

APX™ TWO-WAY RADIOS

APX 1000

APX 2000

APX 4000

APX 4000Li

# DETAILED SERVICE MANUAL

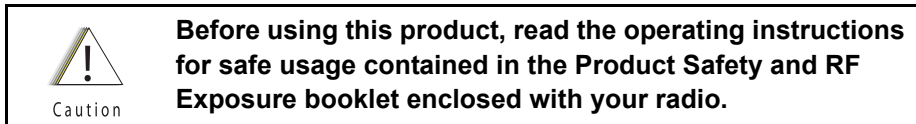


# Foreword

The information contained in this manual relates to all ASTRO® APX™ 1000/ APX™ 2000/ APX™ 4000/ APX™ 4000 Li/ APX™ 1000 digital portable radios, unless otherwise specified. This manual provides sufficient information to enable qualified service shop technicians to troubleshoot and repair an ASTRO APX 2000/ APX 4000/ APX 4000Li/ APX 1000 (900 MHz) digital portable radio to the component level.

For details on the operation of the radio or level 1 or 2 maintenance procedures, refer to the applicable manuals, which are available separately. A list of related publications is provided in the section, “[Related Publications](#),” on page vii.

## Product Safety and RF Exposure Compliance



### ATTENTION!

**This radio is restricted to occupational use only to satisfy FCC RF energy exposure requirements. Before using this product, read the guide enclosed with your radio which contains important operating instructions for safe usage and RF energy awareness and control for compliance and applicable standards and regulations.**

**For a list of Motorola-approved antennas, batteries, and other accessories, visit the following web site : [www.motorolasolutions.com/APX](http://www.motorolasolutions.com/APX)**

## Manual Revisions

Changes which occur after this manual is printed are described in FMRs (Florida Manual Revisions). These FMRs provide complete replacement pages for all added, changed, and deleted items, including pertinent parts list data, schematics, and component layout diagrams. To obtain FMRs, contact the Customer Care and Services Division (refer to “[Appendix A Replacement Parts Ordering](#)”).

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**ASTRO<sup>®</sup> APX 1000/ APX 2000/ APX 4000/ APX 4000Li  
Digital Portable Radios**

**Detailed Service Manual**

**Contents**

**Section 1: APX 2000/ APX 4000/ APX 4000 Li/  
APX 2000/ APX 4000 (Two Knobs)  
APX 1000 (900 MHz)**

**Section 2: APX 1000 (VHF, UHF1, UHF2, 700/800 MHz)**

**Section 3: Appendices**



## Document History

The following major changes have been implemented in this manual since the previous edition:

Edition	Description	Date
68012004061-A	Initial edition	Nov. 2011
68012004061-B	Added information for APX 2000/ APX 4000 (VHF and UHF2) <ul style="list-style-type: none"> <li>• Chapter 3: Theory of Operation</li> <li>• Chapter 5: Troubleshooting Charts</li> <li>• Chapter 7: Troubleshooting Tables</li> <li>• Chapter 8: Schematics, Boards Overlays, and Parts Lists</li> </ul> Updated UHF1 schematics, PCB and Parts List.	May 2012
68012004061-C	Added information for APX 2000/ APX 4000 (900 MHz), Model 1.5 and APX 4000Li <ul style="list-style-type: none"> <li>• Chapter 3: Theory of Operation</li> <li>• Chapter 5: Troubleshooting Charts</li> <li>• Chapter 7: Troubleshooting Tables</li> <li>• Chapter 8: Schematics, Boards Overlays, and Parts Lists</li> </ul>	Nov. 2012
68012004061-D	Updated APX 4000Li Model 2 information <ul style="list-style-type: none"> <li>• Chapter 3: Theory of Operation</li> </ul> Chged GPS Low Noise Amplifier ICs from Part no. 5187344N09 to 51016097001 due to EOL from Infineon	June 2013
68012004061-E	1) Changed Mace IC from part no. 5185912Y03 to 5185912Y05 due to security software enhanced. 2) Added information for APX 1000	June 2014
68012004061-F	Added information for APX 1000 (VHF, UHF2), APX 2000/ APX 4000 (Two Knobs)	Nov. 2014

## Notes

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# Commercial Warranty

For details on the regional Motorola Service Centers, Replacement Parts Ordering and Technical Support assistance, refer to the relevant regions in the Appendix section of this manual.

## Notes



**ASTRO® APX® 1000/ APX® 2000/ APX® 4000/ APX® 4000 Li  
Digital Portable Radios**

Section 1

APX 2000/ APX 4000/ APX 4000Li

APX 2000/ APX 4000 (Two Knobs)

APX 1000 (900 MHz)

## Notes

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## Notes

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# Chapter 1 Introduction

## 1.1 General

This manual includes all the information needed to maintain peak product performance and maximum working time for the ASTRO APX 2000/ APX 4000/ APX 4000Li/ APX 1000 (900 MHz) radio. This detailed level of service (component level) is typical of the service performed by some service centers, self-maintained customers, and distributors.

Use this manual in conjunction with the *APX 2000/ APX 4000/ APX 1000 (900 MHz) VHF* (136–174 MHz), UHF1 (380–470 MHz), UHF2 (450–520 MHz), 700/800 MHz (764–870 MHz) and 900 MHz (896–941 MHz) *Digital Portable Radios Basic Service Manual* (Motorola part number 68012004056), which can help in troubleshooting a problem to a particular printed circuit (PC) board.

Conduct the basic performance checks outlined in the basic service manual first to verify the need to analyze the radio and to help pinpoint the functional problem area. In addition, you will become familiar with the radio test mode of operation, which is a helpful tool. If any basic receive or transmit parameters fail to be met, the radio should be aligned according to the radio alignment procedure.

Included in other areas of this manual are functional block diagrams, detailed theory of operation, troubleshooting charts and waveforms, schematics, and parts lists. You should become familiar with these sections to aid in determining circuit problems. Also included are component location diagrams to aid in locating individual circuit components and some IC diagrams, which identify some convenient probe points.

“[Chapter 3, Theory of Operation,](#)” on page 3-1, contains detailed descriptions of the operations of many circuits. Once you locate the problem area, review the troubleshooting flowchart for that circuit to fix the problem.

## 1.2 Notations Used in This Manual

Throughout the text in this publication, you will notice the use of warnings, cautions, and notes. These notations are used to emphasize that safety hazards exist, and care must be taken and observed.

**NOTE:** An operational procedure, practice, or condition that is essential to emphasize.



Caution

CAUTION indicates a potentially hazardous situation which, if not avoided, might result in equipment damage.



WARNING

**WARNING** indicates a potentially hazardous situation which, if not avoided, could result in death or injury.



DANGER

**DANGER** indicates an imminently hazardous situation which, if not avoided, will result in death or injury.



---

## Chapter 2 Radio Power

This chapter provides a detailed circuit description of the power distribution of an ASTRO APX 2000/ APX 4000/ APX 4000Li/ APX 1000 (900 MHz) radio.

### 2.1 General

In the ASTRO APX 2000/ APX 4000/ APX 4000Li/ APX 1000 (900 MHz) radio, power (B+) is distributed to two boards: the main board and the keypad board (see [Figure 2-1 on page 2-2](#)).

Power for the radio is provided through a battery supplying a nominal 7.5 Vdc directly to the transceiver. The following battery types and capacities are available:

*Table 2-1. IMPRES Batteries*

Part Number	Description
NNTN8128_	APX 2000 IMPRES Li Ion Battery Slim (1900 mAh)
NNTN8129_	APX 2000 IMPRES Li Ion High Cap Battery (FM, 2300 mAh)
PMNN4424_	APX 2000 IMPRES Li Ion High Cap Battery (2300 mAh)
NNTN8560_*	APX 2000 IMPRES Li Ion High Cap Battery (TIA4950, 2500 mAh)
<b>Note:</b> * = Applicable to APX 2000/ APX 4000 (Two Knobs) only.	

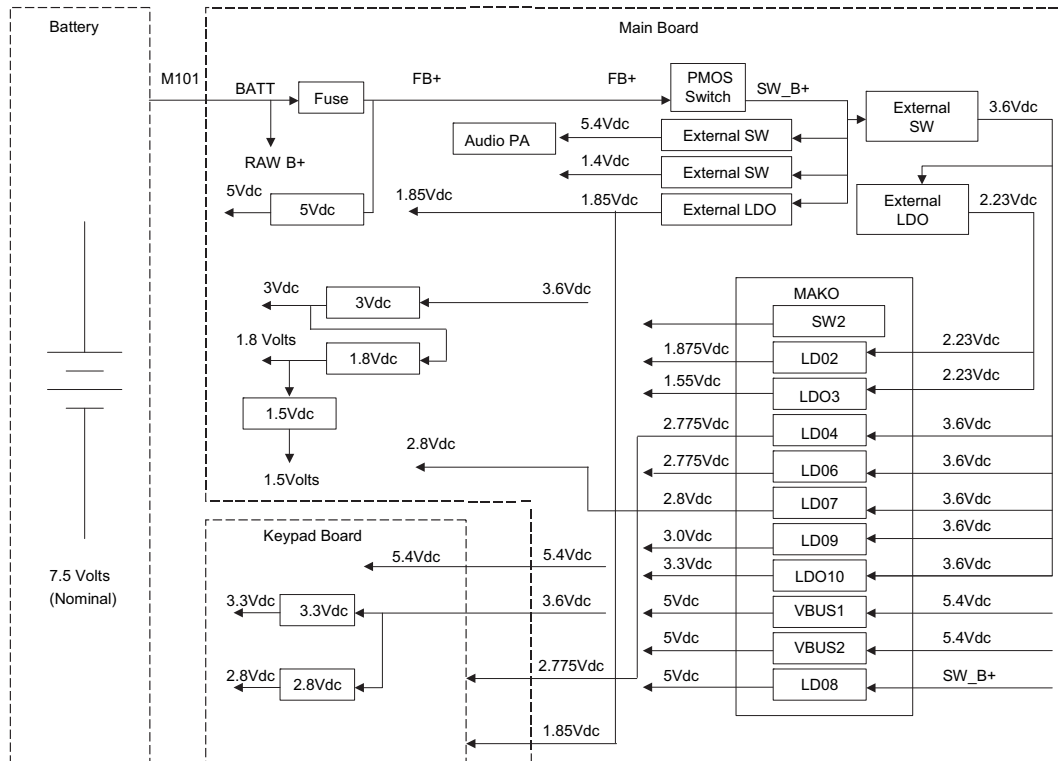


Figure 2-1. DC Power Distribution

B+ from the battery is electrically switched to most of the radio, rather than routed through the On/Off/volume control knob, S2 (APX 2000/ APX 4000/ APX 4000Li/ APX 1000 (900 MHz)); S3 (APX 2000/ APX 4000 (Two Knobs)). The electrical switching of B+ supports a *keep-alive* mode. Under software control, even when the On/Off/volume control knob has been turned to the Off position, power remains on until the MCU completes its power-down, at which time the radio is physically powered down.

## 2.2 DC Power Routing

**NOTE:** Refer to [Table 8-1, “List of Transceiver Schematics and Board Overlays,”](#) on page 8-1 for a listing of schematics showing the transceiver board DC power routing components.

Connector M101, the B-plus assembly, connects the battery to the main board. Component E201 forms a power-line filter for signal DC\_RAW\_B+, which supplies battery voltage to the transmitter section. Fuse F200 and filter C202, L200, C203 supply fused B plus to the controller section.

In turn, the controller supplies VSW1 regulated 3.6 Vdc, 2.78 Vdc, and 1.85 Vdc. The 3.6 Vdc supplies regulator U201 and controls switch Q201 which supplies fuse B+ to regulator U200. Regulator U201 supplies regulator U202. The 2.775 Vdc supplies regulator U202, Trident IC U702, and 16.8 MHz crystal circuit. The 1.85 sets the logic level for the SPI and SSI data.

In addition, the main board also has four regulators 5 Vdc (U200), 3 Vdc (U201), 1.8 Vdc (U202) and 1.5 Vdc (U203). The 5 volt regulator supplies the FGU section, transmitter ALC and receiver back end. The 3 volt regulator supplies dc for the receiver front ends, mixer, receiver back end and GPS. The 1.8 volt regulator supplies dc for the receiver front end and mixer. The 1.5 volt regulator supplies dc for the buffers in the FGU section.

---

## Chapter 3 Theory of Operation

This chapter provides a detailed circuit description of the ASTRO APX 2000/ APX 4000/ APX 4000Li/ APX 1000 (900 MHz) mainboard and keypad boards. When reading the theory of operation, refer to the appropriate schematic and component location diagrams located in the back of this manual. This detailed theory of operation can help isolate the problem to a particular component.

The ASTRO APX 2000/ APX 4000/ APX 1000 radio, which is a single-band synthesized radio, is available in the following frequency bands.

- VHF (136–174 MHz)
- UHF1 (380–470 MHz)
- UHF2 (450–520 MHz)
- 700/800 MHz (764–870 MHz)
- 900 MHz (896–941 MHz).

And the ASTRO APX 2000 M1.5, APX 4000Li M1.5 and APX 4000Li M2, APX 2000/ APX 4000 (Two Knobs) is available in the following frequency bands.

- VHF (136–174 MHz)
- UHF1 (380–470 MHz)
- UHF2 (450–520 MHz)
- 700/800 MHz (764–870 MHz)

All ASTRO APX 2000/ APX 4000/ APX4000 Li radios besides the radios with 900 MHz are capable of analog operation (12.5 kHz or 25 kHz bandwidths), ASTRO mode (digital) operation (12.5 kHz only), X2-TDMA mode (25 kHz only) and Phase 2 TDMA mode (12.5 kHz only).

For radios with 900 MHz, they support analog operation (12.5 kHz only), ASTRO mode (digital) operation (12.5 kHz only), and Phase 2 TDMA mode (12.5 kHz only).

**NOTE:** The APX 2000 M1.5, APX 4000Li M1.5 and APX 4000Li M2 radio do not support any Global Positioning System (GPS), Bluetooth, MACE and Accelerometer functions. As such, disregard all references to the functions mentioned above in “Chapter 3 Theory of Operation”.

The ASTRO APX 2000/ APX 4000/ APX 4000Li/ APX 1000 (900 MHz) radio ([Figure 3-1](#)) consists of the following:

- **Main Board** – Contains all transmit, receive, and frequency generation circuitry, including the digital receiver back-end IC and the reference oscillator. The mainboard also contains a dual core processor, which includes both the microcontroller unit (MCU) and a digital signal processor (DSP) core, the processor’s memory devices, an audio and power supply support integrated circuit (IC), a digital support IC, external power amplifier, as well as combination Global Positioning System (GPS) and Bluetooth 2.1 IC and front-end circuitry.
- **Top Control**
  - APX 2000/ APX 4000/ APX 4000Li/ APX 1000 (900 MHz): Contains a Multi-Function knob, a push button switch used for Emergency call and a light bar. The top control also includes TX/RX LED that is solid amber upon receive, red on PTT, and blinks amber on secure TX/ RX.

- APX 2000/ APX 4000 (Two Knobs): Contains an On/Off & Volume Knob, a 16 position Channel/Frequency Knob, a push button switch used for Emergency call and a light bar. The top control also includes TX/RX LED that is solid amber upon receive, red on PTT, and blinks amber on secure TX/RX.
- **Main Display** – 160 x 90 TFT transfective color LCD.
- **Keypad**
  - Standard Control (M1.5) Keypad version has 3 soft keys
  - Limited Keypad Version has 3 soft keys, 4 direction Navigation key, Home and Data buttons
- Full Keypad Version has 3 soft keys, 4 direction Navigation key, 3x4 alphanumeric keypad, Home and Data buttons.
- The expanded version keypad also contains a Bluetooth Controller (ACVR) IC and support circuitry, a 3-axes digital accelerometer and a Type III secure IC (MACE).

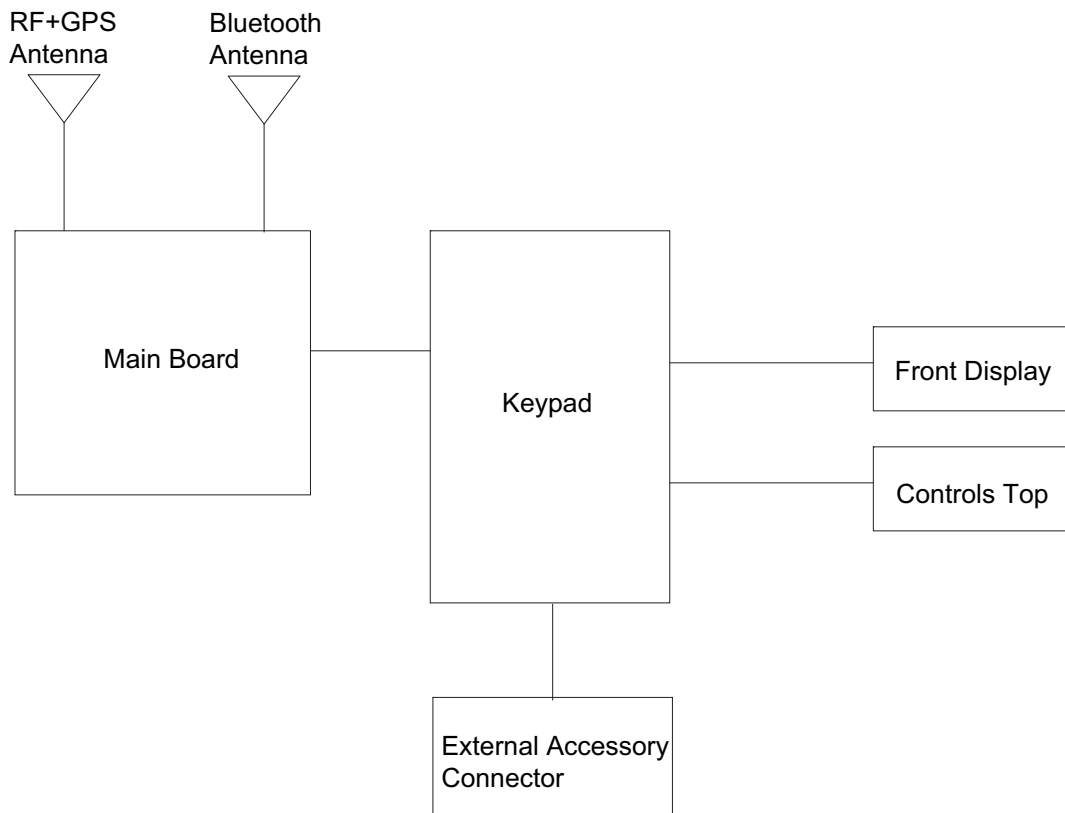


Figure 3-1. APX 2000/ APX 4000/ APX 4000Li Overall Block Diagram

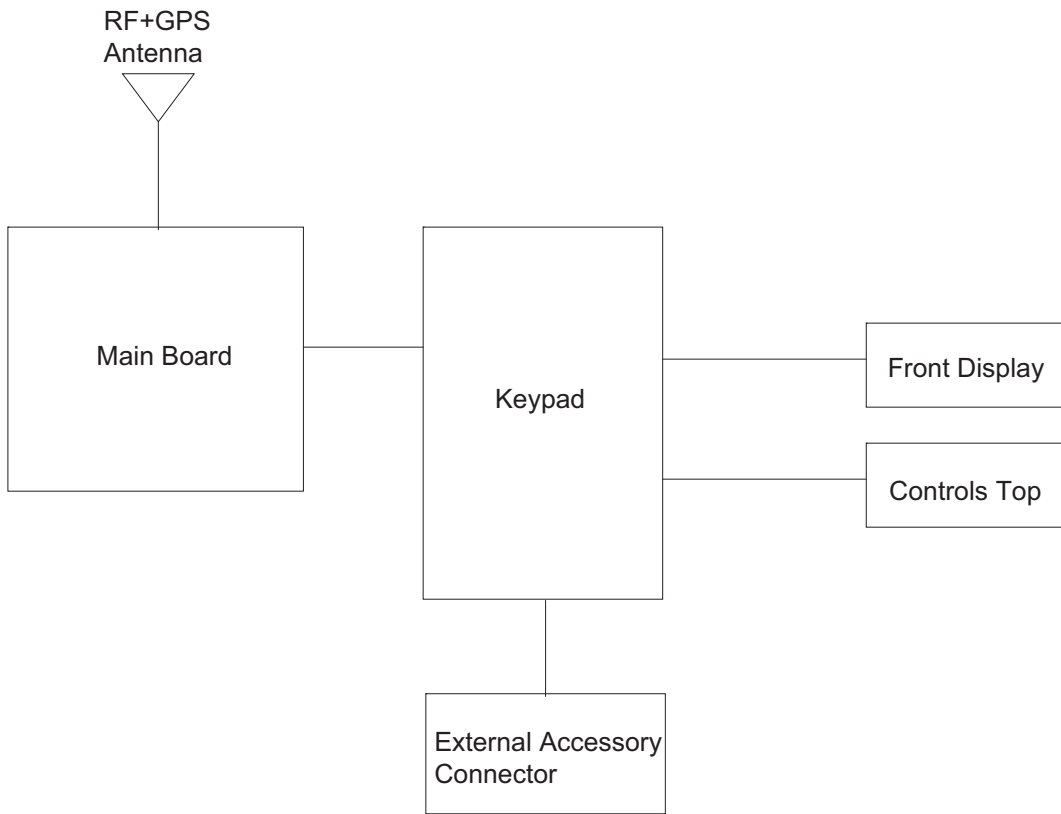


Figure 3-2. APX 1000 (900 MHz) Overall Block Diagram

### 3.1 Main Board

The main board performs the transmitter and receiver functions necessary to translate between voice and data to modulated radio-frequency (RF) carrier at the antenna. The main board contains all the radio's RF circuits for the following major components:

- Receiver
- Transmitter
- Frequency Generation Unit (FGU)
- Controller

Figure 3-3, Figure 3-4, Figure 3-5 and Figure 3-6 illustrates the VHF, UHF1, UHF2, 700/800 MHz and 900 MHz transceiver block diagrams.

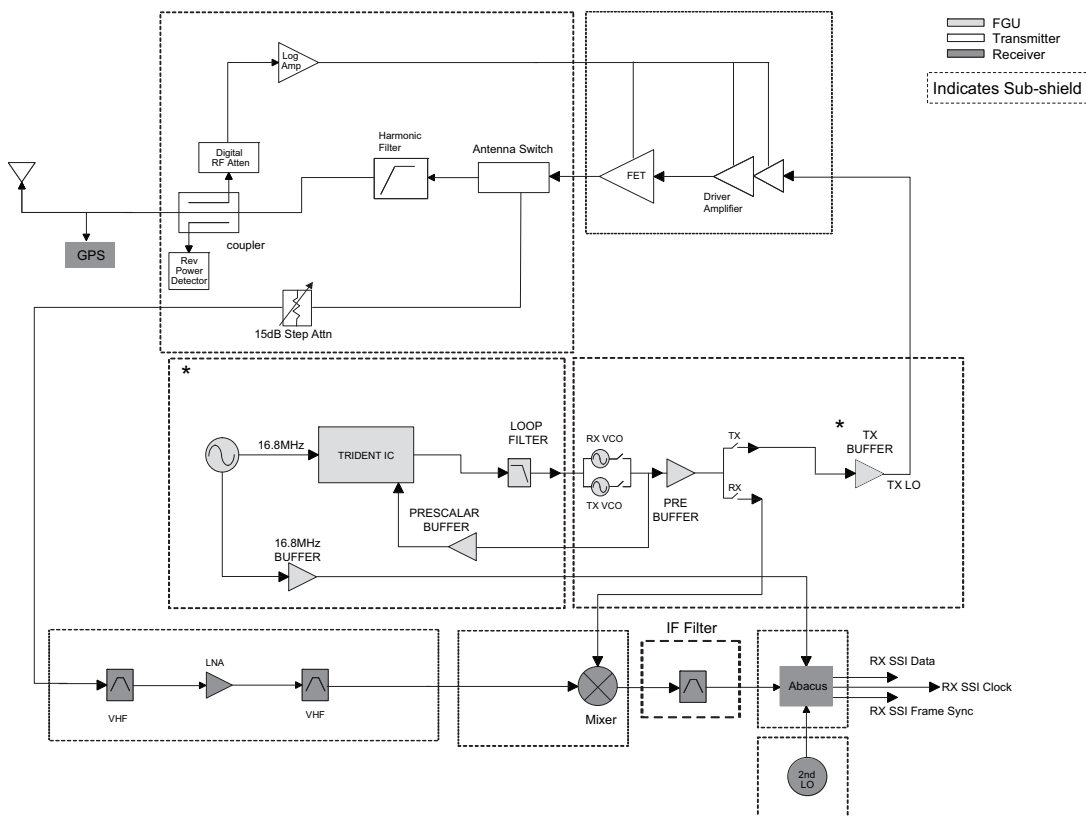


Figure 3-3. Transceiver (VHF) Block Diagram (Power and Control Omitted)

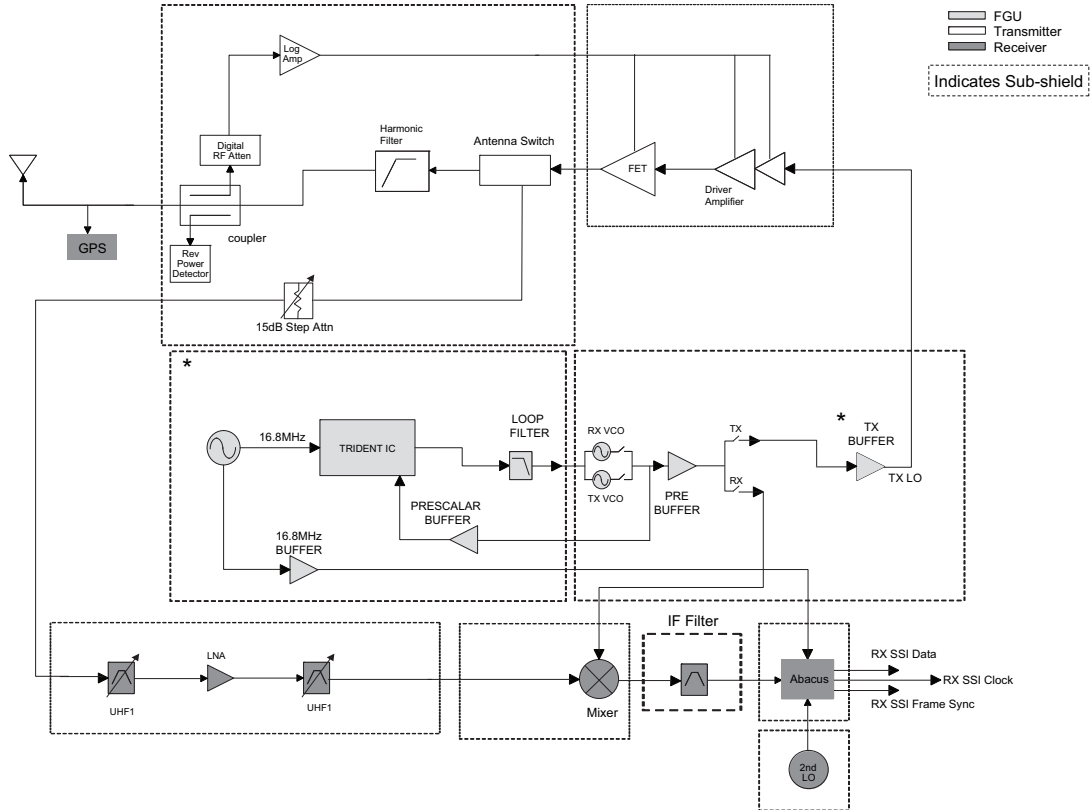


Figure 3-4. Transceiver (UHF1/UHF2) Block Diagram (Power and Control Omitted)

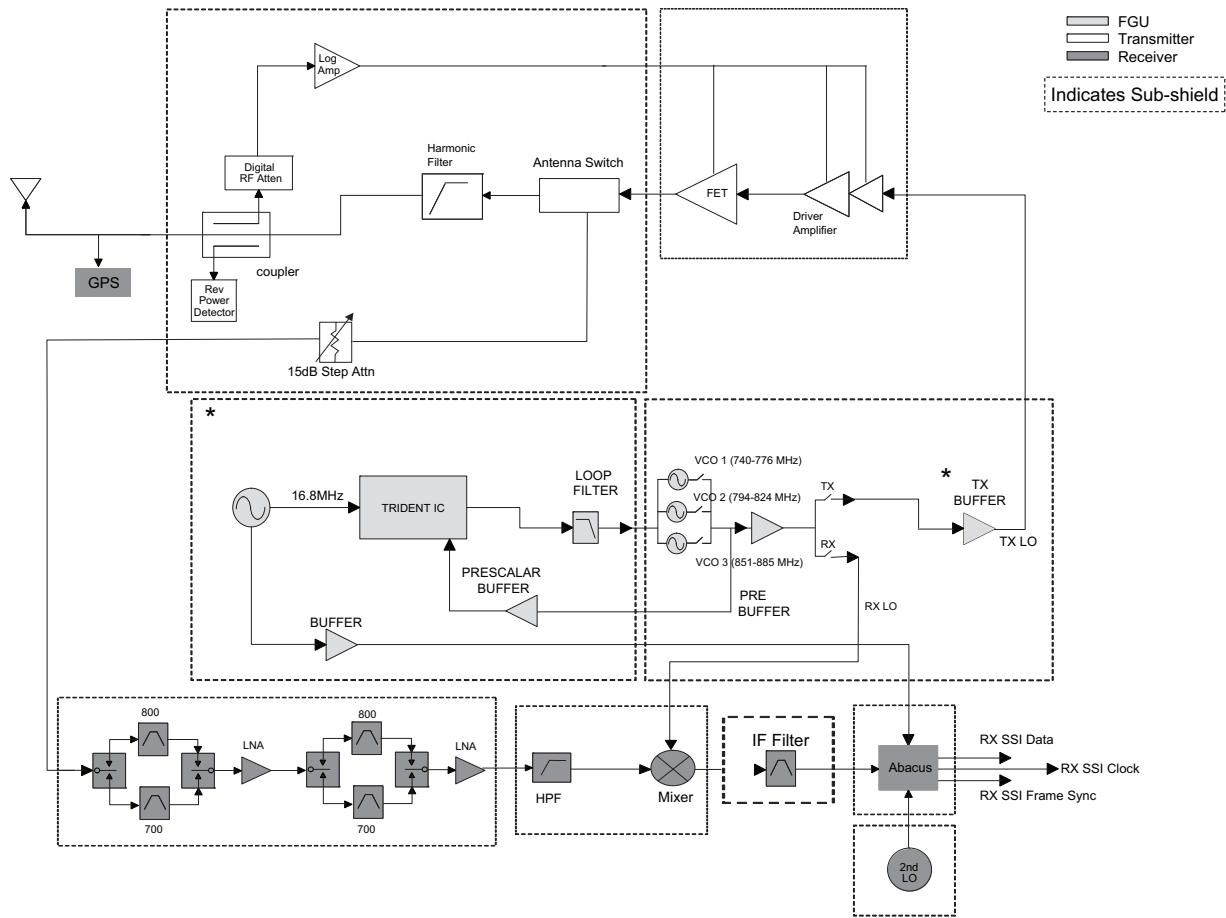


Figure 3-5. Transceiver (700/800 MHz) Block Diagram (Power and Control Omitted)



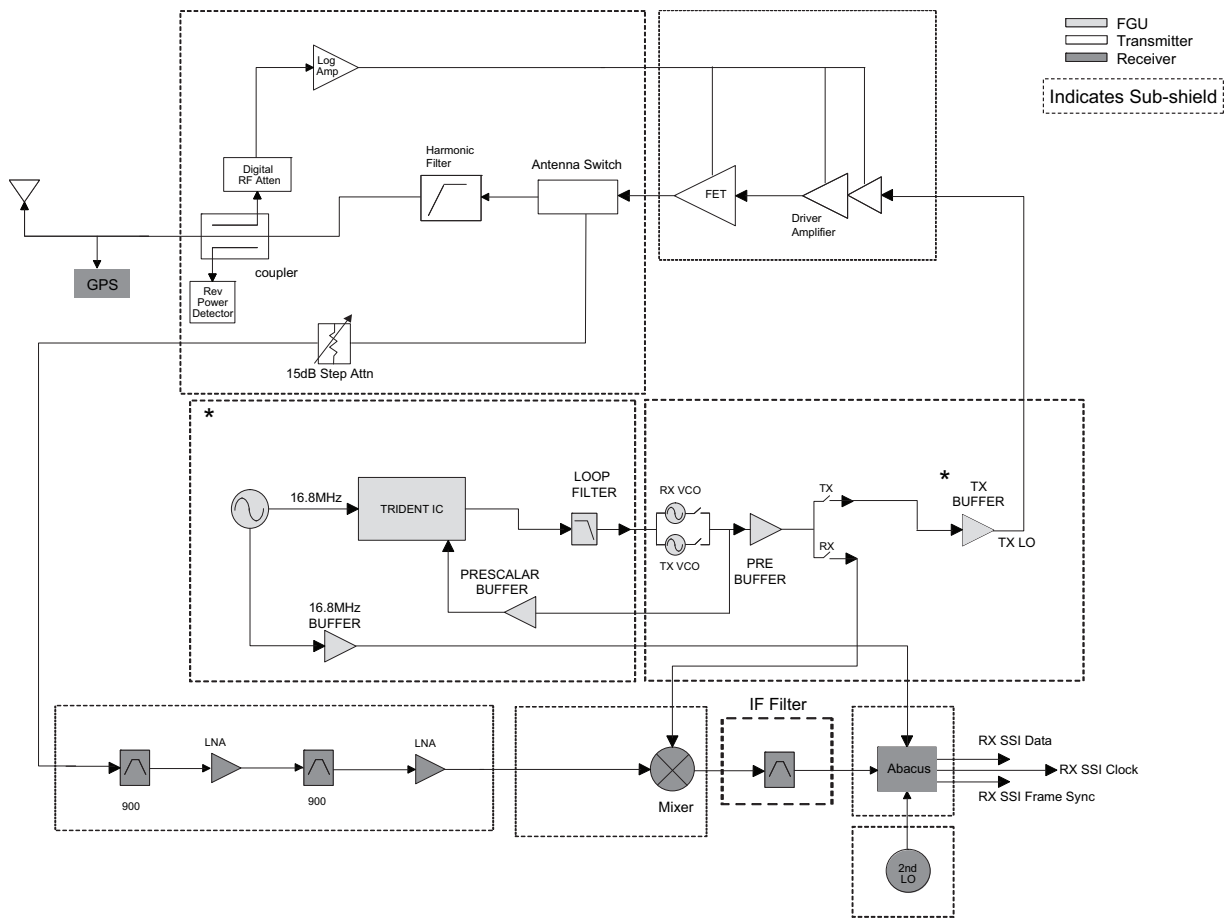


Figure 3-6. Transceiver (900 MHz) Block Diagram (Power and Control Omitted)

### 3.1.1 Interconnections

This section describes the various interconnections for the main board.

#### 3.1.1.1 Battery Connector M101

Battery connector M101 solders to the transceiver printed circuit board. The connector has 5 gold plated contacts that mate with the battery, two contacts for positive, two for negative and one for the Dig\_Battery\_Data. Signal descriptions are in Table 3-1.

Table 3-1. Battery Connector J3

Pin No.	Signal	Description
1	DC_BATT	Battery positive terminal, nominally 7.5 Vdc
2	Dig_Battery_Data	Battery status, from battery to controller
3	Ground	Battery negative terminal, tied to PCB ground

### 3.1.1.2 Power Conditioning Components

DC power-conditioning components include zener diodes, capacitors, ferrite beads, a power inductor, and the fuse. Diodes VR200 and VR101 provide over-voltage protection. Ferrite beads (designated E, etc.) and capacitors suppress electromagnetic interference from the main board.

The power-line filter consisting of L200, C202, and C203 suppresses digital noise from the controller board switching power supplies that could degrade the transmitter spectral purity.

Ground clips M103, M104 and M105 make contact between the main board ground and the radio chassis. The chassis connection is a necessary electrical reference point to complete the antenna circuit path. Shields SH1 through SH17 appear on the schematic to show their connection to ground.

### 3.1.2 Receiver

The RF signal is received at the antenna and is routed through the Harmonic Filter, followed by the Antenna Switch and the 15dB Step Attenuator IC. The latter contains a switchable attenuator that is enabled at predetermined RF power thresholds present at the antenna port. The output of the attenuator leads to the receiver front end section.

- VHF band (See Figure 3-7.)
- UHF1/UHF2 band (See Figure 3-8.)
- 700/800 MHz band (See Figure 3-9.)
- 900 MHz band (See Figure 3-10.)

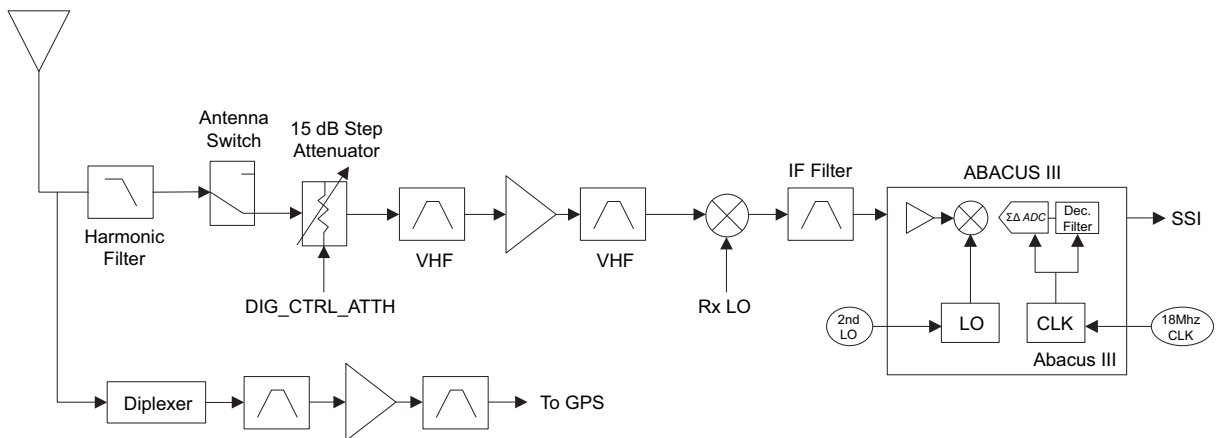


Figure 3-7. Receiver Block Diagram (VHF)

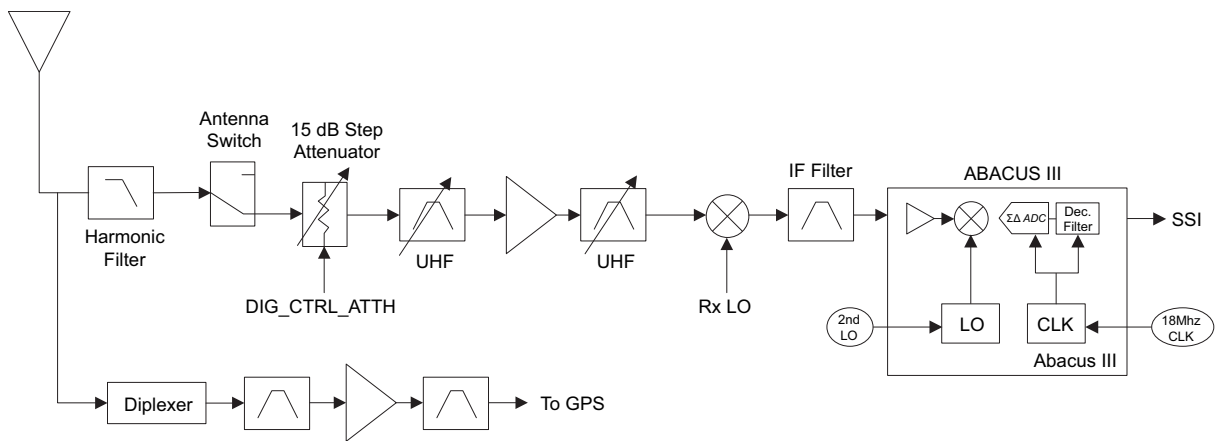


Figure 3-8. Receiver Block Diagram (UHF1/UHF2)

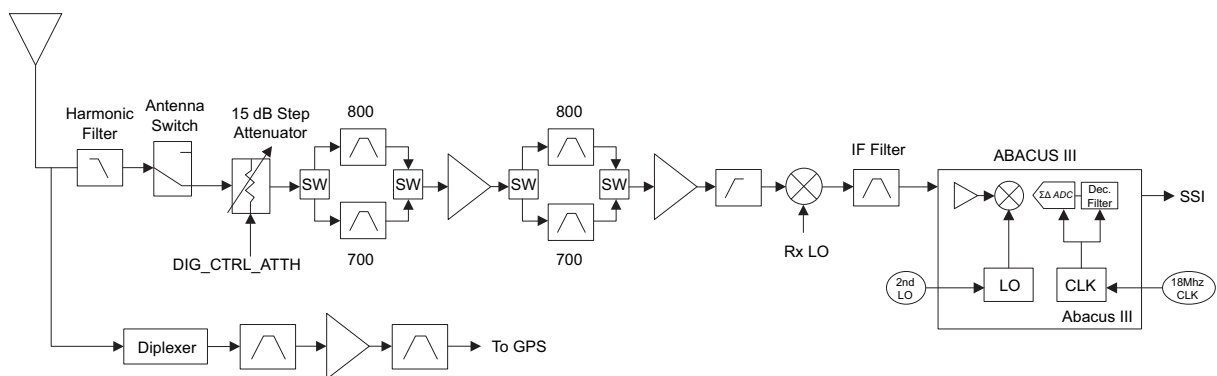


Figure 3-9. Receiver Block Diagram (700/800 MHz)

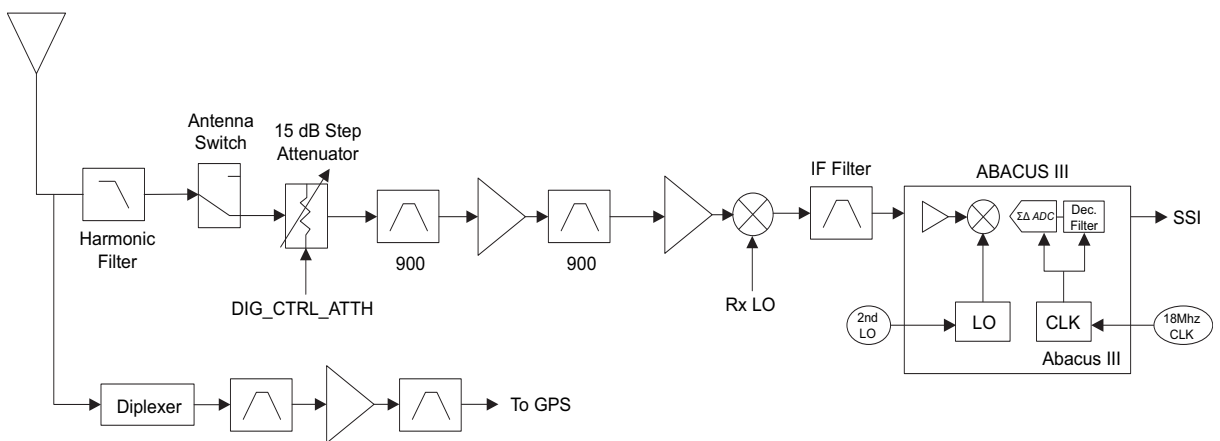


Figure 3-10. Receiver Block Diagram (900 MHz)

### 3.1.2.1 VHF Front-End

From the 15 dB Step Attenuator (U2702), a VHF signal is routed to the first pre-selector filter followed by a Low Noise Amplifier (LNA) and a second pre-selector filter. Both filters are discrete designs and are used to band limit the incoming energy and suppress known spurious responses such as Image and the  $\frac{1}{2}$  IF spur. The LNA active device is an NPN transistor (U304) with active bias provided by transistor pair (Q303).

The output of the second pre-selector filter is applied to the RF port of the Mixer IC (U507) via a balun transformer (T506). The Mixer IC is driven by a Local Oscillator (LO) signal at the LO port to down-convert the RF signal to a 109.65 MHz intermediate frequency (IF). The down converted IF signal is passed through a crystal filter (FL502) which drives the input of the Abacus 3 Analog to Digital Converter IC (AD9864) (U601).

### 3.1.2.2 UHF1/UHF2 Front-End

From the 15 dB Step Attenuator (U2602), a UHF signal is routed to the first pre-selector filter followed by a Low Noise Amplifier (LNA) and a second pre-selector filter. Both filters are discrete and tunable designs and are used to band limit the incoming energy and suppress known spurious responses such as Image and the  $\frac{1}{2}$  IF spur. The LNA active device is an NPN transistor (U1932) with active bias provided by transistor pair (Q1922).

The output of the second pre-selector filter is applied to the RF port of the Mixer IC (U507) via a balun transformer (T506). The Mixer IC is driven by a Local Oscillator (LO) signal at the LO port to down-convert the RF signal to a 109.65 MHz intermediate frequency (IF). The down converted IF signal is passed through a crystal filter (FL502) which drives the input of the Abacus 3 Analog to Digital Converter IC (AD9864) (U601).

### 3.1.2.3 700/800 MHz Front-End

From the 15 dB Step Attenuator (U2302), a 700 MHz or 800 MHz band signal is routed to an SPST band select switch (U402) which selects the 700 or the 800 band signal and routes it to the appropriate first pre-selector filter (FL401). A second band select switch (U404) selects the output of the appropriate filter and applies it to an LNA followed by a similar pre-selector filter/ band-select switch circuit. The signal is then routed to a second LNA (U407) whose output is applied to a discrete image filter. Both preselector filters are Surface Acoustic Wave designs used to band limit the received energy and suppress known spurious responses such as Image and the  $\frac{1}{2}$  IF spur.

The output of the discrete image filter is applied to the RF port of the Mixer IC (U507) via a balun transformer (T506). The Mixer IC is driven by a Local Oscillator (LO) signal at the LO port to down-convert the RF signal to a 109.65 MHz intermediate frequency (IF). The down converted IF signal is passed through a crystal filter (FL502) which drives the input of the Abacus 3 Analog to Digital Converter IC (AD9864)(U601).

### 3.1.2.4 900 MHz Front-End

From the 15 dB Step Attenuator (U2302), a 900 MHz band signal is routed to the first pre-selector filter (FL401) which is used for signal band selection and applies it to a Low Noise Amplifier (LNA) (U406). Signal out of the LNA is then routed to the similar pre-selector filter (FL402) before applies to the second LNA (U407) for further amplification. Both pre-selector filters are Surface Acoustic Wave designs used to band limit the received energy and suppress known spurious responses such as Image and the  $\frac{1}{2}$  IF spur. The output of the LNA is applied to the RF port of the Mixer IC (U507) via a balun transformer (T506). The Mixer IC is driven by a Local Oscillator (LO) signal at the LO port to downconvert the RF signal to a 109.65 MHz intermediate frequency (IF). The down converted IF signal is passed through a crystal filter (FL502) which drives the input to the Abacus 3 Analog to Digital Converter IC (AD9864)(U601).

### 3.1.2.5 Analog To Digital Converter

The ADC IC's front end down converts the first IF to a second IF, a 2.25 MHz signal, by mixing a 107.4MHz LO signal generated by an integrated synthesizer and external VCO with active device U602 and resonator L604. The second IF is sampled at 18 MHz, a signal generated by an integrated clock synthesizer and VCO device with external resonator L605.

The sampled signal is decimated by a factor of 900 to 20 kHz and converted to SSI format at the ADC's output. The Serial Synchronous Interface (SSI) serial data waveform is composed of a 16 bit in-phase word (I) followed by a 16 bit Quadrature word (Q). A 20 kHz Frame Synch and a 1.2 MHz clock waveform are used to synchronize the SSI IQ data transfer to the Digital Signal Processor IC (OMAP) for post-processing and demodulation.

### 3.1.3 Transmitter

The transmitter takes modulated RF from the FGU and amplifies it to the rated output power to produce the modulated carrier at the antenna.

**NOTE:** Refer to [Table 8-1, "List of Transceiver Schematics and Board Overlays,"](#) on [page 8-1](#) for a listing of transmitter-related schematics that will aid in the following discussion.

The transmitter ([Figure 3-1 on page 3-2](#)) for the VHF/UHF1/UHF2 radio consists of one MOSFET high power transistor for the VHF/UHF1/UHF2 band. The same topology applied for the 700/800 MHz radio ([Figure 3-4 on page 3-5](#)) where one MOSFET high power transistor is used for the 700/800 MHz band. The high power transistor is driven by an RF driver IC that receives its input signal from the voltage controlled oscillator. Transmitter power is controlled by a discrete power control circuit that senses the output of a directional coupler and adjusts PA control voltage to maintain the correct power level. The TX signals pass through the antenna switch that will provide switching mechanism from transmit to receive path. The signal then route through each respective harmonic filters, an embedded directional coupler and finally to the antenna.

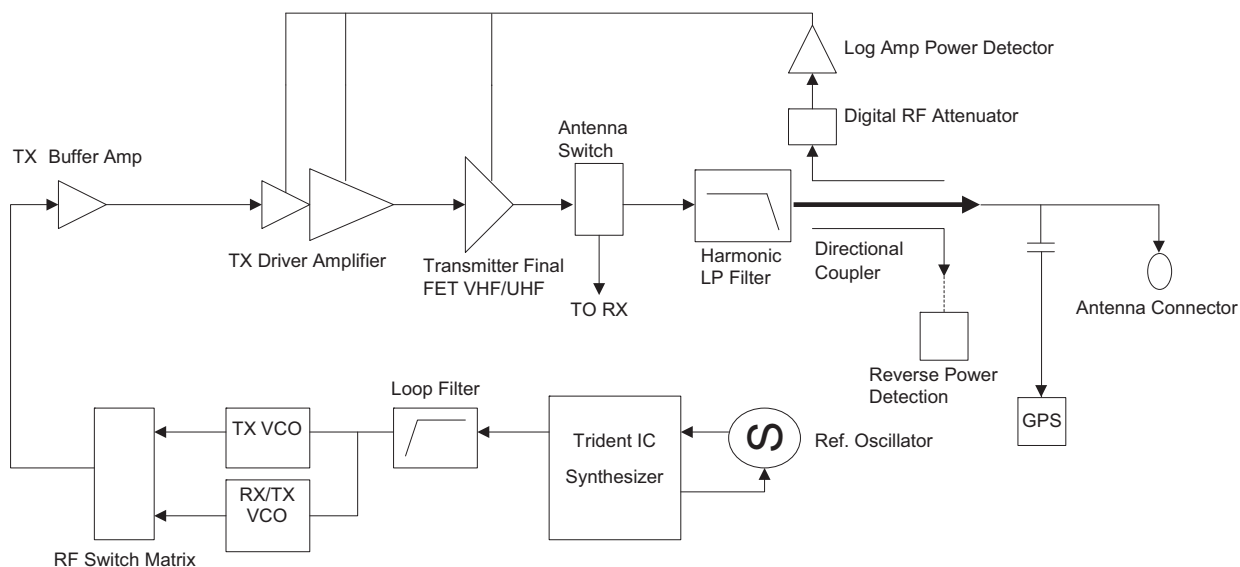


Figure 3-11. Transmitter Block Diagram (VHF/UHF1/UHF2/900 MHz)

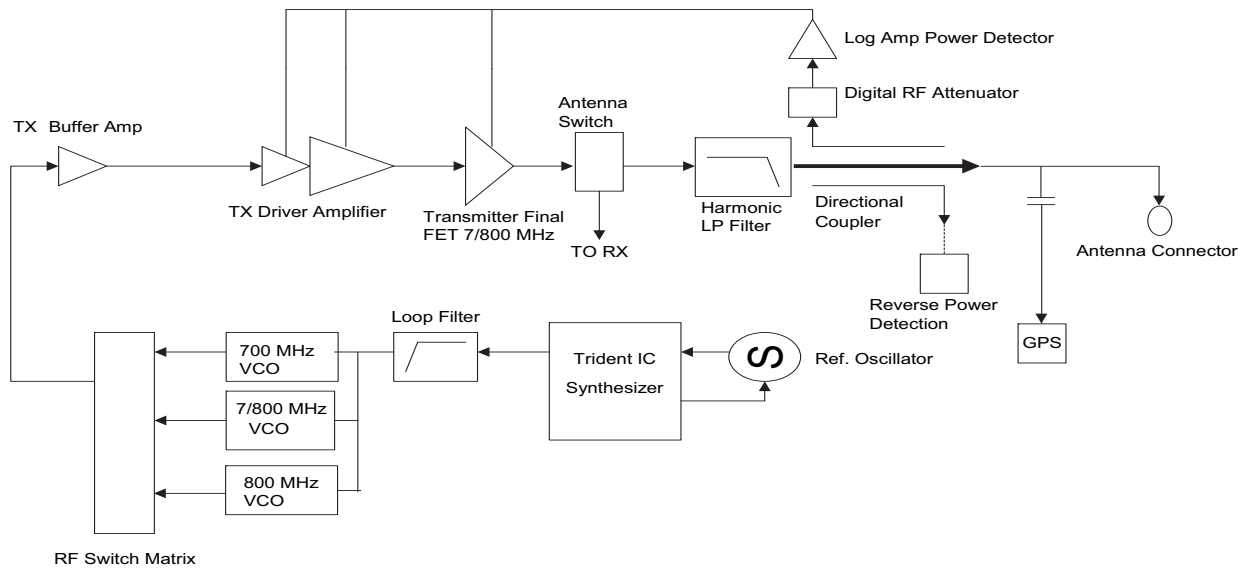


Figure 3-12. Transmitter Block Diagram (700/800 MHz)

### 3.1.3.1 Driver Amplifier

The driver amplifier IC (VHF – U902, UHF1/UHF2 – U1602, 700/800/900 MHz – U1002) contains one LD MOS FET amplifier stages and an internal resistor bias networks. Pin 16 is the RF input. Modulated RF from the FGU, at a level of +3 dBm  $\pm$ 2 dB, is coupled through a blocking capacitor to the gate of FET-1. An LC inter-stage matching network connects the first stage output VD1 to the second stage input G2. The RF output from the drain of FET-2 is pin 6 (RFOUT1). Gain control is provided by a voltage applied to pin 1 (VCNTRL). Typical output power is about +27 dBm (500 mW) with VCNTRL at 5.5 V.

**VHF:** L901 and C904 is the inter-stage matching network of the driver amplifier IC, C907, C910, L904, C913, C914, L905 and C916 serves as matching circuit of the driver IC to the final device of Q901. Capacitor C907 also works as DC block to the circuit.

**UHF1/UHF2:** L1601 and C1604 is the inter-stage matching network of the driver amplifier IC, C1607, C1610, L1604, C1613, C1614, L1605 and C1616 serves as matching circuit of the driver IC to the final device of Q1601. Capacitor C1607 also works as DC block to the circuit.

**700/800/900 MHz:** L1002, C1002 and C1004 are the inter-stage matching network. Components C1013 and C1023 match the output impedance to the input of the final device (Q1001); capacitor C1013 also serves as the DC block.

### 3.1.3.2 Power Amplifier Transistor

The power amplifier transistors (VHF – Q901, UHF1/UHF2 – Q1601, 700/800 MHz – Q1001) are Silicon N-channel MOSFETs housed in a high-power, surface-mount, PMM package. To prevent thermal damage, it is essential that the heat sink of the power module be held in place against the radio chassis using the RF board screw. All FETs are matched using a lowpass topology. Drain bias is applied through L906 for VHF, L1606 for UHF1/UHF2 and L1007 for 700/800 MHz band. Gain is dynamically controlled by adjusting the gate bias. The gate is insulated from the drain and source so that gate bias current is essentially zero

**VHF:** C927, L907 C920, C921, L908, C922, L909, C924, L910, C923, C928 and C925 are the elements of the output matching network apart from a transmission-line structure. The Gate biasing is applied through a biasing network consist of R903, R904, R905, C915 and C917.

**UHF1/UHF2:** C1620, C1621, C1622, L1609, C1624, L1610, C1623, C1628 and C1625 are the elements of the output matching network apart from a transmission-line structure. The Gate biasing is applied through a biasing network consist of R1603, R1604, R1605, C1615 and C1617.

**700/800/900 MHz:** The input impedance-matching network is C1013 and C1023. A transmission-line structure and C1019, C1020, L009 and C1021 form the output-matching network. Gate bias applied through R1003, R1004, C1015 and R1005.

### 3.1.3.3 Directional Coupler

A directional coupler senses the transmitter forward and reverse power as control signals in the transmitter's automatic level control (ALC) loop. Isolated ports are terminated with external resistors.

**VHF/UHF1/UHF2/700/800/900 MHz:** The directional coupler consists of three embedded transmission lines.

### 3.1.3.4 Harmonic Filter

The harmonic filter is a high-power, low-loss, low-pass filter. Its purpose is to suppress transmitter harmonics. The filter also improves receiver out-of-band rejection. Shield SH8 must be in place to achieve the required stop band rejection.

**VHF:** The harmonic filter apply discrete components as the circuit line up. The pass band is up to 174 MHz while the stop band is above 550 MHz.

**UHF1:** The harmonic filter apply discrete components as the circuit line up. The pass band is up to 520 MHz while the stop band is above 1200 MHz.

**UHF2:** The harmonic filter apply discrete components as the circuit line up. The pass band is from 450–520 MHz while the stop band is above 900 MHz.

**700/800 MHz:** The harmonic filter uses both discrete components and transmission lines. The pass band is up to 870 MHz, and the stop band is above 1500 MHz.

**900 MHz:** The harmonic filter uses both discrete components and transmission lines. The pass band is from 896–941 MHz, and the stop band is above 1500 MHz.

### 3.1.3.5 Antenna Switch

The antenna switch consists of discrete components which comprise three ports, transmit, receive and output path. During transmit mode, the antenna switch will be turned ON via Filter\_Raw B+ and input logic gate from Ant\_Swi. When the conditions are fulfilled, the antenna switch will be turned ON and the signal will route to the output port as it will notice high impedance on the receive path. The same concept is applied during the receive mode where the switch is in OFF state, which provides high RF impedance on the transmit mode.

### 3.1.3.6 Reverse Power Protection

The radio, while in receive mode is constantly monitoring the input power from the antenna. This power is sensed by the directional coupler and channeled into an RF detector U1106. The matching network between the coupler and the detector consists of R1107, L1102, C1105 and C1107. Once the input RF level exceeds a certain limit, the detector trips a logic circuit which enables attenuation to protect the RF front end. This is to protect the front end from receiving large signal damage.

### 3.1.3.7 Transmitter Power Control

In TX mode, the transmitter Automatic Level Control (ALC) section enables the transmitter and controls the TX power in all modes. Power control is based on a unique dual control loop approach which utilizes voltage control in one loop and current control in the other. The voltage control loop is normally used in all transmit modes. The only time the current control loop controls TX power is during the end of a TX slot in TDMA (F2) mode in the event transmitter saturation is detected. Several other functions included in the TX ALC section of the radio are RX/TX switching, thermal cutback of power, current cutback of power, and reverse power detection with means to disable the receiver in the event of high reverse power at the antenna port.

#### 3.1.3.7.1 Voltage Control Mode

The heart of the voltage control loop is a logarithmic amplifier based power control IC, U1105. Quad DAC, U1125, receives the power tuning values via the SPI bus and converts them into a voltage at "VOUTB." Resistors, R1121 and R1122, form a voltage divider to set the full-scale value of the DAC, in this case approximately 1.4V. This power set voltage is then fed to the power control IC through the current cutback op amp, U1130, and then into a lesser-of-two voltage decision circuit, consisting of U1126 and U1127. This circuit, used exclusively in voltage control mode, provides the important function of combining the MAKO ramp output with the DAC power set voltage to permit power leveling since the MAKO DAC max amplitude cannot be controlled during TDMA mode. In all other TX modes, the MAKO output is a fixed voltage, approximately 1.5V, which is always higher than the DAC control voltage. The lesser-of-two circuit will then select the smaller input, the set voltage from U1125, resulting in immediate TX turn on in analog or ASTRO mode. IN TDMA mode, the MAKO line is a piecewise linear ramp whose timing is in accordance with F2 requirements. At  $t = 0$ , the ramp line is smaller than the TX set voltage so the MAKO ramp will control the TX power level, resulting in a slower ramping up of the TX power. This continues until the MAKO ramp output reaches the level of the power tuning DAC (which is always lower than the MAKO ramp maximum) which causes control of TX power to be turned over to the power tuning DAC. The output of the selector circuit passes through a 2nd order low pass filter (U1142) and then to the log amp, U1105. The low pass filter performs the dual function of improving transient ACPR by transforming a linear ramp with corners into a smooth second order waveform and by acting as a reconstruction filter for the DAC. The log amp converts RF power fed back from the TX PA into a current which is summed with the current from the conversion of the setpoint voltage from DAC U1125. Any imbalance between the RF input level and the level corresponding to the setpoint voltage is corrected at the VAPC output of the log amp which in turn drives the control voltage input of the RFPA. The setpoint voltage effectively nulls the error in the loop caused by changes in the RF level fed back to the log amp. RF from the RFPA is coupled through a directional coupler embedded in the PC board and passed through a LC equalizer and then to digital attenuator, U1112, which is used to implement thermal cutback in the event of an over-temperature condition. Current protection and limiting in voltage control mode is



provided by cascaded difference amplifiers, U1129 and U1130. A fixed threshold is provided by voltage divider, R1169 and R1170. SPDT switch, U1144, changes the current limit threshold based on the type of battery present. This threshold is based on the conversion characteristic of the current shunt monitor circuit of U1101. The output of the current shunt monitor is fed to the first stage of the difference amplifier. The setpoint voltage for the log amp is fed through the second stage of the difference amplifier. When the current shunt monitor voltage exceeds the fixed threshold, the first stage produces an output greater than 0V. Once the output of the first stage (U1129) is greater than zero, this value is subtracted from the setpoint voltage to the log amp in the second stage (U1130), resulting in a progressive cutback of power in the event PA current continues to climb above the threshold.

#### 3.1.3.7.2 Thermal Cutback

Thermal cutback works only in voltage control mode, which is the primary mode of TX power control. Temperature is sensed by IC U1103 and is located next to RFPA finals. Comparators, U1113 and U1114, establish two temperature trip points. The combined logic of the comparators and logic gate, U1121, together with the truth table of the digital attenuator IC, U1112, determine the amount of attenuation of the RF feedback to the log amp. Rated TX power is achieved with the attenuator at its maximum attenuation of 7 dB. The first temperature threshold will subtract 3 dB of TX power and the next (highest) trip point an additional 3 dB for 6 dB total.

#### 3.1.3.7.3 Current Control Mode

In TDMA mode, excessive transient adjacent channel splatter caused by the RFPA, when it is under a greater degree of compression than is expected at nominal supply voltage, is mitigated through a system of saturation detection and switching of the TX power control mode from the voltage control loop to the current control loop. Comparator U1131 compares the log amp output in voltage control mode to a threshold voltage from DAC "C", which sets the threshold for handover to current control mode and establishes the upper supply rail for the output of current loop integrator, U1104. This threshold is tuned in the factory to correspond to transmitter rated power which means that the threshold for handover occurs at a level corresponding to rated power minus 6% which is set by divider R1162 and R1163. When PA saturation exceeds this threshold and the MAKO T/R control signal (DIG\_GPIO49) and DIG\_DMCS combine logically to signal the end of the data portion of the TX slot, D-flip flop U1132 latches which in turn switches (via U1133 SPDT switch) the output of the current loop integrator, U1104, which sends the control voltage to either the VHF, UHF1/UHF2, 700/800 MHz or 900 MHz band PA.

Integrator, U1104, acts as a PI (Proportional Integral) controller in current mode. Current feedback from the PA is obtained through current shunt resistor R1103 and sent to the current shunt monitor/current to voltage converter, U1101. U1101 has a known gain characteristic for the current-to-voltage conversion. The MAKO ramp is passed through a RC low pass filter for smoothing and on to the current control integrator where it is proportioned with the voltage output of the current shunt monitor. The integrator supply voltage comes from DAC "C" of the Quad DAC, U1125. By way of tuning the DAC "C" value to match TX rated (tuned) power, this approach fixes the upper limit of the control voltage in current control mode to correspond to the tuned power level, further reducing excess adjacent channel splatter.

#### 3.1.3.7.4 PA Offset, Control Voltage Gain Scaling

An offset voltage is applied to the control voltage at a summing junction made up of R1174 and R1154 as a means of further improving transient adjacent channel splatter in the freq band by pre-biasing the PA. The output of DAC "A" is summed with either the output of the log amp or the integrator through R1174. The value for DAC "A" has been established and fixed in the firmware. is sent to a non-inverting, gain-scaling amplifier, U901 (VHF), U1601 (UHF1/UHF2) or U1001 (700/800/900 MHz) and then to the PA driver and final.

### 3.1.4 Frequency Generation Unit (FGU)

The frequency-generation function is performed by several ICs; multiple voltage-controlled oscillators (VCOs); and associated circuitry. The reference oscillator provides a frequency standard to the Trident IC, which controls the VCOs via the port expander. There are also buffers that amplify the VCO signal to the correct level for the next stage. [Figure 3-13](#), [Figure 3-14](#), [Figure 3-15](#) and [Figure 3-16](#) below shows a block diagram of the FGU Section.

**VHF:** Two VCOs are employed: one to generate the first RX LO and the other to generate the transmit injection signals.

**UHF1/UHF2:** Two VCOs are employed: one to generate the first RX LO and the other to generate the transmit injection signals.

**700/800 MHz:** Three VCOs are used to cover the entire 700/800 MHz band.

- VCO1 covers the RX 800 MHz band and the TX 700 MHz (764–776 MHz) band
- VCO2 covers the TX 700/800 MHz (794–824 MHz) band
- VCO3 covers the TX 800 MHz (851–870 MHz) band and the RX 700 MHz band

**900 MHz:** Two VCOs are employed: one to generate the first RX LO and the other to generate the transmit injection signals.

**NOTE:** Refer to [Table 8-1](#), “List of Transceiver Schematics and Board Overlays,” on page 8-1 for a listing of FGU-related schematics that will aid in the following discussion.

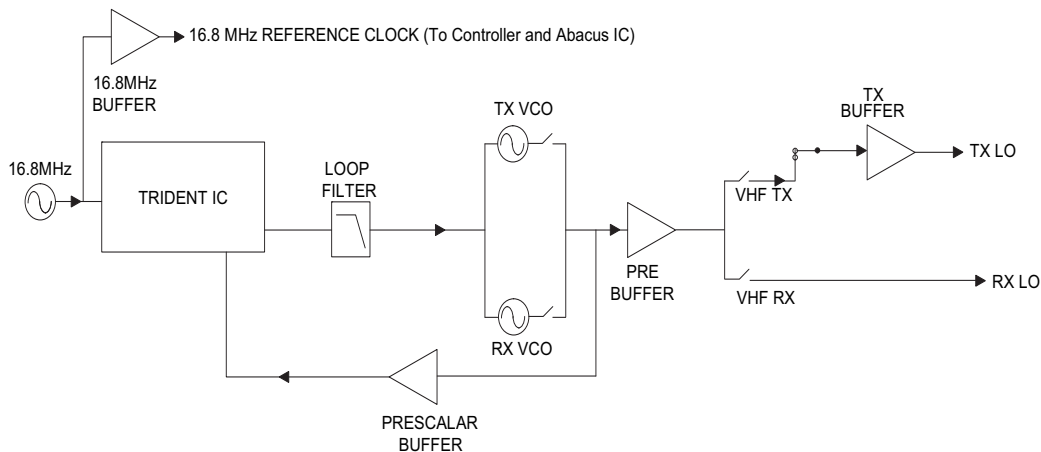


Figure 3-13. Synthesizer Block Diagram (VHF)

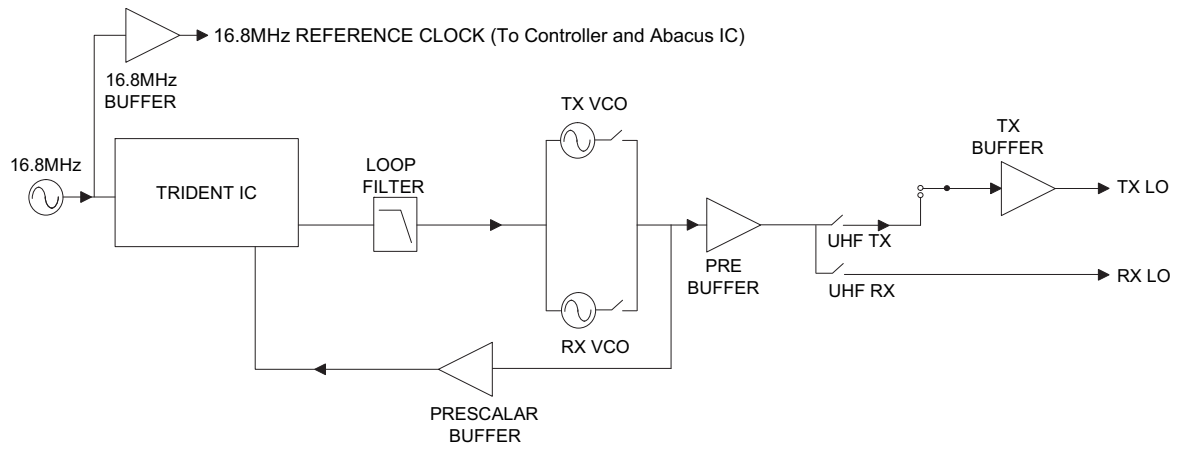


Figure 3-14. Synthesizer Block Diagram (UHF1/UHF2)

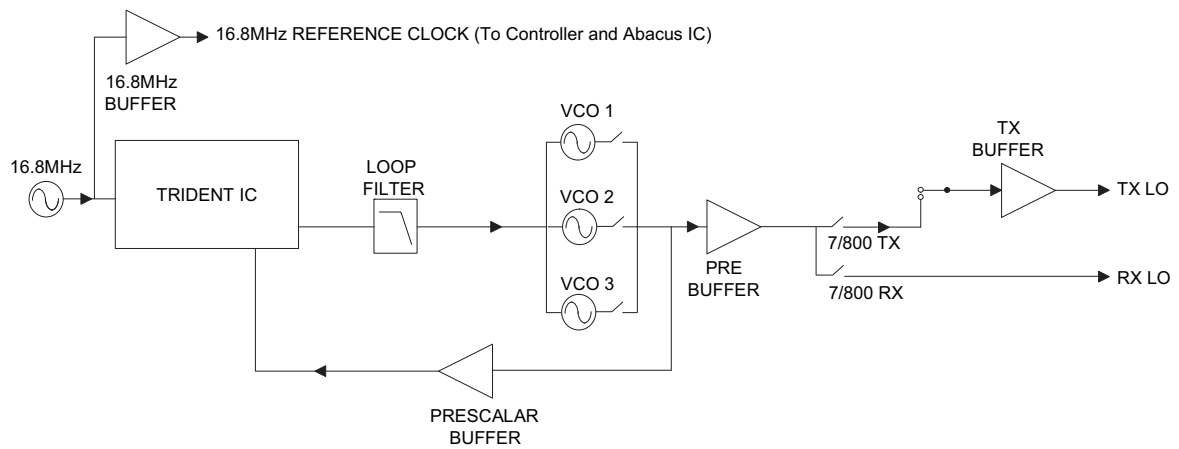


Figure 3-15. Synthesizer Block Diagram (700/800 MHz)

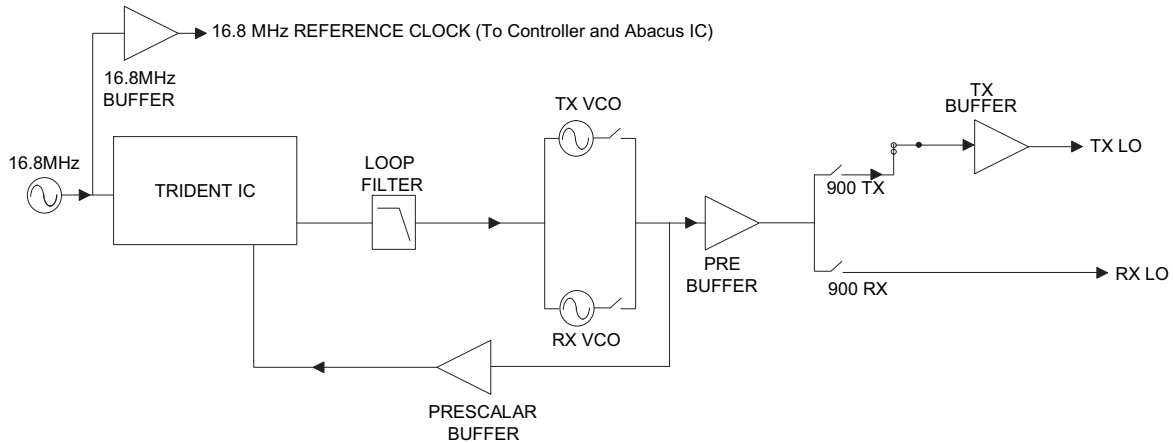


Figure 3-16. Synthesizer Block Diagram (900 MHz)

### 3.1.4.1 Reference Oscillator Y701

The radio's frequency stability and accuracy is derived from the Voltage-Controlled Temperature-Compensated Crystal Oscillator (VCTCXO), Y701. This 16.8 MHz oscillator is controlled by the voltage from the AUX\_DAC pin of the Trident IC, U702, that can be programmed through a serial peripheral interface (SPI). The oscillator output at pin 3 is coupled through capacitor C736 to the Trident IC reference oscillator input. This reference is then passed through an internal buffer and is then coupled to the external BJT buffer (comprised of U746 and supporting circuitry) via C739. These buffers provide isolation for the 16.8 MHz output to the controller circuitry and ABACUS IC. Components L753 and C754 form a low-pass filter to reduce the harmonics of the 16.8 MHz.

### 3.1.4.2 Trident IC U702

The Trident IC, U702, is a multiple protocol, multiple band transceiver Motorola-proprietary, CMOS IC, with built-in dual-port modulation. The Trident IC incorporates frequency division and comparison circuitry to keep the VCO signals stable. The Trident IC is controlled by the MCU through a serial bus. All of the synthesizer circuitry is enclosed in rigid metal cans on the transceiver board to reduce interference effects. Separate power supply inputs are used for the various functional blocks on the IC. Inductors L727, L733, L735, L738 and L741 provide isolation between the IC and the different power supplies. Host control is through a four-wire, smart SPI interface (pins D8, D9, D10 and C11). Some of the Trident IC functions include frequency synthesis, reference clock generation, modulation control, voltage multiplication and filtering, near-integer spurious reduction, RF divide-by-two and auxiliary SPI.

### 3.1.4.3 Synthesizer

Frequency synthesis functions include a low band and high band mode prescaler, a phase detector, a programmable loop divider and its control logic, a charge pump, and a lock detector output. Fractional-N synthesizer principles of operation are covered in detail in the manufacturers' literature. No similar discussion will be attempted here.

### 3.1.4.4 Clocks

U702, pin K5 (REF\_IN), is the 16.8 MHz reference oscillator input from the VCTCXO (Y701).

### 3.1.4.5 Modulation

To support many voice, data, and signaling protocols, APX 2000/ APX 4000/ APX 4000Li/ APX 1000 (900 MHz) radios must modulate the transmitter carrier frequency over a wide audio frequency range, from less than 10 Hz up to more than 6 kHz. The Trident IC supports audio frequencies down to zero Hz by using dual-port modulation. The digital audio signal at pin F11 (TXD) is transferred to the Trident baseband circuitry via the TX Serial Synchronous Interface (SSI) bus. The data is then internally divided into high and low-frequency components, which modify both the synthesizer dividers and the external VCOs through a signal on HP\_MOD\_OUT (pin L9). The DSP scaling is adjusted to achieve a flat modulation frequency response during the transmitter modulation balance calibration.

### 3.1.4.6 Voltage Multiplier and Superfilter

Pins H10 (VMULT2) and H11 (VMULT1) together with diode arrays D722 and D723 and their associated capacitors form the voltage multiplier. The voltage multiplier generates 10.625 Vdc to supply the phase detector and charge-pump output stage at pin F1 (MN\_CP\_VCC). The superfilter is an active filter that provides a low-noise supply for the VCOs. The input is a regulated 5 Vdc from DC\_LIN\_5V at pin K4 (SF\_SPLY). The output is a superfiltered voltage at pin J5 (SF\_OUT).

### 3.1.4.7 Loop Filter

The components connected to pins G3 (MN\_CP) and G2 (MN\_ADAPT\_CP) form a 4th-order, RC low-pass filter. Current from the charge-pump output, MN\_CP, is transformed to voltage VCO\_VCTRL, which modulates the VCOs. Extra current is supplied by MN\_ADAPT\_CP for rapid phase-lock acquisition during frequency changes. The lock detector output pin B4 (TEST1\_LCKDET) goes to a logic "1" to indicate when the phase-lock loop is in lock.

### 3.1.4.8 Buffers and VCOs

Q731 and surrounding circuitry is the prescaler buffer that takes the output of the VCOs and feeds the prescaler input to the Trident IC, pin G1 (M\_PRSC).

Q756 and surrounding circuitry is a buffer that provides the correct drive level to the receiver section (via the transmission line RX\_LO) and to the input to the TX buffer (Q774 and surrounding circuitry). Q745 and surrounding circuitry provide the bias to the buffer. The buffer formed by Q756 and its associated circuitry is called a “pre-buffer” at this stage.

R703, R704 and R707 help provide some extra isolation to the receiver.

Q774 and surrounding circuitry is the transmit injection buffer. The transmit injection buffer provide the correct drive level to the transmitter section (via the transmission line TX\_INJ). Q767 and surrounding circuitry provide the bias to the transmit injection buffer.

**VHF:** The voltage-controlled oscillators are varactor tuned. The voltage (0.3V–10.6V) varies as it is being applied to varactors D3206 to D3209 and D3246 to D3249 of their respective Voltage-Controlled Oscillator (VCO). The capacitance of the varactors also varies, thereby changing the output frequency of the VCOs. Both the VCOs are used to cover the entire 38 MHz bandwidth of the VHF, 136 MHz to 174 MHz band.

- TX VCO covers the transmit frequencies from 136 MHz to 174 MHz
- RX VCO covers the receive Local Oscillator (LO) frequencies from 245.65 MHz to 283.65 MHz

The TX VCO and the RX VCO are selected using GPO1 and GPO2 respectively.

To select the VHF RX VCO, pin E5 (GPO1\_TEST1) must be at a high logic level and pin D5 (GPO2\_TEST2) must be at a low logic level. The output of the RX VCO is then fed to pin 5 (RF2) of switch U3238. The output of U3238 is then split into two signals. One to the Prescaler buffer input and the other to the prebuffer. The output of the prebuffer is then fed to pin 1 (RFC) of U738. The output of U738, pin 5 (RF2) then goes to the attenuator (comprised of R703, R704 and R707) and then fed to the receiver section via the RX\_LO transmission line.

To select the VHF TX VCO, pin D5 (GPO2\_TEST2) must be at a high logic level and pin E5 (GPO1\_TEST1) must be at a low logic level. The output of the TX VCO is then fed to pin 4 (RF1) of switch U3238. The output of U3238 is then split into two signals. One to the Prescaler buffer input and the other to the prebuffer. The output of the prebuffer is then fed to pin 1 (RFC) of U738. The output of U738, pin 4 (RF1) then goes to the transmit injection buffer (comprised of Q774 and surrounding circuitry). The output of the transmit buffer, then goes to the transmit section via the TX\_INJ transmission line.

**UHF1:** The voltage-controlled oscillators are varactor tuned. The voltage (0.3V–10.6V) varies as it is being applied to varactors D3102 to D3105 and D3135 to D3138 of their respective Voltage-Controlled Oscillator (VCO). The capacitance of the varactors also varies, thereby changing the output frequency of the VCOs. Both the VCOs are used to cover the entire 90MHz bandwidth of the UHF range 1, 380 MHz to 470 MHz band.

- TX VCO covers the transmit frequencies from 380 MHz to 470 MHz
- RX VCO covers the receive Local Oscillator (LO) frequencies from 489.65 MHz to 579.65 MHz

The TX VCO and the RX VCO are selected using GPO1 and GPO2 respectively.

To select the UHF RX VCO, pin E5 (GPO1\_TEST1) must be at a high logic level and pin D5 (GPO2\_TEST2) must be at a low logic level. The output of the RX VCO is then fed to pin 5 (RF2) of switch U3001. The output of U3001 is then split into two signals. One to the Prescaler buffer input and the other to the prebuffer. The output of the prebuffer is then fed to pin 1 (RFC) of U738. The output of U738, pin 5 (RF2) then goes to the attenuator (comprised of R703, R704 and R707) and then fed to the receiver section via the RX\_LO transmission line.

To select the UHF TX VCO, pin D5 (GPO2\_TEST2) must be at a high logic level and pin E5 (GPO1\_TEST1) must be at a low logic level. The output of the TX VCO is then fed to pin 4 (RF1) of switch U3001. The output of U3001 is then split into two signals. One to the Prescaler buffer input and the other to the prebuffer. The output of the prebuffer is then fed to pin 1 (RFC) of U738. The output of U738, pin 4 (RF1) then goes to the transmit injection buffer (comprised of Q774 and surrounding circuitry). The output of the transmit buffer, then goes to the transmit section via the TX\_INJ transmission line.

**UHF2:** The voltage-controlled oscillators are varactor tuned. The voltage (0.3V–10.6V) varies as it is being applied to varactors D3102 to D3105 and D3135 to D3138 of their respective Voltage-Controlled Oscillator (VCO). The capacitance of the varactors also varies, thereby changing the output frequency of the VCOs. Both the VCOs are used to cover the entire 70 MHz bandwidth of the UHF range 2, 450 MHz to 520 MHz band.

- TX VCO covers the transmit frequencies from 450 MHz to 520 MHz
- RX VCO covers the receive Local Oscillator (LO) frequencies from 559.65 MHz to 629.65 MHz

To select the UHF2 RX VCO, pin E5 (GPO1\_TEST1) must be at a high logic level and pin D5 (GPO2\_TEST2) must be at a low logic level. The output of the RX VCO is then fed to pin 5 (RF2) of switch U3238. The output of U3238 is then split into two signals. One to the Prescaler buffer input and the other to the prebuffer. The output of the prebuffer is then fed to pin 1 (RFC) of U738. The output of U738, pin 5 (RF2) then goes to the attenuator (comprised of R703, R704 and R707) and then fed to the receiver section via the RX\_LO transmission line.

To select the UHF2 TX VCO, pin D5 (GPO2\_TEST2) must be at a high logic level and pin E5 (GPO1\_TEST1) must be at a low logic level. The output of the TX VCO is then fed to pin 4 (RF1) of switch U3238. The output of U3238 is then split into two signals. One to the Prescaler buffer input and the other to the prebuffer. The output of the prebuffer is then fed to pin 1 (RFC) of U738. The output of U738, pin 4 (RF1) then goes to the transmit injection buffer (comprised of Q774 and surrounding circuitry). The output of the transmit buffer, then goes to the transmit section via the TX\_INJ transmission line.

**700/800 MHz:** The voltage-controlled oscillators are varactor tuned. The voltage (0.3V–10.6V) varies as it is being applied to varactors VR3010 (700MHz), VR3011(700/800 MHz) and VR3048 (800 MHz) of their respective Voltage-Controlled Oscillator (VCO). The capacitance of the varactors also varies, thereby changing the output frequency of the VCOs. Three VCOs are used to cover the entire 700/800 MHz band.

- VCO1 covers the RX 800 MHz band and the TX 700 MHz (764–776 MHz) band
- VCO2 covers the TX 700/800 MHz (794–824 MHz) band
- VCO3 covers the TX 800 MHz (850–870 MHz) band and the RX 700 MHz band

Three VCOs are selected using GPO1, GPO2 and GPO8 respectively.

To select the 700 RX VCO, pin D6 (GPO8) must be at a high logic level and pin E5 (GPO1) and pin D5 (GPO2) must be at a low logic level. The output of the 700 RX VCO is then split into two signals. One to the Prescaler buffer input and the other to the prebuffer input. The output of the prebuffer is then fed to pin 1 (RFC) of U738. The output of U738, pin 5 (RF2) then goes to the pi attenuator (comprised of R703, R704 and R707) and then fed to the receiver section via the RX\_LO transmission line.

To select the 800 RX VCO, pin E5 (GPO1) must be at a high logic level and pin D5 (GPO2) and pin D6 (GPO8) must be at a low logic level. The output of the 800 RX VCO is then split into two signals. One to the Prescaler buffer input and the other to the prebuffer input. The output of the prebuffer is then fed to pin 1 (RFC) of U738. The output of U738, pin 5 (RF2) then goes to the pi attenuator (comprised of R703, R704 and R707) and then fed to the receiver section via the RX\_LO transmission line.

To select the 700 TX VCO, pin E5 (GPO1) must be at a high logic level and pin D5 (GPO2) and pin D6 (GPO8) must be at a low logic level. The output of the 700 TX VCO is then split into two signals. One to the Prescaler buffer input and the other to the prebuffer input. The output of the prebuffer is then fed to pin 1 (RFC) of U738. The output of U738, pin 4 (RF1) then goes to the transmit injection buffer (comprised of Q774 and surrounding circuitry). The output of the transmit buffer, then goes to the transmit section via the TX\_INJ transmission line.

To select the 700/800 MHz TX VCO, pin D5 (GPO2) must be at a high logic level and pin E5 (GPO1) and pin D6 (GPO8) must be at a low logic level. The output of the 700/800 MHz TX VCO is then split into two signals. One to the Prescaler buffer input and the other to the prebuffer input. The output of the prebuffer is then fed to pin 1 (RFC) of U738. The output of U738, pin 4 (RF1) then goes to the transmit injection buffer (comprised of Q774 and surrounding circuitry). The output of the transmit buffer, then goes to the transmit section via the TX\_INJ transmission line.

To select the 800 TX VCO, pin D6 (GPO8) must be at a high logic level and pin E5 (GPO1) and pin D5 (GPO2) must be at a low logic level. The output of the 800 TX VCO is then split into two signals. One to the Prescaler buffer input and the other to the prebuffer input. The output of the prebuffer is then fed to pin 1 (RFC) of U738. The output of U738, pin 4 (RF1) then goes to the transmit injection buffer (comprised of Q774 and surrounding circuitry). The output of the transmit buffer, then goes to the transmit section via the TX\_INJ transmission line.

**900 MHz:** The voltage-controlled oscillators are varactor tuned. The voltage (0.3V–10.6V) varies as it is being applied to varactors VR3006, VR3008, VR3009, VR3010 and VR3011, VR3013, VR3014, VR3048 of their respective Voltage-Controlled Oscillator (VCO). The capacitance of the varactors also varies, thereby changing the output frequency of the VCOs. Both the VCOs are used to cover the entire bandwidth of the 900 MHz, 896–901 MHz and 935–940 MHz for transmitter, 935–940 MHz for receiver.

- TX VCO covers the transmit frequencies from 896 MHz to 941 MHz
- RX VCO covers the receive Local Oscillator (LO) frequencies from 825.35 MHz to 830.35 MHz

The TX VCO and the RX VCO are selected using GPO1 and GPO2 respectively.

To select the 900 MHz RX VCO, pin D5 (GPO1\_TEST2) must be at a high logic level and pin E5 (GPO2\_TEST1) must be at a low logic level. The output of the RX VCO is then split into two signals, one to the Prescaler buffer input and the other to the prebuffer. The output of the prebuffer is then fed to pin 1 (RFC) of U738. The output of U738, with pin A5 (RFSTEPA\_GPO6) at a high logic level, output pin 5 (RF2) is selected and then goes to the attenuator (comprised of R703, R704 and R707) and finally fed to the receiver section via the RX\_LO transmission line.

To select the 900 MHz TX VCO, pin E5 (GPO2\_TEST1) must be at a high logic level and pin D5 (GPO1\_TEST2) must be at a low logic level. The output of the TX VCO is then split into two signals, one to the Prescaler buffer input and the other to the prebuffer. The output of the prebuffer is then fed to pin 1 (RFC) of U738. The output of U738, with pin A5 (RFSTEPA\_GPO6) at a low logic level, pin 4 (RF1) is selected and then goes to the transmit injection buffer (comprised of Q774 and surrounding circuitry). The output of the transmit buffer, then goes to the transmit section via the TX\_INJ transmission line.



## 3.2 Controller

### 3.2.1 Controller Overview

This section provides a detailed circuit description of the APX 2000/ APX 4000/ APX 4000Li/ APX 1000 (900 MHz) controller design. The controller design consists of the following board and flexes:

#### Printed Circuit Boards

- Main Board
- Keypad Board

#### Flexes

- GCAI (Global Core Accessory Interface) (BT Antenna/TX/RX LED)
- Side Controls
- Backkit (keypad and mainboard)
- Frontkit (audio/speaker/knob/front display)
- Mic

The controller interconnection diagram (Figure 3-17.) shows the various physical components of the design, along with how they are all connected. It also shows the key distinguishes between a flex connection and a board-to-board connection. A brief description of each of the components is provided below.

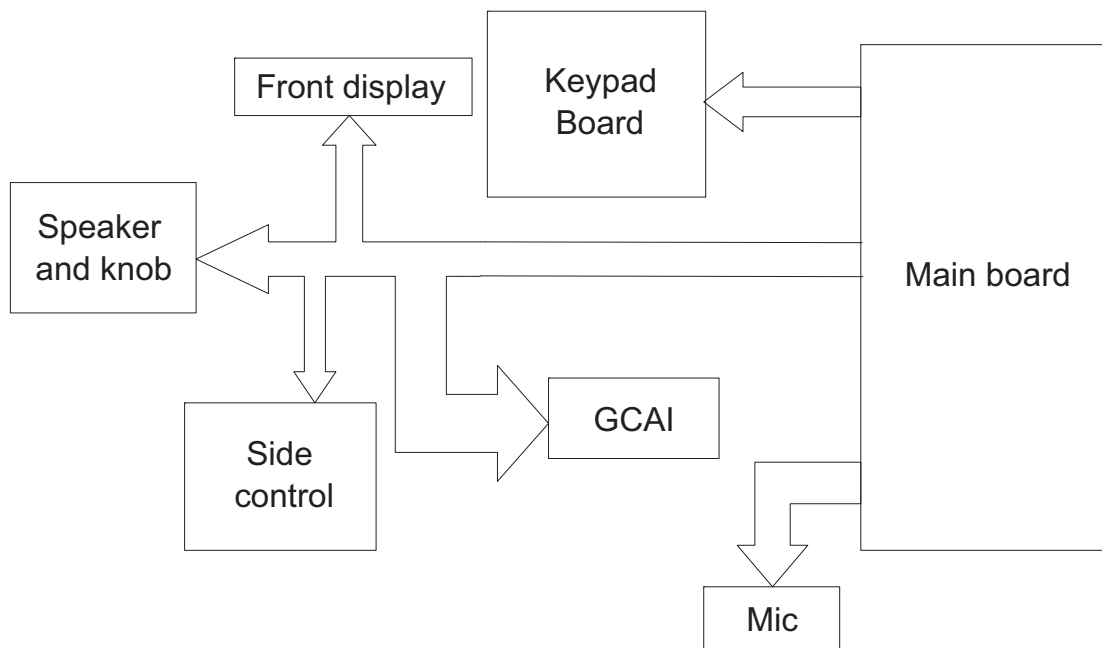


Figure 3-17. Controller Interconnection Diagram

### 3.2.1.1 Main Controller Components and Connections

#### 3.2.1.1.1 Main Board Controller section

The controller section contains the Class D internal audio power amplifier, OMAP1710 dual-core processor, FLASH and SDRAM memory, Audio circuitry (MAKO and CODEC IC's), a Complex Programmable Logic Device (CPLD), and interfaces to the other components in the controller design.

##### **Connectors**

- Keypad – J2301, J2302

#### 3.2.1.1.2 Keypad Board

The keypad board contains the AVR controller IC for Bluetooth 2.1 and support circuitry, a 3-axes digital accelerometer, a Type III encryption IC, and connector interfaces to the frontkit flex. The keypad board features a 3x2 Menu keypad with 4-way navigation button, a 3x4 alphanumeric keypad, or a 3x1 Menu keypad.

##### **Connectors**

- Main Board – P2001, P1000
- Frontkit flex – P2000

#### 3.2.1.1.3 GCAI Flex

The GCAI flex contains a Bluetooth antenna, Audio Mic, TX/RX LED that is solid amber upon receive, red on PTT and blinking amber on receive, status LED, and audio mic and a connector to interface with the frontkit flex. The flex comes with components for ESD protection. For APX 2000/ APX 4000 (Two Knobs), the GCAI flex also contains connector to E-Button flex.

### 3.2.1.2 Front kit Flex

APX 2000/ APX 4000/ APX 4000Li: The front kit contains a speaker, multifunction rotary knob, connectors to the front display, GCAI flex, side control flex and keypad board. The multifunction rotary knob is used for ON/OFF volume and channel/frequency.

APX 2000/ APX 4000 (Two Knobs): The front kit contains a speaker, an On/Off & Volume Knob, a 16-position Channel/Frequency Switch, connectors to the front display, GCAI flex, side control flex and keypad board.

#### 3.2.1.2.1 Front Display

The Front Display is a TFT transfective color LCD, 160 pixels x 90 pixels with a white backlight. The display connects through a flex directly to a 22-pin connector located on the frontkit flex.

#### 3.2.1.2.2 Data-Side Microphone

The data-side microphone is mounted on the front chassis and connects directly to the Main board through a set of pogo pins mounted on the Main board.

#### 3.2.1.2.3 Side Controls Flex

The side controls flex contains the PTT, Side Top button, Side Middle button and Side Bottom button. The flex connects to the frontkit flex through a 10-pin connector.

#### 3.2.1.2.4 Audio-Side Microphone, Speaker, and Bluetooth Antenna

The audio-side microphone and Bluetooth antenna is located on the GCAI flex and connected to Frontkit flex. The speaker assembly is located on the Frontkit flex.

### 3.2.1.2.5 E-Button Flex

The E-button flex contains a toggle switch for Emergency Calling and connector to GCAI flex.

### 3.2.1.3 Controller Electrical Architecture

An overview of the Controller electrical architecture is shown in [Figure 3-18](#) below. The major components and electrical interfaces are shown.

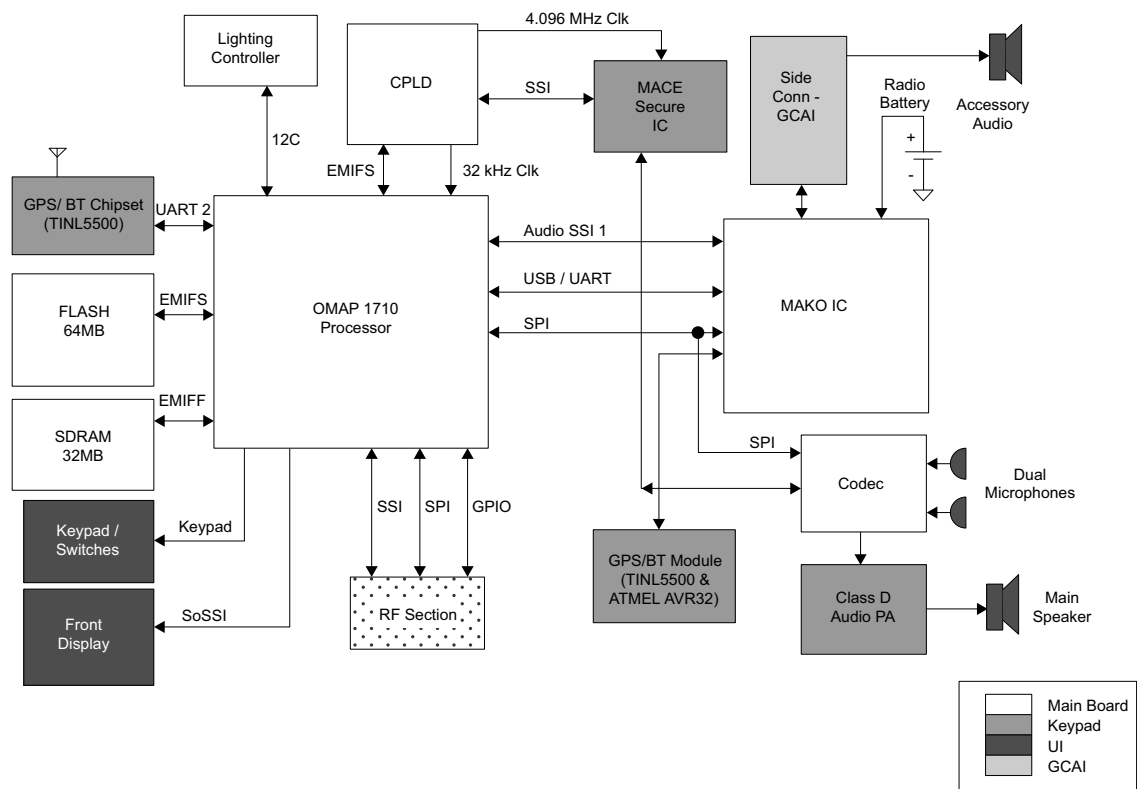


Figure 3-18. Controller Electrical Overview

The functional blocks of the controller are:

- DC Distribution
- Clock Sources
- Processor / Memory
- CPLD
- Audio – Internal and External
- MAKO
- User Interfaces

### 3.2.2 DC Distribution

SW\_B+ supply comes from a pass FET (Q6501) that is powered by UNSW\_B+ (battery voltage). The FET is activated once the power switch is in its on position. SW\_B+ supplies the power for the entire controller. SW\_B+ supplies MAKO and the external regulators. MAKO and the external regulators then regulate the voltage to the desired level. (See Figure 3-19.)

OMAP's core is supplied by VCC\_SW\_1.4 (U6507). 1.85 LDO supplies OMAP's IO, FLASH, CPLD, DDR, and MACE. See Table 3-2 for DC supplies and sources.

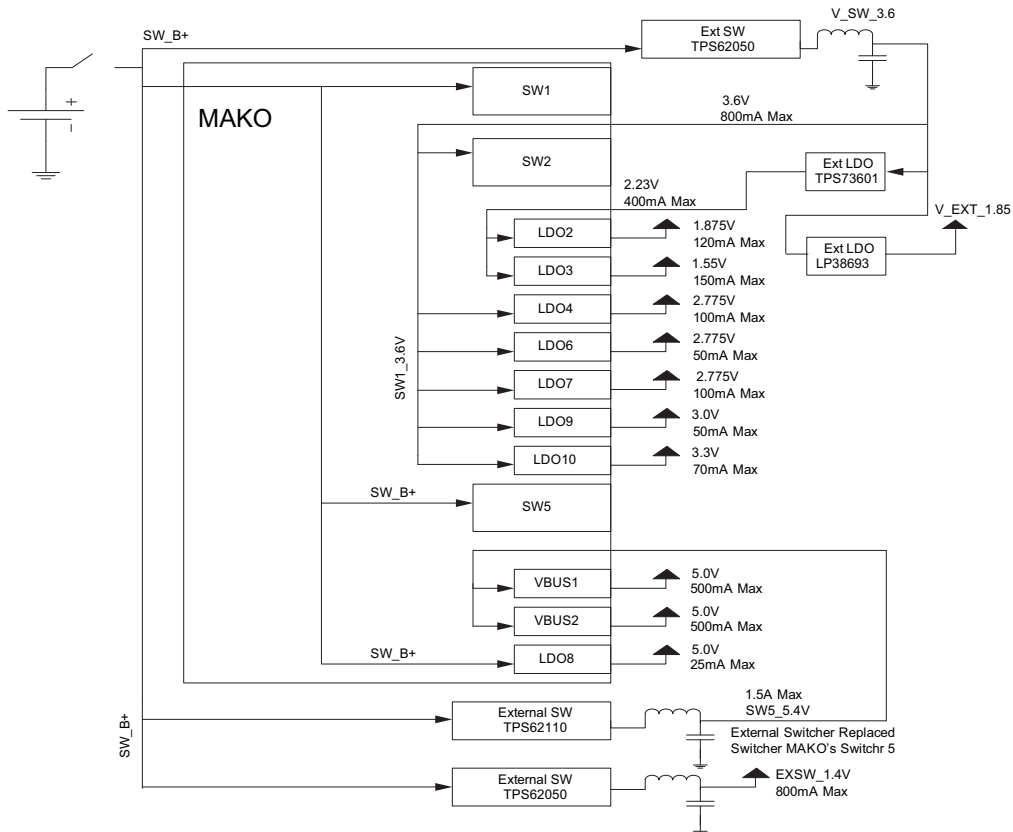


Figure 3-19. Controller DC Block Diagram

Table 3-2. DC Supplies and Sources for Controller

	V_SW_3.60	V_SW_1.4	V_EXT_1.85	V_SW_5	VBUS1	VBUS2	V_1.875	V_2.75D	V_2.775	V_3.0A	SW_B+
OMAP CORE		X									
OMAP IO			X								
DDR			X								
FLASH			X								
CPLD			X								
MACE			X								
CODEC							X			X	
GPS	X										
MAKO	X								X		X
CLASS D PA				X							
FRNT DSPLY			X					X			
USB SPLY						X					
16.8 SQR								X			

### 3.2.2.1 DC Distribution Major Components

The controller's DC section is made up of MAKO and external regulators. This section will give an overview of the schematics and circuitry that makes up the major supplies of the DC architecture.

#### 3.2.2.1.1 MAKO

MAKO (U6501) is a custom power management IC manufactured by Atmel. MAKO controls almost all of the LDO supplies to the controller. [Table 3-3](#) illustrates all of MAKO's LDO and the supplies that feed them. [Figure 3-19](#) shows all of MAKO's LDOs their voltage level and components that can be accessed to verify operation. [Figure 3-19](#) also shows where the battery supply and on off switch can be accessed. MAKO is also responsible for the timing sequence for the enabling of the regulators which is discussed further in [section 3.1.3.7.1](#) and [section 3.1.3.7.3](#).

Table 3-3. MAKO's LDO and Supplies

Name	Ref	Description	Level
ON_OFF_SWITCH*	MAKO_IGN_X	ON/OFF Switch. Radio on when GND	GND
ON_OFF_SWITCH**	MECH_SW	ON/OFF Switch. Radio on when GND	GND
UNSW_B+	F_UNSW_B+	Radio Battery Voltage	6–9V
SW_B+	C6593	Radio Supply Voltage	6–9 V
V_SAVE	C6538	LDO Output Present When Battery is Attached	2.5 V
V_1.875	C6581	LDO Output	1.875 V
V_1.55	R6561	LDO Output	1.55 V
V_2.775D	R6563	LDO Output	2.775 V
V_2.775_EXP	R6562	LDO Output	2.775 V
V_2.8_RF	R6564	LDO Output	2.8 V
V_5.0A	R6565	LDO Output	5.0 V
V_3.3	R6566	LDO Output	3.3 V
V_3.0A	R6567	LDO Output	3.0 V
<b>Note:</b> * = Not applicable to APX 2000/ APX 4000 (Two Knobs). ** = Applicable to APX 2000/ APX 4000 (Two Knobs) only.			

## 3.2.2.1.2 External Regulators: V\_SW\_1.4, V\_SW\_3.60

The controller board contains two TPS62050 regulators in order to regulate voltages of 1.4V and 3.6V. The TPS62050 is a synchronous step-down adjustable regulator. The switching regulator is capable of sourcing 800mA. Its output can be adjusted by using a voltage divider tied to the feedback pin. The regulators are powered from SW\_B+. [Figure 3-20](#) is the schematic for the V\_SW\_1.4 regulator. [Figure 3-20](#) illustrates the supporting circuitry for the TPS62050.

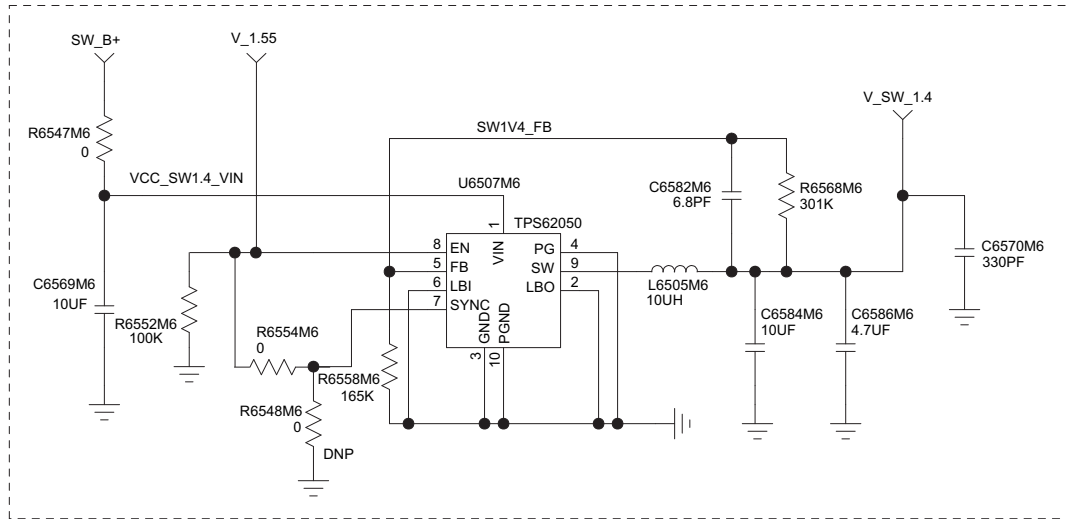


Figure 3-20. V\_SW\_1.4 Switched Power Supply

3.2.2.1.3 External Switcher 5

The controller board uses an external TI regulator (TPS62110, U6505) to regulate to 5.4V. The TPS62110 is a 1.5A capable synchronous step down converter. The output is adjusted using a voltage divider to the feedback pin. The regulator is powered from SW\_B+. Figure 3-21 illustrates the SW5 circuitry. The SW5 circuit also includes or-gate logic that facilitates implementation of current saving PFM mode when the radio is in standby mode.

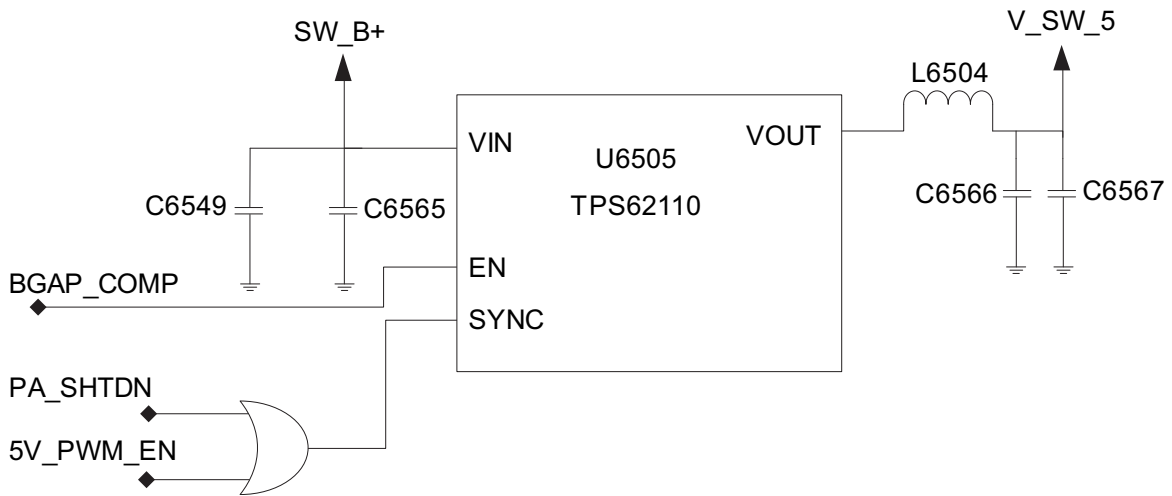


Figure 3-21. 5V Switched Power Supply

APX 2000/ APX 4000/ APX 4000Li/ APX 1000 (900 MHz) has Pulse Switching option.  
 Mode 1: Pulse Frequency Modulation (PFM). A relatively noisy but highly efficient pulsing mode for Switched power supplies.  
 Mode 2: Pulse Width Modulation (PWM). Pulsing mode that is cleaner than PFM, used when risk of RF interference is present which includes both transmit and receive radio modes.

Table 3-4. Pulse Switching Combination

PA_SHTDN	5V_PWM_EN	SYN	MODE
0	0	0	PFM
0	1	1	PWM
1	0	1	PWM
1	1	1	PWM



### 3.2.2.1.4 Power-up Timing

The powering up of the radio starts with the MAKO. Once the radio knob is pressed to 'ON' and battery voltage is supplied, a pass FET is activated to deliver battery voltage to MAKO and external regulators. The external 3.6 V is first turned on then MAKO activates its 24.576 MHz clock, and the remaining regulators begin to turn on. Once all the regulators have turned on, MAKO releases its reset. The CPLD is then powered on from the 1.875 V external regulator and takes MAKO 24.576 MHz clock and divides it to 32.768 kHz in order to provide for OMAP. OMAP starts to power up upon receiving voltages 1.4 V, 1.85 V, and the 32.768 kHz clock. OMAP then activates its 12 MHz clock and releases its reset. It then starts to run the boot loader stored in flash. A more detailed timing view of the regulators is shown in [Figure 3-22](#).

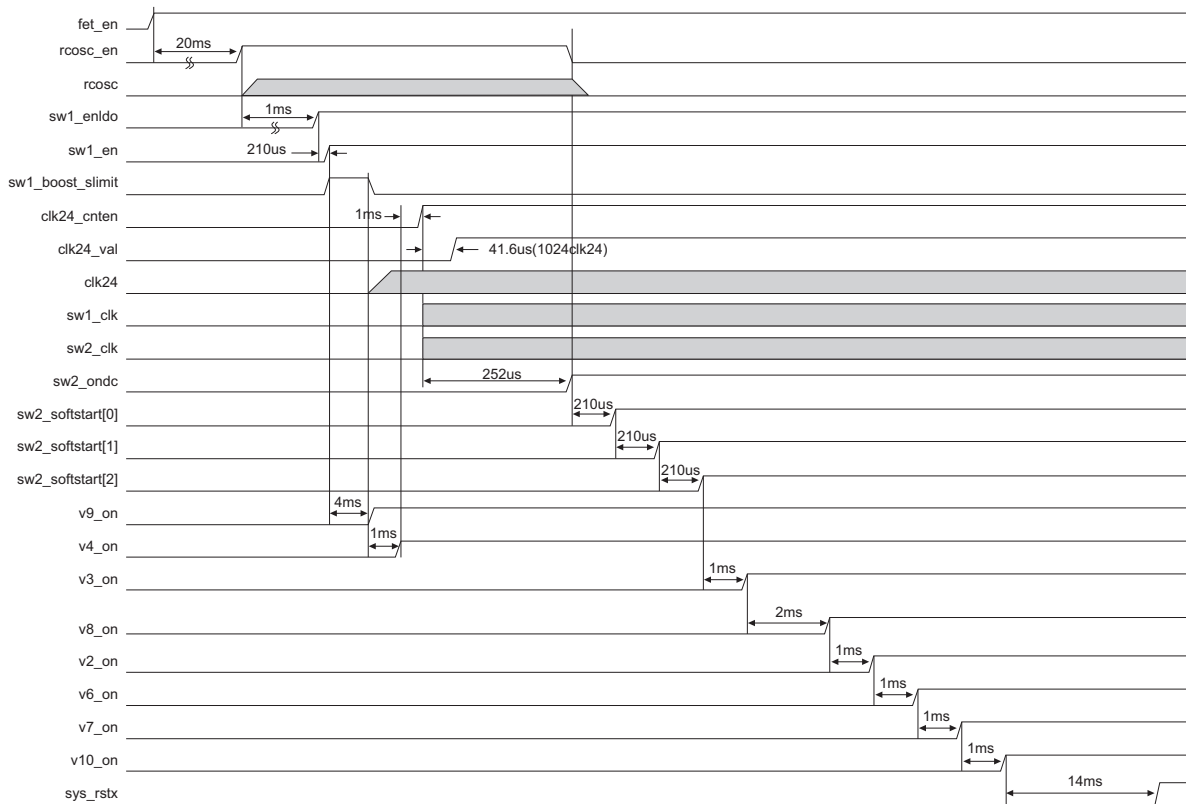


Figure 3-22. Power-up Timing Regulators

### 3.2.3 Clock Sources

The main board and keypad board contains multiple crystal clock sources. These sources are active upon power-up. The controller receives a 16.8 MHz sine wave from the RF section, which is shaped into square wave and fed to the OMAP timer input. Screen shots and test points for these clock signals are shown in [Chapter 6](#).

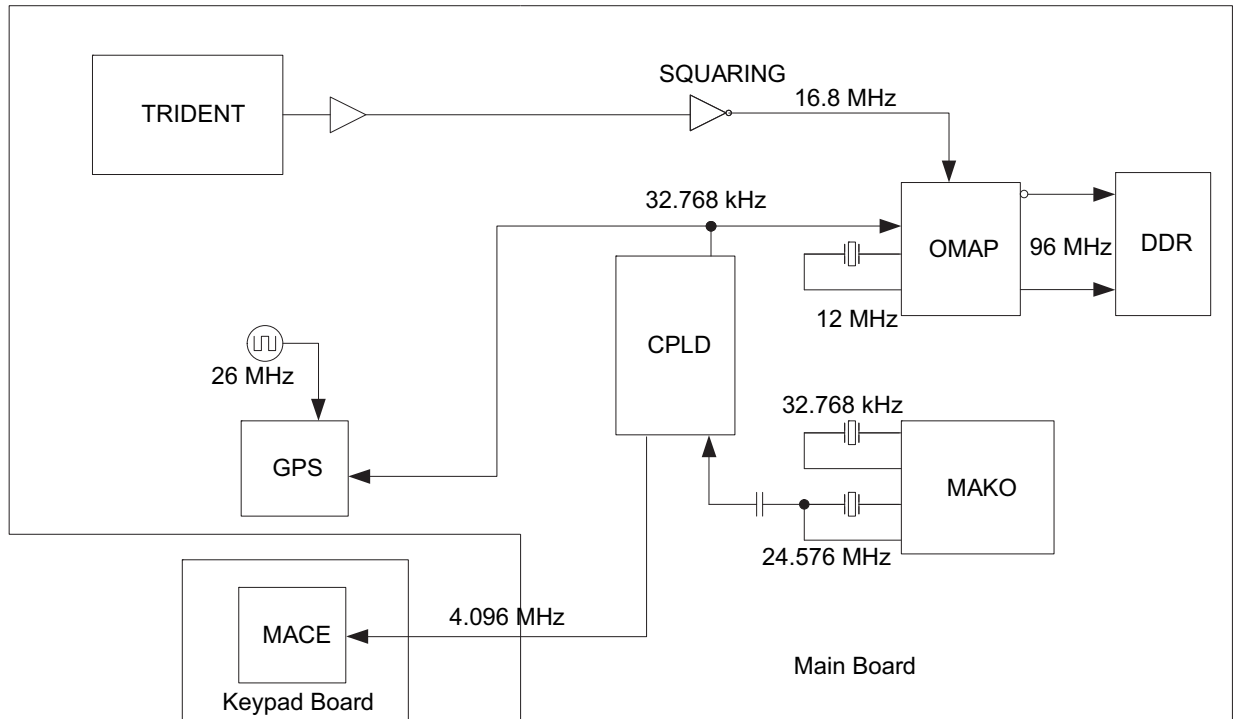


Figure 3-23. Controller Clock Architecture

Table 3-5. Controller Clock Distribution

Clock Source	Frequency	Type	Description	Clock Recipient	Suggested Probe Points
Y6501	24.576 MHz	Crystal Oscillator	MAKO 24 MHz & tapped into CPLD	U6501, U6101	R6574
Y6502	32.768 kHz	Crystal Oscillator	MAKO RTC	U6501	C6541
Y6601	12 MHz	Crystal Oscillator	OMAP CPU Clock	U6302	C6601
U6302	96 MHz	OMAP GPIO	DDR Clocks (Complementary signals)	U6301	TP6307 & TP6308
U6101	4.096 MHz	CPLD GPIO	MACE Clock	U2510 (to Keypad Board)	R6113
U6101	32.768 kHz	CPLD GPIO	OMAP Boot-Up clock & GPS/ Bluetooth digital clock	U6302 & U2401 (Keypad Board)	R6114 (GPS/BT) & R6115 (OMAP)
Y701 (RF board)	16.8 MHz	Crystal Oscillator	RF Frequency Synthesizer IC (Trident) TCXO	U6302	R6218

### 3.2.4 OMAP Processor and Memory

#### 3.2.4.1 OMAP Processor (U6302)

The OMAP1710 dual core processor lies at the center of the controller design. The processor features utilized in the controller design include:

- ARM9 CPU core
- C55X DSP core
- 16KB shared internal RAM
- SSI Interfaces
- USB Interfaces
- Timers & Watchdog Timers
- Keyboard Matrix Interface
- 1-Wire Interface
- LCD Controller
- I2C Interface
- SPI interface
- External Memory Synchronous Interface
- External Memory Asynchronous Interface
- UARTs
- GPIOs

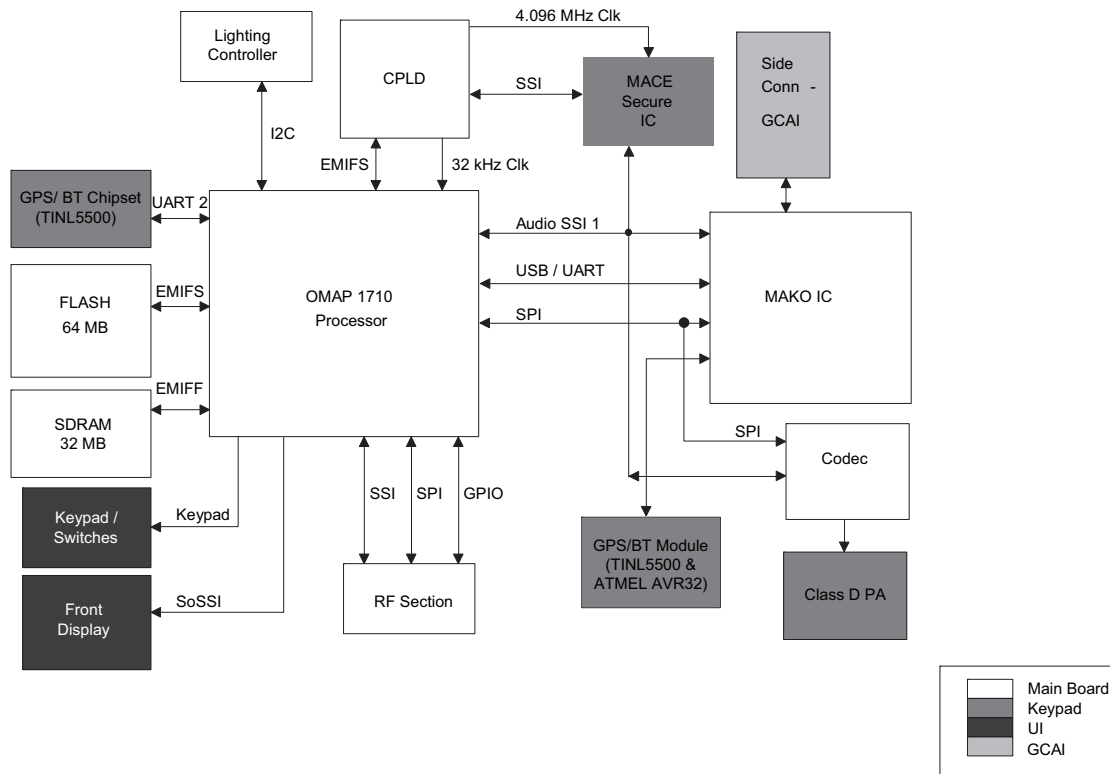


Figure 3-24. Overview of OMAP Interconnection with Controller Peripherals

### 3.2.4.2 Memory

In addition to the internal RAM, the OMAP 1710 Processor (U6302) features three distinct external memory interfaces. All memory devices are located on the main board, as elaborated in Figure 3-24. The external memory interface is shown in Figure 3-25.

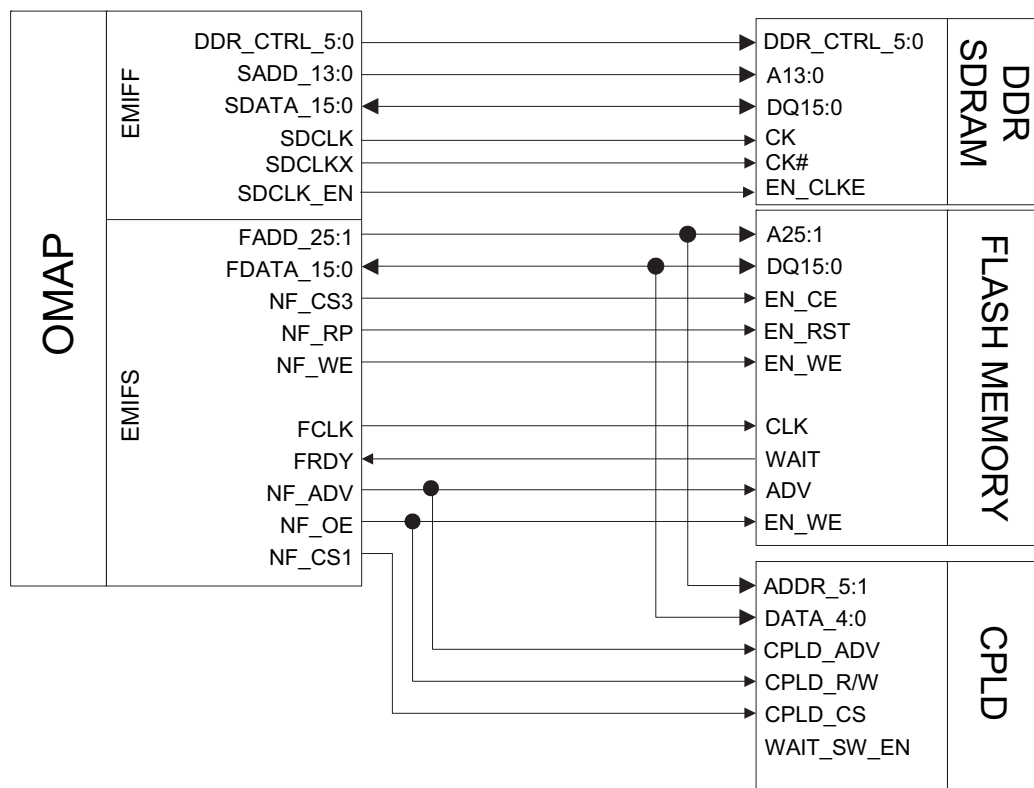


Figure 3-25. OMAP Memory Interface

### 3.2.4.3 Asynchronous External Memory Interface

The EMIFS is used for transferring data between the ARM or DSP cores and the 64 MB External NOR Flash memory (U6304). The Flash memory is a non-volatile memory unit, primarily used to store the radio's executable code, along with device configuration values, event logs, and initialization codes. The flash memory is primarily accessed during the main board's power up and power down cycles.

### 3.2.4.4 Flash Memory (6304)

The Flash memory located in close proximity to the OMAP processor is a 64 MB Numonyx 65nm StrataFlash. The flash interface uses 16 data bits and 25 address bits. The flash IC is enabled by OMAP processor's CS3 line. The flash IC also features a WAIT line that is capable of halting data flow between the processor and flash IC while operating in synchronous read mode.

### 3.2.4.5 CPLD Interface (U6101)

The CPLD (U6101) registers are also mapped to the Asynchronous External Memory Interface. These registers control the CPLD GPIO pins and enable the OMAP to expand its GPIO capability via memory mapped IO.

### 3.2.4.6 Synchronous External Memory Interface

This interfaces the OMAP to a 32 MB Double Data Rate (DDR) RAM IC (U6301). Upon boot-up OMAP configures this interface to operate in synchronous mode at 96 MHz. This volatile memory unit is primarily accessed during code execution.

### 3.2.4.7 Double Data Rate (DDR) Memory (U6301)

The 32MB DDR Synchronous DRAM IC is interfaced to the OMAP using 13 address bits and a 16bit data bus. The DDR IC is driven by a complementary clock signal originating from the OMAP IC. The DDR clock is initialized to 96 MHz by the OMAP boot code. Additional control signals are also dedicated for the DRAM interface.

### 3.2.4.8 Peripheral Devices

The OMAP processor is equipped with multiple buses and interfaces that are configured for peripheral interconnection.

#### 3.2.4.8.1 Receive and Transmit SSI

These two interfaces are dedicated for communicating with the RF deck digital interface, carrying receive and transmit base band signals. The OMAP processor generates the clock and FSYNC signals for the receive SSI interface. The RF deck generates these signals for the transmit SSI interface.

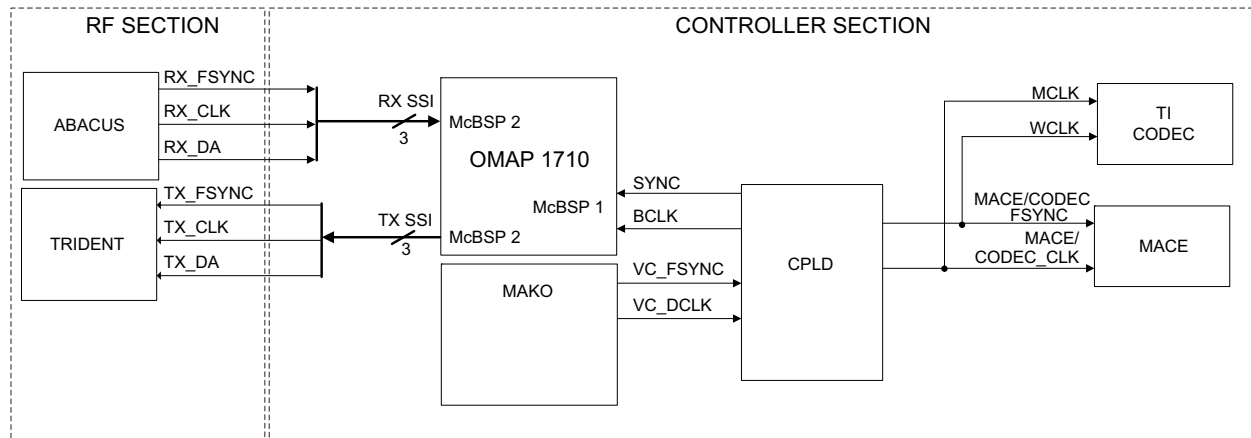


Figure 3-26. RX/ TX SSI Configuration

#### 3.2.4.8.2 Audio SSI

OMAP's McBSP1 interface is configured as a SSI interface dedicated to carry transmit and receive audio data to peripheral devices. The peripherals connected to this bus include MAKO, Audio CODEC, MACE and CPLD. The bus also connects to the keypad board. MAKO generates the clock and frame sync signals for this bus.

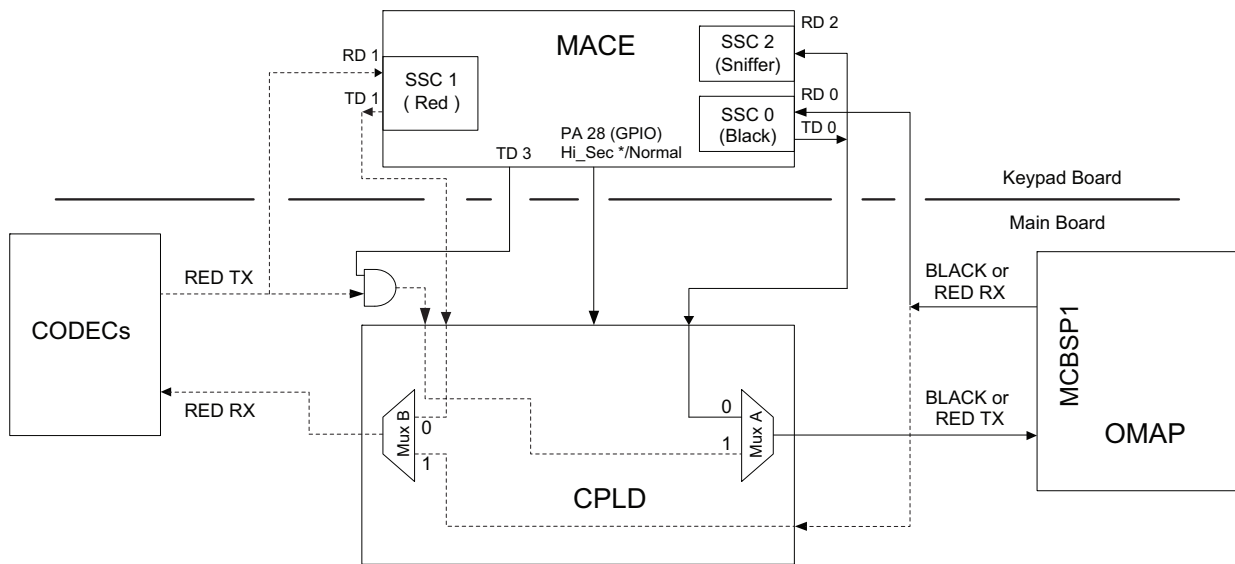


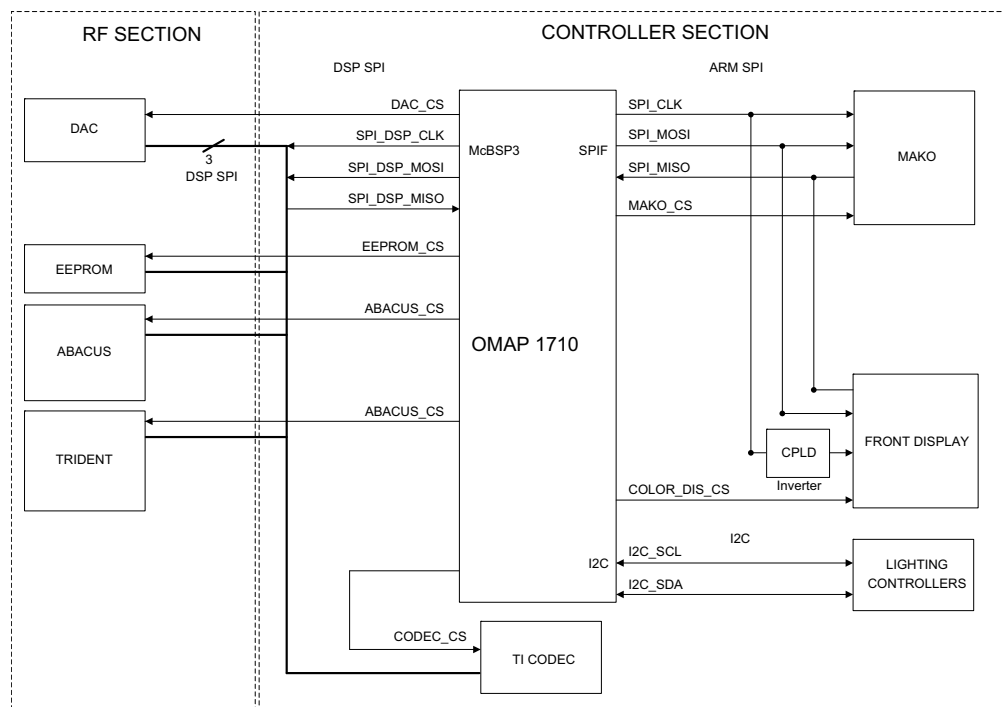
Figure 3-27. Audio SSI Configuration

### 3.2.4.8.3 ARM SPI

This SPI interface is controlled by OMAP's ARM core. Devices connected to this bus include MAKO, display controllers and the audio CODEC.

### 3.2.4.8.4 DSP SPI

This SPI interface is controlled by the DSP core of the OMAP processor. This bus is used to configure and control devices on the RF deck.



*Figure 3-28. SPI and I2C Configuration*

#### 3.2.4.8.5 1-Wire

The OMAP's 1-wire line is available on the Main Board Connector J2302 pin 19. The signal is routed through the back kit flex, keypad, front kit flex and GCAI flex.

#### 3.2.4.8.6 USB

The OMAP CPU's USB port is routed to the side connector via J2302. The USB signals on the side connector are illustrated in [Figure 3-24](#).

#### 3.2.4.8.7 UARTs

Two of OMAP's UARTs are configured for peripheral interfacing.

The four-wire UART1, which is capable of hardware flow control, is available on the side connector for accessory devices. The signals are level translated via MAKO and routed to the side connector via J2302.

OMAP's UART2, which is a two wire interface, capable of software flow control only, is connected to the GPS receiver IC on the Main board.

#### 3.2.4.8.8 CPLD (U6101)

The CoolRunner IC is a complex programmable logic device (CPLD) programmed specifically for the APX product line. The CoolRunner IC is flash based and comes pre-programmed. It is contained in an 8x8mm, 132 BGA package with 0.5mm ball spacing. The primary functions of the CPLD are clock generation, GPIO expansion, SSI clock and frame sync direction control, F2 multiplexing, secure data control, main display off-loading, and clock inversion.

An external linear regulator, U6508, supplies the CPLD's 1.875 V core voltage. The 1.875 V core voltage is used for the CPLD's internal logic and I/O buffers. MAKO's 24.576 MHz clock source is used by the CPLD to generate a 32.768 kHz clock for OMAP booting, real time clock/timer, and for GPS. It is also used to generate 4.096 MHz for the MACE IC.

The CPLD is controlled through OMAP's EMIFS interface. It supports 31 configurable GPIOs. It also supports 20 input only pins that are accessible through an EMIFS read operation. Some of the GPIOs supported by the CPLD include GCAI\_GPIO\_0, F2\_PARAMP\_MON, and USB\_CURR\_LIM. Some examples of the inputs the CPLD is programmed to support are some of the top and side controls buttons (MON, SIDE\_1 and SIDE\_2) and board ID.

[Figure 3-29](#) below shows the basic CPLD interfaces.



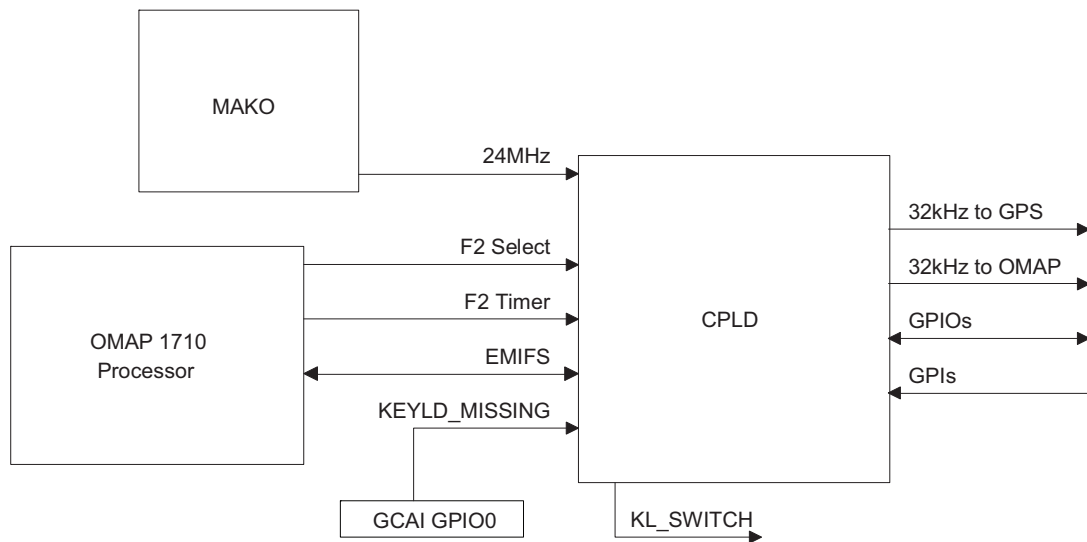


Figure 3-29. CPLD Block Diagram

### 3.2.5 Audio

The audio section of the Controller design consists of:

- TI AIC33 voice CODEC
- TI TPA2034D1 class-D audio power amplifier
- MAKO audio sub-block

#### 3.2.5.1 TX Audio path

The TX audio paths begin with three microphones. There are two internal microphones and one external microphone path going to the GCAI connector.

The internal microphone paths start with two microphones that are embedded within the radio. Both of the microphones are biased with a 4.7 V supply that is generated by the MAKO IC. This supply is solely dedicated to biasing the microphones. The microphone signals are AC coupled into the 16 bit TI AIC33 stereo CODEC on the MIC3R and MIC3L input pins. The TI AIC33 CODEC allows both microphone signals to be amplified, and simultaneously sampled and converted into digital data. The data is sent to the OMAP1710's DSP through the McBSP1 port where the DINC (dual input noise canceller) can process the data for both microphones and provide a high level of noise suppression. The digital data is sent to the OMAP1710 through the audio SSI (synchronous serial interface) bus where the MAKO IC is used as the interface's clock and frame sync generator.

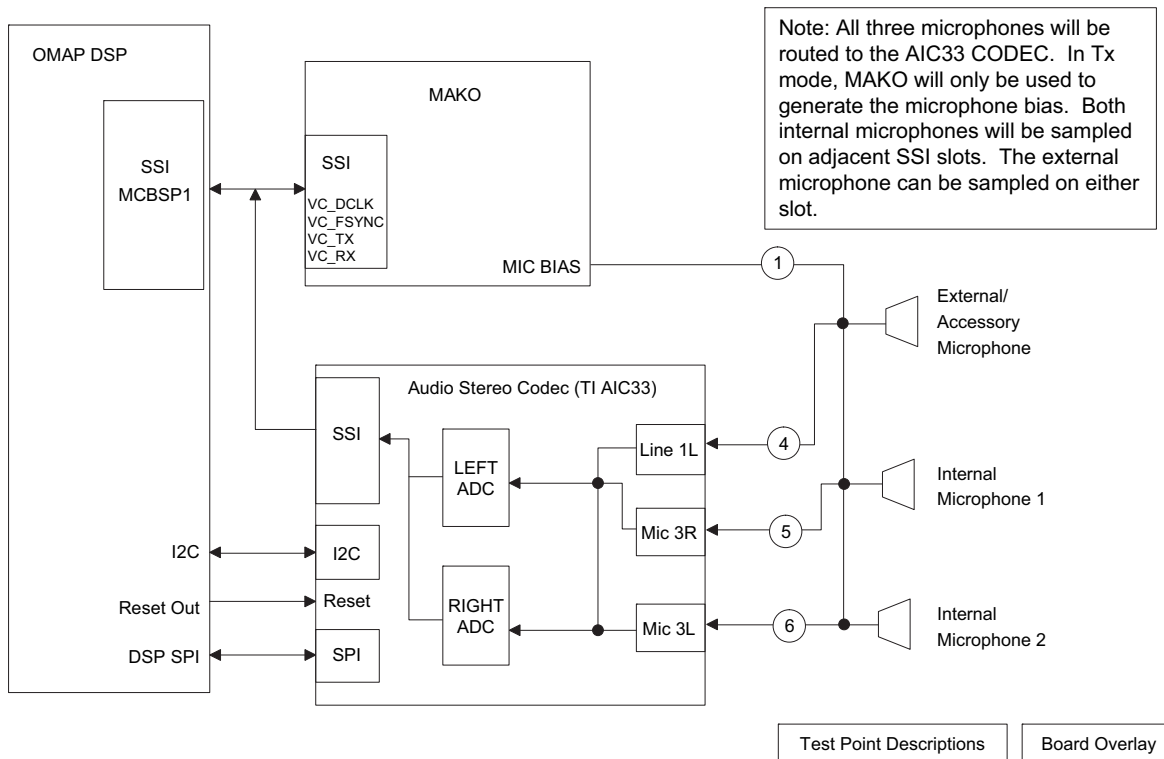


Figure 3-30. Audio TX Path Block Diagram

The external microphone path will also be supported by the TI AIC33 CODEC, using the LINE1LP pin on the IC. The LINE1LP is multiplexed with the MIC3R within the CODEC, and selected as the input when the external microphone path is chosen as the TX audio source. Similar to the internal microphone signals, the TI CODEC amplifies and samples the external microphone signal. The digital data is also sent to the OMAP1710's DSP through the McBSP1 port using the audio SSI bus.

### 3.2.5.2 RX Audio path

The RX audio path supports two internal speakers and one external speaker.

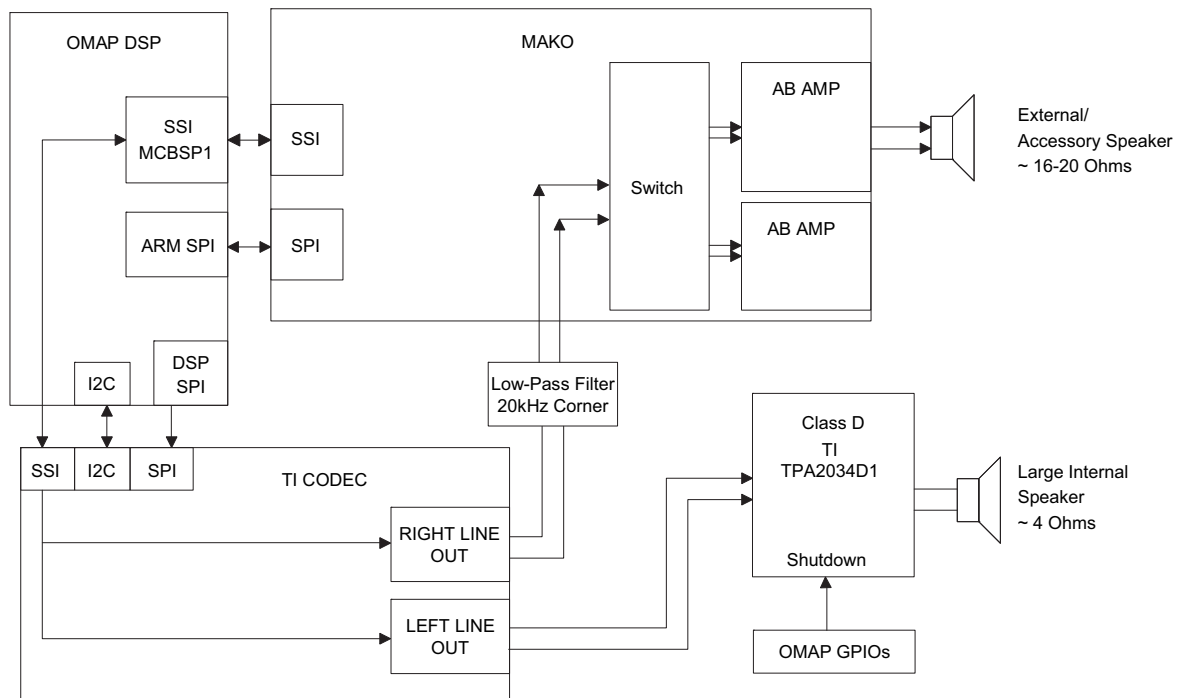


Figure 3-31. RX Audio Path Block Diagram

The RX internal audio path begins with the digital audio samples being sent from the OMAP1710's McBSP1 port to the TI AIC33 CODEC through the audio SSI bus. As in the TX audio paths, the MAKO IC is also used to generate the clock and frame sync for the audio SSI bus. Once the audio data is received by the TI CODEC, the CODEC proceeds to convert the data to analog and implements the volume control. The analog signal in the CODEC is then fully differential and gets sent out to the power amplifier through pins LEFT\_LOP and LEFT\_LOM. The TI TPA2034D1 Class D audio power amplifier accepts a fully differential analog input signal and will also drive a 4 Ohm loudspeaker differentially.

The external speaker path is almost identical to the internal speaker path. The digital audio data is sent from the OMAP1710's McBSP1 port to the TI AIC33 CODEC for digital to analog conversion and volume control. The external speaker path uses the MAKO IC's class-AB audio power amplifier to drive 16 Ohm to 28 Ohm external speakers. The input to MAKO IC's audio power amplifier is fully differential and comes from the TI CODEC's RIGHT\_LOP and RIGHT\_LOM. The output of the MAKO IC's audio amplifier is also fully differential and available on pins EXT\_SPKR\_P and EXT\_SPKR\_M.

## 3.2.6 User Interface

### 3.2.6.1 Top Control

#### 3.2.6.1.1 APX 2000/ APX 4000/ APX 4000Li

The Top Control contains a multifunction knob functioning as ON/OFF switch, Volume and channel switch, and an emergency button. The Top Control also includes a TX/RX LED that is solid amber upon receive, red on PTT, and blinks amber on secure RX and a status LED. The Top Control components are mounted on flex except the emergency button which connects to the Main board connector J2302.

When the On/Off switch is pressed, the switch is grounded and IGN\_X is pulled low. IGN\_X is an input to MAKO (U6501). The logic low input enables an external FET (Q6501) gate voltage, FET\_ENX, which switches UN\_SW\_B+ to SW\_B+ and turns the radio on. The volume and channel switch is controlled by the multifunction knob. The knob is biased by 1.85V through R2 and R3 on the Front kit flex. When the knob is rotated, the signals are converted to binary code and are ready by OMAP through RSW\_A, RSW\_B and RSW\_INT. Pressing the knob once and rotating the knob will change the volume.

The orange programmable Top Button (S1) is typically used for emergency. It is also biased to 1.875 V (R6507) and is an input (EMERG\_BTN\_X) to the CPLD. A button press is detected when EMERG\_BTN\_X is pulled low.

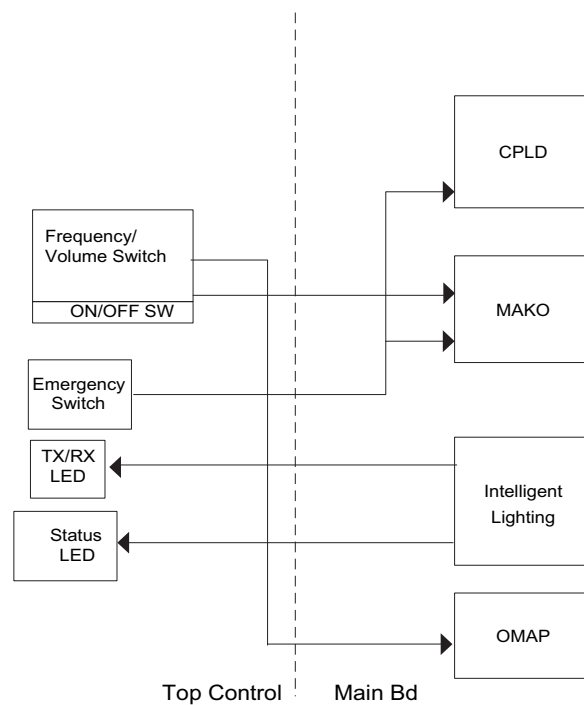


Figure 3-32. Control Top Block Diagram (APX 2000/ APX 4000/ APX 4000Li/ APX 1000 (900 MHz))

## 3.2.6.1.2 APX 2000/ APX 4000 (Two Knobs)

The Top Control contains an On/Off & Volume Knob, a sixteen-position Channel/Frequency Switch, and an emergency button. The Top Control also includes a TX/RX LED that is solid amber upon receive, red on PTT, and blinks amber on secure RX and a status LED. The Top Control components are mounted on flex.

When the On/Off & Volume Knob(S3) is switched to the 'ON' position, the switch is grounded and MECH\_SW is pulled low. MECH\_SW is an input to MAKO (U6501). The logic low input enables an external FET (Q6501) gate voltage, FET\_ENX, which switches UN\_SW\_B+ to SW\_B+ and turns the radio on. Volume is also controlled through S3 and is an input to MAKO. The VOL signal is connected to a potentiometer biased between ground and 2.775 V (R246) from MAKO. When the volume knob is turned, the VOL signal level is converted to a code word by MAKO's ADC and read by OMAP through SPI.

The orange programmable Top Button (S1) is typically used for emergency. It is also biased to 1.875 V (R6507) and is an input (EMERG\_BTN\_X) to the CPLD. A button press is detected when EMERG\_BTN\_X is pulled low.

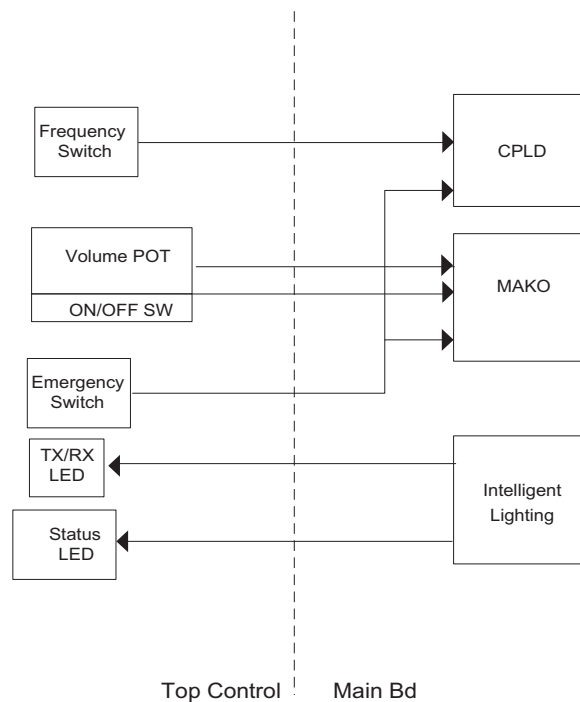


Figure 3-33. Control Top Block Diagram (APX 2000/ APX 4000 (Two Knobs))

### 3.2.6.2 APX 2000/ APX 4000/ APX 4000Li/ APX 1000 (900 MHz) LCD Display Modules

#### 3.2.6.2.1 QVGA

The main Transflective 1.6" color display is a QVGA (160 x RGB x 90) active matrix TFT (Thin Film Transistor) LCD. A display flex connects the main display to the J3-pin connector on Frontkit Flex. The QVGA display uses the 8-bit Special optimized Screen Interface (SoSSI) for data and commands.

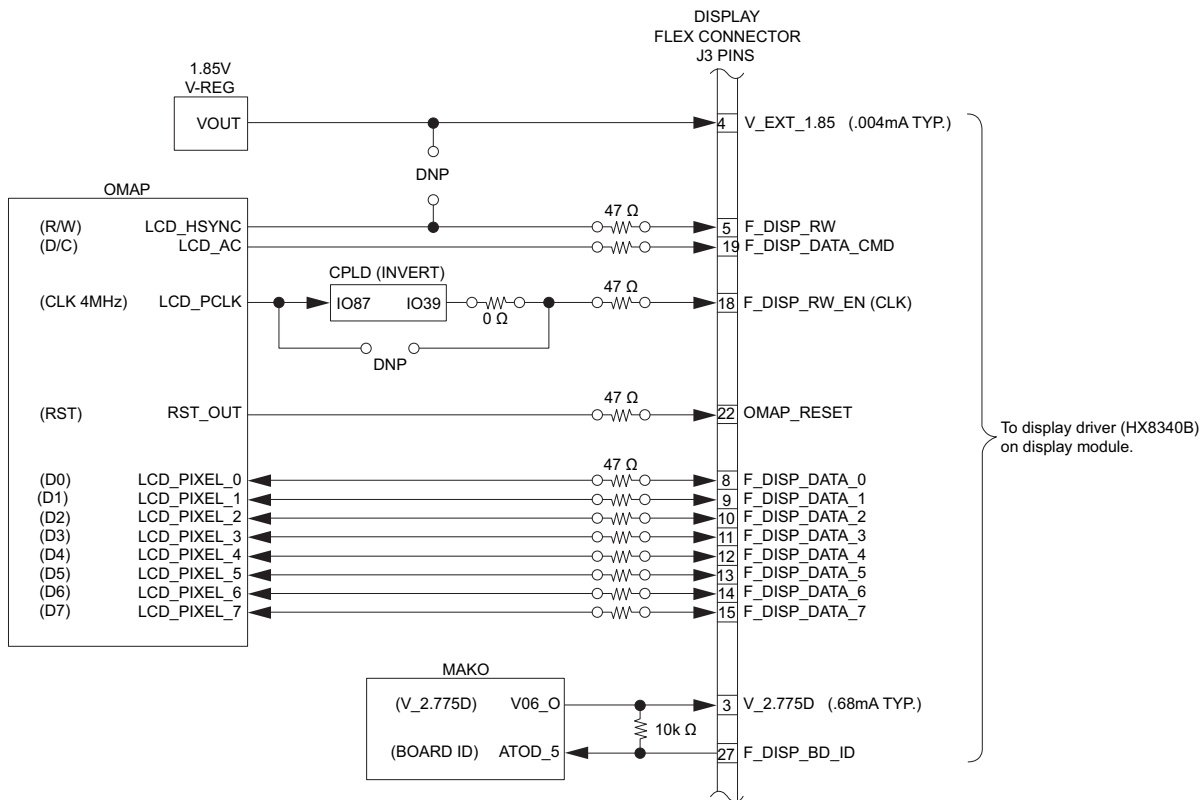


Figure 3-34. Display Circuit Detail Overview Block Diagram

The QVGA LCD Module operates using V\_2.775D and V\_EXT\_1.85. The V\_2.775D is the module's analog supply voltage sourced by LDO6 of MAKO. The V\_EXT\_1.85 is the module's IO voltage sourced by the 1.85V external LDO regulator. An 8-bit parallel bus is used for data and command communication between OMAP's SoSSI interface and LCD driver IC. The F\_DISP\_DATA\_CMD signal indicated the type of data being sent to the driver. A '0' corresponds to command data and a '1' corresponds to display data. Data only travels in one direction, from OMAP to display driver. Therefore F\_DISP\_RW line will always be low. Display data is latched on the falling edge of the F\_DISP\_RW\_EN signal.

The SoSSI interface uses the LCD DMA controller/bus to allow the LCD module to access system memory. Therefore the transfer of pixel data process will require less CPU processing power. An initiate DMA transfer command is used and display data is transferred to the LCD module automatically without intervention thus offloading the processor.

Prior to the LCD interpreting any commands, the correct display power-up sequence must be initiated. First the V\_EXT\_1.85 (1.875 V) and V\_2.775D (2.775 V) supplies must be at 90% or above threshold and stable for 10us, and then reset can be asserted high. After OMAP de-asserts the reset out signal (OMAP\_RESET) the SLPOUT command can be sent. Now configuration commands are ready to be sent to the LCD module.

The QVGA LCD module is only intended to operate up to +80°C due to ghosting effects. Therefore software will shut off the display and backlight if the +80°C limit is reached. The display and backlight will remain off until temperature drops below +75°C. The temperature sensor, U6401, for the display cut-off is input into MAKO A/D Channel 3, pin M14.

For enhanced display readability, the default backlight is set to a dim state while the radio is in Standby mode; however, the backlight turns to full brightness through a button press, call receive, emergency call, and other status indicators. See [Section 3.2.6.3: "Intelligent Lighting"](#) for the display backlight operation.

### 3.2.6.3 Intelligent Lighting

The APX 2000/ APX 4000/ APX 4000Li/ APX 1000 (900 MHz) radio is equipped with numerous LEDs to provide intelligent lighting features. The Main board consists of a backlighting driver, which illuminate all the LEDs throughout the radio, as shown in [Figure 3-35](#). The backlighting driver, U2201, provides white illumination to the main QVGA color display, Tricolor TX/RX indicator, status indicator and white keypad backlights. The driver are controlled through OMAs I2C interface (SCL and SDA). The I2C communication protocol allows the OMAP chip to enable, disable, and control the brightness of each LED. The driver uses PWM output to control the dimming modes operation. A reset line issued by OMAP, OMAP\_RESET, can be used to reset the driver. Some of the intelligent lighting color schemes are shown in [Table 3-6](#). The driver and LEDs are powered by Switcher 5 (V\_SW\_5).

Table 3-6. Color Schemes

	Color
Default	White
Out of Range	Red
Low Battery	Red
Emergency	Amber
Call Received	Green
Call Paged	Green

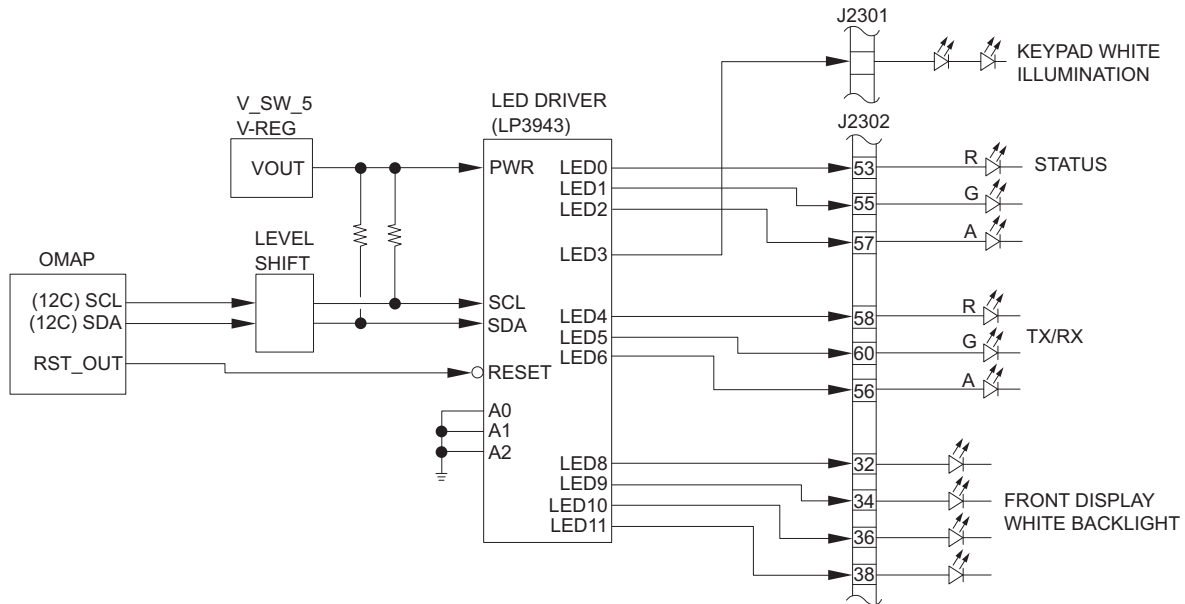


Figure 3-35. Lighting Controller Overview

### 3.2.6.4 Keypad

The Full Keypad Model contains a 21 button keypad, which translates to a 5x5 row and column keypad matrix as shown in [Figure 3-36](#). The keypad also contains LEDs for the backlighting of the keys, which is described in more detail in [Section 3.2.6.3: "Intelligent Lighting"](#). Every key is assigned a particular row and column to identify the unique key, as shown in keypad mapping [Table 3-7](#). The keypad board also contains 2, 6-channel filters that each row and column signal passes through. Each row of the keypad contains an external pull-up resistor, and all the rows are interrupt based inputs to OMAP. The columns are driven low by default in OMAP. When a key is pressed, the corresponding key row and column are shorted together and causes a low level to be input on the corresponding row in OMAP. Upon receiving the row interrupt, the OMAP IC is then programmed to scan the column output to determine which corresponding column was selected that generated the interrupt.



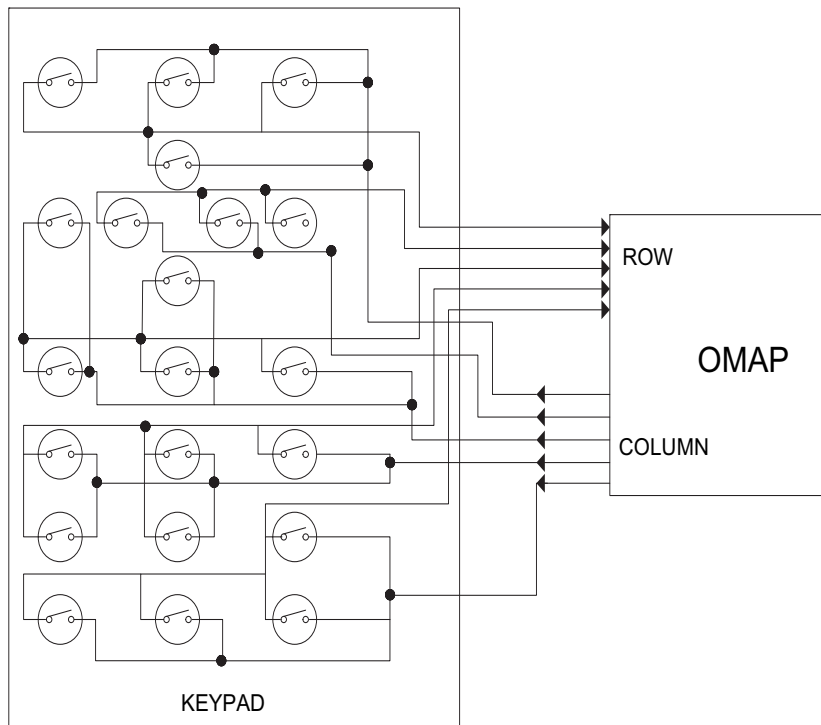


Figure 3-36. Keypad Interface Outline

Table 3-7. Key Map Matrix

Key	Row, Column Map	Key	Row, Column Map
	0, 4		3, 2
	1, 4		2, 0
	2, 4		2, 1
	4, 0		2, 2
	4, 1		1, 0
	0, 3		1, 1
	4, 2		1, 2
	1, 3		0, 0
	2, 3		0, 1
	3, 0		0, 2
	3, 1		

### 3.2.6.5 Side Controls

The side controls include three programmable, momentary, pushbutton switches (Side Button 1 [SB1], Side Button 2 [SB2], Top Side Button [MON]) and a Push-To-Talk switch [PTT]. These components interface to the Frontkit flex via connector J1 through a two-piece, bonded flex circuit. The frontkit flex routes the side controls signals to keypad board through connector P1000 and to Main Board through connector P2000. See [Chapter 7](#) for pin out names and numbers.

Side button 1 (R4006), side button 2 (R4007) and the top side button (R6101) are inputs to the CPLD and are biased to 1.875V. A button press is detected when the OMAP reads a 'LO' state from the CPLD EMIFS interface. PTT (R4005) is connected directly to OMAP and a button press is detected when a LO state is read.

### 3.2.6.6 GCAI

The GCAI (Global Communications Accessory Interface) connector is a 15 pin interface located on the side of the radio. The connector interfaces the radio with accessories and is used for programming. When the OMAP (U6501) detects that an accessory has been attached through a logic low on GPIO0, it will identify the device by reading the GCAI\_ONE\_WIRE line. Once the device type is identified, the appropriate signals are multiplexed through MAK0 to the GCAI connector for the particular device. [Figure 3-37](#) is a block diagram of the GCAI interface.

Mounted to the side connector is a flex that houses ESD protection circuitry. The universal side connector interfaces with the Front kit flex via the J2 connector of a flex circuit and the P1000 connector of the keypad board. A backkit flex routes universal side connector signals through keypad board connector P2000 to the main board. The figures below show the connections and signal assignments from the universal connector to the controller board.

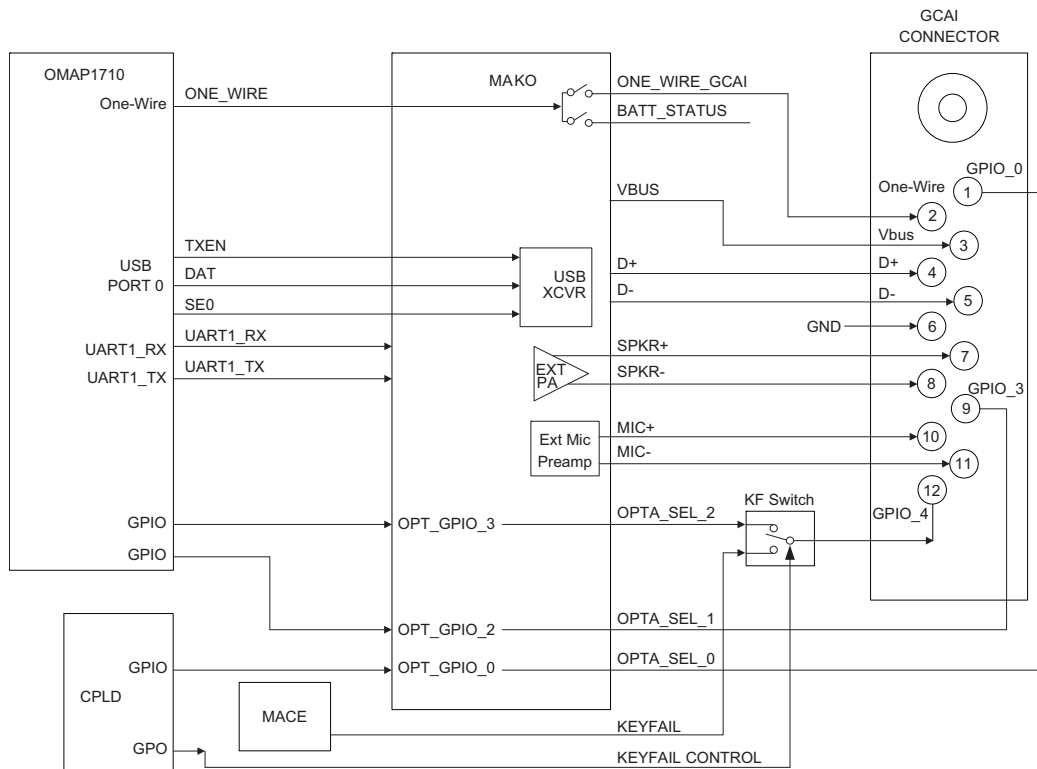


Figure 3-37. GCAI Signal Configuration

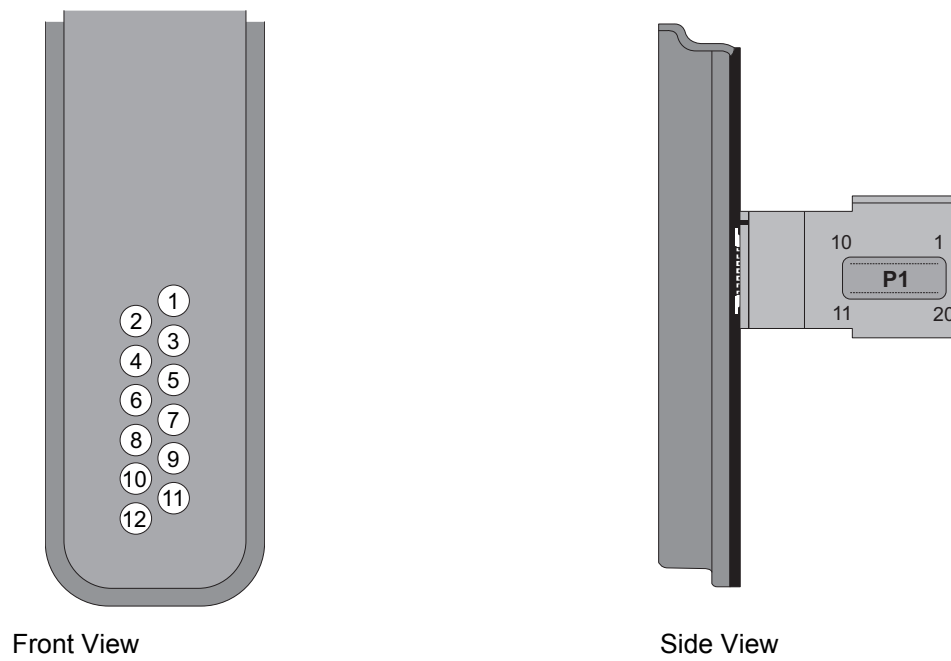


Figure 3-38. GCAI Connector

Table 3-8. P1 Pin Assignment

P1 PIN ASSIGNMENT	SIGNAL
1	GND
7	GCAI_USB_P_GPIO1
5	GCAI_USB_N_GPIO2
3	GCAI_RTS_GPIO_3
11	GCAI_CTS_GPIO_4
17	GCAI_MIC_N
19	GCAI_MIC_P
25	GCAI_SPKR_N
23	GCAI_SPKR_P
9	FCAI_ONE_WIRE
13	GCAI_GPIO0
28	GCAI_VBUS_5V
26	GCAI_VBUS_5V

Table 3-9. GCAI Connector Pin Assignment

<b>PIN ASSIGNMENT</b>	<b>SIGNAL</b>
1	GCAI_GPIO0 / PwrOn
2	GCAI_ONE_WIRE
3	GCAI_VBUS_5V
4	GCAI_USB_P_GPIO1 / TxDc / FillReq
5	GCAI_USB_N_GPIO2 / RxDc / FillData
6	GND
7	GCAI_SPKR_P / LineOut+
8	GCAI_SPKR_N / LineOut-
9	GCAI_RTS_GPIO_3 / OTG-ID / FillSen
10	GCAI_MIC_P
11	GCAI_MIC_N
12	GCAI_CTS_GPIO_4 / KeyFail / FillClk

### 3.2.7 Encryption

The encryption circuitry is placed on the keypad board and interfaces to the main board through the J2301-P2001 connector. The encryption circuitry is designed to digitally encrypt and decrypt voice and ASTRO data in the APX 2000/ APX 4000 radio. The Motorola Advanced Crypto Engine (MACE) IC is the main component in the encryption design, and has some discrete support circuitry along with the interfaces to the main board IC's (CPLD, OMAP, and Audio CODEC).

**NOTE:** The MACE IC is NOT serviceable. The information contained in this section is only intended to help determine whether a problem is due to the MACE IC or the radio itself.

Figure 3-39 below shows the Encryption architecture for the APX 2000/ APX 4000 radio.

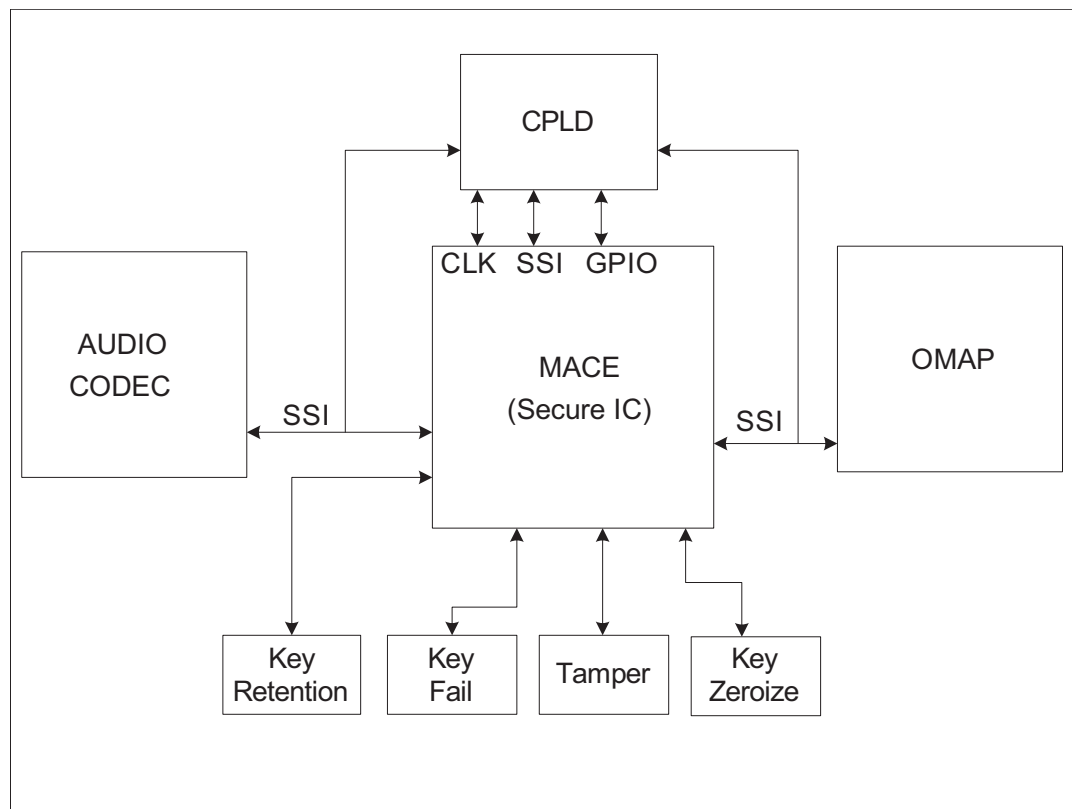


Figure 3-39. APX 2000/ APX 4000 Encryption Architecture

As shown in Figure 3-39 above, the encryption design consists of 5 blocks:

- MACE IC
- Key Loading
- Key Retention
- Tamper
- Key Zeroize.

### 3.2.7.1 MACE IC

The encryption module uses the MACE IC and an encryption key variable to perform its encode/decode function. The encryption key variable is loaded into the MACE IC, via the GCAI (side) connector, from a hand-held, key variable loader (KVL). The MACE IC contains the particular encryption algorithm purchased.

Once the MACE IC has its encryption keys and algorithm, it communicates with the radio's host processor (OMAP) through the Synchronous Serial Interface (SSI) bus. Both commands and audio (clear and encrypted) are sent through the SSI bus. A communications failure between the host processor and the secure module will be indicated as an ERROR 09/10 message on the display.

Figure 3-10 below lists the corresponding kit numbers.

Table 3-10. Secure Keypad KIT Numbers

KIT Number	Description
PMCN4028_	APX 2000/ APX 4000 Expanded Limited Keypad Board
PMCN4026_	APX 2000/ APX 4000 Expanded Full Keypad Board
PMCN4048_	APX 2000/ APX 4000 (Two Knobs) Keypad Board Model 2
PMCN4029_	APX 2000/ APX 4000 (Two Knobs) Keypad Board Model 3

The MACE IC relies on a 4 MHz clock source provided by the CPLD, the clock is connected to MACE's XIN pin (U2510-P5).

### 3.2.7.2 Key Loading / Fail

Key variables are loaded into the MACE IC through the keyfail line. The signal originates from the GCAI connector (pin 11 of J2 on the Front kit flex) and is passed through the keypad board to the main board. The signal is then selected by a multiplexer (U4003) controlled by CPLD output, KEYFAIL\_CTRL, and the signal is routed back to the keypad board to the MACE's KYLD pin (U2510-B10).

### 3.2.7.3 Key Retention

The key variables are retained within the MACE IC's memory (SRAM or FLASH). The keys can be infinite key retention or 30-seconds key retention, depending on how the codeplug is set up. When set to infinite key retention, the keys are stored in the FLASH memory inside the MACE IC. When set to 30-second retention, the keys are stored in SRAM, and will be erased when the radio's battery is removed (after the 30 second delay). The key retention delay circuit controls this time through a comparator op-amp circuit (U2526). When the battery is removed, VSAVE (nominally 2.5 V) will eventually drop to 0V after 30 seconds, which will result in a 0V output from U2526. This output is the input to the CONT\_1.875 regulator (U2525), which is nominally 3.3 V. When the regulator's output is 0 V, the keys in MACE's SRAM will be erased.

### 3.2.7.4 Tamper

The tamper function is intended to erase the encryption keys in a tampering situation. If the radio chassis is opened during operation, the tamper signal, which is normally connected to ground through spring contact M2533, will be disconnected from ground. This will be sensed by MACE through its tamper pin TPR0 (U2510-M2). Once this condition is sensed, the encryption keys will be erased.

### 3.2.7.5 Key Zeroize

The encryption keys can also be manually erased if infinite key retention is not turned on in codeplug, by holding down the Side Top button and emergency buttons during radio power-up. These two button inputs both connect to a dual transistor Q2537, which will release the Key\_ZEROIZE signal sensed by MACE's TPR0 (U2510-M2). Once this condition is sensed (floating high), the encryption keys will be erased.

To troubleshoot the encryption circuitry, refer to the flowcharts in [Chapter 5 "Troubleshooting Charts"](#).

## 3.3 Global Positioning System (GPS)

The APX 2000/ APX 4000 GPS architecture employs the Texas Instruments NL5500 GPS IC (U1301) (located on the Main Board) which decodes GPS signals at 1575.42 MHz (L1 band). It is capable of producing a final position solution including full tracking and data decode capability. The GPS signal is received by the main RF/GPS combination antenna. The GPS signal is then diplexed at the antenna port via a series resonant network, C1315 and L1316 which provides a very low capacitive load to the transceiver. Additional GPS diplexing components include L1117 and C1122 which provide proper termination at the transceiver path output to minimize GPS signal leakage at the antenna port tap point at C1314. The GPS signal will then go through a SAW filter (FL1301), LNA (U1304), and a second SAW filter (FL1303), which then connects to the NL5500's GPS RF input (U1301 pin L2). The NL5500 IC is connected to the main OMAP processor via UART2. It is a two wire UART interface (TX and RX with no handshaking).

The GPS receiver is setup in an autonomous continuous navigation mode where the current position is updated once per second. The GPS receiver continuously tracks satellites for as long as the radio is powered on to ensure the best possible accuracy. In the event the radio loses visibility of the satellites due to terrain or environmental factors such as driving through a tunnel or entering a building, the GPS will temporarily lose its position fix. If the signal outage is long enough, a power savings algorithm will then cycle the GPS in and out of a sleep mode to save battery life until the radio has moved back into an environment where the GPS signal is present.

The following table lists the power, clock, and I/O connections from the GPS IC to various peripherals.

Table 3-11. Power and I/O Pins for NL5500

Signal Name	Type	NL5500 ball(s)	Source/Destination [ref] (board)	Description
VBAT	Power	A2, H1, D8	VSW_3.6 [U6504] (Main Board)	Main NL5500 power supply
VDDS	Power	B3, G10, K5, E2	VCC_1.85 [U6508] (Main Board)	I/O Power Supply
VDD_TCXO	Power	G1	VSW_3.6 [U6504] (Main Board)	TCXO Power Supply
RTC_CLK	Clock	H9	CPLD IO74 [U6101] (Main Board)	32kHz RTC
TCXO_CLK_LV	Clock	F1	TCXO [Y1304] (Main Board)	26MHz TCXO
GPS_nShutdown	Input	D5	CPLD IO91 [U6101] (Main Board)	GPS Reset
GPS_UART_TX	Output	F5	OMAP pin R9 [U6302] (Main Board)	GPS UART TX to OMAP UART RX
GPS_UART_RX	Input	E3	OMAP pin M18 [U6302] (Main Board)	OMAP UART TX to GPS UART RX
LNA_ENABLE	Output	H6	LNA [U1304] (Main Board)	GPS External LNA Enable
GPS_LNA_IN	Input	L2	GPS antenna/front-end	GPS RF Input from antenna

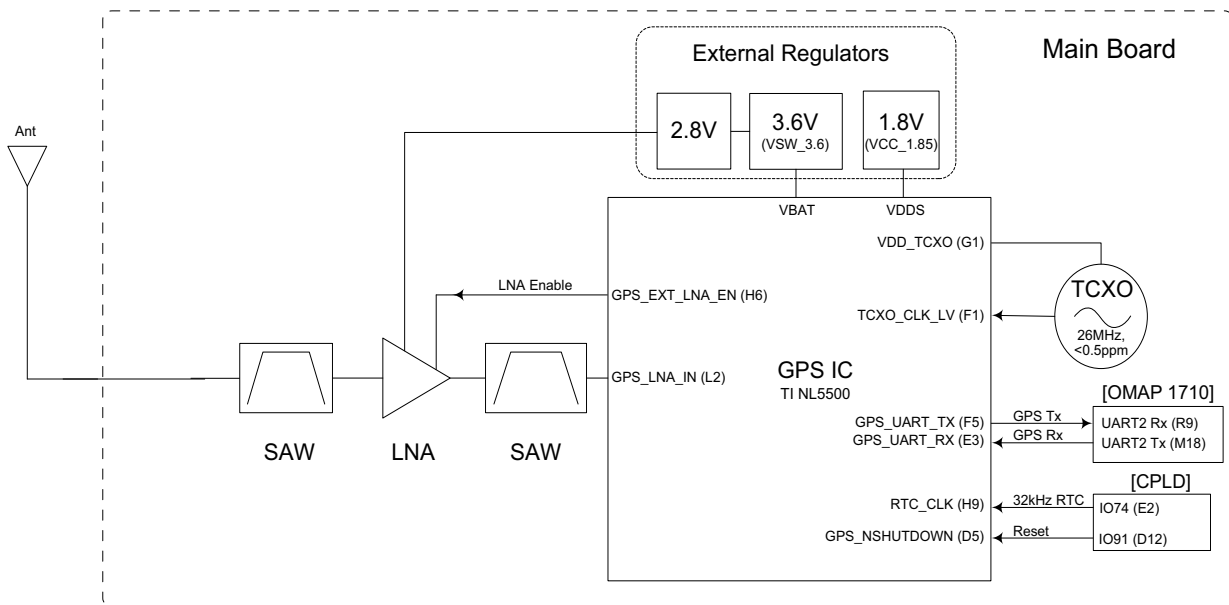


Figure 3-40. GPS Block Diagram



## 3.4 Accelerometer

### 3.4.1 General Overview

Accelerometer capabilities are achieved by the 3-axes “nano” accelerometer IC (LIS331DL) located on the expansion board. The LIS331DL is a digital output linear accelerometer in a LGA package. It is powered by the 3.3V LDO regulator placed in the expansion board. The complete device includes a sensing element and an IC interface to provide the signal to the AVR IC. When acceleration is applied to the sensor, an imbalance in capacitance is produced. This imbalance is measured and converted to an analog voltage that is finally available to the user by an analog to digital converter. The acceleration data is accessed through an SPI interface and presented to the AVR.

**NOTE:** Please refer to User Guide and CPS for further details.

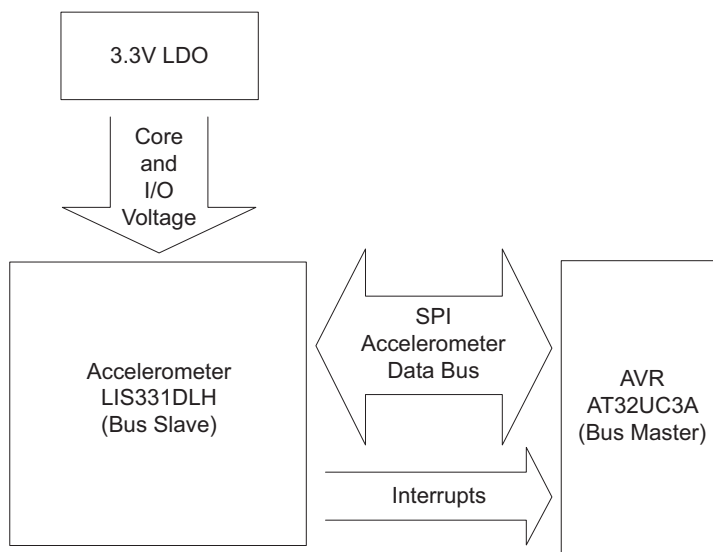


Figure 3-41. Accelerometer Block Diagram

The registers embedded on the LIS331DL are accessed through SPI serial interface. The following pins are responsible for the SPI communication.

Table 3-12. SPI Interface

Pin Name	Pin Description
CS	SPI Enable
SPC	SPI Serial Port Clock
SDI	SPI Serial Data Input
SDO	SPI Serial Data Output

CS is the serial port enable and it is controlled by the AVR (SPI Master). It goes low at the start of the transmission and toggles high at the end. SPC is the serial port clock and it is also controlled by the AVR. It is stopped high when the CS is high (no transmission). SDI and SDO are respectively the serial data input and output. These lines are driven at the falling edge of SPC and should be capture at the rising edge of SPC.

The following table provides a list of the registers and their respective addresses used for the accelerometer IC (LIS331DL).

Table 3-13. Register Address Map

Name	Type	Register Address		Default	Comment
		Hex	Binary		
Reserved (do not modify)		00–0E			Reserved
WHO_AM_I	r	0F	000 1111	110010	Dummy register
CTRL_REG1	rw	20	010 0000	111	
CTRL_REG2	rw	21	010 0001	0	
CTRL_REG3	rw	22	010 0010	0	
CTRL_REG4	rw	23	010 0011	0	
CTRL_REG5	rw	24	010 0100	0	
HP_FILTER_RESET	r	25	010 0101		Dummy register
REFERENCE	rw	26	010 0110	0	
STATUS_REG	r	27	010 0111	0	
OUT_X_L	r	28	010 1000	output	
OUT_X_H	r	29	010 1001	output	
OUT_Y_L	r	2A	010 1010	output	
OUT_Y_H	r	2B	010 1011	output	
OUT_Z_L	r	2C	010 1100	output	
OUT_Z_H	r	2D	010 1101	output	
Reserved (do not modify)		2E–2F			Reserved
INT1_CFG	rw	30	011 0000	0	
INT1_SOURCE	r	31	011 0001	0	
INT1_THS	rw	32	011 0010	0	
INT1_DURATION	rw	33	011 0011	0	
INT2_CFG	rw	34	011 0100	0	
INT2_SOURCE	r	35	011 0101	0	
INT2_THS	rw	36	011 0110	0	
INT2_DURATION	rw	37	011 0111	0	
Reserved (do not modify)		38–3F			Reserved

**NOTE:** Refer to the part data sheet for a detailed explanation of the registers.

### 3.5 Bluetooth

The Bluetooth feature allows the radio the ability to connect wirelessly to a Bluetooth accessory or data terminal. This feature is implemented using a combination Bluetooth/GPS integrated circuit (IC, U1301) located on the Main Board, a low-frequency receiver (NFC, U2403), and a host controller (U2415) with external 16 MB SDRAM (U2413) located on the keypad board. The Bluetooth IC sends data to the host controller processor over an HCI USART link. The host controller processor communicates to the OMAP processor on the RF board through a dedicated USB port.

Each APX accessory that is capable of Bluetooth communication will have its own unique Bluetooth address. An external audio accessory headset can establish a digital connection using a low-data rate GFSK modulated signal hopping on 79 x 1 MHz wide Bluetooth channels from 2402 MHz to 2480 MHz in the ISM band. Bluetooth uses a frequency hopping spread spectrum (FHSS) technique to spread the RF power across the spectrum to reduce the interference and spectral power density. The frequency hopping allows the channel to change up to 1600 times a second (625 us time slot) based on a pseudo random sequence. If a packet is not received on one channel, the packet will be retransmitted on another channel.

The Bluetooth feature is accompanied by a Low-Frequency (LF) detection circuit. Once a radio has the Bluetooth feature enabled, a user can tap their LF enabled Bluetooth audio accessory with the radio at the pairing spot to establish a secure Bluetooth connection. The LF circuit provides the ability of a secure pairing connection with a Bluetooth accessory by sending secure messages including the BT address of the external accessory during pairing. The LF circuit uses a 125 kHz signal to communicate the secure pairing information over a dedicated SPI bus between the Bluetooth accessory and the AVR32 processor.

Low-frequency transmission is done by the host controller itself using a NOR gate. The LF antenna is located on the radio's front-housing (speaker assembly) and connected to the LF receiver IC on the keypad board via flex. The Bluetooth antenna is a stamped metal folded monopole antenna mounted on the speaker assembly at the radio's front housing:

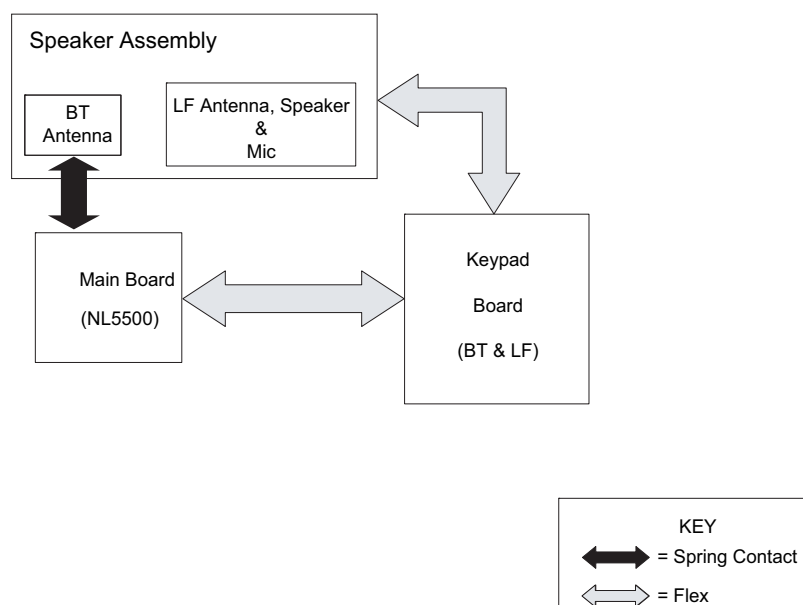


Figure 3-42. Relation of Bluetooth & LF Antenna Assembly to Main & Keypad Boards

To connect a Bluetooth accessory, the blue pairing indicators on the accessory and the radio should be brought close to each other with the Bluetooth feature enabled and on in the radio. The LF/Bluetooth connection flow is shown in Figure 3-43.

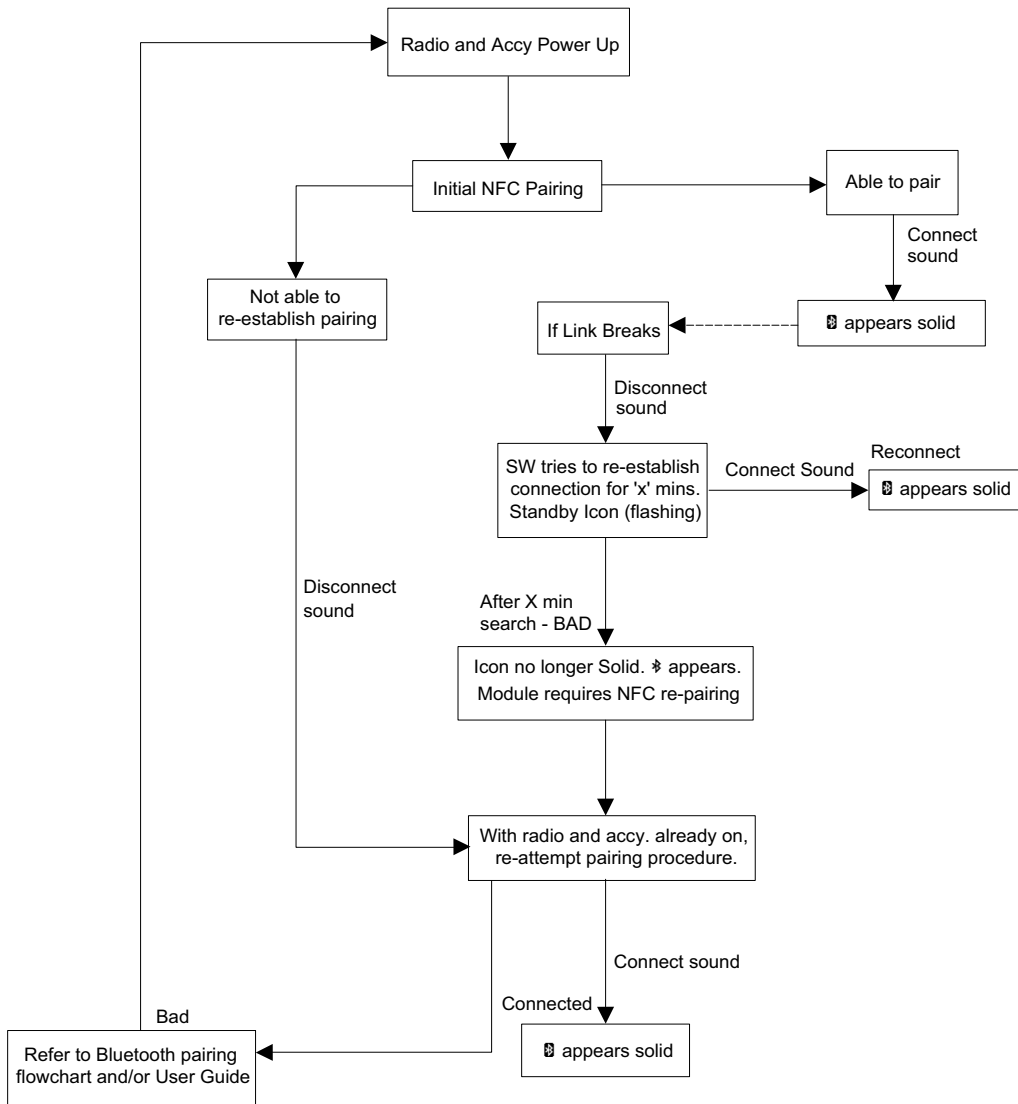


Figure 3-43. Bluetooth Connection Flowchart

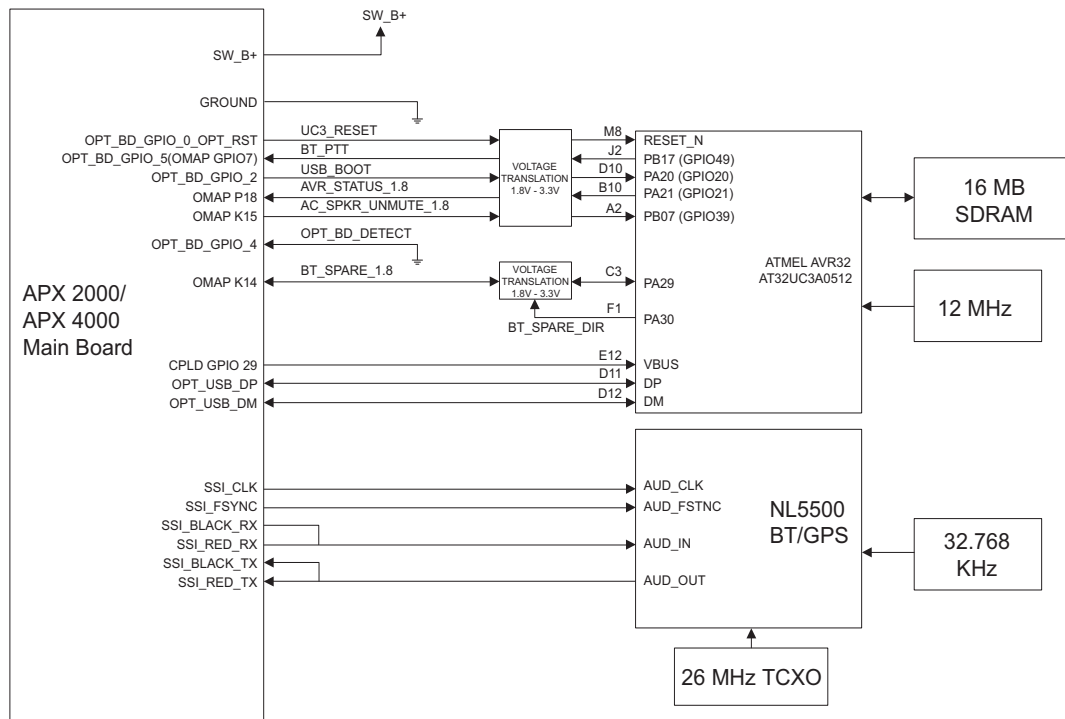


Figure 3-44. Bluetooth/Controller Interface with Clock Sources

The Bluetooth IC transceiver is connected to a dedicated Bluetooth antenna. Between the IC and antenna is a band-pass filter as shown in Figure 3-45.

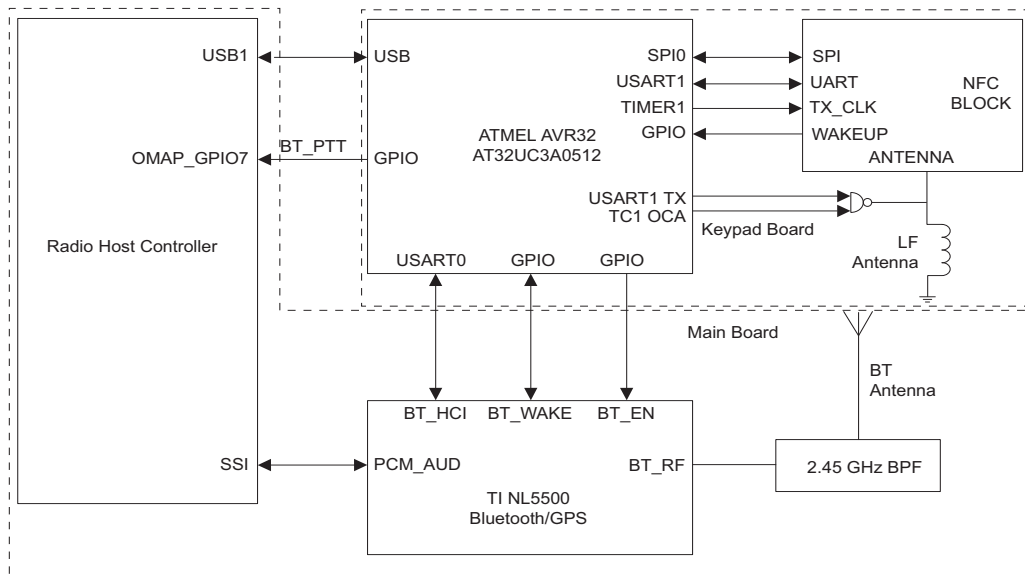


Figure 3-45. Bluetooth Functional Block Diagram

To verify the Bluetooth transmitter is operational, an RCMP command can be sent to transmit a constant carrier waveform on a Bluetooth frequency. To verify the LF transmit feature is operational, an RCMP command can be sent to transmit a constant carrier waveform at 125 kHz. There are similar RCMP commands for verifying BT/LF RSSI when a CW BT/LF signal is applied near the antennas of the BT/LF circuitry.

The Low-Frequency block diagram below shows the main connections:

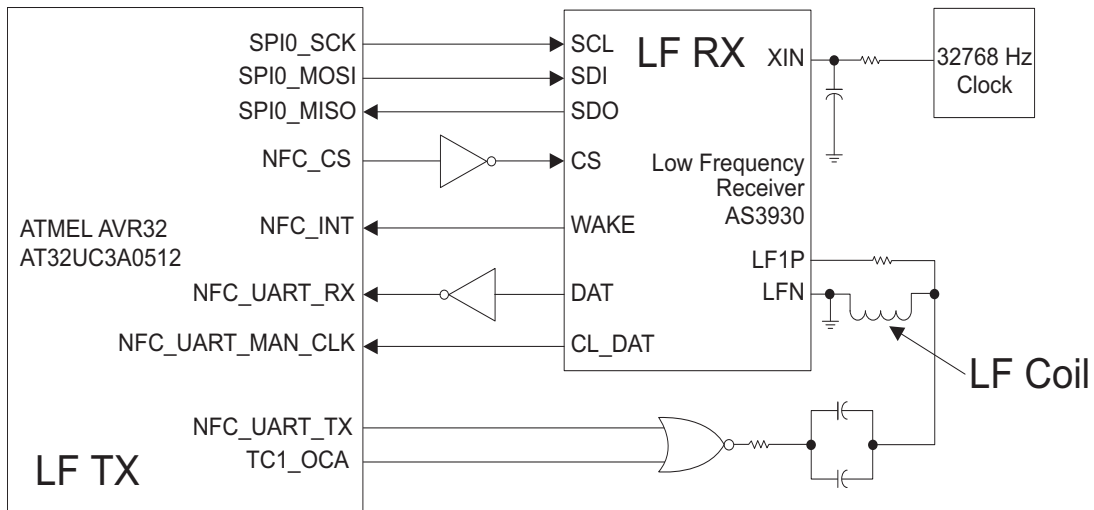


Figure 3-46. Bluetooth Low-Frequency Circuit Block Diagram

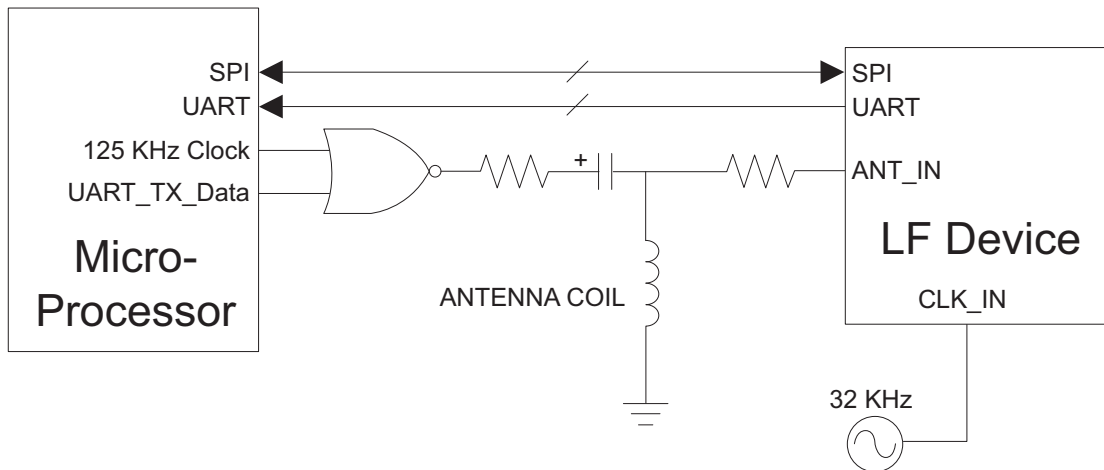


Figure 3-47. Bluetooth Low-Frequency Pairing Data Path

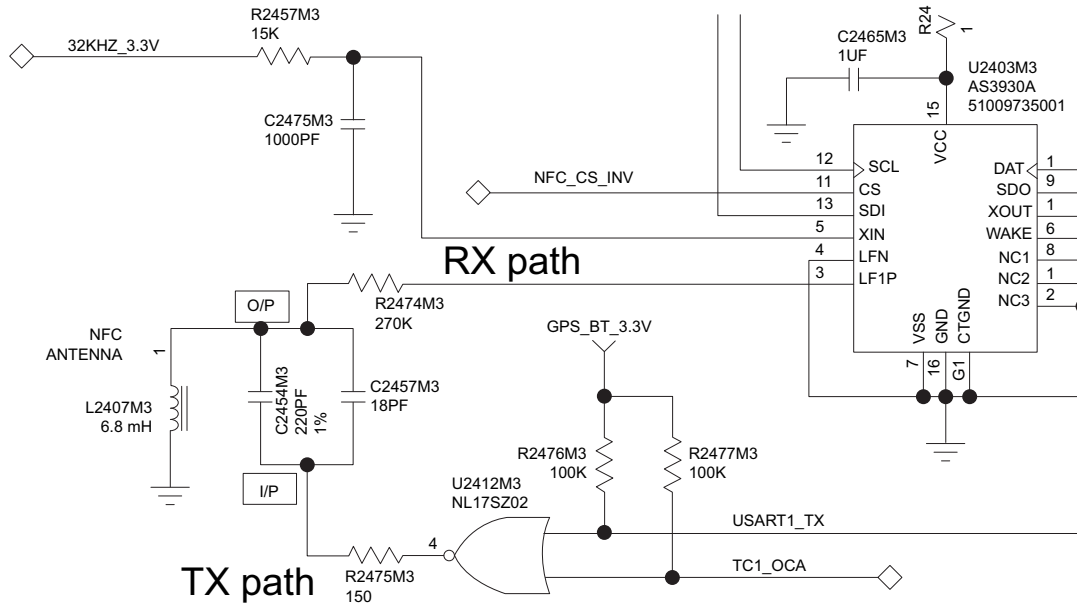


Figure 3-48. Detailed Low-Frequency Transmit/Receive Paths

### 3.5.1 Bluetooth Power

Our Bluetooth IC operates from a 3.6V (U6504, VBAT) switching regulator located on the Main board to supply the Bluetooth IC core and a 1.85V (U6508, VDD5) supply for the I/O. It has a shutdown (U2415 pin L3) that must be high for operation to work. The power-up/down sequence required for operation is shown in Figure 3-49.

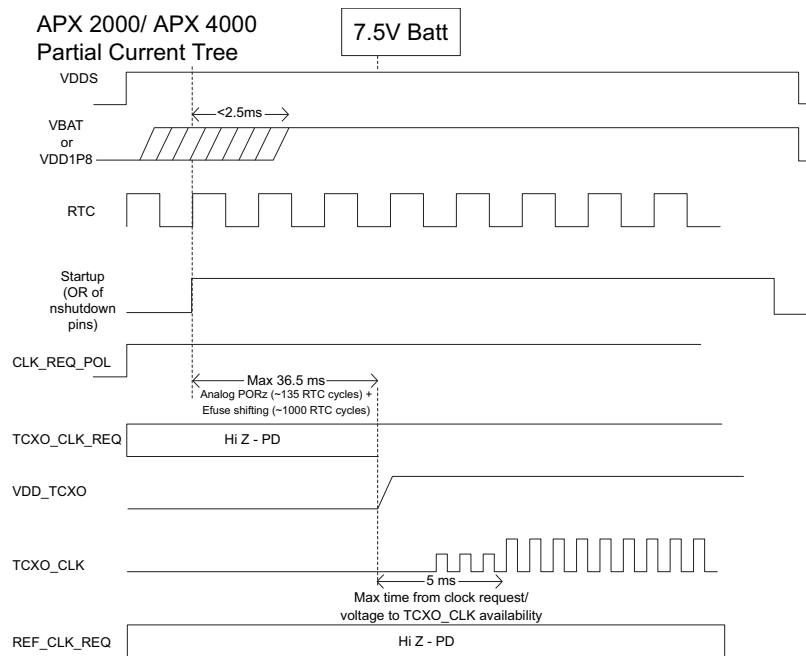


Figure 3-49. Chip Power-Up/Power-Down Sequence (External Input/Output Shown)

The host processor operates from a 3.3V LDO regulator (U2402). The 1.85V regulator enables the 3.3V LDO regulator output. The LF receiver IC is powered from a 3.3V LDO regulator (U2402).

Figure 3-50 is a partial current tree showing the flow of current from the battery to the Bluetooth-related major components sourced by the 3.6V switching regulator on the Main Board.

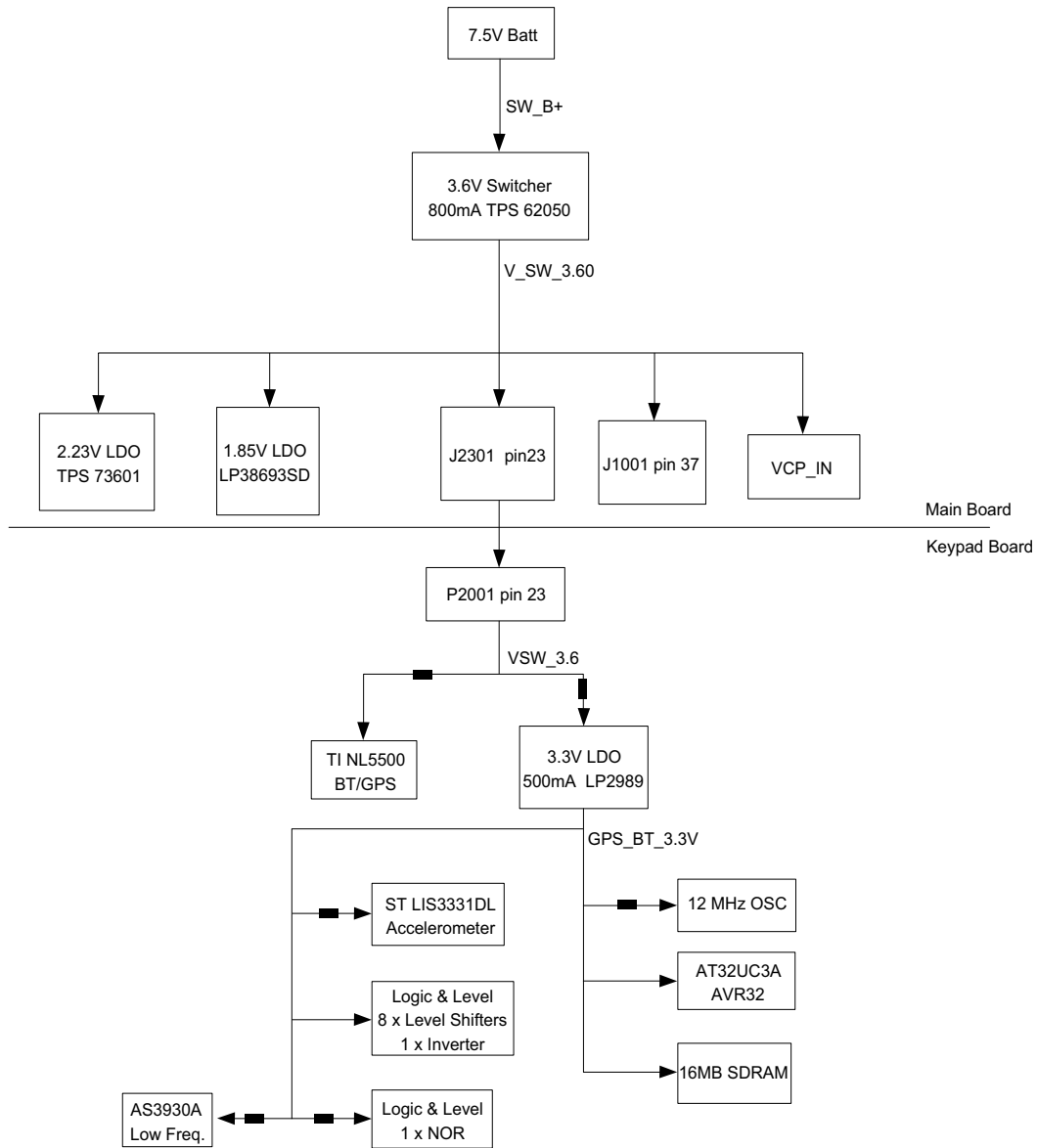


Figure 3-50. Current Distribution Tree for Bluetooth Circuitry



### 3.5.2 Bluetooth Clocks

The Bluetooth IC requires a 26 MHz TCXO (Y1304, TCXO\_CLK) for the core and a 32.768 kHz (U6101 pin E2 on Main Board, RTC\_CLK) slow clock for the USART. This is the same clock used for the GPS portion of the BT/GPS combination IC.

The host processor IC requires a 12 MHz crystal oscillator (Y2475) clock. The LF receiver IC requires a 32.768 kHz (U6101 pin E2 on Main Board, RTC\_CLK) clock.

### 3.5.3 Bluetooth I/Os

The communication between the Bluetooth IC and the host controller is by a four-wire HCI USART0 bus (RX, TX, CTS, RTS). The Bluetooth IC receives a firmware update over the USART0 each time it is powered on. The LF receiver IC transmits its data over the USART1. USART2 is used for displaying debugging messages.

Table 3-14. Bluetooth Host Processor UART I/O

Signal Name	Pad Name	GPIO	MUX Function	Keypad Board Schematic Name	I/O
USART0-RXD	PA00	0	A	BT_UART_TX_3.3V	I
USART0-TXD	PA01	1	A	BT_UART_RX_3.3V	O
USART0-RTS	PA03	3	A	BT_UART_CTS_3.3V	O
USART0-CTS	PA04	4	A	BT_UART_RTS_3.3V	I
USART1-RXD	PA05	5	A	USART1_RX	I
USART1-TXD	PA06	6	A	USART1_TX	O
USART1-CLK	PA07	7	A	USART1_CLK	I
USART2-RXD	PB29	61	A	AVR_USART2_RX	I
USART2-TXD	PB30	62	A	AVR_USART2_TX	O

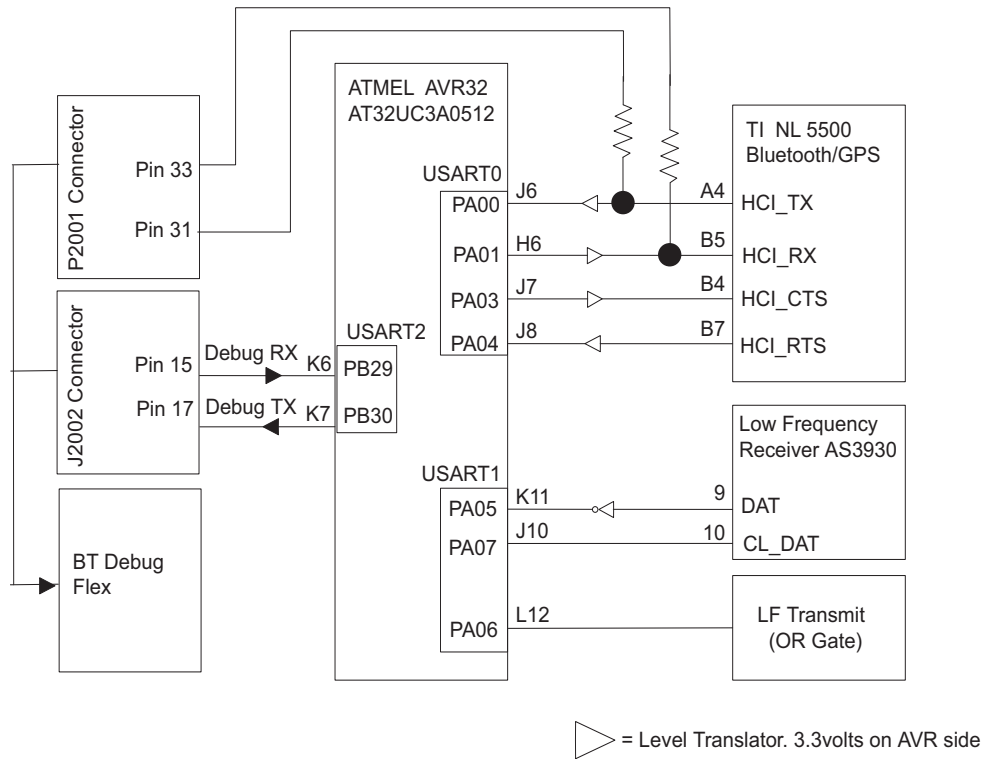


Figure 3-51. Bluetooth LF UART Connection Block Diagram

The Bluetooth IC shutdown (U2415 pin L3) and wakeup (U2415 pin K3) pins are also connected to the host controller. A Bluetooth PTT pin on the host controller (U2415 pin J2) tells the OMAP (U6302 pin Y5) when the user pressed the PTT button on the Bluetooth accessory. As the BT IC I/O is 1.8V, but the host controller I/O is 3.3V, level shifters are employed for interconnection between the two.

The host processor IC is connected to the LF receiver IC by a four-wire SPI bus. This SPI bus also communicates with an on-board accelerometer. The LF transmitter circuit uses a 125 kHz signal (U2415 pin M3) that is turned on and off (OOK) by the USART1\_TX signal (U2415 pin L12).

Table 3-15. SPI I/O

Signal Name	Pad Name	GPIO	MUX Function	Keypad Board Schematic Name	I/O
SPIP-NPCS[2]	PA09	9	B	SPIO_CS2	O
SPIP-NPCS[0]	PA10	10	A	NFC_CS	O
SPIP-MISO	PA11	11	A	SPIO_MISO	I
SPIP-MOSI	PA12	12	A	SPIO_MOSI	O
SPIP-SCK	PA13	13	A	SPIO_CLK	O

The host processor is connected to the 3.3V SDRAM using a synchronous interface. The host processor is connected to the OMAP on the Main Board by a full-speed USB (D11 & D12). VBus is a sense line only.

Table 3-16. USB I/O

Signal Name	Pin Name	Pad Name	Keypad Board Schematic Name	I/O
GPIO19	C12	PA19	USB_BOOT_3.3V	I
GPIO20	D10	PA20	ATMEL_BOOT	I
DP	D11	–	BT_AVR_USB_DP	I/O
DM	D12	–	BT_AVR_USB_DM	I/O
VBUS	E12	–	BT_AVR_VBUS	I

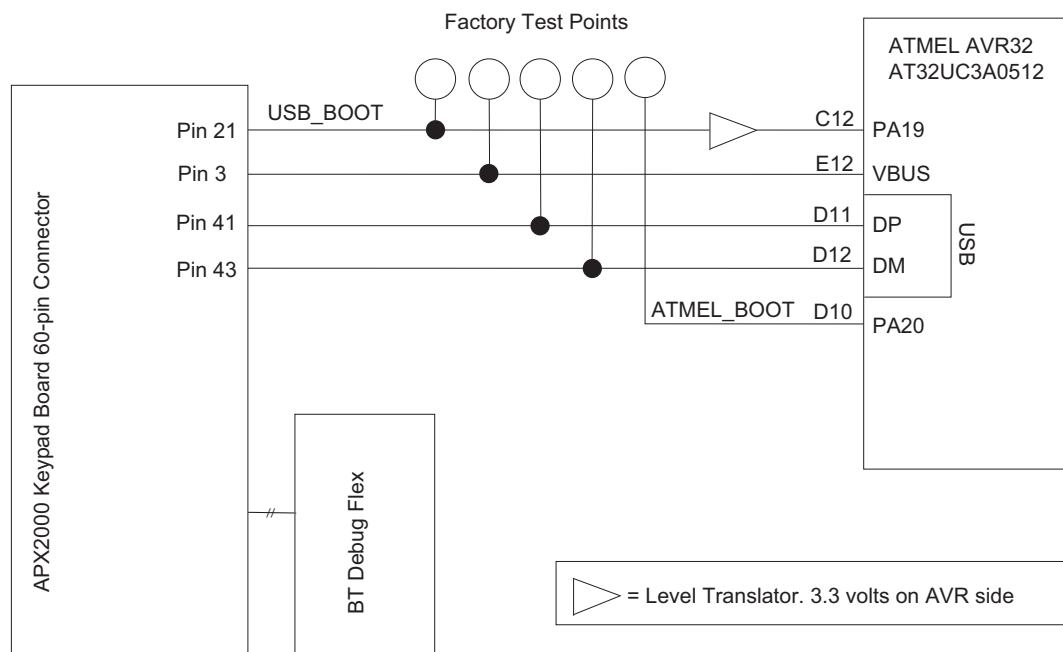


Figure 3-52. Bluetooth USB Interface To Main Board

The ATMEL bootloader is being used as a first stage bootloader that will jump to the Motorola bootloader, which is a stage two bootloader. GPIO20 is used by the ATMEL bootloader to trap in Flash mode. GPIO19 will be used by the Motorola bootloader to trap in Flash mode. Both pins are active low.

The Bluetooth audio is sent over a two-channel PCM/SSI interface to the audio codec (U6405) on the Main board.

Table 3-17. GPIO I/O

Signal Name	Pad Name	GPIO	Keypad Board Schematic Name	I/O
GPIO41	PB09	41	BT_HOST_WAKEUP_3.3V	I
GPIO49	PB17	49	BT_PTT_3.3V	O
GPIO50	PB18	50	BT_SHUTDOWN_3.3V	O
GPIO51	PB19	51	BT_WAKEUP_3.3V	O

---

## Chapter 4 Troubleshooting Procedures

The purpose of this chapter is to aid in troubleshooting problems with the ASTRO APX 2000/ APX 4000/ APX 4000Li/ APX 1000 (900 MHz) radio. It is intended to be detailed enough to localize the malfunctioning circuit and isolate the defective component. It also contains a listing of service tools recommended for PC board repair at the component level.



Caution

Most of the ICs are static sensitive devices. Do not attempt to disassemble the radio or troubleshoot a board without first referring to the following Handling Precautions section.

### 4.1 Handling Precautions

Complementary metal-oxide semiconductor (CMOS) devices, and other high-technology devices, are used in this family of radios. While the attributes of these devices are many, their characteristics make them susceptible to damage by electrostatic discharge (ESD) or high-voltage charges. Damage can be latent, resulting in failures occurring weeks or months later. Therefore, special precautions must be taken to prevent device damage during disassembly, troubleshooting, and repair. Handling precautions are mandatory for this radio, and are especially important in low-humidity conditions. DO NOT attempt to disassemble the radio without observing the following handling precautions.

1. Eliminate static generators (plastics, Styrofoam, etc.) in the work area.
2. Remove nylon or double-knit polyester jackets, roll up long sleeves, and remove or tie back loose-hanging neckties.
3. Store and transport all static-sensitive devices in ESD-protective containers.
4. Disconnect all power from the unit before ESD-sensitive components are removed or inserted unless otherwise noted.
5. Use a static-safeguarded workstation, which can be accomplished through the use of an anti-static kit (Motorola part number 01-80386A82) or equivalent. This kit includes a wrist strap, two ground cords, a static-control table mat and a static-control floor mat.

## 4.2 Recommended Service Tools

Table 4-1 lists recommended service tools that can be used for PC board repairs at the component level. For listings of additional service tools, service aids, and test equipment that are recommended for all levels of service, refer to the APX 2000/ APX 4000/ APX 1000 (900 MHz) basic service manual (see “Related Publications” on page vii).

Table 4-1. Recommended Service Tools

Motorola Part Number	Description	Application
66012028001	Chassis Opener	Used to disassemble chassis from housing
66012031001	Battery Adapter	Used in place of battery to connect radio to an external power supply.
66012030001	Vacuum Test Fixture	Connects the vacuum/pressure hose to the radio.
NLN9839_	Vacuum Pump Kit	Vacuum pump with gauge and vacuum hose. Requires 66012030001 Vacuum Test Fixture.
5880384G68	SMA to BNC Adapter	Adapts radio's antenna port to BNC cabling of test equipment.
RVN5224_	Customer Programming Software (CPS) and Tuner Software	CPS allows customer-specific programming of modes and features. Tuner software required to perform alignment of radio parameters.
PMKN4012B	Programming Cable	Used to program the radio through Customer Programming Software and Tuner Software.
PMKN4013C	Programming/Service Cable	Used to program and service the radio through Customer Programming Software and Tuner Software.
RLN4460_	Portable Test Set	Used for radio performance checks. Connects to radio's universal connector and allows remote switching and signal injection/outputs for test equipment measurements.

**NOTE:** Do not place an order for the Programming Cable (PMKN4012A/PMKN4013B) as it is not compatible with the APX 2000/ APX 4000/ APX 4000Li/ APX 1000 (900 MHz) radio.

### 4.3 Standard Bias Table

Table 4-2 outlines some standard supply voltages and system clocks which should be present under normal operation. These should be checked as a first step to any troubleshooting procedure.

Table 4-2. Standard Operating Bias – DC Voltages

Name	Reference	Description	Level
IGN_X*	Mako_IGN_X	ON/OFF Switch. Radio on when GND	GND
UNSW_B+	F_UNSW_B+	Radio Battery Voltage	6–9V
SW_B+	C6593	Radio Supply Voltage	6–9V
V_SAVE	C6538	LDO Output Present When Battery is Attached	2.5V
V_1.875	C6581	LDO Output	1.875V
V_1.55	R6561	LDO Output	1.55V
V_2.775D	R6563	LDO Output	2.775V
V_2.775_EXP	R6562	LDO Output	2.775V
V_2.8_RF	R6564	LDO Output	2.8V
V_5.0A	R6565	LDO Output	5.0V
V_3.3	R6566	LDO Output	3.3V
V_3.0A	R6567	LDO Output	3.0V
V_EXT_1.85	R6570	LDO Output	1.85V
V_SW_1.4	C6570	Switcher Output	1.4V
V_SW_3.60	C6561	Switcher Output	3.6V
V_2.23	C6573	LDO Output	2.23V
ON_OFF_SWITCH	MECH_SW	ON/OFF Switch. Radio on when GND	GND
<b>Note:</b> * = Not applicable to APX 2000/ APX 4000 (Two Knobs). ** = Applicable to APX 2000/ APX 4000 (Two Knobs) only.			

Table 4-3. Standard Operating Bias – Clock Sources

Clock Source	Reference	Description	Frequency
Y6501	R6533	MAKO 24MHz & tapped into CPLD	24.576MHz
Y6502	C6541	MAKO RTC	32.768KHz
Y6601	C6601	OMAP CPU Clock	12MHz
U6302	TP6307 and TP6308	DDR Clocks (Complementary signals)	96MHz
U6101	R6113	MACE Clock	4MHz

Table 4-3. Standard Operating Bias – Clock Sources

Clock Source	Reference	Description	Frequency
U6101	R6115	GPS RTC clock	32.768KHz
Y701 (RF board)	R6218	RF Freq synth IC (Abacus) TCXO	16.8MHz

## 4.4 Power-Up Self-Check Errors

Each time the radio is turned on, the MCU and DSP perform a series of internal diagnostics. These diagnostics consist of checking such programmable devices as the FLASH ROMs, the EEPROM, and SRAM devices.

Problems detected during the power-up self-check routines are presented as error codes on the radio's display. For non-display radios, the problem is presented at power up by a single, low-frequency tone. Table 4-4 lists possible error codes, a description of each error code, and a recommended corrective action.

Table 4-4. Power-Up Self-Check Error Codes

Error Code/ Error Message	Description	Corrective Action
01/02	FLASH ROM Codeplug Checksum Non-Fatal Error	Reprogram the codeplug
01/12	Security Partition Checksum Non-Fatal Error	Send radio to depot
01/20	ABACUS Tune Failure Non-Fatal Error	Turn the radio off, then on
01/22	Tuning Codeplug Checksum Non-Fatal Error	Send radio to depot
01/81	Host ROM Checksum Fatal Error	Send radio to depot
01/82	FLASH ROM Codeplug Checksum Fatal Error	Reprogram the codeplug
01/88	External RAM Fatal Error – Note: Not a checksum failure	Send radio to depot
01/90	General Hardware Failure Fatal Error	Turn the radio off, then on
01/92	Security Partition Checksum Fatal Error	Send radio to depot
01/93	FLASHport Authentication Code Failure	Send radio to depot
01/98	Internal RAM Fail Fatal Error	Send radio to depot
01/A2	Tuning Codeplug Checksum Fatal Error	Send radio to depot
02/81	DSP ROM Checksum Fatal Error	Send radio to depot
02/88	DSP RAM Fatal Error – Note: Not a checksum failure	Turn the radio off, then on
02/90	General DSP Hardware Failure (DSP startup message not received correctly)	Turn the radio off, then on
09/10	Secure Hardware Error	Turn the radio off, then on
09/90	Secure Hardware Fatal Error	Turn the radio off, then on



Table 4-4. Power-Up Self-Check Error Codes (Continued)

Error Code/ Error Message	Description	Corrective Action
Hardware board absent/ Hardware board absent then Man-Down Hw error	Keypad board is not connected properly to the radio	Ensure the Keypad board is fixed in place
15/10	External Accessory Non-Fatal Error External Accessory is not present on power up or did not power up correctly, and external accessory feature is enabled in codeplug.	Verify external accessory is connected and powers up. Turn the radio off, then on.
15/90	External Accessory Fatal Error External Accessory is not present on power up or did not power up correctly, and external accessory feature is enabled in codeplug.	Verify external accessory is connected and powers up. Turn the radio off, then on.
1E/10	Collaborative device is connected to the radio but the collaborative feature is not enabled in the codeplug.	Contact your Motorola Sales Representative/ Partner on how to add Collaborative feature to your radios.
<b>Note:</b> If the corrective action does not fix the failure, send the radio to the depot.		

## 4.5 Power-Up Self-Check Diagnostics and Repair (Not for Field Use)

Table 4-5 lists additional action items that can be used for the diagnosis and resolution of the error codes listed in Table 4-4.

Table 4-5. Power-Up Self-Check Diagnostic Actions

Error Code/ Error Message	Diagnostic Actions
01/02	This non-fatal error will likely recover if the radio's power is cycled. In the event that this does not resolve the issue, the radio should be reflashed. If the error remains, send the radio to depot.
01/12	The radio should be sent to the depot for reflashing of the security codeplug.
01/20	Cycling radio power should resolve this issue.
01/22	The radio should be sent to the depot for reflash of the tuning codeplug followed by retuning of the radio.
01/81	The radio should be sent to the depot for reflashing of the host code.
01/82	The radio should be sent to the depot for reflashing of the radio codeplug.
01/88	Reflashing of the radio should first be performed. If this fails to resolve the issue, send the radio to depot.
01/90	Cycle power to radio. Continued failure indicates a likely IC failure. In this event, radio should be sent to the depot for isolation and repair of the problem IC.

Table 4-5. Power-Up Self-Check Diagnostic Actions (Continued)

Error Code/ Error Message	Diagnostic Actions
01/92	The radio should be sent to the depot for reprogramming of the security codeplug.
01/93	The radio should be sent to the depot for reflashing of the host code.
01/98	Send radio to the depot.
01/A2	The radio should be sent to the depot for reflashing of the tuning codeplug followed by re-tuning of the radio.
02/81	The radio should be sent to the depot for examination.
02/88	Cycle power to the radio. If this does not fix the problem, then the radio should be sent to the depot for reflashing of the DSP code.
02/90	Cycle power to the radio. If this fails to fix the problem, then the radio should be sent to the depot for reflashing of the DSP code.
09/10	Cycle power to the radio. If this fails then follow instructions in the secure hardware failure troubleshooting flowchart.
09/90	Cycle power to the radio. If this fails then follow instructions in the secure hardware failure troubleshooting flowchart.
Hardware board failed	Bluetooth error. Send radio to depot for examination.
Hardware board failed then Man-Down HW error	Man-Down feature unavailable. Send radio to depot for examination.
Hardware board mismatch	Keypad board does not support bluetooth feature. Send radio to depot. If the Keypad board type supports "Full feature" – "Mace/GPS/BT", updating the keypad board firmware should resolve the error message.
Hardware board mismatch then Man-Down HW error	Keypad board does not support either bluetooth or Man-down feature or both. If the Keypad board type supports "Full feature" – "Mace/GPS/BT", updating the keypad board firmware should resolve the error message.

# Chapter 5 Troubleshooting Charts

This section contains detailed troubleshooting flowcharts. These charts should be used as a guide in determining the problem areas. They are not a substitute for knowledge of circuit operation and astute troubleshooting techniques. It is advisable to refer to the related detailed circuit descriptions in the theory of operation sections prior to troubleshooting a radio.

## 5.1 List of Troubleshooting Charts

Most troubleshooting charts (see [Table 5-1](#)) end up by pointing to an IC to replace. It is not always noted, but it is good practice to verify supplies and grounds to the affected IC and to trace continuity to the malfunctioning signal and related circuitry before replacing any IC. For instance, if a clock signal is not available at a destination, continuity from the source IC should be checked before replacing the source IC.

Table 5-1. Troubleshooting Charts

Troubleshooting	Page No.
<b>Main Troubleshooting</b>	
Main Troubleshooting Flowchart	5-3
<b>Power-Up Failure</b>	
Main Board	5-4
B+ Incorrect Voltage	5-5
Low LDO10 VCC_3.3 Voltage	5-6
Low LDO3 V_1.55 Voltage	5-7
Low LDO8 V_5.0A Voltage	5-8
Low VBUS2 Voltage	5-9
Low V_SW_1.4 Voltage	5-10
Low V_2.23 Voltage	5-11
Low V_SW_3.6 Voltage	5-12
Low V_SW_5 Voltage	5-13
Low V_EXT_1.85 Voltage	5-14
<b>DC Supply</b>	
DC Supply 5 Volt Failure	5-15
DC Supply 3.6 Volt Failure	5-16
DC Supply 3 Volt Failure	5-17
DC Supply 1.85 Volt Failure	5-18

Table 5-1. Troubleshooting Charts (Continued)

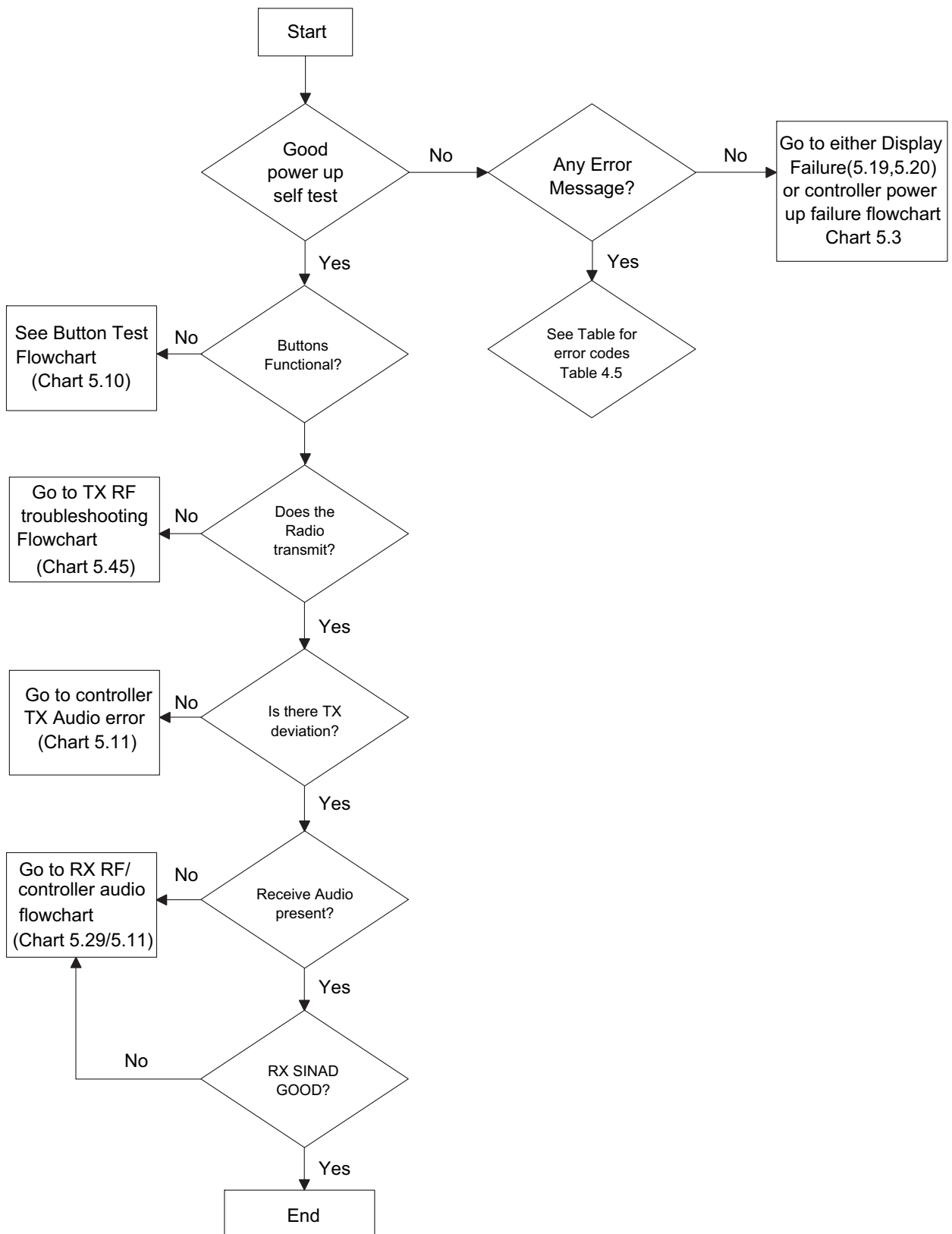
Troubleshooting	Page No.
DC Supply 1.8 Volt Failure	5-19
DC Supply 1.5 Volt Failure	5-20
DC Supply 1.4 Volt Failure	5-21
<b>Display</b>	
Main Display Failure	5-22
<b>Knob/ Button/ Keypad</b>	
Volume/Channel Error	5-23
Volume Set Error (APX 2000/ APX 4000 (Two Knobs))	5-24
Channel Select Error (APX 2000/ APX 4000 (Two Knobs))	5-25
Keypad Error	5-26
Side Button Error	5-27
<b>RX Audio</b>	
External Audio	5-28
Internal Audio	5-29
<b>TX Audio</b>	
Internal Microphone	5-30
External Mic Failure	5-31
<b>Keyload/ Secure Hardware/ Memory</b>	

Table 5-1. Troubleshooting Charts (Continued)

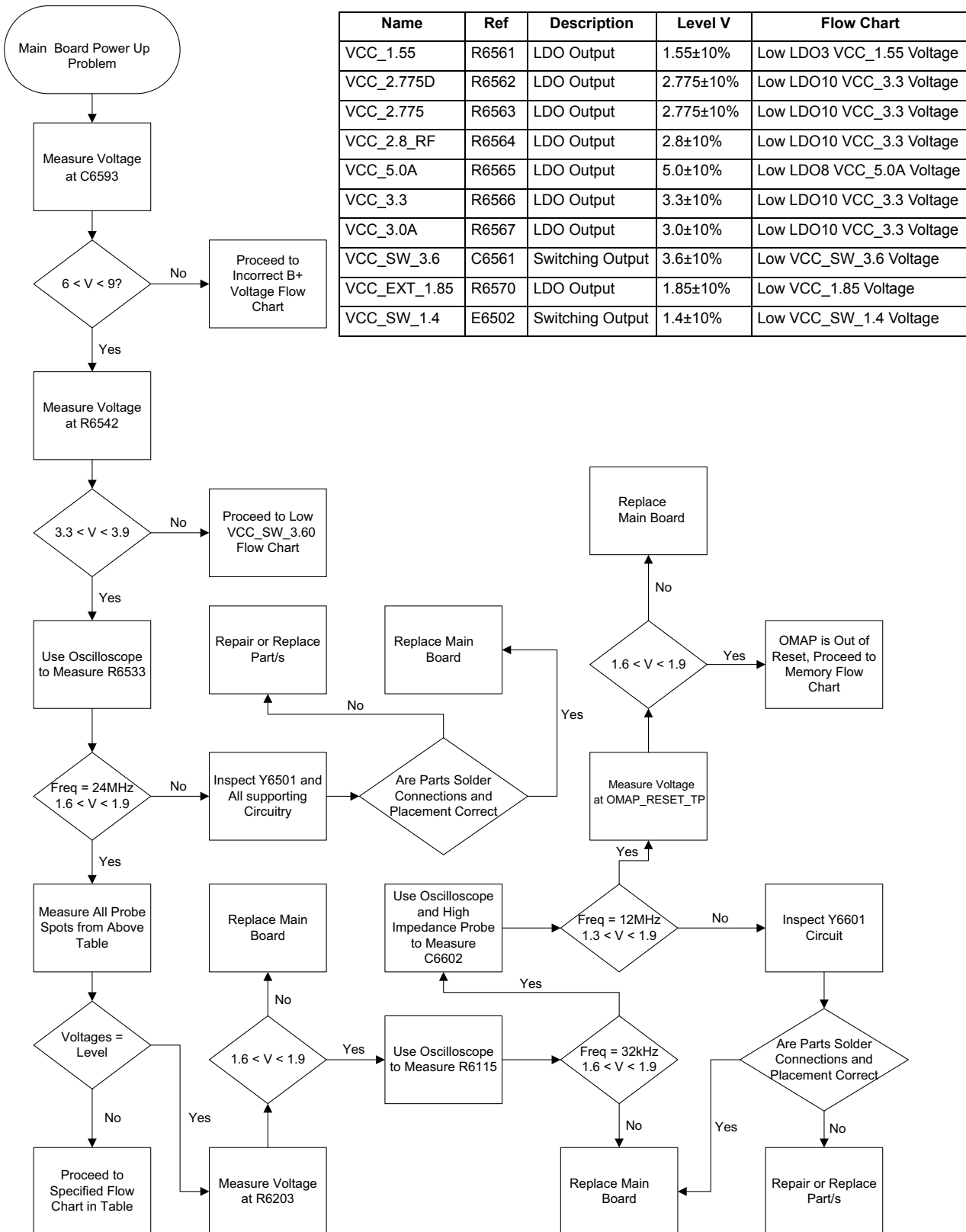
<b>Troubleshooting</b>	<b>Page No.</b>
Keyload/Secure Hardware/Memory	5-32
Secure Hardware Failure	5-33

<b>RX RF</b>	
RX RF Failure	5-34
<b>FGU</b>	
FGU Failure	5-45
<b>VCO</b>	
VCO Failure	5-46
<b>GPS</b>	
GPS Failure	5-52
<b>Bluetooth Failure</b>	
Pairing Issue	5-53
LCD Indication	5-56
No Audio from Headset	5-58
<b>PA Failure</b>	
Main	5-59
UHF1/UHF2 PA	5-60
700/800 MHz PA	5-61
VHF PA	5-62
900 MHz PA	5-63
ALC	5-64

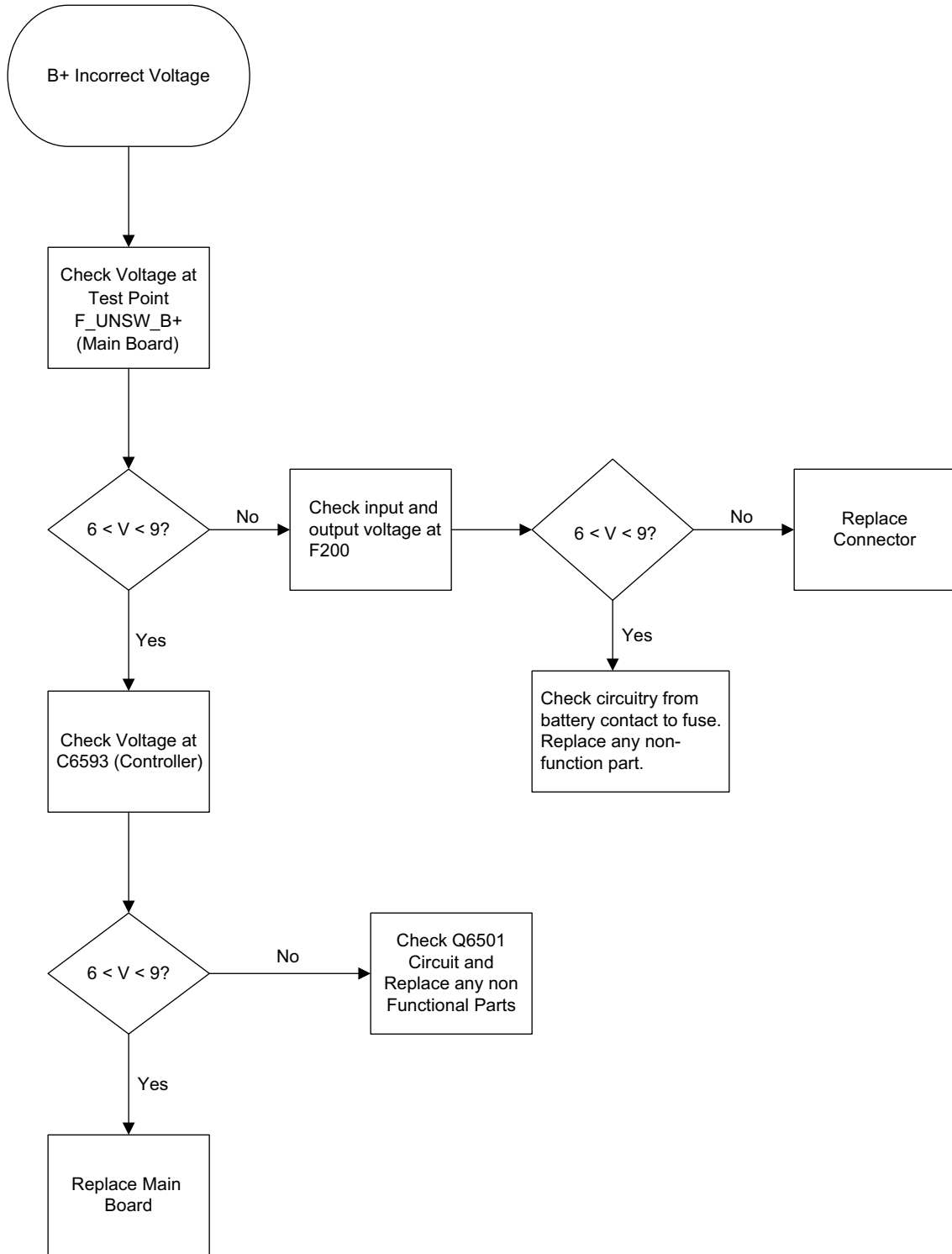
## 5.2 Main Troubleshooting Flowchart



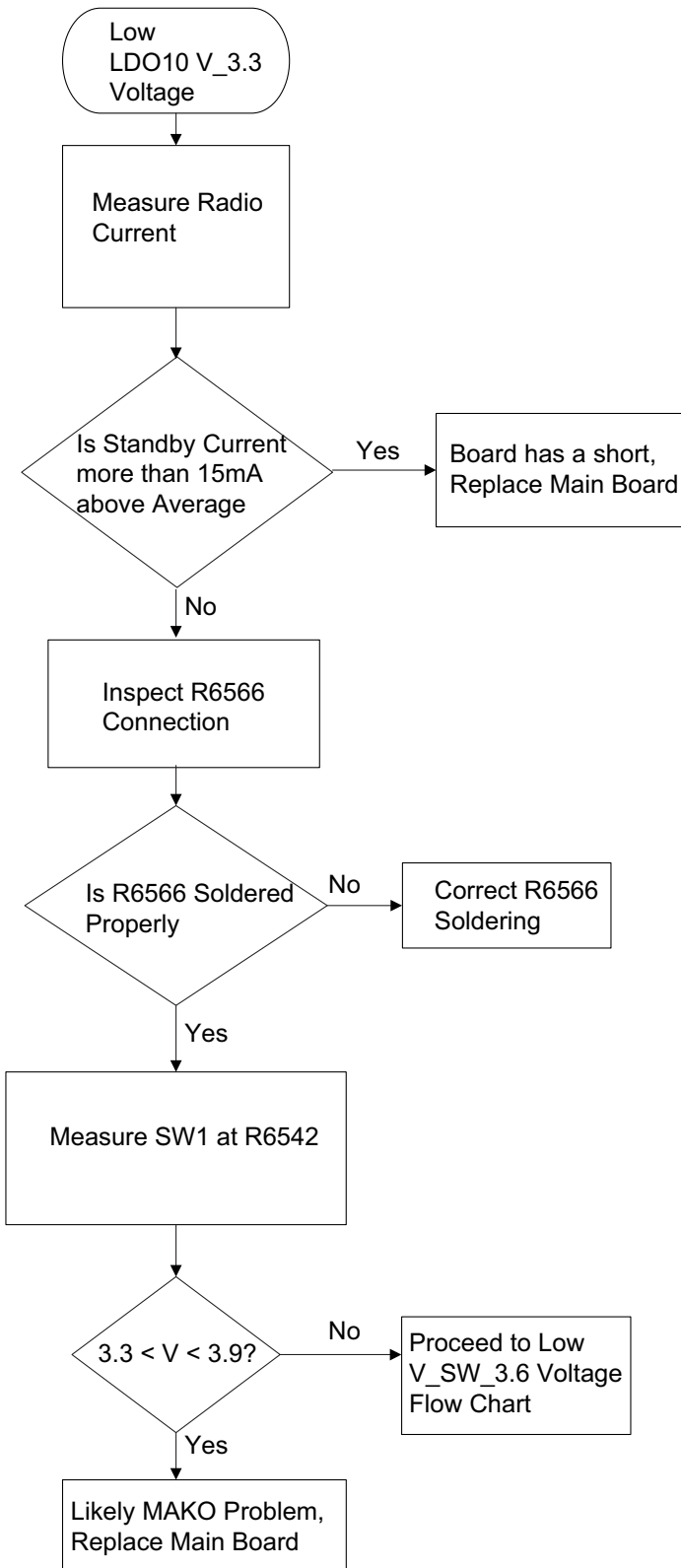
### 5.3 Power-Up Failure – Main Board



# Power-Up Failure – B+ Incorrect Voltage

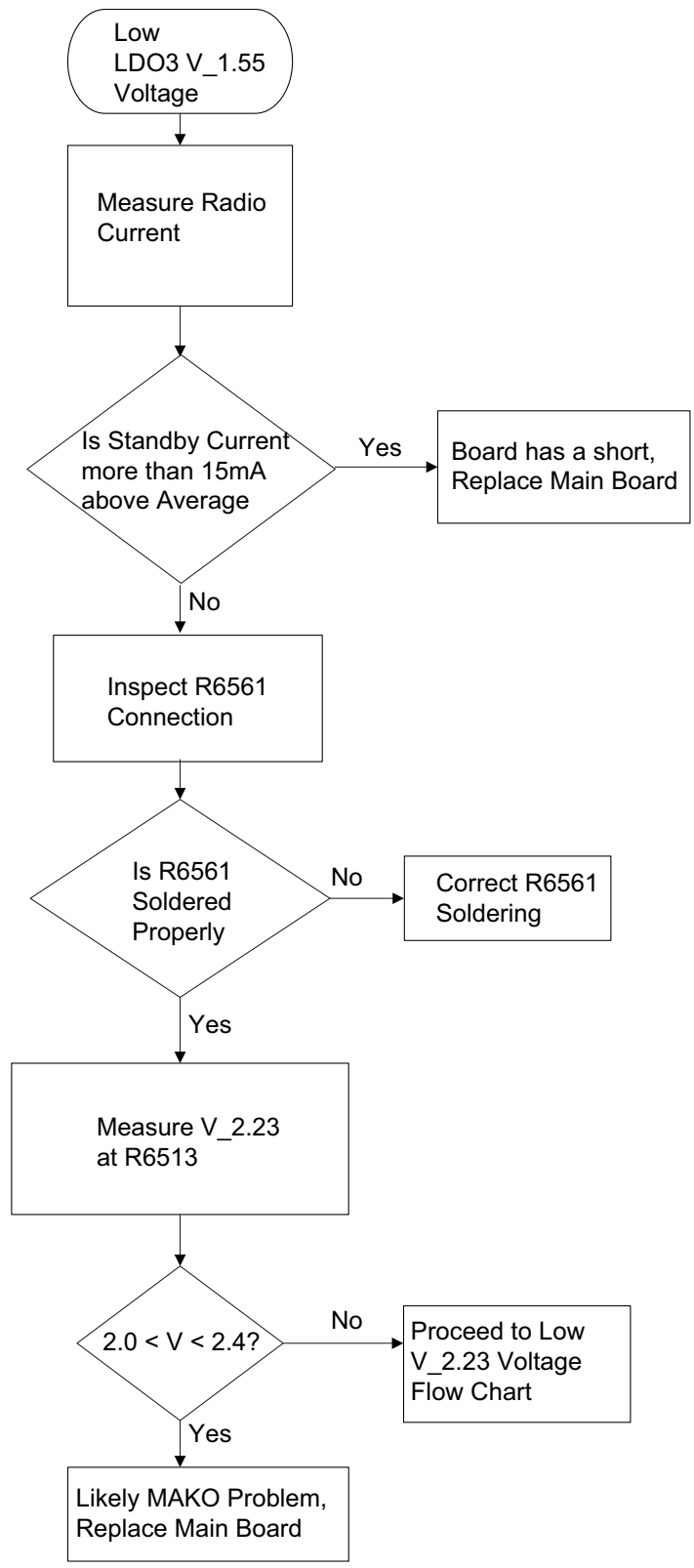


### Power-Up Failure – Low LDO10 VCC\_3.3 Voltage

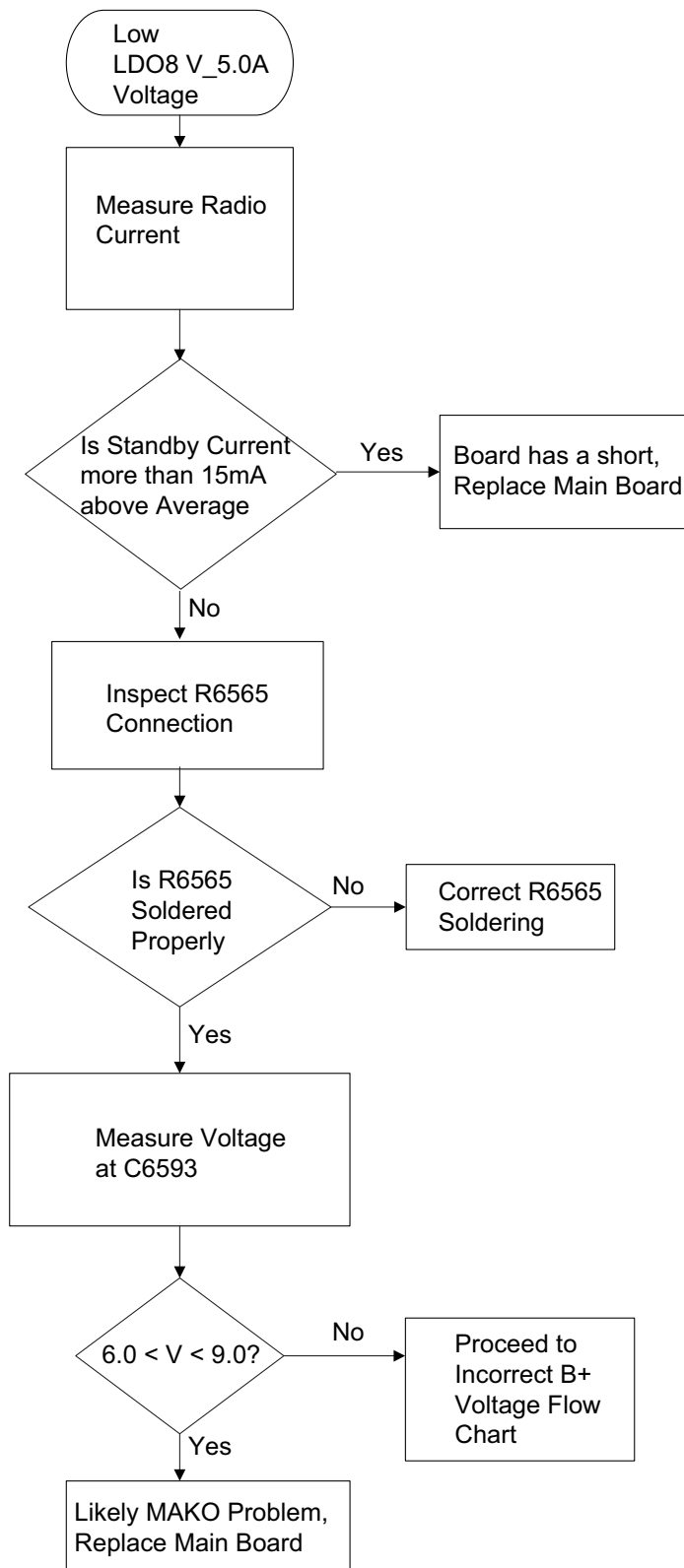




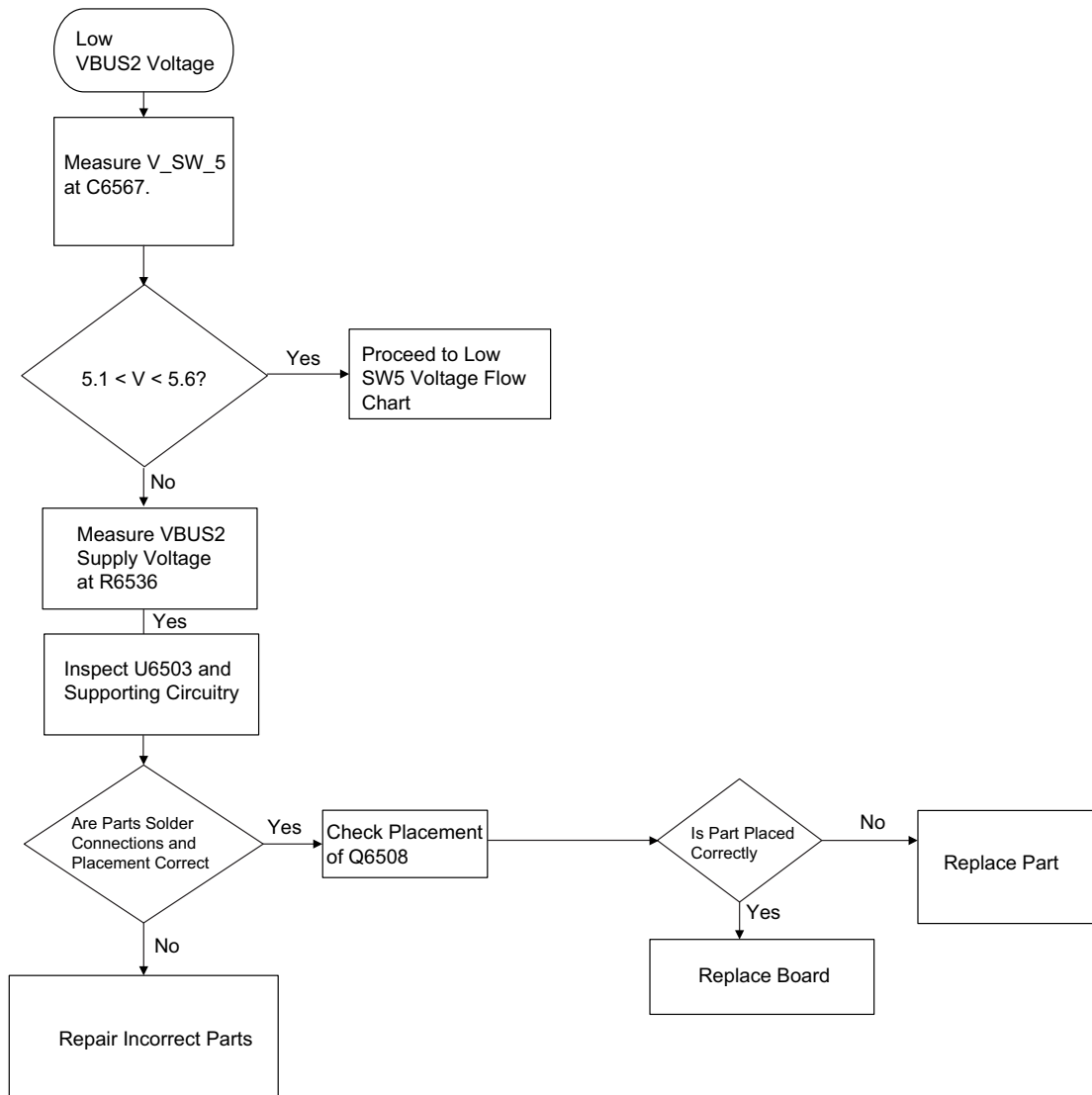
## Power-Up Failure – Low LDO3 V\_1.55 Voltage



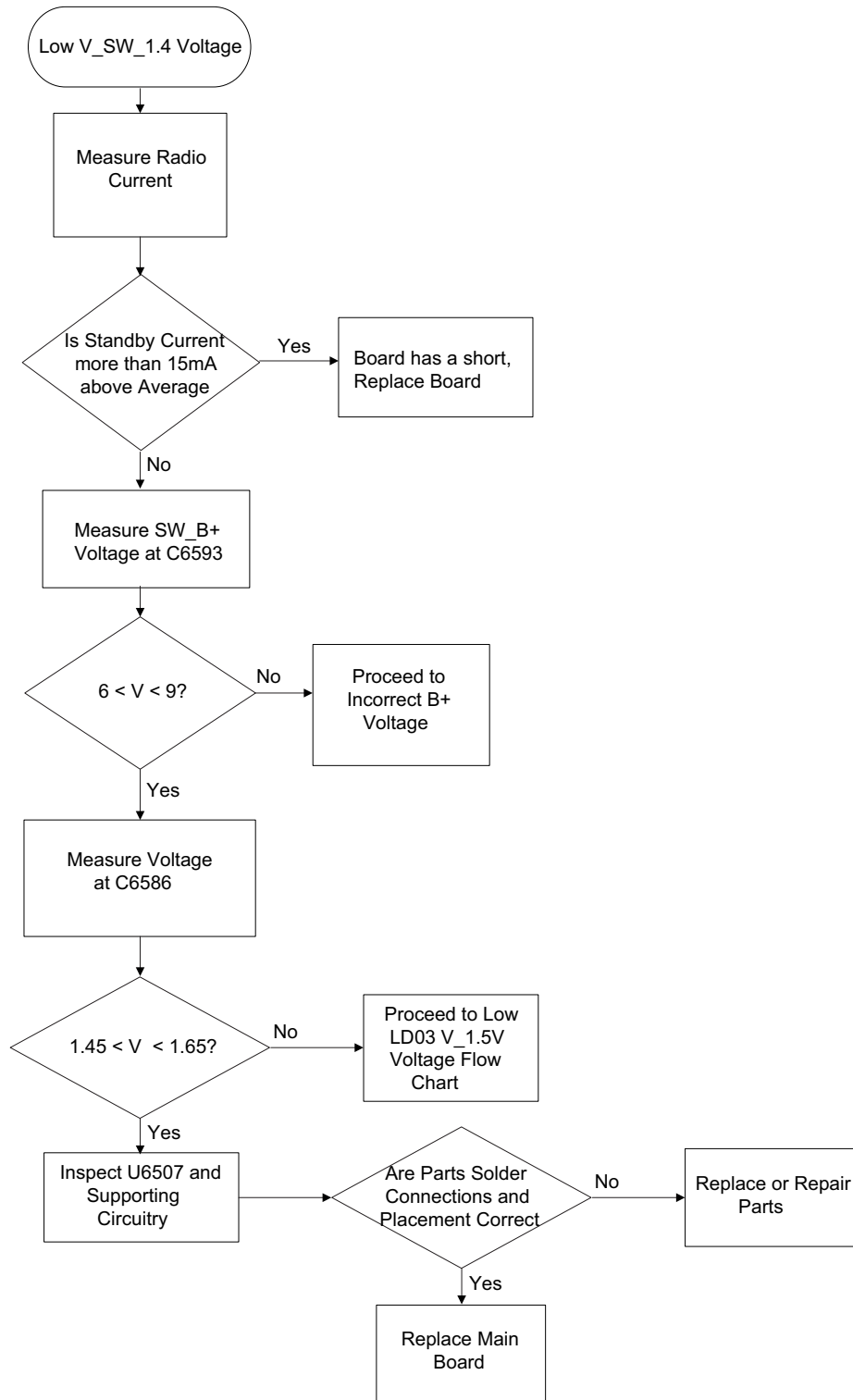
### Power-Up Failure – Low LDO8 V\_5.0A Voltage



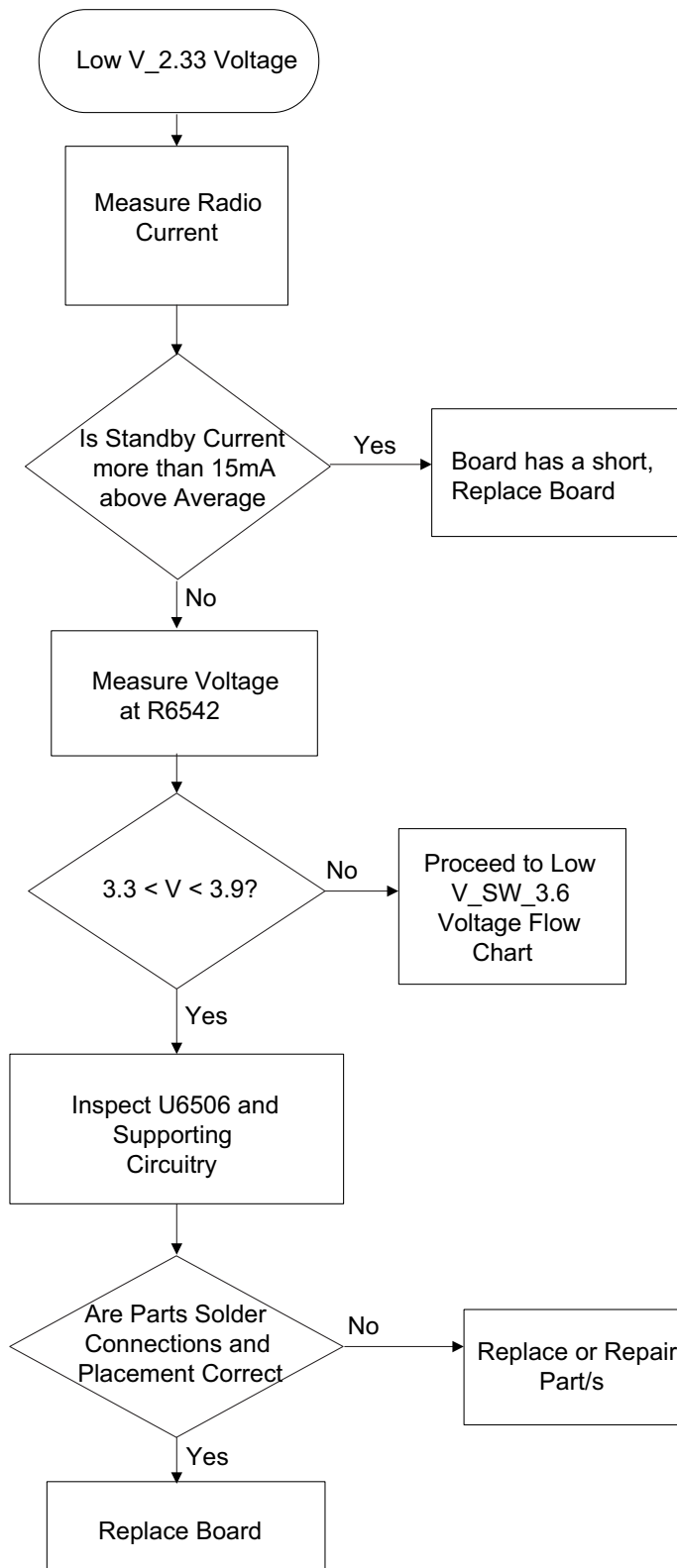
# Power-Up Failure – Low VBUS2 Voltage



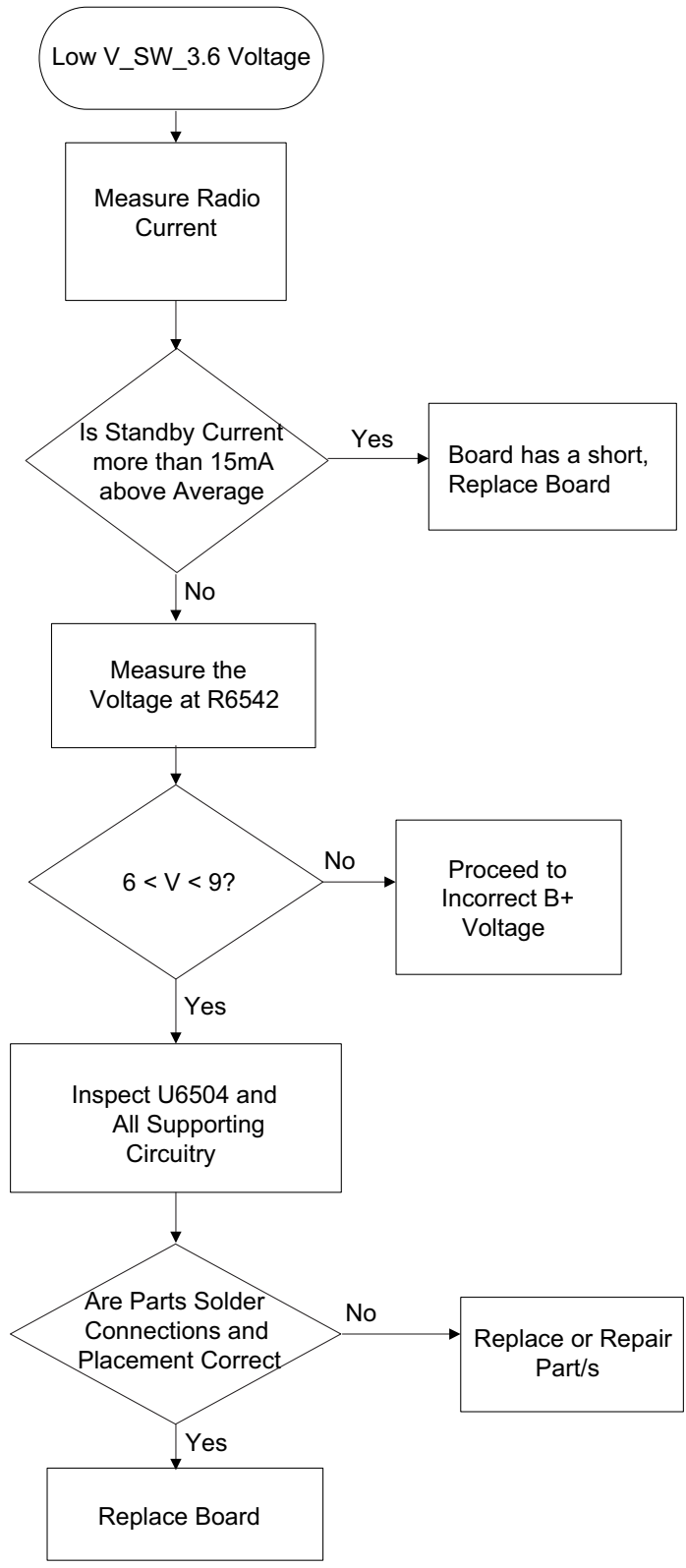
# Power-Up Failure – Low V\_SW\_1.4 Voltage



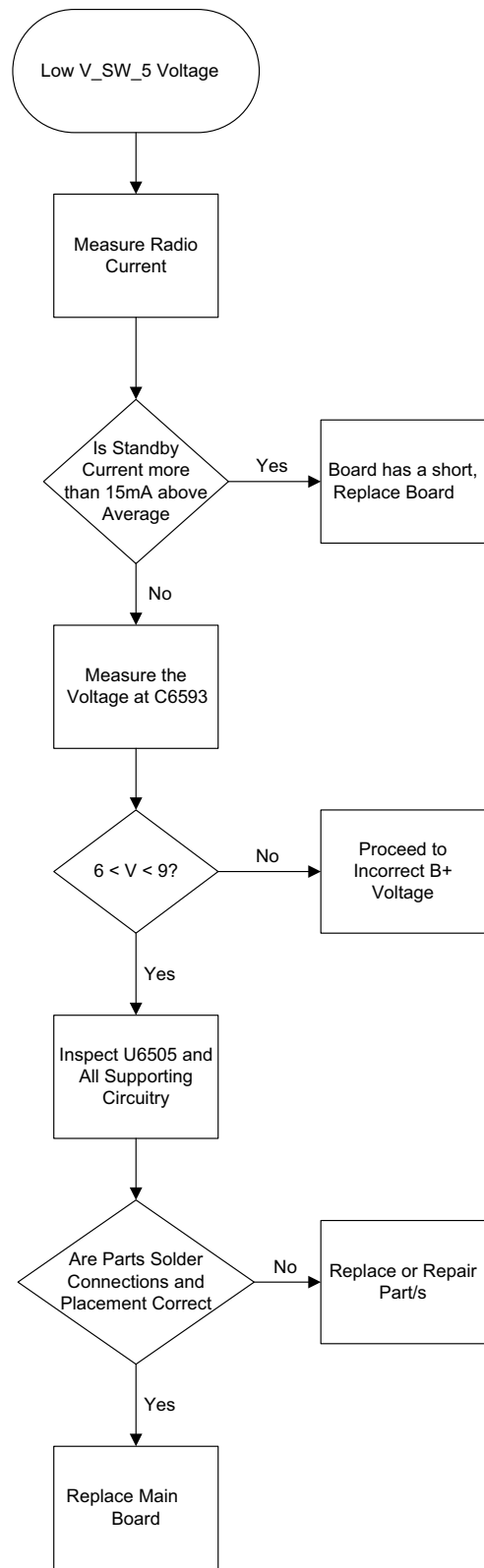
## Power-Up Failure – Low V<sub>2.33</sub> Voltage



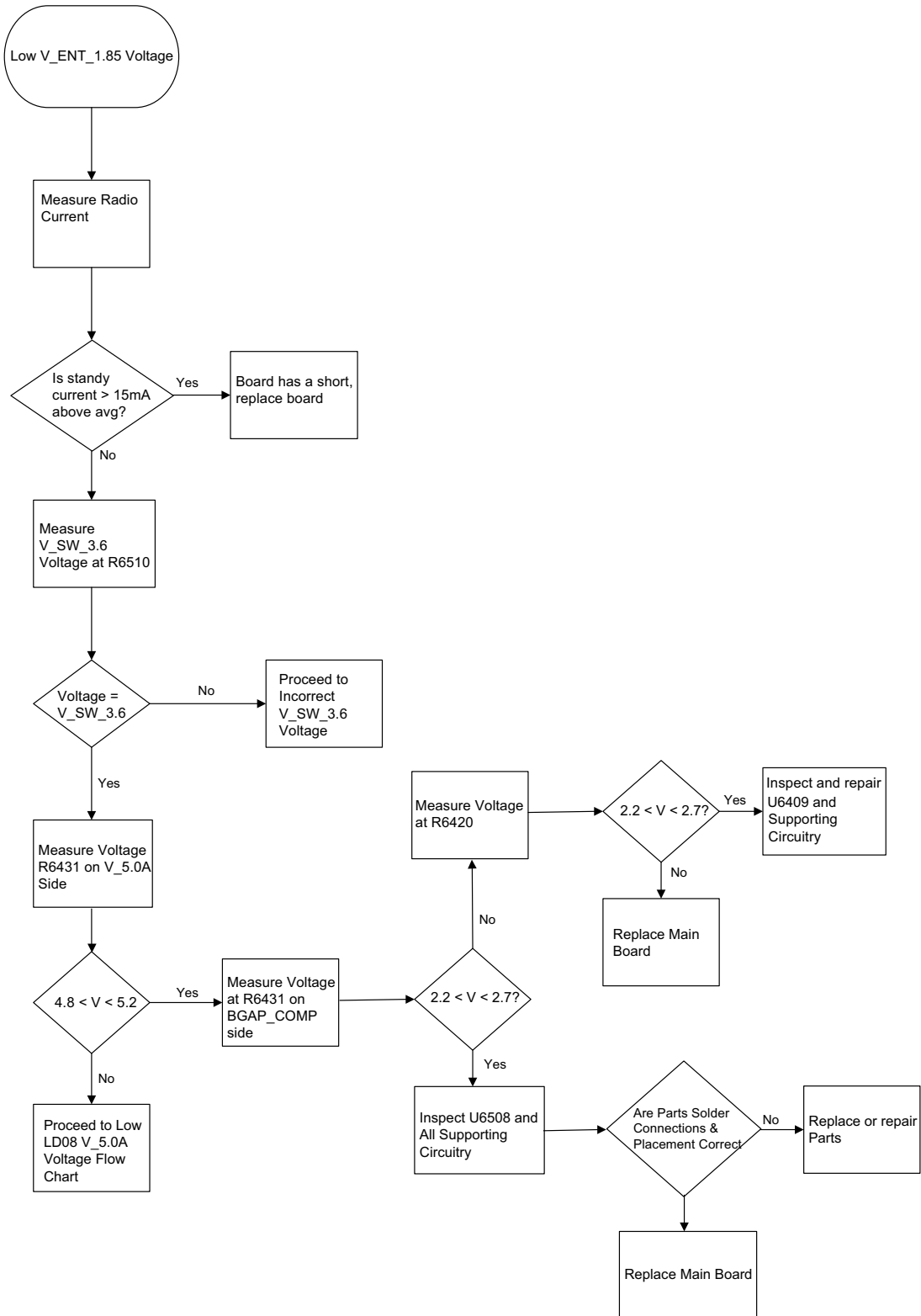
### Power-Up Failure – Low V\_SW\_3.6 Voltage



# Power-Up Failure – Low V\_SW\_5 Voltage



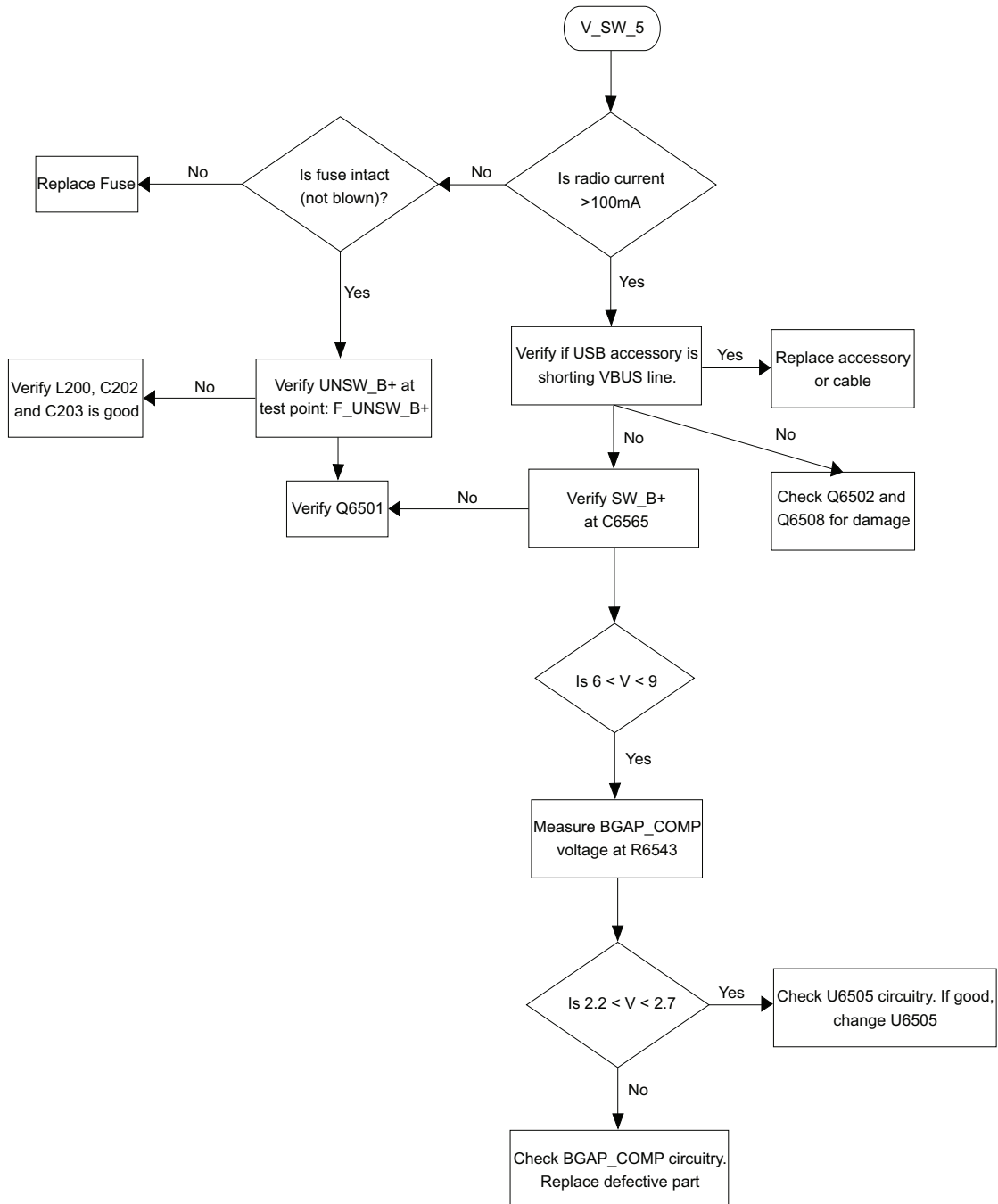
# Power-Up Failure – Low V\_EXT\_1.85 Voltage



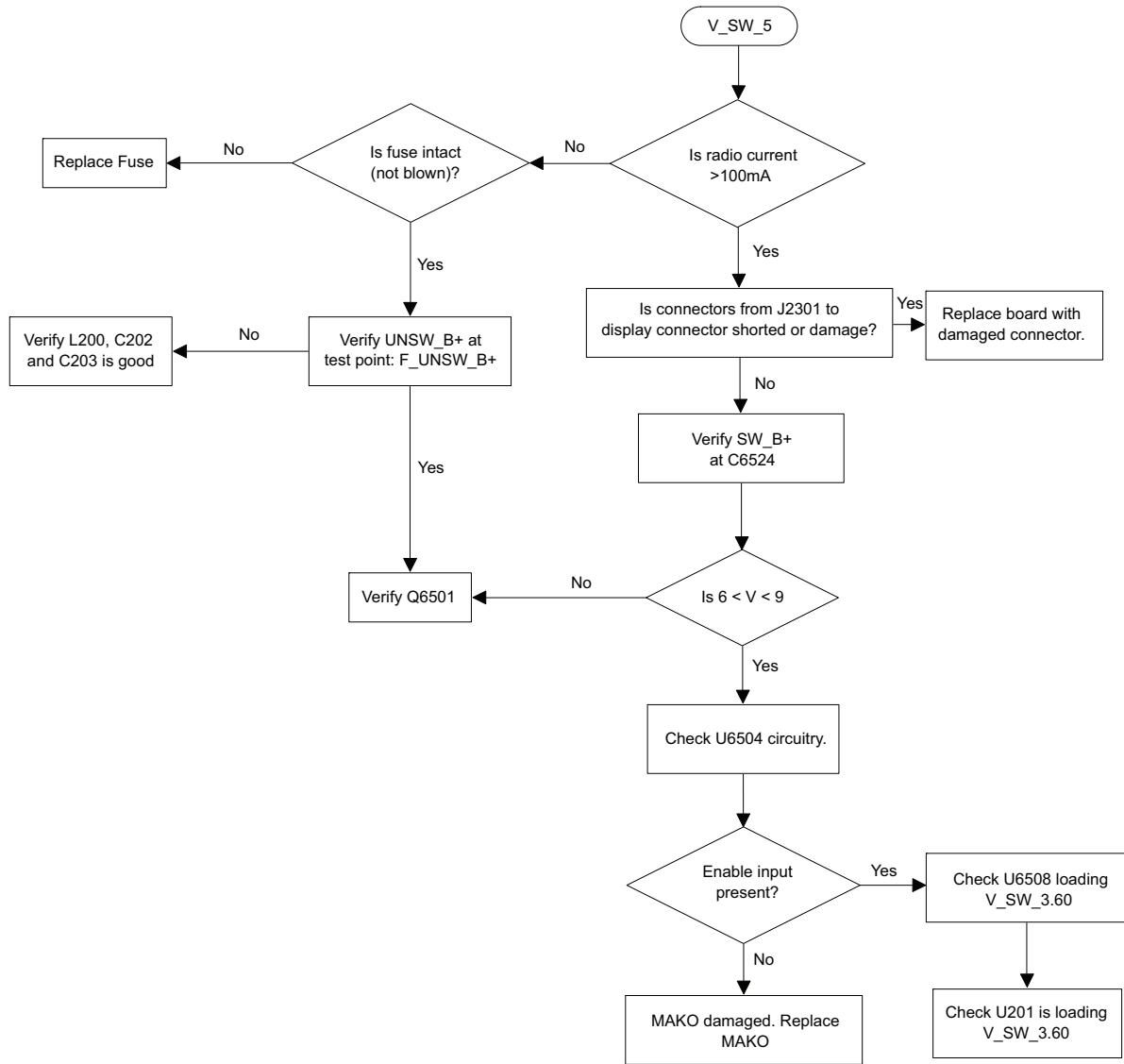


## 5.4 DC Supply Failure

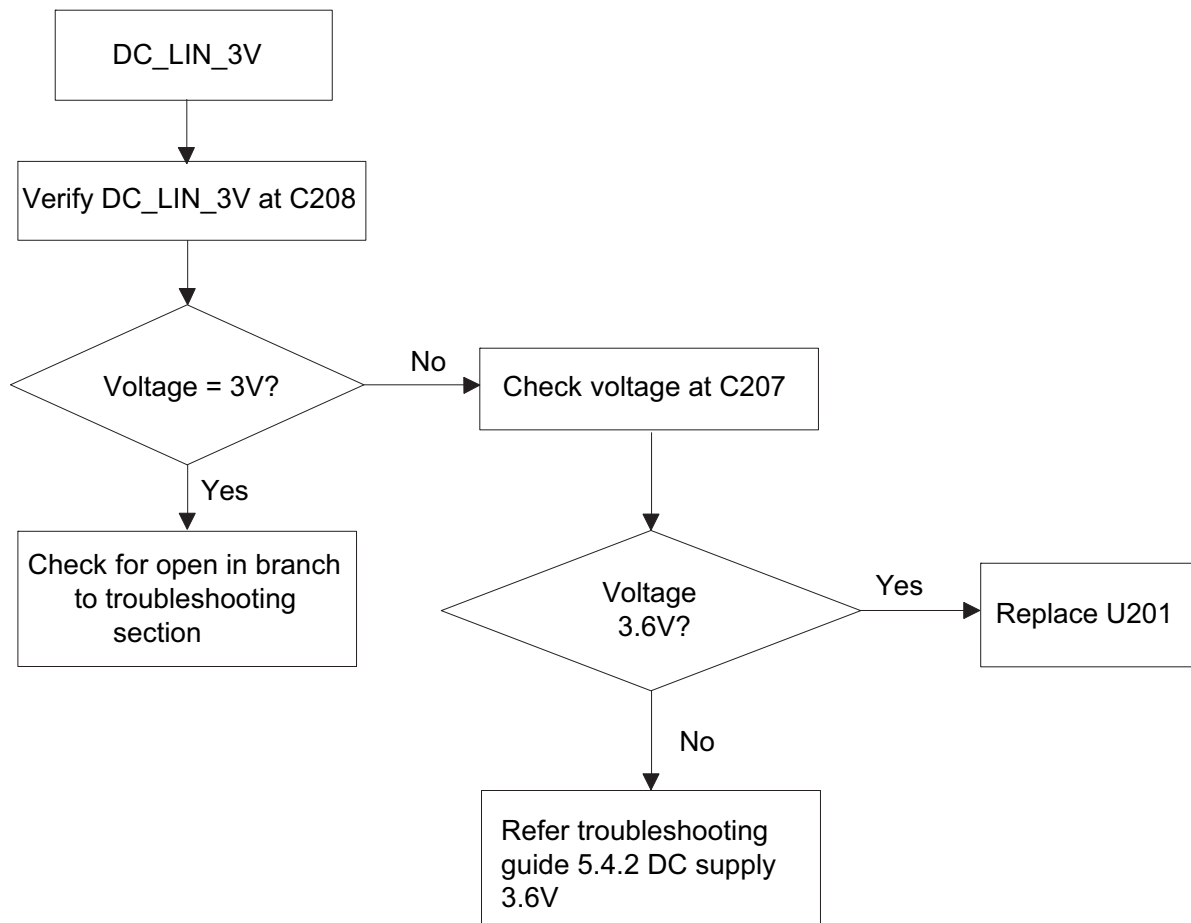
### DC Supply 5 Volt Failure



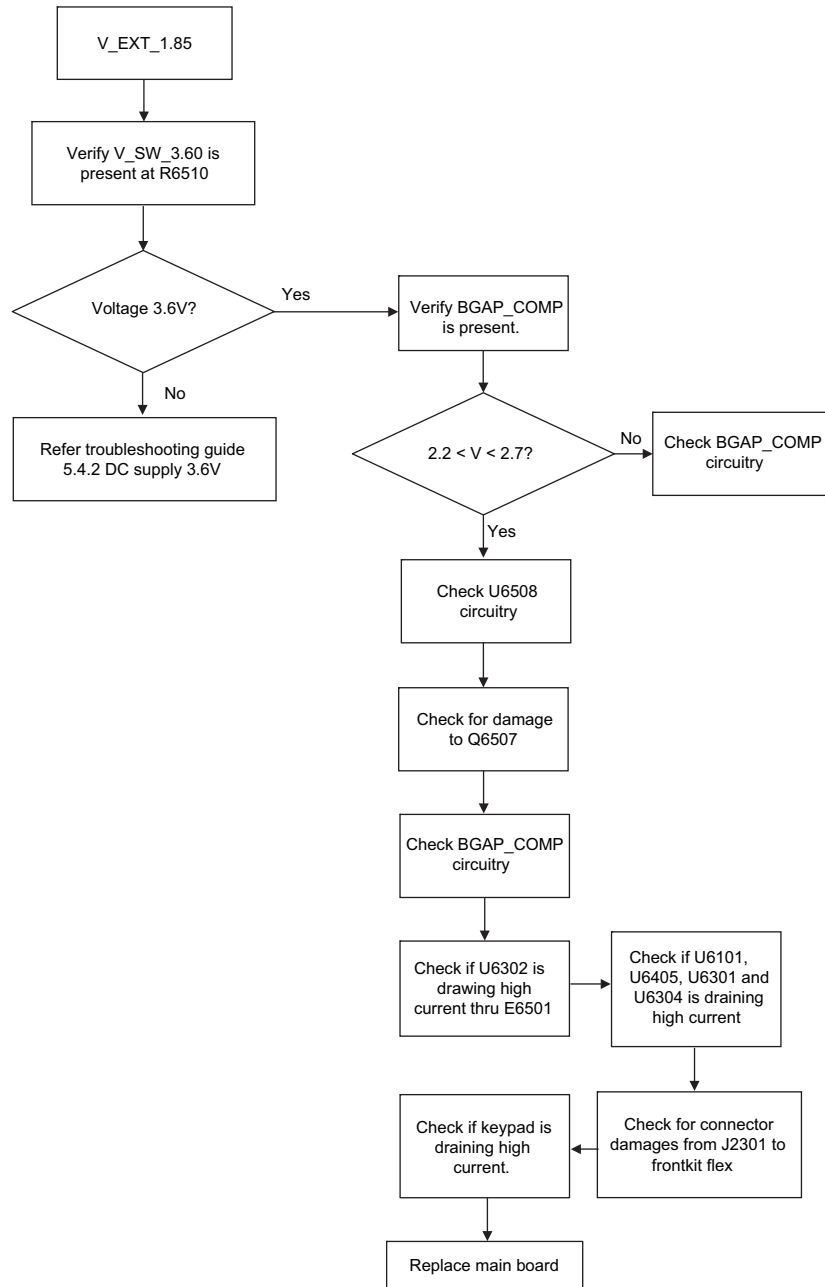
# DC Supply 3.6 Volt Failure



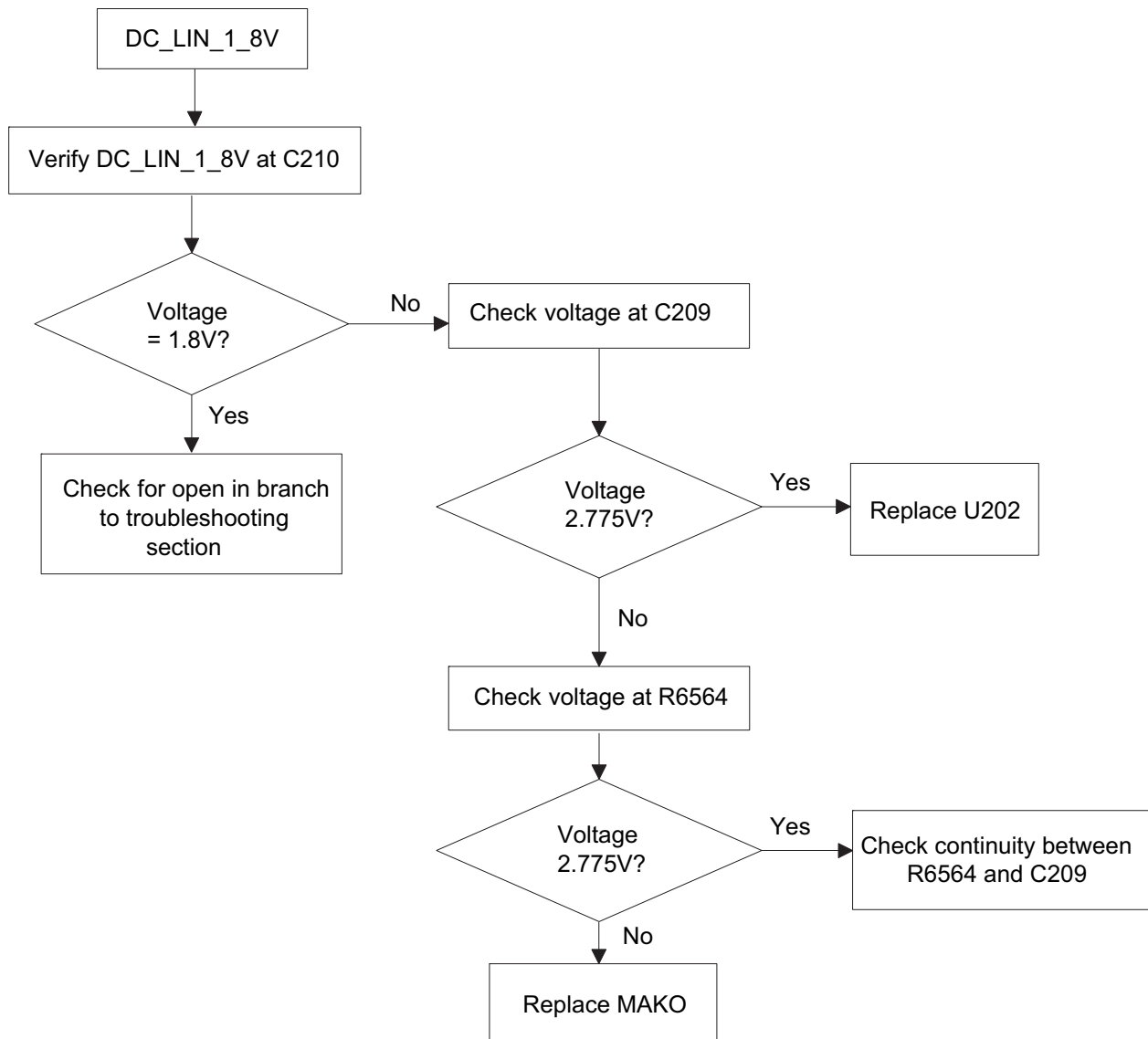
## DC Supply 3 Volt Failure



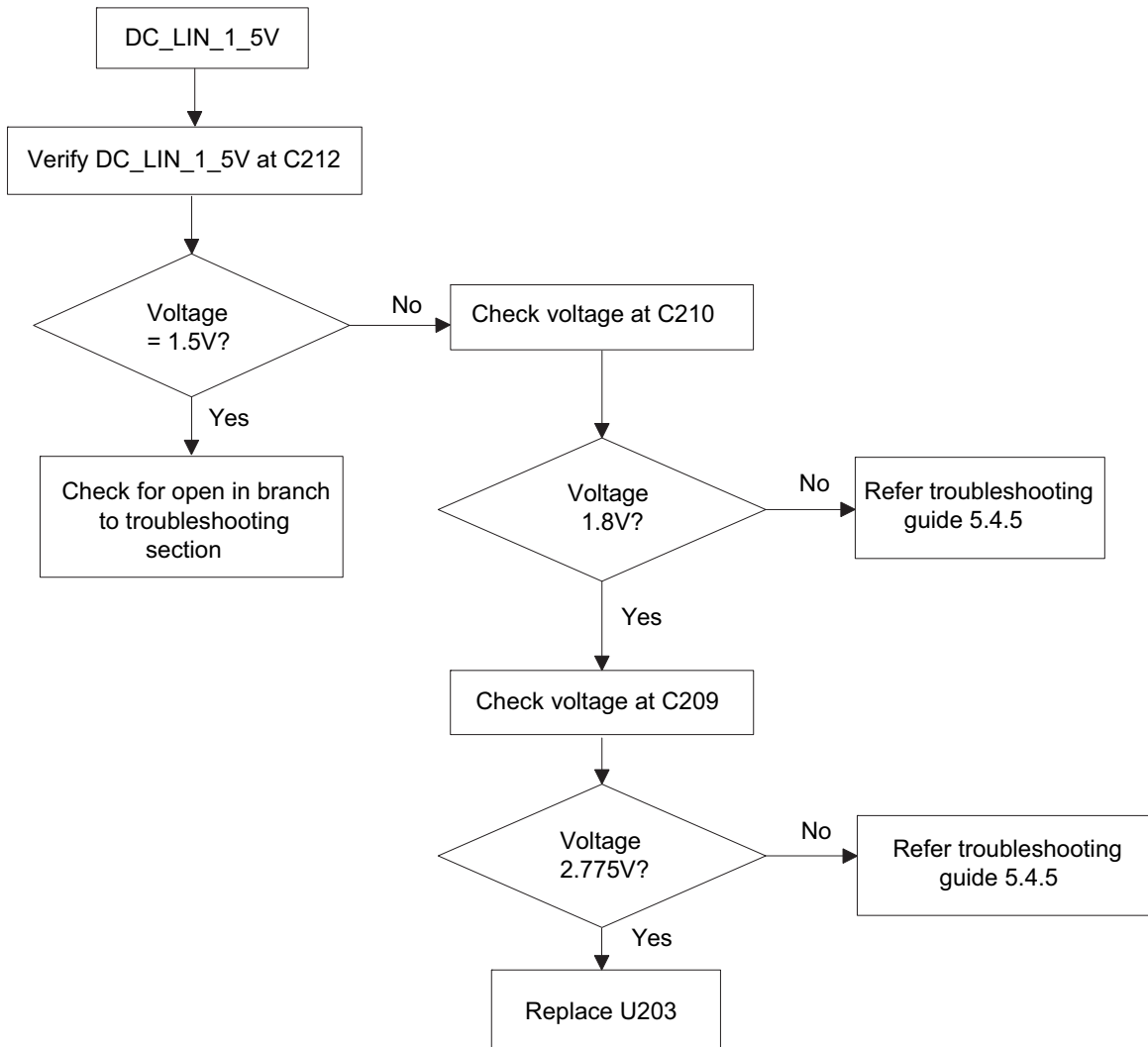
# DC Supply 1.85 Volt Failure



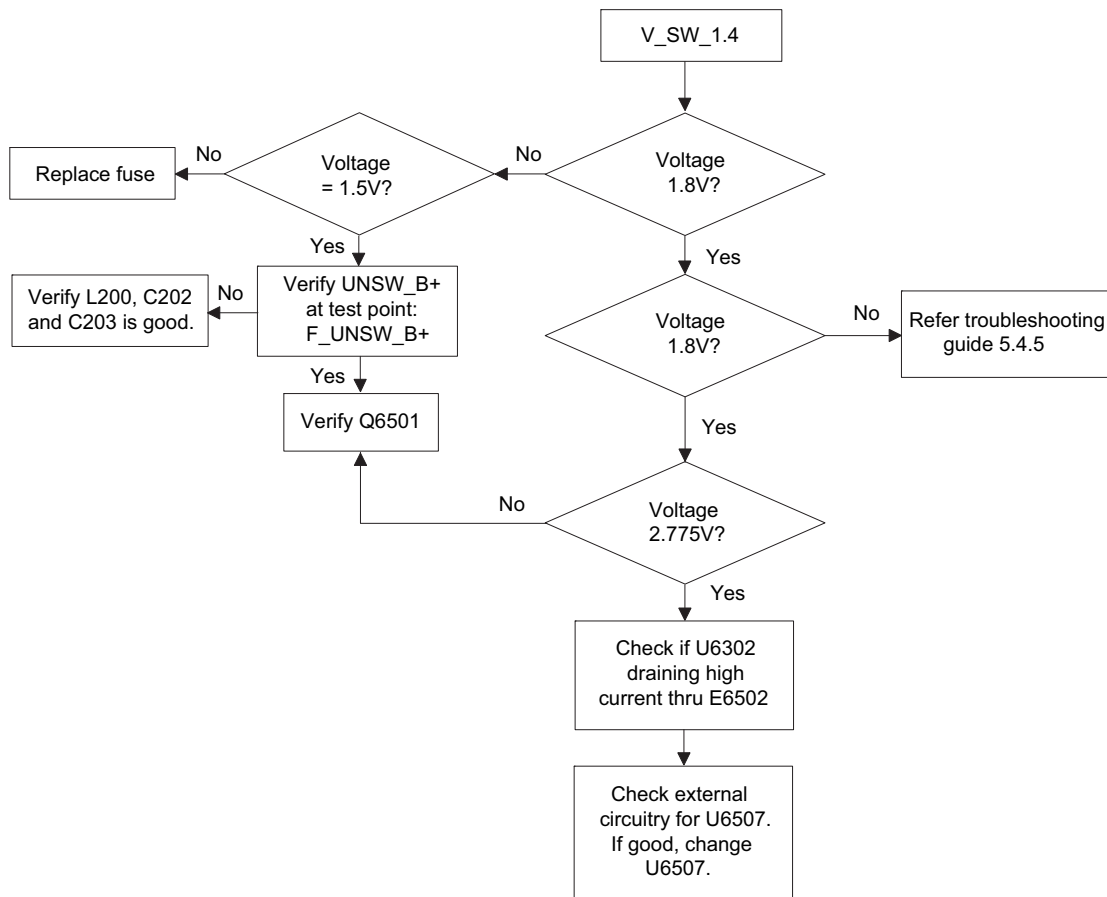
## DC Supply 1.8 Volt Failure



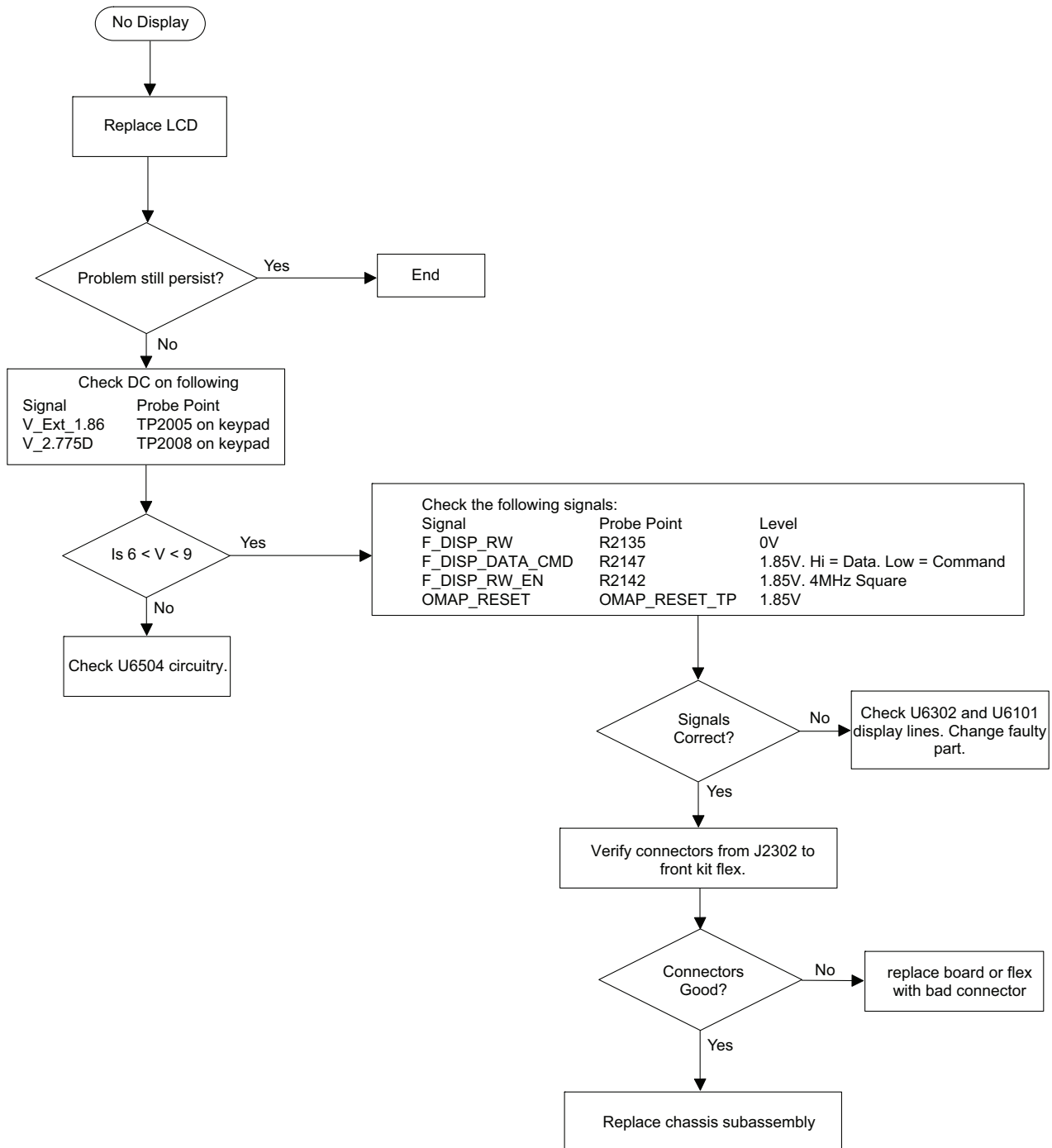
# DC Supply 1.5 Volt Failure



## DC Supply 1.4 Volt Failure

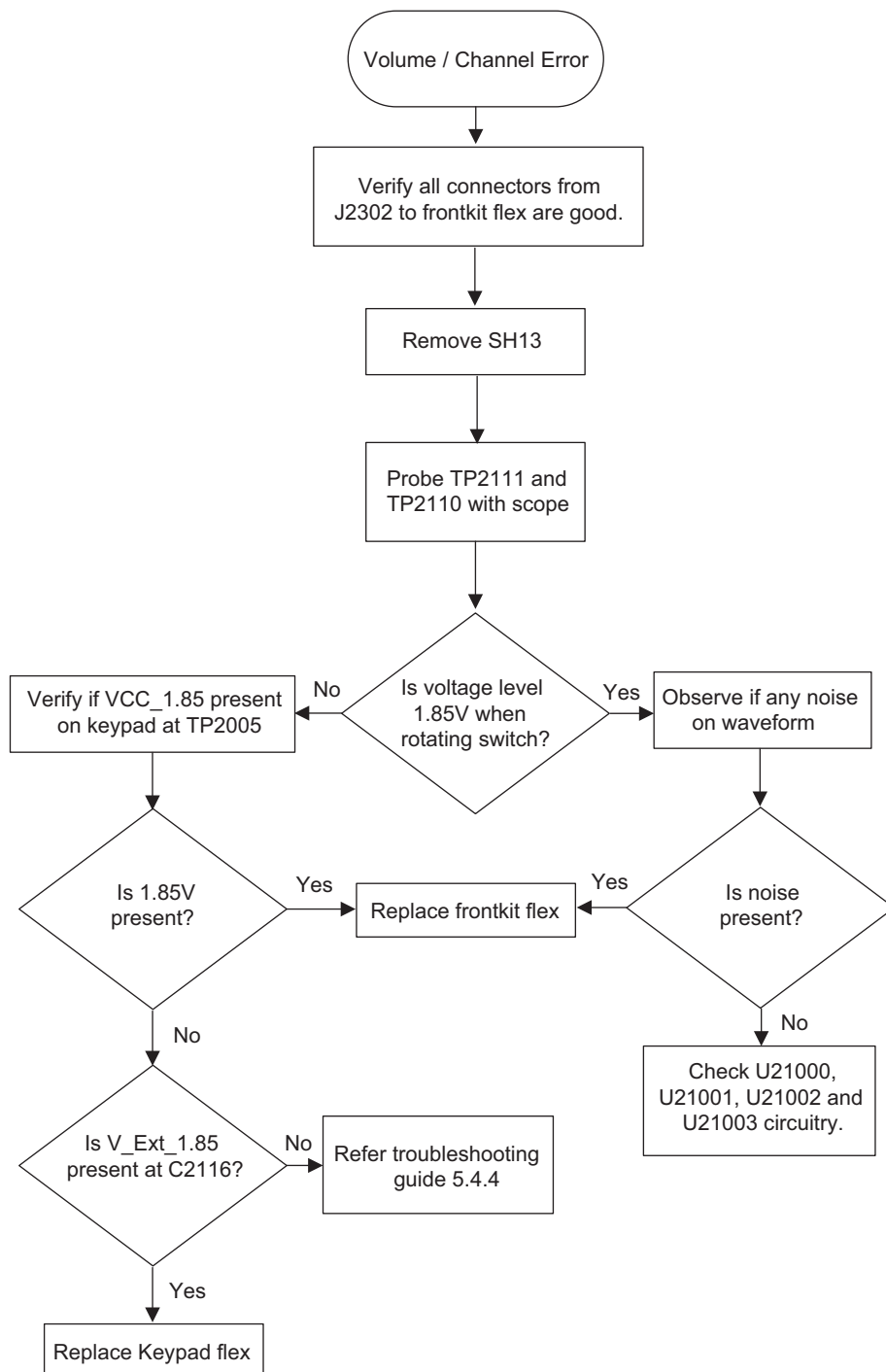


## 5.5 Main Display Failure

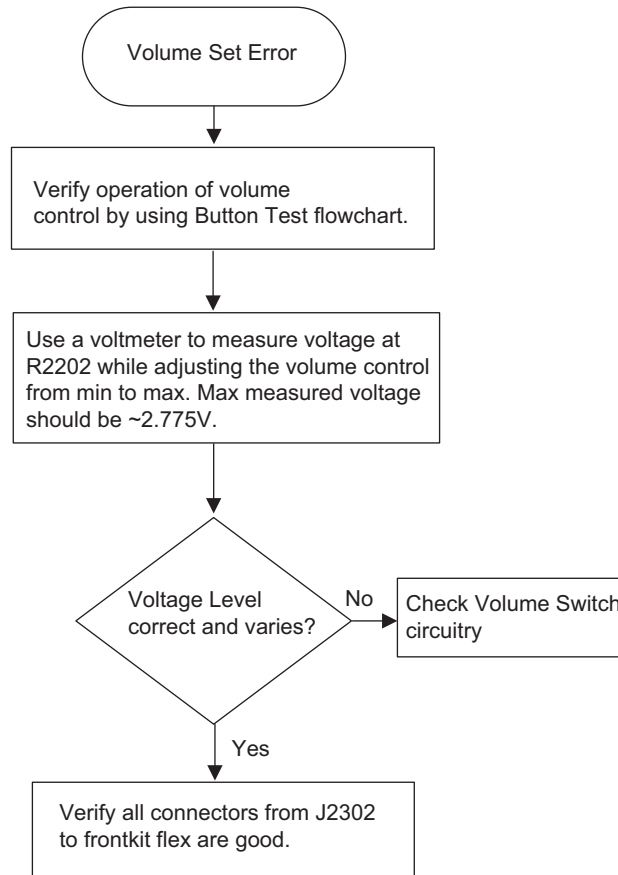




## 5.6 Volume/Channel Error

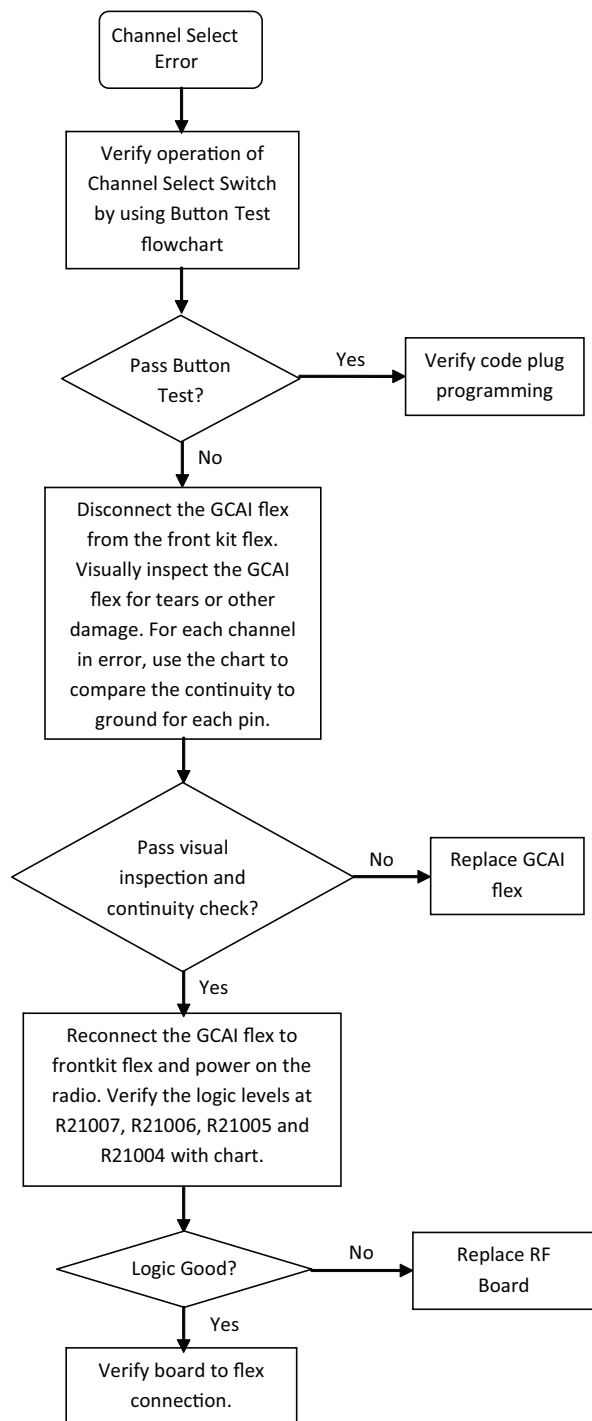


### 5.7 Volume Set Error (APX 2000/ APX 4000 (Two Knobs))



## 5.8 Channel Select Error (APX 2000/ APX 4000 (Two Knobs))

Physical Position	RTA3 (R21007)	RTA2 (R21006)	RTA1 (R21005)	RTA0 (R21004)
Channel 1	1	0	1	0
Channel 2	1	0	1	1
Channel 3	1	1	1	1
Channel 4	1	1	1	0
Channel 5	1	1	0	0
Channel 6	1	1	0	1
Channel 7	1	0	0	1
Channel 8	1	0	0	0
Channel 9	0	0	0	0
Channel 10	0	0	1	0
Channel 11	0	0	1	1
Channel 12	0	1	1	1
Channel 13	0	1	1	0
Channel 14	0	1	0	0
Channel 15	0	1	0	1
Channel 16	0	0	0	1



# 5.9 Keypad Error

**Synopsis**

This Chart relates to failure in the button functions Basic Failure modes are as follows:

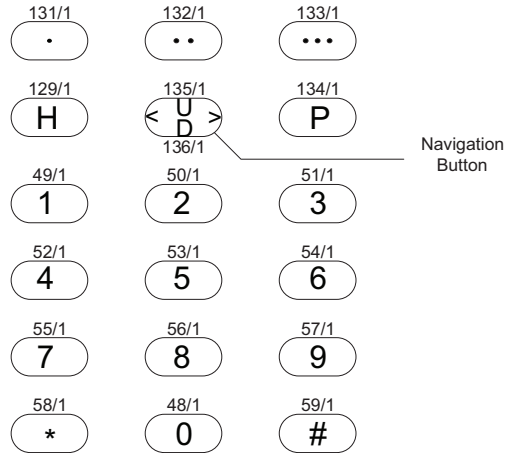
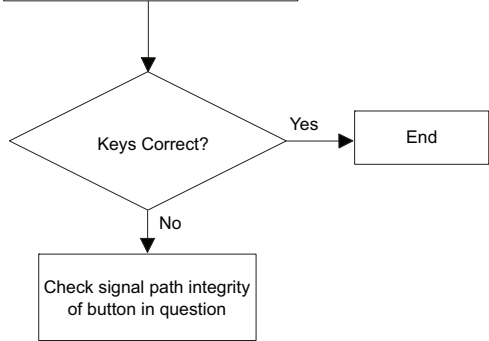
- 1) Failure in control top, side controls or keypad flex assembly
- 2) Bad Connection
- 3) Defective Swithces or pads

**Button Test**

Place radio in Test Mode. Press side Top Button so disply reads CH TEST. This places the radio in button test mode. Then, press the orange (Emergency) Top Button to verify codes displayed as shown in the Button Table at right.

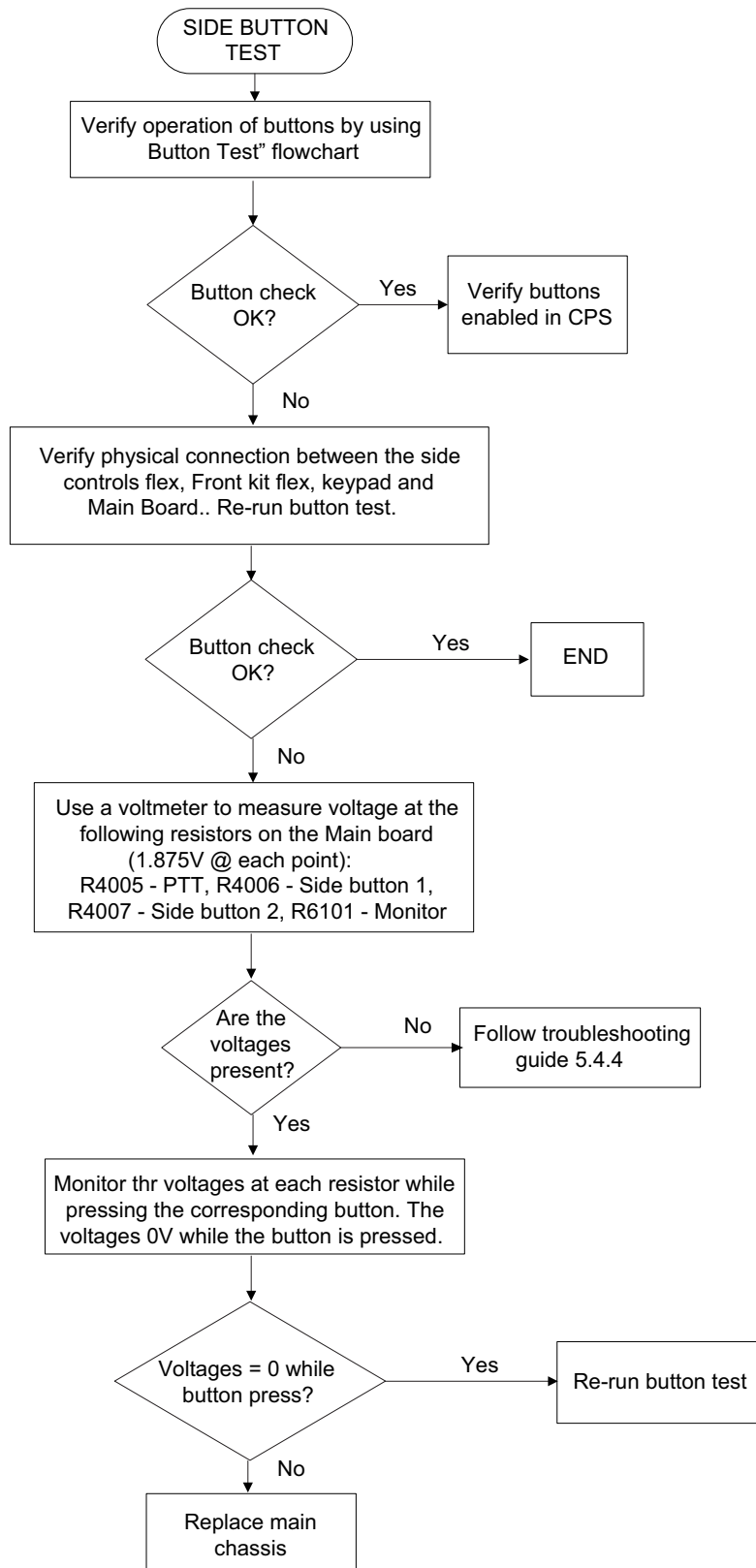
**Button Table**

Button	Code
PTT	1/0-1
Tob Button (Emergency)	148/0-1
Side Button 1	96/0-1
Side Button 2	97/0-1
Side Button 3	98/0-1
Rotary Switch	11/1-255
Rotary Switch Push Button	91/0-1



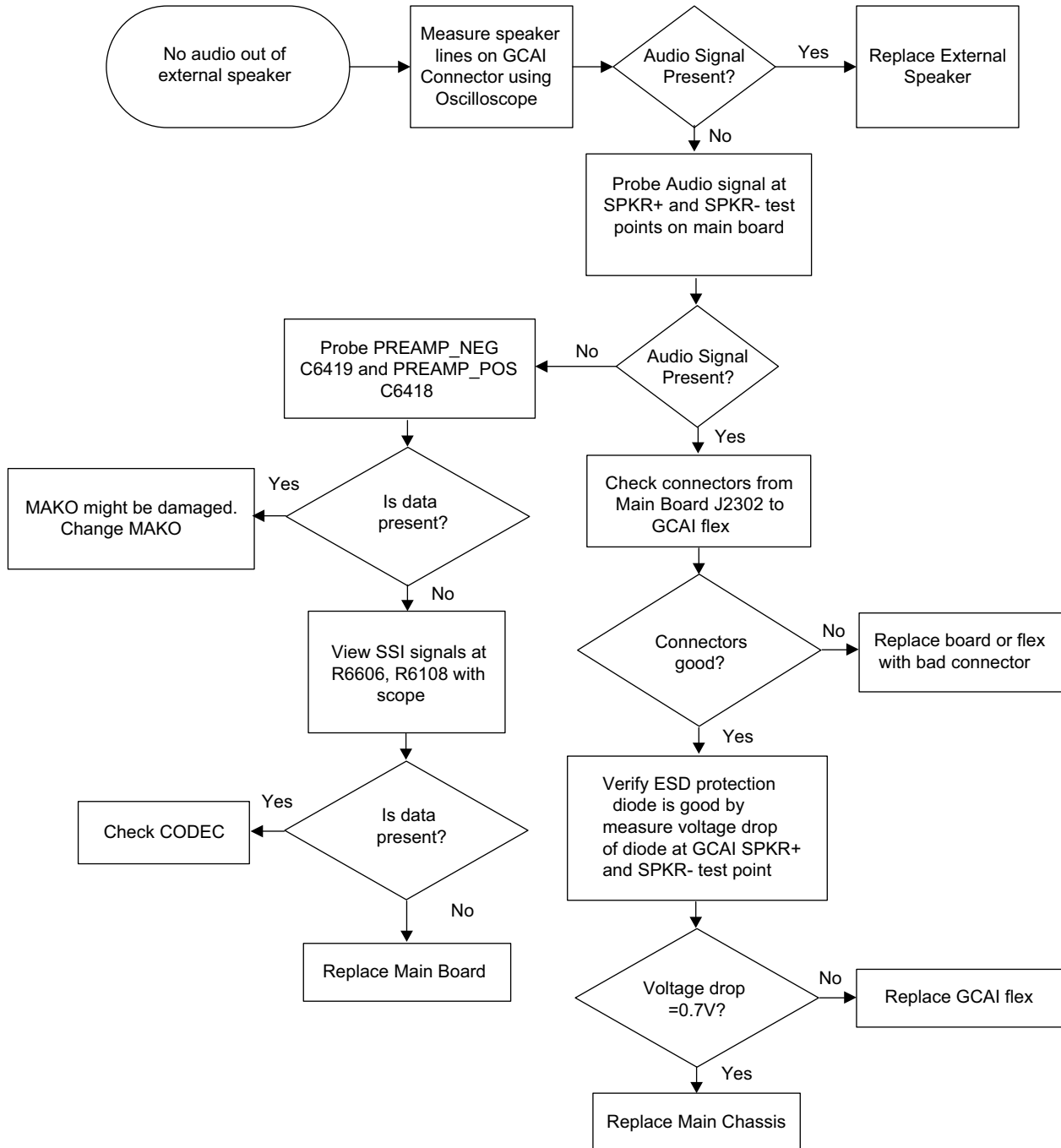
**Note :**  
 Numbers codes with a /1 are for a button pressed condition only. Number codes with a /0 are for a button release condition only.

## 5.10 Side Button Error

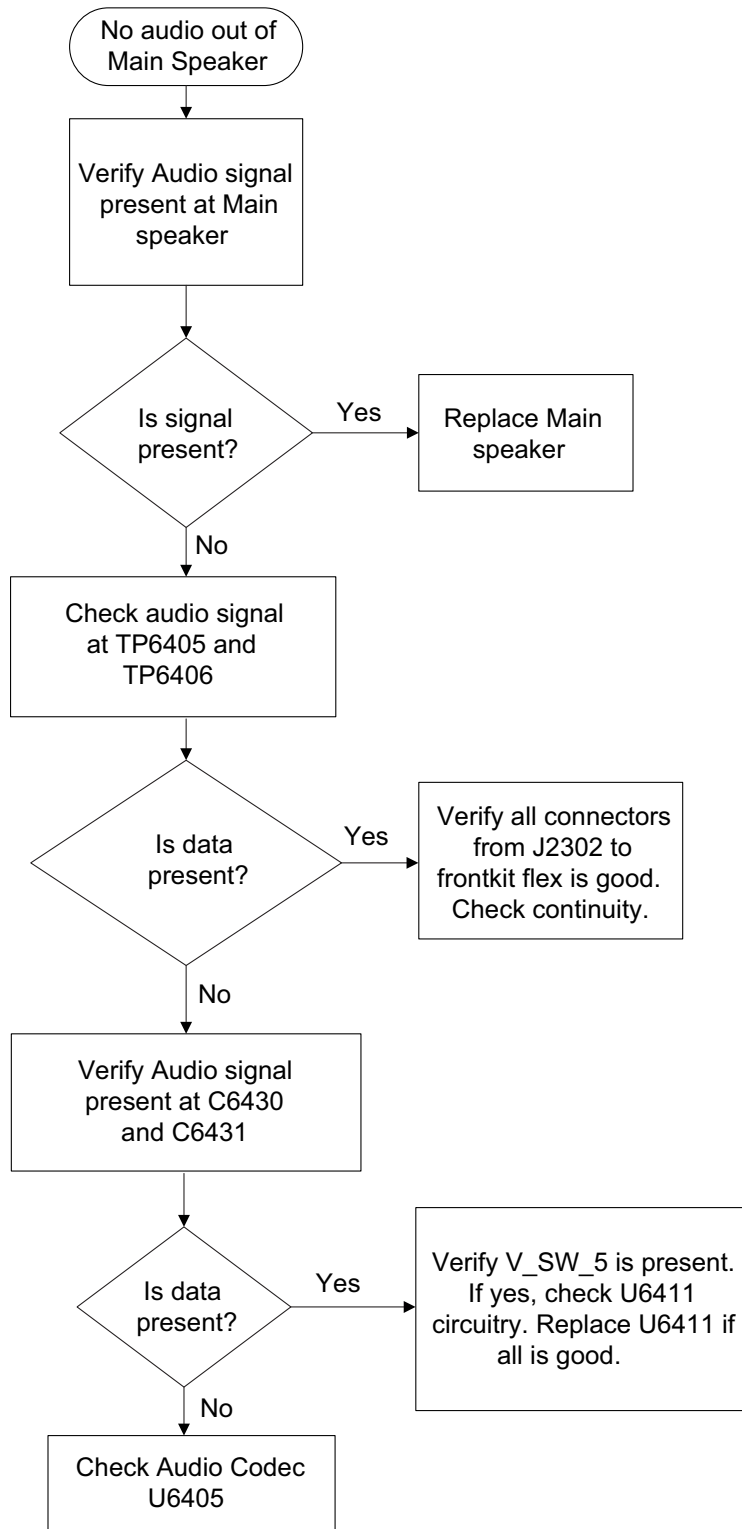


## 5.11 RX Audio Error

### External Audio



## Internal Audio

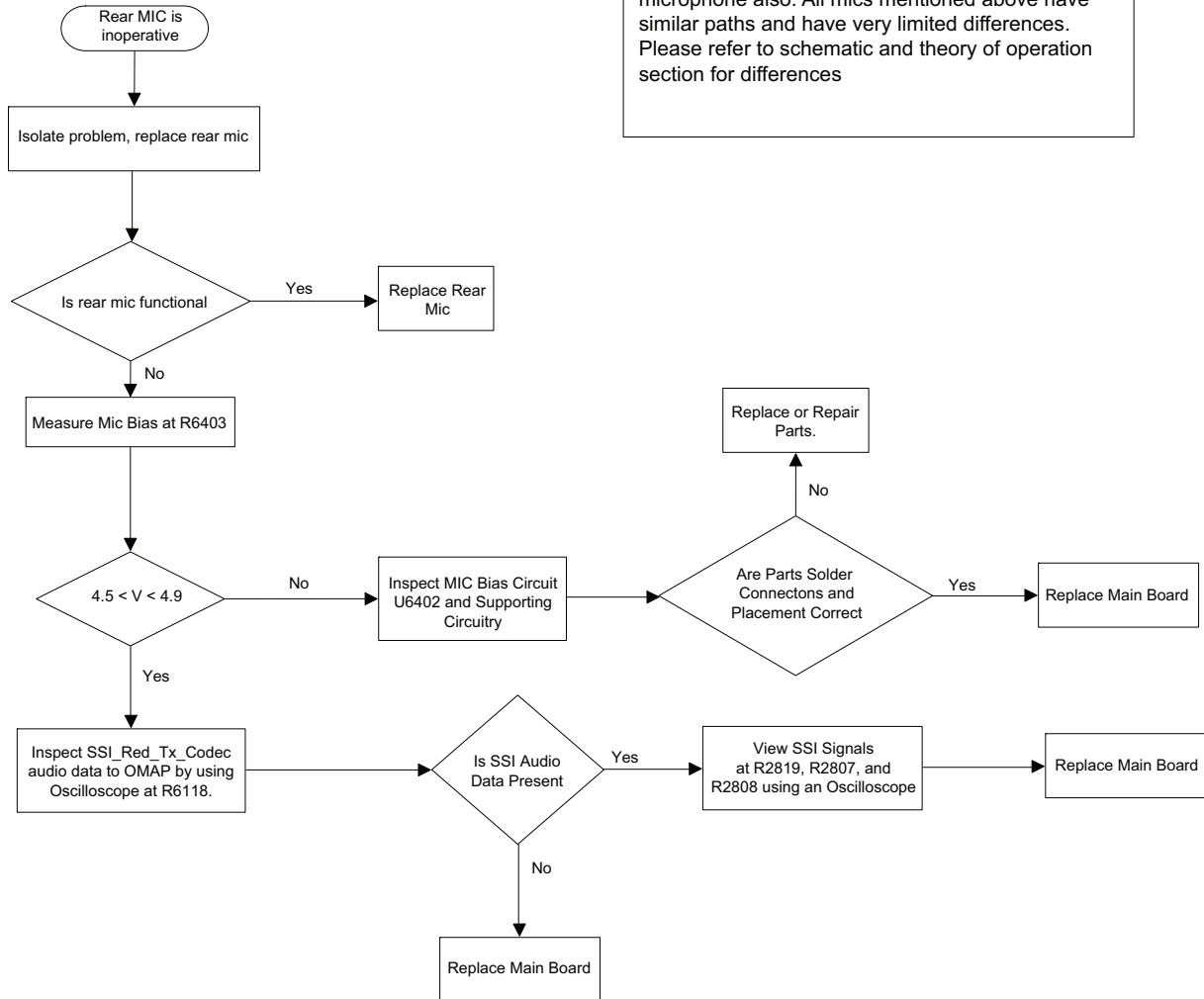


## 5.12 TX Audio Error

### Internal Microphone

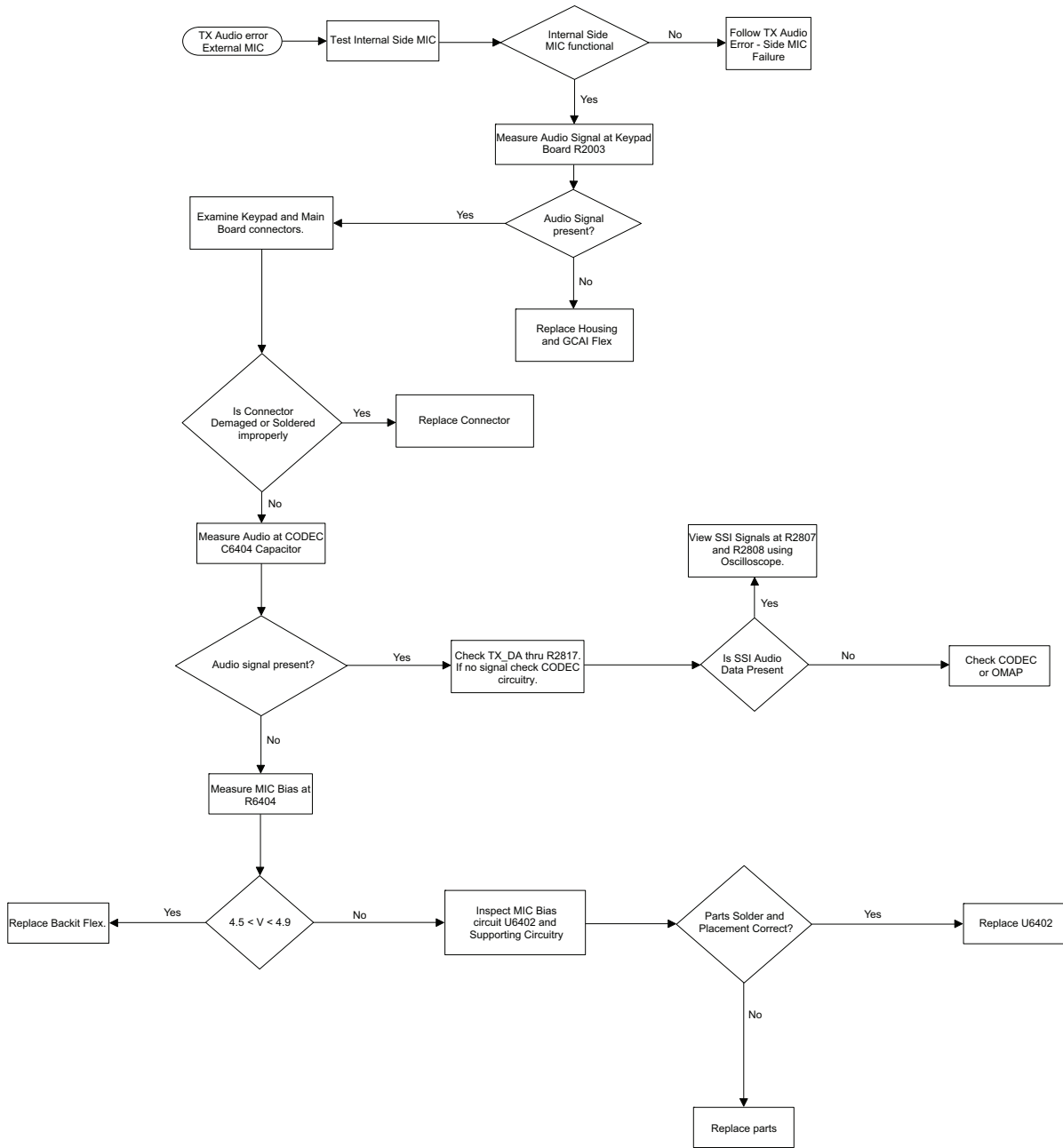
**Synopsis**

This failure specifically refers to the rear microphone but this flowchart can be used to diagnose front side microphone also. All mics mentioned above have similar paths and have very limited differences. Please refer to schematic and theory of operation section for differences



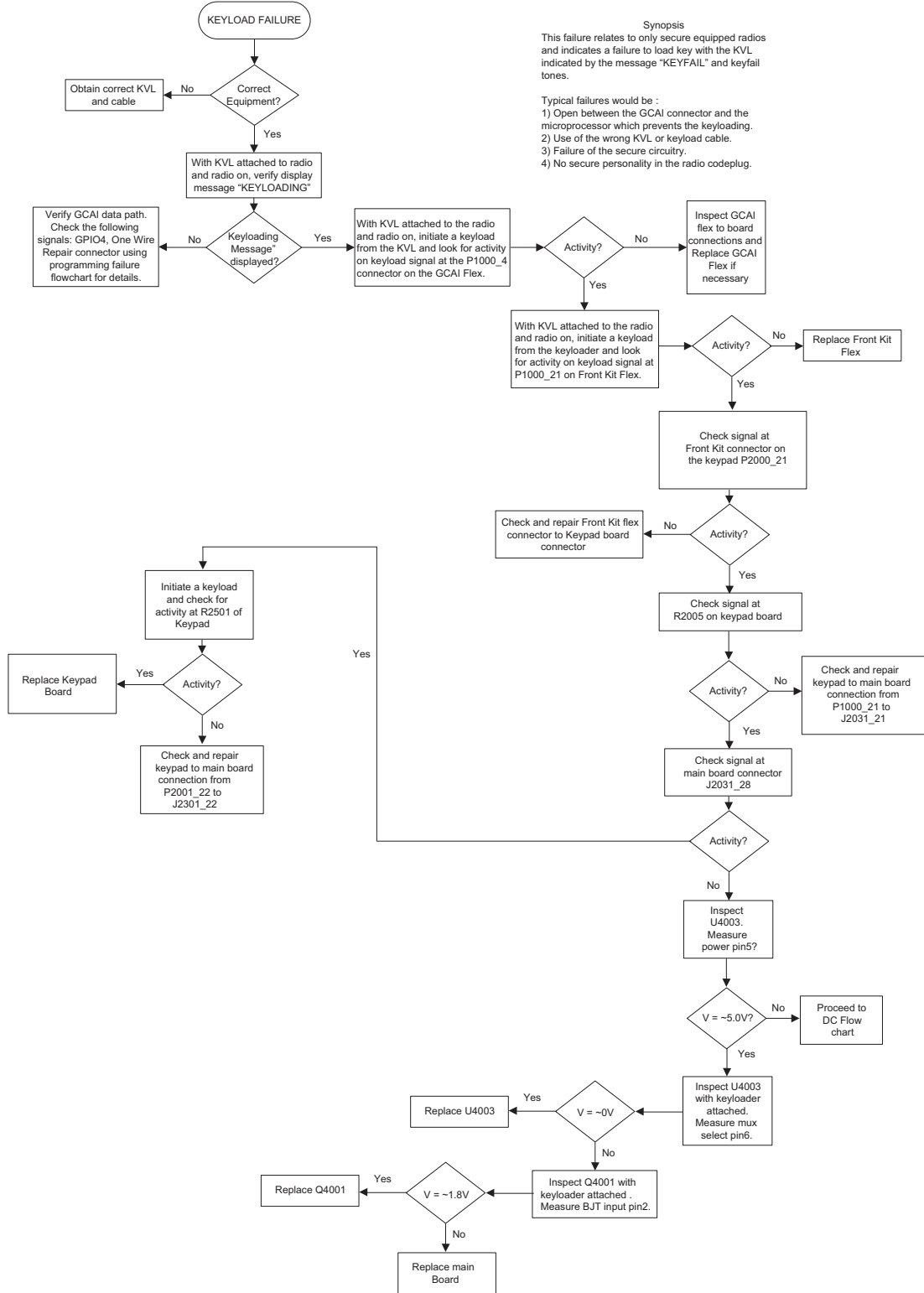


# External Mic Failure

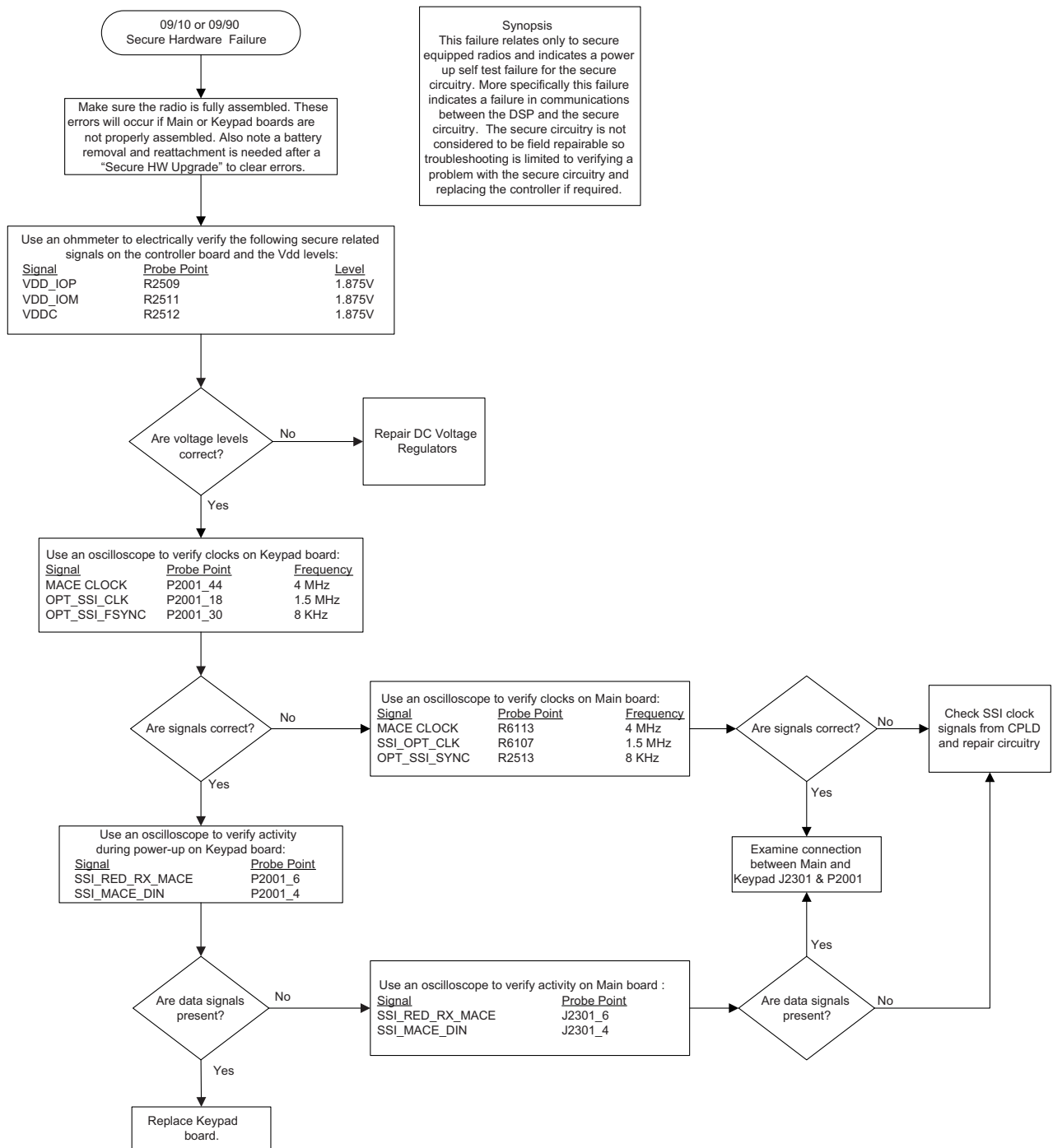


# 5.13 Keyload/Secure Hardware/Memory

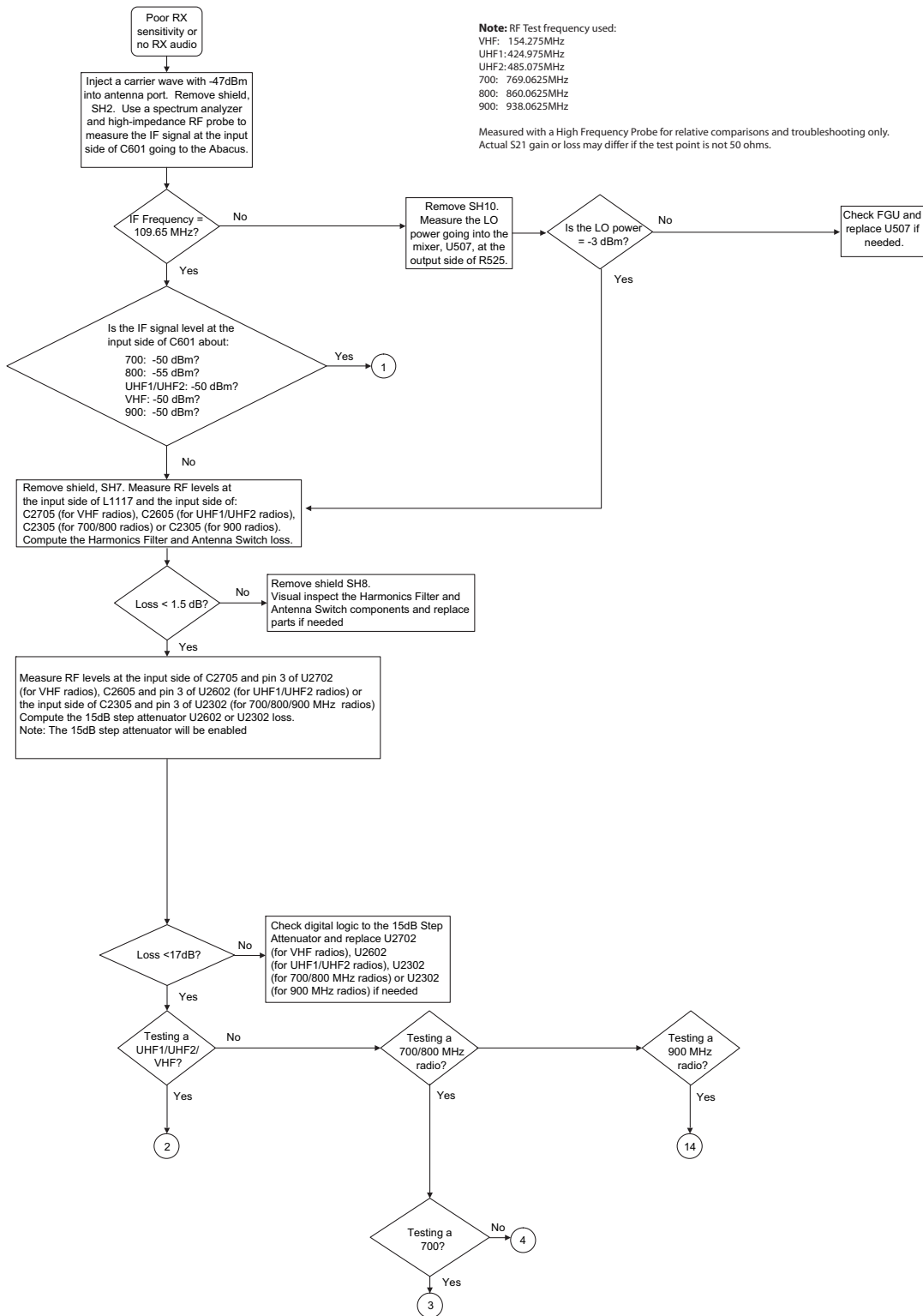
## Keyload Failure



# Secure Hardware Failure



# 5.14 RX RF Failure – Page 1

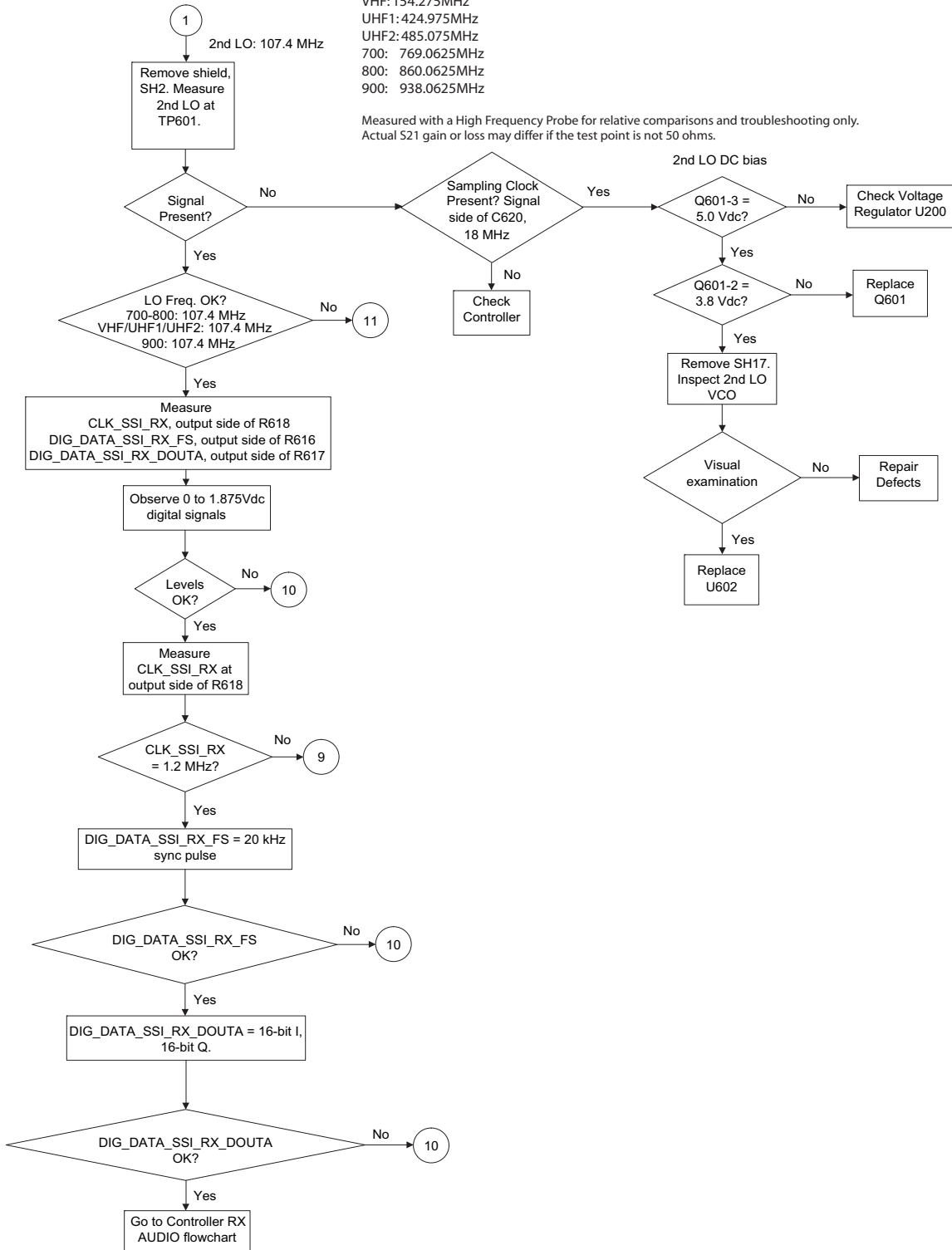


# RX RF Failure – Page 2

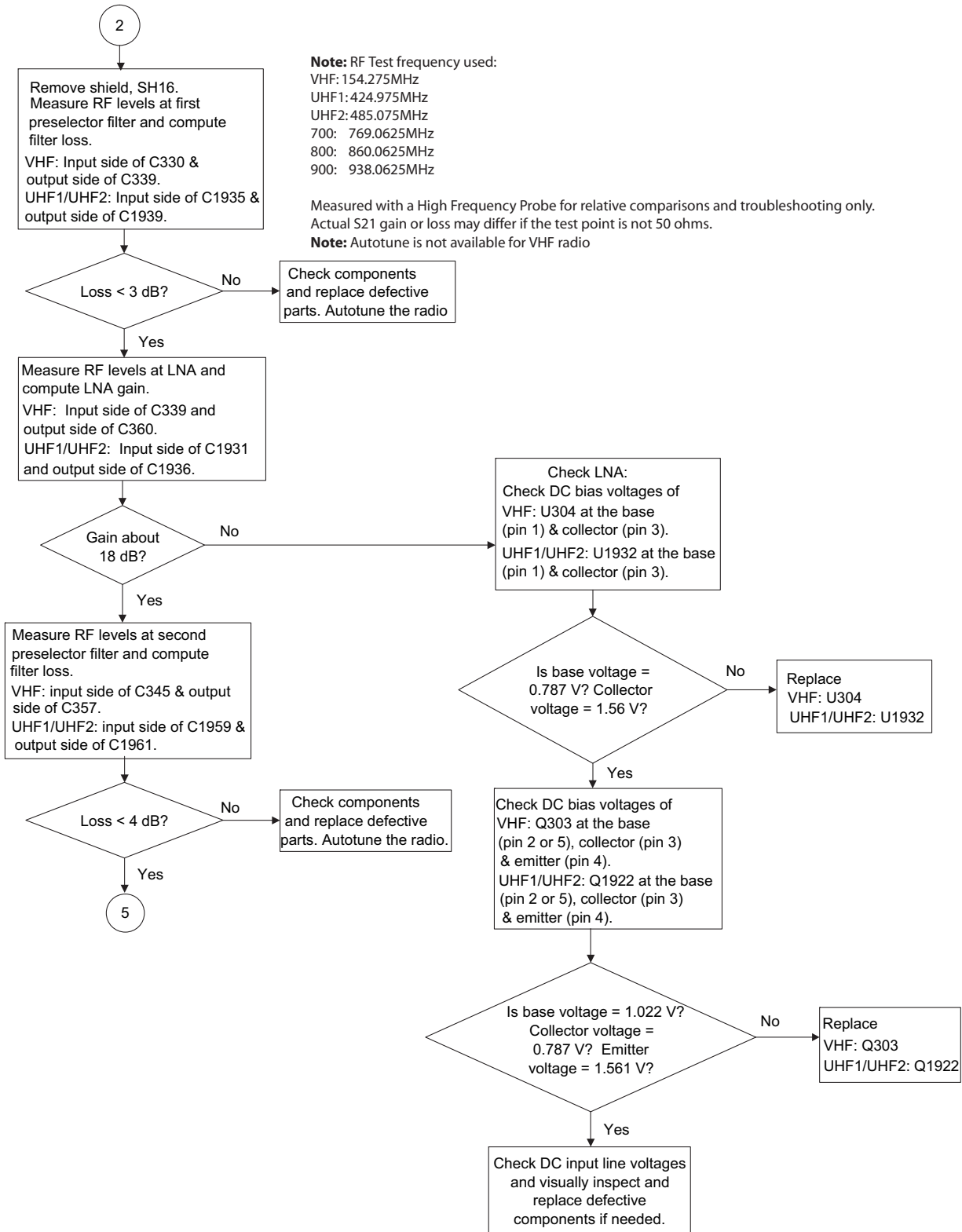
**Note:** RF Test frequency used:

- VHF: 154.275MHz
- UHF1: 424.975MHz
- UHF2: 485.075MHz
- 700: 769.0625MHz
- 800: 860.0625MHz
- 900: 938.0625MHz

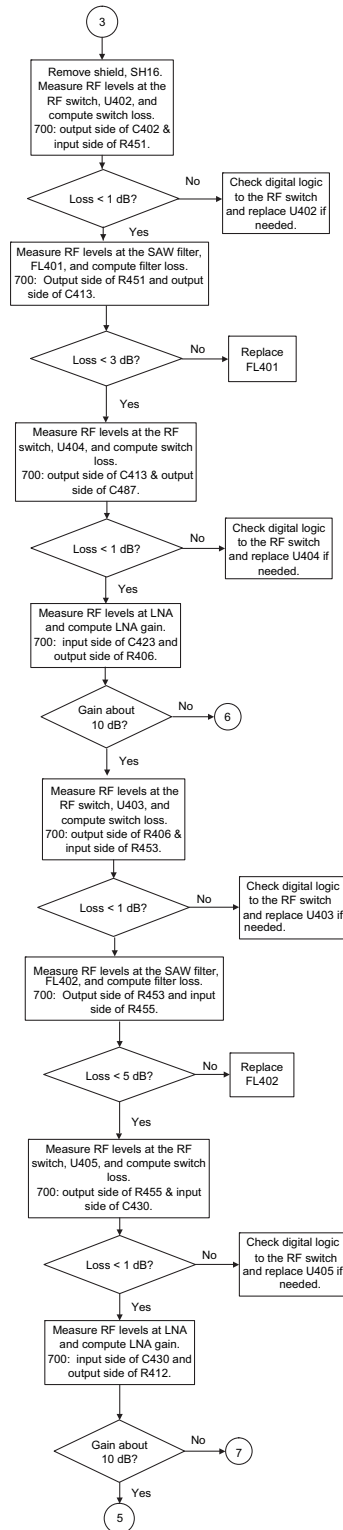
Measured with a High Frequency Probe for relative comparisons and troubleshooting only. Actual S21 gain or loss may differ if the test point is not 50 ohms.



# RX RF Failure – Page 3



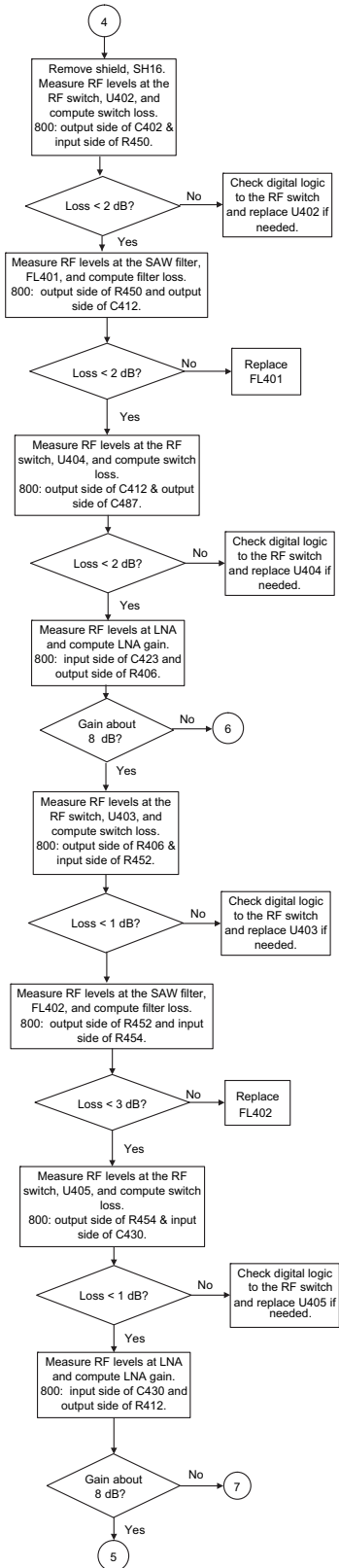
# RX RF Failure – Page 4



**Note:** RF Test frequency used:  
 VHF: 154.275MHz  
 UHF1: 424.975MHz  
 UHF2: 485.075MHz  
 700: 769.0625MHz  
 800: 860.0625MHz  
 900: 938.0625MHz

Measured with a High Frequency Probe for relative comparisons and troubleshooting only.  
 Actual S21 gain or loss may differ if the test point is not 50 ohms.

# RX RF Failure – Page 5



**Note:** RF Test frequency used:  
 VHF: 154.275MHz  
 UHF1: 424.975MHz  
 UHF2: 485.075MHz  
 700: 769.0625MHz  
 800: 860.0625MHz  
 900: 938.0625MHz

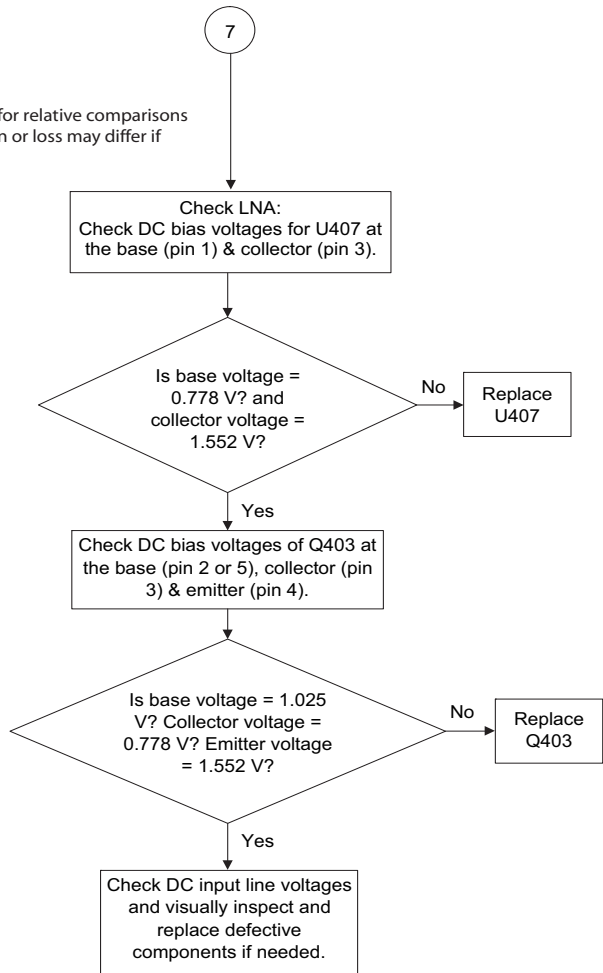
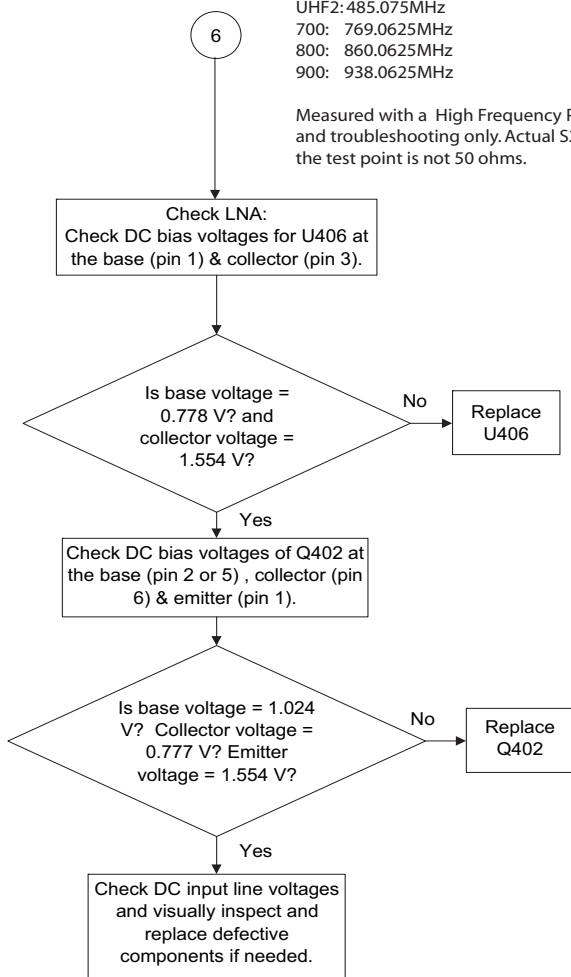
Measured with a High Frequency Probe for relative comparisons and troubleshooting only.  
 Actual S21 gain or loss may differ if the test point is not 50 ohms.



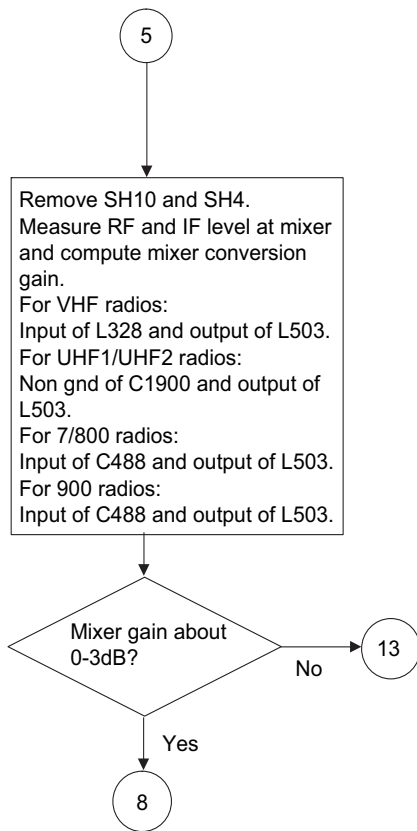
# RX RF Failure – Page 6

**Note:** RF Test frequency used:  
 VHF: 154.275MHz  
 UHF1: 424.975MHz  
 UHF2: 485.075MHz  
 700: 769.0625MHz  
 800: 860.0625MHz  
 900: 938.0625MHz

Measured with a High Frequency Probe for relative comparisons and troubleshooting only. Actual S21 gain or loss may differ if the test point is not 50 ohms.



# RX RF Failure – Page 7



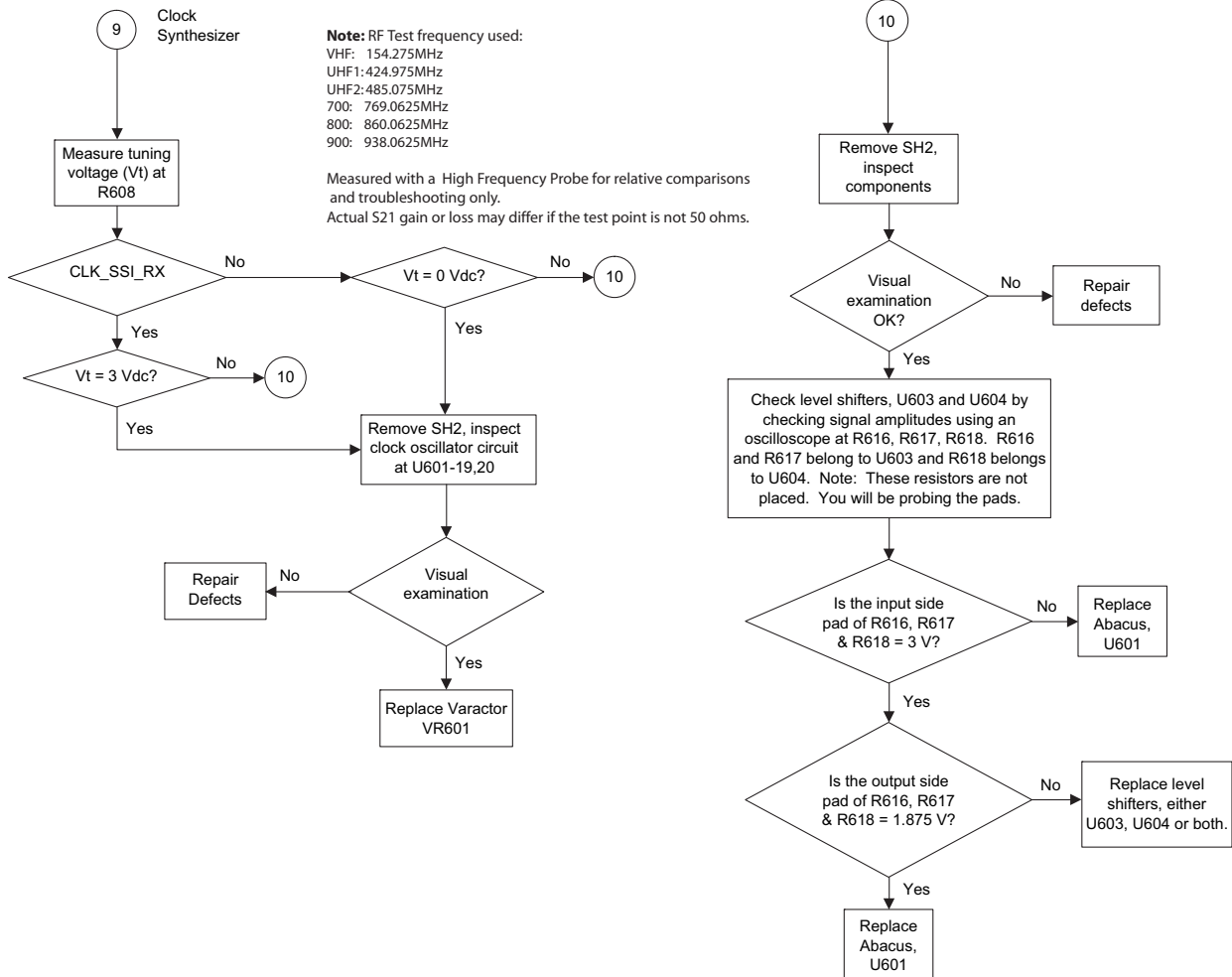
**Note:** RF Test frequency used:

- VHF: 154.275MHz
- UHF1: 424.975MHz
- UHF2: 485.075MHz
- 700: 769.0625MHz
- 800: 860.0625MHz
- 900: 938.0625MHz

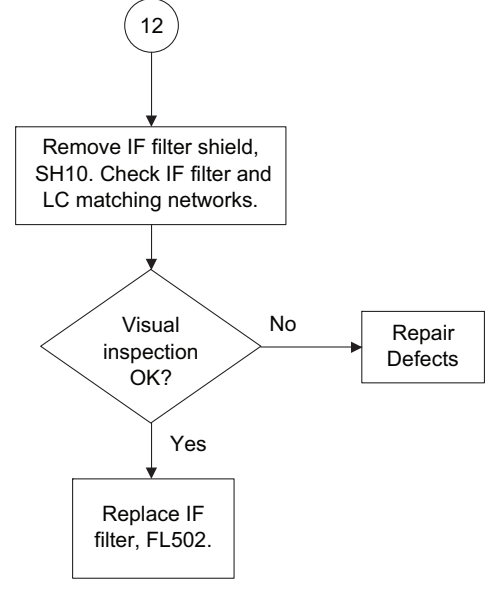
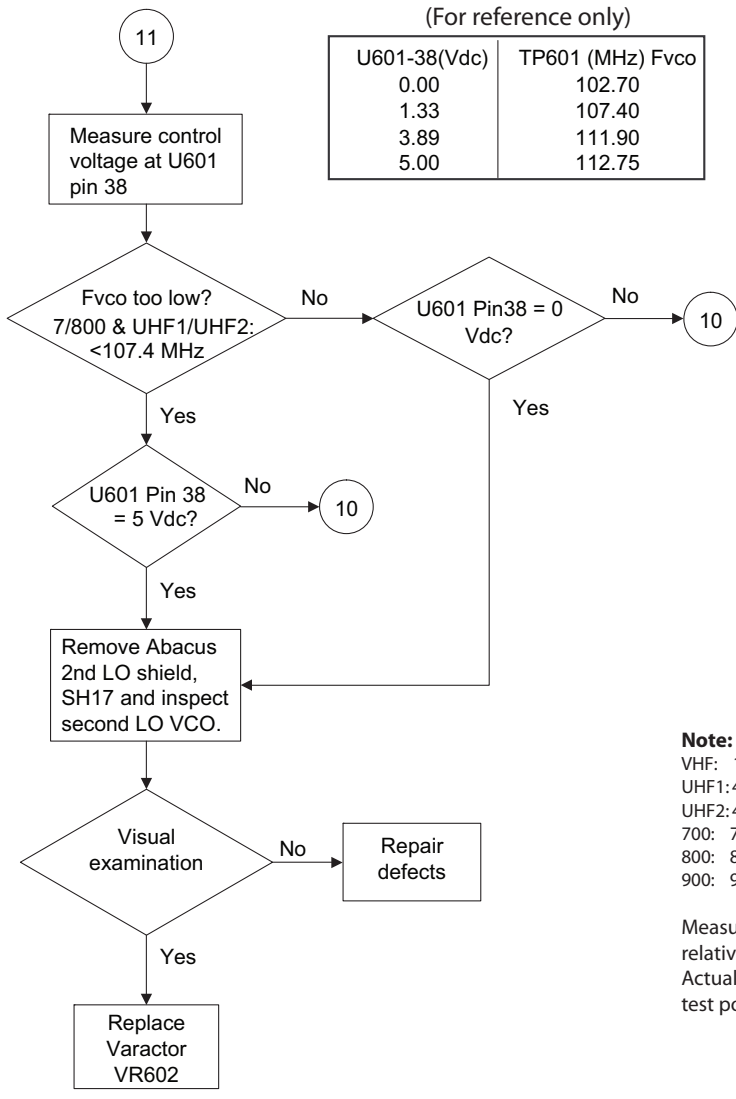
IF: 109.65MHz

Measured with a High Frequency Probe for relative comparisons and troubleshooting only. Actual S21 gain or loss may differ if the test point is not 50 ohms.

# RX RF Failure – Page 8



# RX RF Failure – Page 9

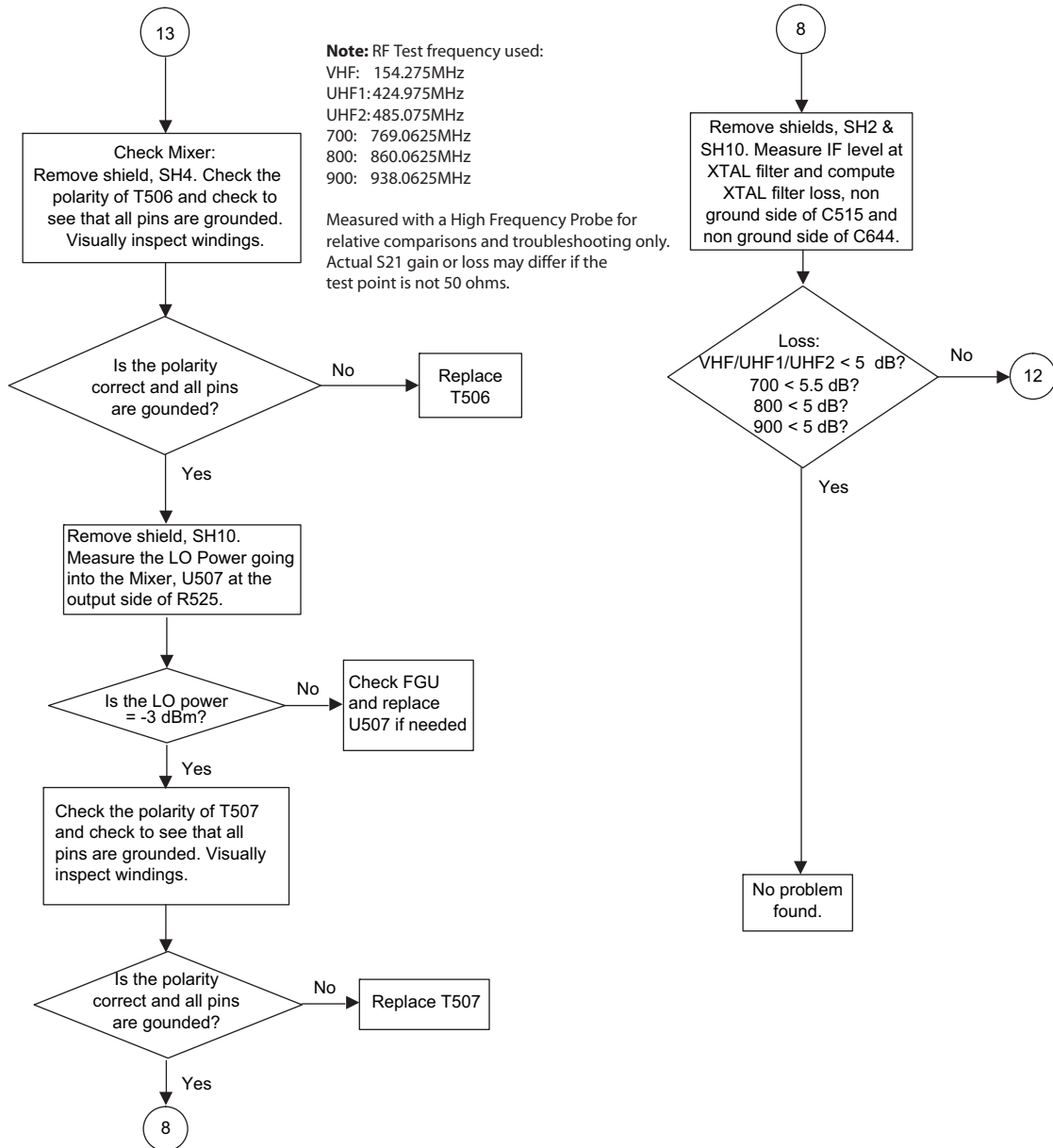


**Note:** RF Test frequency used:

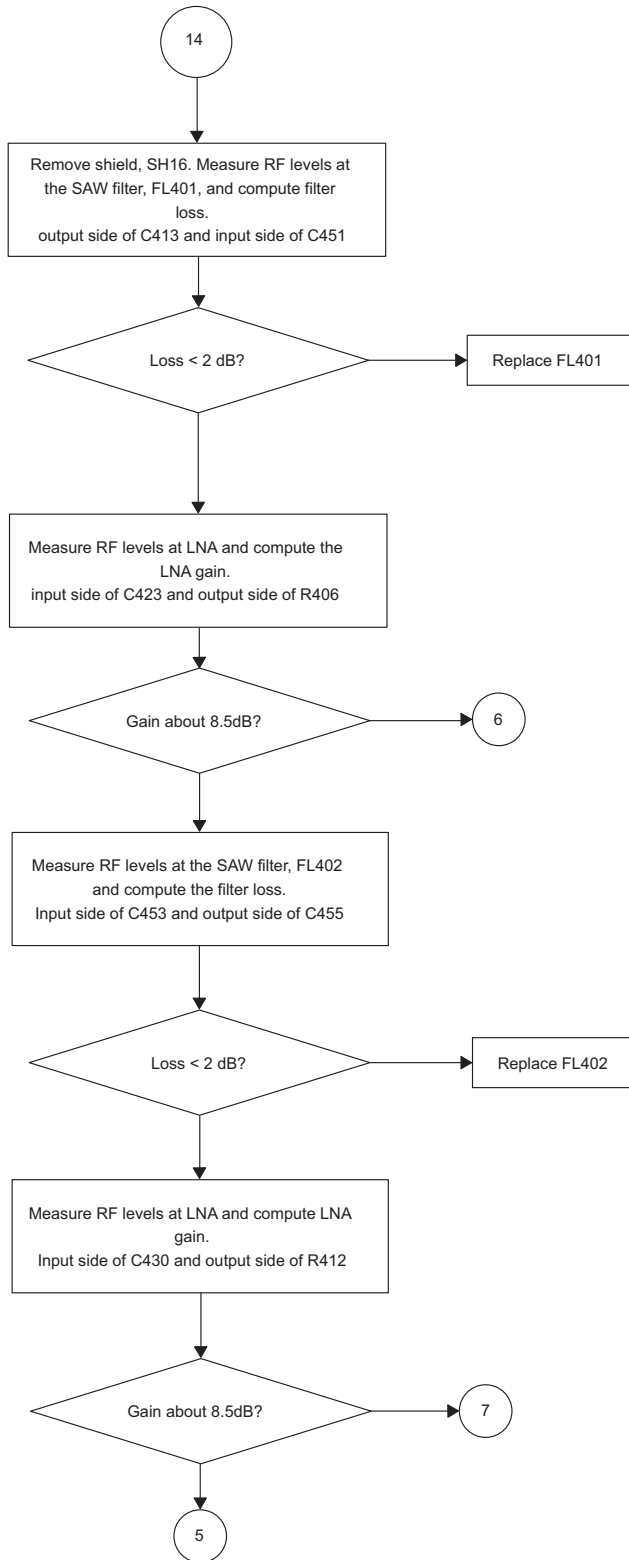
- VHF: 154.275MHz
- UHF1: 424.975MHz
- UHF2: 485.075MHz
- 700: 769.0625MHz
- 800: 860.0625MHz
- 900: 938.0625MHz

Measured with a High Frequency Probe for relative comparisons and troubleshooting only. Actual S21 gain or loss may differ if the test point is not 50 ohms.

# RX RF Failure – Page 10

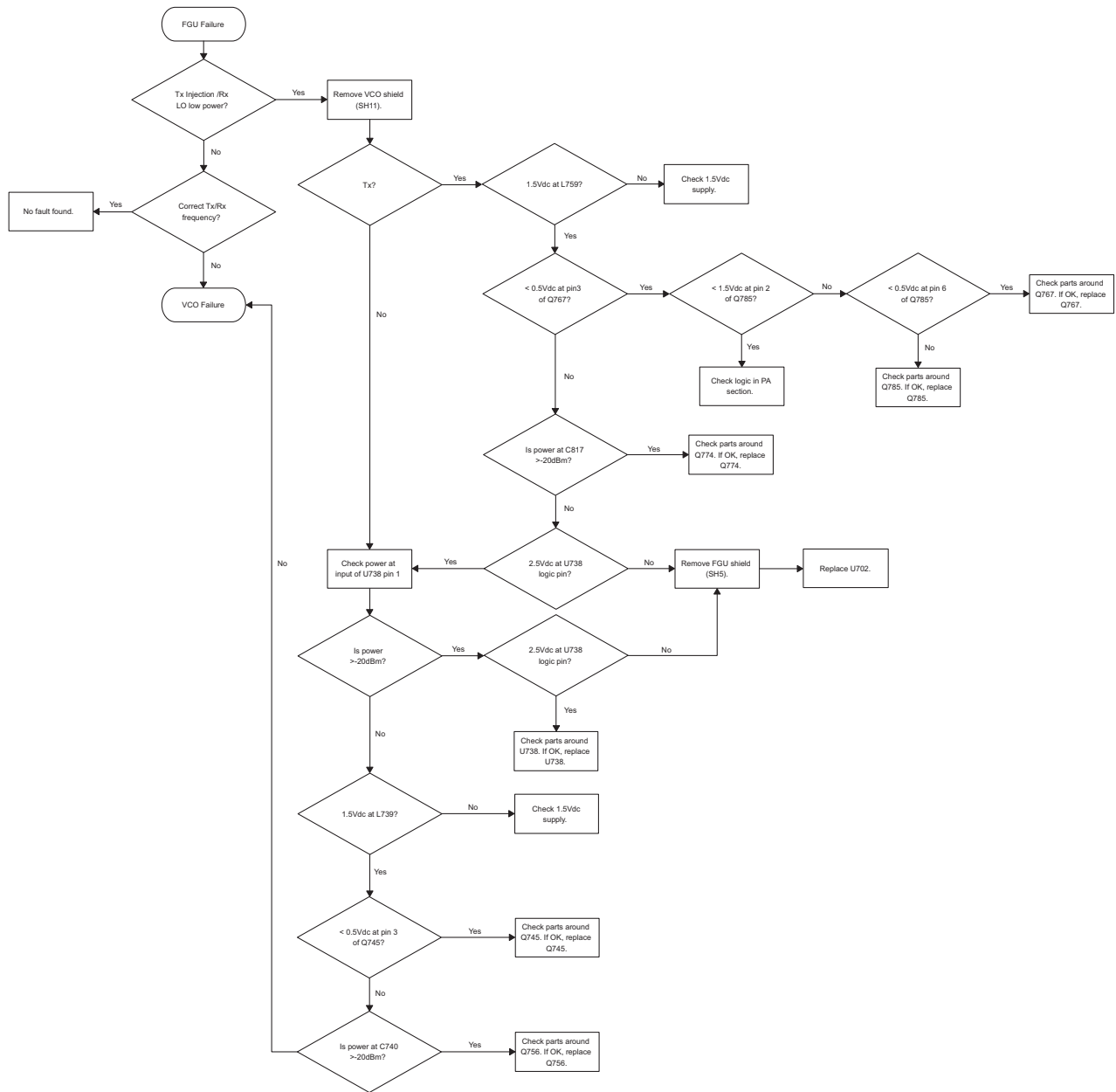


# RX RF Failure – Page 11

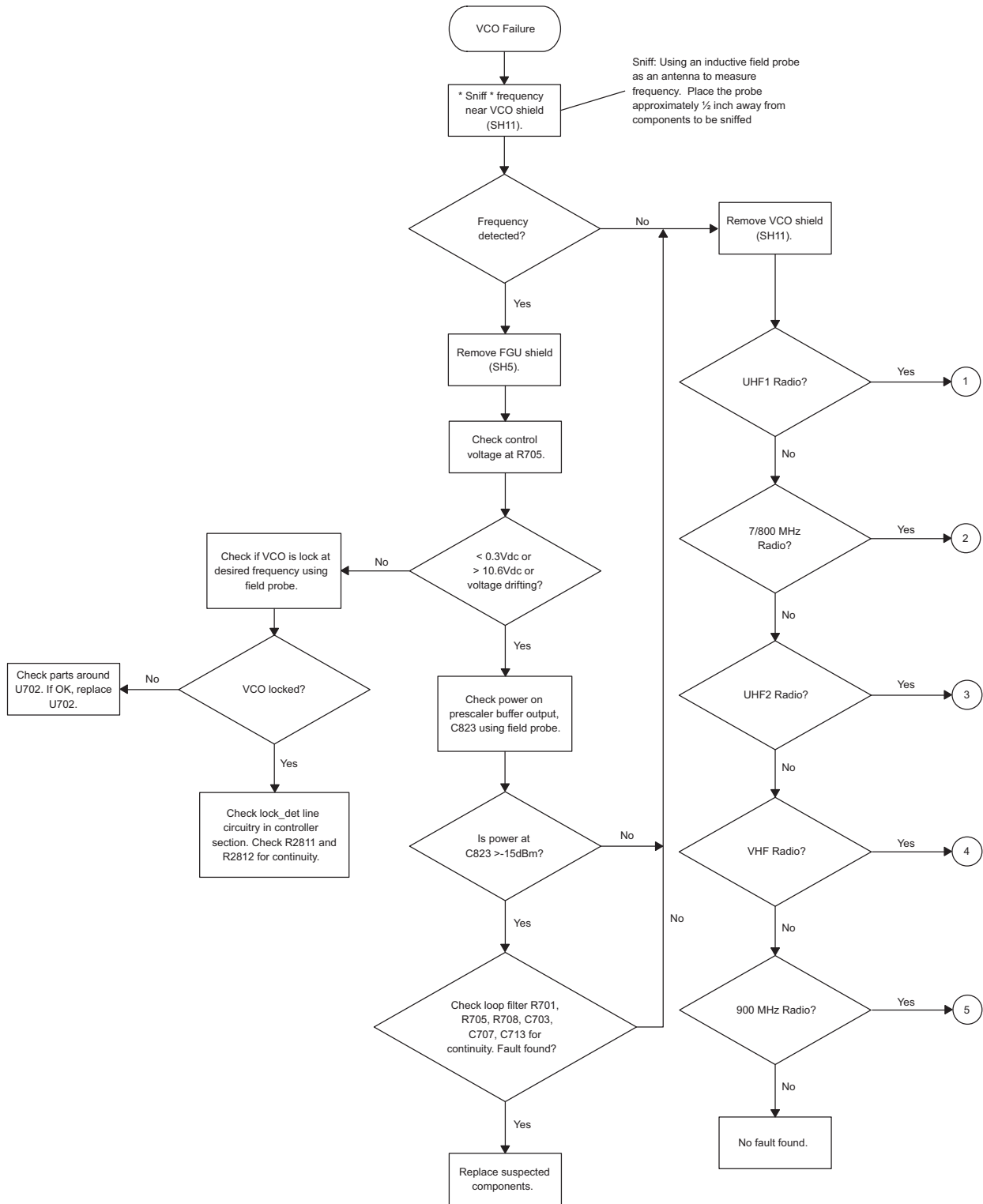


Note: RF Test frequency used:  
VHF: 154.275MHz  
UHF1: 424.975MHz  
UHF2: 485.075MHz  
700: 769.0625MHz  
800: 860.0625MHz  
900: 938.0625MHz  
Measured with a High Frequency Probe for relative comparisons and troubleshooting only.  
Actual S21 gain or loss may differ if the test point is not 50 ohms.

## 5.15 FGU Failure

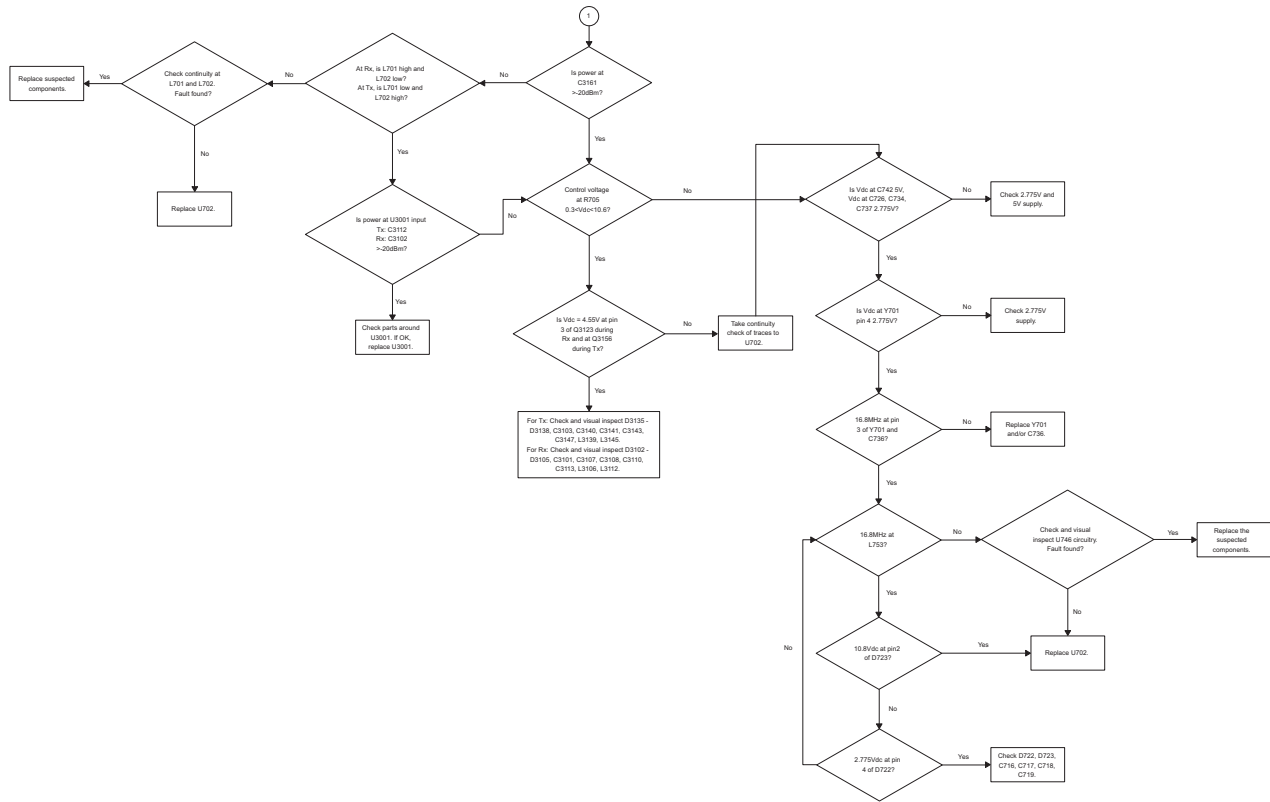


### 5.16 VCO Failure – Page 1 (VHF, UHF1, UHF2, 700/800 MHz, 900 MHz)

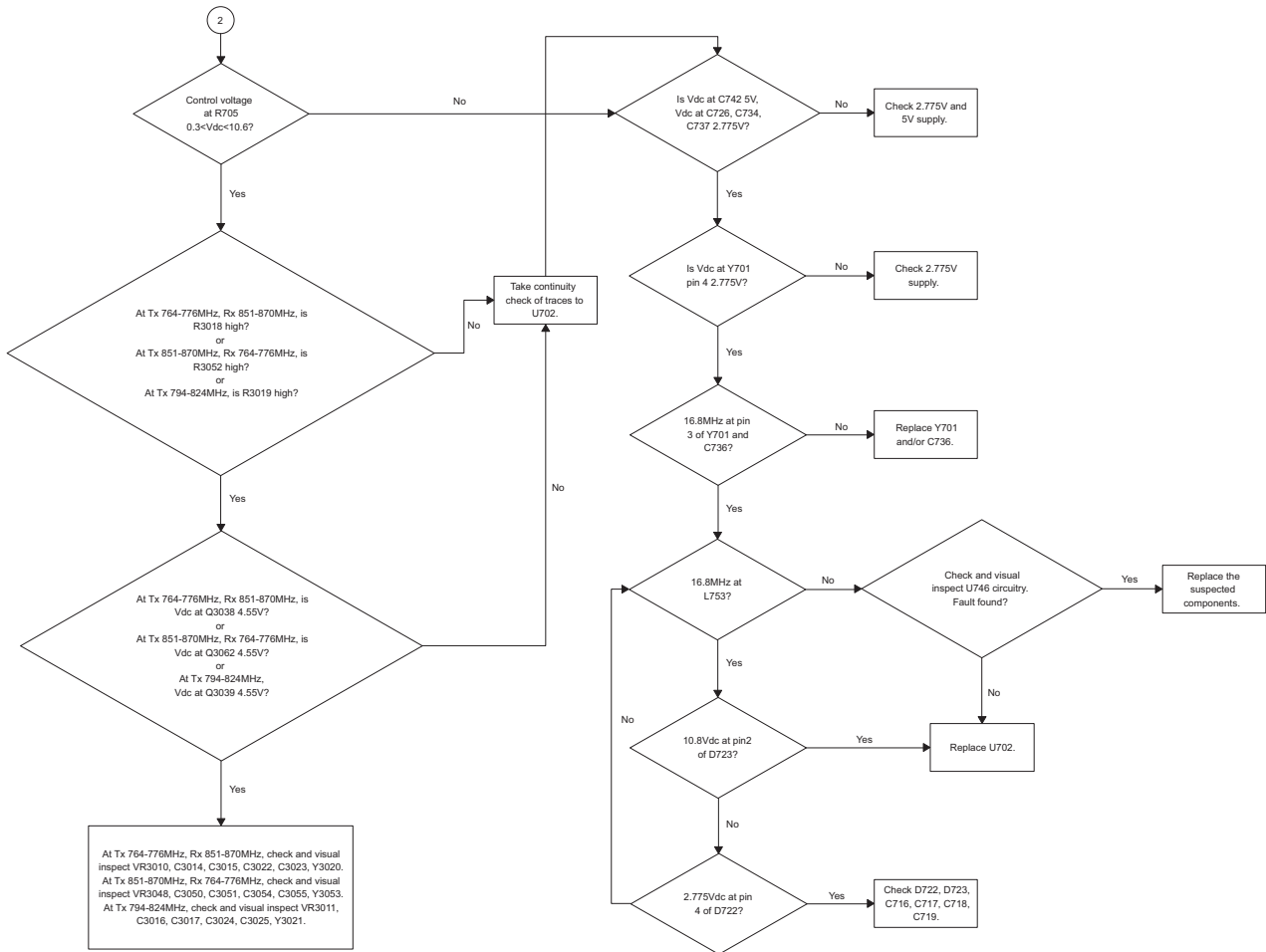




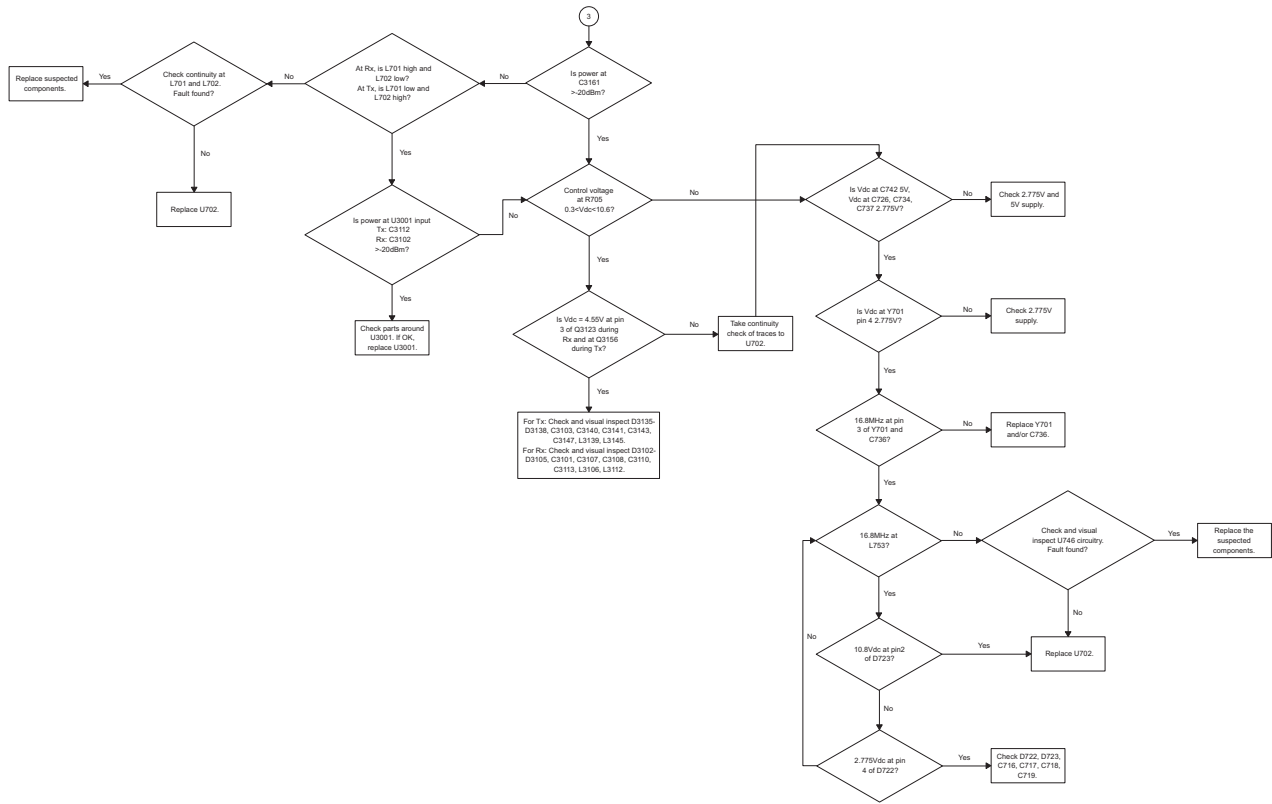
# VCO Failure – Page 2 (UHF1)



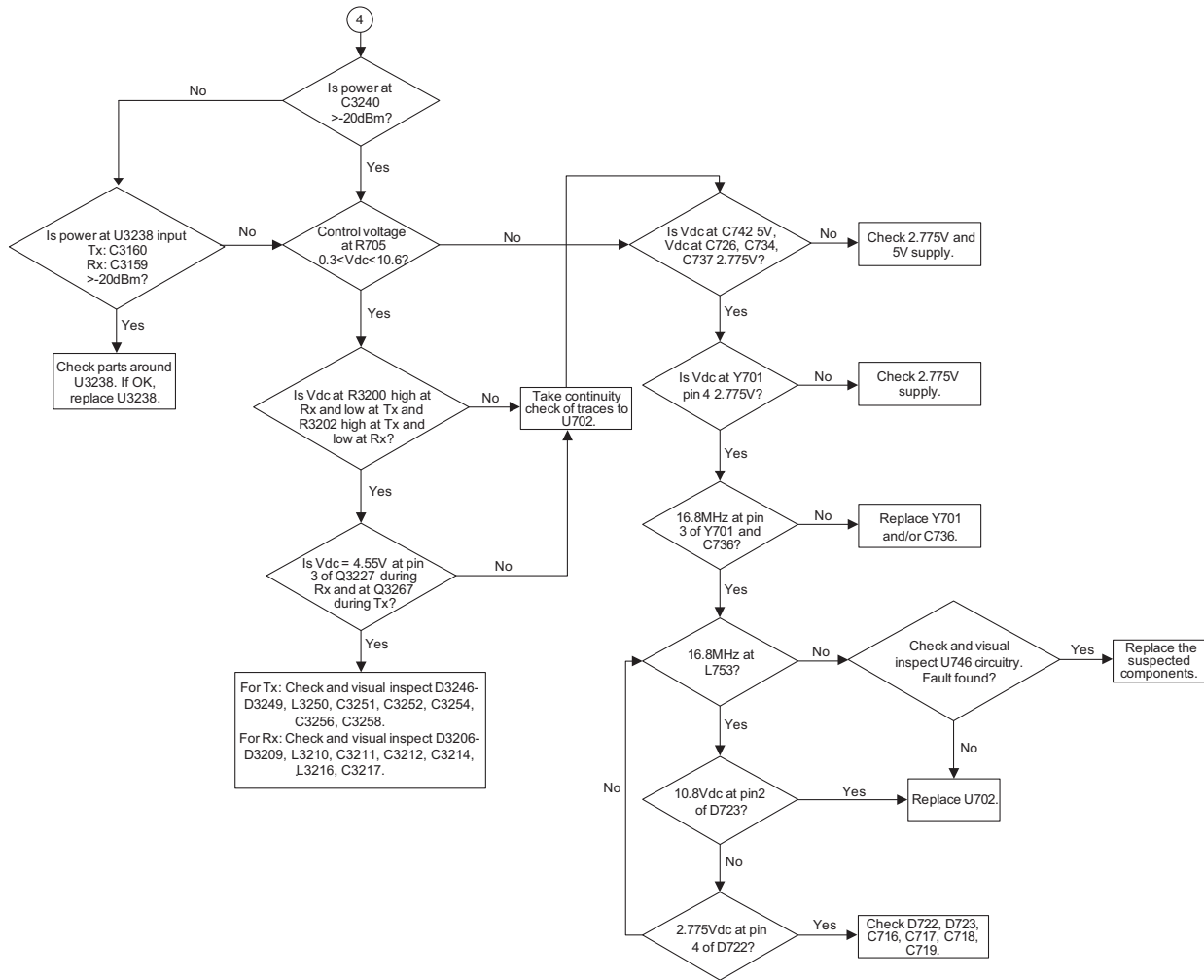
# VCO Failure – Page 3 (700/800 MHz)



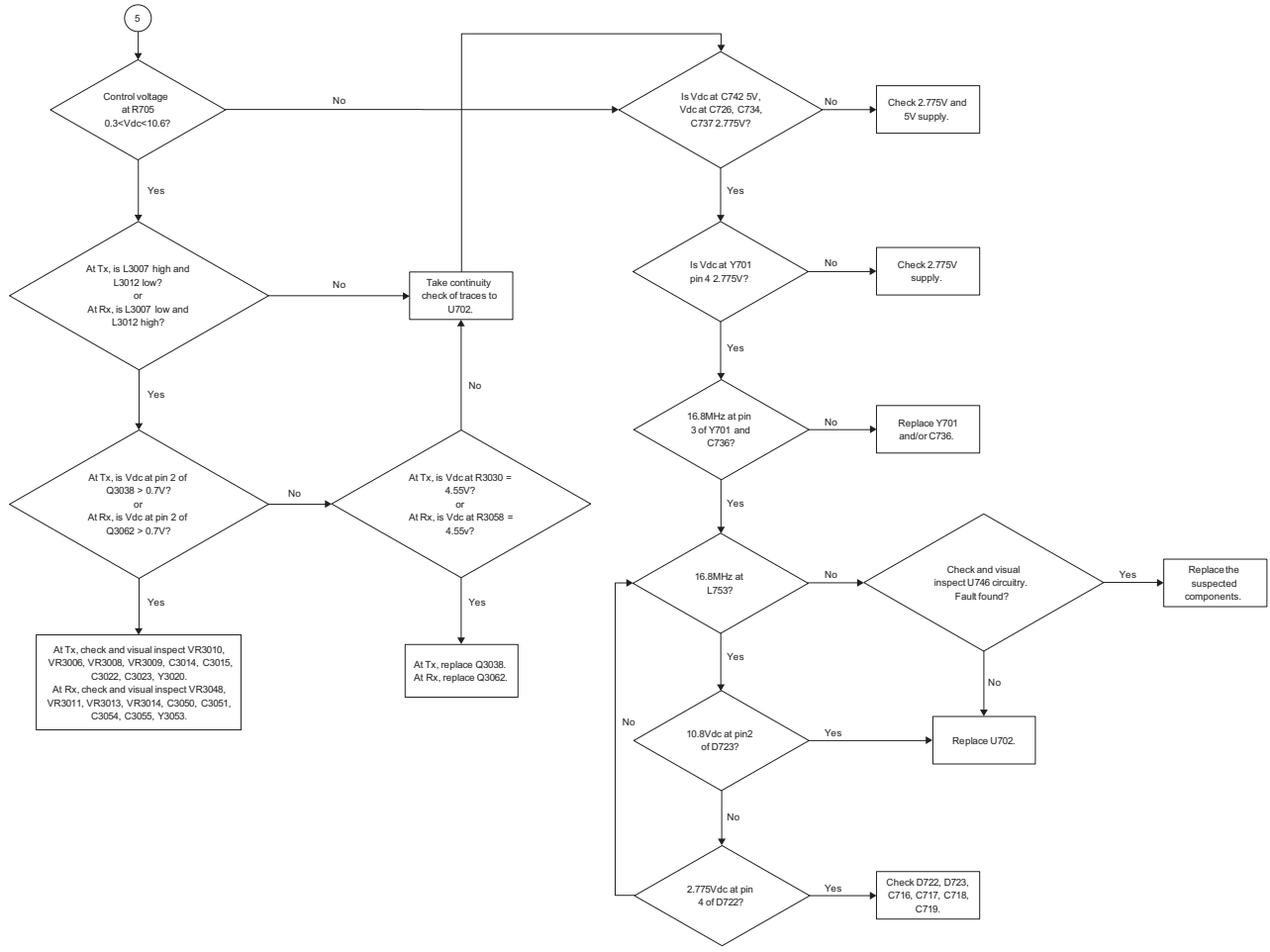
# VCO Failure – Page 4 (UHF2)



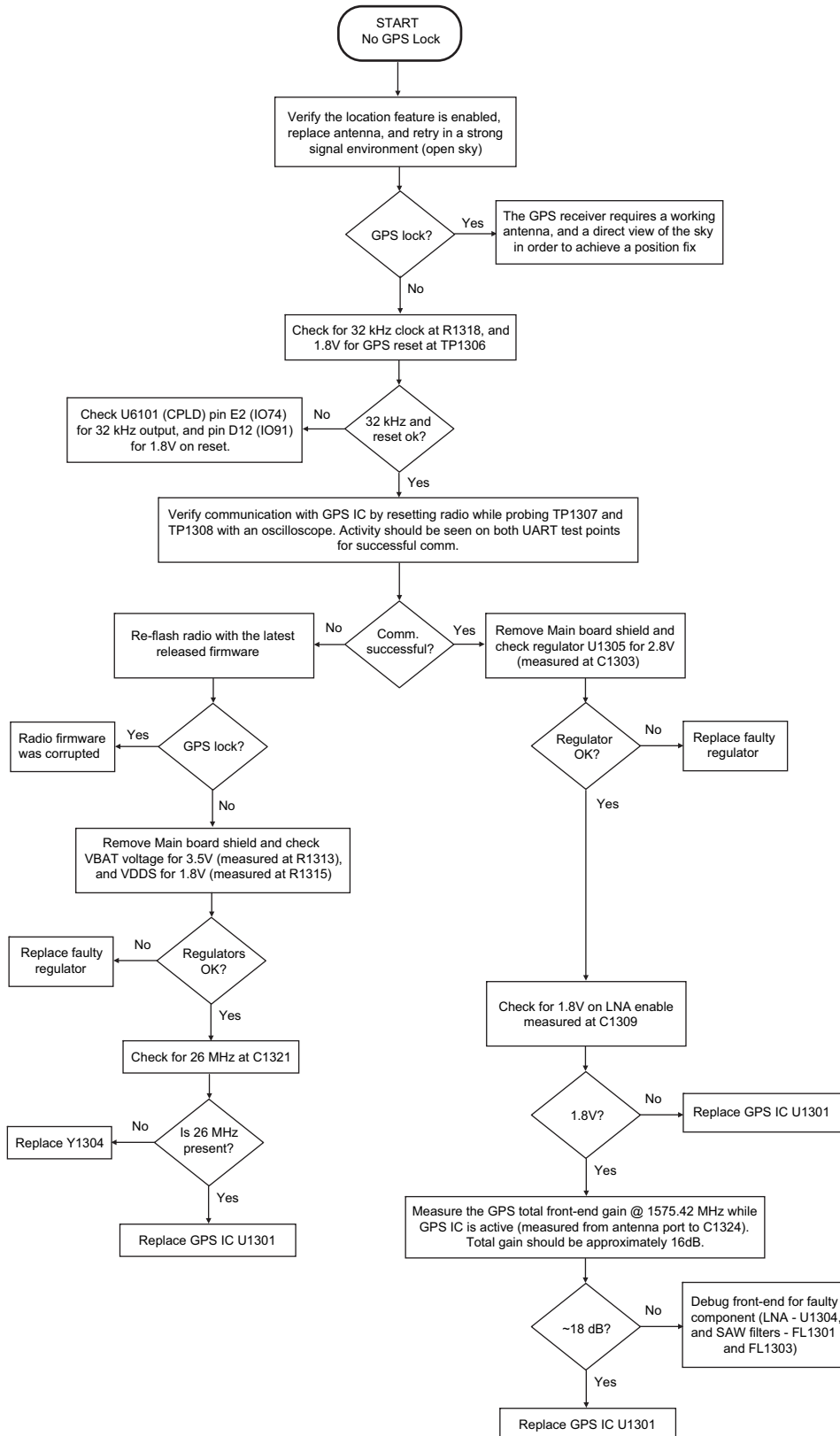
# VCO Failure – Page 5 (VHF)



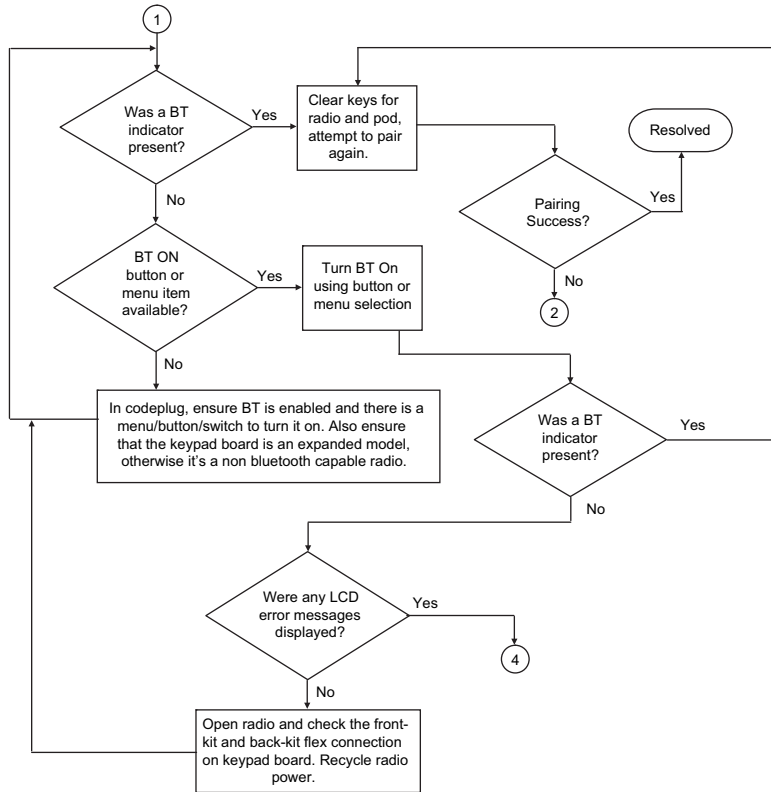
# VCO Failure – Page 6 (900 MHz)



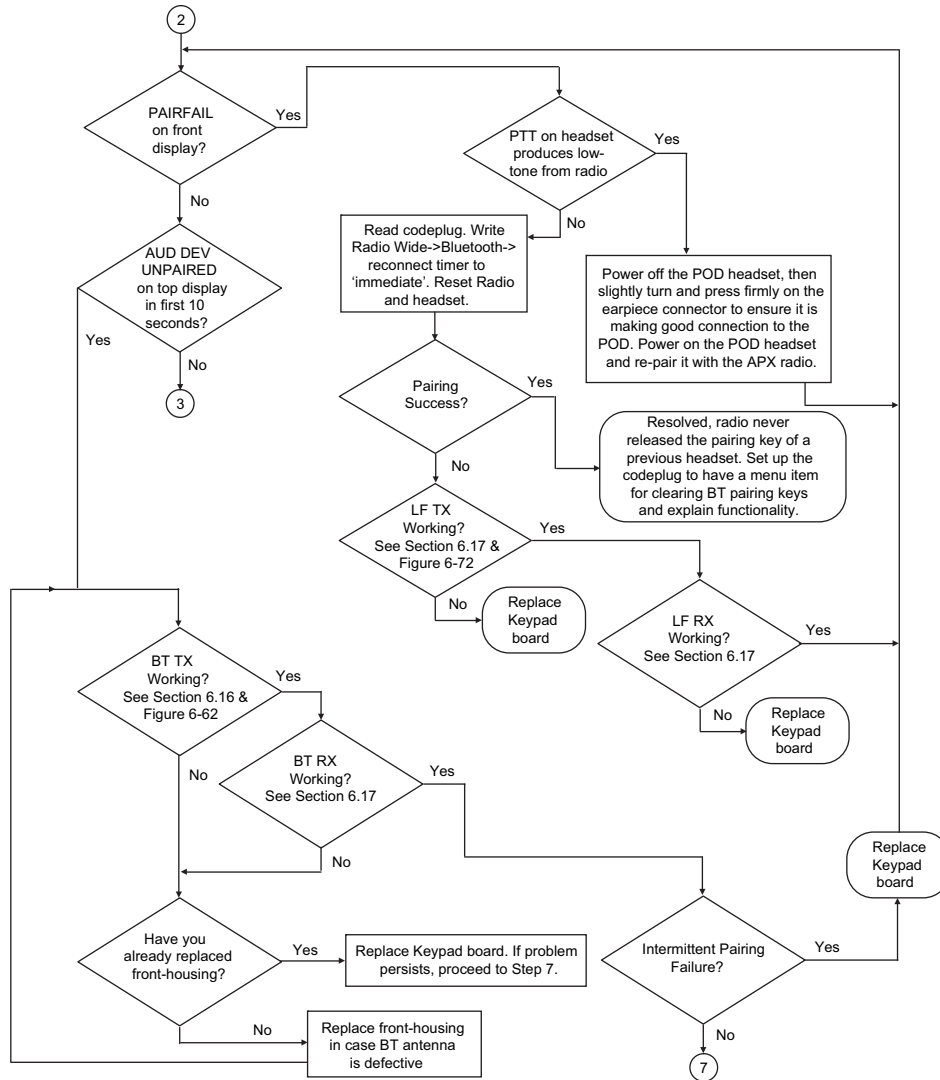
### 5.17 GPS Failure



### 5.18 Bluetooth Failure – Page 1 (Pairing Issue)

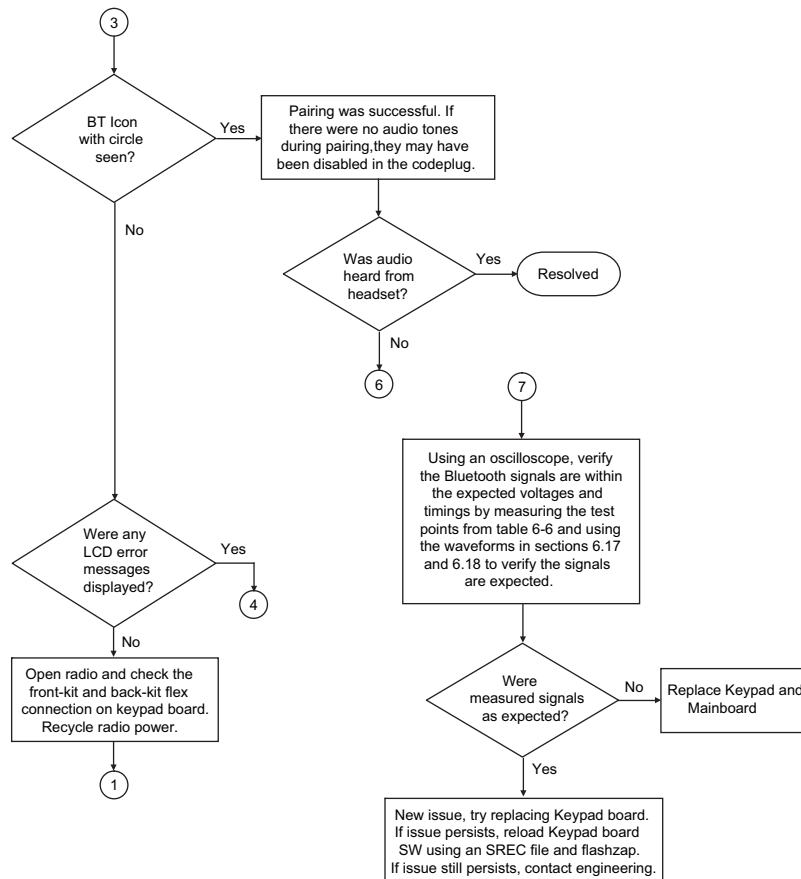


# Bluetooth Failure – Page 2 (Pairing Issue)

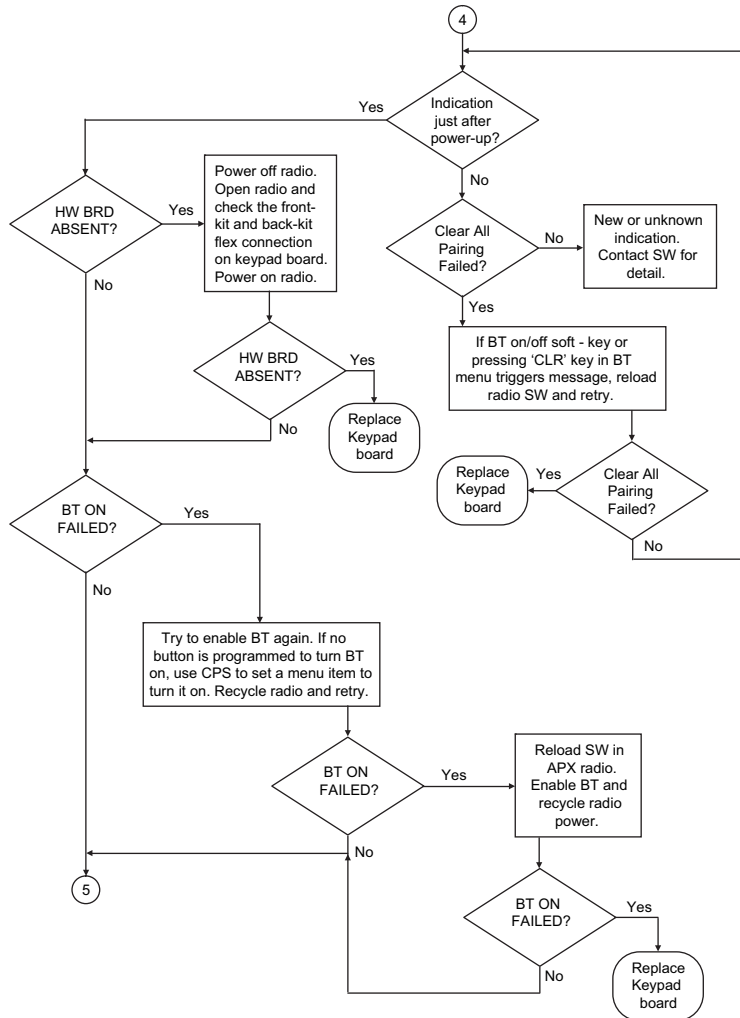




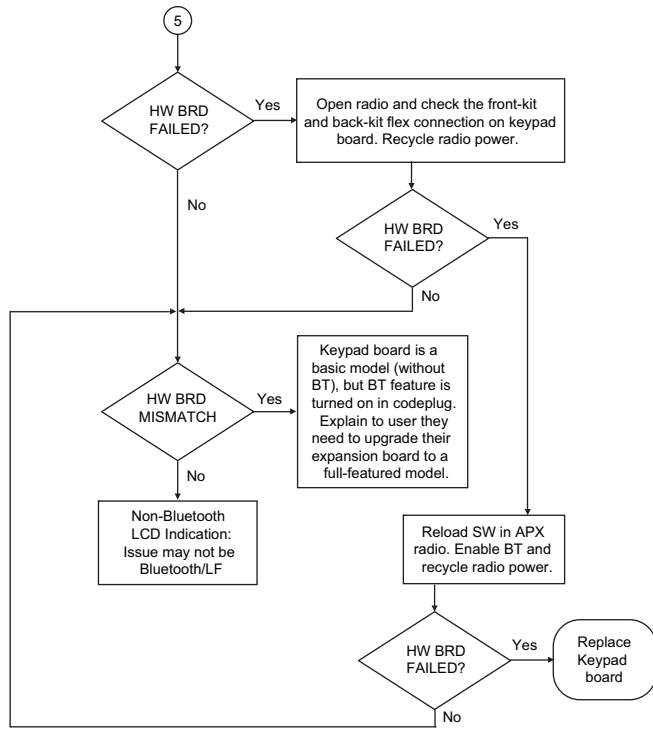
## Bluetooth Failure – Page 3 (Pairing Issue)



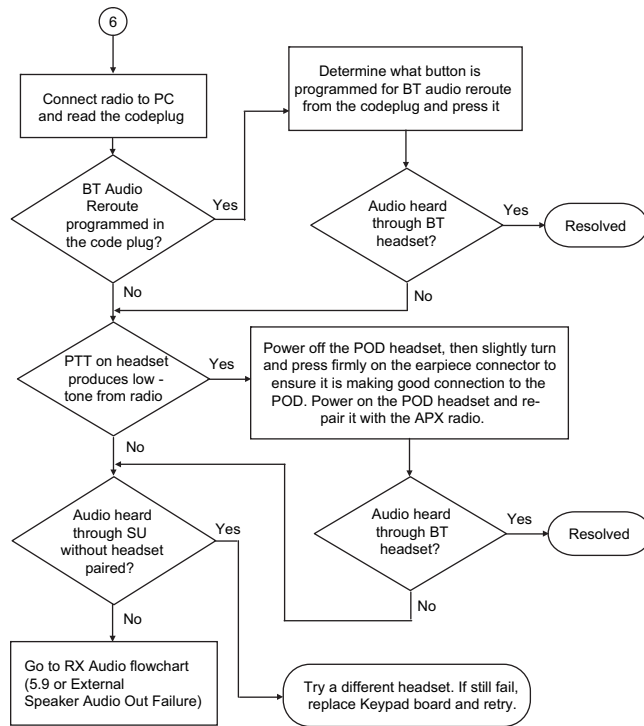
# Bluetooth Failure – Page 4 (LCD Indication)



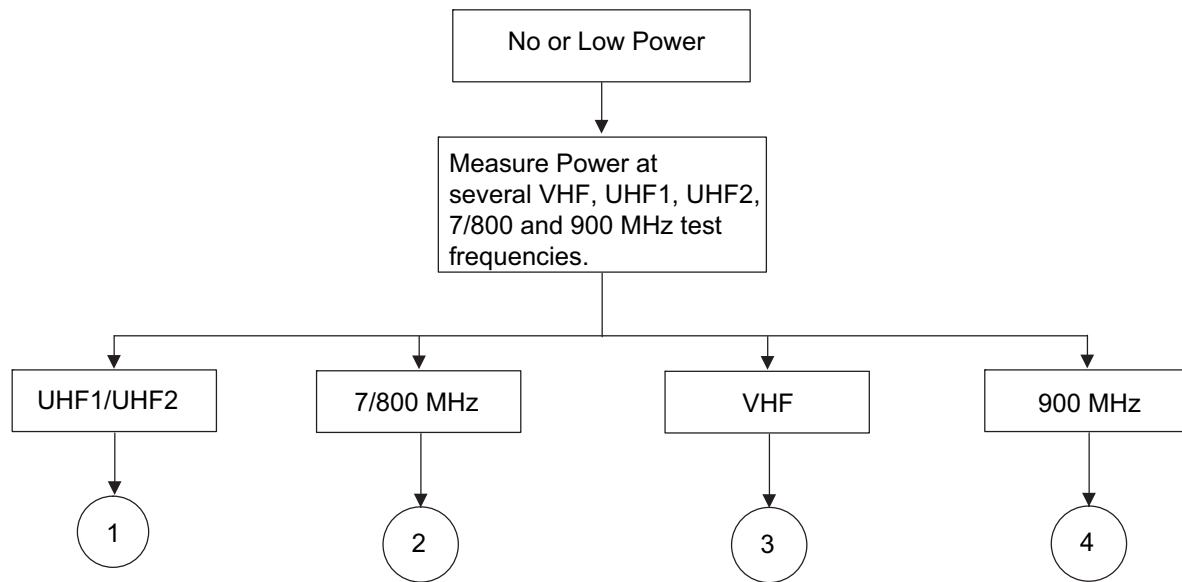
# Bluetooth Failure – Page 5 (LCD Indication)



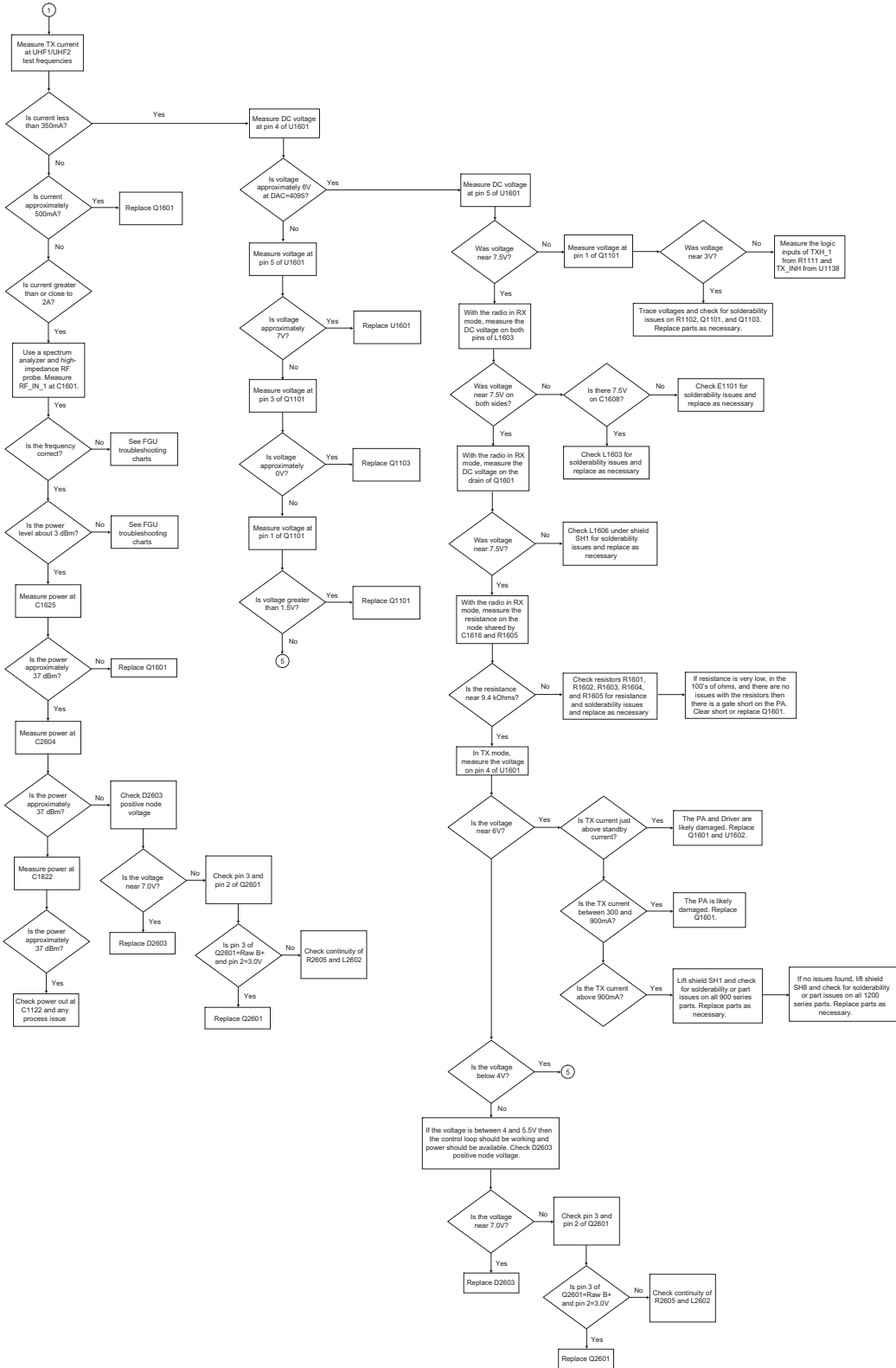
# Bluetooth Failure – Page 6 (No Audio from Headset)



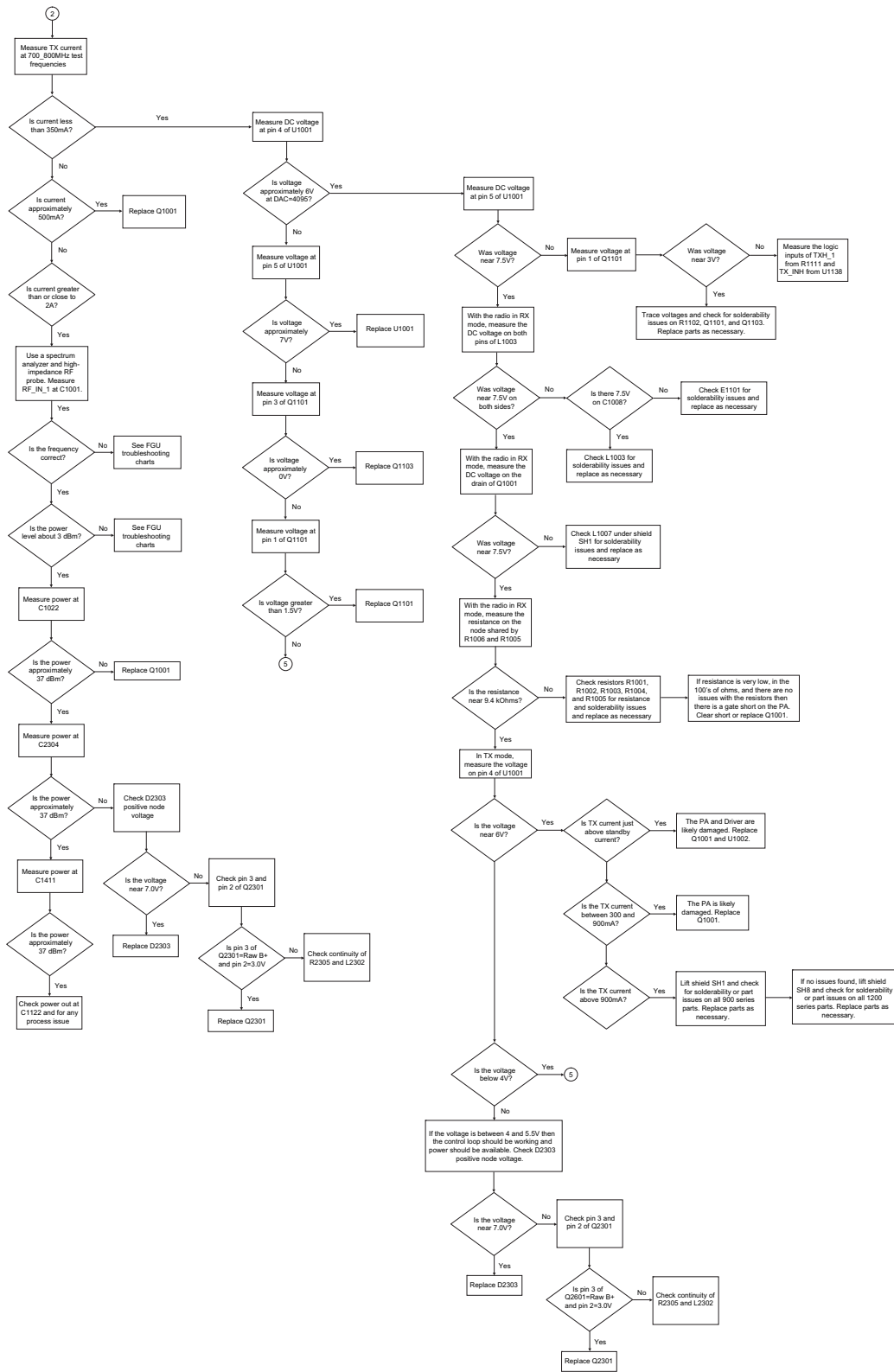
### 5.19 PA Failure – Main



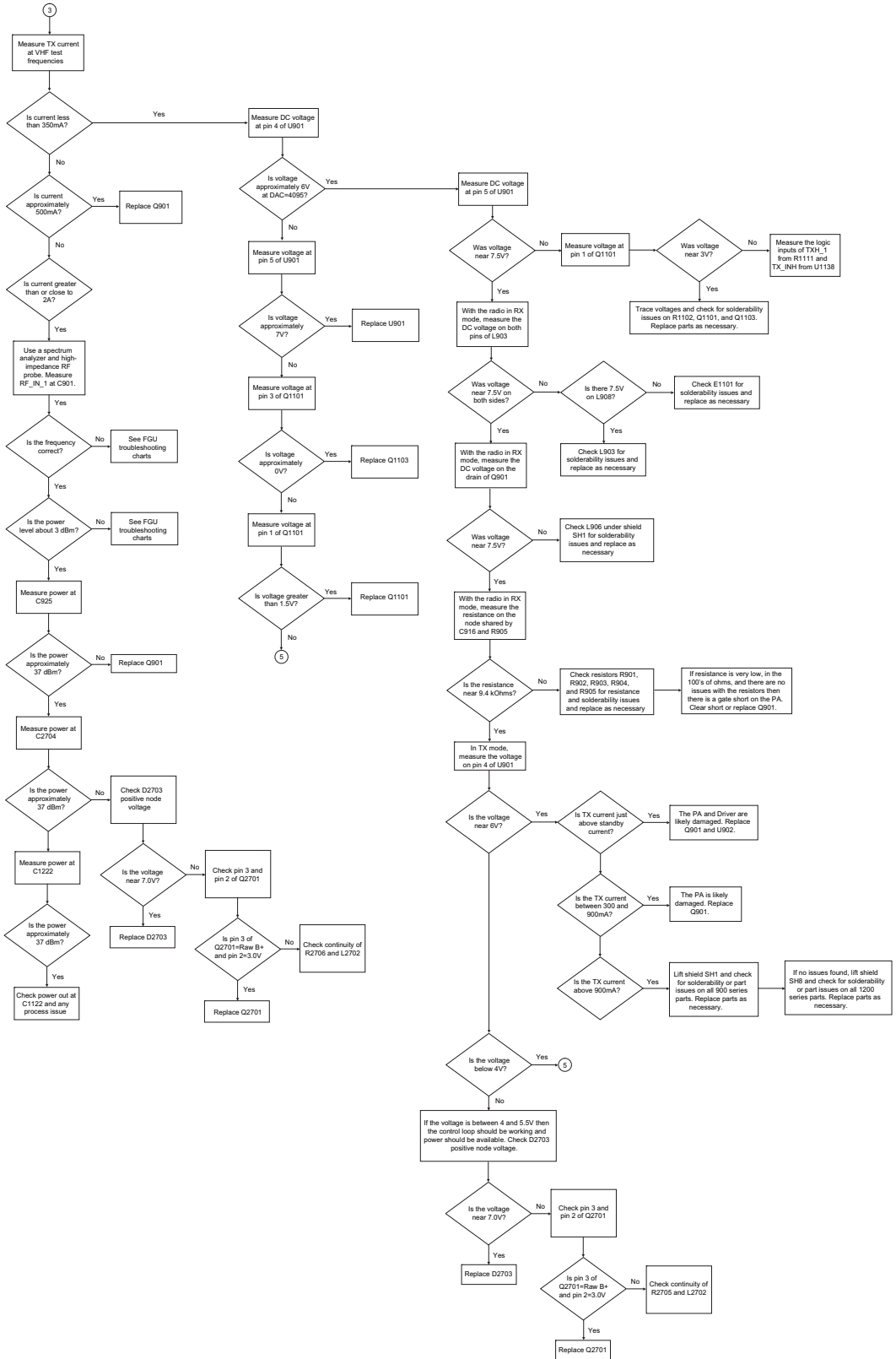
# PA Failure – Page 1 (UHF1/UHF2 PA)



# PA Failure – Page 2 (700/800 MHz PA)

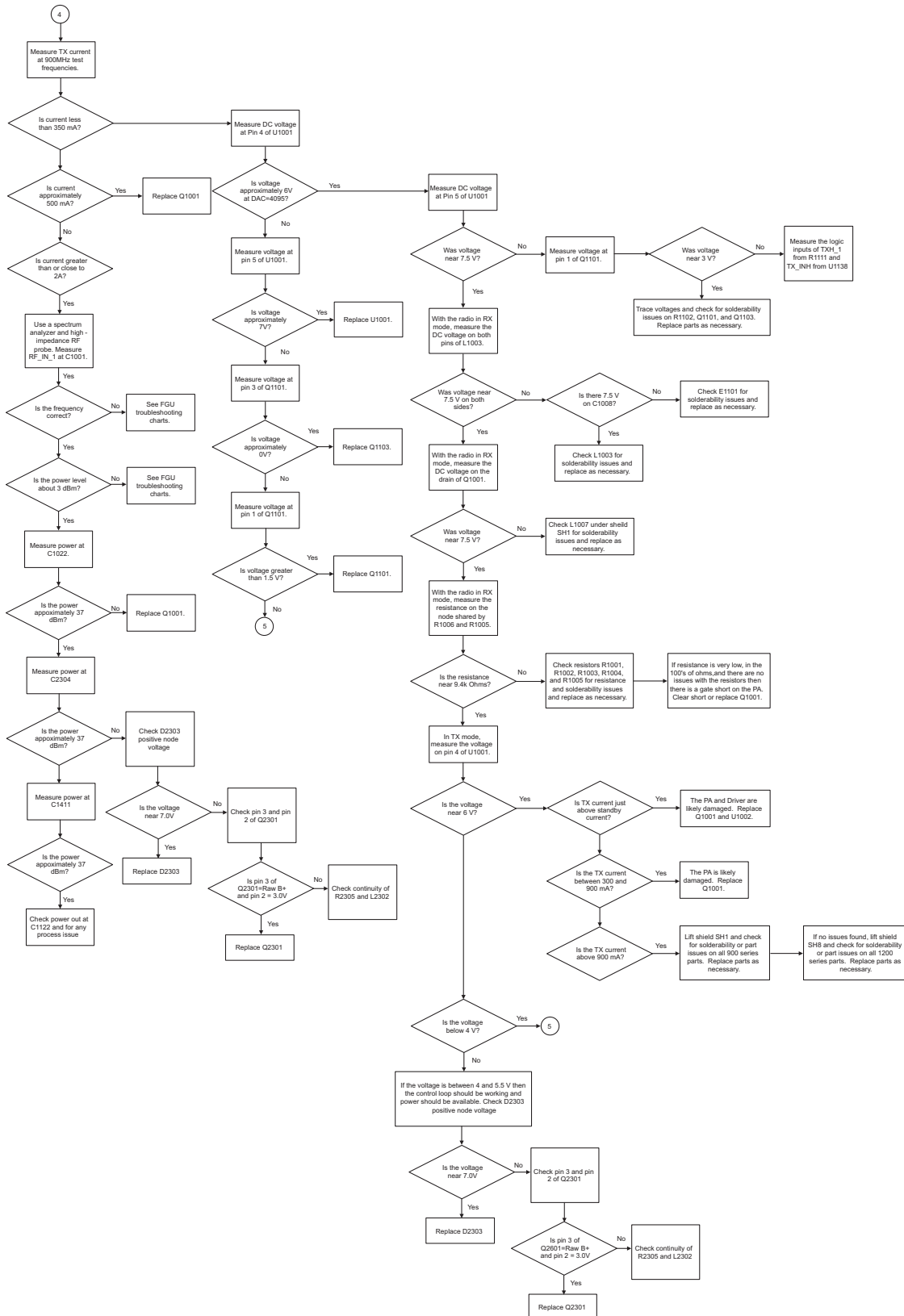


# PA Failure – Page 3 (VHF PA)

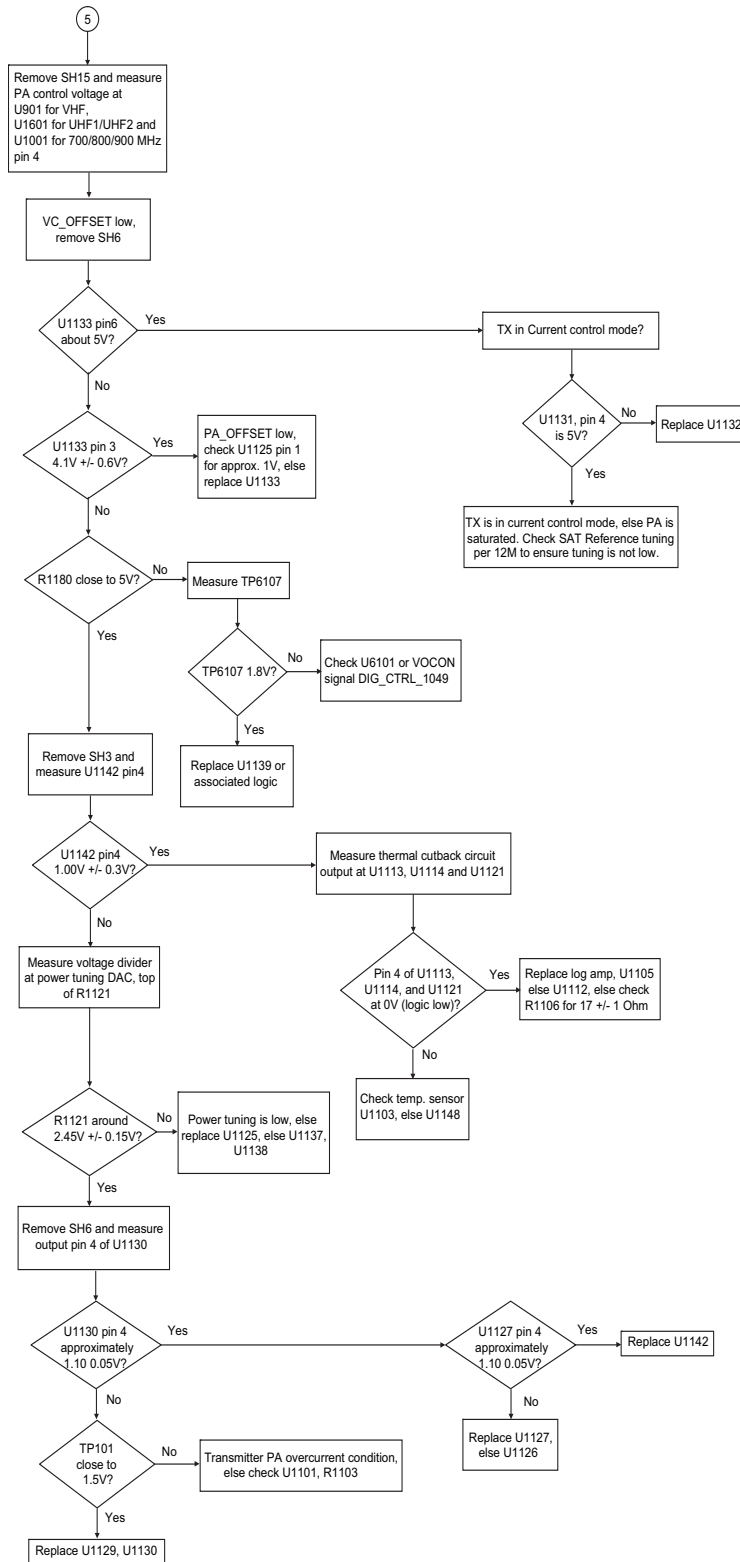




# PA Failure – Page 4 (900 MHz PA)



# PA Failure – Page 5 (ALC)



# Chapter 6 Troubleshooting Waveforms

This chapter contains images of waveforms that might be useful in verifying operation of certain parts of the circuitry. These waveforms are for reference only; the actual data depicted will vary depending on operating conditions.

## 6.1 List of Waveforms

Table 6-1 lists each waveform and the page on which the waveform can be found.

Table 6-1. List of Waveforms

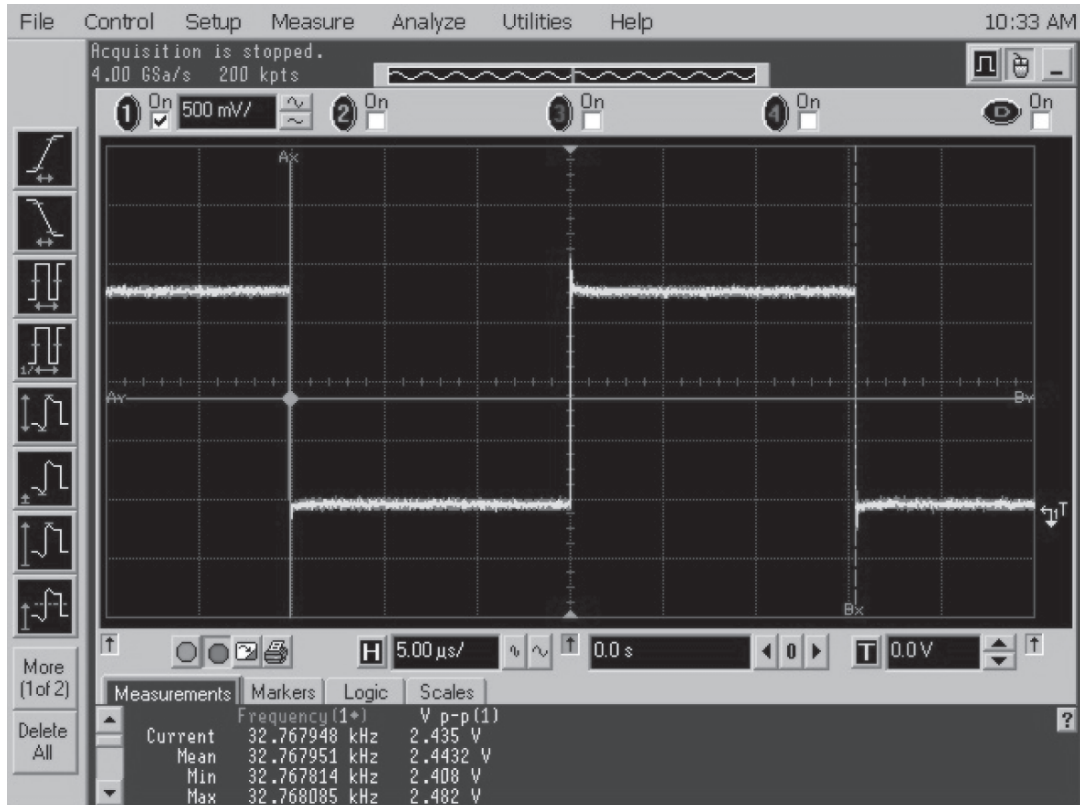
Waveform	Page No.
<b>Clocks</b>	
32 kHz Clock	6-2
4 MHz Clock	6-3
12 MHz Clock	6-4
16.8 MHz Clock	6-5
24 MHz Clock	6-6
<b>Audio SSI</b>	
Red Tx	6-7
Red Rx	6-8
SYNC.	6-9
BCLK	6-10
<b>RX SSI</b>	
CLK.	6-11
DA	6-12
FSYNC.	6-13
<b>TX SSI</b>	
CLK.	6-14
DA.	6-15
FSYNC.	6-16
<b>SPI</b>	
CLK	6-17
CS	6-18
<b>I2C BUS</b>	
SCL	6-19

Table 6-1. List of Waveforms (Continued)

Waveform	Page No.
SCL 5V	6-20
SDA	6-21
<b>One Wire</b>	
1-Wire	6-22
<b>GCAI</b>	
GPIO0	6-23
GPIO4 / Keyfail during Keyload	6-24
<b>USB</b>	
D-	6-25
D+	6-26
<b>SDRAM</b>	
CLK	6-27
CLKX	6-28
<b>FLASH CONTROL</b>	
ADV	6-29
CS3	6-30
OE	6-31
RDY	6-32
WE	6-33

## 6.2 Clocks

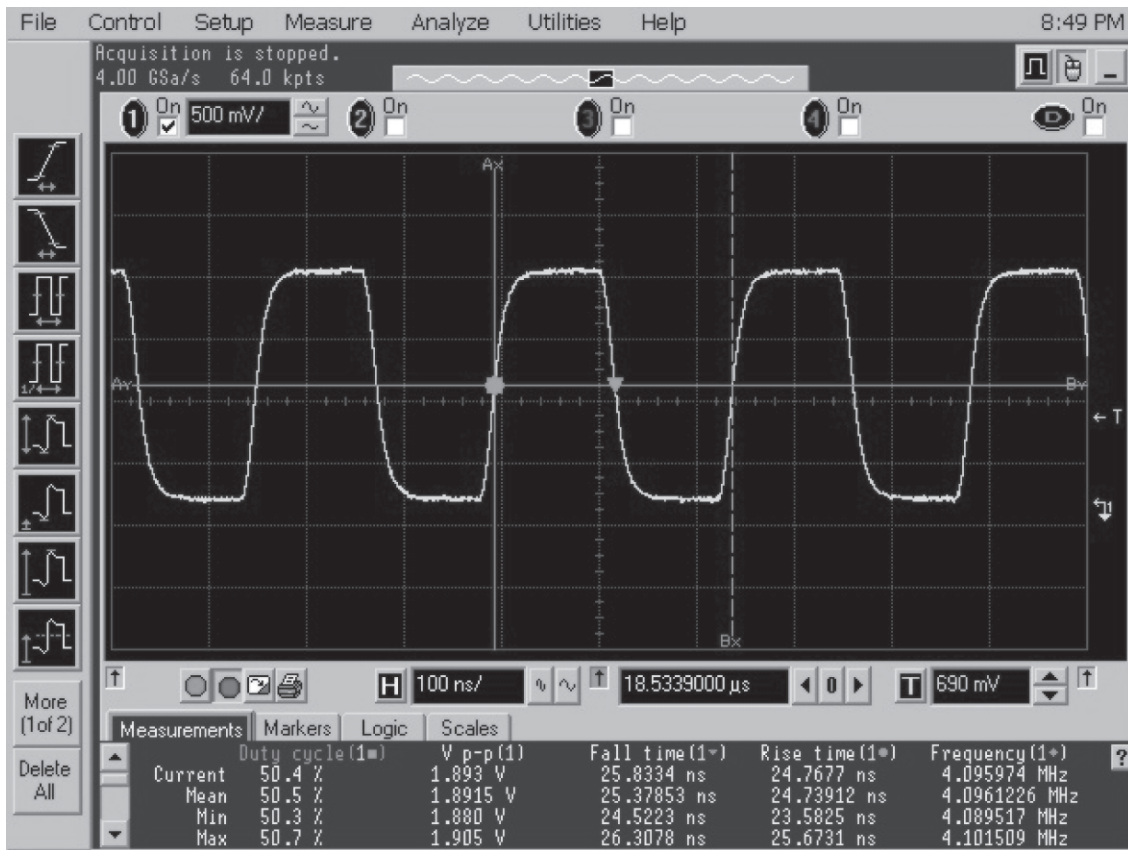
### 6.2.1 32 kHz Clock



Trace 1: Trace recorded at R6115.

Figure 6-1. 32 kHz Clock Waveform

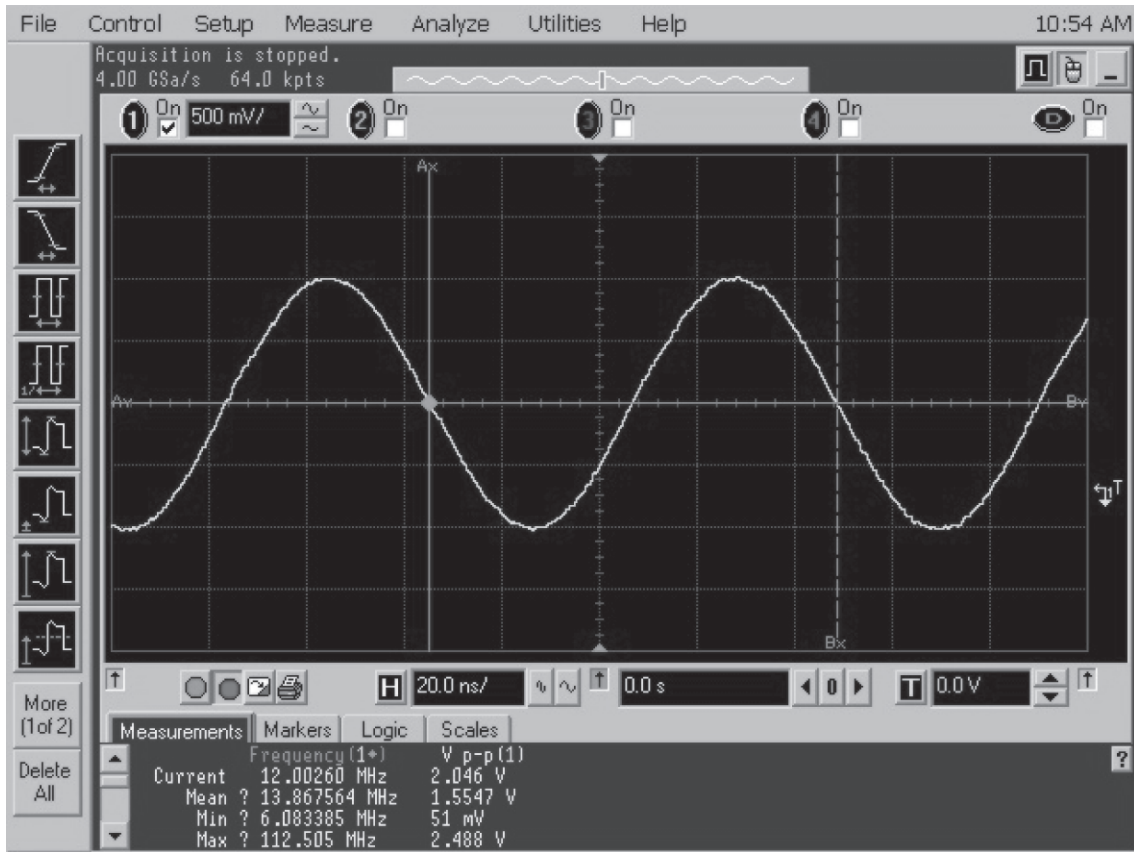
### 6.2.2 4 MHz Clock



Trace 1: Trace recorded at R6113.

Figure 6-2. 4 MHz Clock Waveform

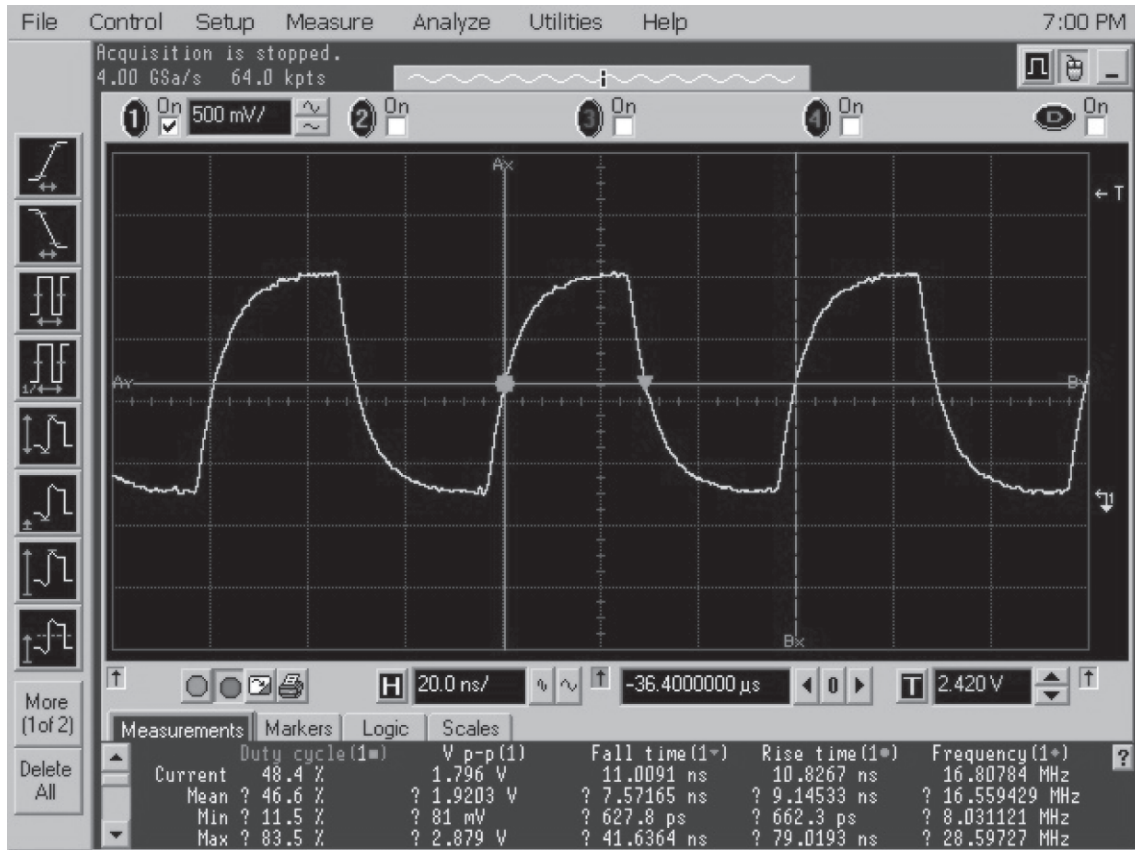
### 6.2.3 12 MHz Clock



Trace 1: Trace recorded at C6601.

Figure 6-3. 12 MHz Clock Waveform

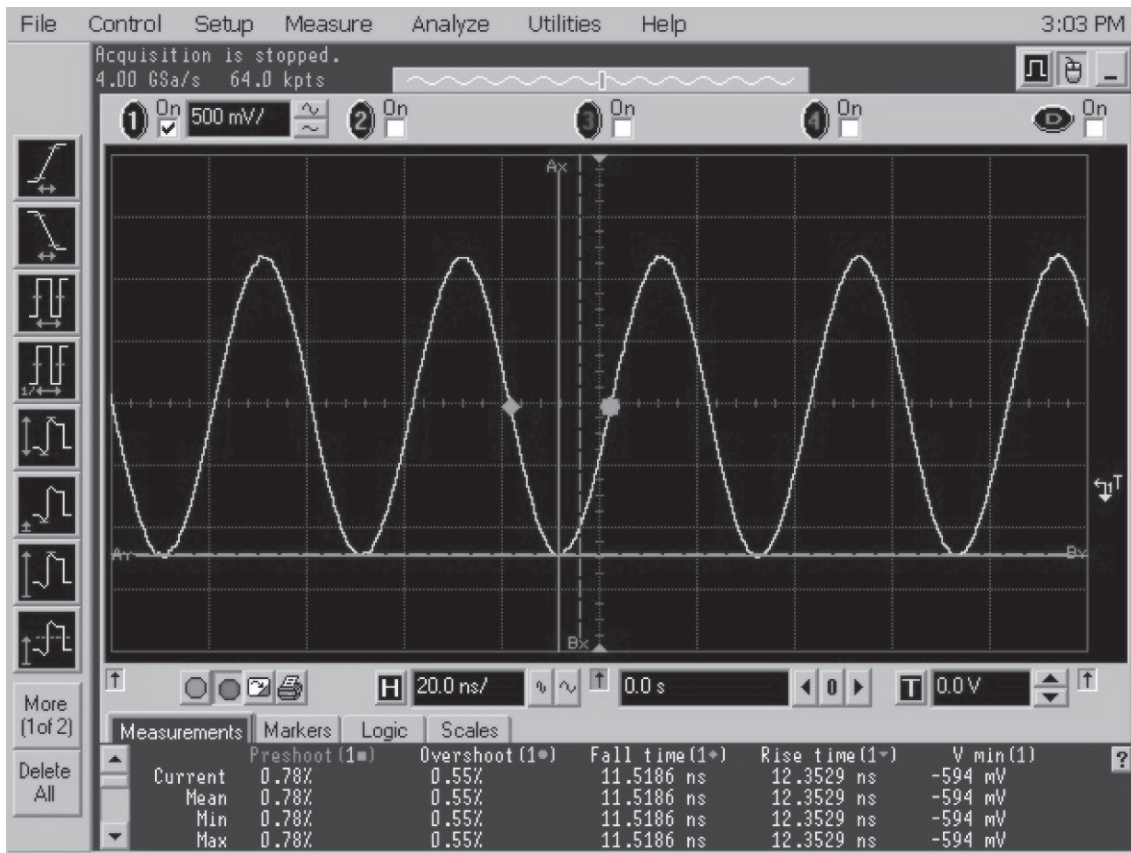
### 6.2.4 16.8 MHz Clock



Trace 1: Trace recorded at R6217.

Figure 6-4. 16.8 MHz Clock Waveform

### 6.2.5 24 MHz Clock



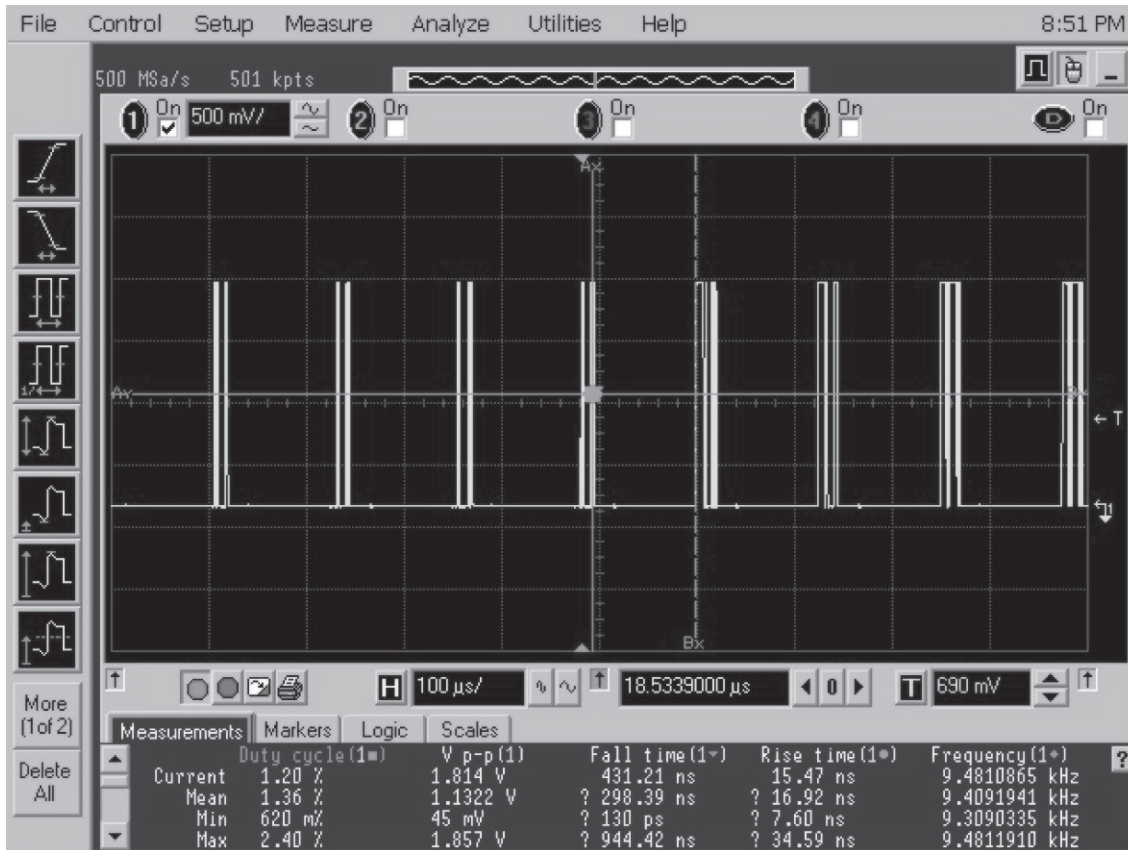
Trace 1: Trace recorded at C6592.

Figure 6-5. 24 MHz Clock Waveform



## 6.3 Audio SSI

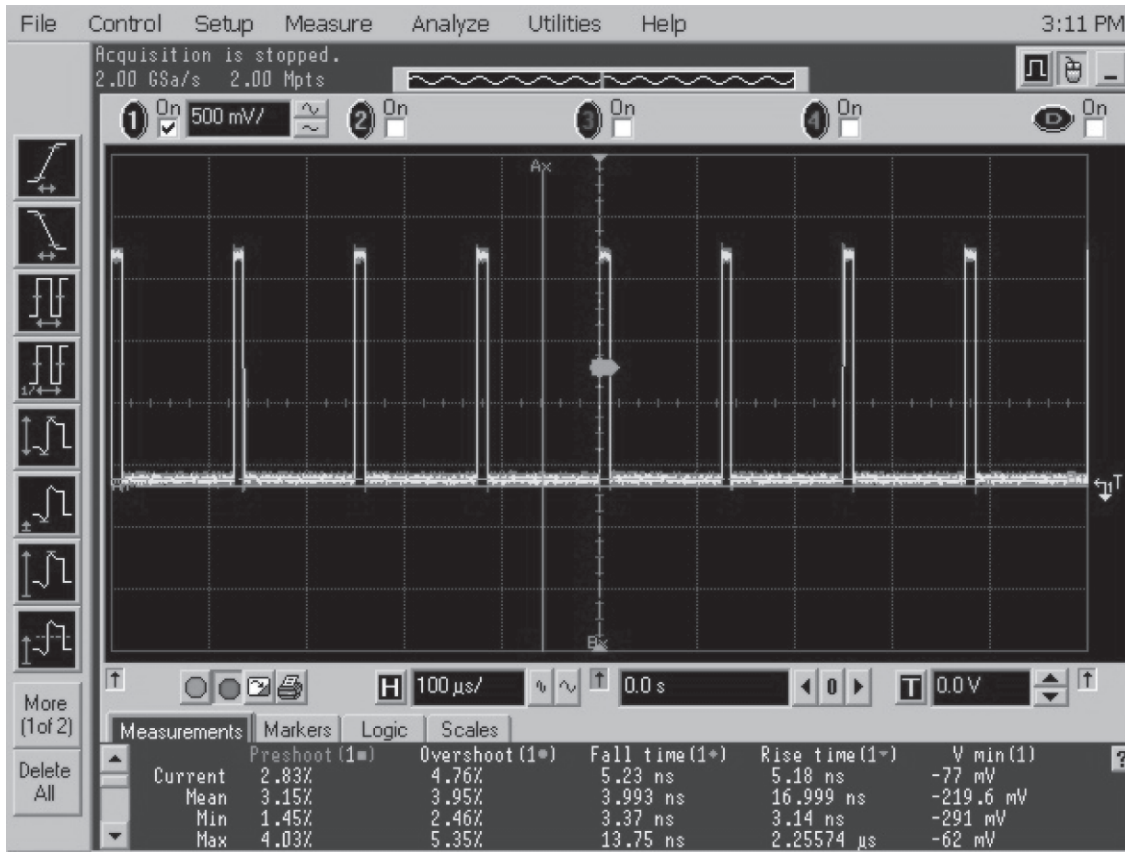
### 6.3.1 Red Tx



Trace 1: Trace recorded at R6618.

Figure 6-6. Audio SSI – Red Tx Waveform

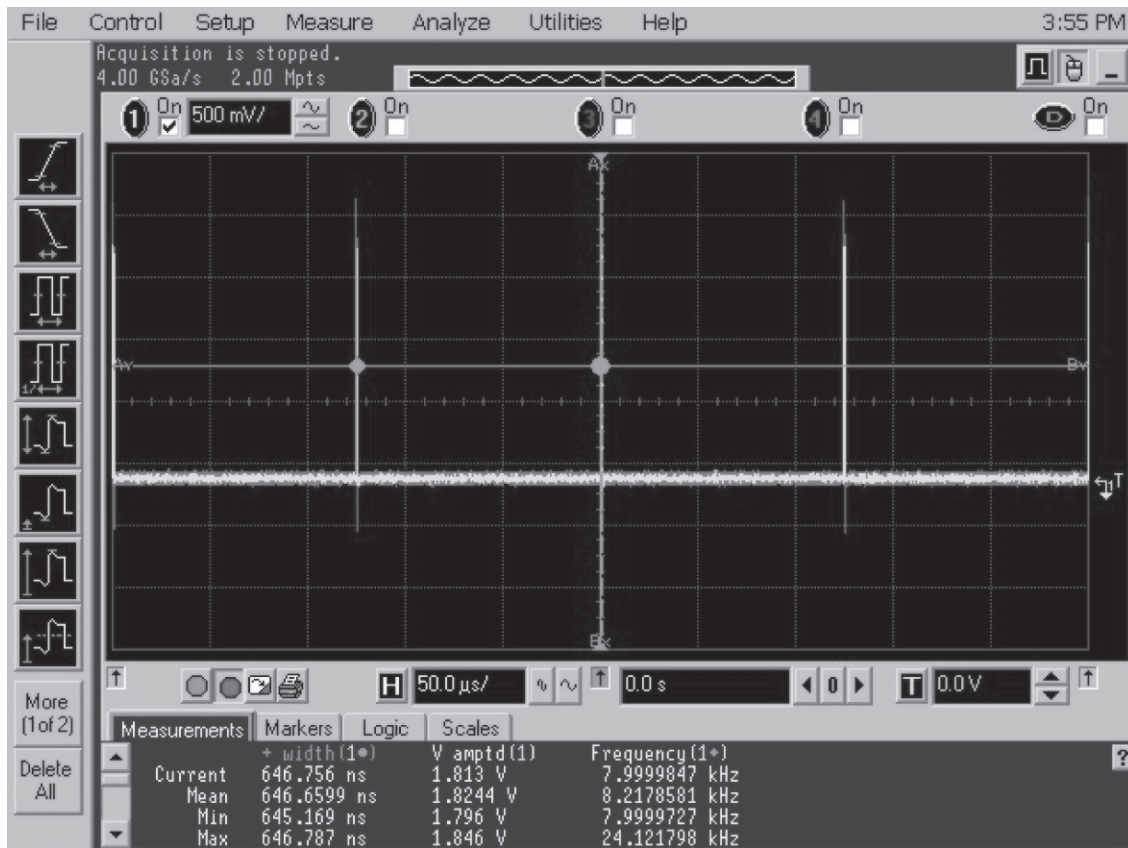
### 6.3.2 Red Rx



Trace 1: Trace recorded at R1332.

Figure 6-7. Audio SSI – Red Rx Waveform

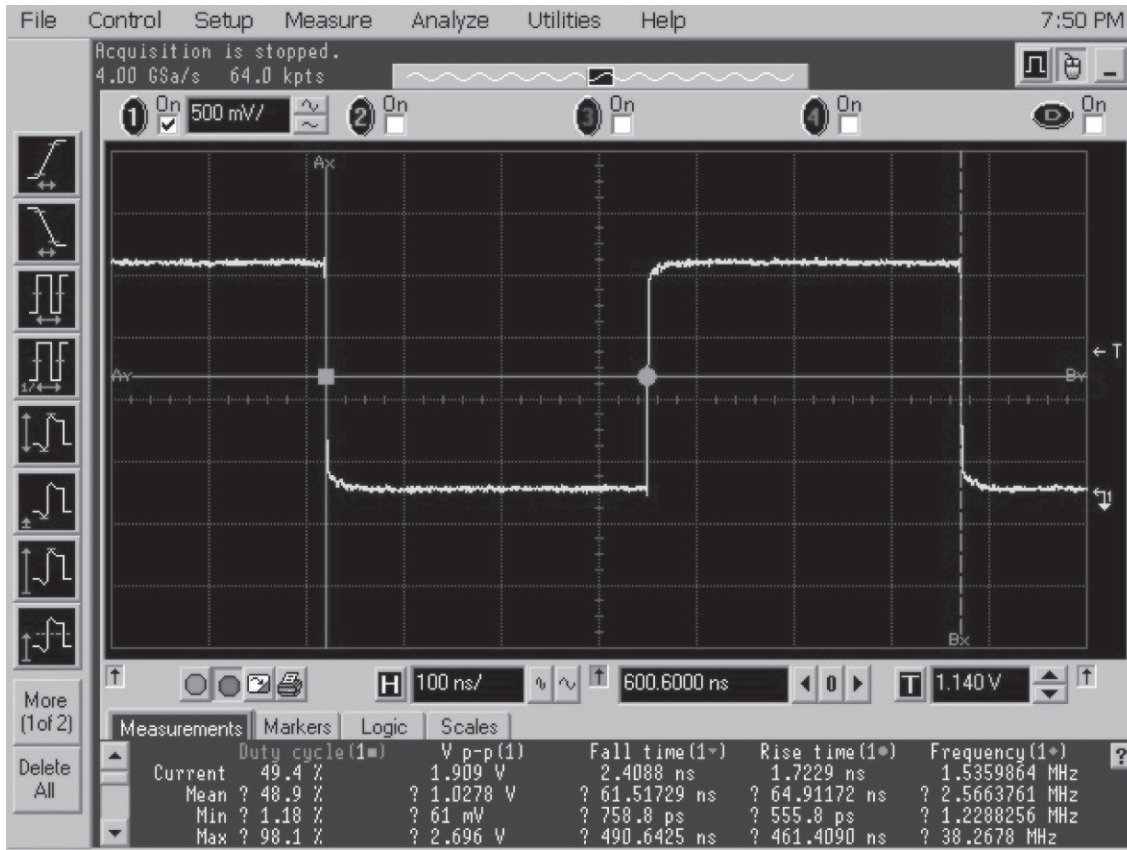
### 6.3.3 SYNC.



Trace 1: Trace recorded at Pin 30 of J2301.

Figure 6-8. Audio SSI – Sync. Waveform

### 6.3.4 BCLK

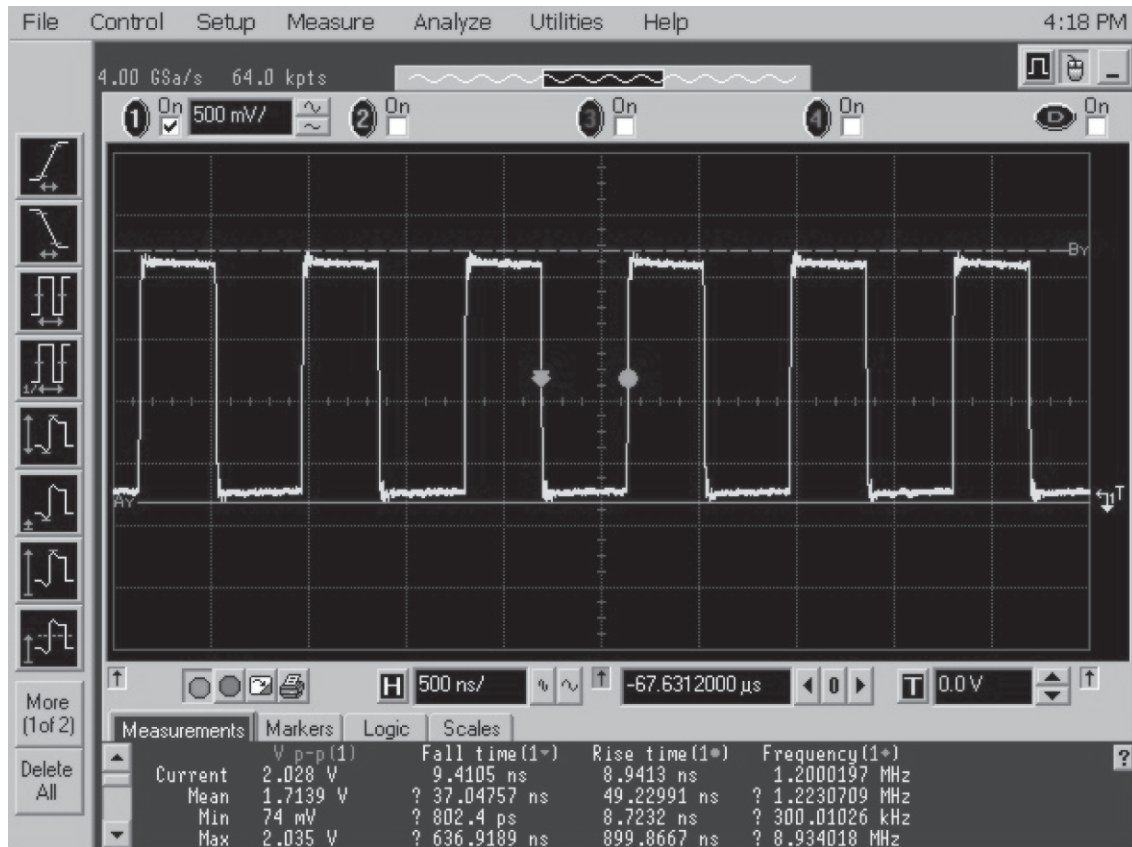


Trace 1: Trace recorded at R6107.

Figure 6-9. Audio SSI – BCLK. Waveform

## 6.4 RX SSI

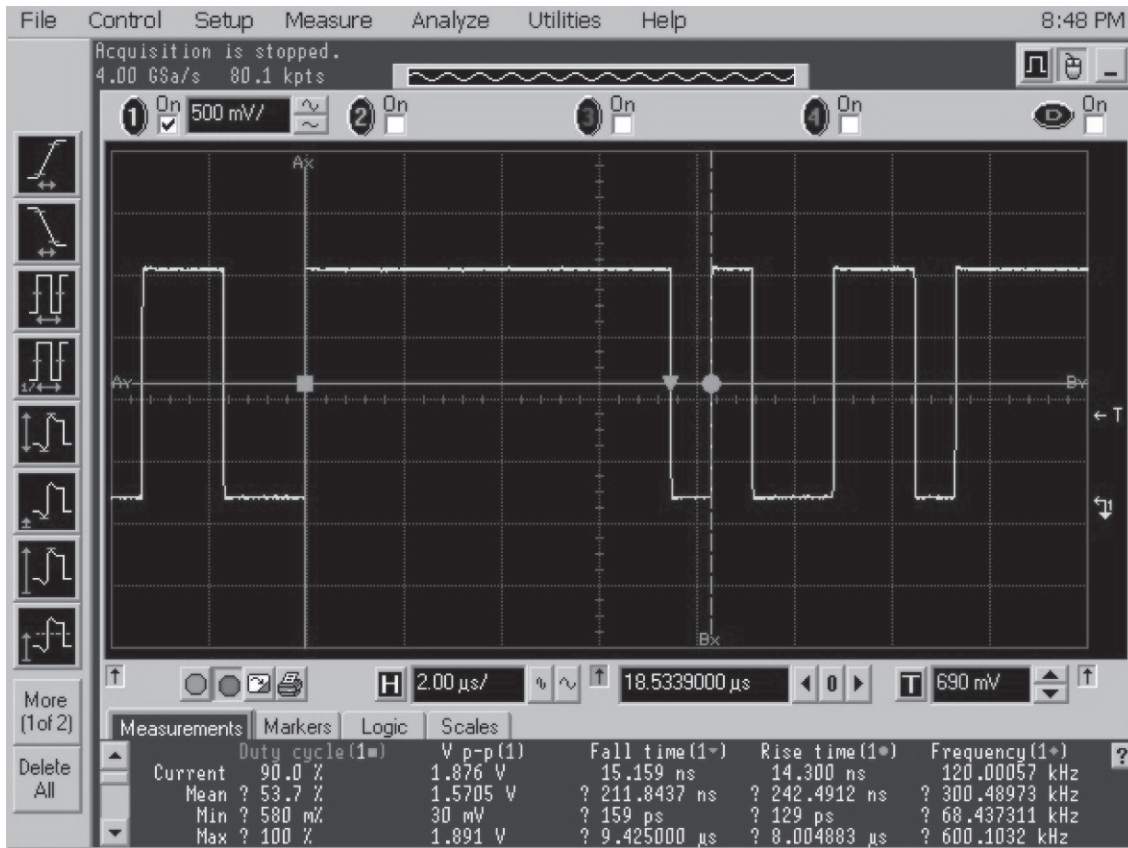
### 6.4.1 CLK.



Trace 1: Trace recorded at R2806.

Figure 6-10. RX SSI – CLK. Waveform

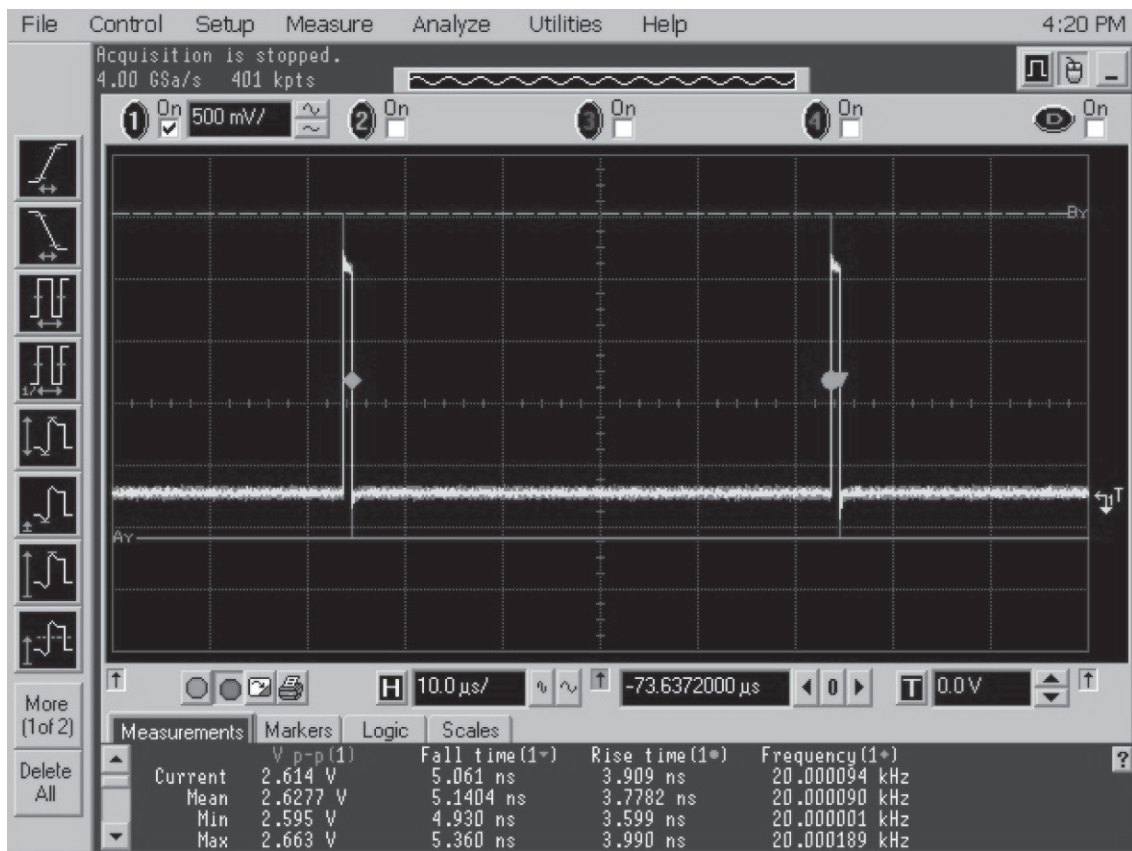
6.4.2 DA



Trace 1: Trace recorded at R2805.

Figure 6-11. RX SSI – DA Waveform

### 6.4.3 FSYNC.

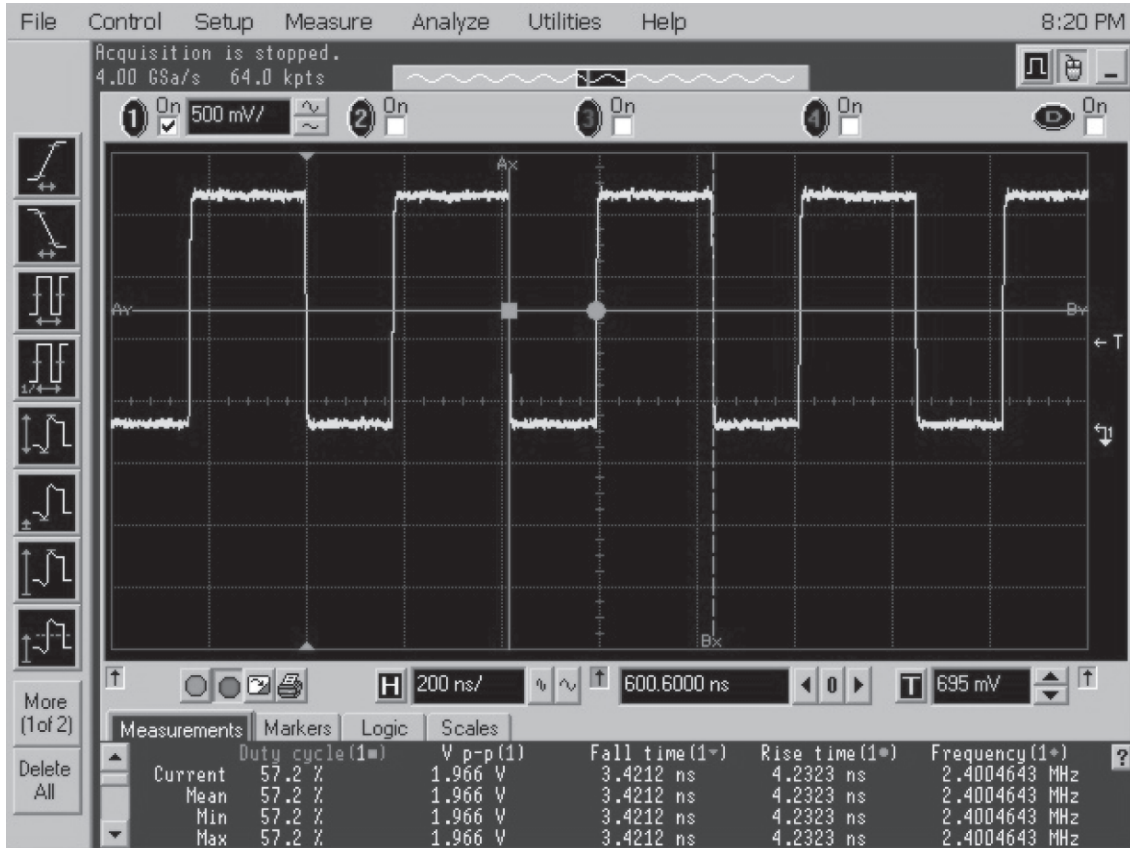


Trace 1: Trace recorded at R2804.

Figure 6-12. RX SSI – FSync. Waveform

## 6.5 TX SSI

### 6.5.1 CLK.

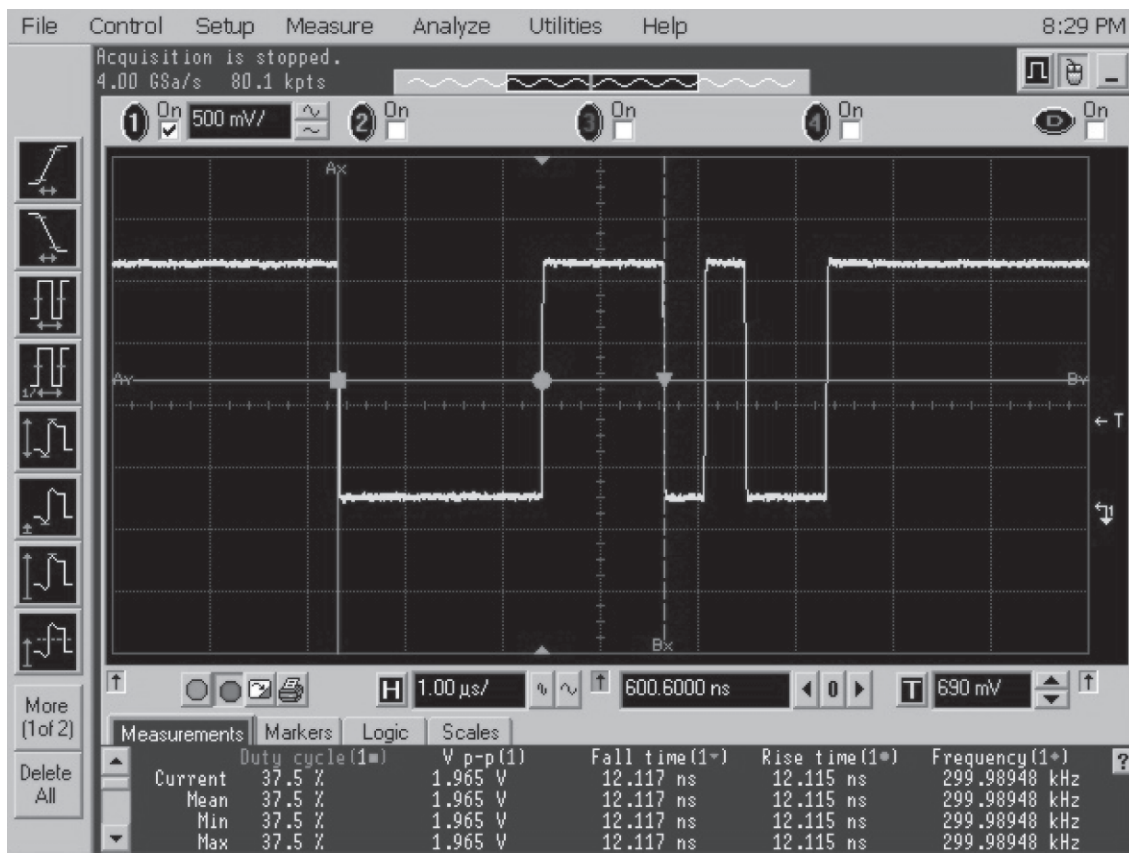


Trace 1: Trace recorded at R2808.

Figure 6-13. TX SSI – TX CLK. Waveform



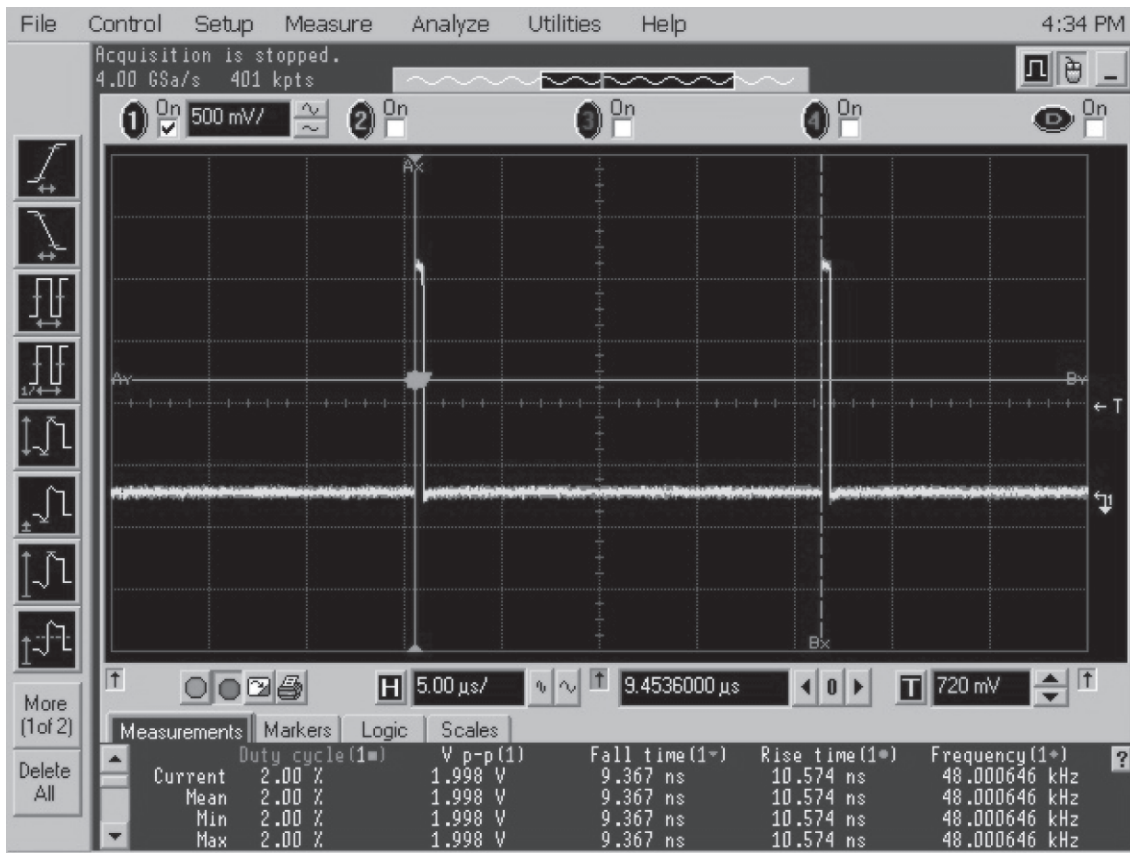
### 6.5.2 DA.



Trace 1: Trace recorded at R2817.

Figure 6-14. TX SSI – DA Waveform

### 6.5.3 FSYNC.

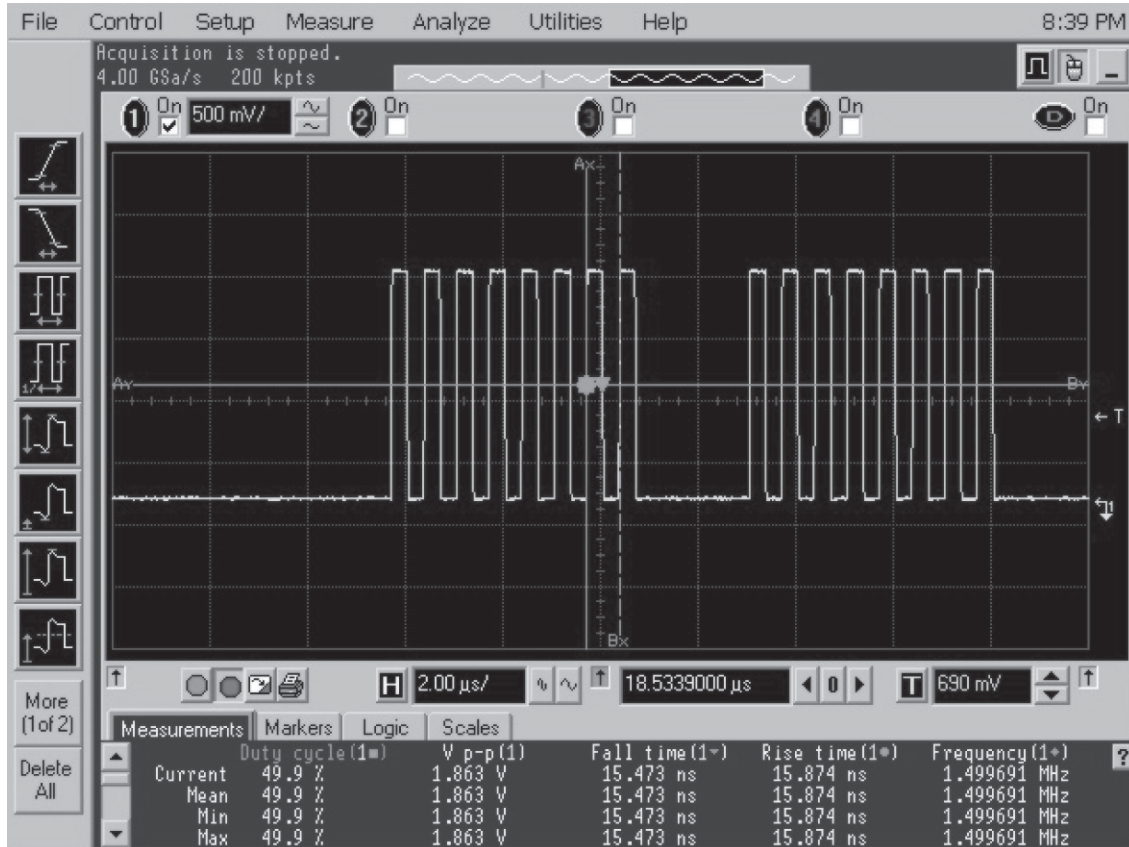


Trace 1: Trace recorded at R2807.

Figure 6-15. TX SSI – FSync. Waveform

## 6.6 SPI

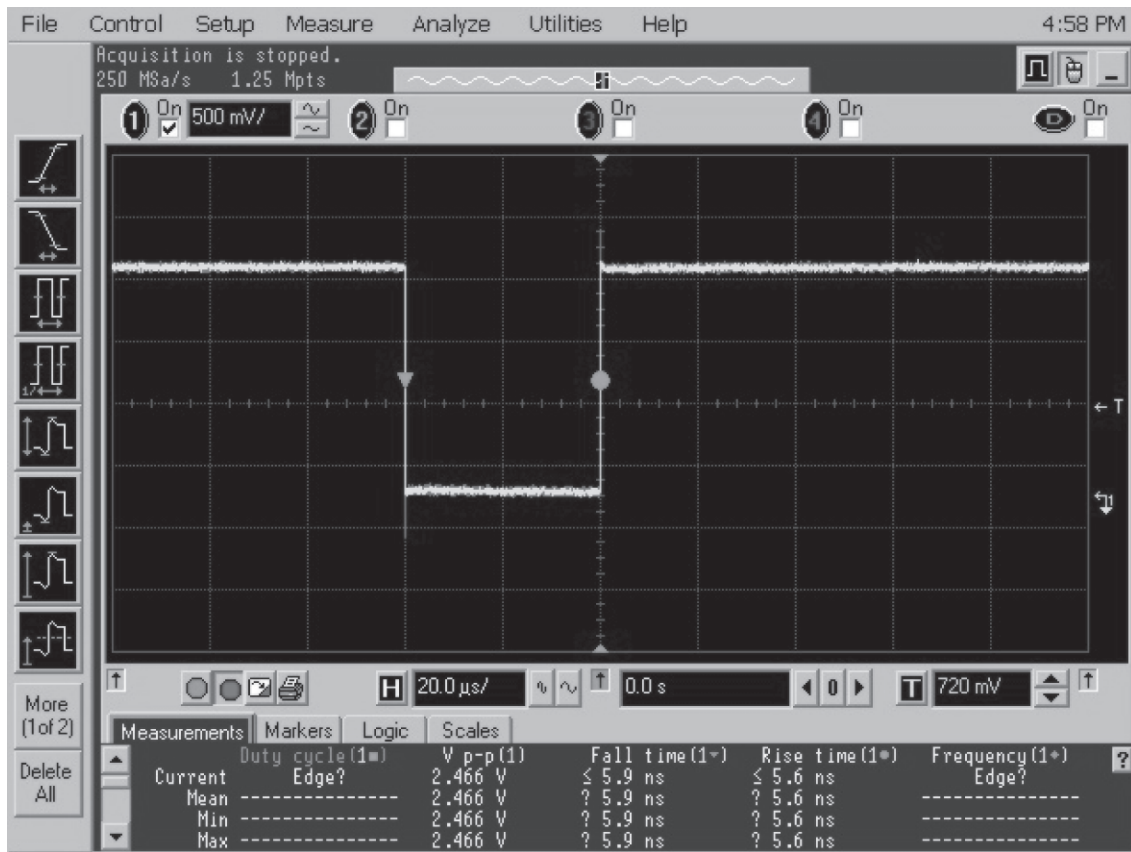
### 6.6.1 CLK



Trace 1: Trace recorded at R2803.

Figure 6-16. SPI – CLK Waveform

### 6.6.2 CS

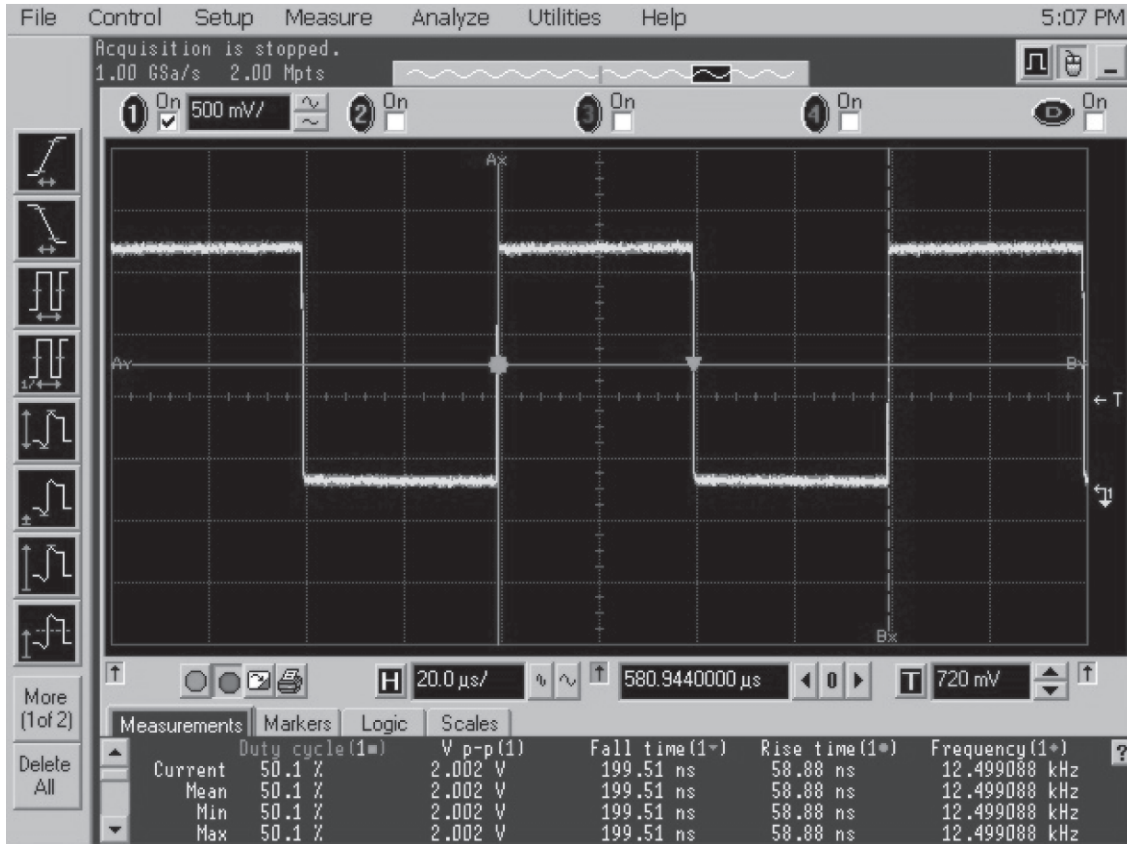


Trace 1: Trace recorded at R6602.

Figure 6-17. CS Waveform

## 6.7 I2C BUS

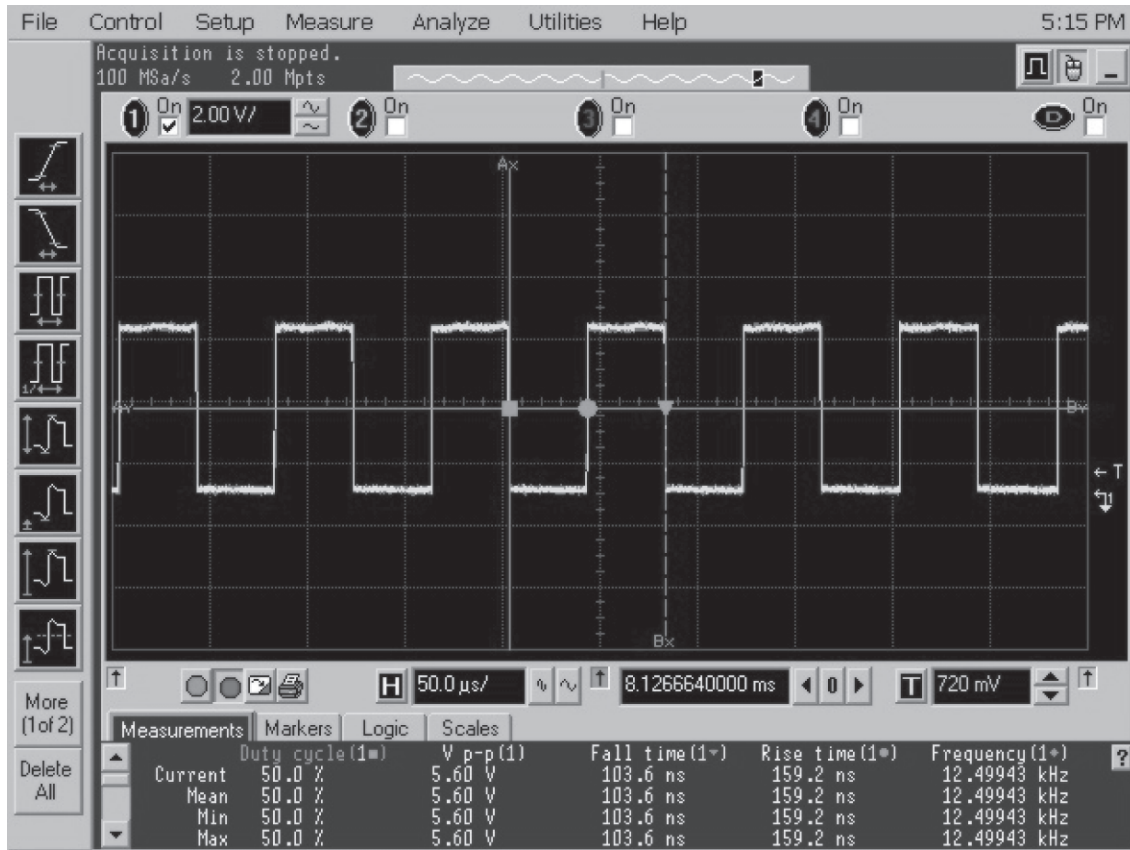
### 6.7.1 SCL



Trace 1: Trace recorded at R6208.

Figure 6-18. I2C Bus – SCA Waveform

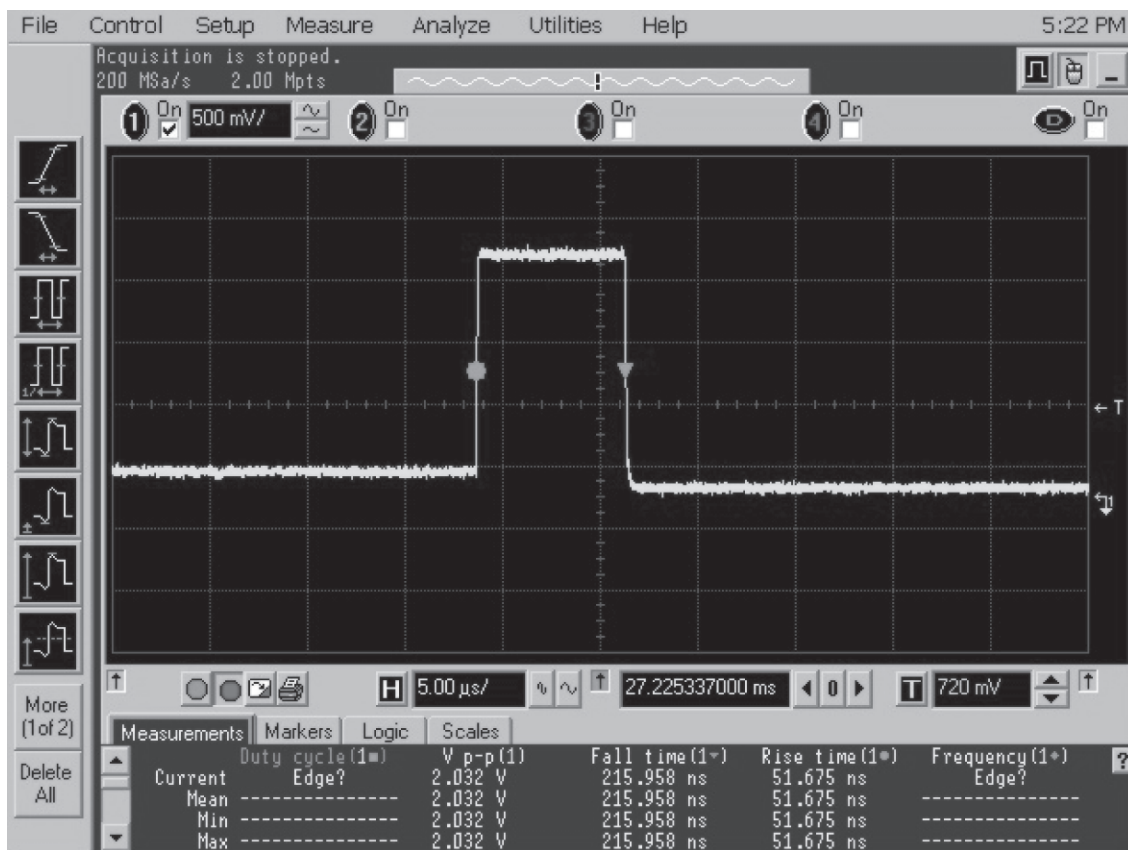
### 6.7.2 SCL 5V



Trace 1: Trace recorded at R2204.

Figure 6-19. I2C Bus – SCA 5V Waveform

### 6.7.3 SDA

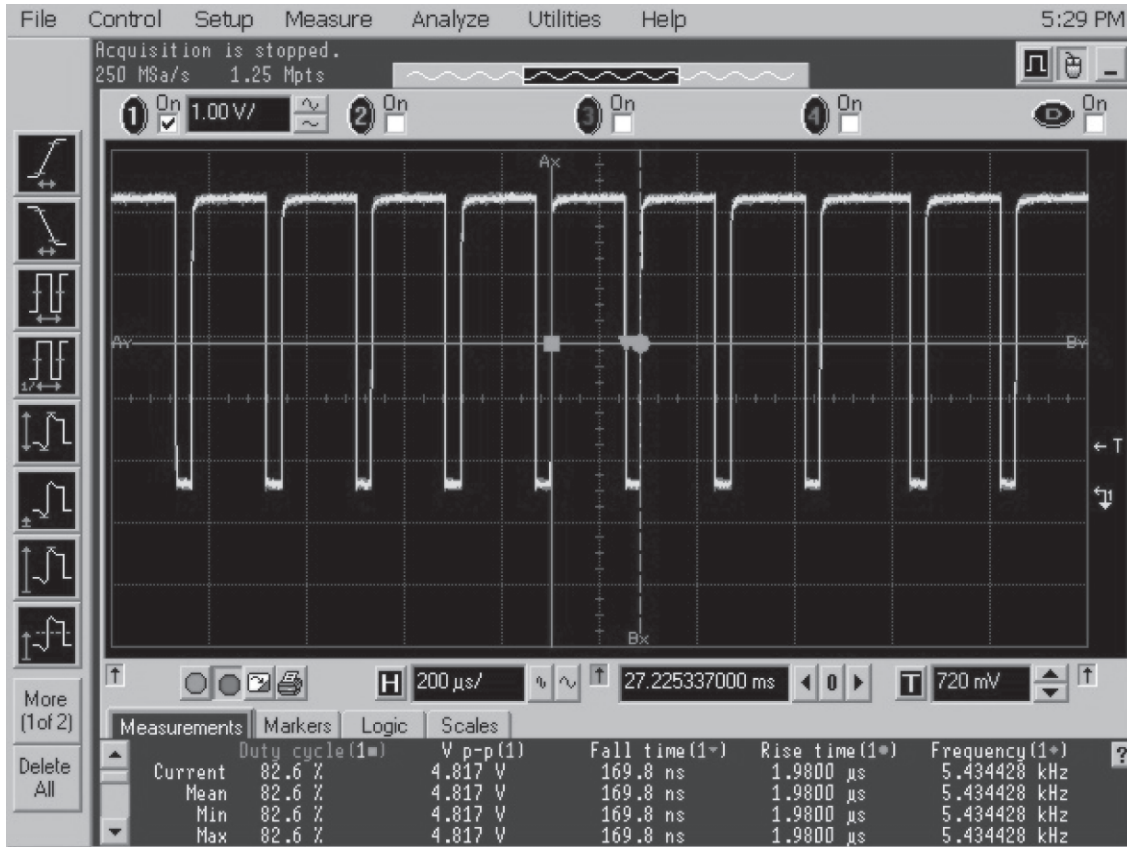


Trace 1: Trace recorded at R6209.

Figure 6-20. I2C Bus – SDA Waveform

## 6.8 One Wire

### 6.8.1 1-Wire



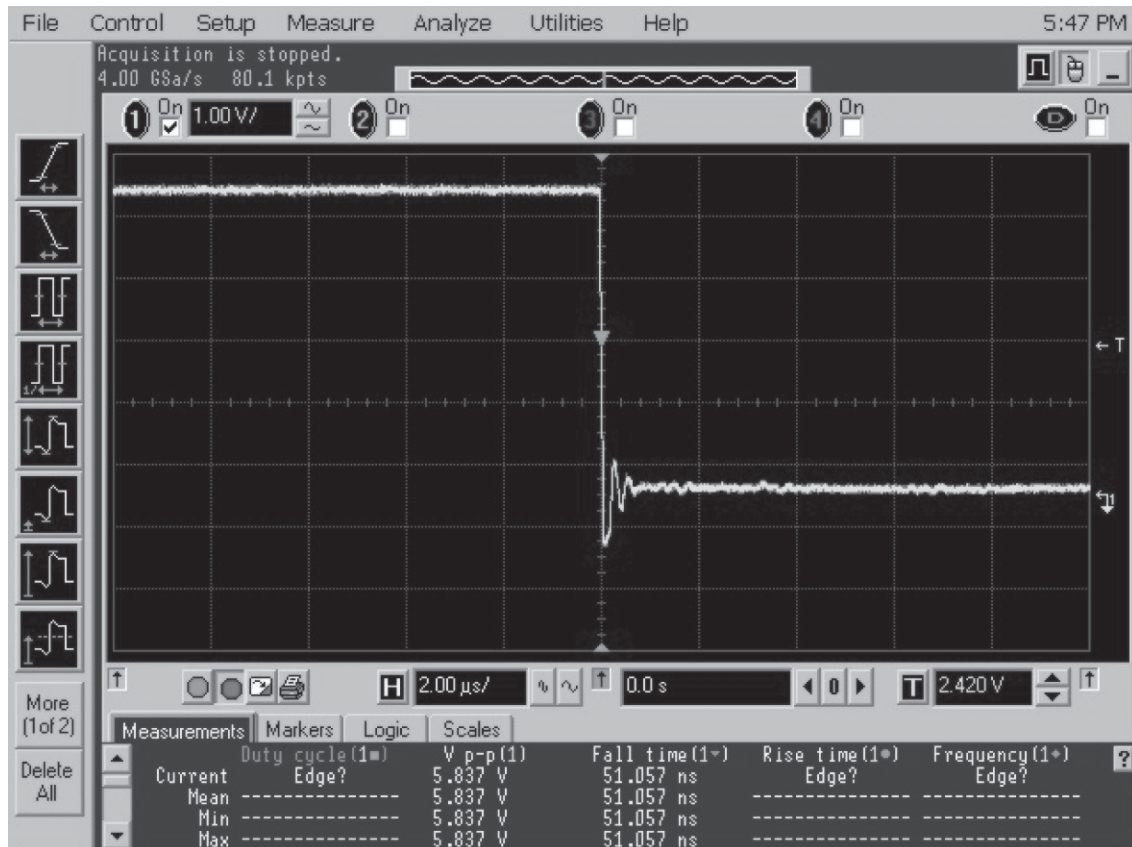
Trace 1: Trace recorded at R4009.

Figure 6-21. 1-Wire Waveform



## 6.9 GCAI

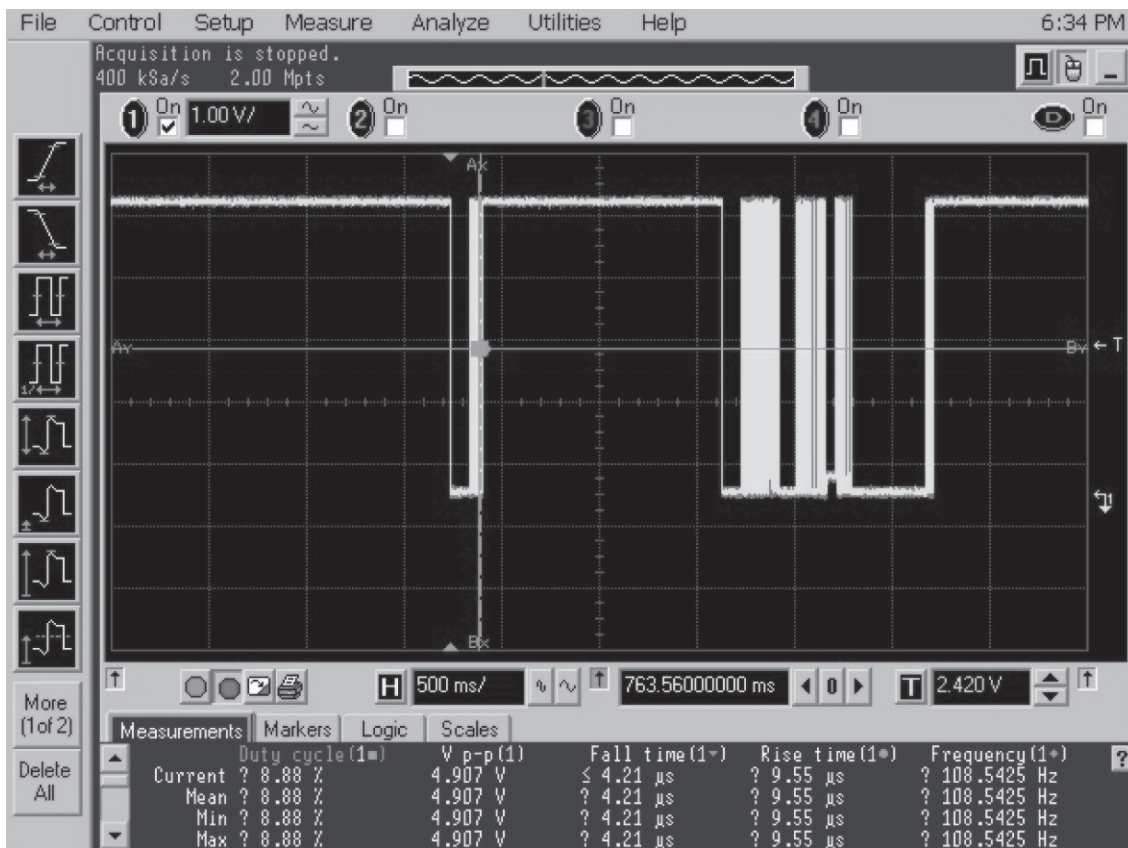
### 6.9.1 GPIO0



Trace 1: Trace recorded at D4001 (test point GPIO0).

Figure 6-22. GCAI – GPIO0 Waveform

## 6.9.2 GPIO4 / Keyfail during Keyload

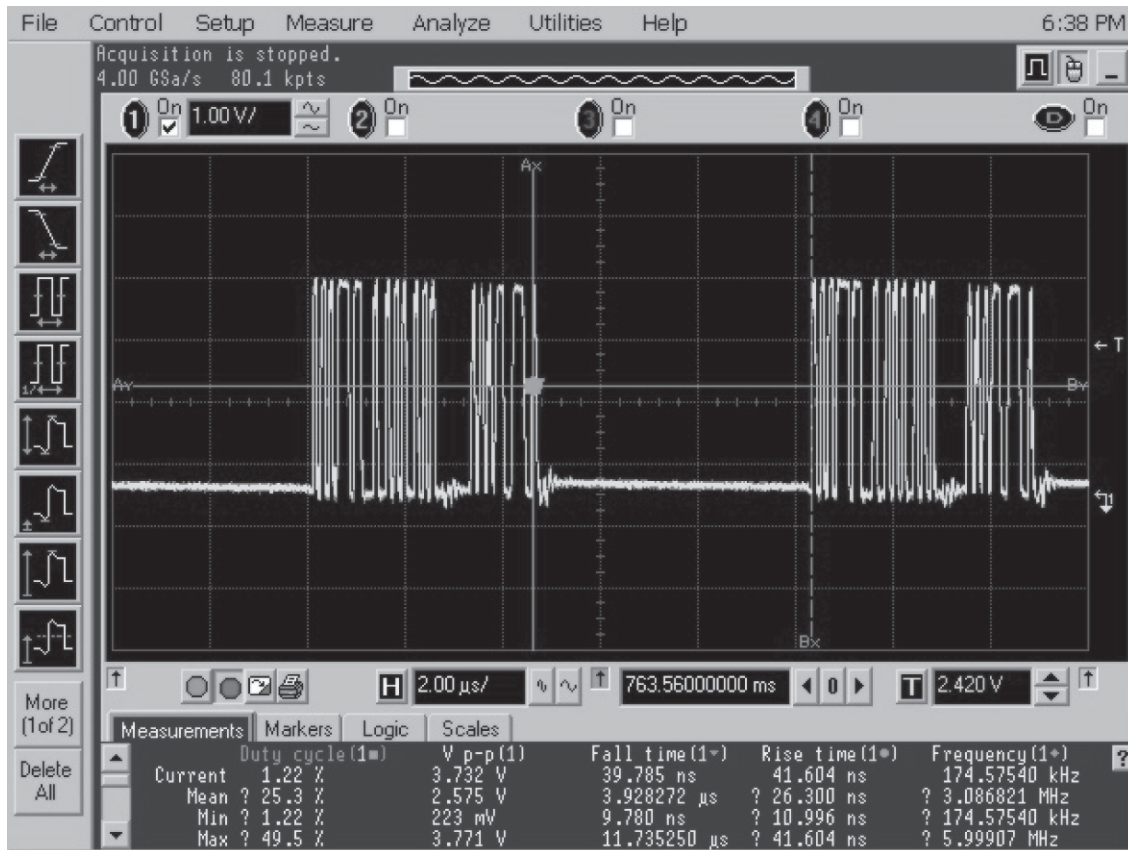


Trace 1: Trace recorded at P2001\_21 or R2005 or C2006 (DNP).

Figure 6-23. GCAI – GPIO4 Waveform

## 6.10 USB

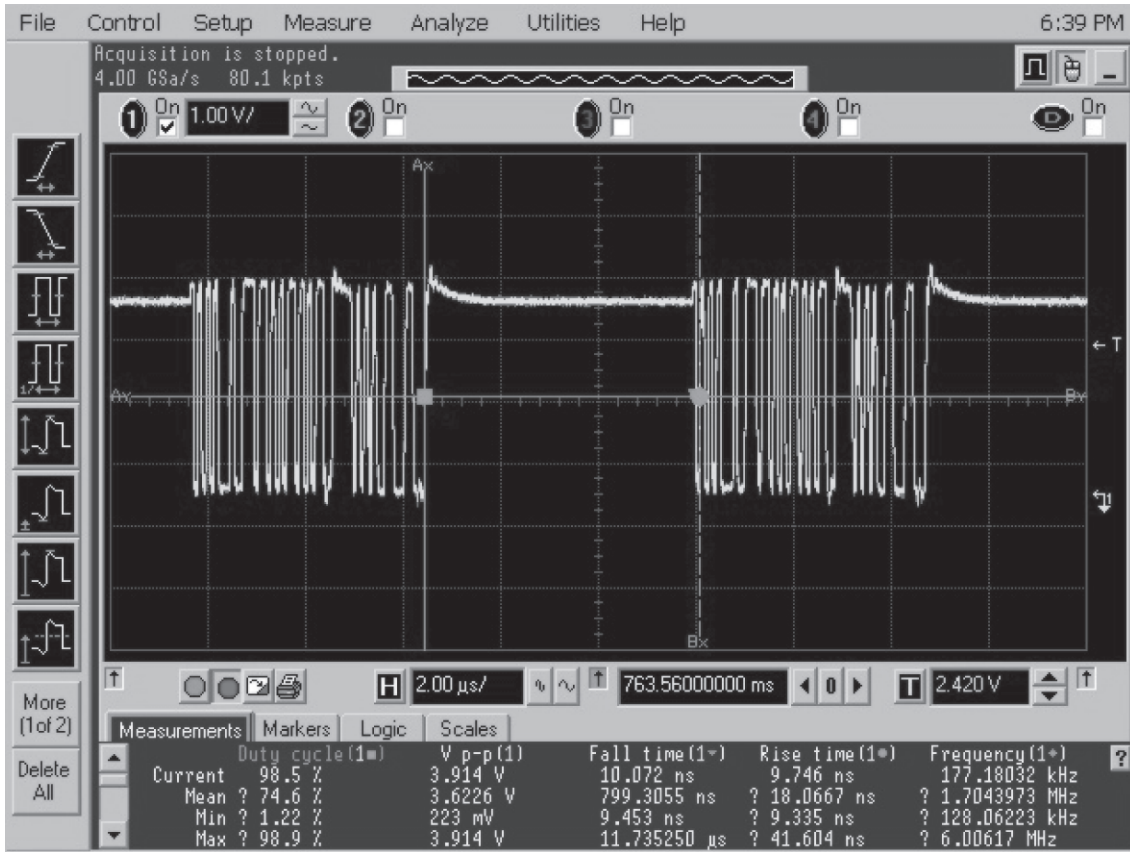
### 6.10.1 D-



Trace 1: Trace recorded at TP F\_GCAI\_USB-.

Figure 6-24. USB – D- Waveform

6.10.2 D+

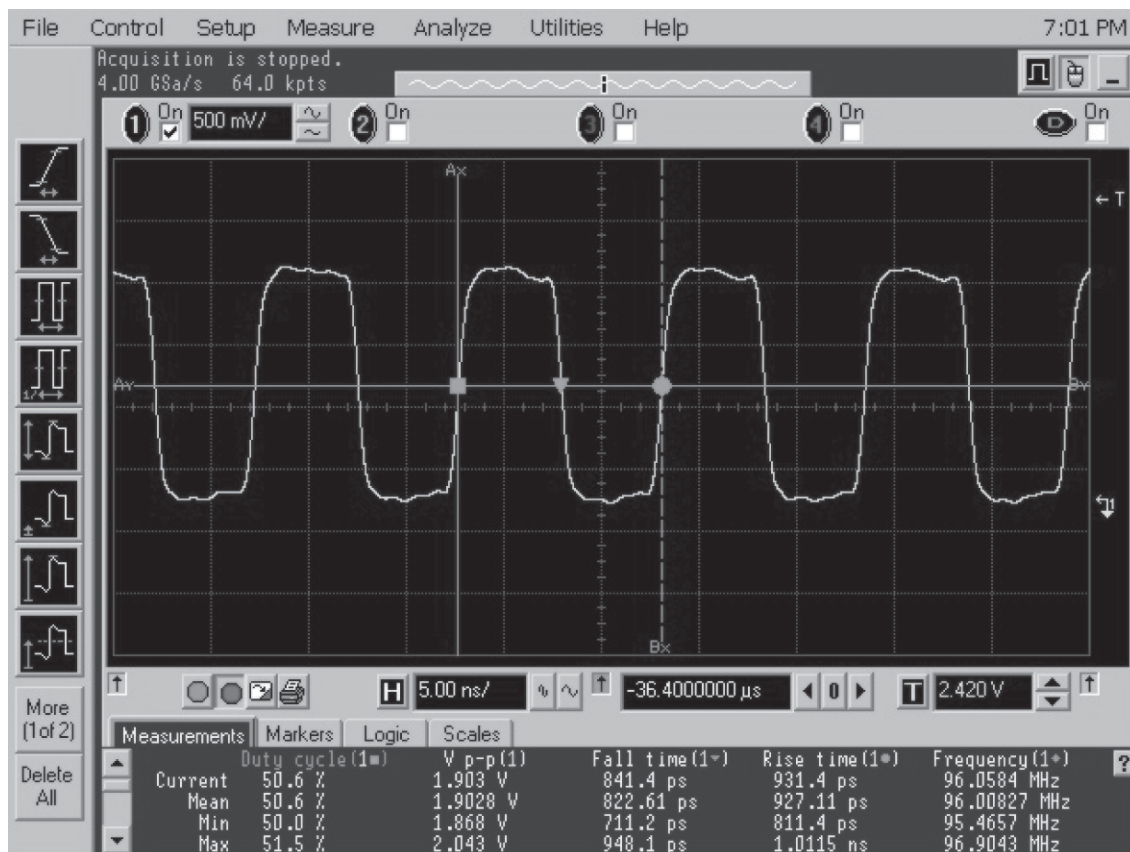


Trace 1: Trace recorded at TP F\_GCAI\_USB+.

Figure 6-25. USB – D+ Waveform

## 6.11 SDRAM

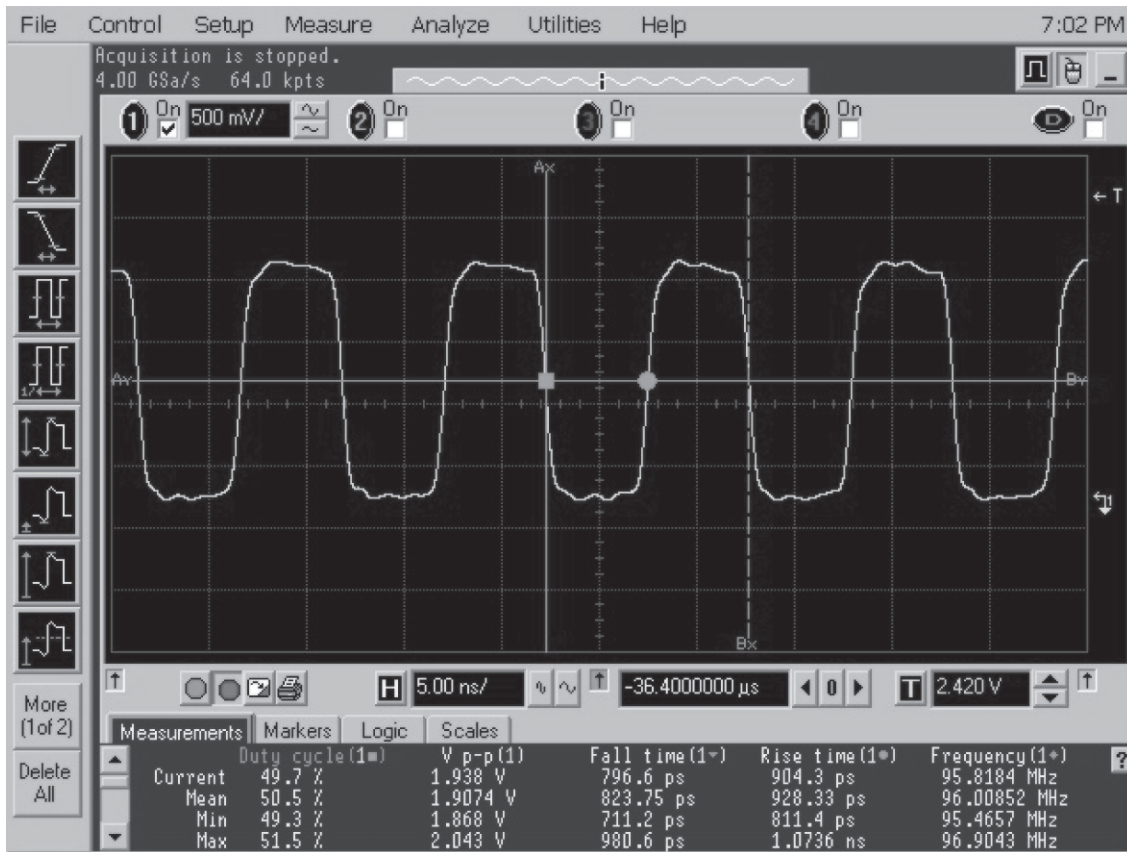
### 6.11.1 CLK



Trace 1: Trace recorded at TP6307.

Figure 6-26. SDRAM – CLK Waveform

### 6.11.2 CLKX

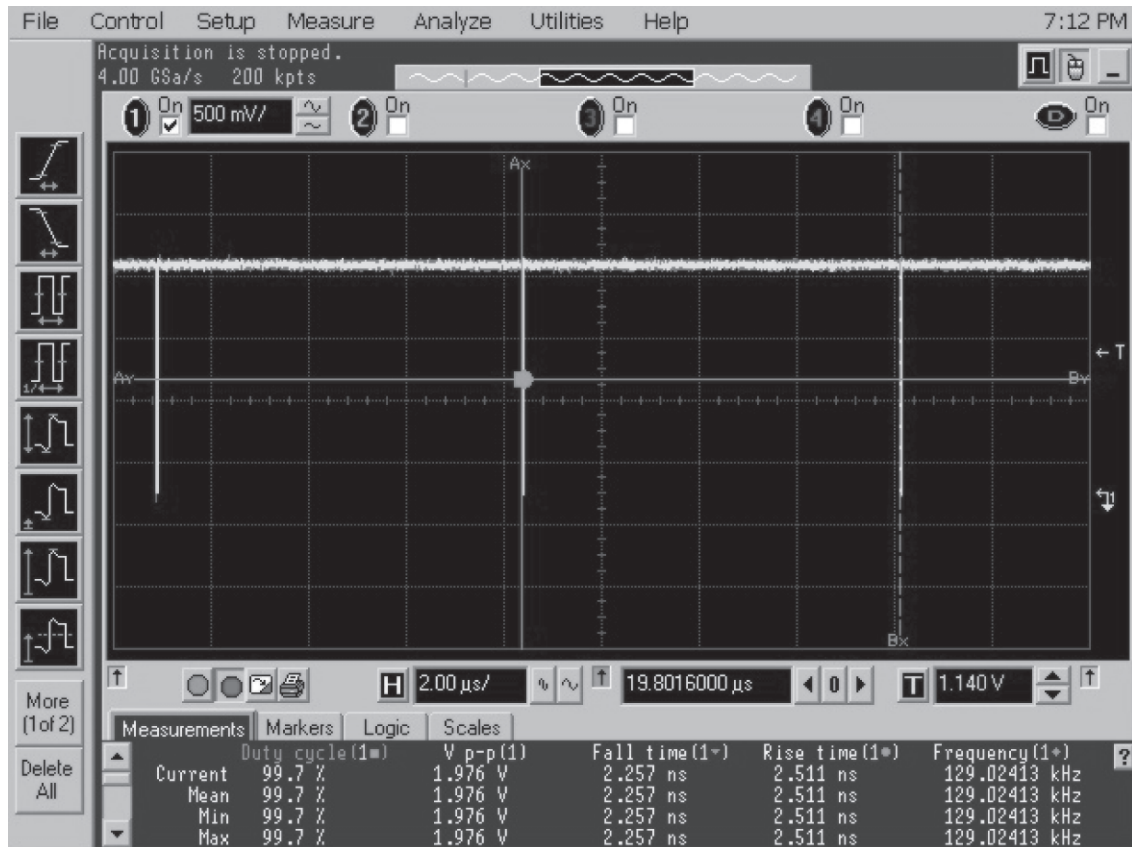


Trace 1: Trace recorded at TP6308.

Figure 6-27. SDRAM – CLKX Waveform

## 6.12 FLASH CONTROL

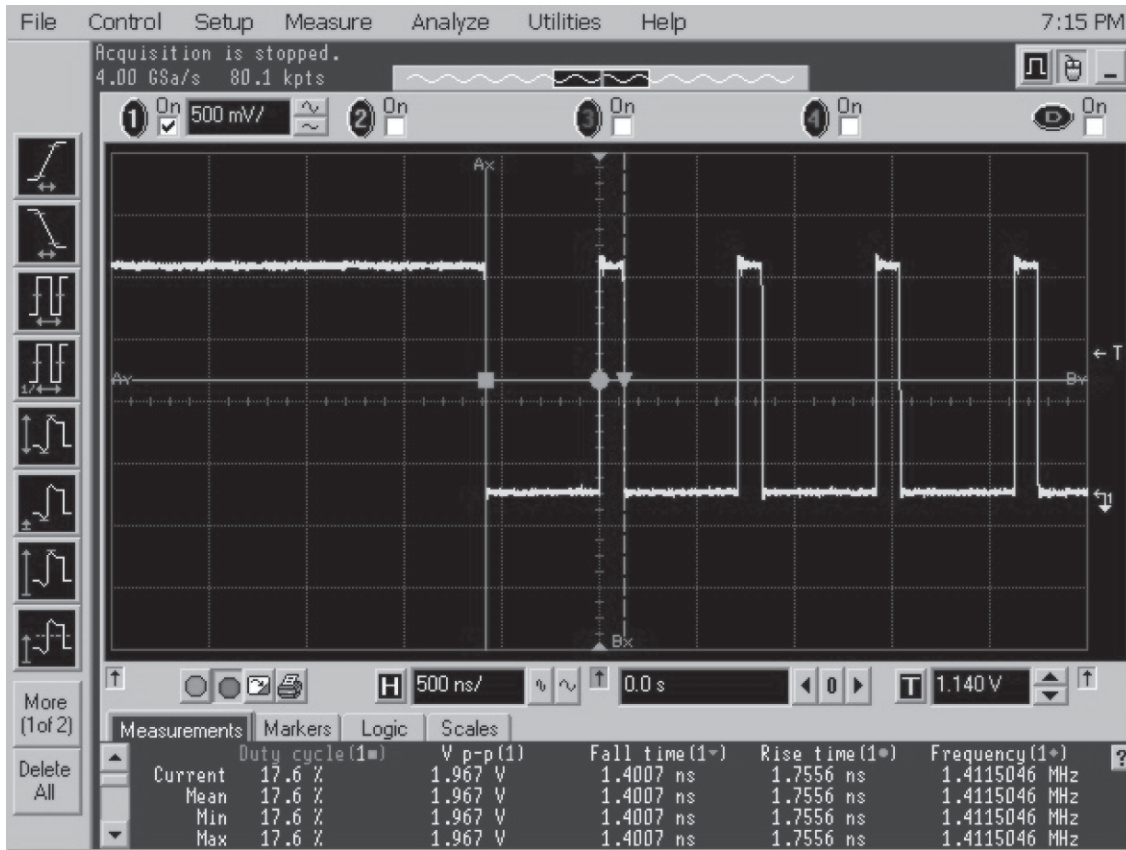
### 6.12.1 ADV



Trace 1: Trace recorded at R6314.

Figure 6-28. FLASH CONTROL – ADV Waveform

6.12.2 CS3

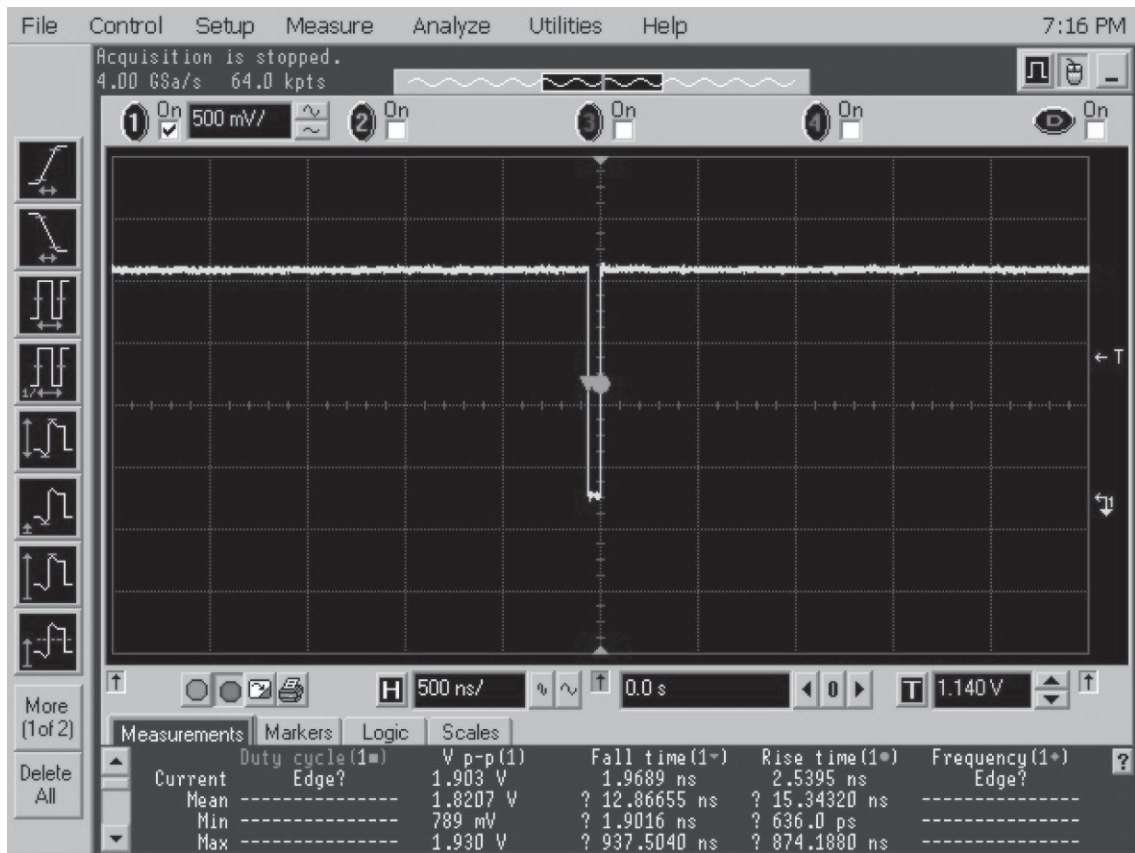


Trace 1: Trace recorded at R6311.

Figure 6-29. FLASH CONTROL – CS3 Waveform



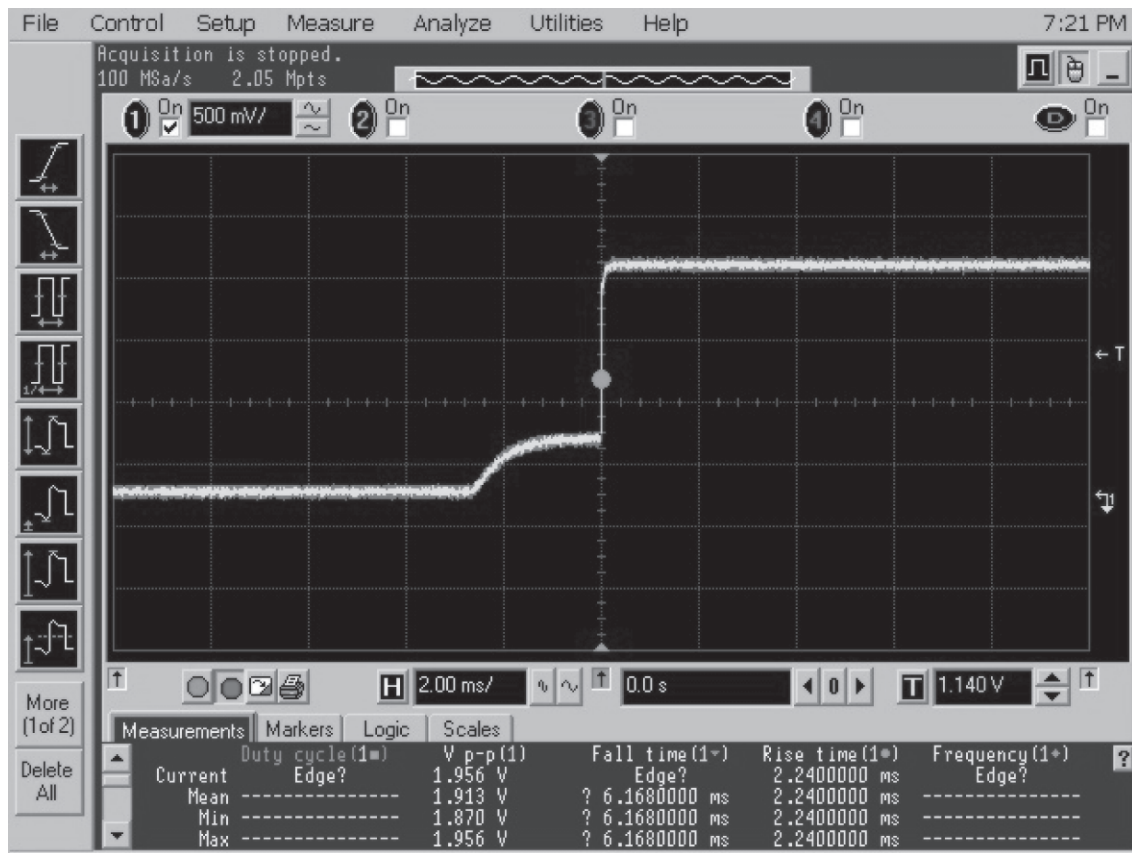
6.12.3 OE



Trace 1: Trace recorded at R6312.

Figure 6-30. FLASH CONTROL – OE Waveform

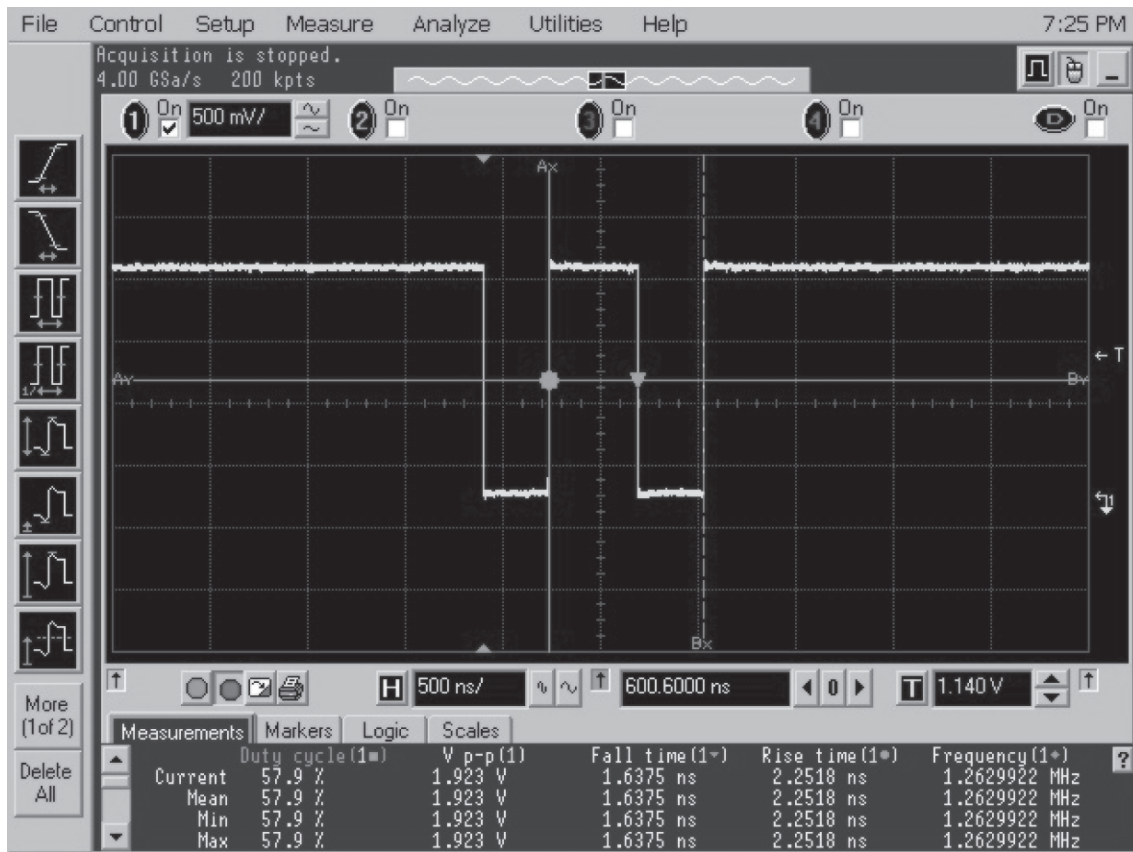
6.12.4 RDY



Trace 1: Trace recorded at R6316.

Figure 6-31. FLASH CONTROL – RDY Waveform

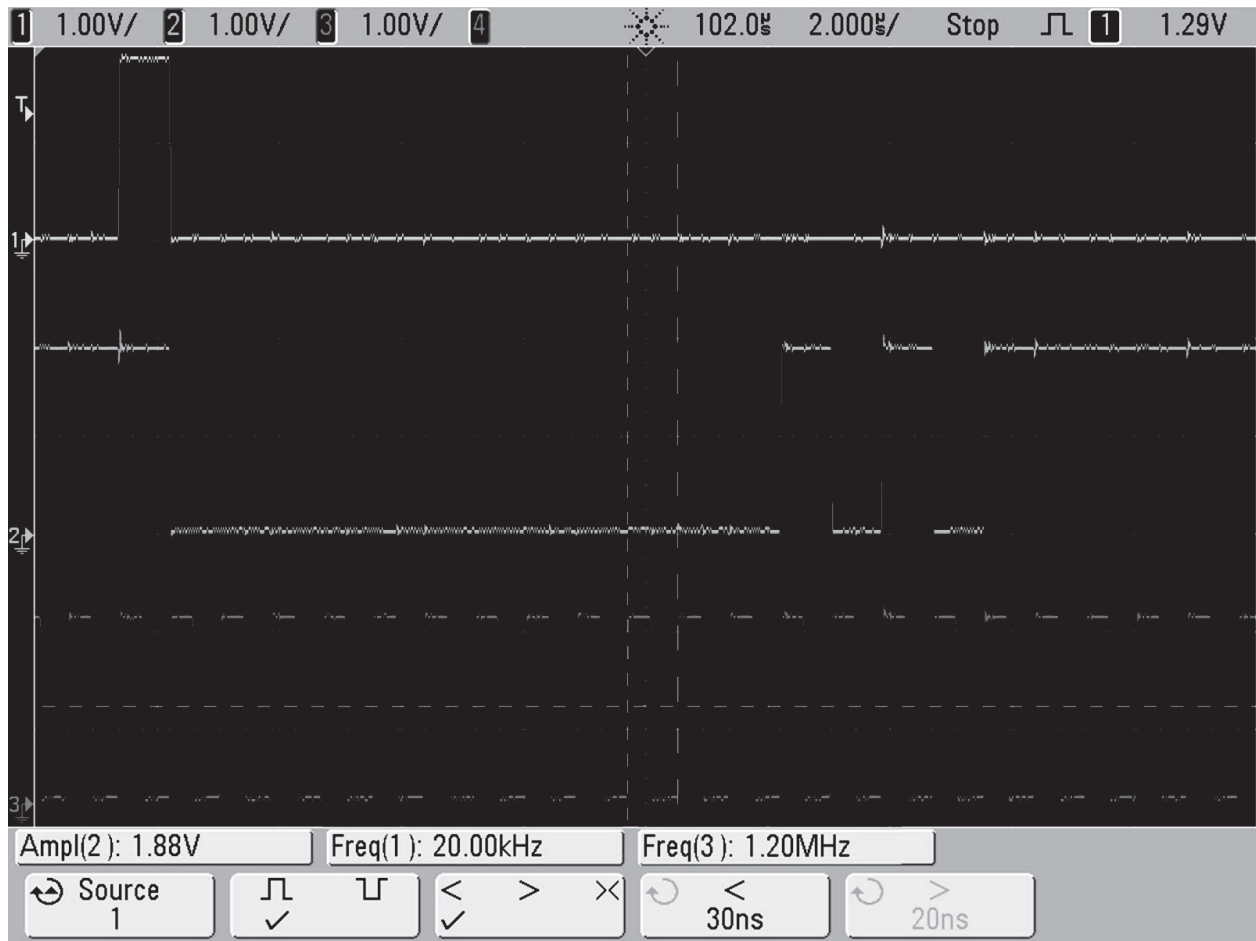
### 6.12.5 WE



Trace 1: Trace recorded at R6313.

Figure 6-32. FLASH CONTROL – WE Waveform

## 6.13 Receive Baseband Signals



Trace 1: DIG\_DATA\_SSI\_RX\_FS at R616.

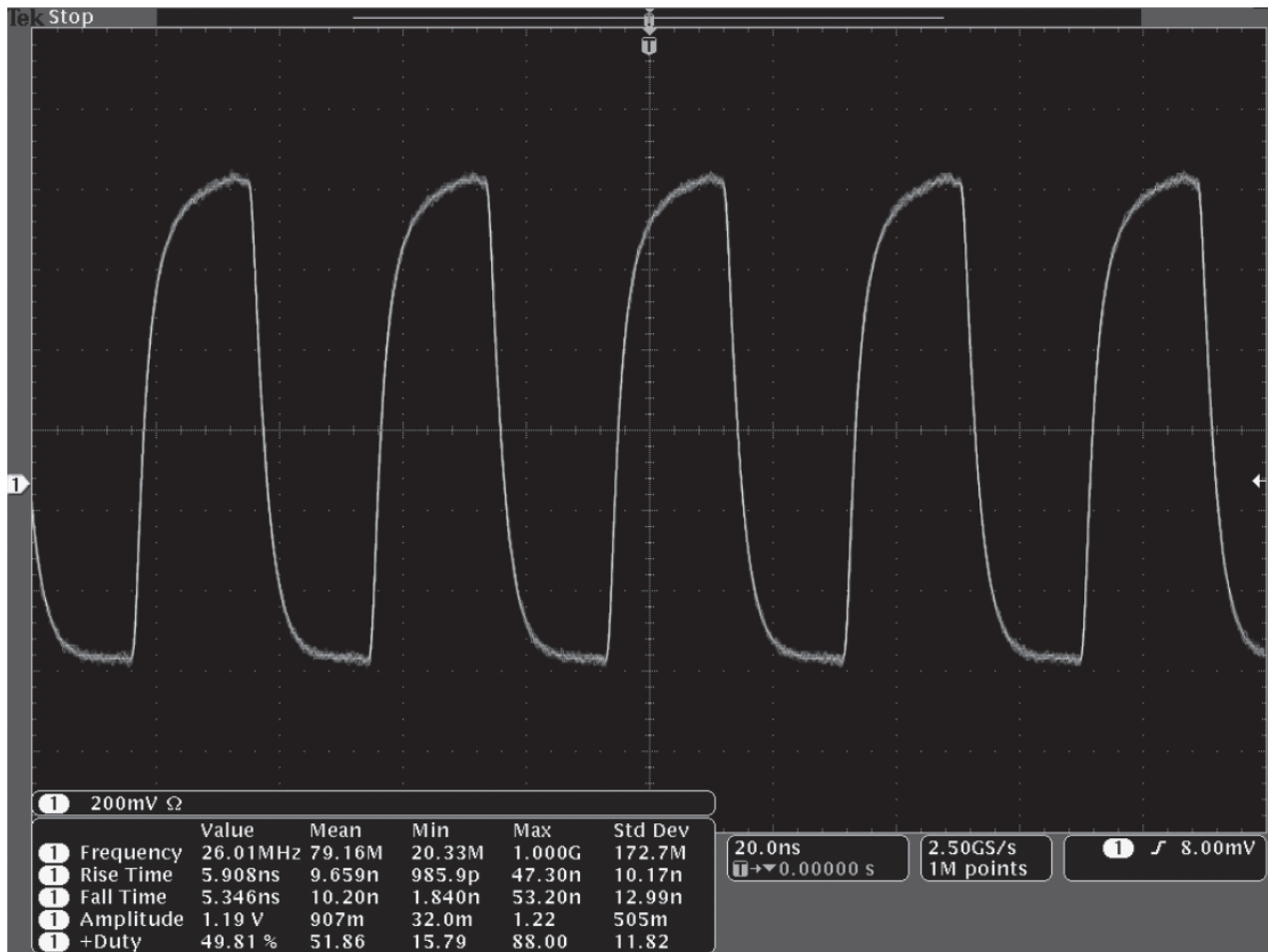
Trace 2: DIG\_DATA\_SSI\_RX\_DOUTA at R617.

Trace 3: CLK\_SSI\_RX at R618.

Figure 6-33. Received Baseband Waveforms

## 6.14 GPS

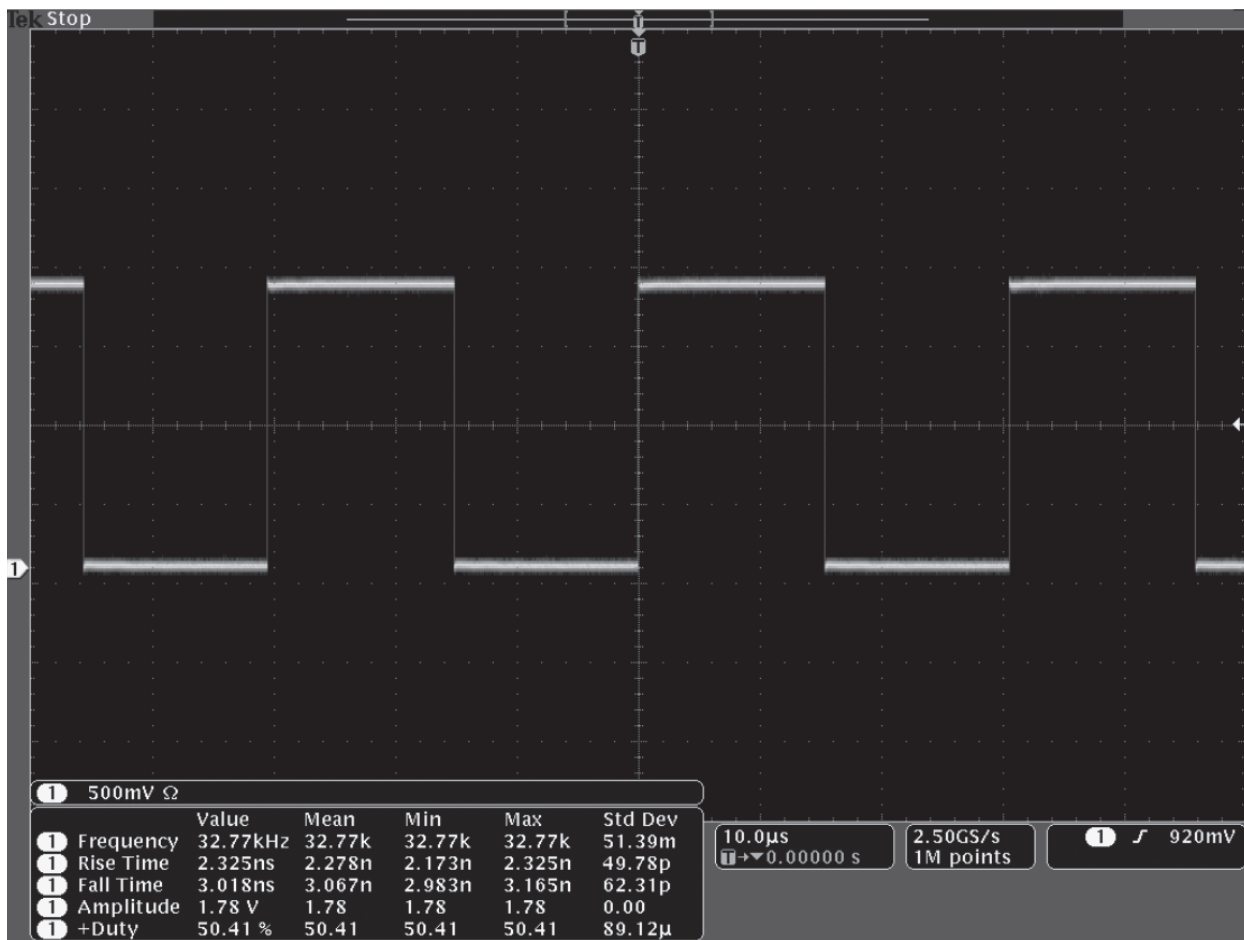
### 6.14.1 GPS TCXO (26 MHz TCXO)



Trace 1: Trace recorded at C1321 at Main Board.

Figure 6-34. GPS TCXO Waveforms

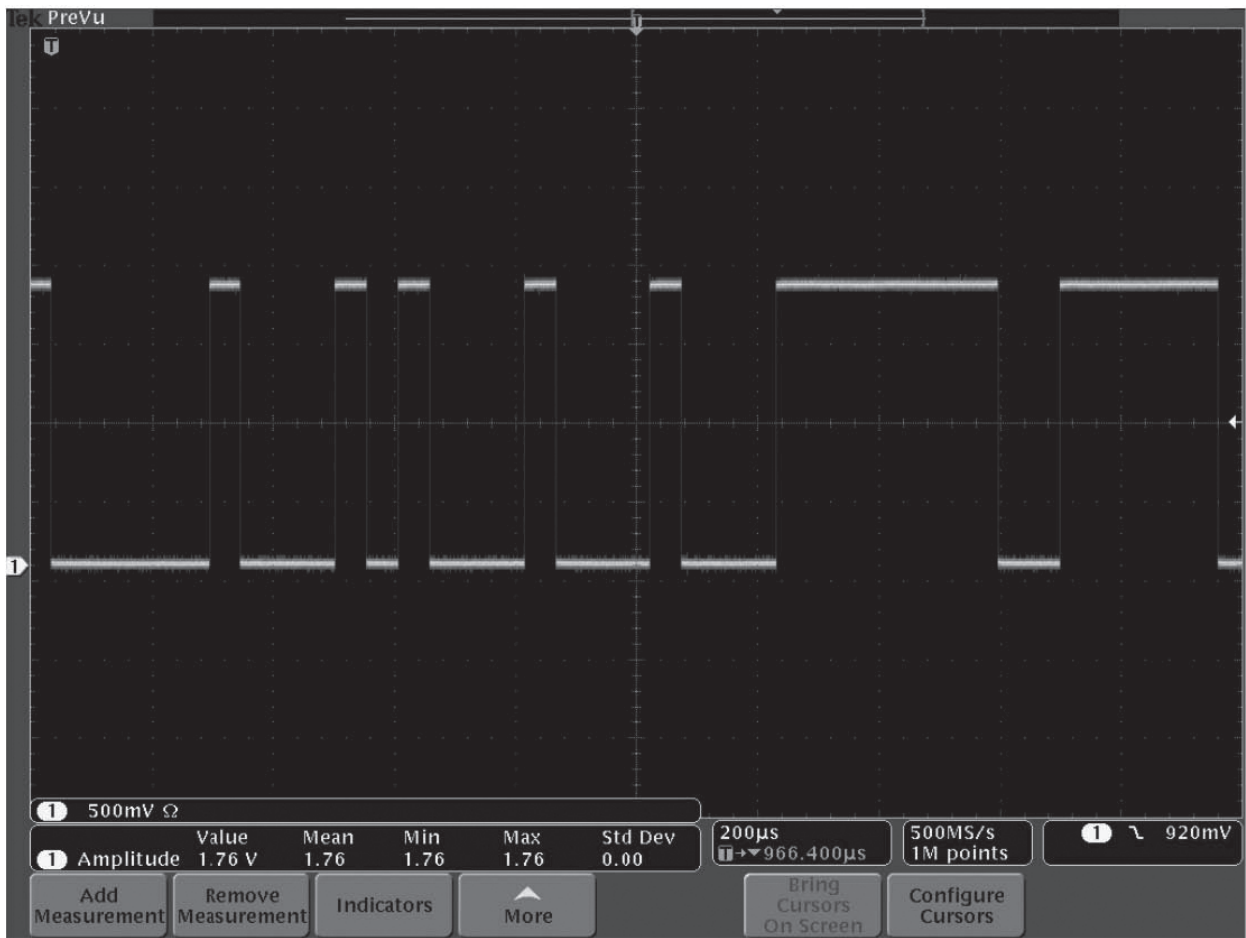
### 6.14.2 GPS RTC (GPS 32 kHz RTC)



**Trace 1: Trace recorded at R1318 of Main Board.**

*Figure 6-35. GPS RTC Waveforms*

### 6.14.3 GPS UART (RX / TX) Data



Trace 1: Trace recorded at TP1307 (TX) / TP1308 (RX) of Main Board.

Figure 6-36. GPS UART DATA Waveforms

## 6.15 Bluetooth Troubleshooting Waveforms

A Bluetooth radiated or conducted signal at 2.402 GHz and a LF radiated signal at 125 kHz can be used to verify the receiver and transmitter on the radio are operational. A spectrum analyzer (such as an Aeroflex 3920 Digital Radio Test Set) can be used to verify the presence of BT signal at the BT antenna contact pin (M1301) on the Main board while the LF signal can be tapped at C2454 or C2457 on the Keypad board. A signal generator can be used to test the APX 2000/ APX 4000 BT/ LF receivers. Radiated Bluetooth TX/RX testing should be performed before conducted testing is performed in the fixture since the radio does not have to be opened for radiated testing. To test the presence of a radiated Bluetooth TX signal, an external Bluetooth antenna should be connected to the input of the spectrum analyzer. To test the presence of a radiated Bluetooth RX signal, an external Bluetooth antenna should be connected to the output of a signal generator set to TX CW 2.402 GHz. The speaker grille of the radio should be brought near the antenna during testing. The following is the procedure to activate the Bluetooth/LF transmitter or receiver using RCMP commands:

To send an RCMP command, connect a RS-232 com port GCAI cable between the radio and PC. Start HyperTerminal on com 1 (typical RS-232 port) using these settings: 9600 baud, 8-bit, non-parity, stop bit = 1, HW flow control. Type, "AT#DEBUG", then type "rcmpraw:000c".

### Bluetooth Command to TX 2.402 GHz CW

Probe the Bluetooth antenna contact pin (M1301) on Main board with a 6 dB attenuator in-line connected to a spectrum analyzer. Set the spectrum analyzer to 2.402 GHz center, 10 MHz span, RBW of 300 kHz, a VBW of 1 MHz, and a sweep time of 2.5 ms. There are two commands to verify a spectrum analyzer can read a 2.402 GHz wave from the radio BT transmitter. Enter the rcmpraw:00390207 command first, then enter rcmpraw:0039020100000F0006 (on SR 7.9 SW, use this command:

rcmpraw:0039020100000F, but be aware that the TX signal may time out in less than 10 minutes).

Table 6-2. Bluetooth Command to TX

TEST	RCMPRAW CMD	RESPONSE
Bluetooth TX at 2.402 GHz CW Modulation	rcmpraw: 00390207	Success: 8039000207 Failure: 8039010207
	rcmpraw: 0039020100000F0006	Success: 8039000201 Failure: 8039010201

Successful Example Entry:

Type:rcmpraw:000c

Response:800c00

Type:rcmpraw:00390207

Response:8039000207

Type:rcmpraw:0039020100000F0006

Response:8039000201



### Bluetooth Command to RX 2.402 GHz

The RSSI should increase significantly in the presence of a 2.402 GHz nearby signal. Using an external signal generator source signal of 2.402 GHz connected to an external Bluetooth antenna, bring it close to the Bluetooth antenna contact pin (M1301) on Main board, send this command to read the 2.402 GHz RSSI

Table 6-3. Bluetooth Command to RX

TEST	RCMPRAW CMD	RESPONSE
Bluetooth RX at 2.402 GHz	rcmpraw:0039020D00	Success: 803900020dBB, where BB is the RSSI in hex. Failure: 803901

If no signal is detected, the response will be 803900020d80.

If no test equipment is available, an APX radio with BT functional could be used to verify the test radio. Hold the speaker grilles together on both radios. One radio could be used to TX while the other radio is used to RX.

### Low Frequency (LF) Command to TX 125 kHz CW

Set the spectrum analyzer at 125 kHz center, 10 MHz span, RBW of 1 kHz, a VBW of 3 kHz, and a sweep time of 25 ms. Use this command to verify the LF coil is emitting a 125 kHz pulse by probing C2454 or C2457 on the Keypad board with a spectrum analyzer:

Table 6-4. Low Frequency Command to TX

TEST	RCMPRAW CMD	RESPONSE
Low Freq. 125 kHz TX	rcmpraw: 00390303	Success: 8039000303* Failure: 8039010303*
<b>Note:</b> * In SR 7.9 SW release, the response is 8039000302 for a success and 8039010302 for a failure.		

### Low Frequency (LF) Command to RX 125 kHz

Use this command to verify the LF coil is receiving a 125 kHz pulse generated by a signal generator by tapping on C2454 or C2457. The result contains the LF RSSI. This command is not in the initial SW release but is included in SR 7.11 SW:

Table 6-5. Low Frequency Command to RX

TEST	RCMPRAW CMD	RESPONSE
Low Freq. 125 kHz RX	rcmpraw: 00390305	Success: 80390003BB, where BB is the RSSI in hex. Failure: 803901

If no signal is detected, the response will be 8039010305.

A fast verification that requires no additional test equipment can be done by sending the LF TX command, then the LF RX command directly afterwards. If both the transmitter and receiver are working, the response should be 803900030x, where x is typically between 4 and 6. Even if the response passes, the LF coil may be physically damaged. It is best to open the radio and observe the coil to ensure it is not damaged.

To test the LF RX using SR 7.9 SW, a POD accessory is required to verify communication.

These are the Bluetooth-related conducted signals that can be measured from test points on the keypad and main board. (See “Keypad Board Layout – Bottom Side” on page 8-390 for measurement locations):

Table 6-6. Bluetooth Test Points

TP	TP Name	Net Name	Description	Voltage	Measured
4	TP2416	BT_AVR_VBUS	USB VBUS	5	4.96
5	TP2413	BT_AVR_RESET	BT AVR Reset	1.85	1.73
9	TP2005	VCC_1.85	VCC 1.85	1.85	1.86
10	TP2417	USB_BOOT_1.8V	USB Boot 1.8V	1.8	1.81
11	TP2466	ATMEL_BOOT	Atmel Boot	3.3	3.04
12	M1	GND	Ground	0	–
13	TP2008	V_2.755D	VCC 2.775	2.775	2.74
14	TP2414	BT_AVR_USB_DP	USB+	3.3	3.43
15	TP2415	BT_AVR_USB_DM	USB-	3.3	3.47
16	TP2007	VSW_3.6	VSW 3.6	3.51	3.49
17	R1318, R2407	32KHZ	32 kHz clock	1.85	1.87

### 6.15.1 Bluetooth Startup: Vmax of TP16



Figure 6-37. Startup Waveforms – Vmax of TP16

### 6.15.2 Bluetooth Startup: Timing Difference of TP9 to TP16

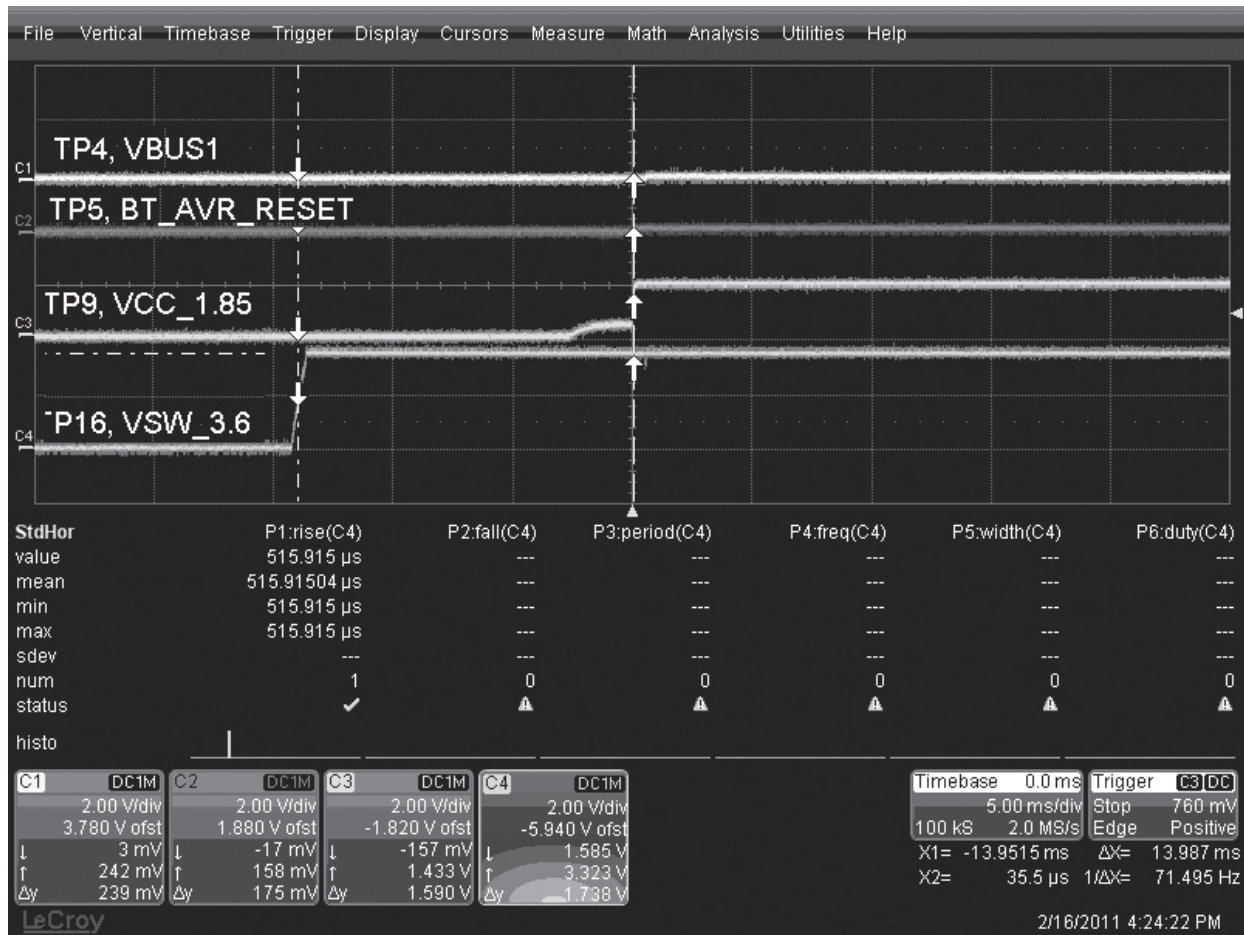


Figure 6-38. Startup – Timing Difference of TP9 to TP16

### 6.15.3 Bluetooth Startup: Timing Difference of TP5 to TP16 and Voltage Statistics



Figure 6-39. Startup – Timing Difference of TP5 to TP16 and Voltage Statistics

### 6.15.4 Bluetooth Startup: Timing Difference of TP4 to TP16 and Time Statistics



Figure 6-40. Startup – Timing Difference of TP4 to TP16 and Time Statistics

### 6.15.5 Bluetooth Startup: Timing Difference of TP4 to TP5 and Time Statistics



Figure 6-41. Startup – Timing Difference of TP4 to TP5 and Time Statistics

### 6.15.6 Bluetooth Startup: Vmax of TP5 and Time Statistics



Figure 6-42. Startup – Vmax of TP5 and Time Statistics



### 6.15.7 Bluetooth Startup: Vmax of TP4 and Time Statistics

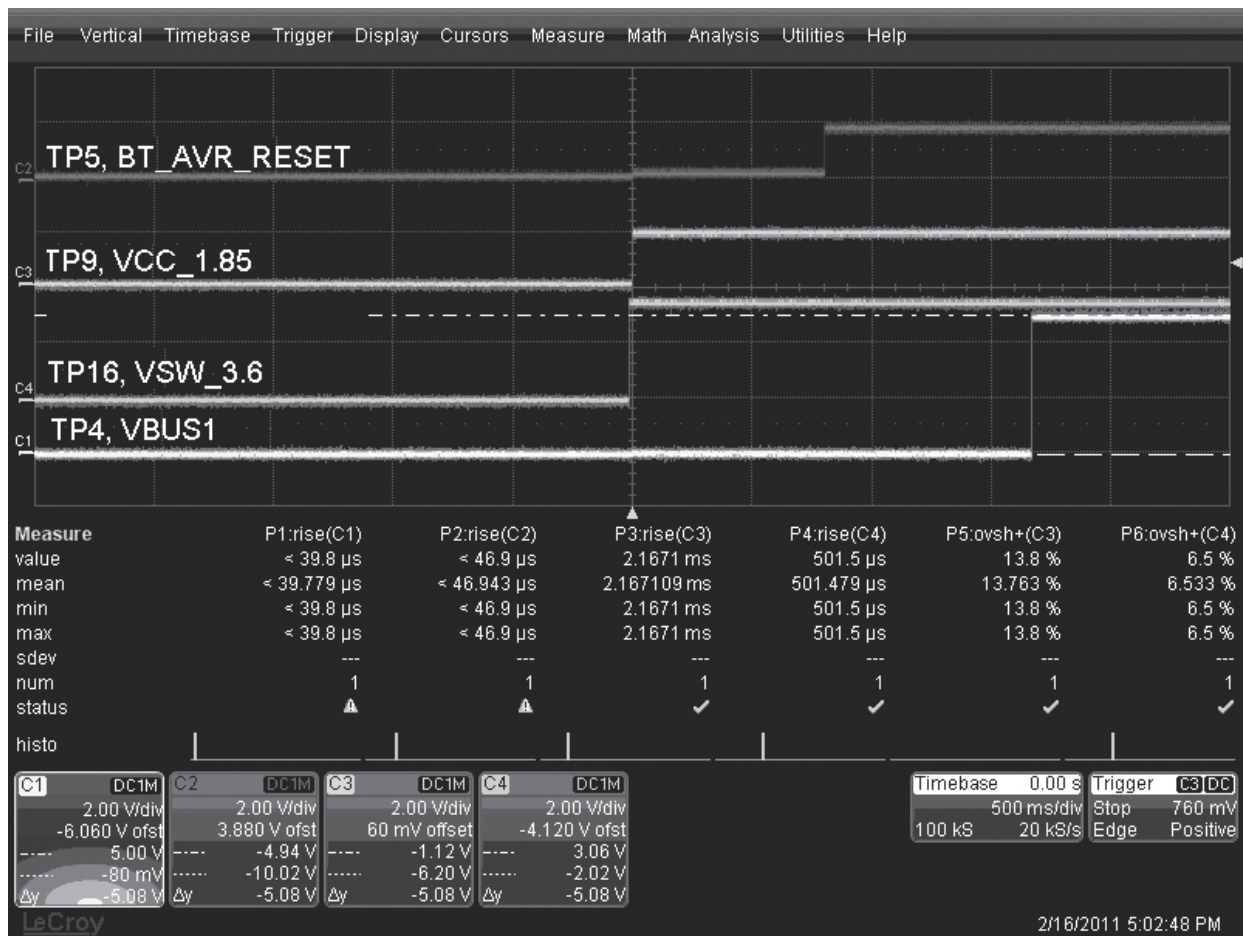


Figure 6-43. Startup – Vmax of TP4 and Time Statistics

### 6.15.8 Bluetooth Startup: Vmax of TP5 and Voltage Statistics

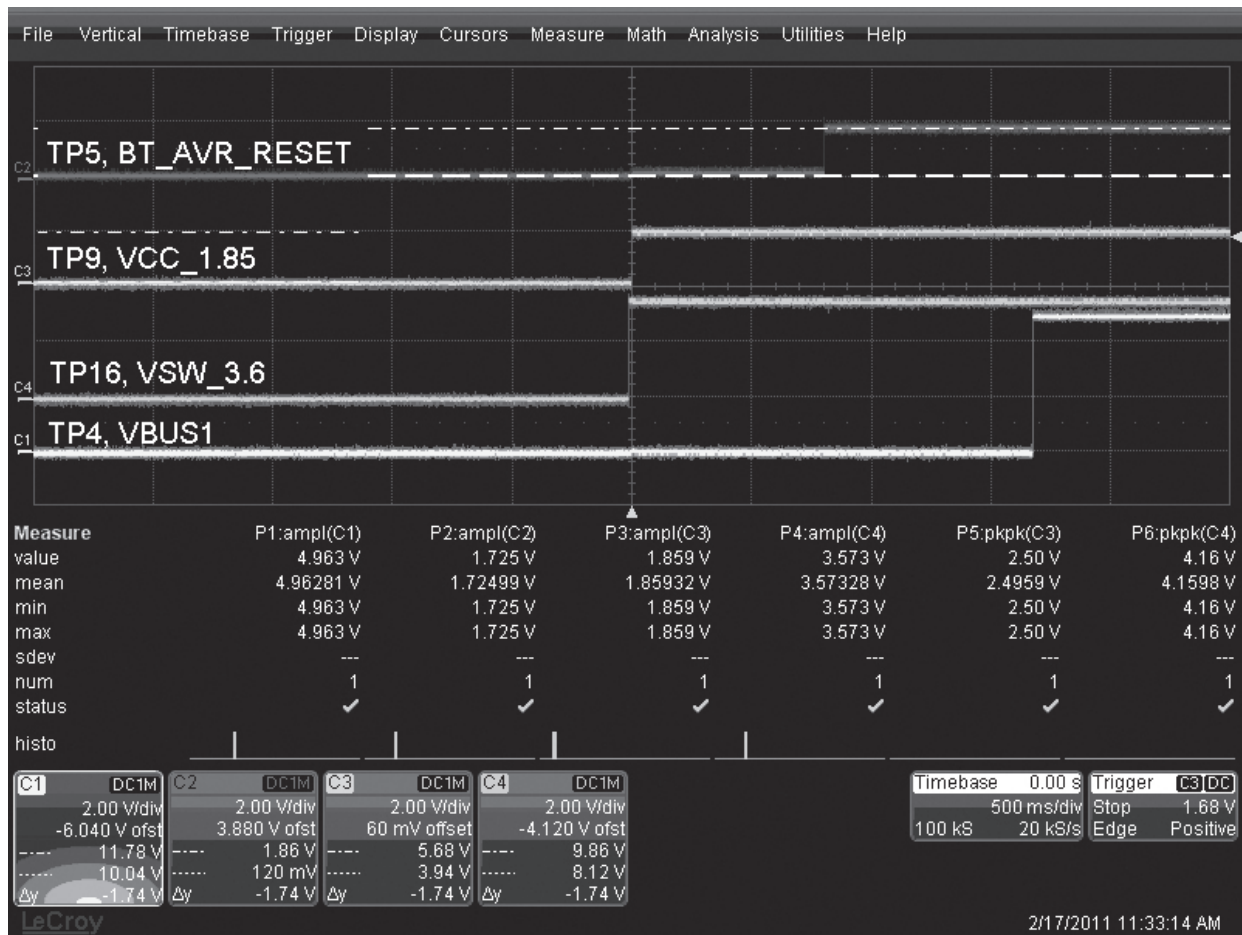


Figure 6-44. Startup – Vmax of TP5 and Voltage Statistics

### 6.15.9 Bluetooth Startup: Vmax of TP9 and Voltage Statistics

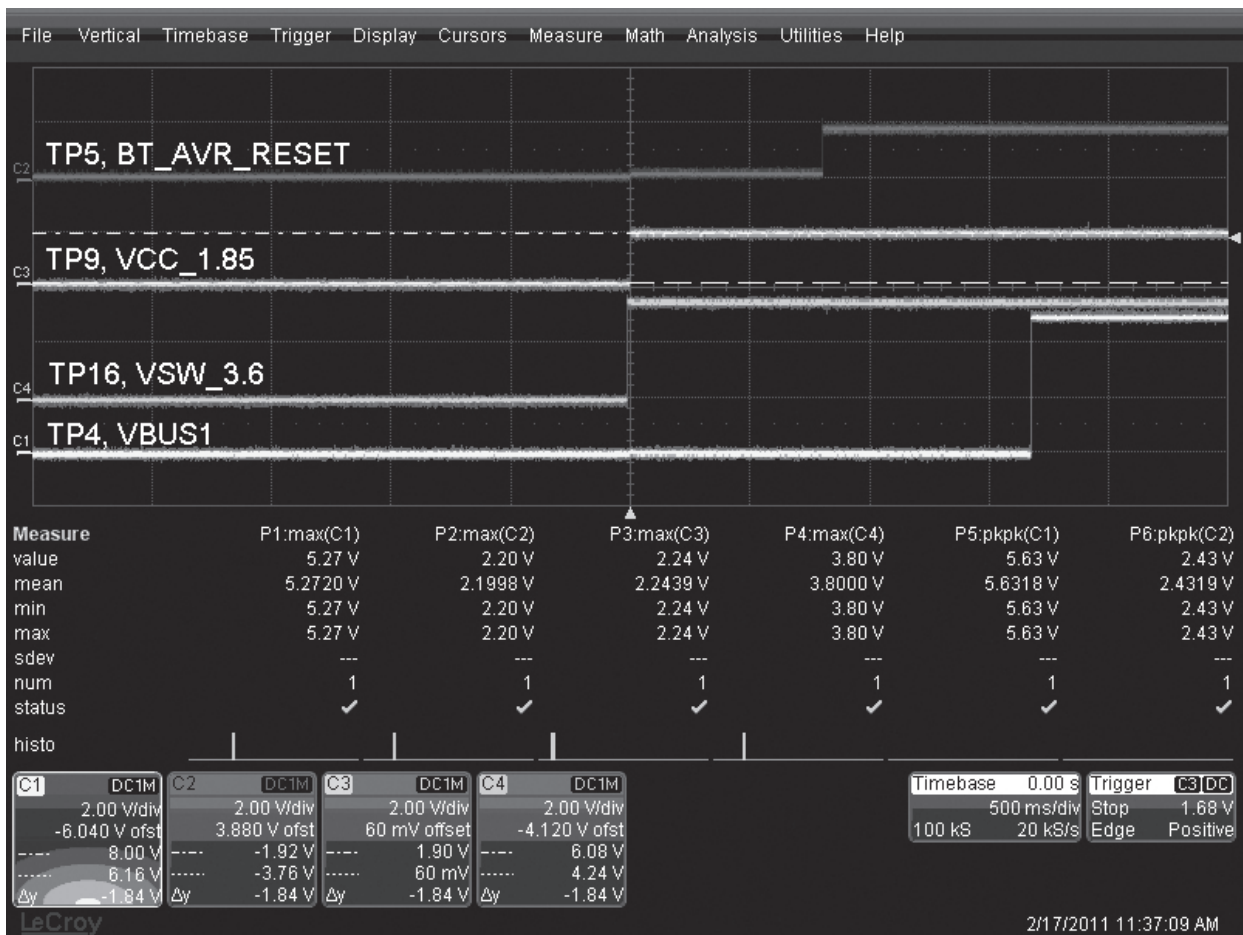


Figure 6-45. Startup – Vmax of TP9 and Voltage Statistics

### 6.15.10 Bluetooth Startup: Vmax of TP10 and Time Statistics

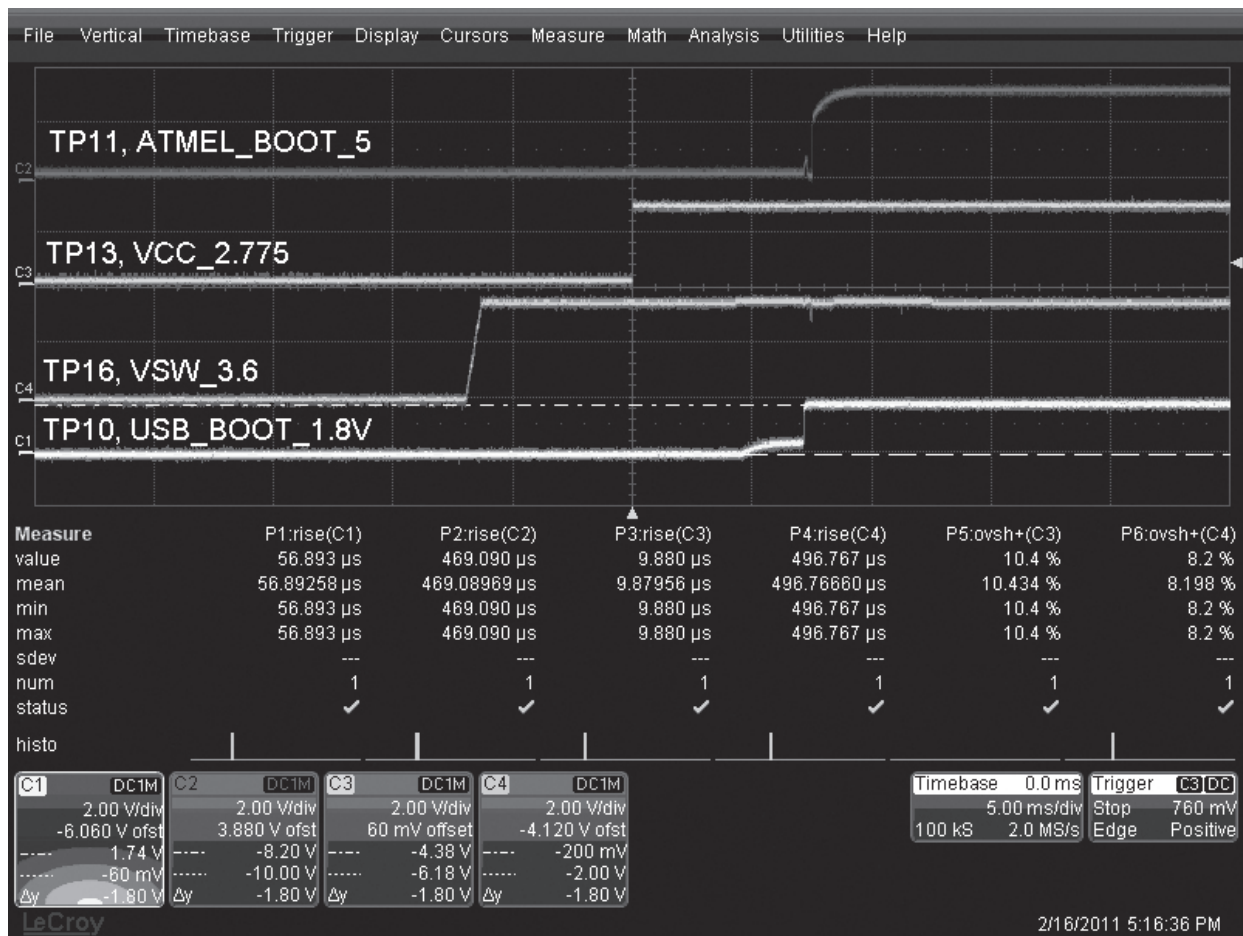


Figure 6-46. Startup – Vmax of TP10 and Time Statistics

### 6.15.11 Bluetooth Startup: Vmax of TP16 and Voltage Statistics

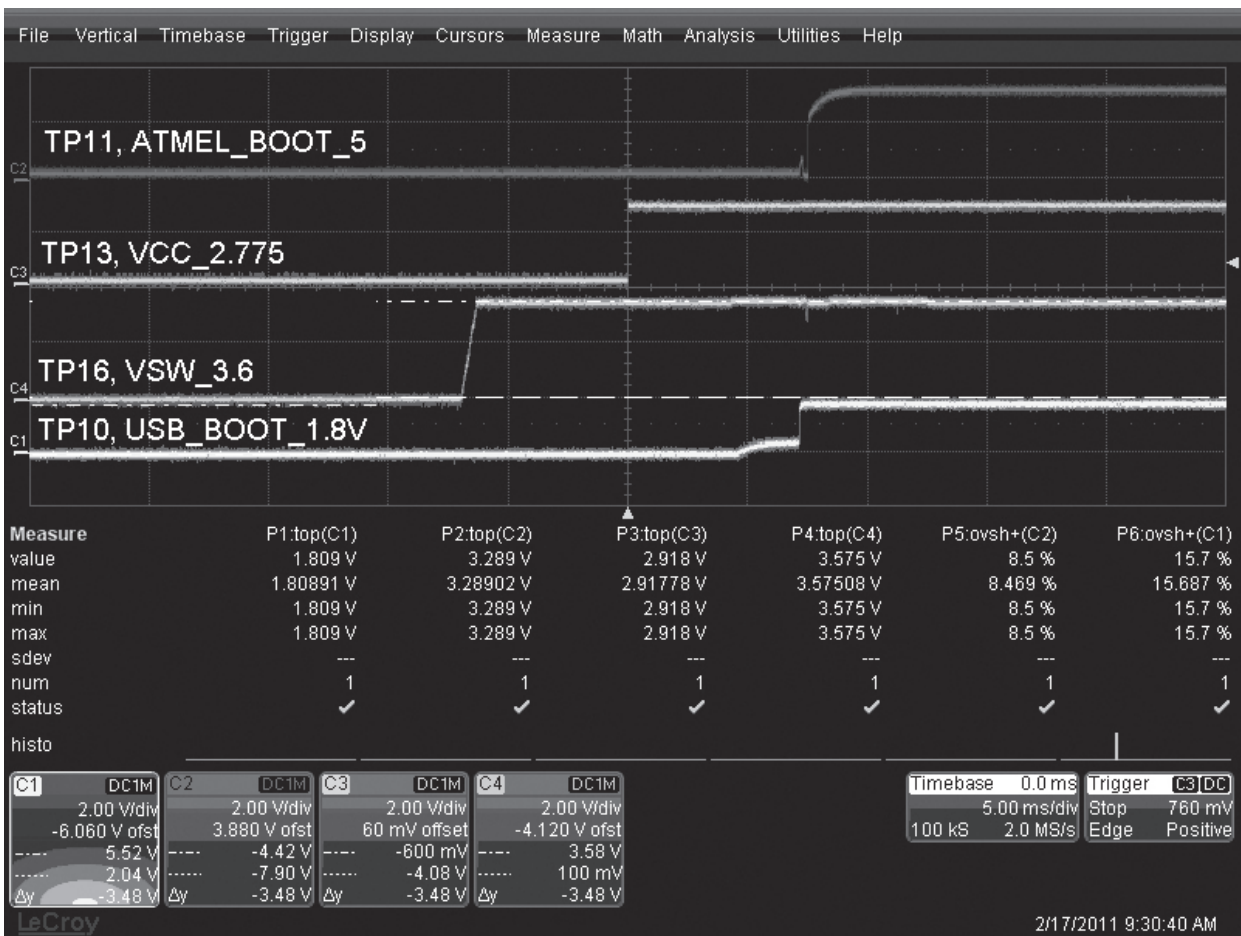


Figure 6-47. Startup – Vmax of TP16 and Voltage Statistics

### 6.15.12 Bluetooth Startup: Vmax of TP13 and Voltage Statistics

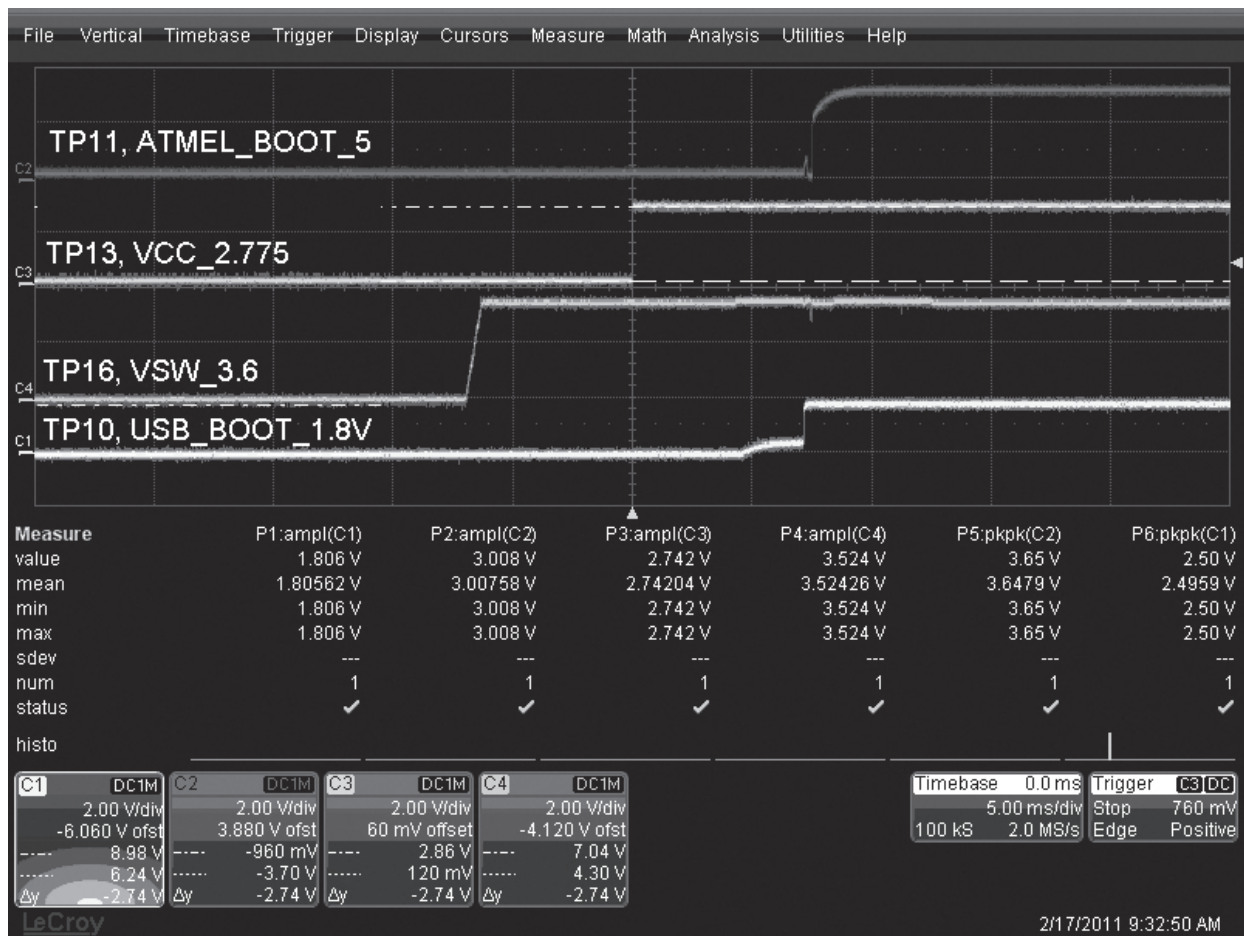


Figure 6-48. Startup – Vmax of TP13 and Voltage Statistics

### 6.15.13 Bluetooth Startup: Vmax of TP11 and Voltage Statistics

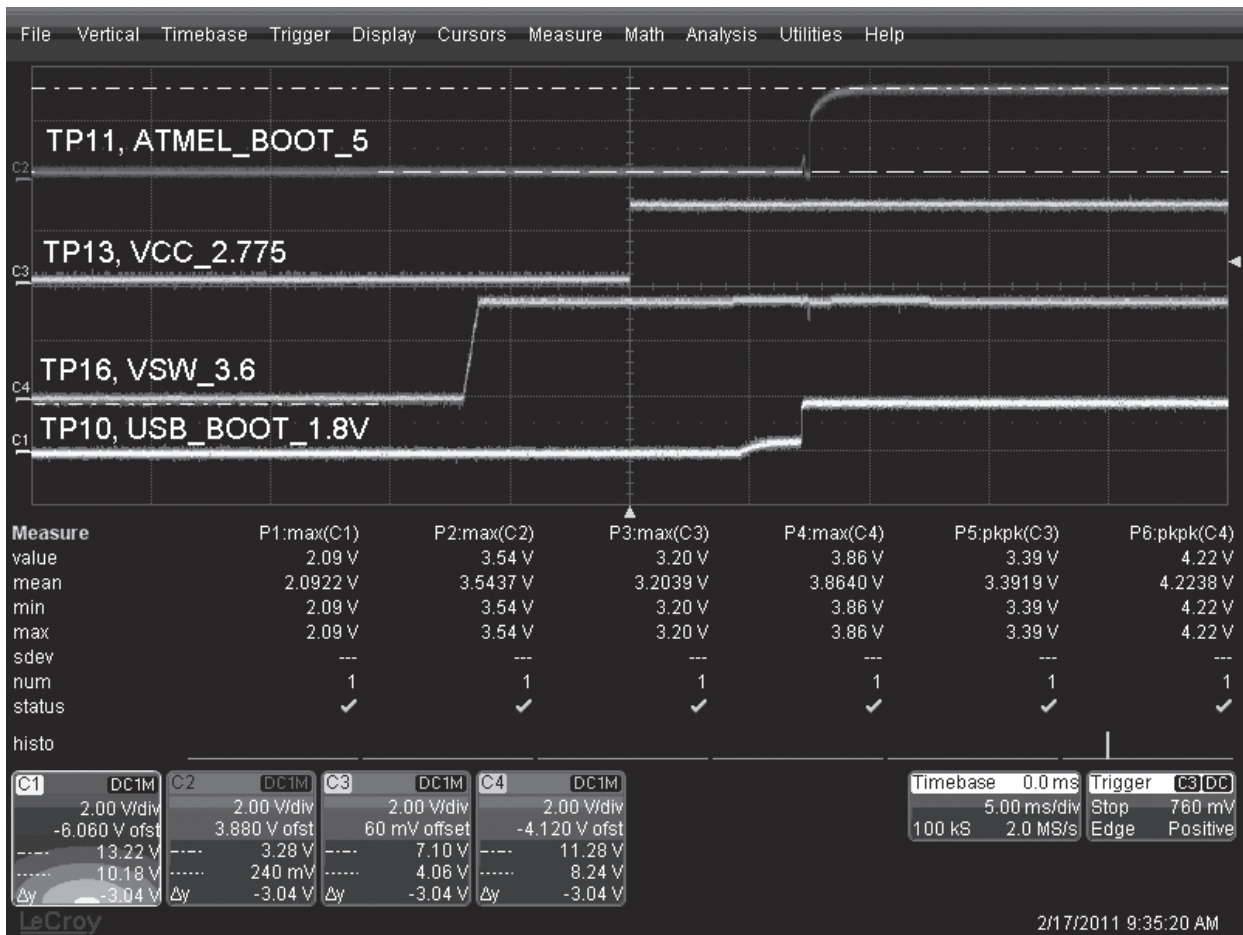


Figure 6-49. Startup – Vmax of TP11 and Voltage Statistics

### 6.15.14 Bluetooth Startup: Timing Difference of TP13 to TP16 and Time Statistics

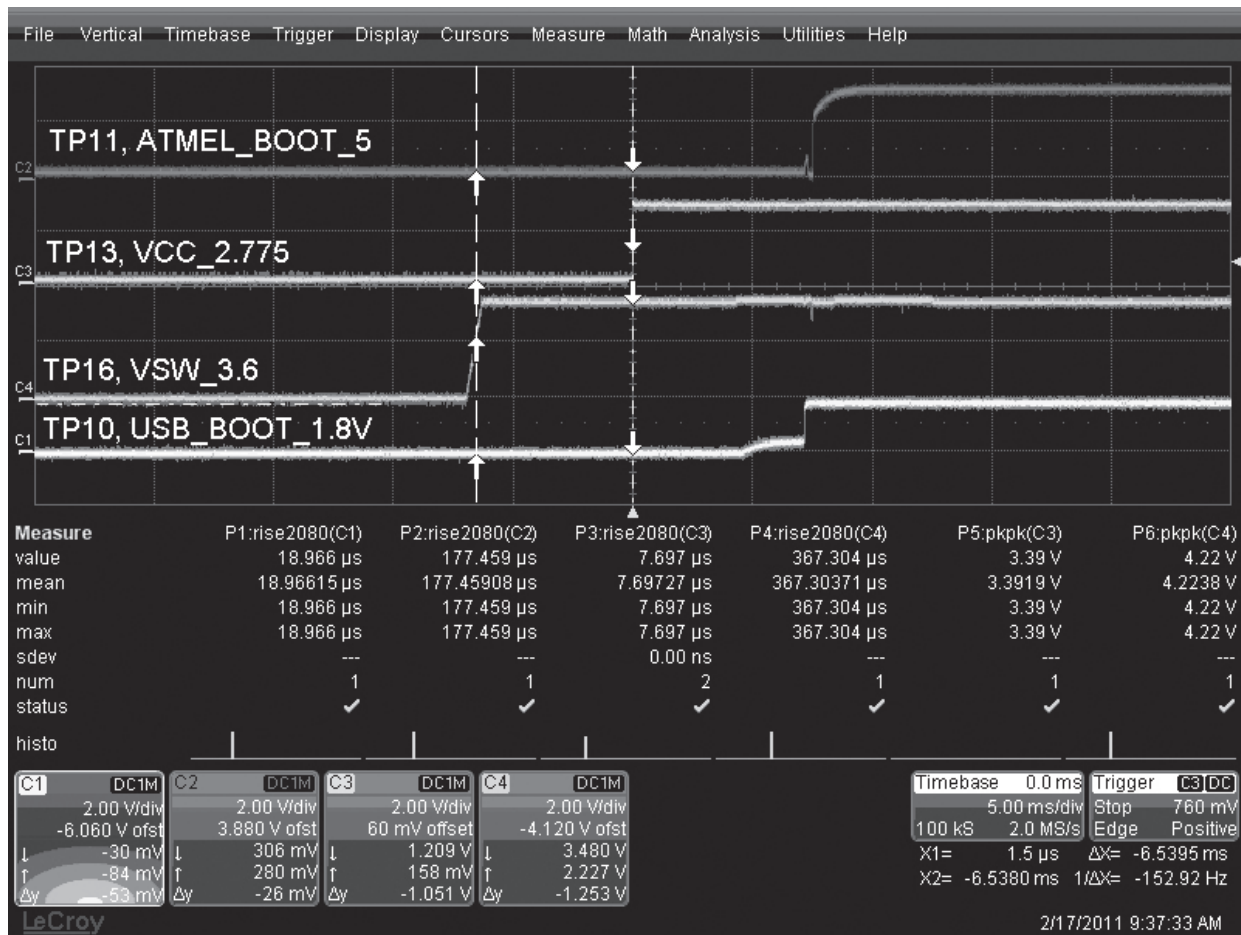


Figure 6-50. Startup – Timing Difference of TP13 to TP16 and Time Statistics



### 6.15.15 Bluetooth Startup: Timing Difference of TP10 to TP13 and Time Statistics

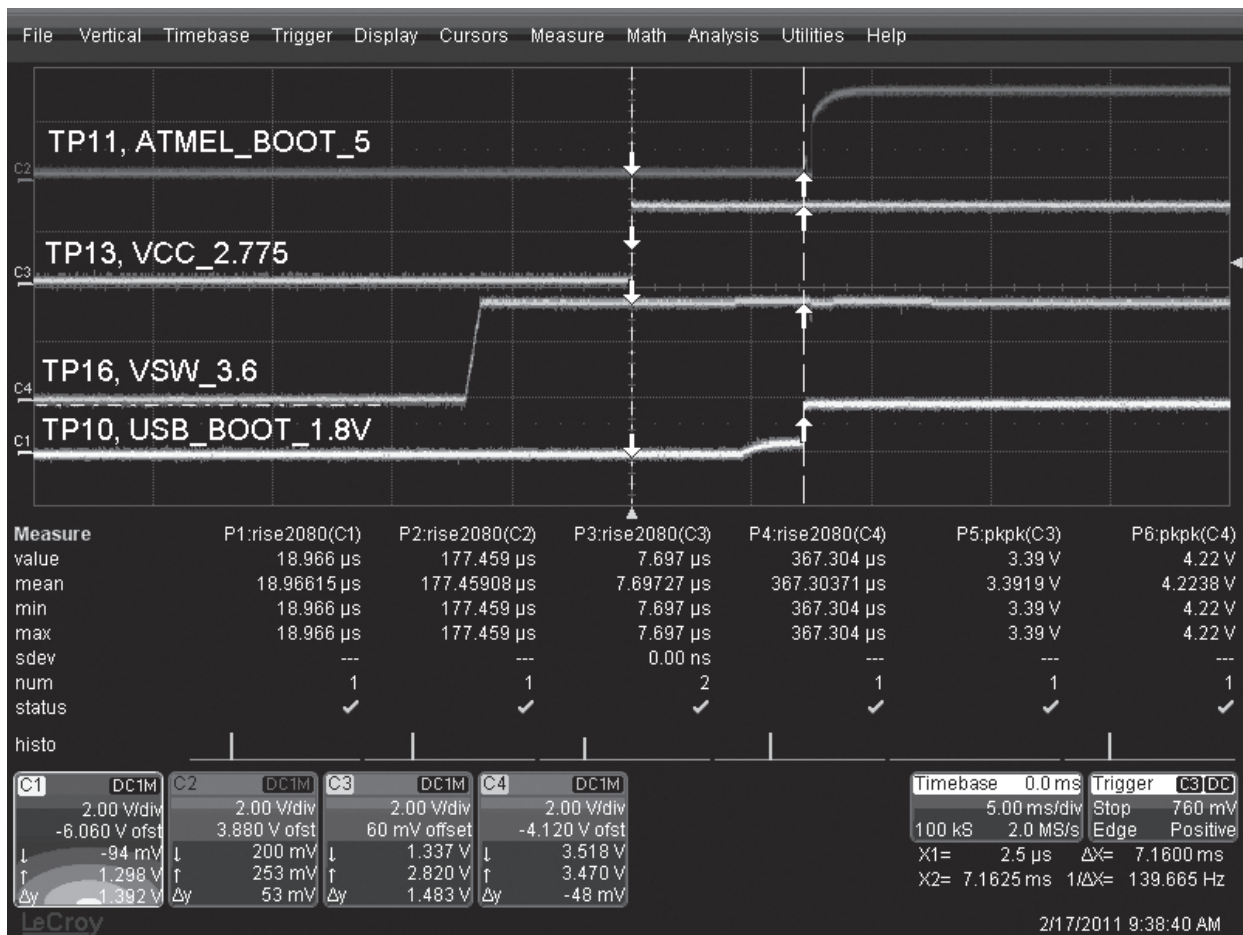


Figure 6-51. Startup – Timing Difference of TP10 to TP13 and Time Statistics

### 6.15.16 Bluetooth Startup: Timing Difference of TP11 to TP13 and Time Statistics

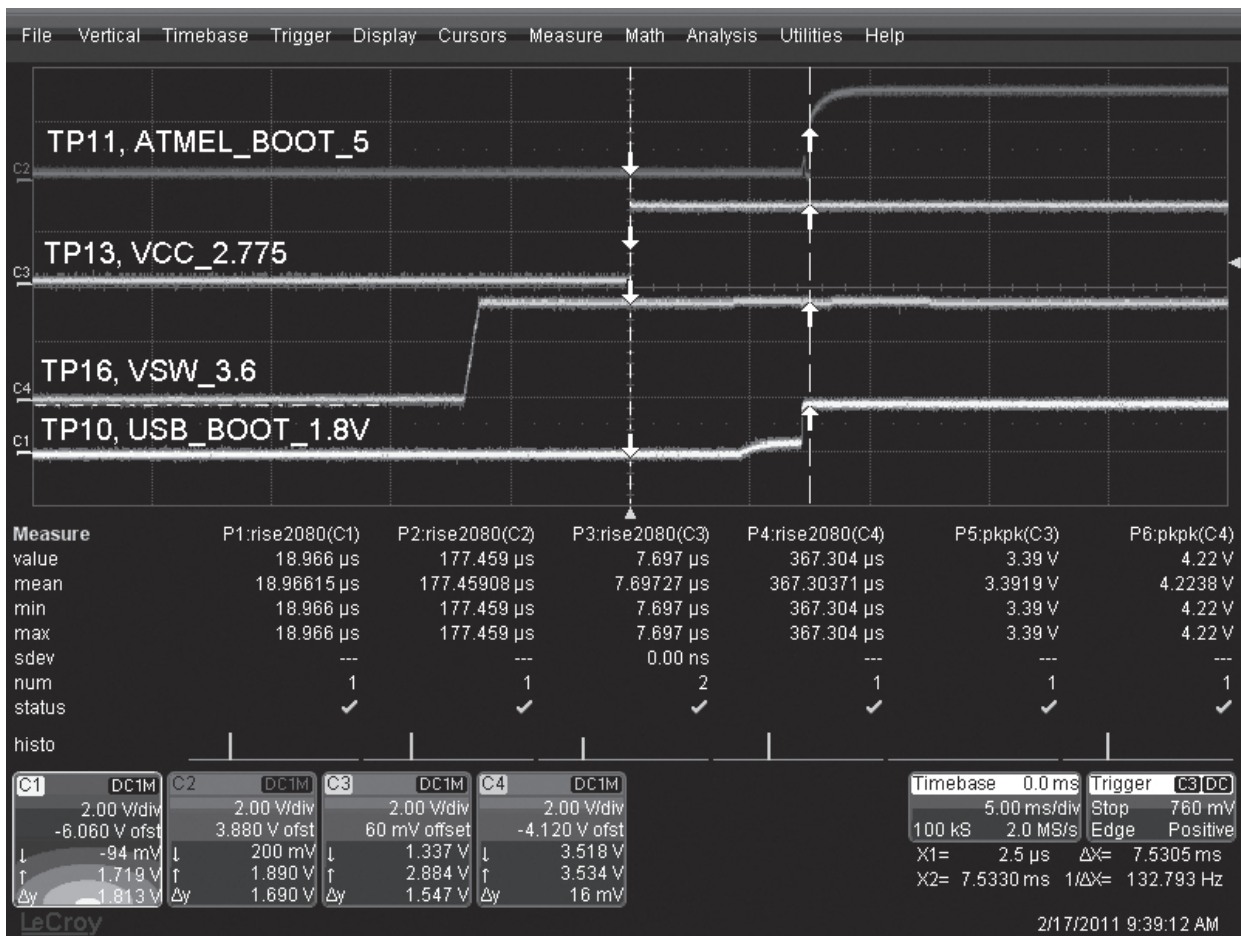


Figure 6-52. Startup – Timing Difference of TP11 to TP13 and Time Statistics

### 6.15.17 Bluetooth CW on Spectrum Analyzer

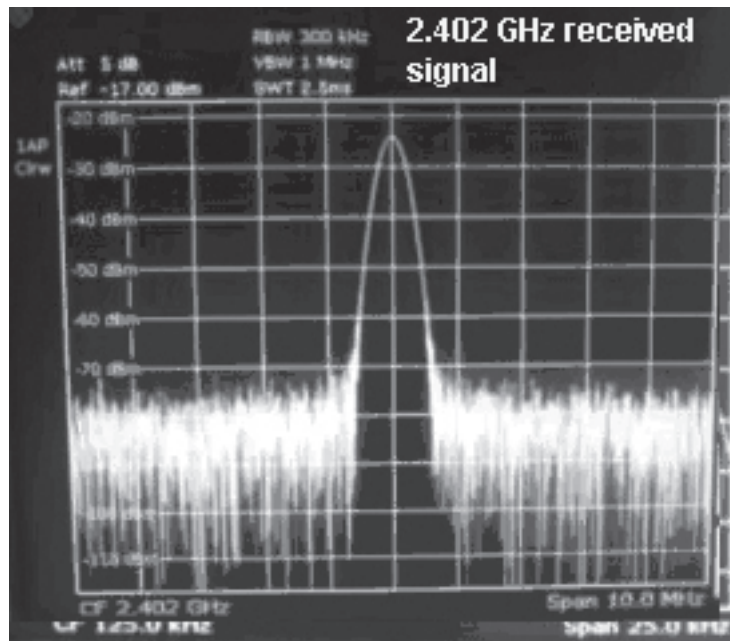


Figure 6-53. Bluetooth CW on Spectrum Analyzer

## 6.16 Bluetooth Steady-State

### 6.16.1 Keypad Board Waveforms – USB D+ Vmax and Packet Timing with Statistics

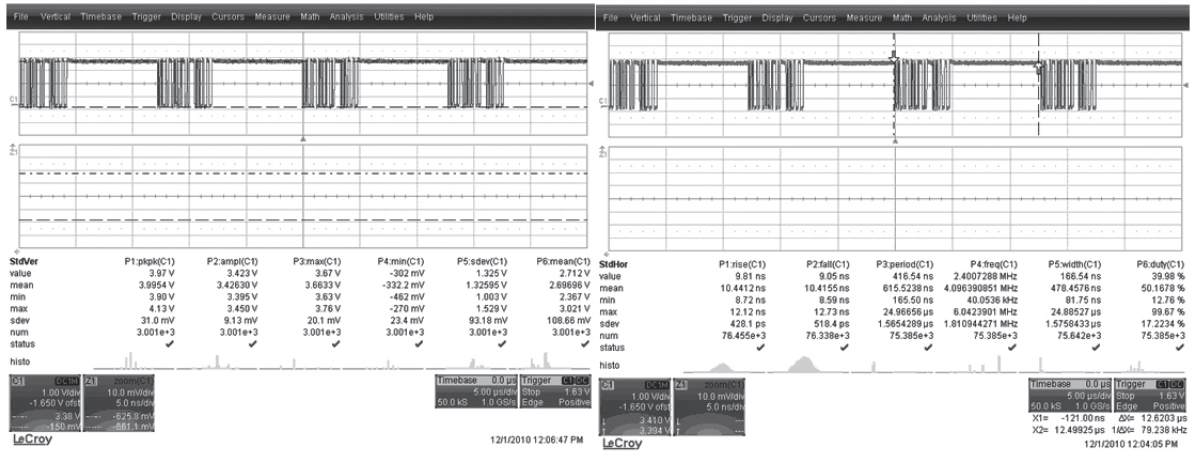


Figure 6-54. Keypad Board – USB D+ Vmax and Packet Timing with Statistics

### 6.16.2 Keypad Board Waveforms – USB D- Vmax and Packet Timing with Statistics

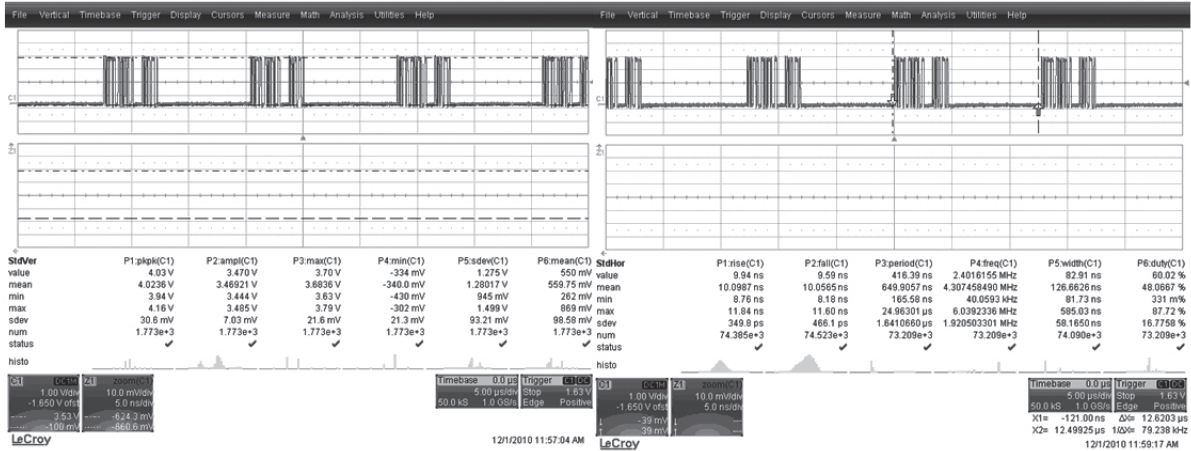


Figure 6-55. Keypad Board – USB D- Vmax and Packet Timing with Statistics

### 6.16.3 Keypad Board Waveforms – VSW\_3.6 Voltage Statistics

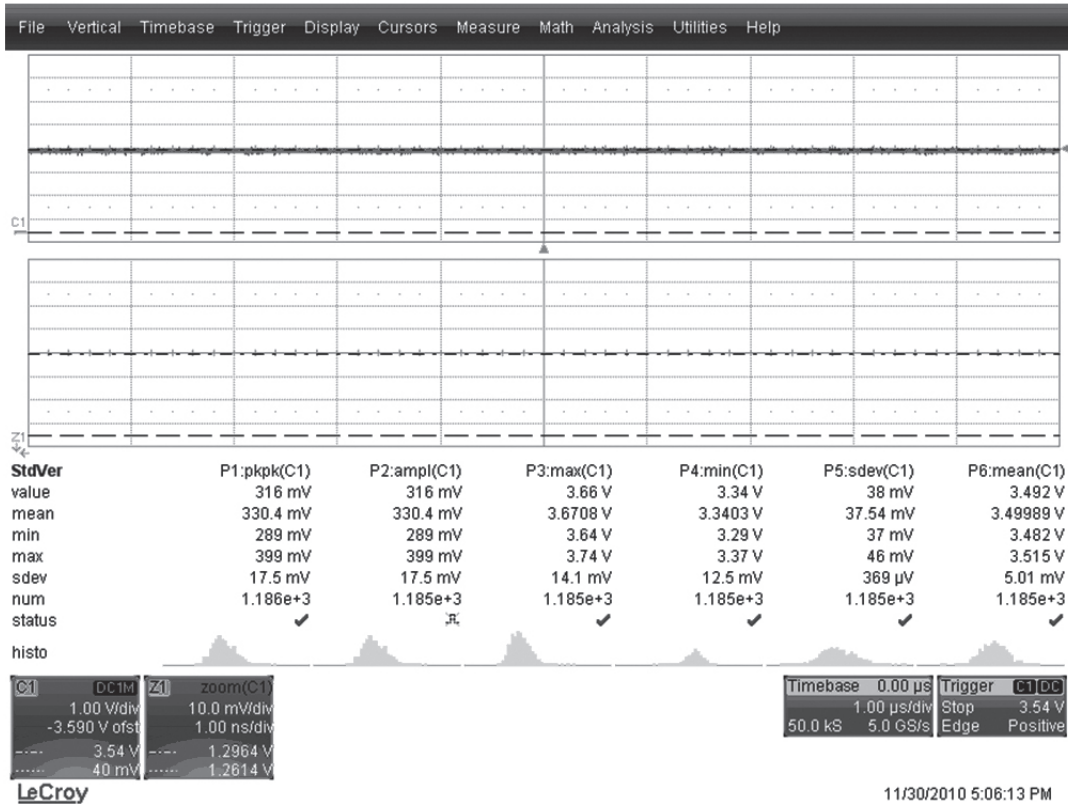


Figure 6-56. Keypad Board – VSW\_3.6 Voltage Statistics

### 6.16.4 Keypad Board Waveforms – 32 kHz clock Vmax with Statistics



Figure 6-57. Keypad Board – 32 kHz clock Vmax with Statistics

### 6.16.5 Keypad Board Waveforms – LF Coil with TX and RX



Data taken from LF inductor contact at C2454 or C2457 while pairing with a headset

TX Voltage can be as high as 40V

OOK used

NFC TX

NFC RX

Figure 6-58. Keypad Board Waveforms – LF Coil when TX and RX



## 6.17 LF CW on Spectrum Analyzer

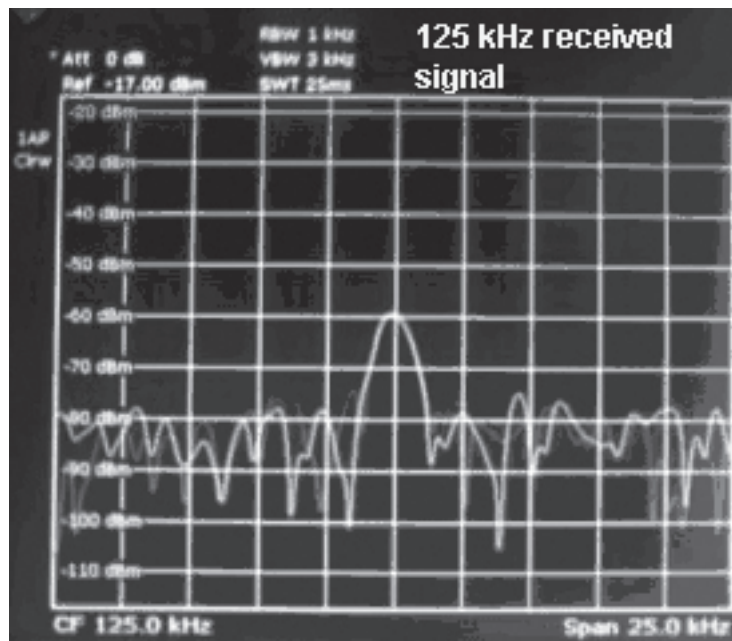


Figure 6-59. LF CW on Spectrum Analyzer

## Notes

# Chapter 7 Troubleshooting Tables

## 7.1 List of Board and IC Signals

Due to the nature of the schematic-generating program, signal names might be different when they are not directly connected to the same point. The tables in this chapter provide a cross reference to the various pinouts for these signals. [Table 7-1](#) lists and provides links to each of the tables in this chapter.

*Table 7-1. List of Tables of Board and IC Signals*

Table No.	Table Name	Page No.
APX 2000/ APX 4000/ APX 4000Li		
<a href="#">7-2</a>	<a href="#">Mainboard to Back kit flex connector interface Pin-Out</a>	<a href="#">7-2</a>
<a href="#">7-3</a>	<a href="#">Main Back kit flex connector to main board connector Interface Pin-Out</a>	<a href="#">7-5</a>
<a href="#">7-4</a>	<a href="#">Main Back kit flex connector to keypad board connector Interface Pin-Out</a>	<a href="#">7-8</a>
<a href="#">7-5</a>	<a href="#">Keypad board connector to mainboard Interface Pin-Out</a>	<a href="#">7-11</a>
<a href="#">7-6</a>	<a href="#">Keypad board connector to front kit flex Interface Pin-Out</a>	<a href="#">7-14</a>
<a href="#">7-7</a>	<a href="#">Front kit connector Interface Pin-Out</a>	<a href="#">7-16</a>
<a href="#">7-8</a>	<a href="#">GCAI flex connector Interface Pin-Out</a>	<a href="#">7-21</a>
<a href="#">7-9</a>	<a href="#">PTT flex connector Interface Pin-Out</a>	<a href="#">7-23</a>
APX 2000/ APX 4000/ APX 4000 (Two Knobs)		
<a href="#">7-10</a>	<a href="#">Mainboard to Back kit flex connector interface Pin-Out</a>	<a href="#">7-24</a>
<a href="#">7-11</a>	<a href="#">Main Back kit flex connector to main board connector Interface Pin-Out</a>	<a href="#">7-26</a>
<a href="#">7-12</a>	<a href="#">Main Back kit flex connector to keypad board connector Interface Pin-Out</a>	<a href="#">7-29</a>
<a href="#">7-13</a>	<a href="#">Keypad board connector to mainboard Interface Pin-Out</a>	<a href="#">7-32</a>
<a href="#">7-14</a>	<a href="#">Keypad board connector to front kit flex Interface Pin-Out</a>	<a href="#">7-35</a>
<a href="#">7-15</a>	<a href="#">Front kit connector Interface Pin-Out</a>	<a href="#">7-38</a>
<a href="#">7-16</a>	<a href="#">GCAI flex connector Interface Pin-Out</a>	<a href="#">7-43</a>
<a href="#">7-17</a>	<a href="#">PTT flex connector Interface Pin-Out</a>	<a href="#">7-45</a>
APX 2000/ APX 4000/ APX 4000Li APX 2000/ APX 4000 (Two Knobs)		
<a href="#">7-18</a>	<a href="#">Overall GPIO pin functions</a>	<a href="#">7-46</a>
<a href="#">7-19</a>	<a href="#">Primary IC Reference Designator</a>	<a href="#">7-54</a>

### 7.1.1 APX 2000/ APX 4000/ APX 4000Li

Table 7-2. Mainboard to Back kit flex connector interface Pin-Out

Test Place	MainBoard		Test Place	MainBoard	
	Signal Name	Pin #		Signal Name	Pin #
chassis	GND	J2302-1	chassis	GND	J2301-1
R2135	F_DISP_RW	J2302-2	chassis	GND	J2301-2
R4005	PTT	J2302-3	C6544	VBUS1	J2301-3
R2139	F_DISP_DATA_0	J2302-4	R6118	SSI_MACE_TX_DIN	J2301-4
R4006	SIDE_1	J2302-5	None	BT_AVR_RESET	J2301-5
R2145	F_DISP_DATA_1	J2302-6	None	SSI_RED_RX_MACE	J2301-6
R4007	SIDE_2	J2302-7	chassis	GND	J2301-7
R2153	F_DISP_DATA_2	J2302-8	R6102	HIGH_SECURE_DATA_GATE	J2301-8
R6101	MONITOR	J2302-9	R6114	GPS_BT_32KHZ	J2301-9
R2148	F_DISP_DATA_3	J2302-10	None	SECURE_HIGH_NORM	J2301-10
chassis	GND	J2302-11	chassis	GND	J2301-11
R2154	F_DISP_DATA_4	J2302-12	None	SSI_BLACK_TX_MACE	J2301-12
None	GPIO_3_RTS_FILLSE NSE	J2302-13	None	BT_PTT	J2301-13
R2149	F_DISP_DATA_5	J2302-14	R6606	SSI_BLACK_RX	J2301-14
F_GCAI_USB-	GPIO_2_DM_RXDC_FI LLDATA	J2302-15	None	BT_SPARE_1.8	J2301-15
R2138	F_DISP_DATA_6	J2302-16	chassis	GND	J2301-16
F_GCAI_USB+	GPIO_1_DP_TXDC_FI LLREQ	J2302-17	None	ACC_SPKR_UNMUTE	J2301-17
R2146	F_DISP_DATA_7	J2302-18	R6107	SSI_OPT_CLK	J2301-18
F_GCAI_1WIRE	GCAI_1WIRE_5V	J2302-19	None	AVR_STATUS_1.8V	J2301-19
chassis	GND	J2302-20	chassis	GND	J2301-20
None	GPIO_4_CTS_KEYFAI L_FILLCLK	J2302-21	None	USB_BOOT_1.8V	J2301-21
R2142	F_DISP_RW_EN	J2302-22	R6570	V_EXT_1.85	J2301-22
F_VBUS2	VBUS2	J2302-23	R6542	V_SW_3.60	J2301-23
chassis	GND	J2302-24	C6590	VRTC	J2301-24
F_VBUS2	VBUS2	J2302-25	TP1309	BT_HOST_WAKEUP_1.8V	J2301-25
R2147	F_DISP_DATA_CMD	J2302-26	R6420	V_SAVE	J2301-26
GPIO0	GPIO_0	J2302-27	TP1310	BT_WAKEUP_1.8V	J2301-27

Table 7-2. Mainboard to Back kit flex connector interface Pin-Out (Continued)

Test Place	MainBoard		Test Place	MainBoard	
	Signal Name	Pin #		Signal Name	Pin #
R6563	V_2.775D	J2302-28	None	KEYFAIL	J2301-28
None	Ext_MIC_Neg_DP	J2302-29	TP1311	BT_SHUTDOWN	J2301-29
chassis	GND	J2302-30	None	OPT_SSI_SYNC	J2301-30
TP6102	Ext_Mic_Pos_DP	J2302-31	TP1312	BT_UART_TX_1.8V	J2301-31
R2136	MAIN_DISPLAY_LED1	J2302-32	None	MACE_WAKEUP	J2301-32
SPKR-	Ext_SPKR_Neg_DP	J2302-33	TP1313	BT_UART_RX_1.8V	J2301-33
R2144	MAIN_DISD2	J2302-34	None	MACE_RESET	J2301-34
SPKR+	Ext_SPKR_Pos_DP	J2302-35	TP1314	BT_UART_RTS_1.8V	J2301-35
R2137	MAIN_DISPLAY_LED3	J2302-36			J2301-36
chassis	GND	J2302-37	TP1315	BT_UART_CTS_1.8V	J2301-37
R2192	MAIN_DISPLAY_LED4	J2302-38	R1101	TX_INHIBIT	J2301-38
TP6405	INT_SPKR_POS_MP	J2302-39	chassis	GND	J2301-39
R6424	F_DISP_BD_ID	J2302-40	C2115	EMERG_BTN	J2301-40
TP6405	INT_SPKR_POS_MP	J2302-41	R6622	USB1_POS_DP	J2301-41
chassis	GND	J2302-42	R6409	EXP_BRD_ID	J2301-42
TP6406	INT_SPKR_NEG_MP	J2302-43	R6623	USB1_NEG_DP	J2301-43
TP2112	RSW_A	J2302-44	R6113	4MHZ_MACE_CLK	J2301-44
TP6406	INT_SPKR_NEG_MP	J2302-45	chassis	GND	J2301-45
TP2113	RSW_B	J2302-46	chassis	GND	J2301-46
F_AUDIO_MICP	INT_MIC_POS_MP	J2302-47	None	KP_COL_0	J2301-47
TP6210	ON_OFF_SWITCH	J2302-48	C6567	V_SW_5	J2301-48
None	INT_MIC_NEG_MP	J2302-49	None	KP_COL_1	J2301-49
chassis	GND	J2302-50	C2126	KP_ROW_0	J2301-50
chassis	GND	J2302-51	None	KP_COL_2	J2301-51
chassis	GND	J2302-52	C2127	KP_ROW_1	J2301-52
E2244	Top_LightBar_Red_Le d	J2302-53	None	KP_COL_3	J2301-53
chassis	GND	J2302-54	C2128	KP_ROW_2	J2301-54
E2245	Top_LightBar_Green_L ed	J2302-55	None	KP_COL_4	J2301-55
R2246	TX_RX_AMBER_LED	J2302-56	C2129	KP_ROW_3	J2301-56

Table 7-2. Mainboard to Back kit flex connector interface Pin-Out (Continued)

Test Place	MainBoard		Test Place	MainBoard	
	Signal Name	Pin #		Signal Name	Pin #
E2246	Top_LightBar_Amber_Led	J2302-57	E2242	KEYPAD_WHITE_LED	J2301-57
R2244	TX_RX_RED_LED	J2302-58	C2130	KP_ROW_4	J2301-58
R2235	V_SW_5	J2302-59	chassis	GND	J2301-59
R2245	TX_RX_GREEN_LED	J2302-60	chassis	GND	J2301-60

Table 7-3. Main Back kit flex connector to main board connector Interface Pin-Out

Test Place	Backkit_Flex		Test Place	Backkit_Flex	
	Signal Name	Pin #		Signal Name	Pin #
	GND	P2000-1		GND	P2001-1
	F_DISP_RW	P2000-2		GND	P2001-2
	PTT	P2000-3		VBUS1	P2001-3
	F_DISP_DATA_0	P2000-4		SSI_MACE_TX_DIN	P2001-4
	SIDE_1	P2000-5		BT_AVR_RESET	P2001-5
	F_DISP_DATA_1	P2000-6		SSI_RED_RX_MACE	P2001-6
	SIDE_2	P2000-7		GND	P2001-7
	F_DISP_DATA_2	P2000-8		HIGH_SECURE_DATA_MACE	P2001-8
	MONITOR	P2000-9		GPS_BT_32KHZ	P2001-9
	F_DISP_DATA_3	P2000-10		SECURE_HIGH_NORM	P2001-10
	GND	P2000-11		GND	P2001-11
	F_DISP_DATA_4	P2000-12		SSI_BLACK_TX_MACE	P2001-12
	GPIO_3_RTS_FILLSNSE	P2000-13		BT_PTT	P2001-13
	F_DISP_DATA_5	P2000-14		SSI_BLACK_RX	P2001-14
	GPIO_2_DM_RXDC_FILLDATA	P2000-15		BT_SPARE_1.8	P2001-15
	F_DISP_DATA_6	P2000-16		GND	P2001-16
	GPIO_1_DP_TXDC_FILLREQ	P2000-17		ACC_SPKR_UNMUTE	P2001-17
	F_DISP_DATA_7	P2000-18		SSI_OPT_CLK	P2001-18
	GCAI_1WIRE_5V	P2000-19		AVR_STATUS_1.8V	P2001-19
	GND	P2000-20		GND	P2001-20
	GPIO_4_CTS_KEYFAIL_FILLCLK	P2000-21		USB_BOOT_1.8V	P2001-21
	F_DISP_RW_EN	P2000-22		V_EXT_1.85	P2001-22
	VBUS2	P2000-23		V_SW_3.60	P2001-23
	GND	P2000-24		VRTC	P2001-24
	VBUS2	P2000-25		BT_HOST_WAKEUP_1.8V	P2001-25
	F-DISP_DATA_CMD	P2000-26		V_SAFE	P2001-26
	GPIO_0	P2000-27		BT_WAKEUP_1.8V	P2001-27
	V_2.755D	P2000-28		KEYFAIL	P2001-28

Table 7-3. Main Back kit flex connector to main board connector Interface Pin-Out (Continued)

Test Place	Backkit_Flex		Test Place	Backkit_Flex	
	Signal Name	Pin #		Signal Name	Pin #
	EXT_MIC_NEG_DP	P2000-29		BT_SHUTDOWN	P2001-29
	GND	P2000-30		OPT_SSI_SYNC	P2001-30
	EXT_MIC_POS_DP	P2000-31		BT_UART_TX_1.8V	P2001-31
	MAIN_DISPLAY_LED1	P2000-32		MACE_WAKEUP	P2001-32
	EXT_SPKR_POS_DP	P2000-33		BT_UART_RX_1.8V	P2001-33
	MAIN_DISPLAY_LED2	P2000-34		MACE_RESET	P2001-34
	EXT_SPKR_NEG_DP	P2000-35		BT_UART_RTS_1.8V	P2001-35
	MAIN_DISPLAY_LED3	P2000-36		OMAP_RESET	P2001-36
	GND	P2000-37		BT_UART_CTS_1.8V	P2001-37
	MAIN_DISPLAY_LED4	P2000-38		TX_INHIBIT	P2001-38
	SPKR+	P2000-39		GND	P2001-39
	F_DISP_BD_ID	P2000-40		EMERG_BTN	P2001-40
	SPKR+	P2000-41		USB1_POS_DP	P2001-41
	GND	P2000-42		EXP_BRD_ID	P2001-42
	SPKR-	P2000-43		USB1_NED_DP	P2001-43
	SWITCH_KNOB_A	P2000-44		4MHZ_MACE_CLK	P2001-44
	SPKR-	P2000-45		GND	P2001-45
	SWITCH_KNOB_B	P2000-46		GND	P2001-46
	MIC+	P2000-47		KP_COL_0	P2001-47
	SWITCH_KNOB_C	P2000-48		V_SW_5	P2001-48
	MIC-	P2000-49		KP_COL_1	P2001-49
	GND	P2000-50		KP_ROW_0	P2001-50
	GND	P2000-51		KP_COL_2	P2001-51
	GND	P2000-52		KP_ROW_1	P2001-52
	SPEAKER_RED_1	P2000-53		KP_COL_3	P2001-53
	GND	P2000-54		KP_ROW_2	P2001-54
	SPEAKER_GREEN_1	P2000-55		KP_COL_4	P2001-55
	TX_RX_LED_AMBER	P2000-56		KP_ROW_3	P2001-56
	SPEAKER_AMBER_1	P2000-57		KEYPAD_WHITE_LED	P2001-57
	TX_RX_LED_RED	P2000-58		KP_ROW_4	P2001-58



Table 7-3. Main Back kit flex connector to main board connector Interface Pin-Out (Continued)

Test Place	Backkit_Flex		Test Place	Backkit_Flex	
	Signal Name	Pin #		Signal Name	Pin #
	SW_5+	P2000-59		GND	P2001-59
	TX_RX_LED_GREEN	P2000-60		GND	P2001-60

Table 7-4. Main Back kit flex connector to keypad board connector Interface Pin-Out

Test Place	Backkit_Flex		Test Place	Backkit_Flex	
	Signal Name	Pin #		Signal Name	Pin #
chassis	GND	P1000-1		GND	P1001-1
	F_DISP_RW	P1000-2		GND	P1001-2
	PTT	P1000-3		VBUS1	P1001-3
	F_DISP_DATA_0	P1000-4		SSI_MACE_TX_DI N	P1001-4
	SIDE_1	P1000-5		BT_AVR_RESET	P1001-5
	F_DISP_DATA_1	P1000-6		SSI_RED_RX_MAC E	P1001-6
	SIDE_2	P1000-7		GND	P1001-7
	F_DISP_DATA_2	P1000-8		HIGH_SECURE_D ATA_MACE	P1001-8
	MONITOR	P1000-9		GPS_BT_32KHZ	P1001-9
	F_DISP_DATA_3	P1000-10		SECURE_HIGH_N ORM	P1001-10
	GND	P1000-11		GND	P1001-11
	F_DISP_DATA_4	P1000-12		SSI_BLACK_TX_M ACE	P1001-12
	GPIO_3_RTS_FILLSENSE	P1000-13		BT_PTT	P1001-13
	F_DISP_DATA_5	P1000-14		SSI_BLACK_RX	P1001-14
	GPIO_2_DM_RXDC_FILL DATA	P1000-15		BT_SPARE_1.8	P1001-15
	F_DISP_DATA_6	P1000-16		GND	P1001-16
	GPIO_1_DP_TXDC_FILLR EQ	P1000-17		ACC_SPKR_UNMU TE	P1001-17
	F_DISP_DATA_7	P1000-18		SSI_OPT_CLK	P1001-18
	GCAI_1WIRE_5V	P1000-19		AVR_STATUS_1.8V	P1001-19
	GND	P1000-20		GND	P1001-20
	GPIO_4_CTS_KEYFAIL_F ILLCLK	P1000-21		USB_BOOT_1.8V	P1001-21
	F_DISP_RW_EN	P1000-22		V_EXT_1.85	P1001-22
	VBUS2	P1000-23		V_SW_3.60	P1001-23
	GND	P1000-24		VRTC	P1001-24
	VBUS2	P1000-25		BT_HOST_WAKEU P_1.8V	P1001-25

Table 7-4. Main Back kit flex connector to keypad board connector Interface Pin-Out (Continued)

Test Place	Backkit_Flex		Test Place	Backkit_Flex	
	Signal Name	Pin #		Signal Name	Pin #
	F-DISP_DATA_CMD	P1000-26		V_SAFE	P1001-26
	GPIO_0	P1000-27		BT_WAKEUP_1.8V	P1001-27
	V_2.755D	P1000-28		KEYFAIL	P1001-28
	EXT_MIC_NEG_DP	P1000-29		BT_SHUTDOWN	P1001-29
	GND	P1000-30		OPT_SSI_SYNC	P1001-30
	EXT_MIC_POS_DP	P1000-31		BT_UART_TX_1.8V	P1001-31
	MAIN_DISPLAY_LED1	P1000-32		MACE_WAKEUP	P1001-32
	EXT_SPKR_POS_DP	P1000-33		BT_UART_RX_1.8 V	P1001-33
	MAIN_DISPLAY_LED2	P1000-34		MACE_RESET	P1001-34
	EXT_SPKR_NEG_DP	P1000-35		BT_UART_RTS_1.8 V	P1001-35
	MAIN_DISPLAY_LED3	P1000-36		OMAP_RESET	P1001-36
	GND	P1000-37		BT_UART_CTS_1.8 V	P1001-37
	MAIN_DISPLAY_LED4	P1000-38		TX_INHIBIT	P1001-38
	SPKR+	P1000-39		GND	P1001-39
	F_DISP_BD_ID	P1000-40		EMERG_BTN	P1001-40
	SPKR+	P1000-41		USB1_POS_DP	P1001-41
	GND	P1000-42		EXP_BRD_ID	P1001-42
	SPKR-	P1000-43		USB1_NED_DP	P1001-43
	SWITCH_KNOB_A	P1000-44		4MHZ_MACE_CLK	P1001-44
	SPKR-	P1000-45		GND	P1001-45
	SWITCH_KNOB_B	P1000-46		GND	P1001-46
	MIC+	P1000-47		KP_COL_0	P1001-47
	SWITCH_KNOB_C	P1000-48		V_SW_5	P1001-48
	MIC-	P1000-49		KP_COL_1	P1001-49
	GND	P1000-50		KP_ROW_0	P1001-50
	GND	P1000-51		KP_COL_2	P1001-51
	GND	P1000-52		KP_ROW_1	P1001-52
	SPEAKER_RED_1	P1000-53		KP_COL_3	P1001-53
	GND	P1000-54		KP_ROW_2	P1001-54

Table 7-4. Main Back kit flex connector to keypad board connector Interface Pin-Out (Continued)

Test Place	Backkit_Flex		Test Place	Backkit_Flex	
	Signal Name	Pin #		Signal Name	Pin #
	SPEAKER_GREEN_1	P1000-55		KP_COL_4	P1001-55
	TX_RX_LED_AMBER	P1000-56		KP_ROW_3	P1001-56
	SPEAKER_AMBER_1	P1000-57		KEYPAD_WHITE_LED	P1001-57
	TX_RX_LED_RED	P1000-58		KP_ROW_4	P1001-58
	SW_5+	P1000-59		GND	P1001-59
	TX_RX_LED_GREEN	P1000-60		GND	P1001-60

Table 7-5. Keypad board connector to mainboard Interface Pin-Out

Test Place	KeyBoard		Test Place	KeyBoard	
	Signal Name	Pin #		Signal Name	Pin #
chassis	GND	P1000-1	chassis	GND	P2001-1
none	F_DISP_RW	P1000-2	chassis	GND	P2001-2
C21	PTT	P1000-3	none	UNNAMED_1_C ONNJ60PIN_I67 1_X	P2001-3
none	F_DISP_DATA_0	P1000-4	none	SSI_MACE_TX_ DIN	P2001-4
C20	SIDE_1	P1000-5	none	UNNAMED_1_C ONNJ60PIN_I67 0_X	P2001-5
none	F_DISP_DATA_1	P1000-6	none	SSI_RED_RX_M ACE	P2001-6
C19	SIDE_2	P1000-7	chassis	GND	P2001-7
none	F_DISP_DATA_2	P1000-8	none	BLOCK_SSI_RE D	P2001-8
C18	MONITOR	P1000-9	none	32KHZ	P2001-9
none	F_DISP_DATA_3	P1000-10	none	MACE_SEC_CL R_MODE	P2001-10
chassis	GND	P1000-11	chassis	GND	P2001-11
none	F_DISP_DATA_4	P1000-12	none	SSI_BLACK_TX _MACE	P2001-12
R2007	GPIO_3_RTS_FILL SENSE	P1000-13	none	UNNAMED_1_C ONNJ60PIN_I66 6_X	P2001-13
none	F_DISP_DATA_5	P1000-14	none	SSI_BLACK_RX	P2001-14
E3	GPIO_2_DM_RXDC _FILLDATA	P1000-15	none	BT_SPARE_1.8	P2001-15
none	F_DISP_DATA_6	P1000-16	chassis	GND	P2001-16
E5	GPIO_1_DP_TXDC _FILLREQ	P1000-17	none	ACC_SPKR_UN MUTE_1.8	P2001-17
none	F_DISP_DATA_7	P1000-18	R2503	OPT_SSI_CLK	P2001-18
R2006	GCAI_1WIRE_5V	P1000-19	none	UNNAMED_1_C ONNJ60PIN_I66 3_X	P2001-19
chassis	GND	P1000-20	chassis	GND	P2001-20

Table 7-5. Keypad board connector to mainboard Interface Pin-Out (Continued)

Test Place	KeyBoard		Test Place	KeyBoard	
	Signal Name	Pin #		Signal Name	Pin #
R2005	GPIO_4_CTS_KEY FAIL_FILLCLK	P1000-21	none	UNNAMED_1_C ONNJ60PIN_I66 2_X	P2001-21
none	F_DISP_RW_EN	P1000-22	TP2005	VCC_1.85	P2001-22
D13	VBUS2	P1000-23	TP2007	VSW_3.6	P2001-23
chassis	GND	P1000-24	none	VRTC	P2001-24
none	VBUS2	P1000-25	none	BT_HOST_WAK EUP_1.8V	P2001-25
none	F- DISP_DATA_CMD	P1000-26	none	VSAVE	P2001-26
R2004	GPIO_0	P1000-27	none	BT_WAKEUP_1. 8V	P2001-27
none	V_2.755D	P1000-28	none	KEYFAIL	P2001-28
C17	EXT_MIC_NEG_DP	P1000-29	none	BT_SHUTDOW N_1.8V	P2001-29
chassis	GND	P1000-30	R2513	OPT_SSI_FSYN C	P2001-30
R2003	EXT_MIC_POS_DP	P1000-31	none	BT_UART_TX_1 .8V	P2001-31
none	MAIN_DISPLAY_LE D1	P1000-32	none	MACE_WAKEU P	P2001-32
R2013	EXT_SPKR_POS_ DP	P1000-33	none	BT_UART_RX_1 .8V	P2001-33
none	MAIN_DISPLAY_LE D2	P1000-34	none	MACE_RESET	P2001-34
R2014	EXT_SPKR_NEG_ DP	P1000-35	none	BT_UART_RTS_ 1.8V	P2001-35
none	MAIN_DISPLAY_LE D3	P1000-36	none	OMAP_RESET_ OUT	P2001-36
chassis	GND	P1000-37	none	BT_UART_CTS_ 1.8V	P2001-37
none	MAIN_DISPLAY_LE D4	P1000-38	none	TX_INHIBIT	P2001-38
C2	SPKR+	P1000-39	chassis	GND	P2001-39
none	F_DISP_BD_ID	P1000-40	none	EMERG_BTN	P2001-40
none	SPKR+	P1000-41	none	UNNAMED_1_C ONNJ60PIN_I65 2_X	P2001-41

Table 7-5. Keypad board connector to mainboard Interface Pin-Out (Continued)

Test Place	KeyBoard		Test Place	KeyBoard	
	Signal Name	Pin #		Signal Name	Pin #
chassis	GND	P1000-42	R2531	EXP_BRD_TYP E	P2001-42
C4	SPKR-	P1000-43	none	UNNAMED_1_C ONNJ60PIN_I65 1_X	P2001-43
E10	SWITCH_KNOB_A	P1000-44	none	MACE_CLOCK	P2001-44
none	SPKR-	P1000-45	chassis	GND	P2001-45
E7	SWITCH_KNOB_B	P1000-46	chassis	GND	P2001-46
E6	MIC+	P1000-47	C22	KP_COL_A	P2001-47
E4	SWITCH_KNOB_S	P1000-48	R2531	VCC5V	P2001-48
E2	MIC-	P1000-49	C24	KP_COL_B	P2001-49
chassis	GND	P1000-50	C27	KP_ROW_A	P2001-50
chassis	GND	P1000-51	C26	KP_COL_C	P2001-51
chassis	GND	P1000-52	C28	KP_ROW_B	P2001-52
none	SPEAKER_RED_1	P1000-53	C23	KP_COL_D	P2001-53
chassis	GND	P1000-54	C29	KP_ROW_C	P2001-54
none	SPEAKER_GREEN _1	P1000-55	C25	KP_COL_E	P2001-55
C11	TX_RX_LED_AMBE R	P1000-56	C30	KP_ROW_D	P2001-56
none	SPEAKER_AMBER _1	P1000-57	R19	KEYPAD_WHIT E_LED	P2001-57
C12	TX_RX_LED_RED	P1000-58	C31	KP_ROW_E	P2001-58
E2003	SW_5+	P1000-59	chassis	GND	P2001-59
C13	TX_RX_LED_GREE N	P1000-60	chassis	GND	P2001-60

Table 7-6. Keypad board connector to front kit flex Interface Pin-Out

Test Place	KeyBoard	
	Signal Name	Pin #
chassis	GND	P2000-1
None	F_DISP_RW	P2000-2
C21	PTT	P2000-3
None	F_DISP_DATA_0	P2000-4
C20	SIDE_1	P2000-5
None	F_DISP_DATA_1	P2000-6
C19	SIDE_2	P2000-7
None	F_DISP_DATA_2	P2000-8
C18	MONITOR	P2000-9
None	F_DISP_DATA_3	P2000-10
chassis	GND	P2000-11
None	F_DISP_DATA_4	P2000-12
R2007	GPIO_3_RTS_FILLSENSE	P2000-13
None	F_DISP_DATA_5	P2000-14
E3	GPIO_2_DM_RXDC_FILLDATA	P2000-15
None	F_DISP_DATA_6	P2000-16
E5	GPIO_1_DP_TXDC_FILLREQ	P2000-17
None	F_DISP_DATA_7	P2000-18
R2006	GCAI_1WIRE_5V	P2000-19
chassis	GND	P2000-20
R2005	GPIO_4_CTS_KEYFAIL_FILLCLK	P2000-21
None	F_DISP_RW_EN	P2000-22
C2009	VBUS2	P2000-23
chassis	GND	P2000-24
None	VBUS2	P2000-25
None	F-DISP_DATA_CMD	P2000-26
R2004	GPIO_0	P2000-27
None	V_2.755D	P2000-28
E14	EXT_MIC_NEG_DP	P2000-29
None	OMAP_RESET_OUT	P2000-30



Table 7-6. Keypad board connector to front kit flex Interface Pin-Out (Continued)

Test Place	KeyBoard	
	Signal Name	Pin #
C16	EXT_MIC_POS_DP	P2000-31
None	MAIN_DISPLAY_LED1	P2000-32
R2013	EXT_SPKR_POS_DP	P2000-33
None	MAIN_DISPLAY_LED2	P2000-34
R2014	EXT_SPKR_NEG_DP	P2000-35
None	MAIN_DISPLAY_LED3	P2000-36
chassis	GND	P2000-37
None	MAIN_DISPLAY_LED4	P2000-38
C2	SPKR+	P2000-39
None	F_DISP_BD_ID	P2000-40
None	SPKR+	P2000-41
chassis	GND	P2000-42
C4	SPKR-	P2000-43
D3	SWITCH_KNOB_A	P2000-44
None	SPKR-	P2000-45
D4	SWITCH_KNOB_B	P2000-46
D5	MIC+	P2000-47
D6	SWITCH_KNOB_S	P2000-48
D7	MIC-	P2000-49
None	VCC_1.85	P2000-50
chassis	GND	P2000-51
None	NFC	P2000-52
None	SPEAKER_RED_1	P2000-53
chassis	GND	P2000-54
None	SPEAKER_GREEN_1	P2000-55
C11	TX_RX_LED_AMBER	P2000-56
None	SPEAKER_AMBER_1	P2000-57
C12	TX_RX_LED_RED	P2000-58
E2003	SW_5+	P2000-59
C13	TX_RX_LED_GREEN	P2000-60

Table 7-7. Front kit connector Interface Pin-Out

Test Place	Front Kit Flex	
	Signal Name	Pin #
	GND	J1-1
	GND	J1-2
	SIDE_1	J1-3
	PTT	J1-4
	GND	J1-5
	GND	J1-6
	SIDE_2	J1-7
	MONITOR	J1-8
	GND	J1-9
	GND	J1-10
	GND	J1-G1
	GND	J1-G2
	GND	J1-G3
	GND	J1-G4

Test Place	Front Kit Flex	
	Signal Name	Pin #
	GND	J2-1
	SPEAKER_RED_1	J2-2
	GPIO_3_RTS_FILLSENSE	J2-3
	SPEAKER_GREEN_1	J2-4
	GPIO_2_DM_RXDC_FILLDATA	J2-5
	SPEAKER_AMBER_1	J2-6
	GPIO_1_DP_TXDC_FILLREQ	J2-7
	SW_5+	J2-8
	GCAI_1WIRE_5V	J2-9
	SW_5+	J2-10
	GPIO_4_CTS_KEYFAIL_FILLCLK	J2-11

Test Place	Front Kit Flex	
	Signal Name	Pin #
	TX_RX_LED_AMBER	J2-12
	GPIO_0	J2-13
	TX_RX_LED_RED	J2-14
	GND	J2-15
	TX_RX_LED_GREEN	J2-16
	EXT_MIC_NEG_DP	J2-17
	GND	J2-18
	EXT_MIC_POS_DP	J2-19
	MIC+	J2-20
	GND	J2-21
	MIC-	J2-22
	EXT_SPKR_POS_DP	J2-23
	GND	J2-24
	EXT_SPKR_NEG_DP	J2-25
	VBUS2	J2-26
	GND	J2-27
	VBUS2	J2-28
	NFC	J2-29
	GND	J2-30
	GND	J2-G1
	GND	J2-G2
	GND	J2-G3
	GND	J2-G4

Test Place	Front Kit Flex	
	Signal Name	Pin #
	GND	J3-1
	V_2.775D	J3-2
	F_DISP_RW	J3-3
	GND	J3-4
	F_DISP_DATA_1	J3-5
	F_DISP_DATA_3	J3-6
	F_DISP_DATA_5	J3-7
	F_DISP_DATA_7	J3-8
	GND	J3-9
	F_DISP_DATA_CMD	J3-10
	GND	J3-11
	SW_5+	J3-12
	MAIN_DISPLAY_LED3	J3-13
	F_DISP_BD_ID	J3-14
	GND	J3-15
	GND	J3-16
	MAIN_DISPLAY_LED4	J3-17
	MAIN_DISPLAY_LED2	J3-18
	MAIN_DISPLAY_LED1	J3-19
	OMAP_RESET	J3-20
	GND	J3-21
	F_DISP_RW_EN	J3-22
	GND	J3-23
	F_DISP_DATA_6	J3-24
	F_DISP_DATA_4	J3-25
	F_DISP_DATA_2	J3-26
	F_DISP_DATA_0	J3-27
	GND	J3-28
	V_EXT_1.85	J3-29
	GND	J3-30

Test Place	Front Kit Flex	
	Signal Name	Pin #
	GND	P1-1
	F_DISP_RW	P1-2
	PTT	P1-3
	F_DISP_DATA_0	P1-4
	SIDE_1	P1-5
	F_DISP_DATA_1	P1-6
	SIDE_2	P1-7
	F_DISP_DATA_2	P1-8
	MONITOR	P1-9
	F_DISP_DATA_3	P1-10
	GND	P1-11
	F_DISP_DATA_4	P1-12
	GPIO_3_RTS_FILLSENSE	P1-13
	F_DISP_DATA_5	P1-14
	GPIO_2_DM_RXDC_FILLDATA	P1-15
	F_DISP_DATA_6	P1-16
	GPIO_1_DP_TXDC_FILLREQ	P1-17
	F_DISP_DATA_7	P1-18
	GCAI_1WIRE_5V	P1-19
	GND	P1-20
	GPIO_4_CTS_KEYFAIL_FILLCLK	P1-21
	F_DISP_RW_EN	P1-22
	VBUS2	P1-23
	GND	P1-24
	VBUS2	P1-25
	F_DISP_DATA_CMD	P1-26
	GPIO_0	P1-27
	V_2.775D	P1-28
	EXT_MIC_NEG_DP	P1-29
	OMAP_RESET	P1-30

Test Place	Front Kit Flex	
	Signal Name	Pin #
	EXT_MIC_POS_DP	P1-31
	MAIN_DISPLAY_LED1	P1-32
	EXT_SPKR_POS_DP	P1-33
	MAIN_DISPLAY_LED2	P1-34
	EXT_SPKR_NEG_DP	P1-35
	MAIN_DISPLAY_LED3	P1-36
	GND	P1-37
	MAIN_DISPLAY_LED4	P1-38
	SPKR+	P1-39
	F_DISP_BD_ID	P1-40
LS1	SPKR+	P1-41
	GND	P1-42
LS1	SPKR-	P1-43
C2	SWITCH_KNOB_A	P1-44
	SPKR-	P1-45
C3	SWITCH_KNOB_B	P1-46
	MIC+	P1-47
R4	PUSH_BUTTON_S	P1-48
	MIC-	P1-49
	V_EXT_1.85	P1-50
	GND	P1-51
	NFC	P1-52
	SPEAKER_RED_1	P1-53
	GND	P1-54
	SPEAKER_GREEN_1	P1-55
	TX_RX_LED_AMBER	P1-56
	SPEAKER_AMBER_1	P1-57
	TX_RX_LED_RED	P1-58
	SW_5+	P1-59
	TX_RX_LED_GREEN	P1-60

Table 7-8. GCAI flex connector Interface Pin-Out

Test Place	GCAI	
	Signal Name	Pin #
	GND	P1-1
	LIGHTBAR_RED	P1-2
	GCAI_RTS_GPIO3	P1-3
	LIGHTBAR_GREEN	P1-4
	GCAI_USB_N_GPIO2	P1-5
	LIGHTBAR_AMBER	P1-6
	GCAI_USB_P_GPIO1	P1-7
	V_SW_5	P1-8
	GCAI_ONE_WIRE	P1-9
	V_SW_5	P1-10
	GCAI_GPIO4_CTS	P1-11
	TX_RX_LED_AMBER	P1-12
	GCAI_GPIO0	P1-13
	TX_RX_LED_RED	P1-14
	GND	P1-15
	TX_RX_LED_GREEN	P1-16
	GCAI_EXT_MIC_N	P1-17
	GND	P1-18
	GCAI_EXT_MIC_P	P1-19
	UNNAMED_1_CONNP30PIN4GND_I168_X	P1-20
	GND	P1-21
	UNNAMED_1_CONNP30PIN4GND_I166_X	P1-22
	GCAI_EXT_SPKR_P	P1-23
	GND	P1-24
	GCAI_EXT_SPKR_N	P1-25
	GCAI_VBUS_5V	P1-26
	GND	P1-27
	GCAI_VBUS_5V	P1-28
	UNNAMED_1_CONNP30PIN4GND_I159_X	P1-29
	GND	P1-30

*Table 7-8. GCAI flex connector Interface Pin-Out (Continued)*

Test Place	GCAI	
	Signal Name	Pin #
	GND	P1-G1
	GND	P1-G2
	GND	P1-G3
	GND	P1-G4



Table 7-9. PTT flex connector Interface Pin-Out

Test Place	PTT	
	Signal Name	Pin #
	GND	P1-1
	GND	P1-2
	CONN_SB1	P1-3
	CONN_INT_PTT	P1-4
	GND	P1-5
	GND	P1-6
	CONN_SB2	P1-7
	MONITOR	P1-8
	GND	P1-9
	GND	P1-10
	GND	P1-G1
	GND	P1-G2
	GND	P1-G3
	GND	P1-G4

## 7.1.2 APX 2000/ APX 4000 (Two Knobs)

Table 7-10. Mainboard to Back kit flex connector interface Pin-Out

Test Place	MainBoard		Test Place	MainBoard	
	Signal Name	Pin #		Signal Name	Pin #
chassis	GND	J2302-1	chassis	GND	J2301-1
R2135	F_DISP_RW	J2302-2	chassis	GND	J2301-2
R4005	PTT	J2302-3	C6544	VBUS1	J2301-3
R2139	F_DISP_DATA_0	J2302-4	R6118	SSI_MACE_TX_DIN	J2301-4
R4006	SIDE_1	J2302-5	None	BT_AVR_RESET	J2301-5
R2145	F_DISP_DATA_1	J2302-6	None	SSI_RED_RX_MACE	J2301-6
R4007	SIDE_2	J2302-7	chassis	GND	J2301-7
R2153	F_DISP_DATA_2	J2302-8	R6102	HIGH_SECURE_DATA_GATE	J2301-8
R6101	MONITOR	J2302-9	R6114	GPS_BT_32KHZ	J2301-9
R2148	F_DISP_DATA_3	J2302-10	None	SECURE_HIGH_NORM	J2301-10
chassis	GND	J2302-11	chassis	GND	J2301-11
R2154	F_DISP_DATA_4	J2302-12	None	SSI_BLACK_TX_MACE	J2301-12
None	GPIO_3_RTS_FILLSE NSE	J2302-13	None	BT_PTT	J2301-13
R2149	F_DISP_DATA_5	J2302-14	R6606	SSI_BLACK_RX	J2301-14
F_GCAI_USB-	GPIO_2_DM_RXDC_FI LLDATA	J2302-15	None	BT_SPARE_1.8	J2301-15
R2138	F_DISP_DATA_6	J2302-16	chassis	GND	J2301-16
F_GCAI_USB+	GPIO_1_DP_TXDC_FI LLREQ	J2302-17	None	ACC_SPKR_UNMUTE	J2301-17
R2146	F_DISP_DATA_7	J2302-18	R6107	SSI_OPT_CLK	J2301-18
F_GCAI_1WIRE	GCAI_1WIRE_5V	J2302-19	None	AVR_STATUS_1.8V	J2301-19
chassis	GND	J2302-20	chassis	GND	J2301-20
None	GPIO_4_CTS_KEYFAI L_FILLCLK	J2302-21	None	USB_BOOT_1.8V	J2301-21
R2142	F_DISP_RW_EN	J2302-22	R6570	V_EXT_1.85	J2301-22
F_VBUS2	VBUS2	J2302-23	R6542	V_SW_3.60	J2301-23
chassis	GND	J2302-24	C6590	VRTC	J2301-24
F_VBUS2	VBUS2	J2302-25	TP1309	BT_HOST_WAKEUP_1.8V	J2301-25
R2147	F_DISP_DATA_CMD	J2302-26	R6420	V_SAVE	J2301-26
GPIO0	GPIO_0	J2302-27	TP1310	BT_WAKEUP_1.8V	J2301-27

Table 7-10. Mainboard to Back kit flex connector interface Pin-Out (Continued)

Test Place	MainBoard		Test Place	MainBoard	
	Signal Name	Pin #		Signal Name	Pin #
R6563	V_2.775D	J2302-28	None	KEYFAIL	J2301-28
None	Ext_MIC_Neg_DP	J2302-29	TP1311	BT_SHUTDOWN	J2301-29
chassis	GND	J2302-30	None	OPT_SSI_SYNC	J2301-30
TP6102	Ext_Mic_Pos_DP	J2302-31	TP1312	BT_UART_TX_1.8V	J2301-31
R2136	MAIN_DISPLAY_LED1	J2302-32	None	MACE_WAKEUP	J2301-32
SPKR-	Ext_SPKR_Neg_DP	J2302-33	TP1313	BT_UART_RX_1.8V	J2301-33
R2144	MAIN_DISD2	J2302-34	None	MACE_RESET	J2301-34
SPKR+	Ext_SPKR_Pos_DP	J2302-35	TP1314	BT_UART_RTS_1.8V	J2301-35
R2137	MAIN_DISPLAY_LED3	J2302-36			J2301-36
chassis	GND	J2302-37	TP1315	BT_UART_CTS_1.8V	J2301-37
R2192	MAIN_DISPLAY_LED4	J2302-38	R1101	TX_INHIBIT	J2301-38
TP6405	INT_SPKR_POS_MP	J2302-39	chassis	GND	J2301-39
R6424	F_DISP_BD_ID	J2302-40	chassis	GND	J2301-40
TP6405	INT_SPKR_POS_MP	J2302-41	R6622	USB1_POS_DP	J2301-41
chassis	GND	J2302-42	R6409	EXP_BRD_ID	J2301-42
TP6406	INT_SPKR_NEG_MP	J2302-43	R6623	USB1_NEG_DP	J2301-43
R21004	FREQ_SEL_0	J2302-44	R6113	4MHZ_MACE_CLK	J2301-44
TP6406	INT_SPKR_NEG_MP	J2302-45	chassis	GND	J2301-45
R21005	FREQ_SEL_1	J2302-46	chassis	GND	J2301-46
F_AUDIO_MICP	INT_MIC_POS_MP	J2302-47	None	KP_COL_0	J2301-47
R21006	FREQ_SEL_2	J2302-48	C6567	V_SW_5	J2301-48
None	INT_MIC_NEG_MP	J2302-49	None	KP_COL_1	J2301-49
R21007	FREQ_SEL_3	J2302-50	C2126	KP_ROW_0	J2301-50
chassis	GND	J2302-51	None	KP_COL_2	J2301-51
R21000	V_EXT_1.85	J2302-52	C2127	KP_ROW_1	J2301-52
E2244	Top_LightBar_Red_Le d	J2302-53	None	KP_COL_3	J2301-53
chassis	GND	J2302-54	C2128	KP_ROW_2	J2301-54
E2245	Top_LightBar_Green_L ed	J2302-55	None	KP_COL_4	J2301-55
chassis	GND	J2302-56	C2129	KP_ROW_3	J2301-56

Table 7-10. Mainboard to Back kit flex connector interface Pin-Out (Continued)

Test Place	MainBoard		Test Place	MainBoard	
	Signal Name	Pin #		Signal Name	Pin #
E2246	Top_LightBar_Amber_Led	J2302-57	E2242	KEYPAD_WHITE_LED	J2301-57
R2246	TX_RX_AMBER_LED	J2302-58	C2130	KP_ROW_4	J2301-58
R2235	V_SW_5	J2302-59	chassis	GND	J2301-59
R2244	TX_RX_RED_LED	J2302-60	chassis	GND	J2301-60
chassis	GND	J2302-61			
R2245	TX_RX_GREEN_LED	J2302-62			
chassis	GND	J2302-63			
chassis	GND	J2302-64			
R2200	EMERG_BTN	J2302-65			
R6592	ON_OFF_SWITCH	J2302-66			
chassis	GND	J2302-67			
R2202	VOLUME	J2302-68			
chassis	GND	J2302-69			
chassis	GND	J2302-70			

Table 7-11. Main Back kit flex connector to main board connector Interface Pin-Out

Test Place	Backkit_Flex		Test Place	Backkit_Flex	
	Signal Name	Pin #		Signal Name	Pin #
	GND	P2000-1		GND	P2001-1
	F_DISP_RW	P2000-2		GND	P2001-2
	PTT	P2000-3		VBUS1	P2001-3
	F_DISP_DATA_0	P2000-4		SSI_MACE_TX_DIN	P2001-4
	SIDE_1	P2000-5		BT_AVR_RESET	P2001-5
	F_DISP_DATA_1	P2000-6		SSI_RED_RX_MACE	P2001-6
	SIDE_2	P2000-7		GND	P2001-7
	F_DISP_DATA_2	P2000-8		HIGH_SECURE_DATA_MACE	P2001-8
	MONITOR	P2000-9		GPS_BT_32KHZ	P2001-9
	F_DISP_DATA_3	P2000-10		SECURE_HIGH_NORM	P2001-10

Table 7-11. Main Back kit flex connector to main board connector Interface Pin-Out (Continued)

Test Place	Backkit_Flex		Test Place	Backkit_Flex	
	Signal Name	Pin #		Signal Name	Pin #
	GND	P2000-11		GND	P2001-11
	F_DISP_DATA_4	P2000-12		SSI_BLACK_TX_MAC E	P2001-12
	GPIO_3_RTS_FILLSENSE	P2000-13		BT_PTT	P2001-13
	F_DISP_DATA_5	P2000-14		SSI_BLACK_RX	P2001-14
	GPIO_2_DM_RXDC_FILLDATA	P2000-15		BT_SPARE_1.8	P2001-15
	F_DISP_DATA_6	P2000-16		GND	P2001-16
	GPIO_1_DP_TXDC_FILLREQ	P2000-17		ACC_SPKR_UNMUTE	P2001-17
	F_DISP_DATA_7	P2000-18		SSI_OPT_CLK	P2001-18
	GCAI_1WIRE_5V	P2000-19		AVR_STATUS_1.8V	P2001-19
	GND	P2000-20		GND	P2001-20
	GPIO_4_CTS_KEYFAIL_FILLCLK	P2000-21		USB_BOOT_1.8V	P2001-21
	F_DISP_RW_EN	P2000-22		V_EXT_1.85	P2001-22
	VBUS2	P2000-23		V_SW_3.60	P2001-23
	GND	P2000-24		VRTC	P2001-24
	VBUS2	P2000-25		BT_HOST_WAKEUP_1 .8V	P2001-25
	F_DISP_DATA_CMD	P2000-26		V_SAFE	P2001-26
	GPIO_0	P2000-27		BT_WAKEUP_1.8V	P2001-27
	V_2.775D	P2000-28		KEYFAIL	P2001-28
	Ext_MIC_Neg_DP	P2000-29		BT_SHUTDOWN	P2001-29
	GND	P2000-30		OPT_SSI_SYNC	P2001-30
	Ext_Mic_Pos_DP	P2000-31		BT_UART_TX_1.8V	P2001-31
	MAIN_DISPLAY_LED1	P2000-32		MACE_WAKEUP	P2001-32
	Ext_SPKR_Neg_DP	P2000-33		BT_UART_RX_1.8V	P2001-33
	MAIN_DISPLAY_LED2	P2000-34		MACE_RESET	P2001-34
	Ext_SPKR_Pos_DP	P2000-35		BT_UART_RTS_1.8V	P2001-35
	MAIN_DISPLAY_LED3	P2000-36		OMAP_RESET	P2001-36
	GND	P2000-37		BT_UART_CTS_1.8V	P2001-37
	MAIN_DISPLAY_LED4	P2000-38		TX_INHIBIT	P2001-38
	SPKR+	P2000-39		GND	P2001-39

Table 7-11. Main Back kit flex connector to main board connector Interface Pin-Out (Continued)

Test Place	Backkit_Flex		Test Place	Backkit_Flex	
	Signal Name	Pin #		Signal Name	Pin #
	F_DISP_BD_ID	P2000-40		GND	P2001-40
	SPKR+	P2000-41		USB1_POS_DP	P2001-41
	GND	P2000-42		EXP_BRD_ID	P2001-42
	SPKR-	P2000-43		USB1_NEG_DP	P2001-43
	FREQ_SEL_0	P2000-44		4MHZ_MACE_CLK	P2001-44
	SPKR-	P2000-45		GND	P2001-45
	FREQ_SEL_1	P2000-46		GND	P2001-46
	MIC+	P2000-47		KP_COL_0	P2001-47
	FREQ_SEL_2	P2000-48		V_SW_5	P2001-48
	MIC-	P2000-49		KP_COL_1	P2001-49
	FREQ_SEL_3	P2000-50		KP_ROW_0	P2001-50
	GND	P2000-51		KP_COL_2	P2001-51
		P2000-52		KP_ROW_1	P2001-52
	SPEAKER_RED_1	P2000-53		KP_COL_3	P2001-53
	GND	P2000-54		KP_ROW_2	P2001-54
	SPEAKER_GREEN_1	P2000-55		KP_COL_4	P2001-55
	GND	P2000-56		KP_ROW_3	P2001-56
	SPEAKER_AMBER_1	P2000-57		KEYPAD_WHITE_LED	P2001-57
	TX_RX_LED_AMBER	P2000-58		KP_ROW_4	P2001-58
	SW_5+	P2000-59		GND	P2001-59
	TX_RX_LED_RED	P2000-60		GND	P2001-60
	GND	P2000-61			
	TX_RX_LED_GREEN	P2000-62			
	GND	P2000-63			
	GND	P2000-64			
	EMERG_BTN	P2000-65			
	ON_OFF_SWITCH	P2000-66			
	GND	P2000-67			
	VOLUME	P2000-68			
	GND	P2000-69			

Table 7-11. Main Back kit flex connector to main board connector Interface Pin-Out (Continued)

Test Place	Backkit_Flex		Test Place	Backkit_Flex	
	Signal Name	Pin #		Signal Name	Pin #
	GND	P2000-70			

Table 7-12. Main Back kit flex connector to keypad board connector Interface Pin-Out

Test Place	Backkit_Flex		Test Place	Backkit_Flex	
	Signal Name	Pin #		Signal Name	Pin #
	GND	P1000-1		GND	P1001-1
	F_DISP_RW	P1000-2		GND	P1001-2
	PTT	P1000-3		VBUS1	P1001-3
	F_DISP_DATA_0	P1000-4		SSI_MACE_TX_DI N	P1001-4
	SIDE_1	P1000-5		BT_AVR_RESET	P1001-5
	F_DISP_DATA_1	P1000-6		SSI_RED_RX_MAC E	P1001-6
	SIDE_2	P1000-7		GND	P1001-7
	F_DISP_DATA_2	P1000-8		HIGH_SECURE_D ATA_MACE	P1001-8
	MONITOR	P1000-9		GPS_BT_32KHZ	P1001-9
	F_DISP_DATA_3	P1000-10		SECURE_HIGH_N ORM	P1001-10
	GND	P1000-11		GND	P1001-11
	F_DISP_DATA_4	P1000-12		SSI_BLACK_TX_M ACE	P1001-12
	GPIO_3_RTS_FILLSENSE	P1000-13		BT_PTT	P1001-13
	F_DISP_DATA_5	P1000-14		SSI_BLACK_RX	P1001-14
	GPIO_2_DM_RXDC_FILL DATA	P1000-15		BT_SPARE_1.8	P1001-15
	F_DISP_DATA_6	P1000-16		GND	P1001-16
	GPIO_1_DP_TXDC_FILLR EQ	P1000-17		ACC_SPKR_UNMU TE	P1001-17
	F_DISP_DATA_7	P1000-18		SSI_OPT_CLK	P1001-18
	GCAI_1WIRE_5V	P1000-19		AVR_STATUS_1.8V	P1001-19
	GND	P1000-20		GND	P1001-20

Table 7-12. Main Back kit flex connector to keypad board connector Interface Pin-Out (Continued)

Test Place	Backkit_Flex		Test Place	Backkit_Flex	
	Signal Name	Pin #		Signal Name	Pin #
	GPIO_4_CTS_KEYFAIL_F ILLCLK	P1000-21		USB_BOOT_1.8V	P1001-21
	F_DISP_RW_EN	P1000-22		V_EXT_1.85	P1001-22
	VBUS2	P1000-23		V_SW_3.60	P1001-23
	GND	P1000-24		VRTC	P1001-24
	VBUS2	P1000-25		BT_HOST_WAKEU P_1.8V	P1001-25
	F_DISP_DATA_CMD	P1000-26		V_SAFE	P1001-26
	GPIO_0	P1000-27		BT_WAKEUP_1.8V	P1001-27
	V_2.775D	P1000-28		KEYFAIL	P1001-28
	Ext_MIC_Neg_DP	P1000-29		BT_SHUTDOWN	P1001-29
	GND	P1000-30		OPT_SSI_SYNC	P1001-30
	Ext_Mic_Pos_DP	P1000-31		BT_UART_TX_1.8V	P1001-31
	MAIN_DISPLAY_LED1	P1000-32		MACE_WAKEUP	P1001-32
	Ext_SPKR_Neg_DP	P1000-33		BT_UART_RX_1.8 V	P1001-33
	MAIN_DISPLAY_LED2	P1000-34		MACE_RESET	P1001-34
	Ext_SPKR_Pos_DP	P1000-35		BT_UART_RTS_1.8 V	P1001-35
	MAIN_DISPLAY_LED3	P1000-36		OMAP_RESET	P1001-36
	GND	P1000-37		BT_UART_CTS_1.8 V	P1001-37
	MAIN_DISPLAY_LED4	P1000-38		TX_INHIBIT	P1001-38
	SPKR+	P1000-39		GND	P1001-39
	F_DISP_BD_ID	P1000-40		GND	P1001-40
	SPKR+	P1000-41		USB1_POS_DP	P1001-41
	GND	P1000-42		EXP_BRD_ID	P1001-42
	SPKR-	P1000-43		USB1_NEG_DP	P1001-43
	FREQ_SEL_0	P1000-44		4MHZ_MACE_CLK	P1001-44
	SPKR-	P1000-45		GND	P1001-45
	FREQ_SEL_1	P1000-46		GND	P1001-46
	MIC+	P1000-47		KP_COL_0	P1001-47



Table 7-12. Main Back kit flex connector to keypad board connector Interface Pin-Out (Continued)

Test Place	Backkit_Flex		Test Place	Backkit_Flex	
	Signal Name	Pin #		Signal Name	Pin #
	FREQ_SEL_2	P1000-48		V_SW_5	P1001-48
	MIC-	P1000-49		KP_COL_1	P1001-49
	FREQ_SEL_3	P1000-50		KP_ROW_0	P1001-50
	GND	P1000-51		KP_COL_2	P1001-51
	GND	P1000-52		KP_ROW_1	P1001-52
	SPEAKER_RED_1	P1000-53		KP_COL_3	P1001-53
	GND	P1000-54		KP_ROW_2	P1001-54
	SPEAKER_GREEN_1	P1000-55		KP_COL_4	P1001-55
	GND	P1000-56		KP_ROW_3	P1001-56
	SPEAKER_AMBER_1	P1000-57		KEYPAD_WHITE_LED	P1001-57
	TX_RX_LED_AMBER	P1000-58		KP_ROW_4	P1001-58
	SW_5+	P1000-59		GND	P1001-59
	TX_RX_LED_RED	P1000-60		GND	P1001-60
	GND	P1000-61			
	TX_RX_LED_GREEN	P1000-62			
	GND	P1000-63			
	GND	P1000-64			
	EMERG_BTN	P1000-65			
	ON_OFF_SWITCH	P1000-66			
	GND	P1000-67			
	VOLUME	P1000-68			
	GND	P1000-69			
	GND	P1000-70			

Table 7-13. Keypad board connector to mainboard Interface Pin-Out

Test Place	KeyBoard		Test Place	KeyBoard	
	Signal Name	Pin #		Signal Name	Pin #
chassis	GND	P1000-1	chassis	GND	P2001-1
none	F_DISP_RW	P1000-2	chassis	GND	P2001-2
C21	PTT	P1000-3	none	UNNAMED_1_C ONNJ60PIN_I67 1_X	P2001-3
none	F_DISP_DATA_0	P1000-4	none	SSI_MACE_TX_ DIN	P2001-4
C20	SIDE_1	P1000-5	none	UNNAMED_1_C ONNJ60PIN_I67 0_X	P2001-5
none	F_DISP_DATA_1	P1000-6	none	SSI_RED_RX_M ACE	P2001-6
C19	SIDE_2	P1000-7	chassis	GND	P2001-7
none	F_DISP_DATA_2	P1000-8	none	BLOCK_SSI_RE D	P2001-8
C18	MONITOR	P1000-9	none	32KHZ	P2001-9
none	F_DISP_DATA_3	P1000-10	none	MACE_SEC_CL R_MODE	P2001-10
chassis	GND	P1000-11	chassis	GND	P2001-11
none	F_DISP_DATA_4	P1000-12	none	SSI_BLACK_TX _MACE	P2001-12
R2007	GPIO_3_RTS_FILL SENSE	P1000-13	none	UNNAMED_1_C ONNJ60PIN_I66 6_X	P2001-13
none	F_DISP_DATA_5	P1000-14	none	SSI_BLACK_RX	P2001-14
E3	GPIO_2_DM_RXDC _FILLDATA	P1000-15	none	BT_SPARE_1.8	P2001-15
none	F_DISP_DATA_6	P1000-16	chassis	GND	P2001-16
E5	GPIO_1_DP_TXDC _FILLREQ	P1000-17	none	ACC_SPKR_UN MUTE_1.8	P2001-17
none	F_DISP_DATA_7	P1000-18	R2503	OPT_SSI_CLK	P2001-18
R2006	GCAI_1WIRE_5V	P1000-19	none	UNNAMED_1_C ONNJ60PIN_I66 3_X	P2001-19
chassis	GND	P1000-20	chassis	GND	P2001-20

Table 7-13. Keypad board connector to mainboard Interface Pin-Out (Continued)

Test Place	KeyBoard		Test Place	KeyBoard	
	Signal Name	Pin #		Signal Name	Pin #
R2005	GPIO_4_CTS_KEY FAIL_FILLCLK	P1000-21	none	UNNAMED_1_C ONNJ60PIN_I66 2_X	P2001-21
none	F_DISP_RW_EN	P1000-22	TP2005	VCC_1.85	P2001-22
D13	VBUS2	P1000-23	TP2007	VSW_3.6	P2001-23
chassis	GND	P1000-24	none	VRTC	P2001-24
none	VBUS2	P1000-25	none	BT_HOST_WAK EUP_1.8V	P2001-25
none	FDISP_DATA_CMD	P1000-26	none	VSAVE	P2001-26
R2004	GPIO_0	P1000-27	none	BT_WAKEUP_1. 8V	P2001-27
none	V_2.755D	P1000-28	none	KEYFAIL	P2001-28
C17	EXT_MIC_NEG_DP	P1000-29	none	BT_SHUTDOW N_1.8V	P2001-29
chassis	GND	P1000-30	R2513	OPT_SSI_FSYN C	P2001-30
R2003	EXT_MIC_POS_DP	P1000-31	none	BT_UART_TX_1 .8V	P2001-31
none	MAIN_DISPLAY_LE D1	P1000-32	none	MACE_WAKEU P	P2001-32
R2013	EXT_SPKR_POS_ DP	P1000-33	none	BT_UART_RX_1 .8V	P2001-33
none	MAIN_DISPLAY_LE D2	P1000-34	none	MACE_RESET	P2001-34
R2014	EXT_SPKR_NEG_ DP	P1000-35	none	BT_UART_RTS_ 1.8V	P2001-35
none	MAIN_DISPLAY_LE D3	P1000-36	none	OMAP_RESET_ OUT	P2001-36
chassis	GND	P1000-37	none	BT_UART_CTS_ 1.8V	P2001-37
none	MAIN_DISPLAY_LE D4	P1000-38	none	TX_INHIBIT	P2001-38
C2	SPKR+	P1000-39	chassis	GND	P2001-39
none	F_DISP_BD_ID	P1000-40	chassis	GND	P2001-40
none	SPKR+	P1000-41	none	UNNAMED_1_C ONNJ60PIN_I65 2_X	P2001-41

Table 7-13. Keypad board connector to mainboard Interface Pin-Out (Continued)

Test Place	KeyBoard		Test Place	KeyBoard	
	Signal Name	Pin #		Signal Name	Pin #
chassis	GND	P1000-42	R2531	EXP_BRD_TYP E	P2001-42
C4	SPKR-	P1000-43	none	UNNAMED_1_C ONNJ60PIN_I65 1_X	P2001-43
C6	FREQ_SEL_0	P1000-44	none	MACE_CLOCK	P2001-44
none	SPKR-	P1000-45	chassis	GND	P2001-45
C7	FREQ_SEL_1	P1000-46	chassis	GND	P2001-46
E6	MIC+	P1000-47	C22	KP_COL_A	P2001-47
C9	FREQ_SEL_2	P1000-48	TP2006	VCC5V	P2001-48
E2	MIC-	P1000-49	C24	KP_COL_B	P2001-49
C32	FREQ_SEL_3	P1000-50	C27	KP_ROW_A	P2001-50
chassis	GND	P1000-51	C26	KP_COL_C	P2001-51
chassis	GND	P1000-52	C28	KP_ROW_B	P2001-52
none	SPEAKER_RED_1	P1000-53	C23	KP_COL_D	P2001-53
chassis	GND	P1000-54	C29	KP_ROW_C	P2001-54
none	SPEAKER_GREEN _1	P1000-55	C25	KP_COL_E	P2001-55
chassis	GND	P1000-56	C30	KP_ROW_D	P2001-56
none	SPEAKER_AMBER _1	P1000-57	R19	KEYPAD_WHIT E_LED	P2001-57
C11	TX_RX_LED_AMBE R	P1000-58	C31	KP_ROW_E	P2001-58
E2003	SW_5+	P1000-59	chassis	GND	P2001-59
C12	TX_RX_LED_RED	P1000-60	chassis	GND	P2001-60
chassis	GND	P1000-61			
C13	TX_RX_LED_GREE N	P1000-62			
chassis	GND	P1000-63			
chassis	GND	P1000-64			
C34	EMERG_BTN	P1000-65			
C35	ON_OFF_SWITCH	P1000-66			
chassis	GND	P1000-67			

Table 7-13. Keypad board connector to mainboard Interface Pin-Out (Continued)

Test Place	KeyBoard		Test Place	KeyBoard	
	Signal Name	Pin #		Signal Name	Pin #
C36	VOLUME	P1000-68			
chassis	GND	P1000-69			
chassis	GND	P1000-70			

Table 7-14. Keypad board connector to front kit flex Interface Pin-Out

Test Place	KeyBoard	
	Signal Name	Pin #
chassis	GND	P2000-1
None	F_DISP_RW	P2000-2
C21	PTT	P2000-3
None	F_DISP_DATA_0	P2000-4
C20	SIDE_1	P2000-5
None	F_DISP_DATA_1	P2000-6
C19	SIDE_2	P2000-7
None	F_DISP_DATA_2	P2000-8
C18	MONITOR	P2000-9
None	F_DISP_DATA_3	P2000-10
chassis	GND	P2000-11
None	F_DISP_DATA_4	P2000-12
R2007	GPIO_3_RTS_FILLSENSE	P2000-13
None	F_DISP_DATA_5	P2000-14
E3	GPIO_2_DM_RXDC_FILLDATA	P2000-15
None	F_DISP_DATA_6	P2000-16
E5	GPIO_1_DP_TXDC_FILLREQ	P2000-17
None	F_DISP_DATA_7	P2000-18
R2006	GCAI_1WIRE_5V	P2000-19
chassis	GND	P2000-20
R2005	GPIO_4_CTS_KEYFAIL_FILLCLK	P2000-21
None	F_DISP_RW_EN	P2000-22

Table 7-14. Keypad board connector to front kit flex Interface Pin-Out (Continued)

Test Place	KeyBoard	
	Signal Name	Pin #
C2009	VBUS2	P2000-23
chassis	GND	P2000-24
None	VBUS2	P2000-25
None	F-DISP_DATA_CMD	P2000-26
R2004	GPIO_0	P2000-27
None	V_2.755D	P2000-28
E14	EXT_MIC_NEG_DP	P2000-29
None	OMAP_RESET_OUT	P2000-30
C16	EXT_MIC_POS_DP	P2000-31
None	MAIN_DISPLAY_LED1	P2000-32
R2013	EXT_SPKR_POS_DP	P2000-33
None	MAIN_DISPLAY_LED2	P2000-34
R2014	EXT_SPKR_NEG_DP	P2000-35
None	MAIN_DISPLAY_LED3	P2000-36
chassis	GND	P2000-37
None	MAIN_DISPLAY_LED4	P2000-38
C2	SPKR+	P2000-39
None	F_DISP_BD_ID	P2000-40
None	SPKR+	P2000-41
chassis	GND	P2000-42
C4	SPKR-	P2000-43
C6	FREQ_SEL_0	P2000-44
None	SPKR-	P2000-45
C7	FREQ_SEL_1	P2000-46
D5	MIC+	P2000-47
C9	FREQ_SEL_2	P2000-48
D7	MIC-	P2000-49
C32	FREQ_SEL_3	P2000-50
chassis	GND	P2000-51
None	VCC_1.85	P2000-52

Table 7-14. Keypad board connector to front kit flex Interface Pin-Out (Continued)

Test Place	KeyBoard	
	Signal Name	Pin #
None	SPEAKER_RED_1	P2000-53
None	NFC	P2000-54
None	SPEAKER_GREEN_1	P2000-55
chassis	GND	P2000-56
None	SPEAKER_AMBER_1	P2000-57
C11	TX_RX_LED_AMBER	P2000-58
E2003	SW_5+	P2000-59
C12	TX_RX_LED_RED	P2000-60
chassis	GND	P2000-61
C13	TX_RX_LED_GREEN	P2000-62
chassis	GND	P2000-63
chassis	GND	P2000-64
C34	EMERG_BTN	P2000-65
C35	ON_OFF_SWITCH	P2000-66
chassis	GND	P2000-67
C36	VOLUME	P2000-68
chassis	GND	P2000-69
chassis	GND	P2000-70

Table 7-15. Front kit connector Interface Pin-Out

Test Place	Front Kit Flex	
	Signal Name	Pin #
	Signal Name	Pin #
	GND	J1-1
	GND	J1-2
	SIDE_1	J1-3
	PTT	J1-4
	GND	J1-5
	GND	J1-6
	SIDE_2	J1-7
	MONITOR	J1-8
	GND	J1-9
	GND	J1-10
	GND	J1-G1
	GND	J1-G2
	GND	J1-G3
	GND	J1-G4

Test Place	Front Kit Flex	
	Signal Name	Pin #
	GND	J2-1
	EMERG_BTN	J2-2
	GND	J2-3
	GND	J2-4
	GND	J2-5
	SPEAKER_RED_1	J2-6
	GPIO_3_RTS_FILLSENSE	J2-7
	SPEAKER_GREEN_1	J2-8
	GPIO_2_DM_RXDC_FILLDATA	J2-9
	SPEAKER_AMBER_1	J2-10



Test Place	Front Kit Flex	
	Signal Name	Pin #
	GPIO_1_DP_TXDC_FILLREQ	J2-11
	SW_5+	J2-12
	GCAI_1WIRE_5V	J2-13
	SW_5+	J2-14
	GPIO_4_CTS_KEYFAIL_FILLCLK	J2-15
	TX_RX_LED_AMBER	J2-16
	GPIO_0	J2-17
	TX_RX_LED_RED	J2-18
	GND	J2-19
	TX_RX_LED_GREEN	J2-20
	EXT_MIC_NEG_DP	J2-21
	GND	J2-22
	EXT_MIC_POS_DP	J2-23
	MIC+	J2-24
	GND	J2-25
	MIC-	J2-26
	EXT_SPKR_POS_DP	J2-27
	GND	J2-28
	EXT_SPKR_NEG_DP	J2-29
	VBUS2	J2-30
	GND	J2-31
	VBUS2	J2-32
	NFC	J2-33
	GND	J2-34
	GND	J2-G1
	GND	J2-G2
	GND	J2-G3
	GND	J2-G4

Test Place	Front Kit Flex	
	Signal Name	Pin #
	GND	J3-1
	V_2.775D	J3-2
	F_DISP_RW	J3-3
	GND	J3-4
	F_DISP_DATA_1	J3-5
	F_DISP_DATA_3	J3-6
	F_DISP_DATA_5	J3-7
	F_DISP_DATA_7	J3-8
	GND	J3-9
	F_DISP_DATA_CMD	J3-10
	GND	J3-11
	SW_5+	J3-12
	MAIN_DISPLAY_LED3	J3-13
	F_DISP_BD_ID	J3-14
	GND	J3-15
	GND	J3-16
	MAIN_DISPLAY_LED4	J3-17
	MAIN_DISPLAY_LED2	J3-18
	MAIN_DISPLAY_LED1	J3-19
	OMAP_RESET	J3-20
	GND	J3-21
	F_DISP_RW_EN	J3-22
	GND	J3-23
	F_DISP_DATA_6	J3-24
	F_DISP_DATA_4	J3-25
	F_DISP_DATA_2	J3-26
	F_DISP_DATA_0	J3-27
	GND	J3-28
	V_EXT_1.85	J3-29
	GND	J3-30

Test Place	Front Kit Flex	
	Signal Name	Pin #
	GND	P1-1
	F_DISP_RW	P1-2
	PTT	P1-3
	F_DISP_DATA_0	P1-4
	SIDE_1	P1-5
	F_DISP_DATA_1	P1-6
	SIDE_2	P1-7
	F_DISP_DATA_2	P1-8
	MONITOR	P1-9
	F_DISP_DATA_3	P1-10
	GND	P1-11
	F_DISP_DATA_4	P1-12
	GPIO_3_RTS_FILLSENSE	P1-13
	F_DISP_DATA_5	P1-14
	GPIO_2_DM_RXDC_FILLDATA	P1-15
	F_DISP_DATA_6	P1-16
	GPIO_1_DP_TXDC_FILLREQ	P1-17
	F_DISP_DATA_7	P1-18
	GCAI_1WIRE_5V	P1-19
	GND	P1-20
	GPIO_4_CTS_KEYFAIL_FILLCLK	P1-21
	F_DISP_RW_EN	P1-22
	VBUS2	P1-23
	GND	P1-24
	VBUS2	P1-25
	F_DISP_DATA_CMD	P1-26
	GPIO_0	P1-27
	V_2.775D	P1-28
	EXT_MIC_NEG_DP	P1-29
	OMAP_RESET	P1-30

Test Place	Front Kit Flex	
	Signal Name	Pin #
	EXT_MIC_POS_DP	P1-31
	MAIN_DISPLAY_LED1	P1-32
	EXT_SPKR_POS_DP	P1-33
	MAIN_DISPLAY_LED2	P1-34
	EXT_SPKR_NEG_DP	P1-35
	MAIN_DISPLAY_LED3	P1-36
	GND	P1-37
	MAIN_DISPLAY_LED4	P1-38
	SPKR+	P1-39
	F_DISP_BD_ID	P1-40
LS1	SPKR+	P1-41
	GND	P1-42
LS1	SPKR-	P1-43
C3	FREQ_SEL_0	P1-44
	SPKR-	P1-45
C4	FREQ_SEL_1	P1-46
	MIC+	P1-47
C6	FREQ_SEL_2	P1-48
	MIC-	P1-49
C5	FREQ_SEL_3	P1-50
	GND	P1-51
	VCC_1.85	P1-52
	SPEAKER_RED_1	P1-53
	NFC	P1-54
	SPEAKER_GREEN_1	P1-55
	GND	P1-56
	SPEAKER_AMBER_1	P1-57
	TX_RX_LED_AMBER	P1-58
	SW_5+	P1-59
	TX_RX_LED_RED	P1-60
	GND	P1-61

Test Place	Front Kit Flex	
	Signal Name	Pin #
	TX_RX_LED_GREEN	P1-62
	GND	P1-63
	GND	P1-64
	EMERG_BTN	P1-65
C2	ON_OFF_SWITCH	P1-66
	GND	P1-67
VR6	VOLUME	P1-68
	GND	P1-69
	GND	P1-70

Table 7-16. GCAI flex connector Interface Pin-Out

Test Place	GCAI	
	Signal Name	Pin #
	GND	P1-1
	EMERG_BTN	P1-2
	GND	P1-3
	GND	P1-4
	GND	P1-5
	LIGHTBAR_RED	P1-6
	GCAI_RTS_GPIO3	P1-7
	LIGHTBAR_GREEN	P1-8
	GCAI_USB_N_GPIO2	P1-9
	LIGHTBAR_AMBER	P1-10
	GCAI_USB_P_GPIO1	P1-11
	V_SW_5	P1-12
	GCAI_ONE_WIRE	P1-13
	V_SW_5	P1-14
	GCAI_GPIO4_CTS	P1-15
	TX_RX_LED_AMBER	P1-16
	GCAI_GPIO0	P1-17

Table 7-16. GCAI flex connector Interface Pin-Out (Continued)

Test Place	GCAI	
	Signal Name	Pin #
	TX_RX_LED_RED	P1-18
	GND	P1-19
	TX_RX_LED_GREEN	P1-20
	GCAI_EXT_MIC_N	P1-21
	GND	P1-22
	GCAI_EXT_MIC_P	P1-23
	UNNAMED_1_CONNP30PIN4GND_I168_X	P1-24
	GND	P1-25
	UNNAMED_1_CONNP30PIN4GND_I166_X	P1-26
	GCAI_EXT_SPKR_P	P1-27
	GND	P1-28
	GCAI_EXT_SPKR_N	P1-29
	GCAI_VBUS_5V	P1-30
	GND	P1-31
	GCAI_VBUS_5V	P1-32
	UNNAMED_1_CONNP30PIN4GND_I159_X	P1-33
	GND	P1-34
	GND	P1-G1
	GND	P1-G2
	GND	P1-G3
	GND	P1-G4

Table 7-17. PTT flex connector Interface Pin-Out

Test Place	PTT	
	Signal Name	Pin #
	GND	P1-1
	GND	P1-2
	CONN_SB1	P1-3
	CONN_INT_PTT	P1-4
	GND	P1-5
	GND	P1-6
	CONN_SB2	P1-7
	MONITOR	P1-8
	GND	P1-9
	GND	P1-10
	GND	P1-G1
	GND	P1-G2
	GND	P1-G3
	GND	P1-G4

### 7.1.3 APX 2000/ APX 4000/ APX 4000Li and APX 2000/ APX 4000 (Two Knobs)

Table 7-18. Overall GPIO pin functions

Signal Name	Description	Pin or Ball #	Active State	SW Initialized		HW Reset		
				Direction	*PU	State	Direction	*PU or PD
NC	NC	M8		Output		0	Output	
codec_cs	DSP SPI chip select for TI dual CODEC	Y1	0	Output		1	Output	
abacus_cs	DSP SPI chipselect for Abacus IC	L3	0	Output		0	Output	
trident_cs	DSP SPI chipselect for Trident IC	V6	0	Output		0	Output	
synthesizer_lock	RF synthesizer lock detect	V15	1=Lock	Input	None		Input	None
f2_timer_dmcs	Timer output compare for DMCS or SYNCB	M20	1	Output			Input	Pull-down
mako_tx_rx	Trigger for Mako DAC ramp	L14	1=TX	Output			*Input	None
On_Off_Switch**	Radio On_Off detection	G19	0	Output		0	Output	
option_spi_cs	Option board SPI chip select	W9	0	Output		0	Output	
dac_cs	RF DAC chip select	T19	0	Output			Input	Pull-down
push_to_talk	Push to talk button input	T20	0	Input	None		Input	Pull-down
mako_intx	Mako main interrupt	P15	0	Input	None		Input	None
mako_usb_intx	Mako USB interrupt	AA9	0	Input	None		Input	Pull-down
mako_option_intx	Mako Option interrupt	Y12	0	Input	None		Input	None
	Unused and Unwired OMAP Pin	M14		Input	Pull-down		Input	Pull-down
top_display_cs	Top LCD SPI chip select	P3	0	Output		1	Output	
	Unused and Unwired OMAP Pin	V19		Output		0	Output	
mako_cs	Mako IC SPI chip select	N15	1	Output			Input	Pull-down



Table 7-18. Overall GPIO pin functions (Continued)

Signal Name	Description	Pin or Ball #	Active State	SW Initialized		HW Reset		
				Direction	*PU	State	Direction	*PU or PD
mortable	Specifies Mobile or Portable hardware	W13	0=Portable	Input	None	0	Output	
gcai_gpio3	GPIO3	AA15		Input	None	0	Output	
gcai_gpio4	GPIO4	R14		Input	None		Input	Pull-down
bluetooth_ptt	PTT signal from Bluetooth AVR	Y5	0=Pressed	Input	Pull-up		Input	Pull-down
f2_timer_input_capture	"Receives one of three timing signals mux'ed through CPLD - Abacus Sync, DMCS, Ramp DAC Trigger.	"P20		Input	Pull-down		Input	Pull-down
bt_avr_status	AVR status read by OMAP	P18		Input	Pull-up		Input	Pull-down
enc_wakeup	MACE encryption wakeup	A6	1	Output		1	Output	
enc_reset	MACE encryption reset	B6	0	I/O	Pull-up	1	I/O	Pull-up
5V_pwm_en	Forces SW5 to PWM	P14	1	Output	Pull-up	0	Output	Pull-up
gcai_gpio2	GPIO2	C13		Input	None		Input	None
gcai_gpio1	GPIO1	C11		Input	None		Input	None
gcai_gpio0	GPIO0	M7		Input	None		Input	None
gcai_vbus_i_limit	Current limit select for GCAI VBUS	C6	1=500mA	Output		0	Output	
f2_paramp_mon	Factory use to test F2 transmit timing. Allows TX/RX signal to appear on GCAI GPIO3.	C5	1=Factory Test	Output	Pull-up	0	Output	Pull-up
top_disp_data_ctrl	Select for data or control on top display(Not Used in WWP)	P12	1=data	Output		0	Output	
top_display_reset	Reset for color front display( Not Used in WWP)	M12	0	Output		1	Output	

Table 7-18. Overall GPIO pin functions (Continued)

Signal Name	Description	Pin or Ball #	Active State	SW Initialized		HW Reset		
				Direction	*PU	State	Direction	*PU or PD
	Unused and Unwired OMAP Pin	N13		Output		0	Output	
	Unused and Unwired OMAP Pin	M14		Output		0	Output	
	Unused and Unwired OMAP Pin	N14		Output		0	Output	
gps_shutdown	Shutdown to GPS	D12	0	Output		0	Output	
rf_reset	Reset to RF board	A8	0	Output		0	Output	
	Unused and Unwired OMAP Pin	B7		Output		0	Output	
	Unused and Unwired OMAP Pin	B8		Output		1	Output	
		C7	0	Output	None	1	Output	None
	Unused and Unwired OMAP Pin	J2		Input	None		Input	None
	Unused and Unwired OMAP Pin	M8		Input	None		Input	None
bt_usb_boot	Bluetooth 'boot' signal	P8	0	Output	None		Input	None
bt_avr_reset	Bluetooth AVR32 Reset signal	M13	0	Output	None		Input	
key_fail_switch	Enables keyload path for MACE secure.	A12	1	Output		0	Output	
NC	Not Used	M6	TBD	Input	Pul-lup		Input	None
NC	Not Used	N11		Input	None		Input	3
NC	Not Used	K14		Input	None		Input	None
NC	Not Used	J13		Input	None		Input	None
NC	Not Used	K13		Input	None		Input	None
emergency	Emergency pushbutton	N7	0=Pressed	Input	Pul-lup		Input	Pul-lup
NC	NC	N6		Input	Pul-lup		Input	Pul-lup
NC	NC	N8		Input	Pul-lup		Input	Pul-lup

Table 7-18. Overall GPIO pin functions (Continued)

Signal Name	Description	Pin or Ball #	Active State	SW Initialized		HW Reset		
				Direction	*PU	State	Direction	*PU or PD
sb2	Side button #2	N5	0=Pressed	Input	Pul-lup		Input	Pul-lup
sb1	Side button #1	M5	0=Pressed	Input	Pul-lup		Input	Pul-lup
monitor	Monitor button	P11	0=Pressed	Input	Pul-lup		Input	Pul-lup
cpld_ver4	CPLD version identifier bit 4	(REG)		Register			Register	
cpld_ver3	CPLD version identifier bit 3	(REG)		Register			Register	
cpld_ver2	CPLD version identifier bit 2	(REG)		Register			Register	
cpld_ver1	CPLD version identifier bit 1	(REG)		Register			Register	
cpld_ver0	CPLD version identifier bit 0	(REG)		Register			Register	
board_id8	Controller Board ID bit 8	H12		Input	Pul-lup		Input	Pul-lup
board_id7	Controller Board ID bit 7	H13		Input	Pul-lup		Input	Pul-lup
board_id6	Controller Board ID bit 6	G13		Input	Pul-lup		Input	Pul-lup
board_id5	Controller Board ID bit 5	F13		Input	Pul-lup		Input	Pul-lup
board_id4	Controller Board ID bit 4	D13		Input	Pul-lup		Input	Pul-lup
board_id3	Controller Board ID bit 3	E13		Input	Pul-lup		Input	Pul-lup
board_id2	Controller Board ID bit 2	C14		Input	Pul-lup		Input	Pul-lup
board_id1	Controller Board ID bit 1	D14		Input	Pul-lup		Input	Pul-lup
board_id0	Controller Board ID bit 0	F14		Input	Pul-lup		Input	Pul-lup

Table 7-18. Overall GPIO pin functions (Continued)

Signal Name	Description	Pin or Ball #	Active State	SW Initialized		HW Reset		
				Direction	*PU	State	Direction	*PU or PD
none	OMAP GPIO1 determines default state of some EMIFS pins. Latched on rising edge of PWR_ON_RESET. Pulled low on PCB	R19		Input	Pull-down	0	Input	Pull-down
none	"Unused, defaults to UART2.BCLK in reset mode 0. Pulldown on PCB	"Y4		Output	None	0	Output	None
omap_mpu_boot	Pin pulled high on PCB to select external boot on EMIFS CS3 (flash memory)	J20		Input	None	1	Input	None
reset_mode	Determines reset mode of OMAP. Latched on rising edge of PWR_ON_RESET. Pulled low on PCB (mode 0).	P12		Input	None	0	Input	None
mako_resetx	"Master cold reset input for entire 1710 chip, controlled by Mako IC	"R12	0	Input	None		Input	None
mako_resetx	"MPU (ARM9) subsystem reset input, tied to PWRON_RESET (R12) on PCB	"U20	0	Input	None		Input	None
omap_reset	"Reset output from OMAP used for CODEC, CPLD, Front Display, Lighting Controllers, MACE Tamper ckt.	"AA20	0	Output	None	0	Output	None
RSW_Int**	Rotary Interrupt to OMAP	Y10		Input	Pull-down		Input	Pull-down
RSW_A**	Rotary knob input to OMAP	V11		Input	Pull-down		Input	Pull-down
RSW_B**	Rotary knob input to OMAP	R11		Input	Pull-down		Input	Pull-down

Table 7-18. Overall GPIO pin functions (Continued)

Signal Name	Description	Pin or Ball #	Active State	SW Initialized		HW Reset		
				Direction	*PU	State	Direction	*PU or PD
NC	NC	R18		Input	Pull-down		Input	Pull-down
NC	NC	Y8		I/O	Pull-up		Input	Pull-down
NC	NC	W8		I/O	Pull-up		Input	Pull-down
NC	NC	V8		I/O	Pull-up		Input	Pull-down
NC	NC	W15		I/O	Pull-up		Input	Pull-down
NC	NC	R10		I/O	Pull-up		Input	Pull-down
uart1_tx	UART1 Serial Transmit Data	Y14		Output	None	0	Output	Pull-down
uart1_rx	UART1 Serial Receive Data	V14		Input	Pull-up		Input	Pull-down
uart1_rts	UART1 Request To Send (output)	AA15		Output	None	0	Output	Pull-down
uart1_cts	UART1 Clear To Send (input)	R14		Input	Pull-up		Input	Pull-down
uart3_tx	UART3 Serial Transmit Data	M18		Output	None	0	Output	Pull-down
uart3_rx	UART3 Serial Receive Data	L14		Input	Pull-up		Input	Pull-down
usb1_txen	USB1 Transmit Enable	W16	0	Output	None		Input	None
usb1_data	USB1 Bidirectional Data	W14		I/O	None	0	Output	Pull-down
usb1_se0	USB1 Bidirectional Single Ended Zero	R13		I/O	None	U	Output	Pull-down
usb0_txen	USB0 Transmit Enable	W4	0	Output	None	1	Output	Pull-down
usb0_data	USB0 Bidirectional Data	P9		I/O	None		Input	None
usb0_se0	USB0 Bidirectional Single Ended Zero	R8		I/O	None		Input	None
ssi_omap_clock	SSI Clock into OMAP	G21		Input	None		Input	None

Table 7-18. Overall GPIO pin functions (Continued)

Signal Name	Description	Pin or Ball #	Active State	SW Initialized		HW Reset		
				Direction	*PU	State	Direction	*PU or PD
ssi_omap_sync	SSI Sync into OMAP	H15		Input	None		Input	None
ssi_omap_txd	SSI Serial Data from CODEC	H20		Input	None		Input	Pull-down
ssi_omap_rxd	SSI Serial Data to CODEC	H18		Output	None	0	Output	Pull-down
spi_arm_clk	ARM SPI Clock from OMAP	U19		I/O	Pull-down		Input	None
spi_arm_mosi	ARM SPI Data from OMAP	W21		I/O	Pull-down	0	Output	Pull-down
spi_arm_miso	ARM SPI Data into OMAP	U18		Input	Pull-down		Input	Pull-down
spi_dsp_clk	DSP SPI Clock from OMAP	N14		I/O	Pull-down		Input	None
spi_dsp_mosi	DSP SPI Data from OMAP	P14		Output	Pull-down		Input	Pull-down
spi_dsp_miso	DSP SPI Data into OMAP	AA17		Input	Pull-down		Input	Pull-down
gps_uart_tx	UART Data from OMAP to GPS IC	M18		Output	None	0	Output	Pull-down
gps_uart_rx	UART Data from GPS IC to OMAP	R9		Input	Pull-up		Input	Pull-down
16.8_mhz_clk	Timer Reference Clock Input	N18		Input	None		Input	Pull-down
trident_ssi[0]	Transmit SSI Clock from RF Board	Y6		Input	Pull-down		Input	Pull-down
trident_ssi[1]	Transmit SSI Frame Sync from RF Board	W7		Input	Pull-down		Input	Pull-down
trident_ssi[2]	Transmit SSI Data from OMAP	AA5		Output	Pull-down	0	Output	Pull-down
abacus_ssi[0]	Receive SSI Clock from RF Board	V7		I/O	Pull-down		Input	None
abacus_ssi[1]	Receive SSI Frame Sync from RF Board	W6		I/O	Pull-down		Input	None
abacus_ssi[2]	Receive SSI Data from RF Board	P10		Input	Pull-down		Input	Pull-down
scl	I2C Clock	T18		I/O	None		Input	None

Table 7-18. Overall GPIO pin functions (Continued)

Signal Name	Description	Pin or Ball #	Active State	SW Initialized		HW Reset		
				Direction	*PU	State	Direction	*PU or PD
sda	I2C Data	V20		I/O	None		Input	None
rtck	JTAG Clock from Controller	Y17		I/O	None	U	Unknown	None
tck	JTAG Clock from JTAG box to Controller	W18		Input	None		Input	Pull-down
ntrst	JTAG Reset from JTAG box	Y18		Input	None		Input	
omap_tms	JTAG Test Mode Select from JTAG box	V17		Input			Input	Pull-down
omap_tdo	JTAG Data out from Controller	AA19		Output		0	Output	None
tdi	JTAG Data in from JTAG box to Controller	Y19		Input			Input	Pull-down
nemu0	"Emulation pin 0, not used, pulled high on PCB	"V16		I/O			Input	Pull-up
nemu1	"Emulation pin 1, not used, pulled high on PCB	"W17		I/O			Input	Pull-up

Note:

- \* PU = Pull Up
- \* PD = Pull Down
- \*\* = Not applicable to APX 2000/ APX 4000 (Two Knobs)

Table 7-19. Primary IC Reference Designator

Primary IC	Reference Designator	Component Location
OMAP 1710	U6302	MAIN BOARD (top-side)
DDR memory	U6301	MAIN BOARD (top-side)
FLASH	U6304	MAIN BOARD (top-side)
CPLD	U6101	MAIN BOARD (top-side)
Audio Codec	U6405	MAIN BOARD (top-side)
Front Lighting controller	U2204	MAIN BOARD (top-side)
MAKO	U6501	MAIN BOARD (bottom-side)
Top Lighting controller	U2201	MAIN BOARD (bottom-side)
Class D Audio PA audio controller	U2101	MAIN BOARD (bottom-side)
MACE	U2510	KEYPAD BOARD (bottom-side)
BLUETOOTH & GPS combination IC	U2401	MAIN BOARD (bottom-side)
BlueTooth AVR processor	U2415	KEYPAD BOARD (bottom-side)
Low Frequency (LF) antenna	L2407	FPC
SDRAM	U2413	KEYPAD BOARD (bottom-side)
Accelerometer	U2416	KEYPAD BOARD (bottom-side)
Battery contact springs	M101	MAIN BOARD (bottom-side)
VCO (VHF)	Q3227	MAIN BOARD (bottom-side)
VCO (VHF)	Q3267	MAIN BOARD (bottom-side)
VCO (UHF1)	Q3123	MAIN BOARD (bottom-side)
VCO (UHF1)	Q3156	MAIN BOARD (bottom-side)
VCO (UHF2)	Q3123	MAIN BOARD (bottom-side)
VCO (UHF2)	Q3156	MAIN BOARD (bottom-side)
VCO (7800)	Q3038	MAIN BOARD (bottom-side)
VCO (7800)	Q3062	MAIN BOARD (bottom-side)
VCO (7800)	Q3039	MAIN BOARD (bottom-side)
VCO (900)	Q3038	MAIN BOARD (bottom-side)
VCO (900)	Q3062	MAIN BOARD (bottom-side)
PA Final stage device	Q1001	MAIN BOARD (bottom-side)
Mixer	U507	MAIN BOARD (top-side)
Trident	U702	MAIN BOARD (top-side)
Abacus III	U601	MAIN BOARD (top-side)



## Chapter 8 Schematics, Boards Overlays, and Parts Lists

This chapter contains the schematics, board overlays, and parts lists for the APX 2000/ APX 4000/ APX 1000 (900 MHz) radio. Use them in conjunction with the theory of operation and the troubleshooting procedures, charts, and waveforms to isolate a problem to the component level.

When schematics are viewed on line or as a PDF file, colors can be seen that denote power and signal paths. The red color denotes voltage paths, blue denotes the receive path, and green denotes the transmit path.

The following tables list the pages where the schematics and board overlays for the APX 2000/ APX 4000/ APX 1000 (900 MHz) radio are found.

### 8.1 List of Transceiver Schematics and Board Overlays

Table 8-1. List of Transceiver Schematics and Board Overlays

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<b>Keypad Board (APX 2000/ APX 4000 (Two Knobs)) : PC000356A02 (Model 2) PC000356A01 (Model 3)</b>	
Keypad Board Overall Circuit Schematic (Expanded)	8-411
Keypad Matrix Circuit (Expanded)	8-412
GPS Bluetooth Circuit	8-413
MACE Circuit	8-414
Keypad Board Layout – Top Side	8-415
Keypad Board Layout – Bottom Side	8-416

## Notes

## 8.2 Transceiver (RF) Boards: VHF (84012320001 / PC000352A01)

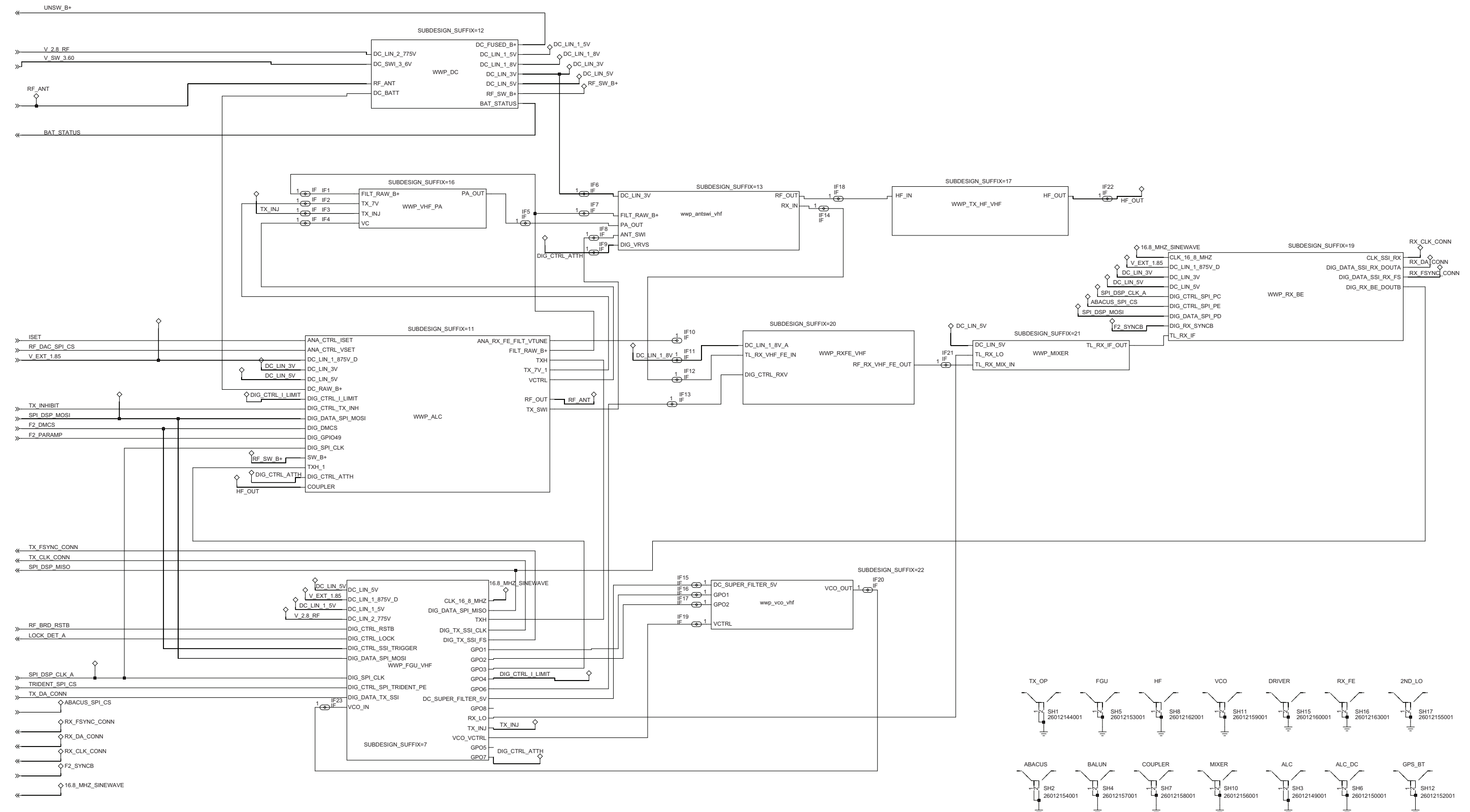


Figure 8-1. Transceiver (RF) Mainboard Overall Schematic (84012320001)

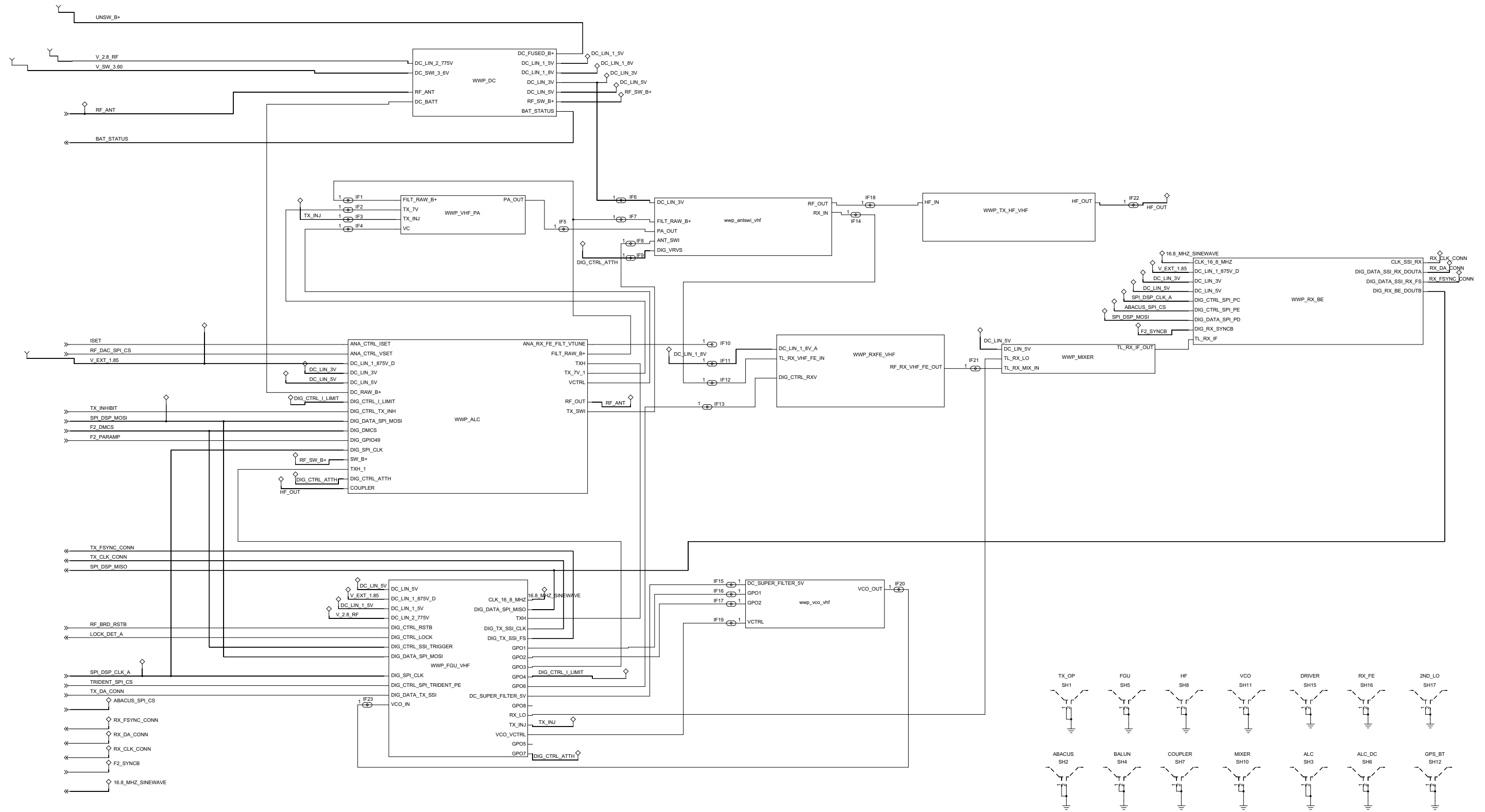


Figure 8-2. Transceiver (RF) Mainboard Overall Schematic (PC000352A01) – 1 of 2

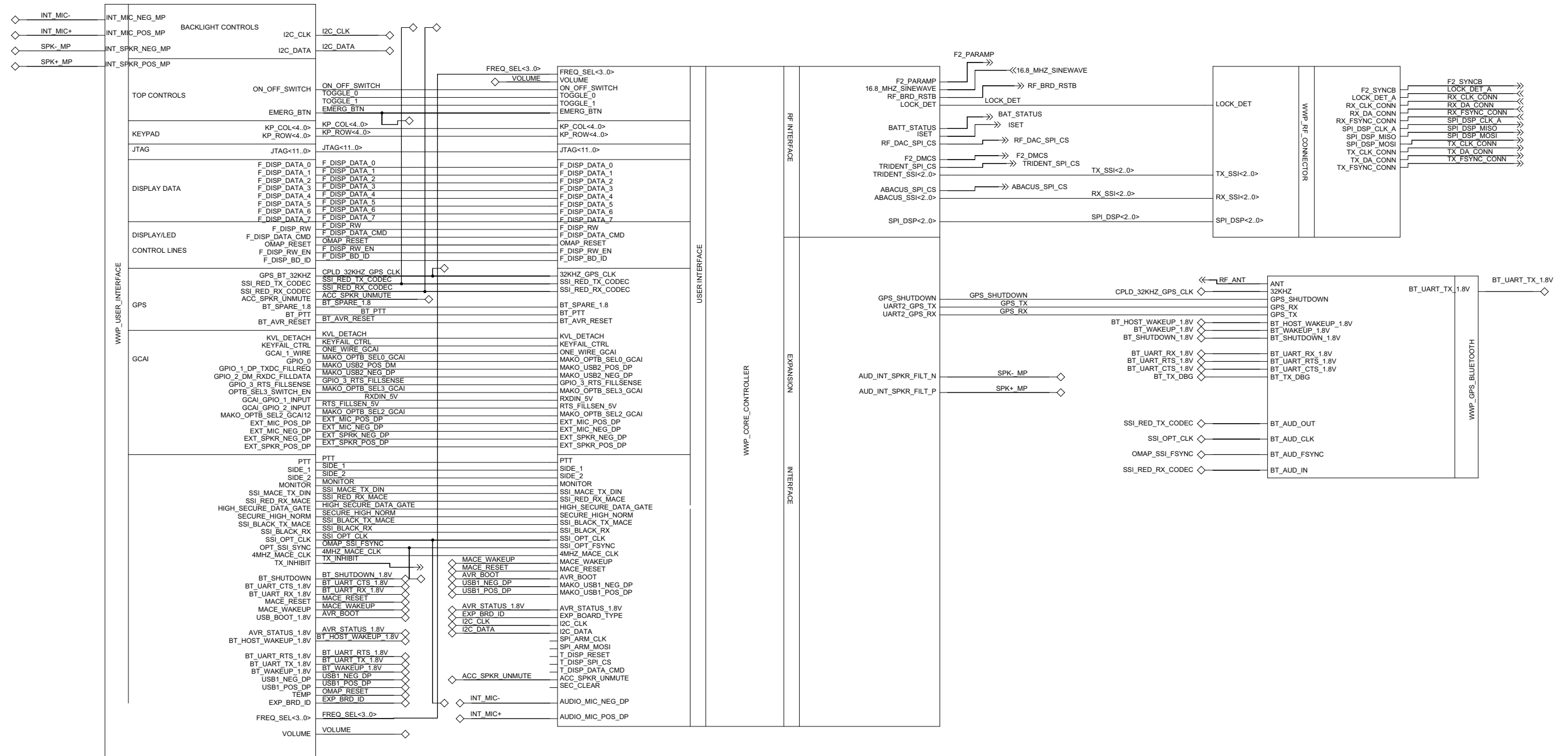


Figure 8-3. Transceiver (RF) Mainboard Overall Schematic (PC000352A01) – 2 of 2

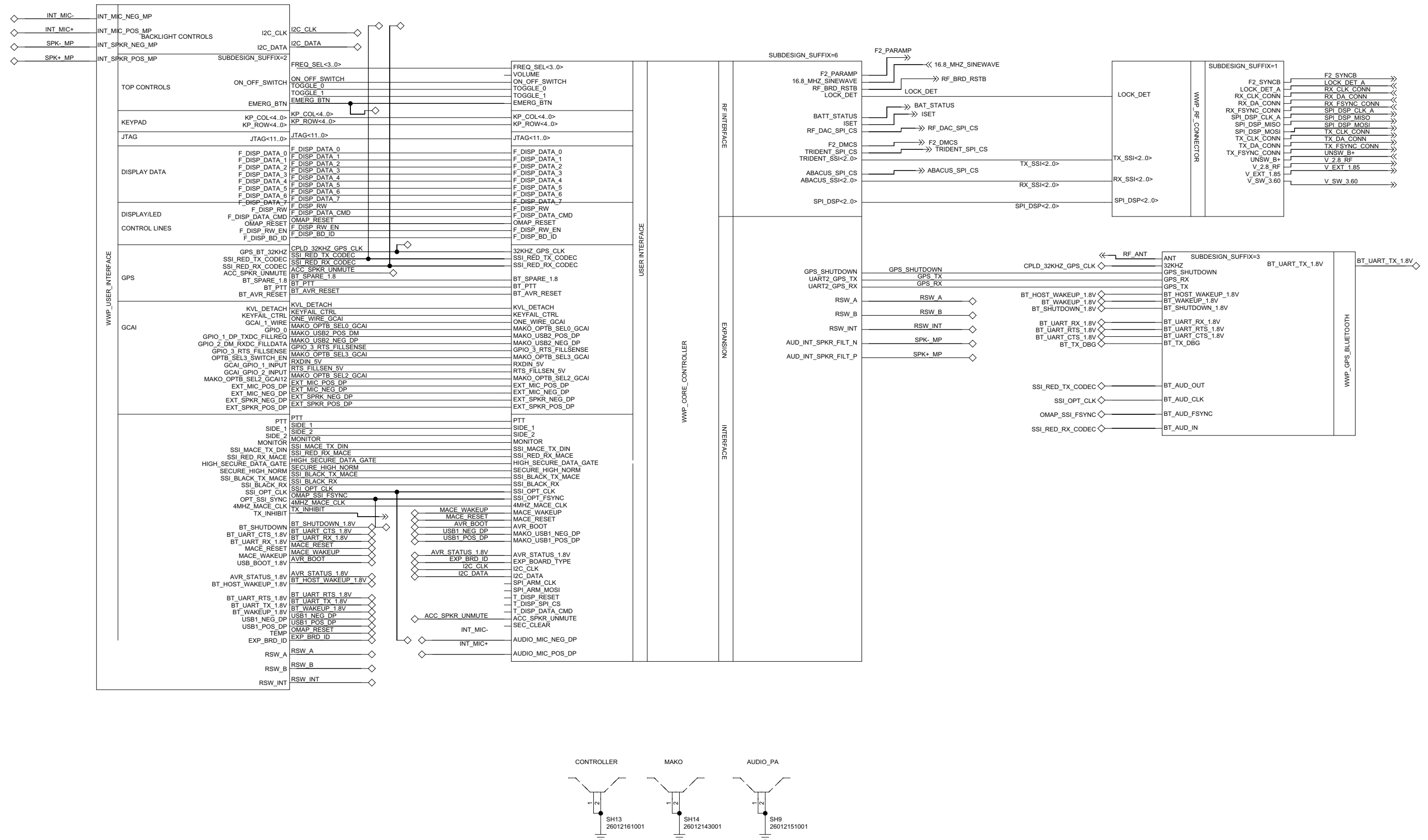


Figure 8-4. Controller Mainboard Circuit



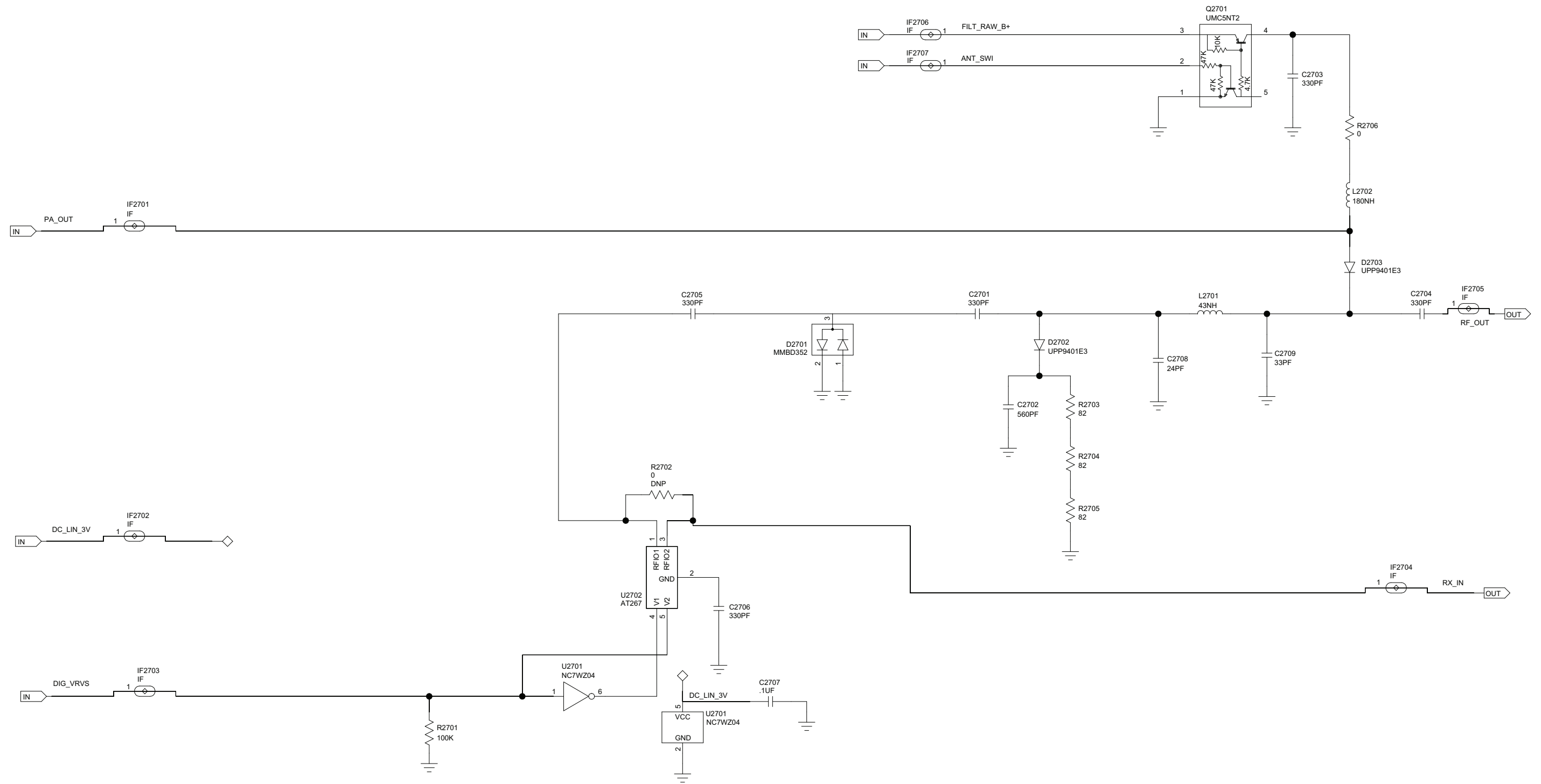


Figure 8-5. ANTSWI Circuit

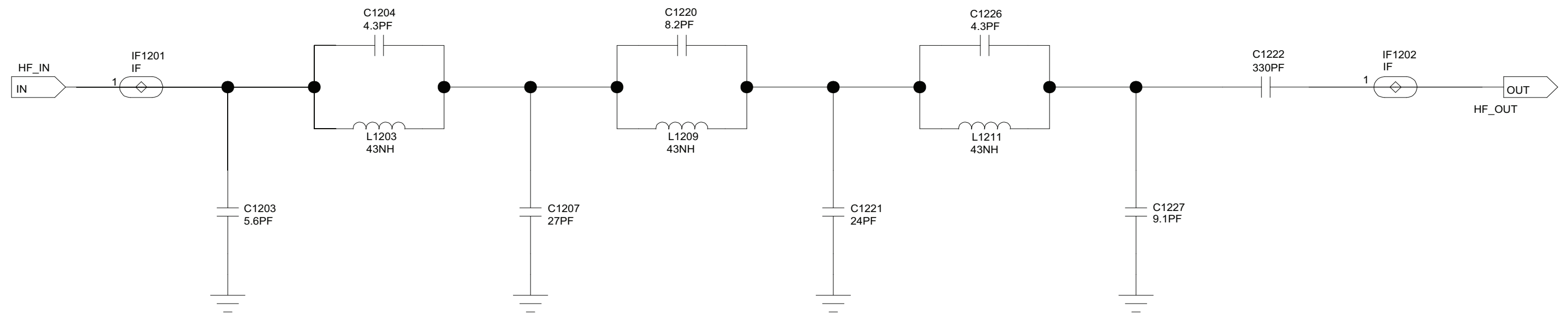


Figure 8-6. TX HF Circuit

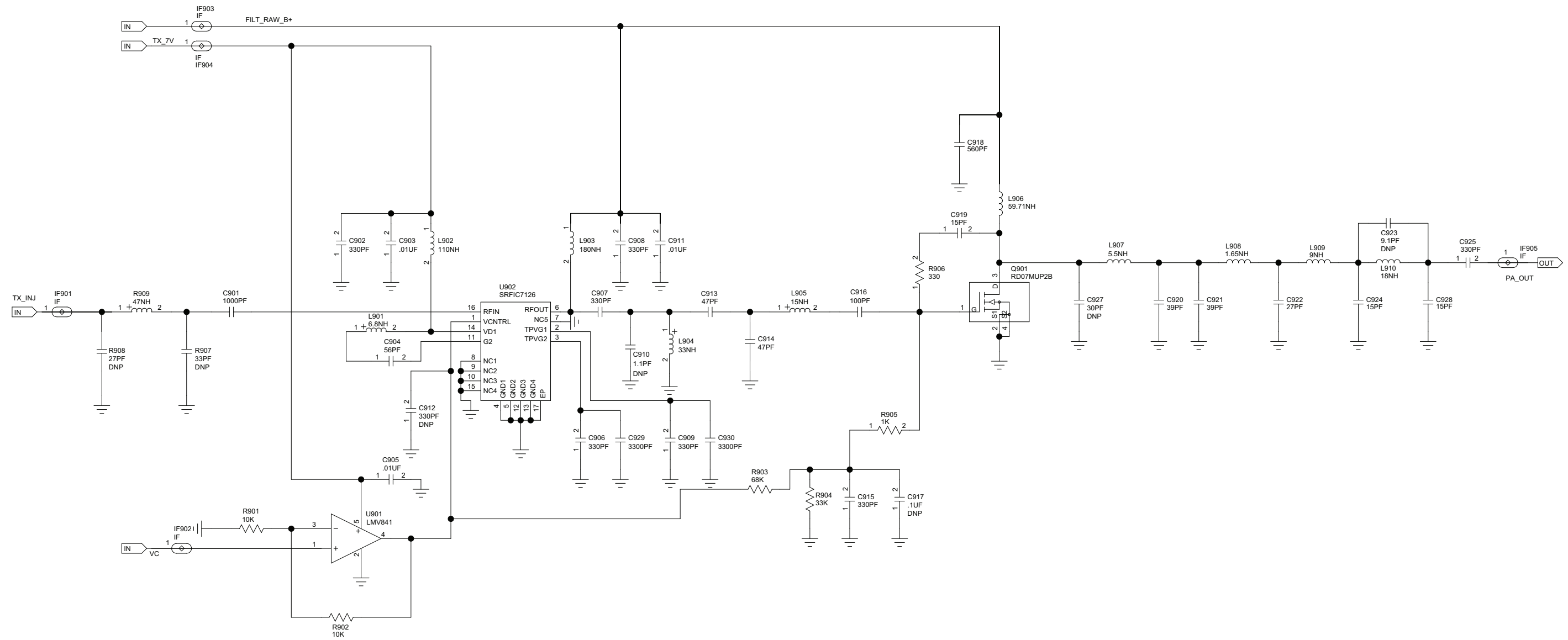


Figure 8-7. Power Amplifier (PA) Circuit

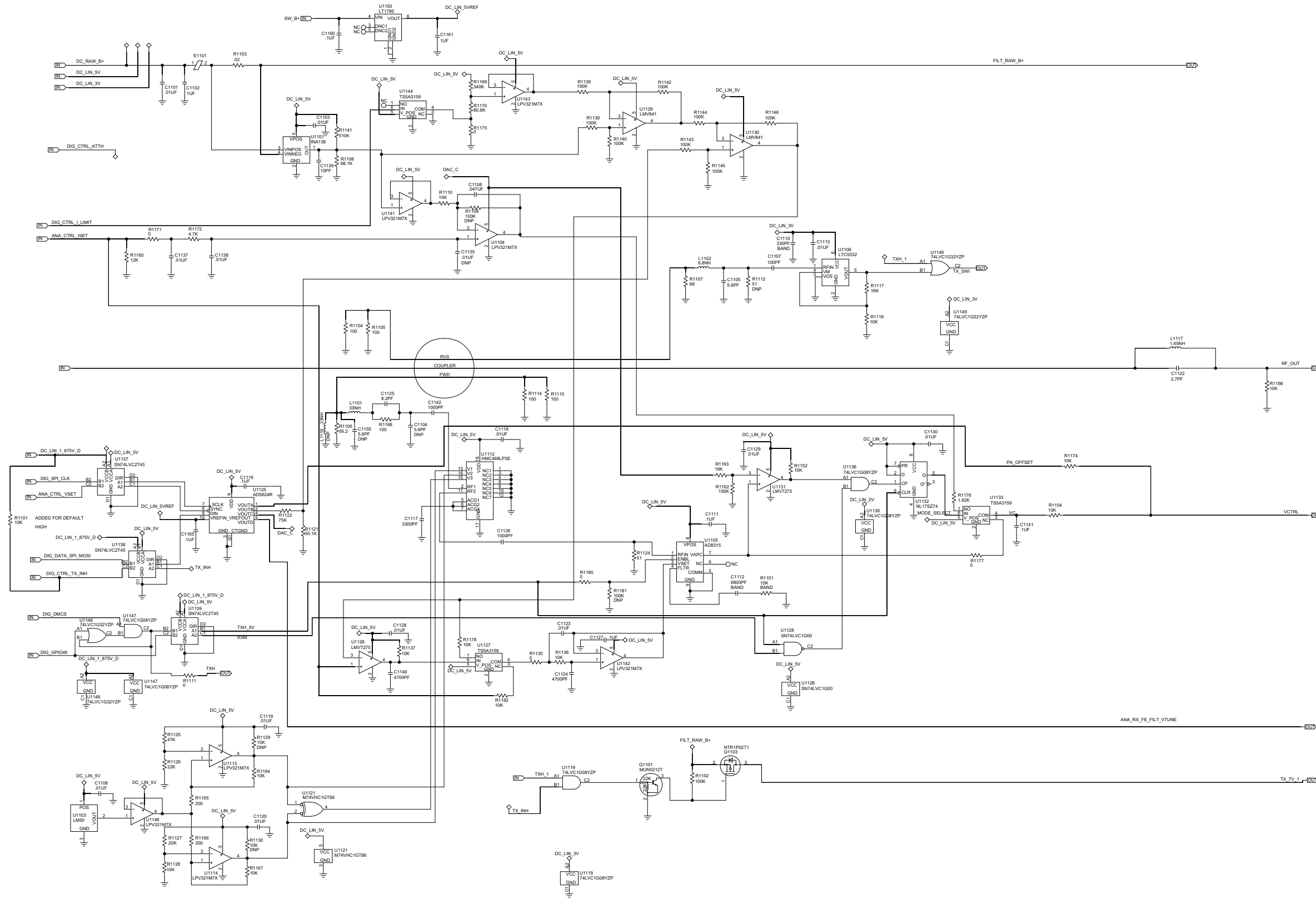


Figure 8-8. Automatic Level Control Circuit

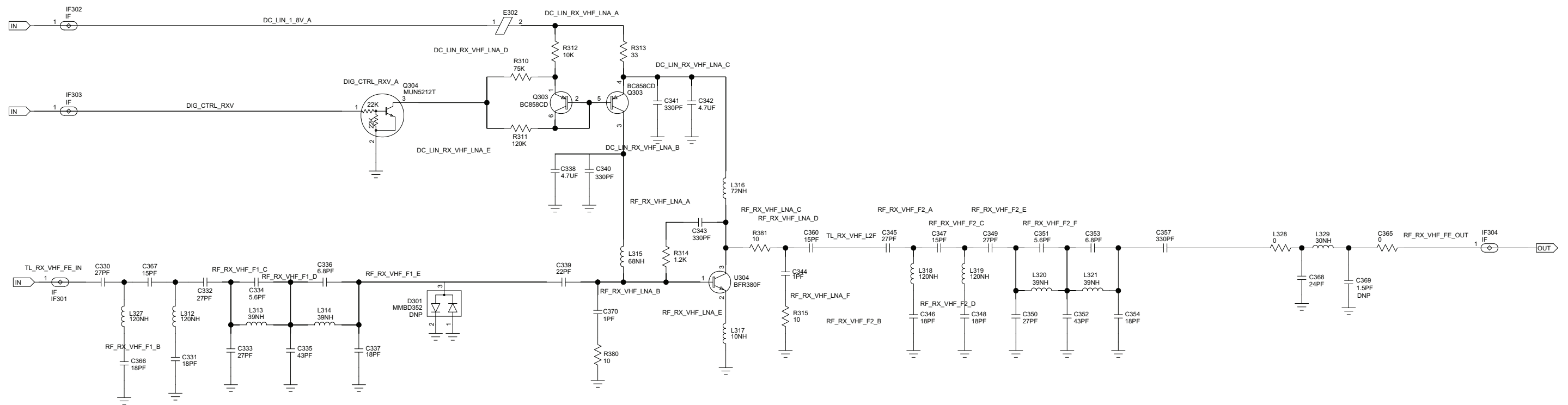


Figure 8-9. Receiver Front End Circuit

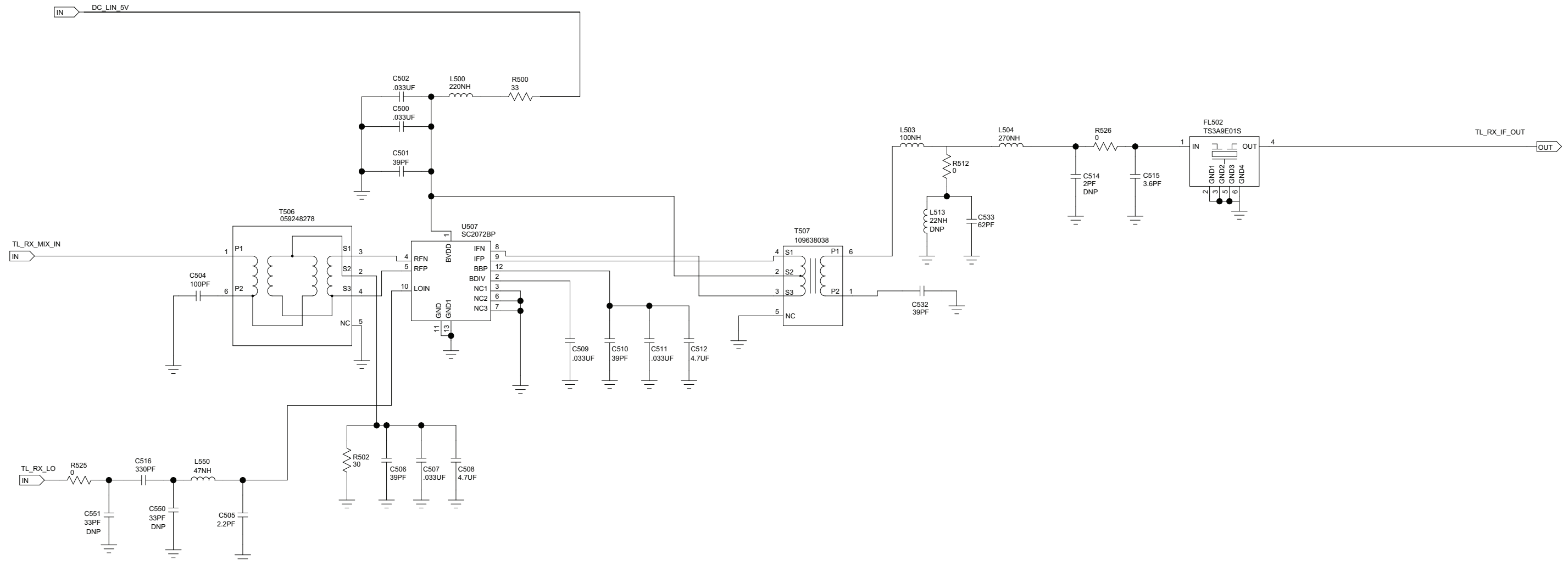


Figure 8-10. Receiver Back End Circuit – 1 of 2

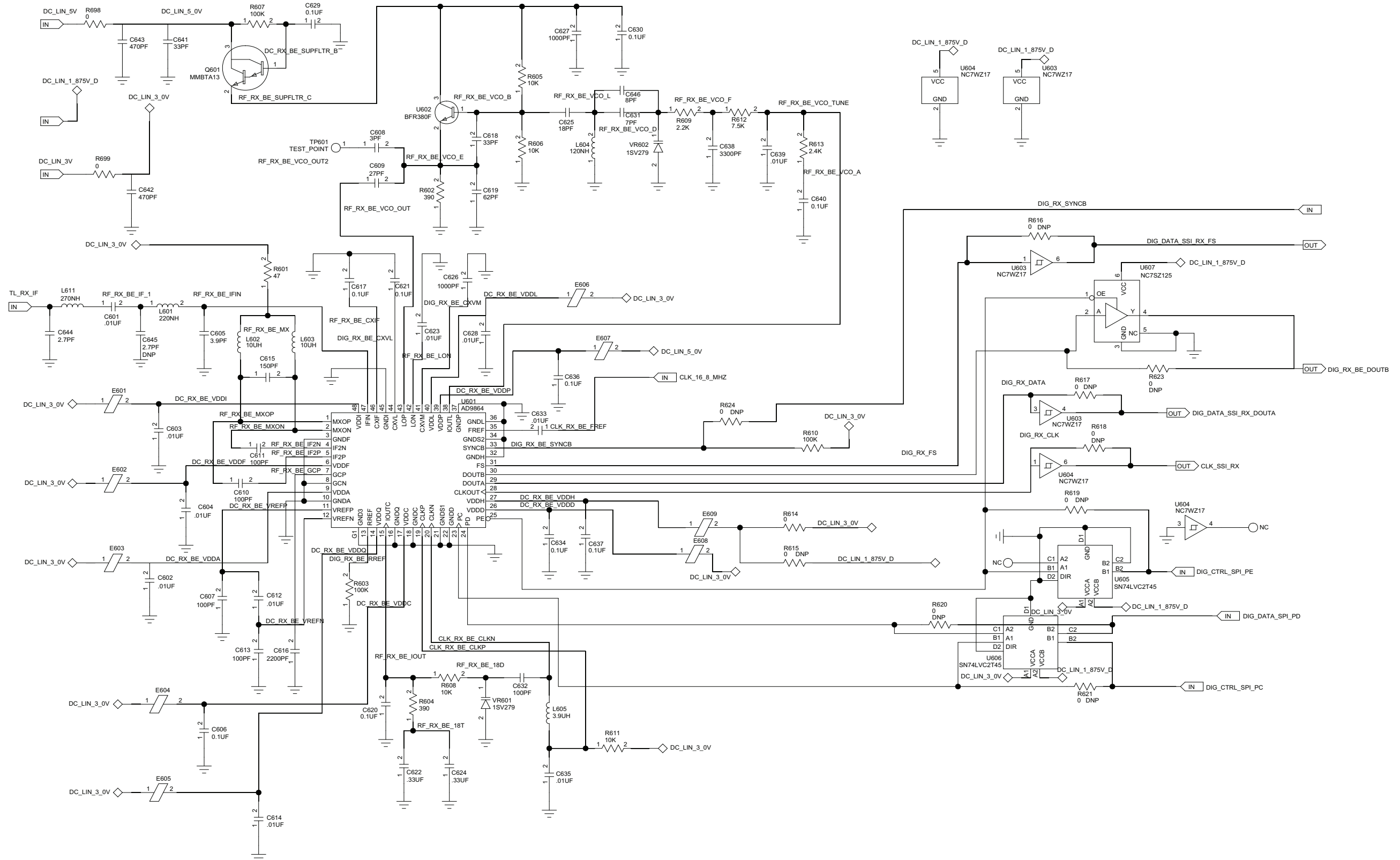


Figure 8-11. Receiver Back End Circuit – 2 of 2

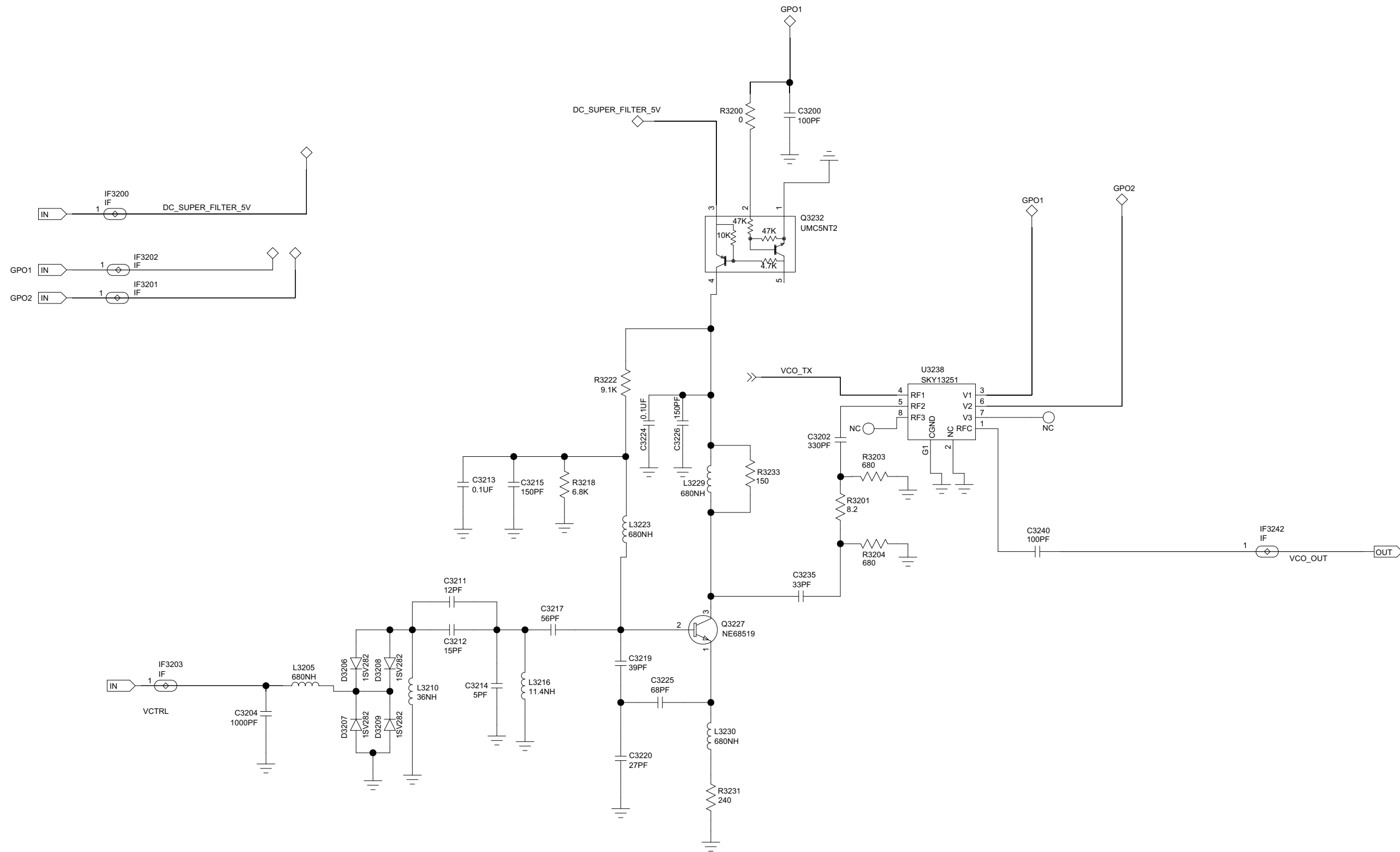


Figure 8-12. Receiver VCO Circuit



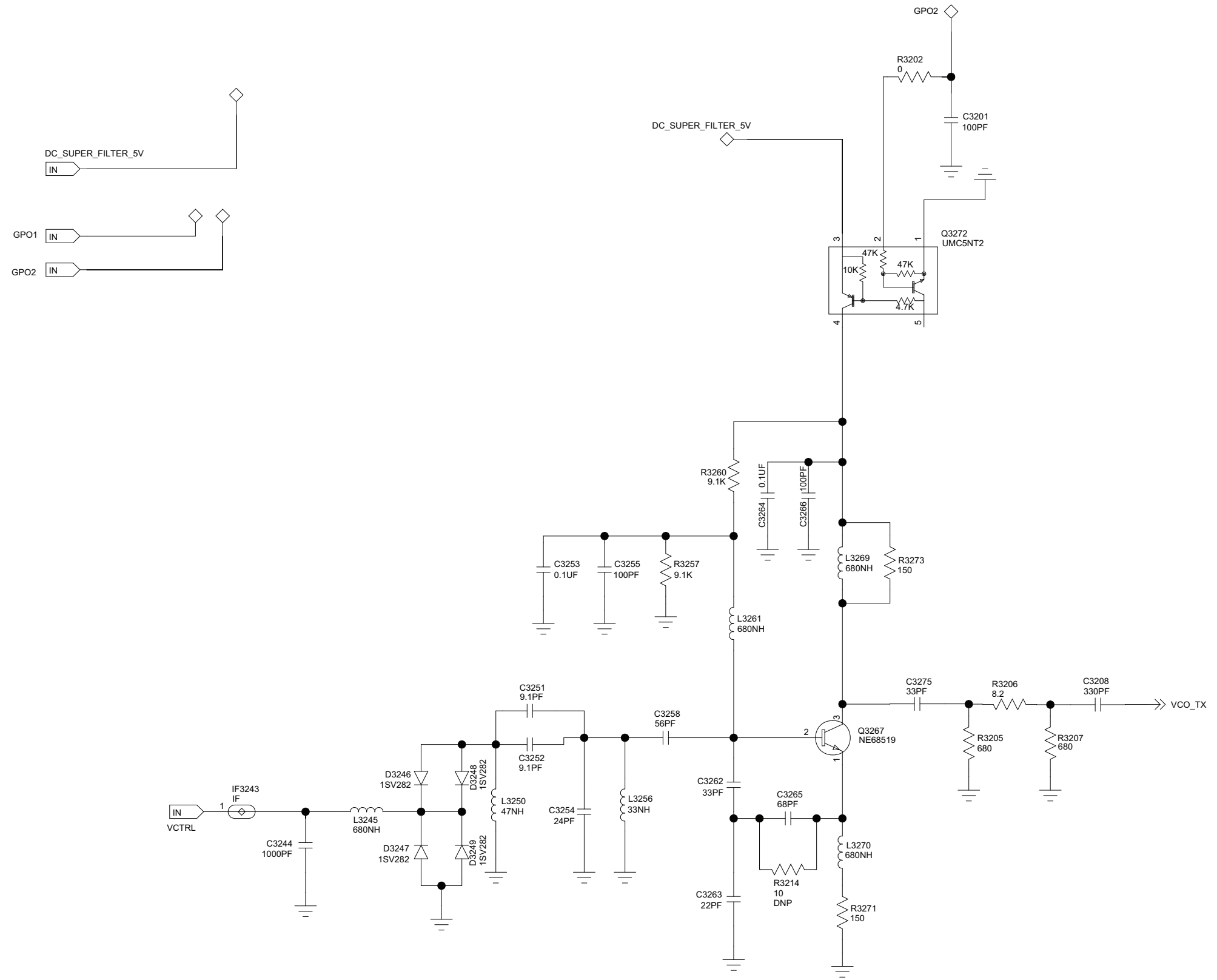


Figure 8-13. Transmitter VCO Circuit

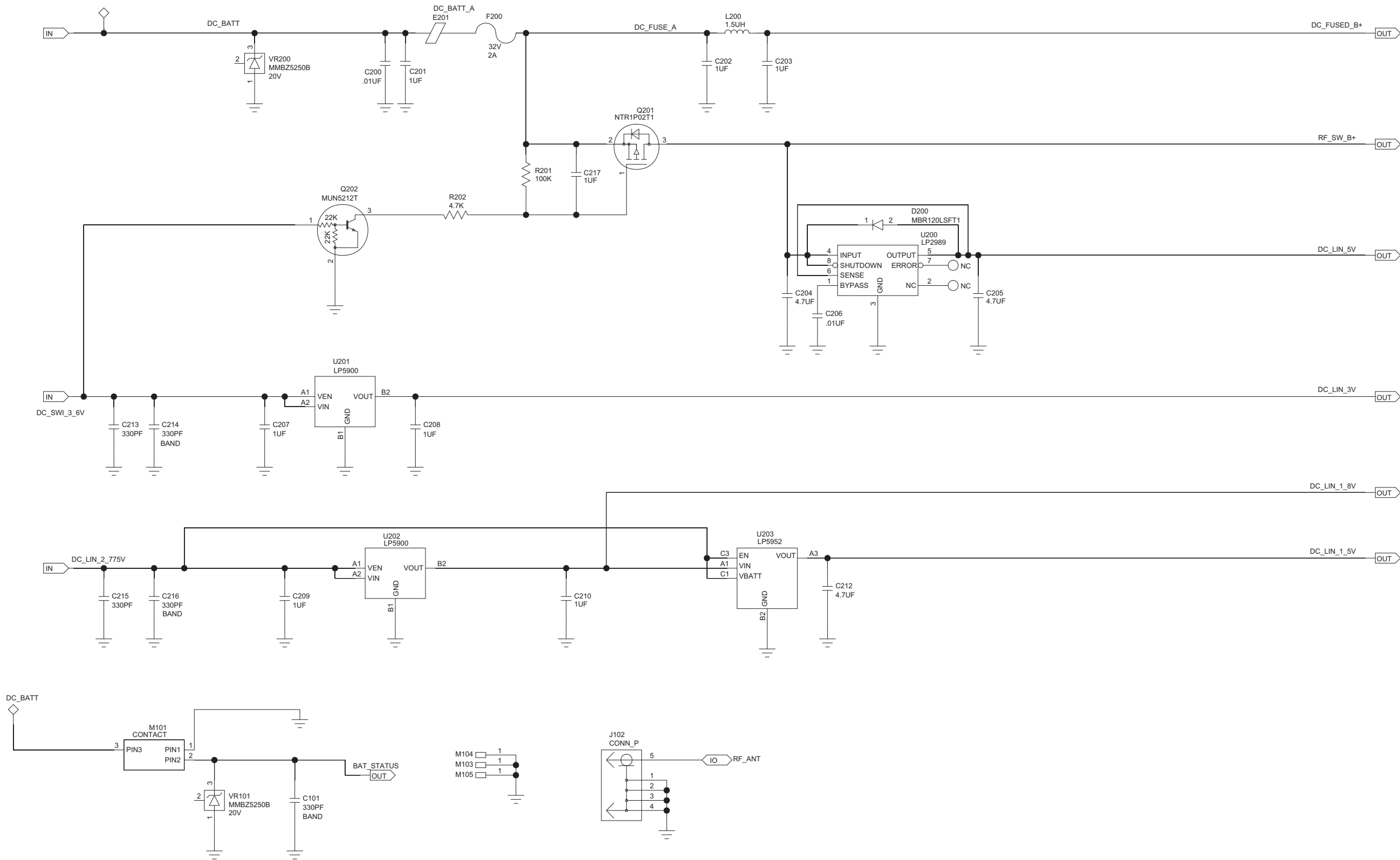


Figure 8-14. DC Circuit

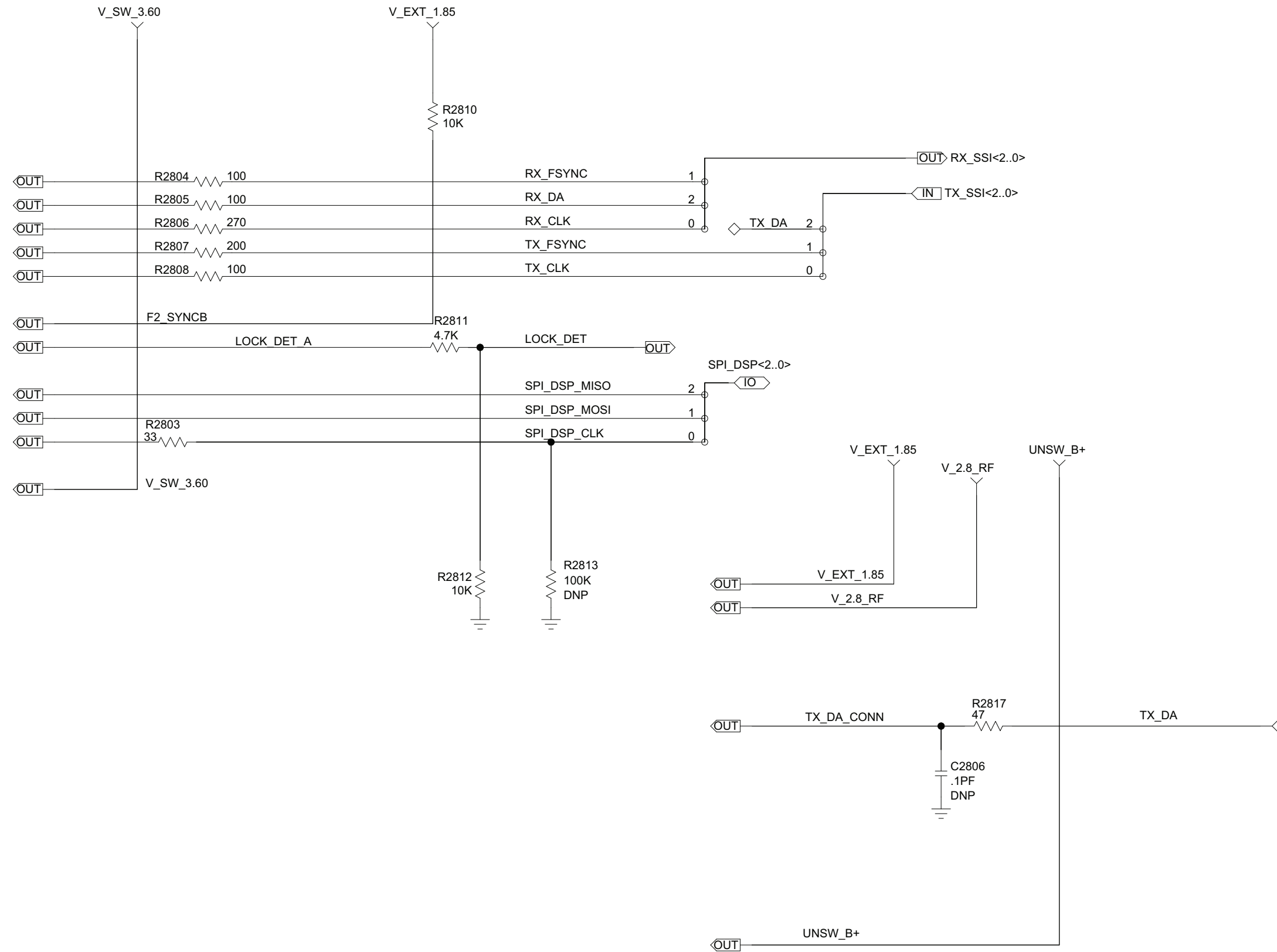


Figure 8-15. RF Interconnects Circuit

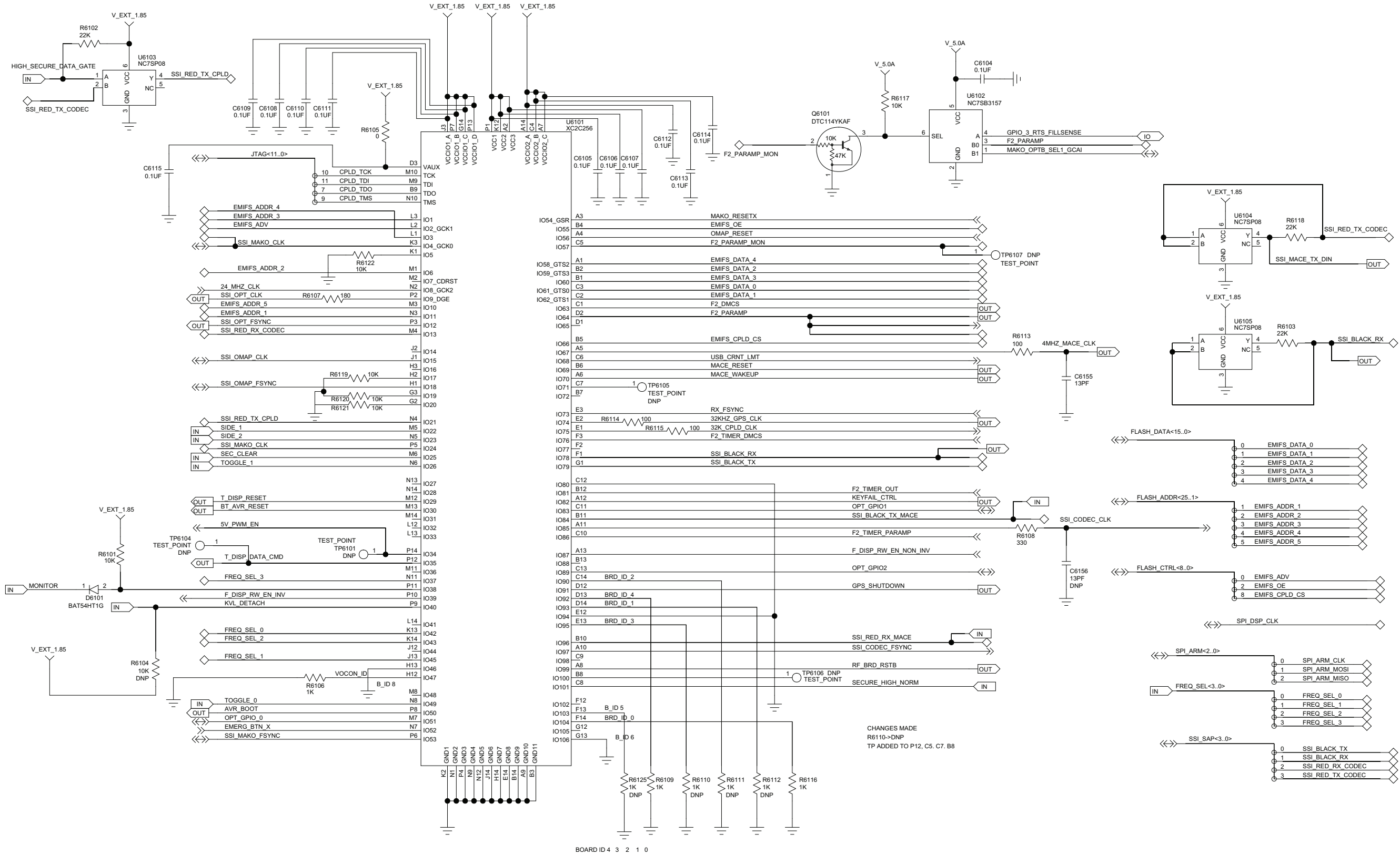


Figure 8-16. CPLD Circuit

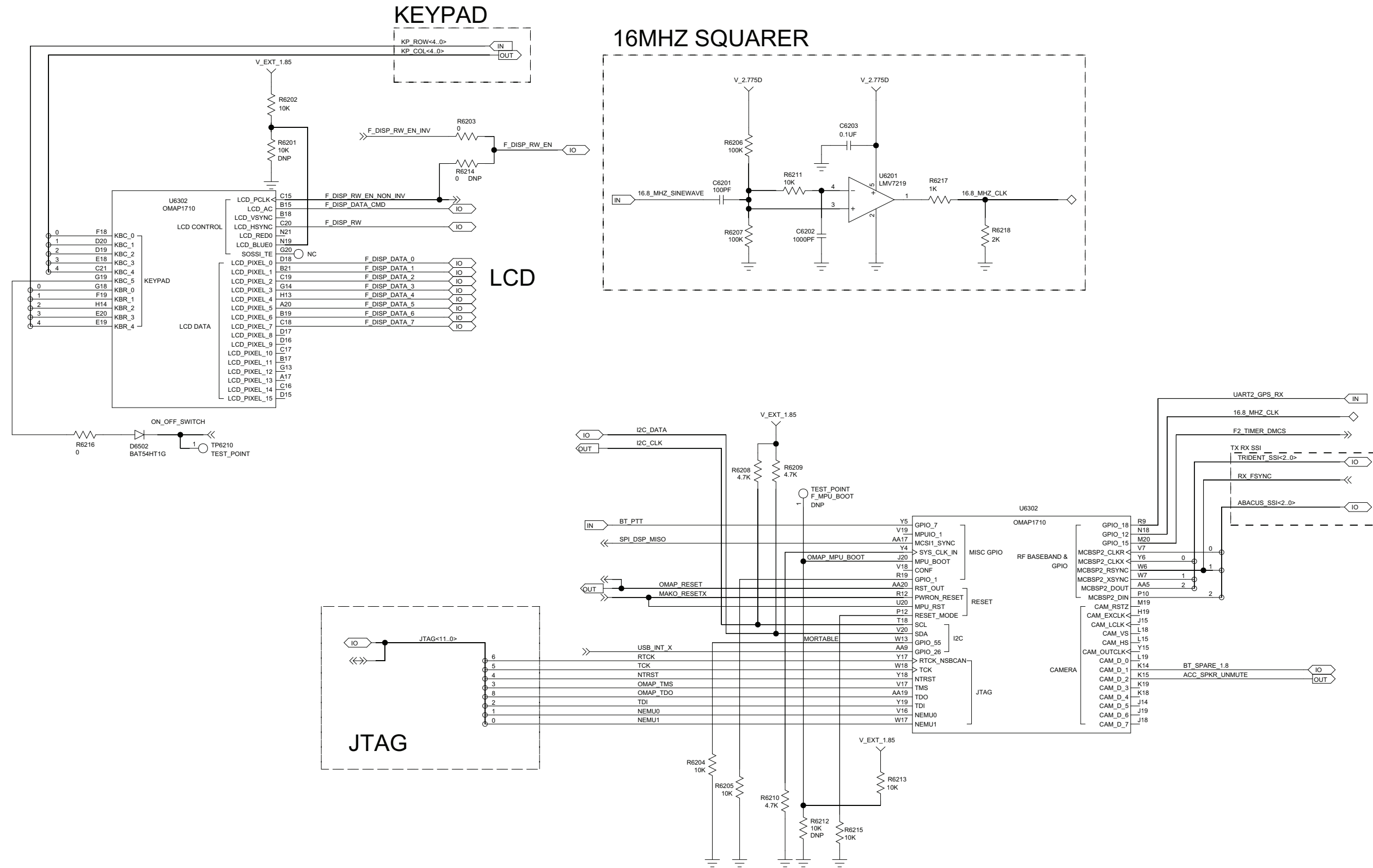
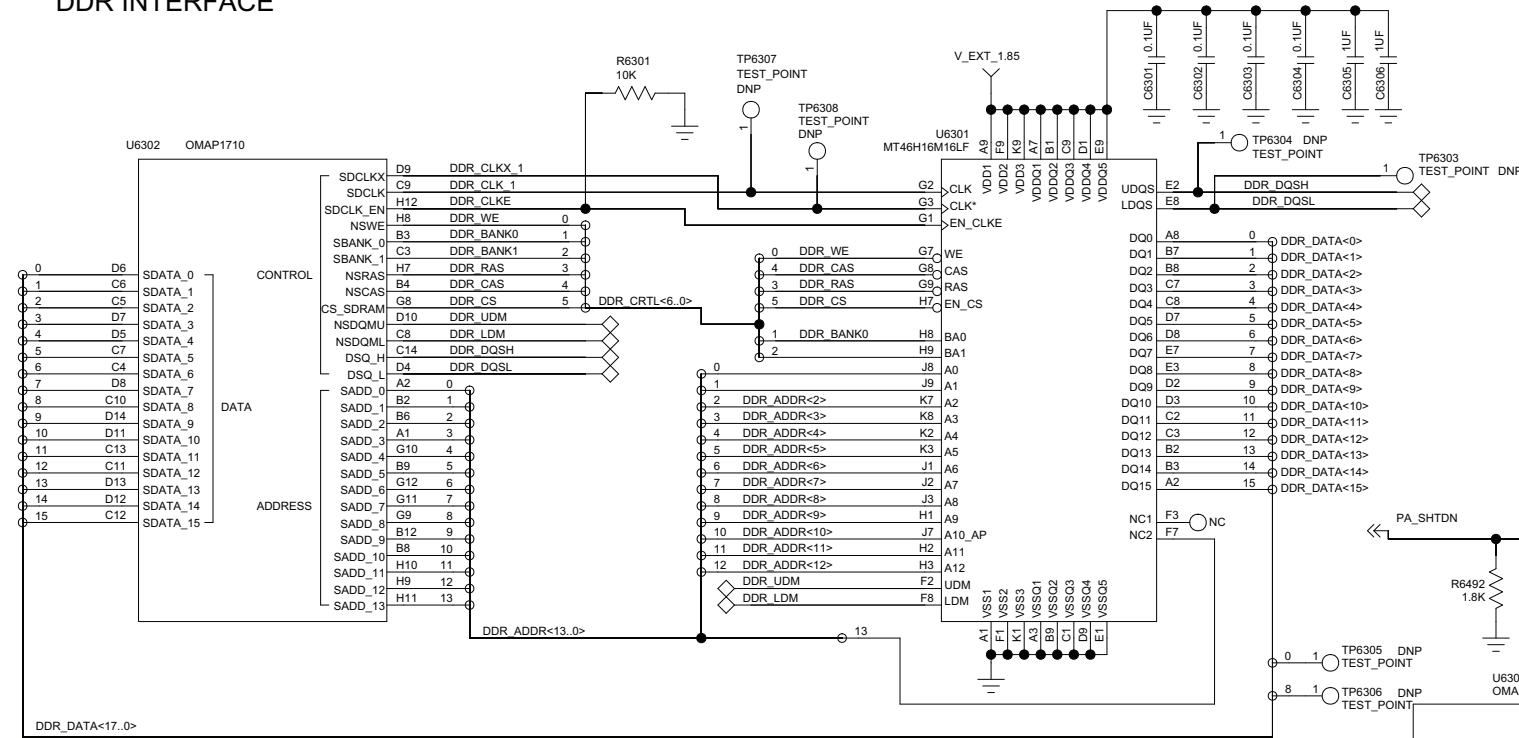
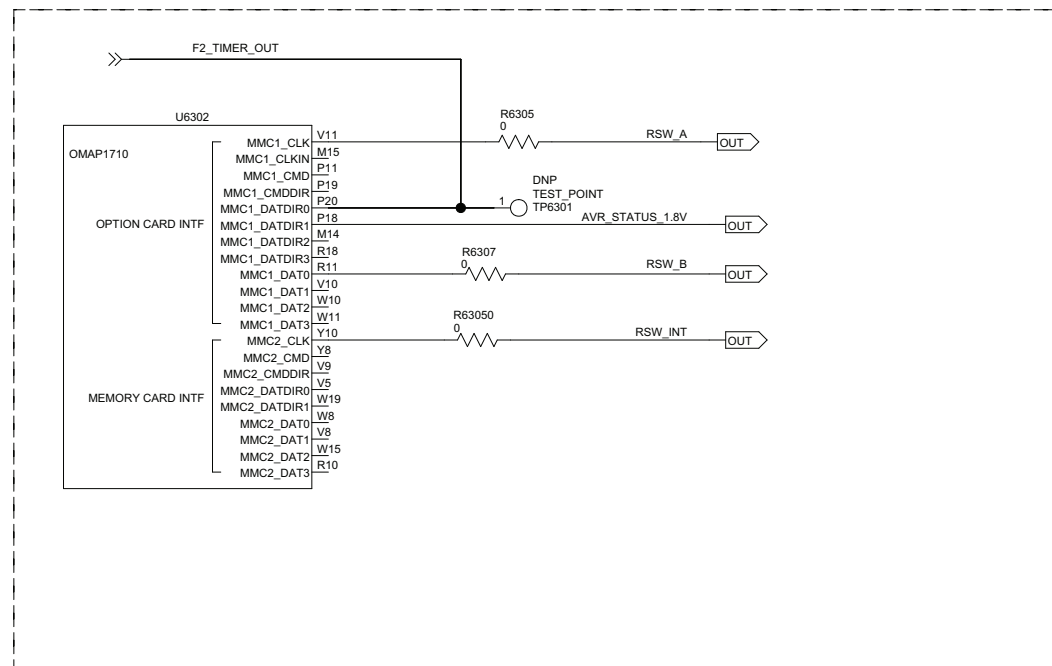


Figure 8-17. OMAP User Interface Circuit

DDR INTERFACE



MMC INTERFACE



FLASH INTERFACE

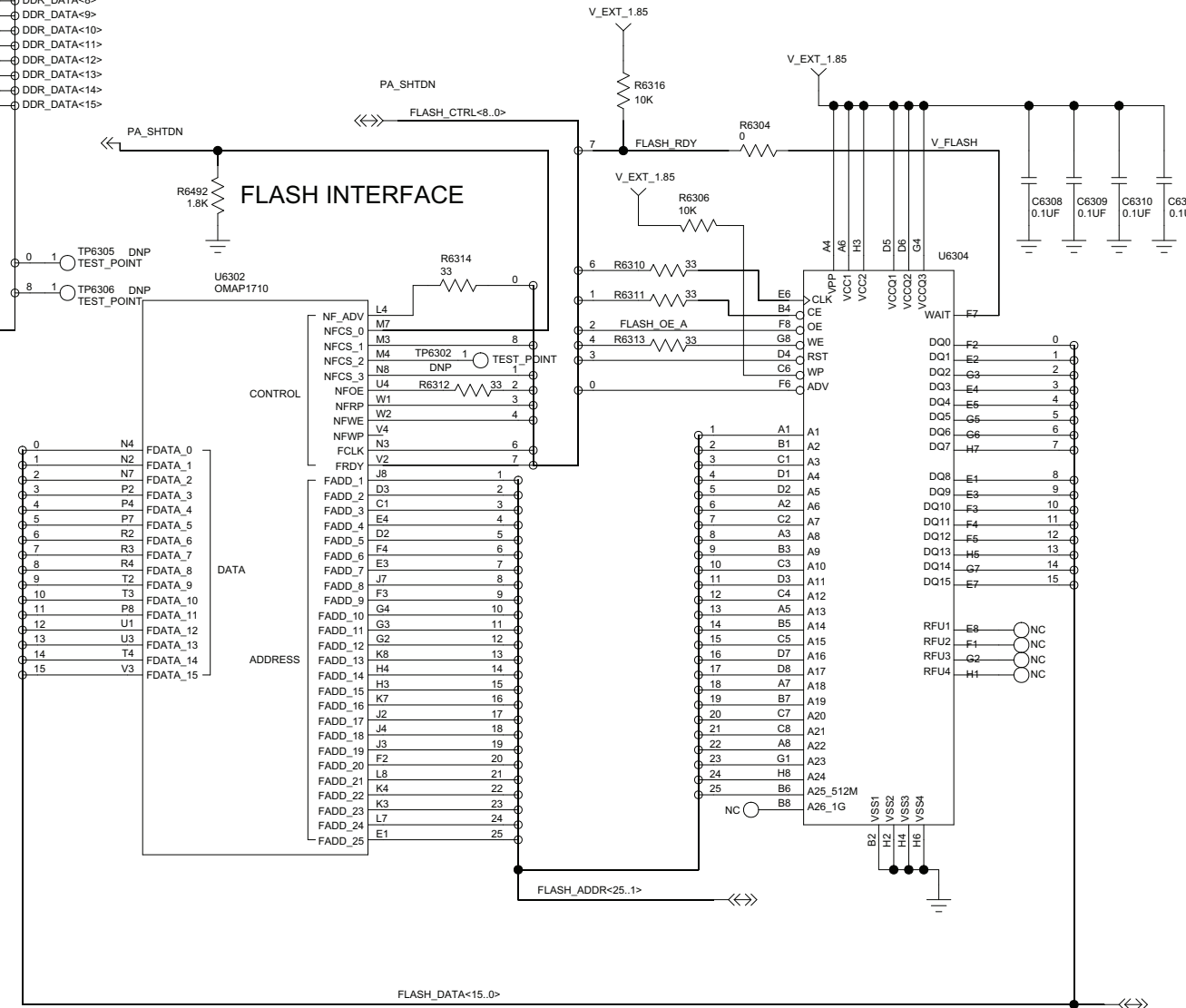
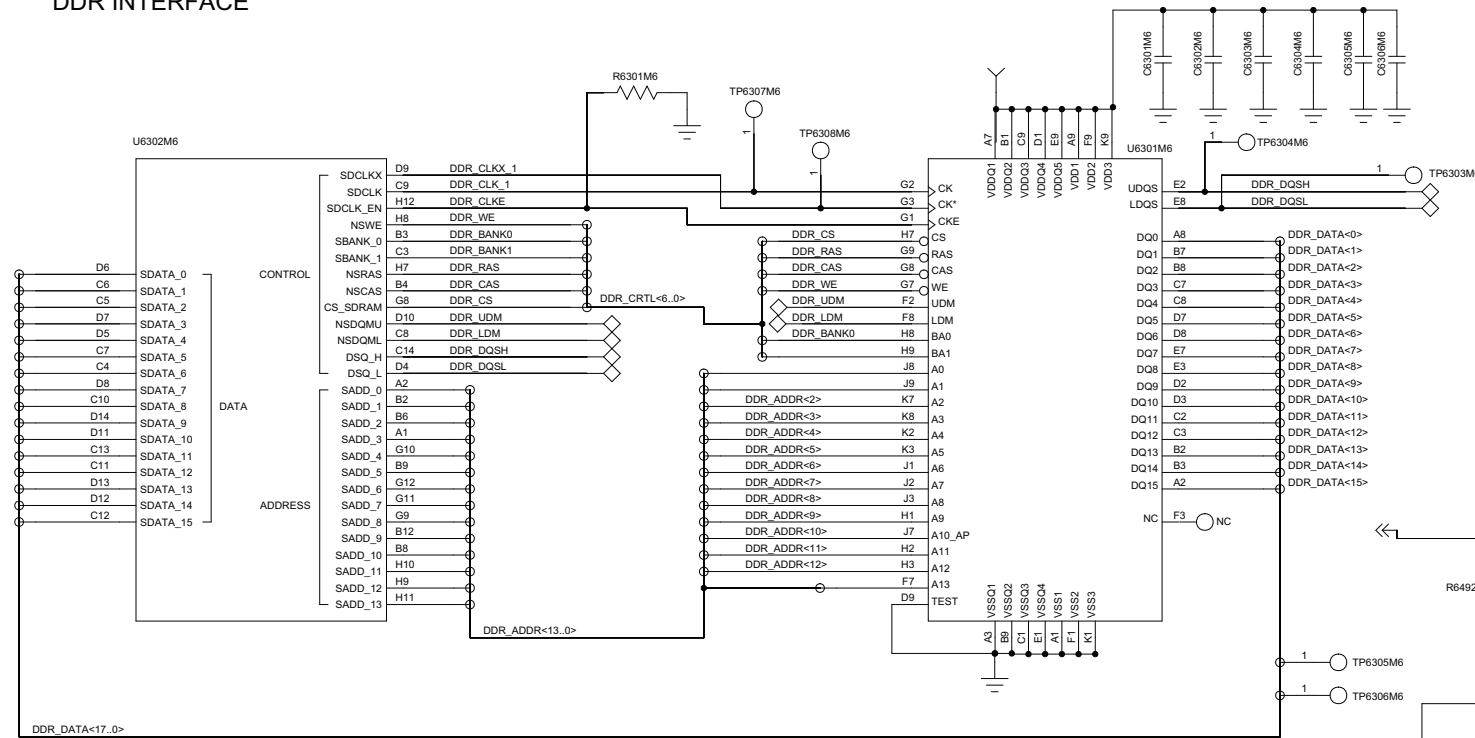
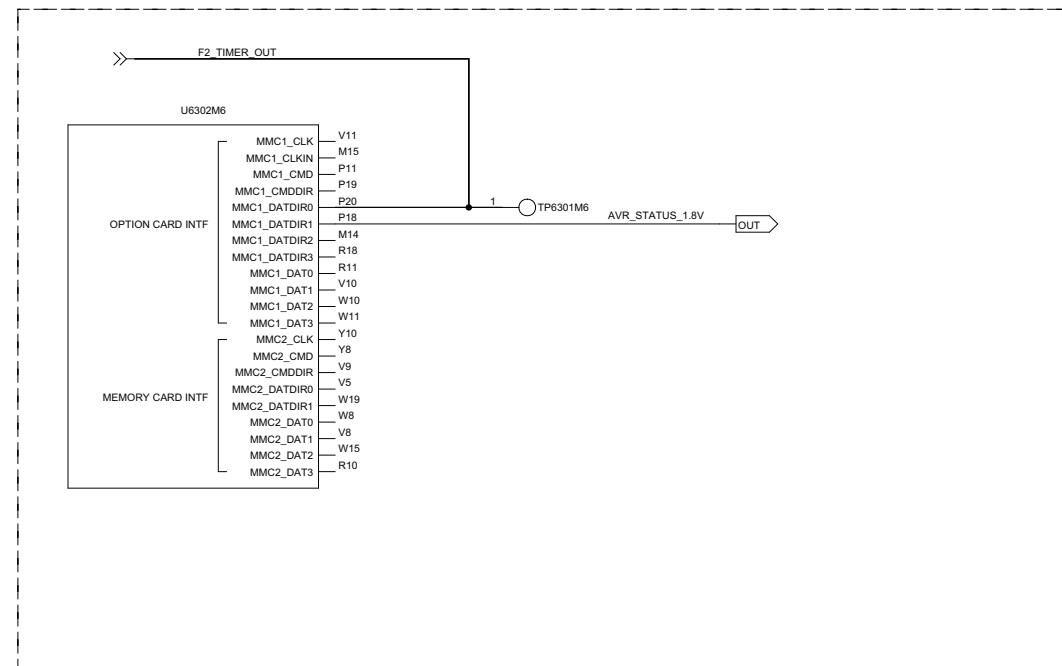


Figure 8-18. Memory Interface Circuit (84012320001)

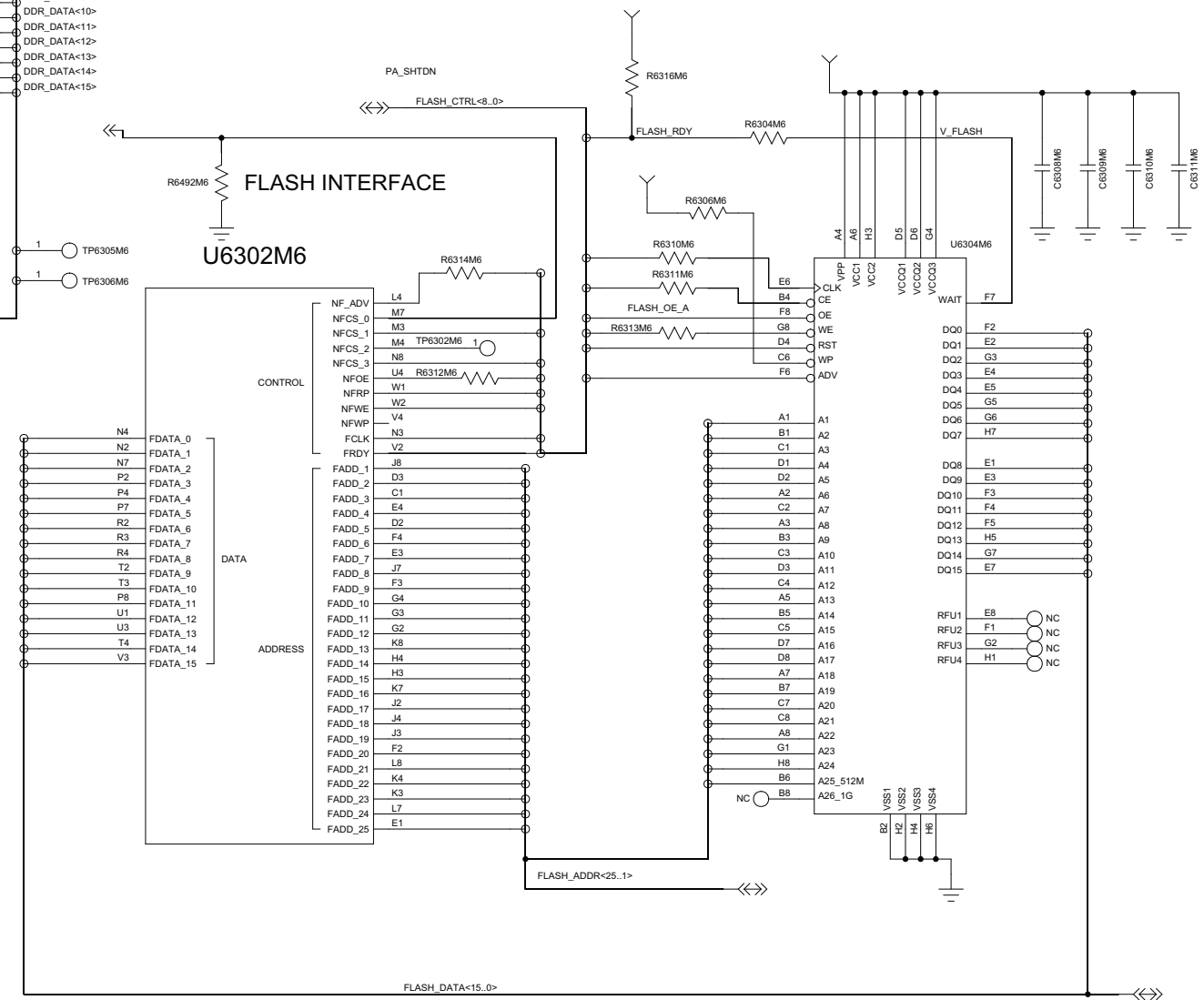
DDR INTERFACE



MMC INTERFACE



FLASH INTERFACE



CHANGES MADE  
ADDED PA\_SHTDN TO PORT M7 & R6492

Figure 8-19. Memory Interface Circuit (PC000352A01)

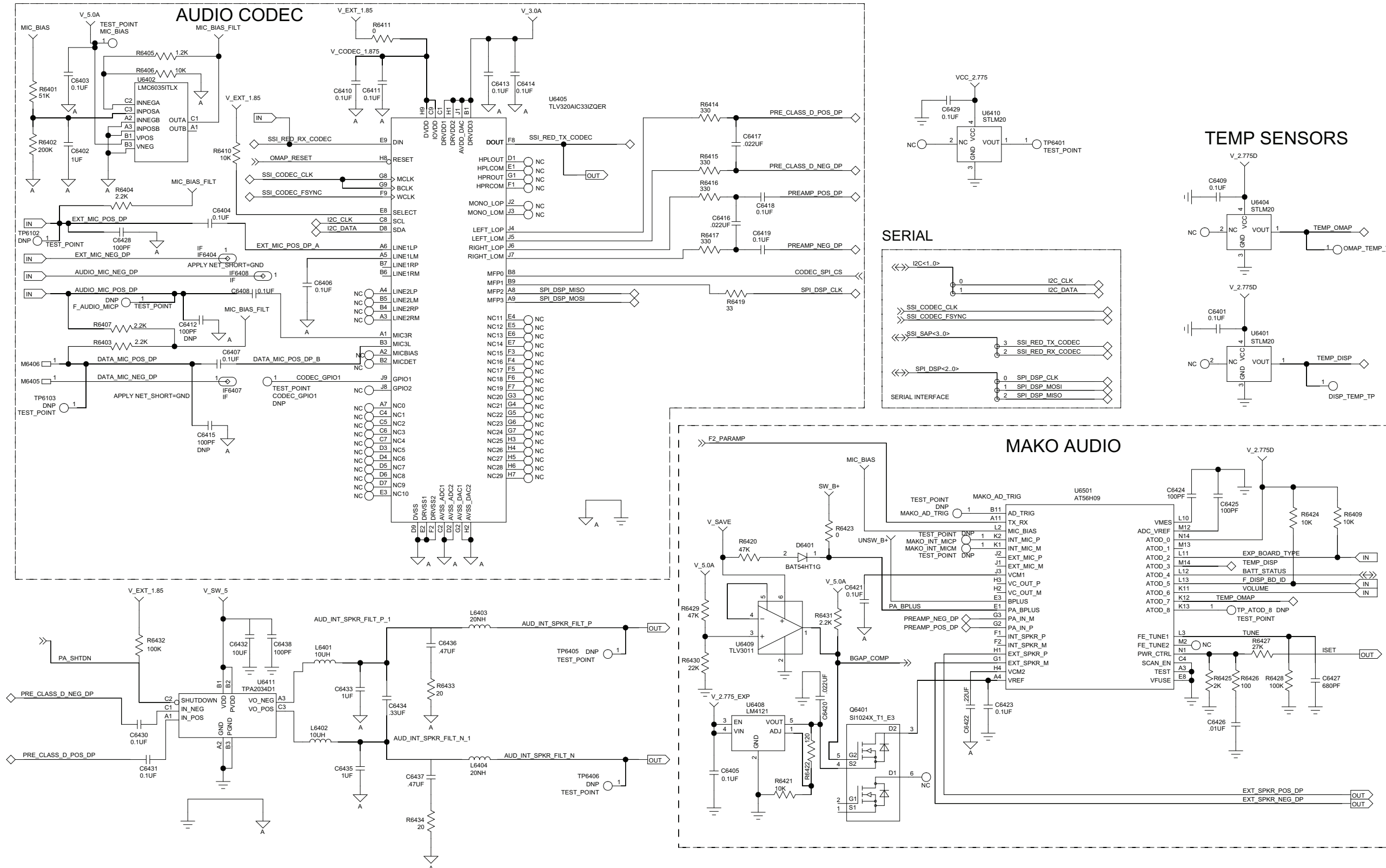


Figure 8-20. Audio Circuit (84012320001)



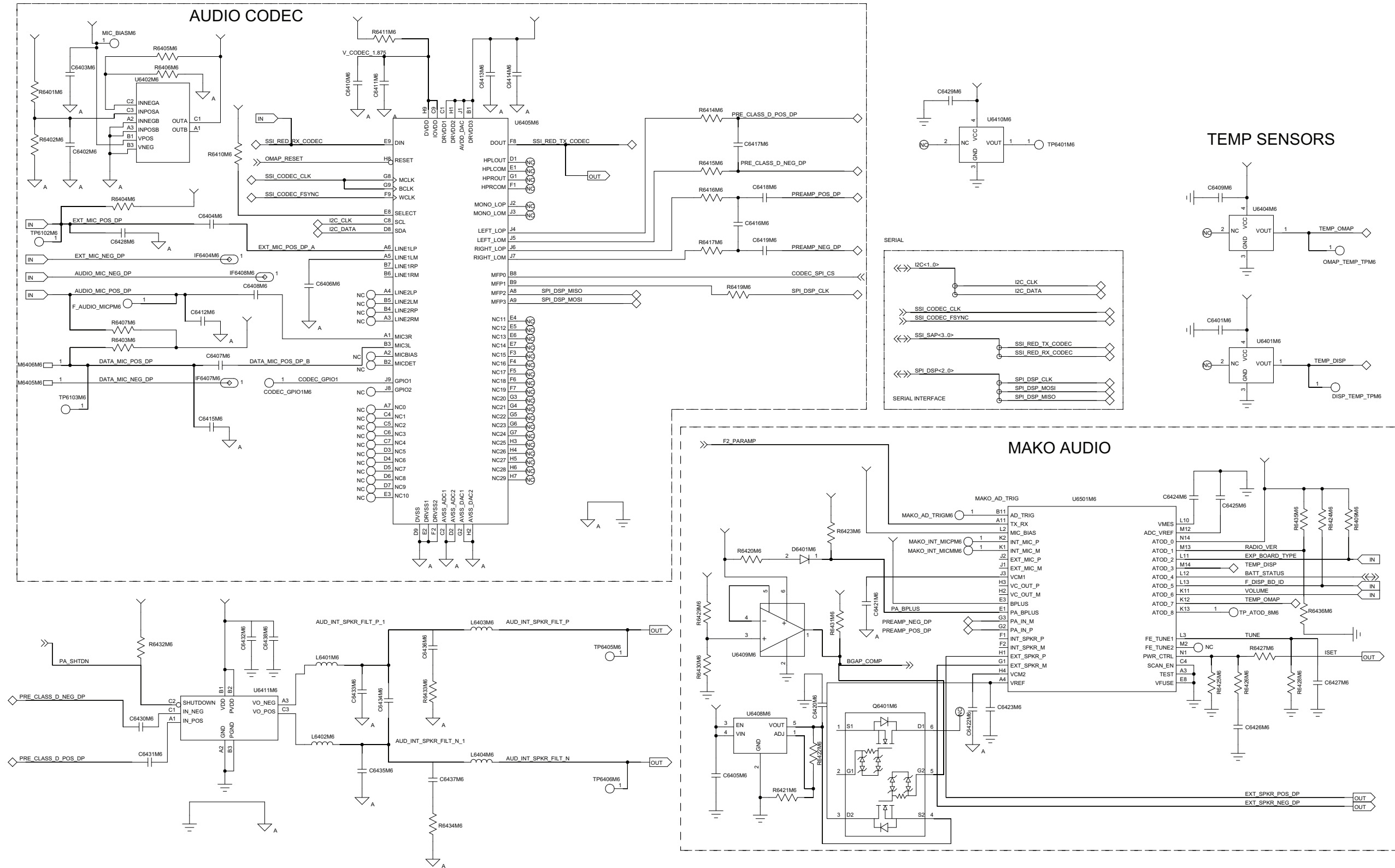


Figure 8-21. Audio Circuit (PC000352A01)

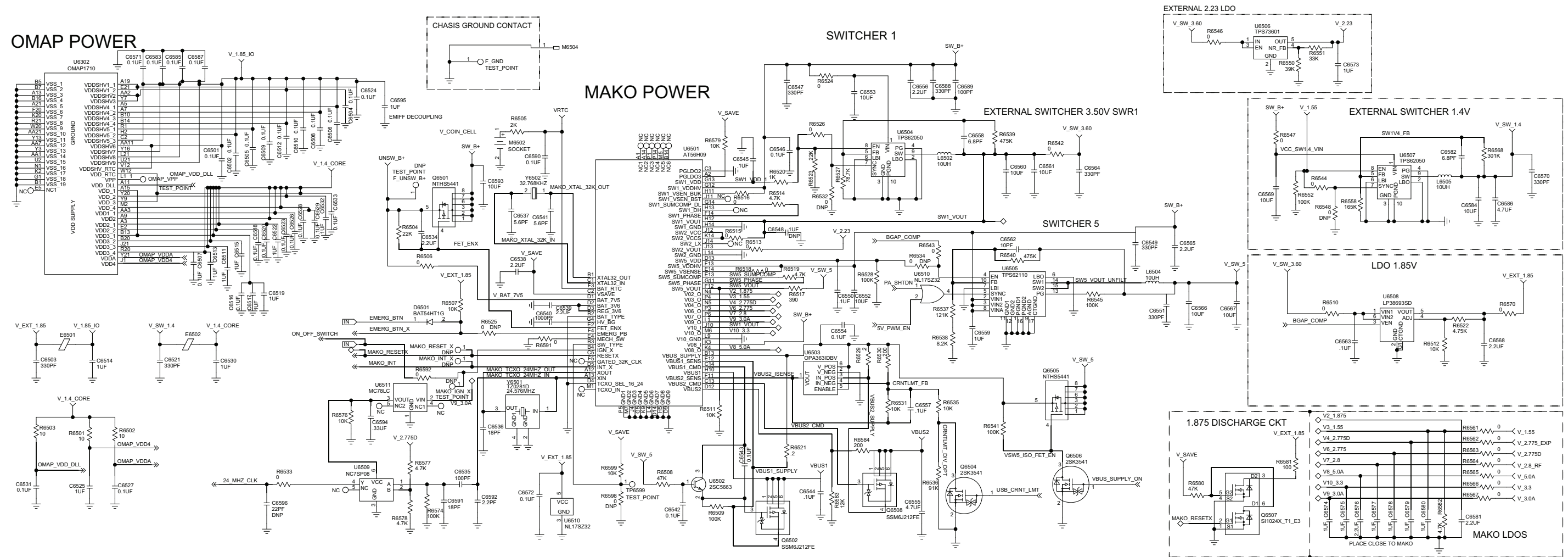


Figure 8-22. MAKO/DC Distribution Circuit (84012320001)

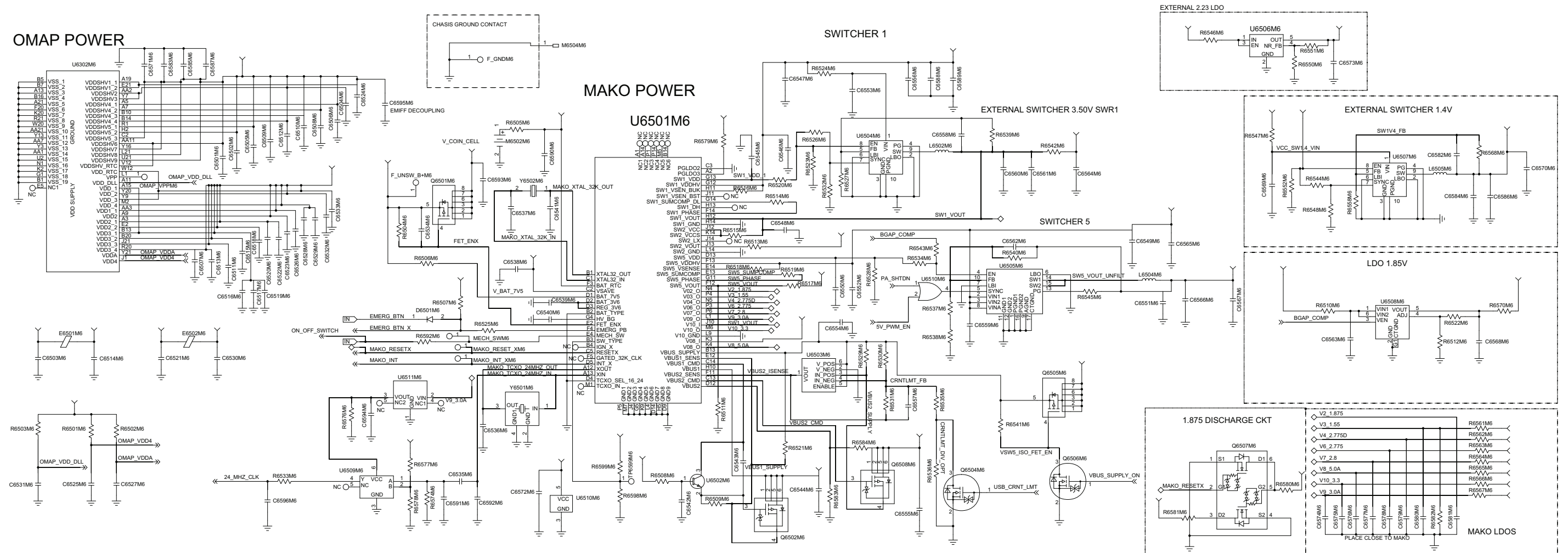


Figure 8-23. MAKO/DC Distribution Circuit (PC000352A01)

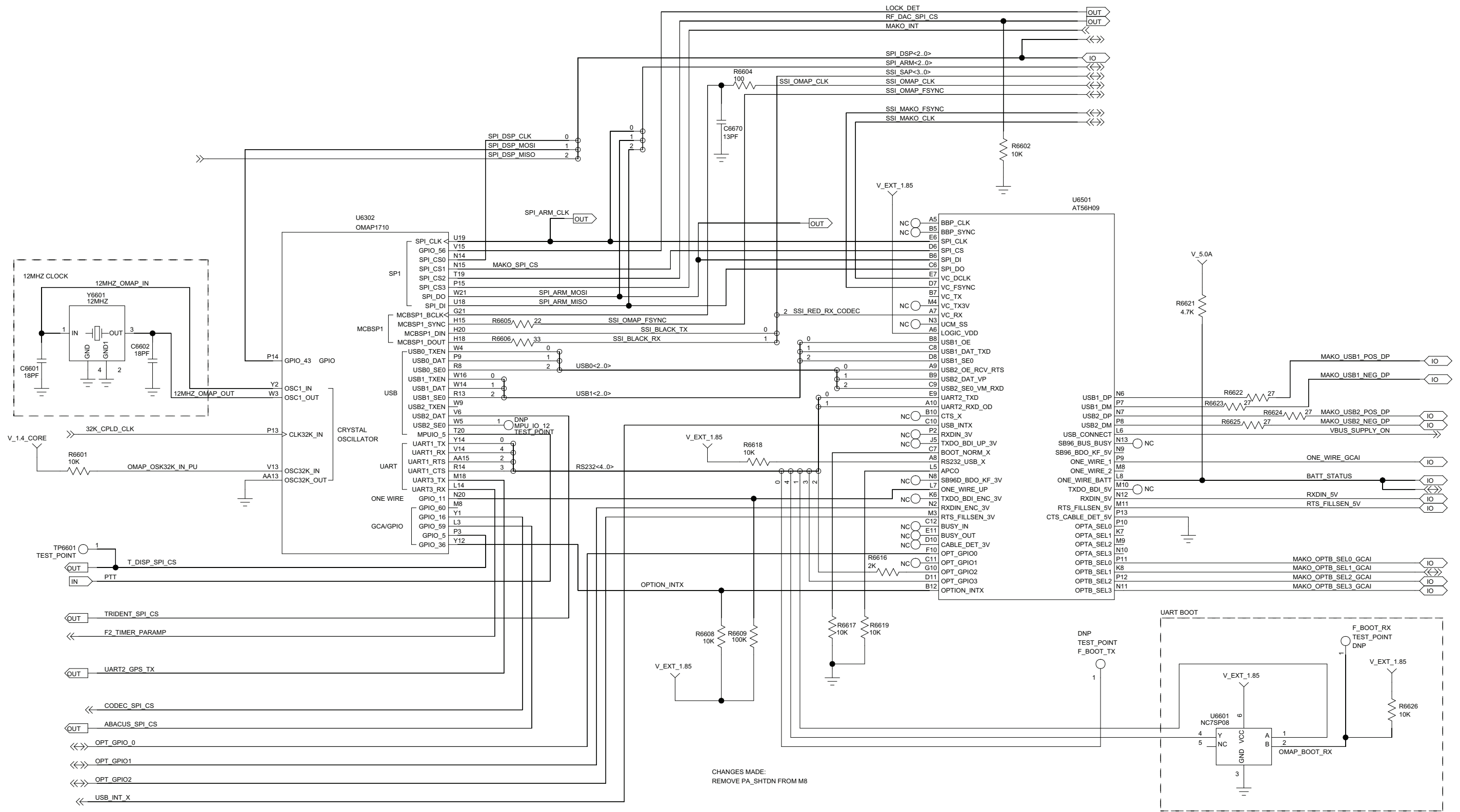


Figure 8-24. Serial Interface Circuit

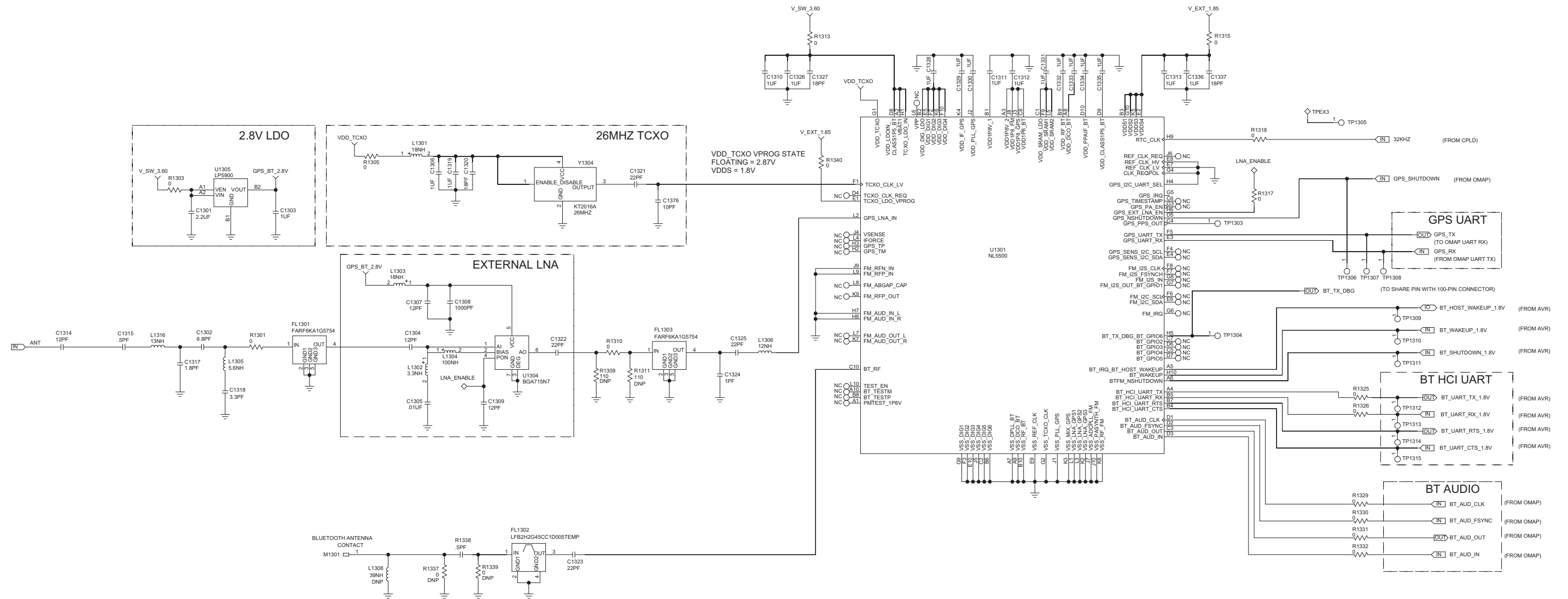


Figure 8-25. GPS Bluetooth Circuit

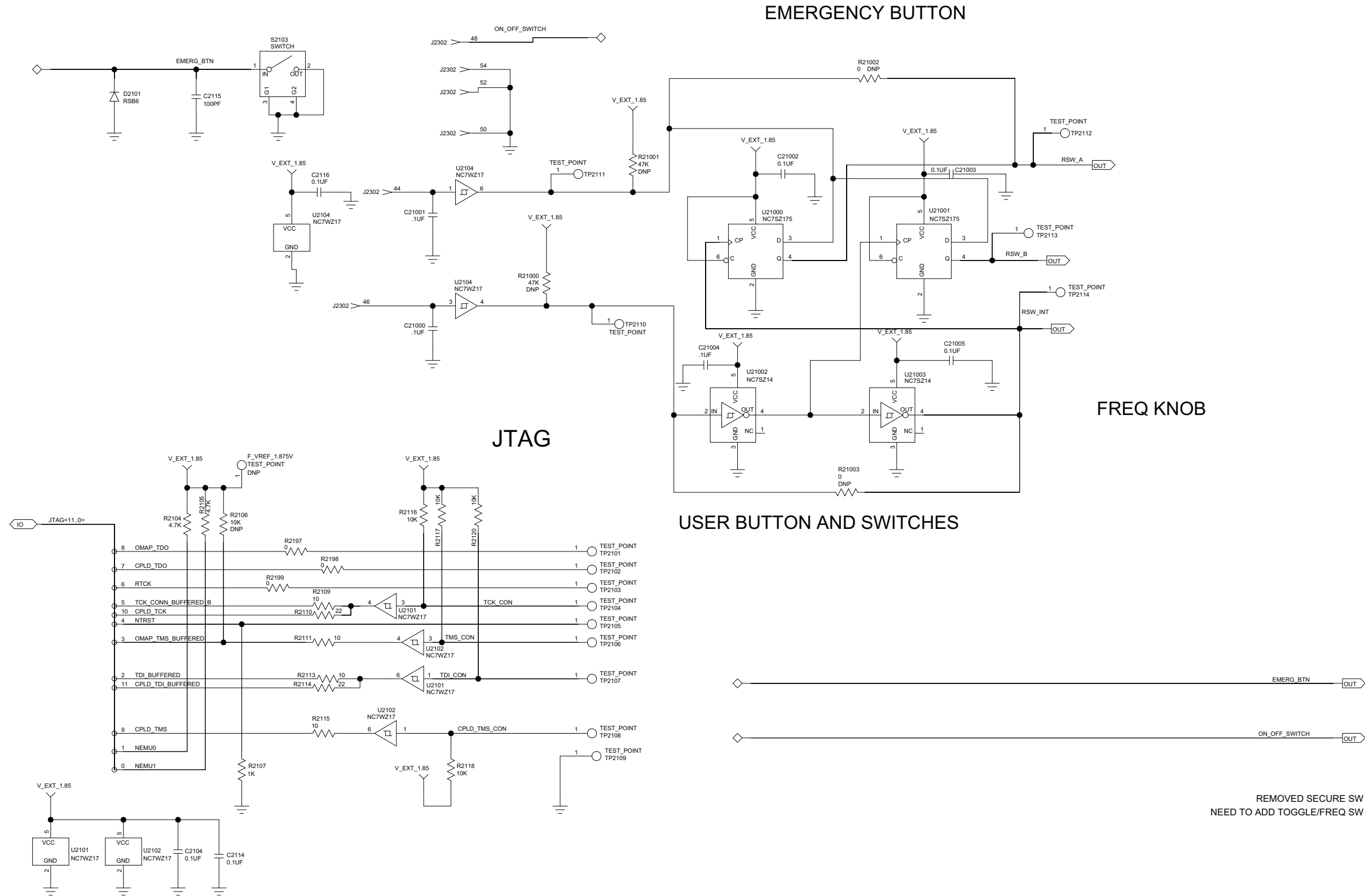


Figure 8-26. Controller Circuit (84012320001)

REMOVED SECURE SW  
NEED TO ADD TOGGLE/FREQ SW

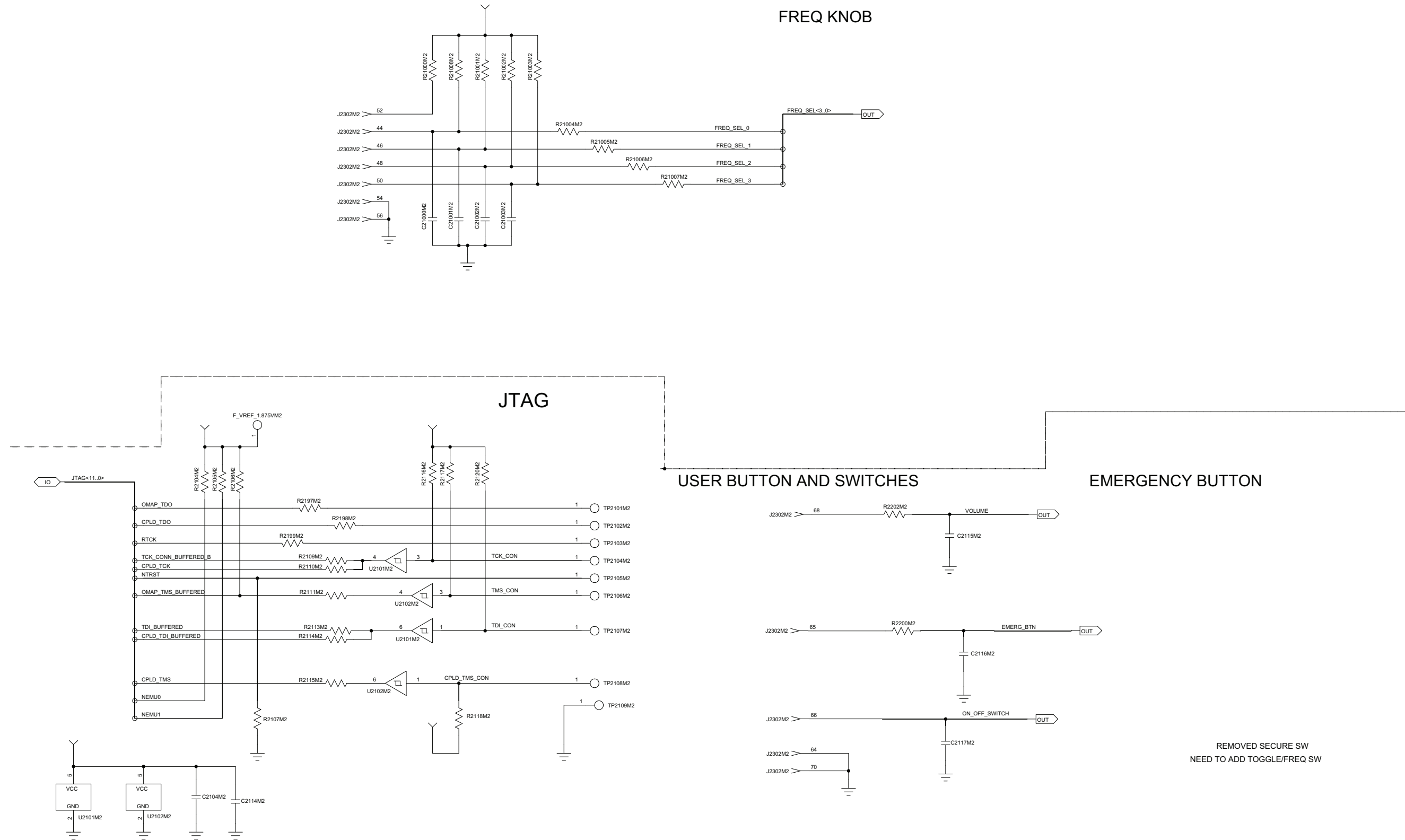
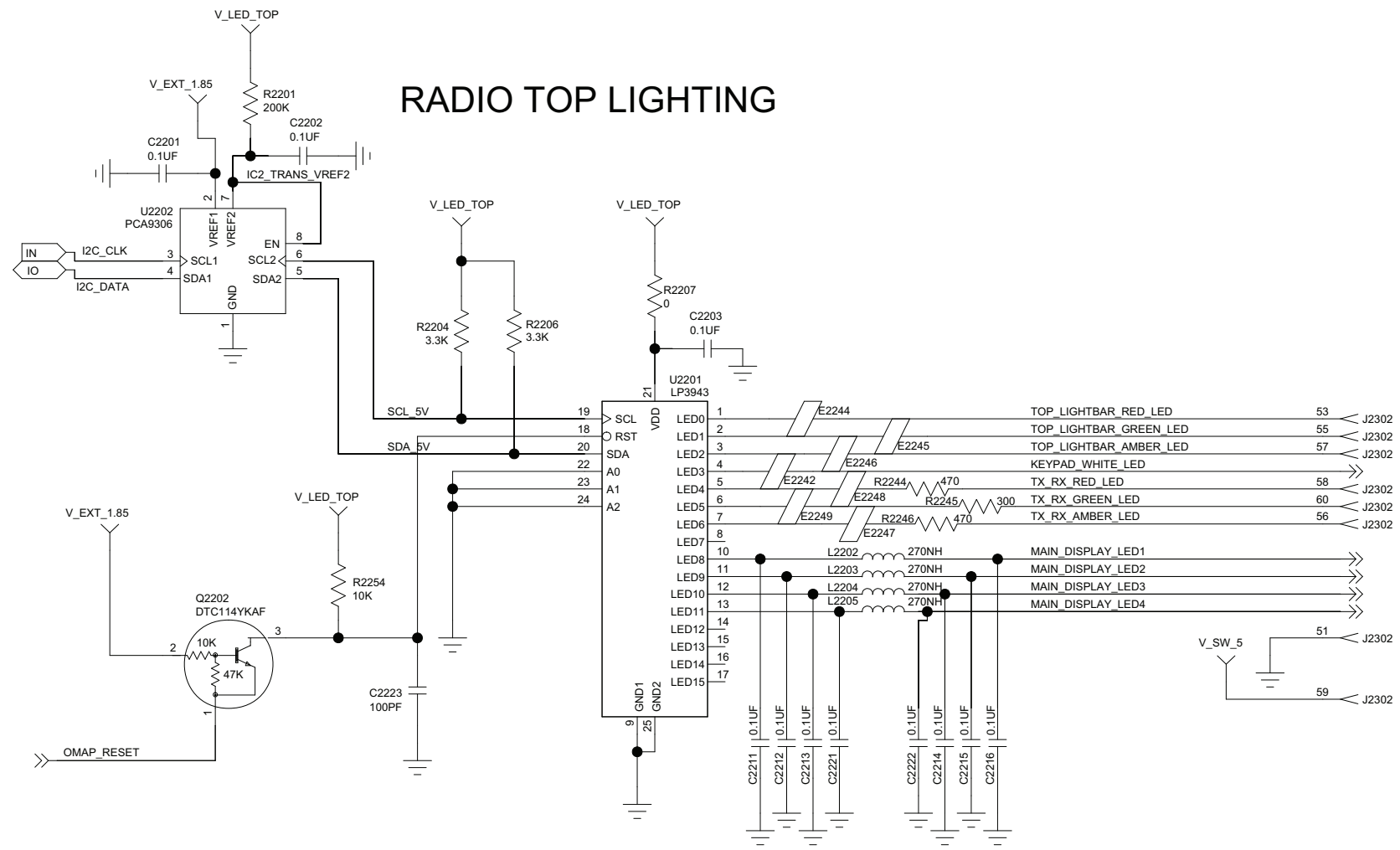


Figure 8-27. Controller Circuit (PC000352A01)



## LIGHTING CONTROLERS

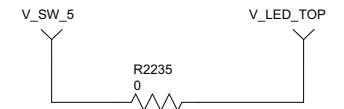


Figure 8-28. Display/Keypad Lighting Control Circuit (84012320001)



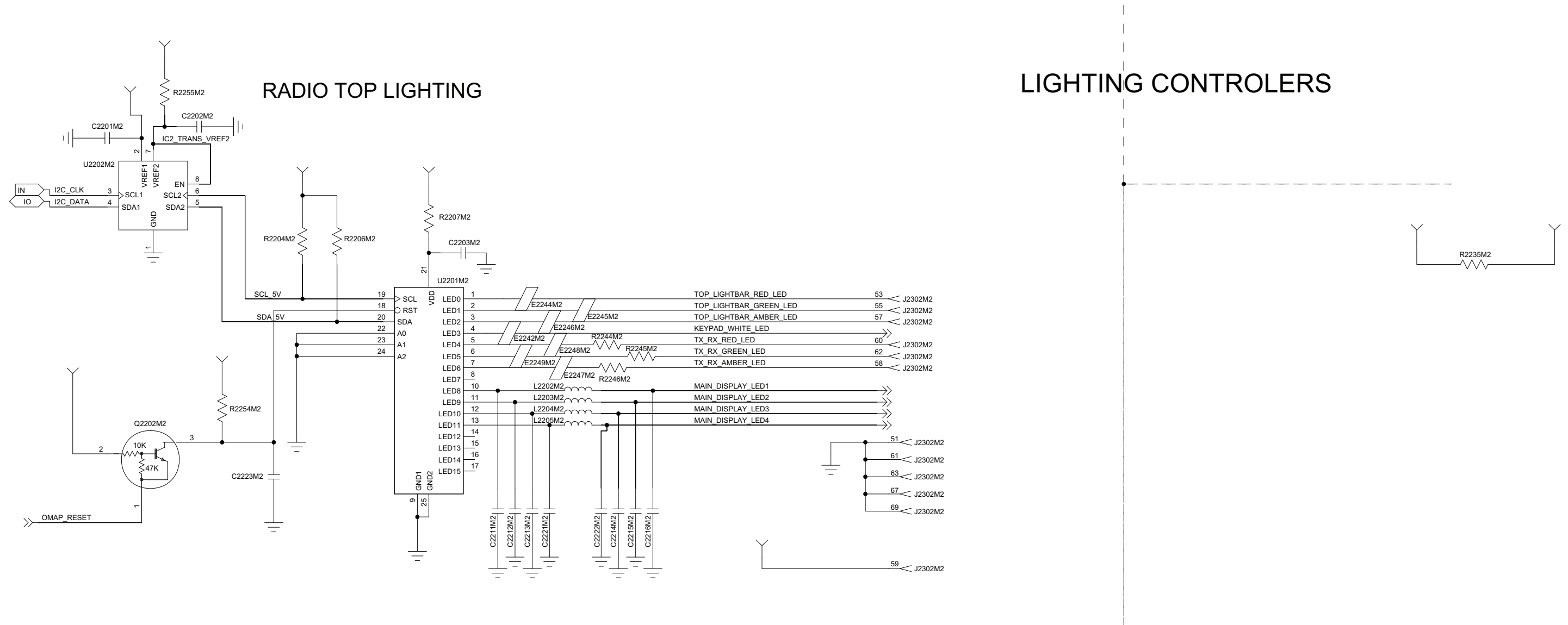
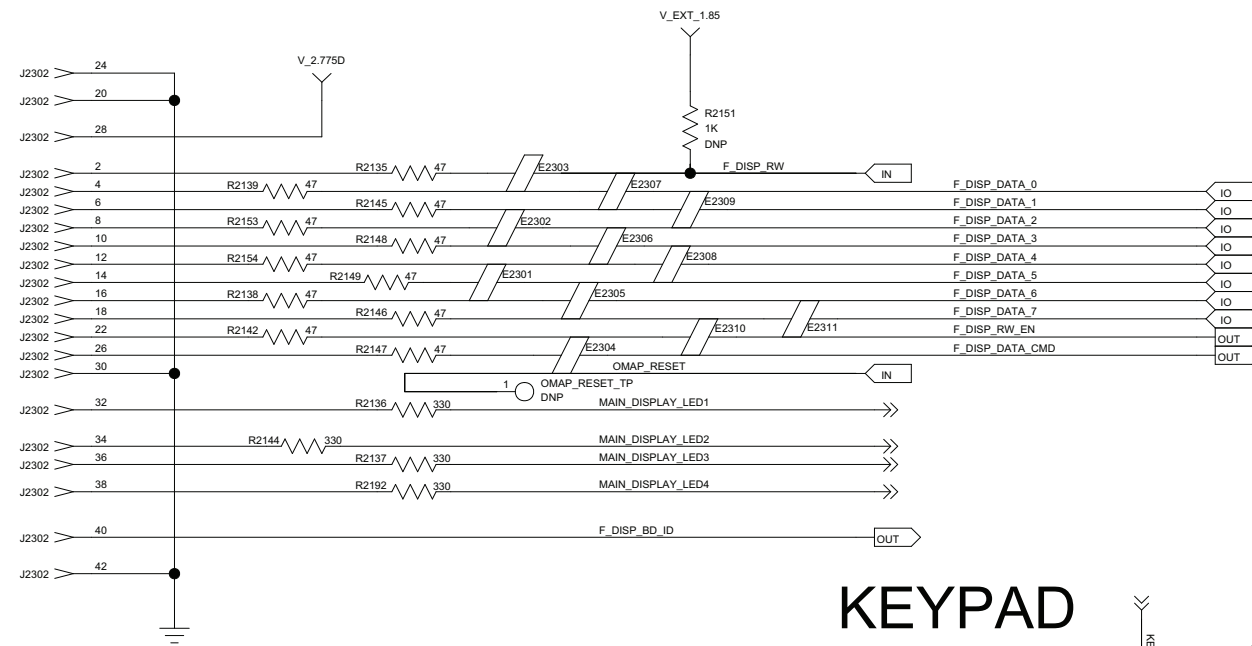


Figure 8-29. Display/Keypad Lighting Control Circuit (PC000352A01)

# FRONT DISPLAY



# KEYPAD

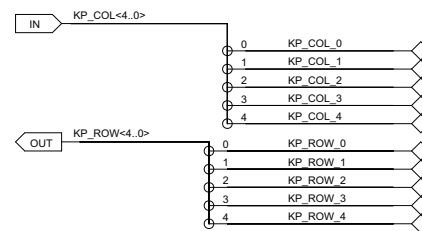
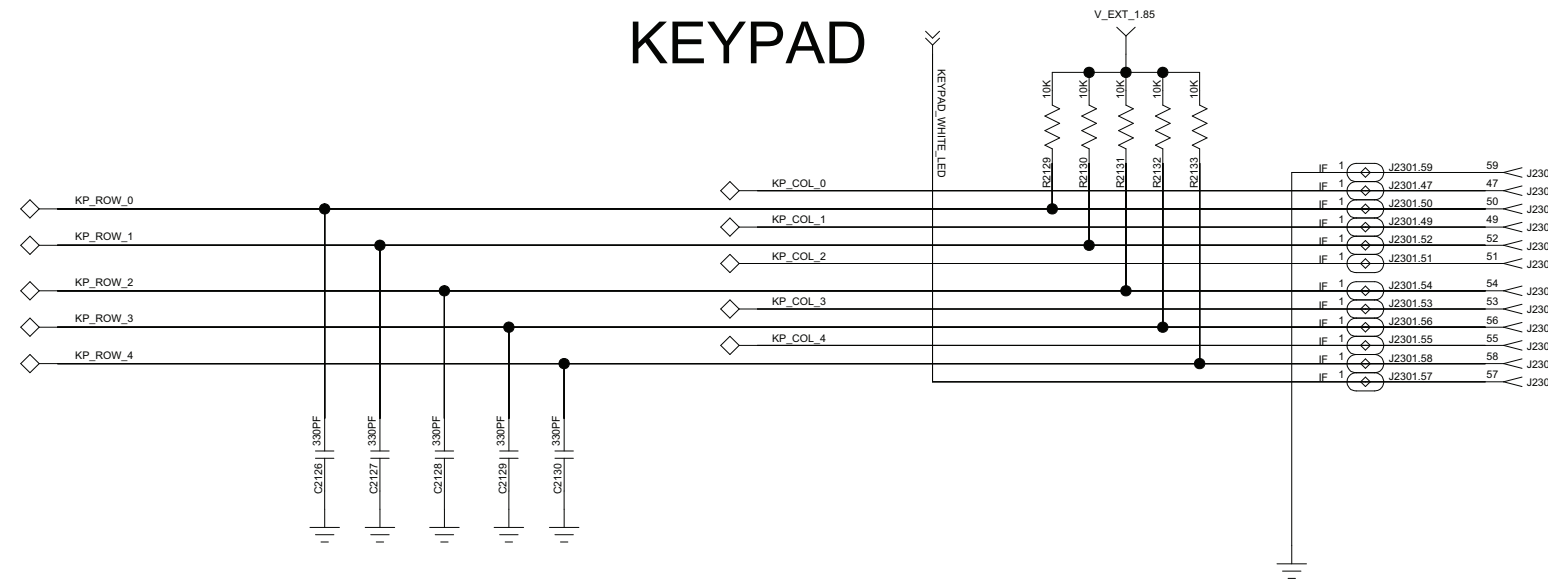
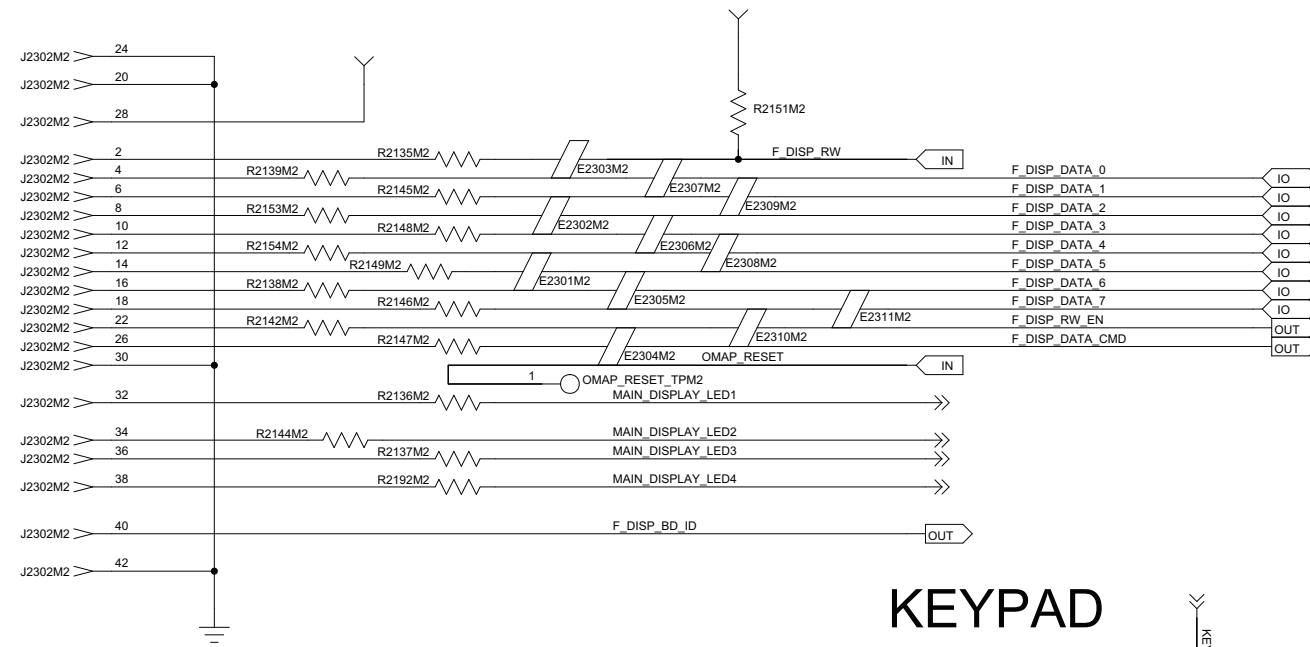


Figure 8-30. LCD and Keypad Connector Circuit (84012320001)

# FRONT DISPLAY



# KEYPAD

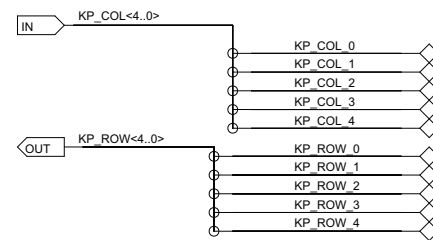
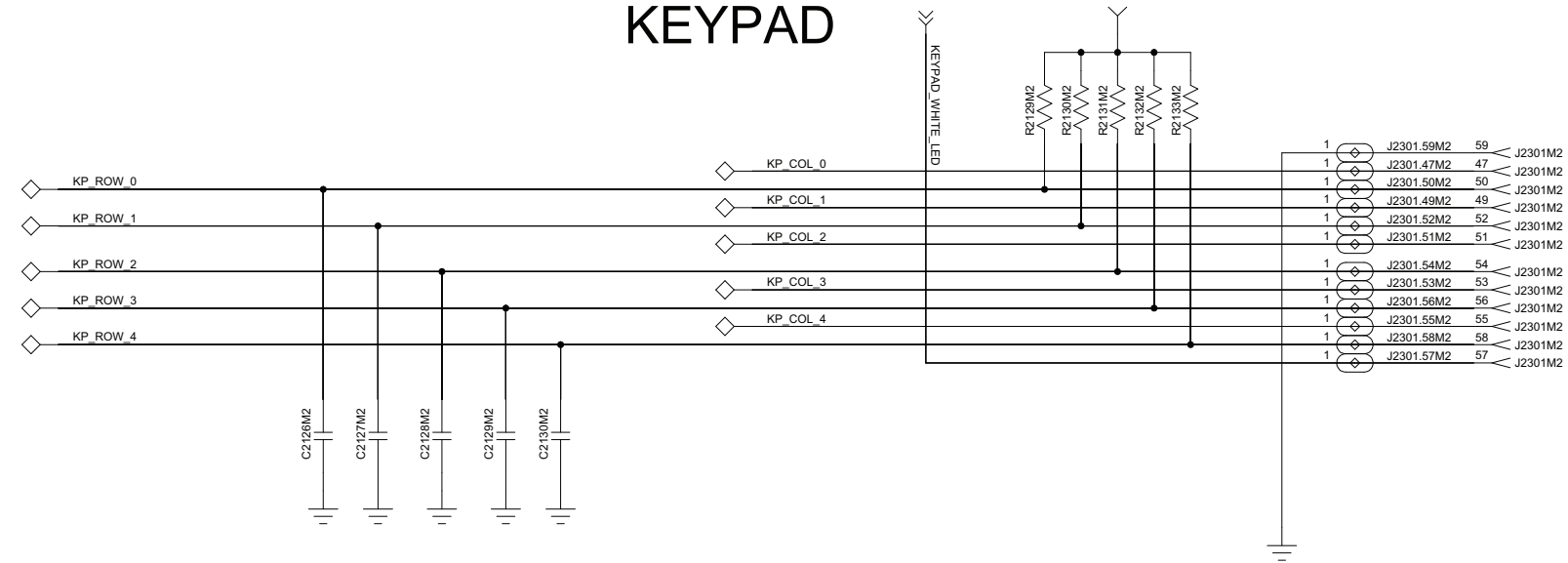


Figure 8-31. LCD and Keypad Connector Circuit (PC000352A01)

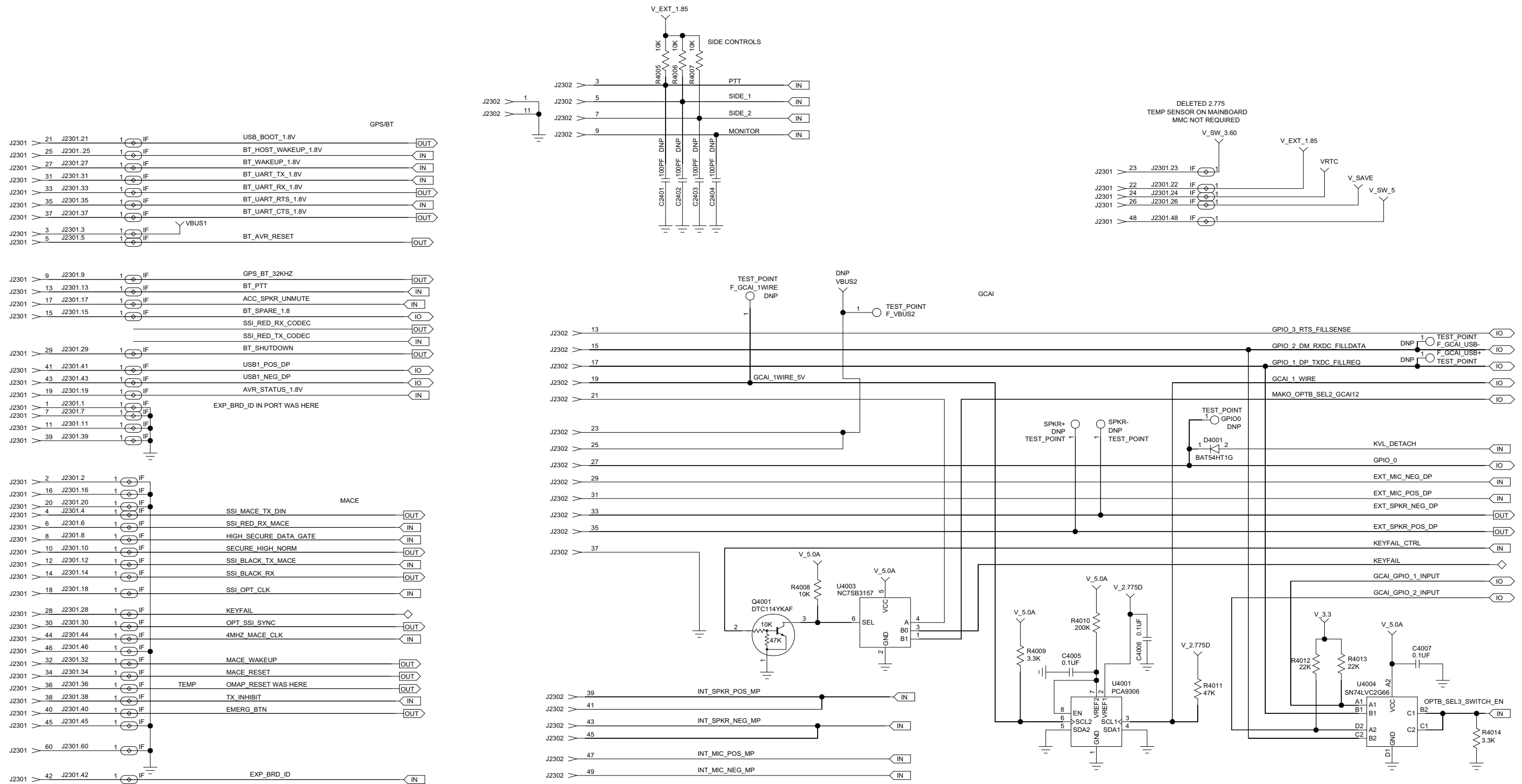


Figure 8-32. GCAI MACE BT Interconnect Circuit (84012320001)

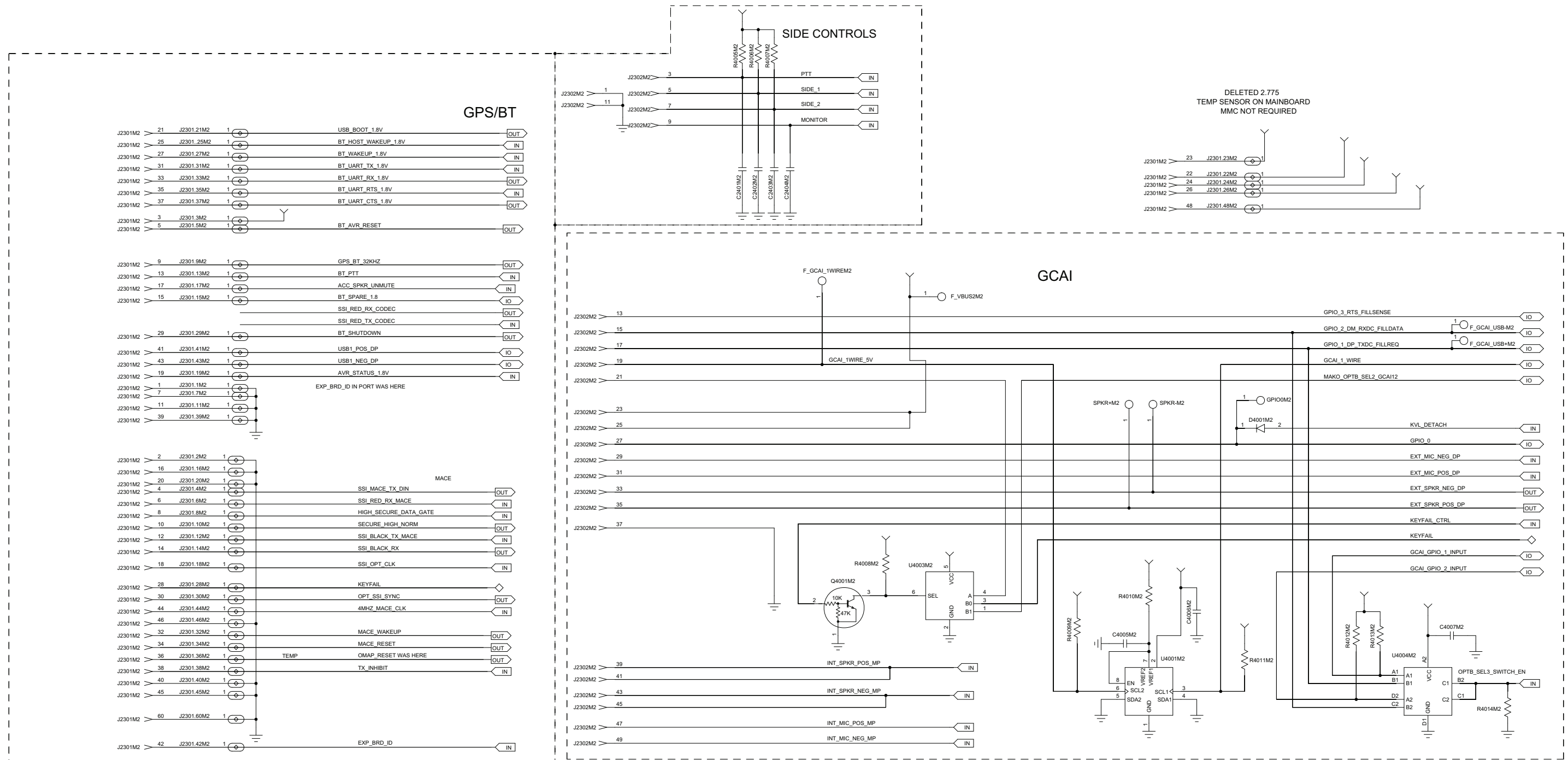


Figure 8-33. GCAI MACE BT Interconnect Circuit (PC000352A01)

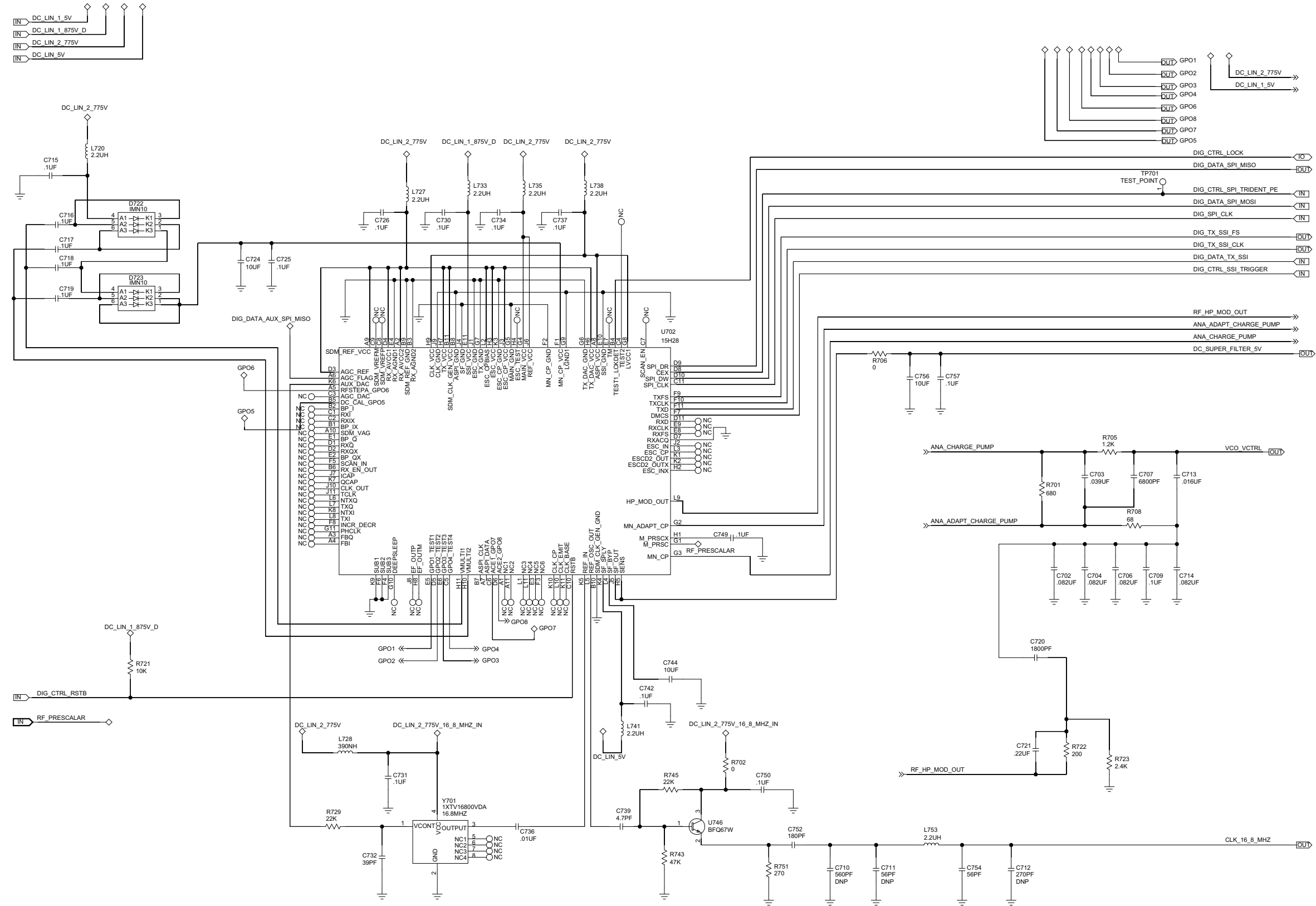


Figure 8-34. Frequency Generation Unit Circuit – 1 of 2

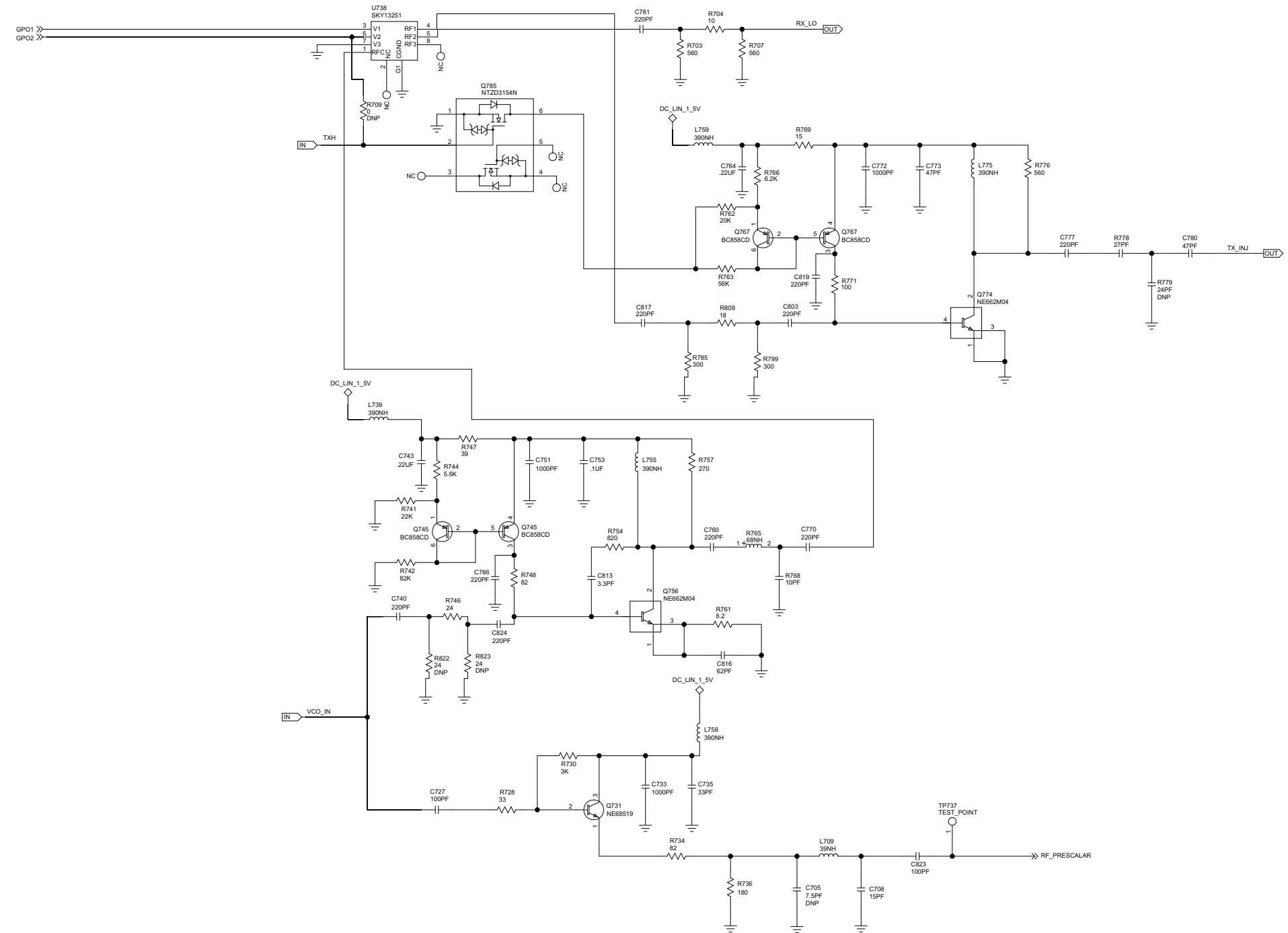
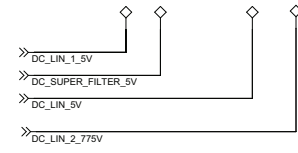


Figure 8-35. Frequency Generation Unit Circuit – 2 of 2

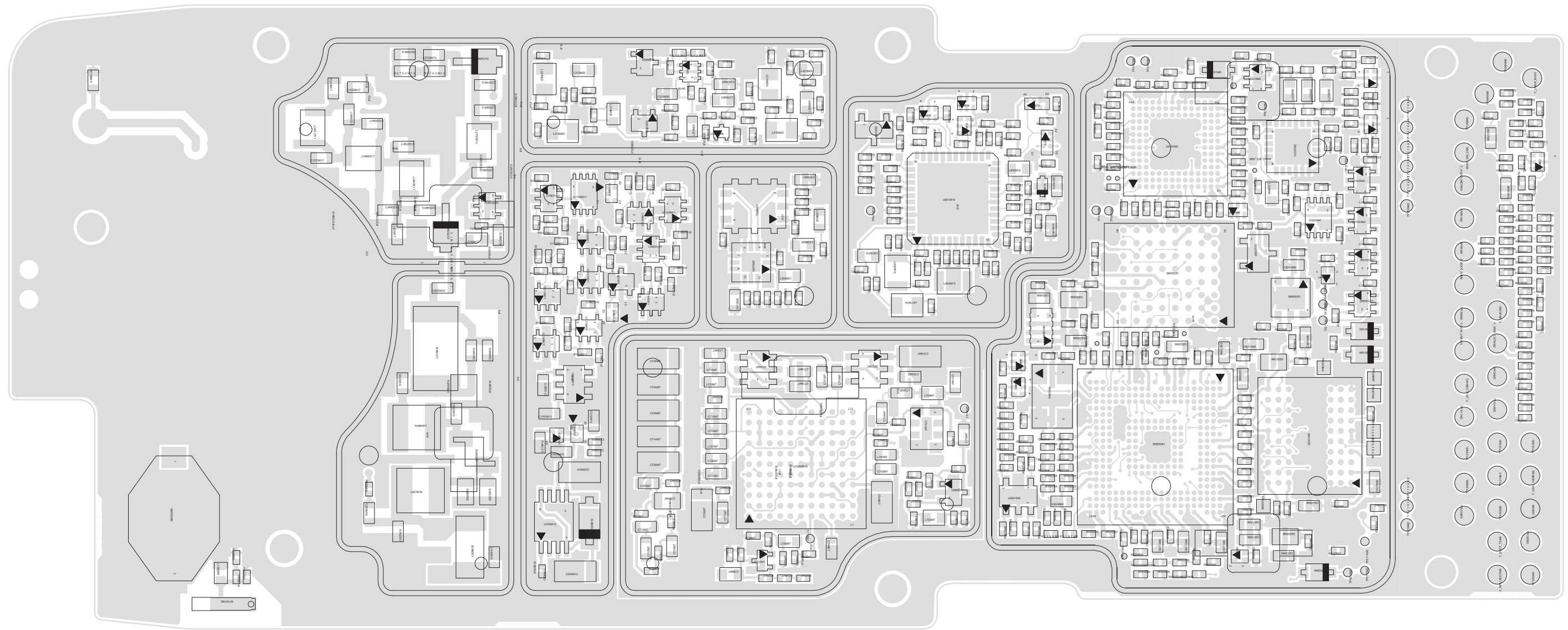


Figure 8-36. Transceiver (RF) Board Layout – Top Side (84012320001)



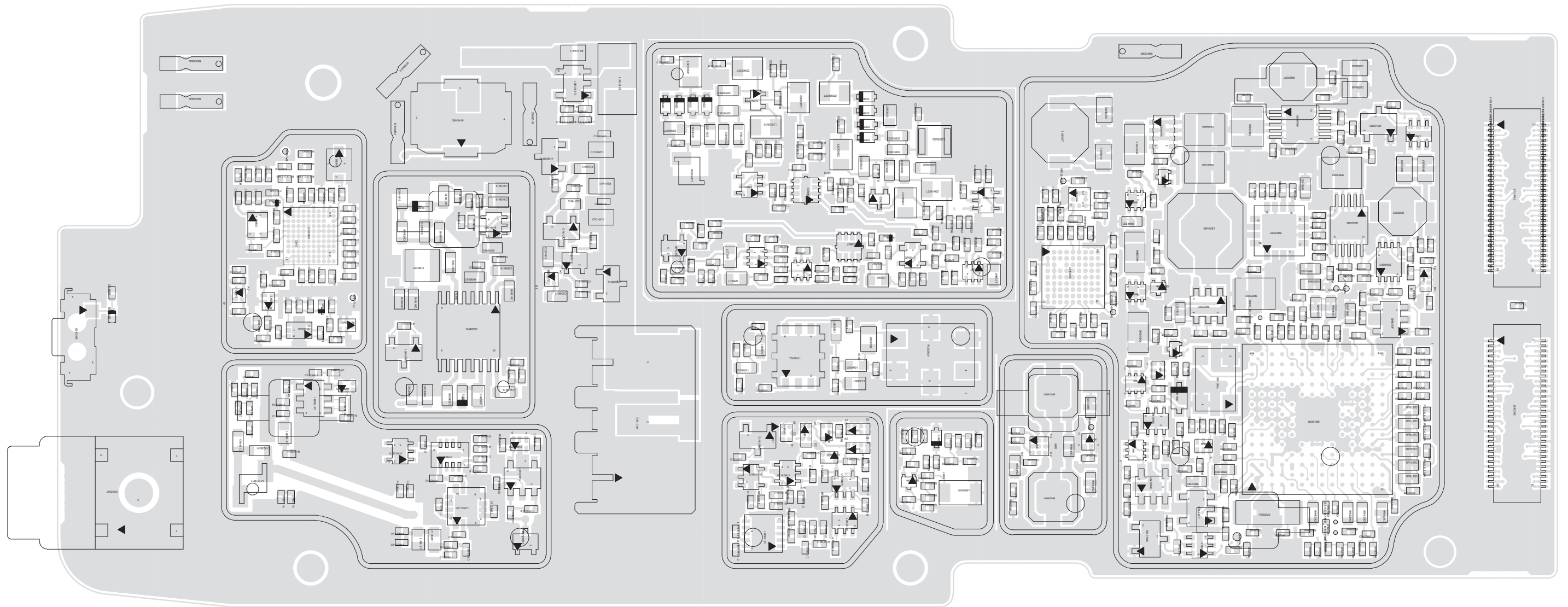


Figure 8-37. Transceiver (RF) Board Layout – Bottom Side (84012320001)

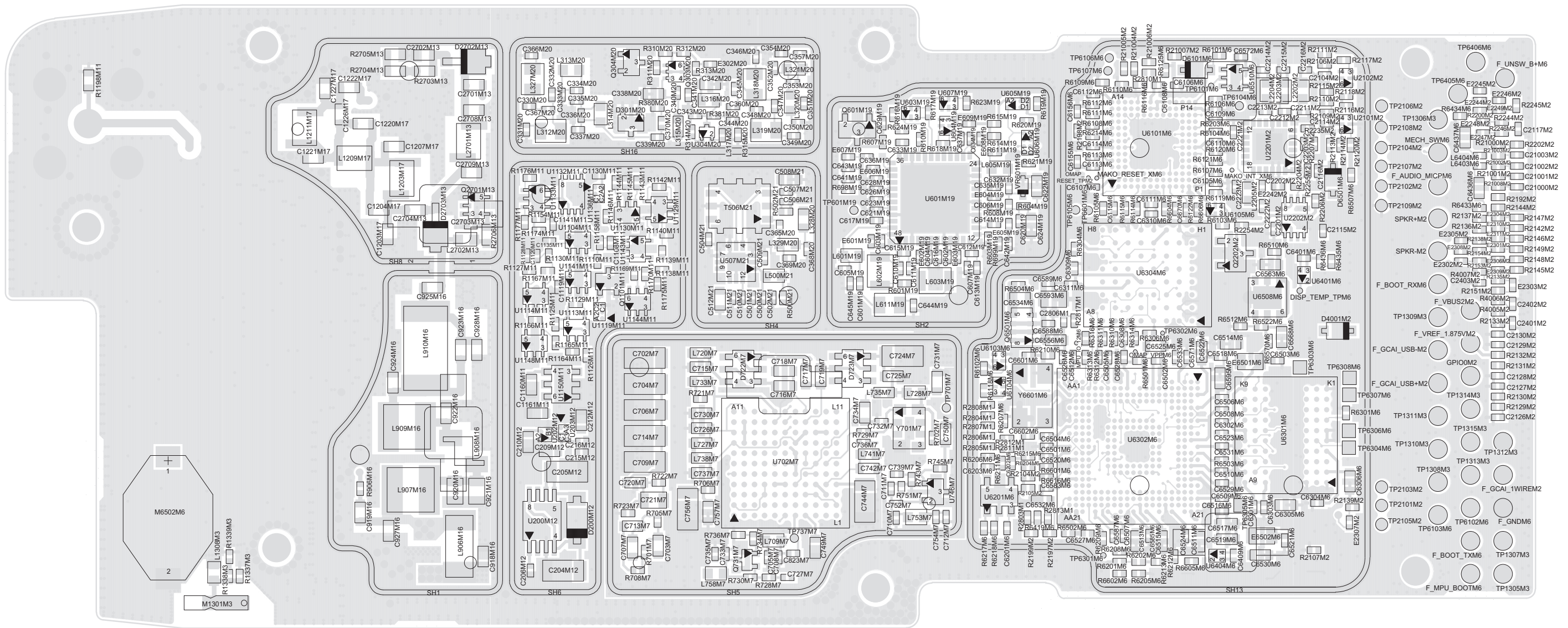


Figure 8-38. Transceiver (RF) Board Layout – Top Side (PC000352A01)

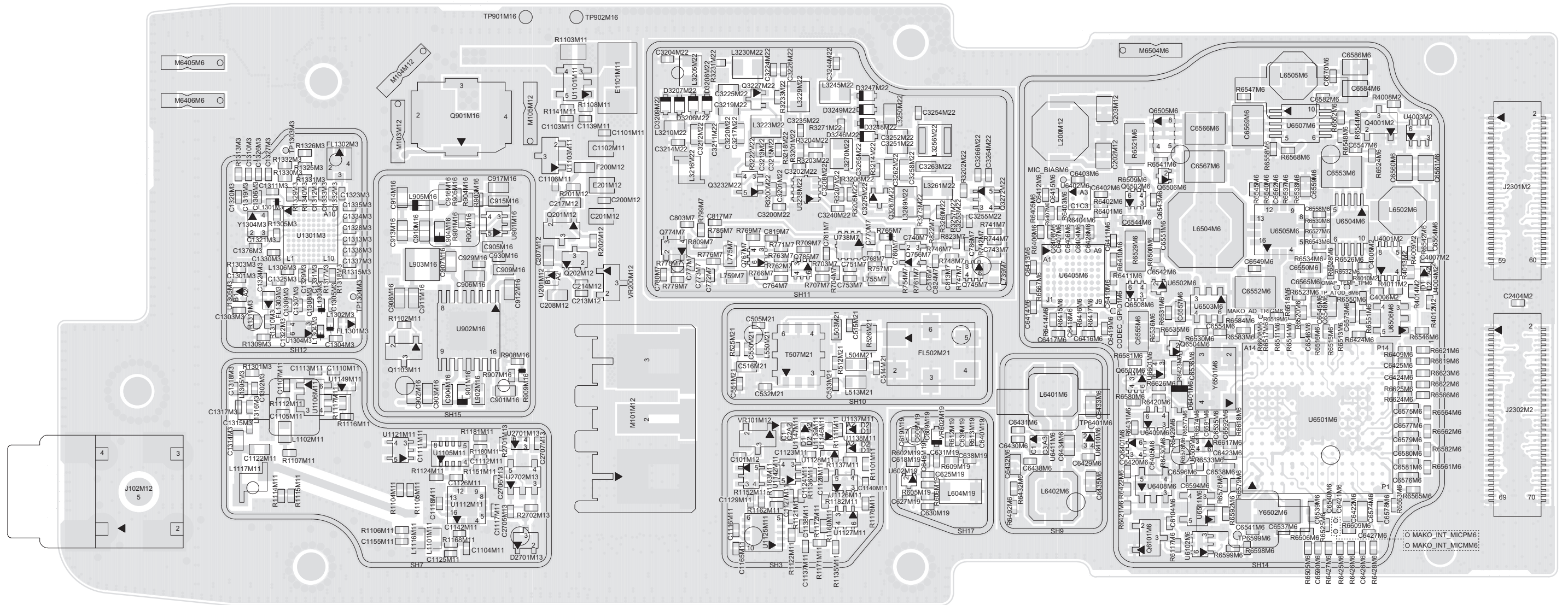


Figure 8-39. Transceiver (RF) Board Layout – Bottom Side (PC000352A01)

VHF Transceiver (RF) Board Parts List –  
84012320001

Ref. Des.	Part Number	Description
C101M12	2113944A46	CAP CER CHP 330.0 PF 50V 5%
C1101M11	2113945B02	CAP CER CHP 10,000PF 25V 10%
C1102M11	2188468Y01	CAP CER 25V X7R 0805 1UF
C1103M11	2113945B02	CAP CER CHP 10,000PF 25V 10%
C1104M11	NOTPLACED	64AM DUMMY PART NUMBER
C1105M11	2113944A19	CAP CER CHP 5.6PF 50V +/- 0.5PF
C1106M11	2113945B02	CAP CER CHP 10,000PF 25V 10%
C1107M11	2113944A40	CAP CER CHP 100.0PF 50V 5%
C1108M11	2113945B06	CAP,FXD,.047UF,+10%,-10%,25V-DC,0402,X7R,-55DEG CMIN,125DEG CMA
C1110M11	2113944A46	CAP CER CHP 330.0 PF 50V 5%
C1111M11	2113945Y02	CAP,FXD,.1UF,+10%,-10%,16V-DC,0402,X7R,-55DEG CMIN,125DEG CMAX
C1112M11	2113945B01	CAP CER CHP 6800PF 25V 10%
C1113M11	2113945B02	CAP CER CHP 10,000PF 25V 10%
C1116M11	2113945Y02	CAP,FXD,.1UF,+10%,-10%,16V-DC,0402,X7R,-55DEG CMIN,125DEG CMAX
C1117M11	2113945A12	CAP CER CHP 3300PF 50V 10%
C1118M11	2113945B02	CAP CER CHP 10,000PF 25V 10%
C1119M11	2113945B02	CAP CER CHP 10,000PF 25V 10%

Ref. Des.	Part Number	Description
C1120M11	2113945B02	CAP CER CHP 10,000PF 25V 10%
C1122M11	2113944M04	CAP,FXD,2.7PF,.1PF+/-,50V-DC,0603,C0G,-55DEG CMIN,125DEG CMAX
C1123M11	2113945B02	CAP CER CHP 10,000PF 25V 10%
C1124M11	2113945A13	CAP CER CHP 4700PF 50V 10%
C1125M11	2113944A23	CAP CER CHP 8.2PF 50V +/- 0.5PF
C1126M11	2113945A09	CAP CER CHP 1000PF 50V 10%
C1127M11	2113945Y02	CAP,FXD,.1UF,+10%,-10%,16V-DC,0402,X7R,-55DEG CMIN,125DEG CMAX
C1128M11	2113945B02	CAP CER CHP 10,000PF 25V 10%
C1129M11	2113945B02	CAP CER CHP 10,000PF 25V 10%
C1130M11	2113945B02	CAP CER CHP 10,000PF 25V 10%
C1135M11	NOTPLACED	64AM DUMMY PART NUMBER
C1137M11	2113945B02	CAP CER CHP 10,000PF 25V 10%
C1138M11	2113945B02	CAP CER CHP 10,000PF 25V 10%
C1139M11	2113944A25	CAP CER CHP 10.0PF 50V +/- 0.5PF
C1140M11	2113945A13	CAP CER CHP 4700PF 50V 10%
C1141M11	2113945Y02	CAP,FXD,.1UF,+10%,-10%,16V-DC,0402,X7R,-55DEG CMIN,125DEG CMAX
C1142M11	2113945A09	CAP CER CHP 1000PF 50V 10%
C1155M11	NOTPLACED	64AM DUMMY PART NUMBER

Ref. Des.	Part Number	Description
C1160M11	2113945C31	CAP,FXD,.1UF,+10%,-10%,50V-DC,0603,X7R,-55DEG CMIN,125DEG CMAX
C1161M11	2113956B91	CAP,FXD,1UF,+10%,-10%,16V-DC,0603,X5R,-55DEG CMIN,85DEG CMAX,PB
C1165M11	2113945Y02	CAP,FXD,.1UF,+10%,-10%,16V-DC,0402,X7R,-55DEG CMIN,125DEG CMAX
C1203M17	2113944M12	CAP,FXD,5.6PF,.1PF+/-,50V-DC,0603,C0G,-55DEG CMIN,125DEG CMAX
C1204M17	2113944M09	CAP,FXD,4.3PF,.1PF+/-,50V-DC,0603,C0G,-55DEG CMIN,125DEG CMAX
C1207M17	2113944M28	CAP,FXD,27PF,+2%,-2%,50V-DC,0603,C0G,-55DEG CMIN,125DEG CMAX,PB
C1220M17	2113944M16	CAP,FXD,8.2PF,.1PF+/-,50V-DC,0603,C0G,-55DEG CMIN,125DEG CMAX
C1221M17	2113944M27	CAP,FXD,24PF,+2%,-2%,50V-DC,0603,C0G,-55DEG CMIN,125DEG CMAX,PB
C1222M17	2113944C04	CAP CER CHP 330.0PF 50V 5%
C1226M17	2175662M26	CAPACITOR 4.3 ?0.1PF, CERAMIC, 100V
C1227M17	2113944M17	CAP,FXD,9.1PF,.1PF+/-,50V-DC,0603,C0G,-55DEG CMIN,125DEG CMAX
C1301M3	2172180Y01	CAP,CHIP,2.2UF,+20%,-20%,6.3V-DC,0402,X5R,-55DEG CMIN,85DEG
C1302M3	2113944A21	CAP CER CHP 6.8PF 50V +/- 0.5PF
C1303M3	2113956A51	CAP,FXD,1UF,+10%,-10%,6.3V-DC,0402,X5R,-55DEG CMIN,85DEG CMAX,P

Ref. Des.	Part Number	Description
C1304M3	2113944A26	CAP CER CHP 12.0PF 50V 5%
C1305M3	2113945B02	CAP CER CHP 10,000PF 25V 10%
C1306M3	2187893N01	CAP 1UF, 6.3V, X5R, 0402 PACKAGE
C1307M3	2113944A26	CAP CER CHP 12.0PF 50V 5%
C1308M3	2113945A09	CAP CER CHP 1000PF 50V 10%
C1309M3	2113944A26	CAP CER CHP 12.0PF 50V 5%
C1310M3	2187893N01	CAP 1UF, 6.3V, X5R, 0402 PACKAGE
C1311M3	2113956A51	CAP,FXD,1UF,+10%,-10%,6.3V-DC,0402,X5R,-55DEG CMIN,85DEG CMAX,P
C1312M3	2113956A51	CAP,FXD,1UF,+10%,-10%,6.3V-DC,0402,X5R,-55DEG CMIN,85DEG CMAX,P
C1313M3	2187893N01	CAP 1UF, 6.3V, X5R, 0402 PACKAGE
C1314M3	2113944M20	CAP,FXD,12PF,+2%,-2%,50V-DC,0603,C0G,-55DEG CMIN,125DEG CMAX,PB
C1315M3	2175389H01	CAP,.5PF, CHIP, 0402, CERAMIC, 50 V
C1317M3	2188881Y12	CAPACITOR CERAMIC NPO HIGH FREQUENCY 16 VOLT (REPLACES 2104801Z12)
C1318M3	2113944A13	CAP CER CHP 3.3PF 50V +/- 0.25PF
C1319M3	2113945Y02	CAP,FXD,.1UF,+10%,-10%,16V-DC,0402,X7R,-55DEG CMIN,125DEG CMAX
C1320M3	2113944A28	CAP CER CHP 18.0PF 50V 5%
C1321M3	2113944A29	CAP CER CHP 22.0PF 50V 5%

Ref. Des.	Part Number	Description
C1322M3	2113944A29	CAP CER CHP 22.0PF 50V 5%
C1323M3	2113944A29	CAP CER CHP 22.0PF 50V 5%
C1324M3	2115153H03	CAP, CERAMIC, COG
C1325M3	2113944A29	CAP CER CHP 22.0PF 50V 5%
C1326M3	2113945Y02	CAP,FXD,.1UF,+10%,-10%,16V-DC,0402,X7R,-55DEG CMIN,125DEG CMAX
C1327M3	2113944A28	CAP CER CHP 18.0PF 50V 5%
C1328M3	2113945Y02	CAP,FXD,.1UF,+10%,-10%,16V-DC,0402,X7R,-55DEG CMIN,125DEG CMAX
C1329M3	2113945Y02	CAP,FXD,.1UF,+10%,-10%,16V-DC,0402,X7R,-55DEG CMIN,125DEG CMAX
C1330M3	2113945Y02	CAP,FXD,.1UF,+10%,-10%,16V-DC,0402,X7R,-55DEG CMIN,125DEG CMAX
C1331M3	2113945Y02	CAP,FXD,.1UF,+10%,-10%,16V-DC,0402,X7R,-55DEG CMIN,125DEG CMAX
C1332M3	2113945Y02	CAP,FXD,.1UF,+10%,-10%,16V-DC,0402,X7R,-55DEG CMIN,125DEG CMAX
C1333M3	2113945Y02	CAP,FXD,.1UF,+10%,-10%,16V-DC,0402,X7R,-55DEG CMIN,125DEG CMAX
C1334M3	2113945Y02	CAP,FXD,.1UF,+10%,-10%,16V-DC,0402,X7R,-55DEG CMIN,125DEG CMAX
C1335M3	2113945Y02	CAP,FXD,.1UF,+10%,-10%,16V-DC,0402,X7R,-55DEG CMIN,125DEG CMAX

Ref. Des.	Part Number	Description
C1336M3	2113945Y02	CAP,FXD,.1UF,+10%,-10%,16V-DC,0402,X7R,-55DEG CMIN,125DEG CMAX
C1337M3	2113944A28	CAP CER CHP 18.0PF 50V 5%
C1376M3	2113944A25	CAP CER CHP 10.0PF 50V +/- 0.5PF
C200M12	2113945B02	CAP CER CHP 10,000PF 25V 10%
C201M12	2188468Y01	CAP CER 25V X7R 0805 1UF
C202M12	2188468Y01	CAP CER 25V X7R 0805 1UF
C203M12	2188468Y01	CAP CER 25V X7R 0805 1UF
C204M12	2113955D35	CAP,FXD,4.7UF,+10%,-10%,16V-DC,1206,X7R,-55DEG CMIN,125DEG CMAX
C205M12	2113955D35	CAP,FXD,4.7UF,+10%,-10%,16V-DC,1206,X7R,-55DEG CMIN,125DEG CMAX
C206M12	2113945B02	CAP CER CHP 10,000PF 25V 10%
C207M12	2113956B91	CAP,FXD,1UF,+10%,-10%,16V-DC,0603,X5R,-55DEG CMIN,85DEG CMAX,PB
C208M12	2113956B91	CAP,FXD,1UF,+10%,-10%,16V-DC,0603,X5R,-55DEG CMIN,85DEG CMAX,PB
C209M12	2113956B91	CAP,FXD,1UF,+10%,-10%,16V-DC,0603,X5R,-55DEG CMIN,85DEG CMAX,PB
C2100M2	2113945Y02	CAP,FXD,.1UF,+10%,-10%,16V-DC,0402,X7R,-55DEG CMIN,125DEG CMAX
C21001M2	2113945Y02	CAP,FXD,.1UF,+10%,-10%,16V-DC,0402,X7R,-55DEG CMIN,125DEG CMAX

Ref. Des.	Part Number	Description
C21002M2	2113946B04	CAP CER CHP 0.10UF 10V 10%
C21003M2	2113946B04	CAP CER CHP 0.10UF 10V 10%
C21004M2	2113945Y02	CAP,FXD,.1UF,+10%,-10%,16V-DC,0402,X7R,-55DEG CMIN,125DEG CMAX
C21005M2	2113946B04	CAP CER CHP 0.10UF 10V 10%
C2104M2	2113946B04	CAP CER CHP 0.10UF 10V 10%
C210M12	2113956B91	CAP,FXD,1UF,+10%,-10%,16V-DC,0603,X5R,-55DEG CMIN,85DEG CMAX,PB
C2114M2	2113946B04	CAP CER CHP 0.10UF 10V 10%
C2115M2	2113944A40	CAP CER CHP 100.0PF 50V 5%
C2116M2	2113946B04	CAP CER CHP 0.10UF 10V 10%
C2126M2	2113944A46	CAP CER CHP 330.0 PF 50V 5%
C2127M2	2113944A46	CAP CER CHP 330.0 PF 50V 5%
C2128M2	2113944A46	CAP CER CHP 330.0 PF 50V 5%
C2129M2	2113944A46	CAP CER CHP 330.0 PF 50V 5%
C212M12	2113946D07	CAP,CHIP,4.7UF,+10%,-10%,6.3V-DC,0603,X5R,-55DEG CMIN,85DEG CMA
C2130M2	2113944A46	CAP CER CHP 330.0 PF 50V 5%
C213M12	2113944A46	CAP CER CHP 330.0 PF 50V 5%
C214M12	2113944A46	CAP CER CHP 330.0 PF 50V 5%
C215M12	2113944A46	CAP CER CHP 330.0 PF 50V 5%
C216M12	2113944A46	CAP CER CHP 330.0 PF 50V 5%

Ref. Des.	Part Number	Description
C217M12	2113956B91	CAP,FXD,1UF,+10%,-10%,16V-DC,0603,X5R,-55DEG CMIN,85DEG CMAX,PB
C2201M2	2113946B04	CAP CER CHP 0.10UF 10V 10%
C2202M2	2113946B04	CAP CER CHP 0.10UF 10V 10%
C2203M2	2113946B04	CAP CER CHP 0.10UF 10V 10%
C2211M2	2113946B04	CAP CER CHP 0.10UF 10V 10%
C2212M2	2113946B04	CAP CER CHP 0.10UF 10V 10%
C2213M2	2113946B04	CAP CER CHP 0.10UF 10V 10%
C2214M2	2113946B04	CAP CER CHP 0.10UF 10V 10%
C2215M2	2113946B04	CAP CER CHP 0.10UF 10V 10%
C2216M2	2113946B04	CAP CER CHP 0.10UF 10V 10%
C2221M2	2113946B04	CAP CER CHP 0.10UF 10V 10%
C2222M2	2113946B04	CAP CER CHP 0.10UF 10V 10%
C2223M2	2113944A40	CAP CER CHP 100.0PF 50V 5%
C2401M2	NOTPLACED	64AM DUMMY PART NUMBER
C2402M2	NOTPLACED	64AM DUMMY PART NUMBER
C2403M2	NOTPLACED	64AM DUMMY PART NUMBER
C2404M2	NOTPLACED	64AM DUMMY PART NUMBER
C2701M13	2113944C04	CAP CER CHP 330.0PF 50V 5%
C2702M13	2113944C48	CAP CER CHP 560.OPF 50V 5%
C2703M13	2113944A46	CAP CER CHP 330.0 PF 50V 5%

Ref. Des.	Part Number	Description	Ref. Des.	Part Number	Description	Ref. Des.	Part Number	Description	Ref. Des.	Part Number	Description
C2704M13	2113944C04	CAP CER CHP 330.0PF 50V 5%	C3219M22	2113944M32	CAP,FXD,39PF,+2%,-2%,50V-DC,0603,C0G,-55DEG CMIN,125DEG CMAX,PB	C3264M22	2113946B04	CAP CER CHP 0.10UF 10V 10%	C344M20	21012043009	CAPACITOR,CERAMIC,1.0 PF,50V-DC,C0G,
C2705M13	2113944A46	CAP CER CHP 330.0 PF 50V 5%	C3220M22	2113944M28	CAP,FXD,27PF,+2%,-2%,50V-DC,0603,C0G,-55DEG CMIN,125DEG CMAX,PB	C3265M22	2113944M38	CAP,FXD,68PF,+2%,-2%,50V-DC,0603,C0G,-55DEG CMIN,125DEG CMAX,PB	C345M20	2113944A30	CAP CER CHP 27.0PF 50V 5%
C2706M13	2113944A46	CAP CER CHP 330.0 PF 50V 5%	C3224M22	2113946B04	CAP CER CHP 0.10UF 10V 10%	C3266M22	2113944A40	CAP CER CHP 100.0PF 50V 5%	C346M20	2113944A28	CAP CER CHP 18.0PF 50V 5%
C2707M13	2113946K02	CAP CER CHP 0.10UF 16V	C3225M22	2113944M38	CAP,FXD,68PF,+2%,-2%,50V-DC,0603,C0G,-55DEG CMIN,125DEG CMAX,PB	C3275M22	2113944A31	CAP CER CHP 33.0PF 50V 5%	C347M20	2113944A27	CAP CER CHP 15.0PF 50V 5%
C2708M13	2113944M27	CAP,FXD,24PF,+2%,-2%,50V-DC,0603,C0G,-55DEG CMIN,125DEG CMAX,PB	C3226M22	2113944A42	CAP CER CHP 150.0PF 50V 5%	C330M20	2113944A30	CAP CER CHP 27.0PF 50V 5%	C348M20	2113944A28	CAP CER CHP 18.0PF 50V 5%
C2709M13	2113944C36	CAP CER CHP 33.0PF 50V 5%	C3235M22	2113944A31	CAP CER CHP 33.0PF 50V 5%	C331M20	2113944A28	CAP CER CHP 18.0PF 50V 5%	C349M20	2113944A30	CAP CER CHP 27.0PF 50V 5%
C2806M1	NOTPLACED	64AM DUMMY PART NUMBER	C3240M22	2113944A40	CAP CER CHP 100.0PF 50V 5%	C332M20	2113944A30	CAP CER CHP 27.0PF 50V 5%	C350M20	2113944A30	CAP CER CHP 27.0PF 50V 5%
C3200M22	2113944A40	CAP CER CHP 100.0PF 50V 5%	C3244M22	2113944A52	CAP CER CHP 1000.0 PF 50V 5%	C333M20	2113944A30	CAP CER CHP 27.0PF 50V 5%	C351M20	2113944A19	CAP CER CHP 5.6PF 50V +/- 0.5PF
C3201M22	2113944A40	CAP CER CHP 100.0PF 50V 5%	C3251M22	2113944M17	CAP,FXD,9.1PF,.1PF+/-,50V-DC,0603,C0G,-55DEG CMIN,125DEG CMAX	C334M20	2113944A19	CAP CER CHP 5.6PF 50V +/- 0.5PF	C352M20	2115153H48	CAP, CERAMIC, COG
C3202M22	2113944A46	CAP CER CHP 330.0 PF 50V 5%	C3252M22	2113944M17	CAP,FXD,9.1PF,.1PF+/-,50V-DC,0603,C0G,-55DEG CMIN,125DEG CMAX	C335M20	2113944A84	CAP,FXD,43PF,+5%,-5%,50V-DC,0402,C0G,-55DEG CMIN,125DEG CMAX,PB	C353M20	2113944A21	CAP CER CHP 6.8PF 50V +/- 0.5PF
C3204M22	2113944A52	CAP CER CHP 1000.0 PF 50V 5%	C3253M22	2113946B04	CAP CER CHP 0.10UF 10V 10%	C336M20	2113944A21	CAP CER CHP 6.8PF 50V +/- 0.5PF	C354M20	2113944A28	CAP CER CHP 18.0PF 50V 5%
C3208M22	2113944A46	CAP CER CHP 330.0 PF 50V 5%	C3254M22	2115153H42	CAP, CERAMIC, COG	C337M20	2113944A28	CAP CER CHP 18.0PF 50V 5%	C357M20	2113944A46	CAP CER CHP 330.0 PF 50V 5%
C3211M22	2113944M20	CAP,FXD,12PF,+2%,-2%,50V-DC,0603,C0G,-55DEG CMIN,125DEG CMAX,PB	C3255M22	2113944A40	CAP CER CHP 100.0PF 50V 5%	C338M20	2113946D07	CAP,CHIP,4.7UF,+10%,-10%,6.3V-DC,0603,X5R,-55DEG CMIN,85DEG CMA	C360M20	2115153H37	CAP, CERAMIC, COG
C3212M22	2113944M22	CAP,FXD,15PF,+2%,-2%,50V-DC,0603,C0G,-55DEG CMIN,125DEG CMAX,PB	C3258M22	2113944M36	CAP,FXD,56PF,+2%,-2%,50V-DC,0603,C0G,-55DEG CMIN,125DEG CMAX,PB	C339M20	2113944A29	CAP CER CHP 22.0PF 50V 5%	C365M20	0613952R66	CER CHIP RES 0.0 +/-0.050 OHM
C3213M22	2113946B04	CAP CER CHP 0.10UF 10V 10%	C3262M22	2113944M30	CAP,FXD,33PF,+2%,-2%,50V-DC,0603,C0G,-55DEG CMIN,125DEG CMAX,PB	C340M20	2113944A46	CAP CER CHP 330.0 PF 50V 5%	C366M20	2113944A28	CAP CER CHP 18.0PF 50V 5%
C3214M22	2115153H29	CAP, CERAMIC, COG	C3263M22	2113944M26	CAP,FXD,22PF,+2%,-2%,50V-DC,0603,C0G,-55DEG CMIN,125DEG CMAX,PB	C341M20	2113944A46	CAP CER CHP 330.0 PF 50V 5%	C367M20	2113944A27	CAP CER CHP 15.0PF 50V 5%
C3215M22	2113944A42	CAP CER CHP 150.0PF 50V 5%				C342M20	2113946D07	CAP,CHIP,4.7UF,+10%,-10%,6.3V-DC,0603,X5R,-55DEG CMIN,85DEG CMA	C368M20	2115153H42	CAP, CERAMIC, COG
C3217M22	2113944M36	CAP,FXD,56PF,+2%,-2%,50V-DC,0603,C0G,-55DEG CMIN,125DEG CMAX,PB				C343M20	2113944A46	CAP CER CHP 330.0 PF 50V 5%	C369M20	NOTPLACED	64AM DUMMY PART NUMBER
									C370M20	21012043009	CAPACITOR,CERAMIC,1.0 PF,50V-DC,C0G,
									C4005M2	2113946B04	CAP CER CHP 0.10UF 10V 10%
									C4006M2	2113946B04	CAP CER CHP 0.10UF 10V 10%
									C4007M2	2113946B04	CAP CER CHP 0.10UF 10V 10%

Ref. Des.	Part Number	Description
C500M21	2113945B05	CAP,FXD,.033UF,+10%,-10%,25V-DC,0402,X7R,-55DEG CMIN,125DEG CMA
C501M21	2113944A32	CAP CER CHP 39.0PF 50V 5%
C502M21	2113945B05	CAP,FXD,.033UF,+10%,-10%,25V-DC,0402,X7R,-55DEG CMIN,125DEG CMA
C504M21	2113944A40	CAP CER CHP 100.0PF 50V 5%
C505M21	2113944A09	CAP CER CHP 2.2PF 50V +/- 0.25PF
C506M21	2113944A32	CAP CER CHP 39.0PF 50V 5%
C507M21	2113945B05	CAP,FXD,.033UF,+10%,-10%,25V-DC,0402,X7R,-55DEG CMIN,125DEG CMA
C508M21	2113946D07	CAP,CHIP,4.7UF,+10%,-10%,6.3V-DC,0603,X5R,-55DEG CMIN,85DEG CMA
C509M21	2113945B05	CAP,FXD,.033UF,+10%,-10%,25V-DC,0402,X7R,-55DEG CMIN,125DEG CMA
C510M21	2113944A32	CAP CER CHP 39.0PF 50V 5%
C511M21	2113945B05	CAP,FXD,.033UF,+10%,-10%,25V-DC,0402,X7R,-55DEG CMIN,125DEG CMA
C512M21	2113946D07	CAP,CHIP,4.7UF,+10%,-10%,6.3V-DC,0603,X5R,-55DEG CMIN,85DEG CMA
C514M21	NOTPLACED	64AM DUMMY PART NUMBER
C515M21	2115153H16	CAP, CERAMIC, COG
C516M21	2113944C04	CAP CER CHP 330.0PF 50V 5%
C532M21	2113944A32	CAP CER CHP 39.0PF 50V 5%
C533M21	2115153H52	CAP, CERAMIC, COG
C550M21	NOTPLACED	64AM DUMMY PART NUMBER
C551M21	NOTPLACED	64AM DUMMY PART NUMBER

Ref. Des.	Part Number	Description
C601M19	2113945B02	CAP CER CHP 10,000PF 25V 10%
C602M19	2113945B02	CAP CER CHP 10,000PF 25V 10%
C603M19	2113945B02	CAP CER CHP 10,000PF 25V 10%
C604M19	2113945B02	CAP CER CHP 10,000PF 25V 10%
C605M19	2113944A15	CAP CER CHP 3.9PF 50V +/- 0.25PF
C606M19	2113946B04	CAP CER CHP 0.10UF 10V 10%
C607M19	2113944A40	CAP CER CHP 100.0PF 50V 5%
C608M19	2113944A12	CAP CER CHP 3.0PF 50V +/- 0.25PF
C609M19	2113944A30	CAP CER CHP 27.0PF 50V 5%
C6104M6	2113946B04	CAP CER CHP 0.10UF 10V 10%
C6105M6	2113946B04	CAP CER CHP 0.10UF 10V 10%
C6106M6	2113946B04	CAP CER CHP 0.10UF 10V 10%
C6107M6	2113946B04	CAP CER CHP 0.10UF 10V 10%
C6108M6	2113946B04	CAP CER CHP 0.10UF 10V 10%
C6109M6	2113946B04	CAP CER CHP 0.10UF 10V 10%
C610M19	2113944A40	CAP CER CHP 100.0PF 50V 5%
C6110M6	2113946B04	CAP CER CHP 0.10UF 10V 10%
C6111M6	2113946B04	CAP CER CHP 0.10UF 10V 10%
C6112M6	2113946B04	CAP CER CHP 0.10UF 10V 10%
C6113M6	2113946B04	CAP CER CHP 0.10UF 10V 10%

Ref. Des.	Part Number	Description
C6114M6	2113946B04	CAP CER CHP 0.10UF 10V 10%
C6115M6	2113946B04	CAP CER CHP 0.10UF 10V 10%
C611M19	2113944A40	CAP CER CHP 100.0PF 50V 5%
C612M19	2113945B02	CAP CER CHP 10,000PF 25V 10%
C613M19	2113944A40	CAP CER CHP 100.0PF 50V 5%
C614M19	2113945B02	CAP CER CHP 10,000PF 25V 10%
C6155M6	2113944A78	CAP,FXD,13PF,+5%,-5%,50V-DC,0402,COG,-55DEG CMIN,125DEG CMAX,PB
C6156M6	NOTPLACED	64AM DUMMY PART NUMBER
C615M19	2113944A42	CAP CER CHP 150.0PF 50V 5%
C616M19	2113945A11	CAP CER CHP 2200PF 50V 10%
C617M19	2113946B04	CAP CER CHP 0.10UF 10V 10%
C618M19	2113944A31	CAP CER CHP 33.0PF 50V 5%
C619M19	2113944A35	CAP CER CHP 62.0PF 50V 5%
C6201M6	2113944A40	CAP CER CHP 100.0PF 50V 5%
C6202M6	2113945A09	CAP CER CHP 1000PF 50V 10%
C6203M6	2113946B04	CAP CER CHP 0.10UF 10V 10%
C620M19	2113946B04	CAP CER CHP 0.10UF 10V 10%
C621M19	2113946B04	CAP CER CHP 0.10UF 10V 10%
C622M19	2113946C07	CAP,FXD,.33UF,+10%,-10%,10V-DC,0603,X5R,-55DEG CMIN,85DEG CMAX

Ref. Des.	Part Number	Description
C623M19	2113945B02	CAP CER CHP 10,000PF 25V 10%
C624M19	2113946C07	CAP,FXD,.33UF,+10%,-10%,10V-DC,0603,X5R,-55DEG CMIN,85DEG CMAX
C625M19	2115153H39	CAP, CERAMIC, COG
C626M19	2113945A09	CAP CER CHP 1000PF 50V 10%
C627M19	2113945A09	CAP CER CHP 1000PF 50V 10%
C628M19	2113945B02	CAP CER CHP 10,000PF 25V 10%
C629M19	2113946B04	CAP CER CHP 0.10UF 10V 10%
C6301M6	2113946B04	CAP CER CHP 0.10UF 10V 10%
C6302M6	2113946B04	CAP CER CHP 0.10UF 10V 10%
C6303M6	2113946B04	CAP CER CHP 0.10UF 10V 10%
C6304M6	2113946B04	CAP CER CHP 0.10UF 10V 10%
C6305M6	2113946S35	CAP CER CHP 1.0UF 16V 10%
C6306M6	2113946S35	CAP CER CHP 1.0UF 16V 10%
C6308M6	2113946B04	CAP CER CHP 0.10UF 10V 10%
C6309M6	2113946B04	CAP CER CHP 0.10UF 10V 10%
C630M19	2113946B04	CAP CER CHP 0.10UF 10V 10%
C6310M6	2113946B04	CAP CER CHP 0.10UF 10V 10%
C6311M6	2113946B04	CAP CER CHP 0.10UF 10V 10%
C631M19	2115153H31	CAP, CERAMIC, COG
C632M19	2113944A40	CAP CER CHP 100.0PF 50V 5%
C633M19	2113945B02	CAP CER CHP 10,000PF 25V 10%

Ref. Des.	Part Number	Description
C634M19	2113946B04	CAP CER CHP 0.10UF 10V 10%
C635M19	2113945B02	CAP CER CHP 10,000PF 25V 10%
C636M19	2113946B04	CAP CER CHP 0.10UF 10V 10%
C637M19	2113946B04	CAP CER CHP 0.10UF 10V 10%
C638M19	2113945A12	CAP CER CHP 3300PF 50V 10%
C639M19	2113945B02	CAP CER CHP 10,000PF 25V 10%
C6401M6	2113946B04	CAP CER CHP 0.10UF 10V 10%
C6402M6	2113956A51	CAP,FXD,1UF,+10%,-10%,6.3V-DC,0402,X5R,-55DEG CMIN,85DEG CMAX,P
C6403M6	2113946B04	CAP CER CHP 0.10UF 10V 10%
C6404M6	2113946B04	CAP CER CHP 0.10UF 10V 10%
C6405M6	2113946B04	CAP CER CHP 0.10UF 10V 10%
C6406M6	2113946B04	CAP CER CHP 0.10UF 10V 10%
C6407M6	2113946B04	CAP CER CHP 0.10UF 10V 10%
C6408M6	2113946B04	CAP CER CHP 0.10UF 10V 10%
C6409M6	2113946B04	CAP CER CHP 0.10UF 10V 10%
C640M19	2113946B04	CAP CER CHP 0.10UF 10V 10%
C6410M6	2113946B04	CAP CER CHP 0.10UF 10V 10%
C6411M6	2113946B04	CAP CER CHP 0.10UF 10V 10%
C6412M6	NOTPLACED	64AM DUMMY PART NUMBER
C6413M6	2113946B04	CAP CER CHP 0.10UF 10V 10%

Ref. Des.	Part Number	Description
C6414M6	2113946B04	CAP CER CHP 0.10UF 10V 10%
C6415M6	NOTPLACED	64AM DUMMY PART NUMBER
C6416M6	2113945B04	CAP,FXD,.022UF,+10%,-10%,25V-DC,0402,X7R,-55DEG CMIN,125DEG CMA
C6417M6	2113945B04	CAP,FXD,.022UF,+10%,-10%,25V-DC,0402,X7R,-55DEG CMIN,125DEG CMA
C6418M6	2113946B04	CAP CER CHP 0.10UF 10V 10%
C6419M6	2113946B04	CAP CER CHP 0.10UF 10V 10%
C641M19	2113944A31	CAP CER CHP 33.0PF 50V 5%
C6420M6	2113945B04	CAP,FXD,.022UF,+10%,-10%,25V-DC,0402,X7R,-55DEG CMIN,125DEG CMA
C6421M6	2113946B04	CAP CER CHP 0.10UF 10V 10%
C6422M6	2113946C02	CAP CER CHP 0.22UF 10V 10%
C6423M6	2113946B04	CAP CER CHP 0.10UF 10V 10%
C6424M6	2113944A40	CAP CER CHP 100.0PF 50V 5%
C6425M6	2113944A40	CAP CER CHP 100.0PF 50V 5%
C6426M6	2113945B02	CAP CER CHP 10,000PF 25V 10%
C6427M6	2113944A50	CAP CER CHP 680.0 PF 50V 5%
C6428M6	2113944A40	CAP CER CHP 100.0PF 50V 5%
C6429M6	2113946B04	CAP CER CHP 0.10UF 10V 10%
C642M19	2113944A48	CAP CER CHP 470.0 PF 50V 5%
C6430M6	2113946B04	CAP CER CHP 0.10UF 10V 10%

Ref. Des.	Part Number	Description
C6431M6	2113946B04	CAP CER CHP 0.10UF 10V 10%
C6432M6	2113956B54	CAP,FXD,10UF,+20%,-20%,6.3V-DC,X5R,-55DEG CMIN,85DEG CMAX,PB-F
C6433M6	2113946S35	CAP CER CHP 1.0UF 16V 10%
C6434M6	2113946L05	CAP,FXD,.33UF,+80%,-20%,16V-DC,0603,Y5V,-30DEG CMIN,85DEG CMAX
C6435M6	2113946S35	CAP CER CHP 1.0UF 16V 10%
C6436M6	2113946C08	CAP,FXD,.47UF,+10%,-10%,10V-DC,0603,X5R,-55DEG CMIN,85DEG CMAX
C6437M6	2113946C08	CAP,FXD,.47UF,+10%,-10%,10V-DC,0603,X5R,-55DEG CMIN,85DEG CMAX
C6438M6	2113944A40	CAP CER CHP 100.0PF 50V 5%
C643M19	2113944A48	CAP CER CHP 470.0 PF 50V 5%
C644M19	2113944A11	CAP CER CHP 2.7PF 50V +/- 0.25PF
C645M19	NOTPLACED	64AM DUMMY PART NUMBER
C646M19	2115153H32	CAP, CERAMIC, COG
C6501M6	2113946B04	CAP CER CHP 0.10UF 10V 10%
C6502M6	2113946B04	CAP CER CHP 0.10UF 10V 10%
C6503M6	2113944A46	CAP CER CHP 330.0 PF 50V 5%
C6504M6	2113946B04	CAP CER CHP 0.10UF 10V 10%
C6505M6	2113946B04	CAP CER CHP 0.10UF 10V 10%
C6506M6	2113946B04	CAP CER CHP 0.10UF 10V 10%
C6507M6	2113946B04	CAP CER CHP 0.10UF 10V 10%

Ref. Des.	Part Number	Description
C6508M6	2113946B04	CAP CER CHP 0.10UF 10V 10%
C6509M6	2113946B04	CAP CER CHP 0.10UF 10V 10%
C6510M6	2113946B04	CAP CER CHP 0.10UF 10V 10%
C6511M6	2113946S35	CAP CER CHP 1.0UF 16V 10%
C6512M6	2113946B04	CAP CER CHP 0.10UF 10V 10%
C6513M6	2113946S35	CAP CER CHP 1.0UF 16V 10%
C6514M6	2113946S35	CAP CER CHP 1.0UF 16V 10%
C6515M6	2113946S35	CAP CER CHP 1.0UF 16V 10%
C6516M6	2113946B04	CAP CER CHP 0.10UF 10V 10%
C6517M6	2113946S35	CAP CER CHP 1.0UF 16V 10%
C6518M6	2113946B04	CAP CER CHP 0.10UF 10V 10%
C6519M6	2113946S35	CAP CER CHP 1.0UF 16V 10%
C6520M6	2113946B04	CAP CER CHP 0.10UF 10V 10%
C6521M6	2113944A46	CAP CER CHP 330.0 PF 50V 5%
C6522M6	2113946S35	CAP CER CHP 1.0UF 16V 10%
C6523M6	2113946B04	CAP CER CHP 0.10UF 10V 10%
C6524M6	2113946B04	CAP CER CHP 0.10UF 10V 10%
C6525M6	2113946S35	CAP CER CHP 1.0UF 16V 10%
C6526M6	2113946B04	CAP CER CHP 0.10UF 10V 10%
C6527M6	2113946B04	CAP CER CHP 0.10UF 10V 10%





Ref. Des.	Part Number	Description
C6602M6	2113944A28	CAP CER CHP 18.0PF 50V 5%
C6670M6	2113944A78	CAP,FXD,13PF,+5%,-5%,50V-DC,0402,C0G,-55DEG CMIN,125DEG CMAX,PB
C702M7	2113944G97	CAP,FXD,.082UF,+5%,-5%,50V-DC,1206,C0G,-55DEG CMIN,125DEG CMAX
C703M7	2113945C26	CAP,FXD,.039UF,+10%,-10%,50V-DC,0603,X7R,-55DEG CMIN,125DEG CMA
C704M7	2113944G97	CAP,FXD,.082UF,+5%,-5%,50V-DC,1206,C0G,-55DEG CMIN,125DEG CMAX
C705M7	NOTPLACED	64AM DUMMY PART NUMBER
C706M7	2113944G97	CAP,FXD,.082UF,+5%,-5%,50V-DC,1206,C0G,-55DEG CMIN,125DEG CMAX
C707M7	2113945C01	CAP CER CHP 6800PF 50V 10%
C708M7	2115153H37	CAP, CERAMIC, COG
C709M7	2185419D06	CAP CER SUPER L/D 0.1UF
C710M7	NOTPLACED	64AM DUMMY PART NUMBER
C711M7	NOTPLACED	64AM DUMMY PART NUMBER
C712M7	NOTPLACED	64AM DUMMY PART NUMBER
C713M7	2113945C20	CAP,FXD,.016UF,+10%,-10%,50V-DC,0603,X7R,-55DEG CMIN,125DEG CMA
C714M7	2113944G97	CAP,FXD,.082UF,+5%,-5%,50V-DC,1206,C0G,-55DEG CMIN,125DEG CMAX
C715M7	2113945C31	CAP,FXD,.1UF,+10%,-10%,50V-DC,0603,X7R,-55DEG CMIN,125DEG CMAX

Ref. Des.	Part Number	Description
C716M7	2113945C31	CAP,FXD,.1UF,+10%,-10%,50V-DC,0603,X7R,-55DEG CMIN,125DEG CMAX
C717M7	2113945C31	CAP,FXD,.1UF,+10%,-10%,50V-DC,0603,X7R,-55DEG CMIN,125DEG CMAX
C718M7	2113945C31	CAP,FXD,.1UF,+10%,-10%,50V-DC,0603,X7R,-55DEG CMIN,125DEG CMAX
C719M7	2113945C31	CAP,FXD,.1UF,+10%,-10%,50V-DC,0603,X7R,-55DEG CMIN,125DEG CMAX
C720M7	2113944C54	CAP CER CHP 1800.OPF 50V 5%
C721M7	2113945G95	CAP,FXD,.22UF,+10%,-10%,50V-DC,0805,X7R,-55DEG CMIN,125DEG CMAX
C724M7	2113955D37	CAP,FXD,10UF,+10%,-10%,16V-DC,1206,X7R,-55DEG CMIN,125DEG CMAX
C725M7	2113945C31	CAP,FXD,.1UF,+10%,-10%,50V-DC,0603,X7R,-55DEG CMIN,125DEG CMAX
C726M7	2113945C31	CAP,FXD,.1UF,+10%,-10%,50V-DC,0603,X7R,-55DEG CMIN,125DEG CMAX
C727M7	2113944A40	CAP CER CHP 100.0PF 50V 5%
C730M7	2113945C31	CAP,FXD,.1UF,+10%,-10%,50V-DC,0603,X7R,-55DEG CMIN,125DEG CMAX
C731M7	2113945C31	CAP,FXD,.1UF,+10%,-10%,50V-DC,0603,X7R,-55DEG CMIN,125DEG CMAX
C732M7	2113944A32	CAP CER CHP 39.0PF 50V 5%

Ref. Des.	Part Number	Description
C733M7	2113945A09	CAP CER CHP 1000PF 50V 10%
C734M7	2113945C31	CAP,FXD,.1UF,+10%,-10%,50V-DC,0603,X7R,-55DEG CMIN,125DEG CMAX
C735M7	2113944A31	CAP CER CHP 33.0PF 50V 5%
C736M7	2113945B02	CAP CER CHP 10,000PF 25V 10%
C737M7	2113945C31	CAP,FXD,.1UF,+10%,-10%,50V-DC,0603,X7R,-55DEG CMIN,125DEG CMAX
C739M7	2113944A17	CAP CER CHP 4.7PF 50V +/- 0.25PF
C740M7	2113944A44	CAP CER CHP 220.0 PF 50V 5%
C742M7	2113945C31	CAP,FXD,.1UF,+10%,-10%,50V-DC,0603,X7R,-55DEG CMIN,125DEG CMAX
C743M7	2113946B06	CAP,CHIP,.22UF,+10%,-10%,10V-DC,0402,X5R,-55DEG CMIN,85DEG CMAX
C744M7	2113955D37	CAP,FXD,10UF,+10%,-10%,16V-DC,1206,X7R,-55DEG CMIN,125DEG CMAX
C749M7	2113945C31	CAP,FXD,.1UF,+10%,-10%,50V-DC,0603,X7R,-55DEG CMIN,125DEG CMAX
C750M7	2113945C31	CAP,FXD,.1UF,+10%,-10%,50V-DC,0603,X7R,-55DEG CMIN,125DEG CMAX
C751M7	2113945A09	CAP CER CHP 1000PF 50V 10%
C752M7	2113944A43	CAP CER CHP 180.0PF 50V 5%
C753M7	2113945Y02	CAP,FXD,.1UF,+10%,-10%,16V-DC,0402,X7R,-55DEG CMIN,125DEG CMAX

Ref. Des.	Part Number	Description
C754M7	2113944A34	CAP CER CHP 56.0PF 50V 5%
C756M7	2113955D37	CAP,FXD,10UF,+10%,-10%,16V-DC,1206,X7R,-55DEG CMIN,125DEG CMAX
C757M7	2113945C31	CAP,FXD,.1UF,+10%,-10%,50V-DC,0603,X7R,-55DEG CMIN,125DEG CMAX
C760M7	2113944A44	CAP CER CHP 220.0 PF 50V 5%
C764M7	2113946B06	CAP,CHIP,.22UF,+10%,-10%,10V-DC,0402,X5R,-55DEG CMIN,85DEG CMAX
C770M7	2113944A44	CAP CER CHP 220.0 PF 50V 5%
C772M7	2113945A09	CAP CER CHP 1000PF 50V 10%
C773M7	2113944A33	CAP CER CHP 47.0PF 50V 5%
C777M7	2113944A44	CAP CER CHP 220.0 PF 50V 5%
C780M7	2113944A33	CAP CER CHP 47.0PF 50V 5%
C781M7	2113944A44	CAP CER CHP 220.0 PF 50V 5%
C786M7	2113944A44	CAP CER CHP 220.0 PF 50V 5%
C803M7	2113944A44	CAP CER CHP 220.0 PF 50V 5%
C813M7	2113944A13	CAP CER CHP 3.3PF 50V +/- 0.25PF
C816M7	2113944A35	CAP CER CHP 62.0PF 50V 5%
C817M7	2113944A44	CAP CER CHP 220.0 PF 50V 5%
C819M7	2113944A44	CAP CER CHP 220.0 PF 50V 5%
C823M7	2113944A40	CAP CER CHP 100.0PF 50V 5%
C824M7	2113944A44	CAP CER CHP 220.0 PF 50V 5%

Ref. Des.	Part Number	Description
C901M16	2113944M49	CAP,FXD,1000PF,+1%,-1%,50V-DC,C0G,-55DEG CMIN,125DEG CMAX,PB-F
C902M16	2113944C04	CAP CER CHP 330.0PF 50V 5%
C903M16	2113945L49	CAP,FXD,.01UF,+5%,-5%,50V-DC,0603,X7R,-55DEG CMIN,125DEG CMAX,P
C904M16	2113944M36	CAP,FXD,56PF,+2%,-2%,50V-DC,0603,C0G,-55DEG CMIN,125DEG CMAX,PB
C905M16	2113945L49	CAP,FXD,.01UF,+5%,-5%,50V-DC,0603,X7R,-55DEG CMIN,125DEG CMAX,P
C906M16	2113944C04	CAP CER CHP 330.0PF 50V 5%
C907M16	2113944C04	CAP CER CHP 330.0PF 50V 5%
C908M16	2113944C04	CAP CER CHP 330.0PF 50V 5%
C909M16	2113944C04	CAP CER CHP 330.0PF 50V 5%
C910M16	NOTPLACED	64AM DUMMY PART NUMBER
C911M16	2113945L49	CAP,FXD,.01UF,+5%,-5%,50V-DC,0603,X7R,-55DEG CMIN,125DEG CMAX,P
C912M16	NOTPLACED	64AM DUMMY PART NUMBER
C913M16	2113944M34	CAP,FXD,47PF,+2%,-2%,50V-DC,0603,C0G,-55DEG CMIN,125DEG CMAX,PB
C914M16	2113944M34	CAP,FXD,47PF,+2%,-2%,50V-DC,0603,C0G,-55DEG CMIN,125DEG CMAX,PB
C915M16	2113944C04	CAP CER CHP 330.0PF 50V 5%

Ref. Des.	Part Number	Description
C916M16	2113944M42	CAP,FXD,100PF,+2%,-2%,50V-DC,0603,C0G,-55DEG CMIN,125DEG CMAX,P
C917M16	NOTPLACED	64AM DUMMY PART NUMBER
C918M16	2113944C48	CAP CER CHP 560.0PF 50V 5%
C919M16	2113944M22	CAP,FXD,15PF,+2%,-2%,50V-DC,0603,C0G,-55DEG CMIN,125DEG CMAX,PB
C920M16	2113742J10	CAP 39.0 PF 5%
C921M16	2113742J10	CAP 39.0 PF 5%
C922M16	2113944M28	CAP,FXD,27PF,+2%,-2%,50V-DC,0603,C0G,-55DEG CMIN,125DEG CMAX,PB
C923M16	NOTPLACED	64AM DUMMY PART NUMBER
C924M16	2113944M22	CAP,FXD,15PF,+2%,-2%,50V-DC,0603,C0G,-55DEG CMIN,125DEG CMAX,PB
C925M16	2113944C04	CAP CER CHP 330.0PF 50V 5%
C927M16	NOTPLACED	64AM DUMMY PART NUMBER
C928M16	2113944M22	CAP,FXD,15PF,+2%,-2%,50V-DC,0603,C0G,-55DEG CMIN,125DEG CMAX,PB
C929M16	2113945A12	CAP CER CHP 3300PF 50V 10%
C930M16	2113945A12	CAP CER CHP 3300PF 50V 10%
D200M12	4813978A19	DIODE,RECT,MBR120,SM,SOD-123,1A,20V,SHTK,PB-FREE
D210M12	4870359B01	DIODE,SUPR,SM,7.82V,.1W,ESD PROT,V360

Ref. Des.	Part Number	Description
D2701M13	4813974A19	DIODE ARRAY,MXR,SM,SOT-323,7V,.2W,SHTK,2,PB-FREE
D2702M13	4815897H01	PIN DIODE
D2703M13	4815897H01	PIN DIODE
D301M20	NOTPLACED	64AM DUMMY PART NUMBER
D3206M22	4815002H03	DIODE,VCTR,@ 34V,SILICON EPITAXIAL
D3207M22	4815002H03	DIODE,VCTR,@ 34V,SILICON EPITAXIAL
D3208M22	4815002H03	DIODE,VCTR,@ 34V,SILICON EPITAXIAL
D3209M22	4815002H03	DIODE,VCTR,@ 34V,SILICON EPITAXIAL
D3246M22	4815002H03	DIODE,VCTR,@ 34V,SILICON EPITAXIAL
D3247M22	4815002H03	DIODE,VCTR,@ 34V,SILICON EPITAXIAL
D3248M22	4815002H03	DIODE,VCTR,@ 34V,SILICON EPITAXIAL
D3249M22	4815002H03	DIODE,VCTR,@ 34V,SILICON EPITAXIAL
D4001M2	4813978A25	SCHOTTKY 30V SOD-323 T&R PB FREE
D6101M6	4813978A25	SCHOTTKY 30V SOD-323 T&R PB FREE
D6401M6	4813978A25	SCHOTTKY 30V SOD-323 T&R PB FREE
D6501M6	4813978A25	SCHOTTKY 30V SOD-323 T&R PB FREE
D6502M6	4813978A25	SCHOTTKY 30V SOD-323 T&R PB FREE
D722M7	4815011H01	DIODE TRIPLE
D723M7	4815011H01	DIODE TRIPLE
E1101M11	2405688Z01	INDUCTOR FERRITE BEAD
E201M12	7686949J14	FLTR,FERRITE BEAD,,2A,,,SM,0805,CHIP,2 20OHM

Ref. Des.	Part Number	Description
E2242M2	'7685268E01	FERRITE BEAD 20X40 200 MA MAX CHIP
E2244M2	'7685268E01	FERRITE BEAD 20X40 200 MA MAX CHIP
E2245M2	'7685268E01	FERRITE BEAD 20X40 200 MA MAX CHIP
E2246M2	'7685268E01	FERRITE BEAD 20X40 200 MA MAX CHIP
E2247M2	'7685268E01	FERRITE BEAD 20X40 200 MA MAX CHIP
E2248M2	'7685268E01	FERRITE BEAD 20X40 200 MA MAX CHIP
E2249M2	'7685268E01	FERRITE BEAD 20X40 200 MA MAX CHIP
E2301M2	7688697V03	FILTER,EMI,,500MA,,SM,04 02
E2302M2	7688697V03	FILTER,EMI,,500MA,,SM,04 02
E2303M2	7688697V03	FILTER,EMI,,500MA,,SM,04 02
E2304M2	7688697V03	FILTER,EMI,,500MA,,SM,04 02
E2305M2	7688697V03	FILTER,EMI,,500MA,,SM,04 02
E2306M2	7688697V03	FILTER,EMI,,500MA,,SM,04 02
E2307M2	7688697V03	FILTER,EMI,,500MA,,SM,04 02
E2308M2	7688697V03	FILTER,EMI,,500MA,,SM,04 02
E2309M2	7688697V03	FILTER,EMI,,500MA,,SM,04 02
E2310M2	7688697V03	FILTER,EMI,,500MA,,SM,04 02
E2311M2	7688697V03	FILTER,EMI,,500MA,,SM,04 02
E302M20	2480640Z01	SURFACE MOUNT FERRITE BEAD
E601M19	2480640Z01	SURFACE MOUNT FERRITE BEAD

Ref. Des.	Part Number	Description
E602M19	2480640Z01	SURFACE MOUNT FERRITE BEAD
E603M19	2480640Z01	SURFACE MOUNT FERRITE BEAD
E604M19	2480640Z01	SURFACE MOUNT FERRITE BEAD
E605M19	2480640Z01	SURFACE MOUNT FERRITE BEAD
E606M19	2480640Z01	SURFACE MOUNT FERRITE BEAD
E607M19	2480640Z01	SURFACE MOUNT FERRITE BEAD
E608M19	2480640Z01	SURFACE MOUNT FERRITE BEAD
E609M19	2480640Z01	SURFACE MOUNT FERRITE BEAD
E6501M6	2480067M02	CHK RF CHIP BEAD INDUCTOR
E6502M6	2480067M02	CHK RF CHIP BEAD INDUCTOR
F200M12	6575834B01	FUSE SURFACE MOUNT
FL1301M3	9102190J23	FLTR,SAW,BANDPASS,1.57 542GHZ NOM,SM,1.4X1.0MM,SMD, PB-FREE
FL1302M3	9109674L58	PASSIVE FILTER,CER,BANDPASS,2. 45GHZ NOM
FL1303M3	9102190J23	FLTR,SAW,BANDPASS,1.57 542GHZ NOM,SM,1.4X1.0MM,SMD, PB-FREE
FL502M21	91009300001	FILTER,MONOLITHIC CRYSTAL,BANDPASS,109. 65MHZ NOM
J102M12	2880658Z08	CONNECTOR SMA
J2301M2	0970312N01	CONN,BTB,RCPT,60CONT,. 4MM,GLD,1 STACK HGT
J2302M2	0970312N01	CONN,BTB,RCPT,60CONT,. 4MM,GLD,1 STACK HGT
L1101M11	2415429H26	CHIP INDUCTOR
L1102M11	2415429H10	CHIP INDUCTOR

Ref. Des.	Part Number	Description
L1116M11	NOTPLACED	64AM DUMMY PART NUMBER
L1117M11	2415428H01	AIR WOUND INDUCTOR
L1203M17	2416066H02	INDUCTOR
L1209M17	2416066H02	INDUCTOR
L1211M17	2416066H02	INDUCTOR
L1301M3	2414017P16	IDCTR,CHIP,18NH,5%,300 MA,.76OHM,CER,9 Q,1.9GHZ SRF,SM,0402,P
L1302M3	2488090Y07	INDUCTOR,MULTILAYER,3 .3NH,1005,SMD,PB FREE
L1303M3	2414017P16	IDCTR,CHIP,18NH,5%,300 MA,.76OHM,CER,9 Q,1.9GHZ SRF,SM,0402,P
L1304M3	2488090Y25	INDUCTOR,MULTILAYER,1 00NH,1005,SMD,PB FREE
L1305M3	24010062002	INDUCTOR, 5.6NH, 0402, 2%
L1306M3	2414017P14	IDCTR,CHIP,12NH,5%,300 MA,.6OHM,CER,9 Q,2GHZ SRF,SM,0402,PB-F
L1308M3	NOTPLACED	64AM DUMMY PART NUMBER
L1316M3	24010062009	INDUCTOR, 13NH, 0402, 2%
L200M12	2571269C01	INDUCTOR WW POWER 20%
L2202M2	2415429H45	CHIP INDUCTOR
L2203M2	2415429H45	CHIP INDUCTOR
L2204M2	2415429H45	CHIP INDUCTOR
L2205M2	2415429H45	CHIP INDUCTOR
L2701M13	2416066H02	INDUCTOR
L2702M13	2415429H40	CHIP INDUCTOR
L312M20	2414032F35	IDCTR,WW,120NH,5%,400 MA,.51OHM,CER,35 Q,860MHZ SRF,SM,PB-FR
L313M20	2415429H28	CHIP INDUCTOR
L314M20	2415429H28	CHIP INDUCTOR

Ref. Des.	Part Number	Description
L315M20	2414017N22	IDCTR,CHIP,68NH,5%,400 MA,1.2OHM,CER,14 Q,800MHZ SRF,SM,0603
L316M20	2415429H34	CHIP INDUCTOR
L317M20	2414017P13	IDCTR,CHIP,10NH,5%,300 MA,.46OHM,CER,9 Q,2.5GHZ SRF,SM,0402,P
L318M20	2414032F35	IDCTR,WW,120NH,5%,400 MA,.51OHM,CER,35 Q,860MHZ SRF,SM,PB-FR
L319M20	2414032F35	IDCTR,WW,120NH,5%,400 MA,.51OHM,CER,35 Q,860MHZ SRF,SM,PB-FR
L3205M22	2414032F44	IDCTR,WW,680NH,10%,130 MA,4OHM,CER,30 Q,570MHZ SRF,SM,PB-FRE
L320M20	2415429H28	CHIP INDUCTOR
L3210M22	2415429H27	CHIP INDUCTOR
L3216M22	2415010H04	AIRWOUND COIL
L321M20	2415429H28	CHIP INDUCTOR
L3223M22	2414032F44	IDCTR,WW,680NH,10%,130 MA,4OHM,CER,30 Q,570MHZ SRF,SM,PB-FRE
L3229M22	2414032F44	IDCTR,WW,680NH,10%,130 MA,4OHM,CER,30 Q,570MHZ SRF,SM,PB-FRE
L3230M22	2414032F44	IDCTR,WW,680NH,10%,130 MA,4OHM,CER,30 Q,570MHZ SRF,SM,PB-FRE
L3245M22	2414032F44	IDCTR,WW,680NH,10%,130 MA,4OHM,CER,30 Q,570MHZ SRF,SM,PB-FRE
L3250M22	2415429H30	CHIP INDUCTOR
L3256M22	2414015C05	IDCTR,FXD,33NH,2%,1.3M A,.09OHM,CER,75 Q,1.7GHZ SRF,SM,1008,P
L3261M22	2414032F44	IDCTR,WW,680NH,10%,130 MA,4OHM,CER,30 Q,570MHZ SRF,SM,PB-FRE
L3269M22	2414032F44	IDCTR,WW,680NH,10%,130 MA,4OHM,CER,30 Q,570MHZ SRF,SM,PB-FRE

Ref. Des.	Part Number	Description
L3270M22	2414032F44	IDCTR,WW,680NH,10%,130 MA,4OHM,CER,30 Q,570MHZ SRF,SM,PB-FRE
L327M20	2414032F35	IDCTR,WW,120NH,5%,400 MA,.51OHM,CER,35 Q,860MHZ SRF,SM,PB-FR
L328M20	0613952G67	CER CHIP RES 0.0 +/-0.050 OHM
L329M20	2478057A30	0306 HIGH Q CHIP INDUCTOR
L500M21	2415429H43	CHIP INDUCTOR
L503M21	2414017N24	IDCTR,CHIP,100NH,5%,300 MA,2OHM,CER,14 Q,700MHZ SRF,SM,0603,P
L504M21	2478057A51	0306 HIGH Q CHIP INDUCTOR
L513M21	NOTPLACED	64AM DUMMY PART NUMBER
L550M21	2414017N20	IDCTR,CHIP,47NH,5%,500 MA,.86OHM,CER,14 Q,900MHZ SRF,SM,0603
L601M19	2415429H43	CHIP INDUCTOR
L602M19	2466505A01	COIL INDUCTOR
L603M19	2466505A01	COIL INDUCTOR
L604M19	2414032D16	IDCTR,WW,120NH,5%,800 MA,.26OHM,CER,42 Q,1GHZ SRF,SM,PB-FREE
L605M19	24012050001	0603LS CHIP INDUCTORS, 1608, 3900NH
L611M19	2414032F39	IDCTR,WW,270NH,10%,280 MA,1OHM,CER,40 Q,800MHZ SRF,SM,PB-FRE
L6401M6	2471189M03	SHIELDED SMT POWER INDUCTOR 10UH
L6402M6	2471189M03	SHIELDED SMT POWER INDUCTOR 10UH
L6403M6	24009271001	20NH HIGH CURRENT CHIP INDUCTOR
L6404M6	24009271001	20NH HIGH CURRENT CHIP INDUCTOR
L6502M6	2471678H01	10UH INDCUTOR

Ref. Des.	Part Number	Description
L6504M6	24009268001	10UH 2.1A SHIELDED INDUCTOR
L6505M6	2471678H01	10UH INDCUTOR
L709M7	2415429H28	CHIP INDUCTOR
L720M7	2480646Z20	COIL MULTI-LAYER CHIP(2.20UH)
L727M7	2480646Z20	COIL MULTI-LAYER CHIP(2.20UH)
L728M7	2415429H47	CHIP INDUCTOR
L733M7	2480646Z20	COIL MULTI-LAYER CHIP(2.20UH)
L735M7	2480646Z20	COIL MULTI-LAYER CHIP(2.20UH)
L738M7	2480646Z20	COIL MULTI-LAYER CHIP(2.20UH)
L739M7	2415429H47	CHIP INDUCTOR
L741M7	2480646Z20	COIL MULTI-LAYER CHIP(2.20UH)
L753M7	2415347H06	IDCTR, 2200NH
L755M7	2415429H47	CHIP INDUCTOR
L758M7	2415429H47	CHIP INDUCTOR
L759M7	2415429H47	CHIP INDUCTOR
L775M7	2415429H47	CHIP INDUCTOR
L901M16	2414017N10	IDCTR,CHIP,6.8NH,5%,600 MA,.22OHM,CER,10 Q,2.7GHZ SRF,SM,0603
L902M16	2415429H37	CHIP INDUCTOR
L903M16	2414015A07	IDCTR,FXD,180NH,2%,750 MA,.77OHM,CER,25 Q,700MHZ SRF,SM,1008
L904M16	2414017N18	IDCTR,CHIP,33NH,5%,600 MA,.71OHM,CER,12 Q,1.1GHZ SRF,SM,0603
L905M16	2414017N14	IDCTR,CHIP,15NH,5%,600 MA,.4OHM,CER,12 Q,1.8GHZ SRF,SM,0603,P
L906M16	2460591K40	COIL AIR WOUND INDUC 59.71
L907M16	2471968L13	LOW PROFILE MINI SPRING INDUCTOR

Ref. Des.	Part Number	Description
L908M16	2415428H01	AIR WOUND INDUCTOR
L909M16	2471968L10	9.0NH 2% LP AIRWOUND INDUCTOR
L910M16	2471968L07	LOW PROFILE MINI SPRING INDUCTOR
M101M12	39012039001	CONNECTOR, BATTERY CONTACT
M103M12	3987977Y04	CONT,CONN,1CONT,,ANT UNIV 4.5MM,UC 1.8
M104M12	3987977Y04	CONT,CONN,1CONT,,ANT UNIV 4.5MM,UC 1.8
M105M12	3987977Y04	CONT,CONN,1CONT,,ANT UNIV 4.5MM,UC 1.8
M1301M3	3987977Y01	CONTACT ANTENNA UNIVERSAL (D35)
M6405M6	3987977Y04	CONT,CONN,1CONT,,ANT UNIV 4.5MM,UC 1.8
M6406M6	3987977Y04	CONT,CONN,1CONT,,ANT UNIV 4.5MM,UC 1.8
M6502M6	0985888K02	SKT RTC BTTY LEAP
M6504M6	3987977Y04	CONT,CONN,1CONT,,ANT UNIV 4.5MM,UC 1.8
PASTE	11012015001	SOLDER PASTE - 9.0A, LOW VOID
PCB	84012320001	BOARD, PC , MAIN BOARD, VHF
Q1101M11	4813973A32	XSTR,BIP GP SS,NPN,SM,SC-70,SMT,50V,.202W,100MA, PB-FREE
Q1103M11	4813970A59	P-CH FET 1.0A 20V SOT-23 T&R
Q201M12	4813970A59	P-CH FET 1.0A 20V SOT-23 T&R
Q202M12	4813973A32	XSTR,BIP GP SS,NPN,SM,SC-70,SMT,50V,.202W,100MA, PB-FREE
Q2202M2	4815261H01	TRANSISTOR,BIP GENERAL PURPOSE SMALL NPN

Ref. Des.	Part Number	Description
Q2701M13	4815055H01	TSTR DUAL NPN/PNP UMH 5
Q303M20	4813973M75	XSTR,BIP GP SS,PNP,BC858,SOT-563,SMT,-30V,.357W,-100MA,100MHZ
Q304M20	4813973A32	XSTR,BIP GP SS,NPN,SM,SC-70,SMT,50V,.202W,100MA, PB-FREE
Q3227M22	4885061Y01	XSTR NPN 6V 30UA 12GHZ PB-FREE
Q3232M22	4815055H01	TSTR DUAL NPN/PNP UMH 5
Q3267M22	4885061Y01	XSTR NPN 6V 30UA 12GHZ PB-FREE
Q3272M22	4815055H01	TSTR DUAL NPN/PNP UMH 5
Q4001M2	4815261H01	TRANSISTOR,BIP GENERAL PURPOSE SMALL NPN
Q601M19	4813973A04	XSTR,BIP GP SS,NPN,TA13,SM,SOT-23,SMT,30V,.225W,300MA,1 25MHZ,P
Q6101M6	4815261H01	TRANSISTOR,BIP GENERAL PURPOSE SMALL NPN
Q6401M6	4888795V06	XSTR,FET GP PWR,,MOSFET,SM,,SMT,20 V,.25W,LEAD-FREE
Q6501M6	4813970A62	XSTR,FET GP PWR,MOSFET,P-CH,ENHN,CF,-20V,1.3W,PB-FREE
Q6502M6	48012154001	FET
Q6504M6	4809579E77	FET, NCH MOS FET, 1.2MM X 1.2MM PACKAGE, SMD, W18 COMPLIANT
Q6505M6	4813970A62	XSTR,FET GP PWR,MOSFET,P-CH,ENHN,CF,-20V,1.3W,PB-FREE

Ref. Des.	Part Number	Description
Q6506M6	4809579E77	FET, NCH MOS FET, 1.2MM X 1.2MM PACKAGE, SMD, W18 COMPLIANT
Q6507M6	4888795V06	XSTR,FET GP PWR,,MOSFET,SM,,SMT,20 V,.25W,LEAD-FREE
Q6508M6	48012154001	FET
Q731M7	4885061Y01	XSTR NPN 6V 30UA 12GHZ PB-FREE
Q745M7	4813973M75	XSTR,BIP GP SS,PNP,BC858,SOT-563,SMT,-30V,.357W,-100MA,100MHZ
Q756M7	4805585Q32	TRANSITOR, NPN RF
Q767M7	4813973M75	XSTR,BIP GP SS,PNP,BC858,SOT-563,SMT,-30V,.357W,-100MA,100MHZ
Q774M7	4805585Q32	TRANSITOR, NPN RF
Q785M7	4889394V04	XSTR,FET GEN PURPOSE SMALL SIG,MOSFET,N-CH,ENHN,SM,20V,.25W,P
Q901M16	48012094001	MOD.XSTR,FET RF PWR, 135-941MHZ
R1101M11	0613952R01	CER CHIP RES 10K OHM 5% 0402
R1102M11	0613952R25	CER CHIP RES 100K OHM 5% 0402
R1103M11	06009259001	LOW RESISTANCE THICK FILM RESISTOR
R1104M11	0613952Q49	CER CHIP RES 100 OHM 5 0402
R1105M11	0613952Q49	CER CHIP RES 100 OHM 5 0402
R1106M11	0613952K73	CER CHIP RES 56.2 OHM 1% 0402
R1107M11	0613952Q45	CER CHIP RES 68.0 OHM 5 0402
R1108M11	0613952N81	CER CHIP RES 68.1K OHM 1 0402
R1110M11	0613952R01	CER CHIP RES 10K OHM 5% 0402

Ref. Des.	Part Number	Description	Ref. Des.	Part Number	Description	Ref. Des.	Part Number	Description	Ref. Des.	Part Number	Description
R1111M11	0613952R66	CER CHIP RES 0.0 +/-0.050 OHM	R1140M11	0613952R25	CER CHIP RES 100K OHM 5% 0402	R1170M11	0613952N88	CER CHIP RES 80.6K OHM 1 0402	R1317M3	0613952R66	CER CHIP RES 0.0 +/-0.050 OHM
R1112M11	NOTPLACED	64AM DUMMY PART NUMBER	R1141M11	0613952R42	CER CHIP RES 510K OHM 5 0402	R1171M11	0613952R66	CER CHIP RES 0.0 +/-0.050 OHM	R1318M3	0613952R66	CER CHIP RES 0.0 +/-0.050 OHM
R1114M11	0613952Q49	CER CHIP RES 100 OHM 5 0402	R1142M11	0613952R25	CER CHIP RES 100K OHM 5% 0402	R1172M11	0613952Q89	CER CHIP RES 4700 OHM 5 0402	R1325M3	0613952R66	CER CHIP RES 0.0 +/-0.050 OHM
R1115M11	0613952Q49	CER CHIP RES 100 OHM 5 0402	R1143M11	0613952R25	CER CHIP RES 100K OHM 5% 0402	R1174M11	0613952N01	CER CHIP RES 10.0K OHM 1 0402	R1326M3	0613952R66	CER CHIP RES 0.0 +/-0.050 OHM
R1116M11	0613952R01	CER CHIP RES 10K OHM 5% 0402	R1144M11	0613952R25	CER CHIP RES 100K OHM 5% 0402	R1175M11	0613952R66	CER CHIP RES 0.0 +/-0.050 OHM	R1329M3	0613952R66	CER CHIP RES 0.0 +/-0.050 OHM
R1117M11	0613952R11	CER CHIP RES 27K OHM 5% 0402	R1145M11	0613952R25	CER CHIP RES 100K OHM 5% 0402	R1176M11	0613952M26	CER CHIP RES 1820 OHM 1% 0402	R1330M3	0613952R66	CER CHIP RES 0.0 +/-0.050 OHM
R1121M11	0613952N47	CER CHIP RES 30.1K OHM 1 0402	R1146M11	0613952R25	CER CHIP RES 100K OHM 5% 0402	R1177M11	0613952R66	CER CHIP RES 0.0 +/-0.050 OHM	R1331M3	0613952R66	CER CHIP RES 0.0 +/-0.050 OHM
R1122M11	0613952N85	CER CHIP RES 75.0K OHM 1 0402	R1151M11	0613952R05	CER CHIP RES 15K OHM 5% 0402	R1178M11	0613952R01	CER CHIP RES 10K OHM 5% 0402	R1332M3	0613952R66	CER CHIP RES 0.0 +/-0.050 OHM
R1124M11	0613952Q42	CER CHIP RES 51.0 OHM 5 0402	R1152M11	0613952R01	CER CHIP RES 10K OHM 5% 0402	R1180M11	0613952R66	CER CHIP RES 0.0 +/-0.050 OHM	R1337M3	NOTPLACED	64AM DUMMY PART NUMBER
R1125M11	0613952R17	CER CHIP RES 47K OHM 5% 0402	R1154M11	0613952N01	CER CHIP RES 10.0K OHM 1 0402	R1181M11	NOTPLACED	64AM DUMMY PART NUMBER	R1338M3	2113944A61	CAP,FXD,.5PF,.25PF+/- .50V-DC,0402,C0G,-55DEG CMIN,125DEG CMAX
R1126M11	0613952R09	CER CHIP RES 22K OHM 5% 0402	R1158M11	NOTPLACED	64AM DUMMY PART NUMBER	R1182M11	0613952R01	CER CHIP RES 10K OHM 5% 0402	R1339M3	NOTPLACED	64AM DUMMY PART NUMBER
R1127M11	0613952R08	CER CHIP RES 20K OHM 5 0402	R1160M11	0613952R03	CER CHIP RES 12K OHM 5% 0402	R1198M11	0613952J01	CER CHIP RES 10K OHM 5% 0603	R1340M3	0613952R66	CER CHIP RES 0.0 +/-0.050 OHM
R1128M11	0613952R01	CER CHIP RES 10K OHM 5% 0402	R1162M11	0613952R29	CER CHIP RES 150K OHM 5% 0402	R1301M3	0613952R66	CER CHIP RES 0.0 +/-0.050 OHM	R201M12	0613952R25	CER CHIP RES 100K OHM 5% 0402
R1129M11	NOTPLACED	64AM DUMMY PART NUMBER	R1163M11	0613952R06	CER CHIP RES 16K OHM 5 0402	R1303M3	0613952R66	CER CHIP RES 0.0 +/-0.050 OHM	R202M12	0613952Q89	CER CHIP RES 4700 OHM 5 0402
R1130M11	NOTPLACED	64AM DUMMY PART NUMBER	R1164M11	0613952R01	CER CHIP RES 10K OHM 5% 0402	R1305M3	0613952R66	CER CHIP RES 0.0 +/-0.050 OHM	R2100M2	NOTPLACED	64AM DUMMY PART NUMBER
R1135M11	0613952R66	CER CHIP RES 0.0 +/-0.050 OHM	R1165M11	0613952Q56	CER CHIP RES 200 OHM 5 0402	R1309M3	NOTPLACED	64AM DUMMY PART NUMBER	R21001M2	NOTPLACED	64AM DUMMY PART NUMBER
R1136M11	0613952R01	CER CHIP RES 10K OHM 5% 0402	R1166M11	0613952Q56	CER CHIP RES 200 OHM 5 0402	R1310M3	0613952R66	CER CHIP RES 0.0 +/-0.050 OHM	R21002M2	NOTPLACED	64AM DUMMY PART NUMBER
R1137M11	0613952R01	CER CHIP RES 10K OHM 5% 0402	R1167M11	0613952R01	CER CHIP RES 10K OHM 5% 0402	R1311M3	NOTPLACED	64AM DUMMY PART NUMBER	R21003M2	NOTPLACED	64AM DUMMY PART NUMBER
R1138M11	0613952R25	CER CHIP RES 100K OHM 5% 0402	R1168M11	0613952Q49	CER CHIP RES 100 OHM 5 0402	R1313M3	0613952R66	CER CHIP RES 0.0 +/-0.050 OHM	R2104M2	0613952Q89	CER CHIP RES 4700 OHM 5 0402
R1139M11	0613952R25	CER CHIP RES 100K OHM 5% 0402	R1169M11	0613952P52	CER CHIP RES 340K OHM 1 0402	R1315M3	0613952R66	CER CHIP RES 0.0 +/-0.050 OHM	R2105M2	0613952Q89	CER CHIP RES 4700 OHM 5 0402

Ref. Des.	Part Number	Description	Ref. Des.	Part Number	Description	Ref. Des.	Part Number	Description	Ref. Des.	Part Number	Description
R2106M2	NOTPLACED	64AM DUMMY PART NUMBER	R2138M2	0613952Q41	CER CHIP RES 47.0 OHM 5 0402	R2235M2	0613952R66	CER CHIP RES 0.0 +/-0.050 OHM	R2813M1	NOTPLACED	64AM DUMMY PART NUMBER
R2107M2	0613952Q73	CER CHIP RES 1000 OHM 5 0402	R2139M2	0613952Q41	CER CHIP RES 47.0 OHM 5 0402	R2244M2	0613952Q65	CER CHIP RES 470 OHM 5 0402	R2817M1	0613952Q41	CER CHIP RES 47.0 OHM 5 0402
R2109M2	0613952Q25	CER CHIP RES 10.0 OHM 5 0402	R2142M2	0613952Q41	CER CHIP RES 47.0 OHM 5 0402	R2245M2	0613952Q60	CER CHIP RES 300 OHM 5 0402	R310M20	0613952R22	CER CHIP RES 75K OHM 5 0402
R2110M2	0613952Q33	CER CHIP RES 22.0 OHM 5 0402	R2144M2	0613952Q61	CER CHIP RES 330 OHM 5 0402	R2246M2	0613952Q65	CER CHIP RES 470 OHM 5 0402	R311M20	0613952R27	CER CHIP RES 120K OHM 5% 0402
R2111M2	0613952Q25	CER CHIP RES 10.0 OHM 5 0402	R2145M2	0613952Q41	CER CHIP RES 47.0 OHM 5 0402	R2254M2	0613952R01	CER CHIP RES 10K OHM 5% 0402	R312M20	0613952R01	CER CHIP RES 10K OHM 5% 0402
R2113M2	0613952Q25	CER CHIP RES 10.0 OHM 5 0402	R2146M2	0613952Q41	CER CHIP RES 47.0 OHM 5 0402	R2701M13	0613952R25	CER CHIP RES 100K OHM 5% 0402	R313M20	0613952Q37	CER CHIP RES 33.0 OHM 5 0402
R2114M2	0613952Q33	CER CHIP RES 22.0 OHM 5 0402	R2147M2	0613952Q41	CER CHIP RES 47.0 OHM 5 0402	R2702M13	NOTPLACED	64AM DUMMY PART NUMBER	R314M20	0613952Q75	CER CHIP RES 1200 OHM 5 0402
R2115M2	0613952Q25	CER CHIP RES 10.0 OHM 5 0402	R2148M2	0613952Q41	CER CHIP RES 47.0 OHM 5 0402	R2703M13	0613952H47	CER CHIP RES 82.0 OHM 5 0603	R315M20	0613952Q25	CER CHIP RES 10.0 OHM 5 0402
R2116M2	0613952R01	CER CHIP RES 10K OHM 5% 0402	R2149M2	0613952Q41	CER CHIP RES 47.0 OHM 5 0402	R2704M13	0613952H47	CER CHIP RES 82.0 OHM 5 0603	R3200M22	0613952R66	CER CHIP RES 0.0 +/-0.050 OHM
R2117M2	0613952R01	CER CHIP RES 10K OHM 5% 0402	R2151M2	NOTPLACED	64AM DUMMY PART NUMBER	R2705M13	0613952H47	CER CHIP RES 82.0 OHM 5 0603	R3201M22	0613952Q23	CER CHIP RES 8.2 OHM 5 0402
R2118M2	0613952R01	CER CHIP RES 10K OHM 5% 0402	R2153M2	0613952Q41	CER CHIP RES 47.0 OHM 5 0402	R2706M13	0662057B47	CHIP RES 0 OHMS +/-0.50 OHMS	R3202M22	0613952R66	CER CHIP RES 0.0 +/-0.050 OHM
R2120M2	0613952R01	CER CHIP RES 10K OHM 5% 0402	R2154M2	0613952Q41	CER CHIP RES 47.0 OHM 5 0402	R2803M1	0613952Q37	CER CHIP RES 33.0 OHM 5 0402	R3203M22	0613952Q69	CER CHIP RES 680 OHM 5 0402
R2129M2	0613952R01	CER CHIP RES 10K OHM 5% 0402	R2192M2	0613952Q61	CER CHIP RES 330 OHM 5 0402	R2804M1	0613952Q49	CER CHIP RES 100 OHM 5 0402	R3204M22	0613952Q69	CER CHIP RES 680 OHM 5 0402
R2130M2	0613952R01	CER CHIP RES 10K OHM 5% 0402	R2197M2	0613952R66	CER CHIP RES 0.0 +/-0.050 OHM	R2805M1	0613952Q49	CER CHIP RES 100 OHM 5 0402	R3205M22	0613952Q69	CER CHIP RES 680 OHM 5 0402
R2131M2	0613952R01	CER CHIP RES 10K OHM 5% 0402	R2198M2	0613952R66	CER CHIP RES 0.0 +/-0.050 OHM	R2806M1	0613952Q59	CER CHIP RES 270 OHM 5 0402	R3206M22	0613952Q23	CER CHIP RES 8.2 OHM 5 0402
R2132M2	0613952R01	CER CHIP RES 10K OHM 5% 0402	R2199M2	0613952R66	CER CHIP RES 0.0 +/-0.050 OHM	R2807M1	0613952Q56	CER CHIP RES 200 OHM 5 0402	R3207M22	0613952Q69	CER CHIP RES 680 OHM 5 0402
R2133M2	0613952R01	CER CHIP RES 10K OHM 5% 0402	R2201M2	0613952R32	CER CHIP RES 200K OHM 5 0402	R2808M1	0613952Q49	CER CHIP RES 100 OHM 5 0402	R3214M22	NOTPLACED	64AM DUMMY PART NUMBER
R2135M2	0613952Q41	CER CHIP RES 47.0 OHM 5 0402	R2204M2	0613952Q85	CER CHIP RES 3300 OHM 5 0402	R2810M1	0613952R01	CER CHIP RES 10K OHM 5% 0402	R3218M22	0613952Q93	CER CHIP RES 6800 OHM 5 0402
R2136M2	0613952Q61	CER CHIP RES 330 OHM 5 0402	R2206M2	0613952Q85	CER CHIP RES 3300 OHM 5 0402	R2811M1	0613952Q89	CER CHIP RES 4700 OHM 5 0402	R3222M22	0613952Q96	CER CHIP RES 9100 OHM 5 0402
R2137M2	0613952Q61	CER CHIP RES 330 OHM 5 0402	R2207M2	0613952R66	CER CHIP RES 0.0 +/-0.050 OHM	R2812M1	0613952R01	CER CHIP RES 10K OHM 5% 0402	R3231M22	0613952Q58	CER CHIP RES 240 OHM 5 0402

Ref. Des.	Part Number	Description	Ref. Des.	Part Number	Description	Ref. Des.	Part Number	Description	Ref. Des.	Part Number	Description
R3233M22	0613952Q53	CER CHIP RES 150 OHM 5 0402	R525M21	0613952R66	CER CHIP RES 0.0 +/-0.050 OHM	R610M19	0613952R25	CER CHIP RES 100K OHM 5% 0402	R616M19	NOTPLACED	64AM DUMMY PART NUMBER
R3257M22	0613952Q96	CER CHIP RES 9100 OHM 5 0402	R526M21	0613958J74	CER CHIP RES 0.0 OHM JMP 0805	R6110M6	0613952Q73	CER CHIP RES 1000 OHM 5 0402	R617M19	NOTPLACED	64AM DUMMY PART NUMBER
R3260M22	0613952Q96	CER CHIP RES 9100 OHM 5 0402	R601M19	0613952Q41	CER CHIP RES 47.0 OHM 5 0402	R6111M6	NOTPLACED	64AM DUMMY PART NUMBER	R618M19	NOTPLACED	64AM DUMMY PART NUMBER
R3271M22	0613952Q53	CER CHIP RES 150 OHM 5 0402	R602M19	0613952Q63	CER CHIP RES 390 OHM 5 0402	R6112M6	0613952Q73	CER CHIP RES 1000 OHM 5 0402	R619M19	NOTPLACED	64AM DUMMY PART NUMBER
R3273M22	0613952Q53	CER CHIP RES 150 OHM 5 0402	R603M19	0613952R25	CER CHIP RES 100K OHM 5% 0402	R6113M6	0613952Q49	CER CHIP RES 100 OHM 5 0402	R6201M6	NOTPLACED	64AM DUMMY PART NUMBER
R380M20	0613952Q25	CER CHIP RES 10.0 OHM 5 0402	R604M19	0613952Q63	CER CHIP RES 390 OHM 5 0402	R6114M6	0613952Q49	CER CHIP RES 100 OHM 5 0402	R6202M6	0613952R01	CER CHIP RES 10K OHM 5% 0402
R381M20	0613952Q25	CER CHIP RES 10.0 OHM 5 0402	R605M19	0613952R01	CER CHIP RES 10K OHM 5% 0402	R6115M6	0613952Q49	CER CHIP RES 100 OHM 5 0402	R6203M6	0613952R66	CER CHIP RES 0.0 +/-0.050 OHM
R4005M2	0613952R01	CER CHIP RES 10K OHM 5% 0402	R606M19	0613952R01	CER CHIP RES 10K OHM 5% 0402	R6116M6	0613952Q73	CER CHIP RES 1000 OHM 5 0402	R6204M6	0613952R01	CER CHIP RES 10K OHM 5% 0402
R4006M2	0613952R01	CER CHIP RES 10K OHM 5% 0402	R607M19	0613952R25	CER CHIP RES 100K OHM 5% 0402	R6117M6	0613952R01	CER CHIP RES 10K OHM 5% 0402	R6205M6	0613952R01	CER CHIP RES 10K OHM 5% 0402
R4007M2	0613952R01	CER CHIP RES 10K OHM 5% 0402	R608M19	0613952R01	CER CHIP RES 10K OHM 5% 0402	R6118M6	0613952R09	CER CHIP RES 22K OHM 5% 0402	R6206M6	0613952R25	CER CHIP RES 100K OHM 5% 0402
R4008M2	0613952R01	CER CHIP RES 10K OHM 5% 0402	R609M19	0613952Q81	CER CHIP RES 2200 OHM 5 0402	R6119M6	0613952R01	CER CHIP RES 10K OHM 5% 0402	R6207M6	0613952R25	CER CHIP RES 100K OHM 5% 0402
R4009M2	0613952Q85	CER CHIP RES 3300 OHM 5 0402	R6101M6	0613952R01	CER CHIP RES 10K OHM 5% 0402	R611M19	0613952R01	CER CHIP RES 10K OHM 5% 0402	R6208M6	0613952Q89	CER CHIP RES 4700 OHM 5 0402
R4010M2	0613952R32	CER CHIP RES 200K OHM 5 0402	R6102M6	0613952R09	CER CHIP RES 22K OHM 5% 0402	R6120M6	0613952R01	CER CHIP RES 10K OHM 5% 0402	R6209M6	0613952Q89	CER CHIP RES 4700 OHM 5 0402
R4011M2	0613952R17	CER CHIP RES 47K OHM 5% 0402	R6103M6	0613952R09	CER CHIP RES 22K OHM 5% 0402	R6121M6	0613952R01	CER CHIP RES 10K OHM 5% 0402	R620M19	NOTPLACED	64AM DUMMY PART NUMBER
R4012M2	0613952R09	CER CHIP RES 22K OHM 5% 0402	R6104M6	NOTPLACED	64AM DUMMY PART NUMBER	R6122M6	0613952R01	CER CHIP RES 10K OHM 5% 0402	R6210M6	0613952Q89	CER CHIP RES 4700 OHM 5 0402
R4013M2	0613952R09	CER CHIP RES 22K OHM 5% 0402	R6105M6	0613952R66	CER CHIP RES 0.0 +/-0.050 OHM	R6125M6	NOTPLACED	64AM DUMMY PART NUMBER	R6211M6	0613952R01	CER CHIP RES 10K OHM 5% 0402
R4014M2	0613952Q85	CER CHIP RES 3300 OHM 5 0402	R6106M6	0613952Q73	CER CHIP RES 1000 OHM 5 0402	R612M19	0613952Q94	CER CHIP RES 7500 OHM 5 0402	R6212M6	NOTPLACED	64AM DUMMY PART NUMBER
R500M21	0613952Q37	CER CHIP RES 33.0 OHM 5 0402	R6107M6	0613952Q55	CER CHIP RES 180 OHM 5 0402	R613M19	0613952Q82	CER CHIP RES 2400 OHM 5 0402	R6213M6	0613952R01	CER CHIP RES 10K OHM 5% 0402
R502M21	0613952Q36	CER CHIP RES 30.0 OHM 5 0402	R6108M6	0613952Q61	CER CHIP RES 330 OHM 5 0402	R614M19	0613952R66	CER CHIP RES 0.0 +/-0.050 OHM	R6214M6	NOTPLACED	64AM DUMMY PART NUMBER
R512M21	0613952R66	CER CHIP RES 0.0 +/-0.050 OHM	R6109M6	0613952Q73	CER CHIP RES 1000 OHM 5 0402	R615M19	NOTPLACED	64AM DUMMY PART NUMBER	R6215M6	0613952R01	CER CHIP RES 10K OHM 5% 0402



Ref. Des.	Part Number	Description	Ref. Des.	Part Number	Description	Ref. Des.	Part Number	Description	Ref. Des.	Part Number	Description
R6216M6	0613952R66	CER CHIP RES 0.0 +/-0.050 OHM	R6403M6	0613952Q81	CER CHIP RES 2200 OHM 5 0402	R6427M6	0613952R11	CER CHIP RES 27K OHM 5% 0402	R6512M6	0613952N01	CER CHIP RES 10.0K OHM 1 0402
R6217M6	0613952Q73	CER CHIP RES 1000 OHM 5 0402	R6404M6	0613952Q81	CER CHIP RES 2200 OHM 5 0402	R6428M6	0613952R25	CER CHIP RES 100K OHM 5% 0402	R6513M6	0613952R66	CER CHIP RES 0.0 +/-0.050 OHM
R6218M6	0613952Q80	CER CHIP RES 2000 OHM 5 0402	R6405M6	0613952Q75	CER CHIP RES 1200 OHM 5 0402	R6429M6	0613952R17	CER CHIP RES 47K OHM 5% 0402	R6514M6	0613952Q89	CER CHIP RES 4700 OHM 5 0402
R621M19	NOTPLACED	64AM DUMMY PART NUMBER	R6406M6	0613952R01	CER CHIP RES 10K OHM 5% 0402	R6430M6	0613952R09	CER CHIP RES 22K OHM 5% 0402	R6515M6	0613952R66	CER CHIP RES 0.0 +/-0.050 OHM
R623M19	NOTPLACED	64AM DUMMY PART NUMBER	R6407M6	0613952Q81	CER CHIP RES 2200 OHM 5 0402	R6431M6	0613952Q81	CER CHIP RES 2200 OHM 5 0402	R6516M6	0613952R66	CER CHIP RES 0.0 +/-0.050 OHM
R624M19	NOTPLACED	64AM DUMMY PART NUMBER	R6409M6	0613952N01	CER CHIP RES 10.0K OHM 1 0402	R6432M6	0613952R25	CER CHIP RES 100K OHM 5% 0402	R6517M6	0613952Q63	CER CHIP RES 390 OHM 5 0402
R6301M6	0613952R01	CER CHIP RES 10K OHM 5% 0402	R6410M6	0613952R01	CER CHIP RES 10K OHM 5% 0402	R6433M6	0613952Q32	CER CHIP RES 20.0 OHM 5 0402	R6518M6	0613952R66	CER CHIP RES 0.0 +/-0.050 OHM
R6304M6	0613952R66	CER CHIP RES 0.0 +/-0.050 OHM	R6411M6	0613952R66	CER CHIP RES 0.0 +/-0.050 OHM	R6434M6	0613952Q32	CER CHIP RES 20.0 OHM 5 0402	R6519M6	0613952Q89	CER CHIP RES 4700 OHM 5 0402
R63050M6	0613952R66	CER CHIP RES 0.0 +/-0.050 OHM	R6414M6	0613952Q61	CER CHIP RES 330 OHM 5 0402	R6492M6	0613952Q79	CER CHIP RES 1800 OHM 5 0402	R6520M6	0613952Q73	CER CHIP RES 1000 OHM 5 0402
R6305M6	0613952R66	CER CHIP RES 0.0 +/-0.050 OHM	R6415M6	0613952Q61	CER CHIP RES 330 OHM 5 0402	R6501M6	0613952Q25	CER CHIP RES 10.0 OHM 5 0402	R6521M6	0615049H01	KAMAYA 0.2 OHM CHIP RESISTOR
R6306M6	0613952R01	CER CHIP RES 10K OHM 5% 0402	R6416M6	0613952Q61	CER CHIP RES 330 OHM 5 0402	R6502M6	0613952Q25	CER CHIP RES 10.0 OHM 5 0402	R6522M6	0613952M66	CER CHIP RES 4750 OHM 1% 0402
R6307M6	0613952R66	CER CHIP RES 0.0 +/-0.050 OHM	R6417M6	0613952Q61	CER CHIP RES 330 OHM 5 0402	R6503M6	0613952Q25	CER CHIP RES 10.0 OHM 5 0402	R6523M6	0613952R09	CER CHIP RES 22K OHM 5% 0402
R6310M6	0613952Q37	CER CHIP RES 33.0 OHM 5 0402	R6419M6	0613952Q37	CER CHIP RES 33.0 OHM 5 0402	R6504M6	0613952R09	CER CHIP RES 22K OHM 5% 0402	R6524M6	0613952R66	CER CHIP RES 0.0 +/-0.050 OHM
R6311M6	0613952Q37	CER CHIP RES 33.0 OHM 5 0402	R6420M6	0613952R17	CER CHIP RES 47K OHM 5% 0402	R6505M6	0613952Q80	CER CHIP RES 2000 OHM 5 0402	R6525M6	NOTPLACED	64AM DUMMY PART NUMBER
R6312M6	0613952Q37	CER CHIP RES 33.0 OHM 5 0402	R6421M6	0613952R01	CER CHIP RES 10K OHM 5% 0402	R6506M6	0613952R66	CER CHIP RES 0.0 +/-0.050 OHM	R6526M6	0613952R66	CER CHIP RES 0.0 +/-0.050 OHM
R6313M6	0613952Q37	CER CHIP RES 33.0 OHM 5 0402	R6422M6	0613952Q51	CER CHIP RES 120 OHM 5 0402	R6507M6	0613952R01	CER CHIP RES 10K OHM 5% 0402	R6527M6	0613952N87	CER CHIP RES 78.7K OHM 1 0402
R6314M6	0613952Q37	CER CHIP RES 33.0 OHM 5 0402	R6423M6	0613952R66	CER CHIP RES 0.0 +/-0.050 OHM	R6508M6	0613952R17	CER CHIP RES 47K OHM 5% 0402	R6528M6	0613952R25	CER CHIP RES 100K OHM 5% 0402
R6316M6	0613952R01	CER CHIP RES 10K OHM 5% 0402	R6424M6	0613952N01	CER CHIP RES 10.0K OHM 1 0402	R6509M6	0613952R25	CER CHIP RES 100K OHM 5% 0402	R6529M6	0615049H01	KAMAYA 0.2 OHM CHIP RESISTOR
R6401M6	0613952R18	CER CHIP RES 51K OHM 5 0402	R6425M6	0613952Q80	CER CHIP RES 2000 OHM 5 0402	R6510M6	0613952R66	CER CHIP RES 0.0 +/-0.050 OHM	R6530M6	0613952L30	CER CHIP RES 200 OHM 1 0402
R6402M6	0613952R32	CER CHIP RES 200K OHM 5 0402	R6426M6	0613952Q49	CER CHIP RES 100 OHM 5 0402	R6511M6	0613952R01	CER CHIP RES 10K OHM 5% 0402	R6531M6	0613952R01	CER CHIP RES 10K OHM 5% 0402

Ref. Des.	Part Number	Description	Ref. Des.	Part Number	Description	Ref. Des.	Part Number	Description	Ref. Des.	Part Number	Description
R6532M6	NOTPLACED	64AM DUMMY PART NUMBER	R6552M6	0613952R25	CER CHIP RES 100K OHM 5% 0402	R6584M6	0613952Q56	CER CHIP RES 200 OHM 5 0402	R6625M6	0613952Q35	CER CHIP RES 27.0 OHM 5 0402
R6533M6	0613952R66	CER CHIP RES 0.0 +/-0.050 OHM	R6558M6	0613952P22	CER CHIP RES 165K OHM 1 0402	R6591M6	0613952R66	CER CHIP RES 0.0 +/-0.050 OHM	R6626M6	0613952R01	CER CHIP RES 10K OHM 5% 0402
R6534M6	NOTPLACED	64AM DUMMY PART NUMBER	R6561M6	0613952R66	CER CHIP RES 0.0 +/-0.050 OHM	R6592M6	0613952R66	CER CHIP RES 0.0 +/-0.050 OHM	R698M19	0613952R66	CER CHIP RES 0.0 +/-0.050 OHM
R6535M6	0613952N01	CER CHIP RES 10.0K OHM 1 0402	R6562M6	0613952R66	CER CHIP RES 0.0 +/-0.050 OHM	R6598M6	NOTPLACED	64AM DUMMY PART NUMBER	R699M19	0613952R66	CER CHIP RES 0.0 +/-0.050 OHM
R6536M6	0613952Z72	RES,MF,91KOHM,1%,.0625 W,SM,0402,200PPM/CEL,PB-FREE	R6563M6	0613952R66	CER CHIP RES 0.0 +/-0.050 OHM	R6599M6	0613952R01	CER CHIP RES 10K OHM 5% 0402	R701M7	0613952Q69	CER CHIP RES 680 OHM 5 0402
R6537M6	0613952P09	CER CHIP RES 121K OHM 1 0402	R6564M6	0613952R66	CER CHIP RES 0.0 +/-0.050 OHM	R6601M6	0613952R01	CER CHIP RES 10K OHM 5% 0402	R702M7	0613952R66	CER CHIP RES 0.0 +/-0.050 OHM
R6538M6	0613952Q95	CER CHIP RES 8200 OHM 5 0402	R6565M6	0613952R66	CER CHIP RES 0.0 +/-0.050 OHM	R6602M6	0613952R01	CER CHIP RES 10K OHM 5% 0402	R703M7	0613952Q67	CER CHIP RES 560 OHM 5 0402
R6539M6	0613952P66	CER CHIP RES 475K OHM 1 0402	R6566M6	0613952R66	CER CHIP RES 0.0 +/-0.050 OHM	R6604M6	0613952Q49	CER CHIP RES 100 OHM 5 0402	R704M7	0613952Q25	CER CHIP RES 10.0 OHM 5 0402
R6540M6	0613952P66	CER CHIP RES 475K OHM 1 0402	R6567M6	0613952R66	CER CHIP RES 0.0 +/-0.050 OHM	R6605M6	0613952Q33	CER CHIP RES 22.0 OHM 5 0402	R705M7	0613952Q75	CER CHIP RES 1200 OHM 5 0402
R6541M6	0613952R25	CER CHIP RES 100K OHM 5% 0402	R6568M6	0613952P47	CER CHIP RES 301K OHM 1 0402	R6606M6	0613952Q37	CER CHIP RES 33.0 OHM 5 0402	R706M7	0613952R66	CER CHIP RES 0.0 +/-0.050 OHM
R6542M6	0613952R66	CER CHIP RES 0.0 +/-0.050 OHM	R6570M6	0613952R66	CER CHIP RES 0.0 +/-0.050 OHM	R6608M6	0613952R01	CER CHIP RES 10K OHM 5% 0402	R707M7	0613952Q67	CER CHIP RES 560 OHM 5 0402
R6543M6	0613952R66	CER CHIP RES 0.0 +/-0.050 OHM	R6574M6	0613952R25	CER CHIP RES 100K OHM 5% 0402	R6609M6	0613952R25	CER CHIP RES 100K OHM 5% 0402	R708M7	0613952Q45	CER CHIP RES 68.0 OHM 5 0402
R6544M6	0613952R66	CER CHIP RES 0.0 +/-0.050 OHM	R6576M6	0613952R01	CER CHIP RES 10K OHM 5% 0402	R6616M6	0613952Q80	CER CHIP RES 2000 OHM 5 0402	R709M7	NOTPLACED	64AM DUMMY PART NUMBER
R6545M6	0613952R25	CER CHIP RES 100K OHM 5% 0402	R6577M6	0613952Q89	CER CHIP RES 4700 OHM 5 0402	R6617M6	0613952R01	CER CHIP RES 10K OHM 5% 0402	R721M7	0613952R01	CER CHIP RES 10K OHM 5% 0402
R6546M6	0613952R66	CER CHIP RES 0.0 +/-0.050 OHM	R6578M6	0613952Q89	CER CHIP RES 4700 OHM 5 0402	R6618M6	0613952R01	CER CHIP RES 10K OHM 5% 0402	R722M7	0613952Q56	CER CHIP RES 200 OHM 5 0402
R6547M6	0613952R66	CER CHIP RES 0.0 +/-0.050 OHM	R6579M6	0613952R01	CER CHIP RES 10K OHM 5% 0402	R6619M6	0613952R01	CER CHIP RES 10K OHM 5% 0402	R723M7	0613952Q82	CER CHIP RES 2400 OHM 5 0402
R6548M6	NOTPLACED	64AM DUMMY PART NUMBER	R6580M6	0613952R17	CER CHIP RES 47K OHM 5% 0402	R6621M6	0613952Q89	CER CHIP RES 4700 OHM 5 0402	R728M7	0613952Q37	CER CHIP RES 33.0 OHM 5 0402
R6550M6	0613952Z64	RES,MF,39KOHM,1%,.0625 W,SM,0402,200PPM/CEL,PB-FREE	R6581M6	0613952Q49	CER CHIP RES 100 OHM 5 0402	R6622M6	0613952Q35	CER CHIP RES 27.0 OHM 5 0402	R729M7	0613952R09	CER CHIP RES 22K OHM 5% 0402
R6551M6	0613952Z62	RES,MF,33KOHM,1%,.0625 W,SM,0402,200PPM/CEL,PB-FREE	R6582M6	0613952Q89	CER CHIP RES 4700 OHM 5 0402	R6623M6	0613952Q35	CER CHIP RES 27.0 OHM 5 0402	R730M7	0613952Q84	CER CHIP RES 3000 OHM 5 0402
			R6583M6	0613952R03	CER CHIP RES 12K OHM 5% 0402	R6624M6	0613952Q35	CER CHIP RES 27.0 OHM 5 0402	R734M7	0613952Q47	CER CHIP RES 82.0 OHM 5% 0402

Ref. Des.	Part Number	Description
R736M7	0613952Q55	CER CHIP RES 180 OHM 5 0402
R741M7	0613952R09	CER CHIP RES 22K OHM 5% 0402
R742M7	0613952R23	CER CHIP RES 82K OHM 5% 0402
R743M7	0613952R17	CER CHIP RES 47K OHM 5% 0402
R744M7	0613952Q91	CER CHIP RES 5600 OHM 5 0402
R745M7	0613952R09	CER CHIP RES 22K OHM 5% 0402
R746M7	0613952Q34	CER CHIP RES 24.0 OHM 5 0402
R747M7	0613952Q39	CER CHIP RES 39.0 OHM 5 0402
R748M7	0613952Q47	CER CHIP RES 82.0 OHM 5% 0402
R751M7	0613952Q59	CER CHIP RES 270 OHM 5 0402
R754M7	0613952Q71	CER CHIP RES 820 OHM 5 0402
R757M7	0613952Q59	CER CHIP RES 270 OHM 5 0402
R761M7	0613952Q23	CER CHIP RES 8.2 OHM 5 0402
R762M7	0613952R08	CER CHIP RES 20K OHM 5 0402
R763M7	0613952R19	CER CHIP RES 56K OHM 5% 0402
R765M7	2414017P23	IDCTR,CHIP,68NH,5%,180 MA,2.2OHM,CER,8 Q,800MHZ SRF,SM,0402,P
R766M7	0613952Q92	CER CHIP RES 6200 OHM 5 0402
R768M7	2113944A25	CAP CER CHP 10.0PF 50V +/- 0.5PF
R769M7	0613952Q29	CER CHIP RES 15.0 OHM 5 0402
R771M7	0613952Q49	CER CHIP RES 100 OHM 5 0402

Ref. Des.	Part Number	Description
R776M7	0613952Q67	CER CHIP RES 560 OHM 5 0402
R778M7	2113944A30	CAP CER CHP 27.0PF 50V 5%
R779M7	NOTPLACED	64AM DUMMY PART NUMBER
R785M7	0613952Q60	CER CHIP RES 300 OHM 5 0402
R799M7	0613952Q60	CER CHIP RES 300 OHM 5 0402
R809M7	0613952Q31	CER CHIP RES 18.0 OHM 5 0402
R822M7	NOTPLACED	64AM DUMMY PART NUMBER
R823M7	NOTPLACED	64AM DUMMY PART NUMBER
R901M16	0613952R01	CER CHIP RES 10K OHM 5% 0402
R902M16	0613952R01	CER CHIP RES 10K OHM 5% 0402
R903M16	0613952R21	CER CHIP RES 68K OHM 5% 0402
R904M16	0613952R13	CER CHIP RES 33K OHM 5% 0402
R905M16	0613952Q73	CER CHIP RES 1000 OHM 5 0402
R906M16	0613952Q61	CER CHIP RES 330 OHM 5 0402
R907M16	2113944A31	CAP CER CHP 33.0PF 50V 5%
R908M16	2113944A30	CAP CER CHP 27.0PF 50V 5%
R909M16	2414017P21	IDCTR,CHIP,47NH,5%,200 MA,2OHM,CER,8 Q,1.1GHZ SRF,SM,0402,PB-
S2103M2	40012069001	TACT SWITCH, EMERGENCY
SH1	26012144001	SHIELD, TXOP
SH10	26012156001	SHIELD, MIXER
SH11	26012159001	SHIELD, VCO
SH12	26012152001	SHIELD, GPS/BT

Ref. Des.	Part Number	Description
SH13	26012161001	SHIELD, CONTROLLER
SH14	26012143001	SHIELD, MAKO
SH15	26012160001	SHIELD, DRIVER
SH16	26012163001	SHIELD, RXFE
SH17	26012155001	SHIELD, 2ND_LO
SH2	26012154001	SHIELD, ABACUS
SH3	26012149001	SHIELD, ALC
SH4	26012157001	SHIELD, BALUN
SH5	26012153001	SHIELD, FGU
SH6	26012150001	SHIELD, ALC/DC
SH7	26012158001	SHIELD, COUPLER
SH8	26012162001	SHIELD, HF
SH9	26012151001	SHIELD, AUDIO PA
T506M21	2575851B01	RF TRANSFORMER BALUN
T507M21	2575851B02	RF TRANSFORMER BALUN
U1101M11	5188032U43	IC,SENSING CIRCUIT,INA138,SM,SOT-23/5,1PER PKG
U1103M11	5185070Y01	IC TEMPERATURE SENSOR PB-FREE
U1104M11	5185941F56	IC SINGLE LV LP OP AMPLIFIER
U1105M11	5180390L83	IC,CNTRLR,,SM,1PER PKG
U1106M11	5175772B05	PRECISION RF DETECTOR
U1112M11	5175772B04	1 DB LSB GAAS MMIC ATTENUATOR
U1113M11	5185941F56	IC SINGLE LV LP OP AMPLIFIER
U1114M11	5185941F56	IC SINGLE LV LP OP AMPLIFIER
U1119M11	'5109522E94	2 INPUT AND GATE IN NANO PACKAGE (C87)
U1121M11	5114000B52	IC,XOR,LOGIC LEVEL SHIFTER,1PER PKG,SM,SOT-353,PB-FREE

Ref. Des.	Part Number	Description
U1125M11	5175206H01	QUAD 12-BIT DAC IC
U1126M11	5109817F77	IC COMPTR LM7275 5SC70 (D54)
U1127M11	5171779H01	SPDT ANALOG SWITCH
U1128M11	5188085K11	IC, SINGLE NAND GATE, 2-INPUT, POSITIVE, 5 DSBGA, PB-FREE
U1129M11	5175143H01	WIDE SUPPLY RANGE OP AMP
U1130M11	5175143H01	WIDE SUPPLY RANGE OP AMP
U1131M11	5109817F77	IC COMPTR LM7275 5SC70 (D54)
U1132M11	5114007M28	IC,F-F/D,1PER PKG,17SZ74,N-I,SM,SOIC8,PB-FREE
U1133M11	5171779H01	SPDT ANALOG SWITCH
U1136M11	'5109522E94	2 INPUT AND GATE IN NANO PACKAGE (C87)
U1137M11	5164852H16	IC TRANSCEIVER W/ LEVEL TRANSLATION
U1138M11	5164852H16	IC TRANSCEIVER W/ LEVEL TRANSLATION
U1139M11	5164852H16	IC TRANSCEIVER W/ LEVEL TRANSLATION
U1141M11	5185941F56	IC SINGLE LV LP OP AMPLIFIER
U1142M11	5185941F56	IC SINGLE LV LP OP AMPLIFIER
U1143M11	5185941F56	IC SINGLE LV LP OP AMPLIFIER
U1144M11	5171779H01	SPDT ANALOG SWITCH
U1146M11	'5109522E93	2 INPUT OR GATE IN NANO PACKAGE (C87)
U1147M11	'5109522E94	2 INPUT AND GATE IN NANO PACKAGE (C87)
U1148M11	5185941F56	IC SINGLE LV LP OP AMPLIFIER
U1149M11	'5109522E93	2 INPUT OR GATE IN NANO PACKAGE (C87)

Ref. Des.	Part Number	Description
U1150M11	51009381001	LOW DROPOUT VOLTAGE REFERENCE
U1301M3	51007377001	IC, XCVR, BLUETOOTH, GPS, FM RX, FM TX
U1304M3	5105739X13	IC, SIGE GPS LOW NOISE AMP 1575 MHZ
U1305M3	51016097001	LOW NOISE, 100MA LINEAR REGULATOR 2.8V
U200M12	5188493T01	IC,VREG/ SWG,LP2989,SM,MINI SO-8 HI PRCN REG 5V
U201M12	5175771A99	LOW NOISE, 100MA LINEAR REGULATOR
U202M12	5175772B02	LINEAR REGULATOR 100MA 1.8V
U203M12	5175772B01	LINEAR VOLTAGE REGULATOR 350MA
U21000M2	5188690V02	IC,D FLIP-FLOP,1PER PKG,7SZ175,,SC70-6,,PB-FREE
U21001M2	5188690V02	IC,D FLIP-FLOP,1PER PKG,7SZ175,,SC70-6,,PB-FREE
U21002M2	5188690V01	IC,SCHMITT INVERTER,7SZ14,1PER PKG,SM,SC70-5,PB FREE
U21003M2	5188690V01	IC,SCHMITT INVERTER,7SZ14,1PER PKG,SM,SC70-5,PB FREE
U2101M2	'5109522E84	IC DUAL SCHMITT TRIG MICRO PAK
U2102M2	'5109522E84	IC DUAL SCHMITT TRIG MICRO PAK
U2104M2	'5109522E84	IC DUAL SCHMITT TRIG MICRO PAK
U2201M2	5171679H01	LED LIGHT DRIVER
U2202M2	5164852H47	IC, I2C LEVEL TRANSLATOR
U2701M13	5103535B53	IC,INVTR,DL,NC7WZ04L6X ,2PER PKG,SC70

Ref. Des.	Part Number	Description
U2702M13	5185941F45	ATTEN,VAR,14.4DBMIN,15.6DBMAX,0-2000 MHZFREQ,50OHM,PCMT,S OT
U304M20	'4885316E32	TRANSISTOR, RF
U3238M22	5171972L01	SP3T RF SWITCH
U4001M2	5164852H47	IC, I2C LEVEL TRANSLATOR
U4003M2	5188691V01	IC,MUX/ DEMUX,NC7SB3157P6X,S M,SC70-6,1PER PKG,BUS,PB FREE
U4004M2	5116783H01	SN74LVC2G66 ANALOG SWITCH
U507M21	5164015H81	IC,MXR,DBL BAL GILBERT,CELL,,SM
U601M19	5102495J14	IC,IF,IF DIGITILIZING SUBSYSTEM IC,AD9864,QFN
U602M19	'4885316E32	TRANSISTOR, RF
U603M19	'5109522E84	IC DUAL SCHMITT TRIG MICRO PAK
U604M19	'5109522E84	IC DUAL SCHMITT TRIG MICRO PAK
U605M19	5164852H16	IC TRANSCEIVER W/ LEVEL TRANSLATION
U606M19	5164852H16	IC TRANSCEIVER W/ LEVEL TRANSLATION
U607M19	5186311J24	IC,BFR,1BITS,NC7SZ125,A CTIVE HIGH,B
U6101M6	0180706J18	PROGRAMMED CPLD
U6102M6	5188691V01	IC,MUX/ DEMUX,NC7SB3157P6X,S M,SC70-6,1PER PKG,BUS,PB FREE
U6103M6	5175114H01	SINGLE AND GATE MICROPAK
U6104M6	5175114H01	SINGLE AND GATE MICROPAK
U6105M6	5175114H01	SINGLE AND GATE MICROPAK

Ref. Des.	Part Number	Description
U6201M6	5185941F26	IC,COMPTR,LMV7219,NOP B
U6301M6	51012031001	32MB DIE SHRINK DDR SDRAM IC
U6302M6	5102495J13	IC,MICROP,P1710ZZGE,BG A,,12MHZ,32BITS
U6304M6	0105955U25	ASSY,IC,BGA SPEC PROG, FLASH MEMORY
U6401M6	5175772B38	IC ANALOG TEMPERATURE SENSOR
U6402M6	5115453H01	RAIL TO RAIL OUTPUT, 8 PIN BGA
U6404M6	5175772B38	IC ANALOG TEMPERATURE SENSOR
U6405M6	5188348V06	IC,AUDIO CODEC,SM,AUDIO CODEC
U6408M6	5188521T01	IC,VREF,SM,SOT23,1PER PKG,.5%,1.25 TO 13.75,PRCN BANDGAP ADJUS
U6409M6	51009000001	NANOPOWER, 1.8V, SOT23 COMPARATOR
U6410M6	5175772B38	IC ANALOG TEMPERATURE SENSOR
U6411M6	5109731C55	IC 2.75 FIXED GAIN MONO FILTER-FREE AMPLFR
U6501M6	'5185143E77	IC, MAKO ASIC, CMOS PWR MGMT
U6502M6	4871987H01	LOW FREQUENCY TRANSISTOR
U6503M6	5171674H01	OP AMP
U6504M6	5171682H01	800MA BUCK REGULATOR
U6505M6	5189631P01	IC,SYNC STEP-DOWN CONV
U6506M6	5184790Y04	IC,400MA ADJ VREG LDO,SOT23
U6507M6	5171682H01	800MA BUCK REGULATOR
U6508M6	51009366001	500MA LOW DROPOUT CMOS LINEAR REG.
U6509M6	5175114H01	SINGLE AND GATE MICROPAK

Ref. Des.	Part Number	Description
U6510M6	5114007A47	IC,OR,17SZ32,1PER PKG,SOT-353,PB FREE
U6511M6	5171339H01	MICROPOWER VOLTAGE REGULATOR
U6601M6	5175114H01	SINGLE AND GATE MICROPAK
U702M7	5164015H28	IC,TRIDENT,INTEG SYNTH,RX/TX BSBND
U738M7	5171972L01	SP3T RF SWITCH
U746M7	4805218N63	RF TRANS SOT 323 BFG67W
U901M16	5175143H01	WIDE SUPPLY RANGE OP AMP
U902M16	51012101001	VHF/UHF/800/900 MHZ LD MOS DRIVER IC
VR101M12	4813977M29	DIODE,VREF,MBZ5250,SM, SOT-23,20V,,225W,ZEN
VR200M12	4813977M29	DIODE,VREF,MBZ5250,SM, SOT-23,20V,,225W,ZEN
VR601M19	4805656W87	DIODE,VCTR, @ 15V,1SV279,SOD-523/SC-79
VR602M19	4805656W87	DIODE,VCTR, @ 15V,1SV279,SOD-523/SC-79
Y1304M3	48014600001	OSC,TCXO,26.0
Y6501M6	93012044001	CRYSTAL UNIT SMD 5.0X3.2 24.576MHZ
Y6502M6	4809995L05	XTAL QUARTZ 32.768KHZ CC4V-T1
Y6601M6	4802582S85	RESON,QRTZ,12MHZ,TOL ERANCE10PPM,STABILITY 15PPM,SM,FUND,LO
Y701M7	4871886H01	16.8 MHZ VCTXO .8PPM

VHF Transceiver (RF) Board Parts List –  
PC000352A01

Ref. Des.	Part Number	Description
C101M12	2113944A46	CAP,CHIP,330PF,+5%,-5%,50V-DC,0402,C0G,-55DEG CMIN,125DEG CMAX
C1101M11	2113945B02	CAP,CHIP,.01UF,+10%,-10%,25V-DC,0402,X7R,-55DEG CMIN,125DEG CMA
C1102M11	2188468Y01	CAP,CHIP,1UF,+10%,-10%,25V-DC,0805,X7R
C1103M11	2113945B02	CAP,CHIP,.01UF,+10%,-10%,25V-DC,0402,X7R,-55DEG CMIN,125DEG CMA
C1104M11	NOTPLACED	64AM DUMMY PART NUMBER
C1105M11	2113944A19	CAP,CHIP,5.6PF,.5PF+/-,50V-DC,0402,C0G,-55DEG CMIN,125DEG CMAX
C1106M11	2113945B02	CAP,CHIP,.01UF,+10%,-10%,25V-DC,0402,X7R,-55DEG CMIN,125DEG CMA
C1107M11	2113944A40	CAP,CHIP,100PF,+5%,-5%,50V-DC,0402,C0G,-55DEG CMIN,125DEG CMAX
C1108M11	2113945B06	CAP,FXD,.047UF,+10%,-10%,25V-DC,0402,X7R,-55DEG CMIN,125DEG CMA
C1110M11	2113944A46	CAP,CHIP,330PF,+5%,-5%,50V-DC,0402,C0G,-55DEG CMIN,125DEG CMAX
C1111M11	2113945Y02	CAP,FXD,.1UF,+10%,-10%,16V-DC,0402,X7R,-55DEG CMIN,125DEG CMAX
C1112M11	2113945B01	CAP,CHIP,6800PF,+10%,-10%,25V-DC,0402,X7R,-55DEG CMIN,125DEG CM
C1113M11	2113945B02	CAP,CHIP,.01UF,+10%,-10%,25V-DC,0402,X7R,-55DEG CMIN,125DEG CMA

Ref. Des.	Part Number	Description
C1116M11	2113945Y02	CAP,FXD,.1UF,+10%,-10%,16V-DC,0402,X7R,-55DEG CMIN,125DEG CMAX
C1117M11	2113945A12	CAP,CHIP,3300PF,+10%,-10%,50V-DC,0402,X7R,-55DEG CMIN,125DEG CM
C1118M11	2113945B02	CAP,CHIP,.01UF,+10%,-10%,25V-DC,0402,X7R,-55DEG CMIN,125DEG CMA
C1119M11	2113945B02	CAP,CHIP,.01UF,+10%,-10%,25V-DC,0402,X7R,-55DEG CMIN,125DEG CMA
C1120M11	2113945B02	CAP,CHIP,.01UF,+10%,-10%,25V-DC,0402,X7R,-55DEG CMIN,125DEG CMA
C1122M11	2113944M04	CAP,FXD,2.7PF,.1PF+/-,50V-DC,0603,C0G,-55DEG CMIN,125DEG CMAX
C1123M11	2113945B02	CAP,CHIP,.01UF,+10%,-10%,25V-DC,0402,X7R,-55DEG CMIN,125DEG CMA
C1124M11	2113945A13	CAP,CHIP,4700PF,+10%,-10%,50V-DC,0402,X7R,-55DEG CMIN,125DEG CM
C1125M11	2113944A23	CAP,CHIP,8.2PF,.5PF+/-,50V-DC,0402,C0G,-55DEG CMIN,125DEG CMAX
C1126M11	2113945A09	CAP,CHIP,1000PF,+10%,-10%,50V-DC,0402,X7R,-55DEG CMIN,125DEG CM
C1127M11	2113945Y02	CAP,FXD,.1UF,+10%,-10%,16V-DC,0402,X7R,-55DEG CMIN,125DEG CMAX
C1128M11	2113945B02	CAP,CHIP,.01UF,+10%,-10%,25V-DC,0402,X7R,-55DEG CMIN,125DEG CMA
C1129M11	2113945B02	CAP,CHIP,.01UF,+10%,-10%,25V-DC,0402,X7R,-55DEG CMIN,125DEG CMA
C1130M11	2113945B02	CAP,CHIP,.01UF,+10%,-10%,25V-DC,0402,X7R,-55DEG CMIN,125DEG CMA
C1135M11	NOTPLACED	64AM DUMMY PART NUMBER

Ref. Des.	Part Number	Description
C1137M11	2113945B02	CAP,CHIP,.01UF,+10%,-10%,25V-DC,0402,X7R,-55DEG CMIN,125DEG CMA
C1138M11	2113945B02	CAP,CHIP,.01UF,+10%,-10%,25V-DC,0402,X7R,-55DEG CMIN,125DEG CMA
C1139M11	2113944A25	CAP,CHIP,10PF,.5PF+/-,50V-DC,0402,C0G,-55DEG CMIN,125DEG CMAX
C1140M11	2113945A13	CAP,CHIP,4700PF,+10%,-10%,50V-DC,0402,X7R,-55DEG CMIN,125DEG CM
C1141M11	2113945Y02	CAP,FXD,.1UF,+10%,-10%,16V-DC,0402,X7R,-55DEG CMIN,125DEG CMAX
C1142M11	2113945A09	CAP,CHIP,1000PF,+10%,-10%,50V-DC,0402,X7R,-55DEG CMIN,125DEG CM
C1155M11	NOTPLACED	64AM DUMMY PART NUMBER
C1160M11	2113945C31	CAP,FXD,.1UF,+10%,-10%,50V-DC,0603,X7R,-55DEG CMIN,125DEG CMAX
C1161M11	2113956B91	CAP,FXD,1UF,+10%,-10%,16V-DC,0603,X5R,-55DEG CMIN,85DEG CMAX,PB
C1165M11	2113945Y02	CAP,FXD,.1UF,+10%,-10%,16V-DC,0402,X7R,-55DEG CMIN,125DEG CMAX
C1203M17	2113944M12	CAP,FXD,5.6PF,.1PF+/-,50V-DC,0603,C0G,-55DEG CMIN,125DEG CMAX
C1204M17	2113944M09	CAP,FXD,4.3PF,.1PF+/-,50V-DC,0603,C0G,-55DEG CMIN,125DEG CMAX
C1207M17	2113944M28	CAP,FXD,27PF,+2%,-2%,50V-DC,0603,C0G,-55DEG CMIN,125DEG CMAX,PB
C1220M17	2113944M16	CAP,FXD,8.2PF,.1PF+/-,50V-DC,0603,C0G,-55DEG CMIN,125DEG CMAX

Ref. Des.	Part Number	Description
C1221M17	2113944M27	CAP,FXD,24PF,+2%,-2%,50V-DC,0603,C0G,-55DEG CMIN,125DEG CMAX,PB
C1222M17	2113944C04	CAP,CHIP,330PF,+5%,-5%,50V-DC,0603,C0G,-55DEG CMIN,125DEG CMAX
C1226M17	2175662M26	CAP,CER,4.3PF,.1PF+/-,100V-DC,0603,COG
C1227M17	2113944M17	CAP,FXD,9.1PF,.1PF+/-,50V-DC,0603,C0G,-55DEG CMIN,125DEG CMAX
C1301M3	2172180Y01	CAP,FXD,2.2UF,+20%,-20%,6.3V-DC,0402,X5R,-55DEG CMIN,85DEG CMAX
C1302M3	2113944A21	CAP,CHIP,6.8PF,.5PF+/-,50V-DC,0402,C0G,-55DEG CMIN,125DEG CMAX
C1303M3	2113956A51	CAP,FXD,1UF,+10%,-10%,6.3V-DC,0402,X5R,-55DEG CMIN,85DEG CMAX,P
C1304M3	2113944A26	CAP,CHIP,12PF,+5%,-5%,50V-DC,0402,C0G,-55DEG CMIN,125DEG CMAX,P
C1305M3	2113945B02	CAP,CHIP,.01UF,+10%,-10%,25V-DC,0402,X7R,-55DEG CMIN,125DEG CMA
C1306M3	2187893N01	CAP,CER,1UF,20PF+/-,+20%,-20%,6.3V-DC,0402,+/-15%,-55DEG CMIN,85
C1307M3	2113944A26	CAP,CHIP,12PF,+5%,-5%,50V-DC,0402,C0G,-55DEG CMIN,125DEG CMAX,P
C1308M3	2113945A09	CAP,CHIP,1000PF,+10%,-10%,50V-DC,0402,X7R,-55DEG CMIN,125DEG CM
C1309M3	2113944A26	CAP,CHIP,12PF,+5%,-5%,50V-DC,0402,C0G,-55DEG CMIN,125DEG CMAX,P

Ref. Des.	Part Number	Description	Ref. Des.	Part Number	Description	Ref. Des.	Part Number	Description	Ref. Des.	Part Number	Description
C1310M3	2187893N01	CAP,CER,1UF,20PF+/-,+20%,-20%,6.3V-DC,0402,+/-15%,-55DEG CMIN,85	C1323M3	2113944A29	CAP,CHIP,22PF,+5%,-5%,50V-DC,0402,C0G,-55DEG CMIN,125DEG CMAX,P	C1335M3	2113945Y02	CAP,FXD,.1UF,+10%,-10%,16V-DC,0402,X7R,-55DEG CMIN,125DEG CMAX	C209M12	2113956B91	CAP,FXD,1UF,+10%,-10%,16V-DC,0603,X5R,-55DEG CMIN,85DEG CMAX,PB
C1311M3	2113956A51	CAP,FXD,1UF,+10%,-10%,6.3V-DC,0402,X5R,-55DEG CMIN,85DEG CMAX,P	C1324M3	2115153H03	CAP,CER CHIP,1PF,.1PF+/-,+1%,-.1%,50V-DC,0402,C0G	C1336M3	2113945Y02	CAP,FXD,.1UF,+10%,-10%,16V-DC,0402,X7R,-55DEG CMIN,125DEG CMAX	C2100M2	2113944A46	CAP,CHIP,330PF,+5%,-5%,50V-DC,0402,C0G,-55DEG CMIN,125DEG CMAX
C1312M3	2113956A51	CAP,FXD,1UF,+10%,-10%,6.3V-DC,0402,X5R,-55DEG CMIN,85DEG CMAX,P	C1325M3	2113944A29	CAP,CHIP,22PF,+5%,-5%,50V-DC,0402,C0G,-55DEG CMIN,125DEG CMAX,P	C1337M3	2113944A28	CAP,CHIP,18PF,+5%,-5%,50V-DC,0402,C0G,-55DEG CMIN,125DEG CMAX,P	C21001M2	2113944A46	CAP,CHIP,330PF,+5%,-5%,50V-DC,0402,C0G,-55DEG CMIN,125DEG CMAX
C1313M3	2187893N01	CAP,CER,1UF,20PF+/-,+20%,-20%,6.3V-DC,0402,+/-15%,-55DEG CMIN,85	C1326M3	2113945Y02	CAP,FXD,.1UF,+10%,-10%,16V-DC,0402,X7R,-55DEG CMIN,125DEG CMAX	C1338M3	21012043007	CAP,.8PF,CAP,.5PF,CHIP,0402,CERAMIC,50V	C21002M2	2113944A46	CAP,CHIP,330PF,+5%,-5%,50V-DC,0402,C0G,-55DEG CMIN,125DEG CMAX
C1314M3	2113944M20	CAP,FXD,12PF,+2%,-2%,50V-DC,0603,C0G,-55DEG CMIN,125DEG CMAX,PB	C1327M3	2113944A28	CAP,CHIP,18PF,+5%,-5%,50V-DC,0402,C0G,-55DEG CMIN,125DEG CMAX,P	C1376M3	2113944A25	CAP,CHIP,10PF,.5PF+/-,50V-DC,0402,C0G,-55DEG CMIN,125DEG CMAX	C21003M2	2113944A46	CAP,CHIP,330PF,+5%,-5%,50V-DC,0402,C0G,-55DEG CMIN,125DEG CMAX
C1315M3	2175389H01	CAP,.5PF,CAP,.5PF,CHIP,0402,CERAMIC,50V	C1328M3	2113945Y02	CAP,FXD,.1UF,+10%,-10%,16V-DC,0402,X7R,-55DEG CMIN,125DEG CMAX	C200M12	2113945B02	CAP,CHIP,.01UF,+10%,-10%,25V-DC,0402,X7R,-55DEG CMIN,125DEG CMA	C21004M2	2113946B04	CAP,CHIP,.1UF,+10%,-10%,10V-DC,0402,X5R,-55DEG CMIN,85DEG CMAX
C1317M3	2188881Y12	CAP,CER CHIP,1.8PF,.1PF+/-,16V-DC,0402,NP0,-55DEG CMIN,85DEG C	C1329M3	2113945Y02	CAP,FXD,.1UF,+10%,-10%,16V-DC,0402,X7R,-55DEG CMIN,125DEG CMAX	C201M12	2188468Y01	CAP,CHIP,1UF,+10%,-10%,25V-DC,0805,X7R	C210M12	2113956B91	CAP,FXD,1UF,+10%,-10%,16V-DC,0603,X5R,-55DEG CMIN,85DEG CMAX,PB
C1318M3	2113944A13	CAP,CHIP,3.3PF,.25PF+/-,50V-DC,0402,C0G,-55DEG CMIN,125DEG CMA	C1330M3	2113945Y02	CAP,FXD,.1UF,+10%,-10%,16V-DC,0402,X7R,-55DEG CMIN,125DEG CMAX	C203M12	2188468Y01	CAP,CHIP,1UF,+10%,-10%,25V-DC,0805,X7R	C2114M2	2113946B04	CAP,CHIP,.1UF,+10%,-10%,10V-DC,0402,X5R,-55DEG CMIN,85DEG CMAX
C1319M3	2113945Y02	CAP,FXD,.1UF,+10%,-10%,16V-DC,0402,X7R,-55DEG CMIN,125DEG CMAX	C1331M3	2113945Y02	CAP,FXD,.1UF,+10%,-10%,16V-DC,0402,X7R,-55DEG CMIN,125DEG CMAX	C204M12	2113955D35	CAP,FXD,4.7UF,+10%,-10%,16V-DC,1206,X7R,-55DEG CMIN,125DEG CMAX	C2115M2	NOTPLACED	64AM DUMMY PART NUMBER
C1320M3	2113944A28	CAP,CHIP,18PF,+5%,-5%,50V-DC,0402,C0G,-55DEG CMIN,125DEG CMAX,P	C1332M3	2113945Y02	CAP,FXD,.1UF,+10%,-10%,16V-DC,0402,X7R,-55DEG CMIN,125DEG CMAX	C205M12	2113955D35	CAP,FXD,4.7UF,+10%,-10%,16V-DC,1206,X7R,-55DEG CMIN,125DEG CMAX	C2116M2	NOTPLACED	64AM DUMMY PART NUMBER
C1321M3	2113944A29	CAP,CHIP,22PF,+5%,-5%,50V-DC,0402,C0G,-55DEG CMIN,125DEG CMAX,P	C1333M3	2113945Y02	CAP,FXD,.1UF,+10%,-10%,16V-DC,0402,X7R,-55DEG CMIN,125DEG CMAX	C206M12	2113945B02	CAP,CHIP,.01UF,+10%,-10%,25V-DC,0402,X7R,-55DEG CMIN,125DEG CMA	C2117M2	NOTPLACED	64AM DUMMY PART NUMBER
C1322M3	2113944A29	CAP,CHIP,22PF,+5%,-5%,50V-DC,0402,C0G,-55DEG CMIN,125DEG CMAX,P	C1334M3	2113945Y02	CAP,FXD,.1UF,+10%,-10%,16V-DC,0402,X7R,-55DEG CMIN,125DEG CMAX	C207M12	2113956B91	CAP,FXD,1UF,+10%,-10%,16V-DC,0603,X5R,-55DEG CMIN,85DEG CMAX,PB	C2126M2	2113944A46	CAP,CHIP,330PF,+5%,-5%,50V-DC,0402,C0G,-55DEG CMIN,125DEG CMAX
						C208M12	2113956B91	CAP,FXD,1UF,+10%,-10%,16V-DC,0603,X5R,-55DEG CMIN,85DEG CMAX,PB	C2127M2	2113944A46	CAP,CHIP,330PF,+5%,-5%,50V-DC,0402,C0G,-55DEG CMIN,125DEG CMAX

Ref. Des.	Part Number	Description	Ref. Des.	Part Number	Description	Ref. Des.	Part Number	Description	Ref. Des.	Part Number	Description
C2128M2	2113944A46	CAP,CHIP,330PF,+5%,-5%,50V-DC,0402,C0G,-55DEG CMIN,125DEG CMAX	C2212M2	2113946B04	CAP,CHIP,.1UF,+10%,-10%,10V-DC,0402,X5R,-55DEG CMIN,85DEG CMAX	C2704M13	2113944C04	CAP,CHIP,330PF,+5%,-5%,50V-DC,0603,C0G,-55DEG CMIN,125DEG CMAX	C3211M22	2113944M20	CAP,FXD,12PF,+2%,-2%,50V-DC,0603,C0G,-55DEG CMIN,125DEG CMAX,PB
C2129M2	2113944A46	CAP,CHIP,330PF,+5%,-5%,50V-DC,0402,C0G,-55DEG CMIN,125DEG CMAX	C2213M2	2113946B04	CAP,CHIP,.1UF,+10%,-10%,10V-DC,0402,X5R,-55DEG CMIN,85DEG CMAX	C2705M13	2113944A46	CAP,CHIP,330PF,+5%,-5%,50V-DC,0402,C0G,-55DEG CMIN,125DEG CMAX	C3212M22	2113944M22	CAP,FXD,15PF,+2%,-2%,50V-DC,0603,C0G,-55DEG CMIN,125DEG CMAX,PB
C212M12	2113946D07	CAP,CHIP,4.7UF,+10%,-10%,6.3V-DC,0603,X5R,-55DEG CMIN,85DEG CMA	C2214M2	2113946B04	CAP,CHIP,.1UF,+10%,-10%,10V-DC,0402,X5R,-55DEG CMIN,85DEG CMAX	C2706M13	2113944A46	CAP,CHIP,330PF,+5%,-5%,50V-DC,0402,C0G,-55DEG CMIN,125DEG CMAX	C3213M22	2113946B04	CAP,CHIP,.1UF,+10%,-10%,10V-DC,0402,X5R,-55DEG CMIN,85DEG CMAX
C2130M2	2113944A46	CAP,CHIP,330PF,+5%,-5%,50V-DC,0402,C0G,-55DEG CMIN,125DEG CMAX	C2215M2	2113946B04	CAP,CHIP,.1UF,+10%,-10%,10V-DC,0402,X5R,-55DEG CMIN,85DEG CMAX	C2707M13	2113946K02	CAP,CHIP,.1UF,+80%,-20%,16V-DC,0402,Y5V,-30DEG CMIN,85DEG CMAX	C3214M22	2115153H29	CAP,FXD,5PF,.1PF+/-,50V-DC,0402,C0G
C213M12	2113944A46	CAP,CHIP,330PF,+5%,-5%,50V-DC,0402,C0G,-55DEG CMIN,125DEG CMAX	C2216M2	2113946B04	CAP,CHIP,.1UF,+10%,-10%,10V-DC,0402,X5R,-55DEG CMIN,85DEG CMAX	C2708M13	2113944M27	CAP,FXD,24PF,+2%,-2%,50V-DC,0603,C0G,-55DEG CMIN,125DEG CMAX,PB	C3215M22	2113944A42	CAP,CHIP,150PF,+5%,-5%,50V-DC,0402,C0G,-55DEG CMIN,125DEG CMAX
C214M12	2113944A46	CAP,CHIP,330PF,+5%,-5%,50V-DC,0402,C0G,-55DEG CMIN,125DEG CMAX	C2221M2	2113946B04	CAP,CHIP,.1UF,+10%,-10%,10V-DC,0402,X5R,-55DEG CMIN,85DEG CMAX	C2709M13	2113944C36	CAP,CHIP,33PF,+5%,-5%,50V-DC,0603,C0G,-55DEG CMIN,125DEG CMAX,P	C3217M22	2113944M36	CAP,FXD,56PF,+2%,-2%,50V-DC,0603,C0G,-55DEG CMIN,125DEG CMAX,PB
C215M12	2113944A46	CAP,CHIP,330PF,+5%,-5%,50V-DC,0402,C0G,-55DEG CMIN,125DEG CMAX	C2222M2	2113946B04	CAP,CHIP,.1UF,+10%,-10%,10V-DC,0402,X5R,-55DEG CMIN,85DEG CMAX	C2806M1	NOTPLACED	64AM DUMMY PART NUMBER	C3219M22	2113944M32	CAP,FXD,39PF,+2%,-2%,50V-DC,0603,C0G,-55DEG CMIN,125DEG CMAX,PB
C216M12	2113944A46	CAP,CHIP,330PF,+5%,-5%,50V-DC,0402,C0G,-55DEG CMIN,125DEG CMAX	C2223M2	2113944A40	CAP,CHIP,100PF,+5%,-5%,50V-DC,0402,C0G,-55DEG CMIN,125DEG CMAX	C3200M22	2113944A40	CAP,CHIP,100PF,+5%,-5%,50V-DC,0402,C0G,-55DEG CMIN,125DEG CMAX	C3220M22	2113944M28	CAP,FXD,27PF,+2%,-2%,50V-DC,0603,C0G,-55DEG CMIN,125DEG CMAX,PB
C217M12	2113956B91	CAP,FXD,1UF,+10%,-10%,16V-DC,0603,X5R,-55DEG CMIN,85DEG CMAX,PB	C2401M2	NOTPLACED	64AM DUMMY PART NUMBER	C3201M22	2113944A40	CAP,CHIP,100PF,+5%,-5%,50V-DC,0402,C0G,-55DEG CMIN,125DEG CMAX	C3224M22	2113946B04	CAP,CHIP,.1UF,+10%,-10%,10V-DC,0402,X5R,-55DEG CMIN,85DEG CMAX
C2201M2	2113946B04	CAP,CHIP,.1UF,+10%,-10%,10V-DC,0402,X5R,-55DEG CMIN,85DEG CMAX	C2402M2	NOTPLACED	64AM DUMMY PART NUMBER	C3202M22	2113944A46	CAP,CHIP,330PF,+5%,-5%,50V-DC,0402,C0G,-55DEG CMIN,125DEG CMAX	C3225M22	2113944M38	CAP,FXD,68PF,+2%,-2%,50V-DC,0603,C0G,-55DEG CMIN,125DEG CMAX,PB
C2202M2	2113946B04	CAP,CHIP,.1UF,+10%,-10%,10V-DC,0402,X5R,-55DEG CMIN,85DEG CMAX	C2403M2	NOTPLACED	64AM DUMMY PART NUMBER	C3204M22	2113944A52	CAP,CHIP,1000PF,+5%,-5%,50V-DC,0402,C0G,-55DEG CMIN,125DEG CMAX	C3226M22	2113944A42	CAP,CHIP,150PF,+5%,-5%,50V-DC,0402,C0G,-55DEG CMIN,125DEG CMAX
C2203M2	2113946B04	CAP,CHIP,.1UF,+10%,-10%,10V-DC,0402,X5R,-55DEG CMIN,85DEG CMAX	C2404M2	NOTPLACED	64AM DUMMY PART NUMBER	C3208M22	2113944A46	CAP,CHIP,330PF,+5%,-5%,50V-DC,0402,C0G,-55DEG CMIN,125DEG CMAX	C3235M22	2113944A31	CAP,CHIP,33PF,+5%,-5%,50V-DC,0402,C0G,-55DEG CMIN,125DEG CMAX,P
C2211M2	2113946B04	CAP,CHIP,.1UF,+10%,-10%,10V-DC,0402,X5R,-55DEG CMIN,85DEG CMAX	C2701M13	2113944C04	CAP,CHIP,330PF,+5%,-5%,50V-DC,0603,C0G,-55DEG CMIN,125DEG CMAX						
			C2702M13	2113944C48	CAP,CHIP,560PF,+5%,-5%,50V-DC,0603,C0G,-55DEG CMIN,125DEG CMAX						
			C2703M13	2113944A46	CAP,CHIP,330PF,+5%,-5%,50V-DC,0402,C0G,-55DEG CMIN,125DEG CMAX						

Ref. Des.	Part Number	Description
C3240M22	2113944A40	CAP,CHIP,100PF,+5%,-5%,50V-DC,0402,C0G,-55DEG CMIN,125DEG CMAX
C3244M22	2113944A52	CAP,CHIP,1000PF,+5%,-5%,50V-DC,0402,C0G,-55DEG CMIN,125DEG CMAX
C3251M22	2113944M17	CAP,FXD,9.1PF,.1PF+/-,50V-DC,0603,C0G,-55DEG CMIN,125DEG CMAX
C3252M22	2113944M17	CAP,FXD,9.1PF,.1PF+/-,50V-DC,0603,C0G,-55DEG CMIN,125DEG CMAX
C3253M22	2113946B04	CAP,CHIP,.1UF,+10%,-10%,10V-DC,0402,X5R,-55DEG CMIN,85DEG CMAX
C3254M22	2115153H42	CAP,FXD,24PF,+1%,-1%,50V-DC,0402,C0G
C3255M22	2113944A40	CAP,CHIP,100PF,+5%,-5%,50V-DC,0402,C0G,-55DEG CMIN,125DEG CMAX
C3258M22	2113944M36	CAP,FXD,56PF,+2%,-2%,50V-DC,0603,C0G,-55DEG CMIN,125DEG CMAX,PB
C3262M22	2113944M30	CAP,FXD,33PF,+2%,-2%,50V-DC,0603,C0G,-55DEG CMIN,125DEG CMAX,PB
C3263M22	2113944M26	CAP,FXD,22PF,+2%,-2%,50V-DC,0603,C0G,-55DEG CMIN,125DEG CMAX,PB
C3264M22	2113946B04	CAP,CHIP,.1UF,+10%,-10%,10V-DC,0402,X5R,-55DEG CMIN,85DEG CMAX
C3265M22	2113944M38	CAP,FXD,68PF,+2%,-2%,50V-DC,0603,C0G,-55DEG CMIN,125DEG CMAX,PB
C3266M22	2113944A40	CAP,CHIP,100PF,+5%,-5%,50V-DC,0402,C0G,-55DEG CMIN,125DEG CMAX

Ref. Des.	Part Number	Description
C3275M22	2113944A31	CAP,CHIP,33PF,+5%,-5%,50V-DC,0402,C0G,-55DEG CMIN,125DEG CMAX,P
C330M20	2113944A30	CAP,CHIP,27PF,+5%,-5%,50V-DC,0402,C0G,-55DEG CMIN,125DEG CMAX,P
C331M20	2113944A28	CAP,CHIP,18PF,+5%,-5%,50V-DC,0402,C0G,-55DEG CMIN,125DEG CMAX,P
C332M20	2113944A30	CAP,CHIP,27PF,+5%,-5%,50V-DC,0402,C0G,-55DEG CMIN,125DEG CMAX,P
C333M20	2113944A30	CAP,CHIP,27PF,+5%,-5%,50V-DC,0402,C0G,-55DEG CMIN,125DEG CMAX,P
C334M20	2113944A19	CAP,CHIP,5.6PF,.5PF+/-,50V-DC,0402,C0G,-55DEG CMIN,125DEG CMAX
C335M20	2113944A84	CAP,FXD,43PF,+5%,-5%,50V-DC,0402,C0G,-55DEG CMIN,125DEG CMAX,PB
C336M20	2113944A21	CAP,CHIP,6.8PF,.5PF+/-,50V-DC,0402,C0G,-55DEG CMIN,125DEG CMAX
C337M20	2113944A28	CAP,CHIP,18PF,+5%,-5%,50V-DC,0402,C0G,-55DEG CMIN,125DEG CMAX,P
C338M20	2113946D07	CAP,CHIP,4.7UF,+10%,-10%,6.3V-DC,0603,X5R,-55DEG CMIN,85DEG CMA
C339M20	2113944A29	CAP,CHIP,22PF,+5%,-5%,50V-DC,0402,C0G,-55DEG CMIN,125DEG CMAX,P
C340M20	2113944A46	CAP,CHIP,330PF,+5%,-5%,50V-DC,0402,C0G,-55DEG CMIN,125DEG CMAX

Ref. Des.	Part Number	Description
C341M20	2113944A46	CAP,CHIP,330PF,+5%,-5%,50V-DC,0402,C0G,-55DEG CMIN,125DEG CMAX
C342M20	2113946D07	CAP,CHIP,4.7UF,+10%,-10%,6.3V-DC,0603,X5R,-55DEG CMIN,85DEG CMA
C343M20	2113944A46	CAP,CHIP,330PF,+5%,-5%,50V-DC,0402,C0G,-55DEG CMIN,125DEG CMAX
C344M20	21012043009	CAP,CER,1PF,.05PF+/-,50V-DC,C0G,CAPACI-TOR,CERAMIC,1.0PF,50V
C345M20	2113944A30	CAP,CHIP,27PF,+5%,-5%,50V-DC,0402,C0G,-55DEG CMIN,125DEG CMAX,P
C346M20	2113944A28	CAP,CHIP,18PF,+5%,-5%,50V-DC,0402,C0G,-55DEG CMIN,125DEG CMAX,P
C347M20	2113944A27	CAP,CHIP,15PF,+5%,-5%,50V-DC,0402,C0G,-55DEG CMIN,125DEG CMAX,P
C348M20	2113944A28	CAP,CHIP,18PF,+5%,-5%,50V-DC,0402,C0G,-55DEG CMIN,125DEG CMAX,P
C349M20	2113944A30	CAP,CHIP,27PF,+5%,-5%,50V-DC,0402,C0G,-55DEG CMIN,125DEG CMAX,P
C350M20	2113944A30	CAP,CHIP,27PF,+5%,-5%,50V-DC,0402,C0G,-55DEG CMIN,125DEG CMAX,P
C351M20	2113944A19	CAP,CHIP,5.6PF,.5PF+/-,50V-DC,0402,C0G,-55DEG CMIN,125DEG CMAX
C352M20	2115153H48	CAP,FXD,43PF,50V-DC,0402,C0G
C353M20	2113944A21	CAP,CHIP,6.8PF,.5PF+/-,50V-DC,0402,C0G,-55DEG CMIN,125DEG CMAX

Ref. Des.	Part Number	Description
C354M20	2113944A28	CAP,CHIP,18PF,+5%,-5%,50V-DC,0402,C0G,-55DEG CMIN,125DEG CMAX,P
C357M20	2113944A46	CAP,CHIP,330PF,+5%,-5%,50V-DC,0402,C0G,-55DEG CMIN,125DEG CMAX
C360M20	2115153H37	CAP,FXD,15PF,.15PF+/-,+1%,-1%,50V-DC,0402,C0G,CAP,CERAMIC,CO
C365M20	0613952R66	RES,MF,0OHM,5%,.0625W,SM,0402,PB-FREE
C366M20	2113944A28	CAP,CHIP,18PF,+5%,-5%,50V-DC,0402,C0G,-55DEG CMIN,125DEG CMAX,P
C367M20	2113944A27	CAP,CHIP,15PF,+5%,-5%,50V-DC,0402,C0G,-55DEG CMIN,125DEG CMAX,P
C368M20	2115153H42	CAP,FXD,24PF,+1%,-1%,50V-DC,0402,C0G
C369M20	NOTPLACED	64AM DUMMY PART NUMBER
C370M20	21012043009	CAP,CER,1PF,.05PF+/-,50V-DC,C0G,CAPACI-TOR,CERAMIC,1.0PF,50V
C4005M2	2113946B04	CAP,CHIP,.1UF,+10%,-10%,10V-DC,0402,X5R,-55DEG CMIN,85DEG CMAX
C4006M2	2113946B04	CAP,CHIP,.1UF,+10%,-10%,10V-DC,0402,X5R,-55DEG CMIN,85DEG CMAX
C4007M2	2113946B04	CAP,CHIP,.1UF,+10%,-10%,10V-DC,0402,X5R,-55DEG CMIN,85DEG CMAX
C500M21	2113945B05	CAP,FXD,.033UF,+10%,-10%,25V-DC,0402,X7R,-55DEG CMIN,125DEG CMA
C501M21	2113944A32	CAP,CHIP,39PF,+5%,-5%,50V-DC,0402,C0G,-55DEG CMIN,125DEG CMAX,P



Ref. Des.	Part Number	Description
C502M21	2113945B05	CAP,FXD,.033UF,+10%,-10%,25V-DC,0402,X7R,-55DEG CMIN,125DEG CMA
C504M21	2113944A40	CAP,CHIP,100PF,+5%,-5%,50V-DC,0402,C0G,-55DEG CMIN,125DEG CMAX
C505M21	2113944A09	CAP,CHIP,2.2PF,.25PF+/-,50V-DC,0402,C0G,-55DEG CMIN,125DEG CMA
C506M21	2113944A32	CAP,CHIP,39PF,+5%,-5%,50V-DC,0402,C0G,-55DEG CMIN,125DEG CMAX,P
C507M21	2113945B05	CAP,FXD,.033UF,+10%,-10%,25V-DC,0402,X7R,-55DEG CMIN,125DEG CMA
C508M21	2113946D07	CAP,CHIP,4.7UF,+10%,-10%,6.3V-DC,0603,X5R,-55DEG CMIN,85DEG CMA
C509M21	2113945B05	CAP,FXD,.033UF,+10%,-10%,25V-DC,0402,X7R,-55DEG CMIN,125DEG CMA
C510M21	2113944A32	CAP,CHIP,39PF,+5%,-5%,50V-DC,0402,C0G,-55DEG CMIN,125DEG CMAX,P
C511M21	2113945B05	CAP,FXD,.033UF,+10%,-10%,25V-DC,0402,X7R,-55DEG CMIN,125DEG CMA
C512M21	2113946D07	CAP,CHIP,4.7UF,+10%,-10%,6.3V-DC,0603,X5R,-55DEG CMIN,85DEG CMA
C514M21	NOTPLACED	64AM DUMMY PART NUMBER
C515M21	2115153H16	CAP, CERAMIC, COG
C516M21	2113944C04	CAP,CHIP,330PF,+5%,-5%,50V-DC,0603,C0G,-55DEG CMIN,125DEG CMAX
C532M21	2113944A32	CAP,CHIP,39PF,+5%,-5%,50V-DC,0402,C0G,-55DEG CMIN,125DEG CMAX,P
C533M21	2115153H52	CAP,FXD,62PF,+1%,-1%,50V-DC,0402,C0G

Ref. Des.	Part Number	Description
C550M21	NOTPLACED	64AM DUMMY PART NUMBER
C551M21	NOTPLACED	64AM DUMMY PART NUMBER
C601M19	2113945B02	CAP,CHIP,.01UF,+10%,-10%,25V-DC,0402,X7R,-55DEG CMIN,125DEG CMA
C602M19	2113945B02	CAP,CHIP,.01UF,+10%,-10%,25V-DC,0402,X7R,-55DEG CMIN,125DEG CMA
C603M19	2113945B02	CAP,CHIP,.01UF,+10%,-10%,25V-DC,0402,X7R,-55DEG CMIN,125DEG CMA
C604M19	2113945B02	CAP,CHIP,.01UF,+10%,-10%,25V-DC,0402,X7R,-55DEG CMIN,125DEG CMA
C605M19	2113944A15	CAP,CHIP,3.9PF,.25PF+/-,50V-DC,0402,C0G,-55DEG CMIN,125DEG CMA
C606M19	2113946B04	CAP,CHIP,.1UF,+10%,-10%,10V-DC,0402,X5R,-55DEG CMIN,85DEG CMAX
C607M19	2113944A40	CAP,CHIP,100PF,+5%,-5%,50V-DC,0402,C0G,-55DEG CMIN,125DEG CMAX
C608M19	2113944A12	CAP,CHIP,3PF,.25PF+/-,50V-DC,0402,C0G,-55DEG CMIN,125DEG CMAX
C609M19	2113944A30	CAP,CHIP,27PF,+5%,-5%,50V-DC,0402,C0G,-55DEG CMIN,125DEG CMAX,P
C6104M6	2113946B04	CAP,CHIP,.1UF,+10%,-10%,10V-DC,0402,X5R,-55DEG CMIN,85DEG CMAX
C6105M6	2113946B04	CAP,CHIP,.1UF,+10%,-10%,10V-DC,0402,X5R,-55DEG CMIN,85DEG CMAX
C6106M6	2113946B04	CAP,CHIP,.1UF,+10%,-10%,10V-DC,0402,X5R,-55DEG CMIN,85DEG CMAX
C6107M6	2113946B04	CAP,CHIP,.1UF,+10%,-10%,10V-DC,0402,X5R,-55DEG CMIN,85DEG CMAX

Ref. Des.	Part Number	Description
C6108M6	2113946B04	CAP,CHIP,.1UF,+10%,-10%,10V-DC,0402,X5R,-55DEG CMIN,85DEG CMAX
C6109M6	2113946B04	CAP,CHIP,.1UF,+10%,-10%,10V-DC,0402,X5R,-55DEG CMIN,85DEG CMAX
C610M19	2113944A40	CAP,CHIP,100PF,+5%,-5%,50V-DC,0402,C0G,-55DEG CMIN,125DEG CMAX
C6110M6	2113946B04	CAP,CHIP,.1UF,+10%,-10%,10V-DC,0402,X5R,-55DEG CMIN,85DEG CMAX
C6111M6	2113946B04	CAP,CHIP,.1UF,+10%,-10%,10V-DC,0402,X5R,-55DEG CMIN,85DEG CMAX
C6112M6	2113946B04	CAP,CHIP,.1UF,+10%,-10%,10V-DC,0402,X5R,-55DEG CMIN,85DEG CMAX
C6113M6	2113946B04	CAP,CHIP,.1UF,+10%,-10%,10V-DC,0402,X5R,-55DEG CMIN,85DEG CMAX
C6114M6	2113946B04	CAP,CHIP,.1UF,+10%,-10%,10V-DC,0402,X5R,-55DEG CMIN,85DEG CMAX
C6115M6	2113946B04	CAP,CHIP,.1UF,+10%,-10%,10V-DC,0402,X5R,-55DEG CMIN,85DEG CMAX
C611M19	2113944A40	CAP,CHIP,100PF,+5%,-5%,50V-DC,0402,C0G,-55DEG CMIN,125DEG CMAX
C612M19	2113945B02	CAP,CHIP,.01UF,+10%,-10%,25V-DC,0402,X7R,-55DEG CMIN,125DEG CMA
C613M19	2113944A40	CAP,CHIP,100PF,+5%,-5%,50V-DC,0402,C0G,-55DEG CMIN,125DEG CMAX
C614M19	2113945B02	CAP,CHIP,.01UF,+10%,-10%,25V-DC,0402,X7R,-55DEG CMIN,125DEG CMA
C6155M6	2113944A78	CAP,FXD,13PF,+5%,-5%,50V-DC,0402,C0G,-55DEG CMIN,125DEG CMAX,PB

Ref. Des.	Part Number	Description
C6156M6	NOTPLACED	64AM DUMMY PART NUMBER
C615M19	2113944A42	CAP,CHIP,150PF,+5%,-5%,50V-DC,0402,C0G,-55DEG CMIN,125DEG CMAX
C616M19	2113945A11	CAP CER CHP 2200PF 50V 10%
C617M19	2113946B04	CAP,CHIP,.1UF,+10%,-10%,10V-DC,0402,X5R,-55DEG CMIN,85DEG CMAX
C618M19	2113944A31	CAP,CHIP,33PF,+5%,-5%,50V-DC,0402,C0G,-55DEG CMIN,125DEG CMAX,P
C619M19	2113944A35	CAP,CHIP,62PF,+5%,-5%,50V-DC,0402,C0G,-55DEG CMIN,125DEG CMAX,P
C6201M6	2113944A40	CAP,CHIP,100PF,+5%,-5%,50V-DC,0402,C0G,-55DEG CMIN,125DEG CMAX
C6202M6	2113945A09	CAP,CHIP,1000PF,+10%,-10%,50V-DC,0402,X7R,-55DEG CMIN,125DEG CM
C6203M6	2113946B04	CAP,CHIP,.1UF,+10%,-10%,10V-DC,0402,X5R,-55DEG CMIN,85DEG CMAX
C620M19	2113946B04	CAP,CHIP,.1UF,+10%,-10%,10V-DC,0402,X5R,-55DEG CMIN,85DEG CMAX
C621M19	2113946B04	CAP,CHIP,.1UF,+10%,-10%,10V-DC,0402,X5R,-55DEG CMIN,85DEG CMAX
C622M19	2113946C07	CAP,FXD,.33UF,+10%,-10%,10V-DC,0603,X5R,-55DEG CMIN,85DEG CMAX
C623M19	2113945B02	CAP,CHIP,.01UF,+10%,-10%,25V-DC,0402,X7R,-55DEG CMIN,125DEG CMA
C624M19	2113946C07	CAP,FXD,.33UF,+10%,-10%,10V-DC,0603,X5R,-55DEG CMIN,85DEG CMAX
C625M19	2115153H39	CAP,FXD,18PF,50V-DC,0402,C0G

Ref. Des.	Part Number	Description	Ref. Des.	Part Number	Description	Ref. Des.	Part Number	Description	Ref. Des.	Part Number	Description
C626M19	2113945A09	CAP,CHIP,1000PF,+10%,-10%,50V-DC,0402,X7R,-55DEG CMIN,125DEG CM	C6311M6	2113946B04	CAP,CHIP,.1UF,+10%,-10%,10V-DC,0402,X5R,-55DEG CMIN,85DEG CMAX	C6405M6	2113946B04	CAP,CHIP,.1UF,+10%,-10%,10V-DC,0402,X5R,-55DEG CMIN,85DEG CMAX	C6419M6	2113946B04	CAP,CHIP,.1UF,+10%,-10%,10V-DC,0402,X5R,-55DEG CMIN,85DEG CMAX
C627M19	2113945A09	CAP,CHIP,1000PF,+10%,-10%,50V-DC,0402,X7R,-55DEG CMIN,125DEG CM	C631M19	2115153H31	CAP,FXD,7PF,.1PF+/-,50V-DC,0402,C0G,-55DEG CMIN,125DEG CMAX,CA	C6406M6	2113946B04	CAP,CHIP,.1UF,+10%,-10%,10V-DC,0402,X5R,-55DEG CMIN,85DEG CMAX	C641M19	2113944A31	CAP,CHIP,33PF,+5%,-5%,50V-DC,0402,C0G,-55DEG CMIN,125DEG CMAX,P
C628M19	2113945B02	CAP,CHIP,.01UF,+10%,-10%,25V-DC,0402,X7R,-55DEG CMIN,125DEG CMA	C632M19	2113944A40	CAP,CHIP,100PF,+5%,-5%,50V-DC,0402,C0G,-55DEG CMIN,125DEG CMAX	C6407M6	2113946B04	CAP,CHIP,.1UF,+10%,-10%,10V-DC,0402,X5R,-55DEG CMIN,85DEG CMAX	C6420M6	2113945B04	CAP,FXD,.022UF,+10%,-10%,25V-DC,0402,X7R,-55DEG CMIN,125DEG CMA
C629M19	2113946B04	CAP,CHIP,.1UF,+10%,-10%,10V-DC,0402,X5R,-55DEG CMIN,85DEG CMAX	C633M19	2113945B02	CAP,CHIP,.01UF,+10%,-10%,25V-DC,0402,X7R,-55DEG CMIN,125DEG CMA	C6408M6	2113946B04	CAP,CHIP,.1UF,+10%,-10%,10V-DC,0402,X5R,-55DEG CMIN,85DEG CMAX	C6421M6	2113946B04	CAP,CHIP,.1UF,+10%,-10%,10V-DC,0402,X5R,-55DEG CMIN,85DEG CMAX
C6301M6	2113946B04	CAP,CHIP,.1UF,+10%,-10%,10V-DC,0402,X5R,-55DEG CMIN,85DEG CMAX	C634M19	2113946B04	CAP,CHIP,.1UF,+10%,-10%,10V-DC,0402,X5R,-55DEG CMIN,85DEG CMAX	C6409M6	2113946B04	CAP,CHIP,.1UF,+10%,-10%,10V-DC,0402,X5R,-55DEG CMIN,85DEG CMAX	C6422M6	2113946C02	CAP,CHIP,.22UF,+10%,-10%,10V-DC,0603,X5R,-55DEG CMIN,85DEG CMAX
C6302M6	2113946B04	CAP,CHIP,.1UF,+10%,-10%,10V-DC,0402,X5R,-55DEG CMIN,85DEG CMAX	C635M19	2113945B02	CAP,CHIP,.01UF,+10%,-10%,25V-DC,0402,X7R,-55DEG CMIN,125DEG CMA	C640M19	2113946B04	CAP,CHIP,.1UF,+10%,-10%,10V-DC,0402,X5R,-55DEG CMIN,85DEG CMAX	C6423M6	2113946B04	CAP,CHIP,.1UF,+10%,-10%,10V-DC,0402,X5R,-55DEG CMIN,85DEG CMAX
C6303M6	2113946B04	CAP,CHIP,.1UF,+10%,-10%,10V-DC,0402,X5R,-55DEG CMIN,85DEG CMAX	C636M19	2113946B04	CAP,CHIP,.1UF,+10%,-10%,10V-DC,0402,X5R,-55DEG CMIN,85DEG CMAX	C6410M6	2113946B04	CAP,CHIP,.1UF,+10%,-10%,10V-DC,0402,X5R,-55DEG CMIN,85DEG CMAX	C6424M6	2113944A40	CAP,CHIP,100PF,+5%,-5%,50V-DC,0402,C0G,-55DEG CMIN,125DEG CMAX
C6304M6	2113946B04	CAP,CHIP,.1UF,+10%,-10%,10V-DC,0402,X5R,-55DEG CMIN,85DEG CMAX	C637M19	2113946B04	CAP,CHIP,.1UF,+10%,-10%,10V-DC,0402,X5R,-55DEG CMIN,85DEG CMAX	C6411M6	2113946B04	CAP,CHIP,.1UF,+10%,-10%,10V-DC,0402,X5R,-55DEG CMIN,85DEG CMAX	C6425M6	2113944A40	CAP,CHIP,100PF,+5%,-5%,50V-DC,0402,C0G,-55DEG CMIN,125DEG CMAX
C6305M6	2113946S35	CAP,CHIP,1UF,+10%,-10%,16V-DC,0603,X5R,-55DEG CMIN,85DEG CMAX,P	C638M19	2113945A12	CAP,CHIP,3300PF,+10%,-10%,50V-DC,0402,X7R,-55DEG CMIN,125DEG CM	C6412M6	NOTPLACED	64AM DUMMY PART NUMBER	C6426M6	2113945B02	CAP,CHIP,.01UF,+10%,-10%,25V-DC,0402,X7R,-55DEG CMIN,125DEG CMA
C6306M6	2113946S35	CAP,CHIP,1UF,+10%,-10%,16V-DC,0603,X5R,-55DEG CMIN,85DEG CMAX,P	C639M19	2113945B02	CAP,CHIP,.01UF,+10%,-10%,25V-DC,0402,X7R,-55DEG CMIN,125DEG CMA	C6413M6	2113946B04	CAP,CHIP,.1UF,+10%,-10%,10V-DC,0402,X5R,-55DEG CMIN,85DEG CMAX	C6427M6	2113944A50	CAP,CHIP,680PF,+5%,-5%,50V-DC,0402,C0G,-55DEG CMIN,125DEG CMAX
C6308M6	2113946B04	CAP,CHIP,.1UF,+10%,-10%,10V-DC,0402,X5R,-55DEG CMIN,85DEG CMAX	C6401M6	2113946B04	CAP,CHIP,.1UF,+10%,-10%,10V-DC,0402,X5R,-55DEG CMIN,85DEG CMAX	C6414M6	2113946B04	CAP,CHIP,.1UF,+10%,-10%,10V-DC,0402,X5R,-55DEG CMIN,85DEG CMAX	C6428M6	2113944A40	CAP,CHIP,100PF,+5%,-5%,50V-DC,0402,C0G,-55DEG CMIN,125DEG CMAX
C6309M6	2113946B04	CAP,CHIP,.1UF,+10%,-10%,10V-DC,0402,X5R,-55DEG CMIN,85DEG CMAX	C6402M6	2113956A51	CAP,FXD,1UF,+10%,-10%,6.3V-DC,0402,X5R,-55DEG CMIN,85DEG CMAX,P	C6415M6	NOTPLACED	64AM DUMMY PART NUMBER	C6429M6	2113946B04	CAP,CHIP,.1UF,+10%,-10%,10V-DC,0402,X5R,-55DEG CMIN,85DEG CMAX
C630M19	2113946B04	CAP,CHIP,.1UF,+10%,-10%,10V-DC,0402,X5R,-55DEG CMIN,85DEG CMAX	C6403M6	2113946B04	CAP,CHIP,.1UF,+10%,-10%,10V-DC,0402,X5R,-55DEG CMIN,85DEG CMAX	C6416M6	2113945B04	CAP,FXD,.022UF,+10%,-10%,25V-DC,0402,X7R,-55DEG CMIN,125DEG CMA	C642M19	2113944A48	CAP,CHIP,470PF,+5%,-5%,50V-DC,0402,C0G,-55DEG CMIN,125DEG CMAX
C6310M6	2113946B04	CAP,CHIP,.1UF,+10%,-10%,10V-DC,0402,X5R,-55DEG CMIN,85DEG CMAX	C6404M6	2113946B04	CAP,CHIP,.1UF,+10%,-10%,10V-DC,0402,X5R,-55DEG CMIN,85DEG CMAX	C6417M6	2113945B04	CAP,FXD,.022UF,+10%,-10%,25V-DC,0402,X7R,-55DEG CMIN,125DEG CMA			
						C6418M6	2113946B04	CAP,CHIP,.1UF,+10%,-10%,10V-DC,0402,X5R,-55DEG CMIN,85DEG CMAX			

Ref. Des.	Part Number	Description
C6430M6	2113946B04	CAP,CHIP,.1UF,+10%,-10%,10V-DC,0402,X5R,-55DEG CMIN,85DEG CMAX
C6431M6	2113946B04	CAP,CHIP,.1UF,+10%,-10%,10V-DC,0402,X5R,-55DEG CMIN,85DEG CMAX
C6432M6	2113956B54	CAP,FXD,10UF,+20%,-20%,6.3V-DC,X5R,-55DEG CMIN,85DEG CMAX
C6433M6	2113946S35	CAP,CHIP,1UF,+10%,-10%,16V-DC,0603,X5R,-55DEG CMIN,85DEG CMAX,P
C6434M6	2113946L05	CAP,FXD,.33UF,+80%,-20%,16V-DC,0603,Y5V,-30DEG CMIN,85DEG CMAX
C6435M6	2113946S35	CAP,CHIP,1UF,+10%,-10%,16V-DC,0603,X5R,-55DEG CMIN,85DEG CMAX,P
C6436M6	2113946C08	CAP,FXD,.47UF,+10%,-10%,10V-DC,0603,X5R,-55DEG CMIN,85DEG CMAX
C6437M6	2113946C08	CAP,FXD,.47UF,+10%,-10%,10V-DC,0603,X5R,-55DEG CMIN,85DEG CMAX
C6438M6	2113944A40	CAP,CHIP,100PF,+5%,-5%,50V-DC,0402,C0G,-55DEG CMIN,125DEG CMAX
C643M19	2113944A48	CAP,CHIP,470PF,+5%,-5%,50V-DC,0402,C0G,-55DEG CMIN,125DEG CMAX
C644M19	2113944A11	CAP,CHIP,2.7PF,.25PF+/-,50V-DC,0402,C0G,-55DEG CMIN,125DEG CMA
C645M19	NOTPLACED	64AM DUMMY PART NUMBER
C646M19	2115153H32	CAP,FXD,8PF,.1PF+/-,+1%,-.1%,50V-DC,0402,C0G,CAP,CERAMIC, CO
C6501M6	2113946B04	CAP,CHIP,.1UF,+10%,-10%,10V-DC,0402,X5R,-55DEG CMIN,85DEG CMAX

Ref. Des.	Part Number	Description
C6502M6	2113946B04	CAP,CHIP,.1UF,+10%,-10%,10V-DC,0402,X5R,-55DEG CMIN,85DEG CMAX
C6503M6	2113944A46	CAP,CHIP,330PF,+5%,-5%,50V-DC,0402,C0G,-55DEG CMIN,125DEG CMAX
C6504M6	2113946B04	CAP,CHIP,.1UF,+10%,-10%,10V-DC,0402,X5R,-55DEG CMIN,85DEG CMAX
C6505M6	2113946B04	CAP,CHIP,.1UF,+10%,-10%,10V-DC,0402,X5R,-55DEG CMIN,85DEG CMAX
C6506M6	2113946B04	CAP,CHIP,.1UF,+10%,-10%,10V-DC,0402,X5R,-55DEG CMIN,85DEG CMAX
C6507M6	2113946B04	CAP,CHIP,.1UF,+10%,-10%,10V-DC,0402,X5R,-55DEG CMIN,85DEG CMAX
C6508M6	2113946B04	CAP,CHIP,.1UF,+10%,-10%,10V-DC,0402,X5R,-55DEG CMIN,85DEG CMAX
C6509M6	2113946B04	CAP,CHIP,.1UF,+10%,-10%,10V-DC,0402,X5R,-55DEG CMIN,85DEG CMAX
C6510M6	2113946B04	CAP,CHIP,.1UF,+10%,-10%,10V-DC,0402,X5R,-55DEG CMIN,85DEG CMAX
C6511M6	2113946S35	CAP,CHIP,1UF,+10%,-10%,16V-DC,0603,X5R,-55DEG CMIN,85DEG CMAX,P
C6512M6	2113946B04	CAP,CHIP,.1UF,+10%,-10%,10V-DC,0402,X5R,-55DEG CMIN,85DEG CMAX
C6513M6	2113946S35	CAP,CHIP,1UF,+10%,-10%,16V-DC,0603,X5R,-55DEG CMIN,85DEG CMAX,P
C6514M6	2113946S35	CAP,CHIP,1UF,+10%,-10%,16V-DC,0603,X5R,-55DEG CMIN,85DEG CMAX,P

Ref. Des.	Part Number	Description
C6515M6	2113946S35	CAP,CHIP,1UF,+10%,-10%,16V-DC,0603,X5R,-55DEG CMIN,85DEG CMAX,P
C6516M6	2113946B04	CAP,CHIP,.1UF,+10%,-10%,10V-DC,0402,X5R,-55DEG CMIN,85DEG CMAX
C6517M6	2113946S35	CAP,CHIP,1UF,+10%,-10%,16V-DC,0603,X5R,-55DEG CMIN,85DEG CMAX,P
C6518M6	2113946B04	CAP,CHIP,.1UF,+10%,-10%,10V-DC,0402,X5R,-55DEG CMIN,85DEG CMAX
C6519M6	2113946S35	CAP,CHIP,1UF,+10%,-10%,16V-DC,0603,X5R,-55DEG CMIN,85DEG CMAX,P
C6520M6	2113946B04	CAP,CHIP,.1UF,+10%,-10%,10V-DC,0402,X5R,-55DEG CMIN,85DEG CMAX
C6521M6	2113944A46	CAP,CHIP,330PF,+5%,-5%,50V-DC,0402,C0G,-55DEG CMIN,125DEG CMAX
C6522M6	2113946S35	CAP,CHIP,1UF,+10%,-10%,16V-DC,0603,X5R,-55DEG CMIN,85DEG CMAX,P
C6523M6	2113946B04	CAP,CHIP,.1UF,+10%,-10%,10V-DC,0402,X5R,-55DEG CMIN,85DEG CMAX
C6524M6	2113946B04	CAP,CHIP,.1UF,+10%,-10%,10V-DC,0402,X5R,-55DEG CMIN,85DEG CMAX
C6525M6	2113946S35	CAP,CHIP,1UF,+10%,-10%,16V-DC,0603,X5R,-55DEG CMIN,85DEG CMAX,P
C6526M6	2113946B04	CAP,CHIP,.1UF,+10%,-10%,10V-DC,0402,X5R,-55DEG CMIN,85DEG CMAX
C6527M6	2113946B04	CAP,CHIP,.1UF,+10%,-10%,10V-DC,0402,X5R,-55DEG CMIN,85DEG CMAX

Ref. Des.	Part Number	Description
C6528M6	2113946B04	CAP,CHIP,.1UF,+10%,-10%,10V-DC,0402,X5R,-55DEG CMIN,85DEG CMAX
C6529M6	2113946B04	CAP,CHIP,.1UF,+10%,-10%,10V-DC,0402,X5R,-55DEG CMIN,85DEG CMAX
C6530M6	2113946S35	CAP,CHIP,1UF,+10%,-10%,16V-DC,0603,X5R,-55DEG CMIN,85DEG CMAX,P
C6531M6	2113946B04	CAP,CHIP,.1UF,+10%,-10%,10V-DC,0402,X5R,-55DEG CMIN,85DEG CMAX
C6532M6	2113946S35	CAP,CHIP,1UF,+10%,-10%,16V-DC,0603,X5R,-55DEG CMIN,85DEG CMAX,P
C6533M6	2113946B04	CAP,CHIP,.1UF,+10%,-10%,10V-DC,0402,X5R,-55DEG CMIN,85DEG CMAX
C6534M6	2113956B33	CAP,FXD,2.2UF,+10%,-10%,16V-DC,0603,X5R,-55DEG CMIN,85DEG CMAX
C6535M6	2113944A40	CAP,CHIP,100PF,+5%,-5%,50V-DC,0402,C0G,-55DEG CMIN,125DEG CMAX
C6536M6	2113944A28	CAP,CHIP,18PF,+5%,-5%,50V-DC,0402,C0G,-55DEG CMIN,125DEG CMAX,P
C6537M6	2113944A19	CAP,CHIP,5.6PF,.5PF+/-,50V-DC,0402,C0G,-55DEG CMIN,125DEG CMAX
C6538M6	2113956B33	CAP,FXD,2.2UF,+10%,-10%,16V-DC,0603,X5R,-55DEG CMIN,85DEG CMAX
C6539M6	2113956B33	CAP,FXD,2.2UF,+10%,-10%,16V-DC,0603,X5R,-55DEG CMIN,85DEG CMAX
C6540M6	2113945A09	CAP,CHIP,1000PF,+10%,-10%,50V-DC,0402,X7R,-55DEG CMIN,125DEG CM
C6541M6	2113944A19	CAP,CHIP,5.6PF,.5PF+/-,50V-DC,0402,C0G,-55DEG CMIN,125DEG CMAX

Ref. Des.	Part Number	Description
C6542M6	2113946B04	CAP,CHIP,.1UF,+10%,-10%,10V-DC,0402,X5R,-55DEG CMIN,85DEG CMAX
C6543M6	2113946B04	CAP,CHIP,.1UF,+10%,-10%,10V-DC,0402,X5R,-55DEG CMIN,85DEG CMAX
C6544M6	2113945D04	CAP,CHIP,.1UF,+10%,-10%,25V-DC,0603,X7R,-55DEG CMIN,125DEG CMAX
C6545M6	2113945D04	CAP,CHIP,.1UF,+10%,-10%,25V-DC,0603,X7R,-55DEG CMIN,125DEG CMAX
C6546M6	2113946B04	CAP,CHIP,.1UF,+10%,-10%,10V-DC,0402,X5R,-55DEG CMIN,85DEG CMAX
C6547M6	2113944A46	CAP,CHIP,330PF,+5%,-5%,50V-DC,0402,C0G,-55DEG CMIN,125DEG CMAX
C6548M6	NOTPLACED	64AM DUMMY PART NUMBER
C6549M6	2113944A46	CAP,CHIP,330PF,+5%,-5%,50V-DC,0402,C0G,-55DEG CMIN,125DEG CMAX
C6550M6	2113945D04	CAP,CHIP,.1UF,+10%,-10%,25V-DC,0603,X7R,-55DEG CMIN,125DEG CMAX
C6551M6	2113944A46	CAP,CHIP,330PF,+5%,-5%,50V-DC,0402,C0G,-55DEG CMIN,125DEG CMAX
C6552M6	2113956E91	CAP,FXD,10UF,+10%,-10%,16V-DC,1210,X5R,-55DEG CMIN,85DEG CMAX,P
C6553M6	2113956E91	CAP,FXD,10UF,+10%,-10%,16V-DC,1210,X5R,-55DEG CMIN,85DEG CMAX,P
C6554M6	2113946B04	CAP,CHIP,.1UF,+10%,-10%,10V-DC,0402,X5R,-55DEG CMIN,85DEG CMAX

Ref. Des.	Part Number	Description
C6555M6	2113955D45	CAP,FXD,4.7UF,+10%,-10%,10V-DC,1206,X7R,-55DEG CMIN,125DEG CMAX
C6556M6	2113956B33	CAP,FXD,2.2UF,+10%,-10%,16V-DC,0603,X5R,-55DEG CMIN,85DEG CMAX
C6557M6	2113945D04	CAP,CHIP,.1UF,+10%,-10%,25V-DC,0603,X7R,-55DEG CMIN,125DEG CMAX
C6558M6	2113944A21	CAP,CHIP,6.8PF,.5PF+/-5%,50V-DC,0402,C0G,-55DEG CMIN,125DEG CMAX
C6559M6	2113946S35	CAP,CHIP,1UF,+10%,-10%,16V-DC,0603,X5R,-55DEG CMIN,85DEG CMAX,P
C6560M6	2113956C37	CAP,FXD,10UF,+10%,-10%,16V-DC,0805,X5R,-55DEG CMIN,85DEG CMAX,P
C6561M6	2113956C37	CAP,FXD,10UF,+10%,-10%,16V-DC,0805,X5R,-55DEG CMIN,85DEG CMAX,P
C6562M6	2113944A25	CAP,CHIP,10PF,.5PF+/-5%,50V-DC,0402,C0G,-55DEG CMIN,125DEG CMAX
C6563M6	2113945D04	CAP,CHIP,.1UF,+10%,-10%,25V-DC,0603,X7R,-55DEG CMIN,125DEG CMAX
C6564M6	2113944A46	CAP,CHIP,330PF,+5%,-5%,50V-DC,0402,C0G,-55DEG CMIN,125DEG CMAX
C6565M6	2113956B33	CAP,FXD,2.2UF,+10%,-10%,16V-DC,0603,X5R,-55DEG CMIN,85DEG CMAX
C6566M6	2113956E91	CAP,FXD,10UF,+10%,-10%,16V-DC,1210,X5R,-55DEG CMIN,85DEG CMAX,P

Ref. Des.	Part Number	Description
C6567M6	2113956E91	CAP,FXD,10UF,+10%,-10%,16V-DC,1210,X5R,-55DEG CMIN,85DEG CMAX,P
C6568M6	2113956B33	CAP,FXD,2.2UF,+10%,-10%,16V-DC,0603,X5R,-55DEG CMIN,85DEG CMAX
C6569M6	2113956E91	CAP,FXD,10UF,+10%,-10%,16V-DC,1210,X5R,-55DEG CMIN,85DEG CMAX,P
C6570M6	2113944A46	CAP,CHIP,330PF,+5%,-5%,50V-DC,0402,C0G,-55DEG CMIN,125DEG CMAX
C6571M6	2113946B04	CAP,CHIP,.1UF,+10%,-10%,10V-DC,0402,X5R,-55DEG CMIN,85DEG CMAX
C6572M6	2113946B04	CAP,CHIP,.1UF,+10%,-10%,10V-DC,0402,X5R,-55DEG CMIN,85DEG CMAX
C6573M6	2113946S35	CAP,CHIP,1UF,+10%,-10%,16V-DC,0603,X5R,-55DEG CMIN,85DEG CMAX,P
C6574M6	2113946S35	CAP,CHIP,1UF,+10%,-10%,16V-DC,0603,X5R,-55DEG CMIN,85DEG CMAX,P
C6575M6	2113946S35	CAP,CHIP,1UF,+10%,-10%,16V-DC,0603,X5R,-55DEG CMIN,85DEG CMAX,P
C6576M6	2113956B33	CAP,FXD,2.2UF,+10%,-10%,16V-DC,0603,X5R,-55DEG CMIN,85DEG CMAX
C6577M6	2113946S35	CAP,CHIP,1UF,+10%,-10%,16V-DC,0603,X5R,-55DEG CMIN,85DEG CMAX,P
C6578M6	2113946S35	CAP,CHIP,1UF,+10%,-10%,16V-DC,0603,X5R,-55DEG CMIN,85DEG CMAX,P

Ref. Des.	Part Number	Description
C6579M6	2113946S35	CAP,CHIP,1UF,+10%,-10%,16V-DC,0603,X5R,-55DEG CMIN,85DEG CMAX,P
C6580M6	2113946S35	CAP,CHIP,1UF,+10%,-10%,16V-DC,0603,X5R,-55DEG CMIN,85DEG CMAX,P
C6581M6	2113956B33	CAP,FXD,2.2UF,+10%,-10%,16V-DC,0603,X5R,-55DEG CMIN,85DEG CMAX
C6582M6	2113944A21	CAP,CHIP,6.8PF,.5PF+/-5%,50V-DC,0402,C0G,-55DEG CMIN,125DEG CMAX
C6583M6	2113946B04	CAP,CHIP,.1UF,+10%,-10%,10V-DC,0402,X5R,-55DEG CMIN,85DEG CMAX
C6584M6	2113956C37	CAP,FXD,10UF,+10%,-10%,16V-DC,0805,X5R,-55DEG CMIN,85DEG CMAX,P
C6585M6	2113946B04	CAP,CHIP,.1UF,+10%,-10%,10V-DC,0402,X5R,-55DEG CMIN,85DEG CMAX
C6586M6	2113956C35	CAP,FXD,4.7UF,+10%,-10%,16V-DC,0805,X5R,-55DEG CMIN,85DEG CMAX
C6587M6	2113946B04	CAP,CHIP,.1UF,+10%,-10%,10V-DC,0402,X5R,-55DEG CMIN,85DEG CMAX
C6588M6	2113944A46	CAP,CHIP,330PF,+5%,-5%,50V-DC,0402,C0G,-55DEG CMIN,125DEG CMAX
C6589M6	2113944A40	CAP,CHIP,100PF,+5%,-5%,50V-DC,0402,C0G,-55DEG CMIN,125DEG CMAX
C6590M6	2113946B04	CAP,CHIP,.1UF,+10%,-10%,10V-DC,0402,X5R,-55DEG CMIN,85DEG CMAX
C6591M6	2113944A28	CAP,CHIP,18PF,+5%,-5%,50V-DC,0402,C0G,-55DEG CMIN,125DEG CMAX,P

Ref. Des.	Part Number	Description
C6592M6	2113944A09	CAP,CHIP,2.2PF,.25PF+/-,50V-DC,0402,C0G,-55DEG CMIN,125DEG CMA
C6593M6	2113956C37	CAP,FXD,10UF,+10%,-10%,16V-DC,0805,X5R,-55DEG CMIN,85DEG CMAX,P
C6594M6	2113946C07	CAP,FXD,.33UF,+10%,-10%,10V-DC,0603,X5R,-55DEG CMIN,85DEG CMAX
C6595M6	2113946S35	CAP,CHIP,1UF,+10%,-10%,16V-DC,0603,X5R,-55DEG CMIN,85DEG CMAX,P
C6596M6	NOTPLACED	64AM DUMMY PART NUMBER
C6601M6	2113944A28	CAP,CHIP,18PF,+5%,-5%,50V-DC,0402,C0G,-55DEG CMIN,125DEG CMAX,P
C6602M6	2113944A28	CAP,CHIP,18PF,+5%,-5%,50V-DC,0402,C0G,-55DEG CMIN,125DEG CMAX,P
C6670M6	2113944A78	CAP,FXD,13PF,+5%,-5%,50V-DC,0402,C0G,-55DEG CMIN,125DEG CMAX,PB
C702M7	2113944G97	CAP,FXD,.082UF,+5%,-5%,50V-DC,1206,C0G,-55DEG CMIN,125DEG CMAX
C703M7	2113945C26	CAP,FXD,.039UF,+10%,-10%,50V-DC,0603,X7R,-55DEG CMIN,125DEG CMA
C704M7	2113944G97	CAP,FXD,.082UF,+5%,-5%,50V-DC,1206,C0G,-55DEG CMIN,125DEG CMAX
C705M7	NOTPLACED	64AM DUMMY PART NUMBER
C706M7	2113944G97	CAP,FXD,.082UF,+5%,-5%,50V-DC,1206,C0G,-55DEG CMIN,125DEG CMAX

Ref. Des.	Part Number	Description
C707M7	2113945C01	CAP,CHIP,6800PF,+10%,-10%,50V-DC,0603,X7R,-55DEG CMIN,125DEG CM
C708M7	2115153H37	CAP,FXD,15PF,.15PF+/-,+1%,-1%,50V-DC,0402,C0G,CAP,CERAMIC, CO
C709M7	2185419D06	CAP,CHIP,.1UF,+10%,-10%,25V-DC,1206,-55DEG CMIN,125DEG CMAX
C710M7	NOTPLACED	64AM DUMMY PART NUMBER
C711M7	NOTPLACED	64AM DUMMY PART NUMBER
C712M7	NOTPLACED	64AM DUMMY PART NUMBER
C713M7	2113945C20	CAP,FXD,.016UF,+10%,-10%,50V-DC,0603,X7R,-55DEG CMIN,125DEG CMA
C714M7	2113944G97	CAP,FXD,.082UF,+5%,-5%,50V-DC,1206,C0G,-55DEG CMIN,125DEG CMAX
C715M7	2113945C31	CAP,FXD,.1UF,+10%,-10%,50V-DC,0603,X7R,-55DEG CMIN,125DEG CMAX
C716M7	2113945C31	CAP,FXD,.1UF,+10%,-10%,50V-DC,0603,X7R,-55DEG CMIN,125DEG CMAX
C717M7	2113945C31	CAP,FXD,.1UF,+10%,-10%,50V-DC,0603,X7R,-55DEG CMIN,125DEG CMAX
C718M7	2113945C31	CAP,FXD,.1UF,+10%,-10%,50V-DC,0603,X7R,-55DEG CMIN,125DEG CMAX
C719M7	2113945C31	CAP,FXD,.1UF,+10%,-10%,50V-DC,0603,X7R,-55DEG CMIN,125DEG CMAX

Ref. Des.	Part Number	Description
C720M7	2113944C54	CAP,CHIP,1800PF,+5%,-5%,50V-DC,0603,C0G,-55DEG CMIN,125DEG CMAX
C721M7	2113945G95	CAP,FXD,.22UF,+10%,-10%,50V-DC,0805,X7R,-55DEG CMIN,125DEG CMAX
C724M7	2113955D37	CAP,FXD,10UF,+10%,-10%,16V-DC,1206,X7R,-55DEG CMIN,125DEG CMAX
C725M7	2113945C31	CAP,FXD,.1UF,+10%,-10%,50V-DC,0603,X7R,-55DEG CMIN,125DEG CMAX
C726M7	2113945C31	CAP,FXD,.1UF,+10%,-10%,50V-DC,0603,X7R,-55DEG CMIN,125DEG CMAX
C727M7	2113944A40	CAP,CHIP,100PF,+5%,-5%,50V-DC,0402,C0G,-55DEG CMIN,125DEG CMAX
C730M7	2113945C31	CAP,FXD,.1UF,+10%,-10%,50V-DC,0603,X7R,-55DEG CMIN,125DEG CMAX
C731M7	2113945C31	CAP,FXD,.1UF,+10%,-10%,50V-DC,0603,X7R,-55DEG CMIN,125DEG CMAX
C732M7	2113944A32	CAP,CHIP,39PF,+5%,-5%,50V-DC,0402,C0G,-55DEG CMIN,125DEG CMAX,P
C733M7	2113945A09	CAP,CHIP,1000PF,+10%,-10%,50V-DC,0402,X7R,-55DEG CMIN,125DEG CM
C734M7	2113945C31	CAP,FXD,.1UF,+10%,-10%,50V-DC,0603,X7R,-55DEG CMIN,125DEG CMAX
C735M7	2113944A31	CAP,CHIP,33PF,+5%,-5%,50V-DC,0402,C0G,-55DEG CMIN,125DEG CMAX,P

Ref. Des.	Part Number	Description
C736M7	2113945B02	CAP,CHIP,.01UF,+10%,-10%,25V-DC,0402,X7R,-55DEG CMIN,125DEG CMA
C737M7	2113945C31	CAP,FXD,.1UF,+10%,-10%,50V-DC,0603,X7R,-55DEG CMIN,125DEG CMAX
C739M7	2113944A17	CAP,CHIP,4.7PF,.25PF+/-,50V-DC,0402,C0G,-55DEG CMIN,125DEG CMA
C740M7	2113944A44	CAP,CHIP,220PF,+5%,-5%,50V-DC,0402,C0G,-55DEG CMIN,125DEG CMAX
C742M7	2113945C31	CAP,FXD,.1UF,+10%,-10%,50V-DC,0603,X7R,-55DEG CMIN,125DEG CMAX
C743M7	2113946B06	CAP,CHIP,.22UF,+10%,-10%,10V-DC,0402,X5R,-55DEG CMIN,85DEG CMAX
C744M7	2113955D37	CAP,FXD,10UF,+10%,-10%,16V-DC,1206,X7R,-55DEG CMIN,125DEG CMAX
C749M7	2113945C31	CAP,FXD,.1UF,+10%,-10%,50V-DC,0603,X7R,-55DEG CMIN,125DEG CMAX
C750M7	2113945C31	CAP,FXD,.1UF,+10%,-10%,50V-DC,0603,X7R,-55DEG CMIN,125DEG CMAX
C751M7	2113945A09	CAP,CHIP,1000PF,+10%,-10%,50V-DC,0402,X7R,-55DEG CMIN,125DEG CM
C752M7	2113944A43	CAP,CHIP,180PF,+5%,-5%,50V-DC,0402,C0G,-55DEG CMIN,125DEG CMAX
C753M7	2113945Y02	CAP,FXD,.1UF,+10%,-10%,16V-DC,0402,X7R,-55DEG CMIN,125DEG CMAX

Ref. Des.	Part Number	Description
C754M7	2113944A34	CAP,CHIP,56PF,+5%,-5%,50V-DC,0402,C0G,-55DEG CMIN,125DEG CMAX,P
C756M7	2113955D37	CAP,FXD,10UF,+10%,-10%,16V-DC,1206,X7R,-55DEG CMIN,125DEG CMAX
C757M7	2113945C31	CAP,FXD,.1UF,+10%,-10%,50V-DC,0603,X7R,-55DEG CMIN,125DEG CMAX
C760M7	2113944A44	CAP,CHIP,220PF,+5%,-5%,50V-DC,0402,C0G,-55DEG CMIN,125DEG CMAX
C764M7	2113946B06	CAP,CHIP,.22UF,+10%,-10%,10V-DC,0402,X5R,-55DEG CMIN,85DEG CMAX
C768M7	2113944A25	CAP,CHIP,10PF,.5PF+/-,50V-DC,0402,C0G,-55DEG CMIN,125DEG CMAX
C770M7	2113944A44	CAP,CHIP,220PF,+5%,-5%,50V-DC,0402,C0G,-55DEG CMIN,125DEG CMAX
C772M7	2113945A09	CAP,CHIP,1000PF,+10%,-10%,50V-DC,0402,X7R,-55DEG CMIN,125DEG CM
C773M7	2113944A33	CAP,CHIP,47PF,+5%,-5%,50V-DC,0402,C0G,-55DEG CMIN,125DEG CMAX,P
C777M7	2113944A44	CAP,CHIP,220PF,+5%,-5%,50V-DC,0402,C0G,-55DEG CMIN,125DEG CMAX
C780M7	2113944A33	CAP,CHIP,47PF,+5%,-5%,50V-DC,0402,C0G,-55DEG CMIN,125DEG CMAX,P
C781M7	2113944A44	CAP,CHIP,220PF,+5%,-5%,50V-DC,0402,C0G,-55DEG CMIN,125DEG CMAX

Ref. Des.	Part Number	Description
C786M7	2113944A44	CAP,CHIP,220PF,+5%,-5%,50V-DC,0402,C0G,-55DEG CMIN,125DEG CMAX
C803M7	2113944A44	CAP,CHIP,220PF,+5%,-5%,50V-DC,0402,C0G,-55DEG CMIN,125DEG CMAX
C813M7	2113944A13	CAP,CHIP,3.3PF,.25PF+/-,50V-DC,0402,C0G,-55DEG CMIN,125DEG CMA
C816M7	2113944A35	CAP,CHIP,62PF,+5%,-5%,50V-DC,0402,C0G,-55DEG CMIN,125DEG CMAX,P
C817M7	2113944A44	CAP,CHIP,220PF,+5%,-5%,50V-DC,0402,C0G,-55DEG CMIN,125DEG CMAX
C819M7	2113944A44	CAP,CHIP,220PF,+5%,-5%,50V-DC,0402,C0G,-55DEG CMIN,125DEG CMAX
C823M7	2113944A40	CAP,CHIP,100PF,+5%,-5%,50V-DC,0402,C0G,-55DEG CMIN,125DEG CMAX
C824M7	2113944A44	CAP,CHIP,220PF,+5%,-5%,50V-DC,0402,C0G,-55DEG CMIN,125DEG CMAX
C901M16	2113944M49	CAP,FXD,1000PF,+1%,-1%,50V-DC,C0G,-55DEG CMIN,125DEG CMAX,PB-F
C902M16	2113944C04	CAP,CHIP,330PF,+5%,-5%,50V-DC,0603,C0G,-55DEG CMIN,125DEG CMAX
C903M16	2113945L49	CAP,FXD,.01UF,+5%,-5%,50V-DC,0603,X7R,-55DEG CMIN,125DEG CMAX,P
C904M16	2113944M36	CAP,FXD,56PF,+2%,-2%,50V-DC,0603,C0G,-55DEG CMIN,125DEG CMAX,PB

Ref. Des.	Part Number	Description
C905M16	2113945L49	CAP,FXD,.01UF,+5%,-5%,50V-DC,0603,X7R,-55DEG CMIN,125DEG CMAX,P
C906M16	2113944C04	CAP,CHIP,330PF,+5%,-5%,50V-DC,0603,C0G,-55DEG CMIN,125DEG CMAX
C907M16	2113944C04	CAP,CHIP,330PF,+5%,-5%,50V-DC,0603,C0G,-55DEG CMIN,125DEG CMAX
C908M16	2113944C04	CAP,CHIP,330PF,+5%,-5%,50V-DC,0603,C0G,-55DEG CMIN,125DEG CMAX
C909M16	2113944C04	CAP,CHIP,330PF,+5%,-5%,50V-DC,0603,C0G,-55DEG CMIN,125DEG CMAX
C910M16	NOTPLACED	64AM DUMMY PART NUMBER
C911M16	2113945L49	CAP,FXD,.01UF,+5%,-5%,50V-DC,0603,X7R,-55DEG CMIN,125DEG CMAX,P
C912M16	NOTPLACED	64AM DUMMY PART NUMBER
C913M16	2113944M34	CAP,FXD,47PF,+2%,-2%,50V-DC,0603,C0G,-55DEG CMIN,125DEG CMAX,PB
C914M16	2113944M34	CAP,FXD,47PF,+2%,-2%,50V-DC,0603,C0G,-55DEG CMIN,125DEG CMAX,PB
C915M16	2113944C04	CAP,CHIP,330PF,+5%,-5%,50V-DC,0603,C0G,-55DEG CMIN,125DEG CMAX
C916M16	2113944M42	CAP,FXD,100PF,+2%,-2%,50V-DC,0603,C0G,-55DEG CMIN,125DEG CMAX,P
C917M16	NOTPLACED	64AM DUMMY PART NUMBER

Ref. Des.	Part Number	Description
C918M16	2113944C48	CAP,CHIP,560PF,+5%,-5%,50V-DC,0603,C0G,-55DEG CMIN,125DEG CMAX
C919M16	2113944M22	CAP,FXD,15PF,+2%,-2%,50V-DC,0603,C0G,-55DEG CMIN,125DEG CMAX,PB
C920M16	21009257002	CAP,CER,39PF,+5%,-5%,50V-DC,0805,-55DEG CMIN,125DEG CMAX,0805
C921M16	21009257002	CAP,CER,39PF,+5%,-5%,50V-DC,0805,-55DEG CMIN,125DEG CMAX,0805
C922M16	2113944M28	CAP,FXD,27PF,+2%,-2%,50V-DC,0603,C0G,-55DEG CMIN,125DEG CMAX,PB
C923M16	NOTPLACED	64AM DUMMY PART NUMBER
C924M16	2113944M22	CAP,FXD,15PF,+2%,-2%,50V-DC,0603,C0G,-55DEG CMIN,125DEG CMAX,PB
C925M16	2113944C04	CAP,CHIP,330PF,+5%,-5%,50V-DC,0603,C0G,-55DEG CMIN,125DEG CMAX
C927M16	NOTPLACED	64AM DUMMY PART NUMBER
C928M16	2113944M22	CAP,FXD,15PF,+2%,-2%,50V-DC,0603,C0G,-55DEG CMIN,125DEG CMAX,PB
C929M16	2113945A12	CAP,CHIP,3300PF,+10%,-10%,50V-DC,0402,X7R,-55DEG CMIN,125DEG CM
C930M16	2113945A12	CAP,CHIP,3300PF,+10%,-10%,50V-DC,0402,X7R,-55DEG CMIN,125DEG CM
D200M12	4813978A19	DIODE,RECT,MBR120,SM,SOD-123,1A,20V,SHTK,PB-FREE

Ref. Des.	Part Number	Description
D2701M13	4813974A19	DIODE, MXR, SM, SOT-323, 7V, .2W, SHTK, 2, PB-FREE
D2702M13	4815897H01	DIODE, PIN, UPP9401E, SM, DO-216, 50A, 50V, 2.5W, POWER-MITE
D2703M13	4815897H01	DIODE, PIN, UPP9401E, SM, DO-216, 50A, 50V, 2.5W, POWER-MITE
D301M20	NOTPLACED	64AM DUMMY PART NUMBER
D3206M22	4815002H03	DIODE, VCTR, SM, DIODE, VCTR, 34V, SILICON EPITAXIAL
D3207M22	4815002H03	DIODE, VCTR, SM, DIODE, VCTR, 34V, SILICON EPITAXIAL
D3208M22	4815002H03	DIODE, VCTR, SM, DIODE, VCTR, 34V, SILICON EPITAXIAL
D3209M22	4815002H03	DIODE, VCTR, SM, DIODE, VCTR, 34V, SILICON EPITAXIAL
D3246M22	4815002H03	DIODE, VCTR, SM, DIODE, VCTR, 34V, SILICON EPITAXIAL
D3247M22	4815002H03	DIODE, VCTR, SM, DIODE, VCTR, 34V, SILICON EPITAXIAL
D3248M22	4815002H03	DIODE, VCTR, SM, DIODE, VCTR, 34V, SILICON EPITAXIAL
D3249M22	4815002H03	DIODE, VCTR, SM, DIODE, VCTR, 34V, SILICON EPITAXIAL
D4001M2	4813978A25	DIODE, SWG, BAT54, SM, SO D-323/SC-76, 200MA, 30V, .2W, SHTK, PB-FREE, W18
D6101M6	4813978A25	DIODE, SWG, BAT54, SM, SO D-323/SC-76, 200MA, 30V, .2W, SHTK, PB-FREE, W18

Ref. Des.	Part Number	Description
D6401M6	4813978A25	DIODE, SWG, BAT54, SM, SO D-323/SC-76, 200MA, 30V, .2W, SHTK, PB-FREE, W18
D6501M6	4813978A25	DIODE, SWG, BAT54, SM, SO D-323/SC-76, 200MA, 30V, .2W, SHTK, PB-FREE, W18
D722M7	4815011H01	DIODE, SWG, SM, 300MA, 80V, TRP
D723M7	4815011H01	DIODE, SWG, SM, 300MA, 80V, TRP
E1101M11	2405688Z01	IDCTR, BEAD, FERR BEAD
E201M12	7686949J14	FLTR, FERRITE BEAD, 2A, SM, 0805, CHIP, 220OHM
E2242M2	7685268E01	FLTR, FERRITE BEAD, 650MA, SM, 0402, CHIP, 80OHM
E2244M2	7685268E01	FLTR, FERRITE BEAD, 650MA, SM, 0402, CHIP, 80OHM
E2245M2	7685268E01	FLTR, FERRITE BEAD, 650MA, SM, 0402, CHIP, 80OHM
E2246M2	7685268E01	FLTR, FERRITE BEAD, 650MA, SM, 0402, CHIP, 80OHM
E2247M2	7685268E01	FLTR, FERRITE BEAD, 650MA, SM, 0402, CHIP, 80OHM
E2248M2	7685268E01	FLTR, FERRITE BEAD, 650MA, SM, 0402, CHIP, 80OHM
E2249M2	7685268E01	FLTR, FERRITE BEAD, 650MA, SM, 0402, CHIP, 80OHM
E2301M2	7688697V03	FLTR, EMI/RFI, 500MA, SM, 0402, PB FREE
E2302M2	7688697V03	FLTR, EMI/RFI, 500MA, SM, 0402, PB FREE

Ref. Des.	Part Number	Description
E2303M2	7688697V03	FLTR, EMI/RFI, 500MA, SM, 0402, PB FREE
E2304M2	7688697V03	FLTR, EMI/RFI, 500MA, SM, 0402, PB FREE
E2305M2	7688697V03	FLTR, EMI/RFI, 500MA, SM, 0402, PB FREE
E2306M2	7688697V03	FLTR, EMI/RFI, 500MA, SM, 0402, PB FREE
E2307M2	7688697V03	FLTR, EMI/RFI, 500MA, SM, 0402, PB FREE
E2308M2	7688697V03	FLTR, EMI/RFI, 500MA, SM, 0402, PB FREE
E2309M2	7688697V03	FLTR, EMI/RFI, 500MA, SM, 0402, PB FREE
E2310M2	7688697V03	FLTR, EMI/RFI, 500MA, SM, 0402, PB FREE
E2311M2	7688697V03	FLTR, EMI/RFI, 500MA, SM, 0402, PB FREE
E302M20	2480640Z01	CHIP INDUCTOR, BEAD, SUR MT FERR BEAD
E601M19	2480640Z01	CHIP INDUCTOR, BEAD, SUR MT FERR BEAD
E602M19	2480640Z01	CHIP INDUCTOR, BEAD, SUR MT FERR BEAD
E603M19	2480640Z01	CHIP INDUCTOR, BEAD, SUR MT FERR BEAD
E604M19	2480640Z01	CHIP INDUCTOR, BEAD, SUR MT FERR BEAD
E605M19	2480640Z01	CHIP INDUCTOR, BEAD, SUR MT FERR BEAD

Ref. Des.	Part Number	Description
E606M19	2480640Z01	CHIP INDUCTOR, BEAD, SUR MT FERR BEAD
E607M19	2480640Z01	CHIP INDUCTOR, BEAD, SUR MT FERR BEAD
E608M19	2480640Z01	CHIP INDUCTOR, BEAD, SUR MT FERR BEAD
E609M19	2480640Z01	CHIP INDUCTOR, BEAD, SUR MT FERR BEAD
E6501M6	2480067M02	FIXED INDUCTOR, FXD, 200MA, .4OHM, FERR, 0805, CHK RF CHIP BE
E6502M6	2480067M02	FIXED INDUCTOR, FXD, 200MA, .4OHM, FERR, 0805, CHK RF CHIP BE
F200M12	6575834B01	FUSE, FST BLW, 2A, 32V, FUSE SUR MT
FL1301M3	9102190J23	FLTR, SAW, BAND-PASS, 1.57542GHZ NOM, SM, 1.4X1.0MM, SMD, PB-FREE
FL1302M3	9109674L58	BAND PASS FILTER
FL1303M3	9102190J23	FLTR, SAW, BAND-PASS, 1.57542GHZ NOM, SM, 1.4X1.0MM, SMD, PB-FREE
FL502M21	91009300001	FLTR, BAND-PASS, 109.65MHZ NOM, FILTER, MONOLITHIC CRYSTAL, BAND
J102M12	2880658Z08	RF CONNECTOR, SMA, M, CONN SMA
J2301M2	0970312N01	CONN, BTB, RCPT, 60CONT, .4MM, GLD, 1 STACK HGT
J2302M2	CN000222A01	CONNECTOR STANDARD-BTB, FEMALE (RECEPTACLE/SOCKET), 0.4MM, 70, CONN
L1101M11	2415429H26	IDCTR, WW, 33NH, 5%, 600MA, .22OHM, CER, SM, 0603, CHIP

Ref. Des.	Part Number	Description
L1102M11	2415429H10	IDCTR,WW,6.8NH,5%,700MA,.11OHM,CER,SM,0603,CHIP
L1116M11	NOTPLACED	64AM DUMMY PART NUMBER
L1117M11	2415428H01	COIL,AW,1.65NH,10%,1.6A,AIR,2 TURNS,SM,AIR WOUND IDCTR
L1203M17	2416066H02	IDCTR,COIL,43NH,5%,2A,.035OHM,50 Q,2GHZ SRF,IDCTR
L1209M17	2416066H02	IDCTR,COIL,43NH,5%,2A,.035OHM,50 Q,2GHZ SRF,IDCTR
L1211M17	2416066H02	IDCTR,COIL,43NH,5%,2A,.035OHM,50 Q,2GHZ SRF,IDCTR
L1301M3	2414017P16	IDCTR,CHIP,18NH,5%,300MA,.76OHM,CER,9 Q,1.9GHZ SRF,SM,0402,P
L1302M3	2488090Y07	IDCTR,CHIP,3.3NH,5%,300MA,CER,SM,0402,MULAY PB FREE
L1303M3	2414017P16	IDCTR,CHIP,18NH,5%,300MA,.76OHM,CER,9 Q,1.9GHZ SRF,SM,0402,P
L1304M3	2488090Y25	IDCTR,CHIP,100NH,5%,90MA,CER,SM,0402,MULAY PB FREE
L1305M3	24010062002	IDCTR,RF,5.6NH,2%,1.6A,.06OHM,CER,6.5GHZ SRF,SM,5.6NH, 040
L1306M3	2414017P14	IDCTR,CHIP,12NH,5%,300MA,.6OHM,CER,9 Q,2GHZ SRF,SM,0402,PB-F
L1308M3	2415429H14	CHIP INDUCTOR,9.5NH,5%,700MA
L1316M3	24010062009	IDCTR,RF,13NH,2%,870MA,.06OHM,CER,4.2GHZ SRF,SM,13NH, 0402
L200M12	2571269C01	IDCTR,COIL,1.5UH,20%,2.9A,.059OHM,FERR,SM,WW PWR W18 COMP
L2202M2	2415429H45	IDCTR,WW,270NH,5%,170MA,CER,SM,CHIP

Ref. Des.	Part Number	Description
L2203M2	2415429H45	IDCTR,WW,270NH,5%,170MA,CER,SM,CHIP
L2204M2	2415429H45	IDCTR,WW,270NH,5%,170MA,CER,SM,CHIP
L2205M2	2415429H45	IDCTR,WW,270NH,5%,170MA,CER,SM,CHIP
L2701M13	2416066H02	IDCTR,COIL,43NH,5%,2A,.035OHM,50 Q,2GHZ SRF,IDCTR
L2702M13	2415429H40	IDCTR,WW,180NH,5%,240MA,1.25OHM,CER,SM,0603,CHIP
L312M20	2414032F35	IDCTR,WW,120NH,5%,400MA,.51OHM,CER,35 Q,860MHZ SRF,SM,PB-FR
L313M20	2415429H28	IDCTR,WW,39NH,5%,600MA,CER,SM,CHIP
L314M20	2415429H28	IDCTR,WW,39NH,5%,600MA,CER,SM,CHIP
L315M20	2414017N22	IDCTR,CHIP,68NH,5%,400MA,1.2OHM,CER,15 Q,800MHZ SRF,SM,0603
L316M20	2415429H34	IDCTR,WW,72NH,5%,400MA,.49OHM,CER,SM,0603,CHIP
L317M20	2414017P13	IDCTR,CHIP,10NH,5%,300MA,.46OHM,CER,9 Q,2.5GHZ SRF,SM,0402,P
L318M20	2414032F35	IDCTR,WW,120NH,5%,400MA,.51OHM,CER,35 Q,860MHZ SRF,SM,PB-FR
L319M20	2414032F35	IDCTR,WW,120NH,5%,400MA,.51OHM,CER,35 Q,860MHZ SRF,SM,PB-FR
L3205M22	2414032F44	IDCTR,WW,680NH,10%,130MA,4OHM,CER,30 Q,570MHZ SRF,SM,PB-FRE
L320M20	2415429H28	IDCTR,WW,39NH,5%,600MA,CER,SM,CHIP
L3210M22	2415429H27	IDCTR,WW,36NH,5%,600MA,.25OHM,CER,SM,0603,CHIP

Ref. Des.	Part Number	Description
L3216M22	2415010H04	IDCTR,AW,11.4NH,2%,AIR,0 AWG,SM,AIRWOUND COIL
L321M20	2415429H28	IDCTR,WW,39NH,5%,600MA,CER,SM,CHIP
L3223M22	2414032F44	IDCTR,WW,680NH,10%,130MA,4OHM,CER,30 Q,570MHZ SRF,SM,PB-FRE
L3229M22	2414032F44	IDCTR,WW,680NH,10%,130MA,4OHM,CER,30 Q,570MHZ SRF,SM,PB-FRE
L3230M22	2414032F44	IDCTR,WW,680NH,10%,130MA,4OHM,CER,30 Q,570MHZ SRF,SM,PB-FRE
L3245M22	2414032F44	IDCTR,WW,680NH,10%,130MA,4OHM,CER,30 Q,570MHZ SRF,SM,PB-FRE
L3250M22	2415429H30	IDCTR,WW,47NH,5%,600MA,CER,SM,CHIP
L3256M22	2414015C05	IDCTR,FXD,33NH,2%,1.3MA,.09OHM,CER,75 Q,1.7GHZ SRF,SM,1008,P
L3261M22	2414032F44	IDCTR,WW,680NH,10%,130MA,4OHM,CER,30 Q,570MHZ SRF,SM,PB-FRE
L3269M22	2414032F44	IDCTR,WW,680NH,10%,130MA,4OHM,CER,30 Q,570MHZ SRF,SM,PB-FRE
L3270M22	2414032F44	IDCTR,WW,680NH,10%,130MA,4OHM,CER,30 Q,570MHZ SRF,SM,PB-FRE
L327M20	2414032F35	IDCTR,WW,120NH,5%,400MA,.51OHM,CER,35 Q,860MHZ SRF,SM,PB-FR
L328M20	0613952G67	RES,MF,0,1,.1,SM,0603,PB-FREE
L329M20	2478057A30	CHIP INDUCTOR,RF,30NH,2%,SM,0603 HI Q CHIP IDCTR
L500M21	2415429H43	IDCTR,WW,220NH,5%,300MA,2.1OHM,CER,SM,0603,CHIP
L503M21	2414017N24	IDCTR,CHIP,100NH,5%,300MA,2OHM,CER,15 Q,700MHZ SRF,SM,0603,P

Ref. Des.	Part Number	Description
L504M21	2478057A51	CHIP INDUCTOR,RF,270NH,2%,SM,0603 HI Q CHIP IDCTR
L513M21	NOTPLACED	64AM DUMMY PART NUMBER
L550M21	2414017N20	IDCTR,CHIP,47NH,5%,500MA,.86OHM,CER,14 Q,900MHZ SRF,SM,0603
L601M19	2415429H43	IDCTR,WW,220NH,5%,300MA,2.1OHM,CER,SM,0603,CHIP
L602M19	2466505A01	CHIP INDUCTOR,CHIP,10UH,5%,150MA,FERR,0 AWG,SM,PB-FREE
L603M19	2466505A01	CHIP INDUCTOR,CHIP,10UH,5%,150MA,FERR,0 AWG,SM,PB-FREE
L604M19	2414032D16	IDCTR,WW,120NH,5%,800MA,.26OHM,CER,42 Q,1GHZ SRF,SM,PB-FREE
L605M19	24012050001	IDCTR,FXD,3.9UH,2%,280MA,CER,SM,0603LS CHIP INDUCTORS, 1
L611M19	2414032F39	IDCTR,WW,270NH,10%,280MA,1OHM,CER,40 Q,800MHZ SRF,SM,PB-FRE
L6401M6	2471189M03	IDCTR,PWR,10UH,20%,1.1A,.2OHM,SM,SHLD SMT PWR IDCTR 10UH
L6402M6	2471189M03	IDCTR,PWR,10UH,20%,1.1A,.2OHM,SM,SHLD SMT PWR IDCTR 10UH
L6403M6	24009271001	CHK,RF CHOKE,20NH HI CUR CHIP IDCTR
L6404M6	24009271001	CHK,RF CHOKE,20NH HI CUR CHIP IDCTR
L6502M6	2471678H01	IDCTR,10UH,20%,FERR,10 UH INDCUTOR
L6504M6	24009268001	IDCTR,PWR,10UH,20%,1.3A,FERR,SM,10UH 2.1A SHLD IDCTR
L6505M6	2471678H01	IDCTR,10UH,20%,FERR,10 UH INDCUTOR



Ref. Des.	Part Number	Description
L709M7	2415429H28	IDCTR,WW,39NH,5%,600MA,CER,SM,CHIP
L720M7	2480646Z20	COIL,CHIP,2.2UH,10%,MULTI-LAYER CHIP
L727M7	2480646Z20	COIL,CHIP,2.2UH,10%,MULTI-LAYER CHIP
L728M7	2415429H47	IDCTR,WW,390NH,5%,100MA,CER,SM,CHIP
L733M7	2480646Z20	COIL,CHIP,2.2UH,10%,MULTI-LAYER CHIP
L735M7	2480646Z20	COIL,CHIP,2.2UH,10%,MULTI-LAYER CHIP
L738M7	2480646Z20	COIL,CHIP,2.2UH,10%,MULTI-LAYER CHIP
L739M7	2415429H47	IDCTR,WW,390NH,5%,100MA,CER,SM,CHIP
L741M7	2480646Z20	COIL,CHIP,2.2UH,10%,MULTI-LAYER CHIP
L753M7	2415347H06	IDCTR,WW,2.2UH,5%,320MA,1.2OHM,CER,SM,IDCTR,2200NH
L755M7	2415429H47	IDCTR,WW,390NH,5%,100MA,CER,SM,CHIP
L758M7	2415429H47	IDCTR,WW,390NH,5%,100MA,CER,SM,CHIP
L759M7	2415429H47	IDCTR,WW,390NH,5%,100MA,CER,SM,CHIP
L775M7	2415429H47	IDCTR,WW,390NH,5%,100MA,CER,SM,CHIP
L901M16	2414017N10	IDCTR,CHIP,6.8NH,5%,600MA,.22OHM,CER,12Q,2.7GHZ SRF,SM,0603
L902M16	2415429H37	IDCTR,WW,110NH,5%,300MA,.61OHM,CER,SM,0603,CHIP
L903M16	2414015A07	IDCTR,FXD,180NH,2%,750MA,.77OHM,CER,25Q,700MHZ SRF,SM,1008
L904M16	2414017N18	IDCTR,CHIP,33NH,5%,600MA,.71OHM,CER,12Q,1.1GHZ SRF,SM,0603

Ref. Des.	Part Number	Description
L905M16	2414017N14	IDCTR,CHIP,15NH,5%,600MA,.4OHM,CER,12Q,1.8GHZ SRF,SM,0603,P
L906M16	2460591K40	IDCTR,FXD,15%,12TURNS,COUNTERCLOCKWISE,28 AWG,SM,HI
L907M16	2471968L13	IDCTR,AW,5.5NH,2%,SM,LOW PROFILE MINI SPR IDCTR
L908M16	2415428H01	COIL,AW,1.65NH,10%,1.6A,AIR,2 TURNS,SM,AIR WOUND IDCTR
L909M16	2471968L10	IDCTR,AW,9NH,2%,4A,.0034OHM,AIR,5 TURNS,120Q,4GHZ SRF,SM,9.
L910M16	2471968L07	FIXED INDUCTOR,AW,18NH,2%,4A,AIR,SM,LOW PROFILE MINI SPR
M101M12	39012039001	CONN,CMPSRN,3CONT,ST,CONNECTOR, BAT CONTACT, WWP
M103M12	3987977Y04	CONT,CONN,1CONT,ANT UNIV 4.5MM,UC 1.8
M104M12	3987977Y04	CONT,CONN,1CONT,ANT UNIV 4.5MM,UC 1.8
M105M12	3987977Y04	CONT,CONN,1CONT,ANT UNIV 4.5MM,UC 1.8
M1301M3	3987977Y04	CONT,CONN,1CONT,ANT UNIV 4.5MM,UC 1.8
M6405M6	3987977Y04	CONT,CONN,1CONT,ANT UNIV 4.5MM,UC 1.8
M6406M6	3987977Y04	CONT,CONN,1CONT,ANT UNIV 4.5MM,UC 1.8
M6502M6	0985888K02	BATTERY CONNECTOR,SKT,NI,LEAP
M6504M6	3987977Y04	CONT,CONN,1CONT,ANT UNIV 4.5MM,UC 1.8
PCB	PC000352A01	PCB
Q1101M11	4813973A32	XSTR,BIP GP SS,NPN,SM,SC-70,SMT,50V,.202W,100MA,PB-FREE

Ref. Des.	Part Number	Description
Q1103M11	4813970A59	XSTR,FET GP PWR,P-CH,ENHN,SM,SOT-23,20V,.4W,PB-FREE
Q201M12	4813970A59	XSTR,FET GP PWR,P-CH,ENHN,SM,SOT-23,20V,.4W,PB-FREE
Q202M12	4813973A32	XSTR,BIP GP SS,NPN,SM,SC-70,SMT,50V,.202W,100MA,PB-FREE
Q2202M2	4815261H01	XSTR,BIP GP SS,NPN,DTC114Y,SC-59,SC-59,SMT3,50V,100MA,250MHZ
Q2701M13	4815055H01	XSTR,GEN PURPOSE SMALL SIG,NPN AND PNP,UMC5NT2G,SM,50V,100A
Q303M20	4813973M75	XSTR,BIP GP SS,PNP,BC858,SOT-563,SMT,-30V,.357W,-100MA,100MHZ
Q304M20	4813973A32	XSTR,BIP GP SS,NPN,SM,SC-70,SMT,50V,.202W,100MA,PB-FREE
Q3227M22	4885061Y01	XSTR,BIP RF SMALL SIGNAL
Q3232M22	4815055H01	XSTR,GEN PURPOSE SMALL SIG,NPN AND PNP,UMC5NT2G,SM,50V,100A
Q3267M22	4885061Y01	XSTR,BIP RF SMALL SIGNAL
Q3272M22	4815055H01	XSTR,GEN PURPOSE SMALL SIG,NPN AND PNP,UMC5NT2G,SM,50V,100A
Q4001M2	4815261H01	XSTR,BIP GP SS,NPN,DTC114Y,SC-59,SC-59,SMT3,50V,100MA,250MHZ

Ref. Des.	Part Number	Description
Q601M19	4813973A04	XSTR,BIP GP SS,NPN,TA13,SM,SOT-23,SMT,30V,.225W,300MA,125MHZ,P
Q6101M6	4815261H01	XSTR,BIP GP SS,NPN,DTC114Y,SC-59,SC-59,SMT3,50V,100MA,250MHZ
Q6401M6	48013068001	XSTR,FET GP PWR,N-CH,SM,SOT-563,SMT,20V,.25W,DL N-CH 20 V
Q6501M6	4813970A62	XSTR,FET GP PWR,MOSFET,P-CH,ENHN,CF,-20V,1.3W,PB-FREE
Q6502M6	48012154001	XSTR,FET GP PWR,P,SM,SMT,-20V,.5W,FET
Q6504M6	4809579E77	XSTR,FET GP SS,MOSFET,N-CH,SM,30V,1.2X1.2MM PKG W18 COMP
Q6505M6	4813970A62	XSTR,FET GP PWR,MOSFET,P-CH,ENHN,CF,-20V,1.3W,PB-FREE
Q6506M6	4809579E77	XSTR,FET GP SS,MOSFET,N-CH,SM,30V,1.2X1.2MM PKG W18 COMP
Q6507M6	48013068001	XSTR,FET GP PWR,N-CH,SM,SOT-563,SMT,20V,.25W,DL N-CH 20 V
Q6508M6	48012154001	XSTR,FET GP PWR,P,SM,SMT,-20V,.5W,FET
Q731M7	4885061Y01	XSTR,BIP RF SMALL SIGNAL
Q745M7	4813973M75	XSTR,BIP GP SS,PNP,BC858,SOT-563,SMT,-30V,.357W,-100MA,100MHZ
Q756M7	4805585Q32	XSTR,BIP RF SML SGNL,NPN,NE662M04,SM,SOT-343,3.3V,TRANSITO

Ref. Des.	Part Number	Description
Q767M7	4813973M75	XSTR,BIP GP SS,PNP,BC858,SOT-563,SMT,-30V,.357W,-100MA,100MHZ
Q774M7	4805585Q32	XSTR,BIP RF SML SGNL,NPN,NE662M04,SM,SOT-343,3.3V,TRANSITO
Q785M7	4889394V04	XSTR,FET GEN PURPOSE SMALL SIG,MOSFET,N-CH,ENHN,SM,20V,.25W,P
Q901M16	48012094001	XSTR,FET RF POWER,SM,25V,MOD,XSTR,FET RF PWR, 135-941MH
R1101M11	0613952R01	RES,MF,10KOHM,5%,.0625W,SM,0402,200PPM/CEL,PB-FREE
R1102M11	0613952R25	RES,MF,100KOHM,5%,.0625W,SM,0402,200PPM/CEL,PB-FREE
R1103M11	06009259001	RES,SHUNT,.02OHM,.33W,SMD,LOW RESISTANCE THK FLM RES
R1104M11	0613952Q49	RES,MF,100,5,.0625,SM,0402,200,PB-FREE
R1105M11	0613952Q49	RES,MF,100,5,.0625,SM,0402,200,PB-FREE
R1106M11	0613952K73	RES,MF,56.2OHM,1%,.0625W,SM,0402,200PPM/CEL,PB-FREE
R1107M11	0613952Q45	RES,MF,68OHM,5%,.0625W,SM,0402,200PPM/CEL,PB-FREE
R1108M11	0613952N81	RES,MF,68.1KOHM,1%,.0625W,SM,0402,200PPM/CEL,PB-FREE
R1110M11	0613952R01	RES,MF,10KOHM,5%,.0625W,SM,0402,200PPM/CEL,PB-FREE
R1111M11	0613952R66	RES,MF,0OHM,5%,.0625W,SM,0402,PB-FREE
R1112M11	NOTPLACED	64AM DUMMY PART NUMBER
R1114M11	0613952Q49	RES,MF,100,5,.0625,SM,0402,200,PB-FREE

Ref. Des.	Part Number	Description
R1115M11	0613952Q49	RES,MF,100,5,.0625,SM,0402,200,PB-FREE
R1116M11	0613952R01	RES,MF,10KOHM,5%,.0625W,SM,0402,200PPM/CEL,PB-FREE
R1117M11	0613952R11	RES,MF,27KOHM,5%,.0625W,SM,0402,200PPM/CEL,PB-FREE
R1121M11	0613952N47	CER CHIP RES 30.1K OHM 1 0402
R1122M11	0613952N85	RES,MF,75KOHM,1%,.0625W,SM,0402,200PPM/CEL,PB-FREE
R1124M11	0613952Q42	RES,MF,51OHM,5%,.0625W,SM,0402,200PPM/CEL,PB-FREE
R1125M11	0613952R17	RES,MF,47000,5,.0625,SM,0402,200,PB-FREE
R1126M11	0613952R09	RES,MF,22000,5,.0625,SM,0402,200,PB-FREE
R1127M11	0613952R08	RES,MF,20KOHM,5%,.0625W,SM,0402,200PPM/CEL,PB-FREE
R1128M11	0613952R01	RES,MF,10KOHM,5%,.0625W,SM,0402,200PPM/CEL,PB-FREE
R1129M11	NOTPLACED	64AM DUMMY PART NUMBER
R1130M11	NOTPLACED	64AM DUMMY PART NUMBER
R1135M11	0613952R66	RES,MF,0OHM,5%,.0625W,SM,0402,PB-FREE
R1136M11	0613952R01	RES,MF,10KOHM,5%,.0625W,SM,0402,200PPM/CEL,PB-FREE
R1137M11	0613952R01	RES,MF,10KOHM,5%,.0625W,SM,0402,200PPM/CEL,PB-FREE
R1138M11	0613952R25	RES,MF,100KOHM,5%,.0625W,SM,0402,200PPM/CEL,PB-FREE
R1139M11	0613952R25	RES,MF,100KOHM,5%,.0625W,SM,0402,200PPM/CEL,PB-FREE

Ref. Des.	Part Number	Description
R1140M11	0613952R25	RES,MF,100KOHM,5%,.0625W,SM,0402,200PPM/CEL,PB-FREE
R1141M11	0613952R42	RES,MF,510KOHM,5%,.0625W,SM,0402,200PPM/CEL,PB-FREE
R1142M11	0613952R25	RES,MF,100KOHM,5%,.0625W,SM,0402,200PPM/CEL,PB-FREE
R1143M11	0613952R25	RES,MF,100KOHM,5%,.0625W,SM,0402,200PPM/CEL,PB-FREE
R1144M11	0613952R25	RES,MF,100KOHM,5%,.0625W,SM,0402,200PPM/CEL,PB-FREE
R1145M11	0613952R25	RES,MF,100KOHM,5%,.0625W,SM,0402,200PPM/CEL,PB-FREE
R1146M11	0613952R25	RES,MF,100KOHM,5%,.0625W,SM,0402,200PPM/CEL,PB-FREE
R1151M11	0613952R05	RES,MF,15KOHM,5%,.0625W,SM,0402,200PPM/CEL,PB-FREE
R1152M11	0613952R01	RES,MF,10KOHM,5%,.0625W,SM,0402,200PPM/CEL,PB-FREE
R1154M11	0613952N01	CER CHIP RES 10.0K OHM 1 0402
R1158M11	NOTPLACED	64AM DUMMY PART NUMBER
R1160M11	0613952R03	RES,MF,12000,5,.0625,SM,0402,200,PB-FREE
R1162M11	0613952R29	RES,MF,150KOHM,5%,.0625W,SM,0402,200PPM/CEL,PB-FREE
R1163M11	0613952R06	RES,MF,16KOHM,5%,.0625W,SM,0402,200PPM/CEL,PB-FREE
R1164M11	0613952R01	RES,MF,10KOHM,5%,.0625W,SM,0402,200PPM/CEL,PB-FREE
R1165M11	0613952Q56	RES,MF,200OHM,5%,.0625W,SM,0402,200PPM/CEL,PB-FREE

Ref. Des.	Part Number	Description
R1166M11	0613952Q56	RES,MF,200OHM,5%,.0625W,SM,0402,200PPM/CEL,PB-FREE
R1167M11	0613952R01	RES,MF,10KOHM,5%,.0625W,SM,0402,200PPM/CEL,PB-FREE
R1168M11	0613952Q49	RES,MF,100,5,.0625,SM,0402,200,PB-FREE
R1169M11	0613952P52	CER CHIP RES 340K OHM 1 0402
R1170M11	0613952N88	RES,MF,80.6KOHM,1%,.0625W,SM,0402,200PPM/CEL,PB-FREE
R1171M11	0613952R66	RES,MF,0OHM,5%,.0625W,SM,0402,PB-FREE
R1172M11	0613952Q89	RES,MF,4700,5,.0625,SM,0402,200,PB-FREE
R1174M11	0613952N01	CER CHIP RES 10.0K OHM 1 0402
R1175M11	0613952R66	RES,MF,0OHM,5%,.0625W,SM,0402,PB-FREE
R1176M11	0613952M26	RES,MF,1.82KOHM,1%,.0625W,SM,0402,200PPM/CEL,PB-FREE
R1177M11	0613952R66	RES,MF,0OHM,5%,.0625W,SM,0402,PB-FREE
R1178M11	0613952R01	RES,MF,10KOHM,5%,.0625W,SM,0402,200PPM/CEL,PB-FREE
R1180M11	0613952R66	RES,MF,0OHM,5%,.0625W,SM,0402,PB-FREE
R1181M11	NOTPLACED	64AM DUMMY PART NUMBER
R1182M11	0613952R01	RES,MF,10KOHM,5%,.0625W,SM,0402,200PPM/CEL,PB-FREE
R1198M11	0613952J01	RES,MF,10KOHM,5%,.1W,SM,0603,200PPM/CEL,PB-FREE
R1301M3	0613952R66	RES,MF,0OHM,5%,.0625W,SM,0402,PB-FREE
R1303M3	0613952R66	RES,MF,0OHM,5%,.0625W,SM,0402,PB-FREE

Ref. Des.	Part Number	Description
R1305M3	0613952R66	RES,MF,0OHM,5%,.0625W,SM,0402,PB-FREE
R1309M3	NOTPLACED	64AM DUMMY PART NUMBER
R1310M3	0613952R66	RES,MF,0OHM,5%,.0625W,SM,0402,PB-FREE
R1311M3	NOTPLACED	64AM DUMMY PART NUMBER
R1313M3	0613952R66	RES,MF,0OHM,5%,.0625W,SM,0402,PB-FREE
R1315M3	0613952R66	RES,MF,0OHM,5%,.0625W,SM,0402,PB-FREE
R1317M3	0613952R66	RES,MF,0OHM,5%,.0625W,SM,0402,PB-FREE
R1318M3	0613952R66	RES,MF,0OHM,5%,.0625W,SM,0402,PB-FREE
R1325M3	0613952R66	RES,MF,0OHM,5%,.0625W,SM,0402,PB-FREE
R1326M3	0613952R66	RES,MF,0OHM,5%,.0625W,SM,0402,PB-FREE
R1329M3	0613952R66	RES,MF,0OHM,5%,.0625W,SM,0402,PB-FREE
R1330M3	0613952R66	RES,MF,0OHM,5%,.0625W,SM,0402,PB-FREE
R1331M3	0613952R66	RES,MF,0OHM,5%,.0625W,SM,0402,PB-FREE
R1332M3	0613952R66	RES,MF,0OHM,5%,.0625W,SM,0402,PB-FREE
R1337M3	NOTPLACED	64AM DUMMY PART NUMBER
R1338M3	2113944A61	CAP,FXD,.5PF,.25PF+/-,50V-DC,0402,C0G,-55DEG CMIN,125DEG CMAX
R1339M3	NOTPLACED	64AM DUMMY PART NUMBER
R1340M3	0613952R66	RES,MF,0OHM,5%,.0625W,SM,0402,PB-FREE
R201M12	0613952R25	RES,MF,100KOHM,5%,.0625W,SM,0402,200PPM/CEL,PB-FREE
R202M12	0613952Q89	RES,MF,4700,5,.0625,SM,0402,200,PB-FREE

Ref. Des.	Part Number	Description
R21000M2	0613952R01	RES,MF,10KOHM,5%,.0625W,SM,0402,200PPM/CEL,PB-FREE
R21001M2	0613952R01	RES,MF,10KOHM,5%,.0625W,SM,0402,200PPM/CEL,PB-FREE
R21002M2	0613952R01	RES,MF,10KOHM,5%,.0625W,SM,0402,200PPM/CEL,PB-FREE
R21003M2	0613952R01	RES,MF,10KOHM,5%,.0625W,SM,0402,200PPM/CEL,PB-FREE
R21004M2	0613952Q73	RES,MF,1KOHM,5%,.0625W,SM,0402,200PPM/CEL,PB-FREE
R21005M2	0613952Q73	RES,MF,1KOHM,5%,.0625W,SM,0402,200PPM/CEL,PB-FREE
R21006M2	0613952Q73	RES,MF,1KOHM,5%,.0625W,SM,0402,200PPM/CEL,PB-FREE
R21007M2	0613952Q73	RES,MF,1KOHM,5%,.0625W,SM,0402,200PPM/CEL,PB-FREE
R21008M2	0613952R01	RES,MF,10KOHM,5%,.0625W,SM,0402,200PPM/CEL,PB-FREE
R2104M2	0613952Q89	RES,MF,4700,5,.0625,SM,0402,200,PB-FREE
R2105M2	0613952Q89	RES,MF,4700,5,.0625,SM,0402,200,PB-FREE
R2106M2	NOTPLACED	64AM DUMMY PART NUMBER
R2107M2	0613952Q73	RES,MF,1KOHM,5%,.0625W,SM,0402,200PPM/CEL,PB-FREE
R2109M2	0613952Q25	RES,MF,10,5,.0625,SM,0402,200,PB-FREE
R2110M2	0613952Q33	RES,MF,22,5,.0625,SM,0402,200,PB-FREE
R2111M2	0613952Q25	RES,MF,10,5,.0625,SM,0402,200,PB-FREE
R2113M2	0613952Q25	RES,MF,10,5,.0625,SM,0402,200,PB-FREE

Ref. Des.	Part Number	Description
R2114M2	0613952Q33	RES,MF,22,5,.0625,SM,0402,200,PB-FREE
R2115M2	0613952Q25	RES,MF,10,5,.0625,SM,0402,200,PB-FREE
R2116M2	0613952R01	RES,MF,10KOHM,5%,.0625W,SM,0402,200PPM/CEL,PB-FREE
R2117M2	0613952R01	RES,MF,10KOHM,5%,.0625W,SM,0402,200PPM/CEL,PB-FREE
R2118M2	0613952R01	RES,MF,10KOHM,5%,.0625W,SM,0402,200PPM/CEL,PB-FREE
R2120M2	0613952R01	RES,MF,10KOHM,5%,.0625W,SM,0402,200PPM/CEL,PB-FREE
R2129M2	0613952R01	RES,MF,10KOHM,5%,.0625W,SM,0402,200PPM/CEL,PB-FREE
R2130M2	0613952R01	RES,MF,10KOHM,5%,.0625W,SM,0402,200PPM/CEL,PB-FREE
R2131M2	0613952R01	RES,MF,10KOHM,5%,.0625W,SM,0402,200PPM/CEL,PB-FREE
R2132M2	0613952R01	RES,MF,10KOHM,5%,.0625W,SM,0402,200PPM/CEL,PB-FREE
R2133M2	0613952R01	RES,MF,10KOHM,5%,.0625W,SM,0402,200PPM/CEL,PB-FREE
R2135M2	0613952Q41	RES,MF,47OHM,5%,.0625W,SM,0402,200PPM/CEL,PB-FREE
R2136M2	0613952Q61	RES,MF,330OHM,5%,.0625W,SM,0402,200PPM/CEL,PB-FREE
R2137M2	0613952Q61	RES,MF,330OHM,5%,.0625W,SM,0402,200PPM/CEL,PB-FREE
R2138M2	0613952Q41	RES,MF,47OHM,5%,.0625W,SM,0402,200PPM/CEL,PB-FREE

Ref. Des.	Part Number	Description
R2139M2	0613952Q41	RES,MF,47OHM,5%,.0625W,SM,0402,200PPM/CEL,PB-FREE
R2142M2	0613952Q41	RES,MF,47OHM,5%,.0625W,SM,0402,200PPM/CEL,PB-FREE
R2144M2	0613952Q61	RES,MF,330OHM,5%,.0625W,SM,0402,200PPM/CEL,PB-FREE
R2145M2	0613952Q41	RES,MF,47OHM,5%,.0625W,SM,0402,200PPM/CEL,PB-FREE
R2146M2	0613952Q41	RES,MF,47OHM,5%,.0625W,SM,0402,200PPM/CEL,PB-FREE
R2147M2	0613952Q41	RES,MF,47OHM,5%,.0625W,SM,0402,200PPM/CEL,PB-FREE
R2148M2	0613952Q41	RES,MF,47OHM,5%,.0625W,SM,0402,200PPM/CEL,PB-FREE
R2149M2	0613952Q41	RES,MF,47OHM,5%,.0625W,SM,0402,200PPM/CEL,PB-FREE
R2151M2	NOTPLACED	64AM DUMMY PART NUMBER
R2153M2	0613952Q41	RES,MF,47OHM,5%,.0625W,SM,0402,200PPM/CEL,PB-FREE
R2154M2	0613952Q41	RES,MF,47OHM,5%,.0625W,SM,0402,200PPM/CEL,PB-FREE
R2192M2	0613952Q61	RES,MF,330OHM,5%,.0625W,SM,0402,200PPM/CEL,PB-FREE
R2197M2	0613952R66	RES,MF,0OHM,5%,.0625W,SM,0402,PB-FREE
R2198M2	0613952R66	RES,MF,0OHM,5%,.0625W,SM,0402,PB-FREE
R2199M2	0613952R66	RES,MF,0OHM,5%,.0625W,SM,0402,PB-FREE
R2200M2	0613952R66	RES,MF,0OHM,5%,.0625W,SM,0402,PB-FREE

Ref. Des.	Part Number	Description
R2202M2	0613952R66	RES,MF,0OHM,5%,.0625W,SM,0402,PB-FREE
R2204M2	0613952Q85	RES,MF,3.3KOHM,5%,.0625W,SM,0402,200PPM/CEL,PB-FREE
R2206M2	0613952Q85	RES,MF,3.3KOHM,5%,.0625W,SM,0402,200PPM/CEL,PB-FREE
R2207M2	0613952R66	RES,MF,0OHM,5%,.0625W,SM,0402,PB-FREE
R2235M2	0613952R66	RES,MF,0OHM,5%,.0625W,SM,0402,PB-FREE
R2244M2	0613952Q72	RES,MF,910OHM,5%,.0625W,SM,0402,PB-FREE
R2245M2	0613952Q63	RES,MF,390OHM,5%,.0625W,SM,0402,200PPM/CEL,PB-FREE
R2246M2	0613952Q60	RES,MF,300OHM,5%,.0625W,SM,0402,200PPM/CEL,PB-FREE
R2254M2	0613952R01	RES,MF,10KOHM,5%,.0625W,SM,0402,200PPM/CEL,PB-FREE
R2255M2	0613952R32	RES,MF,200KOHM,5%,.0625W,SM,0402,200PPM/CEL,PB-FREE
R2701M13	0613952R25	RES,MF,100KOHM,5%,.0625W,SM,0402,200PPM/CEL,PB-FREE
R2702M13	NOTPLACED	64AM DUMMY PART NUMBER
R2703M13	0613952H47	RES,MF,82OHM,5%,.1W,SM,0603,200PPM/CEL,PB-FREE
R2704M13	0613952H47	RES,MF,82OHM,5%,.1W,SM,0603,200PPM/CEL,PB-FREE
R2705M13	0613952H47	RES,MF,82OHM,5%,.1W,SM,0603,200PPM/CEL,PB-FREE
R2706M13	0662057B47	RES,CF,0OHM,5%,.1W,SM,0603

Ref. Des.	Part Number	Description
R2803M1	0613952Q37	RES,MF,33OHM,5%,.0625W,SM,0402,200PPM/CEL,PB-FREE
R2804M1	0613952Q49	RES,MF,100,5,.0625,SM,0402,200,PB-FREE
R2805M1	0613952Q49	RES,MF,100,5,.0625,SM,0402,200,PB-FREE
R2806M1	0613952Q59	RES,MF,270OHM,5%,.0625W,SM,0402,200PPM/CEL,PB-FREE
R2807M1	0613952Q56	RES,MF,200OHM,5%,.0625W,SM,0402,200PPM/CEL,PB-FREE
R2808M1	0613952Q49	RES,MF,100,5,.0625,SM,0402,200,PB-FREE
R2810M1	0613952R01	RES,MF,10KOHM,5%,.0625W,SM,0402,200PPM/CEL,PB-FREE
R2811M1	0613952Q89	RES,MF,4700,5,.0625,SM,0402,200,PB-FREE
R2812M1	0613952R01	RES,MF,10KOHM,5%,.0625W,SM,0402,200PPM/CEL,PB-FREE
R2813M1	NOTPLACED	64AM DUMMY PART NUMBER
R2817M1	0613952Q41	RES,MF,47OHM,5%,.0625W,SM,0402,200PPM/CEL,PB-FREE
R310M20	0613952R22	RES,MF,75KOHM,5%,.0625W,SM,0402,200PPM/CEL,PB-FREE
R311M20	0613952R27	RES,MF,120KOHM,5%,.0625W,SM,0402,200PPM/CEL,PB-FREE
R312M20	0613952R01	RES,MF,10KOHM,5%,.0625W,SM,0402,200PPM/CEL,PB-FREE
R313M20	0613952Q37	RES,MF,33OHM,5%,.0625W,SM,0402,200PPM/CEL,PB-FREE
R314M20	0613952Q75	RES,MF,1.2KOHM,5%,.0625W,SM,0402,200PPM/CEL,PB-FREE

Ref. Des.	Part Number	Description
R315M20	0613952Q25	RES,MF,10,5,.0625,SM,0402,200,PB-FREE
R3200M22	0613952R66	RES,MF,0OHM,5%,.0625W,SM,0402,PB-FREE
R3201M22	0613952Q23	RES,MF,8.2OHM,5%,.0625W,SM,0402,200PPM/CEL,PB-FREE
R3202M22	0613952R66	RES,MF,0OHM,5%,.0625W,SM,0402,PB-FREE
R3203M22	0613952Q69	RES,MF,680OHM,5%,.0625W,SM,0402,200PPM/CEL,PB-FREE
R3204M22	0613952Q69	RES,MF,680OHM,5%,.0625W,SM,0402,200PPM/CEL,PB-FREE
R3205M22	0613952Q69	RES,MF,680OHM,5%,.0625W,SM,0402,200PPM/CEL,PB-FREE
R3206M22	0613952Q23	RES,MF,8.2OHM,5%,.0625W,SM,0402,200PPM/CEL,PB-FREE
R3207M22	0613952Q69	RES,MF,680OHM,5%,.0625W,SM,0402,200PPM/CEL,PB-FREE
R3214M22	NOTPLACED	64AM DUMMY PART NUMBER
R3218M22	0613952Q93	RES,MF,6.8KOHM,5%,.0625W,SM,0402,200PPM/CEL,PB-FREE
R3222M22	0613952Q96	RES,MF,9.1KOHM,5%,.0625W,SM,0402,200PPM/CEL,PB-FREE
R3231M22	0613952Q58	RES,MF,240OHM,5%,.0625W,SM,0402,200PPM/CEL,PB-FREE
R3233M22	0613952Q53	RES,MF,150OHM,5%,.0625W,SM,0402,200PPM/CEL,PB-FREE
R3257M22	0613952Q96	RES,MF,9.1KOHM,5%,.0625W,SM,0402,200PPM/CEL,PB-FREE
R3260M22	0613952Q96	RES,MF,9.1KOHM,5%,.0625W,SM,0402,200PPM/CEL,PB-FREE

Ref. Des.	Part Number	Description
R3271M22	0613952Q53	RES,MF,150OHM,5%,.0625W,SM,0402,200PPM/CEL,PB-FREE
R3273M22	0613952Q53	RES,MF,150OHM,5%,.0625W,SM,0402,200PPM/CEL,PB-FREE
R380M20	0613952Q25	RES,MF,10,5,.0625,SM,0402,200,PB-FREE
R381M20	0613952Q25	RES,MF,10,5,.0625,SM,0402,200,PB-FREE
R4005M2	0613952R01	RES,MF,10KOHM,5%,.0625W,SM,0402,200PPM/CEL,PB-FREE
R4006M2	0613952R01	RES,MF,10KOHM,5%,.0625W,SM,0402,200PPM/CEL,PB-FREE
R4007M2	0613952R01	RES,MF,10KOHM,5%,.0625W,SM,0402,200PPM/CEL,PB-FREE
R4008M2	0613952R01	RES,MF,10KOHM,5%,.0625W,SM,0402,200PPM/CEL,PB-FREE
R4009M2	0613952Q85	RES,MF,3.3KOHM,5%,.0625W,SM,0402,200PPM/CEL,PB-FREE
R4010M2	0613952R32	RES,MF,200KOHM,5%,.0625W,SM,0402,200PPM/CEL,PB-FREE
R4011M2	0613952R17	RES,MF,47000,5,.0625,SM,0402,200,PB-FREE
R4012M2	0613952R09	RES,MF,22000,5,.0625,SM,0402,200,PB-FREE
R4013M2	0613952R09	RES,MF,22000,5,.0625,SM,0402,200,PB-FREE
R4014M2	0613952Q85	RES,MF,3.3KOHM,5%,.0625W,SM,0402,200PPM/CEL,PB-FREE
R500M21	0613952Q37	RES,MF,33OHM,5%,.0625W,SM,0402,200PPM/CEL,PB-FREE
R502M21	0613952Q36	RES,MF,30OHM,5%,.0625W,SM,0402,200PPM/CEL,PB-FREE

Ref. Des.	Part Number	Description	Ref. Des.	Part Number	Description	Ref. Des.	Part Number	Description	Ref. Des.	Part Number	Description
R512M21	0613952R66	RES,MF,0OHM,5%,.0625W,SM,0402,PB-FREE	R6106M6	0613952Q73	RES,MF,1KOHM,5%,.0625W,SM,0402,200PPM/CEL,PB-FREE	R6120M6	0613952R01	RES,MF,10KOHM,5%,.0625W,SM,0402,200PPM/CEL,PB-FREE	R6206M6	0613952R25	RES,MF,100KOHM,5%,.0625W,SM,0402,200PPM/CEL,PB-FREE
R525M21	0613952R66	RES,MF,0OHM,5%,.0625W,SM,0402,PB-FREE	R6107M6	0613952Q55	RES,MF,180OHM,5%,.0625W,SM,0402,200PPM/CEL,PB-FREE	R6121M6	0613952R01	RES,MF,10KOHM,5%,.0625W,SM,0402,200PPM/CEL,PB-FREE	R6207M6	0613952R25	RES,MF,100KOHM,5%,.0625W,SM,0402,200PPM/CEL,PB-FREE
R526M21	0613958J74	RES,MF,0OHM,5%,.125W,SM,0805,PB-FREE	R6108M6	0613952Q61	RES,MF,330OHM,5%,.0625W,SM,0402,200PPM/CEL,PB-FREE	R6122M6	0613952R01	RES,MF,10KOHM,5%,.0625W,SM,0402,200PPM/CEL,PB-FREE	R6208M6	0613952Q89	RES,MF,4700,5,.0625,SM,0402,200,PB-FREE
R601M19	0613952Q41	RES,MF,47OHM,5%,.0625W,SM,0402,200PPM/CEL,PB-FREE	R6109M6	0613952Q73	RES,MF,1KOHM,5%,.0625W,SM,0402,200PPM/CEL,PB-FREE	R6125M6	NOTPLACED	64AM DUMMY PART NUMBER	R6209M6	0613952Q89	RES,MF,4700,5,.0625,SM,0402,200,PB-FREE
R602M19	0613952Q63	RES,MF,390OHM,5%,.0625W,SM,0402,200PPM/CEL,PB-FREE	R610M19	0613952R25	RES,MF,100KOHM,5%,.0625W,SM,0402,200PPM/CEL,PB-FREE	R612M19	0613952Q94	RES,MF,7.5KOHM,5%,.0625W,SM,0402,200PPM/CEL,PB-FREE	R620M19	NOTPLACED	64AM DUMMY PART NUMBER
R603M19	0613952R25	RES,MF,100KOHM,5%,.0625W,SM,0402,200PPM/CEL,PB-FREE	R6110M6	0613952Q73	RES,MF,1KOHM,5%,.0625W,SM,0402,200PPM/CEL,PB-FREE	R613M19	0613952Q82	RES,MF,2.4KOHM,5%,.0625W,SM,0402,200PPM/CEL,PB-FREE	R6210M6	0613952Q89	RES,MF,4700,5,.0625,SM,0402,200,PB-FREE
R604M19	0613952Q63	RES,MF,390OHM,5%,.0625W,SM,0402,200PPM/CEL,PB-FREE	R6111M6	NOTPLACED	64AM DUMMY PART NUMBER	R614M19	0613952R66	RES,MF,0OHM,5%,.0625W,SM,0402,PB-FREE	R6211M6	0613952R01	RES,MF,10KOHM,5%,.0625W,SM,0402,200PPM/CEL,PB-FREE
R605M19	0613952R01	RES,MF,10KOHM,5%,.0625W,SM,0402,200PPM/CEL,PB-FREE	R6112M6	0613952Q73	RES,MF,1KOHM,5%,.0625W,SM,0402,200PPM/CEL,PB-FREE	R615M19	NOTPLACED	64AM DUMMY PART NUMBER	R6212M6	NOTPLACED	64AM DUMMY PART NUMBER
R606M19	0613952R01	RES,MF,10KOHM,5%,.0625W,SM,0402,200PPM/CEL,PB-FREE	R6113M6	0613952Q49	RES,MF,100,5,.0625,SM,0402,200,PB-FREE	R616M19	NOTPLACED	64AM DUMMY PART NUMBER	R6213M6	0613952R01	RES,MF,10KOHM,5%,.0625W,SM,0402,200PPM/CEL,PB-FREE
R607M19	0613952R25	RES,MF,100KOHM,5%,.0625W,SM,0402,200PPM/CEL,PB-FREE	R6114M6	0613952Q49	RES,MF,100,5,.0625,SM,0402,200,PB-FREE	R617M19	NOTPLACED	64AM DUMMY PART NUMBER	R6214M6	NOTPLACED	64AM DUMMY PART NUMBER
R608M19	0613952R01	RES,MF,10KOHM,5%,.0625W,SM,0402,200PPM/CEL,PB-FREE	R6115M6	0613952Q49	RES,MF,100,5,.0625,SM,0402,200,PB-FREE	R618M19	NOTPLACED	64AM DUMMY PART NUMBER	R6215M6	0613952R01	RES,MF,10KOHM,5%,.0625W,SM,0402,200PPM/CEL,PB-FREE
R609M19	0613952Q81	RES,MF,2200,5,.0625,SM,0402,200,PB-FREE	R6116M6	0613952Q73	RES,MF,1KOHM,5%,.0625W,SM,0402,200PPM/CEL,PB-FREE	R619M19	NOTPLACED	64AM DUMMY PART NUMBER	R6217M6	0613952Q73	RES,MF,1KOHM,5%,.0625W,SM,0402,200PPM/CEL,PB-FREE
R6101M6	0613952R01	RES,MF,10KOHM,5%,.0625W,SM,0402,200PPM/CEL,PB-FREE	R6117M6	0613952R01	RES,MF,10KOHM,5%,.0625W,SM,0402,200PPM/CEL,PB-FREE	R6201M6	NOTPLACED	64AM DUMMY PART NUMBER	R6218M6	0613952Q80	RES,MF,2KOHM,5%,.0625W,SM,0402,200PPM/CEL,PB-FREE
R6102M6	0613952R09	RES,MF,22000,5,.0625,SM,0402,200,PB-FREE	R6118M6	0613952R09	RES,MF,22000,5,.0625,SM,0402,200,PB-FREE	R6202M6	0613952R01	RES,MF,10KOHM,5%,.0625W,SM,0402,200PPM/CEL,PB-FREE	R621M19	NOTPLACED	64AM DUMMY PART NUMBER
R6103M6	0613952R09	RES,MF,22000,5,.0625,SM,0402,200,PB-FREE	R6119M6	0613952R01	RES,MF,10KOHM,5%,.0625W,SM,0402,200PPM/CEL,PB-FREE	R6203M6	0613952R66	RES,MF,0OHM,5%,.0625W,SM,0402,PB-FREE	R623M19	NOTPLACED	64AM DUMMY PART NUMBER
R6104M6	NOTPLACED	64AM DUMMY PART NUMBER	R611M19	0613952R01	RES,MF,10KOHM,5%,.0625W,SM,0402,200PPM/CEL,PB-FREE	R6204M6	0613952R01	RES,MF,10KOHM,5%,.0625W,SM,0402,200PPM/CEL,PB-FREE	R624M19	NOTPLACED	64AM DUMMY PART NUMBER
R6105M6	0613952R66	RES,MF,0OHM,5%,.0625W,SM,0402,PB-FREE				R6205M6	0613952R01	RES,MF,10KOHM,5%,.0625W,SM,0402,200PPM/CEL,PB-FREE	R6301M6	0613952R01	RES,MF,10KOHM,5%,.0625W,SM,0402,200PPM/CEL,PB-FREE

Ref. Des.	Part Number	Description
R6304M6	0613952R66	RES,MF,0OHM,5%,.0625W, SM,0402,PB-FREE
R6306M6	0613952R01	RES,MF,10KOHM,5%,.0625 W,SM,0402,200PPM/ CEL,PB-FREE
R6310M6	0613952Q37	RES,MF,33OHM,5%,.0625 W,SM,0402,200PPM/ CEL,PB-FREE
R6311M6	0613952Q37	RES,MF,33OHM,5%,.0625 W,SM,0402,200PPM/ CEL,PB-FREE
R6312M6	0613952Q37	RES,MF,33OHM,5%,.0625 W,SM,0402,200PPM/ CEL,PB-FREE
R6313M6	0613952Q37	RES,MF,33OHM,5%,.0625 W,SM,0402,200PPM/ CEL,PB-FREE
R6314M6	0613952Q37	RES,MF,33OHM,5%,.0625 W,SM,0402,200PPM/ CEL,PB-FREE
R6316M6	0613952R01	RES,MF,10KOHM,5%,.0625 W,SM,0402,200PPM/ CEL,PB-FREE
R6401M6	0613952R18	RES,MF,51KOHM,5%,.0625 W,SM,0402,200PPM/ CEL,PB-FREE
R6402M6	0613952R32	RES,MF,200KOHM,5%,.062 5W,SM,0402,200PPM/ CEL,PB-FREE
R6403M6	0613952Q81	RES,MF,2200,5,.0625,SM,0 402,200,PB-FREE
R6404M6	0613952Q81	RES,MF,2200,5,.0625,SM,0 402,200,PB-FREE
R6405M6	0613952Q75	RES,MF,1.2KOHM,5%,.062 5W,SM,0402,200PPM/ CEL,PB-FREE
R6406M6	0613952R01	RES,MF,10KOHM,5%,.0625 W,SM,0402,200PPM/ CEL,PB-FREE
R6407M6	0613952Q81	RES,MF,2200,5,.0625,SM,0 402,200,PB-FREE
R6409M6	0613952N01	CER CHIP RES 10.0K OHM 1 0402

Ref. Des.	Part Number	Description
R6410M6	0613952R01	RES,MF,10KOHM,5%,.0625 W,SM,0402,200PPM/ CEL,PB-FREE
R6411M6	0613952R66	RES,MF,0OHM,5%,.0625W, SM,0402,PB-FREE
R6414M6	0613952Q61	RES,MF,330OHM,5%,.0625 W,SM,0402,200PPM/ CEL,PB-FREE
R6415M6	0613952Q61	RES,MF,330OHM,5%,.0625 W,SM,0402,200PPM/ CEL,PB-FREE
R6416M6	0613952Q61	RES,MF,330OHM,5%,.0625 W,SM,0402,200PPM/ CEL,PB-FREE
R6417M6	0613952Q61	RES,MF,330OHM,5%,.0625 W,SM,0402,200PPM/ CEL,PB-FREE
R6419M6	0613952Q37	RES,MF,33OHM,5%,.0625 W,SM,0402,200PPM/ CEL,PB-FREE
R6420M6	0613952R17	RES,MF,47000,5,.0625,SM, 0402,200,PB-FREE
R6421M6	0613952R01	RES,MF,10KOHM,5%,.0625 W,SM,0402,200PPM/ CEL,PB-FREE
R6422M6	0613952Q51	RES,MF,120,5,.0625,SM,04 02,200,PB-FREE
R6423M6	0613952R66	RES,MF,0OHM,5%,.0625W, SM,0402,PB-FREE
R6424M6	0613952N01	CER CHIP RES 10.0K OHM 1 0402
R6425M6	0613952Q80	RES,MF,2KOHM,5%,.0625 W,SM,0402,200PPM/ CEL,PB-FREE
R6426M6	0613952Q49	RES,MF,100,5,.0625,SM,04 02,200,PB-FREE
R6427M6	0613952R11	RES,MF,27KOHM,5%,.0625 W,SM,0402,200PPM/ CEL,PB-FREE
R6428M6	0613952R25	RES,MF,100KOHM,5%,.062 5W,SM,0402,200PPM/ CEL,PB-FREE
R6429M6	0613952R17	RES,MF,47000,5,.0625,SM, 0402,200,PB-FREE

Ref. Des.	Part Number	Description
R6430M6	0613952R09	RES,MF,22000,5,.0625,SM, 0402,200,PB-FREE
R6431M6	0613952Q81	RES,MF,2200,5,.0625,SM,0 402,200,PB-FREE
R6432M6	0613952R25	RES,MF,100KOHM,5%,.062 5W,SM,0402,200PPM/ CEL,PB-FREE
R6433M6	0613952Q32	RES,MF,20OHM,5%,.0625 W,SM,0402,200PPM/ CEL,PB-FREE
R6434M6	0613952Q32	RES,MF,20OHM,5%,.0625 W,SM,0402,200PPM/ CEL,PB-FREE
R6435M6	0613952N01	CER CHIP RES 10.0K OHM 1 0402
R6436M6	NOTPLACED	64AM DUMMY PART NUM- BER
R6492M6	0613952Q79	RES,MF,1800,5,.0625,SM,0 402,200,PB-FREE
R6501M6	0613952Q25	RES,MF,10,5,.0625,SM,040 2,200,PB-FREE
R6502M6	0613952Q25	RES,MF,10,5,.0625,SM,040 2,200,PB-FREE
R6503M6	0613952Q25	RES,MF,10,5,.0625,SM,040 2,200,PB-FREE
R6504M6	0613952R09	RES,MF,22000,5,.0625,SM, 0402,200,PB-FREE
R6505M6	0613952Q80	RES,MF,2KOHM,5%,.0625 W,SM,0402,200PPM/ CEL,PB-FREE
R6506M6	0613952R66	RES,MF,0OHM,5%,.0625W, SM,0402,PB-FREE
R6507M6	0613952R01	RES,MF,10KOHM,5%,.0625 W,SM,0402,200PPM/ CEL,PB-FREE
R6508M6	0613952R17	RES,MF,47000,5,.0625,SM, 0402,200,PB-FREE
R6509M6	0613952R25	RES,MF,100KOHM,5%,.062 5W,SM,0402,200PPM/ CEL,PB-FREE
R6510M6	0613952R66	RES,MF,0OHM,5%,.0625W, SM,0402,PB-FREE

Ref. Des.	Part Number	Description
R6511M6	0613952R01	RES,MF,10KOHM,5%,.0625 W,SM,0402,200PPM/ CEL,PB-FREE
R6512M6	0613952N01	CER CHIP RES 10.0K OHM 1 0402
R6513M6	0613952R66	RES,MF,0OHM,5%,.0625W, SM,0402,PB-FREE
R6514M6	0613952Q89	RES,MF,4700,5,.0625,SM,0 402,200,PB-FREE
R6515M6	0613952R66	RES,MF,0OHM,5%,.0625W, SM,0402,PB-FREE
R6516M6	0613952R66	RES,MF,0OHM,5%,.0625W, SM,0402,PB-FREE
R6517M6	0613952Q63	RES,MF,390OHM,5%,.0625 W,SM,0402,200PPM/ CEL,PB-FREE
R6518M6	0613952R66	RES,MF,0OHM,5%,.0625W, SM,0402,PB-FREE
R6519M6	0613952Q89	RES,MF,4700,5,.0625,SM,0 402,200,PB-FREE
R6520M6	0613952Q73	RES,MF,1KOHM,5%,.0625 W,SM,0402,200PPM/ CEL,PB-FREE
R6521M6	0615049H01	RES,MF,.2OHM,1%,.5W,120 6,KAMAYA 0.2 OHM CHIP RES
R6522M6	0613952M66	CER CHIP RES 4750 OHM 1% 0402
R6523M6	0613952R09	RES,MF,22000,5,.0625,SM, 0402,200,PB-FREE
R6524M6	0613952R66	RES,MF,0OHM,5%,.0625W, SM,0402,PB-FREE
R6525M6	NOTPLACED	64AM DUMMY PART NUM- BER
R6526M6	0613952R66	RES,MF,0OHM,5%,.0625W, SM,0402,PB-FREE
R6527M6	0613952N87	RES,MF,78.7KOHM,1%,.06 25W,SM,0402,200PPM/ CEL,PB-FREE
R6528M6	0613952R25	RES,MF,100KOHM,5%,.062 5W,SM,0402,200PPM/ CEL,PB-FREE

Ref. Des.	Part Number	Description
R6529M6	0615049H01	RES,MF,.2OHM,1%,.5W,120 6,KAMAYA 0.2 OHM CHIP RES
R6530M6	0613952L30	RES,MF,200OHM,1%,.0625 W,SM,0402,200PPM/ CEL,PB-FREE
R6531M6	0613952R01	RES,MF,10KOHM,5%,.0625 W,SM,0402,200PPM/ CEL,PB-FREE
R6532M6	NOTPLACED	64AM DUMMY PART NUM- BER
R6533M6	0613952R66	RES,MF,0OHM,5%,.0625W, SM,0402,PB-FREE
R6534M6	NOTPLACED	64AM DUMMY PART NUM- BER
R6535M6	0613952N01	CER CHIP RES 10.0K OHM 1 0402
R6536M6	0613952Z72	RES,MF,91KOHM,1%,.0625 W,SM,0402,200PPM/ CEL,PB-FREE
R6537M6	0613952P09	CER CHIP RES 121K OHM 1 0402
R6538M6	0613952Q95	RES,MF,8.2KOHM,5%,.062 5W,SM,0402,200PPM/ CEL,PB-FREE
R6539M6	0613952P66	RES,MF,475KOHM,1%,.062 5W,SM,0402,200PPM/ CEL,PB-FREE
R6540M6	0613952P66	RES,MF,475KOHM,1%,.062 5W,SM,0402,200PPM/ CEL,PB-FREE
R6541M6	0613952R25	RES,MF,100KOHM,5%,.062 5W,SM,0402,200PPM/ CEL,PB-FREE
R6542M6	0613952R66	RES,MF,0OHM,5%,.0625W, SM,0402,PB-FREE
R6543M6	0613952R66	RES,MF,0OHM,5%,.0625W, SM,0402,PB-FREE
R6544M6	0613952R66	RES,MF,0OHM,5%,.0625W, SM,0402,PB-FREE
R6545M6	0613952R25	RES,MF,100KOHM,5%,.062 5W,SM,0402,200PPM/ CEL,PB-FREE

Ref. Des.	Part Number	Description
R6546M6	0613952R66	RES,MF,0OHM,5%,.0625W, SM,0402,PB-FREE
R6547M6	0613952R66	RES,MF,0OHM,5%,.0625W, SM,0402,PB-FREE
R6548M6	NOTPLACED	64AM DUMMY PART NUM- BER
R6550M6	0613952Z64	RES,MF,39KOHM,1%,.0625 W,SM,0402,200PPM/ CEL,PB-FREE
R6551M6	0613952Z62	RES,MF,33KOHM,1%,.0625 W,SM,0402,200PPM/ CEL,PB-FREE
R6552M6	0613952R25	RES,MF,100KOHM,5%,.062 5W,SM,0402,200PPM/ CEL,PB-FREE
R6558M6	0613952P22	RES,MF,165KOHM,1%,.062 5W,SM,0402,200PPM/ CEL,PB-FREE
R6561M6	0613952R66	RES,MF,0OHM,5%,.0625W, SM,0402,PB-FREE
R6562M6	0613952R66	RES,MF,0OHM,5%,.0625W, SM,0402,PB-FREE
R6563M6	0613952R66	RES,MF,0OHM,5%,.0625W, SM,0402,PB-FREE
R6564M6	0613952R66	RES,MF,0OHM,5%,.0625W, SM,0402,PB-FREE
R6565M6	0613952R66	RES,MF,0OHM,5%,.0625W, SM,0402,PB-FREE
R6566M6	0613952R66	RES,MF,0OHM,5%,.0625W, SM,0402,PB-FREE
R6567M6	0613952R66	RES,MF,0OHM,5%,.0625W, SM,0402,PB-FREE
R6568M6	0613952P47	RES,MF,301KOHM,1%,.062 5W,SM,0402,200PPM/ CEL,PB-FREE
R6570M6	0613952R66	RES,MF,0OHM,5%,.0625W, SM,0402,PB-FREE
R6574M6	0613952R25	RES,MF,100KOHM,5%,.062 5W,SM,0402,200PPM/ CEL,PB-FREE
R6576M6	0613952R01	RES,MF,10KOHM,5%,.0625 W,SM,0402,200PPM/ CEL,PB-FREE

Ref. Des.	Part Number	Description
R6577M6	0613952Q89	RES,MF,4700,5,.0625,SM,0 402,200,PB-FREE
R6578M6	0613952Q89	RES,MF,4700,5,.0625,SM,0 402,200,PB-FREE
R6579M6	0613952R01	RES,MF,10KOHM,5%,.0625 W,SM,0402,200PPM/ CEL,PB-FREE
R6580M6	0613952R17	RES,MF,47000,5,.0625,SM, 0402,200,PB-FREE
R6581M6	0613952Q49	RES,MF,100,5,.0625,SM,04 02,200,PB-FREE
R6582M6	0613952Q89	RES,MF,4700,5,.0625,SM,0 402,200,PB-FREE
R6583M6	0613952R03	RES,MF,12000,5,.0625,SM, 0402,200,PB-FREE
R6584M6	0613952Q56	RES,MF,200OHM,5%,.0625 W,SM,0402,200PPM/ CEL,PB-FREE
R6592M6	0613952R66	RES,MF,0OHM,5%,.0625W, SM,0402,PB-FREE
R6598M6	0613952R66	RES,MF,0OHM,5%,.0625W, SM,0402,PB-FREE
R6599M6	NOTPLACED	64AM DUMMY PART NUM- BER
R6601M6	0613952R01	RES,MF,10KOHM,5%,.0625 W,SM,0402,200PPM/ CEL,PB-FREE
R6602M6	0613952R01	RES,MF,10KOHM,5%,.0625 W,SM,0402,200PPM/ CEL,PB-FREE
R6604M6	0613952Q49	RES,MF,100,5,.0625,SM,04 02,200,PB-FREE
R6605M6	0613952Q33	RES,MF,22,5,.0625,SM,040 2,200,PB-FREE
R6606M6	0613952Q37	RES,MF,33OHM,5%,.0625 W,SM,0402,200PPM/ CEL,PB-FREE
R6608M6	0613952R01	RES,MF,10KOHM,5%,.0625 W,SM,0402,200PPM/ CEL,PB-FREE
R6609M6	0613952R25	RES,MF,100KOHM,5%,.062 5W,SM,0402,200PPM/ CEL,PB-FREE

Ref. Des.	Part Number	Description
R6616M6	0613952Q80	RES,MF,2KOHM,5%,.0625 W,SM,0402,200PPM/ CEL,PB-FREE
R6617M6	0613952R01	RES,MF,10KOHM,5%,.0625 W,SM,0402,200PPM/ CEL,PB-FREE
R6618M6	0613952R01	RES,MF,10KOHM,5%,.0625 W,SM,0402,200PPM/ CEL,PB-FREE
R6619M6	0613952R01	RES,MF,10KOHM,5%,.0625 W,SM,0402,200PPM/ CEL,PB-FREE
R6621M6	0613952Q89	RES,MF,4700,5,.0625,SM,0 402,200,PB-FREE
R6622M6	0613952Q35	RES,MF,27OHM,5%,.0625 W,SM,0402,200PPM/ CEL,PB-FREE
R6623M6	0613952Q35	RES,MF,27OHM,5%,.0625 W,SM,0402,200PPM/ CEL,PB-FREE
R6624M6	0613952Q35	RES,MF,27OHM,5%,.0625 W,SM,0402,200PPM/ CEL,PB-FREE
R6625M6	0613952Q35	RES,MF,27OHM,5%,.0625 W,SM,0402,200PPM/ CEL,PB-FREE
R6626M6	0613952R01	RES,MF,10KOHM,5%,.0625 W,SM,0402,200PPM/ CEL,PB-FREE
R698M19	0613952R66	RES,MF,0OHM,5%,.0625W, SM,0402,PB-FREE
R699M19	0613952R66	RES,MF,0OHM,5%,.0625W, SM,0402,PB-FREE
R701M7	0613952Q69	RES,MF,680OHM,5%,.0625 W,SM,0402,200PPM/ CEL,PB-FREE
R702M7	0613952R66	RES,MF,0OHM,5%,.0625W, SM,0402,PB-FREE
R703M7	0613952Q67	RES,MF,560OHM,5%,.0625 W,SM,0402,200PPM/ CEL,PB-FREE
R704M7	0613952Q25	RES,MF,10,5,.0625,SM,040 2,200,PB-FREE

Ref. Des.	Part Number	Description
R705M7	0613952Q75	RES,MF,1.2KOHM,5%,.0625W,SM,0402,200PPM/CEL,PB-FREE
R706M7	0613952R66	RES,MF,0OHM,5%,.0625W,SM,0402,PB-FREE
R707M7	0613952Q67	RES,MF,560OHM,5%,.0625W,SM,0402,200PPM/CEL,PB-FREE
R708M7	0613952Q45	RES,MF,68OHM,5%,.0625W,SM,0402,200PPM/CEL,PB-FREE
R709M7	NOTPLACED	64AM DUMMY PART NUMBER
R721M7	0613952R01	RES,MF,10KOHM,5%,.0625W,SM,0402,200PPM/CEL,PB-FREE
R722M7	0613952Q56	RES,MF,200OHM,5%,.0625W,SM,0402,200PPM/CEL,PB-FREE
R723M7	0613952Q82	RES,MF,2.4KOHM,5%,.0625W,SM,0402,200PPM/CEL,PB-FREE
R728M7	0613952Q37	RES,MF,33OHM,5%,.0625W,SM,0402,200PPM/CEL,PB-FREE
R729M7	0613952R09	RES,MF,22000,5,.0625,SM,0402,200,PB-FREE
R730M7	0613952Q84	RES,MF,3KOHM,5%,.0625W,SM,0402,200PPM/CEL,PB-FREE
R734M7	0613952Q47	RES,MF,82OHM,5%,.0625W,SMD,0402,200PPM/CEL,CER CHIP 82.0 OHM 5%
R736M7	0613952Q55	RES,MF,180OHM,5%,.0625W,SM,0402,200PPM/CEL,PB-FREE
R741M7	0613952R09	RES,MF,22000,5,.0625,SM,0402,200,PB-FREE
R742M7	0613952R23	RES,MF,82KOHM,5%,.0625W,SM,0402,200PPM/CEL,PB-FREE
R743M7	0613952R17	RES,MF,47000,5,.0625,SM,0402,200,PB-FREE

Ref. Des.	Part Number	Description
R744M7	0613952Q91	RES,MF,5600,5,.0625,SM,0402,200,PB-FREE
R745M7	0613952R09	RES,MF,22000,5,.0625,SM,0402,200,PB-FREE
R746M7	0613952Q34	RES,MF,24OHM,5%,.0625W,SM,0402,200PPM/CEL,PB-FREE
R747M7	0613952Q39	RES,MF,39OHM,5%,.0625W,SM,0402,200PPM/CEL,PB-FREE
R748M7	0613952Q47	RES,MF,82OHM,5%,.0625W,SMD,0402,200PPM/CEL,CER CHIP 82.0 OHM 5%
R751M7	0613952Q59	RES,MF,270OHM,5%,.0625W,SM,0402,200PPM/CEL,PB-FREE
R754M7	0613952Q71	RES,MF,820OHM,5%,.0625W,SM,0402,200PPM/CEL,PB-FREE
R757M7	0613952Q59	RES,MF,270OHM,5%,.0625W,SM,0402,200PPM/CEL,PB-FREE
R761M7	0613952Q23	RES,MF,8.2OHM,5%,.0625W,SM,0402,200PPM/CEL,PB-FREE
R762M7	0613952R08	RES,MF,20KOHM,5%,.0625W,SM,0402,200PPM/CEL,PB-FREE
R763M7	0613952R19	RES,MF,56KOHM,5%,.0625W,SM,0402,200PPM/CEL,PB-FREE
R765M7	2414017P23	IDCTR,CHIP,68NH,5%,180MA,2.2OHM,CER,8Q,800MHZ SRF,SM,0402,P
R766M7	0613952Q92	RES,MF,6.2KOHM,5%,.0625W,SM,0402,200PPM/CEL,PB-FREE
R769M7	0613952Q29	RES,MF,15OHM,5%,.0625W,SM,0402,200PPM/CEL,PB-FREE
R771M7	0613952Q49	RES,MF,100,5,.0625,SM,0402,200,PB-FREE

Ref. Des.	Part Number	Description
R776M7	0613952Q67	RES,MF,560OHM,5%,.0625W,SM,0402,200PPM/CEL,PB-FREE
R778M7	2113944A30	CAP,CHIP,27PF,+5%,-5%,50V-DC,0402,C0G,-55DEG CMIN,125DEG CMAX,P
R779M7	NOTPLACED	64AM DUMMY PART NUMBER
R785M7	0613952Q60	RES,MF,300OHM,5%,.0625W,SM,0402,200PPM/CEL,PB-FREE
R799M7	0613952Q60	RES,MF,300OHM,5%,.0625W,SM,0402,200PPM/CEL,PB-FREE
R809M7	0613952Q31	RES,MF,18OHM,5%,.0625W,SM,0402,200PPM/CEL,PB-FREE
R822M7	NOTPLACED	64AM DUMMY PART NUMBER
R823M7	NOTPLACED	64AM DUMMY PART NUMBER
R901M16	0613952R01	RES,MF,10KOHM,5%,.0625W,SM,0402,200PPM/CEL,PB-FREE
R902M16	0613952R01	RES,MF,10KOHM,5%,.0625W,SM,0402,200PPM/CEL,PB-FREE
R903M16	0613952R21	RES,MF,68KOHM,5%,.0625W,SM,0402,200PPM/CEL,PB-FREE
R904M16	0613952R13	RES,MF,33KOHM,5%,.0625W,SM,0402,200PPM/CEL,PB-FREE
R905M16	0613952Q73	RES,MF,1KOHM,5%,.0625W,SM,0402,200PPM/CEL,PB-FREE
R906M16	0613952Q61	RES,MF,330OHM,5%,.0625W,SM,0402,200PPM/CEL,PB-FREE
R907M16	2113944A31	CAP,CHIP,33PF,+5%,-5%,50V-DC,0402,C0G,-55DEG CMIN,125DEG CMAX,P

Ref. Des.	Part Number	Description
R908M16	2113944A30	CAP,CHIP,27PF,+5%,-5%,50V-DC,0402,C0G,-55DEG CMIN,125DEG CMAX,P
R909M16	2414017P21	IDCTR,CHIP,47NH,5%,200MA,2OHM,CER,8Q,700MHZ SRF,SM,0402,PB-
T506M21	2575851B01	XFMR,BALUN,RF XFMR BALUN
T507M21	2575851B02	XFMR,BALUN,25,SM,RF XFMR BALUN
U1101M11	5188032U43	IC,SENSING CIRCUIT,INA138,SM,SOT-23/5,1PER PKG
U1103M11	5185070Y01	IC,TEMP SENS
U1104M11	5185941F56	IC,OP AMP,1PER PKG,RAIL-RAIL,SOIC,IC SNGL LV LP OP AMP
U1105M11	5180390L83	IC,CNTRLR,SM,1PER PKG
U1106M11	5175772B05	IC,LTC5532ES6,SOT-23,1PER PKG,PRCN RF DET
U1112M11	5175772B04	IC,HMC468LP3E,QFN,1 DB LSB GAAS MMIC ATTEN
U1113M11	5185941F56	IC,OP AMP,1PER PKG,RAIL-RAIL,SOIC,IC SNGL LV LP OP AMP
U1114M11	5185941F56	IC,OP AMP,1PER PKG,RAIL-RAIL,SOIC,IC SNGL LV LP OP AMP
U1119M11	5109522E94	GATE,AND,1PER PKG,SM,2 INPUT IN NANO PKG
U1121M11	5114000B52	IC,XOR,LOGIC LEVEL SHIFTER,1PER PKG,SM,SOT-353,PB-FREE
U1125M11	5175206H01	IC,DAC,W/ 5 PPM/C INT REF
U1126M11	5109817F77	IC,COMPTR,LMV7275,SC70-5
U1127M11	5171779H01	IC,ANLG SW,SC70,SC70-6,1PER PKG,SPDT ANLG SW



Ref. Des.	Part Number	Description	Ref. Des.	Part Number	Description	Ref. Des.	Part Number	Description	Ref. Des.	Part Number	Description
U1128M11	5188085K11	IC,NAND,SINGLE 2 INPUT,SN74LVC1G00YZPR,SM,GATE, POS, 5 DSBGA,	U1147M11	5109522E94	GATE,AND,1PER PKG,SM,2 INPUT IN NANO PKG	U2701M13	5103535B53	IC,INVTR,DL,NC7WZ04L6X,2PER PKG,SC70	U6101M6	0180706J18	IC,PGM,PGM CPLD
U1129M11	5175143H01	IC,WIDE SPLY RANGE OP AMP	U1148M11	5185941F56	IC,OP AMP,1PER PKG,RAIL-RAIL,SOIC,IC SNGL LV LP OP AMP	U2702M13	5185941F45	ATTEN,VAR,14.4DBMIN,15.6DBMAX,0-2000 MHZ-FREQ,50OHM,PCMT,SOT-25	U6102M6	5188691V01	IC,MUX/ DEMUX,NC7SB3157P6X,SM,SC70-6,1PER PKG,BUS,PB FREE
U1130M11	5175143H01	IC,WIDE SPLY RANGE OP AMP	U1149M11	5109522E93	GATE,OR,SN74LVC1G32YZPR,1PER PKG,SM,2 INPUT IN NANO PKG	U304M20	4885316E32	XSTR,BIP RF SML SGNL,SLCN,BFR380F,SM,SMT,6V,380W,80A,14MHZ,TR	U6103M6	5175114H01	IC,SNGL AND GATE MICROPAK
U1131M11	5109817F77	IC,COMPTR,LMV7275,SC70-5	U1150M11	51009381001	IC,MICROPOWER SOT-23 V REF	U3238M22	5171972L01	IC,SW,SP3T RF SW	U6104M6	5175114H01	IC,SNGL AND GATE MICROPAK
U1132M11	5114007M28	IC,D FLIP-FLOP,1PER PKG,17SZ74,N-I,SM,SOIC8,PB-FREE	U1301M3	51007377001	IC,XCVR,NL5500,BGA,BLU-ETOOTH, GPS, FM RX, FM TX	U4001M2	5164852H47	IC,XLTR,2PER PKG,TSSOP8,IC, I2C LEV XLTR	U6105M6	5175114H01	IC,SNGL AND GATE MICROPAK
U1133M11	5171779H01	IC,ANLG SW,SC70,SC70-6,1PER PKG,SPDT ANLG SW	U1304M3	51007599001	AMP,20.0DB,1.58GHZMIN,1.58GHZMAX,SLCN GERMANIUM GPS LOW NOISE AM	U4003M2	5188691V01	IC,MUX/ DEMUX,NC7SB3157P6X,SM,SC70-6,1PER PKG,BUS,PB FREE	U6201M6	5185941F26	IC,COMPTR,LMV7219,SM,SOT-23/5,IC,LM7219,COMPARTATOR,NOPB
U1136M11	5109522E94	GATE,AND,1PER PKG,SM,2 INPUT IN NANO PKG	U1305M3	5187344N09	IC,LNR V REGLTR,FXD,2.8V,100MA,LOW NOISE	U4004M2	5116783H01	IC,ANLG SW,SN74LVC2G66YZPR,SM,2PER PKG,0CHANNELS,BILATERAL,DL	U6301M6	51012058002	IC,SDRAM,512MBITS,8 MEG X 16 X 4 BANKS,6NS,SM,MOBILE LPDDR 5
U1137M11	5164852H16	IC,TRANSLATING,2PER PKG,LVC2T45,TRANSCIEVER W/VOLTAGE TRANSLATI	U200M12	5188493T01	IC,VREG/ SWG,LP2989,SM,MINI SO-8 HI PRCN REG 5V	U507M21	5164015H81	IC,MXR,SM	U6302M6	5102495J13	IC,MICROP,P1710ZZGE,BGA,12MHZ,32BITS
U1138M11	5164852H16	IC,TRANSLATING,2PER PKG,LVC2T45,TRANSCIEVER W/VOLTAGE TRANSLATI	U201M12	5175771A99	IC,LNR V REGLTR,FXD,100MA,VFBGA,LOW NOISE, 100MA LINEAR REGL	U601M19	5102495J14	IC,IF,IF DIGITILIZING SUBSYSTEM IC,AD9864,QFN	U6304M6	0105955U25	ASSY,ASSY,ASSY,IC,BGA SPEC PROG, FLSH MEM
U1139M11	5164852H16	IC,TRANSLATING,2PER PKG,LVC2T45,TRANSCIEVER W/VOLTAGE TRANSLATI	U202M12	5175772B02	IC,LNR V REGLTR,FXD,1.8V,100MA,VFBGA,LINEAR REGLTR 100MA 1.8	U602M19	4885316E32	XSTR,BIP RF SML SGNL,SLCN,BFR380F,SM,SMT,6V,380W,80A,14MHZ,TR	U6401M6	5175772B38	IC,IC ANLG TEMP SENSOR
U1141M11	5185941F56	IC,OP AMP,1PER PKG,RAIL-RAIL,SOIC,IC SNGL LV LP OP AMP	U203M12	5175772B01	IC,LNR V REGLTR,FXD,1.5V,350MA,VFBGA,LINEAR V REGLTR 350MA	U603M19	5109522E84	IC,DL SCHK TRIG MICRO PAK	U6402M6	5115453H01	IC,OP AMP,2PER PKG,RAIL TO RAIL OUTPUT, 8 PIN BGA
U1142M11	5185941F56	IC,OP AMP,1PER PKG,RAIL-RAIL,SOIC,IC SNGL LV LP OP AMP	U2101M2	5109522E84	IC,DL SCHK TRIG MICRO PAK	U604M19	5109522E84	IC,DL SCHK TRIG MICRO PAK	U6404M6	5175772B38	IC,IC ANLG TEMP SENSOR
U1143M11	5185941F56	IC,OP AMP,1PER PKG,RAIL-RAIL,SOIC,IC SNGL LV LP OP AMP	U2102M2	5109522E84	IC,DL SCHK TRIG MICRO PAK	U605M19	5164852H16	IC,TRANSLATING,2PER PKG,LVC2T45,TRANSCIEVER W/VOLTAGE TRANSLATI	U6405M6	5188348V06	IC,AUDIO CODEC,SM,AUDIO CODEC
U1144M11	5171779H01	IC,ANLG SW,SC70,SC70-6,1PER PKG,SPDT ANLG SW	U2201M2	5171679H01	IC,DISP DRVR,LED LT DRVR	U606M19	5164852H16	IC,TRANSLATING,2PER PKG,LVC2T45,TRANSCIEVER W/VOLTAGE TRANSLATI	U6408M6	5188521T01	IC,VREF,SM,SOT23,1PER PKG,5%,1.25 TO 13.75,PRCN BANDGAP ADJUS
U1146M11	5109522E93	GATE,OR,SN74LVC1G32YZPR,1PER PKG,SM,2 INPUT IN NANO PKG	U2202M2	5164852H47	IC,XLTR,2PER PKG,TSSOP8,IC, I2C LEV XLTR	U607M19	5186311J24	IC,BFR,1PER PKG,NC7SZ125,ACTIVE HIGH,BFR,3ST,SM,5.5	U6409M6	51009000001	IC,COMPTR,SC70,NANOPOWER, 1.8V, SC70 COMPTR
									U6410M6	5175772B38	IC,IC ANLG TEMP SENSOR
									U6411M6	5109731C55	IC,AU AMP,BGA,2.75 FXD GAIN MONO FLTR-FREE
									U6501M6	5185143E77	IC,CUST,BGA,IC, MAKO ASIC, CMOS PWR MGMT

Ref. Des.	Part Number	Description
U6502M6	4871987H01	XSTR,BIP GP POWER,12V,1A,LOW FREQ XSTR
U6503M6	5171674H01	IC,OP AMP,SO-8,OP AMP
U6504M6	5171682H01	IC,DC TO DC CON- VERTER,800MA BUCK REGLTR
U6505M6	5189631P01	IC,0PER PKG,SYNC STEP- DOWN CONV
U6506M6	5184790Y04	IC,LINEAR VOLTAGE REG- ULATOR,400MA
U6507M6	5171682H01	IC,DC TO DC CON- VERTER,800MA BUCK REGLTR
U6508M6	51009366001	IC,LNR V REGLTR,LLP6,500MA LOW DROPOUT CMOS LINEAR REG
U6509M6	5175114H01	IC,SNGL AND GATE MICROPAK
U6510M6	5114007A47	IC,OR,17SZ32,1PER PKG,SOT-353,PB FREE
U6511M6	5171339H01	IC,MC78LC18,MICROPO- WER V REGLTR
U6601M6	5175114H01	IC,SNGL AND GATE MICROPAK
U702M7	5164015H28	IC,CUST,MULTI PROTO- COL/BAND TRANSCVR IC,SM,BGA,TRIDENT, INTEG
U738M7	5171972L01	IC,SW,SP3T RF SW
U746M7	4805218N63	XSTR,GEN PURPOSE SMALL SIG,SOT- 323,BROADBAND AND XSTR
U901M16	5175143H01	IC,WIDE SPLY RANGE OP AMP
U902M16	51012101001	VHF/UHF/800/900 MHZ LDMOS DRIVER IC
VR101M12	4813977M29	DIODE,ZEN,MBZ5250,SM,S OT-23,ZEN,PB-FREE
VR200M12	4813977M29	DIODE,ZEN,MBZ5250,SM,S OT-23,ZEN,PB-FREE

Ref. Des.	Part Number	Description
VR601M19	4805656W87	DIODE,VCTR, @ 15V,1SV279,SOD-523/SC- 79,SOD-523/SC-79
VR602M19	4805656W87	DIODE,VCTR, @ 15V,1SV279,SOD-523/SC- 79,SOD-523/SC-79
Y1304M3	48014600001	OSC,TCXO,26.0
Y6501M6	93012044001	OSC,XO,24.576MHZ,SM,XT AL U SMD 5.0X3.2 24.576MHZ
Y6502M6	4809995L05	RESON,QRTZ,32.768KHZ, SM,FUND,9PF LOAD CAP,- 40DEG C MIN,85DE
Y6601M6	4802582S85	RESON,QRTZ,12MHZ,10P PM TOL,18PPM STAB,SM,FUND,AT,10PF LOAD CAP
Y701M7	4871886H01	OSC,VO,16.8 MHZ VCTXO .8PPM

### 8.3 Transceiver (RF) Boards: UHF1 (84012313002 / PC000353A01)

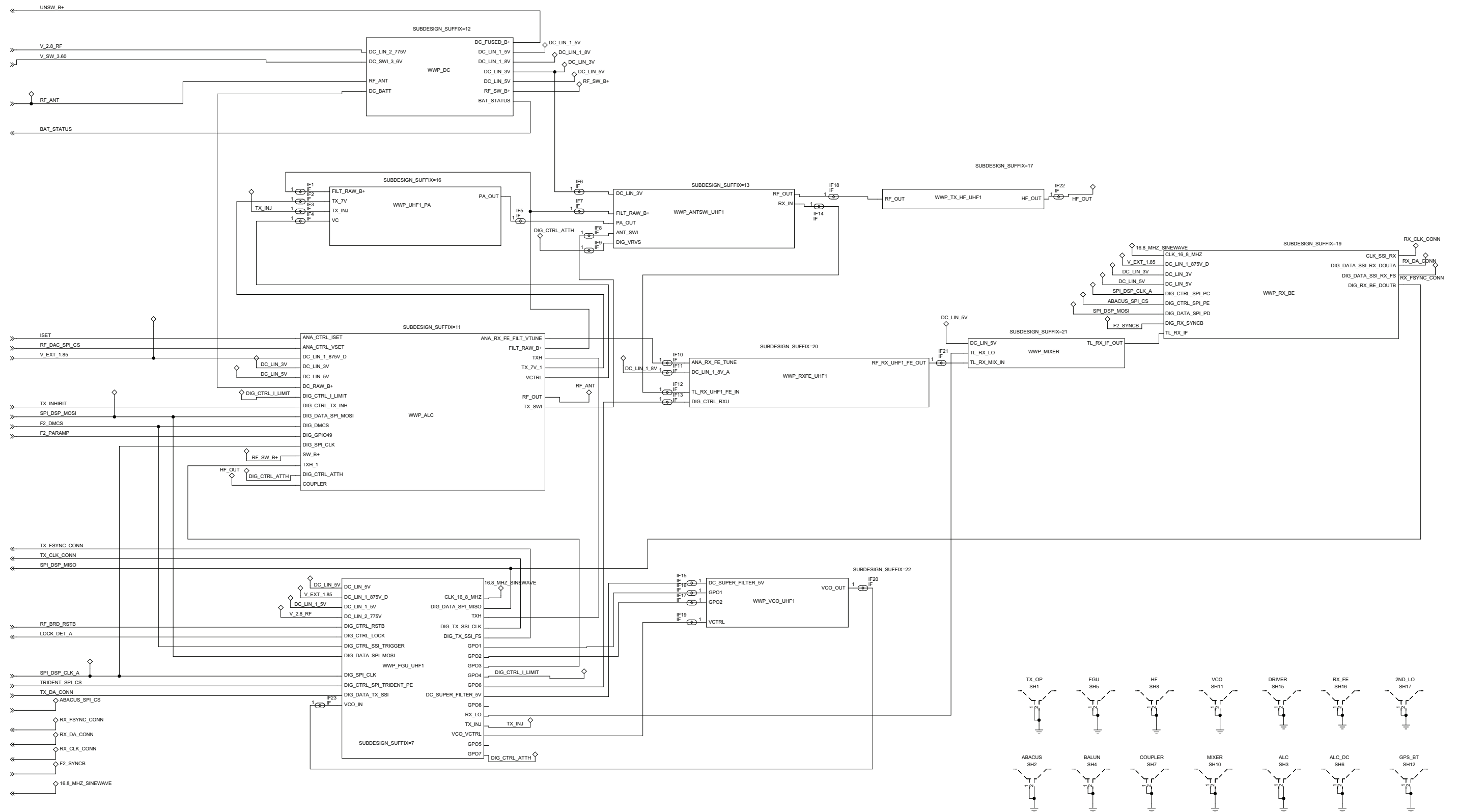


Figure 8-40. Transceiver (RF) Mainboard Overall Schematic (84012313002)

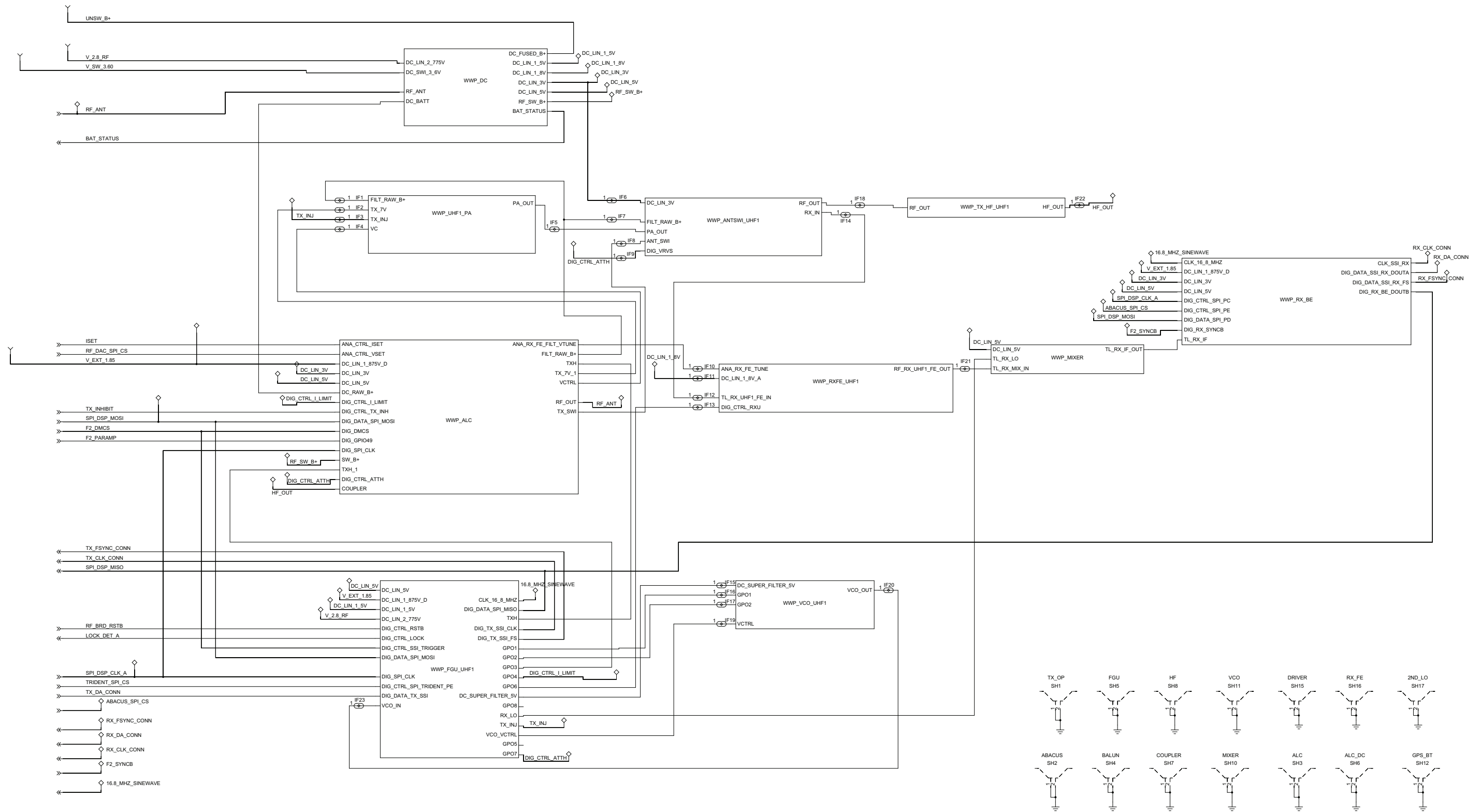


Figure 8-41. Transceiver (RF) Mainboard Overall Schematic (PC000353A01) – 1 of 2

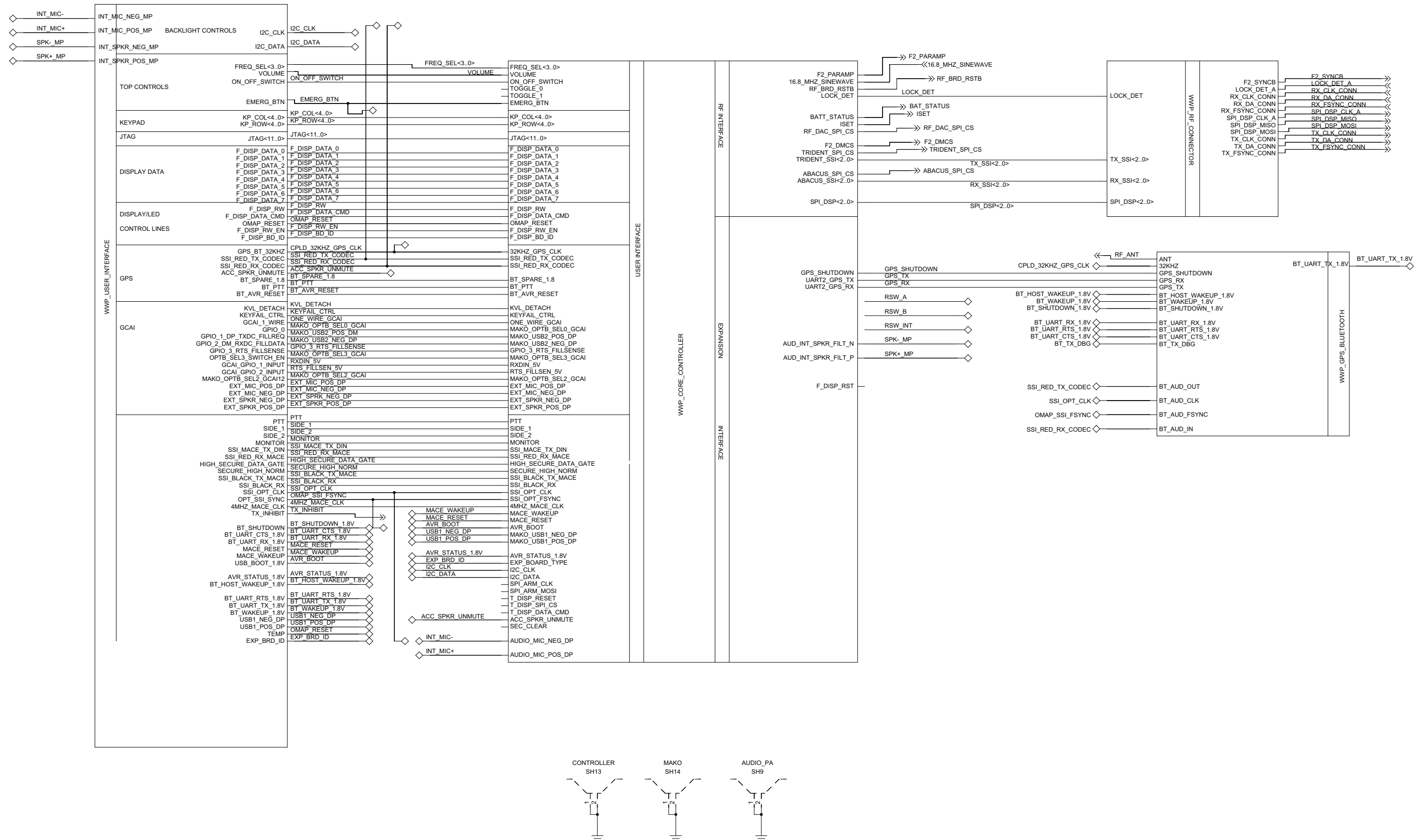


Figure 8-42. Transceiver (RF) Mainboard Overall Schematic (PC000353A01) – 2 of 2

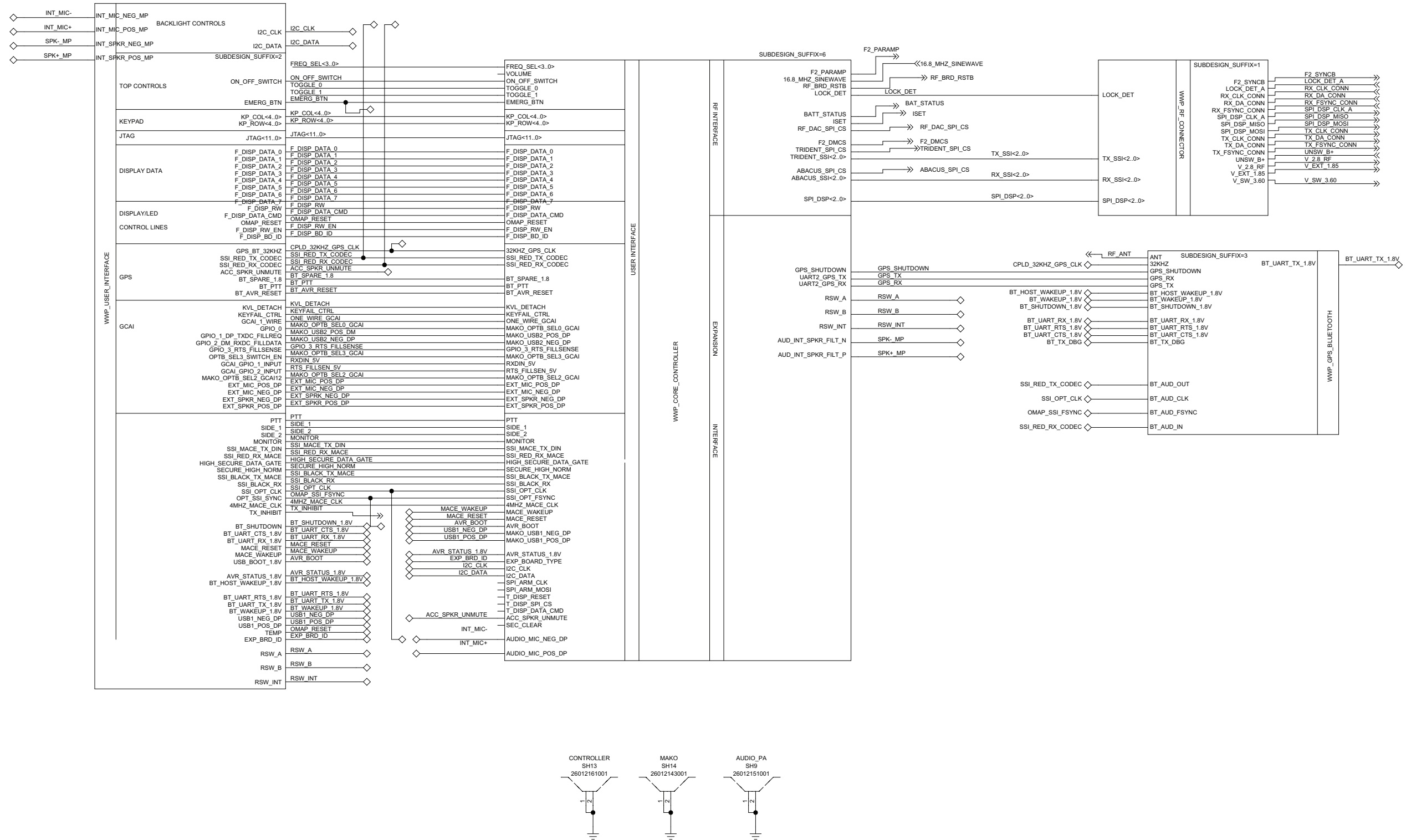


Figure 8-43. Controller Mainboard Circuit

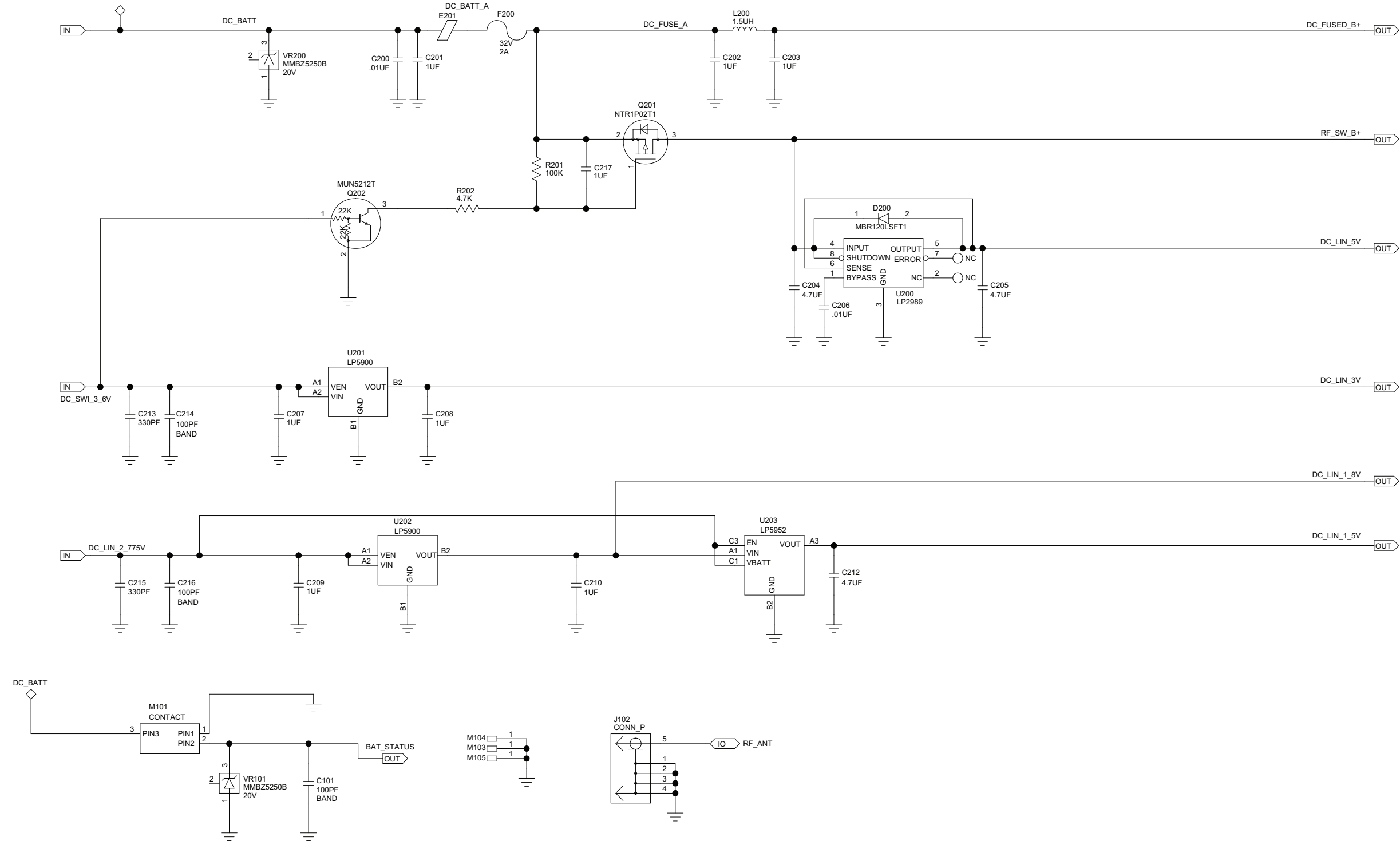


Figure 8-44. DC Circuit

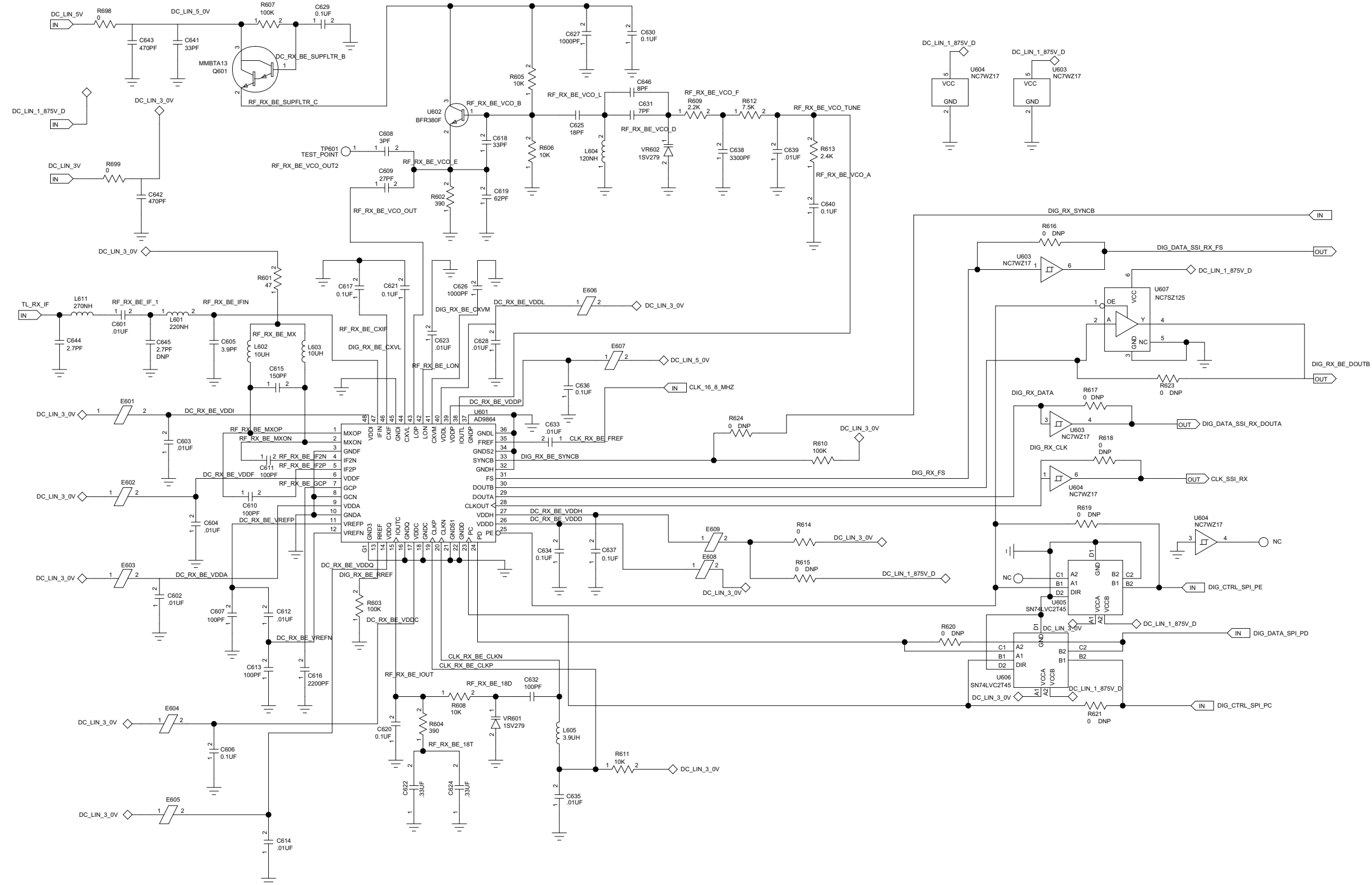


Figure 8-45. Receiver Back End Circuit



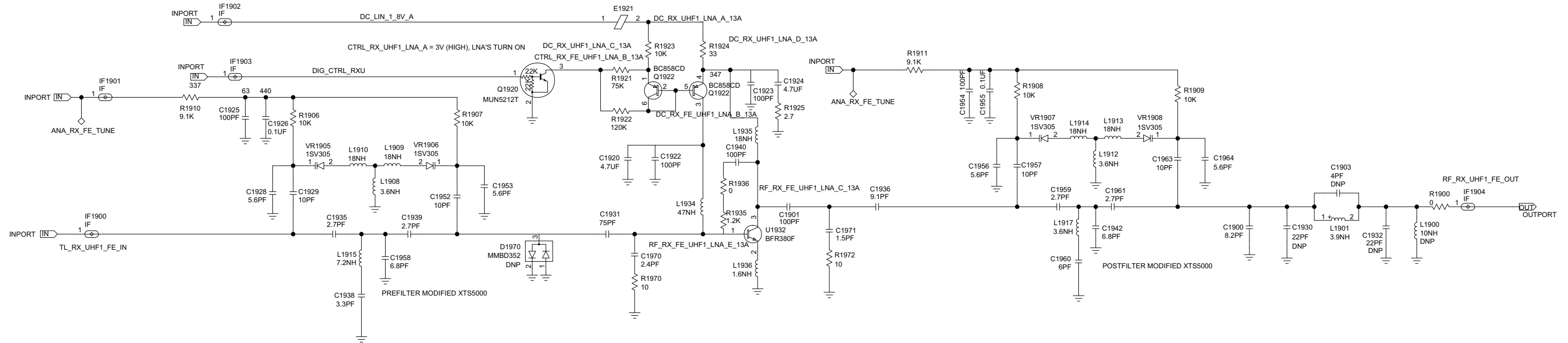


Figure 8-46. Receiver Front End Circuit

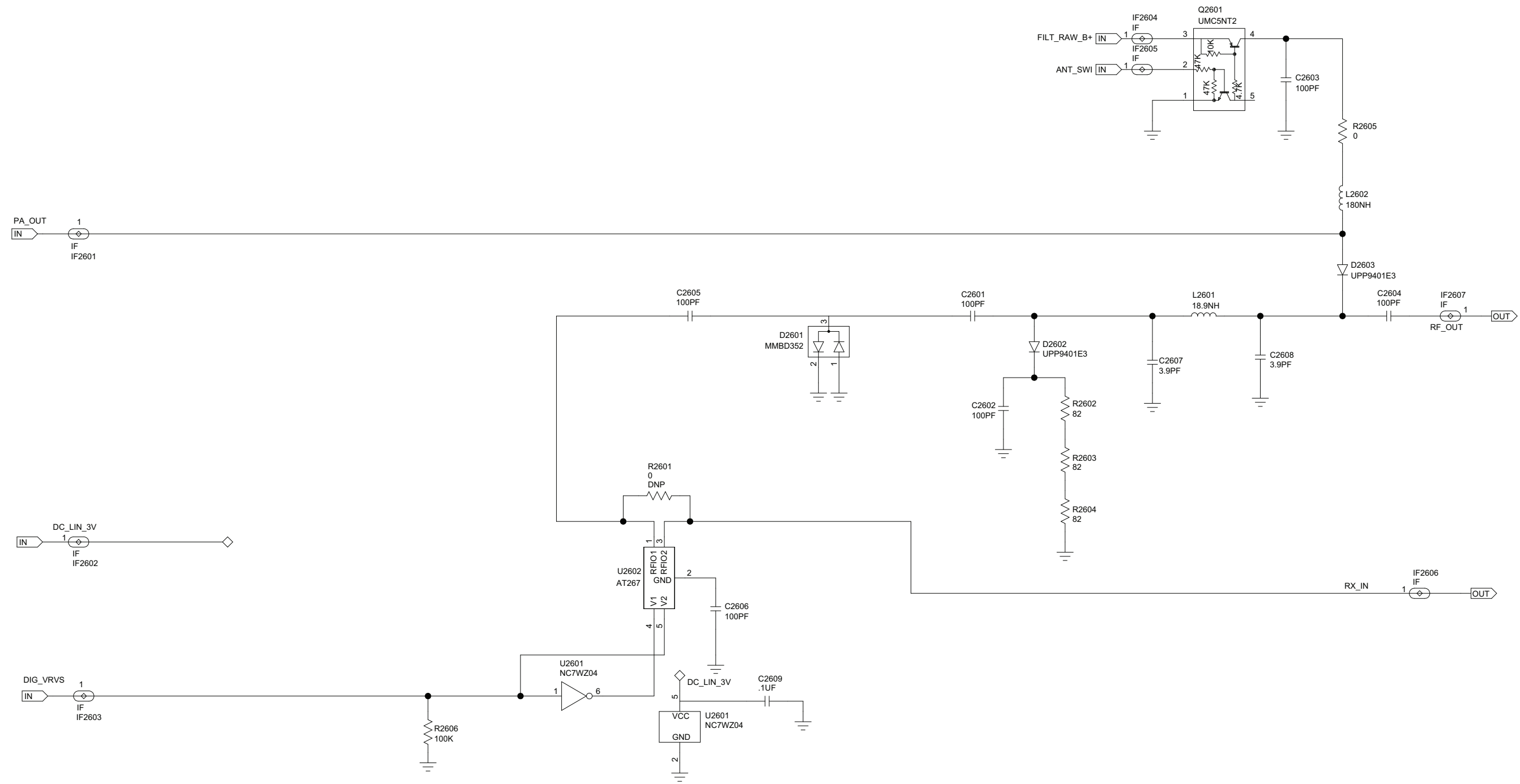


Figure 8-47. ANTSWI Circuit

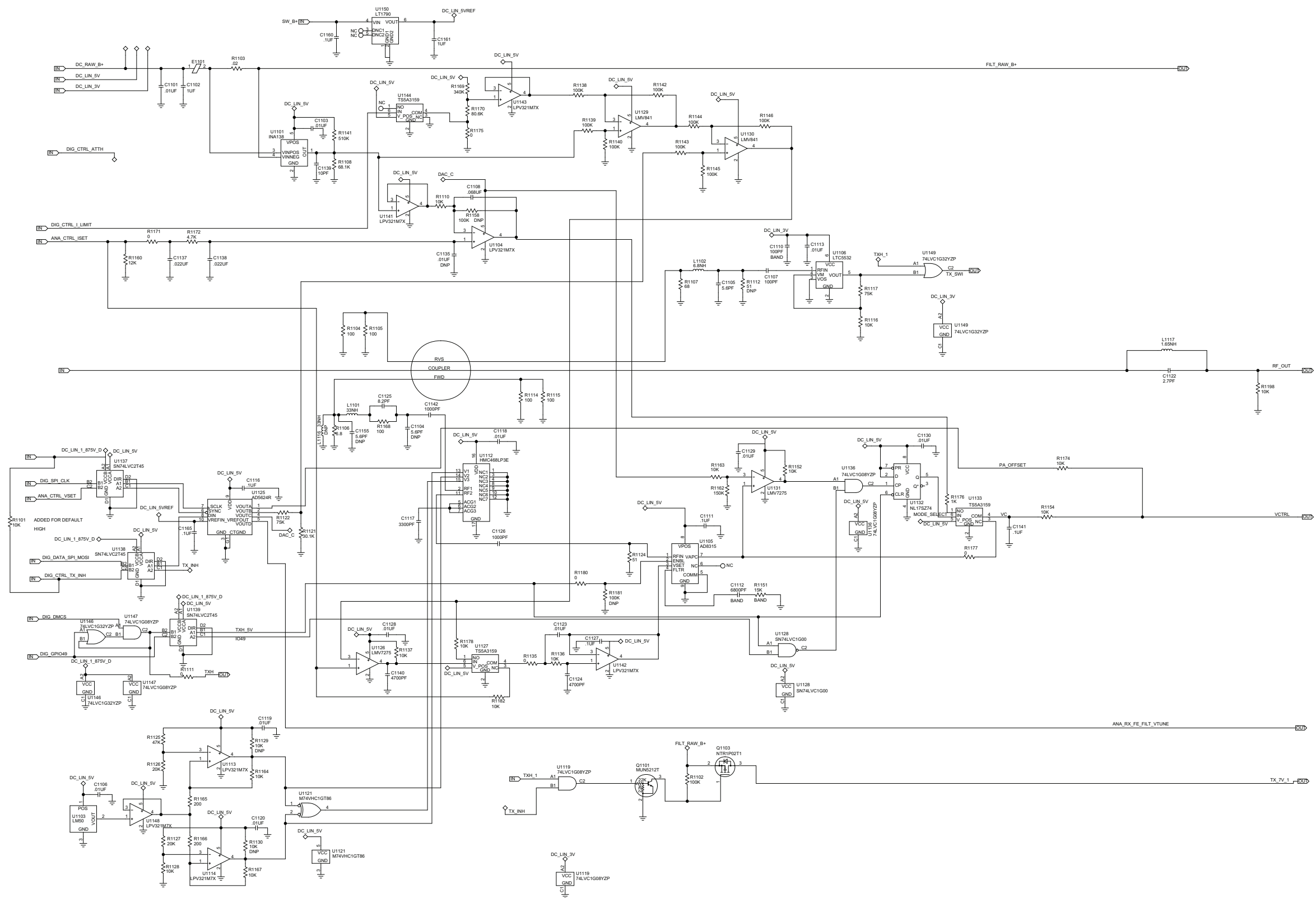


Figure 8-48. Automatic Level Control Circuit

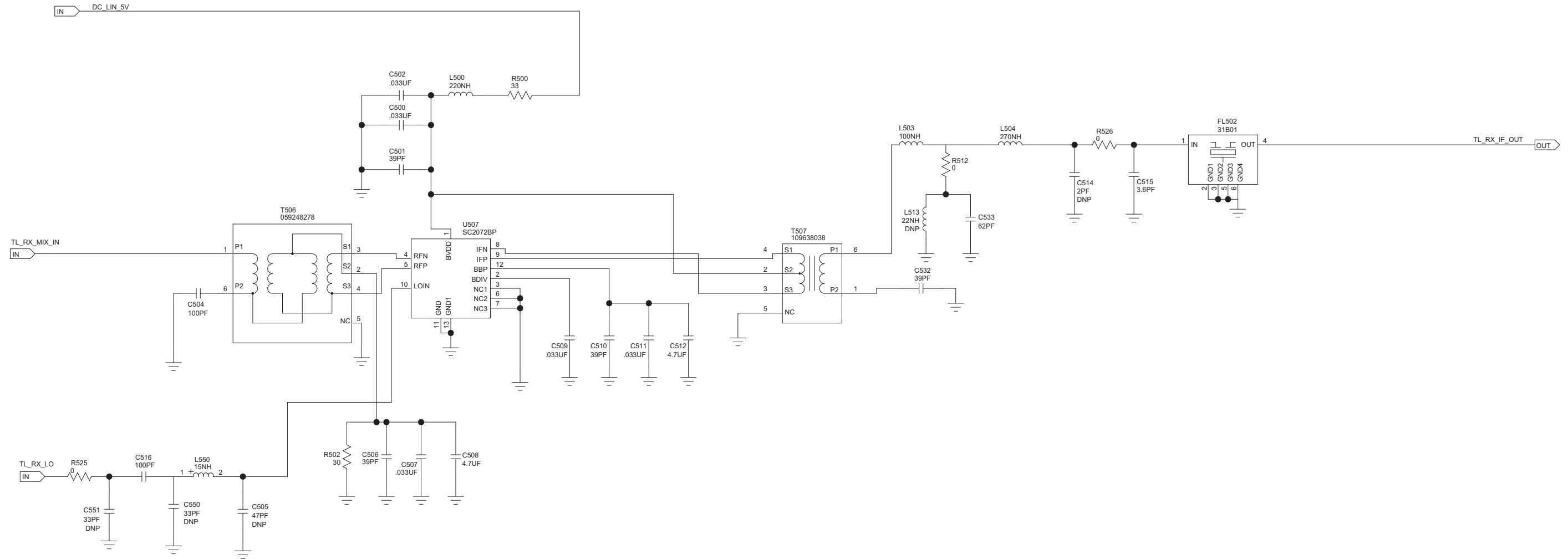


Figure 8-49. Receiver Back End Circuit

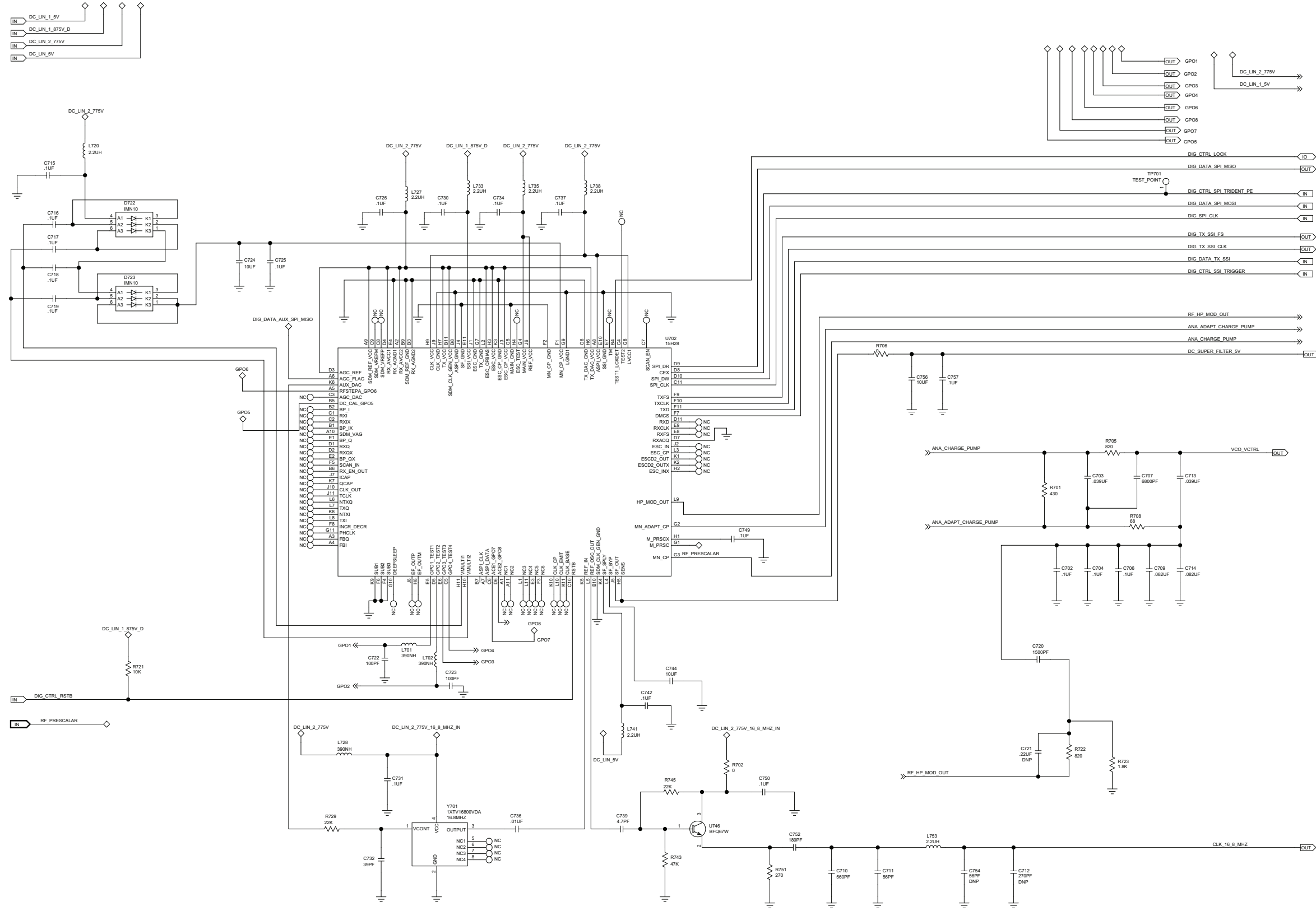


Figure 8-50. Frequency Generation Unit Circuit – 1 of 2

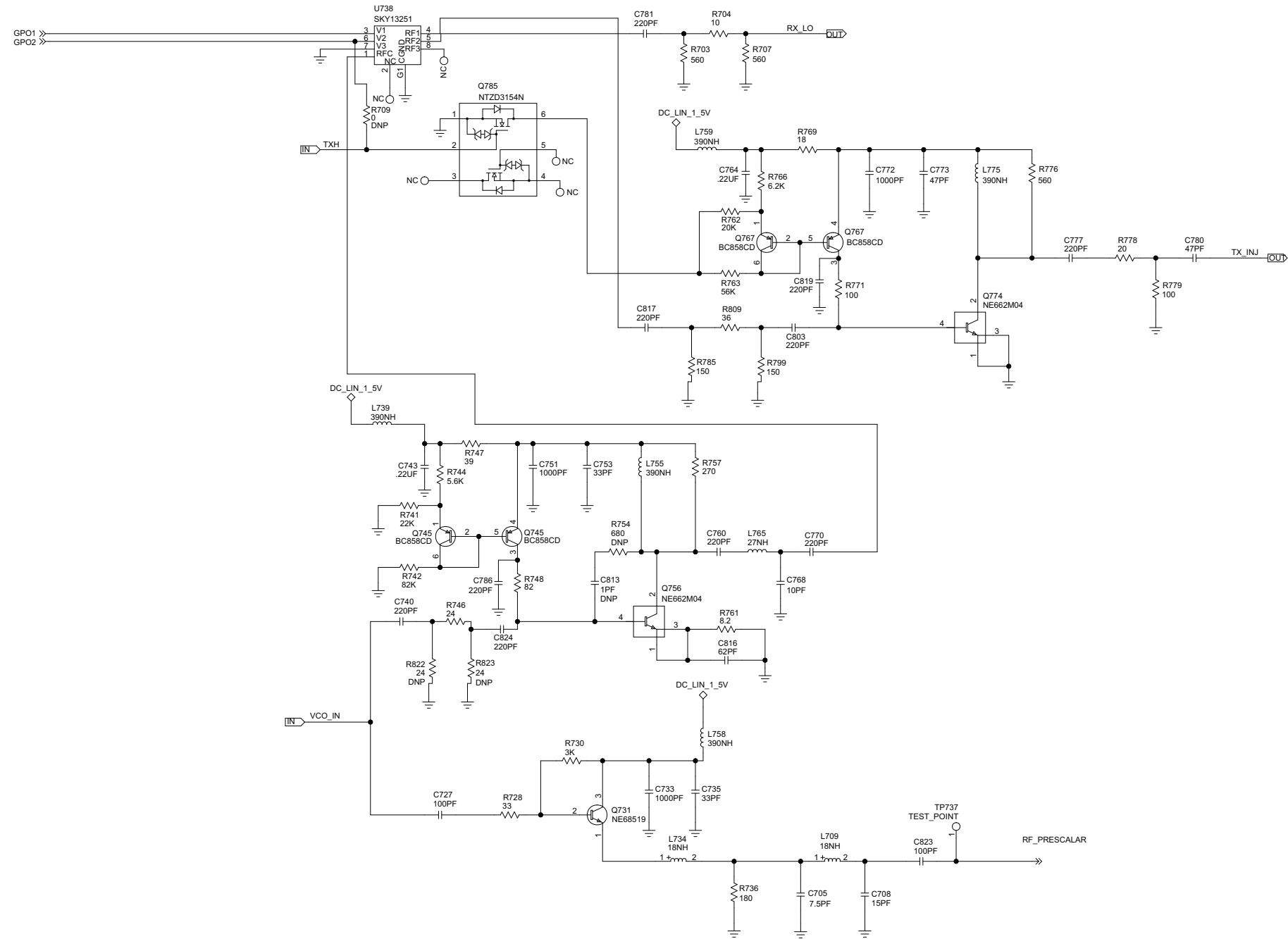
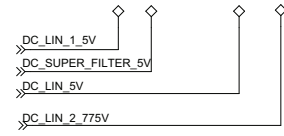


Figure 8-51. Frequency Generation Unit Circuit – 2 of 2

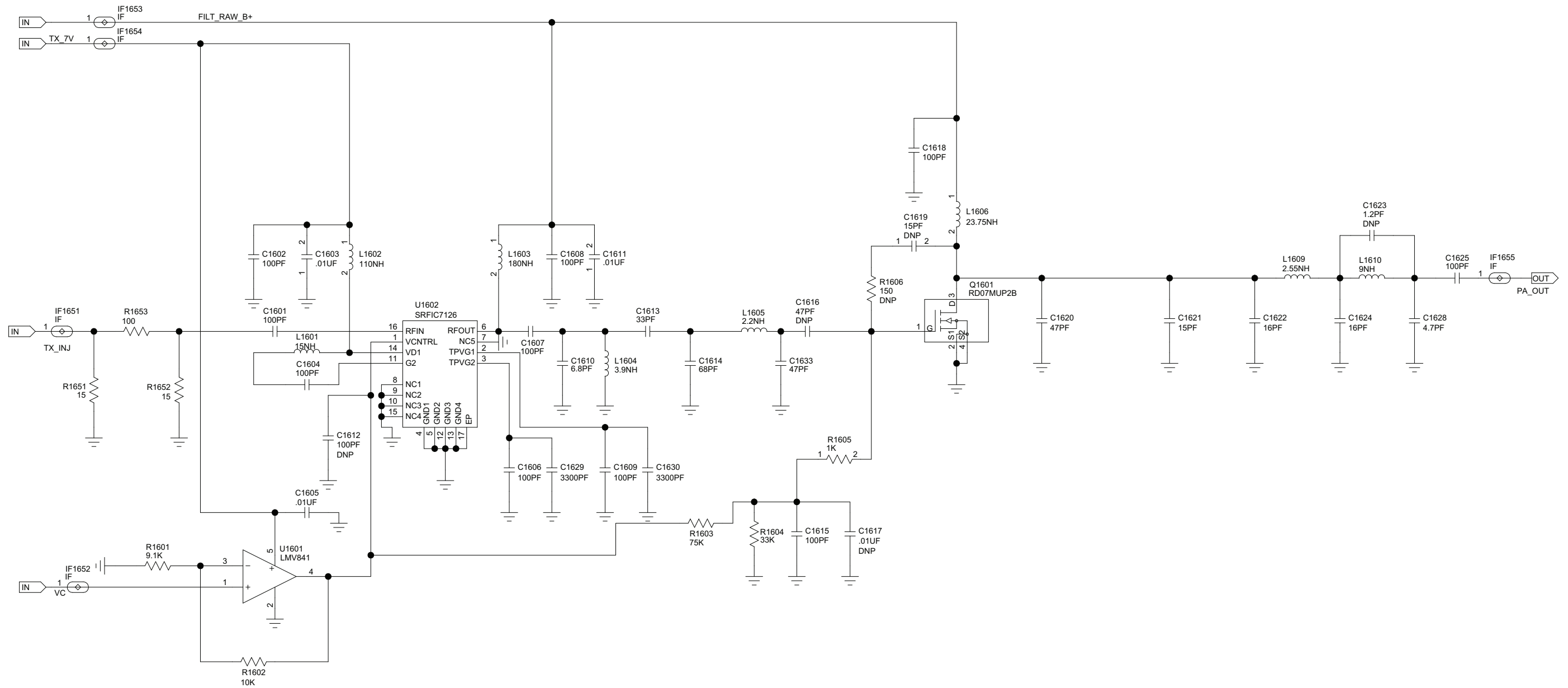


Figure 8-52. Power Amplifier Circuit

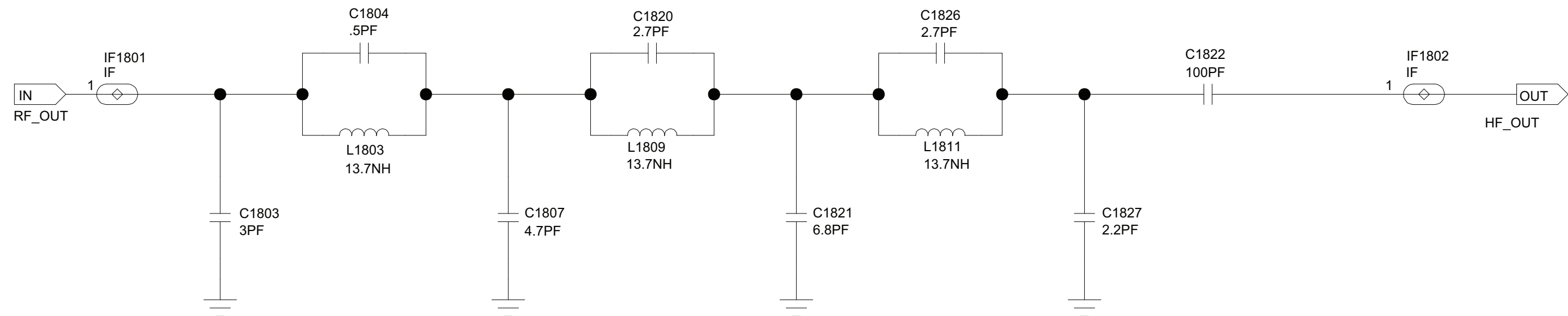


Figure 8-53. Transmitter HF Circuit



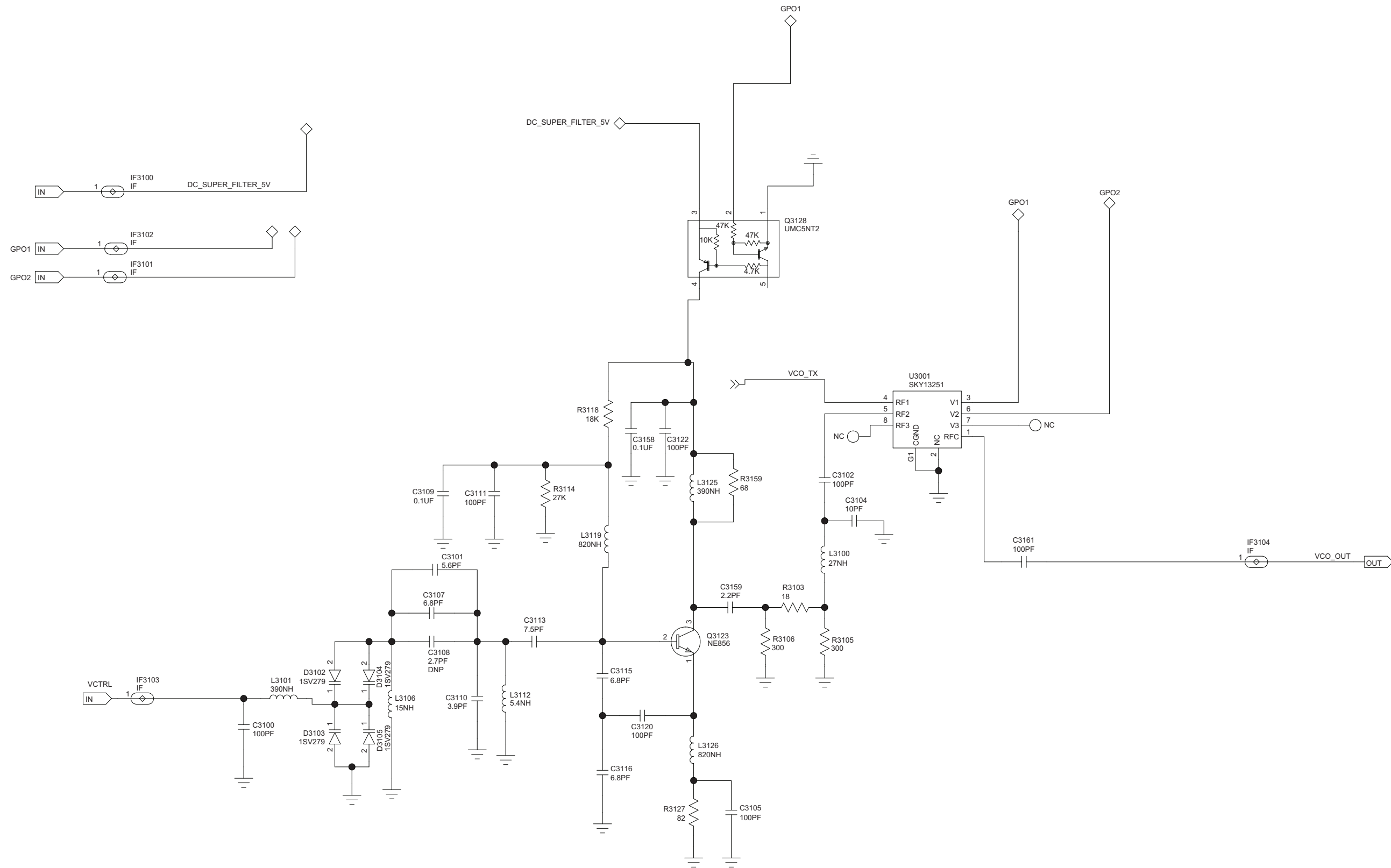


Figure 8-54. Receiver VCO Circuit

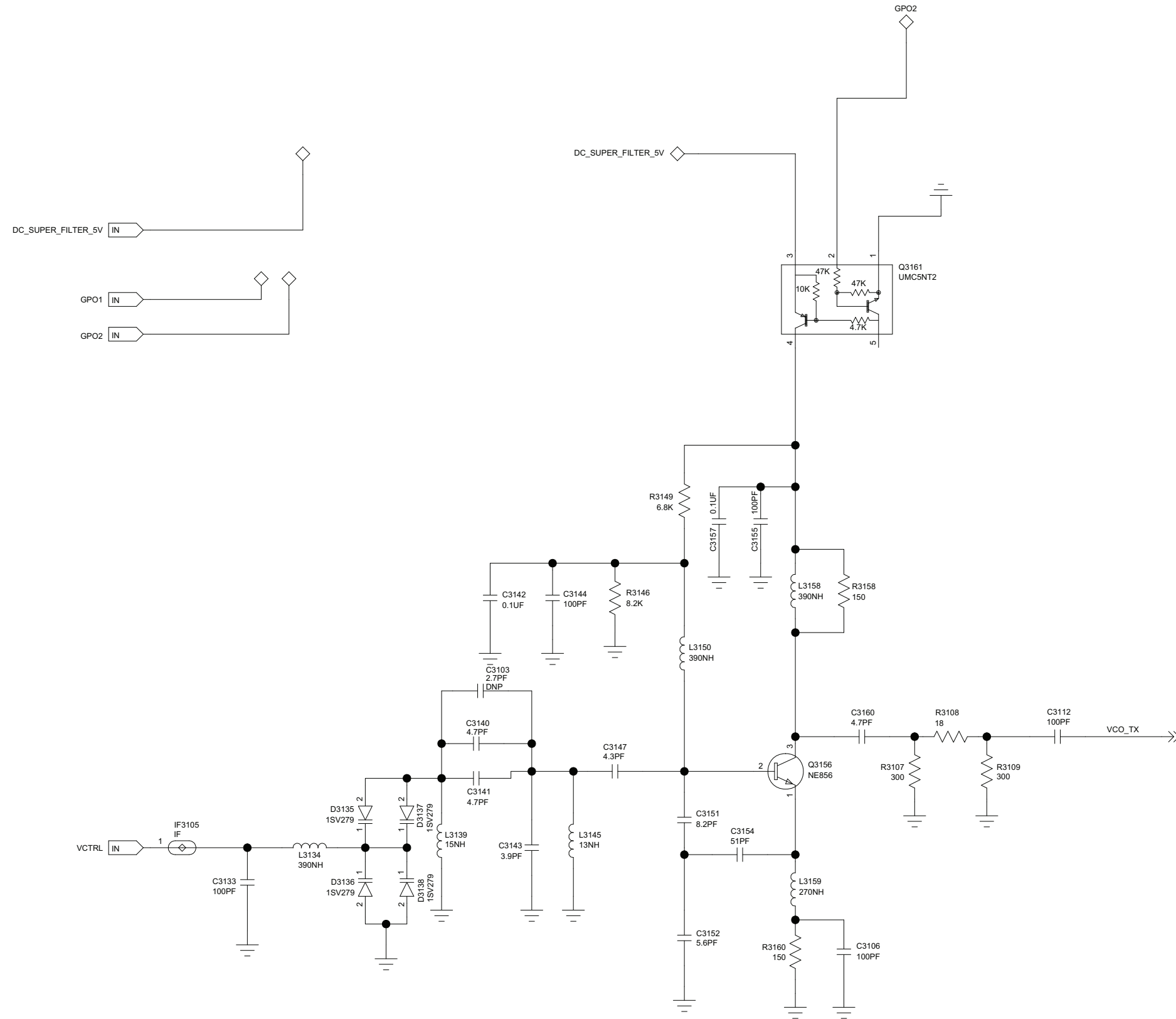


Figure 8-55. Transmitter VCO Circuit

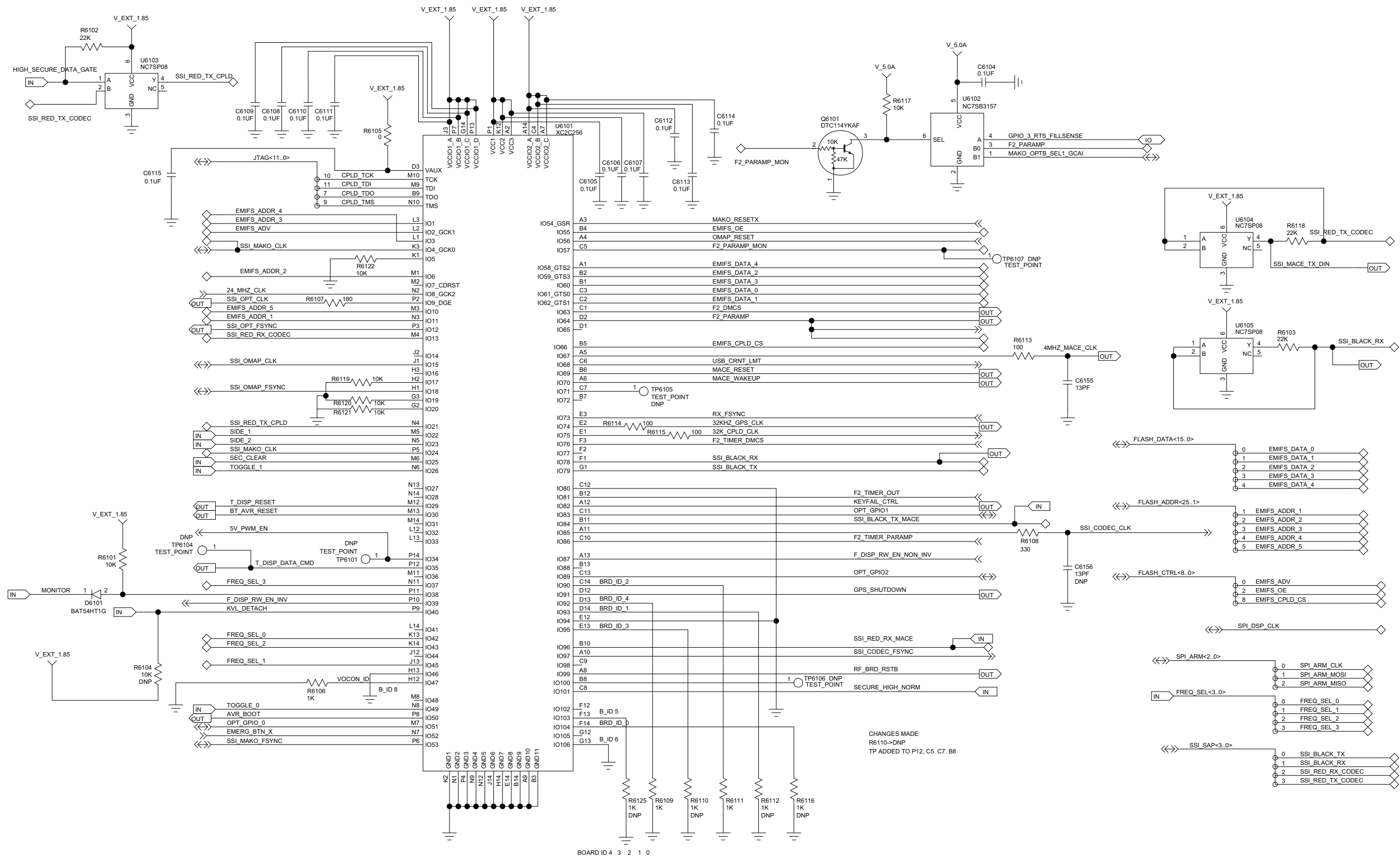


Figure 8-56. CPLD Circuit

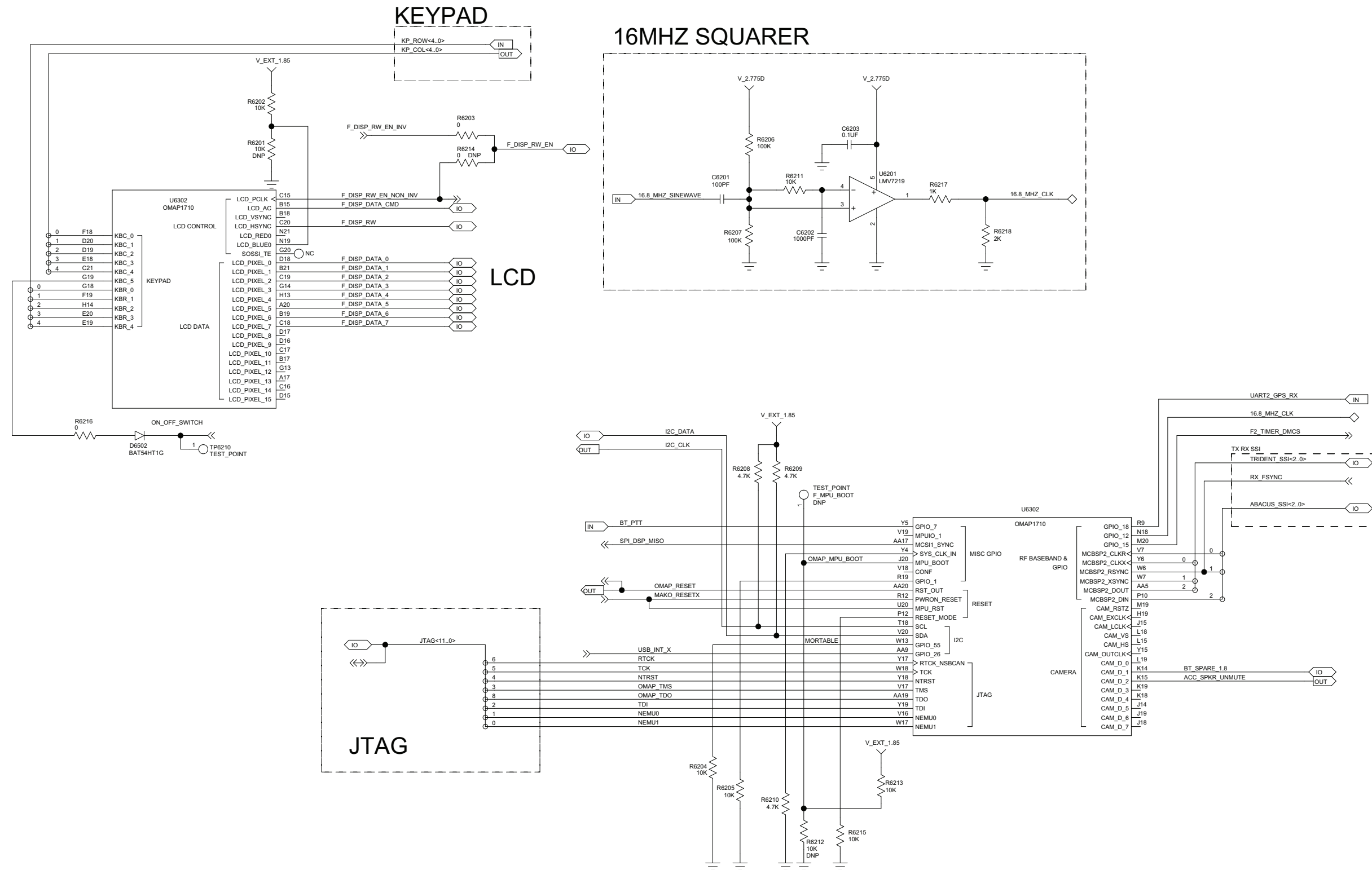
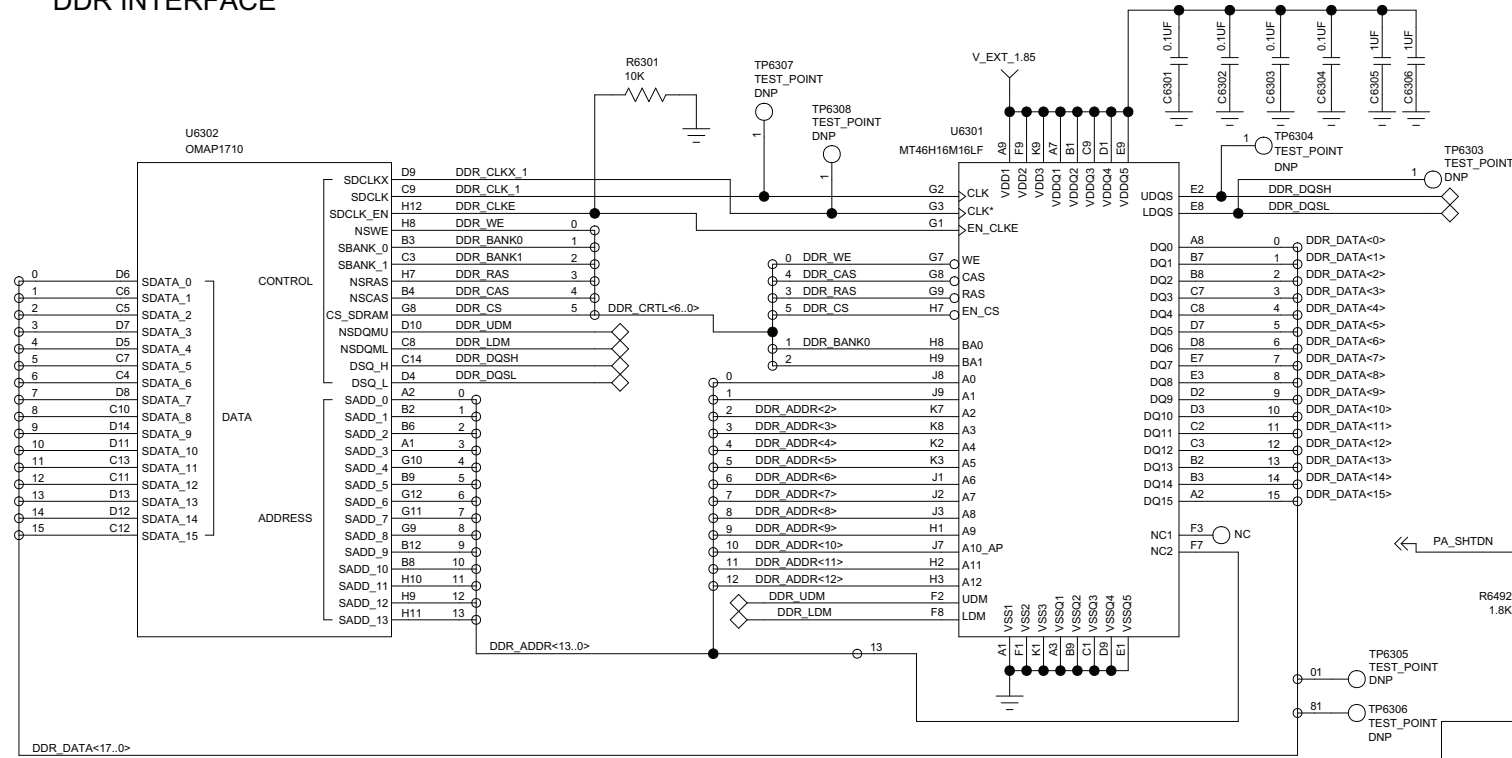
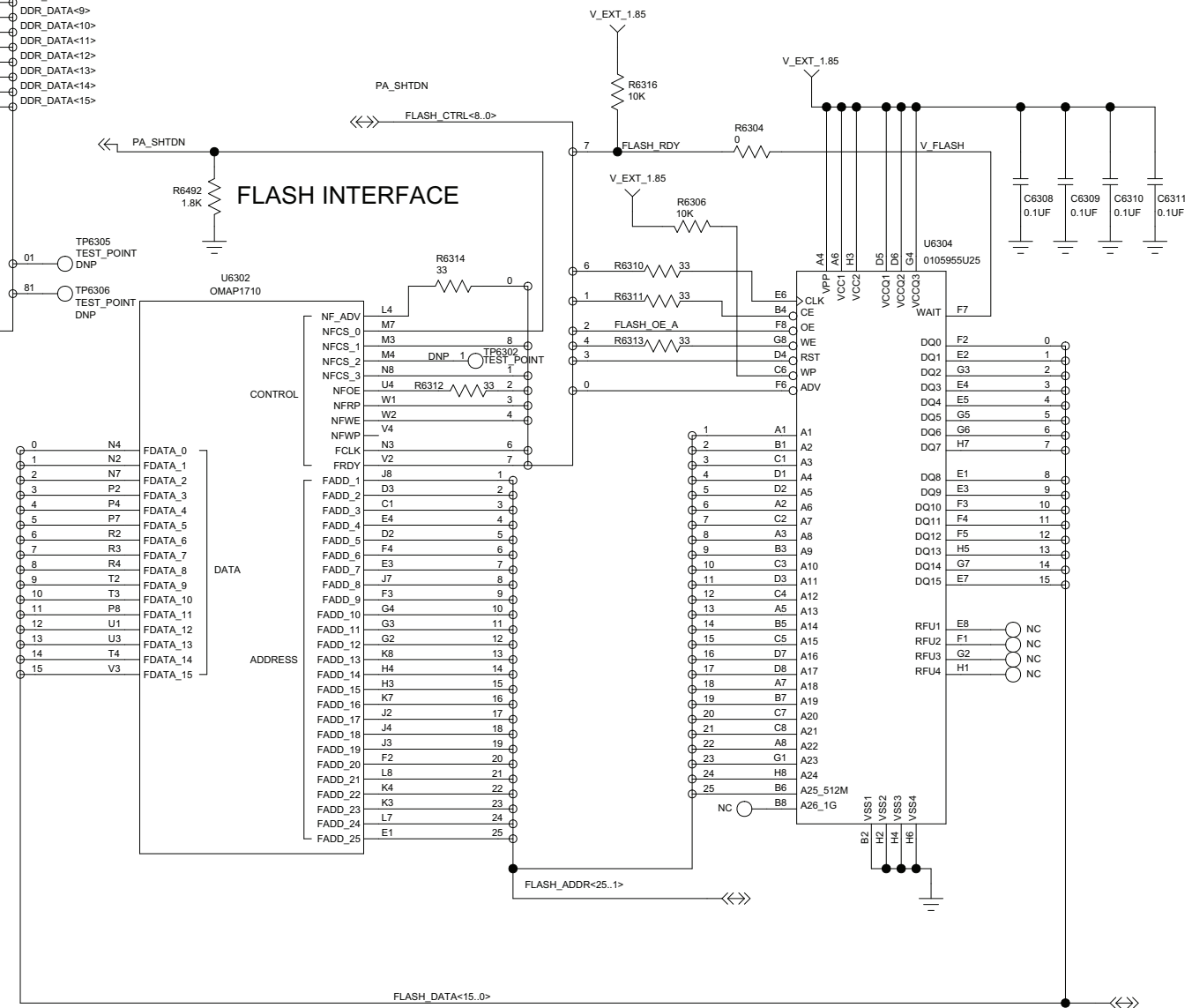


Figure 8-57. OMAP User Interface Circuit

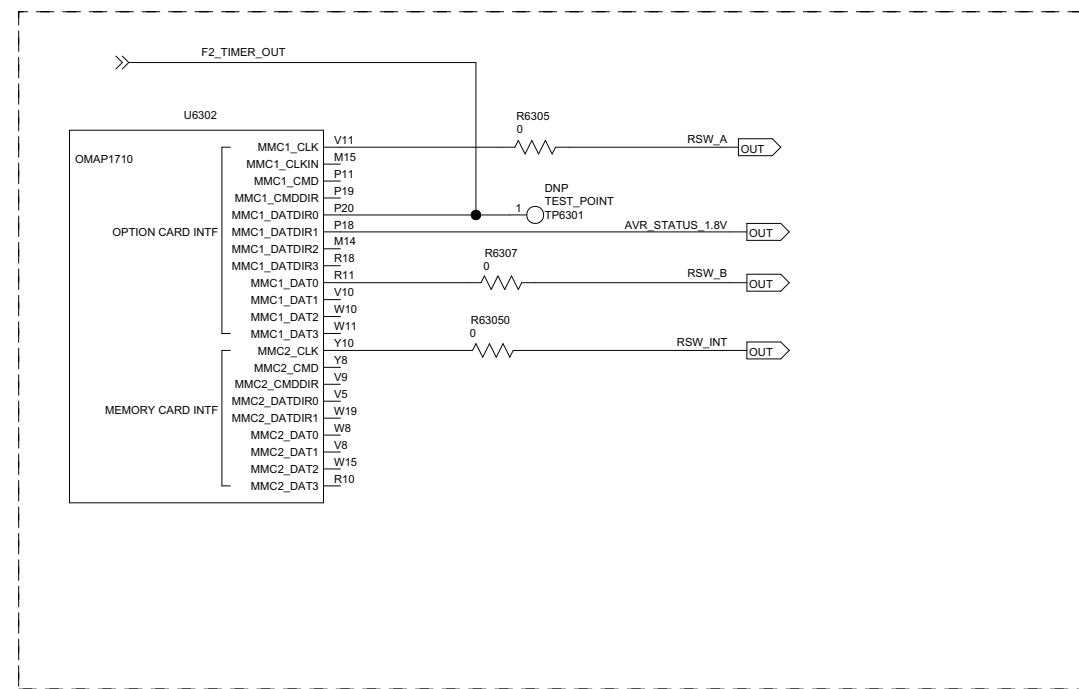
DDR INTERFACE



FLASH INTERFACE



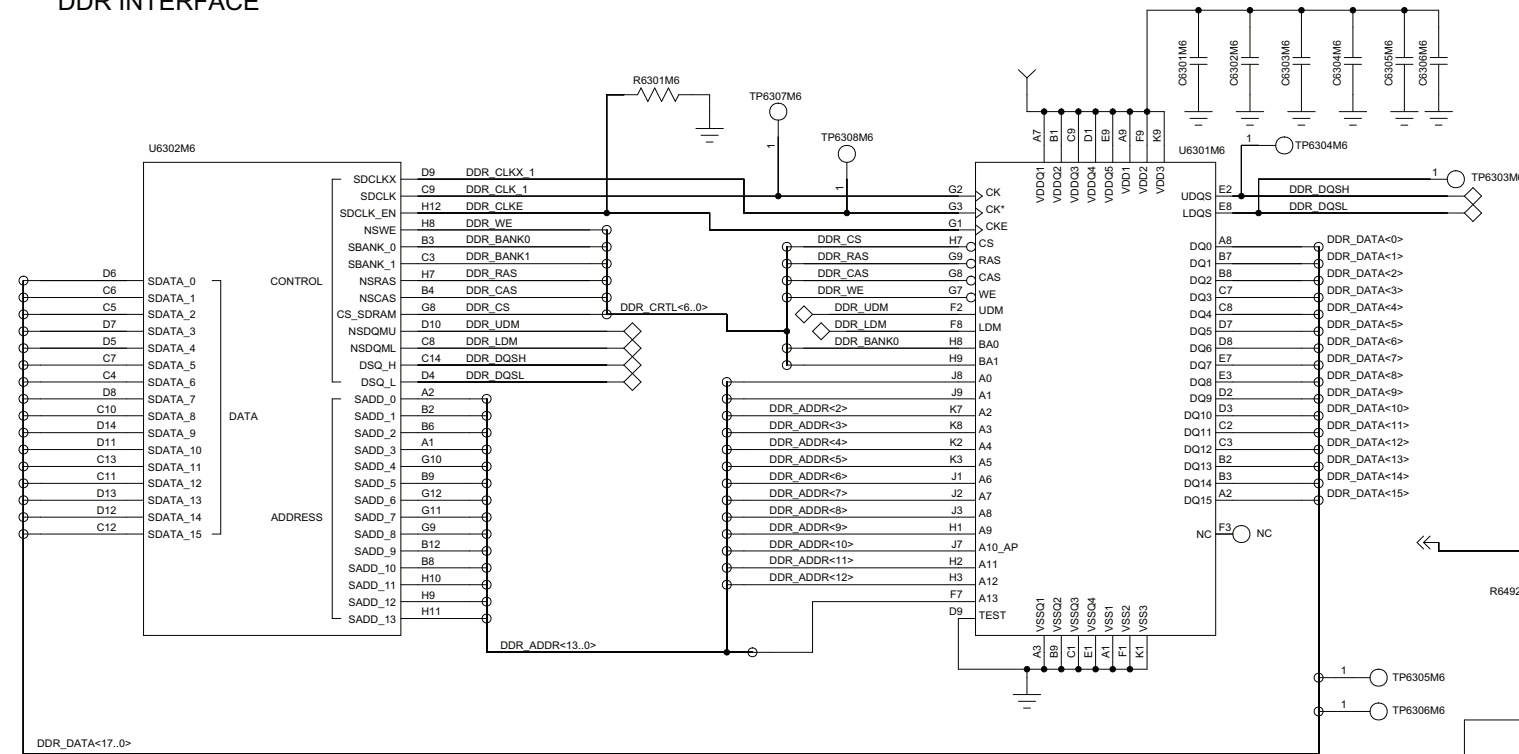
MMC INTERFACE



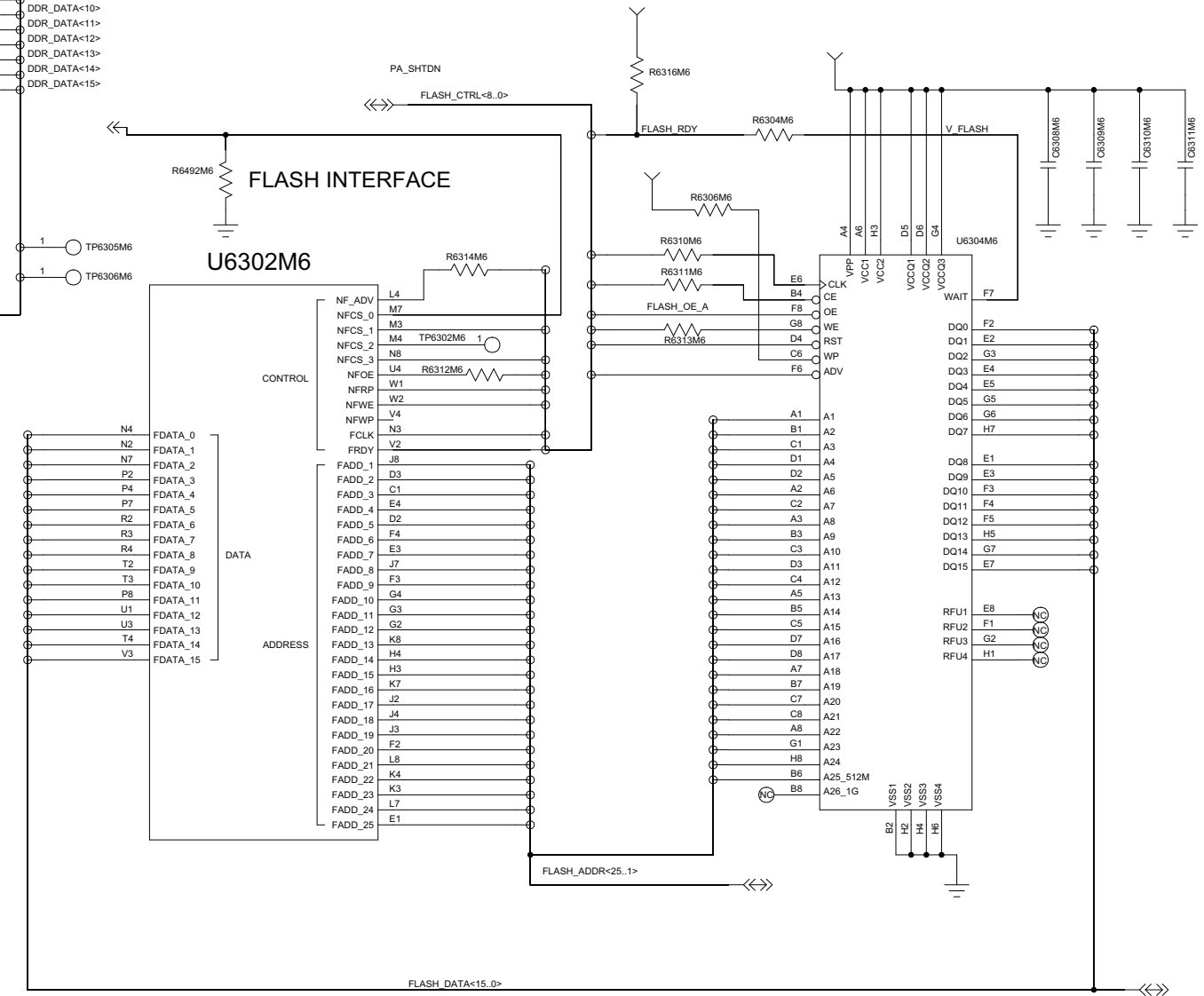
CHANGES MADE  
ADDED PA\_SHTDN TO PORT M7 & R6492

Figure 8-58. Memory Interface Circuit (84012313002)

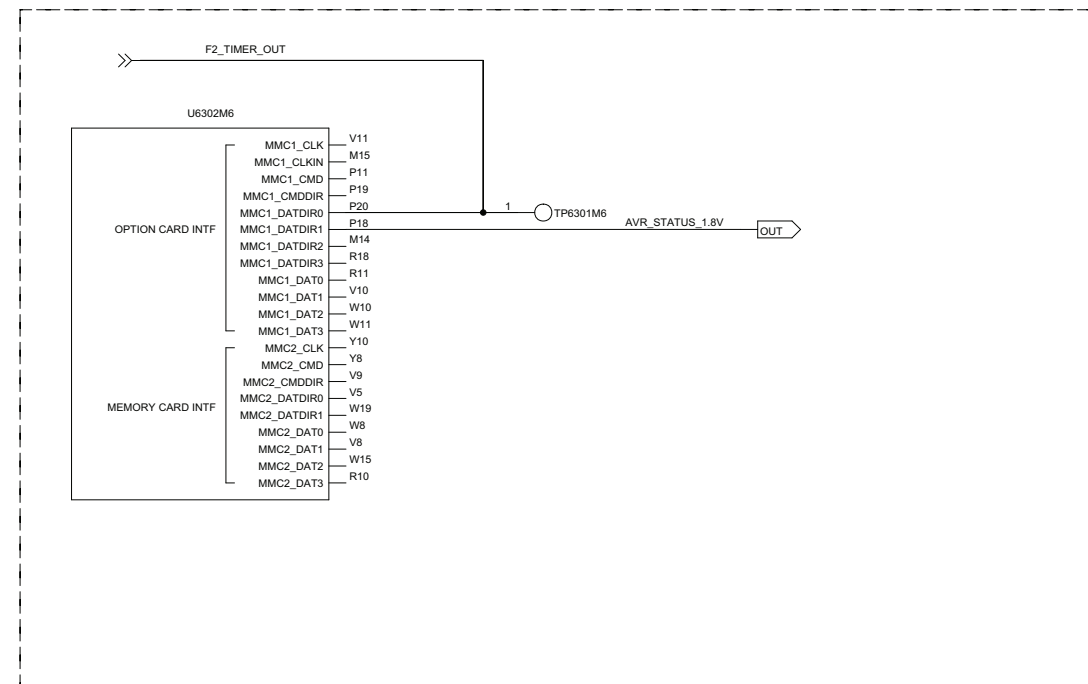
DDR INTERFACE



FLASH INTERFACE



MMC INTERFACE



CHANGES MADE  
ADDED PA\_SHTDN TO PORT M7 & R6492

Figure 8-59. Memory Interface Circuit (PC000353A01)

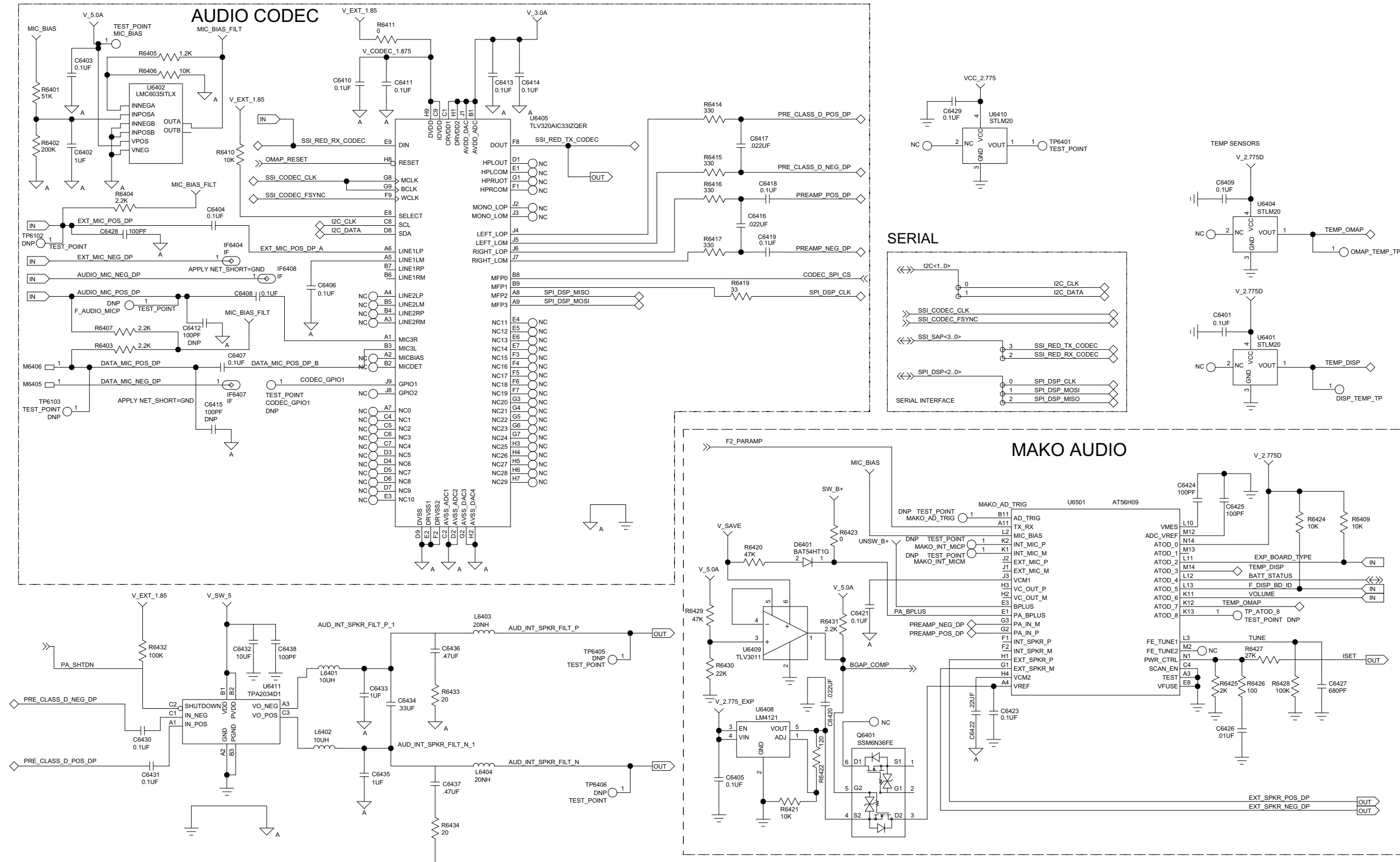


Figure 8-60. Audio Circuit (84012313002)

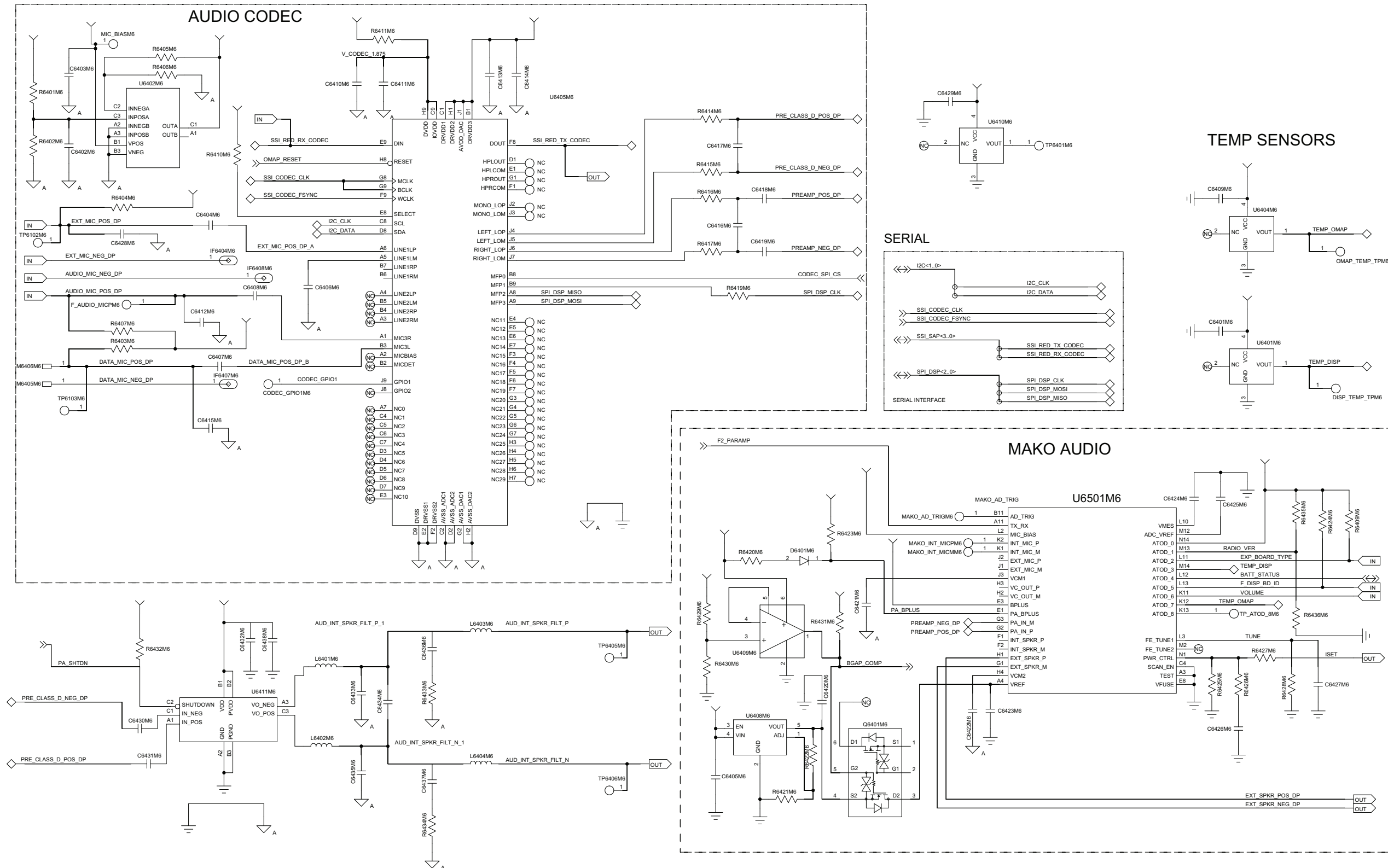


Figure 8-61. Audio Circuit (PC000353A01)



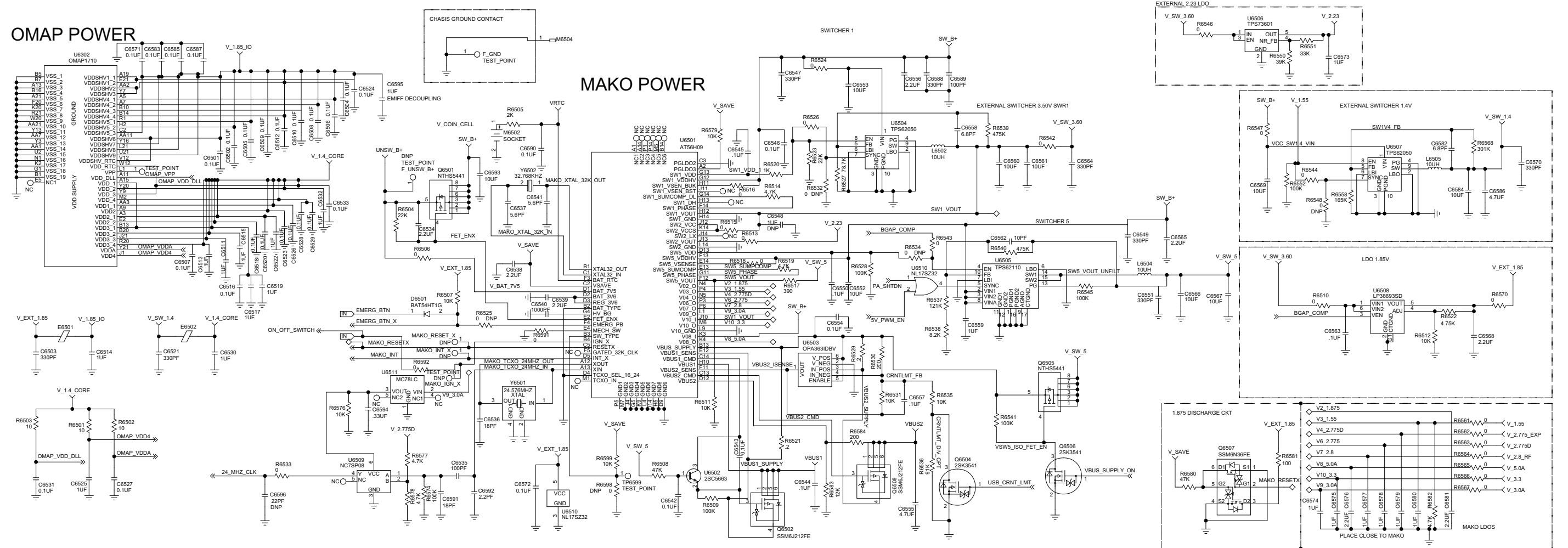


Figure 8-62. MAKO/DC Distribution Circuit (84012313002)

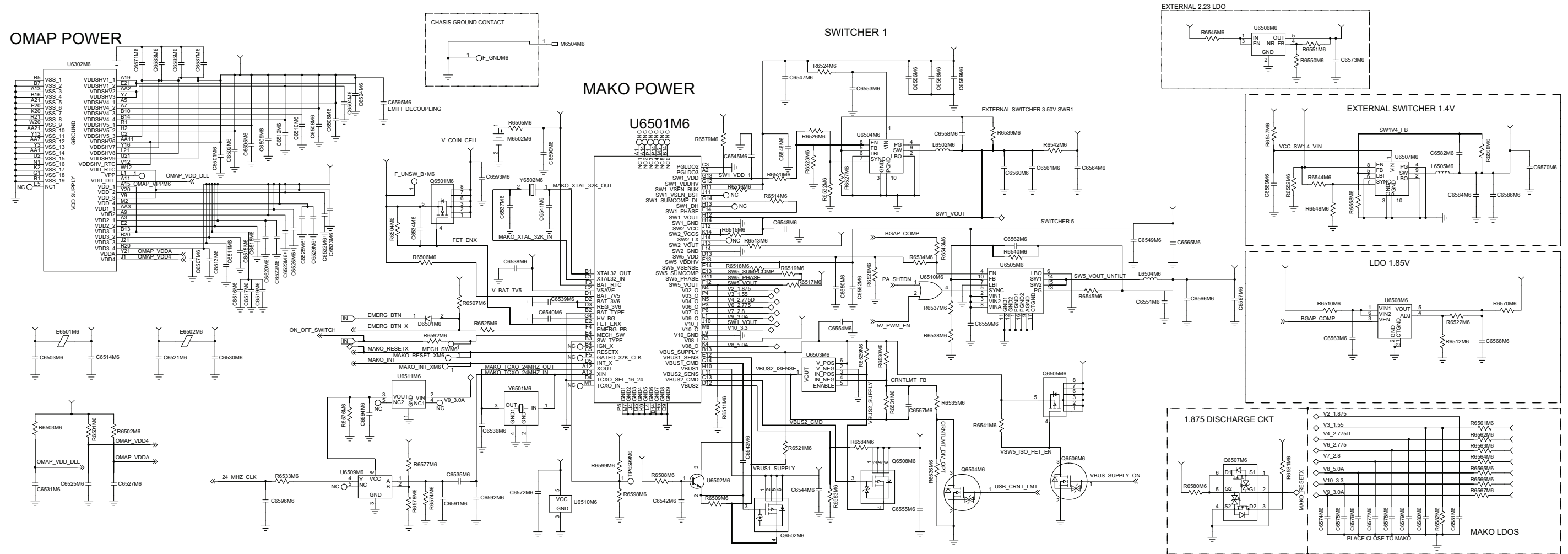


Figure 8-63. MAKO/DC Distribution Circuit (PC000353A01)

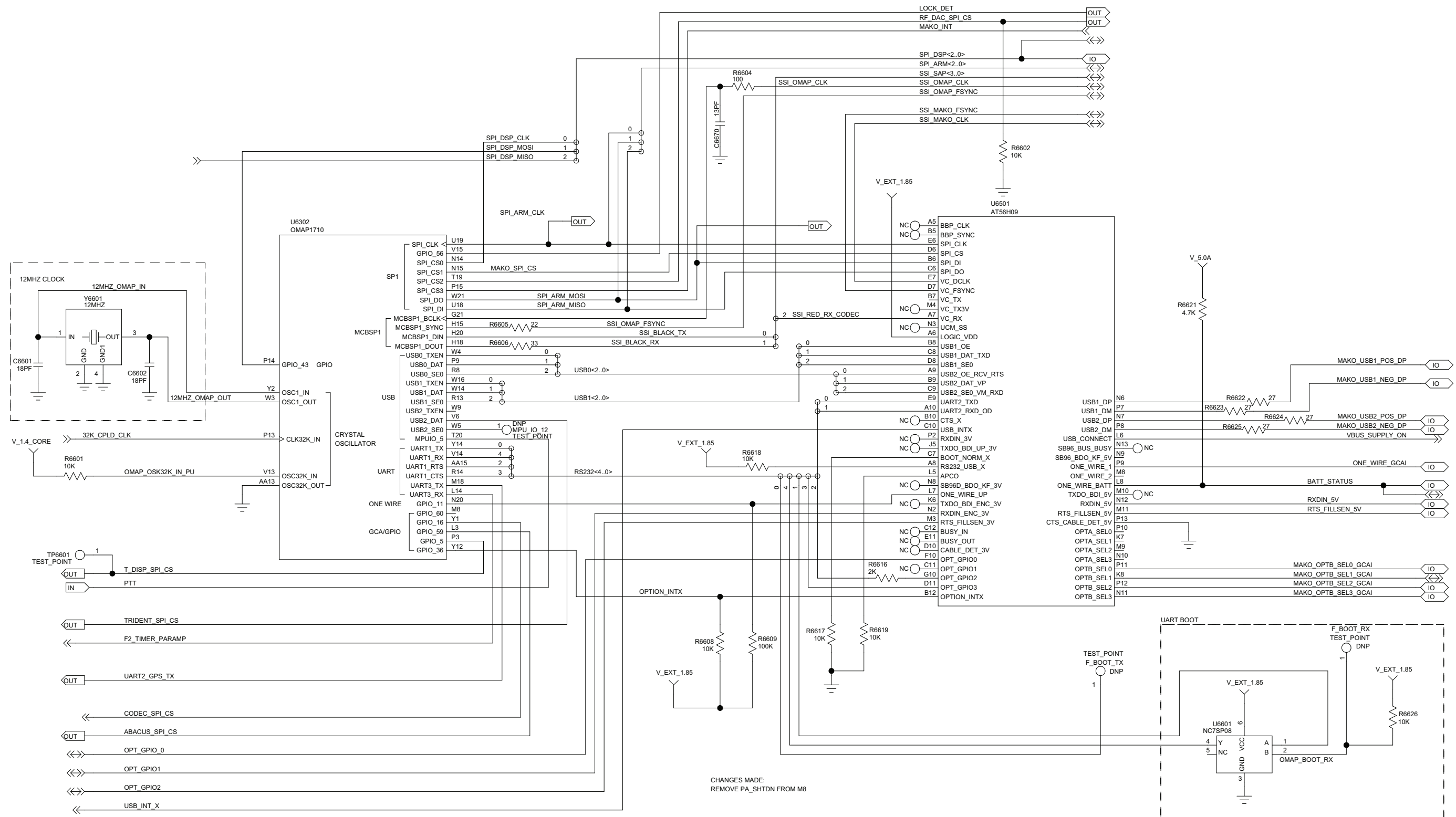


Figure 8-64. Serial Interface Circuit

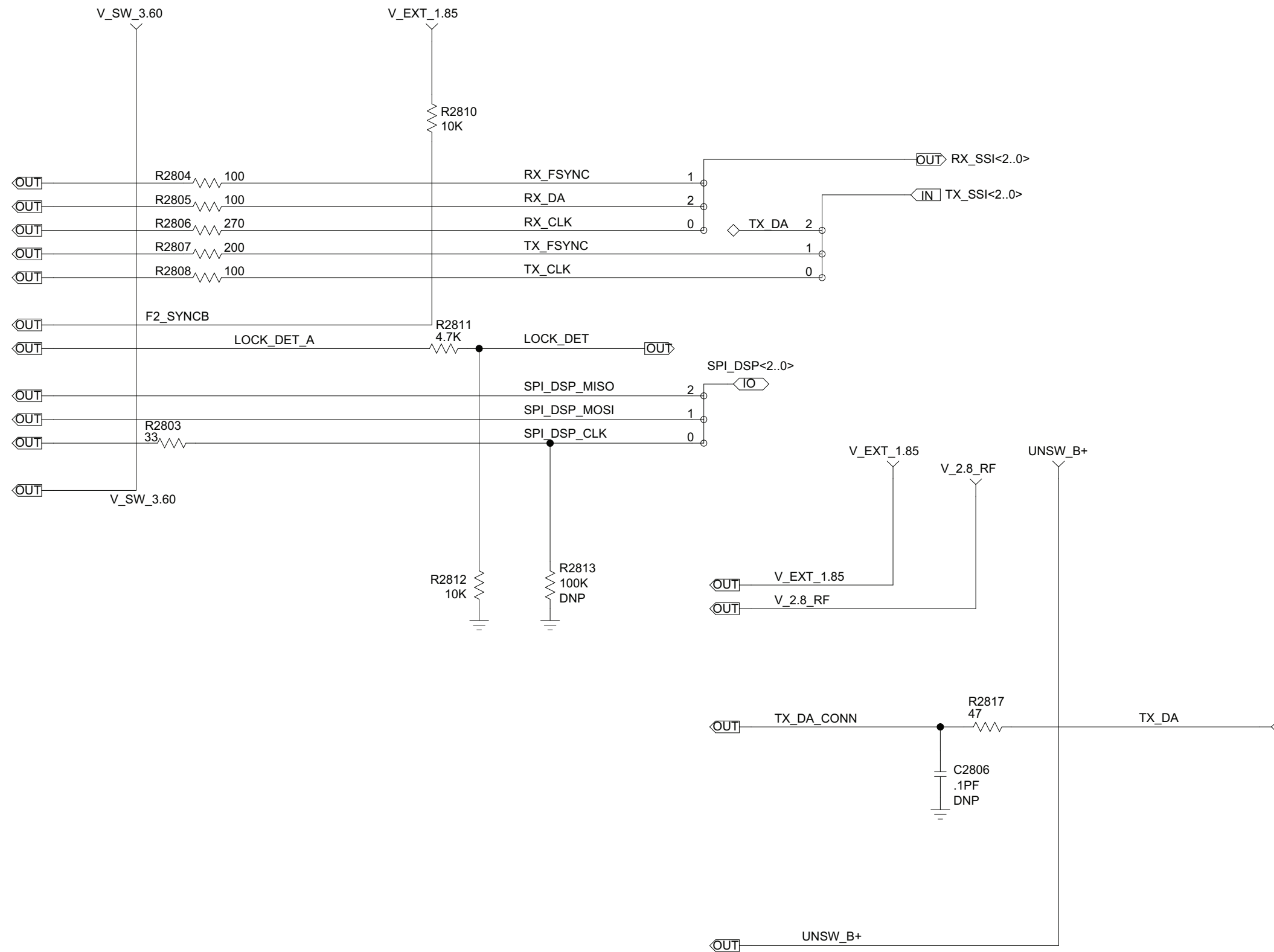


Figure 8-65. RF Interconnects Circuit

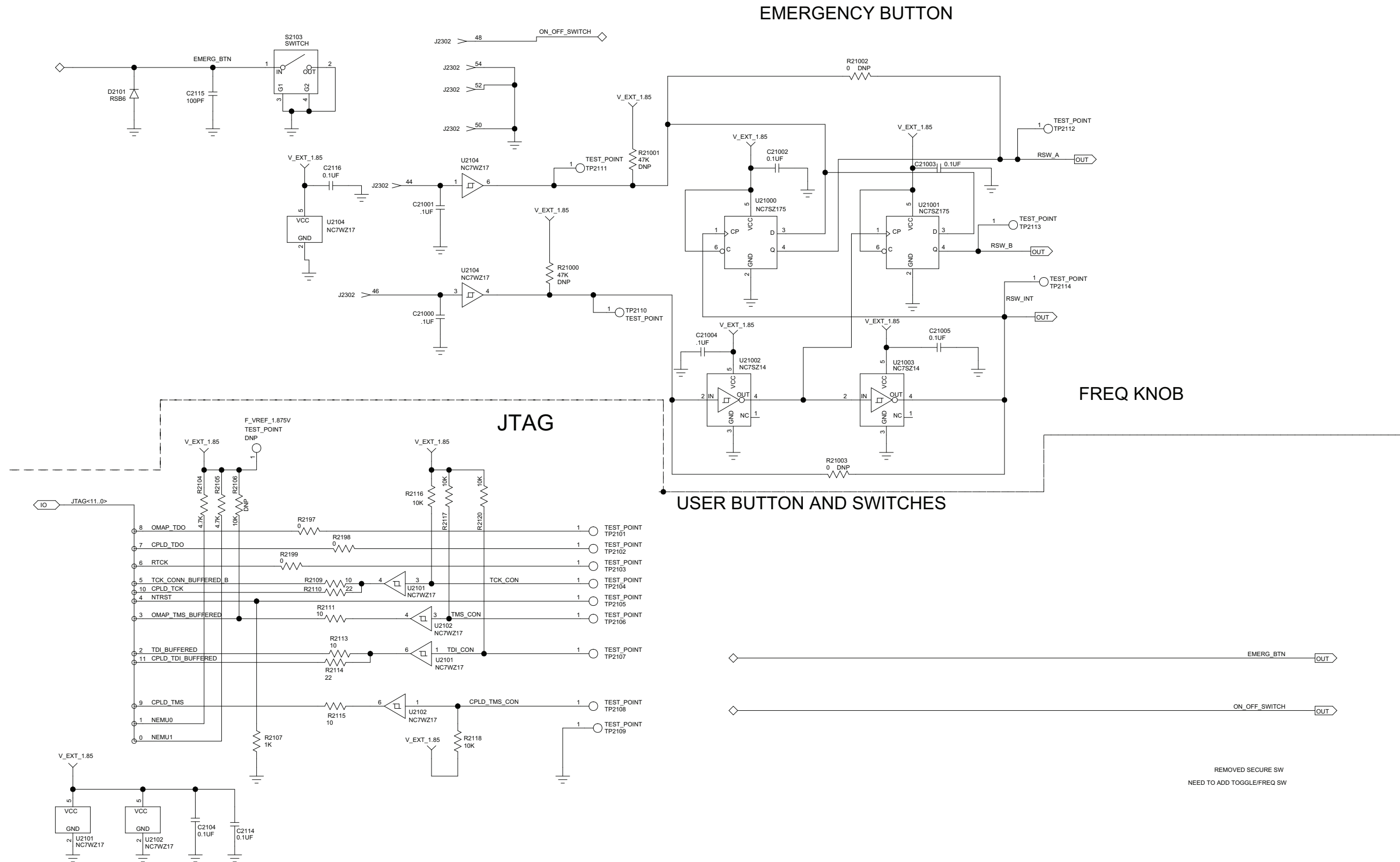


Figure 8-66. Controller Circuit (84012313002)

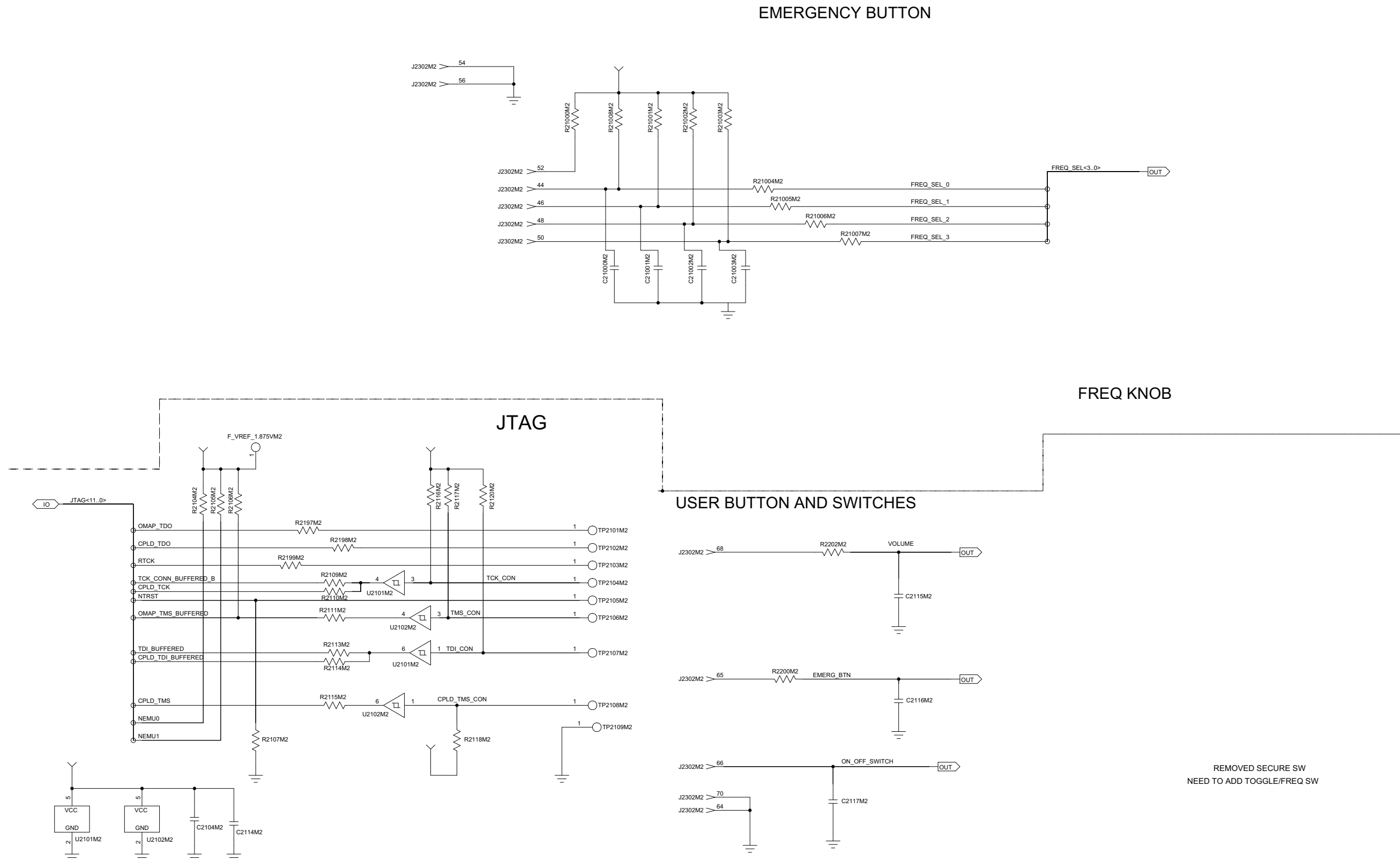
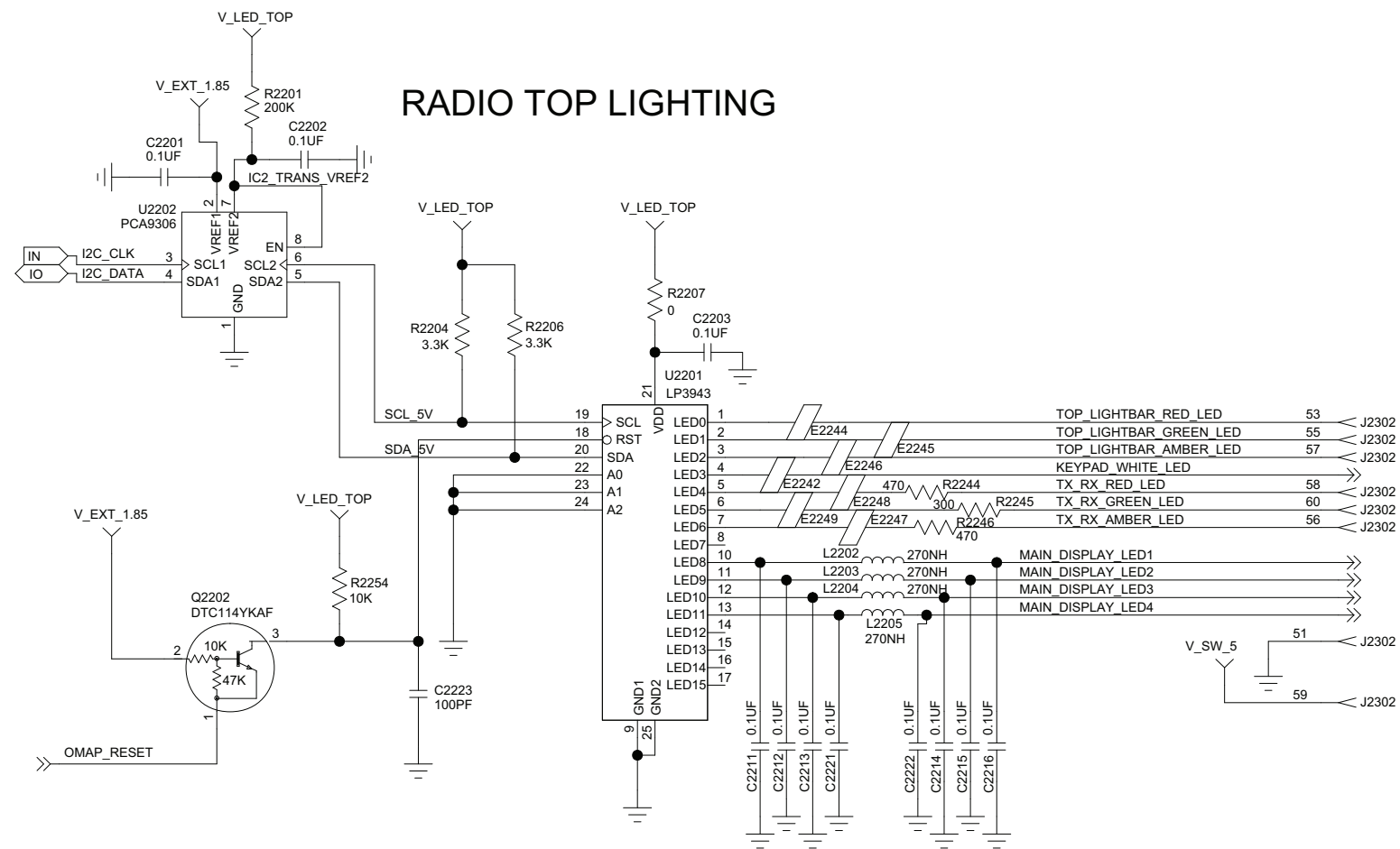


Figure 8-67. Controller Circuit (PC000353A01)



## LIGHTING CONTROLERS

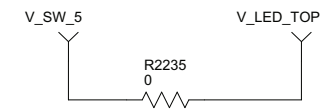


Figure 8-68. Display/Keypad Lighting Control Circuit (84012313002)

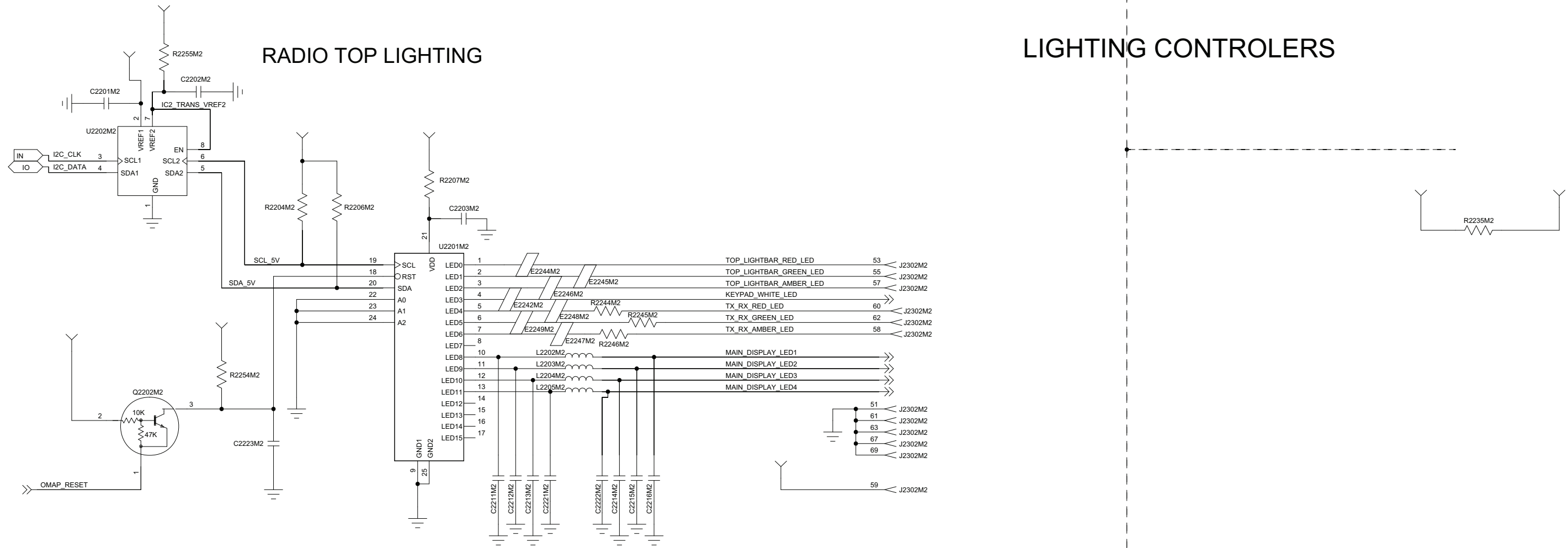
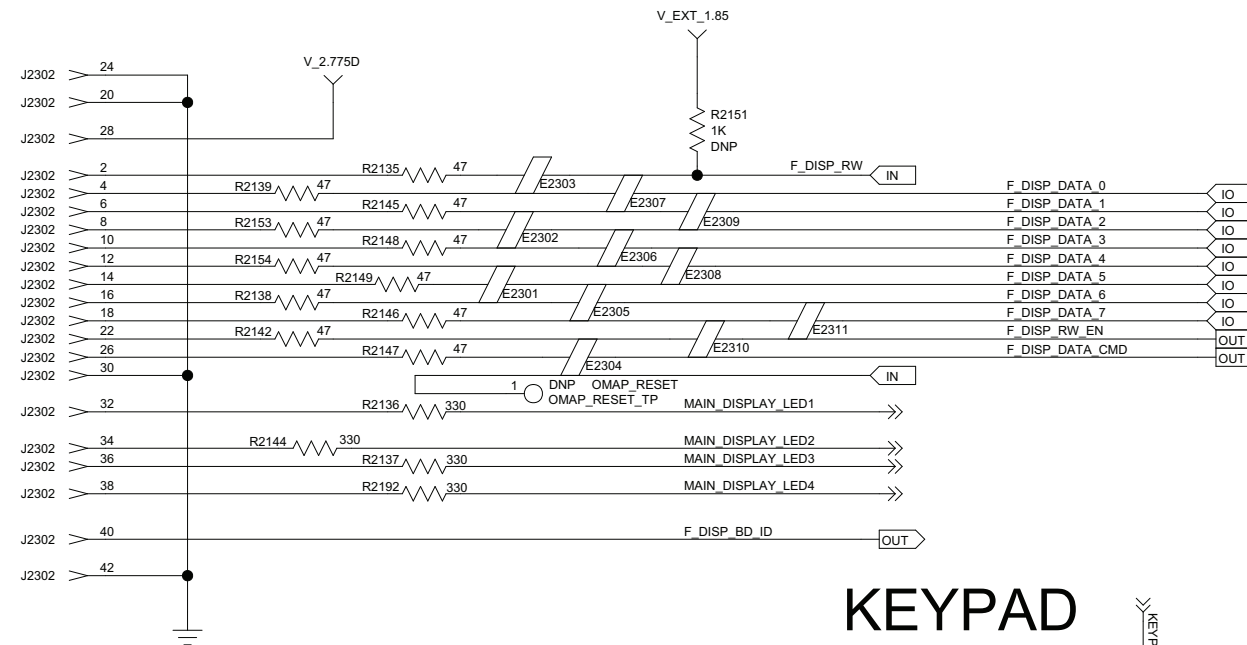


Figure 8-69. Display/Keypad Lighting Control Circuit (PC000353A01)



# FRONT DISPLAY



# KEYPAD

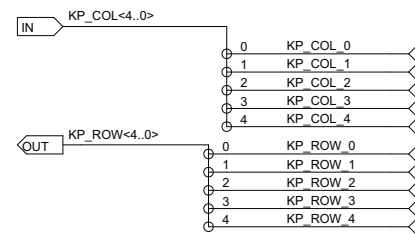
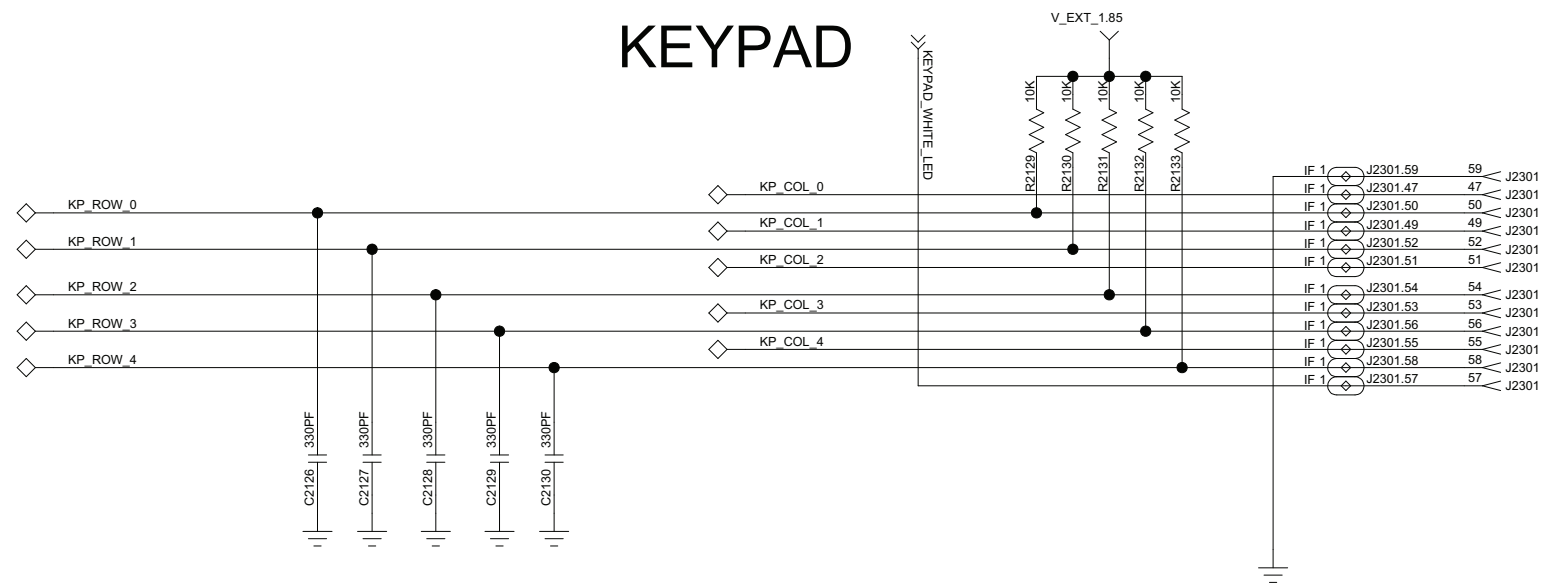


Figure 8-70. LCD and Keypad Connector Circuit (84012313002)

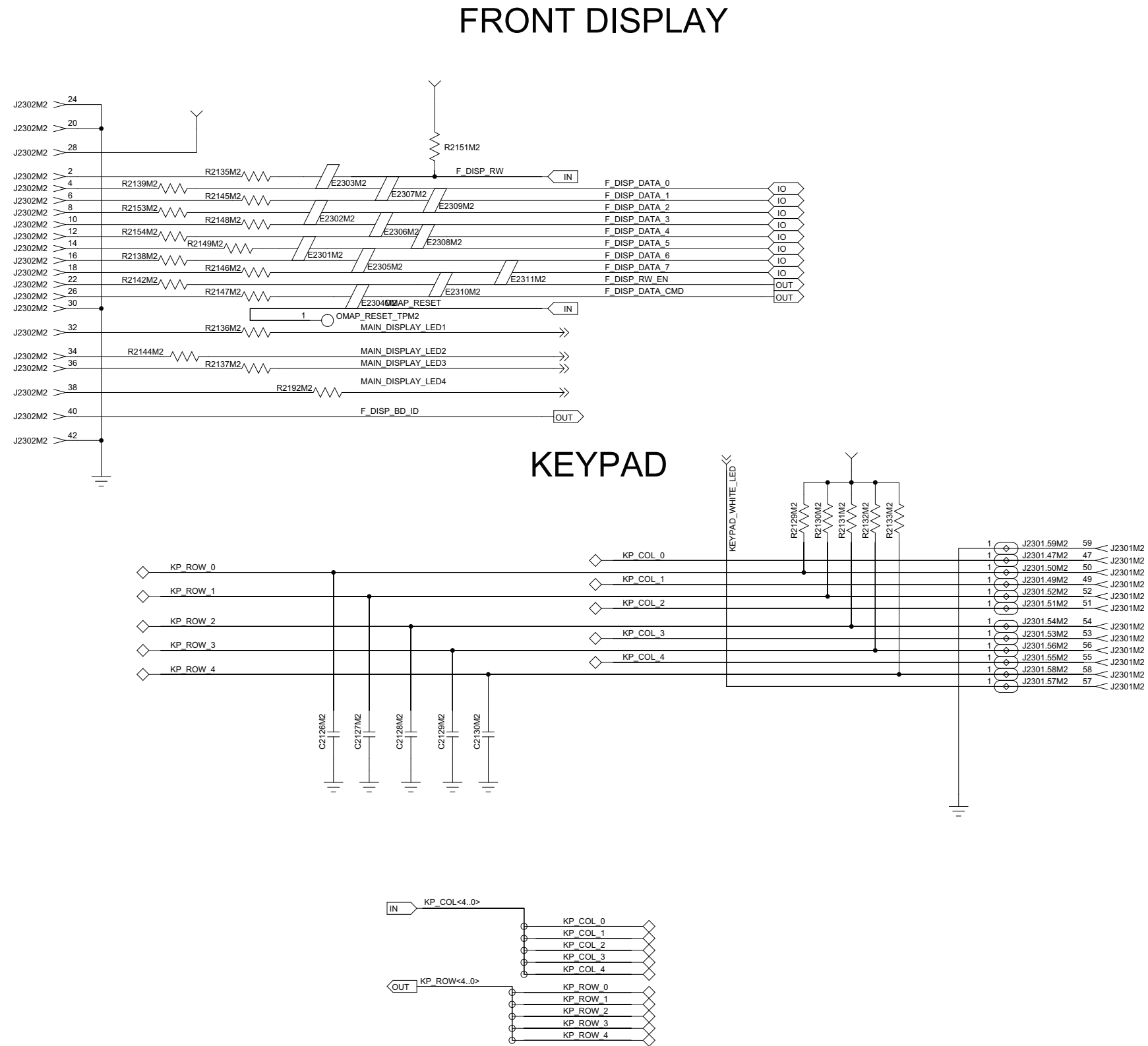


Figure 8-71. LCD and Keypad Connector Circuit (PC000353A01)

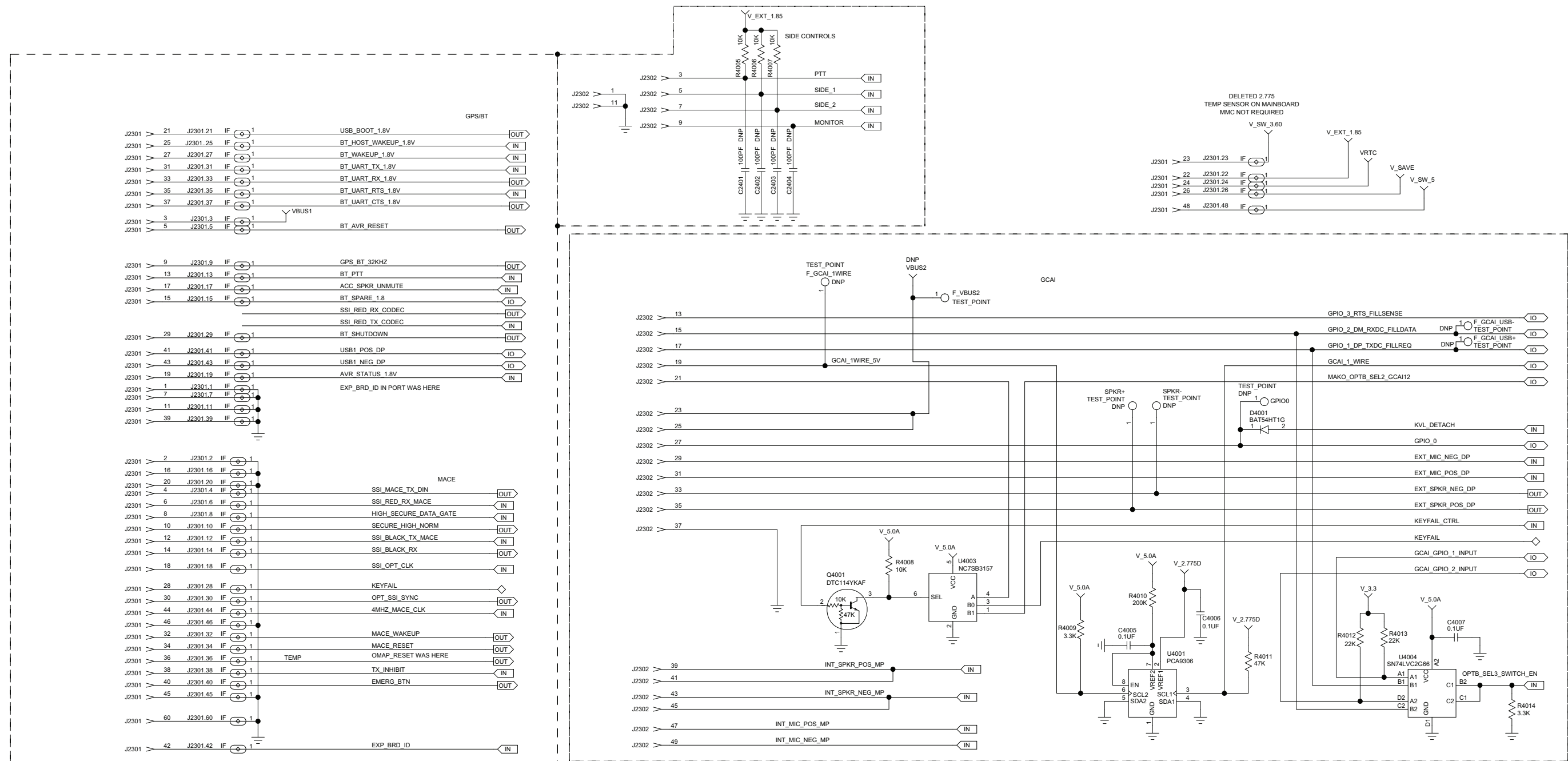


Figure 8-72. GCAI MACE BT Interconnect Circuit (84012313002)

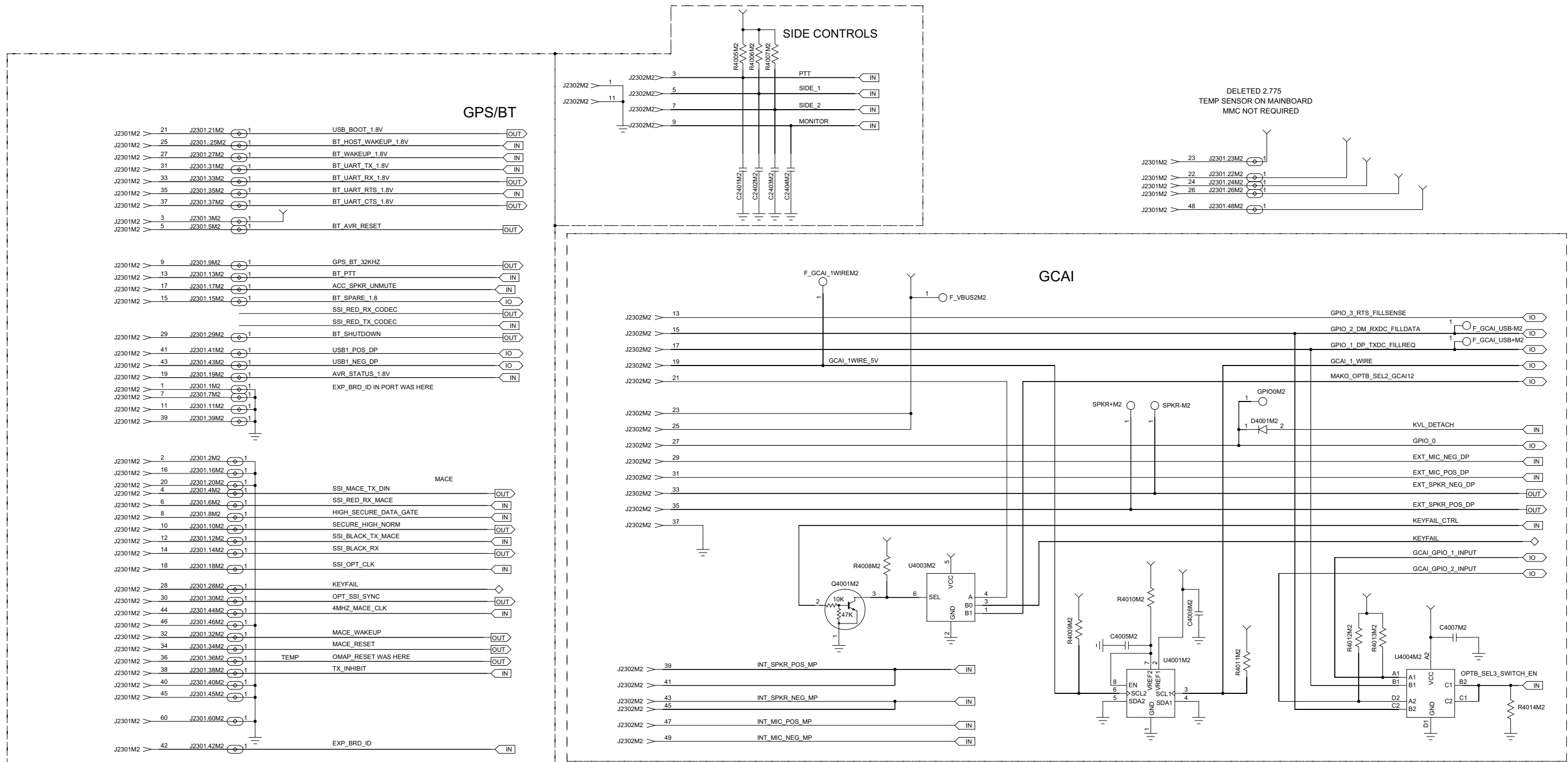


Figure 8-73. GCAI MACE BT Interconnect Circuit (PC000353A01)

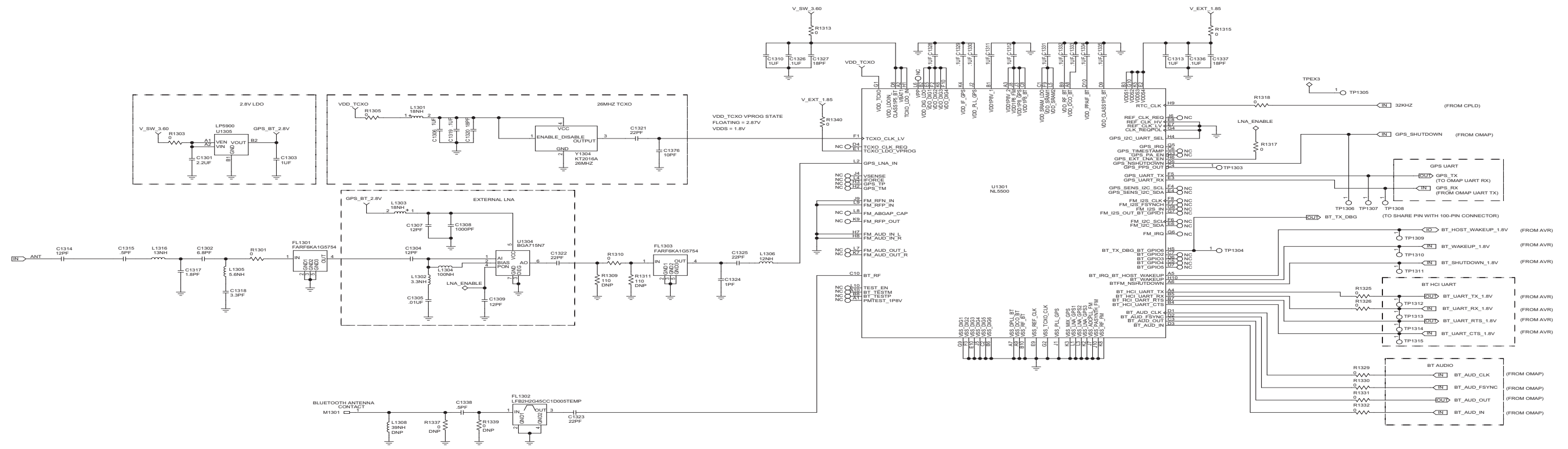


Figure 8-74. GPS Bluetooth Circuit

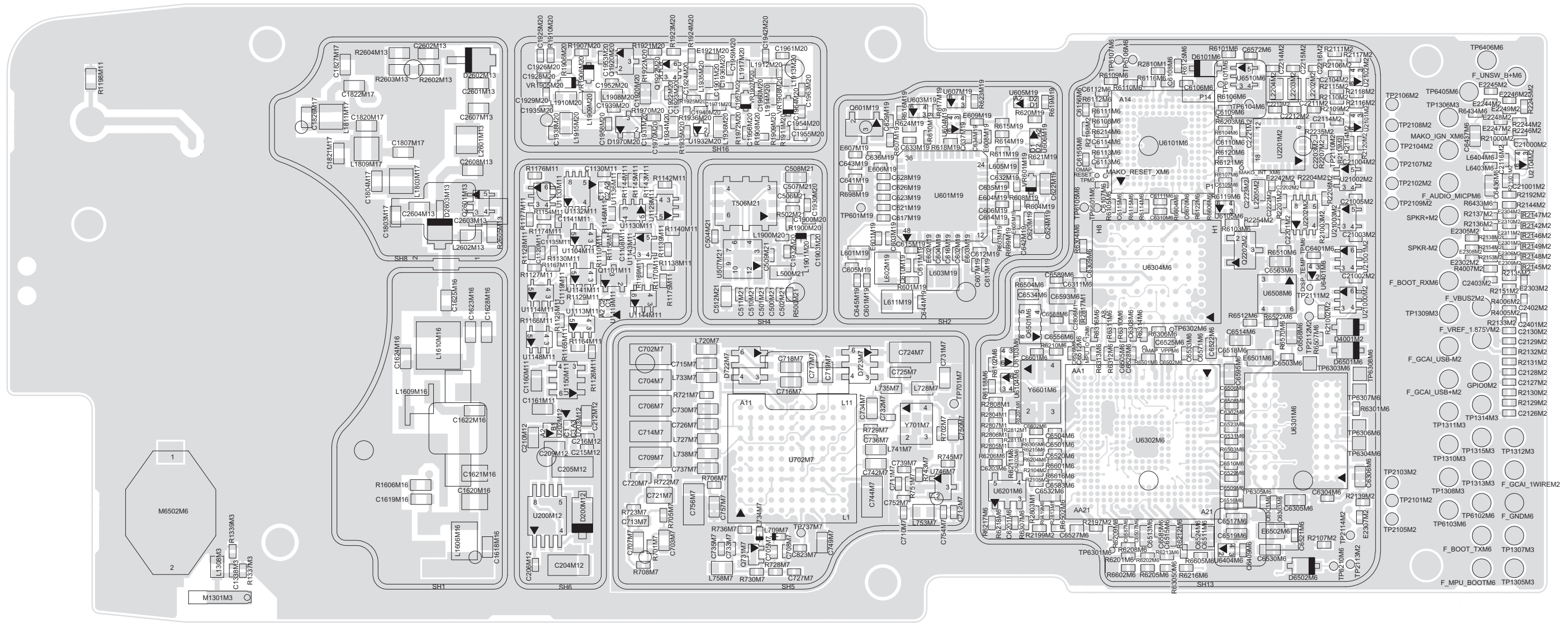


Figure 8-75. Transceiver (RF) Board Layout – Top Side (84012313002)

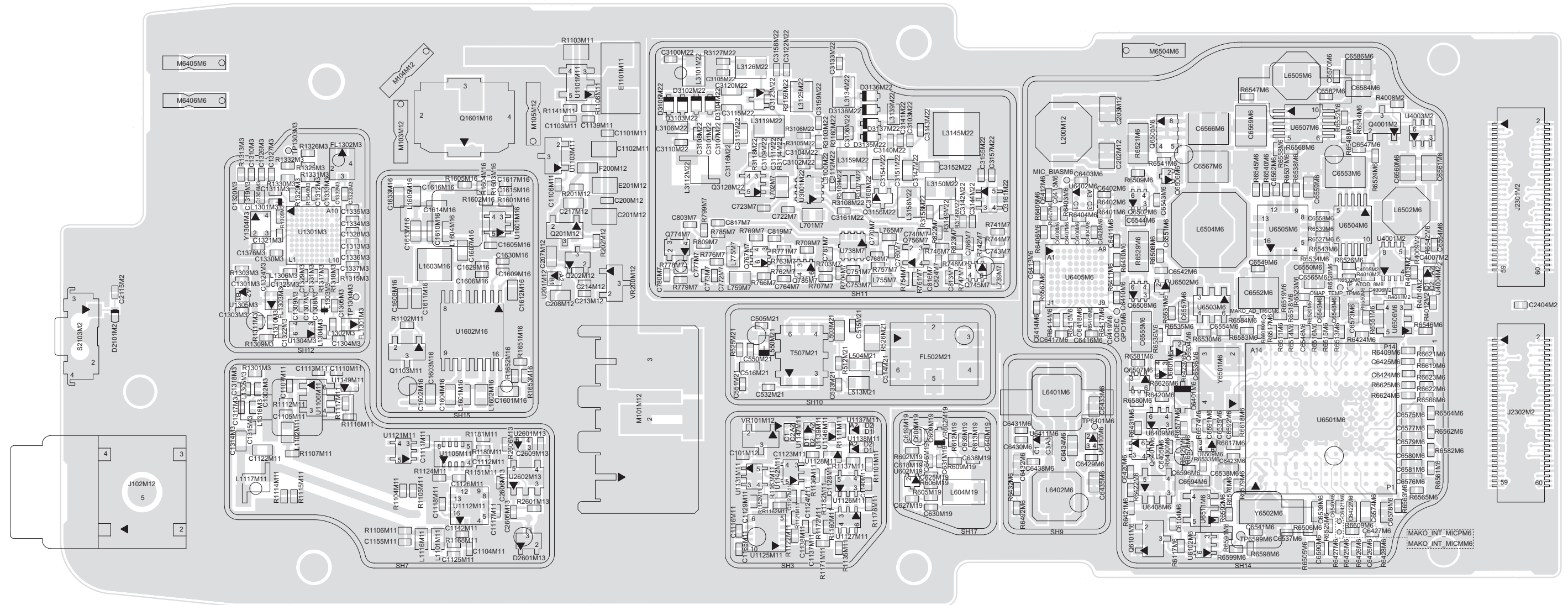


Figure 8-76. Transceiver (RF) Board Layout – Bottom Side (84012313002)

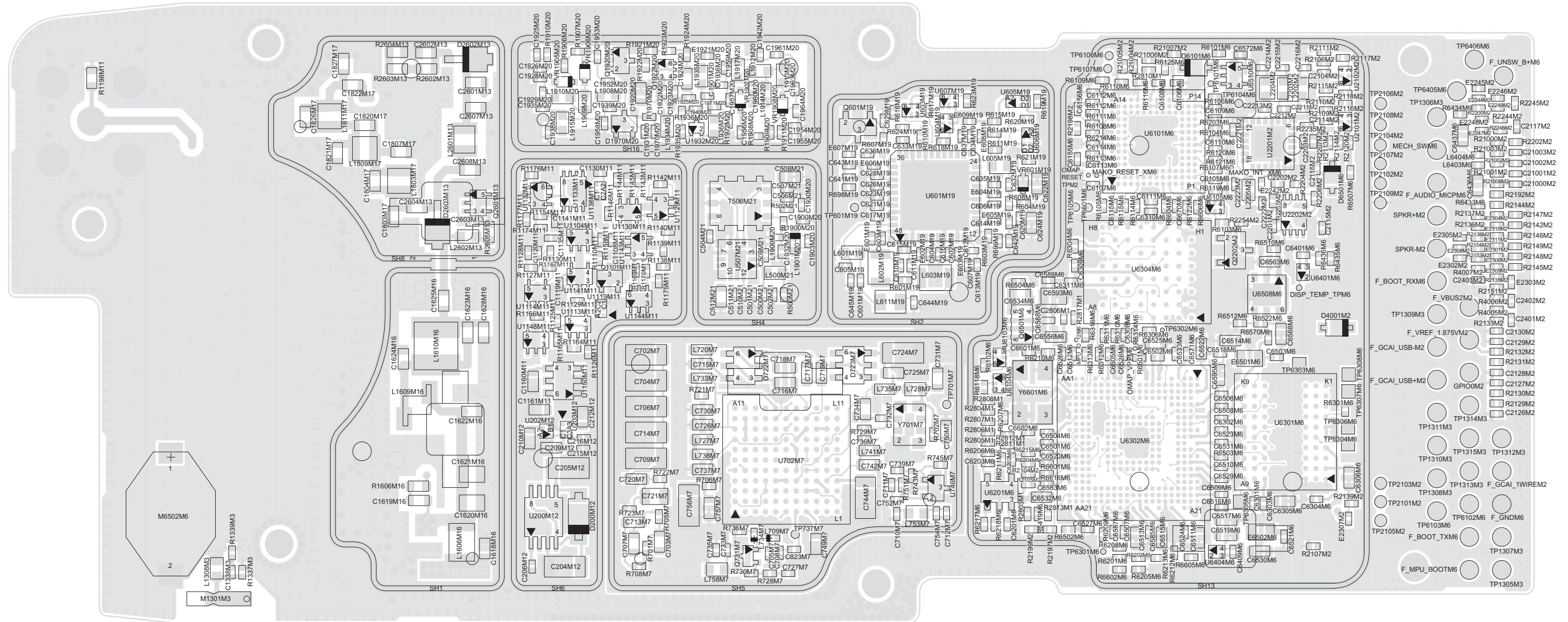


Figure 8-77. Transceiver (RF) Board Layout – Top Side (PC000353A01)



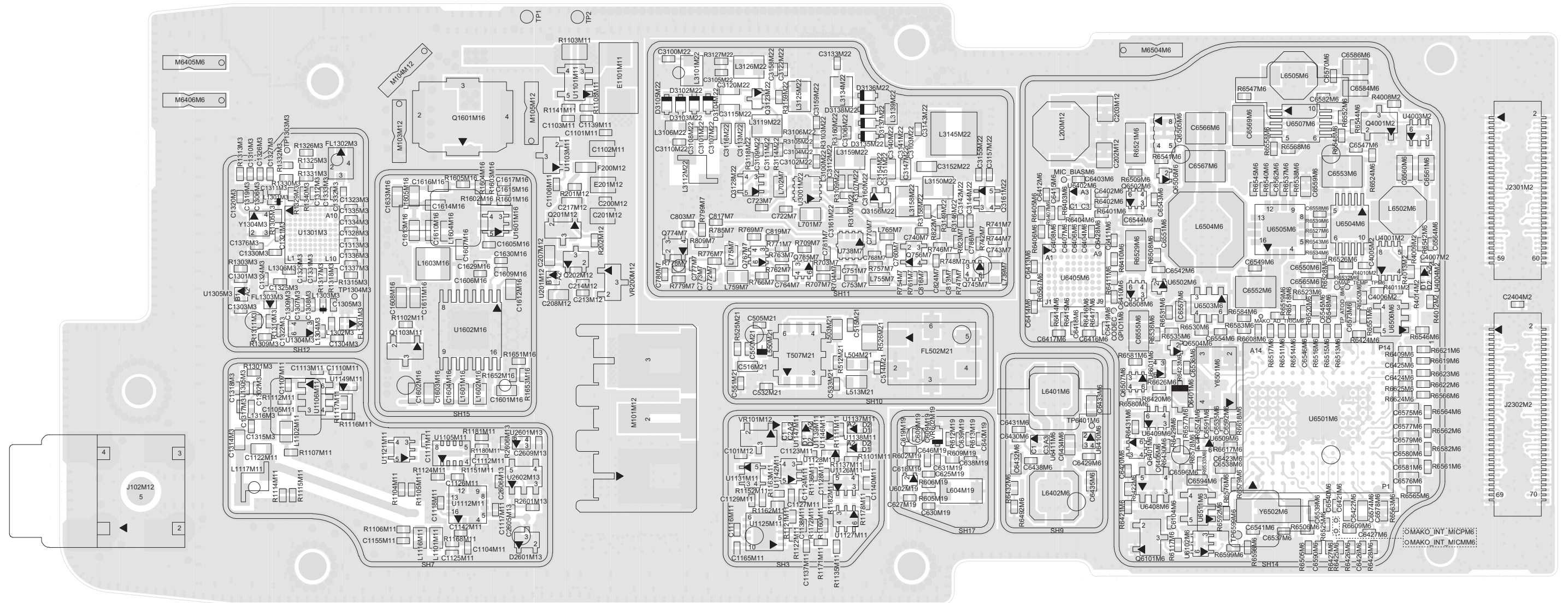


Figure 8-78. Transceiver (RF) Board Layout – Bottom Side (PC000353A01)

UHF1 Transceiver (RF) Board Parts List –  
84012313002

Ref. Des.	Part Number	Description
C101M12	2113944A40	CAP CER CHP 100.0PF 50V 5%
C1101M11	2113945B02	CAP CER CHP 10,000PF 25V 10%
C1102M11	2188468Y01	CAP CER 25V X7R 0805 1UF
C1103M11	2113945B02	CAP CER CHP 10,000PF 25V 10%
C1104M11	NOTPLACED	-
C1105M11	2113944A19	CAP CER CHP 5.6PF 50V +/- 0.5PF
C1106M11	2113945B02	CAP CER CHP 10,000PF 25V 10%
C1107M11	2113944A40	CAP CER CHP 100.0PF 50V 5%
C1108M11	2113946B03	CAP CER CHP 0.068UF 10V 10
C1110M11	2113944A40	CAP CER CHP 100.0PF 50V 5%
C1111M11	2113945Y02	CAP,FXD,.1UF,+10%,-10%,16V-DC,0402,X7R,-55DEG CMIN,125DEG CMAX
C1112M11	2113945B01	CAP CER CHP 6800PF 25V 10%
C1113M11	2113945B02	CAP CER CHP 10,000PF 25V 10%
C1116M11	2113945Y02	CAP,FXD,.1UF,+10%,-10%,16V-DC,0402,X7R,-55DEG CMIN,125DEG CMAX
C1117M11	2113945A12	CAP CER CHP 3300PF 50V 10%
C1118M11	2113945B02	CAP CER CHP 10,000PF 25V 10%
C1119M11	2113945B02	CAP CER CHP 10,000PF 25V 10%
C1120M11	2113945B02	CAP CER CHP 10,000PF 25V 10%

Ref. Des.	Part Number	Description
C1122M11	2113944M04	CAP,FXD,2.7PF,.1PF+/-,50V-DC,0603,C0G,-55DEG CMIN,125DEG CMAX
C1123M11	2113945B02	CAP CER CHP 10,000PF 25V 10%
C1124M11	2113945A13	CAP CER CHP 4700PF 50V 10%
C1125M11	2113944A23	CAP CER CHP 8.2PF 50V +/- 0.5PF
C1126M11	2113945A09	CAP CER CHP 1000PF 50V 10%
C1127M11	2113945Y02	CAP,FXD,.1UF,+10%,-10%,16V-DC,0402,X7R,-55DEG CMIN,125DEG CMAX
C1128M11	2113945B02	CAP CER CHP 10,000PF 25V 10%
C1129M11	2113945B02	CAP CER CHP 10,000PF 25V 10%
C1130M11	2113945B02	CAP CER CHP 10,000PF 25V 10%
C1135M11	NOTPLACED	-
C1137M11	2113945B04	CAP,FXD,.022UF,+10%,-10%,25V-DC,0402,X7R,-55DEG CMIN,125DEG CMA
C1138M11	2113945B04	CAP,FXD,.022UF,+10%,-10%,25V-DC,0402,X7R,-55DEG CMIN,125DEG CMA
C1139M11	2113944A25	CAP CER CHP 10.0PF 50V +/- 0.5PF
C1140M11	2113945A13	CAP CER CHP 4700PF 50V 10%
C1141M11	2113945Y02	CAP,FXD,.1UF,+10%,-10%,16V-DC,0402,X7R,-55DEG CMIN,125DEG CMAX
C1142M11	2113945A09	CAP CER CHP 1000PF 50V 10%
C1155M11	NOTPLACED	-
C1160M11	2113945C31	CAP,FXD,.1UF,+10%,-10%,50V-DC,0603,X7R,-55DEG CMIN,125DEG CMAX

Ref. Des.	Part Number	Description
C1161M11	2113956B91	CAP,FXD,1UF,+10%,-10%,16V-DC,0603,X5R,-55DEG CMIN,85DEG CMAX,PB
C1165M11	2113945Y02	CAP,FXD,.1UF,+10%,-10%,16V-DC,0402,X7R,-55DEG CMIN,125DEG CMAX
C1301M3	2172180Y01	CAP,CHIP,2.2UF,+20%,-20%,6.3V-DC,0402,X5R,-55DEG CMIN,85DEG
C1302M3	2113944A21	CAP CER CHP 6.8PF 50V +/- 0.5PF
C1303M3	2113956A51	CAP,FXD,1UF,+10%,-10%,6.3V-DC,0402,X5R,-55DEG CMIN,85DEG CMAX,P
C1304M3	2113944A26	CAP CER CHP 12.0PF 50V 5%
C1305M3	2113945B02	CAP CER CHP 10,000PF 25V 10%
C1306M3	2187893N01	CAP 1UF, 6.3V, X5R, 0402 PACKAGE
C1307M3	2113944A26	CAP CER CHP 12.0PF 50V 5%
C1308M3	2113945A09	CAP CER CHP 1000PF 50V 10%
C1309M3	2113944A26	CAP CER CHP 12.0PF 50V 5%
C1310M3	2187893N01	CAP 1UF, 6.3V, X5R, 0402 PACKAGE
C1311M3	2113956A51	CAP,FXD,1UF,+10%,-10%,6.3V-DC,0402,X5R,-55DEG CMIN,85DEG CMAX,P
C1312M3	2113956A51	CAP,FXD,1UF,+10%,-10%,6.3V-DC,0402,X5R,-55DEG CMIN,85DEG CMAX,P
C1313M3	2187893N01	CAP 1UF, 6.3V, X5R, 0402 PACKAGE
C1314M3	2113944M20	CAP,FXD,12PF,+2%,-2%,50V-DC,0603,C0G,-55DEG CMIN,125DEG CMAX,PB

Ref. Des.	Part Number	Description
C1315M3	2175389H01	CAP,.5PF,CHIP,0402,CERAMIC,50V
C1317M3	2188881Y12	CAPACITOR CERAMIC NPO HIGH FREQUENCY 16 VOLT (REPLACES 2104801Z12)
C1318M3	2113944A13	CAP CER CHP 3.3PF 50V +/- 0.25PF
C1319M3	2113945Y02	CAP,FXD,.1UF,+10%,-10%,16V-DC,0402,X7R,-55DEG CMIN,125DEG CMAX
C1320M3	2113944A28	CAP CER CHP 18.0PF 50V 5%
C1321M3	2113944A29	CAP CER CHP 22.0PF 50V 5%
C1322M3	2113944A29	CAP CER CHP 22.0PF 50V 5%
C1323M3	2113944A29	CAP CER CHP 22.0PF 50V 5%
C1324M3	2115153H03	CAP,CERAMIC,COG
C1325M3	2113944A29	CAP CER CHP 22.0PF 50V 5%
C1326M3	2113945Y02	CAP,FXD,.1UF,+10%,-10%,16V-DC,0402,X7R,-55DEG CMIN,125DEG CMAX
C1327M3	2113944A28	CAP CER CHP 18.0PF 50V 5%
C1328M3	2113945Y02	CAP,FXD,.1UF,+10%,-10%,16V-DC,0402,X7R,-55DEG CMIN,125DEG CMAX
C1329M3	2113945Y02	CAP,FXD,.1UF,+10%,-10%,16V-DC,0402,X7R,-55DEG CMIN,125DEG CMAX
C1330M3	2113945Y02	CAP,FXD,.1UF,+10%,-10%,16V-DC,0402,X7R,-55DEG CMIN,125DEG CMAX
C1331M3	2113945Y02	CAP,FXD,.1UF,+10%,-10%,16V-DC,0402,X7R,-55DEG CMIN,125DEG CMAX

Ref. Des.	Part Number	Description	Ref. Des.	Part Number	Description	Ref. Des.	Part Number	Description	Ref. Des.	Part Number	Description
C1332M3	2113945Y02	CAP,FXD,.1UF,+10%,-10%,16V-DC,0402,X7R,-55DEG CMIN,125DEG CMAX	C1607M16	2113944M42	CAP,FXD,100PF,+2%,-2%,50V-DC,0603,C0G,-55DEG CMIN,125DEG CMAX,P	C1622M16	2113944M20	CAP,FXD,12PF,+2%,-2%,50V-DC,0603,C0G,-55DEG CMIN,125DEG CMAX,PB	C1903M20	NOTPLACED	-
C1333M3	2113945Y02	CAP,FXD,.1UF,+10%,-10%,16V-DC,0402,X7R,-55DEG CMIN,125DEG CMAX	C1608M16	2113944M42	CAP,FXD,100PF,+2%,-2%,50V-DC,0603,C0G,-55DEG CMIN,125DEG CMAX,P	C1623M16	NOTPLACED	-	C1920M20	2113946D07	CAP,CHIP,4.7UF,+10%,-10%,6.3V-DC,0603,X5R,-55DEG CMIN,85DEG CMA
C1334M3	2113945Y02	CAP,FXD,.1UF,+10%,-10%,16V-DC,0402,X7R,-55DEG CMIN,125DEG CMAX	C1609M16	2113944A40	CAP CER CHP 100.0PF 50V 5%	C1624M16	2113944M25	CAP,FXD,20PF,+2%,-2%,50V-DC,0603,C0G,-55DEG CMIN,125DEG CMAX,PB	C1922M20	2113944A40	CAP CER CHP 100.0PF 50V 5%
C1335M3	2113945Y02	CAP,FXD,.1UF,+10%,-10%,16V-DC,0402,X7R,-55DEG CMIN,125DEG CMAX	C1610M16	2113944M14	CAP,FXD,6.8PF,.1PF+/-,50V-DC,0603,C0G,-55DEG CMIN,125DEG CMAX	C1625M16	2113944M42	CAP,FXD,100PF,+2%,-2%,50V-DC,0603,C0G,-55DEG CMIN,125DEG CMAX,P	C1923M20	2113944A40	CAP CER CHP 100.0PF 50V 5%
C1336M3	2113945Y02	CAP,FXD,.1UF,+10%,-10%,16V-DC,0402,X7R,-55DEG CMIN,125DEG CMAX	C1611M16	2113945L49	CAP,FXD,.01UF,+5%,-5%,50V-DC,0603,X7R,-55DEG CMIN,125DEG CMAX,P	C1628M16	2113951C21	CAP,FXD,3PF,.05PF+/-,250V-DC,0603,C0G,-55DEG CMIN,125DEG CMAX	C1924M20	2113946D07	CAP,CHIP,4.7UF,+10%,-10%,6.3V-DC,0603,X5R,-55DEG CMIN,85DEG CMA
C1337M3	2113944A28	CAP CER CHP 18.0PF 50V 5%	C1612M16	NOTPLACED	-	C1629M16	2113945A12	CAP CER CHP 3300PF 50V 10%	C1925M20	2113944A40	CAP CER CHP 100.0PF 50V 5%
C1338M3	2175389H01	CAP,.5PF,CHIP,0402,CERAMIC,50V	C1613M16	2113944M29	CAP,FXD,30PF,+2%,-2%,50V-DC,0603,C0G,-55DEG CMIN,125DEG CMAX,PB	C1630M16	2113945A12	CAP CER CHP 3300PF 50V 10%	C1926M20	2113946B04	CAP CER CHP 0.10UF 10V 10%
C1376M3	2113944A25	CAP CER CHP 10.0PF 50V +/- 0.5PF	C1614M16	2113944M36	CAP,FXD,56PF,+2%,-2%,50V-DC,0603,C0G,-55DEG CMIN,125DEG CMAX,PB	C1633M16	NOTPLACED	-	C1928M20	2115153H21	CAP,CERAMIC,COG
C1601M16	2113944M42	CAP,FXD,100PF,+2%,-2%,50V-DC,0603,C0G,-55DEG CMIN,125DEG CMAX,P	C1615M16	2113944A40	CAP CER CHP 100.0PF 50V 5%	C1803M17	2113944C17	CAP CER CHP 3.0PF 50V +/- 0.25PF	C1929M20	2115153H27	CAP,CERAMIC,COG
C1602M16	2113944M42	CAP,FXD,100PF,+2%,-2%,50V-DC,0603,C0G,-55DEG CMIN,125DEG CMAX,P	C1616M16	2113944M34	CAP,FXD,47PF,+2%,-2%,50V-DC,0603,C0G,-55DEG CMIN,125DEG CMAX,PB	C1804M17	2113951C05	CAP,FXD,.5PF,.05PF+/-,250V-DC,0603,C0G,-55DEG CMIN,125DEG CMAX	C1930M20	NOTPLACED	-
C1603M16	2113945L49	CAP,FXD,.01UF,+5%,-5%,50V-DC,0603,X7R,-55DEG CMIN,125DEG CMAX,P	C1617M16	2113945B02	CAP CER CHP 10,000PF 25V 10%	C1807M17	2113951C26	CAP,FXD,4.7PF,.05PF+/-,250V-DC,0603,C0G,-55DEG CMIN,125DEG CMA	C1931M20	2115153H54	CAP,CERAMIC,COG
C1604M16	2113944M42	CAP,FXD,100PF,+2%,-2%,50V-DC,0603,C0G,-55DEG CMIN,125DEG CMAX,P	C1618M16	2113944M42	CAP,FXD,100PF,+2%,-2%,50V-DC,0603,C0G,-55DEG CMIN,125DEG CMAX,P	C1820M17	2113944C16	CAP CER CHP 2.7PF 50V +/- 0.25PF	C1932M20	NOTPLACED	-
C1605M16	2113945B02	CAP CER CHP 10,000PF 25V 10%	C1619M16	2113945C02	CAP CER CHP 10,000PF 50V 10%	C1821M17	2113944C26	CAP CER CHP 6.8PF 50V +/- 0.5PF	C1935M20	2115153H13	CAP,CERAMIC,COG
C1606M16	2113944A40	CAP CER CHP 100.0PF 50V 5%	C1620M16	2171741M09	CAP,CER CHIP,68PF,50V-DC,HI Q CAP,68PF,0805,C0G,5%	C1822M17	2113944C45	CAP CER CHP 100.0PF 50V 5%	C1936M20	2115153H26	CAP,CERAMIC,COG
			C1621M16	2171741M10	CAP,CER CHIP,12PF,100V-DC,HI Q CAP,12PF,0805,C0G,5%	C1826M17	2113944C16	CAP CER CHP 2.7PF 50V +/- 0.25PF	C1938M20	2115153H15	CAP,CERAMIC,COG
						C1827M17	2113944C14	CAP CER CHP 2.2PF 50V +/- 0.25PF	C1939M20	2115153H13	CAP,CERAMIC,COG
						C1900M20	2115153H25	CAP,CERAMIC,COG	C1940M20	2113944A40	CAP CER CHP 100.0PF 50V 5%
						C1901M20	2115153H57	CAP,CERAMIC,COG	C1942M20	2115153H23	CAP,CERAMIC,COG
									C1952M20	2115153H27	CAP,CERAMIC,COG
									C1953M20	2115153H21	CAP,CERAMIC,COG
									C1954M20	2113944A40	CAP CER CHP 100.0PF 50V 5%
									C1955M20	2113946B04	CAP CER CHP 0.10UF 10V 10%
									C1956M20	2115153H21	CAP,CERAMIC,COG
									C1957M20	2115153H27	CAP,CERAMIC,COG
									C1958M20	2115153H23	CAP,CERAMIC,COG
									C1959M20	2115153H13	CAP,CERAMIC,COG

Ref. Des.	Part Number	Description
C1960M20	2115153H30	CAP, CERAMIC, COG
C1961M20	2115153H13	CAP, CERAMIC, COG
C1963M20	2115153H27	CAP, CERAMIC, COG
C1964M20	2115153H21	CAP, CERAMIC, COG
C1970M20	2115153H12	CAP, CERAMIC, COG
C1971M20	2115153H07	CAP, CERAMIC, COG
C200M12	2113945B02	CAP CER CHP 10,000PF 25V 10%
C201M12	2188468Y01	CAP CER 25V X7R 0805 1UF
C202M12	2188468Y01	CAP CER 25V X7R 0805 1UF
C203M12	2188468Y01	CAP CER 25V X7R 0805 1UF
C204M12	2113955D35	CAP,FXD,4.7UF,+10%,-10%,16V-DC,1206,X7R,-55DEG CMIN,125DEG CMAX
C205M12	2113955D35	CAP,FXD,4.7UF,+10%,-10%,16V-DC,1206,X7R,-55DEG CMIN,125DEG CMAX
C206M12	2113945B02	CAP CER CHP 10,000PF 25V 10%
C207M12	2113956B91	CAP,FXD,1UF,+10%,-10%,16V-DC,0603,X5R,-55DEG CMIN,85DEG CMAX,PB
C208M12	2113956B91	CAP,FXD,1UF,+10%,-10%,16V-DC,0603,X5R,-55DEG CMIN,85DEG CMAX,PB
C209M12	2113956B91	CAP,FXD,1UF,+10%,-10%,16V-DC,0603,X5R,-55DEG CMIN,85DEG CMAX,PB
C2100M2	2113945Y02	CAP,FXD,.1UF,+10%,-10%,16V-DC,0402,X7R,-55DEG CMIN,125DEG CMAX

Ref. Des.	Part Number	Description
C21001M2	2113945Y02	CAP,FXD,.1UF,+10%,-10%,16V-DC,0402,X7R,-55DEG CMIN,125DEG CMAX
C21002M2	2113946B04	CAP CER CHP 0.10UF 10V 10%
C21003M2	2113946B04	CAP CER CHP 0.10UF 10V 10%
C21004M2	2113945Y02	CAP,FXD,.1UF,+10%,-10%,16V-DC,0402,X7R,-55DEG CMIN,125DEG CMAX
C21005M2	2113946B04	CAP CER CHP 0.10UF 10V 10%
C2104M2	2113946B04	CAP CER CHP 0.10UF 10V 10%
C210M12	2113956B91	CAP,FXD,1UF,+10%,-10%,16V-DC,0603,X5R,-55DEG CMIN,85DEG CMAX,PB
C2114M2	2113946B04	CAP CER CHP 0.10UF 10V 10%
C2115M2	2113944A40	CAP CER CHP 100.0PF 50V 5%
C2116M2	2113946B04	CAP CER CHP 0.10UF 10V 10%
C2126M2	2113944A46	CAP CER CHP 330.0 PF 50V 5%
C2127M2	2113944A46	CAP CER CHP 330.0 PF 50V 5%
C2128M2	2113944A46	CAP CER CHP 330.0 PF 50V 5%
C2129M2	2113944A46	CAP CER CHP 330.0 PF 50V 5%
C212M12	2113946D07	CAP,CHIP,4.7UF,+10%,-10%,6.3V-DC,0603,X5R,-55DEG CMIN,85DEG CMA
C2130M2	2113944A46	CAP CER CHP 330.0 PF 50V 5%
C213M12	2113944A46	CAP CER CHP 330.0 PF 50V 5%
C214M12	2113944A40	CAP CER CHP 100.0PF 50V 5%

Ref. Des.	Part Number	Description
C215M12	2113944A46	CAP CER CHP 330.0 PF 50V 5%
C216M12	2113944A40	CAP CER CHP 100.0PF 50V 5%
C217M12	2113956B91	CAP,FXD,1UF,+10%,-10%,16V-DC,0603,X5R,-55DEG CMIN,85DEG CMAX,PB
C2201M2	2113946B04	CAP CER CHP 0.10UF 10V 10%
C2202M2	2113946B04	CAP CER CHP 0.10UF 10V 10%
C2203M2	2113946B04	CAP CER CHP 0.10UF 10V 10%
C2211M2	2113946B04	CAP CER CHP 0.10UF 10V 10%
C2212M2	2113946B04	CAP CER CHP 0.10UF 10V 10%
C2213M2	2113946B04	CAP CER CHP 0.10UF 10V 10%
C2214M2	2113946B04	CAP CER CHP 0.10UF 10V 10%
C2215M2	2113946B04	CAP CER CHP 0.10UF 10V 10%
C2216M2	2113946B04	CAP CER CHP 0.10UF 10V 10%
C2221M2	2113946B04	CAP CER CHP 0.10UF 10V 10%
C2222M2	2113946B04	CAP CER CHP 0.10UF 10V 10%
C2223M2	2113944A40	CAP CER CHP 100.0PF 50V 5%
C2401M2	NOTPLACED	-
C2402M2	NOTPLACED	-
C2403M2	NOTPLACED	-
C2404M2	NOTPLACED	-
C2601M13	2113944C45	CAP CER CHP 100.0PF 50V 5%
C2602M13	2113944C45	CAP CER CHP 100.0PF 50V 5%

Ref. Des.	Part Number	Description
C2603M13	2113944A40	CAP CER CHP 100.0PF 50V 5%
C2604M13	2113944C45	CAP CER CHP 100.0PF 50V 5%
C2605M13	2113944A40	CAP CER CHP 100.0PF 50V 5%
C2606M13	2113944A40	CAP CER CHP 100.0PF 50V 5%
C2607M13	2113944C20	CAP CER CHP 3.9PF 50V +/- 0.25PF
C2608M13	2113944C20	CAP CER CHP 3.9PF 50V +/- 0.25PF
C2609M13	2113946K02	CAP CER CHP 0.10UF 16V
C2806M1	NOTPLACED	-
C3100M22	2113944A40	CAP CER CHP 100.0PF 50V 5%
C3101M22	2115153H21	CAP, CERAMIC, COG
C3102M22	2113944A40	CAP CER CHP 100.0PF 50V 5%
C3103M22	NOTPLACED	-
C3104M22	NOTPLACED	-
C3105M22	2113944A40	CAP CER CHP 100.0PF 50V 5%
C3106M22	2113944A40	CAP CER CHP 100.0PF 50V 5%
C3107M22	2115153H23	CAP, CERAMIC, COG
C3108M22	NOTPLACED	-
C3109M22	2113946B04	CAP CER CHP 0.10UF 10V 10%
C3110M22	2113944A15	CAP CER CHP 3.9PF 50V +/- 0.25PF
C3111M22	2113944A40	CAP CER CHP 100.0PF 50V 5%
C3112M22	2113944A40	CAP CER CHP 100.0PF 50V 5%
C3113M22	2113944M15	CAP,FXD,7.5PF,.1PF+/-,50V-DC,0603,C0G,-55DEG CMIN,125DEG CMAX

Ref. Des.	Part Number	Description
C3115M22	2113944M14	CAP,FXD,6.8PF,.1PF+/-,50V-DC,0603,C0G,-55DEG CMIN,125DEG CMAX
C3116M22	2113944M14	CAP,FXD,6.8PF,.1PF+/-,50V-DC,0603,C0G,-55DEG CMIN,125DEG CMAX
C3120M22	2113944M42	CAP,FXD,100PF,+2%,-2%,50V-DC,0603,C0G,-55DEG CMIN,125DEG CMAX,P
C3122M22	2113944A40	CAP CER CHP 100.0PF 50V 5%
C3133M22	2113944A40	CAP CER CHP 100.0PF 50V 5%
C3140M22	2115153H19	CAP, CERAMIC, COG
C3141M22	2115153H19	CAP, CERAMIC, COG
C3142M22	2113946B04	CAP CER CHP 0.10UF 10V 10%
C3143M22	2113944A15	CAP CER CHP 3.9PF 50V +/- 0.25PF
C3144M22	2113944A40	CAP CER CHP 100.0PF 50V 5%
C3147M22	2113944M09	CAP,FXD,4.3PF,.1PF+/-,50V-DC,0603,C0G,-55DEG CMIN,125DEG CMAX
C3151M22	2113944M16	CAP,FXD,8.2PF,.1PF+/-,50V-DC,0603,C0G,-55DEG CMIN,125DEG CMAX
C3152M22	2113944M12	CAP,FXD,5.6PF,.1PF+/-,50V-DC,0603,C0G,-55DEG CMIN,125DEG CMAX
C3154M22	2113944M35	CAP,FXD,51PF,+2%,-2%,50V-DC,0603,C0G,-55DEG CMIN,125DEG CMAX,PB
C3155M22	2113944A40	CAP CER CHP 100.0PF 50V 5%
C3157M22	2113946B04	CAP CER CHP 0.10UF 10V 10%
C3158M22	2113946B04	CAP CER CHP 0.10UF 10V 10%
C3159M22	2113944A09	CAP CER CHP 2.2PF 50V +/- 0.25PF

Ref. Des.	Part Number	Description
C3160M22	2113944A17	CAP CER CHP 4.7PF 50V +/- 0.25PF
C3161M22	2113944A40	CAP CER CHP 100.0PF 50V 5%
C4005M2	2113946B04	CAP CER CHP 0.10UF 10V 10%
C4006M2	2113946B04	CAP CER CHP 0.10UF 10V 10%
C4007M2	2113946B04	CAP CER CHP 0.10UF 10V 10%
C500M21	2113945B05	CAP,FXD,.033UF,+10%,-10%,25V-DC,0402,X7R,-55DEG CMIN,125DEG CMA
C501M21	2113944A32	CAP CER CHP 39.0PF 50V 5%
C502M21	2113945B05	CAP,FXD,.033UF,+10%,-10%,25V-DC,0402,X7R,-55DEG CMIN,125DEG CMA
C504M21	2113944A40	CAP CER CHP 100.0PF 50V 5%
C505M21	NOTPLACED	-
C506M21	2113944A32	CAP CER CHP 39.0PF 50V 5%
C507M21	2113945B05	CAP,FXD,.033UF,+10%,-10%,25V-DC,0402,X7R,-55DEG CMIN,125DEG CMA
C508M21	2113946D07	CAP,CHIP,4.7UF,+10%,-10%,6.3V-DC,0603,X5R,-55DEG CMIN,85DEG CMA
C509M21	2113945B05	CAP,FXD,.033UF,+10%,-10%,25V-DC,0402,X7R,-55DEG CMIN,125DEG CMA
C510M21	2113944A32	CAP CER CHP 39.0PF 50V 5%
C511M21	2113945B05	CAP,FXD,.033UF,+10%,-10%,25V-DC,0402,X7R,-55DEG CMIN,125DEG CMA
C512M21	2113946D07	CAP,CHIP,4.7UF,+10%,-10%,6.3V-DC,0603,X5R,-55DEG CMIN,85DEG CMA
C514M21	NOTPLACED	-
C515M21	2113944A14	CAP CER CHP 3.6PF 50V +/- 0.25PF

Ref. Des.	Part Number	Description
C516M21	2113944M42	CAP,FXD,100PF,+2%,-2%,50V-DC,0603,C0G,-55DEG CMIN,125DEG CMAX,P
C532M21	2113944A32	CAP CER CHP 39.0PF 50V 5%
C533M21	2115153H52	CAP, CERAMIC, COG
C550M21	NOTPLACED	-
C551M21	NOTPLACED	-
C601M19	2113945B02	CAP CER CHP 10,000PF 25V 10%
C602M19	2113945B02	CAP CER CHP 10,000PF 25V 10%
C603M19	2113945B02	CAP CER CHP 10,000PF 25V 10%
C604M19	2113945B02	CAP CER CHP 10,000PF 25V 10%
C605M19	2113944A15	CAP CER CHP 3.9PF 50V +/- 0.25PF
C606M19	2113946B04	CAP CER CHP 0.10UF 10V 10%
C607M19	2113944A40	CAP CER CHP 100.0PF 50V 5%
C608M19	2113944A12	CAP CER CHP 3.0PF 50V +/- 0.25PF
C609M19	2113944A30	CAP CER CHP 27.0PF 50V 5%
C6104M6	2113946B04	CAP CER CHP 0.10UF 10V 10%
C6105M6	2113946B04	CAP CER CHP 0.10UF 10V 10%
C6106M6	2113946B04	CAP CER CHP 0.10UF 10V 10%
C6107M6	2113946B04	CAP CER CHP 0.10UF 10V 10%
C6108M6	2113946B04	CAP CER CHP 0.10UF 10V 10%
C6109M6	2113946B04	CAP CER CHP 0.10UF 10V 10%
C610M19	2113944A40	CAP CER CHP 100.0PF 50V 5%

Ref. Des.	Part Number	Description
C6110M6	2113946B04	CAP CER CHP 0.10UF 10V 10%
C6111M6	2113946B04	CAP CER CHP 0.10UF 10V 10%
C6112M6	2113946B04	CAP CER CHP 0.10UF 10V 10%
C6113M6	2113946B04	CAP CER CHP 0.10UF 10V 10%
C6114M6	2113946B04	CAP CER CHP 0.10UF 10V 10%
C6115M6	2113946B04	CAP CER CHP 0.10UF 10V 10%
C611M19	2113944A40	CAP CER CHP 100.0PF 50V 5%
C612M19	2113945B02	CAP CER CHP 10,000PF 25V 10%
C613M19	2113944A40	CAP CER CHP 100.0PF 50V 5%
C614M19	2113945B02	CAP CER CHP 10,000PF 25V 10%
C6155M6	NOTPLACED	-
C6156M6	NOTPLACED	-
C615M19	2113944A42	CAP CER CHP 150.0PF 50V 5%
C616M19	2113945A11	CAP CER CHP 2200PF 50V 10%
C617M19	2113946B04	CAP CER CHP 0.10UF 10V 10%
C618M19	2113944A31	CAP CER CHP 33.0PF 50V 5%
C619M19	2113944A35	CAP CER CHP 62.0PF 50V 5%
C6201M6	2113944A40	CAP CER CHP 100.0PF 50V 5%
C6202M6	2113945A09	CAP CER CHP 1000PF 50V 10%
C6203M6	2113946B04	CAP CER CHP 0.10UF 10V 10%
C620M19	2113946B04	CAP CER CHP 0.10UF 10V 10%

Ref. Des.	Part Number	Description
C621M19	2113946B04	CAP CER CHP 0.10UF 10V 10%
C622M19	2113946C07	CAP,FXD,.33UF,+10%,-10%,10V-DC,0603,X5R,-55DEG CMIN,85DEG CMAX
C623M19	2113945B02	CAP CER CHP 10,000PF 25V 10%
C624M19	2113946C07	CAP,FXD,.33UF,+10%,-10%,10V-DC,0603,X5R,-55DEG CMIN,85DEG CMAX
C625M19	2115153H39	CAP, CERAMIC, COG
C626M19	2113945A09	CAP CER CHP 1000PF 50V 10%
C627M19	2113945A09	CAP CER CHP 1000PF 50V 10%
C628M19	2113945B02	CAP CER CHP 10,000PF 25V 10%
C629M19	2113946B04	CAP CER CHP 0.10UF 10V 10%
C6301M6	2113946B04	CAP CER CHP 0.10UF 10V 10%
C6302M6	2113946B04	CAP CER CHP 0.10UF 10V 10%
C6303M6	2113946B04	CAP CER CHP 0.10UF 10V 10%
C6304M6	2113946B04	CAP CER CHP 0.10UF 10V 10%
C6305M6	2113946S35	CAP CER CHP 1.0UF 16V 10%
C6306M6	2113946S35	CAP CER CHP 1.0UF 16V 10%
C6308M6	2113946B04	CAP CER CHP 0.10UF 10V 10%
C6309M6	2113946B04	CAP CER CHP 0.10UF 10V 10%
C630M19	2113946B04	CAP CER CHP 0.10UF 10V 10%
C6310M6	2113946B04	CAP CER CHP 0.10UF 10V 10%
C6311M6	2113946B04	CAP CER CHP 0.10UF 10V 10%

Ref. Des.	Part Number	Description
C631M19	2115153H31	CAP, CERAMIC, COG
C632M19	2113944A40	CAP CER CHP 100.0PF 50V 5%
C633M19	2113945B02	CAP CER CHP 10,000PF 25V 10%
C634M19	2113946B04	CAP CER CHP 0.10UF 10V 10%
C635M19	2113945B02	CAP CER CHP 10,000PF 25V 10%
C636M19	2113946B04	CAP CER CHP 0.10UF 10V 10%
C637M19	2113946B04	CAP CER CHP 0.10UF 10V 10%
C638M19	2113945A12	CAP CER CHP 3300PF 50V 10%
C639M19	2113945B02	CAP CER CHP 10,000PF 25V 10%
C6401M6	2113946B04	CAP CER CHP 0.10UF 10V 10%
C6402M6	2113956A51	CAP,FXD,1UF,+10%,-10%,6.3V-DC,0402,X5R,-55DEG CMIN,85DEG CMAX,P
C6403M6	2113946B04	CAP CER CHP 0.10UF 10V 10%
C6404M6	2113946B04	CAP CER CHP 0.10UF 10V 10%
C6405M6	2113946B04	CAP CER CHP 0.10UF 10V 10%
C6406M6	2113946B04	CAP CER CHP 0.10UF 10V 10%
C6407M6	2113946B04	CAP CER CHP 0.10UF 10V 10%
C6408M6	2113946B04	CAP CER CHP 0.10UF 10V 10%
C6409M6	2113946B04	CAP CER CHP 0.10UF 10V 10%
C640M19	2113946B04	CAP CER CHP 0.10UF 10V 10%
C6410M6	2113946B04	CAP CER CHP 0.10UF 10V 10%

Ref. Des.	Part Number	Description
C6411M6	2113946B04	CAP CER CHP 0.10UF 10V 10%
C6412M6	NOTPLACED	-
C6413M6	2113946B04	CAP CER CHP 0.10UF 10V 10%
C6414M6	2113946B04	CAP CER CHP 0.10UF 10V 10%
C6415M6	NOTPLACED	-
C6416M6	2113945B04	CAP,FXD,.022UF,+10%,-10%,25V-DC,0402,X7R,-55DEG CMIN,125DEG CMA
C6417M6	2113945B04	CAP,FXD,.022UF,+10%,-10%,25V-DC,0402,X7R,-55DEG CMIN,125DEG CMA
C6418M6	2113946B04	CAP CER CHP 0.10UF 10V 10%
C6419M6	2113946B04	CAP CER CHP 0.10UF 10V 10%
C641M19	2113944A31	CAP CER CHP 33.0PF 50V 5%
C6420M6	2113945B04	CAP,FXD,.022UF,+10%,-10%,25V-DC,0402,X7R,-55DEG CMIN,125DEG CMA
C6421M6	2113946B04	CAP CER CHP 0.10UF 10V 10%
C6422M6	2113946C02	CAP CER CHP 0.22UF 10V 10%
C6423M6	2113946B04	CAP CER CHP 0.10UF 10V 10%
C6424M6	2113944A40	CAP CER CHP 100.0PF 50V 5%
C6425M6	2113944A40	CAP CER CHP 100.0PF 50V 5%
C6426M6	2113945B02	CAP CER CHP 10,000PF 25V 10%
C6427M6	2113944A50	CAP CER CHP 680.0 PF 50V 5%
C6428M6	2113944A40	CAP CER CHP 100.0PF 50V 5%
C6429M6	2113946B04	CAP CER CHP 0.10UF 10V 10%

Ref. Des.	Part Number	Description
C642M19	2113944A48	CAP CER CHP 470.0 PF 50V 5%
C6430M6	2113946B04	CAP CER CHP 0.10UF 10V 10%
C6431M6	2113946B04	CAP CER CHP 0.10UF 10V 10%
C6432M6	2113956B54	CAP,FXD,10UF,+20%,-20%,6.3V-DC,X5R,-55DEG CMIN,85DEG CMAX,PB-F
C6433M6	2113946S35	CAP CER CHP 1.0UF 16V 10%
C6434M6	2113946L05	CAP,FXD,.33UF,+80%,-20%,16V-DC,0603,Y5V,-30DEG CMIN,85DEG CMAX
C6435M6	2113946S35	CAP CER CHP 1.0UF 16V 10%
C6436M6	2113946C08	CAP,FXD,.47UF,+10%,-10%,10V-DC,0603,X5R,-55DEG CMIN,85DEG CMAX
C6437M6	2113946C08	CAP,FXD,.47UF,+10%,-10%,10V-DC,0603,X5R,-55DEG CMIN,85DEG CMAX
C6438M6	2113944A40	CAP CER CHP 100.0PF 50V 5%
C643M19	2113944A48	CAP CER CHP 470.0 PF 50V 5%
C644M19	2113944A11	CAP CER CHP 2.7PF 50V +/- 0.25PF
C645M19	NOTPLACED	-
C646M19	2115153H32	CAP, CERAMIC, COG
C6501M6	2113946B04	CAP CER CHP 0.10UF 10V 10%
C6502M6	2113946B04	CAP CER CHP 0.10UF 10V 10%
C6503M6	2113944A46	CAP CER CHP 330.0 PF 50V 5%
C6504M6	2113946B04	CAP CER CHP 0.10UF 10V 10%
C6505M6	2113946B04	CAP CER CHP 0.10UF 10V 10%
C6506M6	2113946B04	CAP CER CHP 0.10UF 10V 10%

Ref. Des.	Part Number	Description
C6507M6	2113946B04	CAP CER CHP 0.10UF 10V 10%
C6508M6	2113946B04	CAP CER CHP 0.10UF 10V 10%
C6509M6	2113946B04	CAP CER CHP 0.10UF 10V 10%
C6510M6	2113946B04	CAP CER CHP 0.10UF 10V 10%
C6511M6	2113946S35	CAP CER CHP 1.0UF 16V 10%
C6512M6	2113946B04	CAP CER CHP 0.10UF 10V 10%
C6513M6	2113946S35	CAP CER CHP 1.0UF 16V 10%
C6514M6	2113946S35	CAP CER CHP 1.0UF 16V 10%
C6515M6	2113946S35	CAP CER CHP 1.0UF 16V 10%
C6516M6	2113946B04	CAP CER CHP 0.10UF 10V 10%
C6517M6	2113946S35	CAP CER CHP 1.0UF 16V 10%
C6518M6	2113946B04	CAP CER CHP 0.10UF 10V 10%
C6519M6	2113946S35	CAP CER CHP 1.0UF 16V 10%
C6520M6	2113946B04	CAP CER CHP 0.10UF 10V 10%
C6521M6	2113944A46	CAP CER CHP 330.0 PF 50V 5%
C6522M6	2113946S35	CAP CER CHP 1.0UF 16V 10%
C6523M6	2113946B04	CAP CER CHP 0.10UF 10V 10%
C6524M6	2113946B04	CAP CER CHP 0.10UF 10V 10%
C6525M6	2113946S35	CAP CER CHP 1.0UF 16V 10%
C6526M6	2113946B04	CAP CER CHP 0.10UF 10V 10%

Ref. Des.	Part Number	Description
C6527M6	2113946B04	CAP CER CHP 0.10UF 10V 10%
C6528M6	2113946B04	CAP CER CHP 0.10UF 10V 10%
C6529M6	2113946B04	CAP CER CHP 0.10UF 10V 10%
C6530M6	2113946S35	CAP CER CHP 1.0UF 16V 10%
C6531M6	2113946B04	CAP CER CHP 0.10UF 10V 10%
C6532M6	2113946S35	CAP CER CHP 1.0UF 16V 10%
C6533M6	2113946B04	CAP CER CHP 0.10UF 10V 10%
C6534M6	2113956B33	CAP,FXD,2.2UF,+10%,-10%,16V-DC,0603,X5R,-55DEG CMIN,85DEG CMAX
C6535M6	2113944A40	CAP CER CHP 100.0PF 50V 5%
C6536M6	2113944A28	CAP CER CHP 18.0PF 50V 5%
C6537M6	2113944A19	CAP CER CHP 5.6PF 50V +/- 0.5PF
C6538M6	2113956B33	CAP,FXD,2.2UF,+10%,-10%,16V-DC,0603,X5R,-55DEG CMIN,85DEG CMAX
C6539M6	2113956B33	CAP,FXD,2.2UF,+10%,-10%,16V-DC,0603,X5R,-55DEG CMIN,85DEG CMAX
C6540M6	2113945A09	CAP CER CHP 1000PF 50V 10%
C6541M6	2113944A19	CAP CER CHP 5.6PF 50V +/- 0.5PF
C6542M6	2113946B04	CAP CER CHP 0.10UF 10V 10%
C6543M6	2113946B04	CAP CER CHP 0.10UF 10V 10%
C6544M6	2113945D04	CAP CER CHP 100,000PF 25V 10%
C6545M6	2113945D04	CAP CER CHP 100,000PF 25V 10%

Ref. Des.	Part Number	Description
C6546M6	2113946B04	CAP CER CHP 0.10UF 10V 10%
C6547M6	2113944A46	CAP CER CHP 330.0 PF 50V 5%
C6548M6	NOTPLACED	-
C6549M6	2113944A46	CAP CER CHP 330.0 PF 50V 5%
C6550M6	2113945D04	CAP CER CHP 100,000PF 25V 10%
C6551M6	2113944A46	CAP CER CHP 330.0 PF 50V 5%
C6552M6	2113956E91	CAP,FXD,10UF,+10%,-10%,16V-DC,1210,X5R,-55DEG CMIN,85DEG CMAX,P
C6553M6	2113956E91	CAP,FXD,10UF,+10%,-10%,16V-DC,1210,X5R,-55DEG CMIN,85DEG CMAX,P
C6554M6	2113946B04	CAP CER CHP 0.10UF 10V 10%
C6555M6	2113955D45	CAP,FXD,4.7UF,+10%,-10%,10V-DC,1206,X7R,-55DEG CMIN,125DEG CMAX
C6556M6	2113956B33	CAP,FXD,2.2UF,+10%,-10%,16V-DC,0603,X5R,-55DEG CMIN,85DEG CMAX
C6557M6	2113945D04	CAP CER CHP 100,000PF 25V 10%
C6558M6	2113944A21	CAP CER CHP 6.8PF 50V +/- 0.5PF
C6559M6	2113946S35	CAP CER CHP 1.0UF 16V 10%
C6560M6	2113956C37	CAP,FXD,10UF,+10%,-10%,16V-DC,0805,X5R,-55DEG CMIN,85DEG CMAX,P
C6561M6	2113956C37	CAP,FXD,10UF,+10%,-10%,16V-DC,0805,X5R,-55DEG CMIN,85DEG CMAX,P
C6562M6	2113944A25	CAP CER CHP 10.0PF 50V +/- 0.5PF

Ref. Des.	Part Number	Description
C6563M6	2113945D04	CAP CER CHP 100,000PF 25V 10%
C6564M6	2113944A46	CAP CER CHP 330.0 PF 50V 5%
C6565M6	2113956B33	CAP,FXD,2.2UF,+10%,-10%,16V-DC,0603,X5R,-55DEG CMIN,85DEG CMAX
C6566M6	2113956E91	CAP,FXD,10UF,+10%,-10%,16V-DC,1210,X5R,-55DEG CMIN,85DEG CMAX,P
C6567M6	2113956E91	CAP,FXD,10UF,+10%,-10%,16V-DC,1210,X5R,-55DEG CMIN,85DEG CMAX,P
C6568M6	2113956B33	CAP,FXD,2.2UF,+10%,-10%,16V-DC,0603,X5R,-55DEG CMIN,85DEG CMAX
C6569M6	2113956E91	CAP,FXD,10UF,+10%,-10%,16V-DC,1210,X5R,-55DEG CMIN,85DEG CMAX,P
C6570M6	2113944A46	CAP CER CHP 330.0 PF 50V 5%
C6571M6	2113946B04	CAP CER CHP 0.10UF 10V 10%
C6572M6	2113946B04	CAP CER CHP 0.10UF 10V 10%
C6573M6	2113946S35	CAP CER CHP 1.0UF 16V 10%
C6574M6	2113946S35	CAP CER CHP 1.0UF 16V 10%
C6575M6	2113946S35	CAP CER CHP 1.0UF 16V 10%
C6576M6	2113956B33	CAP,FXD,2.2UF,+10%,-10%,16V-DC,0603,X5R,-55DEG CMIN,85DEG CMAX
C6577M6	2113946S35	CAP CER CHP 1.0UF 16V 10%
C6578M6	2113946S35	CAP CER CHP 1.0UF 16V 10%
C6579M6	2113946S35	CAP CER CHP 1.0UF 16V 10%

Ref. Des.	Part Number	Description
C6580M6	2113946S35	CAP CER CHP 1.0UF 16V 10%
C6581M6	2113956B33	CAP,FXD,2.2UF,+10%,-10%,16V-DC,0603,X5R,-55DEG CMIN,85DEG CMAX
C6582M6	2113944A21	CAP CER CHP 6.8PF 50V +/- 0.5PF
C6583M6	2113946B04	CAP CER CHP 0.10UF 10V 10%
C6584M6	2113956C37	CAP,FXD,10UF,+10%,-10%,16V-DC,0805,X5R,-55DEG CMIN,85DEG CMAX,P
C6585M6	2113946B04	CAP CER CHP 0.10UF 10V 10%
C6586M6	2113956C35	CAP,FXD,4.7UF,+10%,-10%,16V-DC,0805,X5R,-55DEG CMIN,85DEG CMAX
C6587M6	2113946B04	CAP CER CHP 0.10UF 10V 10%
C6588M6	2113944A46	CAP CER CHP 330.0 PF 50V 5%
C6589M6	2113944A40	CAP CER CHP 100.0PF 50V 5%
C6590M6	2113946B04	CAP CER CHP 0.10UF 10V 10%
C6591M6	2113944A28	CAP CER CHP 18.0PF 50V 5%
C6592M6	2113944A09	CAP CER CHP 2.2PF 50V +/- 0.25PF
C6593M6	2113956C37	CAP,FXD,10UF,+10%,-10%,16V-DC,0805,X5R,-55DEG CMIN,85DEG CMAX,P
C6594M6	2113946C07	CAP,FXD,.33UF,+10%,-10%,10V-DC,0603,X5R,-55DEG CMIN,85DEG CMAX
C6595M6	2113946S35	CAP CER CHP 1.0UF 16V 10%
C6596M6	NOTPLACED	-
C6601M6	2113944A28	CAP CER CHP 18.0PF 50V 5%

Ref. Des.	Part Number	Description
C6602M6	2113944A28	CAP CER CHP 18.0PF 50V 5%
C6670M6	NOTPLACED	-
C702M7	2185419D06	CAP CER SUPER L/D 0.1UF
C703M7	2113945C26	CAP,FXD,.039UF,+10%,-10%,50V-DC,0603,X7R,-55DEG CMIN,125DEG CMA
C704M7	2185419D06	CAP CER SUPER L/D 0.1UF
C705M7	2115153H24	CAP, CERAMIC, COG
C706M7	2185419D06	CAP CER SUPER L/D 0.1UF
C707M7	2113945C01	CAP CER CHP 6800PF 50V 10%
C708M7	2115153H37	CAP, CERAMIC, COG
C709M7	2171051Y11	CAP,FXD,.1UF,+5%,-5%,1206,-55DEG CMIN,125DEG CMAX,PB-FREE
C710M7	NOTPLACED	-
C711M7	NOTPLACED	-
C712M7	NOTPLACED	-
C713M7	2113945C26	CAP,FXD,.039UF,+10%,-10%,50V-DC,0603,X7R,-55DEG CMIN,125DEG CMA
C714M7	2171051Y11	CAP,FXD,.1UF,+5%,-5%,1206,-55DEG CMIN,125DEG CMAX,PB-FREE
C715M7	2113945C31	CAP,FXD,.1UF,+10%,-10%,50V-DC,0603,X7R,-55DEG CMIN,125DEG CMAX
C716M7	2113945C31	CAP,FXD,.1UF,+10%,-10%,50V-DC,0603,X7R,-55DEG CMIN,125DEG CMAX
C717M7	2113945C31	CAP,FXD,.1UF,+10%,-10%,50V-DC,0603,X7R,-55DEG CMIN,125DEG CMAX

Ref. Des.	Part Number	Description
C718M7	2113945C31	CAP,FXD,.1UF,+10%,-10%,50V-DC,0603,X7R,-55DEG CMIN,125DEG CMAX
C719M7	2113945C31	CAP,FXD,.1UF,+10%,-10%,50V-DC,0603,X7R,-55DEG CMIN,125DEG CMAX
C720M7	2113944C53	CAP CER CHP 1500.OPF 50V 5
C721M7	NOTPLACED	-
C722M7	2113944A40	CAP CER CHP 100.0PF 50V 5%
C723M7	2113944A40	CAP CER CHP 100.0PF 50V 5%
C724M7	2113955D37	CAP,FXD,10UF,+10%,-10%,16V-DC,1206,X7R,-55DEG CMIN,125DEG CMAX
C725M7	2113945C31	CAP,FXD,.1UF,+10%,-10%,50V-DC,0603,X7R,-55DEG CMIN,125DEG CMAX
C726M7	2113945C31	CAP,FXD,.1UF,+10%,-10%,50V-DC,0603,X7R,-55DEG CMIN,125DEG CMAX
C727M7	2113944A40	CAP CER CHP 100.0PF 50V 5%
C730M7	2113945C31	CAP,FXD,.1UF,+10%,-10%,50V-DC,0603,X7R,-55DEG CMIN,125DEG CMAX
C731M7	2113945C31	CAP,FXD,.1UF,+10%,-10%,50V-DC,0603,X7R,-55DEG CMIN,125DEG CMAX
C732M7	2113944A32	CAP CER CHP 39.0PF 50V 5%
C733M7	2113945A09	CAP CER CHP 1000PF 50V 10%
C734M7	2113945C31	CAP,FXD,.1UF,+10%,-10%,50V-DC,0603,X7R,-55DEG CMIN,125DEG CMAX

Ref. Des.	Part Number	Description
C735M7	2113944A31	CAP CER CHP 33.0PF 50V 5%
C736M7	2113945B02	CAP CER CHP 10,000PF 25V 10%
C737M7	2113945C31	CAP,FXD,.1UF,+10%,-10%,50V-DC,0603,X7R,-55DEG CMIN,125DEG CMAX
C739M7	2113944A17	CAP CER CHP 4.7PF 50V +/- 0.25PF
C740M7	2113944A44	CAP CER CHP 220.0 PF 50V 5%
C742M7	2113945C31	CAP,FXD,.1UF,+10%,-10%,50V-DC,0603,X7R,-55DEG CMIN,125DEG CMAX
C743M7	2113946B06	CAP,CHIP,.22UF,+10%,-10%,10V-DC,0402,X5R,-55DEG CMIN,85DEG CMAX
C744M7	2113955D37	CAP,FXD,10UF,+10%,-10%,16V-DC,1206,X7R,-55DEG CMIN,125DEG CMAX
C749M7	2113945C31	CAP,FXD,.1UF,+10%,-10%,50V-DC,0603,X7R,-55DEG CMIN,125DEG CMAX
C750M7	2113945C31	CAP,FXD,.1UF,+10%,-10%,50V-DC,0603,X7R,-55DEG CMIN,125DEG CMAX
C751M7	2113945A09	CAP CER CHP 1000PF 50V 10%
C752M7	2113944A43	CAP CER CHP 180.0PF 50V 5%
C753M7	2113944A31	CAP CER CHP 33.0PF 50V 5%
C754M7	2113944A34	CAP CER CHP 56.0PF 50V 5%
C756M7	2113955D37	CAP,FXD,10UF,+10%,-10%,16V-DC,1206,X7R,-55DEG CMIN,125DEG CMAX



Ref. Des.	Part Number	Description
C757M7	2113945C31	CAP,FXD,.1UF,+10%,-10%,50V-DC,0603,X7R,-55DEG CMIN,125DEG CMAX
C760M7	2113944A44	CAP CER CHP 220.0 PF 50V 5%
C764M7	2113946B06	CAP,CHIP,.22UF,+10%,-10%,10V-DC,0402,X5R,-55DEG CMIN,85DEG CMAX
C768M7	2115153H27	CAP, CERAMIC, COG
C770M7	2113944A44	CAP CER CHP 220.0 PF 50V 5%
C772M7	2113945A09	CAP CER CHP 1000PF 50V 10%
C773M7	2113944A33	CAP CER CHP 47.0PF 50V 5%
C777M7	2113944A44	CAP CER CHP 220.0 PF 50V 5%
C780M7	2113944A33	CAP CER CHP 47.0PF 50V 5%
C781M7	2115153H57	CAP, CERAMIC, COG
C786M7	2113944A44	CAP CER CHP 220.0 PF 50V 5%
C803M7	2113944A44	CAP CER CHP 220.0 PF 50V 5%
C813M7	NOTPLACED	-
C816M7	2113944A35	CAP CER CHP 62.0PF 50V 5%
C817M7	2113944A44	CAP CER CHP 220.0 PF 50V 5%
C819M7	2113944A44	CAP CER CHP 220.0 PF 50V 5%
C823M7	2113944A40	CAP CER CHP 100.0PF 50V 5%
C824M7	2113944A44	CAP CER CHP 220.0 PF 50V 5%
D1970M20	NOTPLACED	-
D200M12	4813978A19	DIODE,RECT,MBR120,SM,SOD-123,1A,20V,SHTK,PB-FREE

Ref. Des.	Part Number	Description
D2101M2	4870359B01	DIODE,SUPR,SM,7.82V,.1W,ESD PROT,V360
D2601M13	4813974A19	DIODE ARRAY,MXR,SM,SOT-323,7V,.2W,SHTK,2,PB-FREE
D2602M13	4815897H01	PIN DIODE
D2603M13	4815897H01	PIN DIODE
D3102M22	4805656W87	DIODE,VCTR, @ 15V,1SV279,SOD-523/SC-79
D3103M22	4805656W87	DIODE,VCTR, @ 15V,1SV279,SOD-523/SC-80
D3104M22	4805656W87	DIODE,VCTR, @ 15V,1SV279,SOD-523/SC-81
D3105M22	4805656W87	DIODE,VCTR, @ 15V,1SV279,SOD-523/SC-82
D3135M22	4805656W87	DIODE,VCTR, @ 15V,1SV279,SOD-523/SC-83
D3136M22	4805656W87	DIODE,VCTR, @ 15V,1SV279,SOD-523/SC-84
D3137M22	4805656W87	DIODE,VCTR, @ 15V,1SV279,SOD-523/SC-85
D3138M22	4805656W87	DIODE,VCTR, @ 15V,1SV279,SOD-523/SC-86
D4001M2	4813978A25	SCHOTTKY 30V SOD-323 T&R PB FREE
D6101M6	4813978A25	SCHOTTKY 30V SOD-323 T&R PB FREE
D6401M6	4813978A25	SCHOTTKY 30V SOD-323 T&R PB FREE
D6501M6	4813978A25	SCHOTTKY 30V SOD-323 T&R PB FREE
D6502M6	4813978A25	SCHOTTKY 30V SOD-323 T&R PB FREE
D722M7	4815011H01	DIODE TRIPLE

Ref. Des.	Part Number	Description
D723M7	4815011H01	DIODE TRIPLE
E1101M11	2405688Z01	INDUCTOR FERRITE BEAD
E1921M20	2471132D14	IDCTR,FXD,470OHM,200MA,FER,0402,BEA
E201M12	7686949J14	FLTR,FERRITE BEAD,,2A,,,SM,0805,CHIP,220OHM
E2242M2	7685268E01	FERRITE BEAD 20X40 200 MA MAX CHIP
E2244M2	7685268E01	FERRITE BEAD 20X40 200 MA MAX CHIP
E2245M2	7685268E01	FERRITE BEAD 20X40 200 MA MAX CHIP
E2246M2	7685268E01	FERRITE BEAD 20X40 200 MA MAX CHIP
E2247M2	7685268E01	FERRITE BEAD 20X40 200 MA MAX CHIP
E2248M2	7685268E01	FERRITE BEAD 20X40 200 MA MAX CHIP
E2249M2	7685268E01	FERRITE BEAD 20X40 200 MA MAX CHIP
E2301M2	91012036001	FILTER,EMI/RFI,300MA,SM,0402,PB FREE
E2302M2	91012036001	FILTER,EMI/RFI,300MA,SM,0402,PB FREE
E2303M2	91012036001	FILTER,EMI/RFI,300MA,SM,0402,PB FREE
E2304M2	91012036001	FILTER,EMI/RFI,300MA,SM,0402,PB FREE
E2305M2	91012036001	FILTER,EMI/RFI,300MA,SM,0402,PB FREE
E2306M2	91012036001	FILTER,EMI/RFI,300MA,SM,0402,PB FREE
E2307M2	91012036001	FILTER,EMI/RFI,300MA,SM,0402,PB FREE

Ref. Des.	Part Number	Description
E2308M2	91012036001	FILTER,EMI/RFI,300MA,SM,0402,PB FREE
E2309M2	91012036001	FILTER,EMI/RFI,300MA,SM,0402,PB FREE
E2310M2	91012036001	FILTER,EMI/RFI,300MA,SM,0402,PB FREE
E2311M2	91012036001	FILTER,EMI/RFI,300MA,SM,0402,PB FREE
E601M19	2471132D14	IDCTR,FXD,470OHM,200MA,FER,0402,BEA
E602M19	2471132D14	IDCTR,FXD,470OHM,200MA,FER,0402,BEA
E603M19	2471132D14	IDCTR,FXD,470OHM,200MA,FER,0402,BEA
E604M19	2471132D14	IDCTR,FXD,470OHM,200MA,FER,0402,BEA
E605M19	2471132D14	IDCTR,FXD,470OHM,200MA,FER,0402,BEA
E606M19	2471132D14	IDCTR,FXD,470OHM,200MA,FER,0402,BEA
E607M19	2471132D14	IDCTR,FXD,470OHM,200MA,FER,0402,BEA
E608M19	2471132D14	IDCTR,FXD,470OHM,200MA,FER,0402,BEA
E609M19	2471132D14	IDCTR,FXD,470OHM,200MA,FER,0402,BEA
E6501M6	2480067M02	CHK RF CHIP BEAD INDUCTOR
E6502M6	2480067M02	CHK RF CHIP BEAD INDUCTOR
F200M12	6575834B01	FUSE SURFACE MOUNT
FL1301M3	9102190J23	FLTR,SAW,BAND-PASS,1.57542GHZ NOM,SM,1.4X1.0MM,SMD,PB-FREE
FL1302M3	9109674L58	PASSIVE FILTER,CER,BAND-PASS,2.45GHZ NOM

Ref. Des.	Part Number	Description
FL1303M3	9102190J23	FLTR,SAW,BAND-PASS,1.57542GHZ NOM,SM,1.4X1.0MM,SMD,PB-FREE
FL502M21	91009300001	FILTER,MONOLITHIC CRYSTAL,BAND-PASS,109.65MHZ NOM
J102M12	2880658Z08	CONNECTOR SMA
J2301M2	0970312N01	CONN,BTB,RCPT,60CONT,.4MM,GLD,1 STACK HGT
J2302M2	0970312N01	CONN,BTB,RCPT,60CONT,.4MM,GLD,1 STACK HGT
L1101M11	2415429H26	CHIP INDUCTOR
L1102M11	2415429H10	CHIP INDUCTOR
L1116M11	NOTPLACED	-
L1117M11	2415428H01	AIR WOUND INDUCTOR
L1301M3	2414017P16	IDCTR,CHIP,18NH,5%,300 MA,.76OHM,CER,9 Q,1.9GHZ SRF,SM,0402,P
L1302M3	2414017P07	IDCTR,CHIP,3.3NH,300MA,.19OHM,CER,8 Q,4GHZ SRF,SM,0402,PB-F
L1303M3	2414017P16	IDCTR,CHIP,18NH,5%,300 MA,.76OHM,CER,9 Q,1.9GHZ SRF,SM,0402,P
L1304M3	2414017P25	IDCTR,CHIP,100NH,5%,100 MA,5.5OHM,CER,8 Q,650MHZ SRF,SM,0402
L1305M3	24010062002	INDUCTOR, 5.6NH, 0402, 2%
L1306M3	2414017P14	IDCTR,CHIP,12NH,5%,300 MA,6OHM,CER,9 Q,2GHZ SRF,SM,0402,PB-F
L1308M3	NOTPLACED	-
L1316M3	24010062009	INDUCTOR, 13NH, 0402, 2%
L1601M16	2414017H14	IDCTR,CHIP,15NH,5%,3A,.32OHM,CER,12 Q,1.5GHZ SRF,SM,0603,PB-
L1602M16	2415429H37	CHIP INDUCTOR

Ref. Des.	Part Number	Description
L1603M16	2414015A07	IDCTR,FXD,180NH,2%,750 MA,.77OHM,CER,25 Q,700MHZ SRF,SM,1008
L1604M16	2414017H06	IDCTR,CHIP,3.3NH,300MA,.12OHM,CER,10 Q,3.8GHZ SRF,SM,0603,P
L1605M16	2414017H06	IDCTR,CHIP,3.3NH,300MA,.12OHM,CER,10 Q,3.8GHZ SRF,SM,0603,P
L1606M16	2460591E24	COIL AIR WOUND INDUC 23.75
L1609M16	2415428H02	AIR WOUND INDUCTOR
L1610M16	2471968L10	9.0NH 2% LP AIRWOUND INDUCTOR
L1803M17	24012026006	ULTRA-MINIATURE AIR CORE INDUCTORS
L1809M17	24012026006	ULTRA-MINIATURE AIR CORE INDUCTORS
L1811M17	24012026006	ULTRA-MINIATURE AIR CORE INDUCTORS
L1900M20	NOTPLACED	-
L1901M20	2414017N07	IDCTR,CHIP,3.9NH,1A,.150 HM,CER,10 Q,3.5GHZ SRF,SM,0603,PB-F
L1908M20	2478057A04	3.6 NH SURFACE MOUNT INDUCTOR
L1909M20	2478057A23	18 NH SURFACE MOUNT INDUCTOR
L1910M20	2478057A23	19 NH SURFACE MOUNT INDUCTOR
L1912M20	2478057A04	3.6 NH SURFACE MOUNT INDUCTOR
L1913M20	2478057A23	20 NH SURFACE MOUNT INDUCTOR
L1914M20	2478057A23	21 NH SURFACE MOUNT INDUCTOR
L1915M20	2478057A12	7.2NH SURFACE MOUNT INDUCTOR
L1917M20	2478057A04	3.6 NH SURFACE MOUNT INDUCTOR
L1934M20	2478057A35	0306 HIGH Q CHIP INDUC-TOR

Ref. Des.	Part Number	Description
L1935M20	2478057A23	22 NH SURFACE MOUNT INDUCTOR
L1936M20	2415429H01	CHIP INDUCTOR
L200M12	2571269C01	INDUCTOR WW POWER 20%
L2202M2	2415429H45	CHIP INDUCTOR
L2203M2	2415429H45	CHIP INDUCTOR
L2204M2	2415429H45	CHIP INDUCTOR
L2205M2	2415429H45	CHIP INDUCTOR
L2601M13	2471912M03	SQUARE AIR CORE INDUCTORS
L2602M13	2415429H40	CHIP INDUCTOR
L3100M22	0613952R66	CER CHIP RES 0.0 +/-0.050 OHM
L3101M22	2414032F41	IDCTR,WW,390NH,10%,200 MA,1.5OHM,CER,40 Q,730MHZ SRF,SM,PB-F
L3106M22	2478057A21	15 NH SURFACE MOUNT INDUCTOR
L3112M22	2415428H04	AIR WOUND INDUCTOR
L3119M22	2414032F73	IDCTR,WW,820NH,5%,180 MA,2.23OHM,CER,23 Q,215MHZ SRF,SM,PB-F
L3125M22	2414032F41	IDCTR,WW,390NH,10%,200 MA,1.5OHM,CER,40 Q,730MHZ SRF,SM,PB-F
L3126M22	2414032F73	IDCTR,WW,820NH,5%,180 MA,2.23OHM,CER,23 Q,215MHZ SRF,SM,PB-F
L3134M22	2414032F41	IDCTR,WW,390NH,10%,200 MA,1.5OHM,CER,40 Q,730MHZ SRF,SM,PB-F
L3139M22	2478057A21	16 NH SURFACE MOUNT INDUCTOR
L3145M22	2471968L11	13.0NH 2% LP AIRWOUND INDUCTOR
L3150M22	2414032F41	IDCTR,WW,390NH,10%,200 MA,1.5OHM,CER,40 Q,730MHZ SRF,SM,PB-F

Ref. Des.	Part Number	Description
L3158M22	2414032F41	IDCTR,WW,390NH,10%,200 MA,1.5OHM,CER,40 Q,730MHZ SRF,SM,PB-F
L3159M22	2414032F39	IDCTR,WW,270NH,10%,280 MA,1OHM,CER,40 Q,800MHZ SRF,SM,PB-FRE
L500M21	2415429H43	CHIP INDUCTOR
L503M21	2414017N24	IDCTR,CHIP,100NH,5%,300 MA,2OHM,CER,14 Q,700MHZ SRF,SM,0603,P
L504M21	2478057A51	0306 HIGH Q CHIP INDUC-TOR
L513M21	NOTPLACED	-
L550M21	2414017N14	IDCTR,CHIP,15NH,5%,600 MA,.4OHM,CER,12 Q,1.8GHZ SRF,SM,0603,P
L601M19	2415429H43	CHIP INDUCTOR
L602M19	2466505A01	COIL INDUCTOR
L603M19	2466505A01	COIL INDUCTOR
L604M19	2414032D16	IDCTR,WW,120NH,5%,800 MA,.26OHM,CER,42 Q,1GHZ SRF,SM,PB-FREE
L605M19	24012050001	0603LS CHIP INDUC-TORS, 1608, 3900NH
L611M19	2414032F39	IDCTR,WW,270NH,10%,280 MA,1OHM,CER,40 Q,800MHZ SRF,SM,PB-FRE
L6401M6	2471189M03	SHIELDED SMT POWER INDUCTOR 10UH
L6402M6	2471189M03	SHIELDED SMT POWER INDUCTOR 10UH
L6403M6	24009271001	20NH HIGH CURRENT CHIP INDUCTOR
L6404M6	24009271001	20NH HIGH CURRENT CHIP INDUCTOR
L6502M6	2471678H01	10UH INDCUTOR
L6504M6	24009268001	10UH 2.1A SHIELDED INDUCTOR
L6505M6	2471678H01	10UH INDCUTOR
L701M7	2415429H47	CHIP INDUCTOR
L702M7	2415429H47	CHIP INDUCTOR

Ref. Des.	Part Number	Description
L709M7	2414017P16	IDCTR,CHIP,18NH,5%,300 MA,.76OHM,CER,9 Q,1.9GHZ SRF,SM,0402,P
L720M7	2480646Z20	COIL MULTI-LAYER CHIP(2.20UH)
L727M7	2480646Z20	COIL MULTI-LAYER CHIP(2.20UH)
L728M7	2415429H47	CHIP INDUCTOR
L733M7	2480646Z20	COIL MULTI-LAYER CHIP(2.20UH)
L734M7	2414017P16	IDCTR,CHIP,18NH,5%,300 MA,.76OHM,CER,9 Q,1.9GHZ SRF,SM,0402,P
L735M7	2480646Z20	COIL MULTI-LAYER CHIP(2.20UH)
L738M7	2480646Z20	COIL MULTI-LAYER CHIP(2.20UH)
L739M7	2415429H47	CHIP INDUCTOR
L741M7	2480646Z20	COIL MULTI-LAYER CHIP(2.20UH)
L753M7	2415347H06	IDCTR, 2200NH
L755M7	2415429H47	CHIP INDUCTOR
L758M7	2415429H47	CHIP INDUCTOR
L759M7	2415429H47	CHIP INDUCTOR
L765M7	2415427H34	CHIP INDUCTOR
L775M7	2415429H47	CHIP INDUCTOR
M101M12	39012039001	CONNECTOR, BATTERY CONTACT
M103M12	3987977Y04	CONT,CONN,1CONT,,ANT UNIV 4.5MM,UC 1.8
M104M12	3987977Y04	CONT,CONN,1CONT,,ANT UNIV 4.5MM,UC 1.9
M105M12	3987977Y04	CONT,CONN,1CONT,,ANT UNIV 4.5MM,UC 1.10
M1301M3	3987977Y01	CONTACT ANTENNA UNIVERSAL (D35)
M6405M6	3987977Y04	CONT,CONN,1CONT,,ANT UNIV 4.5MM,UC 1.11
M6406M6	3987977Y04	CONT,CONN,1CONT,,ANT UNIV 4.5MM,UC 1.12

Ref. Des.	Part Number	Description
M6502M6	0985888K02	SKT RTC BTTY LEAP
M6504M6	3987977Y04	CONT,CONN,1CONT,,ANT UNIV 4.5MM,UC 1.13
PASTE	11012015001	SOLDER PASTE - 9.0A, LOW VOID
PCB	84012313002	BOARD, PC , MAIN BOARD, UHF1
Q1101M11	4813973A32	XSTR,BIP GP SS,NPN,SM,SC-70,SMT,50V,.202W,100MA, PB-FREE
Q1103M11	4813970A59	P-CH FET 1.0A 20V SOT-23 T&R
Q1601M16	48012094001	MOD,XSTR,FET RF PWR, 135-941MHZ
Q1920M20	4813973A32	XSTR,BIP GP SS,NPN,SM,SC-70,SMT,50V,.202W,100MA, PB-FREE
Q1922M20	4813973M75	XSTR,BIP GP SS,PNP,BC858,SOT-563,SMT,-30V,.357W,-100MA,100MHZ
Q201M12	4813970A59	P-CH FET 1.0A 20V SOT-23 T&R
Q202M12	4813973A32	XSTR,BIP GP SS,NPN,SM,SC-70,SMT,50V,.202W,100MA, PB-FREE
Q2202M2	4815261H01	TRANSISTOR,BIP GENERAL PURPOSE SMALL NPN
Q2601M13	4815055H01	TSTR DUAL NPN/PNP UMH 5
Q3123M22	4871915M01	XSTR,BIP RF SML SGNL,NPN,SM,4.5GHZ
Q3128M22	4815055H01	TSTR DUAL NPN/PNP UMH 6
Q3156M22	4871915M01	XSTR,BIP RF SML SGNL,NPN,SM,4.5GHZ
Q3161M22	4815055H01	TSTR DUAL NPN/PNP UMH 7

Ref. Des.	Part Number	Description
Q4001M2	4815261H01	TRANSISTOR,BIP GENERAL PURPOSE SMALL NPN
Q601M19	4813973A04	XSTR,BIP GP SS,NPN,TA13,SM,SOT-23,SMT,30V,.225W,300MA,1 25MHZ,P
Q6101M6	4815261H01	TRANSISTOR,BIP GENERAL PURPOSE SMALL NPN
Q6401M6	48012170001	FET
Q6501M6	4813970A62	XSTR,FET GP PWR,MOS-FET,P-CH,ENHN,CF,-20V,1.3W,PB-FREE
Q6502M6	48012154001	FET
Q6504M6	4809579E77	FET, NCH MOS FET, 1.2MM X 1.2MM PACKAGE, SMD, W18 COMPLIANT
Q6505M6	4813970A62	XSTR,FET GP PWR,MOS-FET,P-CH,ENHN,CF,-20V,1.3W,PB-FREE
Q6506M6	4809579E77	FET, NCH MOS FET, 1.2MM X 1.2MM PACKAGE, SMD, W18 COMPLIANT
Q6507M6	48012170001	FET
Q6508M6	48012154001	FET
Q731M7	4885061Y01	XSTR NPN 6V 30UA 12GHZ PB-FREE
Q745M7	4813973M75	XSTR,BIP GP SS,PNP,BC858,SOT-563,SMT,-30V,.357W,-100MA,100MHZ
Q756M7	4805585Q32	TRANSITOR, NPN RF
Q767M7	4813973M75	XSTR,BIP GP SS,PNP,BC858,SOT-563,SMT,-30V,.357W,-100MA,100MHZ
Q774M7	4805585Q32	TRANSITOR, NPN RF
Q785M7	4889394V04	XSTR,FET GEN PURPOSE SMALL SIG,MOSFET,N-CH,ENHN,SM,20V,.25W,P
R1101M11	0613952R01	CER CHIP RES 10K OHM 5% 0402

Ref. Des.	Part Number	Description
R1102M11	0613952R25	CER CHIP RES 100K OHM 5% 0402
R1103M11	06012035001	0805, 0.02 OHM, CHIP RESISTOR
R1104M11	0613952Q49	CER CHIP RES 100 OHM 5 0402
R1105M11	0613952Q49	CER CHIP RES 100 OHM 5 0403
R1106M11	0613952Q21	CER CHIP RES 6.8 OHM 5 0402
R1107M11	0613952Q45	CER CHIP RES 68.0 OHM 5 0402
R1108M11	0613952N81	CER CHIP RES 68.1K OHM 1 0402
R1110M11	0613952R01	CER CHIP RES 10K OHM 5% 0403
R1111M11	0613952R66	CER CHIP RES 0.0 +/-0.050 OHM
R1112M11	NOTPLACED	-
R1114M11	0613952Q49	CER CHIP RES 100 OHM 5 0404
R1115M11	0613952Q49	CER CHIP RES 100 OHM 5 0405
R1116M11	0613952R01	CER CHIP RES 10K OHM 5% 0404
R1117M11	0613952R11	CER CHIP RES 27K OHM 5% 0402
R1121M11	0613952N47	CER CHIP RES 30.1K OHM 1 0402
R1122M11	0613952N85	CER CHIP RES 75.0K OHM 1 0402
R1124M11	0613952Q42	CER CHIP RES 51.0 OHM 5 0402
R1125M11	0613952R10	CER CHIP RES 24K OHM 5 0402
R1126M11	0613952R02	CER CHIP RES 11K OHM 5 0402
R1127M11	0613952R08	CER CHIP RES 20K OHM 5 0402
R1128M11	0613952R01	CER CHIP RES 10K OHM 5% 0405

Ref. Des.	Part Number	Description
R1129M11	NOTPLACED	-
R1130M11	NOTPLACED	-
R1135M11	0613952R66	CER CHIP RES 0.0 +/-0.050 OHM
R1136M11	0613952R01	CER CHIP RES 10K OHM 5% 0406
R1137M11	0613952R01	CER CHIP RES 10K OHM 5% 0407
R1138M11	0613952R25	CER CHIP RES 100K OHM 5% 0403
R1139M11	0613952R25	CER CHIP RES 100K OHM 5% 0405
R1140M11	0613952R25	CER CHIP RES 100K OHM 5% 0406
R1141M11	0613952R42	CER CHIP RES 510K OHM 5 0402
R1142M11	0613952R25	CER CHIP RES 100K OHM 5% 0407
R1143M11	0613952R25	CER CHIP RES 100K OHM 5% 0408
R1144M11	0613952R25	CER CHIP RES 100K OHM 5% 0409
R1145M11	0613952R25	CER CHIP RES 100K OHM 5% 0410
R1146M11	0613952R25	CER CHIP RES 100K OHM 5% 0411
R1151M11	0613952R05	CER CHIP RES 15K OHM 5% 0402
R1152M11	0613952R01	CER CHIP RES 10K OHM 5% 0408
R1154M11	0613952N01	CER CHIP RES 10.0K OHM 1 0402
R1158M11	NOTPLACED	-
R1160M11	0613952R03	CER CHIP RES 12K OHM 5% 0402
R1162M11	0613952R29	CER CHIP RES 150K OHM 5% 0402
R1163M11	0613952R01	CER CHIP RES 10K OHM 5% 0409
R1164M11	0613952R01	CER CHIP RES 10K OHM 5% 0410

Ref. Des.	Part Number	Description
R1165M11	0613952Q56	CER CHIP RES 200 OHM 5 0402
R1166M11	0613952Q56	CER CHIP RES 200 OHM 5 0403
R1167M11	0613952R01	CER CHIP RES 10K OHM 5% 0411
R1168M11	0613952Q49	CER CHIP RES 100 OHM 5 0406
R1169M11	0613952P52	CER CHIP RES 340K OHM 1 0402
R1170M11	0613952N88	CER CHIP RES 80.6K OHM 1 0402
R1171M11	0613952R66	CER CHIP RES 0.0 +/-0.050 OHM
R1172M11	0613952Q89	CER CHIP RES 4700 OHM 5 0402
R1174M11	0613952N01	CER CHIP RES 10.0K OHM 1 0402
R1175M11	0613952R66	CER CHIP RES 0.0 +/-0.050 OHM
R1176M11	0613952M01	CER CHIP RES 1000 OHM 1% 0402
R1177M11	0613952R66	CER CHIP RES 0.0 +/-0.050 OHM
R1178M11	0613952R01	CER CHIP RES 10K OHM 5% 0412
R1180M11	0613952R66	CER CHIP RES 0.0 +/-0.050 OHM
R1181M11	NOTPLACED	-
R1182M11	0613952R01	CER CHIP RES 10K OHM 5% 0413
R1198M11	0613952J01	CER CHIP RES 10K OHM 5% 0603
R1301M3	0613952R66	CER CHIP RES 0.0 +/-0.050 OHM
R1303M3	0613952R66	CER CHIP RES 0.0 +/-0.050 OHM
R1305M3	0613952R66	CER CHIP RES 0.0 +/-0.050 OHM
R1309M3	NOTPLACED	-

Ref. Des.	Part Number	Description
R1310M3	0613952R66	CER CHIP RES 0.0 +/-0.050 OHM
R1311M3	NOTPLACED	-
R1313M3	0613952R66	CER CHIP RES 0.0 +/-0.050 OHM
R1315M3	0613952R66	CER CHIP RES 0.0 +/-0.050 OHM
R1317M3	0613952R66	CER CHIP RES 0.0 +/-0.050 OHM
R1318M3	0613952R66	CER CHIP RES 0.0 +/-0.050 OHM
R1325M3	0613952R66	CER CHIP RES 0.0 +/-0.050 OHM
R1326M3	0613952R66	CER CHIP RES 0.0 +/-0.050 OHM
R1329M3	0613952R66	CER CHIP RES 0.0 +/-0.050 OHM
R1330M3	0613952R66	CER CHIP RES 0.0 +/-0.050 OHM
R1331M3	0613952R66	CER CHIP RES 0.0 +/-0.050 OHM
R1332M3	0613952R66	CER CHIP RES 0.0 +/-0.050 OHM
R1337M3	NOTPLACED	-
R1339M3	NOTPLACED	-
R1340M3	0613952R66	CER CHIP RES 0.0 +/-0.050 OHM
R1601M16	0613952Q96	CER CHIP RES 9100 OHM 5 0402
R1602M16	0613952R01	CER CHIP RES 10K OHM 5% 0414
R1603M16	0613952R22	CER CHIP RES 75K OHM 5 0402
R1604M16	0613952R13	CER CHIP RES 33K OHM 5% 0402
R1605M16	0613952Q73	CER CHIP RES 1000 OHM 5 0402
R1606M16	0613952H53	CER CHIP RES 150 OHM 5% 0603
R1651M16	NOTPLACED	-

Ref. Des.	Part Number	Description
R1652M16	NOTPLACED	-
R1653M16	0613952R66	CER CHIP RES 0.0 +/-0.050 OHM
R1900M20	0613952R66	CER CHIP RES 0.0 +/-0.050 OHM
R1906M20	0613952R01	CER CHIP RES 10K OHM 5% 0415
R1907M20	0613952R01	CER CHIP RES 10K OHM 5% 0416
R1908M20	0613952R01	CER CHIP RES 10K OHM 5% 0417
R1909M20	0613952R01	CER CHIP RES 10K OHM 5% 0418
R1910M20	0613952Q96	CER CHIP RES 9100 OHM 5 0403
R1911M20	0613952Q96	CER CHIP RES 9100 OHM 5 0404
R1921M20	0613952R22	CER CHIP RES 75K OHM 5 0403
R1922M20	0613952R27	CER CHIP RES 120K OHM 5% 0402
R1923M20	0613952R01	CER CHIP RES 10K OHM 5% 0419
R1924M20	0613952Q37	CER CHIP RES 33.0 OHM 5 0402
R1925M20	0613952Q11	CER CHIP RES 2.7 OHM 5 0402
R1935M20	0613952Q75	CER CHIP RES 1200 OHM 5 0402
R1936M20	0613952R66	CER CHIP RES 0.0 +/-0.050 OHM
R1970M20	0613952Q25	CER CHIP RES 10.0 OHM 5 0402
R1972M20	0613952Q25	CER CHIP RES 10.0 OHM 5 0402
R201M12	0613952R25	CER CHIP RES 100K OHM 5% 0412
R202M12	0613952Q89	CER CHIP RES 4700 OHM 5 0403
R21000M2	NOTPLACED	-
R21001M2	NOTPLACED	-

Ref. Des.	Part Number	Description
R21002M2	NOTPLACED	-
R21003M2	NOTPLACED	-
R2104M2	0613952Q89	CER CHIP RES 4700 OHM 5 0404
R2105M2	0613952Q89	CER CHIP RES 4700 OHM 5 0405
R2106M2	NOTPLACED	-
R2107M2	0613952Q73	CER CHIP RES 1000 OHM 5 0403
R2109M2	0613952Q25	CER CHIP RES 10.0 OHM 5 0403
R2110M2	0613952Q33	CER CHIP RES 22.0 OHM 5 0402
R2111M2	0613952Q25	CER CHIP RES 10.0 OHM 5 0404
R2113M2	0613952Q25	CER CHIP RES 10.0 OHM 5 0405
R2114M2	0613952Q33	CER CHIP RES 22.0 OHM 5 0403
R2115M2	0613952Q25	CER CHIP RES 10.0 OHM 5 0406
R2116M2	0613952R01	CER CHIP RES 10K OHM 5% 0420
R2117M2	0613952R01	CER CHIP RES 10K OHM 5% 0421
R2118M2	0613952R01	CER CHIP RES 10K OHM 5% 0422
R2120M2	0613952R01	CER CHIP RES 10K OHM 5% 0423
R2129M2	0613952R01	CER CHIP RES 10K OHM 5% 0424
R2130M2	0613952R01	CER CHIP RES 10K OHM 5% 0425
R2131M2	0613952R01	CER CHIP RES 10K OHM 5% 0426
R2132M2	0613952R01	CER CHIP RES 10K OHM 5% 0427
R2133M2	0613952R01	CER CHIP RES 10K OHM 5% 0428
R2135M2	0613952Q41	CER CHIP RES 47.0 OHM 5 0402

Ref. Des.	Part Number	Description
R2136M2	0613952Q61	CER CHIP RES 330 OHM 5 0402
R2137M2	0613952Q61	CER CHIP RES 330 OHM 5 0403
R2138M2	0613952Q41	CER CHIP RES 47.0 OHM 5 0403
R2139M2	0613952Q41	CER CHIP RES 47.0 OHM 5 0404
R2142M2	0613952Q41	CER CHIP RES 47.0 OHM 5 0405
R2144M2	0613952Q61	CER CHIP RES 330 OHM 5 0404
R2145M2	0613952Q41	CER CHIP RES 47.0 OHM 5 0406
R2146M2	0613952Q41	CER CHIP RES 47.0 OHM 5 0407
R2147M2	0613952Q41	CER CHIP RES 47.0 OHM 5 0408
R2148M2	0613952Q41	CER CHIP RES 47.0 OHM 5 0409
R2149M2	0613952Q41	CER CHIP RES 47.0 OHM 5 0410
R2151M2	NOTPLACED	-
R2153M2	0613952Q41	CER CHIP RES 47.0 OHM 5 0411
R2154M2	0613952Q41	CER CHIP RES 47.0 OHM 5 0412
R2192M2	0613952Q61	CER CHIP RES 330 OHM 5 0405
R2197M2	0613952R66	CER CHIP RES 0.0 +/-0.050 OHM
R2198M2	0613952R66	CER CHIP RES 0.0 +/-0.050 OHM
R2199M2	0613952R66	CER CHIP RES 0.0 +/-0.050 OHM
R2201M2	0613952R32	CER CHIP RES 200K OHM 5 0402
R2204M2	0613952Q85	CER CHIP RES 3300 OHM 5 0402
R2206M2	0613952Q85	CER CHIP RES 3300 OHM 5 0403

Ref. Des.	Part Number	Description
R2207M2	0613952R66	CER CHIP RES 0.0 +/-0.050 OHM
R2235M2	0613952R66	CER CHIP RES 0.0 +/-0.050 OHM
R2244M2	0613952Q65	CER CHIP RES 470 OHM 5 0402
R2245M2	0613952Q60	CER CHIP RES 300 OHM 5 0402
R2246M2	0613952Q65	CER CHIP RES 470 OHM 5 0403
R2254M2	0613952R01	CER CHIP RES 10K OHM 5% 0429
R2601M13	NOTPLACED	-
R2602M13	0613952H47	CER CHIP RES 82.0 OHM 5 0603
R2603M13	0613952H47	CER CHIP RES 82.0 OHM 5 0603
R2604M13	0613952H47	CER CHIP RES 82.0 OHM 5 0603
R2605M13	0613952G67	CER CHIP RES 0.0 +/-0.050 OHM
R2606M13	0613952R25	CER CHIP RES 100K OHM 5% 0413
R2803M1	0613952Q37	CER CHIP RES 33.0 OHM 5 0403
R2804M1	0613952Q49	CER CHIP RES 100 OHM 5 0407
R2805M1	0613952Q49	CER CHIP RES 100 OHM 5 0408
R2806M1	0613952Q59	CER CHIP RES 270 OHM 5 0402
R2807M1	0613952Q56	CER CHIP RES 200 OHM 5 0404
R2808M1	0613952Q49	CER CHIP RES 100 OHM 5 0409
R2810M1	0613952R01	CER CHIP RES 10K OHM 5% 0430
R2811M1	0613952Q89	CER CHIP RES 4700 OHM 5 0406
R2812M1	0613952R01	CER CHIP RES 10K OHM 5% 0431

Ref. Des.	Part Number	Description
R2813M1	NOTPLACED	-
R2817M1	0613952Q41	CER CHIP RES 47.0 OHM 5 0413
R3103M22	0613952Q31	CER CHIP RES 18.0 OHM 5 0402
R3105M22	0613952Q60	CER CHIP RES 300 OHM 5 0403
R3106M22	0613952Q60	CER CHIP RES 300 OHM 5 0404
R3107M22	0613952Q60	CER CHIP RES 300 OHM 5 0405
R3108M22	0613952Q31	CER CHIP RES 18.0 OHM 5 0403
R3109M22	0613952Q60	CER CHIP RES 300 OHM 5 0406
R3114M22	0613952R11	CER CHIP RES 27K OHM 5% 0403
R3118M22	0613952R07	CER CHIP RES 18K OHM 5% 0402
R3127M22	0613952Q47	CER CHIP RES 82.0 OHM 5% 0402
R3146M22	0613952Q95	CER CHIP RES 8200 OHM 5 0402
R3149M22	0613952Q93	CER CHIP RES 6800 OHM 5 0402
R3158M22	0613952Q53	CER CHIP RES 150 OHM 5 0402
R3159M22	0613952Q45	CER CHIP RES 68.0 OHM 5 0403
R3160M22	0613952Q53	CER CHIP RES 150 OHM 5 0403
R4005M2	0613952R01	CER CHIP RES 10K OHM 5% 0432
R4006M2	0613952R01	CER CHIP RES 10K OHM 5% 0433
R4007M2	0613952R01	CER CHIP RES 10K OHM 5% 0434
R4008M2	0613952R01	CER CHIP RES 10K OHM 5% 0435
R4009M2	0613952Q85	CER CHIP RES 3300 OHM 5 0404

Ref. Des.	Part Number	Description
R4010M2	0613952R32	CER CHIP RES 200K OHM 5 0403
R4011M2	0613952R17	CER CHIP RES 47K OHM 5% 0402
R4012M2	0613952R09	CER CHIP RES 22K OHM 5% 0402
R4013M2	0613952R09	CER CHIP RES 22K OHM 5% 0403
R4014M2	0613952Q85	CER CHIP RES 3300 OHM 5 0405
R500M21	0613952Q37	CER CHIP RES 33.0 OHM 5 0404
R502M21	0613952Q36	CER CHIP RES 30.0 OHM 5 0402
R512M21	0613952R66	CER CHIP RES 0.0 +/-0.050 OHM
R525M21	0613952R66	CER CHIP RES 0.0 +/-0.050 OHM
R526M21	0613958J74	CER CHIP RES 0.0 OHM JMP 0805
R601M19	0613952Q41	CER CHIP RES 47.0 OHM 5 0414
R602M19	0613952Q63	CER CHIP RES 390 OHM 5 0402
R603M19	0613952R25	CER CHIP RES 100K OHM 5% 0414
R604M19	0613952Q63	CER CHIP RES 390 OHM 5 0403
R605M19	0613952R01	CER CHIP RES 10K OHM 5% 0436
R606M19	0613952R01	CER CHIP RES 10K OHM 5% 0437
R607M19	0613952R25	CER CHIP RES 100K OHM 5% 0415
R608M19	0613952R01	CER CHIP RES 10K OHM 5% 0438
R609M19	0613952Q81	CER CHIP RES 2200 OHM 5 0402
R6101M6	0613952R01	CER CHIP RES 10K OHM 5% 0439

Ref. Des.	Part Number	Description
R6102M6	0613952R09	CER CHIP RES 22K OHM 5% 0404
R6103M6	0613952R09	CER CHIP RES 22K OHM 5% 0405
R6104M6	NOTPLACED	-
R6105M6	0613952R66	CER CHIP RES 0.0 +/-0.050 OHM
R6106M6	0613952Q73	CER CHIP RES 1000 OHM 5 0404
R6107M6	0613952Q55	CER CHIP RES 180 OHM 5 0402
R6108M6	0613952Q61	CER CHIP RES 330 OHM 5 0406
R6109M6	0613952Q73	CER CHIP RES 1000 OHM 5 0405
R610M19	0613952R25	CER CHIP RES 100K OHM 5% 0416
R6110M6	NOTPLACED	-
R6111M6	0613952Q73	CER CHIP RES 1000 OHM 5 0406
R6112M6	NOTPLACED	-
R6113M6	0613952Q51	CER CHIP RES 120 OHM 5 0402
R6114M6	0613952Q49	CER CHIP RES 100 OHM 5 0410
R6115M6	0613952Q49	CER CHIP RES 100 OHM 5 0411
R6116M6	0613952Q73	CER CHIP RES 1000 OHM 5 0407
R6117M6	0613952R01	CER CHIP RES 10K OHM 5% 0440
R6118M6	0613952R09	CER CHIP RES 22K OHM 5% 0406
R6119M6	0613952R01	CER CHIP RES 10K OHM 5% 0441
R611M19	0613952R01	CER CHIP RES 10K OHM 5% 0442
R6120M6	0613952R01	CER CHIP RES 10K OHM 5% 0443
R6121M6	0613952R01	CER CHIP RES 10K OHM 5% 0444

Ref. Des.	Part Number	Description
R6122M6	0613952R01	CER CHIP RES 10K OHM 5% 0445
R6125M6	NOTPLACED	-
R612M19	0613952Q94	CER CHIP RES 7500 OHM 5 0402
R613M19	0613952Q82	CER CHIP RES 2400 OHM 5 0402
R614M19	0613952R66	CER CHIP RES 0.0 +/-0.050 OHM
R615M19	NOTPLACED	-
R616M19	NOTPLACED	-
R617M19	NOTPLACED	-
R618M19	NOTPLACED	-
R619M19	NOTPLACED	-
R6201M6	NOTPLACED	-
R6202M6	0613952R01	CER CHIP RES 10K OHM 5% 0446
R6203M6	0613952R66	CER CHIP RES 0.0 +/-0.050 OHM
R6204M6	0613952R01	CER CHIP RES 10K OHM 5% 0447
R6205M6	0613952R01	CER CHIP RES 10K OHM 5% 0448
R6206M6	0613952R25	CER CHIP RES 100K OHM 5% 0417
R6207M6	0613952R25	CER CHIP RES 100K OHM 5% 0418
R6208M6	0613952Q89	CER CHIP RES 4700 OHM 5 0407
R6209M6	0613952Q89	CER CHIP RES 4700 OHM 5 0408
R620M19	NOTPLACED	-
R6210M6	0613952Q89	CER CHIP RES 4700 OHM 5 0409
R6211M6	0613952R01	CER CHIP RES 10K OHM 5% 0449
R6212M6	NOTPLACED	-
R6213M6	0613952R01	CER CHIP RES 10K OHM 5% 0450

Ref. Des.	Part Number	Description
R6214M6	NOTPLACED	-
R6215M6	0613952R01	CER CHIP RES 10K OHM 5% 0451
R6216M6	0613952R66	CER CHIP RES 0.0 +/-0.050 OHM
R6217M6	0613952Q73	CER CHIP RES 1000 OHM 5 0408
R6218M6	0613952Q80	CER CHIP RES 2000 OHM 5 0402
R621M19	NOTPLACED	-
R623M19	NOTPLACED	-
R624M19	NOTPLACED	-
R6301M6	0613952R01	CER CHIP RES 10K OHM 5% 0452
R6304M6	0613952R66	CER CHIP RES 0.0 +/-0.050 OHM
R63050M6	0613952R66	CER CHIP RES 0.0 +/-0.050 OHM
R6305M6	0613952R66	CER CHIP RES 0.0 +/-0.050 OHM
R6306M6	0613952R01	CER CHIP RES 10K OHM 5% 0453
R6307M6	0613952R66	CER CHIP RES 0.0 +/-0.050 OHM
R6310M6	0613952Q37	CER CHIP RES 33.0 OHM 5 0405
R6311M6	0613952Q37	CER CHIP RES 33.0 OHM 5 0406
R6312M6	0613952Q37	CER CHIP RES 33.0 OHM 5 0407
R6313M6	0613952Q37	CER CHIP RES 33.0 OHM 5 0408
R6314M6	0613952Q37	CER CHIP RES 33.0 OHM 5 0409
R6316M6	0613952R01	CER CHIP RES 10K OHM 5% 0454
R6401M6	0613952R18	CER CHIP RES 51K OHM 5 0402
R6402M6	0613952R32	CER CHIP RES 200K OHM 5 0404

Ref. Des.	Part Number	Description	Ref. Des.	Part Number	Description	Ref. Des.	Part Number	Description	Ref. Des.	Part Number	Description
R6403M6	0613952Q81	CER CHIP RES 2200 OHM 5 0403	R6427M6	0613952R11	CER CHIP RES 27K OHM 5% 0404	R6512M6	0613952N01	CER CHIP RES 10.0K OHM 1 0402	R6533M6	0613952R66	CER CHIP RES 0.0 +/-0.050 OHM
R6404M6	0613952Q81	CER CHIP RES 2200 OHM 5 0404	R6428M6	0613952R25	CER CHIP RES 100K OHM 5% 0419	R6513M6	0613952R66	CER CHIP RES 0.0 +/-0.050 OHM	R6534M6	NOTPLACED	-
R6405M6	0613952Q75	CER CHIP RES 1200 OHM 5 0403	R6429M6	0613952R17	CER CHIP RES 47K OHM 5% 0404	R6514M6	0613952Q89	CER CHIP RES 4700 OHM 5 0410	R6535M6	0613952N01	CER CHIP RES 10.0K OHM 1 0402
R6406M6	0613952R01	CER CHIP RES 10K OHM 5% 0455	R6430M6	0613952R09	CER CHIP RES 22K OHM 5% 0407	R6515M6	0613952R66	CER CHIP RES 0.0 +/-0.050 OHM	R6536M6	0613952Z72	RES,MF,91KOHM,1%,.0625 W,SM,0402,200PPM/CEL,PB-FREE
R6407M6	0613952Q81	CER CHIP RES 2200 OHM 5 0405	R6431M6	0613952Q81	CER CHIP RES 2200 OHM 5 0406	R6516M6	0613952R66	CER CHIP RES 0.0 +/-0.050 OHM	R6537M6	0613952P09	CER CHIP RES 121K OHM 1 0402
R6409M6	0613952N01	CER CHIP RES 10.0K OHM 1 0402	R6432M6	0613952R25	CER CHIP RES 100K OHM 5% 0420	R6517M6	0613952Q63	CER CHIP RES 390 OHM 5 0404	R6538M6	0613952Q95	CER CHIP RES 8200 OHM 5 0403
R6410M6	0613952R01	CER CHIP RES 10K OHM 5% 0456	R6433M6	0613952Q32	CER CHIP RES 20.0 OHM 5 0402	R6518M6	0613952R66	CER CHIP RES 0.0 +/-0.050 OHM	R6539M6	0613952P66	CER CHIP RES 475K OHM 1 0402
R6411M6	0613952R66	CER CHIP RES 0.0 +/-0.050 OHM	R6434M6	0613952Q32	CER CHIP RES 20.0 OHM 5 0403	R6519M6	0613952Q89	CER CHIP RES 4700 OHM 5 0411	R6540M6	0613952P66	CER CHIP RES 475K OHM 1 0402
R6414M6	0613952Q61	CER CHIP RES 330 OHM 5 0407	R6492M6	0613952Q79	CER CHIP RES 1800 OHM 5 0402	R6520M6	0613952Q73	CER CHIP RES 1000 OHM 5 0409	R6541M6	0613952R25	CER CHIP RES 100K OHM 5% 0423
R6415M6	0613952Q61	CER CHIP RES 330 OHM 5 0408	R6501M6	0613952Q25	CER CHIP RES 10.0 OHM 5 0407	R6521M6	0615049H01	KAMAYA 0.2 OHM CHIP RESISTOR	R6542M6	0613952R66	CER CHIP RES 0.0 +/-0.050 OHM
R6416M6	0613952Q61	CER CHIP RES 330 OHM 5 0409	R6502M6	0613952Q25	CER CHIP RES 10.0 OHM 5 0408	R6522M6	0613952M66	CER CHIP RES 4750 OHM 1% 0402	R6543M6	0613952R66	CER CHIP RES 0.0 +/-0.050 OHM
R6417M6	0613952Q61	CER CHIP RES 330 OHM 5 0410	R6503M6	0613952Q25	CER CHIP RES 10.0 OHM 5 0409	R6523M6	0613952R09	CER CHIP RES 22K OHM 5% 0409	R6544M6	0613952R66	CER CHIP RES 0.0 +/-0.050 OHM
R6419M6	0613952Q37	CER CHIP RES 33.0 OHM 5 0410	R6504M6	0613952R09	CER CHIP RES 22K OHM 5% 0408	R6524M6	0613952R66	CER CHIP RES 0.0 +/-0.050 OHM	R6545M6	0613952R25	CER CHIP RES 100K OHM 5% 0424
R6420M6	0613952R17	CER CHIP RES 47K OHM 5% 0403	R6505M6	0613952Q80	CER CHIP RES 2000 OHM 5 0404	R6525M6	NOTPLACED	-	R6546M6	0613952R66	CER CHIP RES 0.0 +/-0.050 OHM
R6421M6	0613952R01	CER CHIP RES 10K OHM 5% 0457	R6506M6	0613952R66	CER CHIP RES 0.0 +/-0.050 OHM	R6526M6	0613952R66	CER CHIP RES 0.0 +/-0.050 OHM	R6547M6	0613952R66	CER CHIP RES 0.0 +/-0.050 OHM
R6422M6	0613952Q51	CER CHIP RES 120 OHM 5 0403	R6507M6	0613952R01	CER CHIP RES 10K OHM 5% 0458	R6527M6	0613952N87	CER CHIP RES 78.7K OHM 1 0402	R6548M6	NOTPLACED	-
R6423M6	0613952R66	CER CHIP RES 0.0 +/-0.050 OHM	R6508M6	0613952R17	CER CHIP RES 47K OHM 5% 0405	R6528M6	0613952R25	CER CHIP RES 100K OHM 5% 0422	R6550M6	0613952Z64	RES,MF,39KOHM,1%,.0625 W,SM,0402,200PPM/CEL,PB-FREE
R6424M6	0613952N01	CER CHIP RES 10.0K OHM 1 0402	R6509M6	0613952R25	CER CHIP RES 100K OHM 5% 0421	R6529M6	0615049H01	KAMAYA 0.2 OHM CHIP RESISTOR	R6551M6	0613952Z62	RES,MF,33KOHM,1%,.0625 W,SM,0402,200PPM/CEL,PB-FREE
R6425M6	0613952Q80	CER CHIP RES 2000 OHM 5 0403	R6510M6	0613952R66	CER CHIP RES 0.0 +/-0.050 OHM	R6530M6	0613952L30	CER CHIP RES 200 OHM 1 0402	R6552M6	0613952R25	CER CHIP RES 100K OHM 5% 0425
R6426M6	0613952Q49	CER CHIP RES 100 OHM 5 0412	R6511M6	0613952R01	CER CHIP RES 10K OHM 5% 0459	R6531M6	0613952R01	CER CHIP RES 10K OHM 5% 0460	R6558M6	0613952P22	CER CHIP RES 165K OHM 1 0402
						R6532M6	NOTPLACED	-			

Ref. Des.	Part Number	Description
R6561M6	0613952R66	CER CHIP RES 0.0 +/-0.050 OHM
R6562M6	0613952R66	CER CHIP RES 0.0 +/-0.050 OHM
R6563M6	0613952R66	CER CHIP RES 0.0 +/-0.050 OHM
R6564M6	0613952R66	CER CHIP RES 0.0 +/-0.050 OHM
R6565M6	0613952R66	CER CHIP RES 0.0 +/-0.050 OHM
R6566M6	0613952R66	CER CHIP RES 0.0 +/-0.050 OHM
R6567M6	0613952R66	CER CHIP RES 0.0 +/-0.050 OHM
R6568M6	0613952P47	CER CHIP RES 301K OHM 1 0402
R6570M6	0613952R66	CER CHIP RES 0.0 +/-0.050 OHM
R6574M6	0613952R25	CER CHIP RES 100K OHM 5% 0426
R6576M6	0613952R01	CER CHIP RES 10K OHM 5% 0461
R6577M6	0613952Q89	CER CHIP RES 4700 OHM 5 0412
R6578M6	0613952Q89	CER CHIP RES 4700 OHM 5 0413
R6579M6	0613952R01	CER CHIP RES 10K OHM 5% 0462
R6580M6	0613952R17	CER CHIP RES 47K OHM 5% 0406
R6581M6	0613952Q49	CER CHIP RES 100 OHM 5 0413
R6582M6	0613952Q89	CER CHIP RES 4700 OHM 5 0414
R6583M6	0613952R03	CER CHIP RES 12K OHM 5% 0403
R6584M6	0613952Q56	CER CHIP RES 200 OHM 5 0405
R6591M6	0613952R66	CER CHIP RES 0.0 +/-0.050 OHM

Ref. Des.	Part Number	Description
R6592M6	0613952R66	CER CHIP RES 0.0 +/-0.050 OHM
R6598M6	NOTPLACED	-
R6599M6	0613952R01	CER CHIP RES 10K OHM 5% 0463
R6601M6	0613952R01	CER CHIP RES 10K OHM 5% 0464
R6602M6	0613952R01	CER CHIP RES 10K OHM 5% 0465
R6604M6	0613952Q51	CER CHIP RES 120 OHM 5 0404
R6605M6	0613952Q33	CER CHIP RES 22.0 OHM 5 0404
R6606M6	0613952Q37	CER CHIP RES 33.0 OHM 5 0411
R6608M6	0613952R01	CER CHIP RES 10K OHM 5% 0466
R6609M6	0613952R25	CER CHIP RES 100K OHM 5% 0427
R6616M6	0613952Q80	CER CHIP RES 2000 OHM 5 0405
R6617M6	0613952R01	CER CHIP RES 10K OHM 5% 0467
R6618M6	0613952R01	CER CHIP RES 10K OHM 5% 0468
R6619M6	0613952R01	CER CHIP RES 10K OHM 5% 0469
R6621M6	0613952Q89	CER CHIP RES 4700 OHM 5 0415
R6622M6	0613952Q35	CER CHIP RES 27.0 OHM 5 0402
R6623M6	0613952Q35	CER CHIP RES 27.0 OHM 5 0403
R6624M6	0613952Q35	CER CHIP RES 27.0 OHM 5 0404
R6625M6	0613952Q35	CER CHIP RES 27.0 OHM 5 0405
R6626M6	0613952R01	CER CHIP RES 10K OHM 5% 0470
R698M19	0613952R66	CER CHIP RES 0.0 +/-0.050 OHM

Ref. Des.	Part Number	Description
R699M19	0613952R66	CER CHIP RES 0.0 +/-0.050 OHM
R701M7	0613952Q64	CER CHIP RES 430 OHM 5 0402
R702M7	0613952R66	CER CHIP RES 0.0 +/-0.050 OHM
R703M7	0613952Q67	CER CHIP RES 560 OHM 5 0402
R704M7	0613952Q25	CER CHIP RES 10.0 OHM 5 0410
R705M7	0613952Q71	CER CHIP RES 820 OHM 5 0402
R706M7	0613952R66	CER CHIP RES 0.0 +/-0.050 OHM
R707M7	0613952Q67	CER CHIP RES 560 OHM 5 0403
R708M7	0613952Q45	CER CHIP RES 68.0 OHM 5 0404
R709M7	NOTPLACED	-
R721M7	0613952R01	CER CHIP RES 10K OHM 5% 0471
R722M7	0613952Q71	CER CHIP RES 820 OHM 5 0403
R723M7	0613952Q79	CER CHIP RES 1800 OHM 5 0403
R728M7	0613952Q37	CER CHIP RES 33.0 OHM 5 0412
R729M7	0613952R09	CER CHIP RES 22K OHM 5% 0410
R730M7	0613952Q84	CER CHIP RES 3000 OHM 5 0402
R736M7	0613952Q55	CER CHIP RES 180 OHM 5 0403
R741M7	0613952R09	CER CHIP RES 22K OHM 5% 0411
R742M7	0613952R23	CER CHIP RES 82K OHM 5% 0402
R743M7	0613952R17	CER CHIP RES 47K OHM 5% 0407
R744M7	0613952Q91	CER CHIP RES 5600 OHM 5 0402

Ref. Des.	Part Number	Description
R745M7	0613952R09	CER CHIP RES 22K OHM 5% 0412
R746M7	0613952Q34	CER CHIP RES 24.0 OHM 5 0402
R747M7	0613952Q39	CER CHIP RES 39.0 OHM 5 0402
R748M7	0613952Q47	CER CHIP RES 82.0 OHM 5% 0403
R751M7	0613952Q59	CER CHIP RES 270 OHM 5 0403
R754M7	NOTPLACED	-
R757M7	0613952Q59	CER CHIP RES 270 OHM 5 0404
R761M7	0613952Q23	CER CHIP RES 8.2 OHM 5 0402
R762M7	0613952R08	CER CHIP RES 20K OHM 5 0403
R763M7	0613952R19	CER CHIP RES 56K OHM 5% 0402
R766M7	0613952Q92	CER CHIP RES 6200 OHM 5 0402
R769M7	0613952Q31	CER CHIP RES 18.0 OHM 5 0404
R771M7	0613952Q49	CER CHIP RES 100 OHM 5 0414
R776M7	0613952Q67	CER CHIP RES 560 OHM 5 0404
R778M7	0613952Q32	CER CHIP RES 20.0 OHM 5 0404
R779M7	0613952Q49	CER CHIP RES 100 OHM 5 0415
R785M7	0613952Q53	CER CHIP RES 150 OHM 5 0404
R799M7	0613952Q53	CER CHIP RES 150 OHM 5 0405
R809M7	0613952Q38	CER CHIP RES 36.0 OHM 5 0402
R822M7	NOTPLACED	-
R823M7	NOTPLACED	-
S2103M2	40012069001	TACT SWITCH, EMERGENCY





Ref. Des.	Part Number	Description
U6104M6	5175114H01	SINGLE AND GATE MICROPAK
U6105M6	5175114H01	SINGLE AND GATE MICROPAK
U6201M6	5185941F26	IC,COMPTR,LMV7219,NOP B
U6301M6	51012031001	32MB DIE SHRINK DDR SDRAM IC
U6302M6	5102495J13	IC,MICROP,P1710ZZGE,BG A,,12MHZ,32BITS
U6304M6	0105955U25	ASSY,IC,BGA SPEC PROG, FLASH MEMORY
U6401M6	5175772B38	IC ANALOG TEMPERATURE SENSOR
U6402M6	5115453H01	RAIL TO RAIL OUTPUT, 8 PIN BGA
U6404M6	5175772B38	IC ANALOG TEMPERATURE SENSOR
U6405M6	5188348V06	IC,AUDIO CODEC,SM,AUDIO CODEC
U6408M6	5188521T01	IC,VREF,SM,SOT23,1PER PKG,.5%,1.25 TO 13.75,PRCN BANDGAP ADJUS
U6409M6	51009000001	NANOPOWER, 1.8V, SOT23 COMPARATOR
U6410M6	5175772B38	IC ANALOG TEMPERATURE SENSOR
U6411M6	5109731C55	IC 2.75 FIXED GAIN MONO FILTER-FREE AMPLFR
U6501M6	5185143E77	IC, MAKO ASIC, CMOS PWR MGMT
U6502M6	4871987H01	LOW FREQUENCY TRANSISTOR
U6503M6	5171674H01	OP AMP
U6504M6	5171682H01	800MA BUCK REGULATOR
U6505M6	5189631P01	IC,SYNC STEP-DOWN CONV
U6506M6	5184790Y04	IC,400MA ADJ VREG LDO,SOT23
U6507M6	5171682H01	800MA BUCK REGULATOR

Ref. Des.	Part Number	Description
U6508M6	51009366001	500MA LOW DROPOUT CMOS LINEAR REG.
U6509M6	5175114H01	SINGLE AND GATE MICROPAK
U6510M6	5114007A47	IC,OR,17SZ32,1PER PKG,SOT-353,PB FREE
U6511M6	5171339H01	MICROPOWER VOLTAGE REGULATOR
U6601M6	5175114H01	SINGLE AND GATE MICROPAK
U702M7	5164015H28	IC,TRIDENT,INTEG SYNTH,RX/TX BSBND
U738M7	5171972L01	SP3T RF SWITCH
U746M7	4805218N63	RF TRANS SOT 323 BFQ67W
VR101M12	4813977M29	DIODE,VREF,MBZ5250,SM, SOT-23,20V,.225W,ZEN
VR1905M20	4815096H01	VARACTOR DIODE 1SV305
VR1906M20	4815096H01	VARACTOR DIODE 1SV306
VR1907M20	4815096H01	VARACTOR DIODE 1SV307
VR1908M20	4815096H01	VARACTOR DIODE 1SV308
VR200M12	4813977M29	DIODE,VREF,MBZ5250,SM, SOT-23,20V,.225W,ZEN
VR601M19	4805656W87	DIODE,VCTR, @ 15V,1SV279,SOD-523/SC-87
VR602M19	4805656W87	DIODE,VCTR, @ 15V,1SV279,SOD-523/SC-88
Y1304M3	48014600001	OSC,TCXO,26.0
Y6501M6	4864005H01	RESONATOR, CRYSTAL 24.576 MHZ
Y6502M6	4809995L05	XTAL QUARTZ 32.768KHZ CC4V-T1
Y6601M6	4802582S85	RESON,QRTZ,12MHZ,TOLERANCE10PPM,STABILITY 15PPM,SM,FUND,LO
Y701M7	4871886H01	16.8 MHZ VCTXO .8PPM

UHF1 Transceiver (RF) Board Parts List –  
PC000353A01

Ref. Des.	Part Number	Description
C101M12	2113944A40	CAP,CHIP,100PF,+5%,-5%,50V-DC,0402,C0G,-55DEG CMIN,125DEG CMAX
C1101M11	2113945B02	CAP,CHIP,.01UF,+10%,-10%,25V-DC,0402,X7R,-55DEG CMIN,125DEG CMA
C1102M11	2188468Y01	CAP,CHIP,1UF,+10%,-10%,25V-DC,0805,X7R
C1103M11	2113945B02	CAP,CHIP,.01UF,+10%,-10%,25V-DC,0402,X7R,-55DEG CMIN,125DEG CMA
C1104M11	NOTPLACED	64AM DUMMY PART NUMBER
C1105M11	2113944A19	CAP,CHIP,5.6PF,.5PF+/-,50V-DC,0402,C0G,-55DEG CMIN,125DEG CMAX
C1106M11	2113945B02	CAP,CHIP,.01UF,+10%,-10%,25V-DC,0402,X7R,-55DEG CMIN,125DEG CMA
C1107M11	2113944A40	CAP,CHIP,100PF,+5%,-5%,50V-DC,0402,C0G,-55DEG CMIN,125DEG CMAX
C1108M11	2113946B03	CAP,CHIP,.068UF,+10%,-10%,10V-DC,0402,X5R,-55DEG CMIN,85DEG CMA
C1110M11	2113944A40	CAP,CHIP,100PF,+5%,-5%,50V-DC,0402,C0G,-55DEG CMIN,125DEG CMAX
C1111M11	2113945Y02	CAP:X7R,0402,10%,16V,0.1 UF
C1112M11	2113945B01	CAP,CHIP,6800PF,+10%,-10%,25V-DC,0402,X7R,-55DEG CMIN,125DEG CM
C1113M11	2113945B02	CAP,CHIP,.01UF,+10%,-10%,25V-DC,0402,X7R,-55DEG CMIN,125DEG CMA
C1116M11	2113945Y02	CAP:X7R,0402,10%,16V,0.1 UF

Ref. Des.	Part Number	Description
C1117M11	2113945A12	CAP,CHIP,3300PF,+10%,-10%,50V-DC,0402,X7R,-55DEG CMIN,125DEG CM
C1118M11	2113945B02	CAP,CHIP,.01UF,+10%,-10%,25V-DC,0402,X7R,-55DEG CMIN,125DEG CMA
C1119M11	2113945B02	CAP,CHIP,.01UF,+10%,-10%,25V-DC,0402,X7R,-55DEG CMIN,125DEG CMA
C1120M11	2113945B02	CAP,CHIP,.01UF,+10%,-10%,25V-DC,0402,X7R,-55DEG CMIN,125DEG CMA
C1122M11	2113944M04	CAP,FXD,2.7PF,.1PF+/-,50V-DC,0603,C0G,-55DEG CMIN,125DEG CMAX
C1123M11	2113945B02	CAP,CHIP,.01UF,+10%,-10%,25V-DC,0402,X7R,-55DEG CMIN,125DEG CMA
C1124M11	2113945A13	CAP,CHIP,4700PF,+10%,-10%,50V-DC,0402,X7R,-55DEG CMIN,125DEG CM
C1125M11	2113944A23	CAP,CHIP,8.2PF,.5PF+/-,50V-DC,0402,C0G,-55DEG CMIN,125DEG CMAX
C1126M11	2113945A09	CAP,CHIP,1000PF,+10%,-10%,50V-DC,0402,X7R,-55DEG CMIN,125DEG CM
C1127M11	2113945Y02	CAP:X7R,0402,10%,16V,0.1 UF
C1128M11	2113945B02	CAP,CHIP,.01UF,+10%,-10%,25V-DC,0402,X7R,-55DEG CMIN,125DEG CMA
C1129M11	2113945B02	CAP,CHIP,.01UF,+10%,-10%,25V-DC,0402,X7R,-55DEG CMIN,125DEG CMA
C1130M11	2113945B02	CAP,CHIP,.01UF,+10%,-10%,25V-DC,0402,X7R,-55DEG CMIN,125DEG CMA
C1135M11	NOTPLACED	64AM DUMMY PART NUMBER
C1137M11	2113945B04	CAP,FXD,.022UF,+10%,-10%,25V-DC,0402,X7R,-55DEG CMIN,125DEG CMA

Ref. Des.	Part Number	Description
C1138M11	2113945B04	CAP,FXD,.022UF,+10%,-10%,25V-DC,0402,X7R,-55DEG CMIN,125DEG CMA
C1139M11	2113944A25	CAP,CHIP,10PF,.5PF+/-,50V-DC,0402,C0G,-55DEG CMIN,125DEG CMAX
C1140M11	2113945A13	CAP,CHIP,4700PF,+10%,-10%,50V-DC,0402,X7R,-55DEG CMIN,125DEG CM
C1141M11	2113945Y02	CAP:X7R,0402,10%,16V,0.1 UF
C1142M11	2113945A09	CAP,CHIP,1000PF,+10%,-10%,50V-DC,0402,X7R,-55DEG CMIN,125DEG CM
C1155M11	NOTPLACED	64AM DUMMY PART NUMBER
C1160M11	2113945C31	CAP,FXD,.1UF,+10%,-10%,50V-DC,0603,X7R,-55DEG CMIN,125DEG CMAX
C1161M11	2113956B91	CAP,FXD,1UF,+10%,-10%,16V-DC,0603,X5R,-55DEG CMIN,85DEG CMAX,PB
C1165M11	2113945Y02	CAP:X7R,0402,10%,16V,0.1 UF
C1301M3	2172180Y01	CAP,FXD,2.2UF,+20%,-20%,6.3V-DC,0402,X5R,-55DEG CMIN,85DEG CMAX
C1302M3	2113944A21	CAP,CHIP,6.8PF,.5PF+/-,50V-DC,0402,C0G,-55DEG CMIN,125DEG CMAX
C1303M3	2113956A51	CAP,FXD,1UF,+10%,-10%,6.3V-DC,0402,X5R,-55DEG CMIN,85DEG CMAX,P
C1304M3	2113944A26	CAP,CHIP,12PF,+5%,-5%,50V-DC,0402,C0G,-55DEG CMIN,125DEG CMAX,P
C1305M3	2113945B02	CAP,CHIP,.01UF,+10%,-10%,25V-DC,0402,X7R,-55DEG CMIN,125DEG CMA

Ref. Des.	Part Number	Description
C1306M3	2187893N01	CAP,CER,1UF,20PF+/-,+20%,-20%,6.3V-DC,0402,+/-15%,-55DEG CMIN,85
C1307M3	2113944A26	CAP,CHIP,12PF,+5%,-5%,50V-DC,0402,C0G,-55DEG CMIN,125DEG CMAX,P
C1308M3	2113945A09	CAP,CHIP,1000PF,+10%,-10%,50V-DC,0402,X7R,-55DEG CMIN,125DEG CM
C1309M3	2113944A26	CAP,CHIP,12PF,+5%,-5%,50V-DC,0402,C0G,-55DEG CMIN,125DEG CMAX,P
C1310M3	2187893N01	CAP,CER,1UF,20PF+/-,+20%,-20%,6.3V-DC,0402,+/-15%,-55DEG CMIN,85
C1311M3	2113956A51	CAP,FXD,1UF,+10%,-10%,6.3V-DC,0402,X5R,-55DEG CMIN,85DEG CMAX,P
C1312M3	2113956A51	CAP,FXD,1UF,+10%,-10%,6.3V-DC,0402,X5R,-55DEG CMIN,85DEG CMAX,P
C1313M3	2187893N01	CAP,CER,1UF,20PF+/-,+20%,-20%,6.3V-DC,0402,+/-15%,-55DEG CMIN,85
C1314M3	2113944M20	CAP,FXD,12PF,+2%,-2%,50V-DC,0603,C0G,-55DEG CMIN,125DEG CMAX,PB
C1315M3	2175389H01	CAP,.5PF,CAP,.5PF,CHIP,0402,CERAMIC,50 V
C1317M3	2188881Y12	CAP,CER,CHIP,1.8PF,.1PF+/-,16V-DC,0402,NP0,-55DEG CMIN,85DEG C
C1318M3	2113944A13	CAP,CHIP,3.3PF,.25PF+/-,50V-DC,0402,C0G,-55DEG CMIN,125DEG CMA
C1319M3	2113945Y02	CAP:X7R,0402,10%,16V,0.1 UF

Ref. Des.	Part Number	Description
C1320M3	2113944A28	CAP,CHIP,18PF,+5%,-5%,50V-DC,0402,C0G,-55DEG CMIN,125DEG CMAX,P
C1321M3	2113944A29	CAP,CHIP,22PF,+5%,-5%,50V-DC,0402,C0G,-55DEG CMIN,125DEG CMAX,P
C1322M3	2113944A29	CAP,CHIP,22PF,+5%,-5%,50V-DC,0402,C0G,-55DEG CMIN,125DEG CMAX,P
C1323M3	2113944A29	CAP,CHIP,22PF,+5%,-5%,50V-DC,0402,C0G,-55DEG CMIN,125DEG CMAX,P
C1324M3	2115153H03	CAP,CER CHIP,1PF,.1PF+/-,.1%,-.1%,50V-DC,0402,C0G
C1325M3	2113944A29	CAP,CHIP,22PF,+5%,-5%,50V-DC,0402,C0G,-55DEG CMIN,125DEG CMAX,P
C1326M3	2113945Y02	CAP:X7R,0402,10%,16V,0.1 UF
C1327M3	2113944A28	CAP,CHIP,18PF,+5%,-5%,50V-DC,0402,C0G,-55DEG CMIN,125DEG CMAX,P
C1328M3	2113945Y02	CAP:X7R,0402,10%,16V,0.1 UF
C1329M3	2113945Y02	CAP:X7R,0402,10%,16V,0.1 UF
C1330M3	2113945Y02	CAP:X7R,0402,10%,16V,0.1 UF
C1331M3	2113945Y02	CAP:X7R,0402,10%,16V,0.1 UF
C1332M3	2113945Y02	CAP:X7R,0402,10%,16V,0.1 UF
C1333M3	2113945Y02	CAP:X7R,0402,10%,16V,0.1 UF
C1334M3	2113945Y02	CAP:X7R,0402,10%,16V,0.1 UF
C1335M3	2113945Y02	CAP:X7R,0402,10%,16V,0.1 UF

Ref. Des.	Part Number	Description
C1336M3	2113945Y02	CAP:X7R,0402,10%,16V,0.1 UF
C1337M3	2113944A28	CAP,CHIP,18PF,+5%,-5%,50V-DC,0402,C0G,-55DEG CMIN,125DEG CMAX,P
C1338M3	21012043007	CAP,.8PF,CAP,.5PF,CHIP,0402,CERAMIC,50V
C1376M3	2113944A25	CAP,CHIP,10PF,.5PF+/-,50V-DC,0402,C0G,-55DEG CMIN,125DEG CMAX
C1601M16	2113944M42	CAP,FXD,100PF,+2%,-2%,50V-DC,0603,C0G,-55DEG CMIN,125DEG CMAX,P
C1602M16	2113944M42	CAP,FXD,100PF,+2%,-2%,50V-DC,0603,C0G,-55DEG CMIN,125DEG CMAX,P
C1603M16	2113945L49	CAP,FXD,.01UF,+5%,-5%,50V-DC,0603,X7R,-55DEG CMIN,125DEG CMAX,P
C1604M16	2113944M42	CAP,FXD,100PF,+2%,-2%,50V-DC,0603,C0G,-55DEG CMIN,125DEG CMAX,P
C1605M16	2113945B02	CAP,CHIP,.01UF,+10%,-10%,25V-DC,0402,X7R,-55DEG CMIN,125DEG CMA
C1606M16	2113944A40	CAP,CHIP,100PF,+5%,-5%,50V-DC,0402,C0G,-55DEG CMIN,125DEG CMAX
C1607M16	2113944M42	CAP,FXD,100PF,+2%,-2%,50V-DC,0603,C0G,-55DEG CMIN,125DEG CMAX,P
C1608M16	2113944M42	CAP,FXD,100PF,+2%,-2%,50V-DC,0603,C0G,-55DEG CMIN,125DEG CMAX,P
C1609M16	2113944A40	CAP,CHIP,100PF,+5%,-5%,50V-DC,0402,C0G,-55DEG CMIN,125DEG CMAX

Ref. Des.	Part Number	Description
C1610M16	2113944M14	CAP,FXD,6.8PF,.1PF+/-,50V-DC,0603,C0G,-55DEG CMIN,125DEG CMAX
C1611M16	2113945L49	CAP,FXD,.01UF,+5%,-5%,50V-DC,0603,X7R,-55DEG CMIN,125DEG CMAX,P
C1612M16	NOTPLACED	64AM DUMMY PART NUMBER
C1613M16	2113944M29	CAP,FXD,30PF,+2%,-2%,50V-DC,0603,C0G,-55DEG CMIN,125DEG CMAX,PB
C1614M16	2113944M36	CAP,FXD,56PF,+2%,-2%,50V-DC,0603,C0G,-55DEG CMIN,125DEG CMAX,PB
C1615M16	2113944A40	CAP,CHIP,100PF,+5%,-5%,50V-DC,0402,C0G,-55DEG CMIN,125DEG CMAX
C1616M16	2113944M34	CAP,FXD,47PF,+2%,-2%,50V-DC,0603,C0G,-55DEG CMIN,125DEG CMAX,PB
C1617M16	2113945B02	CAP,CHIP,.01UF,+10%,-10%,25V-DC,0402,X7R,-55DEG CMIN,125DEG CMA
C1618M16	2113944M42	CAP,FXD,100PF,+2%,-2%,50V-DC,0603,C0G,-55DEG CMIN,125DEG CMAX,P
C1619M16	2113945C02	CAP,CHIP,.01UF,+10%,-10%,50V-DC,0603,X7R,-55DEG CMIN,125DEG CMA
C1620M16	2171741M09	CAP,CER,68PF,+5%,-5%,50V-DC,CAP,CER CHIP,68PF,50V-DC,HI
C1621M16	2171741M10	CAP,CER,12PF,+5%,-5%,100V-DC,CAP,CER CHIP,12PF,100V-DC,
C1622M16	2113944M20	CAP,FXD,12PF,+2%,-2%,50V-DC,0603,C0G,-55DEG CMIN,125DEG CMAX,PB

Ref. Des.	Part Number	Description
C1623M16	NOTPLACED	64AM DUMMY PART NUMBER
C1624M16	2113944M25	CAP,FXD,20PF,+2%,-2%,50V-DC,0603,C0G,-55DEG CMIN,125DEG CMAX,PB
C1625M16	2113944M42	CAP,FXD,100PF,+2%,-2%,50V-DC,0603,C0G,-55DEG CMIN,125DEG CMAX,P
C1628M16	2113951C21	CAP,FXD,3PF,.05PF+/-,250V-DC,0603,C0G,-55DEG CMIN,125DEG CMAX
C1629M16	2113945A12	CAP,CHIP,3300PF,+10%,-10%,50V-DC,0402,X7R,-55DEG CMIN,125DEG CM
C1630M16	2113945A12	CAP,CHIP,3300PF,+10%,-10%,50V-DC,0402,X7R,-55DEG CMIN,125DEG CM
C1633M16	NOTPLACED	64AM DUMMY PART NUMBER
C1803M17	2113944C17	CAP,CHIP,3PF,.25PF+/-,50V-DC,0603,C0G,-55DEG CMIN,125DEG CMAX
C1804M17	2113951C05	CAP,FXD,.5PF,.05PF+/-,250V-DC,0603,C0G,-55DEG CMIN,125DEG CMAX
C1807M17	2113951C26	CAP,FXD,4.7PF,.05PF+/-,250V-DC,0603,C0G,-55DEG CMIN,125DEG CMA
C1820M17	2113944C16	CAP,CHIP,2.7PF,.25PF+/-,50V-DC,0603,C0G,-55DEG CMIN,125DEG CMA
C1821M17	2113944C26	CAP,CHIP,6.8PF,.5PF+/-,50V-DC,0603,C0G,-55DEG CMIN,125DEG CMAX
C1822M17	2113944C45	CAP,CHIP,100PF,+5%,-5%,50V-DC,0603,C0G,-55DEG CMIN,125DEG CMAX
C1826M17	2113944C16	CAP,CHIP,2.7PF,.25PF+/-,50V-DC,0603,C0G,-55DEG CMIN,125DEG CMA

Ref. Des.	Part Number	Description	Ref. Des.	Part Number	Description	Ref. Des.	Part Number	Description	Ref. Des.	Part Number	Description
C1827M17	2113944C14	CAP,CHIP,2.2PF,.25PF+/-,50V-DC,0603,C0G,-55DEG CMIN,125DEG CMA	C1935M20	2115153H13	CAP,FXD,2.7PF,.1PF+/-,+3.7%,-3.7%,50V-DC,0402,C0G,CAP,CERAMIC	C1958M20	2115153H23	CAP,CER CHIP,6.8PF,.1PF+/-,+1%,-.1%,50V-DC,0402,C0G,CAP,CERA	C205M12	2113955D35	CAP,FXD,4.7UF,+10%,-10%,16V-DC,1206,X7R,-55DEG CMIN,125DEG CMAX
C1900M20	2115153H25	CAP,FXD,8.2PF,.1PF+/-,50V-DC,0402,C0G	C1936M20	2115153H26	CAP,CER CHIP,9.1PF,.1PF+/-,+1%,-.1%,50V-DC,0402,C0G,CAP,CERA	C1959M20	2115153H13	CAP,FXD,2.7PF,.1PF+/-,+3.7%,-3.7%,50V-DC,0402,C0G,CAP,CERAMIC	C206M12	2113945B02	CAP,CHIP,.01UF,+10%,-10%,25V-DC,0402,X7R,-55DEG CMIN,125DEG CMA
C1901M20	2115153H57	CAP,CERAMIC CHIP,100PF,+1%,-1%,50V-DC,0402,C0G,CAP,CERAMIC,	C1938M20	2115153H15	CAP,CER CHIP,3.3PF,.1PF+/-,+1%,-.1%,50V-DC,0402,C0G,CAP,CERA	C1960M20	2115153H30	CAP,CER CHIP,6PF,.1PF+/-,+1%,-.1%,50V-DC,0402,C0G,CAP,CERAMI	C207M12	2113956B91	CAP,FXD,1UF,+10%,-10%,16V-DC,0603,X5R,-55DEG CMIN,85DEG CMAX,PB
C1903M20	NOTPLACED	64AM DUMMY PART NUMBER	C1939M20	2115153H13	CAP,FXD,2.7PF,.1PF+/-,+3.7%,-3.7%,50V-DC,0402,C0G,CAP,CERAMIC	C1961M20	2115153H13	CAP,FXD,2.7PF,.1PF+/-,+3.7%,-3.7%,50V-DC,0402,C0G,CAP,CERAMIC	C208M12	2113956B91	CAP,FXD,1UF,+10%,-10%,16V-DC,0603,X5R,-55DEG CMIN,85DEG CMAX,PB
C1920M20	2113946D07	CAP,CHIP,4.7UF,+10%,-10%,6.3V-DC,0603,X5R,-55DEG CMIN,85DEG CMA	C1940M20	2113944A40	CAP,CHIP,100PF,+5%,-5%,50V-DC,0402,C0G,-55DEG CMIN,125DEG CMAX	C1963M20	2115153H27	CAP,FXD,10PF,.1PF+/-,+1%,-.1%,50V-DC,0402,C0G,CAP,CERAMIC,COG	C209M12	2113956B91	CAP,FXD,1UF,+10%,-10%,16V-DC,0603,X5R,-55DEG CMIN,85DEG CMAX,PB
C1922M20	2113944A40	CAP,CHIP,100PF,+5%,-5%,50V-DC,0402,C0G,-55DEG CMIN,125DEG CMAX	C1942M20	2115153H23	CAP,CER CHIP,6.8PF,.1PF+/-,+1%,-.1%,50V-DC,0402,C0G,CAP,CERA	C1964M20	2115153H21	CAP,FXD,5.6PF,.1PF+/-,50V-DC,0402,C0G,CAP,CERAMIC,COG	C2100M2	2113944A46	CAP,CHIP,330PF,+5%,-5%,50V-DC,0402,C0G,-55DEG CMIN,125DEG CMAX
C1923M20	2113944A40	CAP,CHIP,100PF,+5%,-5%,50V-DC,0402,C0G,-55DEG CMIN,125DEG CMAX	C1952M20	2115153H27	CAP,FXD,10PF,.1PF+/-,+1%,-.1%,50V-DC,0402,C0G,CAP,CERAMIC,COG	C1970M20	2115153H12	CAP,CERAMIC CHIP,2.4PF,.1PF+/-,+1%,-.1%,50V-DC,0402,C0G,CAP,	C21001M2	2113944A46	CAP,CHIP,330PF,+5%,-5%,50V-DC,0402,C0G,-55DEG CMIN,125DEG CMAX
C1924M20	2113946D07	CAP,CHIP,4.7UF,+10%,-10%,6.3V-DC,0603,X5R,-55DEG CMIN,85DEG CMA	C1953M20	2115153H21	CAP,FXD,5.6PF,.1PF+/-,50V-DC,0402,C0G,CAP,CERAMIC,COG	C1971M20	2115153H07	CAP,FXD,1.5PF,.1PF+/-,+6.67%,-6.67%,50V-DC,0402,C0G	C21002M2	2113944A46	CAP,CHIP,330PF,+5%,-5%,50V-DC,0402,C0G,-55DEG CMIN,125DEG CMAX
C1925M20	2113944A40	CAP,CHIP,100PF,+5%,-5%,50V-DC,0402,C0G,-55DEG CMIN,125DEG CMAX	C1954M20	2113944A40	CAP,CHIP,100PF,+5%,-5%,50V-DC,0402,C0G,-55DEG CMIN,125DEG CMAX	C200M12	2113945B02	CAP,CHIP,.01UF,+10%,-10%,25V-DC,0402,X7R,-55DEG CMIN,125DEG CMA	C21003M2	2113944A46	CAP,CHIP,330PF,+5%,-5%,50V-DC,0402,C0G,-55DEG CMIN,125DEG CMAX
C1926M20	2113946B04	CAP,CHIP,.1UF,+10%,-10%,10V-DC,0402,X5R,-55DEG CMIN,85DEG CMAX	C1955M20	2113946B04	CAP,CHIP,.1UF,+10%,-10%,10V-DC,0402,X5R,-55DEG CMIN,85DEG CMAX	C201M12	2188468Y01	CAP,CHIP,1UF,+10%,-10%,25V-DC,0805,X7R	C2104M2	2113946B04	CAP,CHIP,.1UF,+10%,-10%,10V-DC,0402,X5R,-55DEG CMIN,85DEG CMAX
C1928M20	2115153H21	CAP,FXD,5.6PF,.1PF+/-,50V-DC,0402,C0G,CAP,CERAMIC,COG	C1956M20	2115153H21	CAP,FXD,5.6PF,.1PF+/-,50V-DC,0402,C0G,CAP,CERAMIC,COG	C202M12	2188468Y01	CAP,CHIP,1UF,+10%,-10%,25V-DC,0805,X7R	C210M12	2113956B91	CAP,FXD,1UF,+10%,-10%,16V-DC,0603,X5R,-55DEG CMIN,85DEG CMAX,PB
C1929M20	2115153H27	CAP,FXD,10PF,.1PF+/-,+1%,-.1%,50V-DC,0402,C0G,CAP,CERAMIC,COG	C1957M20	2115153H27	CAP,FXD,10PF,.1PF+/-,+1%,-.1%,50V-DC,0402,C0G,CAP,CERAMIC,COG	C203M12	2188468Y01	CAP,CHIP,1UF,+10%,-10%,25V-DC,0805,X7R	C2114M2	2113946B04	CAP,CHIP,.1UF,+10%,-10%,10V-DC,0402,X5R,-55DEG CMIN,85DEG CMAX
C1930M20	NOTPLACED	64AM DUMMY PART NUMBER				C204M12	2113955D35	CAP,FXD,4.7UF,+10%,-10%,16V-DC,1206,X7R,-55DEG CMIN,125DEG CMAX	C2115M2	NOTPLACED	64AM DUMMY PART NUMBER

Ref. Des.	Part Number	Description	Ref. Des.	Part Number	Description	Ref. Des.	Part Number	Description	Ref. Des.	Part Number	Description
C2116M2	NOTPLACED	64AM DUMMY PART NUMBER	C2201M2	2113946B04	CAP,CHIP,.1UF,+10%,-10%,10V-DC,0402,X5R,-55DEG CMIN,85DEG CMAX	C2601M13	2113944C45	CAP,CHIP,100PF,+5%,-5%,50V-DC,0603,C0G,-55DEG CMIN,125DEG CMAX	C3103M22	NOTPLACED	64AM DUMMY PART NUMBER
C2117M2	NOTPLACED	64AM DUMMY PART NUMBER	C2202M2	2113946B04	CAP,CHIP,.1UF,+10%,-10%,10V-DC,0402,X5R,-55DEG CMIN,85DEG CMAX	C2602M13	2113944C45	CAP,CHIP,100PF,+5%,-5%,50V-DC,0603,C0G,-55DEG CMIN,125DEG CMAX	C3104M22	NOTPLACED	64AM DUMMY PART NUMBER
C2126M2	2113944A46	CAP,CHIP,330PF,+5%,-5%,50V-DC,0402,C0G,-55DEG CMIN,125DEG CMAX	C2203M2	2113946B04	CAP,CHIP,.1UF,+10%,-10%,10V-DC,0402,X5R,-55DEG CMIN,85DEG CMAX	C2603M13	2113944A40	CAP,CHIP,100PF,+5%,-5%,50V-DC,0402,C0G,-55DEG CMIN,125DEG CMAX	C3105M22	2113944A40	CAP,CHIP,100PF,+5%,-5%,50V-DC,0402,C0G,-55DEG CMIN,125DEG CMAX
C2127M2	2113944A46	CAP,CHIP,330PF,+5%,-5%,50V-DC,0402,C0G,-55DEG CMIN,125DEG CMAX	C2211M2	2113946B04	CAP,CHIP,.1UF,+10%,-10%,10V-DC,0402,X5R,-55DEG CMIN,85DEG CMAX	C2604M13	2113944C45	CAP,CHIP,100PF,+5%,-5%,50V-DC,0603,C0G,-55DEG CMIN,125DEG CMAX	C3106M22	2113944A40	CAP,CHIP,100PF,+5%,-5%,50V-DC,0402,C0G,-55DEG CMIN,125DEG CMAX
C2128M2	2113944A46	CAP,CHIP,330PF,+5%,-5%,50V-DC,0402,C0G,-55DEG CMIN,125DEG CMAX	C2212M2	2113946B04	CAP,CHIP,.1UF,+10%,-10%,10V-DC,0402,X5R,-55DEG CMIN,85DEG CMAX	C2605M13	2113944A40	CAP,CHIP,100PF,+5%,-5%,50V-DC,0402,C0G,-55DEG CMIN,125DEG CMAX	C3107M22	2115153H23	CAP,CER CHIP,6.8PF,.1PF+/-,.1%,-.1%,50V-DC,0402,C0G,CAP, CERA
C2129M2	2113944A46	CAP,CHIP,330PF,+5%,-5%,50V-DC,0402,C0G,-55DEG CMIN,125DEG CMAX	C2213M2	2113946B04	CAP,CHIP,.1UF,+10%,-10%,10V-DC,0402,X5R,-55DEG CMIN,85DEG CMAX	C2606M13	2113944A40	CAP,CHIP,100PF,+5%,-5%,50V-DC,0402,C0G,-55DEG CMIN,125DEG CMAX	C3108M22	NOTPLACED	64AM DUMMY PART NUMBER
C212M12	2113946D07	CAP,CHIP,4.7UF,+10%,-10%,6.3V-DC,0603,X5R,-55DEG CMIN,85DEG CMA	C2214M2	2113946B04	CAP,CHIP,.1UF,+10%,-10%,10V-DC,0402,X5R,-55DEG CMIN,85DEG CMAX	C2607M13	2113944C20	CAP,CHIP,3.9PF,.25PF+/-,50V-DC,0603,C0G,-55DEG CMIN,125DEG CMA	C3109M22	2113946B04	CAP,CHIP,.1UF,+10%,-10%,10V-DC,0402,X5R,-55DEG CMIN,85DEG CMAX
C2130M2	2113944A46	CAP,CHIP,330PF,+5%,-5%,50V-DC,0402,C0G,-55DEG CMIN,125DEG CMAX	C2215M2	2113946B04	CAP,CHIP,.1UF,+10%,-10%,10V-DC,0402,X5R,-55DEG CMIN,85DEG CMAX	C2608M13	2113944C20	CAP,CHIP,3.9PF,.25PF+/-,50V-DC,0603,C0G,-55DEG CMIN,125DEG CMA	C3110M22	21667009210	CAPACITOR, FIXED, CERAMIC, 0402, 0.0000036UF, 0.05PF, 50V, C0G
C213M12	2113944A46	CAP,CHIP,330PF,+5%,-5%,50V-DC,0402,C0G,-55DEG CMIN,125DEG CMAX	C2216M2	2113946B04	CAP,CHIP,.1UF,+10%,-10%,10V-DC,0402,X5R,-55DEG CMIN,85DEG CMAX	C2609M13	2113946K02	CAP,CHIP,.1UF,+80%,-20%,16V-DC,0402,Y5V,-30DEG CMIN,85DEG CMAX	C3111M22	2113944A40	CAP,CHIP,100PF,+5%,-5%,50V-DC,0402,C0G,-55DEG CMIN,125DEG CMAX
C214M12	2113944A40	CAP,CHIP,100PF,+5%,-5%,50V-DC,0402,C0G,-55DEG CMIN,125DEG CMAX	C2221M2	2113946B04	CAP,CHIP,.1UF,+10%,-10%,10V-DC,0402,X5R,-55DEG CMIN,85DEG CMAX	C2806M1	NOTPLACED	64AM DUMMY PART NUMBER	C3112M22	2113944A40	CAP,CHIP,100PF,+5%,-5%,50V-DC,0402,C0G,-55DEG CMIN,125DEG CMAX
C215M12	2113944A46	CAP,CHIP,330PF,+5%,-5%,50V-DC,0402,C0G,-55DEG CMIN,125DEG CMAX	C2222M2	2113946B04	CAP,CHIP,.1UF,+10%,-10%,10V-DC,0402,X5R,-55DEG CMIN,85DEG CMAX	C3100M22	2113944A40	CAP,CHIP,100PF,+5%,-5%,50V-DC,0402,C0G,-55DEG CMIN,125DEG CMAX	C3113M22	2113944M15	CAP,FXD,7.5PF,.1PF+/-,50V-DC,0603,C0G,-55DEG CMIN,125DEG CMAX
C216M12	2113944A40	CAP,CHIP,100PF,+5%,-5%,50V-DC,0402,C0G,-55DEG CMIN,125DEG CMAX	C2223M2	2113944A40	CAP,CHIP,100PF,+5%,-5%,50V-DC,0402,C0G,-55DEG CMIN,125DEG CMAX	C3101M22	2115153H21	CAP,FXD,5.6PF,.1PF+/-,50V-DC,0402,C0G,CAP, CERAMIC, COG	C3115M22	2113944M14	CAP,FXD,6.8PF,.1PF+/-,50V-DC,0603,C0G,-55DEG CMIN,125DEG CMAX
C217M12	2113956B91	CAP,FXD,1UF,+10%,-10%,16V-DC,0603,X5R,-55DEG CMIN,85DEG CMAX,PB	C2401M2	NOTPLACED	64AM DUMMY PART NUMBER	C3102M22	2113944A40	CAP,CHIP,100PF,+5%,-5%,50V-DC,0402,C0G,-55DEG CMIN,125DEG CMAX	C3116M22	2113944M14	CAP,FXD,6.8PF,.1PF+/-,50V-DC,0603,C0G,-55DEG CMIN,125DEG CMAX
			C2402M2	NOTPLACED	64AM DUMMY PART NUMBER				C3120M22	2113944M42	CAP,FXD,100PF,+2%,-2%,50V-DC,0603,C0G,-55DEG CMIN,125DEG CMAX,P
			C2403M2	NOTPLACED	64AM DUMMY PART NUMBER						
			C2404M2	NOTPLACED	64AM DUMMY PART NUMBER						

Ref. Des.	Part Number	Description	Ref. Des.	Part Number	Description	Ref. Des.	Part Number	Description	Ref. Des.	Part Number	Description
C3122M22	2113944A40	CAP,CHIP,100PF,+5%,-5%,50V-DC,0402,C0G,-55DEG CMIN,125DEG CMAX	C3158M22	2113946B04	CAP,CHIP,.1UF,+10%,-10%,10V-DC,0402,X5R,-55DEG CMIN,85DEG CMAX	C508M21	2113946D07	CAP,CHIP,4.7UF,+10%,-10%,6.3V-DC,0603,X5R,-55DEG CMIN,85DEG CMA	C604M19	2113945B02	CAP,CHIP,.01UF,+10%,-10%,25V-DC,0402,X7R,-55DEG CMIN,125DEG CMA
C3133M22	2113944A40	CAP,CHIP,100PF,+5%,-5%,50V-DC,0402,C0G,-55DEG CMIN,125DEG CMAX	C3159M22	2113944A09	CAP,CHIP,2.2PF,.25PF+/-,50V-DC,0402,C0G,-55DEG CMIN,125DEG CMA	C509M21	2113945B05	CAP,FXD,.033UF,+10%,-10%,25V-DC,0402,X7R,-55DEG CMIN,125DEG CMA	C605M19	2113944A15	CAP,CHIP,3.9PF,.25PF+/-,50V-DC,0402,C0G,-55DEG CMIN,125DEG CMA
C3140M22	2115153H19	CAP,FXD,4.7PF,.1PF+/-,+1%,-1%,50V-DC,0402,C0G	C3160M22	2113944A17	CAP,CHIP,4.7PF,.25PF+/-,50V-DC,0402,C0G,-55DEG CMIN,125DEG CMA	C510M21	2113944A32	CAP,CHIP,39PF,+5%,-5%,50V-DC,0402,C0G,-55DEG CMIN,125DEG CMAX,P	C606M19	2113946B04	CAP,CHIP,.1UF,+10%,-10%,10V-DC,0402,X5R,-55DEG CMIN,85DEG CMAX
C3141M22	2115153H19	CAP,FXD,4.7PF,.1PF+/-,+1%,-1%,50V-DC,0402,C0G	C3161M22	2113944A40	CAP,CHIP,100PF,+5%,-5%,50V-DC,0402,C0G,-55DEG CMIN,125DEG CMAX	C511M21	2113945B05	CAP,FXD,.033UF,+10%,-10%,25V-DC,0402,X7R,-55DEG CMIN,125DEG CMA	C607M19	2113944A40	CAP,CHIP,100PF,+5%,-5%,50V-DC,0402,C0G,-55DEG CMIN,125DEG CMAX
C3142M22	2113946B04	CAP,CHIP,.1UF,+10%,-10%,10V-DC,0402,X5R,-55DEG CMIN,85DEG CMAX	C4005M2	2113946B04	CAP,CHIP,.1UF,+10%,-10%,10V-DC,0402,X5R,-55DEG CMIN,85DEG CMAX	C512M21	2113946D07	CAP,CHIP,4.7UF,+10%,-10%,6.3V-DC,0603,X5R,-55DEG CMIN,85DEG CMA	C608M19	2113944A12	CAP,CHIP,3PF,.25PF+/-,50V-DC,0402,C0G,-55DEG CMIN,125DEG CMAX
C3143M22	2113944A15	CAP,CHIP,3.9PF,.25PF+/-,50V-DC,0402,C0G,-55DEG CMIN,125DEG CMA	C4006M2	2113946B04	CAP,CHIP,.1UF,+10%,-10%,10V-DC,0402,X5R,-55DEG CMIN,85DEG CMAX	C514M21	NOTPLACED	64AM DUMMY PART NUMBER	C609M19	2113944A30	CAP,CHIP,27PF,+5%,-5%,50V-DC,0402,C0G,-55DEG CMIN,125DEG CMAX,P
C3144M22	2113944A40	CAP,CHIP,100PF,+5%,-5%,50V-DC,0402,C0G,-55DEG CMIN,125DEG CMAX	C4007M2	2113946B04	CAP,CHIP,.1UF,+10%,-10%,10V-DC,0402,X5R,-55DEG CMIN,85DEG CMAX	C515M21	2113944A14	CAP,CHIP,3.6PF,.25PF+/-,50V-DC,0402,C0G,-55DEG CMIN,125DEG CMA	C6104M6	2113946B04	CAP,CHIP,.1UF,+10%,-10%,10V-DC,0402,X5R,-55DEG CMIN,85DEG CMAX
C3147M22	2113944M09	CAP,FXD,4.3PF,.1PF+/-,50V-DC,0603,C0G,-55DEG CMIN,125DEG CMAX	C500M21	2113945B05	CAP,FXD,.033UF,+10%,-10%,25V-DC,0402,X7R,-55DEG CMIN,125DEG CMA	C516M21	2113944M42	CAP,FXD,100PF,+2%,-2%,50V-DC,0603,C0G,-55DEG CMIN,125DEG CMAX,P	C6105M6	2113946B04	CAP,CHIP,.1UF,+10%,-10%,10V-DC,0402,X5R,-55DEG CMIN,85DEG CMAX
C3151M22	2113944M16	CAP,FXD,8.2PF,.1PF+/-,50V-DC,0603,C0G,-55DEG CMIN,125DEG CMAX	C501M21	2113944A32	CAP,CHIP,39PF,+5%,-5%,50V-DC,0402,C0G,-55DEG CMIN,125DEG CMAX,P	C532M21	2113944A32	CAP,CHIP,39PF,+5%,-5%,50V-DC,0402,C0G,-55DEG CMIN,125DEG CMAX,P	C6106M6	2113946B04	CAP,CHIP,.1UF,+10%,-10%,10V-DC,0402,X5R,-55DEG CMIN,85DEG CMAX
C3152M22	2113944M12	CAP,FXD,5.6PF,.1PF+/-,50V-DC,0603,C0G,-55DEG CMIN,125DEG CMAX	C502M21	2113945B05	CAP,FXD,.033UF,+10%,-10%,25V-DC,0402,X7R,-55DEG CMIN,125DEG CMA	C533M21	2115153H52	CAP,FXD,62PF,+1%,-1%,50V-DC,0402,C0G	C6107M6	2113946B04	CAP,CHIP,.1UF,+10%,-10%,10V-DC,0402,X5R,-55DEG CMIN,85DEG CMAX
C3154M22	2113944M35	CAP,FXD,51PF,+2%,-2%,50V-DC,0603,C0G,-55DEG CMIN,125DEG CMAX,PB	C504M21	2113944A40	CAP,CHIP,100PF,+5%,-5%,50V-DC,0402,C0G,-55DEG CMIN,125DEG CMAX	C550M21	NOTPLACED	64AM DUMMY PART NUMBER	C6108M6	2113946B04	CAP,CHIP,.1UF,+10%,-10%,10V-DC,0402,X5R,-55DEG CMIN,85DEG CMAX
C3155M22	2113944A40	CAP,CHIP,100PF,+5%,-5%,50V-DC,0402,C0G,-55DEG CMIN,125DEG CMAX	C505M21	NOTPLACED	64AM DUMMY PART NUMBER	C551M21	NOTPLACED	64AM DUMMY PART NUMBER	C6109M6	2113946B04	CAP,CHIP,.1UF,+10%,-10%,10V-DC,0402,X5R,-55DEG CMIN,85DEG CMAX
C3157M22	2113946B04	CAP,CHIP,.1UF,+10%,-10%,10V-DC,0402,X5R,-55DEG CMIN,85DEG CMAX	C506M21	2113944A32	CAP,CHIP,39PF,+5%,-5%,50V-DC,0402,C0G,-55DEG CMIN,125DEG CMAX,P	C601M19	2113945B02	CAP,CHIP,.01UF,+10%,-10%,25V-DC,0402,X7R,-55DEG CMIN,125DEG CMA	C610M19	2113944A40	CAP,CHIP,100PF,+5%,-5%,50V-DC,0402,C0G,-55DEG CMIN,125DEG CMAX
			C507M21	2113945B05	CAP,FXD,.033UF,+10%,-10%,25V-DC,0402,X7R,-55DEG CMIN,125DEG CMA	C602M19	2113945B02	CAP,CHIP,.01UF,+10%,-10%,25V-DC,0402,X7R,-55DEG CMIN,125DEG CMA	C6110M6	2113946B04	CAP,CHIP,.1UF,+10%,-10%,10V-DC,0402,X5R,-55DEG CMIN,85DEG CMAX
						C603M19	2113945B02	CAP,CHIP,.01UF,+10%,-10%,25V-DC,0402,X7R,-55DEG CMIN,125DEG CMA			

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C6111M6	2113946B04	CAP,CHIP,.1UF,+10%,-10%,10V-DC,0402,X5R,-55DEG CMIN,85DEG CMAX	C619M19	2113944A35	CAP,CHIP,62PF,+5%,-5%,50V-DC,0402,C0G,-55DEG CMIN,125DEG CMAX,P	C6302M6	2113946B04	CAP,CHIP,.1UF,+10%,-10%,10V-DC,0402,X5R,-55DEG CMIN,85DEG CMAX	C635M19	2113945B02	CAP,CHIP,.01UF,+10%,-10%,25V-DC,0402,X7R,-55DEG CMIN,125DEG CMA
C6112M6	2113946B04	CAP,CHIP,.1UF,+10%,-10%,10V-DC,0402,X5R,-55DEG CMIN,85DEG CMAX	C6201M6	2113944A40	CAP,CHIP,100PF,+5%,-5%,50V-DC,0402,C0G,-55DEG CMIN,125DEG CMAX	C6303M6	2113946B04	CAP,CHIP,.1UF,+10%,-10%,10V-DC,0402,X5R,-55DEG CMIN,85DEG CMAX	C636M19	2113946B04	CAP,CHIP,.1UF,+10%,-10%,10V-DC,0402,X5R,-55DEG CMIN,85DEG CMAX
C6113M6	2113946B04	CAP,CHIP,.1UF,+10%,-10%,10V-DC,0402,X5R,-55DEG CMIN,85DEG CMAX	C6202M6	2113945A09	CAP,CHIP,1000PF,+10%,-10%,50V-DC,0402,X7R,-55DEG CMIN,125DEG CM	C6304M6	2113946B04	CAP,CHIP,.1UF,+10%,-10%,10V-DC,0402,X5R,-55DEG CMIN,85DEG CMAX	C637M19	2113946B04	CAP,CHIP,.1UF,+10%,-10%,10V-DC,0402,X5R,-55DEG CMIN,85DEG CMAX
C6114M6	2113946B04	CAP,CHIP,.1UF,+10%,-10%,10V-DC,0402,X5R,-55DEG CMIN,85DEG CMAX	C6203M6	2113946B04	CAP,CHIP,.1UF,+10%,-10%,10V-DC,0402,X5R,-55DEG CMIN,85DEG CMAX	C6305M6	2113946S35	CAP,CHIP,1UF,+10%,-10%,16V-DC,0603,X5R,-55DEG CMIN,85DEG CMAX,P	C638M19	2113945A12	CAP,CHIP,3300PF,+10%,-10%,50V-DC,0402,X7R,-55DEG CMIN,125DEG CM
C6115M6	2113946B04	CAP,CHIP,.1UF,+10%,-10%,10V-DC,0402,X5R,-55DEG CMIN,85DEG CMAX	C620M19	2113946B04	CAP,CHIP,.1UF,+10%,-10%,10V-DC,0402,X5R,-55DEG CMIN,85DEG CMAX	C6306M6	2113946S35	CAP,CHIP,1UF,+10%,-10%,16V-DC,0603,X5R,-55DEG CMIN,85DEG CMAX,P	C639M19	2113945B02	CAP,CHIP,.01UF,+10%,-10%,25V-DC,0402,X7R,-55DEG CMIN,125DEG CMA
C611M19	2113944A40	CAP,CHIP,100PF,+5%,-5%,50V-DC,0402,C0G,-55DEG CMIN,125DEG CMAX	C621M19	2113946B04	CAP,CHIP,.1UF,+10%,-10%,10V-DC,0402,X5R,-55DEG CMIN,85DEG CMAX	C6308M6	2113946B04	CAP,CHIP,.1UF,+10%,-10%,10V-DC,0402,X5R,-55DEG CMIN,85DEG CMAX	C6401M6	2113946B04	CAP,CHIP,.1UF,+10%,-10%,10V-DC,0402,X5R,-55DEG CMIN,85DEG CMAX
C612M19	2113945B02	CAP,CHIP,.01UF,+10%,-10%,25V-DC,0402,X7R,-55DEG CMIN,125DEG CMA	C622M19	2113946C07	CAP,FXD,.33UF,+10%,-10%,10V-DC,0603,X5R,-55DEG CMIN,85DEG CMAX	C6309M6	2113946B04	CAP,CHIP,.1UF,+10%,-10%,10V-DC,0402,X5R,-55DEG CMIN,85DEG CMAX	C6402M6	2113956A51	CAP,FXD,1UF,+10%,-10%,6.3V-DC,0402,X5R,-55DEG CMIN,85DEG CMAX,P
C613M19	2113944A40	CAP,CHIP,100PF,+5%,-5%,50V-DC,0402,C0G,-55DEG CMIN,125DEG CMAX	C623M19	2113945B02	CAP,CHIP,.01UF,+10%,-10%,25V-DC,0402,X7R,-55DEG CMIN,125DEG CMA	C630M19	2113946B04	CAP,CHIP,.1UF,+10%,-10%,10V-DC,0402,X5R,-55DEG CMIN,85DEG CMAX	C6403M6	2113946B04	CAP,CHIP,.1UF,+10%,-10%,10V-DC,0402,X5R,-55DEG CMIN,85DEG CMAX
C614M19	2113945B02	CAP,CHIP,.01UF,+10%,-10%,25V-DC,0402,X7R,-55DEG CMIN,125DEG CMA	C624M19	2113946C07	CAP,FXD,.33UF,+10%,-10%,10V-DC,0603,X5R,-55DEG CMIN,85DEG CMAX	C6310M6	2113946B04	CAP,CHIP,.1UF,+10%,-10%,10V-DC,0402,X5R,-55DEG CMIN,85DEG CMAX	C6404M6	2113946B04	CAP,CHIP,.1UF,+10%,-10%,10V-DC,0402,X5R,-55DEG CMIN,85DEG CMAX
C6155M6	NOTPLACED	64AM DUMMY PART NUMBER	C625M19	2115153H39	CAP,FXD,18PF,50V-DC,0402,C0G	C6311M6	2113946B04	CAP,CHIP,.1UF,+10%,-10%,10V-DC,0402,X5R,-55DEG CMIN,85DEG CMAX	C6405M6	2113946B04	CAP,CHIP,.1UF,+10%,-10%,10V-DC,0402,X5R,-55DEG CMIN,85DEG CMAX
C6156M6	NOTPLACED	64AM DUMMY PART NUMBER	C626M19	2113945A09	CAP,CHIP,1000PF,+10%,-10%,50V-DC,0402,X7R,-55DEG CMIN,125DEG CM	C631M19	2115153H31	CAP,FXD,7PF,.1PF+/-,50V-DC,0402,C0G,-55DEG CMIN,125DEG CMAX,CA	C6406M6	2113946B04	CAP,CHIP,.1UF,+10%,-10%,10V-DC,0402,X5R,-55DEG CMIN,85DEG CMAX
C615M19	2113944A42	CAP,CHIP,150PF,+5%,-5%,50V-DC,0402,C0G,-55DEG CMIN,125DEG CMAX	C627M19	2113945A09	CAP,CHIP,1000PF,+10%,-10%,50V-DC,0402,X7R,-55DEG CMIN,125DEG CM	C632M19	2113944A40	CAP,CHIP,100PF,+5%,-5%,50V-DC,0402,C0G,-55DEG CMIN,125DEG CMAX	C6407M6	2113946B04	CAP,CHIP,.1UF,+10%,-10%,10V-DC,0402,X5R,-55DEG CMIN,85DEG CMAX
C616M19	2113945A11	CAP:CHIP,2200PF,+10%,-10%,50V-DC,0402,*	C628M19	2113945B02	CAP,CHIP,.01UF,+10%,-10%,25V-DC,0402,X7R,-55DEG CMIN,125DEG CMA	C633M19	2113945B02	CAP,CHIP,.01UF,+10%,-10%,25V-DC,0402,X7R,-55DEG CMIN,125DEG CMA	C6408M6	2113946B04	CAP,CHIP,.1UF,+10%,-10%,10V-DC,0402,X5R,-55DEG CMIN,85DEG CMAX
C617M19	2113946B04	CAP,CHIP,.1UF,+10%,-10%,10V-DC,0402,X5R,-55DEG CMIN,85DEG CMAX	C629M19	2113946B04	CAP,CHIP,.1UF,+10%,-10%,10V-DC,0402,X5R,-55DEG CMIN,85DEG CMAX	C634M19	2113946B04	CAP,CHIP,.1UF,+10%,-10%,10V-DC,0402,X5R,-55DEG CMIN,85DEG CMAX	C6409M6	2113946B04	CAP,CHIP,.1UF,+10%,-10%,10V-DC,0402,X5R,-55DEG CMIN,85DEG CMAX
C618M19	2113944A31	CAP,CHIP,33PF,+5%,-5%,50V-DC,0402,C0G,-55DEG CMIN,125DEG CMAX,P	C6301M6	2113946B04	CAP,CHIP,.1UF,+10%,-10%,10V-DC,0402,X5R,-55DEG CMIN,85DEG CMAX				C640M19	2113946B04	CAP,CHIP,.1UF,+10%,-10%,10V-DC,0402,X5R,-55DEG CMIN,85DEG CMAX





Ref. Des.	Part Number	Description
C6521M6	2113944A46	CAP,CHIP,330PF,+5%,-5%,50V-DC,0402,C0G,-55DEG CMIN,125DEG CMAX
C6522M6	2113946S35	CAP,CHIP,1UF,+10%,-10%,16V-DC,0603,X5R,-55DEG CMIN,85DEG CMAX,P
C6523M6	2113946B04	CAP,CHIP,.1UF,+10%,-10%,10V-DC,0402,X5R,-55DEG CMIN,85DEG CMAX
C6524M6	2113946B04	CAP,CHIP,.1UF,+10%,-10%,10V-DC,0402,X5R,-55DEG CMIN,85DEG CMAX
C6525M6	2113946S35	CAP,CHIP,1UF,+10%,-10%,16V-DC,0603,X5R,-55DEG CMIN,85DEG CMAX,P
C6526M6	2113946B04	CAP,CHIP,.1UF,+10%,-10%,10V-DC,0402,X5R,-55DEG CMIN,85DEG CMAX
C6527M6	2113946B04	CAP,CHIP,.1UF,+10%,-10%,10V-DC,0402,X5R,-55DEG CMIN,85DEG CMAX
C6528M6	2113946B04	CAP,CHIP,.1UF,+10%,-10%,10V-DC,0402,X5R,-55DEG CMIN,85DEG CMAX
C6529M6	2113946B04	CAP,CHIP,.1UF,+10%,-10%,10V-DC,0402,X5R,-55DEG CMIN,85DEG CMAX
C6530M6	2113946S35	CAP,CHIP,1UF,+10%,-10%,16V-DC,0603,X5R,-55DEG CMIN,85DEG CMAX,P
C6531M6	2113946B04	CAP,CHIP,.1UF,+10%,-10%,10V-DC,0402,X5R,-55DEG CMIN,85DEG CMAX
C6532M6	2113946S35	CAP,CHIP,1UF,+10%,-10%,16V-DC,0603,X5R,-55DEG CMIN,85DEG CMAX,P
C6533M6	2113946B04	CAP,CHIP,.1UF,+10%,-10%,10V-DC,0402,X5R,-55DEG CMIN,85DEG CMAX

Ref. Des.	Part Number	Description
C6534M6	2113956B33	CAP,FXD,2.2UF,+10%,-10%,16V-DC,0603,X5R,-55DEG CMIN,85DEG CMAX
C6535M6	2113944A40	CAP,CHIP,100PF,+5%,-5%,50V-DC,0402,C0G,-55DEG CMIN,125DEG CMAX
C6536M6	2113944A28	CAP,CHIP,18PF,+5%,-5%,50V-DC,0402,C0G,-55DEG CMIN,125DEG CMAX,P
C6537M6	2113944A19	CAP,CHIP,5.6PF,.5PF+/-,50V-DC,0402,C0G,-55DEG CMIN,125DEG CMAX
C6538M6	2113956B33	CAP,FXD,2.2UF,+10%,-10%,16V-DC,0603,X5R,-55DEG CMIN,85DEG CMAX
C6539M6	2113956B33	CAP,FXD,2.2UF,+10%,-10%,16V-DC,0603,X5R,-55DEG CMIN,85DEG CMAX
C6540M6	2113945A09	CAP,CHIP,1000PF,+10%,-10%,50V-DC,0402,X7R,-55DEG CMIN,125DEG CM
C6541M6	2113944A19	CAP,CHIP,5.6PF,.5PF+/-,50V-DC,0402,C0G,-55DEG CMIN,125DEG CMAX
C6542M6	2113946B04	CAP,CHIP,.1UF,+10%,-10%,10V-DC,0402,X5R,-55DEG CMIN,85DEG CMAX
C6543M6	2113946B04	CAP,CHIP,.1UF,+10%,-10%,10V-DC,0402,X5R,-55DEG CMIN,85DEG CMAX
C6544M6	2113945D04	CAP,CHIP,.1UF,+10%,-10%,25V-DC,0603,X7R,-55DEG CMIN,125DEG CMAX
C6545M6	2113945D04	CAP,CHIP,.1UF,+10%,-10%,25V-DC,0603,X7R,-55DEG CMIN,125DEG CMAX
C6546M6	2113946B04	CAP,CHIP,.1UF,+10%,-10%,10V-DC,0402,X5R,-55DEG CMIN,85DEG CMAX

Ref. Des.	Part Number	Description
C6547M6	2113944A46	CAP,CHIP,330PF,+5%,-5%,50V-DC,0402,C0G,-55DEG CMIN,125DEG CMAX
C6548M6	NOTPLACED	64AM DUMMY PART NUMBER
C6549M6	2113944A46	CAP,CHIP,330PF,+5%,-5%,50V-DC,0402,C0G,-55DEG CMIN,125DEG CMAX
C6550M6	2113945D04	CAP,CHIP,.1UF,+10%,-10%,25V-DC,0603,X7R,-55DEG CMIN,125DEG CMAX
C6551M6	2113944A46	CAP,CHIP,330PF,+5%,-5%,50V-DC,0402,C0G,-55DEG CMIN,125DEG CMAX
C6552M6	2113956E91	CAP,FXD,10UF,+10%,-10%,16V-DC,1210,X5R,-55DEG CMIN,85DEG CMAX,P
C6553M6	2113956E91	CAP,FXD,10UF,+10%,-10%,16V-DC,1210,X5R,-55DEG CMIN,85DEG CMAX,P
C6554M6	2113946B04	CAP,CHIP,.1UF,+10%,-10%,10V-DC,0402,X5R,-55DEG CMIN,85DEG CMAX
C6555M6	2113955D45	CAP,FXD,4.7UF,+10%,-10%,10V-DC,1206,X7R,-55DEG CMIN,125DEG CMAX
C6556M6	2113956B33	CAP,FXD,2.2UF,+10%,-10%,16V-DC,0603,X5R,-55DEG CMIN,85DEG CMAX
C6557M6	2113945D04	CAP,CHIP,.1UF,+10%,-10%,25V-DC,0603,X7R,-55DEG CMIN,125DEG CMAX
C6558M6	2113944A21	CAP,CHIP,6.8PF,.5PF+/-,50V-DC,0402,C0G,-55DEG CMIN,125DEG CMAX
C6559M6	2113946S35	CAP,CHIP,1UF,+10%,-10%,16V-DC,0603,X5R,-55DEG CMIN,85DEG CMAX,P

Ref. Des.	Part Number	Description
C6560M6	2113956C37	CAP,FXD,10UF,+10%,-10%,16V-DC,0805,X5R,-55DEG CMIN,85DEG CMAX,P
C6561M6	2113956C37	CAP,FXD,10UF,+10%,-10%,16V-DC,0805,X5R,-55DEG CMIN,85DEG CMAX,P
C6562M6	2113944A25	CAP,CHIP,10PF,.5PF+/-,50V-DC,0402,C0G,-55DEG CMIN,125DEG CMAX
C6563M6	2113945D04	CAP,CHIP,.1UF,+10%,-10%,25V-DC,0603,X7R,-55DEG CMIN,125DEG CMAX
C6564M6	2113944A46	CAP,CHIP,330PF,+5%,-5%,50V-DC,0402,C0G,-55DEG CMIN,125DEG CMAX
C6565M6	2113956B33	CAP,FXD,2.2UF,+10%,-10%,16V-DC,0603,X5R,-55DEG CMIN,85DEG CMAX
C6566M6	2113956E91	CAP,FXD,10UF,+10%,-10%,16V-DC,1210,X5R,-55DEG CMIN,85DEG CMAX,P
C6567M6	2113956E91	CAP,FXD,10UF,+10%,-10%,16V-DC,1210,X5R,-55DEG CMIN,85DEG CMAX,P
C6568M6	2113956B33	CAP,FXD,2.2UF,+10%,-10%,16V-DC,0603,X5R,-55DEG CMIN,85DEG CMAX
C6569M6	2113956E91	CAP,FXD,10UF,+10%,-10%,16V-DC,1210,X5R,-55DEG CMIN,85DEG CMAX,P
C6570M6	2113944A46	CAP,CHIP,330PF,+5%,-5%,50V-DC,0402,C0G,-55DEG CMIN,125DEG CMAX
C6571M6	2113946B04	CAP,CHIP,.1UF,+10%,-10%,10V-DC,0402,X5R,-55DEG CMIN,85DEG CMAX
C6572M6	2113946B04	CAP,CHIP,.1UF,+10%,-10%,10V-DC,0402,X5R,-55DEG CMIN,85DEG CMAX

Ref. Des.	Part Number	Description
C6573M6	2113946S35	CAP,CHIP,1UF,+10%,-10%,16V-DC,0603,X5R,-55DEG CMIN,85DEG CMAX,P
C6574M6	2113946S35	CAP,CHIP,1UF,+10%,-10%,16V-DC,0603,X5R,-55DEG CMIN,85DEG CMAX,P
C6575M6	2113946S35	CAP,CHIP,1UF,+10%,-10%,16V-DC,0603,X5R,-55DEG CMIN,85DEG CMAX,P
C6576M6	2113956B33	CAP,FXD,2.2UF,+10%,-10%,16V-DC,0603,X5R,-55DEG CMIN,85DEG CMAX
C6577M6	2113946S35	CAP,CHIP,1UF,+10%,-10%,16V-DC,0603,X5R,-55DEG CMIN,85DEG CMAX,P
C6578M6	2113946S35	CAP,CHIP,1UF,+10%,-10%,16V-DC,0603,X5R,-55DEG CMIN,85DEG CMAX,P
C6579M6	2113946S35	CAP,CHIP,1UF,+10%,-10%,16V-DC,0603,X5R,-55DEG CMIN,85DEG CMAX,P
C6580M6	2113946S35	CAP,CHIP,1UF,+10%,-10%,16V-DC,0603,X5R,-55DEG CMIN,85DEG CMAX,P
C6581M6	2113956B33	CAP,FXD,2.2UF,+10%,-10%,16V-DC,0603,X5R,-55DEG CMIN,85DEG CMAX
C6582M6	2113944A21	CAP,CHIP,6.8PF,.5PF+/-,50V-DC,0402,C0G,-55DEG CMIN,125DEG CMAX
C6583M6	2113946B04	CAP,CHIP,.1UF,+10%,-10%,10V-DC,0402,X5R,-55DEG CMIN,85DEG CMAX
C6584M6	2113956C37	CAP,FXD,10UF,+10%,-10%,16V-DC,0805,X5R,-55DEG CMIN,85DEG CMAX,P
C6585M6	2113946B04	CAP,CHIP,.1UF,+10%,-10%,10V-DC,0402,X5R,-55DEG CMIN,85DEG CMAX

Ref. Des.	Part Number	Description
C6586M6	2113956C35	CAP,FXD,4.7UF,+10%,-10%,16V-DC,0805,X5R,-55DEG CMIN,85DEG CMAX
C6587M6	2113946B04	CAP,CHIP,.1UF,+10%,-10%,10V-DC,0402,X5R,-55DEG CMIN,85DEG CMAX
C6588M6	2113944A46	CAP,CHIP,330PF,+5%,-5%,50V-DC,0402,C0G,-55DEG CMIN,125DEG CMAX
C6589M6	2113944A40	CAP,CHIP,100PF,+5%,-5%,50V-DC,0402,C0G,-55DEG CMIN,125DEG CMAX
C6590M6	2113946B04	CAP,CHIP,.1UF,+10%,-10%,10V-DC,0402,X5R,-55DEG CMIN,85DEG CMAX
C6591M6	2113944A28	CAP,CHIP,18PF,+5%,-5%,50V-DC,0402,C0G,-55DEG CMIN,125DEG CMAX,P
C6592M6	2113944A09	CAP,CHIP,2.2PF,.25PF+/-,50V-DC,0402,C0G,-55DEG CMIN,125DEG CMA
C6593M6	2113956C37	CAP,FXD,10UF,+10%,-10%,16V-DC,0805,X5R,-55DEG CMIN,85DEG CMAX,P
C6594M6	2113946C07	CAP,FXD,.33UF,+10%,-10%,10V-DC,0603,X5R,-55DEG CMIN,85DEG CMAX
C6595M6	2113946S35	CAP,CHIP,1UF,+10%,-10%,16V-DC,0603,X5R,-55DEG CMIN,85DEG CMAX,P
C6596M6	NOTPLACED	64AM DUMMY PART NUMBER
C6601M6	2113944A28	CAP,CHIP,18PF,+5%,-5%,50V-DC,0402,C0G,-55DEG CMIN,125DEG CMAX,P
C6602M6	2113944A28	CAP,CHIP,18PF,+5%,-5%,50V-DC,0402,C0G,-55DEG CMIN,125DEG CMAX,P

Ref. Des.	Part Number	Description
C6670M6	NOTPLACED	64AM DUMMY PART NUMBER
C702M7	2185419D06	CAP,CHIP,.1UF,+10%,-10%,25V-DC,1206,-55DEG CMIN,125DEG CMAX
C703M7	2113945C26	CAP,FXD,.039UF,+10%,-10%,50V-DC,0603,X7R,-55DEG CMIN,125DEG CMA
C704M7	2185419D06	CAP,CHIP,.1UF,+10%,-10%,25V-DC,1206,-55DEG CMIN,125DEG CMAX
C705M7	2115153H24	CAP,CER CHIP,7.5PF,.1PF+/-,.1%,-.1%,50V-DC,0402,C0G,CAP, CERA
C706M7	2185419D06	CAP,CHIP,.1UF,+10%,-10%,25V-DC,1206,-55DEG CMIN,125DEG CMAX
C707M7	2113945C01	CAP,CHIP,6800PF,+10%,-10%,50V-DC,0603,X7R,-55DEG CMIN,125DEG CM
C708M7	2115153H37	CAP,FXD,15PF,.15PF+/-,+1%,-1%,50V-DC,0402,C0G,CAP, CERAMIC, CO
C709M7	2171051Y11	CAP,FXD,.1UF,+5%,-5%,1206,-55DEG CMIN,125DEG CMAX,PB-FREE
C710M7	NOTPLACED	64AM DUMMY PART NUMBER
C711M7	NOTPLACED	64AM DUMMY PART NUMBER
C712M7	NOTPLACED	64AM DUMMY PART NUMBER
C713M7	2113945C26	CAP,FXD,.039UF,+10%,-10%,50V-DC,0603,X7R,-55DEG CMIN,125DEG CMA
C714M7	2171051Y11	CAP,FXD,.1UF,+5%,-5%,1206,-55DEG CMIN,125DEG CMAX,PB-FREE
C715M7	2113945C31	CAP,FXD,.1UF,+10%,-10%,50V-DC,0603,X7R,-55DEG CMIN,125DEG CMAX

Ref. Des.	Part Number	Description
C716M7	2113945C31	CAP,FXD,.1UF,+10%,-10%,50V-DC,0603,X7R,-55DEG CMIN,125DEG CMAX
C717M7	2113945C31	CAP,FXD,.1UF,+10%,-10%,50V-DC,0603,X7R,-55DEG CMIN,125DEG CMAX
C718M7	2113945C31	CAP,FXD,.1UF,+10%,-10%,50V-DC,0603,X7R,-55DEG CMIN,125DEG CMAX
C719M7	2113945C31	CAP,FXD,.1UF,+10%,-10%,50V-DC,0603,X7R,-55DEG CMIN,125DEG CMAX
C720M7	2113944C53	CAP,CHIP,1500PF,+5%,-5%,50V-DC,0603,C0G,-55DEG CMIN,125DEG CMAX
C721M7	NOTPLACED	64AM DUMMY PART NUMBER
C722M7	2113944A40	CAP,CHIP,100PF,+5%,-5%,50V-DC,0402,C0G,-55DEG CMIN,125DEG CMAX
C723M7	2113944A40	CAP,CHIP,100PF,+5%,-5%,50V-DC,0402,C0G,-55DEG CMIN,125DEG CMAX
C724M7	2113955D37	CAP,FXD,10UF,+10%,-10%,16V-DC,1206,X7R,-55DEG CMIN,125DEG CMAX
C725M7	2113945C31	CAP,FXD,.1UF,+10%,-10%,50V-DC,0603,X7R,-55DEG CMIN,125DEG CMAX
C726M7	2113945C31	CAP,FXD,.1UF,+10%,-10%,50V-DC,0603,X7R,-55DEG CMIN,125DEG CMAX
C727M7	2113944A40	CAP,CHIP,100PF,+5%,-5%,50V-DC,0402,C0G,-55DEG CMIN,125DEG CMAX

Ref. Des.	Part Number	Description
C730M7	2113945C31	CAP,FXD,.1UF,+10%,-10%,50V-DC,0603,X7R,-55DEG CMIN,125DEG CMAX
C731M7	2113945C31	CAP,FXD,.1UF,+10%,-10%,50V-DC,0603,X7R,-55DEG CMIN,125DEG CMAX
C732M7	2113944A32	CAP,CHIP,39PF,+5%,-5%,50V-DC,0402,C0G,-55DEG CMIN,125DEG CMAX,P
C733M7	2113945A09	CAP,CHIP,1000PF,+10%,-10%,50V-DC,0402,X7R,-55DEG CMIN,125DEG CM
C734M7	2113945C31	CAP,FXD,.1UF,+10%,-10%,50V-DC,0603,X7R,-55DEG CMIN,125DEG CMAX
C735M7	2113944A31	CAP,CHIP,33PF,+5%,-5%,50V-DC,0402,C0G,-55DEG CMIN,125DEG CMAX,P
C736M7	2113945B02	CAP,CHIP,.01UF,+10%,-10%,25V-DC,0402,X7R,-55DEG CMIN,125DEG CMA
C737M7	2113945C31	CAP,FXD,.1UF,+10%,-10%,50V-DC,0603,X7R,-55DEG CMIN,125DEG CMAX
C739M7	2113944A17	CAP,CHIP,4.7PF,.25PF+/-,50V-DC,0402,C0G,-55DEG CMIN,125DEG CMA
C740M7	2113944A44	CAP,CHIP,220PF,+5%,-5%,50V-DC,0402,C0G,-55DEG CMIN,125DEG CMAX
C742M7	2113945C31	CAP,FXD,.1UF,+10%,-10%,50V-DC,0603,X7R,-55DEG CMIN,125DEG CMAX
C743M7	2113946B06	CAP,CHIP,.22UF,+10%,-10%,10V-DC,0402,X5R,-55DEG CMIN,85DEG CMAX

Ref. Des.	Part Number	Description
C744M7	2113955D37	CAP,FXD,10UF,+10%,-10%,16V-DC,1206,X7R,-55DEG CMIN,125DEG CMAX
C749M7	2113945C31	CAP,FXD,.1UF,+10%,-10%,50V-DC,0603,X7R,-55DEG CMIN,125DEG CMAX
C750M7	2113945C31	CAP,FXD,.1UF,+10%,-10%,50V-DC,0603,X7R,-55DEG CMIN,125DEG CMAX
C751M7	2113945A09	CAP,CHIP,1000PF,+10%,-10%,50V-DC,0402,X7R,-55DEG CMIN,125DEG CM
C752M7	2113944A43	CAP,CHIP,180PF,+5%,-5%,50V-DC,0402,C0G,-55DEG CMIN,125DEG CMAX
C753M7	2113944A31	CAP,CHIP,33PF,+5%,-5%,50V-DC,0402,C0G,-55DEG CMIN,125DEG CMAX,P
C754M7	2113944A34	CAP,CHIP,56PF,+5%,-5%,50V-DC,0402,C0G,-55DEG CMIN,125DEG CMAX,P
C756M7	2113955D37	CAP,FXD,10UF,+10%,-10%,16V-DC,1206,X7R,-55DEG CMIN,125DEG CMAX
C757M7	2113945C31	CAP,FXD,.1UF,+10%,-10%,50V-DC,0603,X7R,-55DEG CMIN,125DEG CMAX
C760M7	2113944A44	CAP,CHIP,220PF,+5%,-5%,50V-DC,0402,C0G,-55DEG CMIN,125DEG CMAX
C764M7	2113946B06	CAP,CHIP,.22UF,+10%,-10%,10V-DC,0402,X5R,-55DEG CMIN,85DEG CMAX
C768M7	2115153H27	CAP,FXD,10PF,.1PF+/-,+1%,-1%,50V-DC,0402,C0G,CAP,CERAMIC, COG

Ref. Des.	Part Number	Description
C770M7	2113944A44	CAP,CHIP,220PF,+5%,-5%,50V-DC,0402,C0G,-55DEG CMIN,125DEG CMAX
C772M7	2113945A09	CAP,CHIP,1000PF,+10%,-10%,50V-DC,0402,X7R,-55DEG CMIN,125DEG CM
C773M7	2113944A33	CAP,CHIP,47PF,+5%,-5%,50V-DC,0402,C0G,-55DEG CMIN,125DEG CMAX,P
C777M7	2113944A44	CAP,CHIP,220PF,+5%,-5%,50V-DC,0402,C0G,-55DEG CMIN,125DEG CMAX
C780M7	2113944A33	CAP,CHIP,47PF,+5%,-5%,50V-DC,0402,C0G,-55DEG CMIN,125DEG CMAX,P
C781M7	2115153H57	CAP,CERAMIC CHIP,100PF,+1%,-1%,50V-DC,0402,C0G,CAP,CERAMIC,
C786M7	2113944A44	CAP,CHIP,220PF,+5%,-5%,50V-DC,0402,C0G,-55DEG CMIN,125DEG CMAX
C803M7	2113944A44	CAP,CHIP,220PF,+5%,-5%,50V-DC,0402,C0G,-55DEG CMIN,125DEG CMAX
C813M7	NOTPLACED	64AM DUMMY PART NUMBER
C816M7	2113944A35	CAP,CHIP,62PF,+5%,-5%,50V-DC,0402,C0G,-55DEG CMIN,125DEG CMAX,P
C817M7	2113944A44	CAP,CHIP,220PF,+5%,-5%,50V-DC,0402,C0G,-55DEG CMIN,125DEG CMAX
C819M7	2113944A44	CAP,CHIP,220PF,+5%,-5%,50V-DC,0402,C0G,-55DEG CMIN,125DEG CMAX

Ref. Des.	Part Number	Description
C823M7	2113944A40	CAP,CHIP,100PF,+5%,-5%,50V-DC,0402,C0G,-55DEG CMIN,125DEG CMAX
C824M7	2113944A44	CAP,CHIP,220PF,+5%,-5%,50V-DC,0402,C0G,-55DEG CMIN,125DEG CMAX
D1970M20	NOTPLACED	64AM DUMMY PART NUMBER
D200M12	4813978A19	DIODE,RECT,MBR120,SM,SOD-123,1A,20V,SHTK,PB-FREE
D2601M13	4813974A19	DIODE ARRAY,MXR,SM,SOT-323,7V,.2W,SHTK,2,PB-FREE
D2602M13	4815897H01	DIODE,PIN,UPP9401E,SM,DO-216,50A,50V,2.5W,POWER-MITE
D2603M13	4815897H01	DIODE,PIN,UPP9401E,SM,DO-216,50A,50V,2.5W,POWER-MITE
D3102M22	4805656W87	DIODE,VCTR, @ 15V,1SV279,SOD-523/SC-79,SOD-523/SC-79
D3103M22	4805656W87	DIODE,VCTR, @ 15V,1SV279,SOD-523/SC-79,SOD-523/SC-79
D3104M22	4805656W87	DIODE,VCTR, @ 15V,1SV279,SOD-523/SC-79,SOD-523/SC-79
D3105M22	4805656W87	DIODE,VCTR, @ 15V,1SV279,SOD-523/SC-79,SOD-523/SC-79
D3135M22	4805656W87	DIODE,VCTR, @ 15V,1SV279,SOD-523/SC-79,SOD-523/SC-79
D3136M22	4805656W87	DIODE,VCTR, @ 15V,1SV279,SOD-523/SC-79,SOD-523/SC-79
D3137M22	4805656W87	DIODE,VCTR, @ 15V,1SV279,SOD-523/SC-79,SOD-523/SC-79

Ref. Des.	Part Number	Description
D3138M22	4805656W87	DIODE,VCTR, @ 15V,1SV279,SOD-523/SC-79,SOD-523/SC-79
D4001M2	4813978A25	DIODE,SWG,BAT54,SM,SO D-323/SC-76,200MA,30V,.2W,SHTK,P B-FREE, W18
D6101M6	4813978A25	DIODE,SWG,BAT54,SM,SO D-323/SC-76,200MA,30V,.2W,SHTK,P B-FREE, W18
D6401M6	4813978A25	DIODE,SWG,BAT54,SM,SO D-323/SC-76,200MA,30V,.2W,SHTK,P B-FREE, W18
D6501M6	4813978A25	DIODE,SWG,BAT54,SM,SO D-323/SC-76,200MA,30V,.2W,SHTK,P B-FREE, W18
D722M7	4815011H01	DIODE,SWG,SM,300MA,80 V,TRP
D723M7	4815011H01	DIODE,SWG,SM,300MA,80 V,TRP
E1101M11	2405688Z01	IDCTR,BEAD,FERR BEAD
E1921M20	2471132D14	IDCTR,25%,200MA,.6OHM, FERR,SM,0402,IDCTR,FXD ,470OHM,200M
E201M12	7686949J14	FLTR,FERRITE BEAD,2A,SM,0805,CHIP,22 0OHM
E2242M2	7685268E01	FLTR,FERRITE BEAD,650MA,SM,0402,CHI P,80OHM
E2244M2	7685268E01	FLTR,FERRITE BEAD,650MA,SM,0402,CHI P,80OHM
E2245M2	7685268E01	FLTR,FERRITE BEAD,650MA,SM,0402,CHI P,80OHM
E2246M2	7685268E01	FLTR,FERRITE BEAD,650MA,SM,0402,CHI P,80OHM
E2247M2	7685268E01	FLTR,FERRITE BEAD,650MA,SM,0402,CHI P,80OHM

Ref. Des.	Part Number	Description
E2248M2	7685268E01	FLTR,FERRITE BEAD,650MA,SM,0402,CHI P,80OHM
E2249M2	7685268E01	FLTR,FERRITE BEAD,650MA,SM,0402,CHI P,80OHM
E2301M2	91012036001	FLTR,EMI/ RFI,300MA,SM,FIL- TER,EMI/ RFI,300MA,SM,0402,PB F
E2302M2	91012036001	FLTR,EMI/ RFI,300MA,SM,FIL- TER,EMI/ RFI,300MA,SM,0402,PB F
E2303M2	91012036001	FLTR,EMI/ RFI,300MA,SM,FIL- TER,EMI/ RFI,300MA,SM,0402,PB F
E2304M2	91012036001	FLTR,EMI/ RFI,300MA,SM,FIL- TER,EMI/ RFI,300MA,SM,0402,PB F
E2305M2	91012036001	FLTR,EMI/ RFI,300MA,SM,FIL- TER,EMI/ RFI,300MA,SM,0402,PB F
E2306M2	91012036001	FLTR,EMI/ RFI,300MA,SM,FIL- TER,EMI/ RFI,300MA,SM,0402,PB F
E2307M2	91012036001	FLTR,EMI/ RFI,300MA,SM,FIL- TER,EMI/ RFI,300MA,SM,0402,PB F
E2308M2	91012036001	FLTR,EMI/ RFI,300MA,SM,FIL- TER,EMI/ RFI,300MA,SM,0402,PB F
E2309M2	91012036001	FLTR,EMI/ RFI,300MA,SM,FIL- TER,EMI/ RFI,300MA,SM,0402,PB F
E2310M2	91012036001	FLTR,EMI/ RFI,300MA,SM,FIL- TER,EMI/ RFI,300MA,SM,0402,PB F

Ref. Des.	Part Number	Description
E2311M2	91012036001	FLTR,EMI/ RFI,300MA,SM,FIL- TER,EMI/ RFI,300MA,SM,0402,PB F
E601M19	2471132D14	IDCTR,25%,200MA,.6OHM, FERR,SM,0402,IDCTR,FXD ,470OHM,200M
E602M19	2471132D14	IDCTR,25%,200MA,.6OHM, FERR,SM,0402,IDCTR,FXD ,470OHM,200M
E603M19	2471132D14	IDCTR,25%,200MA,.6OHM, FERR,SM,0402,IDCTR,FXD ,470OHM,200M
E604M19	2471132D14	IDCTR,25%,200MA,.6OHM, FERR,SM,0402,IDCTR,FXD ,470OHM,200M
E605M19	2471132D14	IDCTR,25%,200MA,.6OHM, FERR,SM,0402,IDCTR,FXD ,470OHM,200M
E606M19	2471132D14	IDCTR,25%,200MA,.6OHM, FERR,SM,0402,IDCTR,FXD ,470OHM,200M
E607M19	2471132D14	IDCTR,25%,200MA,.6OHM, FERR,SM,0402,IDCTR,FXD ,470OHM,200M
E608M19	2471132D14	IDCTR,25%,200MA,.6OHM, FERR,SM,0402,IDCTR,FXD ,470OHM,200M
E609M19	2471132D14	IDCTR,25%,200MA,.6OHM, FERR,SM,0402,IDCTR,FXD ,470OHM,200M
E6501M6	2480067M02	FIXED INDUC- TOR,FXD,200MA,.4OHM,F ERR,0805,CHK RF CHIP BE
E6502M6	2480067M02	FIXED INDUC- TOR,FXD,200MA,.4OHM,F ERR,0805,CHK RF CHIP BE
F200M12	6575834B01	FUSE,FST BLW,2A,32V,FUSE SUR MT
FL1301M3	9102190J23	FLTR,SAW,BAND- PASS,1.57542GHZ NOM,SM,1.4X1.0MM,SMD, PB-FREE
FL1302M3	9109674L58	BAND PASS FILTER

Ref. Des.	Part Number	Description
FL1303M3	9102190J23	FLTR,SAW,BAND- PASS,1.57542GHZ NOM,SM,1.4X1.0MM,SMD, PB-FREE
FL502M21	91009300001	FLTR,BAND- PASS,109.65MHZ NOM,FIL- TER,MONOLITHIC CRYSTAL,BAND
J102M12	2880658Z08	RF CONNEC- TOR,SMA,M,CONN SMA
J2301M2	0970312N01	CONN,BTB,RCPT,60CONT,. 4MM,GLD,1 STACK HGT
J2302M2	CN000222A0 1	CONNECTOR STANDARD- BTB,FEMALE(RECEPTA- CLE/SOCKET),0.4 MM,70,CONN
L1101M11	2415429H26	IDCTR,WW,33NH,5%,600M A,.22OHM,CER,SM,0603,C HIP
L1102M11	2415429H10	IDCTR,WW,6.8NH,5%,700M A,.11OHM,CER,SM,0603,C HIP
L1116M11	NOTPLACED	64AM DUMMY PART NUM- BER
L1117M11	2415428H01	COIL,AW,1.65NH,10%,1.6A, AIR,2 TURNS,SM,AIR WOUND IDCTR
L1301M3	2414017P16	IDCTR,CHIP,18NH,5%,300 MA,.76OHM,CER,9 Q,1.9GHZ SRF,SM,0402,P
L1302M3	2414017P07	IDCTR,CHIP,3.3NH,300MA,. 19OHM,CER,8 Q,4GHZ SRF,SM,0402,PB-F
L1303M3	2414017P16	IDCTR,CHIP,18NH,5%,300 MA,.76OHM,CER,9 Q,1.9GHZ SRF,SM,0402,P
L1304M3	2414017P25	IDCTR,CHIP,100NH,5%,100 MA,5.5OHM,CER,8 Q,650MHZ SRF,SM,0402
L1305M3	24010062002	IDCTR,RF,5.6NH,2%,1.6A,. 06OHM,CER,6.5GHZ SRF,SM,5.6NH, 040
L1306M3	2414017P14	IDCTR,CHIP,12NH,5%,300 MA,6OHM,CER,9 Q,2GHZ SRF,SM,0402,PB-F

Ref. Des.	Part Number	Description	Ref. Des.	Part Number	Description	Ref. Des.	Part Number	Description	Ref. Des.	Part Number	Description
L1308M3	2415429H14	CHIP INDUC-TOR,9.5NH,5%,700MA	L1909M20	2478057A23	IDCTR,18NH,2%,.066OHM,CER,41 Q,3.3GHZ SRF,PCMT,18 NH SUR	L2602M13	2415429H40	IDCTR,WW,180NH,5%,240 MA,1.25OHM,CER,SM,0603 ,CHIP	L503M21	2414017N24	IDCTR,CHIP,100NH,5%,300 MA,2OHM,CER,15 Q,700MHZ SRF,SM,0603,P
L1316M3	24010062009	IDCTR,RF,13NH,2%,870MA ,.06OHM,CER,4.2GHZ SRF,SM,13NH, 0402	L1910M20	2478057A23	IDCTR,18NH,2%,.066OHM,CER,41 Q,3.3GHZ SRF,PCMT,18 NH SUR	L3100M22	0613952R66	RES,MF,0OHM,5%,.0625W, SM,0402,PB-FREE	L504M21	2478057A51	CHIP INDUC-TOR,RF,270NH,2%,SM,0603 HI Q CHIP IDCTR
L1601M16	2414017H14	IDCTR,CHIP,15NH,5%,.3A,.32OHM,CER,12 Q,1.5GHZ SRF,SM,0603,PB-	L1912M20	2478057A04	IDCTR,3.6NH,2%,.031OHM,CER,40 Q,9.7GHZ SRF,PCMT,3.6 NH SU	L3101M22	2414032F41	IDCTR,WW,390NH,10%,200 MA,1.5OHM,CER,40 Q,730MHZ SRF,SM,PB-F	L513M21	NOTPLACED	64AM DUMMY PART NUM-BER
L1602M16	2415429H37	IDCTR,WW,110NH,5%,300 MA,.61OHM,CER,SM,0603, CHIP	L1913M20	2478057A23	IDCTR,18NH,2%,.066OHM,CER,41 Q,3.3GHZ SRF,PCMT,18 NH SUR	L3106M22	2478057A21	IDCTR,15NH,2%,.078OHM,CER,48 Q,3.6GHZ SRF,PCMT,15 NH SUR	L550M21	2414017N14	IDCTR,CHIP,15NH,5%,600 MA,.4OHM,CER,12 Q,1.8GHZ SRF,SM,0603,P
L1603M16	2414015A07	IDCTR,FXD,180NH,2%,750 MA,.77OHM,CER,25 Q,700MHZ SRF,SM,1008	L1914M20	2478057A23	IDCTR,18NH,2%,.066OHM,CER,41 Q,3.3GHZ SRF,PCMT,18 NH SUR	L3112M22	24009316003	AIR CORE,MICRO,5.4NH,1.6A,1 %,SM,5T	L601M19	2415429H43	IDCTR,WW,220NH,5%,300 MA,2.1OHM,CER,SM,0603, CHIP
L1604M16	2414017H06	IDCTR,CHIP,3.3NH,300MA,.12OHM,CER,10 Q,3.8GHZ SRF,SM,0603,P	L1915M20	2478057A12	IDCTR,7.2NH,2%,.052OHM,CER,48 Q,5.4GHZ SRF,PCMT,7.2NH SUR	L3119M22	2414032F73	IDCTR,WW,820NH,5%,180 MA,2.23OHM,CER,23 Q,215MHZ SRF,SM,PB-F	L602M19	2466505A01	CHIP INDUC-TOR,CHIP,10UH,5%,150MA ,FERR,0 AWG,SM,PB-FREE
L1605M16	2414017H06	IDCTR,CHIP,3.3NH,300MA,.12OHM,CER,10 Q,3.8GHZ SRF,SM,0603,P	L1917M20	2478057A04	IDCTR,3.6NH,2%,.031OHM,CER,40 Q,9.7GHZ SRF,PCMT,3.6 NH SU	L3125M22	2414032F41	IDCTR,WW,390NH,10%,200 MA,1.5OHM,CER,40 Q,730MHZ SRF,SM,PB-F	L603M19	2466505A01	CHIP INDUC-TOR,CHIP,10UH,5%,150MA ,FERR,0 AWG,SM,PB-FREE
L1606M16	2460591E24	COIL AIR WOUND INDUC 23.75	L1934M20	2478057A35	CHIP INDUC-TOR,RF,47NH,2%,SM,0603 HI Q CHIP IDCTR	L3126M22	2414032F73	IDCTR,WW,820NH,5%,180 MA,2.23OHM,CER,23 Q,215MHZ SRF,SM,PB-F	L604M19	2414032D16	IDCTR,WW,120NH,5%,800 MA,.26OHM,CER,42 Q,1GHZ SRF,SM,PB-FREE
L1609M16	2415428H02	IDCTR,AW,2.55NH,5%,1.6A ,AIR,3 TURNS,SM,AIR WOUND IDCTR	L1935M20	2478057A23	IDCTR,18NH,2%,.066OHM,CER,41 Q,3.3GHZ SRF,PCMT,18 NH SUR	L3134M22	2414032F41	IDCTR,WW,390NH,10%,200 MA,1.5OHM,CER,40 Q,730MHZ SRF,SM,PB-F	L605M19	24012050001	IDCTR,FXD,3.9UH,2%,280 MA,CER,SM,0603LS CHIP INDUCTORS, 1
L1610M16	2471968L10	IDCTR,AW,9NH,2%,4A,.003 4OHM,AIR,5 TURNS,120 Q,4GHZ SRF,SM,9.	L1936M20	2415429H01	IDCTR,WW,1.6NH,5%,700M A,.03OHM,CER,SM,0603,C HIP	L3139M22	2478057A21	IDCTR,15NH,2%,.078OHM,CER,48 Q,3.6GHZ SRF,PCMT,15 NH SUR	L611M19	2414032F39	IDCTR,WW,270NH,10%,280 MA,1OHM,CER,40 Q,800MHZ SRF,SM,PB-FRE
L1803M17	24012026006	IDCTR,AW,13.7NH,2%,2.7A ,AIR,SM,ULTRA-MINIA-TURE AIR CORE	L200M12	2571269C01	IDCTR,COIL,1.5UH,20%,2.9 A,.059OHM,FERR,SM,WW PWR W18 COMP	L3145M22	2471968L11	IDCTR,AW,13NH,2%,4A,.00 39OHM,AIR,5 TURNS,100 Q,3GHZ SRF,SM,1	L6401M6	2471189M03	IDCTR,PWR,10UH,20%,1.1 A,.2OHM,SM,SHLD SMT PWR IDCTR 10UH
L1809M17	24012026006	IDCTR,AW,13.7NH,2%,2.7A ,AIR,SM,ULTRA-MINIA-TURE AIR CORE	L2202M2	2415429H45	IDCTR,WW,270NH,5%,170 MA,CER,SM,CHIP	L3150M22	2414032F41	IDCTR,WW,390NH,10%,200 MA,1.5OHM,CER,40 Q,730MHZ SRF,SM,PB-F	L6402M6	2471189M03	IDCTR,PWR,10UH,20%,1.1 A,.2OHM,SM,SHLD SMT PWR IDCTR 10UH
L1811M17	24012026006	IDCTR,AW,13.7NH,2%,2.7A ,AIR,SM,ULTRA-MINIA-TURE AIR CORE	L2203M2	2415429H45	IDCTR,WW,270NH,5%,170 MA,CER,SM,CHIP	L3158M22	2414032F41	IDCTR,WW,390NH,10%,200 MA,1.5OHM,CER,40 Q,730MHZ SRF,SM,PB-F	L6403M6	24009271001	CHK,RF CHOKE,20NH HI CUR CHIP IDCTR
L1900M20	NOTPLACED	64AM DUMMY PART NUM-BER	L2204M2	2415429H45	IDCTR,WW,270NH,5%,170 MA,CER,SM,CHIP	L3159M22	2414032F39	IDCTR,WW,270NH,10%,280 MA,1OHM,CER,40 Q,800MHZ SRF,SM,PB-FRE	L6404M6	24009271001	CHK,RF CHOKE,20NH HI CUR CHIP IDCTR
L1901M20	2414017N07	IDCTR,CHIP,3.9NH,1A,.150 HM,CER,10 Q,3.5GHZ SRF,SM,0603,PB-F	L2205M2	2415429H45	IDCTR,WW,270NH,5%,170 MA,CER,SM,CHIP	L500M21	2415429H43	IDCTR,WW,220NH,5%,300 MA,2.1OHM,CER,SM,0603, CHIP	L6502M6	2471678H01	IDCTR,10UH,20%,FERR,10 UH INDCUTOR
L1908M20	2478057A04	IDCTR,3.6NH,2%,.031OHM,CER,40 Q,9.7GHZ SRF,PCMT,3.6 NH SU	L2601M13	2471912M03	IDCTR,COIL,18.9NH,5%,2.6 A,.015OHM,AIR,40 Q,2.8GHZ SRF,SQ A						

Ref. Des.	Part Number	Description
L6504M6	24009268001	IDCTR,PWR,10UH,20%,1.3A,FERR,SM,10UH 2.1A SHLD IDCTR
L6505M6	2471678H01	IDCTR,10UH,20%,FERR,10UH INDCUTOR
L701M7	2415429H47	IDCTR,WW,390NH,5%,100MA,CER,SM,CHIP
L702M7	2415429H47	IDCTR,WW,390NH,5%,100MA,CER,SM,CHIP
L709M7	2414017P16	IDCTR,CHIP,18NH,5%,300MA,.76OHM,CER,9Q,1.9GHZ SRF,SM,0402,P
L720M7	2480646Z20	COIL,CHIP,2.2UH,10%,MULTI-LAYER CHIP
L727M7	2480646Z20	COIL,CHIP,2.2UH,10%,MULTI-LAYER CHIP
L728M7	2415429H47	IDCTR,WW,390NH,5%,100MA,CER,SM,CHIP
L733M7	2480646Z20	COIL,CHIP,2.2UH,10%,MULTI-LAYER CHIP
L734M7	2414017P16	IDCTR,CHIP,18NH,5%,300MA,.76OHM,CER,9Q,1.9GHZ SRF,SM,0402,P
L735M7	2480646Z20	COIL,CHIP,2.2UH,10%,MULTI-LAYER CHIP
L738M7	2480646Z20	COIL,CHIP,2.2UH,10%,MULTI-LAYER CHIP
L739M7	2415429H47	IDCTR,WW,390NH,5%,100MA,CER,SM,CHIP
L741M7	2480646Z20	COIL,CHIP,2.2UH,10%,MULTI-LAYER CHIP
L753M7	2415347H06	IDCTR,WW,2.2UH,5%,320MA,1.2OHM,CER,SM,IDCTR,2200NH
L755M7	2415429H47	IDCTR,WW,390NH,5%,100MA,CER,SM,CHIP
L758M7	2415429H47	IDCTR,WW,390NH,5%,100MA,CER,SM,CHIP
L759M7	2415429H47	IDCTR,WW,390NH,5%,100MA,CER,SM,CHIP
L765M7	2415427H34	IDCTR,WW,27NH,5%,400MA,CER,SM,0402,CHIP

Ref. Des.	Part Number	Description
L775M7	2415429H47	IDCTR,WW,390NH,5%,100MA,CER,SM,CHIP
M101M12	39012039001	CONN,CMPRSN,3CONT,ST,CONNECTOR, BAT CONTACT, WWP
M103M12	3987977Y04	CONT,CONN,1CONT,ANT UNIV 4.5MM,UC 1.8
M104M12	NOTPLACED	64AM DUMMY PART NUMBER
M105M12	3987977Y04	CONT,CONN,1CONT,ANT UNIV 4.5MM,UC 1.8
M1301M3	3987977Y04	CONT,CONN,1CONT,ANT UNIV 4.5MM,UC 1.8
M6405M6	3987977Y04	CONT,CONN,1CONT,ANT UNIV 4.5MM,UC 1.8
M6406M6	3987977Y04	CONT,CONN,1CONT,ANT UNIV 4.5MM,UC 1.8
M6502M6	0985888K02	BATTERY CONNECTOR,SKT,NI,LEAP
M6504M6	3987977Y04	CONT,CONN,1CONT,ANT UNIV 4.5MM,UC 1.8
PCB	PC000353A01	PCB
Q1101M11	4813973A32	XSTR,BIP GP SS,NPN,SM,SC-70,SMT,50V,.202W,100MA,PB-FREE
Q1103M11	4813970A59	XSTR,FET GP PWR,P-CH,ENHN,SM,SOT-23,20V,.4W,PB-FREE
Q1601M16	48012094001	XSTR,FET RF POWER,SM,25V,MOD,XSTR,FET RF PWR, 135-941MH
Q1920M20	4813973A32	XSTR,BIP GP SS,NPN,SM,SC-70,SMT,50V,.202W,100MA,PB-FREE
Q1922M20	4813973M75	XSTR,BIP GP SS,PNP,BC858,SOT-563,SMT,-30V,.357W,-100MA,100MHZ

Ref. Des.	Part Number	Description
Q201M12	4813970A59	XSTR,FET GP PWR,P-CH,ENHN,SM,SOT-23,20V,.4W,PB-FREE
Q202M12	4813973A32	XSTR,BIP GP SS,NPN,SM,SC-70,SMT,50V,.202W,100MA,PB-FREE
Q2202M2	4815261H01	XSTR,BIP GP SS,NPN,DTC114Y,SC-59,SC-59,SMT3,50V,100MA,250MHZ
Q2601M13	4815055H01	XSTR,GEN PURPOSE SMALL SIG,NPN AND PNP,UMC5NT2G,SM,50V,100A
Q3123M22	4871915M01	XSTR,BIP RF SML SGNL,NPN,SC-75A,SMT,12V,.1W,100MA,4.5GHZ,XST
Q3128M22	4815055H01	XSTR,GEN PURPOSE SMALL SIG,NPN AND PNP,UMC5NT2G,SM,50V,100A
Q3156M22	4871915M01	XSTR,BIP RF SML SGNL,NPN,SC-75A,SMT,12V,.1W,100MA,4.5GHZ,XST
Q3161M22	4815055H01	XSTR,GEN PURPOSE SMALL SIG,NPN AND PNP,UMC5NT2G,SM,50V,100A
Q4001M2	4815261H01	XSTR,BIP GP SS,NPN,DTC114Y,SC-59,SC-59,SMT3,50V,100MA,250MHZ
Q601M19	4813973A04	XSTR,BIP GP SS,NPN,TA13,SM,SOT-23,SMT,30V,.225W,300MA,125MHZ,P
Q6101M6	4815261H01	XSTR,BIP GP SS,NPN,DTC114Y,SC-59,SC-59,SMT3,50V,100MA,250MHZ
Q6401M6	48012170001	XSTR,FET GP PWR,N,SM,SMT,20V,.15W

Ref. Des.	Part Number	Description
Q6501M6	4813970A62	XSTR,FET GP PWR,MOS-FET,P-CH,ENHN,CF,-20V,1.3W,PB-FREE
Q6502M6	48012154001	XSTR,FET GP PWR,P,SM,SMT,-20V,.5W,FET
Q6504M6	4809579E77	XSTR,FET GP SS,MOS-FET,N-CH,SM,30V,1.2X1.2MM PKG W18 COMP
Q6505M6	4813970A62	XSTR,FET GP PWR,MOS-FET,P-CH,ENHN,CF,-20V,1.3W,PB-FREE
Q6506M6	4809579E77	XSTR,FET GP SS,MOS-FET,N-CH,SM,30V,1.2X1.2MM PKG W18 COMP
Q6507M6	48012170001	XSTR,FET GP PWR,N,SM,SMT,20V,.15W
Q6508M6	48012154001	XSTR,FET GP PWR,P,SM,SMT,-20V,.5W,FET
Q731M7	4885061Y01	XSTR,BIP RF SMALL SIGNAL
Q745M7	4813973M75	XSTR,BIP GP SS,PNP,BC858,SOT-563,SMT,-30V,.357W,-100MA,100MHZ
Q756M7	4805585Q32	XSTR,BIP RF SML SGNL,NPN,NE662M04,SM,SOT-343,3.3V,TRANSITO
Q767M7	4813973M75	XSTR,BIP GP SS,PNP,BC858,SOT-563,SMT,-30V,.357W,-100MA,100MHZ
Q774M7	4805585Q32	XSTR,BIP RF SML SGNL,NPN,NE662M04,SM,SOT-343,3.3V,TRANSITO
Q785M7	4889394V04	XSTR,FET GEN PURPOSE SMALL SIG,MOSFET,N-CH,ENHN,SM,20V,.25W,P
R1101M11	0613952R01	RES,MF,10KOHM,5%,.0625W,SM,0402,200PPM/CEL,PB-FREE

Ref. Des.	Part Number	Description	Ref. Des.	Part Number	Description	Ref. Des.	Part Number	Description	Ref. Des.	Part Number	Description
R1102M11	0613952R25	RES,MF,100KOHM,5%,.0625W,SM,0402,200PPM/CEL,PB-FREE	R1125M11	0613952R10	RES,MF,24KOHM,5%,.0625W,SM,0402,200PPM/CEL,PB-FREE	R1145M11	0613952R25	RES,MF,100KOHM,5%,.0625W,SM,0402,200PPM/CEL,PB-FREE	R1171M11	0613952R66	RES,MF,0OHM,5%,.0625W,SM,0402,PB-FREE
R1103M11	06012035001	RES,MF,.02OHM,1%,.33W,SM,0805,0.02 OHM,CHIP RES	R1126M11	0613952R02	RES,MF,11KOHM,5%,.0625W,SM,0402,200PPM/CEL,PB-FREE	R1146M11	0613952R25	RES,MF,100KOHM,5%,.0625W,SM,0402,200PPM/CEL,PB-FREE	R1172M11	0613952Q89	RES,MF,4700,5,.0625,SM,0402,200,PB-FREE
R1104M11	0613952Q49	RES,MF,100,5,.0625,SM,0402,200,PB-FREE	R1127M11	0613952R08	RES,MF,20KOHM,5%,.0625W,SM,0402,200PPM/CEL,PB-FREE	R1151M11	0613952R05	RES,MF,15KOHM,5%,.0625W,SM,0402,200PPM/CEL,PB-FREE	R1174M11	0613952N01	RES:MF,10KOHM,1%,.0625W,SM,0402*
R1105M11	0613952Q49	RES,MF,100,5,.0625,SM,0402,200,PB-FREE	R1128M11	0613952R01	RES,MF,10KOHM,5%,.0625W,SM,0402,200PPM/CEL,PB-FREE	R1152M11	0613952R01	RES,MF,10KOHM,5%,.0625W,SM,0402,200PPM/CEL,PB-FREE	R1175M11	0613952R66	RES,MF,0OHM,5%,.0625W,SM,0402,PB-FREE
R1106M11	0613952Q21	RES,MF,6.8OHM,5%,.0625W,SM,0402,200PPM/CEL,PB-FREE	R1129M11	NOTPLACED	64AM DUMMY PART NUMBER	R1154M11	0613952N01	RES:MF,10KOHM,1%,.0625W,SM,0402*	R1176M11	0613952M01	RES,MF,1KOHM,1%,.0625W,SM,0402,200PPM/CEL,PB-FREE
R1107M11	0613952Q45	RES,MF,68OHM,5%,.0625W,SM,0402,200PPM/CEL,PB-FREE	R1130M11	NOTPLACED	64AM DUMMY PART NUMBER	R1158M11	NOTPLACED	64AM DUMMY PART NUMBER	R1177M11	0613952R66	RES,MF,0OHM,5%,.0625W,SM,0402,PB-FREE
R1108M11	0613952N81	RES,MF,68.1KOHM,1%,.0625W,SM,0402,200PPM/CEL,PB-FREE	R1135M11	0613952R66	RES,MF,0OHM,5%,.0625W,SM,0402,PB-FREE	R1160M11	0613952R03	RES,MF,12000,5,.0625,SM,0402,200,PB-FREE	R1178M11	0613952R01	RES,MF,10KOHM,5%,.0625W,SM,0402,200PPM/CEL,PB-FREE
R1110M11	0613952R01	RES,MF,10KOHM,5%,.0625W,SM,0402,200PPM/CEL,PB-FREE	R1136M11	0613952R01	RES,MF,10KOHM,5%,.0625W,SM,0402,200PPM/CEL,PB-FREE	R1162M11	0613952R29	RES,MF,150KOHM,5%,.0625W,SM,0402,200PPM/CEL,PB-FREE	R1180M11	0613952R66	RES,MF,0OHM,5%,.0625W,SM,0402,PB-FREE
R1111M11	0613952R66	RES,MF,0OHM,5%,.0625W,SM,0402,PB-FREE	R1137M11	0613952R01	RES,MF,10KOHM,5%,.0625W,SM,0402,200PPM/CEL,PB-FREE	R1163M11	0613952R01	RES,MF,10KOHM,5%,.0625W,SM,0402,200PPM/CEL,PB-FREE	R1181M11	NOTPLACED	64AM DUMMY PART NUMBER
R1112M11	NOTPLACED	64AM DUMMY PART NUMBER	R1138M11	0613952R25	RES,MF,100KOHM,5%,.0625W,SM,0402,200PPM/CEL,PB-FREE	R1164M11	0613952R01	RES,MF,10KOHM,5%,.0625W,SM,0402,200PPM/CEL,PB-FREE	R1182M11	0613952R01	RES,MF,10KOHM,5%,.0625W,SM,0402,200PPM/CEL,PB-FREE
R1114M11	0613952Q49	RES,MF,100,5,.0625,SM,0402,200,PB-FREE	R1139M11	0613952R25	RES,MF,100KOHM,5%,.0625W,SM,0402,200PPM/CEL,PB-FREE	R1165M11	0613952Q56	RES,MF,200OHM,5%,.0625W,SM,0402,200PPM/CEL,PB-FREE	R1198M11	0613952J01	RES,MF,10KOHM,5%,.1W,SM,0603,200PPM/CEL,PB-FREE
R1115M11	0613952Q49	RES,MF,100,5,.0625,SM,0402,200,PB-FREE	R1140M11	0613952R25	RES,MF,100KOHM,5%,.0625W,SM,0402,200PPM/CEL,PB-FREE	R1166M11	0613952Q56	RES,MF,200OHM,5%,.0625W,SM,0402,200PPM/CEL,PB-FREE	R1301M3	0613952R66	RES,MF,0OHM,5%,.0625W,SM,0402,PB-FREE
R1116M11	0613952R01	RES,MF,10KOHM,5%,.0625W,SM,0402,200PPM/CEL,PB-FREE	R1141M11	0613952R42	RES,MF,510KOHM,5%,.0625W,SM,0402,200PPM/CEL,PB-FREE	R1167M11	0613952R01	RES,MF,10KOHM,5%,.0625W,SM,0402,200PPM/CEL,PB-FREE	R1303M3	0613952R66	RES,MF,0OHM,5%,.0625W,SM,0402,PB-FREE
R1117M11	0613952R11	RES,MF,27KOHM,5%,.0625W,SM,0402,200PPM/CEL,PB-FREE	R1142M11	0613952R25	RES,MF,100KOHM,5%,.0625W,SM,0402,200PPM/CEL,PB-FREE	R1168M11	0613952Q49	RES,MF,100,5,.0625,SM,0402,200,PB-FREE	R1305M3	0613952R66	RES,MF,0OHM,5%,.0625W,SM,0402,PB-FREE
R1121M11	0613952N47	CER CHIP RES 30.1K OHM 1 0402	R1143M11	0613952R25	RES,MF,100KOHM,5%,.0625W,SM,0402,200PPM/CEL,PB-FREE	R1169M11	0613952P52	RES:MF,340KOHM,1%,.0625W,SM,0402*	R1309M3	NOTPLACED	64AM DUMMY PART NUMBER
R1122M11	0613952N85	RES,MF,75KOHM,1%,.0625W,SM,0402,200PPM/CEL,PB-FREE	R1144M11	0613952R25	RES,MF,100KOHM,5%,.0625W,SM,0402,200PPM/CEL,PB-FREE	R1170M11	0613952N88	RES,MF,80.6KOHM,1%,.0625W,SM,0402,200PPM/CEL,PB-FREE	R1310M3	0613952R66	RES,MF,0OHM,5%,.0625W,SM,0402,PB-FREE
R1124M11	0613952Q42	RES,MF,51OHM,5%,.0625W,SM,0402,200PPM/CEL,PB-FREE							R1311M3	NOTPLACED	64AM DUMMY PART NUMBER
									R1313M3	0613952R66	RES,MF,0OHM,5%,.0625W,SM,0402,PB-FREE
									R1315M3	0613952R66	RES,MF,0OHM,5%,.0625W,SM,0402,PB-FREE



Ref. Des.	Part Number	Description
R1317M3	0613952R66	RES,MF,0OHM,5%,.0625W,SM,0402,PB-FREE
R1318M3	0613952R66	RES,MF,0OHM,5%,.0625W,SM,0402,PB-FREE
R1325M3	0613952R66	RES,MF,0OHM,5%,.0625W,SM,0402,PB-FREE
R1326M3	0613952R66	RES,MF,0OHM,5%,.0625W,SM,0402,PB-FREE
R1329M3	0613952R66	RES,MF,0OHM,5%,.0625W,SM,0402,PB-FREE
R1330M3	0613952R66	RES,MF,0OHM,5%,.0625W,SM,0402,PB-FREE
R1331M3	0613952R66	RES,MF,0OHM,5%,.0625W,SM,0402,PB-FREE
R1332M3	0613952R66	RES,MF,0OHM,5%,.0625W,SM,0402,PB-FREE
R1337M3	NOTPLACED	64AM DUMMY PART NUMBER
R1339M3	NOTPLACED	64AM DUMMY PART NUMBER
R1340M3	0613952R66	RES,MF,0OHM,5%,.0625W,SM,0402,PB-FREE
R1601M16	0613952Q96	RES,MF,9.1KOHM,5%,.0625W,SM,0402,200PPM/CEL,PB-FREE
R1602M16	0613952R01	RES,MF,10KOHM,5%,.0625W,SM,0402,200PPM/CEL,PB-FREE
R1603M16	0613952R22	RES,MF,75KOHM,5%,.0625W,SM,0402,200PPM/CEL,PB-FREE
R1604M16	0613952R13	RES,MF,33KOHM,5%,.0625W,SM,0402,200PPM/CEL,PB-FREE
R1605M16	0613952Q73	RES,MF,1KOHM,5%,.0625W,SM,0402,200PPM/CEL,PB-FREE
R1606M16	NOTPLACED	64AM DUMMY PART NUMBER
R1651M16	NOTPLACED	64AM DUMMY PART NUMBER
R1652M16	NOTPLACED	64AM DUMMY PART NUMBER

Ref. Des.	Part Number	Description
R1653M16	0613952R66	RES,MF,0OHM,5%,.0625W,SM,0402,PB-FREE
R1900M20	0613952R66	RES,MF,0OHM,5%,.0625W,SM,0402,PB-FREE
R1906M20	0613952R01	RES,MF,10KOHM,5%,.0625W,SM,0402,200PPM/CEL,PB-FREE
R1907M20	0613952R01	RES,MF,10KOHM,5%,.0625W,SM,0402,200PPM/CEL,PB-FREE
R1908M20	0613952R01	RES,MF,10KOHM,5%,.0625W,SM,0402,200PPM/CEL,PB-FREE
R1909M20	0613952R01	RES,MF,10KOHM,5%,.0625W,SM,0402,200PPM/CEL,PB-FREE
R1910M20	0613952Q96	RES,MF,9.1KOHM,5%,.0625W,SM,0402,200PPM/CEL,PB-FREE
R1911M20	0613952Q96	RES,MF,9.1KOHM,5%,.0625W,SM,0402,200PPM/CEL,PB-FREE
R1921M20	0613952R22	RES,MF,75KOHM,5%,.0625W,SM,0402,200PPM/CEL,PB-FREE
R1922M20	0613952R27	RES,MF,120KOHM,5%,.0625W,SM,0402,200PPM/CEL,PB-FREE
R1923M20	0613952R01	RES,MF,10KOHM,5%,.0625W,SM,0402,200PPM/CEL,PB-FREE
R1924M20	0613952Q37	RES,MF,33OHM,5%,.0625W,SM,0402,200PPM/CEL,PB-FREE
R1925M20	0613952Q11	RES,MF,2.7OHM,5%,.0625W,SM,0402,200PPM/CEL,PB-FREE
R1935M20	0613952Q75	RES,MF,1.2KOHM,5%,.0625W,SM,0402,200PPM/CEL,PB-FREE
R1936M20	0613952R66	RES,MF,0OHM,5%,.0625W,SM,0402,PB-FREE
R1970M20	0613952Q25	RES,MF,10.5,.0625,SM,0402,200,PB-FREE

Ref. Des.	Part Number	Description
R1972M20	0613952Q25	RES,MF,10.5,.0625,SM,0402,200,PB-FREE
R201M12	0613952R25	RES,MF,100KOHM,5%,.0625W,SM,0402,200PPM/CEL,PB-FREE
R202M12	0613952Q89	RES,MF,4700.5,.0625,SM,0402,200,PB-FREE
R2100M2	0613952R01	RES,MF,10KOHM,5%,.0625W,SM,0402,200PPM/CEL,PB-FREE
R21001M2	0613952R01	RES,MF,10KOHM,5%,.0625W,SM,0402,200PPM/CEL,PB-FREE
R21002M2	0613952R01	RES,MF,10KOHM,5%,.0625W,SM,0402,200PPM/CEL,PB-FREE
R21003M2	0613952R01	RES,MF,10KOHM,5%,.0625W,SM,0402,200PPM/CEL,PB-FREE
R21004M2	0613952Q73	RES,MF,1KOHM,5%,.0625W,SM,0402,200PPM/CEL,PB-FREE
R21005M2	0613952Q73	RES,MF,1KOHM,5%,.0625W,SM,0402,200PPM/CEL,PB-FREE
R21006M2	0613952Q73	RES,MF,1KOHM,5%,.0625W,SM,0402,200PPM/CEL,PB-FREE
R21007M2	0613952Q73	RES,MF,1KOHM,5%,.0625W,SM,0402,200PPM/CEL,PB-FREE
R21008M2	0613952R01	RES,MF,10KOHM,5%,.0625W,SM,0402,200PPM/CEL,PB-FREE
R2104M2	0613952Q89	RES,MF,4700.5,.0625,SM,0402,200,PB-FREE
R2105M2	0613952Q89	RES,MF,4700.5,.0625,SM,0402,200,PB-FREE
R2106M2	NOTPLACED	64AM DUMMY PART NUMBER
R2107M2	0613952Q73	RES,MF,1KOHM,5%,.0625W,SM,0402,200PPM/CEL,PB-FREE

Ref. Des.	Part Number	Description
R2109M2	0613952Q25	RES,MF,10.5,.0625,SM,0402,200,PB-FREE
R2110M2	0613952Q33	RES,MF,22.5,.0625,SM,0402,200,PB-FREE
R2111M2	0613952Q25	RES,MF,10.5,.0625,SM,0402,200,PB-FREE
R2113M2	0613952Q25	RES,MF,10.5,.0625,SM,0402,200,PB-FREE
R2114M2	0613952Q33	RES,MF,22.5,.0625,SM,0402,200,PB-FREE
R2115M2	0613952Q25	RES,MF,10.5,.0625,SM,0402,200,PB-FREE
R2116M2	0613952R01	RES,MF,10KOHM,5%,.0625W,SM,0402,200PPM/CEL,PB-FREE
R2117M2	0613952R01	RES,MF,10KOHM,5%,.0625W,SM,0402,200PPM/CEL,PB-FREE
R2118M2	0613952R01	RES,MF,10KOHM,5%,.0625W,SM,0402,200PPM/CEL,PB-FREE
R2120M2	0613952R01	RES,MF,10KOHM,5%,.0625W,SM,0402,200PPM/CEL,PB-FREE
R2129M2	0613952R01	RES,MF,10KOHM,5%,.0625W,SM,0402,200PPM/CEL,PB-FREE
R2130M2	0613952R01	RES,MF,10KOHM,5%,.0625W,SM,0402,200PPM/CEL,PB-FREE
R2131M2	0613952R01	RES,MF,10KOHM,5%,.0625W,SM,0402,200PPM/CEL,PB-FREE
R2132M2	0613952R01	RES,MF,10KOHM,5%,.0625W,SM,0402,200PPM/CEL,PB-FREE
R2133M2	0613952R01	RES,MF,10KOHM,5%,.0625W,SM,0402,200PPM/CEL,PB-FREE
R2135M2	0613952Q41	RES,MF,47OHM,5%,.0625W,SM,0402,200PPM/CEL,PB-FREE

Ref. Des.	Part Number	Description
R2136M2	0613952Q61	RES,MF,330OHM,5%,.0625 W,SM,0402,200PPM/CEL,PB-FREE
R2137M2	0613952Q61	RES,MF,330OHM,5%,.0625 W,SM,0402,200PPM/CEL,PB-FREE
R2138M2	0613952Q41	RES,MF,47OHM,5%,.0625 W,SM,0402,200PPM/CEL,PB-FREE
R2139M2	0613952Q41	RES,MF,47OHM,5%,.0625 W,SM,0402,200PPM/CEL,PB-FREE
R2142M2	0613952Q41	RES,MF,47OHM,5%,.0625 W,SM,0402,200PPM/CEL,PB-FREE
R2144M2	0613952Q61	RES,MF,330OHM,5%,.0625 W,SM,0402,200PPM/CEL,PB-FREE
R2145M2	0613952Q41	RES,MF,47OHM,5%,.0625 W,SM,0402,200PPM/CEL,PB-FREE
R2146M2	0613952Q41	RES,MF,47OHM,5%,.0625 W,SM,0402,200PPM/CEL,PB-FREE
R2147M2	0613952Q41	RES,MF,47OHM,5%,.0625 W,SM,0402,200PPM/CEL,PB-FREE
R2148M2	0613952Q41	RES,MF,47OHM,5%,.0625 W,SM,0402,200PPM/CEL,PB-FREE
R2149M2	0613952Q41	RES,MF,47OHM,5%,.0625 W,SM,0402,200PPM/CEL,PB-FREE
R2151M2	NOTPLACED	64AM DUMMY PART NUMBER
R2153M2	0613952Q41	RES,MF,47OHM,5%,.0625 W,SM,0402,200PPM/CEL,PB-FREE
R2154M2	0613952Q41	RES,MF,47OHM,5%,.0625 W,SM,0402,200PPM/CEL,PB-FREE
R2192M2	0613952Q61	RES,MF,330OHM,5%,.0625 W,SM,0402,200PPM/CEL,PB-FREE

Ref. Des.	Part Number	Description
R2197M2	0613952R66	RES,MF,0OHM,5%,.0625W,SM,0402,PB-FREE
R2198M2	0613952R66	RES,MF,0OHM,5%,.0625W,SM,0402,PB-FREE
R2199M2	0613952R66	RES,MF,0OHM,5%,.0625W,SM,0402,PB-FREE
R2200M2	0613952R66	RES,MF,0OHM,5%,.0625W,SM,0402,PB-FREE
R2202M2	0613952R66	RES,MF,0OHM,5%,.0625W,SM,0402,PB-FREE
R2204M2	0613952Q85	RES,MF,3.3KOHM,5%,.0625W,SM,0402,200PPM/CEL,PB-FREE
R2206M2	0613952Q85	RES,MF,3.3KOHM,5%,.0625W,SM,0402,200PPM/CEL,PB-FREE
R2207M2	0613952R66	RES,MF,0OHM,5%,.0625W,SM,0402,PB-FREE
R2235M2	0613952R66	RES,MF,0OHM,5%,.0625W,SM,0402,PB-FREE
R2244M2	0613952Q72	RES,MF,910OHM,5%,.0625 W,SM,0402,PB-FREE
R2245M2	0613952Q63	RES,MF,390OHM,5%,.0625 W,SM,0402,200PPM/CEL,PB-FREE
R2246M2	0613952Q60	RES,MF,300OHM,5%,.0625 W,SM,0402,200PPM/CEL,PB-FREE
R2254M2	0613952R01	RES,MF,10KOHM,5%,.0625 W,SM,0402,200PPM/CEL,PB-FREE
R2255M2	0613952R32	RES,MF,200KOHM,5%,.0625W,SM,0402,200PPM/CEL,PB-FREE
R2601M13	NOTPLACED	64AM DUMMY PART NUMBER
R2602M13	0613952H47	RES,MF,82OHM,5%,.1W,SM,0603,200PPM/CEL,PB-FREE
R2603M13	0613952H47	RES,MF,82OHM,5%,.1W,SM,0603,200PPM/CEL,PB-FREE

Ref. Des.	Part Number	Description
R2604M13	0613952H47	RES,MF,82OHM,5%,.1W,SM,0603,200PPM/CEL,PB-FREE
R2605M13	0613952G67	RES,MF,0,1,.1,SM,0603,PB-FREE
R2606M13	0613952R25	RES,MF,100KOHM,5%,.0625W,SM,0402,200PPM/CEL,PB-FREE
R2803M1	0613952Q37	RES,MF,33OHM,5%,.0625 W,SM,0402,200PPM/CEL,PB-FREE
R2804M1	0613952Q49	RES,MF,100,5,.0625,SM,0402,200,PB-FREE
R2805M1	0613952Q49	RES,MF,100,5,.0625,SM,0402,200,PB-FREE
R2806M1	0613952Q59	RES,MF,270OHM,5%,.0625 W,SM,0402,200PPM/CEL,PB-FREE
R2807M1	0613952Q56	RES,MF,200OHM,5%,.0625 W,SM,0402,200PPM/CEL,PB-FREE
R2808M1	0613952Q49	RES,MF,100,5,.0625,SM,0402,200,PB-FREE
R2810M1	0613952R01	RES,MF,10KOHM,5%,.0625 W,SM,0402,200PPM/CEL,PB-FREE
R2811M1	0613952Q89	RES,MF,4700,5,.0625,SM,0402,200,PB-FREE
R2812M1	0613952R01	RES,MF,10KOHM,5%,.0625 W,SM,0402,200PPM/CEL,PB-FREE
R2813M1	NOTPLACED	64AM DUMMY PART NUMBER
R2817M1	0613952Q41	RES,MF,47OHM,5%,.0625 W,SM,0402,200PPM/CEL,PB-FREE
R3103M22	0613952Q31	RES,MF,18OHM,5%,.0625 W,SM,0402,200PPM/CEL,PB-FREE
R3105M22	0613952Q60	RES,MF,300OHM,5%,.0625 W,SM,0402,200PPM/CEL,PB-FREE

Ref. Des.	Part Number	Description
R3106M22	0613952Q60	RES,MF,300OHM,5%,.0625 W,SM,0402,200PPM/CEL,PB-FREE
R3107M22	0613952Q60	RES,MF,300OHM,5%,.0625 W,SM,0402,200PPM/CEL,PB-FREE
R3108M22	0613952Q31	RES,MF,18OHM,5%,.0625 W,SM,0402,200PPM/CEL,PB-FREE
R3109M22	0613952Q60	RES,MF,300OHM,5%,.0625 W,SM,0402,200PPM/CEL,PB-FREE
R3114M22	0613952R11	RES,MF,27KOHM,5%,.0625 W,SM,0402,200PPM/CEL,PB-FREE
R3118M22	0613952R07	RES,MF,18KOHM,5%,.0625 W,SM,0402,200PPM/CEL,PB-FREE
R3127M22	0613952Q47	RES,MF,82OHM,5%,.0625 W,SMD,0402,200PPM/CEL,CER CHIP 82.0 OHM 5%
R3146M22	0613952Q95	RES,MF,8.2KOHM,5%,.0625W,SM,0402,200PPM/CEL,PB-FREE
R3149M22	0613952Q93	RES,MF,6.8KOHM,5%,.0625W,SM,0402,200PPM/CEL,PB-FREE
R3158M22	0613952Q53	RES,MF,150OHM,5%,.0625 W,SM,0402,200PPM/CEL,PB-FREE
R3159M22	0613952Q45	RES,MF,68OHM,5%,.0625 W,SM,0402,200PPM/CEL,PB-FREE
R3160M22	0613952Q53	RES,MF,150OHM,5%,.0625 W,SM,0402,200PPM/CEL,PB-FREE
R4005M2	0613952R01	RES,MF,10KOHM,5%,.0625 W,SM,0402,200PPM/CEL,PB-FREE
R4006M2	0613952R01	RES,MF,10KOHM,5%,.0625 W,SM,0402,200PPM/CEL,PB-FREE
R4007M2	0613952R01	RES,MF,10KOHM,5%,.0625 W,SM,0402,200PPM/CEL,PB-FREE

Ref. Des.	Part Number	Description
R4008M2	0613952R01	RES,MF,10KOHM,5%,.0625 W,SM,0402,200PPM/ CEL,PB-FREE
R4009M2	0613952Q85	RES,MF,3.3KOHM,5%,.0625 W,SM,0402,200PPM/ CEL,PB-FREE
R4010M2	0613952R32	RES,MF,200KOHM,5%,.0625 W,SM,0402,200PPM/ CEL,PB-FREE
R4011M2	0613952R17	RES,MF,47000,5,.0625,SM,0402,200,PB-FREE
R4012M2	0613952R09	RES,MF,22000,5,.0625,SM,0402,200,PB-FREE
R4013M2	0613952R09	RES,MF,22000,5,.0625,SM,0402,200,PB-FREE
R4014M2	0613952Q85	RES,MF,3.3KOHM,5%,.0625 W,SM,0402,200PPM/ CEL,PB-FREE
R500M21	0613952Q37	RES,MF,330OHM,5%,.0625 W,SM,0402,200PPM/ CEL,PB-FREE
R502M21	0613952Q36	RES,MF,300OHM,5%,.0625 W,SM,0402,200PPM/ CEL,PB-FREE
R512M21	0613952R66	RES,MF,0OHM,5%,.0625W,SM,0402,PB-FREE
R525M21	0613952R66	RES,MF,0OHM,5%,.0625W,SM,0402,PB-FREE
R526M21	0613958J74	RES,MF,0OHM,5%,.125W,SM,0805,PB-FREE
R601M19	0613952Q41	RES,MF,470OHM,5%,.0625 W,SM,0402,200PPM/ CEL,PB-FREE
R602M19	0613952Q63	RES,MF,390OHM,5%,.0625 W,SM,0402,200PPM/ CEL,PB-FREE
R603M19	0613952R25	RES,MF,100KOHM,5%,.0625 W,SM,0402,200PPM/ CEL,PB-FREE
R604M19	0613952Q63	RES,MF,390OHM,5%,.0625 W,SM,0402,200PPM/ CEL,PB-FREE

Ref. Des.	Part Number	Description
R605M19	0613952R01	RES,MF,10KOHM,5%,.0625 W,SM,0402,200PPM/ CEL,PB-FREE
R606M19	0613952R01	RES,MF,10KOHM,5%,.0625 W,SM,0402,200PPM/ CEL,PB-FREE
R607M19	0613952R25	RES,MF,100KOHM,5%,.0625 W,SM,0402,200PPM/ CEL,PB-FREE
R608M19	0613952R01	RES,MF,10KOHM,5%,.0625 W,SM,0402,200PPM/ CEL,PB-FREE
R609M19	0613952Q81	RES,MF,2200,5,.0625,SM,0402,200,PB-FREE
R6101M6	0613952R01	RES,MF,10KOHM,5%,.0625 W,SM,0402,200PPM/ CEL,PB-FREE
R6102M6	0613952R09	RES,MF,22000,5,.0625,SM,0402,200,PB-FREE
R6103M6	0613952R09	RES,MF,22000,5,.0625,SM,0402,200,PB-FREE
R6104M6	NOTPLACED	64AM DUMMY PART NUMBER
R6105M6	0613952R66	RES,MF,0OHM,5%,.0625W,SM,0402,PB-FREE
R6106M6	0613952Q73	RES,MF,1KOHM,5%,.0625 W,SM,0402,200PPM/ CEL,PB-FREE
R6107M6	0613952Q55	RES,MF,180OHM,5%,.0625 W,SM,0402,200PPM/ CEL,PB-FREE
R6108M6	0613952Q61	RES,MF,330OHM,5%,.0625 W,SM,0402,200PPM/ CEL,PB-FREE
R6109M6	0613952Q73	RES,MF,1KOHM,5%,.0625 W,SM,0402,200PPM/ CEL,PB-FREE
R610M19	0613952R25	RES,MF,100KOHM,5%,.0625 W,SM,0402,200PPM/ CEL,PB-FREE
R6110M6	NOTPLACED	64AM DUMMY PART NUMBER

Ref. Des.	Part Number	Description
R6111M6	0613952Q73	RES,MF,1KOHM,5%,.0625 W,SM,0402,200PPM/ CEL,PB-FREE
R6112M6	NOTPLACED	64AM DUMMY PART NUMBER
R6113M6	0613952Q51	RES,MF,120,5,.0625,SM,0402,200,PB-FREE
R6114M6	0613952Q49	RES,MF,100,5,.0625,SM,0402,200,PB-FREE
R6115M6	0613952Q49	RES,MF,100,5,.0625,SM,0402,200,PB-FREE
R6116M6	0613952Q73	RES,MF,1KOHM,5%,.0625 W,SM,0402,200PPM/ CEL,PB-FREE
R6117M6	0613952R01	RES,MF,10KOHM,5%,.0625 W,SM,0402,200PPM/ CEL,PB-FREE
R6118M6	0613952R09	RES,MF,22000,5,.0625,SM,0402,200,PB-FREE
R6119M6	0613952R01	RES,MF,10KOHM,5%,.0625 W,SM,0402,200PPM/ CEL,PB-FREE
R611M19	0613952R01	RES,MF,10KOHM,5%,.0625 W,SM,0402,200PPM/ CEL,PB-FREE
R6120M6	0613952R01	RES,MF,10KOHM,5%,.0625 W,SM,0402,200PPM/ CEL,PB-FREE
R6121M6	0613952R01	RES,MF,10KOHM,5%,.0625 W,SM,0402,200PPM/ CEL,PB-FREE
R6122M6	0613952R01	RES,MF,10KOHM,5%,.0625 W,SM,0402,200PPM/ CEL,PB-FREE
R6125M6	NOTPLACED	64AM DUMMY PART NUMBER
R612M19	0613952Q94	RES,MF,7.5KOHM,5%,.0625 W,SM,0402,200PPM/ CEL,PB-FREE
R613M19	0613952Q82	RES,MF,2.4KOHM,5%,.0625 W,SM,0402,200PPM/ CEL,PB-FREE
R614M19	0613952R66	RES,MF,0OHM,5%,.0625W,SM,0402,PB-FREE

Ref. Des.	Part Number	Description
R615M19	NOTPLACED	64AM DUMMY PART NUMBER
R616M19	NOTPLACED	64AM DUMMY PART NUMBER
R617M19	NOTPLACED	64AM DUMMY PART NUMBER
R618M19	NOTPLACED	64AM DUMMY PART NUMBER
R619M19	NOTPLACED	64AM DUMMY PART NUMBER
R6201M6	NOTPLACED	64AM DUMMY PART NUMBER
R6202M6	0613952R01	RES,MF,10KOHM,5%,.0625 W,SM,0402,200PPM/ CEL,PB-FREE
R6203M6	0613952R66	RES,MF,0OHM,5%,.0625W,SM,0402,PB-FREE
R6204M6	0613952R01	RES,MF,10KOHM,5%,.0625 W,SM,0402,200PPM/ CEL,PB-FREE
R6205M6	0613952R01	RES,MF,10KOHM,5%,.0625 W,SM,0402,200PPM/ CEL,PB-FREE
R6206M6	0613952R25	RES,MF,100KOHM,5%,.0625 W,SM,0402,200PPM/ CEL,PB-FREE
R6207M6	0613952R25	RES,MF,100KOHM,5%,.0625 W,SM,0402,200PPM/ CEL,PB-FREE
R6208M6	0613952Q89	RES,MF,4700,5,.0625,SM,0402,200,PB-FREE
R6209M6	0613952Q89	RES,MF,4700,5,.0625,SM,0402,200,PB-FREE
R620M19	NOTPLACED	64AM DUMMY PART NUMBER
R6210M6	0613952Q89	RES,MF,4700,5,.0625,SM,0402,200,PB-FREE
R6211M6	0613952R01	RES,MF,10KOHM,5%,.0625 W,SM,0402,200PPM/ CEL,PB-FREE
R6212M6	NOTPLACED	64AM DUMMY PART NUMBER

Ref. Des.	Part Number	Description
R6213M6	0613952R01	RES,MF,10KOHM,5%,.0625 W,SM,0402,200PPM/ CEL,PB-FREE
R6214M6	NOTPLACED	64AM DUMMY PART NUMBER
R6215M6	0613952R01	RES,MF,10KOHM,5%,.0625 W,SM,0402,200PPM/ CEL,PB-FREE
R6217M6	0613952Q73	RES,MF,1KOHM,5%,.0625 W,SM,0402,200PPM/ CEL,PB-FREE
R6218M6	0613952Q80	RES,MF,2KOHM,5%,.0625 W,SM,0402,200PPM/ CEL,PB-FREE
R621M19	NOTPLACED	64AM DUMMY PART NUMBER
R623M19	NOTPLACED	64AM DUMMY PART NUMBER
R624M19	NOTPLACED	64AM DUMMY PART NUMBER
R6301M6	0613952R01	RES,MF,10KOHM,5%,.0625 W,SM,0402,200PPM/ CEL,PB-FREE
R6304M6	0613952R66	RES,MF,0OHM,5%,.0625W, SM,0402,PB-FREE
R6306M6	0613952R01	RES,MF,10KOHM,5%,.0625 W,SM,0402,200PPM/ CEL,PB-FREE
R6310M6	0613952Q37	RES,MF,33OHM,5%,.0625 W,SM,0402,200PPM/ CEL,PB-FREE
R6311M6	0613952Q37	RES,MF,33OHM,5%,.0625 W,SM,0402,200PPM/ CEL,PB-FREE
R6312M6	0613952Q37	RES,MF,33OHM,5%,.0625 W,SM,0402,200PPM/ CEL,PB-FREE
R6313M6	0613952Q37	RES,MF,33OHM,5%,.0625 W,SM,0402,200PPM/ CEL,PB-FREE
R6314M6	0613952Q37	RES,MF,33OHM,5%,.0625 W,SM,0402,200PPM/ CEL,PB-FREE

Ref. Des.	Part Number	Description
R6316M6	0613952R01	RES,MF,10KOHM,5%,.0625 W,SM,0402,200PPM/ CEL,PB-FREE
R6401M6	0613952R18	RES,MF,51KOHM,5%,.0625 W,SM,0402,200PPM/ CEL,PB-FREE
R6402M6	0613952R32	RES,MF,200KOHM,5%,.062 5W,SM,0402,200PPM/ CEL,PB-FREE
R6403M6	0613952Q81	RES,MF,2200,5,.0625,SM,0 402,200,PB-FREE
R6404M6	0613952Q81	RES,MF,2200,5,.0625,SM,0 402,200,PB-FREE
R6405M6	0613952Q75	RES,MF,1.2KOHM,5%,.062 5W,SM,0402,200PPM/ CEL,PB-FREE
R6406M6	0613952R01	RES,MF,10KOHM,5%,.0625 W,SM,0402,200PPM/ CEL,PB-FREE
R6407M6	0613952Q81	RES,MF,2200,5,.0625,SM,0 402,200,PB-FREE
R6409M6	0613952N01	RES:MF,10KOHM,1%,.0625 W,SM,0402*
R6410M6	0613952R01	RES,MF,10KOHM,5%,.0625 W,SM,0402,200PPM/ CEL,PB-FREE
R6411M6	0613952R66	RES,MF,0OHM,5%,.0625W, SM,0402,PB-FREE
R6414M6	0613952Q61	RES,MF,330OHM,5%,.0625 W,SM,0402,200PPM/ CEL,PB-FREE
R6415M6	0613952Q61	RES,MF,330OHM,5%,.0625 W,SM,0402,200PPM/ CEL,PB-FREE
R6416M6	0613952Q61	RES,MF,330OHM,5%,.0625 W,SM,0402,200PPM/ CEL,PB-FREE
R6417M6	0613952Q61	RES,MF,330OHM,5%,.0625 W,SM,0402,200PPM/ CEL,PB-FREE
R6419M6	0613952Q37	RES,MF,33OHM,5%,.0625 W,SM,0402,200PPM/ CEL,PB-FREE

Ref. Des.	Part Number	Description
R6420M6	0613952R17	RES,MF,47000,5,.0625,SM, 0402,200,PB-FREE
R6421M6	0613952R01	RES,MF,10KOHM,5%,.0625 W,SM,0402,200PPM/ CEL,PB-FREE
R6422M6	0613952Q51	RES,MF,120,5,.0625,SM,04 02,200,PB-FREE
R6423M6	0613952R66	RES,MF,0OHM,5%,.0625W, SM,0402,PB-FREE
R6424M6	0613952N01	RES:MF,10KOHM,1%,.0625 W,SM,0402*
R6425M6	0613952Q80	RES,MF,2KOHM,5%,.0625 W,SM,0402,200PPM/ CEL,PB-FREE
R6426M6	0613952Q49	RES,MF,100,5,.0625,SM,04 02,200,PB-FREE
R6427M6	0613952R11	RES,MF,27KOHM,5%,.0625 W,SM,0402,200PPM/ CEL,PB-FREE
R6428M6	0613952R25	RES,MF,100KOHM,5%,.062 5W,SM,0402,200PPM/ CEL,PB-FREE
R6429M6	0613952R17	RES,MF,47000,5,.0625,SM, 0402,200,PB-FREE
R6430M6	0613952R09	RES,MF,22000,5,.0625,SM, 0402,200,PB-FREE
R6431M6	0613952Q81	RES,MF,2200,5,.0625,SM,0 402,200,PB-FREE
R6432M6	0613952R25	RES,MF,100KOHM,5%,.062 5W,SM,0402,200PPM/ CEL,PB-FREE
R6433M6	0613952Q32	RES,MF,20OHM,5%,.0625 W,SM,0402,200PPM/ CEL,PB-FREE
R6434M6	0613952Q32	RES,MF,20OHM,5%,.0625 W,SM,0402,200PPM/ CEL,PB-FREE
R6435M6	0613952N01	RES:MF,10KOHM,1%,.0625 W,SM,0402*
R6436M6	NOTPLACED	64AM DUMMY PART NUMBER
R6492M6	0613952Q79	RES,MF,1800,5,.0625,SM,0 402,200,PB-FREE

Ref. Des.	Part Number	Description
R6501M6	0613952Q25	RES,MF,10,5,.0625,SM,040 2,200,PB-FREE
R6502M6	0613952Q25	RES,MF,10,5,.0625,SM,040 2,200,PB-FREE
R6503M6	0613952Q25	RES,MF,10,5,.0625,SM,040 2,200,PB-FREE
R6504M6	0613952R09	RES,MF,22000,5,.0625,SM, 0402,200,PB-FREE
R6505M6	0613952Q80	RES,MF,2KOHM,5%,.0625 W,SM,0402,200PPM/ CEL,PB-FREE
R6506M6	0613952R66	RES,MF,0OHM,5%,.0625W, SM,0402,PB-FREE
R6507M6	0613952R01	RES,MF,10KOHM,5%,.0625 W,SM,0402,200PPM/ CEL,PB-FREE
R6508M6	0613952R17	RES,MF,47000,5,.0625,SM, 0402,200,PB-FREE
R6509M6	0613952R25	RES,MF,100KOHM,5%,.062 5W,SM,0402,200PPM/ CEL,PB-FREE
R6510M6	0613952R66	RES,MF,0OHM,5%,.0625W, SM,0402,PB-FREE
R6511M6	0613952R01	RES,MF,10KOHM,5%,.0625 W,SM,0402,200PPM/ CEL,PB-FREE
R6512M6	0613952N01	RES:MF,10KOHM,1%,.0625 W,SM,0402*
R6513M6	0613952R66	RES,MF,0OHM,5%,.0625W, SM,0402,PB-FREE
R6514M6	0613952Q89	RES,MF,4700,5,.0625,SM,0 402,200,PB-FREE
R6515M6	0613952R66	RES,MF,0OHM,5%,.0625W, SM,0402,PB-FREE
R6516M6	0613952R66	RES,MF,0OHM,5%,.0625W, SM,0402,PB-FREE
R6517M6	0613952Q63	RES,MF,390OHM,5%,.0625 W,SM,0402,200PPM/ CEL,PB-FREE
R6518M6	0613952R66	RES,MF,0OHM,5%,.0625W, SM,0402,PB-FREE
R6519M6	0613952Q89	RES,MF,4700,5,.0625,SM,0 402,200,PB-FREE

Ref. Des.	Part Number	Description
R6520M6	0613952Q73	RES,MF,1KOHM,5%,.0625 W,SM,0402,200PPM/ CEL,PB-FREE
R6521M6	0615049H01	RES,MF,.2OHM,1%,.5W,120 6,KAMAYA 0.2 OHM CHIP RES
R6522M6	0613952M66	CER CHIP RES 4750 OHM 1% 0402
R6523M6	0613952R09	RES,MF,22000,5,.0625,SM, 0402,200,PB-FREE
R6524M6	0613952R66	RES,MF,0OHM,5%,.0625W, SM,0402,PB-FREE
R6525M6	NOTPLACED	64AM DUMMY PART NUMBER
R6526M6	0613952R66	RES,MF,0OHM,5%,.0625W, SM,0402,PB-FREE
R6527M6	0613952N87	RES,MF,78.7KOHM,1%,.06 25W,SM,0402,200PPM/ CEL,PB-FREE
R6528M6	0613952R25	RES,MF,100KOHM,5%,.062 5W,SM,0402,200PPM/ CEL,PB-FREE
R6529M6	0615049H01	RES,MF,.2OHM,1%,.5W,120 6,KAMAYA 0.2 OHM CHIP RES
R6530M6	0613952L30	RES,MF,200OHM,1%,.0625 W,SM,0402,200PPM/ CEL,PB-FREE
R6531M6	0613952R01	RES,MF,10KOHM,5%,.0625 W,SM,0402,200PPM/ CEL,PB-FREE
R6532M6	NOTPLACED	64AM DUMMY PART NUMBER
R6533M6	0613952R66	RES,MF,0OHM,5%,.0625W, SM,0402,PB-FREE
R6534M6	NOTPLACED	64AM DUMMY PART NUMBER
R6535M6	0613952N01	RES:MF,10KOHM,1%,.0625 W,SM,0402*
R6536M6	0613952Z72	RES,MF,91KOHM,1%,.0625 W,SM,0402,200PPM/ CEL,PB-FREE

Ref. Des.	Part Number	Description
R6537M6	0613952P09	CER CHIP RES 121K OHM 1 0402
R6538M6	0613952Q95	RES,MF,8.2KOHM,5%,.062 5W,SM,0402,200PPM/ CEL,PB-FREE
R6539M6	0613952P66	RES,MF,475KOHM,1%,.062 5W,SM,0402,200PPM/ CEL,PB-FREE
R6540M6	0613952P66	RES,MF,475KOHM,1%,.062 5W,SM,0402,200PPM/ CEL,PB-FREE
R6541M6	0613952R25	RES,MF,100KOHM,5%,.062 5W,SM,0402,200PPM/ CEL,PB-FREE
R6542M6	0613952R66	RES,MF,0OHM,5%,.0625W, SM,0402,PB-FREE
R6543M6	0613952R66	RES,MF,0OHM,5%,.0625W, SM,0402,PB-FREE
R6544M6	0613952R66	RES,MF,0OHM,5%,.0625W, SM,0402,PB-FREE
R6545M6	0613952R25	RES,MF,100KOHM,5%,.062 5W,SM,0402,200PPM/ CEL,PB-FREE
R6546M6	0613952R66	RES,MF,0OHM,5%,.0625W, SM,0402,PB-FREE
R6547M6	0613952R66	RES,MF,0OHM,5%,.0625W, SM,0402,PB-FREE
R6548M6	NOTPLACED	64AM DUMMY PART NUMBER
R6550M6	0613952Z64	RES,MF,39KOHM,1%,.0625 W,SM,0402,200PPM/ CEL,PB-FREE
R6551M6	0613952Z62	RES,MF,33KOHM,1%,.0625 W,SM,0402,200PPM/ CEL,PB-FREE
R6552M6	0613952R25	RES,MF,100KOHM,5%,.062 5W,SM,0402,200PPM/ CEL,PB-FREE
R6558M6	0613952P22	RES,MF,165KOHM,1%,.062 5W,SM,0402,200PPM/ CEL,PB-FREE
R6561M6	0613952R66	RES,MF,0OHM,5%,.0625W, SM,0402,PB-FREE

Ref. Des.	Part Number	Description
R6562M6	0613952R66	RES,MF,0OHM,5%,.0625W, SM,0402,PB-FREE
R6563M6	0613952R66	RES,MF,0OHM,5%,.0625W, SM,0402,PB-FREE
R6564M6	0613952R66	RES,MF,0OHM,5%,.0625W, SM,0402,PB-FREE
R6565M6	0613952R66	RES,MF,0OHM,5%,.0625W, SM,0402,PB-FREE
R6566M6	0613952R66	RES,MF,0OHM,5%,.0625W, SM,0402,PB-FREE
R6567M6	0613952R66	RES,MF,0OHM,5%,.0625W, SM,0402,PB-FREE
R6568M6	0613952P47	RES,MF,301KOHM,1%,.062 5W,SM,0402,200PPM/ CEL,PB-FREE
R6570M6	0613952R66	RES,MF,0OHM,5%,.0625W, SM,0402,PB-FREE
R6574M6	0613952R25	RES,MF,100KOHM,5%,.062 5W,SM,0402,200PPM/ CEL,PB-FREE
R6576M6	0613952R01	RES,MF,10KOHM,5%,.0625 W,SM,0402,200PPM/ CEL,PB-FREE
R6577M6	0613952Q89	RES,MF,4700,5,.0625,SM,0 402,200,PB-FREE
R6578M6	0613952Q89	RES,MF,4700,5,.0625,SM,0 402,200,PB-FREE
R6579M6	0613952R01	RES,MF,10KOHM,5%,.0625 W,SM,0402,200PPM/ CEL,PB-FREE
R6580M6	0613952R17	RES,MF,47000,5,.0625,SM, 0402,200,PB-FREE
R6581M6	0613952Q49	RES,MF,100,5,.0625,SM,04 02,200,PB-FREE
R6582M6	0613952Q89	RES,MF,4700,5,.0625,SM,0 402,200,PB-FREE
R6583M6	0613952R03	RES,MF,12000,5,.0625,SM, 0402,200,PB-FREE
R6584M6	0613952Q56	RES,MF,200OHM,5%,.0625 W,SM,0402,200PPM/ CEL,PB-FREE
R6592M6	0613952R66	RES,MF,0OHM,5%,.0625W, SM,0402,PB-FREE

Ref. Des.	Part Number	Description
R6598M6	0613952R66	RES,MF,0OHM,5%,.0625W, SM,0402,PB-FREE
R6599M6	NOTPLACED	64AM DUMMY PART NUMBER
R6601M6	0613952R01	RES,MF,10KOHM,5%,.0625 W,SM,0402,200PPM/ CEL,PB-FREE
R6602M6	0613952R01	RES,MF,10KOHM,5%,.0625 W,SM,0402,200PPM/ CEL,PB-FREE
R6604M6	0613952Q51	RES,MF,120,5,.0625,SM,04 02,200,PB-FREE
R6605M6	0613952Q33	RES,MF,22,5,.0625,SM,040 2,200,PB-FREE
R6606M6	0613952Q37	RES,MF,33OHM,5%,.0625 W,SM,0402,200PPM/ CEL,PB-FREE
R6608M6	0613952R01	RES,MF,10KOHM,5%,.0625 W,SM,0402,200PPM/ CEL,PB-FREE
R6609M6	0613952R25	RES,MF,100KOHM,5%,.062 5W,SM,0402,200PPM/ CEL,PB-FREE
R6616M6	0613952Q80	RES,MF,2KOHM,5%,.0625 W,SM,0402,200PPM/ CEL,PB-FREE
R6617M6	0613952R01	RES,MF,10KOHM,5%,.0625 W,SM,0402,200PPM/ CEL,PB-FREE
R6618M6	0613952R01	RES,MF,10KOHM,5%,.0625 W,SM,0402,200PPM/ CEL,PB-FREE
R6619M6	0613952R01	RES,MF,10KOHM,5%,.0625 W,SM,0402,200PPM/ CEL,PB-FREE
R6621M6	0613952Q89	RES,MF,4700,5,.0625,SM,0 402,200,PB-FREE
R6622M6	0613952Q35	RES,MF,27OHM,5%,.0625 W,SM,0402,200PPM/ CEL,PB-FREE
R6623M6	0613952Q35	RES,MF,27OHM,5%,.0625 W,SM,0402,200PPM/ CEL,PB-FREE

Ref. Des.	Part Number	Description	Ref. Des.	Part Number	Description	Ref. Des.	Part Number	Description	Ref. Des.	Part Number	Description
R6624M6	0613952Q35	RES,MF,27OHM,5%,.0625 W,SM,0402,200PPM/CEL,PB-FREE	R728M7	0613952Q37	RES,MF,33OHM,5%,.0625 W,SM,0402,200PPM/CEL,PB-FREE	R762M7	0613952R08	RES,MF,20KOHM,5%,.0625 W,SM,0402,200PPM/CEL,PB-FREE	U1104M11	5185941F56	IC,OP AMP,1PER PKG,RAIL-RAIL,SOIC,IC SNGL LV LP OP AMP
R6625M6	0613952Q35	RES,MF,27OHM,5%,.0625 W,SM,0402,200PPM/CEL,PB-FREE	R729M7	0613952R09	RES,MF,22000,5,.0625,SM,0402,200,PB-FREE	R763M7	0613952R19	RES,MF,56KOHM,5%,.0625 W,SM,0402,200PPM/CEL,PB-FREE	U1105M11	5180390L83	IC,CNTRLR,SM,1PER PKG
R6626M6	0613952R01	RES,MF,10KOHM,5%,.0625 W,SM,0402,200PPM/CEL,PB-FREE	R730M7	0613952Q84	RES,MF,3KOHM,5%,.0625 W,SM,0402,200PPM/CEL,PB-FREE	R766M7	0613952Q92	RES,MF,6.2KOHM,5%,.0625 W,SM,0402,200PPM/CEL,PB-FREE	U1106M11	5175772B05	IC,LTC5532ES6,SOT-23,1PER PKG,PRCN RF DET
R698M19	0613952R66	RES,MF,0OHM,5%,.0625W,SM,0402,PB-FREE	R736M7	0613952Q55	RES,MF,180OHM,5%,.0625 W,SM,0402,200PPM/CEL,PB-FREE	R769M7	0613952Q31	RES,MF,18OHM,5%,.0625 W,SM,0402,200PPM/CEL,PB-FREE	U1112M11	5175772B04	IC,HMC468LP3E,QFN,1 DB LSB GAAS MMIC ATTEN
R699M19	0613952R66	RES,MF,0OHM,5%,.0625W,SM,0402,PB-FREE	R741M7	0613952R09	RES,MF,22000,5,.0625,SM,0402,200,PB-FREE	R771M7	0613952Q49	RES,MF,100,5,.0625,SM,0402,200,PB-FREE	U1113M11	5185941F56	IC,OP AMP,1PER PKG,RAIL-RAIL,SOIC,IC SNGL LV LP OP AMP
R701M7	0613952Q64	RES,MF,430OHM,5%,.0625 W,SM,0402,200PPM/CEL,PB-FREE	R742M7	0613952R23	RES,MF,82KOHM,5%,.0625 W,SM,0402,200PPM/CEL,PB-FREE	R776M7	0613952Q67	RES,MF,560OHM,5%,.0625 W,SM,0402,200PPM/CEL,PB-FREE	U1114M11	5185941F56	IC,OP AMP,1PER PKG,RAIL-RAIL,SOIC,IC SNGL LV LP OP AMP
R702M7	0613952R66	RES,MF,0OHM,5%,.0625W,SM,0402,PB-FREE	R743M7	0613952R17	RES,MF,47000,5,.0625,SM,0402,200,PB-FREE	R778M7	0613952Q32	RES,MF,20OHM,5%,.0625 W,SM,0402,200PPM/CEL,PB-FREE	U1119M11	5109522E94	GATE,AND,1PER PKG,SM,2 INPUT IN NANO PKG
R703M7	0613952Q67	RES,MF,560OHM,5%,.0625 W,SM,0402,200PPM/CEL,PB-FREE	R744M7	0613952Q91	RES,MF,5600,5,.0625,SM,0402,200,PB-FREE	R779M7	0613952Q49	RES,MF,100,5,.0625,SM,0402,200,PB-FREE	U1121M11	5114000B52	IC,XOR,LOGIC LEVEL SHIFTER,1PER PKG,SM,SOT-353,PB-FREE
R704M7	0613952Q25	RES,MF,10,5,.0625,SM,0402,200,PB-FREE	R745M7	0613952R09	RES,MF,22000,5,.0625,SM,0402,200,PB-FREE	R785M7	0613952Q53	RES,MF,150OHM,5%,.0625 W,SM,0402,200PPM/CEL,PB-FREE	U1125M11	5175206H01	IC,DAC,W/ 5 PPM/C INT REF
R705M7	0613952Q71	RES,MF,820OHM,5%,.0625 W,SM,0402,200PPM/CEL,PB-FREE	R746M7	0613952Q34	RES,MF,24OHM,5%,.0625 W,SM,0402,200PPM/CEL,PB-FREE	R799M7	0613952Q53	RES,MF,150OHM,5%,.0625 W,SM,0402,200PPM/CEL,PB-FREE	U1126M11	5109817F77	IC,COMPTR,LMV7275,SC70-5
R706M7	0613952R66	RES,MF,0OHM,5%,.0625W,SM,0402,PB-FREE	R747M7	0613952Q39	RES,MF,39OHM,5%,.0625 W,SM,0402,200PPM/CEL,PB-FREE	R809M7	0613952Q38	RES,MF,36OHM,5%,.0625 W,SM,0402,200PPM/CEL,PB-FREE	U1127M11	5171779H01	IC,ANLG SW,SC70,SC70-6,1PER PKG,SPDT ANLG SW
R707M7	0613952Q67	RES,MF,560OHM,5%,.0625 W,SM,0402,200PPM/CEL,PB-FREE	R748M7	0613952Q47	RES,MF,82OHM,5%,.0625 W,SMD,0402,200PPM/CEL,CER CHIP 82.0 OHM 5%	R822M7	NOTPLACED	64AM DUMMY PART NUMBER	U1128M11	5188085K11	IC,NAND,SINGLE 2 INPUT,SN74LVC1G00YZPR,SM,GATE, POS, 5 DSBGA,
R708M7	0613952Q45	RES,MF,68OHM,5%,.0625 W,SM,0402,200PPM/CEL,PB-FREE	R751M7	0613952Q59	RES,MF,270OHM,5%,.0625 W,SM,0402,200PPM/CEL,PB-FREE	R823M7	NOTPLACED	64AM DUMMY PART NUMBER	U1129M11	5175143H01	IC,WIDE SPLY RANGE OP AMP
R709M7	NOTPLACED	64AM DUMMY PART NUMBER	R754M7	NOTPLACED	64AM DUMMY PART NUMBER	T506M21	2575851B01	XFMR,BALUN,RF XFMR BALUN	U1130M11	5175143H01	IC,WIDE SPLY RANGE OP AMP
R721M7	0613952R01	RES,MF,10KOHM,5%,.0625 W,SM,0402,200PPM/CEL,PB-FREE	R757M7	0613952Q59	RES,MF,270OHM,5%,.0625 W,SM,0402,200PPM/CEL,PB-FREE	T507M21	2575851B02	XFMR,BALUN,25,SM,RF XFMR BALUN	U1131M11	5109817F77	IC,COMPTR,LMV7275,SC70-5
R722M7	0613952Q71	RES,MF,820OHM,5%,.0625 W,SM,0402,200PPM/CEL,PB-FREE	R761M7	0613952Q23	RES,MF,8.2OHM,5%,.0625 W,SM,0402,200PPM/CEL,PB-FREE	U1101M11	5188032U43	IC,SENSING CIRCUIT,INA138,SM,SOT-23/5,1PER PKG	U1132M11	5114007M28	IC,D FLIP-FLOP,1PER PKG,17SZ74,N-I,SM,SOIC8,PB-FREE
R723M7	0613952Q79	RES,MF,1800,5,.0625,SM,0402,200,PB-FREE				U1103M11	5185070Y01	IC,TEMP SENS	U1133M11	5171779H01	IC,ANLG SW,SC70,SC70-6,1PER PKG,SPDT ANLG SW

Ref. Des.	Part Number	Description
U1136M11	5109522E94	GATE,AND,1PER PKG,SM,2 INPUT IN NANO PKG
U1137M11	5164852H16	IC,TRANSLATING,2PER PKG,LVC2T45,TRANS- CEIVER W/VOLTAGE TRANSLATI
U1138M11	5164852H16	IC,TRANSLATING,2PER PKG,LVC2T45,TRANS- CEIVER W/VOLTAGE TRANSLATI
U1139M11	5164852H16	IC,TRANSLATING,2PER PKG,LVC2T45,TRANS- CEIVER W/VOLTAGE TRANSLATI
U1141M11	5185941F56	IC,OP AMP,1PER PKG,RAIL-RAIL,SOIC,IC SNGL LV LP OP AMP
U1142M11	5185941F56	IC,OP AMP,1PER PKG,RAIL-RAIL,SOIC,IC SNGL LV LP OP AMP
U1143M11	5185941F56	IC,OP AMP,1PER PKG,RAIL-RAIL,SOIC,IC SNGL LV LP OP AMP
U1144M11	5171779H01	IC,ANLG SW,SC70,SC70- 6,1PER PKG,SPDT ANLG SW
U1146M11	5109522E93	GATE,OR,SN74LVC1G32Y ZPR,1PER PKG,SM,2 INPUT IN NANO PKG
U1147M11	5109522E94	GATE,AND,1PER PKG,SM,2 INPUT IN NANO PKG
U1148M11	5185941F56	IC,OP AMP,1PER PKG,RAIL-RAIL,SOIC,IC SNGL LV LP OP AMP
U1149M11	5109522E93	GATE,OR,SN74LVC1G32Y ZPR,1PER PKG,SM,2 INPUT IN NANO PKG
U1150M11	51009381001	IC,MICROPOWER SOT-23 V REF
U1301M3	51007377001	IC,XCVR,NL5500,BGA,BLU- ETOOTH, GPS, FM RX, FM TX

Ref. Des.	Part Number	Description
U1304M3	51007599001	AMP,20.0DB,1.58GHZMIN,1 .58GHZMAX,SLCN GER- MANIUM GPS LOW NOISE AM
U1305M3	5187344N09	IC,LNR V REGLTR,FXD,2.8V,100MA,L OW NOISE
U1601M16	5175143H01	IC,WIDE SPLY RANGE OP AMP
U1602M16	51012101001	VHF/UHF/800/900 MHZ LDMOS DRIVER IC
U1932M20	4885316E32	XSTR,BIP RF SML SGNL,SLCN,BFR380F,SM, SMT,6V,380W,80A,14MHZ,T R
U200M12	5188493T01	IC,VREG/ SWG,LP2989,SM,MINI SO- 8 HI PRCN REG 5V
U201M12	5175771A99	IC,LNR V REGLTR,FXD,100MA,VFBG A,LOW NOISE, 100MA LIN- EAR REGL
U202M12	5175772B02	IC,LNR V REGLTR,FXD,1.8V,100MA, VFBGA,LINEAR REGLTR 100MA 1.8
U203M12	5175772B01	IC,LNR V REGLTR,FXD,1.5V,350MA, VFBGA,LINEAR V REGLTR 350MA
U2101M2	5109522E84	IC,DL SCHT TRIG MICRO PAK
U2102M2	5109522E84	IC,DL SCHT TRIG MICRO PAK
U2201M2	5171679H01	IC,DISP DRVR,LED LT DRVR
U2202M2	5164852H47	IC,XLTR,2PER PKG,TSSOP8,IC, I2C LEV XLTR
U2601M13	5103535B53	IC,INVTR,DL,NC7WZ04L6X ,2PER PKG,SC70
U2602M13	5185941F45	ATTEN,VAR,14.4DBMIN,15. 6DBMAX,0-2000 MHZ- FREQ,50OHM,PCMT,SOT- 25

Ref. Des.	Part Number	Description
U3001M22	5171972L01	IC,SW,SP3T RF SW
U4001M2	5164852H47	IC,XLTR,2PER PKG,TSSOP8,IC, I2C LEV XLTR
U4003M2	5188691V01	IC,MUX/ DEMUX,NC7SB3157P6X,S M,SC70-6,1PER PKG,BUS,PB FREE
U4004M2	5116783H01	IC,ANLG SW,SN74LVC2G66YZPR,S M,2PER PKG,0CHANNELS,BILAT- ERAL,DL
U507M21	5164015H81	IC,MXR,SM
U601M19	5102495J14	IC,IF,IF DIGITILIZING SUB- SYSTEM IC,AD9864,QFN
U602M19	4885316E32	XSTR,BIP RF SML SGNL,SLCN,BFR380F,SM, SMT,6V,380W,80A,14MHZ,T R
U603M19	5109522E84	IC,DL SCHT TRIG MICRO PAK
U604M19	5109522E84	IC,DL SCHT TRIG MICRO PAK
U605M19	5164852H16	IC,TRANSLATING,2PER PKG,LVC2T45,TRANS- CEIVER W/VOLTAGE TRANSLATI
U606M19	5164852H16	IC,TRANSLATING,2PER PKG,LVC2T45,TRANS- CEIVER W/VOLTAGE TRANSLATI
U607M19	5186311J24	IC,BFR,1PER PKG,NC7SZ125,ACTIVE HIGH,BFR,3ST,SM,5.5
U6101M6	0180706J18	IC,PGM,PGM CPLD
U6102M6	5188691V01	IC,MUX/ DEMUX,NC7SB3157P6X,S M,SC70-6,1PER PKG,BUS,PB FREE
U6103M6	5175114H01	IC,SNGL AND GATE MICROPAK
U6104M6	5175114H01	IC,SNGL AND GATE MICROPAK

Ref. Des.	Part Number	Description
U6105M6	5175114H01	IC,SNGL AND GATE MICROPAK
U6201M6	5185941F26	IC,COMPTR,LMV7219,SM, SOT-23/5,IC,LM7219,COM- PARATOR,NOPB
U6301M6	51012058002	IC,SDRAM,512MBITS,8 MEG X 16 X 4 BANKS,6NS,SM,MOBILE LPDDR 5
U6302M6	5102495J13	IC,MICROP,P1710ZZGE,BG A,12MHZ,32BITS
U6304M6	0105955U25	ASSY,ASSY,ASSY,IC,BGA SPEC PROG, FLSH MEM
U6401M6	5175772B38	IC,IC ANLG TEMP SENSOR
U6402M6	5115453H01	IC,OP AMP,2PER PKG,RAIL TO RAIL OUTPUT, 8 PIN BGA
U6404M6	5175772B38	IC,IC ANLG TEMP SENSOR
U6405M6	5188348V06	IC,AUDIO CODEC,SM,AUDIO CODEC
U6408M6	5188521T01	IC,VREF,SM,SOT23,1PER PKG,5%,1.25 TO 13.75,PRCN BANDGAP ADJUS
U6409M6	51009000001	IC,COMPTR,SC70,NANOP- OWER, 1.8V, SC70 COMPTR
U6410M6	5175772B38	IC,IC ANLG TEMP SENSOR
U6411M6	5109731C55	IC,AU AMP,BGA,2.75 FXD GAIN MONO FLTR-FREE
U6501M6	5185143E77	IC,CUST,BGA,IC, MAKO ASIC, CMOS PWR MGMT
U6502M6	4871987H01	XSTR,BIP GP POWER,12V,1A,LOW FREQ XSTR
U6503M6	5171674H01	IC,OP AMP,SO-8,OP AMP
U6504M6	5171682H01	IC,DC TO DC CON- VERTER,800MA BUCK REGLTR
U6505M6	5189631P01	IC,0PER PKG,SYNC STEP- DOWN CONV
U6506M6	5184790Y04	IC,LINEAR VOLTAGE REG- ULATOR,400MA

Ref. Des.	Part Number	Description
U6507M6	5171682H01	IC,DC TO DC CON- VERTER,800MA BUCK REGLTR
U6508M6	51009366001	IC,LNR V REGLTR,LLP6,500MA LOW DROPOUT CMOS LINEAR REG
U6509M6	5175114H01	IC,SNGL AND GATE MICROPAK
U6510M6	5114007A47	IC,OR,17SZ32,1PER PKG,SOT-353,PB FREE
U6511M6	5171339H01	IC,MC78LC18,MICROPO- WER V REGLTR
U6601M6	5175114H01	IC,SNGL AND GATE MICROPAK
U702M7	5164015H28	IC,CUST,MULTI PROTO- COL/BAND TRANSCVR IC,SM,BGA,TRIDENT, INTEG
U738M7	5171972L01	IC,SW,SP3T RF SW
U746M7	4805218N63	XSTR,GEN PURPOSE SMALL SIG,SOT- 323,BROADBAND AND XSTR
VR101M12	4813977M29	DIODE,ZEN,MBZ5250,SM,S OT-23,ZEN,PB-FREE
VR1905M20	4815096H01	DIODE,VCTR,10V,1SV305G ,VCTR DIODE 1SV305
VR1906M20	4815096H01	DIODE,VCTR,10V,1SV305G ,VCTR DIODE 1SV305
VR1907M20	4815096H01	DIODE,VCTR,10V,1SV305G ,VCTR DIODE 1SV305
VR1908M20	4815096H01	DIODE,VCTR,10V,1SV305G ,VCTR DIODE 1SV305
VR200M12	4813977M29	DIODE,ZEN,MBZ5250,SM,S OT-23,ZEN,PB-FREE
VR601M19	4805656W87	DIODE,VCTR, @ 15V,1SV279,SOD-523/SC- 79,SOD-523/SC-79
VR602M19	4805656W87	DIODE,VCTR, @ 15V,1SV279,SOD-523/SC- 79,SOD-523/SC-79
Y1304M3	48014600001	OSC,TCXO,26.0

Ref. Des.	Part Number	Description
Y6501M6	93012044001	OSC,XO,24.576MHZ,SM,XT AL U SMD 5.0X3.2 24.576MHZ
Y6502M6	4809995L05	RESON,QRTZ,32.768KHZ, SM,FUND,9PF LOAD CAP,- 40DEG C MIN,85DE
Y6601M6	4802582S85	RESON,QRTZ,12MHZ,10P PM TOL,18PPM STAB,SM,FUND,AT,10PF LOAD CAP
Y701M7	4871886H01	OSC,VO,16.8 MHZ VCTXO .8PPM



### 8.4 Transceiver (RF) Boards: UHF2 (84012432001 / PC000354A01)

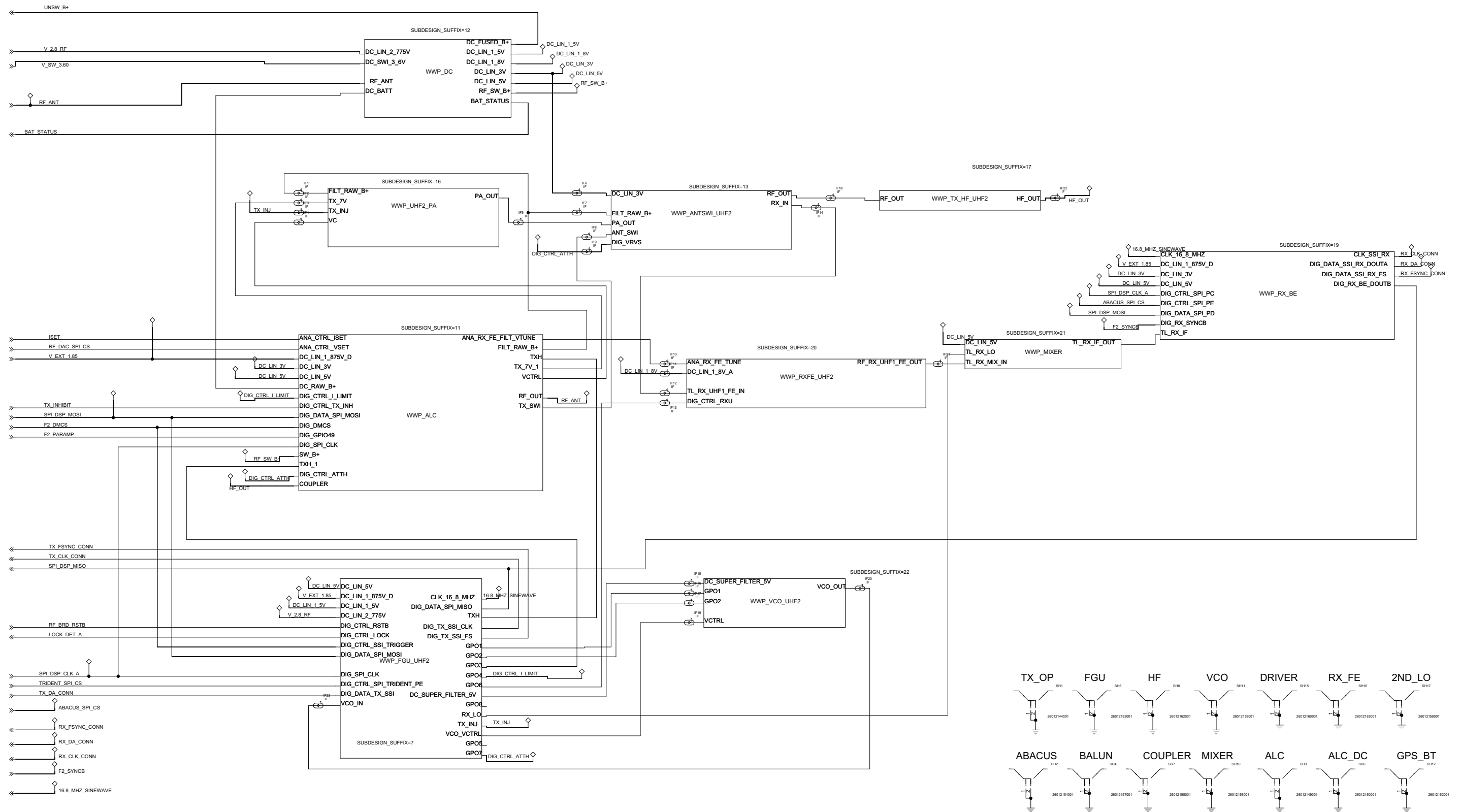


Figure 8-79. Transceiver (RF) Mainboard Overall Schematic (84012432001)

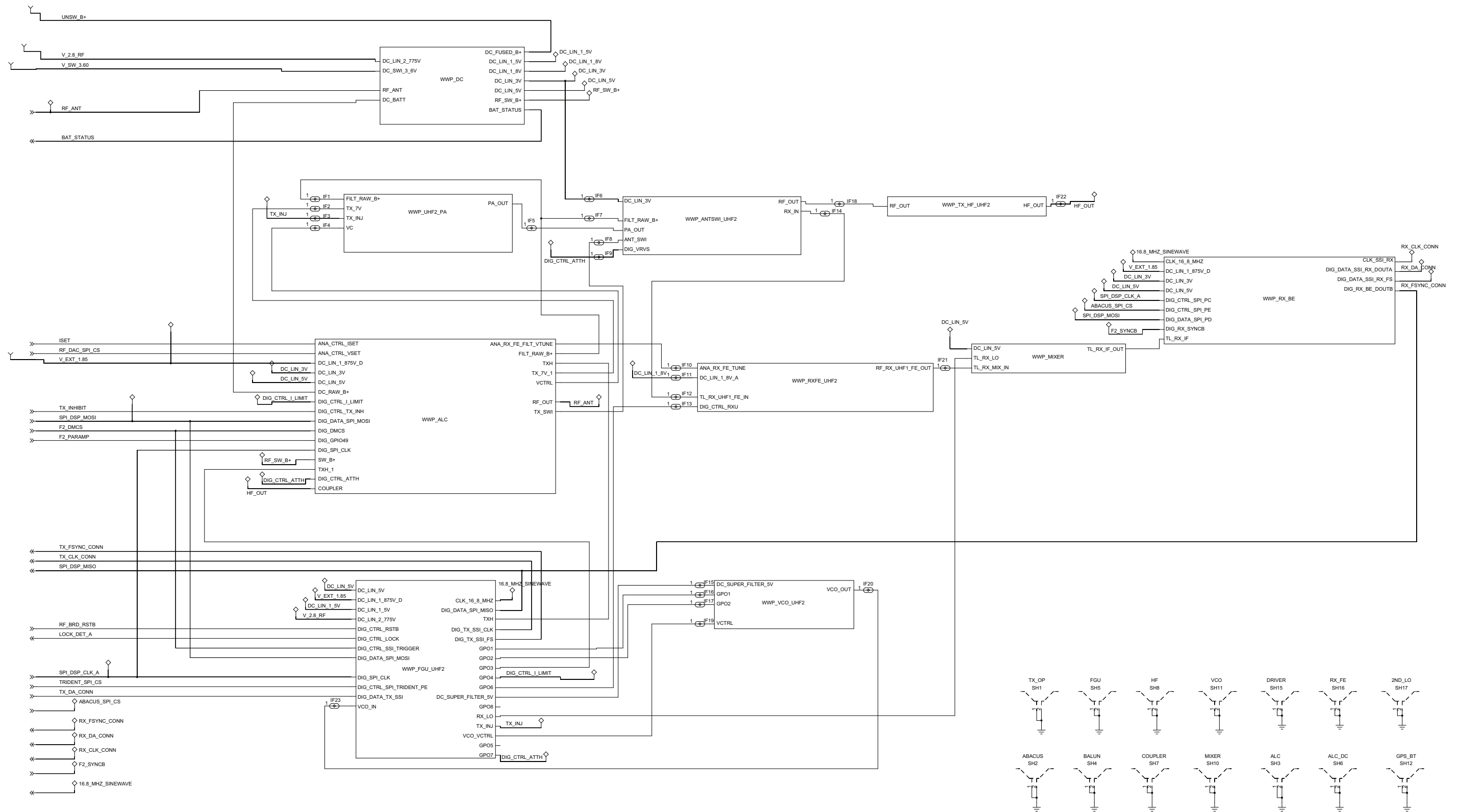


Figure 8-80. Transceiver (RF) Mainboard Overall Schematic (PC000354A01) – 1 of 2

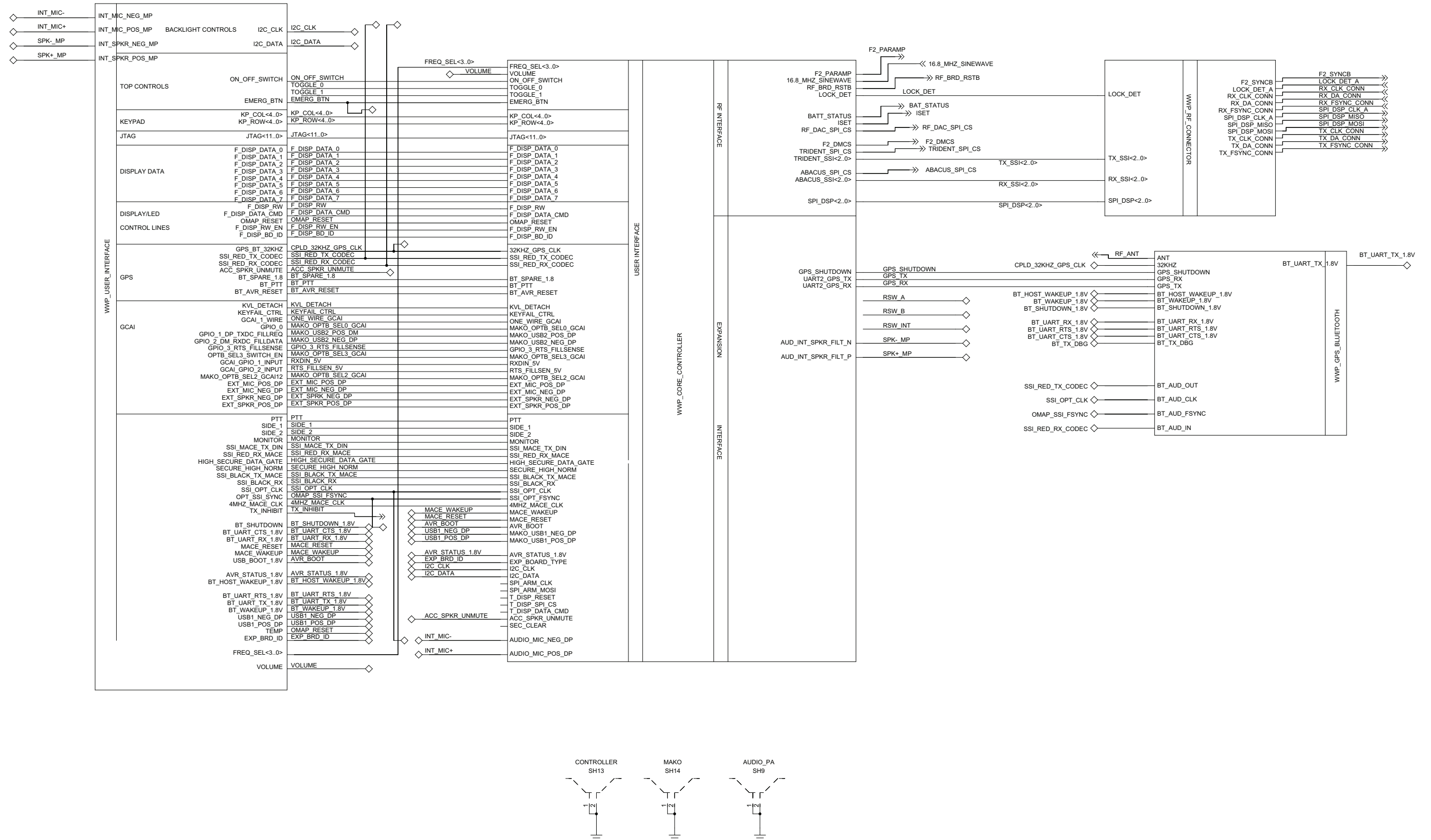


Figure 8-81. Transceiver (RF) Mainboard Overall Schematic (PC000354A01) – 2 of 2

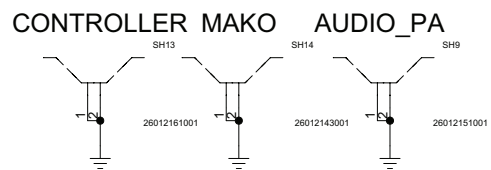
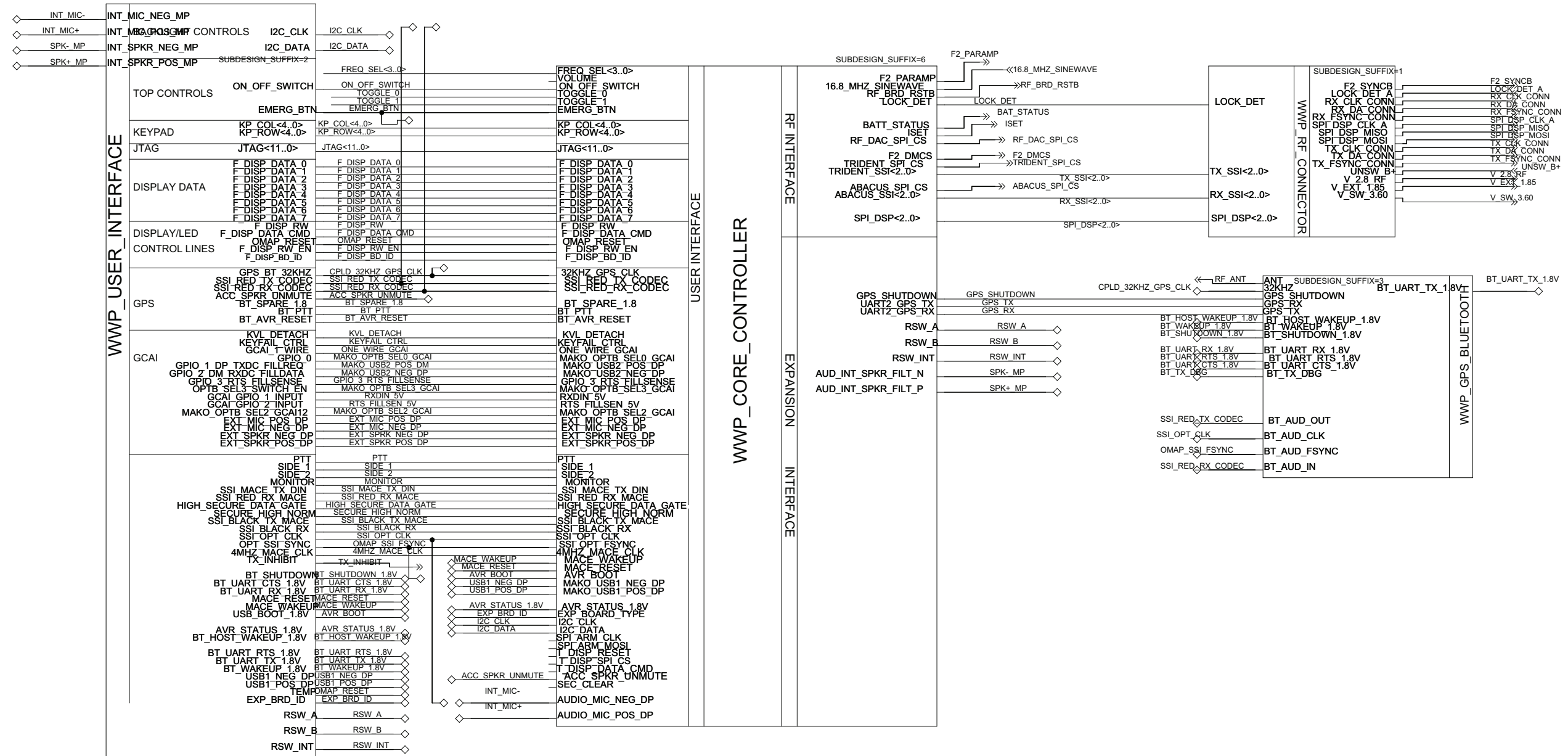


Figure 8-82. Controller Mainboard Circuit

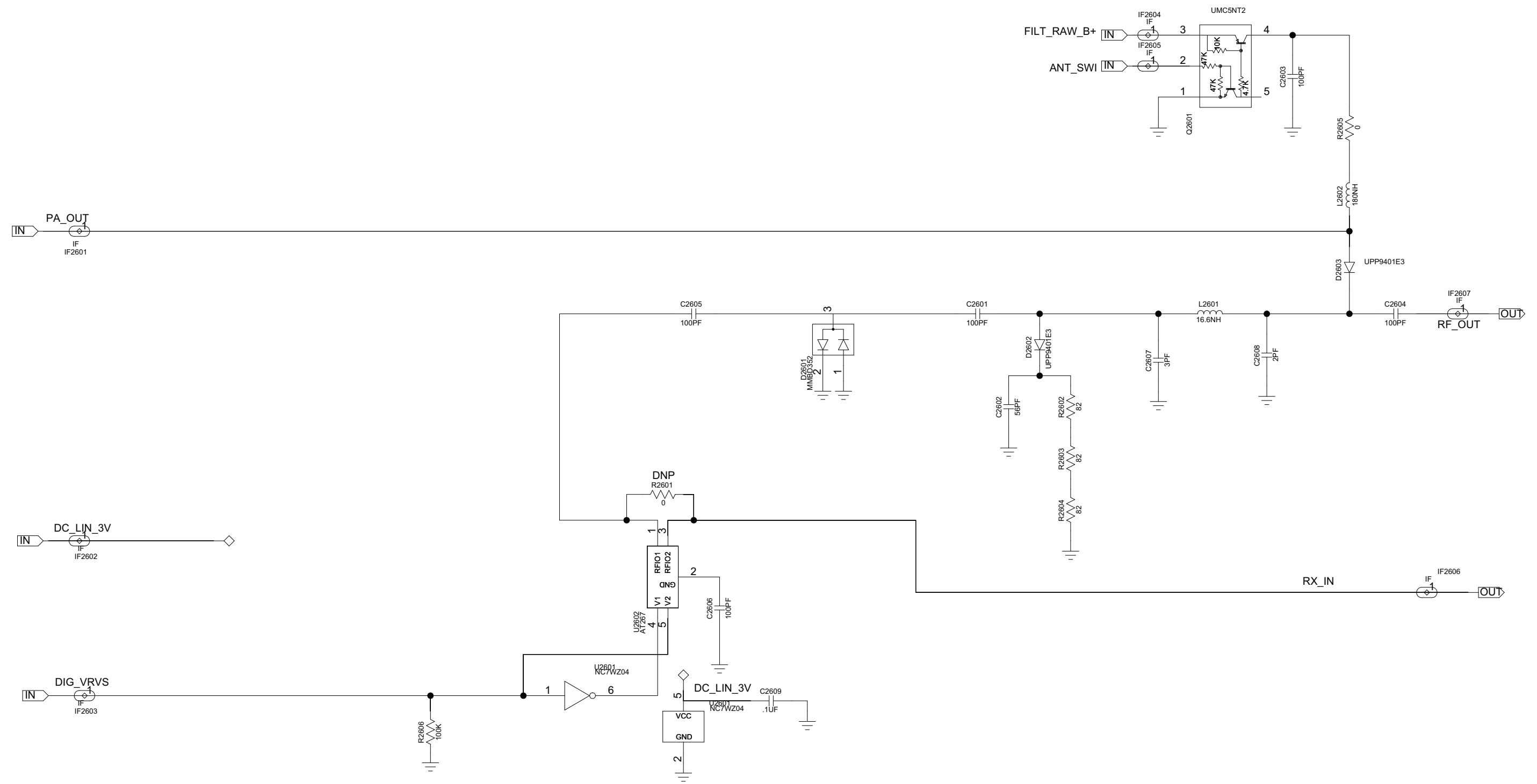


Figure 8-83. DC Circuit

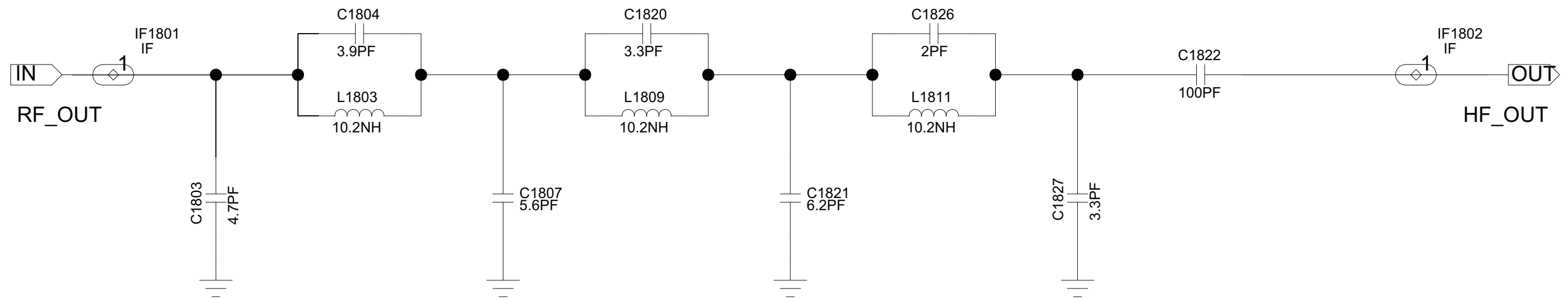


Figure 8-84. Transmitter HF Circuit

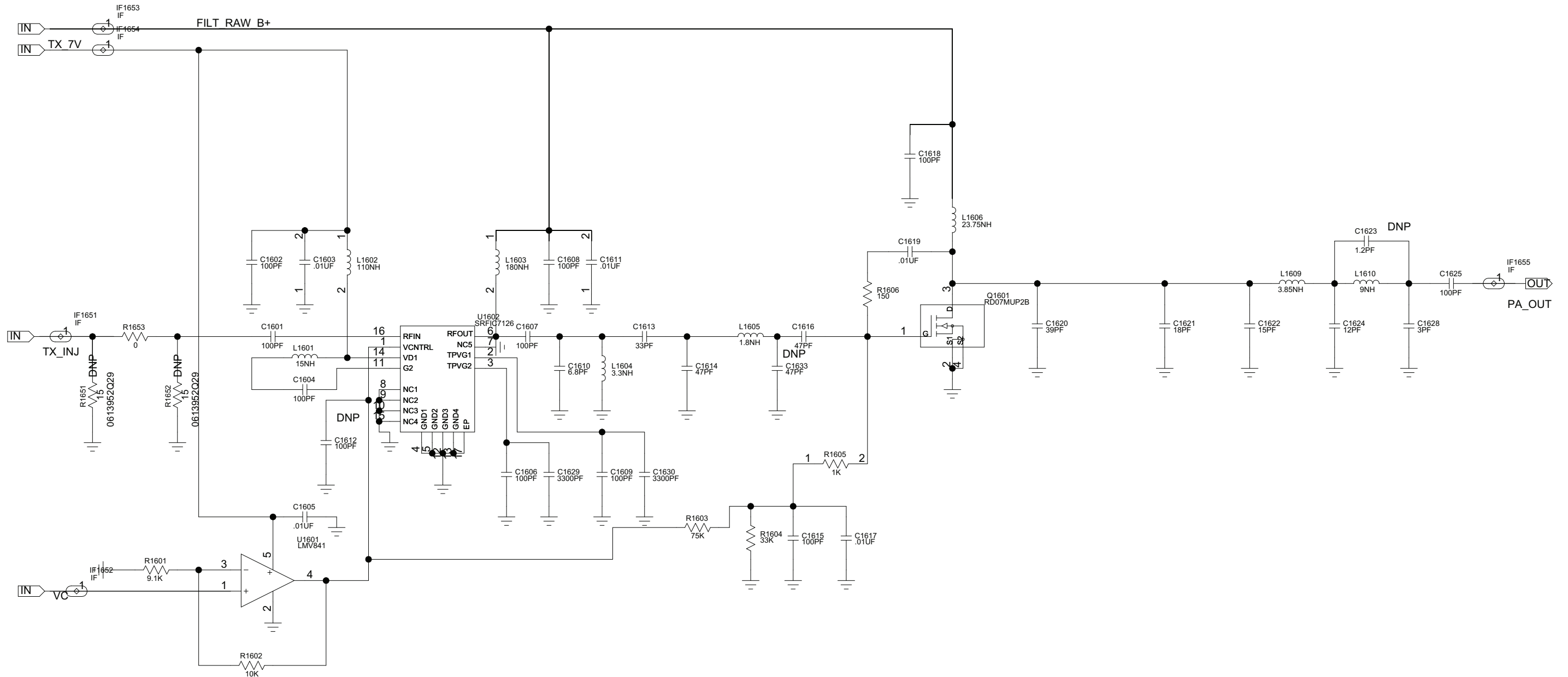


Figure 8-85. Power Amplifier Circuit

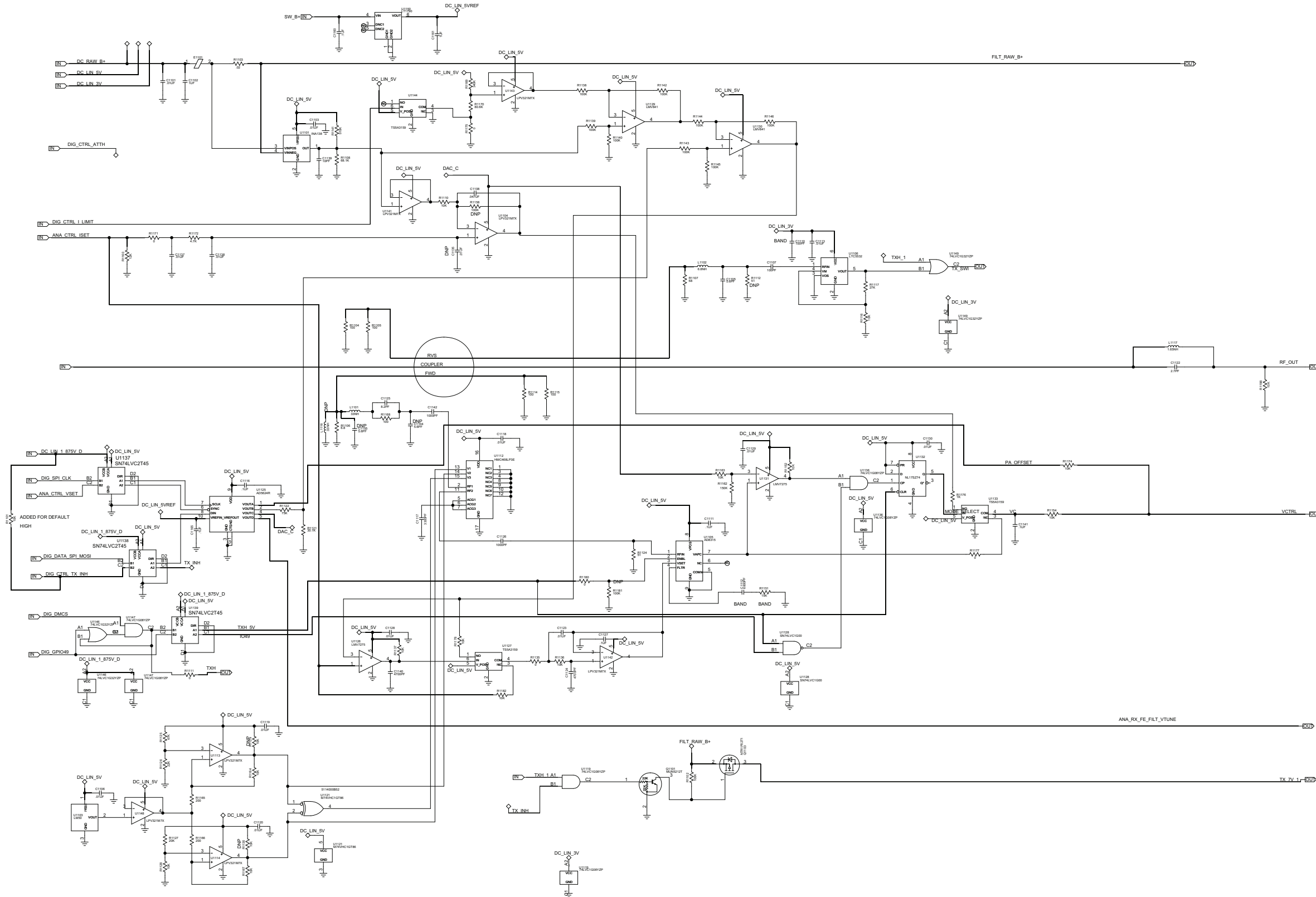


Figure 8-86. Automatic Level Control Circuit



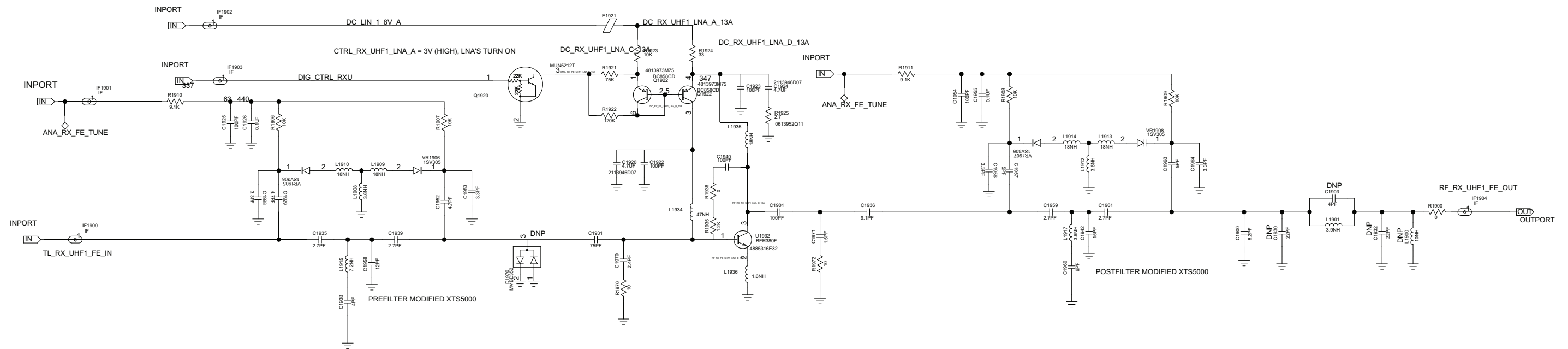


Figure 8-87. Receiver Front End Circuit

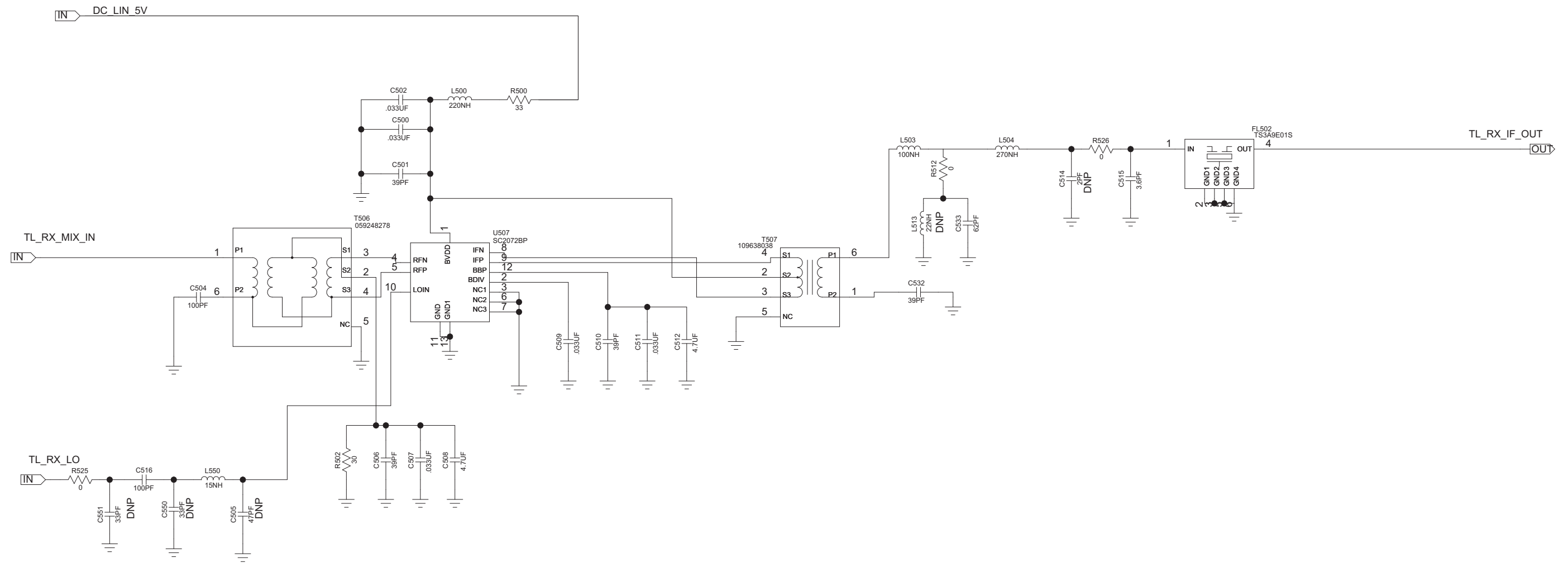


Figure 8-88. Receiver Back End Circuit – 1 of 2

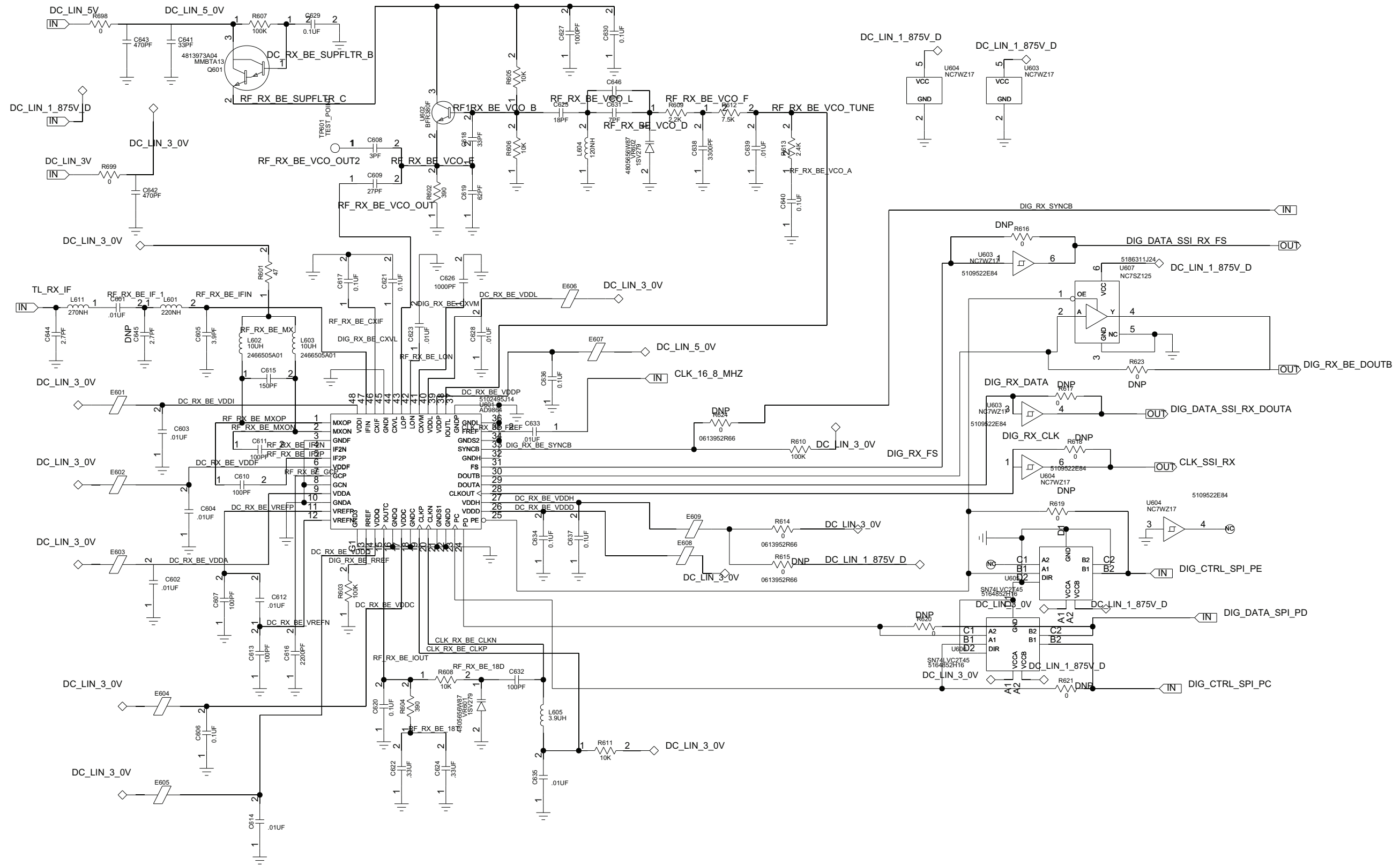


Figure 8-89. Receiver Back End Circuit – 2 of 2

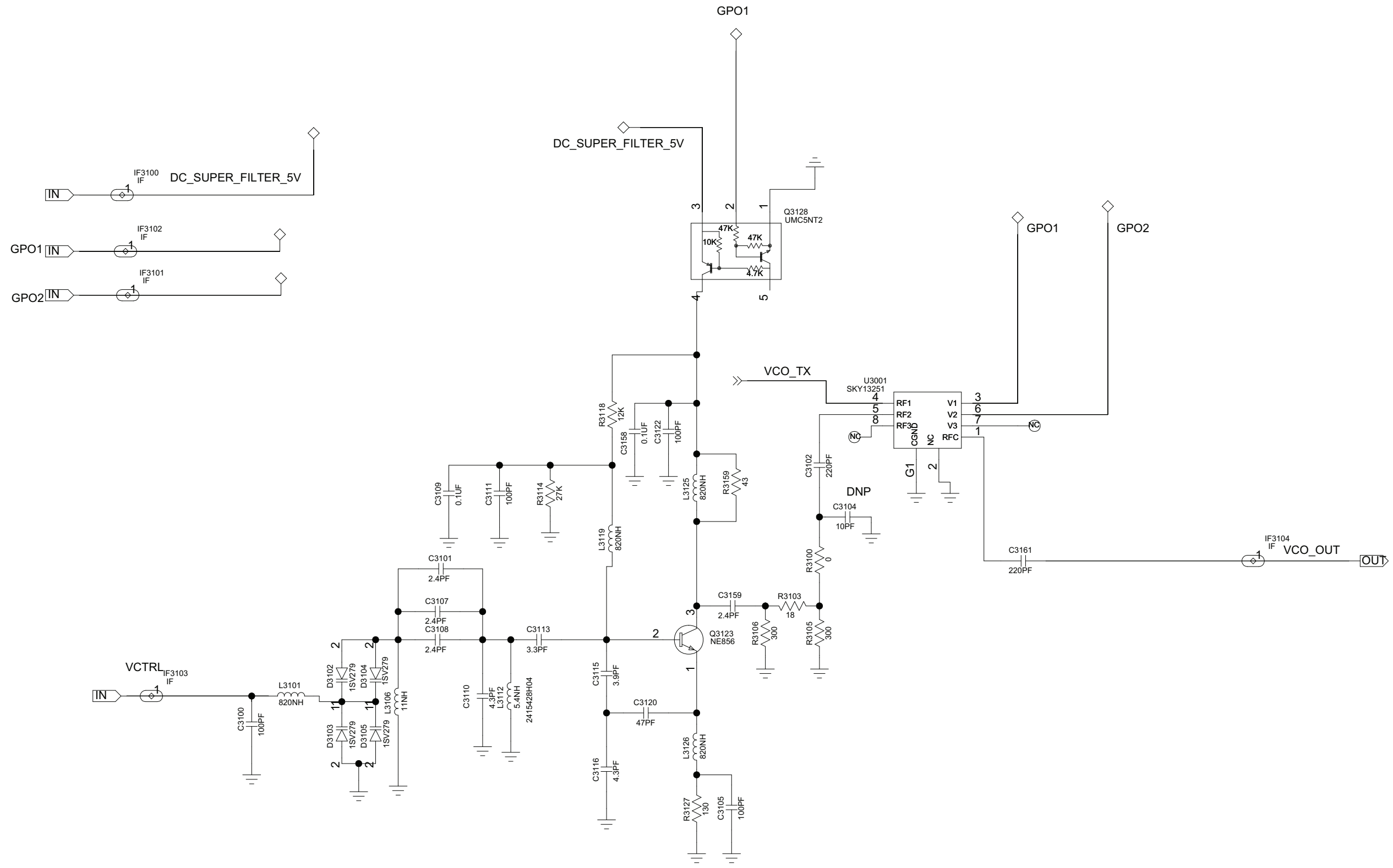


Figure 8-90. Receiver VCO Circuit

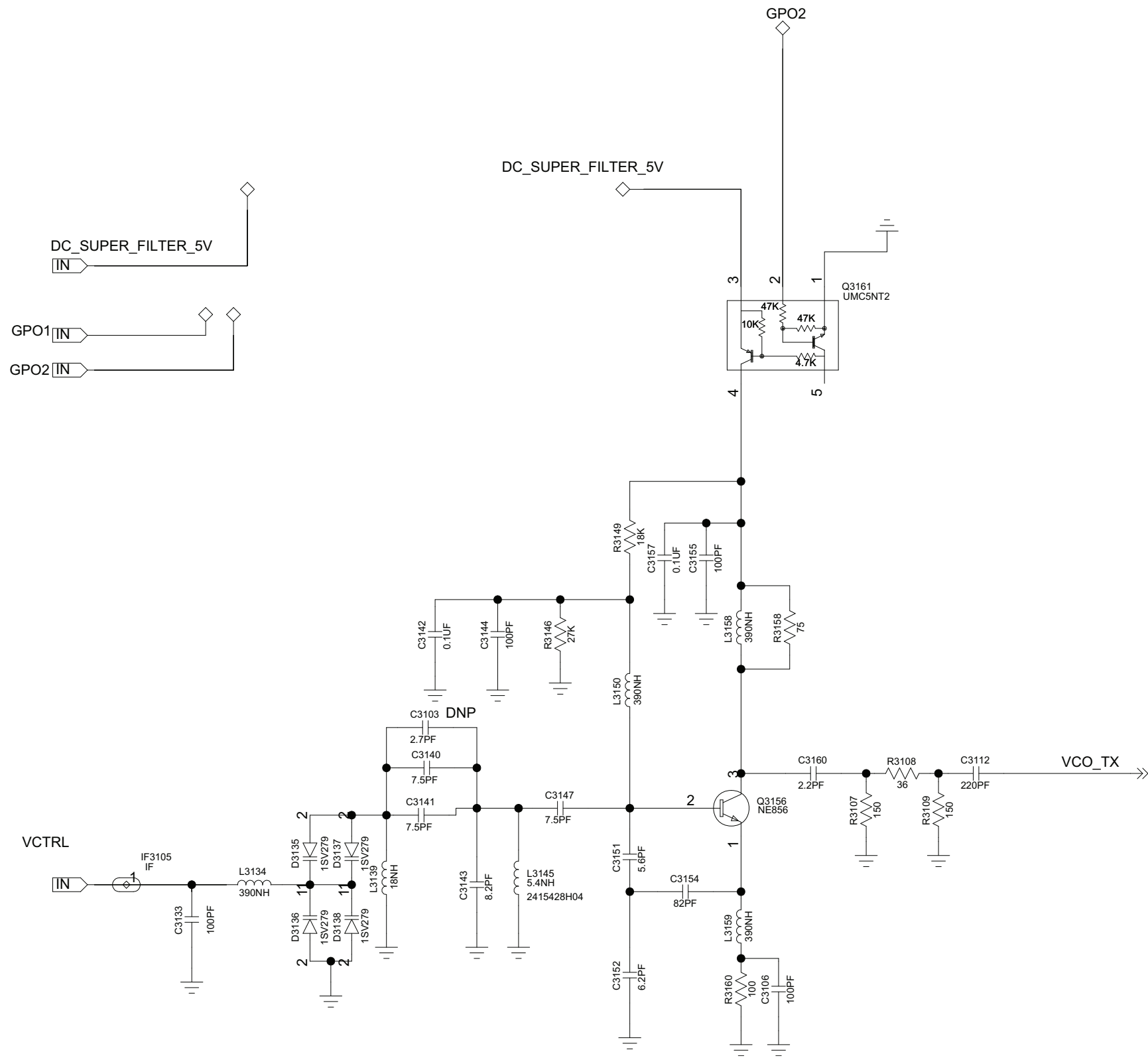


Figure 8-91. Transmitter VCO Circuit

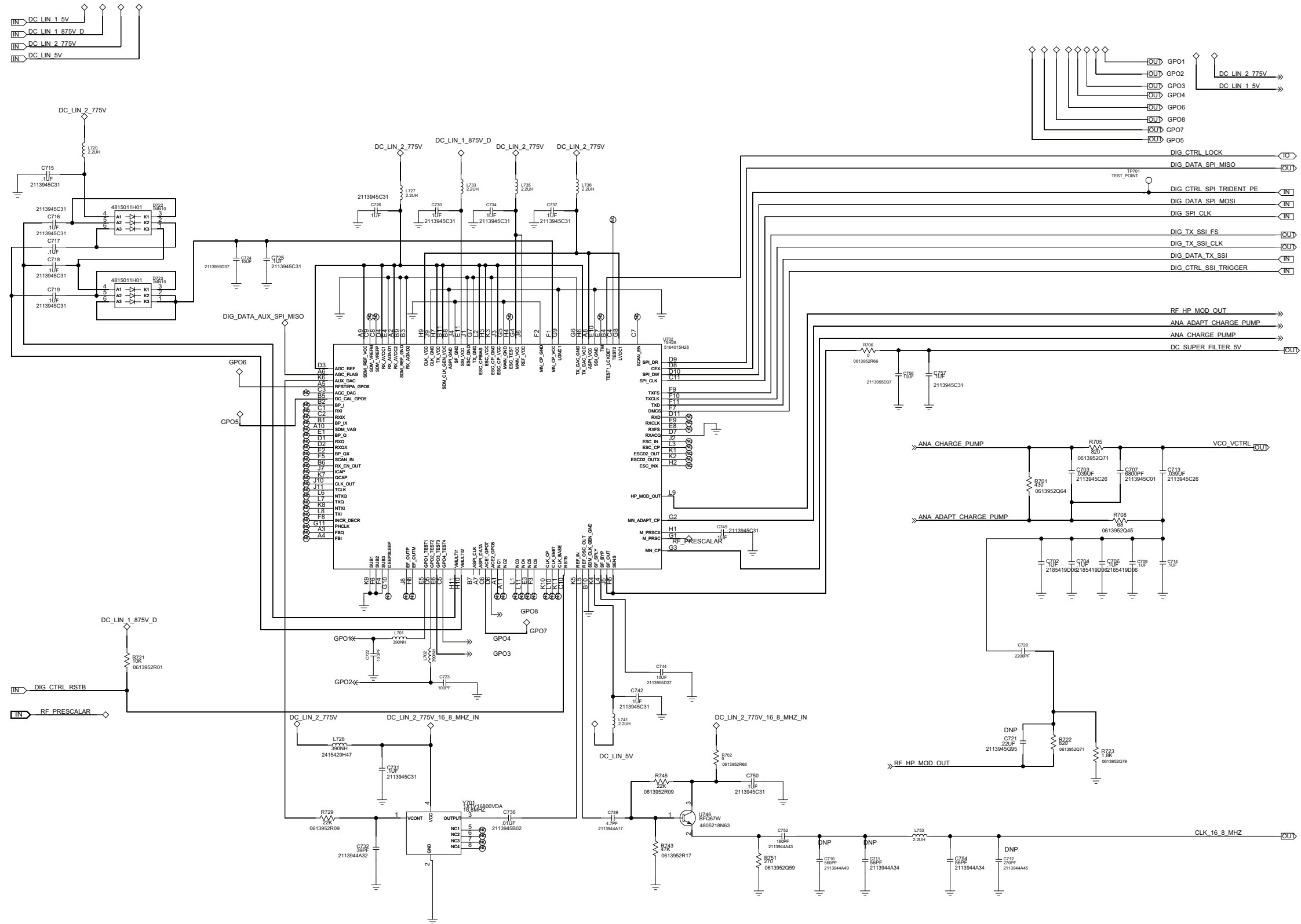


Figure 8-92. Frequency Generation Unit Circuit – 1 of 2

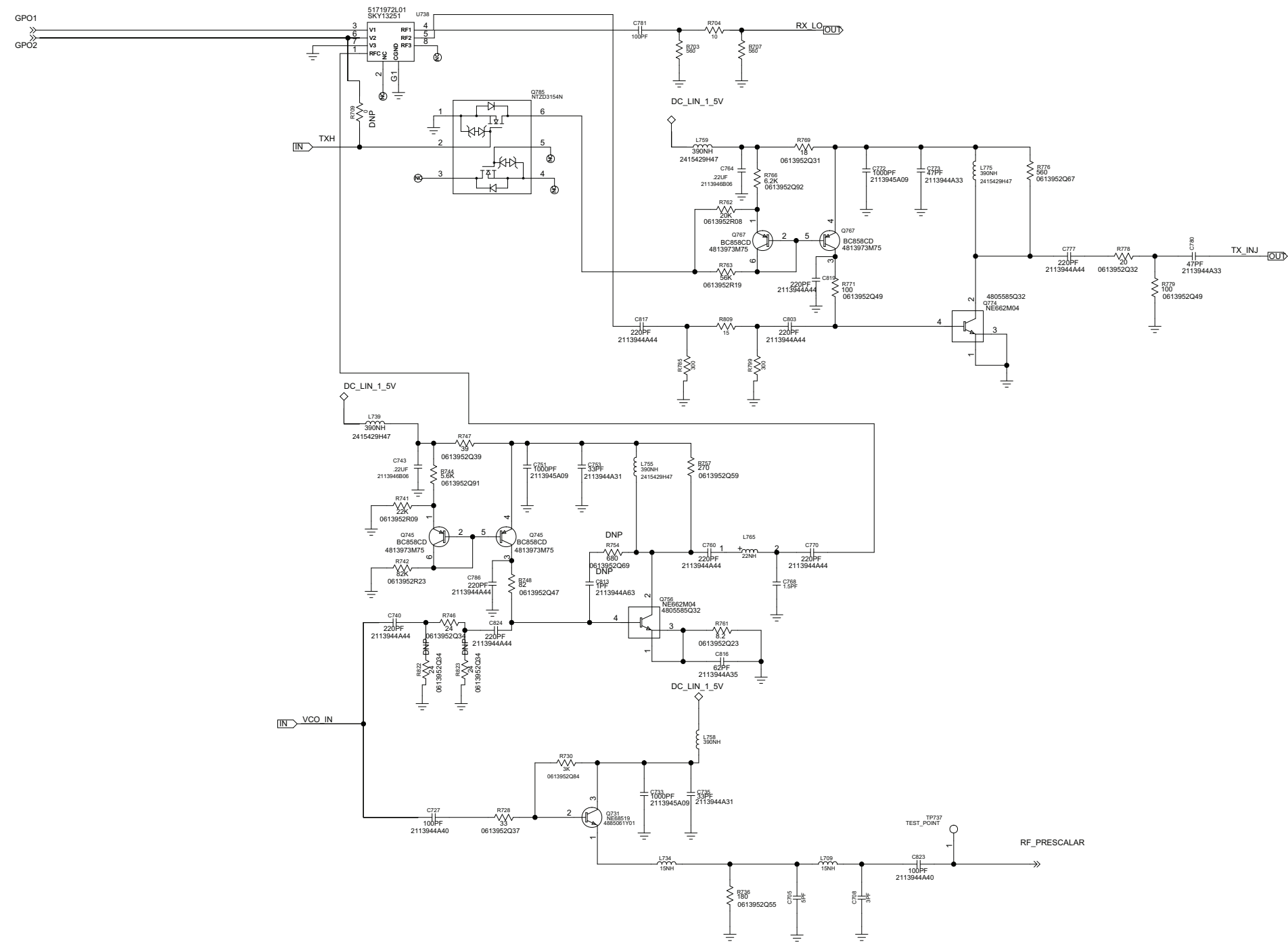
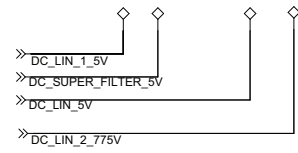


Figure 8-93. Frequency Generation Unit Circuit – 2 of 2

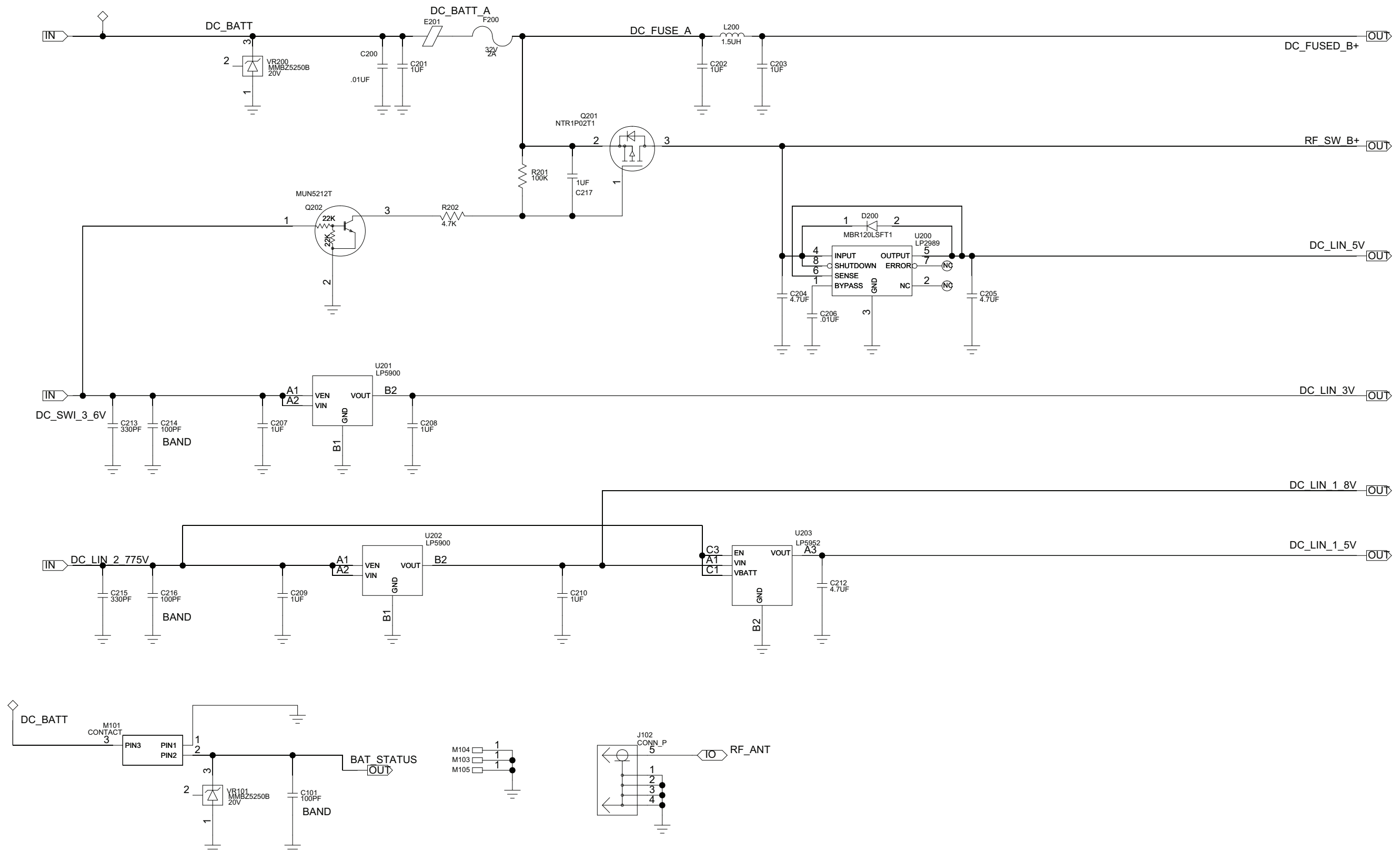


Figure 8-94. DC Circuit



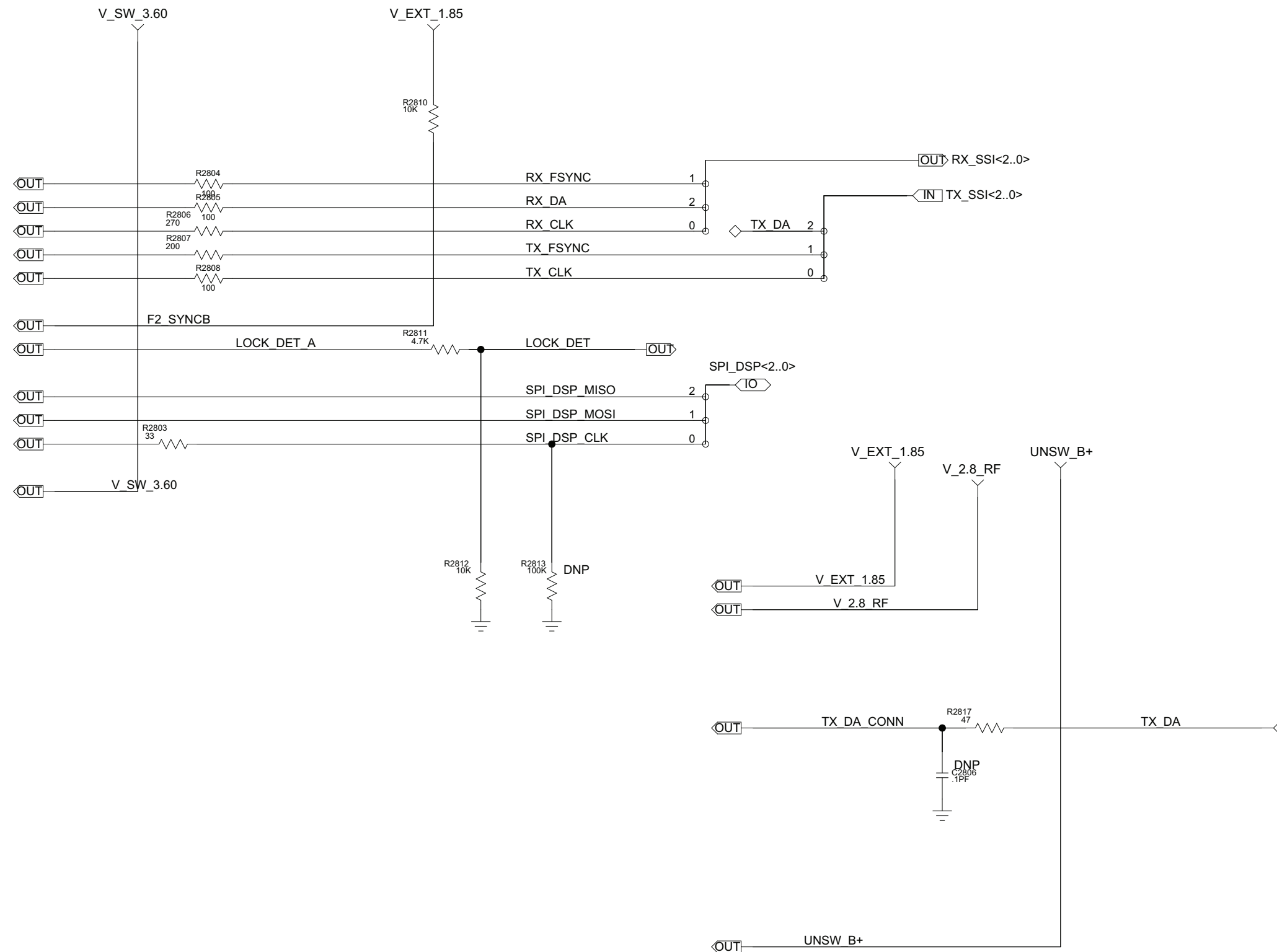


Figure 8-95. RF Interconnects Circuit

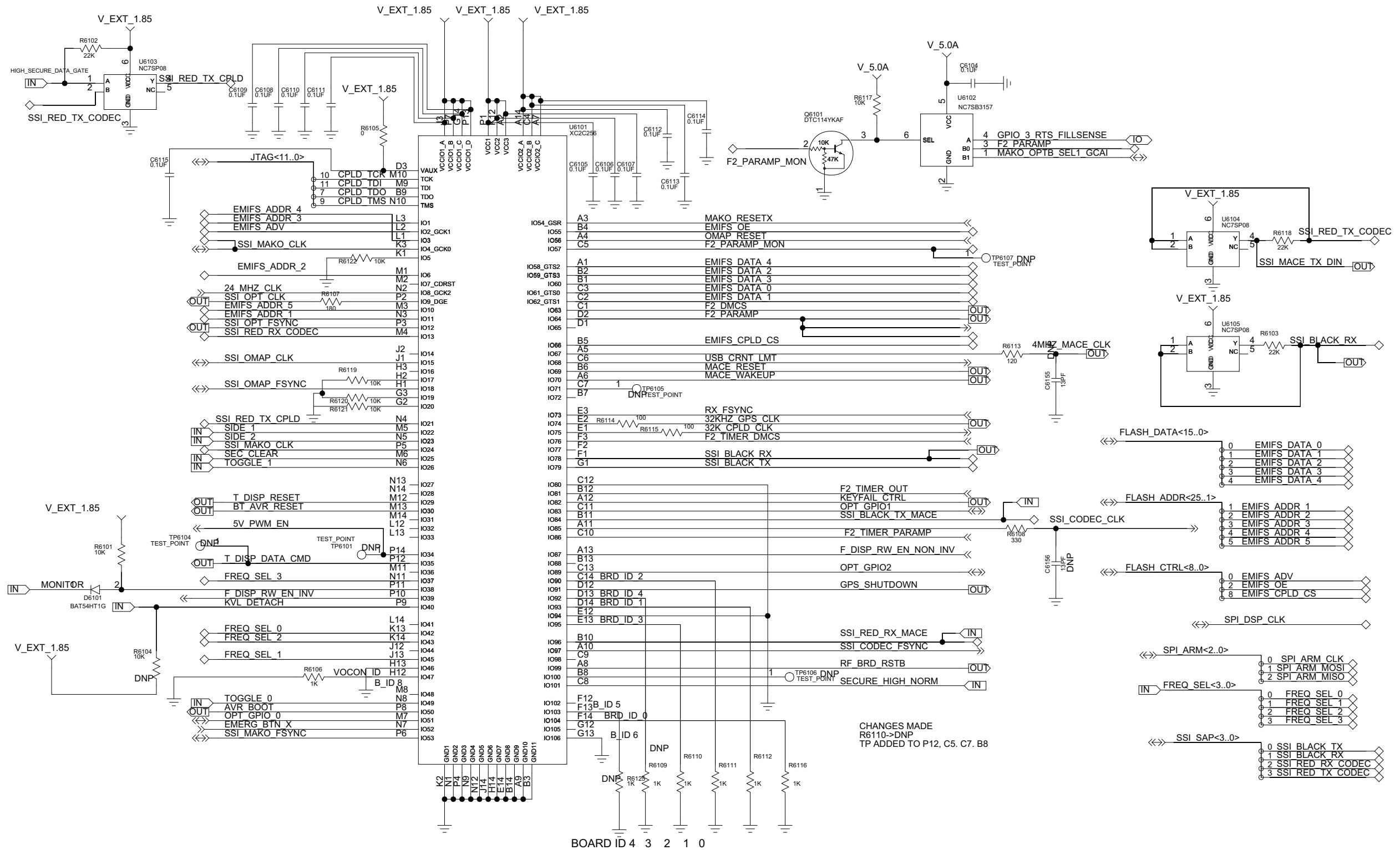


Figure 8-96. CPLD Circuit

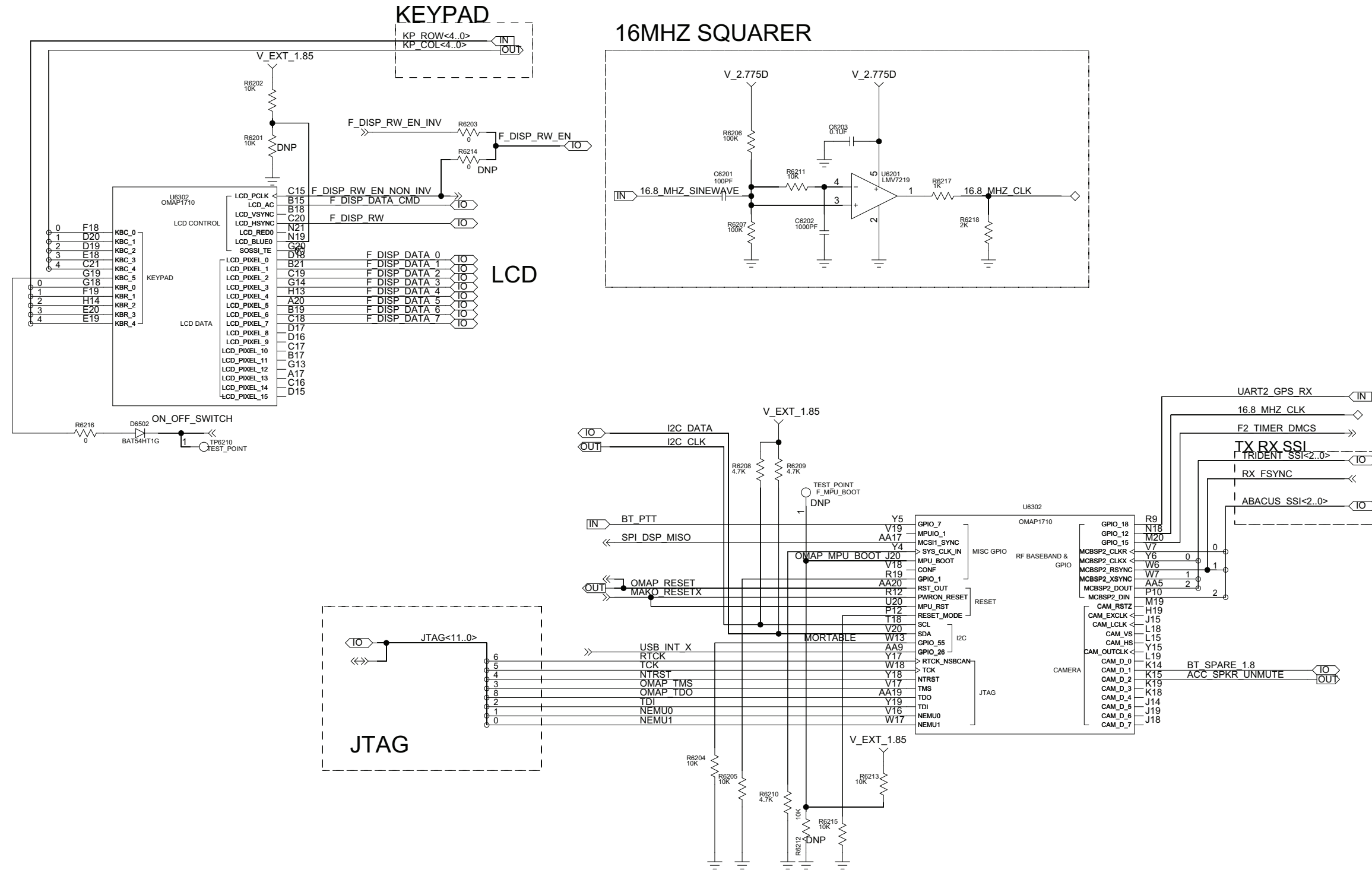


Figure 8-97. OMAP User Interface Circuit

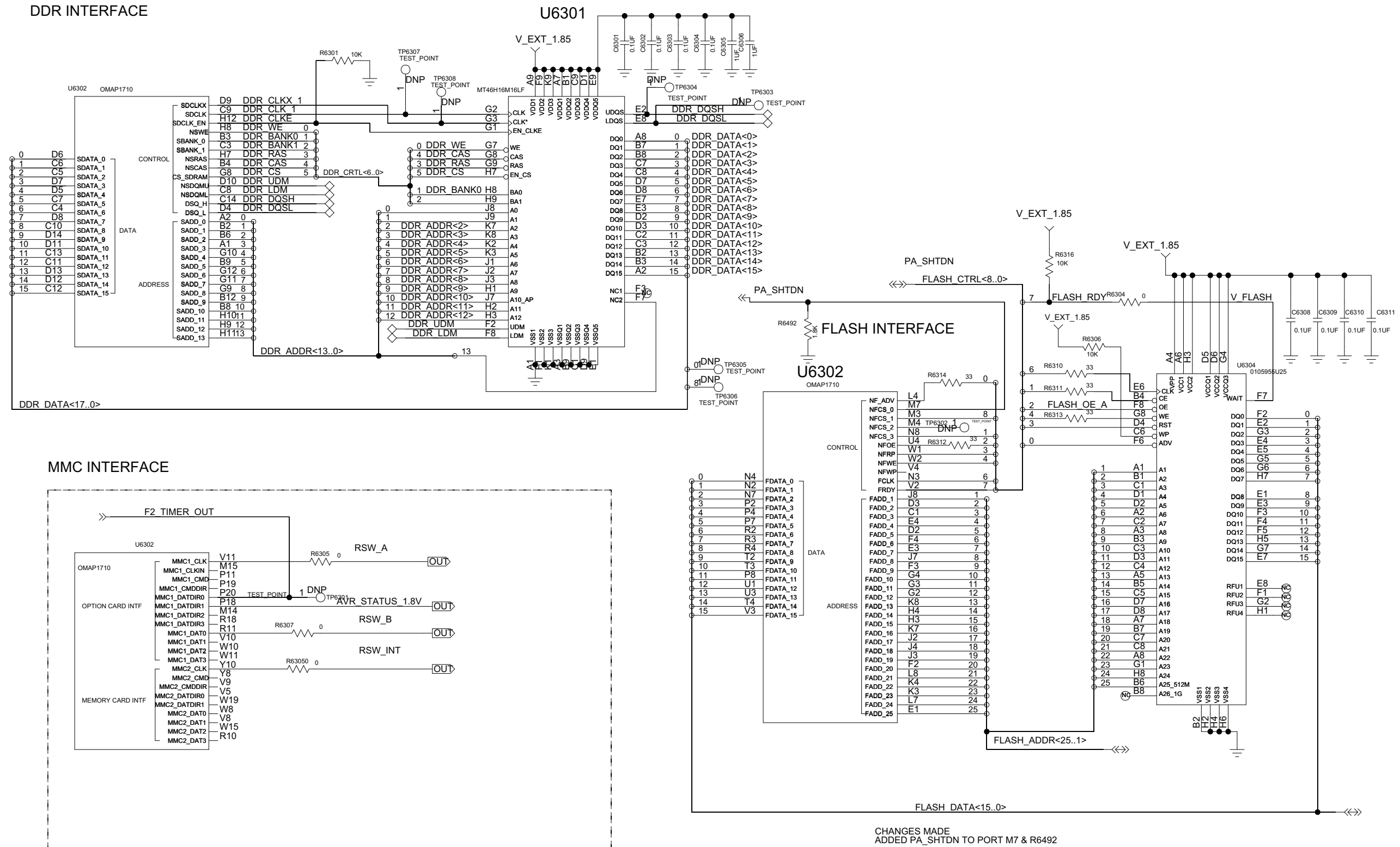
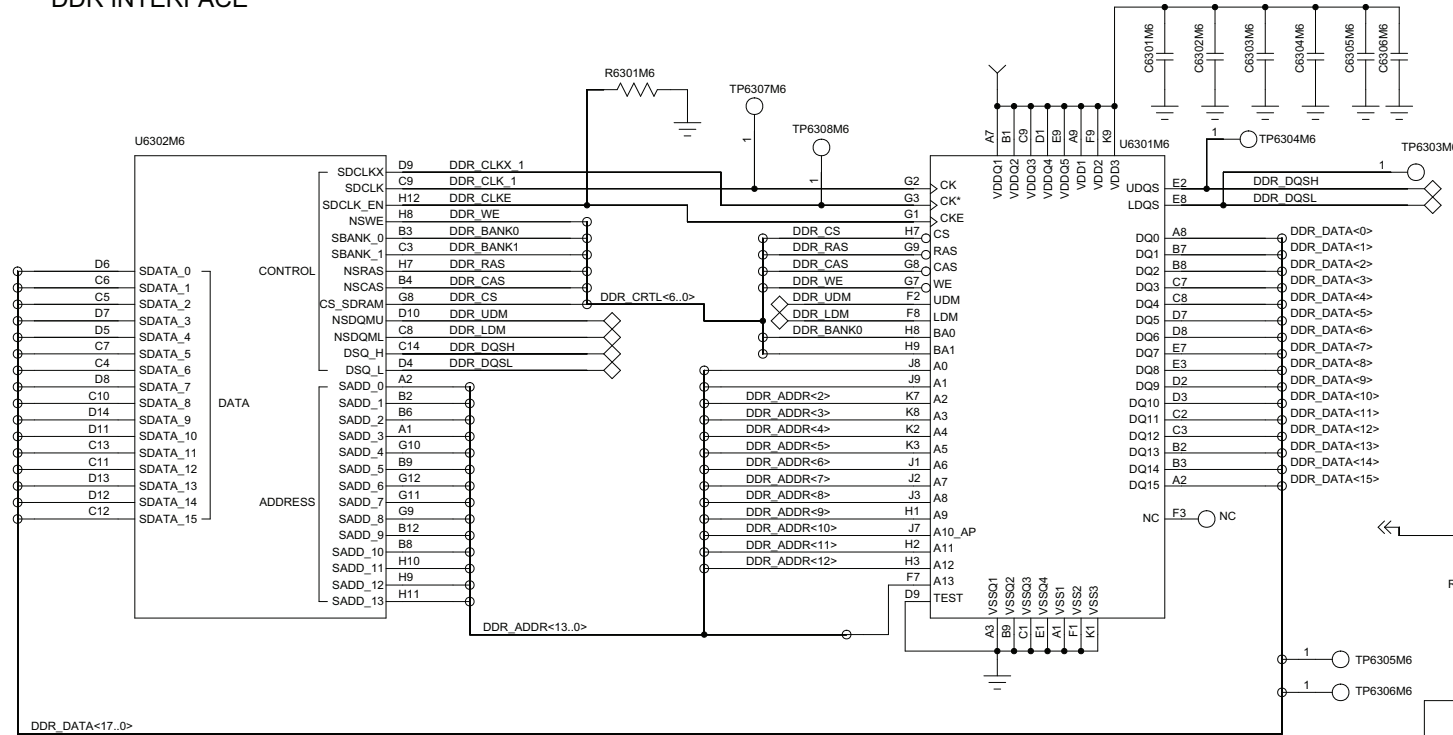


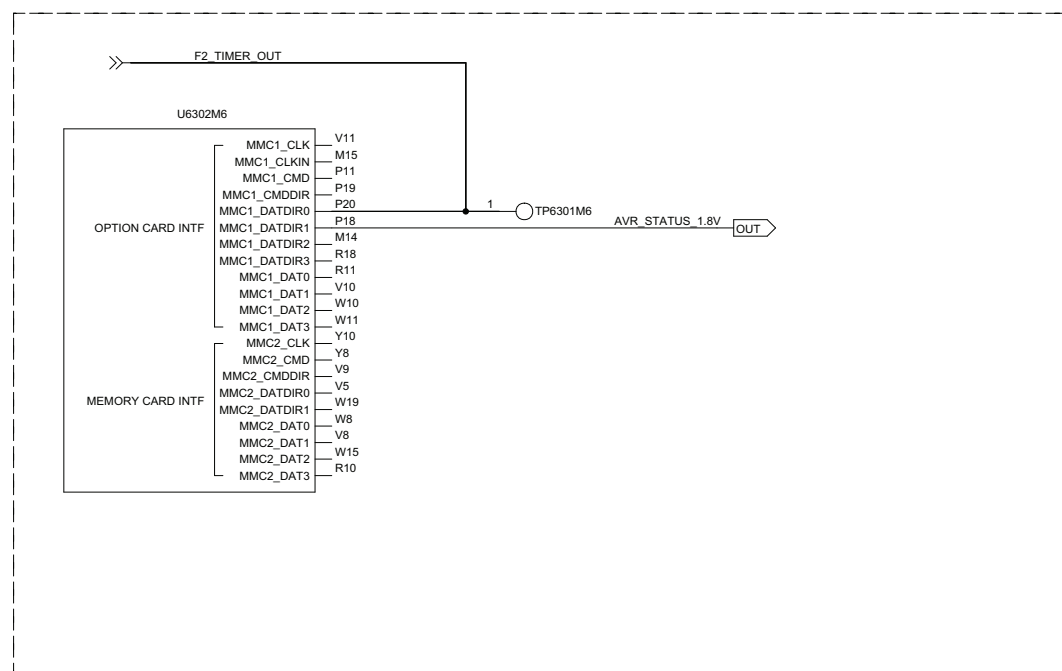
Figure 8-98. Memory Interface Circuit (84012432001)

CHANGES MADE  
ADDED PA\_SHTDN TO PORT M7 & R6492

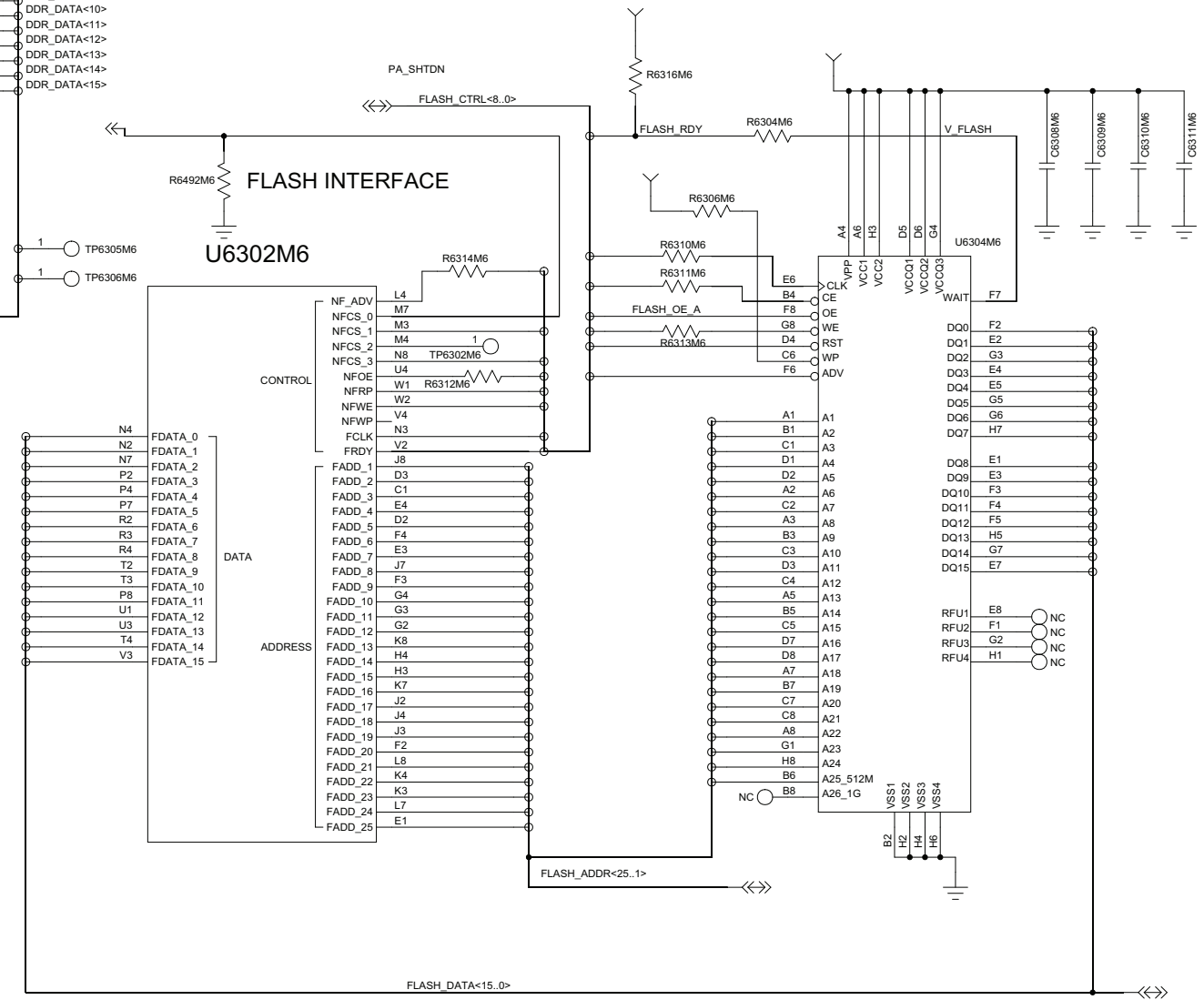
DDR INTERFACE



MMC INTERFACE



FLASH INTERFACE



CHANGES MADE  
ADDED PA\_SHTDN TO PORT M7 & R6492

Figure 8-99. Memory Interface Circuit (PC000354A01)

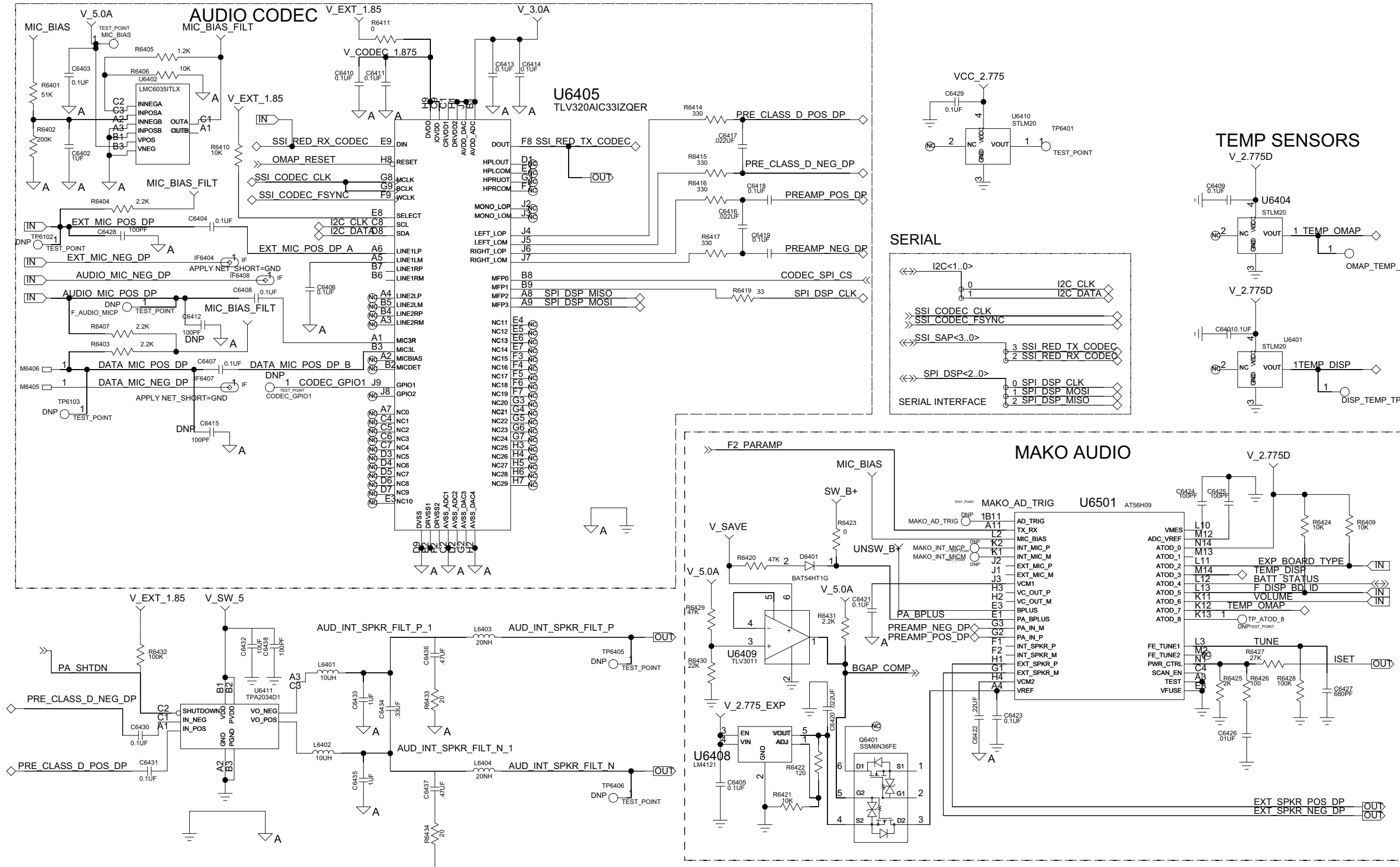


Figure 8-100. Audio Circuit (84012432001)

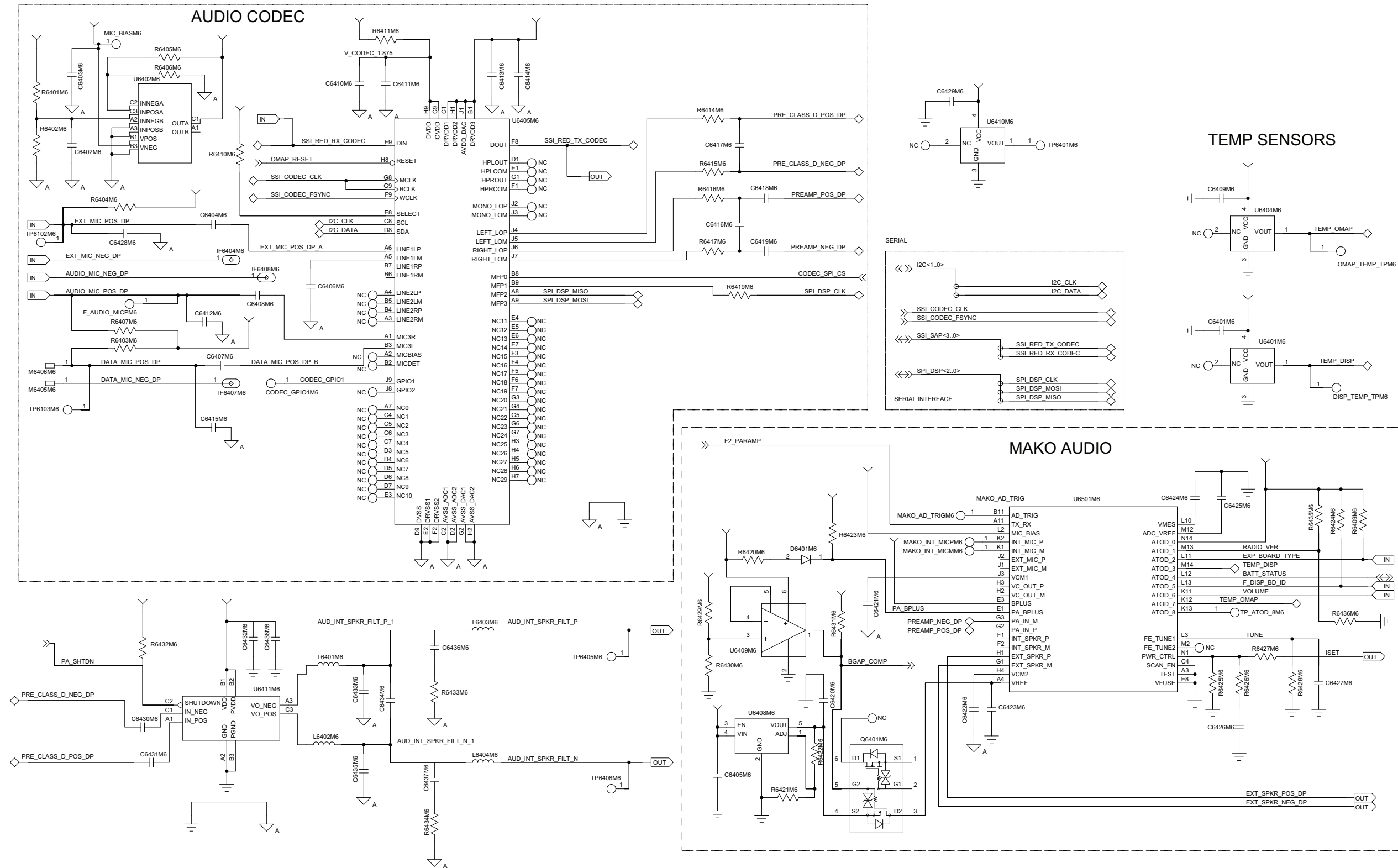


Figure 8-101. Audio Circuit (PC000354A01)

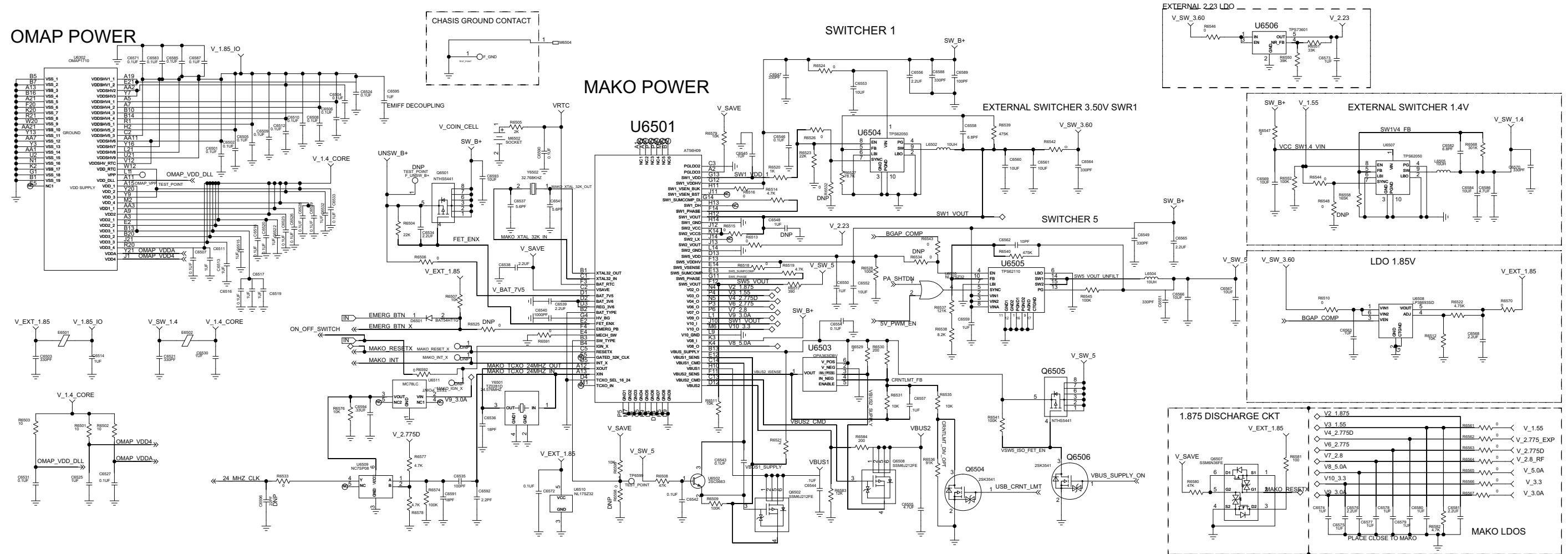


Figure 8-102. MAKO/DC Distribution Circuit (84012432001)



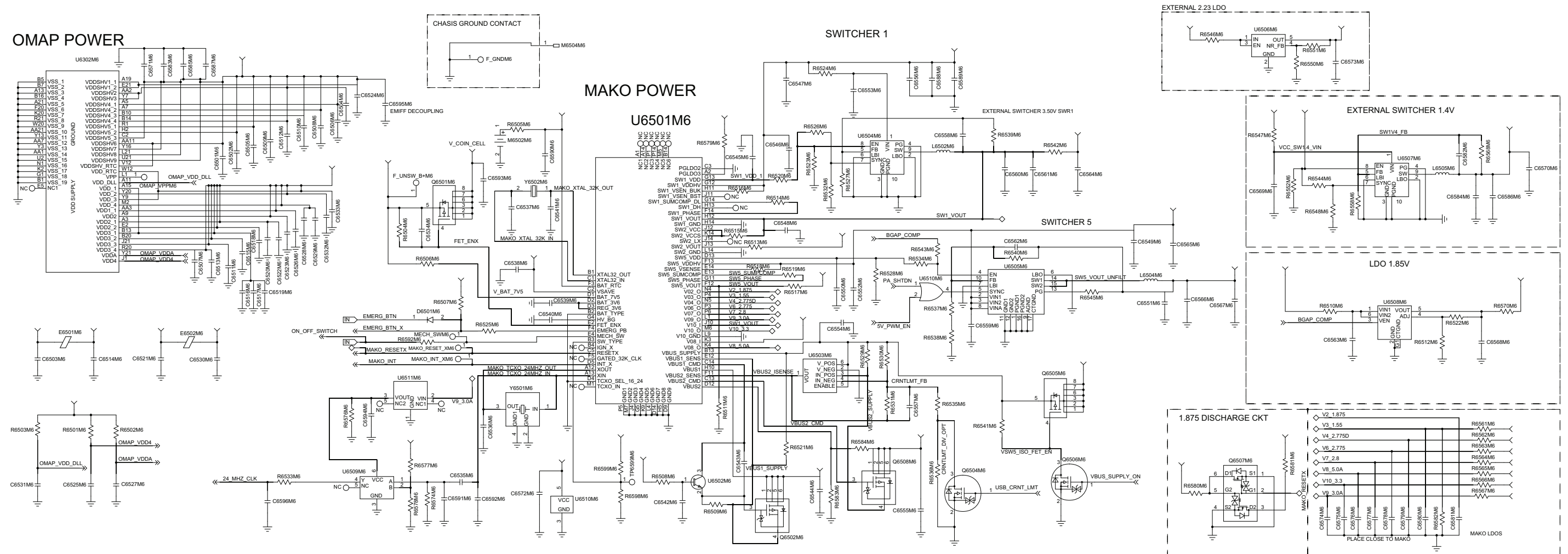


Figure 8-103. MAKO/DC Distribution Circuit (PC000354A01)

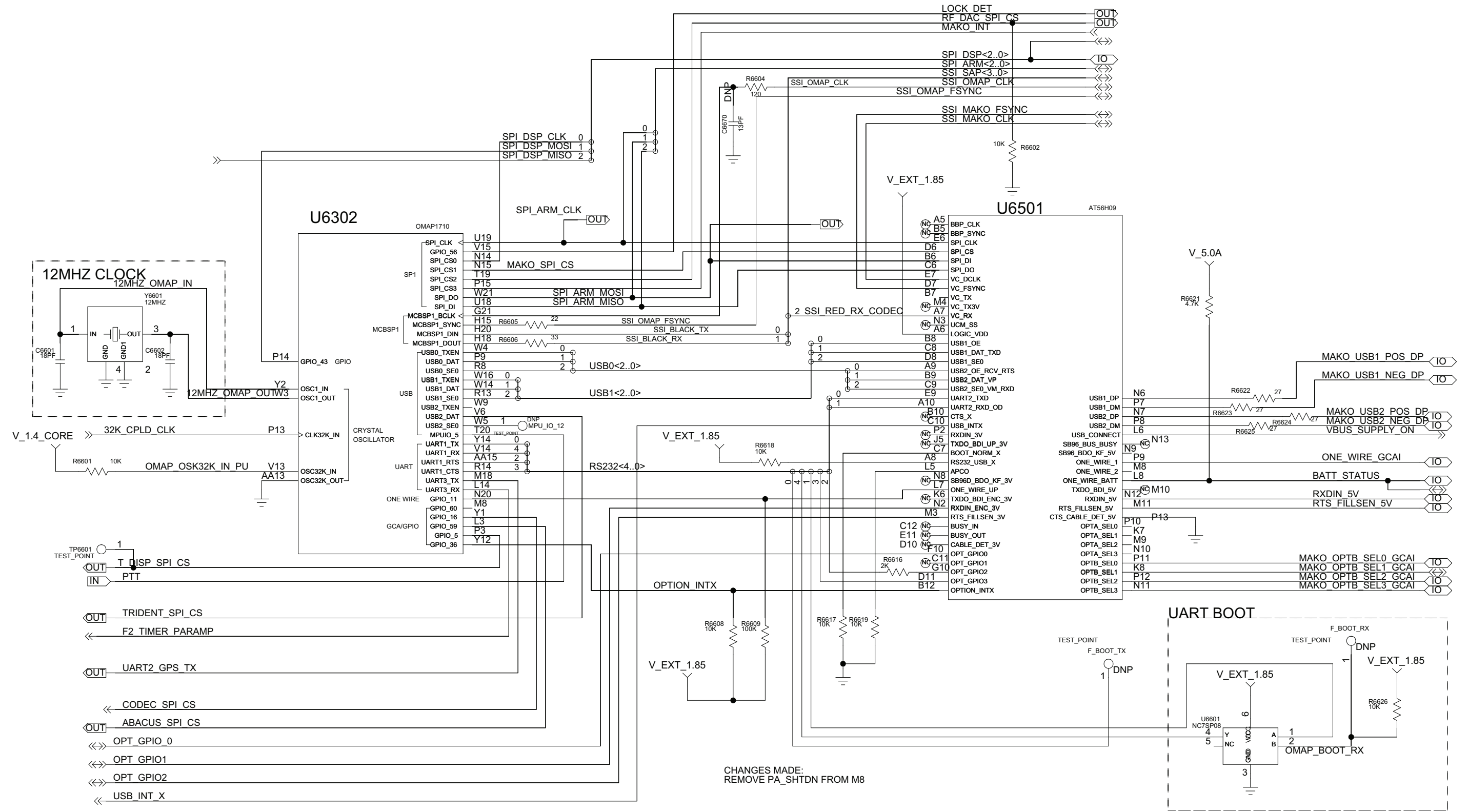


Figure 8-104. Serial Interface Circuit

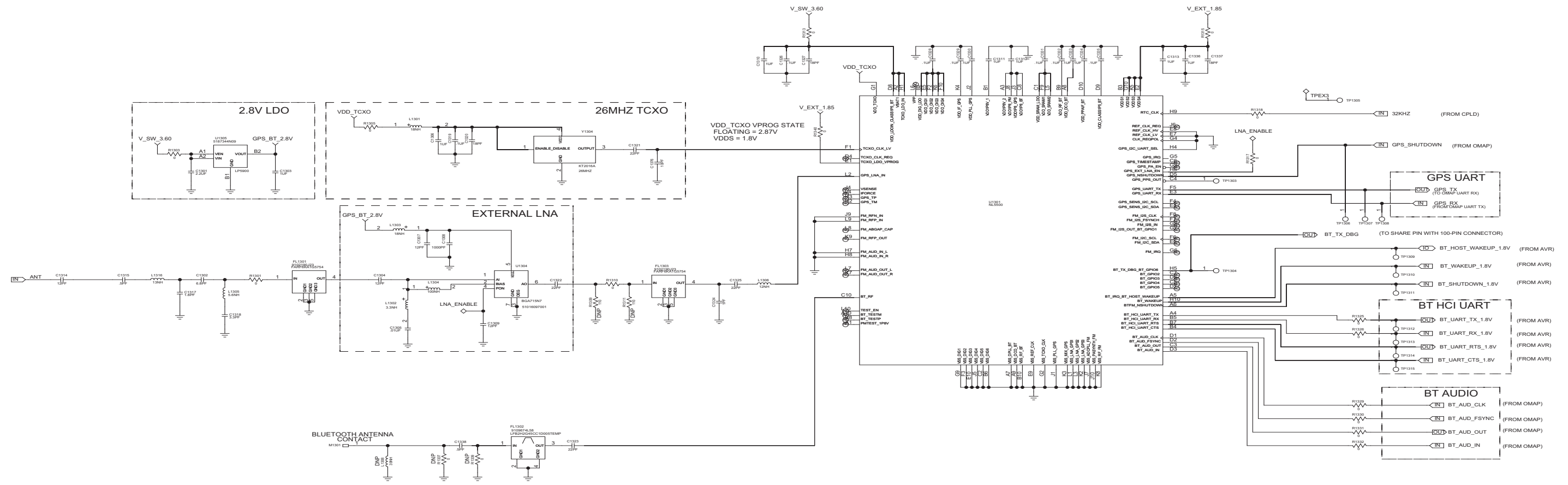


Figure 8-105. GPS Bluetooth Circuit

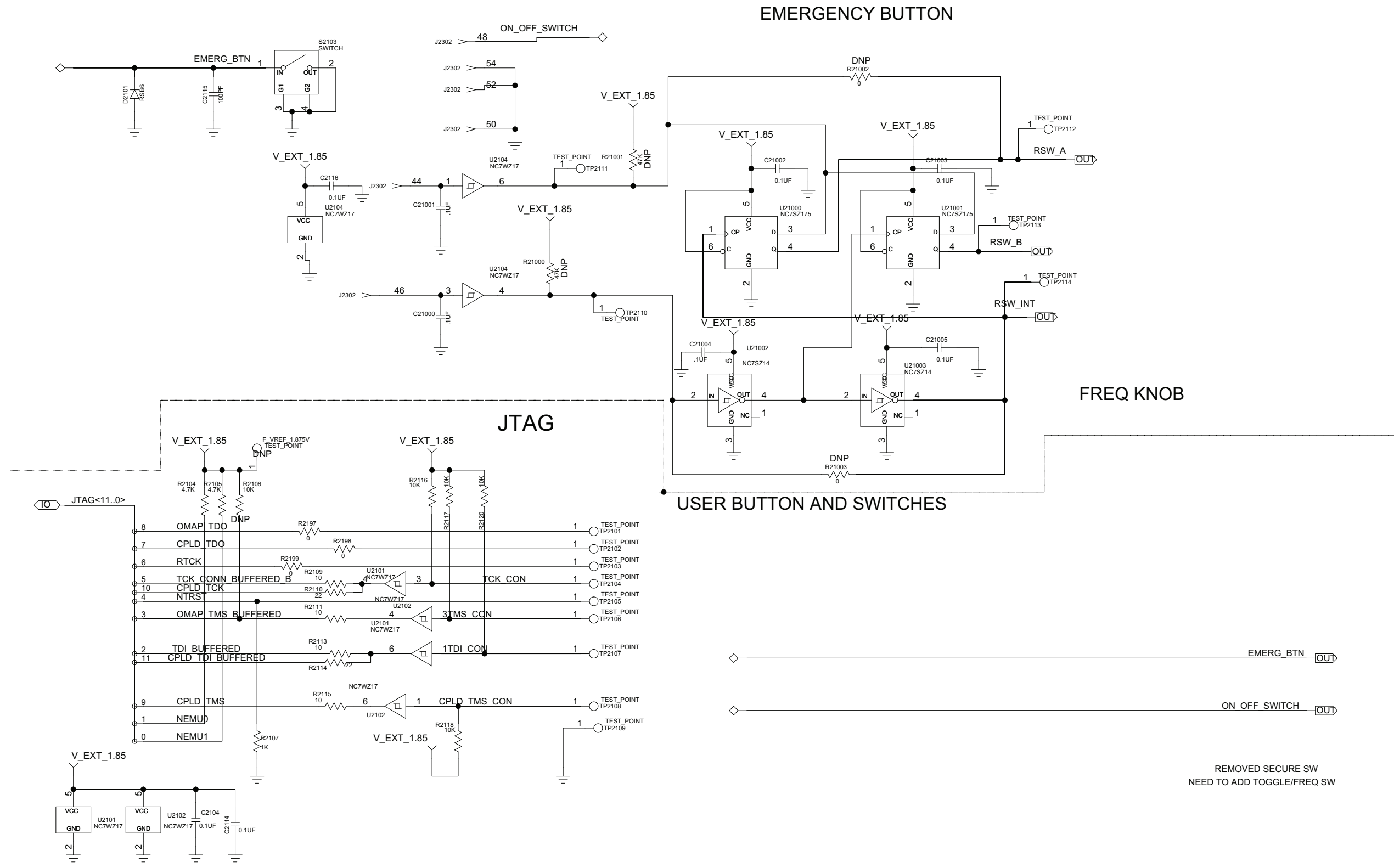
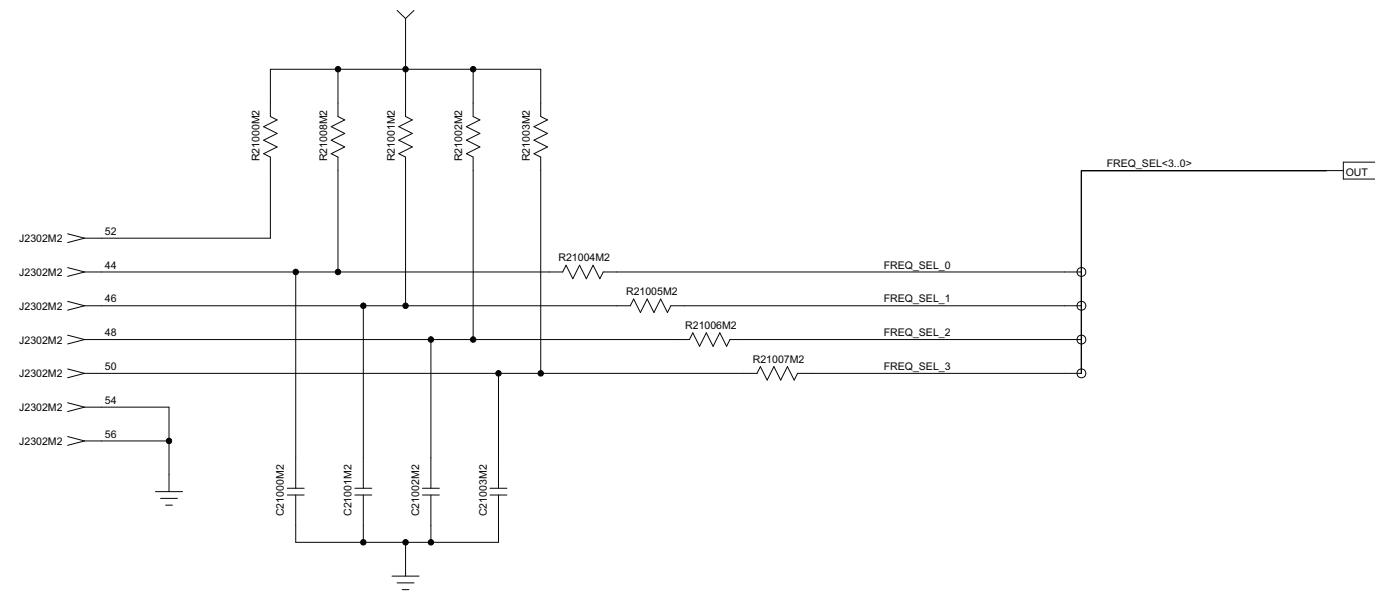
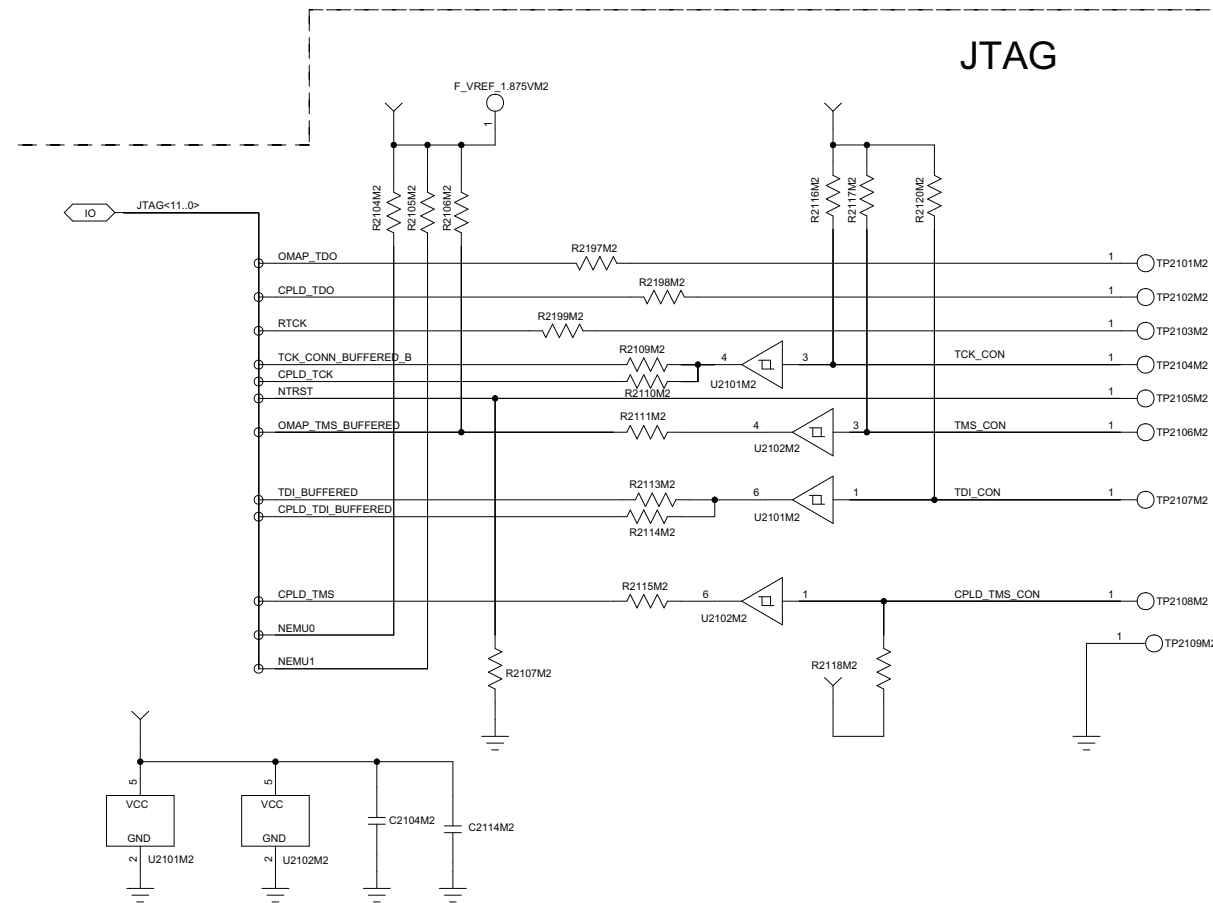


Figure 8-106. Controller Circuit (84012432001)

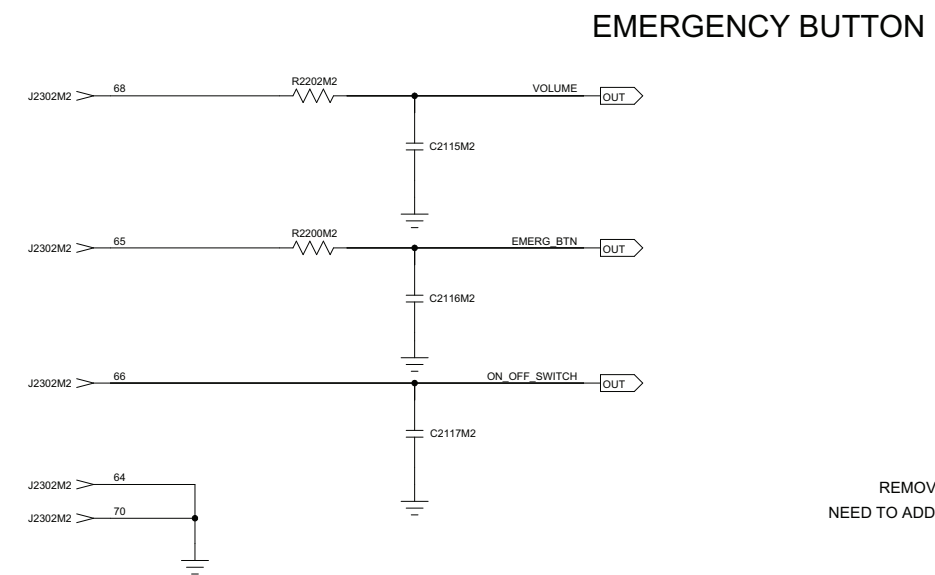
FREQ KNOB



JTAG



USER BUTTON AND SWITCHES



REMOVED SECURE SW  
NEED TO ADD TOGGLE/FREQ SW

Figure 8-107. Controller Circuit (PC000354A01)

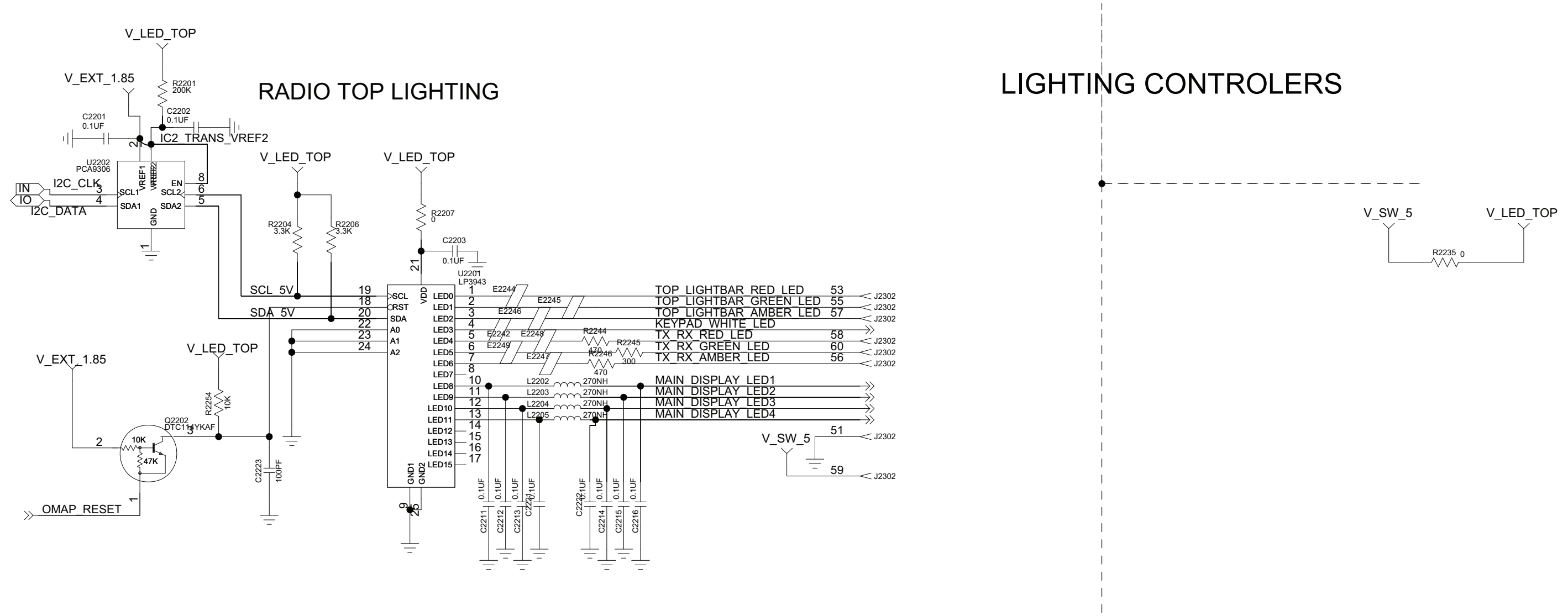
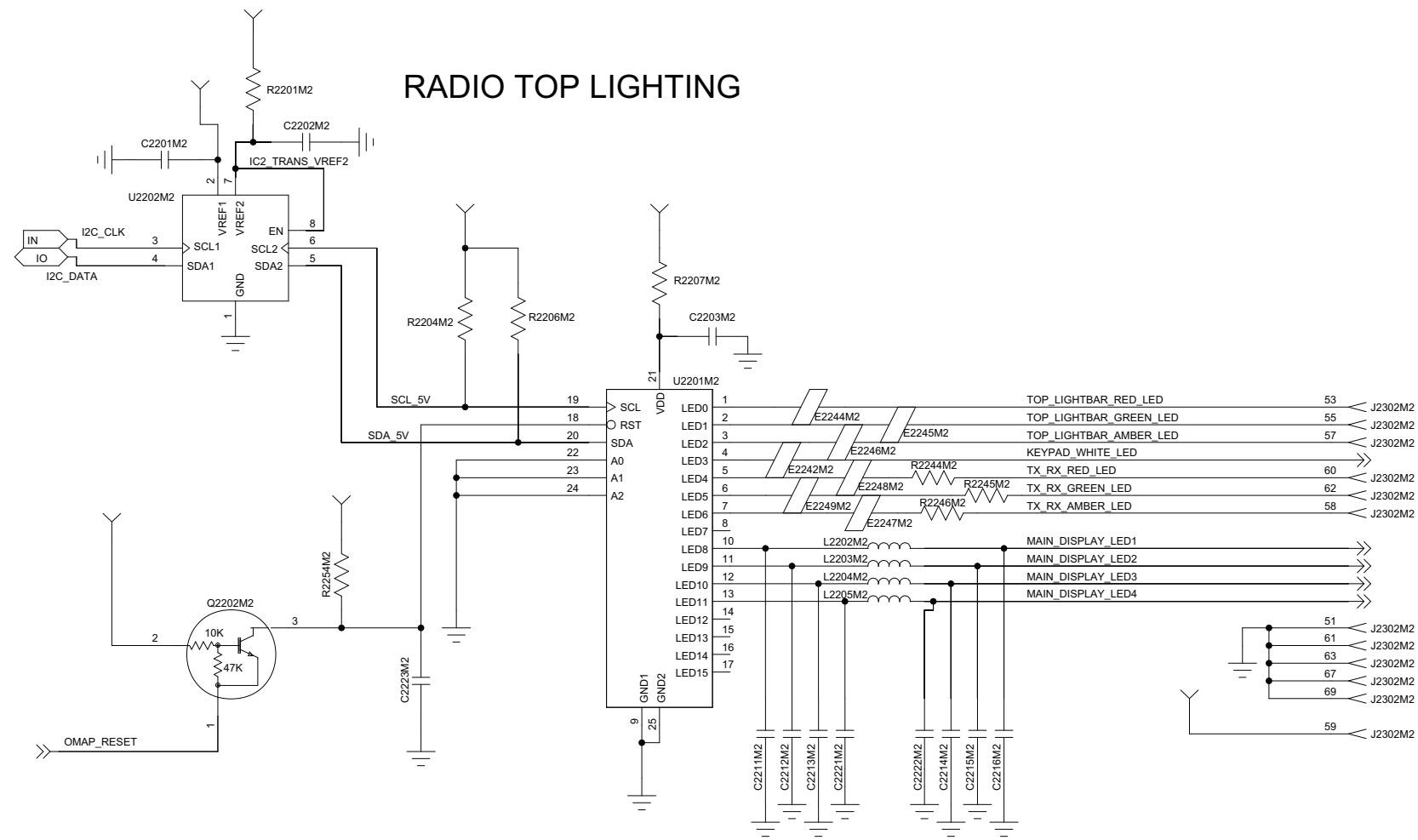


Figure 8-108. Display/Keypad Lighting Control Circuit (84012432001)



## LIGHTING CONTROLERS

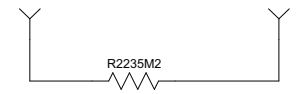


Figure 8-109. Display/Keypad Lighting Control Circuit (PC000354A01)

# FRONT DISPLAY

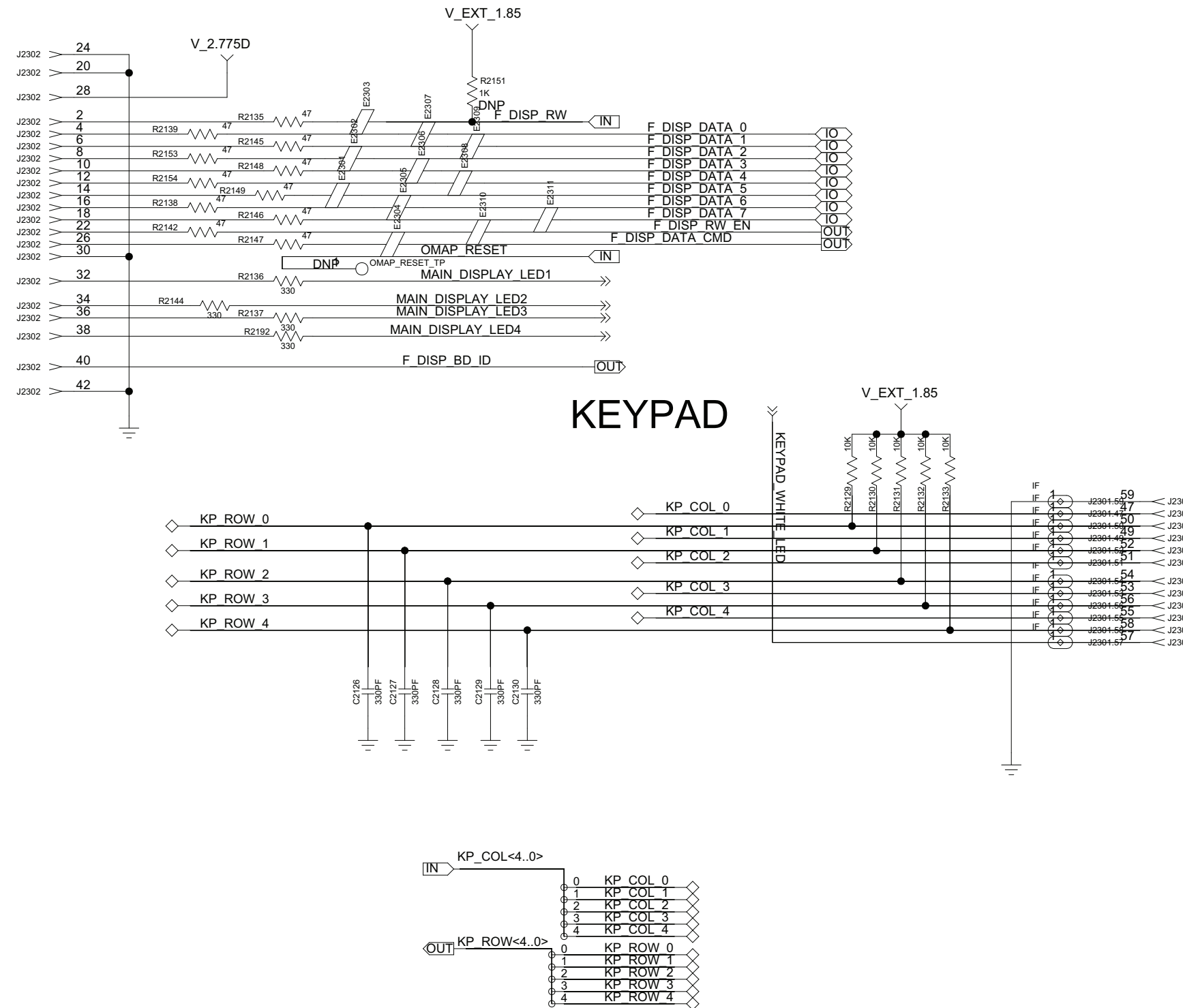
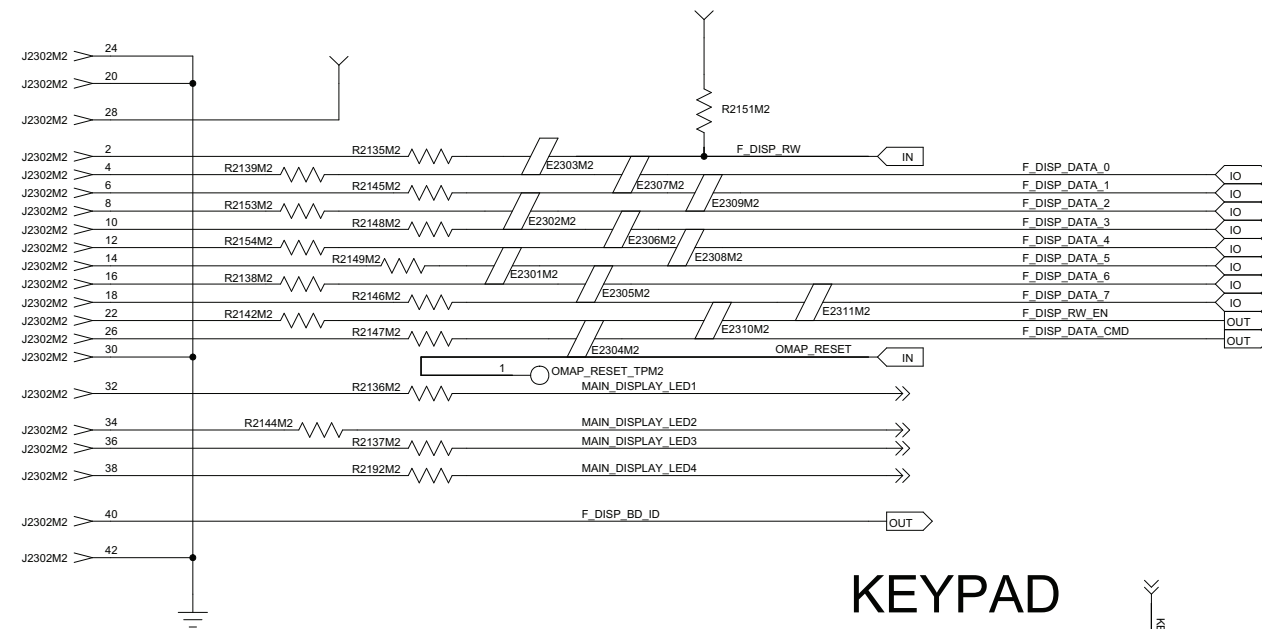


Figure 8-110. LCD and Keypad Connector Circuit (84012432001)



# FRONT DISPLAY



# KEYPAD

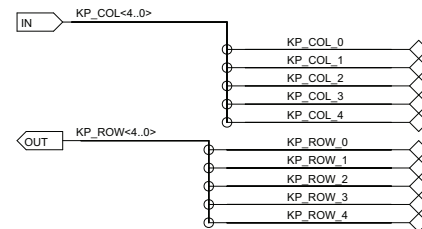
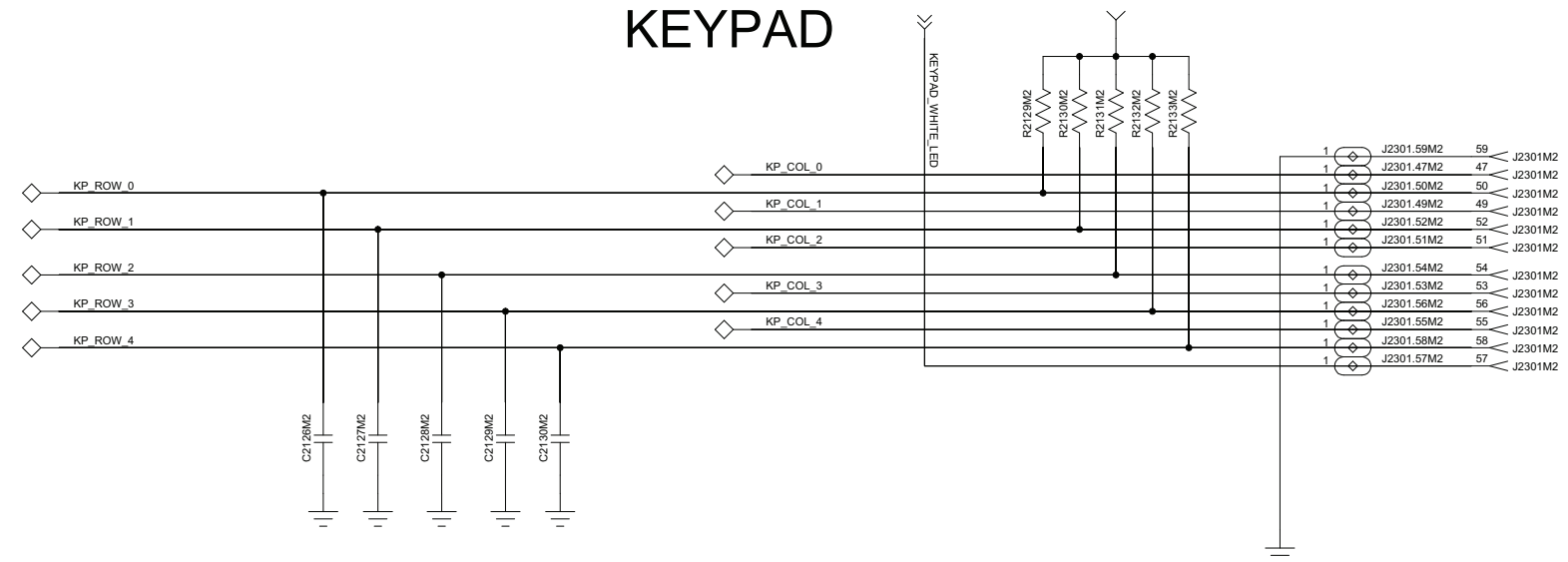


Figure 8-111. LCD and Keypad Connector Circuit (PC000354A01)

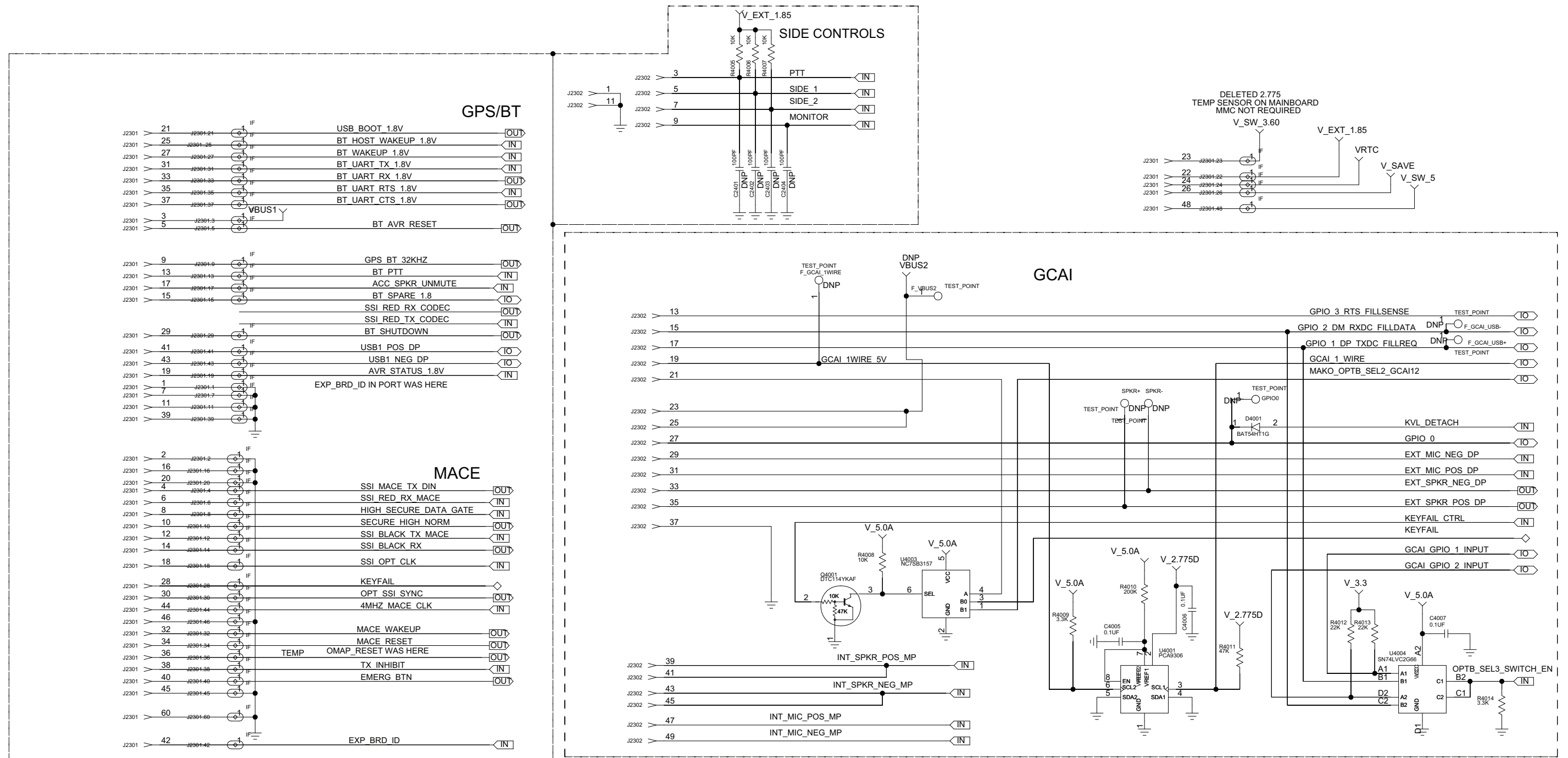


Figure 8-112. GCAI MACE BT Interconnect Circuit (84012432001)

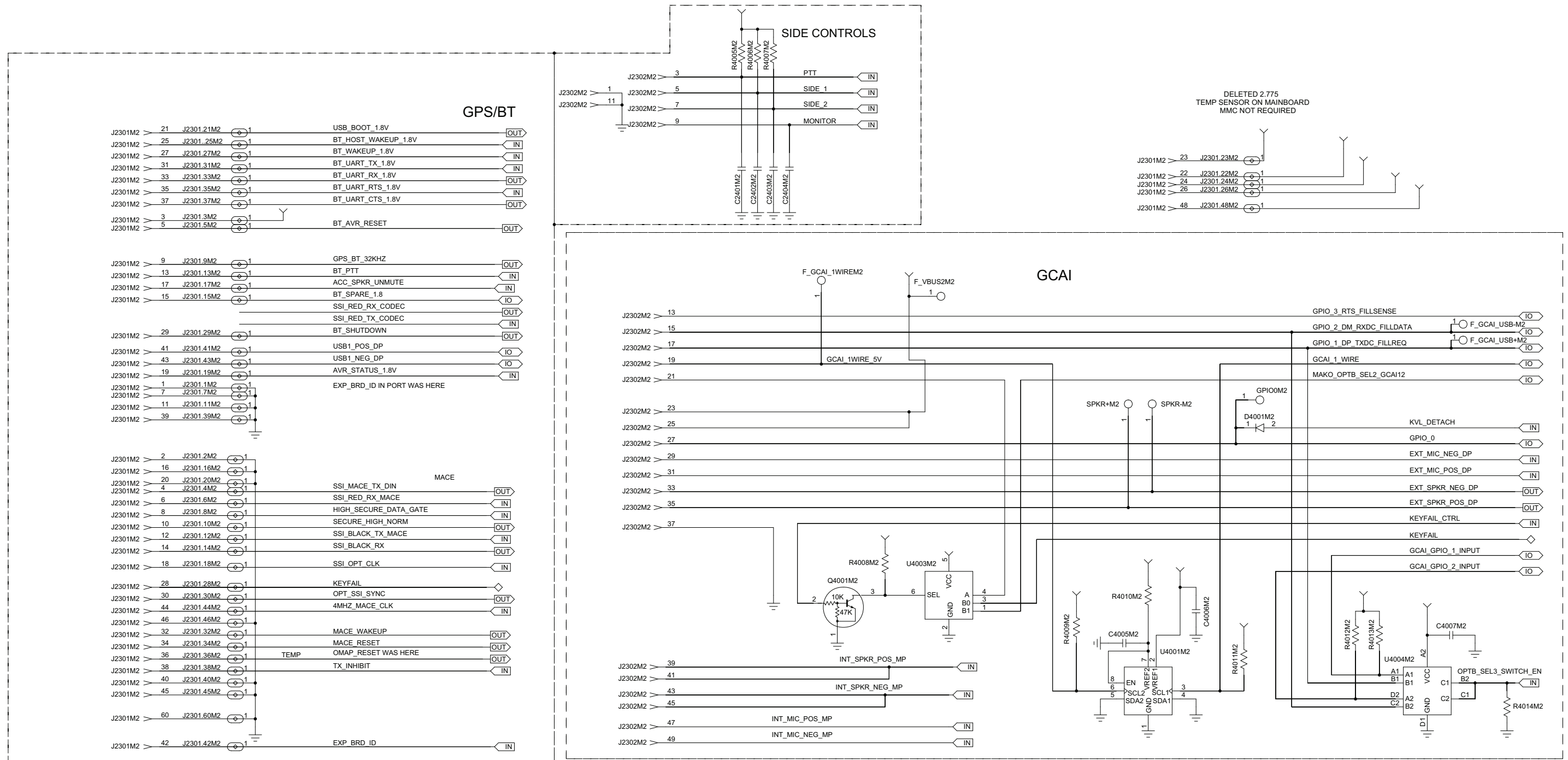


Figure 8-113. GCAI MACE BT Interconnect Circuit (PC000354A01)

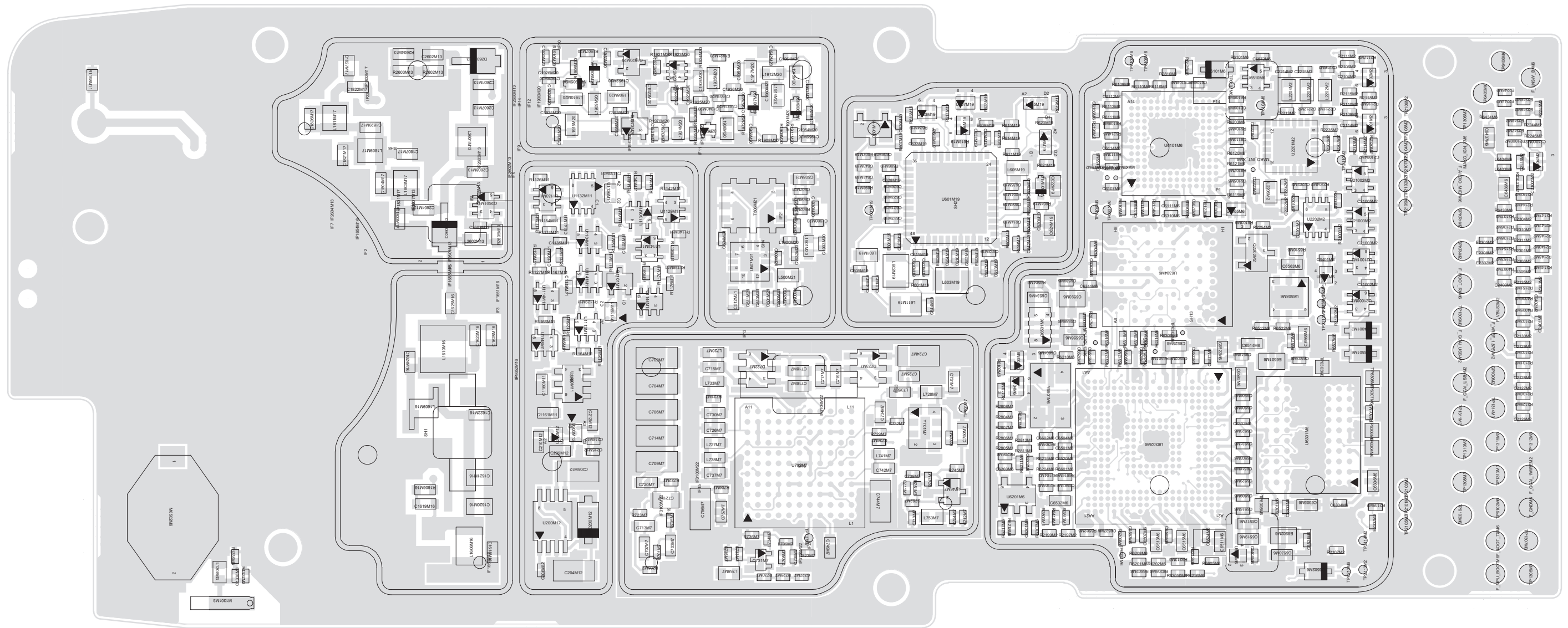


Figure 8-114. Transceiver (RF) Board Layout – Top Side (84012432001)

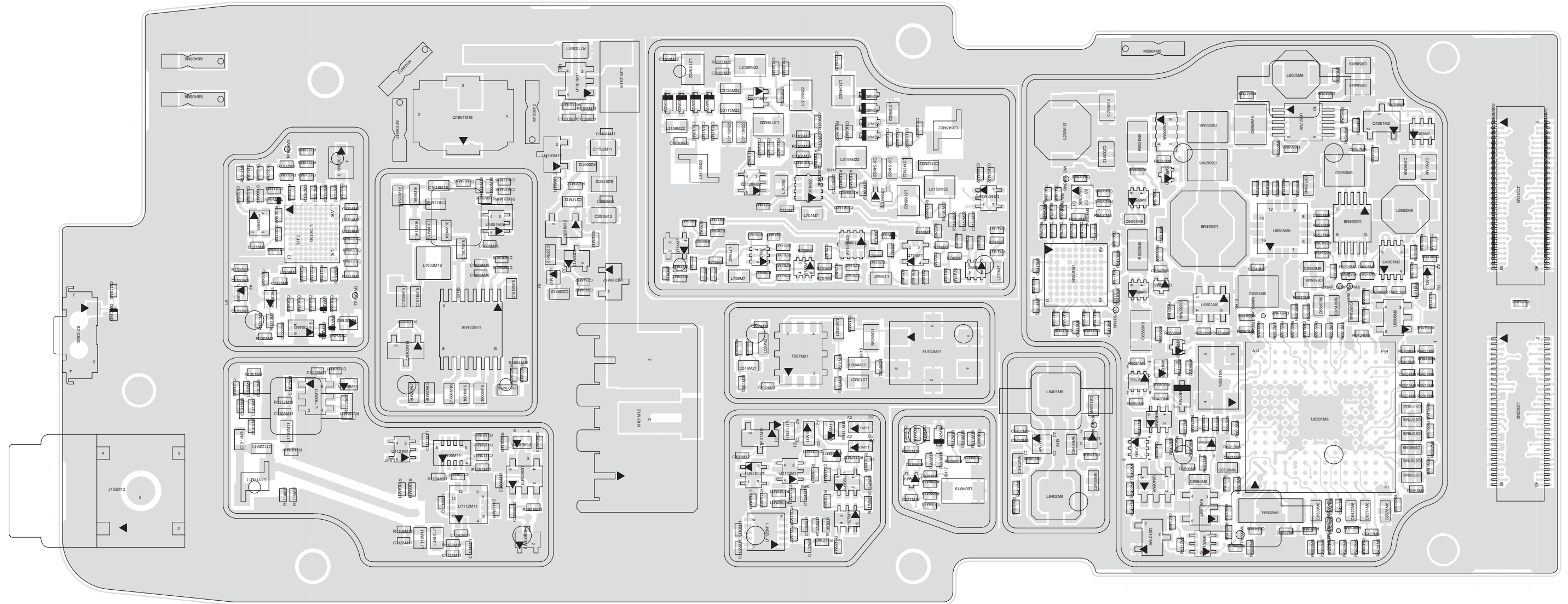


Figure 8-115. Transceiver (RF) Board Layout – Bottom Side (84012432001)

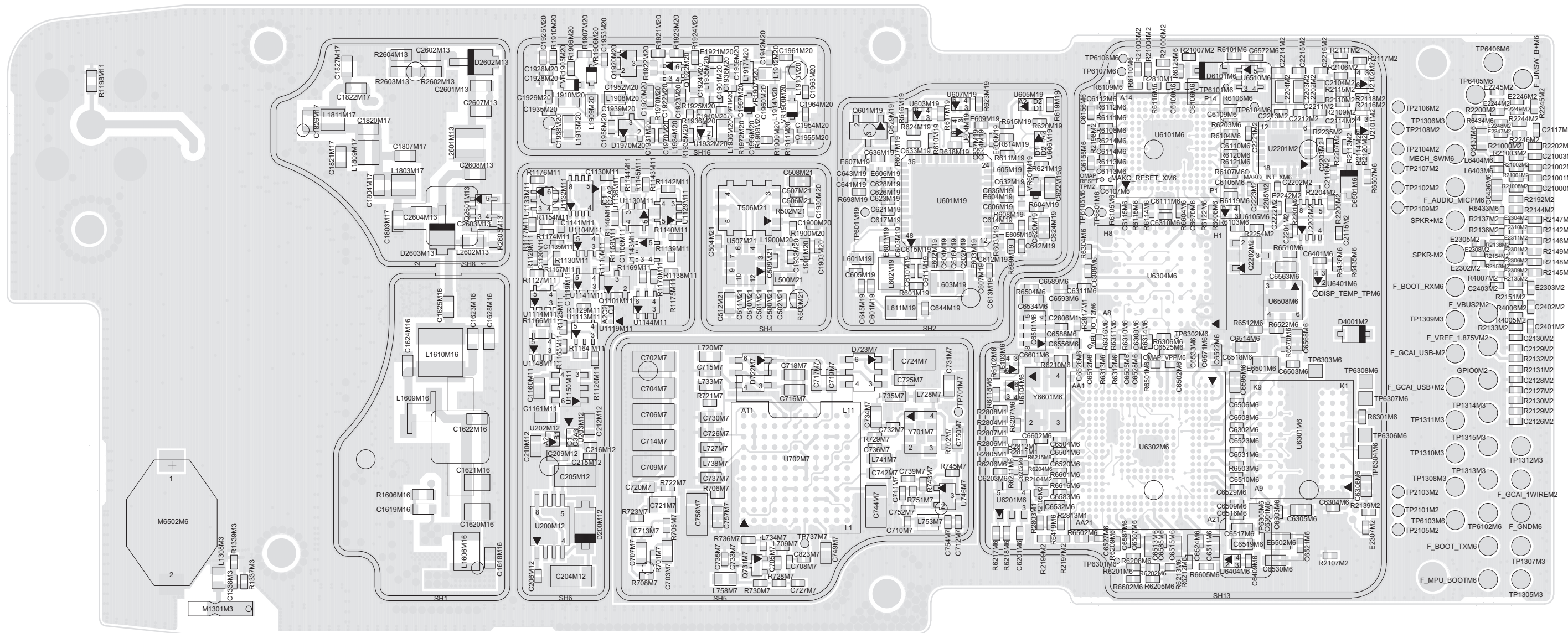


Figure 8-116. Transceiver (RF) Board Layout – Top Side (PC000354A01)

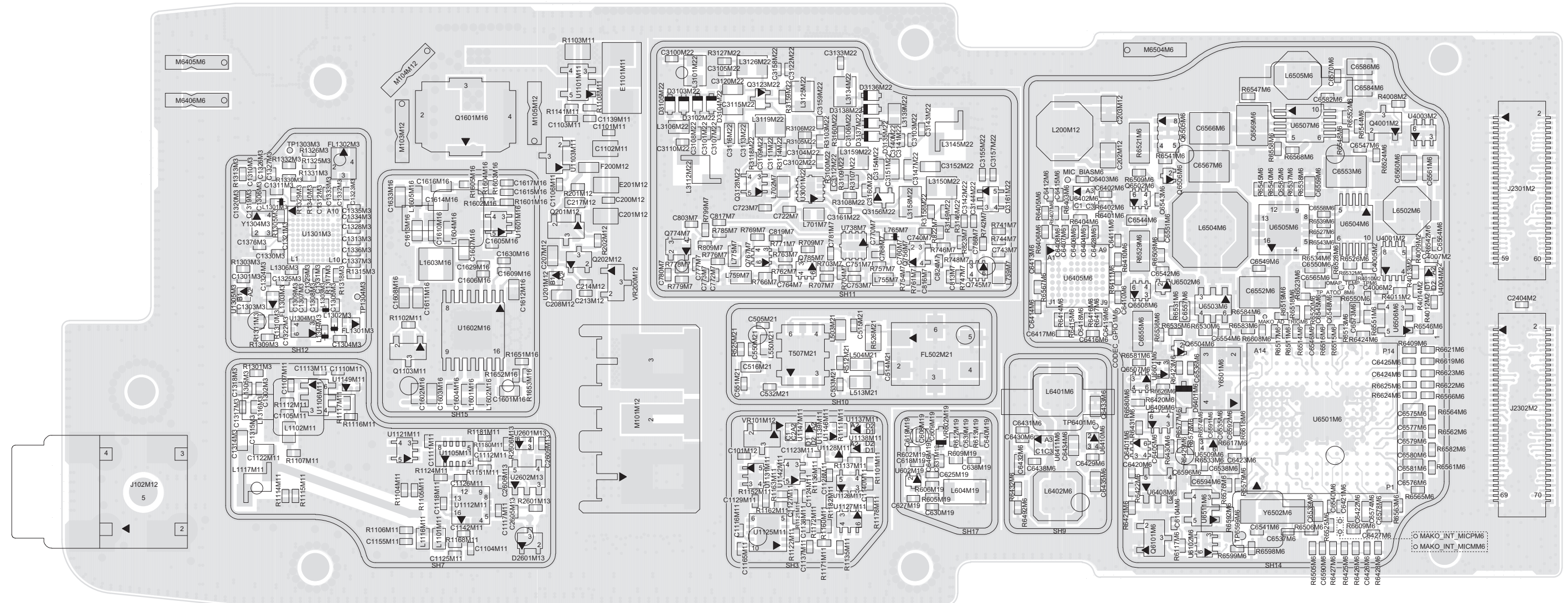


Figure 8-117. Transceiver (RF) Board Layout – Bottom Side (PC000354A01)

UHF2 Transceiver (RF) Board Parts List –  
84012432001

Ref. Des.	Part Number	Description
C101M12	2113944A40	CAP CER CHP 100.0PF 50V 5%
C1101M11	2113945B02	CAP CER CHP 10,000PF 25V 10%
C1102M11	21012118001	CAP,FXD,1UF,10%,25V-DC,X7R,0805,LEAD-FREE/ROHS COMPLIANT
C1103M11	2113945B02	CAP CER CHP 10,000PF 25V 10%
C1104M11	NOTPLACED	64AM DUMMY PART NUMBER
C1105M11	2113944A19	CAP CER CHP 5.6PF 50V +/- 0.5PF
C1106M11	2113945B02	CAP CER CHP 10,000PF 25V 10%
C1107M11	2113944A40	CAP CER CHP 100.0PF 50V 5%
C1108M11	2113946B02	CAP CER CHP 0.047UF 10V 10,
C1110M11	2113944A40	CAP CER CHP 100.0PF 50V 5%
C1111M11	2113945Y02	CAP,FXD,.1UF,+10%,-10%,16V-DC,0402,X7R,-55DEG CMIN,125DEG CMAX
C1112M11	2113945B01	CAP CER CHP 6800PF 25V 10%
C1113M11	2113945B02	CAP CER CHP 10,000PF 25V 10%
C1116M11	2113945Y02	CAP,FXD,.1UF,+10%,-10%,16V-DC,0402,X7R,-55DEG CMIN,125DEG CMAX
C1117M11	2113945A12	CAP CER CHP 3300PF 50V 10%
C1118M11	2113945B02	CAP CER CHP 10,000PF 25V 10%
C1119M11	2113945B02	CAP CER CHP 10,000PF 25V 10%

Ref. Des.	Part Number	Description
C1120M11	2113945B02	CAP CER CHP 10,000PF 25V 10%
C1122M11	2113944M04	CAP,FXD,2.7PF,.1PF+/-,50V-DC,0603,C0G,-55DEG CMIN,125DEG CMAX
C1123M11	2113945B02	CAP CER CHP 10,000PF 25V 10%
C1124M11	2113945A13	CAP CER CHP 4700PF 50V 10%
C1125M11	2113944A23	CAP CER CHP 8.2PF 50V +/- 0.5PF
C1126M11	2113945A09	CAP CER CHP 1000PF 50V 10%
C1127M11	2113945Y02	CAP,FXD,.1UF,+10%,-10%,16V-DC,0402,X7R,-55DEG CMIN,125DEG CMAX
C1128M11	2113945B02	CAP CER CHP 10,000PF 25V 10%
C1129M11	2113945B02	CAP CER CHP 10,000PF 25V 10%
C1130M11	2113945B02	CAP CER CHP 10,000PF 25V 10%
C1135M11	NOTPLACED	64AM DUMMY PART NUMBER
C1137M11	2113945B02	CAP CER CHP 10,000PF 25V 10%
C1138M11	2113945B02	CAP CER CHP 10,000PF 25V 10%
C1139M11	2113944A25	CAP CER CHP 10.0PF 50V +/- 0.5PF
C1140M11	2113945A13	CAP CER CHP 4700PF 50V 10%
C1141M11	2113945Y02	CAP,FXD,.1UF,+10%,-10%,16V-DC,0402,X7R,-55DEG CMIN,125DEG CMAX
C1142M11	2113945A09	CAP CER CHP 1000PF 50V 10%
C1155M11	NOTPLACED	64AM DUMMY PART NUMBER

Ref. Des.	Part Number	Description
C1160M11	2113945C31	CAP,FXD,.1UF,+10%,-10%,50V-DC,0603,X7R,-55DEG CMIN,125DEG CMAX
C1161M11	2113956B91	CAP,FXD,1UF,+10%,-10%,16V-DC,0603,X5R,-55DEG CMIN,85DEG CMAX,PB
C1165M11	2113945Y02	CAP,FXD,.1UF,+10%,-10%,16V-DC,0402,X7R,-55DEG CMIN,125DEG CMAX
C1301M3	21012119001	CAP,FXD,2.2UF,20%,6.3V-DC,-55DEG CMIN,85DEG CM,X5R,0402
C1302M3	2113944A21	CAP CER CHP 6.8PF 50V +/- 0.5PF
C1303M3	2113956A51	CAP,FXD,1UF,+10%,-10%,6.3V-DC,0402,X5R,-55DEG CMIN,85DEG CMAX,P
C1304M3	2113944A26	CAP CER CHP 12.0PF 50V 5%
C1305M3	2113945B02	CAP CER CHP 10,000PF 25V 10%
C1306M3	2187893N01	CAP 1UF, 6.3V, X5R, 0402 PACKAGE
C1307M3	2113944A26	CAP CER CHP 12.0PF 50V 5%
C1308M3	2113945A09	CAP CER CHP 1000PF 50V 10%
C1309M3	2113944A26	CAP CER CHP 12.0PF 50V 5%
C1310M3	2187893N01	CAP 1UF, 6.3V, X5R, 0402 PACKAGE
C1311M3	2113956A51	CAP,FXD,1UF,+10%,-10%,6.3V-DC,0402,X5R,-55DEG CMIN,85DEG CMAX,P
C1312M3	2113956A51	CAP,FXD,1UF,+10%,-10%,6.3V-DC,0402,X5R,-55DEG CMIN,85DEG CMAX,P
C1313M3	2187893N01	CAP 1UF, 6.3V, X5R, 0402 PACKAGE

Ref. Des.	Part Number	Description
C1314M3	2113944M20	CAP,FXD,12PF,+2%,-2%,50V-DC,0603,C0G,-55DEG CMIN,125DEG CMAX,PB
C1315M3	2175389H01	CAP,.5PF,CHIP,0402,CERAMIC,50V
C1317M3	2188881Y12	CAPACITOR CERAMIC NPO HIGH FREQUENCY 16 VOLT (REPLACES 2104801Z12)
C1318M3	2113944A13	CAP CER CHP 3.3PF 50V +/- 0.25PF
C1319M3	2113945Y02	CAP,FXD,.1UF,+10%,-10%,16V-DC,0402,X7R,-55DEG CMIN,125DEG CMAX
C1320M3	2113944A28	CAP CER CHP 18.0PF 50V 5%
C1321M3	2113944A29	CAP CER CHP 22.0PF 50V 5%
C1322M3	2113944A29	CAP CER CHP 22.0PF 50V 5%
C1323M3	2113944A29	CAP CER CHP 22.0PF 50V 5%
C1324M3	2115153H03	CAP, CERAMIC, COG
C1325M3	2113944A29	CAP CER CHP 22.0PF 50V 5%
C1326M3	2113945Y02	CAP,FXD,.1UF,+10%,-10%,16V-DC,0402,X7R,-55DEG CMIN,125DEG CMAX
C1327M3	2113944A28	CAP CER CHP 18.0PF 50V 5%
C1328M3	2113945Y02	CAP,FXD,.1UF,+10%,-10%,16V-DC,0402,X7R,-55DEG CMIN,125DEG CMAX
C1329M3	2113945Y02	CAP,FXD,.1UF,+10%,-10%,16V-DC,0402,X7R,-55DEG CMIN,125DEG CMAX
C1330M3	2113945Y02	CAP,FXD,.1UF,+10%,-10%,16V-DC,0402,X7R,-55DEG CMIN,125DEG CMAX



Ref. Des.	Part Number	Description	Ref. Des.	Part Number	Description	Ref. Des.	Part Number	Description	Ref. Des.	Part Number	Description
C1331M3	2113945Y02	CAP,FXD,.1UF,+10%,-10%,16V-DC,0402,X7R,-55DEG CMIN,125DEG CMAX	C1605M16	2113945B02	CAP CER CHP 10,000PF 25V 10%	C1620M16	2171741M06	HIGH Q CAP, 39 PF	C1901M20	2115153H57	CAP, CERAMIC, COG
C1332M3	2113945Y02	CAP,FXD,.1UF,+10%,-10%,16V-DC,0402,X7R,-55DEG CMIN,125DEG CMAX	C1606M16	2113944A40	CAP CER CHP 100.0PF 50V 5%	C1621M16	2171741M03	HIGH Q CAP	C1903M20	NOTPLACED	64AM DUMMY PART NUMBER
C1333M3	2113945Y02	CAP,FXD,.1UF,+10%,-10%,16V-DC,0402,X7R,-55DEG CMIN,125DEG CMAX	C1607M16	2113944M42	CAP,FXD,100PF,+2%,-2%,50V-DC,0603,C0G,-55DEG CMIN,125DEG CMAX,P	C1622M16	2113944M22	CAP,FXD,15PF,+2%,-2%,50V-DC,0603,C0G,-55DEG CMIN,125DEG CMAX,PB	C1920M20	2113946D07	CAP,CHIP,4.7UF,+10%,-10%,6.3V-DC,0603,X5R,-55DEG CMIN,85DEG CMA
C1334M3	2113945Y02	CAP,FXD,.1UF,+10%,-10%,16V-DC,0402,X7R,-55DEG CMIN,125DEG CMAX	C1608M16	2113944M42	CAP,FXD,100PF,+2%,-2%,50V-DC,0603,C0G,-55DEG CMIN,125DEG CMAX,P	C1623M16	NOTPLACED	64AM DUMMY PART NUMBER	C1922M20	2113944A40	CAP CER CHP 100.0PF 50V 5%
C1335M3	2113945Y02	CAP,FXD,.1UF,+10%,-10%,16V-DC,0402,X7R,-55DEG CMIN,125DEG CMAX	C1609M16	2113944A40	CAP CER CHP 100.0PF 50V 5%	C1624M16	2113944M20	CAP,FXD,12PF,+2%,-2%,50V-DC,0603,C0G,-55DEG CMIN,125DEG CMAX,PB	C1923M20	2113944A40	CAP CER CHP 100.0PF 50V 5%
C1336M3	2113945Y02	CAP,FXD,.1UF,+10%,-10%,16V-DC,0402,X7R,-55DEG CMIN,125DEG CMAX	C1610M16	2113944M14	CAP,FXD,6.8PF,.1PF+/-,50V-DC,0603,C0G,-55DEG CMIN,125DEG CMAX	C1625M16	2113944M42	CAP,FXD,100PF,+2%,-2%,50V-DC,0603,C0G,-55DEG CMIN,125DEG CMAX,P	C1924M20	2113946D07	CAP,CHIP,4.7UF,+10%,-10%,6.3V-DC,0603,X5R,-55DEG CMIN,85DEG CMA
C1337M3	2113944A28	CAP CER CHP 18.0PF 50V 5%	C1611M16	2113945L49	CAP,FXD,.01UF,+5%,-5%,50V-DC,0603,X7R,-55DEG CMIN,125DEG CMAX,P	C1628M16	2113944M05	CAP,FXD,3PF,.1PF+/-,50V-DC,0603,C0G,-55DEG CMIN,125DEG CMAX,PB	C1925M20	2113944A40	CAP CER CHP 100.0PF 50V 5%
C1338M3	2175389H01	CAP,.5PF,CHIP,0402,CERAMIC,50V	C1612M16	NOTPLACED	64AM DUMMY PART NUMBER	C1629M16	2113945A12	CAP CER CHP 3300PF 50V 10%	C1926M20	2113946B04	CAP CER CHP 0.10UF 10V 10%
C1376M3	2113944A25	CAP CER CHP 10.0PF 50V +/- 0.5PF	C1613M16	2113944M30	CAP,FXD,33PF,+2%,-2%,50V-DC,0603,C0G,-55DEG CMIN,125DEG CMAX,PB	C1630M16	2113945A12	CAP CER CHP 3300PF 50V 10%	C1928M20	2115153H15	CAP, CERAMIC, COG
C1601M16	2113944M42	CAP,FXD,100PF,+2%,-2%,50V-DC,0603,C0G,-55DEG CMIN,125DEG CMAX,P	C1614M16	2113944M34	CAP,FXD,47PF,+2%,-2%,50V-DC,0603,C0G,-55DEG CMIN,125DEG CMAX,PB	C1633M16	NOTPLACED	64AM DUMMY PART NUMBER	C1929M20	2115153H19	CAP, CERAMIC, COG
C1602M16	2113944M42	CAP,FXD,100PF,+2%,-2%,50V-DC,0603,C0G,-55DEG CMIN,125DEG CMAX,P	C1615M16	2113944A40	CAP CER CHP 100.0PF 50V 5%	C1803M17	2113944C22	CAP CER CHP 4.7PF 50V +/- 0.25PF	C1930M20	NOTPLACED	64AM DUMMY PART NUMBER
C1603M16	2113945L49	CAP,FXD,.01UF,+5%,-5%,50V-DC,0603,X7R,-55DEG CMIN,125DEG CMAX,P	C1616M16	2113944M34	CAP,FXD,47PF,+2%,-2%,50V-DC,0603,C0G,-55DEG CMIN,125DEG CMAX,PB	C1804M17	2113944C20	CAP CER CHP 3.9PF 50V +/- 0.25PF	C1931M20	2115153H54	CAP, CERAMIC, COG
C1604M16	2113944M42	CAP,FXD,100PF,+2%,-2%,50V-DC,0603,C0G,-55DEG CMIN,125DEG CMAX,P	C1617M16	2113945B02	CAP CER CHP 10,000PF 25V 10%	C1807M17	2113944C24	CAP CER CHP 5.6PF 50V +/- 0.5PF	C1932M20	NOTPLACED	64AM DUMMY PART NUMBER
			C1618M16	2113944M42	CAP,FXD,100PF,+2%,-2%,50V-DC,0603,C0G,-55DEG CMIN,125DEG CMAX,P	C1820M17	2113944C18	CAP CER CHP 3.3PF 50V +/- 0.25PF	C1935M20	2115153H13	CAP, CERAMIC, COG
			C1619M16	2113945C02	CAP CER CHP 10,000PF 50V 10%	C1821M17	2113944C25	CAP CER CHP 6.2PF 50V +/- 0.5PF	C1936M20	2115153H26	CAP, CERAMIC, COG
						C1822M17	2113944C45	CAP CER CHP 100.0PF 50V 5%	C1938M20	2115153H28	CAP, CERAMIC, COG
						C1826M17	2113944C13	CAP CER CHP 2.0PF 50V +/- 0.25PF	C1939M20	2115153H13	CAP, CERAMIC, COG
						C1827M17	2113944C18	CAP CER CHP 3.3PF 50V +/- 0.25PF	C1940M20	2113944A40	CAP CER CHP 100.0PF 50V 5%
						C1900M20	2115153H25	CAP, CERAMIC, COG	C1942M20	2115153H37	CAP, CERAMIC, COG
									C1952M20	2115153H19	CAP, CERAMIC, COG
									C1953M20	2115153H15	CAP, CERAMIC, COG
									C1954M20	2113944A40	CAP CER CHP 100.0PF 50V 5%
									C1955M20	2113946B04	CAP CER CHP 0.10UF 10V 10%
									C1956M20	2115153H15	CAP, CERAMIC, COG

Ref. Des.	Part Number	Description	Ref. Des.	Part Number	Description	Ref. Des.	Part Number	Description	Ref. Des.	Part Number	Description
C1957M20	2115153H29	CAP, CERAMIC, COG	C21000M2	2113945Y02	CAP,FXD,.1UF,+10%,-10%,16V-DC,0402,X7R,-55DEG CMIN,125DEG CMAX	C213M12	2113944A46	CAP CER CHP 330.0 PF 50V 5%	C2404M2	NOTPLACED	64AM DUMMY PART NUMBER
C1958M20	2115153H35	CAP, CERAMIC, COG	C21001M2	2113945Y02	CAP,FXD,.1UF,+10%,-10%,16V-DC,0402,X7R,-55DEG CMIN,125DEG CMAX	C214M12	2113944A40	CAP CER CHP 100.0PF 50V 5%	C2601M13	2113944C45	CAP CER CHP 100.0PF 50V 5%
C1959M20	2115153H13	CAP, CERAMIC, COG	C21002M2	2113946B04	CAP CER CHP 0.10UF 10V 10%	C215M12	2113944A46	CAP CER CHP 330.0 PF 50V 5%	C2602M13	2113944C39	CAP CER CHP 56.0PF 50V 5%
C1960M20	2115153H30	CAP, CERAMIC, COG	C21003M2	2113946B04	CAP CER CHP 0.10UF 10V 10%	C216M12	2113944A40	CAP CER CHP 100.0PF 50V 5%	C2603M13	2113944A40	CAP CER CHP 100.0PF 50V 5%
C1961M20	2115153H13	CAP, CERAMIC, COG	C21004M2	2113945Y02	CAP,FXD,.1UF,+10%,-10%,16V-DC,0402,X7R,-55DEG CMIN,125DEG CMAX	C217M12	2113956B91	CAP,FXD,1UF,+10%,-10%,16V-DC,0603,X5R,-55DEG CMIN,85DEG CMAX,PB	C2604M13	2113944C45	CAP CER CHP 100.0PF 50V 5%
C1963M20	2115153H29	CAP, CERAMIC, COG	C21005M2	2113946B04	CAP CER CHP 0.10UF 10V 10%	C2201M2	2113946B04	CAP CER CHP 0.10UF 10V 10%	C2605M13	2113944A40	CAP CER CHP 100.0PF 50V 5%
C1964M20	2115153H15	CAP, CERAMIC, COG	C2104M2	2113946B04	CAP CER CHP 0.10UF 10V 10%	C2202M2	2113946B04	CAP CER CHP 0.10UF 10V 10%	C2606M13	2113944A40	CAP CER CHP 100.0PF 50V 5%
C1970M20	2115153H12	CAP, CERAMIC, COG	C210M12	2113956B91	CAP,FXD,1UF,+10%,-10%,16V-DC,0603,X5R,-55DEG CMIN,85DEG CMAX,PB	C2203M2	2113946B04	CAP CER CHP 0.10UF 10V 10%	C2607M13	2113944C17	CAP CER CHP 3.0PF 50V +/- 0.25PF
C1971M20	2115153H07	CAP, CERAMIC, COG	C2114M2	2113946B04	CAP CER CHP 0.10UF 10V 10%	C2211M2	2113946B04	CAP CER CHP 0.10UF 10V 10%	C2608M13	2113944C13	CAP CER CHP 2.0PF 50V +/- 0.25PF
C200M12	2113945B02	CAP CER CHP 10,000PF 25V 10%	C2115M2	2113944A40	CAP CER CHP 100.0PF 50V 5%	C2212M2	2113946B04	CAP CER CHP 0.10UF 10V 10%	C2609M13	2113946K02	CAP CER CHP 0.10UF 16V
C201M12	21012118001	CAP,FXD,1UF,10%,25V-DC,X7R,0805,LEAD-FREE/ROHS COMPLIANT	C2116M2	2113946B04	CAP CER CHP 0.10UF 10V 10%	C2213M2	2113946B04	CAP CER CHP 0.10UF 10V 10%	C2806M1	NOTPLACED	64AM DUMMY PART NUMBER
C202M12	21012118001	CAP,FXD,1UF,10%,25V-DC,X7R,0805,LEAD-FREE/ROHS COMPLIANT	C2126M2	2113944A46	CAP CER CHP 330.0 PF 50V 5%	C2214M2	2113946B04	CAP CER CHP 0.10UF 10V 10%	C3100M22	2113944A40	CAP CER CHP 100.0PF 50V 5%
C203M12	21012118001	CAP,FXD,1UF,10%,25V-DC,X7R,0805,LEAD-FREE/ROHS COMPLIANT	C2127M2	2113944A46	CAP CER CHP 330.0 PF 50V 5%	C2215M2	2113946B04	CAP CER CHP 0.10UF 10V 10%	C3101M22	2115153H12	CAP, CERAMIC, COG
C204M12	2113955D35	CAP,FXD,4.7UF,+10%,-10%,16V-DC,1206,X7R,-55DEG CMIN,125DEG CMAX	C2128M2	2113944A46	CAP CER CHP 330.0 PF 50V 5%	C2216M2	2113946B04	CAP CER CHP 0.10UF 10V 10%	C3102M22	2113944A44	CAP CER CHP 220.0 PF 50V 5%
C205M12	2113955D35	CAP,FXD,4.7UF,+10%,-10%,16V-DC,1206,X7R,-55DEG CMIN,125DEG CMAX	C2129M2	2113944A46	CAP CER CHP 330.0 PF 50V 5%	C2221M2	2113946B04	CAP CER CHP 0.10UF 10V 10%	C3103M22	NOTPLACED	64AM DUMMY PART NUMBER
C206M12	2113945B02	CAP CER CHP 10,000PF 25V 10%	C212M12	2113946D07	CAP,CHIP,4.7UF,+10%,-10%,6.3V-DC,0603,X5R,-55DEG CMIN,85DEG CMA	C2222M2	2113946B04	CAP CER CHP 0.10UF 10V 10%	C3104M22	NOTPLACED	64AM DUMMY PART NUMBER
C207M12	2113956B91	CAP,FXD,1UF,+10%,-10%,16V-DC,0603,X5R,-55DEG CMIN,85DEG CMAX,PB	C2130M2	2113944A46	CAP CER CHP 330.0 PF 50V 5%	C2223M2	2113944A40	CAP CER CHP 100.0PF 50V 5%	C3105M22	2113944A40	CAP CER CHP 100.0PF 50V 5%
C208M12	2113956B91	CAP,FXD,1UF,+10%,-10%,16V-DC,0603,X5R,-55DEG CMIN,85DEG CMAX,PB				C2401M2	NOTPLACED	64AM DUMMY PART NUMBER	C3106M22	2113944A40	CAP CER CHP 100.0PF 50V 5%
C209M12	2113956B91	CAP,FXD,1UF,+10%,-10%,16V-DC,0603,X5R,-55DEG CMIN,85DEG CMAX,PB				C2402M2	NOTPLACED	64AM DUMMY PART NUMBER	C3107M22	2115153H12	CAP, CERAMIC, COG
						C2403M2	NOTPLACED	64AM DUMMY PART NUMBER	C3108M22	2115153H12	CAP, CERAMIC, COG
									C3109M22	2113946B04	CAP CER CHP 0.10UF 10V 10%
									C3110M22	2115153H18	CAP, CERAMIC, COG

Ref. Des.	Part Number	Description	Ref. Des.	Part Number	Description	Ref. Des.	Part Number	Description	Ref. Des.	Part Number	Description
C3111M22	2113944A40	CAP CER CHP 100.0PF 50V 5%	C3157M22	2113946B04	CAP CER CHP 0.10UF 10V 10%	C512M21	2113946D07	CAP,CHIP,4.7UF,+10%,-10%,6.3V-DC,0603,X5R,-55DEG CMIN,85DEG CMA	C6107M6	2113946B04	CAP CER CHP 0.10UF 10V 10%
C3112M22	2113944A44	CAP CER CHP 220.0 PF 50V 5%	C3158M22	2113946B04	CAP CER CHP 0.10UF 10V 10%	C514M21	NOTPLACED	64AM DUMMY PART NUMBER	C6108M6	2113946B04	CAP CER CHP 0.10UF 10V 10%
C3113M22	2113944M06	CAP,FXD,3.3PF,.1PF+/-,50V-DC,0603,C0G,-55DEG CMIN,125DEG CMAX	C3159M22	2115153H12	CAP, CERAMIC, COG	C515M21	2113944A14	CAP CER CHP 3.6PF 50V +/- 0.25PF	C6109M6	2113946B04	CAP CER CHP 0.10UF 10V 10%
C3115M22	2113944M08	CAP,FXD,3.9PF,.1PF+/-,50V-DC,0603,C0G,-55DEG CMIN,125DEG CMAX	C3160M22	2115153H11	CAP, CERAMIC, COG	C516M21	2113944M42	CAP,FXD,100PF,+2%,-2%,50V-DC,0603,C0G,-55DEG CMIN,125DEG CMAX,P	C610M19	2113944A40	CAP CER CHP 100.0PF 50V 5%
C3116M22	2113944M09	CAP,FXD,4.3PF,.1PF+/-,50V-DC,0603,C0G,-55DEG CMIN,125DEG CMAX	C3161M22	2113944A44	CAP CER CHP 220.0 PF 50V 5%	C532M21	2113944A32	CAP CER CHP 39.0PF 50V 5%	C6110M6	2113946B04	CAP CER CHP 0.10UF 10V 10%
C3120M22	2113944M34	CAP,FXD,47PF,+2%,-2%,50V-DC,0603,C0G,-55DEG CMIN,125DEG CMAX,PB	C4005M2	2113946B04	CAP CER CHP 0.10UF 10V 10%	C533M21	2115153H52	CAP, CERAMIC, COG	C6111M6	2113946B04	CAP CER CHP 0.10UF 10V 10%
C3122M22	2113944A40	CAP CER CHP 100.0PF 50V 5%	C4006M2	2113946B04	CAP CER CHP 0.10UF 10V 10%	C550M21	NOTPLACED	64AM DUMMY PART NUMBER	C6112M6	2113946B04	CAP CER CHP 0.10UF 10V 10%
C3133M22	2113944A40	CAP CER CHP 100.0PF 50V 5%	C4007M2	2113946B04	CAP CER CHP 0.10UF 10V 10%	C551M21	NOTPLACED	64AM DUMMY PART NUMBER	C6113M6	2113946B04	CAP CER CHP 0.10UF 10V 10%
C3140M22	2115153H24	CAP, CERAMIC, COG	C500M21	2113945B05	CAP,FXD,.033UF,+10%,-10%,25V-DC,0402,X7R,-55DEG CMIN,125DEG CMA	C601M19	2113945B02	CAP CER CHP 10,000PF 25V 10%	C6114M6	2113946B04	CAP CER CHP 0.10UF 10V 10%
C3141M22	2115153H24	CAP, CERAMIC, COG	C501M21	2113944A32	CAP CER CHP 39.0PF 50V 5%	C602M19	2113945B02	CAP CER CHP 10,000PF 25V 10%	C6115M6	2113946B04	CAP CER CHP 0.10UF 10V 10%
C3142M22	2113946B04	CAP CER CHP 0.10UF 10V 10%	C502M21	2113945B05	CAP,FXD,.033UF,+10%,-10%,25V-DC,0402,X7R,-55DEG CMIN,125DEG CMA	C603M19	2113945B02	CAP CER CHP 10,000PF 25V 10%	C611M19	2113944A40	CAP CER CHP 100.0PF 50V 5%
C3143M22	2115153H25	CAP, CERAMIC, COG	C504M21	2113944A40	CAP CER CHP 100.0PF 50V 5%	C604M19	2113945B02	CAP CER CHP 10,000PF 25V 10%	C612M19	2113945B02	CAP CER CHP 10,000PF 25V 10%
C3144M22	2113944A40	CAP CER CHP 100.0PF 50V 5%	C505M21	NOTPLACED	64AM DUMMY PART NUMBER	C605M19	2113944A15	CAP CER CHP 3.9PF 50V +/- 0.25PF	C613M19	2113944A40	CAP CER CHP 100.0PF 50V 5%
C3147M22	2113944M15	CAP,FXD,7.5PF,.1PF+/-,50V-DC,0603,C0G,-55DEG CMIN,125DEG CMAX	C506M21	2113944A32	CAP CER CHP 39.0PF 50V 5%	C606M19	2113946B04	CAP CER CHP 0.10UF 10V 10%	C614M19	2113945B02	CAP CER CHP 10,000PF 25V 10%
C3151M22	2113944M12	CAP,FXD,5.6PF,.1PF+/-,50V-DC,0603,C0G,-55DEG CMIN,125DEG CMAX	C507M21	2113945B05	CAP,FXD,.033UF,+10%,-10%,25V-DC,0402,X7R,-55DEG CMIN,125DEG CMA	C607M19	2113944A40	CAP CER CHP 100.0PF 50V 5%	C6155M6	NOTPLACED	64AM DUMMY PART NUMBER
C3152M22	2113944M13	CAP,FXD,6.2PF,.1PF+/-,50V-DC,0603,C0G,-55DEG CMIN,125DEG CMAX	C508M21	2113946D07	CAP,CHIP,4.7UF,+10%,-10%,6.3V-DC,0603,X5R,-55DEG CMIN,85DEG CMA	C608M19	2113944A12	CAP CER CHP 3.0PF 50V +/- 0.25PF	C6156M6	NOTPLACED	64AM DUMMY PART NUMBER
C3154M22	2113944M40	CAP,FXD,82PF,+2%,-2%,50V-DC,0603,C0G,-55DEG CMIN,125DEG CMAX,PB	C509M21	2113945B05	CAP,FXD,.033UF,+10%,-10%,25V-DC,0402,X7R,-55DEG CMIN,125DEG CMA	C609M19	2113944A30	CAP CER CHP 27.0PF 50V 5%	C615M19	2113944A42	CAP CER CHP 150.0PF 50V 5%
C3155M22	2113944A40	CAP CER CHP 100.0PF 50V 5%	C510M21	2113944A32	CAP CER CHP 39.0PF 50V 5%	C6104M6	2113946B04	CAP CER CHP 0.10UF 10V 10%	C616M19	2113945A11	CAP CER CHP 2200PF 50V 10%
			C511M21	2113945B05	CAP,FXD,.033UF,+10%,-10%,25V-DC,0402,X7R,-55DEG CMIN,125DEG CMA	C6105M6	2113946B04	CAP CER CHP 0.10UF 10V 10%	C617M19	2113946B04	CAP CER CHP 0.10UF 10V 10%
						C6106M6	2113946B04	CAP CER CHP 0.10UF 10V 10%	C618M19	2113944A31	CAP CER CHP 33.0PF 50V 5%

Ref. Des.	Part Number	Description	Ref. Des.	Part Number	Description	Ref. Des.	Part Number	Description	Ref. Des.	Part Number	Description
C619M19	2113944A35	CAP CER CHP 62.0PF 50V 5%	C6308M6	2113946B04	CAP CER CHP 0.10UF 10V 10%	C6407M6	2113946B04	CAP CER CHP 0.10UF 10V 10%	C6424M6	2113944A40	CAP CER CHP 100.0PF 50V 5%
C6201M6	2113944A40	CAP CER CHP 100.0PF 50V 5%	C6309M6	2113946B04	CAP CER CHP 0.10UF 10V 10%	C6408M6	2113946B04	CAP CER CHP 0.10UF 10V 10%	C6425M6	2113944A40	CAP CER CHP 100.0PF 50V 5%
C6202M6	2113945A09	CAP CER CHP 1000PF 50V 10%	C630M19	2113946B04	CAP CER CHP 0.10UF 10V 10%	C6409M6	2113946B04	CAP CER CHP 0.10UF 10V 10%	C6426M6	2113945B02	CAP CER CHP 10,000PF 25V 10%
C6203M6	2113946B04	CAP CER CHP 0.10UF 10V 10%	C6310M6	2113946B04	CAP CER CHP 0.10UF 10V 10%	C640M19	2113946B04	CAP CER CHP 0.10UF 10V 10%	C6427M6	2113944A50	CAP CER CHP 680.0 PF 50V 5%
C620M19	2113946B04	CAP CER CHP 0.10UF 10V 10%	C6311M6	2113946B04	CAP CER CHP 0.10UF 10V 10%	C6410M6	2113946B04	CAP CER CHP 0.10UF 10V 10%	C6428M6	2113944A40	CAP CER CHP 100.0PF 50V 5%
C621M19	2113946B04	CAP CER CHP 0.10UF 10V 10%	C631M19	2115153H31	CAP, CERAMIC, COG	C6411M6	2113946B04	CAP CER CHP 0.10UF 10V 10%	C6429M6	2113946B04	CAP CER CHP 0.10UF 10V 10%
C622M19	2113946C07	CAP,FXD,.33UF,+10%,-10%,10V-DC,0603,X5R,-55DEG CMIN,85DEG CMAX	C632M19	2113944A40	CAP CER CHP 100.0PF 50V 5%	C6412M6	NOTPLACED	64AM DUMMY PART NUMBER	C642M19	2113944A48	CAP CER CHP 470.0 PF 50V 5%
C623M19	2113945B02	CAP CER CHP 10,000PF 25V 10%	C633M19	2113945B02	CAP CER CHP 10,000PF 25V 10%	C6413M6	2113946B04	CAP CER CHP 0.10UF 10V 10%	C6430M6	2113946B04	CAP CER CHP 0.10UF 10V 10%
C624M19	2113946C07	CAP,FXD,.33UF,+10%,-10%,10V-DC,0603,X5R,-55DEG CMIN,85DEG CMAX	C634M19	2113946B04	CAP CER CHP 0.10UF 10V 10%	C6414M6	2113946B04	CAP CER CHP 0.10UF 10V 10%	C6431M6	2113946B04	CAP CER CHP 0.10UF 10V 10%
C625M19	2115153H39	CAP, CERAMIC, COG	C635M19	2113945B02	CAP CER CHP 10,000PF 25V 10%	C6415M6	NOTPLACED	64AM DUMMY PART NUMBER	C6432M6	2113956B54	CAP,FXD,10UF,+20%,-20%,6.3V-DC,X5R,-55DEG CMIN,85DEG CMAX,PB-F
C626M19	2113945A09	CAP CER CHP 1000PF 50V 10%	C636M19	2113946B04	CAP CER CHP 0.10UF 10V 10%	C6416M6	2113945B04	CAP,FXD,.022UF,+10%,-10%,25V-DC,0402,X7R,-55DEG CMIN,125DEG CMA	C6433M6	2113946S35	CAP CER CHP 1.0UF 16V 10%
C627M19	2113945A09	CAP CER CHP 1000PF 50V 10%	C637M19	2113946B04	CAP CER CHP 0.10UF 10V 10%	C6417M6	2113945B04	CAP,FXD,.022UF,+10%,-10%,25V-DC,0402,X7R,-55DEG CMIN,125DEG CMA	C6434M6	2113946L05	CAP,FXD,.33UF,+80%,-20%,16V-DC,0603,Y5V,-30DEG CMIN,85DEG CMAX
C628M19	2113945B02	CAP CER CHP 10,000PF 25V 10%	C638M19	2113945A12	CAP CER CHP 3300PF 50V 10%	C6418M6	2113946B04	CAP CER CHP 0.10UF 10V 10%	C6435M6	2113946S35	CAP CER CHP 1.0UF 16V 10%
C629M19	2113946B04	CAP CER CHP 0.10UF 10V 10%	C639M19	2113945B02	CAP CER CHP 10,000PF 25V 10%	C6419M6	2113946B04	CAP CER CHP 0.10UF 10V 10%	C6436M6	2113946C08	CAP,FXD,.47UF,+10%,-10%,10V-DC,0603,X5R,-55DEG CMIN,85DEG CMAX
C6301M6	2113946B04	CAP CER CHP 0.10UF 10V 10%	C6401M6	2113946B04	CAP CER CHP 0.10UF 10V 10%	C641M19	2113944A31	CAP CER CHP 33.0PF 50V 5%	C6437M6	2113946C08	CAP,FXD,.47UF,+10%,-10%,10V-DC,0603,X5R,-55DEG CMIN,85DEG CMAX
C6302M6	2113946B04	CAP CER CHP 0.10UF 10V 10%	C6402M6	2113956A51	CAP,FXD,1UF,+10%,-10%,6.3V-DC,0402,X5R,-55DEG CMIN,85DEG CMAX,P	C6420M6	2113945B04	CAP,FXD,.022UF,+10%,-10%,25V-DC,0402,X7R,-55DEG CMIN,125DEG CMA	C6438M6	2113944A40	CAP CER CHP 100.0PF 50V 5%
C6303M6	2113946B04	CAP CER CHP 0.10UF 10V 10%	C6403M6	2113946B04	CAP CER CHP 0.10UF 10V 10%	C6421M6	2113946B04	CAP CER CHP 0.10UF 10V 10%	C643M19	2113944A48	CAP CER CHP 470.0 PF 50V 5%
C6304M6	2113946B04	CAP CER CHP 0.10UF 10V 10%	C6404M6	2113946B04	CAP CER CHP 0.10UF 10V 10%	C6422M6	2113946C02	CAP CER CHP 0.22UF 10V 10%	C644M19	2113944A11	CAP CER CHP 2.7PF 50V +/- 0.25PF
C6305M6	2113946S35	CAP CER CHP 1.0UF 16V 10%	C6405M6	2113946B04	CAP CER CHP 0.10UF 10V 10%	C6423M6	2113946B04	CAP CER CHP 0.10UF 10V 10%	C645M19	NOTPLACED	64AM DUMMY PART NUMBER
C6306M6	2113946S35	CAP CER CHP 1.0UF 16V 10%	C6406M6	2113946B04	CAP CER CHP 0.10UF 10V 10%						

Ref. Des.	Part Number	Description
C646M19	2115153H32	CAP, CERAMIC, COG
C6501M6	2113946B04	CAP CER CHP 0.10UF 10V 10%
C6502M6	2113946B04	CAP CER CHP 0.10UF 10V 10%
C6503M6	2113944A46	CAP CER CHP 330.0 PF 50V 5%
C6504M6	2113946B04	CAP CER CHP 0.10UF 10V 10%
C6505M6	2113946B04	CAP CER CHP 0.10UF 10V 10%
C6506M6	2113946B04	CAP CER CHP 0.10UF 10V 10%
C6507M6	2113946B04	CAP CER CHP 0.10UF 10V 10%
C6508M6	2113946B04	CAP CER CHP 0.10UF 10V 10%
C6509M6	2113946B04	CAP CER CHP 0.10UF 10V 10%
C6510M6	2113946B04	CAP CER CHP 0.10UF 10V 10%
C6511M6	2113946S35	CAP CER CHP 1.0UF 16V 10%
C6512M6	2113946B04	CAP CER CHP 0.10UF 10V 10%
C6513M6	2113946S35	CAP CER CHP 1.0UF 16V 10%
C6514M6	2113946S35	CAP CER CHP 1.0UF 16V 10%
C6515M6	2113946S35	CAP CER CHP 1.0UF 16V 10%
C6516M6	2113946B04	CAP CER CHP 0.10UF 10V 10%
C6517M6	2113946S35	CAP CER CHP 1.0UF 16V 10%
C6518M6	2113946B04	CAP CER CHP 0.10UF 10V 10%
C6519M6	2113946S35	CAP CER CHP 1.0UF 16V 10%
C6520M6	2113946B04	CAP CER CHP 0.10UF 10V 10%

Ref. Des.	Part Number	Description
C6521M6	2113944A46	CAP CER CHP 330.0 PF 50V 5%
C6522M6	2113946S35	CAP CER CHP 1.0UF 16V 10%
C6523M6	2113946B04	CAP CER CHP 0.10UF 10V 10%
C6524M6	2113946B04	CAP CER CHP 0.10UF 10V 10%
C6525M6	2113946S35	CAP CER CHP 1.0UF 16V 10%
C6526M6	2113946B04	CAP CER CHP 0.10UF 10V 10%
C6527M6	2113946B04	CAP CER CHP 0.10UF 10V 10%
C6528M6	2113946B04	CAP CER CHP 0.10UF 10V 10%
C6529M6	2113946B04	CAP CER CHP 0.10UF 10V 10%
C6530M6	2113946S35	CAP CER CHP 1.0UF 16V 10%
C6531M6	2113946B04	CAP CER CHP 0.10UF 10V 10%
C6532M6	2113946S35	CAP CER CHP 1.0UF 16V 10%
C6533M6	2113946B04	CAP CER CHP 0.10UF 10V 10%
C6534M6	2113956B33	CAP,FXD,2.2UF,+10%,-10%,16V-DC,0603,X5R,-55DEG CMIN,85DEG CMAX
C6535M6	2113944A40	CAP CER CHP 100.0PF 50V 5%
C6536M6	2113944A28	CAP CER CHP 18.0PF 50V 5%
C6537M6	2113944A19	CAP CER CHP 5.6PF 50V +/- 0.5PF
C6538M6	2113956B33	CAP,FXD,2.2UF,+10%,-10%,16V-DC,0603,X5R,-55DEG CMIN,85DEG CMAX
C6539M6	2113956B33	CAP,FXD,2.2UF,+10%,-10%,16V-DC,0603,X5R,-55DEG CMIN,85DEG CMAX

Ref. Des.	Part Number	Description
C6540M6	2113945A09	CAP CER CHP 1000PF 50V 10%
C6541M6	2113944A19	CAP CER CHP 5.6PF 50V +/- 0.5PF
C6542M6	2113946B04	CAP CER CHP 0.10UF 10V 10%
C6543M6	2113946B04	CAP CER CHP 0.10UF 10V 10%
C6544M6	2113945D04	CAP CER CHP 100,000PF 25V 10%
C6545M6	2113945D04	CAP CER CHP 100,000PF 25V 10%
C6546M6	2113946B04	CAP CER CHP 0.10UF 10V 10%
C6547M6	2113944A46	CAP CER CHP 330.0 PF 50V 5%
C6548M6	NOTPLACED	64AM DUMMY PART NUMBER
C6549M6	2113944A46	CAP CER CHP 330.0 PF 50V 5%
C6550M6	2113945D04	CAP CER CHP 100,000PF 25V 10%
C6551M6	2113944A46	CAP CER CHP 330.0 PF 50V 5%
C6552M6	2113956E91	CAP,FXD,10UF,+10%,-10%,16V-DC,1210,X5R,-55DEG CMIN,85DEG CMAX,P
C6553M6	2113956E91	CAP,FXD,10UF,+10%,-10%,16V-DC,1210,X5R,-55DEG CMIN,85DEG CMAX,P
C6554M6	2113946B04	CAP CER CHP 0.10UF 10V 10%
C6555M6	2113955D45	CAP,FXD,4.7UF,+10%,-10%,10V-DC,1206,X7R,-55DEG CMIN,125DEG CMAX
C6556M6	2113956B33	CAP,FXD,2.2UF,+10%,-10%,16V-DC,0603,X5R,-55DEG CMIN,85DEG CMAX
C6557M6	2113945D04	CAP CER CHP 100,000PF 25V 10%

Ref. Des.	Part Number	Description
C6558M6	2113944A21	CAP CER CHP 6.8PF 50V +/- 0.5PF
C6559M6	2113946S35	CAP CER CHP 1.0UF 16V 10%
C6560M6	2113956C37	CAP,FXD,10UF,+10%,-10%,16V-DC,0805,X5R,-55DEG CMIN,85DEG CMAX,P
C6561M6	2113956C37	CAP,FXD,10UF,+10%,-10%,16V-DC,0805,X5R,-55DEG CMIN,85DEG CMAX,P
C6562M6	2113944A25	CAP CER CHP 10.0PF 50V +/- 0.5PF
C6563M6	2113945D04	CAP CER CHP 100,000PF 25V 10%
C6564M6	2113944A46	CAP CER CHP 330.0 PF 50V 5%
C6565M6	2113956B33	CAP,FXD,2.2UF,+10%,-10%,16V-DC,0603,X5R,-55DEG CMIN,85DEG CMAX
C6566M6	2113956E91	CAP,FXD,10UF,+10%,-10%,16V-DC,1210,X5R,-55DEG CMIN,85DEG CMAX,P
C6567M6	2113956E91	CAP,FXD,10UF,+10%,-10%,16V-DC,1210,X5R,-55DEG CMIN,85DEG CMAX,P
C6568M6	2113956B33	CAP,FXD,2.2UF,+10%,-10%,16V-DC,0603,X5R,-55DEG CMIN,85DEG CMAX
C6569M6	2113956E91	CAP,FXD,10UF,+10%,-10%,16V-DC,1210,X5R,-55DEG CMIN,85DEG CMAX,P
C6570M6	2113944A46	CAP CER CHP 330.0 PF 50V 5%
C6571M6	2113946B04	CAP CER CHP 0.10UF 10V 10%
C6572M6	2113946B04	CAP CER CHP 0.10UF 10V 10%
C6573M6	2113946S35	CAP CER CHP 1.0UF 16V 10%

Ref. Des.	Part Number	Description
C6574M6	2113946S35	CAP CER CHP 1.0UF 16V 10%
C6575M6	2113946S35	CAP CER CHP 1.0UF 16V 10%
C6576M6	2113956B33	CAP,FXD,2.2UF,+10%,-10%,16V-DC,0603,X5R,-55DEG CMIN,85DEG CMAX
C6577M6	2113946S35	CAP CER CHP 1.0UF 16V 10%
C6578M6	2113946S35	CAP CER CHP 1.0UF 16V 10%
C6579M6	2113946S35	CAP CER CHP 1.0UF 16V 10%
C6580M6	2113946S35	CAP CER CHP 1.0UF 16V 10%
C6581M6	2113956B33	CAP,FXD,2.2UF,+10%,-10%,16V-DC,0603,X5R,-55DEG CMIN,85DEG CMAX
C6582M6	2113944A21	CAP CER CHP 6.8PF 50V +/- 0.5PF
C6583M6	2113946B04	CAP CER CHP 0.10UF 10V 10%
C6584M6	2113956C37	CAP,FXD,10UF,+10%,-10%,16V-DC,0805,X5R,-55DEG CMIN,85DEG CMAX,P
C6585M6	2113946B04	CAP CER CHP 0.10UF 10V 10%
C6586M6	2113956C35	CAP,FXD,4.7UF,+10%,-10%,16V-DC,0805,X5R,-55DEG CMIN,85DEG CMAX
C6587M6	2113946B04	CAP CER CHP 0.10UF 10V 10%
C6588M6	2113944A46	CAP CER CHP 330.0 PF 50V 5%
C6589M6	2113944A40	CAP CER CHP 100.0PF 50V 5%
C6590M6	2113946B04	CAP CER CHP 0.10UF 10V 10%
C6591M6	2113944A28	CAP CER CHP 18.0PF 50V 5%
C6592M6	2113944A09	CAP CER CHP 2.2PF 50V +/- 0.25PF

Ref. Des.	Part Number	Description
C6593M6	2113956C37	CAP,FXD,10UF,+10%,-10%,16V-DC,0805,X5R,-55DEG CMIN,85DEG CMAX,P
C6594M6	2113946C07	CAP,FXD,.33UF,+10%,-10%,10V-DC,0603,X5R,-55DEG CMIN,85DEG CMAX
C6595M6	2113946S35	CAP CER CHP 1.0UF 16V 10%
C6596M6	NOTPLACED	64AM DUMMY PART NUMBER
C6601M6	2113944A28	CAP CER CHP 18.0PF 50V 5%
C6602M6	2113944A28	CAP CER CHP 18.0PF 50V 5%
C6670M6	NOTPLACED	64AM DUMMY PART NUMBER
C702M7	2185419D06	CAP CER SUPER L/D 0.1UF
C703M7	2113945C26	CAP,FXD,.039UF,+10%,-10%,50V-DC,0603,X7R,-55DEG CMIN,125DEG CMA
C704M7	2185419D06	CAP CER SUPER L/D 0.1UF
C705M7	2115153H29	CAP, CERAMIC, COG
C706M7	2185419D06	CAP CER SUPER L/D 0.1UF
C707M7	2113945C01	CAP CER CHP 6800PF 50V 10%
C708M7	2115153H14	CAP, CERAMIC, COG
C709M7	2171051Y11	CAP,FXD,.1UF,+5%,-5%,1206,-55DEG CMIN,125DEG CMAX,PB-FREE
C710M7	NOTPLACED	64AM DUMMY PART NUMBER
C711M7	NOTPLACED	64AM DUMMY PART NUMBER
C712M7	NOTPLACED	64AM DUMMY PART NUMBER
C713M7	2113945C26	CAP,FXD,.039UF,+10%,-10%,50V-DC,0603,X7R,-55DEG CMIN,125DEG CMA

Ref. Des.	Part Number	Description
C714M7	2171051Y11	CAP,FXD,.1UF,+5%,-5%,1206,-55DEG CMIN,125DEG CMAX,PB-FREE
C715M7	2113945C31	CAP,FXD,.1UF,+10%,-10%,50V-DC,0603,X7R,-55DEG CMIN,125DEG CMAX
C716M7	2113945C31	CAP,FXD,.1UF,+10%,-10%,50V-DC,0603,X7R,-55DEG CMIN,125DEG CMAX
C717M7	2113945C31	CAP,FXD,.1UF,+10%,-10%,50V-DC,0603,X7R,-55DEG CMIN,125DEG CMAX
C718M7	2113945C31	CAP,FXD,.1UF,+10%,-10%,50V-DC,0603,X7R,-55DEG CMIN,125DEG CMAX
C719M7	2113945C31	CAP,FXD,.1UF,+10%,-10%,50V-DC,0603,X7R,-55DEG CMIN,125DEG CMAX
C720M7	2113944C55	CAP CER CHP 1200.OPF 50V 5%
C721M7	NOTPLACED	64AM DUMMY PART NUMBER
C722M7	2113944A40	CAP CER CHP 100.0PF 50V 5%
C723M7	2113944A40	CAP CER CHP 100.0PF 50V 5%
C724M7	2113955D37	CAP,FXD,10UF,+10%,-10%,16V-DC,1206,X7R,-55DEG CMIN,125DEG CMAX
C725M7	2113945C31	CAP,FXD,.1UF,+10%,-10%,50V-DC,0603,X7R,-55DEG CMIN,125DEG CMAX
C726M7	2113945C31	CAP,FXD,.1UF,+10%,-10%,50V-DC,0603,X7R,-55DEG CMIN,125DEG CMAX
C727M7	2113944A40	CAP CER CHP 100.0PF 50V 5%

Ref. Des.	Part Number	Description
C730M7	2113945C31	CAP,FXD,.1UF,+10%,-10%,50V-DC,0603,X7R,-55DEG CMIN,125DEG CMAX
C731M7	2113945C31	CAP,FXD,.1UF,+10%,-10%,50V-DC,0603,X7R,-55DEG CMIN,125DEG CMAX
C732M7	2113944A32	CAP CER CHP 39.0PF 50V 5%
C733M7	2113945A09	CAP CER CHP 1000PF 50V 10%
C734M7	2113945C31	CAP,FXD,.1UF,+10%,-10%,50V-DC,0603,X7R,-55DEG CMIN,125DEG CMAX
C735M7	2113944A31	CAP CER CHP 33.0PF 50V 5%
C736M7	2113945B02	CAP CER CHP 10,000PF 25V 10%
C737M7	2113945C31	CAP,FXD,.1UF,+10%,-10%,50V-DC,0603,X7R,-55DEG CMIN,125DEG CMAX
C739M7	2113944A17	CAP CER CHP 4.7PF 50V +/- 0.25PF
C740M7	2113944A44	CAP CER CHP 220.0 PF 50V 5%
C742M7	2113945C31	CAP,FXD,.1UF,+10%,-10%,50V-DC,0603,X7R,-55DEG CMIN,125DEG CMAX
C743M7	2113946B06	CAP,CHIP,.22UF,+10%,-10%,10V-DC,0402,X5R,-55DEG CMIN,85DEG CMAX
C744M7	2113955D37	CAP,FXD,10UF,+10%,-10%,16V-DC,1206,X7R,-55DEG CMIN,125DEG CMAX
C749M7	2113945C31	CAP,FXD,.1UF,+10%,-10%,50V-DC,0603,X7R,-55DEG CMIN,125DEG CMAX

Ref. Des.	Part Number	Description
C750M7	2113945C31	CAP,FXD,.1UF,+10%,-10%,50V-DC,0603,X7R,-55DEG CMIN,125DEG CMAX
C751M7	2113945A09	CAP CER CHP 1000PF 50V 10%
C752M7	2113944A43	CAP CER CHP 180.0PF 50V 5%
C753M7	2113944A31	CAP CER CHP 33.0PF 50V 5%
C754M7	2113944A34	CAP CER CHP 56.0PF 50V 5%
C756M7	2113955D37	CAP,FXD,10UF,+10%,-10%,16V-DC,1206,X7R,-55DEG CMIN,125DEG CMAX
C757M7	2113945C31	CAP,FXD,.1UF,+10%,-10%,50V-DC,0603,X7R,-55DEG CMIN,125DEG CMAX
C760M7	2113944A44	CAP CER CHP 220.0 PF 50V 5%
C764M7	2113946B06	CAP,CHIP,.22UF,+10%,-10%,10V-DC,0402,X5R,-55DEG CMIN,85DEG CMAX
C768M7	2115153H07	CAP, CERAMIC, COG
C770M7	2113944A44	CAP CER CHP 220.0 PF 50V 5%
C772M7	2113945A09	CAP CER CHP 1000PF 50V 10%
C773M7	2113944A33	CAP CER CHP 47.0PF 50V 5%
C777M7	2113944A44	CAP CER CHP 220.0 PF 50V 5%
C780M7	2113944A33	CAP CER CHP 47.0PF 50V 5%
C781M7	2115153H57	CAP, CERAMIC, COG
C786M7	2113944A44	CAP CER CHP 220.0 PF 50V 5%
C803M7	2113944A44	CAP CER CHP 220.0 PF 50V 5%
C813M7	NOTPLACED	64AM DUMMY PART NUMBER

Ref. Des.	Part Number	Description
C816M7	2113944A35	CAP CER CHP 62.0PF 50V 5%
C817M7	2113944A44	CAP CER CHP 220.0 PF 50V 5%
C819M7	2113944A44	CAP CER CHP 220.0 PF 50V 5%
C823M7	2113944A40	CAP CER CHP 100.0PF 50V 5%
C824M7	2113944A44	CAP CER CHP 220.0 PF 50V 5%
D1970M20	NOTPLACED	64AM DUMMY PART NUMBER
D200M12	4813978A19	DIODE,RECT,MBR120,SM,SOD-123,1A,20V,SHTK,PB-FREE
D2101M2	4870359B01	DIODE,SUPR,SM,7.82V,.1W,ESD PROT,V360
D2601M13	4813974A19	DIODE ARRAY,MXR,SM,SOT-323,7V,.2W,SHTK,2,PB-FREE
D2602M13	4815897H01	PIN DIODE
D2603M13	4815897H01	PIN DIODE
D3102M22	4805656W87	DIODE,VCTR,@ 15V,1SV279,SOD-523/SC-79
D3103M22	4805656W87	DIODE,VCTR,@ 15V,1SV279,SOD-523/SC-79
D3104M22	4805656W87	DIODE,VCTR,@ 15V,1SV279,SOD-523/SC-79
D3105M22	4805656W87	DIODE,VCTR,@ 15V,1SV279,SOD-523/SC-79
D3135M22	4805656W87	DIODE,VCTR,@ 15V,1SV279,SOD-523/SC-79
D3136M22	4805656W87	DIODE,VCTR,@ 15V,1SV279,SOD-523/SC-79

Ref. Des.	Part Number	Description
D3137M22	4805656W87	DIODE,VCTR,@ 15V,1SV279,SOD-523/SC-79
D3138M22	4805656W87	DIODE,VCTR,@ 15V,1SV279,SOD-523/SC-79
D4001M2	4813978A25	SCHOTTKY 30V SOD-323 T&R PB FREE
D6101M6	4813978A25	SCHOTTKY 30V SOD-323 T&R PB FREE
D6401M6	4813978A25	SCHOTTKY 30V SOD-323 T&R PB FREE
D6501M6	4813978A25	SCHOTTKY 30V SOD-323 T&R PB FREE
D6502M6	4813978A25	SCHOTTKY 30V SOD-323 T&R PB FREE
D722M7	4815011H01	DIODE TRIPLE
D723M7	4815011H01	DIODE TRIPLE
E1101M11	2405688Z01	INDUCTOR FERRITE BEAD
E1921M20	2471132D14	IDCTR,FXD,470OHM,200M A,FER,0402,BEA
E201M12	7686949J14	FLTR,FERRITE BEAD,,2A,,,SM,0805,CHIP,2 20OHM
E2242M2	7685268E01	FERRITE BEAD 20X40 200 MA MAX CHIP
E2244M2	7685268E01	FERRITE BEAD 20X40 200 MA MAX CHIP
E2245M2	7685268E01	FERRITE BEAD 20X40 200 MA MAX CHIP
E2246M2	7685268E01	FERRITE BEAD 20X40 200 MA MAX CHIP
E2247M2	7685268E01	FERRITE BEAD 20X40 200 MA MAX CHIP
E2248M2	7685268E01	FERRITE BEAD 20X40 200 MA MAX CHIP
E2249M2	7685268E01	FERRITE BEAD 20X40 200 MA MAX CHIP
E2301M2	91012036001	FILTER,EMI/RFI,300MA,SM,0402,PB FREE

Ref. Des.	Part Number	Description
E2302M2	91012036001	FILTER,EMI/RFI,300MA,SM,0402,PB FREE
E2303M2	91012036001	FILTER,EMI/RFI,300MA,SM,0402,PB FREE
E2304M2	91012036001	FILTER,EMI/RFI,300MA,SM,0402,PB FREE
E2305M2	91012036001	FILTER,EMI/RFI,300MA,SM,0402,PB FREE
E2306M2	91012036001	FILTER,EMI/RFI,300MA,SM,0402,PB FREE
E2307M2	91012036001	FILTER,EMI/RFI,300MA,SM,0402,PB FREE
E2308M2	91012036001	FILTER,EMI/RFI,300MA,SM,0402,PB FREE
E2309M2	91012036001	FILTER,EMI/RFI,300MA,SM,0402,PB FREE
E2310M2	91012036001	FILTER,EMI/RFI,300MA,SM,0402,PB FREE
E2311M2	91012036001	FILTER,EMI/RFI,300MA,SM,0402,PB FREE
E601M19	2471132D14	IDCTR,FXD,470OHM,200M A,FER,0402,BEA
E602M19	2471132D14	IDCTR,FXD,470OHM,200M A,FER,0402,BEA
E603M19	2471132D14	IDCTR,FXD,470OHM,200M A,FER,0402,BEA
E604M19	2471132D14	IDCTR,FXD,470OHM,200M A,FER,0402,BEA
E605M19	2471132D14	IDCTR,FXD,470OHM,200M A,FER,0402,BEA
E606M19	2471132D14	IDCTR,FXD,470OHM,200M A,FER,0402,BEA
E607M19	2471132D14	IDCTR,FXD,470OHM,200M A,FER,0402,BEA

Ref. Des.	Part Number	Description
E608M19	2471132D14	IDCTR,FXD,470OHM,200MA,FER,0402,BEA
E609M19	2471132D14	IDCTR,FXD,470OHM,200MA,FER,0402,BEA
E6501M6	2480067M02	CHK RF CHIP BEAD INDUCTOR
E6502M6	2480067M02	CHK RF CHIP BEAD INDUCTOR
F200M12	6575834B01	FUSE SURFACE MOUNT
FL1301M3	9102190J23	FLTR,SAW,BAND-PASS,1.57542GHZ NOM,SM,1.4X1.0MM,SMD,PB-FREE
FL1302M3	9109674L58	PASSIVE FILTER,CER,BAND-PASS,2.45GHZ NOM
FL1303M3	9102190J23	FLTR,SAW,BAND-PASS,1.57542GHZ NOM,SM,1.4X1.0MM,SMD,PB-FREE
FL502M21	91009300001	FILTER,MONOLITHIC CRYSTAL,BAND-PASS,109.65MHZ NOM
J102M12	2880658Z08	CONNECTOR SMA
J2301M2	0970312N01	CONN,BTB,RCPT,60CONT,.4MM,GLD,1 STACK HGT
J2302M2	0970312N01	CONN,BTB,RCPT,60CONT,.4MM,GLD,1 STACK HGT
L1101M11	2415429H26	CHIP INDUCTOR
L1102M11	2415429H10	CHIP INDUCTOR
L1116M11	NOTPLACED	64AM DUMMY PART NUMBER
L1117M11	2415428H01	AIR WOUND INDUCTOR
L1301M3	2414017P16	IDCTR,CHIP,18NH,5%,300MA,.76OHM,CER,9 Q,1.9GHZ SRF,SM,0402,P
L1302M3	2475122C13	IND, MULTI-LAY, 3.3NH $\pm$ 0.3%, 0402,
L1303M3	2414017P16	IDCTR,CHIP,18NH,5%,300MA,.76OHM,CER,9 Q,1.9GHZ SRF,SM,0402,P

Ref. Des.	Part Number	Description
L1304M3	2475122C37	IND, MULTI-LAYER, 100NH $\pm$ 5%, 0402,
L1305M3	24010062002	INDUCTOR, 5.6NH, 0402, 2%
L1306M3	2414017P14	IDCTR,CHIP,12NH,5%,300MA,.6OHM,CER,9 Q,2GHZ SRF,SM,0402,PB-F
L1308M3	NOTPLACED	64AM DUMMY PART NUMBER
L1316M3	24010062009	INDUCTOR, 13NH, 0402, 2%
L1601M16	2414017H14	IDCTR,CHIP,15NH,5%,3A,.32OHM,CER,12 Q,1.5GHZ SRF,SM,0603,PB-
L1602M16	2415429H37	CHIP INDUCTOR
L1603M16	2414015A07	IDCTR,FXD,180NH,2%,750MA,.77OHM,CER,25 Q,700MHZ SRF,SM,1008
L1604M16	2414017H06	IDCTR,CHIP,3.3NH,300MA,.12OHM,CER,10 Q,3.8GHZ SRF,SM,0603,P
L1605M16	2414017H03	IDCTR,CHIP,1.8NH,300MA,.1OHM,CER,8 Q,4GHZ SRF,SM,0603,PB-FR
L1606M16	2460591E24	COIL AIR WOUND INDUC 23.75
L1609M16	2415428H03	AIR WOUND INDUCTOR
L1610M16	2471968L10	9.0NH 2% LP AIRWOUND INDUCTOR
L1803M17	2471884M01	10.2NH SQUARE SPRING
L1809M17	2471884M01	10.2NH SQUARE SPRING
L1811M17	2471884M01	10.2NH SQUARE SPRING
L1900M20	NOTPLACED	64AM DUMMY PART NUMBER
L1901M20	24009331005	INDUCTOR, 3.9NH, $\pm$ 0.5NH, 0603
L1908M20	2478057A04	3.6 NH SURFACE MOUNT INDUCTOR
L1909M20	2478057A23	18 NH SURFACE MOUNT INDUCTOR

Ref. Des.	Part Number	Description
L1910M20	2478057A23	18 NH SURFACE MOUNT INDUCTOR
L1912M20	2478057A04	3.6 NH SURFACE MOUNT INDUCTOR
L1913M20	2478057A23	18 NH SURFACE MOUNT INDUCTOR
L1914M20	2478057A23	18 NH SURFACE MOUNT INDUCTOR
L1915M20	2478057A12	7.2NH SURFACE MOUNT INDUCTOR
L1917M20	2478057A04	3.6 NH SURFACE MOUNT INDUCTOR
L1934M20	2478057A35	0306 HIGH Q CHIP INDUCTOR
L1935M20	2478057A23	18 NH SURFACE MOUNT INDUCTOR
L1936M20	2415429H01	CHIP INDUCTOR
L200M12	2571269C01	INDUCTOR WW POWER 20%
L2202M2	2415429H45	CHIP INDUCTOR
L2203M2	2415429H45	CHIP INDUCTOR
L2204M2	2415429H45	CHIP INDUCTOR
L2205M2	2415429H45	CHIP INDUCTOR
L2601M13	24012026011	ULTRA-MINIATURE AIR CORE INDUCTORS
L2602M13	2415429H40	CHIP INDUCTOR
L3101M22	2414032F73	IDCTR,WW,820NH,5%,180MA,2.23OHM,CER,23 Q,215MHZ SRF,SM,PB-F
L3106M22	2415429H16	CHIP INDUCTOR
L3112M22	2415428H04	AIR WOUND INDUCTOR
L3119M22	2414032F73	IDCTR,WW,820NH,5%,180MA,2.23OHM,CER,23 Q,215MHZ SRF,SM,PB-F
L3125M22	2414032F73	IDCTR,WW,820NH,5%,180MA,2.23OHM,CER,23 Q,215MHZ SRF,SM,PB-F
L3126M22	2414032F73	IDCTR,WW,820NH,5%,180MA,2.23OHM,CER,23 Q,215MHZ SRF,SM,PB-F

Ref. Des.	Part Number	Description
L3134M22	2414032F41	IDCTR,WW,390NH,10%,200MA,1.5OHM,CER,40 Q,730MHZ SRF,SM,PB-F
L3139M22	2415429H20	CHIP INDUCTOR
L3145M22	2415428H04	AIR WOUND INDUCTOR
L3150M22	2414032F41	IDCTR,WW,390NH,10%,200MA,1.5OHM,CER,40 Q,730MHZ SRF,SM,PB-F
L3158M22	2414032F41	IDCTR,WW,390NH,10%,200MA,1.5OHM,CER,40 Q,730MHZ SRF,SM,PB-F
L3159M22	2414032F41	IDCTR,WW,390NH,10%,200MA,1.5OHM,CER,40 Q,730MHZ SRF,SM,PB-F
L500M21	2415429H43	CHIP INDUCTOR
L503M21	2414017N24	IDCTR,CHIP,100NH,5%,300MA,2OHM,CER,14 Q,700MHZ SRF,SM,0603,P
L504M21	2478057A51	0306 HIGH Q CHIP INDUCTOR
L513M21	NOTPLACED	64AM DUMMY PART NUMBER
L550M21	24009331029	IDCTR,WW,15NH,5%,600MA,SM,0603,CHIP INDUCTOR, CHIP, 15NH
L601M19	2415429H43	CHIP INDUCTOR
L602M19	2466505A01	COIL INDUCTOR
L603M19	2466505A01	COIL INDUCTOR
L604M19	2414032D16	IDCTR,WW,120NH,5%,800MA,.26OHM,CER,42 Q,1GHZ SRF,SM,PB-FREE
L605M19	24012050001	0603LS CHIP INDUCTORS, 1608, 3900NH
L611M19	2414032F39	IDCTR,WW,270NH,10%,280MA,1OHM,CER,40 Q,800MHZ SRF,SM,PB-FRE
L6401M6	2471189M03	SHIELDED SMT POWER INDUCTOR 10UH
L6402M6	2471189M03	SHIELDED SMT POWER INDUCTOR 10UH
L6403M6	24009271001	20NH HIGH CURRENT CHIP INDUCTOR



Ref. Des.	Part Number	Description
L6404M6	24009271001	20NH HIGH CURRENT CHIP INDUCTOR
L6502M6	2471678H01	10UH INDCUTOR
L6504M6	24009268001	10UH 2.1A SHIELDED INDUCTOR
L6505M6	2471678H01	10UH INDCUTOR
L701M7	2415429H47	CHIP INDUCTOR
L702M7	2415429H47	CHIP INDUCTOR
L709M7	2414017P15	IDCTR,CHIP,15NH,5%,300 MA,.65OHM,CER,9 Q,1.95GHZ SRF,SM,0402
L720M7	24012100001	IDCTR,2.2UH,10%,15MA,S M,MAGNETICALLY SHIELDED CHIP
L727M7	24012100001	IDCTR,2.2UH,10%,15MA,S M,MAGNETICALLY SHIELDED CHIP
L728M7	2415429H47	CHIP INDUCTOR
L733M7	24012100001	IDCTR,2.2UH,10%,15MA,S M,MAGNETICALLY SHIELDED CHIP
L734M7	2414017P15	IDCTR,CHIP,15NH,5%,300 MA,.65OHM,CER,9 Q,1.95GHZ SRF,SM,0402
L735M7	24012100001	IDCTR,2.2UH,10%,15MA,S M,MAGNETICALLY SHIELDED CHIP
L738M7	24012100001	IDCTR,2.2UH,10%,15MA,S M,MAGNETICALLY SHIELDED CHIP
L739M7	2415429H47	CHIP INDUCTOR
L741M7	24012100001	IDCTR,2.2UH,10%,15MA,S M,MAGNETICALLY SHIELDED CHIP
L753M7	2415347H06	IDCTR, 2200NH
L755M7	2415429H47	CHIP INDUCTOR
L758M7	2415429H47	CHIP INDUCTOR
L759M7	2415429H47	CHIP INDUCTOR
L765M7	2475122C29	IND, MULTI-LAYER, 22NH ?5%, 0402,
L775M7	2415429H47	CHIP INDUCTOR

Ref. Des.	Part Number	Description
M101M12	39012039001	CONNECTOR, BATTERY CONTACT
M103M12	3987977Y04	CONT,CONN,1CONT,,ANT UNIV 4.5MM,UC 1.8
M104M12	3987977Y04	CONT,CONN,1CONT,,ANT UNIV 4.5MM,UC 1.8
M105M12	3987977Y04	CONT,CONN,1CONT,,ANT UNIV 4.5MM,UC 1.8
M1301M3	3987977Y01	CONTACT ANTENNA UNIVERSAL (D35)
M6405M6	3987977Y04	CONT,CONN,1CONT,,ANT UNIV 4.5MM,UC 1.8
M6406M6	3987977Y04	CONT,CONN,1CONT,,ANT UNIV 4.5MM,UC 1.8
M6502M6	0985888K02	SKT RTC BTTY LEAP
M6504M6	3987977Y04	CONT,CONN,1CONT,,ANT UNIV 4.5MM,UC 1.8
PASTE	11012015001	SOLDER PASTE - 9.0A, LOW VOID
PCB	84012432001	BOARD, PC , MAIN BOARD, UHF2
Q1101M11	4813973A32	XSTR,BIP GP SS,NPN,SM,SC-70,SMT,50V,.202W,100MA, PB-FREE
Q1103M11	4813970A59	P-CH FET 1.0A 20V SOT-23 T&R
Q1601M16	48012094001	MOD,XSTR,FET RF PWR, 135-941MHZ
Q1920M20	4813973A32	XSTR,BIP GP SS,NPN,SM,SC-70,SMT,50V,.202W,100MA, PB-FREE
Q1922M20	4813973M75	XSTR,BIP GP SS,PNP,BC858,SOT-563,SMT,-30V,.357W,-100MA,100MHZ
Q201M12	4813970A59	P-CH FET 1.0A 20V SOT-23 T&R
Q202M12	4813973A32	XSTR,BIP GP SS,NPN,SM,SC-70,SMT,50V,.202W,100MA, PB-FREE

Ref. Des.	Part Number	Description
Q2202M2	4815261H01	TRANSISTOR,BIP GENERAL PURPOSE SMALL NPN
Q2601M13	4815055H01	TSTR DUAL NPN/PNP UMH 5
Q3123M22	4871915M01	XSTR,BIP RF SML SGNL,NPN,SM,4.5GHZ
Q3128M22	4815055H01	TSTR DUAL NPN/PNP UMH 5
Q3156M22	4871915M01	XSTR,BIP RF SML SGNL,NPN,SM,4.5GHZ
Q3161M22	4815055H01	TSTR DUAL NPN/PNP UMH 5
Q4001M2	4815261H01	TRANSISTOR,BIP GENERAL PURPOSE SMALL NPN
Q601M19	4813973A04	XSTR,BIP GP SS,NPN,TA13,SM,SOT-23,SMT,30V,.225W,300MA,1 25MHZ,P
Q6101M6	4815261H01	TRANSISTOR,BIP GENERAL PURPOSE SMALL NPN
Q6401M6	48012170001	FET
Q6501M6	4813970A62	XSTR,FET GP PWR,MOS-FET,P-CH,ENHN,CF,-20V,1.3W,PB-FREE
Q6502M6	48012154001	FET
Q6504M6	4809579E77	FET, NCH MOS FET, 1.2MM X 1.2MM PACKAGE, SMD, W18 COMPLIANT
Q6505M6	4813970A62	XSTR,FET GP PWR,MOS-FET,P-CH,ENHN,CF,-20V,1.3W,PB-FREE
Q6506M6	4809579E77	FET, NCH MOS FET, 1.2MM X 1.2MM PACKAGE, SMD, W18 COMPLIANT
Q6507M6	48012170001	FET
Q6508M6	48012154001	FET
Q731M7	4885061Y01	XSTR NPN 6V 30UA 12GHZ PB-FREE

Ref. Des.	Part Number	Description
Q745M7	4813973M75	XSTR,BIP GP SS,PNP,BC858,SOT-563,SMT,-30V,.357W,-100MA,100MHZ
Q756M7	4805585Q32	TRANSITOR, NPN RF
Q767M7	4813973M75	XSTR,BIP GP SS,PNP,BC858,SOT-563,SMT,-30V,.357W,-100MA,100MHZ
Q774M7	4805585Q32	TRANSITOR, NPN RF
Q785M7	4889394V04	XSTR,FET GEN PURPOSE SMALL SIG,MOSFET,N-CH,ENHN,SM,20V,.25W,P
R1101M11	0613952R01	CER CHIP RES 10K OHM 5% 0402
R1102M11	0613952R25	CER CHIP RES 100K OHM 5% 0402
R1103M11	06012035001	0805, 0.02 OHM, CHIP RESISTOR
R1104M11	0613952Q49	CER CHIP RES 100 OHM 5 0402
R1105M11	0613952Q49	CER CHIP RES 100 OHM 5 0402
R1106M11	0613952Q21	CER CHIP RES 6.8 OHM 5 0402
R1107M11	0613952Q45	CER CHIP RES 68.0 OHM 5 0402
R1108M11	0613952N81	CER CHIP RES 68.1K OHM 1 0402
R1110M11	0613952R01	CER CHIP RES 10K OHM 5% 0402
R1111M11	0613952R66	CER CHIP RES 0.0 +/-0.050 OHM
R1112M11	NOTPLACED	64AM DUMMY PART NUMBER
R1114M11	0613952Q49	CER CHIP RES 100 OHM 5 0402
R1115M11	0613952Q49	CER CHIP RES 100 OHM 5 0402
R1116M11	0613952R01	CER CHIP RES 10K OHM 5% 0402

Ref. Des.	Part Number	Description	Ref. Des.	Part Number	Description	Ref. Des.	Part Number	Description	Ref. Des.	Part Number	Description
R1117M11	0613952R11	CER CHIP RES 27K OHM 5% 0402	R1145M11	0613952R25	CER CHIP RES 100K OHM 5% 0402	R1176M11	0613952M01	CER CHIP RES 1000 OHM 1% 0402	R1330M3	0613952R66	CER CHIP RES 0.0 +/-0.050 OHM
R1121M11	0613952N47	CER CHIP RES 30.1K OHM 1 0402	R1146M11	0613952R25	CER CHIP RES 100K OHM 5% 0402	R1177M11	0613952R66	CER CHIP RES 0.0 +/-0.050 OHM	R1331M3	0613952R66	CER CHIP RES 0.0 +/-0.050 OHM
R1122M11	0613952N85	CER CHIP RES 75.0K OHM 1 0402	R1151M11	0613952R05	CER CHIP RES 15K OHM 5% 0402	R1178M11	0613952R01	CER CHIP RES 10K OHM 5% 0402	R1332M3	0613952R66	CER CHIP RES 0.0 +/-0.050 OHM
R1124M11	0613952Q42	CER CHIP RES 51.0 OHM 5 0402	R1152M11	0613952R01	CER CHIP RES 10K OHM 5% 0402	R1180M11	0613952R66	CER CHIP RES 0.0 +/-0.050 OHM	R1337M3	NOTPLACED	64AM DUMMY PART NUMBER
R1125M11	0613952R17	CER CHIP RES 47K OHM 5% 0402	R1154M11	0613952N01	CER CHIP RES 10.0K OHM 1 0402	R1181M11	NOTPLACED	64AM DUMMY PART NUMBER	R1339M3	NOTPLACED	64AM DUMMY PART NUMBER
R1126M11	0613952R09	CER CHIP RES 22K OHM 5% 0402	R1158M11	NOTPLACED	64AM DUMMY PART NUMBER	R1182M11	0613952R01	CER CHIP RES 10K OHM 5% 0402	R1340M3	0613952R66	CER CHIP RES 0.0 +/-0.050 OHM
R1127M11	0613952R08	CER CHIP RES 20K OHM 5 0402	R1160M11	0613952R03	CER CHIP RES 12K OHM 5% 0402	R1198M11	0613952J01	CER CHIP RES 10K OHM 5% 0603	R1601M16	0613952Q96	CER CHIP RES 9100 OHM 5 0402
R1128M11	0613952R01	CER CHIP RES 10K OHM 5% 0402	R1162M11	0613952R29	CER CHIP RES 150K OHM 5% 0402	R1301M3	0613952R66	CER CHIP RES 0.0 +/-0.050 OHM	R1602M16	0613952R01	CER CHIP RES 10K OHM 5% 0402
R1129M11	NOTPLACED	64AM DUMMY PART NUMBER	R1163M11	0613952R01	CER CHIP RES 10K OHM 5% 0402	R1303M3	0613952R66	CER CHIP RES 0.0 +/-0.050 OHM	R1603M16	0613952R22	CER CHIP RES 75K OHM 5 0402
R1130M11	NOTPLACED	64AM DUMMY PART NUMBER	R1164M11	0613952R01	CER CHIP RES 10K OHM 5% 0402	R1305M3	0613952R66	CER CHIP RES 0.0 +/-0.050 OHM	R1604M16	0613952R13	CER CHIP RES 33K OHM 5% 0402
R1135M11	0613952R66	CER CHIP RES 0.0 +/-0.050 OHM	R1165M11	0613952Q56	CER CHIP RES 200 OHM 5 0402	R1309M3	NOTPLACED	64AM DUMMY PART NUMBER	R1605M16	0613952Q73	CER CHIP RES 1000 OHM 5 0402
R1136M11	0613952R01	CER CHIP RES 10K OHM 5% 0402	R1166M11	0613952Q56	CER CHIP RES 200 OHM 5 0402	R1310M3	0613952R66	CER CHIP RES 0.0 +/-0.050 OHM	R1606M16	0613952H53	CER CHIP RES 150 OHM 5% 0603
R1137M11	0613952R01	CER CHIP RES 10K OHM 5% 0402	R1167M11	0613952R01	CER CHIP RES 10K OHM 5% 0402	R1311M3	NOTPLACED	64AM DUMMY PART NUMBER	R1651M16	NOTPLACED	64AM DUMMY PART NUMBER
R1138M11	0613952R25	CER CHIP RES 100K OHM 5% 0402	R1168M11	0613952Q49	CER CHIP RES 100 OHM 5 0402	R1313M3	0613952R66	CER CHIP RES 0.0 +/-0.050 OHM	R1652M16	NOTPLACED	64AM DUMMY PART NUMBER
R1139M11	0613952R25	CER CHIP RES 100K OHM 5% 0402	R1169M11	0613952P52	CER CHIP RES 340K OHM 1 0402	R1315M3	0613952R66	CER CHIP RES 0.0 +/-0.050 OHM	R1653M16	0613952R66	CER CHIP RES 0.0 +/-0.050 OHM
R1140M11	0613952R25	CER CHIP RES 100K OHM 5% 0402	R1170M11	0613952N88	CER CHIP RES 80.6K OHM 1 0402	R1317M3	0613952R66	CER CHIP RES 0.0 +/-0.050 OHM	R1900M20	0613952R66	CER CHIP RES 0.0 +/-0.050 OHM
R1141M11	0613952R42	CER CHIP RES 510K OHM 5 0402	R1171M11	0613952R66	CER CHIP RES 0.0 +/-0.050 OHM	R1318M3	0613952R66	CER CHIP RES 0.0 +/-0.050 OHM	R1906M20	0613952R01	CER CHIP RES 10K OHM 5% 0402
R1142M11	0613952R25	CER CHIP RES 100K OHM 5% 0402	R1172M11	0613952Q89	CER CHIP RES 4700 OHM 5 0402	R1325M3	0613952R66	CER CHIP RES 0.0 +/-0.050 OHM	R1907M20	0613952R01	CER CHIP RES 10K OHM 5% 0402
R1143M11	0613952R25	CER CHIP RES 100K OHM 5% 0402	R1174M11	0613952N01	CER CHIP RES 10.0K OHM 1 0402	R1326M3	0613952R66	CER CHIP RES 0.0 +/-0.050 OHM	R1908M20	0613952R01	CER CHIP RES 10K OHM 5% 0402
R1144M11	0613952R25	CER CHIP RES 100K OHM 5% 0402	R1175M11	0613952R66	CER CHIP RES 0.0 +/-0.050 OHM	R1329M3	0613952R66	CER CHIP RES 0.0 +/-0.050 OHM	R1909M20	0613952R01	CER CHIP RES 10K OHM 5% 0402

Ref. Des.	Part Number	Description	Ref. Des.	Part Number	Description	Ref. Des.	Part Number	Description	Ref. Des.	Part Number	Description
R1910M20	0613952Q96	CER CHIP RES 9100 OHM 5 0402	R2107M2	0613952Q73	CER CHIP RES 1000 OHM 5 0402	R2139M2	0613952Q41	CER CHIP RES 47.0 OHM 5 0402	R2244M2	0613952Q65	CER CHIP RES 470 OHM 5 0402
R1911M20	0613952Q96	CER CHIP RES 9100 OHM 5 0402	R2109M2	0613952Q25	CER CHIP RES 10.0 OHM 5 0402	R2142M2	0613952Q41	CER CHIP RES 47.0 OHM 5 0402	R2245M2	0613952Q60	CER CHIP RES 300 OHM 5 0402
R1921M20	0613952R22	CER CHIP RES 75K OHM 5 0402	R2110M2	0613952Q33	CER CHIP RES 22.0 OHM 5 0402	R2144M2	0613952Q61	CER CHIP RES 330 OHM 5 0402	R2246M2	0613952Q65	CER CHIP RES 470 OHM 5 0402
R1922M20	0613952R27	CER CHIP RES 120K OHM 5% 0402	R2111M2	0613952Q25	CER CHIP RES 10.0 OHM 5 0402	R2145M2	0613952Q41	CER CHIP RES 47.0 OHM 5 0402	R2254M2	0613952R01	CER CHIP RES 10K OHM 5% 0402
R1923M20	0613952R01	CER CHIP RES 10K OHM 5% 0402	R2113M2	0613952Q25	CER CHIP RES 10.0 OHM 5 0402	R2146M2	0613952Q41	CER CHIP RES 47.0 OHM 5 0402	R2601M13	NOTPLACED	64AM DUMMY PART NUMBER
R1924M20	0613952Q37	CER CHIP RES 33.0 OHM 5 0402	R2114M2	0613952Q33	CER CHIP RES 22.0 OHM 5 0402	R2147M2	0613952Q41	CER CHIP RES 47.0 OHM 5 0402	R2602M13	0613952H47	CER CHIP RES 82.0 OHM 5 0603
R1925M20	0613952Q11	CER CHIP RES 2.7 OHM 5 0402	R2115M2	0613952Q25	CER CHIP RES 10.0 OHM 5 0402	R2148M2	0613952Q41	CER CHIP RES 47.0 OHM 5 0402	R2603M13	0613952H47	CER CHIP RES 82.0 OHM 5 0603
R1935M20	0613952Q75	CER CHIP RES 1200 OHM 5 0402	R2116M2	0613952R01	CER CHIP RES 10K OHM 5% 0402	R2149M2	0613952Q41	CER CHIP RES 47.0 OHM 5 0402	R2604M13	0613952H47	CER CHIP RES 82.0 OHM 5 0603
R1936M20	0613952R66	CER CHIP RES 0.0 +/-0.050 OHM	R2117M2	0613952R01	CER CHIP RES 10K OHM 5% 0402	R2151M2	NOTPLACED	64AM DUMMY PART NUMBER	R2605M13	0613952G67	CER CHIP RES 0.0 +/-0.050 OHM
R1970M20	0613952Q25	CER CHIP RES 10.0 OHM 5 0402	R2118M2	0613952R01	CER CHIP RES 10K OHM 5% 0402	R2153M2	0613952Q41	CER CHIP RES 47.0 OHM 5 0402	R2606M13	0613952R25	CER CHIP RES 100K OHM 5% 0402
R1972M20	0613952Q25	CER CHIP RES 10.0 OHM 5 0402	R2120M2	0613952R01	CER CHIP RES 10K OHM 5% 0402	R2154M2	0613952Q41	CER CHIP RES 47.0 OHM 5 0402	R2803M1	0613952Q37	CER CHIP RES 33.0 OHM 5 0402
R201M12	0613952R25	CER CHIP RES 100K OHM 5% 0402	R2129M2	0613952R01	CER CHIP RES 10K OHM 5% 0402	R2192M2	0613952Q61	CER CHIP RES 330 OHM 5 0402	R2804M1	0613952Q49	CER CHIP RES 100 OHM 5 0402
R202M12	0613952Q89	CER CHIP RES 4700 OHM 5 0402	R2130M2	0613952R01	CER CHIP RES 10K OHM 5% 0402	R2197M2	0613952R66	CER CHIP RES 0.0 +/-0.050 OHM	R2805M1	0613952Q49	CER CHIP RES 100 OHM 5 0402
R2100M2	NOTPLACED	64AM DUMMY PART NUMBER	R2131M2	0613952R01	CER CHIP RES 10K OHM 5% 0402	R2198M2	0613952R66	CER CHIP RES 0.0 +/-0.050 OHM	R2806M1	0613952Q59	CER CHIP RES 270 OHM 5 0402
R21001M2	NOTPLACED	64AM DUMMY PART NUMBER	R2132M2	0613952R01	CER CHIP RES 10K OHM 5% 0402	R2199M2	0613952R66	CER CHIP RES 0.0 +/-0.050 OHM	R2807M1	0613952Q56	CER CHIP RES 200 OHM 5 0402
R21002M2	NOTPLACED	64AM DUMMY PART NUMBER	R2133M2	0613952R01	CER CHIP RES 10K OHM 5% 0402	R2201M2	0613952R32	CER CHIP RES 200K OHM 5 0402	R2808M1	0613952Q49	CER CHIP RES 100 OHM 5 0402
R21003M2	NOTPLACED	64AM DUMMY PART NUMBER	R2135M2	0613952Q41	CER CHIP RES 47.0 OHM 5 0402	R2204M2	0613952Q85	CER CHIP RES 3300 OHM 5 0402	R2810M1	0613952R01	CER CHIP RES 10K OHM 5% 0402
R2104M2	0613952Q89	CER CHIP RES 4700 OHM 5 0402	R2136M2	0613952Q61	CER CHIP RES 330 OHM 5 0402	R2206M2	0613952Q85	CER CHIP RES 3300 OHM 5 0402	R2811M1	0613952Q89	CER CHIP RES 4700 OHM 5 0402
R2105M2	0613952Q89	CER CHIP RES 4700 OHM 5 0402	R2137M2	0613952Q61	CER CHIP RES 330 OHM 5 0402	R2207M2	0613952R66	CER CHIP RES 0.0 +/-0.050 OHM	R2812M1	0613952R01	CER CHIP RES 10K OHM 5% 0402
R2106M2	NOTPLACED	64AM DUMMY PART NUMBER	R2138M2	0613952Q41	CER CHIP RES 47.0 OHM 5 0402	R2235M2	0613952R66	CER CHIP RES 0.0 +/-0.050 OHM	R2813M1	NOTPLACED	64AM DUMMY PART NUMBER

Ref. Des.	Part Number	Description	Ref. Des.	Part Number	Description	Ref. Des.	Part Number	Description	Ref. Des.	Part Number	Description
R2817M1	0613952Q41	CER CHIP RES 47.0 OHM 5 0402	R4009M2	0613952Q85	CER CHIP RES 3300 OHM 5 0402	R6101M6	0613952R01	CER CHIP RES 10K OHM 5% 0402	R611M19	0613952R01	CER CHIP RES 10K OHM 5% 0402
R3100M22	0613952R66	CER CHIP RES 0.0 +/-0.050 OHM	R4010M2	0613952R32	CER CHIP RES 200K OHM 5 0402	R6102M6	0613952R09	CER CHIP RES 22K OHM 5% 0402	R6120M6	0613952R01	CER CHIP RES 10K OHM 5% 0402
R3103M22	0613952Q31	CER CHIP RES 18.0 OHM 5 0402	R4011M2	0613952R17	CER CHIP RES 47K OHM 5% 0402	R6103M6	0613952R09	CER CHIP RES 22K OHM 5% 0402	R6121M6	0613952R01	CER CHIP RES 10K OHM 5% 0402
R3105M22	0613952Q60	CER CHIP RES 300 OHM 5 0402	R4012M2	0613952R09	CER CHIP RES 22K OHM 5% 0402	R6104M6	NOTPLACED	64AM DUMMY PART NUMBER	R6122M6	0613952R01	CER CHIP RES 10K OHM 5% 0402
R3106M22	0613952Q60	CER CHIP RES 300 OHM 5 0402	R4013M2	0613952R09	CER CHIP RES 22K OHM 5% 0402	R6105M6	0613952R66	CER CHIP RES 0.0 +/-0.050 OHM	R6125M6	NOTPLACED	64AM DUMMY PART NUMBER
R3107M22	0613952Q53	CER CHIP RES 150 OHM 5 0402	R4014M2	0613952Q85	CER CHIP RES 3300 OHM 5 0402	R6106M6	0613952Q73	CER CHIP RES 1000 OHM 5 0402	R612M19	0613952Q94	CER CHIP RES 7500 OHM 5 0402
R3108M22	0613952Q38	CER CHIP RES 36.0 OHM 5 0402	R500M21	0613952Q37	CER CHIP RES 33.0 OHM 5 0402	R6107M6	0613952Q55	CER CHIP RES 180 OHM 5 0402	R613M19	0613952Q82	CER CHIP RES 2400 OHM 5 0402
R3109M22	0613952Q53	CER CHIP RES 150 OHM 5 0402	R502M21	0613952Q36	CER CHIP RES 30.0 OHM 5 0402	R6108M6	0613952Q61	CER CHIP RES 330 OHM 5 0402	R614M19	0613952R66	CER CHIP RES 0.0 +/-0.050 OHM
R3114M22	0613952R11	CER CHIP RES 27K OHM 5% 0402	R512M21	0613952R66	CER CHIP RES 0.0 +/-0.050 OHM	R6109M6	NOTPLACED	64AM DUMMY PART NUMBER	R615M19	NOTPLACED	64AM DUMMY PART NUMBER
R3118M22	0613952R03	CER CHIP RES 12K OHM 5% 0402	R525M21	0613952R66	CER CHIP RES 0.0 +/-0.050 OHM	R610M19	0613952R25	CER CHIP RES 100K OHM 5% 0402	R616M19	NOTPLACED	64AM DUMMY PART NUMBER
R3127M22	0613952Q52	CER CHIP RES 130 OHM 5 0402	R526M21	0613958J74	CER CHIP RES 0.0 OHM JMP 0805	R6110M6	0613952Q73	CER CHIP RES 1000 OHM 5 0402	R617M19	NOTPLACED	64AM DUMMY PART NUMBER
R3146M22	0613952R11	CER CHIP RES 27K OHM 5% 0402	R601M19	0613952Q41	CER CHIP RES 47.0 OHM 5 0402	R6111M6	0613952Q73	CER CHIP RES 1000 OHM 5 0402	R618M19	NOTPLACED	64AM DUMMY PART NUMBER
R3149M22	0613952R07	CER CHIP RES 18K OHM 5% 0402	R602M19	0613952Q63	CER CHIP RES 390 OHM 5 0402	R6112M6	0613952Q73	CER CHIP RES 1000 OHM 5 0402	R619M19	NOTPLACED	64AM DUMMY PART NUMBER
R3158M22	0613952Q46	CER CHIP RES 75.0 OHM 5 0402	R603M19	0613952R25	CER CHIP RES 100K OHM 5% 0402	R6113M6	0613952Q51	CER CHIP RES 120 OHM 5 0402	R6201M6	NOTPLACED	64AM DUMMY PART NUMBER
R3159M22	0613952Q40	CER CHIP RES 43.0 OHM 5 0402	R604M19	0613952Q63	CER CHIP RES 390 OHM 5 0402	R6114M6	0613952Q49	CER CHIP RES 100 OHM 5 0402	R6202M6	0613952R01	CER CHIP RES 10K OHM 5% 0402
R3160M22	0613952Q49	CER CHIP RES 100 OHM 5 0402	R605M19	0613952R01	CER CHIP RES 10K OHM 5% 0402	R6115M6	0613952Q49	CER CHIP RES 100 OHM 5 0402	R6203M6	0613952R66	CER CHIP RES 0.0 +/-0.050 OHM
R4005M2	0613952R01	CER CHIP RES 10K OHM 5% 0402	R606M19	0613952R01	CER CHIP RES 10K OHM 5% 0402	R6116M6	0613952Q73	CER CHIP RES 1000 OHM 5 0402	R6204M6	0613952R01	CER CHIP RES 10K OHM 5% 0402
R4006M2	0613952R01	CER CHIP RES 10K OHM 5% 0402	R607M19	0613952R25	CER CHIP RES 100K OHM 5% 0402	R6117M6	0613952R01	CER CHIP RES 10K OHM 5% 0402	R6205M6	0613952R01	CER CHIP RES 10K OHM 5% 0402
R4007M2	0613952R01	CER CHIP RES 10K OHM 5% 0402	R608M19	0613952R01	CER CHIP RES 10K OHM 5% 0402	R6118M6	0613952R09	CER CHIP RES 22K OHM 5% 0402	R6206M6	0613952R25	CER CHIP RES 100K OHM 5% 0402
R4008M2	0613952R01	CER CHIP RES 10K OHM 5% 0402	R609M19	0613952Q81	CER CHIP RES 2200 OHM 5 0402	R6119M6	0613952R01	CER CHIP RES 10K OHM 5% 0402	R6207M6	0613952R25	CER CHIP RES 100K OHM 5% 0402

Ref. Des.	Part Number	Description	Ref. Des.	Part Number	Description	Ref. Des.	Part Number	Description	Ref. Des.	Part Number	Description
R6208M6	0613952Q89	CER CHIP RES 4700 OHM 5 0402	R6307M6	0613952R66	CER CHIP RES 0.0 +/-0.050 OHM	R6417M6	0613952Q61	CER CHIP RES 330 OHM 5 0402	R6503M6	0613952Q25	CER CHIP RES 10.0 OHM 5 0402
R6209M6	0613952Q89	CER CHIP RES 4700 OHM 5 0402	R6310M6	0613952Q37	CER CHIP RES 33.0 OHM 5 0402	R6419M6	0613952Q37	CER CHIP RES 33.0 OHM 5 0402	R6504M6	0613952R09	CER CHIP RES 22K OHM 5% 0402
R620M19	NOTPLACED	64AM DUMMY PART NUMBER	R6311M6	0613952Q37	CER CHIP RES 33.0 OHM 5 0402	R6420M6	0613952R17	CER CHIP RES 47K OHM 5% 0402	R6505M6	0613952Q80	CER CHIP RES 2000 OHM 5 0402
R6210M6	0613952Q89	CER CHIP RES 4700 OHM 5 0402	R6312M6	0613952Q37	CER CHIP RES 33.0 OHM 5 0402	R6421M6	0613952R01	CER CHIP RES 10K OHM 5% 0402	R6506M6	0613952R66	CER CHIP RES 0.0 +/-0.050 OHM
R6211M6	0613952R01	CER CHIP RES 10K OHM 5% 0402	R6313M6	0613952Q37	CER CHIP RES 33.0 OHM 5 0402	R6422M6	0613952Q51	CER CHIP RES 120 OHM 5 0402	R6507M6	0613952R01	CER CHIP RES 10K OHM 5% 0402
R6212M6	NOTPLACED	64AM DUMMY PART NUMBER	R6314M6	0613952Q37	CER CHIP RES 33.0 OHM 5 0402	R6423M6	0613952R66	CER CHIP RES 0.0 +/-0.050 OHM	R6508M6	0613952R17	CER CHIP RES 47K OHM 5% 0402
R6213M6	0613952R01	CER CHIP RES 10K OHM 5% 0402	R6316M6	0613952R01	CER CHIP RES 10K OHM 5% 0402	R6424M6	0613952N01	CER CHIP RES 10.0K OHM 1 0402	R6509M6	0613952R25	CER CHIP RES 100K OHM 5% 0402
R6214M6	NOTPLACED	64AM DUMMY PART NUMBER	R6401M6	0613952R18	CER CHIP RES 51K OHM 5 0402	R6425M6	0613952Q80	CER CHIP RES 2000 OHM 5 0402	R6510M6	0613952R66	CER CHIP RES 0.0 +/-0.050 OHM
R6215M6	0613952R01	CER CHIP RES 10K OHM 5% 0402	R6402M6	0613952R32	CER CHIP RES 200K OHM 5 0402	R6426M6	0613952Q49	CER CHIP RES 100 OHM 5 0402	R6511M6	0613952R01	CER CHIP RES 10K OHM 5% 0402
R6216M6	0613952R66	CER CHIP RES 0.0 +/-0.050 OHM	R6403M6	0613952Q81	CER CHIP RES 2200 OHM 5 0402	R6427M6	0613952R11	CER CHIP RES 27K OHM 5% 0402	R6512M6	0613952N01	CER CHIP RES 10.0K OHM 1 0402
R6217M6	0613952Q73	CER CHIP RES 1000 OHM 5 0402	R6404M6	0613952Q81	CER CHIP RES 2200 OHM 5 0402	R6428M6	0613952R25	CER CHIP RES 100K OHM 5% 0402	R6513M6	0613952R66	CER CHIP RES 0.0 +/-0.050 OHM
R6218M6	0613952Q80	CER CHIP RES 2000 OHM 5 0402	R6405M6	0613952Q75	CER CHIP RES 1200 OHM 5 0402	R6429M6	0613952R17	CER CHIP RES 47K OHM 5% 0402	R6514M6	0613952Q89	CER CHIP RES 4700 OHM 5 0402
R621M19	NOTPLACED	64AM DUMMY PART NUMBER	R6406M6	0613952R01	CER CHIP RES 10K OHM 5% 0402	R6430M6	0613952R09	CER CHIP RES 22K OHM 5% 0402	R6515M6	0613952R66	CER CHIP RES 0.0 +/-0.050 OHM
R623M19	NOTPLACED	64AM DUMMY PART NUMBER	R6407M6	0613952Q81	CER CHIP RES 2200 OHM 5 0402	R6431M6	0613952Q81	CER CHIP RES 2200 OHM 5 0402	R6516M6	0613952R66	CER CHIP RES 0.0 +/-0.050 OHM
R624M19	NOTPLACED	64AM DUMMY PART NUMBER	R6409M6	0613952N01	CER CHIP RES 10.0K OHM 1 0402	R6432M6	0613952R25	CER CHIP RES 100K OHM 5% 0402	R6517M6	0613952Q63	CER CHIP RES 390 OHM 5 0402
R6301M6	0613952R01	CER CHIP RES 10K OHM 5% 0402	R6410M6	0613952R01	CER CHIP RES 10K OHM 5% 0402	R6433M6	0613952Q32	CER CHIP RES 20.0 OHM 5 0402	R6518M6	0613952R66	CER CHIP RES 0.0 +/-0.050 OHM
R6304M6	0613952R66	CER CHIP RES 0.0 +/-0.050 OHM	R6411M6	0613952R66	CER CHIP RES 0.0 +/-0.050 OHM	R6434M6	0613952Q32	CER CHIP RES 20.0 OHM 5 0402	R6519M6	0613952Q89	CER CHIP RES 4700 OHM 5 0402
R63050M6	0613952R66	CER CHIP RES 0.0 +/-0.050 OHM	R6414M6	0613952Q61	CER CHIP RES 330 OHM 5 0402	R6492M6	0613952Q79	CER CHIP RES 1800 OHM 5 0402	R6520M6	0613952Q73	CER CHIP RES 1000 OHM 5 0402
R6305M6	0613952R66	CER CHIP RES 0.0 +/-0.050 OHM	R6415M6	0613952Q61	CER CHIP RES 330 OHM 5 0402	R6501M6	0613952Q25	CER CHIP RES 10.0 OHM 5 0402	R6521M6	0615049H01	KAMAYA 0.2 OHM CHIP RESISTOR
R6306M6	0613952R01	CER CHIP RES 10K OHM 5% 0402	R6416M6	0613952Q61	CER CHIP RES 330 OHM 5 0402	R6502M6	0613952Q25	CER CHIP RES 10.0 OHM 5 0402	R6522M6	0613952M66	CER CHIP RES 4750 OHM 1% 0402

Ref. Des.	Part Number	Description
R6523M6	0613952R09	CER CHIP RES 22K OHM 5% 0402
R6524M6	0613952R66	CER CHIP RES 0.0 +/-0.050 OHM
R6525M6	NOTPLACED	64AM DUMMY PART NUMBER
R6526M6	0613952R66	CER CHIP RES 0.0 +/-0.050 OHM
R6527M6	0613952N87	CER CHIP RES 78.7K OHM 1 0402
R6528M6	0613952R25	CER CHIP RES 100K OHM 5% 0402
R6529M6	0615049H01	KAMAYA 0.2 OHM CHIP RESISTOR
R6530M6	0613952L30	CER CHIP RES 200 OHM 1 0402
R6531M6	0613952R01	CER CHIP RES 10K OHM 5% 0402
R6532M6	NOTPLACED	64AM DUMMY PART NUMBER
R6533M6	0613952R66	CER CHIP RES 0.0 +/-0.050 OHM
R6534M6	NOTPLACED	64AM DUMMY PART NUMBER
R6535M6	0613952N01	CER CHIP RES 10.0K OHM 1 0402
R6536M6	0613952Z72	RES,MF,91KOHM,1%,.0625 W,SM,0402,200PPM/CEL,PB-FREE
R6537M6	0613952P09	CER CHIP RES 121K OHM 1 0402
R6538M6	0613952Q95	CER CHIP RES 8200 OHM 5 0402
R6539M6	0613952P66	CER CHIP RES 475K OHM 1 0402
R6540M6	0613952P66	CER CHIP RES 475K OHM 1 0402
R6541M6	0613952R25	CER CHIP RES 100K OHM 5% 0402
R6542M6	0613952R66	CER CHIP RES 0.0 +/-0.050 OHM

Ref. Des.	Part Number	Description
R6543M6	0613952R66	CER CHIP RES 0.0 +/-0.050 OHM
R6544M6	0613952R66	CER CHIP RES 0.0 +/-0.050 OHM
R6545M6	0613952R25	CER CHIP RES 100K OHM 5% 0402
R6546M6	0613952R66	CER CHIP RES 0.0 +/-0.050 OHM
R6547M6	0613952R66	CER CHIP RES 0.0 +/-0.050 OHM
R6548M6	NOTPLACED	64AM DUMMY PART NUMBER
R6550M6	0613952Z64	RES,MF,39KOHM,1%,.0625 W,SM,0402,200PPM/CEL,PB-FREE
R6551M6	0613952Z62	RES,MF,33KOHM,1%,.0625 W,SM,0402,200PPM/CEL,PB-FREE
R6552M6	0613952R25	CER CHIP RES 100K OHM 5% 0402
R6558M6	0613952P22	CER CHIP RES 165K OHM 1 0402
R6561M6	0613952R66	CER CHIP RES 0.0 +/-0.050 OHM
R6562M6	0613952R66	CER CHIP RES 0.0 +/-0.050 OHM
R6563M6	0613952R66	CER CHIP RES 0.0 +/-0.050 OHM
R6564M6	0613952R66	CER CHIP RES 0.0 +/-0.050 OHM
R6565M6	0613952R66	CER CHIP RES 0.0 +/-0.050 OHM
R6566M6	0613952R66	CER CHIP RES 0.0 +/-0.050 OHM
R6567M6	0613952R66	CER CHIP RES 0.0 +/-0.050 OHM
R6568M6	0613952P47	CER CHIP RES 301K OHM 1 0402
R6570M6	0613952R66	CER CHIP RES 0.0 +/-0.050 OHM
R6574M6	0613952R25	CER CHIP RES 100K OHM 5% 0402

Ref. Des.	Part Number	Description
R6576M6	0613952R01	CER CHIP RES 10K OHM 5% 0402
R6577M6	0613952Q89	CER CHIP RES 4700 OHM 5 0402
R6578M6	0613952Q89	CER CHIP RES 4700 OHM 5 0402
R6579M6	0613952R01	CER CHIP RES 10K OHM 5% 0402
R6580M6	0613952R17	CER CHIP RES 47K OHM 5% 0402
R6581M6	0613952Q49	CER CHIP RES 100 OHM 5 0402
R6582M6	0613952Q89	CER CHIP RES 4700 OHM 5 0402
R6583M6	0613952R03	CER CHIP RES 12K OHM 5% 0402
R6584M6	0613952Q56	CER CHIP RES 200 OHM 5 0402
R6591M6	0613952R66	CER CHIP RES 0.0 +/-0.050 OHM
R6592M6	0613952R66	CER CHIP RES 0.0 +/-0.050 OHM
R6598M6	NOTPLACED	64AM DUMMY PART NUMBER
R6599M6	0613952R01	CER CHIP RES 10K OHM 5% 0402
R6601M6	0613952R01	CER CHIP RES 10K OHM 5% 0402
R6602M6	0613952R01	CER CHIP RES 10K OHM 5% 0402
R6604M6	0613952Q51	CER CHIP RES 120 OHM 5 0402
R6605M6	0613952Q33	CER CHIP RES 22.0 OHM 5 0402
R6606M6	0613952Q37	CER CHIP RES 33.0 OHM 5 0402
R6608M6	0613952R01	CER CHIP RES 10K OHM 5% 0402
R6609M6	0613952R25	CER CHIP RES 100K OHM 5% 0402

Ref. Des.	Part Number	Description
R6616M6	0613952Q80	CER CHIP RES 2000 OHM 5 0402
R6617M6	0613952R01	CER CHIP RES 10K OHM 5% 0402
R6618M6	0613952R01	CER CHIP RES 10K OHM 5% 0402
R6619M6	0613952R01	CER CHIP RES 10K OHM 5% 0402
R6621M6	0613952Q89	CER CHIP RES 4700 OHM 5 0402
R6622M6	0613952Q35	CER CHIP RES 27.0 OHM 5 0402
R6623M6	0613952Q35	CER CHIP RES 27.0 OHM 5 0402
R6624M6	0613952Q35	CER CHIP RES 27.0 OHM 5 0402
R6625M6	0613952Q35	CER CHIP RES 27.0 OHM 5 0402
R6626M6	0613952R01	CER CHIP RES 10K OHM 5% 0402
R698M19	0613952R66	CER CHIP RES 0.0 +/-0.050 OHM
R699M19	0613952R66	CER CHIP RES 0.0 +/-0.050 OHM
R701M7	0613952Q64	CER CHIP RES 430 OHM 5 0402
R702M7	0613952R66	CER CHIP RES 0.0 +/-0.050 OHM
R703M7	0613952Q67	CER CHIP RES 560 OHM 5 0402
R704M7	0613952Q25	CER CHIP RES 10.0 OHM 5 0402
R705M7	0613952Q71	CER CHIP RES 820 OHM 5 0402
R706M7	0613952R66	CER CHIP RES 0.0 +/-0.050 OHM
R707M7	0613952Q67	CER CHIP RES 560 OHM 5 0402
R708M7	0613952Q45	CER CHIP RES 68.0 OHM 5 0402

Ref. Des.	Part Number	Description
R709M7	NOTPLACED	64AM DUMMY PART NUMBER
R721M7	0613952R01	CER CHIP RES 10K OHM 5% 0402
R722M7	0613952Q71	CER CHIP RES 820 OHM 5 0402
R723M7	0613952Q79	CER CHIP RES 1800 OHM 5 0402
R728M7	0613952Q37	CER CHIP RES 33.0 OHM 5 0402
R729M7	0613952R09	CER CHIP RES 22K OHM 5% 0402
R730M7	0613952Q84	CER CHIP RES 3000 OHM 5 0402
R736M7	0613952Q55	CER CHIP RES 180 OHM 5 0402
R741M7	0613952R09	CER CHIP RES 22K OHM 5% 0402
R742M7	0613952R23	CER CHIP RES 82K OHM 5% 0402
R743M7	0613952R17	CER CHIP RES 47K OHM 5% 0402
R744M7	0613952Q91	CER CHIP RES 5600 OHM 5 0402
R745M7	0613952R09	CER CHIP RES 22K OHM 5% 0402
R746M7	0613952Q34	CER CHIP RES 24.0 OHM 5 0402
R747M7	0613952Q39	CER CHIP RES 39.0 OHM 5 0402
R748M7	0613952Q47	CER CHIP RES 82.0 OHM 5% 0402
R751M7	0613952Q59	CER CHIP RES 270 OHM 5 0402
R754M7	NOTPLACED	64AM DUMMY PART NUMBER
R757M7	0613952Q59	CER CHIP RES 270 OHM 5 0402
R761M7	0613952Q23	CER CHIP RES 8.2 OHM 5 0402

Ref. Des.	Part Number	Description
R762M7	0613952R08	CER CHIP RES 20K OHM 5 0402
R763M7	0613952R19	CER CHIP RES 56K OHM 5% 0402
R766M7	0613952Q92	CER CHIP RES 6200 OHM 5 0402
R769M7	0613952Q31	CER CHIP RES 18.0 OHM 5 0402
R771M7	0613952Q49	CER CHIP RES 100 OHM 5 0402
R776M7	0613952Q67	CER CHIP RES 560 OHM 5 0402
R778M7	0613952Q32	CER CHIP RES 20.0 OHM 5 0402
R779M7	0613952Q49	CER CHIP RES 100 OHM 5 0402
R785M7	0613952Q60	CER CHIP RES 300 OHM 5 0402
R799M7	0613952Q60	CER CHIP RES 300 OHM 5 0402
R809M7	0613952Q29	CER CHIP RES 15.0 OHM 5 0402
R822M7	NOTPLACED	64AM DUMMY PART NUMBER
R823M7	NOTPLACED	64AM DUMMY PART NUMBER
S2103M2	40012069001	TACT SWITCH, EMERGENCY
SH1	26012144001	SHIELD, TXOP
SH10	26012156001	SHIELD, MIXER
SH11	26012159001	SHIELD, VCO
SH12	26012152001	SHIELD, GPS/BT
SH13	26012161001	SHIELD, CONTROLLER
SH14	26012143001	SHIELD, MAKO
SH15	26012160001	SHIELD, DRIVER
SH16	26012163001	SHIELD, RXFE
SH17	26012155001	SHIELD, 2ND_LO
SH2	26012154001	SHIELD, ABACUS

Ref. Des.	Part Number	Description
SH3	26012149001	SHIELD, ALC
SH4	26012157001	SHIELD, BALUN
SH5	26012153001	SHIELD, FGU
SH6	26012150001	SHIELD, ALC/DC
SH7	26012158001	SHIELD, COUPLER
SH8	26012162001	SHIELD, HF
SH9	26012151001	SHIELD, AUDIO PA
T506M21	2575851B01	RF TRANSFORMER BALUN
T507M21	2575851B02	RF TRANSFORMER BALUN
U1101M11	5188032U43	IC, SENSING CIRCUIT, INA138, SM, SOT-23/5, 1PER PKG
U1103M11	5185070Y01	IC TEMPERATURE SENSOR PB-FREE
U1104M11	5185941F56	IC SINGLE LV LP OP AMPLIFIER
U1105M11	5180390L83	IC, CNTLR., SM, 1PER PKG
U1106M11	5175772B05	PRECISION RF DETECTOR
U1112M11	5175772B04	1 DB LSB GAAS MMIC ATTENUATOR
U1113M11	5185941F56	IC SINGLE LV LP OP AMPLIFIER
U1114M11	5185941F56	IC SINGLE LV LP OP AMPLIFIER
U1119M11	5109522E94	2 INPUT AND GATE IN NANO PACKAGE (C87)
U1121M11	5114000B52	IC, XOR, LOGIC LEVEL SHIFTER, 1PER PKG, SM, SOT-353, PB-FREE
U1125M11	5175206H01	QUAD 12-BIT DAC IC
U1126M11	5109817F77	IC COMPTR LM7275 5SC70 (D54)
U1127M11	5171779H01	SPDT ANALOG SWITCH
U1128M11	5188085K11	IC, SINGLE NAND GATE, 2-INPUT, POSITIVE, 5 DSBGA, PB-FREE

Ref. Des.	Part Number	Description
U1129M11	5175143H01	WIDE SUPPLY RANGE OP AMP
U1130M11	5175143H01	WIDE SUPPLY RANGE OP AMP
U1131M11	5109817F77	IC COMPTR LM7275 5SC70 (D54)
U1132M11	5114007M28	IC, F-F/D, 1PER PKG, 17SZ74, N-I, SM, SOIC8, PB-FREE
U1133M11	5171779H01	SPDT ANALOG SWITCH
U1136M11	5109522E94	2 INPUT AND GATE IN NANO PACKAGE (C87)
U1137M11	5164852H16	IC TRANSCEIVER W/ LEVEL TRANSLATION
U1138M11	5164852H16	IC TRANSCEIVER W/ LEVEL TRANSLATION
U1139M11	5164852H16	IC TRANSCEIVER W/ LEVEL TRANSLATION
U1141M11	5185941F56	IC SINGLE LV LP OP AMPLIFIER
U1142M11	5185941F56	IC SINGLE LV LP OP AMPLIFIER
U1143M11	5185941F56	IC SINGLE LV LP OP AMPLIFIER
U1144M11	5171779H01	SPDT ANALOG SWITCH
U1146M11	5109522E93	2 INPUT OR GATE IN NANO PACKAGE (C87)
U1147M11	5109522E94	2 INPUT AND GATE IN NANO PACKAGE (C87)
U1148M11	5185941F56	IC SINGLE LV LP OP AMPLIFIER
U1149M11	5109522E93	2 INPUT OR GATE IN NANO PACKAGE (C87)
U1150M11	51009381001	LOW DROPOUT VOLTAGE REFERENCE
U1301M3	51007377001	IC, XCVR, BLUETOOTH, GPS, FM RX, FM TX
U1304M3	5105739X13	IC, SIGE GPS LOW NOISE AMP 1575 MHZ
U1305M3	51016097001	LOW NOISE, 100MA LINEAR REGULATOR 2.8V

Ref. Des.	Part Number	Description	Ref. Des.	Part Number	Description	Ref. Des.	Part Number	Description	Ref. Des.	Part Number	Description
U1601M16	5175143H01	WIDE SUPPLY RANGE OP AMP	U4001M2	5164852H47	IC, I2C LEVEL TRANSLATOR	U6401M6	5175772B38	IC ANALOG TEMPERATURE SENSOR	U738M7	5171972L01	SP3T RF SWITCH
U1602M16	51012101001	VHF/UHF/800/900 MHZ LDMOS DRIVER IC	U4003M2	5188691V01	IC,MUX/DEMUX,NC7SB3157P6X,SM,SC70-6,1PER PKG,BUS,PB FREE	U6402M6	5115453H01	RAIL TO RAIL OUTPUT, 8 PIN BGA	U746M7	4805218N63	RF TRANS SOT 323 BFG67W
U1932M20	4885316E32	TRANSISTOR, RF	U4004M2	5116783H01	SN74LVC2G66 ANALOG SWITCH	U6404M6	5175772B38	IC ANALOG TEMPERATURE SENSOR	VR101M12	4813977M29	DIODE,VREF,MBZ5250,SM,SOT-23,20V,.225W,ZEN
U200M12	5188493T01	IC,VREG/SWG,LP2989,SM,MINI SO-8 HI PRCN REG 5V	U507M21	5164015H81	IC,MXR,DBL BAL GILBERT,CELL,,SM	U6405M6	5188348V06	IC,AUDIO CODEC,SM,AUDIO CODEC	VR1905M20	4815096H01	VARACTOR DIODE 1SV305
U201M12	5175771A99	LOW NOISE, 100MA LINEAR REGULATOR	U601M19	5102495J14	IC,IF,IF DIGITILIZING SUBSYSTEM IC,AD9864,QFN	U6408M6	5188521T01	IC,VREF,SM,SOT23,1PER PKG,.5%,1.25 TO 13.75,PRCN BANDGAP ADJUS	VR1906M20	4815096H01	VARACTOR DIODE 1SV305
U202M12	5175772B02	LINEAR REGULATOR 100MA 1.8V	U602M19	4885316E32	TRANSISTOR, RF	U6409M6	51009000001	NANOPOWER, 1.8V, SOT23 COMPARATOR	VR1907M20	4815096H01	VARACTOR DIODE 1SV305
U203M12	5175772B01	LINEAR VOLTAGE REGULATOR 350MA	U603M19	5109522E84	IC DUAL SCHMITT TRIG MICRO PAK	U6410M6	5175772B38	IC ANALOG TEMPERATURE SENSOR	VR1908M20	4815096H01	VARACTOR DIODE 1SV305
U21000M2	5188690V02	IC,D FLIP-FLOP,1PER PKG,7SZ175,,SC70-6,,PB-FREE	U604M19	5109522E84	IC DUAL SCHMITT TRIG MICRO PAK	U6411M6	5109731C55	IC 2.75 FIXED GAIN MONO FILTER-FREE AMPLFR	VR200M12	4813977M29	DIODE,VREF,MBZ5250,SM,SOT-23,20V,.225W,ZEN
U21001M2	5188690V02	IC,D FLIP-FLOP,1PER PKG,7SZ175,,SC70-6,,PB-FREE	U605M19	5164852H16	IC TRANSCEIVER W/ LEVEL TRANSLATION	U6501M6	5185143E77	IC, MAKO ASIC, CMOS PWR MGMT	VR601M19	4805656W87	DIODE,VCTR, @ 15V,1SV279,SOD-523/SC-79
U21002M2	5188690V01	IC,SCHMITT INVERTER,7SZ14,1PER PKG,SM,SC70-5,PB FREE	U606M19	5164852H16	IC TRANSCEIVER W/ LEVEL TRANSLATION	U6502M6	4871987H01	LOW FREQUENCY TRANSISTOR	VR602M19	4805656W87	DIODE,VCTR, @ 15V,1SV279,SOD-523/SC-79
U21003M2	5188690V01	IC,SCHMITT INVERTER,7SZ14,1PER PKG,SM,SC70-5,PB FREE	U607M19	5186311J24	IC,BFR,1BITS,NC7SZ125,ACTIVE HIGH,B	U6503M6	5171674H01	OP AMP	Y1304M3	48014600001	OSC,TCXO,26.0
U2101M2	5109522E84	IC DUAL SCHMITT TRIG MICRO PAK	U6101M6	0180706J18	PROGRAMMED CPLD	U6504M6	5171682H01	800MA BUCK REGULATOR	Y6501M6	93012044001	CRYSTAL UNIT SMD 5.0X3.2 24.576MHZ
U2102M2	5109522E84	IC DUAL SCHMITT TRIG MICRO PAK	U6102M6	5188691V01	IC,MUX/DEMUX,NC7SB3157P6X,SM,SC70-6,1PER PKG,BUS,PB FREE	U6505M6	5189631P01	IC,SYNC STEP-DOWN CONV	Y6502M6	4809995L05	XTAL QUARTZ 32.768KHZ CC4V-T1
U2104M2	5109522E84	IC DUAL SCHMITT TRIG MICRO PAK	U6103M6	5175114H01	SINGLE AND GATE MICROPAK	U6506M6	5184790Y04	IC,400MA ADJ VREG LDO,SOT23	Y6601M6	4802582S85	RESON.QRTZ,12MHZ,TOLERANCE10PPM,STABILITY15PPM,SM,FUND,LO
U2201M2	5171679H01	LED LIGHT DRIVER	U6104M6	5175114H01	SINGLE AND GATE MICROPAK	U6507M6	5171682H01	800MA BUCK REGULATOR	Y701M7	4871886H01	16.8 MHZ VCTXO .8PPM
U2202M2	5164852H47	IC, I2C LEVEL TRANSLATOR	U6105M6	5175114H01	SINGLE AND GATE MICROPAK	U6508M6	51009366001	500MA LOW DROPOUT CMOS LINEAR REG.			
U2601M13	5103535B53	IC,INVTR,DL,NC7WZ04L6X,2PER PKG,SC70	U6201M6	5185941F26	IC,COMPTR,LMV7219,NOP B	U6509M6	5175114H01	SINGLE AND GATE MICROPAK			
U2602M13	5185941F45	ATTEN,VAR,14.4DBMIN,15.6DBMAX,0-2000 MHZ-FREQ,50OHM,PCMT,SOT	U6301M6	51012031001	32MB DIE SHRINK DDR SDRAM IC	U6510M6	5114007A47	IC,OR,17SZ32,1PER PKG,SOT-353,PB FREE			
U3001M22	5171972L01	SP3T RF SWITCH	U6302M6	5102495J13	IC,MICROP,P1710ZZGE,BGA,,12MHZ,32BITS	U6511M6	5171339H01	MICROPOWER VOLTAGE REGULATOR			
			U6304M6	0105955U25	ASSY,IC,BGA SPEC PROG, FLASH MEMORY	U6601M6	5175114H01	SINGLE AND GATE MICROPAK			
						U702M7	5164015H28	IC,TRIDENT,INTEG SYNTH,RX/TX BSBND			



## UHF2 Transceiver (RF) Board Parts List – PC000354A01

Ref. Des.	Part Number	Description
C101M12	2113944A40	CAP,CHIP,100PF,+5%,-5%,50V-DC,0402,C0G,-55DEG CMIN,125DEG CMAX
C1101M11	2113945B02	CAP,CHIP,.01UF,+10%,-10%,25V-DC,0402,X7R,-55DEG CMIN,125DEG CMA
C1102M11	21012118001	CAP,FXD,1UF,+10%,-10%,25V-DC,X7R,CAP,FXD,1UF,10%,25V-DC,X7R
C1103M11	2113945B02	CAP,CHIP,.01UF,+10%,-10%,25V-DC,0402,X7R,-55DEG CMIN,125DEG CMA
C1104M11	NOTPLACED	64AM DUMMY PART NUMBER
C1105M11	2113944A19	CAP,CHIP,5.6PF,.5PF+/-,50V-DC,0402,C0G,-55DEG CMIN,125DEG CMAX
C1106M11	2113945B02	CAP,CHIP,.01UF,+10%,-10%,25V-DC,0402,X7R,-55DEG CMIN,125DEG CMA
C1107M11	2113944A40	CAP,CHIP,100PF,+5%,-5%,50V-DC,0402,C0G,-55DEG CMIN,125DEG CMAX
C1108M11	2113946B02	CAP,CHIP,.047UF,+10%,-10%,10V-DC,0402,X5R,-55DEG CMIN,85DEG CMA
C1110M11	2113944A40	CAP,CHIP,100PF,+5%,-5%,50V-DC,0402,C0G,-55DEG CMIN,125DEG CMAX
C1111M11	2113945Y02	CAP:X7R,0402,10%,16V,0.1UF
C1112M11	2113945B01	CAP,CHIP,6800PF,+10%,-10%,25V-DC,0402,X7R,-55DEG CMIN,125DEG CM
C1113M11	2113945B02	CAP,CHIP,.01UF,+10%,-10%,25V-DC,0402,X7R,-55DEG CMIN,125DEG CMA
C1116M11	2113945Y02	CAP:X7R,0402,10%,16V,0.1UF

Ref. Des.	Part Number	Description
C1117M11	2113945A12	CAP,CHIP,3300PF,+10%,-10%,50V-DC,0402,X7R,-55DEG CMIN,125DEG CM
C1118M11	2113945B02	CAP,CHIP,.01UF,+10%,-10%,25V-DC,0402,X7R,-55DEG CMIN,125DEG CMA
C1119M11	2113945B02	CAP,CHIP,.01UF,+10%,-10%,25V-DC,0402,X7R,-55DEG CMIN,125DEG CMA
C1120M11	2113945B02	CAP,CHIP,.01UF,+10%,-10%,25V-DC,0402,X7R,-55DEG CMIN,125DEG CMA
C1122M11	2113944M04	CAP,FXD,2.7PF,.1PF+/-,50V-DC,0603,C0G,-55DEG CMIN,125DEG CMAX
C1123M11	2113945B02	CAP,CHIP,.01UF,+10%,-10%,25V-DC,0402,X7R,-55DEG CMIN,125DEG CMA
C1124M11	2113945A13	CAP,CHIP,4700PF,+10%,-10%,50V-DC,0402,X7R,-55DEG CMIN,125DEG CM
C1125M11	2113944A23	CAP,CHIP,8.2PF,.5PF+/-,50V-DC,0402,C0G,-55DEG CMIN,125DEG CMAX
C1126M11	2113945A09	CAP,CHIP,1000PF,+10%,-10%,50V-DC,0402,X7R,-55DEG CMIN,125DEG CM
C1127M11	2113945Y02	CAP:X7R,0402,10%,16V,0.1UF
C1128M11	2113945B02	CAP,CHIP,.01UF,+10%,-10%,25V-DC,0402,X7R,-55DEG CMIN,125DEG CMA
C1129M11	2113945B02	CAP,CHIP,.01UF,+10%,-10%,25V-DC,0402,X7R,-55DEG CMIN,125DEG CMA
C1130M11	2113945B02	CAP,CHIP,.01UF,+10%,-10%,25V-DC,0402,X7R,-55DEG CMIN,125DEG CMA
C1135M11	NOTPLACED	64AM DUMMY PART NUMBER
C1137M11	2113945B02	CAP,CHIP,.01UF,+10%,-10%,25V-DC,0402,X7R,-55DEG CMIN,125DEG CMA

Ref. Des.	Part Number	Description
C1138M11	2113945B02	CAP,CHIP,.01UF,+10%,-10%,25V-DC,0402,X7R,-55DEG CMIN,125DEG CMA
C1139M11	2113944A25	CAP,CHIP,10PF,.5PF+/-,50V-DC,0402,C0G,-55DEG CMIN,125DEG CMAX
C1140M11	2113945A13	CAP,CHIP,4700PF,+10%,-10%,50V-DC,0402,X7R,-55DEG CMIN,125DEG CM
C1141M11	2113945Y02	CAP:X7R,0402,10%,16V,0.1UF
C1142M11	2113945A09	CAP,CHIP,1000PF,+10%,-10%,50V-DC,0402,X7R,-55DEG CMIN,125DEG CM
C1155M11	NOTPLACED	64AM DUMMY PART NUMBER
C1160M11	2113945C31	CAP,FXD,.1UF,+10%,-10%,50V-DC,0603,X7R,-55DEG CMIN,125DEG CMAX
C1161M11	2113956B91	CAP,FXD,1UF,+10%,-10%,16V-DC,0603,X5R,-55DEG CMIN,85DEG CMAX,PB
C1165M11	2113945Y02	CAP:X7R,0402,10%,16V,0.1UF
C1301M3	21012119001	CAP,FXD,2.2UF,+20%,-20%,6.3V-DC,X5R,CAP,FXD,2.2UF,20%,6.3V-D
C1302M3	2113944A21	CAP,CHIP,6.8PF,.5PF+/-,50V-DC,0402,C0G,-55DEG CMIN,125DEG CMAX
C1303M3	2113956A51	CAP,FXD,1UF,+10%,-10%,6.3V-DC,0402,X5R,-55DEG CMIN,85DEG CMAX,P
C1304M3	2113944A26	CAP,CHIP,12PF,+5%,-5%,50V-DC,0402,C0G,-55DEG CMIN,125DEG CMAX,P
C1305M3	2113945B02	CAP,CHIP,.01UF,+10%,-10%,25V-DC,0402,X7R,-55DEG CMIN,125DEG CMA

Ref. Des.	Part Number	Description
C1306M3	2187893N01	CAP,CER,1UF,20PF+/-,+20%,-20%,6.3V-DC,0402,+/-15%,-55DEG CMIN,85
C1307M3	2113944A26	CAP,CHIP,12PF,+5%,-5%,50V-DC,0402,C0G,-55DEG CMIN,125DEG CMAX,P
C1308M3	2113945A09	CAP,CHIP,1000PF,+10%,-10%,50V-DC,0402,X7R,-55DEG CMIN,125DEG CM
C1309M3	2113944A26	CAP,CHIP,12PF,+5%,-5%,50V-DC,0402,C0G,-55DEG CMIN,125DEG CMAX,P
C1310M3	2187893N01	CAP,CER,1UF,20PF+/-,+20%,-20%,6.3V-DC,0402,+/-15%,-55DEG CMIN,85
C1311M3	2113956A51	CAP,FXD,1UF,+10%,-10%,6.3V-DC,0402,X5R,-55DEG CMIN,85DEG CMAX,P
C1312M3	2113956A51	CAP,FXD,1UF,+10%,-10%,6.3V-DC,0402,X5R,-55DEG CMIN,85DEG CMAX,P
C1313M3	2187893N01	CAP,CER,1UF,20PF+/-,+20%,-20%,6.3V-DC,0402,+/-15%,-55DEG CMIN,85
C1314M3	2113944M20	CAP,FXD,12PF,+2%,-2%,50V-DC,0603,C0G,-55DEG CMIN,125DEG CMAX,PB
C1315M3	2175389H01	CAP,.5PF,CAP,.5PF,CHIP,0402,CERAMIC,50V
C1317M3	2188881Y12	CAP,CER,CHIP,1.8PF,.1PF+/-,16V-DC,0402,NP0,-55DEG CMIN,85DEG C
C1318M3	2113944A13	CAP,CHIP,3.3PF,.25PF+/-,50V-DC,0402,C0G,-55DEG CMIN,125DEG CMA
C1319M3	2113945Y02	CAP:X7R,0402,10%,16V,0.1UF

Ref. Des.	Part Number	Description
C1320M3	2113944A28	CAP,CHIP,18PF,+5%,-5%,50V-DC,0402,C0G,-55DEG CMIN,125DEG CMAX,P
C1321M3	2113944A29	CAP,CHIP,22PF,+5%,-5%,50V-DC,0402,C0G,-55DEG CMIN,125DEG CMAX,P
C1322M3	2113944A29	CAP,CHIP,22PF,+5%,-5%,50V-DC,0402,C0G,-55DEG CMIN,125DEG CMAX,P
C1323M3	2113944A29	CAP,CHIP,22PF,+5%,-5%,50V-DC,0402,C0G,-55DEG CMIN,125DEG CMAX,P
C1324M3	2115153H03	CAP,CER CHIP,1PF,.1PF+/-,.1%,-.1%,50V-DC,0402,C0G
C1325M3	2113944A29	CAP,CHIP,22PF,+5%,-5%,50V-DC,0402,C0G,-55DEG CMIN,125DEG CMAX,P
C1326M3	2113945Y02	CAP:X7R,0402,10%,16V,0.1UF
C1327M3	2113944A28	CAP,CHIP,18PF,+5%,-5%,50V-DC,0402,C0G,-55DEG CMIN,125DEG CMAX,P
C1328M3	2113945Y02	CAP:X7R,0402,10%,16V,0.1UF
C1329M3	2113945Y02	CAP:X7R,0402,10%,16V,0.1UF
C1330M3	2113945Y02	CAP:X7R,0402,10%,16V,0.1UF
C1331M3	2113945Y02	CAP:X7R,0402,10%,16V,0.1UF
C1332M3	2113945Y02	CAP:X7R,0402,10%,16V,0.1UF
C1333M3	2113945Y02	CAP:X7R,0402,10%,16V,0.1UF
C1334M3	2113945Y02	CAP:X7R,0402,10%,16V,0.1UF
C1335M3	2113945Y02	CAP:X7R,0402,10%,16V,0.1UF

Ref. Des.	Part Number	Description
C1336M3	2113945Y02	CAP:X7R,0402,10%,16V,0.1UF
C1337M3	2113944A28	CAP,CHIP,18PF,+5%,-5%,50V-DC,0402,C0G,-55DEG CMIN,125DEG CMAX,P
C1338M3	21012043007	CAP,.8PF,CAP,.5PF,CHIP,0402,CERAMIC,50V
C1376M3	2113944A25	CAP,CHIP,10PF,.5PF+/-,50V-DC,0402,C0G,-55DEG CMIN,125DEG CMAX
C1601M16	2113944M42	CAP,FXD,100PF,+2%,-2%,50V-DC,0603,C0G,-55DEG CMIN,125DEG CMAX,P
C1602M16	2113944M42	CAP,FXD,100PF,+2%,-2%,50V-DC,0603,C0G,-55DEG CMIN,125DEG CMAX,P
C1603M16	2113945L49	CAP,FXD,.01UF,+5%,-5%,50V-DC,0603,X7R,-55DEG CMIN,125DEG CMAX,P
C1604M16	2113944M42	CAP,FXD,100PF,+2%,-2%,50V-DC,0603,C0G,-55DEG CMIN,125DEG CMAX,P
C1605M16	2113945B02	CAP,CHIP,.01UF,+10%,-10%,25V-DC,0402,X7R,-55DEG CMIN,125DEG CMA
C1606M16	2113944A40	CAP,CHIP,100PF,+5%,-5%,50V-DC,0402,C0G,-55DEG CMIN,125DEG CMAX
C1607M16	2113944M42	CAP,FXD,100PF,+2%,-2%,50V-DC,0603,C0G,-55DEG CMIN,125DEG CMAX,P
C1608M16	2113944M42	CAP,FXD,100PF,+2%,-2%,50V-DC,0603,C0G,-55DEG CMIN,125DEG CMAX,P
C1609M16	2113944A40	CAP,CHIP,100PF,+5%,-5%,50V-DC,0402,C0G,-55DEG CMIN,125DEG CMAX

Ref. Des.	Part Number	Description
C1610M16	2113944M14	CAP,FXD,6.8PF,.1PF+/-,50V-DC,0603,C0G,-55DEG CMIN,125DEG CMAX
C1611M16	2113945L49	CAP,FXD,.01UF,+5%,-5%,50V-DC,0603,X7R,-55DEG CMIN,125DEG CMAX,P
C1612M16	NOTPLACED	64AM DUMMY PART NUMBER
C1613M16	2113944M30	CAP,FXD,33PF,+2%,-2%,50V-DC,0603,C0G,-55DEG CMIN,125DEG CMAX,PB
C1614M16	2113944M34	CAP,FXD,47PF,+2%,-2%,50V-DC,0603,C0G,-55DEG CMIN,125DEG CMAX,PB
C1615M16	2113944A40	CAP,CHIP,100PF,+5%,-5%,50V-DC,0402,C0G,-55DEG CMIN,125DEG CMAX
C1616M16	2113944M34	CAP,FXD,47PF,+2%,-2%,50V-DC,0603,C0G,-55DEG CMIN,125DEG CMAX,PB
C1617M16	2113945B02	CAP,CHIP,.01UF,+10%,-10%,25V-DC,0402,X7R,-55DEG CMIN,125DEG CMA
C1618M16	2113944M42	CAP,FXD,100PF,+2%,-2%,50V-DC,0603,C0G,-55DEG CMIN,125DEG CMAX,P
C1619M16	2113945C02	CAP,CHIP,.01UF,+10%,-10%,50V-DC,0603,X7R,-55DEG CMIN,125DEG CMA
C1620M16	2171741M06	CAP,CER CHIP,39PF,50V-DC,HI Q CAP,39PF
C1621M16	2171741M03	CAP,FXD,18PF,+5%,-5%,50V-DC,COG,HI Q CAP
C1622M16	2113944M22	CAP,FXD,15PF,+2%,-2%,50V-DC,0603,C0G,-55DEG CMIN,125DEG CMAX,PB
C1623M16	NOTPLACED	64AM DUMMY PART NUMBER

Ref. Des.	Part Number	Description
C1624M16	2113944M20	CAP,FXD,12PF,+2%,-2%,50V-DC,0603,C0G,-55DEG CMIN,125DEG CMAX,PB
C1625M16	2113944M42	CAP,FXD,100PF,+2%,-2%,50V-DC,0603,C0G,-55DEG CMIN,125DEG CMAX,P
C1628M16	2113944M05	CAP,FXD,3PF,.1PF+/-,50V-DC,0603,C0G,-55DEG CMIN,125DEG CMAX,PB
C1629M16	2113945A12	CAP,CHIP,3300PF,+10%,-10%,50V-DC,0402,X7R,-55DEG CMIN,125DEG CM
C1630M16	2113945A12	CAP,CHIP,3300PF,+10%,-10%,50V-DC,0402,X7R,-55DEG CMIN,125DEG CM
C1633M16	NOTPLACED	64AM DUMMY PART NUMBER
C1803M17	2113944C22	CAP,CHIP,4.7PF,.25PF+/-,50V-DC,0603,C0G,-55DEG CMIN,125DEG CMA
C1804M17	2113944C20	CAP,CHIP,3.9PF,.25PF+/-,50V-DC,0603,C0G,-55DEG CMIN,125DEG CMA
C1807M17	2113944C24	CAP,CHIP,5.6PF,.5PF+/-,50V-DC,0603,C0G,-55DEG CMIN,125DEG CMAX
C1820M17	2113944C18	CAP,CHIP,3.3PF,.25PF+/-,50V-DC,0603,C0G,-55DEG CMIN,125DEG CMA
C1821M17	2113944C25	CAP,CHIP,6.2PF,.5PF+/-,50V-DC,0603,C0G,-55DEG CMIN,125DEG CMAX
C1822M17	2113944C45	CAP,CHIP,100PF,+5%,-5%,50V-DC,0603,C0G,-55DEG CMIN,125DEG CMAX
C1826M17	2113944C13	CAP,CHIP,2PF,.25PF+/-,50V-DC,0603,C0G,-55DEG CMIN,125DEG CMAX
C1827M17	2113944C18	CAP,CHIP,3.3PF,.25PF+/-,50V-DC,0603,C0G,-55DEG CMIN,125DEG CMA
C1900M20	2115153H25	CAP,CERAMIC,COG



Ref. Des.	Part Number	Description
C2115M2	2113944A40	CAP,CHIP,100PF,+5%,-5%,50V-DC,0402,C0G,-55DEG CMIN,125DEG CMAX
C2116M2	2113944A40	CAP,CHIP,100PF,+5%,-5%,50V-DC,0402,C0G,-55DEG CMIN,125DEG CMAX
C2117M2	2113944A40	CAP,CHIP,100PF,+5%,-5%,50V-DC,0402,C0G,-55DEG CMIN,125DEG CMAX
C2126M2	2113944A46	CAP,CHIP,330PF,+5%,-5%,50V-DC,0402,C0G,-55DEG CMIN,125DEG CMAX
C2127M2	2113944A46	CAP,CHIP,330PF,+5%,-5%,50V-DC,0402,C0G,-55DEG CMIN,125DEG CMAX
C2128M2	2113944A46	CAP,CHIP,330PF,+5%,-5%,50V-DC,0402,C0G,-55DEG CMIN,125DEG CMAX
C2129M2	2113944A46	CAP,CHIP,330PF,+5%,-5%,50V-DC,0402,C0G,-55DEG CMIN,125DEG CMAX
C212M12	2113946D07	CAP,CHIP,4.7UF,+10%,-10%,6.3V-DC,0603,X5R,-55DEG CMIN,85DEG CMA
C2130M2	2113944A46	CAP,CHIP,330PF,+5%,-5%,50V-DC,0402,C0G,-55DEG CMIN,125DEG CMAX
C213M12	2113944A46	CAP,CHIP,330PF,+5%,-5%,50V-DC,0402,C0G,-55DEG CMIN,125DEG CMAX
C214M12	2113944A40	CAP,CHIP,100PF,+5%,-5%,50V-DC,0402,C0G,-55DEG CMIN,125DEG CMAX
C215M12	2113944A46	CAP,CHIP,330PF,+5%,-5%,50V-DC,0402,C0G,-55DEG CMIN,125DEG CMAX

Ref. Des.	Part Number	Description
C216M12	2113944A40	CAP,CHIP,100PF,+5%,-5%,50V-DC,0402,C0G,-55DEG CMIN,125DEG CMAX
C217M12	2113956B91	CAP,FXD,1UF,+10%,-10%,16V-DC,0603,X5R,-55DEG CMIN,85DEG CMAX,PB
C2201M2	2113946B04	CAP,CHIP,.1UF,+10%,-10%,10V-DC,0402,X5R,-55DEG CMIN,85DEG CMAX
C2202M2	2113946B04	CAP,CHIP,.1UF,+10%,-10%,10V-DC,0402,X5R,-55DEG CMIN,85DEG CMAX
C2203M2	2113946B04	CAP,CHIP,.1UF,+10%,-10%,10V-DC,0402,X5R,-55DEG CMIN,85DEG CMAX
C2211M2	2113946B04	CAP,CHIP,.1UF,+10%,-10%,10V-DC,0402,X5R,-55DEG CMIN,85DEG CMAX
C2212M2	2113946B04	CAP,CHIP,.1UF,+10%,-10%,10V-DC,0402,X5R,-55DEG CMIN,85DEG CMAX
C2213M2	2113946B04	CAP,CHIP,.1UF,+10%,-10%,10V-DC,0402,X5R,-55DEG CMIN,85DEG CMAX
C2214M2	2113946B04	CAP,CHIP,.1UF,+10%,-10%,10V-DC,0402,X5R,-55DEG CMIN,85DEG CMAX
C2215M2	2113946B04	CAP,CHIP,.1UF,+10%,-10%,10V-DC,0402,X5R,-55DEG CMIN,85DEG CMAX
C2216M2	2113946B04	CAP,CHIP,.1UF,+10%,-10%,10V-DC,0402,X5R,-55DEG CMIN,85DEG CMAX
C2221M2	2113946B04	CAP,CHIP,.1UF,+10%,-10%,10V-DC,0402,X5R,-55DEG CMIN,85DEG CMAX
C2222M2	2113946B04	CAP,CHIP,.1UF,+10%,-10%,10V-DC,0402,X5R,-55DEG CMIN,85DEG CMAX
C2223M2	2113944A40	CAP,CHIP,100PF,+5%,-5%,50V-DC,0402,C0G,-55DEG CMIN,125DEG CMAX

Ref. Des.	Part Number	Description
C2401M2	NOTPLACED	64AM DUMMY PART NUMBER
C2402M2	NOTPLACED	64AM DUMMY PART NUMBER
C2403M2	NOTPLACED	64AM DUMMY PART NUMBER
C2404M2	NOTPLACED	64AM DUMMY PART NUMBER
C2601M13	2113944C45	CAP,CHIP,100PF,+5%,-5%,50V-DC,0603,C0G,-55DEG CMIN,125DEG CMAX
C2602M13	2113944C39	CAP,CHIP,56PF,+5%,-5%,50V-DC,0603,C0G,-55DEG CMIN,125DEG CMAX,P
C2603M13	2113944A40	CAP,CHIP,100PF,+5%,-5%,50V-DC,0402,C0G,-55DEG CMIN,125DEG CMAX
C2604M13	2113944C45	CAP,CHIP,100PF,+5%,-5%,50V-DC,0603,C0G,-55DEG CMIN,125DEG CMAX
C2605M13	2113944A40	CAP,CHIP,100PF,+5%,-5%,50V-DC,0402,C0G,-55DEG CMIN,125DEG CMAX
C2606M13	2113944A40	CAP,CHIP,100PF,+5%,-5%,50V-DC,0402,C0G,-55DEG CMIN,125DEG CMAX
C2607M13	2113944C17	CAP,CHIP,3PF,.25PF+/-,50V-DC,0603,C0G,-55DEG CMIN,125DEG CMAX
C2608M13	2113944C13	CAP,CHIP,2PF,.25PF+/-,50V-DC,0603,C0G,-55DEG CMIN,125DEG CMAX
C2609M13	2113946K02	CAP,CHIP,.1UF,+80%,-20%,16V-DC,0402,Y5V,-30DEG CMIN,85DEG CMAX
C2806M1	NOTPLACED	64AM DUMMY PART NUMBER

Ref. Des.	Part Number	Description
C3100M22	2113944A40	CAP,CHIP,100PF,+5%,-5%,50V-DC,0402,C0G,-55DEG CMIN,125DEG CMAX
C3101M22	2115153H12	CAP,CERAMIC CHIP,2.4PF,.1PF+/-,.1%,-.1%,50V-DC,0402,C0G,CAP,
C3102M22	2113944A44	CAP,CHIP,220PF,+5%,-5%,50V-DC,0402,C0G,-55DEG CMIN,125DEG CMAX
C3103M22	NOTPLACED	64AM DUMMY PART NUMBER
C3104M22	NOTPLACED	64AM DUMMY PART NUMBER
C3105M22	2113944A40	CAP,CHIP,100PF,+5%,-5%,50V-DC,0402,C0G,-55DEG CMIN,125DEG CMAX
C3106M22	2113944A40	CAP,CHIP,100PF,+5%,-5%,50V-DC,0402,C0G,-55DEG CMIN,125DEG CMAX
C3107M22	2115153H12	CAP,CERAMIC CHIP,2.4PF,.1PF+/-,.1%,-.1%,50V-DC,0402,C0G,CAP,
C3108M22	2115153H12	CAP,CERAMIC CHIP,2.4PF,.1PF+/-,.1%,-.1%,50V-DC,0402,C0G,CAP,
C3109M22	2113946B04	CAP,CHIP,.1UF,+10%,-10%,10V-DC,0402,X5R,-55DEG CMIN,85DEG CMAX
C3110M22	2115153H18	CAP,CER CHIP,4.3PF,.1PF+/-,.1%,-.1%,50V-DC,0402,C0G,CAP, CERA
C3111M22	2113944A40	CAP,CHIP,100PF,+5%,-5%,50V-DC,0402,C0G,-55DEG CMIN,125DEG CMAX
C3112M22	2113944A44	CAP,CHIP,220PF,+5%,-5%,50V-DC,0402,C0G,-55DEG CMIN,125DEG CMAX

Ref. Des.	Part Number	Description
C3113M22	2113944M06	CAP,FXD,3.3PF,.1PF+/-,50V-DC,0603,C0G,-55DEG CMIN,125DEG CMAX
C3115M22	2113944M08	CAP,FXD,3.9PF,.1PF+/-,50V-DC,0603,C0G,-55DEG CMIN,125DEG CMAX
C3116M22	2113944M09	CAP,FXD,4.3PF,.1PF+/-,50V-DC,0603,C0G,-55DEG CMIN,125DEG CMAX
C3120M22	2113944M34	CAP,FXD,47PF,+2%,-2%,50V-DC,0603,C0G,-55DEG CMIN,125DEG CMAX,PB
C3122M22	2113944A40	CAP,CHIP,100PF,+5%,-5%,50V-DC,0402,C0G,-55DEG CMIN,125DEG CMAX
C3133M22	2113944A40	CAP,CHIP,100PF,+5%,-5%,50V-DC,0402,C0G,-55DEG CMIN,125DEG CMAX
C3140M22	2115153H24	CAP,CER CHIP,7.5PF,.1PF+/-,+1%,-.1%,50V-DC,0402,C0G,CAP, CERA
C3141M22	2115153H24	CAP,CER CHIP,7.5PF,.1PF+/-,+1%,-.1%,50V-DC,0402,C0G,CAP, CERA
C3142M22	2113946B04	CAP,CHIP,.1UF,+10%,-10%,10V-DC,0402,X5R,-55DEG CMIN,85DEG CMAX
C3143M22	2115153H25	CAP, CERAMIC, COG
C3144M22	2113944A40	CAP,CHIP,100PF,+5%,-5%,50V-DC,0402,C0G,-55DEG CMIN,125DEG CMAX
C3147M22	2113944M15	CAP,FXD,7.5PF,.1PF+/-,50V-DC,0603,C0G,-55DEG CMIN,125DEG CMAX
C3151M22	2113944M12	CAP,FXD,5.6PF,.1PF+/-,50V-DC,0603,C0G,-55DEG CMIN,125DEG CMAX
C3152M22	2113944M13	CAP,FXD,6.2PF,.1PF+/-,50V-DC,0603,C0G,-55DEG CMIN,125DEG CMAX

Ref. Des.	Part Number	Description
C3154M22	2113944M40	CAP,FXD,82PF,+2%,-2%,50V-DC,0603,C0G,-55DEG CMIN,125DEG CMAX,PB
C3155M22	2113944A40	CAP,CHIP,100PF,+5%,-5%,50V-DC,0402,C0G,-55DEG CMIN,125DEG CMAX
C3157M22	2113946B04	CAP,CHIP,.1UF,+10%,-10%,10V-DC,0402,X5R,-55DEG CMIN,85DEG CMAX
C3158M22	2113946B04	CAP,CHIP,.1UF,+10%,-10%,10V-DC,0402,X5R,-55DEG CMIN,85DEG CMAX
C3159M22	2115153H12	CAP,CERAMIC CHIP,2.4PF,.1PF+/-,+1%,-.1%,50V-DC,0402,C0G,CAP,
C3160M22	2115153H11	CAP,FXD,2.2PF,.1PF+/-,+1%,-.1%,50V-DC,0402,C0G
C3161M22	2113944A44	CAP,CHIP,220PF,+5%,-5%,50V-DC,0402,C0G,-55DEG CMIN,125DEG CMAX
C4005M2	2113946B04	CAP,CHIP,.1UF,+10%,-10%,10V-DC,0402,X5R,-55DEG CMIN,85DEG CMAX
C4006M2	2113946B04	CAP,CHIP,.1UF,+10%,-10%,10V-DC,0402,X5R,-55DEG CMIN,85DEG CMAX
C4007M2	2113946B04	CAP,CHIP,.1UF,+10%,-10%,10V-DC,0402,X5R,-55DEG CMIN,85DEG CMAX
C500M21	2113945B05	CAP,FXD,.033UF,+10%,-10%,25V-DC,0402,X7R,-55DEG CMIN,125DEG CMA
C501M21	2113944A32	CAP,CHIP,39PF,+5%,-5%,50V-DC,0402,C0G,-55DEG CMIN,125DEG CMAX,P
C502M21	2113945B05	CAP,FXD,.033UF,+10%,-10%,25V-DC,0402,X7R,-55DEG CMIN,125DEG CMA

Ref. Des.	Part Number	Description
C504M21	2113944A40	CAP,CHIP,100PF,+5%,-5%,50V-DC,0402,C0G,-55DEG CMIN,125DEG CMAX
C505M21	NOTPLACED	64AM DUMMY PART NUMBER
C506M21	2113944A32	CAP,CHIP,39PF,+5%,-5%,50V-DC,0402,C0G,-55DEG CMIN,125DEG CMAX,P
C507M21	2113945B05	CAP,FXD,.033UF,+10%,-10%,25V-DC,0402,X7R,-55DEG CMIN,125DEG CMA
C508M21	2113946D07	CAP,CHIP,4.7UF,+10%,-10%,6.3V-DC,0603,X5R,-55DEG CMIN,85DEG CMA
C509M21	2113945B05	CAP,FXD,.033UF,+10%,-10%,25V-DC,0402,X7R,-55DEG CMIN,125DEG CMA
C510M21	2113944A32	CAP,CHIP,39PF,+5%,-5%,50V-DC,0402,C0G,-55DEG CMIN,125DEG CMAX,P
C511M21	2113945B05	CAP,FXD,.033UF,+10%,-10%,25V-DC,0402,X7R,-55DEG CMIN,125DEG CMA
C512M21	2113946D07	CAP,CHIP,4.7UF,+10%,-10%,6.3V-DC,0603,X5R,-55DEG CMIN,85DEG CMA
C514M21	NOTPLACED	64AM DUMMY PART NUMBER
C515M21	2113944A14	CAP,CHIP,3.6PF,.25PF+/-,50V-DC,0402,C0G,-55DEG CMIN,125DEG CMA
C516M21	2113944M42	CAP,FXD,100PF,+2%,-2%,50V-DC,0603,C0G,-55DEG CMIN,125DEG CMAX,P
C532M21	2113944A32	CAP,CHIP,39PF,+5%,-5%,50V-DC,0402,C0G,-55DEG CMIN,125DEG CMAX,P
C533M21	2115153H52	CAP,FXD,62PF,+1%,-1%,50V-DC,0402,C0G
C550M21	NOTPLACED	64AM DUMMY PART NUMBER

Ref. Des.	Part Number	Description
C551M21	NOTPLACED	64AM DUMMY PART NUMBER
C601M19	2113945B02	CAP,CHIP,.01UF,+10%,-10%,25V-DC,0402,X7R,-55DEG CMIN,125DEG CMA
C602M19	2113945B02	CAP,CHIP,.01UF,+10%,-10%,25V-DC,0402,X7R,-55DEG CMIN,125DEG CMA
C603M19	2113945B02	CAP,CHIP,.01UF,+10%,-10%,25V-DC,0402,X7R,-55DEG CMIN,125DEG CMA
C604M19	2113945B02	CAP,CHIP,.01UF,+10%,-10%,25V-DC,0402,X7R,-55DEG CMIN,125DEG CMA
C605M19	2113944A15	CAP,CHIP,3.9PF,.25PF+/-,50V-DC,0402,C0G,-55DEG CMIN,125DEG CMA
C606M19	2113946B04	CAP,CHIP,.1UF,+10%,-10%,10V-DC,0402,X5R,-55DEG CMIN,85DEG CMAX
C607M19	2113944A40	CAP,CHIP,100PF,+5%,-5%,50V-DC,0402,C0G,-55DEG CMIN,125DEG CMAX
C608M19	2113944A12	CAP,CHIP,3PF,.25PF+/-,50V-DC,0402,C0G,-55DEG CMIN,125DEG CMAX
C609M19	2113944A30	CAP,CHIP,27PF,+5%,-5%,50V-DC,0402,C0G,-55DEG CMIN,125DEG CMAX,P
C6104M6	2113946B04	CAP,CHIP,.1UF,+10%,-10%,10V-DC,0402,X5R,-55DEG CMIN,85DEG CMAX
C6105M6	2113946B04	CAP,CHIP,.1UF,+10%,-10%,10V-DC,0402,X5R,-55DEG CMIN,85DEG CMAX
C6106M6	2113946B04	CAP,CHIP,.1UF,+10%,-10%,10V-DC,0402,X5R,-55DEG CMIN,85DEG CMAX
C6107M6	2113946B04	CAP,CHIP,.1UF,+10%,-10%,10V-DC,0402,X5R,-55DEG CMIN,85DEG CMAX
C6108M6	2113946B04	CAP,CHIP,.1UF,+10%,-10%,10V-DC,0402,X5R,-55DEG CMIN,85DEG CMAX

Ref. Des.	Part Number	Description	Ref. Des.	Part Number	Description	Ref. Des.	Part Number	Description	Ref. Des.	Part Number	Description
C6109M6	2113946B04	CAP,CHIP,.1UF,+10%,-10%,10V-DC,0402,X5R,-55DEG CMIN,85DEG CMAX	C615M19	2113944A42	CAP,CHIP,150PF,+5%,-5%,50V-DC,0402,C0G,-55DEG CMIN,125DEG CMAX	C626M19	2113945A09	CAP,CHIP,1000PF,+10%,-10%,50V-DC,0402,X7R,-55DEG CMIN,125DEG CM	C6311M6	2113946B04	CAP,CHIP,.1UF,+10%,-10%,10V-DC,0402,X5R,-55DEG CMIN,85DEG CMAX
C610M19	2113944A40	CAP,CHIP,100PF,+5%,-5%,50V-DC,0402,C0G,-55DEG CMIN,125DEG CMAX	C616M19	2113945A11	CAP:CHIP,2200PF,+10%,-10%,50V-DC,0402	C627M19	2113945A09	CAP,CHIP,1000PF,+10%,-10%,50V-DC,0402,X7R,-55DEG CMIN,125DEG CM	C631M19	2115153H31	CAP,FXD,7PF,.1PF+/-,50V-DC,0402,C0G,-55DEG CMIN,125DEG CMAX,CA
C6110M6	2113946B04	CAP,CHIP,.1UF,+10%,-10%,10V-DC,0402,X5R,-55DEG CMIN,85DEG CMAX	C617M19	2113946B04	CAP,CHIP,.1UF,+10%,-10%,10V-DC,0402,X5R,-55DEG CMIN,85DEG CMAX	C628M19	2113945B02	CAP,CHIP,.01UF,+10%,-10%,25V-DC,0402,X7R,-55DEG CMIN,125DEG CMA	C632M19	2113944A40	CAP,CHIP,100PF,+5%,-5%,50V-DC,0402,C0G,-55DEG CMIN,125DEG CMAX
C6111M6	2113946B04	CAP,CHIP,.1UF,+10%,-10%,10V-DC,0402,X5R,-55DEG CMIN,85DEG CMAX	C618M19	2113944A31	CAP,CHIP,33PF,+5%,-5%,50V-DC,0402,C0G,-55DEG CMIN,125DEG CMAX,P	C629M19	2113946B04	CAP,CHIP,.1UF,+10%,-10%,10V-DC,0402,X5R,-55DEG CMIN,85DEG CMAX	C633M19	2113945B02	CAP,CHIP,.01UF,+10%,-10%,25V-DC,0402,X7R,-55DEG CMIN,125DEG CMA
C6112M6	2113946B04	CAP,CHIP,.1UF,+10%,-10%,10V-DC,0402,X5R,-55DEG CMIN,85DEG CMAX	C619M19	2113944A35	CAP,CHIP,62PF,+5%,-5%,50V-DC,0402,C0G,-55DEG CMIN,125DEG CMAX,P	C6301M6	2113946B04	CAP,CHIP,.1UF,+10%,-10%,10V-DC,0402,X5R,-55DEG CMIN,85DEG CMAX	C634M19	2113946B04	CAP,CHIP,.1UF,+10%,-10%,10V-DC,0402,X5R,-55DEG CMIN,85DEG CMAX
C6113M6	2113946B04	CAP,CHIP,.1UF,+10%,-10%,10V-DC,0402,X5R,-55DEG CMIN,85DEG CMAX	C6201M6	2113944A40	CAP,CHIP,100PF,+5%,-5%,50V-DC,0402,C0G,-55DEG CMIN,125DEG CMAX	C6302M6	2113946B04	CAP,CHIP,.1UF,+10%,-10%,10V-DC,0402,X5R,-55DEG CMIN,85DEG CMAX	C635M19	2113945B02	CAP,CHIP,.01UF,+10%,-10%,25V-DC,0402,X7R,-55DEG CMIN,125DEG CMA
C6114M6	2113946B04	CAP,CHIP,.1UF,+10%,-10%,10V-DC,0402,X5R,-55DEG CMIN,85DEG CMAX	C6202M6	2113945A09	CAP,CHIP,1000PF,+10%,-10%,50V-DC,0402,X7R,-55DEG CMIN,125DEG CM	C6303M6	2113946B04	CAP,CHIP,.1UF,+10%,-10%,10V-DC,0402,X5R,-55DEG CMIN,85DEG CMAX	C636M19	2113946B04	CAP,CHIP,.1UF,+10%,-10%,10V-DC,0402,X5R,-55DEG CMIN,85DEG CMAX
C6115M6	2113946B04	CAP,CHIP,.1UF,+10%,-10%,10V-DC,0402,X5R,-55DEG CMIN,85DEG CMAX	C6203M6	2113946B04	CAP,CHIP,.1UF,+10%,-10%,10V-DC,0402,X5R,-55DEG CMIN,85DEG CMAX	C6304M6	2113946B04	CAP,CHIP,.1UF,+10%,-10%,10V-DC,0402,X5R,-55DEG CMIN,85DEG CMAX	C637M19	2113946B04	CAP,CHIP,.1UF,+10%,-10%,10V-DC,0402,X5R,-55DEG CMIN,85DEG CMAX
C611M19	2113944A40	CAP,CHIP,100PF,+5%,-5%,50V-DC,0402,C0G,-55DEG CMIN,125DEG CMAX	C620M19	2113946B04	CAP,CHIP,.1UF,+10%,-10%,10V-DC,0402,X5R,-55DEG CMIN,85DEG CMAX	C6305M6	2113946S35	CAP,CHIP,1UF,+10%,-10%,16V-DC,0603,X5R,-55DEG CMIN,85DEG CMAX,P	C638M19	2113945A12	CAP,CHIP,3300PF,+10%,-10%,50V-DC,0402,X7R,-55DEG CMIN,125DEG CM
C612M19	2113945B02	CAP,CHIP,.01UF,+10%,-10%,25V-DC,0402,X7R,-55DEG CMIN,125DEG CMA	C621M19	2113946B04	CAP,CHIP,.1UF,+10%,-10%,10V-DC,0402,X5R,-55DEG CMIN,85DEG CMAX	C6306M6	2113946S35	CAP,CHIP,1UF,+10%,-10%,16V-DC,0603,X5R,-55DEG CMIN,85DEG CMAX,P	C639M19	2113945B02	CAP,CHIP,.01UF,+10%,-10%,25V-DC,0402,X7R,-55DEG CMIN,125DEG CMA
C613M19	2113944A40	CAP,CHIP,100PF,+5%,-5%,50V-DC,0402,C0G,-55DEG CMIN,125DEG CMAX	C622M19	2113946C07	CAP,FXD,.33UF,+10%,-10%,10V-DC,0603,X5R,-55DEG CMIN,85DEG CMAX	C6308M6	2113946B04	CAP,CHIP,.1UF,+10%,-10%,10V-DC,0402,X5R,-55DEG CMIN,85DEG CMAX	C6401M6	2113946B04	CAP,CHIP,.1UF,+10%,-10%,10V-DC,0402,X5R,-55DEG CMIN,85DEG CMAX
C614M19	2113945B02	CAP,CHIP,.01UF,+10%,-10%,25V-DC,0402,X7R,-55DEG CMIN,125DEG CMA	C623M19	2113945B02	CAP,CHIP,.01UF,+10%,-10%,25V-DC,0402,X7R,-55DEG CMIN,125DEG CMA	C6309M6	2113946B04	CAP,CHIP,.1UF,+10%,-10%,10V-DC,0402,X5R,-55DEG CMIN,85DEG CMAX	C6402M6	2113956A51	CAP,FXD,1UF,+10%,-10%,6.3V-DC,0402,X5R,-55DEG CMIN,85DEG CMAX,P
C6155M6	NOTPLACED	64AM DUMMY PART NUMBER	C624M19	2113946C07	CAP,FXD,.33UF,+10%,-10%,10V-DC,0603,X5R,-55DEG CMIN,85DEG CMAX	C630M19	2113946B04	CAP,CHIP,.1UF,+10%,-10%,10V-DC,0402,X5R,-55DEG CMIN,85DEG CMAX	C6403M6	2113946B04	CAP,CHIP,.1UF,+10%,-10%,10V-DC,0402,X5R,-55DEG CMIN,85DEG CMAX
C6156M6	NOTPLACED	64AM DUMMY PART NUMBER	C625M19	2115153H39	CAP,FXD,18PF,50V-DC,0402,C0G	C6310M6	2113946B04	CAP,CHIP,.1UF,+10%,-10%,10V-DC,0402,X5R,-55DEG CMIN,85DEG CMAX	C6404M6	2113946B04	CAP,CHIP,.1UF,+10%,-10%,10V-DC,0402,X5R,-55DEG CMIN,85DEG CMAX

Ref. Des.	Part Number	Description
C6405M6	2113946B04	CAP,CHIP,.1UF,+10%,-10%,10V-DC,0402,X5R,-55DEG CMIN,85DEG CMAX
C6406M6	2113946B04	CAP,CHIP,.1UF,+10%,-10%,10V-DC,0402,X5R,-55DEG CMIN,85DEG CMAX
C6407M6	2113946B04	CAP,CHIP,.1UF,+10%,-10%,10V-DC,0402,X5R,-55DEG CMIN,85DEG CMAX
C6408M6	2113946B04	CAP,CHIP,.1UF,+10%,-10%,10V-DC,0402,X5R,-55DEG CMIN,85DEG CMAX
C6409M6	2113946B04	CAP,CHIP,.1UF,+10%,-10%,10V-DC,0402,X5R,-55DEG CMIN,85DEG CMAX
C640M19	2113946B04	CAP,CHIP,.1UF,+10%,-10%,10V-DC,0402,X5R,-55DEG CMIN,85DEG CMAX
C6410M6	2113946B04	CAP,CHIP,.1UF,+10%,-10%,10V-DC,0402,X5R,-55DEG CMIN,85DEG CMAX
C6411M6	2113946B04	CAP,CHIP,.1UF,+10%,-10%,10V-DC,0402,X5R,-55DEG CMIN,85DEG CMAX
C6412M6	NOTPLACED	64AM DUMMY PART NUMBER
C6413M6	2113946B04	CAP,CHIP,.1UF,+10%,-10%,10V-DC,0402,X5R,-55DEG CMIN,85DEG CMAX
C6414M6	2113946B04	CAP,CHIP,.1UF,+10%,-10%,10V-DC,0402,X5R,-55DEG CMIN,85DEG CMAX
C6415M6	NOTPLACED	64AM DUMMY PART NUMBER
C6416M6	2113945B04	CAP,FXD,.022UF,+10%,-10%,25V-DC,0402,X7R,-55DEG CMIN,125DEG CMA
C6417M6	2113945B04	CAP,FXD,.022UF,+10%,-10%,25V-DC,0402,X7R,-55DEG CMIN,125DEG CMA
C6418M6	2113946B04	CAP,CHIP,.1UF,+10%,-10%,10V-DC,0402,X5R,-55DEG CMIN,85DEG CMAX

Ref. Des.	Part Number	Description
C6419M6	2113946B04	CAP,CHIP,.1UF,+10%,-10%,10V-DC,0402,X5R,-55DEG CMIN,85DEG CMAX
C641M19	2113944A31	CAP,CHIP,33PF,+5%,-5%,50V-DC,0402,C0G,-55DEG CMIN,125DEG CMAX,P
C6420M6	2113945B04	CAP,FXD,.022UF,+10%,-10%,25V-DC,0402,X7R,-55DEG CMIN,125DEG CMA
C6421M6	2113946B04	CAP,CHIP,.1UF,+10%,-10%,10V-DC,0402,X5R,-55DEG CMIN,85DEG CMAX
C6422M6	2113946C02	CAP,CHIP,.22UF,+10%,-10%,10V-DC,0603,X5R,-55DEG CMIN,85DEG CMAX
C6423M6	2113946B04	CAP,CHIP,.1UF,+10%,-10%,10V-DC,0402,X5R,-55DEG CMIN,85DEG CMAX
C6424M6	2113944A40	CAP,CHIP,100PF,+5%,-5%,50V-DC,0402,C0G,-55DEG CMIN,125DEG CMAX
C6425M6	2113944A40	CAP,CHIP,100PF,+5%,-5%,50V-DC,0402,C0G,-55DEG CMIN,125DEG CMAX
C6426M6	2113945B02	CAP,CHIP,.01UF,+10%,-10%,25V-DC,0402,X7R,-55DEG CMIN,125DEG CMA
C6427M6	2113944A50	CAP,CHIP,680PF,+5%,-5%,50V-DC,0402,C0G,-55DEG CMIN,125DEG CMAX
C6428M6	2113944A40	CAP,CHIP,100PF,+5%,-5%,50V-DC,0402,C0G,-55DEG CMIN,125DEG CMAX
C6429M6	2113946B04	CAP,CHIP,.1UF,+10%,-10%,10V-DC,0402,X5R,-55DEG CMIN,85DEG CMAX
C642M19	2113944A48	CAP,CHIP,470PF,+5%,-5%,50V-DC,0402,C0G,-55DEG CMIN,125DEG CMAX

Ref. Des.	Part Number	Description
C6430M6	2113946B04	CAP,CHIP,.1UF,+10%,-10%,10V-DC,0402,X5R,-55DEG CMIN,85DEG CMAX
C6431M6	2113946B04	CAP,CHIP,.1UF,+10%,-10%,10V-DC,0402,X5R,-55DEG CMIN,85DEG CMAX
C6432M6	2113956B54	CAP,FXD,10UF,+20%,-20%,6.3V-DC,X5R,-55DEG CMIN,85DEG CMAX
C6433M6	2113946S35	CAP,CHIP,1UF,+10%,-10%,16V-DC,0603,X5R,-55DEG CMIN,85DEG CMAX,P
C6434M6	2113946L05	CAP,FXD,.33UF,+80%,-20%,16V-DC,0603,Y5V,-30DEG CMIN,85DEG CMAX
C6435M6	2113946S35	CAP,CHIP,1UF,+10%,-10%,16V-DC,0603,X5R,-55DEG CMIN,85DEG CMAX,P
C6436M6	2113946C08	CAP,FXD,.47UF,+10%,-10%,10V-DC,0603,X5R,-55DEG CMIN,85DEG CMAX
C6437M6	2113946C08	CAP,FXD,.47UF,+10%,-10%,10V-DC,0603,X5R,-55DEG CMIN,85DEG CMAX
C6438M6	2113944A40	CAP,CHIP,100PF,+5%,-5%,50V-DC,0402,C0G,-55DEG CMIN,125DEG CMAX
C643M19	2113944A48	CAP,CHIP,470PF,+5%,-5%,50V-DC,0402,C0G,-55DEG CMIN,125DEG CMAX
C644M19	2113944A11	CAP,CHIP,2.7PF,.25PF+/-,50V-DC,0402,C0G,-55DEG CMIN,125DEG CMA
C645M19	NOTPLACED	64AM DUMMY PART NUMBER
C646M19	2115153H32	CAP,FXD,8PF,.1PF+/-,+.1%,-.1%,50V-DC,0402,C0G,CAP,CERAMIC, CO
C6501M6	2113946B04	CAP,CHIP,.1UF,+10%,-10%,10V-DC,0402,X5R,-55DEG CMIN,85DEG CMAX

Ref. Des.	Part Number	Description
C6502M6	2113946B04	CAP,CHIP,.1UF,+10%,-10%,10V-DC,0402,X5R,-55DEG CMIN,85DEG CMAX
C6503M6	2113944A46	CAP,CHIP,330PF,+5%,-5%,50V-DC,0402,C0G,-55DEG CMIN,125DEG CMAX
C6504M6	2113946B04	CAP,CHIP,.1UF,+10%,-10%,10V-DC,0402,X5R,-55DEG CMIN,85DEG CMAX
C6505M6	2113946B04	CAP,CHIP,.1UF,+10%,-10%,10V-DC,0402,X5R,-55DEG CMIN,85DEG CMAX
C6506M6	2113946B04	CAP,CHIP,.1UF,+10%,-10%,10V-DC,0402,X5R,-55DEG CMIN,85DEG CMAX
C6507M6	2113946B04	CAP,CHIP,.1UF,+10%,-10%,10V-DC,0402,X5R,-55DEG CMIN,85DEG CMAX
C6508M6	2113946B04	CAP,CHIP,.1UF,+10%,-10%,10V-DC,0402,X5R,-55DEG CMIN,85DEG CMAX
C6509M6	2113946B04	CAP,CHIP,.1UF,+10%,-10%,10V-DC,0402,X5R,-55DEG CMIN,85DEG CMAX
C6510M6	2113946B04	CAP,CHIP,.1UF,+10%,-10%,10V-DC,0402,X5R,-55DEG CMIN,85DEG CMAX
C6511M6	2113946S35	CAP,CHIP,1UF,+10%,-10%,16V-DC,0603,X5R,-55DEG CMIN,85DEG CMAX,P
C6512M6	2113946B04	CAP,CHIP,.1UF,+10%,-10%,10V-DC,0402,X5R,-55DEG CMIN,85DEG CMAX
C6513M6	2113946S35	CAP,CHIP,1UF,+10%,-10%,16V-DC,0603,X5R,-55DEG CMIN,85DEG CMAX,P
C6514M6	2113946S35	CAP,CHIP,1UF,+10%,-10%,16V-DC,0603,X5R,-55DEG CMIN,85DEG CMAX,P

Ref. Des.	Part Number	Description	Ref. Des.	Part Number	Description	Ref. Des.	Part Number	Description	Ref. Des.	Part Number	Description
C6515M6	2113946S35	CAP,CHIP,1UF,+10%,-10%,16V-DC,0603,X5R,-55DEG CMIN,85DEG CMAX,P	C6528M6	2113946B04	CAP,CHIP,.1UF,+10%,-10%,10V-DC,0402,X5R,-55DEG CMIN,85DEG CMAX	C6542M6	2113946B04	CAP,CHIP,.1UF,+10%,-10%,10V-DC,0402,X5R,-55DEG CMIN,85DEG CMAX	C6555M6	2113955D45	CAP,FXD,4.7UF,+10%,-10%,10V-DC,1206,X7R,-55DEG CMIN,125DEG CMAX
C6516M6	2113946B04	CAP,CHIP,.1UF,+10%,-10%,10V-DC,0402,X5R,-55DEG CMIN,85DEG CMAX	C6529M6	2113946B04	CAP,CHIP,.1UF,+10%,-10%,10V-DC,0402,X5R,-55DEG CMIN,85DEG CMAX	C6543M6	2113946B04	CAP,CHIP,.1UF,+10%,-10%,10V-DC,0402,X5R,-55DEG CMIN,85DEG CMAX	C6556M6	2113956B33	CAP,FXD,2.2UF,+10%,-10%,16V-DC,0603,X5R,-55DEG CMIN,85DEG CMAX
C6517M6	2113946S35	CAP,CHIP,1UF,+10%,-10%,16V-DC,0603,X5R,-55DEG CMIN,85DEG CMAX,P	C6530M6	2113946S35	CAP,CHIP,1UF,+10%,-10%,16V-DC,0603,X5R,-55DEG CMIN,85DEG CMAX,P	C6544M6	2113945D04	CAP,CHIP,.1UF,+10%,-10%,25V-DC,0603,X7R,-55DEG CMIN,125DEG CMAX	C6557M6	2113945D04	CAP,CHIP,.1UF,+10%,-10%,25V-DC,0603,X7R,-55DEG CMIN,125DEG CMAX
C6518M6	2113946B04	CAP,CHIP,.1UF,+10%,-10%,10V-DC,0402,X5R,-55DEG CMIN,85DEG CMAX	C6531M6	2113946B04	CAP,CHIP,.1UF,+10%,-10%,10V-DC,0402,X5R,-55DEG CMIN,85DEG CMAX	C6545M6	2113945D04	CAP,CHIP,.1UF,+10%,-10%,25V-DC,0603,X7R,-55DEG CMIN,125DEG CMAX	C6558M6	2113944A21	CAP,CHIP,6.8PF,.5PF+/-50V-DC,0402,C0G,-55DEG CMIN,125DEG CMAX
C6519M6	2113946S35	CAP,CHIP,1UF,+10%,-10%,16V-DC,0603,X5R,-55DEG CMIN,85DEG CMAX,P	C6532M6	2113946S35	CAP,CHIP,1UF,+10%,-10%,16V-DC,0603,X5R,-55DEG CMIN,85DEG CMAX,P	C6546M6	2113946B04	CAP,CHIP,.1UF,+10%,-10%,10V-DC,0402,X5R,-55DEG CMIN,85DEG CMAX	C6559M6	2113946S35	CAP,CHIP,1UF,+10%,-10%,16V-DC,0603,X5R,-55DEG CMIN,85DEG CMAX,P
C6520M6	2113946B04	CAP,CHIP,.1UF,+10%,-10%,10V-DC,0402,X5R,-55DEG CMIN,85DEG CMAX	C6533M6	2113946B04	CAP,CHIP,.1UF,+10%,-10%,10V-DC,0402,X5R,-55DEG CMIN,85DEG CMAX	C6547M6	2113944A46	CAP,CHIP,330PF,+5%,-5%,50V-DC,0402,C0G,-55DEG CMIN,125DEG CMAX	C6560M6	2113956C37	CAP,FXD,10UF,+10%,-10%,16V-DC,0805,X5R,-55DEG CMIN,85DEG CMAX,P
C6521M6	2113944A46	CAP,CHIP,330PF,+5%,-5%,50V-DC,0402,C0G,-55DEG CMIN,125DEG CMAX	C6534M6	2113956B33	CAP,FXD,2.2UF,+10%,-10%,16V-DC,0603,X5R,-55DEG CMIN,85DEG CMAX	C6548M6	NOTPLACED	64AM DUMMY PART NUMBER	C6561M6	2113956C37	CAP,FXD,10UF,+10%,-10%,16V-DC,0805,X5R,-55DEG CMIN,85DEG CMAX,P
C6522M6	2113946S35	CAP,CHIP,1UF,+10%,-10%,16V-DC,0603,X5R,-55DEG CMIN,85DEG CMAX,P	C6535M6	2113944A40	CAP,CHIP,100PF,+5%,-5%,50V-DC,0402,C0G,-55DEG CMIN,125DEG CMAX	C6549M6	2113944A46	CAP,CHIP,330PF,+5%,-5%,50V-DC,0402,C0G,-55DEG CMIN,125DEG CMAX	C6562M6	2113944A25	CAP,CHIP,10PF,.5PF+/-50V-DC,0402,C0G,-55DEG CMIN,125DEG CMAX
C6523M6	2113946B04	CAP,CHIP,.1UF,+10%,-10%,10V-DC,0402,X5R,-55DEG CMIN,85DEG CMAX	C6536M6	2113944A28	CAP,CHIP,18PF,+5%,-5%,50V-DC,0402,C0G,-55DEG CMIN,125DEG CMAX,P	C6550M6	2113945D04	CAP,CHIP,.1UF,+10%,-10%,25V-DC,0603,X7R,-55DEG CMIN,125DEG CMAX	C6563M6	2113945D04	CAP,CHIP,.1UF,+10%,-10%,25V-DC,0603,X7R,-55DEG CMIN,125DEG CMAX
C6524M6	2113946B04	CAP,CHIP,.1UF,+10%,-10%,10V-DC,0402,X5R,-55DEG CMIN,85DEG CMAX	C6537M6	2113944A19	CAP,CHIP,5.6PF,.5PF+/-50V-DC,0402,C0G,-55DEG CMIN,125DEG CMAX	C6551M6	2113944A46	CAP,CHIP,330PF,+5%,-5%,50V-DC,0402,C0G,-55DEG CMIN,125DEG CMAX	C6564M6	2113944A46	CAP,CHIP,330PF,+5%,-5%,50V-DC,0402,C0G,-55DEG CMIN,125DEG CMAX
C6525M6	2113946S35	CAP,CHIP,1UF,+10%,-10%,16V-DC,0603,X5R,-55DEG CMIN,85DEG CMAX,P	C6538M6	2113956B33	CAP,FXD,2.2UF,+10%,-10%,16V-DC,0603,X5R,-55DEG CMIN,85DEG CMAX	C6552M6	2113956E91	CAP,FXD,10UF,+10%,-10%,16V-DC,1210,X5R,-55DEG CMIN,85DEG CMAX,P	C6565M6	2113956B33	CAP,FXD,2.2UF,+10%,-10%,16V-DC,0603,X5R,-55DEG CMIN,85DEG CMAX
C6526M6	2113946B04	CAP,CHIP,.1UF,+10%,-10%,10V-DC,0402,X5R,-55DEG CMIN,85DEG CMAX	C6539M6	2113956B33	CAP,FXD,2.2UF,+10%,-10%,16V-DC,0603,X5R,-55DEG CMIN,85DEG CMAX	C6553M6	2113956E91	CAP,FXD,10UF,+10%,-10%,16V-DC,1210,X5R,-55DEG CMIN,85DEG CMAX,P	C6566M6	2113956E91	CAP,FXD,10UF,+10%,-10%,16V-DC,1210,X5R,-55DEG CMIN,85DEG CMAX,P
C6527M6	2113946B04	CAP,CHIP,.1UF,+10%,-10%,10V-DC,0402,X5R,-55DEG CMIN,85DEG CMAX	C6540M6	2113945A09	CAP,CHIP,1000PF,+10%,-10%,50V-DC,0402,X7R,-55DEG CMIN,125DEG CM	C6554M6	2113946B04	CAP,CHIP,.1UF,+10%,-10%,10V-DC,0402,X5R,-55DEG CMIN,85DEG CMAX			
			C6541M6	2113944A19	CAP,CHIP,5.6PF,.5PF+/-50V-DC,0402,C0G,-55DEG CMIN,125DEG CMAX						



Ref. Des.	Part Number	Description
C6567M6	2113956E91	CAP,FXD,10UF,+10%,-10%,16V-DC,1210,X5R,-55DEG CMIN,85DEG CMAX,P
C6568M6	2113956B33	CAP,FXD,2.2UF,+10%,-10%,16V-DC,0603,X5R,-55DEG CMIN,85DEG CMAX
C6569M6	2113956E91	CAP,FXD,10UF,+10%,-10%,16V-DC,1210,X5R,-55DEG CMIN,85DEG CMAX,P
C6570M6	2113944A46	CAP,CHIP,330PF,+5%,-5%,50V-DC,0402,C0G,-55DEG CMIN,125DEG CMAX
C6571M6	2113946B04	CAP,CHIP,.1UF,+10%,-10%,10V-DC,0402,X5R,-55DEG CMIN,85DEG CMAX
C6572M6	2113946B04	CAP,CHIP,.1UF,+10%,-10%,10V-DC,0402,X5R,-55DEG CMIN,85DEG CMAX
C6573M6	2113946S35	CAP,CHIP,1UF,+10%,-10%,16V-DC,0603,X5R,-55DEG CMIN,85DEG CMAX,P
C6574M6	2113946S35	CAP,CHIP,1UF,+10%,-10%,16V-DC,0603,X5R,-55DEG CMIN,85DEG CMAX,P
C6575M6	2113946S35	CAP,CHIP,1UF,+10%,-10%,16V-DC,0603,X5R,-55DEG CMIN,85DEG CMAX,P
C6576M6	2113956B33	CAP,FXD,2.2UF,+10%,-10%,16V-DC,0603,X5R,-55DEG CMIN,85DEG CMAX
C6577M6	2113946S35	CAP,CHIP,1UF,+10%,-10%,16V-DC,0603,X5R,-55DEG CMIN,85DEG CMAX,P
C6578M6	2113946S35	CAP,CHIP,1UF,+10%,-10%,16V-DC,0603,X5R,-55DEG CMIN,85DEG CMAX,P

Ref. Des.	Part Number	Description
C6579M6	2113946S35	CAP,CHIP,1UF,+10%,-10%,16V-DC,0603,X5R,-55DEG CMIN,85DEG CMAX,P
C6580M6	2113946S35	CAP,CHIP,1UF,+10%,-10%,16V-DC,0603,X5R,-55DEG CMIN,85DEG CMAX,P
C6581M6	2113956B33	CAP,FXD,2.2UF,+10%,-10%,16V-DC,0603,X5R,-55DEG CMIN,85DEG CMAX
C6582M6	2113944A21	CAP,CHIP,6.8PF,.5PF+/-,50V-DC,0402,C0G,-55DEG CMIN,125DEG CMAX
C6583M6	2113946B04	CAP,CHIP,.1UF,+10%,-10%,10V-DC,0402,X5R,-55DEG CMIN,85DEG CMAX
C6584M6	2113956C37	CAP,FXD,10UF,+10%,-10%,16V-DC,0805,X5R,-55DEG CMIN,85DEG CMAX,P
C6585M6	2113946B04	CAP,CHIP,.1UF,+10%,-10%,10V-DC,0402,X5R,-55DEG CMIN,85DEG CMAX
C6586M6	2113956C35	CAP,FXD,4.7UF,+10%,-10%,16V-DC,0805,X5R,-55DEG CMIN,85DEG CMAX
C6587M6	2113946B04	CAP,CHIP,.1UF,+10%,-10%,10V-DC,0402,X5R,-55DEG CMIN,85DEG CMAX
C6588M6	2113944A46	CAP,CHIP,330PF,+5%,-5%,50V-DC,0402,C0G,-55DEG CMIN,125DEG CMAX
C6589M6	2113944A40	CAP,CHIP,100PF,+5%,-5%,50V-DC,0402,C0G,-55DEG CMIN,125DEG CMAX
C6590M6	2113946B04	CAP,CHIP,.1UF,+10%,-10%,10V-DC,0402,X5R,-55DEG CMIN,85DEG CMAX
C6591M6	2113944A28	CAP,CHIP,18PF,+5%,-5%,50V-DC,0402,C0G,-55DEG CMIN,125DEG CMAX,P

Ref. Des.	Part Number	Description
C6592M6	2113944A09	CAP,CHIP,2.2PF,.25PF+/-,50V-DC,0402,C0G,-55DEG CMIN,125DEG CMA
C6593M6	2113956C37	CAP,FXD,10UF,+10%,-10%,16V-DC,0805,X5R,-55DEG CMIN,85DEG CMAX,P
C6594M6	2113946C07	CAP,FXD,.33UF,+10%,-10%,10V-DC,0603,X5R,-55DEG CMIN,85DEG CMAX
C6595M6	2113946S35	CAP,CHIP,1UF,+10%,-10%,16V-DC,0603,X5R,-55DEG CMIN,85DEG CMAX,P
C6596M6	NOTPLACED	64AM DUMMY PART NUMBER
C6601M6	2113944A28	CAP,CHIP,18PF,+5%,-5%,50V-DC,0402,C0G,-55DEG CMIN,125DEG CMAX,P
C6602M6	2113944A28	CAP,CHIP,18PF,+5%,-5%,50V-DC,0402,C0G,-55DEG CMIN,125DEG CMAX,P
C6670M6	NOTPLACED	64AM DUMMY PART NUMBER
C702M7	2185419D06	CAP,CHIP,.1UF,+10%,-10%,25V-DC,1206,-55DEG CMIN,125DEG CMAX
C703M7	2113945C26	CAP,FXD,.039UF,+10%,-10%,50V-DC,0603,X7R,-55DEG CMIN,125DEG CMA
C704M7	2185419D06	CAP,CHIP,.1UF,+10%,-10%,25V-DC,1206,-55DEG CMIN,125DEG CMAX
C705M7	2115153H29	CAP,FXD,5PF,.1PF+/-,50V-DC,0402,C0G
C706M7	2185419D06	CAP,CHIP,.1UF,+10%,-10%,25V-DC,1206,-55DEG CMIN,125DEG CMAX
C707M7	2113945C01	CAP,CHIP,6800PF,+10%,-10%,50V-DC,0603,X7R,-55DEG CMIN,125DEG CM
C708M7	2115153H14	CAP:FXD,3PF,.1PF+/-,50V-DC,0402,C0G*

Ref. Des.	Part Number	Description
C709M7	2171051Y11	CAP,FXD,.1UF,+5%,-5%,1206,-55DEG CMIN,125DEG CMAX,PB-FREE
C710M7	NOTPLACED	64AM DUMMY PART NUMBER
C711M7	NOTPLACED	64AM DUMMY PART NUMBER
C712M7	NOTPLACED	64AM DUMMY PART NUMBER
C713M7	2113945C26	CAP,FXD,.039UF,+10%,-10%,50V-DC,0603,X7R,-55DEG CMIN,125DEG CMA
C714M7	2171051Y11	CAP,FXD,.1UF,+5%,-5%,1206,-55DEG CMIN,125DEG CMAX,PB-FREE
C715M7	2113945C31	CAP,FXD,.1UF,+10%,-10%,50V-DC,0603,X7R,-55DEG CMIN,125DEG CMAX
C716M7	2113945C31	CAP,FXD,.1UF,+10%,-10%,50V-DC,0603,X7R,-55DEG CMIN,125DEG CMAX
C717M7	2113945C31	CAP,FXD,.1UF,+10%,-10%,50V-DC,0603,X7R,-55DEG CMIN,125DEG CMAX
C718M7	2113945C31	CAP,FXD,.1UF,+10%,-10%,50V-DC,0603,X7R,-55DEG CMIN,125DEG CMAX
C719M7	2113945C31	CAP,FXD,.1UF,+10%,-10%,50V-DC,0603,X7R,-55DEG CMIN,125DEG CMAX
C720M7	2113944C55	CAP,CHIP,2200PF,+5%,-5%,50V-DC,0603,C0G,-55DEG CMIN,125DEG CMAX
C721M7	NOTPLACED	64AM DUMMY PART NUMBER

Ref. Des.	Part Number	Description
C722M7	2113944A40	CAP,CHIP,100PF,+5%,-5%,50V-DC,0402,C0G,-55DEG CMIN,125DEG CMAX
C723M7	2113944A40	CAP,CHIP,100PF,+5%,-5%,50V-DC,0402,C0G,-55DEG CMIN,125DEG CMAX
C724M7	2113955D37	CAP,FXD,10UF,+10%,-10%,16V-DC,1206,X7R,-55DEG CMIN,125DEG CMAX
C725M7	2113945C31	CAP,FXD,.1UF,+10%,-10%,50V-DC,0603,X7R,-55DEG CMIN,125DEG CMAX
C726M7	2113945C31	CAP,FXD,.1UF,+10%,-10%,50V-DC,0603,X7R,-55DEG CMIN,125DEG CMAX
C727M7	2113944A40	CAP,CHIP,100PF,+5%,-5%,50V-DC,0402,C0G,-55DEG CMIN,125DEG CMAX
C730M7	2113945C31	CAP,FXD,.1UF,+10%,-10%,50V-DC,0603,X7R,-55DEG CMIN,125DEG CMAX
C731M7	2113945C31	CAP,FXD,.1UF,+10%,-10%,50V-DC,0603,X7R,-55DEG CMIN,125DEG CMAX
C732M7	2113944A32	CAP,CHIP,39PF,+5%,-5%,50V-DC,0402,C0G,-55DEG CMIN,125DEG CMAX,P
C733M7	2113945A09	CAP,CHIP,1000PF,+10%,-10%,50V-DC,0402,X7R,-55DEG CMIN,125DEG CM
C734M7	2113945C31	CAP,FXD,.1UF,+10%,-10%,50V-DC,0603,X7R,-55DEG CMIN,125DEG CMAX
C735M7	2113944A31	CAP,CHIP,33PF,+5%,-5%,50V-DC,0402,C0G,-55DEG CMIN,125DEG CMAX,P

Ref. Des.	Part Number	Description
C736M7	2113945B02	CAP,CHIP,.01UF,+10%,-10%,25V-DC,0402,X7R,-55DEG CMIN,125DEG CMA
C737M7	2113945C31	CAP,FXD,.1UF,+10%,-10%,50V-DC,0603,X7R,-55DEG CMIN,125DEG CMAX
C739M7	2113944A17	CAP,CHIP,4.7PF,.25PF+/-,50V-DC,0402,C0G,-55DEG CMIN,125DEG CMA
C740M7	2113944A44	CAP,CHIP,220PF,+5%,-5%,50V-DC,0402,C0G,-55DEG CMIN,125DEG CMAX
C742M7	2113945C31	CAP,FXD,.1UF,+10%,-10%,50V-DC,0603,X7R,-55DEG CMIN,125DEG CMAX
C743M7	2113946B06	CAP,CHIP,.22UF,+10%,-10%,10V-DC,0402,X5R,-55DEG CMIN,85DEG CMAX
C744M7	2113955D37	CAP,FXD,10UF,+10%,-10%,16V-DC,1206,X7R,-55DEG CMIN,125DEG CMAX
C749M7	2113945C31	CAP,FXD,.1UF,+10%,-10%,50V-DC,0603,X7R,-55DEG CMIN,125DEG CMAX
C750M7	2113945C31	CAP,FXD,.1UF,+10%,-10%,50V-DC,0603,X7R,-55DEG CMIN,125DEG CMAX
C751M7	2113945A09	CAP,CHIP,1000PF,+10%,-10%,50V-DC,0402,X7R,-55DEG CMIN,125DEG CM
C752M7	2113944A43	CAP,CHIP,180PF,+5%,-5%,50V-DC,0402,C0G,-55DEG CMIN,125DEG CMAX
C753M7	2113944A31	CAP,CHIP,33PF,+5%,-5%,50V-DC,0402,C0G,-55DEG CMIN,125DEG CMAX,P

Ref. Des.	Part Number	Description
C754M7	2113944A34	CAP,CHIP,56PF,+5%,-5%,50V-DC,0402,C0G,-55DEG CMIN,125DEG CMAX,P
C756M7	2113955D37	CAP,FXD,10UF,+10%,-10%,16V-DC,1206,X7R,-55DEG CMIN,125DEG CMAX
C757M7	2113945C31	CAP,FXD,.1UF,+10%,-10%,50V-DC,0603,X7R,-55DEG CMIN,125DEG CMAX
C760M7	2113944A44	CAP,CHIP,220PF,+5%,-5%,50V-DC,0402,C0G,-55DEG CMIN,125DEG CMAX
C764M7	2113946B06	CAP,CHIP,.22UF,+10%,-10%,10V-DC,0402,X5R,-55DEG CMIN,85DEG CMAX
C768M7	2115153H07	CAP,FXD,1.5PF,.1PF+/-,+6.67%,-6.67%,50V-DC,0402,C0G
C770M7	2113944A44	CAP,CHIP,220PF,+5%,-5%,50V-DC,0402,C0G,-55DEG CMIN,125DEG CMAX
C772M7	2113945A09	CAP,CHIP,1000PF,+10%,-10%,50V-DC,0402,X7R,-55DEG CMIN,125DEG CM
C773M7	2113944A33	CAP,CHIP,47PF,+5%,-5%,50V-DC,0402,C0G,-55DEG CMIN,125DEG CMAX,P
C777M7	2113944A44	CAP,CHIP,220PF,+5%,-5%,50V-DC,0402,C0G,-55DEG CMIN,125DEG CMAX
C780M7	2113944A33	CAP,CHIP,47PF,+5%,-5%,50V-DC,0402,C0G,-55DEG CMIN,125DEG CMAX,P
C781M7	2115153H57	CAP,CERAMIC CHIP,100PF,+1%,-1%,50V-DC,0402,C0G,CAP,CERAMIC,

Ref. Des.	Part Number	Description
C786M7	2113944A44	CAP,CHIP,220PF,+5%,-5%,50V-DC,0402,C0G,-55DEG CMIN,125DEG CMAX
C803M7	2113944A44	CAP,CHIP,220PF,+5%,-5%,50V-DC,0402,C0G,-55DEG CMIN,125DEG CMAX
C813M7	NOTPLACED	64AM DUMMY PART NUMBER
C816M7	2113944A35	CAP,CHIP,62PF,+5%,-5%,50V-DC,0402,C0G,-55DEG CMIN,125DEG CMAX,P
C817M7	2113944A44	CAP,CHIP,220PF,+5%,-5%,50V-DC,0402,C0G,-55DEG CMIN,125DEG CMAX
C819M7	2113944A44	CAP,CHIP,220PF,+5%,-5%,50V-DC,0402,C0G,-55DEG CMIN,125DEG CMAX
C823M7	2113944A40	CAP,CHIP,100PF,+5%,-5%,50V-DC,0402,C0G,-55DEG CMIN,125DEG CMAX
C824M7	2113944A44	CAP,CHIP,220PF,+5%,-5%,50V-DC,0402,C0G,-55DEG CMIN,125DEG CMAX
D1970M20	NOTPLACED	64AM DUMMY PART NUMBER
D200M12	4813978A19	DIODE,RECT,MBR120,SM,SOD-123,1A,20V,SHTK,PB-FREE
D2601M13	4813974A19	DIODE ARRAY,MXR,SM,SOT-323,7V,.2W,SHTK,2,PB-FREE
D2602M13	4815897H01	DIODE,PIN,UPP9401E,SM,DO-216,50A,50V,2.5W,POWER-MITE
D2603M13	4815897H01	DIODE,PIN,UPP9401E,SM,DO-216,50A,50V,2.5W,POWER-MITE

Ref. Des.	Part Number	Description
D3102M22	4805656W87	DIODE,VCTR, @ 15V,1SV279,SOD-523/SC-79,SOD-523/SC-79
D3103M22	4805656W87	DIODE,VCTR, @ 15V,1SV279,SOD-523/SC-79,SOD-523/SC-79
D3104M22	4805656W87	DIODE,VCTR, @ 15V,1SV279,SOD-523/SC-79,SOD-523/SC-79
D3105M22	4805656W87	DIODE,VCTR, @ 15V,1SV279,SOD-523/SC-79,SOD-523/SC-79
D3135M22	4805656W87	DIODE,VCTR, @ 15V,1SV279,SOD-523/SC-79,SOD-523/SC-79
D3136M22	4805656W87	DIODE,VCTR, @ 15V,1SV279,SOD-523/SC-79,SOD-523/SC-79
D3137M22	4805656W87	DIODE,VCTR, @ 15V,1SV279,SOD-523/SC-79,SOD-523/SC-79
D3138M22	4805656W87	DIODE,VCTR, @ 15V,1SV279,SOD-523/SC-79,SOD-523/SC-79
D4001M2	4813978A25	DIODE,SWG,BAT54,SM,SO D-323/SC-76,200MA,30V,.2W,SHTK,P B-FREE, W18
D6101M6	4813978A25	DIODE,SWG,BAT54,SM,SO D-323/SC-76,200MA,30V,.2W,SHTK,P B-FREE, W18
D6401M6	4813978A25	DIODE,SWG,BAT54,SM,SO D-323/SC-76,200MA,30V,.2W,SHTK,P B-FREE, W18
D6501M6	4813978A25	DIODE,SWG,BAT54,SM,SO D-323/SC-76,200MA,30V,.2W,SHTK,P B-FREE, W18
D722M7	4815011H01	DIODE,SWG,SM,300MA,80V,TRP
D723M7	4815011H01	DIODE,SWG,SM,300MA,80V,TRP
E1101M11	2405688Z01	IDCTR,BEAD,FERR BEAD

Ref. Des.	Part Number	Description
E1921M20	2471132D14	IDCTR,25%,200MA,.6OHM, FERR,SM,0402,IDCTR,FXD ,470OHM,200M
E201M12	7686949J14	FLTR,FERRITE BEAD,2A,SM,0805,CHIP,22 0OHM
E2242M2	7685268E01	FLTR,FERRITE BEAD,650MA,SM,0402,CHI P,80OHM
E2244M2	7685268E01	FLTR,FERRITE BEAD,650MA,SM,0402,CHI P,80OHM
E2245M2	7685268E01	FLTR,FERRITE BEAD,650MA,SM,0402,CHI P,80OHM
E2246M2	7685268E01	FLTR,FERRITE BEAD,650MA,SM,0402,CHI P,80OHM
E2247M2	7685268E01	FLTR,FERRITE BEAD,650MA,SM,0402,CHI P,80OHM
E2248M2	7685268E01	FLTR,FERRITE BEAD,650MA,SM,0402,CHI P,80OHM
E2249M2	7685268E01	FLTR,FERRITE BEAD,650MA,SM,0402,CHI P,80OHM
E2301M2	91012036001	FLTR,EMI/ RFI,300MA,SM,FIL- TER,EMI/ RFI,300MA,SM,0402,PB F
E2302M2	91012036001	FLTR,EMI/ RFI,300MA,SM,FIL- TER,EMI/ RFI,300MA,SM,0402,PB F
E2303M2	91012036001	FLTR,EMI/ RFI,300MA,SM,FIL- TER,EMI/ RFI,300MA,SM,0402,PB F
E2304M2	91012036001	FLTR,EMI/ RFI,300MA,SM,FIL- TER,EMI/ RFI,300MA,SM,0402,PB F

Ref. Des.	Part Number	Description
E2305M2	91012036001	FLTR,EMI/ RFI,300MA,SM,FIL- TER,EMI/ RFI,300MA,SM,0402,PB F
E2306M2	91012036001	FLTR,EMI/ RFI,300MA,SM,FIL- TER,EMI/ RFI,300MA,SM,0402,PB F
E2307M2	91012036001	FLTR,EMI/ RFI,300MA,SM,FIL- TER,EMI/ RFI,300MA,SM,0402,PB F
E2308M2	91012036001	FLTR,EMI/ RFI,300MA,SM,FIL- TER,EMI/ RFI,300MA,SM,0402,PB F
E2309M2	91012036001	FLTR,EMI/ RFI,300MA,SM,FIL- TER,EMI/ RFI,300MA,SM,0402,PB F
E2310M2	91012036001	FLTR,EMI/ RFI,300MA,SM,FIL- TER,EMI/ RFI,300MA,SM,0402,PB F
E2311M2	91012036001	FLTR,EMI/ RFI,300MA,SM,FIL- TER,EMI/ RFI,300MA,SM,0402,PB F
E601M19	2471132D14	IDCTR,25%,200MA,.6OHM, FERR,SM,0402,IDCTR,FXD ,470OHM,200M
E602M19	2471132D14	IDCTR,25%,200MA,.6OHM, FERR,SM,0402,IDCTR,FXD ,470OHM,200M
E603M19	2471132D14	IDCTR,25%,200MA,.6OHM, FERR,SM,0402,IDCTR,FXD ,470OHM,200M
E604M19	2471132D14	IDCTR,25%,200MA,.6OHM, FERR,SM,0402,IDCTR,FXD ,470OHM,200M
E605M19	2471132D14	IDCTR,25%,200MA,.6OHM, FERR,SM,0402,IDCTR,FXD ,470OHM,200M
E606M19	2471132D14	IDCTR,25%,200MA,.6OHM, FERR,SM,0402,IDCTR,FXD ,470OHM,200M

Ref. Des.	Part Number	Description
E607M19	2471132D14	IDCTR,25%,200MA,.6OHM, FERR,SM,0402,IDCTR,FXD ,470OHM,200M
E608M19	2471132D14	IDCTR,25%,200MA,.6OHM, FERR,SM,0402,IDCTR,FXD ,470OHM,200M
E609M19	2471132D14	IDCTR,25%,200MA,.6OHM, FERR,SM,0402,IDCTR,FXD ,470OHM,200M
E6501M6	2480067M02	FIXED INDUC- TOR,FXD,200MA,.4OHM,F ERR,0805,CHK RF CHIP BE
E6502M6	2480067M02	FIXED INDUC- TOR,FXD,200MA,.4OHM,F ERR,0805,CHK RF CHIP BE
F200M12	6575834B01	FUSE,FST BLW,2A,32V,FUSE SUR MT
FL1301M3	9102190J23	FLTR,SAW,BAND- PASS,1.57542GHZ NOM,SM,1.4X1.0MM,SMD, PB-FREE
FL1302M3	9109674L58	BAND PASS FILTER
FL1303M3	9102190J23	FLTR,SAW,BAND- PASS,1.57542GHZ NOM,SM,1.4X1.0MM,SMD, PB-FREE
FL502M21	91009300001	FLTR,BAND- PASS,109.65MHZ NOM,FIL- TER,MONOLITHIC CRYSTAL,BAND
J102M12	2880658Z08	RF CONNec- TOR,SMA,M,CONN SMA
J2301M2	0970312N01	CONN,BTB,RCPT,60CONT,. 4MM,GLD,1 STACK HGT
J2302M2	CN000222A0 1	CONNECTOR STANDARD- BTB,FEMALE(RECEPTA- CLE/SOCKET),0.4 MM,70,CONN
L1101M11	2415429H26	IDCTR,WW,33NH,5%,600M A,.22OHM,CER,SM,0603,C HIP
L1102M11	2415429H10	IDCTR,WW,6.8NH,5%,700M A,.11OHM,CER,SM,0603,C HIP

Ref. Des.	Part Number	Description	Ref. Des.	Part Number	Description	Ref. Des.	Part Number	Description	Ref. Des.	Part Number	Description
L1116M11	NOTPLACED	64AM DUMMY PART NUMBER	L1606M16	2460591E24	COIL AIR WOUND INDUC 23.75	L1934M20	2478057A35	CHIP INDUC-TOR,RF,47NH,2%,SM,0603 HI Q CHIP IDCTR	L3134M22	2414032F41	IDCTR,WW,390NH,10%,200 MA,1.5OHM,CER,40 Q,730MHZ SRF,SM,PB-F
L1117M11	2415428H01	COIL,AW,1.65NH,10%,1.6A, AIR,2 TURNS,SM,AIR WOUND IDCTR	L1609M16	2415428H03	IDCTR,AW,3.85NH,2%,1.6A ,AIR,SM,AIR WOUND IDCTR	L1935M20	2478057A23	IDCTR,18NH,2%,.066OHM, CER,41 Q,3.3GHZ SRF,PCMT,18 NH SUR	L3139M22	2415429H20	IDCTR,WW,18NH,5%,700M A,.17OHM,CER,SM,0603,C HIP
L1301M3	2414017P16	IDCTR,CHIP,18NH,5%,300 MA,.76OHM,CER,9 Q,1.9GHZ SRF,SM,0402,P	L1610M16	2471968L10	IDCTR,AW,9NH,2%,4A,.003 4OHM,AIR,5 TURNS,120 Q,4GHZ SRF,SM,9.	L1936M20	2415429H01	IDCTR,WW,1.6NH,5%,700M A,.03OHM,CER,SM,0603,C HIP	L3145M22	2415428H04	IDCTR,AW,5.4NH,2%,1.6A, AIR,SM,AIR WOUND IDCTR
L1302M3	2475122C13	IDCTR,3.3NH,9.09%,300MA ,.17OHM,CER,4 TURNS,SM,IND, MULTI-LA	L1803M17	2471884M01	IDCTR,AW,10.2NH,5%,AIR, SM,10.2NH SQ SPR	L200M12	2571269C01	IDCTR,COIL,1.5UH,20%,2.9 A,.059OHM,FERR,SM,WW PWR W18 COMP	L3150M22	2414032F41	IDCTR,WW,390NH,10%,200 MA,1.5OHM,CER,40 Q,730MHZ SRF,SM,PB-F
L1303M3	2414017P16	IDCTR,CHIP,18NH,5%,300 MA,.76OHM,CER,9 Q,1.9GHZ SRF,SM,0402,P	L1809M17	2471884M01	IDCTR,AW,10.2NH,5%,AIR, SM,10.2NH SQ SPR	L2202M2	2415429H45	IDCTR,WW,270NH,5%,170 MA,CER,SM,CHIP	L3158M22	2414032F41	IDCTR,WW,390NH,10%,200 MA,1.5OHM,CER,40 Q,730MHZ SRF,SM,PB-F
L1304M3	2475122C37	IDCTR,100NH,5%,300MA,.0 7OHM,CER,4 TURNS,SM,IND, MULTI-LAY	L1811M17	2471884M01	IDCTR,AW,10.2NH,5%,AIR, SM,10.2NH SQ SPR	L2203M2	2415429H45	IDCTR,WW,270NH,5%,170 MA,CER,SM,CHIP	L3159M22	2414032F41	IDCTR,WW,390NH,10%,200 MA,1.5OHM,CER,40 Q,730MHZ SRF,SM,PB-F
L1305M3	24010062002	IDCTR,RF,5.6NH,2%,1.6A,. 06OHM,CER,6.5GHZ SRF,SM,5.6NH, 040	L1900M20	NOTPLACED	64AM DUMMY PART NUMBER	L2204M2	2415429H45	IDCTR,WW,270NH,5%,170 MA,CER,SM,CHIP	L500M21	2415429H43	IDCTR,WW,220NH,5%,300 MA,2.1OHM,CER,SM,0603, CHIP
L1306M3	2414017P14	IDCTR,CHIP,12NH,5%,300 MA,.6OHM,CER,9 Q,2GHZ SRF,SM,0402,PB-F	L1901M20	24009331005	IDCTR,WW,3.9NH,INDUC-TOR, 3.9NH, +/-0.5NH, 0603	L2205M2	2415429H45	IDCTR,WW,270NH,5%,170 MA,CER,SM,CHIP	L503M21	2414017N24	IDCTR,CHIP,100NH,5%,300 MA,2OHM,CER,15 Q,700MHZ SRF,SM,0603,P
L1308M3	2415429H14	CHIP INDUC-TOR,9.5NH,5%,700MA	L1908M20	2478057A04	IDCTR,3.6NH,2%,.031OHM, CER,40 Q,9.7GHZ SRF,PCMT,3.6 NH SU	L2601M13	24012026011	IDCTR,AW,16.6NH,2%,4.4A ,AIR,SM,ULTRA-MINIA-TURE AIR CORE	L504M21	2478057A51	CHIP INDUC-TOR,RF,270NH,2%,SM,060 3 HI Q CHIP IDCTR
L1316M3	24010062009	IDCTR,RF,13NH,2%,870MA ,.06OHM,CER,4.2GHZ SRF,SM,13NH, 0402	L1909M20	2478057A23	IDCTR,18NH,2%,.066OHM, CER,41 Q,3.3GHZ SRF,PCMT,18 NH SUR	L2602M13	2415429H40	IDCTR,WW,180NH,5%,240 MA,1.25OHM,CER,SM,0603 ,CHIP	L513M21	NOTPLACED	64AM DUMMY PART NUMBER
L1601M16	2414017H14	IDCTR,CHIP,15NH,5%,.3A,. 32OHM,CER,12 Q,1.5GHZ SRF,SM,0603,PB-	L1910M20	2478057A23	IDCTR,18NH,2%,.066OHM, CER,41 Q,3.3GHZ SRF,PCMT,18 NH SUR	L3101M22	2414032F73	IDCTR,WW,820NH,5%,180 MA,2.23OHM,CER,23 Q,215MHZ SRF,SM,PB-F	L550M21	24009331029	IDCTR,WW,15NH,5%,600M A,SM,IDCTR,WW,15NH,5%, 600MA,SM,060
L1602M16	2415429H37	IDCTR,WW,110NH,5%,300 MA,.61OHM,CER,SM,0603, CHIP	L1912M20	2478057A04	IDCTR,3.6NH,2%,.031OHM, CER,40 Q,9.7GHZ SRF,PCMT,3.6 NH SU	L3106M22	2415429H16	IDCTR,WW,11NH,5%,700M A,.086OHM,CER,SM,0603, CHIP	L601M19	2415429H43	IDCTR,WW,220NH,5%,300 MA,2.1OHM,CER,SM,0603, CHIP
L1603M16	2414015A07	IDCTR,FXD,180NH,2%,750 MA,.77OHM,CER,25 Q,700MHZ SRF,SM,1008	L1913M20	2478057A23	IDCTR,18NH,2%,.066OHM, CER,41 Q,3.3GHZ SRF,PCMT,18 NH SUR	L3112M22	2415428H04	IDCTR,AW,5.4NH,2%,1.6A, AIR,SM,AIR WOUND IDCTR	L602M19	2466505A01	CHIP INDUC-TOR,CHIP,10UH,5%,150MA ,FERR,0 AWG,SM,PB-FREE
L1604M16	2414017H06	IDCTR,CHIP,3.3NH,300MA,. 12OHM,CER,10 Q,3.8GHZ SRF,SM,0603,P	L1914M20	2478057A23	IDCTR,18NH,2%,.066OHM, CER,41 Q,3.3GHZ SRF,PCMT,18 NH SUR	L3119M22	2414032F73	IDCTR,WW,820NH,5%,180 MA,2.23OHM,CER,23 Q,215MHZ SRF,SM,PB-F	L603M19	2466505A01	CHIP INDUC-TOR,CHIP,10UH,5%,150MA ,FERR,0 AWG,SM,PB-FREE
L1605M16	2414017H03	IDCTR,CHIP,1.8NH,300MA,. 1OHM,CER,8 Q,4GHZ SRF,SM,0603,PB-FR	L1915M20	2478057A12	IDCTR,7.2NH,2%,.052OHM, CER,48 Q,5.4GHZ SRF,PCMT,7.2NH SUR	L3125M22	2414032F73	IDCTR,WW,820NH,5%,180 MA,2.23OHM,CER,23 Q,215MHZ SRF,SM,PB-F	L604M19	2414032D16	IDCTR,WW,120NH,5%,800 MA,.26OHM,CER,42 Q,1GHZ SRF,SM,PB-FREE
			L1917M20	2478057A04	IDCTR,3.6NH,2%,.031OHM, CER,40 Q,9.7GHZ SRF,PCMT,3.6 NH SU	L3126M22	2414032F73	IDCTR,WW,820NH,5%,180 MA,2.23OHM,CER,23 Q,215MHZ SRF,SM,PB-F			

Ref. Des.	Part Number	Description
L605M19	24012050001	IDCTR,FXD,3.9UH,2%,280 MA,CER,SM,0603LS CHIP INDUCTORS, 1
L611M19	2414032F39	IDCTR,WW,270NH,10%,280 MA,1OHM,CER,40 Q,800MHZ SRF,SM,PB-FRE
L6401M6	2471189M03	IDCTR,PWR,10UH,20%,1.1 A,.2OHM,SM,SHLD SMT PWR IDCTR 10UH
L6402M6	2471189M03	IDCTR,PWR,10UH,20%,1.1 A,.2OHM,SM,SHLD SMT PWR IDCTR 10UH
L6403M6	24009271001	CHK,RF CHOKE,.20NH HI CUR CHIP IDCTR
L6404M6	24009271001	CHK,RF CHOKE,.20NH HI CUR CHIP IDCTR
L6502M6	2471678H01	IDCTR,10UH,20%,FERR,10 UH INDCUTOR
L6504M6	24009268001	IDCTR,PWR,10UH,20%,1.3 A,FERR,SM,10UH 2.1A SHLD IDCTR
L6505M6	2471678H01	IDCTR,10UH,20%,FERR,10 UH INDCUTOR
L701M7	2415429H47	IDCTR,WW,390NH,5%,100 MA,CER,SM,CHIP
L702M7	2415429H47	IDCTR,WW,390NH,5%,100 MA,CER,SM,CHIP
L709M7	2414017P15	IDCTR,CHIP,CER,SM,0402, PB-FREE
L720M7	24012100001	IDCTR,FXD,2.2UH,10%,15 MA,35 Q,50MHZ SRF,SM,IDCTR,2.2UH,1
L727M7	24012100001	IDCTR,FXD,2.2UH,10%,15 MA,35 Q,50MHZ SRF,SM,IDCTR,2.2UH,1
L728M7	2415429H47	IDCTR,WW,390NH,5%,100 MA,CER,SM,CHIP
L733M7	24012100001	IDCTR,FXD,2.2UH,10%,15 MA,35 Q,50MHZ SRF,SM,IDCTR,2.2UH,1
L734M7	2414017P15	IDCTR,CHIP,CER,SM,0402, PB-FREE

Ref. Des.	Part Number	Description
L735M7	24012100001	IDCTR,FXD,2.2UH,10%,15 MA,35 Q,50MHZ SRF,SM,IDCTR,2.2UH,1
L738M7	24012100001	IDCTR,FXD,2.2UH,10%,15 MA,35 Q,50MHZ SRF,SM,IDCTR,2.2UH,1
L739M7	2415429H47	IDCTR,WW,390NH,5%,100 MA,CER,SM,CHIP
L741M7	24012100001	IDCTR,FXD,2.2UH,10%,15 MA,35 Q,50MHZ SRF,SM,IDCTR,2.2UH,1
L753M7	2415347H06	IDCTR,WW,2.2UH,5%,320M A,1.2OHM,CER,SM,IDCTR, 2200NH
L755M7	2415429H47	IDCTR,WW,390NH,5%,100 MA,CER,SM,CHIP
L758M7	2415429H47	IDCTR,WW,390NH,5%,100 MA,CER,SM,CHIP
L759M7	2415429H47	IDCTR,WW,390NH,5%,100 MA,CER,SM,CHIP
L765M7	2475122C29	IDCTR,22NH,5%,300MA,.07 OHM,CER,4 TURNS,SM,IND, MULTI-LAYE
L775M7	2415429H47	IDCTR,WW,390NH,5%,100 MA,CER,SM,CHIP
M101M12	39012039001	CONN,CMPSRN,3CONT,ST ,CONNECTOR, BAT CON-TACT, WWP
M103M12	3987977Y04	CONT,CONN,1CONT,ANT UNIV 4.5MM,UC 1.8
M104M12	3987977Y04	CONT,CONN,1CONT,ANT UNIV 4.5MM,UC 1.8
M105M12	3987977Y04	CONT,CONN,1CONT,ANT UNIV 4.5MM,UC 1.8
M1301M3	3987977Y04	CONT,CONN,1CONT,ANT UNIV 4.5MM,UC 1.8
M6405M6	3987977Y04	CONT,CONN,1CONT,ANT UNIV 4.5MM,UC 1.8
M6406M6	3987977Y04	CONT,CONN,1CONT,ANT UNIV 4.5MM,UC 1.8
M6502M6	0985888K02	BATTERY CONNEC-TOR,SKT,NI,LEAP

Ref. Des.	Part Number	Description
M6504M6	3987977Y04	CONT,CONN,1CONT,ANT UNIV 4.5MM,UC 1.8
PCB	PC000354A0 1	PCB
Q1101M11	4813973A32	XSTR,BIP GP SS,NPN,SM,SC-70,SMT,50V,.202W,100MA, PB-FREE
Q1103M11	4813970A59	XSTR,FET GP PWR,P-CH,ENHN,SM,SOT-23,20V,.4W,PB-FREE
Q1601M16	48012094001	XSTR,FET RF POWER,SM,25V,MOD,XST R,FET RF PWR, 135-941MH
Q1920M20	4813973A32	XSTR,BIP GP SS,NPN,SM,SC-70,SMT,50V,.202W,100MA, PB-FREE
Q1922M20	4813973M75	XSTR,BIP GP SS,PNP,BC858,SOT-563,SMT,-30V,.357W,-100MA,100MHZ
Q201M12	4813970A59	XSTR,FET GP PWR,P-CH,ENHN,SM,SOT-23,20V,.4W,PB-FREE
Q202M12	4813973A32	XSTR,BIP GP SS,NPN,SM,SC-70,SMT,50V,.202W,100MA, PB-FREE
Q2202M2	4815261H01	XSTR,BIP GP SS,NPN,DTC114Y,SC-59,SC-59,SMT3,50V,100MA,250M HZ
Q2601M13	4815055H01	XSTR,GEN PURPOSE SMALL SIG,NPN AND PNP,UMC5NT2G,SM,50V,1 00A
Q3123M22	4871915M01	XSTR,BIP RF SML SGNL,NPN,SC-75A,SMT,12V,.1W,100MA,4. 5GHZ,XST
Q3128M22	4815055H01	XSTR,GEN PURPOSE SMALL SIG,NPN AND PNP,UMC5NT2G,SM,50V,1 00A

Ref. Des.	Part Number	Description
Q3156M22	4871915M01	XSTR,BIP RF SML SGNL,NPN,SC-75A,SMT,12V,.1W,100MA,4. 5GHZ,XST
Q3161M22	4815055H01	XSTR,GEN PURPOSE SMALL SIG,NPN AND PNP,UMC5NT2G,SM,50V,1 00A
Q4001M2	4815261H01	XSTR,BIP GP SS,NPN,DTC114Y,SC-59,SC-59,SMT3,50V,100MA,250M HZ
Q601M19	4813973A04	XSTR,BIP GP SS,NPN,TA13,SM,SOT-23,SMT,30V,.225W,300MA,1 25MHZ,P
Q6101M6	4815261H01	XSTR,BIP GP SS,NPN,DTC114Y,SC-59,SC-59,SMT3,50V,100MA,250M HZ
Q6401M6	48012170001	XSTR,FET GP PWR,N,SM,SMT,20V,.15W
Q6501M6	4813970A62	XSTR,FET GP PWR,MOS-FET,P-CH,ENHN,CF,-20V,1.3W,PB-FREE
Q6502M6	48012154001	XSTR,FET GP PWR,P,SM,SMT,-20V,.5W,FET
Q6504M6	4809579E77	XSTR,FET GP SS,MOS-FET,N-CH,SM,30V,1.2X1.2MM PKG W18 COMP
Q6505M6	4813970A62	XSTR,FET GP PWR,MOS-FET,P-CH,ENHN,CF,-20V,1.3W,PB-FREE
Q6506M6	4809579E77	XSTR,FET GP SS,MOS-FET,N-CH,SM,30V,1.2X1.2MM PKG W18 COMP
Q6507M6	48012170001	XSTR,FET GP PWR,N,SM,SMT,20V,.15W
Q6508M6	48012154001	XSTR,FET GP PWR,P,SM,SMT,-20V,.5W,FET

Ref. Des.	Part Number	Description
Q731M7	4885061Y01	XSTR,BIP RF SMALL SIGNAL
Q745M7	4813973M75	XSTR,BIP GP SS,PNP,BC858,SOT-563,SMT,-30V,.357W,-100MA,100MHZ
Q756M7	4805585Q32	XSTR,BIP RF SML SGNL,NPN,NE662M04,SM,SOT-343,3.3V,TRANSITO
Q767M7	4813973M75	XSTR,BIP GP SS,PNP,BC858,SOT-563,SMT,-30V,.357W,-100MA,100MHZ
Q774M7	4805585Q32	XSTR,BIP RF SML SGNL,NPN,NE662M04,SM,SOT-343,3.3V,TRANSITO
Q785M7	4889394V04	XSTR,FET GEN PURPOSE SMALL SIG,MOSFET,N-CH,ENHN,SM,20V,.25W,P
R1101M11	0613952R01	RES,MF,10KOHM,5%,.0625W,SM,0402,200PPM/CEL,PB-FREE
R1102M11	0613952R25	RES,MF,100KOHM,5%,.0625W,SM,0402,200PPM/CEL,PB-FREE
R1103M11	06012035001	RES,MF,.02OHM,1%,.33W,SM,0805,0.02 OHM,CHIP RES
R1104M11	0613952Q49	RES,MF,100,5,.0625,SM,0402,200,PB-FREE
R1105M11	0613952Q49	RES,MF,100,5,.0625,SM,0402,200,PB-FREE
R1106M11	0613952Q21	RES,MF,6.8OHM,5%,.0625W,SM,0402,200PPM/CEL,PB-FREE
R1107M11	0613952Q45	RES,MF,68OHM,5%,.0625W,SM,0402,200PPM/CEL,PB-FREE
R1108M11	0613952N81	RES,MF,68.1KOHM,1%,.0625W,SM,0402,200PPM/CEL,PB-FREE
R1110M11	0613952R01	RES,MF,10KOHM,5%,.0625W,SM,0402,200PPM/CEL,PB-FREE

Ref. Des.	Part Number	Description
R1111M11	0613952R66	RES,MF,0OHM,5%,.0625W,SM,0402,PB-FREE
R1112M11	NOTPLACED	64AM DUMMY PART NUMBER
R1114M11	0613952Q49	RES,MF,100,5,.0625,SM,0402,200,PB-FREE
R1115M11	0613952Q49	RES,MF,100,5,.0625,SM,0402,200,PB-FREE
R1116M11	0613952R01	RES,MF,10KOHM,5%,.0625W,SM,0402,200PPM/CEL,PB-FREE
R1117M11	0613952R11	RES,MF,27KOHM,5%,.0625W,SM,0402,200PPM/CEL,PB-FREE
R1121M11	0613952N47	RES,MF,30.1KOHM,1%,.0625W,SM,0402,200PPM/CEL,PB-FREE
R1122M11	0613952N85	RES,MF,75KOHM,1%,.0625W,SM,0402,200PPM/CEL,PB-FREE
R1124M11	0613952Q42	RES,MF,51OHM,5%,.0625W,SM,0402,200PPM/CEL,PB-FREE
R1125M11	0613952R17	RES,MF,47000,5,.0625,SM,0402,200,PB-FREE
R1126M11	0613952R09	RES,MF,22000,5,.0625,SM,0402,200,PB-FREE
R1127M11	0613952R08	RES,MF,20KOHM,5%,.0625W,SM,0402,200PPM/CEL,PB-FREE
R1128M11	0613952R01	RES,MF,10KOHM,5%,.0625W,SM,0402,200PPM/CEL,PB-FREE
R1129M11	NOTPLACED	64AM DUMMY PART NUMBER
R1130M11	NOTPLACED	64AM DUMMY PART NUMBER
R1135M11	0613952R66	RES,MF,0OHM,5%,.0625W,SM,0402,PB-FREE
R1136M11	0613952R01	RES,MF,10KOHM,5%,.0625W,SM,0402,200PPM/CEL,PB-FREE

Ref. Des.	Part Number	Description
R1137M11	0613952R01	RES,MF,10KOHM,5%,.0625W,SM,0402,200PPM/CEL,PB-FREE
R1138M11	0613952R25	RES,MF,100KOHM,5%,.0625W,SM,0402,200PPM/CEL,PB-FREE
R1139M11	0613952R25	RES,MF,100KOHM,5%,.0625W,SM,0402,200PPM/CEL,PB-FREE
R1140M11	0613952R25	RES,MF,100KOHM,5%,.0625W,SM,0402,200PPM/CEL,PB-FREE
R1141M11	0613952R42	RES,MF,510KOHM,5%,.0625W,SM,0402,200PPM/CEL,PB-FREE
R1142M11	0613952R25	RES,MF,100KOHM,5%,.0625W,SM,0402,200PPM/CEL,PB-FREE
R1143M11	0613952R25	RES,MF,100KOHM,5%,.0625W,SM,0402,200PPM/CEL,PB-FREE
R1144M11	0613952R25	RES,MF,100KOHM,5%,.0625W,SM,0402,200PPM/CEL,PB-FREE
R1145M11	0613952R25	RES,MF,100KOHM,5%,.0625W,SM,0402,200PPM/CEL,PB-FREE
R1146M11	0613952R25	RES,MF,100KOHM,5%,.0625W,SM,0402,200PPM/CEL,PB-FREE
R1151M11	0613952R05	RES,MF,15KOHM,5%,.0625W,SM,0402,200PPM/CEL,PB-FREE
R1152M11	0613952R01	RES,MF,10KOHM,5%,.0625W,SM,0402,200PPM/CEL,PB-FREE
R1154M11	0613952N01	RES,MF,10KOHM,1%,.0625W,SM,0402,200PPM/CEL,PB-FREE
R1158M11	NOTPLACED	64AM DUMMY PART NUMBER
R1160M11	0613952R03	RES,MF,12000,5,.0625,SM,0402,200,PB-FREE

Ref. Des.	Part Number	Description
R1162M11	0613952R29	RES,MF,150KOHM,5%,.0625W,SM,0402,200PPM/CEL,PB-FREE
R1163M11	0613952R01	RES,MF,10KOHM,5%,.0625W,SM,0402,200PPM/CEL,PB-FREE
R1164M11	0613952R01	RES,MF,10KOHM,5%,.0625W,SM,0402,200PPM/CEL,PB-FREE
R1165M11	0613952Q56	RES,MF,200OHM,5%,.0625W,SM,0402,200PPM/CEL,PB-FREE
R1166M11	0613952Q56	RES,MF,200OHM,5%,.0625W,SM,0402,200PPM/CEL,PB-FREE
R1167M11	0613952R01	RES,MF,10KOHM,5%,.0625W,SM,0402,200PPM/CEL,PB-FREE
R1168M11	0613952Q49	RES,MF,100,5,.0625,SM,0402,200,PB-FREE
R1169M11	0613952P52	RES,MF,340KOHM,1%,.0625W,SM,0402,200PPM/CEL,PB-FREE
R1170M11	0613952N88	RES,MF,80.6KOHM,1%,.0625W,SM,0402,200PPM/CEL,PB-FREE
R1171M11	0613952R66	RES,MF,0OHM,5%,.0625W,SM,0402,PB-FREE
R1172M11	0613952Q89	RES,MF,4700,5,.0625,SM,0402,200,PB-FREE
R1174M11	0613952N01	RES,MF,10KOHM,1%,.0625W,SM,0402,200PPM/CEL,PB-FREE
R1175M11	0613952R66	RES,MF,0OHM,5%,.0625W,SM,0402,PB-FREE
R1176M11	0613952M01	RES,MF,1KOHM,1%,.0625W,SM,0402,200PPM/CEL,PB-FREE
R1177M11	0613952R66	RES,MF,0OHM,5%,.0625W,SM,0402,PB-FREE
R1178M11	0613952R01	RES,MF,10KOHM,5%,.0625W,SM,0402,200PPM/CEL,PB-FREE

Ref. Des.	Part Number	Description
R1180M11	0613952R66	RES,MF,0OHM,5%,.0625W,SM,0402,PB-FREE
R1181M11	NOTPLACED	64AM DUMMY PART NUMBER
R1182M11	0613952R01	RES,MF,10KOHM,5%,.0625W,SM,0402,200PPM/CEL,PB-FREE
R1198M11	0613952J01	RES,MF,10KOHM,5%,.1W,SM,0603,200PPM/CEL,PB-FREE
R1301M3	0613952R66	RES,MF,0OHM,5%,.0625W,SM,0402,PB-FREE
R1303M3	0613952R66	RES,MF,0OHM,5%,.0625W,SM,0402,PB-FREE
R1305M3	0613952R66	RES,MF,0OHM,5%,.0625W,SM,0402,PB-FREE
R1309M3	NOTPLACED	64AM DUMMY PART NUMBER
R1310M3	0613952R66	RES,MF,0OHM,5%,.0625W,SM,0402,PB-FREE
R1311M3	NOTPLACED	64AM DUMMY PART NUMBER
R1313M3	0613952R66	RES,MF,0OHM,5%,.0625W,SM,0402,PB-FREE
R1315M3	0613952R66	RES,MF,0OHM,5%,.0625W,SM,0402,PB-FREE
R1317M3	0613952R66	RES,MF,0OHM,5%,.0625W,SM,0402,PB-FREE
R1318M3	0613952R66	RES,MF,0OHM,5%,.0625W,SM,0402,PB-FREE
R1325M3	0613952R66	RES,MF,0OHM,5%,.0625W,SM,0402,PB-FREE
R1326M3	0613952R66	RES,MF,0OHM,5%,.0625W,SM,0402,PB-FREE
R1329M3	0613952R66	RES,MF,0OHM,5%,.0625W,SM,0402,PB-FREE
R1330M3	0613952R66	RES,MF,0OHM,5%,.0625W,SM,0402,PB-FREE
R1331M3	0613952R66	RES,MF,0OHM,5%,.0625W,SM,0402,PB-FREE
R1332M3	0613952R66	RES,MF,0OHM,5%,.0625W,SM,0402,PB-FREE

Ref. Des.	Part Number	Description
R1337M3	NOTPLACED	64AM DUMMY PART NUMBER
R1339M3	NOTPLACED	64AM DUMMY PART NUMBER
R1340M3	0613952R66	RES,MF,0OHM,5%,.0625W,SM,0402,PB-FREE
R1601M16	0613952Q96	RES,MF,9.1KOHM,5%,.0625W,SM,0402,200PPM/CEL,PB-FREE
R1602M16	0613952R01	RES,MF,10KOHM,5%,.0625W,SM,0402,200PPM/CEL,PB-FREE
R1603M16	0613952R22	RES,MF,75KOHM,5%,.0625W,SM,0402,200PPM/CEL,PB-FREE
R1604M16	0613952R13	RES,MF,33KOHM,5%,.0625W,SM,0402,200PPM/CEL,PB-FREE
R1605M16	0613952Q73	RES,MF,1KOHM,5%,.0625W,SM,0402,200PPM/CEL,PB-FREE
R1606M16	0613952H53	RES,MF,150OHM,5%,.1W,SM,0603,200PPM/CEL,PB-FREE
R1651M16	NOTPLACED	64AM DUMMY PART NUMBER
R1652M16	NOTPLACED	64AM DUMMY PART NUMBER
R1653M16	0613952R66	RES,MF,0OHM,5%,.0625W,SM,0402,PB-FREE
R1900M20	0613952R66	RES,MF,0OHM,5%,.0625W,SM,0402,PB-FREE
R1906M20	0613952R01	RES,MF,10KOHM,5%,.0625W,SM,0402,200PPM/CEL,PB-FREE
R1907M20	0613952R01	RES,MF,10KOHM,5%,.0625W,SM,0402,200PPM/CEL,PB-FREE
R1908M20	0613952R01	RES,MF,10KOHM,5%,.0625W,SM,0402,200PPM/CEL,PB-FREE
R1909M20	0613952R01	RES,MF,10KOHM,5%,.0625W,SM,0402,200PPM/CEL,PB-FREE

Ref. Des.	Part Number	Description
R1910M20	0613952Q96	RES,MF,9.1KOHM,5%,.0625W,SM,0402,200PPM/CEL,PB-FREE
R1911M20	0613952Q96	RES,MF,9.1KOHM,5%,.0625W,SM,0402,200PPM/CEL,PB-FREE
R1921M20	0613952R22	RES,MF,75KOHM,5%,.0625W,SM,0402,200PPM/CEL,PB-FREE
R1922M20	0613952R27	RES,MF,120KOHM,5%,.0625W,SM,0402,200PPM/CEL,PB-FREE
R1923M20	0613952R01	RES,MF,10KOHM,5%,.0625W,SM,0402,200PPM/CEL,PB-FREE
R1924M20	0613952Q37	RES,MF,33OHM,5%,.0625W,SM,0402,200PPM/CEL,PB-FREE
R1925M20	0613952Q11	RES,MF,2.7OHM,5%,.0625W,SM,0402,200PPM/CEL,PB-FREE
R1935M20	0613952Q75	RES,MF,1.2KOHM,5%,.0625W,SM,0402,200PPM/CEL,PB-FREE
R1936M20	0613952R66	RES,MF,0OHM,5%,.0625W,SM,0402,PB-FREE
R1970M20	0613952Q25	RES,MF,10.5,.0625,SM,0402,200,PB-FREE
R1972M20	0613952Q25	RES,MF,10.5,.0625,SM,0402,200,PB-FREE
R201M12	0613952R25	RES,MF,100KOHM,5%,.0625W,SM,0402,200PPM/CEL,PB-FREE
R202M12	0613952Q89	RES,MF,4700.5,.0625,SM,0402,200,PB-FREE
R21000M2	0613952R01	RES,MF,10KOHM,5%,.0625W,SM,0402,200PPM/CEL,PB-FREE
R21001M2	0613952R01	RES,MF,10KOHM,5%,.0625W,SM,0402,200PPM/CEL,PB-FREE
R21002M2	0613952R01	RES,MF,10KOHM,5%,.0625W,SM,0402,200PPM/CEL,PB-FREE

Ref. Des.	Part Number	Description
R21003M2	0613952R01	RES,MF,10KOHM,5%,.0625W,SM,0402,200PPM/CEL,PB-FREE
R21004M2	0613952Q73	RES,MF,1KOHM,5%,.0625W,SM,0402,200PPM/CEL,PB-FREE
R21005M2	0613952Q73	RES,MF,1KOHM,5%,.0625W,SM,0402,200PPM/CEL,PB-FREE
R21006M2	0613952Q73	RES,MF,1KOHM,5%,.0625W,SM,0402,200PPM/CEL,PB-FREE
R21007M2	0613952Q73	RES,MF,1KOHM,5%,.0625W,SM,0402,200PPM/CEL,PB-FREE
R21008M2	0613952R01	RES,MF,10KOHM,5%,.0625W,SM,0402,200PPM/CEL,PB-FREE
R2104M2	0613952Q89	RES,MF,4700.5,.0625,SM,0402,200,PB-FREE
R2105M2	0613952Q89	RES,MF,4700.5,.0625,SM,0402,200,PB-FREE
R2106M2	NOTPLACED	64AM DUMMY PART NUMBER
R2107M2	0613952Q73	RES,MF,1KOHM,5%,.0625W,SM,0402,200PPM/CEL,PB-FREE
R2109M2	0613952Q25	RES,MF,10.5,.0625,SM,0402,200,PB-FREE
R2110M2	0613952Q33	RES,MF,22.5,.0625,SM,0402,200,PB-FREE
R2111M2	0613952Q25	RES,MF,10.5,.0625,SM,0402,200,PB-FREE
R2113M2	0613952Q25	RES,MF,10.5,.0625,SM,0402,200,PB-FREE
R2114M2	0613952Q33	RES,MF,22.5,.0625,SM,0402,200,PB-FREE
R2115M2	0613952Q25	RES,MF,10.5,.0625,SM,0402,200,PB-FREE
R2116M2	0613952R01	RES,MF,10KOHM,5%,.0625W,SM,0402,200PPM/CEL,PB-FREE

Ref. Des.	Part Number	Description
R2117M2	0613952R01	RES,MF,10KOHM,5%,.0625 W,SM,0402,200PPM/ CEL,PB-FREE
R2118M2	0613952R01	RES,MF,10KOHM,5%,.0625 W,SM,0402,200PPM/ CEL,PB-FREE
R2120M2	0613952R01	RES,MF,10KOHM,5%,.0625 W,SM,0402,200PPM/ CEL,PB-FREE
R2129M2	0613952R01	RES,MF,10KOHM,5%,.0625 W,SM,0402,200PPM/ CEL,PB-FREE
R2130M2	0613952R01	RES,MF,10KOHM,5%,.0625 W,SM,0402,200PPM/ CEL,PB-FREE
R2131M2	0613952R01	RES,MF,10KOHM,5%,.0625 W,SM,0402,200PPM/ CEL,PB-FREE
R2132M2	0613952R01	RES,MF,10KOHM,5%,.0625 W,SM,0402,200PPM/ CEL,PB-FREE
R2133M2	0613952R01	RES,MF,10KOHM,5%,.0625 W,SM,0402,200PPM/ CEL,PB-FREE
R2135M2	0613952Q41	RES,MF,47OHM,5%,.0625 W,SM,0402,200PPM/ CEL,PB-FREE
R2136M2	0613952Q61	RES,MF,330OHM,5%,.0625 W,SM,0402,200PPM/ CEL,PB-FREE
R2137M2	0613952Q61	RES,MF,330OHM,5%,.0625 W,SM,0402,200PPM/ CEL,PB-FREE
R2138M2	0613952Q41	RES,MF,47OHM,5%,.0625 W,SM,0402,200PPM/ CEL,PB-FREE
R2139M2	0613952Q41	RES,MF,47OHM,5%,.0625 W,SM,0402,200PPM/ CEL,PB-FREE
R2142M2	0613952Q41	RES,MF,47OHM,5%,.0625 W,SM,0402,200PPM/ CEL,PB-FREE
R2144M2	0613952Q61	RES,MF,330OHM,5%,.0625 W,SM,0402,200PPM/ CEL,PB-FREE

Ref. Des.	Part Number	Description
R2145M2	0613952Q41	RES,MF,47OHM,5%,.0625 W,SM,0402,200PPM/ CEL,PB-FREE
R2146M2	0613952Q41	RES,MF,47OHM,5%,.0625 W,SM,0402,200PPM/ CEL,PB-FREE
R2147M2	0613952Q41	RES,MF,47OHM,5%,.0625 W,SM,0402,200PPM/ CEL,PB-FREE
R2148M2	0613952Q41	RES,MF,47OHM,5%,.0625 W,SM,0402,200PPM/ CEL,PB-FREE
R2149M2	0613952Q41	RES,MF,47OHM,5%,.0625 W,SM,0402,200PPM/ CEL,PB-FREE
R2151M2	NOTPLACED	64AM DUMMY PART NUMBER
R2153M2	0613952Q41	RES,MF,47OHM,5%,.0625 W,SM,0402,200PPM/ CEL,PB-FREE
R2154M2	0613952Q41	RES,MF,47OHM,5%,.0625 W,SM,0402,200PPM/ CEL,PB-FREE
R2192M2	0613952Q61	RES,MF,330OHM,5%,.0625 W,SM,0402,200PPM/ CEL,PB-FREE
R2197M2	0613952R66	RES,MF,0OHM,5%,.0625W, SM,0402,PB-FREE
R2198M2	0613952R66	RES,MF,0OHM,5%,.0625W, SM,0402,PB-FREE
R2199M2	0613952R66	RES,MF,0OHM,5%,.0625W, SM,0402,PB-FREE
R2200M2	0613952R66	RES,MF,0OHM,5%,.0625W, SM,0402,PB-FREE
R2201M2	0613952R32	RES,MF,200KOHM,5%,.0625 W,SM,0402,200PPM/ CEL,PB-FREE
R2202M2	0613952R66	RES,MF,0OHM,5%,.0625W, SM,0402,PB-FREE
R2204M2	0613952Q85	RES,MF,3.3KOHM,5%,.0625 W,SM,0402,200PPM/ CEL,PB-FREE

Ref. Des.	Part Number	Description
R2206M2	0613952Q85	RES,MF,3.3KOHM,5%,.0625 W,SM,0402,200PPM/ CEL,PB-FREE
R2207M2	0613952R66	RES,MF,0OHM,5%,.0625W, SM,0402,PB-FREE
R2235M2	0613952R66	RES,MF,0OHM,5%,.0625W, SM,0402,PB-FREE
R2244M2	0613952Q72	RES,MF,910OHM,5%,.0625 W,SM,0402,PB-FREE
R2245M2	0613952Q63	RES,MF,390OHM,5%,.0625 W,SM,0402,200PPM/ CEL,PB-FREE
R2246M2	0613952Q60	RES,MF,300OHM,5%,.0625 W,SM,0402,200PPM/ CEL,PB-FREE
R2254M2	0613952R01	RES,MF,10KOHM,5%,.0625 W,SM,0402,200PPM/ CEL,PB-FREE
R2601M13	NOTPLACED	64AM DUMMY PART NUMBER
R2602M13	0613952H47	RES,MF,82OHM,5%,.1W,S M,0603,200PPM/CEL,PB-FREE
R2603M13	0613952H47	RES,MF,82OHM,5%,.1W,S M,0603,200PPM/CEL,PB-FREE
R2604M13	0613952H47	RES,MF,82OHM,5%,.1W,S M,0603,200PPM/CEL,PB-FREE
R2605M13	0613952G67	RES,MF,0,1,.1,SM,0603,PB-FREE
R2606M13	0613952R25	RES,MF,100KOHM,5%,.0625 W,SM,0402,200PPM/ CEL,PB-FREE
R2803M1	0613952Q37	RES,MF,33OHM,5%,.0625 W,SM,0402,200PPM/ CEL,PB-FREE
R2804M1	0613952Q49	RES,MF,100,5,.0625,SM,04 02,200,PB-FREE
R2805M1	0613952Q49	RES,MF,100,5,.0625,SM,04 02,200,PB-FREE
R2806M1	0613952Q59	RES,MF,270OHM,5%,.0625 W,SM,0402,200PPM/ CEL,PB-FREE

Ref. Des.	Part Number	Description
R2807M1	0613952Q56	RES,MF,200OHM,5%,.0625 W,SM,0402,200PPM/ CEL,PB-FREE
R2808M1	0613952Q49	RES,MF,100,5,.0625,SM,04 02,200,PB-FREE
R2810M1	0613952R01	RES,MF,10KOHM,5%,.0625 W,SM,0402,200PPM/ CEL,PB-FREE
R2811M1	0613952Q89	RES,MF,4700,5,.0625,SM,0 402,200,PB-FREE
R2812M1	0613952R01	RES,MF,10KOHM,5%,.0625 W,SM,0402,200PPM/ CEL,PB-FREE
R2813M1	NOTPLACED	64AM DUMMY PART NUMBER
R2817M1	0613952Q41	RES,MF,47OHM,5%,.0625 W,SM,0402,200PPM/ CEL,PB-FREE
R3100M22	0613952R66	RES,MF,0OHM,5%,.0625W, SM,0402,PB-FREE
R3103M22	0613952Q31	RES,MF,180OHM,5%,.0625 W,SM,0402,200PPM/ CEL,PB-FREE
R3105M22	0613952Q60	RES,MF,300OHM,5%,.0625 W,SM,0402,200PPM/ CEL,PB-FREE
R3106M22	0613952Q60	RES,MF,300OHM,5%,.0625 W,SM,0402,200PPM/ CEL,PB-FREE
R3107M22	0613952Q53	RES,MF,150OHM,5%,.0625 W,SM,0402,200PPM/ CEL,PB-FREE
R3108M22	0613952Q38	RES,MF,36OHM,5%,.0625 W,SM,0402,200PPM/ CEL,PB-FREE
R3109M22	0613952Q53	RES,MF,150OHM,5%,.0625 W,SM,0402,200PPM/ CEL,PB-FREE
R3114M22	0613952R11	RES,MF,27KOHM,5%,.0625 W,SM,0402,200PPM/ CEL,PB-FREE
R3118M22	0613952R03	RES,MF,12000,5,.0625,SM, 0402,200,PB-FREE



Ref. Des.	Part Number	Description
R3127M22	0613952Q52	RES,MF,130OHM,5%,.0625 W,SM,0402,200PPM/ CEL,PB-FREE
R3146M22	0613952R11	RES,MF,27KOHM,5%,.0625 W,SM,0402,200PPM/ CEL,PB-FREE
R3149M22	0613952R07	RES,MF,18KOHM,5%,.0625 W,SM,0402,200PPM/ CEL,PB-FREE
R3158M22	0613952Q46	RES,MF,75OHM,5%,.0625 W,SM,0402,200PPM/ CEL,PB-FREE
R3159M22	0613952Q40	RES,MF,43OHM,5%,.0625 W,SM,0402,200PPM/ CEL,PB-FREE
R3160M22	0613952Q49	RES,MF,100,5,.0625,SM,0402,200,PB-FREE
R4005M2	0613952R01	RES,MF,10KOHM,5%,.0625 W,SM,0402,200PPM/ CEL,PB-FREE
R4006M2	0613952R01	RES,MF,10KOHM,5%,.0625 W,SM,0402,200PPM/ CEL,PB-FREE
R4007M2	0613952R01	RES,MF,10KOHM,5%,.0625 W,SM,0402,200PPM/ CEL,PB-FREE
R4008M2	0613952R01	RES,MF,10KOHM,5%,.0625 W,SM,0402,200PPM/ CEL,PB-FREE
R4009M2	0613952Q85	RES,MF,3.3KOHM,5%,.0625 W,SM,0402,200PPM/ CEL,PB-FREE
R4010M2	0613952R32	RES,MF,200KOHM,5%,.0625 W,SM,0402,200PPM/ CEL,PB-FREE
R4011M2	0613952R17	RES,MF,47000,5,.0625,SM,0402,200,PB-FREE
R4012M2	0613952R09	RES,MF,22000,5,.0625,SM,0402,200,PB-FREE
R4013M2	0613952R09	RES,MF,22000,5,.0625,SM,0402,200,PB-FREE
R4014M2	0613952Q85	RES,MF,3.3KOHM,5%,.0625 W,SM,0402,200PPM/ CEL,PB-FREE

Ref. Des.	Part Number	Description
R500M21	0613952Q37	RES,MF,33OHM,5%,.0625 W,SM,0402,200PPM/ CEL,PB-FREE
R502M21	0613952Q36	RES,MF,30OHM,5%,.0625 W,SM,0402,200PPM/ CEL,PB-FREE
R512M21	0613952R66	RES,MF,0OHM,5%,.0625W,SM,0402,PB-FREE
R525M21	0613952R66	RES,MF,0OHM,5%,.0625W,SM,0402,PB-FREE
R526M21	0613958J74	RES,MF,0OHM,5%,.125W,SM,0805,PB-FREE
R601M19	0613952Q41	RES,MF,47OHM,5%,.0625 W,SM,0402,200PPM/ CEL,PB-FREE
R602M19	0613952Q63	RES,MF,390OHM,5%,.0625 W,SM,0402,200PPM/ CEL,PB-FREE
R603M19	0613952R25	RES,MF,100KOHM,5%,.0625 W,SM,0402,200PPM/ CEL,PB-FREE
R604M19	0613952Q63	RES,MF,390OHM,5%,.0625 W,SM,0402,200PPM/ CEL,PB-FREE
R605M19	0613952R01	RES,MF,10KOHM,5%,.0625 W,SM,0402,200PPM/ CEL,PB-FREE
R606M19	0613952R01	RES,MF,10KOHM,5%,.0625 W,SM,0402,200PPM/ CEL,PB-FREE
R607M19	0613952R25	RES,MF,100KOHM,5%,.0625 W,SM,0402,200PPM/ CEL,PB-FREE
R608M19	0613952R01	RES,MF,10KOHM,5%,.0625 W,SM,0402,200PPM/ CEL,PB-FREE
R609M19	0613952Q81	RES,MF,2200,5,.0625,SM,0402,200,PB-FREE
R6101M6	0613952R01	RES,MF,10KOHM,5%,.0625 W,SM,0402,200PPM/ CEL,PB-FREE
R6102M6	0613952R09	RES,MF,22000,5,.0625,SM,0402,200,PB-FREE

Ref. Des.	Part Number	Description
R6103M6	0613952R09	RES,MF,22000,5,.0625,SM,0402,200,PB-FREE
R6104M6	NOTPLACED	64AM DUMMY PART NUMBER
R6105M6	0613952R66	RES,MF,0OHM,5%,.0625W,SM,0402,PB-FREE
R6106M6	0613952Q73	RES,MF,1KOHM,5%,.0625 W,SM,0402,200PPM/ CEL,PB-FREE
R6107M6	0613952Q55	RES,MF,180OHM,5%,.0625 W,SM,0402,200PPM/ CEL,PB-FREE
R6108M6	0613952Q61	RES,MF,330OHM,5%,.0625 W,SM,0402,200PPM/ CEL,PB-FREE
R6109M6	NOTPLACED	64AM DUMMY PART NUMBER
R610M19	0613952R25	RES,MF,100KOHM,5%,.0625 W,SM,0402,200PPM/ CEL,PB-FREE
R6110M6	0613952Q73	RES,MF,1KOHM,5%,.0625 W,SM,0402,200PPM/ CEL,PB-FREE
R6111M6	0613952Q73	RES,MF,1KOHM,5%,.0625 W,SM,0402,200PPM/ CEL,PB-FREE
R6112M6	0613952Q73	RES,MF,1KOHM,5%,.0625 W,SM,0402,200PPM/ CEL,PB-FREE
R6113M6	0613952Q51	RES,MF,120,5,.0625,SM,0402,200,PB-FREE
R6114M6	0613952Q49	RES,MF,100,5,.0625,SM,0402,200,PB-FREE
R6115M6	0613952Q49	RES,MF,100,5,.0625,SM,0402,200,PB-FREE
R6116M6	0613952Q73	RES,MF,1KOHM,5%,.0625 W,SM,0402,200PPM/ CEL,PB-FREE
R6117M6	0613952R01	RES,MF,10KOHM,5%,.0625 W,SM,0402,200PPM/ CEL,PB-FREE
R6118M6	0613952R09	RES,MF,22000,5,.0625,SM,0402,200,PB-FREE

Ref. Des.	Part Number	Description
R6119M6	0613952R01	RES,MF,10KOHM,5%,.0625 W,SM,0402,200PPM/ CEL,PB-FREE
R611M19	0613952R01	RES,MF,10KOHM,5%,.0625 W,SM,0402,200PPM/ CEL,PB-FREE
R6120M6	0613952R01	RES,MF,10KOHM,5%,.0625 W,SM,0402,200PPM/ CEL,PB-FREE
R6121M6	0613952R01	RES,MF,10KOHM,5%,.0625 W,SM,0402,200PPM/ CEL,PB-FREE
R6122M6	0613952R01	RES,MF,10KOHM,5%,.0625 W,SM,0402,200PPM/ CEL,PB-FREE
R6125M6	NOTPLACED	64AM DUMMY PART NUMBER
R612M19	0613952Q94	RES,MF,7.5KOHM,5%,.0625 W,SM,0402,200PPM/ CEL,PB-FREE
R613M19	0613952Q82	RES,MF,2.4KOHM,5%,.0625 W,SM,0402,200PPM/ CEL,PB-FREE
R614M19	0613952R66	RES,MF,0OHM,5%,.0625W,SM,0402,PB-FREE
R615M19	NOTPLACED	64AM DUMMY PART NUMBER
R616M19	NOTPLACED	64AM DUMMY PART NUMBER
R617M19	NOTPLACED	64AM DUMMY PART NUMBER
R618M19	NOTPLACED	64AM DUMMY PART NUMBER
R619M19	NOTPLACED	64AM DUMMY PART NUMBER
R6201M6	NOTPLACED	64AM DUMMY PART NUMBER
R6202M6	0613952R01	RES,MF,10KOHM,5%,.0625 W,SM,0402,200PPM/ CEL,PB-FREE
R6203M6	0613952R66	RES,MF,0OHM,5%,.0625W,SM,0402,PB-FREE

Ref. Des.	Part Number	Description
R6204M6	0613952R01	RES,MF,10KOHM,5%,.0625 W,SM,0402,200PPM/ CEL,PB-FREE
R6205M6	0613952R01	RES,MF,10KOHM,5%,.0625 W,SM,0402,200PPM/ CEL,PB-FREE
R6206M6	0613952R25	RES,MF,100KOHM,5%,.0625 W,SM,0402,200PPM/ CEL,PB-FREE
R6207M6	0613952R25	RES,MF,100KOHM,5%,.0625 W,SM,0402,200PPM/ CEL,PB-FREE
R6208M6	0613952Q89	RES,MF,4700,5,.0625,SM,0402,200,PB-FREE
R6209M6	0613952Q89	RES,MF,4700,5,.0625,SM,0402,200,PB-FREE
R620M19	NOTPLACED	64AM DUMMY PART NUMBER
R6210M6	0613952Q89	RES,MF,4700,5,.0625,SM,0402,200,PB-FREE
R6211M6	0613952R01	RES,MF,10KOHM,5%,.0625 W,SM,0402,200PPM/ CEL,PB-FREE
R6212M6	NOTPLACED	64AM DUMMY PART NUMBER
R6213M6	0613952R01	RES,MF,10KOHM,5%,.0625 W,SM,0402,200PPM/ CEL,PB-FREE
R6214M6	NOTPLACED	64AM DUMMY PART NUMBER
R6215M6	0613952R01	RES,MF,10KOHM,5%,.0625 W,SM,0402,200PPM/ CEL,PB-FREE
R6217M6	0613952Q73	RES,MF,1KOHM,5%,.0625 W,SM,0402,200PPM/ CEL,PB-FREE
R6218M6	0613952Q80	RES,MF,2KOHM,5%,.0625 W,SM,0402,200PPM/ CEL,PB-FREE
R621M19	NOTPLACED	64AM DUMMY PART NUMBER
R623M19	NOTPLACED	64AM DUMMY PART NUMBER

Ref. Des.	Part Number	Description
R624M19	NOTPLACED	64AM DUMMY PART NUMBER
R6301M6	0613952R01	RES,MF,10KOHM,5%,.0625 W,SM,0402,200PPM/ CEL,PB-FREE
R6304M6	0613952R66	RES,MF,0OHM,5%,.0625W,SM,0402,PB-FREE
R6306M6	0613952R01	RES,MF,10KOHM,5%,.0625 W,SM,0402,200PPM/ CEL,PB-FREE
R6310M6	0613952Q37	RES,MF,33OHM,5%,.0625 W,SM,0402,200PPM/ CEL,PB-FREE
R6311M6	0613952Q37	RES,MF,33OHM,5%,.0625 W,SM,0402,200PPM/ CEL,PB-FREE
R6312M6	0613952Q37	RES,MF,33OHM,5%,.0625 W,SM,0402,200PPM/ CEL,PB-FREE
R6313M6	0613952Q37	RES,MF,33OHM,5%,.0625 W,SM,0402,200PPM/ CEL,PB-FREE
R6314M6	0613952Q37	RES,MF,33OHM,5%,.0625 W,SM,0402,200PPM/ CEL,PB-FREE
R6316M6	0613952R01	RES,MF,10KOHM,5%,.0625 W,SM,0402,200PPM/ CEL,PB-FREE
R6401M6	0613952R18	RES,MF,51KOHM,5%,.0625 W,SM,0402,200PPM/ CEL,PB-FREE
R6402M6	0613952R32	RES,MF,200KOHM,5%,.0625 W,SM,0402,200PPM/ CEL,PB-FREE
R6403M6	0613952Q81	RES,MF,2200,5,.0625,SM,0402,200,PB-FREE
R6404M6	0613952Q81	RES,MF,2200,5,.0625,SM,0402,200,PB-FREE
R6405M6	0613952Q75	RES,MF,1.2KOHM,5%,.0625 W,SM,0402,200PPM/ CEL,PB-FREE
R6406M6	0613952R01	RES,MF,10KOHM,5%,.0625 W,SM,0402,200PPM/ CEL,PB-FREE

Ref. Des.	Part Number	Description
R6407M6	0613952Q81	RES,MF,2200,5,.0625,SM,0402,200,PB-FREE
R6409M6	0613952N01	RES,MF,10KOHM,1%,.0625 W,SM,0402,200PPM/ CEL,PB-FREE
R6410M6	0613952R01	RES,MF,10KOHM,5%,.0625 W,SM,0402,200PPM/ CEL,PB-FREE
R6411M6	0613952R66	RES,MF,0OHM,5%,.0625W,SM,0402,PB-FREE
R6414M6	0613952Q61	RES,MF,330OHM,5%,.0625 W,SM,0402,200PPM/ CEL,PB-FREE
R6415M6	0613952Q61	RES,MF,330OHM,5%,.0625 W,SM,0402,200PPM/ CEL,PB-FREE
R6416M6	0613952Q61	RES,MF,330OHM,5%,.0625 W,SM,0402,200PPM/ CEL,PB-FREE
R6417M6	0613952Q61	RES,MF,330OHM,5%,.0625 W,SM,0402,200PPM/ CEL,PB-FREE
R6419M6	0613952Q37	RES,MF,33OHM,5%,.0625 W,SM,0402,200PPM/ CEL,PB-FREE
R6420M6	0613952R17	RES,MF,47000,5,.0625,SM,0402,200,PB-FREE
R6421M6	0613952R01	RES,MF,10KOHM,5%,.0625 W,SM,0402,200PPM/ CEL,PB-FREE
R6422M6	0613952Q51	RES,MF,120,5,.0625,SM,0402,200,PB-FREE
R6423M6	0613952R66	RES,MF,0OHM,5%,.0625W,SM,0402,PB-FREE
R6424M6	0613952N01	RES,MF,10KOHM,1%,.0625 W,SM,0402,200PPM/ CEL,PB-FREE
R6425M6	0613952Q80	RES,MF,2KOHM,5%,.0625 W,SM,0402,200PPM/ CEL,PB-FREE
R6426M6	0613952Q49	RES,MF,100,5,.0625,SM,0402,200,PB-FREE

Ref. Des.	Part Number	Description
R6427M6	0613952R11	RES,MF,27KOHM,5%,.0625 W,SM,0402,200PPM/ CEL,PB-FREE
R6428M6	0613952R25	RES,MF,100KOHM,5%,.0625 W,SM,0402,200PPM/ CEL,PB-FREE
R6429M6	0613952R17	RES,MF,47000,5,.0625,SM,0402,200,PB-FREE
R6430M6	0613952R09	RES,MF,22000,5,.0625,SM,0402,200,PB-FREE
R6431M6	0613952Q81	RES,MF,2200,5,.0625,SM,0402,200,PB-FREE
R6432M6	0613952R25	RES,MF,100KOHM,5%,.0625 W,SM,0402,200PPM/ CEL,PB-FREE
R6433M6	0613952Q32	RES,MF,20OHM,5%,.0625 W,SM,0402,200PPM/ CEL,PB-FREE
R6434M6	0613952Q32	RES,MF,20OHM,5%,.0625 W,SM,0402,200PPM/ CEL,PB-FREE
R6435M6	0613952N01	RES,MF,10KOHM,1%,.0625 W,SM,0402,200PPM/ CEL,PB-FREE
R6436M6	NOTPLACED	64AM DUMMY PART NUMBER
R6492M6	0613952Q79	RES,MF,1800,5,.0625,SM,0402,200,PB-FREE
R6501M6	0613952Q25	RES,MF,10,5,.0625,SM,0402,200,PB-FREE
R6502M6	0613952Q25	RES,MF,10,5,.0625,SM,0402,200,PB-FREE
R6503M6	0613952Q25	RES,MF,10,5,.0625,SM,0402,200,PB-FREE
R6504M6	0613952R09	RES,MF,22000,5,.0625,SM,0402,200,PB-FREE
R6505M6	0613952Q80	RES,MF,2KOHM,5%,.0625 W,SM,0402,200PPM/ CEL,PB-FREE
R6506M6	0613952R66	RES,MF,0OHM,5%,.0625W,SM,0402,PB-FREE

Ref. Des.	Part Number	Description
R6507M6	0613952R01	RES,MF,10KOHM,5%,.0625W,SM,0402,200PPM/CEL,PB-FREE
R6508M6	0613952R17	RES,MF,47000,5,.0625,SM,0402,200,PB-FREE
R6509M6	0613952R25	RES,MF,100KOHM,5%,.0625W,SM,0402,200PPM/CEL,PB-FREE
R6510M6	0613952R66	RES,MF,0OHM,5%,.0625W,SM,0402,PB-FREE
R6511M6	0613952R01	RES,MF,10KOHM,5%,.0625W,SM,0402,200PPM/CEL,PB-FREE
R6512M6	0613952N01	RES,MF,10KOHM,1%,.0625W,SM,0402,200PPM/CEL,PB-FREE
R6513M6	0613952R66	RES,MF,0OHM,5%,.0625W,SM,0402,PB-FREE
R6514M6	0613952Q89	RES,MF,4700,5,.0625,SM,0402,200,PB-FREE
R6515M6	0613952R66	RES,MF,0OHM,5%,.0625W,SM,0402,PB-FREE
R6516M6	0613952R66	RES,MF,0OHM,5%,.0625W,SM,0402,PB-FREE
R6517M6	0613952Q63	RES,MF,390OHM,5%,.0625W,SM,0402,200PPM/CEL,PB-FREE
R6518M6	0613952R66	RES,MF,0OHM,5%,.0625W,SM,0402,PB-FREE
R6519M6	0613952Q89	RES,MF,4700,5,.0625,SM,0402,200,PB-FREE
R6520M6	0613952Q73	RES,MF,1KOHM,5%,.0625W,SM,0402,200PPM/CEL,PB-FREE
R6521M6	0615049H01	RES,MF,.2OHM,1%,.5W,1206,KAMAYA 0.2 OHM CHIP RES
R6522M6	0613952M66	RES,MF,4.75KOHM,1%,.0625W,SM,0402,200PPM/CEL,PB-FREE
R6523M6	0613952R09	RES,MF,22000,5,.0625,SM,0402,200,PB-FREE

Ref. Des.	Part Number	Description
R6524M6	0613952R66	RES,MF,0OHM,5%,.0625W,SM,0402,PB-FREE
R6525M6	NOTPLACED	64AM DUMMY PART NUMBER
R6526M6	0613952R66	RES,MF,0OHM,5%,.0625W,SM,0402,PB-FREE
R6527M6	0613952N87	RES,MF,78.7KOHM,1%,.0625W,SM,0402,200PPM/CEL,PB-FREE
R6528M6	0613952R25	RES,MF,100KOHM,5%,.0625W,SM,0402,200PPM/CEL,PB-FREE
R6529M6	0615049H01	RES,MF,.2OHM,1%,.5W,1206,KAMAYA 0.2 OHM CHIP RES
R6530M6	0613952L30	RES,MF,200OHM,1%,.0625W,SM,0402,200PPM/CEL,PB-FREE
R6531M6	0613952R01	RES,MF,10KOHM,5%,.0625W,SM,0402,200PPM/CEL,PB-FREE
R6532M6	NOTPLACED	64AM DUMMY PART NUMBER
R6533M6	0613952R66	RES,MF,0OHM,5%,.0625W,SM,0402,PB-FREE
R6534M6	NOTPLACED	64AM DUMMY PART NUMBER
R6535M6	0613952N01	RES,MF,10KOHM,1%,.0625W,SM,0402,200PPM/CEL,PB-FREE
R6536M6	0613952Z72	RES,MF,91KOHM,1%,.0625W,SM,0402,200PPM/CEL,PB-FREE
R6537M6	0613952P09	RES,MF,121KOHM,1%,.0625W,SM,0402,200PPM/CEL,PB-FREE
R6538M6	0613952Q95	RES,MF,8.2KOHM,5%,.0625W,SM,0402,200PPM/CEL,PB-FREE
R6539M6	0613952P66	RES,MF,475KOHM,1%,.0625W,SM,0402,200PPM/CEL,PB-FREE

Ref. Des.	Part Number	Description
R6540M6	0613952P66	RES,MF,475KOHM,1%,.0625W,SM,0402,200PPM/CEL,PB-FREE
R6541M6	0613952R25	RES,MF,100KOHM,5%,.0625W,SM,0402,200PPM/CEL,PB-FREE
R6542M6	0613952R66	RES,MF,0OHM,5%,.0625W,SM,0402,PB-FREE
R6543M6	0613952R66	RES,MF,0OHM,5%,.0625W,SM,0402,PB-FREE
R6544M6	0613952R66	RES,MF,0OHM,5%,.0625W,SM,0402,PB-FREE
R6545M6	0613952R25	RES,MF,100KOHM,5%,.0625W,SM,0402,200PPM/CEL,PB-FREE
R6546M6	0613952R66	RES,MF,0OHM,5%,.0625W,SM,0402,PB-FREE
R6547M6	0613952R66	RES,MF,0OHM,5%,.0625W,SM,0402,PB-FREE
R6548M6	NOTPLACED	64AM DUMMY PART NUMBER
R6550M6	0613952Z64	RES,MF,39KOHM,1%,.0625W,SM,0402,200PPM/CEL,PB-FREE
R6551M6	0613952Z62	RES,MF,33KOHM,1%,.0625W,SM,0402,200PPM/CEL,PB-FREE
R6552M6	0613952R25	RES,MF,100KOHM,5%,.0625W,SM,0402,200PPM/CEL,PB-FREE
R6558M6	0613952P22	RES,MF,165KOHM,1%,.0625W,SM,0402,200PPM/CEL,PB-FREE
R6561M6	0613952R66	RES,MF,0OHM,5%,.0625W,SM,0402,PB-FREE
R6562M6	0613952R66	RES,MF,0OHM,5%,.0625W,SM,0402,PB-FREE
R6563M6	0613952R66	RES,MF,0OHM,5%,.0625W,SM,0402,PB-FREE
R6564M6	0613952R66	RES,MF,0OHM,5%,.0625W,SM,0402,PB-FREE
R6565M6	0613952R66	RES,MF,0OHM,5%,.0625W,SM,0402,PB-FREE

Ref. Des.	Part Number	Description
R6566M6	0613952R66	RES,MF,0OHM,5%,.0625W,SM,0402,PB-FREE
R6567M6	0613952R66	RES,MF,0OHM,5%,.0625W,SM,0402,PB-FREE
R6568M6	0613952P47	RES,MF,301KOHM,1%,.0625W,SM,0402,200PPM/CEL,PB-FREE
R6570M6	0613952R66	RES,MF,0OHM,5%,.0625W,SM,0402,PB-FREE
R6574M6	0613952R25	RES,MF,100KOHM,5%,.0625W,SM,0402,200PPM/CEL,PB-FREE
R6576M6	0613952R01	RES,MF,10KOHM,5%,.0625W,SM,0402,200PPM/CEL,PB-FREE
R6577M6	0613952Q89	RES,MF,4700,5,.0625,SM,0402,200,PB-FREE
R6578M6	0613952Q89	RES,MF,4700,5,.0625,SM,0402,200,PB-FREE
R6579M6	0613952R01	RES,MF,10KOHM,5%,.0625W,SM,0402,200PPM/CEL,PB-FREE
R6580M6	0613952R17	RES,MF,47000,5,.0625,SM,0402,200,PB-FREE
R6581M6	0613952Q49	RES,MF,100,5,.0625,SM,0402,200,PB-FREE
R6582M6	0613952Q89	RES,MF,4700,5,.0625,SM,0402,200,PB-FREE
R6583M6	0613952R03	RES,MF,12000,5,.0625,SM,0402,200,PB-FREE
R6584M6	0613952Q56	RES,MF,200OHM,5%,.0625W,SM,0402,200PPM/CEL,PB-FREE
R6592M6	0613952R66	RES,MF,0OHM,5%,.0625W,SM,0402,PB-FREE
R6598M6	0613952R66	RES,MF,0OHM,5%,.0625W,SM,0402,PB-FREE
R6599M6	NOTPLACED	64AM DUMMY PART NUMBER
R6601M6	0613952R01	RES,MF,10KOHM,5%,.0625W,SM,0402,200PPM/CEL,PB-FREE

Ref. Des.	Part Number	Description
R6602M6	0613952R01	RES,MF,10KOHM,5%,.0625 W,SM,0402,200PPM/ CEL,PB-FREE
R6604M6	0613952Q51	RES,MF,120,5,.0625,SM,04 02,200,PB-FREE
R6605M6	0613952Q33	RES,MF,22,5,.0625,SM,040 2,200,PB-FREE
R6606M6	0613952Q37	RES,MF,33OHM,5%,.0625 W,SM,0402,200PPM/ CEL,PB-FREE
R6608M6	0613952R01	RES,MF,10KOHM,5%,.0625 W,SM,0402,200PPM/ CEL,PB-FREE
R6609M6	0613952R25	RES,MF,100KOHM,5%,.062 5W,SM,0402,200PPM/ CEL,PB-FREE
R6616M6	0613952Q80	RES,MF,2KOHM,5%,.0625 W,SM,0402,200PPM/ CEL,PB-FREE
R6617M6	0613952R01	RES,MF,10KOHM,5%,.0625 W,SM,0402,200PPM/ CEL,PB-FREE
R6618M6	0613952R01	RES,MF,10KOHM,5%,.0625 W,SM,0402,200PPM/ CEL,PB-FREE
R6619M6	0613952R01	RES,MF,10KOHM,5%,.0625 W,SM,0402,200PPM/ CEL,PB-FREE
R6621M6	0613952Q89	RES,MF,4700,5,.0625,SM,0 402,200,PB-FREE
R6622M6	0613952Q35	RES,MF,27OHM,5%,.0625 W,SM,0402,200PPM/ CEL,PB-FREE
R6623M6	0613952Q35	RES,MF,27OHM,5%,.0625 W,SM,0402,200PPM/ CEL,PB-FREE
R6624M6	0613952Q35	RES,MF,27OHM,5%,.0625 W,SM,0402,200PPM/ CEL,PB-FREE
R6625M6	0613952Q35	RES,MF,27OHM,5%,.0625 W,SM,0402,200PPM/ CEL,PB-FREE
R6626M6	0613952R01	RES,MF,10KOHM,5%,.0625 W,SM,0402,200PPM/ CEL,PB-FREE

Ref. Des.	Part Number	Description
R698M19	0613952R66	RES,MF,0OHM,5%,.0625W, SM,0402,PB-FREE
R699M19	0613952R66	RES,MF,0OHM,5%,.0625W, SM,0402,PB-FREE
R701M7	0613952Q64	RES,MF,430OHM,5%,.0625 W,SM,0402,200PPM/ CEL,PB-FREE
R702M7	0613952R66	RES,MF,0OHM,5%,.0625W, SM,0402,PB-FREE
R703M7	0613952Q67	RES,MF,560OHM,5%,.0625 W,SM,0402,200PPM/ CEL,PB-FREE
R704M7	0613952Q25	RES,MF,10,5,.0625,SM,040 2,200,PB-FREE
R705M7	0613952Q71	RES,MF,820OHM,5%,.0625 W,SM,0402,200PPM/ CEL,PB-FREE
R706M7	0613952R66	RES,MF,0OHM,5%,.0625W, SM,0402,PB-FREE
R707M7	0613952Q67	RES,MF,560OHM,5%,.0625 W,SM,0402,200PPM/ CEL,PB-FREE
R708M7	0613952Q45	RES,MF,68OHM,5%,.0625 W,SM,0402,200PPM/ CEL,PB-FREE
R709M7	NOTPLACED	64AM DUMMY PART NUM- BER
R721M7	0613952R01	RES,MF,10KOHM,5%,.0625 W,SM,0402,200PPM/ CEL,PB-FREE
R722M7	0613952Q71	RES,MF,820OHM,5%,.0625 W,SM,0402,200PPM/ CEL,PB-FREE
R723M7	0613952Q79	RES,MF,1800,5,.0625,SM,0 402,200,PB-FREE
R728M7	0613952Q37	RES,MF,33OHM,5%,.0625 W,SM,0402,200PPM/ CEL,PB-FREE
R729M7	0613952R09	RES,MF,22000,5,.0625,SM, 0402,200,PB-FREE
R730M7	0613952Q84	RES,MF,3KOHM,5%,.0625 W,SM,0402,200PPM/ CEL,PB-FREE

Ref. Des.	Part Number	Description
R736M7	0613952Q55	RES,MF,180OHM,5%,.0625 W,SM,0402,200PPM/ CEL,PB-FREE
R741M7	0613952R09	RES,MF,22000,5,.0625,SM, 0402,200,PB-FREE
R742M7	0613952R23	RES,MF,82KOHM,5%,.0625 W,SM,0402,200PPM/ CEL,PB-FREE
R743M7	0613952R17	RES,MF,47000,5,.0625,SM, 0402,200,PB-FREE
R744M7	0613952Q91	RES,MF,5600,5,.0625,SM,0 402,200,PB-FREE
R745M7	0613952R09	RES,MF,22000,5,.0625,SM, 0402,200,PB-FREE
R746M7	0613952Q34	RES,MF,24OHM,5%,.0625 W,SM,0402,200PPM/ CEL,PB-FREE
R747M7	0613952Q39	RES,MF,39OHM,5%,.0625 W,SM,0402,200PPM/ CEL,PB-FREE
R748M7	0613952Q47	RES,MF,82OHM,5%,.0625 W,SMD,0402,200PPM/ CEL,CER CHIP 82.0 OHM 5%
R751M7	0613952Q59	RES,MF,270OHM,5%,.0625 W,SM,0402,200PPM/ CEL,PB-FREE
R754M7	NOTPLACED	64AM DUMMY PART NUM- BER
R757M7	0613952Q59	RES,MF,270OHM,5%,.0625 W,SM,0402,200PPM/ CEL,PB-FREE
R761M7	0613952Q23	RES,MF,8.2OHM,5%,.0625 W,SM,0402,200PPM/ CEL,PB-FREE
R762M7	0613952R08	RES,MF,20KOHM,5%,.0625 W,SM,0402,200PPM/ CEL,PB-FREE
R763M7	0613952R19	RES,MF,56KOHM,5%,.0625 W,SM,0402,200PPM/ CEL,PB-FREE
R766M7	0613952Q92	RES,MF,6.2KOHM,5%,.062 5W,SM,0402,200PPM/ CEL,PB-FREE

Ref. Des.	Part Number	Description
R769M7	0613952Q31	RES,MF,180OHM,5%,.0625 W,SM,0402,200PPM/ CEL,PB-FREE
R771M7	0613952Q49	RES,MF,100,5,.0625,SM,04 02,200,PB-FREE
R776M7	0613952Q67	RES,MF,560OHM,5%,.0625 W,SM,0402,200PPM/ CEL,PB-FREE
R778M7	0613952Q32	RES,MF,20OHM,5%,.0625 W,SM,0402,200PPM/ CEL,PB-FREE
R779M7	0613952Q49	RES,MF,100,5,.0625,SM,04 02,200,PB-FREE
R785M7	0613952Q60	RES,MF,300OHM,5%,.0625 W,SM,0402,200PPM/ CEL,PB-FREE
R799M7	0613952Q60	RES,MF,300OHM,5%,.0625 W,SM,0402,200PPM/ CEL,PB-FREE
R809M7	0613952Q29	RES,MF,150OHM,5%,.0625 W,SM,0402,200PPM/ CEL,PB-FREE
R822M7	NOTPLACED	64AM DUMMY PART NUM- BER
R823M7	NOTPLACED	64AM DUMMY PART NUM- BER
T506M21	2575851B01	XFMR,BALUN,RF XFMR BALUN
T507M21	2575851B02	XFMR,BALUN,25,SM,RF XFMR BALUN
U1101M11	5188032U43	IC,SENSING CIR- CUIT,INA138,SM,SOT-23/ 5,1PER PKG
U1103M11	5185070Y01	IC,TEMP SENS
U1104M11	5185941F56	IC,OP AMP,1PER PKG,RAIL-RAIL,SOIC,IC SNGL LV LP OP AMP
U1105M11	5180390L83	IC,CNTRLR,SM,1PER PKG
U1106M11	5175772B05	IC,LTC5532ES6,SOT- 23,1PER PKG,PRCN RF DET
U1112M11	5175772B04	IC,HMC468LP3E,QFN,1 DB LSB GAAS MMIC ATTEN

Ref. Des.	Part Number	Description
U1113M11	5185941F56	IC,OP AMP,1PER PKG,RAIL-RAIL,SOIC,IC SNGL LV LP OP AMP
U1114M11	5185941F56	IC,OP AMP,1PER PKG,RAIL-RAIL,SOIC,IC SNGL LV LP OP AMP
U1119M11	5109522E94	GATE,AND,1PER PKG,SM,2 INPUT IN NANO PKG
U1121M11	5114000B52	IC,XOR,LOGIC LEVEL SHIFTER,1PER PKG,SM,SOT-353,PB-FREE
U1125M11	5175206H01	IC,DAC,W/ 5 PPM/C INT REF
U1126M11	5109817F77	IC,COMPTR,LMV7275,SC7 0-5
U1127M11	5171779H01	IC,ANLG SW,SC70,SC70- 6,1PER PKG,SPDT ANLG SW
U1128M11	5188085K11	IC,NAND,SINGLE 2 INPUT,SN74LVC1G00YZPR ,SM,GATE, POS, 5 DSBGA,
U1129M11	5175143H01	IC,WIDE SPLY RANGE OP AMP
U1130M11	5175143H01	IC,WIDE SPLY RANGE OP AMP
U1131M11	5109817F77	IC,COMPTR,LMV7275,SC7 0-5
U1132M11	5114007M28	IC,D FLIP-FLOP,1PER PKG,17SZ74,N- I,SM,SOIC8,PB-FREE
U1133M11	5171779H01	IC,ANLG SW,SC70,SC70- 6,1PER PKG,SPDT ANLG SW
U1136M11	5109522E94	GATE,AND,1PER PKG,SM,2 INPUT IN NANO PKG
U1137M11	5164852H16	IC,TRANSLATING,2PER PKG,LVC2T45,TRANS- CEIVER W/VOLTAGE TRANSLATI
U1138M11	5164852H16	IC,TRANSLATING,2PER PKG,LVC2T45,TRANS- CEIVER W/VOLTAGE TRANSLATI

Ref. Des.	Part Number	Description
U1139M11	5164852H16	IC,TRANSLATING,2PER PKG,LVC2T45,TRANS- CEIVER W/VOLTAGE TRANSLATI
U1141M11	5185941F56	IC,OP AMP,1PER PKG,RAIL-RAIL,SOIC,IC SNGL LV LP OP AMP
U1142M11	5185941F56	IC,OP AMP,1PER PKG,RAIL-RAIL,SOIC,IC SNGL LV LP OP AMP
U1143M11	5185941F56	IC,OP AMP,1PER PKG,RAIL-RAIL,SOIC,IC SNGL LV LP OP AMP
U1144M11	5171779H01	IC,ANLG SW,SC70,SC70- 6,1PER PKG,SPDT ANLG SW
U1146M11	5109522E93	GATE,OR,SN74LVC1G32Y ZPR,1PER PKG,SM,2 INPUT IN NANO PKG
U1147M11	5109522E94	GATE,AND,1PER PKG,SM,2 INPUT IN NANO PKG
U1148M11	5185941F56	IC,OP AMP,1PER PKG,RAIL-RAIL,SOIC,IC SNGL LV LP OP AMP
U1149M11	5109522E93	GATE,OR,SN74LVC1G32Y ZPR,1PER PKG,SM,2 INPUT IN NANO PKG
U1150M11	51009381001	IC,MICROPOWER SOT-23 V REF
U1301M3	51007377001	IC,XCVR,NL5500,BGA,BLU- ETOOTH, GPS, FM RX, FM TX
U1304M3	51007599001	AMP,20.0DB,1.58GHZMIN,1 .58GHZMAX,SLCN GER- MANIUM GPS LOW NOISE AM
U1305M3	5187344N09	IC,LNR V REGLTR,FXD,2.8V,100MA,L OW NOISE
U1601M16	5175143H01	IC,WIDE SPLY RANGE OP AMP
U1602M16	51012101001	VHF/UHF/800/900 MHZ LDMOS DRIVER IC

Ref. Des.	Part Number	Description
U1932M20	4885316E32	XSTR,BIP RF SML SGNL,SLCN,BFR380F,SM, SMT,6V,380W,80A,14MHZ,T R
U200M12	5188493T01	IC,VREG/ SWG,LP2989,SM,MINI SO- 8 HI PRCN REG 5V
U201M12	5175771A99	IC,LNR V REGLTR,FXD,100MA,VFBG A,LOW NOISE, 100MA LIN- EAR REGL
U202M12	5175772B02	IC,LNR V REGLTR,FXD,1.8V,100MA, VFBGA,LINEAR REGLTR 100MA 1.8
U203M12	5175772B01	IC,LNR V REGLTR,FXD,1.5V,350MA, VFBGA,LINEAR V REGLTR 350MA
U2101M2	5109522E84	IC,DL SCHT TRIG MICRO PAK
U2102M2	5109522E84	IC,DL SCHT TRIG MICRO PAK
U2201M2	5171679H01	IC,DISP DRVR,LED LT DRVR
U2202M2	5164852H47	IC,XLTR,2PER PKG,TSSOP8,IC, I2C LEV XLTR
U2601M13	5103535B53	IC,INVTR,DL,NC7WZ04L6X ,2PER PKG,SC70
U2602M13	5185941F45	ATTEN,VAR,14.4DBMIN,15. 6DBMAX,0-2000 MHZ- FREQ,50OHM,PCMT,SOT- 25
U3001M22	5171972L01	IC,SW,SP3T RF SW
U4001M2	5164852H47	IC,XLTR,2PER PKG,TSSOP8,IC, I2C LEV XLTR
U4003M2	5188691V01	IC,MUX/ DEMUX,NC7SB3157P6X,S M,SC70-6,1PER PKG,BUS,PB FREE

Ref. Des.	Part Number	Description
U4004M2	5116783H01	IC,ANLG SW,SN74LVC2G66YZPR,S M,2PER PKG,0CHANNELS,BILAT- ERAL,DL
U507M21	5164015H81	IC,MXR,SM
U601M19	5102495J14	IC,IF,IF DIGITILIZING SUB- SYSTEM IC,AD9864,QFN
U602M19	4885316E32	XSTR,BIP RF SML SGNL,SLCN,BFR380F,SM, SMT,6V,380W,80A,14MHZ,T R
U603M19	5109522E84	IC,DL SCHT TRIG MICRO PAK
U604M19	5109522E84	IC,DL SCHT TRIG MICRO PAK
U605M19	5164852H16	IC,TRANSLATING,2PER PKG,LVC2T45,TRANS- CEIVER W/VOLTAGE TRANSLATI
U606M19	5164852H16	IC,TRANSLATING,2PER PKG,LVC2T45,TRANS- CEIVER W/VOLTAGE TRANSLATI
U607M19	5186311J24	IC,BFR,1PER PKG,NC7SZ125,ACTIVE HIGH,BFR,3ST,SM,5.5
U6101M6	0180706J18	IC,PGM,PGM CPLD
U6102M6	5188691V01	IC,MUX/ DEMUX,NC7SB3157P6X,S M,SC70-6,1PER PKG,BUS,PB FREE
U6103M6	5175114H01	IC,SNGL AND GATE MICROPAK
U6104M6	5175114H01	IC,SNGL AND GATE MICROPAK
U6105M6	5175114H01	IC,SNGL AND GATE MICROPAK
U6201M6	5185941F26	IC,COMPTR,LMV7219,SM, SOT-23/5,IC,LM7219,COM- PARATOR,NOBP
U6301M6	51012058002	IC,SDRAM,512MBITS,8 MEG X 16 X 4 BANKS,6NS,SM,MOBILE LPDDR 5

Ref. Des.	Part Number	Description
U6302M6	5102495J13	IC,MICROP,P1710ZZGE,BG A,12MHZ,32BITS
U6304M6	0105955U25	ASSY,ASSY,ASSY,IC,BGA SPEC PROG, FLSH MEM
U6401M6	5175772B38	IC,IC ANLG TEMP SENSOR
U6402M6	5115453H01	IC,OP AMP,2PER PKG,RAIL TO RAIL OUTPUT, 8 PIN BGA
U6404M6	5175772B38	IC,IC ANLG TEMP SENSOR
U6405M6	5188348V06	IC,AUDIO CODEC,SM,AUDIO CODEC
U6408M6	5188521T01	IC,VREF,SM,SOT23,1PER PKG,.5%,1.25 TO 13.75,PRCN BANDGAP ADJUS
U6409M6	51009000001	IC,COMPTR,SC70,NANOP-OWER, 1.8V, SC70 COMPTR
U6410M6	5175772B38	IC,IC ANLG TEMP SENSOR
U6411M6	5109731C55	IC,AU AMP,BGA,2.75 FXD GAIN MONO FLTR-FREE
U6501M6	5185143E77	IC,CUST,BGA,IC, MAKO ASIC, CMOS PWR MGMT
U6502M6	4871987H01	XSTR,BIP GP POWER,12V,1A,LOW FREQ XSTR
U6503M6	5171674H01	IC,OP AMP,SO-8,OP AMP
U6504M6	5171682H01	IC,DC TO DC CON-VERTER,800MA BUCK REGLTR
U6505M6	5189631P01	IC,0PER PKG,SYNC STEP-DOWN CONV
U6506M6	5184790Y04	IC,LINEAR VOLTAGE REG-ULATOR,400MA
U6507M6	5171682H01	IC,DC TO DC CON-VERTER,800MA BUCK REGLTR
U6508M6	51009366001	IC,LNR V REGLTR,LLP6,500MA LOW DROPOUT CMOS LINEAR REG
U6509M6	5175114H01	IC,SNGL AND GATE MICROPAK

Ref. Des.	Part Number	Description
U6510M6	5114007A47	IC,OR,17SZ32,1PER PKG,SOT-353,PB FREE
U6511M6	5171339H01	IC,MC78LC18,MICROPO- WER V REGLTR
U6601M6	5175114H01	IC,SNGL AND GATE MICROPAK
U702M7	5164015H28	IC,CUST,MULTI PROTO- COL/BAND TRANSCVR IC,SM,BGA,TRIDENT, INTEG
U738M7	5171972L01	IC,SW,SP3T RF SW
U746M7	4805218N63	XSTR,GEN PURPOSE SMALL SIG,SOT- 323,BROADBAND AND XSTR
VR101M12	4813977M29	DIODE,ZEN,MBZ5250,SM,S OT-23,ZEN,PB-FREE
VR1905M20	4815096H01	DIODE,VCTR,10V,1SV305G ,VCTR DIODE 1SV305
VR1906M20	4815096H01	DIODE,VCTR,10V,1SV305G ,VCTR DIODE 1SV305
VR1907M20	4815096H01	DIODE,VCTR,10V,1SV305G ,VCTR DIODE 1SV305
VR1908M20	4815096H01	DIODE,VCTR,10V,1SV305G ,VCTR DIODE 1SV305
VR200M12	4813977M29	DIODE,ZEN,MBZ5250,SM,S OT-23,ZEN,PB-FREE
VR601M19	4805656W87	DIODE,VCTR, @ 15V,1SV279,SOD-523/SC- 79,SOD-523/SC-79
VR602M19	4805656W87	DIODE,VCTR, @ 15V,1SV279,SOD-523/SC- 79,SOD-523/SC-79
Y1304M3	48014600001	OSC,TCXO,26.0
Y6501M6	93012044001	OSC,XO,24.576MHZ,SM,XT AL U SMD 5.0X3.2 24.576MHZ
Y6502M6	4809995L05	RESON,QRTZ,32.768KHZ, SM,FUND,9PF LOAD CAP,- 40DEG C MIN,85DE

Ref. Des.	Part Number	Description
Y6601M6	4802582S85	RESON,QRTZ,12MHZ,10P PM TOL,18PPM STAB,SM,FUND,AT,10PF LOAD CAP
Y701M7	4871886H01	OSC,VO,16.8 MHZ VCTXO .8PPM

### 8.5 Transceiver (RF) Boards: 700 – 800 MHz (84012266001 / PC000351A01)

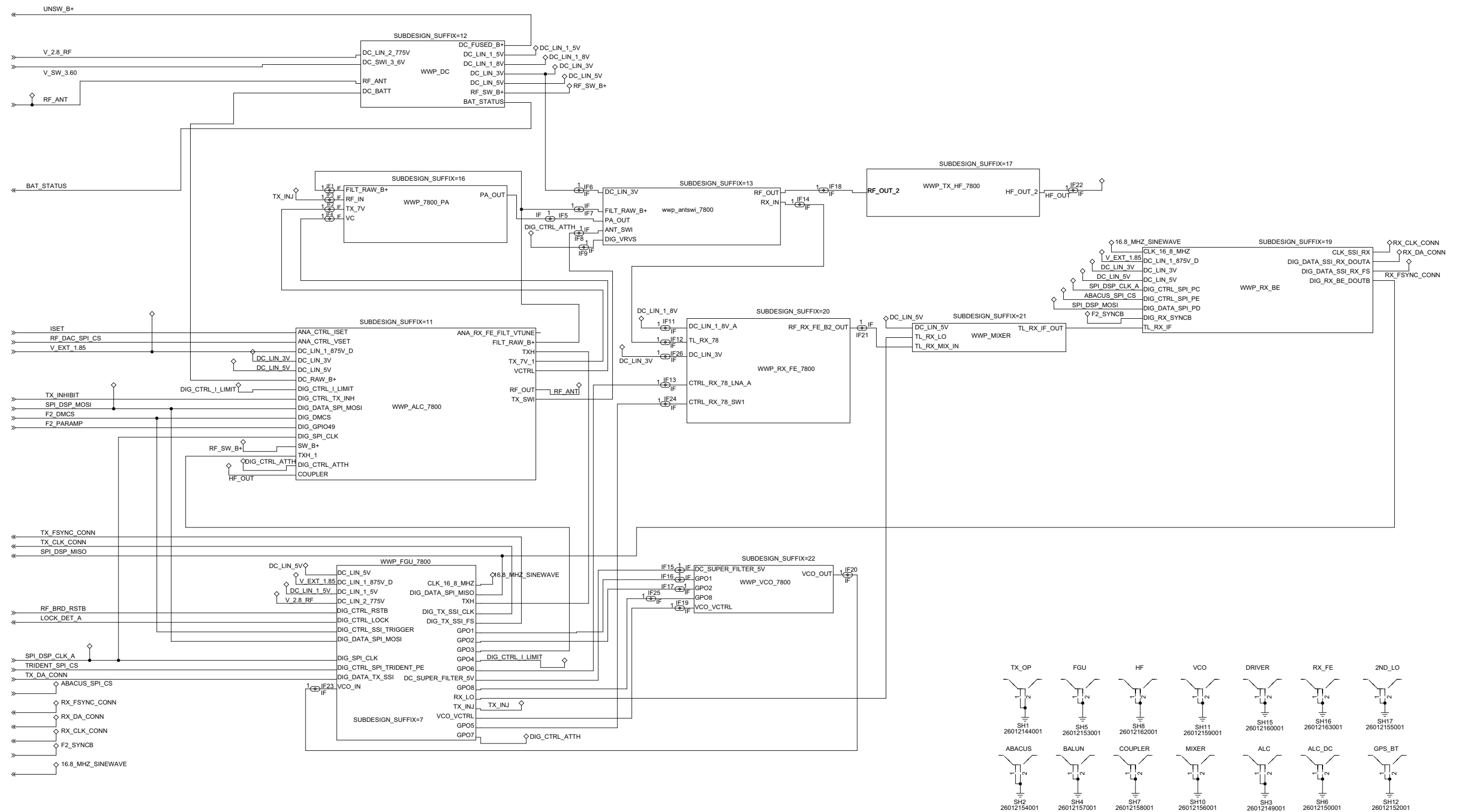


Figure 8-118. Transceiver (RF) Board Overall Schematic (84012266001)

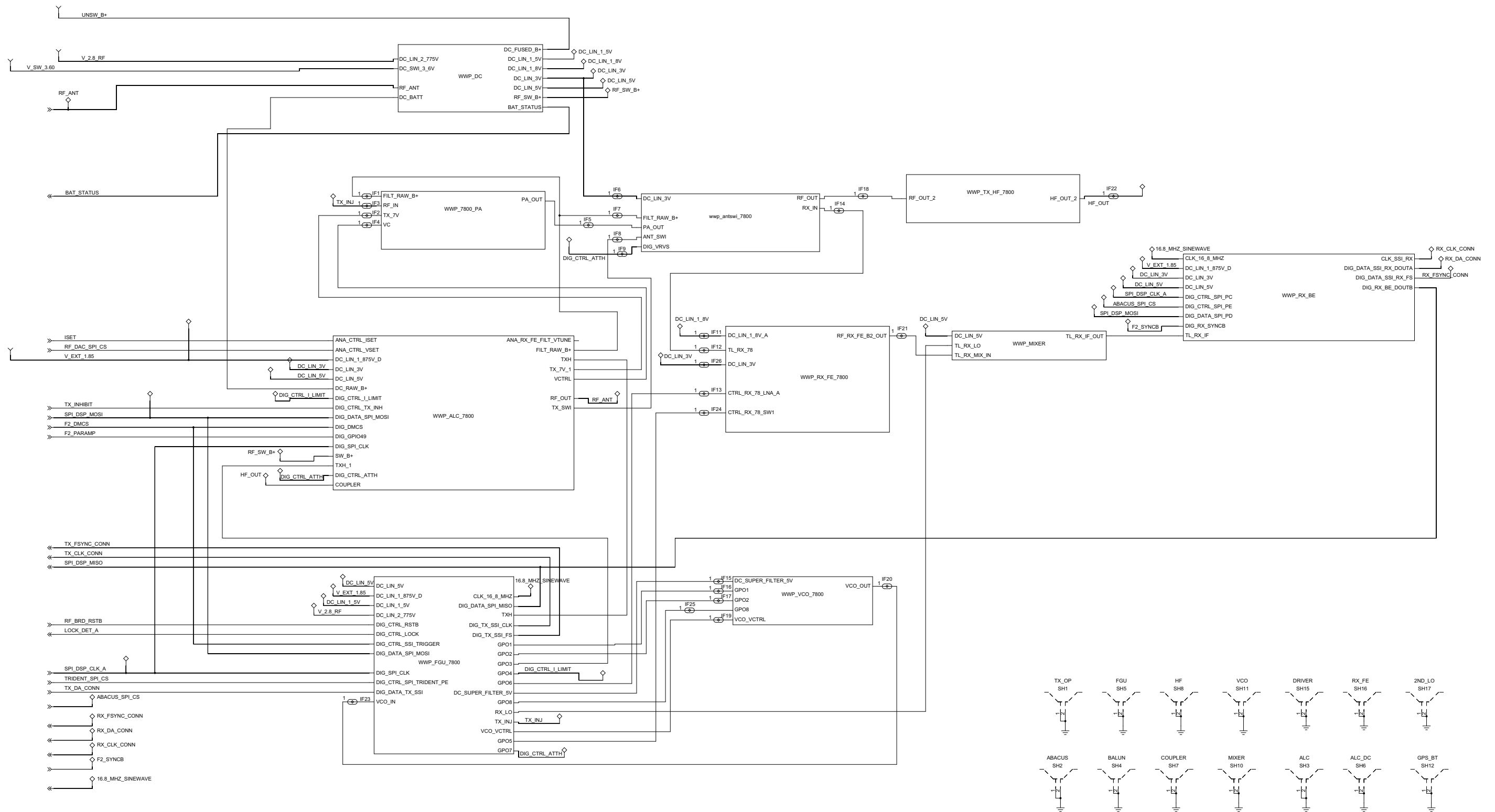


Figure 8-119. Transceiver (RF) Board Overall Schematic (PC000351A01) – 1 of 2



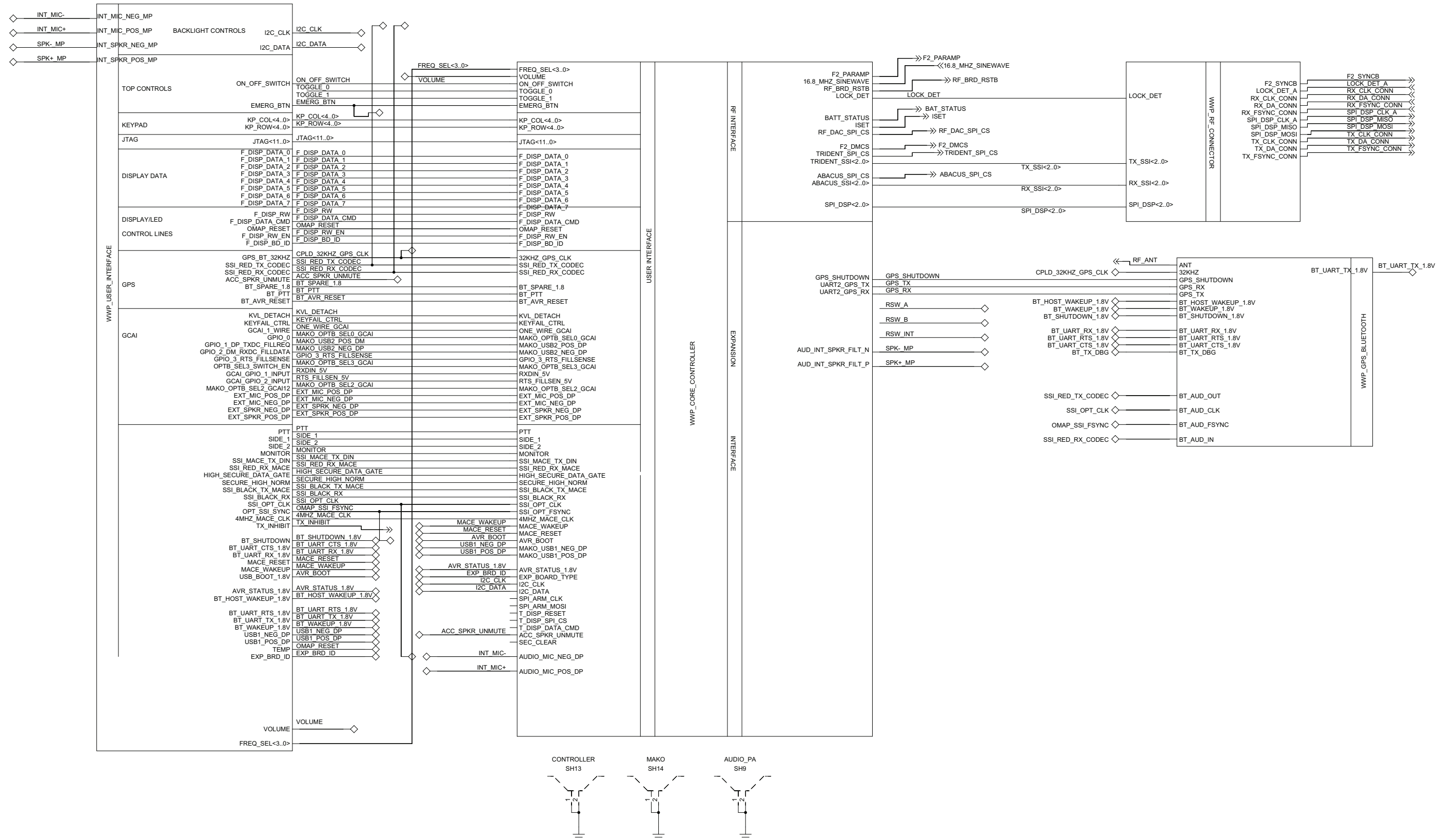


Figure 8-120. Transceiver (RF) Board Overall Schematic (PC000351A01) – 2 of 2

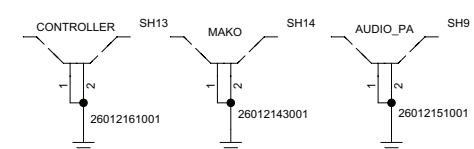
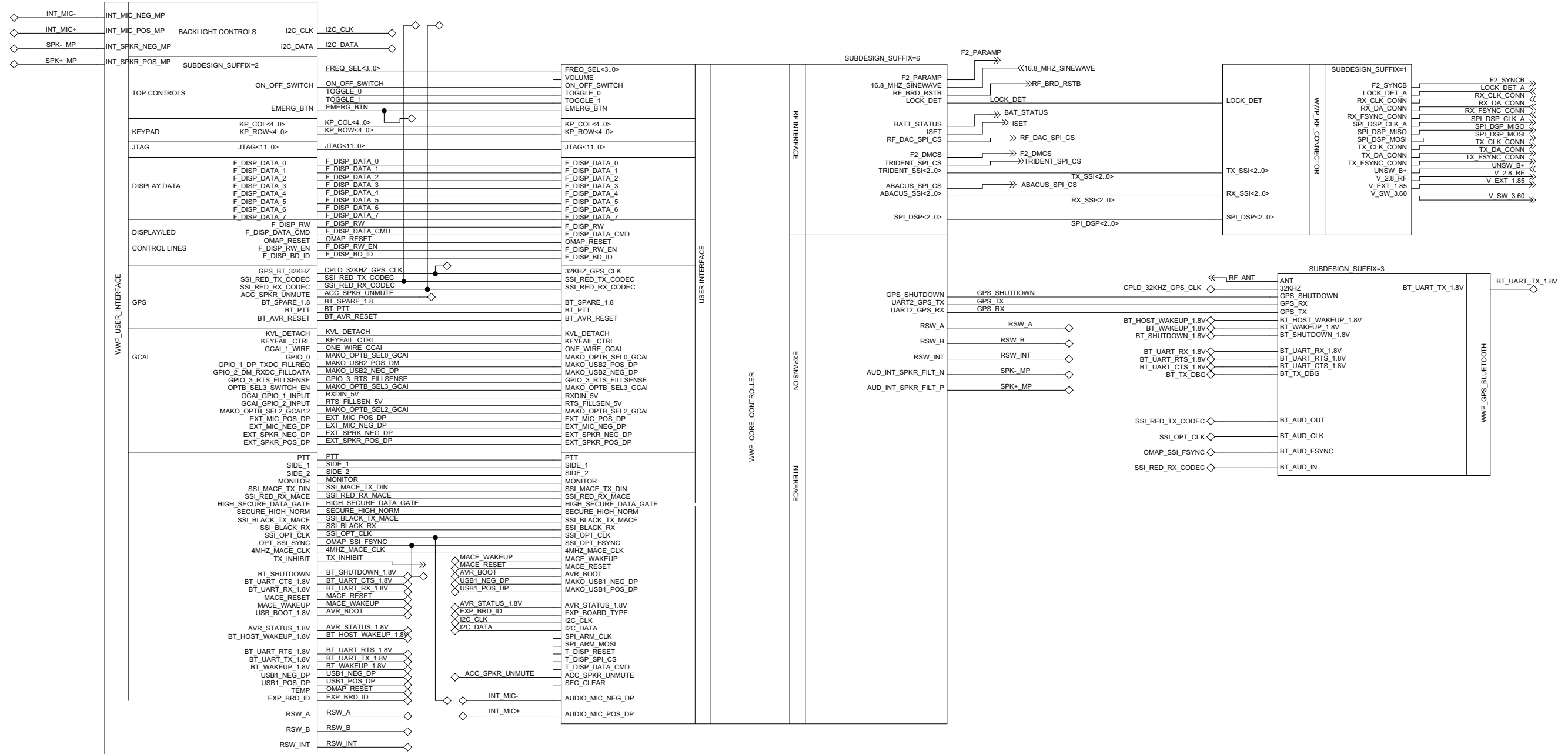


Figure 8-121. Controller Mainboard Circuit

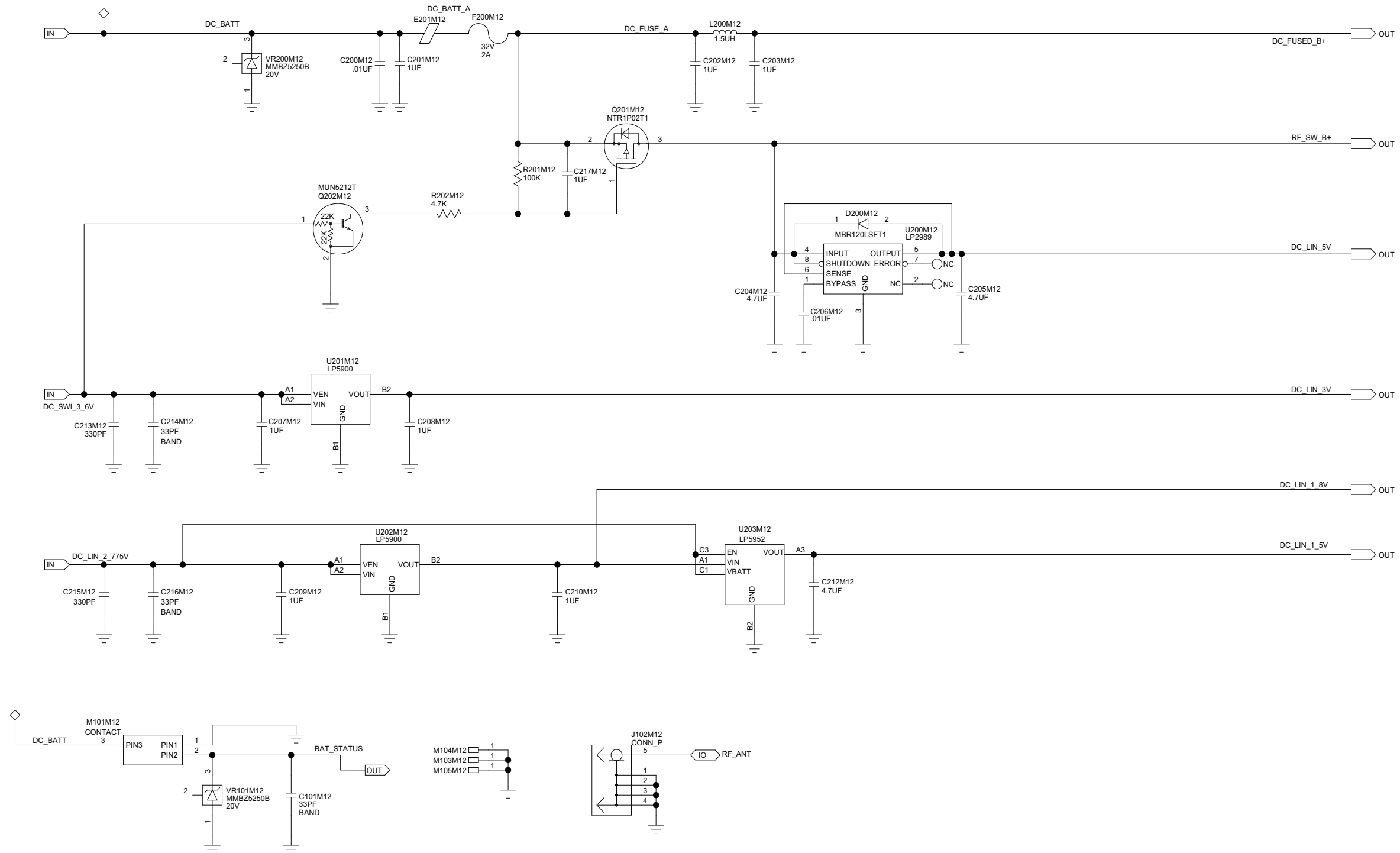


Figure 8-122. DC Circuit

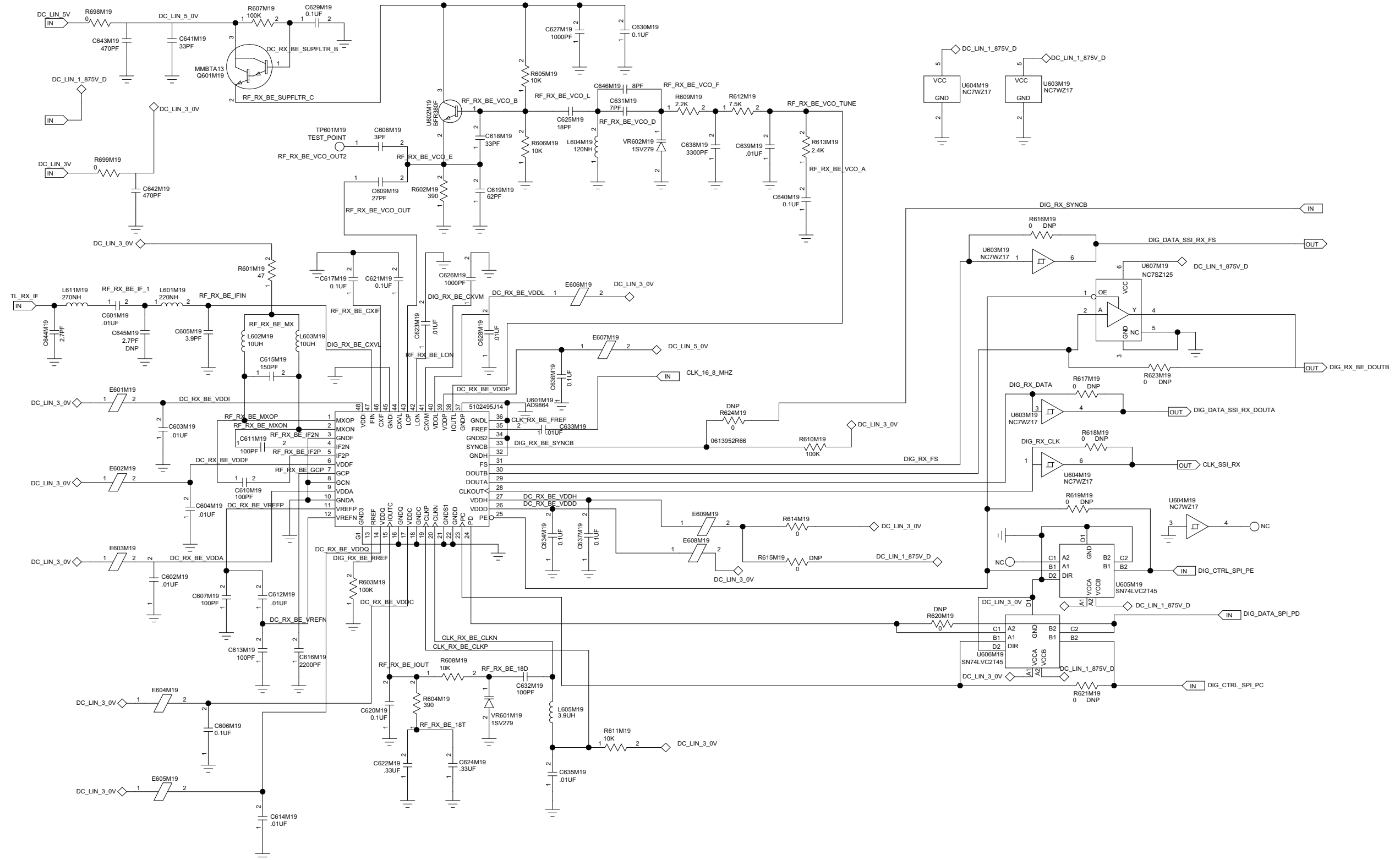


Figure 8-123. Receiver Back End Circuit

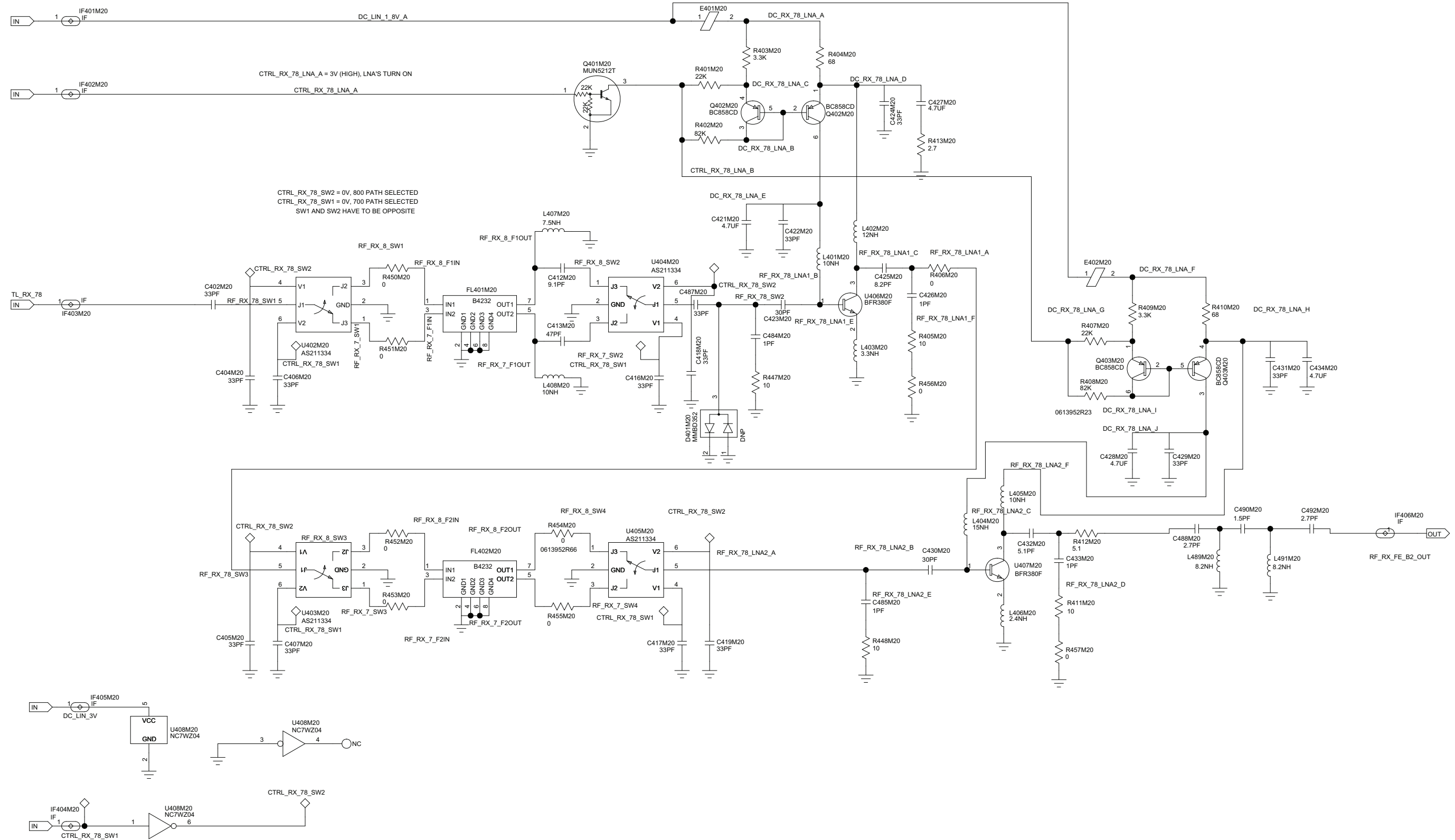


Figure 8-124. Receiver Front End Circuit

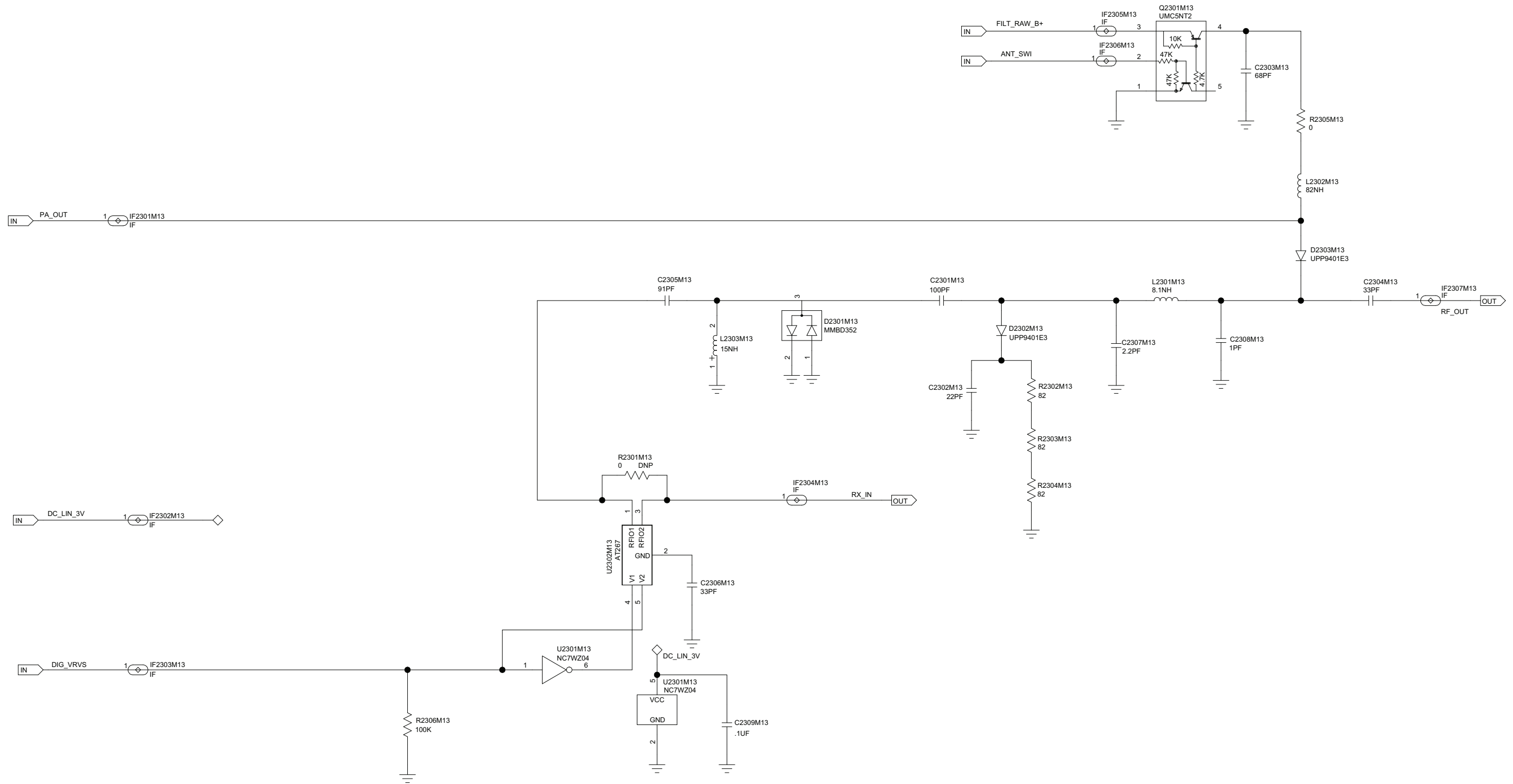


Figure 8-125. ANTSWI Circuit

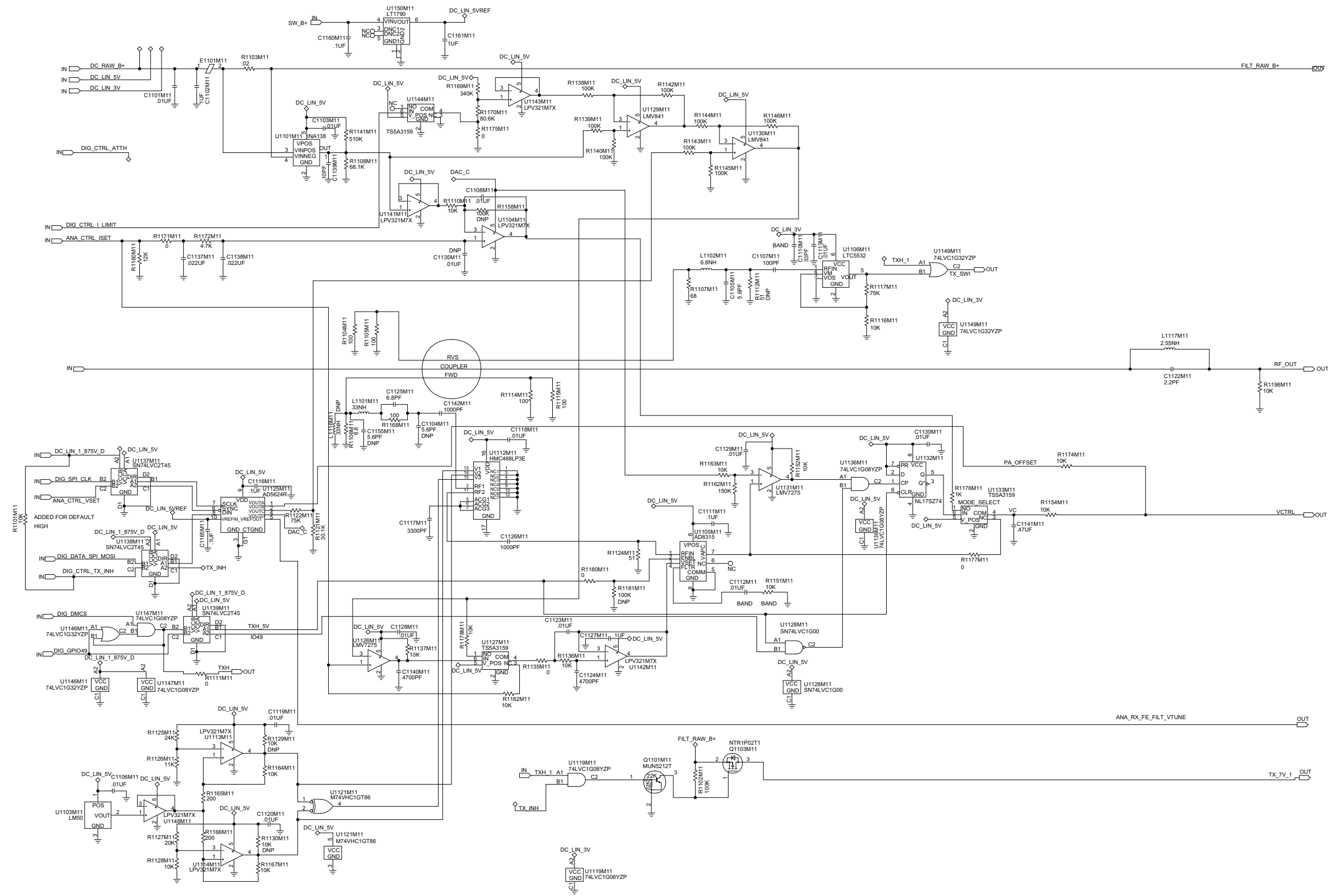


Figure 8-126. Automatic Level Control Circuit

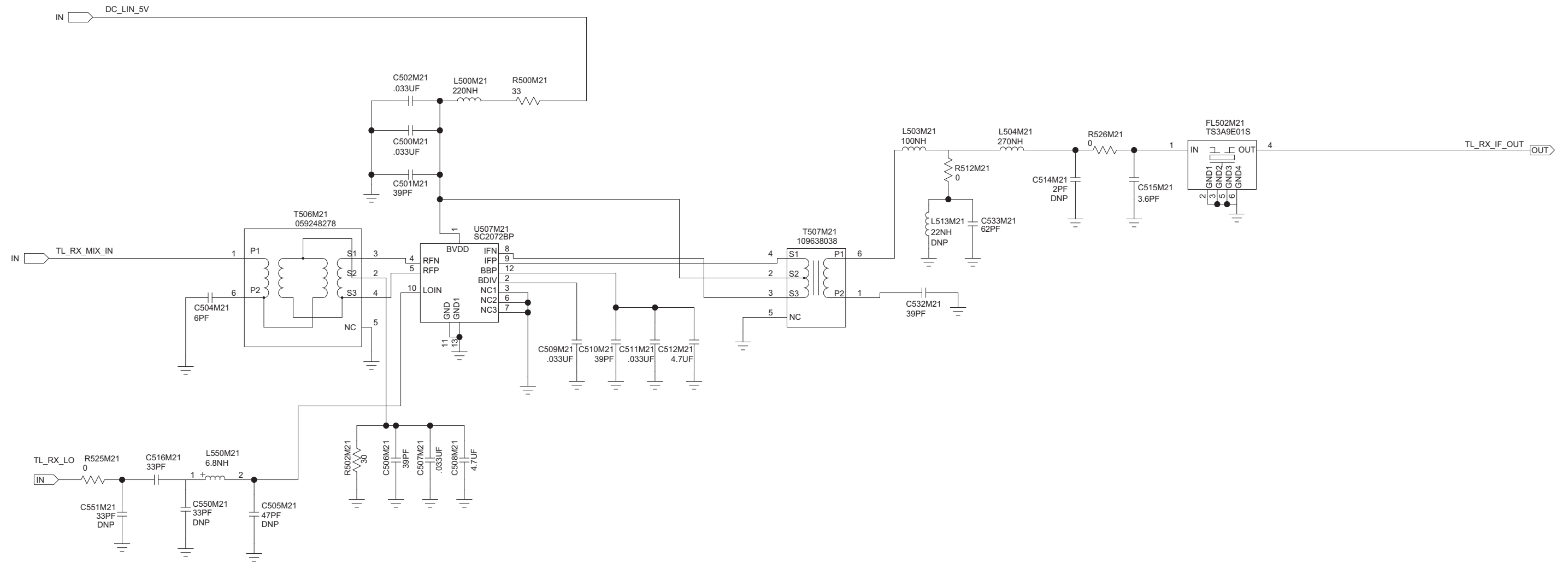


Figure 8-127. Receiver Back End Circuit



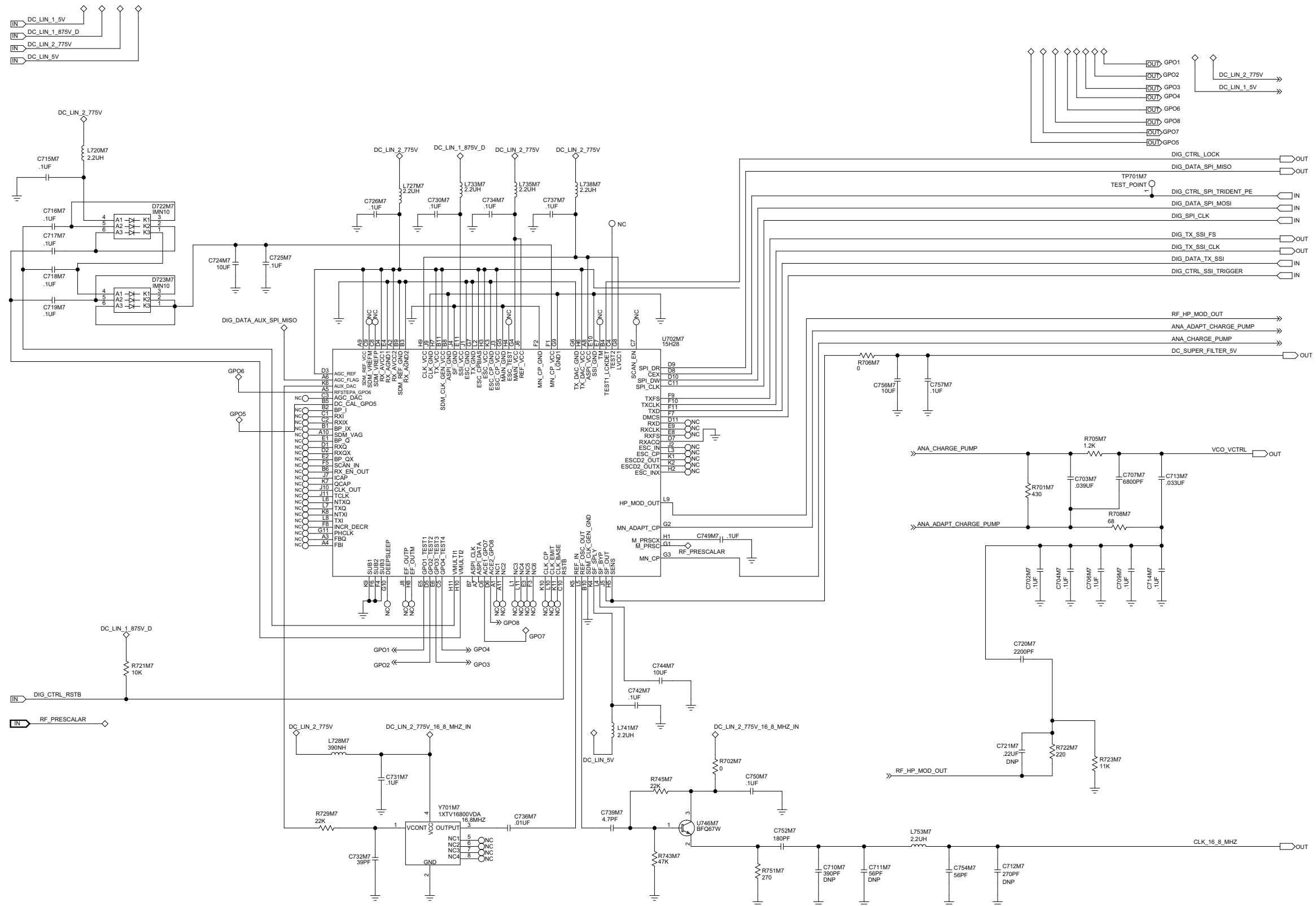


Figure 8-128. Frequency Generation Unit Circuit – 1 of 2

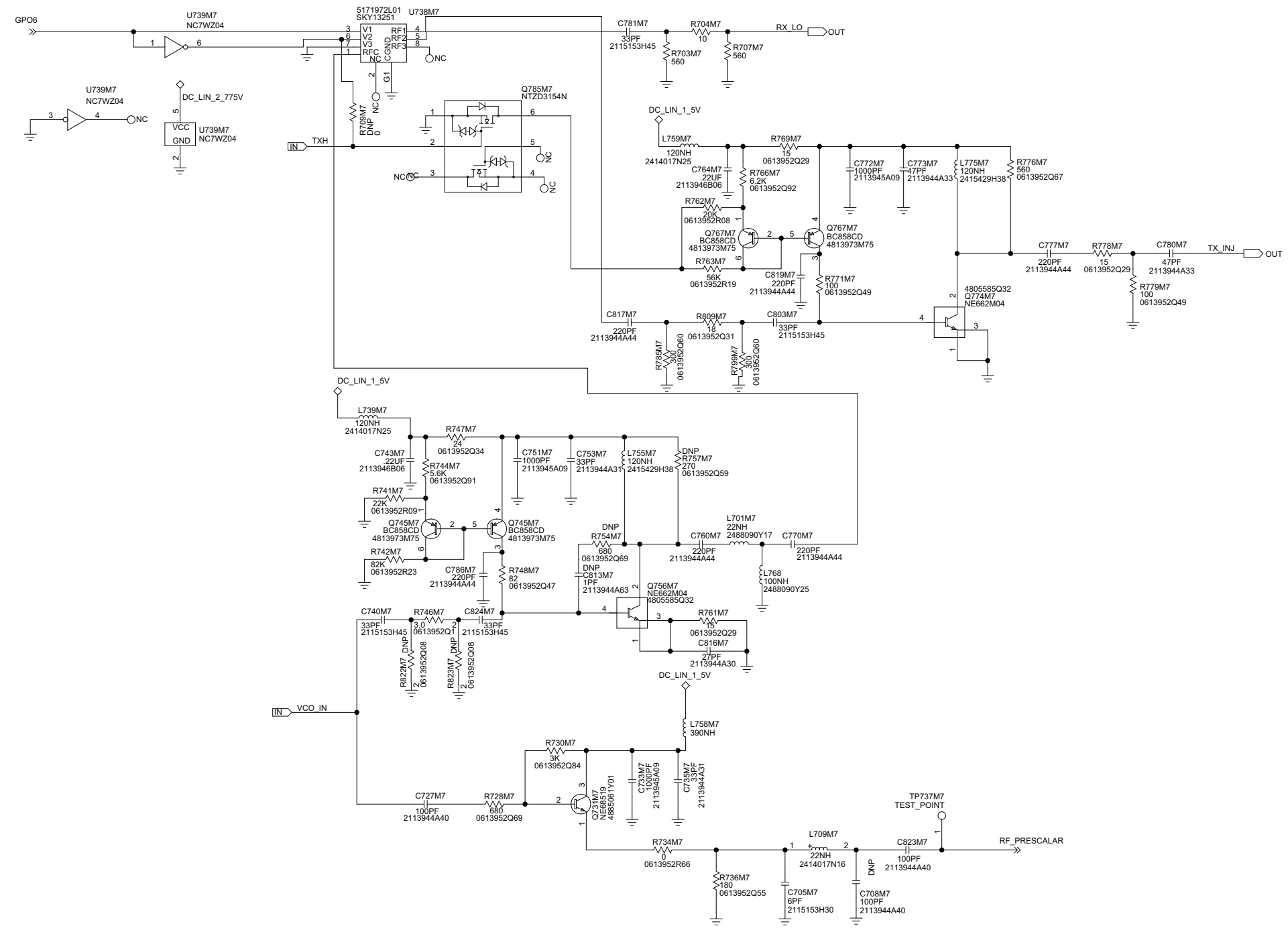
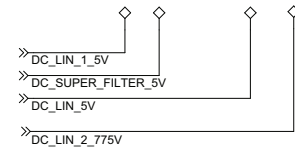


Figure 8-129. Frequency Generation Unit Circuit – 2 of 2

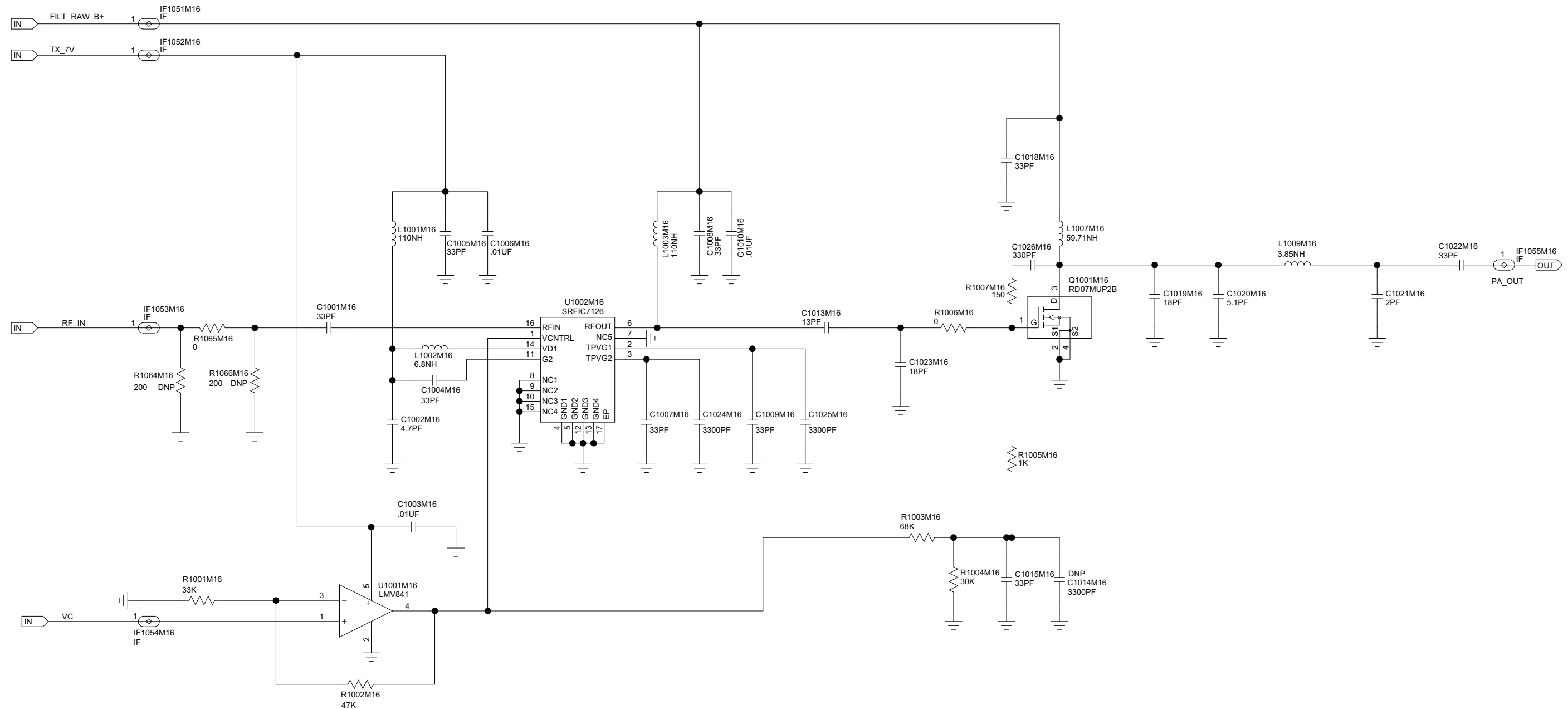


Figure 8-130. Power Amplifier Circuit

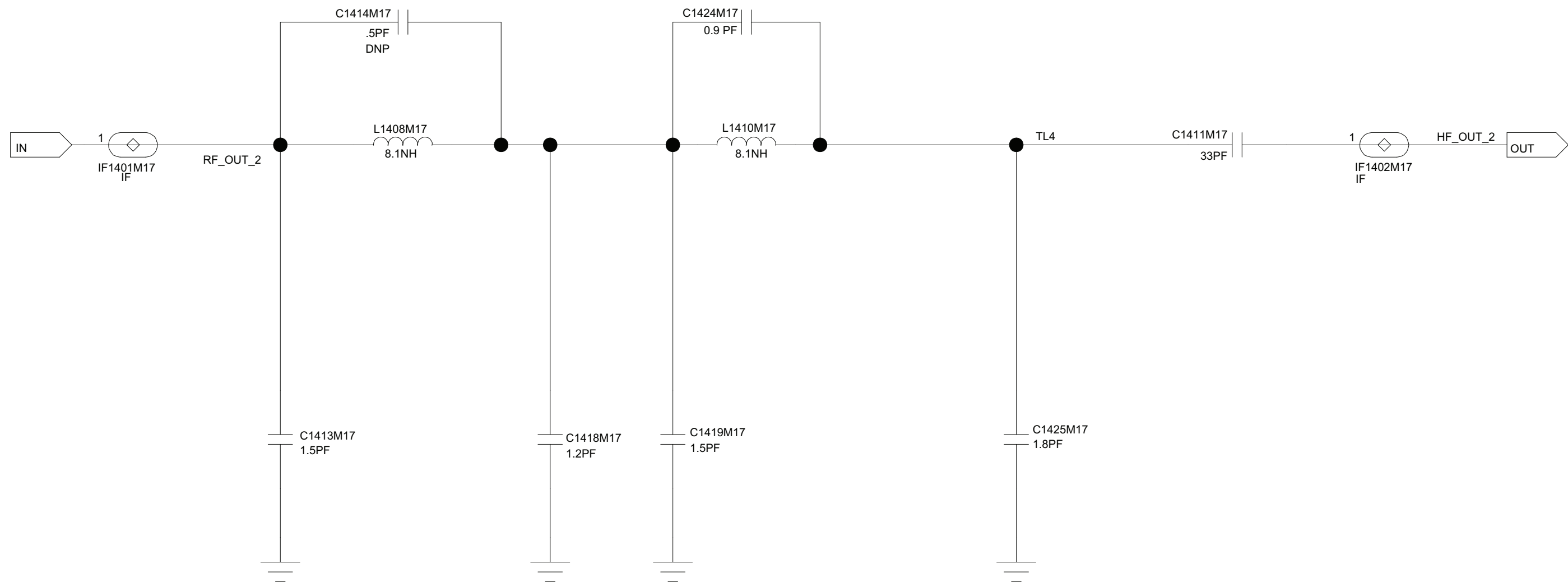


Figure 8-131. Transmitter HF Circuit

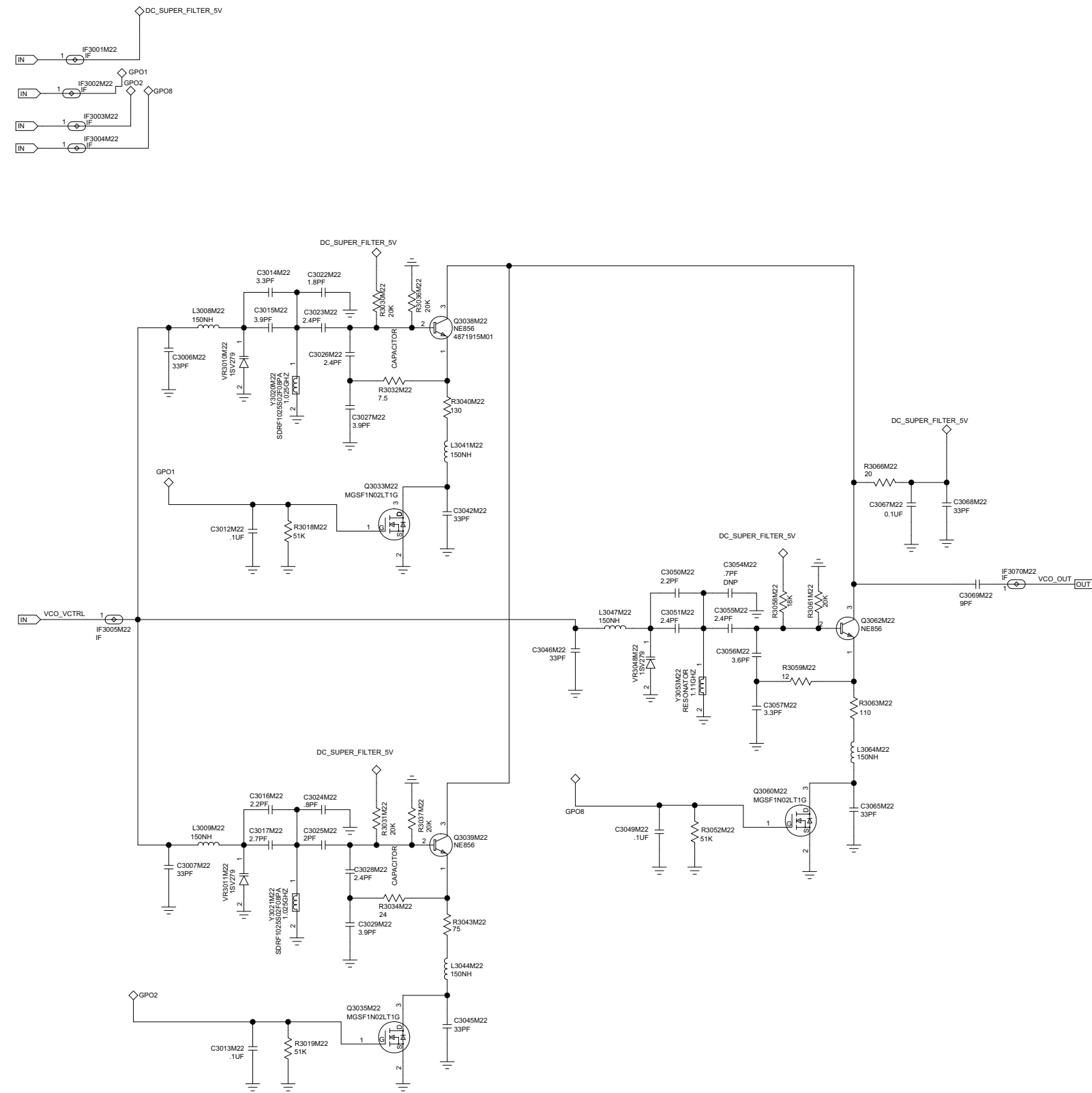


Figure 8-132. VCO Circuit

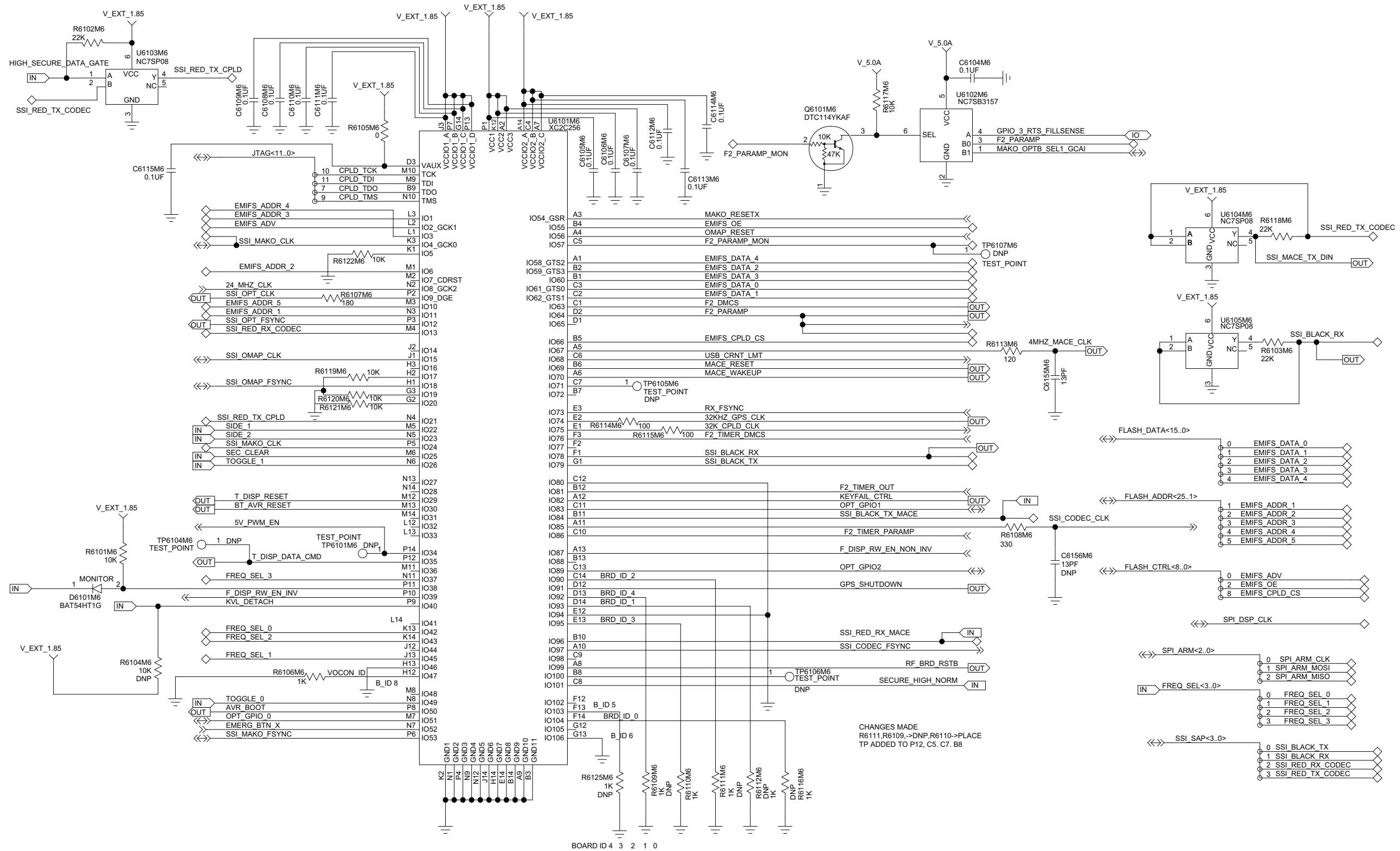


Figure 8-133. CPLD Circuit

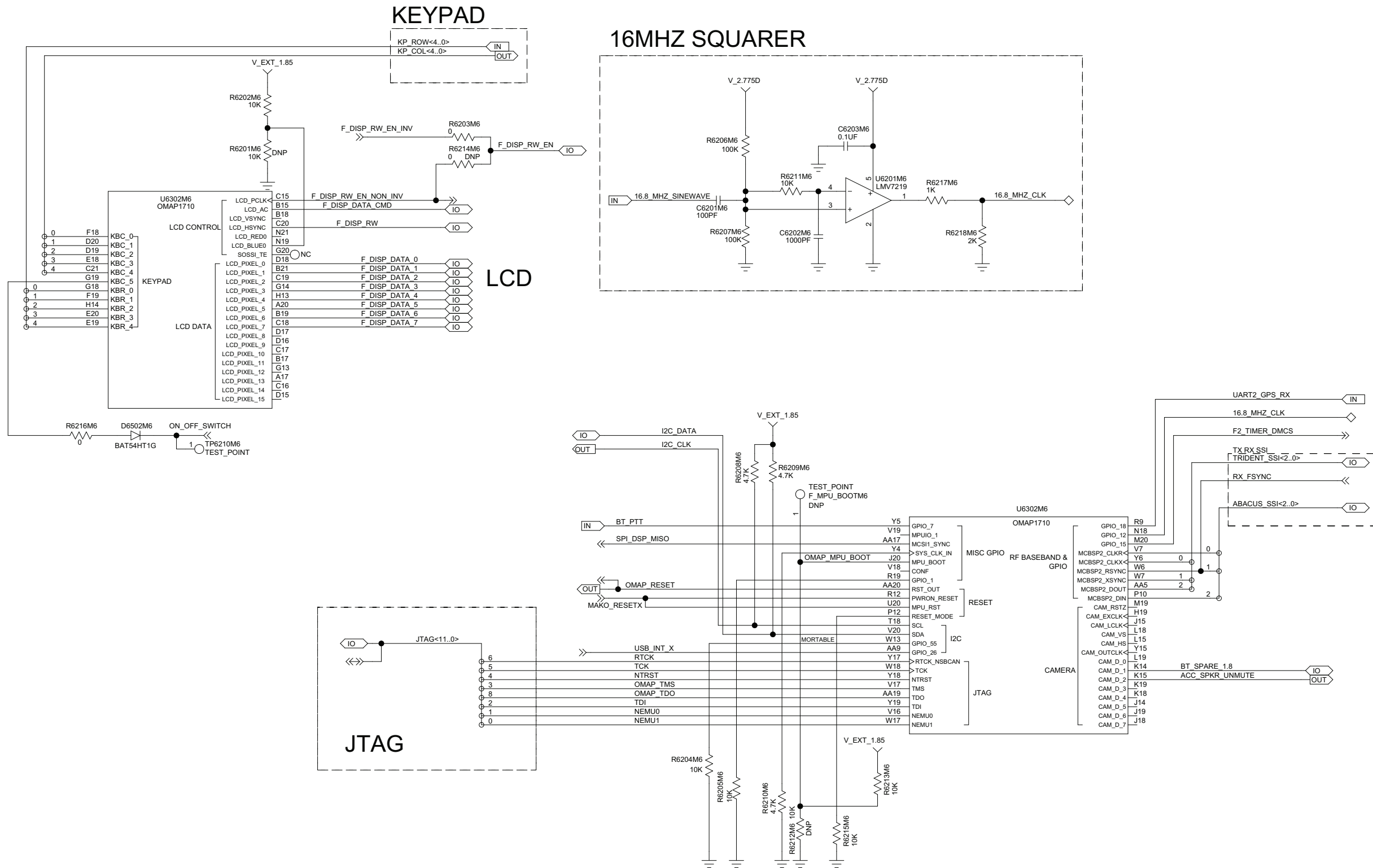


Figure 8-134. OMAP User Interface Circuit

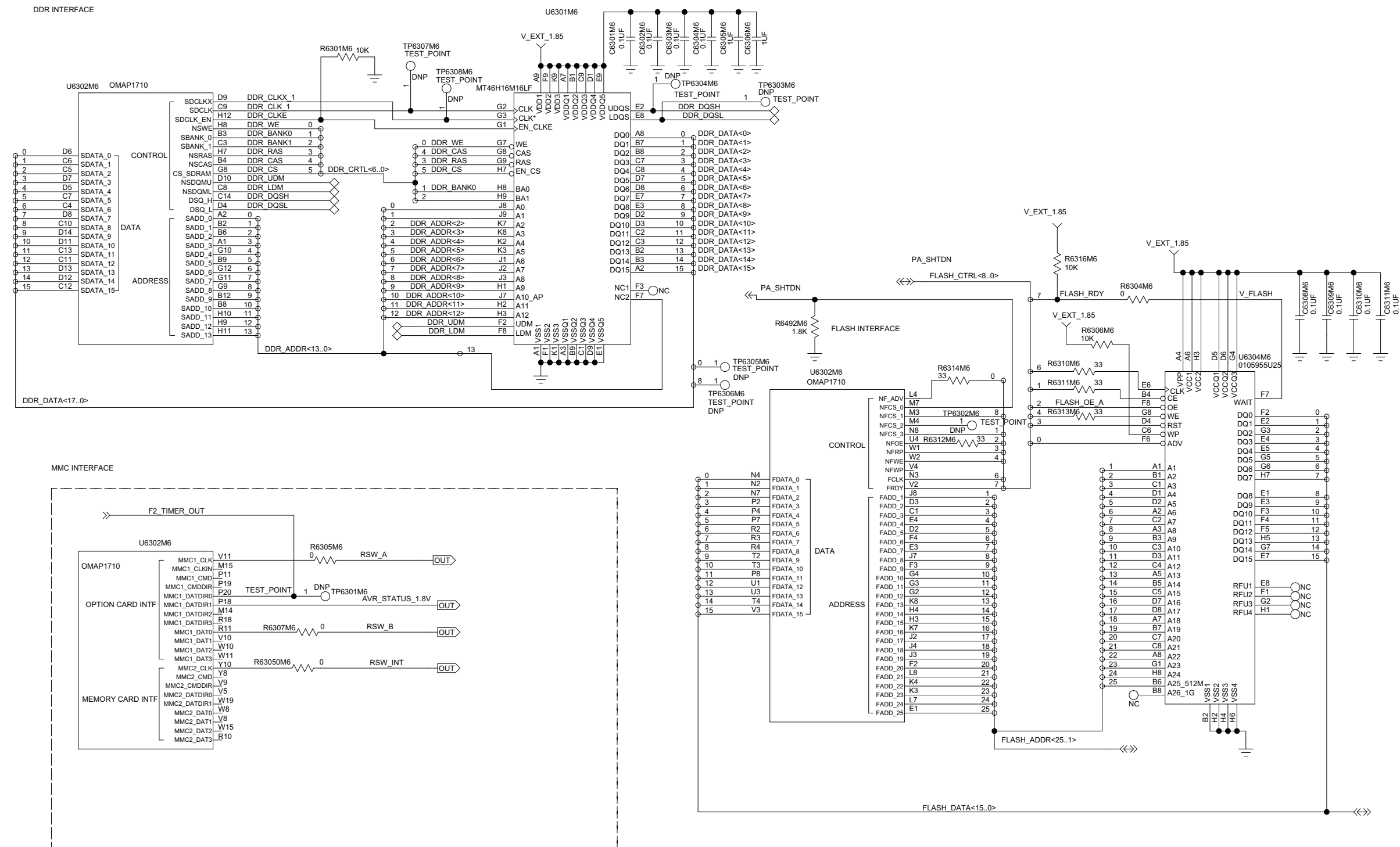
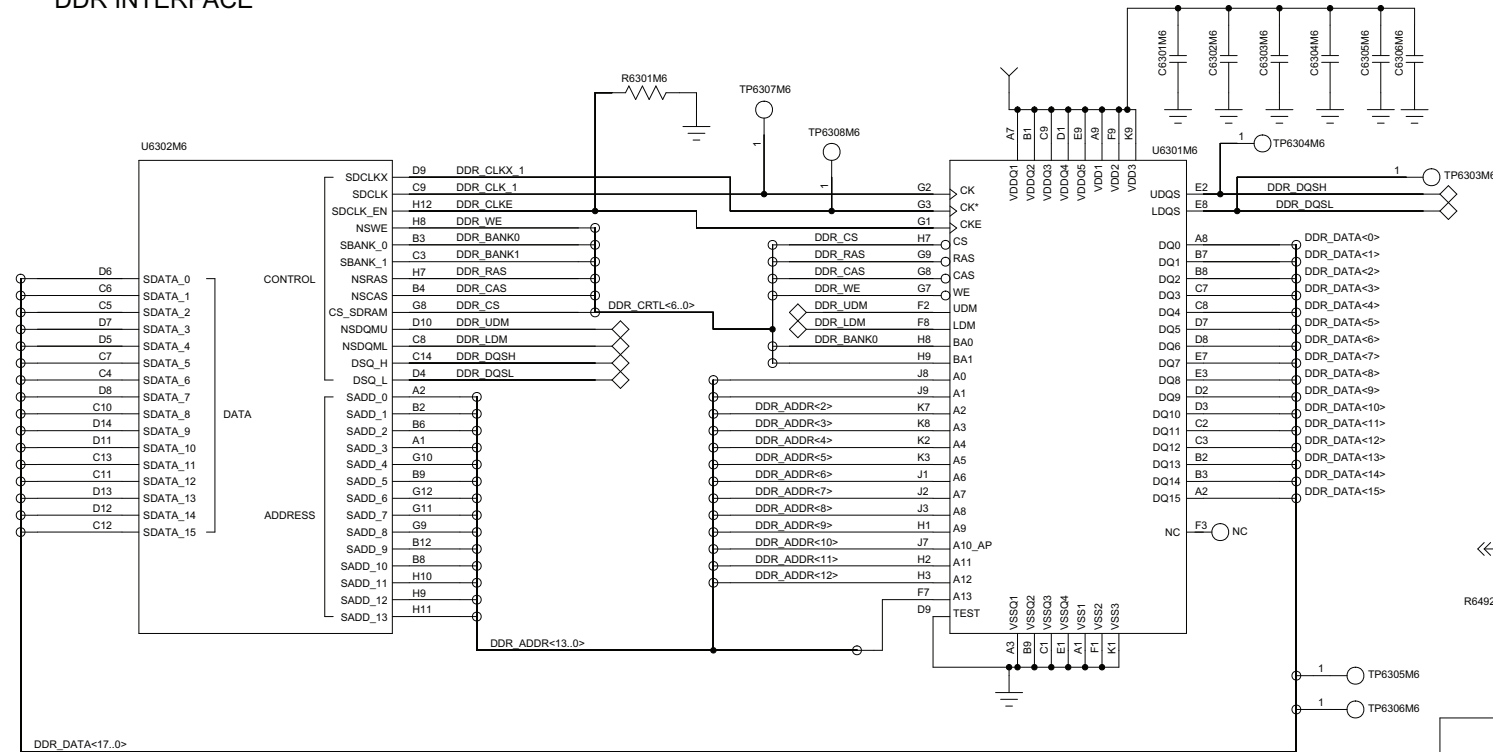


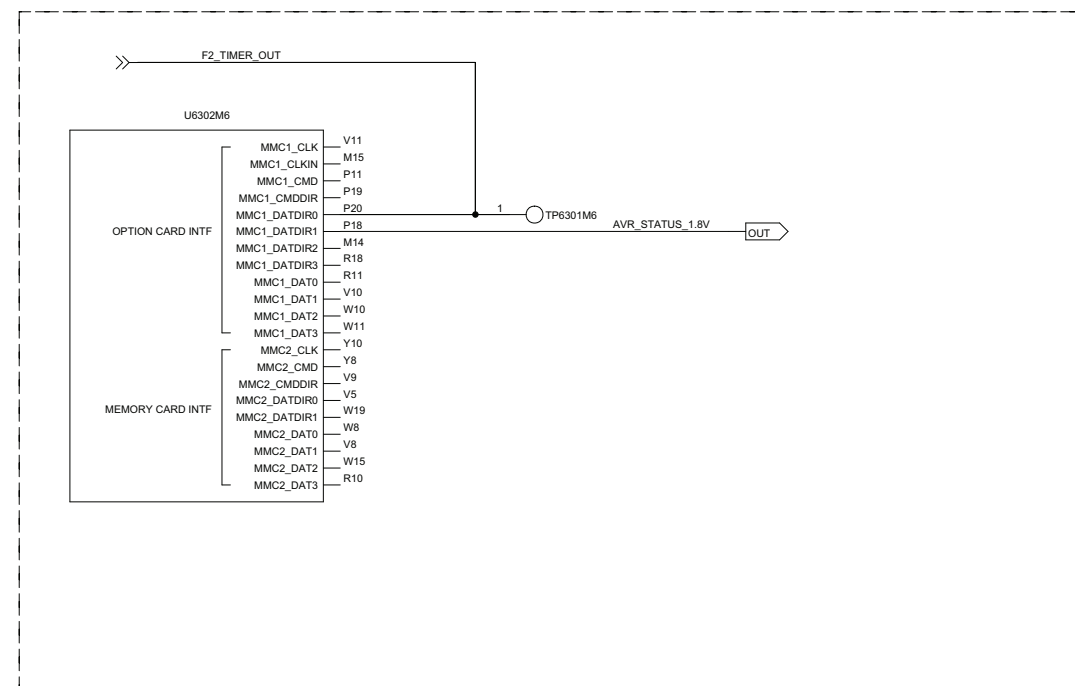
Figure 8-135. Memory Interface Circuit (84012266001)



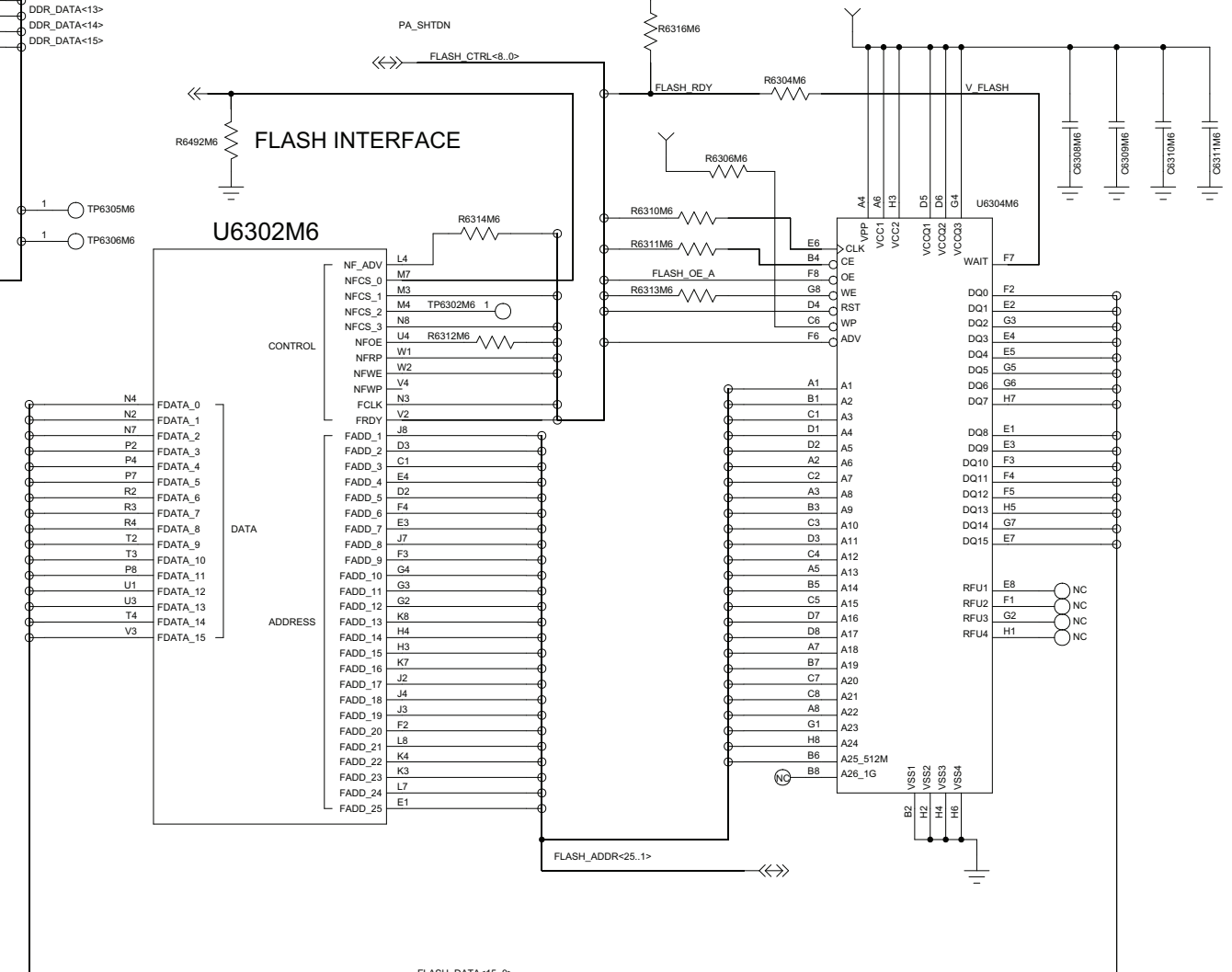
DDR INTERFACE



MMC INTERFACE



FLASH INTERFACE



CHANGES MADE  
ADDED PA\_SHTDN TO PORT M7 & R6492

Figure 8-136. Memory Interface Circuit (PC000351A01)

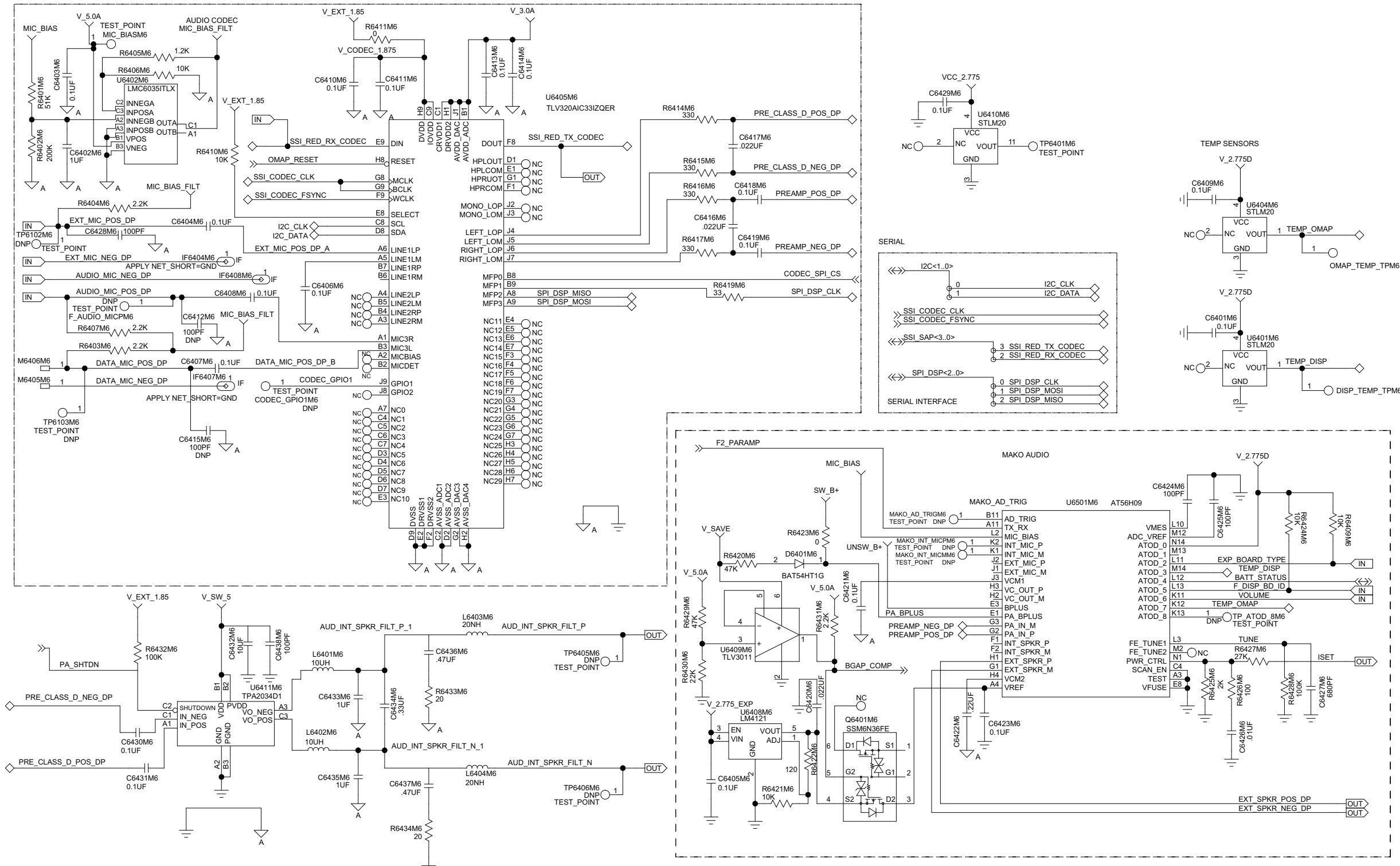


Figure 8-137. Audio Circuit (84012266001)

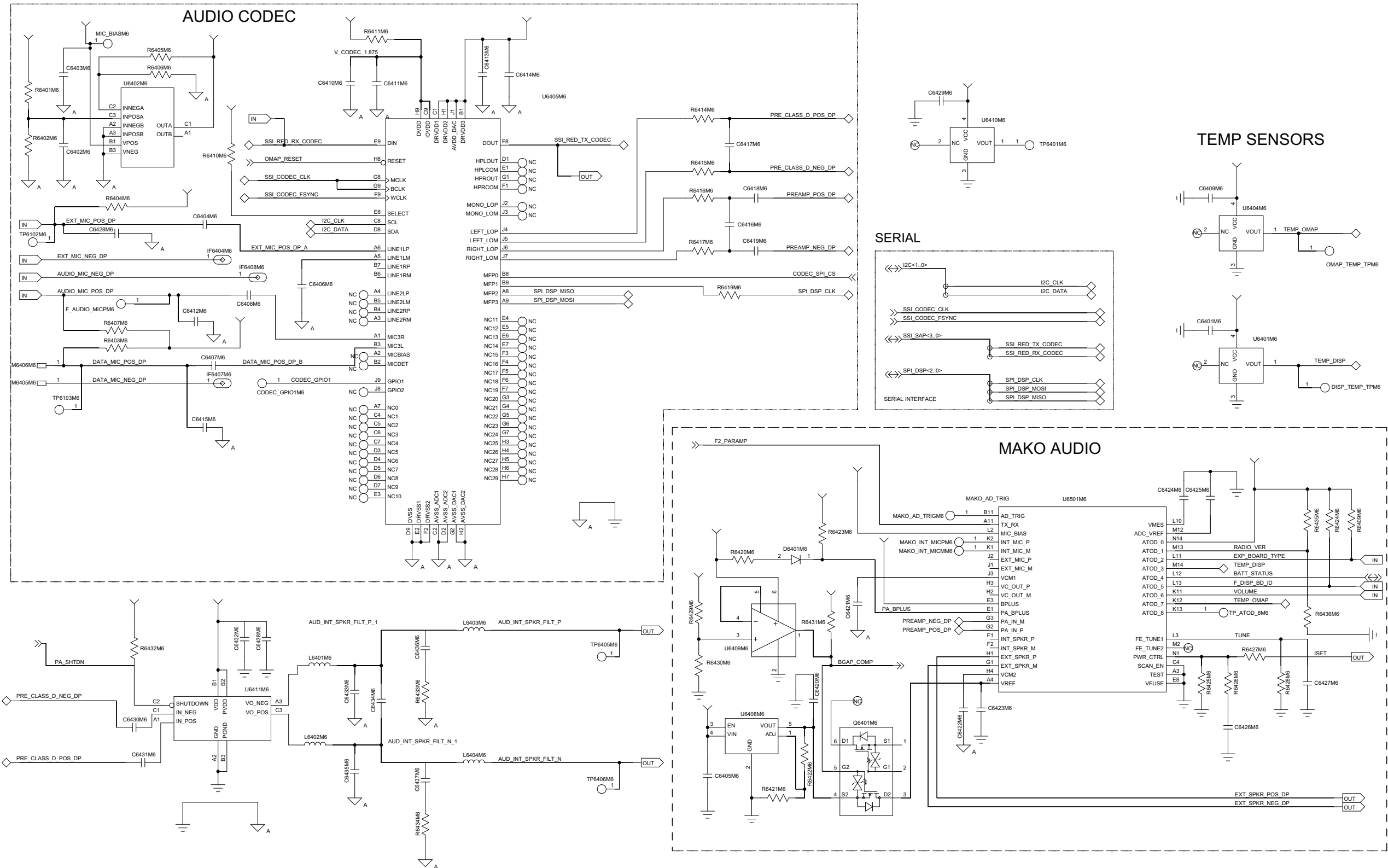


Figure 8-138. Audio Circuit (PC000351A01)

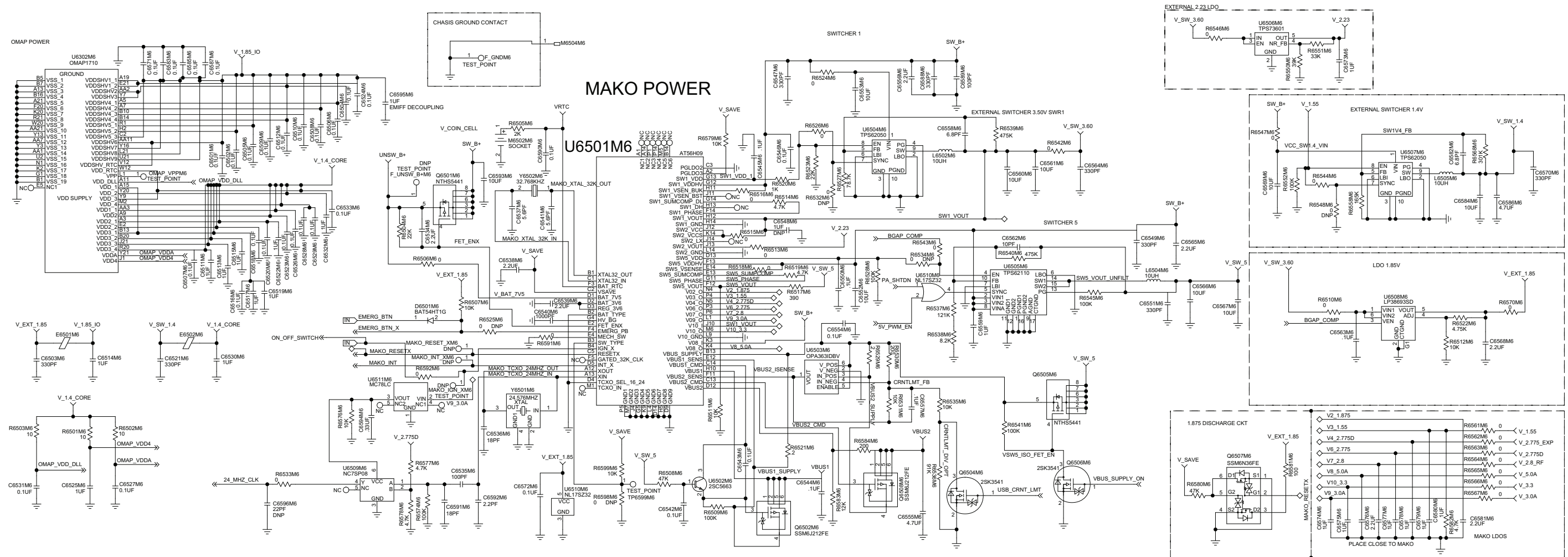


Figure 8-139. MAKO/DC Distribution Circuit (84012266001)

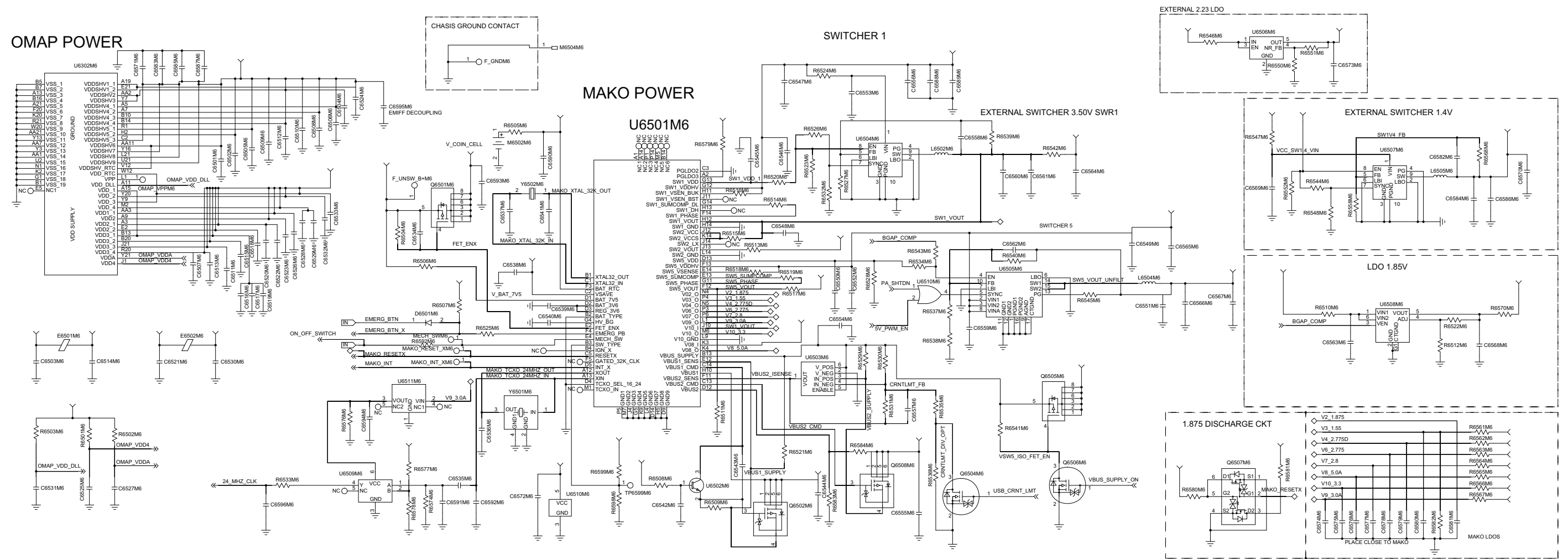


Figure 8-140. MAKO/DC Distribution Circuit (PC000351A01)

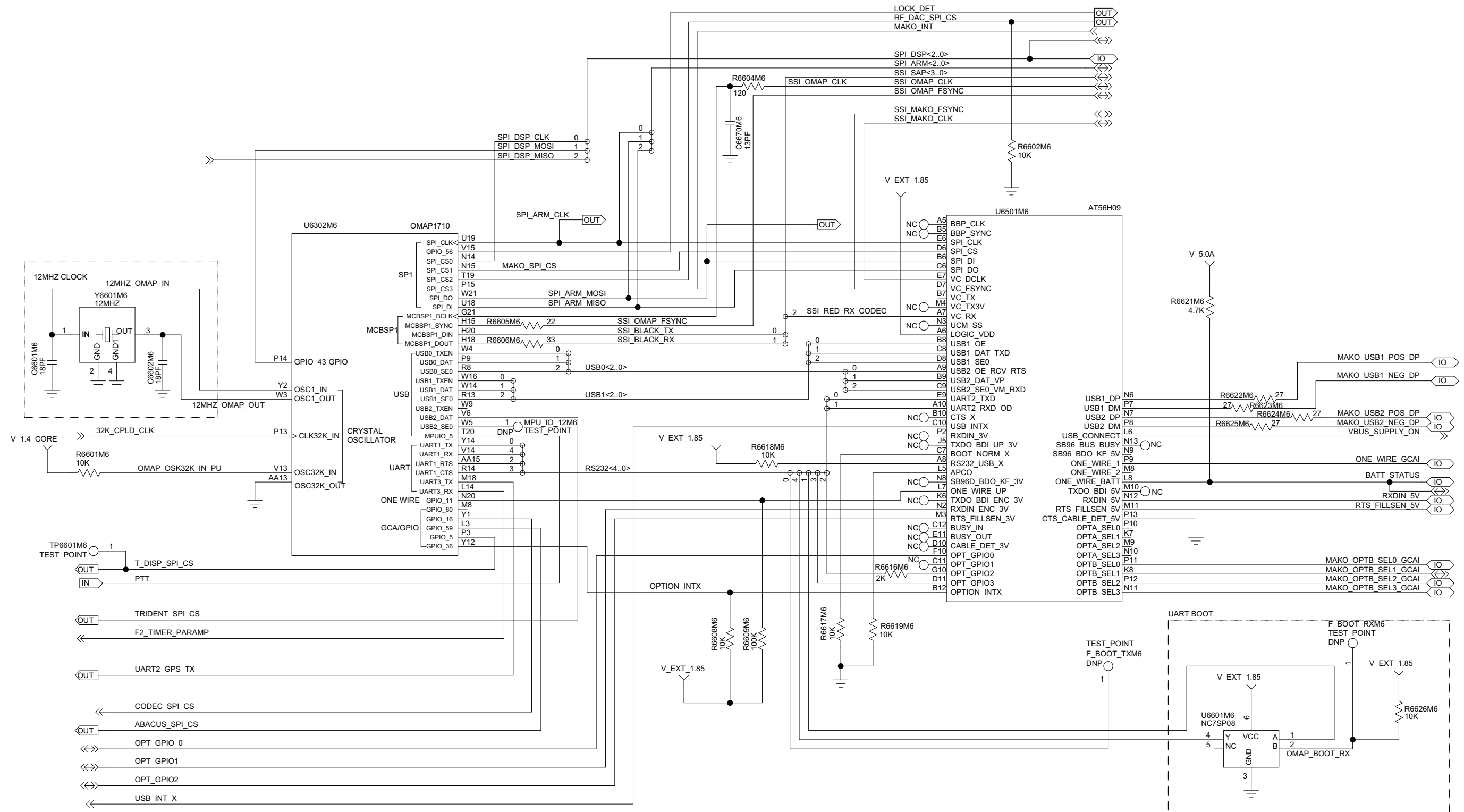


Figure 8-141. Serial Interface Circuit

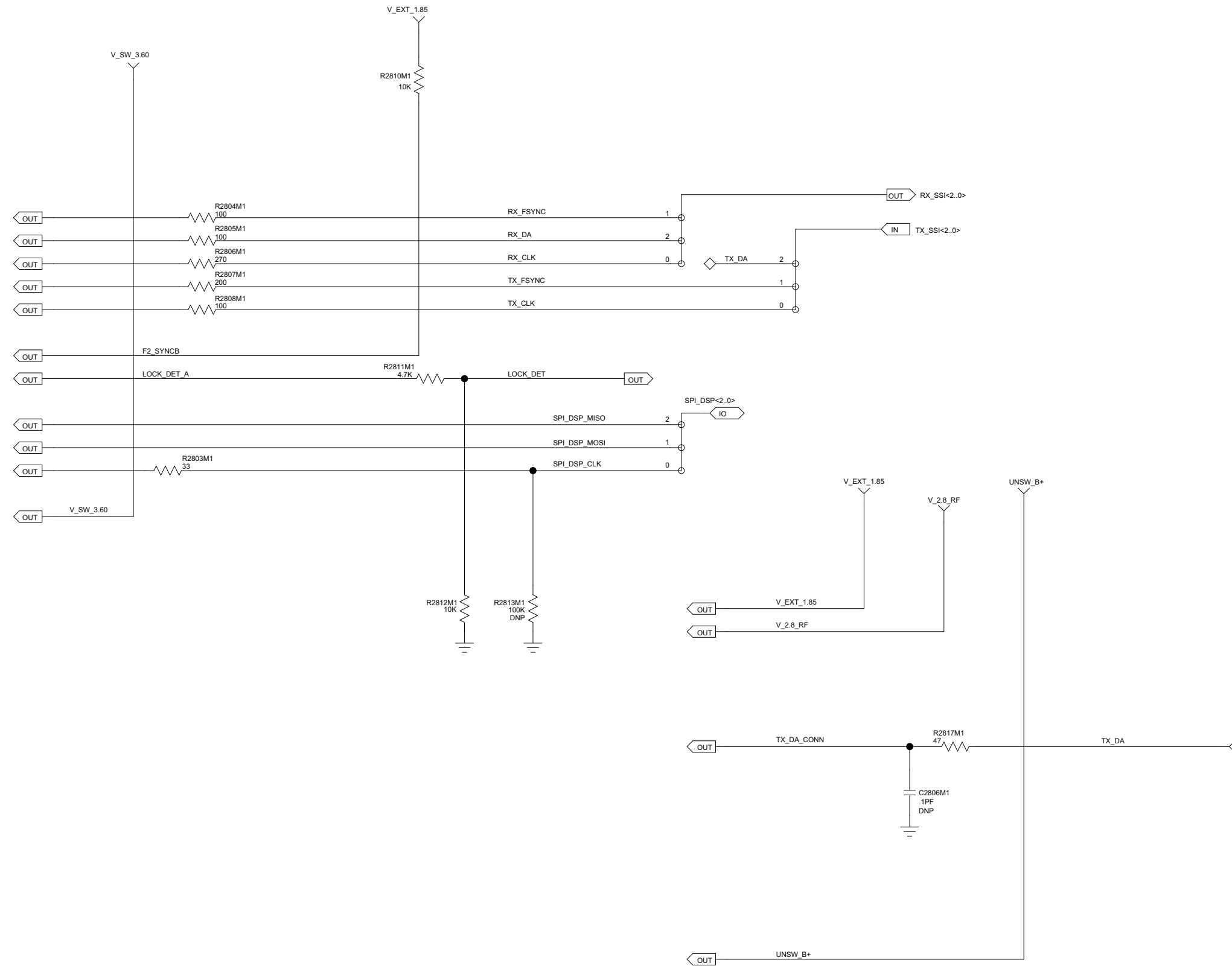


Figure 8-142. RF Interconnects Circuit

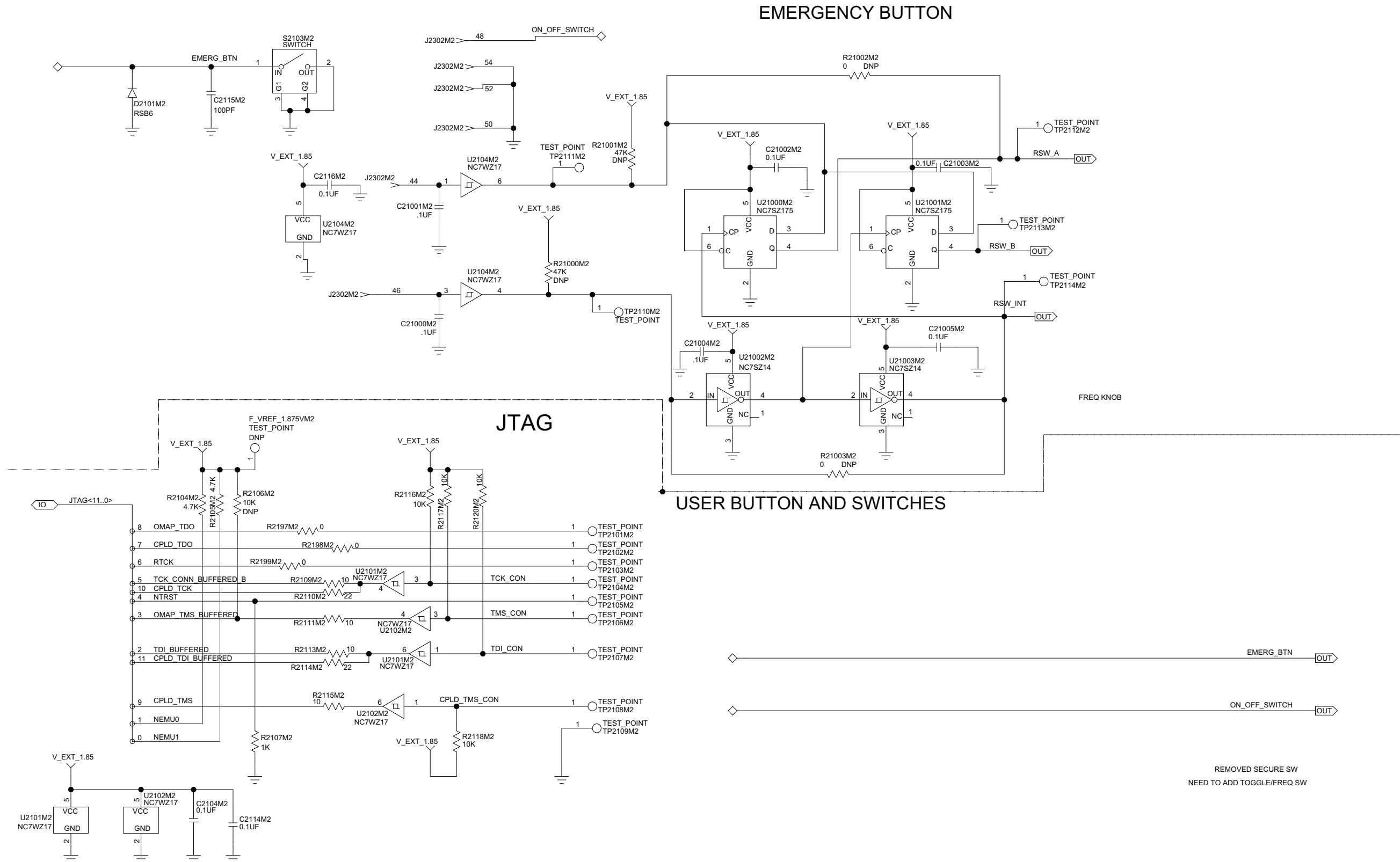
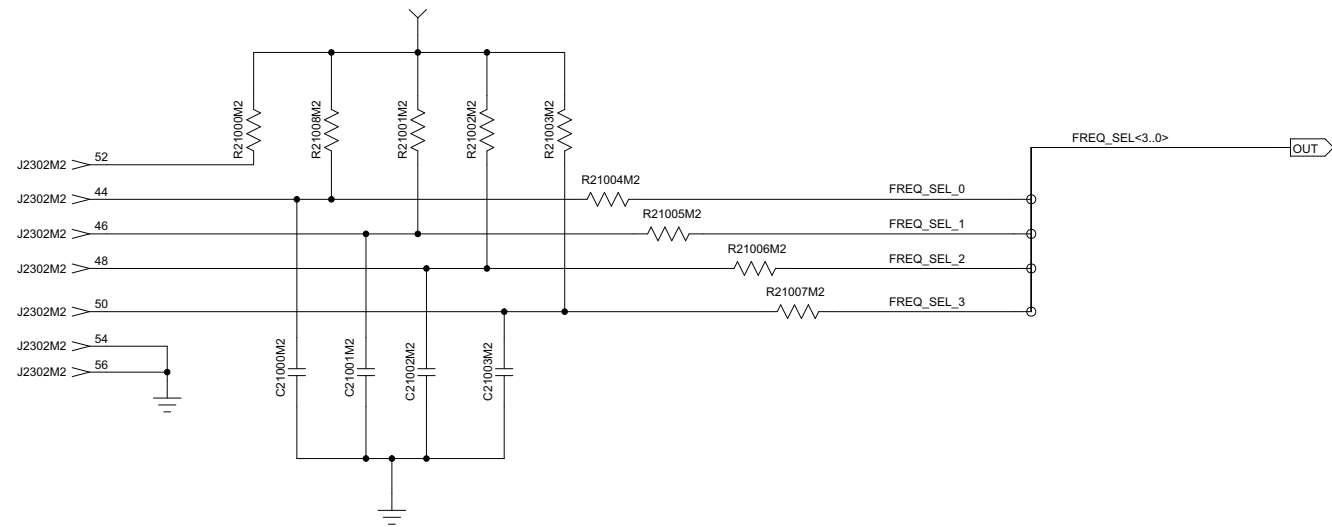


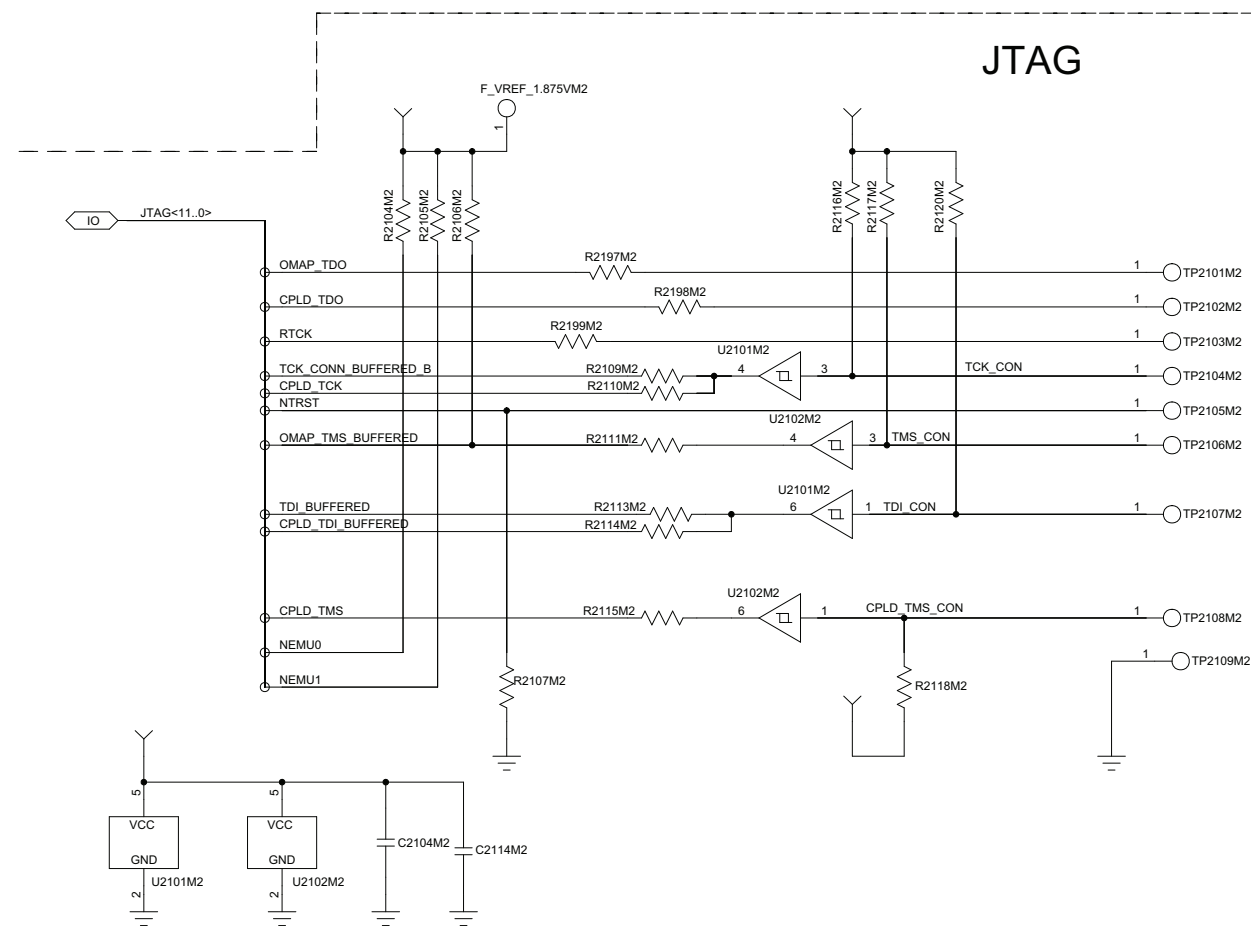
Figure 8-143. Controller Circuit (84012266001)



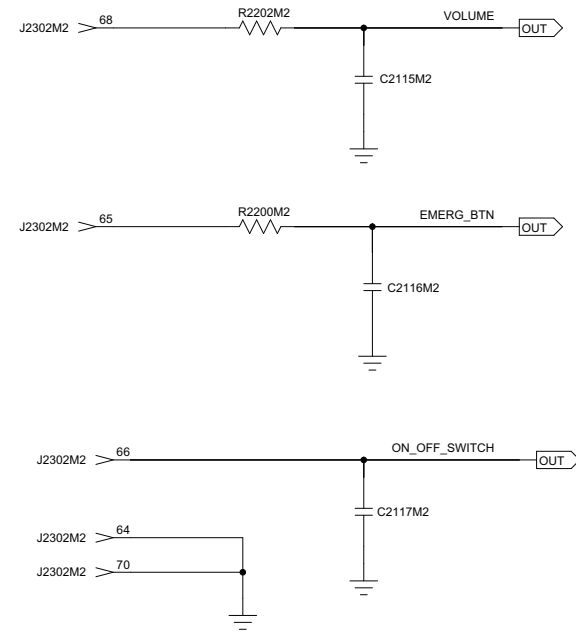
### FREQ KNOB



### JTAG



### USER BUTTON AND SWITCHES



### EMERGENCY BUTTON

REMOVED SECURE SW  
NEED TO ADD TOGGLE/FREQ SW

Figure 8-144. Controller Circuit (PC000351A01)

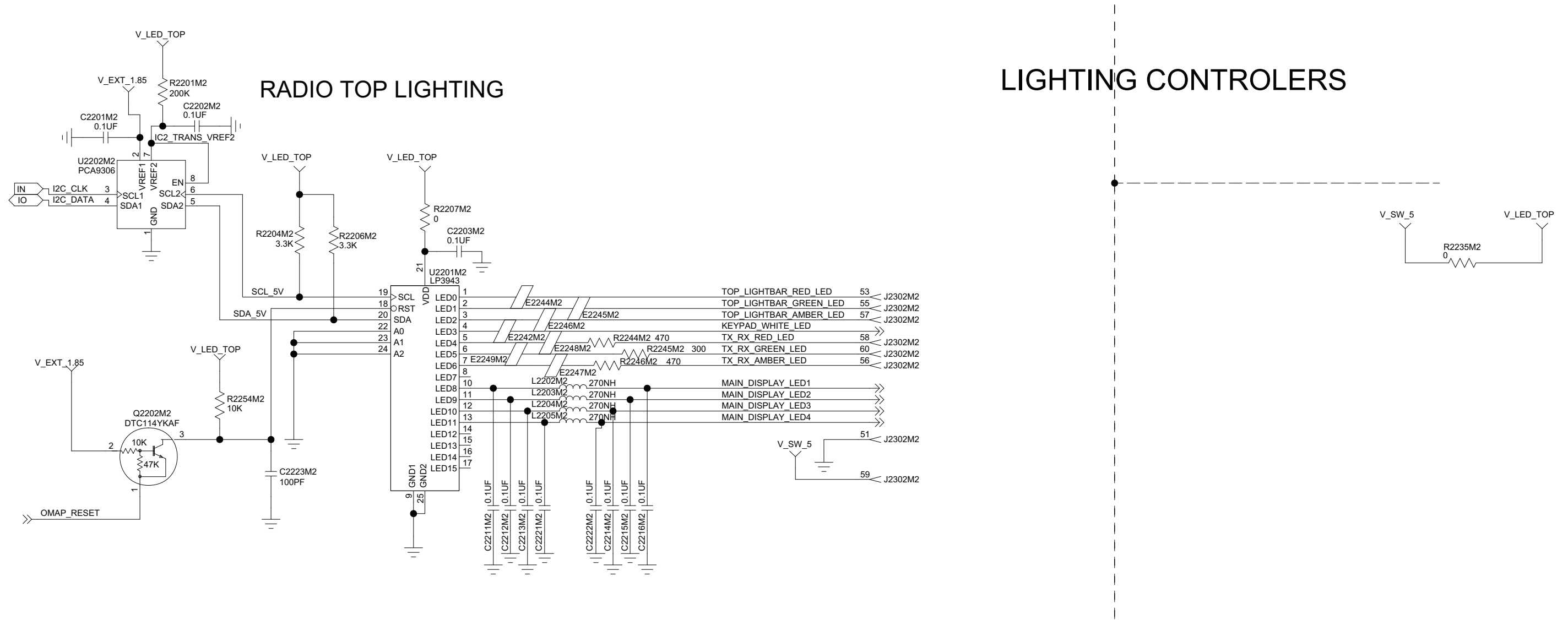


Figure 8-145. Display/Keypad Lighting Control Circuit (84012266001)

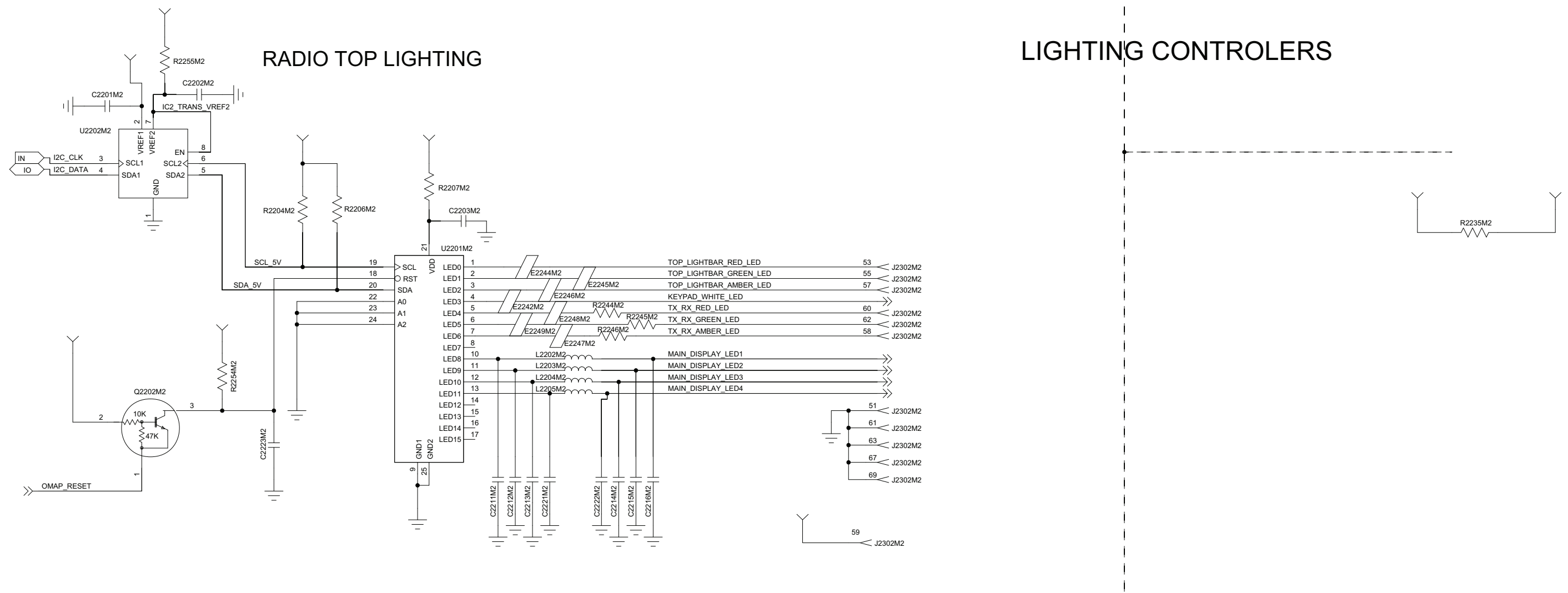
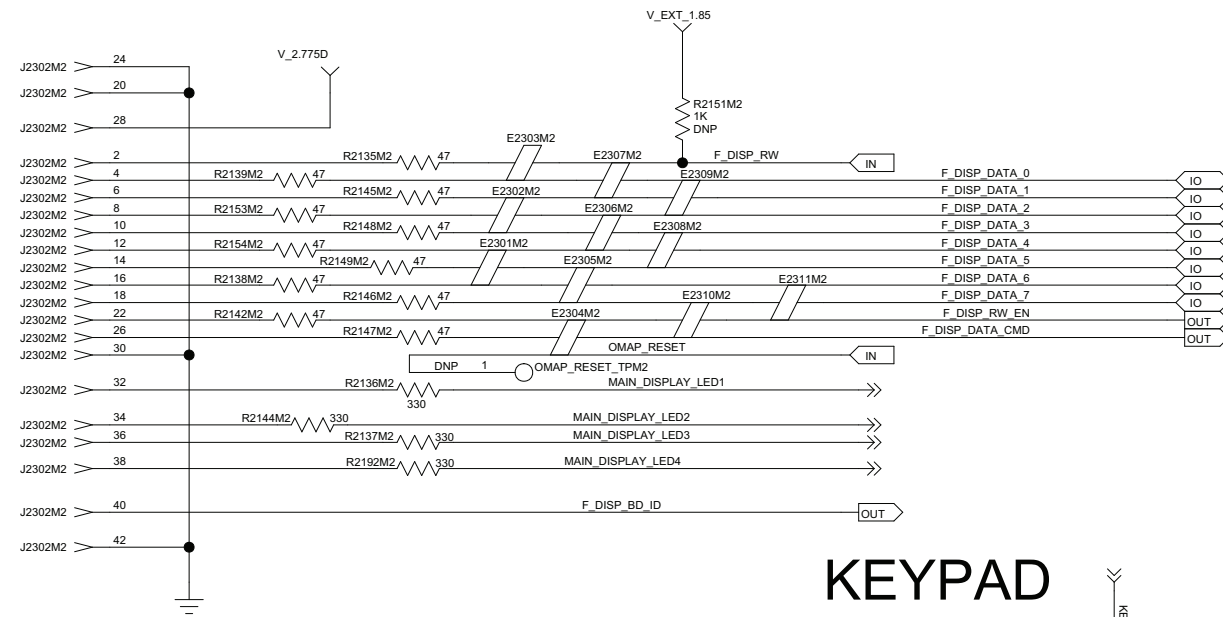


Figure 8-146. Display/Keypad Lighting Control Circuit (PC000351A01)

# FRONT DISPLAY



# KEYPAD

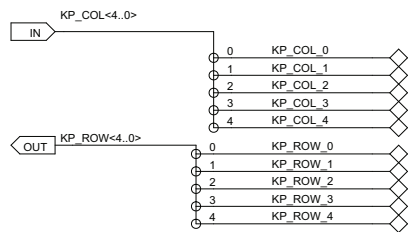
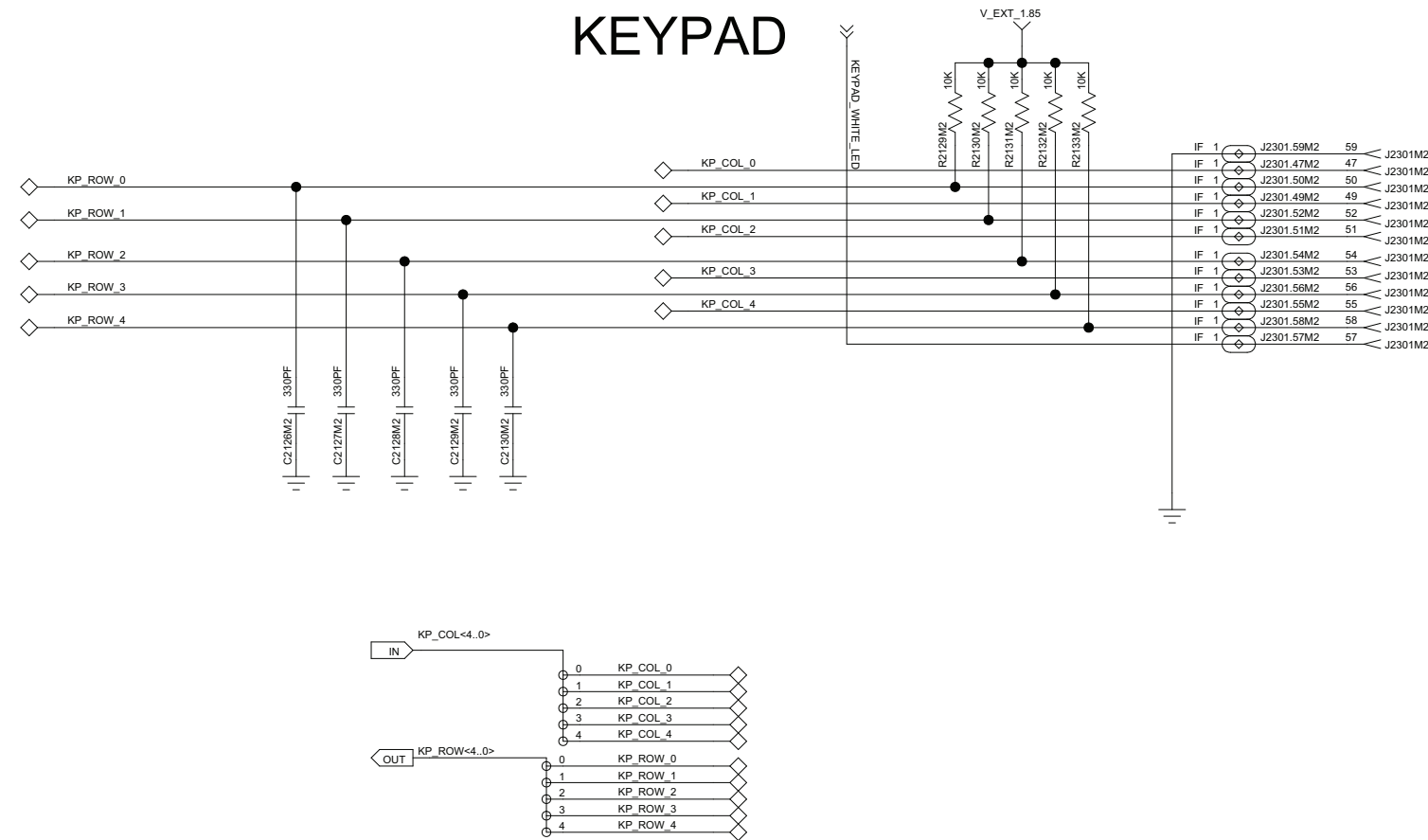


Figure 8-147. LCD and Keypad Connector Circuit (84012266001)

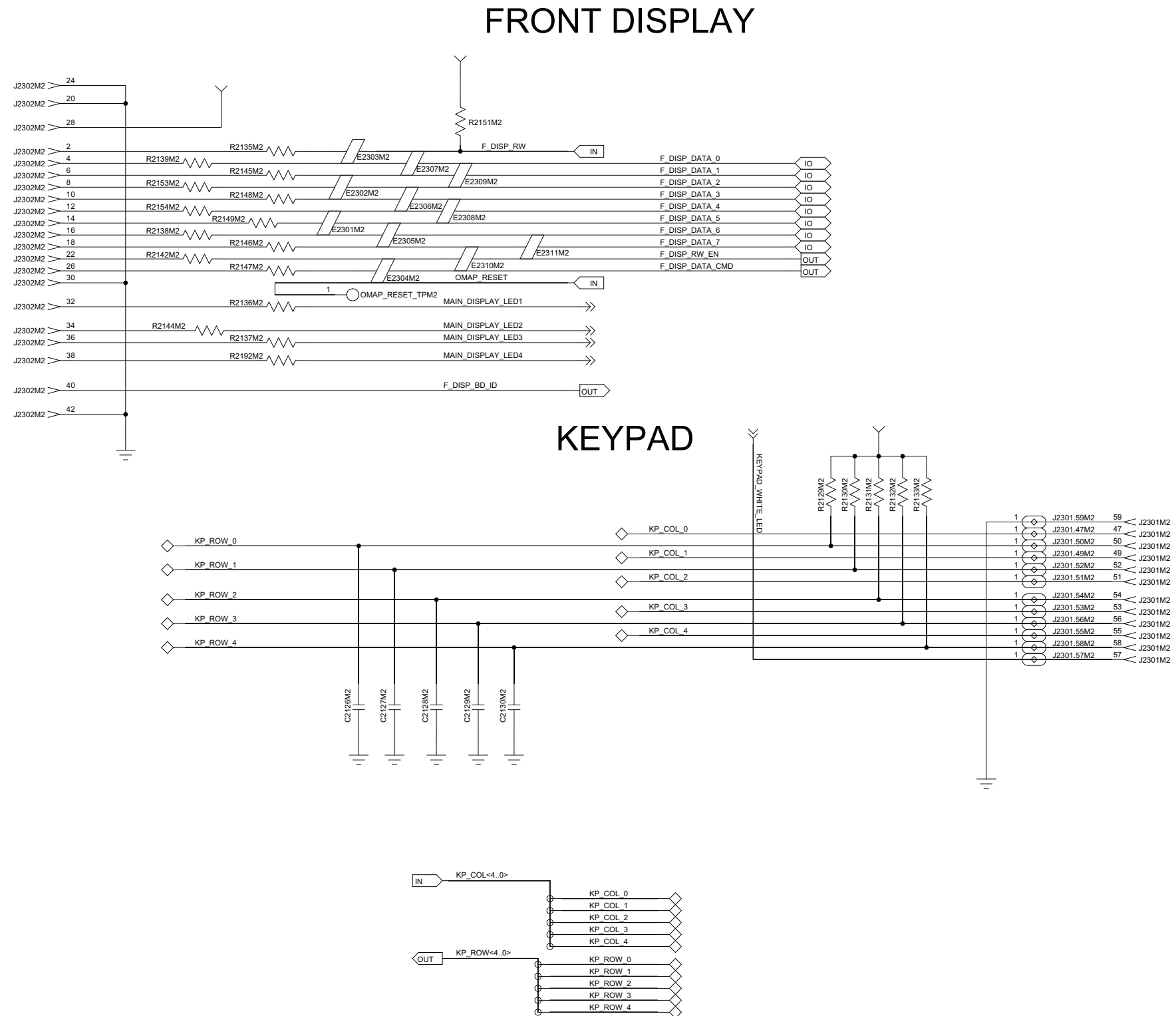


Figure 8-148. LCD and Keypad Connector Circuit (PC000351A01)

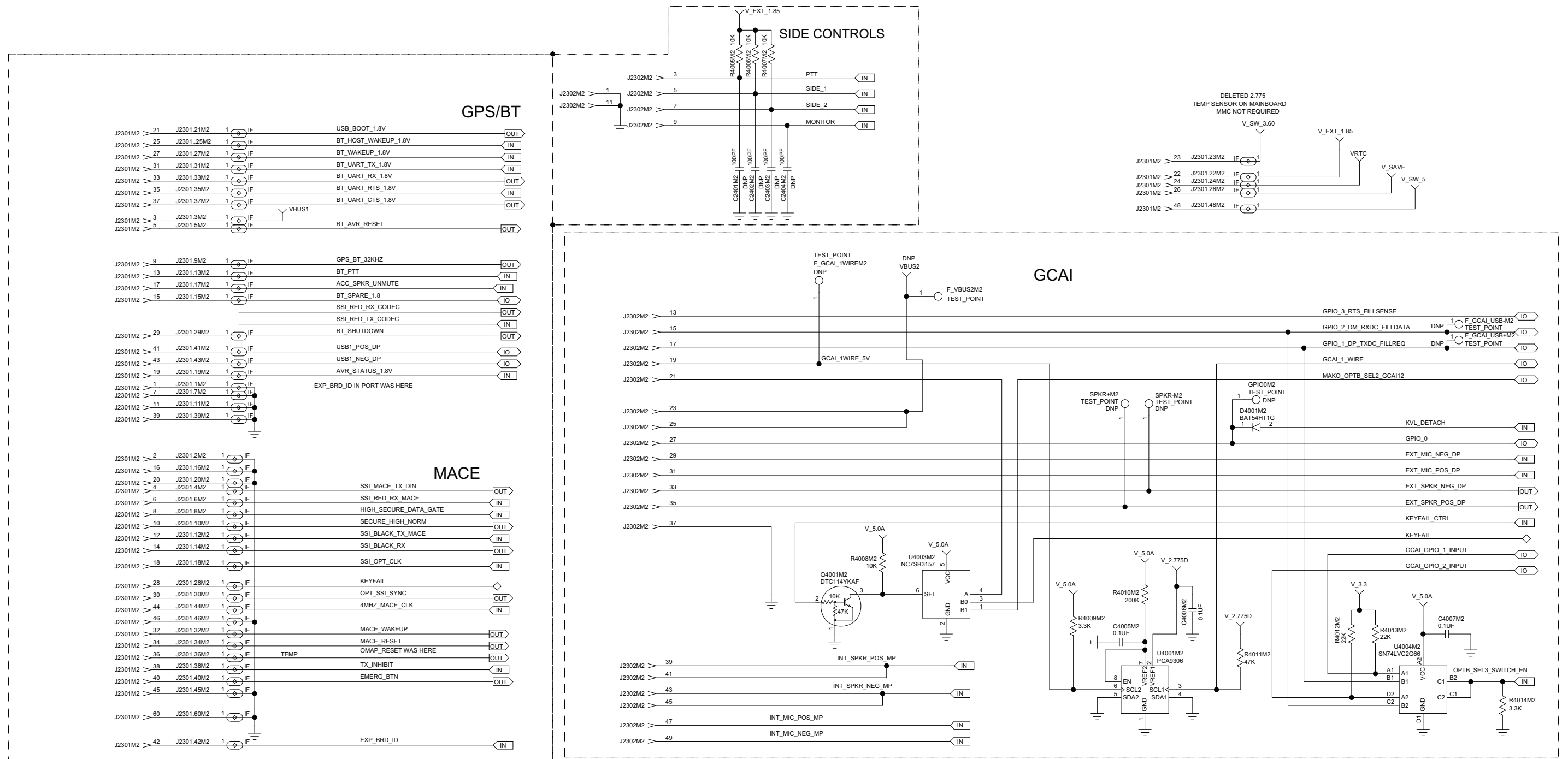


Figure 8-149. GCAI MACE BT Interconnect Circuit (84012266001)

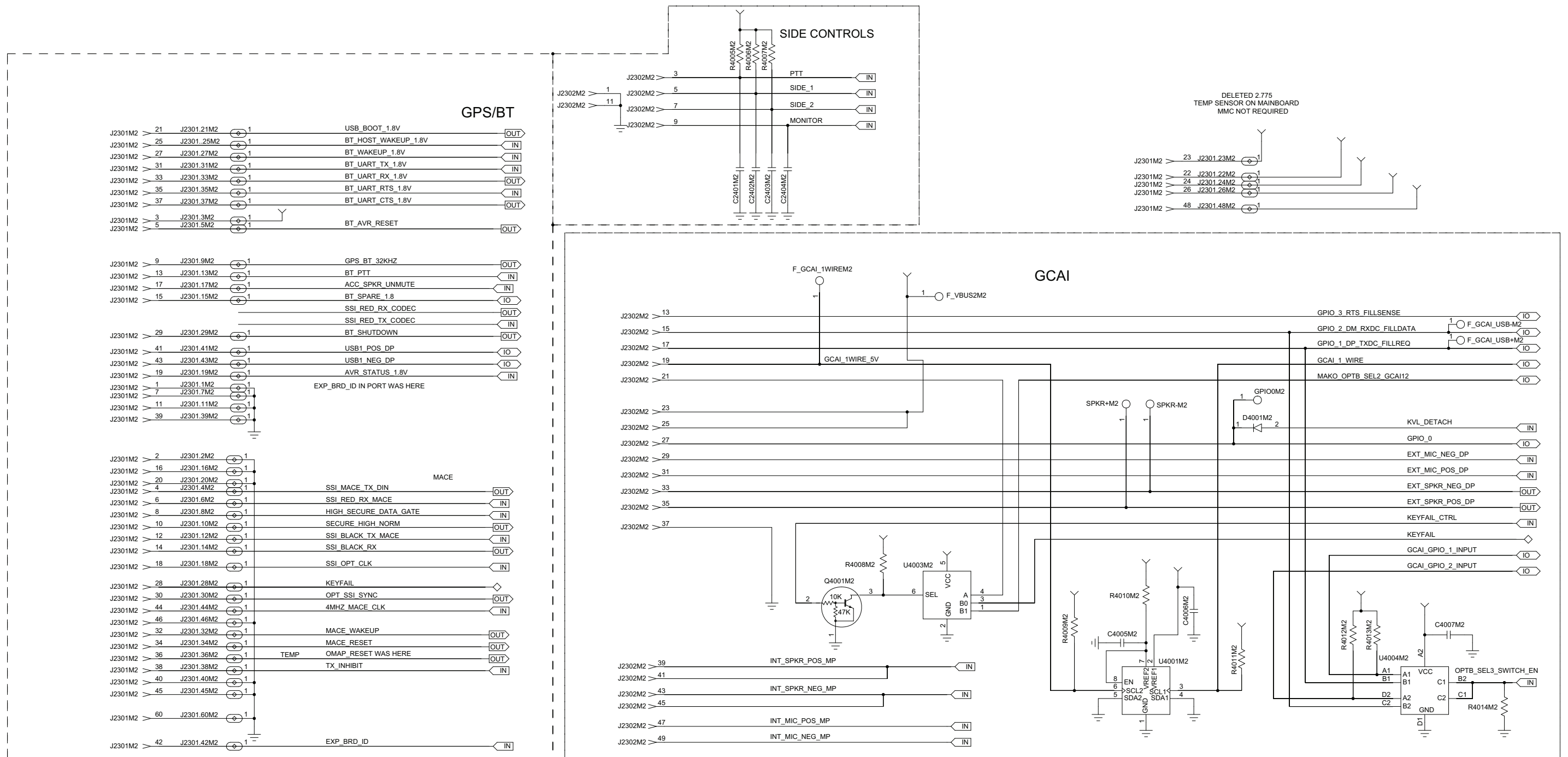


Figure 8-150. GCAI MACE BT Interconnect Circuit (PC000351A01)

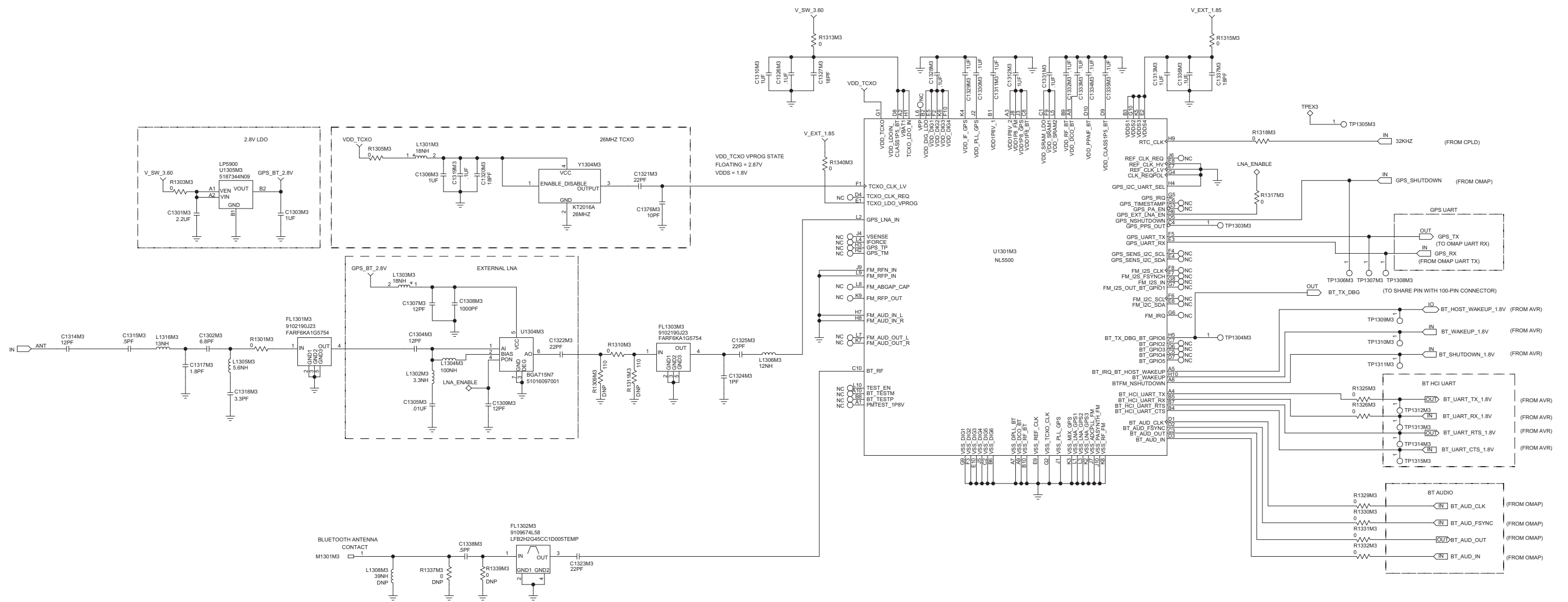


Figure 8-151. GPS Bluetooth Circuit



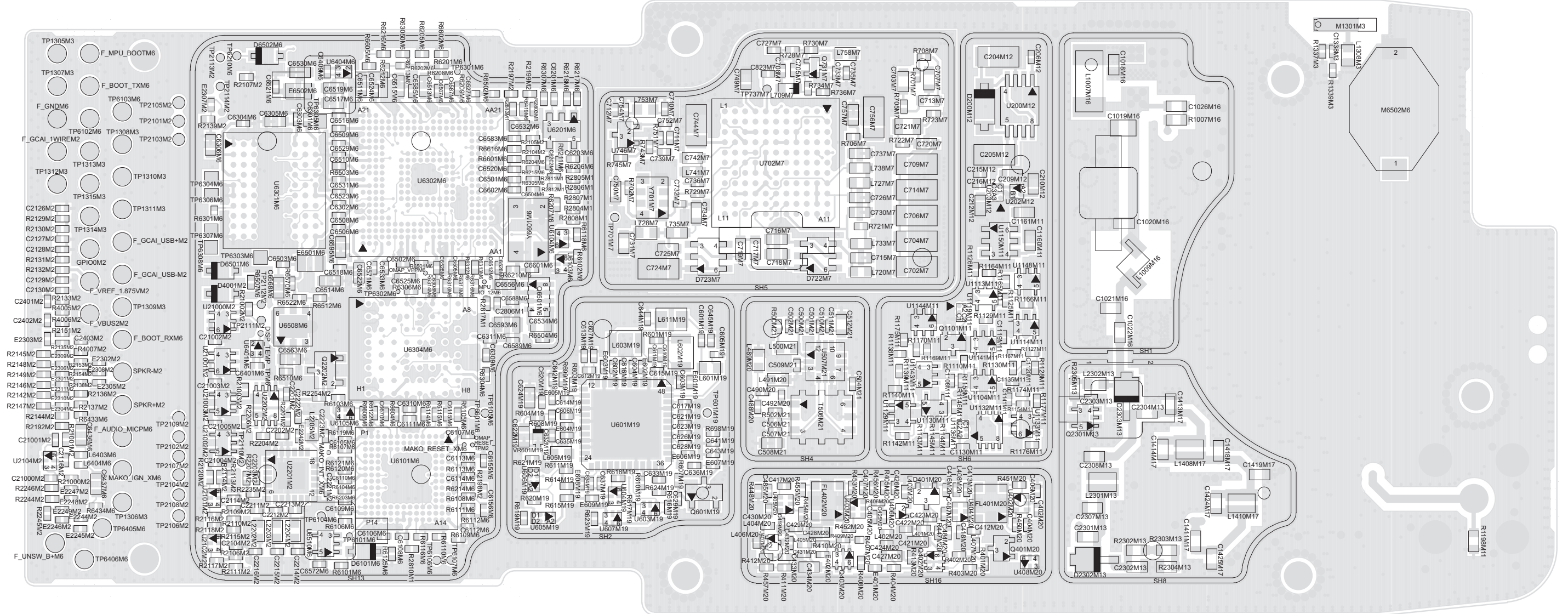


Figure 8-152. Transceiver (RF) Board Layout – Top Side (84012266001)

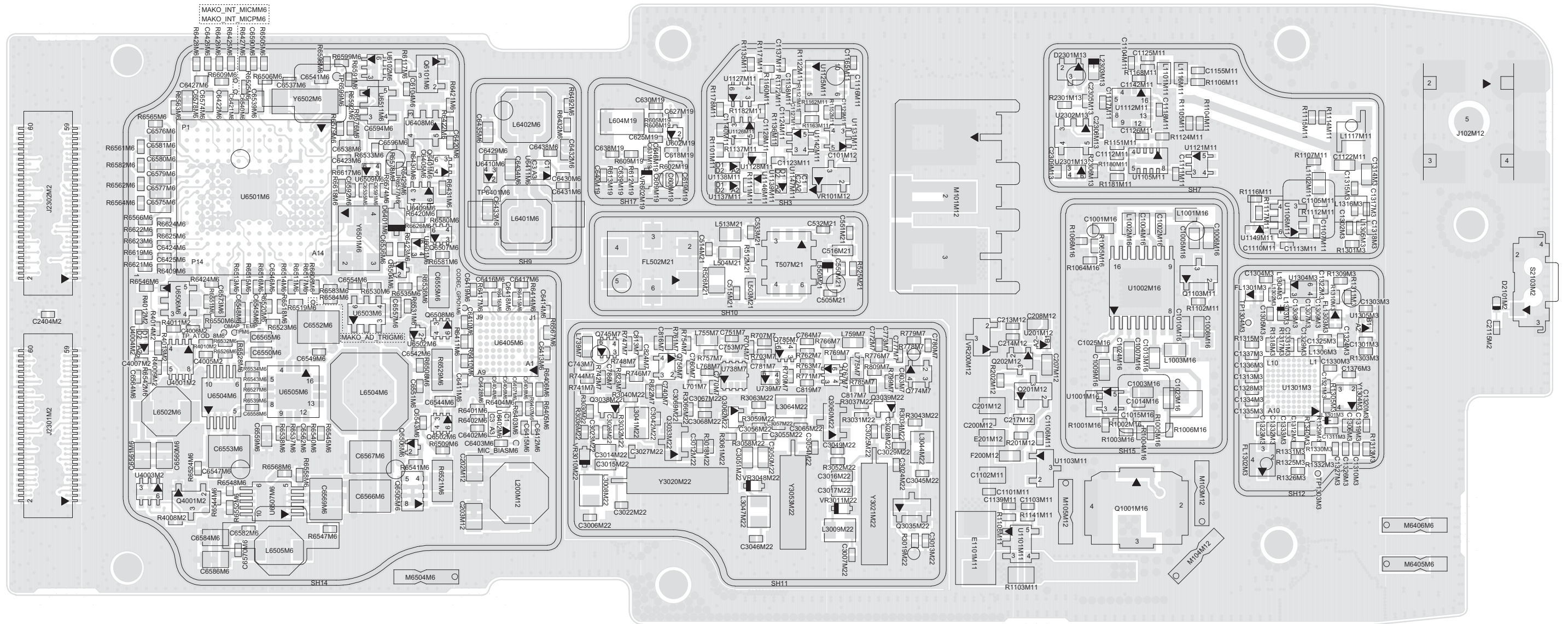


Figure 8-153. Transceiver (RF) Board Layout – Bottom Side (84012266001)

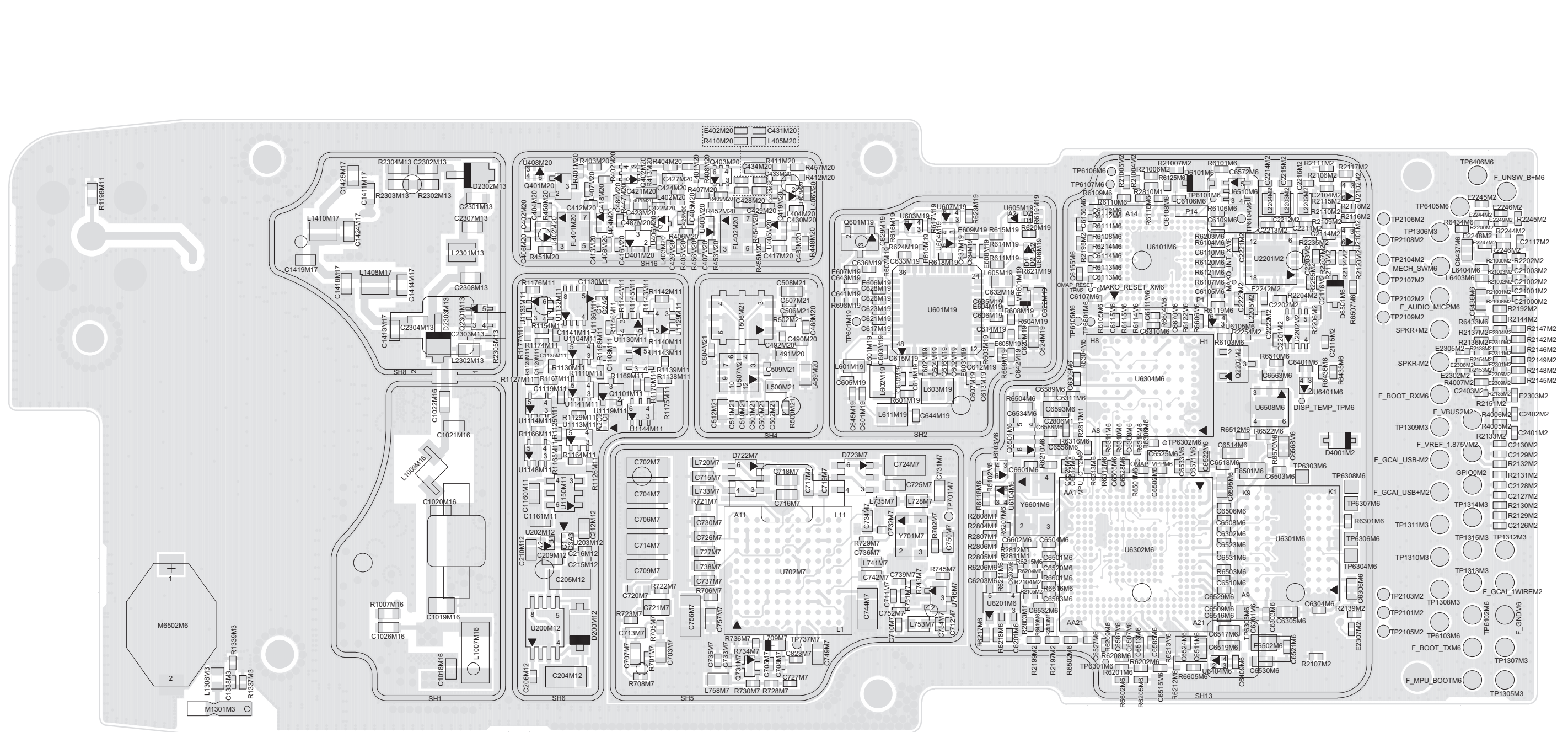


Figure 8-154. Transceiver (RF) Board Layout – Top Side(PC000351A01)

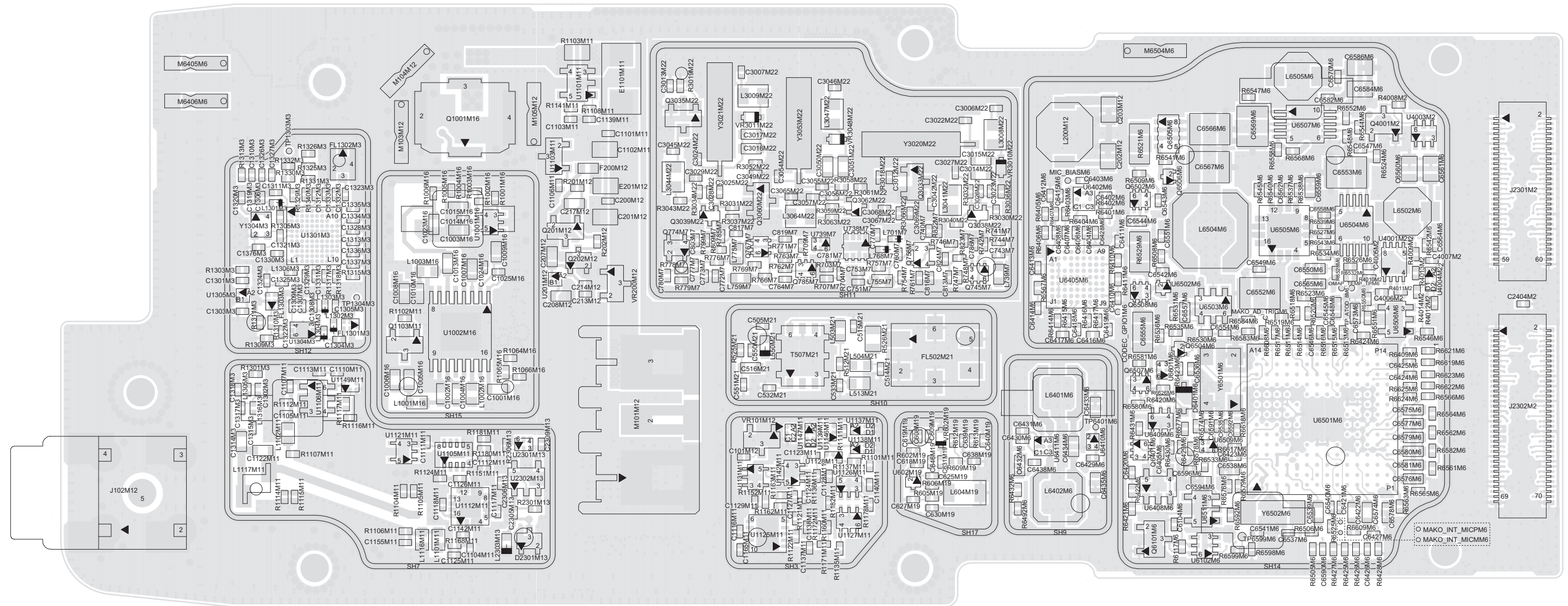


Figure 8-155. Transceiver (RF) Board Layout – Bottom Side (PC000351A01)

700/800 MHz Transceiver (RF) Board Parts List  
– 84012266001

Ref. Des.	Part Number	Description
C1001M16	2113944M30	CAP,FXD,33PF,+2%,-2%,50V-DC,0603,C0G,-55DEG CMIN,125DEG CMAX,PB
C1002M16	2113944C22	CAP CER CHP 4.7PF 50V +/- 0.25PF
C1003M16	2113945C02	CAP CER CHP 10,000PF 50V 10%
C1004M16	2113944M30	CAP,FXD,33PF,+2%,-2%,50V-DC,0603,C0G,-55DEG CMIN,125DEG CMAX,PB
C1005M16	2113944M30	CAP,FXD,33PF,+2%,-2%,50V-DC,0603,C0G,-55DEG CMIN,125DEG CMAX,PB
C1006M16	2113945C02	CAP CER CHP 10,000PF 50V 10%
C1007M16	2113944M30	CAP,FXD,33PF,+2%,-2%,50V-DC,0603,C0G,-55DEG CMIN,125DEG CMAX,PB
C1008M16	2113944M30	CAP,FXD,33PF,+2%,-2%,50V-DC,0603,C0G,-55DEG CMIN,125DEG CMAX,PB
C1009M16	2113944M30	CAP,FXD,33PF,+2%,-2%,50V-DC,0603,C0G,-55DEG CMIN,125DEG CMAX,PB
C1010M16	2113945C02	CAP CER CHP 10,000PF 50V 10%
C1013M16	2113944M21	CAP,FXD,13PF,+2%,-2%,50V-DC,0603,C0G,-55DEG CMIN,125DEG CMAX,PB
C1014M16	NOTPLACED	–
C1015M16	2113944M30	CAP,FXD,33PF,+2%,-2%,50V-DC,0603,C0G,-55DEG CMIN,125DEG CMAX,PB

Ref. Des.	Part Number	Description
C1018M16	2113944M30	CAP,FXD,33PF,+2%,-2%,50V-DC,0603,C0G,-55DEG CMIN,125DEG CMAX,PB
C1019M16	2171741M03	HIGH Q CAP
C101M12	2113944A31	CAP CER CHP 33.0PF 50V 5%
C1020M16	2113944M11	CAP,FXD,5.1PF,.1PF+/-,50V-DC,0603,C0G,-55DEG CMIN,125DEG CMAX
C1021M16	2113944M01	CAP,FXD,2PF,.1PF+/-,50V-DC,0603,C0G,-55DEG CMIN,125DEG CMAX,PB
C1022M16	2113944M30	CAP,FXD,33PF,+2%,-2%,50V-DC,0603,C0G,-55DEG CMIN,125DEG CMAX,PB
C1023M16	2113944M24	CAP,FXD,18PF,+2%,-2%,50V-DC,0603,C0G,-55DEG CMIN,125DEG CMAX,PB
C1024M16	2113945A12	CAP CER CHP 3300PF 50V 10%
C1025M16	2113945A12	CAP CER CHP 3300PF 50V 10%
C1026M16	2113945C07	CAP CER CHP 330PF 50V 10%
C1101M11	2113945B02	CAP CER CHP 10,000PF 25V 10%
C1102M11	2188468Y01	CAP CER 25V X7R 0805 1UF
C1103M11	2113945B02	CAP CER CHP 10,000PF 25V 10%
C1104M11	NOTPLACED	–
C1105M11	2113944A19	CAP CER CHP 5.6PF 50V +/- 0.5PF
C1106M11	2113945B02	CAP CER CHP 10,000PF 25V 10%
C1107M11	2113944A40	CAP CER CHP 100.0PF 50V 5%
C1108M11	2113945B02	CAP CER CHP 10,000PF 25V 10%

Ref. Des.	Part Number	Description
C1110M11	2113944A31	CAP CER CHP 33.0PF 50V 5%
C1111M11	2113945Y02	CAP,FXD,.1UF,+10%,-10%,16V-DC,0402,X7R,-55DEG CMIN,125DEG CMAX
C1112M11	2113945B02	CAP CER CHP 10,000PF 25V 10%
C1113M11	2113945B02	CAP CER CHP 10,000PF 25V 10%
C1116M11	2113945Y02	CAP,FXD,.1UF,+10%,-10%,16V-DC,0402,X7R,-55DEG CMIN,125DEG CMAX
C1117M11	2113945A12	CAP CER CHP 3300PF 50V 10%
C1118M11	2113945B02	CAP CER CHP 10,000PF 25V 10%
C1119M11	2113945B02	CAP CER CHP 10,000PF 25V 10%
C1120M11	2113945B02	CAP CER CHP 10,000PF 25V 10%
C1122M11	2113944M02	CAP,FXD,2.2PF,.1PF+/-,50V-DC,0603,C0G,-55DEG CMIN,125DEG CMAX
C1123M11	2113945B02	CAP CER CHP 10,000PF 25V 10%
C1124M11	2113945A13	CAP CER CHP 4700PF 50V 10%
C1125M11	2113944A21	CAP CER CHP 6.8PF 50V +/- 0.5PF
C1126M11	2113945A09	CAP CER CHP 1000PF 50V 10%
C1127M11	2113945Y02	CAP,FXD,.1UF,+10%,-10%,16V-DC,0402,X7R,-55DEG CMIN,125DEG CMAX
C1128M11	2113945B02	CAP CER CHP 10,000PF 25V 10%
C1129M11	2113945B02	CAP CER CHP 10,000PF 25V 10%
C1130M11	2113945B02	CAP CER CHP 10,000PF 25V 10%

Ref. Des.	Part Number	Description
C1135M11	NOTPLACED	–
C1137M11	2113945B04	CAP,FXD,.022UF,+10%,-10%,25V-DC,0402,X7R,-55DEG CMIN,125DEG CMA
C1138M11	2113945B04	CAP,FXD,.022UF,+10%,-10%,25V-DC,0402,X7R,-55DEG CMIN,125DEG CMA
C1139M11	2113944A25	CAP CER CHP 10.0PF 50V +/- 0.5PF
C1140M11	2113945A13	CAP CER CHP 4700PF 50V 10%
C1141M11	2175793A01	CAP CHIP .47 UF 0402 6.3V X5R
C1142M11	2113945A09	CAP CER CHP 1000PF 50V 10%
C1155M11	NOTPLACED	–
C1160M11	2113945C31	CAP,FXD,.1UF,+10%,-10%,50V-DC,0603,X7R,-55DEG CMIN,125DEG CMAX
C1161M11	2113956B91	CAP,FXD,1UF,+10%,-10%,16V-DC,0603,X5R,-55DEG CMIN,85DEG CMAX,PB
C1165M11	2113945Y02	CAP,FXD,.1UF,+10%,-10%,16V-DC,0402,X7R,-55DEG CMIN,125DEG CMAX
C1301M3	2172180Y01	CAP,CHIP,2.2UF,+20%,-20%,6.3V-DC,0402,X5R,-55DEG CMIN,85DEG
C1302M3	2113944A21	CAP CER CHP 6.8PF 50V +/- 0.5PF
C1303M3	2113956A51	CAP,FXD,1UF,+10%,-10%,6.3V-DC,0402,X5R,-55DEG CMIN,85DEG CMAX,P
C1304M3	2113944A26	CAP CER CHP 12.0PF 50V 5%
C1305M3	2113945B02	CAP CER CHP 10,000PF 25V 10%
C1306M3	2187893N01	CAP 1UF, 6.3V, X5R, 0402 PACKAGE

Ref. Des.	Part Number	Description
C1307M3	2113944A26	CAP CER CHP 12.0PF 50V 5%
C1308M3	2113945A09	CAP CER CHP 1000PF 50V 10%
C1309M3	2113944A26	CAP CER CHP 12.0PF 50V 5%
C1310M3	2187893N01	CAP 1UF, 6.3V, X5R, 0402 PACKAGE
C1311M3	2113956A51	CAP,FXD,1UF,+10%,-10%,6.3V-DC,0402,X5R,-55DEG CMIN,85DEG CMAX,P
C1312M3	2113956A51	CAP,FXD,1UF,+10%,-10%,6.3V-DC,0402,X5R,-55DEG CMIN,85DEG CMAX,P
C1313M3	2187893N01	CAP 1UF, 6.3V, X5R, 0402 PACKAGE
C1314M3	2113944M20	CAP,FXD,12PF,+2%,-2%,50V-DC,0603,C0G,-55DEG CMIN,125DEG CMAX,PB
C1315M3	2175389H01	CAP,.5PF,CHIP,0402,CERAMIC,50V
C1317M3	2188881Y12	CAPACITOR CERAMIC NPO HIGH FREQUENCY 16 VOLT (REPLACES 2104801Z12)
C1318M3	2113944A13	CAP CER CHP 3.3PF 50V +/- 0.25PF
C1319M3	2113945Y02	CAP,FXD,.1UF,+10%,-10%,16V-DC,0402,X7R,-55DEG CMIN,125DEG CMAX
C1320M3	2113944A28	CAP CER CHP 18.0PF 50V 5%
C1321M3	2113944A29	CAP CER CHP 22.0PF 50V 5%
C1322M3	2113944A29	CAP CER CHP 22.0PF 50V 5%
C1323M3	2113944A29	CAP CER CHP 22.0PF 50V 5%
C1324M3	2115153H03	CAP, CERAMIC, COG

Ref. Des.	Part Number	Description
C1325M3	2113944A29	CAP CER CHP 22.0PF 50V 5%
C1326M3	2113945Y02	CAP,FXD,.1UF,+10%,-10%,16V-DC,0402,X7R,-55DEG CMIN,125DEG CMAX
C1327M3	2113944A28	CAP CER CHP 18.0PF 50V 5%
C1328M3	2113945Y02	CAP,FXD,.1UF,+10%,-10%,16V-DC,0402,X7R,-55DEG CMIN,125DEG CMAX
C1329M3	2113945Y02	CAP,FXD,.1UF,+10%,-10%,16V-DC,0402,X7R,-55DEG CMIN,125DEG CMAX
C1330M3	2113945Y02	CAP,FXD,.1UF,+10%,-10%,16V-DC,0402,X7R,-55DEG CMIN,125DEG CMAX
C1331M3	2113945Y02	CAP,FXD,.1UF,+10%,-10%,16V-DC,0402,X7R,-55DEG CMIN,125DEG CMAX
C1332M3	2113945Y02	CAP,FXD,.1UF,+10%,-10%,16V-DC,0402,X7R,-55DEG CMIN,125DEG CMAX
C1333M3	2113945Y02	CAP,FXD,.1UF,+10%,-10%,16V-DC,0402,X7R,-55DEG CMIN,125DEG CMAX
C1334M3	2113945Y02	CAP,FXD,.1UF,+10%,-10%,16V-DC,0402,X7R,-55DEG CMIN,125DEG CMAX
C1335M3	2113945Y02	CAP,FXD,.1UF,+10%,-10%,16V-DC,0402,X7R,-55DEG CMIN,125DEG CMAX
C1336M3	2113945Y02	CAP,FXD,.1UF,+10%,-10%,16V-DC,0402,X7R,-55DEG CMIN,125DEG CMAX
C1337M3	2113944A28	CAP CER CHP 18.0PF 50V 5%

Ref. Des.	Part Number	Description
C1338M3	2175389H01	CAP,.5PF,CHIP,0402,CERAMIC,50V
C1376M3	2113944A25	CAP CER CHP 10.0PF 50V +/- 0.5PF
C1411M17	2113944C36	CAP CER CHP 33.0PF 50V 5%
C1413M17	2113944C10	CAP CER CHP 1.5PF 50V +/- 0.25PF
C1414M17	NOTPLACED	-
C1418M17	2113944C08	CAP CER CHP 1.2PF 50V +/- 0.25PF
C1419M17	2113944C67	CAP,FXD,1.5PF,.1PF+/-,50V-DC,0603,C0G,-55DEG CMIN,125DEG CMAX
C1424M17	2113742C09	CAP CER CHP 0.9PF +/- .10PF 100V
C1425M17	2113944C12	CAP CER CHP 1.8PF 50V +/- 0.25PF
C200M12	2113945B02	CAP CER CHP 10,000PF 25V 10%
C201M12	2188468Y01	CAP CER 25V X7R 0805 1UF
C202M12	2188468Y01	CAP CER 25V X7R 0805 1UF
C203M12	2188468Y01	CAP CER 25V X7R 0805 1UF
C204M12	2113955D35	CAP,FXD,4.7UF,+10%,-10%,16V-DC,1206,X7R,-55DEG CMIN,125DEG CMAX
C205M12	2113955D35	CAP,FXD,4.7UF,+10%,-10%,16V-DC,1206,X7R,-55DEG CMIN,125DEG CMAX
C206M12	2113945B02	CAP CER CHP 10,000PF 25V 10%
C207M12	2113956B91	CAP,FXD,1UF,+10%,-10%,16V-DC,0603,X5R,-55DEG CMIN,85DEG CMAX,PB

Ref. Des.	Part Number	Description
C208M12	2113956B91	CAP,FXD,1UF,+10%,-10%,16V-DC,0603,X5R,-55DEG CMIN,85DEG CMAX,PB
C209M12	2113956B91	CAP,FXD,1UF,+10%,-10%,16V-DC,0603,X5R,-55DEG CMIN,85DEG CMAX,PB
C21000M2	2113945Y02	CAP,FXD,.1UF,+10%,-10%,16V-DC,0402,X7R,-55DEG CMIN,125DEG CMAX
C21001M2	2113945Y02	CAP,FXD,.1UF,+10%,-10%,16V-DC,0402,X7R,-55DEG CMIN,125DEG CMAX
C21002M2	2113946B04	CAP CER CHP 0.10UF 10V 10%
C21003M2	2113946B04	CAP CER CHP 0.10UF 10V 10%
C21004M2	2113945Y02	CAP,FXD,.1UF,+10%,-10%,16V-DC,0402,X7R,-55DEG CMIN,125DEG CMAX
C21005M2	2113946B04	CAP CER CHP 0.10UF 10V 10%
C2104M2	2113946B04	CAP CER CHP 0.10UF 10V 10%
C210M12	2113956B91	CAP,FXD,1UF,+10%,-10%,16V-DC,0603,X5R,-55DEG CMIN,85DEG CMAX,PB
C2114M2	2113946B04	CAP CER CHP 0.10UF 10V 10%
C2115M2	2113944A40	CAP CER CHP 100.0PF 50V 5%
C2116M2	2113946B04	CAP CER CHP 0.10UF 10V 10%
C2126M2	2113944A46	CAP CER CHP 330.0 PF 50V 5%
C2127M2	2113944A46	CAP CER CHP 330.0 PF 50V 5%
C2128M2	2113944A46	CAP CER CHP 330.0 PF 50V 5%

Ref. Des.	Part Number	Description	Ref. Des.	Part Number	Description	Ref. Des.	Part Number	Description	Ref. Des.	Part Number	Description
C2129M2	2113944A46	CAP CER CHP 330.0 PF 50V 5%	C2223M2	2113944A40	CAP CER CHP 100.0PF 50V 5%	C3017M22	2113944M04	CAP,FXD,2.7PF,.1PF+/-,50V-DC,0603,C0G,-55DEG CMIN,125DEG CMAX	C4005M2	2113946B04	CAP CER CHP 0.10UF 10V 10%
C212M12	2113946D07	CAP,CHIP,4.7UF,+10%,-10%,6.3V-DC,0603,X5R,-55DEG CMIN,85DEG CMA	C2301M13	2113944C45	CAP CER CHP 100.0PF 50V 5%	C3022M22	21012043014	CAPACI-TOR,CERAMIC,1.8PF,50V-DC,C0G,	C4006M2	2113946B04	CAP CER CHP 0.10UF 10V 10%
C2130M2	2113944A46	CAP CER CHP 330.0 PF 50V 5%	C2302M13	2113944M26	CAP,FXD,22PF,+2%,-2%,50V-DC,0603,C0G,-55DEG CMIN,125DEG CMAX,PB	C3023M22	2115153H12	CAP, CERAMIC, COG	C4007M2	2113946B04	CAP CER CHP 0.10UF 10V 10%
C213M12	2113944A46	CAP CER CHP 330.0 PF 50V 5%	C2303M13	2113944A36	CAP CER CHP 68.0PF 50V 5%	C3024M22	21012043007	CAPACI-TOR,CERAMIC,0.8PF,50V-DC,C0G,	C402M20	2113944A31	CAP CER CHP 33.0PF 50V 5%
C214M12	2113944A31	CAP CER CHP 33.0PF 50V 5%	C2304M13	2113944C36	CAP CER CHP 33.0PF 50V 5%	C3025M22	2115153H10	CAP, CERAMIC, COG	C404M20	2113944A31	CAP CER CHP 33.0PF 50V 5%
C215M12	2113944A46	CAP CER CHP 330.0 PF 50V 5%	C2305M13	2115153H56	CAP, CERAMIC, COG	C3026M22	2115153H12	CAP, CERAMIC, COG	C405M20	2113944A31	CAP CER CHP 33.0PF 50V 5%
C216M12	2113944A31	CAP CER CHP 33.0PF 50V 5%	C2306M13	2113944A31	CAP CER CHP 33.0PF 50V 5%	C3027M22	2115153H17	CAP, CERAMIC, COG	C406M20	2113944A31	CAP CER CHP 33.0PF 50V 5%
C217M12	2113956B91	CAP,FXD,1UF,+10%,-10%,16V-DC,0603,X5R,-55DEG CMIN,85DEG CMAX,PB	C2307M13	2113944C14	CAP CER CHP 2.2PF 50V +/- 0.25PF	C3028M22	2115153H12	CAP, CERAMIC, COG	C407M20	2113944A31	CAP CER CHP 33.0PF 50V 5%
C2201M2	2113946B04	CAP CER CHP 0.10UF 10V 10%	C2308M13	2113944C63	CAP,FXD,1PF,.1PF+/-,50V-DC,0603,C0G,-55DEG CMIN,125DEG CMAX,PB	C3029M22	2115153H17	CAP, CERAMIC, COG	C412M20	2115153H26	CAP, CERAMIC, COG
C2202M2	2113946B04	CAP CER CHP 0.10UF 10V 10%	C2309M13	2113946K02	CAP CER CHP 0.10UF 16V	C3042M22	2113944A31	CAP CER CHP 33.0PF 50V 5%	C413M20	2113944A33	CAP CER CHP 47.0PF 50V 5%
C2203M2	2113946B04	CAP CER CHP 0.10UF 10V 10%	C2401M2	NOTPLACED	-	C3045M22	2113944A31	CAP CER CHP 33.0PF 50V 5%	C416M20	2113944A31	CAP CER CHP 33.0PF 50V 5%
C2211M2	2113946B04	CAP CER CHP 0.10UF 10V 10%	C2402M2	NOTPLACED	-	C3046M22	2113944A31	CAP CER CHP 33.0PF 50V 5%	C417M20	2113944A31	CAP CER CHP 33.0PF 50V 5%
C2212M2	2113946B04	CAP CER CHP 0.10UF 10V 10%	C2403M2	NOTPLACED	-	C3049M22	2113946K02	CAP CER CHP 0.10UF 16V	C418M20	2113944A31	CAP CER CHP 33.0PF 50V 5%
C2213M2	2113946B04	CAP CER CHP 0.10UF 10V 10%	C2404M2	NOTPLACED	-	C3050M22	2113944M02	CAP,FXD,2.2PF,.1PF+/-,50V-DC,0603,C0G,-55DEG CMIN,125DEG CMAX	C419M20	2113944A31	CAP CER CHP 33.0PF 50V 5%
C2214M2	2113946B04	CAP CER CHP 0.10UF 10V 10%	C2806M1	NOTPLACED	-	C3051M22	2175662M20	CAPACITOR 2.4 ?0.1PF, CERAMIC, 100V	C421M20	2113946D07	CAP,CHIP,4.7UF,+10%,-10%,6.3V-DC,0603,X5R,-55DEG CMIN,85DEG CMA
C2215M2	2113946B04	CAP CER CHP 0.10UF 10V 10%	C3006M22	2113944A31	CAP CER CHP 33.0PF 50V 5%	C3054M22	NOTPLACED	-	C422M20	2113944A31	CAP CER CHP 33.0PF 50V 5%
C2216M2	2113946B04	CAP CER CHP 0.10UF 10V 10%	C3007M22	2113944A31	CAP CER CHP 33.0PF 50V 5%	C3055M22	2115153H12	CAP, CERAMIC, COG	C423M20	2115153H44	CAP, CERAMIC, COG
C2221M2	2113946B04	CAP CER CHP 0.10UF 10V 10%	C3012M22	2113946K02	CAP CER CHP 0.10UF 16V	C3056M22	2115153H16	CAP, CERAMIC, COG	C424M20	2113944A31	CAP CER CHP 33.0PF 50V 5%
C2222M2	2113946B04	CAP CER CHP 0.10UF 10V 10%	C3013M22	2113946K02	CAP CER CHP 0.10UF 16V	C3057M22	2115153H15	CAP, CERAMIC, COG	C425M20	2115153H25	CAP, CERAMIC, COG
			C3014M22	2113944M06	CAP,FXD,3.3PF,.1PF+/-,50V-DC,0603,C0G,-55DEG CMIN,125DEG CMAX	C3065M22	2113944A31	CAP CER CHP 33.0PF 50V 5%	C426M20	2113944A63	CAP,FXD,1PF,.25PF+/-,50V-DC,0402,C0G,-55DEG CMIN,125DEG CMAX,P
			C3015M22	2113944M08	CAP,FXD,3.9PF,.1PF+/-,50V-DC,0603,C0G,-55DEG CMIN,125DEG CMAX	C3067M22	2113946B04	CAP CER CHP 0.10UF 10V 10%			
			C3016M22	2113944M02	CAP,FXD,2.2PF,.1PF+/-,50V-DC,0603,C0G,-55DEG CMIN,125DEG CMAX	C3068M22	2113944A31	CAP CER CHP 33.0PF 50V 5%			
						C3069M22	2115153H33	CAP, CERAMIC, COG			

Ref. Des.	Part Number	Description
C427M20	2113946D07	CAP,CHIP,4.7UF,+10%,-10%,6.3V-DC,0603,X5R,-55DEG CMIN,85DEG CMA
C428M20	2113946D07	CAP,CHIP,4.7UF,+10%,-10%,6.3V-DC,0603,X5R,-55DEG CMIN,85DEG CMA
C429M20	2113944A31	CAP CER CHP 33.0PF 50V 5%
C430M20	2115153H44	CAP, CERAMIC, COG
C431M20	2113944A31	CAP CER CHP 33.0PF 50V 5%
C432M20	2115153H20	CAP, CERAMIC, COG
C433M20	2113944A63	CAP,FXD,1PF,.25PF+/-,50V-DC,0402,C0G,-55DEG CMIN,125DEG CMAX,P
C434M20	2113946D07	CAP,CHIP,4.7UF,+10%,-10%,6.3V-DC,0603,X5R,-55DEG CMIN,85DEG CMA
C484M20	2115153H03	CAP, CERAMIC, COG
C485M20	2113944A63	CAP,FXD,1PF,.25PF+/-,50V-DC,0402,C0G,-55DEG CMIN,125DEG CMAX,P
C487M20	2113944A31	CAP CER CHP 33.0PF 50V 5%
C488M20	2113944V13	CAP,FXD,2.7PF,.1PF+/-,50V-DC,0402,C0G,-55DEG CMIN,125DEG CMAX
C490M20	2113944V07	CAP,FXD,1.5PF,.1PF+/-,50V-DC,0402,C0G,-55DEG CMIN,125DEG CMAX
C492M20	2113944V13	CAP,FXD,2.7PF,.1PF+/-,50V-DC,0402,C0G,-55DEG CMIN,125DEG CMAX
C500M21	2113945B05	CAP,FXD,.033UF,+10%,-10%,25V-DC,0402,X7R,-55DEG CMIN,125DEG CMA
C501M21	2113944A32	CAP CER CHP 39.0PF 50V 5%
C502M21	2113945B05	CAP,FXD,.033UF,+10%,-10%,25V-DC,0402,X7R,-55DEG CMIN,125DEG CMA

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C504M21	2113944A70	CAP,FXD,6PF,.5PF+/-,50V-DC,0402,C0G,-55DEG CMIN,125DEG CMAX,PB
C505M21	NOTPLACED	-
C506M21	2113944A32	CAP CER CHP 39.0PF 50V 5%
C507M21	2113945B05	CAP,FXD,.033UF,+10%,-10%,25V-DC,0402,X7R,-55DEG CMIN,125DEG CMA
C508M21	2113946D07	CAP,CHIP,4.7UF,+10%,-10%,6.3V-DC,0603,X5R,-55DEG CMIN,85DEG CMA
C509M21	2113945B05	CAP,FXD,.033UF,+10%,-10%,25V-DC,0402,X7R,-55DEG CMIN,125DEG CMA
C510M21	2113944A32	CAP CER CHP 39.0PF 50V 5%
C511M21	2113945B05	CAP,FXD,.033UF,+10%,-10%,25V-DC,0402,X7R,-55DEG CMIN,125DEG CMA
C512M21	2113946D07	CAP,CHIP,4.7UF,+10%,-10%,6.3V-DC,0603,X5R,-55DEG CMIN,85DEG CMA
C514M21	NOTPLACED	-
C515M21	2113944A14	CAP CER CHP 3.6PF 50V +/- 0.25PF
C516M21	2113944M30	CAP,FXD,33PF,+2%,-2%,50V-DC,0603,C0G,-55DEG CMIN,125DEG CMAX,PB
C532M21	2113944A32	CAP CER CHP 39.0PF 50V 5%
C533M21	2115153H52	CAP, CERAMIC, COG
C550M21	NOTPLACED	-
C551M21	NOTPLACED	-
C601M19	2113945B02	CAP CER CHP 10,000PF 25V 10%
C602M19	2113945B02	CAP CER CHP 10,000PF 25V 10%
C603M19	2113945B02	CAP CER CHP 10,000PF 25V 10%

Ref. Des.	Part Number	Description
C604M19	2113945B02	CAP CER CHP 10,000PF 25V 10%
C605M19	2113944A15	CAP CER CHP 3.9PF 50V +/- 0.25PF
C606M19	2113946B04	CAP CER CHP 0.10UF 10V 10%
C607M19	2113944A40	CAP CER CHP 100.0PF 50V 5%
C608M19	2113944A12	CAP CER CHP 3.0PF 50V +/- 0.25PF
C609M19	2113944A30	CAP CER CHP 27.0PF 50V 5%
C6104M6	2113946B04	CAP CER CHP 0.10UF 10V 10%
C6105M6	2113946B04	CAP CER CHP 0.10UF 10V 10%
C6106M6	2113946B04	CAP CER CHP 0.10UF 10V 10%
C6107M6	2113946B04	CAP CER CHP 0.10UF 10V 10%
C6108M6	2113946B04	CAP CER CHP 0.10UF 10V 10%
C6109M6	2113946B04	CAP CER CHP 0.10UF 10V 10%
C610M19	2113944A40	CAP CER CHP 100.0PF 50V 5%
C6110M6	2113946B04	CAP CER CHP 0.10UF 10V 10%
C6111M6	2113946B04	CAP CER CHP 0.10UF 10V 10%
C6112M6	2113946B04	CAP CER CHP 0.10UF 10V 10%
C6113M6	2113946B04	CAP CER CHP 0.10UF 10V 10%
C6114M6	2113946B04	CAP CER CHP 0.10UF 10V 10%
C6115M6	2113946B04	CAP CER CHP 0.10UF 10V 10%
C611M19	2113944A40	CAP CER CHP 100.0PF 50V 5%

Ref. Des.	Part Number	Description
C612M19	2113945B02	CAP CER CHP 10,000PF 25V 10%
C613M19	2113944A40	CAP CER CHP 100.0PF 50V 5%
C614M19	2113945B02	CAP CER CHP 10,000PF 25V 10%
C6155M6	NOTPLACED	-
C6156M6	NOTPLACED	-
C615M19	2113944A42	CAP CER CHP 150.0PF 50V 5%
C616M19	2113945A11	CAP CER CHP 2200PF 50V 10%
C617M19	2113946B04	CAP CER CHP 0.10UF 10V 10%
C618M19	2113944A31	CAP CER CHP 33.0PF 50V 5%
C619M19	2113944A35	CAP CER CHP 62.0PF 50V 5%
C6201M6	2113944A40	CAP CER CHP 100.0PF 50V 5%
C6202M6	2113945A09	CAP CER CHP 1000PF 50V 10%
C6203M6	2113946B04	CAP CER CHP 0.10UF 10V 10%
C620M19	2113946B04	CAP CER CHP 0.10UF 10V 10%
C621M19	2113946B04	CAP CER CHP 0.10UF 10V 10%
C622M19	2113946C07	CAP,FXD,.33UF,+10%,-10%,10V-DC,0603,X5R,-55DEG CMIN,85DEG CMAX
C623M19	2113945B02	CAP CER CHP 10,000PF 25V 10%
C624M19	2113946C07	CAP,FXD,.33UF,+10%,-10%,10V-DC,0603,X5R,-55DEG CMIN,85DEG CMAX
C625M19	2115153H39	CAP, CERAMIC, COG
C626M19	2113945A09	CAP CER CHP 1000PF 50V 10%
C627M19	2113945A09	CAP CER CHP 1000PF 50V 10%





Ref. Des.	Part Number	Description
C6514M6	2113946S35	CAP CER CHP 1.0UF 16V 10%
C6515M6	2113946S35	CAP CER CHP 1.0UF 16V 10%
C6516M6	2113946B04	CAP CER CHP 0.10UF 10V 10%
C6517M6	2113946S35	CAP CER CHP 1.0UF 16V 10%
C6518M6	2113946B04	CAP CER CHP 0.10UF 10V 10%
C6519M6	2113946S35	CAP CER CHP 1.0UF 16V 10%
C6520M6	2113946B04	CAP CER CHP 0.10UF 10V 10%
C6521M6	2113944A46	CAP CER CHP 330.0 PF 50V 5%
C6522M6	2113946S35	CAP CER CHP 1.0UF 16V 10%
C6523M6	2113946B04	CAP CER CHP 0.10UF 10V 10%
C6524M6	2113946B04	CAP CER CHP 0.10UF 10V 10%
C6525M6	2113946S35	CAP CER CHP 1.0UF 16V 10%
C6526M6	2113946B04	CAP CER CHP 0.10UF 10V 10%
C6527M6	2113946B04	CAP CER CHP 0.10UF 10V 10%
C6528M6	2113946B04	CAP CER CHP 0.10UF 10V 10%
C6529M6	2113946B04	CAP CER CHP 0.10UF 10V 10%
C6530M6	2113946S35	CAP CER CHP 1.0UF 16V 10%
C6531M6	2113946B04	CAP CER CHP 0.10UF 10V 10%
C6532M6	2113946S35	CAP CER CHP 1.0UF 16V 10%
C6533M6	2113946B04	CAP CER CHP 0.10UF 10V 10%

Ref. Des.	Part Number	Description
C6534M6	2113956B33	CAP,FXD,2.2UF,+10%,-10%,16V-DC,0603,X5R,-55DEG CMIN,85DEG CMAX
C6535M6	2113944A40	CAP CER CHP 100.0PF 50V 5%
C6536M6	2113944A28	CAP CER CHP 18.0PF 50V 5%
C6537M6	2113944A19	CAP CER CHP 5.6PF 50V +/- 0.5PF
C6538M6	2113956B33	CAP,FXD,2.2UF,+10%,-10%,16V-DC,0603,X5R,-55DEG CMIN,85DEG CMAX
C6539M6	2113956B33	CAP,FXD,2.2UF,+10%,-10%,16V-DC,0603,X5R,-55DEG CMIN,85DEG CMAX
C6540M6	2113945A09	CAP CER CHP 1000PF 50V 10%
C6541M6	2113944A19	CAP CER CHP 5.6PF 50V +/- 0.5PF
C6542M6	2113946B04	CAP CER CHP 0.10UF 10V 10%
C6543M6	2113946B04	CAP CER CHP 0.10UF 10V 10%
C6544M6	2113945D04	CAP CER CHP 100,000PF 25V 10%
C6545M6	2113945D04	CAP CER CHP 100,000PF 25V 10%
C6546M6	2113946B04	CAP CER CHP 0.10UF 10V 10%
C6547M6	2113944A46	CAP CER CHP 330.0 PF 50V 5%
C6548M6	NOTPLACED	-
C6549M6	2113944A46	CAP CER CHP 330.0 PF 50V 5%
C6550M6	2113945D04	CAP CER CHP 100,000PF 25V 10%
C6551M6	2113944A46	CAP CER CHP 330.0 PF 50V 5%
C6552M6	2113956E91	CAP,FXD,10UF,+10%,-10%,16V-DC,1210,X5R,-55DEG CMIN,85DEG CMAX,P

Ref. Des.	Part Number	Description
C6553M6	2113956E91	CAP,FXD,10UF,+10%,-10%,16V-DC,1210,X5R,-55DEG CMIN,85DEG CMAX,P
C6554M6	2113946B04	CAP CER CHP 0.10UF 10V 10%
C6555M6	2113955D45	CAP,FXD,4.7UF,+10%,-10%,10V-DC,1206,X7R,-55DEG CMIN,125DEG CMAX
C6556M6	2113956B33	CAP,FXD,2.2UF,+10%,-10%,16V-DC,0603,X5R,-55DEG CMIN,85DEG CMAX
C6557M6	2113945D04	CAP CER CHP 100,000PF 25V 10%
C6558M6	2113944A21	CAP CER CHP 6.8PF 50V +/- 0.5PF
C6559M6	2113946S35	CAP CER CHP 1.0UF 16V 10%
C6560M6	2113956C37	CAP,FXD,10UF,+10%,-10%,16V-DC,0805,X5R,-55DEG CMIN,85DEG CMAX,P
C6561M6	2113956C37	CAP,FXD,10UF,+10%,-10%,16V-DC,0805,X5R,-55DEG CMIN,85DEG CMAX,P
C6562M6	2113944A25	CAP CER CHP 10.0PF 50V +/- 0.5PF
C6563M6	2113945D04	CAP CER CHP 100,000PF 25V 10%
C6564M6	2113944A46	CAP CER CHP 330.0 PF 50V 5%
C6565M6	2113956B33	CAP,FXD,2.2UF,+10%,-10%,16V-DC,0603,X5R,-55DEG CMIN,85DEG CMAX
C6566M6	2113956E91	CAP,FXD,10UF,+10%,-10%,16V-DC,1210,X5R,-55DEG CMIN,85DEG CMAX,P
C6567M6	2113956E91	CAP,FXD,10UF,+10%,-10%,16V-DC,1210,X5R,-55DEG CMIN,85DEG CMAX,P

Ref. Des.	Part Number	Description
C6568M6	2113956B33	CAP,FXD,2.2UF,+10%,-10%,16V-DC,0603,X5R,-55DEG CMIN,85DEG CMAX
C6569M6	2113956E91	CAP,FXD,10UF,+10%,-10%,16V-DC,1210,X5R,-55DEG CMIN,85DEG CMAX,P
C6570M6	2113944A46	CAP CER CHP 330.0 PF 50V 5%
C6571M6	2113946B04	CAP CER CHP 0.10UF 10V 10%
C6572M6	2113946B04	CAP CER CHP 0.10UF 10V 10%
C6573M6	2113946S35	CAP CER CHP 1.0UF 16V 10%
C6574M6	2113946S35	CAP CER CHP 1.0UF 16V 10%
C6575M6	2113946S35	CAP CER CHP 1.0UF 16V 10%
C6576M6	2113956B33	CAP,FXD,2.2UF,+10%,-10%,16V-DC,0603,X5R,-55DEG CMIN,85DEG CMAX
C6577M6	2113946S35	CAP CER CHP 1.0UF 16V 10%
C6578M6	2113946S35	CAP CER CHP 1.0UF 16V 10%
C6579M6	2113946S35	CAP CER CHP 1.0UF 16V 10%
C6580M6	2113946S35	CAP CER CHP 1.0UF 16V 10%
C6581M6	2113956B33	CAP,FXD,2.2UF,+10%,-10%,16V-DC,0603,X5R,-55DEG CMIN,85DEG CMAX
C6582M6	2113944A21	CAP CER CHP 6.8PF 50V +/- 0.5PF
C6583M6	2113946B04	CAP CER CHP 0.10UF 10V 10%
C6584M6	2113956C37	CAP,FXD,10UF,+10%,-10%,16V-DC,0805,X5R,-55DEG CMIN,85DEG CMAX,P
C6585M6	2113946B04	CAP CER CHP 0.10UF 10V 10%

Ref. Des.	Part Number	Description
C6586M6	2113956C35	CAP,FXD,4.7UF,+10%,-10%,16V-DC,0805,X5R,-55DEG CMIN,85DEG CMAX
C6587M6	2113946B04	CAP CER CHP 0.10UF 10V 10%
C6588M6	2113944A46	CAP CER CHP 330.0 PF 50V 5%
C6589M6	2113944A40	CAP CER CHP 100.0PF 50V 5%
C6590M6	2113946B04	CAP CER CHP 0.10UF 10V 10%
C6591M6	2113944A28	CAP CER CHP 18.0PF 50V 5%
C6592M6	2113944A09	CAP CER CHP 2.2PF 50V +/- 0.25PF
C6593M6	2113956C37	CAP,FXD,10UF,+10%,-10%,16V-DC,0805,X5R,-55DEG CMIN,85DEG CMAX,P
C6594M6	2113946C07	CAP,FXD,.33UF,+10%,-10%,10V-DC,0603,X5R,-55DEG CMIN,85DEG CMAX
C6595M6	2113946S35	CAP CER CHP 1.0UF 16V 10%
C6596M6	NOTPLACED	-
C6601M6	2113944A28	CAP CER CHP 18.0PF 50V 5%
C6602M6	2113944A28	CAP CER CHP 18.0PF 50V 5%
C6670M6	NOTPLACED	-
C702M7	2185419D06	CAP CER SUPER L/D 0.1UF
C703M7	2113945C26	CAP,FXD,.039UF,+10%,-10%,50V-DC,0603,X7R,-55DEG CMIN,125DEG CMA
C704M7	2185419D06	CAP CER SUPER L/D 0.1UF
C705M7	2115153H30	CAP, CERAMIC, COG
C706M7	2185419D06	CAP CER SUPER L/D 0.1UF
C707M7	2113945C01	CAP CER CHP 6800PF 50V 10%

Ref. Des.	Part Number	Description
C708M7	NOTPLACED	-
C709M7	2185419D06	CAP CER SUPER L/D 0.1UF
C710M7	NOTPLACED	-
C711M7	NOTPLACED	-
C712M7	NOTPLACED	-
C713M7	2113945C25	CAP,FXD,.033UF,+10%,-10%,50V-DC,0603,X7R,-55DEG CMIN,125DEG CMA
C714M7	2185419D06	CAP CER SUPER L/D 0.1UF
C715M7	2113945C31	CAP,FXD,.1UF,+10%,-10%,50V-DC,0603,X7R,-55DEG CMIN,125DEG CMAX
C716M7	2113945C31	CAP,FXD,.1UF,+10%,-10%,50V-DC,0603,X7R,-55DEG CMIN,125DEG CMAX
C717M7	2113945C31	CAP,FXD,.1UF,+10%,-10%,50V-DC,0603,X7R,-55DEG CMIN,125DEG CMAX
C718M7	2113945C31	CAP,FXD,.1UF,+10%,-10%,50V-DC,0603,X7R,-55DEG CMIN,125DEG CMAX
C719M7	2113945C31	CAP,FXD,.1UF,+10%,-10%,50V-DC,0603,X7R,-55DEG CMIN,125DEG CMAX
C720M7	2113944C55	CAP CER CHP 1200.OPF 50V 5%
C721M7	NOTPLACED	-
C724M7	2113955D37	CAP,FXD,10UF,+10%,-10%,16V-DC,1206,X7R,-55DEG CMIN,125DEG CMAX
C725M7	2113945C31	CAP,FXD,.1UF,+10%,-10%,50V-DC,0603,X7R,-55DEG CMIN,125DEG CMAX

Ref. Des.	Part Number	Description
C726M7	2113945C31	CAP,FXD,.1UF,+10%,-10%,50V-DC,0603,X7R,-55DEG CMIN,125DEG CMAX
C727M7	2113944A40	CAP CER CHP 100.0PF 50V 5%
C730M7	2113945C31	CAP,FXD,.1UF,+10%,-10%,50V-DC,0603,X7R,-55DEG CMIN,125DEG CMAX
C731M7	2113945C31	CAP,FXD,.1UF,+10%,-10%,50V-DC,0603,X7R,-55DEG CMIN,125DEG CMAX
C732M7	2113944A32	CAP CER CHP 39.0PF 50V 5%
C733M7	2113945A09	CAP CER CHP 1000PF 50V 10%
C734M7	2113945C31	CAP,FXD,.1UF,+10%,-10%,50V-DC,0603,X7R,-55DEG CMIN,125DEG CMAX
C735M7	2113944A31	CAP CER CHP 33.0PF 50V 5%
C736M7	2113945B02	CAP CER CHP 10,000PF 25V 10%
C737M7	2113945C31	CAP,FXD,.1UF,+10%,-10%,50V-DC,0603,X7R,-55DEG CMIN,125DEG CMAX
C739M7	2113944A17	CAP CER CHP 4.7PF 50V +/- 0.25PF
C740M7	2115153H45	CAP, CERAMIC, COG
C742M7	2113945C31	CAP,FXD,.1UF,+10%,-10%,50V-DC,0603,X7R,-55DEG CMIN,125DEG CMAX
C743M7	2113946B06	CAP,CHIP,.22UF,+10%,-10%,10V-DC,0402,X5R,-55DEG CMIN,85DEG CMAX
C744M7	2113955D37	CAP,FXD,10UF,+10%,-10%,16V-DC,1206,X7R,-55DEG CMIN,125DEG CMAX

Ref. Des.	Part Number	Description
C749M7	2113945C31	CAP,FXD,.1UF,+10%,-10%,50V-DC,0603,X7R,-55DEG CMIN,125DEG CMAX
C750M7	2113945C31	CAP,FXD,.1UF,+10%,-10%,50V-DC,0603,X7R,-55DEG CMIN,125DEG CMAX
C751M7	2113945A09	CAP CER CHP 1000PF 50V 10%
C752M7	2113944A43	CAP CER CHP 180.0PF 50V 5%
C753M7	2113944A31	CAP CER CHP 33.0PF 50V 5%
C754M7	2113944A34	CAP CER CHP 56.0PF 50V 5%
C756M7	2113955D37	CAP,FXD,10UF,+10%,-10%,16V-DC,1206,X7R,-55DEG CMIN,125DEG CMAX
C757M7	2113945C31	CAP,FXD,.1UF,+10%,-10%,50V-DC,0603,X7R,-55DEG CMIN,125DEG CMAX
C760M7	2113944A44	CAP CER CHP 220.0 PF 50V 5%
C764M7	2113946B06	CAP,CHIP,.22UF,+10%,-10%,10V-DC,0402,X5R,-55DEG CMIN,85DEG CMAX
C770M7	2113944A44	CAP CER CHP 220.0 PF 50V 5%
C772M7	2113945A09	CAP CER CHP 1000PF 50V 10%
C773M7	2113944A33	CAP CER CHP 47.0PF 50V 5%
C777M7	2113944A44	CAP CER CHP 220.0 PF 50V 5%
C780M7	2113944A33	CAP CER CHP 47.0PF 50V 5%
C781M7	2115153H45	CAP, CERAMIC, COG
C786M7	2113944A44	CAP CER CHP 220.0 PF 50V 5%
C803M7	2115153H45	CAP, CERAMIC, COG

Ref. Des.	Part Number	Description
C813M7	NOTPLACED	–
C816M7	2113944A30	CAP CER CHP 27.0PF 50V 5%
C817M7	2113944A44	CAP CER CHP 220.0 PF 50V 5%
C819M7	2113944A44	CAP CER CHP 220.0 PF 50V 5%
C823M7	2113944A40	CAP CER CHP 100.0PF 50V 5%
C824M7	2115153H45	CAP, CERAMIC, COG
D200M12	4813978A19	DIODE,RECT,MBR120,SM, SOD-123,1A,20V,SHTK,PB-FREE
D2101M2	4870359B01	DIODE,SUPR,SM,7.82V,.1 W,ESD PROT,V360
D2301M13	4813974A19	DIODE ARRAY,MXR,SM,SOT-323,7V,.2W,SHTK,2,PB-FREE
D2302M13	4815897H01	PIN DIODE
D2303M13	4815897H01	PIN DIODE
D4001M2	4813978A25	SCHOTTKY 30V SOD-323 T&R PB FREE
D401M20	NOTPLACED	–
D6101M6	4813978A25	SCHOTTKY 30V SOD-323 T&R PB FREE
D6401M6	4813978A25	SCHOTTKY 30V SOD-323 T&R PB FREE
D6501M6	4813978A25	SCHOTTKY 30V SOD-323 T&R PB FREE
D6502M6	4813978A25	SCHOTTKY 30V SOD-323 T&R PB FREE
D722M7	4815011H01	DIODE TRIPLE
D723M7	4815011H01	DIODE TRIPLE
E1101M11	2405688Z01	INDUCTOR FERRITE BEAD
E201M12	7686949J14	FLTR,FERRITE BEAD,,2A,,,SM,0805,CHIP,2 20OHM
E2242M2	7685268E01	FERRITE BEAD 20X40 200 MA MAX CHIP

Ref. Des.	Part Number	Description
E2244M2	7685268E01	FERRITE BEAD 20X40 200 MA MAX CHIP
E2245M2	7685268E01	FERRITE BEAD 20X40 200 MA MAX CHIP
E2246M2	7685268E01	FERRITE BEAD 20X40 200 MA MAX CHIP
E2247M2	7685268E01	FERRITE BEAD 20X40 200 MA MAX CHIP
E2248M2	7685268E01	FERRITE BEAD 20X40 200 MA MAX CHIP
E2249M2	7685268E01	FERRITE BEAD 20X40 200 MA MAX CHIP
E2301M2	91012036001	FILTER,EMI/ RFI,300MA,SM,0402,PB FREE
E2302M2	91012036001	FILTER,EMI/ RFI,300MA,SM,0402,PB FREE
E2303M2	91012036001	FILTER,EMI/ RFI,300MA,SM,0402,PB FREE
E2304M2	91012036001	FILTER,EMI/ RFI,300MA,SM,0402,PB FREE
E2305M2	91012036001	FILTER,EMI/ RFI,300MA,SM,0402,PB FREE
E2306M2	91012036001	FILTER,EMI/ RFI,300MA,SM,0402,PB FREE
E2307M2	91012036001	FILTER,EMI/ RFI,300MA,SM,0402,PB FREE
E2308M2	91012036001	FILTER,EMI/ RFI,300MA,SM,0402,PB FREE
E2309M2	91012036001	FILTER,EMI/ RFI,300MA,SM,0402,PB FREE
E2310M2	91012036001	FILTER,EMI/ RFI,300MA,SM,0402,PB FREE

Ref. Des.	Part Number	Description
E2311M2	91012036001	FILTER,EMI/ RFI,300MA,SM,0402,PB FREE
E401M20	2480640Z01	SURFACE MOUNT FER- RITE BEAD
E402M20	2480640Z01	SURFACE MOUNT FER- RITE BEAD
E601M19	2480640Z01	SURFACE MOUNT FER- RITE BEAD
E602M19	2480640Z01	SURFACE MOUNT FER- RITE BEAD
E603M19	2480640Z01	SURFACE MOUNT FER- RITE BEAD
E604M19	2480640Z01	SURFACE MOUNT FER- RITE BEAD
E605M19	2480640Z01	SURFACE MOUNT FER- RITE BEAD
E606M19	2480640Z01	SURFACE MOUNT FER- RITE BEAD
E607M19	2480640Z01	SURFACE MOUNT FER- RITE BEAD
E608M19	2480640Z01	SURFACE MOUNT FER- RITE BEAD
E609M19	2480640Z01	SURFACE MOUNT FER- RITE BEAD
E6501M6	2480067M02	CHK RF CHIP BEAD INDUCTOR
E6502M6	2480067M02	CHK RF CHIP BEAD INDUCTOR
F200M12	6575834B01	FUSE SURFACE MOUNT
FL1301M3	9102190J23	FLTR,SAW,BAND- PASS,1.57542GHZ NOM,SM,1.4X1.0MM,SMD, PB-FREE
FL1302M3	9109674L58	PASSIVE FIL- TER,CER,BAND- PASS,2.45GHZ NOM
FL1303M3	9102190J23	FLTR,SAW,BAND- PASS,1.57542GHZ NOM,SM,1.4X1.0MM,SMD, PB-FREE
FL401M20	9175390A01	SAW FILTER, DUAL BAND 769/860.5

Ref. Des.	Part Number	Description
FL402M20	9175390A01	SAW FILTER, DUAL BAND 769/860.5
FL502M21	91009300001	FILTER,MONOLITHIC CRYSTAL,BAND- PASS,109.65MHZ NOM
J102M12	2880658Z08	CONNECTOR SMA
J2301M2	0970312N01	CONN,BTB,RCPT,60CONT,, 4MM,GLD,1 STACK HGT
J2302M2	0970312N01	CONN,BTB,RCPT,60CONT,, 4MM,GLD,1 STACK HGT
L1001M16	2415429H37	CHIP INDUCTOR
L1002M16	2415429H10	CHIP INDUCTOR
L1003M16	2415429H37	CHIP INDUCTOR
L1007M16	2460591K40	COIL AIR WOUND INDUC 59.71
L1009M16	2415428H03	AIR WOUND INDUCTOR
L1101M11	2415429H26	CHIP INDUCTOR
L1102M11	2415429H10	CHIP INDUCTOR
L1116M11	NOTPLACED	–
L1117M11	2415428H02	AIR WOUND INDUCTOR
L1301M3	2414017P16	IDCTR,CHIP,18NH,5%,300 MA,.76OHM,CER,9 Q,1.9GHZ SRF,SM,0402,P
L1302M3	2488090Y07	INDUCTOR,MULTI- LAYER,3.3NH,1005,SMD,P B FREE
L1303M3	2414017P16	IDCTR,CHIP,18NH,5%,300 MA,.76OHM,CER,9 Q,1.9GHZ SRF,SM,0402,P
L1304M3	2488090Y25	INDUCTOR,MULTI- LAYER,100NH,1005,SMD,P B FREE
L1305M3	24010062002	INDUCTOR, 5.6NH, 0402, 2%
L1306M3	2414017P14	IDCTR,CHIP,12NH,5%,300 MA,.60HM,CER,9 Q,2GHZ SRF,SM,0402,PB-F
L1308M3	NOTPLACED	–
L1316M3	24010062009	INDUCTOR, 13NH, 0402, 2%

Ref. Des.	Part Number	Description	Ref. Des.	Part Number	Description	Ref. Des.	Part Number	Description	Ref. Des.	Part Number	Description
L1408M17	24012026009	ULTRA-MINIATURE AIR CORE INDUCTORS	L406M20	2415427H05	CHIP INDUCTOR	L701M7	2488090Y17	INDUCTOR,MULTI-LAYER,22NH,1005,SMD,PB FREE	M1301M3	3987977Y01	CONTACT ANTENNA UNIVERSAL (D35)
L1410M17	24012026009	ULTRA-MINIATURE AIR CORE INDUCTORS	L407M20	2415427H16	CHIP INDUCTOR	L709M7	2414017N16	IDCTR,CHIP,22NH,5%,600 MA,.54OHM,CER,12 Q,1.3GHZ SRF,SM,0603	M6405M6	3987977Y04	CONT,CONN,1CONT,,ANT UNIV 4.5MM,UC 1.8
L200M12	2571269C01	INDUCTOR WW POWER 20%	L408M20	2415427H21	CHIP INDUCTOR	L720M7	2480646Z20	COIL MULTI-LAYER CHIP(2.20UH)	M6406M6	3987977Y04	CONT,CONN,1CONT,,ANT UNIV 4.5MM,UC 1.8
L2202M2	2415429H45	CHIP INDUCTOR	L489M20	2478057A14	8.2NH SURFACE MOUNT INDUCTOR	L727M7	2480646Z20	COIL MULTI-LAYER CHIP(2.20UH)	M6502M6	0985888K02	SKT RTC BTTY LEAP
L2203M2	2415429H45	CHIP INDUCTOR	L491M20	2478057A14	8.2NH SURFACE MOUNT INDUCTOR	L728M7	2415429H47	CHIP INDUCTOR	M6504M6	3987977Y04	CONT,CONN,1CONT,,ANT UNIV 4.5MM,UC 1.8
L2204M2	2415429H45	CHIP INDUCTOR	L500M21	2415429H43	CHIP INDUCTOR	L733M7	2480646Z20	COIL MULTI-LAYER CHIP(2.20UH)	PCB	84012266001	BOARD, PC , MAIN BOARD
L2205M2	2415429H45	CHIP INDUCTOR	L503M21	2414017N24	IDCTR,CHIP,100NH,5%,300 MA,2OHM,CER,14 Q,700MHZ SRF,SM,0603,P	L735M7	2480646Z20	COIL MULTI-LAYER CHIP(2.20UH)	Q1001M16	48012094001	MOD,XSTR,FET RF PWR, 135-941MHZ
L2301M13	24012026009	ULTRA-MINIATURE AIR CORE INDUCTORS	L504M21	2478057A51	0306 HIGH Q CHIP INDUCTOR	L738M7	2480646Z20	COIL MULTI-LAYER CHIP(2.20UH)	Q1101M11	4813973A32	XSTR,BIP GP SS,NPN,SM,SC-70,SMT,50V,.202W,100MA, PB-FREE
L2302M13	2415429H35	CHIP INDUCTOR	L513M21	NOTPLACED	-	L739M7	2414017N25	IDCTR,CHIP,120NH,5%,200 MA,2.4OHM,CER,12 Q,600MHZ SRF,SM,0603	Q1103M11	4813970A59	P-CH FET 1.0A 20V SOT-23 T&R
L2303M13	2414017N14	IDCTR,CHIP,15NH,5%,600 MA,.4OHM,CER,12 Q,1.8GHZ SRF,SM,0603,P	L550M21	2414017N10	IDCTR,CHIP,6.8NH,5%,600 MA,.22OHM,CER,10 Q,2.7GHZ SRF,SM,0603	L741M7	2480646Z20	COIL MULTI-LAYER CHIP(2.20UH)	Q201M12	4813970A59	P-CH FET 1.0A 20V SOT-23 T&R
L3008M22	2414032F36	IDCTR,WW,150NH,5%,400 MA,.56OHM,CER,35 Q,780MHZ SRF,SM,PB-FR	L601M19	2415429H43	CHIP INDUCTOR	L753M7	2415347H06	IDCTR, 2200NH	Q202M12	4813973A32	XSTR,BIP GP SS,NPN,SM,SC-70,SMT,50V,.202W,100MA, PB-FREE
L3009M22	2414032F36	IDCTR,WW,150NH,5%,400 MA,.56OHM,CER,35 Q,780MHZ SRF,SM,PB-FR	L602M19	2466505A01	COIL INDUCTOR	L755M7	2415429H38	CHIP INDUCTOR	Q2202M2	4815261H01	TRANSISTOR,BIP GENERAL PURPOSE SMALL NPN
L3041M22	2414032F36	IDCTR,WW,150NH,5%,400 MA,.56OHM,CER,35 Q,780MHZ SRF,SM,PB-FR	L603M19	2466505A01	COIL INDUCTOR	L758M7	2415429H47	CHIP INDUCTOR	Q2301M13	4815055H01	TSTR DUAL NPN/PNP UMH 5
L3044M22	2414032F36	IDCTR,WW,150NH,5%,400 MA,.56OHM,CER,35 Q,780MHZ SRF,SM,PB-FR	L604M19	2414032D16	IDCTR,WW,120NH,5%,800 MA,.26OHM,CER,42 Q,1GHZ SRF,SM,PB-FREE	L759M7	2414017N25	IDCTR,CHIP,120NH,5%,200 MA,2.4OHM,CER,12 Q,600MHZ SRF,SM,0603	Q3033M22	4813972A17	PB-FREE,NOT COMPLETELY ENRICHED
L3047M22	2414032F36	IDCTR,WW,150NH,5%,400 MA,.56OHM,CER,35 Q,780MHZ SRF,SM,PB-FR	L605M19	24012050001	0603LS CHIP INDUCTORS, 1608, 3900NH	L768M7	2488090Y25	INDUCTOR,MULTI-LAYER,100NH,1005,SMD,PB FREE	Q3035M22	4813972A17	PB-FREE,NOT COMPLETELY ENRICHED
L3064M22	2414032F36	IDCTR,WW,150NH,5%,400 MA,.56OHM,CER,35 Q,780MHZ SRF,SM,PB-FR	L611M19	2414032F39	IDCTR,WW,270NH,10%,280 MA,1OHM,CER,40 Q,800MHZ SRF,SM,PB-FRE	L775M7	2415429H38	CHIP INDUCTOR	Q3038M22	4871915M01	XSTR,BIP RF SML SGNL,NPN,SM,4.5GHZ
L401M20	2415427H21	CHIP INDUCTOR	L6401M6	2471189M03	SHIELDED SMT POWER INDUCTOR 10UH	M101M12	39012039001	CONNECTOR, BATTERY CONTACT	Q3039M22	4871915M01	XSTR,BIP RF SML SGNL,NPN,SM,4.5GHZ
L402M20	2415427H23	CHIP INDUCTOR	L6402M6	2471189M03	SHIELDED SMT POWER INDUCTOR 10UH	M104M12	3987977Y04	CONT,CONN,1CONT,,ANT UNIV 4.5MM,UC 1.8	Q3060M22	4813972A17	PB-FREE,NOT COMPLETELY ENRICHED
L403M20	2414017P07	IDCTR,CHIP,3.3NH,300MA,.19OHM,CER,8 Q,4GHZ SRF,SM,0402,PB-F	L6403M6	24009271001	20NH HIGH CURRENT CHIP INDUCTOR	M105M12	3987977Y04	CONT,CONN,1CONT,,ANT UNIV 4.5MM,UC 1.8	Q3062M22	4871915M01	XSTR,BIP RF SML SGNL,NPN,SM,4.5GHZ
L404M20	2415427H26	CHIP INDUCTOR	L6404M6	24009271001	20NH HIGH CURRENT CHIP INDUCTOR						
L405M20	2415427H21	CHIP INDUCTOR	L6502M6	2471678H01	10UH INDCUTOR						
			L6504M6	24009268001	10UH 2.1A SHIELDED INDUCTOR						
			L6505M6	2471678H01	10UH INDCUTOR						

Ref. Des.	Part Number	Description
Q4001M2	4815261H01	TRANSISTOR,BIP GENERAL PURPOSE SMALL NPN
Q401M20	4813973A32	XSTR,BIP GP SS,NPN,SM,SC-70,SMT,50V,.202W,100MA,PB-FREE
Q402M20	4813973M75	XSTR,BIP GP SS,PNP,BC858,SOT-563,SMT,-30V,.357W,-100MA,100MHZ
Q403M20	4813973M75	XSTR,BIP GP SS,PNP,BC858,SOT-563,SMT,-30V,.357W,-100MA,100MHZ
Q601M19	4813973A04	XSTR,BIP GP SS,NPN,TA13,SM,SOT-23,SMT,30V,.225W,300MA,125MHZ,P
Q6101M6	4815261H01	TRANSISTOR,BIP GENERAL PURPOSE SMALL NPN
Q6401M6	48012170001	FET
Q6501M6	4813970A62	XSTR,FET GP PWR,MOS-FET,P-CH,ENHN,CF,-20V,1.3W,PB-FREE
Q6502M6	48012154001	FET
Q6504M6	4809579E77	FET, NCH MOS FET, 1.2MM X 1.2MM PACKAGE, SMD, W18 COMPLIANT
Q6505M6	4813970A62	XSTR,FET GP PWR,MOS-FET,P-CH,ENHN,CF,-20V,1.3W,PB-FREE
Q6506M6	4809579E77	FET, NCH MOS FET, 1.2MM X 1.2MM PACKAGE, SMD, W18 COMPLIANT
Q6507M6	48012170001	FET
Q6508M6	48012154001	FET
Q731M7	4885061Y01	XSTR NPN 6V 30UA 12GHZ PB-FREE
Q745M7	4813973M75	XSTR,BIP GP SS,PNP,BC858,SOT-563,SMT,-30V,.357W,-100MA,100MHZ

Ref. Des.	Part Number	Description
Q756M7	4805585Q32	TRANSITOR, NPN RF
Q767M7	4813973M75	XSTR,BIP GP SS,PNP,BC858,SOT-563,SMT,-30V,.357W,-100MA,100MHZ
Q774M7	4805585Q32	TRANSITOR, NPN RF
Q785M7	4889394V04	XSTR,FET GEN PURPOSE SMALL SIG,MOSFET,N-CH,ENHN,SM,20V,.25W,P
R1001M16	0613952R13	CER CHIP RES 33K OHM 5% 0402
R1002M16	0613952R17	CER CHIP RES 47K OHM 5% 0402
R1003M16	0613952R21	CER CHIP RES 68K OHM 5% 0402
R1004M16	0613952R12	CER CHIP RES 30K OHM 5 0402
R1005M16	0613952Q73	CER CHIP RES 1000 OHM 5 0402
R1006M16	0613952R66	CER CHIP RES 0.0 +/-0.050 OHM
R1007M16	0613952H53	CER CHIP RES 150 OHM 5% 0603
R1064M16	NOTPLACED	-
R1065M16	0613952R66	CER CHIP RES 0.0 +/-0.050 OHM
R1066M16	NOTPLACED	-
R1101M11	0613952R01	CER CHIP RES 10K OHM 5% 0402
R1102M11	0613952R25	CER CHIP RES 100K OHM 5% 0402
R1103M11	6009259001	LOW RESISTANCE THICK FILM RESISTOR
R1104M11	0613952Q49	CER CHIP RES 100 OHM 5 0402
R1105M11	0613952Q49	CER CHIP RES 100 OHM 5 0402
R1106M11	0613952Q21	CER CHIP RES 6.8 OHM 5 0402
R1107M11	0613952Q45	CER CHIP RES 68.0 OHM 5 0402

Ref. Des.	Part Number	Description
R1108M11	0613952N81	CER CHIP RES 68.1K OHM 1 0402
R1110M11	0613952R01	CER CHIP RES 10K OHM 5% 0402
R1111M11	0613952R66	CER CHIP RES 0.0 +/-0.050 OHM
R1112M11	NOTPLACED	-
R1114M11	0613952Q49	CER CHIP RES 100 OHM 5 0402
R1115M11	0613952Q49	CER CHIP RES 100 OHM 5 0402
R1116M11	0613952R01	CER CHIP RES 10K OHM 5% 0402
R1117M11	0613952R22	CER CHIP RES 75K OHM 5 0402
R1121M11	0613952N47	CER CHIP RES 30.1K OHM 1 0402
R1122M11	0613952N85	CER CHIP RES 75.0K OHM 1 0402
R1124M11	0613952Q42	CER CHIP RES 51.0 OHM 5 0402
R1125M11	0613952R10	CER CHIP RES 24K OHM 5 0402
R1126M11	0613952R02	CER CHIP RES 11K OHM 5 0402
R1127M11	0613952R08	CER CHIP RES 20K OHM 5 0402
R1128M11	0613952R01	CER CHIP RES 10K OHM 5% 0402
R1129M11	NOTPLACED	-
R1130M11	NOTPLACED	-
R1135M11	0613952R66	CER CHIP RES 0.0 +/-0.050 OHM
R1136M11	0613952R01	CER CHIP RES 10K OHM 5% 0402
R1137M11	0613952R01	CER CHIP RES 10K OHM 5% 0402
R1138M11	0613952R25	CER CHIP RES 100K OHM 5% 0402
R1139M11	0613952R25	CER CHIP RES 100K OHM 5% 0402

Ref. Des.	Part Number	Description
R1140M11	0613952R25	CER CHIP RES 100K OHM 5% 0402
R1141M11	0613952R42	CER CHIP RES 510K OHM 5 0402
R1142M11	0613952R25	CER CHIP RES 100K OHM 5% 0402
R1143M11	0613952R25	CER CHIP RES 100K OHM 5% 0402
R1144M11	0613952R25	CER CHIP RES 100K OHM 5% 0402
R1145M11	0613952R25	CER CHIP RES 100K OHM 5% 0402
R1146M11	0613952R25	CER CHIP RES 100K OHM 5% 0402
R1151M11	0613952R01	CER CHIP RES 10K OHM 5% 0402
R1152M11	0613952R01	CER CHIP RES 10K OHM 5% 0402
R1154M11	0613952N01	CER CHIP RES 10.0K OHM 1 0402
R1158M11	NOTPLACED	-
R1160M11	0613952R03	CER CHIP RES 12K OHM 5% 0402
R1162M11	0613952R29	CER CHIP RES 150K OHM 5% 0402
R1163M11	0613952R01	CER CHIP RES 10K OHM 5% 0402
R1164M11	0613952R01	CER CHIP RES 10K OHM 5% 0402
R1165M11	0613952Q56	CER CHIP RES 200 OHM 5 0402
R1166M11	0613952Q56	CER CHIP RES 200 OHM 5 0402
R1167M11	0613952R01	CER CHIP RES 10K OHM 5% 0402
R1168M11	0613952Q49	CER CHIP RES 100 OHM 5 0402
R1169M11	0613952P52	CER CHIP RES 340K OHM 1 0402
R1170M11	0613952N88	CER CHIP RES 80.6K OHM 1 0402

Ref. Des.	Part Number	Description
R1171M11	0613952R66	CER CHIP RES 0.0 +/-0.050 OHM
R1172M11	0613952Q89	CER CHIP RES 4700 OHM 5 0402
R1174M11	0613952N01	CER CHIP RES 10.0K OHM 1 0402
R1175M11	0613952R66	CER CHIP RES 0.0 +/-0.050 OHM
R1176M11	0613952M01	CER CHIP RES 1000 OHM 1% 0402
R1177M11	0613952R66	CER CHIP RES 0.0 +/-0.050 OHM
R1178M11	0613952R01	CER CHIP RES 10K OHM 5% 0402
R1180M11	0613952R66	CER CHIP RES 0.0 +/-0.050 OHM
R1181M11	NOTPLACED	–
R1182M11	0613952R01	CER CHIP RES 10K OHM 5% 0402
R1198M11	0613952J01	CER CHIP RES 10K OHM 5% 0603
R1301M3	0613952R66	CER CHIP RES 0.0 +/-0.050 OHM
R1303M3	0613952R66	CER CHIP RES 0.0 +/-0.050 OHM
R1305M3	0613952R66	CER CHIP RES 0.0 +/-0.050 OHM
R1309M3	NOTPLACED	–
R1310M3	0613952R66	CER CHIP RES 0.0 +/-0.050 OHM
R1311M3	NOTPLACED	–
R1313M3	0613952R66	CER CHIP RES 0.0 +/-0.050 OHM
R1315M3	0613952R66	CER CHIP RES 0.0 +/-0.050 OHM
R1317M3	0613952R66	CER CHIP RES 0.0 +/-0.050 OHM
R1318M3	0613952R66	CER CHIP RES 0.0 +/-0.050 OHM
R1325M3	0613952R66	CER CHIP RES 0.0 +/-0.050 OHM

Ref. Des.	Part Number	Description
R1326M3	0613952R66	CER CHIP RES 0.0 +/-0.050 OHM
R1329M3	0613952R66	CER CHIP RES 0.0 +/-0.050 OHM
R1330M3	0613952R66	CER CHIP RES 0.0 +/-0.050 OHM
R1331M3	0613952R66	CER CHIP RES 0.0 +/-0.050 OHM
R1332M3	0613952R66	CER CHIP RES 0.0 +/-0.050 OHM
R1337M3	NOTPLACED	–
R1339M3	NOTPLACED	–
R1340M3	0613952R66	CER CHIP RES 0.0 +/-0.050 OHM
R201M12	0613952R25	CER CHIP RES 100K OHM 5% 0402
R202M12	0613952Q89	CER CHIP RES 4700 OHM 5 0402
R21000M2	NOTPLACED	–
R21001M2	NOTPLACED	–
R21002M2	NOTPLACED	–
R21003M2	NOTPLACED	–
R2104M2	0613952Q89	CER CHIP RES 4700 OHM 5 0402
R2105M2	0613952Q89	CER CHIP RES 4700 OHM 5 0402
R2106M2	NOTPLACED	–
R2107M2	0613952Q73	CER CHIP RES 1000 OHM 5 0402
R2109M2	0613952Q25	CER CHIP RES 10.0 OHM 5 0402
R2110M2	0613952Q33	CER CHIP RES 22.0 OHM 5 0402
R2111M2	0613952Q25	CER CHIP RES 10.0 OHM 5 0402
R2113M2	0613952Q25	CER CHIP RES 10.0 OHM 5 0402
R2114M2	0613952Q33	CER CHIP RES 22.0 OHM 5 0402

Ref. Des.	Part Number	Description
R2115M2	0613952Q25	CER CHIP RES 10.0 OHM 5 0402
R2116M2	0613952R01	CER CHIP RES 10K OHM 5% 0402
R2117M2	0613952R01	CER CHIP RES 10K OHM 5% 0402
R2118M2	0613952R01	CER CHIP RES 10K OHM 5% 0402
R2120M2	0613952R01	CER CHIP RES 10K OHM 5% 0402
R2129M2	0613952R01	CER CHIP RES 10K OHM 5% 0402
R2130M2	0613952R01	CER CHIP RES 10K OHM 5% 0402
R2131M2	0613952R01	CER CHIP RES 10K OHM 5% 0402
R2132M2	0613952R01	CER CHIP RES 10K OHM 5% 0402
R2133M2	0613952R01	CER CHIP RES 10K OHM 5% 0402
R2135M2	0613952Q41	CER CHIP RES 47.0 OHM 5 0402
R2136M2	0613952Q61	CER CHIP RES 330 OHM 5 0402
R2137M2	0613952Q61	CER CHIP RES 330 OHM 5 0402
R2138M2	0613952Q41	CER CHIP RES 47.0 OHM 5 0402
R2139M2	0613952Q41	CER CHIP RES 47.0 OHM 5 0402
R2142M2	0613952Q41	CER CHIP RES 47.0 OHM 5 0402
R2144M2	0613952Q61	CER CHIP RES 330 OHM 5 0402
R2145M2	0613952Q41	CER CHIP RES 47.0 OHM 5 0402
R2146M2	0613952Q41	CER CHIP RES 47.0 OHM 5 0402
R2147M2	0613952Q41	CER CHIP RES 47.0 OHM 5 0402

Ref. Des.	Part Number	Description
R2148M2	0613952Q41	CER CHIP RES 47.0 OHM 5 0402
R2149M2	0613952Q41	CER CHIP RES 47.0 OHM 5 0402
R2151M2	NOTPLACED	–
R2153M2	0613952Q41	CER CHIP RES 47.0 OHM 5 0402
R2154M2	0613952Q41	CER CHIP RES 47.0 OHM 5 0402
R2192M2	0613952Q61	CER CHIP RES 330 OHM 5 0402
R2197M2	0613952R66	CER CHIP RES 0.0 +/-0.050 OHM
R2198M2	0613952R66	CER CHIP RES 0.0 +/-0.050 OHM
R2199M2	0613952R66	CER CHIP RES 0.0 +/-0.050 OHM
R2201M2	0613952R32	CER CHIP RES 200K OHM 5 0402
R2204M2	0613952Q85	CER CHIP RES 3300 OHM 5 0402
R2206M2	0613952Q85	CER CHIP RES 3300 OHM 5 0402
R2207M2	0613952R66	CER CHIP RES 0.0 +/-0.050 OHM
R2235M2	0613952R66	CER CHIP RES 0.0 +/-0.050 OHM
R2244M2	0613952Q65	CER CHIP RES 470 OHM 5 0402
R2245M2	0613952Q60	CER CHIP RES 300 OHM 5 0402
R2246M2	0613952Q65	CER CHIP RES 470 OHM 5 0402
R2254M2	0613952R01	CER CHIP RES 10K OHM 5% 0402
R2301M13	NOTPLACED	–
R2302M13	0613952H47	CER CHIP RES 82.0 OHM 5 0603
R2303M13	0613952H47	CER CHIP RES 82.0 OHM 5 0603

Ref. Des.	Part Number	Description
R2304M13	0613952H47	CER CHIP RES 82.0 OHM 5 0603
R2305M13	0613952G67	CER CHIP RES 0.0 +/-0.050 OHM
R2306M13	0613952R25	CER CHIP RES 100K OHM 5% 0402
R2803M1	0613952Q37	CER CHIP RES 33.0 OHM 5 0402
R2804M1	0613952Q49	CER CHIP RES 100 OHM 5 0402
R2805M1	0613952Q49	CER CHIP RES 100 OHM 5 0402
R2806M1	0613952Q59	CER CHIP RES 270 OHM 5 0402
R2807M1	0613952Q56	CER CHIP RES 200 OHM 5 0402
R2808M1	0613952Q49	CER CHIP RES 100 OHM 5 0402
R2810M1	0613952R01	CER CHIP RES 10K OHM 5% 0402
R2811M1	0613952Q89	CER CHIP RES 4700 OHM 5 0402
R2812M1	0613952R01	CER CHIP RES 10K OHM 5% 0402
R2813M1	NOTPLACED	–
R2817M1	0613952Q41	CER CHIP RES 47.0 OHM 5 0402
R3018M22	0613952R18	CER CHIP RES 51K OHM 5 0402
R3019M22	0613952R18	CER CHIP RES 51K OHM 5 0402
R3030M22	0613952R08	CER CHIP RES 20K OHM 5 0402
R3031M22	0613952R08	CER CHIP RES 20K OHM 5 0402
R3032M22	0613952Q22	CER CHIP RES 7.5 OHM 5 0402
R3034M22	0613952Q34	CER CHIP RES 24.0 OHM 5 0402
R3036M22	0613952R08	CER CHIP RES 20K OHM 5 0402

Ref. Des.	Part Number	Description
R3037M22	0613952R08	CER CHIP RES 20K OHM 5 0402
R3040M22	0613952Q52	CER CHIP RES 130 OHM 5 0402
R3043M22	0613952Q46	CER CHIP RES 75.0 OHM 5 0402
R3052M22	0613952R18	CER CHIP RES 51K OHM 5 0402
R3058M22	0613952R07	CER CHIP RES 18K OHM 5% 0402
R3059M22	0613952Q27	CER CHIP RES 12.0 OHM 5 0402
R3061M22	0613952R08	CER CHIP RES 20K OHM 5 0402
R3063M22	0613952Q50	CER CHIP RES 110 OHM 5 0402
R3066M22	0613952Q32	CER CHIP RES 20.0 OHM 5 0402
R4005M2	0613952R01	CER CHIP RES 10K OHM 5% 0402
R4006M2	0613952R01	CER CHIP RES 10K OHM 5% 0402
R4007M2	0613952R01	CER CHIP RES 10K OHM 5% 0402
R4008M2	0613952R01	CER CHIP RES 10K OHM 5% 0402
R4009M2	0613952Q85	CER CHIP RES 3300 OHM 5 0402
R4010M2	0613952R32	CER CHIP RES 200K OHM 5 0402
R4011M2	0613952R17	CER CHIP RES 47K OHM 5% 0402
R4012M2	0613952R09	CER CHIP RES 22K OHM 5% 0402
R4013M2	0613952R09	CER CHIP RES 22K OHM 5% 0402
R4014M2	0613952Q85	CER CHIP RES 3300 OHM 5 0402
R401M20	0613952R09	CER CHIP RES 22K OHM 5% 0402

Ref. Des.	Part Number	Description
R402M20	0613952R23	CER CHIP RES 82K OHM 5% 0402
R403M20	0613952Q85	CER CHIP RES 3300 OHM 5 0402
R404M20	0613952Q45	CER CHIP RES 68.0 OHM 5 0402
R405M20	0613952Q25	CER CHIP RES 10.0 OHM 5 0402
R406M20	0613952R66	CER CHIP RES 0.0 +/-0.050 OHM
R407M20	0613952R09	CER CHIP RES 22K OHM 5% 0402
R408M20	0613952R23	CER CHIP RES 82K OHM 5% 0402
R409M20	0613952Q85	CER CHIP RES 3300 OHM 5 0402
R410M20	0613952Q45	CER CHIP RES 68.0 OHM 5 0402
R411M20	0613952Q25	CER CHIP RES 10.0 OHM 5 0402
R412M20	0613952Q18	CER CHIP RES 5.1 OHM 5 0402
R413M20	0613952Q11	CER CHIP RES 2.7 OHM 5 0402
R447M20	0613952Q25	CER CHIP RES 10.0 OHM 5 0402
R448M20	0613952Q25	CER CHIP RES 10.0 OHM 5 0402
R450M20	0613952R66	CER CHIP RES 0.0 +/-0.050 OHM
R451M20	0613952R66	CER CHIP RES 0.0 +/-0.050 OHM
R452M20	0613952R66	CER CHIP RES 0.0 +/-0.050 OHM
R453M20	0613952R66	CER CHIP RES 0.0 +/-0.050 OHM
R454M20	0613952R66	CER CHIP RES 0.0 +/-0.050 OHM
R455M20	0613952R66	CER CHIP RES 0.0 +/-0.050 OHM

Ref. Des.	Part Number	Description
R456M20	0613952R66	CER CHIP RES 0.0 +/-0.050 OHM
R457M20	0613952R66	CER CHIP RES 0.0 +/-0.050 OHM
R500M21	0613952Q37	CER CHIP RES 33.0 OHM 5 0402
R502M21	0613952Q36	CER CHIP RES 30.0 OHM 5 0402
R512M21	0613952R66	CER CHIP RES 0.0 +/-0.050 OHM
R525M21	0613952R66	CER CHIP RES 0.0 +/-0.050 OHM
R526M21	0613958J74	CER CHIP RES 0.0 OHM JMP 0805
R601M19	0613952Q41	CER CHIP RES 47.0 OHM 5 0402
R602M19	0613952Q63	CER CHIP RES 390 OHM 5 0402
R603M19	0613952R25	CER CHIP RES 100K OHM 5% 0402
R604M19	0613952Q63	CER CHIP RES 390 OHM 5 0402
R605M19	0613952R01	CER CHIP RES 10K OHM 5% 0402
R606M19	0613952R01	CER CHIP RES 10K OHM 5% 0402
R607M19	0613952R25	CER CHIP RES 100K OHM 5% 0402
R608M19	0613952R01	CER CHIP RES 10K OHM 5% 0402
R609M19	0613952Q81	CER CHIP RES 2200 OHM 5 0402
R6101M6	0613952R01	CER CHIP RES 10K OHM 5% 0402
R6102M6	0613952R09	CER CHIP RES 22K OHM 5% 0402
R6103M6	0613952R09	CER CHIP RES 22K OHM 5% 0402
R6104M6	NOTPLACED	–
R6105M6	0613952R66	CER CHIP RES 0.0 +/-0.050 OHM



Ref. Des.	Part Number	Description
R6106M6	0613952Q73	CER CHIP RES 1000 OHM 5 0402
R6107M6	0613952Q55	CER CHIP RES 180 OHM 5 0402
R6108M6	0613952Q61	CER CHIP RES 330 OHM 5 0402
R6109M6	NOTPLACED	–
R610M19	0613952R25	CER CHIP RES 100K OHM 5% 0402
R6110M6	0613952Q73	CER CHIP RES 1000 OHM 5 0402
R6111M6	NOTPLACED	–
R6112M6	NOTPLACED	–
R6113M6	0613952Q51	CER CHIP RES 120 OHM 5 0402
R6114M6	0613952Q49	CER CHIP RES 100 OHM 5 0402
R6115M6	0613952Q49	CER CHIP RES 100 OHM 5 0402
R6116M6	0613952Q73	CER CHIP RES 1000 OHM 5 0402
R6117M6	0613952R01	CER CHIP RES 10K OHM 5% 0402
R6118M6	0613952R09	CER CHIP RES 22K OHM 5% 0402
R6119M6	0613952R01	CER CHIP RES 10K OHM 5% 0402
R611M19	0613952R01	CER CHIP RES 10K OHM 5% 0402
R6120M6	0613952R01	CER CHIP RES 10K OHM 5% 0402
R6121M6	0613952R01	CER CHIP RES 10K OHM 5% 0402
R6122M6	0613952R01	CER CHIP RES 10K OHM 5% 0402
R6125M6	NOTPLACED	–
R612M19	0613952Q94	CER CHIP RES 7500 OHM 5 0402
R613M19	0613952Q82	CER CHIP RES 2400 OHM 5 0402

Ref. Des.	Part Number	Description
R614M19	0613952R66	CER CHIP RES 0.0 +/-0.050 OHM
R615M19	NOTPLACED	–
R616M19	NOTPLACED	–
R617M19	NOTPLACED	–
R618M19	NOTPLACED	–
R619M19	NOTPLACED	–
R6201M6	NOTPLACED	–
R6202M6	0613952R01	CER CHIP RES 10K OHM 5% 0402
R6203M6	0613952R66	CER CHIP RES 0.0 +/-0.050 OHM
R6204M6	0613952R01	CER CHIP RES 10K OHM 5% 0402
R6205M6	0613952R01	CER CHIP RES 10K OHM 5% 0402
R6206M6	0613952R25	CER CHIP RES 100K OHM 5% 0402
R6207M6	0613952R25	CER CHIP RES 100K OHM 5% 0402
R6208M6	0613952Q89	CER CHIP RES 4700 OHM 5 0402
R6209M6	0613952Q89	CER CHIP RES 4700 OHM 5 0402
R620M19	NOTPLACED	–
R6210M6	0613952Q89	CER CHIP RES 4700 OHM 5 0402
R6211M6	0613952R01	CER CHIP RES 10K OHM 5% 0402
R6212M6	NOTPLACED	–
R6213M6	0613952R01	CER CHIP RES 10K OHM 5% 0402
R6214M6	NOTPLACED	–
R6215M6	0613952R01	CER CHIP RES 10K OHM 5% 0402
R6216M6	0613952R66	CER CHIP RES 0.0 +/-0.050 OHM
R6217M6	0613952Q73	CER CHIP RES 1000 OHM 5 0402

Ref. Des.	Part Number	Description
R6218M6	0613952Q80	CER CHIP RES 2000 OHM 5 0402
R621M19	NOTPLACED	–
R623M19	NOTPLACED	–
R624M19	NOTPLACED	–
R6301M6	0613952R01	CER CHIP RES 10K OHM 5% 0402
R6304M6	0613952R66	CER CHIP RES 0.0 +/-0.050 OHM
R63050M6	0613952R66	CER CHIP RES 0.0 +/-0.050 OHM
R6305M6	0613952R66	CER CHIP RES 0.0 +/-0.050 OHM
R6306M6	0613952R01	CER CHIP RES 10K OHM 5% 0402
R6307M6	0613952R66	CER CHIP RES 0.0 +/-0.050 OHM
R6310M6	0613952Q37	CER CHIP RES 33.0 OHM 5 0402
R6311M6	0613952Q37	CER CHIP RES 33.0 OHM 5 0402
R6312M6	0613952Q37	CER CHIP RES 33.0 OHM 5 0402
R6313M6	0613952Q37	CER CHIP RES 33.0 OHM 5 0402
R6314M6	0613952Q37	CER CHIP RES 33.0 OHM 5 0402
R6316M6	0613952R01	CER CHIP RES 10K OHM 5% 0402
R6401M6	0613952R18	CER CHIP RES 51K OHM 5 0402
R6402M6	0613952R32	CER CHIP RES 200K OHM 5 0402
R6403M6	0613952Q81	CER CHIP RES 2200 OHM 5 0402
R6404M6	0613952Q81	CER CHIP RES 2200 OHM 5 0402
R6405M6	0613952Q75	CER CHIP RES 1200 OHM 5 0402
R6406M6	0613952R01	CER CHIP RES 10K OHM 5% 0402

Ref. Des.	Part Number	Description
R6407M6	0613952Q81	CER CHIP RES 2200 OHM 5 0402
R6409M6	0613952N01	CER CHIP RES 10.0K OHM 1 0402
R6410M6	0613952R01	CER CHIP RES 10K OHM 5% 0402
R6411M6	0613952R66	CER CHIP RES 0.0 +/-0.050 OHM
R6414M6	0613952Q61	CER CHIP RES 330 OHM 5 0402
R6415M6	0613952Q61	CER CHIP RES 330 OHM 5 0402
R6416M6	0613952Q61	CER CHIP RES 330 OHM 5 0402
R6417M6	0613952Q61	CER CHIP RES 330 OHM 5 0402
R6419M6	0613952Q37	CER CHIP RES 33.0 OHM 5 0402
R6420M6	0613952R17	CER CHIP RES 47K OHM 5% 0402
R6421M6	0613952R01	CER CHIP RES 10K OHM 5% 0402
R6422M6	0613952Q51	CER CHIP RES 120 OHM 5 0402
R6423M6	0613952R66	CER CHIP RES 0.0 +/-0.050 OHM
R6424M6	0613952N01	CER CHIP RES 10.0K OHM 1 0402
R6425M6	0613952Q80	CER CHIP RES 2000 OHM 5 0402
R6426M6	0613952Q49	CER CHIP RES 100 OHM 5 0402
R6427M6	0613952R11	CER CHIP RES 27K OHM 5% 0402
R6428M6	0613952R25	CER CHIP RES 100K OHM 5% 0402
R6429M6	0613952R17	CER CHIP RES 47K OHM 5% 0402
R6430M6	0613952R09	CER CHIP RES 22K OHM 5% 0402

Ref. Des.	Part Number	Description
R6431M6	0613952Q81	CER CHIP RES 2200 OHM 5 0402
R6432M6	0613952R25	CER CHIP RES 100K OHM 5% 0402
R6433M6	0613952Q32	CER CHIP RES 20.0 OHM 5 0402
R6434M6	0613952Q32	CER CHIP RES 20.0 OHM 5 0402
R6492M6	0613952Q79	CER CHIP RES 1800 OHM 5 0402
R6501M6	0613952Q25	CER CHIP RES 10.0 OHM 5 0402
R6502M6	0613952Q25	CER CHIP RES 10.0 OHM 5 0402
R6503M6	0613952Q25	CER CHIP RES 10.0 OHM 5 0402
R6504M6	0613952R09	CER CHIP RES 22K OHM 5% 0402
R6505M6	0613952Q80	CER CHIP RES 2000 OHM 5 0402
R6506M6	0613952R66	CER CHIP RES 0.0 +/-0.050 OHM
R6507M6	0613952R01	CER CHIP RES 10K OHM 5% 0402
R6508M6	0613952R17	CER CHIP RES 47K OHM 5% 0402
R6509M6	0613952R25	CER CHIP RES 100K OHM 5% 0402
R6510M6	0613952R66	CER CHIP RES 0.0 +/-0.050 OHM
R6511M6	0613952R01	CER CHIP RES 10K OHM 5% 0402
R6512M6	0613952N01	CER CHIP RES 10.0K OHM 1 0402
R6513M6	0613952R66	CER CHIP RES 0.0 +/-0.050 OHM
R6514M6	0613952Q89	CER CHIP RES 4700 OHM 5 0402
R6515M6	0613952R66	CER CHIP RES 0.0 +/-0.050 OHM

Ref. Des.	Part Number	Description
R6516M6	0613952R66	CER CHIP RES 0.0 +/-0.050 OHM
R6517M6	0613952Q63	CER CHIP RES 390 OHM 5 0402
R6518M6	0613952R66	CER CHIP RES 0.0 +/-0.050 OHM
R6519M6	0613952Q89	CER CHIP RES 4700 OHM 5 0402
R6520M6	0613952Q73	CER CHIP RES 1000 OHM 5 0402
R6521M6	0615049H01	KAMAYA 0.2 OHM CHIP RESISTOR
R6522M6	0613952M66	CER CHIP RES 4750 OHM 1% 0402
R6523M6	0613952R09	CER CHIP RES 22K OHM 5% 0402
R6524M6	0613952R66	CER CHIP RES 0.0 +/-0.050 OHM
R6525M6	NOTPLACED	-
R6526M6	0613952R66	CER CHIP RES 0.0 +/-0.050 OHM
R6527M6	0613952N87	CER CHIP RES 78.7K OHM 1 0402
R6528M6	0613952R25	CER CHIP RES 100K OHM 5% 0402
R6529M6	0615049H01	KAMAYA 0.2 OHM CHIP RESISTOR
R6530M6	0613952L30	CER CHIP RES 200 OHM 1 0402
R6531M6	0613952R01	CER CHIP RES 10K OHM 5% 0402
R6532M6	NOTPLACED	-
R6533M6	0613952R66	CER CHIP RES 0.0 +/-0.050 OHM
R6534M6	NOTPLACED	-
R6535M6	0613952N01	CER CHIP RES 10.0K OHM 1 0402
R6536M6	0613952Z72	RES,MF,91KOHM,1%,.0625 W,SM,0402,200PPM/ CEL,PB-FREE

Ref. Des.	Part Number	Description
R6537M6	0613952P09	CER CHIP RES 121K OHM 1 0402
R6538M6	0613952Q95	CER CHIP RES 8200 OHM 5 0402
R6539M6	0613952P66	CER CHIP RES 475K OHM 1 0402
R6540M6	0613952P66	CER CHIP RES 475K OHM 1 0402
R6541M6	0613952R25	CER CHIP RES 100K OHM 5% 0402
R6542M6	0613952R66	CER CHIP RES 0.0 +/-0.050 OHM
R6543M6	0613952R66	CER CHIP RES 0.0 +/-0.050 OHM
R6544M6	0613952R66	CER CHIP RES 0.0 +/-0.050 OHM
R6545M6	0613952R25	CER CHIP RES 100K OHM 5% 0402
R6546M6	0613952R66	CER CHIP RES 0.0 +/-0.050 OHM
R6547M6	0613952R66	CER CHIP RES 0.0 +/-0.050 OHM
R6548M6	NOTPLACED	-
R6550M6	0613952Z64	RES,MF,39KOHM,1%,.0625 W,SM,0402,200PPM/ CEL,PB-FREE
R6551M6	0613952Z62	RES,MF,33KOHM,1%,.0625 W,SM,0402,200PPM/ CEL,PB-FREE
R6552M6	0613952R25	CER CHIP RES 100K OHM 5% 0402
R6558M6	0613952P22	CER CHIP RES 165K OHM 1 0402
R6561M6	0613952R66	CER CHIP RES 0.0 +/-0.050 OHM
R6562M6	0613952R66	CER CHIP RES 0.0 +/-0.050 OHM
R6563M6	0613952R66	CER CHIP RES 0.0 +/-0.050 OHM
R6564M6	0613952R66	CER CHIP RES 0.0 +/-0.050 OHM

Ref. Des.	Part Number	Description
R6565M6	0613952R66	CER CHIP RES 0.0 +/-0.050 OHM
R6566M6	0613952R66	CER CHIP RES 0.0 +/-0.050 OHM
R6567M6	0613952R66	CER CHIP RES 0.0 +/-0.050 OHM
R6568M6	0613952P47	CER CHIP RES 301K OHM 1 0402
R6570M6	0613952R66	CER CHIP RES 0.0 +/-0.050 OHM
R6574M6	0613952R25	CER CHIP RES 100K OHM 5% 0402
R6576M6	0613952R01	CER CHIP RES 10K OHM 5% 0402
R6577M6	0613952Q89	CER CHIP RES 4700 OHM 5 0402
R6578M6	0613952Q89	CER CHIP RES 4700 OHM 5 0402
R6579M6	0613952R01	CER CHIP RES 10K OHM 5% 0402
R6580M6	0613952R17	CER CHIP RES 47K OHM 5% 0402
R6581M6	0613952Q49	CER CHIP RES 100 OHM 5 0402
R6582M6	0613952Q89	CER CHIP RES 4700 OHM 5 0402
R6583M6	0613952R03	CER CHIP RES 12K OHM 5% 0402
R6584M6	0613952Q56	CER CHIP RES 200 OHM 5 0402
R6591M6	0613952R66	CER CHIP RES 0.0 +/-0.050 OHM
R6592M6	0613952R66	CER CHIP RES 0.0 +/-0.050 OHM
R6598M6	NOTPLACED	-
R6599M6	0613952R01	CER CHIP RES 10K OHM 5% 0402
R6601M6	0613952R01	CER CHIP RES 10K OHM 5% 0402
R6602M6	0613952R01	CER CHIP RES 10K OHM 5% 0402

Ref. Des.	Part Number	Description
R6604M6	0613952Q51	CER CHIP RES 120 OHM 5 0402
R6605M6	0613952Q33	CER CHIP RES 22.0 OHM 5 0402
R6606M6	0613952Q37	CER CHIP RES 33.0 OHM 5 0402
R6608M6	0613952R01	CER CHIP RES 10K OHM 5% 0402
R6609M6	0613952R25	CER CHIP RES 100K OHM 5% 0402
R6616M6	0613952Q80	CER CHIP RES 2000 OHM 5 0402
R6617M6	0613952R01	CER CHIP RES 10K OHM 5% 0402
R6618M6	0613952R01	CER CHIP RES 10K OHM 5% 0402
R6619M6	0613952R01	CER CHIP RES 10K OHM 5% 0402
R6621M6	0613952Q89	CER CHIP RES 4700 OHM 5 0402
R6622M6	0613952Q35	CER CHIP RES 27.0 OHM 5 0402
R6623M6	0613952Q35	CER CHIP RES 27.0 OHM 5 0402
R6624M6	0613952Q35	CER CHIP RES 27.0 OHM 5 0402
R6625M6	0613952Q35	CER CHIP RES 27.0 OHM 5 0402
R6626M6	0613952R01	CER CHIP RES 10K OHM 5% 0402
R698M19	0613952R66	CER CHIP RES 0.0 +/-0.050 OHM
R699M19	0613952R66	CER CHIP RES 0.0 +/-0.050 OHM
R701M7	0613952Q64	CER CHIP RES 430 OHM 5 0402
R702M7	0613952R66	CER CHIP RES 0.0 +/-0.050 OHM
R703M7	0613952Q67	CER CHIP RES 560 OHM 5 0402

Ref. Des.	Part Number	Description
R704M7	0613952Q25	CER CHIP RES 10.0 OHM 5 0402
R705M7	0613952Q75	CER CHIP RES 1200 OHM 5 0402
R706M7	0613952R66	CER CHIP RES 0.0 +/-0.050 OHM
R707M7	0613952Q67	CER CHIP RES 560 OHM 5 0402
R708M7	0613952Q45	CER CHIP RES 68.0 OHM 5 0402
R709M7	NOTPLACED	–
R721M7	0613952R01	CER CHIP RES 10K OHM 5% 0402
R722M7	0613952Q57	CER CHIP RES 220 OHM 5 0402
R723M7	0613952R02	CER CHIP RES 11K OHM 5 0402
R728M7	0613952Q69	CER CHIP RES 680 OHM 5 0402
R729M7	0613952R09	CER CHIP RES 22K OHM 5% 0402
R730M7	0613952Q84	CER CHIP RES 3000 OHM 5 0402
R734M7	0613952R66	CER CHIP RES 0.0 +/-0.050 OHM
R736M7	0613952Q55	CER CHIP RES 180 OHM 5 0402
R741M7	0613952R09	CER CHIP RES 22K OHM 5% 0402
R742M7	0613952R23	CER CHIP RES 82K OHM 5% 0402
R743M7	0613952R17	CER CHIP RES 47K OHM 5% 0402
R744M7	0613952Q91	CER CHIP RES 5600 OHM 5 0402
R745M7	0613952R09	CER CHIP RES 22K OHM 5% 0402
R746M7	0613952Q12	CER CHIP RES 3.0 OHM 5 0402
R747M7	0613952Q34	CER CHIP RES 24.0 OHM 5 0402

Ref. Des.	Part Number	Description
R748M7	0613952Q47	CER CHIP RES 82.0 OHM 5% 0402
R751M7	0613952Q59	CER CHIP RES 270 OHM 5 0402
R754M7	NOTPLACED	–
R757M7	NOTPLACED	–
R761M7	0613952Q29	CER CHIP RES 15.0 OHM 5 0402
R762M7	0613952R08	CER CHIP RES 20K OHM 5 0402
R763M7	0613952R19	CER CHIP RES 56K OHM 5% 0402
R766M7	0613952Q92	CER CHIP RES 6200 OHM 5 0402
R769M7	0613952Q29	CER CHIP RES 15.0 OHM 5 0402
R771M7	0613952Q49	CER CHIP RES 100 OHM 5 0402
R776M7	0613952Q67	CER CHIP RES 560 OHM 5 0402
R778M7	0613952Q29	CER CHIP RES 15.0 OHM 5 0402
R779M7	0613952Q49	CER CHIP RES 100 OHM 5 0402
R785M7	0613952Q60	CER CHIP RES 300 OHM 5 0402
R799M7	0613952Q60	CER CHIP RES 300 OHM 5 0402
R809M7	0613952Q31	CER CHIP RES 18.0 OHM 5 0402
R822M7	NOTPLACED	–
R823M7	NOTPLACED	–
S2103M2	40012069001	TACT SWITCH, EMERGENCY
SH1	26012144001	SHIELD, TXOP
SH10	26012156001	SHIELD, MIXER
SH11	26012159001	SHIELD, VCO
SH12	26012152001	SHIELD, GPS/BT
SH13	26012161001	SHIELD, CONTROLLER

Ref. Des.	Part Number	Description
SH14	26012143001	SHIELD, MAKO
SH15	26012160001	SHIELD, DRIVER
SH16	26012163001	SHIELD, RXFE
SH17	26012155001	SHIELD, 2ND_LO
SH2	26012154001	SHIELD, ABACUS
SH3	26012149001	SHIELD, ALC
SH4	26012157001	SHIELD, BALUN
SH5	26012153001	SHIELD, FGU
SH6	26012150001	SHIELD, ALC/DC
SH7	26012158001	SHIELD, COUPLER
SH8	26012162001	SHIELD, HF
SH9	26012151001	SHIELD, AUDIO PA
T506M21	2575851B01	RF TRANSFORMER BALUN
T507M21	2575851B02	RF TRANSFORMER BALUN
U1001M16	5175143H01	WIDE SUPPLY RANGE OP AMP
U1002M16	51012101001	VHF/UHF/800/900 MHZ LDMOS DRIVER IC
U1101M11	5188032U43	IC,SENSING CIRCUIT,INA138,SM,SOT-23/5,1PER PKG
U1103M11	5185070Y01	IC TEMPERATURE SENSOR PB-FREE
U1104M11	5185941F56	IC SINGLE LV LP OP AMPLIFIER
U1105M11	5180390L83	IC,CNTRLR,,SM,1PER PKG
U1106M11	5175772B05	PRECISION RF DETECTOR
U1112M11	5175772B04	1 DB LSB GAAS MMIC ATTENUATOR
U1113M11	5185941F56	IC SINGLE LV LP OP AMPLIFIER
U1114M11	5185941F56	IC SINGLE LV LP OP AMPLIFIER
U1119M11	5109522E94	2 INPUT AND GATE IN NANO PACKAGE (C87)

Ref. Des.	Part Number	Description
U1121M11	5114000B52	IC,XOR,LOGIC LEVEL SHIFTER,1PER PKG,SM,SOT-353,PB-FREE
U1125M11	5175206H01	QUAD 12-BIT DAC IC
U1126M11	5109817F77	IC COMPTR LM7275 5SC70 (D54)
U1127M11	5171779H01	SPDT ANALOG SWITCH
U1128M11	5188085K11	IC, SINGLE NAND GATE, 2-INPUT, POSITIVE, 5 DSBGA, PB-FREE
U1129M11	5175143H01	WIDE SUPPLY RANGE OP AMP
U1130M11	5175143H01	WIDE SUPPLY RANGE OP AMP
U1131M11	5109817F77	IC COMPTR LM7275 5SC70 (D54)
U1132M11	5114007M28	IC,F-F/D,1PER PKG,17SZ74,N-I,SM,SOIC8,PB-FREE
U1133M11	5171779H01	SPDT ANALOG SWITCH
U1136M11	5109522E94	2 INPUT AND GATE IN NANO PACKAGE (C87)
U1137M11	5164852H16	IC TRANSCEIVER W/ LEVEL TRANSLATION
U1138M11	5164852H16	IC TRANSCEIVER W/ LEVEL TRANSLATION
U1139M11	5164852H16	IC TRANSCEIVER W/ LEVEL TRANSLATION
U1141M11	5185941F56	IC SINGLE LV LP OP AMPLIFIER
U1142M11	5185941F56	IC SINGLE LV LP OP AMPLIFIER
U1143M11	5185941F56	IC SINGLE LV LP OP AMPLIFIER
U1144M11	5171779H01	SPDT ANALOG SWITCH
U1146M11	5109522E93	2 INPUT OR GATE IN NANO PACKAGE (C87)
U1147M11	5109522E94	2 INPUT AND GATE IN NANO PACKAGE (C87)
U1148M11	5185941F56	IC SINGLE LV LP OP AMPLIFIER

Ref. Des.	Part Number	Description
U1149M11	5109522E93	2 INPUT OR GATE IN NANO PACKAGE (C87)
U1150M11	51009381001	LOW DROPOUT VOLTAGE REFERENCE
U1301M3	51007377001	IC, XCVR, BLUETOOTH, GPS, FM RX, FM TX
U1304M3	5105739X13	IC, SIGE GPS LOW NOISE AMP 1575 MHZ
U1305M3	51016097001	LOW NOISE, 100MA LINEAR REGULATOR 2.8V
U200M12	5188493T01	IC,VREG/ SWG,LP2989,SM,MINI SO-8 HI PRCN REG 5V
U201M12	5175771A99	LOW NOISE, 100MA LINEAR REGULATOR
U202M12	5175772B02	LINEAR REGULATOR 100MA 1.8V
U203M12	5175772B01	LINEAR VOLTAGE REGULATOR 350MA
U21000M2	5188690V02	IC,D FLIP-FLOP,1PER PKG,7SZ175,,SC70-6,,PB-FREE
U21001M2	5188690V02	IC,D FLIP-FLOP,1PER PKG,7SZ175,,SC70-6,,PB-FREE
U21002M2	5188690V01	IC,SCHMITT INVERTER,7SZ14,1PER PKG,SM,SC70-5,PB FREE
U21003M2	5188690V01	IC,SCHMITT INVERTER,7SZ14,1PER PKG,SM,SC70-5,PB FREE
U2101M2	5109522E84	IC DUAL SCHMITT TRIG MICRO PAK
U2102M2	5109522E84	IC DUAL SCHMITT TRIG MICRO PAK
U2104M2	5109522E84	IC DUAL SCHMITT TRIG MICRO PAK
U2201M2	5171679H01	LED LIGHT DRIVER
U2202M2	5164852H47	IC, I2C LEVEL TRANSLATOR
U2301M13	5103535B53	IC,INVTR,DL,NC7WZ04L6X ,2PER PKG,SC70

Ref. Des.	Part Number	Description
U2302M13	5185941F45	ATTEN,VAR,14.4DBMIN,15.6DBMAX,0-2000 MHZ-FREQ,50OHM,PCMT,SOT
U4001M2	5164852H47	IC, I2C LEVEL TRANSLATOR
U4003M2	5188691V01	IC,MUX/ DEMUX,NC7SB3157P6X,S M,SC70-6,1PER PKG,BUS,PB FREE
U4004M2	5116783H01	SN74LVC2G66 ANALOG SWITCH
U402M20	5180428L15	SW,RF SWITCH,SPDT,SMT,6W,3V
U403M20	5180428L15	SW,RF SWITCH,SPDT,SMT,6W,3V
U404M20	5180428L15	SW,RF SWITCH,SPDT,SMT,6W,3V
U405M20	5180428L15	SW,RF SWITCH,SPDT,SMT,6W,3V
U406M20	4885316E32	TRANSISTOR, RF
U407M20	4885316E32	TRANSISTOR, RF
U408M20	5103535B53	IC,INVTR,DL,NC7WZ04L6X ,2PER PKG,SC70
U507M21	5164015H81	IC,MXR,DBL BAL GILBERT,CELL,,SM
U601M19	5102495J14	IC,IF,IF DIGITILIZING SUBSYSTEM IC,AD9864,QFN
U602M19	4.885316E32	TRANSISTOR, RF
U603M19	5109522E84	IC DUAL SCHMITT TRIG MICRO PAK
U604M19	5109522E84	IC DUAL SCHMITT TRIG MICRO PAK
U605M19	5164852H16	IC TRANSCEIVER W/ LEVEL TRANSLATION
U606M19	5164852H16	IC TRANSCEIVER W/ LEVEL TRANSLATION
U607M19	5186311J24	IC,BFR,1BITS,NC7SZ125,A CTIVE HIGH,B
U6101M6	0180706J18	PROGRAMMED CPLD

Ref. Des.	Part Number	Description
U6102M6	5188691V01	IC,MUX/ DEMUX,NC7SB3157P6X,S M,SC70-6,1PER PKG,BUS,PB FREE
U6103M6	5175114H01	SINGLE AND GATE MICROPAK
U6104M6	5175114H01	SINGLE AND GATE MICROPAK
U6105M6	5175114H01	SINGLE AND GATE MICROPAK
U6201M6	5185941F26	IC,COMPTR,LMV7219,NOP B
U6301M6	51012031001	32MB DIE SHRINK DDR SDRAM IC
U6302M6	5102495J13	IC,MICROP,P1710ZZGE,BG A,,12MHZ,32BITS
U6304M6	0105955U25	ASSY,IC,BGA SPEC PROG, FLASH MEMORY
U6401M6	5175772B38	IC ANALOG TEMPERATURE SENSOR
U6402M6	5115453H01	RAIL TO RAIL OUTPUT, 8 PIN BGA
U6404M6	5175772B38	IC ANALOG TEMPERATURE SENSOR
U6405M6	5188348V06	IC,AUDIO CODEC,SM,AUDIO CODEC
U6408M6	5188521T01	IC,VREF,SM,SOT23,1PER PKG,.5%,1.25 TO 13.75,PRCN BANDGAP ADJUS
U6409M6	51009000001	NANOPOWER, 1.8V, SOT23 COMPARATOR
U6410M6	5175772B38	IC ANALOG TEMPERATURE SENSOR
U6411M6	5109731C55	IC 2.75 FIXED GAIN MONO FILTER-FREE AMPLFR
U6501M6	5185143E77	IC, MAKO ASIC, CMOS PWR MGMT
U6502M6	4871987H01	LOW FREQUENCY TRANSISTOR
U6503M6	5171674H01	OP AMP
U6504M6	5171682H01	800MA BUCK REGULATOR

Ref. Des.	Part Number	Description
U6505M6	5189631P01	IC, SYNC STEP-DOWN CONV
U6506M6	5184790Y04	IC, 400MA ADJ VREG LDO, SOT23
U6507M6	5171682H01	800MA BUCK REGULATOR
U6508M6	51009366001	500MA LOW DROPOUT CMOS LINEAR REG.
U6509M6	5175114H01	SINGLE AND GATE MICROPAK
U6510M6	5114007A47	IC, OR, 17SZ32, 1PER PKG, SOT-353, PB FREE
U6511M6	5171339H01	MICROPOWER VOLTAGE REGULATOR
U6601M6	5175114H01	SINGLE AND GATE MICROPAK
U702M7	5164015H28	IC, TRIDENT, INTEG SYNTH, RX/TX BSBND
U738M7	5171972L01	SP3T RF SWITCH
U739M7	5103535B53	IC, INVTR, DL, NC7WZ04L6X, 2PER PKG, SC70
U746M7	4805218N63	RF TRANS SOT 323 BFQ67W
VR101M12	4813977M29	DIODE, VREF, MBZ5250, SM, SOT-23, 20V, .225W, ZEN
VR200M12	4813977M29	DIODE, VREF, MBZ5250, SM, SOT-23, 20V, .225W, ZEN
VR3010M22	4805656W87	DIODE, VCTR, @ 15V, 1SV279, SOD-523/SC-79
VR3011M22	4805656W87	DIODE, VCTR, @ 15V, 1SV279, SOD-523/SC-79
VR3048M22	4805656W87	DIODE, VCTR, @ 15V, 1SV279, SOD-523/SC-79
VR601M19	4805656W87	DIODE, VCTR, @ 15V, 1SV279, SOD-523/SC-79
VR602M19	4805656W87	DIODE, VCTR, @ 15V, 1SV279, SOD-523/SC-79
Y1304M3	48014600001	OSC, TCXO, 26.0

Ref. Des.	Part Number	Description
Y3020M22	48012102005	RESONATOR CERAMIC 1025MHZ
Y3021M22	48012102005	RESONATOR CERAMIC 1025MHZ
Y3053M22	48012102006	RESONATOR CERAMIC 1110MHZ
Y6501M6	4864005H01	RESONATOR, CRYSTAL 24.576 MHZ
Y6502M6	4809995L05	XTAL QUARTZ 32.768KHZ CC4V-T1
Y6601M6	4802582S85	RESON, QRTZ, 12MHZ, TOLERANCE 10PPM, STABILITY 15PPM, SM, FUND, LO
Y701M7	4871886H01	16.8 MHZ VCTXO .8PPM

700/800 MHz Transceiver (RF) Board Parts List  
– PC000351A01

Ref. Des.	Part Number	Description
C1001M16	2113944M30	CAP,FXD,33PF,+2%,-2%,50V-DC,0603,C0G,-55DEG CMIN,125DEG CMAX,PB
C1002M16	2113944C22	CAP,CHIP,4.7PF,.25PF+/-,50V-DC,0603,C0G,-55DEG CMIN,125DEG CMA
C1003M16	2113945C02	CAP,CHIP,.01UF,+10%,-10%,50V-DC,0603,X7R,-55DEG CMIN,125DEG CMA
C1004M16	2113944M30	CAP,FXD,33PF,+2%,-2%,50V-DC,0603,C0G,-55DEG CMIN,125DEG CMAX,PB
C1005M16	2113944M30	CAP,FXD,33PF,+2%,-2%,50V-DC,0603,C0G,-55DEG CMIN,125DEG CMAX,PB
C1006M16	2113945C02	CAP,CHIP,.01UF,+10%,-10%,50V-DC,0603,X7R,-55DEG CMIN,125DEG CMA
C1007M16	2113944M30	CAP,FXD,33PF,+2%,-2%,50V-DC,0603,C0G,-55DEG CMIN,125DEG CMAX,PB
C1008M16	2113944M30	CAP,FXD,33PF,+2%,-2%,50V-DC,0603,C0G,-55DEG CMIN,125DEG CMAX,PB
C1009M16	2113944M30	CAP,FXD,33PF,+2%,-2%,50V-DC,0603,C0G,-55DEG CMIN,125DEG CMAX,PB
C1010M16	2113945C02	CAP,CHIP,.01UF,+10%,-10%,50V-DC,0603,X7R,-55DEG CMIN,125DEG CMA
C1013M16	2113944M21	CAP,FXD,13PF,+2%,-2%,50V-DC,0603,C0G,-55DEG CMIN,125DEG CMAX,PB
C1014M16	NOTPLACED	64AM DUMMY PART NUMBER

Ref. Des.	Part Number	Description
C1015M16	2113944M30	CAP,FXD,33PF,+2%,-2%,50V-DC,0603,C0G,-55DEG CMIN,125DEG CMAX,PB
C1018M16	2113944M30	CAP,FXD,33PF,+2%,-2%,50V-DC,0603,C0G,-55DEG CMIN,125DEG CMAX,PB
C1019M16	2171741M03	CAP,FXD,18PF,+5%,-5%,50V-DC,COG,HI Q CAP
C101M12	2113944A31	CAP,CHIP,33PF,+5%,-5%,50V-DC,0402,C0G,-55DEG CMIN,125DEG CMAX,P
C1020M16	2113944M11	CAP,FXD,5.1PF,.1PF+/-,50V-DC,0603,C0G,-55DEG CMIN,125DEG CMAX
C1021M16	2113944M01	CAP,FXD,2PF,.1PF+/-,50V-DC,0603,C0G,-55DEG CMIN,125DEG CMAX,PB
C1022M16	2113944M30	CAP,FXD,33PF,+2%,-2%,50V-DC,0603,C0G,-55DEG CMIN,125DEG CMAX,PB
C1023M16	2113944M24	CAP,FXD,18PF,+2%,-2%,50V-DC,0603,C0G,-55DEG CMIN,125DEG CMAX,PB
C1024M16	2113945A12	CAP,CHIP,3300PF,+10%,-10%,50V-DC,0402,X7R,-55DEG CMIN,125DEG CM
C1025M16	2113945A12	CAP,CHIP,3300PF,+10%,-10%,50V-DC,0402,X7R,-55DEG CMIN,125DEG CM
C1026M16	2113945C07	CAP,CHIP,330PF,+10%,-10%,50V-DC,0603,X7R,-55DEG CMIN,125DEG CMA
C1101M11	2113945B02	CAP,CHIP,.01UF,+10%,-10%,25V-DC,0402,X7R,-55DEG CMIN,125DEG CMA
C1102M11	2188468Y01	CAP,CHIP,1UF,+10%,-10%,25V-DC,0805,X7R
C1103M11	2113945B02	CAP,CHIP,.01UF,+10%,-10%,25V-DC,0402,X7R,-55DEG CMIN,125DEG CMA

Ref. Des.	Part Number	Description
C1104M11	NOTPLACED	64AM DUMMY PART NUMBER
C1105M11	2113944A19	CAP,CHIP,5.6PF,.5PF+/-,50V-DC,0402,C0G,-55DEG CMIN,125DEG CMAX
C1106M11	2113945B02	CAP,CHIP,.01UF,+10%,-10%,25V-DC,0402,X7R,-55DEG CMIN,125DEG CMA
C1107M11	2113944A40	CAP,CHIP,100PF,+5%,-5%,50V-DC,0402,C0G,-55DEG CMIN,125DEG CMAX
C1108M11	2113945B02	CAP,CHIP,.01UF,+10%,-10%,25V-DC,0402,X7R,-55DEG CMIN,125DEG CMA
C1110M11	2113944A31	CAP,CHIP,33PF,+5%,-5%,50V-DC,0402,C0G,-55DEG CMIN,125DEG CMAX,P
C1111M11	2113945Y02	CAP:X7R,0402,10%,16V,0.1UF
C1112M11	2113945B02	CAP,CHIP,.01UF,+10%,-10%,25V-DC,0402,X7R,-55DEG CMIN,125DEG CMA
C1113M11	2113945B02	CAP,CHIP,.01UF,+10%,-10%,25V-DC,0402,X7R,-55DEG CMIN,125DEG CMA
C1116M11	2113945Y02	CAP:X7R,0402,10%,16V,0.1UF
C1117M11	2113945A12	CAP,CHIP,3300PF,+10%,-10%,50V-DC,0402,X7R,-55DEG CMIN,125DEG CM
C1118M11	2113945B02	CAP,CHIP,.01UF,+10%,-10%,25V-DC,0402,X7R,-55DEG CMIN,125DEG CMA
C1119M11	2113945B02	CAP,CHIP,.01UF,+10%,-10%,25V-DC,0402,X7R,-55DEG CMIN,125DEG CMA
C1120M11	2113945B02	CAP,CHIP,.01UF,+10%,-10%,25V-DC,0402,X7R,-55DEG CMIN,125DEG CMA
C1122M11	2113944M02	CAP,FXD,2.2PF,.1PF+/-,50V-DC,0603,C0G,-55DEG CMIN,125DEG CMAX

Ref. Des.	Part Number	Description
C1123M11	2113945B02	CAP,CHIP,.01UF,+10%,-10%,25V-DC,0402,X7R,-55DEG CMIN,125DEG CMA
C1124M11	2113945A13	CAP,CHIP,4700PF,+10%,-10%,50V-DC,0402,X7R,-55DEG CMIN,125DEG CM
C1125M11	2113944A21	CAP,CHIP,6.8PF,.5PF+/-,50V-DC,0402,C0G,-55DEG CMIN,125DEG CMAX
C1126M11	2113945A09	CAP,CHIP,1000PF,+10%,-10%,50V-DC,0402,X7R,-55DEG CMIN,125DEG CM
C1127M11	2113945Y02	CAP:X7R,0402,10%,16V,0.1UF
C1128M11	2113945B02	CAP,CHIP,.01UF,+10%,-10%,25V-DC,0402,X7R,-55DEG CMIN,125DEG CMA
C1129M11	2113945B02	CAP,CHIP,.01UF,+10%,-10%,25V-DC,0402,X7R,-55DEG CMIN,125DEG CMA
C1130M11	2113945B02	CAP,CHIP,.01UF,+10%,-10%,25V-DC,0402,X7R,-55DEG CMIN,125DEG CMA
C1135M11	NOTPLACED	64AM DUMMY PART NUMBER
C1137M11	2113945B04	CAP,FXD,.022UF,+10%,-10%,25V-DC,0402,X7R,-55DEG CMIN,125DEG CMA
C1138M11	2113945B04	CAP,FXD,.022UF,+10%,-10%,25V-DC,0402,X7R,-55DEG CMIN,125DEG CMA
C1139M11	2113944A25	CAP,CHIP,10PF,.5PF+/-,50V-DC,0402,C0G,-55DEG CMIN,125DEG CMAX
C1140M11	2113945A13	CAP,CHIP,4700PF,+10%,-10%,50V-DC,0402,X7R,-55DEG CMIN,125DEG CM
C1141M11	2175793A01	CAP,CHIP,.47UF,+10%,-10%,6.3V-DC,0402,X5R,-55DEG CMIN,85DEG CMA
C1142M11	2113945A09	CAP,CHIP,1000PF,+10%,-10%,50V-DC,0402,X7R,-55DEG CMIN,125DEG CM
C1155M11	NOTPLACED	64AM DUMMY PART NUMBER

Ref. Des.	Part Number	Description	Ref. Des.	Part Number	Description	Ref. Des.	Part Number	Description	Ref. Des.	Part Number	Description
C1160M11	2113945C31	CAP,FXD,.1UF,+10%,-10%,50V-DC,0603,X7R,-55DEG CMIN,125DEG CMAX	C1311M3	2113956A51	CAP,FXD,1UF,+10%,-10%,6.3V-DC,0402,X5R,-55DEG CMIN,85DEG CMAX,P	C1325M3	2113944A29	CAP,CHIP,22PF,+5%,-5%,50V-DC,0402,C0G,-55DEG CMIN,125DEG CMAX,P	C1414M17	NOTPLACED	64AM DUMMY PART NUMBER
C1161M11	2113956B91	CAP,FXD,1UF,+10%,-10%,16V-DC,0603,X5R,-55DEG CMIN,85DEG CMAX,PB	C1312M3	2113956A51	CAP,FXD,1UF,+10%,-10%,6.3V-DC,0402,X5R,-55DEG CMIN,85DEG CMAX,P	C1326M3	2113945Y02	CAP:X7R,0402,10%,16V,0.1UF	C1418M17	2113944C08	CAP,CHIP,1.2PF,.25PF+/-,50V-DC,0603,C0G,-55DEG CMIN,125DEG CMA
C1165M11	2113945Y02	CAP:X7R,0402,10%,16V,0.1UF	C1313M3	2187893N01	CAP,CER,1UF,20PF+/-,+20%,-20%,6.3V-DC,0402,+/-15%,-55DEG CMIN,85	C1327M3	2113944A28	CAP,CHIP,18PF,+5%,-5%,50V-DC,0402,C0G,-55DEG CMIN,125DEG CMAX,P	C1419M17	2113944C67	CAP,FXD,1.5PF,.1PF+/-,50V-DC,0603,C0G,-55DEG CMIN,125DEG CMAX
C1301M3	2172180Y01	CAP,FXD,2.2UF,+20%,-20%,6.3V-DC,0402,X5R,-55DEG CMIN,85DEG CMAX	C1314M3	2113944M20	CAP,FXD,12PF,+2%,-2%,50V-DC,0603,C0G,-55DEG CMIN,125DEG CMAX,PB	C1328M3	2113945Y02	CAP:X7R,0402,10%,16V,0.1UF	C1424M17	2113742C09	CAP,THIN FILM,.9PF,100V-DC,SM,0603,-55DEG CMIN,125DEG CMAX,NI
C1302M3	2113944A21	CAP,CHIP,6.8PF,.5PF+/-,50V-DC,0402,C0G,-55DEG CMIN,125DEG CMAX	C1315M3	2175389H01	CAP,.5PF,CAP,.5PF,CHIP,0402,CERAMIC,50V	C1329M3	2113945Y02	CAP:X7R,0402,10%,16V,0.1UF	C1425M17	2113944C12	CAP,CHIP,1.8PF,.25PF+/-,50V-DC,0603,C0G,-55DEG CMIN,125DEG CMA
C1303M3	2113956A51	CAP,FXD,1UF,+10%,-10%,6.3V-DC,0402,X5R,-55DEG CMIN,85DEG CMAX,P	C1317M3	2188881Y12	CAP,CER,CHIP,1.8PF,.1PF+/-,16V-DC,0402,NP0,-55DEG CMIN,85DEG C	C1330M3	2113945Y02	CAP:X7R,0402,10%,16V,0.1UF	C200M12	2113945B02	CAP,CHIP,.01UF,+10%,-10%,25V-DC,0402,X7R,-55DEG CMIN,125DEG CMA
C1304M3	2113944A26	CAP,CHIP,12PF,+5%,-5%,50V-DC,0402,C0G,-55DEG CMIN,125DEG CMAX,P	C1318M3	2113944A13	CAP,CHIP,3.3PF,.25PF+/-,50V-DC,0402,C0G,-55DEG CMIN,125DEG CMA	C1331M3	2113945Y02	CAP:X7R,0402,10%,16V,0.1UF	C201M12	2188468Y01	CAP,CHIP,1UF,+10%,-10%,25V-DC,0805,X7R
C1305M3	2113945B02	CAP,CHIP,.01UF,+10%,-10%,25V-DC,0402,X7R,-55DEG CMIN,125DEG CMA	C1319M3	2113945Y02	CAP:X7R,0402,10%,16V,0.1UF	C1332M3	2113945Y02	CAP:X7R,0402,10%,16V,0.1UF	C202M12	2188468Y01	CAP,CHIP,1UF,+10%,-10%,25V-DC,0805,X7R
C1306M3	2187893N01	CAP,CER,1UF,20PF+/-,+20%,-20%,6.3V-DC,0402,+/-15%,-55DEG CMIN,85	C1320M3	2113944A28	CAP,CHIP,18PF,+5%,-5%,50V-DC,0402,C0G,-55DEG CMIN,125DEG CMAX,P	C1333M3	2113945Y02	CAP:X7R,0402,10%,16V,0.1UF	C203M12	2188468Y01	CAP,CHIP,1UF,+10%,-10%,25V-DC,0805,X7R
C1307M3	2113944A26	CAP,CHIP,12PF,+5%,-5%,50V-DC,0402,C0G,-55DEG CMIN,125DEG CMAX,P	C1321M3	2113944A29	CAP,CHIP,22PF,+5%,-5%,50V-DC,0402,C0G,-55DEG CMIN,125DEG CMAX,P	C1334M3	2113945Y02	CAP:X7R,0402,10%,16V,0.1UF	C204M12	2113955D35	CAP,FXD,4.7UF,+10%,-10%,16V-DC,1206,X7R,-55DEG CMIN,125DEG CMAX
C1308M3	2113945A09	CAP,CHIP,1000PF,+10%,-10%,50V-DC,0402,X7R,-55DEG CMIN,125DEG CM	C1322M3	2113944A29	CAP,CHIP,22PF,+5%,-5%,50V-DC,0402,C0G,-55DEG CMIN,125DEG CMAX,P	C1335M3	2113945Y02	CAP:X7R,0402,10%,16V,0.1UF	C205M12	2113955D35	CAP,FXD,4.7UF,+10%,-10%,16V-DC,1206,X7R,-55DEG CMIN,125DEG CMAX
C1309M3	2113944A26	CAP,CHIP,12PF,+5%,-5%,50V-DC,0402,C0G,-55DEG CMIN,125DEG CMAX,P	C1323M3	2113944A29	CAP,CHIP,22PF,+5%,-5%,50V-DC,0402,C0G,-55DEG CMIN,125DEG CMAX,P	C1336M3	2113945Y02	CAP:X7R,0402,10%,16V,0.1UF	C206M12	2113945B02	CAP,CHIP,.01UF,+10%,-10%,25V-DC,0402,X7R,-55DEG CMIN,125DEG CMA
C1310M3	2187893N01	CAP,CER,1UF,20PF+/-,+20%,-20%,6.3V-DC,0402,+/-15%,-55DEG CMIN,85	C1324M3	2115153H03	CAP,CER,CHIP,1PF,.1PF+/-,+1%,-1%,50V-DC,0402,C0G	C1337M3	2113944A28	CAP,CHIP,18PF,+5%,-5%,50V-DC,0402,C0G,-55DEG CMIN,125DEG CMAX,P	C207M12	2113956B91	CAP,FXD,1UF,+10%,-10%,16V-DC,0603,X5R,-55DEG CMIN,85DEG CMAX,PB
						C1338M3	21012043007	CAP,.8PF,CAP,.5PF,CHIP,0402,CERAMIC,50V	C208M12	2113956B91	CAP,FXD,1UF,+10%,-10%,16V-DC,0603,X5R,-55DEG CMIN,85DEG CMAX,PB
						C1376M3	2113944A25	CAP,CHIP,10PF,.5PF+/-,50V-DC,0402,C0G,-55DEG CMIN,125DEG CMAX	C209M12	2113956B91	CAP,FXD,1UF,+10%,-10%,16V-DC,0603,X5R,-55DEG CMIN,85DEG CMAX,PB
						C1411M17	2113944C36	CAP,CHIP,33PF,+5%,-5%,50V-DC,0603,C0G,-55DEG CMIN,125DEG CMAX,P			
						C1413M17	2113944C10	CAP,CHIP,1.5PF,.25PF+/-,50V-DC,0603,C0G,-55DEG CMIN,125DEG CMA			

Ref. Des.	Part Number	Description
C2100M2	2113944A46	CAP,CHIP,330PF,+5%,-5%,50V-DC,0402,C0G,-55DEG CMIN,125DEG CMAX
C21001M2	2113944A46	CAP,CHIP,330PF,+5%,-5%,50V-DC,0402,C0G,-55DEG CMIN,125DEG CMAX
C21002M2	2113944A46	CAP,CHIP,330PF,+5%,-5%,50V-DC,0402,C0G,-55DEG CMIN,125DEG CMAX
C21003M2	2113944A46	CAP,CHIP,330PF,+5%,-5%,50V-DC,0402,C0G,-55DEG CMIN,125DEG CMAX
C2104M2	2113946B04	CAP,CHIP,.1UF,+10%,-10%,10V-DC,0402,X5R,-55DEG CMIN,85DEG CMAX
C210M12	2113956B91	CAP,FXD,1UF,+10%,-10%,16V-DC,0603,X5R,-55DEG CMIN,85DEG CMAX,PB
C2114M2	2113946B04	CAP,CHIP,.1UF,+10%,-10%,10V-DC,0402,X5R,-55DEG CMIN,85DEG CMAX
C2115M2	NOTPLACED	64AM DUMMY PART NUMBER
C2116M2	NOTPLACED	64AM DUMMY PART NUMBER
C2117M2	NOTPLACED	64AM DUMMY PART NUMBER
C2126M2	2113944A46	CAP,CHIP,330PF,+5%,-5%,50V-DC,0402,C0G,-55DEG CMIN,125DEG CMAX
C2127M2	2113944A46	CAP,CHIP,330PF,+5%,-5%,50V-DC,0402,C0G,-55DEG CMIN,125DEG CMAX
C2128M2	2113944A46	CAP,CHIP,330PF,+5%,-5%,50V-DC,0402,C0G,-55DEG CMIN,125DEG CMAX

Ref. Des.	Part Number	Description
C2129M2	2113944A46	CAP,CHIP,330PF,+5%,-5%,50V-DC,0402,C0G,-55DEG CMIN,125DEG CMAX
C212M12	2113946D07	CAP,CHIP,4.7UF,+10%,-10%,6.3V-DC,0603,X5R,-55DEG CMIN,85DEG CMA
C2130M2	2113944A46	CAP,CHIP,330PF,+5%,-5%,50V-DC,0402,C0G,-55DEG CMIN,125DEG CMAX
C213M12	2113944A46	CAP,CHIP,330PF,+5%,-5%,50V-DC,0402,C0G,-55DEG CMIN,125DEG CMAX
C214M12	2113944A31	CAP,CHIP,33PF,+5%,-5%,50V-DC,0402,C0G,-55DEG CMIN,125DEG CMAX,P
C215M12	2113944A46	CAP,CHIP,330PF,+5%,-5%,50V-DC,0402,C0G,-55DEG CMIN,125DEG CMAX
C216M12	2113944A31	CAP,CHIP,33PF,+5%,-5%,50V-DC,0402,C0G,-55DEG CMIN,125DEG CMAX,P
C217M12	2113956B91	CAP,FXD,1UF,+10%,-10%,16V-DC,0603,X5R,-55DEG CMIN,85DEG CMAX,PB
C2201M2	2113946B04	CAP,CHIP,.1UF,+10%,-10%,10V-DC,0402,X5R,-55DEG CMIN,85DEG CMAX
C2202M2	2113946B04	CAP,CHIP,.1UF,+10%,-10%,10V-DC,0402,X5R,-55DEG CMIN,85DEG CMAX
C2203M2	2113946B04	CAP,CHIP,.1UF,+10%,-10%,10V-DC,0402,X5R,-55DEG CMIN,85DEG CMAX
C2211M2	2113946B04	CAP,CHIP,.1UF,+10%,-10%,10V-DC,0402,X5R,-55DEG CMIN,85DEG CMAX
C2212M2	2113946B04	CAP,CHIP,.1UF,+10%,-10%,10V-DC,0402,X5R,-55DEG CMIN,85DEG CMAX

Ref. Des.	Part Number	Description
C2213M2	2113946B04	CAP,CHIP,.1UF,+10%,-10%,10V-DC,0402,X5R,-55DEG CMIN,85DEG CMAX
C2214M2	2113946B04	CAP,CHIP,.1UF,+10%,-10%,10V-DC,0402,X5R,-55DEG CMIN,85DEG CMAX
C2215M2	2113946B04	CAP,CHIP,.1UF,+10%,-10%,10V-DC,0402,X5R,-55DEG CMIN,85DEG CMAX
C2216M2	2113946B04	CAP,CHIP,.1UF,+10%,-10%,10V-DC,0402,X5R,-55DEG CMIN,85DEG CMAX
C2221M2	2113946B04	CAP,CHIP,.1UF,+10%,-10%,10V-DC,0402,X5R,-55DEG CMIN,85DEG CMAX
C2222M2	2113946B04	CAP,CHIP,.1UF,+10%,-10%,10V-DC,0402,X5R,-55DEG CMIN,85DEG CMAX
C2223M2	2113944A40	CAP,CHIP,100PF,+5%,-5%,50V-DC,0402,C0G,-55DEG CMIN,125DEG CMAX
C2301M13	2113944C45	CAP,CHIP,100PF,+5%,-5%,50V-DC,0603,C0G,-55DEG CMIN,125DEG CMAX
C2302M13	2113944M26	CAP,FXD,22PF,+2%,-2%,50V-DC,0603,C0G,-55DEG CMIN,125DEG CMAX,PB
C2303M13	2113944A36	CAP,CHIP,68PF,+5%,-5%,50V-DC,0402,C0G,-55DEG CMIN,125DEG CMAX,P
C2304M13	2113944C36	CAP,CHIP,33PF,+5%,-5%,50V-DC,0603,C0G,-55DEG CMIN,125DEG CMAX,P
C2305M13	2115153H56	CAP,CER CHIP,91PF,50V-DC,0402,C0G
C2306M13	2113944A31	CAP,CHIP,33PF,+5%,-5%,50V-DC,0402,C0G,-55DEG CMIN,125DEG CMAX,P

Ref. Des.	Part Number	Description
C2307M13	2113944C14	CAP,CHIP,2.2PF,.25PF+/-,50V-DC,0603,C0G,-55DEG CMIN,125DEG CMA
C2308M13	2113944C63	CAP,FXD,1PF,.1PF+/-,50V-DC,0603,C0G,-55DEG CMIN,125DEG CMAX,PB
C2309M13	2113946K02	CAP,CHIP,.1UF,+80%,-20%,16V-DC,0402,Y5V,-30DEG CMIN,85DEG CMAX
C2401M2	NOTPLACED	64AM DUMMY PART NUMBER
C2402M2	NOTPLACED	64AM DUMMY PART NUMBER
C2403M2	NOTPLACED	64AM DUMMY PART NUMBER
C2404M2	NOTPLACED	64AM DUMMY PART NUMBER
C2806M1	NOTPLACED	64AM DUMMY PART NUMBER
C3006M22	2113944A31	CAP,CHIP,33PF,+5%,-5%,50V-DC,0402,C0G,-55DEG CMIN,125DEG CMAX,P
C3007M22	2113944A31	CAP,CHIP,33PF,+5%,-5%,50V-DC,0402,C0G,-55DEG CMIN,125DEG CMAX,P
C3012M22	2113946K02	CAP,CHIP,.1UF,+80%,-20%,16V-DC,0402,Y5V,-30DEG CMIN,85DEG CMAX
C3013M22	2113946K02	CAP,CHIP,.1UF,+80%,-20%,16V-DC,0402,Y5V,-30DEG CMIN,85DEG CMAX
C3014M22	2113944M06	CAP,FXD,3.3PF,.1PF+/-,50V-DC,0603,C0G,-55DEG CMIN,125DEG CMAX
C3015M22	2113944M08	CAP,FXD,3.9PF,.1PF+/-,50V-DC,0603,C0G,-55DEG CMIN,125DEG CMAX
C3016M22	2113944M02	CAP,FXD,2.2PF,.1PF+/-,50V-DC,0603,C0G,-55DEG CMIN,125DEG CMAX
C3017M22	2113944M04	CAP,FXD,2.7PF,.1PF+/-,50V-DC,0603,C0G,-55DEG CMIN,125DEG CMAX



Ref. Des.	Part Number	Description	Ref. Des.	Part Number	Description	Ref. Des.	Part Number	Description	Ref. Des.	Part Number	Description
C3022M22	21012043014	CAP,CER,1.8PF,.05PF+/-,50V-DC,C0G,CAPACITOR,CERAMIC,1.8PF,5	C3054M22	NOTPLACED	64AM DUMMY PART NUMBER	C405M20	2113944A31	CAP,CHIP,33PF,+5%,-5%,50V-DC,0402,C0G,-55DEG CMIN,125DEG CMAX,P	C424M20	2113944A31	CAP,CHIP,33PF,+5%,-5%,50V-DC,0402,C0G,-55DEG CMIN,125DEG CMAX,P
C3023M22	2115153H12	CAP,CERAMIC CHIP,2.4PF,.1PF+/-,+1%,-.1%,50V-DC,0402,C0G,CAP,	C3055M22	2115153H12	CAP,CERAMIC CHIP,2.4PF,.1PF+/-,+1%,-.1%,50V-DC,0402,C0G,CAP,	C406M20	2113944A31	CAP,CHIP,33PF,+5%,-5%,50V-DC,0402,C0G,-55DEG CMIN,125DEG CMAX,P	C425M20	2115153H25	CAP, CERAMIC, COG
C3024M22	21012043007	CAP,CER,.8PF,.05PF+/-,50V-DC,C0G,CAPACITOR,CERAMIC,.8PF,50	C3056M22	2115153H16	CAP, CERAMIC, COG	C407M20	2113944A31	CAP,CHIP,33PF,+5%,-5%,50V-DC,0402,C0G,-55DEG CMIN,125DEG CMAX,P	C426M20	2113944A63	CAP,FXD,1PF,.25PF+/-,50V-DC,0402,C0G,-55DEG CMIN,125DEG CMAX,P
C3025M22	2115153H10	CAP, CERAMIC, COG	C3057M22	2115153H15	CAP,CER CHIP,3.3PF,.1PF+/-,+1%,-.1%,50V-DC,0402,C0G,CAP, CERA	C412M20	2115153H26	CAP,CER CHIP,9.1PF,.1PF+/-,+1%,-.1%,50V-DC,0402,C0G,CAP, CERA	C427M20	2113946D07	CAP,CHIP,4.7UF,+10%,-10%,6.3V-DC,0603,X5R,-55DEG CMIN,85DEG CMA
C3026M22	2115153H12	CAP,CERAMIC CHIP,2.4PF,.1PF+/-,+1%,-.1%,50V-DC,0402,C0G,CAP,	C3065M22	2113944A31	CAP,CHIP,33PF,+5%,-5%,50V-DC,0402,C0G,-55DEG CMIN,125DEG CMAX,P	C413M20	2113944A33	CAP,CHIP,47PF,+5%,-5%,50V-DC,0402,C0G,-55DEG CMIN,125DEG CMAX,P	C428M20	2113946D07	CAP,CHIP,4.7UF,+10%,-10%,6.3V-DC,0603,X5R,-55DEG CMIN,85DEG CMA
C3027M22	2115153H17	CAP,FXD,3.9PF,.1PF+/-,50V-DC,0402,C0G,CAP,CERAMIC, COG	C3067M22	2113946B04	CAP,CHIP,.1UF,+10%,-10%,10V-DC,0402,X5R,-55DEG CMIN,85DEG CMAX	C416M20	2113944A31	CAP,CHIP,33PF,+5%,-5%,50V-DC,0402,C0G,-55DEG CMIN,125DEG CMAX,P	C429M20	2113944A31	CAP,CHIP,33PF,+5%,-5%,50V-DC,0402,C0G,-55DEG CMIN,125DEG CMAX,P
C3028M22	2115153H12	CAP,CERAMIC CHIP,2.4PF,.1PF+/-,+1%,-.1%,50V-DC,0402,C0G,CAP,	C3068M22	2113944A31	CAP,CHIP,33PF,+5%,-5%,50V-DC,0402,C0G,-55DEG CMIN,125DEG CMAX,P	C417M20	2113944A31	CAP,CHIP,33PF,+5%,-5%,50V-DC,0402,C0G,-55DEG CMIN,125DEG CMAX,P	C430M20	2115153H44	CAP,FXD,30PF,+1%,-1%,50V-DC,0402,C0G
C3029M22	2115153H17	CAP,FXD,3.9PF,.1PF+/-,50V-DC,0402,C0G,CAP,CERAMIC, COG	C3069M22	2115153H33	CAP,CER CHIP,9PF,.1PF+/-,+1%,-.1%,50V-DC,0402,C0G,CAP,CERAMI	C418M20	2113944A31	CAP,CHIP,33PF,+5%,-5%,50V-DC,0402,C0G,-55DEG CMIN,125DEG CMAX,P	C431M20	2113944A31	CAP,CHIP,33PF,+5%,-5%,50V-DC,0402,C0G,-55DEG CMIN,125DEG CMAX,P
C3042M22	2113944A31	CAP,CHIP,33PF,+5%,-5%,50V-DC,0402,C0G,-55DEG CMIN,125DEG CMAX,P	C4005M2	2113946B04	CAP,CHIP,.1UF,+10%,-10%,10V-DC,0402,X5R,-55DEG CMIN,85DEG CMAX	C419M20	2113944A31	CAP,CHIP,33PF,+5%,-5%,50V-DC,0402,C0G,-55DEG CMIN,125DEG CMAX,P	C432M20	2115153H20	CAP,FXD,5.1PF,.1PF+/-,+2%,-2%,50V-DC,0402,C0G,CAP,CERAMIC, CO
C3045M22	2113944A31	CAP,CHIP,33PF,+5%,-5%,50V-DC,0402,C0G,-55DEG CMIN,125DEG CMAX,P	C4006M2	2113946B04	CAP,CHIP,.1UF,+10%,-10%,10V-DC,0402,X5R,-55DEG CMIN,85DEG CMAX	C421M20	2113946D07	CAP,CHIP,4.7UF,+10%,-10%,6.3V-DC,0603,X5R,-55DEG CMIN,85DEG CMA	C433M20	2113944A63	CAP,FXD,1PF,.25PF+/-,50V-DC,0402,C0G,-55DEG CMIN,125DEG CMAX,P
C3046M22	2113944A31	CAP,CHIP,33PF,+5%,-5%,50V-DC,0402,C0G,-55DEG CMIN,125DEG CMAX,P	C4007M2	2113946B04	CAP,CHIP,.1UF,+10%,-10%,10V-DC,0402,X5R,-55DEG CMIN,85DEG CMAX	C422M20	2113944A31	CAP,CHIP,33PF,+5%,-5%,50V-DC,0402,C0G,-55DEG CMIN,125DEG CMAX,P	C434M20	2113946D07	CAP,CHIP,4.7UF,+10%,-10%,6.3V-DC,0603,X5R,-55DEG CMIN,85DEG CMA
C3049M22	2113946K02	CAP,CHIP,.1UF,+80%,-20%,16V-DC,0402,Y5V,-30DEG CMIN,85DEG CMAX	C402M20	2113944A31	CAP,CHIP,33PF,+5%,-5%,50V-DC,0402,C0G,-55DEG CMIN,125DEG CMAX,P	C423M20	2115153H44	CAP,FXD,30PF,+1%,-1%,50V-DC,0402,C0G	C484M20	2115153H03	CAP,CER CHIP,1PF,.1PF+/-,+1%,-.1%,50V-DC,0402,C0G
C3050M22	2113944M02	CAP,FXD,2.2PF,.1PF+/-,50V-DC,0603,C0G,-55DEG CMIN,125DEG CMAX	C404M20	2113944A31	CAP,CHIP,33PF,+5%,-5%,50V-DC,0402,C0G,-55DEG CMIN,125DEG CMAX,P				C485M20	2113944A63	CAP,FXD,1PF,.25PF+/-,50V-DC,0402,C0G,-55DEG CMIN,125DEG CMAX,P
C3051M22	2175662M20	CAP,CER,2.4PF,.1PF+/-,100V-DC,0603,COG,CAP 2.4PF, +/- 0.1PF, CERAM							C487M20	2113944A31	CAP,CHIP,33PF,+5%,-5%,50V-DC,0402,C0G,-55DEG CMIN,125DEG CMAX,P

Ref. Des.	Part Number	Description
C488M20	2113944V13	CAP,FXD,2.7PF,.1PF+/-,50V-DC,0402,C0G,-55DEG CMIN,125DEG CMAX
C490M20	2113944V07	CAP,FXD,1.5PF,.1PF+/-,50V-DC,0402,C0G,-55DEG CMIN,125DEG CMAX
C492M20	2113944V13	CAP,FXD,2.7PF,.1PF+/-,50V-DC,0402,C0G,-55DEG CMIN,125DEG CMAX
C500M21	2113945B05	CAP,FXD,.033UF,+10%,-10%,25V-DC,0402,X7R,-55DEG CMIN,125DEG CMA
C501M21	2113944A32	CAP,CHIP,39PF,+5%,-5%,50V-DC,0402,C0G,-55DEG CMIN,125DEG CMAX,P
C502M21	2113945B05	CAP,FXD,.033UF,+10%,-10%,25V-DC,0402,X7R,-55DEG CMIN,125DEG CMA
C504M21	2113944A70	CAP,FXD,6PF,.5PF+/-,50V-DC,0402,C0G,-55DEG CMIN,125DEG CMAX,PB
C505M21	NOTPLACED	64AM DUMMY PART NUMBER
C506M21	2113944A32	CAP,CHIP,39PF,+5%,-5%,50V-DC,0402,C0G,-55DEG CMIN,125DEG CMAX,P
C507M21	2113945B05	CAP,FXD,.033UF,+10%,-10%,25V-DC,0402,X7R,-55DEG CMIN,125DEG CMA
C508M21	2113946D07	CAP,CHIP,4.7UF,+10%,-10%,6.3V-DC,0603,X5R,-55DEG CMIN,85DEG CMA
C509M21	2113945B05	CAP,FXD,.033UF,+10%,-10%,25V-DC,0402,X7R,-55DEG CMIN,125DEG CMA
C510M21	2113944A32	CAP,CHIP,39PF,+5%,-5%,50V-DC,0402,C0G,-55DEG CMIN,125DEG CMAX,P
C511M21	2113945B05	CAP,FXD,.033UF,+10%,-10%,25V-DC,0402,X7R,-55DEG CMIN,125DEG CMA

Ref. Des.	Part Number	Description
C512M21	2113946D07	CAP,CHIP,4.7UF,+10%,-10%,6.3V-DC,0603,X5R,-55DEG CMIN,85DEG CMA
C514M21	NOTPLACED	64AM DUMMY PART NUMBER
C515M21	2113944A14	CAP,CHIP,3.6PF,.25PF+/-,50V-DC,0402,C0G,-55DEG CMIN,125DEG CMA
C516M21	2113944M30	CAP,FXD,33PF,+2%,-2%,50V-DC,0603,C0G,-55DEG CMIN,125DEG CMAX,PB
C532M21	2113944A32	CAP,CHIP,39PF,+5%,-5%,50V-DC,0402,C0G,-55DEG CMIN,125DEG CMAX,P
C533M21	2115153H52	CAP,FXD,62PF,+1%,-1%,50V-DC,0402,C0G
C550M21	NOTPLACED	64AM DUMMY PART NUMBER
C551M21	NOTPLACED	64AM DUMMY PART NUMBER
C601M19	2113945B02	CAP,CHIP,.01UF,+10%,-10%,25V-DC,0402,X7R,-55DEG CMIN,125DEG CMA
C602M19	2113945B02	CAP,CHIP,.01UF,+10%,-10%,25V-DC,0402,X7R,-55DEG CMIN,125DEG CMA
C603M19	2113945B02	CAP,CHIP,.01UF,+10%,-10%,25V-DC,0402,X7R,-55DEG CMIN,125DEG CMA
C604M19	2113945B02	CAP,CHIP,.01UF,+10%,-10%,25V-DC,0402,X7R,-55DEG CMIN,125DEG CMA
C605M19	2113944A15	CAP,CHIP,3.9PF,.25PF+/-,50V-DC,0402,C0G,-55DEG CMIN,125DEG CMA
C606M19	2113946B04	CAP,CHIP,.1UF,+10%,-10%,10V-DC,0402,X5R,-55DEG CMIN,85DEG CMAX
C607M19	2113944A40	CAP,CHIP,100PF,+5%,-5%,50V-DC,0402,C0G,-55DEG CMIN,125DEG CMAX

Ref. Des.	Part Number	Description
C608M19	2113944A12	CAP,CHIP,3PF,.25PF+/-,50V-DC,0402,C0G,-55DEG CMIN,125DEG CMAX
C609M19	2113944A30	CAP,CHIP,27PF,+5%,-5%,50V-DC,0402,C0G,-55DEG CMIN,125DEG CMAX,P
C6104M6	2113946B04	CAP,CHIP,.1UF,+10%,-10%,10V-DC,0402,X5R,-55DEG CMIN,85DEG CMAX
C6105M6	2113946B04	CAP,CHIP,.1UF,+10%,-10%,10V-DC,0402,X5R,-55DEG CMIN,85DEG CMAX
C6106M6	2113946B04	CAP,CHIP,.1UF,+10%,-10%,10V-DC,0402,X5R,-55DEG CMIN,85DEG CMAX
C6107M6	2113946B04	CAP,CHIP,.1UF,+10%,-10%,10V-DC,0402,X5R,-55DEG CMIN,85DEG CMAX
C6108M6	2113946B04	CAP,CHIP,.1UF,+10%,-10%,10V-DC,0402,X5R,-55DEG CMIN,85DEG CMAX
C6109M6	2113946B04	CAP,CHIP,.1UF,+10%,-10%,10V-DC,0402,X5R,-55DEG CMIN,85DEG CMAX
C610M19	2113944A40	CAP,CHIP,100PF,+5%,-5%,50V-DC,0402,C0G,-55DEG CMIN,125DEG CMAX
C6110M6	2113946B04	CAP,CHIP,.1UF,+10%,-10%,10V-DC,0402,X5R,-55DEG CMIN,85DEG CMAX
C6111M6	2113946B04	CAP,CHIP,.1UF,+10%,-10%,10V-DC,0402,X5R,-55DEG CMIN,85DEG CMAX
C6112M6	2113946B04	CAP,CHIP,.1UF,+10%,-10%,10V-DC,0402,X5R,-55DEG CMIN,85DEG CMAX
C6113M6	2113946B04	CAP,CHIP,.1UF,+10%,-10%,10V-DC,0402,X5R,-55DEG CMIN,85DEG CMAX
C6114M6	2113946B04	CAP,CHIP,.1UF,+10%,-10%,10V-DC,0402,X5R,-55DEG CMIN,85DEG CMAX

Ref. Des.	Part Number	Description
C6115M6	2113946B04	CAP,CHIP,.1UF,+10%,-10%,10V-DC,0402,X5R,-55DEG CMIN,85DEG CMAX
C611M19	2113944A40	CAP,CHIP,100PF,+5%,-5%,50V-DC,0402,C0G,-55DEG CMIN,125DEG CMAX
C612M19	2113945B02	CAP,CHIP,.01UF,+10%,-10%,25V-DC,0402,X7R,-55DEG CMIN,125DEG CMA
C613M19	2113944A40	CAP,CHIP,100PF,+5%,-5%,50V-DC,0402,C0G,-55DEG CMIN,125DEG CMAX
C614M19	2113945B02	CAP,CHIP,.01UF,+10%,-10%,25V-DC,0402,X7R,-55DEG CMIN,125DEG CMA
C6155M6	NOTPLACED	64AM DUMMY PART NUMBER
C6156M6	NOTPLACED	64AM DUMMY PART NUMBER
C615M19	2113944A42	CAP,CHIP,150PF,+5%,-5%,50V-DC,0402,C0G,-55DEG CMIN,125DEG CMAX
C616M19	2113945A11	CAP,CHIP,2200PF,+10%,-10%,50V-DC,0402
C617M19	2113946B04	CAP,CHIP,.1UF,+10%,-10%,10V-DC,0402,X5R,-55DEG CMIN,85DEG CMAX
C618M19	2113944A31	CAP,CHIP,33PF,+5%,-5%,50V-DC,0402,C0G,-55DEG CMIN,125DEG CMAX,P
C619M19	2113944A35	CAP,CHIP,62PF,+5%,-5%,50V-DC,0402,C0G,-55DEG CMIN,125DEG CMAX,P
C6201M6	2113944A40	CAP,CHIP,100PF,+5%,-5%,50V-DC,0402,C0G,-55DEG CMIN,125DEG CMAX
C6202M6	2113945A09	CAP,CHIP,1000PF,+10%,-10%,50V-DC,0402,X7R,-55DEG CMIN,125DEG CM

Ref. Des.	Part Number	Description	Ref. Des.	Part Number	Description	Ref. Des.	Part Number	Description	Ref. Des.	Part Number	Description
C6203M6	2113946B04	CAP,CHIP,.1UF,+10%,-10%,10V-DC,0402,X5R,-55DEG CMIN,85DEG CMAX	C6305M6	2113946S35	CAP,CHIP,1UF,+10%,-10%,16V-DC,0603,X5R,-55DEG CMIN,85DEG CMAX,P	C638M19	2113945A12	CAP,CHIP,3300PF,+10%,-10%,50V-DC,0402,X7R,-55DEG CMIN,125DEG CM	C6413M6	2113946B04	CAP,CHIP,.1UF,+10%,-10%,10V-DC,0402,X5R,-55DEG CMIN,85DEG CMAX
C620M19	2113946B04	CAP,CHIP,.1UF,+10%,-10%,10V-DC,0402,X5R,-55DEG CMIN,85DEG CMAX	C6306M6	2113946S35	CAP,CHIP,1UF,+10%,-10%,16V-DC,0603,X5R,-55DEG CMIN,85DEG CMAX,P	C639M19	2113945B02	CAP,CHIP,.01UF,+10%,-10%,25V-DC,0402,X7R,-55DEG CMIN,125DEG CMA	C6414M6	2113946B04	CAP,CHIP,.1UF,+10%,-10%,10V-DC,0402,X5R,-55DEG CMIN,85DEG CMAX
C621M19	2113946B04	CAP,CHIP,.1UF,+10%,-10%,10V-DC,0402,X5R,-55DEG CMIN,85DEG CMAX	C6308M6	2113946B04	CAP,CHIP,.1UF,+10%,-10%,10V-DC,0402,X5R,-55DEG CMIN,85DEG CMAX	C6401M6	2113946B04	CAP,CHIP,.1UF,+10%,-10%,10V-DC,0402,X5R,-55DEG CMIN,85DEG CMAX	C6415M6	NOTPLACED	64AM DUMMY PART NUMBER
C622M19	2113946C07	CAP,FXD,.33UF,+10%,-10%,10V-DC,0603,X5R,-55DEG CMIN,85DEG CMAX	C6309M6	2113946B04	CAP,CHIP,.1UF,+10%,-10%,10V-DC,0402,X5R,-55DEG CMIN,85DEG CMAX	C6402M6	2113956A51	CAP,FXD,1UF,+10%,-10%,6.3V-DC,0402,X5R,-55DEG CMIN,85DEG CMAX,P	C6416M6	2113945B04	CAP,FXD,.022UF,+10%,-10%,25V-DC,0402,X7R,-55DEG CMIN,125DEG CMA
C623M19	2113945B02	CAP,CHIP,.01UF,+10%,-10%,25V-DC,0402,X7R,-55DEG CMIN,125DEG CMA	C630M19	2113946B04	CAP,CHIP,.1UF,+10%,-10%,10V-DC,0402,X5R,-55DEG CMIN,85DEG CMAX	C6403M6	2113946B04	CAP,CHIP,.1UF,+10%,-10%,10V-DC,0402,X5R,-55DEG CMIN,85DEG CMAX	C6417M6	2113945B04	CAP,FXD,.022UF,+10%,-10%,25V-DC,0402,X7R,-55DEG CMIN,125DEG CMA
C624M19	2113946C07	CAP,FXD,.33UF,+10%,-10%,10V-DC,0603,X5R,-55DEG CMIN,85DEG CMAX	C6310M6	2113946B04	CAP,CHIP,.1UF,+10%,-10%,10V-DC,0402,X5R,-55DEG CMIN,85DEG CMAX	C6404M6	2113946B04	CAP,CHIP,.1UF,+10%,-10%,10V-DC,0402,X5R,-55DEG CMIN,85DEG CMAX	C6418M6	2113946B04	CAP,CHIP,.1UF,+10%,-10%,10V-DC,0402,X5R,-55DEG CMIN,85DEG CMAX
C625M19	2115153H39	CAP,FXD,18PF,50V-DC,0402,C0G	C6311M6	2113946B04	CAP,CHIP,.1UF,+10%,-10%,10V-DC,0402,X5R,-55DEG CMIN,85DEG CMAX	C6405M6	2113946B04	CAP,CHIP,.1UF,+10%,-10%,10V-DC,0402,X5R,-55DEG CMIN,85DEG CMAX	C6419M6	2113946B04	CAP,CHIP,.1UF,+10%,-10%,10V-DC,0402,X5R,-55DEG CMIN,85DEG CMAX
C626M19	2113945A09	CAP,CHIP,1000PF,+10%,-10%,50V-DC,0402,X7R,-55DEG CMIN,125DEG CM	C631M19	2115153H31	CAP,FXD,7PF,.1PF,+/-,50V-DC,0402,C0G,-55DEG CMIN,125DEG CMAX,CA	C6406M6	2113946B04	CAP,CHIP,.1UF,+10%,-10%,10V-DC,0402,X5R,-55DEG CMIN,85DEG CMAX	C641M19	2113944A31	CAP,CHIP,33PF,+5%,-5%,50V-DC,0402,C0G,-55DEG CMIN,125DEG CMAX,P
C627M19	2113945A09	CAP,CHIP,1000PF,+10%,-10%,50V-DC,0402,X7R,-55DEG CMIN,125DEG CM	C632M19	2113944A40	CAP,CHIP,100PF,+5%,-5%,50V-DC,0402,C0G,-55DEG CMIN,125DEG CMAX	C6407M6	2113946B04	CAP,CHIP,.1UF,+10%,-10%,10V-DC,0402,X5R,-55DEG CMIN,85DEG CMAX	C6420M6	2113945B04	CAP,FXD,.022UF,+10%,-10%,25V-DC,0402,X7R,-55DEG CMIN,125DEG CMA
C628M19	2113945B02	CAP,CHIP,.01UF,+10%,-10%,25V-DC,0402,X7R,-55DEG CMIN,125DEG CMA	C633M19	2113945B02	CAP,CHIP,.01UF,+10%,-10%,25V-DC,0402,X7R,-55DEG CMIN,125DEG CMA	C6408M6	2113946B04	CAP,CHIP,.1UF,+10%,-10%,10V-DC,0402,X5R,-55DEG CMIN,85DEG CMAX	C6421M6	2113946B04	CAP,CHIP,.1UF,+10%,-10%,10V-DC,0402,X5R,-55DEG CMIN,85DEG CMAX
C629M19	2113946B04	CAP,CHIP,.1UF,+10%,-10%,10V-DC,0402,X5R,-55DEG CMIN,85DEG CMAX	C634M19	2113946B04	CAP,CHIP,.1UF,+10%,-10%,10V-DC,0402,X5R,-55DEG CMIN,85DEG CMAX	C6409M6	2113946B04	CAP,CHIP,.1UF,+10%,-10%,10V-DC,0402,X5R,-55DEG CMIN,85DEG CMAX	C6422M6	2113946C02	CAP,CHIP,.22UF,+10%,-10%,10V-DC,0603,X5R,-55DEG CMIN,85DEG CMAX
C6301M6	2113946B04	CAP,CHIP,.1UF,+10%,-10%,10V-DC,0402,X5R,-55DEG CMIN,85DEG CMAX	C635M19	2113945B02	CAP,CHIP,.01UF,+10%,-10%,25V-DC,0402,X7R,-55DEG CMIN,125DEG CMA	C640M19	2113946B04	CAP,CHIP,.1UF,+10%,-10%,10V-DC,0402,X5R,-55DEG CMIN,85DEG CMAX	C6423M6	2113946B04	CAP,CHIP,.1UF,+10%,-10%,10V-DC,0402,X5R,-55DEG CMIN,85DEG CMAX
C6302M6	2113946B04	CAP,CHIP,.1UF,+10%,-10%,10V-DC,0402,X5R,-55DEG CMIN,85DEG CMAX	C636M19	2113946B04	CAP,CHIP,.1UF,+10%,-10%,10V-DC,0402,X5R,-55DEG CMIN,85DEG CMAX	C6410M6	2113946B04	CAP,CHIP,.1UF,+10%,-10%,10V-DC,0402,X5R,-55DEG CMIN,85DEG CMAX	C6424M6	2113944A40	CAP,CHIP,100PF,+5%,-5%,50V-DC,0402,C0G,-55DEG CMIN,125DEG CMAX
C6303M6	2113946B04	CAP,CHIP,.1UF,+10%,-10%,10V-DC,0402,X5R,-55DEG CMIN,85DEG CMAX	C637M19	2113946B04	CAP,CHIP,.1UF,+10%,-10%,10V-DC,0402,X5R,-55DEG CMIN,85DEG CMAX	C6411M6	2113946B04	CAP,CHIP,.1UF,+10%,-10%,10V-DC,0402,X5R,-55DEG CMIN,85DEG CMAX	C6425M6	2113944A40	CAP,CHIP,100PF,+5%,-5%,50V-DC,0402,C0G,-55DEG CMIN,125DEG CMAX
C6304M6	2113946B04	CAP,CHIP,.1UF,+10%,-10%,10V-DC,0402,X5R,-55DEG CMIN,85DEG CMAX				C6412M6	NOTPLACED	64AM DUMMY PART NUMBER			

Ref. Des.	Part Number	Description
C6426M6	2113945B02	CAP,CHIP,.01UF,+10%,-10%,25V-DC,0402,X7R,-55DEG CMIN,125DEG CMA
C6427M6	2113944A50	CAP,CHIP,680PF,+5%,-5%,50V-DC,0402,C0G,-55DEG CMIN,125DEG CMAX
C6428M6	2113944A40	CAP,CHIP,100PF,+5%,-5%,50V-DC,0402,C0G,-55DEG CMIN,125DEG CMAX
C6429M6	2113946B04	CAP,CHIP,.1UF,+10%,-10%,10V-DC,0402,X5R,-55DEG CMIN,85DEG CMAX
C642M19	2113944A48	CAP,CHIP,470PF,+5%,-5%,50V-DC,0402,C0G,-55DEG CMIN,125DEG CMAX
C6430M6	2113946B04	CAP,CHIP,.1UF,+10%,-10%,10V-DC,0402,X5R,-55DEG CMIN,85DEG CMAX
C6431M6	2113946B04	CAP,CHIP,.1UF,+10%,-10%,10V-DC,0402,X5R,-55DEG CMIN,85DEG CMAX
C6432M6	2113956B54	CAP,FXD,10UF,+20%,-20%,6.3V-DC,X5R,-55DEG CMIN,85DEG CMAX
C6433M6	2113946S35	CAP,CHIP,1UF,+10%,-10%,16V-DC,0603,X5R,-55DEG CMIN,85DEG CMAX,P
C6434M6	2113946L05	CAP,FXD,.33UF,+80%,-20%,16V-DC,0603,Y5V,-30DEG CMIN,85DEG CMAX
C6435M6	2113946S35	CAP,CHIP,1UF,+10%,-10%,16V-DC,0603,X5R,-55DEG CMIN,85DEG CMAX,P
C6436M6	2113946C08	CAP,FXD,.47UF,+10%,-10%,10V-DC,0603,X5R,-55DEG CMIN,85DEG CMAX
C6437M6	2113946C08	CAP,FXD,.47UF,+10%,-10%,10V-DC,0603,X5R,-55DEG CMIN,85DEG CMAX

Ref. Des.	Part Number	Description
C6438M6	2113944A40	CAP,CHIP,100PF,+5%,-5%,50V-DC,0402,C0G,-55DEG CMIN,125DEG CMAX
C643M19	2113944A48	CAP,CHIP,470PF,+5%,-5%,50V-DC,0402,C0G,-55DEG CMIN,125DEG CMAX
C644M19	2113944A11	CAP,CHIP,2.7PF,.25PF+/-,50V-DC,0402,C0G,-55DEG CMIN,125DEG CMA
C645M19	NOTPLACED	64AM DUMMY PART NUMBER
C646M19	2115153H32	CAP,FXD,8PF,.1PF+/-,.1%,-.1%,50V-DC,0402,C0G,CAP,CERAMIC, CO
C6501M6	2113946B04	CAP,CHIP,.1UF,+10%,-10%,10V-DC,0402,X5R,-55DEG CMIN,85DEG CMAX
C6502M6	2113946B04	CAP,CHIP,.1UF,+10%,-10%,10V-DC,0402,X5R,-55DEG CMIN,85DEG CMAX
C6503M6	2113944A46	CAP,CHIP,330PF,+5%,-5%,50V-DC,0402,C0G,-55DEG CMIN,125DEG CMAX
C6504M6	2113946B04	CAP,CHIP,.1UF,+10%,-10%,10V-DC,0402,X5R,-55DEG CMIN,85DEG CMAX
C6505M6	2113946B04	CAP,CHIP,.1UF,+10%,-10%,10V-DC,0402,X5R,-55DEG CMIN,85DEG CMAX
C6506M6	2113946B04	CAP,CHIP,.1UF,+10%,-10%,10V-DC,0402,X5R,-55DEG CMIN,85DEG CMAX
C6507M6	2113946B04	CAP,CHIP,.1UF,+10%,-10%,10V-DC,0402,X5R,-55DEG CMIN,85DEG CMAX
C6508M6	2113946B04	CAP,CHIP,.1UF,+10%,-10%,10V-DC,0402,X5R,-55DEG CMIN,85DEG CMAX
C6509M6	2113946B04	CAP,CHIP,.1UF,+10%,-10%,10V-DC,0402,X5R,-55DEG CMIN,85DEG CMAX

Ref. Des.	Part Number	Description
C6510M6	2113946B04	CAP,CHIP,.1UF,+10%,-10%,10V-DC,0402,X5R,-55DEG CMIN,85DEG CMAX
C6511M6	2113946S35	CAP,CHIP,1UF,+10%,-10%,16V-DC,0603,X5R,-55DEG CMIN,85DEG CMAX,P
C6512M6	2113946B04	CAP,CHIP,.1UF,+10%,-10%,10V-DC,0402,X5R,-55DEG CMIN,85DEG CMAX
C6513M6	2113946S35	CAP,CHIP,1UF,+10%,-10%,16V-DC,0603,X5R,-55DEG CMIN,85DEG CMAX,P
C6514M6	2113946S35	CAP,CHIP,1UF,+10%,-10%,16V-DC,0603,X5R,-55DEG CMIN,85DEG CMAX,P
C6515M6	2113946S35	CAP,CHIP,1UF,+10%,-10%,16V-DC,0603,X5R,-55DEG CMIN,85DEG CMAX,P
C6516M6	2113946B04	CAP,CHIP,.1UF,+10%,-10%,10V-DC,0402,X5R,-55DEG CMIN,85DEG CMAX
C6517M6	2113946S35	CAP,CHIP,1UF,+10%,-10%,16V-DC,0603,X5R,-55DEG CMIN,85DEG CMAX,P
C6518M6	2113946B04	CAP,CHIP,.1UF,+10%,-10%,10V-DC,0402,X5R,-55DEG CMIN,85DEG CMAX
C6519M6	2113946S35	CAP,CHIP,1UF,+10%,-10%,16V-DC,0603,X5R,-55DEG CMIN,85DEG CMAX,P
C6520M6	2113946B04	CAP,CHIP,.1UF,+10%,-10%,10V-DC,0402,X5R,-55DEG CMIN,85DEG CMAX
C6521M6	2113944A46	CAP,CHIP,330PF,+5%,-5%,50V-DC,0402,C0G,-55DEG CMIN,125DEG CMAX
C6522M6	2113946S35	CAP,CHIP,1UF,+10%,-10%,16V-DC,0603,X5R,-55DEG CMIN,85DEG CMAX,P

Ref. Des.	Part Number	Description
C6523M6	2113946B04	CAP,CHIP,.1UF,+10%,-10%,10V-DC,0402,X5R,-55DEG CMIN,85DEG CMAX
C6524M6	2113946B04	CAP,CHIP,.1UF,+10%,-10%,10V-DC,0402,X5R,-55DEG CMIN,85DEG CMAX
C6525M6	2113946S35	CAP,CHIP,1UF,+10%,-10%,16V-DC,0603,X5R,-55DEG CMIN,85DEG CMAX,P
C6526M6	2113946B04	CAP,CHIP,.1UF,+10%,-10%,10V-DC,0402,X5R,-55DEG CMIN,85DEG CMAX
C6527M6	2113946B04	CAP,CHIP,.1UF,+10%,-10%,10V-DC,0402,X5R,-55DEG CMIN,85DEG CMAX
C6528M6	2113946B04	CAP,CHIP,.1UF,+10%,-10%,10V-DC,0402,X5R,-55DEG CMIN,85DEG CMAX
C6529M6	2113946B04	CAP,CHIP,.1UF,+10%,-10%,10V-DC,0402,X5R,-55DEG CMIN,85DEG CMAX
C6530M6	2113946S35	CAP,CHIP,1UF,+10%,-10%,16V-DC,0603,X5R,-55DEG CMIN,85DEG CMAX,P
C6531M6	2113946B04	CAP,CHIP,.1UF,+10%,-10%,10V-DC,0402,X5R,-55DEG CMIN,85DEG CMAX
C6532M6	2113946S35	CAP,CHIP,1UF,+10%,-10%,16V-DC,0603,X5R,-55DEG CMIN,85DEG CMAX,P
C6533M6	2113946B04	CAP,CHIP,.1UF,+10%,-10%,10V-DC,0402,X5R,-55DEG CMIN,85DEG CMAX
C6534M6	2113956B33	CAP,FXD,2.2UF,+10%,-10%,16V-DC,0603,X5R,-55DEG CMIN,85DEG CMAX
C6535M6	2113944A40	CAP,CHIP,100PF,+5%,-5%,50V-DC,0402,C0G,-55DEG CMIN,125DEG CMAX

Ref. Des.	Part Number	Description
C6536M6	2113944A28	CAP,CHIP,18PF,+5%,-5%,50V-DC,0402,C0G,-55DEG CMIN,125DEG CMAX,P
C6537M6	2113944A19	CAP,CHIP,5.6PF,.5PF+/-,50V-DC,0402,C0G,-55DEG CMIN,125DEG CMAX
C6538M6	2113956B33	CAP,FXD,2.2UF,+10%,-10%,16V-DC,0603,X5R,-55DEG CMIN,85DEG CMAX
C6539M6	2113956B33	CAP,FXD,2.2UF,+10%,-10%,16V-DC,0603,X5R,-55DEG CMIN,85DEG CMAX
C6540M6	2113945A09	CAP,CHIP,1000PF,+10%,-10%,50V-DC,0402,X7R,-55DEG CMIN,125DEG CM
C6541M6	2113944A19	CAP,CHIP,5.6PF,.5PF+/-,50V-DC,0402,C0G,-55DEG CMIN,125DEG CMAX
C6542M6	2113946B04	CAP,CHIP,.1UF,+10%,-10%,10V-DC,0402,X5R,-55DEG CMIN,85DEG CMAX
C6543M6	2113946B04	CAP,CHIP,.1UF,+10%,-10%,10V-DC,0402,X5R,-55DEG CMIN,85DEG CMAX
C6544M6	2113945D04	CAP,CHIP,.1UF,+10%,-10%,25V-DC,0603,X7R,-55DEG CMIN,125DEG CMAX
C6545M6	2113945D04	CAP,CHIP,.1UF,+10%,-10%,25V-DC,0603,X7R,-55DEG CMIN,125DEG CMAX
C6546M6	2113946B04	CAP,CHIP,.1UF,+10%,-10%,10V-DC,0402,X5R,-55DEG CMIN,85DEG CMAX
C6547M6	2113944A46	CAP,CHIP,330PF,+5%,-5%,50V-DC,0402,C0G,-55DEG CMIN,125DEG CMAX
C6548M6	NOTPLACED	64AM DUMMY PART NUMBER
C6549M6	2113944A46	CAP,CHIP,330PF,+5%,-5%,50V-DC,0402,C0G,-55DEG CMIN,125DEG CMAX

Ref. Des.	Part Number	Description
C6550M6	2113945D04	CAP,CHIP,.1UF,+10%,-10%,25V-DC,0603,X7R,-55DEG CMIN,125DEG CMAX
C6551M6	2113944A46	CAP,CHIP,330PF,+5%,-5%,50V-DC,0402,C0G,-55DEG CMIN,125DEG CMAX
C6552M6	2113956E91	CAP,FXD,10UF,+10%,-10%,16V-DC,1210,X5R,-55DEG CMIN,85DEG CMAX,P
C6553M6	2113956E91	CAP,FXD,10UF,+10%,-10%,16V-DC,1210,X5R,-55DEG CMIN,85DEG CMAX,P
C6554M6	2113946B04	CAP,CHIP,.1UF,+10%,-10%,10V-DC,0402,X5R,-55DEG CMIN,85DEG CMAX
C6555M6	2113955D45	CAP,FXD,4.7UF,+10%,-10%,10V-DC,1206,X7R,-55DEG CMIN,125DEG CMAX
C6556M6	2113956B33	CAP,FXD,2.2UF,+10%,-10%,16V-DC,0603,X5R,-55DEG CMIN,85DEG CMAX
C6557M6	2113945D04	CAP,CHIP,.1UF,+10%,-10%,25V-DC,0603,X7R,-55DEG CMIN,125DEG CMAX
C6558M6	2113944A21	CAP,CHIP,6.8PF,.5PF+/-,50V-DC,0402,C0G,-55DEG CMIN,125DEG CMAX
C6559M6	2113946S35	CAP,CHIP,1UF,+10%,-10%,16V-DC,0603,X5R,-55DEG CMIN,85DEG CMAX,P
C6560M6	2113956C37	CAP,FXD,10UF,+10%,-10%,16V-DC,0805,X5R,-55DEG CMIN,85DEG CMAX,P
C6561M6	2113956C37	CAP,FXD,10UF,+10%,-10%,16V-DC,0805,X5R,-55DEG CMIN,85DEG CMAX,P

Ref. Des.	Part Number	Description
C6562M6	2113944A25	CAP,CHIP,10PF,.5PF+/-,50V-DC,0402,C0G,-55DEG CMIN,125DEG CMAX
C6563M6	2113945D04	CAP,CHIP,.1UF,+10%,-10%,25V-DC,0603,X7R,-55DEG CMIN,125DEG CMAX
C6564M6	2113944A46	CAP,CHIP,330PF,+5%,-5%,50V-DC,0402,C0G,-55DEG CMIN,125DEG CMAX
C6565M6	2113956B33	CAP,FXD,2.2UF,+10%,-10%,16V-DC,0603,X5R,-55DEG CMIN,85DEG CMAX
C6566M6	2113956E91	CAP,FXD,10UF,+10%,-10%,16V-DC,1210,X5R,-55DEG CMIN,85DEG CMAX,P
C6567M6	2113956E91	CAP,FXD,10UF,+10%,-10%,16V-DC,1210,X5R,-55DEG CMIN,85DEG CMAX,P
C6568M6	2113956B33	CAP,FXD,2.2UF,+10%,-10%,16V-DC,0603,X5R,-55DEG CMIN,85DEG CMAX
C6569M6	2113956E91	CAP,FXD,10UF,+10%,-10%,16V-DC,1210,X5R,-55DEG CMIN,85DEG CMAX,P
C6570M6	2113944A46	CAP,CHIP,330PF,+5%,-5%,50V-DC,0402,C0G,-55DEG CMIN,125DEG CMAX
C6571M6	2113946B04	CAP,CHIP,.1UF,+10%,-10%,10V-DC,0402,X5R,-55DEG CMIN,85DEG CMAX
C6572M6	2113946B04	CAP,CHIP,.1UF,+10%,-10%,10V-DC,0402,X5R,-55DEG CMIN,85DEG CMAX
C6573M6	2113946S35	CAP,CHIP,1UF,+10%,-10%,16V-DC,0603,X5R,-55DEG CMIN,85DEG CMAX,P
C6574M6	2113946S35	CAP,CHIP,1UF,+10%,-10%,16V-DC,0603,X5R,-55DEG CMIN,85DEG CMAX,P

Ref. Des.	Part Number	Description
C6575M6	2113946S35	CAP,CHIP,1UF,+10%,-10%,16V-DC,0603,X5R,-55DEG CMIN,85DEG CMAX,P
C6576M6	2113956B33	CAP,FXD,2.2UF,+10%,-10%,16V-DC,0603,X5R,-55DEG CMIN,85DEG CMAX
C6577M6	2113946S35	CAP,CHIP,1UF,+10%,-10%,16V-DC,0603,X5R,-55DEG CMIN,85DEG CMAX,P
C6578M6	2113946S35	CAP,CHIP,1UF,+10%,-10%,16V-DC,0603,X5R,-55DEG CMIN,85DEG CMAX,P
C6579M6	2113946S35	CAP,CHIP,1UF,+10%,-10%,16V-DC,0603,X5R,-55DEG CMIN,85DEG CMAX,P
C6580M6	2113946S35	CAP,CHIP,1UF,+10%,-10%,16V-DC,0603,X5R,-55DEG CMIN,85DEG CMAX,P
C6581M6	2113956B33	CAP,FXD,2.2UF,+10%,-10%,16V-DC,0603,X5R,-55DEG CMIN,85DEG CMAX
C6582M6	2113944A21	CAP,CHIP,6.8PF,.5PF+/-,50V-DC,0402,C0G,-55DEG CMIN,125DEG CMAX
C6583M6	2113946B04	CAP,CHIP,.1UF,+10%,-10%,10V-DC,0402,X5R,-55DEG CMIN,85DEG CMAX
C6584M6	2113956C37	CAP,FXD,10UF,+10%,-10%,16V-DC,0805,X5R,-55DEG CMIN,85DEG CMAX,P
C6585M6	2113946B04	CAP,CHIP,.1UF,+10%,-10%,10V-DC,0402,X5R,-55DEG CMIN,85DEG CMAX
C6586M6	2113956C35	CAP,FXD,4.7UF,+10%,-10%,16V-DC,0805,X5R,-55DEG CMIN,85DEG CMAX
C6587M6	2113946B04	CAP,CHIP,.1UF,+10%,-10%,10V-DC,0402,X5R,-55DEG CMIN,85DEG CMAX

Ref. Des.	Part Number	Description
C6588M6	2113944A46	CAP,CHIP,330PF,+5%,-5%,50V-DC,0402,C0G,-55DEG CMIN,125DEG CMAX
C6589M6	2113944A40	CAP,CHIP,100PF,+5%,-5%,50V-DC,0402,C0G,-55DEG CMIN,125DEG CMAX
C6590M6	2113946B04	CAP,CHIP,.1UF,+10%,-10%,10V-DC,0402,X5R,-55DEG CMIN,85DEG CMAX
C6591M6	2113944A28	CAP,CHIP,18PF,+5%,-5%,50V-DC,0402,C0G,-55DEG CMIN,125DEG CMAX,P
C6592M6	2113944A09	CAP,CHIP,2.2PF,.25PF+/-,50V-DC,0402,C0G,-55DEG CMIN,125DEG CMA
C6593M6	2113956C37	CAP,FXD,10UF,+10%,-10%,16V-DC,0805,X5R,-55DEG CMIN,85DEG CMAX,P
C6594M6	2113946C07	CAP,FXD,.33UF,+10%,-10%,10V-DC,0603,X5R,-55DEG CMIN,85DEG CMAX
C6595M6	2113946S35	CAP,CHIP,1UF,+10%,-10%,16V-DC,0603,X5R,-55DEG CMIN,85DEG CMAX,P
C6596M6	NOTPLACED	64AM DUMMY PART NUMBER
C6601M6	2113944A28	CAP,CHIP,18PF,+5%,-5%,50V-DC,0402,C0G,-55DEG CMIN,125DEG CMAX,P
C6602M6	2113944A28	CAP,CHIP,18PF,+5%,-5%,50V-DC,0402,C0G,-55DEG CMIN,125DEG CMAX,P
C6670M6	NOTPLACED	64AM DUMMY PART NUMBER
C702M7	2185419D06	CAP,CHIP,.1UF,+10%,-10%,25V-DC,1206,-55DEG CMIN,125DEG CMAX

Ref. Des.	Part Number	Description
C703M7	2113945C26	CAP,FXD,.039UF,+10%,-10%,50V-DC,0603,X7R,-55DEG CMIN,125DEG CMA
C704M7	2185419D06	CAP,CHIP,.1UF,+10%,-10%,25V-DC,1206,-55DEG CMIN,125DEG CMAX
C705M7	2115153H30	CAP,CER CHIP,6PF,.1PF+/-,.1%,-.1%,50V-DC,0402,C0G,CAP,CERAMI
C706M7	2185419D06	CAP,CHIP,.1UF,+10%,-10%,25V-DC,1206,-55DEG CMIN,125DEG CMAX
C707M7	2113945C01	CAP,CHIP,6800PF,+10%,-10%,50V-DC,0603,X7R,-55DEG CMIN,125DEG CM
C708M7	NOTPLACED	64AM DUMMY PART NUMBER
C709M7	2185419D06	CAP,CHIP,.1UF,+10%,-10%,25V-DC,1206,-55DEG CMIN,125DEG CMAX
C710M7	NOTPLACED	64AM DUMMY PART NUMBER
C711M7	NOTPLACED	64AM DUMMY PART NUMBER
C712M7	NOTPLACED	64AM DUMMY PART NUMBER
C713M7	2113945C25	CAP,FXD,.033UF,+10%,-10%,50V-DC,0603,X7R,-55DEG CMIN,125DEG CMA
C714M7	2185419D06	CAP,CHIP,.1UF,+10%,-10%,25V-DC,1206,-55DEG CMIN,125DEG CMAX
C715M7	2113945C31	CAP,FXD,.1UF,+10%,-10%,50V-DC,0603,X7R,-55DEG CMIN,125DEG CMAX
C716M7	2113945C31	CAP,FXD,.1UF,+10%,-10%,50V-DC,0603,X7R,-55DEG CMIN,125DEG CMAX
C717M7	2113945C31	CAP,FXD,.1UF,+10%,-10%,50V-DC,0603,X7R,-55DEG CMIN,125DEG CMAX

Ref. Des.	Part Number	Description
C718M7	2113945C31	CAP,FXD,.1UF,+10%,-10%,50V-DC,0603,X7R,-55DEG CMIN,125DEG CMAX
C719M7	2113945C31	CAP,FXD,.1UF,+10%,-10%,50V-DC,0603,X7R,-55DEG CMIN,125DEG CMAX
C720M7	2113944C55	CAP,CHIP,2200PF,+5%,-5%,50V-DC,0603,C0G,-55DEG CMIN,125DEG CMAX
C721M7	NOTPLACED	64AM DUMMY PART NUMBER
C724M7	2113955D37	CAP,FXD,10UF,+10%,-10%,16V-DC,1206,X7R,-55DEG CMIN,125DEG CMAX
C725M7	2113945C31	CAP,FXD,.1UF,+10%,-10%,50V-DC,0603,X7R,-55DEG CMIN,125DEG CMAX
C726M7	2113945C31	CAP,FXD,.1UF,+10%,-10%,50V-DC,0603,X7R,-55DEG CMIN,125DEG CMAX
C727M7	2113944A40	CAP,CHIP,100PF,+5%,-5%,50V-DC,0402,C0G,-55DEG CMIN,125DEG CMAX
C730M7	2113945C31	CAP,FXD,.1UF,+10%,-10%,50V-DC,0603,X7R,-55DEG CMIN,125DEG CMAX
C731M7	2113945C31	CAP,FXD,.1UF,+10%,-10%,50V-DC,0603,X7R,-55DEG CMIN,125DEG CMAX
C732M7	2113944A32	CAP,CHIP,39PF,+5%,-5%,50V-DC,0402,C0G,-55DEG CMIN,125DEG CMAX,P
C733M7	2113945A09	CAP,CHIP,1000PF,+10%,-10%,50V-DC,0402,X7R,-55DEG CMIN,125DEG CM

Ref. Des.	Part Number	Description
C734M7	2113945C31	CAP,FXD,.1UF,+10%,-10%,50V-DC,0603,X7R,-55DEG CMIN,125DEG CMAX
C735M7	2113944A31	CAP,CHIP,33PF,+5%,-5%,50V-DC,0402,C0G,-55DEG CMIN,125DEG CMAX,P
C736M7	2113945B02	CAP,CHIP,.01UF,+10%,-10%,25V-DC,0402,X7R,-55DEG CMIN,125DEG CMA
C737M7	2113945C31	CAP,FXD,.1UF,+10%,-10%,50V-DC,0603,X7R,-55DEG CMIN,125DEG CMAX
C739M7	2113944A17	CAP,CHIP,4.7PF,.25PF+/-,50V-DC,0402,C0G,-55DEG CMIN,125DEG CMA
C740M7	2115153H45	CAP,CERAMIC CHIP,33PF,+1%,-1%,50V-DC,0402,C0G
C742M7	2113945C31	CAP,FXD,.1UF,+10%,-10%,50V-DC,0603,X7R,-55DEG CMIN,125DEG CMAX
C743M7	2113946B06	CAP,CHIP,.22UF,+10%,-10%,10V-DC,0402,X5R,-55DEG CMIN,85DEG CMAX
C744M7	2113955D37	CAP,FXD,10UF,+10%,-10%,16V-DC,1206,X7R,-55DEG CMIN,125DEG CMAX
C749M7	2113945C31	CAP,FXD,.1UF,+10%,-10%,50V-DC,0603,X7R,-55DEG CMIN,125DEG CMAX
C750M7	2113945C31	CAP,FXD,.1UF,+10%,-10%,50V-DC,0603,X7R,-55DEG CMIN,125DEG CMAX
C751M7	2113945A09	CAP,CHIP,1000PF,+10%,-10%,50V-DC,0402,X7R,-55DEG CMIN,125DEG CM
C752M7	2113944A43	CAP,CHIP,180PF,+5%,-5%,50V-DC,0402,C0G,-55DEG CMIN,125DEG CMAX

Ref. Des.	Part Number	Description
C753M7	2113944A31	CAP,CHIP,33PF,+5%,-5%,50V-DC,0402,C0G,-55DEG CMIN,125DEG CMAX,P
C754M7	2113944A34	CAP,CHIP,56PF,+5%,-5%,50V-DC,0402,C0G,-55DEG CMIN,125DEG CMAX,P
C756M7	2113955D37	CAP,FXD,10UF,+10%,-10%,16V-DC,1206,X7R,-55DEG CMIN,125DEG CMAX
C757M7	2113945C31	CAP,FXD,.1UF,+10%,-10%,50V-DC,0603,X7R,-55DEG CMIN,125DEG CMAX
C760M7	2113944A44	CAP,CHIP,220PF,+5%,-5%,50V-DC,0402,C0G,-55DEG CMIN,125DEG CMAX
C764M7	2113946B06	CAP,CHIP,.22UF,+10%,-10%,10V-DC,0402,X5R,-55DEG CMIN,85DEG CMAX
C770M7	2113944A44	CAP,CHIP,220PF,+5%,-5%,50V-DC,0402,C0G,-55DEG CMIN,125DEG CMAX
C772M7	2113945A09	CAP,CHIP,1000PF,+10%,-10%,50V-DC,0402,X7R,-55DEG CMIN,125DEG CM
C773M7	2113944A33	CAP,CHIP,47PF,+5%,-5%,50V-DC,0402,C0G,-55DEG CMIN,125DEG CMAX,P
C777M7	2113944A44	CAP,CHIP,220PF,+5%,-5%,50V-DC,0402,C0G,-55DEG CMIN,125DEG CMAX
C780M7	2113944A33	CAP,CHIP,47PF,+5%,-5%,50V-DC,0402,C0G,-55DEG CMIN,125DEG CMAX,P
C781M7	2115153H45	CAP,CERAMIC CHIP,33PF,+1%,-1%,50V-DC,0402,C0G

Ref. Des.	Part Number	Description
C786M7	2113944A44	CAP,CHIP,220PF,+5%,-5%,50V-DC,0402,C0G,-55DEG CMIN,125DEG CMAX
C803M7	2115153H45	CAP,CERAMIC CHIP,33PF,+1%,-1%,50V-DC,0402,C0G
C813M7	NOTPLACED	64AM DUMMY PART NUMBER
C816M7	2113944A30	CAP,CHIP,27PF,+5%,-5%,50V-DC,0402,C0G,-55DEG CMIN,125DEG CMAX,P
C817M7	2113944A44	CAP,CHIP,220PF,+5%,-5%,50V-DC,0402,C0G,-55DEG CMIN,125DEG CMAX
C819M7	2113944A44	CAP,CHIP,220PF,+5%,-5%,50V-DC,0402,C0G,-55DEG CMIN,125DEG CMAX
C823M7	2113944A40	CAP,CHIP,100PF,+5%,-5%,50V-DC,0402,C0G,-55DEG CMIN,125DEG CMAX
C824M7	2115153H45	CAP,CERAMIC CHIP,33PF,+1%,-1%,50V-DC,0402,C0G
D200M12	4813978A19	DIODE,RECT,MBR120,SM,SOD-123,1A,20V,SHTK,PB-FREE
D2301M13	4813974A19	DIODE ARRAY,MXR,SM,SOT-323,7V,.2W,SHTK,2,PB-FREE
D2302M13	4815897H01	DIODE,PIN,UPP9401E,SM,DO-216,50A,50V,2.5W,POWER-MITE
D2303M13	4815897H01	DIODE,PIN,UPP9401E,SM,DO-216,50A,50V,2.5W,POWER-MITE
D4001M2	4813978A25	DIODE,SWG,BAT54,SM,SO D-323/SC-76,200MA,30V,.2W,SHTK,PB-FREE, W18

Ref. Des.	Part Number	Description
D401M20	NOTPLACED	64AM DUMMY PART NUMBER
D6101M6	4813978A25	DIODE,SWG,BAT54,SM,SO D-323/SC-76,200MA,30V,.2W,SHTK,PB-FREE, W18
D6401M6	4813978A25	DIODE,SWG,BAT54,SM,SO D-323/SC-76,200MA,30V,.2W,SHTK,PB-FREE, W18
D6501M6	4813978A25	DIODE,SWG,BAT54,SM,SO D-323/SC-76,200MA,30V,.2W,SHTK,PB-FREE, W18
D722M7	4815011H01	DIODE,SWG,SM,300MA,80V,TRP
D723M7	4815011H01	DIODE,SWG,SM,300MA,80V,TRP
E1101M11	2405688Z01	IDCTR,BEAD,FERR BEAD
E201M12	7686949J14	FLTR,FERRITE BEAD,2A,SM,0805,CHIP,220OHM
E2242M2	7685268E01	FLTR,FERRITE BEAD,650MA,SM,0402,CHIP,80OHM
E2244M2	7685268E01	FLTR,FERRITE BEAD,650MA,SM,0402,CHIP,80OHM
E2245M2	7685268E01	FLTR,FERRITE BEAD,650MA,SM,0402,CHIP,80OHM
E2246M2	7685268E01	FLTR,FERRITE BEAD,650MA,SM,0402,CHIP,80OHM
E2247M2	7685268E01	FLTR,FERRITE BEAD,650MA,SM,0402,CHIP,80OHM
E2248M2	7685268E01	FLTR,FERRITE BEAD,650MA,SM,0402,CHIP,80OHM
E2249M2	7685268E01	FLTR,FERRITE BEAD,650MA,SM,0402,CHIP,80OHM

Ref. Des.	Part Number	Description
E2301M2	91012036001	FLTR,EMI/RFI,300MA,SM,FILTER,EMI/RFI,300MA,SM,0402,PB F
E2302M2	91012036001	FLTR,EMI/RFI,300MA,SM,FILTER,EMI/RFI,300MA,SM,0402,PB F
E2303M2	91012036001	FLTR,EMI/RFI,300MA,SM,FILTER,EMI/RFI,300MA,SM,0402,PB F
E2304M2	91012036001	FLTR,EMI/RFI,300MA,SM,FILTER,EMI/RFI,300MA,SM,0402,PB F
E2305M2	91012036001	FLTR,EMI/RFI,300MA,SM,FILTER,EMI/RFI,300MA,SM,0402,PB F
E2306M2	91012036001	FLTR,EMI/RFI,300MA,SM,FILTER,EMI/RFI,300MA,SM,0402,PB F
E2307M2	91012036001	FLTR,EMI/RFI,300MA,SM,FILTER,EMI/RFI,300MA,SM,0402,PB F
E2308M2	91012036001	FLTR,EMI/RFI,300MA,SM,FILTER,EMI/RFI,300MA,SM,0402,PB F
E2309M2	91012036001	FLTR,EMI/RFI,300MA,SM,FILTER,EMI/RFI,300MA,SM,0402,PB F
E2310M2	91012036001	FLTR,EMI/RFI,300MA,SM,FILTER,EMI/RFI,300MA,SM,0402,PB F
E2311M2	91012036001	FLTR,EMI/RFI,300MA,SM,FILTER,EMI/RFI,300MA,SM,0402,PB F
E401M20	2480640Z01	CHIP INDUCTOR,BEAD,SUR MT FERR BEAD

Ref. Des.	Part Number	Description
E402M20	2480640Z01	CHIP INDUC-TOR,BEAD,SUR MT FERR BEAD
E601M19	2480640Z01	CHIP INDUC-TOR,BEAD,SUR MT FERR BEAD
E602M19	2480640Z01	CHIP INDUC-TOR,BEAD,SUR MT FERR BEAD
E603M19	2480640Z01	CHIP INDUC-TOR,BEAD,SUR MT FERR BEAD
E604M19	2480640Z01	CHIP INDUC-TOR,BEAD,SUR MT FERR BEAD
E605M19	2480640Z01	CHIP INDUC-TOR,BEAD,SUR MT FERR BEAD
E606M19	2480640Z01	CHIP INDUC-TOR,BEAD,SUR MT FERR BEAD
E607M19	2480640Z01	CHIP INDUC-TOR,BEAD,SUR MT FERR BEAD
E608M19	2480640Z01	CHIP INDUC-TOR,BEAD,SUR MT FERR BEAD
E609M19	2480640Z01	CHIP INDUC-TOR,BEAD,SUR MT FERR BEAD
E6501M6	2480067M02	FIXED INDUC-TOR,FXD,200MA,.4OHM,FERR,0805,CHK RF CHIP BE
E6502M6	2480067M02	FIXED INDUC-TOR,FXD,200MA,.4OHM,FERR,0805,CHK RF CHIP BE
F200M12	6575834B01	FUSE,FST BLW,2A,32V,FUSE SUR MT
FL1301M3	9102190J23	FLTR,SAW,BAND-PASS,1.57542GHZ NOM,SM,1.4X1.0MM,SMD,PB-FREE
FL1302M3	9109674L58	BAND PASS FILTER

Ref. Des.	Part Number	Description
FL1303M3	9102190J23	FLTR,SAW,BAND-PASS,1.57542GHZ NOM,SM,1.4X1.0MM,SMD,PB-FREE
FL401M20	9175390A01	FLTR,DB,BAND-PASS,762MHZ MIN,870MHZ MAX,50OHM,SM,SAW FILTER, DL
FL402M20	9175390A01	FLTR,DB,BAND-PASS,762MHZ MIN,870MHZ MAX,50OHM,SM,SAW FILTER, DL
FL502M21	91009300001	FLTR,BAND-PASS,109.65MHZ NOM,FILTER,MONOLITHIC CRYSTAL,BAND
J102M12	2880658Z08	RF CONNec-TOR,SMA,M,CONN SMA
J2301M2	0970312N01	CONN,BTB,RCPT,60CONT,.4MM,GLD,1 STACK HGT
J2302M2	CN000222A01	CONNECTOR STANDARD-BTB,FEMALE(RECEPTACLE/SOCKET),0.4 MM,70,CONN
L1001M16	2415429H37	IDCTR,WW,110NH,5%,300 MA,.61OHM,CER,SM,0603,CHIP
L1002M16	2415429H10	IDCTR,WW,6.8NH,5%,700MA,.11OHM,CER,SM,0603,CHIP
L1003M16	2415429H37	IDCTR,WW,110NH,5%,300 MA,.61OHM,CER,SM,0603,CHIP
L1007M16	2460591K40	IDCTR,FXD,15%,12 TURNS,COUNTERCLOCK-WISE,28 AWG,SM,HI
L1009M16	2415428H03	IDCTR,AW,3.85NH,2%,1.6A,AIR,SM,AIR WOUND IDCTR
L1101M11	2415429H26	IDCTR,WW,33NH,5%,600MA,.22OHM,CER,SM,0603,CHIP

Ref. Des.	Part Number	Description
L1102M11	2415429H10	IDCTR,WW,6.8NH,5%,700MA,.11OHM,CER,SM,0603,CHIP
L1116M11	NOTPLACED	64AM DUMMY PART NUMBER
L1117M11	2415428H02	IDCTR,AW,2.55NH,5%,1.6A,AIR,3 TURNS,SM,AIR WOUND IDCTR
L1301M3	2414017P16	IDCTR,CHIP,18NH,5%,300 MA,.76OHM,CER,9 Q,1.9GHZ SRF,SM,0402,P
L1302M3	2488090Y07	IDCTR,CHIP,3.3NH,5%,300 MA,CER,SM,0402,MULAY PB FREE
L1303M3	2414017P16	IDCTR,CHIP,18NH,5%,300 MA,.76OHM,CER,9 Q,1.9GHZ SRF,SM,0402,P
L1304M3	2488090Y25	IDCTR,CHIP,100NH,5%,90 MA,CER,SM,0402,MULAY PB FREE
L1305M3	24010062002	IDCTR,RF,5.6NH,2%,1.6A,.06OHM,CER,6.5GHZ SRF,SM,5.6NH, 040
L1306M3	2414017P14	IDCTR,CHIP,12NH,5%,300 MA,.6OHM,CER,9 Q,2GHZ SRF,SM,0402,PB-F
L1308M3	2415429H14	CHIP INDUC-TOR,9.5NH,5%,700MA
L1316M3	24010062009	IDCTR,RF,13NH,2%,870MA,.06OHM,CER,4.2GHZ SRF,SM,13NH, 0402
L1408M17	24012026009	ULTRA-MINIATURE AIR CORE INDUCTORS
L1410M17	24012026009	ULTRA-MINIATURE AIR CORE INDUCTORS
L200M12	2571269C01	IDCTR,COIL,1.5UH,20%,2.9 A,.059OHM,FERR,SM,WW PWR W18 COMP
L2202M2	2415429H45	IDCTR,WW,270NH,5%,170 MA,CER,SM,CHIP
L2203M2	2415429H45	IDCTR,WW,270NH,5%,170 MA,CER,SM,CHIP
L2204M2	2415429H45	IDCTR,WW,270NH,5%,170 MA,CER,SM,CHIP

Ref. Des.	Part Number	Description
L2205M2	2415429H45	IDCTR,WW,270NH,5%,170 MA,CER,SM,CHIP
L2301M13	24012026009	ULTRA-MINIATURE AIR CORE INDUCTORS
L2302M13	2415429H35	IDCTR,WW,82NH,5%,400MA,.54OHM,CER,SM,0603,CHIP
L2303M13	2414017N14	IDCTR,CHIP,15NH,5%,600 MA,.4OHM,CER,12 Q,1.8GHZ SRF,SM,0603,P
L3008M22	2414032F36	IDCTR,WW,150NH,5%,400 MA,.56OHM,CER,35 Q,780MHZ SRF,SM,PB-FR
L3009M22	2414032F36	IDCTR,WW,150NH,5%,400 MA,.56OHM,CER,35 Q,780MHZ SRF,SM,PB-FR
L3041M22	2414032F36	IDCTR,WW,150NH,5%,400 MA,.56OHM,CER,35 Q,780MHZ SRF,SM,PB-FR
L3044M22	2414032F36	IDCTR,WW,150NH,5%,400 MA,.56OHM,CER,35 Q,780MHZ SRF,SM,PB-FR
L3047M22	2414032F36	IDCTR,WW,150NH,5%,400 MA,.56OHM,CER,35 Q,780MHZ SRF,SM,PB-FR
L3064M22	2414032F36	IDCTR,WW,150NH,5%,400 MA,.56OHM,CER,35 Q,780MHZ SRF,SM,PB-FR
L401M20	2415427H21	IDCTR,WW,10NH,5%,480MA,.2OHM,CER,SM,0402,CHIP
L402M20	2415427H23	IDCTR,WW,12NH,5%,640MA,CER,120KHZ SRF,SM,0402,CHIP
L403M20	2414017P07	IDCTR,CHIP,3.3NH,300MA,.19OHM,CER,8 Q,4GHZ SRF,SM,0402,PB-F
L404M20	2415427H26	IDCTR,WW,15NH,5%,560MA,CER,SM,0402,CHIP
L405M20	2415427H21	IDCTR,WW,10NH,5%,480MA,.2OHM,CER,SM,0402,CHIP
L406M20	2415427H05	IDCTR,WW,2.4NH,5%,790MA,.068OHM,CER,SM,0402,CHIP



Ref. Des.	Part Number	Description	Ref. Des.	Part Number	Description	Ref. Des.	Part Number	Description	Ref. Des.	Part Number	Description
L407M20	2415427H16	IDCTR,WW,7.5NH,5%,680MA,.1OHM,CER,SM,0402,CHIP	L6401M6	2471189M03	IDCTR,PWR,10UH,20%,1.1A,.2OHM,SM,SHLD SMT PWR IDCTR 10UH	L755M7	2415429H38	IDCTR,WW,120NH,5%,300MA,.65OHM,CER,SM,0603,CHIP	Q1103M11	4813970A59	XSTR,FET GP PWR,P-CH,ENHN,SM,SOT-23,20V,.4W,PB-FREE
L408M20	2415427H21	IDCTR,WW,10NH,5%,480MA,.2OHM,CER,SM,0402,CHIP	L6402M6	2471189M03	IDCTR,PWR,10UH,20%,1.1A,.2OHM,SM,SHLD SMT PWR IDCTR 10UH	L758M7	2415429H47	IDCTR,WW,390NH,5%,100MA,CER,SM,CHIP	Q201M12	4813970A59	XSTR,FET GP PWR,P-CH,ENHN,SM,SOT-23,20V,.4W,PB-FREE
L489M20	2478057A14	IDCTR,8.2NH,2%,.054OHM,CER,46 Q,5.9GHZ SRF,PCMT,8.2NH SUR	L6403M6	24009271001	CHK,RF CHOKE,20NH HI CUR CHIP IDCTR	L759M7	2414017N25	IDCTR,CHIP,120NH,5%,200MA,2.4OHM,CER,12 Q,600MHZ SRF,SM,0603	Q202M12	4813973A32	XSTR,BIP GP SS,NPN,SM,SC-70,SMT,50V,.202W,100MA,PB-FREE
L491M20	2478057A14	IDCTR,8.2NH,2%,.054OHM,CER,46 Q,5.9GHZ SRF,PCMT,8.2NH SUR	L6404M6	24009271001	CHK,RF CHOKE,20NH HI CUR CHIP IDCTR	L768M7	2488090Y25	IDCTR,CHIP,100NH,5%,90MA,CER,SM,0402,MULAY PB FREE	Q2202M2	4815261H01	XSTR,BIP GP SS,NPN,DTC114Y,SC-59,SC-59,SMT3,50V,100MA,250MHZ
L500M21	2415429H43	IDCTR,WW,220NH,5%,300MA,2.1OHM,CER,SM,0603,CHIP	L6502M6	2471678H01	IDCTR,10UH,20%,FERR,10UH INDCUTOR	L775M7	2415429H38	IDCTR,WW,120NH,5%,300MA,.65OHM,CER,SM,0603,CHIP	Q2301M13	4815055H01	XSTR,GEN PURPOSE SMALL SIG,NPN AND PNP,UMC5NT2G,SM,50V,100A
L503M21	2414017N24	IDCTR,CHIP,100NH,5%,300MA,2OHM,CER,15 Q,700MHZ SRF,SM,0603,P	L6504M6	24009268001	IDCTR,PWR,10UH,20%,1.3A,FERR,SM,10UH 2.1A SHLD IDCTR	M101M12	39012039001	CONN,CMPRSN,3CONT,ST,CONNECTOR, BAT CONTACT, WWP	Q3033M22	4813972A17	XSTR,FET GEN PURPOSE SMALL SIG,MOS-FET,N,ENHN,SM,SOT-23,.4W,P
L504M21	2478057A51	CHIP INDUCTOR,RF,270NH,2%,SM,0603 HI Q CHIP IDCTR	L6505M6	2471678H01	IDCTR,10UH,20%,FERR,10UH INDCUTOR	M103M12	3987977Y04	CONT,CONN,1CONT,ANT UNIV 4.5MM,UC 1.8	Q3035M22	4813972A17	XSTR,FET GEN PURPOSE SMALL SIG,MOS-FET,N,ENHN,SM,SOT-23,.4W,P
L513M21	NOTPLACED	64AM DUMMY PART NUMBER	L701M7	2488090Y17	IDCTR,CHIP,22NH,5%,300MA,CER,SM,0402,MULAY PB FREE	M104M12	3987977Y04	CONT,CONN,1CONT,ANT UNIV 4.5MM,UC 1.8	Q3038M22	4871915M01	XSTR,BIP RF SML SGNL,NPN,SC-75A,SMT,12V,.1W,100MA,4.5GHZ,XST
L550M21	2414017N10	IDCTR,CHIP,6.8NH,5%,600MA,.22OHM,CER,12 Q,2.7GHZ SRF,SM,0603	L709M7	2414017N16	IDCTR,CHIP,22NH,5%,600MA,.54OHM,CER,12 Q,1.3GHZ SRF,SM,0603	M105M12	3987977Y04	CONT,CONN,1CONT,ANT UNIV 4.5MM,UC 1.8	Q3039M22	4871915M01	XSTR,BIP RF SML SGNL,NPN,SC-75A,SMT,12V,.1W,100MA,4.5GHZ,XST
L601M19	2415429H43	IDCTR,WW,220NH,5%,300MA,2.1OHM,CER,SM,0603,CHIP	L720M7	2480646Z20	COIL,CHIP,2.2UH,10%,MULTI-LAYER CHIP	M1301M3	3987977Y04	CONT,CONN,1CONT,ANT UNIV 4.5MM,UC 1.8	Q3060M22	4813972A17	XSTR,FET GEN PURPOSE SMALL SIG,MOS-FET,N,ENHN,SM,SOT-23,.4W,P
L602M19	2466505A01	CHIP INDUCTOR,CHIP,10UH,5%,150MA,FERR,0 AWG,SM,PB-FREE	L727M7	2480646Z20	COIL,CHIP,2.2UH,10%,MULTI-LAYER CHIP	M6405M6	3987977Y04	CONT,CONN,1CONT,ANT UNIV 4.5MM,UC 1.8	Q3062M22	4871915M01	XSTR,BIP RF SML SGNL,NPN,SC-75A,SMT,12V,.1W,100MA,4.5GHZ,XST
L603M19	2466505A01	CHIP INDUCTOR,CHIP,10UH,5%,150MA,FERR,0 AWG,SM,PB-FREE	L728M7	2415429H47	IDCTR,WW,390NH,5%,100MA,CER,SM,CHIP	M6406M6	3987977Y04	CONT,CONN,1CONT,ANT UNIV 4.5MM,UC 1.8	Q4001M2	4815261H01	XSTR,BIP GP SS,NPN,DTC114Y,SC-59,SC-59,SMT3,50V,100MA,250MHZ
L604M19	2414032D16	IDCTR,WW,120NH,5%,800MA,.26OHM,CER,42 Q,1GHZ SRF,SM,PB-FREE	L733M7	2480646Z20	COIL,CHIP,2.2UH,10%,MULTI-LAYER CHIP	M6502M6	0985888K02	BATTERY CONNECTOR,SKT,NI,LEAP			
L605M19	24012050001	IDCTR,FXD,3.9UH,2%,280MA,CER,SM,0603LS CHIP INDUCTORS, 1	L735M7	2480646Z20	COIL,CHIP,2.2UH,10%,MULTI-LAYER CHIP	M6504M6	3987977Y04	CONT,CONN,1CONT,ANT UNIV 4.5MM,UC 1.8			
L611M19	2414032F39	IDCTR,WW,270NH,10%,280MA,1OHM,CER,40 Q,800MHZ SRF,SM,PB-FRE	L738M7	2480646Z20	COIL,CHIP,2.2UH,10%,MULTI-LAYER CHIP	PCB	PC000351A01	PCB			
			L739M7	2414017N25	IDCTR,CHIP,120NH,5%,200MA,2.4OHM,CER,12 Q,600MHZ SRF,SM,0603	Q1001M16	48012094001	XSTR,FET RF POWER,SM,25V,MOD,XSTR,FET RF PWR, 135-941MH			
			L741M7	2480646Z20	COIL,CHIP,2.2UH,10%,MULTI-LAYER CHIP	Q1101M11	4813973A32	XSTR,BIP GP SS,NPN,SM,SC-70,SMT,50V,.202W,100MA,PB-FREE			
			L753M7	2415347H06	IDCTR,WW,2.2UH,5%,320MA,1.2OHM,CER,SM,IDCTR,2200NH						

Ref. Des.	Part Number	Description
Q401M20	4813973A32	XSTR,BIP GP SS,NPN,SM,SC-70,SMT,50V,.202W,100MA,PB-FREE
Q402M20	4813973M75	XSTR,BIP GP SS,PNP,BC858,SOT-563,SMT,-30V,.357W,-100MA,100MHZ
Q403M20	4813973M75	XSTR,BIP GP SS,PNP,BC858,SOT-563,SMT,-30V,.357W,-100MA,100MHZ
Q601M19	4813973A04	XSTR,BIP GP SS,NPN,TA13,SM,SOT-23,SMT,30V,.225W,300MA,125MHZ,P
Q6101M6	4815261H01	XSTR,BIP GP SS,NPN,DTC114Y,SC-59,SC-59,SMT3,50V,100MA,250MHZ
Q6401M6	48012170001	XSTR,FET GP PWR,N,SM,SMT,20V,.15W
Q6501M6	4813970A62	XSTR,FET GP PWR,MOS-FET,P-CH,ENHN,CF,-20V,1.3W,PB-FREE
Q6502M6	48012154001	XSTR,FET GP PWR,P,SM,SMT,-20V,.5W,FET
Q6504M6	4809579E77	XSTR,FET GP SS,MOS-FET,N-CH,SM,30V,1.2X1.2MM PKG W18 COMP
Q6505M6	4813970A62	XSTR,FET GP PWR,MOS-FET,P-CH,ENHN,CF,-20V,1.3W,PB-FREE
Q6506M6	4809579E77	XSTR,FET GP SS,MOS-FET,N-CH,SM,30V,1.2X1.2MM PKG W18 COMP
Q6507M6	48012170001	XSTR,FET GP PWR,N,SM,SMT,20V,.15W
Q6508M6	48012154001	XSTR,FET GP PWR,P,SM,SMT,-20V,.5W,FET

Ref. Des.	Part Number	Description
Q731M7	4885061Y01	XSTR,BIP RF SMALL SIGNAL
Q745M7	4813973M75	XSTR,BIP GP SS,PNP,BC858,SOT-563,SMT,-30V,.357W,-100MA,100MHZ
Q756M7	4805585Q32	XSTR,BIP RF SML SGNL,NPN,NE662M04,SM,SOT-343,3.3V,TRANSITO
Q767M7	4813973M75	XSTR,BIP GP SS,PNP,BC858,SOT-563,SMT,-30V,.357W,-100MA,100MHZ
Q774M7	4805585Q32	XSTR,BIP RF SML SGNL,NPN,NE662M04,SM,SOT-343,3.3V,TRANSITO
Q785M7	4889394V04	XSTR,FET GEN PURPOSE SMALL SIG,MOSFET,N-CH,ENHN,SM,20V,.25W,P
R1001M16	0613952R13	RES,MF,33KOHM,5%,.0625W,SM,0402,200PPM/CEL,PB-FREE
R1002M16	0613952R17	RES,MF,47000,5,.0625,SM,0402,200,PB-FREE
R1003M16	0613952R21	RES,MF,68KOHM,5%,.0625W,SM,0402,200PPM/CEL,PB-FREE
R1004M16	0613952R12	RES,MF,30KOHM,5%,.0625W,SM,0402,200PPM/CEL,PB-FREE
R1005M16	0613952Q73	RES,MF,1KOHM,5%,.0625W,SM,0402,200PPM/CEL,PB-FREE
R1006M16	0613952R66	RES,MF,0OHM,5%,.0625W,SM,0402,PB-FREE
R1007M16	0613952H53	RES,MF,150OHM,5%,.1W,SM,0603,200PPM/CEL,PB-FREE
R1064M16	NOTPLACED	64AM DUMMY PART NUMBER
R1065M16	0613952R66	RES,MF,0OHM,5%,.0625W,SM,0402,PB-FREE
R1066M16	NOTPLACED	64AM DUMMY PART NUMBER

Ref. Des.	Part Number	Description
R1101M11	0613952R01	RES,MF,10KOHM,5%,.0625W,SM,0402,200PPM/CEL,PB-FREE
R1102M11	0613952R25	RES,MF,100KOHM,5%,.0625W,SM,0402,200PPM/CEL,PB-FREE
R1103M11	06009259001	RES,SHUNT,.02OHM,.33W,SMD,LOW RESISTANCE THK FLM RES
R1104M11	0613952Q49	RES,MF,100,5,.0625,SM,0402,200,PB-FREE
R1105M11	0613952Q49	RES,MF,100,5,.0625,SM,0402,200,PB-FREE
R1106M11	0613952Q21	RES,MF,6.8OHM,5%,.0625W,SM,0402,200PPM/CEL,PB-FREE
R1107M11	0613952Q45	RES,MF,68OHM,5%,.0625W,SM,0402,200PPM/CEL,PB-FREE
R1108M11	0613952N81	RES,MF,68.1KOHM,1%,.0625W,SM,0402,200PPM/CEL,PB-FREE
R1110M11	0613952R01	RES,MF,10KOHM,5%,.0625W,SM,0402,200PPM/CEL,PB-FREE
R1111M11	0613952R66	RES,MF,0OHM,5%,.0625W,SM,0402,PB-FREE
R1112M11	NOTPLACED	64AM DUMMY PART NUMBER
R1114M11	0613952Q49	RES,MF,100,5,.0625,SM,0402,200,PB-FREE
R1115M11	0613952Q49	RES,MF,100,5,.0625,SM,0402,200,PB-FREE
R1116M11	0613952R01	RES,MF,10KOHM,5%,.0625W,SM,0402,200PPM/CEL,PB-FREE
R1117M11	0613952R22	RES,MF,75KOHM,5%,.0625W,SM,0402,200PPM/CEL,PB-FREE
R1121M11	0613952N47	RES,MF,30.1KOHM,1%,.0625W,SM,0402,200PPM/CEL,PB-FREE

Ref. Des.	Part Number	Description
R1122M11	0613952N85	RES,MF,75KOHM,1%,.0625W,SM,0402,200PPM/CEL,PB-FREE
R1124M11	0613952Q42	RES,MF,51OHM,5%,.0625W,SM,0402,200PPM/CEL,PB-FREE
R1125M11	0613952R10	RES,MF,24KOHM,5%,.0625W,SM,0402,200PPM/CEL,PB-FREE
R1126M11	0613952R02	RES,MF,11KOHM,5%,.0625W,SM,0402,200PPM/CEL,PB-FREE
R1127M11	0613952R08	RES,MF,20KOHM,5%,.0625W,SM,0402,200PPM/CEL,PB-FREE
R1128M11	0613952R01	RES,MF,10KOHM,5%,.0625W,SM,0402,200PPM/CEL,PB-FREE
R1129M11	NOTPLACED	64AM DUMMY PART NUMBER
R1130M11	NOTPLACED	64AM DUMMY PART NUMBER
R1135M11	0613952R66	RES,MF,0OHM,5%,.0625W,SM,0402,PB-FREE
R1136M11	0613952R01	RES,MF,10KOHM,5%,.0625W,SM,0402,200PPM/CEL,PB-FREE
R1137M11	0613952R01	RES,MF,10KOHM,5%,.0625W,SM,0402,200PPM/CEL,PB-FREE
R1138M11	0613952R25	RES,MF,100KOHM,5%,.0625W,SM,0402,200PPM/CEL,PB-FREE
R1139M11	0613952R25	RES,MF,100KOHM,5%,.0625W,SM,0402,200PPM/CEL,PB-FREE
R1140M11	0613952R25	RES,MF,100KOHM,5%,.0625W,SM,0402,200PPM/CEL,PB-FREE
R1141M11	0613952R42	RES,MF,510KOHM,5%,.0625W,SM,0402,200PPM/CEL,PB-FREE
R1142M11	0613952R25	RES,MF,100KOHM,5%,.0625W,SM,0402,200PPM/CEL,PB-FREE

Ref. Des.	Part Number	Description	Ref. Des.	Part Number	Description	Ref. Des.	Part Number	Description	Ref. Des.	Part Number	Description
R1143M11	0613952R25	RES,MF,100KOHM,5%,.0625W,SM,0402,200PPM/CEL,PB-FREE	R1169M11	0613952P52	RES,MF,340KOHM,1%,.0625W,SM,0402,200PPM/CEL,PB-FREE	R1311M3	NOTPLACED	64AM DUMMY PART NUMBER	R21003M2	0613952R01	RES,MF,10KOHM,5%,.0625W,SM,0402,200PPM/CEL,PB-FREE
R1144M11	0613952R25	RES,MF,100KOHM,5%,.0625W,SM,0402,200PPM/CEL,PB-FREE	R1170M11	0613952N88	RES,MF,80.6KOHM,1%,.0625W,SM,0402,200PPM/CEL,PB-FREE	R1313M3	0613952R66	RES,MF,0OHM,5%,.0625W,SM,0402,PB-FREE	R21004M2	0613952Q73	RES,MF,1KOHM,5%,.0625W,SM,0402,200PPM/CEL,PB-FREE
R1145M11	0613952R25	RES,MF,100KOHM,5%,.0625W,SM,0402,200PPM/CEL,PB-FREE	R1171M11	0613952R66	RES,MF,0OHM,5%,.0625W,SM,0402,PB-FREE	R1315M3	0613952R66	RES,MF,0OHM,5%,.0625W,SM,0402,PB-FREE	R21005M2	0613952Q73	RES,MF,1KOHM,5%,.0625W,SM,0402,200PPM/CEL,PB-FREE
R1146M11	0613952R25	RES,MF,100KOHM,5%,.0625W,SM,0402,200PPM/CEL,PB-FREE	R1172M11	0613952Q89	RES,MF,4700,5,.0625,SM,0402,200,PB-FREE	R1317M3	0613952R66	RES,MF,0OHM,5%,.0625W,SM,0402,PB-FREE	R21006M2	0613952Q73	RES,MF,1KOHM,5%,.0625W,SM,0402,200PPM/CEL,PB-FREE
R1151M11	0613952R01	RES,MF,10KOHM,5%,.0625W,SM,0402,200PPM/CEL,PB-FREE	R1174M11	0613952N01	RES,MF,10KOHM,1%,.0625W,SM,0402,200PPM/CEL,PB-FREE	R1318M3	0613952R66	RES,MF,0OHM,5%,.0625W,SM,0402,PB-FREE	R21007M2	0613952Q73	RES,MF,1KOHM,5%,.0625W,SM,0402,200PPM/CEL,PB-FREE
R1152M11	0613952R01	RES,MF,10KOHM,5%,.0625W,SM,0402,200PPM/CEL,PB-FREE	R1175M11	0613952R66	RES,MF,0OHM,5%,.0625W,SM,0402,PB-FREE	R1325M3	0613952R66	RES,MF,0OHM,5%,.0625W,SM,0402,PB-FREE	R21008M2	0613952R01	RES,MF,10KOHM,5%,.0625W,SM,0402,200PPM/CEL,PB-FREE
R1154M11	0613952N01	RES,MF,10KOHM,1%,.0625W,SM,0402,200PPM/CEL,PB-FREE	R1176M11	0613952M01	RES,MF,1KOHM,1%,.0625W,SM,0402,200PPM/CEL,PB-FREE	R1326M3	0613952R66	RES,MF,0OHM,5%,.0625W,SM,0402,PB-FREE	R2104M2	0613952Q89	RES,MF,4700,5,.0625,SM,0402,200,PB-FREE
R1158M11	NOTPLACED	64AM DUMMY PART NUMBER	R1177M11	0613952R66	RES,MF,0OHM,5%,.0625W,SM,0402,PB-FREE	R1329M3	0613952R66	RES,MF,0OHM,5%,.0625W,SM,0402,PB-FREE	R2105M2	0613952Q89	RES,MF,4700,5,.0625,SM,0402,200,PB-FREE
R1160M11	0613952R03	RES,MF,12000,5,.0625,SM,0402,200,PB-FREE	R1178M11	0613952R01	RES,MF,10KOHM,5%,.0625W,SM,0402,200PPM/CEL,PB-FREE	R1330M3	0613952R66	RES,MF,0OHM,5%,.0625W,SM,0402,PB-FREE	R2106M2	NOTPLACED	64AM DUMMY PART NUMBER
R1162M11	0613952R29	RES,MF,150KOHM,5%,.0625W,SM,0402,200PPM/CEL,PB-FREE	R1180M11	0613952R66	RES,MF,0OHM,5%,.0625W,SM,0402,PB-FREE	R1331M3	0613952R66	RES,MF,0OHM,5%,.0625W,SM,0402,PB-FREE	R2107M2	0613952Q73	RES,MF,1KOHM,5%,.0625W,SM,0402,200PPM/CEL,PB-FREE
R1163M11	0613952R01	RES,MF,10KOHM,5%,.0625W,SM,0402,200PPM/CEL,PB-FREE	R1181M11	NOTPLACED	64AM DUMMY PART NUMBER	R1332M3	0613952R66	RES,MF,0OHM,5%,.0625W,SM,0402,PB-FREE	R2109M2	0613952Q25	RES,MF,10,5,.0625,SM,0402,200,PB-FREE
R1164M11	0613952R01	RES,MF,10KOHM,5%,.0625W,SM,0402,200PPM/CEL,PB-FREE	R1182M11	0613952R01	RES,MF,10KOHM,5%,.0625W,SM,0402,200PPM/CEL,PB-FREE	R1337M3	NOTPLACED	64AM DUMMY PART NUMBER	R2110M2	0613952Q33	RES,MF,22,5,.0625,SM,0402,200,PB-FREE
R1165M11	0613952Q56	RES,MF,200OHM,5%,.0625W,SM,0402,200PPM/CEL,PB-FREE	R1198M11	0613952J01	RES,MF,10KOHM,5%,.1W,SM,0603,200PPM/CEL,PB-FREE	R1339M3	NOTPLACED	64AM DUMMY PART NUMBER	R2111M2	0613952Q25	RES,MF,10,5,.0625,SM,0402,200,PB-FREE
R1166M11	0613952Q56	RES,MF,200OHM,5%,.0625W,SM,0402,200PPM/CEL,PB-FREE	R1301M3	0613952R66	RES,MF,0OHM,5%,.0625W,SM,0402,PB-FREE	R1340M3	0613952R66	RES,MF,0OHM,5%,.0625W,SM,0402,PB-FREE	R2113M2	0613952Q25	RES,MF,10,5,.0625,SM,0402,200,PB-FREE
R1167M11	0613952R01	RES,MF,10KOHM,5%,.0625W,SM,0402,200PPM/CEL,PB-FREE	R1303M3	0613952R66	RES,MF,0OHM,5%,.0625W,SM,0402,PB-FREE	R201M12	0613952R25	RES,MF,100KOHM,5%,.0625W,SM,0402,200PPM/CEL,PB-FREE	R2114M2	0613952Q33	RES,MF,22,5,.0625,SM,0402,200,PB-FREE
R1168M11	0613952Q49	RES,MF,100,5,.0625,SM,0402,200,PB-FREE	R1305M3	0613952R66	RES,MF,0OHM,5%,.0625W,SM,0402,PB-FREE	R202M12	0613952Q89	RES,MF,4700,5,.0625,SM,0402,200,PB-FREE	R2115M2	0613952Q25	RES,MF,10,5,.0625,SM,0402,200,PB-FREE
			R1309M3	NOTPLACED	64AM DUMMY PART NUMBER	R21000M2	0613952R01	RES,MF,10KOHM,5%,.0625W,SM,0402,200PPM/CEL,PB-FREE	R2116M2	0613952R01	RES,MF,10KOHM,5%,.0625W,SM,0402,200PPM/CEL,PB-FREE
			R1310M3	0613952R66	RES,MF,0OHM,5%,.0625W,SM,0402,PB-FREE	R21001M2	0613952R01	RES,MF,10KOHM,5%,.0625W,SM,0402,200PPM/CEL,PB-FREE			
						R21002M2	0613952R01	RES,MF,10KOHM,5%,.0625W,SM,0402,200PPM/CEL,PB-FREE			

Ref. Des.	Part Number	Description
R2117M2	0613952R01	RES,MF,10KOHM,5%,.0625 W,SM,0402,200PPM/CEL,PB-FREE
R2118M2	0613952R01	RES,MF,10KOHM,5%,.0625 W,SM,0402,200PPM/CEL,PB-FREE
R2120M2	0613952R01	RES,MF,10KOHM,5%,.0625 W,SM,0402,200PPM/CEL,PB-FREE
R2129M2	0613952R01	RES,MF,10KOHM,5%,.0625 W,SM,0402,200PPM/CEL,PB-FREE
R2130M2	0613952R01	RES,MF,10KOHM,5%,.0625 W,SM,0402,200PPM/CEL,PB-FREE
R2131M2	0613952R01	RES,MF,10KOHM,5%,.0625 W,SM,0402,200PPM/CEL,PB-FREE
R2132M2	0613952R01	RES,MF,10KOHM,5%,.0625 W,SM,0402,200PPM/CEL,PB-FREE
R2133M2	0613952R01	RES,MF,10KOHM,5%,.0625 W,SM,0402,200PPM/CEL,PB-FREE
R2135M2	0613952Q41	RES,MF,47OHM,5%,.0625 W,SM,0402,200PPM/CEL,PB-FREE
R2136M2	0613952Q61	RES,MF,330OHM,5%,.0625 W,SM,0402,200PPM/CEL,PB-FREE
R2137M2	0613952Q61	RES,MF,330OHM,5%,.0625 W,SM,0402,200PPM/CEL,PB-FREE
R2138M2	0613952Q41	RES,MF,47OHM,5%,.0625 W,SM,0402,200PPM/CEL,PB-FREE
R2139M2	0613952Q41	RES,MF,47OHM,5%,.0625 W,SM,0402,200PPM/CEL,PB-FREE
R2142M2	0613952Q41	RES,MF,47OHM,5%,.0625 W,SM,0402,200PPM/CEL,PB-FREE
R2144M2	0613952Q61	RES,MF,330OHM,5%,.0625 W,SM,0402,200PPM/CEL,PB-FREE

Ref. Des.	Part Number	Description
R2145M2	0613952Q41	RES,MF,47OHM,5%,.0625 W,SM,0402,200PPM/CEL,PB-FREE
R2146M2	0613952Q41	RES,MF,47OHM,5%,.0625 W,SM,0402,200PPM/CEL,PB-FREE
R2147M2	0613952Q41	RES,MF,47OHM,5%,.0625 W,SM,0402,200PPM/CEL,PB-FREE
R2148M2	0613952Q41	RES,MF,47OHM,5%,.0625 W,SM,0402,200PPM/CEL,PB-FREE
R2149M2	0613952Q41	RES,MF,47OHM,5%,.0625 W,SM,0402,200PPM/CEL,PB-FREE
R2151M2	NOTPLACED	64AM DUMMY PART NUMBER
R2153M2	0613952Q41	RES,MF,47OHM,5%,.0625 W,SM,0402,200PPM/CEL,PB-FREE
R2154M2	0613952Q41	RES,MF,47OHM,5%,.0625 W,SM,0402,200PPM/CEL,PB-FREE
R2192M2	0613952Q61	RES,MF,330OHM,5%,.0625 W,SM,0402,200PPM/CEL,PB-FREE
R2197M2	0613952R66	RES,MF,0OHM,5%,.0625W,SM,0402,PB-FREE
R2198M2	0613952R66	RES,MF,0OHM,5%,.0625W,SM,0402,PB-FREE
R2199M2	0613952R66	RES,MF,0OHM,5%,.0625W,SM,0402,PB-FREE
R2200M2	0613952R66	RES,MF,0OHM,5%,.0625W,SM,0402,PB-FREE
R2202M2	0613952R66	RES,MF,0OHM,5%,.0625W,SM,0402,PB-FREE
R2204M2	0613952Q85	RES,MF,3.3KOHM,5%,.0625W,SM,0402,200PPM/CEL,PB-FREE
R2206M2	0613952Q85	RES,MF,3.3KOHM,5%,.0625W,SM,0402,200PPM/CEL,PB-FREE
R2207M2	0613952R66	RES,MF,0OHM,5%,.0625W,SM,0402,PB-FREE

Ref. Des.	Part Number	Description
R2235M2	0613952R66	RES,MF,0OHM,5%,.0625W,SM,0402,PB-FREE
R2244M2	0613952Q72	RES,MF,910OHM,5%,.0625 W,SM,0402,PB-FREE
R2245M2	0613952Q63	RES,MF,390OHM,5%,.0625 W,SM,0402,200PPM/CEL,PB-FREE
R2246M2	0613952Q60	RES,MF,300OHM,5%,.0625 W,SM,0402,200PPM/CEL,PB-FREE
R2254M2	0613952R01	RES,MF,10KOHM,5%,.0625 W,SM,0402,200PPM/CEL,PB-FREE
R2255M2	0613952R32	RES,MF,200KOHM,5%,.0625W,SM,0402,200PPM/CEL,PB-FREE
R2301M13	NOTPLACED	64AM DUMMY PART NUMBER
R2302M13	0613952H47	RES,MF,82OHM,5%,.1W,SM,0603,200PPM/CEL,PB-FREE
R2303M13	0613952H47	RES,MF,82OHM,5%,.1W,SM,0603,200PPM/CEL,PB-FREE
R2304M13	0613952H47	RES,MF,82OHM,5%,.1W,SM,0603,200PPM/CEL,PB-FREE
R2305M13	0613952G67	RES,MF,0,1,.1,SM,0603,PB-FREE
R2306M13	0613952R25	RES,MF,100KOHM,5%,.0625W,SM,0402,200PPM/CEL,PB-FREE
R2803M1	0613952Q37	RES,MF,33OHM,5%,.0625 W,SM,0402,200PPM/CEL,PB-FREE
R2804M1	0613952Q49	RES,MF,100,5,.0625,SM,0402,200,PB-FREE
R2805M1	0613952Q49	RES,MF,100,5,.0625,SM,0402,200,PB-FREE
R2806M1	0613952Q59	RES,MF,270OHM,5%,.0625 W,SM,0402,200PPM/CEL,PB-FREE

Ref. Des.	Part Number	Description
R2807M1	0613952Q56	RES,MF,200OHM,5%,.0625 W,SM,0402,200PPM/CEL,PB-FREE
R2808M1	0613952Q49	RES,MF,100,5,.0625,SM,0402,200,PB-FREE
R2810M1	0613952R01	RES,MF,10KOHM,5%,.0625 W,SM,0402,200PPM/CEL,PB-FREE
R2811M1	0613952Q89	RES,MF,4700,5,.0625,SM,0402,200,PB-FREE
R2812M1	0613952R01	RES,MF,10KOHM,5%,.0625 W,SM,0402,200PPM/CEL,PB-FREE
R2813M1	NOTPLACED	64AM DUMMY PART NUMBER
R2817M1	0613952Q41	RES,MF,47OHM,5%,.0625 W,SM,0402,200PPM/CEL,PB-FREE
R3018M22	0613952R18	RES,MF,51KOHM,5%,.0625 W,SM,0402,200PPM/CEL,PB-FREE
R3019M22	0613952R18	RES,MF,51KOHM,5%,.0625 W,SM,0402,200PPM/CEL,PB-FREE
R3030M22	0613952R08	RES,MF,20KOHM,5%,.0625 W,SM,0402,200PPM/CEL,PB-FREE
R3031M22	0613952R08	RES,MF,20KOHM,5%,.0625 W,SM,0402,200PPM/CEL,PB-FREE
R3032M22	0613952Q22	RES,MF,7.5OHM,5%,.0625 W,SM,0402,200PPM/CEL,PB-FREE
R3034M22	0613952Q34	RES,MF,24OHM,5%,.0625 W,SM,0402,200PPM/CEL,PB-FREE
R3036M22	0613952R08	RES,MF,20KOHM,5%,.0625 W,SM,0402,200PPM/CEL,PB-FREE
R3037M22	0613952R08	RES,MF,20KOHM,5%,.0625 W,SM,0402,200PPM/CEL,PB-FREE
R3040M22	0613952Q52	RES,MF,130OHM,5%,.0625 W,SM,0402,200PPM/CEL,PB-FREE

Ref. Des.	Part Number	Description
R3043M22	0613952Q46	RES,MF,75OHM,5%,.0625 W,SM,0402,200PPM/ CEL,PB-FREE
R3052M22	0613952R18	RES,MF,51KOHM,5%,.0625 W,SM,0402,200PPM/ CEL,PB-FREE
R3058M22	0613952R07	RES,MF,18KOHM,5%,.0625 W,SM,0402,200PPM/ CEL,PB-FREE
R3059M22	0613952Q27	RES,MF,12OHM,5%,.0625 W,SM,0402,200PPM/ CEL,PB-FREE
R3061M22	0613952R08	RES,MF,20KOHM,5%,.0625 W,SM,0402,200PPM/ CEL,PB-FREE
R3063M22	0613952Q50	RES,MF,110OHM,5%,.0625 W,SM,0402,200PPM/ CEL,PB-FREE
R3066M22	0613952Q32	RES,MF,20OHM,5%,.0625 W,SM,0402,200PPM/ CEL,PB-FREE
R4005M2	0613952R01	RES,MF,10KOHM,5%,.0625 W,SM,0402,200PPM/ CEL,PB-FREE
R4006M2	0613952R01	RES,MF,10KOHM,5%,.0625 W,SM,0402,200PPM/ CEL,PB-FREE
R4007M2	0613952R01	RES,MF,10KOHM,5%,.0625 W,SM,0402,200PPM/ CEL,PB-FREE
R4008M2	0613952R01	RES,MF,10KOHM,5%,.0625 W,SM,0402,200PPM/ CEL,PB-FREE
R4009M2	0613952Q85	RES,MF,3.3KOHM,5%,.062 5W,SM,0402,200PPM/ CEL,PB-FREE
R4010M2	0613952R32	RES,MF,200KOHM,5%,.062 5W,SM,0402,200PPM/ CEL,PB-FREE
R4011M2	0613952R17	RES,MF,47000,5,.0625,SM, 0402,200,PB-FREE
R4012M2	0613952R09	RES,MF,22000,5,.0625,SM, 0402,200,PB-FREE
R4013M2	0613952R09	RES,MF,22000,5,.0625,SM, 0402,200,PB-FREE

Ref. Des.	Part Number	Description
R4014M2	0613952Q85	RES,MF,3.3KOHM,5%,.062 5W,SM,0402,200PPM/ CEL,PB-FREE
R401M20	0613952R09	RES,MF,22000,5,.0625,SM, 0402,200,PB-FREE
R402M20	0613952R23	RES,MF,82KOHM,5%,.0625 W,SM,0402,200PPM/ CEL,PB-FREE
R403M20	0613952Q85	RES,MF,3.3KOHM,5%,.062 5W,SM,0402,200PPM/ CEL,PB-FREE
R404M20	0613952Q45	RES,MF,68OHM,5%,.0625 W,SM,0402,200PPM/ CEL,PB-FREE
R405M20	0613952Q25	RES,MF,10,5,.0625,SM,040 2,200,PB-FREE
R406M20	0613952R66	RES,MF,0OHM,5%,.0625W, SM,0402,PB-FREE
R407M20	0613952R09	RES,MF,22000,5,.0625,SM, 0402,200,PB-FREE
R408M20	0613952R23	RES,MF,82KOHM,5%,.0625 W,SM,0402,200PPM/ CEL,PB-FREE
R409M20	0613952Q85	RES,MF,3.3KOHM,5%,.062 5W,SM,0402,200PPM/ CEL,PB-FREE
R410M20	0613952Q45	RES,MF,68OHM,5%,.0625 W,SM,0402,200PPM/ CEL,PB-FREE
R411M20	0613952Q25	RES,MF,10,5,.0625,SM,040 2,200,PB-FREE
R412M20	0613952Q18	RES,MF,5.1OHM,5%,.0625 W,SM,0402,200PPM/ CEL,PB-FREE
R413M20	0613952Q11	RES,MF,2.7OHM,5%,.0625 W,SM,0402,200PPM/ CEL,PB-FREE
R447M20	0613952Q25	RES,MF,10,5,.0625,SM,040 2,200,PB-FREE
R448M20	0613952Q25	RES,MF,10,5,.0625,SM,040 2,200,PB-FREE
R450M20	0613952R66	RES,MF,0OHM,5%,.0625W, SM,0402,PB-FREE

Ref. Des.	Part Number	Description
R451M20	0613952R66	RES,MF,0OHM,5%,.0625W, SM,0402,PB-FREE
R452M20	0613952R66	RES,MF,0OHM,5%,.0625W, SM,0402,PB-FREE
R453M20	0613952R66	RES,MF,0OHM,5%,.0625W, SM,0402,PB-FREE
R454M20	0613952R66	RES,MF,0OHM,5%,.0625W, SM,0402,PB-FREE
R455M20	0613952R66	RES,MF,0OHM,5%,.0625W, SM,0402,PB-FREE
R456M20	0613952R66	RES,MF,0OHM,5%,.0625W, SM,0402,PB-FREE
R457M20	0613952R66	RES,MF,0OHM,5%,.0625W, SM,0402,PB-FREE
R500M21	0613952Q37	RES,MF,33OHM,5%,.0625 W,SM,0402,200PPM/ CEL,PB-FREE
R502M21	0613952Q36	RES,MF,30OHM,5%,.0625 W,SM,0402,200PPM/ CEL,PB-FREE
R512M21	0613952R66	RES,MF,0OHM,5%,.0625W, SM,0402,PB-FREE
R525M21	0613952R66	RES,MF,0OHM,5%,.0625W, SM,0402,PB-FREE
R526M21	0613958J74	RES,MF,0OHM,5%,.125W,S M,0805,PB-FREE
R601M19	0613952Q41	RES,MF,47OHM,5%,.0625 W,SM,0402,200PPM/ CEL,PB-FREE
R602M19	0613952Q63	RES,MF,390OHM,5%,.0625 W,SM,0402,200PPM/ CEL,PB-FREE
R603M19	0613952R25	RES,MF,100KOHM,5%,.062 5W,SM,0402,200PPM/ CEL,PB-FREE
R604M19	0613952Q63	RES,MF,390OHM,5%,.0625 W,SM,0402,200PPM/ CEL,PB-FREE
R605M19	0613952R01	RES,MF,10KOHM,5%,.0625 W,SM,0402,200PPM/ CEL,PB-FREE

Ref. Des.	Part Number	Description
R606M19	0613952R01	RES,MF,10KOHM,5%,.0625 W,SM,0402,200PPM/ CEL,PB-FREE
R607M19	0613952R25	RES,MF,100KOHM,5%,.062 5W,SM,0402,200PPM/ CEL,PB-FREE
R608M19	0613952R01	RES,MF,10KOHM,5%,.0625 W,SM,0402,200PPM/ CEL,PB-FREE
R609M19	0613952Q81	RES,MF,2200,5,.0625,SM,0 402,200,PB-FREE
R6101M6	0613952R01	RES,MF,10KOHM,5%,.0625 W,SM,0402,200PPM/ CEL,PB-FREE
R6102M6	0613952R09	RES,MF,22000,5,.0625,SM, 0402,200,PB-FREE
R6103M6	0613952R09	RES,MF,22000,5,.0625,SM, 0402,200,PB-FREE
R6104M6	NOTPLACED	64AM DUMMY PART NUM- BER
R6105M6	0613952R66	RES,MF,0OHM,5%,.0625W, SM,0402,PB-FREE
R6106M6	0613952Q73	RES,MF,1KOHM,5%,.0625 W,SM,0402,200PPM/ CEL,PB-FREE
R6107M6	0613952Q55	RES,MF,180OHM,5%,.0625 W,SM,0402,200PPM/ CEL,PB-FREE
R6108M6	0613952Q61	RES,MF,330OHM,5%,.0625 W,SM,0402,200PPM/ CEL,PB-FREE
R6109M6	NOTPLACED	64AM DUMMY PART NUM- BER
R610M19	0613952R25	RES,MF,100KOHM,5%,.062 5W,SM,0402,200PPM/ CEL,PB-FREE
R6110M6	0613952Q73	RES,MF,1KOHM,5%,.0625 W,SM,0402,200PPM/ CEL,PB-FREE
R6111M6	NOTPLACED	64AM DUMMY PART NUM- BER
R6112M6	NOTPLACED	64AM DUMMY PART NUM- BER

Ref. Des.	Part Number	Description
R6113M6	0613952Q51	RES,MF,120,5,.0625,SM,0402,200,PB-FREE
R6114M6	0613952Q49	RES,MF,100,5,.0625,SM,0402,200,PB-FREE
R6115M6	0613952Q49	RES,MF,100,5,.0625,SM,0402,200,PB-FREE
R6116M6	0613952Q73	RES,MF,1KOHM,5%,.0625W,SM,0402,200PPM/CEL,PB-FREE
R6117M6	0613952R01	RES,MF,10KOHM,5%,.0625W,SM,0402,200PPM/CEL,PB-FREE
R6118M6	0613952R09	RES,MF,22000,5,.0625,SM,0402,200,PB-FREE
R6119M6	0613952R01	RES,MF,10KOHM,5%,.0625W,SM,0402,200PPM/CEL,PB-FREE
R611M19	0613952R01	RES,MF,10KOHM,5%,.0625W,SM,0402,200PPM/CEL,PB-FREE
R6120M6	0613952R01	RES,MF,10KOHM,5%,.0625W,SM,0402,200PPM/CEL,PB-FREE
R6121M6	0613952R01	RES,MF,10KOHM,5%,.0625W,SM,0402,200PPM/CEL,PB-FREE
R6122M6	0613952R01	RES,MF,10KOHM,5%,.0625W,SM,0402,200PPM/CEL,PB-FREE
R6125M6	NOTPLACED	64AM DUMMY PART NUMBER
R612M19	0613952Q94	RES,MF,7.5KOHM,5%,.0625W,SM,0402,200PPM/CEL,PB-FREE
R613M19	0613952Q82	RES,MF,2.4KOHM,5%,.0625W,SM,0402,200PPM/CEL,PB-FREE
R614M19	0613952R66	RES,MF,0OHM,5%,.0625W,SM,0402,PB-FREE
R615M19	NOTPLACED	64AM DUMMY PART NUMBER
R616M19	NOTPLACED	64AM DUMMY PART NUMBER

Ref. Des.	Part Number	Description
R617M19	NOTPLACED	64AM DUMMY PART NUMBER
R618M19	NOTPLACED	64AM DUMMY PART NUMBER
R619M19	NOTPLACED	64AM DUMMY PART NUMBER
R6201M6	NOTPLACED	64AM DUMMY PART NUMBER
R6202M6	0613952R01	RES,MF,10KOHM,5%,.0625W,SM,0402,200PPM/CEL,PB-FREE
R6203M6	0613952R66	RES,MF,0OHM,5%,.0625W,SM,0402,PB-FREE
R6204M6	0613952R01	RES,MF,10KOHM,5%,.0625W,SM,0402,200PPM/CEL,PB-FREE
R6205M6	0613952R01	RES,MF,10KOHM,5%,.0625W,SM,0402,200PPM/CEL,PB-FREE
R6206M6	0613952R25	RES,MF,100KOHM,5%,.0625W,SM,0402,200PPM/CEL,PB-FREE
R6207M6	0613952R25	RES,MF,100KOHM,5%,.0625W,SM,0402,200PPM/CEL,PB-FREE
R6208M6	0613952Q89	RES,MF,4700,5,.0625,SM,0402,200,PB-FREE
R6209M6	0613952Q89	RES,MF,4700,5,.0625,SM,0402,200,PB-FREE
R620M19	NOTPLACED	64AM DUMMY PART NUMBER
R6210M6	0613952Q89	RES,MF,4700,5,.0625,SM,0402,200,PB-FREE
R6211M6	0613952R01	RES,MF,10KOHM,5%,.0625W,SM,0402,200PPM/CEL,PB-FREE
R6212M6	NOTPLACED	64AM DUMMY PART NUMBER
R6213M6	0613952R01	RES,MF,10KOHM,5%,.0625W,SM,0402,200PPM/CEL,PB-FREE
R6214M6	NOTPLACED	64AM DUMMY PART NUMBER

Ref. Des.	Part Number	Description
R6215M6	0613952R01	RES,MF,10KOHM,5%,.0625W,SM,0402,200PPM/CEL,PB-FREE
R6217M6	0613952Q73	RES,MF,1KOHM,5%,.0625W,SM,0402,200PPM/CEL,PB-FREE
R6218M6	0613952Q80	RES,MF,2KOHM,5%,.0625W,SM,0402,200PPM/CEL,PB-FREE
R621M19	NOTPLACED	64AM DUMMY PART NUMBER
R623M19	NOTPLACED	64AM DUMMY PART NUMBER
R624M19	NOTPLACED	64AM DUMMY PART NUMBER
R6301M6	0613952R01	RES,MF,10KOHM,5%,.0625W,SM,0402,200PPM/CEL,PB-FREE
R6304M6	0613952R66	RES,MF,0OHM,5%,.0625W,SM,0402,PB-FREE
R6306M6	0613952R01	RES,MF,10KOHM,5%,.0625W,SM,0402,200PPM/CEL,PB-FREE
R6310M6	0613952Q37	RES,MF,33OHM,5%,.0625W,SM,0402,200PPM/CEL,PB-FREE
R6311M6	0613952Q37	RES,MF,33OHM,5%,.0625W,SM,0402,200PPM/CEL,PB-FREE
R6312M6	0613952Q37	RES,MF,33OHM,5%,.0625W,SM,0402,200PPM/CEL,PB-FREE
R6313M6	0613952Q37	RES,MF,33OHM,5%,.0625W,SM,0402,200PPM/CEL,PB-FREE
R6314M6	0613952Q37	RES,MF,33OHM,5%,.0625W,SM,0402,200PPM/CEL,PB-FREE
R6316M6	0613952R01	RES,MF,10KOHM,5%,.0625W,SM,0402,200PPM/CEL,PB-FREE
R6401M6	0613952R18	RES,MF,51KOHM,5%,.0625W,SM,0402,200PPM/CEL,PB-FREE

Ref. Des.	Part Number	Description
R6402M6	0613952R32	RES,MF,200KOHM,5%,.0625W,SM,0402,200PPM/CEL,PB-FREE
R6403M6	0613952Q81	RES,MF,2200,5,.0625,SM,0402,200,PB-FREE
R6404M6	0613952Q81	RES,MF,2200,5,.0625,SM,0402,200,PB-FREE
R6405M6	0613952Q75	RES,MF,1.2KOHM,5%,.0625W,SM,0402,200PPM/CEL,PB-FREE
R6406M6	0613952R01	RES,MF,10KOHM,5%,.0625W,SM,0402,200PPM/CEL,PB-FREE
R6407M6	0613952Q81	RES,MF,2200,5,.0625,SM,0402,200,PB-FREE
R6409M6	0613952N01	RES,MF,10KOHM,1%,.0625W,SM,0402,200PPM/CEL,PB-FREE
R6410M6	0613952R01	RES,MF,10KOHM,5%,.0625W,SM,0402,200PPM/CEL,PB-FREE
R6411M6	0613952R66	RES,MF,0OHM,5%,.0625W,SM,0402,PB-FREE
R6414M6	0613952Q61	RES,MF,330OHM,5%,.0625W,SM,0402,200PPM/CEL,PB-FREE
R6415M6	0613952Q61	RES,MF,330OHM,5%,.0625W,SM,0402,200PPM/CEL,PB-FREE
R6416M6	0613952Q61	RES,MF,330OHM,5%,.0625W,SM,0402,200PPM/CEL,PB-FREE
R6417M6	0613952Q61	RES,MF,330OHM,5%,.0625W,SM,0402,200PPM/CEL,PB-FREE
R6419M6	0613952Q37	RES,MF,33OHM,5%,.0625W,SM,0402,200PPM/CEL,PB-FREE
R6420M6	0613952R17	RES,MF,47000,5,.0625,SM,0402,200,PB-FREE
R6421M6	0613952R01	RES,MF,10KOHM,5%,.0625W,SM,0402,200PPM/CEL,PB-FREE

Ref. Des.	Part Number	Description
R6422M6	0613952Q51	RES,MF,120,5,.0625,SM,0402,200,PB-FREE
R6423M6	0613952R66	RES,MF,0OHM,5%,.0625W,SM,0402,PB-FREE
R6424M6	0613952N01	RES,MF,10KOHM,1%,.0625W,SM,0402,200PPM/CEL,PB-FREE
R6425M6	0613952Q80	RES,MF,2KOHM,5%,.0625W,SM,0402,200PPM/CEL,PB-FREE
R6426M6	0613952Q49	RES,MF,100,5,.0625,SM,0402,200,PB-FREE
R6427M6	0613952R11	RES,MF,27KOHM,5%,.0625W,SM,0402,200PPM/CEL,PB-FREE
R6428M6	0613952R25	RES,MF,100KOHM,5%,.0625W,SM,0402,200PPM/CEL,PB-FREE
R6429M6	0613952R17	RES,MF,47000,5,.0625,SM,0402,200,PB-FREE
R6430M6	0613952R09	RES,MF,22000,5,.0625,SM,0402,200,PB-FREE
R6431M6	0613952Q81	RES,MF,2200,5,.0625,SM,0402,200,PB-FREE
R6432M6	0613952R25	RES,MF,100KOHM,5%,.0625W,SM,0402,200PPM/CEL,PB-FREE
R6433M6	0613952Q32	RES,MF,20OHM,5%,.0625W,SM,0402,200PPM/CEL,PB-FREE
R6434M6	0613952Q32	RES,MF,20OHM,5%,.0625W,SM,0402,200PPM/CEL,PB-FREE
R6435M6	0613952N01	RES,MF,10KOHM,1%,.0625W,SM,0402,200PPM/CEL,PB-FREE
R6436M6	NOTPLACED	64AM DUMMY PART NUMBER
R6492M6	0613952Q79	RES,MF,1800,5,.0625,SM,0402,200,PB-FREE
R6501M6	0613952Q25	RES,MF,10,5,.0625,SM,0402,200,PB-FREE

Ref. Des.	Part Number	Description
R6502M6	0613952Q25	RES,MF,10,5,.0625,SM,0402,200,PB-FREE
R6503M6	0613952Q25	RES,MF,10,5,.0625,SM,0402,200,PB-FREE
R6504M6	0613952R09	RES,MF,22000,5,.0625,SM,0402,200,PB-FREE
R6505M6	0613952Q80	RES,MF,2KOHM,5%,.0625W,SM,0402,200PPM/CEL,PB-FREE
R6506M6	0613952R66	RES,MF,0OHM,5%,.0625W,SM,0402,PB-FREE
R6507M6	0613952R01	RES,MF,10KOHM,5%,.0625W,SM,0402,200PPM/CEL,PB-FREE
R6508M6	0613952R17	RES,MF,47000,5,.0625,SM,0402,200,PB-FREE
R6509M6	0613952R25	RES,MF,100KOHM,5%,.0625W,SM,0402,200PPM/CEL,PB-FREE
R6510M6	0613952R66	RES,MF,0OHM,5%,.0625W,SM,0402,PB-FREE
R6511M6	0613952R01	RES,MF,10KOHM,5%,.0625W,SM,0402,200PPM/CEL,PB-FREE
R6512M6	0613952N01	RES,MF,10KOHM,1%,.0625W,SM,0402,200PPM/CEL,PB-FREE
R6513M6	0613952R66	RES,MF,0OHM,5%,.0625W,SM,0402,PB-FREE
R6514M6	0613952Q89	RES,MF,4700,5,.0625,SM,0402,200,PB-FREE
R6515M6	0613952R66	RES,MF,0OHM,5%,.0625W,SM,0402,PB-FREE
R6516M6	0613952R66	RES,MF,0OHM,5%,.0625W,SM,0402,PB-FREE
R6517M6	0613952Q63	RES,MF,390OHM,5%,.0625W,SM,0402,200PPM/CEL,PB-FREE
R6518M6	0613952R66	RES,MF,0OHM,5%,.0625W,SM,0402,PB-FREE
R6519M6	0613952Q89	RES,MF,4700,5,.0625,SM,0402,200,PB-FREE

Ref. Des.	Part Number	Description
R6520M6	0613952Q73	RES,MF,1KOHM,5%,.0625W,SM,0402,200PPM/CEL,PB-FREE
R6521M6	0615049H01	RES,MF,.2OHM,1%,.5W,1206,KAMAYA 0.2 OHM CHIP RES
R6522M6	0613952M66	RES,MF,4.75KOHM,1%,.0625W,SM,0402,200PPM/CEL,PB-FREE
R6523M6	0613952R09	RES,MF,22000,5,.0625,SM,0402,200,PB-FREE
R6524M6	0613952R66	RES,MF,0OHM,5%,.0625W,SM,0402,PB-FREE
R6525M6	NOTPLACED	64AM DUMMY PART NUMBER
R6526M6	0613952R66	RES,MF,0OHM,5%,.0625W,SM,0402,PB-FREE
R6527M6	0613952N87	RES,MF,78.7KOHM,1%,.0625W,SM,0402,200PPM/CEL,PB-FREE
R6528M6	0613952R25	RES,MF,100KOHM,5%,.0625W,SM,0402,200PPM/CEL,PB-FREE
R6529M6	0615049H01	RES,MF,.2OHM,1%,.5W,1206,KAMAYA 0.2 OHM CHIP RES
R6530M6	0613952L30	RES,MF,200OHM,1%,.0625W,SM,0402,200PPM/CEL,PB-FREE
R6531M6	0613952R01	RES,MF,10KOHM,5%,.0625W,SM,0402,200PPM/CEL,PB-FREE
R6532M6	NOTPLACED	64AM DUMMY PART NUMBER
R6533M6	0613952R66	RES,MF,0OHM,5%,.0625W,SM,0402,PB-FREE
R6534M6	NOTPLACED	64AM DUMMY PART NUMBER
R6535M6	0613952N01	RES,MF,10KOHM,1%,.0625W,SM,0402,200PPM/CEL,PB-FREE
R6536M6	0613952Z72	RES,MF,91KOHM,1%,.0625W,SM,0402,200PPM/CEL,PB-FREE

Ref. Des.	Part Number	Description
R6537M6	0613952P09	RES,MF,121KOHM,1%,.0625W,SM,0402,200PPM/CEL,PB-FREE
R6538M6	0613952Q95	RES,MF,8.2KOHM,5%,.0625W,SM,0402,200PPM/CEL,PB-FREE
R6539M6	0613952P66	RES,MF,475KOHM,1%,.0625W,SM,0402,200PPM/CEL,PB-FREE
R6540M6	0613952P66	RES,MF,475KOHM,1%,.0625W,SM,0402,200PPM/CEL,PB-FREE
R6541M6	0613952R25	RES,MF,100KOHM,5%,.0625W,SM,0402,200PPM/CEL,PB-FREE
R6542M6	0613952R66	RES,MF,0OHM,5%,.0625W,SM,0402,PB-FREE
R6543M6	0613952R66	RES,MF,0OHM,5%,.0625W,SM,0402,PB-FREE
R6544M6	0613952R66	RES,MF,0OHM,5%,.0625W,SM,0402,PB-FREE
R6545M6	0613952R25	RES,MF,100KOHM,5%,.0625W,SM,0402,200PPM/CEL,PB-FREE
R6546M6	0613952R66	RES,MF,0OHM,5%,.0625W,SM,0402,PB-FREE
R6547M6	0613952R66	RES,MF,0OHM,5%,.0625W,SM,0402,PB-FREE
R6548M6	NOTPLACED	64AM DUMMY PART NUMBER
R6550M6	0613952Z64	RES,MF,39KOHM,1%,.0625W,SM,0402,200PPM/CEL,PB-FREE
R6551M6	0613952Z62	RES,MF,33KOHM,1%,.0625W,SM,0402,200PPM/CEL,PB-FREE
R6552M6	0613952R25	RES,MF,100KOHM,5%,.0625W,SM,0402,200PPM/CEL,PB-FREE
R6558M6	0613952P22	RES,MF,165KOHM,1%,.0625W,SM,0402,200PPM/CEL,PB-FREE
R6561M6	0613952R66	RES,MF,0OHM,5%,.0625W,SM,0402,PB-FREE

Ref. Des.	Part Number	Description
R6562M6	0613952R66	RES,MF,0OHM,5%,.0625W,SM,0402,PB-FREE
R6563M6	0613952R66	RES,MF,0OHM,5%,.0625W,SM,0402,PB-FREE
R6564M6	0613952R66	RES,MF,0OHM,5%,.0625W,SM,0402,PB-FREE
R6565M6	0613952R66	RES,MF,0OHM,5%,.0625W,SM,0402,PB-FREE
R6566M6	0613952R66	RES,MF,0OHM,5%,.0625W,SM,0402,PB-FREE
R6567M6	0613952R66	RES,MF,0OHM,5%,.0625W,SM,0402,PB-FREE
R6568M6	0613952P47	RES,MF,301KOHM,1%,.0625W,SM,0402,200PPM/CEL,PB-FREE
R6570M6	0613952R66	RES,MF,0OHM,5%,.0625W,SM,0402,PB-FREE
R6574M6	0613952R25	RES,MF,100KOHM,5%,.0625W,SM,0402,200PPM/CEL,PB-FREE
R6576M6	0613952R01	RES,MF,10KOHM,5%,.0625W,SM,0402,200PPM/CEL,PB-FREE
R6577M6	0613952Q89	RES,MF,4700,5,.0625,SM,0402,200,PB-FREE
R6578M6	0613952Q89	RES,MF,4700,5,.0625,SM,0402,200,PB-FREE
R6579M6	0613952R01	RES,MF,10KOHM,5%,.0625W,SM,0402,200PPM/CEL,PB-FREE
R6580M6	0613952R17	RES,MF,47000,5,.0625,SM,0402,200,PB-FREE
R6581M6	0613952Q49	RES,MF,100,5,.0625,SM,0402,200,PB-FREE
R6582M6	0613952Q89	RES,MF,4700,5,.0625,SM,0402,200,PB-FREE
R6583M6	0613952R03	RES,MF,12000,5,.0625,SM,0402,200,PB-FREE
R6584M6	0613952Q56	RES,MF,200OHM,5%,.0625W,SM,0402,200PPM/CEL,PB-FREE
R6592M6	0613952R66	RES,MF,0OHM,5%,.0625W,SM,0402,PB-FREE

Ref. Des.	Part Number	Description
R6598M6	0613952R66	RES,MF,0OHM,5%,.0625W,SM,0402,PB-FREE
R6599M6	NOTPLACED	64AM DUMMY PART NUMBER
R6601M6	0613952R01	RES,MF,10KOHM,5%,.0625W,SM,0402,200PPM/CEL,PB-FREE
R6602M6	0613952R01	RES,MF,10KOHM,5%,.0625W,SM,0402,200PPM/CEL,PB-FREE
R6604M6	0613952Q51	RES,MF,120,5,.0625,SM,0402,200,PB-FREE
R6605M6	0613952Q33	RES,MF,22,5,.0625,SM,0402,200,PB-FREE
R6606M6	0613952Q37	RES,MF,33OHM,5%,.0625W,SM,0402,200PPM/CEL,PB-FREE
R6608M6	0613952R01	RES,MF,10KOHM,5%,.0625W,SM,0402,200PPM/CEL,PB-FREE
R6609M6	0613952R25	RES,MF,100KOHM,5%,.0625W,SM,0402,200PPM/CEL,PB-FREE
R6616M6	0613952Q80	RES,MF,2KOHM,5%,.0625W,SM,0402,200PPM/CEL,PB-FREE
R6617M6	0613952R01	RES,MF,10KOHM,5%,.0625W,SM,0402,200PPM/CEL,PB-FREE
R6618M6	0613952R01	RES,MF,10KOHM,5%,.0625W,SM,0402,200PPM/CEL,PB-FREE
R6619M6	0613952R01	RES,MF,10KOHM,5%,.0625W,SM,0402,200PPM/CEL,PB-FREE
R6621M6	0613952Q89	RES,MF,4700,5,.0625,SM,0402,200,PB-FREE
R6622M6	0613952Q35	RES,MF,27OHM,5%,.0625W,SM,0402,200PPM/CEL,PB-FREE
R6623M6	0613952Q35	RES,MF,27OHM,5%,.0625W,SM,0402,200PPM/CEL,PB-FREE

Ref. Des.	Part Number	Description
R6624M6	0613952Q35	RES,MF,27OHM,5%,.0625W,SM,0402,200PPM/CEL,PB-FREE
R6625M6	0613952Q35	RES,MF,27OHM,5%,.0625W,SM,0402,200PPM/CEL,PB-FREE
R6626M6	0613952R01	RES,MF,10KOHM,5%,.0625W,SM,0402,200PPM/CEL,PB-FREE
R698M19	0613952R66	RES,MF,0OHM,5%,.0625W,SM,0402,PB-FREE
R699M19	0613952R66	RES,MF,0OHM,5%,.0625W,SM,0402,PB-FREE
R701M7	0613952Q64	RES,MF,430OHM,5%,.0625W,SM,0402,200PPM/CEL,PB-FREE
R702M7	0613952R66	RES,MF,0OHM,5%,.0625W,SM,0402,PB-FREE
R703M7	0613952Q67	RES,MF,560OHM,5%,.0625W,SM,0402,200PPM/CEL,PB-FREE
R704M7	0613952Q25	RES,MF,10,5,.0625,SM,0402,200,PB-FREE
R705M7	0613952Q75	RES,MF,1.2KOHM,5%,.0625W,SM,0402,200PPM/CEL,PB-FREE
R706M7	0613952R66	RES,MF,0OHM,5%,.0625W,SM,0402,PB-FREE
R707M7	0613952Q67	RES,MF,560OHM,5%,.0625W,SM,0402,200PPM/CEL,PB-FREE
R708M7	0613952Q45	RES,MF,68OHM,5%,.0625W,SM,0402,200PPM/CEL,PB-FREE
R709M7	NOTPLACED	64AM DUMMY PART NUMBER
R721M7	0613952R01	RES,MF,10KOHM,5%,.0625W,SM,0402,200PPM/CEL,PB-FREE
R722M7	0613952Q57	RES,MF,220OHM,5%,.0625W,SM,0402,200PPM/CEL,PB-FREE

Ref. Des.	Part Number	Description
R723M7	0613952R02	RES,MF,11KOHM,5%,.0625W,SM,0402,200PPM/CEL,PB-FREE
R728M7	0613952Q69	RES,MF,680OHM,5%,.0625W,SM,0402,200PPM/CEL,PB-FREE
R729M7	0613952R09	RES,MF,22000,5,.0625,SM,0402,200,PB-FREE
R730M7	0613952Q84	RES,MF,3KOHM,5%,.0625W,SM,0402,200PPM/CEL,PB-FREE
R734M7	0613952R66	RES,MF,0OHM,5%,.0625W,SM,0402,PB-FREE
R736M7	0613952Q55	RES,MF,180OHM,5%,.0625W,SM,0402,200PPM/CEL,PB-FREE
R741M7	0613952R09	RES,MF,22000,5,.0625,SM,0402,200,PB-FREE
R742M7	0613952R23	RES,MF,82KOHM,5%,.0625W,SM,0402,200PPM/CEL,PB-FREE
R743M7	0613952R17	RES,MF,47000,5,.0625,SM,0402,200,PB-FREE
R744M7	0613952Q91	RES,MF,5600,5,.0625,SM,0402,200,PB-FREE
R745M7	0613952R09	RES,MF,22000,5,.0625,SM,0402,200,PB-FREE
R746M7	0613952Q12	RES,MF,3OHM,5%,.0625W,SM,0402,200PPM/CEL,PB-FREE
R747M7	0613952Q34	RES,MF,24OHM,5%,.0625W,SM,0402,200PPM/CEL,PB-FREE
R748M7	0613952Q47	RES,MF,82OHM,5%,.0625W,SMD,0402,200PPM/CEL,CER CHIP 82.0 OHM 5%
R751M7	0613952Q59	RES,MF,270OHM,5%,.0625W,SM,0402,200PPM/CEL,PB-FREE
R754M7	NOTPLACED	64AM DUMMY PART NUMBER
R757M7	NOTPLACED	64AM DUMMY PART NUMBER



Ref. Des.	Part Number	Description	Ref. Des.	Part Number	Description	Ref. Des.	Part Number	Description	Ref. Des.	Part Number	Description
R761M7	0613952Q29	RES,MF,15OHM,5%,.0625 W,SM,0402,200PPM/CEL,PB-FREE	U1002M16	51012101001	IC,SM,VHF/UHF/800/900 MHZ LDMOS DRVR IC	U1132M11	5114007M28	IC,D FLIP-FLOP,1PER PKG,17SZ74,N-I,SM,SOIC8,PB-FREE	U1150M11	51009381001	IC,MICROPOWER SOT-23 V REF
R762M7	0613952R08	RES,MF,20KOHM,5%,.0625 W,SM,0402,200PPM/CEL,PB-FREE	U1101M11	5188032U43	IC,SENSING CIRCUIT,INA138,SM,SOT-23/5,1PER PKG	U1133M11	5171779H01	IC,ANLG SW,SC70,SC70-6,1PER PKG,SPDT ANLG SW	U1301M3	51007377001	IC,XCVR,NL5500,BGA,BLUE TOOTH, GPS, FM RX, FM TX
R763M7	0613952R19	RES,MF,56KOHM,5%,.0625 W,SM,0402,200PPM/CEL,PB-FREE	U1103M11	5185070Y01	IC,TEMP SENS	U1136M11	5109522E94	GATE,AND,1PER PKG,SM,2 INPUT IN NANO PKG	U1304M3	51007599001	AMP,20.0DB,1.58GHZMIN,1.58GHZMAX,SLCN GERMANIUM GPS LOW NOISE AM
R766M7	0613952Q92	RES,MF,6.2KOHM,5%,.0625 W,SM,0402,200PPM/CEL,PB-FREE	U1104M11	5185941F56	IC,OP AMP,1PER PKG,RAIL-RAIL,SOIC,IC SNGL LV LP OP AMP	U1137M11	5164852H16	IC,TRANSLATING,2PER PKG,LVC2T45,TRANSCIEVER W/VOLTAGE TRANSLATI	U1305M3	5187344N09	IC,LNR V REGLTR,FXD,2.8V,100MA,LOW NOISE
R769M7	0613952Q29	RES,MF,15OHM,5%,.0625 W,SM,0402,200PPM/CEL,PB-FREE	U1105M11	5180390L83	IC,CNTRLR,SM,1PER PKG	U1138M11	5164852H16	IC,TRANSLATING,2PER PKG,LVC2T45,TRANSCIEVER W/VOLTAGE TRANSLATI	U200M12	5188493T01	IC,VREG/SWG,LP2989,SM,MINI SO-8 HI PRCN REG 5V
R771M7	0613952Q49	RES,MF,100,5,.0625,SM,0402,200,PB-FREE	U1106M11	5175772B05	IC,LTC5532ES6,SOT-23,1PER PKG,PRCN RF DET	U1139M11	5164852H16	IC,TRANSLATING,2PER PKG,LVC2T45,TRANSCIEVER W/VOLTAGE TRANSLATI	U201M12	5175771A99	IC,LNR V REGLTR,FXD,100MA,VFBGA,LOW NOISE, 100MA LINEAR REGL
R776M7	0613952Q67	RES,MF,560OHM,5%,.0625 W,SM,0402,200PPM/CEL,PB-FREE	U1112M11	5175772B04	IC,HMC468LP3E,QFN,1 DB LSB GAAS MMIC ATTEN	U1141M11	5185941F56	IC,OP AMP,1PER PKG,RAIL-RAIL,SOIC,IC SNGL LV LP OP AMP	U202M12	5175772B02	IC,LNR V REGLTR,FXD,1.8V,100MA,VFBGA,LINEAR REGLTR 100MA 1.8
R778M7	0613952Q29	RES,MF,15OHM,5%,.0625 W,SM,0402,200PPM/CEL,PB-FREE	U1113M11	5185941F56	IC,OP AMP,1PER PKG,RAIL-RAIL,SOIC,IC SNGL LV LP OP AMP	U1142M11	5185941F56	IC,OP AMP,1PER PKG,RAIL-RAIL,SOIC,IC SNGL LV LP OP AMP	U203M12	5175772B01	IC,LNR V REGLTR,FXD,1.5V,350MA,VFBGA,LINEAR V REGLTR 350MA
R779M7	0613952Q49	RES,MF,100,5,.0625,SM,0402,200,PB-FREE	U1114M11	5185941F56	IC,OP AMP,1PER PKG,RAIL-RAIL,SOIC,IC SNGL LV LP OP AMP	U1143M11	5185941F56	IC,OP AMP,1PER PKG,RAIL-RAIL,SOIC,IC SNGL LV LP OP AMP	U2101M2	5109522E84	IC,DL SCHT TRIG MICRO PAK
R785M7	0613952Q60	RES,MF,300OHM,5%,.0625 W,SM,0402,200PPM/CEL,PB-FREE	U1119M11	5109522E94	GATE,AND,1PER PKG,SM,2 INPUT IN NANO PKG	U1144M11	5171779H01	IC,ANLG SW,SC70,SC70-6,1PER PKG,SPDT ANLG SW	U2102M2	5109522E84	IC,DL SCHT TRIG MICRO PAK
R799M7	0613952Q60	RES,MF,300OHM,5%,.0625 W,SM,0402,200PPM/CEL,PB-FREE	U1121M11	5114000B52	IC,XOR,LOGIC LEVEL SHIFTER,1PER PKG,SM,SOT-353,PB-FREE	U1146M11	5109522E93	GATE,OR,SN74LVC1G32Y ZPR,1PER PKG,SM,2 INPUT IN NANO PKG	U2201M2	5171679H01	IC,DISP DRVR,LED LT DRVR
R809M7	0613952Q31	RES,MF,18OHM,5%,.0625 W,SM,0402,200PPM/CEL,PB-FREE	U1125M11	5175206H01	IC,DAC,W/ 5 PPM/C INT REF	U1147M11	5109522E94	GATE,AND,1PER PKG,SM,2 INPUT IN NANO PKG	U2202M2	5164852H47	IC,XLTR,2PER PKG,TSSOP8,IC, I2C LEV XLTR
R822M7	NOTPLACED	64AM DUMMY PART NUMBER	U1126M11	5109817F77	IC,COMPTR,LMV7275,SC70-5	U1148M11	5185941F56	IC,OP AMP,1PER PKG,RAIL-RAIL,SOIC,IC SNGL LV LP OP AMP	U2301M13	5103535B53	IC,INVTR,DL,NC7WZ04L6X,2PER PKG,SC70
R823M7	NOTPLACED	64AM DUMMY PART NUMBER	U1127M11	5171779H01	IC,ANLG SW,SC70,SC70-6,1PER PKG,SPDT ANLG SW	U1149M11	5109522E93	GATE,OR,SN74LVC1G32Y ZPR,1PER PKG,SM,2 INPUT IN NANO PKG	U2302M13	5185941F45	ATTEN,VAR,14.4DBMIN,15.6DBMAX,0-2000 MHZ-FREQ,50OHM,PCMT,SOT-25
T506M21	2575851B01	XFMR,BALUN,RF XFMR BALUN	U1128M11	5188085K11	IC,NAND,SINGLE 2 INPUT,SN74LVC1G00YZPR,SM,GATE, POS, 5 DSBGA,				U4001M2	5164852H47	IC,XLTR,2PER PKG,TSSOP8,IC, I2C LEV XLTR
T507M21	2575851B02	XFMR,BALUN,25,SM,RF XFMR BALUN	U1129M11	5175143H01	IC,WIDE SPLY RANGE OP AMP						
U1001M16	5175143H01	IC,WIDE SPLY RANGE OP AMP	U1130M11	5175143H01	IC,WIDE SPLY RANGE OP AMP						
			U1131M11	5109817F77	IC,COMPTR,LMV7275,SC70-5						

Ref. Des.	Part Number	Description	Ref. Des.	Part Number	Description	Ref. Des.	Part Number	Description	Ref. Des.	Part Number	Description
U4003M2	5188691V01	IC,MUX/ DEMUX,NC7SB3157P6X,S M,SC70-6,1PER PKG,BUS,PB FREE	U606M19	5164852H16	IC,TRANSLATING,2PER PKG,LVC2T45,TRANS- CEIVER W/VOLTAGE TRANSLATI	U6410M6	5175772B38	IC,IC ANLG TEMP SENSOR	VR101M12	4813977M29	DIODE,ZEN,MBZ5250,SM,S OT-23,ZEN,PB-FREE
U4004M2	5116783H01	IC,ANLG SW,SN74LVC2G66YZPR,S M,2PER PKG,0CHANNELS,BILAT- ERAL,DL	U607M19	5186311J24	IC,BFR,1PER PKG,NC7SZ125,ACTIVE HIGH,BFR,3ST,SM,5.5	U6411M6	5109731C55	IC,AU AMP,BGA,2.75 FXD GAIN MONO FLTR-FREE	VR200M12	4813977M29	DIODE,ZEN,MBZ5250,SM,S OT-23,ZEN,PB-FREE
U402M20	5180428L15	SW,RF SWITCH,SPDT,SMT,6W,3V	U6101M6	0180706J18	IC,PGM,PGM CPLD	U6501M6	5185143E77	IC,CUST,BGA,IC, MAKO ASIC, CMOS PWR MGMT	VR3010M22	4805656W87	DIODE,VCTR, @ 15V,1SV279,SOD-523/SC- 79,SOD-523/SC-79
U403M20	5180428L15	SW,RF SWITCH,SPDT,SMT,6W,3V	U6102M6	5188691V01	IC,MUX/ DEMUX,NC7SB3157P6X,S M,SC70-6,1PER PKG,BUS,PB FREE	U6502M6	4871987H01	XSTR,BIP GP POWER,12V,1A,LOW FREQ XSTR	VR3011M22	4805656W87	DIODE,VCTR, @ 15V,1SV279,SOD-523/SC- 79,SOD-523/SC-79
U404M20	5180428L15	SW,RF SWITCH,SPDT,SMT,6W,3V	U6103M6	5175114H01	IC,SNGL AND GATE MICROPAK	U6503M6	5171674H01	IC,OP AMP,SO-8,OP AMP	VR3048M22	4805656W87	DIODE,VCTR, @ 15V,1SV279,SOD-523/SC- 79,SOD-523/SC-79
U405M20	5180428L15	SW,RF SWITCH,SPDT,SMT,6W,3V	U6104M6	5175114H01	IC,SNGL AND GATE MICROPAK	U6504M6	5171682H01	IC,DC TO DC CON- VERTER,800MA BUCK REGLTR	VR601M19	4805656W87	DIODE,VCTR, @ 15V,1SV279,SOD-523/SC- 79,SOD-523/SC-79
U406M20	4885316E32	XSTR,BIP RF SML SGNL,SLCN,BFR380F,SM, SMT,6V,380W,80A,14MHZ,T R	U6105M6	5175114H01	IC,SNGL AND GATE MICROPAK	U6505M6	5189631P01	IC,0PER PKG,SYNC STEP- DOWN CONV	VR602M19	4805656W87	DIODE,VCTR, @ 15V,1SV279,SOD-523/SC- 79,SOD-523/SC-79
U407M20	4885316E32	XSTR,BIP RF SML SGNL,SLCN,BFR380F,SM, SMT,6V,380W,80A,14MHZ,T R	U6201M6	5185941F26	IC,COMPTR,LMV7219,SM, SOT-23/5,IC,LM7219,COM- PARATOR,NOPB	U6506M6	5184790Y04	IC,LINER VOLTAGE REG- ULATOR,400MA	Y1304M3	48014600001	OSC,TCXO,26.0
U408M20	5103535B53	IC,INVTR,DL,NC7WZ04L6X ,2PER PKG,SC70	U6301M6	51012058002	IC,SDRAM,512MBITS,8 MEG X 16 X 4 BANKS,6NS,SM,MOBILE LPDDR 5	U6507M6	5171682H01	IC,DC TO DC CON- VERTER,800MA BUCK REGLTR	Y3020M22	48012102005	RESON,NON- QUARTZ,1025MHZ,SM,RE SON CER 1025MHZ
U507M21	5164015H81	IC,MXR,SM	U6302M6	5102495J13	IC,MICROP,P1710ZZGE,BG A,12MHZ,32BITS	U6508M6	51009366001	IC,LNR V REGLTR,LLP6,500MA LOW DROPOUT CMOS LINEAR REG	Y3021M22	48012102005	RESON,NON- QUARTZ,1025MHZ,SM,RE SON CER 1025MHZ
U601M19	5102495J14	IC,IF,IF DIGITILIZING SUB- SYSTEM IC,AD9864,QFN	U6304M6	0105955U25	ASSY,ASSY,ASSY,IC,BGA SPEC PROG, FLSH MEM	U6509M6	5175114H01	IC,SNGL AND GATE MICROPAK	Y3053M22	48012102006	RESON,NON- QUARTZ,1110MHZ,SM,RES ON CER 1110MHZ
U602M19	4885316E32	XSTR,BIP RF SML SGNL,SLCN,BFR380F,SM, SMT,6V,380W,80A,14MHZ,T R	U6401M6	5175772B38	IC,IC ANLG TEMP SENSOR	U6510M6	5114007A47	IC,OR,17SZ32,1PER PKG,SOT-353,PB FREE	Y6501M6	93012044001	OSC,XO,24.576MHZ,SM,XT AL U SMD 5.0X3.2 24.576MHZ
U603M19	5109522E84	IC,DL SCHT TRIG MICRO PAK	U6402M6	5115453H01	IC,OP AMP,2PER PKG,RAIL TO RAIL OUTPUT, 8 PIN BGA	U6511M6	5171339H01	IC,MC78LC18,MICROPO- WER V REGLTR	Y6502M6	4809995L05	RESON,QRTZ,32.768KHZ, SM,FUND,9PF LOAD CAP,- 40DEG C MIN,85DE
U604M19	5109522E84	IC,DL SCHT TRIG MICRO PAK	U6404M6	5175772B38	IC,IC ANLG TEMP SENSOR	U6601M6	5175114H01	IC,SNGL AND GATE MICROPAK	Y6601M6	4802582S85	RESON,QRTZ,12MHZ,10P PM TOL,18PPM STAB,SM,FUND,AT,10PF LOAD CAP
U605M19	5164852H16	IC,TRANSLATING,2PER PKG,LVC2T45,TRANS- CEIVER W/VOLTAGE TRANSLATI	U6405M6	5188348V06	IC,AUDIO CODEC,SM,AUDIO CODEC	U702M7	5164015H28	IC,CUST,MULTI PROTO- COL/BAND TRANSCVR IC,SM,BGA,TRIDENT, INTEG	Y701M7	4871886H01	OSC,VO,16.8 MHZ VCTXO .8PPM
			U6408M6	5188521T01	IC,VREF,SM,SOT23,1PER PKG,.5%,1.25 TO 13.75,PRCN BANDGAP ADJUS	U738M7	5171972L01	IC,SW,SP3T RF SW			
			U6409M6	51009000001	IC,COMPTR,SC70,NANOP- OWER, 1.8V, SC70 COMPTR	U739M7	5103535B53	IC,INVTR,DL,NC7WZ04L6X ,2PER PKG,SC70			
						U746M7	4805218N63	XSTR,GEN PURPOSE SMALL SIG,SOT- 323,BROADBAND AND XSTR			

### 8.6 Transceiver (RF) Boards: 900 MHz (84012478001)

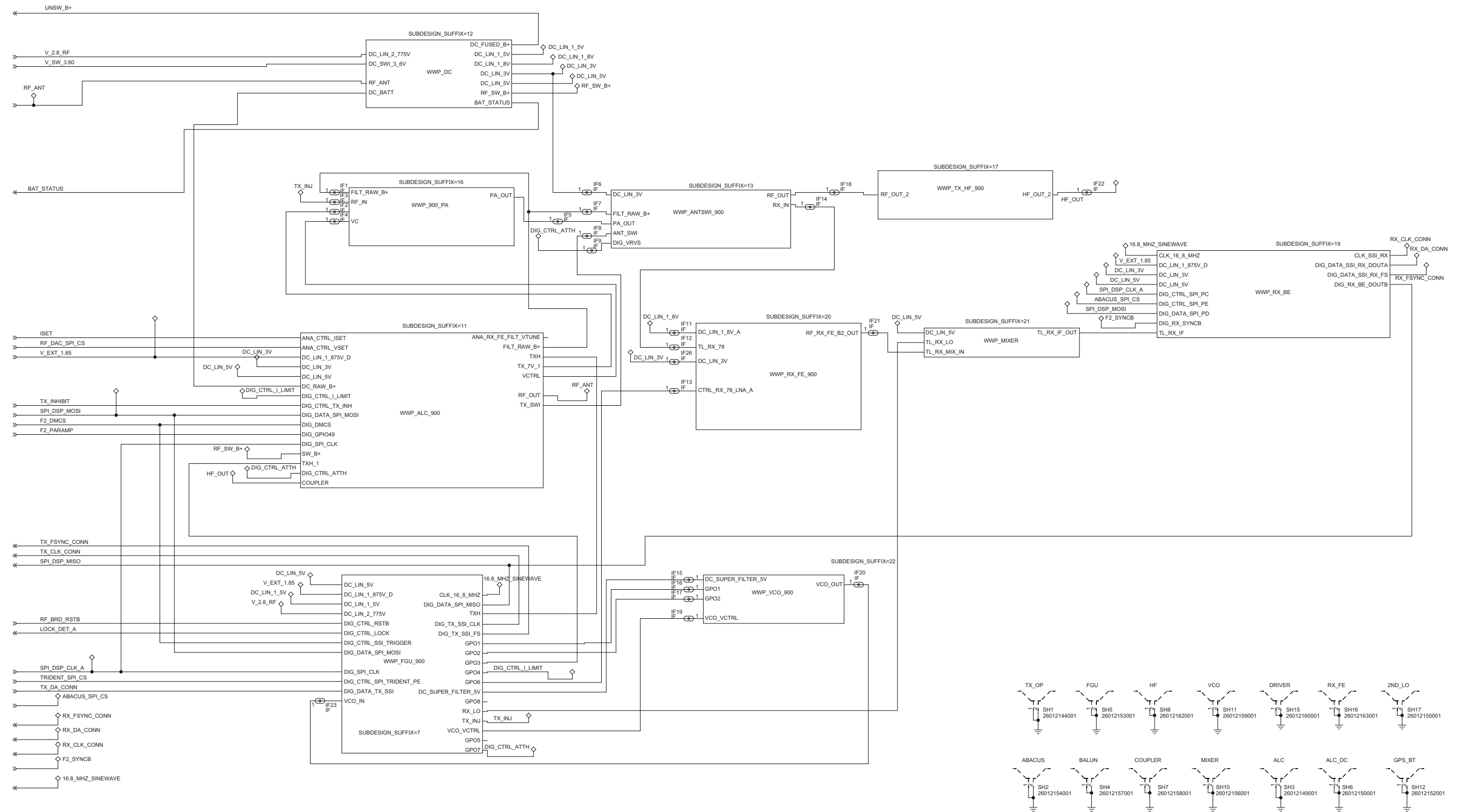


Figure 8-156. Transceiver (RF) Board Overall Schematic

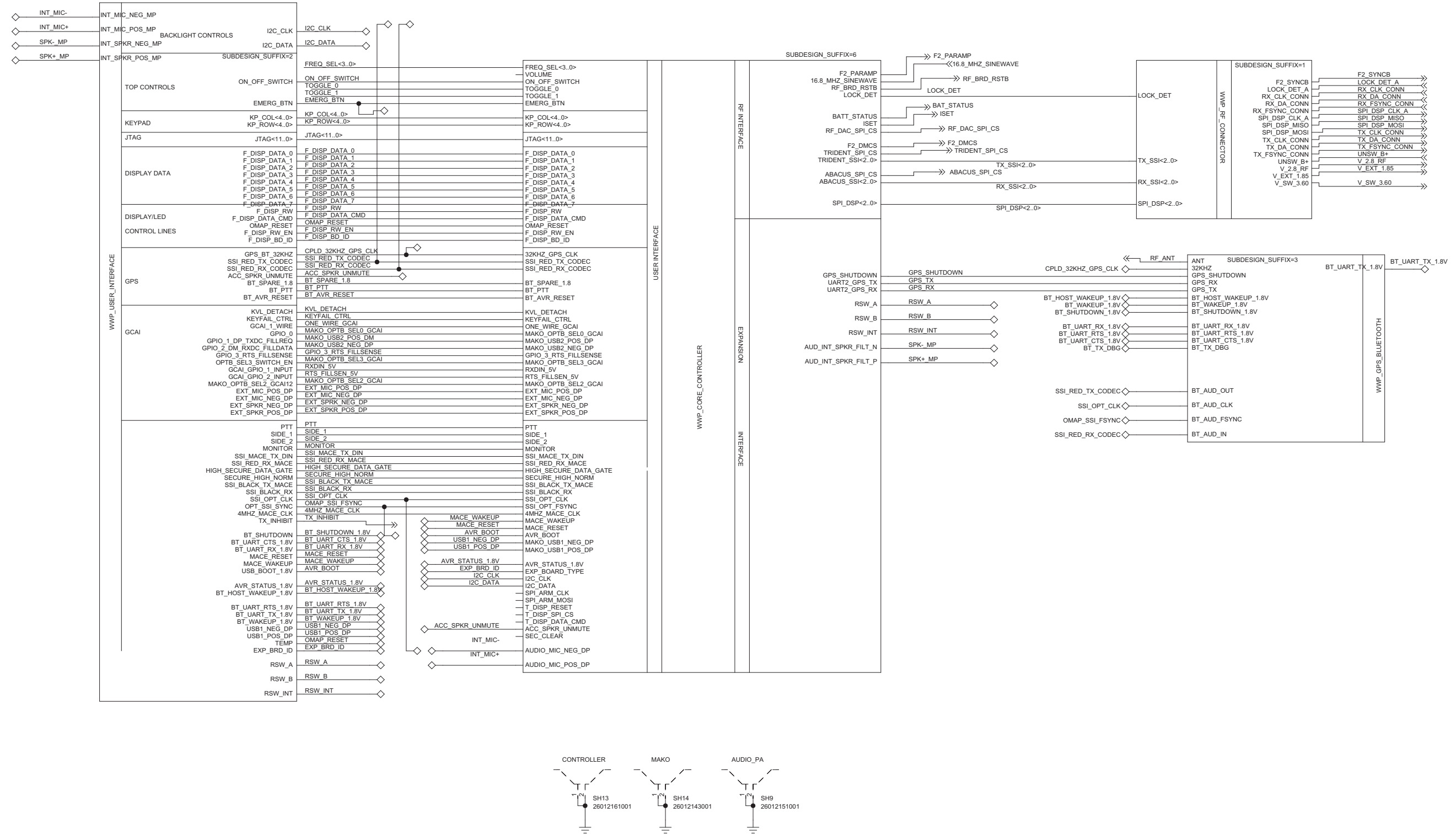


Figure 8-157. Controller Mainboard Circuit

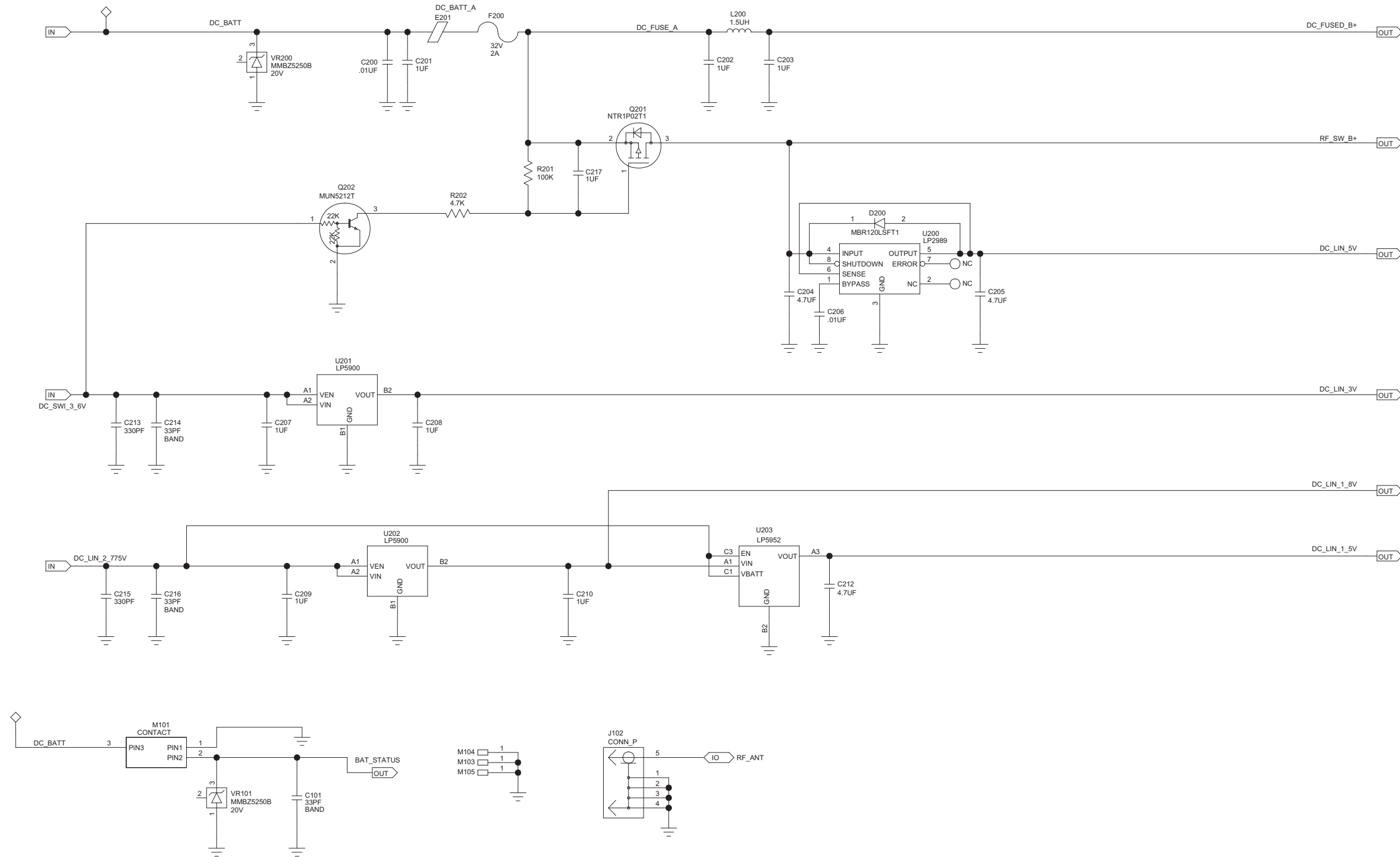


Figure 8-158. DC Circuit

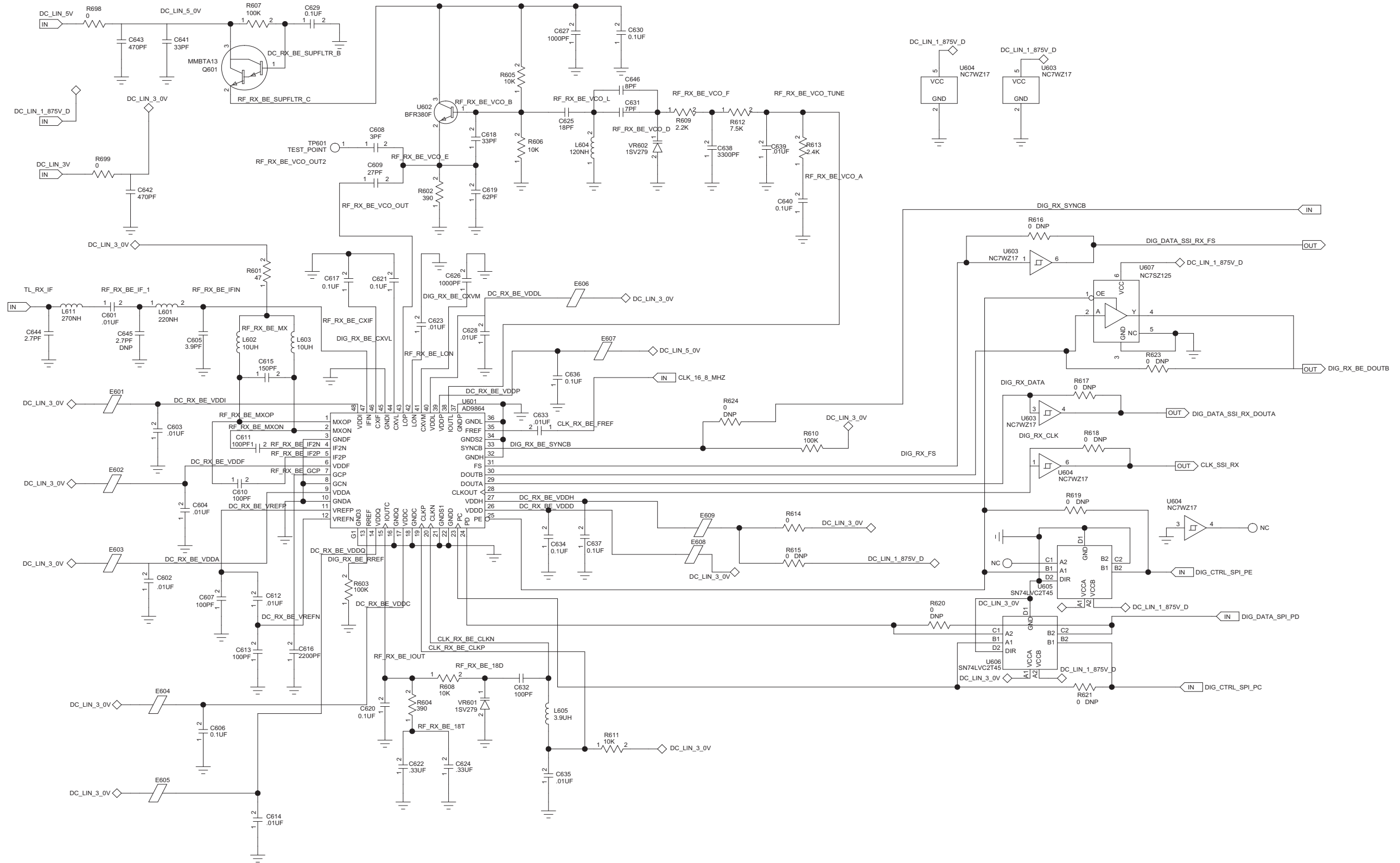


Figure 8-159. Receiver Back End Circuit

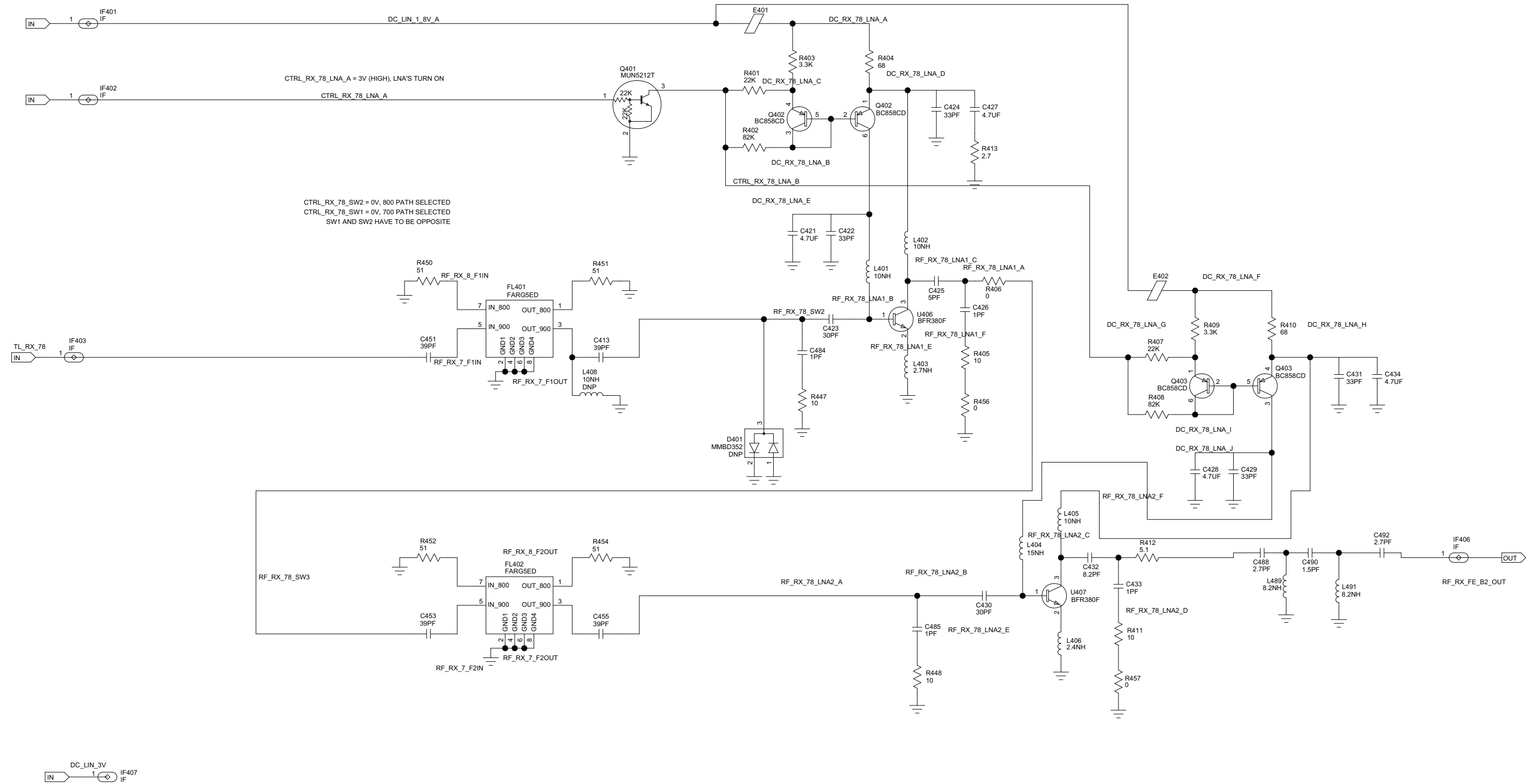


Figure 8-160. Receiver Front End Circuit

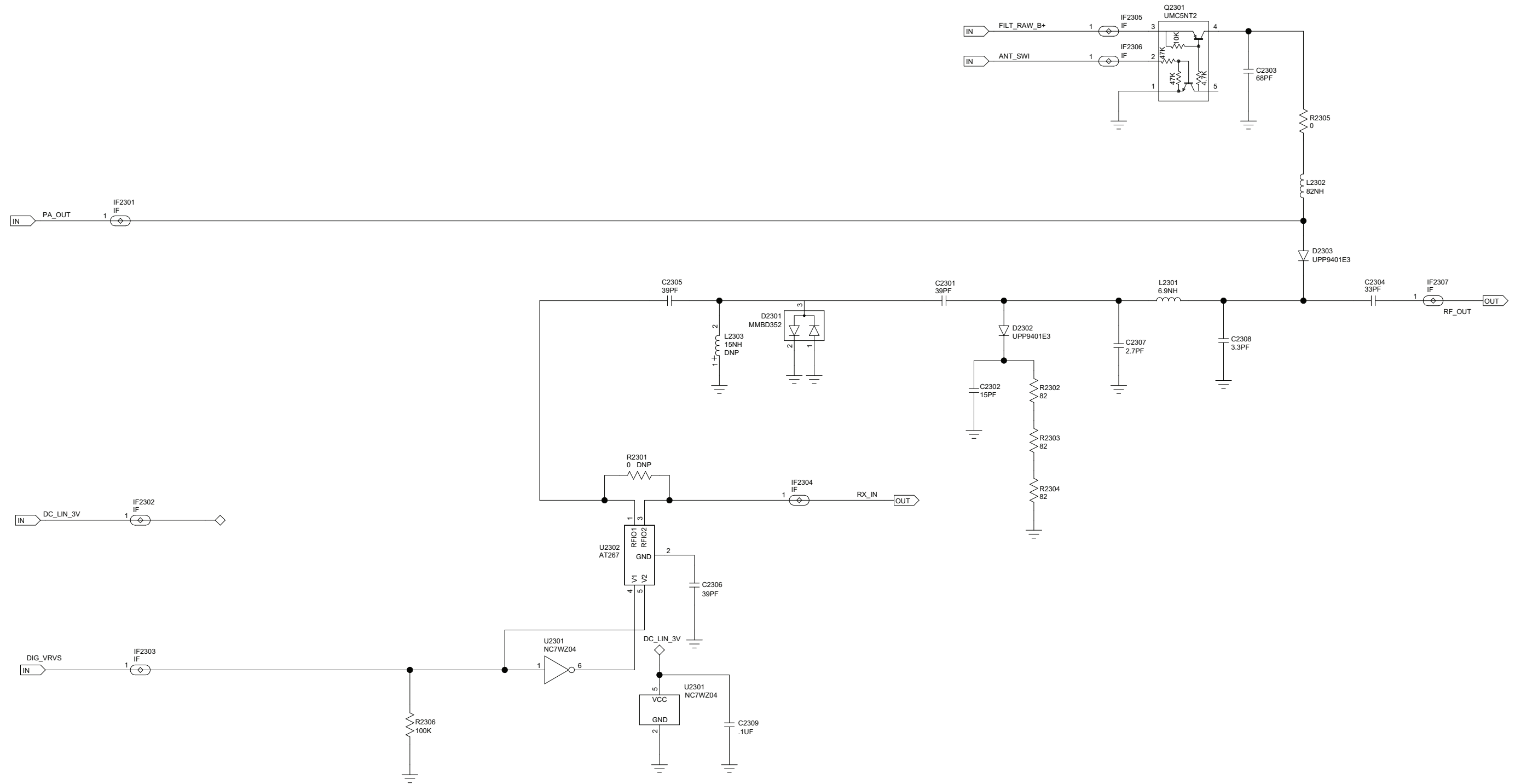


Figure 8-161. ANTSWI Circuit



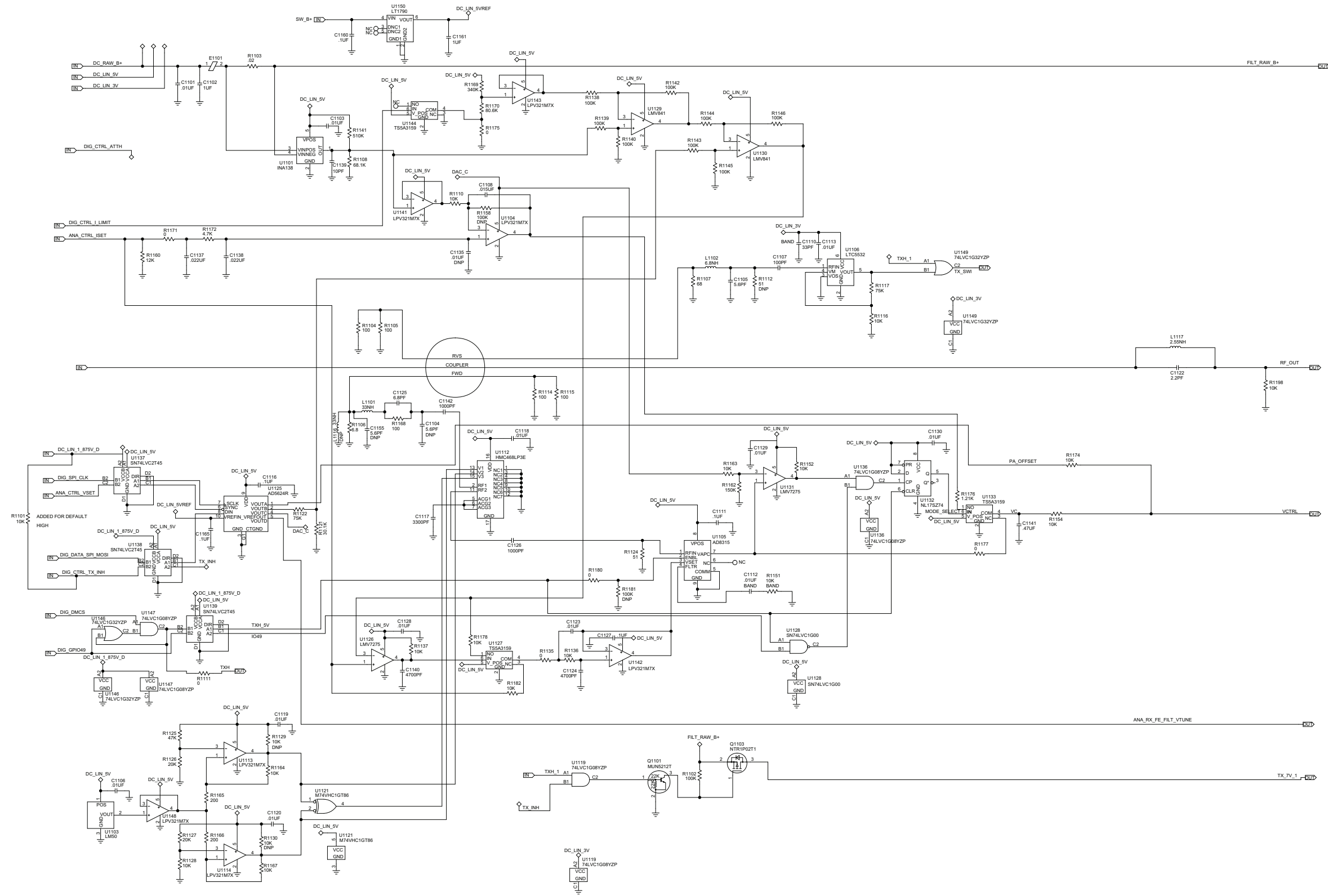


Figure 8-162. Automatic Level Control Circuit

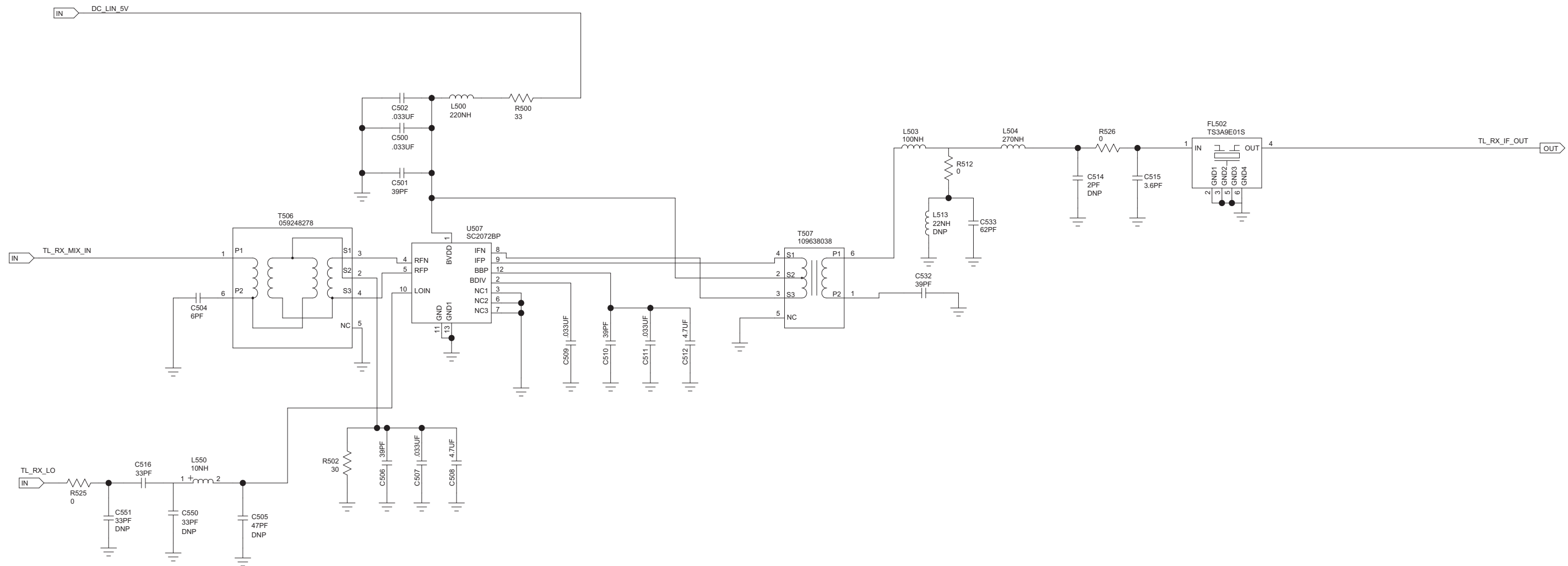


Figure 8-163. Receiver Back End Circuit

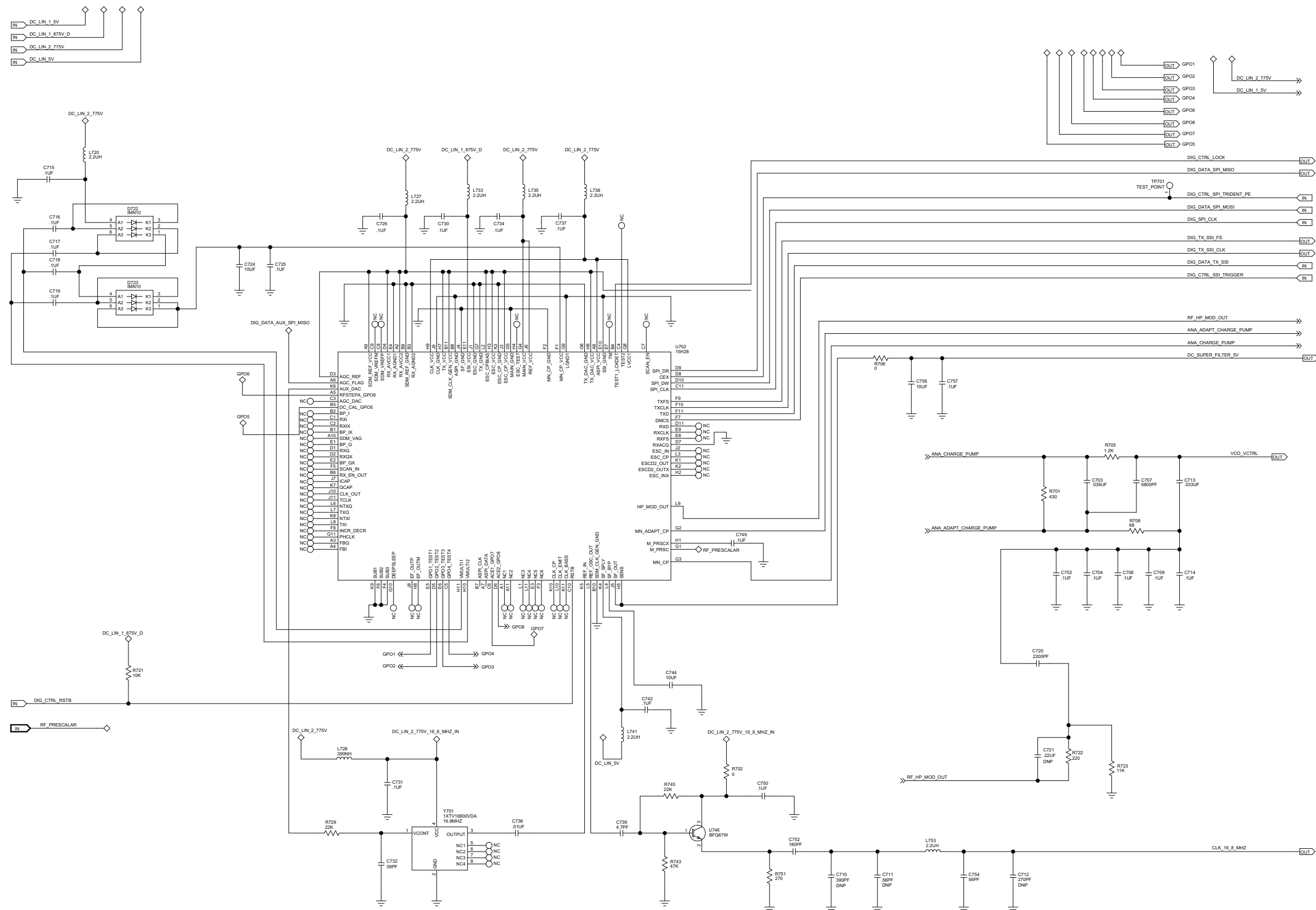


Figure 8-164. Frequency Generation Unit Circuit – 1 of 2

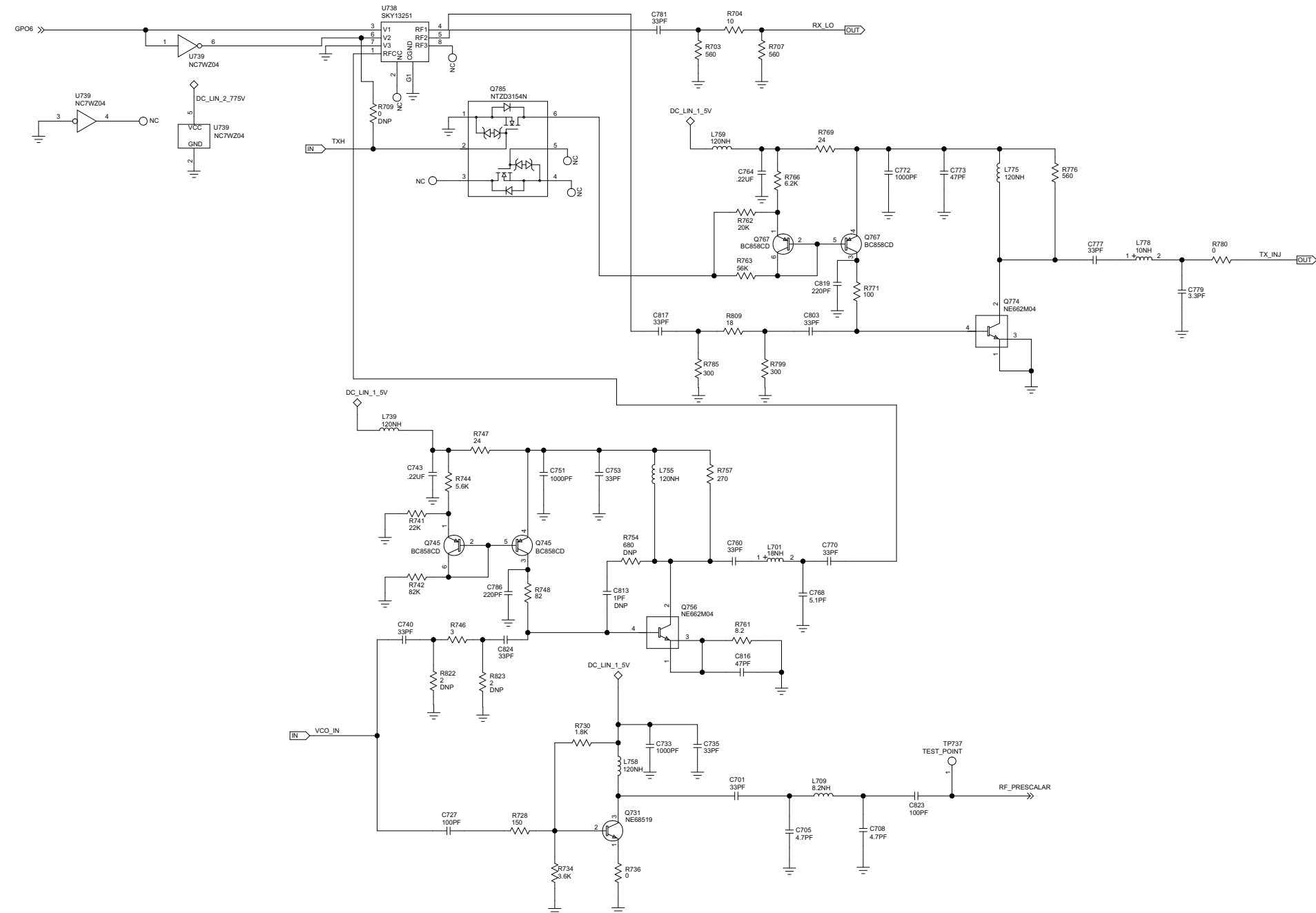
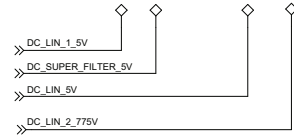


Figure 8-165. Frequency Generation Unit Circuit – 2 of 2

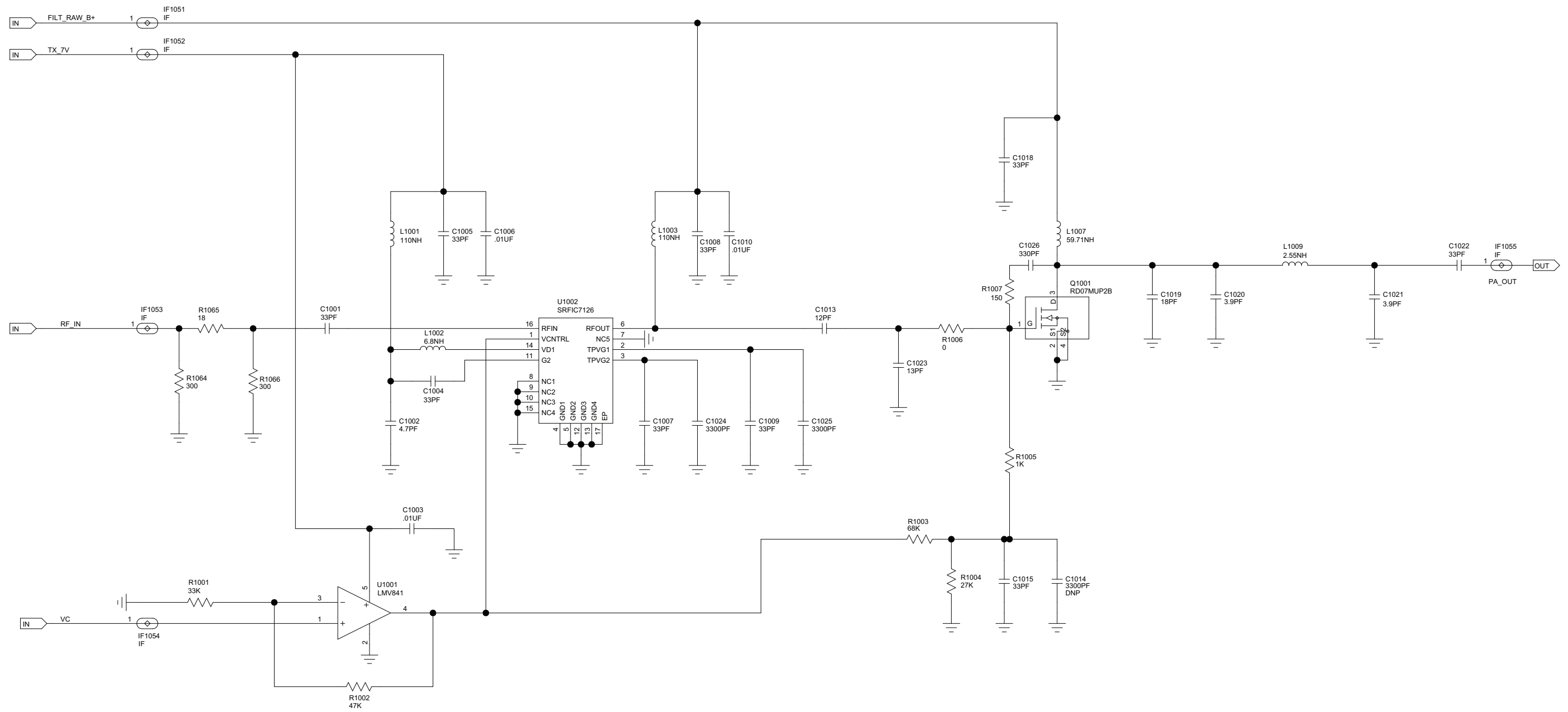


Figure 8-166. Power Amplifier Circuit

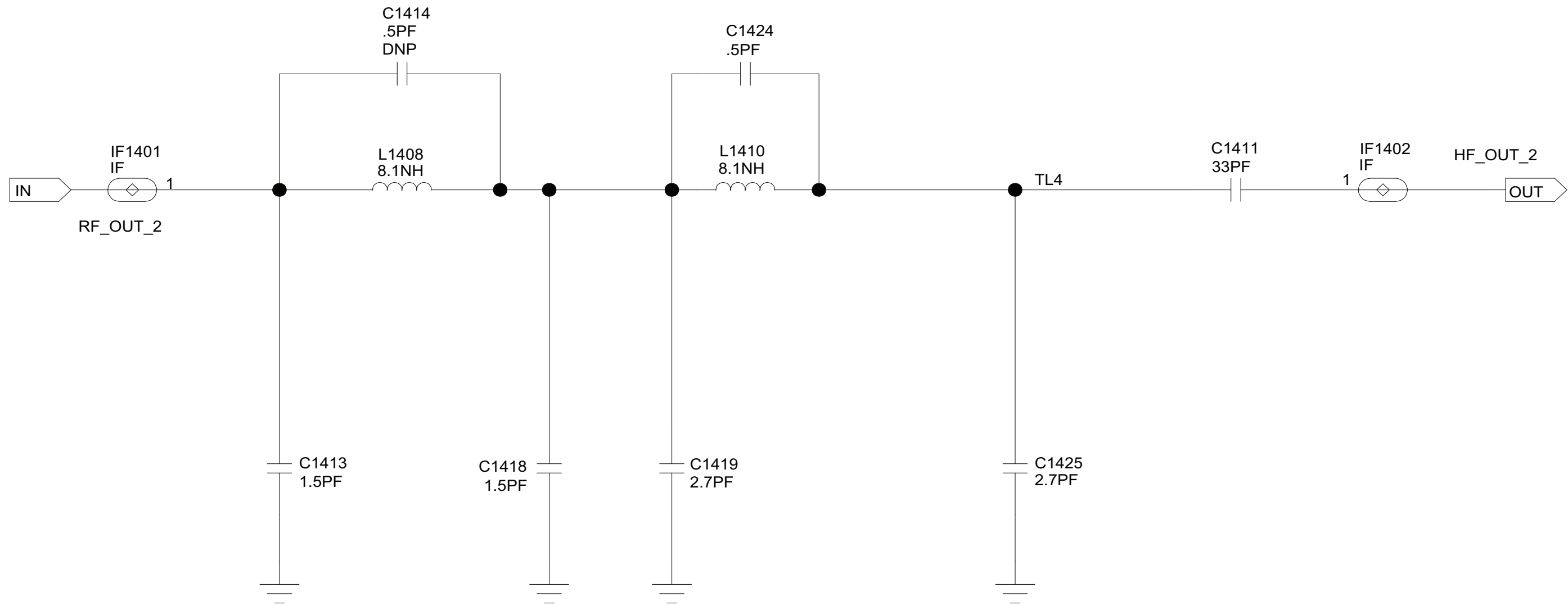


Figure 8-167. Transmitter HF Circuit

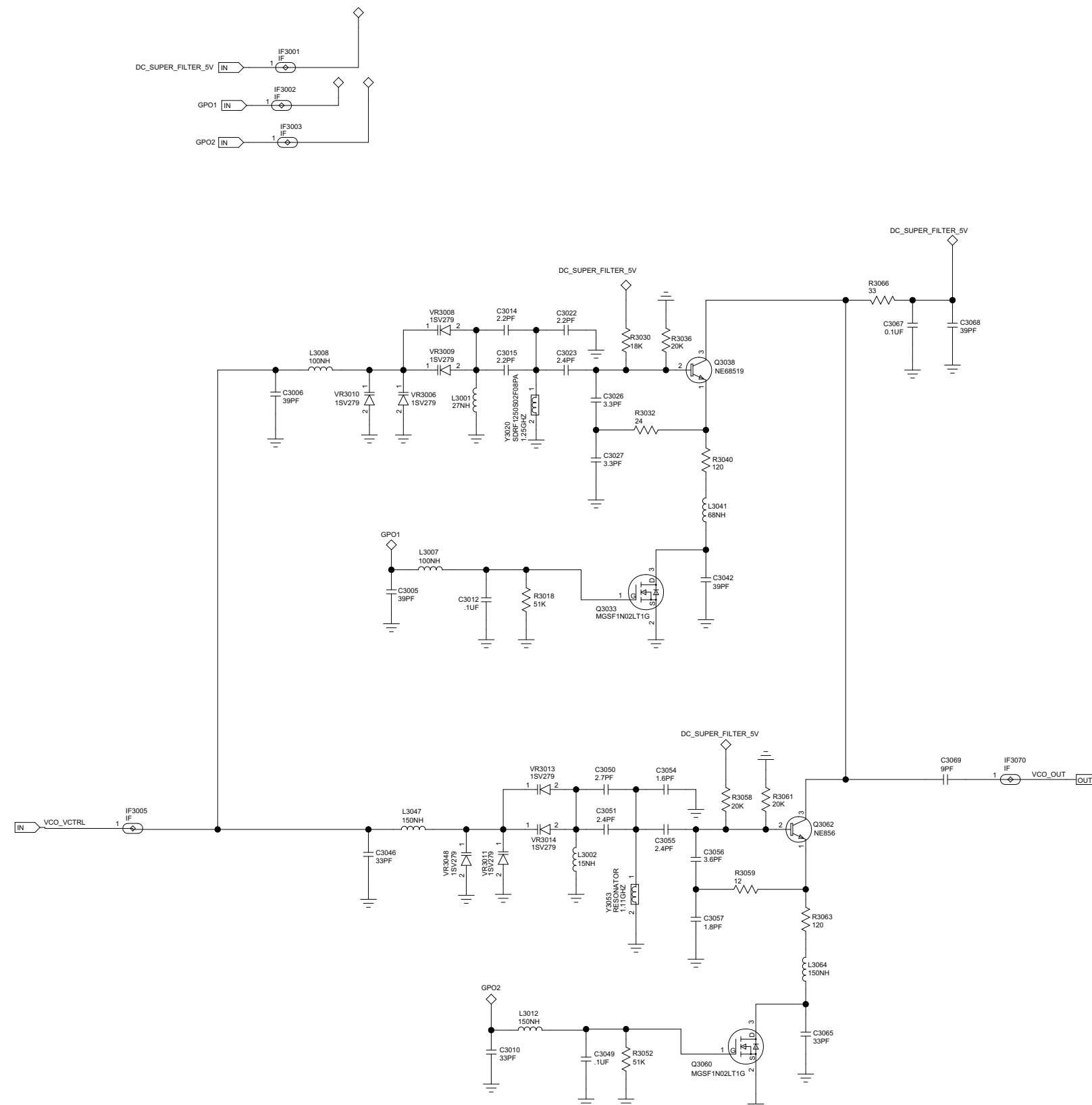


Figure 8-168. Receive and Transmit VCO Circuit

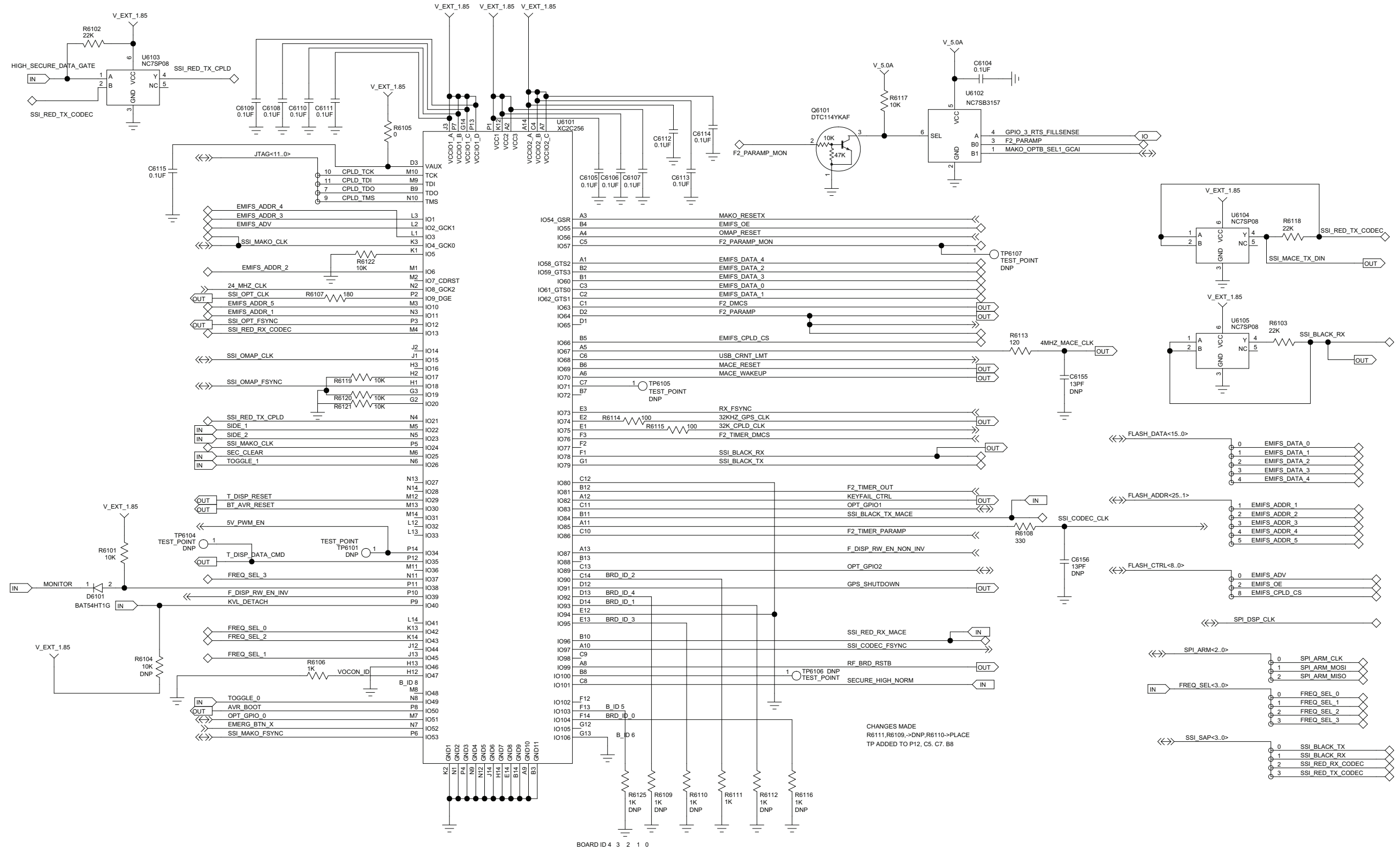


Figure 8-169. CPLD Circuit



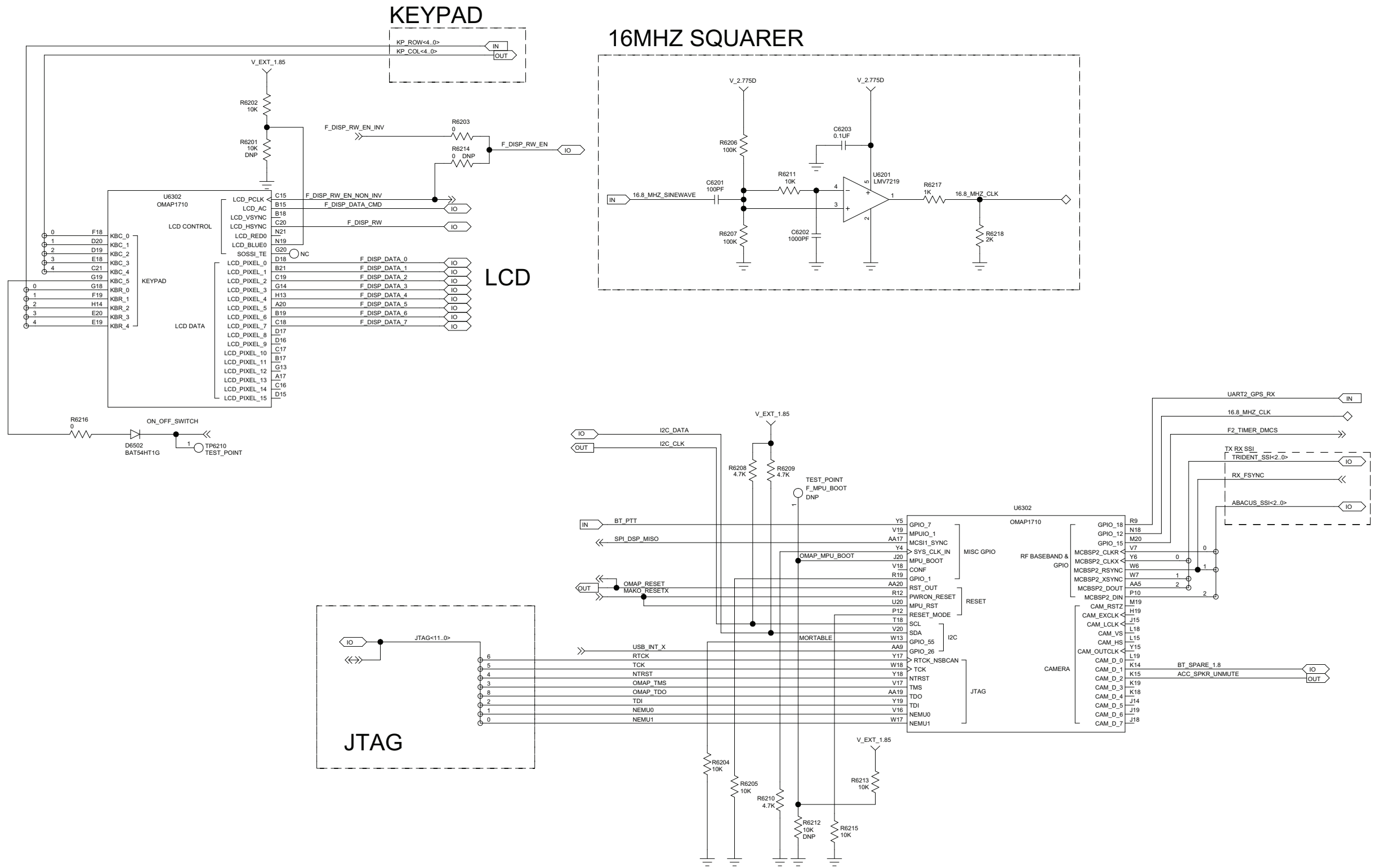
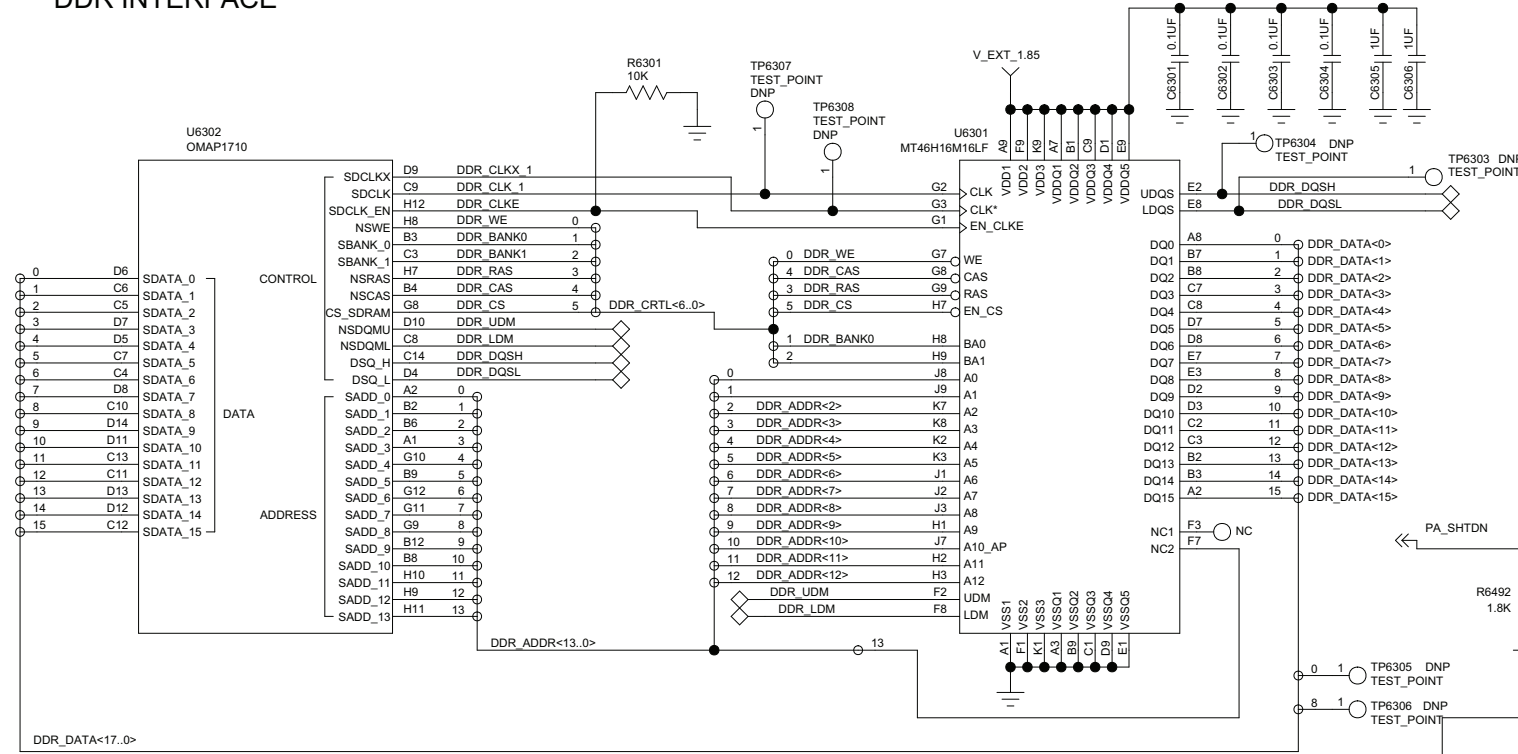
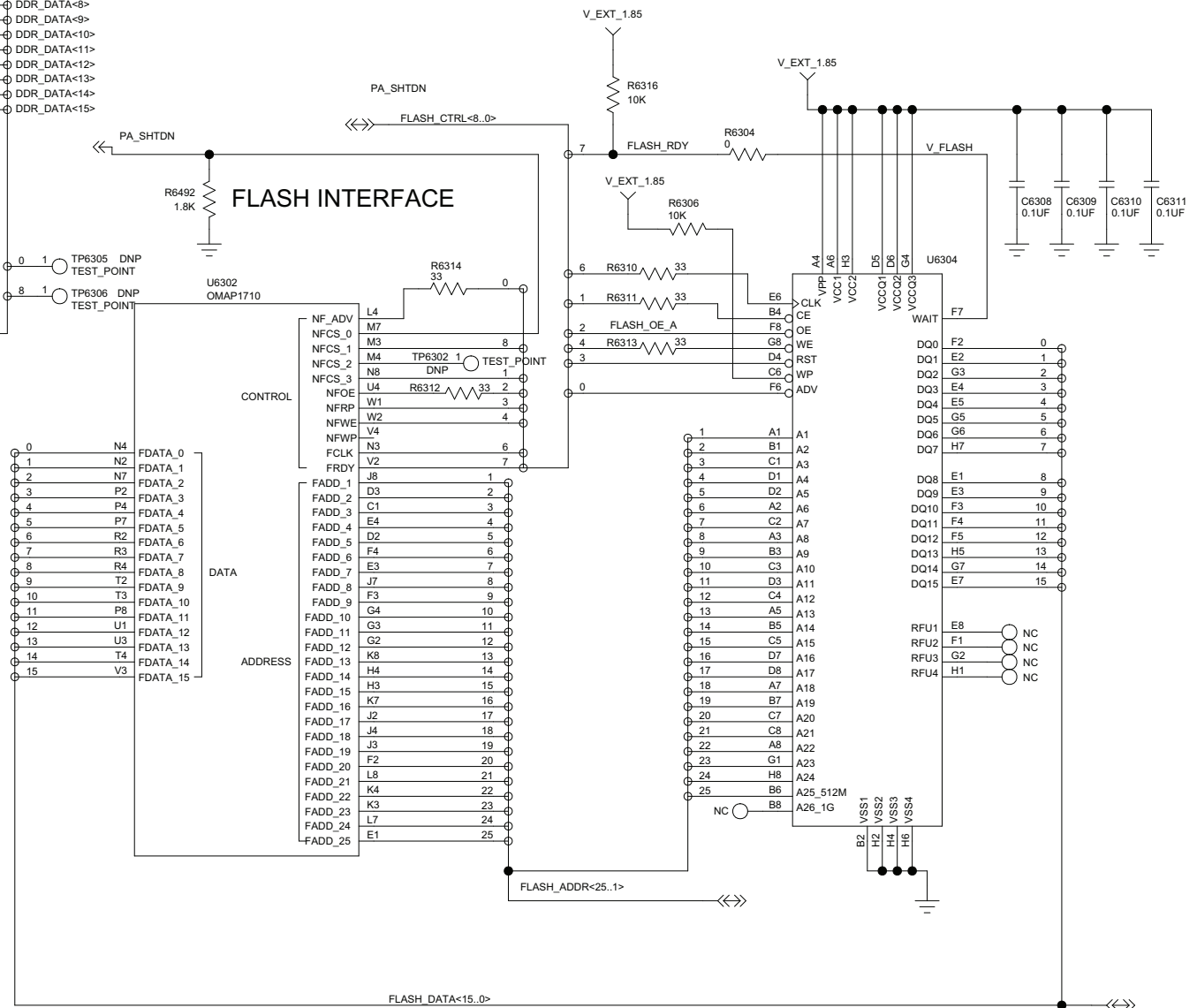


Figure 8-170. OMAP User Interface Circuit

DDR INTERFACE



FLASH INTERFACE



MMC INTERFACE

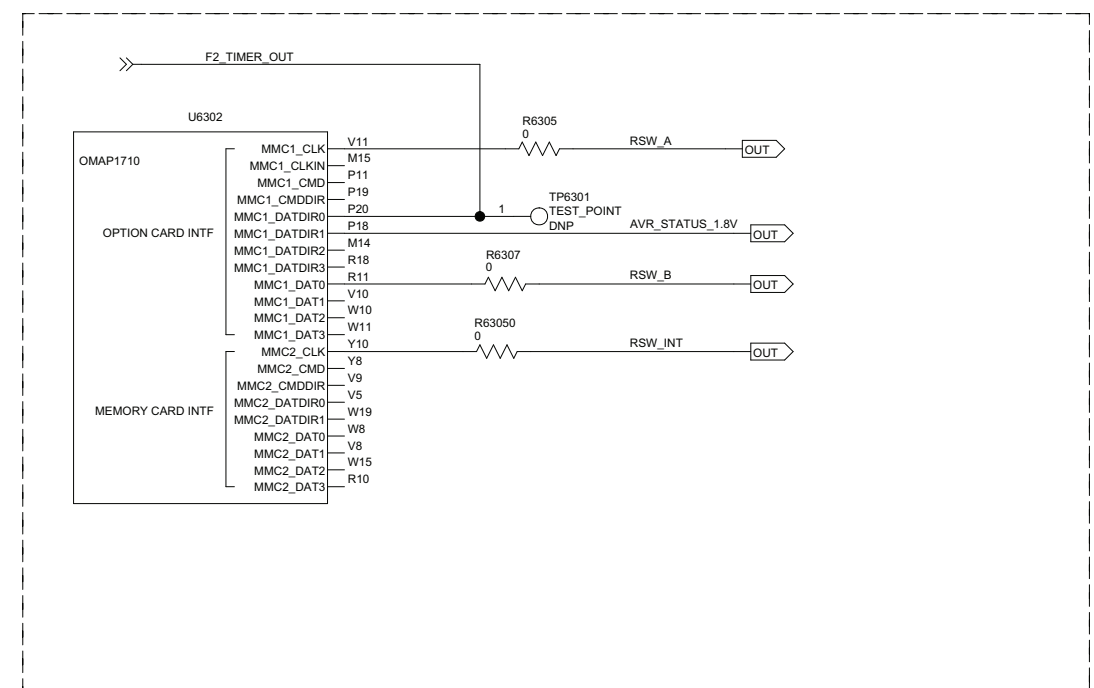


Figure 8-171. Memory Interface Circuit

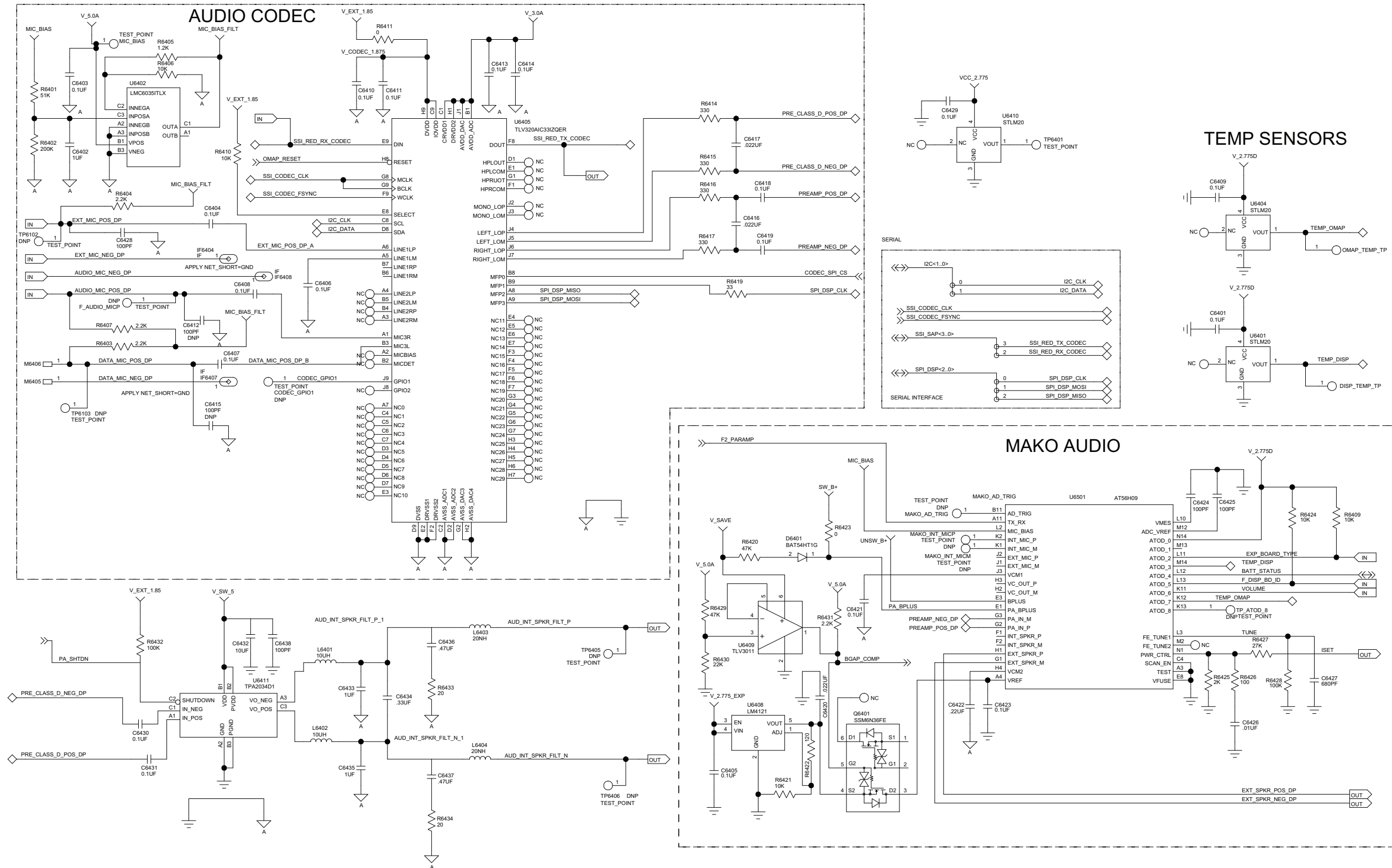


Figure 8-172. Audio Circuit

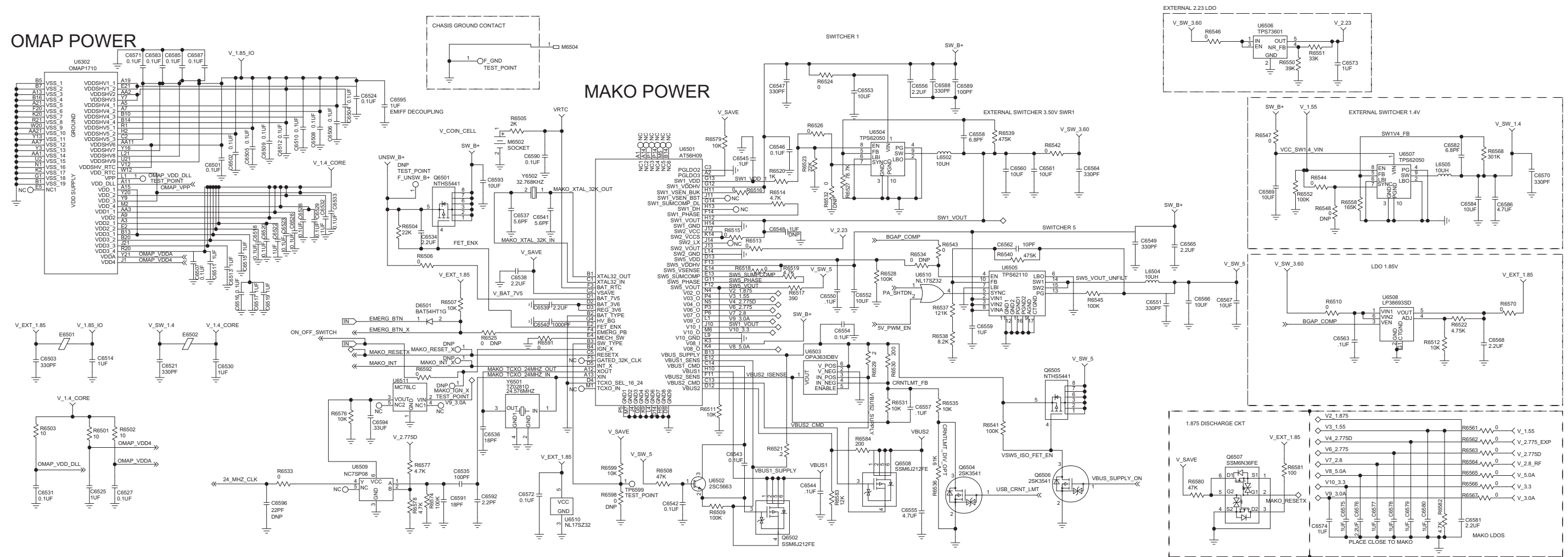


Figure 8-173. MAKO/DC Distribution Circuit

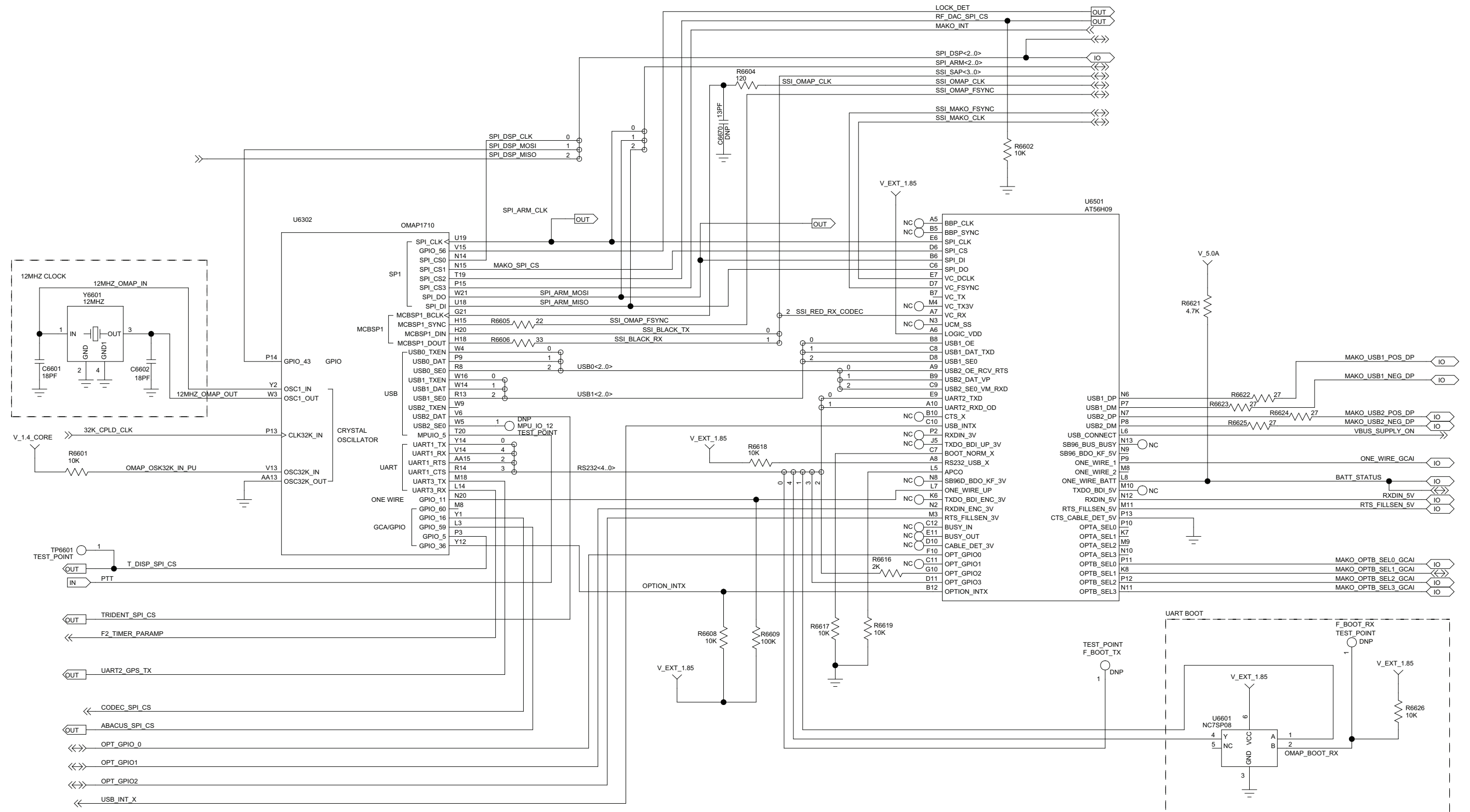


Figure 8-174. Serial Interface Circuit

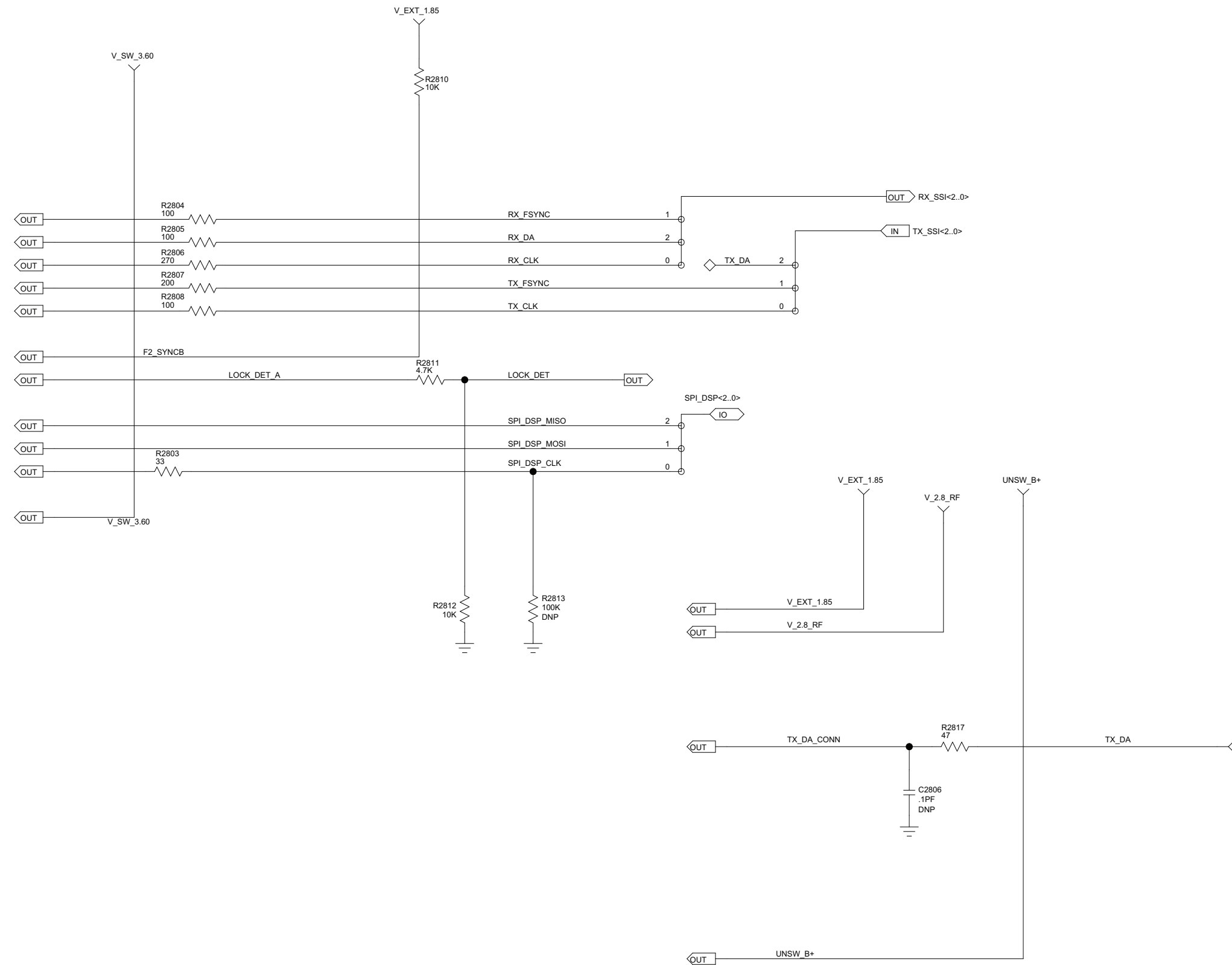


Figure 8-175. RF Interconnects Circuit

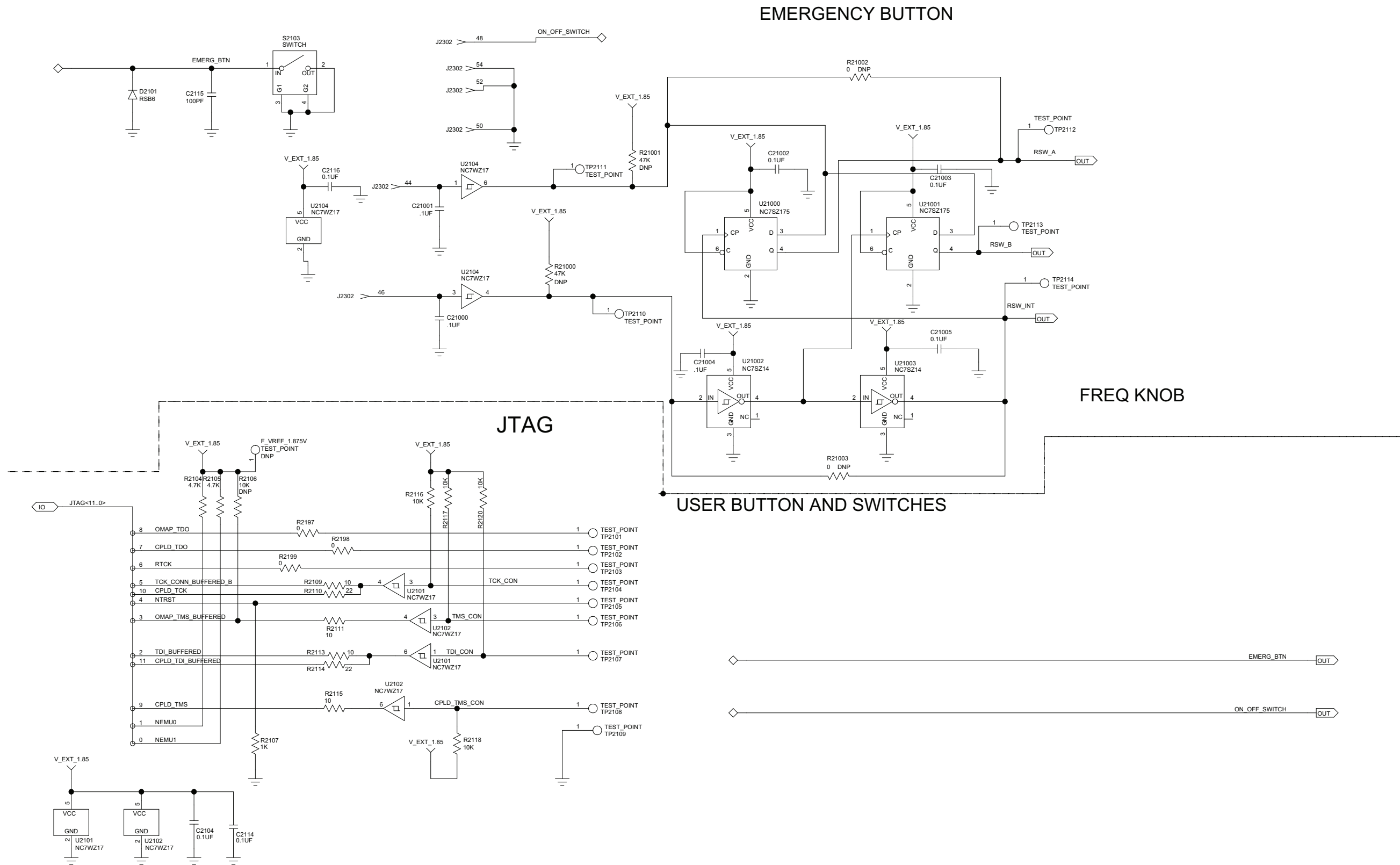


Figure 8-176. Controller Circuit

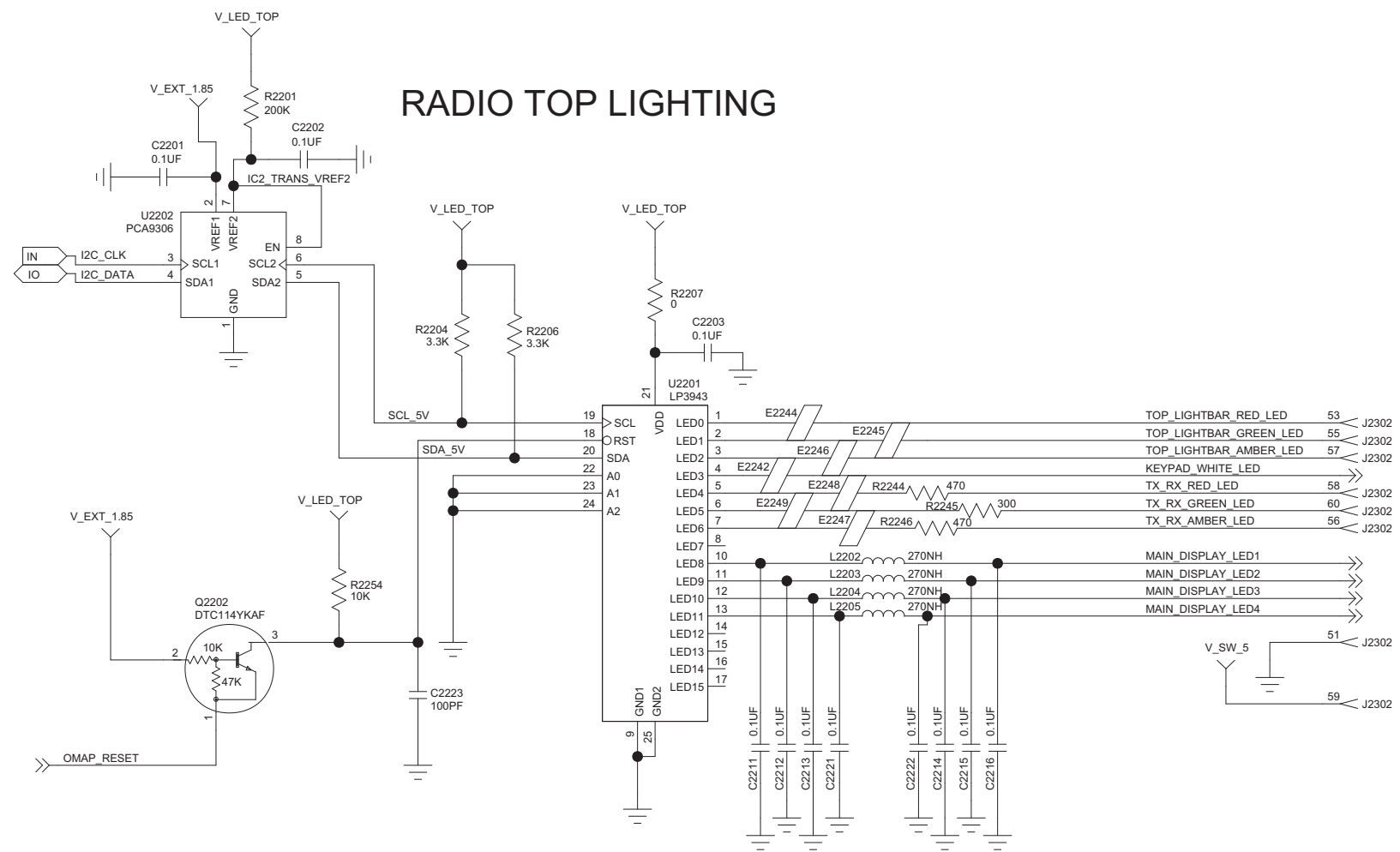
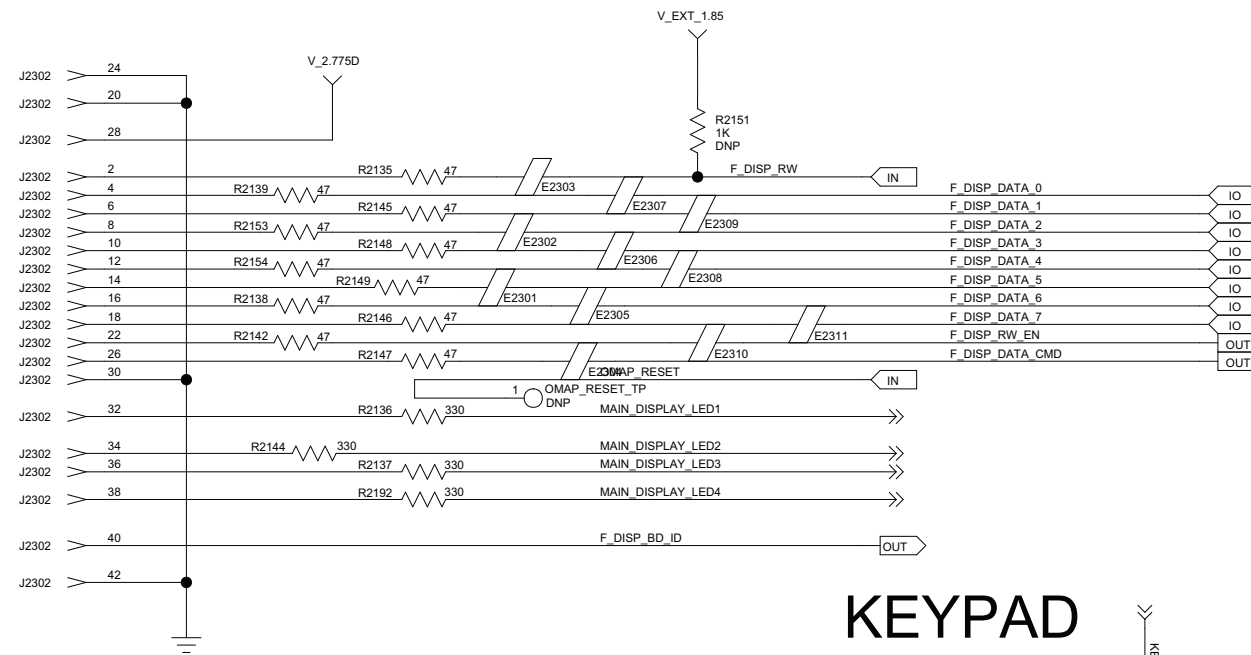


Figure 8-177. Display/Keypad Lighting Control Circuit



# FRONT DISPLAY



# KEYPAD

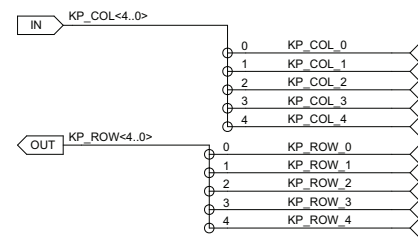
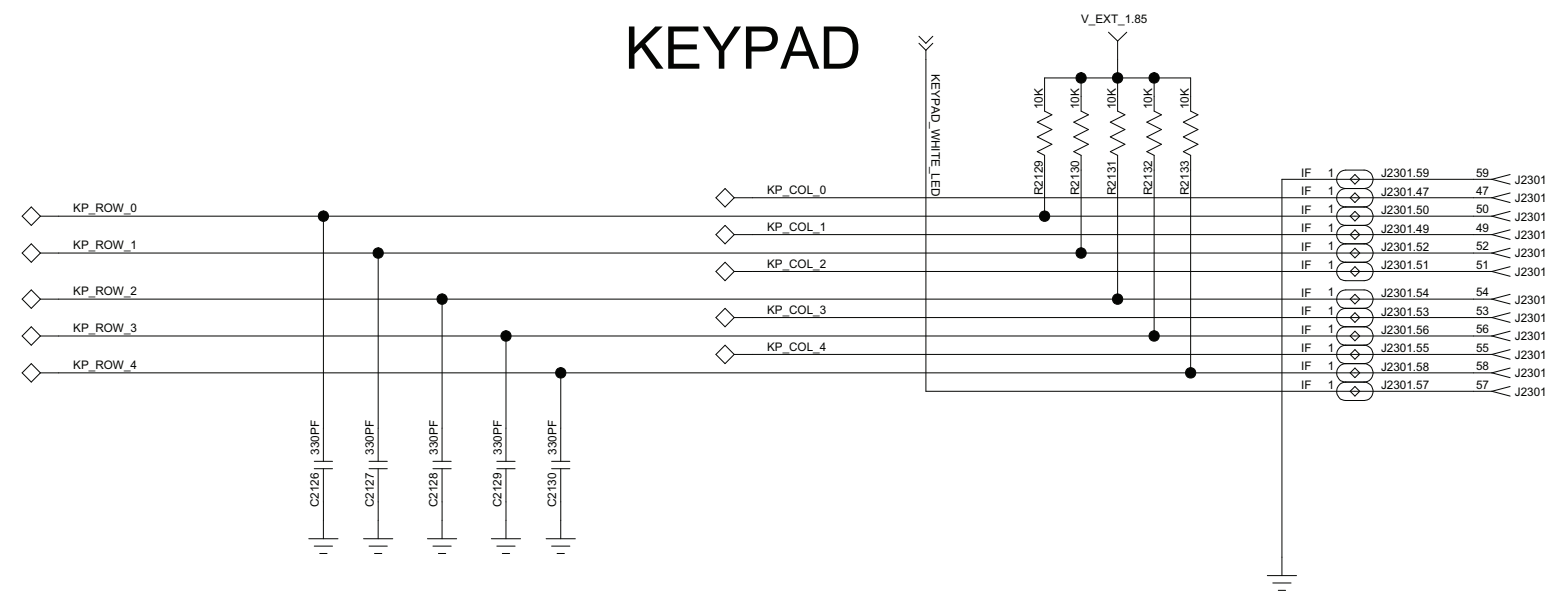


Figure 8-178. LCD and Keypad Connector Circuit

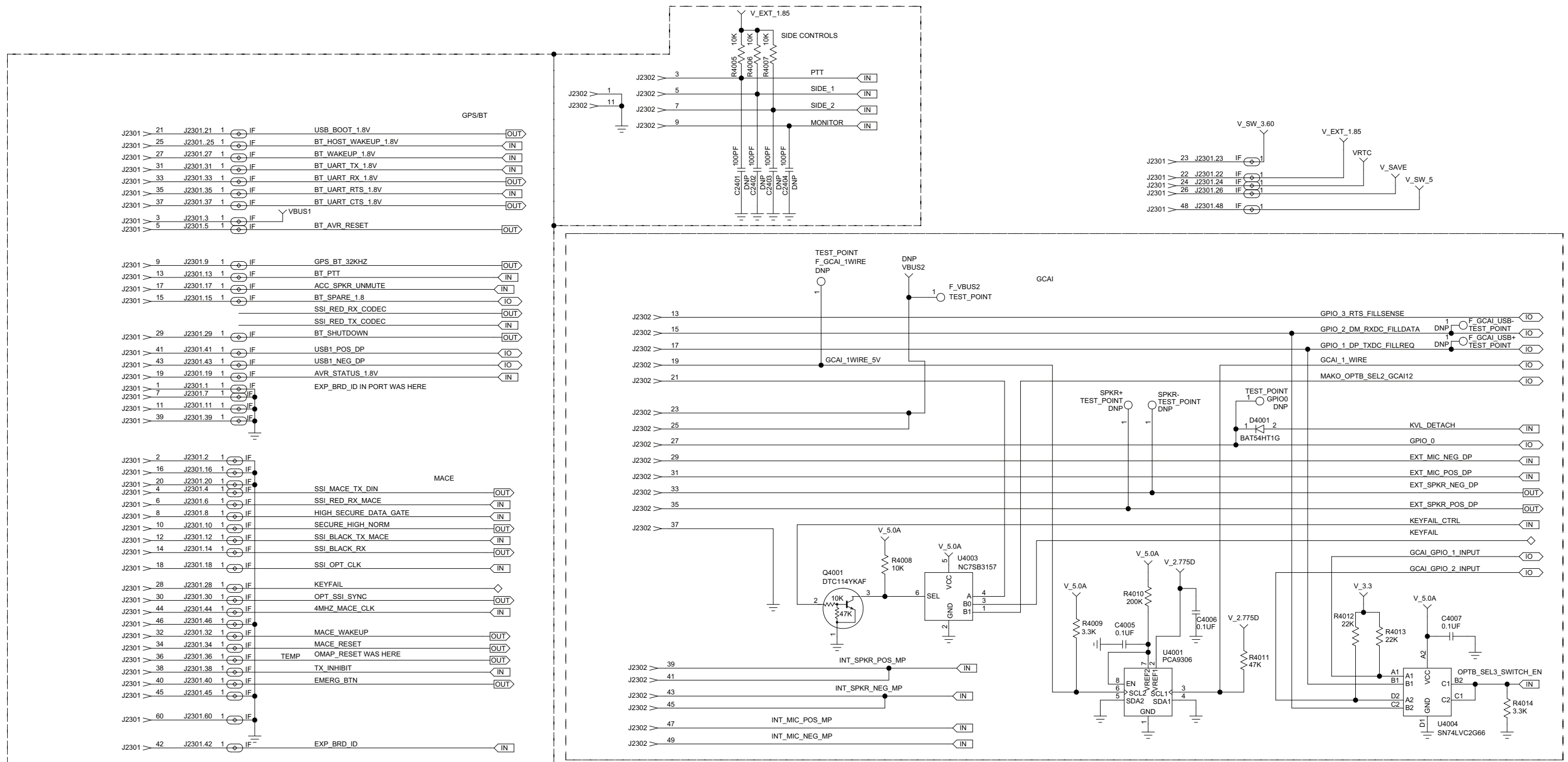


Figure 8-179. GCAI MACE BT Interconnect Circuit

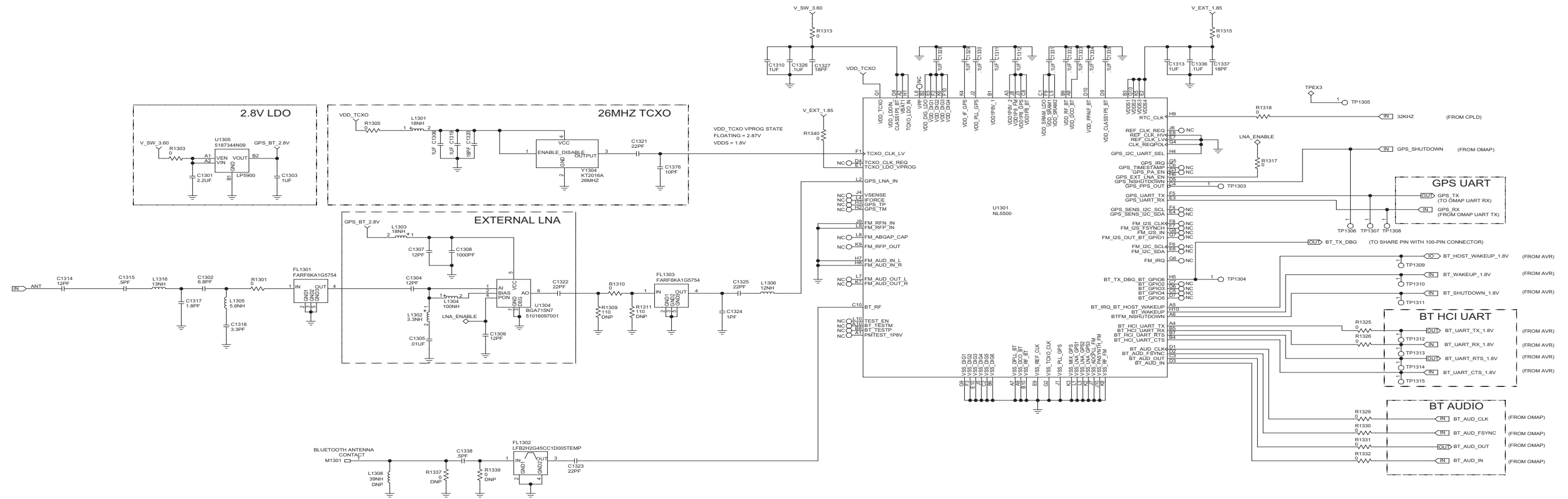


Figure 8-180. GPS Bluetooth Circuit

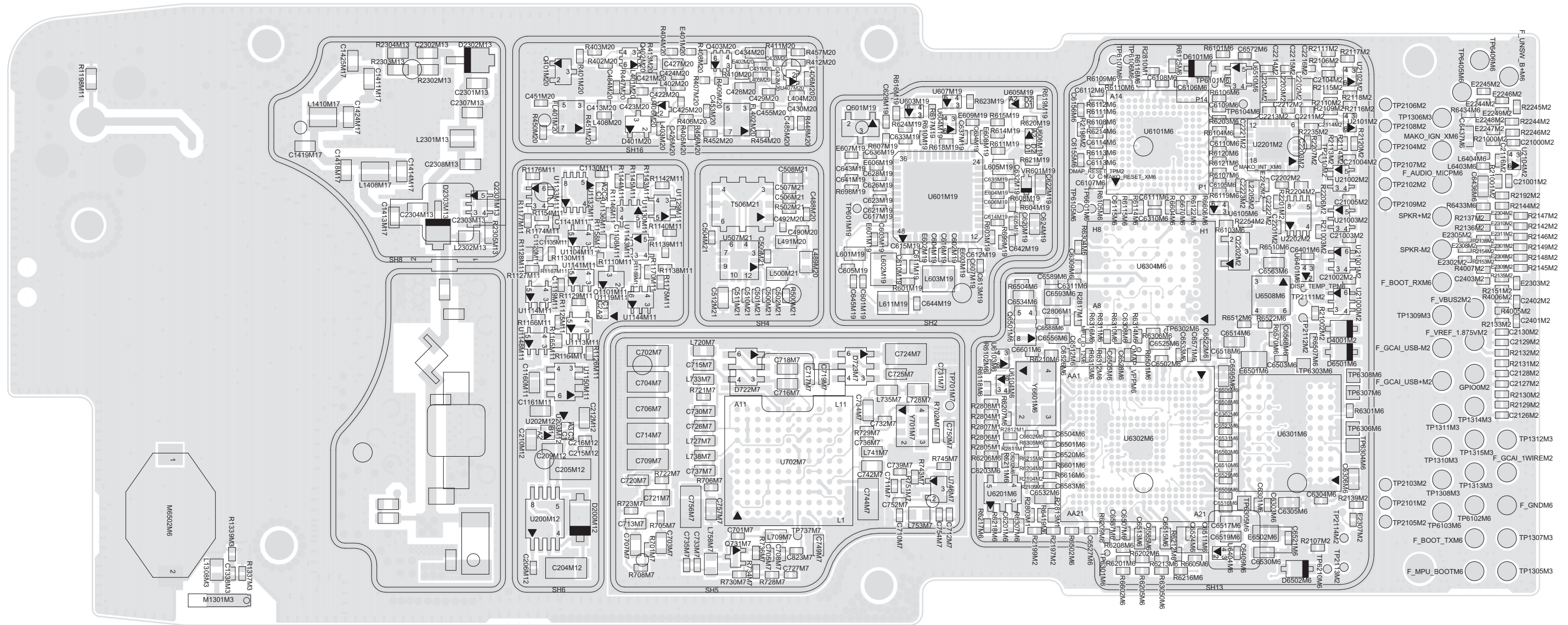


Figure 8-181. Transceiver (RF) Board Layout – Top Side

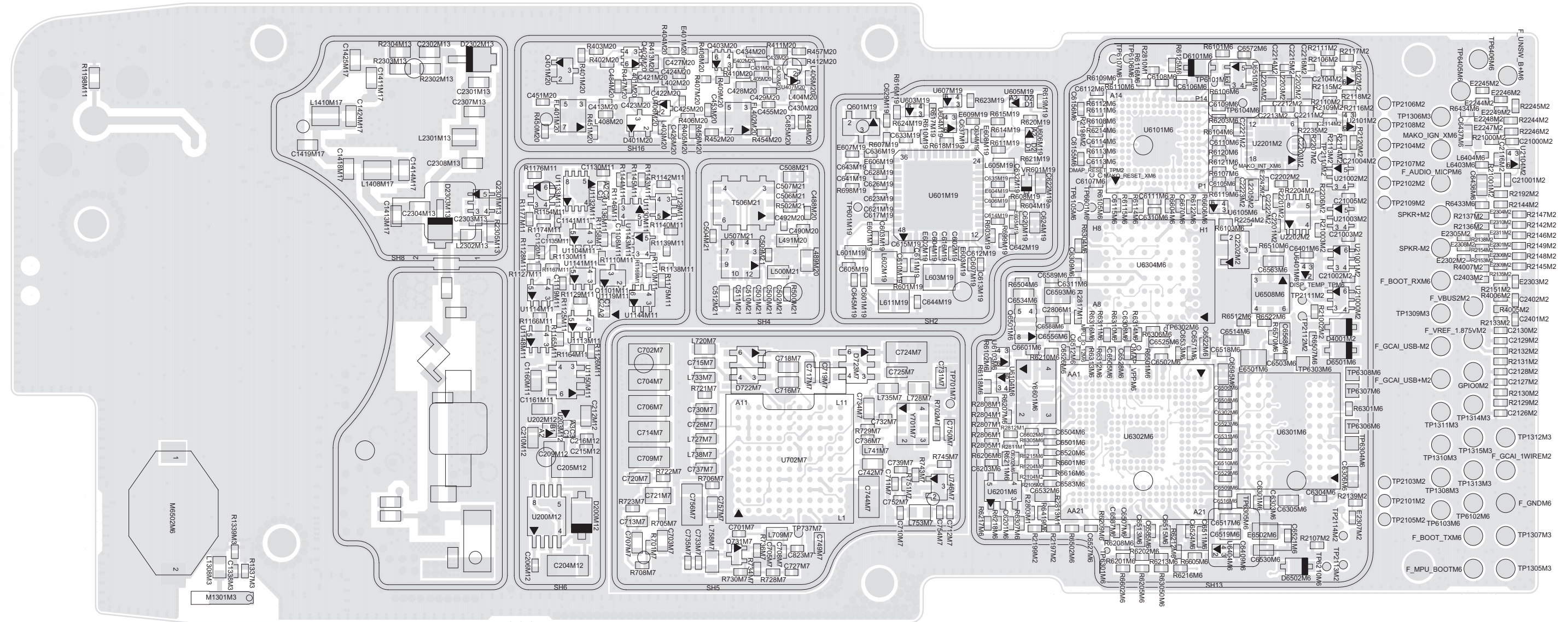


Figure 8-182. Transceiver (RF) Board Layout – Bottom Side

## 900 MHz Transceiver (RF) Board Parts List – 84012478001

Ref. Des.	Part Number	Description
C1001M16	2113944M30	CAP,FXD,33PF,+2%,-2%,50V-DC,0603,C0G,-55DEG CMIN,125DEG CMAX,PB
C1002M16	2113944C22	CAP CER CHP 4.7PF 50V +/- 0.25PF
C1003M16	2113945C02	CAP CER CHP 10,000PF 50V 10%
C1004M16	2113944M30	CAP,FXD,33PF,+2%,-2%,50V-DC,0603,C0G,-55DEG CMIN,125DEG CMAX,PB
C1005M16	2113944M30	CAP,FXD,33PF,+2%,-2%,50V-DC,0603,C0G,-55DEG CMIN,125DEG CMAX,PB
C1006M16	2113945C02	CAP CER CHP 10,000PF 50V 10%
C1007M16	2113944M30	CAP,FXD,33PF,+2%,-2%,50V-DC,0603,C0G,-55DEG CMIN,125DEG CMAX,PB
C1008M16	2113944M30	CAP,FXD,33PF,+2%,-2%,50V-DC,0603,C0G,-55DEG CMIN,125DEG CMAX,PB
C1009M16	2113944M30	CAP,FXD,33PF,+2%,-2%,50V-DC,0603,C0G,-55DEG CMIN,125DEG CMAX,PB
C1010M16	2113945C02	CAP CER CHP 10,000PF 50V 10%
C1013M16	2113944M20	CAP,FXD,12PF,+2%,-2%,50V-DC,0603,C0G,-55DEG CMIN,125DEG CMAX,PB
C1014M16	NOTPLACED	64AM DUMMY PART NUMBER
C1015M16	2113944M30	CAP,FXD,33PF,+2%,-2%,50V-DC,0603,C0G,-55DEG CMIN,125DEG CMAX,PB

Ref. Des.	Part Number	Description
C1018M16	2113944M30	CAP,FXD,33PF,+2%,-2%,50V-DC,0603,C0G,-55DEG CMIN,125DEG CMAX,PB
C1019M16	2171741M03	HIGH Q CAP
C101M12	2113944A31	CAP CER CHP 33.0PF 50V 5%
C1020M16	2113944C20	CAP CER CHP 3.9PF 50V +/- 0.25PF
C1021M16	2113944C20	CAP CER CHP 3.9PF 50V +/- 0.25PF
C1022M16	2113944M30	CAP,FXD,33PF,+2%,-2%,50V-DC,0603,C0G,-55DEG CMIN,125DEG CMAX,PB
C1023M16	2113944M21	CAP,FXD,13PF,+2%,-2%,50V-DC,0603,C0G,-55DEG CMIN,125DEG CMAX,PB
C1024M16	2113945A12	CAP CER CHP 3300PF 50V 10%
C1025M16	2113945A12	CAP CER CHP 3300PF 50V 10%
C1026M16	2113945C07	CAP CER CHP 330PF 50V 10%
C1101M11	2113945B02	CAP CER CHP 10,000PF 25V 10%
C1102M11	21012118001	CAP,FXD,1UF,10%,25V-DC,X7R,0805,LEAD-FREE/ROHS COMPLIANT
C1103M11	2113945B02	CAP CER CHP 10,000PF 25V 10%
C1104M11	NOTPLACED	64AM DUMMY PART NUMBER
C1105M11	2113944A19	CAP CER CHP 5.6PF 50V +/- 0.5PF
C1106M11	2113945B02	CAP CER CHP 10,000PF 25V 10%
C1107M11	2113944A40	CAP CER CHP 100.0PF 50V 5%
C1108M11	2113945B03	CAP,FXD,.015UF,+10%,-10%,25V-DC,0402,X7R,-55DEG CMIN,125DEG CMA

Ref. Des.	Part Number	Description
C1110M11	2113944A31	CAP CER CHP 33.0PF 50V 5%
C1111M11	2113945Y02	CAP,FXD,.1UF,+10%,-10%,16V-DC,0402,X7R,-55DEG CMIN,125DEG CMAX
C1112M11	2113945B02	CAP CER CHP 10,000PF 25V 10%
C1113M11	2113945B02	CAP CER CHP 10,000PF 25V 10%
C1116M11	2113945Y02	CAP,FXD,.1UF,+10%,-10%,16V-DC,0402,X7R,-55DEG CMIN,125DEG CMAX
C1117M11	2113945A12	CAP CER CHP 3300PF 50V 10%
C1118M11	2113945B02	CAP CER CHP 10,000PF 25V 10%
C1119M11	2113945B02	CAP CER CHP 10,000PF 25V 10%
C1120M11	2113945B02	CAP CER CHP 10,000PF 25V 10%
C1122M11	2113944M02	CAP,FXD,2.2PF,.1PF+/-,50V-DC,0603,C0G,-55DEG CMIN,125DEG CMAX
C1123M11	2113945B02	CAP CER CHP 10,000PF 25V 10%
C1124M11	2113945A13	CAP CER CHP 4700PF 50V 10%
C1125M11	2113944A21	CAP CER CHP 6.8PF 50V +/- 0.5PF
C1126M11	2113945A09	CAP CER CHP 1000PF 50V 10%
C1127M11	2113945Y02	CAP,FXD,.1UF,+10%,-10%,16V-DC,0402,X7R,-55DEG CMIN,125DEG CMAX
C1128M11	2113945B02	CAP CER CHP 10,000PF 25V 10%
C1129M11	2113945B02	CAP CER CHP 10,000PF 25V 10%
C1130M11	2113945B02	CAP CER CHP 10,000PF 25V 10%

Ref. Des.	Part Number	Description
C1135M11	NOTPLACED	64AM DUMMY PART NUMBER
C1137M11	2113945B04	CAP,FXD,.022UF,+10%,-10%,25V-DC,0402,X7R,-55DEG CMIN,125DEG CMA
C1138M11	2113945B04	CAP,FXD,.022UF,+10%,-10%,25V-DC,0402,X7R,-55DEG CMIN,125DEG CMA
C1139M11	2113944A25	CAP CER CHP 10.0PF 50V +/- 0.5PF
C1140M11	2113945A13	CAP CER CHP 4700PF 50V 10%
C1141M11	2175793A01	CAP CHIP .47 UF 0402 6.3V X5R
C1142M11	2113945A09	CAP CER CHP 1000PF 50V 10%
C1155M11	NOTPLACED	64AM DUMMY PART NUMBER
C1160M11	2113945C31	CAP,FXD,.1UF,+10%,-10%,50V-DC,0603,X7R,-55DEG CMIN,125DEG CMAX
C1161M11	2113956B91	CAP,FXD,1UF,+10%,-10%,16V-DC,0603,X5R,-55DEG CMIN,85DEG CMAX,PB
C1165M11	2113945Y02	CAP,FXD,.1UF,+10%,-10%,16V-DC,0402,X7R,-55DEG CMIN,125DEG CMAX
C1301M3	21012119001	CAP,FXD,2.2UF,20%,6.3V-DC,-55DEG CMIN,85DEG CM,X5R,0402
C1302M3	2113944A21	CAP CER CHP 6.8PF 50V +/- 0.5PF
C1303M3	2113956A51	CAP,FXD,1UF,+10%,-10%,6.3V-DC,0402,X5R,-55DEG CMIN,85DEG CMAX,P
C1304M3	2113944A26	CAP CER CHP 12.0PF 50V 5%
C1305M3	2113945B02	CAP CER CHP 10,000PF 25V 10%

Ref. Des.	Part Number	Description	Ref. Des.	Part Number	Description	Ref. Des.	Part Number	Description	Ref. Des.	Part Number	Description
C1306M3	2187893N01	CAP 1UF, 6.3V, X5R, 0402 PACKAGE	C1324M3	2115153H03	CAP, CERAMIC, COG	C1337M3	2113944A28	CAP CER CHP 18.0PF 50V 5%	C207M12	2113956B91	CAP,FXD,1UF,+10%,-10%,16V-DC,0603,X5R,-55DEG CMIN,85DEG CMAX,PB
C1307M3	2113944A26	CAP CER CHP 12.0PF 50V 5%	C1325M3	2113944A29	CAP CER CHP 22.0PF 50V 5%	C1338M3	2175389H01	CAP,.5PF, CHIP, 0402, CERAMIC, 50 V	C208M12	2113956B91	CAP,FXD,1UF,+10%,-10%,16V-DC,0603,X5R,-55DEG CMIN,85DEG CMAX,PB
C1308M3	2113945A09	CAP CER CHP 1000PF 50V 10%	C1326M3	2113945Y02	CAP,FXD,.1UF,+10%,-10%,16V-DC,0402,X7R,-55DEG CMIN,125DEG CMAX	C1376M3	2113944A25	CAP CER CHP 10.0PF 50V +/- 0.5PF	C209M12	2113956B91	CAP,FXD,1UF,+10%,-10%,16V-DC,0603,X5R,-55DEG CMIN,85DEG CMAX,PB
C1309M3	2113944A26	CAP CER CHP 12.0PF 50V 5%	C1327M3	2113944A28	CAP CER CHP 18.0PF 50V 5%	C1411M17	2113944C36	CAP CER CHP 33.0PF 50V 5%	C2100M2	2113945Y02	CAP,FXD,.1UF,+10%,-10%,16V-DC,0402,X7R,-55DEG CMIN,125DEG CMAX
C1310M3	2187893N01	CAP 1UF, 6.3V, X5R, 0402 PACKAGE	C1328M3	2113945Y02	CAP,FXD,.1UF,+10%,-10%,16V-DC,0402,X7R,-55DEG CMIN,125DEG CMAX	C1413M17	2113944C10	CAP CER CHP 1.5PF 50V +/- 0.25PF	C21001M2	2113945Y02	CAP,FXD,.1UF,+10%,-10%,16V-DC,0402,X7R,-55DEG CMIN,125DEG CMAX
C1311M3	2113956A51	CAP,FXD,1UF,+10%,-10%,6.3V-DC,0402,X5R,-55DEG CMIN,85DEG CMAX,P	C1329M3	2113945Y02	CAP,FXD,.1UF,+10%,-10%,16V-DC,0402,X7R,-55DEG CMIN,125DEG CMAX	C1414M17	NOTPLACED	64AM DUMMY PART NUMBER	C21002M2	2113946B04	CAP CER CHP 0.10UF 10V 10%
C1312M3	2113956A51	CAP,FXD,1UF,+10%,-10%,6.3V-DC,0402,X5R,-55DEG CMIN,85DEG CMAX,P	C1330M3	2113945Y02	CAP,FXD,.1UF,+10%,-10%,16V-DC,0402,X7R,-55DEG CMIN,125DEG CMAX	C1418M17	2113944C10	CAP CER CHP 1.5PF 50V +/- 0.25PF	C21003M2	2113946B04	CAP CER CHP 0.10UF 10V 10%
C1313M3	2187893N01	CAP 1UF, 6.3V, X5R, 0402 PACKAGE	C1331M3	2113945Y02	CAP,FXD,.1UF,+10%,-10%,16V-DC,0402,X7R,-55DEG CMIN,125DEG CMAX	C1419M17	2113944C16	CAP CER CHP 2.7PF 50V +/- 0.25PF	C21004M2	2113945Y02	CAP,FXD,.1UF,+10%,-10%,16V-DC,0402,X7R,-55DEG CMIN,125DEG CMAX
C1314M3	2113944M20	CAP,FXD,12PF,+2%,-2%,50V-DC,0603,C0G,-55DEG CMIN,125DEG CMAX,PB	C1332M3	2113945Y02	CAP,FXD,.1UF,+10%,-10%,16V-DC,0402,X7R,-55DEG CMIN,125DEG CMAX	C1424M17	2113944C61	CAP,FXD,.5PF,.1PF+/-,50V-DC,0603,C0G,-55DEG CMIN,125DEG CMAX,P	C21005M2	2113946B04	CAP CER CHP 0.10UF 10V 10%
C1315M3	2175389H01	CAP,.5PF, CHIP, 0402, CERAMIC, 50 V	C1333M3	2113945Y02	CAP,FXD,.1UF,+10%,-10%,16V-DC,0402,X7R,-55DEG CMIN,125DEG CMAX	C1425M17	2113944C16	CAP CER CHP 2.7PF 50V +/- 0.25PF	C2104M2	2113946B04	CAP CER CHP 0.10UF 10V 10%
C1317M3	2188881Y12	CAPACITOR CERAMIC NPO HIGH FREQUENCY 16 VOLT (REPLACES 2104801Z12)	C1334M3	2113945Y02	CAP,FXD,.1UF,+10%,-10%,16V-DC,0402,X7R,-55DEG CMIN,125DEG CMAX	C200M12	2113945B02	CAP CER CHP 10,000PF 25V 10%	C210M12	2113956B91	CAP,FXD,1UF,+10%,-10%,16V-DC,0603,X5R,-55DEG CMIN,85DEG CMAX,PB
C1318M3	2113944A13	CAP CER CHP 3.3PF 50V +/- 0.25PF	C1335M3	2113945Y02	CAP,FXD,.1UF,+10%,-10%,16V-DC,0402,X7R,-55DEG CMIN,125DEG CMAX	C201M12	21012118001	CAP,FXD,1UF,10%,25V-DC,X7R,0805,LEAD-FREE/ROHS COMPLIANT	C2114M2	2113946B04	CAP CER CHP 0.10UF 10V 10%
C1319M3	2113945Y02	CAP,FXD,.1UF,+10%,-10%,16V-DC,0402,X7R,-55DEG CMIN,125DEG CMAX	C1336M3	2113945Y02	CAP,FXD,.1UF,+10%,-10%,16V-DC,0402,X7R,-55DEG CMIN,125DEG CMAX	C202M12	21012118001	CAP,FXD,1UF,10%,25V-DC,X7R,0805,LEAD-FREE/ROHS COMPLIANT	C2115M2	2113944A40	CAP CER CHP 100.0PF 50V 5%
C1320M3	2113944A28	CAP CER CHP 18.0PF 50V 5%				C203M12	21012118001	CAP,FXD,1UF,10%,25V-DC,X7R,0805,LEAD-FREE/ROHS COMPLIANT	C2116M2	2113946B04	CAP CER CHP 0.10UF 10V 10%
C1321M3	2113944A29	CAP CER CHP 22.0PF 50V 5%				C204M12	2113955D35	CAP,FXD,4.7UF,+10%,-10%,16V-DC,1206,X7R,-55DEG CMIN,125DEG CMAX	C2126M2	2113944A46	CAP CER CHP 330.0 PF 50V 5%
C1322M3	2113944A29	CAP CER CHP 22.0PF 50V 5%				C205M12	2113955D35	CAP,FXD,4.7UF,+10%,-10%,16V-DC,1206,X7R,-55DEG CMIN,125DEG CMAX			
C1323M3	2113944A29	CAP CER CHP 22.0PF 50V 5%				C206M12	2113945B02	CAP CER CHP 10,000PF 25V 10%			

Ref. Des.	Part Number	Description
C2127M2	2113944A46	CAP CER CHP 330.0 PF 50V 5%
C2128M2	2113944A46	CAP CER CHP 330.0 PF 50V 5%
C2129M2	2113944A46	CAP CER CHP 330.0 PF 50V 5%
C212M12	2113946D07	CAP,CHIP,4.7UF,+10%,-10%,6.3V-DC,0603,X5R,-55DEG CMIN,85DEG CMA
C2130M2	2113944A46	CAP CER CHP 330.0 PF 50V 5%
C213M12	2113944A46	CAP CER CHP 330.0 PF 50V 5%
C214M12	2113944A31	CAP CER CHP 33.0PF 50V 5%
C215M12	2113944A46	CAP CER CHP 330.0 PF 50V 5%
C216M12	2113944A31	CAP CER CHP 33.0PF 50V 5%
C217M12	2113956B91	CAP,FXD,1UF,+10%,-10%,16V-DC,0603,X5R,-55DEG CMIN,85DEG CMAX,PB
C2201M2	2113946B04	CAP CER CHP 0.10UF 10V 10%
C2202M2	2113946B04	CAP CER CHP 0.10UF 10V 10%
C2203M2	2113946B04	CAP CER CHP 0.10UF 10V 10%
C2211M2	2113946B04	CAP CER CHP 0.10UF 10V 10%
C2212M2	2113946B04	CAP CER CHP 0.10UF 10V 10%
C2213M2	2113946B04	CAP CER CHP 0.10UF 10V 10%
C2214M2	2113946B04	CAP CER CHP 0.10UF 10V 10%
C2215M2	2113946B04	CAP CER CHP 0.10UF 10V 10%
C2216M2	2113946B04	CAP CER CHP 0.10UF 10V 10%

Ref. Des.	Part Number	Description
C2221M2	2113946B04	CAP CER CHP 0.10UF 10V 10%
C2222M2	2113946B04	CAP CER CHP 0.10UF 10V 10%
C2223M2	2113944A40	CAP CER CHP 100.0PF 50V 5%
C2301M13	2113944C37	CAP CER CHP 39.0PF 50V 5%
C2302M13	2113944M22	CAP,FXD,15PF,+2%,-2%,50V-DC,0603,C0G,-55DEG CMIN,125DEG CMAX,PB
C2303M13	2113944A36	CAP CER CHP 68.0PF 50V 5%
C2304M13	2113944C36	CAP CER CHP 33.0PF 50V 5%
C2305M13	2115153H47	CAP, CERAMIC, COG
C2306M13	2115153H47	CAP, CERAMIC, COG
C2307M13	2113944C16	CAP CER CHP 2.7PF 50V +/- 0.25PF
C2308M13	2113944C18	CAP CER CHP 3.3PF 50V +/- 0.25PF
C2309M13	2113946K02	CAP CER CHP 0.10UF 16V
C2401M2	NOTPLACED	64AM DUMMY PART NUMBER
C2402M2	NOTPLACED	64AM DUMMY PART NUMBER
C2403M2	NOTPLACED	64AM DUMMY PART NUMBER
C2404M2	NOTPLACED	64AM DUMMY PART NUMBER
C2806M1	NOTPLACED	64AM DUMMY PART NUMBER
C3005M22	2113944A32	CAP CER CHP 39.0PF 50V 5%
C3006M22	2113944A32	CAP CER CHP 39.0PF 50V 5%
C3010M22	2113944A31	CAP CER CHP 33.0PF 50V 5%
C3012M22	2113946K02	CAP CER CHP 0.10UF 16V
C3014M22	2115153H11	CAP, CERAMIC, COG

Ref. Des.	Part Number	Description
C3015M22	2115153H11	CAP, CERAMIC, COG
C3022M22	2115153H11	CAP, CERAMIC, COG
C3023M22	2115153H12	CAP, CERAMIC, COG
C3026M22	2115153H15	CAP, CERAMIC, COG
C3027M22	2115153H15	CAP, CERAMIC, COG
C3042M22	2113944A32	CAP CER CHP 39.0PF 50V 5%
C3046M22	2113944A31	CAP CER CHP 33.0PF 50V 5%
C3049M22	2113946K02	CAP CER CHP 0.10UF 16V
C3050M22	2113944M04	CAP,FXD,2.7PF,.1PF+/-,50V-DC,0603,C0G,-55DEG CMIN,125DEG CMAX
C3051M22	2113944M03	CAP,FXD,2.4PF,.1PF+/-,50V-DC,0603,C0G,-55DEG CMIN,125DEG CMAX
C3054M22	2115153H08	CAP, CERAMIC, COG
C3055M22	2115153H12	CAP, CERAMIC, COG
C3056M22	2115153H16	CAP, CERAMIC, COG
C3057M22	2115153H09	CAP, CERAMIC, COG
C3065M22	2113944A31	CAP CER CHP 33.0PF 50V 5%
C3067M22	2113946B04	CAP CER CHP 0.10UF 10V 10%
C3068M22	2113944A32	CAP CER CHP 39.0PF 50V 5%
C3069M22	2115153H33	CAP, CERAMIC, COG
C4005M2	2113946B04	CAP CER CHP 0.10UF 10V 10%
C4006M2	2113946B04	CAP CER CHP 0.10UF 10V 10%
C4007M2	2113946B04	CAP CER CHP 0.10UF 10V 10%
C413M20	2115153H47	CAP, CERAMIC, COG
C421M20	2113946D07	CAP,CHIP,4.7UF,+10%,-10%,6.3V-DC,0603,X5R,-55DEG CMIN,85DEG CMA
C422M20	2113944A31	CAP CER CHP 33.0PF 50V 5%

Ref. Des.	Part Number	Description
C423M20	2115153H44	CAP, CERAMIC, COG
C424M20	2113944A31	CAP CER CHP 33.0PF 50V 5%
C425M20	2115153H29	CAP, CERAMIC, COG
C426M20	2113944A63	CAP,FXD,1PF,.25PF+/-,50V-DC,0402,C0G,-55DEG CMIN,125DEG CMAX,P
C427M20	2113946D07	CAP,CHIP,4.7UF,+10%,-10%,6.3V-DC,0603,X5R,-55DEG CMIN,85DEG CMA
C428M20	2113946D07	CAP,CHIP,4.7UF,+10%,-10%,6.3V-DC,0603,X5R,-55DEG CMIN,85DEG CMA
C429M20	2113944A31	CAP CER CHP 33.0PF 50V 5%
C430M20	2115153H44	CAP, CERAMIC, COG
C431M20	2113944A31	CAP CER CHP 33.0PF 50V 5%
C432M20	2115153H25	CAP, CERAMIC, COG
C433M20	2113944A63	CAP,FXD,1PF,.25PF+/-,50V-DC,0402,C0G,-55DEG CMIN,125DEG CMAX,P
C434M20	2113946D07	CAP,CHIP,4.7UF,+10%,-10%,6.3V-DC,0603,X5R,-55DEG CMIN,85DEG CMA
C451M20	2115153H47	CAP, CERAMIC, COG
C453M20	2115153H47	CAP, CERAMIC, COG
C455M20	2115153H47	CAP, CERAMIC, COG
C484M20	2115153H03	CAP, CERAMIC, COG
C485M20	2113944A63	CAP,FXD,1PF,.25PF+/-,50V-DC,0402,C0G,-55DEG CMIN,125DEG CMAX,P
C488M20	2113944V13	CAP,FXD,2.7PF,.1PF+/-,50V-DC,0402,C0G,-55DEG CMIN,125DEG CMAX
C490M20	2113944V07	CAP,FXD,1.5PF,.1PF+/-,50V-DC,0402,C0G,-55DEG CMIN,125DEG CMAX
C492M20	2113944V13	CAP,FXD,2.7PF,.1PF+/-,50V-DC,0402,C0G,-55DEG CMIN,125DEG CMAX



Ref. Des.	Part Number	Description
C500M21	2113945B05	CAP,FXD,.033UF,+10%,-10%,25V-DC,0402,X7R,-55DEG CMIN,125DEG CMA
C501M21	2115153H47	CAP, CERAMIC, COG
C502M21	2113945B05	CAP,FXD,.033UF,+10%,-10%,25V-DC,0402,X7R,-55DEG CMIN,125DEG CMA
C504M21	2113944A70	CAP,FXD,6PF,.5PF+/-,50V-DC,0402,C0G,-55DEG CMIN,125DEG CMAX,PB
C505M21	NOTPLACED	64AM DUMMY PART NUMBER
C506M21	2115153H47	CAP, CERAMIC, COG
C507M21	2113945B05	CAP,FXD,.033UF,+10%,-10%,25V-DC,0402,X7R,-55DEG CMIN,125DEG CMA
C508M21	2113946D07	CAP,CHIP,4.7UF,+10%,-10%,6.3V-DC,0603,X5R,-55DEG CMIN,85DEG CMA
C509M21	2113945B05	CAP,FXD,.033UF,+10%,-10%,25V-DC,0402,X7R,-55DEG CMIN,125DEG CMA
C510M21	2115153H47	CAP, CERAMIC, COG
C511M21	2113945B05	CAP,FXD,.033UF,+10%,-10%,25V-DC,0402,X7R,-55DEG CMIN,125DEG CMA
C512M21	2113946D07	CAP,CHIP,4.7UF,+10%,-10%,6.3V-DC,0603,X5R,-55DEG CMIN,85DEG CMA
C514M21	NOTPLACED	64AM DUMMY PART NUMBER
C515M21	2113944A14	CAP CER CHP 3.6PF 50V +/- 0.25PF
C516M21	2113944M30	CAP,FXD,33PF,+2%,-2%,50V-DC,0603,C0G,-55DEG CMIN,125DEG CMAX,PB
C532M21	2115153H47	CAP, CERAMIC, COG
C533M21	2115153H52	CAP, CERAMIC, COG
C550M21	NOTPLACED	64AM DUMMY PART NUMBER
C551M21	NOTPLACED	64AM DUMMY PART NUMBER

Ref. Des.	Part Number	Description
C601M19	2113945B02	CAP CER CHP 10,000PF 25V 10%
C602M19	2113945B02	CAP CER CHP 10,000PF 25V 10%
C603M19	2113945B02	CAP CER CHP 10,000PF 25V 10%
C604M19	2113945B02	CAP CER CHP 10,000PF 25V 10%
C605M19	2113944A15	CAP CER CHP 3.9PF 50V +/- 0.25PF
C606M19	2113946B04	CAP CER CHP 0.10UF 10V 10%
C607M19	2113944A40	CAP CER CHP 100.0PF 50V 5%
C608M19	2113944A12	CAP CER CHP 3.0PF 50V +/- 0.25PF
C609M19	2113944A30	CAP CER CHP 27.0PF 50V 5%
C6104M6	2113946B04	CAP CER CHP 0.10UF 10V 10%
C6105M6	2113946B04	CAP CER CHP 0.10UF 10V 10%
C6106M6	2113946B04	CAP CER CHP 0.10UF 10V 10%
C6107M6	2113946B04	CAP CER CHP 0.10UF 10V 10%
C6108M6	2113946B04	CAP CER CHP 0.10UF 10V 10%
C6109M6	2113946B04	CAP CER CHP 0.10UF 10V 10%
C610M19	2113944A40	CAP CER CHP 100.0PF 50V 5%
C6110M6	2113946B04	CAP CER CHP 0.10UF 10V 10%
C6111M6	2113946B04	CAP CER CHP 0.10UF 10V 10%
C6112M6	2113946B04	CAP CER CHP 0.10UF 10V 10%
C6113M6	2113946B04	CAP CER CHP 0.10UF 10V 10%

Ref. Des.	Part Number	Description
C6114M6	2113946B04	CAP CER CHP 0.10UF 10V 10%
C6115M6	2113946B04	CAP CER CHP 0.10UF 10V 10%
C611M19	2113944A40	CAP CER CHP 100.0PF 50V 5%
C612M19	2113945B02	CAP CER CHP 10,000PF 25V 10%
C613M19	2113944A40	CAP CER CHP 100.0PF 50V 5%
C614M19	2113945B02	CAP CER CHP 10,000PF 25V 10%
C6155M6	NOTPLACED	64AM DUMMY PART NUMBER
C6156M6	NOTPLACED	64AM DUMMY PART NUMBER
C615M19	2113944A42	CAP CER CHP 150.0PF 50V 5%
C616M19	2113945A11	CAP CER CHP 2200PF 50V 10%
C617M19	2113946B04	CAP CER CHP 0.10UF 10V 10%
C618M19	2113944A31	CAP CER CHP 33.0PF 50V 5%
C619M19	2113944A35	CAP CER CHP 62.0PF 50V 5%
C6201M6	2113944A40	CAP CER CHP 100.0PF 50V 5%
C6202M6	2113945A09	CAP CER CHP 1000PF 50V 10%
C6203M6	2113946B04	CAP CER CHP 0.10UF 10V 10%
C620M19	2113946B04	CAP CER CHP 0.10UF 10V 10%
C621M19	2113946B04	CAP CER CHP 0.10UF 10V 10%
C622M19	2113946C07	CAP,FXD,.33UF,+10%,-10%,10V-DC,0603,X5R,-55DEG CMIN,85DEG CMAX
C623M19	2113945B02	CAP CER CHP 10,000PF 25V 10%

Ref. Des.	Part Number	Description
C624M19	2113946C07	CAP,FXD,.33UF,+10%,-10%,10V-DC,0603,X5R,-55DEG CMIN,85DEG CMAX
C625M19	2115153H39	CAP, CERAMIC, COG
C626M19	2113945A09	CAP CER CHP 1000PF 50V 10%
C627M19	2113945A09	CAP CER CHP 1000PF 50V 10%
C628M19	2113945B02	CAP CER CHP 10,000PF 25V 10%
C629M19	2113946B04	CAP CER CHP 0.10UF 10V 10%
C6301M6	2113946B04	CAP CER CHP 0.10UF 10V 10%
C6302M6	2113946B04	CAP CER CHP 0.10UF 10V 10%
C6303M6	2113946B04	CAP CER CHP 0.10UF 10V 10%
C6304M6	2113946B04	CAP CER CHP 0.10UF 10V 10%
C6305M6	2113946S35	CAP CER CHP 1.0UF 16V 10%
C6306M6	2113946S35	CAP CER CHP 1.0UF 16V 10%
C6308M6	2113946B04	CAP CER CHP 0.10UF 10V 10%
C6309M6	2113946B04	CAP CER CHP 0.10UF 10V 10%
C630M19	2113946B04	CAP CER CHP 0.10UF 10V 10%
C6310M6	2113946B04	CAP CER CHP 0.10UF 10V 10%
C6311M6	2113946B04	CAP CER CHP 0.10UF 10V 10%
C631M19	2115153H31	CAP, CERAMIC, COG
C632M19	2113944A40	CAP CER CHP 100.0PF 50V 5%
C633M19	2113945B02	CAP CER CHP 10,000PF 25V 10%
C634M19	2113946B04	CAP CER CHP 0.10UF 10V 10%

Ref. Des.	Part Number	Description
C635M19	2113945B02	CAP CER CHP 10,000PF 25V 10%
C636M19	2113946B04	CAP CER CHP 0.10UF 10V 10%
C637M19	2113946B04	CAP CER CHP 0.10UF 10V 10%
C638M19	2113945A12	CAP CER CHP 3300PF 50V 10%
C639M19	2113945B02	CAP CER CHP 10,000PF 25V 10%
C6401M6	2113946B04	CAP CER CHP 0.10UF 10V 10%
C6402M6	2113956A51	CAP,FXD,1UF,+10%,-10%,6.3V-DC,0402,X5R,-55DEG CMIN,85DEG CMAX,P
C6403M6	2113946B04	CAP CER CHP 0.10UF 10V 10%
C6404M6	2113946B04	CAP CER CHP 0.10UF 10V 10%
C6405M6	2113946B04	CAP CER CHP 0.10UF 10V 10%
C6406M6	2113946B04	CAP CER CHP 0.10UF 10V 10%
C6407M6	2113946B04	CAP CER CHP 0.10UF 10V 10%
C6408M6	2113946B04	CAP CER CHP 0.10UF 10V 10%
C6409M6	2113946B04	CAP CER CHP 0.10UF 10V 10%
C640M19	2113946B04	CAP CER CHP 0.10UF 10V 10%
C6410M6	2113946B04	CAP CER CHP 0.10UF 10V 10%
C6411M6	2113946B04	CAP CER CHP 0.10UF 10V 10%
C6412M6	NOTPLACED	64AM DUMMY PART NUMBER
C6413M6	2113946B04	CAP CER CHP 0.10UF 10V 10%
C6414M6	2113946B04	CAP CER CHP 0.10UF 10V 10%

Ref. Des.	Part Number	Description
C6415M6	NOTPLACED	64AM DUMMY PART NUMBER
C6416M6	2113945B04	CAP,FXD,.022UF,+10%,-10%,25V-DC,0402,X7R,-55DEG CMIN,125DEG CMA
C6417M6	2113945B04	CAP,FXD,.022UF,+10%,-10%,25V-DC,0402,X7R,-55DEG CMIN,125DEG CMA
C6418M6	2113946B04	CAP CER CHP 0.10UF 10V 10%
C6419M6	2113946B04	CAP CER CHP 0.10UF 10V 10%
C641M19	2113944A31	CAP CER CHP 33.0PF 50V 5%
C6420M6	2113945B04	CAP,FXD,.022UF,+10%,-10%,25V-DC,0402,X7R,-55DEG CMIN,125DEG CMA
C6421M6	2113946B04	CAP CER CHP 0.10UF 10V 10%
C6422M6	2113946C02	CAP CER CHP 0.22UF 10V 10%
C6423M6	2113946B04	CAP CER CHP 0.10UF 10V 10%
C6424M6	2113944A40	CAP CER CHP 100.0PF 50V 5%
C6425M6	2113944A40	CAP CER CHP 100.0PF 50V 5%
C6426M6	2113945B02	CAP CER CHP 10,000PF 25V 10%
C6427M6	2113944A50	CAP CER CHP 680.0 PF 50V 5%
C6428M6	2113944A40	CAP CER CHP 100.0PF 50V 5%
C6429M6	2113946B04	CAP CER CHP 0.10UF 10V 10%
C642M19	2113944A48	CAP CER CHP 470.0 PF 50V 5%
C6430M6	2113946B04	CAP CER CHP 0.10UF 10V 10%
C6431M6	2113946B04	CAP CER CHP 0.10UF 10V 10%

Ref. Des.	Part Number	Description
C6432M6	2113956B54	CAP,FXD,10UF,+20%,-20%,6.3V-DC,X5R,-55DEG CMIN,85DEG CMAX,PB-F
C6433M6	2113946S35	CAP CER CHP 1.0UF 16V 10%
C6434M6	2113946L05	CAP,FXD,.33UF,+80%,-20%,16V-DC,0603,Y5V,-30DEG CMIN,85DEG CMAX
C6435M6	2113946S35	CAP CER CHP 1.0UF 16V 10%
C6436M6	2113946C08	CAP,FXD,.47UF,+10%,-10%,10V-DC,0603,X5R,-55DEG CMIN,85DEG CMAX
C6437M6	2113946C08	CAP,FXD,.47UF,+10%,-10%,10V-DC,0603,X5R,-55DEG CMIN,85DEG CMAX
C6438M6	2113944A40	CAP CER CHP 100.0PF 50V 5%
C643M19	2113944A48	CAP CER CHP 470.0 PF 50V 5%
C644M19	2113944A11	CAP CER CHP 2.7PF 50V +/- 0.25PF
C645M19	NOTPLACED	64AM DUMMY PART NUMBER
C646M19	2115153H32	CAP, CERAMIC, COG
C6501M6	2113946B04	CAP CER CHP 0.10UF 10V 10%
C6502M6	2113946B04	CAP CER CHP 0.10UF 10V 10%
C6503M6	2113944A46	CAP CER CHP 330.0 PF 50V 5%
C6504M6	2113946B04	CAP CER CHP 0.10UF 10V 10%
C6505M6	2113946B04	CAP CER CHP 0.10UF 10V 10%
C6506M6	2113946B04	CAP CER CHP 0.10UF 10V 10%
C6507M6	2113946B04	CAP CER CHP 0.10UF 10V 10%
C6508M6	2113946B04	CAP CER CHP 0.10UF 10V 10%

Ref. Des.	Part Number	Description
C6509M6	2113946B04	CAP CER CHP 0.10UF 10V 10%
C6510M6	2113946B04	CAP CER CHP 0.10UF 10V 10%
C6511M6	2113946S35	CAP CER CHP 1.0UF 16V 10%
C6512M6	2113946B04	CAP CER CHP 0.10UF 10V 10%
C6513M6	2113946S35	CAP CER CHP 1.0UF 16V 10%
C6514M6	2113946S35	CAP CER CHP 1.0UF 16V 10%
C6515M6	2113946S35	CAP CER CHP 1.0UF 16V 10%
C6516M6	2113946B04	CAP CER CHP 0.10UF 10V 10%
C6517M6	2113946S35	CAP CER CHP 1.0UF 16V 10%
C6518M6	2113946B04	CAP CER CHP 0.10UF 10V 10%
C6519M6	2113946S35	CAP CER CHP 1.0UF 16V 10%
C6520M6	2113946B04	CAP CER CHP 0.10UF 10V 10%
C6521M6	2113944A46	CAP CER CHP 330.0 PF 50V 5%
C6522M6	2113946S35	CAP CER CHP 1.0UF 16V 10%
C6523M6	2113946B04	CAP CER CHP 0.10UF 10V 10%
C6524M6	2113946B04	CAP CER CHP 0.10UF 10V 10%
C6525M6	2113946S35	CAP CER CHP 1.0UF 16V 10%
C6526M6	2113946B04	CAP CER CHP 0.10UF 10V 10%
C6527M6	2113946B04	CAP CER CHP 0.10UF 10V 10%
C6528M6	2113946B04	CAP CER CHP 0.10UF 10V 10%



Ref. Des.	Part Number	Description	Ref. Des.	Part Number	Description	Ref. Des.	Part Number	Description	Ref. Des.	Part Number	Description
C6670M6	NOTPLACED	64AM DUMMY PART NUMBER	C717M7	2113945C31	CAP,FXD,.1UF,+10%,-10%,50V-DC,0603,X7R,-55DEG CMIN,125DEG CMAX	C735M7	2113944A31	CAP CER CHP 33.0PF 50V 5%	C757M7	2113945C31	CAP,FXD,.1UF,+10%,-10%,50V-DC,0603,X7R,-55DEG CMIN,125DEG CMAX
C701M7	2113944A31	CAP CER CHP 33.0PF 50V 5%	C718M7	2113945C31	CAP,FXD,.1UF,+10%,-10%,50V-DC,0603,X7R,-55DEG CMIN,125DEG CMAX	C736M7	2113945B02	CAP CER CHP 10,000PF 25V 10%	C760M7	2113944A31	CAP CER CHP 33.0PF 50V 5%
C702M7	2185419D06	CAP CER SUPER L/D 0.1UF	C719M7	2113945C31	CAP,FXD,.1UF,+10%,-10%,50V-DC,0603,X7R,-55DEG CMIN,125DEG CMAX	C737M7	2113945C31	CAP,FXD,.1UF,+10%,-10%,50V-DC,0603,X7R,-55DEG CMIN,125DEG CMAX	C764M7	2113946B06	CAP,CHIP,.22UF,+10%,-10%,10V-DC,0402,X5R,-55DEG CMIN,85DEG CMAX
C703M7	2113945C26	CAP,FXD,.039UF,+10%,-10%,50V-DC,0603,X7R,-55DEG CMIN,125DEG CMA	C720M7	2113944C55	CAP CER CHP 1200.OPF 50V 5%	C739M7	2113944A17	CAP CER CHP 4.7PF 50V +/- 0.25PF	C768M7	2115153H20	CAP, CERAMIC, COG
C704M7	2185419D06	CAP CER SUPER L/D 0.1UF	C721M7	NOTPLACED	64AM DUMMY PART NUMBER	C740M7	2113944A31	CAP CER CHP 33.0PF 50V 5%	C770M7	2113944A31	CAP CER CHP 33.0PF 50V 5%
C705M7	2115153H19	CAP, CERAMIC, COG	C724M7	2113955D37	CAP,FXD,10UF,+10%,-10%,16V-DC,1206,X7R,-55DEG CMIN,125DEG CMAX	C742M7	2113945C31	CAP,FXD,.1UF,+10%,-10%,50V-DC,0603,X7R,-55DEG CMIN,125DEG CMAX	C772M7	2113945A09	CAP CER CHP 1000PF 50V 10%
C706M7	2171051Y11	CAP,FXD,.1UF,+5%,-5%,1206,-55DEG CMIN,125DEG CMAX,PB-FREE	C725M7	2113945C31	CAP,FXD,.1UF,+10%,-10%,50V-DC,0603,X7R,-55DEG CMIN,125DEG CMAX	C743M7	2113946B06	CAP,CHIP,.22UF,+10%,-10%,10V-DC,0402,X5R,-55DEG CMIN,85DEG CMAX	C773M7	2113944A33	CAP CER CHP 47.0PF 50V 5%
C707M7	2113945C01	CAP CER CHP 6800PF 50V 10%	C726M7	2113945C31	CAP,FXD,.1UF,+10%,-10%,50V-DC,0603,X7R,-55DEG CMIN,125DEG CMAX	C744M7	2113955D37	CAP,FXD,10UF,+10%,-10%,16V-DC,1206,X7R,-55DEG CMIN,125DEG CMAX	C777M7	2113944A31	CAP CER CHP 33.0PF 50V 5%
C708M7	2115153H19	CAP, CERAMIC, COG	C727M7	2113944A40	CAP CER CHP 100.0PF 50V 5%	C749M7	2113945C31	CAP,FXD,.1UF,+10%,-10%,50V-DC,0603,X7R,-55DEG CMIN,125DEG CMAX	C779M7	2115153H15	CAP, CERAMIC, COG
C709M7	2171051Y11	CAP,FXD,.1UF,+5%,-5%,1206,-55DEG CMIN,125DEG CMAX,PB-FREE	C730M7	2113945C31	CAP,FXD,.1UF,+10%,-10%,50V-DC,0603,X7R,-55DEG CMIN,125DEG CMAX	C750M7	2113945C31	CAP,FXD,.1UF,+10%,-10%,50V-DC,0603,X7R,-55DEG CMIN,125DEG CMAX	C781M7	2113944A31	CAP CER CHP 33.0PF 50V 5%
C710M7	NOTPLACED	64AM DUMMY PART NUMBER	C731M7	2113945C31	CAP,FXD,.1UF,+10%,-10%,50V-DC,0603,X7R,-55DEG CMIN,125DEG CMAX	C751M7	2113945A09	CAP CER CHP 1000PF 50V 10%	C786M7	2113944A44	CAP CER CHP 220.0 PF 50V 5%
C711M7	NOTPLACED	64AM DUMMY PART NUMBER	C732M7	2113944A32	CAP CER CHP 39.0PF 50V 5%	C752M7	2113944A43	CAP CER CHP 180.0PF 50V 5%	C803M7	2113944A31	CAP CER CHP 33.0PF 50V 5%
C712M7	NOTPLACED	64AM DUMMY PART NUMBER	C733M7	2113945A09	CAP CER CHP 1000PF 50V 10%	C753M7	2113944A31	CAP CER CHP 33.0PF 50V 5%	C813M7	NOTPLACED	64AM DUMMY PART NUMBER
C713M7	2113945C25	CAP,FXD,.033UF,+10%,-10%,50V-DC,0603,X7R,-55DEG CMIN,125DEG CMA	C734M7	2113945C31	CAP,FXD,.1UF,+10%,-10%,50V-DC,0603,X7R,-55DEG CMIN,125DEG CMAX	C754M7	2113944A34	CAP CER CHP 56.0PF 50V 5%	C816M7	2113944A33	CAP CER CHP 47.0PF 50V 5%
C714M7	2171051Y11	CAP,FXD,.1UF,+5%,-5%,1206,-55DEG CMIN,125DEG CMAX,PB-FREE				C756M7	2113955D37	CAP,FXD,10UF,+10%,-10%,16V-DC,1206,X7R,-55DEG CMIN,125DEG CMAX	C817M7	2113944A31	CAP CER CHP 33.0PF 50V 5%
C715M7	2113945C31	CAP,FXD,.1UF,+10%,-10%,50V-DC,0603,X7R,-55DEG CMIN,125DEG CMAX							C819M7	2113944A44	CAP CER CHP 220.0 PF 50V 5%
C716M7	2113945C31	CAP,FXD,.1UF,+10%,-10%,50V-DC,0603,X7R,-55DEG CMIN,125DEG CMAX							C823M7	2113944A40	CAP CER CHP 100.0PF 50V 5%
									C824M7	2113944A31	CAP CER CHP 33.0PF 50V 5%
									D200M12	4813978A19	DIODE,RECT,MBR120,SM,SOD-123,1A,20V,SHTK,PB-FREE
									D2101M2	4870359B01	DIODE,SUPR,SM,7.82V,.1W,ESD PROT,V360

Ref. Des.	Part Number	Description	Ref. Des.	Part Number	Description	Ref. Des.	Part Number	Description	Ref. Des.	Part Number	Description
D2301M13	4813974A19	DIODE ARRAY,MXR,SM,SOT-323,7V,.2W,SHTK,2,PB-FREE	E2302M2	91012036001	FILTER,EMI/RFI,300MA,SM,0402,PB FREE	E606M19	2471132D14	IDCTR,FXD,470OHM,200MA,FER,0402,BEA	L1102M11	2415429H10	CHIP INDUCTOR
D2302M13	4815897H01	PIN DIODE	E2303M2	91012036001	FILTER,EMI/RFI,300MA,SM,0402,PB FREE	E607M19	2471132D14	IDCTR,FXD,470OHM,200MA,FER,0402,BEA	L1116M11	NOTPLACED	64AM DUMMY PART NUMBER
D2303M13	4815897H01	PIN DIODE	E2304M2	91012036001	FILTER,EMI/RFI,300MA,SM,0402,PB FREE	E608M19	2471132D14	IDCTR,FXD,470OHM,200MA,FER,0402,BEA	L1117M11	2415428H02	AIR WOUND INDUCTOR
D4001M2	4813978A25	SCHOTTKY 30V SOD-323 T&R PB FREE	E2305M2	91012036001	FILTER,EMI/RFI,300MA,SM,0402,PB FREE	E609M19	2471132D14	IDCTR,FXD,470OHM,200MA,FER,0402,BEA	L1301M3	2414017P16	IDCTR,CHIP,18NH,5%,300MA,.76OHM,CER,9 Q,1.9GHZ SRF,SM,0402,P
D401M20	NOTPLACED	64AM DUMMY PART NUMBER	E2306M2	91012036001	FILTER,EMI/RFI,300MA,SM,0402,PB FREE	E6501M6	2480067M02	CHK RF CHIP BEAD INDUCTOR	L1302M3	2475122C13	IND, MULTI-LAY, 3.3NH ?0.3%, 0402,
D6101M6	4813978A25	SCHOTTKY 30V SOD-323 T&R PB FREE	E2307M2	91012036001	FILTER,EMI/RFI,300MA,SM,0402,PB FREE	E6502M6	2480067M02	CHK RF CHIP BEAD INDUCTOR	L1303M3	2414017P16	IDCTR,CHIP,18NH,5%,300MA,.76OHM,CER,9 Q,1.9GHZ SRF,SM,0402,P
D6401M6	4813978A25	SCHOTTKY 30V SOD-323 T&R PB FREE	E2308M2	91012036001	FILTER,EMI/RFI,300MA,SM,0402,PB FREE	F200M12	6575834B01	FUSE SURFACE MOUNT	L1304M3	2475122C37	IND, MULTI-LAYER, 100NH ?5%, 0402,
D6501M6	4813978A25	SCHOTTKY 30V SOD-323 T&R PB FREE	E2309M2	91012036001	FILTER,EMI/RFI,300MA,SM,0402,PB FREE	FL1301M3	9102190J23	FLTR,SAW,BANDPASS,1.57542GHZ NOM,SM,1.4X1.0MM,SMD, PB-FREE	L1305M3	24010062002	INDUCTOR, 5.6NH, 0402, 2%
D6502M6	4813978A25	SCHOTTKY 30V SOD-323 T&R PB FREE	E2310M2	91012036001	FILTER,EMI/RFI,300MA,SM,0402,PB FREE	FL1302M3	9109674L58	PASSIVE FILTER,CER,BANDPASS,2.45GHZ NOM	L1306M3	2414017P14	IDCTR,CHIP,12NH,5%,300MA,.60OHM,CER,9 Q,2GHZ SRF,SM,0402,PB-F
D722M7	4815011H01	DIODE TRIPLE	E2311M2	91012036001	FILTER,EMI/RFI,300MA,SM,0402,PB FREE	FL1303M3	9102190J23	FLTR,SAW,BANDPASS,1.57542GHZ NOM,SM,1.4X1.0MM,SMD, PB-FREE	L1308M3	NOTPLACED	64AM DUMMY PART NUMBER
D723M7	4815011H01	DIODE TRIPLE	E401M20	2471132D14	IDCTR,FXD,470OHM,200MA,FER,0402,BEA	FL401M20	9105849W18	FLTR, SAW, ISM BAND	L1316M3	24010062009	INDUCTOR, 13NH, 0402, 2%
E1101M11	2405688Z01	INDUCTOR FERRITE BEAD	E402M20	2471132D14	IDCTR,FXD,470OHM,200MA,FER,0402,BEA	FL402M20	9105849W18	FLTR, SAW, ISM BAND	L1408M17	24012026009	ULTRA-MINIATURE AIR CORE INDUCTORS
E201M12	7686949J14	FLTR,FERRITE BEAD,,,,,2A,,,,,SM,0805,,CHIP,220OHM	E601M19	2471132D14	IDCTR,FXD,470OHM,200MA,FER,0402,BEA	FL502M21	91009300001	FILTER,MONOLITHIC CRYSTAL,BANDPASS,109.65MHZ NOM	L1410M17	24012026009	ULTRA-MINIATURE AIR CORE INDUCTORS
E2242M2	7685268E01	FERRITE BEAD 20X40 200 MA MAX CHIP	E602M19	2471132D14	IDCTR,FXD,470OHM,200MA,FER,0402,BEA	J102M12	2880658Z08	CONNECTOR SMA	L200M12	2571269C01	INDUCTOR WW POWER 20%
E2244M2	7685268E01	FERRITE BEAD 20X40 200 MA MAX CHIP	E603M19	2471132D14	IDCTR,FXD,470OHM,200MA,FER,0402,BEA	J2301M2	0970312N01	CONN,BTB,RCPT,60CONT,.4MM,GLD,1 STACK HGT	L2202M2	2415429H45	CHIP INDUCTOR
E2245M2	7685268E01	FERRITE BEAD 20X40 200 MA MAX CHIP	E604M19	2471132D14	IDCTR,FXD,470OHM,200MA,FER,0402,BEA	J2302M2	0970312N01	CONN,BTB,RCPT,60CONT,.4MM,GLD,1 STACK HGT	L2203M2	2415429H45	CHIP INDUCTOR
E2246M2	7685268E01	FERRITE BEAD 20X40 200 MA MAX CHIP	E605M19	2471132D14	IDCTR,FXD,470OHM,200MA,FER,0402,BEA	L1001M16	2415429H37	CHIP INDUCTOR	L2204M2	2415429H45	CHIP INDUCTOR
E2247M2	7685268E01	FERRITE BEAD 20X40 200 MA MAX CHIP				L1002M16	2415429H10	CHIP INDUCTOR	L2205M2	2415429H45	CHIP INDUCTOR
E2248M2	7685268E01	FERRITE BEAD 20X40 200 MA MAX CHIP				L1003M16	2415429H37	CHIP INDUCTOR	L2301M13	24012026004	ULTRA-MINIATURE AIR CORE INDUCTORS
E2249M2	7685268E01	FERRITE BEAD 20X40 200 MA MAX CHIP				L1007M16	2460591K40	COIL AIR WOUND INDUC 59.71	L2302M13	2415429H35	CHIP INDUCTOR
E2301M2	91012036001	FILTER,EMI/RFI,300MA,SM,0402,PB FREE				L1009M16	2415428H02	AIR WOUND INDUCTOR	L2303M13	NOTPLACED	64AM DUMMY PART NUMBER
						L1101M11	2415429H26	CHIP INDUCTOR	L3001M22	2478057A27	27 NH SURFACE MOUNT INDUCTOR

Ref. Des.	Part Number	Description
L3002M22	2478057A21	15 NH SURFACE MOUNT INDUCTOR
L3007M22	2415429H36	CHIP INDUCTOR
L3008M22	2414032F34	IDCTR,WW,100NH,5%,400 MA,.46OHM,CER,40 Q,950MHZ SRF,SM,PB-FR
L3012M22	2415429H39	CHIP INDUCTOR
L3041M22	2414032F32	IDCTR,FXD,68NH,5%,500M A,.38OHM,CER,40 Q,1.2GHZ SRF,SM,0805,P
L3047M22	2414032F36	IDCTR,WW,150NH,5%,400 MA,.56OHM,CER,35 Q,780MHZ SRF,SM,PB-FR
L3064M22	2414032F36	IDCTR,WW,150NH,5%,400 MA,.56OHM,CER,35 Q,780MHZ SRF,SM,PB-FR
L401M20	2415427H21	CHIP INDUCTOR
L402M20	2415427H21	CHIP INDUCTOR
L403M20	2414017P06	IDCTR,CHIP,2.7NH,300MA,.17OHM,CER,8 Q,5GHZ SRF,SM,0402,PB-F
L404M20	2415427H26	CHIP INDUCTOR
L405M20	2415427H21	CHIP INDUCTOR
L406M20	2415427H05	CHIP INDUCTOR
L408M20	NOTPLACED	64AM DUMMY PART NUMBER
L489M20	2478057A14	8.2NH SURFACE MOUNT INDUCTOR
L491M20	2478057A14	8.2NH SURFACE MOUNT INDUCTOR
L500M21	2415429H43	CHIP INDUCTOR
L503M21	2414017N24	IDCTR,CHIP,100NH,5%,300 MA,2OHM,CER,14 Q,700MHZ SRF,SM,0603,P
L504M21	2478057A51	0306 HIGH Q CHIP INDUCTOR
L513M21	NOTPLACED	64AM DUMMY PART NUMBER
L550M21	2414017N12	IDCTR,CHIP,10NH,5%,600 MA,.3OHM,CER,12 Q,2.2GHZ SRF,SM,0603,P

Ref. Des.	Part Number	Description
L601M19	2415429H43	CHIP INDUCTOR
L602M19	2466505A01	COIL INDUCTOR
L603M19	2466505A01	COIL INDUCTOR
L604M19	2414032D16	IDCTR,WW,120NH,5%,800 MA,.26OHM,CER,42 Q,1GHZ SRF,SM,PB-FREE
L605M19	24012050001	0603LS CHIP INDUCTORS, 1608, 3900NH
L611M19	2414032F39	IDCTR,WW,270NH,10%,280 MA,1OHM,CER,40 Q,800MHZ SRF,SM,PB-FRE
L6401M6	2471189M03	SHIELDED SMT POWER INDUCTOR 10UH
L6402M6	2471189M03	SHIELDED SMT POWER INDUCTOR 10UH
L6403M6	24009271001	20NH HIGH CURRENT CHIP INDUCTOR
L6404M6	24009271001	20NH HIGH CURRENT CHIP INDUCTOR
L6502M6	2471678H01	10UH INDCUTOR
L6504M6	24009268001	10UH 2.1A SHIELDED INDUCTOR
L6505M6	2471678H01	10UH INDCUTOR
L701M7	2488090Y16	INDUCTOR,MULTILAYER,1 8NH,1005,SMD,PB FREE
L709M7	2478057A14	8.2NH SURFACE MOUNT INDUCTOR
L720M7	24012100001	IDCTR,2.2UH,10%,15MA,S M,MAGNETICALLY SHIELDED CHIP
L727M7	24012100001	IDCTR,2.2UH,10%,15MA,S M,MAGNETICALLY SHIELDED CHIP
L728M7	2415429H47	CHIP INDUCTOR
L733M7	24012100001	IDCTR,2.2UH,10%,15MA,S M,MAGNETICALLY SHIELDED CHIP
L735M7	24012100001	IDCTR,2.2UH,10%,15MA,S M,MAGNETICALLY SHIELDED CHIP

Ref. Des.	Part Number	Description
L738M7	24012100001	IDCTR,2.2UH,10%,15MA,S M,MAGNETICALLY SHIELDED CHIP
L739M7	2414017N25	IDCTR,CHIP,120NH,5%,200 MA,2.4OHM,CER,12 Q,600MHZ SRF,SM,0603
L741M7	24012100001	IDCTR,2.2UH,10%,15MA,S M,MAGNETICALLY SHIELDED CHIP
L753M7	2415347H06	IDCTR, 2200NH
L755M7	2415429H38	CHIP INDUCTOR
L758M7	2415429H38	CHIP INDUCTOR
L759M7	2414017N25	IDCTR,CHIP,120NH,5%,200 MA,2.4OHM,CER,12 Q,600MHZ SRF,SM,0603
L775M7	2415429H38	CHIP INDUCTOR
L778M7	2488090Y13	INDUCTOR,MULTILAYER,1 0NH,1005,SMD,PB FREE
M101M12	39012039001	CONNECTOR, BATTERY CONTACT
M103M12	3987977Y04	CONT,CONN,,1CONT,,ANT UNIV 4.5MM,UC 1.8
M104M12	3987977Y04	CONT,CONN,,1CONT,,ANT UNIV 4.5MM,UC 1.8
M105M12	3987977Y04	CONT,CONN,,1CONT,,ANT UNIV 4.5MM,UC 1.8
M1301M3	3987977Y01	CONTACT ANTENNA UNIVERSAL (D35)
M6405M6	3987977Y04	CONT,CONN,,1CONT,,ANT UNIV 4.5MM,UC 1.8
M6406M6	3987977Y04	CONT,CONN,,1CONT,,ANT UNIV 4.5MM,UC 1.8
M6502M6	0985888K02	SKT RTC BTTY LEAP
M6504M6	3987977Y04	CONT,CONN,,1CONT,,ANT UNIV 4.5MM,UC 1.8
PASTE	11012015001	SOLDER PASTE - 9.0A, LOW VOID
PCB	84012478001	BOARD, PC , MAIN BOARD, 900 MHZ
Q1001M16	48012094001	MOD,XSTR,FET RF PWR, 135-941MHZ

Ref. Des.	Part Number	Description
Q1101M11	4813973A32	XSTR,BIP GP SS,NPN,SM,SC-70,SMT,50V,.202W,100MA, PB-FREE
Q1103M11	4813970A59	P-CH FET 1.0A 20V SOT-23 T&R
Q201M12	4813970A59	P-CH FET 1.0A 20V SOT-23 T&R
Q202M12	4813973A32	XSTR,BIP GP SS,NPN,SM,SC-70,SMT,50V,.202W,100MA, PB-FREE
Q2202M2	4815261H01	TRANSISTOR,BIP GENERAL PURPOSE SMALL NPN
Q2301M13	4815055H01	TSTR DUAL NPN/PNP UMH 5
Q3033M22	4813972A17	PB-FREE,NOT COMPLETELY ENRICHED
Q3038M22	4885061Y01	XSTR NPN 6V 30UA 12GHZ PB-FREE
Q3060M22	4813972A17	PB-FREE,NOT COMPLETELY ENRICHED
Q3062M22	4871915M01	XSTR,BIP RF SML SGNL,NPN,SM,4.5GHZ
Q4001M2	4815261H01	TRANSISTOR,BIP GENERAL PURPOSE SMALL NPN
Q401M20	4813973A32	XSTR,BIP GP SS,NPN,SM,SC-70,SMT,50V,.202W,100MA, PB-FREE
Q402M20	4813973M75	XSTR,BIP GP SS,PNP,BC858,SOT-563,SMT,-30V,.357W,-100MA,100MHZ
Q403M20	4813973M75	XSTR,BIP GP SS,PNP,BC858,SOT-563,SMT,-30V,.357W,-100MA,100MHZ
Q601M19	4813973A04	XSTR,BIP GP SS,NPN,TA13,SM,SOT-23,SMT,30V,.225W,300MA,1 25MHZ,P

Ref. Des.	Part Number	Description
Q6101M6	4815261H01	TRANSISTOR,BIP GENERAL PURPOSE SMALL NPN
Q6401M6	48012170001	FET
Q6501M6	4813970A62	XSTR,FET GP PWR,MOSFET,P-CH,ENHN,CF,-20V,1.3W,PB-FREE
Q6502M6	48012154001	FET
Q6504M6	4809579E77	FET, NCH MOS FET, 1.2MM X 1.2MM PACKAGE, SMD, W18 COMPLIANT
Q6505M6	4813970A62	XSTR,FET GP PWR,MOSFET,P-CH,ENHN,CF,-20V,1.3W,PB-FREE
Q6506M6	4809579E77	FET, NCH MOS FET, 1.2MM X 1.2MM PACKAGE, SMD, W18 COMPLIANT
Q6507M6	48012170001	FET
Q6508M6	48012154001	FET
Q731M7	4885061Y01	XSTR NPN 6V 30UA 12GHZ PB-FREE
Q745M7	4813973M75	XSTR,BIP GP SS,PNP,BC858,SOT-563,SMT,-30V,.357W,-100MA,100MHZ
Q756M7	4805585Q32	TRANSITOR, NPN RF
Q767M7	4813973M75	XSTR,BIP GP SS,PNP,BC858,SOT-563,SMT,-30V,.357W,-100MA,100MHZ
Q774M7	4805585Q32	TRANSITOR, NPN RF
Q785M7	4889394V04	XSTR,FET GEN PURPOSE SMALL SIG,MOSFET,N-CH,ENHN,SM,20V,.25W,P
R1001M16	0613952R13	CER CHIP RES 33K OHM 5% 0402
R1002M16	0613952R17	CER CHIP RES 47K OHM 5% 0402
R1003M16	0613952R21	CER CHIP RES 68K OHM 5% 0402

Ref. Des.	Part Number	Description
R1004M16	0613952R11	CER CHIP RES 27K OHM 5% 0402
R1005M16	0613952Q73	CER CHIP RES 1000 OHM 5 0402
R1006M16	0613952R66	CER CHIP RES 0.0 +/-0.050 OHM
R1007M16	0613952H53	CER CHIP RES 150 OHM 5% 0603
R1064M16	0613952Q60	CER CHIP RES 300 OHM 5 0402
R1065M16	0613952Q31	CER CHIP RES 18.0 OHM 5 0402
R1066M16	0613952Q60	CER CHIP RES 300 OHM 5 0402
R1101M11	0613952R01	CER CHIP RES 10K OHM 5% 0402
R1102M11	0613952R25	CER CHIP RES 100K OHM 5% 0402
R1103M11	06012035001	0805, 0.02 OHM, CHIP RESISTOR
R1104M11	0613952Q49	CER CHIP RES 100 OHM 5 0402
R1105M11	0613952Q49	CER CHIP RES 100 OHM 5 0402
R1106M11	0613952Q21	CER CHIP RES 6.8 OHM 5 0402
R1107M11	0613952Q45	CER CHIP RES 68.0 OHM 5 0402
R1108M11	0613952N81	CER CHIP RES 68.1K OHM 1 0402
R1110M11	0613952R01	CER CHIP RES 10K OHM 5% 0402
R1111M11	0613952R66	CER CHIP RES 0.0 +/-0.050 OHM
R1112M11	NOTPLACED	64AM DUMMY PART NUMBER
R1114M11	0613952Q49	CER CHIP RES 100 OHM 5 0402
R1115M11	0613952Q49	CER CHIP RES 100 OHM 5 0402

Ref. Des.	Part Number	Description
R1116M11	0613952R01	CER CHIP RES 10K OHM 5% 0402
R1117M11	0613952R22	CER CHIP RES 75K OHM 5 0402
R1121M11	0613952N47	CER CHIP RES 30.1K OHM 1 0402
R1122M11	0613952N85	CER CHIP RES 75.0K OHM 1 0402
R1124M11	0613952Q42	CER CHIP RES 51.0 OHM 5 0402
R1125M11	0613952R17	CER CHIP RES 47K OHM 5% 0402
R1126M11	0613952R08	CER CHIP RES 20K OHM 5 0402
R1127M11	0613952R08	CER CHIP RES 20K OHM 5 0402
R1128M11	0613952R01	CER CHIP RES 10K OHM 5% 0402
R1129M11	NOTPLACED	64AM DUMMY PART NUMBER
R1130M11	NOTPLACED	64AM DUMMY PART NUMBER
R1135M11	0613952R66	CER CHIP RES 0.0 +/-0.050 OHM
R1136M11	0613952R01	CER CHIP RES 10K OHM 5% 0402
R1137M11	0613952R01	CER CHIP RES 10K OHM 5% 0402
R1138M11	0613952R25	CER CHIP RES 100K OHM 5% 0402
R1139M11	0613952R25	CER CHIP RES 100K OHM 5% 0402
R1140M11	0613952R25	CER CHIP RES 100K OHM 5% 0402
R1141M11	0613952R42	CER CHIP RES 510K OHM 5 0402
R1142M11	0613952R25	CER CHIP RES 100K OHM 5% 0402
R1143M11	0613952R25	CER CHIP RES 100K OHM 5% 0402

Ref. Des.	Part Number	Description
R1144M11	0613952R25	CER CHIP RES 100K OHM 5% 0402
R1145M11	0613952R25	CER CHIP RES 100K OHM 5% 0402
R1146M11	0613952R25	CER CHIP RES 100K OHM 5% 0402
R1151M11	0613952R01	CER CHIP RES 10K OHM 5% 0402
R1152M11	0613952R01	CER CHIP RES 10K OHM 5% 0402
R1154M11	0613952N01	CER CHIP RES 10.0K OHM 1 0402
R1158M11	NOTPLACED	64AM DUMMY PART NUMBER
R1160M11	0613952R03	CER CHIP RES 12K OHM 5% 0402
R1162M11	0613952R29	CER CHIP RES 150K OHM 5% 0402
R1163M11	0613952R01	CER CHIP RES 10K OHM 5% 0402
R1164M11	0613952R01	CER CHIP RES 10K OHM 5% 0402
R1165M11	0613952Q56	CER CHIP RES 200 OHM 5 0402
R1166M11	0613952Q56	CER CHIP RES 200 OHM 5 0402
R1167M11	0613952R01	CER CHIP RES 10K OHM 5% 0402
R1168M11	0613952Q49	CER CHIP RES 100 OHM 5 0402
R1169M11	0613952P52	CER CHIP RES 340K OHM 1 0402
R1170M11	0613952N88	CER CHIP RES 80.6K OHM 1 0402
R1171M11	0613952R66	CER CHIP RES 0.0 +/-0.050 OHM
R1172M11	0613952Q89	CER CHIP RES 4700 OHM 5 0402
R1174M11	0613952N01	CER CHIP RES 10.0K OHM 1 0402

Ref. Des.	Part Number	Description	Ref. Des.	Part Number	Description	Ref. Des.	Part Number	Description	Ref. Des.	Part Number	Description
R1175M11	0613952R66	CER CHIP RES 0.0 +/-0.050 OHM	R1329M3	0613952R66	CER CHIP RES 0.0 +/-0.050 OHM	R2113M2	0613952Q25	CER CHIP RES 10.0 OHM 5 0402	R2146M2	0613952Q41	CER CHIP RES 47.0 OHM 5 0402
R1176M11	0613952M09	CER CHIP RES 1210 OHM 1% 0402	R1330M3	0613952R66	CER CHIP RES 0.0 +/-0.050 OHM	R2114M2	0613952Q33	CER CHIP RES 22.0 OHM 5 0402	R2147M2	0613952Q41	CER CHIP RES 47.0 OHM 5 0402
R1177M11	0613952R66	CER CHIP RES 0.0 +/-0.050 OHM	R1331M3	0613952R66	CER CHIP RES 0.0 +/-0.050 OHM	R2115M2	0613952Q25	CER CHIP RES 10.0 OHM 5 0402	R2148M2	0613952Q41	CER CHIP RES 47.0 OHM 5 0402
R1178M11	0613952R01	CER CHIP RES 10K OHM 5% 0402	R1332M3	0613952R66	CER CHIP RES 0.0 +/-0.050 OHM	R2116M2	0613952R01	CER CHIP RES 10K OHM 5% 0402	R2149M2	0613952Q41	CER CHIP RES 47.0 OHM 5 0402
R1180M11	0613952R66	CER CHIP RES 0.0 +/-0.050 OHM	R1337M3	NOTPLACED	64AM DUMMY PART NUMBER	R2117M2	0613952R01	CER CHIP RES 10K OHM 5% 0402	R2151M2	NOTPLACED	64AM DUMMY PART NUMBER
R1181M11	NOTPLACED	64AM DUMMY PART NUMBER	R1339M3	NOTPLACED	64AM DUMMY PART NUMBER	R2118M2	0613952R01	CER CHIP RES 10K OHM 5% 0402	R2153M2	0613952Q41	CER CHIP RES 47.0 OHM 5 0402
R1182M11	0613952R01	CER CHIP RES 10K OHM 5% 0402	R1340M3	0613952R66	CER CHIP RES 0.0 +/-0.050 OHM	R2120M2	0613952R01	CER CHIP RES 10K OHM 5% 0402	R2154M2	0613952Q41	CER CHIP RES 47.0 OHM 5 0402
R1198M11	0613952J01	CER CHIP RES 10K OHM 5% 0603	R201M12	0613952R25	CER CHIP RES 100K OHM 5% 0402	R2129M2	0613952R01	CER CHIP RES 10K OHM 5% 0402	R2192M2	0613952Q61	CER CHIP RES 330 OHM 5 0402
R1301M3	0613952R66	CER CHIP RES 0.0 +/-0.050 OHM	R202M12	0613952Q89	CER CHIP RES 4700 OHM 5 0402	R2130M2	0613952R01	CER CHIP RES 10K OHM 5% 0402	R2197M2	0613952R66	CER CHIP RES 0.0 +/-0.050 OHM
R1303M3	0613952R66	CER CHIP RES 0.0 +/-0.050 OHM	R21000M2	NOTPLACED	64AM DUMMY PART NUMBER	R2131M2	0613952R01	CER CHIP RES 10K OHM 5% 0402	R2198M2	0613952R66	CER CHIP RES 0.0 +/-0.050 OHM
R1305M3	0613952R66	CER CHIP RES 0.0 +/-0.050 OHM	R21001M2	NOTPLACED	64AM DUMMY PART NUMBER	R2132M2	0613952R01	CER CHIP RES 10K OHM 5% 0402	R2199M2	0613952R66	CER CHIP RES 0.0 +/-0.050 OHM
R1309M3	NOTPLACED	64AM DUMMY PART NUMBER	R21002M2	NOTPLACED	64AM DUMMY PART NUMBER	R2133M2	0613952R01	CER CHIP RES 10K OHM 5% 0402	R2201M2	0613952R32	CER CHIP RES 200K OHM 5 0402
R1310M3	0613952R66	CER CHIP RES 0.0 +/-0.050 OHM	R21003M2	NOTPLACED	64AM DUMMY PART NUMBER	R2135M2	0613952Q41	CER CHIP RES 47.0 OHM 5 0402	R2204M2	0613952Q85	CER CHIP RES 3300 OHM 5 0402
R1311M3	NOTPLACED	64AM DUMMY PART NUMBER	R2104M2	0613952Q89	CER CHIP RES 4700 OHM 5 0402	R2136M2	0613952Q61	CER CHIP RES 330 OHM 5 0402	R2206M2	0613952Q85	CER CHIP RES 3300 OHM 5 0402
R1313M3	0613952R66	CER CHIP RES 0.0 +/-0.050 OHM	R2105M2	0613952Q89	CER CHIP RES 4700 OHM 5 0402	R2137M2	0613952Q61	CER CHIP RES 330 OHM 5 0402	R2207M2	0613952R66	CER CHIP RES 0.0 +/-0.050 OHM
R1315M3	0613952R66	CER CHIP RES 0.0 +/-0.050 OHM	R2106M2	NOTPLACED	64AM DUMMY PART NUMBER	R2138M2	0613952Q41	CER CHIP RES 47.0 OHM 5 0402	R2235M2	0613952R66	CER CHIP RES 0.0 +/-0.050 OHM
R1317M3	0613952R66	CER CHIP RES 0.0 +/-0.050 OHM	R2107M2	0613952Q73	CER CHIP RES 1000 OHM 5 0402	R2139M2	0613952Q41	CER CHIP RES 47.0 OHM 5 0402	R2244M2	0613952Q65	CER CHIP RES 470 OHM 5 0402
R1318M3	0613952R66	CER CHIP RES 0.0 +/-0.050 OHM	R2109M2	0613952Q25	CER CHIP RES 10.0 OHM 5 0402	R2142M2	0613952Q41	CER CHIP RES 47.0 OHM 5 0402	R2245M2	0613952Q60	CER CHIP RES 300 OHM 5 0402
R1325M3	0613952R66	CER CHIP RES 0.0 +/-0.050 OHM	R2110M2	0613952Q33	CER CHIP RES 22.0 OHM 5 0402	R2144M2	0613952Q61	CER CHIP RES 330 OHM 5 0402	R2246M2	0613952Q65	CER CHIP RES 470 OHM 5 0402
R1326M3	0613952R66	CER CHIP RES 0.0 +/-0.050 OHM	R2111M2	0613952Q25	CER CHIP RES 10.0 OHM 5 0402	R2145M2	0613952Q41	CER CHIP RES 47.0 OHM 5 0402	R2254M2	0613952R01	CER CHIP RES 10K OHM 5% 0402



Ref. Des.	Part Number	Description	Ref. Des.	Part Number	Description	Ref. Des.	Part Number	Description	Ref. Des.	Part Number	Description
R2301M13	NOTPLACED	64AM DUMMY PART NUMBER	R3036M22	0613952R08	CER CHIP RES 20K OHM 5 0402	R403M20	0613952Q85	CER CHIP RES 3300 OHM 5 0402	R502M21	0613952Q36	CER CHIP RES 30.0 OHM 5 0402
R2302M13	0613952H47	CER CHIP RES 82.0 OHM 5 0603	R3040M22	0613952Q51	CER CHIP RES 120 OHM 5 0402	R404M20	0613952Q45	CER CHIP RES 68.0 OHM 5 0402	R512M21	0613952R66	CER CHIP RES 0.0 +/-0.050 OHM
R2303M13	0613952H47	CER CHIP RES 82.0 OHM 5 0603	R3052M22	0613952R18	CER CHIP RES 51K OHM 5 0402	R405M20	0613952Q25	CER CHIP RES 10.0 OHM 5 0402	R525M21	0613952R66	CER CHIP RES 0.0 +/-0.050 OHM
R2304M13	0613952H47	CER CHIP RES 82.0 OHM 5 0603	R3058M22	0613952R08	CER CHIP RES 20K OHM 5 0402	R406M20	0613952R66	CER CHIP RES 0.0 +/-0.050 OHM	R526M21	0613958J74	CER CHIP RES 0.0 OHM JMP 0805
R2305M13	0613952G67	CER CHIP RES 0.0 +/-0.050 OHM	R3059M22	0613952Q27	CER CHIP RES 12.0 OHM 5 0402	R407M20	0613952R09	CER CHIP RES 22K OHM 5% 0402	R601M19	0613952Q41	CER CHIP RES 47.0 OHM 5 0402
R2306M13	0613952R25	CER CHIP RES 100K OHM 5% 0402	R3061M22	0613952R08	CER CHIP RES 20K OHM 5 0402	R408M20	0613952R23	CER CHIP RES 82K OHM 5% 0402	R602M19	0613952Q63	CER CHIP RES 390 OHM 5 0402
R2803M1	0613952Q37	CER CHIP RES 33.0 OHM 5 0402	R3063M22	0613952Q51	CER CHIP RES 120 OHM 5 0402	R409M20	0613952Q85	CER CHIP RES 3300 OHM 5 0402	R603M19	0613952R25	CER CHIP RES 100K OHM 5% 0402
R2804M1	0613952Q49	CER CHIP RES 100 OHM 5 0402	R3066M22	0613952Q37	CER CHIP RES 33.0 OHM 5 0402	R410M20	0613952Q45	CER CHIP RES 68.0 OHM 5 0402	R604M19	0613952Q63	CER CHIP RES 390 OHM 5 0402
R2805M1	0613952Q49	CER CHIP RES 100 OHM 5 0402	R4005M2	0613952R01	CER CHIP RES 10K OHM 5% 0402	R411M20	0613952Q25	CER CHIP RES 10.0 OHM 5 0402	R605M19	0613952R01	CER CHIP RES 10K OHM 5% 0402
R2806M1	0613952Q59	CER CHIP RES 270 OHM 5 0402	R4006M2	0613952R01	CER CHIP RES 10K OHM 5% 0402	R412M20	0613952Q18	CER CHIP RES 5.1 OHM 5 0402	R606M19	0613952R01	CER CHIP RES 10K OHM 5% 0402
R2807M1	0613952Q56	CER CHIP RES 200 OHM 5 0402	R4007M2	0613952R01	CER CHIP RES 10K OHM 5% 0402	R413M20	0613952Q11	CER CHIP RES 2.7 OHM 5 0402	R607M19	0613952R25	CER CHIP RES 100K OHM 5% 0402
R2808M1	0613952Q49	CER CHIP RES 100 OHM 5 0402	R4008M2	0613952R01	CER CHIP RES 10K OHM 5% 0402	R447M20	0613952Q25	CER CHIP RES 10.0 OHM 5 0402	R608M19	0613952R01	CER CHIP RES 10K OHM 5% 0402
R2810M1	0613952R01	CER CHIP RES 10K OHM 5% 0402	R4009M2	0613952Q85	CER CHIP RES 3300 OHM 5 0402	R448M20	0613952Q25	CER CHIP RES 10.0 OHM 5 0402	R609M19	0613952Q81	CER CHIP RES 2200 OHM 5 0402
R2811M1	0613952Q89	CER CHIP RES 4700 OHM 5 0402	R4010M2	0613952R32	CER CHIP RES 200K OHM 5 0402	R450M20	0613952Q42	CER CHIP RES 51.0 OHM 5 0402	R6101M6	0613952R01	CER CHIP RES 10K OHM 5% 0402
R2812M1	0613952R01	CER CHIP RES 10K OHM 5% 0402	R4011M2	0613952R17	CER CHIP RES 47K OHM 5% 0402	R451M20	0613952Q42	CER CHIP RES 51.0 OHM 5 0402	R6102M6	0613952R09	CER CHIP RES 22K OHM 5% 0402
R2813M1	NOTPLACED	64AM DUMMY PART NUMBER	R4012M2	0613952R09	CER CHIP RES 22K OHM 5% 0402	R452M20	0613952Q42	CER CHIP RES 51.0 OHM 5 0402	R6103M6	0613952R09	CER CHIP RES 22K OHM 5% 0402
R2817M1	0613952Q41	CER CHIP RES 47.0 OHM 5 0402	R4013M2	0613952R09	CER CHIP RES 22K OHM 5% 0402	R454M20	0613952Q42	CER CHIP RES 51.0 OHM 5 0402	R6104M6	NOTPLACED	64AM DUMMY PART NUMBER
R3018M22	0613952R18	CER CHIP RES 51K OHM 5 0402	R4014M2	0613952Q85	CER CHIP RES 3300 OHM 5 0402	R456M20	0613952R66	CER CHIP RES 0.0 +/-0.050 OHM	R6105M6	0613952R66	CER CHIP RES 0.0 +/-0.050 OHM
R3030M22	0613952R07	CER CHIP RES 18K OHM 5% 0402	R401M20	0613952R09	CER CHIP RES 22K OHM 5% 0402	R457M20	0613952R66	CER CHIP RES 0.0 +/-0.050 OHM	R6106M6	0613952Q73	CER CHIP RES 1000 OHM 5 0402
R3032M22	0613952Q34	CER CHIP RES 24.0 OHM 5 0402	R402M20	0613952R23	CER CHIP RES 82K OHM 5% 0402	R500M21	0613952Q37	CER CHIP RES 33.0 OHM 5 0402	R6107M6	0613952Q55	CER CHIP RES 180 OHM 5 0402

Ref. Des.	Part Number	Description	Ref. Des.	Part Number	Description	Ref. Des.	Part Number	Description	Ref. Des.	Part Number	Description
R6108M6	0613952Q61	CER CHIP RES 330 OHM 5 0402	R614M19	0613952R66	CER CHIP RES 0.0 +/-0.050 OHM	R6214M6	NOTPLACED	64AM DUMMY PART NUMBER	R6401M6	0613952R18	CER CHIP RES 51K OHM 5 0402
R6109M6	NOTPLACED	64AM DUMMY PART NUMBER	R615M19	NOTPLACED	64AM DUMMY PART NUMBER	R6215M6	0613952R01	CER CHIP RES 10K OHM 5% 0402	R6402M6	0613952R32	CER CHIP RES 200K OHM 5 0402
R610M19	0613952R25	CER CHIP RES 100K OHM 5% 0402	R616M19	NOTPLACED	64AM DUMMY PART NUMBER	R6216M6	0613952R66	CER CHIP RES 0.0 +/-0.050 OHM	R6403M6	0613952Q81	CER CHIP RES 2200 OHM 5 0402
R6110M6	NOTPLACED	64AM DUMMY PART NUMBER	R617M19	NOTPLACED	64AM DUMMY PART NUMBER	R6217M6	0613952Q73	CER CHIP RES 1000 OHM 5 0402	R6404M6	0613952Q81	CER CHIP RES 2200 OHM 5 0402
R6111M6	0613952Q73	CER CHIP RES 1000 OHM 5 0402	R618M19	NOTPLACED	64AM DUMMY PART NUMBER	R6218M6	0613952Q80	CER CHIP RES 2000 OHM 5 0402	R6405M6	0613952Q75	CER CHIP RES 1200 OHM 5 0402
R6112M6	NOTPLACED	64AM DUMMY PART NUMBER	R619M19	NOTPLACED	64AM DUMMY PART NUMBER	R621M19	NOTPLACED	64AM DUMMY PART NUMBER	R6406M6	0613952R01	CER CHIP RES 10K OHM 5% 0402
R6113M6	0613952Q51	CER CHIP RES 120 OHM 5 0402	R6201M6	NOTPLACED	64AM DUMMY PART NUMBER	R623M19	NOTPLACED	64AM DUMMY PART NUMBER	R6407M6	0613952Q81	CER CHIP RES 2200 OHM 5 0402
R6114M6	0613952Q49	CER CHIP RES 100 OHM 5 0402	R6202M6	0613952R01	CER CHIP RES 10K OHM 5% 0402	R624M19	NOTPLACED	64AM DUMMY PART NUMBER	R6409M6	0613952N01	CER CHIP RES 10.0K OHM 1 0402
R6115M6	0613952Q49	CER CHIP RES 100 OHM 5 0402	R6203M6	0613952R66	CER CHIP RES 0.0 +/-0.050 OHM	R6301M6	0613952R01	CER CHIP RES 10K OHM 5% 0402	R6410M6	0613952R01	CER CHIP RES 10K OHM 5% 0402
R6116M6	NOTPLACED	64AM DUMMY PART NUMBER	R6204M6	0613952R01	CER CHIP RES 10K OHM 5% 0402	R6304M6	0613952R66	CER CHIP RES 0.0 +/-0.050 OHM	R6411M6	0613952R66	CER CHIP RES 0.0 +/-0.050 OHM
R6117M6	0613952R01	CER CHIP RES 10K OHM 5% 0402	R6205M6	0613952R01	CER CHIP RES 10K OHM 5% 0402	R63050M6	0613952R66	CER CHIP RES 0.0 +/-0.050 OHM	R6414M6	0613952Q61	CER CHIP RES 330 OHM 5 0402
R6118M6	0613952R09	CER CHIP RES 22K OHM 5% 0402	R6206M6	0613952R25	CER CHIP RES 100K OHM 5% 0402	R6305M6	0613952R66	CER CHIP RES 0.0 +/-0.050 OHM	R6415M6	0613952Q61	CER CHIP RES 330 OHM 5 0402
R6119M6	0613952R01	CER CHIP RES 10K OHM 5% 0402	R6207M6	0613952R25	CER CHIP RES 100K OHM 5% 0402	R6306M6	0613952R01	CER CHIP RES 10K OHM 5% 0402	R6416M6	0613952Q61	CER CHIP RES 330 OHM 5 0402
R611M19	0613952R01	CER CHIP RES 10K OHM 5% 0402	R6208M6	0613952Q89	CER CHIP RES 4700 OHM 5 0402	R6307M6	0613952R66	CER CHIP RES 0.0 +/-0.050 OHM	R6417M6	0613952Q61	CER CHIP RES 330 OHM 5 0402
R6120M6	0613952R01	CER CHIP RES 10K OHM 5% 0402	R6209M6	0613952Q89	CER CHIP RES 4700 OHM 5 0402	R6310M6	0613952Q37	CER CHIP RES 33.0 OHM 5 0402	R6419M6	0613952Q37	CER CHIP RES 33.0 OHM 5 0402
R6121M6	0613952R01	CER CHIP RES 10K OHM 5% 0402	R620M19	NOTPLACED	64AM DUMMY PART NUMBER	R6311M6	0613952Q37	CER CHIP RES 33.0 OHM 5 0402	R6420M6	0613952R17	CER CHIP RES 47K OHM 5% 0402
R6122M6	0613952R01	CER CHIP RES 10K OHM 5% 0402	R6210M6	0613952Q89	CER CHIP RES 4700 OHM 5 0402	R6312M6	0613952Q37	CER CHIP RES 33.0 OHM 5 0402	R6421M6	0613952R01	CER CHIP RES 10K OHM 5% 0402
R6125M6	NOTPLACED	64AM DUMMY PART NUMBER	R6211M6	0613952R01	CER CHIP RES 10K OHM 5% 0402	R6313M6	0613952Q37	CER CHIP RES 33.0 OHM 5 0402	R6422M6	0613952Q51	CER CHIP RES 120 OHM 5 0402
R612M19	0613952Q94	CER CHIP RES 7500 OHM 5 0402	R6212M6	NOTPLACED	64AM DUMMY PART NUMBER	R6314M6	0613952Q37	CER CHIP RES 33.0 OHM 5 0402	R6423M6	0613952R66	CER CHIP RES 0.0 +/-0.050 OHM
R613M19	0613952Q82	CER CHIP RES 2400 OHM 5 0402	R6213M6	0613952R01	CER CHIP RES 10K OHM 5% 0402	R6316M6	0613952R01	CER CHIP RES 10K OHM 5% 0402	R6424M6	0613952N01	CER CHIP RES 10.0K OHM 1 0402

Ref. Des.	Part Number	Description
R6425M6	0613952Q80	CER CHIP RES 2000 OHM 5 0402
R6426M6	0613952Q49	CER CHIP RES 100 OHM 5 0402
R6427M6	0613952R11	CER CHIP RES 27K OHM 5% 0402
R6428M6	0613952R25	CER CHIP RES 100K OHM 5% 0402
R6429M6	0613952R17	CER CHIP RES 47K OHM 5% 0402
R6430M6	0613952R09	CER CHIP RES 22K OHM 5% 0402
R6431M6	0613952Q81	CER CHIP RES 2200 OHM 5 0402
R6432M6	0613952R25	CER CHIP RES 100K OHM 5% 0402
R6433M6	0613952Q32	CER CHIP RES 20.0 OHM 5 0402
R6434M6	0613952Q32	CER CHIP RES 20.0 OHM 5 0402
R6492M6	0613952Q79	CER CHIP RES 1800 OHM 5 0402
R6501M6	0613952Q25	CER CHIP RES 10.0 OHM 5 0402
R6502M6	0613952Q25	CER CHIP RES 10.0 OHM 5 0402
R6503M6	0613952Q25	CER CHIP RES 10.0 OHM 5 0402
R6504M6	0613952R09	CER CHIP RES 22K OHM 5% 0402
R6505M6	0613952Q80	CER CHIP RES 2000 OHM 5 0402
R6506M6	0613952R66	CER CHIP RES 0.0 +/-0.050 OHM
R6507M6	0613952R01	CER CHIP RES 10K OHM 5% 0402
R6508M6	0613952R17	CER CHIP RES 47K OHM 5% 0402
R6509M6	0613952R25	CER CHIP RES 100K OHM 5% 0402

Ref. Des.	Part Number	Description
R6510M6	0613952R66	CER CHIP RES 0.0 +/-0.050 OHM
R6511M6	0613952R01	CER CHIP RES 10K OHM 5% 0402
R6512M6	0613952N01	CER CHIP RES 10.0K OHM 1 0402
R6513M6	0613952R66	CER CHIP RES 0.0 +/-0.050 OHM
R6514M6	0613952Q89	CER CHIP RES 4700 OHM 5 0402
R6515M6	0613952R66	CER CHIP RES 0.0 +/-0.050 OHM
R6516M6	0613952R66	CER CHIP RES 0.0 +/-0.050 OHM
R6517M6	0613952Q63	CER CHIP RES 390 OHM 5 0402
R6518M6	0613952R66	CER CHIP RES 0.0 +/-0.050 OHM
R6519M6	0613952Q89	CER CHIP RES 4700 OHM 5 0402
R6520M6	0613952Q73	CER CHIP RES 1000 OHM 5 0402
R6521M6	0615049H01	KAMAYA 0.2 OHM CHIP RESISTOR
R6522M6	0613952M66	CER CHIP RES 4750 OHM 1% 0402
R6523M6	0613952R09	CER CHIP RES 22K OHM 5% 0402
R6524M6	0613952R66	CER CHIP RES 0.0 +/-0.050 OHM
R6525M6	NOTPLACED	64AM DUMMY PART NUMBER
R6526M6	0613952R66	CER CHIP RES 0.0 +/-0.050 OHM
R6527M6	0613952N87	CER CHIP RES 78.7K OHM 1 0402
R6528M6	0613952R25	CER CHIP RES 100K OHM 5% 0402
R6529M6	0615049H01	KAMAYA 0.2 OHM CHIP RESISTOR

Ref. Des.	Part Number	Description
R6530M6	0613952L30	CER CHIP RES 200 OHM 1 0402
R6531M6	0613952R01	CER CHIP RES 10K OHM 5% 0402
R6532M6	NOTPLACED	64AM DUMMY PART NUMBER
R6533M6	0613952R66	CER CHIP RES 0.0 +/-0.050 OHM
R6534M6	NOTPLACED	64AM DUMMY PART NUMBER
R6535M6	0613952N01	CER CHIP RES 10.0K OHM 1 0402
R6536M6	0613952Z72	RES,MF,91KOHM,1%,.0625 W,SM,0402,200PPM/CEL,PB-FREE
R6537M6	0613952P09	CER CHIP RES 121K OHM 1 0402
R6538M6	0613952Q95	CER CHIP RES 8200 OHM 5 0402
R6539M6	0613952P66	CER CHIP RES 475K OHM 1 0402
R6540M6	0613952P66	CER CHIP RES 475K OHM 1 0402
R6541M6	0613952R25	CER CHIP RES 100K OHM 5% 0402
R6542M6	0613952R66	CER CHIP RES 0.0 +/-0.050 OHM
R6543M6	0613952R66	CER CHIP RES 0.0 +/-0.050 OHM
R6544M6	0613952R66	CER CHIP RES 0.0 +/-0.050 OHM
R6545M6	0613952R25	CER CHIP RES 100K OHM 5% 0402
R6546M6	0613952R66	CER CHIP RES 0.0 +/-0.050 OHM
R6547M6	0613952R66	CER CHIP RES 0.0 +/-0.050 OHM
R6548M6	NOTPLACED	64AM DUMMY PART NUMBER
R6550M6	0613952Z64	RES,MF,39KOHM,1%,.0625 W,SM,0402,200PPM/CEL,PB-FREE

Ref. Des.	Part Number	Description
R6551M6	0613952Z62	RES,MF,33KOHM,1%,.0625 W,SM,0402,200PPM/CEL,PB-FREE
R6552M6	0613952R25	CER CHIP RES 100K OHM 5% 0402
R6558M6	0613952P22	CER CHIP RES 165K OHM 1 0402
R6561M6	0613952R66	CER CHIP RES 0.0 +/-0.050 OHM
R6562M6	0613952R66	CER CHIP RES 0.0 +/-0.050 OHM
R6563M6	0613952R66	CER CHIP RES 0.0 +/-0.050 OHM
R6564M6	0613952R66	CER CHIP RES 0.0 +/-0.050 OHM
R6565M6	0613952R66	CER CHIP RES 0.0 +/-0.050 OHM
R6566M6	0613952R66	CER CHIP RES 0.0 +/-0.050 OHM
R6567M6	0613952R66	CER CHIP RES 0.0 +/-0.050 OHM
R6568M6	0613952P47	CER CHIP RES 301K OHM 1 0402
R6570M6	0613952R66	CER CHIP RES 0.0 +/-0.050 OHM
R6574M6	0613952R25	CER CHIP RES 100K OHM 5% 0402
R6576M6	0613952R01	CER CHIP RES 10K OHM 5% 0402
R6577M6	0613952Q89	CER CHIP RES 4700 OHM 5 0402
R6578M6	0613952Q89	CER CHIP RES 4700 OHM 5 0402
R6579M6	0613952R01	CER CHIP RES 10K OHM 5% 0402
R6580M6	0613952R17	CER CHIP RES 47K OHM 5% 0402
R6581M6	0613952Q49	CER CHIP RES 100 OHM 5 0402
R6582M6	0613952Q89	CER CHIP RES 4700 OHM 5 0402

Ref. Des.	Part Number	Description	Ref. Des.	Part Number	Description	Ref. Des.	Part Number	Description	Ref. Des.	Part Number	Description
R6583M6	0613952R03	CER CHIP RES 12K OHM 5% 0402	R6624M6	0613952Q35	CER CHIP RES 27.0 OHM 5 0402	R734M7	0613952Q86	CER CHIP RES 3600 OHM 5 0402	R780M7	0613952R66	CER CHIP RES 0.0 +/-0.050 OHM
R6584M6	0613952Q56	CER CHIP RES 200 OHM 5 0402	R6625M6	0613952Q35	CER CHIP RES 27.0 OHM 5 0402	R736M7	0613952R66	CER CHIP RES 0.0 +/-0.050 OHM	R785M7	0613952Q60	CER CHIP RES 300 OHM 5 0402
R6591M6	0613952R66	CER CHIP RES 0.0 +/-0.050 OHM	R6626M6	0613952R01	CER CHIP RES 10K OHM 5% 0402	R741M7	0613952R09	CER CHIP RES 22K OHM 5% 0402	R799M7	0613952Q60	CER CHIP RES 300 OHM 5 0402
R6592M6	0613952R66	CER CHIP RES 0.0 +/-0.050 OHM	R698M19	0613952R66	CER CHIP RES 0.0 +/-0.050 OHM	R742M7	0613952R23	CER CHIP RES 82K OHM 5% 0402	R809M7	0613952Q31	CER CHIP RES 18.0 OHM 5 0402
R6598M6	NOTPLACED	64AM DUMMY PART NUMBER	R699M19	0613952R66	CER CHIP RES 0.0 +/-0.050 OHM	R743M7	0613952R17	CER CHIP RES 47K OHM 5% 0402	R822M7	NOTPLACED	64AM DUMMY PART NUMBER
R6599M6	0613952R01	CER CHIP RES 10K OHM 5% 0402	R701M7	0613952Q64	CER CHIP RES 430 OHM 5 0402	R744M7	0613952Q91	CER CHIP RES 5600 OHM 5 0402	R823M7	NOTPLACED	64AM DUMMY PART NUMBER
R6601M6	0613952R01	CER CHIP RES 10K OHM 5% 0402	R702M7	0613952R66	CER CHIP RES 0.0 +/-0.050 OHM	R745M7	0613952R09	CER CHIP RES 22K OHM 5% 0402	S2103M2	40012069001	TACT SWITCH, EMERGENCY
R6602M6	0613952R01	CER CHIP RES 10K OHM 5% 0402	R703M7	0613952Q67	CER CHIP RES 560 OHM 5 0402	R746M7	0613952Q12	CER CHIP RES 3.0 OHM 5 0402	SH1	26012144001	SHIELD, TXOP
R6604M6	0613952Q51	CER CHIP RES 120 OHM 5 0402	R704M7	0613952Q25	CER CHIP RES 10.0 OHM 5 0402	R747M7	0613952Q34	CER CHIP RES 24.0 OHM 5 0402	SH10	26012156001	SHIELD, MIXER
R6605M6	0613952Q33	CER CHIP RES 22.0 OHM 5 0402	R705M7	0613952Q75	CER CHIP RES 1200 OHM 5 0402	R748M7	0613952Q47	CER CHIP RES 82.0 OHM 5% 0402	SH11	26012159001	SHIELD, VCO
R6606M6	0613952Q37	CER CHIP RES 33.0 OHM 5 0402	R706M7	0613952R66	CER CHIP RES 0.0 +/-0.050 OHM	R751M7	0613952Q59	CER CHIP RES 270 OHM 5 0402	SH12	26012152001	SHIELD, GPS/BT
R6608M6	0613952R01	CER CHIP RES 10K OHM 5% 0402	R707M7	0613952Q67	CER CHIP RES 560 OHM 5 0402	R754M7	NOTPLACED	64AM DUMMY PART NUMBER	SH13	26012161001	SHIELD, CONTROLLER
R6609M6	0613952R25	CER CHIP RES 100K OHM 5% 0402	R708M7	0613952Q45	CER CHIP RES 68.0 OHM 5 0402	R757M7	0613952Q59	CER CHIP RES 270 OHM 5 0402	SH14	26012143001	SHIELD, MAKO
R6616M6	0613952Q80	CER CHIP RES 2000 OHM 5 0402	R709M7	NOTPLACED	64AM DUMMY PART NUMBER	R761M7	0613952Q23	CER CHIP RES 8.2 OHM 5 0402	SH15	26012160001	SHIELD, DRIVER
R6617M6	0613952R01	CER CHIP RES 10K OHM 5% 0402	R721M7	0613952R01	CER CHIP RES 10K OHM 5% 0402	R762M7	0613952R08	CER CHIP RES 20K OHM 5 0402	SH16	26012163001	SHIELD, RXFE
R6618M6	0613952R01	CER CHIP RES 10K OHM 5% 0402	R722M7	0613952Q57	CER CHIP RES 220 OHM 5 0402	R763M7	0613952R19	CER CHIP RES 56K OHM 5% 0402	SH17	26012155001	SHIELD, 2ND_LO
R6619M6	0613952R01	CER CHIP RES 10K OHM 5% 0402	R723M7	0613952R02	CER CHIP RES 11K OHM 5 0402	R766M7	0613952Q92	CER CHIP RES 6200 OHM 5 0402	SH2	26012154001	SHIELD, ABACUS
R6621M6	0613952Q89	CER CHIP RES 4700 OHM 5 0402	R728M7	0613952Q53	CER CHIP RES 150 OHM 5 0402	R769M7	0613952Q34	CER CHIP RES 24.0 OHM 5 0402	SH3	26012149001	SHIELD, ALC
R6622M6	0613952Q35	CER CHIP RES 27.0 OHM 5 0402	R729M7	0613952R09	CER CHIP RES 22K OHM 5% 0402	R771M7	0613952Q49	CER CHIP RES 100 OHM 5 0402	SH4	26012157001	SHIELD, BALUN
R6623M6	0613952Q35	CER CHIP RES 27.0 OHM 5 0402	R730M7	0613952Q79	CER CHIP RES 1800 OHM 5 0402	R776M7	0613952Q67	CER CHIP RES 560 OHM 5 0402	SH5	26012153001	SHIELD, FGU
									SH6	26012150001	SHIELD, ALC/DC
									SH7	26012158001	SHIELD, COUPLER
									SH8	26012162001	SHIELD, HF
									SH9	26012151001	SHIELD, AUDIO PA
									T506M21	2575851B01	RF TRANSFORMER BALUN
									T507M21	2575851B02	RF TRANSFORMER BALUN
									U1001M16	5175143H01	WIDE SUPPLY RANGE OP AMP

Ref. Des.	Part Number	Description
U1002M16	51012101001	VHF/UHF/800/900 MHZ LDMOS DRIVER IC
U1101M11	5188032U43	IC, SENSING CIRCUIT, INA138, SM, SOT-23/5, 1PER PKG
U1103M11	5185070Y01	IC TEMPERATURE SENSOR PB-FREE
U1104M11	5185941F56	IC SINGLE LV LP OP AMPLIFIER
U1105M11	5180390L83	IC, CNTLR, SM, 1PER PKG
U1106M11	5175772B05	PRECISION RF DETECTOR
U1112M11	5175772B04	1 DB LSB GAAS MMIC ATTENUATOR
U1113M11	5185941F56	IC SINGLE LV LP OP AMPLIFIER
U1114M11	5185941F56	IC SINGLE LV LP OP AMPLIFIER
U1119M11	5109522E94	2 INPUT AND GATE IN NANO PACKAGE (C87)
U1121M11	5114000B52	IC, XOR, LOGIC LEVEL SHIFTER, 1PER PKG, SM, SOT-353, PB-FREE
U1125M11	5175206H01	QUAD 12-BIT DAC IC
U1126M11	5109817F77	IC COMPTR LM7275 5SC70 (D54)
U1127M11	5171779H01	SPDT ANALOG SWITCH
U1128M11	5188085K11	IC, SINGLE NAND GATE, 2-INPUT, POSITIVE, 5 DSBGA, PB-FREE
U1129M11	5175143H01	WIDE SUPPLY RANGE OP AMP
U1130M11	5175143H01	WIDE SUPPLY RANGE OP AMP
U1131M11	5109817F77	IC COMPTR LM7275 5SC70 (D54)
U1132M11	5114007M28	IC, F-F/D, 1PER PKG, 17SZ74, N-I, SM, SOIC8, PB-FREE
U1133M11	5171779H01	SPDT ANALOG SWITCH

Ref. Des.	Part Number	Description
U1136M11	5109522E94	2 INPUT AND GATE IN NANO PACKAGE (C87)
U1137M11	5164852H16	IC TRANSCEIVER W/ LEVEL TRANSLATION
U1138M11	5164852H16	IC TRANSCEIVER W/ LEVEL TRANSLATION
U1139M11	5164852H16	IC TRANSCEIVER W/ LEVEL TRANSLATION
U1141M11	5185941F56	IC SINGLE LV LP OP AMPLIFIER
U1142M11	5185941F56	IC SINGLE LV LP OP AMPLIFIER
U1143M11	5185941F56	IC SINGLE LV LP OP AMPLIFIER
U1144M11	5171779H01	SPDT ANALOG SWITCH
U1146M11	5109522E93	2 INPUT OR GATE IN NANO PACKAGE (C87)
U1147M11	5109522E94	2 INPUT AND GATE IN NANO PACKAGE (C87)
U1148M11	5185941F56	IC SINGLE LV LP OP AMPLIFIER
U1149M11	5109522E93	2 INPUT OR GATE IN NANO PACKAGE (C87)
U1150M11	51009381001	LOW DROPOUT VOLTAGE REFERENCE
U1301M3	51007377001	IC, XCVR, BLUETOOTH, GPS, FM RX, FM TX
U1304M3	5105739X13	IC, SIGE GPS LOW NOISE AMP 1575 MHZ
U1305M3	51016097001	LOW NOISE, 100MA LINEAR REGULATOR 2.8V
U200M12	5188493T01	IC, VREG/ SWG, LP2989, SM, MINI SO-8 HI PRCN REG 5V
U201M12	5175771A99	LOW NOISE, 100MA LINEAR REGULATOR
U202M12	5175772B02	LINEAR REGULATOR 100MA 1.8V
U203M12	5175772B01	LINEAR VOLTAGE REGULATOR 350MA

Ref. Des.	Part Number	Description
U21000M2	5188690V02	IC, D FLIP-FLOP, 1PER PKG, 7SZ175, SC70-6, PB-FREE
U21001M2	5188690V02	IC, D FLIP-FLOP, 1PER PKG, 7SZ175, SC70-6, PB-FREE
U21002M2	5188690V01	IC, SCHMITT INVERTER, 7SZ14, 1PER PKG, SM, SC70-5, PB FREE
U21003M2	5188690V01	IC, SCHMITT INVERTER, 7SZ14, 1PER PKG, SM, SC70-5, PB FREE
U2101M2	5109522E84	IC DUAL SCHMITT TRIG MICRO PAK
U2102M2	5109522E84	IC DUAL SCHMITT TRIG MICRO PAK
U2104M2	5109522E84	IC DUAL SCHMITT TRIG MICRO PAK
U2201M2	5171679H01	LED LIGHT DRIVER
U2202M2	5164852H47	IC, I2C LEVEL TRANSLATOR
U2301M13	5103535B53	IC, INVTR, DL, NC7WZ04L6X, 2PER PKG, SC70
U2302M13	5185941F45	ATTEN, VAR, 14.4DBMIN, 15.6DBMAX, 0-2000 MHZFREQ, 50OHM, PCMT, SOT
U4001M2	5164852H47	IC, I2C LEVEL TRANSLATOR
U4003M2	5188691V01	IC, MUX/ DEMUX, NC7SB3157P6X, SM, SC70-6, 1PER PKG, BUS, PB FREE
U4004M2	5116783H01	SN74LVC2G66 ANALOG SWITCH
U406M20	4885316E32	TRANSISTOR, RF
U407M20	4885316E32	TRANSISTOR, RF
U507M21	5164015H81	IC, MXR, DBL BAL GILBERT, CELL, SM
U601M19	5102495J14	IC, IF, IF DIGITILIZING SUBSYSTEM IC, AD9864, QFN
U602M19	4885316E32	TRANSISTOR, RF

Ref. Des.	Part Number	Description
U603M19	5109522E84	IC DUAL SCHMITT TRIG MICRO PAK
U604M19	5109522E84	IC DUAL SCHMITT TRIG MICRO PAK
U605M19	5164852H16	IC TRANSCEIVER W/ LEVEL TRANSLATION
U606M19	5164852H16	IC TRANSCEIVER W/ LEVEL TRANSLATION
U607M19	5186311J24	IC, BFR, 1BITS, NC7SZ125, ACTIVE HIGH, B
U6101M6	0180706J18	PROGRAMMED CPLD
U6102M6	5188691V01	IC, MUX/ DEMUX, NC7SB3157P6X, SM, SC70-6, 1PER PKG, BUS, PB FREE
U6103M6	5175114H01	SINGLE AND GATE MICROPAK
U6104M6	5175114H01	SINGLE AND GATE MICROPAK
U6105M6	5175114H01	SINGLE AND GATE MICROPAK
U6201M6	5185941F26	IC, COMPTR, LMV7219, NOP B
U6301M6	51012031001	32MB DIE SHRINK DDR SDRAM IC
U6302M6	5102495J13	IC, MICROP, P1710ZZGE, BGA, 12MHZ, 32BITS
U6304M6	0105955U25	ASSY, IC, BGA SPEC PROG, FLASH MEMORY
U6401M6	5175772B38	IC ANALOG TEMPERATURE SENSOR
U6402M6	5115453H01	RAIL TO RAIL OUTPUT, 8 PIN BGA
U6404M6	5175772B38	IC ANALOG TEMPERATURE SENSOR
U6405M6	5188348V06	IC, AUDIO CODEC, SM, AUDIO CODEC
U6408M6	5188521T01	IC, VREF, SM, SOT23, 1PER PKG, 5%, 1.25 TO 13.75, PRCN BANDGAP ADJUS

Ref. Des.	Part Number	Description
U6409M6	51009000001	NANOPOWER, 1.8V, SOT23 COMPARATOR
U6410M6	5175772B38	IC ANALOG TEMPERATURE SENSOR
U6411M6	5109731C55	IC 2.75 FIXED GAIN MONO FILTER-FREE AMPLFR
U6501M6	5185143E77	IC, MAKO ASIC, CMOS PWR MGMT
U6502M6	4871987H01	LOW FREQUENCY TRANSISTOR
U6503M6	5171674H01	OP AMP
U6504M6	5171682H01	800MA BUCK REGULATOR
U6505M6	5189631P01	IC,SYNC STEP-DOWN CONV
U6506M6	5184790Y04	IC,400MA ADJ VREG LDO,SOT23
U6507M6	5171682H01	800MA BUCK REGULATOR
U6508M6	51009366001	500MA LOW DROPOUT CMOS LINEAR REG.
U6509M6	5175114H01	SINGLE AND GATE MICROPAK
U6510M6	5114007A47	IC,OR,17SZ32,1PER PKG,SOT-353,PB FREE
U6511M6	5171339H01	MICROPOWER VOLTAGE REGULATOR
U6601M6	5175114H01	SINGLE AND GATE MICROPAK
U702M7	5164015H28	IC,TRIDENT,INTEG SYNTH,RX/TX BSBND
U738M7	5171972L01	SP3T RF SWITCH
U739M7	5103535B53	IC,INVTR,DL,NC7WZ04L6X ,2PER PKG,SC70
U746M7	4805218N63	RF TRANS SOT 323 BFQ67W
VR101M12	4813977M29	DIODE,VREF,MBZ5250,SM, SOT-23,20V,,225W,ZEN
VR200M12	4813977M29	DIODE,VREF,MBZ5250,SM, SOT-23,20V,,225W,ZEN
VR3006M22	4805656W87	DIODE,VCTR, @ 15V,1SV279,,SOD-523/SC-79

Ref. Des.	Part Number	Description
VR3008M22	4805656W87	DIODE,VCTR, @ 15V,1SV279,,SOD-523/SC-79
VR3009M22	4805656W87	DIODE,VCTR, @ 15V,1SV279,,SOD-523/SC-79
VR3010M22	4805656W87	DIODE,VCTR, @ 15V,1SV279,,SOD-523/SC-79
VR3011M22	4805656W87	DIODE,VCTR, @ 15V,1SV279,,SOD-523/SC-79
VR3013M22	4805656W87	DIODE,VCTR, @ 15V,1SV279,,SOD-523/SC-79
VR3014M22	4805656W87	DIODE,VCTR, @ 15V,1SV279,,SOD-523/SC-79
VR3048M22	4805656W87	DIODE,VCTR, @ 15V,1SV279,,SOD-523/SC-79
VR601M19	4805656W87	DIODE,VCTR, @ 15V,1SV279,,SOD-523/SC-79
VR602M19	4805656W87	DIODE,VCTR, @ 15V,1SV279,,SOD-523/SC-79
Y1304M3	48014600001	OSC,TCXO,26.0
Y3020M22	93012021001	RESONATOR CERAMIC
Y3053M22	48012102006	RESONATOR CERAMIC 1110MHZ
Y6501M6	93012044001	CRYSTAL UNIT SMD 5.0X3.2 24.576MHZ
Y6502M6	4809995L05	XTAL QUARTZ 32.768KHZ CC4V-T1
Y6601M6	4802582S85	RESON,QRTZ,12MHZ,TOLERANCE10PPM,STABILITY 15PPM,,SM,,FUND,,LO
Y701M7	4871886H01	16.8 MHZ VCTXO .8PPM

### 8.7 Keypad Board (84012282001)

VOCON CONNECTOR

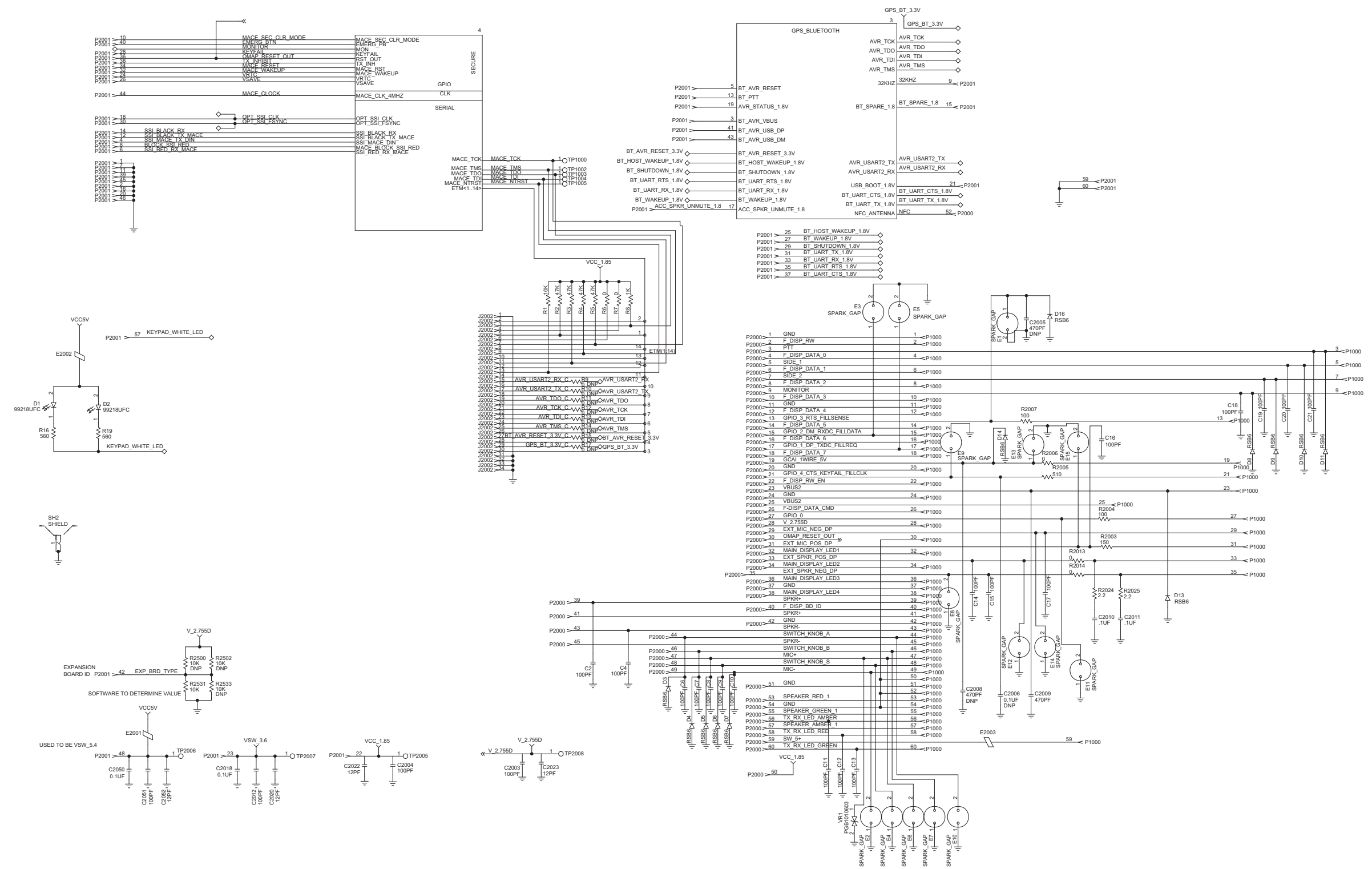
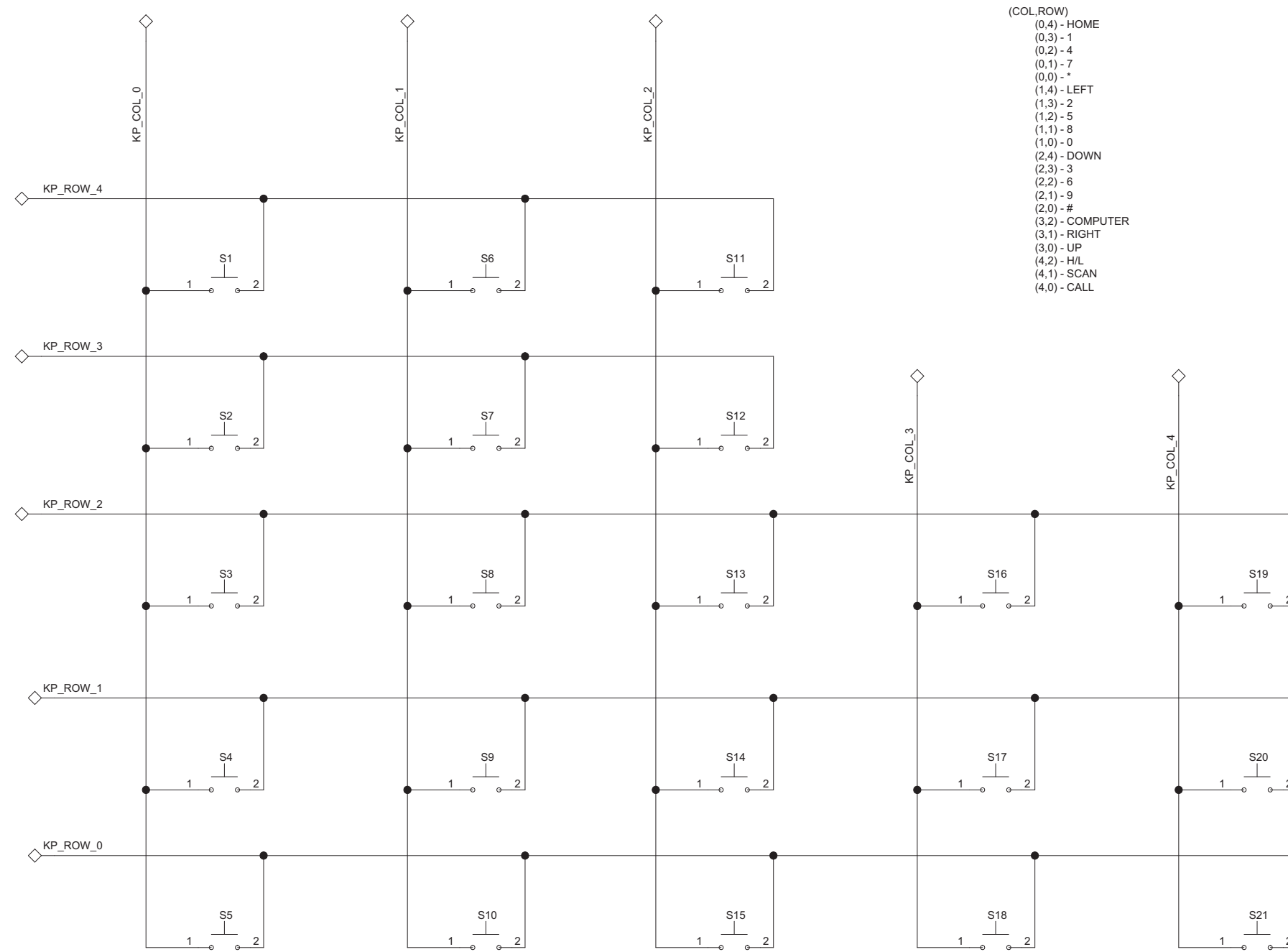


Figure 8-183. Keypad Board Overall Circuit Schematic (Basic)



- (COL,ROW)
- (0,4) - HOME
  - (0,3) - 1
  - (0,2) - 4
  - (0,1) - 7
  - (0,0) - \*
  - (1,4) - LEFT
  - (1,3) - 2
  - (1,2) - 5
  - (1,1) - 8
  - (1,0) - 0
  - (2,4) - DOWN
  - (2,3) - 3
  - (2,2) - 6
  - (2,1) - 9
  - (2,0) - #
  - (3,2) - COMPUTER
  - (3,1) - RIGHT
  - (3,0) - UP
  - (4,2) - H/L
  - (4,1) - SCAN
  - (4,0) - CALL

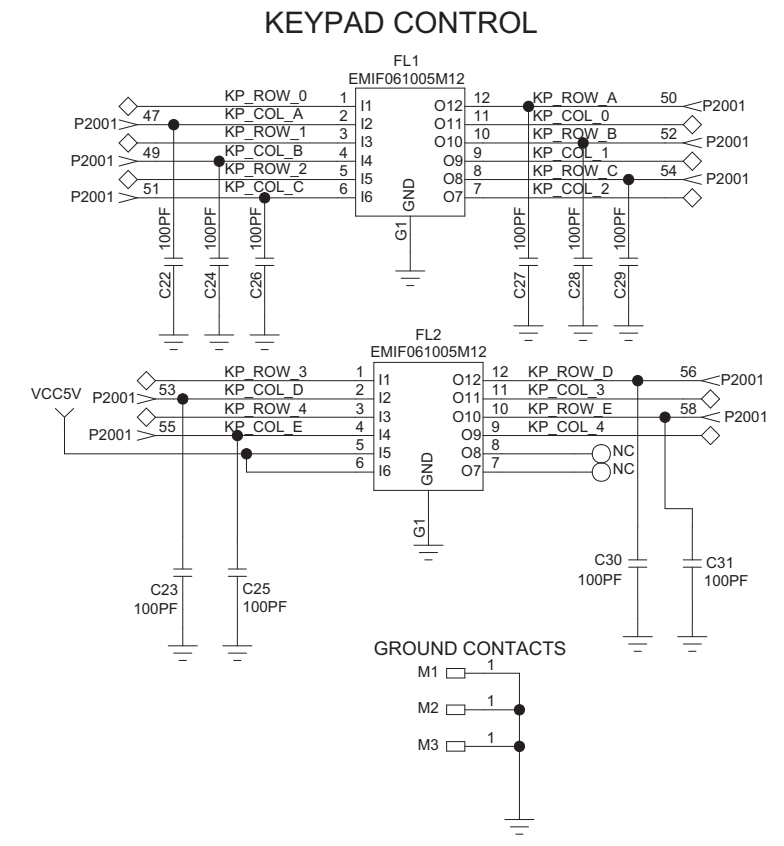


Figure 8-184. Keypad Matrix Circuit (Basic)



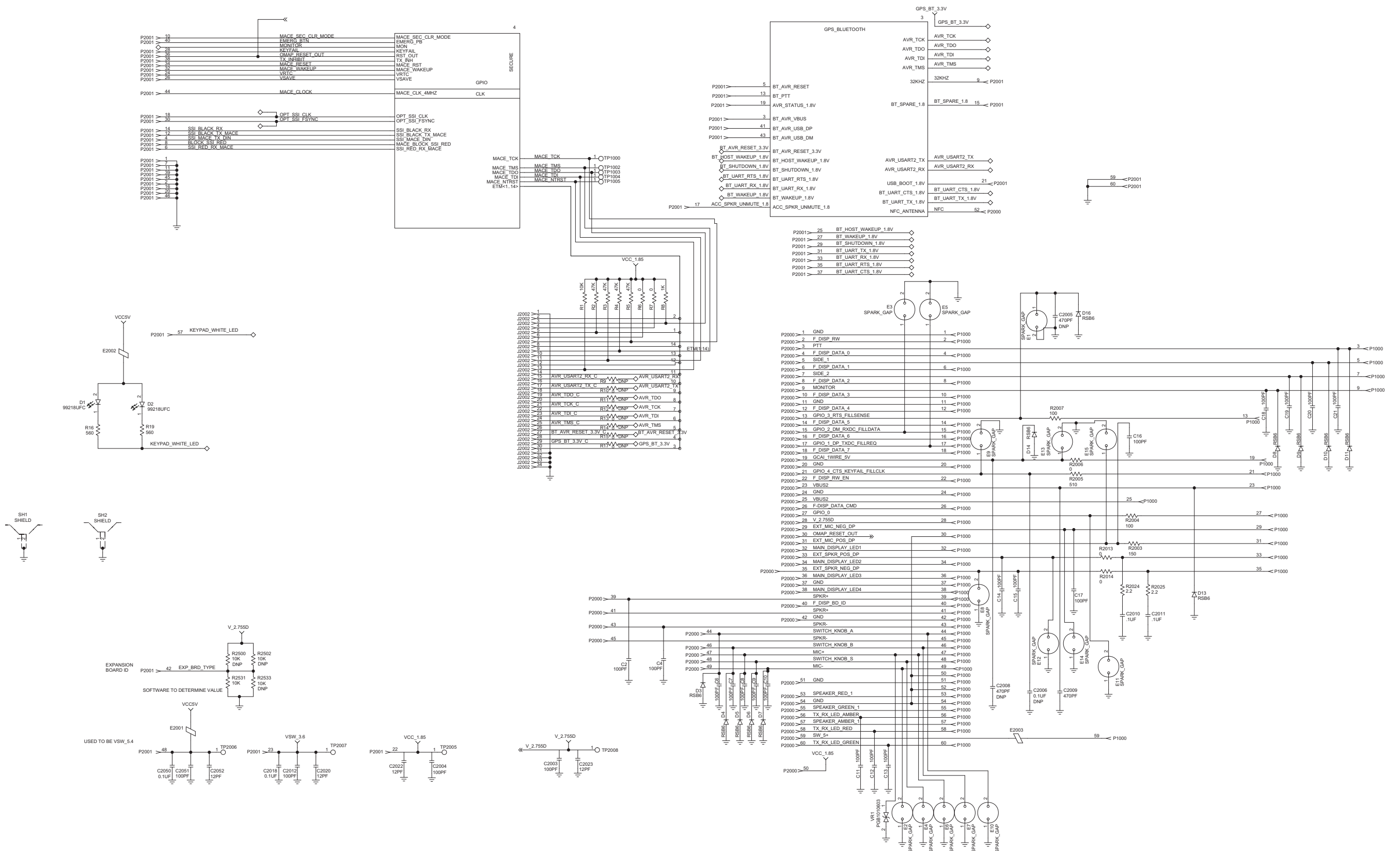
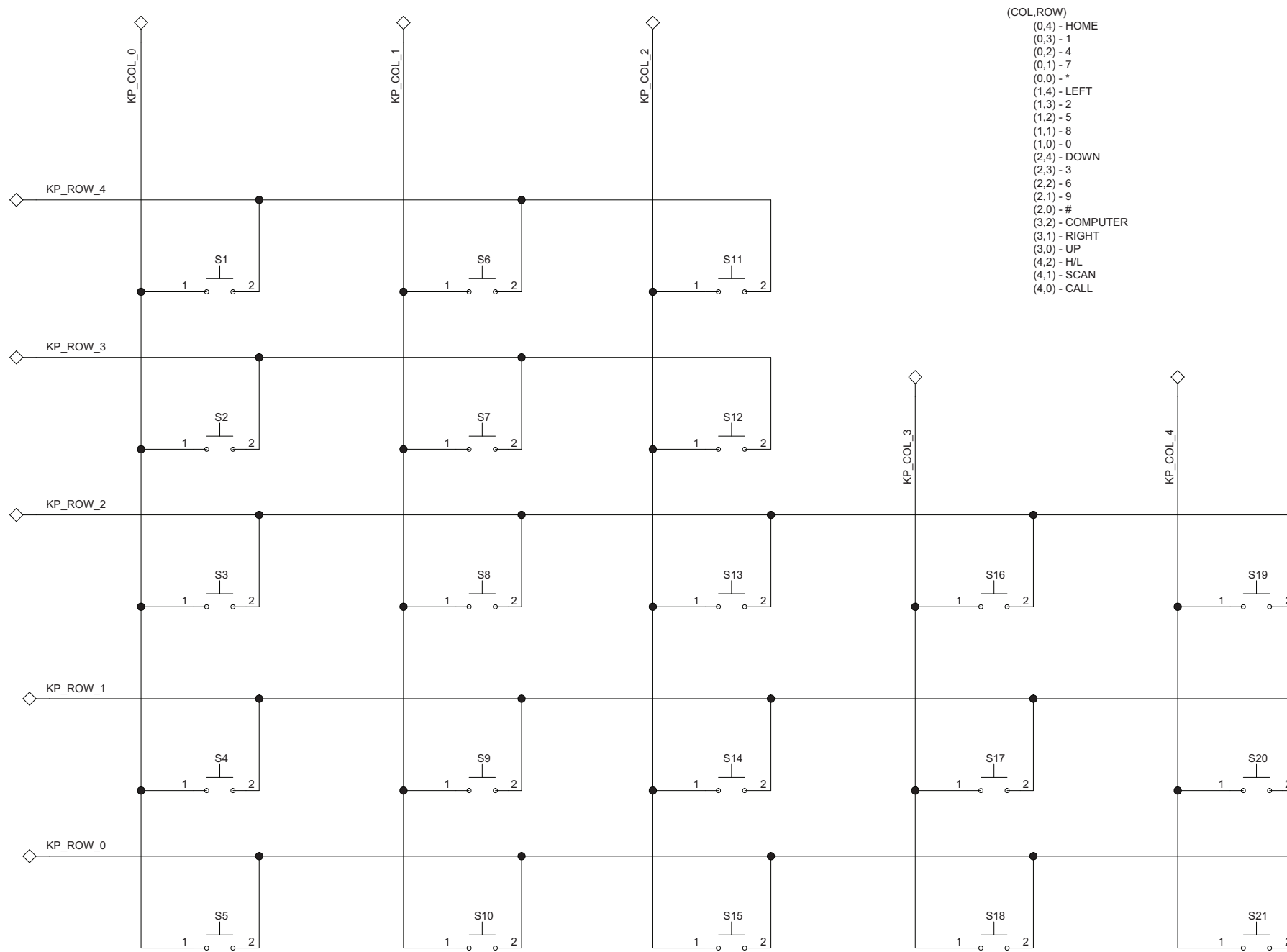


Figure 8-185. Keypad Board Overall Circuit Schematic (Expanded)



- (COL,ROW)  
 (0,4) - HOME  
 (0,3) - 1  
 (0,2) - 4  
 (0,1) - 7  
 (0,0) - \*  
 (1,4) - LEFT  
 (1,3) - 2  
 (1,2) - 5  
 (1,1) - 8  
 (1,0) - 0  
 (2,4) - DOWN  
 (2,3) - 3  
 (2,2) - 6  
 (2,1) - 9  
 (2,0) - #  
 (3,2) - COMPUTER  
 (3,1) - RIGHT  
 (3,0) - UP  
 (4,2) - H/L  
 (4,1) - SCAN  
 (4,0) - CALL

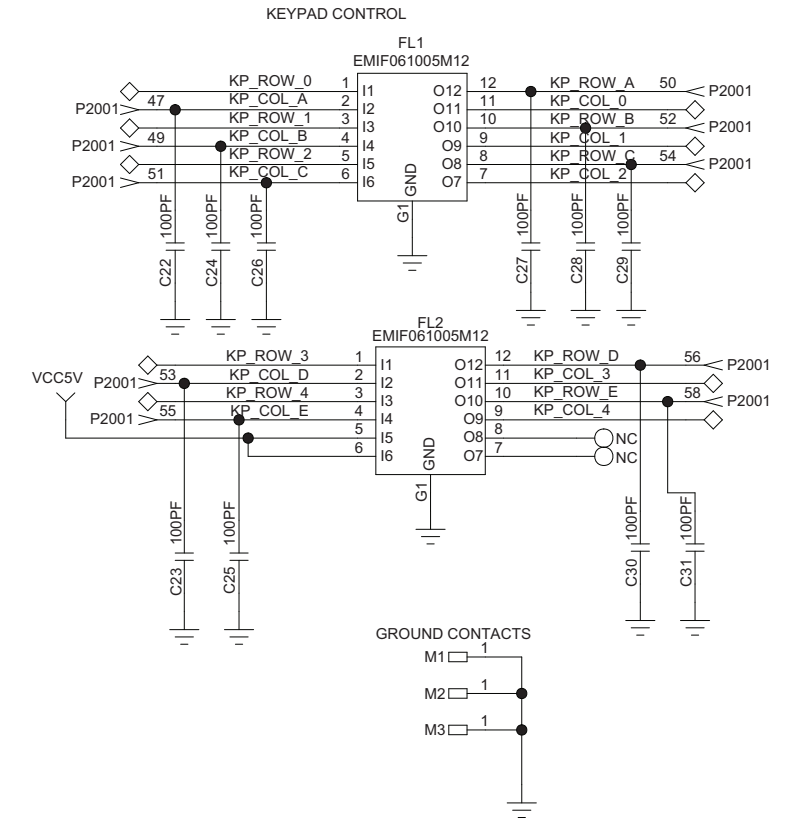


Figure 8-186. Keypad Matrix Circuit (Expanded)

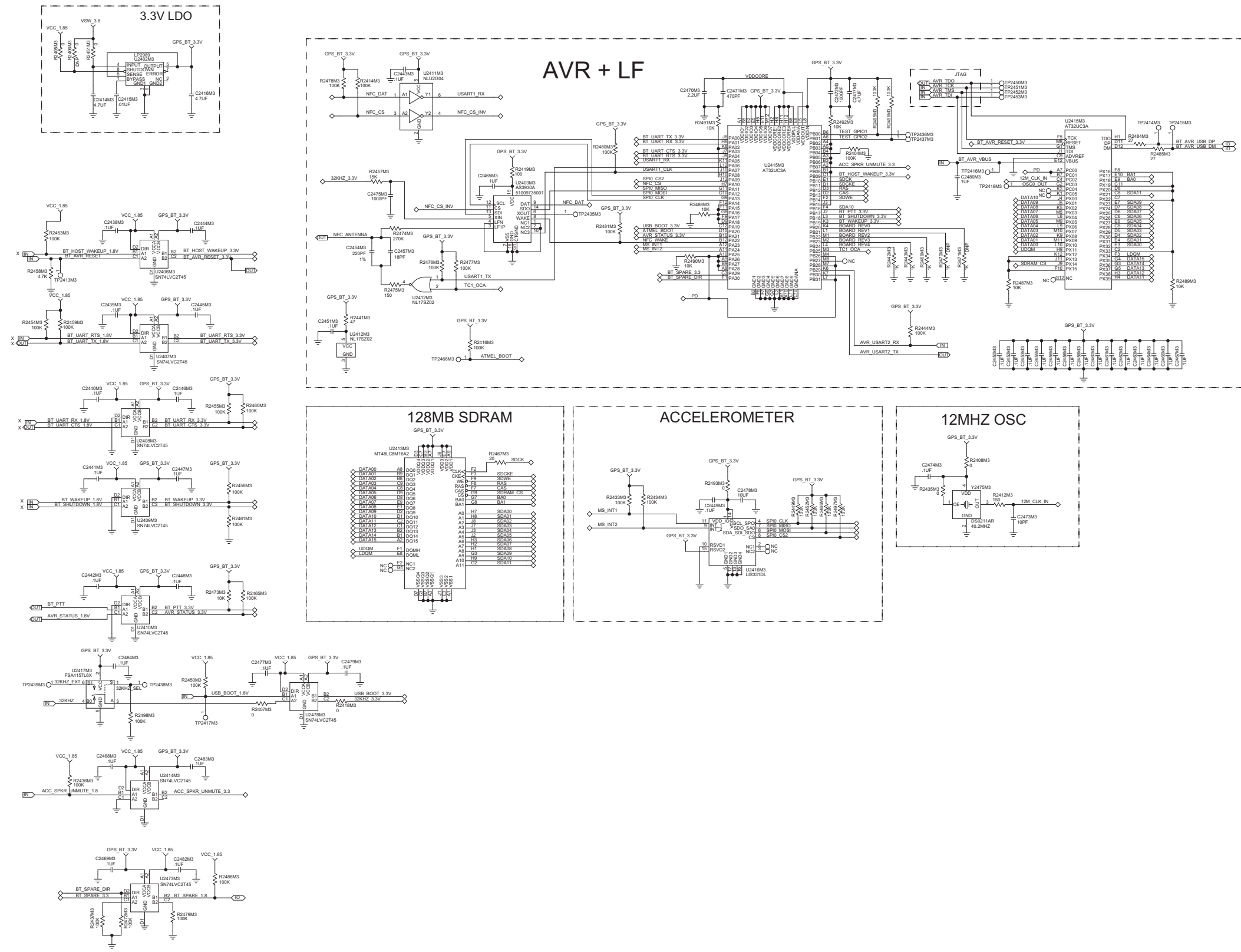


Figure 8-187. GPS Bluetooth Circuit

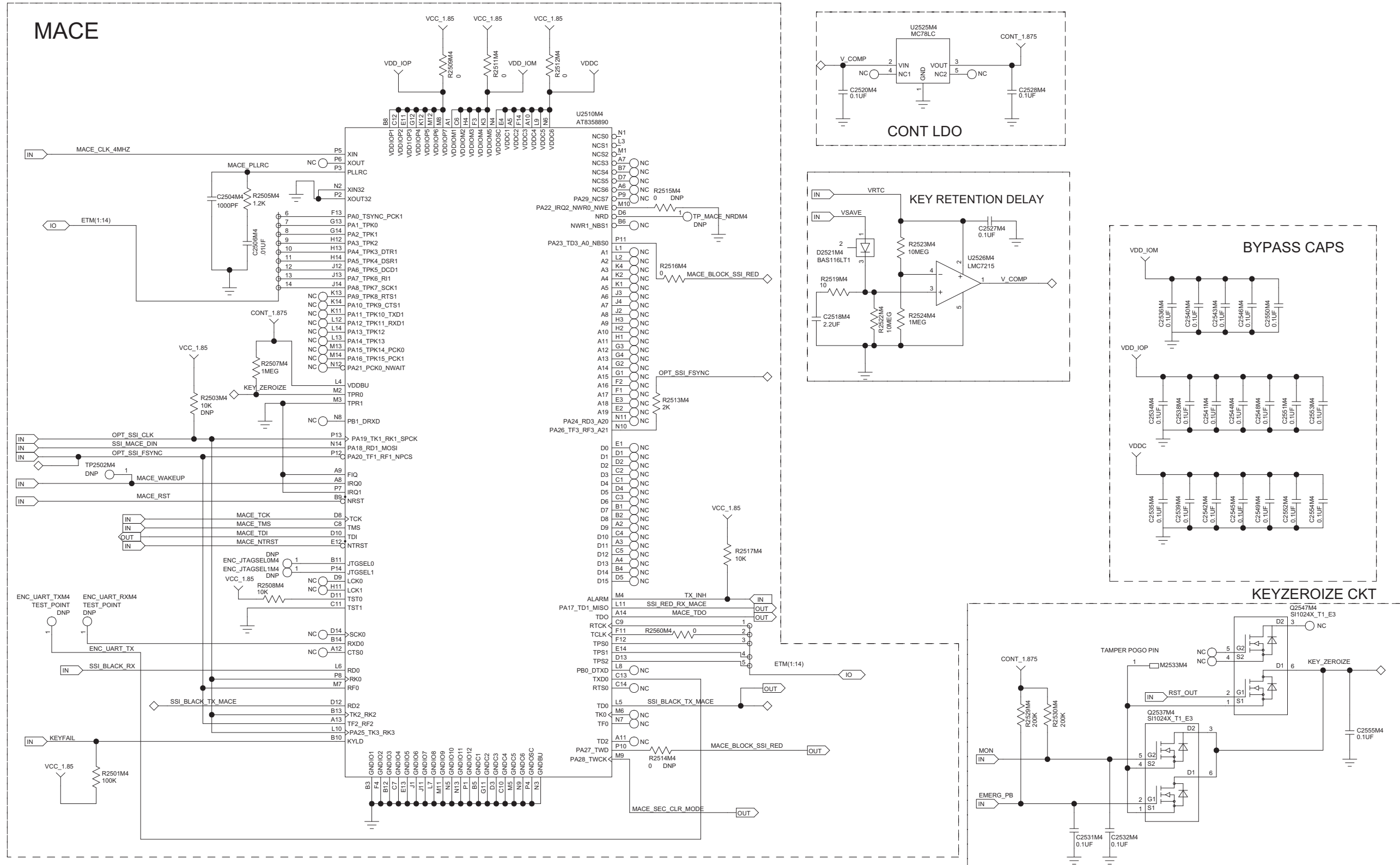


Figure 8-188. MACE Circuit

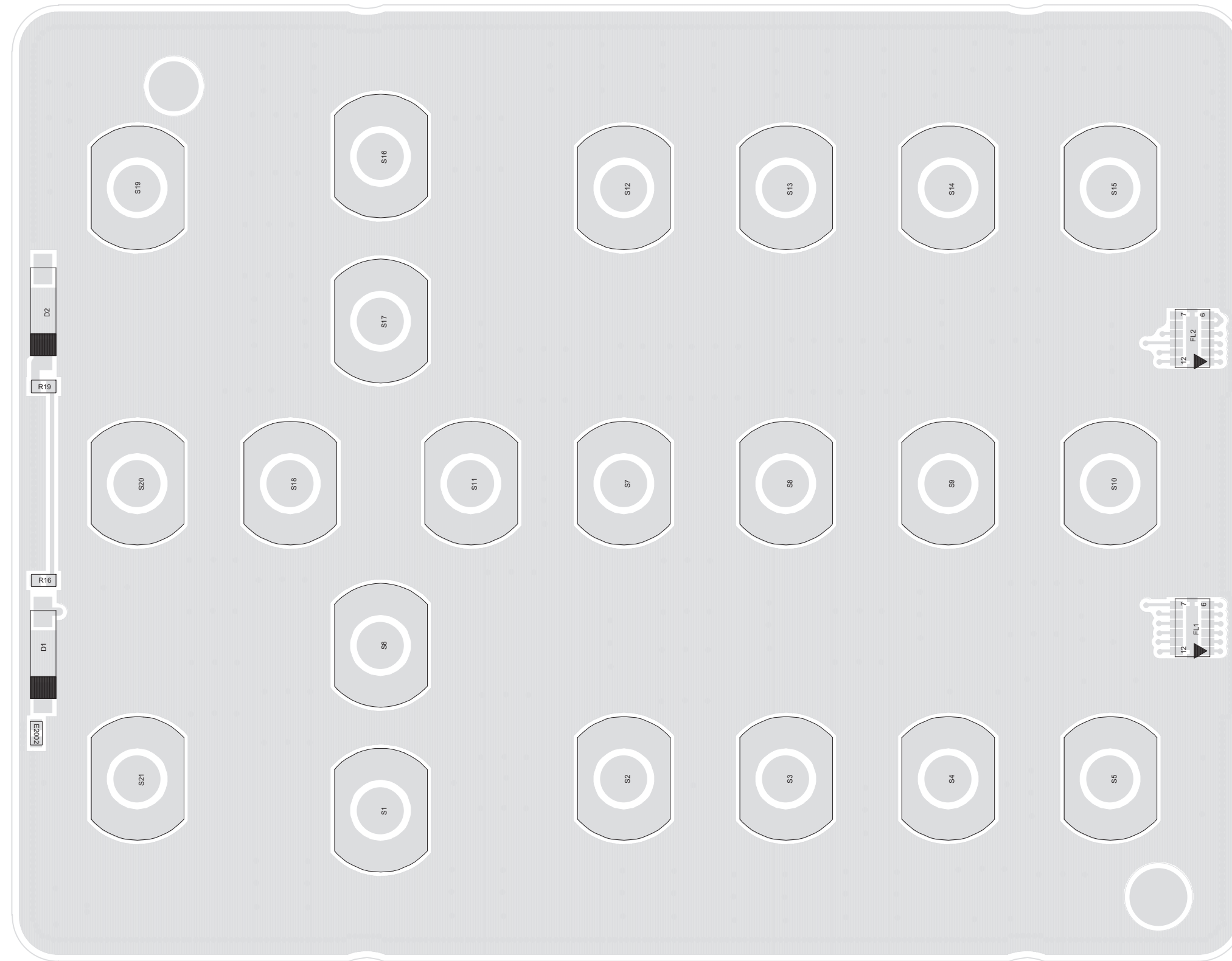


Figure 8-189. Keypad Board Layout – Top Side

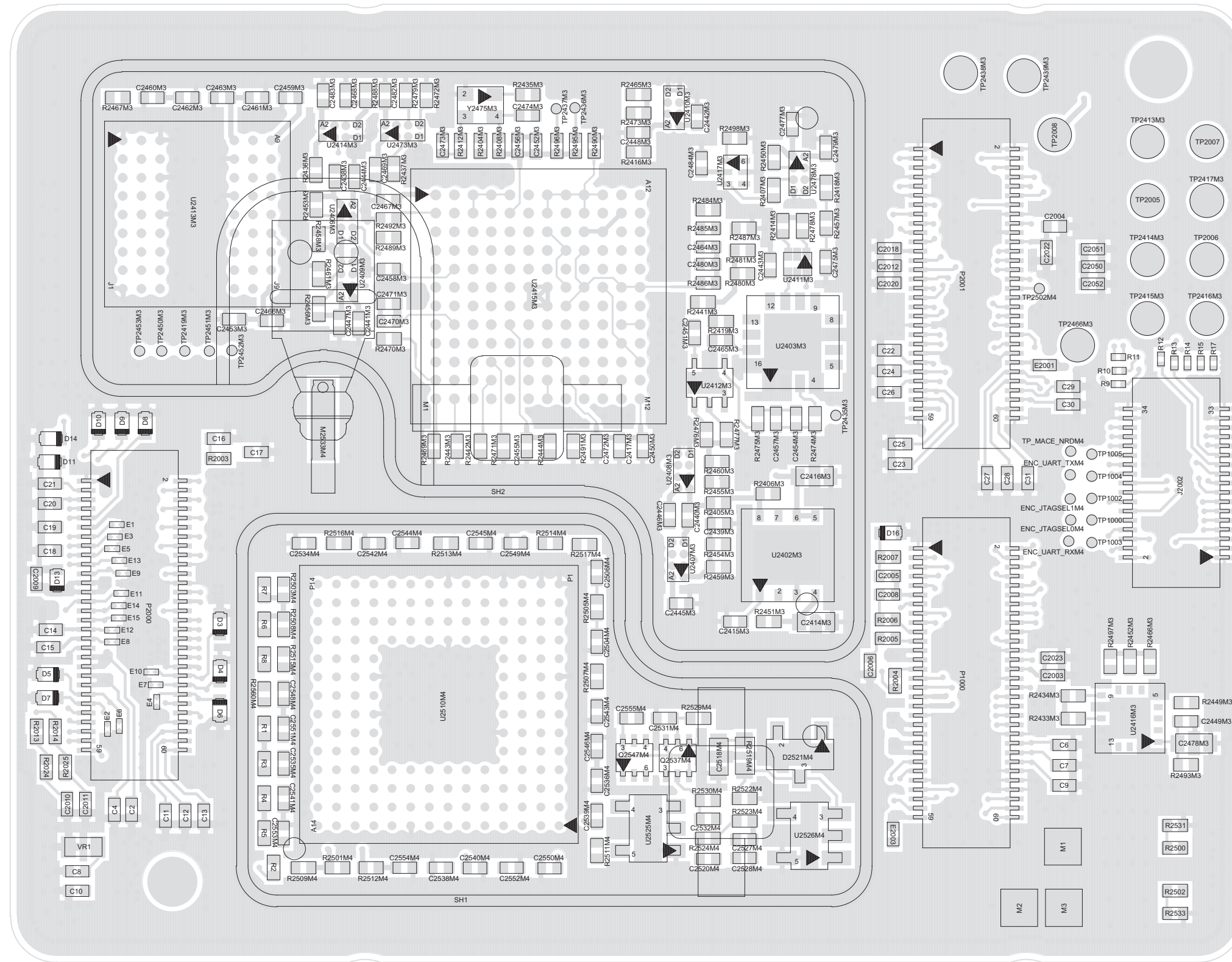


Figure 8-190. Keypad Board Layout – Bottom Side

## PMCN4026B Keypad Board Parts List

Ref. Des.	Part Number	Description
C2	2113944A40	CAP CER CHP 100.0PF 50V 5%
C4	2113944A40	CAP CER CHP 100.0PF 50V 5%
C6	2113944A40	CAP CER CHP 100.0PF 50V 5%
C7	2113944A40	CAP CER CHP 100.0PF 50V 5%
C8	2113944A40	CAP CER CHP 100.0PF 50V 5%
C9	2113944A40	CAP CER CHP 100.0PF 50V 5%
C10	2113944A40	CAP CER CHP 100.0PF 50V 5%
C11	2113944A40	CAP CER CHP 100.0PF 50V 5%
C12	2113944A40	CAP CER CHP 100.0PF 50V 5%
C13	2113944A40	CAP CER CHP 100.0PF 50V 5%
C14	2113944A40	CAP CER CHP 100.0PF 50V 5%
C15	2113944A40	CAP CER CHP 100.0PF 50V 5%
C16	2113944A40	CAP CER CHP 100.0PF 50V 5%
C17	2113944A40	CAP CER CHP 100.0PF 50V 5%
C18	2113944A40	CAP CER CHP 100.0PF 50V 5%
C19	2113944A40	CAP CER CHP 100.0PF 50V 5%
C20	2113944A40	CAP CER CHP 100.0PF 50V 5%
C21	2113944A40	CAP CER CHP 100.0PF 50V 5%
C22	2113944A40	CAP CER CHP 100.0PF 50V 5%
C23	2113944A40	CAP CER CHP 100.0PF 50V 5%

Ref. Des.	Part Number	Description
C24	2113944A40	CAP CER CHP 100.0PF 50V 5%
C25	2113944A40	CAP CER CHP 100.0PF 50V 5%
C26	2113944A40	CAP CER CHP 100.0PF 50V 5%
C27	2113944A40	CAP CER CHP 100.0PF 50V 5%
C28	2113944A40	CAP CER CHP 100.0PF 50V 5%
C29	2113944A40	CAP CER CHP 100.0PF 50V 5%
C30	2113944A40	CAP CER CHP 100.0PF 50V 5%
C31	2113944A40	CAP CER CHP 100.0PF 50V 5%
C2003	2113944A40	CAP CER CHP 100.0PF 50V 5%
C2004	2113944A40	CAP CER CHP 100.0PF 50V 5%
C2005	NOTPLACED	-
C2006	NOTPLACED	-
C2008	NOTPLACED	-
C2009	2113945A05	CAP CER CHP 470PF 50V 10%
C2010	2113945Y02	CAP,FXD,.1UF,+10%,-10%,16V-DC,0402,X7R,-55DEG CMIN,125DEG CMAX
C2011	2113945Y02	CAP,FXD,.1UF,+10%,-10%,16V-DC,0402,X7R,-55DEG CMIN,125DEG CMAX
C2012	2113944A40	CAP CER CHP 100.0PF 50V 5%
C2018	2113946B04	CAP CER CHP 0.10UF 10V 10%
C2020	2113944A26	CAP CER CHP 12.0PF 50V 5%
C2022	2113944A26	CAP CER CHP 12.0PF 50V 5%

Ref. Des.	Part Number	Description
C2023	2113944A26	CAP CER CHP 12.0PF 50V 5%
C2050	2113946B04	CAP CER CHP 0.10UF 10V 10%
C2051	2113944A40	CAP CER CHP 100.0PF 50V 5%
C2052	2113944A26	CAP CER CHP 12.0PF 50V 5%
C2414M3	2113946D07	CAP,CHIP,4.7UF,+10%,-10%,6.3V-DC,0603,X5R,-55DEG CMIN,85DEG CMA
C2415M3	2113945B02	CAP CER CHP 10,000PF 25V 10%
C2416M3	2113946D07	CAP,CHIP,4.7UF,+10%,-10%,6.3V-DC,0603,X5R,-55DEG CMIN,85DEG CMA
C2417M3	2171206F01	CAPACITOR, CHIP MONOLITHIC CERAMIC, X5R, 4.7UF, 4V, SMD, W18
C2438M3	2113945Y02	CAP,FXD,.1UF,+10%,-10%,16V-DC,0402,X7R,-55DEG CMIN,125DEG CMAX
C2439M3	2113945Y02	CAP,FXD,.1UF,+10%,-10%,16V-DC,0402,X7R,-55DEG CMIN,125DEG CMAX
C2440M3	2113945Y02	CAP,FXD,.1UF,+10%,-10%,16V-DC,0402,X7R,-55DEG CMIN,125DEG CMAX
C2441M3	2113945Y02	CAP,FXD,.1UF,+10%,-10%,16V-DC,0402,X7R,-55DEG CMIN,125DEG CMAX
C2442M3	2113945Y02	CAP,FXD,.1UF,+10%,-10%,16V-DC,0402,X7R,-55DEG CMIN,125DEG CMAX
C2443M3	2113945Y02	CAP,FXD,.1UF,+10%,-10%,16V-DC,0402,X7R,-55DEG CMIN,125DEG CMAX

Ref. Des.	Part Number	Description
C2444M3	2113945Y02	CAP,FXD,.1UF,+10%,-10%,16V-DC,0402,X7R,-55DEG CMIN,125DEG CMAX
C2445M3	2113945Y02	CAP,FXD,.1UF,+10%,-10%,16V-DC,0402,X7R,-55DEG CMIN,125DEG CMAX
C2446M3	2113945Y02	CAP,FXD,.1UF,+10%,-10%,16V-DC,0402,X7R,-55DEG CMIN,125DEG CMAX
C2447M3	2113945Y02	CAP,FXD,.1UF,+10%,-10%,16V-DC,0402,X7R,-55DEG CMIN,125DEG CMAX
C2448M3	2113945Y02	CAP,FXD,.1UF,+10%,-10%,16V-DC,0402,X7R,-55DEG CMIN,125DEG CMAX
C2449M3	2113945Y02	CAP,FXD,.1UF,+10%,-10%,16V-DC,0402,X7R,-55DEG CMIN,125DEG CMAX
C2450M3	2113945Y02	CAP,FXD,.1UF,+10%,-10%,16V-DC,0402,X7R,-55DEG CMIN,125DEG CMAX
C2451M3	2113945Y02	CAP,FXD,.1UF,+10%,-10%,16V-DC,0402,X7R,-55DEG CMIN,125DEG CMAX
C2452M3	2113945Y02	CAP,FXD,.1UF,+10%,-10%,16V-DC,0402,X7R,-55DEG CMIN,125DEG CMAX
C2453M3	2113945Y02	CAP,FXD,.1UF,+10%,-10%,16V-DC,0402,X7R,-55DEG CMIN,125DEG CMAX
C2454M3	2171051Y01	CAP,FXD,220PF,+1%,-1%,50V-DC,C0G,-55DEG CMIN,125DEG CMAX,PB-
C2455M3	2113945Y02	CAP,FXD,.1UF,+10%,-10%,16V-DC,0402,X7R,-55DEG CMIN,125DEG CMAX

Ref. Des.	Part Number	Description
C2456M3	2113945Y02	CAP,FXD,.1UF,+10%,-10%,16V-DC,0402,X7R,-55DEG CMIN,125DEG CMAX
C2457M3	2113944A28	CAP CER CHP 18.0PF 50V 5%
C2458M3	2113945Y02	CAP,FXD,.1UF,+10%,-10%,16V-DC,0402,X7R,-55DEG CMIN,125DEG CMAX
C2459M3	2113945Y02	CAP,FXD,.1UF,+10%,-10%,16V-DC,0402,X7R,-55DEG CMIN,125DEG CMAX
C2460M3	2113945Y02	CAP,FXD,.1UF,+10%,-10%,16V-DC,0402,X7R,-55DEG CMIN,125DEG CMAX
C2461M3	2113945Y02	CAP,FXD,.1UF,+10%,-10%,16V-DC,0402,X7R,-55DEG CMIN,125DEG CMAX
C2462M3	2113945Y02	CAP,FXD,.1UF,+10%,-10%,16V-DC,0402,X7R,-55DEG CMIN,125DEG CMAX
C2463M3	2113945Y02	CAP,FXD,.1UF,+10%,-10%,16V-DC,0402,X7R,-55DEG CMIN,125DEG CMAX
C2464M3	2113945Y02	CAP,FXD,.1UF,+10%,-10%,16V-DC,0402,X7R,-55DEG CMIN,125DEG CMAX
C2465M3	2113956A51	CAP,FXD,1UF,+10%,-10%,6.3V-DC,0402,X5R,-55DEG CMIN,85DEG CMAX,P
C2466M3	2113945Y02	CAP,FXD,.1UF,+10%,-10%,16V-DC,0402,X7R,-55DEG CMIN,125DEG CMAX
C2467M3	2113945Y02	CAP,FXD,.1UF,+10%,-10%,16V-DC,0402,X7R,-55DEG CMIN,125DEG CMAX

Ref. Des.	Part Number	Description
C2468M3	2113945Y02	CAP,FXD,.1UF,+10%,-10%,16V-DC,0402,X7R,-55DEG CMIN,125DEG CMAX
C2469M3	2113945Y02	CAP,FXD,.1UF,+10%,-10%,16V-DC,0402,X7R,-55DEG CMIN,125DEG CMAX
C2470M3	2172180Y01	CAP,CHIP,2.2UF,+20%,-20%,6.3V-DC,0402,X5R,-55DEG CMIN,85DEG
C2471M3	2113945A05	CAP CER CHP 470PF 50V 10%
C2472M3	2113945A09	CAP CER CHP 1000PF 50V 10%
C2473M3	2113944A25	CAP CER CHP 10.0PF 50V +/- 0.5PF
C2474M3	2113945Y02	CAP,FXD,.1UF,+10%,-10%,16V-DC,0402,X7R,-55DEG CMIN,125DEG CMAX
C2475M3	2113945A09	CAP CER CHP 1000PF 50V 10%
C2477M3	2113945Y02	CAP,FXD,.1UF,+10%,-10%,16V-DC,0402,X7R,-55DEG CMIN,125DEG CMAX
C2478M3	2113956B54	CAP,FXD,10UF,+20%,-20%,6.3V-DC,X5R,-55DEG CMIN,85DEG CMAX,PB-F
C2479M3	2113945Y02	CAP,FXD,.1UF,+10%,-10%,16V-DC,0402,X7R,-55DEG CMIN,125DEG CMAX
C2480M3	2113956A51	CAP,FXD,1UF,+10%,-10%,6.3V-DC,0402,X5R,-55DEG CMIN,85DEG CMAX,P
C2482M3	2113945Y02	CAP,FXD,.1UF,+10%,-10%,16V-DC,0402,X7R,-55DEG CMIN,125DEG CMAX
C2483M3	2113945Y02	CAP,FXD,.1UF,+10%,-10%,16V-DC,0402,X7R,-55DEG CMIN,125DEG CMAX

Ref. Des.	Part Number	Description
C2484M3	2113945Y02	CAP,FXD,.1UF,+10%,-10%,16V-DC,0402,X7R,-55DEG CMIN,125DEG CMAX
C2504M4	2113945A09	CAP CER CHP 1000PF 50V 10%
C2506M4	2113945B02	CAP CER CHP 10,000PF 25V 10%
C2518M4	2113956B33	CAP,FXD,2.2UF,+10%,-10%,16V-DC,0603,X5R,-55DEG CMIN,85DEG CMAX
C2520M4	2113946B04	CAP CER CHP 0.10UF 10V 10%
C2527M4	2113946B04	CAP CER CHP 0.10UF 10V 10%
C2528M4	2113946B04	CAP CER CHP 0.10UF 10V 10%
C2531M4	2113946B04	CAP CER CHP 0.10UF 10V 10%
C2532M4	2113946B04	CAP CER CHP 0.10UF 10V 10%
C2534M4	2113946B04	CAP CER CHP 0.10UF 10V 10%
C2535M4	2113946B04	CAP CER CHP 0.10UF 10V 10%
C2536M4	2113946B04	CAP CER CHP 0.10UF 10V 10%
C2538M4	2113946B04	CAP CER CHP 0.10UF 10V 10%
C2539M4	2113946B04	CAP CER CHP 0.10UF 10V 10%
C2540M4	2113946B04	CAP CER CHP 0.10UF 10V 10%
C2541M4	2113946B04	CAP CER CHP 0.10UF 10V 10%
C2542M4	2113946B04	CAP CER CHP 0.10UF 10V 10%
C2543M4	2113946B04	CAP CER CHP 0.10UF 10V 10%
C2544M4	2113946B04	CAP CER CHP 0.10UF 10V 10%

Ref. Des.	Part Number	Description
C2545M4	2113946B04	CAP CER CHP 0.10UF 10V 10%
C2546M4	2113946B04	CAP CER CHP 0.10UF 10V 10%
C2548M4	2113946B04	CAP CER CHP 0.10UF 10V 10%
C2549M4	2113946B04	CAP CER CHP 0.10UF 10V 10%
C2550M4	2113946B04	CAP CER CHP 0.10UF 10V 10%
C2551M4	2113946B04	CAP CER CHP 0.10UF 10V 10%
C2552M4	2113946B04	CAP CER CHP 0.10UF 10V 10%
C2553M4	2113946B04	CAP CER CHP 0.10UF 10V 10%
C2554M4	2113946B04	CAP CER CHP 0.10UF 10V 10%
C2555M4	2113946B04	CAP CER CHP 0.10UF 10V 10%
D1	48009289001	WHITE 2 PIN SIDE FIRE LED HIGH INT
D2	48009289001	WHITE 2 PIN SIDE FIRE LED HIGH INT
D3	4870359B01	DIODE,SUPR,SM,7.82V,.1 W,ESD PROT,V360
D4	4870359B01	DIODE,SUPR,SM,7.82V,.1 W,ESD PROT,V360
D5	4870359B01	DIODE,SUPR,SM,7.82V,.1 W,ESD PROT,V360
D6	4870359B01	DIODE,SUPR,SM,7.82V,.1 W,ESD PROT,V360
D7	4870359B01	DIODE,SUPR,SM,7.82V,.1 W,ESD PROT,V360
D8	4870359B01	DIODE,SUPR,SM,7.82V,.1 W,ESD PROT,V360
D9	4870359B01	DIODE,SUPR,SM,7.82V,.1 W,ESD PROT,V360
D10	4870359B01	DIODE,SUPR,SM,7.82V,.1 W,ESD PROT,V360



Ref. Des.	Part Number	Description
D11	4870359B01	DIODE,SUPR,SM,7.82V,.1 W,ESD PROT,V360
D13	NOTPLACED	-
D14	4870359B01	DIODE,SUPR,SM,7.82V,.1 W,ESD PROT,V360
D16	4870359B01	DIODE,SUPR,SM,7.82V,.1 W,ESD PROT,V360
D2521M4	4871785H01	SWITCHING DIODE BAS116LT1G
E2001	7685268E01	FERRITE BEAD 20X40 200 MA MAX CHIP
E2002	7685268E01	FERRITE BEAD 20X40 200 MA MAX CHIP
E2003	7685268E01	FERRITE BEAD 20X40 200 MA MAX CHIP
FL1	9171981H01	FILTER 6 CHANNEL EMI ESD 12PIN
FL2	9171981H01	FILTER 6 CHANNEL EMI ESD 12PIN
J2002	09012073001	CONNECTOR, B2B RECEPTACLE 34PINS
M2533M4	3987977Y01	CONTACT ANTENNA UNIVERSAL (D35)
P1000	0970312N01	CONN,BTB,RCPT,60CONT ,.4MM,GLD,1 STACK HGT
P2000	0970312N01	CONN,BTB,RCPT,60CONT ,.4MM,GLD,1 STACK HGT
P2001	0970312N01	CONN,BTB,RCPT,60CONT ,.4MM,GLD,1 STACK HGT
PCB	84012282001	BOARD, PC , KEYPAD
Q2537M4	4888795V06	XSTR,FET GP PWR,,MOS-FET,,SM,,SMT,20V,.25W,L EAD-FREE
Q2547M4	4888795V06	XSTR,FET GP PWR,,MOS-FET,,SM,,SMT,20V,.25W,L EAD-FREE
R1	0613952R01	CER CHIP RES 10K OHM 5% 0402
R2	0613952R17	CER CHIP RES 47K OHM 5% 0402

Ref. Des.	Part Number	Description
R3	0613952R17	CER CHIP RES 47K OHM 5% 0402
R4	0613952R17	CER CHIP RES 47K OHM 5% 0402
R5	0613952R17	CER CHIP RES 47K OHM 5% 0402
R6	0613952R66	CER CHIP RES 0.0 +/- 0.050 OHM
R7	0613952R66	CER CHIP RES 0.0 +/- 0.050 OHM
R8	0613952Q73	CER CHIP RES 1000 OHM 5 0402
R9	NOTPLACED	-
R10	NOTPLACED	-
R11	NOTPLACED	-
R12	NOTPLACED	-
R13	NOTPLACED	-
R14	NOTPLACED	-
R15	NOTPLACED	-
R16	0613952Q67	CER CHIP RES 560 OHM 5 0402
R17	NOTPLACED	-
R19	0613952Q67	CER CHIP RES 560 OHM 5 0402
R2003	0613952Q53	CER CHIP RES 150 OHM 5 0402
R2004	0613952Q49	CER CHIP RES 100 OHM 5 0402
R2005	0613952Q66	CER CHIP RES 510 OHM 5 0402
R2006	0613952R66	CER CHIP RES 0.0 +/- 0.050 OHM
R2007	0613952Q49	CER CHIP RES 100 OHM 5 0402
R2013	0613952R66	CER CHIP RES 0.0 +/- 0.050 OHM
R2014	0613952R66	CER CHIP RES 0.0 +/- 0.050 OHM

Ref. Des.	Part Number	Description
R2024	0613952Q09	CER CHIP RES 2.2 OHM 5 0402
R2025	0613952Q09	CER CHIP RES 2.2 OHM 5 0402
R2500	NOTPLACED	-
R2502	NOTPLACED	-
R2531	0613952R66	CER CHIP RES 0.0 +/- 0.050 OHM
R2533	NOTPLACED	-
R2404M3	0613952R25	CER CHIP RES 100K OHM 5% 0402
R2405M3	0613952R66	CER CHIP RES 0.0 +/- 0.050 OHM
R2406M3	NOTPLACED	-
R2407M3	0613952R66	CER CHIP RES 0.0 +/- 0.050 OHM
R2408M3	0613952R66	CER CHIP RES 0.0 +/- 0.050 OHM
R2412M3	0613952Q53	CER CHIP RES 150 OHM 5 0402
R2414M3	0613952R25	CER CHIP RES 100K OHM 5% 0402
R2416M3	0613952R25	CER CHIP RES 100K OHM 5% 0402
R2418M3	0613952R66	CER CHIP RES 0.0 +/- 0.050 OHM
R2419M3	0613952Q49	CER CHIP RES 100 OHM 5 0402
R2433M3	0613952R25	CER CHIP RES 100K OHM 5% 0402
R2434M3	0613952R25	CER CHIP RES 100K OHM 5% 0402
R2435M3	0613952R66	CER CHIP RES 0.0 +/- 0.050 OHM
R2436M3	0613952R25	CER CHIP RES 100K OHM 5% 0402
R2437M3	0613952R25	CER CHIP RES 100K OHM 5% 0402
R2441M3	0613952Q41	CER CHIP RES 47.0 OHM 5 0402

Ref. Des.	Part Number	Description
R2442M3	0613952Q73	CER CHIP RES 1000 OHM 5 0402
R2443M3	0613952Q73	CER CHIP RES 1000 OHM 5 0402
R2444M3	0613952R25	CER CHIP RES 100K OHM 5% 0402
R2449M3	0613952R25	CER CHIP RES 100K OHM 5% 0402
R2450M3	0613952R25	CER CHIP RES 100K OHM 5% 0402
R2451M3	0613952R66	CER CHIP RES 0.0 +/- 0.050 OHM
R2452M3	0613952R25	CER CHIP RES 100K OHM 5% 0402
R2453M3	0613952R25	CER CHIP RES 100K OHM 5% 0402
R2454M3	0613952R25	CER CHIP RES 100K OHM 5% 0402
R2455M3	0613952R25	CER CHIP RES 100K OHM 5% 0402
R2456M3	0613952R25	CER CHIP RES 100K OHM 5% 0402
R2457M3	0613952R05	CER CHIP RES 15K OHM 5% 0402
R2458M3	0613952Q89	CER CHIP RES 4700 OHM 5 0402
R2459M3	0613952R25	CER CHIP RES 100K OHM 5% 0402
R2460M3	0613952R25	CER CHIP RES 100K OHM 5% 0402
R2461M3	0613952R25	CER CHIP RES 100K OHM 5% 0402
R2465M3	0613952R25	CER CHIP RES 100K OHM 5% 0402
R2466M3	0613952R25	CER CHIP RES 100K OHM 5% 0402
R2467M3	0613952Q32	CER CHIP RES 20.0 OHM 5 0402
R2469M3	NOTPLACED	-
R2470M3	0613952Q73	CER CHIP RES 1000 OHM 5 0402

Ref. Des.	Part Number	Description
R2471M3	0613952Q73	CER CHIP RES 1000 OHM 5 0402
R2472M3	0613952R25	CER CHIP RES 100K OHM 5% 0402
R2473M3	0613952R01	CER CHIP RES 10K OHM 5% 0402
R2474M3	0613952R35	CER CHIP RES 270K OHM 5% 0402
R2475M3	0613952Q53	CER CHIP RES 150 OHM 5 0402
R2476M3	0613952R25	CER CHIP RES 100K OHM 5% 0402
R2477M3	0613952R25	CER CHIP RES 100K OHM 5% 0402
R2478M3	0613952R25	CER CHIP RES 100K OHM 5% 0402
R2479M3	0613952R25	CER CHIP RES 100K OHM 5% 0402
R2480M3	0613952R25	CER CHIP RES 100K OHM 5% 0402
R2481M3	0613952R25	CER CHIP RES 100K OHM 5% 0402
R2484M3	0613952Q35	CER CHIP RES 27.0 OHM 5 0402
R2485M3	0613952Q35	CER CHIP RES 27.0 OHM 5 0402
R2486M3	0613952R01	CER CHIP RES 10K OHM 5% 0402
R2487M3	0613952R01	CER CHIP RES 10K OHM 5% 0402
R2488M3	0613952R25	CER CHIP RES 100K OHM 5% 0402
R2489M3	0613952R01	CER CHIP RES 10K OHM 5% 0402
R2490M3	0613952R01	CER CHIP RES 10K OHM 5% 0402
R2491M3	0613952R01	CER CHIP RES 10K OHM 5% 0402
R2492M3	0613952R01	CER CHIP RES 10K OHM 5% 0402

Ref. Des.	Part Number	Description
R2493M3	0613952R66	CER CHIP RES 0.0 +/- 0.050 OHM
R2495M3	0613952R25	CER CHIP RES 100K OHM 5% 0402
R2496M3	0613952R25	CER CHIP RES 100K OHM 5% 0402
R2497M3	0613952R25	CER CHIP RES 100K OHM 5% 0402
R2498M3	0613952R25	CER CHIP RES 100K OHM 5% 0402
R2501M4	0613952R25	CER CHIP RES 100K OHM 5% 0402
R2503M4	NOTPLACED	-
R2505M4	0613952Q75	CER CHIP RES 1200 OHM 5 0402
R2507M4	0613952R49	CER CHIP RES 1.0M OHM 5% 0402
R2508M4	0613952R01	CER CHIP RES 10K OHM 5% 0402
R2509M4	0613952R66	CER CHIP RES 0.0 +/- 0.050 OHM
R2511M4	0613952R66	CER CHIP RES 0.0 +/- 0.050 OHM
R2512M4	0613952R66	CER CHIP RES 0.0 +/- 0.050 OHM
R2513M4	0613952Q80	CER CHIP RES 2000 OHM 5 0402
R2514M4	NOTPLACED	-
R2515M4	NOTPLACED	-
R2516M4	0613952R66	CER CHIP RES 0.0 +/- 0.050 OHM
R2517M4	0613952R01	CER CHIP RES 10K OHM 5% 0402
R2519M4	0613952H25	CER CHIP RES 10.0 OHM 5% 0603
R2522M4	0613952R74	RES,MF,10MOHM,5%,.062 5W,SM,0402,400PPM/ CEL,PB-FREE
R2523M4	0613952R74	RES,MF,10MOHM,5%,.062 5W,SM,0402,400PPM/ CEL,PB-FREE

Ref. Des.	Part Number	Description
R2524M4	0613952R49	CER CHIP RES 1.0M OHM 5% 0402
R2529M4	0613952P30	CER CHIP RES 200K OHM 1 0402
R2530M4	0613952P30	CER CHIP RES 200K OHM 1 0402
R2560M4	0613952R66	CER CHIP RES 0.0 +/- 0.050 OHM
SH1	26012170001	SHIELD, MACE
SH2	26012171001	SHIELD, SDRAM
U2402M3	51002923001	IC,LNR V REGLTR,3.3V LP2989,NOPB
U2403M3	51009735001	IC, RCVR, ONE-CHAN, QFN, LF WAKE-UP
U2406M3	5164852H16	IC TRANSCEIVER W/ LEVEL TRANSLATION
U2407M3	5164852H16	IC TRANSCEIVER W/ LEVEL TRANSLATION
U2408M3	5164852H16	IC TRANSCEIVER W/ LEVEL TRANSLATION
U2409M3	5164852H16	IC TRANSCEIVER W/ LEVEL TRANSLATION
U2410M3	5164852H16	IC TRANSCEIVER W/ LEVEL TRANSLATION
U2411M3	5175856M01	DUAL INVERTER
U2412M3	5114007M45	IC,NOR,1PER PKG,SOT-353,PB-FREE
U2413M3	51010274001	IC,SDRAM,128MBIT,8MX1 6,7.5NS, SCRND
U2414M3	5164852H16	IC TRANSCEIVER W/ LEVEL TRANSLATION
U2415M3	51009372001	IC MICROCONTROLLER AT32UC3A0512
U2416M3	51009669001	IC, ACCELEROMETER, MOTION SENSOR
U2417M3	5102836C11	IC,ANLG SW,,FSA4157,SM,,,,SPDT,, PB FREE
U2473M3	5164852H16	IC TRANSCEIVER W/ LEVEL TRANSLATION

Ref. Des.	Part Number	Description
U2478M3	5164852H16	IC TRANSCEIVER W/ LEVEL TRANSLATION
U2510M4	5185912Y05	IC,MICROPROCES-SOR,INDIGENOUS MACE
U2525M4	5171339H01	MICROPOWER VOLTAGE REGULATOR
U2526M4	5171988H01	CMOS COMPARATOR
VR1	NOTPLACED	-
Y2475M3	48009319001	SMD CRYSTAL OSCILLA-TOR DS0211AR

## PMCN4028B Keypad Board Parts List

Ref. Des.	Part Number	Description
C2	2113944A40	CAP CER CHP 100.0PF 50V 5%
C4	2113944A40	CAP CER CHP 100.0PF 50V 5%
C6	2113944A40	CAP CER CHP 100.0PF 50V 5%
C7	2113944A40	CAP CER CHP 100.0PF 50V 5%
C8	2113944A40	CAP CER CHP 100.0PF 50V 5%
C9	2113944A40	CAP CER CHP 100.0PF 50V 5%
C10	2113944A40	CAP CER CHP 100.0PF 50V 5%
C11	2113944A40	CAP CER CHP 100.0PF 50V 5%
C12	2113944A40	CAP CER CHP 100.0PF 50V 5%
C13	2113944A40	CAP CER CHP 100.0PF 50V 5%
C14	2113944A40	CAP CER CHP 100.0PF 50V 5%
C15	2113944A40	CAP CER CHP 100.0PF 50V 5%
C16	2113944A40	CAP CER CHP 100.0PF 50V 5%
C17	2113944A40	CAP CER CHP 100.0PF 50V 5%
C18	2113944A40	CAP CER CHP 100.0PF 50V 5%
C19	2113944A40	CAP CER CHP 100.0PF 50V 5%
C20	2113944A40	CAP CER CHP 100.0PF 50V 5%
C21	2113944A40	CAP CER CHP 100.0PF 50V 5%
C22	2113944A40	CAP CER CHP 100.0PF 50V 5%
C23	2113944A40	CAP CER CHP 100.0PF 50V 5%

Ref. Des.	Part Number	Description
C24	2113944A40	CAP CER CHP 100.0PF 50V 5%
C25	2113944A40	CAP CER CHP 100.0PF 50V 5%
C26	2113944A40	CAP CER CHP 100.0PF 50V 5%
C27	2113944A40	CAP CER CHP 100.0PF 50V 5%
C28	2113944A40	CAP CER CHP 100.0PF 50V 5%
C29	2113944A40	CAP CER CHP 100.0PF 50V 5%
C30	2113944A40	CAP CER CHP 100.0PF 50V 5%
C31	2113944A40	CAP CER CHP 100.0PF 50V 5%
C2003	2113944A40	CAP CER CHP 100.0PF 50V 5%
C2004	2113944A40	CAP CER CHP 100.0PF 50V 5%
C2005	NOTPLACED	-
C2006	NOTPLACED	-
C2008	NOTPLACED	-
C2009	2113945A05	CAP CER CHP 470PF 50V 10%
C2010	2113945Y02	CAP,FXD,.1UF,+10%,-10%,16V-DC,0402,X7R,-55DEG CMIN,125DEG CMAX
C2011	2113945Y02	CAP,FXD,.1UF,+10%,-10%,16V-DC,0402,X7R,-55DEG CMIN,125DEG CMAX
C2012	2113944A40	CAP CER CHP 100.0PF 50V 5%
C2018	2113946B04	CAP CER CHP 0.10UF 10V 10%
C2020	2113944A26	CAP CER CHP 12.0PF 50V 5%
C2022	2113944A26	CAP CER CHP 12.0PF 50V 5%

Ref. Des.	Part Number	Description
C2023	2113944A26	CAP CER CHP 12.0PF 50V 5%
C2050	2113946B04	CAP CER CHP 0.10UF 10V 10%
C2051	2113944A40	CAP CER CHP 100.0PF 50V 5%
C2052	2113944A26	CAP CER CHP 12.0PF 50V 5%
C2414M3	2113946D07	CAP,CHIP,4.7UF,+10%,-10%,6.3V-DC,0603,X5R,-55DEG CMIN,85DEG CMA
C2415M3	2113945B02	CAP CER CHP 10,000PF 25V 10%
C2416M3	2113946D07	CAP,CHIP,4.7UF,+10%,-10%,6.3V-DC,0603,X5R,-55DEG CMIN,85DEG CMA
C2417M3	2171206F01	CAPACITOR, CHIP MONO-LITHIC CERAMIC, X5R, 4.7UF, 4V, SMD, W18
C2438M3	2113945Y02	CAP,FXD,.1UF,+10%,-10%,16V-DC,0402,X7R,-55DEG CMIN,125DEG CMAX
C2439M3	2113945Y02	CAP,FXD,.1UF,+10%,-10%,16V-DC,0402,X7R,-55DEG CMIN,125DEG CMAX
C2440M3	2113945Y02	CAP,FXD,.1UF,+10%,-10%,16V-DC,0402,X7R,-55DEG CMIN,125DEG CMAX
C2441M3	2113945Y02	CAP,FXD,.1UF,+10%,-10%,16V-DC,0402,X7R,-55DEG CMIN,125DEG CMAX
C2442M3	2113945Y02	CAP,FXD,.1UF,+10%,-10%,16V-DC,0402,X7R,-55DEG CMIN,125DEG CMAX
C2443M3	2113945Y02	CAP,FXD,.1UF,+10%,-10%,16V-DC,0402,X7R,-55DEG CMIN,125DEG CMAX

Ref. Des.	Part Number	Description
C2444M3	2113945Y02	CAP,FXD,.1UF,+10%,-10%,16V-DC,0402,X7R,-55DEG CMIN,125DEG CMAX
C2445M3	2113945Y02	CAP,FXD,.1UF,+10%,-10%,16V-DC,0402,X7R,-55DEG CMIN,125DEG CMAX
C2446M3	2113945Y02	CAP,FXD,.1UF,+10%,-10%,16V-DC,0402,X7R,-55DEG CMIN,125DEG CMAX
C2447M3	2113945Y02	CAP,FXD,.1UF,+10%,-10%,16V-DC,0402,X7R,-55DEG CMIN,125DEG CMAX
C2448M3	2113945Y02	CAP,FXD,.1UF,+10%,-10%,16V-DC,0402,X7R,-55DEG CMIN,125DEG CMAX
C2449M3	2113945Y02	CAP,FXD,.1UF,+10%,-10%,16V-DC,0402,X7R,-55DEG CMIN,125DEG CMAX
C2450M3	2113945Y02	CAP,FXD,.1UF,+10%,-10%,16V-DC,0402,X7R,-55DEG CMIN,125DEG CMAX
C2451M3	2113945Y02	CAP,FXD,.1UF,+10%,-10%,16V-DC,0402,X7R,-55DEG CMIN,125DEG CMAX
C2452M3	2113945Y02	CAP,FXD,.1UF,+10%,-10%,16V-DC,0402,X7R,-55DEG CMIN,125DEG CMAX
C2453M3	2113945Y02	CAP,FXD,.1UF,+10%,-10%,16V-DC,0402,X7R,-55DEG CMIN,125DEG CMAX
C2454M3	2171051Y01	CAP,FXD,220PF,+1%,-1%,50V-DC,C0G,-55DEG CMIN,125DEG CMAX,PB-
C2455M3	2113945Y02	CAP,FXD,.1UF,+10%,-10%,16V-DC,0402,X7R,-55DEG CMIN,125DEG CMAX

Ref. Des.	Part Number	Description
C2456M3	2113945Y02	CAP,FXD,.1UF,+10%,-10%,16V-DC,0402,X7R,-55DEG CMIN,125DEG CMAX
C2457M3	2113944A28	CAP CER CHP 18.0PF 50V 5%
C2458M3	2113945Y02	CAP,FXD,.1UF,+10%,-10%,16V-DC,0402,X7R,-55DEG CMIN,125DEG CMAX
C2459M3	2113945Y02	CAP,FXD,.1UF,+10%,-10%,16V-DC,0402,X7R,-55DEG CMIN,125DEG CMAX
C2460M3	2113945Y02	CAP,FXD,.1UF,+10%,-10%,16V-DC,0402,X7R,-55DEG CMIN,125DEG CMAX
C2461M3	2113945Y02	CAP,FXD,.1UF,+10%,-10%,16V-DC,0402,X7R,-55DEG CMIN,125DEG CMAX
C2462M3	2113945Y02	CAP,FXD,.1UF,+10%,-10%,16V-DC,0402,X7R,-55DEG CMIN,125DEG CMAX
C2463M3	2113945Y02	CAP,FXD,.1UF,+10%,-10%,16V-DC,0402,X7R,-55DEG CMIN,125DEG CMAX
C2464M3	2113945Y02	CAP,FXD,.1UF,+10%,-10%,16V-DC,0402,X7R,-55DEG CMIN,125DEG CMAX
C2465M3	2113956A51	CAP,FXD,1UF,+10%,-10%,6.3V-DC,0402,X5R,-55DEG CMIN,85DEG CMAX,P
C2466M3	2113945Y02	CAP,FXD,.1UF,+10%,-10%,16V-DC,0402,X7R,-55DEG CMIN,125DEG CMAX
C2467M3	2113945Y02	CAP,FXD,.1UF,+10%,-10%,16V-DC,0402,X7R,-55DEG CMIN,125DEG CMAX

Ref. Des.	Part Number	Description
C2468M3	2113945Y02	CAP,FXD,.1UF,+10%,-10%,16V-DC,0402,X7R,-55DEG CMIN,125DEG CMAX
C2469M3	2113945Y02	CAP,FXD,.1UF,+10%,-10%,16V-DC,0402,X7R,-55DEG CMIN,125DEG CMAX
C2470M3	2172180Y01	CAP,CHIP,2.2UF,+20%,-20%,6.3V-DC,0402,X5R,-55DEG CMIN,85DEG
C2471M3	2113945A05	CAP CER CHP 470PF 50V 10%
C2472M3	2113945A09	CAP CER CHP 1000PF 50V 10%
C2473M3	2113944A25	CAP CER CHP 10.0PF 50V +/- 0.5PF
C2474M3	2113945Y02	CAP,FXD,.1UF,+10%,-10%,16V-DC,0402,X7R,-55DEG CMIN,125DEG CMAX
C2475M3	2113945A09	CAP CER CHP 1000PF 50V 10%
C2477M3	2113945Y02	CAP,FXD,.1UF,+10%,-10%,16V-DC,0402,X7R,-55DEG CMIN,125DEG CMAX
C2478M3	2113956B54	CAP,FXD,10UF,+20%,-20%,6.3V-DC,X5R,-55DEG CMIN,85DEG CMAX,PB-F
C2479M3	2113945Y02	CAP,FXD,.1UF,+10%,-10%,16V-DC,0402,X7R,-55DEG CMIN,125DEG CMAX
C2480M3	2113956A51	CAP,FXD,1UF,+10%,-10%,6.3V-DC,0402,X5R,-55DEG CMIN,85DEG CMAX,P
C2482M3	2113945Y02	CAP,FXD,.1UF,+10%,-10%,16V-DC,0402,X7R,-55DEG CMIN,125DEG CMAX
C2483M3	2113945Y02	CAP,FXD,.1UF,+10%,-10%,16V-DC,0402,X7R,-55DEG CMIN,125DEG CMAX

Ref. Des.	Part Number	Description
C2484M3	2113945Y02	CAP,FXD,.1UF,+10%,-10%,16V-DC,0402,X7R,-55DEG CMIN,125DEG CMAX
C2504M4	2113945A09	CAP CER CHP 1000PF 50V 10%
C2506M4	2113945B02	CAP CER CHP 10,000PF 25V 10%
C2518M4	2113956B33	CAP,FXD,2.2UF,+10%,-10%,16V-DC,0603,X5R,-55DEG CMIN,85DEG CMAX
C2520M4	2113946B04	CAP CER CHP 0.10UF 10V 10%
C2527M4	2113946B04	CAP CER CHP 0.10UF 10V 10%
C2528M4	2113946B04	CAP CER CHP 0.10UF 10V 10%
C2531M4	2113946B04	CAP CER CHP 0.10UF 10V 10%
C2532M4	2113946B04	CAP CER CHP 0.10UF 10V 10%
C2534M4	2113946B04	CAP CER CHP 0.10UF 10V 10%
C2535M4	2113946B04	CAP CER CHP 0.10UF 10V 10%
C2536M4	2113946B04	CAP CER CHP 0.10UF 10V 10%
C2538M4	2113946B04	CAP CER CHP 0.10UF 10V 10%
C2539M4	2113946B04	CAP CER CHP 0.10UF 10V 10%
C2540M4	2113946B04	CAP CER CHP 0.10UF 10V 10%
C2541M4	2113946B04	CAP CER CHP 0.10UF 10V 10%
C2542M4	2113946B04	CAP CER CHP 0.10UF 10V 10%
C2543M4	2113946B04	CAP CER CHP 0.10UF 10V 10%
C2544M4	2113946B04	CAP CER CHP 0.10UF 10V 10%

Ref. Des.	Part Number	Description
C2545M4	2113946B04	CAP CER CHP 0.10UF 10V 10%
C2546M4	2113946B04	CAP CER CHP 0.10UF 10V 10%
C2548M4	2113946B04	CAP CER CHP 0.10UF 10V 10%
C2549M4	2113946B04	CAP CER CHP 0.10UF 10V 10%
C2550M4	2113946B04	CAP CER CHP 0.10UF 10V 10%
C2551M4	2113946B04	CAP CER CHP 0.10UF 10V 10%
C2552M4	2113946B04	CAP CER CHP 0.10UF 10V 10%
C2553M4	2113946B04	CAP CER CHP 0.10UF 10V 10%
C2554M4	2113946B04	CAP CER CHP 0.10UF 10V 10%
C2555M4	2113946B04	CAP CER CHP 0.10UF 10V 10%
D1	48009289001	WHITE 2 PIN SIDE FIRE LED HIGH INT
D2	48009289001	WHITE 2 PIN SIDE FIRE LED HIGH INT
D3	4870359B01	DIODE,SUPR,SM,7.82V,.1W,ESD PROT,V360
D4	4870359B01	DIODE,SUPR,SM,7.82V,.1W,ESD PROT,V360
D5	4870359B01	DIODE,SUPR,SM,7.82V,.1W,ESD PROT,V360
D6	4870359B01	DIODE,SUPR,SM,7.82V,.1W,ESD PROT,V360
D7	4870359B01	DIODE,SUPR,SM,7.82V,.1W,ESD PROT,V360
D8	4870359B01	DIODE,SUPR,SM,7.82V,.1W,ESD PROT,V360
D9	4870359B01	DIODE,SUPR,SM,7.82V,.1W,ESD PROT,V360
D10	4870359B01	DIODE,SUPR,SM,7.82V,.1W,ESD PROT,V360

Ref. Des.	Part Number	Description
D11	4870359B01	DIODE,SUPR,SM,7.82V,.1W,ESD PROT,V360
D13	NOTPLACED	-
D14	4870359B01	DIODE,SUPR,SM,7.82V,.1W,ESD PROT,V360
D16	4870359B01	DIODE,SUPR,SM,7.82V,.1W,ESD PROT,V360
D2521M4	4871785H01	SWITCHING DIODE BAS116LT1G
E2001	7685268E01	FERRITE BEAD 20X40 200 MA MAX CHIP
E2002	7685268E01	FERRITE BEAD 20X40 200 MA MAX CHIP
E2003	7685268E01	FERRITE BEAD 20X40 200 MA MAX CHIP
FL1	9171981H01	FILTER 6 CHANNEL EMI ESD 12PIN
FL2	9171981H01	FILTER 6 CHANNEL EMI ESD 12PIN
J2002	09012073001	CONNECTOR, B2B RECEPTACLE 34PINS
M2533M4	3987977Y01	CONTACT ANTENNA UNIVERSAL (D35)
P1000	0970312N01	CONN,BTB,RCPT,60CONT,.4MM,GLD,1 STACK HGT
P2000	0970312N01	CONN,BTB,RCPT,60CONT,.4MM,GLD,1 STACK HGT
P2001	0970312N01	CONN,BTB,RCPT,60CONT,.4MM,GLD,1 STACK HGT
PCB	84012282001	BOARD, PC , KEYPAD
Q2537M4	4888795V06	XSTR,FET GP PWR,,,MOS-FET,,SM,,,SMT,20V,.25W,LE AD-FREE
Q2547M4	4888795V06	XSTR,FET GP PWR,,,MOS-FET,,SM,,,SMT,20V,.25W,LE AD-FREE
R1	0613952R01	CER CHIP RES 10K OHM 5% 0402
R2	0613952R17	CER CHIP RES 47K OHM 5% 0402

Ref. Des.	Part Number	Description
R3	0613952R17	CER CHIP RES 47K OHM 5% 0402
R4	0613952R17	CER CHIP RES 47K OHM 5% 0402
R5	0613952R17	CER CHIP RES 47K OHM 5% 0402
R6	0613952R66	CER CHIP RES 0.0 +/-0.050 OHM
R7	0613952R66	CER CHIP RES 0.0 +/-0.050 OHM
R8	0613952Q73	CER CHIP RES 1000 OHM 5 0402
R9	NOTPLACED	-
R10	NOTPLACED	-
R11	NOTPLACED	-
R12	NOTPLACED	-
R13	NOTPLACED	-
R14	NOTPLACED	-
R15	NOTPLACED	-
R16	0613952Q67	CER CHIP RES 560 OHM 5 0402
R17	NOTPLACED	-
R19	0613952Q67	CER CHIP RES 560 OHM 5 0402
R2003	0613952Q53	CER CHIP RES 150 OHM 5 0402
R2004	0613952Q49	CER CHIP RES 100 OHM 5 0402
R2005	0613952Q66	CER CHIP RES 510 OHM 5 0402
R2006	0613952R66	CER CHIP RES 0.0 +/-0.050 OHM
R2007	0613952Q49	CER CHIP RES 100 OHM 5 0402
R2013	0613952R66	CER CHIP RES 0.0 +/-0.050 OHM
R2014	0613952R66	CER CHIP RES 0.0 +/-0.050 OHM

Ref. Des.	Part Number	Description
R2024	0613952Q09	CER CHIP RES 2.2 OHM 5 0402
R2025	0613952Q09	CER CHIP RES 2.2 OHM 5 0402
R2500	NOTPLACED	-
R2502	NOTPLACED	-
R2531	NOTPLACED	-
R2533	0613952Q68	CER CHIP RES 620 OHM 5 0402
R2404M3	0613952R25	CER CHIP RES 100K OHM 5% 0402
R2405M3	0613952R66	CER CHIP RES 0.0 +/-0.050 OHM
R2406M3	NOTPLACED	-
R2407M3	0613952R66	CER CHIP RES 0.0 +/-0.050 OHM
R2408M3	0613952R66	CER CHIP RES 0.0 +/-0.050 OHM
R2412M3	0613952Q53	CER CHIP RES 150 OHM 5 0402
R2414M3	0613952R25	CER CHIP RES 100K OHM 5% 0402
R2416M3	0613952R25	CER CHIP RES 100K OHM 5% 0402
R2418M3	0613952R66	CER CHIP RES 0.0 +/-0.050 OHM
R2419M3	0613952Q49	CER CHIP RES 100 OHM 5 0402
R2433M3	0613952R25	CER CHIP RES 100K OHM 5% 0402
R2434M3	0613952R25	CER CHIP RES 100K OHM 5% 0402
R2435M3	0613952R66	CER CHIP RES 0.0 +/-0.050 OHM
R2436M3	0613952R25	CER CHIP RES 100K OHM 5% 0402
R2437M3	0613952R25	CER CHIP RES 100K OHM 5% 0402
R2441M3	0613952Q41	CER CHIP RES 47.0 OHM 5 0402

Ref. Des.	Part Number	Description
R2442M3	0613952Q73	CER CHIP RES 1000 OHM 5 0402
R2443M3	0613952Q73	CER CHIP RES 1000 OHM 5 0402
R2444M3	0613952R25	CER CHIP RES 100K OHM 5% 0402
R2449M3	0613952R25	CER CHIP RES 100K OHM 5% 0402
R2450M3	0613952R25	CER CHIP RES 100K OHM 5% 0402
R2451M3	0613952R66	CER CHIP RES 0.0 +/-0.050 OHM
R2452M3	0613952R25	CER CHIP RES 100K OHM 5% 0402
R2453M3	0613952R25	CER CHIP RES 100K OHM 5% 0402
R2454M3	0613952R25	CER CHIP RES 100K OHM 5% 0402
R2455M3	0613952R25	CER CHIP RES 100K OHM 5% 0402
R2456M3	0613952R25	CER CHIP RES 100K OHM 5% 0402
R2457M3	0613952R05	CER CHIP RES 15K OHM 5% 0402
R2458M3	0613952Q89	CER CHIP RES 4700 OHM 5 0402
R2459M3	0613952R25	CER CHIP RES 100K OHM 5% 0402
R2460M3	0613952R25	CER CHIP RES 100K OHM 5% 0402
R2461M3	0613952R25	CER CHIP RES 100K OHM 5% 0402
R2465M3	0613952R25	CER CHIP RES 100K OHM 5% 0402
R2466M3	0613952R25	CER CHIP RES 100K OHM 5% 0402
R2467M3	0613952Q32	CER CHIP RES 20.0 OHM 5 0402
R2469M3	NOTPLACED	-
R2470M3	0613952Q73	CER CHIP RES 1000 OHM 5 0402

Ref. Des.	Part Number	Description
R2471M3	0613952Q73	CER CHIP RES 1000 OHM 5 0402
R2472M3	0613952R25	CER CHIP RES 100K OHM 5% 0402
R2473M3	0613952R01	CER CHIP RES 10K OHM 5% 0402
R2474M3	0613952R35	CER CHIP RES 270K OHM 5% 0402
R2475M3	0613952Q53	CER CHIP RES 150 OHM 5 0402
R2476M3	0613952R25	CER CHIP RES 100K OHM 5% 0402
R2477M3	0613952R25	CER CHIP RES 100K OHM 5% 0402
R2478M3	0613952R25	CER CHIP RES 100K OHM 5% 0402
R2479M3	0613952R25	CER CHIP RES 100K OHM 5% 0402
R2480M3	0613952R25	CER CHIP RES 100K OHM 5% 0402
R2481M3	0613952R25	CER CHIP RES 100K OHM 5% 0402
R2484M3	0613952Q35	CER CHIP RES 27.0 OHM 5 0402
R2485M3	0613952Q35	CER CHIP RES 27.0 OHM 5 0402
R2486M3	0613952R01	CER CHIP RES 10K OHM 5% 0402
R2487M3	0613952R01	CER CHIP RES 10K OHM 5% 0402
R2488M3	0613952R25	CER CHIP RES 100K OHM 5% 0402
R2489M3	0613952R01	CER CHIP RES 10K OHM 5% 0402
R2490M3	0613952R01	CER CHIP RES 10K OHM 5% 0402
R2491M3	0613952R01	CER CHIP RES 10K OHM 5% 0402
R2492M3	0613952R01	CER CHIP RES 10K OHM 5% 0402

Ref. Des.	Part Number	Description
R2493M3	0613952R66	CER CHIP RES 0.0 +/-0.050 OHM
R2495M3	0613952R25	CER CHIP RES 100K OHM 5% 0402
R2496M3	0613952R25	CER CHIP RES 100K OHM 5% 0402
R2497M3	0613952R25	CER CHIP RES 100K OHM 5% 0402
R2498M3	0613952R25	CER CHIP RES 100K OHM 5% 0402
R2501M4	0613952R25	CER CHIP RES 100K OHM 5% 0402
R2503M4	NOTPLACED	-
R2505M4	0613952Q75	CER CHIP RES 1200 OHM 5 0402
R2507M4	0613952R49	CER CHIP RES 1.0M OHM 5% 0402
R2508M4	0613952R01	CER CHIP RES 10K OHM 5% 0402
R2509M4	0613952R66	CER CHIP RES 0.0 +/-0.050 OHM
R2511M4	0613952R66	CER CHIP RES 0.0 +/-0.050 OHM
R2512M4	0613952R66	CER CHIP RES 0.0 +/-0.050 OHM
R2513M4	0613952Q80	CER CHIP RES 2000 OHM 5 0402
R2514M4	NOTPLACED	-
R2515M4	NOTPLACED	-
R2516M4	0613952R66	CER CHIP RES 0.0 +/-0.050 OHM
R2517M4	0613952R01	CER CHIP RES 10K OHM 5% 0402
R2519M4	0613952H25	CER CHIP RES 10.0 OHM 5% 0603
R2522M4	0613952R74	RES,MF,10MOHM,5%,.0625 W,SM,0402,400PPM/CEL,PB-FREE
R2523M4	0613952R74	RES,MF,10MOHM,5%,.0625 W,SM,0402,400PPM/CEL,PB-FREE

Ref. Des.	Part Number	Description
R2524M4	0613952R49	CER CHIP RES 1.0M OHM 5% 0402
R2529M4	0613952P30	CER CHIP RES 200K OHM 1 0402
R2530M4	0613952P30	CER CHIP RES 200K OHM 1 0402
R2560M4	0613952R66	CER CHIP RES 0.0 +/-0.050 OHM
SH1	26012170001	SHIELD, MACE
SH2	26012171001	SHIELD, SDRAM
U2402M3	51002923001	IC,LNR V REGLTR,3.3V LP2989,NOPB
U2403M3	51009735001	IC, RCVR, ONE-CHAN, QFN, LF WAKE-UP
U2406M3	5164852H16	IC TRANSCEIVER W/LEVEL TRANSLATION
U2407M3	5164852H16	IC TRANSCEIVER W/LEVEL TRANSLATION
U2408M3	5164852H16	IC TRANSCEIVER W/LEVEL TRANSLATION
U2409M3	5164852H16	IC TRANSCEIVER W/LEVEL TRANSLATION
U2410M3	5164852H16	IC TRANSCEIVER W/LEVEL TRANSLATION
U2411M3	5175856M01	DUAL INVERTER
U2412M3	5114007M45	IC,NOR,1PER PKG,SOT-353,PB-FREE
U2413M3	51010274001	IC,SDRAM,128MBIT,8MX16, 7.5NS, SCRND
U2414M3	5164852H16	IC TRANSCEIVER W/LEVEL TRANSLATION
U2415M3	51009372001	IC MICROCONTROLLER AT32UC3A0512
U2416M3	51009669001	IC, ACCELEROMETER, MOTION SENSOR
U2417M3	5102836C11	IC,ANLG SW,,FSA4157,SM,,,,SPDT,,P B FREE
U2473M3	5164852H16	IC TRANSCEIVER W/LEVEL TRANSLATION

Ref. Des.	Part Number	Description
U2478M3	5164852H16	IC TRANSCEIVER W/LEVEL TRANSLATION
U2510M4	5185912Y05	IC,MICROPROCES- SOR,INDIGENOUS MACE
U2525M4	5171339H01	MICROPOWER VOLTAGE REGULATOR
U2526M4	5171988H01	CMOS COMPARATOR
VR1	NOTPLACED	-
Y2475M3	48009319001	SMD CRYSTAL OSCILLA- TOR DS0211AR

## PMCN4029A Keypad Board Parts List

Ref. Des.	Part Number	Description
C2	2113944A40	CAP CER CHP 100.0PF 50V 5%
C4	2113944A40	CAP CER CHP 100.0PF 50V 5%
C6	2113944A40	CAP CER CHP 100.0PF 50V 5%
C7	2113944A40	CAP CER CHP 100.0PF 50V 5%
C8	2113944A40	CAP CER CHP 100.0PF 50V 5%
C9	2113944A40	CAP CER CHP 100.0PF 50V 5%
C10	2113944A40	CAP CER CHP 100.0PF 50V 5%
C11	2113944A40	CAP CER CHP 100.0PF 50V 5%
C12	2113944A40	CAP CER CHP 100.0PF 50V 5%
C13	2113944A40	CAP CER CHP 100.0PF 50V 5%
C14	2113944A40	CAP CER CHP 100.0PF 50V 5%
C15	2113944A40	CAP CER CHP 100.0PF 50V 5%
C16	2113944A40	CAP CER CHP 100.0PF 50V 5%
C17	2113944A40	CAP CER CHP 100.0PF 50V 5%
C18	2113944A40	CAP CER CHP 100.0PF 50V 5%
C19	2113944A40	CAP CER CHP 100.0PF 50V 5%
C20	2113944A40	CAP CER CHP 100.0PF 50V 5%
C21	2113944A40	CAP CER CHP 100.0PF 50V 5%
C22	2113944A40	CAP CER CHP 100.0PF 50V 5%
C23	2113944A40	CAP CER CHP 100.0PF 50V 5%

Ref. Des.	Part Number	Description
C24	2113944A40	CAP CER CHP 100.0PF 50V 5%
C25	2113944A40	CAP CER CHP 100.0PF 50V 5%
C26	2113944A40	CAP CER CHP 100.0PF 50V 5%
C27	2113944A40	CAP CER CHP 100.0PF 50V 5%
C28	2113944A40	CAP CER CHP 100.0PF 50V 5%
C29	2113944A40	CAP CER CHP 100.0PF 50V 5%
C30	2113944A40	CAP CER CHP 100.0PF 50V 5%
C31	2113944A40	CAP CER CHP 100.0PF 50V 5%
C2003	2113944A40	CAP CER CHP 100.0PF 50V 5%
C2004	2113944A40	CAP CER CHP 100.0PF 50V 5%
C2005	NOTPLACED	-
C2006	NOTPLACED	-
C2008	NOTPLACED	-
C2009	2113945A05	CAP CER CHP 470PF 50V 10%
C2010	2113945Y02	CAP,FXD,.1UF,+10%,-10%,16V-DC,0402,X7R,-55DEG CMIN,125DEG CMAX
C2011	2113945Y02	CAP,FXD,.1UF,+10%,-10%,16V-DC,0402,X7R,-55DEG CMIN,125DEG CMAX
C2012	2113944A40	CAP CER CHP 100.0PF 50V 5%
C2018	2113946B04	CAP CER CHP 0.10UF 10V 10%
C2020	2113944A26	CAP CER CHP 12.0PF 50V 5%
C2022	2113944A26	CAP CER CHP 12.0PF 50V 5%

Ref. Des.	Part Number	Description
C2023	2113944A26	CAP CER CHP 12.0PF 50V 5%
C2050	2113946B04	CAP CER CHP 0.10UF 10V 10%
C2051	2113944A40	CAP CER CHP 100.0PF 50V 5%
C2052	2113944A26	CAP CER CHP 12.0PF 50V 5%
C2414M3	NOTPLACED	-
C2415M3	NOTPLACED	-
C2416M3	NOTPLACED	-
C2417M3	NOTPLACED	-
C2438M3	NOTPLACED	-
C2439M3	NOTPLACED	-
C2440M3	NOTPLACED	-
C2441M3	NOTPLACED	-
C2442M3	NOTPLACED	-
C2443M3	NOTPLACED	-
C2444M3	NOTPLACED	-
C2445M3	NOTPLACED	-
C2446M3	NOTPLACED	-
C2447M3	NOTPLACED	-
C2448M3	NOTPLACED	-
C2449M3	NOTPLACED	-
C2450M3	NOTPLACED	-
C2451M3	NOTPLACED	-
C2452M3	NOTPLACED	-
C2453M3	NOTPLACED	-
C2454M4	NOTPLACED	-
C2455M3	NOTPLACED	-
C2456M3	NOTPLACED	-
C2457M3	NOTPLACED	-
C2458M3	NOTPLACED	-
C2459M3	NOTPLACED	-

Ref. Des.	Part Number	Description
C2460M3	NOTPLACED	-
C2461M3	NOTPLACED	-
C2462M3	NOTPLACED	-
C2463M3	NOTPLACED	-
C2464M3	NOTPLACED	-
C2465M3	NOTPLACED	-
C2466M3	NOTPLACED	-
C2467M3	NOTPLACED	-
C2468M3	NOTPLACED	-
C2469M3	NOTPLACED	-
C2470M3	NOTPLACED	-
C2471M3	NOTPLACED	-
C2472M3	NOTPLACED	-
C2473M3	NOTPLACED	-
C2474M3	NOTPLACED	-
C2475M3	NOTPLACED	-
C2477M3	NOTPLACED	-
C2478M3	NOTPLACED	-
C2479M3	NOTPLACED	-
C2480M3	NOTPLACED	-
C2482M3	NOTPLACED	-
C2483M3	NOTPLACED	-
C2484M3	NOTPLACED	-
C2504M4	NOTPLACED	-
C2506M4	NOTPLACED	-
C2518M4	NOTPLACED	-
C2520M4	NOTPLACED	-
C2527M4	NOTPLACED	-
C2528M4	NOTPLACED	-
C2531M4	NOTPLACED	-
C2532M4	NOTPLACED	-
C2534M4	NOTPLACED	-
C2535M4	NOTPLACED	-

Ref. Des.	Part Number	Description
C2536M4	NOTPLACED	-
C2538M4	NOTPLACED	-
C2539M4	NOTPLACED	-
C2540M4	NOTPLACED	-
C2541M4	NOTPLACED	-
C2542M4	NOTPLACED	-
C2543M4	NOTPLACED	-
C2544M4	NOTPLACED	-
C2545M4	NOTPLACED	-
C2546M4	NOTPLACED	-
C2548M4	NOTPLACED	-
C2549M4	NOTPLACED	-
C2550M4	NOTPLACED	-
C2551M4	NOTPLACED	-
C2552M4	NOTPLACED	-
C2553M4	NOTPLACED	-
C2554M4	NOTPLACED	-
C2555M4	NOTPLACED	-
D1	48009289001	WHITE 2 PIN SIDE FIRE LED HIGH INT
D2	48009289001	WHITE 2 PIN SIDE FIRE LED HIGH INT
D3	4870359B01	DIODE,SUPR,SM,7.82V,.1W,ESD PROT,V360
D4	4870359B01	DIODE,SUPR,SM,7.82V,.1W,ESD PROT,V360
D5	4870359B01	DIODE,SUPR,SM,7.82V,.1W,ESD PROT,V360
D6	4870359B01	DIODE,SUPR,SM,7.82V,.1W,ESD PROT,V360
D7	4870359B01	DIODE,SUPR,SM,7.82V,.1W,ESD PROT,V360
D8	4870359B01	DIODE,SUPR,SM,7.82V,.1W,ESD PROT,V360
D9	4870359B01	DIODE,SUPR,SM,7.82V,.1W,ESD PROT,V360

Ref. Des.	Part Number	Description
D10	4870359B01	DIODE,SUPR,SM,7.82V,.1W,ESD PROT,V360
D11	4870359B01	DIODE,SUPR,SM,7.82V,.1W,ESD PROT,V360
D13	NOTPLACED	-
D14	4870359B01	DIODE,SUPR,SM,7.82V,.1W,ESD PROT,V360
D16	4870359B01	DIODE,SUPR,SM,7.82V,.1W,ESD PROT,V360
D2521M4	NOTPLACED	-
E2001	7685268E01	FERRITE BEAD 20X40 200 MA MAX CHIP
E2002	7685268E01	FERRITE BEAD 20X40 200 MA MAX CHIP
E2003	7685268E01	FERRITE BEAD 20X40 200 MA MAX CHIP
FL1	9171981H01	FILTER 6 CHANNEL EMI ESD 12PIN
FL2	9171981H01	FILTER 6 CHANNEL EMI ESD 12PIN
J2002	NOTPLACED	-
M2533M4	NOTPLACED	-
P1000	0970312N01	CONN,BTB,RCPT,60CONT,.4MM,GLD,1 STACK HGT
P2000	0970312N01	CONN,BTB,RCPT,60CONT,.4MM,GLD,1 STACK HGT
P2001	0970312N01	CONN,BTB,RCPT,60CONT,.4MM,GLD,1 STACK HGT
PCB	84012282001	BOARD, PC , KEYPAD
Q2537M4	NOTPLACED	-
Q2547M4	NOTPLACED	-
R1	NOTPLACED	-
R2	NOTPLACED	-
R3	NOTPLACED	-
R4	NOTPLACED	-
R5	NOTPLACED	-
R6	NOTPLACED	-
R7	NOTPLACED	-

Ref. Des.	Part Number	Description
R8	NOTPLACED	-
R9	NOTPLACED	-
R10	NOTPLACED	-
R11	NOTPLACED	-
R12	NOTPLACED	-
R13	NOTPLACED	-
R14	NOTPLACED	-
R15	NOTPLACED	-
R16	0613952Q67	CER CHIP RES 560 OHM 5 0402
R17	NOTPLACED	-
R19	0613952Q67	CER CHIP RES 560 OHM 5 0402
R2003	0613952Q53	CER CHIP RES 150 OHM 5 0402
R2004	0613952Q49	CER CHIP RES 100 OHM 5 0402
R2005	0613952Q66	CER CHIP RES 510 OHM 5 0402
R2006	0613952R66	CER CHIP RES 0.0 +/-0.050 OHM
R2007	0613952Q49	CER CHIP RES 100 OHM 5 0402
R2013	0613952R66	CER CHIP RES 0.0 +/-0.050 OHM
R2014	0613952R66	CER CHIP RES 0.0 +/-0.050 OHM
R2024	0613952Q09	CER CHIP RES 2.2 OHM 5 0402
R2025	0613952Q09	CER CHIP RES 2.2 OHM 5 0402
R2500	NOTPLACED	-
R2502	NOTPLACED	-
R2531	NOTPLACED	-
R2533	0613952Q82	CER CHIP RES 2400 OHM 5 0402
R2404M3	NOTPLACED	-
R2405M3	NOTPLACED	-

Ref. Des.	Part Number	Description
R2406M3	NOTPLACED	-
R2407M3	NOTPLACED	-
R2408M3	NOTPLACED	-
R2412M3	NOTPLACED	-
R2414M3	NOTPLACED	-
R2416M3	NOTPLACED	-
R2418M3	NOTPLACED	-
R2419M3	NOTPLACED	-
R2433M3	NOTPLACED	-
R2434M3	NOTPLACED	-
R2435M3	NOTPLACED	-
R2436M3	NOTPLACED	-
R2437M3	NOTPLACED	-
R2441M3	NOTPLACED	-
R2442M3	NOTPLACED	-
R2443M3	NOTPLACED	-
R2444M3	NOTPLACED	-
R2449M3	NOTPLACED	-
R2450M3	NOTPLACED	-
R2451M3	NOTPLACED	-
R2452M3	NOTPLACED	-
R2453M3	NOTPLACED	-
R2454M3	NOTPLACED	-
R2455M3	NOTPLACED	-
R2456M3	NOTPLACED	-
R2457M3	NOTPLACED	-
R2458M3	NOTPLACED	-
R2459M3	NOTPLACED	-
R2460M3	NOTPLACED	-
R2461M3	NOTPLACED	-
R2465M3	NOTPLACED	-
R2466M3	NOTPLACED	-
R2467M3	NOTPLACED	-



Ref. Des.	Part Number	Description
R2469M3	NOTPLACED	–
R2470M3	NOTPLACED	–
R2471M3	NOTPLACED	–
R2472M3	NOTPLACED	–
R2473M3	NOTPLACED	–
R2474M3	NOTPLACED	–
R2475M3	NOTPLACED	–
R2476M3	NOTPLACED	–
R2477M3	NOTPLACED	–
R2478M3	NOTPLACED	–
R2479M3	NOTPLACED	–
R2480M3	NOTPLACED	–
R2481M3	NOTPLACED	–
R2484M3	NOTPLACED	–
R2485M3	NOTPLACED	–
R2486M3	NOTPLACED	–
R2487M3	NOTPLACED	–
R2488M3	NOTPLACED	–
R2489M3	NOTPLACED	–
R2490M3	NOTPLACED	–
R2491M3	NOTPLACED	–
R2492M3	NOTPLACED	–
R2493M3	NOTPLACED	–
R2495M3	NOTPLACED	–
R2496M3	NOTPLACED	–
R2497M3	NOTPLACED	–
R2498M3	NOTPLACED	–
R2501M4	NOTPLACED	–
R2503M4	NOTPLACED	–
R2505M4	NOTPLACED	–
R2507M4	NOTPLACED	–
R2508M4	NOTPLACED	–
R2509M4	NOTPLACED	–

Ref. Des.	Part Number	Description
R2511M4	NOTPLACED	–
R2512M4	NOTPLACED	–
R2513M4	NOTPLACED	–
R2514M4	NOTPLACED	–
R2515M4	NOTPLACED	–
R2516M4	NOTPLACED	–
R2517M4	NOTPLACED	–
R2519M4	NOTPLACED	–
R2522M4	NOTPLACED	–
R2523M4	NOTPLACED	–
R2524M4	NOTPLACED	–
R2529M4	NOTPLACED	–
R2530M4	NOTPLACED	–
R2560M4	NOTPLACED	–
SH1	26012170001	SHIELD, MACE
SH2	26012171001	SHIELD, SDRAM
U2402M3	NOTPLACED	–
U2403M3	NOTPLACED	–
U2406M3	NOTPLACED	–
U2407M3	NOTPLACED	–
U2408M3	NOTPLACED	–
U2409M3	NOTPLACED	–
U2410M3	NOTPLACED	–
U2411M3	NOTPLACED	–
U2412M3	NOTPLACED	–
U2413M3	NOTPLACED	–
U2414M3	NOTPLACED	–
U2415M3	NOTPLACED	–
U2416M3	NOTPLACED	–
U2417M3	NOTPLACED	–
U2473M3	NOTPLACED	–
U2478M3	NOTPLACED	–
U2510M4	NOTPLACED	–

Ref. Des.	Part Number	Description
U2525M4	NOTPLACED	–
U2526M4	NOTPLACED	–
VR1	NOTPLACED	–
Y2475M3	NOTPLACED	–

## PMCN4027A Keypad Board Parts List

Ref. Des.	Part Number	Description
C2	2113944A40	CAP CER CHP 100.0PF 50V 5%
C4	2113944A40	CAP CER CHP 100.0PF 50V 5%
C6	2113944A40	CAP CER CHP 100.0PF 50V 5%
C7	2113944A40	CAP CER CHP 100.0PF 50V 5%
C8	2113944A40	CAP CER CHP 100.0PF 50V 5%
C9	2113944A40	CAP CER CHP 100.0PF 50V 5%
C10	2113944A40	CAP CER CHP 100.0PF 50V 5%
C11	2113944A40	CAP CER CHP 100.0PF 50V 5%
C12	2113944A40	CAP CER CHP 100.0PF 50V 5%
C13	2113944A40	CAP CER CHP 100.0PF 50V 5%
C14	2113944A40	CAP CER CHP 100.0PF 50V 5%
C15	2113944A40	CAP CER CHP 100.0PF 50V 5%
C16	2113944A40	CAP CER CHP 100.0PF 50V 5%
C17	2113944A40	CAP CER CHP 100.0PF 50V 5%
C18	2113944A40	CAP CER CHP 100.0PF 50V 5%
C19	2113944A40	CAP CER CHP 100.0PF 50V 5%
C20	2113944A40	CAP CER CHP 100.0PF 50V 5%
C21	2113944A40	CAP CER CHP 100.0PF 50V 5%
C22	2113944A40	CAP CER CHP 100.0PF 50V 5%
C23	2113944A40	CAP CER CHP 100.0PF 50V 5%

Ref. Des.	Part Number	Description
C24	2113944A40	CAP CER CHP 100.0PF 50V 5%
C25	2113944A40	CAP CER CHP 100.0PF 50V 5%
C26	2113944A40	CAP CER CHP 100.0PF 50V 5%
C27	2113944A40	CAP CER CHP 100.0PF 50V 5%
C28	2113944A40	CAP CER CHP 100.0PF 50V 5%
C29	2113944A40	CAP CER CHP 100.0PF 50V 5%
C30	2113944A40	CAP CER CHP 100.0PF 50V 5%
C31	2113944A40	CAP CER CHP 100.0PF 50V 5%
C2003	2113944A40	CAP CER CHP 100.0PF 50V 5%
C2004	2113944A40	CAP CER CHP 100.0PF 50V 5%
C2005	NOTPLACED	-
C2006	NOTPLACED	-
C2008	NOTPLACED	-
C2009	2113945A05	CAP CER CHP 470PF 50V 10%
C2010	2113945Y02	CAP,FXD,.1UF,+10%,-10%,16V-DC,0402,X7R,-55DEG CMIN,125DEG CMAX
C2011	2113945Y02	CAP,FXD,.1UF,+10%,-10%,16V-DC,0402,X7R,-55DEG CMIN,125DEG CMAX
C2012	2113944A40	CAP CER CHP 100.0PF 50V 5%
C2018	2113946B04	CAP CER CHP 0.10UF 10V 10%
C2020	2113944A26	CAP CER CHP 12.0PF 50V 5%
C2022	2113944A26	CAP CER CHP 12.0PF 50V 5%

Ref. Des.	Part Number	Description
C2023	2113944A26	CAP CER CHP 12.0PF 50V 5%
C2050	2113946B04	CAP CER CHP 0.10UF 10V 10%
C2051	2113944A40	CAP CER CHP 100.0PF 50V 5%
C2052	2113944A26	CAP CER CHP 12.0PF 50V 5%
C2414M3	NOTPLACED	-
C2415M3	NOTPLACED	-
C2416M3	NOTPLACED	-
C2417M3	NOTPLACED	-
C2438M3	NOTPLACED	-
C2439M3	NOTPLACED	-
C2440M3	NOTPLACED	-
C2441M3	NOTPLACED	-
C2442M3	NOTPLACED	-
C2443M3	NOTPLACED	-
C2444M3	NOTPLACED	-
C2445M3	NOTPLACED	-
C2446M3	NOTPLACED	-
C2447M3	NOTPLACED	-
C2448M3	NOTPLACED	-
C2449M3	NOTPLACED	-
C2450M3	NOTPLACED	-
C2451M3	NOTPLACED	-
C2452M3	NOTPLACED	-
C2453M3	NOTPLACED	-
C2454M4	NOTPLACED	-
C2455M3	NOTPLACED	-
C2456M3	NOTPLACED	-
C2457M3	NOTPLACED	-
C2458M3	NOTPLACED	-
C2459M3	NOTPLACED	-

Ref. Des.	Part Number	Description
C2460M3	NOTPLACED	-
C2461M3	NOTPLACED	-
C2462M3	NOTPLACED	-
C2463M3	NOTPLACED	-
C2464M3	NOTPLACED	-
C2465M3	NOTPLACED	-
C2466M3	NOTPLACED	-
C2467M3	NOTPLACED	-
C2468M3	NOTPLACED	-
C2469M3	NOTPLACED	-
C2470M3	NOTPLACED	-
C2471M3	NOTPLACED	-
C2472M3	NOTPLACED	-
C2473M3	NOTPLACED	-
C2474M3	NOTPLACED	-
C2475M3	NOTPLACED	-
C2477M3	NOTPLACED	-
C2478M3	NOTPLACED	-
C2479M3	NOTPLACED	-
C2480M3	NOTPLACED	-
C2482M3	NOTPLACED	-
C2483M3	NOTPLACED	-
C2484M3	NOTPLACED	-
C2504M4	NOTPLACED	-
C2506M4	NOTPLACED	-
C2518M4	NOTPLACED	-
C2520M4	NOTPLACED	-
C2527M4	NOTPLACED	-
C2528M4	NOTPLACED	-
C2531M4	NOTPLACED	-
C2532M4	NOTPLACED	-
C2534M4	NOTPLACED	-
C2535M4	NOTPLACED	-

Ref. Des.	Part Number	Description
C2536M4	NOTPLACED	-
C2538M4	NOTPLACED	-
C2539M4	NOTPLACED	-
C2540M4	NOTPLACED	-
C2541M4	NOTPLACED	-
C2542M4	NOTPLACED	-
C2543M4	NOTPLACED	-
C2544M4	NOTPLACED	-
C2545M4	NOTPLACED	-
C2546M4	NOTPLACED	-
C2548M4	NOTPLACED	-
C2549M4	NOTPLACED	-
C2550M4	NOTPLACED	-
C2551M4	NOTPLACED	-
C2552M4	NOTPLACED	-
C2553M4	NOTPLACED	-
C2554M4	NOTPLACED	-
C2555M4	NOTPLACED	-
D1	48009289001	WHITE 2 PIN SIDE FIRE LED HIGH INT
D2	48009289001	WHITE 2 PIN SIDE FIRE LED HIGH INT
D3	4870359B01	DIODE,SUPR,SM,7.82V,.1W,ESD PROT,V360
D4	4870359B01	DIODE,SUPR,SM,7.82V,.1W,ESD PROT,V360
D5	4870359B01	DIODE,SUPR,SM,7.82V,.1W,ESD PROT,V360
D6	4870359B01	DIODE,SUPR,SM,7.82V,.1W,ESD PROT,V360
D7	4870359B01	DIODE,SUPR,SM,7.82V,.1W,ESD PROT,V360
D8	4870359B01	DIODE,SUPR,SM,7.82V,.1W,ESD PROT,V360
D9	4870359B01	DIODE,SUPR,SM,7.82V,.1W,ESD PROT,V360

Ref. Des.	Part Number	Description
D10	4870359B01	DIODE,SUPR,SM,7.82V,.1W,ESD PROT,V360
D11	4870359B01	DIODE,SUPR,SM,7.82V,.1W,ESD PROT,V360
D13	NOTPLACED	-
D14	4870359B01	DIODE,SUPR,SM,7.82V,.1W,ESD PROT,V360
D16	4870359B01	DIODE,SUPR,SM,7.82V,.1W,ESD PROT,V360
D2521M4	NOTPLACED	-
E2001	7685268E01	FERRITE BEAD 20X40 200 MA MAX CHIP
E2002	7685268E01	FERRITE BEAD 20X40 200 MA MAX CHIP
E2003	7685268E01	FERRITE BEAD 20X40 200 MA MAX CHIP
FL1	9171981H01	FILTER 6 CHANNEL EMI ESD 12PIN
FL2	9171981H01	FILTER 6 CHANNEL EMI ESD 12PIN
J2002	NOTPLACED	-
M2533M4	NOTPLACED	-
P1000	0970312N01	CONN,BTB,RCPT,60CONT,.4MM,GLD,1 STACK HGT
P2000	0970312N01	CONN,BTB,RCPT,60CONT,.4MM,GLD,1 STACK HGT
P2001	0970312N01	CONN,BTB,RCPT,60CONT,.4MM,GLD,1 STACK HGT
PCB	84012282001	BOARD, PC , KEYPAD
Q2537M4	NOTPLACED	-
Q2547M4	NOTPLACED	-
R1	NOTPLACED	-
R2	NOTPLACED	-
R3	NOTPLACED	-
R4	NOTPLACED	-
R5	NOTPLACED	-
R6	NOTPLACED	-
R7	NOTPLACED	-

Ref. Des.	Part Number	Description
R8	NOTPLACED	-
R9	NOTPLACED	-
R10	NOTPLACED	-
R11	NOTPLACED	-
R12	NOTPLACED	-
R13	NOTPLACED	-
R14	NOTPLACED	-
R15	NOTPLACED	-
R16	0613952Q67	CER CHIP RES 560 OHM 5 0402
R17	NOTPLACED	-
R19	0613952Q67	CER CHIP RES 560 OHM 5 0402
R2003	0613952Q53	CER CHIP RES 150 OHM 5 0402
R2004	0613952Q49	CER CHIP RES 100 OHM 5 0402
R2005	0613952Q66	CER CHIP RES 510 OHM 5 0402
R2006	0613952R66	CER CHIP RES 0.0 +/-0.050 OHM
R2007	0613952Q49	CER CHIP RES 100 OHM 5 0402
R2013	0613952R66	CER CHIP RES 0.0 +/-0.050 OHM
R2014	0613952R66	CER CHIP RES 0.0 +/-0.050 OHM
R2024	0613952Q09	CER CHIP RES 2.2 OHM 5 0402
R2025	0613952Q09	CER CHIP RES 2.2 OHM 5 0402
R2500	NOTPLACED	-
R2502	NOTPLACED	-
R2531	NOTPLACED	-
R2533	0613952Q82	CER CHIP RES 2400 OHM 5 0402
R2404M3	NOTPLACED	-
R2405M3	NOTPLACED	-

Ref. Des.	Part Number	Description
R2406M3	NOTPLACED	-
R2407M3	NOTPLACED	-
R2408M3	NOTPLACED	-
R2412M3	NOTPLACED	-
R2414M3	NOTPLACED	-
R2416M3	NOTPLACED	-
R2418M3	NOTPLACED	-
R2419M3	NOTPLACED	-
R2433M3	NOTPLACED	-
R2434M3	NOTPLACED	-
R2435M3	NOTPLACED	-
R2436M3	NOTPLACED	-
R2437M3	NOTPLACED	-
R2441M3	NOTPLACED	-
R2442M3	NOTPLACED	-
R2443M3	NOTPLACED	-
R2444M3	NOTPLACED	-
R2449M3	NOTPLACED	-
R2450M3	NOTPLACED	-
R2451M3	NOTPLACED	-
R2452M3	NOTPLACED	-
R2453M3	NOTPLACED	-
R2454M3	NOTPLACED	-
R2455M3	NOTPLACED	-
R2456M3	NOTPLACED	-
R2457M3	NOTPLACED	-
R2458M3	NOTPLACED	-
R2459M3	NOTPLACED	-
R2460M3	NOTPLACED	-
R2461M3	NOTPLACED	-
R2465M3	NOTPLACED	-
R2466M3	NOTPLACED	-
R2467M3	NOTPLACED	-

Ref. Des.	Part Number	Description
R2469M3	NOTPLACED	–
R2470M3	NOTPLACED	–
R2471M3	NOTPLACED	–
R2472M3	NOTPLACED	–
R2473M3	NOTPLACED	–
R2474M3	NOTPLACED	–
R2475M3	NOTPLACED	–
R2476M3	NOTPLACED	–
R2477M3	NOTPLACED	–
R2478M3	NOTPLACED	–
R2479M3	NOTPLACED	–
R2480M3	NOTPLACED	–
R2481M3	NOTPLACED	–
R2484M3	NOTPLACED	–
R2485M3	NOTPLACED	–
R2486M3	NOTPLACED	–
R2487M3	NOTPLACED	–
R2488M3	NOTPLACED	–
R2489M3	NOTPLACED	–
R2490M3	NOTPLACED	–
R2491M3	NOTPLACED	–
R2492M3	NOTPLACED	–
R2493M3	NOTPLACED	–
R2495M3	NOTPLACED	–
R2496M3	NOTPLACED	–
R2497M3	NOTPLACED	–
R2498M3	NOTPLACED	–
R2501M4	NOTPLACED	–
R2503M4	NOTPLACED	–
R2505M4	NOTPLACED	–
R2507M4	NOTPLACED	–
R2508M4	NOTPLACED	–
R2509M4	NOTPLACED	–

Ref. Des.	Part Number	Description
R2511M4	NOTPLACED	–
R2512M4	NOTPLACED	–
R2513M4	NOTPLACED	–
R2514M4	NOTPLACED	–
R2515M4	NOTPLACED	–
R2516M4	NOTPLACED	–
R2517M4	NOTPLACED	–
R2519M4	NOTPLACED	–
R2522M4	NOTPLACED	–
R2523M4	NOTPLACED	–
R2524M4	NOTPLACED	–
R2529M4	NOTPLACED	–
R2530M4	NOTPLACED	–
R2560M4	NOTPLACED	–
SH1	26012170001	SHIELD, MACE
SH2	26012171001	SHIELD, SDRAM
U2402M3	NOTPLACED	–
U2403M3	NOTPLACED	–
U2406M3	NOTPLACED	–
U2407M3	NOTPLACED	–
U2408M3	NOTPLACED	–
U2409M3	NOTPLACED	–
U2410M3	NOTPLACED	–
U2411M3	NOTPLACED	–
U2412M3	NOTPLACED	–
U2413M3	NOTPLACED	–
U2414M3	NOTPLACED	–
U2415M3	NOTPLACED	–
U2416M3	NOTPLACED	–
U2417M3	NOTPLACED	–
U2473M3	NOTPLACED	–
U2478M3	NOTPLACED	–
U2510M4	NOTPLACED	–

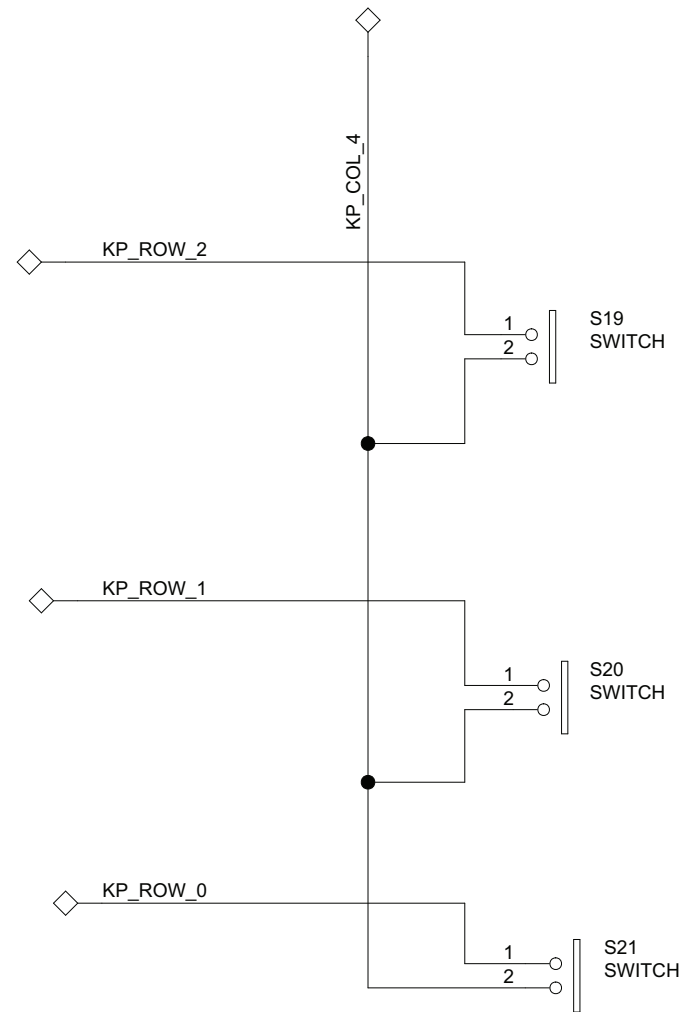
Ref. Des.	Part Number	Description
U2525M4	NOTPLACED	–
U2526M4	NOTPLACED	–
VR1	NOTPLACED	–
Y2475M3	NOTPLACED	–

### 8.8 Keypad Lite Board (84012559002)

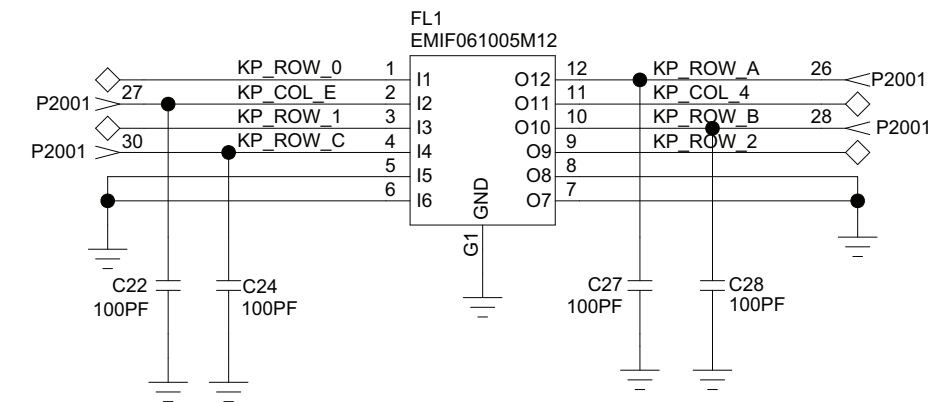


Figure 8-191. Keypad Lite Board Overall Circuit Schematic

(COL,ROW)  
 (4,2) - H/L  
 (4,1) - SCAN  
 (4,0) - CALL



### KEYPAD CONTROL



### GROUND CONTACTS

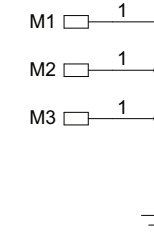


Figure 8-192. Keypad Lite Matrix Circuit

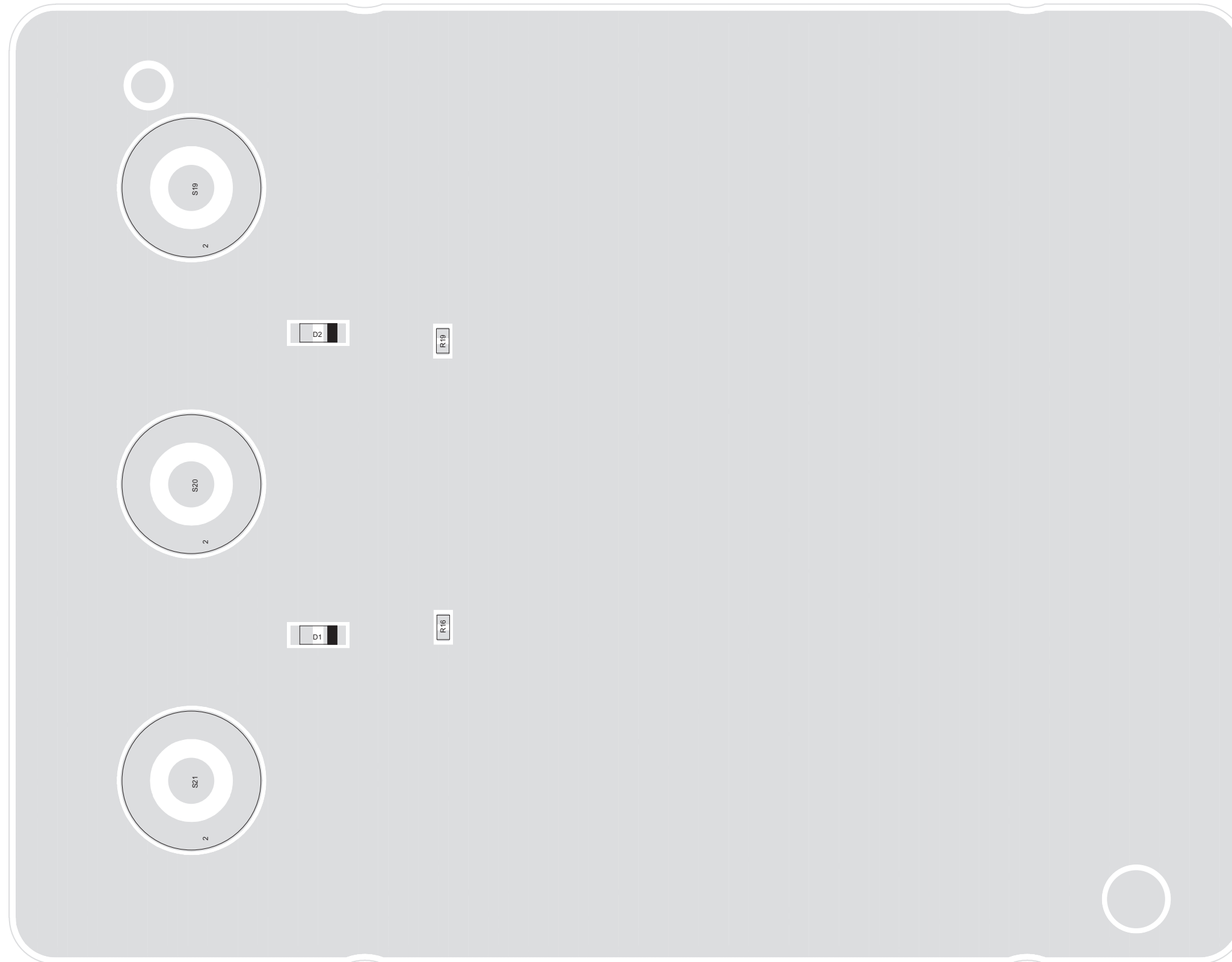


Figure 8-193. Keypad Lite Board Layout – Top Side

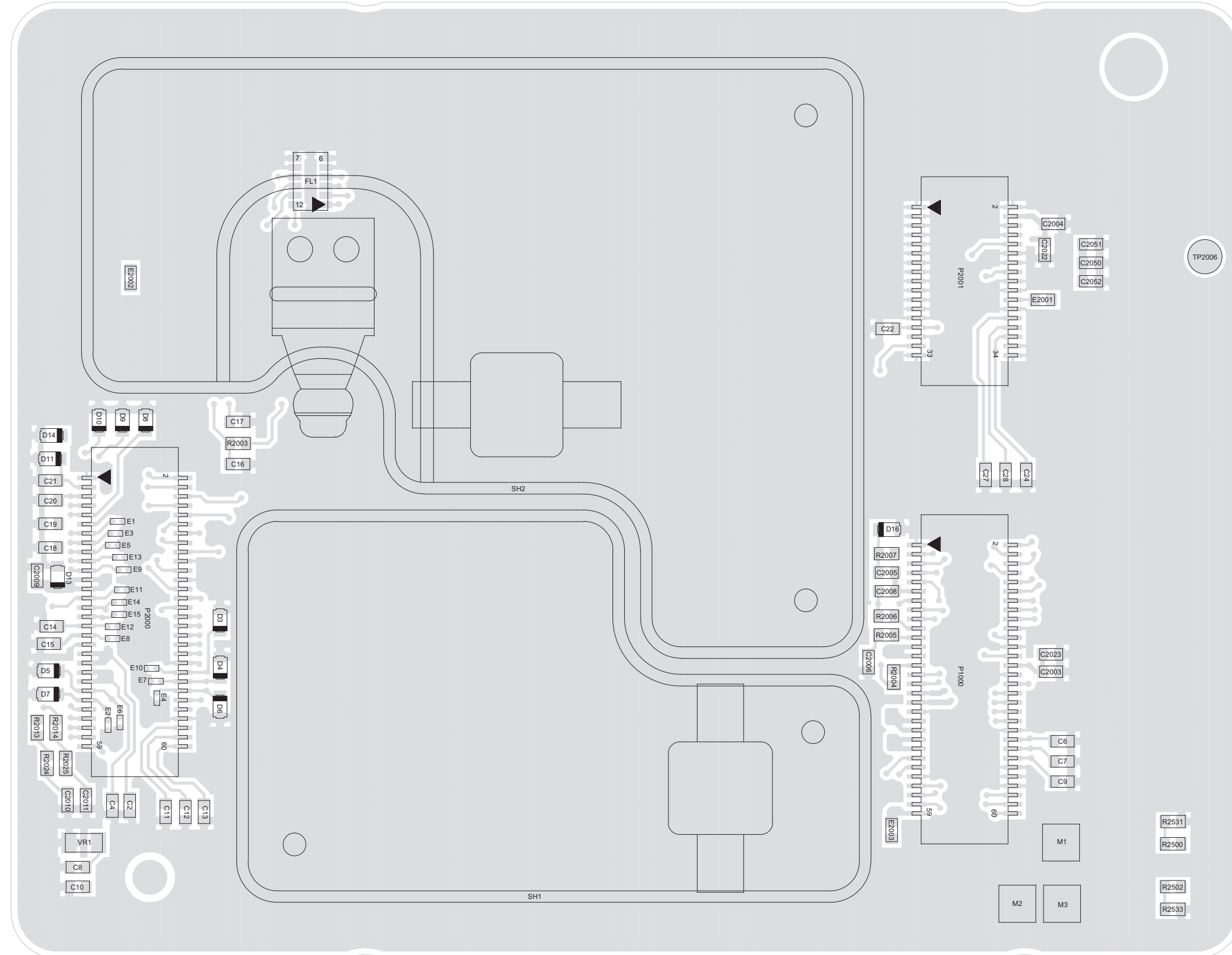


Figure 8-194. Keypad Lite Board Layout – Bottom Side



## PMCN4033A Keypad Lite Board Parts List

Ref. Des.	Part Number	Description
C2	2113944A40	CAPACITOR,CHIP,100PF,+5%,-5%,50V-DC,0402,C0G,-55DEG CMIN,125DEG CMAX,PB-FREE
C4	2113944A40	CAPACITOR,CHIP,100PF,+5%,-5%,50V-DC,0402,C0G,-55DEG CMIN,125DEG CMAX,PB-FREE
C6	2113944A40	CAPACITOR,CHIP,100PF,+5%,-5%,50V-DC,0402,C0G,-55DEG CMIN,125DEG CMAX,PB-FREE
C7	2113944A40	CAPACITOR,CHIP,100PF,+5%,-5%,50V-DC,0402,C0G,-55DEG CMIN,125DEG CMAX,PB-FREE
C8	2113944A40	CAPACITOR,CHIP,100PF,+5%,-5%,50V-DC,0402,C0G,-55DEG CMIN,125DEG CMAX,PB-FREE
C9	2113944A40	CAPACITOR,CHIP,100PF,+5%,-5%,50V-DC,0402,C0G,-55DEG CMIN,125DEG CMAX,PB-FREE
C10	2113944A40	CAPACITOR,CHIP,100PF,+5%,-5%,50V-DC,0402,C0G,-55DEG CMIN,125DEG CMAX,PB-FREE
C11	2113944A40	CAPACITOR,CHIP,100PF,+5%,-5%,50V-DC,0402,C0G,-55DEG CMIN,125DEG CMAX,PB-FREE
C12	2113944A40	CAPACITOR,CHIP,100PF,+5%,-5%,50V-DC,0402,C0G,-55DEG CMIN,125DEG CMAX,PB-FREE

Ref. Des.	Part Number	Description
C13	2113944A40	CAPACITOR,CHIP,100PF,+5%,-5%,50V-DC,0402,C0G,-55DEG CMIN,125DEG CMAX,PB-FREE
C14	2113944A40	CAPACITOR,CHIP,100PF,+5%,-5%,50V-DC,0402,C0G,-55DEG CMIN,125DEG CMAX,PB-FREE
C15	2113944A40	CAPACITOR,CHIP,100PF,+5%,-5%,50V-DC,0402,C0G,-55DEG CMIN,125DEG CMAX,PB-FREE
C16	2113944A40	CAPACITOR,CHIP,100PF,+5%,-5%,50V-DC,0402,C0G,-55DEG CMIN,125DEG CMAX,PB-FREE
C17	2113944A40	CAPACITOR,CHIP,100PF,+5%,-5%,50V-DC,0402,C0G,-55DEG CMIN,125DEG CMAX,PB-FREE
C18	2113944A40	CAPACITOR,CHIP,100PF,+5%,-5%,50V-DC,0402,C0G,-55DEG CMIN,125DEG CMAX,PB-FREE
C19	2113944A40	CAPACITOR,CHIP,100PF,+5%,-5%,50V-DC,0402,C0G,-55DEG CMIN,125DEG CMAX,PB-FREE
C20	2113944A40	CAPACITOR,CHIP,100PF,+5%,-5%,50V-DC,0402,C0G,-55DEG CMIN,125DEG CMAX,PB-FREE
C21	2113944A40	CAPACITOR,CHIP,100PF,+5%,-5%,50V-DC,0402,C0G,-55DEG CMIN,125DEG CMAX,PB-FREE

Ref. Des.	Part Number	Description
C22	2113944A40	CAPACITOR,CHIP,100PF,+5%,-5%,50V-DC,0402,C0G,-55DEG CMIN,125DEG CMAX,PB-FREE
C24	2113944A40	CAPACITOR,CHIP,100PF,+5%,-5%,50V-DC,0402,C0G,-55DEG CMIN,125DEG CMAX,PB-FREE
C27	2113944A40	CAPACITOR,CHIP,100PF,+5%,-5%,50V-DC,0402,C0G,-55DEG CMIN,125DEG CMAX,PB-FREE
C28	2113944A40	CAPACITOR,CHIP,100PF,+5%,-5%,50V-DC,0402,C0G,-55DEG CMIN,125DEG CMAX,PB-FREE
C2003	2113944A40	CAPACITOR,CHIP,100PF,+5%,-5%,50V-DC,0402,C0G,-55DEG CMIN,125DEG CMAX,PB-FREE
C2004	2113944A40	CAPACITOR,CHIP,100PF,+5%,-5%,50V-DC,0402,C0G,-55DEG CMIN,125DEG CMAX,PB-FREE
C2009	2113945A05	CAPACITOR,CHIP,470PF,+10%,-10%,50V-DC,0402,X7R,-55DEG CMIN,125DEG,CMAX,PB-FREE
C2010	2113945Y02	CAPACITOR,FIXED,.1UF,+10%,-10%,16V-DC,0402,X7R,-55DEG CMIN,125DEG,CMAX,PB-FREE
C2011	2113945Y02	CAPACITOR,FIXED,.1UF,+10%,-10%,16V-DC,0402,X7R,-55DEG CMIN,125DEG,CMAX,PB-FREE

Ref. Des.	Part Number	Description
C2022	2113944A26	CAPACITOR,CHIP,12PF,+5%,-5%,50V-DC,0402,C0G,-55DEG CMIN,125DEG CMAX,PB-FREE
C2023	2113944A26	CAPACITOR,CHIP,12PF,+5%,-5%,50V-DC,0402,C0G,-55DEG CMIN,125DEG CMAX,PB-FREE
C2050	2113946B04	CAPACITOR,CHIP,.1UF,+10%,-10%,10V-DC,0402,X5R,-55DEG CMIN,85DEG CMAX,PB-FREE
C2051	2113944A40	CAPACITOR,CHIP,100PF,+5%,-5%,50V-DC,0402,C0G,-55DEG CMIN,125DEG CMAX,PB-FREE
C2052	2113944A26	CAPACITOR,CHIP,12PF,+5%,-5%,50V-DC,0402,C0G,-55DEG CMIN,125DEG CMAX,PB-FREE
D1	4875053H01	DIODE,5V,25A,WHITE LED 0603 19-217 SMD 5V
D2	4875053H01	DIODE,5V,25A,WHITE LED 0603 19-217 SMD 5V
D3	4870359B01	DIODE,SUPPRESSOR,SM,7.82V,.1W,ESD PROTECTION,V360
D4	4870359B01	DIODE,SUPPRESSOR,SM,7.82V,.1W,ESD PROTECTION,V360
D5	4870359B01	DIODE,SUPPRESSOR,SM,7.82V,.1W,ESD PROTECTION,V360
D6	4870359B01	DIODE,SUPPRESSOR,SM,7.82V,.1W,ESD PROTECTION,V360
D7	4870359B01	DIODE,SUPPRESSOR,SM,7.82V,.1W,ESD PROTECTION,V360
D8	4870359B01	DIODE,SUPPRESSOR,SM,7.82V,.1W,ESD PROTECTION,V360

Ref. Des.	Part Number	Description
D9	4870359B01	DIODE,SUPPRESSOR,SM,7.82V,.1W,ESD PROTECTION,V360
D10	4870359B01	DIODE,SUPPRESSOR,SM,7.82V,.1W,ESD PROTECTION,V360
D11	4870359B01	DIODE,SUPPRESSOR,SM,7.82V,.1W,ESD PROTECTION,V360
D13	4870359B01	DIODE,SUPPRESSOR,SM,7.82V,.1W,ESD PROTECTION,V360
D14	4870359B01	DIODE,SUPPRESSOR,SM,7.82V,.1W,ESD PROTECTION,V360
D16	4870359B01	DIODE,SUPPRESSOR,SM,7.82V,.1W,ESD PROTECTION,V360
E1	NOTPLACED	64AM DUMMY PART NUMBER
E2	NOTPLACED	64AM DUMMY PART NUMBER
E3	NOTPLACED	64AM DUMMY PART NUMBER
E4	NOTPLACED	64AM DUMMY PART NUMBER
E5	NOTPLACED	64AM DUMMY PART NUMBER
E6	NOTPLACED	64AM DUMMY PART NUMBER
E7	NOTPLACED	64AM DUMMY PART NUMBER
E8	NOTPLACED	64AM DUMMY PART NUMBER
E9	NOTPLACED	64AM DUMMY PART NUMBER
E10	NOTPLACED	64AM DUMMY PART NUMBER
E11	NOTPLACED	64AM DUMMY PART NUMBER
E12	NOTPLACED	64AM DUMMY PART NUMBER

Ref. Des.	Part Number	Description
E13	NOTPLACED	64AM DUMMY PART NUMBER
E14	NOTPLACED	64AM DUMMY PART NUMBER
E15	NOTPLACED	64AM DUMMY PART NUMBER
E2001	7685268E01	FILTER,FERRITE BEAD,650MA,SM,0402,CHIP,80OHM
E2002	7685268E01	FILTER,FERRITE BEAD,650MA,SM,0402,CHIP,80OHM
E2003	7685268E01	FILTER,FERRITE BEAD,650MA,SM,0402,CHIP,80OHM
FL1	9171981H01	EMI FILTER,EMI/RFI,FILTER 6 CHANNEL EMI ESD 12PIN
M1	NOTPLACED	64AM DUMMY PART NUMBER
M2	NOTPLACED	64AM DUMMY PART NUMBER
M3	NOTPLACED	64AM DUMMY PART NUMBER
P1000	0970312N01	CONNECTOR,BOARD TO BOARD,RECEPTACLE,60C ONT,.4MM,GOLD,1 STACK HGT
P2000	0970312N01	CONNECTOR,BOARD TO BOARD,RECEPTACLE,60C ONT,.4MM,GOLD,1 STACK HGT
P2001	9012073001	CONNECTOR,BOARD TO BOARD,RECEPTACLE,34C ONT,.4MM,GOLD,STRAIGHT,CONNECTOR, B2B RECEPTACLE 34PINS
PASTE	11012015001	SOLDER,PASTE,CARTRIDGE,SOLDER PASTE - 9.0A, LOW VOID
PWB	84012559001	PCB,BOARD, PC , LITE KEYPAD
R16	0613952Q67	RESISTOR,METAL FILM,560OHM,5%,.0625W,SM,0402,200PPM/CEL,PB-FREE

Ref. Des.	Part Number	Description
R19	0613952Q67	RESISTOR,METAL FILM,560OHM,5%,.0625W,SM,0402,200PPM/CEL,PB-FREE
R2003	0613952Q53	RESISTOR,METAL FILM,150OHM,5%,.0625W,SM,0402,200PPM/CEL,PB-FREE
R2004	0613952Q49	RESISTOR,METAL FILM,100OHM,5%,.0625W,SM,0402,200PPM/CEL,PB-FREE
R2005	0613952Q66	RESISTOR,METAL FILM,510OHM,5%,.0625W,SM,0402,200PPM/CEL,PB-FREE
R2006	0613952R66	RESISTOR,METAL FILM,0OHM,5%,.0625W,SM,0402,PB-FREE
R2007	0613952Q49	RESISTOR,METAL FILM,100OHM,5%,.0625W,SM,0402,200PPM/CEL,PB-FREE
R2013	0613952R66	RESISTOR,METAL FILM,0OHM,5%,.0625W,SM,0402,PB-FREE
R2014	0613952R66	RESISTOR,METAL FILM,0OHM,5%,.0625W,SM,0402,PB-FREE
R2024	0613952Q09	RESISTOR,METAL FILM,2.2OHM,5%,.0625W,SM,0402,200PPM/CEL,PB-FREE
R2025	0613952Q09	RESISTOR,METAL FILM,3.3KOHM,5%,.0625W,SM,0402,200PPM/CEL,PB-FREE
R2531	0613952Q85	RESISTOR,METAL FILM,10KOHM,5%,.0625W,SM,0402,200PPM/CEL,PB-FREE
S19	NOTPLACED	64AM DUMMY PART NUMBER
S20	NOTPLACED	64AM DUMMY PART NUMBER

Ref. Des.	Part Number	Description
S21	NOTPLACED	64AM DUMMY PART NUMBER
SH1	26012170001	SHIELD,CAN,STEEL,TIN PLATED,SHIELD, MACE
SH2	26012171001	SHIELD,CAN,STEEL,TIN PLATED,SHIELD, SDRAM
PWB	84012559002	PCB,BOARD, PC , LITE KEYPAD
TP2006	NOTPLACED	64AM DUMMY PART NUMBER
VR1	NOTPLACED	64AM DUMMY PART NUMBER

### 8.9 Keypad Board (APX 2000/ APX 4000 (Two Knobs)) (PC000356A02 (Model 2) / PC000356A01 (Model 3))

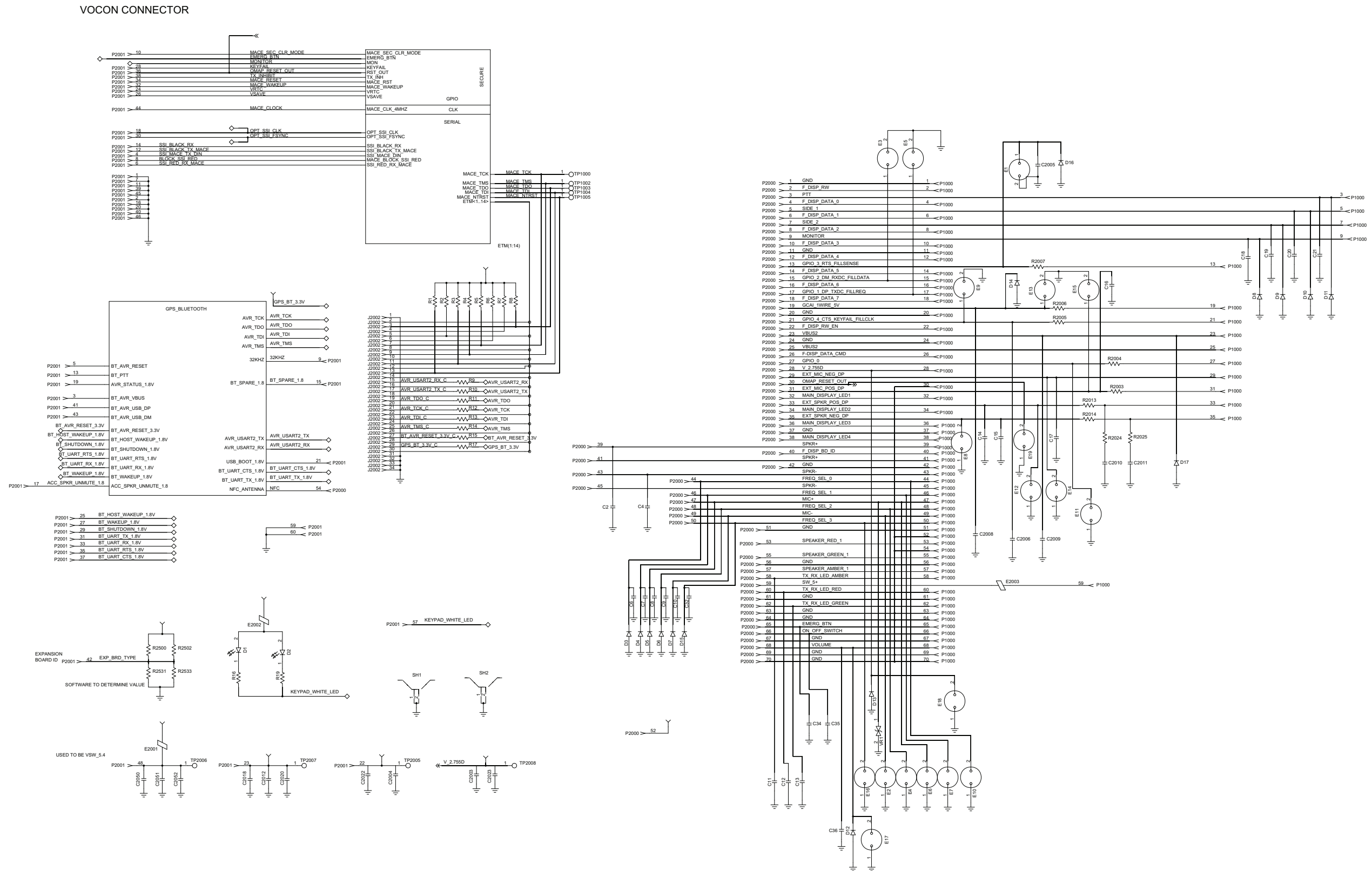
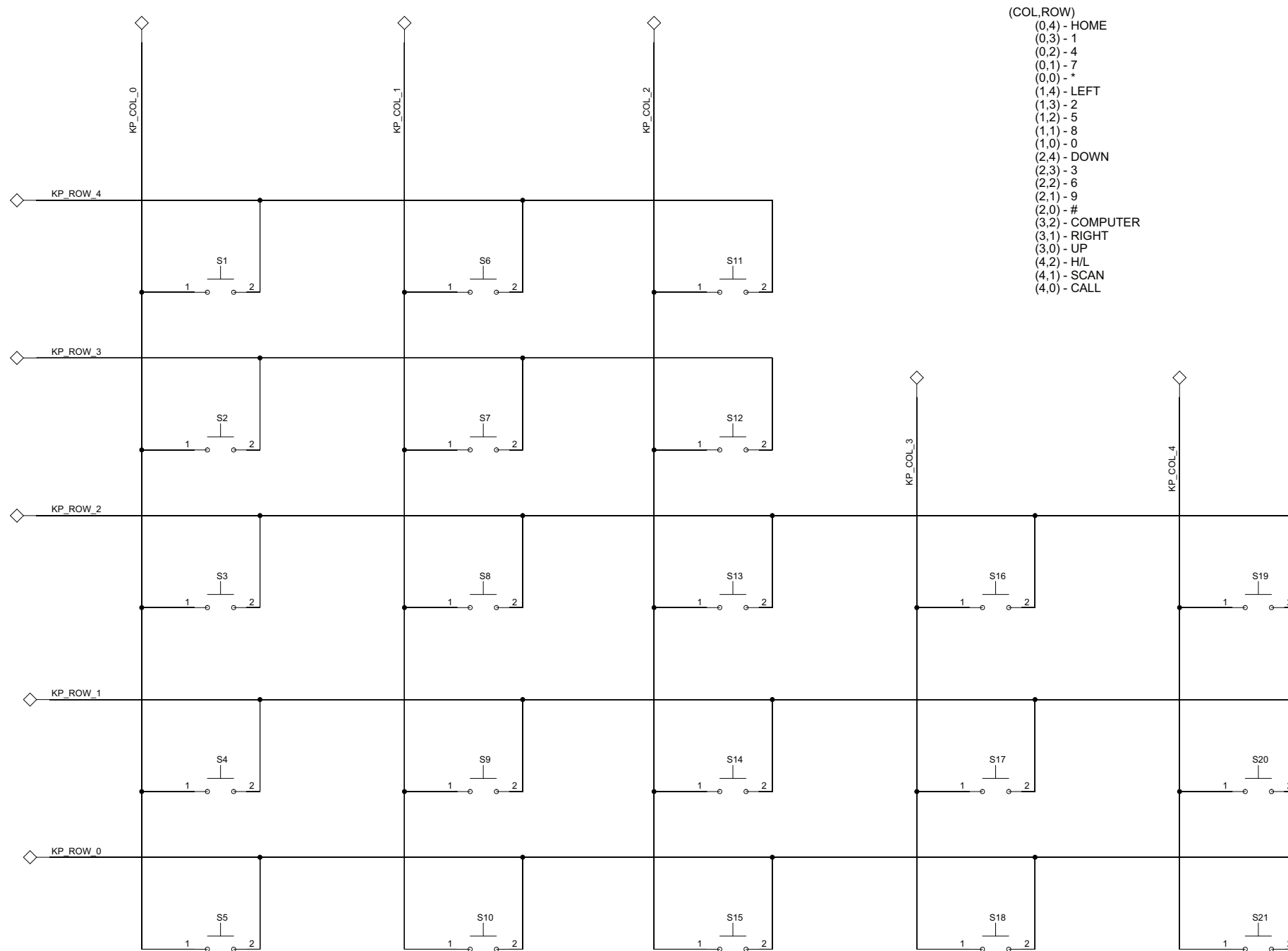


Figure 8-195. Keypad Board Overall Circuit Schematic (Expanded)



- (COL,ROW)  
 (0,4) - HOME  
 (0,3) - 1  
 (0,2) - 4  
 (0,1) - 7  
 (0,0) - \*  
 (1,4) - LEFT  
 (1,3) - 2  
 (1,2) - 5  
 (1,1) - 8  
 (1,0) - 0  
 (2,4) - DOWN  
 (2,3) - 3  
 (2,2) - 6  
 (2,1) - 9  
 (2,0) - #  
 (3,2) - COMPUTER  
 (3,1) - RIGHT  
 (3,0) - UP  
 (4,2) - H/L  
 (4,1) - SCAN  
 (4,0) - CALL

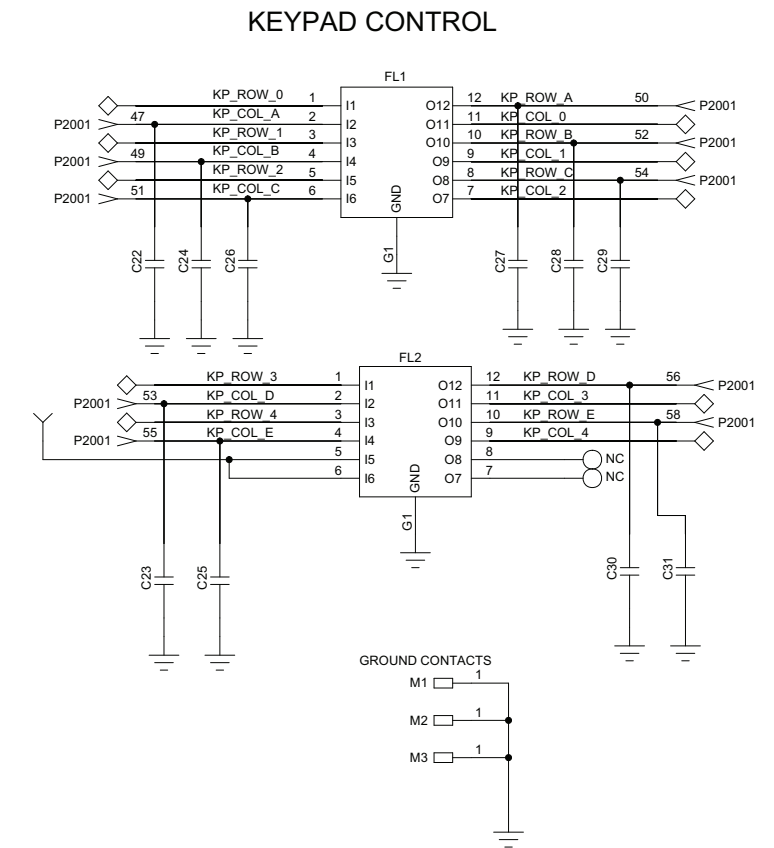


Figure 8-196. Keypad Matrix Circuit (Expanded)

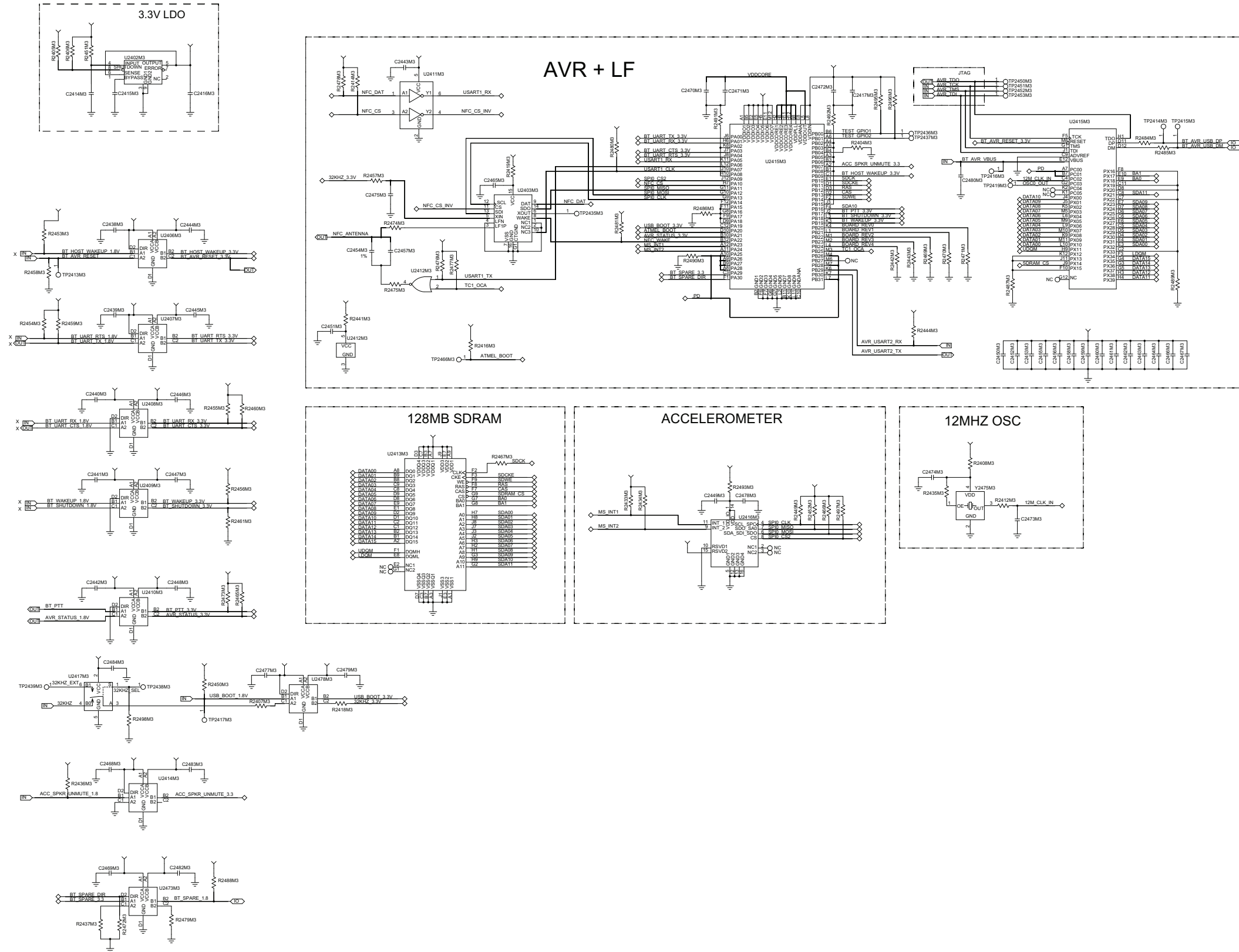


Figure 8-197. GPS Bluetooth Circuit

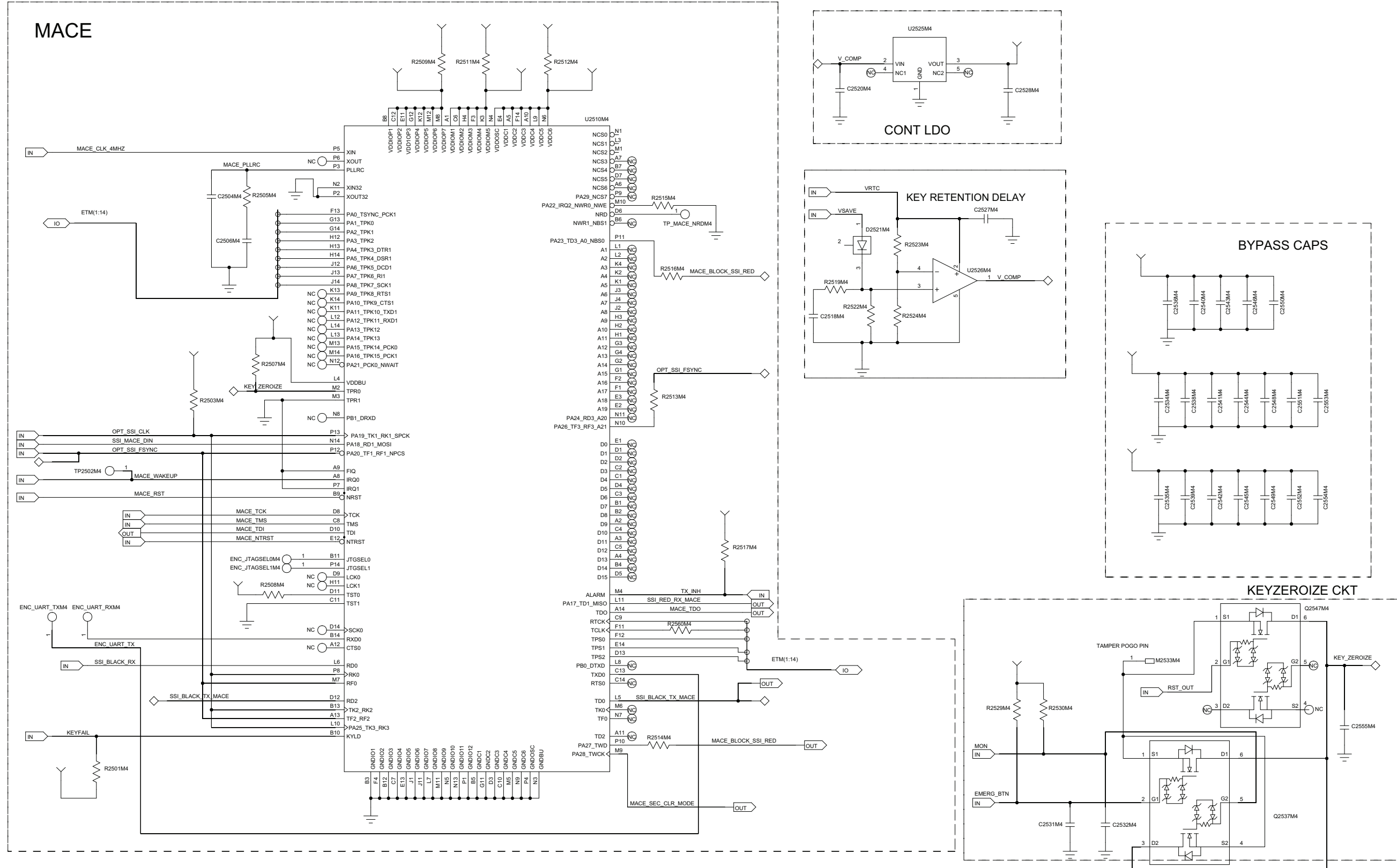


Figure 8-198. MACE Circuit

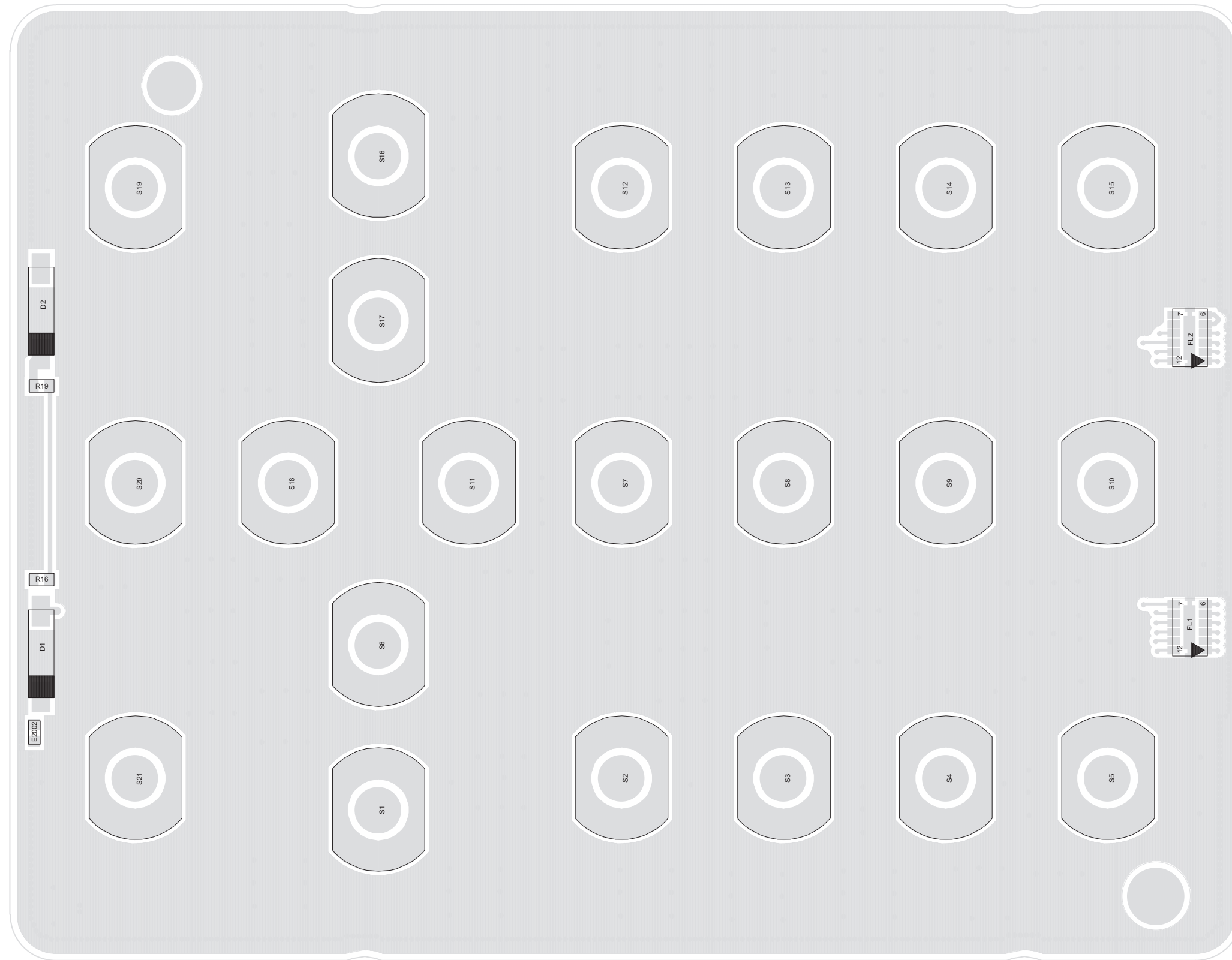


Figure 8-199. Keypad Board Layout – Top Side

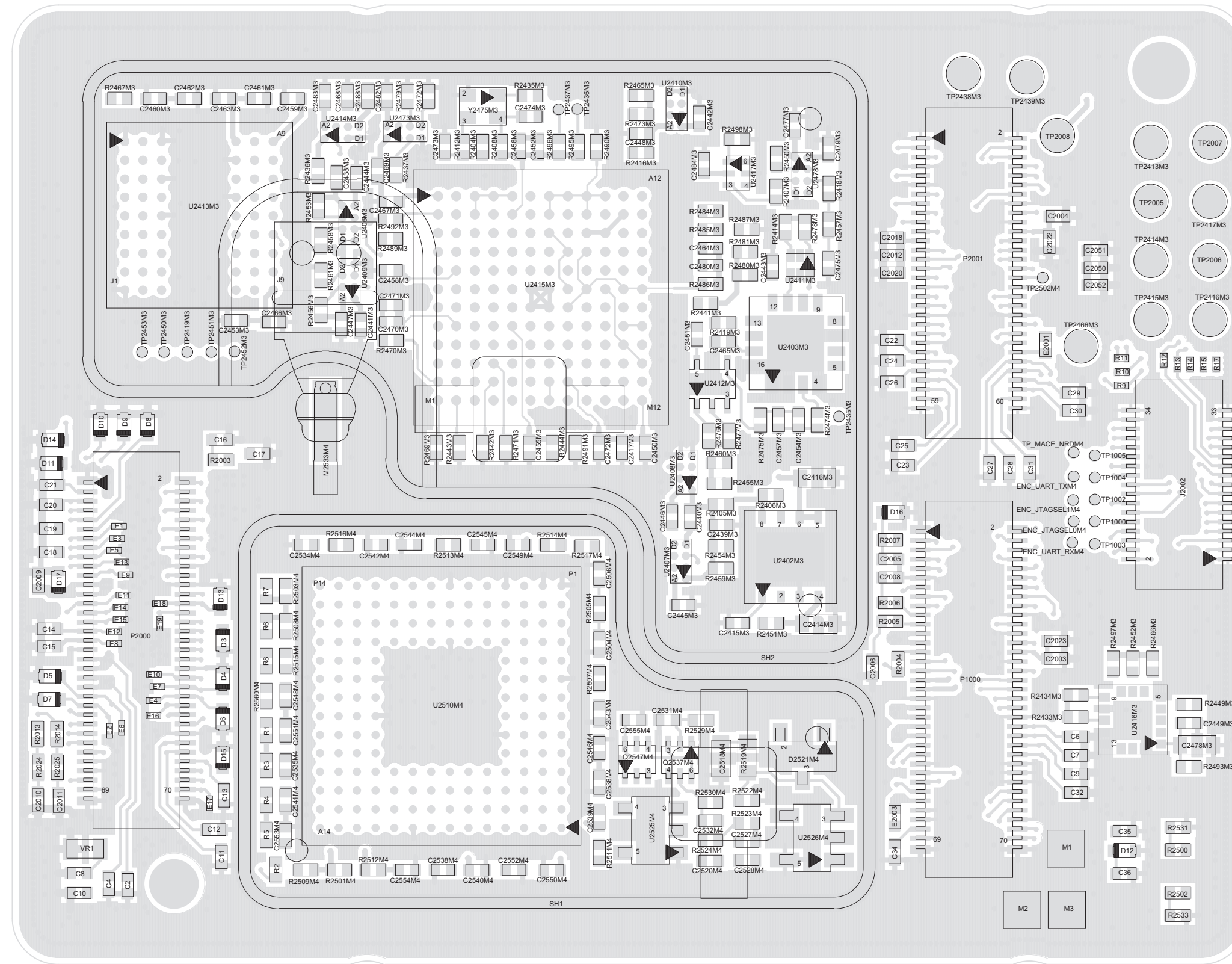


Figure 8-200. Keypad Board Layout – Bottom Side



## PC000356A02 Keypad Board Model 2 Parts List

Ref. Des.	Part Number	Description
C10	2113944A40	CAP,CHIP,100PF,+5%,-5%,50V-DC,0402,C0G,-55DEG CMIN,125DEG CMAX
C11	2113944A40	CAP,CHIP,100PF,+5%,-5%,50V-DC,0402,C0G,-55DEG CMIN,125DEG CMAX
C12	2113944A40	CAP,CHIP,100PF,+5%,-5%,50V-DC,0402,C0G,-55DEG CMIN,125DEG CMAX
C13	2113944A40	CAP,CHIP,100PF,+5%,-5%,50V-DC,0402,C0G,-55DEG CMIN,125DEG CMAX
C14	2113944A40	CAP,CHIP,100PF,+5%,-5%,50V-DC,0402,C0G,-55DEG CMIN,125DEG CMAX
C15	2113944A40	CAP,CHIP,100PF,+5%,-5%,50V-DC,0402,C0G,-55DEG CMIN,125DEG CMAX
C16	2113944A40	CAP,CHIP,100PF,+5%,-5%,50V-DC,0402,C0G,-55DEG CMIN,125DEG CMAX
C17	2113944A40	CAP,CHIP,100PF,+5%,-5%,50V-DC,0402,C0G,-55DEG CMIN,125DEG CMAX
C18	2113944A40	CAP,CHIP,100PF,+5%,-5%,50V-DC,0402,C0G,-55DEG CMIN,125DEG CMAX
C19	2113944A40	CAP,CHIP,100PF,+5%,-5%,50V-DC,0402,C0G,-55DEG CMIN,125DEG CMAX
C2	2113944A40	CAP,CHIP,100PF,+5%,-5%,50V-DC,0402,C0G,-55DEG CMIN,125DEG CMAX

Ref. Des.	Part Number	Description
C20	2113944A40	CAP,CHIP,100PF,+5%,-5%,50V-DC,0402,C0G,-55DEG CMIN,125DEG CMAX
C2003	2113944A40	CAP,CHIP,100PF,+5%,-5%,50V-DC,0402,C0G,-55DEG CMIN,125DEG CMAX
C2004	2113944A40	CAP,CHIP,100PF,+5%,-5%,50V-DC,0402,C0G,-55DEG CMIN,125DEG CMAX
C2005	NOTPLACED	64AM DUMMY PART NUMBER
C2006	NOTPLACED	64AM DUMMY PART NUMBER
C2008	NOTPLACED	64AM DUMMY PART NUMBER
C2009	2113945A05	CAP,CHIP,470PF,+10%,-10%,50V-DC,0402,X7R,-55DEG CMIN,125DEG CMA
C2010	2113945Y02	CAPACITOR, FIXED, .1UF, +10%, -10%, 16V-DC, 0402, X7R, -55DEG CMIN, 125DEG, CMAX, PB-FREE
C2011	2113945Y02	CAPACITOR, FIXED, .1UF, +10%, -10%, 16V-DC, 0402, X7R, -55DEG CMIN, 125DEG, CMAX, PB-FREE
C2012	2113944A40	CAP,CHIP,100PF,+5%,-5%,50V-DC,0402,C0G,-55DEG CMIN,125DEG CMAX
C2018	2113946B04	CAP,CHIP,.1UF,+10%,-10%,10V-DC,0402,X5R,-55DEG CMIN,85DEG CMAX
C2020	2113944A26	CAP,CHIP,12PF,+5%,-5%,50V-DC,0402,C0G,-55DEG CMIN,125DEG CMAX,P

Ref. Des.	Part Number	Description
C2022	2113944A26	CAP,CHIP,12PF,+5%,-5%,50V-DC,0402,C0G,-55DEG CMIN,125DEG CMAX,P
C2023	2113944A26	CAP,CHIP,12PF,+5%,-5%,50V-DC,0402,C0G,-55DEG CMIN,125DEG CMAX,P
C2050	2113946B04	CAP,CHIP,.1UF,+10%,-10%,10V-DC,0402,X5R,-55DEG CMIN,85DEG CMAX
C2051	2113944A40	CAP,CHIP,100PF,+5%,-5%,50V-DC,0402,C0G,-55DEG CMIN,125DEG CMAX
C2052	2113944A26	CAP,CHIP,12PF,+5%,-5%,50V-DC,0402,C0G,-55DEG CMIN,125DEG CMAX,P
C21	2113944A40	CAP,CHIP,100PF,+5%,-5%,50V-DC,0402,C0G,-55DEG CMIN,125DEG CMAX
C22	2113944A40	CAP,CHIP,100PF,+5%,-5%,50V-DC,0402,C0G,-55DEG CMIN,125DEG CMAX
C23	2113944A40	CAP,CHIP,100PF,+5%,-5%,50V-DC,0402,C0G,-55DEG CMIN,125DEG CMAX
C24	2113944A40	CAP,CHIP,100PF,+5%,-5%,50V-DC,0402,C0G,-55DEG CMIN,125DEG CMAX
C2414M3	2113946D07	CAP,CHIP,4.7UF,+10%,-10%,6.3V-DC,0603,X5R,-55DEG CMIN,85DEG CMA
C2415M3	2113945B02	CAP,CHIP,.01UF,+10%,-10%,25V-DC,0402,X7R,-55DEG CMIN,125DEG CMA
C2416M3	2113946D07	CAP,CHIP,4.7UF,+10%,-10%,6.3V-DC,0603,X5R,-55DEG CMIN,85DEG CMA

Ref. Des.	Part Number	Description
C2417M3	2171206F01	CAP,CER CHIP,4.7UF,+20%,-20%,4V-DC,0402,X5R,MONO,SMD,W18
C2438M3	2113945Y02	CAPACITOR, FIXED, .1UF, +10%, -10%, 16V-DC, 0402, X7R, -55DEG CMIN, 125DEG, CMAX, PB-FREE
C2439M3	2113945Y02	CAPACITOR, FIXED, .1UF, +10%, -10%, 16V-DC, 0402, X7R, -55DEG CMIN, 125DEG, CMAX, PB-FREE
C2440M3	2113945Y02	CAPACITOR, FIXED, .1UF, +10%, -10%, 16V-DC, 0402, X7R, -55DEG CMIN, 125DEG, CMAX, PB-FREE
C2441M3	2113945Y02	CAPACITOR, FIXED, .1UF, +10%, -10%, 16V-DC, 0402, X7R, -55DEG CMIN, 125DEG, CMAX, PB-FREE
C2442M3	2113945Y02	CAPACITOR, FIXED, .1UF, +10%, -10%, 16V-DC, 0402, X7R, -55DEG CMIN, 125DEG, CMAX, PB-FREE
C2443M3	2113945Y02	CAPACITOR, FIXED, .1UF, +10%, -10%, 16V-DC, 0402, X7R, -55DEG CMIN, 125DEG, CMAX, PB-FREE
C2444M3	2113945Y02	CAPACITOR, FIXED, .1UF, +10%, -10%, 16V-DC, 0402, X7R, -55DEG CMIN, 125DEG, CMAX, PB-FREE

Ref. Des.	Part Number	Description
C2445M3	2113945Y02	CAPACITOR, FIXED, .1UF, +10%, -10%, 16V-DC, 0402, X7R, -55DEG CMIN, 125DEG, CMAX, PB-FREE
C2446M3	2113945Y02	CAPACITOR, FIXED, .1UF, +10%, -10%, 16V-DC, 0402, X7R, -55DEG CMIN, 125DEG, CMAX, PB-FREE
C2447M3	2113945Y02	CAPACITOR, FIXED, .1UF, +10%, -10%, 16V-DC, 0402, X7R, -55DEG CMIN, 125DEG, CMAX, PB-FREE
C2448M3	2113945Y02	CAPACITOR, FIXED, .1UF, +10%, -10%, 16V-DC, 0402, X7R, -55DEG CMIN, 125DEG, CMAX, PB-FREE
C2449M3	2113945Y02	CAPACITOR, FIXED, .1UF, +10%, -10%, 16V-DC, 0402, X7R, -55DEG CMIN, 125DEG, CMAX, PB-FREE
C2450M3	2113945Y02	CAPACITOR, FIXED, .1UF, +10%, -10%, 16V-DC, 0402, X7R, -55DEG CMIN, 125DEG, CMAX, PB-FREE
C2451M3	2113945Y02	CAPACITOR, FIXED, .1UF, +10%, -10%, 16V-DC, 0402, X7R, -55DEG CMIN, 125DEG, CMAX, PB-FREE
C2452M3	2113945Y02	CAPACITOR, FIXED, .1UF, +10%, -10%, 16V-DC, 0402, X7R, -55DEG CMIN, 125DEG, CMAX, PB-FREE

Ref. Des.	Part Number	Description
C2453M3	2113945Y02	CAPACITOR, FIXED, .1UF, +10%, -10%, 16V-DC, 0402, X7R, -55DEG CMIN, 125DEG, CMAX, PB-FREE
C2454M3	2171051Y01	CAP, CER CHIP, 220PF, +1%, -1%, 50V-DC, 0402, COG, -55DEG CMIN, 125DEG C
C2455M3	2113945Y02	CAPACITOR, FIXED, .1UF, +10%, -10%, 16V-DC, 0402, X7R, -55DEG CMIN, 125DEG, CMAX, PB-FREE
C2456M3	2113945Y02	CAPACITOR, FIXED, .1UF, +10%, -10%, 16V-DC, 0402, X7R, -55DEG CMIN, 125DEG, CMAX, PB-FREE
C2457M3	2113944A28	CAP, CHIP, 18PF, +5%, -5%, 50V-DC, 0402, COG, -55DEG CMIN, 125DEG CMAX, P
C2458M3	2113945Y02	CAPACITOR, FIXED, .1UF, +10%, -10%, 16V-DC, 0402, X7R, -55DEG CMIN, 125DEG, CMAX, PB-FREE
C2459M3	2113945Y02	CAPACITOR, FIXED, .1UF, +10%, -10%, 16V-DC, 0402, X7R, -55DEG CMIN, 125DEG, CMAX, PB-FREE
C2460M3	2113945Y02	CAPACITOR, FIXED, .1UF, +10%, -10%, 16V-DC, 0402, X7R, -55DEG CMIN, 125DEG, CMAX, PB-FREE
C2461M3	2113945Y02	CAPACITOR, FIXED, .1UF, +10%, -10%, 16V-DC, 0402, X7R, -55DEG CMIN, 125DEG, CMAX, PB-FREE

Ref. Des.	Part Number	Description
C2462M3	2113945Y02	CAPACITOR, FIXED, .1UF, +10%, -10%, 16V-DC, 0402, X7R, -55DEG CMIN, 125DEG, CMAX, PB-FREE
C2463M3	2113945Y02	CAPACITOR, FIXED, .1UF, +10%, -10%, 16V-DC, 0402, X7R, -55DEG CMIN, 125DEG, CMAX, PB-FREE
C2464M3	2113945Y02	CAPACITOR, FIXED, .1UF, +10%, -10%, 16V-DC, 0402, X7R, -55DEG CMIN, 125DEG, CMAX, PB-FREE
C2465M3	2113956A51	CAP, FXD, 1UF, +10%, -10%, 6.3V-DC, 0402, X5R, -55DEG CMIN, 85DEG CMAX, P
C2466M3	2113945Y02	CAPACITOR, FIXED, .1UF, +10%, -10%, 16V-DC, 0402, X7R, -55DEG CMIN, 125DEG, CMAX, PB-FREE
C2467M3	2113945Y02	CAPACITOR, FIXED, .1UF, +10%, -10%, 16V-DC, 0402, X7R, -55DEG CMIN, 125DEG, CMAX, PB-FREE
C2468M3	2113945Y02	CAPACITOR, FIXED, .1UF, +10%, -10%, 16V-DC, 0402, X7R, -55DEG CMIN, 125DEG, CMAX, PB-FREE
C2469M3	2113945Y02	CAPACITOR, FIXED, .1UF, +10%, -10%, 16V-DC, 0402, X7R, -55DEG CMIN, 125DEG, CMAX, PB-FREE
C2470M3	2172180Y01	CAP, FXD, 2.2UF, +20%, -20%, 6.3V-DC, 0402, X5R, -55DEG CMIN, 85DEG CMAX

Ref. Des.	Part Number	Description
C2471M3	2113945A05	CAP, CHIP, 470PF, +10%, -10%, 50V-DC, 0402, X7R, -55DEG CMIN, 125DEG CMA
C2472M3	2113945A09	CAP, CHIP, 1000PF, +10%, -10%, 50V-DC, 0402, X7R, -55DEG CMIN, 125DEG CM
C2473M3	2113944A25	CAP, CHIP, 10PF, .5PF +/-, 50V-DC, 0402, COG, -55DEG CMIN, 125DEG CMAX
C2474M3	2113945Y02	CAPACITOR, FIXED, .1UF, +10%, -10%, 16V-DC, 0402, X7R, -55DEG CMIN, 125DEG, CMAX, PB-FREE
C2475M3	2113945A09	CAP, CHIP, 1000PF, +10%, -10%, 50V-DC, 0402, X7R, -55DEG CMIN, 125DEG CM
C2477M3	2113945Y02	CAPACITOR, FIXED, .1UF, +10%, -10%, 16V-DC, 0402, X7R, -55DEG CMIN, 125DEG, CMAX, PB-FREE
C2478M3	2113956B54	CAP, FXD, 10UF, +20%, -20%, 6.3V-DC, X5R, -55DEG CMIN, 85DEG CMAX
C2479M3	2113945Y02	CAPACITOR, FIXED, .1UF, +10%, -10%, 16V-DC, 0402, X7R, -55DEG CMIN, 125DEG, CMAX, PB-FREE
C2480M3	2113956A51	CAP, FXD, 1UF, +10%, -10%, 6.3V-DC, 0402, X5R, -55DEG CMIN, 85DEG CMAX, P
C2482M3	2113945Y02	CAPACITOR, FIXED, .1UF, +10%, -10%, 16V-DC, 0402, X7R, -55DEG CMIN, 125DEG, CMAX, PB-FREE

Ref. Des.	Part Number	Description
C2483M3	2113945Y02	CAPACITOR, FIXED, .1UF, +10%, -10%, 16V-DC, 0402, X7R, -55DEG CMIN, 125DEG, CMAX, PB-FREE
C2484M3	2113945Y02	CAPACITOR, FIXED, .1UF, +10%, -10%, 16V-DC, 0402, X7R, -55DEG CMIN, 125DEG, CMAX, PB-FREE
C25	2113944A40	CAP, CHIP, 100PF, +5%, -5%, 50V-DC, 0402, C0G, -55DEG CMIN, 125DEG CMAX
C2504M4	2113945A09	CAP, CHIP, 1000PF, +10%, -10%, 50V-DC, 0402, X7R, -55DEG CMIN, 125DEG CM
C2506M4	2113945B02	CAP, CHIP, .01UF, +10%, -10%, 25V-DC, 0402, X7R, -55DEG CMIN, 125DEG CMA
C2518M4	2113956B33	CAP, FXD, 2.2UF, +10%, -10%, 16V-DC, 0603, X5R, -55DEG CMIN, 85DEG CMAX
C2520M4	2113946B04	CAP, CHIP, .1UF, +10%, -10%, 10V-DC, 0402, X5R, -55DEG CMIN, 85DEG CMAX
C2527M4	2113946B04	CAP, CHIP, .1UF, +10%, -10%, 10V-DC, 0402, X5R, -55DEG CMIN, 85DEG CMAX
C2528M4	2113946B04	CAP, CHIP, .1UF, +10%, -10%, 10V-DC, 0402, X5R, -55DEG CMIN, 85DEG CMAX
C2531M4	2113946B04	CAP, CHIP, .1UF, +10%, -10%, 10V-DC, 0402, X5R, -55DEG CMIN, 85DEG CMAX
C2532M4	2113946B04	CAP, CHIP, .1UF, +10%, -10%, 10V-DC, 0402, X5R, -55DEG CMIN, 85DEG CMAX

Ref. Des.	Part Number	Description
C2534M4	2113946B04	CAP, CHIP, .1UF, +10%, -10%, 10V-DC, 0402, X5R, -55DEG CMIN, 85DEG CMAX
C2535M4	2113946B04	CAP, CHIP, .1UF, +10%, -10%, 10V-DC, 0402, X5R, -55DEG CMIN, 85DEG CMAX
C2536M4	2113946B04	CAP, CHIP, .1UF, +10%, -10%, 10V-DC, 0402, X5R, -55DEG CMIN, 85DEG CMAX
C2538M4	2113946B04	CAP, CHIP, .1UF, +10%, -10%, 10V-DC, 0402, X5R, -55DEG CMIN, 85DEG CMAX
C2539M4	2113946B04	CAP, CHIP, .1UF, +10%, -10%, 10V-DC, 0402, X5R, -55DEG CMIN, 85DEG CMAX
C2540M4	2113946B04	CAP, CHIP, .1UF, +10%, -10%, 10V-DC, 0402, X5R, -55DEG CMIN, 85DEG CMAX
C2541M4	2113946B04	CAP, CHIP, .1UF, +10%, -10%, 10V-DC, 0402, X5R, -55DEG CMIN, 85DEG CMAX
C2542M4	2113946B04	CAP, CHIP, .1UF, +10%, -10%, 10V-DC, 0402, X5R, -55DEG CMIN, 85DEG CMAX
C2543M4	2113946B04	CAP, CHIP, .1UF, +10%, -10%, 10V-DC, 0402, X5R, -55DEG CMIN, 85DEG CMAX
C2544M4	2113946B04	CAP, CHIP, .1UF, +10%, -10%, 10V-DC, 0402, X5R, -55DEG CMIN, 85DEG CMAX
C2545M4	2113946B04	CAP, CHIP, .1UF, +10%, -10%, 10V-DC, 0402, X5R, -55DEG CMIN, 85DEG CMAX
C2546M4	2113946B04	CAP, CHIP, .1UF, +10%, -10%, 10V-DC, 0402, X5R, -55DEG CMIN, 85DEG CMAX

Ref. Des.	Part Number	Description
C2548M4	2113946B04	CAP, CHIP, .1UF, +10%, -10%, 10V-DC, 0402, X5R, -55DEG CMIN, 85DEG CMAX
C2549M4	2113946B04	CAP, CHIP, .1UF, +10%, -10%, 10V-DC, 0402, X5R, -55DEG CMIN, 85DEG CMAX
C2550M4	2113946B04	CAP, CHIP, .1UF, +10%, -10%, 10V-DC, 0402, X5R, -55DEG CMIN, 85DEG CMAX
C2551M4	2113946B04	CAP, CHIP, .1UF, +10%, -10%, 10V-DC, 0402, X5R, -55DEG CMIN, 85DEG CMAX
C2552M4	2113946B04	CAP, CHIP, .1UF, +10%, -10%, 10V-DC, 0402, X5R, -55DEG CMIN, 85DEG CMAX
C2553M4	2113946B04	CAP, CHIP, .1UF, +10%, -10%, 10V-DC, 0402, X5R, -55DEG CMIN, 85DEG CMAX
C2554M4	2113946B04	CAP, CHIP, .1UF, +10%, -10%, 10V-DC, 0402, X5R, -55DEG CMIN, 85DEG CMAX
C2555M4	2113946B04	CAP, CHIP, .1UF, +10%, -10%, 10V-DC, 0402, X5R, -55DEG CMIN, 85DEG CMAX
C26	2113944A40	CAP, CHIP, 100PF, +5%, -5%, 50V-DC, 0402, C0G, -55DEG CMIN, 125DEG CMAX
C27	2113944A40	CAP, CHIP, 100PF, +5%, -5%, 50V-DC, 0402, C0G, -55DEG CMIN, 125DEG CMAX
C28	2113944A40	CAP, CHIP, 100PF, +5%, -5%, 50V-DC, 0402, C0G, -55DEG CMIN, 125DEG CMAX
C29	2113944A40	CAP, CHIP, 100PF, +5%, -5%, 50V-DC, 0402, C0G, -55DEG CMIN, 125DEG CMAX

Ref. Des.	Part Number	Description
C30	2113944A40	CAP, CHIP, 100PF, +5%, -5%, 50V-DC, 0402, C0G, -55DEG CMIN, 125DEG CMAX
C31	2113944A40	CAP, CHIP, 100PF, +5%, -5%, 50V-DC, 0402, C0G, -55DEG CMIN, 125DEG CMAX
C32	2113944A40	CAP, CHIP, 100PF, +5%, -5%, 50V-DC, 0402, C0G, -55DEG CMIN, 125DEG CMAX
C34	2113944A40	CAP, CHIP, 100PF, +5%, -5%, 50V-DC, 0402, C0G, -55DEG CMIN, 125DEG CMAX
C35	2113944A40	CAP, CHIP, 100PF, +5%, -5%, 50V-DC, 0402, C0G, -55DEG CMIN, 125DEG CMAX
C36	2113944A40	CAP, CHIP, 100PF, +5%, -5%, 50V-DC, 0402, C0G, -55DEG CMIN, 125DEG CMAX
C4	2113944A40	CAP, CHIP, 100PF, +5%, -5%, 50V-DC, 0402, C0G, -55DEG CMIN, 125DEG CMAX
C6	2113944A40	CAP, CHIP, 100PF, +5%, -5%, 50V-DC, 0402, C0G, -55DEG CMIN, 125DEG CMAX
C7	2113944A40	CAP, CHIP, 100PF, +5%, -5%, 50V-DC, 0402, C0G, -55DEG CMIN, 125DEG CMAX
C8	2113944A40	CAP, CHIP, 100PF, +5%, -5%, 50V-DC, 0402, C0G, -55DEG CMIN, 125DEG CMAX
C9	2113944A40	CAP, CHIP, 100PF, +5%, -5%, 50V-DC, 0402, C0G, -55DEG CMIN, 125DEG CMAX
D1	48009289001	LED ARRAY, LED, 5V, 25A, WHITE, SMT, 85, WHT 2 PIN SIDE FIRE LED HI

Ref. Des.	Part Number	Description
D10	4870359B01	DIODE,SUPR,SM,7.82V,.1 W,ESD PROT,V360
D11	4870359B01	DIODE,SUPR,SM,7.82V,.1 W,ESD PROT,V360
D12	4870359B01	DIODE,SUPR,SM,7.82V,.1 W,ESD PROT,V360
D13	4870359B01	DIODE,SUPR,SM,7.82V,.1 W,ESD PROT,V360
D14	4870359B01	DIODE,SUPR,SM,7.82V,.1 W,ESD PROT,V360
D15	4870359B01	DIODE,SUPR,SM,7.82V,.1 W,ESD PROT,V360
D16	4870359B01	DIODE,SUPR,SM,7.82V,.1 W,ESD PROT,V360
D17	NOTPLACED	64AM DUMMY PART NUMBER
D2	48009289001	LED ARRAY,LED,5V,25A,WHITE,SMT,85,WHT 2 PIN SIDE FIRE LED HI
D2521M4	4871785H01	DIODE,SWG,BAS116LT1G,SOT-23/SC-59,SOT-23,200MA,75V,.225W,SWG DI
D3	4870359B01	DIODE,SUPR,SM,7.82V,.1 W,ESD PROT,V360
D4	4870359B01	DIODE,SUPR,SM,7.82V,.1 W,ESD PROT,V360
D5	4870359B01	DIODE,SUPR,SM,7.82V,.1 W,ESD PROT,V360
D6	4870359B01	DIODE,SUPR,SM,7.82V,.1 W,ESD PROT,V360
D7	4870359B01	DIODE,SUPR,SM,7.82V,.1 W,ESD PROT,V360
D8	4870359B01	DIODE,SUPR,SM,7.82V,.1 W,ESD PROT,V360
D9	4870359B01	DIODE,SUPR,SM,7.82V,.1 W,ESD PROT,V360
E2001	7685268E01	FLTR,FERRITE BEAD,650MA,SM,0402,CHIP,80OHM

Ref. Des.	Part Number	Description
E2002	7685268E01	FLTR,FERRITE BEAD,650MA,SM,0402,CHIP,80OHM
E2003	7685268E01	FLTR,FERRITE BEAD,650MA,SM,0402,CHIP,80OHM
FL1	9171981H01	EMI FILTER,EM/RFI,FLTR 6 CHAN EMI ESD 12PIN
FL2	9171981H01	EMI FILTER,EM/RFI,FLTR 6 CHAN EMI ESD 12PIN
J2002	09012073001	CONN,BTB,RCPT,34CONT,.4MM,GLD,ST,CONNECTOR, B2B RCPT 34PINS
M2533M4	3987977Y01	CONT,CONN,1CONT,ANT UNIV UC2.5
P1000	CN000222A01	CONNECTOR STANDARD-BTB,FEMALE(RECEPTACLE/SOCKET),0.4 MM,70,CONN,BTB,RCPT,70CONT
P2000	CN000222A01	CONNECTOR STANDARD-BTB,FEMALE(RECEPTACLE/SOCKET),0.4 MM,70,CONN,BTB,RCPT,70CONT
P2001	0970312N01	CONN,BTB,RCPT,60CONT,.4MM,GLD,1 STACK HGT
Q2537M4	48013068001	XSTR,FET GP PWR,N-CH,SM,SOT-563,SMT,20V,.25W,DL N-CH 20 V
Q2547M4	48013068001	XSTR,FET GP PWR,N-CH,SM,SOT-563,SMT,20V,.25W,DL N-CH 20 V
R1	0613952R01	RES,MF,10KOHM,5%,.0625W,SM,0402,200PPM/CEL,PB-FREE
R10	NOTPLACED	64AM DUMMY PART NUMBER
R11	NOTPLACED	64AM DUMMY PART NUMBER
R12	NOTPLACED	64AM DUMMY PART NUMBER

Ref. Des.	Part Number	Description
R13	NOTPLACED	64AM DUMMY PART NUMBER
R14	NOTPLACED	64AM DUMMY PART NUMBER
R15	NOTPLACED	64AM DUMMY PART NUMBER
R16	0613952Q61	RES,MF,330OHM,5%,.0625W,SM,0402,200PPM/CEL,PB-FREE
R17	NOTPLACED	64AM DUMMY PART NUMBER
R19	0613952Q61	RES,MF,330OHM,5%,.0625W,SM,0402,200PPM/CEL,PB-FREE
R2	0613952R17	RES,MF,47000,5,.0625,SM,0402,200,PB-FREE
R2003	0613952Q53	RES,MF,150OHM,5%,.0625W,SM,0402,200PPM/CEL,PB-FREE
R2004	0613952Q49	RES,MF,100,5,.0625,SM,0402,200,PB-FREE
R2005	0613952Q66	RES,MF,510OHM,5%,.0625W,SM,0402,200PPM/CEL,PB-FREE
R2006	0613952R66	RES,MF,0OHM,5%,.0625W,SM,0402,PB-FREE
R2007	0613952Q49	RES,MF,100,5,.0625,SM,0402,200,PB-FREE
R2013	0613952R66	RES,MF,0OHM,5%,.0625W,SM,0402,PB-FREE
R2014	0613952R66	RES,MF,0OHM,5%,.0625W,SM,0402,PB-FREE
R2024	0613952Q09	RES,MF,2.2OHM,5%,.0625W,SM,0402,200PPM/CEL,PB-FREE
R2025	0613952Q09	RES,MF,2.2OHM,5%,.0625W,SM,0402,200PPM/CEL,PB-FREE
R2404M3	0613952R25	RES,MF,100KOHM,5%,.0625W,SM,0402,200PPM/CEL,PB-FREE
R2405M3	0613952R66	RES,MF,0OHM,5%,.0625W,SM,0402,PB-FREE

Ref. Des.	Part Number	Description
R2406M3	NOTPLACED	64AM DUMMY PART NUMBER
R2407M3	0613952R66	RES,MF,0OHM,5%,.0625W,SM,0402,PB-FREE
R2408M3	0613952R66	RES,MF,0OHM,5%,.0625W,SM,0402,PB-FREE
R2412M3	0613952Q53	RES,MF,150OHM,5%,.0625W,SM,0402,200PPM/CEL,PB-FREE
R2414M3	0613952R25	RES,MF,100KOHM,5%,.0625W,SM,0402,200PPM/CEL,PB-FREE
R2416M3	0613952R25	RES,MF,100KOHM,5%,.0625W,SM,0402,200PPM/CEL,PB-FREE
R2418M3	0613952R66	RES,MF,0OHM,5%,.0625W,SM,0402,PB-FREE
R2419M3	0613952Q49	RES,MF,100,5,.0625,SM,0402,200,PB-FREE
R2433M3	0613952R25	RES,MF,100KOHM,5%,.0625W,SM,0402,200PPM/CEL,PB-FREE
R2434M3	0613952R25	RES,MF,100KOHM,5%,.0625W,SM,0402,200PPM/CEL,PB-FREE
R2435M3	0613952R66	RES,MF,0OHM,5%,.0625W,SM,0402,PB-FREE
R2436M3	0613952R25	RES,MF,100KOHM,5%,.0625W,SM,0402,200PPM/CEL,PB-FREE
R2437M3	0613952R25	RES,MF,100KOHM,5%,.0625W,SM,0402,200PPM/CEL,PB-FREE
R2441M3	0613952Q41	RES,MF,47OHM,5%,.0625W,SM,0402,200PPM/CEL,PB-FREE
R2442M3	0613952Q73	RES,MF,1KOHM,5%,.0625W,SM,0402,200PPM/CEL,PB-FREE
R2443M3	0613952Q73	RES,MF,1KOHM,5%,.0625W,SM,0402,200PPM/CEL,PB-FREE

Ref. Des.	Part Number	Description
R2444M3	0613952R25	RES,MF,100KOHM,5%,.06 25W,SM,0402,200PPM/ CEL,PB-FREE
R2449M3	0613952R25	RES,MF,100KOHM,5%,.06 25W,SM,0402,200PPM/ CEL,PB-FREE
R2450M3	0613952R25	RES,MF,100KOHM,5%,.06 25W,SM,0402,200PPM/ CEL,PB-FREE
R2451M3	0613952R66	RES,MF,0OHM,5%,.0625W ,SM,0402,PB-FREE
R2452M3	0613952R25	RES,MF,100KOHM,5%,.06 25W,SM,0402,200PPM/ CEL,PB-FREE
R2453M3	0613952R25	RES,MF,100KOHM,5%,.06 25W,SM,0402,200PPM/ CEL,PB-FREE
R2454M3	0613952R25	RES,MF,100KOHM,5%,.06 25W,SM,0402,200PPM/ CEL,PB-FREE
R2455M3	0613952R25	RES,MF,100KOHM,5%,.06 25W,SM,0402,200PPM/ CEL,PB-FREE
R2456M3	0613952R25	RES,MF,100KOHM,5%,.06 25W,SM,0402,200PPM/ CEL,PB-FREE
R2457M3	0613952R05	RES,MF,15KOHM,5%,.062 5W,SM,0402,200PPM/ CEL,PB-FREE
R2458M3	0613952Q89	RES,MF,4700,5,.0625,SM, 0402,200,PB-FREE
R2459M3	0613952R25	RES,MF,100KOHM,5%,.06 25W,SM,0402,200PPM/ CEL,PB-FREE
R2460M3	0613952R25	RES,MF,100KOHM,5%,.06 25W,SM,0402,200PPM/ CEL,PB-FREE
R2461M3	0613952R25	RES,MF,100KOHM,5%,.06 25W,SM,0402,200PPM/ CEL,PB-FREE
R2465M3	0613952R25	RES,MF,100KOHM,5%,.06 25W,SM,0402,200PPM/ CEL,PB-FREE

Ref. Des.	Part Number	Description
R2466M3	0613952R25	RES,MF,100KOHM,5%,.06 25W,SM,0402,200PPM/ CEL,PB-FREE
R2467M3	0613952Q32	RES,MF,20OHM,5%,.0625 W,SM,0402,200PPM/ CEL,PB-FREE
R2469M3	NOTPLACED	64AM DUMMY PART NUMBER
R2470M3	0613952Q73	RES,MF,1KOHM,5%,.0625 W,SM,0402,200PPM/ CEL,PB-FREE
R2471M3	0613952Q73	RES,MF,1KOHM,5%,.0625 W,SM,0402,200PPM/ CEL,PB-FREE
R2472M3	0613952R25	RES,MF,100KOHM,5%,.06 25W,SM,0402,200PPM/ CEL,PB-FREE
R2473M3	0613952R01	RES,MF,10KOHM,5%,.062 5W,SM,0402,200PPM/ CEL,PB-FREE
R2474M3	0613952R35	RES,MF,270000,5,.0625,S M,0402,200,PB-FREE
R2475M3	0613952Q53	RES,MF,150OHM,5%,.062 5W,SM,0402,200PPM/ CEL,PB-FREE
R2476M3	0613952R25	RES,MF,100KOHM,5%,.06 25W,SM,0402,200PPM/ CEL,PB-FREE
R2477M3	0613952R25	RES,MF,100KOHM,5%,.06 25W,SM,0402,200PPM/ CEL,PB-FREE
R2478M3	0613952R25	RES,MF,100KOHM,5%,.06 25W,SM,0402,200PPM/ CEL,PB-FREE
R2479M3	0613952R25	RES,MF,100KOHM,5%,.06 25W,SM,0402,200PPM/ CEL,PB-FREE
R2480M3	0613952R25	RES,MF,100KOHM,5%,.06 25W,SM,0402,200PPM/ CEL,PB-FREE
R2481M3	0613952R25	RES,MF,100KOHM,5%,.06 25W,SM,0402,200PPM/ CEL,PB-FREE

Ref. Des.	Part Number	Description
R2484M3	0613952Q35	RES,MF,27OHM,5%,.0625 W,SM,0402,200PPM/ CEL,PB-FREE
R2485M3	0613952Q35	RES,MF,27OHM,5%,.0625 W,SM,0402,200PPM/ CEL,PB-FREE
R2486M3	0613952R01	RES,MF,10KOHM,5%,.062 5W,SM,0402,200PPM/ CEL,PB-FREE
R2487M3	0613952R01	RES,MF,10KOHM,5%,.062 5W,SM,0402,200PPM/ CEL,PB-FREE
R2488M3	0613952R25	RES,MF,100KOHM,5%,.06 25W,SM,0402,200PPM/ CEL,PB-FREE
R2489M3	0613952R01	RES,MF,10KOHM,5%,.062 5W,SM,0402,200PPM/ CEL,PB-FREE
R2490M3	0613952R01	RES,MF,10KOHM,5%,.062 5W,SM,0402,200PPM/ CEL,PB-FREE
R2491M3	0613952R01	RES,MF,10KOHM,5%,.062 5W,SM,0402,200PPM/ CEL,PB-FREE
R2492M3	0613952R01	RES,MF,10KOHM,5%,.062 5W,SM,0402,200PPM/ CEL,PB-FREE
R2493M3	0613952R66	RES,MF,0OHM,5%,.0625W ,SM,0402,PB-FREE
R2495M3	0613952R25	RES,MF,100KOHM,5%,.06 25W,SM,0402,200PPM/ CEL,PB-FREE
R2496M3	0613952R25	RES,MF,100KOHM,5%,.06 25W,SM,0402,200PPM/ CEL,PB-FREE
R2497M3	0613952R25	RES,MF,100KOHM,5%,.06 25W,SM,0402,200PPM/ CEL,PB-FREE
R2498M3	0613952R25	RES,MF,100KOHM,5%,.06 25W,SM,0402,200PPM/ CEL,PB-FREE
R2500	NOTPLACED	64AM DUMMY PART NUMBER

Ref. Des.	Part Number	Description
R2501M4	0613952R25	RES,MF,100KOHM,5%,.06 25W,SM,0402,200PPM/ CEL,PB-FREE
R2502	NOTPLACED	64AM DUMMY PART NUMBER
R2503M4	NOTPLACED	64AM DUMMY PART NUMBER
R2505M4	0613952Q75	RES,MF,1.2KOHM,5%,.062 5W,SM,0402,200PPM/ CEL,PB-FREE
R2507M4	0613952R49	RES,MF,1MOHM,5%,.0625 W,SM,0402,200PPM/ CEL,PB-FREE
R2508M4	0613952R01	RES,MF,10KOHM,5%,.062 5W,SM,0402,200PPM/ CEL,PB-FREE
R2509M4	0613952R66	RES,MF,0OHM,5%,.0625W ,SM,0402,PB-FREE
R2511M4	0613952R66	RES,MF,0OHM,5%,.0625W ,SM,0402,PB-FREE
R2512M4	0613952R66	RES,MF,0OHM,5%,.0625W ,SM,0402,PB-FREE
R2513M4	0613952Q80	RES,MF,2KOHM,5%,.0625 W,SM,0402,200PPM/ CEL,PB-FREE
R2514M4	NOTPLACED	64AM DUMMY PART NUMBER
R2515M4	NOTPLACED	64AM DUMMY PART NUMBER
R2516M4	0613952R66	RES,MF,0OHM,5%,.0625W ,SM,0402,PB-FREE
R2517M4	0613952R01	RES,MF,10KOHM,5%,.062 5W,SM,0402,200PPM/ CEL,PB-FREE
R2519M4	0613952H25	RES,MF,10OHM,5%,.1W,S M,0603,200PPM/CEL,PB- FREE
R2522M4	0613952R74	RES,MF,10MOHM,5%,.062 5W,SM,0402,400PPM/ CEL,PB-FREE
R2523M4	0613952R74	RES,MF,10MOHM,5%,.062 5W,SM,0402,400PPM/ CEL,PB-FREE

Ref. Des.	Part Number	Description
R2524M4	0613952R49	RES,MF,1MOHM,5%,.0625 W,SM,0402,200PPM/CEL,PB-FREE
R2529M4	0613952P30	RES,MF,200000,1,.0625,SM,0402,200,PB-FREE
R2530M4	0613952P30	RES,MF,200000,1,.0625,SM,0402,200,PB-FREE
R2533	0613952R01	RES,MF,10KOHM,5%,.0625W,SM,0402,200PPM/CEL,PB-FREE
R2560M4	0613952R66	RES,MF,0OHM,5%,.0625W,SM,0402,PB-FREE
R3	0613952R17	RES,MF,47000,5,.0625,SM,0402,200,PB-FREE
R4	0613952R17	RES,MF,47000,5,.0625,SM,0402,200,PB-FREE
R5	0613952R17	RES,MF,47000,5,.0625,SM,0402,200,PB-FREE
R6	0613952R66	RES,MF,0OHM,5%,.0625W,SM,0402,PB-FREE
R7	0613952R66	RES,MF,0OHM,5%,.0625W,SM,0402,PB-FREE
R8	0613952Q73	RES,MF,1KOHM,5%,.0625 W,SM,0402,200PPM/CEL,PB-FREE
R9	NOTPLACED	64AM DUMMY PART NUMBER
S1	4071633L01	KYPD SW,MET DM,18,SPST,4MA,24V,ME T DOME (FULL)
S10	4071633L01	KYPD SW,MET DM,18,SPST,4MA,24V,ME T DOME (FULL)
S11	4071633L01	KYPD SW,MET DM,18,SPST,4MA,24V,ME T DOME (FULL)
S12	4071633L01	KYPD SW,MET DM,18,SPST,4MA,24V,ME T DOME (FULL)
S13	4071633L01	KYPD SW,MET DM,18,SPST,4MA,24V,ME T DOME (FULL)

Ref. Des.	Part Number	Description
S14	4071633L01	KYPD SW,MET DM,18,SPST,4MA,24V,ME T DOME (FULL)
S15	4071633L01	KYPD SW,MET DM,18,SPST,4MA,24V,ME T DOME (FULL)
S16	4071633L01	KYPD SW,MET DM,18,SPST,4MA,24V,ME T DOME (FULL)
S17	4071633L01	KYPD SW,MET DM,18,SPST,4MA,24V,ME T DOME (FULL)
S18	4071633L01	KYPD SW,MET DM,18,SPST,4MA,24V,ME T DOME (FULL)
S19	4071633L01	KYPD SW,MET DM,18,SPST,4MA,24V,ME T DOME (FULL)
S2	4071633L01	KYPD SW,MET DM,18,SPST,4MA,24V,ME T DOME (FULL)
S20	4071633L01	KYPD SW,MET DM,18,SPST,4MA,24V,ME T DOME (FULL)
S21	4071633L01	KYPD SW,MET DM,18,SPST,4MA,24V,ME T DOME (FULL)
S3	4071633L01	KYPD SW,MET DM,18,SPST,4MA,24V,ME T DOME (FULL)
S4	4071633L01	KYPD SW,MET DM,18,SPST,4MA,24V,ME T DOME (FULL)
S5	4071633L01	KYPD SW,MET DM,18,SPST,4MA,24V,ME T DOME (FULL)
S6	4071633L01	KYPD SW,MET DM,18,SPST,4MA,24V,ME T DOME (FULL)
S7	4071633L01	KYPD SW,MET DM,18,SPST,4MA,24V,ME T DOME (FULL)
S8	4071633L01	KYPD SW,MET DM,18,SPST,4MA,24V,ME T DOME (FULL)

Ref. Des.	Part Number	Description
S9	4071633L01	KYPD SW,MET DM,18,SPST,4MA,24V,ME T DOME (FULL)
SH1	26012170001	SHIELD,CAN,STEEL,TIN PLATED,SHIELD, MACE
SH2	26012171001	SHLD,CAN,STL,SN PLT,SHIELD, SDRAM
U2402M3	51002923001	IC,LNR V REGLTR,3.3V LP2989,NOPB
U2403M3	51009735001	IC,RCVR,QFN,IC, RCVR, ONE-CHAN, QFN, LF WAKE-UP
U2406M3	5164852H16	IC,TRANSLATING,2PER PKG,LVC2T45,TRANS-CEIVER W/VOLTAGE TRANSLATI
U2407M3	5164852H16	IC,TRANSLATING,2PER PKG,LVC2T45,TRANS-CEIVER W/VOLTAGE TRANSLATI
U2408M3	5164852H16	IC,TRANSLATING,2PER PKG,LVC2T45,TRANS-CEIVER W/VOLTAGE TRANSLATI
U2409M3	5164852H16	IC,TRANSLATING,2PER PKG,LVC2T45,TRANS-CEIVER W/VOLTAGE TRANSLATI
U2410M3	5164852H16	IC,TRANSLATING,2PER PKG,LVC2T45,TRANS-CEIVER W/VOLTAGE TRANSLATI
U2411M3	5175856M01	IC,INVTR,0MHZMAX,DL INVTR
U2412M3	5114007M45	IC,NOR,1PER PKG,SOT-353,PB-FREE
U2413M3	51007645001	IC,SDRAM,128MB,8 MEG X 16,6NS,SM,64MSRFRSH,IC,SDRAM,128MBIT,8
U2414M3	5164852H16	IC,TRANSLATING,2PER PKG,LVC2T45,TRANS-CEIVER W/VOLTAGE TRANSLATI
U2415M3	51009372001	IC,UCNTR,IC UCNTR AT32UC3A0512

Ref. Des.	Part Number	Description
U2416M3	51009669001	IC,SENSOR,SM,IC, ACCELEROMETER, MOTION SENSOR
U2417M3	5102836C11	IC,ANLG SW,FSA4157,SM,SPDT,PB FREE
U2473M3	5164852H16	IC,TRANSLATING,2PER PKG,LVC2T45,TRANS-CEIVER W/VOLTAGE TRANSLATI
U2478M3	5164852H16	IC,TRANSLATING,2PER PKG,LVC2T45,TRANS-CEIVER W/VOLTAGE TRANSLATI
U2510M4	5185912Y05	IC,MICROPROCES-SOR,INDIGENOUS MACE
U2525M4	5171339H01	IC,MC78LC18,MICROPO- WER V REGLTR
U2526M4	5171988H01	IC,COMPTR,CMOS COMPTR
VR1	NOTPLACED	64AM DUMMY PART NUMBER
Y2475M3	48009319001	OSC,VAR,SMD XTAL OSC DS0211AR

## PC000356A01 Keypad Board Model 3 Parts List

Ref. Des.	Part Number	Description
C10	2113944A40	CAP,CHIP,100PF,+5%,-5%,50V-DC,0402,C0G,-55DEG CMIN,125DEG CMAX
C11	2113944A40	CAP,CHIP,100PF,+5%,-5%,50V-DC,0402,C0G,-55DEG CMIN,125DEG CMAX
C12	2113944A40	CAP,CHIP,100PF,+5%,-5%,50V-DC,0402,C0G,-55DEG CMIN,125DEG CMAX
C13	2113944A40	CAP,CHIP,100PF,+5%,-5%,50V-DC,0402,C0G,-55DEG CMIN,125DEG CMAX
C14	2113944A40	CAP,CHIP,100PF,+5%,-5%,50V-DC,0402,C0G,-55DEG CMIN,125DEG CMAX
C15	2113944A40	CAP,CHIP,100PF,+5%,-5%,50V-DC,0402,C0G,-55DEG CMIN,125DEG CMAX
C16	2113944A40	CAP,CHIP,100PF,+5%,-5%,50V-DC,0402,C0G,-55DEG CMIN,125DEG CMAX
C17	2113944A40	CAP,CHIP,100PF,+5%,-5%,50V-DC,0402,C0G,-55DEG CMIN,125DEG CMAX
C18	2113944A40	CAP,CHIP,100PF,+5%,-5%,50V-DC,0402,C0G,-55DEG CMIN,125DEG CMAX
C19	2113944A40	CAP,CHIP,100PF,+5%,-5%,50V-DC,0402,C0G,-55DEG CMIN,125DEG CMAX
C2	2113944A40	CAP,CHIP,100PF,+5%,-5%,50V-DC,0402,C0G,-55DEG CMIN,125DEG CMAX

Ref. Des.	Part Number	Description
C20	2113944A40	CAP,CHIP,100PF,+5%,-5%,50V-DC,0402,C0G,-55DEG CMIN,125DEG CMAX
C2003	2113944A40	CAP,CHIP,100PF,+5%,-5%,50V-DC,0402,C0G,-55DEG CMIN,125DEG CMAX
C2004	2113944A40	CAP,CHIP,100PF,+5%,-5%,50V-DC,0402,C0G,-55DEG CMIN,125DEG CMAX
C2005	NOTPLACED	64AM DUMMY PART NUMBER
C2006	NOTPLACED	64AM DUMMY PART NUMBER
C2008	NOTPLACED	64AM DUMMY PART NUMBER
C2009	2113945A05	CAP,CHIP,470PF,+10%,-10%,50V-DC,0402,X7R,-55DEG CMIN,125DEG CMA
C2010	2113945Y02	CAPACITOR, FIXED, .1UF, +10%, -10%, 16V-DC, 0402, X7R, -55DEG CMIN, 125DEG, CMAX, PB-FREE
C2011	2113945Y02	CAPACITOR, FIXED, .1UF, +10%, -10%, 16V-DC, 0402, X7R, -55DEG CMIN, 125DEG, CMAX, PB-FREE
C2012	2113944A40	CAP,CHIP,100PF,+5%,-5%,50V-DC,0402,C0G,-55DEG CMIN,125DEG CMAX
C2018	2113946B04	CAP,CHIP,.1UF,+10%,-10%,10V-DC,0402,X5R,-55DEG CMIN,85DEG CMAX
C2020	2113944A26	CAP,CHIP,12PF,+5%,-5%,50V-DC,0402,C0G,-55DEG CMIN,125DEG CMAX,P

Ref. Des.	Part Number	Description
C2022	2113944A26	CAP,CHIP,12PF,+5%,-5%,50V-DC,0402,C0G,-55DEG CMIN,125DEG CMAX,P
C2023	2113944A26	CAP,CHIP,12PF,+5%,-5%,50V-DC,0402,C0G,-55DEG CMIN,125DEG CMAX,P
C2050	2113946B04	CAP,CHIP,.1UF,+10%,-10%,10V-DC,0402,X5R,-55DEG CMIN,85DEG CMAX
C2051	2113944A40	CAP,CHIP,100PF,+5%,-5%,50V-DC,0402,C0G,-55DEG CMIN,125DEG CMAX
C2052	2113944A26	CAP,CHIP,12PF,+5%,-5%,50V-DC,0402,C0G,-55DEG CMIN,125DEG CMAX,P
C21	2113944A40	CAP,CHIP,100PF,+5%,-5%,50V-DC,0402,C0G,-55DEG CMIN,125DEG CMAX
C22	2113944A40	CAP,CHIP,100PF,+5%,-5%,50V-DC,0402,C0G,-55DEG CMIN,125DEG CMAX
C23	2113944A40	CAP,CHIP,100PF,+5%,-5%,50V-DC,0402,C0G,-55DEG CMIN,125DEG CMAX
C24	2113944A40	CAP,CHIP,100PF,+5%,-5%,50V-DC,0402,C0G,-55DEG CMIN,125DEG CMAX
C2414M3	2113946D07	CAP,CHIP,4.7UF,+10%,-10%,6.3V-DC,0603,X5R,-55DEG CMIN,85DEG CMA
C2415M3	2113945B02	CAP,CHIP,.01UF,+10%,-10%,25V-DC,0402,X7R,-55DEG CMIN,125DEG CMA
C2416M3	2113946D07	CAP,CHIP,4.7UF,+10%,-10%,6.3V-DC,0603,X5R,-55DEG CMIN,85DEG CMA

Ref. Des.	Part Number	Description
C2417M3	2171206F01	CAP,CER CHIP,4.7UF,+20%,-20%,4V-DC,0402,X5R,MONO,SMD,W18
C2438M3	2113945Y02	CAPACITOR, FIXED, .1UF, +10%, -10%, 16V-DC, 0402, X7R, -55DEG CMIN, 125DEG, CMAX, PB-FREE
C2439M3	2113945Y02	CAPACITOR, FIXED, .1UF, +10%, -10%, 16V-DC, 0402, X7R, -55DEG CMIN, 125DEG, CMAX, PB-FREE
C2440M3	2113945Y02	CAPACITOR, FIXED, .1UF, +10%, -10%, 16V-DC, 0402, X7R, -55DEG CMIN, 125DEG, CMAX, PB-FREE
C2441M3	2113945Y02	CAPACITOR, FIXED, .1UF, +10%, -10%, 16V-DC, 0402, X7R, -55DEG CMIN, 125DEG, CMAX, PB-FREE
C2442M3	2113945Y02	CAPACITOR, FIXED, .1UF, +10%, -10%, 16V-DC, 0402, X7R, -55DEG CMIN, 125DEG, CMAX, PB-FREE
C2443M3	2113945Y02	CAPACITOR, FIXED, .1UF, +10%, -10%, 16V-DC, 0402, X7R, -55DEG CMIN, 125DEG, CMAX, PB-FREE
C2444M3	2113945Y02	CAPACITOR, FIXED, .1UF, +10%, -10%, 16V-DC, 0402, X7R, -55DEG CMIN, 125DEG, CMAX, PB-FREE

Ref. Des.	Part Number	Description	Ref. Des.	Part Number	Description	Ref. Des.	Part Number	Description	Ref. Des.	Part Number	Description
C2445M3	2113945Y02	CAPACITOR, FIXED, .1UF, +10%, -10%, 16V-DC, 0402, X7R, -55DEG CMIN, 125DEG, CMAX, PB-FREE	C2453M3	2113945Y02	CAPACITOR, FIXED, .1UF, +10%, -10%, 16V-DC, 0402, X7R, -55DEG CMIN, 125DEG, CMAX, PB-FREE	C2462M3	2113945Y02	CAPACITOR, FIXED, .1UF, +10%, -10%, 16V-DC, 0402, X7R, -55DEG CMIN, 125DEG, CMAX, PB-FREE	C2471M3	2113945A05	CAP, CHIP, 470PF, +10%, -10%, 50V-DC, 0402, X7R, -55DEG CMIN, 125DEG CMA
C2446M3	2113945Y02	CAPACITOR, FIXED, .1UF, +10%, -10%, 16V-DC, 0402, X7R, -55DEG CMIN, 125DEG, CMAX, PB-FREE	C2454M3	2171051Y01	CAP, CER CHIP, 220PF, +1%, -1%, 50V-DC, 0402, COG, -55DEG CMIN, 125DEG C	C2463M3	2113945Y02	CAPACITOR, FIXED, .1UF, +10%, -10%, 16V-DC, 0402, X7R, -55DEG CMIN, 125DEG, CMAX, PB-FREE	C2472M3	2113945A09	CAP, CHIP, 1000PF, +10%, -10%, 50V-DC, 0402, X7R, -55DEG CMIN, 125DEG CM
C2447M3	2113945Y02	CAPACITOR, FIXED, .1UF, +10%, -10%, 16V-DC, 0402, X7R, -55DEG CMIN, 125DEG, CMAX, PB-FREE	C2455M3	2113945Y02	CAPACITOR, FIXED, .1UF, +10%, -10%, 16V-DC, 0402, X7R, -55DEG CMIN, 125DEG, CMAX, PB-FREE	C2464M3	2113945Y02	CAPACITOR, FIXED, .1UF, +10%, -10%, 16V-DC, 0402, X7R, -55DEG CMIN, 125DEG, CMAX, PB-FREE	C2473M3	2113944A25	CAP, CHIP, 10PF, .5PF +/-, 50V-DC, 0402, COG, -55DEG CMIN, 125DEG CMAX
C2448M3	2113945Y02	CAPACITOR, FIXED, .1UF, +10%, -10%, 16V-DC, 0402, X7R, -55DEG CMIN, 125DEG, CMAX, PB-FREE	C2456M3	2113945Y02	CAPACITOR, FIXED, .1UF, +10%, -10%, 16V-DC, 0402, X7R, -55DEG CMIN, 125DEG, CMAX, PB-FREE	C2465M3	2113956A51	CAP, FXD, 1UF, +10%, -10%, 6.3V-DC, 0402, X5R, -55DEG CMIN, 85DEG CMAX, P	C2474M3	2113945Y02	CAPACITOR, FIXED, .1UF, +10%, -10%, 16V-DC, 0402, X7R, -55DEG CMIN, 125DEG, CMAX, PB-FREE
C2449M3	2113945Y02	CAPACITOR, FIXED, .1UF, +10%, -10%, 16V-DC, 0402, X7R, -55DEG CMIN, 125DEG, CMAX, PB-FREE	C2457M3	2113944A28	CAP, CHIP, 18PF, +5%, -5%, 50V-DC, 0402, COG, -55DEG CMIN, 125DEG CMAX, P	C2466M3	2113945Y02	CAPACITOR, FIXED, .1UF, +10%, -10%, 16V-DC, 0402, X7R, -55DEG CMIN, 125DEG, CMAX, PB-FREE	C2475M3	2113945A09	CAP, CHIP, 1000PF, +10%, -10%, 50V-DC, 0402, X7R, -55DEG CMIN, 125DEG CM
C2450M3	2113945Y02	CAPACITOR, FIXED, .1UF, +10%, -10%, 16V-DC, 0402, X7R, -55DEG CMIN, 125DEG, CMAX, PB-FREE	C2458M3	2113945Y02	CAPACITOR, FIXED, .1UF, +10%, -10%, 16V-DC, 0402, X7R, -55DEG CMIN, 125DEG, CMAX, PB-FREE	C2467M3	2113945Y02	CAPACITOR, FIXED, .1UF, +10%, -10%, 16V-DC, 0402, X7R, -55DEG CMIN, 125DEG, CMAX, PB-FREE	C2477M3	2113945Y02	CAPACITOR, FIXED, .1UF, +10%, -10%, 16V-DC, 0402, X7R, -55DEG CMIN, 125DEG, CMAX, PB-FREE
C2451M3	2113945Y02	CAPACITOR, FIXED, .1UF, +10%, -10%, 16V-DC, 0402, X7R, -55DEG CMIN, 125DEG, CMAX, PB-FREE	C2459M3	2113945Y02	CAPACITOR, FIXED, .1UF, +10%, -10%, 16V-DC, 0402, X7R, -55DEG CMIN, 125DEG, CMAX, PB-FREE	C2468M3	2113945Y02	CAPACITOR, FIXED, .1UF, +10%, -10%, 16V-DC, 0402, X7R, -55DEG CMIN, 125DEG, CMAX, PB-FREE	C2478M3	2113956B54	CAP, FXD, 10UF, +20%, -20%, 6.3V-DC, X5R, -55DEG CMIN, 85DEG CMAX
C2452M3	2113945Y02	CAPACITOR, FIXED, .1UF, +10%, -10%, 16V-DC, 0402, X7R, -55DEG CMIN, 125DEG, CMAX, PB-FREE	C2460M3	2113945Y02	CAPACITOR, FIXED, .1UF, +10%, -10%, 16V-DC, 0402, X7R, -55DEG CMIN, 125DEG, CMAX, PB-FREE	C2469M3	2113945Y02	CAPACITOR, FIXED, .1UF, +10%, -10%, 16V-DC, 0402, X7R, -55DEG CMIN, 125DEG, CMAX, PB-FREE	C2479M3	2113945Y02	CAPACITOR, FIXED, .1UF, +10%, -10%, 16V-DC, 0402, X7R, -55DEG CMIN, 125DEG, CMAX, PB-FREE
			C2461M3	2113945Y02	CAPACITOR, FIXED, .1UF, +10%, -10%, 16V-DC, 0402, X7R, -55DEG CMIN, 125DEG, CMAX, PB-FREE	C2470M3	2172180Y01	CAP, FXD, 2.2UF, +20%, -20%, 6.3V-DC, 0402, X5R, -55DEG CMIN, 85DEG CMAX	C2480M3	2113956A51	CAP, FXD, 1UF, +10%, -10%, 6.3V-DC, 0402, X5R, -55DEG CMIN, 85DEG CMAX, P
									C2482M3	2113945Y02	CAPACITOR, FIXED, .1UF, +10%, -10%, 16V-DC, 0402, X7R, -55DEG CMIN, 125DEG, CMAX, PB-FREE
									C2483M3	2113945Y02	CAPACITOR, FIXED, .1UF, +10%, -10%, 16V-DC, 0402, X7R, -55DEG CMIN, 125DEG, CMAX, PB-FREE



Ref. Des.	Part Number	Description	Ref. Des.	Part Number	Description	Ref. Des.	Part Number	Description	Ref. Des.	Part Number	Description
C2484M3	2113945Y02	CAPACITOR, FIXED, .1UF, +10%, -10%, 16V-DC, 0402, X7R, -55DEG CMIN, 125DEG, CMAX, PB-FREE	C2539M4	2113946B04	CAP, CHIP, .1UF, +10%, -10%, 10V-DC, 0402, X5R, -55DEG CMIN, 85DEG CMAX	C2555M4	2113946B04	CAP, CHIP, .1UF, +10%, -10%, 10V-DC, 0402, X5R, -55DEG CMIN, 85DEG CMAX	C6	2113944A40	CAP, CHIP, 100PF, +5%, -5%, 50V-DC, 0402, C0G, -55DEG CMIN, 125DEG CMAX
C25	2113944A40	CAP, CHIP, 100PF, +5%, -5%, 50V-DC, 0402, C0G, -55DEG CMIN, 125DEG CMAX	C2540M4	2113946B04	CAP, CHIP, .1UF, +10%, -10%, 10V-DC, 0402, X5R, -55DEG CMIN, 85DEG CMAX	C26	2113944A40	CAP, CHIP, 100PF, +5%, -5%, 50V-DC, 0402, C0G, -55DEG CMIN, 125DEG CMAX	C7	2113944A40	CAP, CHIP, 100PF, +5%, -5%, 50V-DC, 0402, C0G, -55DEG CMIN, 125DEG CMAX
C2504M4	2113945A09	CAP, CHIP, 1000PF, +10%, -10%, 50V-DC, 0402, X7R, -55DEG CMIN, 125DEG CM	C2541M4	2113946B04	CAP, CHIP, .1UF, +10%, -10%, 10V-DC, 0402, X5R, -55DEG CMIN, 85DEG CMAX	C27	2113944A40	CAP, CHIP, 100PF, +5%, -5%, 50V-DC, 0402, C0G, -55DEG CMIN, 125DEG CMAX	C8	2113944A40	CAP, CHIP, 100PF, +5%, -5%, 50V-DC, 0402, C0G, -55DEG CMIN, 125DEG CMAX
C2506M4	2113945B02	CAP, CHIP, .01UF, +10%, -10%, 25V-DC, 0402, X7R, -55DEG CMIN, 125DEG CMA	C2542M4	2113946B04	CAP, CHIP, .1UF, +10%, -10%, 10V-DC, 0402, X5R, -55DEG CMIN, 85DEG CMAX	C28	2113944A40	CAP, CHIP, 100PF, +5%, -5%, 50V-DC, 0402, C0G, -55DEG CMIN, 125DEG CMAX	C9	2113944A40	CAP, CHIP, 100PF, +5%, -5%, 50V-DC, 0402, C0G, -55DEG CMIN, 125DEG CMAX
C2518M4	2113956B33	CAP, FXD, 2.2UF, +10%, -10%, 16V-DC, 0603, X5R, -55DEG CMIN, 85DEG CMAX	C2543M4	2113946B04	CAP, CHIP, .1UF, +10%, -10%, 10V-DC, 0402, X5R, -55DEG CMIN, 85DEG CMAX	C29	2113944A40	CAP, CHIP, 100PF, +5%, -5%, 50V-DC, 0402, C0G, -55DEG CMIN, 125DEG CMAX	D1	48009289001	LED ARRAY, LED, 5V, 25A, WHITE, SMT, 85, WHT 2 PIN SIDE FIRE LED HI
C2520M4	2113946B04	CAP, CHIP, .1UF, +10%, -10%, 10V-DC, 0402, X5R, -55DEG CMIN, 85DEG CMAX	C2544M4	2113946B04	CAP, CHIP, .1UF, +10%, -10%, 10V-DC, 0402, X5R, -55DEG CMIN, 85DEG CMAX	C30	2113944A40	CAP, CHIP, 100PF, +5%, -5%, 50V-DC, 0402, C0G, -55DEG CMIN, 125DEG CMAX	D10	4870359B01	DIODE, SUPR, SM, 7.82V, .1W, ESD PROT, V360
C2527M4	2113946B04	CAP, CHIP, .1UF, +10%, -10%, 10V-DC, 0402, X5R, -55DEG CMIN, 85DEG CMAX	C2545M4	2113946B04	CAP, CHIP, .1UF, +10%, -10%, 10V-DC, 0402, X5R, -55DEG CMIN, 85DEG CMAX	C31	2113944A40	CAP, CHIP, 100PF, +5%, -5%, 50V-DC, 0402, C0G, -55DEG CMIN, 125DEG CMAX	D11	4870359B01	DIODE, SUPR, SM, 7.82V, .1W, ESD PROT, V360
C2528M4	2113946B04	CAP, CHIP, .1UF, +10%, -10%, 10V-DC, 0402, X5R, -55DEG CMIN, 85DEG CMAX	C2546M4	2113946B04	CAP, CHIP, .1UF, +10%, -10%, 10V-DC, 0402, X5R, -55DEG CMIN, 85DEG CMAX	C32	2113944A40	CAP, CHIP, 100PF, +5%, -5%, 50V-DC, 0402, C0G, -55DEG CMIN, 125DEG CMAX	D12	4870359B01	DIODE, SUPR, SM, 7.82V, .1W, ESD PROT, V360
C2531M4	2113946B04	CAP, CHIP, .1UF, +10%, -10%, 10V-DC, 0402, X5R, -55DEG CMIN, 85DEG CMAX	C2548M4	2113946B04	CAP, CHIP, .1UF, +10%, -10%, 10V-DC, 0402, X5R, -55DEG CMIN, 85DEG CMAX	C33	2113944A40	CAP, CHIP, 100PF, +5%, -5%, 50V-DC, 0402, C0G, -55DEG CMIN, 125DEG CMAX	D13	4870359B01	DIODE, SUPR, SM, 7.82V, .1W, ESD PROT, V360
C2532M4	2113946B04	CAP, CHIP, .1UF, +10%, -10%, 10V-DC, 0402, X5R, -55DEG CMIN, 85DEG CMAX	C2549M4	2113946B04	CAP, CHIP, .1UF, +10%, -10%, 10V-DC, 0402, X5R, -55DEG CMIN, 85DEG CMAX	C34	2113944A40	CAP, CHIP, 100PF, +5%, -5%, 50V-DC, 0402, C0G, -55DEG CMIN, 125DEG CMAX	D14	4870359B01	DIODE, SUPR, SM, 7.82V, .1W, ESD PROT, V360
C2534M4	2113946B04	CAP, CHIP, .1UF, +10%, -10%, 10V-DC, 0402, X5R, -55DEG CMIN, 85DEG CMAX	C2550M4	2113946B04	CAP, CHIP, .1UF, +10%, -10%, 10V-DC, 0402, X5R, -55DEG CMIN, 85DEG CMAX	C35	2113944A40	CAP, CHIP, 100PF, +5%, -5%, 50V-DC, 0402, C0G, -55DEG CMIN, 125DEG CMAX	D15	4870359B01	DIODE, SUPR, SM, 7.82V, .1W, ESD PROT, V360
C2535M4	2113946B04	CAP, CHIP, .1UF, +10%, -10%, 10V-DC, 0402, X5R, -55DEG CMIN, 85DEG CMAX	C2551M4	2113946B04	CAP, CHIP, .1UF, +10%, -10%, 10V-DC, 0402, X5R, -55DEG CMIN, 85DEG CMAX	C36	2113944A40	CAP, CHIP, 100PF, +5%, -5%, 50V-DC, 0402, C0G, -55DEG CMIN, 125DEG CMAX	D16	4870359B01	DIODE, SUPR, SM, 7.82V, .1W, ESD PROT, V360
C2536M4	2113946B04	CAP, CHIP, .1UF, +10%, -10%, 10V-DC, 0402, X5R, -55DEG CMIN, 85DEG CMAX	C2552M4	2113946B04	CAP, CHIP, .1UF, +10%, -10%, 10V-DC, 0402, X5R, -55DEG CMIN, 85DEG CMAX	C4	2113944A40	CAP, CHIP, 100PF, +5%, -5%, 50V-DC, 0402, C0G, -55DEG CMIN, 125DEG CMAX	D17	NOTPLACED	64AM DUMMY PART NUMBER
C2538M4	2113946B04	CAP, CHIP, .1UF, +10%, -10%, 10V-DC, 0402, X5R, -55DEG CMIN, 85DEG CMAX	C2553M4	2113946B04	CAP, CHIP, .1UF, +10%, -10%, 10V-DC, 0402, X5R, -55DEG CMIN, 85DEG CMAX				D2	48009289001	LED ARRAY, LED, 5V, 25A, WHITE, SMT, 85, WHT 2 PIN SIDE FIRE LED HI
			C2554M4	2113946B04	CAP, CHIP, .1UF, +10%, -10%, 10V-DC, 0402, X5R, -55DEG CMIN, 85DEG CMAX				D2521M4	4871785H01	DIODE, SWG, BAS116LT1G, SOT-23/SC-59, SOT-23, 200MA, 75V, .225W, SWG DI

Ref. Des.	Part Number	Description
D3	4870359B01	DIODE,SUPR,SM,7.82V,.1W,ESD PROT,V360
D4	4870359B01	DIODE,SUPR,SM,7.82V,.1W,ESD PROT,V360
D5	4870359B01	DIODE,SUPR,SM,7.82V,.1W,ESD PROT,V360
D6	4870359B01	DIODE,SUPR,SM,7.82V,.1W,ESD PROT,V360
D7	4870359B01	DIODE,SUPR,SM,7.82V,.1W,ESD PROT,V360
D8	4870359B01	DIODE,SUPR,SM,7.82V,.1W,ESD PROT,V360
D9	4870359B01	DIODE,SUPR,SM,7.82V,.1W,ESD PROT,V360
E2001	7685268E01	FLTR,FERRITE BEAD,650MA,SM,0402,CHIP,80OHM
E2002	7685268E01	FLTR,FERRITE BEAD,650MA,SM,0402,CHIP,80OHM
E2003	7685268E01	FLTR,FERRITE BEAD,650MA,SM,0402,CHIP,80OHM
FL1	9171981H01	EMI FILTER,EMI/RFI,FLTR 6 CHAN EMI ESD 12PIN
FL2	9171981H01	EMI FILTER,EMI/RFI,FLTR 6 CHAN EMI ESD 12PIN
J2002	09012073001	CONN,BTB,RCPT,34CONT,.4MM,GLD,ST,CONNECTOR, B2B RCPT 34PINS
M2533M4	3987977Y01	CONT,CONN,1CONT,ANT UNIV UC2.5
P1000	CN000222A01	CONNECTOR STANDARD-BTB,FEMALE(RECEPTACLE/SOCKET),0.4MM,70,CONN,BTB,RCPT,70 CONT
P2000	CN000222A01	CONNECTOR STANDARD-BTB,FEMALE(RECEPTACLE/SOCKET),0.4MM,70,CONN,BTB,RCPT,70 CONT
P2001	0970312N01	CONN,BTB,RCPT,60CONT,.4MM,GLD,1 STACK HGT

Ref. Des.	Part Number	Description
Q2537M4	48013068001	XSTR,FET GP PWR,N-CH,SM,SOT-563,SMT,20V,.25W,DL N-CH 20 V
Q2547M4	48013068001	XSTR,FET GP PWR,N-CH,SM,SOT-563,SMT,20V,.25W,DL N-CH 20 V
R1	0613952R01	RES,MF,10KOHM,5%,.0625W,SM,0402,200PPM/CEL,PB-FREE
R10	NOTPLACED	64AM DUMMY PART NUMBER
R11	NOTPLACED	64AM DUMMY PART NUMBER
R12	NOTPLACED	64AM DUMMY PART NUMBER
R13	NOTPLACED	64AM DUMMY PART NUMBER
R14	NOTPLACED	64AM DUMMY PART NUMBER
R15	NOTPLACED	64AM DUMMY PART NUMBER
R16	0613952Q61	RES,MF,330OHM,5%,.0625W,SM,0402,200PPM/CEL,PB-FREE
R17	NOTPLACED	64AM DUMMY PART NUMBER
R19	0613952Q61	RES,MF,330OHM,5%,.0625W,SM,0402,200PPM/CEL,PB-FREE
R2	0613952R17	RES,MF,47000,5%,.0625,SM,0402,200,PB-FREE
R2003	0613952Q53	RES,MF,150OHM,5%,.0625W,SM,0402,200PPM/CEL,PB-FREE
R2004	0613952Q49	RES,MF,100,5%,.0625,SM,0402,2,200,PB-FREE
R2005	0613952Q66	RES,MF,510OHM,5%,.0625W,SM,0402,200PPM/CEL,PB-FREE
R2006	0613952R66	RES,MF,0OHM,5%,.0625W,SM,0402,PB-FREE

Ref. Des.	Part Number	Description
R2007	0613952Q49	RES,MF,100,5%,.0625,SM,0402,2,200,PB-FREE
R2013	0613952R66	RES,MF,0OHM,5%,.0625W,SM,0402,PB-FREE
R2014	0613952R66	RES,MF,0OHM,5%,.0625W,SM,0402,PB-FREE
R2024	0613952Q09	RES,MF,2.2OHM,5%,.0625W,SM,0402,200PPM/CEL,PB-FREE
R2025	0613952Q09	RES,MF,2.2OHM,5%,.0625W,SM,0402,200PPM/CEL,PB-FREE
R2404M3	0613952R25	RES,MF,100KOHM,5%,.0625W,SM,0402,200PPM/CEL,PB-FREE
R2405M3	0613952R66	RES,MF,0OHM,5%,.0625W,SM,0402,PB-FREE
R2406M3	NOTPLACED	64AM DUMMY PART NUMBER
R2407M3	0613952R66	RES,MF,0OHM,5%,.0625W,SM,0402,PB-FREE
R2408M3	0613952R66	RES,MF,0OHM,5%,.0625W,SM,0402,PB-FREE
R2412M3	0613952Q53	RES,MF,150OHM,5%,.0625W,SM,0402,200PPM/CEL,PB-FREE
R2414M3	0613952R25	RES,MF,100KOHM,5%,.0625W,SM,0402,200PPM/CEL,PB-FREE
R2416M3	0613952R25	RES,MF,100KOHM,5%,.0625W,SM,0402,200PPM/CEL,PB-FREE
R2418M3	0613952R66	RES,MF,0OHM,5%,.0625W,SM,0402,PB-FREE
R2419M3	0613952Q49	RES,MF,100,5%,.0625,SM,0402,2,200,PB-FREE
R2433M3	0613952R25	RES,MF,100KOHM,5%,.0625W,SM,0402,200PPM/CEL,PB-FREE
R2434M3	0613952R25	RES,MF,100KOHM,5%,.0625W,SM,0402,200PPM/CEL,PB-FREE

Ref. Des.	Part Number	Description
R2435M3	0613952R66	RES,MF,0OHM,5%,.0625W,SM,0402,PB-FREE
R2436M3	0613952R25	RES,MF,100KOHM,5%,.0625W,SM,0402,200PPM/CEL,PB-FREE
R2437M3	0613952R25	RES,MF,100KOHM,5%,.0625W,SM,0402,200PPM/CEL,PB-FREE
R2441M3	0613952Q41	RES,MF,47OHM,5%,.0625W,SM,0402,200PPM/CEL,PB-FREE
R2442M3	0613952Q73	RES,MF,1KOHM,5%,.0625W,SM,0402,200PPM/CEL,PB-FREE
R2443M3	0613952Q73	RES,MF,1KOHM,5%,.0625W,SM,0402,200PPM/CEL,PB-FREE
R2444M3	0613952R25	RES,MF,100KOHM,5%,.0625W,SM,0402,200PPM/CEL,PB-FREE
R2449M3	0613952R25	RES,MF,100KOHM,5%,.0625W,SM,0402,200PPM/CEL,PB-FREE
R2450M3	0613952R25	RES,MF,100KOHM,5%,.0625W,SM,0402,200PPM/CEL,PB-FREE
R2451M3	0613952R66	RES,MF,0OHM,5%,.0625W,SM,0402,PB-FREE
R2452M3	0613952R25	RES,MF,100KOHM,5%,.0625W,SM,0402,200PPM/CEL,PB-FREE
R2453M3	0613952R25	RES,MF,100KOHM,5%,.0625W,SM,0402,200PPM/CEL,PB-FREE
R2454M3	0613952R25	RES,MF,100KOHM,5%,.0625W,SM,0402,200PPM/CEL,PB-FREE
R2455M3	0613952R25	RES,MF,100KOHM,5%,.0625W,SM,0402,200PPM/CEL,PB-FREE
R2456M3	0613952R25	RES,MF,100KOHM,5%,.0625W,SM,0402,200PPM/CEL,PB-FREE

Ref. Des.	Part Number	Description
R2457M3	0613952R05	RES,MF,15KOHM,5%,.0625 W,SM,0402,200PPM/CEL,PB-FREE
R2458M3	0613952Q89	RES,MF,4700,5,.0625,SM,0402,200,PB-FREE
R2459M3	0613952R25	RES,MF,100KOHM,5%,.0625W,SM,0402,200PPM/CEL,PB-FREE
R2460M3	0613952R25	RES,MF,100KOHM,5%,.0625W,SM,0402,200PPM/CEL,PB-FREE
R2461M3	0613952R25	RES,MF,100KOHM,5%,.0625W,SM,0402,200PPM/CEL,PB-FREE
R2465M3	0613952R25	RES,MF,100KOHM,5%,.0625W,SM,0402,200PPM/CEL,PB-FREE
R2466M3	0613952R25	RES,MF,100KOHM,5%,.0625W,SM,0402,200PPM/CEL,PB-FREE
R2467M3	0613952Q32	RES,MF,20OHM,5%,.0625W,SM,0402,200PPM/CEL,PB-FREE
R2469M3	NOTPLACED	64AM DUMMY PART NUMBER
R2470M3	0613952Q73	RES,MF,1KOHM,5%,.0625W,SM,0402,200PPM/CEL,PB-FREE
R2471M3	0613952Q73	RES,MF,1KOHM,5%,.0625W,SM,0402,200PPM/CEL,PB-FREE
R2472M3	0613952R25	RES,MF,100KOHM,5%,.0625W,SM,0402,200PPM/CEL,PB-FREE
R2473M3	0613952R01	RES,MF,10KOHM,5%,.0625W,SM,0402,200PPM/CEL,PB-FREE
R2474M3	0613952R35	RES,MF,270000,5,.0625,SM,0402,200,PB-FREE
R2475M3	0613952Q53	RES,MF,150OHM,5%,.0625W,SM,0402,200PPM/CEL,PB-FREE
R2476M3	0613952R25	RES,MF,100KOHM,5%,.0625W,SM,0402,200PPM/CEL,PB-FREE

Ref. Des.	Part Number	Description
R2477M3	0613952R25	RES,MF,100KOHM,5%,.0625W,SM,0402,200PPM/CEL,PB-FREE
R2478M3	0613952R25	RES,MF,100KOHM,5%,.0625W,SM,0402,200PPM/CEL,PB-FREE
R2479M3	0613952R25	RES,MF,100KOHM,5%,.0625W,SM,0402,200PPM/CEL,PB-FREE
R2480M3	0613952R25	RES,MF,100KOHM,5%,.0625W,SM,0402,200PPM/CEL,PB-FREE
R2481M3	0613952R25	RES,MF,100KOHM,5%,.0625W,SM,0402,200PPM/CEL,PB-FREE
R2484M3	0613952Q35	RES,MF,27OHM,5%,.0625W,SM,0402,200PPM/CEL,PB-FREE
R2485M3	0613952Q35	RES,MF,27OHM,5%,.0625W,SM,0402,200PPM/CEL,PB-FREE
R2486M3	0613952R01	RES,MF,10KOHM,5%,.0625W,SM,0402,200PPM/CEL,PB-FREE
R2487M3	0613952R01	RES,MF,10KOHM,5%,.0625W,SM,0402,200PPM/CEL,PB-FREE
R2488M3	0613952R25	RES,MF,100KOHM,5%,.0625W,SM,0402,200PPM/CEL,PB-FREE
R2489M3	0613952R01	RES,MF,10KOHM,5%,.0625W,SM,0402,200PPM/CEL,PB-FREE
R2490M3	0613952R01	RES,MF,10KOHM,5%,.0625W,SM,0402,200PPM/CEL,PB-FREE
R2491M3	0613952R01	RES,MF,10KOHM,5%,.0625W,SM,0402,200PPM/CEL,PB-FREE
R2492M3	0613952R01	RES,MF,10KOHM,5%,.0625W,SM,0402,200PPM/CEL,PB-FREE
R2493M3	0613952R66	RES,MF,0OHM,5%,.0625W,SM,0402,PB-FREE

Ref. Des.	Part Number	Description
R2495M3	0613952R25	RES,MF,100KOHM,5%,.0625W,SM,0402,200PPM/CEL,PB-FREE
R2496M3	0613952R25	RES,MF,100KOHM,5%,.0625W,SM,0402,200PPM/CEL,PB-FREE
R2497M3	0613952R25	RES,MF,100KOHM,5%,.0625W,SM,0402,200PPM/CEL,PB-FREE
R2498M3	0613952R25	RES,MF,100KOHM,5%,.0625W,SM,0402,200PPM/CEL,PB-FREE
R2500	NOTPLACED	64AM DUMMY PART NUMBER
R2501M4	0613952R25	RES,MF,100KOHM,5%,.0625W,SM,0402,200PPM/CEL,PB-FREE
R2502	NOTPLACED	64AM DUMMY PART NUMBER
R2503M4	NOTPLACED	64AM DUMMY PART NUMBER
R2505M4	0613952Q75	RES,MF,1.2KOHM,5%,.0625W,SM,0402,200PPM/CEL,PB-FREE
R2507M4	0613952R49	RES,MF,1MOHM,5%,.0625W,SM,0402,200PPM/CEL,PB-FREE
R2508M4	0613952R01	RES,MF,10KOHM,5%,.0625W,SM,0402,200PPM/CEL,PB-FREE
R2509M4	0613952R66	RES,MF,0OHM,5%,.0625W,SM,0402,PB-FREE
R2511M4	0613952R66	RES,MF,0OHM,5%,.0625W,SM,0402,PB-FREE
R2512M4	0613952R66	RES,MF,0OHM,5%,.0625W,SM,0402,PB-FREE
R2513M4	0613952Q80	RES,MF,2KOHM,5%,.0625W,SM,0402,200PPM/CEL,PB-FREE
R2514M4	NOTPLACED	64AM DUMMY PART NUMBER
R2515M4	NOTPLACED	64AM DUMMY PART NUMBER

Ref. Des.	Part Number	Description
R2516M4	0613952R66	RES,MF,0OHM,5%,.0625W,SM,0402,PB-FREE
R2517M4	0613952R01	RES,MF,10KOHM,5%,.0625W,SM,0402,200PPM/CEL,PB-FREE
R2519M4	0613952H25	RES,MF,10OHM,5%,.1W,SM,0603,200PPM/CEL,PB-FREE
R2522M4	0613952R74	RES,MF,10MOHM,5%,.0625W,SM,0402,400PPM/CEL,PB-FREE
R2523M4	0613952R74	RES,MF,10MOHM,5%,.0625W,SM,0402,400PPM/CEL,PB-FREE
R2524M4	0613952R49	RES,MF,1MOHM,5%,.0625W,SM,0402,200PPM/CEL,PB-FREE
R2529M4	0613952P30	RES,MF,200000,1,.0625,SM,0402,200,PB-FREE
R2530M4	0613952P30	RES,MF,200000,1,.0625,SM,0402,200,PB-FREE
R2531	NOTPLACED	64AM DUMMY PART NUMBER
R2560M4	0613952R66	RES,MF,0OHM,5%,.0625W,SM,0402,PB-FREE
R3	0613952R17	RES,MF,47000,5,.0625,SM,0402,200,PB-FREE
R4	0613952R17	RES,MF,47000,5,.0625,SM,0402,200,PB-FREE
R5	0613952R17	RES,MF,47000,5,.0625,SM,0402,200,PB-FREE
R6	0613952R66	RES,MF,0OHM,5%,.0625W,SM,0402,PB-FREE
R7	0613952R66	RES,MF,0OHM,5%,.0625W,SM,0402,PB-FREE
R8	0613952Q73	RES,MF,1KOHM,5%,.0625W,SM,0402,200PPM/CEL,PB-FREE
R9	NOTPLACED	64AM DUMMY PART NUMBER
S1	4071633L01	KYPD SW,MET DM,18,SPST,4MA,24V,MET DOME (FULL)

Ref. Des.	Part Number	Description
S10	4071633L01	KYPD SW,MET DM,18,SPST,4MA,24V,MET DOME (FULL)
S11	4071633L01	KYPD SW,MET DM,18,SPST,4MA,24V,MET DOME (FULL)
S12	4071633L01	KYPD SW,MET DM,18,SPST,4MA,24V,MET DOME (FULL)
S13	4071633L01	KYPD SW,MET DM,18,SPST,4MA,24V,MET DOME (FULL)
S14	4071633L01	KYPD SW,MET DM,18,SPST,4MA,24V,MET DOME (FULL)
S15	4071633L01	KYPD SW,MET DM,18,SPST,4MA,24V,MET DOME (FULL)
S16	4071633L01	KYPD SW,MET DM,18,SPST,4MA,24V,MET DOME (FULL)
S17	4071633L01	KYPD SW,MET DM,18,SPST,4MA,24V,MET DOME (FULL)
S18	4071633L01	KYPD SW,MET DM,18,SPST,4MA,24V,MET DOME (FULL)
S19	4071633L01	KYPD SW,MET DM,18,SPST,4MA,24V,MET DOME (FULL)
S2	4071633L01	KYPD SW,MET DM,18,SPST,4MA,24V,MET DOME (FULL)
S20	4071633L01	KYPD SW,MET DM,18,SPST,4MA,24V,MET DOME (FULL)
S21	4071633L01	KYPD SW,MET DM,18,SPST,4MA,24V,MET DOME (FULL)
S3	4071633L01	KYPD SW,MET DM,18,SPST,4MA,24V,MET DOME (FULL)
S4	4071633L01	KYPD SW,MET DM,18,SPST,4MA,24V,MET DOME (FULL)

Ref. Des.	Part Number	Description
S5	4071633L01	KYPD SW,MET DM,18,SPST,4MA,24V,MET DOME (FULL)
S6	4071633L01	KYPD SW,MET DM,18,SPST,4MA,24V,MET DOME (FULL)
S7	4071633L01	KYPD SW,MET DM,18,SPST,4MA,24V,MET DOME (FULL)
S8	4071633L01	KYPD SW,MET DM,18,SPST,4MA,24V,MET DOME (FULL)
S9	4071633L01	KYPD SW,MET DM,18,SPST,4MA,24V,MET DOME (FULL)
SH1	26012170001	SHIELD,CAN,STEEL,TIN PLATED,SHIELD, MACE
SH2	26012171001	SHLD,CAN,STL,SN PLT,SHIELD, SDRAM
U2402M3	51002923001	IC,LNR V REGLTR,3.3V LP2989,NOPB
U2403M3	51009735001	IC,RCVR,QFN,IC, RCVR, ONE-CHAN, QFN, LF WAKE-UP
U2406M3	5164852H16	IC,TRANSLATING,2PER PKG,LVC2T45,TRANS-CEIVER W/VOLTAGE TRANSLATI
U2407M3	5164852H16	IC,TRANSLATING,2PER PKG,LVC2T45,TRANS-CEIVER W/VOLTAGE TRANSLATI
U2408M3	5164852H16	IC,TRANSLATING,2PER PKG,LVC2T45,TRANS-CEIVER W/VOLTAGE TRANSLATI
U2409M3	5164852H16	IC,TRANSLATING,2PER PKG,LVC2T45,TRANS-CEIVER W/VOLTAGE TRANSLATI
U2410M3	5164852H16	IC,TRANSLATING,2PER PKG,LVC2T45,TRANS-CEIVER W/VOLTAGE TRANSLATI
U2411M3	5175856M01	IC,INVTR,0MHZMAX,DL INVTR

Ref. Des.	Part Number	Description
U2412M3	5114007M45	IC,NOR,1PER PKG,SOT-353,PB-FREE
U2413M3	51007645001	IC,SDRAM,128MB,8 MEG X 16,6NS,SM,64MSRFRSH,IC, SDRAM,128MBIT,8
U2414M3	5164852H16	IC,TRANSLATING,2PER PKG,LVC2T45,TRANS-CEIVER W/VOLTAGE TRANSLATI
U2415M3	51009372001	IC,UCNTR,IC UCNTR AT32UC3A0512
U2416M3	51009669001	IC,SENSOR,SM,IC, ACCELEROMETER, MOTION SENSOR
U2417M3	5102836C11	IC,ANLG SW,FSA4157,SM,SPDT,PB FREE
U2473M3	5164852H16	IC,TRANSLATING,2PER PKG,LVC2T45,TRANS-CEIVER W/VOLTAGE TRANSLATI
U2478M3	5164852H16	IC,TRANSLATING,2PER PKG,LVC2T45,TRANS-CEIVER W/VOLTAGE TRANSLATI
U2510M4	5185912Y05	IC,MICROPROCES-SOR,INDIGENOUS MACE
U2525M4	5171339H01	IC,MC78LC18,MICROPO-WER V REGLTR
U2526M4	5171988H01	IC,COMPTR,CMOS COMPTR
VR1	NOTPLACED	64AM DUMMY PART NUMBER
Y2475M3	48009319001	OSC,VAR,SMD XTAL OSC DS0211AR

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## Notes



**ASTRO<sup>®</sup> APX<sup>®</sup> 1000**  
**Digital Portable Radios**

Section 2

(VHF, UHF1, UHF2, 700/800 MHz)

APX 1000

## Notes

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## Notes

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# Chapter 1 Introduction

## 1.1 General

This manual includes all the information needed to maintain peak product performance and maximum working time for the ASTRO APX 1000 radio. This detailed level of service (component level) is typical of the service performed by some service centers, self-maintained customers, and distributors.

Use this manual in conjunction with the *APX 1000* VHF (136–174 MHz), UHF1 (380–470 MHz), UHF2 (450–520 MHz) and 700/800 MHz (764–870 MHz) *Digital Portable Radios Basic Service Manual* (Motorola part number 68012004056), which can help in troubleshooting a problem to a particular printed circuit (PC) board.

Conduct the basic performance checks outlined in the basic service manual first to verify the need to analyze the radio and to help pinpoint the functional problem area. In addition, you will become familiar with the radio test mode of operation, which is a helpful tool. If any basic receive or transmit parameters fail to be met, the radio should be aligned according to the radio alignment procedure.

Included in other areas of this manual are functional block diagrams, detailed theory of operation, troubleshooting charts and waveforms, schematics, and parts lists. You should become familiar with these sections to aid in determining circuit problems. Also included are component location diagrams to aid in locating individual circuit components and some IC diagrams, which identify some convenient probe points.

“[Chapter 3, Theory of Operation](#),” contains detailed descriptions of the operations of many circuits. Once you locate the problem area, review the troubleshooting flowchart for that circuit to fix the problem.

## 1.2 Notations Used in This Manual

Throughout the text in this publication, you will notice the use of warnings, cautions, and notes. These notations are used to emphasize that safety hazards exist, and care must be taken and observed.

**NOTE:** An operational procedure, practice, or condition that is essential to emphasize.



Caution

CAUTION indicates a potentially hazardous situation which, if not avoided, might result in equipment damage.



WARNING

WARNING indicates a potentially hazardous situation which, if not avoided, could result in death or injury.



DANGER

DANGER indicates an imminently hazardous situation which, if not avoided, will result in death or injury.

---

## Chapter 2 Radio Power

This chapter provides a detailed circuit description of the power distribution of an ASTRO APX 1000 radio.

### 2.1 General

In the ASTRO APX 1000 radio, power (B+) is distributed to two boards: the main board and the keypad board ([Figure 2-1](#)).

Power for the radio is provided through a battery supplying a nominal 7.5 Vdc directly to the transceiver. The following battery types and capacities are available:

*Table 2-1. IMPRES Batteries*

Part Number	Description
NNTN8128_	Li-Ion 1900 mAh
PMNN4424_	Li-Ion 2300 mAH
PMNN4448_	Li-Ion 2700 mAh

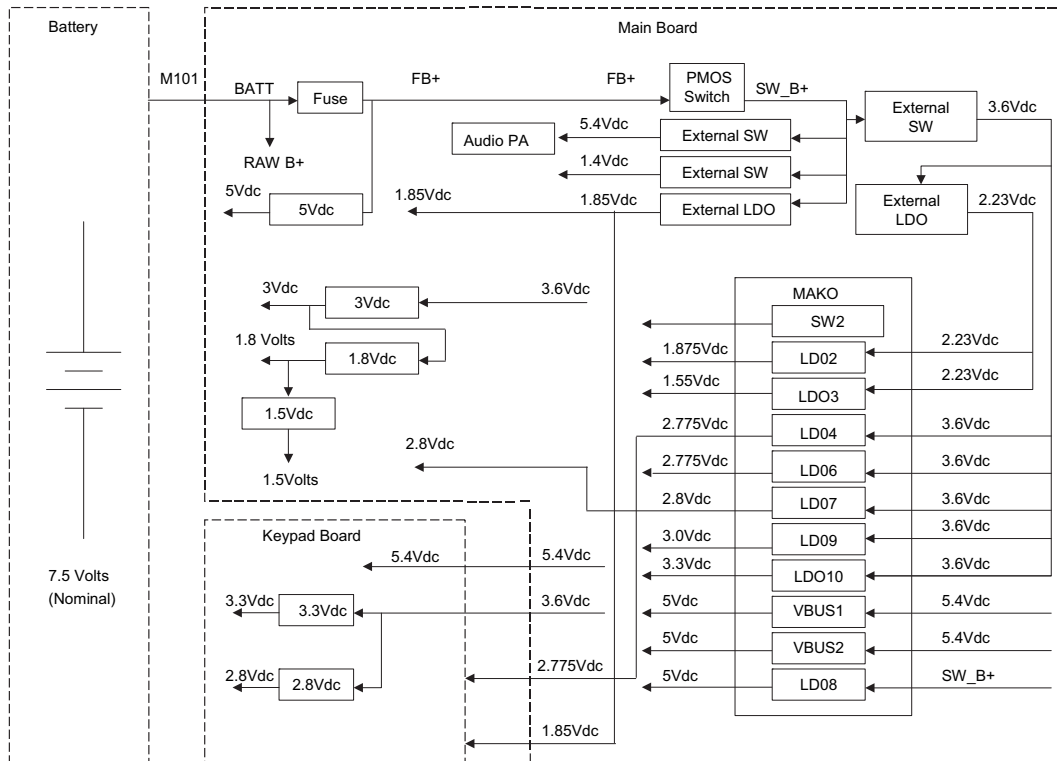


Figure 2-1. DC Power Distribution

B+ from the battery is electrically switched to most of the radio, rather than routed through the On/Off/volume control knob, S2. The electrical switching of B+ supports a *keep-alive* mode. Under software control, even when the On/Off/volume control knob has been turned to the Off position, power remains on until the MCU completes its power-down, at which time the radio is physically powered down.

## 2.2 DC Power Routing

**NOTE:** Refer to [Table 8-1](#) for a listing of schematics showing the transceiver board DC power routing components.

Connector M101, the B-plus assembly, connects the battery to the main board. Component E201 forms a power-line filter for signal DC\_RAW\_B+, which supplies battery voltage to the transmitter section. Fuse F200 and filter C202, L200, C203 supply fused B plus to the controller section.

In turn, the controller supplies VSW1 regulated 3.6 Vdc, 2.78 Vdc, and 1.85 Vdc. The 3.6 Vdc supplies regulator U201 and controls switch Q201 which supplies fuse B+ to regulator U200. Regulator U201 supplies regulator U202. The 2.775 Vdc supplies regulator U202, Trident IC U702, and 16.8 MHz crystal circuit. The 1.85 sets the logic level for the SPI and SSI data.

In addition, the main board also has four regulators 5 Vdc (U200), 3 Vdc (U201), 1.8 Vdc (U202) and 1.5 Vdc (U203). The 5 volt regulator supplies the FGU section, transmitter ALC and receiver back end. The 3 volt regulator supplies dc for the receiver front ends, mixer, receiver back end and GPS. The 1.8 volt regulator supplies dc for the receiver front end and mixer. The 1.5 volt regulator supplies dc for the buffers in the FGU section.



---

## Chapter 3 Theory of Operation

This chapter provides a detailed circuit description of the ASTRO APX 1000 mainboard and keypad boards. When reading the theory of operation, refer to the appropriate schematic and component location diagrams located in the back of this manual. This detailed theory of operation can help isolate the problem to a particular component.

The ASTRO APX 1000 M1.5, APX 1000 M2 and APX 1000 M3 radio, which is a single-band synthesized radio, is available in the following frequency bands.

- VHF (136–174 MHz)
- UHF1 (380–470 MHz)
- UHF2 (450–520 MHz)
- 700/800 MHz (764–870 MHz)

All ASTRO APX 1000 radios are capable of analog operation (12.5 kHz or 25 kHz bandwidths), ASTRO mode (digital) operation (12.5 kHz only), X2-TDMA mode (25 kHz only) and Phase 2 TDMA mode (12.5 kHz only).

The ASTRO APX 1000 radio ([Figure 3-1](#)) consists of the following:

- **Main Board** – Contains all transmit, receive, and frequency generation circuitry, including the digital receiver back-end IC and the reference oscillator. The mainboard also contains a dual core processor, which includes both the microcontroller unit (MCU) and a digital signal processor (DSP) core, the processor's memory devices, an audio and power supply support integrated circuit (IC), a digital support IC, external power amplifier.
- **Top Control** – Contains a Multi-Function knob, a push button switch used for Emergency call and a light bar. The top control also includes TX/RX LED that is solid amber upon receive, red on PTT, and blinks amber on secure TX/RX.
- **Main Display** – 160 x 90 TFT transfective color LCD.

- **Keypad**

- Standard Control (M1.5) Keypad version has 3 soft keys
- Limited Keypad Version has 3 soft keys, 4 direction Navigation key, Home and Data buttons
- Full Keypad Version has 3 soft keys, 4 direction Navigation key, 3x4 alphanumeric keypad, Home and Data buttons.

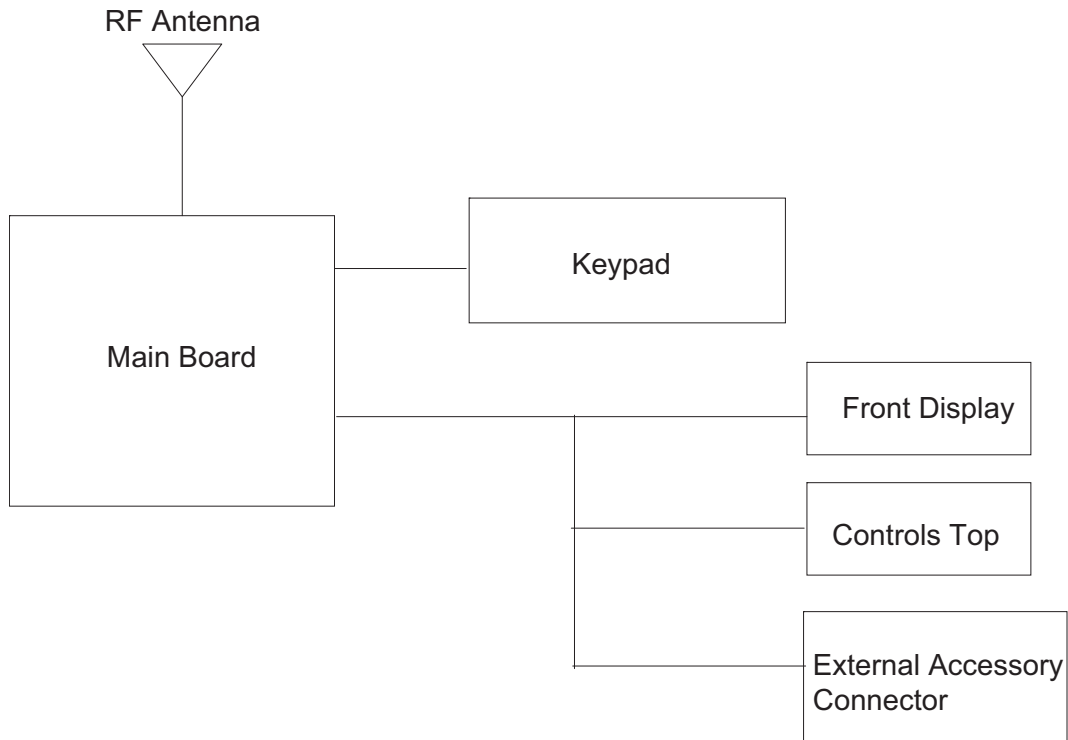


Figure 3-1. APX 1000 Overall Block Diagram

### 3.1 Main Board

The main board performs the transmitter and receiver functions necessary to translate between voice and data to modulated radio-frequency (RF) carrier at the antenna. The main board contains all the radio's RF circuits for the following major components:

- Receiver
- Transmitter
- Frequency Generation Unit (FGU)
- Controller

Figure 3-2, Figure 3-3, Figure 3-4 and Figure 3-5 illustrates the VHF, UHF1, UHF2 and 700/800 MHz transceiver block diagrams.

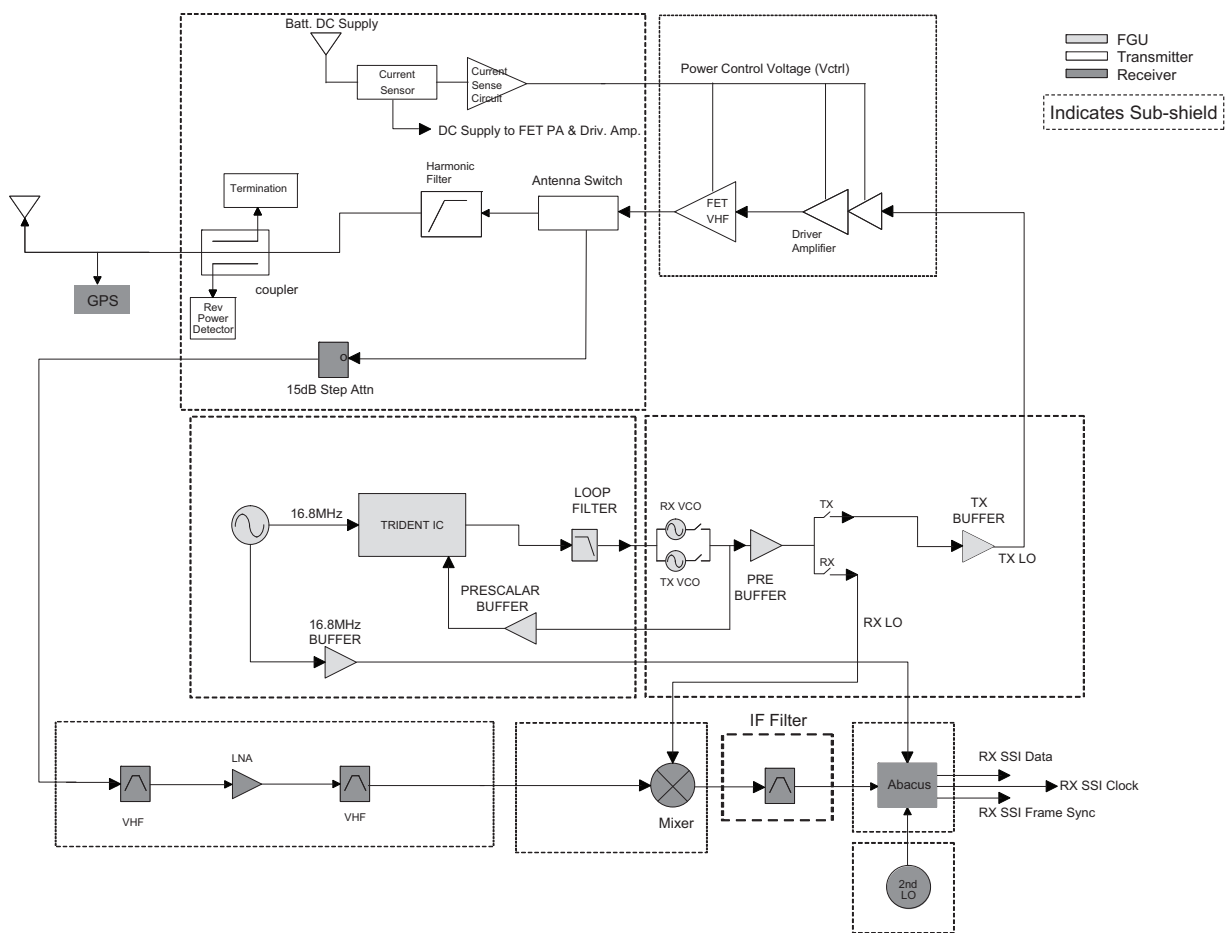


Figure 3-2. Transceiver (VHF) Block Diagram (Power and Control Omitted)

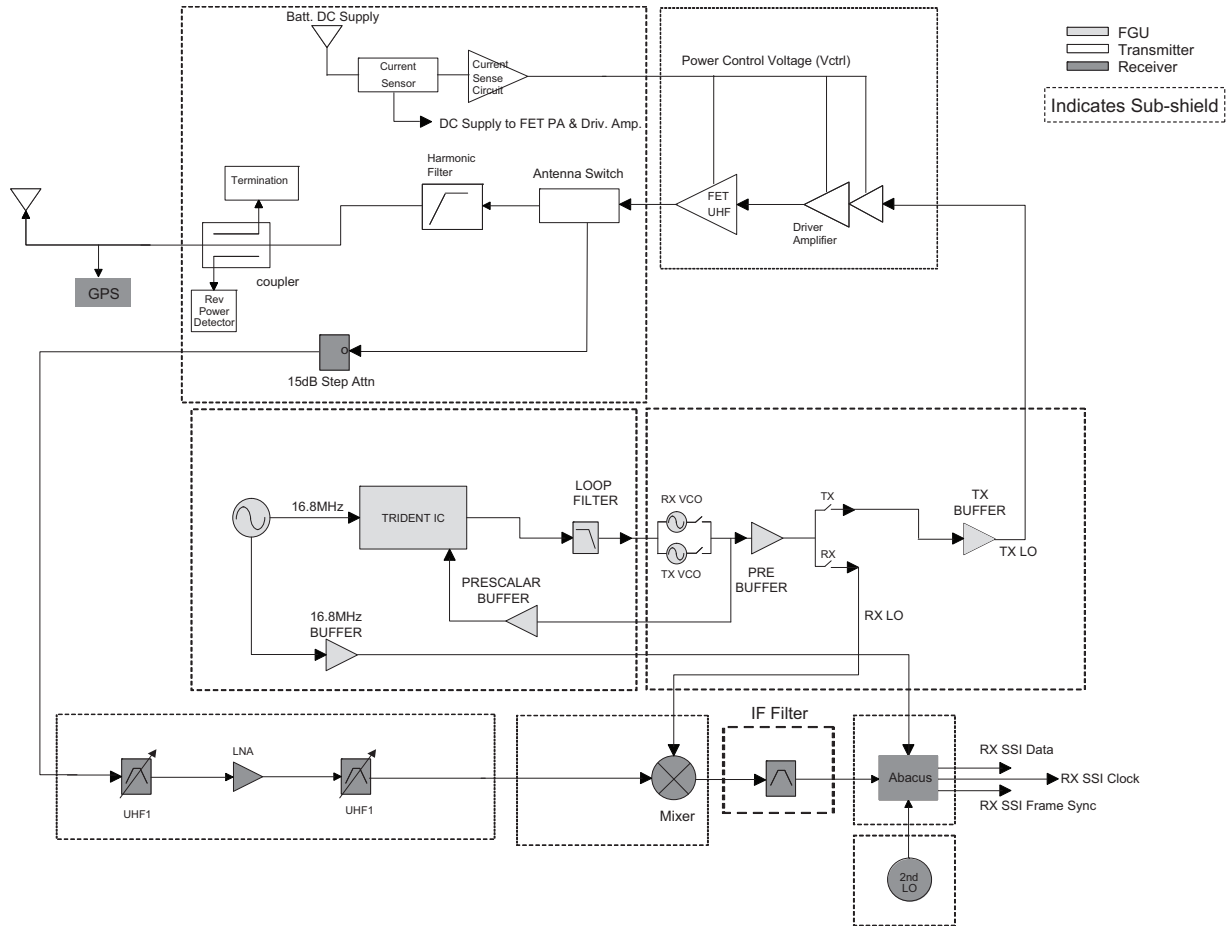


Figure 3-3. Transceiver (UHF1) Block Diagram (Power and Control Omitted)

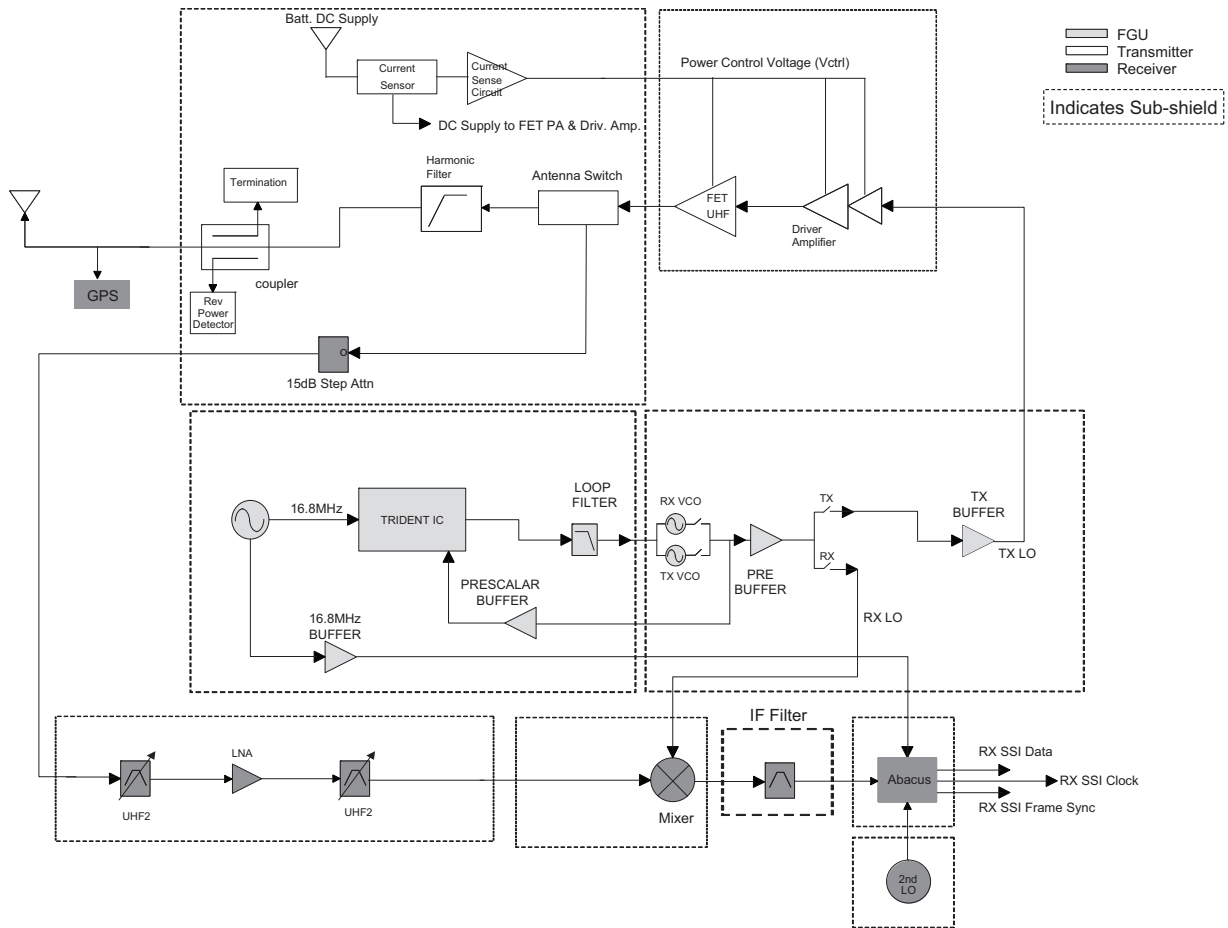


Figure 3-4. Transceiver (UHF2) Block Diagram (Power and Control Omitted)

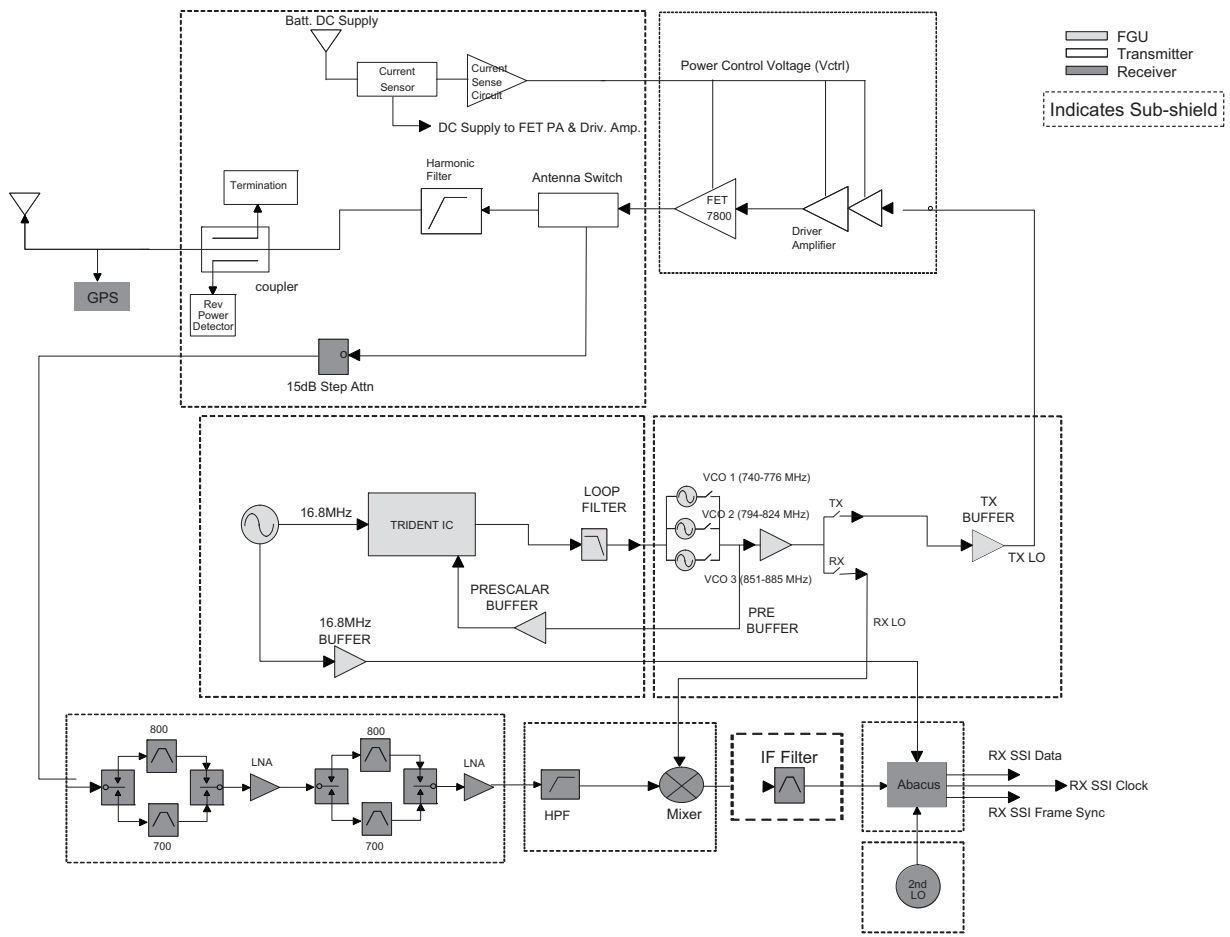


Figure 3-5. Transceiver (700/800 MHz) Block Diagram (Power and Control Omitted)

### 3.1.1 Interconnections

This section describes the various interconnections for the main board.

#### 3.1.1.1 Battery Connector M101

Battery connector M101 solders to the transceiver printed circuit board. The connector has 5 gold plated contacts that mate with the battery, two contacts for positive, two for negative and one for the Dig\_Battery\_Data. Signal descriptions are in [Table 3-1](#).

*Table 3-1. Battery Connector J3*

Pin No.	Signal	Description
1	DC_BATT	Battery positive terminal, nominally 7.5 Vdc
2	Dig_Battery_Data	Battery status, from battery to controller
3	Ground	Battery negative terminal, tied to PCB ground

#### 3.1.1.2 Power Conditioning Components

DC power-conditioning components include zener diodes, capacitors, ferrite beads, a power inductor, and the fuse. Diodes VR200 and VR101 provide over-voltage protection. Ferrite beads (designated E, etc.) and capacitors suppress electromagnetic interference from the main board.

The power-line filter consisting of L200, C202, and C203 suppresses digital noise from the controller board switching power supplies that could degrade the transmitter spectral purity.

Ground clips M103, M104 and M105 make contact between the main board ground and the radio chassis. The chassis connection is a necessary electrical reference point to complete the antenna circuit path. Shields SH1 through SH17 appear on the schematic to show their connection to ground.

### 3.1.2 Receiver

The RF signal is received at the antenna and is routed through the Harmonic Filter, followed by the Antenna Switch and the 15dB Step Attenuator IC. The latter contains a switchable attenuator that is enabled at predetermined RF power thresholds present at the antenna port. The output of the attenuator leads to the receiver front end section.

- VHF band (See Figure 3-6.)
- UHF1/UHF2 band (See Figure 3-7.)
- 700/800 MHz band (See Figure 3-8.)

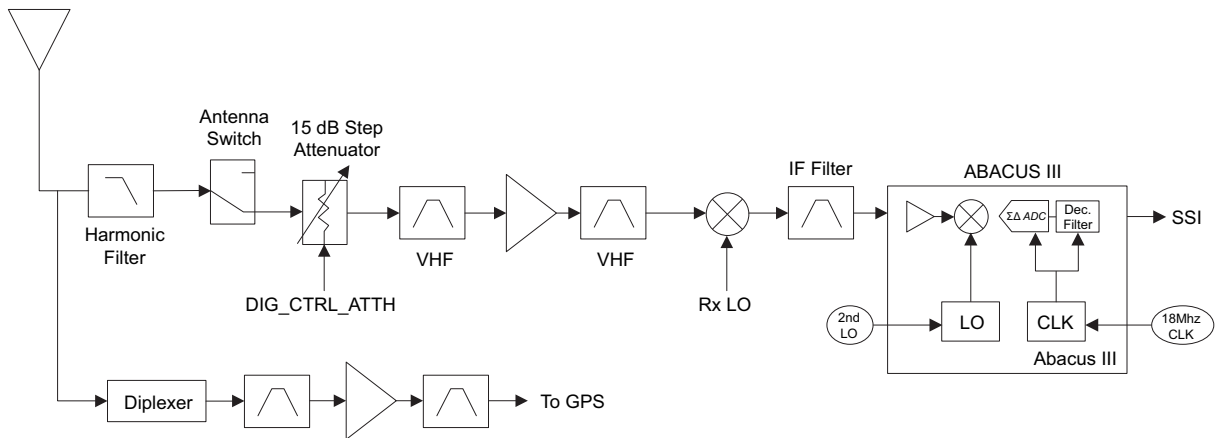


Figure 3-6. Receiver Block Diagram (VHF)

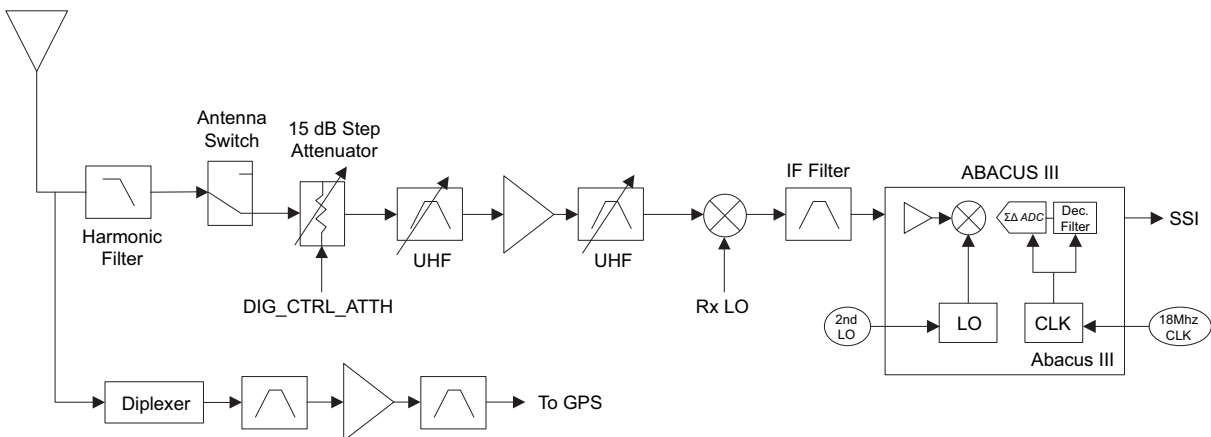


Figure 3-7. Receiver Block Diagram (UHF1/UHF2)



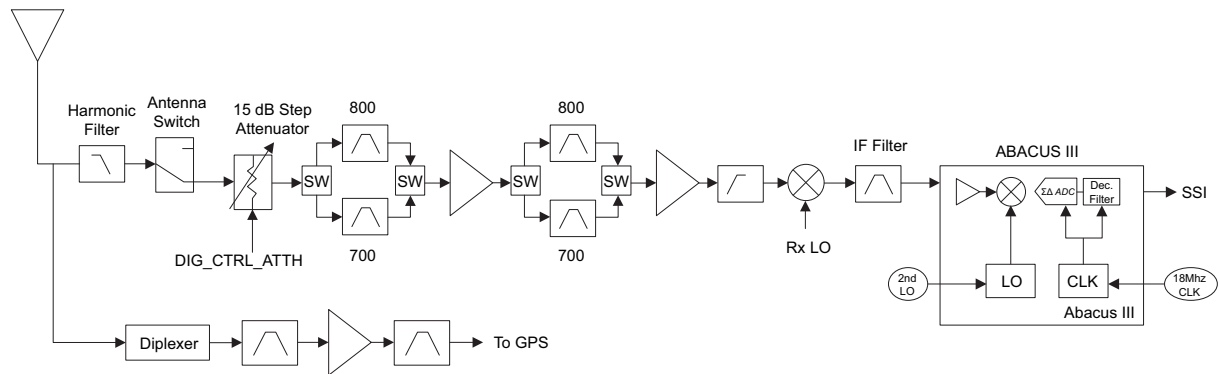


Figure 3-8. Receiver Block Diagram (700/800 MHz)

### 3.1.2.1 VHF Front-End

From the 15 dB Step Attenuator (U2702), a VHF signal is routed to the first pre-selector filter followed by a Low Noise Amplifier (LNA) and a second pre-selector filter. Both filters are discrete designs and are used to band limit the incoming energy and suppress known spurious responses such as Image and the  $\frac{1}{2}$  IF spur. The LNA active device is an NPN transistor (U304) with active bias provided by transistor pair (Q303).

The output of the second pre-selector filter is applied to the RF port of the Mixer IC (U507) via a balun transformer (T506). The Mixer IC is driven by a Local Oscillator (LO) signal at the LO port to down-convert the RF signal to a 109.65 MHz intermediate frequency (IF). The down converted IF signal is passed through a crystal filter (FL502) which drives the input of the Abacus 3 Analog to Digital Converter IC (AD9864) (U601).

### 3.1.2.2 UHF1/UHF2 Front-End

From the 15 dB Step Attenuator (U2602), a UHF signal is routed to the first pre-selector filter followed by a Low Noise Amplifier (LNA) and a second pre-selector filter. Both filters are discrete and tunable designs and are used to band limit the incoming energy and suppress known spurious responses such as Image and the  $\frac{1}{2}$  IF spur. The LNA active device is an NPN transistor (U1932) with active bias provided by transistor pair (Q1922).

The output of the second pre-selector filter is applied to the RF port of the Mixer IC (U507) via a balun transformer (T506). The Mixer IC is driven by a Local Oscillator (LO) signal at the LO port to down-convert the RF signal to a 109.65 MHz intermediate frequency (IF). The down converted IF signal is passed through a crystal filter (FL502) which drives the input of the Abacus 3 Analog to Digital Converter IC (AD9864) (U601).

### 3.1.2.3 700/800 MHz Front-End

From the 15 dB Step Attenuator (U2302), a 700 MHz or 800 MHz band signal is routed to an SPST band select switch (U402) which selects the 700 or the 800 band signal and routes it to the appropriate first pre-selector filter (FL401). A second band select switch (U404) selects the output of the appropriate filter and applies it to an LNA followed by a similar pre-selector filter/ band-select switch circuit. The signal is then routed to a second LNA (U407) whose output is applied to a discrete image filter. Both preselector filters are Surface Acoustic Wave designs used to band limit the received energy and suppress known spurious responses such as Image and the  $\frac{1}{2}$  IF spur.

The output of the discrete image filter is applied to the RF port of the Mixer IC (U507) via a balun transformer (T506). The Mixer IC is driven by a Local Oscillator (LO) signal at the LO port to down-convert the RF signal to a 109.65 MHz intermediate frequency (IF). The down converted IF signal is passed through a crystal filter (FL502) which drives the input of the Abacus 3 Analog to Digital Converter IC (AD9864)(U601).

#### 3.1.2.4 Analog To Digital Converter

The ADC IC's front end down converts the first IF to a second IF, a 2.25 MHz signal, by mixing a 107.4MHz LO signal generated by an integrated synthesizer and external VCO with active device U602 and resonator L604. The second IF is sampled at 18 MHz, a signal generated by an integrated clock synthesizer and VCO device with external resonator L605.

The sampled signal is decimated by a factor of 900 to 20 kHz and converted to SSI format at the ADC's output. The Serial Synchronous Interface (SSI) serial data waveform is composed of a 16 bit in-phase word (I) followed by a 16 bit Quadrature word (Q). A 20 kHz Frame Synch and a 1.2 MHz clock waveform are used to synchronize the SSI IQ data transfer to the Digital Signal Processor IC (OMAP) for post-processing and demodulation.

### 3.1.3 Transmitter

The transmitter takes modulated RF from the FGU and amplifies it to the rated output power to produce the modulated carrier at the antenna.

**NOTE:** Refer to [Table 8-1](#) for a listing of transmitter-related schematics that will aid in the following discussion.

The transmitter ([Figure 3-1](#)) for the UHF1 radio consists of one MOSFET high power transistor for the UHF1 band. The same topology applied for the 700/800 MHz radio ([Figure 3-3](#)) where one MOSFET high power transistor is used for the 700/800 MHz band. The high power transistor is driven by an RF driver IC that receives its input signal from the voltage controlled oscillator. Transmitter current is controlled by a discrete current

control circuit that senses the current drawn by the Power Amplifier and the driver IC via a sensing resistor which controls the Power Amplifier and driver IC control voltage to maintain the overall current level. The TX signals pass through the antenna switch that will provide switching mechanism from transmit to receive path. The signal then route through each respective harmonic filters, an embedded directional coupler and finally to the antenna.

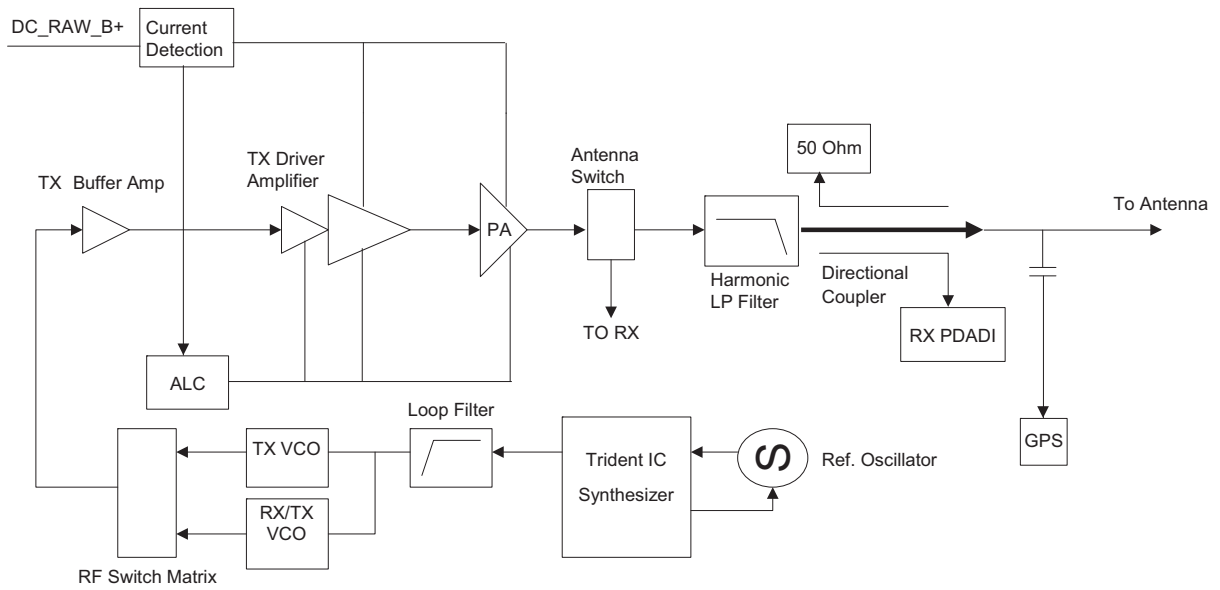


Figure 3-9. Transmitter Block Diagram

### 3.1.3.1 Driver Amplifier

The driver amplifier IC (VHF – U902, UHF1/UHF2 – U1602, 700/800 MHz – U1002) contains one LDMOS FET amplifier stages and an internal resistor bias networks. Pin 16 is the RF input. Modulated RF from the FGU, at a level of +3 dBm  $\pm$ 2 dB, is coupled through a blocking capacitor to the gate of

FET-1. An LC inter-stage matching network connects the first stage output VD1 to the second stage input G2. The RF output from the drain of FET-2 is pin 6 (RFOUT1). Gain control is provided by a voltage applied to pin 1 (VCNTRL). Typical output power is about +27 dBm (500 mW) with VCNTRL at 5.5 V.

**VHF:** L901 and C904 is the inter-stage matching network. Components C907, C910, C913, C914, C916 L904, L905 match the output impedance to the input of the final device (Q901). Capacitor C907 also serves as the DC block.

**UHF1/UHF2:** L1601 and C1604 is the inter-stage matching network of the driver amplifier IC, C1607, C1610, L1604, C1613, C1614, L1605 and C1616 serves as matching circuit of the driver IC to the final device of Q1601. Capacitor C1607 also works as DC block to the circuit.

**700/800 MHz:** L1002, C1002 and C1004 are the inter-stage matching network. Components C1013 and C1023 match the output impedance to the input of the final device (Q1001). Capacitor C1013 also serves as the DC block.

### 3.1.3.2 Power Amplifier Transistor

The power amplifier transistors (VHF – Q901, UHF1/UHF2 – Q1601, 700/800 MHz – Q1001) are Silicon N-channel MOSFETs housed in a high-power, surface-mount, PMM package. To prevent thermal damage, it is essential that the heat sink of the power module be held in place against the radio chassis using the RF board screw. All FETs are matched using a lowpass topology. Drain bias is applied through L906 for VHF, L1606 for UHF1/UHF2 and L1606 for 700/800 MHz band. Gain is dynamically controlled by adjusting the gate bias. The gate is insulated from the drain and source so that gate bias current is essentially zero

**VHF:** C927, C920, C921, C922, C924, C928, C923, C925, L907, L908, L909 and L910 are the elements of the output matching network apart from a transmission-line structure. The Gate biasing is applied through a biasing network consist of R903, R904, R905, C915 and C917.

**UHF1/UHF2:** C1620, C1621, C1622, L1609, C1624, L1610, C1623, C1628 and C1625 are the elements of the output matching network apart from a transmission-line structure. The Gate biasing is applied through a biasing network consist of R1603, R1604, R1605, C1615 and C1617.

**700/800 MHz:** The input impedance-matching network is C1013 and C1023. A transmission-line structure and C1019, C1020, L009 and C1021 form the output-matching network. Gate bias applied through R1003, R1004, C1015 and R1005.

### 3.1.3.3 Directional Coupler

A directional coupler is used only for receiving mode. Only forward power is feed into the directional coupler without sensing any reverse power.

### 3.1.3.4 Harmonic Filter

The harmonic filter is a high-power, low-loss, low-pass filter. Its purpose is to suppress transmitter harmonics. The filter also improves receiver out-of-band rejection. Shield SH8 must be in place to achieve the required stop band rejection.

**VHF:** The harmonic filter apply discrete components as the circuit line up. The pass band is up to 174 MHz while the stop band is above 270 MHz.

**UHF1/UHF2:** The harmonic filter apply discrete components as the circuit line up. The pass band is up to 520 MHz while the stop band is above 1200 MHz.

**700/800 MHz:** The harmonic filter uses both discrete components and transmission lines. The pass band is up to 870 MHz, and the stop band is above 1500 MHz.

### 3.1.3.5 Antenna Switch

The antenna switch consists of discrete components which comprise three ports, transmit, receive and output path. During transmit mode, the antenna switch will be turned ON via Filter\_Raw B+ and input logic gate from Ant\_Swi. When the conditions are fulfilled, the antenna switch will be turned ON and the signal will route to the output port as it will notice high impedance on the receive path. The same concept is applied during the receive mode where the switch is in OFF state, which provides high RF impedance on the transmit mode.

### 3.1.3.6 Reverse Power Protection

The radio, while in receive mode is constantly monitoring the input power from the antenna. This power is sensed by the directional coupler and channeled into an RF detector U1106. The matching network between the coupler and the detector consists of R1107, L1102, C1105 and C1107. Once the input RF level exceeds a certain limit, the detector trips a logic circuit which enables attenuation to protect the RF front end. This is to protect the front end from receiving large signal damage.

### 3.1.3.7 Transmitter Current Control

In TX mode, the transmitter Automatic Level Control (ALC) section enables the transmitter and controls the TX current. Current control is used in all transmit mode. Several other functions included in the TX ALC section of the radio are thermal cutback of power, current cutback of power, and reverse power detection with means to disable the receiver in the event of high reverse power at the antenna port.

#### 3.1.3.7.1 Thermal Cutback

Temperature is sensed by IC U1238 and is located next to RFPA finals. Comparators, U1254 establish a temperature trip points. The combined logic of the comparator and temperature sense IC, U1238, will trigger the transistor Q1264 and attenuate the power by reducing the voltage feed into the smaller picker by 3 dB. There is only 1 stage of thermal cutback in the circuitry.

#### 3.1.3.7.2 Current Control Mode

To enable the TX section, two control signals (DIG\_DMCS and DIG\_GPIO49) are required to trigger the Tx circuitry. Once these signals are received, the TXH control logic is enabled and voltage will be supplied to the driver amplifier.

In Current Control Mode, the sensing resistor R1229 is used to sense the small voltage drop across the resistor. This voltage (Delta Voltage) is then feed into the differential operational amplifier U1202 to obtain the difference in voltage level. The output of the differential amplifier will then be filtered by a second order low pass filter before being amplified by the integrator op-amp.

In order for the Automatic Logic Control (ALC) to function, 2 inputs are needed to be supplied to the Integrator operational amplifier. First is the voltage from the sensing resistor and the second voltage from the 10-bit DAC IC and MAKO. In order to trigger the voltage from the 10-bit DAC IC, three control signals are required, ANA\_CTRL\_VSET, DIG\_SPI\_CLK, and DIG\_DATA\_SPI\_MOSI. Once these control signals are received, the 10-Bit DAC IC will provide an output based on the DAC programmed. The output of the 10-Bit DAC IC ranges from 0V to 5V. The DAC scalar (U1253) will then scale the voltage via a summing amplifier to enable a full voltage scaling. This voltage is known as Vdac. The smaller picker (U1269) circuitry will then compare the input voltage from Vdac and MAKO voltage (0-5V). The smaller picker will output the smaller voltage between the 2 voltages. As the Vdac rise time is shorter than the MAKO voltage rise time in micro seconds, the initial rise time of the output of smaller picker will be picked by the Vdac. However, when the MAKO voltage exceeds the Vdac voltage, the output of the smaller picker will be picked from the MAKO voltage. The final output voltage from the smaller picker will then be filtered by a Sallen Key active low pass filter before feeding it to the Integrator voltage reference pin.

The integrator will then integrate the voltage feed into its Voltage reference pin versus the Voltage of the second order low pass filter. The output voltage of the integrator will be double up by an op-amp. This control voltage is then feed into the Power amplifier and Driver amplifier to control the current of the active devices.

#### 3.1.3.7.3 PA Offset, Control Voltage Gain Scaling

An offset voltage is applied to the control voltage at a summing junction made up of R1174 and R1154 as a means of further improving transient adjacent channel splatter in the freq band by pre-biasing the PA. The output of DAC "A" is summed with either the output of the log amp or the integrator through R1174. The value for DAC "A" has been established and fixed in the firmware. is sent to a non-inverting, gain-scaling amplifier, U901 (VHF), U1601 (UHF1/UHF2) or U1001 (700/800 MHz) and then to the PA driver and final.

### 3.1.4 Frequency Generation Unit (FGU)

The frequency-generation function is performed by several ICs; multiple voltage-controlled oscillators (VCOs); and associated circuitry. The reference oscillator provides a frequency standard to the Trident IC, which controls the VCOs via the port expander. There are also buffers that amplify the VCO signal to the correct level for the next stage. Figure 3-10, Figure 3-11 and Figure 3-12 below shows a block diagram of the FGU Section.

**VHF:** Two VCOs are employed: one to generate the first RX LO and the other to generate the transmit injection signals.

**UHF1/UHF2:** Two VCOs are employed: one to generate the first RX LO and the other to generate the transmit injection signals.

**700/800 MHz:** Three VCOs are used to cover the entire 700/800 MHz band.

- VCO1 covers the RX 800 MHz band and the TX 700 MHz (764–776 MHz) band
- VCO2 covers the TX 700/800 MHz (794–824 MHz) band
- VCO3 covers the TX 800 MHz (851–870 MHz) band and the RX 700 MHz band

**NOTE:** Refer to Table 8-1 for a listing of FGU-related schematics that will aid in the following discussion.

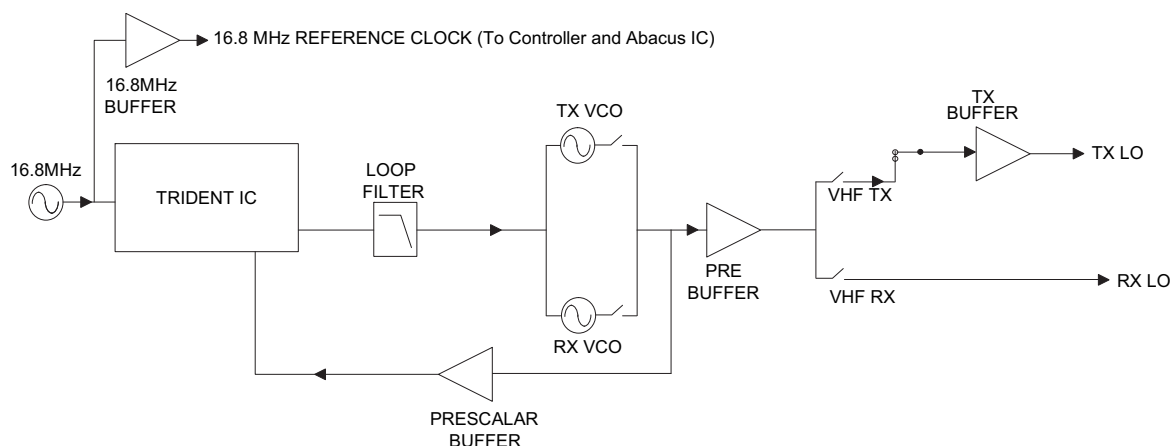


Figure 3-10. Synthesizer Block Diagram (VHF)

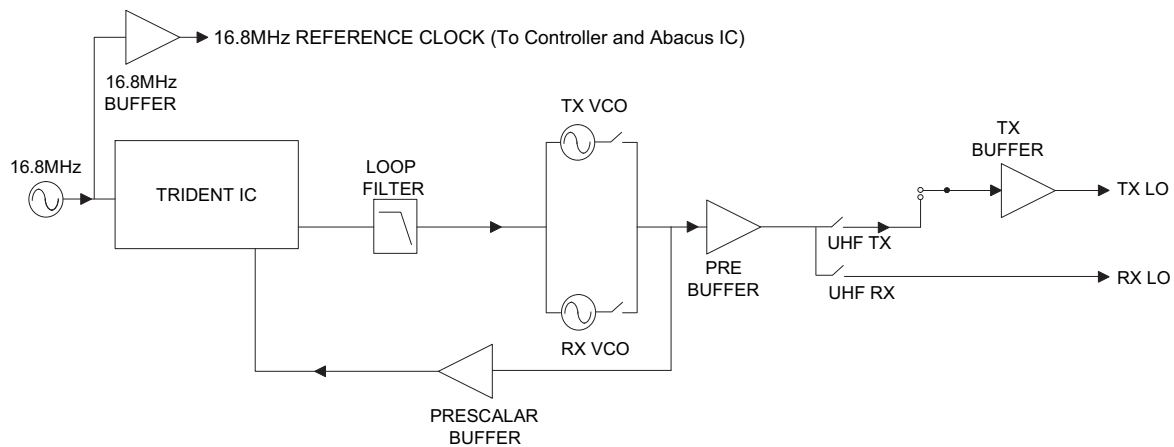


Figure 3-11. Synthesizer Block Diagram (UHF1/UHF2)

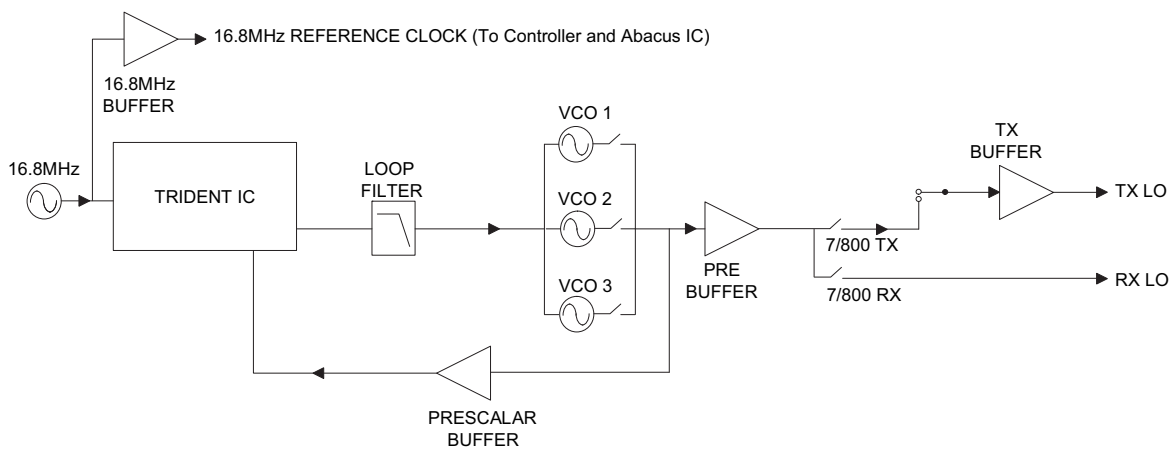


Figure 3-12. Synthesizer Block Diagram (700/800 MHz)

### 3.1.4.1 Reference Oscillator Y701

The radio's frequency stability and accuracy is derived from the Voltage-Controlled Temperature-Compensated Crystal Oscillator (VCTCXO), Y701. This 16.8 MHz oscillator is controlled by the voltage from the AUX\_DAC pin of the Trident IC, U702, that can be programmed through a serial peripheral interface (SPI). The oscillator output at pin 3 is coupled through capacitor C736 to the Trident IC reference oscillator input. This reference is then passed through an internal buffer and is then coupled to the external BJT buffer (comprised of U746 and supporting circuitry) via C739. These buffers provide isolation for the 16.8 MHz output to the controller circuitry and ABACUS IC. Components L753 and C754 form a low-pass filter to reduce the harmonics of the 16.8 MHz.



### 3.1.4.2 Trident IC U702

The Trident IC, U702, is a multiple protocol, multiple band transceiver Motorola-proprietary, CMOS IC, with built-in dual-port modulation. The Trident IC incorporates frequency division and comparison circuitry to keep the VCO signals stable. The Trident IC is controlled by the MCU through a serial bus. All of the synthesizer circuitry is enclosed in rigid metal cans on the transceiver board to reduce interference effects. Separate power supply inputs are used for the various functional blocks on the IC. Inductors L727, L733, L735, L738 and L741 provide isolation between the IC and the different power supplies. Host control is through a four-wire, smart SPI interface (pins D8, D9, D10 and C11). Some of the Trident IC functions include frequency synthesis, reference clock generation, modulation control, voltage multiplication and filtering, near-integer spurious reduction, RF divide-by-two and auxiliary SPI.

### 3.1.4.3 Synthesizer

Frequency synthesis functions include a low band and high band mode prescaler, a phase detector, a programmable loop divider and its control logic, a charge pump, and a lock detector output. Fractional-N synthesizer principles of operation are covered in detail in the manufacturers' literature. No similar discussion will be attempted here.

### 3.1.4.4 Clocks

U702, pin K5 (REF\_IN), is the 16.8 MHz reference oscillator input from the VCTCXO (Y701).

### 3.1.4.5 Modulation

To support many voice, data, and signaling protocols, APX 1000 radios must modulate the transmitter carrier frequency over a wide audio frequency range, from less than 10 Hz up to more than 6 kHz. The Trident IC supports audio frequencies down to zero Hz by using dual-port modulation. The digital audio signal at pin F11 (TXD) is transferred to the Trident baseband circuitry via the TX Serial Synchronous Interface (SSI) bus. The data is then internally divided into high and low-frequency components, which modify both the synthesizer dividers and the external VCOs through a signal on HP\_MOD\_OUT (pin L9). The DSP scaling is adjusted to achieve a flat modulation frequency response during the transmitter modulation balance calibration.

### 3.1.4.6 Voltage Multiplier and Superfilter

Pins H10 (VMULT2) and H11 (VMULT1) together with diode arrays D722 and D723 and their associated capacitors form the voltage multiplier. The voltage multiplier generates 10.625 Vdc to supply the phase detector and charge-pump output stage at pin F1 (MN\_CP\_VCC). The superfilter is an active filter that provides a low-noise supply for the VCOs. The input is a regulated 5 Vdc from DC\_LIN\_5V at pin K4 (SF\_SPLY). The output is a superfiltered voltage at pin J5 (SF\_OUT).

### 3.1.4.7 Loop Filter

The components connected to pins G3 (MN\_CP) and G2 (MN\_ADAPT\_CP) form a 4th-order, RC low-pass filter. Current from the charge-pump output, MN\_CP, is transformed to voltage VCO\_VCTRL, which modulates the VCOs. Extra current is supplied by MN\_ADAPT\_CP for rapid phase-lock acquisition during frequency changes. The lock detector output pin B4 (TEST1\_LCKDET) goes to a logic "1" to indicate when the phase-lock loop is in lock.

### 3.1.4.8 Buffers and VCOs

Q731 and surrounding circuitry is the prescaler buffer that takes the output of the VCOs and feeds the prescaler input to the Trident IC, pin G1 (M\_PRSC).

Q756 and surrounding circuitry is a buffer that provides the correct drive level to the receiver section (via the transmission line RX\_LO) and to the input to the TX buffer (Q774 and surrounding circuitry). Q745 and surrounding circuitry provide the bias to the buffer. The buffer formed by Q756 and its associated circuitry is called a “pre-buffer” at this stage.

R703, R704 and R707 help provide some extra isolation to the receiver.

Q774 and surrounding circuitry is the transmit injection buffer. The transmit injection buffer provide the correct drive level to the transmitter section (via the transmission line TX\_INJ). Q767 and surrounding circuitry provide the bias to the transmit injection buffer.

**VHF:** The voltage-controlled oscillators are varactor tuned. The voltage (0.3V–10.6V) varies as it is being applied to varactors D3206 to D3209 and D3246 to D3249 of their respective Voltage-Controlled Oscillator (VCO). The capacitance of the varactors also varies, thereby changing the output frequency of the VCOs. Both the VCOs are used to cover the entire 38 MHz bandwidth of the VHF, 136 MHz to 174 MHz band.

- TX VCO covers the transmit frequencies from 136 MHz to 174 MHz
- RX VCO covers the receive Local Oscillator (LO) frequencies from 245.65 MHz to 283.65 MHz

The TX VCO and the RX VCO are selected using GPO1 and GPO2 respectively.

To select the VHF RX VCO, pin E5 (GPO1\_TEST1) must be at a high logic level and pin D5 (GPO2\_TEST2) must be at a low logic level. The output of the RX VCO is then fed to pin 5 (RF2) of switch U3238. The output of U3238 is then split into two signals. One to the Prescaler buffer input and the other to the prebuffer. The output of the prebuffer is then fed to pin 1 (RFC) of U738. The output of U738, pin 5 (RF2) then goes to the attenuator (comprised of R703, R704 and R707) and then fed to the receiver section via the RX\_LO transmission line.

To select the VHF TX VCO, pin D5 (GPO2\_TEST2) must be at a high logic level and pin E5 (GPO1\_TEST1) must be at a low logic level. The output of the TX VCO is then fed to pin 4 (RF1) of switch U3238. The output of U3238 is then split into two signals. One to the Prescaler buffer input and the other to the prebuffer. The output of the prebuffer is then fed to pin 1 (RFC) of U738. The output of U738, pin 4 (RF1) then goes to the transmit injection buffer (comprised of Q774 and surrounding circuitry). The output of the transmit buffer, then goes to the transmit section via the TX\_INJ transmission line.

**UHF1:** The voltage-controlled oscillators are varactor tuned. The voltage (0.3V–10.6V) varies as it is being applied to varactors D3102 to D3105 and D3135 to D3138 of their respective Voltage-Controlled Oscillator (VCO). The capacitance of the varactors also varies, thereby changing the output frequency of the VCOs. Both the VCOs are used to cover the entire 90MHz bandwidth of the UHF range 1, 380 MHz to 470 MHz band.

- TX VCO covers the transmit frequencies from 380 MHz to 470 MHz
- RX VCO covers the receive Local Oscillator (LO) frequencies from 489.65 MHz to 579.65 MHz

The TX VCO and the RX VCO are selected using GPO1 and GPO2 respectively.

To select the UHF RX VCO, pin E5 (GPO1\_TEST1) must be at a high logic level and pin D5 (GPO2\_TEST2) must be at a low logic level. The output of the RX VCO is then fed to pin 5 (RF2) of switch U3001. The output of U3001 is then split into two signals. One to the Prescaler buffer input and the other to the prebuffer. The output of the prebuffer is then fed to pin 1 (RFC) of U738. The output of U738, pin 5 (RF2) then goes to the attenuator (comprised of R703, R704 and R707) and then fed to the receiver section via the RX\_LO transmission line.

To select the UHF TX VCO, pin D5 (GPO2\_TEST2) must be at a high logic level and pin E5 (GPO1\_TEST1) must be at a low logic level. The output of the TX VCO is then fed to pin 4 (RF1) of switch U3001. The output of U3001 is then split into two signals. One to the Prescaler buffer input and the other to the prebuffer. The output of the prebuffer is then fed to pin 1 (RFC) of U738. The output of U738, pin 4 (RF1) then goes to the transmit injection buffer (comprised of Q774 and surrounding circuitry). The output of the transmit buffer, then goes to the transmit section via the TX\_INJ transmission line.

**UHF2:** The voltage-controlled oscillators are varactor tuned. The voltage (0.3V–10.6V) varies as it is being applied to varactors D3102 to D3105 and D3135 to D3138 of their respective Voltage-Controlled Oscillator (VCO). The capacitance of the varactors also varies, thereby changing the output frequency of the VCOs. Both the VCOs are used to cover the entire 70 MHz bandwidth of the UHF range 2, 450 MHz to 520 MHz band.

- TX VCO covers the transmit frequencies from 450 MHz to 520 MHz
- RX VCO covers the receive Local Oscillator (LO) frequencies from 559.65 MHz to 629.65 MHz

To select the UHF2 RX VCO, pin E5 (GPO1\_TEST1) must be at a high logic level and pin D5 (GPO2\_TEST2) must be at a low logic level. The output of the RX VCO is then fed to pin 5 (RF2) of switch U3238. The output of U3238 is then split into two signals. One to the Prescaler buffer input and the other to the prebuffer. The output of the prebuffer is then fed to pin 1 (RFC) of U738. The output of U738, pin 5 (RF2) then goes to the attenuator (comprised of R703, R704 and R707) and then fed to the receiver section via the RX\_LO transmission line.

To select the UHF2 TX VCO, pin D5 (GPO2\_TEST2) must be at a high logic level and pin E5 (GPO1\_TEST1) must be at a low logic level. The output of the TX VCO is then fed to pin 4 (RF1) of switch U3238. The output of U3238 is then split into two signals. One to the Prescaler buffer input and the other to the prebuffer. The output of the prebuffer is then fed to pin 1 (RFC) of U738. The output of U738, pin 4 (RF1) then goes to the transmit injection buffer (comprised of Q774 and surrounding circuitry). The output of the transmit buffer, then goes to the transmit section via the TX\_INJ transmission line.

**700/800 MHz:** The voltage-controlled oscillators are varactor tuned. The voltage (0.3V–10.6V) varies as it is being applied to varactors VR3010 (700MHz), VR3011(700/800 MHz) and VR3048 (800 MHz) of their respective Voltage-Controlled Oscillator (VCO). The capacitance of the varactors also varies, thereby changing the output frequency of the VCOs. Three VCOs are used to cover the entire 700/800 MHz band.

- VCO1 covers the RX 800 MHz band and the TX 700 MHz (764–776 MHz) band
- VCO2 covers the TX 700/800 MHz (794–824 MHz) band
- VCO3 covers the TX 800 MHz (850–870 MHz) band and the RX 700 MHz band

Three VCOs are selected using GPO1, GPO2 and GPO8 respectively.

To select the 700 RX VCO, pin D6 (GPO8) must be at a high logic level and pin E5 (GPO1) and pin D5 (GPO2) must be at a low logic level. The output of the 700 RX VCO is then split into two signals. One to the Prescaler buffer input and the other to the prebuffer input. The output of the prebuffer is then fed to pin 1 (RFC) of U738. The output of U738, pin 5 (RF2) then goes to the pi attenuator (comprised of R703, R704 and R707) and then fed to the receiver section via the RX\_LO transmission line.

To select the 800 RX VCO, pin E5 (GPO1) must be at a high logic level and pin D5 (GPO2) and pin D6 (GPO8) must be at a low logic level. The output of the 800 RX VCO is then split into two signals. One to the Prescaler buffer input and the other to the prebuffer input. The output of the prebuffer is then fed to pin 1 (RFC) of U738. The output of U738, pin 5 (RF2) then goes to the pi attenuator (comprised of R703, R704 and R707) and then fed to the receiver section via the RX\_LO transmission line.

To select the 700 TX VCO, pin E5 (GPO1) must be at a high logic level and pin D5 (GPO2) and pin D6 (GPO8) must be at a low logic level. The output of the 700 TX VCO is then split into two signals. One to the Prescaler buffer input and the other to the prebuffer input. The output of the prebuffer is then fed to pin 1 (RFC) of U738. The output of U738, pin 4 (RF1) then goes to the transmit injection buffer (comprised of Q774 and surrounding circuitry). The output of the transmit buffer, then goes to the transmit section via the TX\_INJ transmission line.

To select the 700/800 MHz TX VCO, pin D5 (GPO2) must be at a high logic level and pin E5 (GPO1) and pin D6 (GPO8) must be at a low logic level. The output of the 700/800 MHz TX VCO is then split into two signals. One to the Prescaler buffer input and the other to the prebuffer input. The output of the prebuffer is then fed to pin 1 (RFC) of U738. The output of U738, pin 4 (RF1) then goes to the transmit injection buffer (comprised of Q774 and surrounding circuitry). The output of the transmit buffer, then goes to the transmit section via the TX\_INJ transmission line.

To select the 800 TX VCO, pin D6 (GPO8) must be at a high logic level and pin E5 (GPO1) and pin D5 (GPO2) must be at a low logic level. The output of the 800 TX VCO is then split into two signals. One to the Prescaler buffer input and the other to the prebuffer input. The output of the prebuffer is then fed to pin 1 (RFC) of U738. The output of U738, pin 4 (RF1) then goes to the transmit injection buffer (comprised of Q774 and surrounding circuitry). The output of the transmit buffer, then goes to the transmit section via the TX\_INJ transmission line.

## 3.2 Controller

### 3.2.1 Controller Overview

This section provides a detailed circuit description of the APX 1000 controller design. The controller design consists of the following board and flexes:

#### Printed Circuit Boards

- Main Board
- Keypad Board

#### Flexes

- GCAI (Global Core Accessory Interface) (BT Antenna/TX/RX LED)
- Side Controls
- Backkit (keypad)
- Frontkit (audio/speaker/knob/front display)
- Mic

The controller interconnection diagram (Figure 3-13.) shows the various physical components of the design, along with how they are all connected. It also shows the key distinguishes between a flex connection and a board-to-board connection. A brief description of each of the components is provided below.

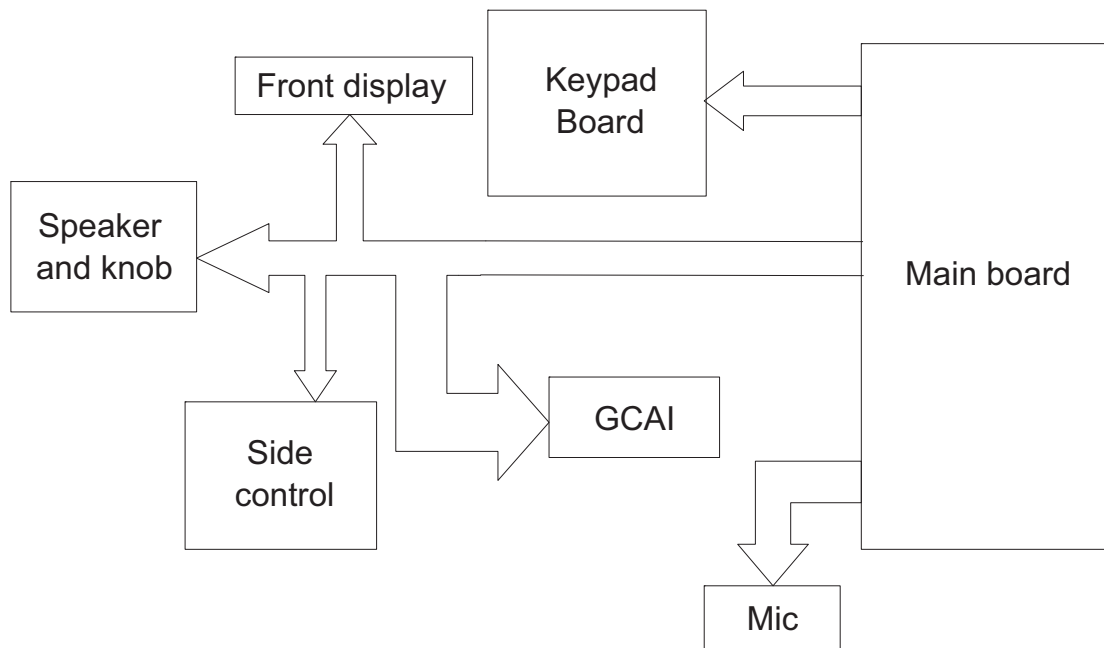


Figure 3-13. Controller Interconnection Diagram

### 3.2.1.1 Main Controller Components and Connections

#### 3.2.1.1.1 Main Board Controller section

The controller section contains the Class D internal audio power amplifier, OMAP1710 dual-core processor, FLASH and SDRAM memory, Audio circuitry (MAKO and CODEC IC's), a Complex Programmable Logic Device (CPLD), and interfaces to the other components in the controller design.

##### **Connectors**

- Keypad – J2305

#### 3.2.1.1.2 Keypad Board

The keypad board features a 3x2 Menu keypad with 4-way navigation button, a 3x4 alphanumeric keypad, or a 3x1 Menu keypad.

##### **Connectors**

- Main Board – P2001, P1000
- Frontkit flex – P2000

#### 3.2.1.1.3 GCAI Flex

The GCAI flex contains an Audio Mic, TX/RX LED that is solid amber upon receive, red on PTT and blinking amber on receive, status LED, and audio mic and a connector to interface with the frontkit flex. The flex comes with components for ESD protection.

### 3.2.1.2 Front kit Flex

The frontkit contains a speaker, multifunction rotary knob, connectors to the front display, GCAI flex, side control flex and keypad board. The multifunction rotary knob is used for ON/OFF volume and channel/frequency.

#### 3.2.1.2.1 Front Display

The Front Display is a TFT transfective color LCD, 160 pixels x 90 pixels with a white backlight. The display connects through a flex directly to a 22-pin connector located on the frontkit flex.

#### 3.2.1.2.2 Data-Side Microphone

The data-side microphone is mounted on the front chassis and connects directly to the Main board through a set of pogo pins mounted on the Main board.

#### 3.2.1.2.3 Side Controls Flex

The side controls flex contains the PTT, Side Top button, Side Middle button and Side Bottom button. The flex connects to the frontkit flex through a 10-pin connector.

#### 3.2.1.2.4 Audio-Side Microphone and Speaker

The audio-side microphone is located on the GCAI flex and connected to Frontkit flex. The speaker assembly is located on the Frontkit flex.

### 3.2.1.3 Controller Electrical Architecture

An overview of the Controller electrical architecture is shown in [Figure 3-14](#) below. The major components and electrical interfaces are shown.

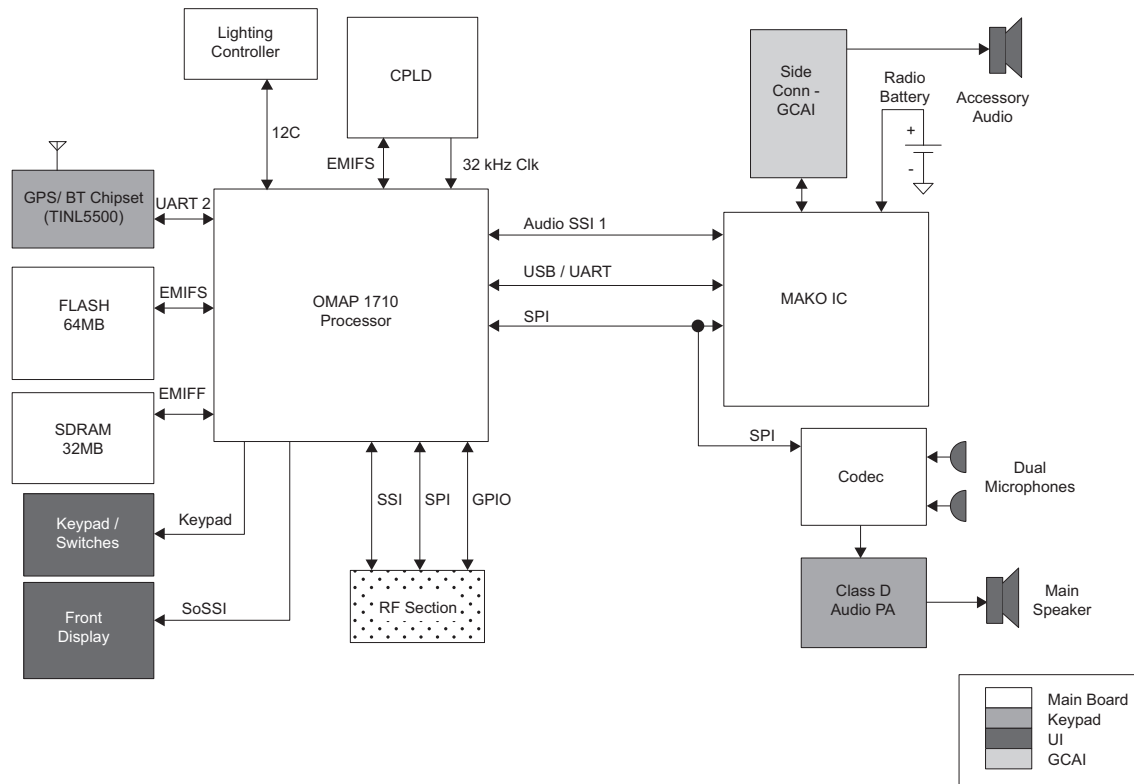


Figure 3-14. Controller Electrical Overview

The functional blocks of the controller are:

- DC Distribution
- Clock Sources
- Processor / Memory
- CPLD
- Audio – Internal and External
- MAKO
- User Interfaces

### 3.2.2 DC Distribution

SW\_B+ supply comes from a pass FET (Q6501) that is powered by UNSW\_B+ (battery voltage). The FET is activated once the power switch is in its on position. SW\_B+ supplies the power for the entire controller. SW\_B+ supplies MAKO and the external regulators. MAKO and the external regulators then regulate the voltage to the desired level. (See Figure 3-15.)

OMAP's core is supplied by VCC\_SW\_1.4 (U6507). 1.85 LDO supplies OMAP's IO, FLASH, CPLD, DDR, and MACE. See Table 3-2 for DC supplies and sources.

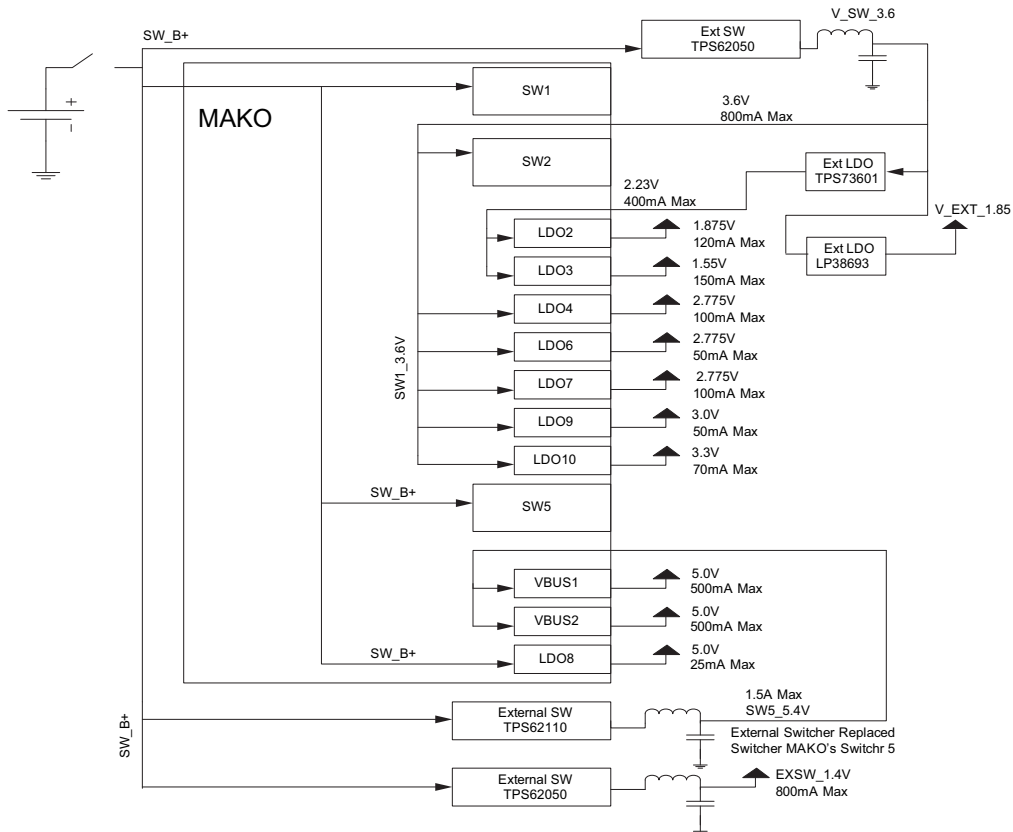


Figure 3-15. Controller DC Block Diagram



Table 3-2. DC Supplies and Sources for Controller

	V_SW_3.60	V_SW_1.4	V_EXT_1.85	V_SW_5	VBUS1	VBUS2	V_1.875	V_2.75D	V_2.775	V_3.0A	SW_B+
OMAP CORE		X									
OMAP IO			X								
DDR			X								
FLASH			X								
CPLD			X								
CODEC							X			X	
GPS	X										
MAKO	X								X		X
CLASS D PA				X							
FRNT DSPLY			X					X			
USB SPLY						X					
16.8 SQR								X			

### 3.2.2.1 DC Distribution Major Components

The controller's DC section is made up of MAKO and external regulators. This section will give an overview of the schematics and circuitry that makes up the major supplies of the DC architecture.

#### 3.2.2.1.1 MAKO

MAKO (U6501) is a custom power management IC manufactured by Atmel. MAKO controls almost all of the LDO supplies to the controller. [Table 3-3](#) illustrates all of MAKO's LDO and the supplies that feed them. [Figure 3-15](#) shows all of MAKO's LDOs their voltage level and components that can be accessed to verify operation. [Figure 3-15](#) also shows where the battery supply and on off switch can be accessed. MAKO is also responsible for the timing sequence for the enabling of the regulators which is discussed further in [section 3.1.3.7.1](#) and [section 3.1.3.7.2](#).

Table 3-3. MAKO's LDO and Supplies

Name	Ref	Description	Level
ON_OFF_SWITCH	MAKO_IGN_X	ON/OFF Switch. Radio on when GND	GND
UNSW_B+	F_UNSW_B+	Radio Battery Voltage	6–9V
SW_B+	C6593	Radio Supply Voltage	6–9 V
V_SAVE	C6538	LDO Output Present When Battery is Attached	2.5 V
V_1.875	C6581	LDO Output	1.875 V
V_1.55	R6561	LDO Output	1.55 V
V_2.775D	R6563	LDO Output	2.775 V
V_2.775_EXP	R6562	LDO Output	2.775 V
V_2.8_RF	R6564	LDO Output	2.8 V
V_5.0A	R6565	LDO Output	5.0 V
V_3.3	R6566	LDO Output	3.3 V
V_3.0A	R6567	LDO Output	3.0 V

## 3.2.2.1.2 External Regulators: V\_SW\_1.4, V\_SW\_3.60

The controller board contains two TPS62050 regulators in order to regulate voltages of 1.4V and 3.6V. The TPS62050 is a synchronous step-down adjustable regulator. The switching regulator is capable of sourcing 800mA. Its output can be adjusted by using a voltage divider tied to the feedback pin. The regulators are powered from SW\_B+. [Figure 3-16](#) is the schematic for the V\_SW\_1.4 regulator. [Figure 3-16](#) illustrates the supporting circuitry for the TPS62050.

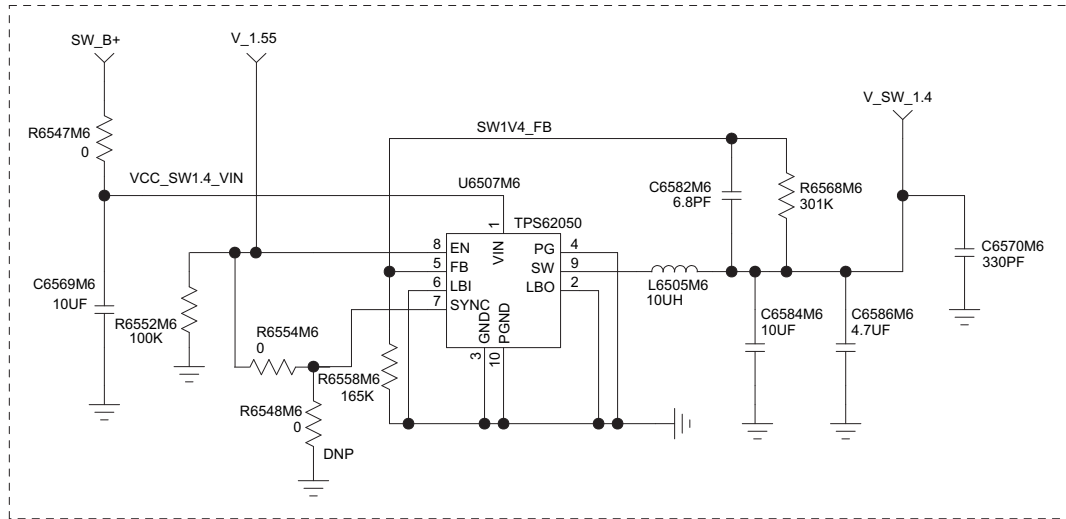


Figure 3-16. V\_SW\_1.4 Switched Power Supply

3.2.2.1.3 External Switcher 5

The controller board uses an external TI regulator (TPS62110, U6505) to regulate to 5.4V. The TPS62110 is a 1.5A capable synchronous step down converter. The output is adjusted using a voltage divider to the feedback pin. The regulator is powered from SW\_B+. Figure 3-17 illustrates the SW5 circuitry. The SW5 circuit also includes or-gate logic that facilitates implementation of current saving PFM mode when the radio is in standby mode.

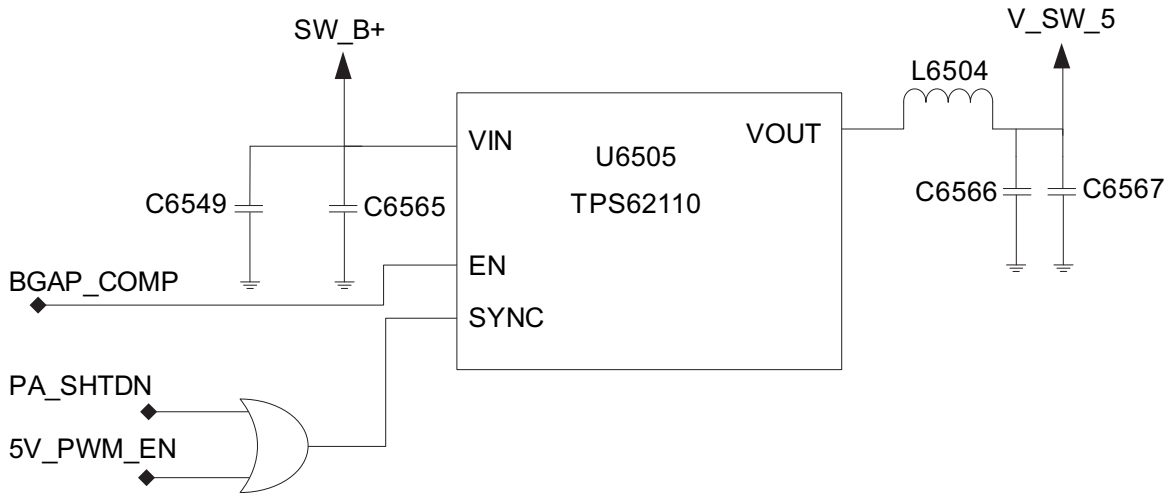


Figure 3-17. 5V Switched Power Supply

APX 1000 has Pulse Switching option.

Mode 1: Pulse Frequency Modulation (PFM). A relatively noisy but highly efficient pulsing mode for Switched power supplies.

Mode 2: Pulse Width Modulation (PWM). Pulsing mode that is cleaner than PFM, used when risk of RF interference is present which includes both transmit and receive radio modes.

Table 3-4. Pulse Switching Combination

PA_SHTDN	5V_PWM_EN	SYN	MODE
0	0	0	PFM
0	1	1	PWM
1	0	1	PWM
1	1	1	PWM

### 3.2.2.1.4 Power-up Timing

The powering up of the radio starts with the MAKO. Once the radio knob is pressed to 'ON' and battery voltage is supplied, a pass FET is activated to deliver battery voltage to MAKO and external regulators. The external 3.6 V is first turned on then MAKO activates its 24.576 MHz clock, and the remaining regulators begin to turn on. Once all the regulators have turned on, MAKO releases its reset. The CPLD is then powered on from the 1.875 V external regulator and takes MAKO 24.576 MHz clock and divides it to 32.768 kHz in order to provide for OMAP. OMAP starts to power up upon receiving voltages 1.4 V, 1.85 V, and the 32.768 kHz clock. OMAP then activates its 12 MHz clock and releases its reset. It then starts to run the boot loader stored in flash. A more detailed timing view of the regulators is shown in [Figure 3-18](#).

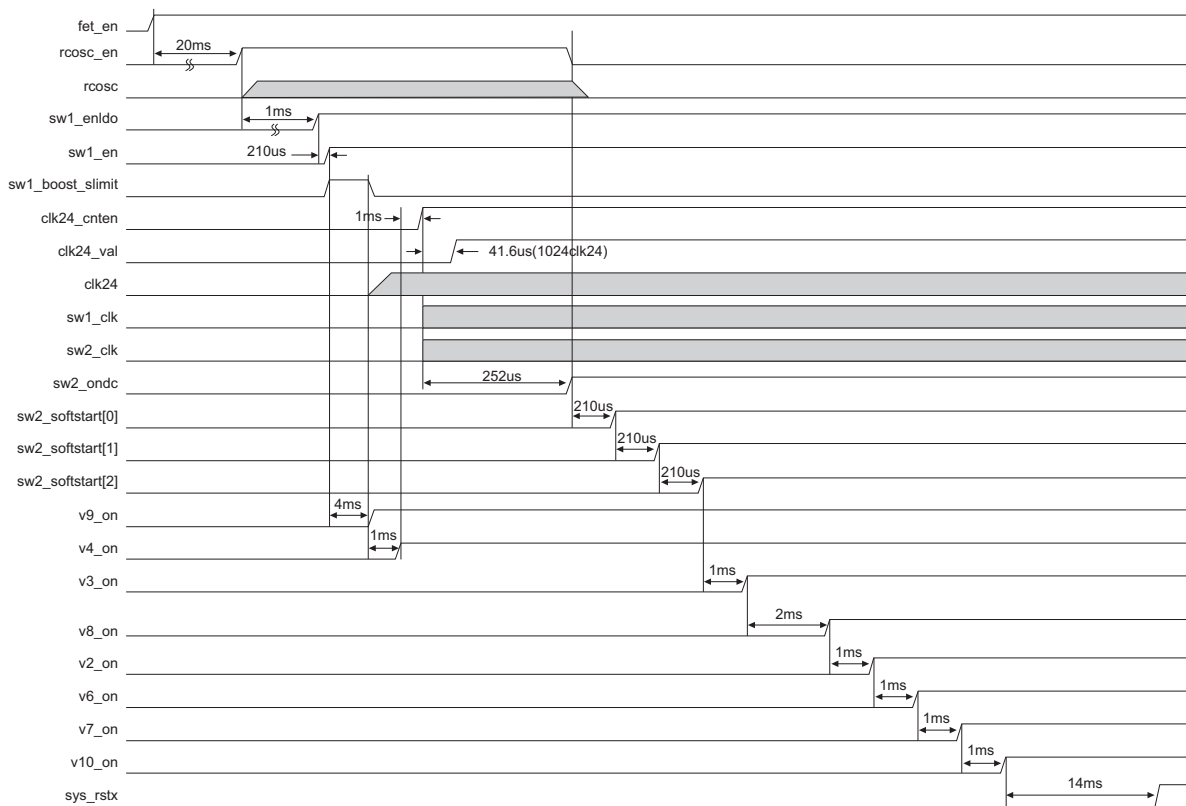


Figure 3-18. Power-up Timing Regulators

### 3.2.3 Clock Sources

The main board and keypad board contains multiple crystal clock sources. These sources are active upon power-up. The controller receives a 16.8 MHz sine wave from the RF section, which is shaped into square wave and fed to the OMAP timer input. Screen shots and test points for these clock signals are shown in [Chapter 6](#).

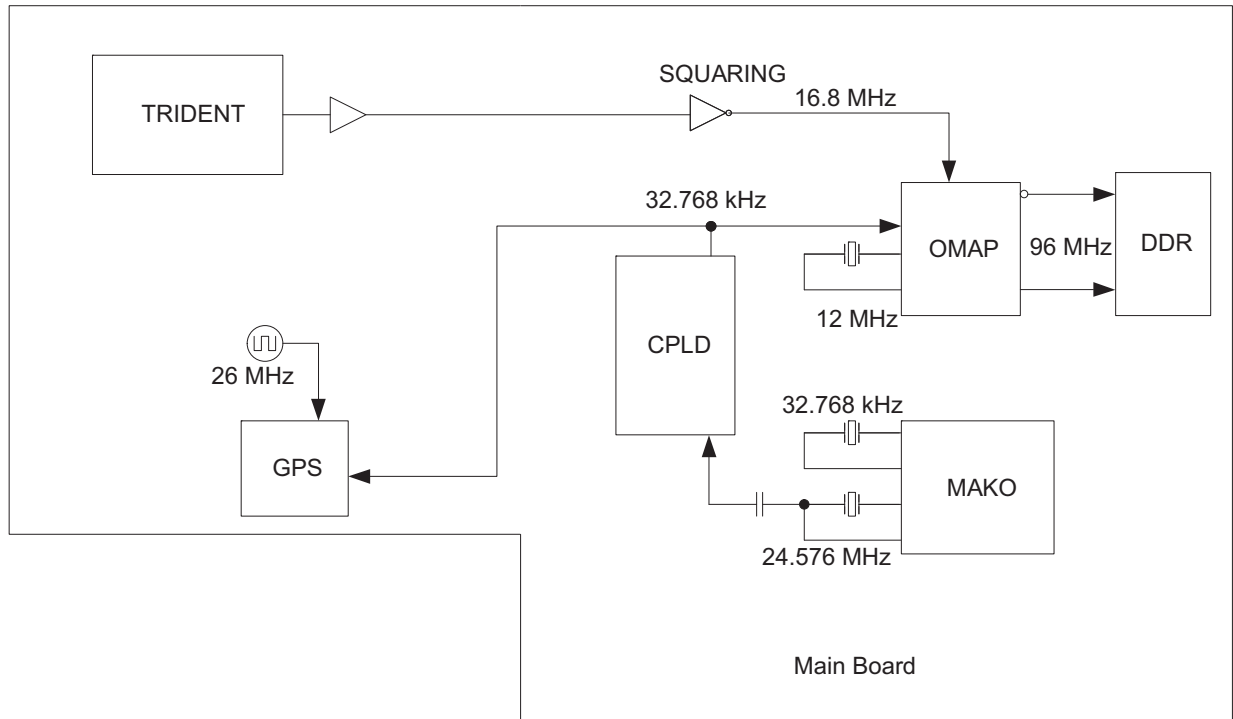


Figure 3-19. Controller Clock Architecture

Table 3-5. Controller Clock Distribution

Clock Source	Frequency	Type	Description	Clock Recipient	Suggested Probe Points
Y6501	24.576 MHz	Crystal Oscillator	MAKO 24 MHz & tapped into CPLD	U6501, U6101	R6574
Y6502	32.768 kHz	Crystal Oscillator	MAKO RTC	U6501	C6541
Y6601	12 MHz	Crystal Oscillator	OMAP CPU Clock	U6302	C6601
U6302	96 MHz	OMAP GPIO	DDR Clocks (Complementary signals)	U6301	TP6307 & TP6308
U6101	32.768 kHz	CPLD GPIO	OMAP Boot-Up clock & GPS/Bluetooth digital clock	U6302 & U2401 (Keypad Board)	R6114 (GPS/BT) & R6115 (OMAP)
Y701 (RF board)	16.8 MHz	Crystal Oscillator	RF Frequency Synthesizer IC (Trident) TCXO	U6302	R6218

### 3.2.4 OMAP Processor and Memory

#### 3.2.4.1 OMAP Processor (U6302)

The OMAP1710 dual core processor lies at the center of the controller design. The processor features utilized in the controller design include:

- ARM9 CPU core
- C55X DSP core
- 16KB shared internal RAM
- SSI Interfaces
- USB Interfaces
- Timers & Watchdog Timers
- Keyboard Matrix Interface
- 1-Wire Interface
- LCD Controller
- I2C Interface
- SPI interface
- External Memory Synchronous Interface
- External Memory Asynchronous Interface
- UARTs
- GPIOs

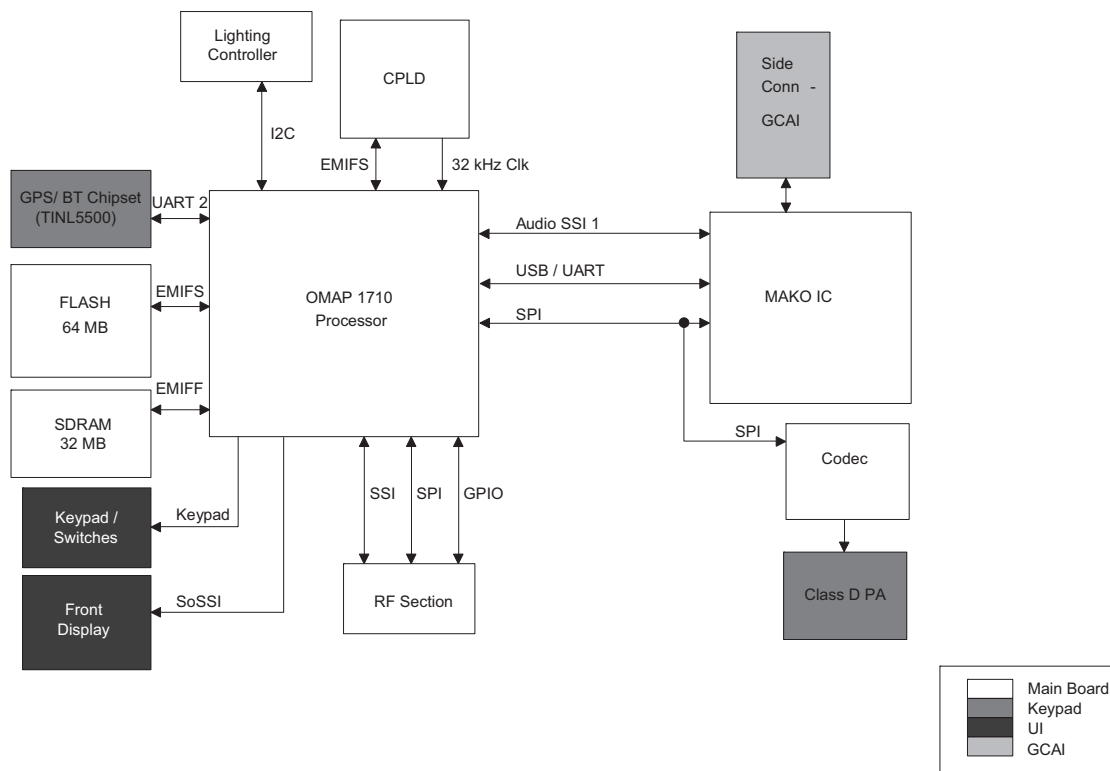


Figure 3-20. Overview of OMAP Interconnection with Controller Peripherals

### 3.2.4.2 Memory

In addition to the internal RAM, the OMAP 1710 Processor (U6302) features three distinct external memory interfaces. All memory devices are located on the main board, as elaborated in [Figure 3-20](#). The external memory interface is shown in [Figure 3-21](#).

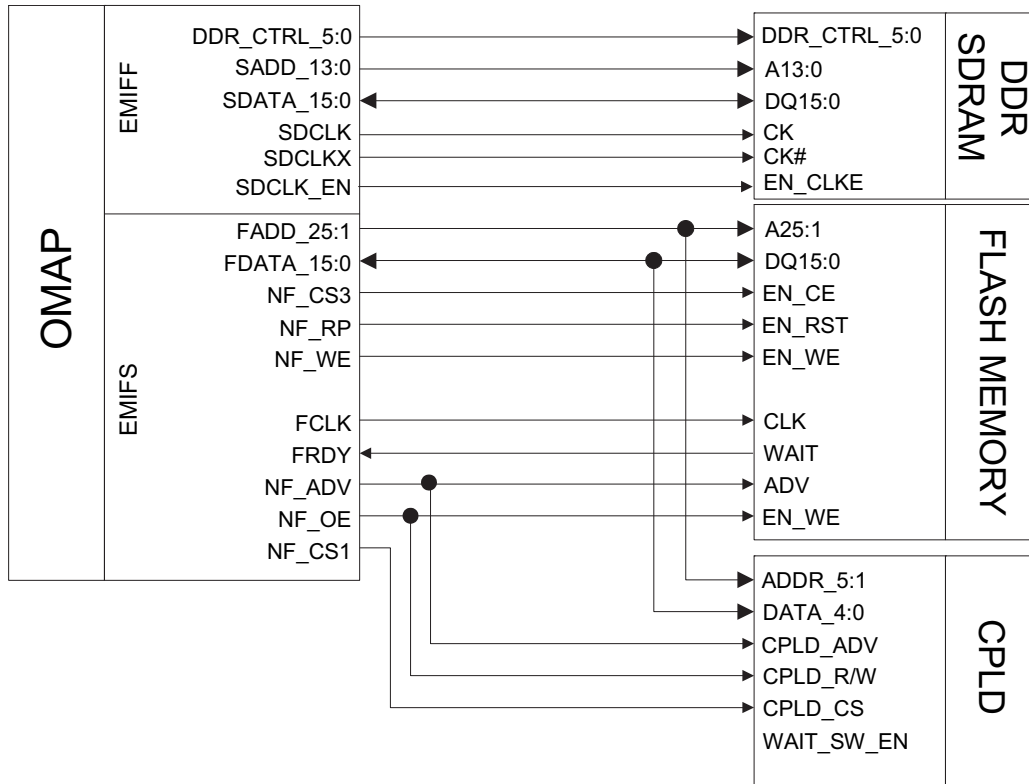


Figure 3-21. OMAP Memory Interface

### 3.2.4.3 Asynchronous External Memory Interface

The EMIFS is used for transferring data between the ARM or DSP cores and the 64 MB External NOR Flash memory (U6304). The Flash memory is a non-volatile memory unit, primarily used to store the radio's executable code, along with device configuration values, event logs, and initialization codes. The flash memory is primarily accessed during the main board's power up and power down cycles.

### 3.2.4.4 Flash Memory (6304)

The Flash memory located in close proximity to the OMAP processor is a 64 MB Numonyx 65nm StrataFlash. The flash interface uses 16 data bits and 25 address bits. The flash IC is enabled by OMAP processor's CS3 line. The flash IC also features a WAIT line that is capable of halting data flow between the processor and flash IC while operating in synchronous read mode.

### 3.2.4.5 CPLD Interface (U6101)

The CPLD (U6101) registers are also mapped to the Asynchronous External Memory Interface. These registers control the CPLD GPIO pins and enable the OMAP to expand its GPIO capability via memory mapped IO.



### 3.2.4.6 Synchronous External Memory Interface

This interfaces the OMAP to a 32 MB Double Data Rate (DDR) RAM IC (U6301). Upon boot-up OMAP configures this interface to operate in synchronous mode at 96MHz. This volatile memory unit is primarily accessed during code execution.

### 3.2.4.7 Double Data Rate (DDR) Memory (U6301)

The 32MB DDR Synchronous DRAM IC is interfaced to the OMAP using 13 address bits and a 16bit data bus. The DDR IC is driven by a complementary clock signal originating from the OMAP IC. The DDR clock is initialized to 96MHz by the OMAP boot code. Additional control signals are also dedicated for the DRAM interface.

### 3.2.4.8 Peripheral Devices

The OMAP processor is equipped with multiple buses and interfaces that are configured for peripheral interconnection.

#### 3.2.4.8.1 Receive and Transmit SSI

These two interfaces are dedicated for communicating with the RF deck digital interface, carrying receive and transmit base band signals. The OMAP processor generates the clock and FSYNC signals for the receive SSI interface. The RF deck generates these signals for the transmit SSI interface.

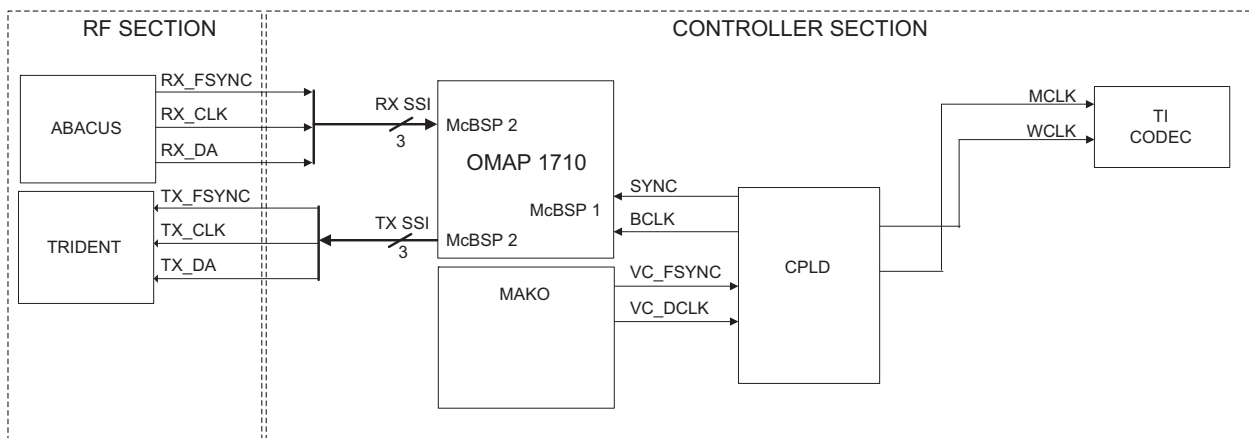


Figure 3-22. RX / TX SSI Configuration

### 3.2.4.8.2 Audio SSI

OMAP's McBSP1 interface is configured as a SSI interface dedicated to carry transmit and receive audio data to peripheral devices. The peripherals connected to this bus include MAKO, Audio CODEC and CPLD. The bus also connects to the keypad board. MAKO generates the clock and frame sync signals for this bus.

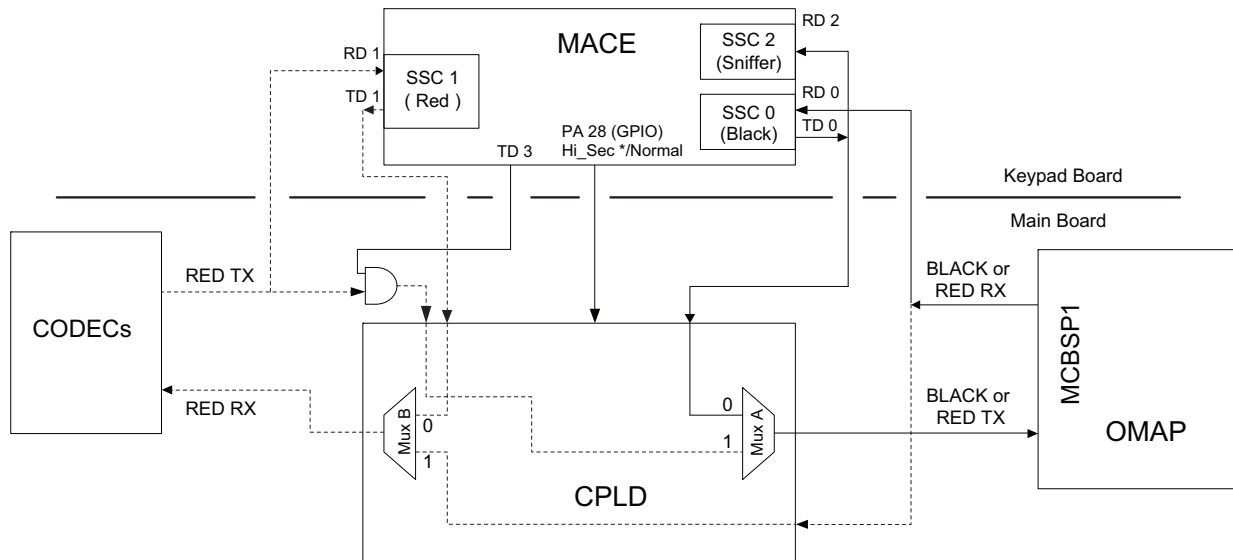


Figure 3-23. Audio SSI Configuration

### 3.2.4.8.3 ARM SPI

This SPI interface is controlled by OMAP's ARM core. Devices connected to this bus include MAKO, display controllers and the audio CODEC.

### 3.2.4.8.4 DSP SPI

This SPI interface is controlled by the DSP core of the OMAP processor. This bus is used to configure and control devices on the RF deck.

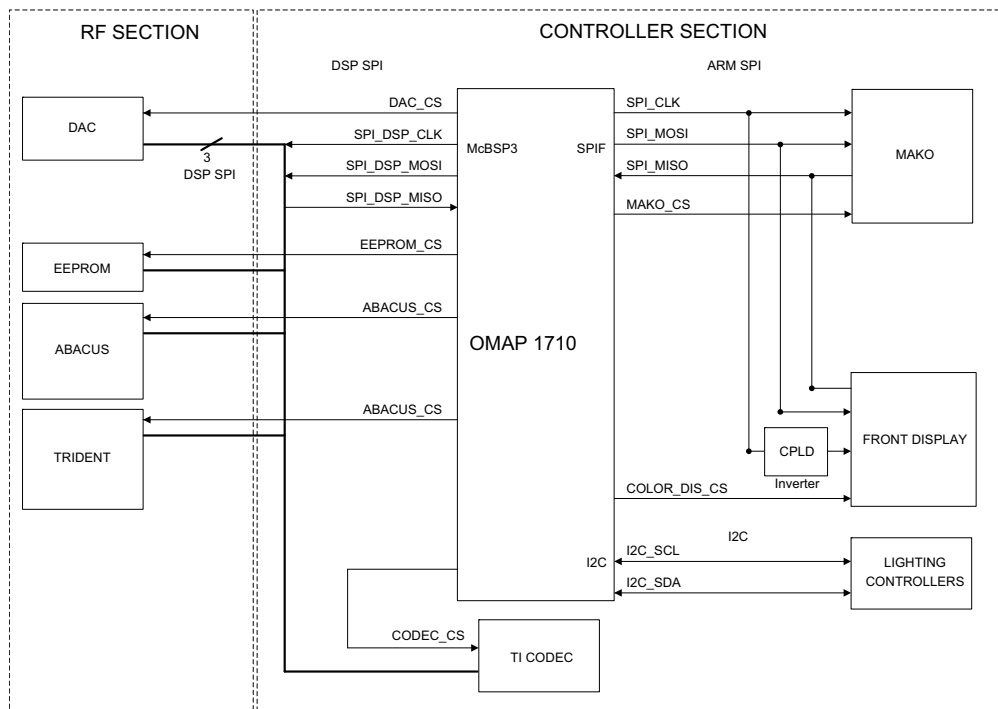


Figure 3-24. SPI and I2C Configuration

#### 3.2.4.8.5 1-Wire

The OMAP's 1-wire line is available on the Main Board Connector J2302 pin 19. The signal is routed through the keypad flex, keypad, front kit flex and GCAI flex.

#### 3.2.4.8.6 USB

The OMAP CPU's USB port is routed to the side connector via J2302. The USB signals on the side connector are illustrated in [Figure 3-20](#).

#### 3.2.4.8.7 UARTs

Two of OMAP's UARTs are configured for peripheral interfacing.

The four-wire UART1, which is capable of hardware flow control, is available on the side connector for accessory devices. The signals are level translated via MAKO and routed to the side connector via J2302.

OMAP's UART2, which is a two wire interface, capable of software flow control only, is connected to the GPS receiver IC on the Main board.

#### 3.2.4.8.8 CPLD (U6101)

The CoolRunner IC is a complex programmable logic device (CPLD) programmed specifically for the APX product line. The CoolRunner IC is flash based and comes pre-programmed. It is contained in an 8x8mm, 132 BGA package with 0.5mm ball spacing. The primary functions of the CPLD are clock generation, GPIO expansion, SSI clock and frame sync direction control, F2 multiplexing, secure data control, main display off-loading, and clock inversion.

An external linear regulator, U6508, supplies the CPLD's 1.875 V core voltage. The 1.875 V core voltage is used for the CPLD's internal logic and I/O buffers. MAKO's 24.576 MHz clock source is used by the CPLD to generate a 32.768 kHz clock for OMAP booting, real time clock/timer, and for GPS.

The CPLD is controlled through OMAP's EMIFS interface. It supports 31 configurable GPIOs. It also supports 20 input only pins that are accessible through an EMIFS read operation. Some of the GPIOs supported by the CPLD include GCAI\_GPIO\_0, F2\_PARAMAMP\_MON, and USB\_CURR\_LIM. Some examples of the inputs the CPLD is programmed to support are some of the top and side controls buttons (MON, SIDE\_1 and SIDE\_2) and board ID.

Figure 3-25 below shows the basic CPLD interfaces.

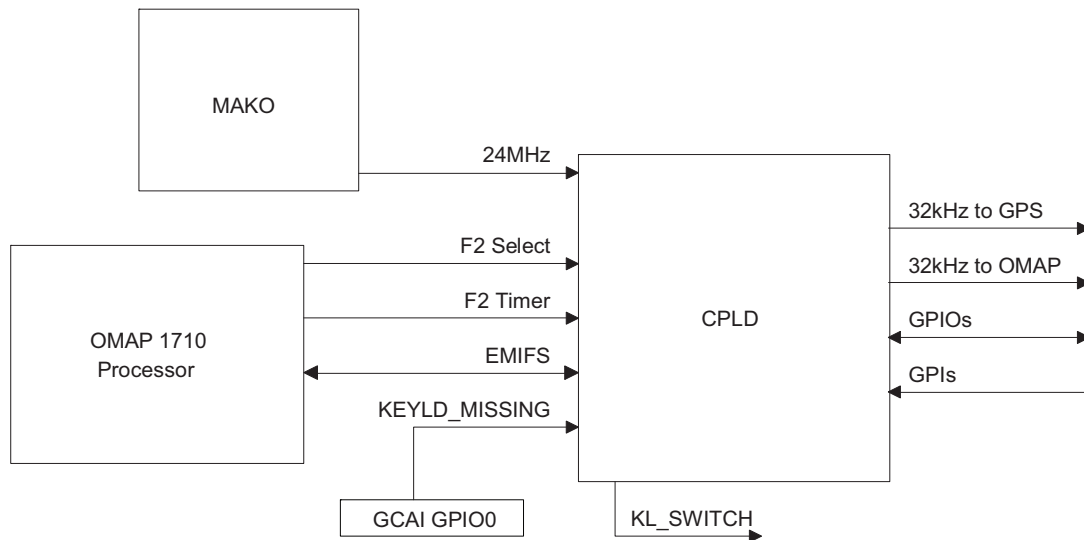


Figure 3-25. CPLD Block Diagram

### 3.2.5 Audio

The audio section of the Controller design consists of:

- TI AIC33 voice CODEC
- TI TPA2034D1 class-D audio power amplifier
- MAKO audio sub-block

#### 3.2.5.1 TX Audio path

The TX audio paths begin with three microphones. There are two internal microphones and one external microphone path going to the GCAI connector.

The internal microphone paths start with two microphones that are embedded within the radio. Both of the microphones are biased with a 4.7 V supply that is generated by the MAKO IC. This supply is solely dedicated to biasing the microphones. The microphone signals are AC coupled into the 16 bit TI AIC33 stereo CODEC on the MIC3R and MIC3L input pins. The TI AIC33 CODEC allows both microphone signals to be amplified, and simultaneously sampled and converted into digital data. The data is sent to the OMAP1710's DSP through the McBSP1 port where the DINC (dual input noise canceller) can process the data for both microphones and provide a high level of noise suppression. The digital data is sent to the OMAP1710 through the audio SSI (synchronous serial interface) bus where the MAKO IC is used as the interface's clock and frame sync generator.

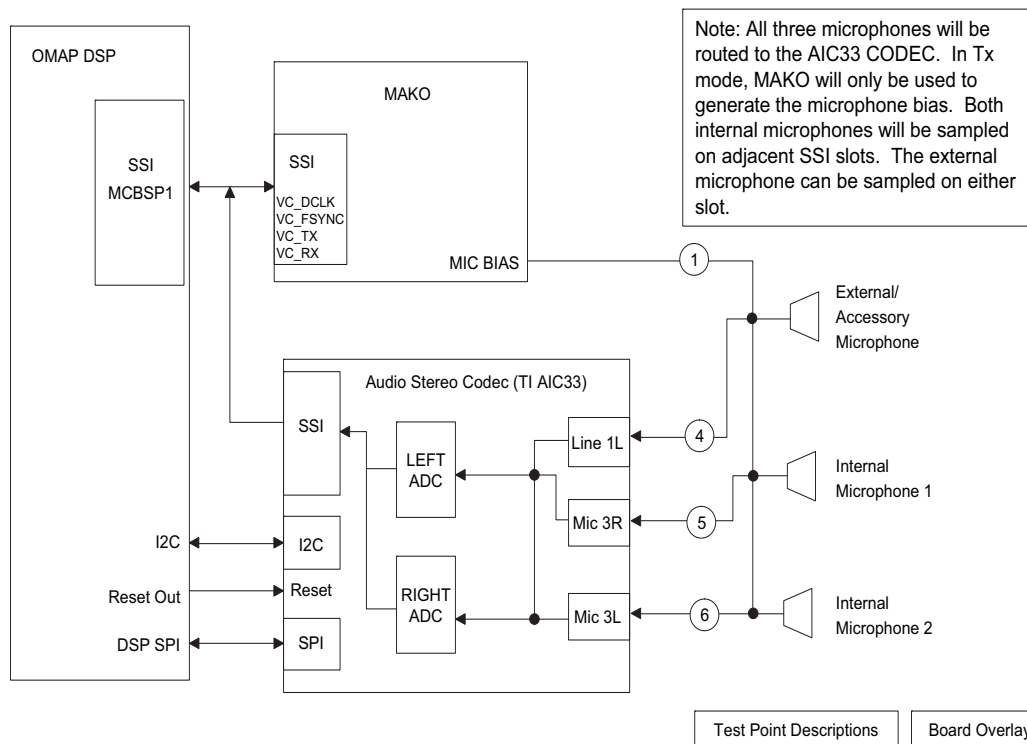


Figure 3-26. Audio TX Path Block Diagram

The external microphone path will also be supported by the TI AIC33 CODEC, using the LINE1LP pin on the IC. The LINE1LP is multiplexed with the MIC3R within the CODEC, and selected as the input when the external microphone path is chosen as the TX audio source. Similar to the internal microphone signals, the TI CODEC amplifies and samples the external microphone signal. The digital data is also sent to the OMAP1710's DSP through the McBSP1 port using the audio SSI bus.

### 3.2.5.2 RX Audio path

The RX audio path supports two internal speakers and one external speaker.

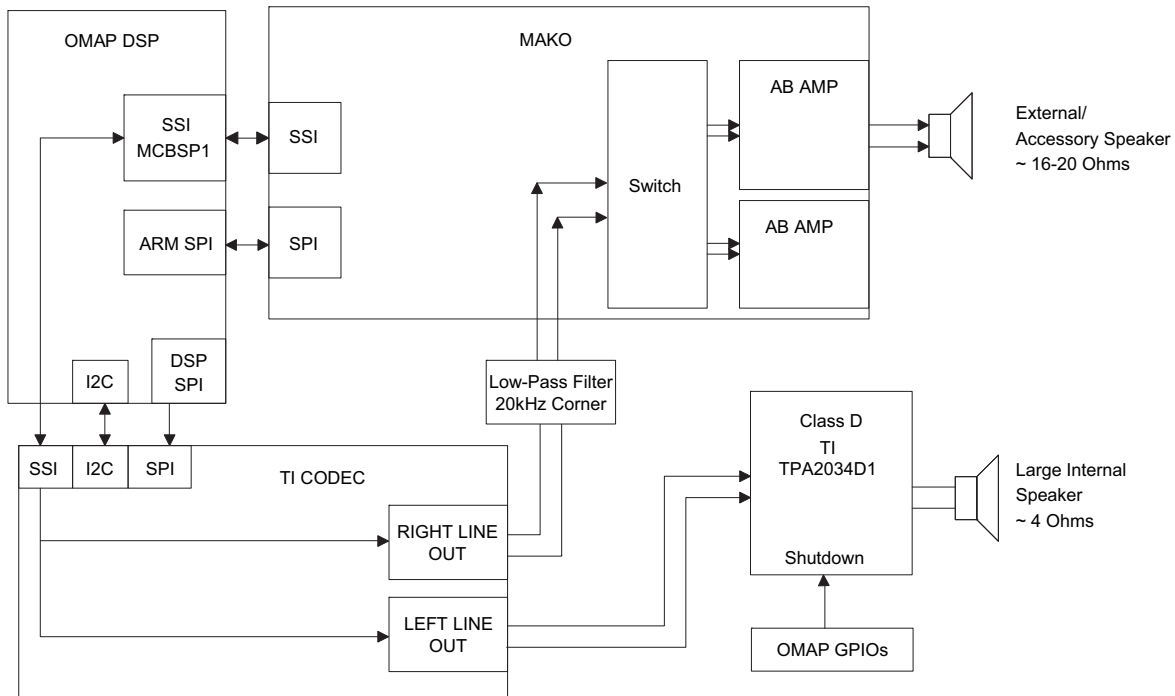


Figure 3-27. RX Audio Path Block Diagram

The RX internal audio path begins with the digital audio samples being sent from the OMAP1710's McBSP1 port to the TI AIC33 CODEC through the audio SSI bus. As in the TX audio paths, the MAKO IC is also used to generate the clock and frame sync for the audio SSI bus. Once the audio data is received by the TI CODEC, the CODEC proceeds to convert the data to analog and implements the volume control. The analog signal in the CODEC is then fully differential and gets sent out to the power amplifier through pins LEFT\_LOP and LEFT\_LOM. The TI TPA2034D1 Class D audio power amplifier accepts a fully differential analog input signal and will also drive a 4 Ohm loudspeaker differentially.

The external speaker path is almost identical to the internal speaker path. The digital audio data is sent from the OMAP1710's McBSP1 port to the TI AIC33 CODEC for digital to analog conversion and volume control. The external speaker path uses the MAKO IC's class-AB audio power amplifier to drive 16 Ohm to 28 Ohm external speakers. The input to MAKO IC's audio power amplifier is fully differential and comes from the TI CODEC's RIGHT\_LOP and RIGHT\_LOM. The output of the MAKO IC's audio amplifier is also fully differential and available on pins EXT\_SPKR\_P and EXT\_SPKR\_M.

## 3.2.6 User Interface

### 3.2.6.1 Top Control

The Top Control contains a multifunction knob functioning as ON/OFF switch, Volume and channel switch, and an emergency button. The Top Control also includes a TX/RX LED that is solid amber upon receive, red on PTT, and blinks amber on secure RX and a status LED. The Top Control components are mounted on flex except the emergency button which connects to the Main board connector J2302.

When the On/Off switch is pressed, the switch is grounded and IGN\_X is pulled low. IGN\_X is an input to MAKO (U6501). The logic low input enables an external FET (Q6501) gate voltage, FET\_ENX, which switches UN\_SW\_B+ to SW\_B+ and turns the radio on. The volume and channel switch is controlled by the multifunction knob. The knob is biased by 1.85V through R2 and R3 on the Front kit flex. When the knob is rotated, the signals are converted to binary code and are ready by OMAP through RSW\_A, RSW\_B and RSW\_INT. Pressing the knob once and rotating the knob will change the volume.

The orange programmable Top Button (S1) is typically used for emergency. It is also biased to 1.875 V (R6507) and is an input (EMERG\_BTN\_X) to the CPLD. A button press is detected when EMERG\_BTN\_X is pulled low.

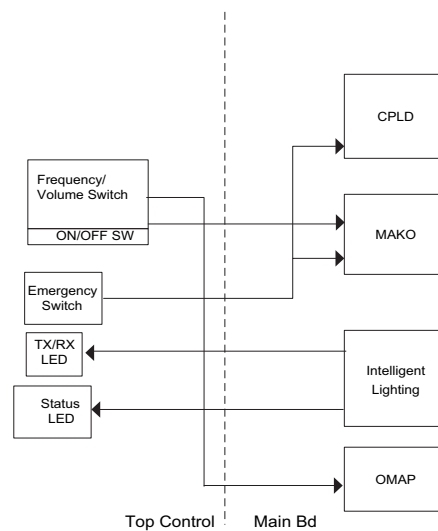


Figure 3-28. Control Top Block Diagram

### 3.2.6.2 APX 1000 LCD Display Modules

#### 3.2.6.2.1 QVGA

The main Transflective 1.6" color display is a QVGA (160 x RGB x 90) active matrix TFT (Thin Film Transistor) LCD. A display flex connects the main display to the J3-pin connector on Frontkit Flex. The QVGA display uses the 8-bit Special optimized Screen Interface (SoSSI) for data and commands.

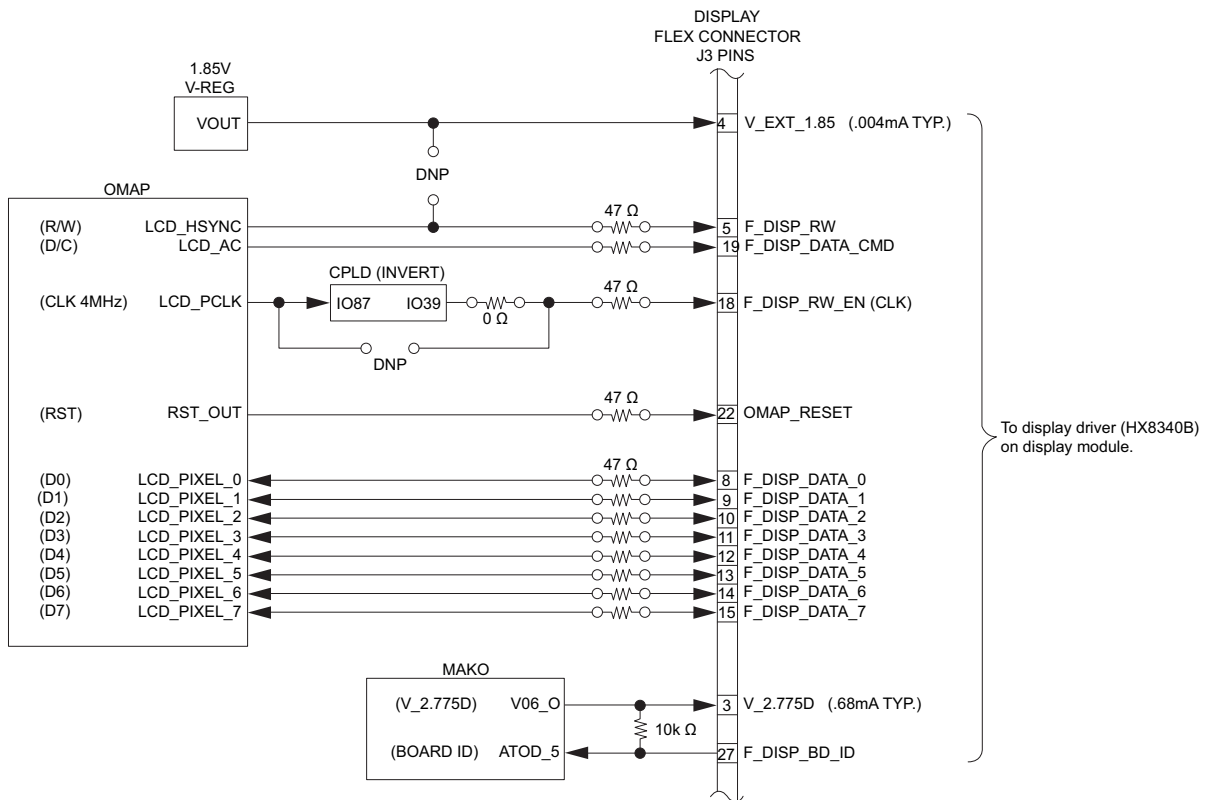


Figure 3-29. Display Circuit Detail Overview Block Diagram

The QVGA LCD Module operates using V\_2.775D and V\_EXT\_1.85. The V\_2.775D is the module's analog supply voltage sourced by LDO6 of MAKO. The V\_EXT\_1.85 is the module's IO voltage sourced by the 1.85V external LDO regulator. An 8-bit parallel bus is used for data and command communication between OMAP's SoSSI interface and LCD driver IC. The F\_DISP\_DATA\_CMD signal indicated the type of data being sent to the driver. A '0' corresponds to command data and a '1' corresponds to display data. Data only travels in one direction, from OMAP to display driver. Therefore F\_DISP\_RW line will always be low. Display data is latched on the falling edge of the F\_DISP\_RW\_EN signal.

The SoSSI interface uses the LCD DMA controller/bus to allow the LCD module to access system memory. Therefore the transfer of pixel data process will require less CPU processing power. An initiate DMA transfer command is used and display data is transferred to the LCD module automatically without intervention thus offloading the processor.



Prior to the LCD interpreting any commands, the correct display power-up sequence must be initiated. First the V\_EXT\_1.85 (1.875 V) and V\_2.775D (2.775 V) supplies must be at 90% or above threshold and stable for 10us, and then reset can be asserted high. After OMAP de-asserts the reset out signal (OMAP\_RESET) the SLPOUT command can be sent. Now configuration commands are ready to be sent to the LCD module.

The QVGA LCD module is only intended to operate up to +80°C due to ghosting effects. Therefore software will shut off the display and backlight if the +80°C limit is reached. The display and backlight will remain off until temperature drops below +75°C. The temperature sensor, U6401, for the display cut-off is input into MAKO A/D Channel 3, pin M14.

For enhanced display readability, the default backlight is set to a dim state while the radio is in Standby mode; however, the backlight turns to full brightness through a button press, call receive, emergency call, and other status indicators. See [Section 3.2.6.3: "Intelligent Lighting"](#) for the display backlight operation.

### 3.2.6.3 Intelligent Lighting

The APX 1000 radio is equipped with numerous LEDs to provide intelligent lighting features. The Main board consists of a backlighting driver, which illuminate all the LEDs throughout the radio, as shown in [Figure 3-30](#). The backlighting driver, U2201, provides white illumination to the main QVGA color display, Tricolor TX/RX indicator, status indicator and white keypad backlights. The driver are controlled through OMAPs I2C interface (SCL and SDA). The I2C communication protocol allows the OMAP chip to enable, disable, and control the brightness of each LED. The driver uses PWM output to control the dimming modes operation. A reset line issued by OMAP, OMAP\_RESET, can be used to reset the driver. Some of the intelligent lighting color schemes are shown in [Table 3-6](#). The driver and LEDs are powered by Switcher 5 (V\_SW\_5).

Table 3-6. Color Schemes

	Color
Default	White
Out of Range	Red
Low Battery	Red
Emergency	Amber
Call Received	Green
Call Paged	Green

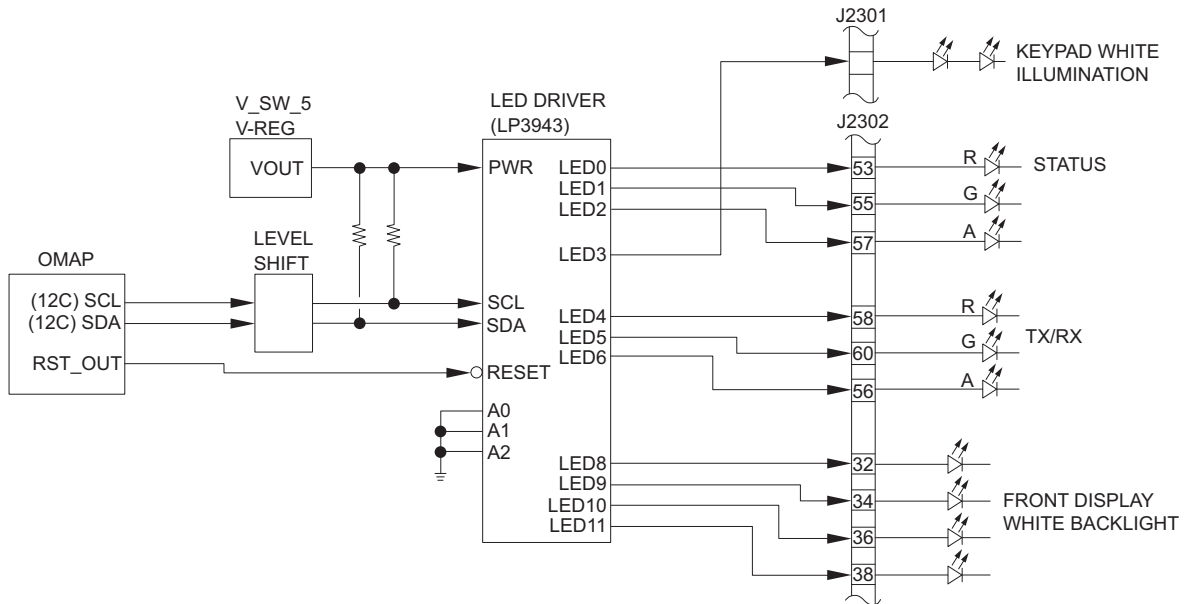


Figure 3-30. Lighting Controller Overview

### 3.2.6.4 Keypad

The Full Keypad Model contains a 21 button keypad, which translates to a 5x5 row and column keypad matrix as shown in Figure 3-31. The keypad also contains LEDs for the backlighting of the keys, which is described in more detail in Section 3.2.6.3: "Intelligent Lighting". Every key is assigned a particular row and column to identify the unique key, as shown in keypad mapping Table 3-7. The keypad board also contains 2, 6-channel filters that each row and column signal passes through. Each row of the keypad contains an external pull-up resistor, and all the rows are interrupt based inputs to OMAP. The columns are driven low by default in OMAP. When a key is pressed, the corresponding key row and column are shorted together and causes a low level to be input on the corresponding row in OMAP. Upon receiving the row interrupt, the OMAP IC is then programmed to scan the column output to determine which corresponding column was selected that generated the interrupt.

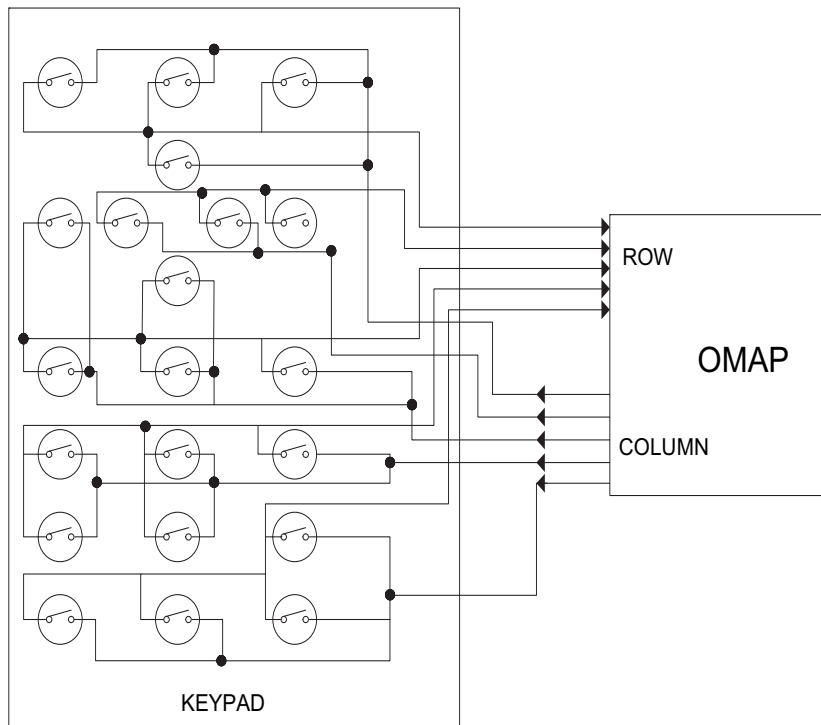


Figure 3-31. Keypad Interface Outline

Table 3-7. Key Map Matrix

Key	Row, Column Map	Key	Row, Column Map
	0, 4		3, 2
	1, 4		2, 0
	2, 4		2, 1
	4, 0		2, 2
	4, 1		1, 0
	0, 3		1, 1
	4, 2		1, 2
	1, 3		0, 0
	2, 3		0, 1
	3, 0		0, 2
	3, 1		

### 3.2.6.5 Side Controls

The side controls include three programmable, momentary, pushbutton switches (Side Button 1 [SB1], Side Button 2 [SB2], Top Side Button [MON]) and a Push-To-Talk switch [PTT]. These components interface to the Frontkit flex via connector J1 through a two-piece, bonded flex circuit. The frontkit flex routes the side controls signals to the Main Board through connector J2302. See [Chapter 7](#) for pin out names and numbers.

Side button 1 (R4006), side button 2 (R4007) and the top side button (R6101) are inputs to the CPLD and are biased to 1.875V. A button press is detected when the OMAP reads a 'LO' state from the CPLD EMIFS interface. PTT (R4005) is connected directly to OMAP and a button press is detected when a LO state is read.

### 3.2.6.6 GCAI

The GCAI (Global Communications Accessory Interface) connector is a 15 pin interface located on the side of the radio. The connector interfaces the radio with accessories and is used for programming. When the OMAP (U6501) detects that an accessory has been attached through a logic low on GPIO0, it will identify the device by reading the GCAI\_ONE\_WIRE line. Once the device type is identified, the appropriate signals are multiplexed through MAK0 to the GCAI connector for the particular device. [Figure 3-32](#) is a block diagram of the GCAI interface.

Mounted to the side connector is a flex that houses ESD protection circuitry. The universal side connector interfaces with the Front kit flex via the J2 connector of a flex circuit and the P1000 connector of the keypad board. A keypad flex routes universal side connector signals through keypad board connector P2000 to the main board. The figures below show the connections and signal assignments from the universal connector to the controller board.

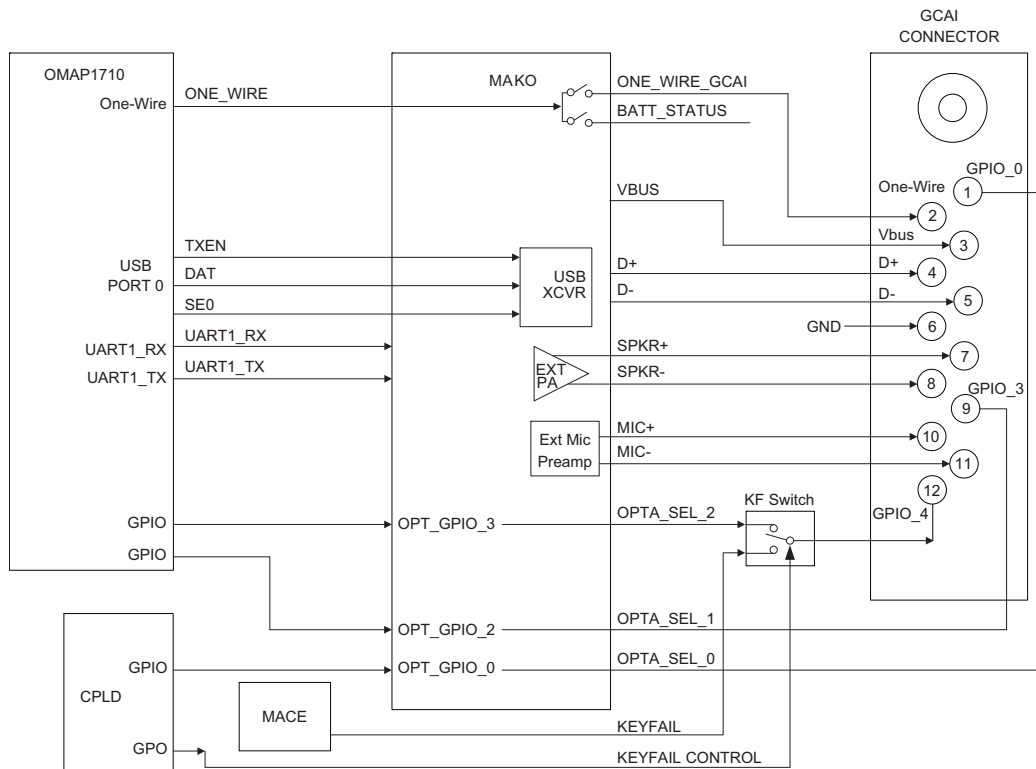


Figure 3-32. GCAI Signal Configuration

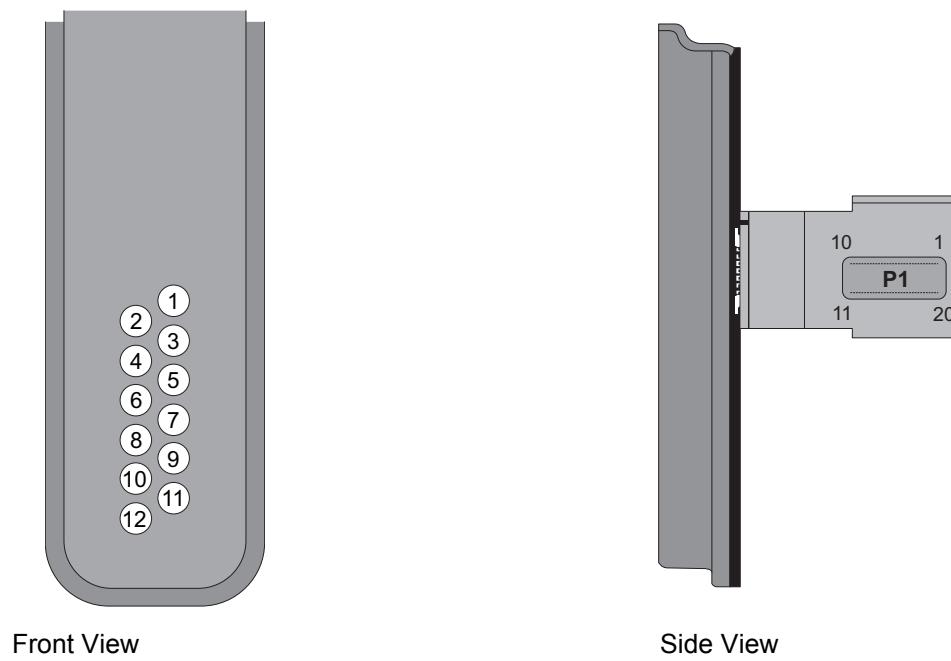


Figure 3-33. GCAI Connector

Table 3-8. P1 Pin Assignment

P1 PIN ASSIGNMENT	SIGNAL
1	GND
7	GCAI_USB_P_GPIO1
5	GCAI_USB_N_GPIO2
3	GCAI_RTS_GPIO_3
11	GCAI_CTS_GPIO_4
17	GCAI_MIC_N
19	GCAI_MIC_P
25	GCAI_SPKR_N
23	GCAI_SPKR_P
9	FCAI_ONE_WIRE
13	GCAI_GPIO0
28	GCAI_VBUS_5V
26	GCAI_VBUS_5V

Table 3-9. GCAI Connector Pin Assignment

<b>PIN ASSIGNMENT</b>	<b>SIGNAL</b>
1	GCAI_GPIO0 / PwrOn
2	GCAI_ONE_WIRE
3	GCAI_VBUS_5V
4	GCAI_USB_P_GPIO1 / TxDc / FillReq
5	GCAI_USB_N_GPIO2 / RxDc / FillData
6	GND
7	GCAI_SPKR_P / LineOut+
8	GCAI_SPKR_N / LineOut-
9	GCAI_RTS_GPIO_3 / OTG-ID / FillSen
10	GCAI_MIC_P
11	GCAI_MIC_N
12	GCAI_CTS_GPIO_4 / KeyFail / FillClk

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## Chapter 4 Troubleshooting Procedures

The purpose of this chapter is to aid in troubleshooting problems with the ASTRO APX 1000 radio. It is intended to be detailed enough to localize the malfunctioning circuit and isolate the defective component. It also contains a listing of service tools recommended for PC board repair at the component level.



Caution

Most of the ICs are static sensitive devices. Do not attempt to disassemble the radio or troubleshoot a board without first referring to the following Handling Precautions section.

### 4.1 Handling Precautions

Complementary metal-oxide semiconductor (CMOS) devices, and other high-technology devices, are used in this family of radios. While the attributes of these devices are many, their characteristics make them susceptible to damage by electrostatic discharge (ESD) or high-voltage charges. Damage can be latent, resulting in failures occurring weeks or months later. Therefore, special precautions must be taken to prevent device damage during disassembly, troubleshooting, and repair. Handling precautions are mandatory for this radio, and are especially important in low-humidity conditions. DO NOT attempt to disassemble the radio without observing the following handling precautions.

1. Eliminate static generators (plastics, Styrofoam, etc.) in the work area.
2. Remove nylon or double-knit polyester jackets, roll up long sleeves, and remove or tie back loose-hanging neckties.
3. Store and transport all static-sensitive devices in ESD-protective containers.
4. Disconnect all power from the unit before ESD-sensitive components are removed or inserted unless otherwise noted.
5. Use a static-safeguarded workstation, which can be accomplished through the use of an anti-static kit (Motorola part number 01-80386A82) or equivalent. This kit includes a wrist strap, two ground cords, a static-control table mat and a static-control floor mat.

## 4.2 Recommended Service Tools

Table 4-1 lists recommended service tools that can be used for PC board repairs at the component level. For listings of additional service tools, service aids, and test equipment that are recommended for all levels of service, refer to the APX 1000 basic service manual (see [Related Publications](#)).

Table 4-1. Recommended Service Tools

Motorola Part Number	Description	Application
66012028001	Chassis Opener	Used to disassemble chassis from housing
66012031001	Battery Adapter	Used in place of battery to connect radio to an external power supply.
5880384G68	SMA to BNC Adapter	Adapts radio's antenna port to BNC cabling of test equipment.
RVN5224_	Customer Programming Software (CPS) and Tuner Software	CPS allows customer-specific programming of modes and features. Tuner software required to perform alignment of radio parameters.
PMKN4012B	Programming Cable	To program the radio through Customer Programming Software and Tuner Software.
PMKN4013C	Programming/Service Cable	To program and service the radio through Customer Programming Software and Tuner Software.
RLN4460_	Portable Test Set	For radio performance checks. Connects to radio's universal connector and allows remote switching and signal injection/outputs for test equipment measurements.
TE000008A01	APX1000 Board Debugging Fixture	To hold the APX1000 main board in position and provides necessary connections to the APX1000 front housing kit for debugging purposes.

**NOTE:** Do not place an order for the Programming Cable (PMKN4012A/PMKN4013B) as it is not compatible with the APX 1000 radio.



### 4.3 Standard Bias Table

Table 4-2 outlines some standard supply voltages and system clocks which should be present under normal operation. These should be checked as a first step to any troubleshooting procedure.

Table 4-2. Standard Operating Bias – DC Voltages

Name	Reference	Description	Level
IGN_X	Mako_IGN_X	ON/OFF Switch. Radio on when GND	GND
UNSW_B+	F_UNSW_B+	Radio Battery Voltage	6–9V
SW_B+	C6593	Radio Supply Voltage	6–9V
V_SAVE	C6538	LDO Output Present When Battery is Attached	2.5V
V_1.875	C6581	LDO Output	1.875V
V_1.55	R6561	LDO Output	1.55V
V_2.775D	R6563	LDO Output	2.775V
V_2.775_EXP	R6562	LDO Output	2.775V
V_2.8_RF	R6564	LDO Output	2.8V
V_5.0A	R6565	LDO Output	5.0V
V_3.3	R6566	LDO Output	3.3V
V_3.0A	R6567	LDO Output	3.0V
V_EXT_1.85	R6570	LDO Output	1.85V
V_SW_1.4	C6570	Switcher Output	1.4V
V_SW_3.60	C6561	Switcher Output	3.6V
V_2.23	C6573	LDO Output	2.23V

Table 4-3. Standard Operating Bias – Clock Sources

Clock Source	Reference	Description	Frequency
Y6501	R6533	MAKO 24MHz & tapped into CPLD	24.576MHz
Y6502	C6541	MAKO RTC	32.768KHz
Y6601	C6601	OMAP CPU Clock	12MHz
U6302	TP6307 and TP6308	DDR Clocks (Complementary signals)	96MHz
U6101	R6113	MACE Clock	4MHz
U6101	R6115	GPS RTC clock	32.768KHz
Y701 (RF board)	R6218	RF Freq synth IC (Abacus) TCXO	16.8MHz

## 4.4 Power-Up Self-Check Errors

Each time the radio is turned on, the MCU and DSP perform a series of internal diagnostics. These diagnostics consist of checking such programmable devices as the FLASH ROMs, the EEPROM, and SRAM devices.

Problems detected during the power-up self-check routines are presented as error codes on the radio's display. For non-display radios, the problem is presented at power up by a single, low-frequency tone. [Table 4-4](#) lists possible error codes, a description of each error code, and a recommended corrective action.

*Table 4-4. Power-Up Self-Check Error Codes*

<b>Error Code/ Error Message</b>	<b>Description</b>	<b>Corrective Action</b>
01/02	FLASH ROM Codeplug Checksum Non-Fatal Error	Reprogram the codeplug
01/12	Security Partition Checksum Non-Fatal Error	Send radio to depot
01/20	ABACUS Tune Failure Non-Fatal Error	Turn the radio off, then on
01/22	Tuning Codeplug Checksum Non-Fatal Error	Send radio to depot
01/81	Host ROM Checksum Fatal Error	Send radio to depot
01/82	FLASH ROM Codeplug Checksum Fatal Error	Reprogram the codeplug
01/88	External RAM Fatal Error – Note: Not a checksum failure	Send radio to depot
01/90	General Hardware Failure Fatal Error	Turn the radio off, then on
01/92	Security Partition Checksum Fatal Error	Send radio to depot
01/93	FLASHport Authentication Code Failure	Send radio to depot
01/98	Internal RAM Fail Fatal Error	Send radio to depot
01/A2	Tuning Codeplug Checksum Fatal Error	Send radio to depot
02/81	DSP ROM Checksum Fatal Error	Send radio to depot
02/88	DSP RAM Fatal Error – Note: Not a checksum failure	Turn the radio off, then on
02/90	General DSP Hardware Failure (DSP startup message not received correctly)	Turn the radio off, then on
Hardware board absent/ Hardware board absent then Man-Down Hw error	Keypad board is not connected properly to the radio	Ensure the Keypad board is fixed in place
15/10	External Accessory Non-Fatal Error External Accessory is not present on power up or did not power up correctly, and external accessory feature is enabled in codeplug.	Verify external accessory is connected and powers up. Turn the radio off, then on.
15/90	External Accessory Fatal Error External Accessory is not present on power up or did not power up correctly, and external accessory feature is enabled in codeplug.	Verify external accessory is connected and powers up. Turn the radio off, then on.

Table 4-4. Power-Up Self-Check Error Codes (Continued)

Error Code/ Error Message	Description	Corrective Action
1E/10	Collaborative device is connected to the radio but the collaborative feature is not enabled in the codeplug.	Contact your Motorola Sales Representative/ Partner on how to add Collaborative feature to your radios.
<i>Note: If the corrective action does not fix the failure, send the radio to the depot.</i>		

## 4.5 Power-Up Self-Check Diagnostics and Repair (Not for Field Use)

Table 4-5 lists additional action items that can be used for the diagnosis and resolution of the error codes listed in Table 4-4.

Table 4-5. Power-Up Self-Check Diagnostic Actions

Error Code/ Error Message	Diagnostic Actions
01/02	This non-fatal error will likely recover if the radio's power is cycled. In the event that this does not resolve the issue, the radio should be reflashed. If the error remains, send the radio to depot.
01/12	The radio should be sent to the depot for reflashing of the security codeplug.
01/20	Cycling radio power should resolve this issue.
01/22	The radio should be sent to the depot for reflash of the tuning codeplug followed by retuning of the radio.
01/81	The radio should be sent to the depot for reflashing of the host code.
01/82	The radio should be sent to the depot for reflashing of the radio codeplug.
01/88	Reflashing of the radio should first be performed. If this fails to resolve the issue, send the radio to depot.
01/90	Cycle power to radio. Continued failure indicates a likely IC failure. In this event, radio should be sent to the depot for isolation and repair of the problem IC.
01/92	The radio should be sent to the depot for reprogramming of the security codeplug.
01/93	The radio should be sent to the depot for reflashing of the host code.
01/98	Send radio to the depot.
01/A2	The radio should be sent to the depot for reflashing of the tuning codeplug followed by re-tuning of the radio.
02/81	The radio should be sent to the depot for examination.
02/88	Cycle power to the radio. If this does not fix the problem, then the radio should be sent to the depot for reflashing of the DSP code.
02/90	Cycle power to the radio. If this fails to fix the problem, then the radio should be sent to the depot for reflashing of the DSP code.

## **Notes**

# Chapter 5 Troubleshooting Charts

This section contains detailed troubleshooting flowcharts. These charts should be used as a guide in determining the problem areas. They are not a substitute for knowledge of circuit operation and astute troubleshooting techniques. It is advisable to refer to the related detailed circuit descriptions in the theory of operation sections prior to troubleshooting a radio.

## 5.1 List of Troubleshooting Charts

Most troubleshooting charts (see [Table 5-1](#)) end up by pointing to an IC to replace. It is not always noted, but it is good practice to verify supplies and grounds to the affected IC and to trace continuity to the malfunctioning signal and related circuitry before replacing any IC. For instance, if a clock signal is not available at a destination, continuity from the source IC should be checked before replacing the source IC.

Table 5-1. Troubleshooting Charts

Troubleshooting	Page No.
<b>Main Troubleshooting</b>	
Main Troubleshooting Flowchart	5-3
<b>Power-Up Failure</b>	
Main Board	5-4
B+ Incorrect Voltage	5-5
Low LDO10 VCC_3.3 Voltage	5-6
Low LDO3 V_1.55 Voltage	5-7
Low LDO8 V_5.0A Voltage	5-8
Low VBUS2 Voltage	5-9
Low V_SW_1.4 Voltage	5-10
Low V_2.23 Voltage	5-11
Low V_SW_3.6 Voltage	5-12
Low V_SW_5 Voltage	5-13
Low V_EXT_1.85 Voltage	5-14
<b>DC Supply</b>	
DC Supply 5 Volt Failure	5-15
DC Supply 3.6 Volt Failure	5-16
DC Supply 3 Volt Failure	5-17
DC Supply 1.85 Volt Failure	5-18

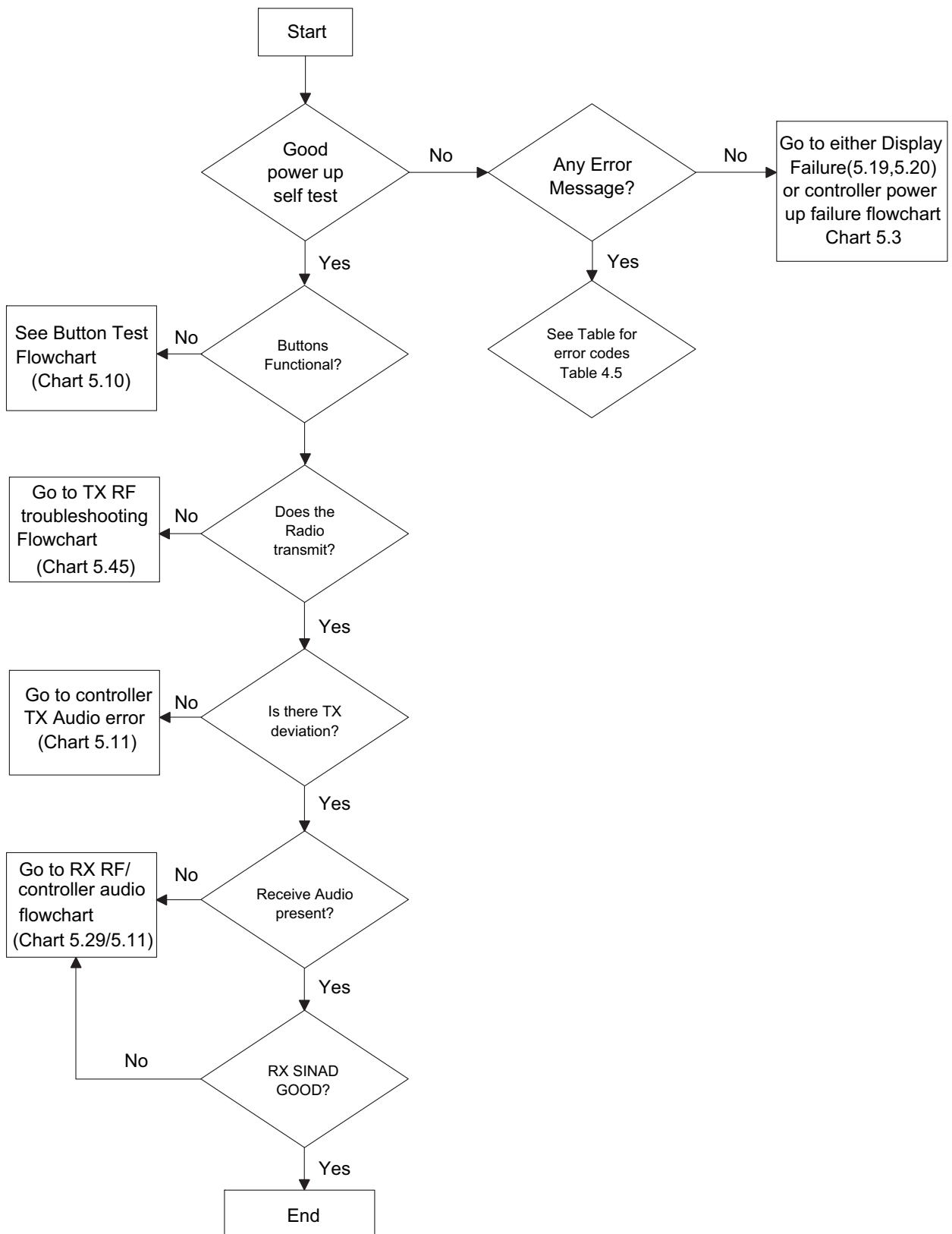
Table 5-1. Troubleshooting Charts (Continued)

Troubleshooting	Page No.
DC Supply 1.8 Volt Failure	5-19
DC Supply 1.5 Volt Failure	5-20
DC Supply 1.4 Volt Failure	5-21
<b>Display</b>	
Main Display Failure	5-22
<b>Knob/ Button/ Keypad</b>	
Volume/Channel Error	5-23
Keypad Error	5-24
Side Button Error	5-25
<b>RX Audio</b>	
External Audio	5-26
Internal Audio	5-27
<b>TX Audio</b>	
Internal Microphone	5-28
External Mic Failure	5-29
<b>RX RF</b>	
RX RF Failure	5-30
<b>FGU</b>	

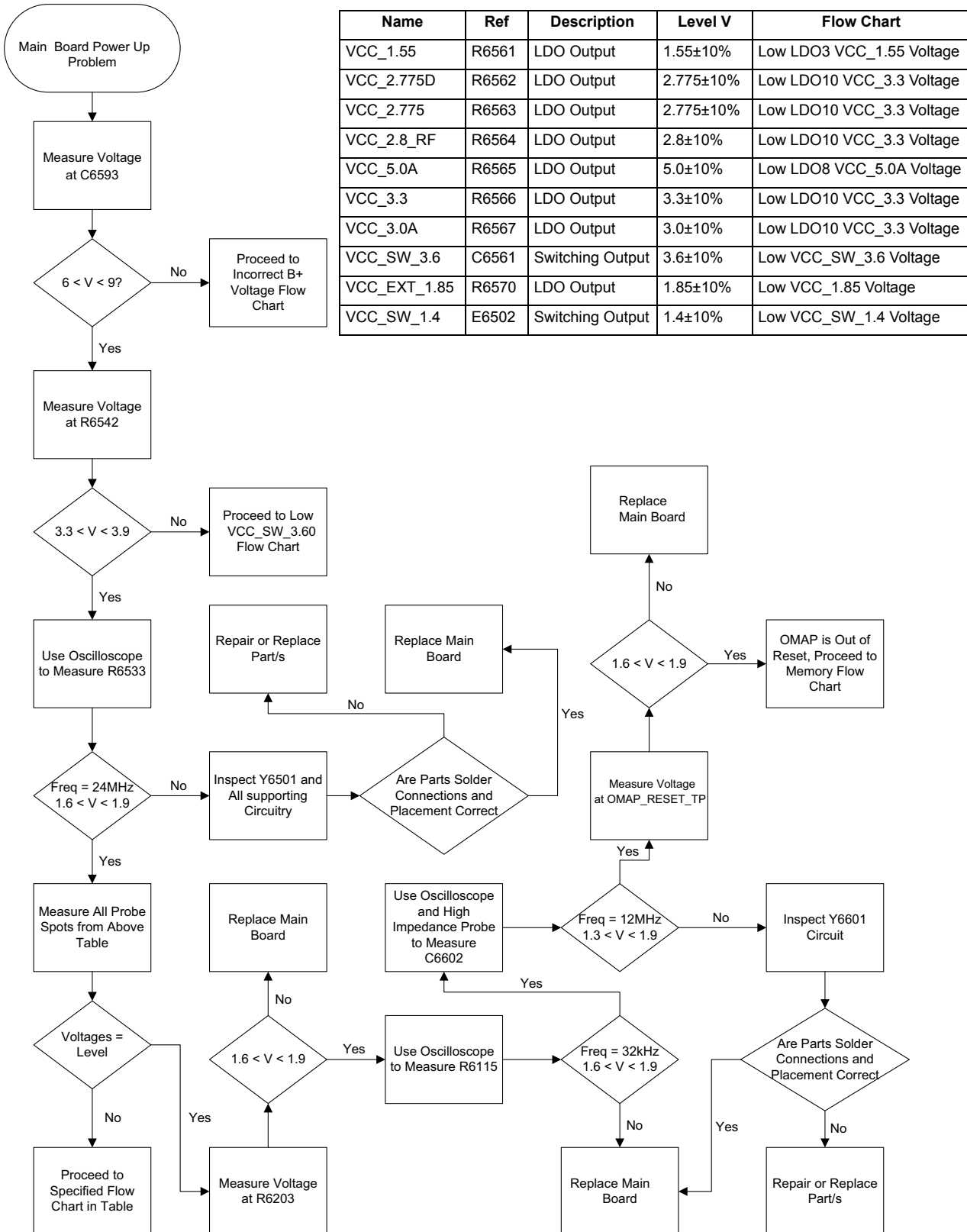
Table 5-1. Troubleshooting Charts (Continued)

<b>Troubleshooting</b>	<b>Page No.</b>
FGU Failure	5-41
<b>VCO</b>	
VCO Failure	5-42
<b>GPS</b>	
PA Failure	5-45
<b>PA Failure</b>	
Main	5-45
VHF PA	5-46
UHF1/UHF2 PA	5-47
700/800 MHz PA	5-48
ALC	5-49

## 5.2 Main Troubleshooting Flowchart

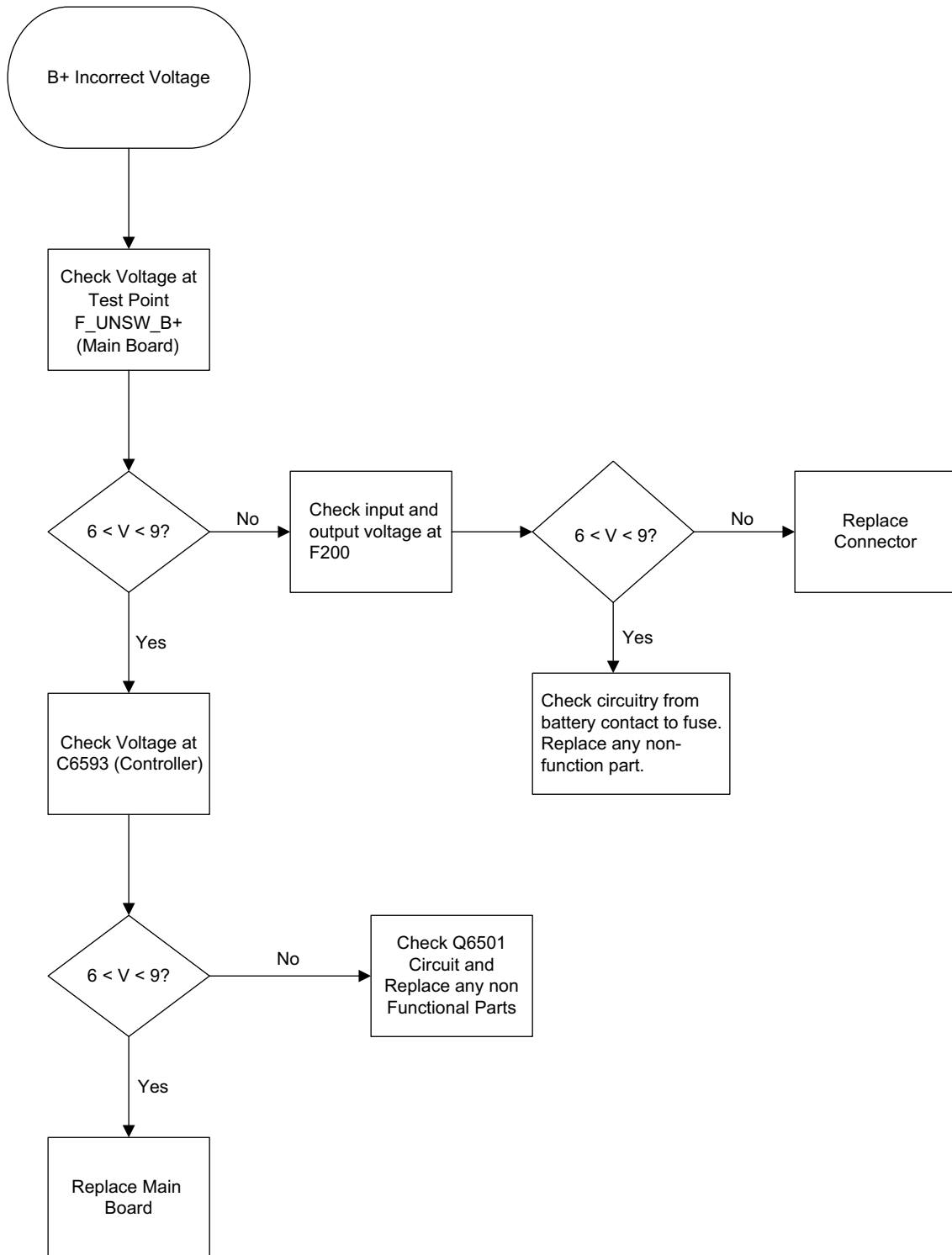


### 5.3 Power-Up Failure – Main Board

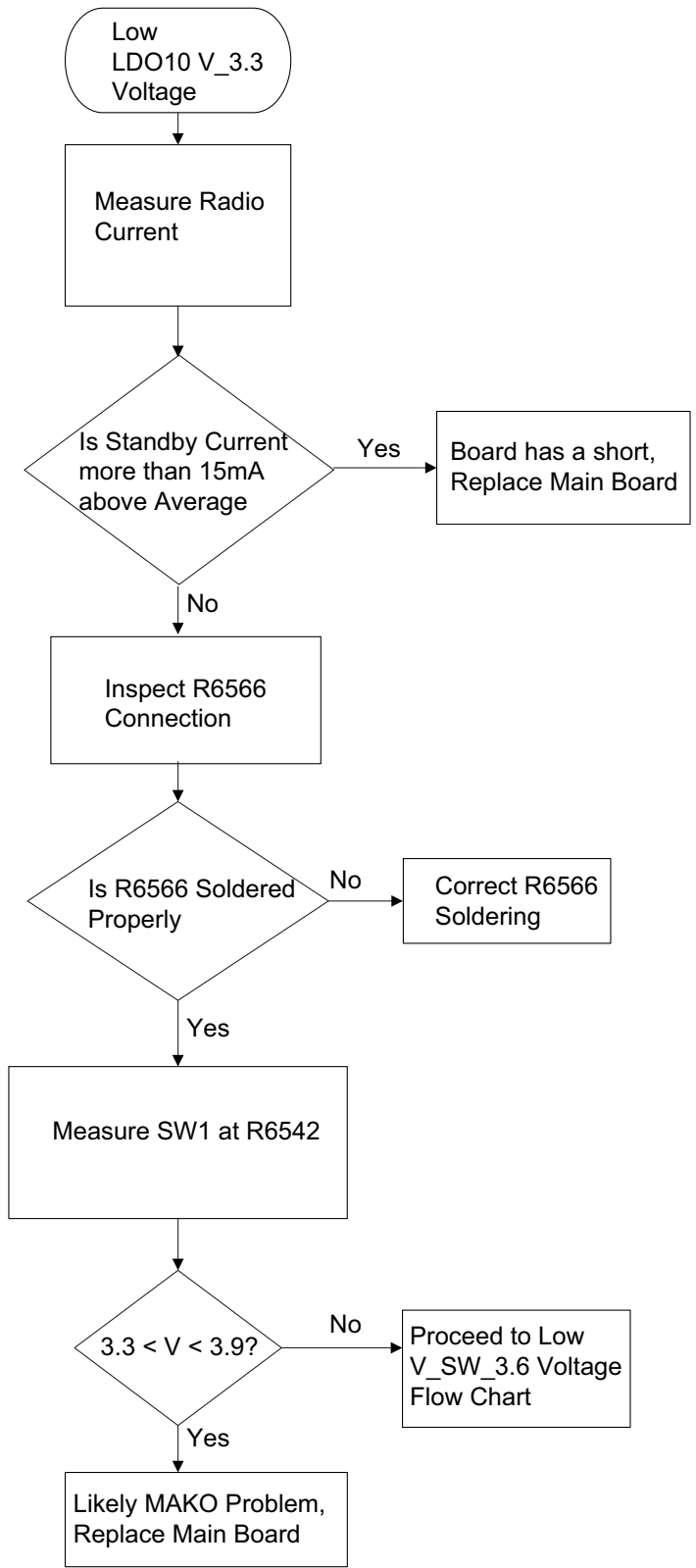




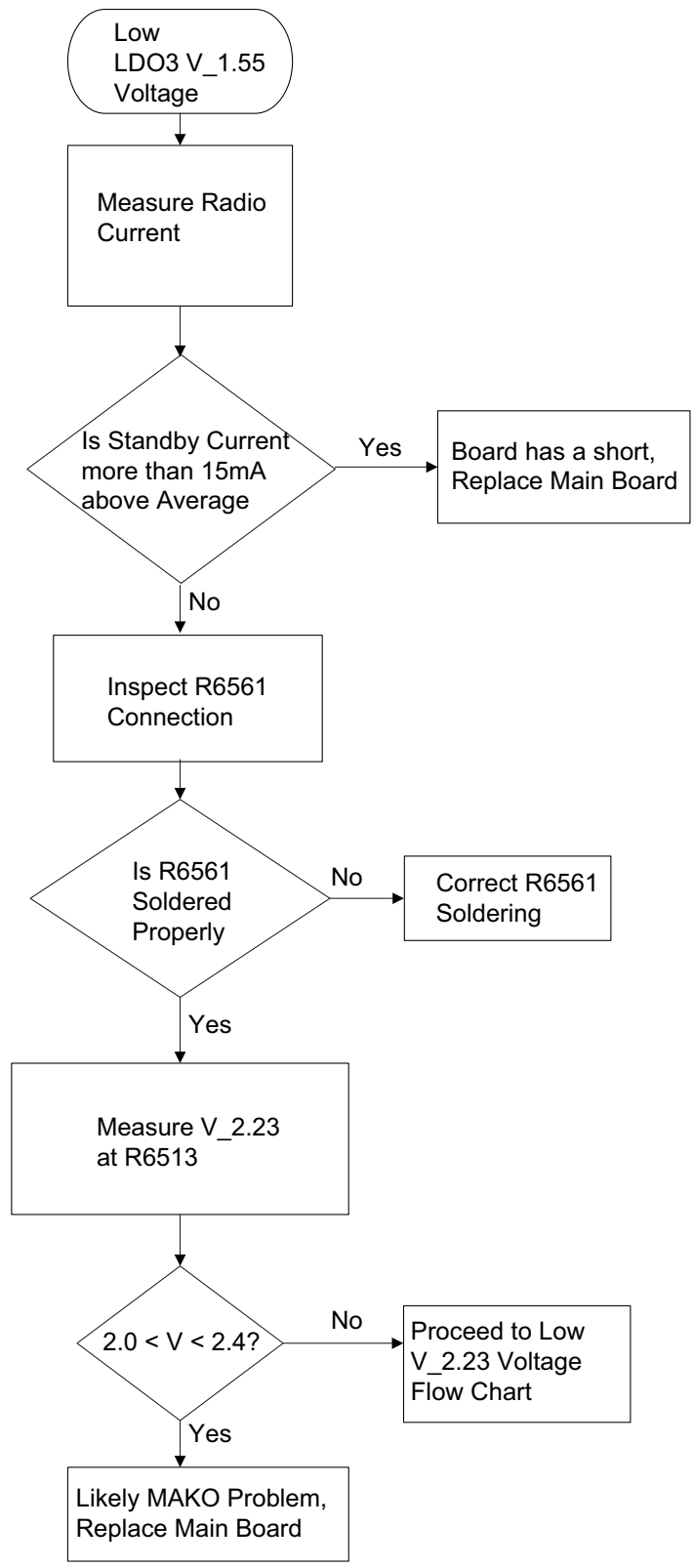
## Power-Up Failure – B+ Incorrect Voltage



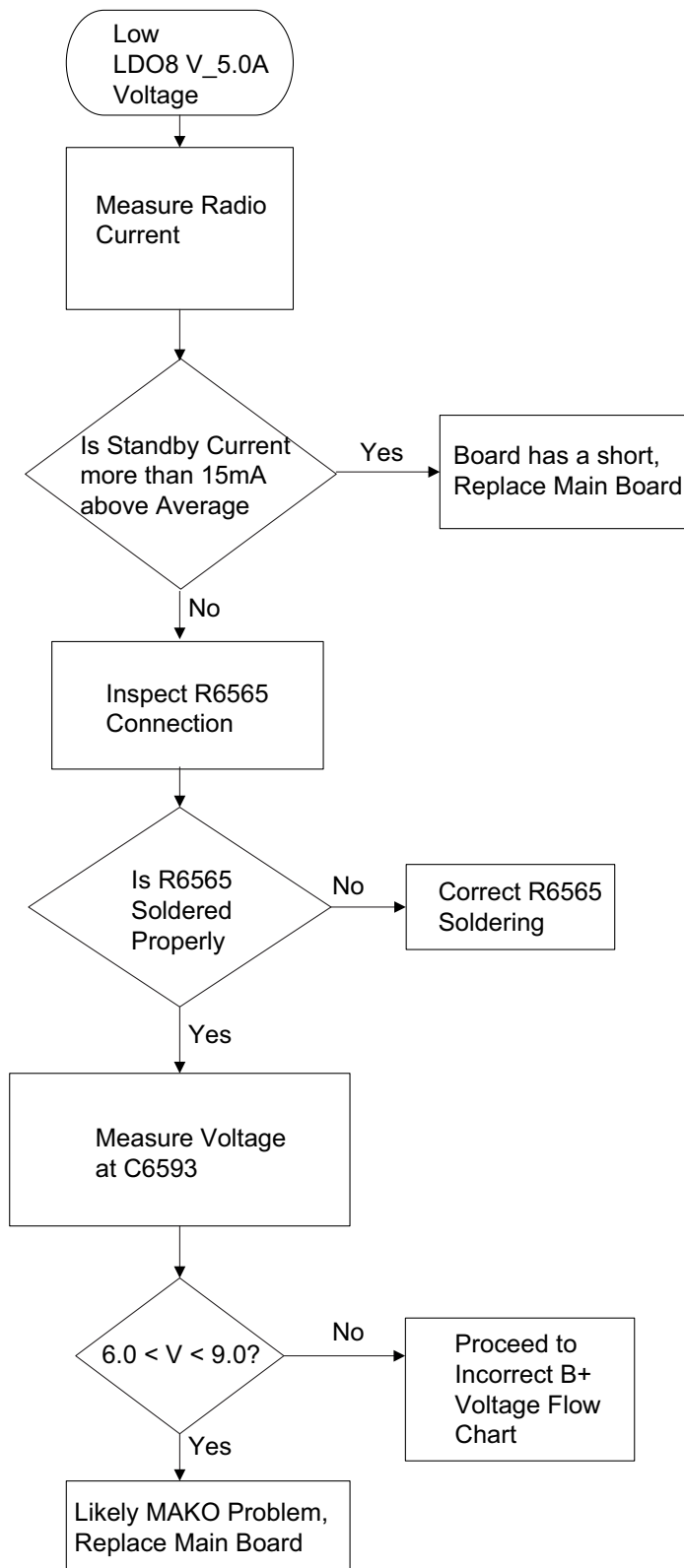
### Power-Up Failure – Low LDO10 VCC\_3.3 Voltage



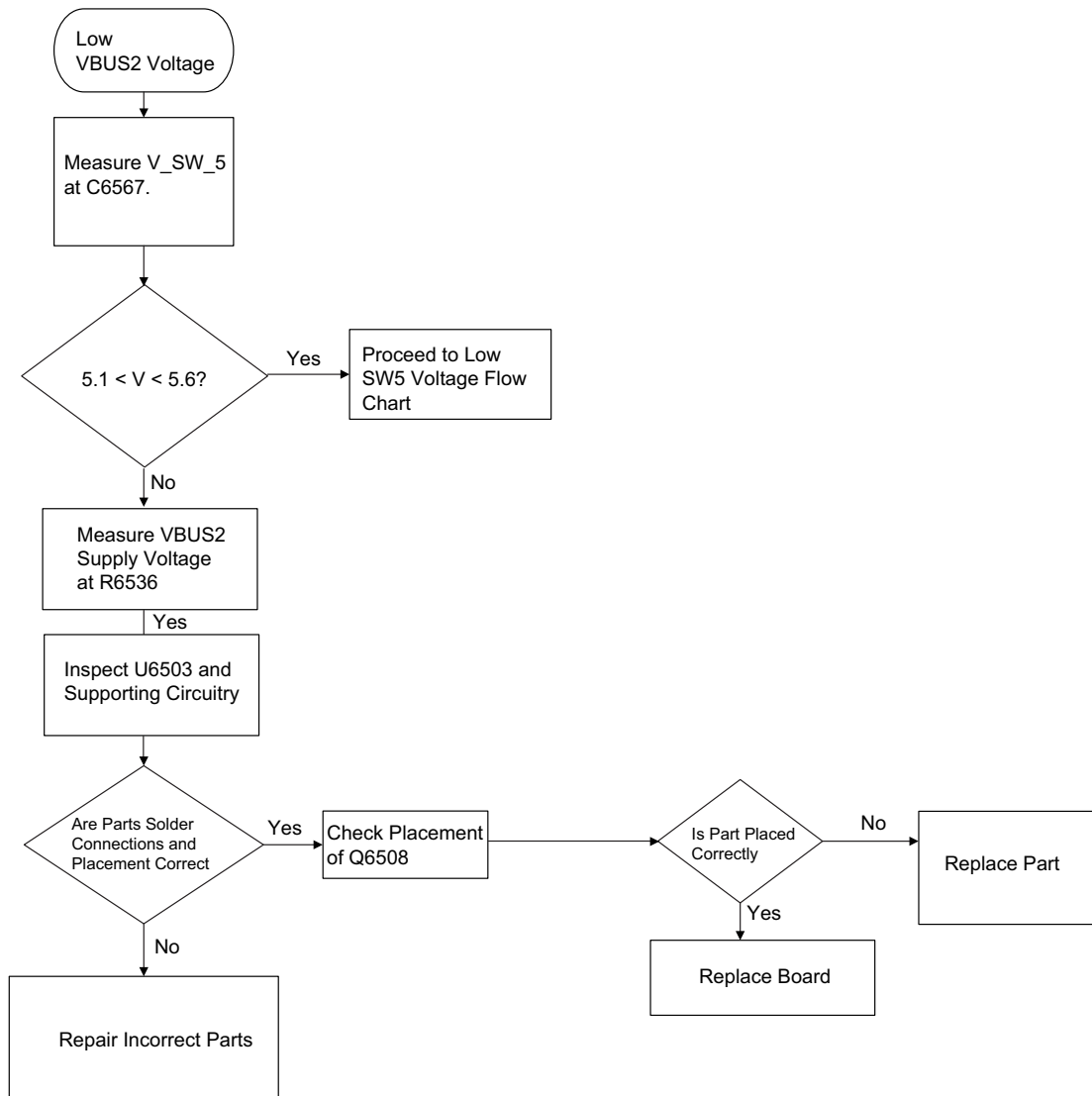
## Power-Up Failure – Low LDO3 V\_1.55 Voltage



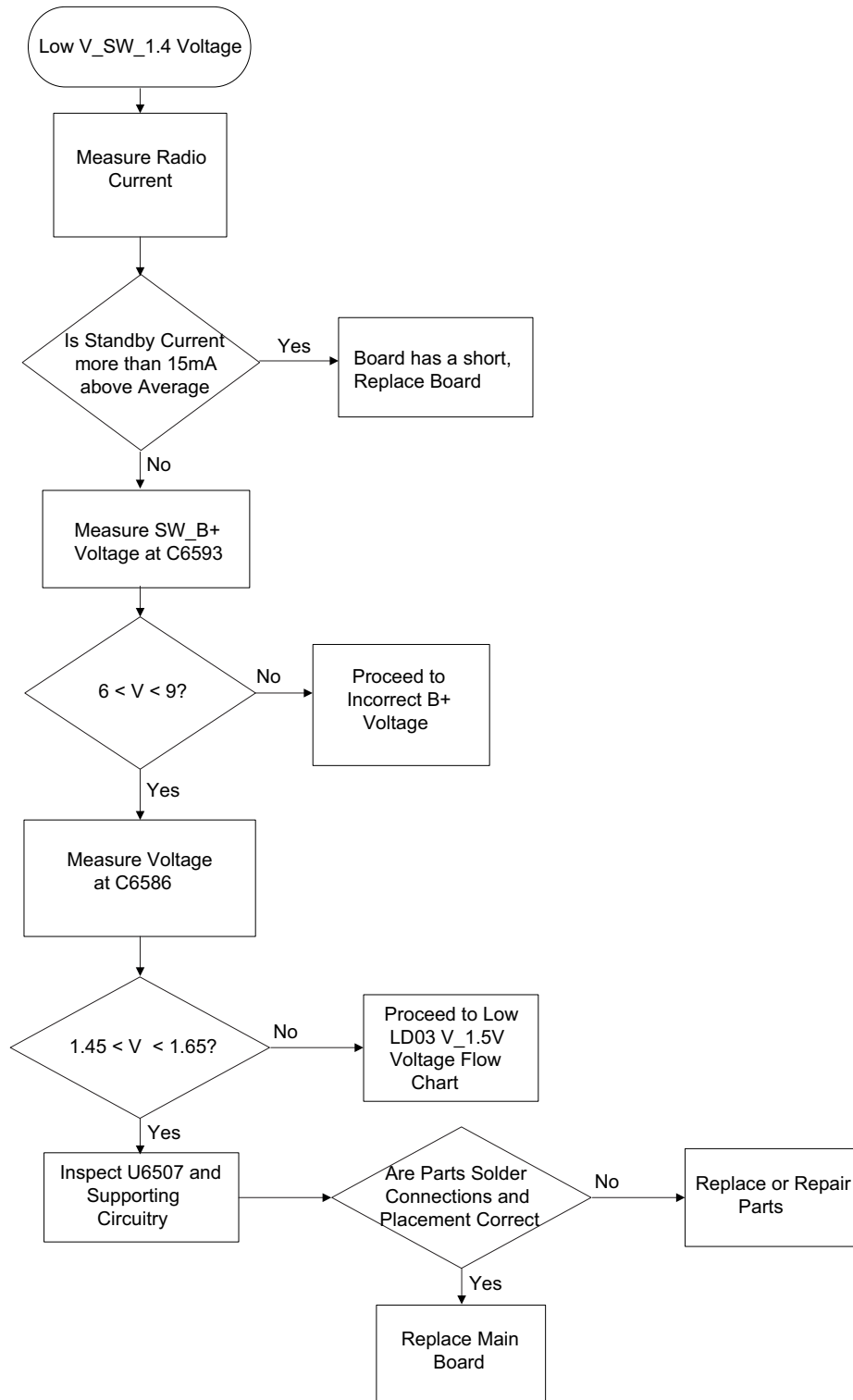
### Power-Up Failure – Low LDO8 V\_5.0A Voltage



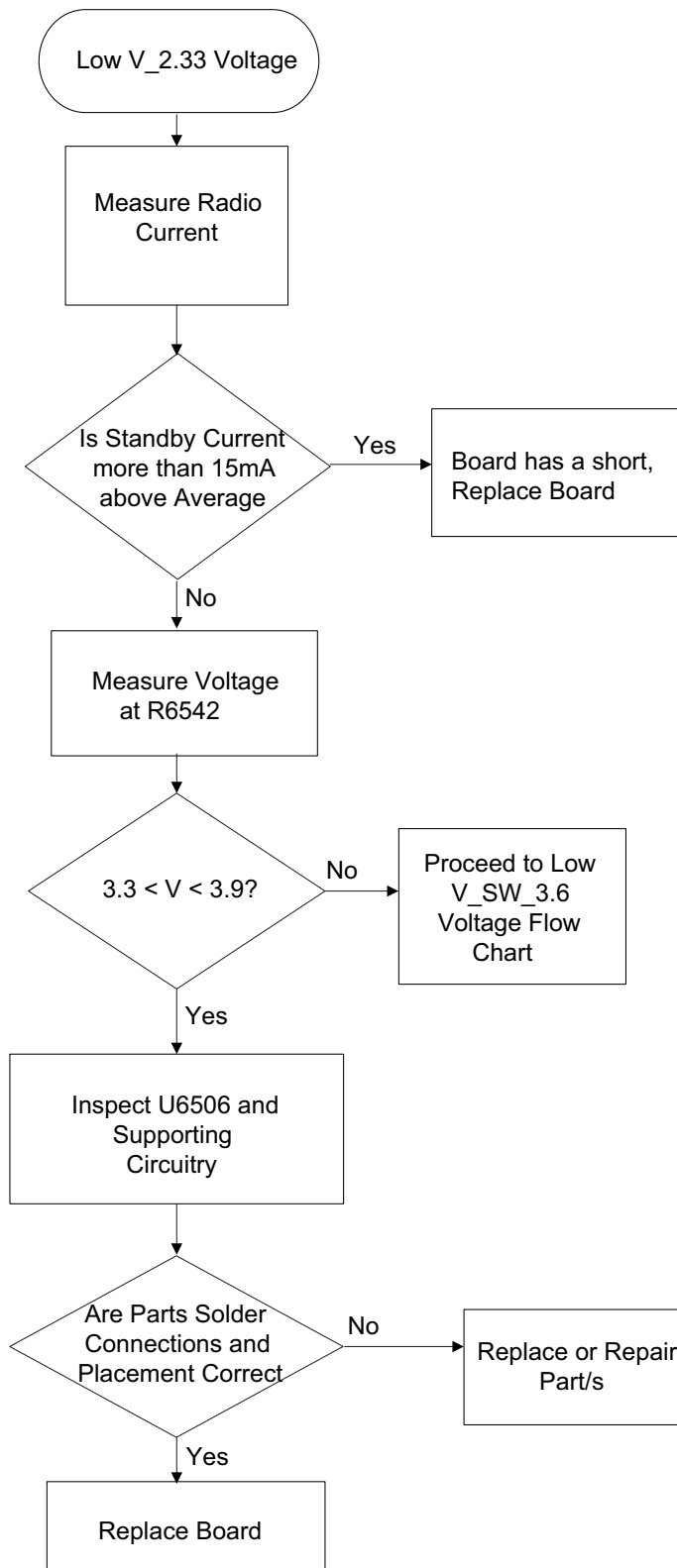
# Power-Up Failure – Low VBUS2 Voltage



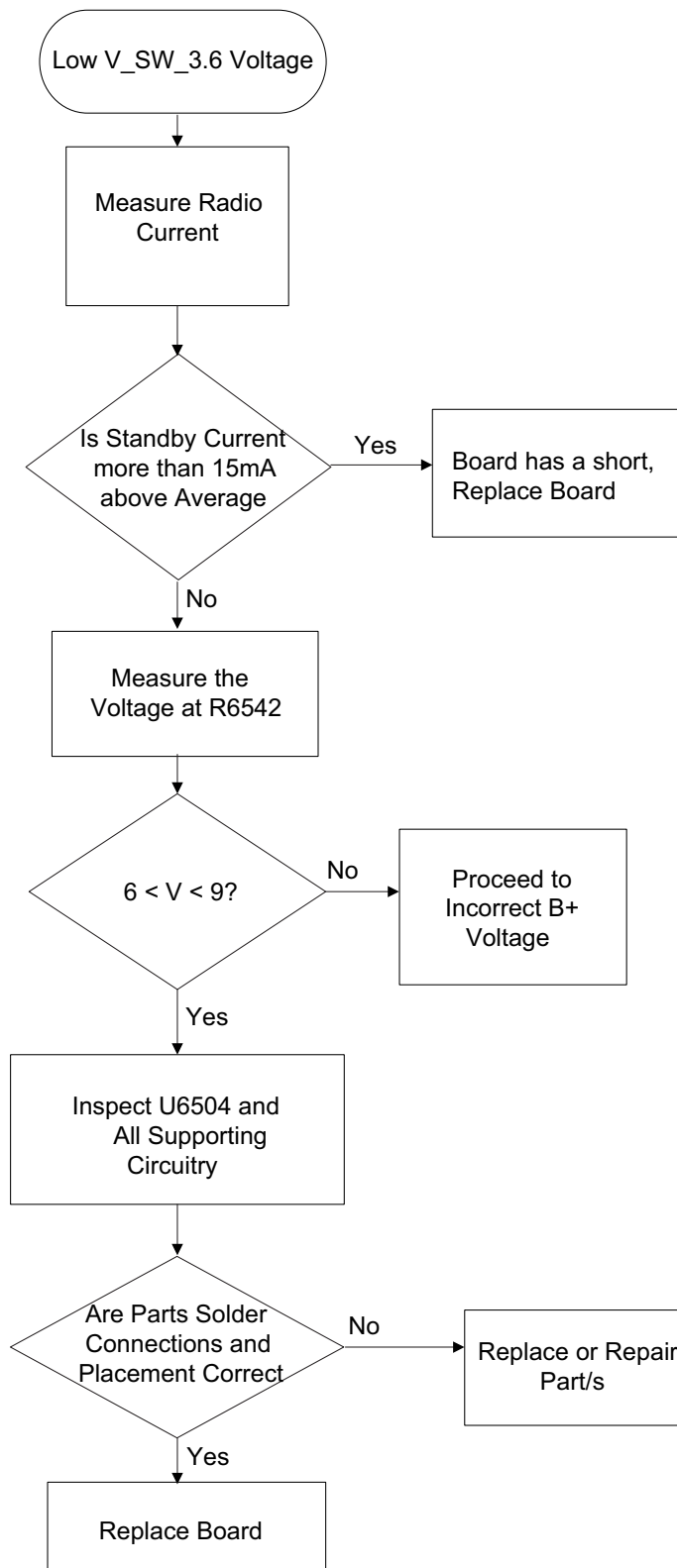
# Power-Up Failure – Low V\_SW\_1.4 Voltage



## Power-Up Failure – Low V<sub>2.33</sub> Voltage

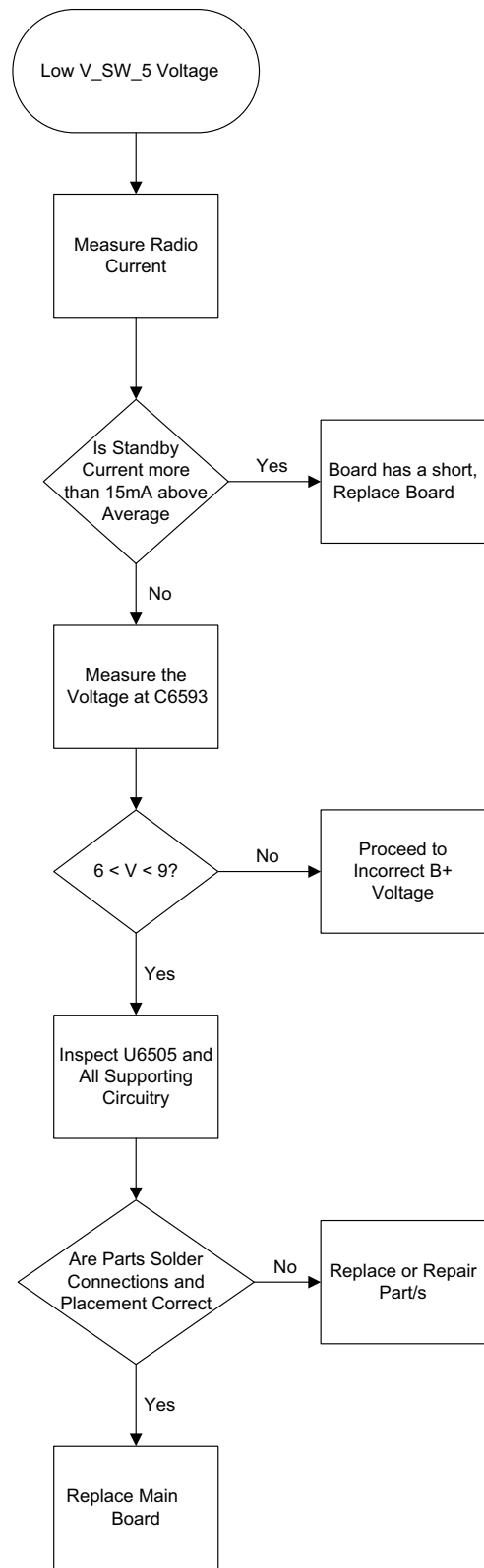


### Power-Up Failure – Low V\_SW\_3.6 Voltage

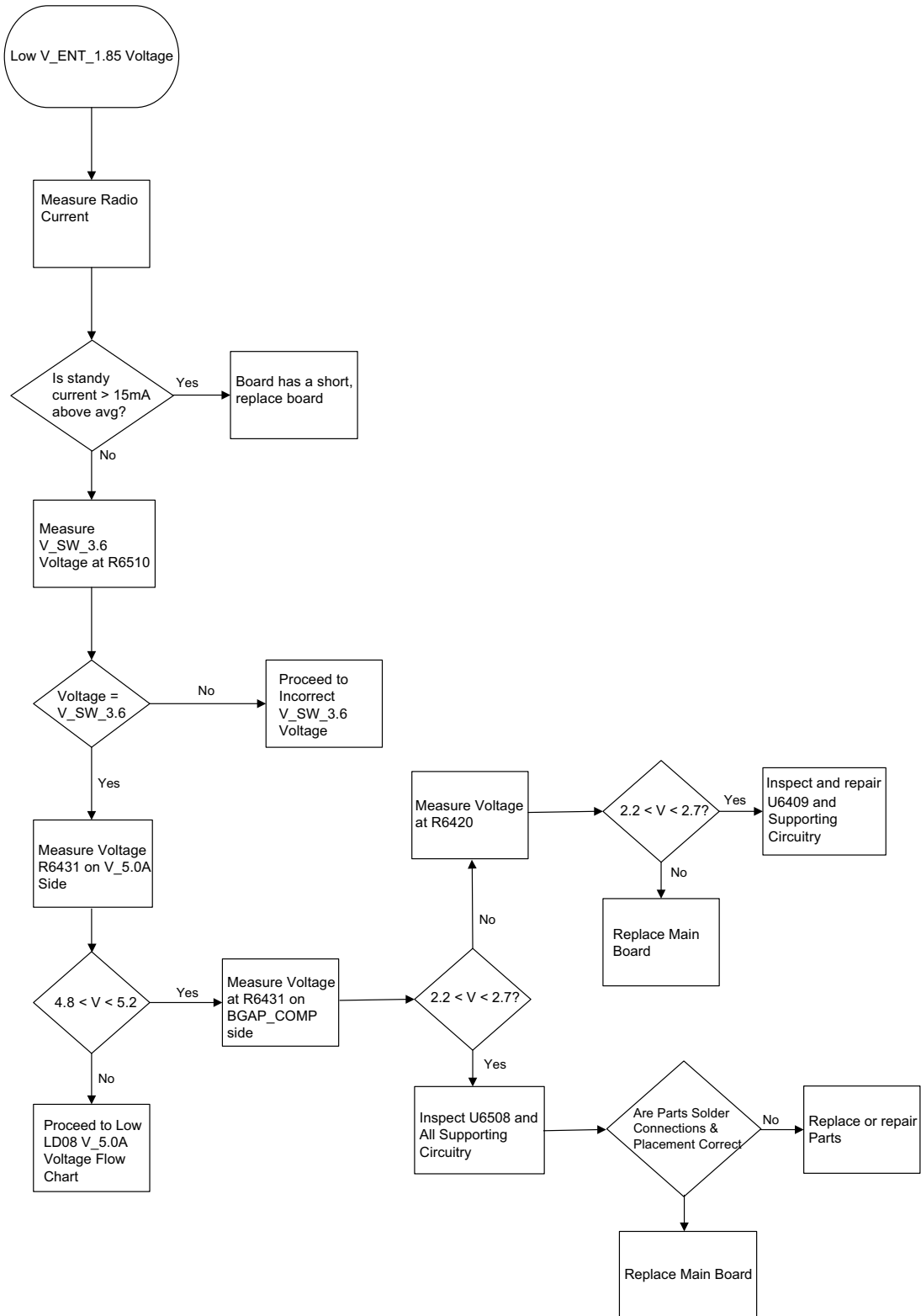




# Power-Up Failure – Low V\_SW\_5 Voltage

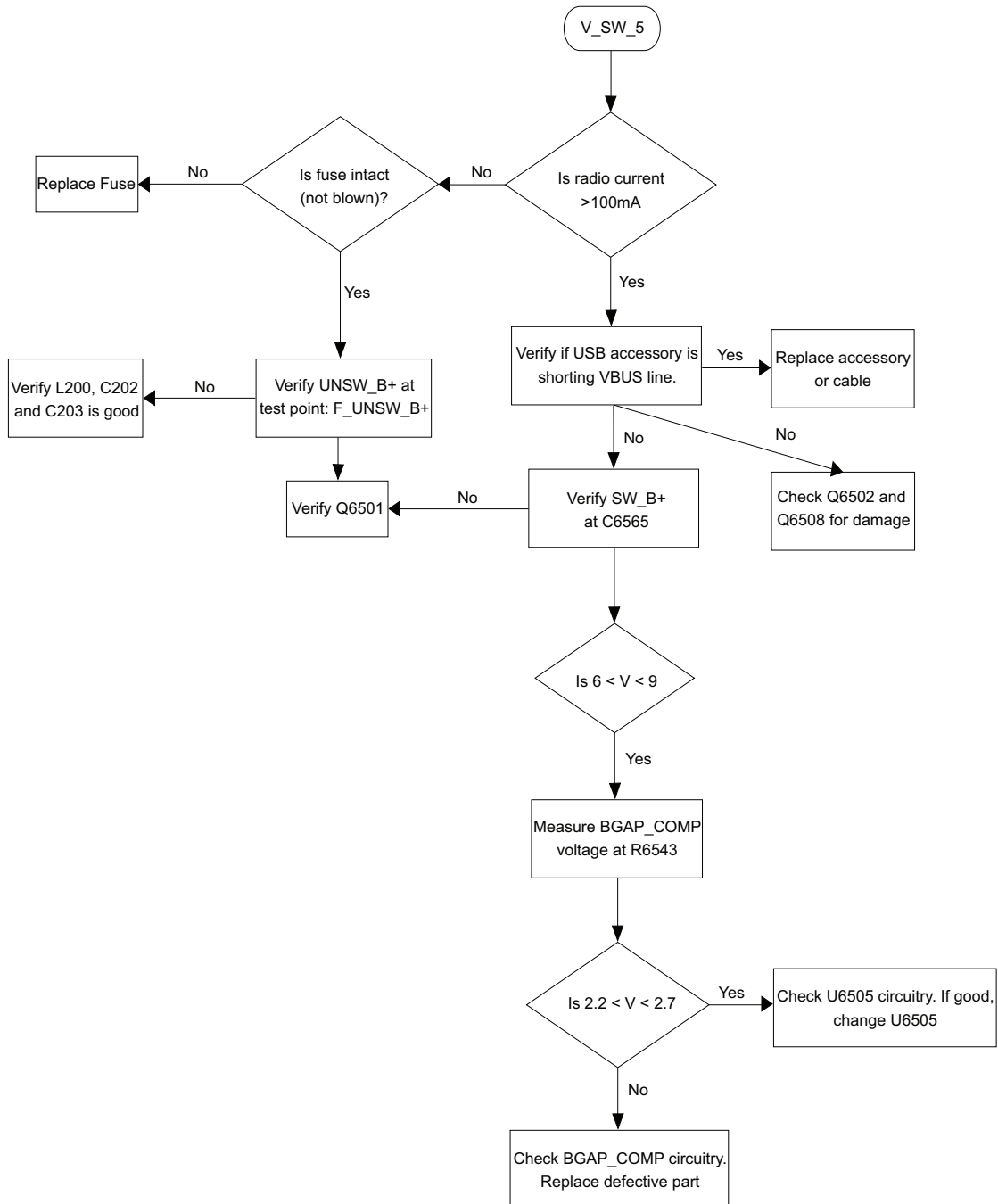


# Power-Up Failure – Low V\_EXT\_1.85 Voltage

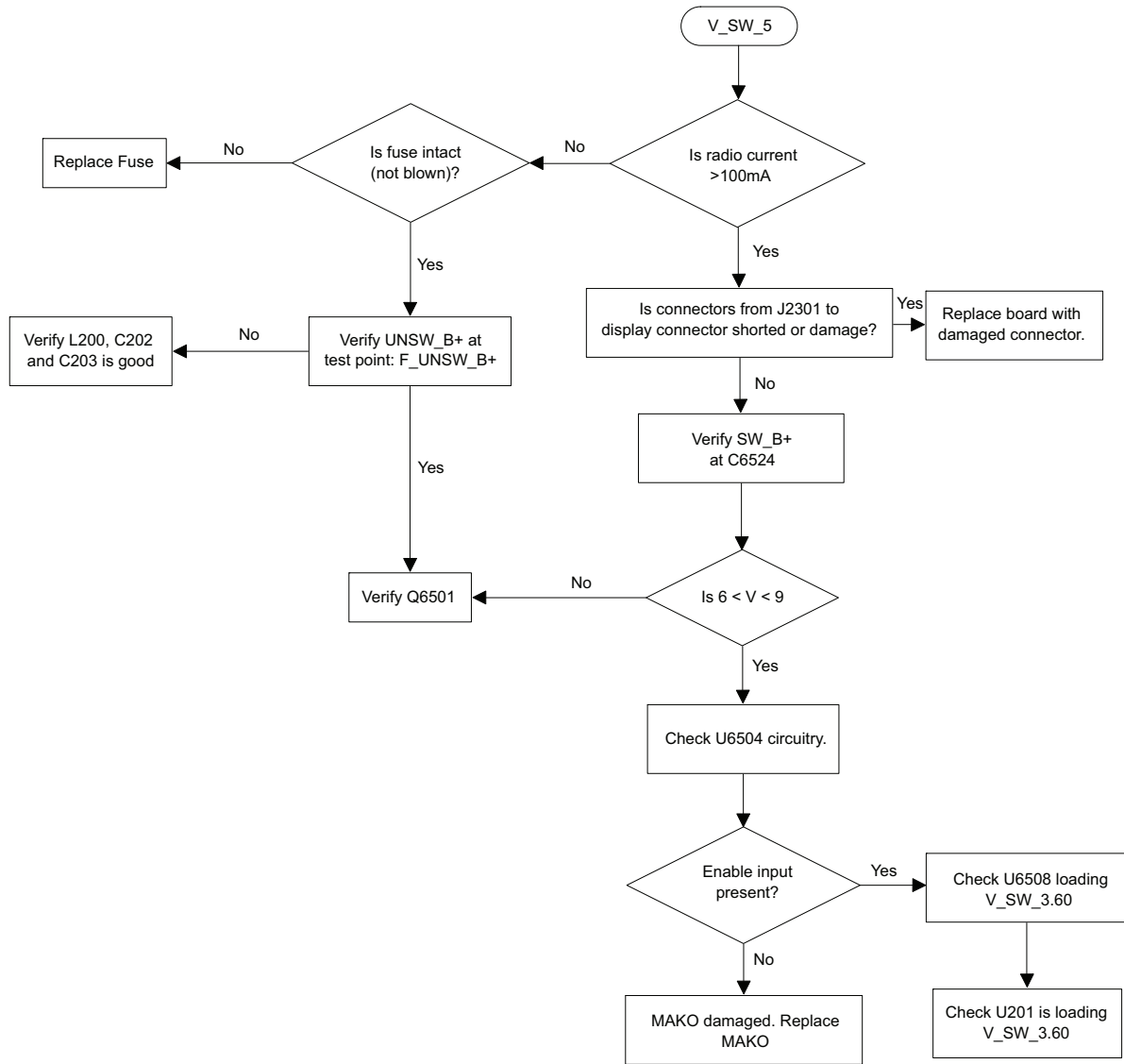


## 5.4 DC Supply Failure

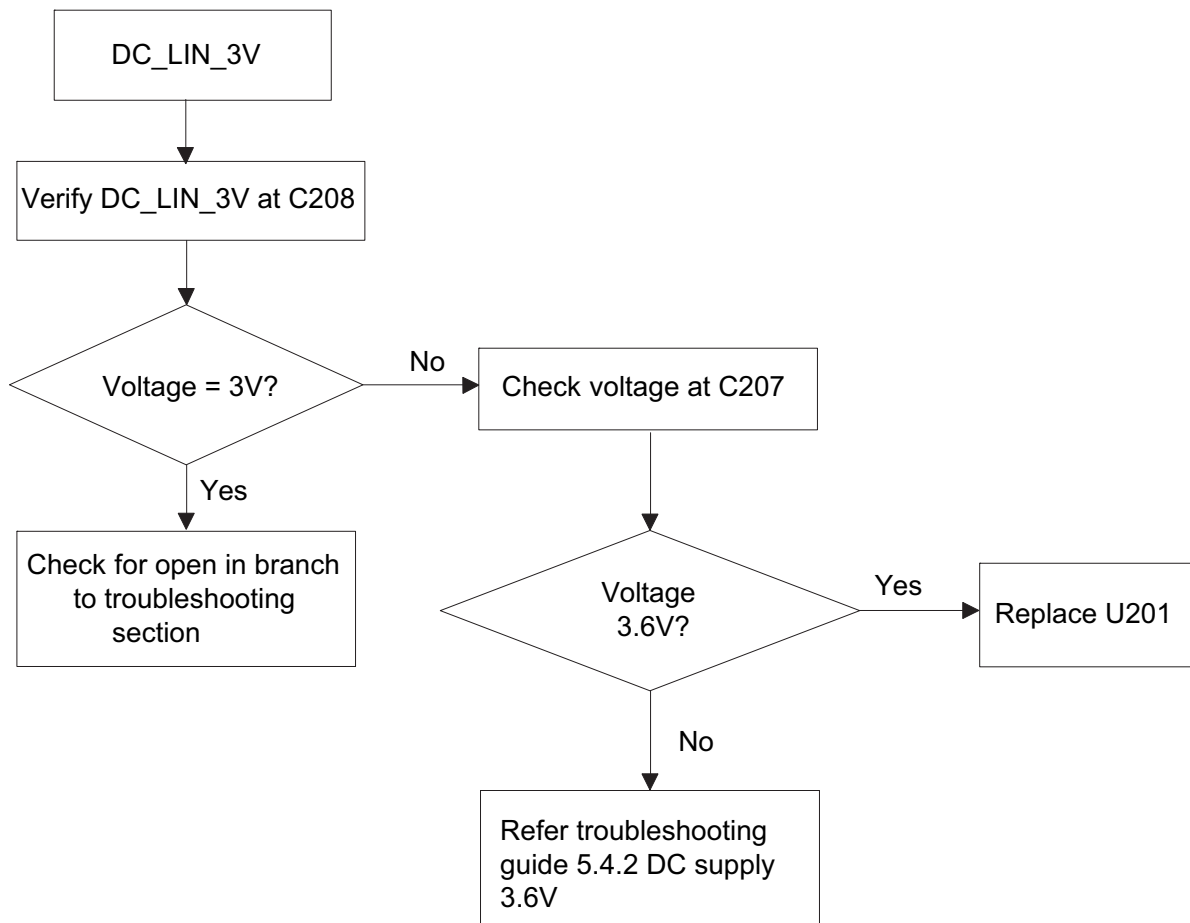
### DC Supply 5 Volt Failure



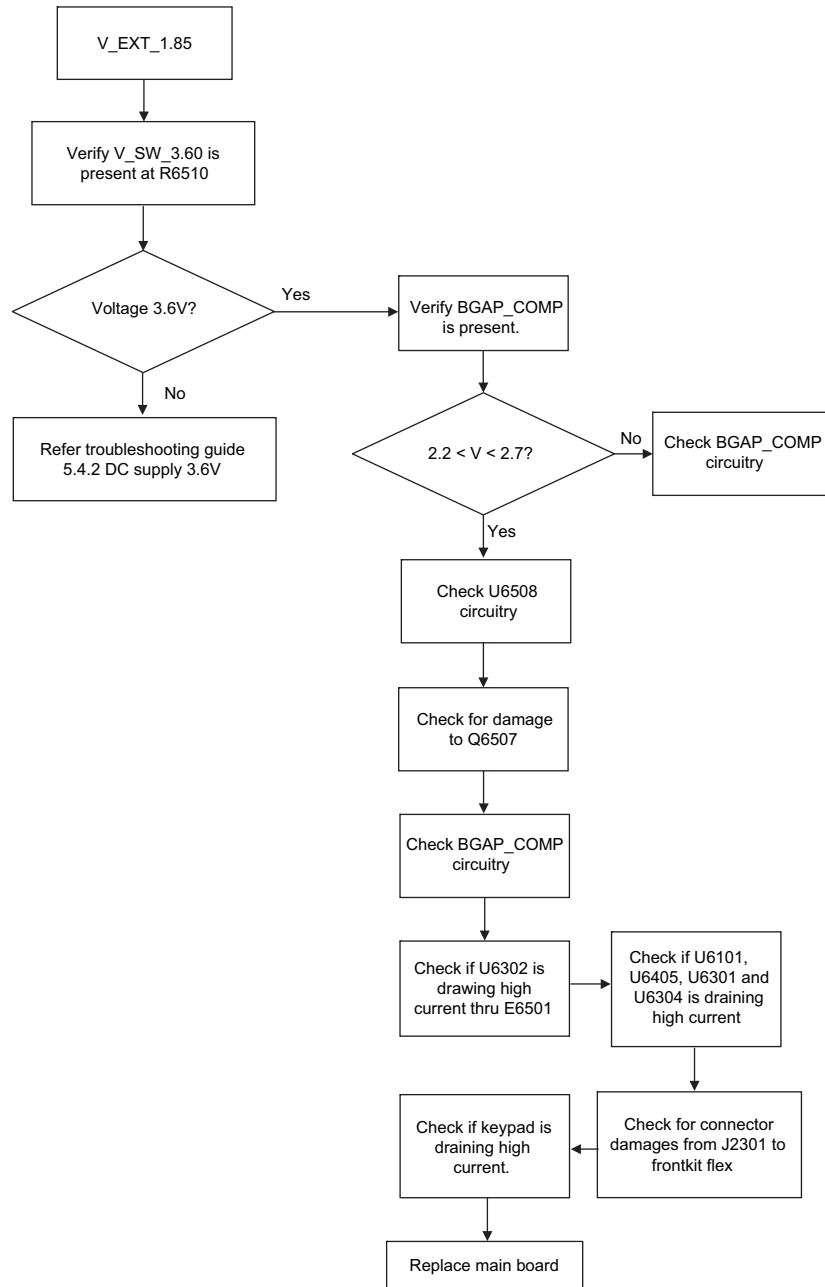
# DC Supply 3.6 Volt Failure



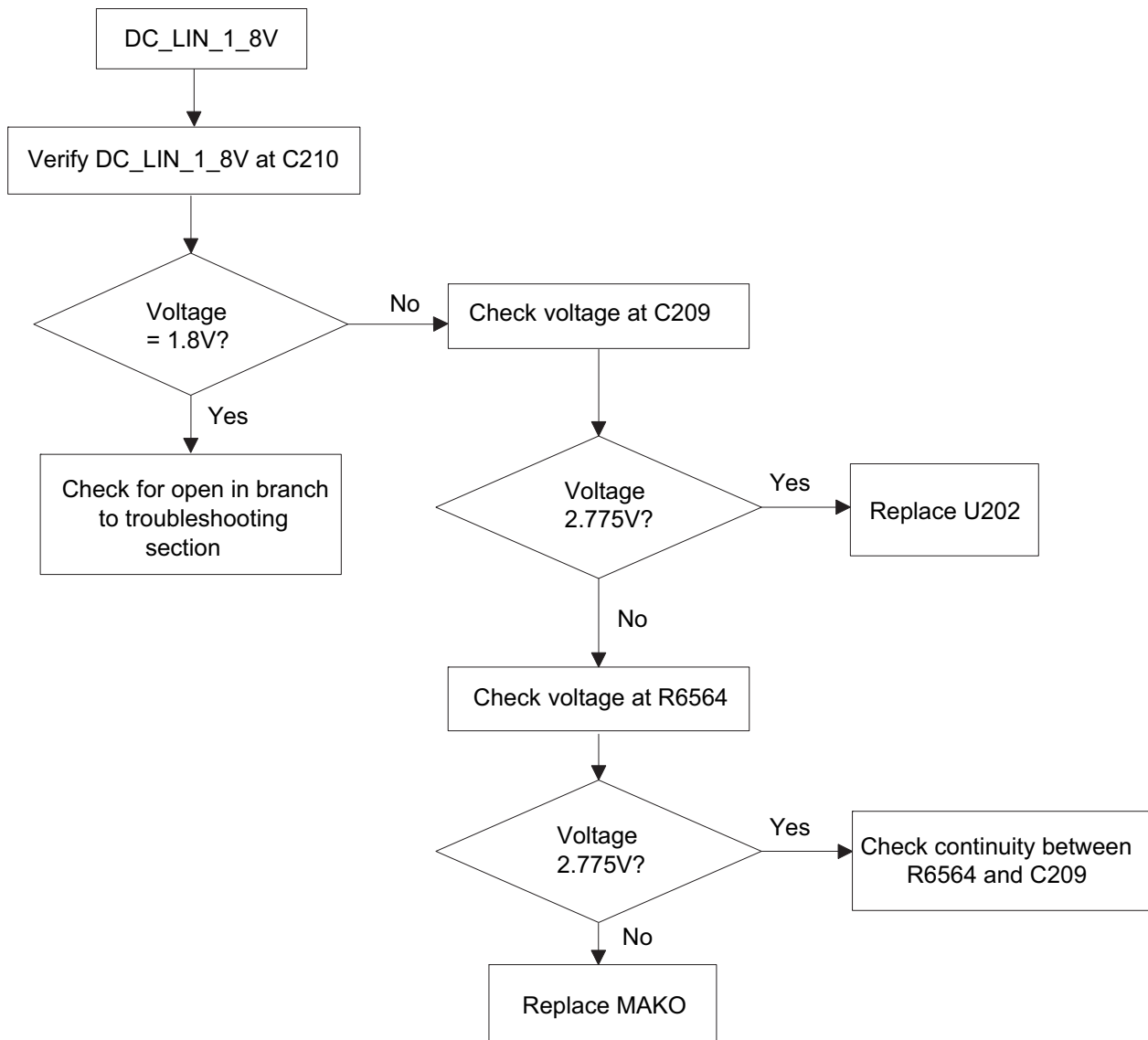
## DC Supply 3 Volt Failure



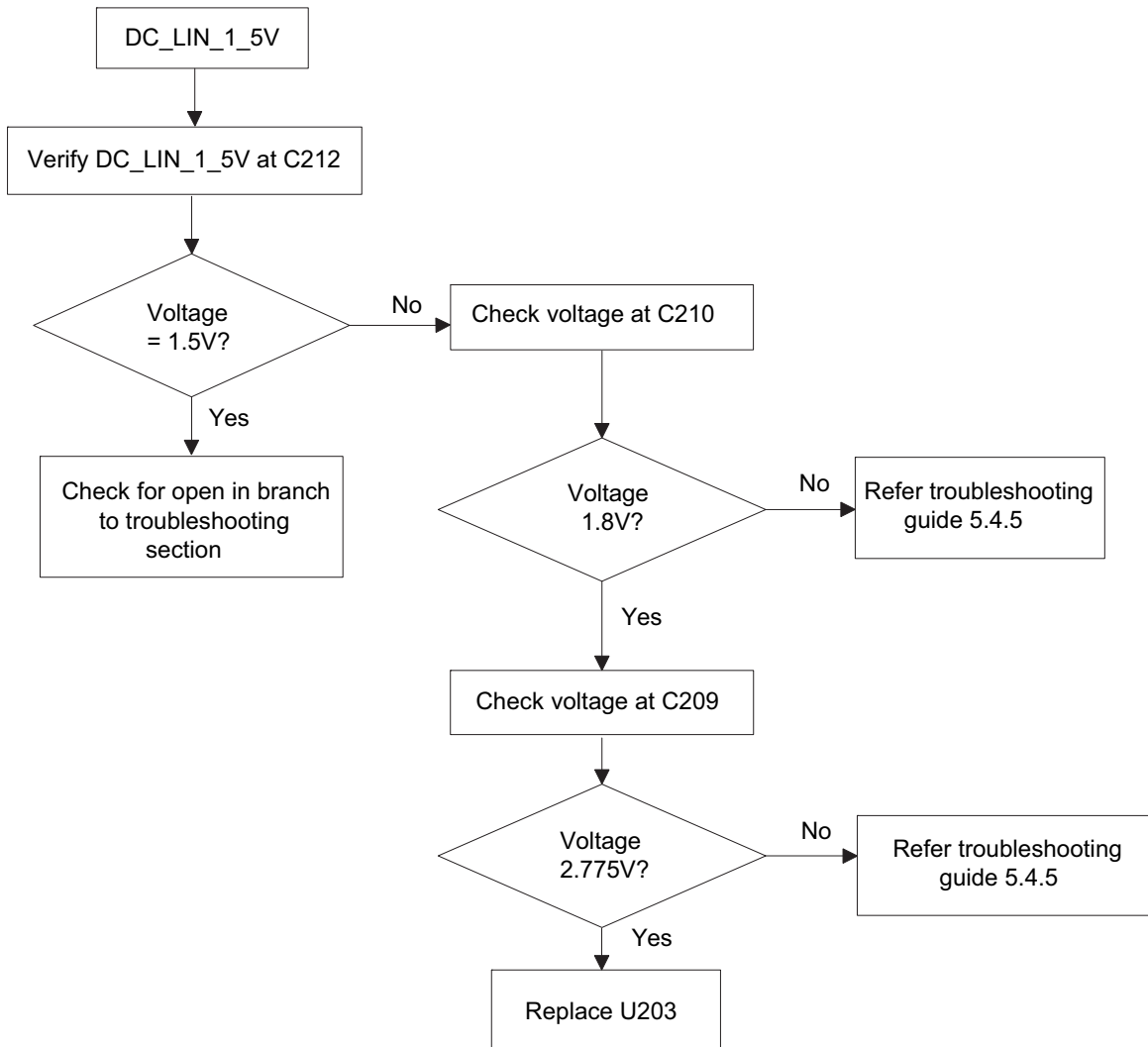
# DC Supply 1.85 Volt Failure



## DC Supply 1.8 Volt Failure

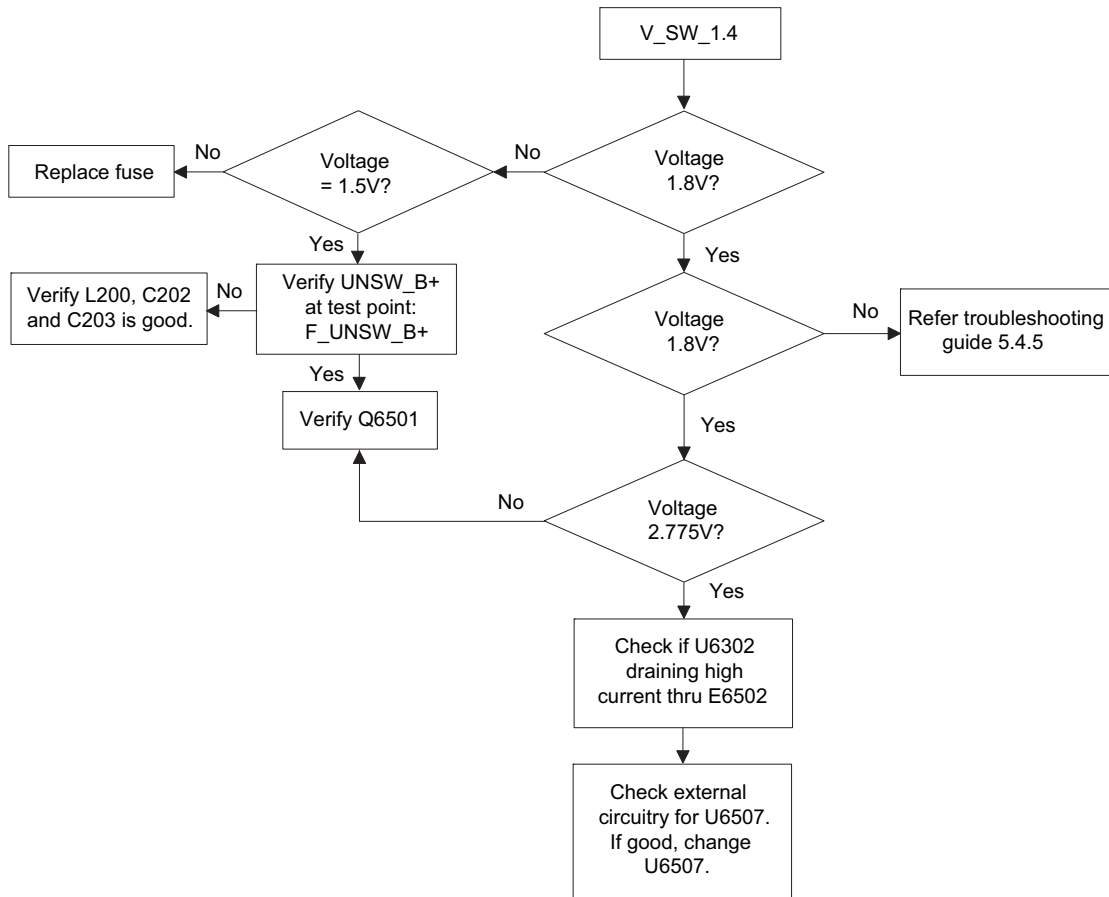


# DC Supply 1.5 Volt Failure

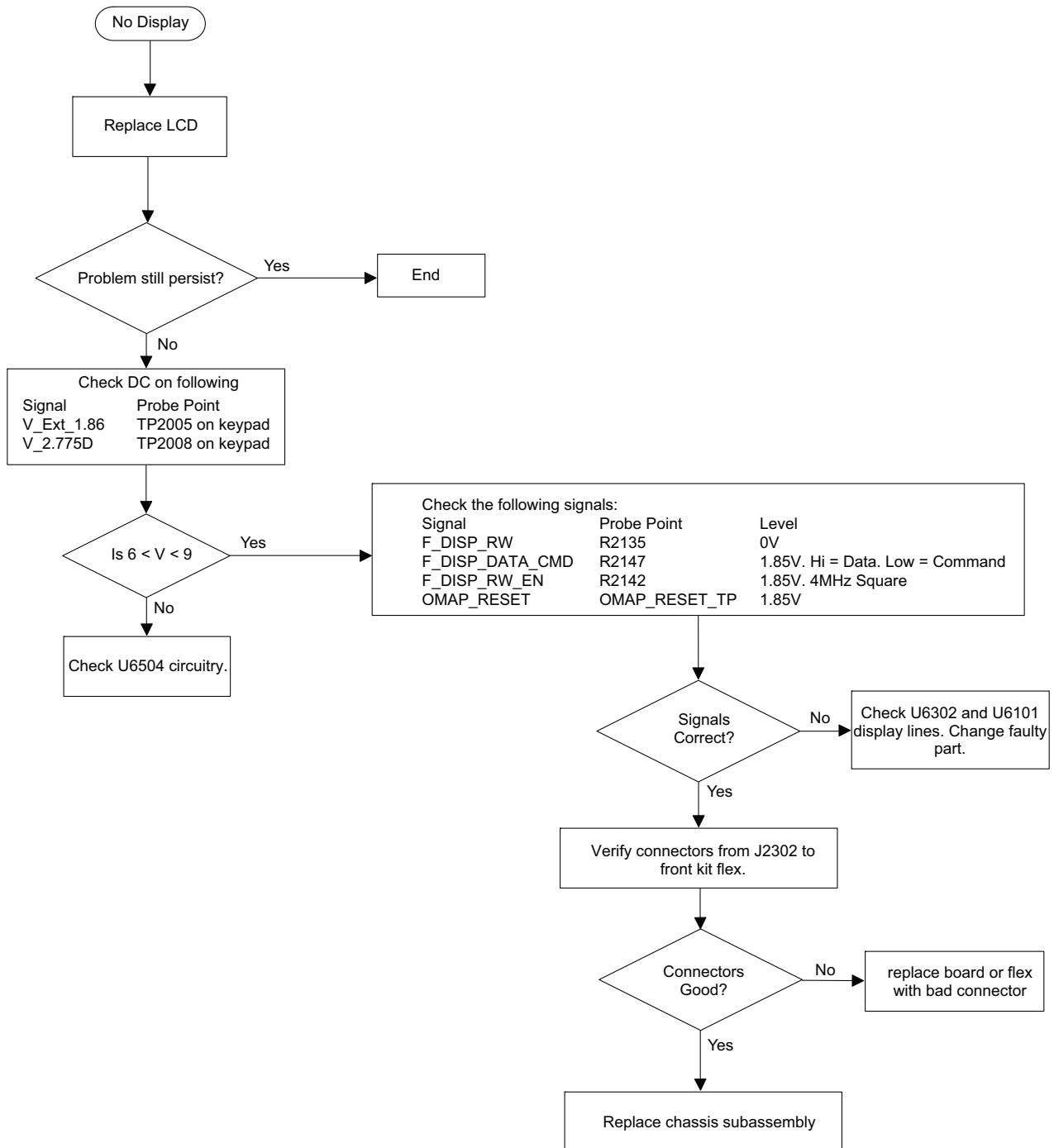




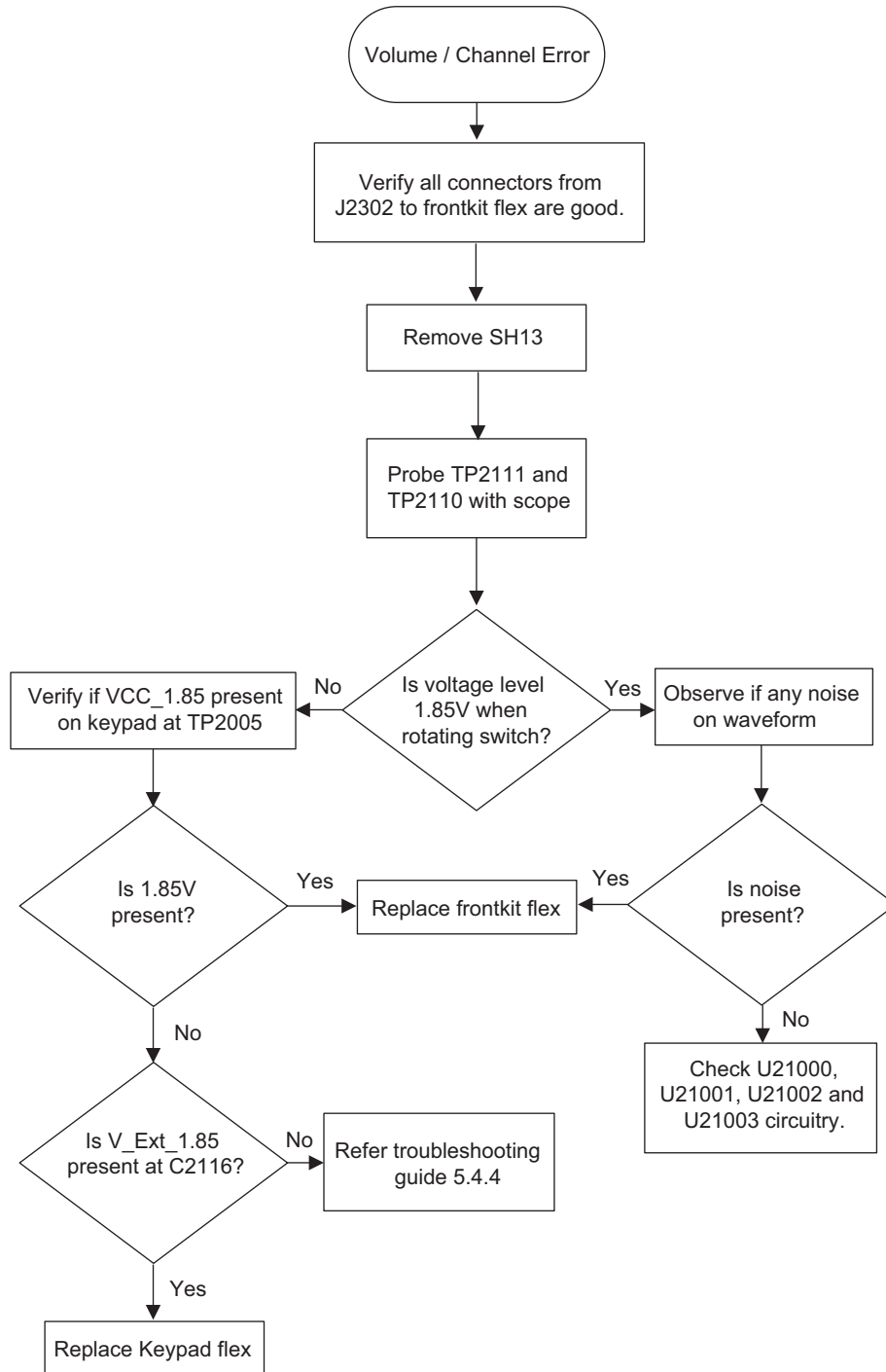
## DC Supply 1.4 Volt Failure



## 5.5 Main Display Failure



## 5.6 Volume/Channel Error



# 5.7 Keypad Error

**Synopsis**

This Chart relates to failure in the button functions Basic Failure modes are as follows:

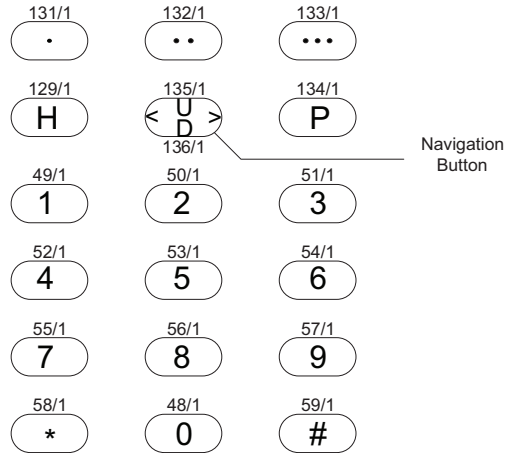
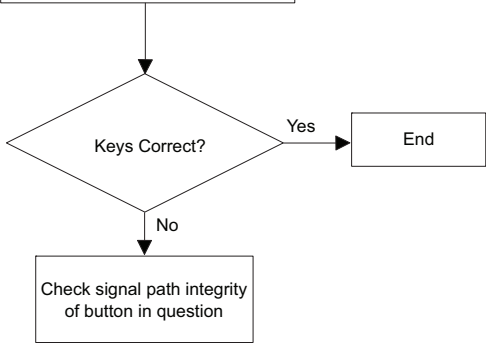
- 1) Failure in control top, side controls or keypad flex assembly
- 2) Bad Connection
- 3) Defective Swithces or pads

**Button Test**

Place radio in Test Mode. Press side Top Button so disply reads CH TEST. This places the radio in button test mode. Then, press the orange (Emergency) Top Button to verify codes displayed as shown in the Button Table at right.

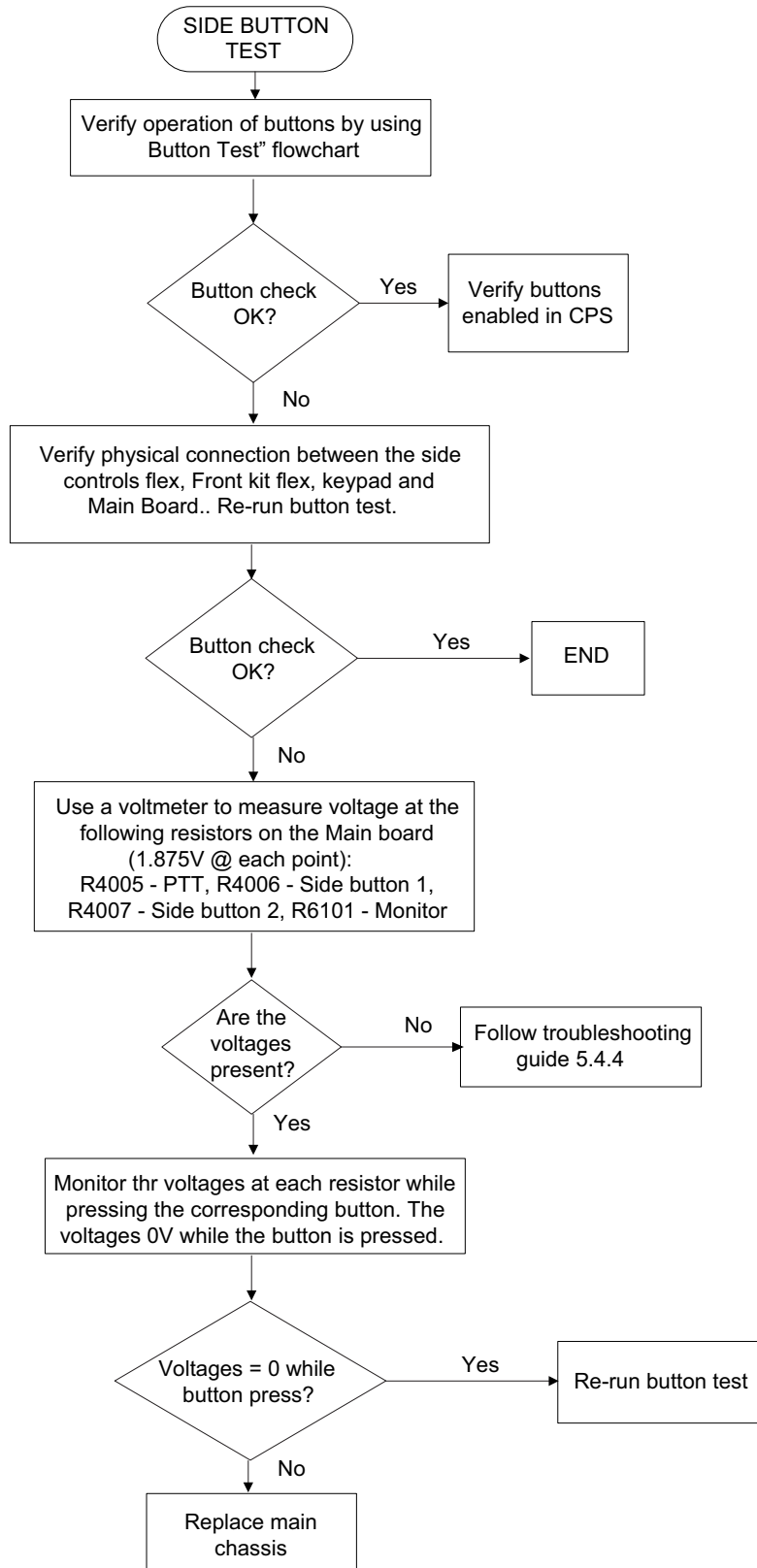
**Button Table**

Button	Code
PTT	1/0-1
Tob Button (Emergency)	148/0-1
Side Button 1	96/0-1
Side Button 2	97/0-1
Side Button 3	98/0-1
Rotary Switch	11/1-255
Rotary Switch Push Button	91/0-1



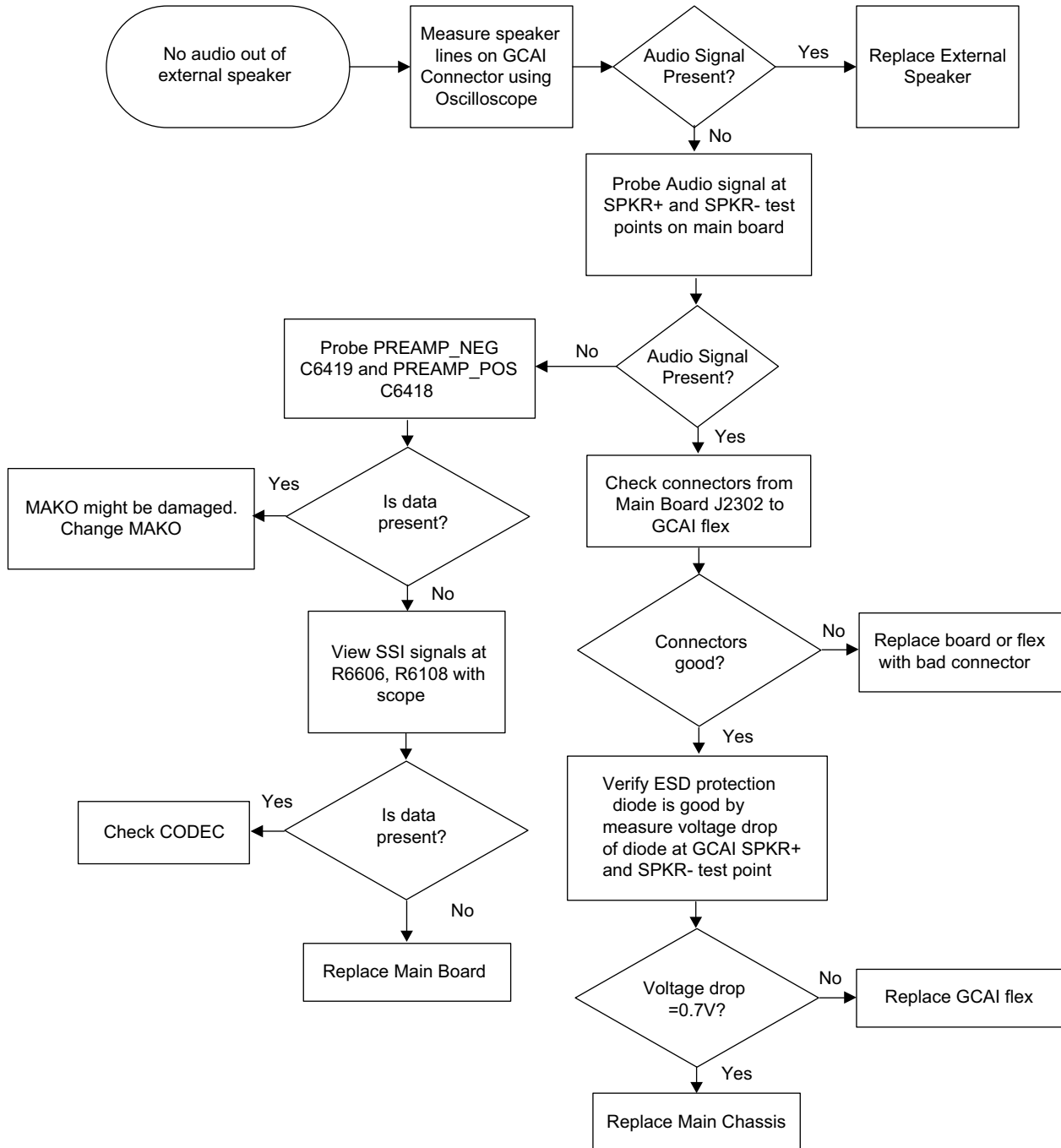
**Note :**  
 Numbers codes with a /1 are for a button pressed condition only. Number codes with a /0 are for a button release condition only.

## 5.8 Side Button Error

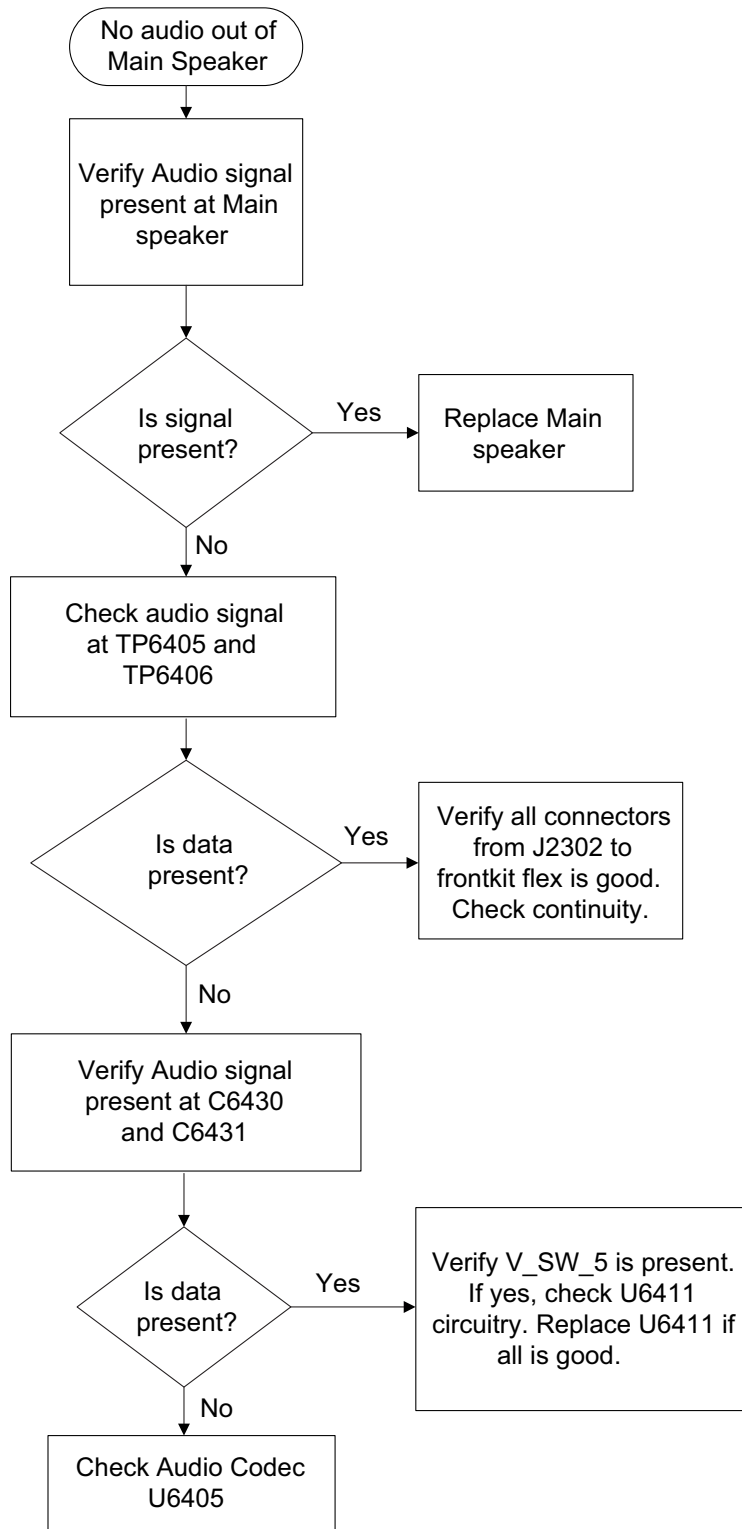


## 5.9 RX Audio Error

### External Audio



## Internal Audio

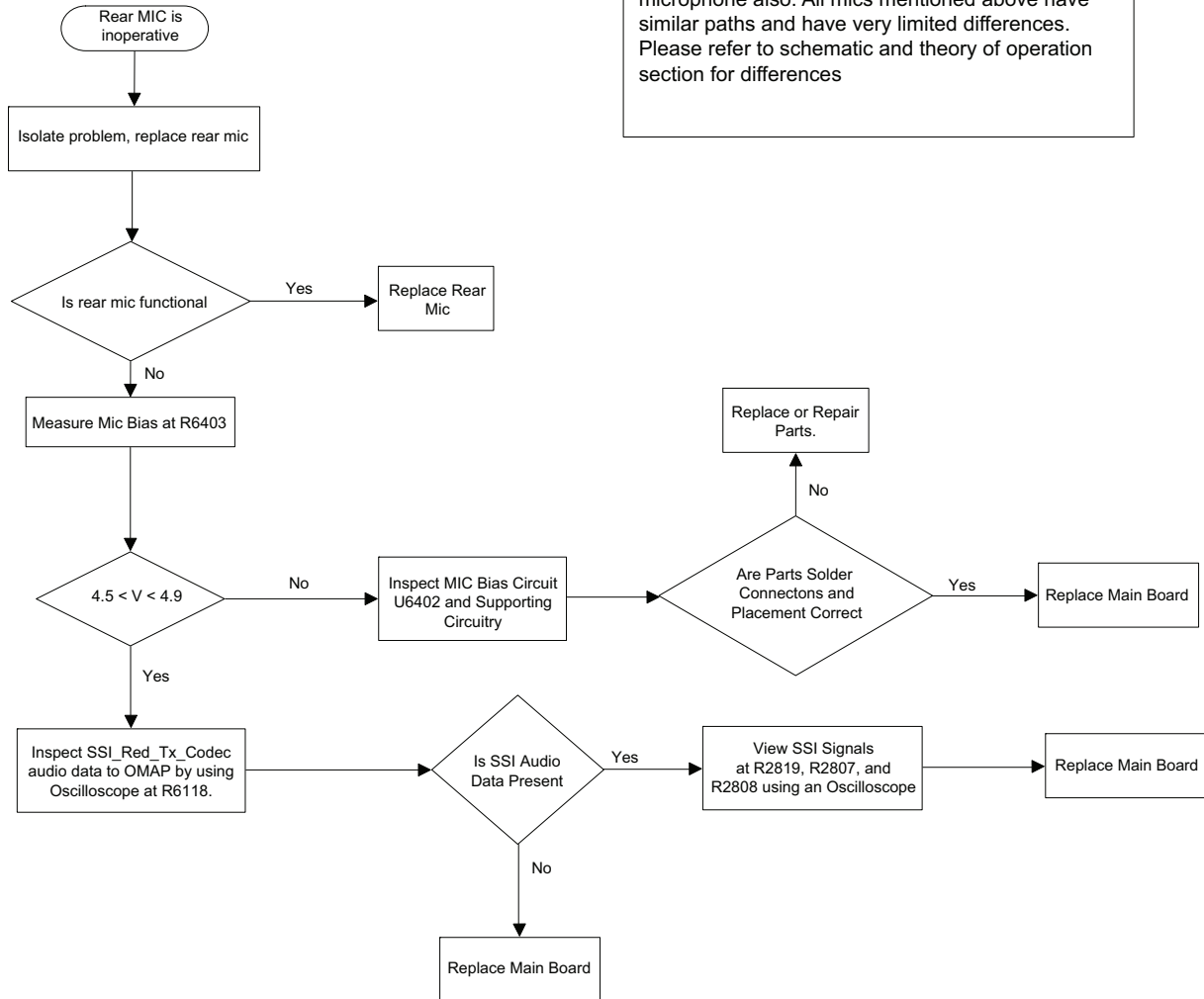


## 5.10 TX Audio Error

### Internal Microphone

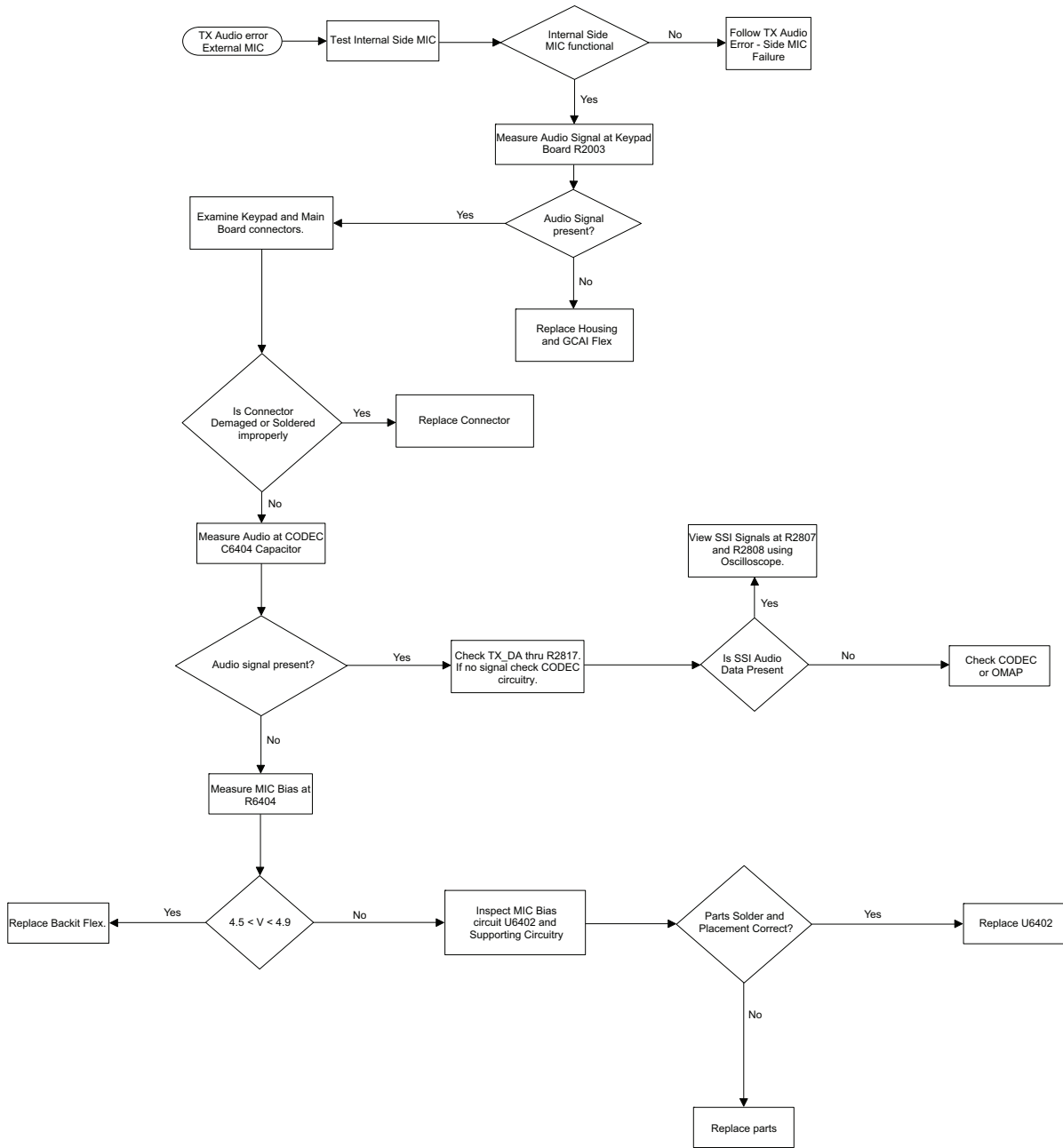
**Synopsis**

This failure specifically refers to the rear microphone but this flowchart can be used to diagnose front side microphone also. All mics mentioned above have similar paths and have very limited differences. Please refer to schematic and theory of operation section for differences

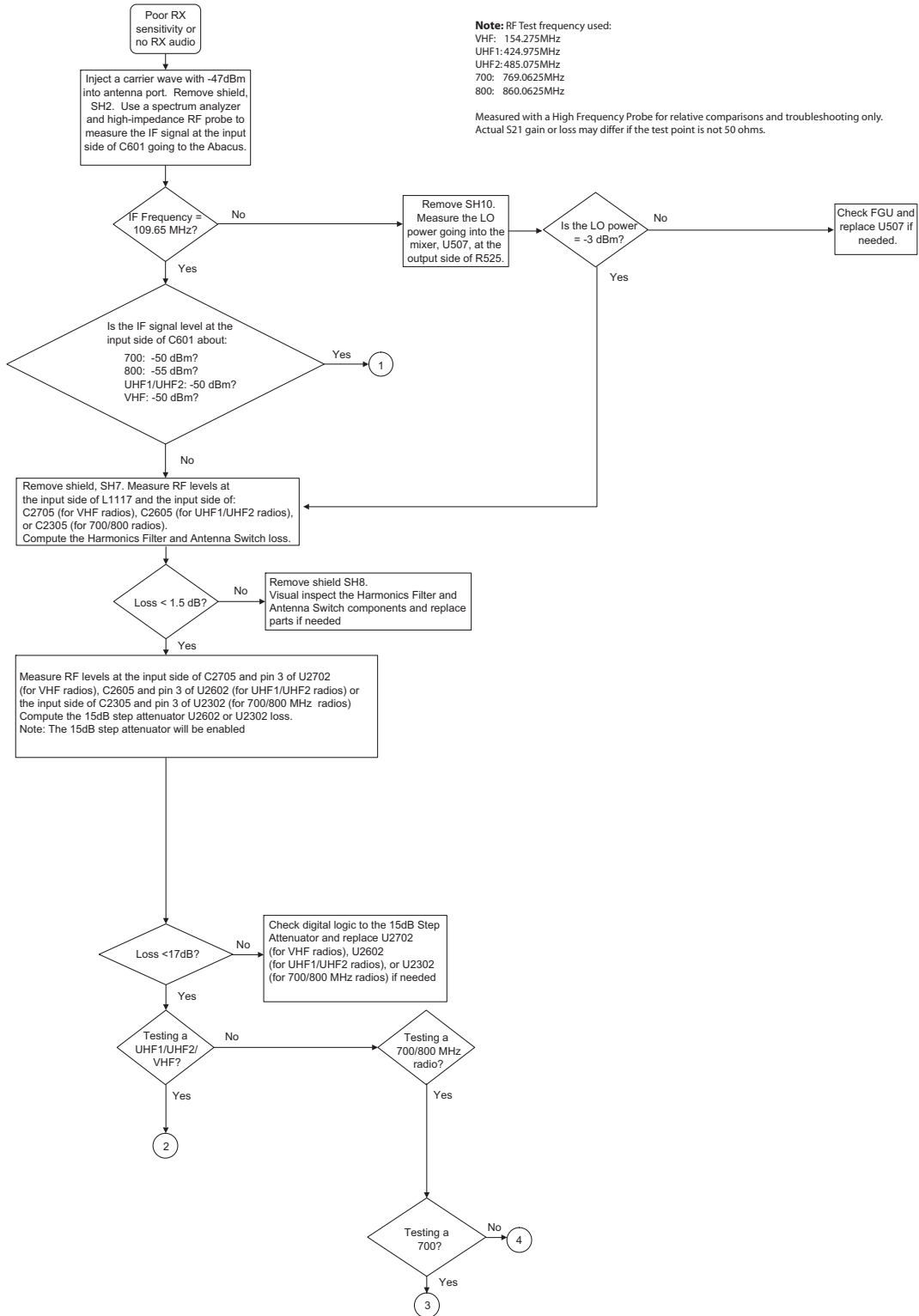




# External Mic Failure



# 5.11 RX RF Failure – Page 1

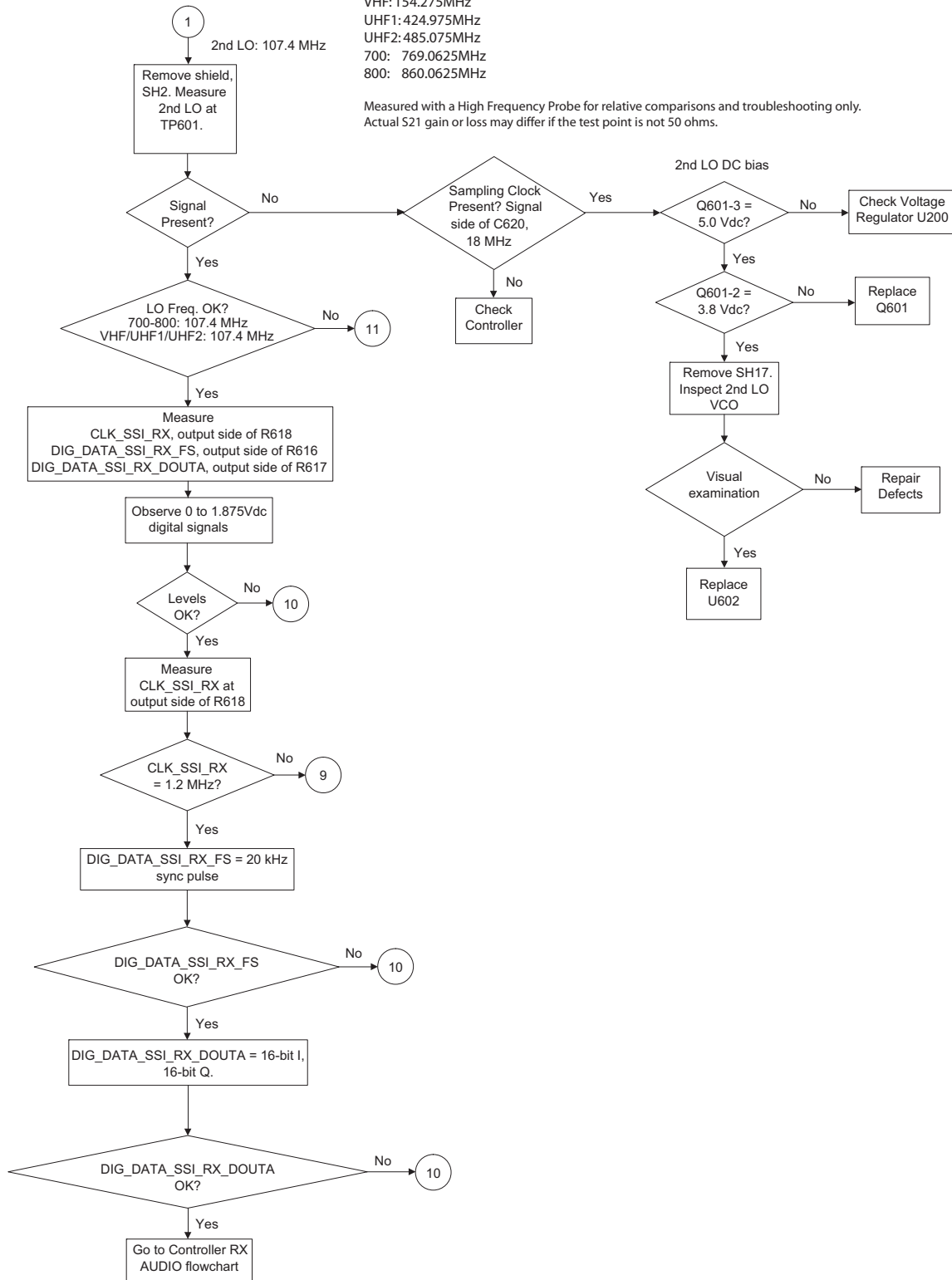


# RX RF Failure – Page 2

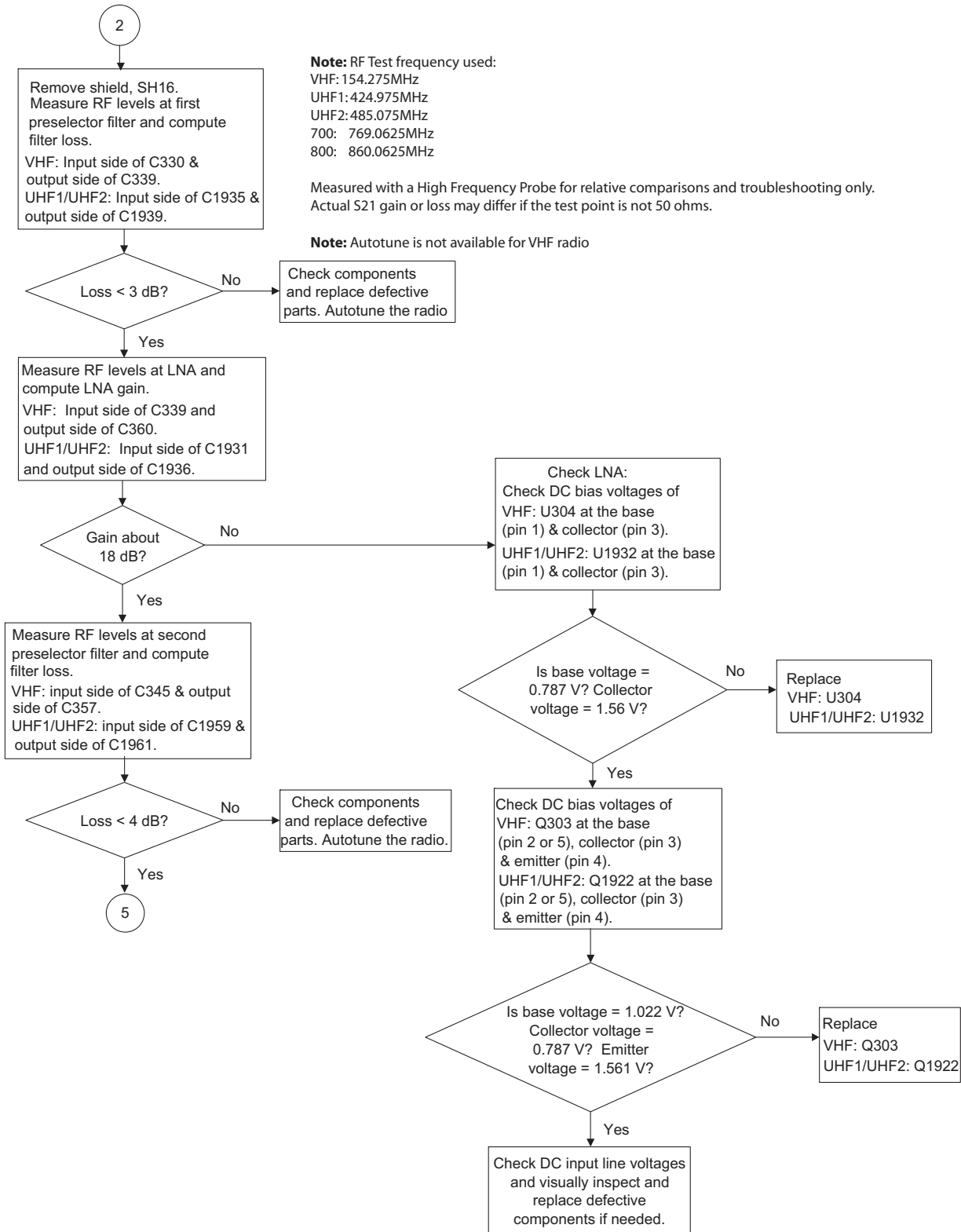
**Note:** RF Test frequency used:

- VHF: 154.275MHz
- UHF1: 424.975MHz
- UHF2: 485.075MHz
- 700: 769.0625MHz
- 800: 860.0625MHz

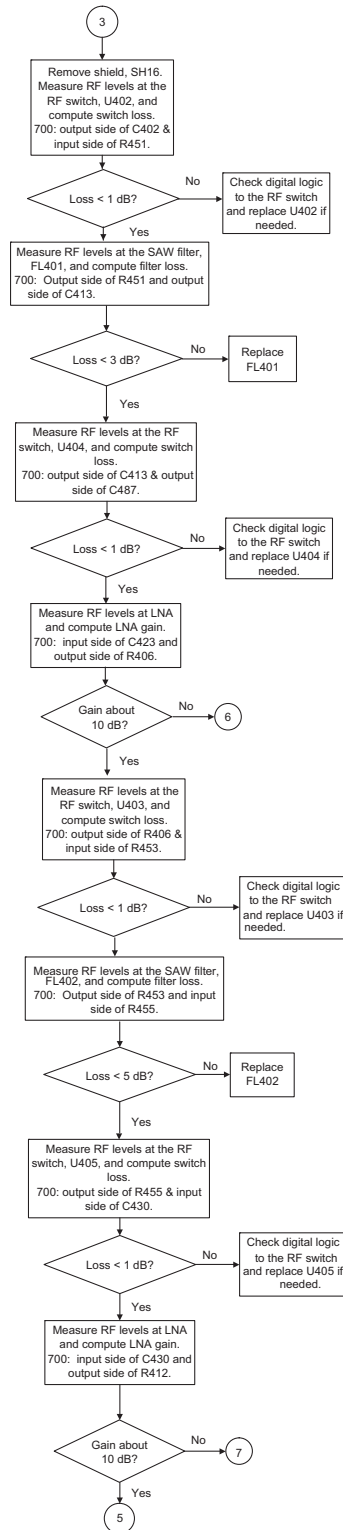
Measured with a High Frequency Probe for relative comparisons and troubleshooting only.  
Actual S21 gain or loss may differ if the test point is not 50 ohms.



# RX RF Failure – Page 3



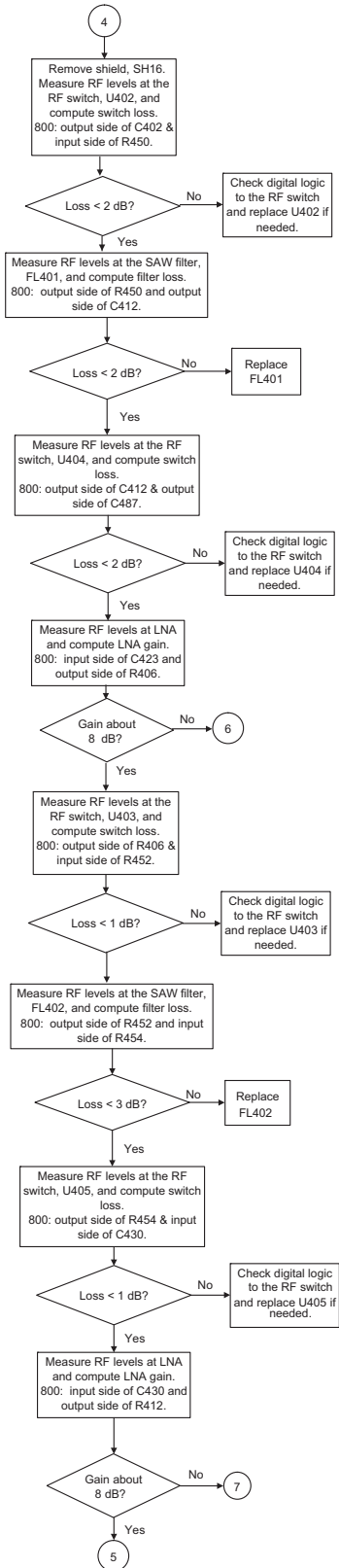
# RX RF Failure – Page 4



**Note:** RF Test frequency used:  
 VHF: 154.275MHz  
 UHF1: 424.975MHz  
 UHF2: 485.075MHz  
 700: 769.0625MHz  
 800: 860.0625MHz

Measured with a High Frequency Probe for relative comparisons and troubleshooting only. Actual 521 gain or loss may differ if the test point is not 50 ohms.

# RX RF Failure – Page 5



**Note:** RF Test frequency used:  
 VHF: 154.275MHz  
 UHF1: 424.975MHz  
 UHF2: 485.075MHz  
 700: 769.0625MHz  
 800: 860.0625MHz

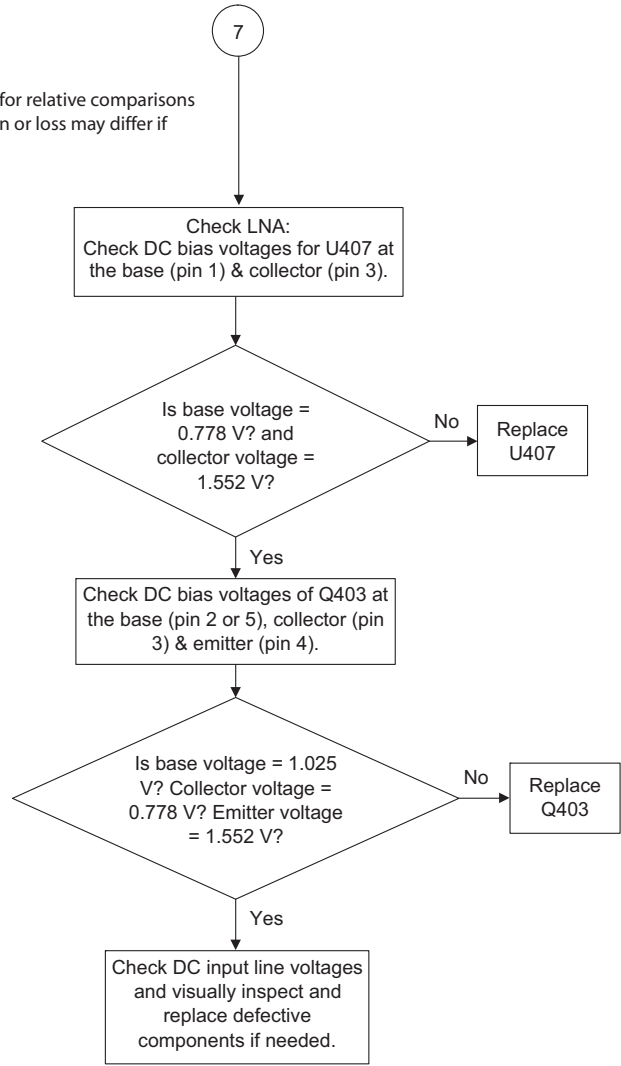
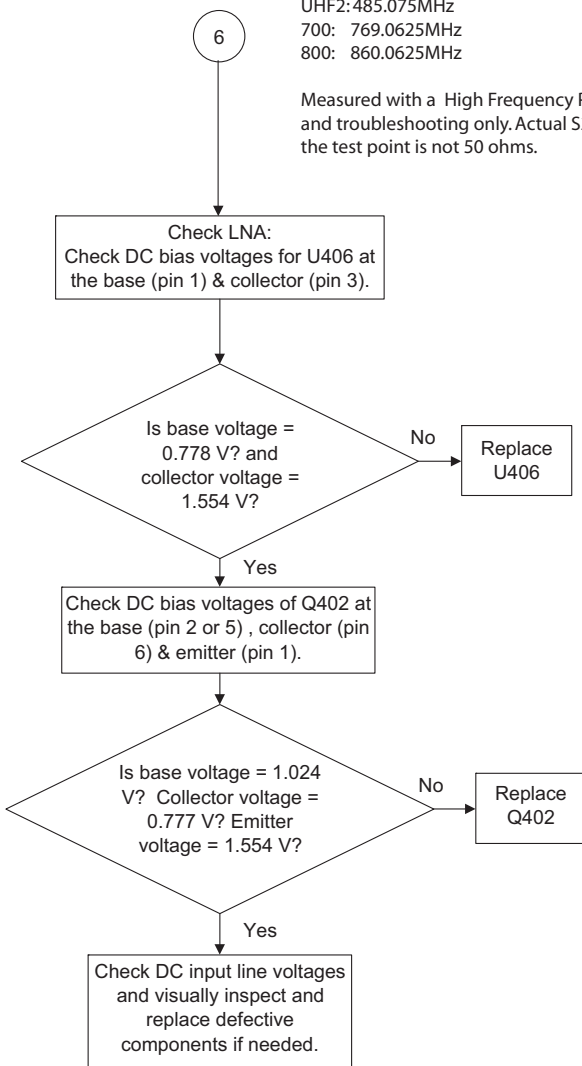
Measured with a High Frequency Probe for relative comparisons and troubleshooting only.  
 Actual S21 gain or loss may differ if the test point is not 50 ohms.

# RX RF Failure – Page 6

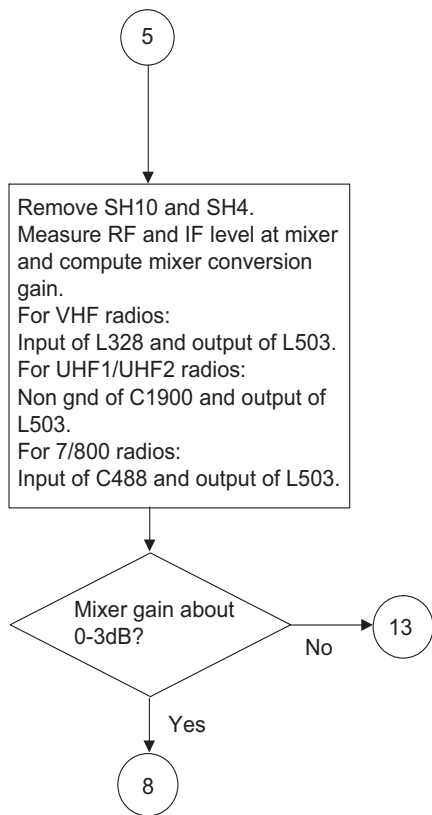
**Note:** RF Test frequency used:

- VHF: 154.275MHz
- UHF1: 424.975MHz
- UHF2: 485.075MHz
- 700: 769.0625MHz
- 800: 860.0625MHz

Measured with a High Frequency Probe for relative comparisons and troubleshooting only. Actual S21 gain or loss may differ if the test point is not 50 ohms.



# RX RF Failure – Page 7



**Note:** RF Test frequency used:

VHF: 154.275MHz

UHF1: 424.975MHz

UHF2: 485.075MHz

700: 769.0625MHz

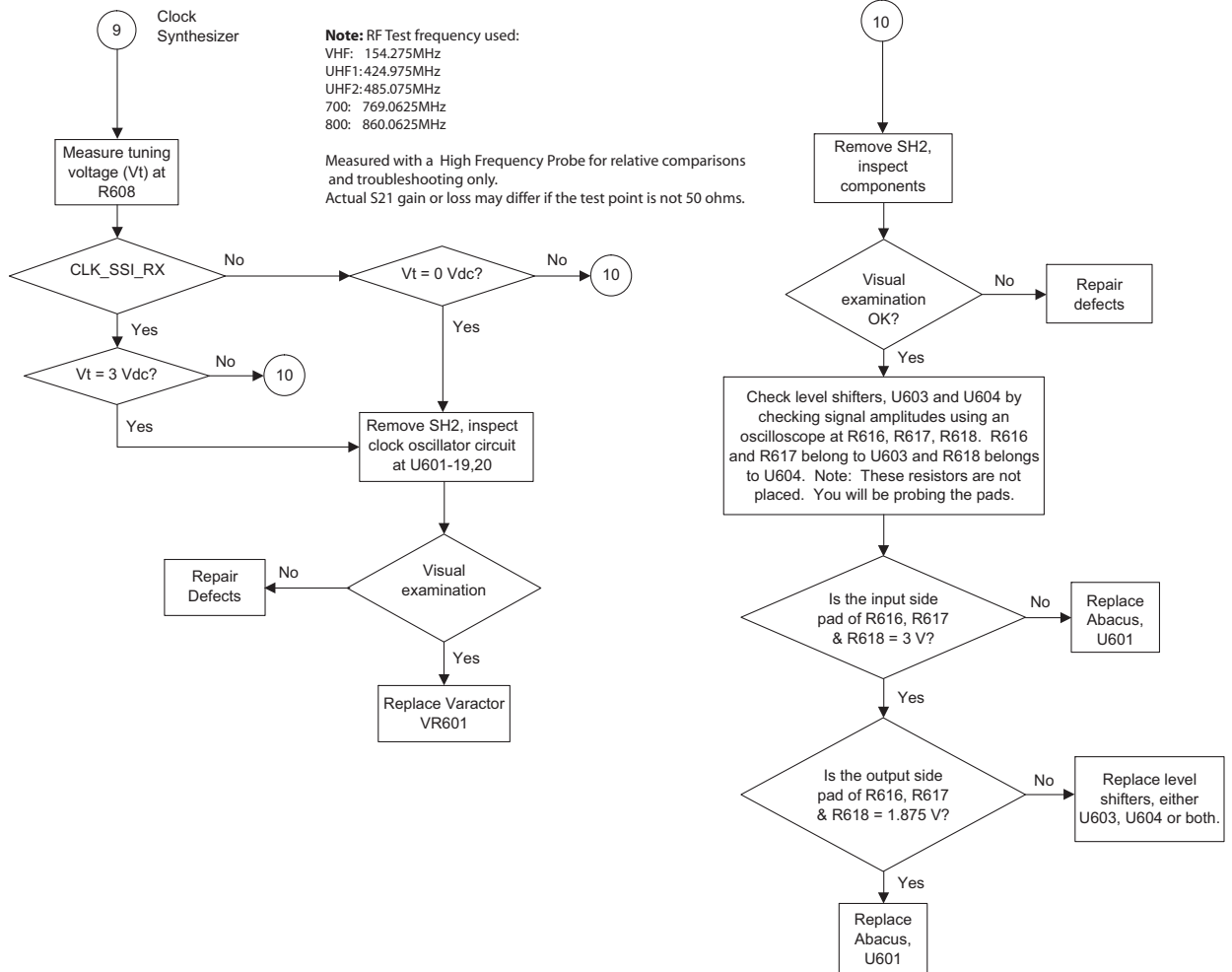
800: 860.0625MHz

IF: 109.65MHz

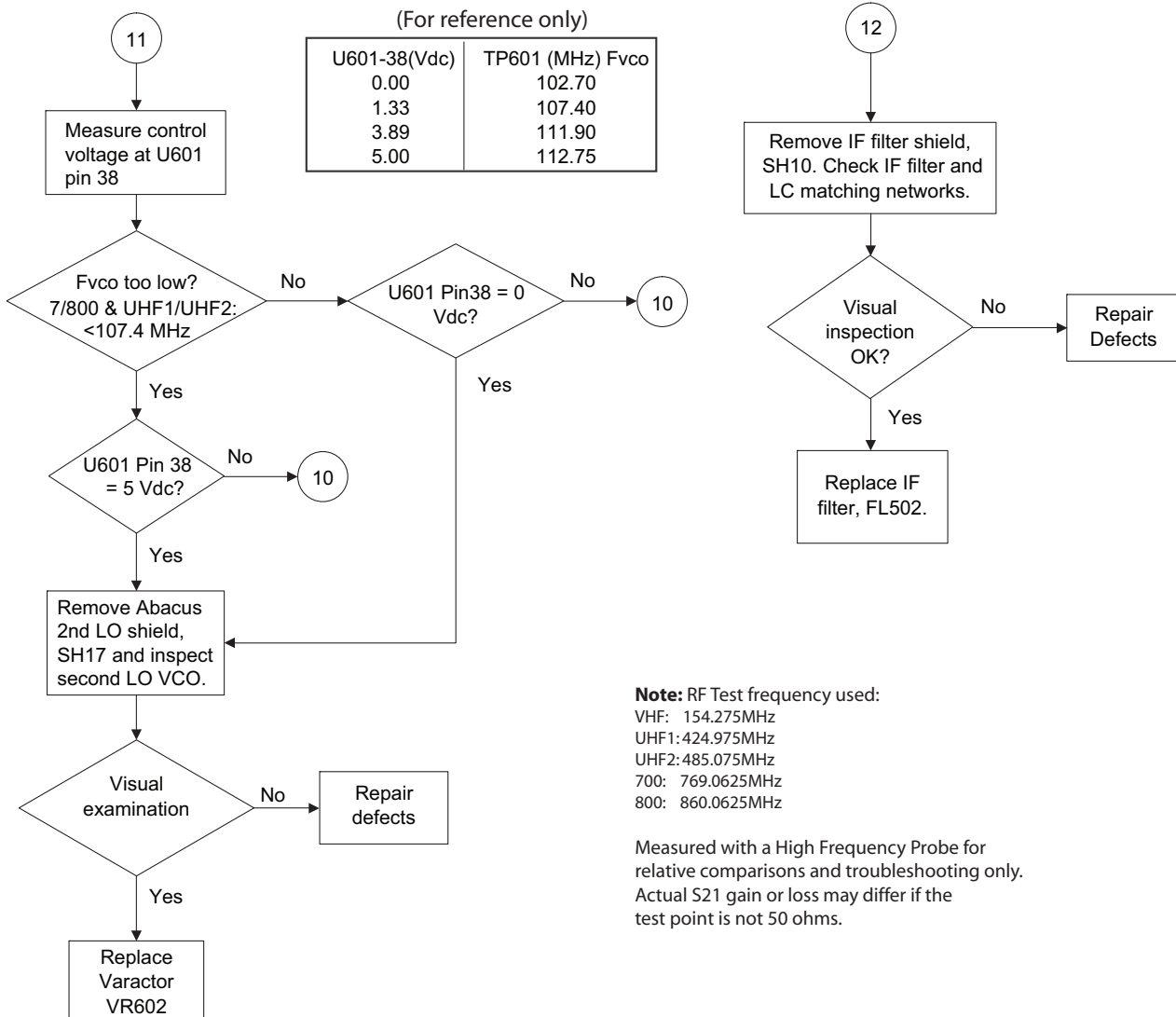
Measured with a High Frequency Probe for relative comparisons and troubleshooting only. Actual S21 gain or loss may differ if the test point is not 50 ohms.



# RX RF Failure – Page 8



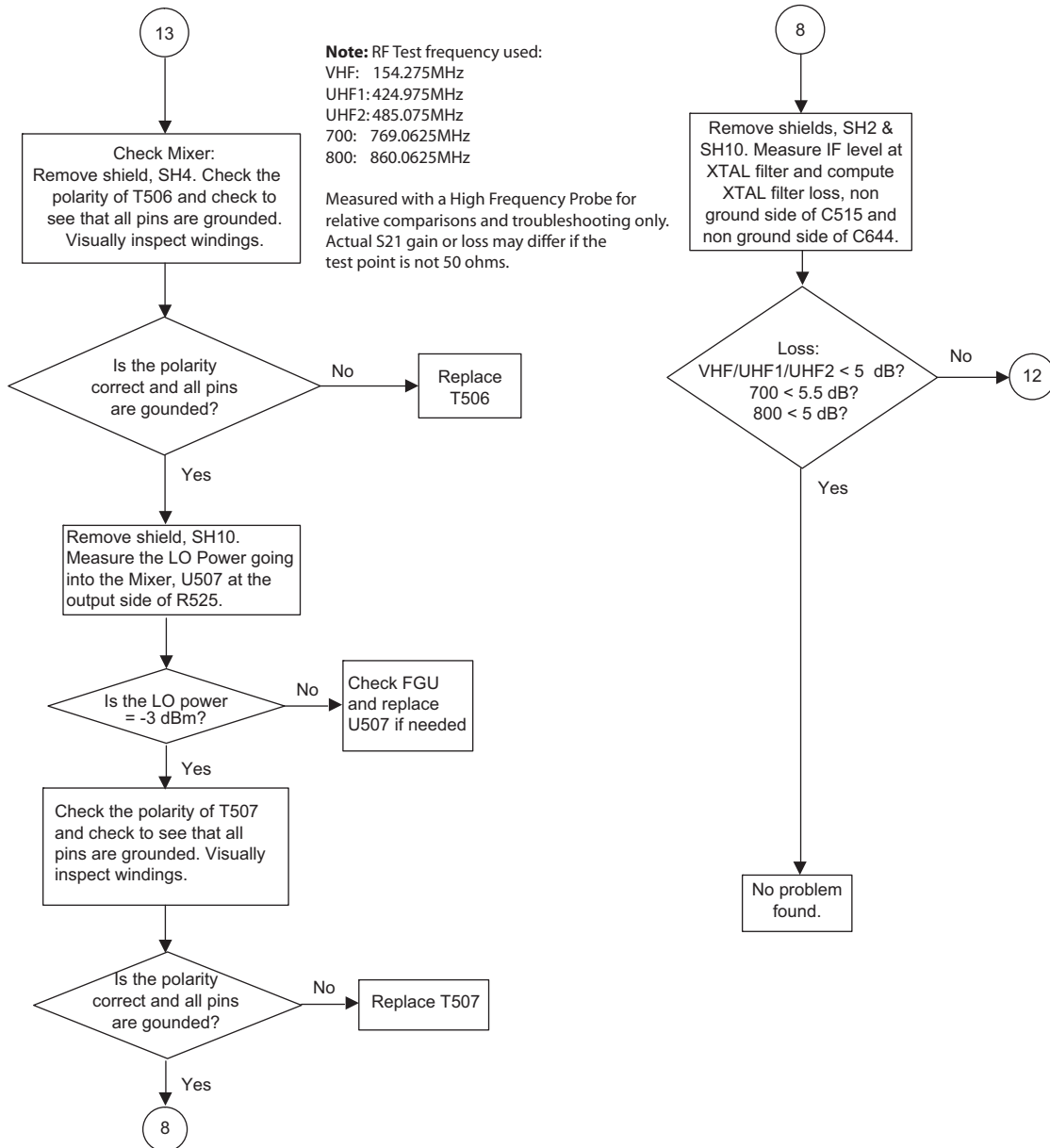
# RX RF Failure – Page 9



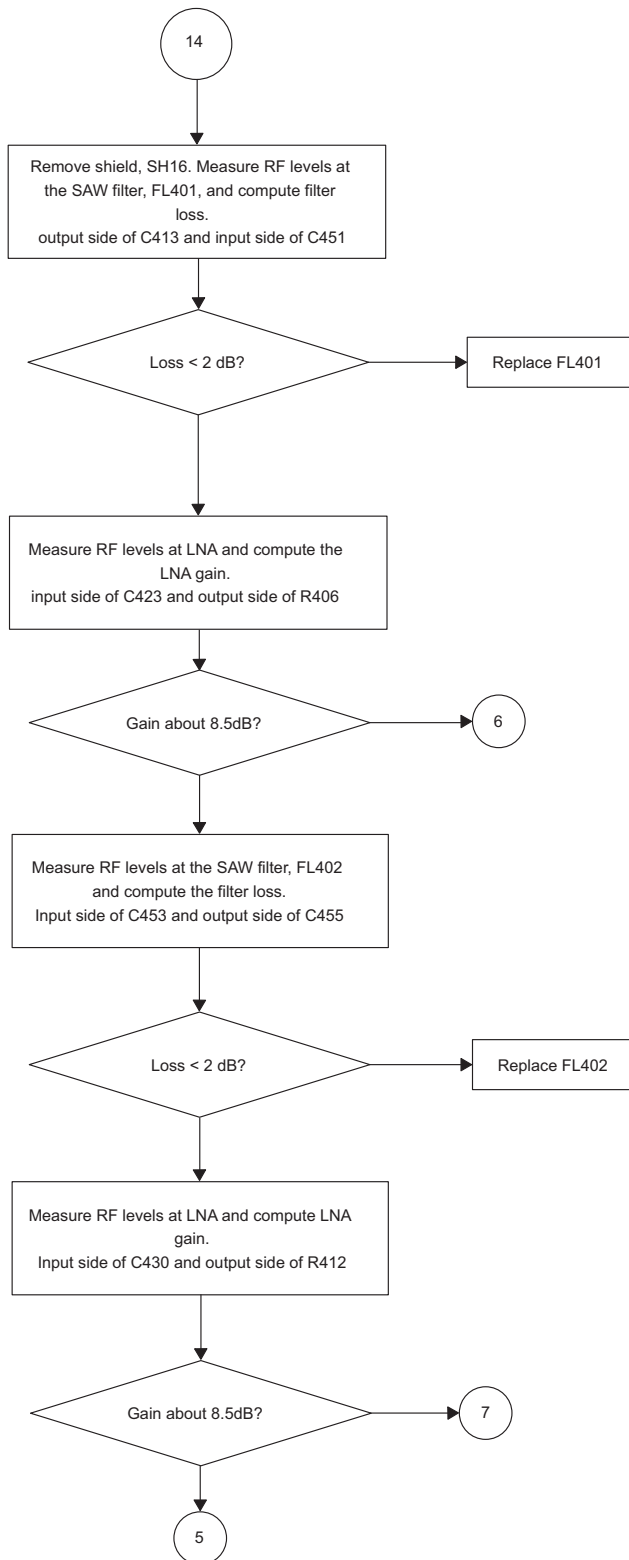
**Note:** RF Test frequency used:  
 VHF: 154.275MHz  
 UHF1:424.975MHz  
 UHF2:485.075MHz  
 700: 769.0625MHz  
 800: 860.0625MHz

Measured with a High Frequency Probe for relative comparisons and troubleshooting only. Actual S21 gain or loss may differ if the test point is not 50 ohms.

# RX RF Failure – Page 10



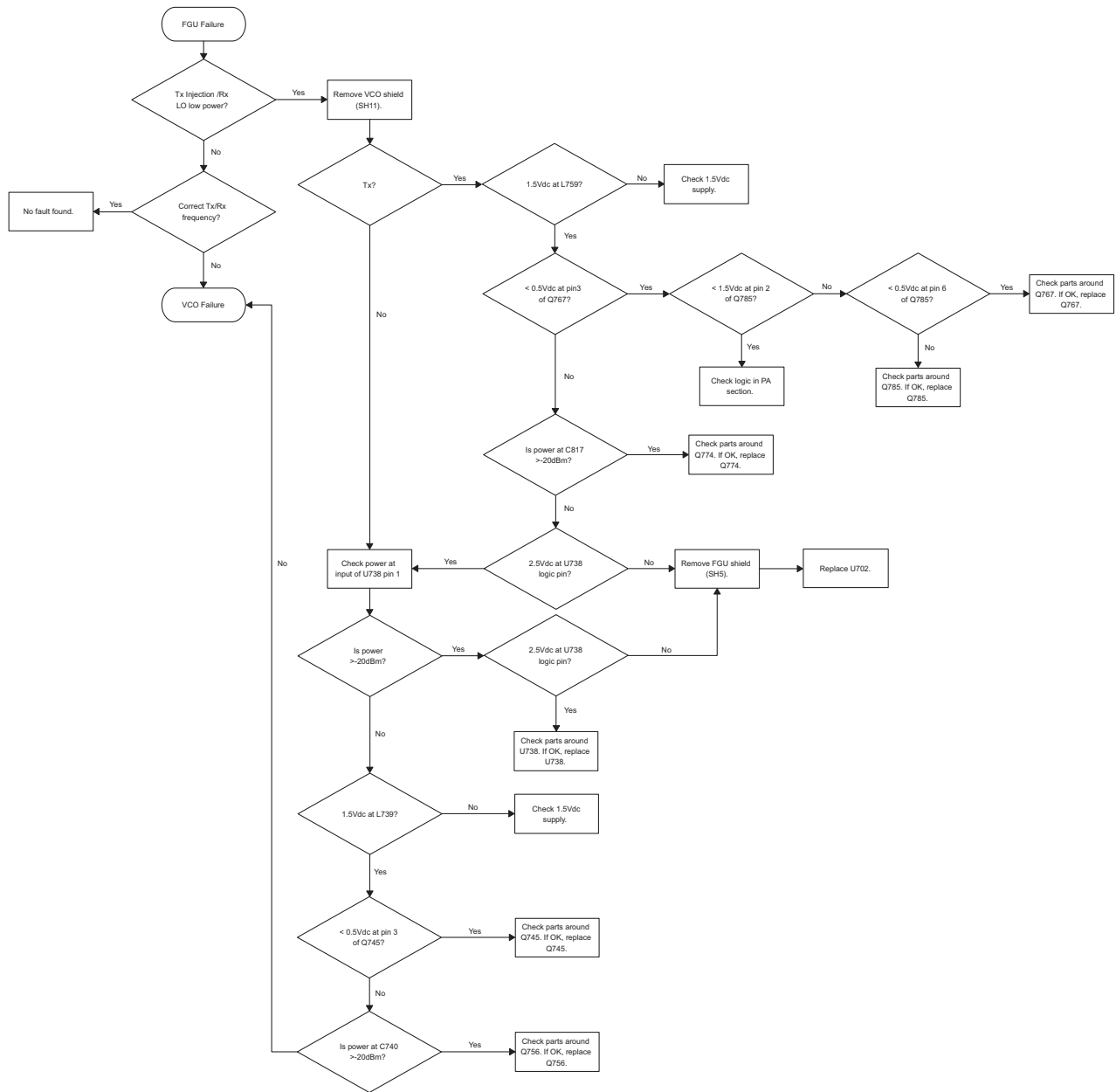
# RX RF Failure – Page 11



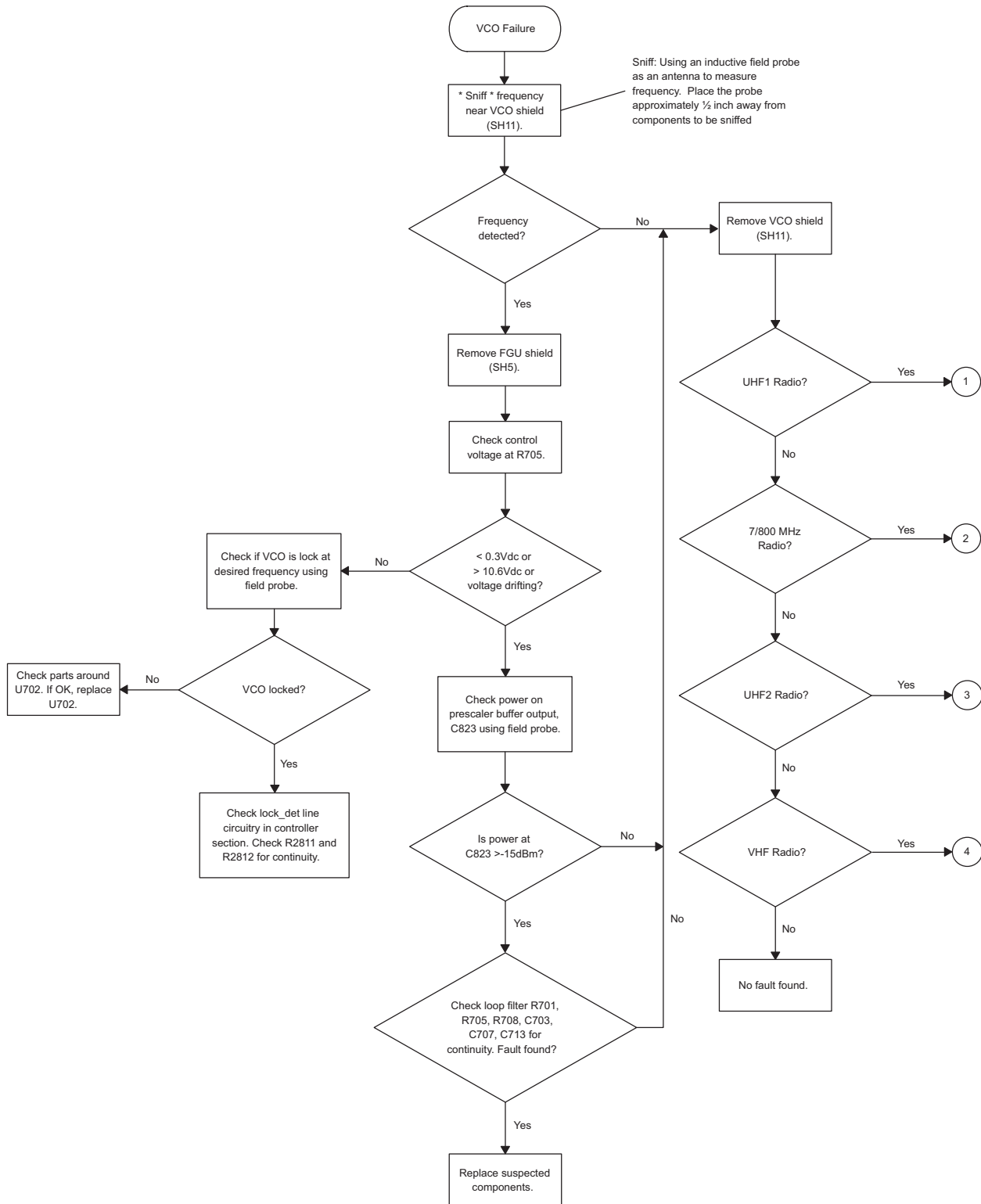
Note: RF Test frequency used:  
VHF: 154.275MHz  
UHF1: 424.975MHz  
UHF2: 485.075MHz  
700: 769.0625MHz  
800: 860.0625MHz

Measured with a High Frequency Probe for relative comparisons and troubleshooting only.  
Actual S21 gain or loss may differ if the test point is not 50 ohms.

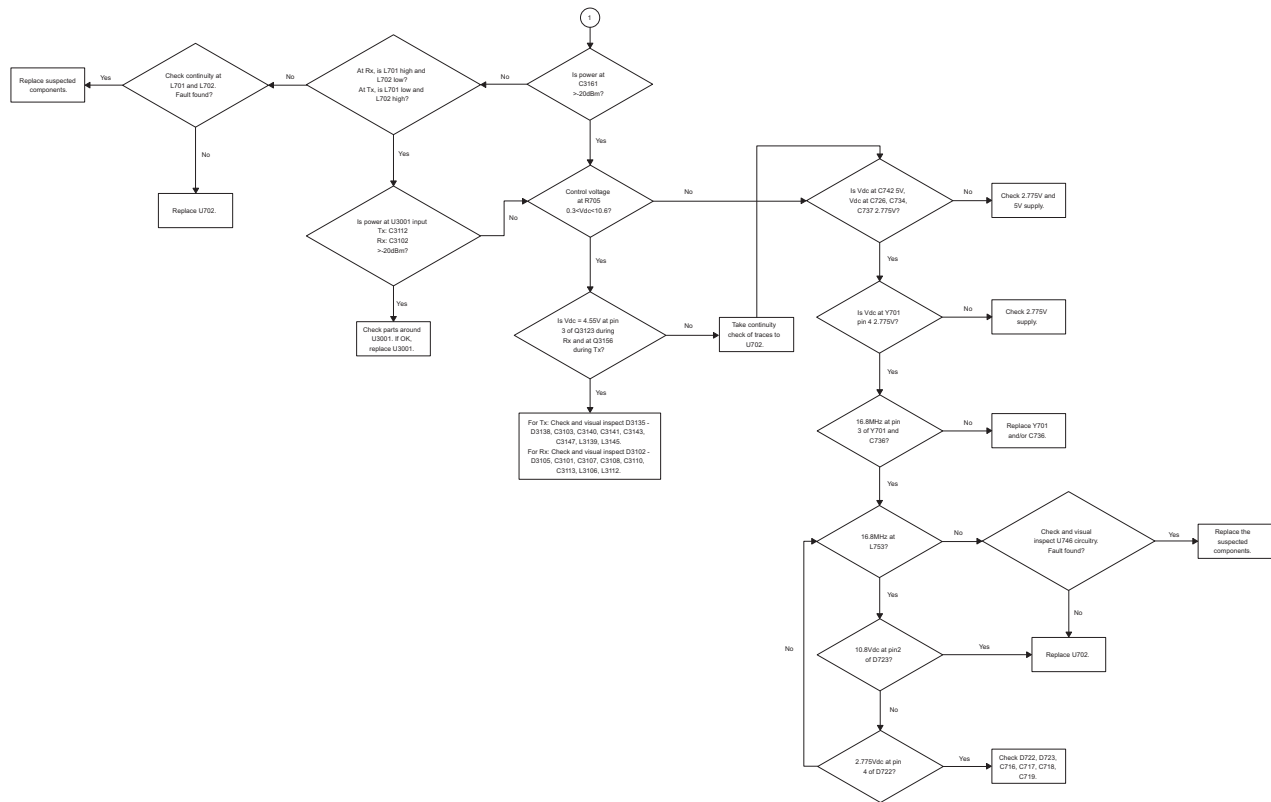
## 5.12 FGU Failure



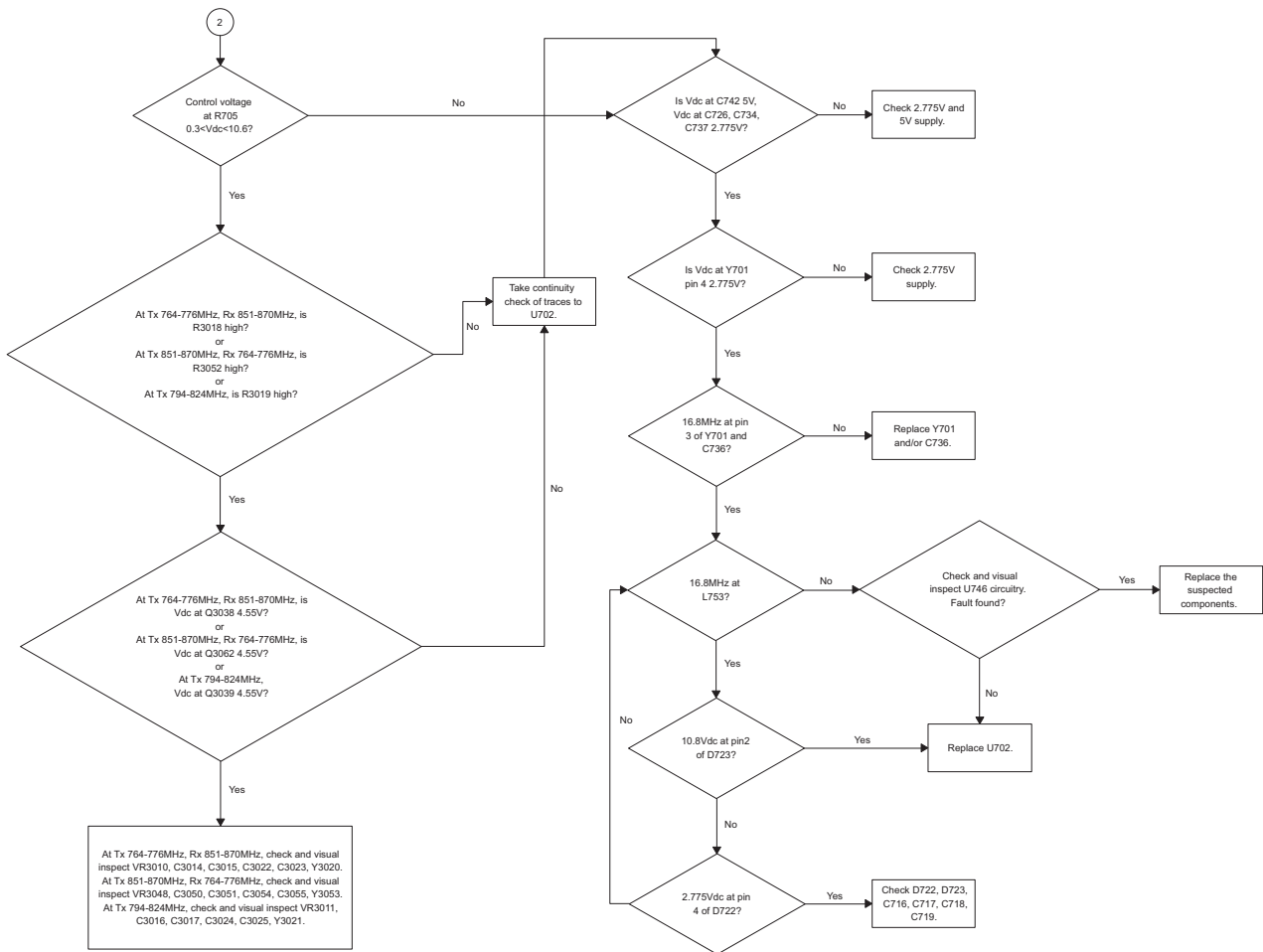
### 5.13 VCO Failure – Page 1 (UHF1, 700/800 MHz)



# VCO Failure – Page 2 (UHF1)

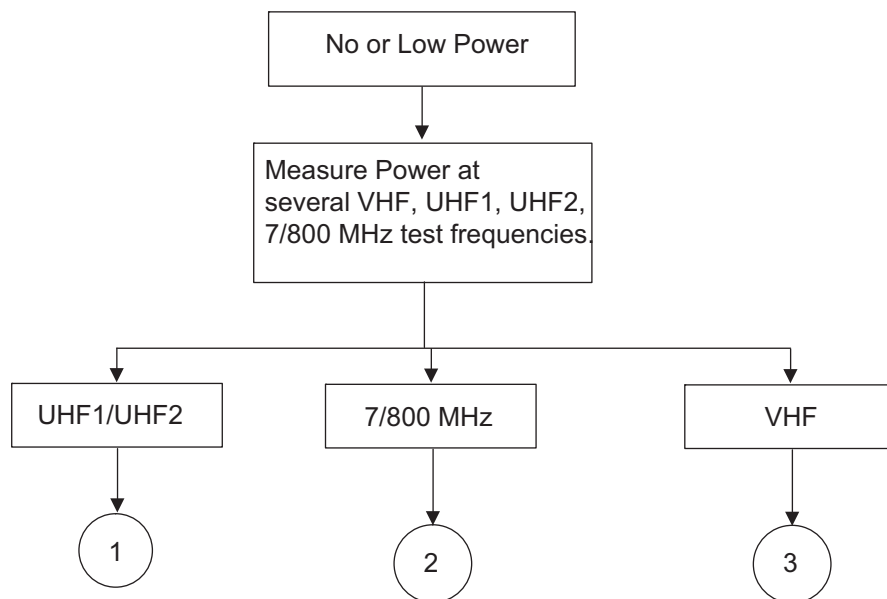


# VCO Failure – Page 3 (700/800 MHz)

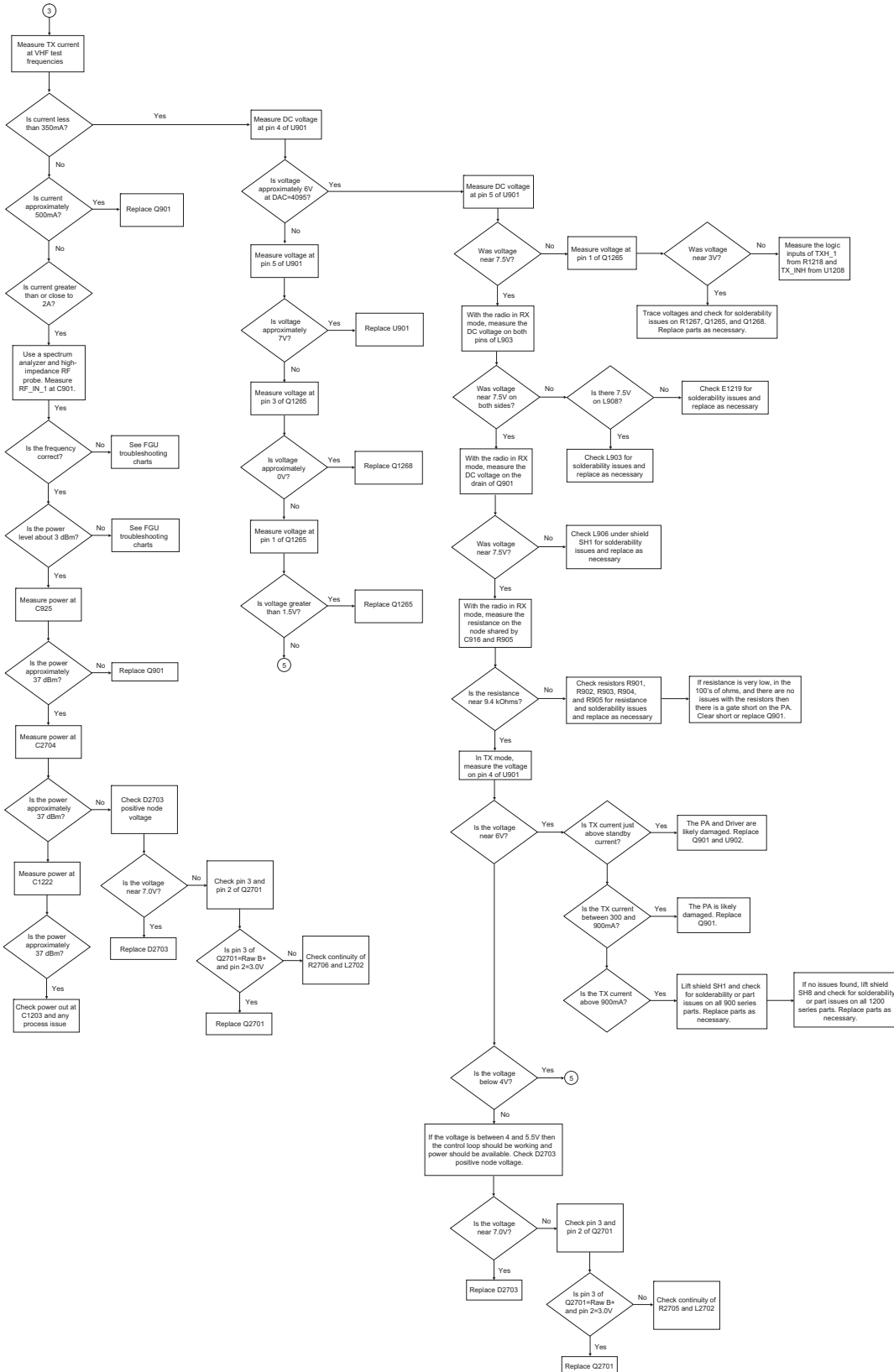




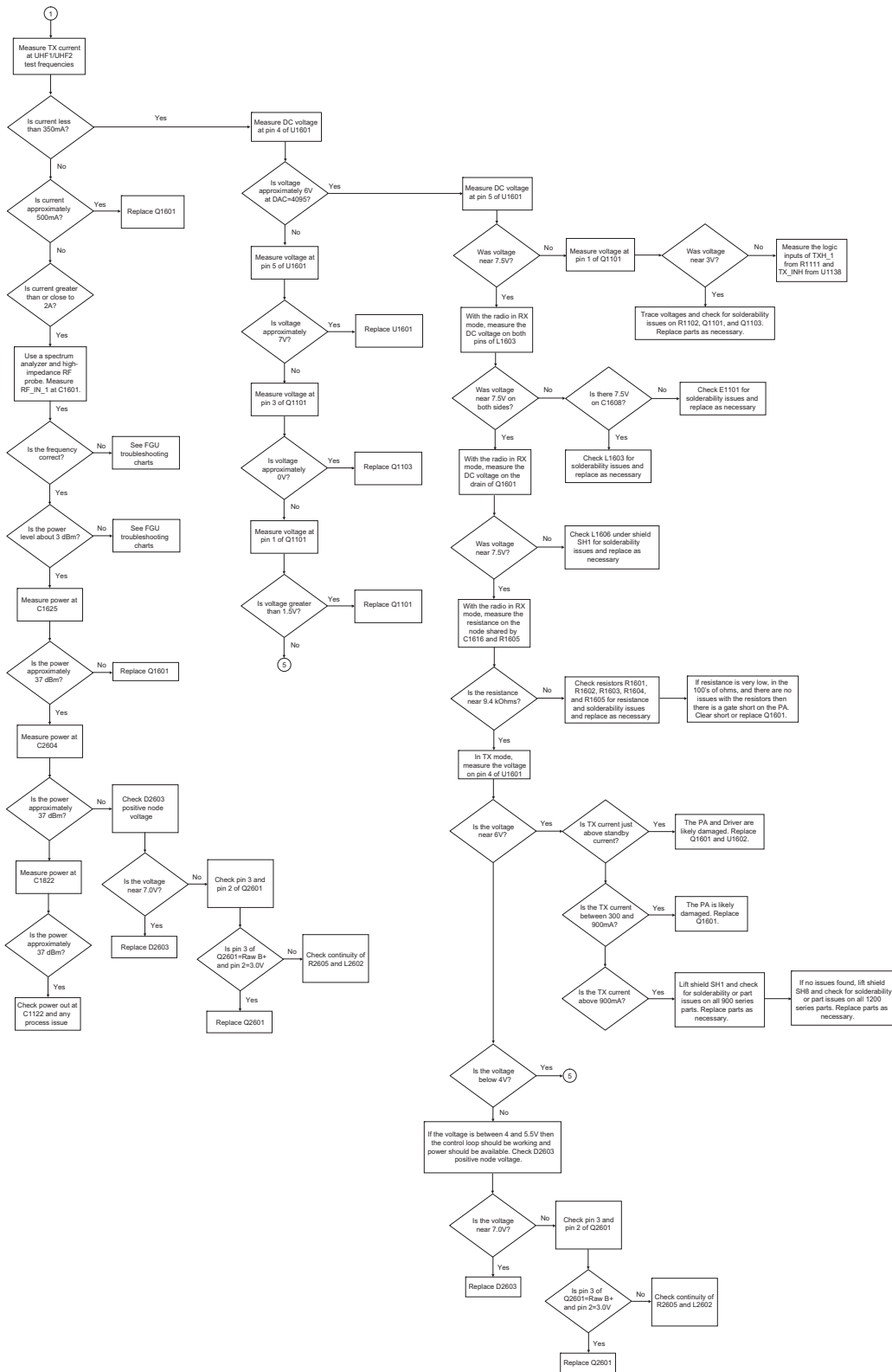
### 5.14 PA Failure – Main



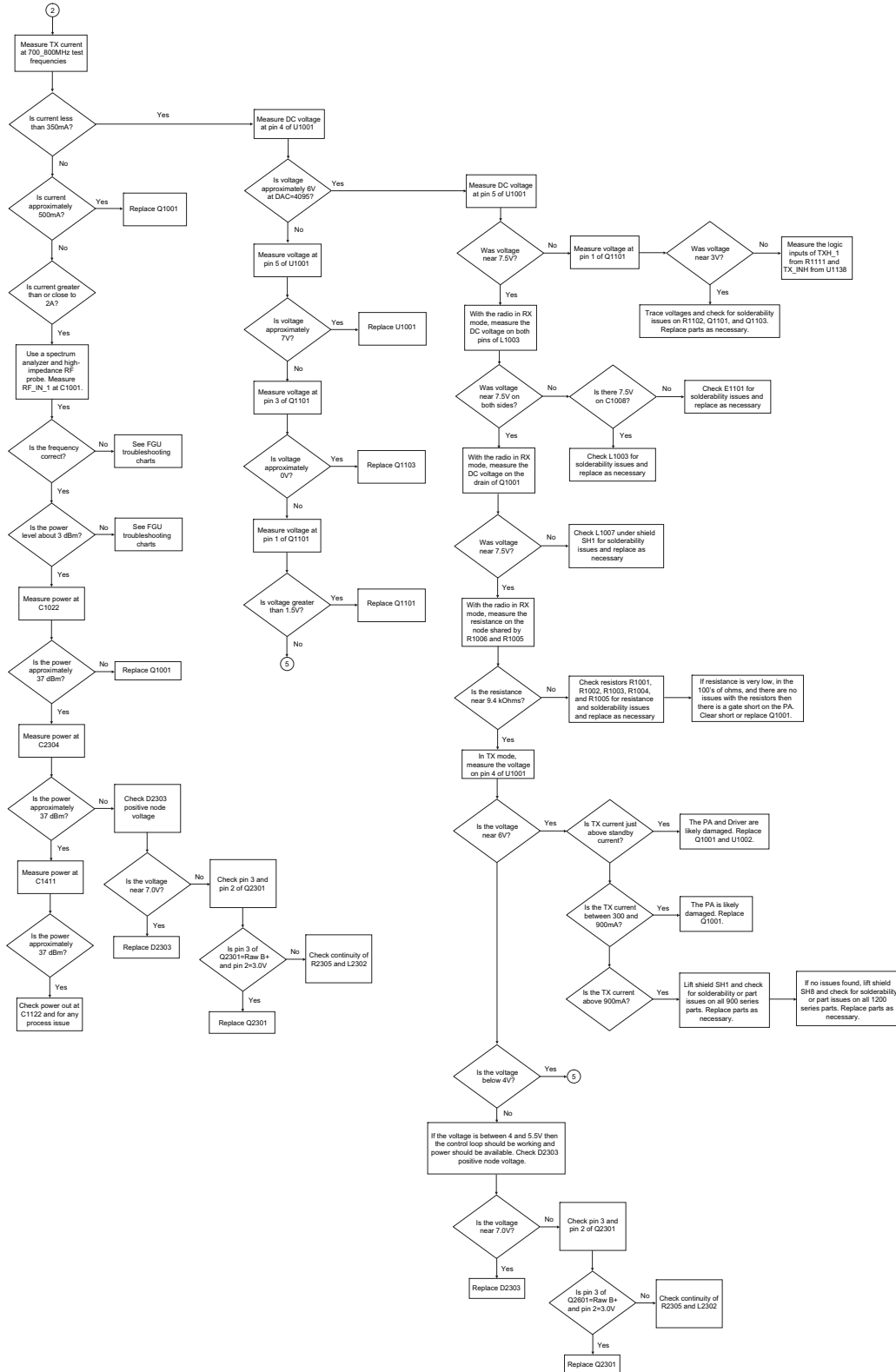
# PA Failure – Page 1 (VHF PA)



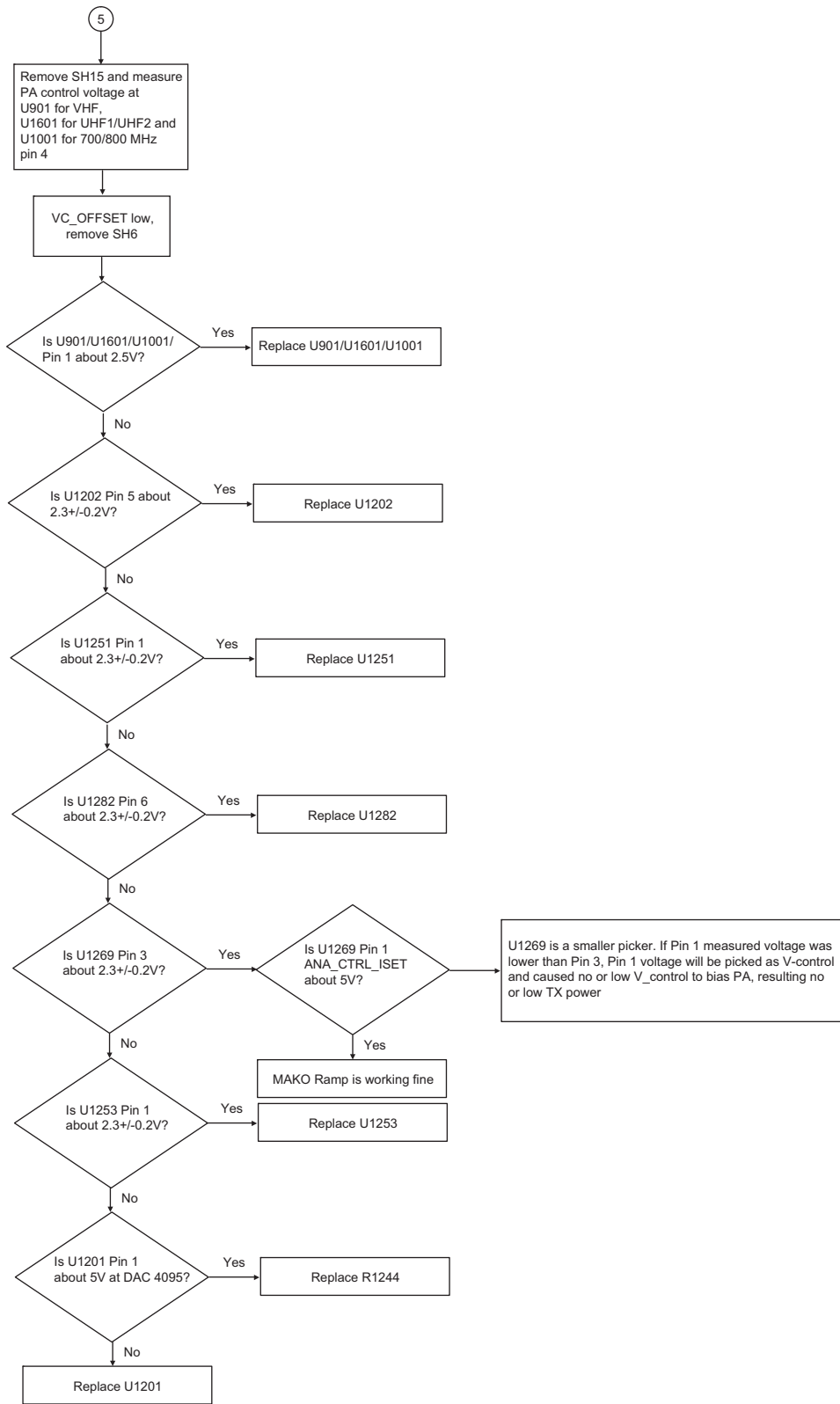
# PA Failure – Page 2 (UHF1/UHF2 PA)



# PA Failure – Page 3 (700/800 MHz PA)



# PA Failure – Page 4 (ALC)



## Notes

# Chapter 6 Troubleshooting Waveforms

This chapter contains images of waveforms that might be useful in verifying operation of certain parts of the circuitry. These waveforms are for reference only; the actual data depicted will vary depending on operating conditions.

## 6.1 List of Waveforms

Table 6-1 lists each waveform and the page on which the waveform can be found.

Table 6-1. List of Waveforms

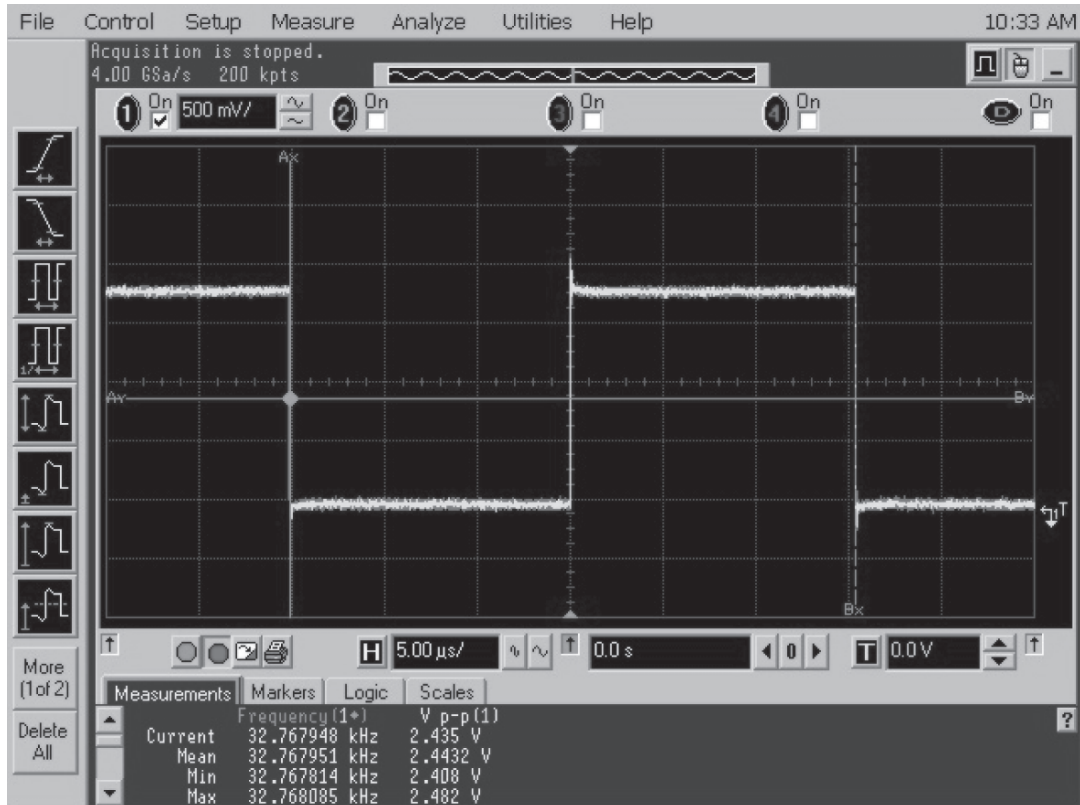
Waveform	Page No.
<b>Clocks</b>	
32 kHz Clock	6-2
4 MHz Clock	6-3
12 MHz Clock	6-4
16.8 MHz Clock	6-5
24 MHz Clock	6-6
<b>Audio SSI</b>	
Red Tx	6-7
Red Rx	6-8
SYNC.	6-9
BCLK	6-10
<b>RX SSI</b>	
CLK.	6-11
DA	6-12
FSYNC.	6-13
<b>TX SSI</b>	
CLK.	6-14
DA.	6-15
FSYNC.	6-16
<b>SPI</b>	
CLK	6-17
CS	6-18
<b>I2C BUS</b>	
SCL	6-19

Table 6-1. List of Waveforms (Continued)

Waveform	Page No.
SCL 5V	6-20
SDA	6-21
<b>One Wire</b>	
1-Wire	6-22
<b>GCAI</b>	
GPIO0	6-23
GPIO4 / Keyfail during Keyload	6-24
<b>USB</b>	
D-	6-25
D+	6-26
<b>SDRAM</b>	
CLK	6-27
CLKX	6-28
<b>FLASH CONTROL</b>	
ADV	6-29
CS3	6-30
OE	6-31
RDY	6-32
WE	6-33

## 6.2 Clocks

### 6.2.1 32 kHz Clock

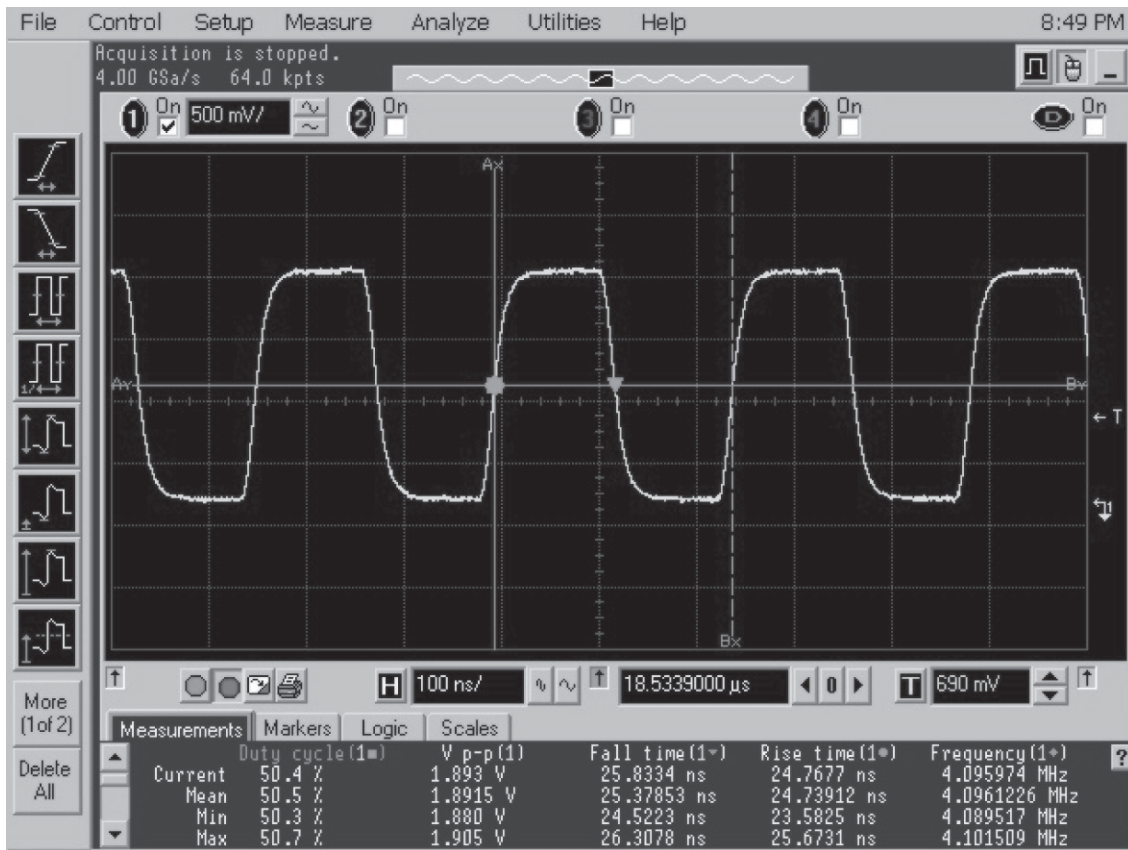


Trace 1: Trace recorded at R6115.

Figure 6-1. 32 kHz Clock Waveform



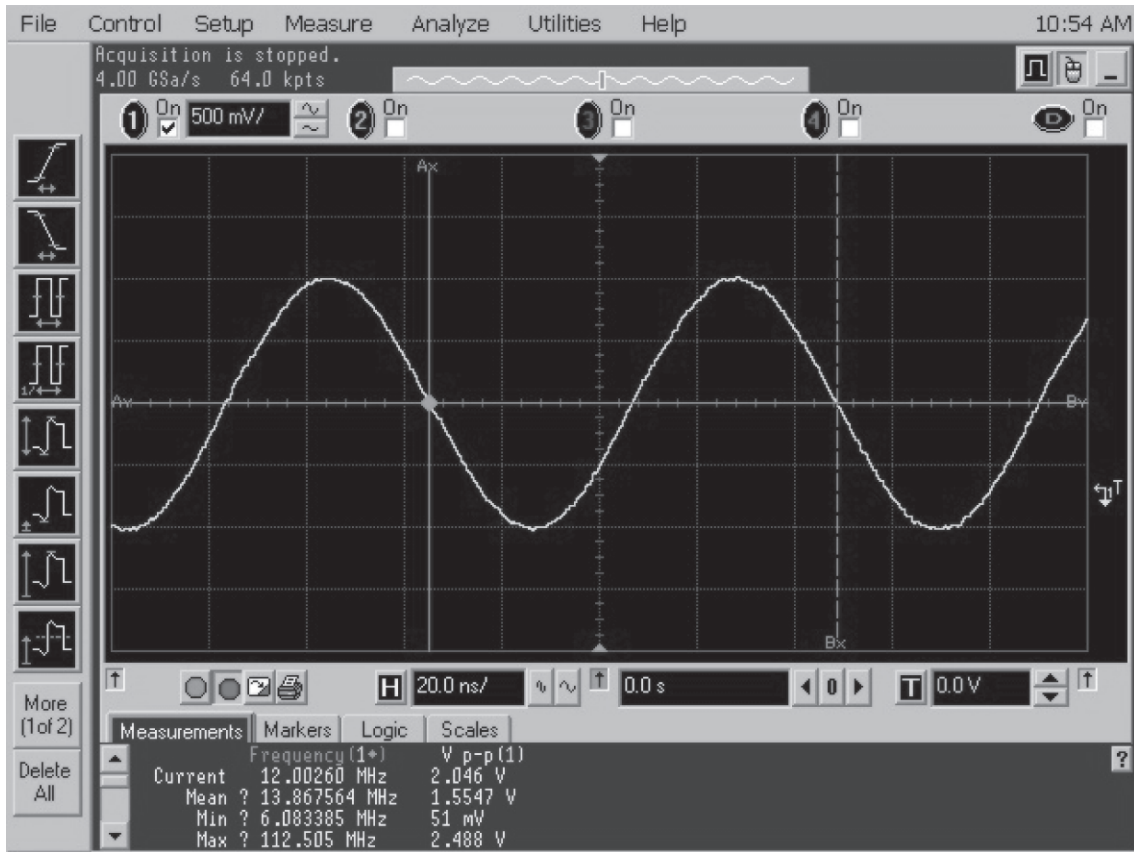
### 6.2.2 4 MHz Clock



Trace 1: Trace recorded at R6113.

Figure 6-2. 4 MHz Clock Waveform

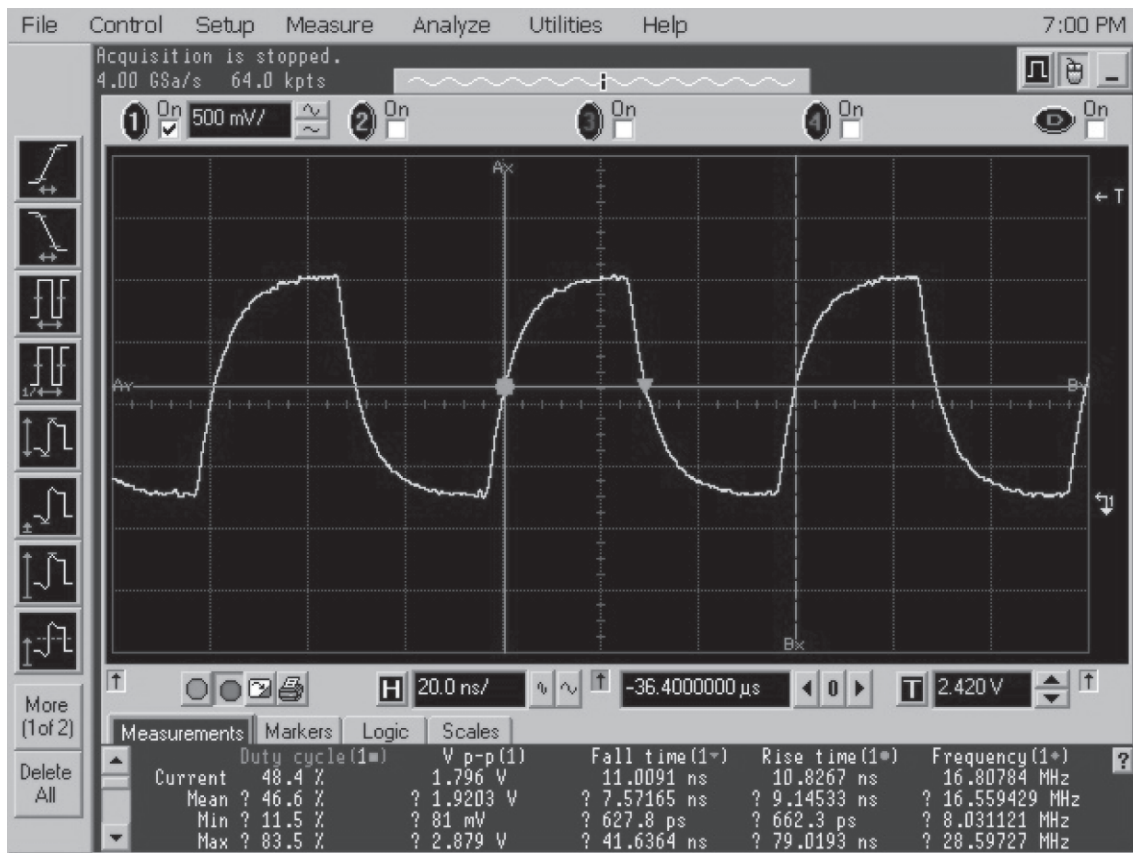
### 6.2.3 12 MHz Clock



Trace 1: Trace recorded at C6601.

Figure 6-3. 12 MHz Clock Waveform

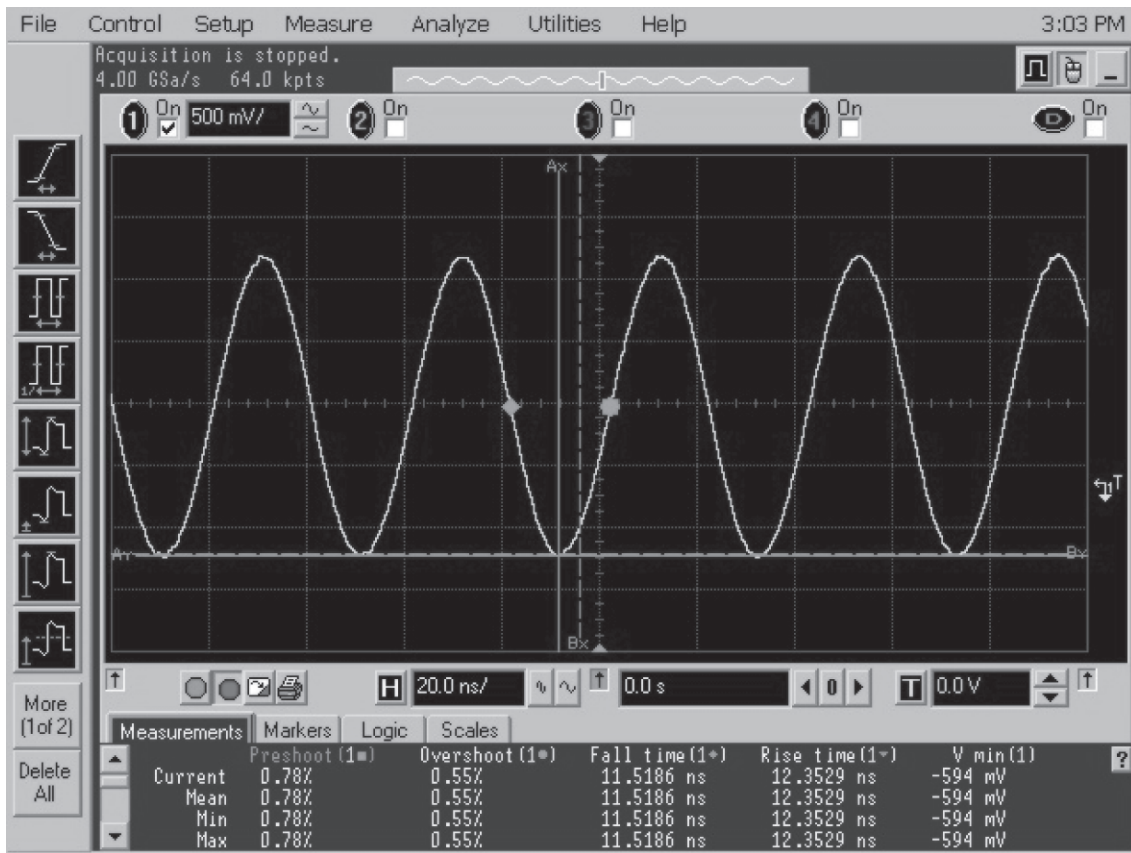
### 6.2.4 16.8 MHz Clock



Trace 1: Trace recorded at R6217.

Figure 6-4. 16.8 MHz Clock Waveform

### 6.2.5 24 MHz Clock

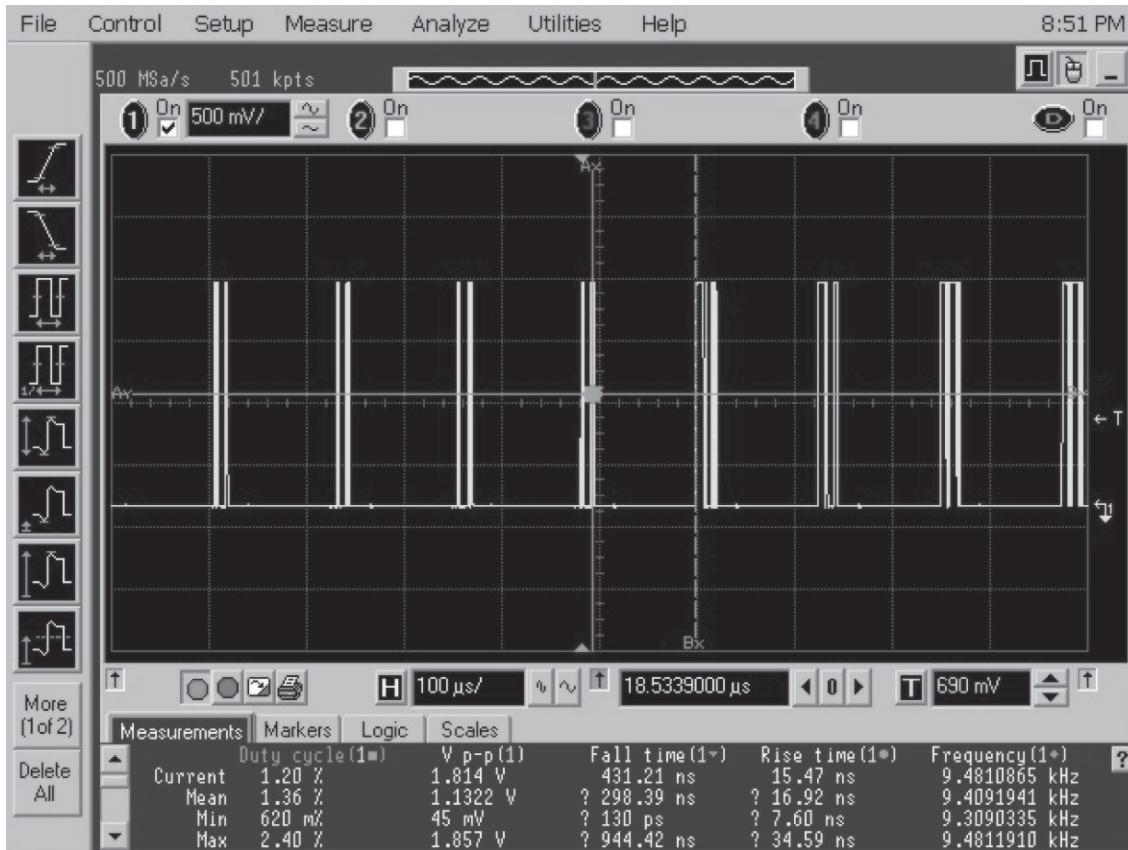


Trace 1: Trace recorded at C6592.

Figure 6-5. 24 MHz Clock Waveform

## 6.3 Audio SSI

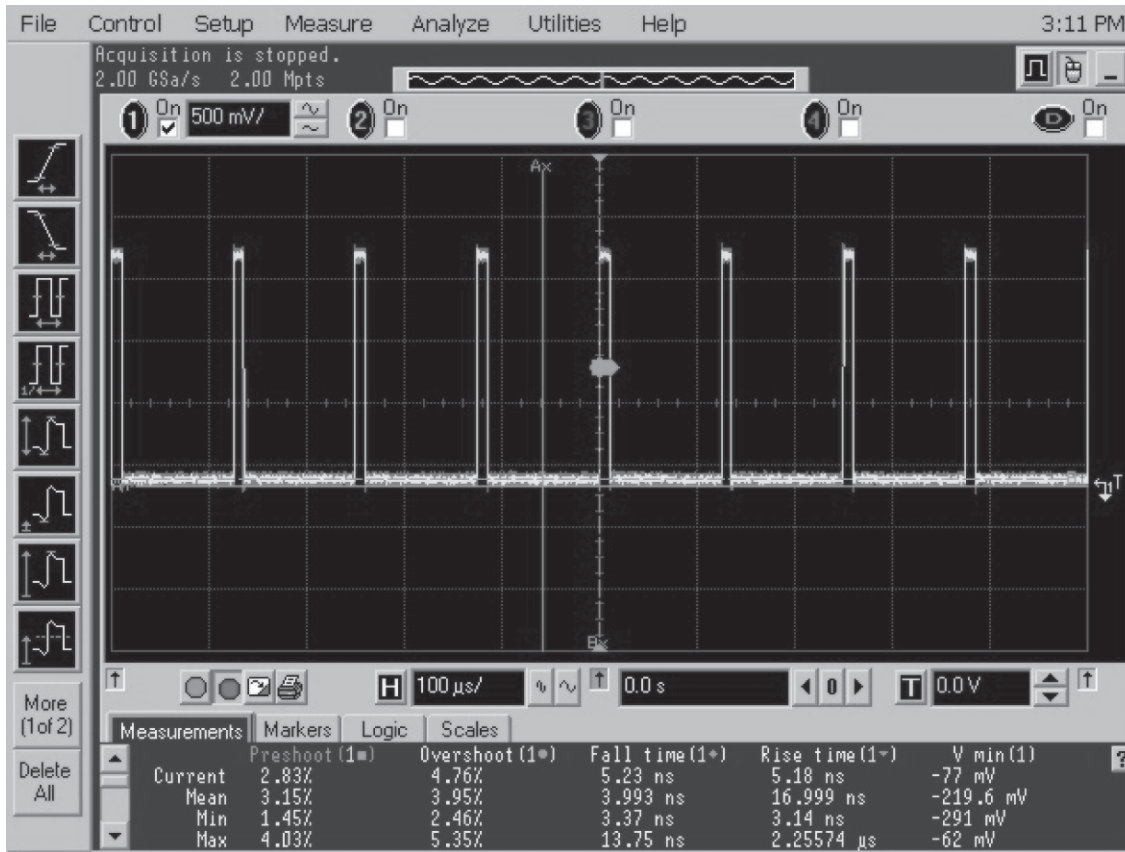
### 6.3.1 Red Tx



Trace 1: Trace recorded at R6618.

Figure 6-6. Audio SSI – Red Tx Waveform

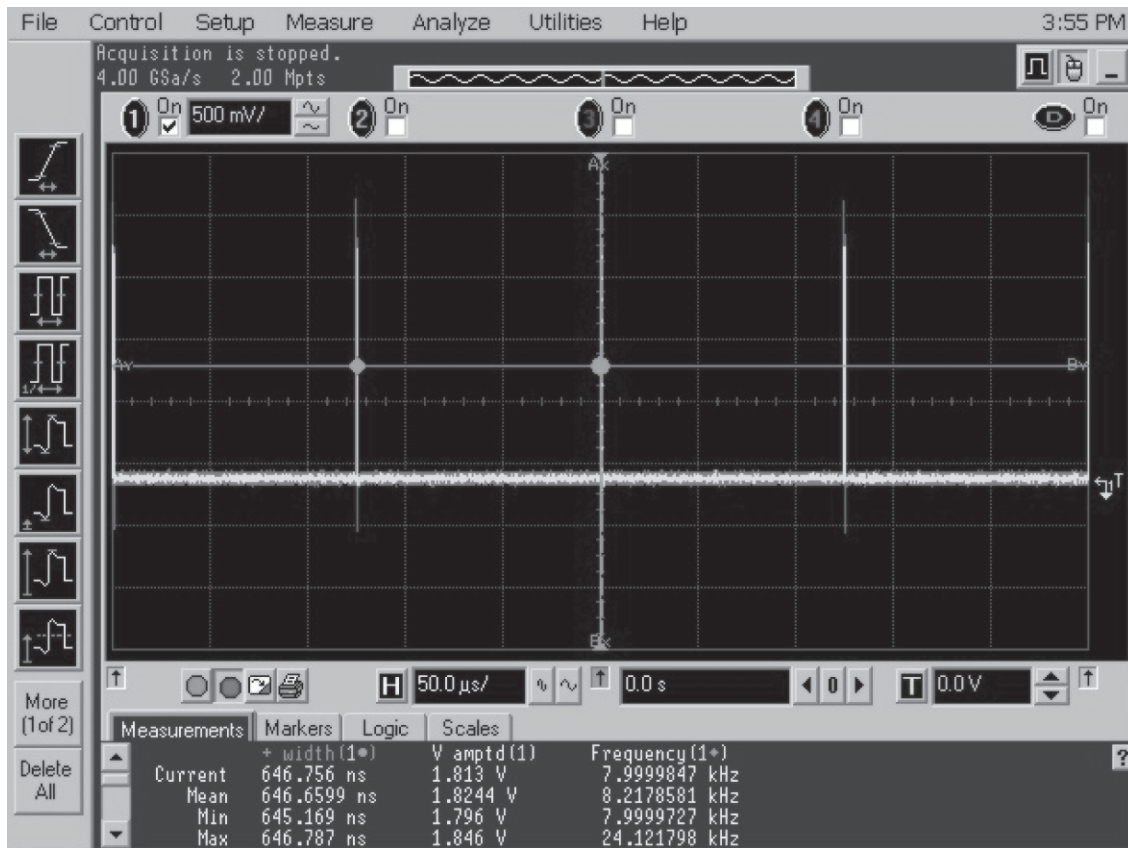
### 6.3.2 Red Rx



Trace 1: Trace recorded at R1332.

Figure 6-7. Audio SSI – Red Rx Waveform

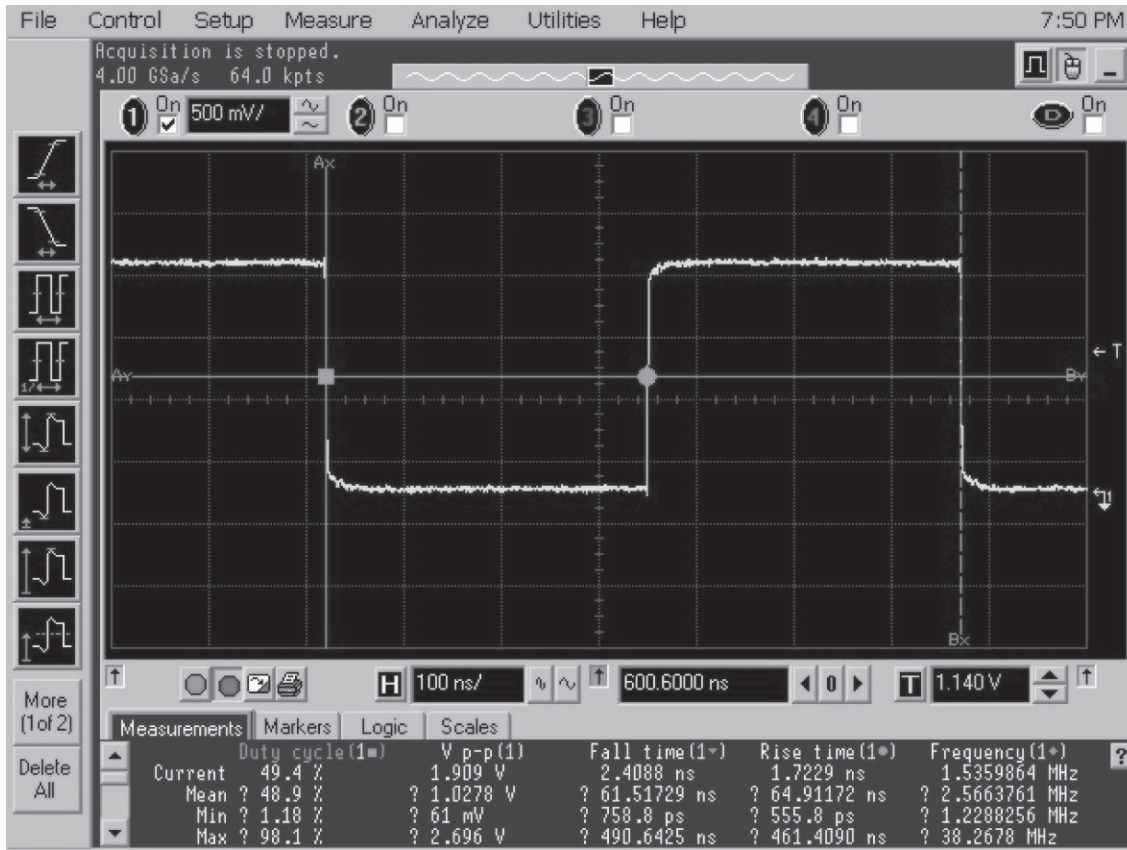
### 6.3.3 SYNC.



Trace 1: Trace recorded at Pin 30 of J2301.

Figure 6-8. Audio SSI – Sync. Waveform

### 6.3.4 BCLK



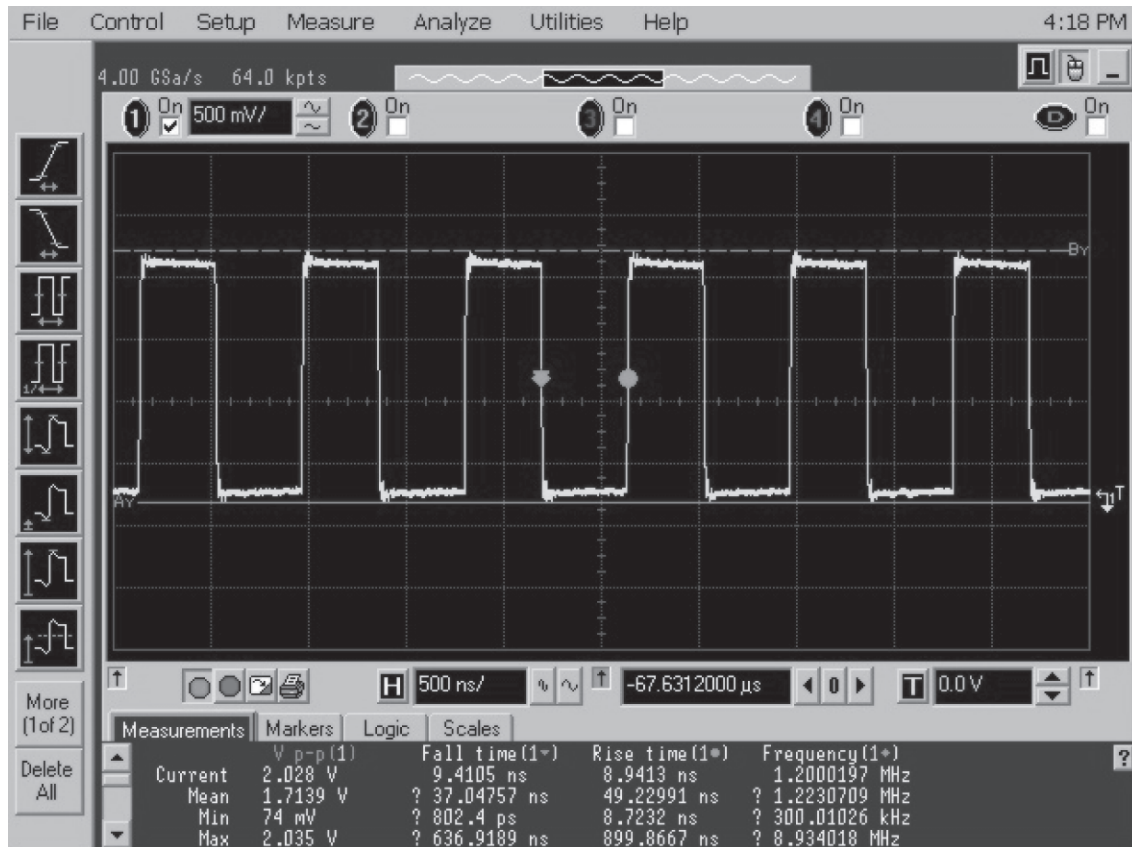
Trace 1: Trace recorded at R6107.

Figure 6-9. Audio SSI – BCLK. Waveform



## 6.4 RX SSI

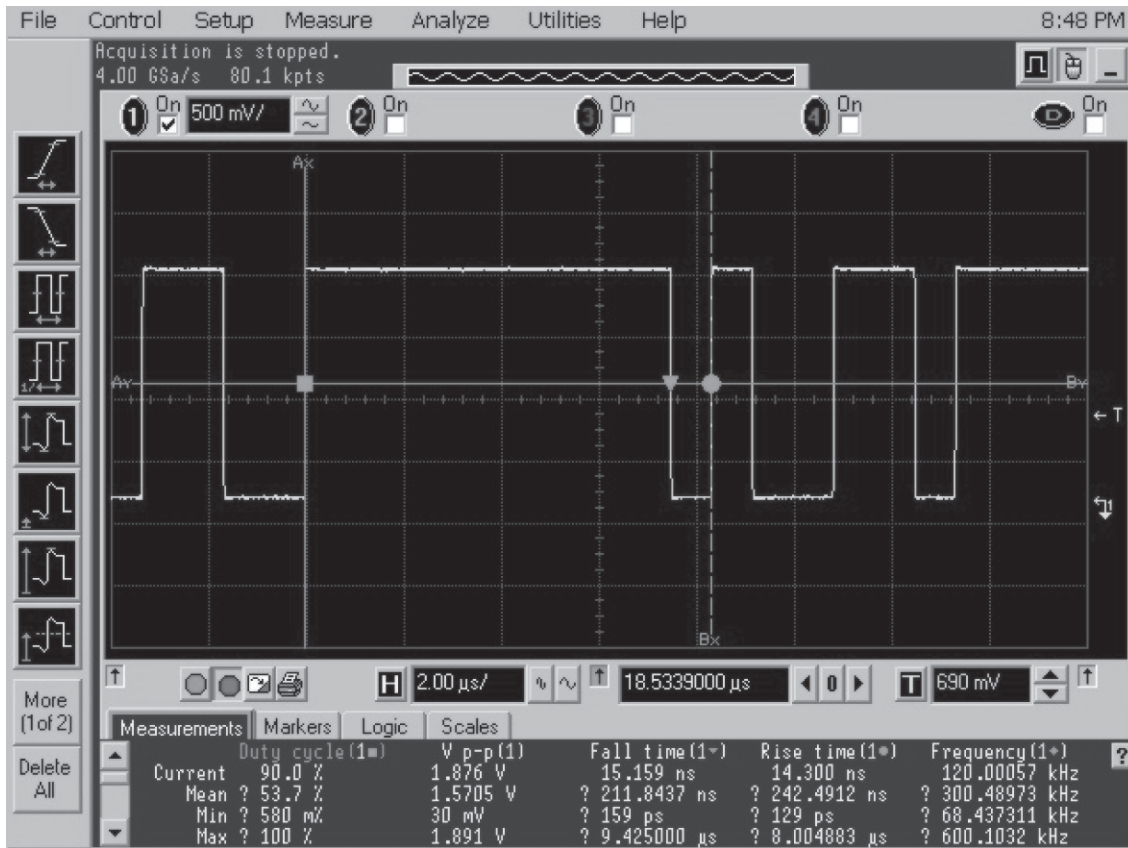
### 6.4.1 CLK.



Trace 1: Trace recorded at R2806.

Figure 6-10. RX SSI – CLK. Waveform

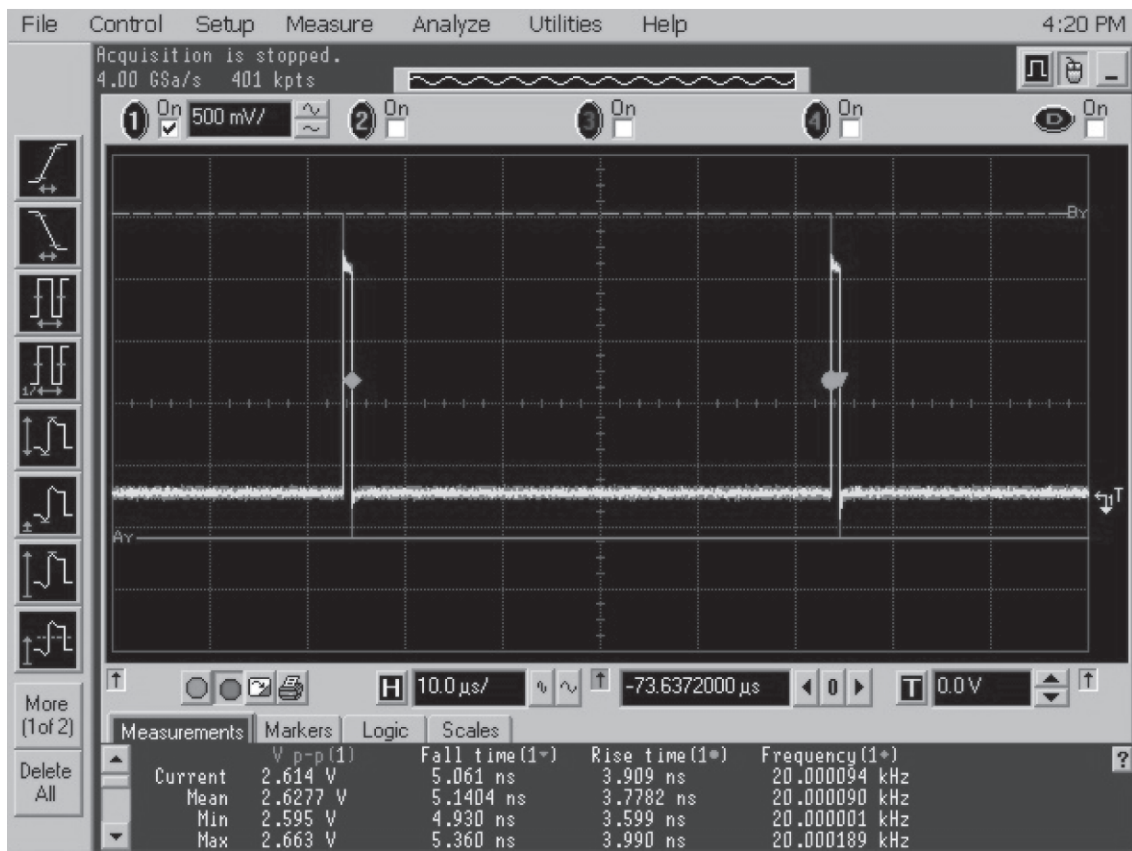
### 6.4.2 DA



Trace 1: Trace recorded at R2805.

Figure 6-11. RX SSI – DA Waveform

### 6.4.3 FSYNC.

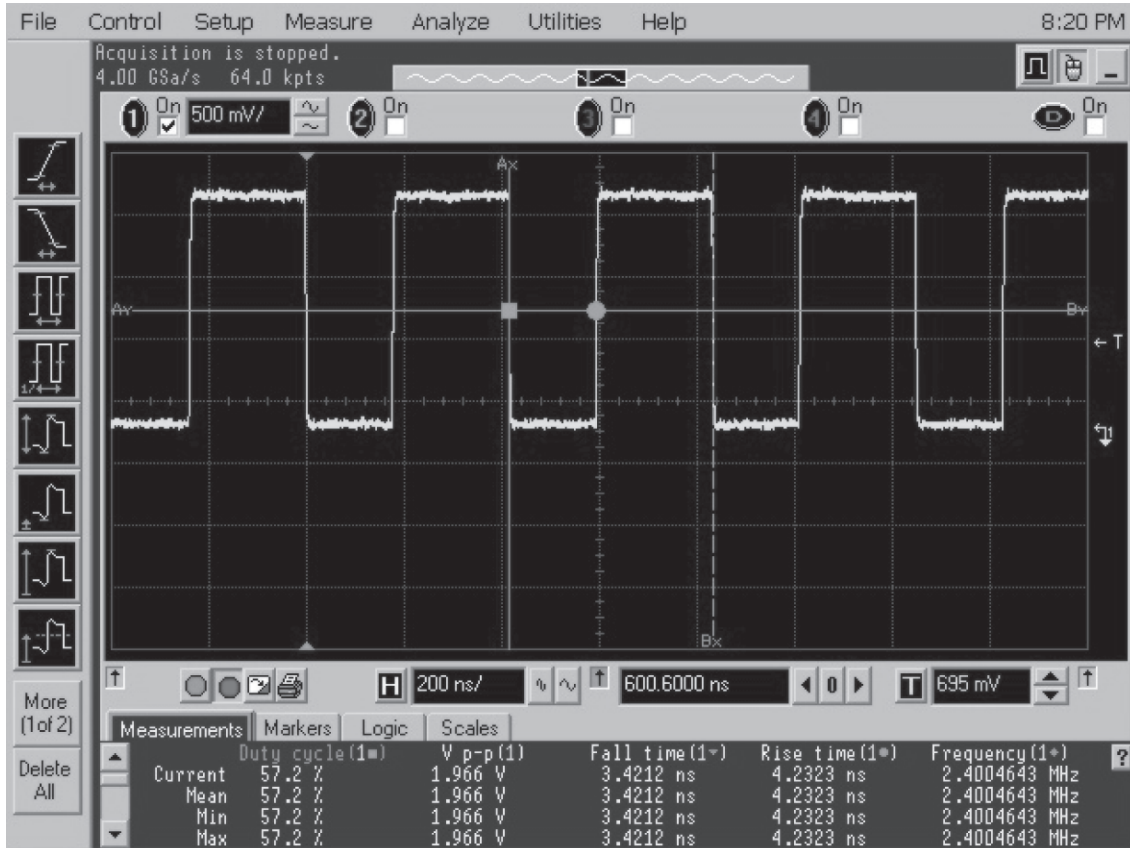


Trace 1: Trace recorded at R2804.

Figure 6-12. RX SSI – FSync. Waveform

## 6.5 TX SSI

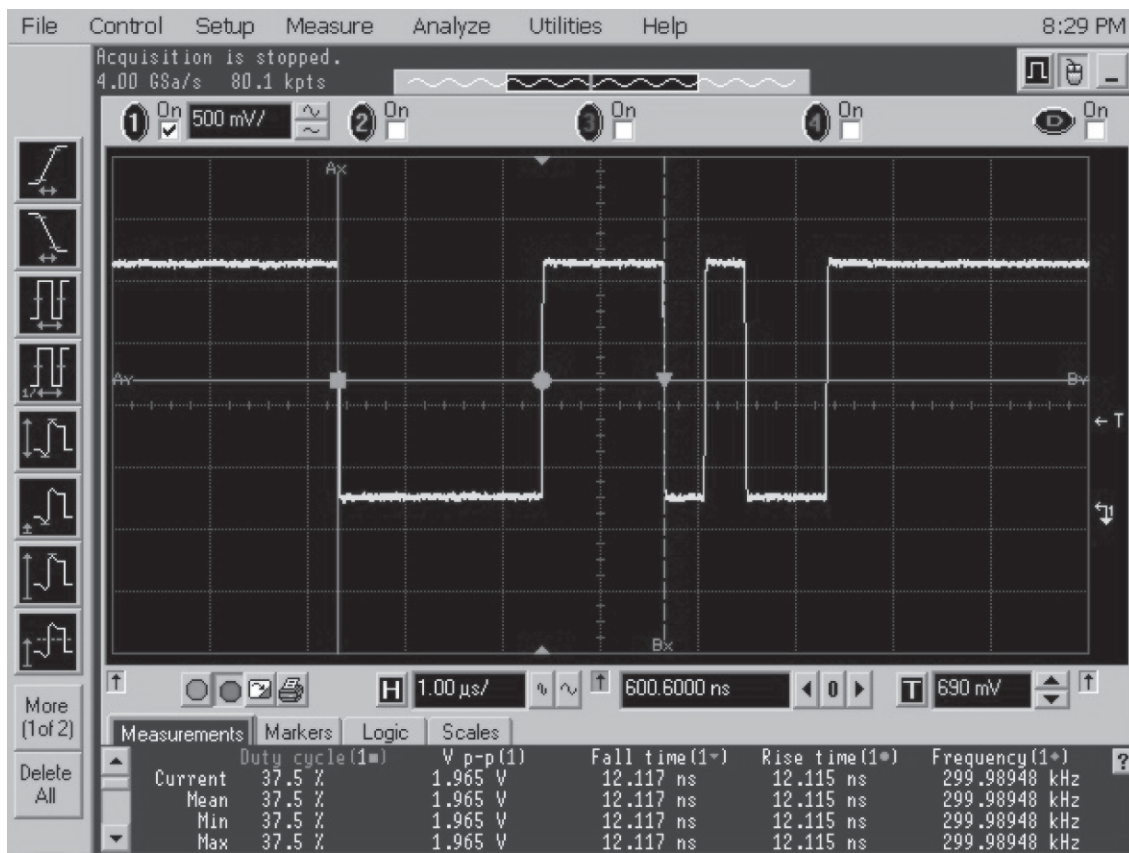
### 6.5.1 CLK.



Trace 1: Trace recorded at R2808.

Figure 6-13. TX SSI – TX CLK. Waveform

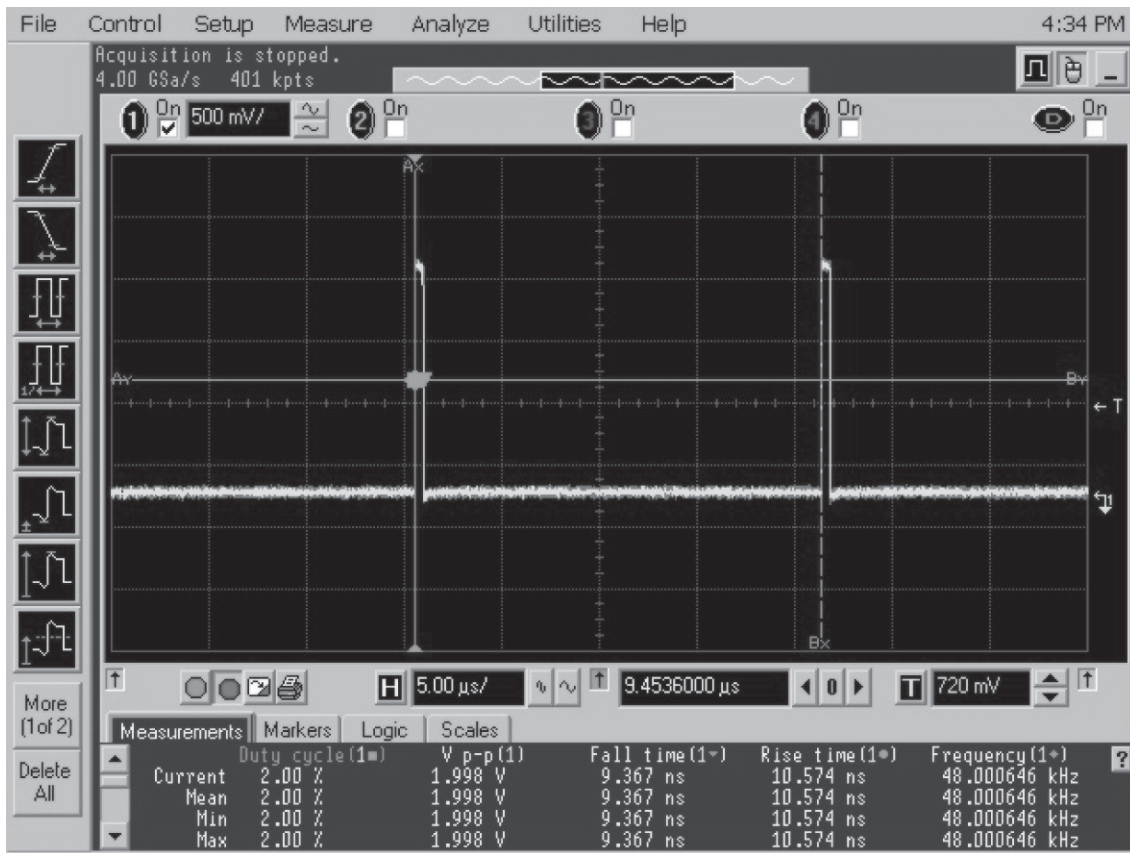
### 6.5.2 DA.



Trace 1: Trace recorded at R2817.

Figure 6-14. TX SSI – DA Waveform

6.5.3 FSYNC.

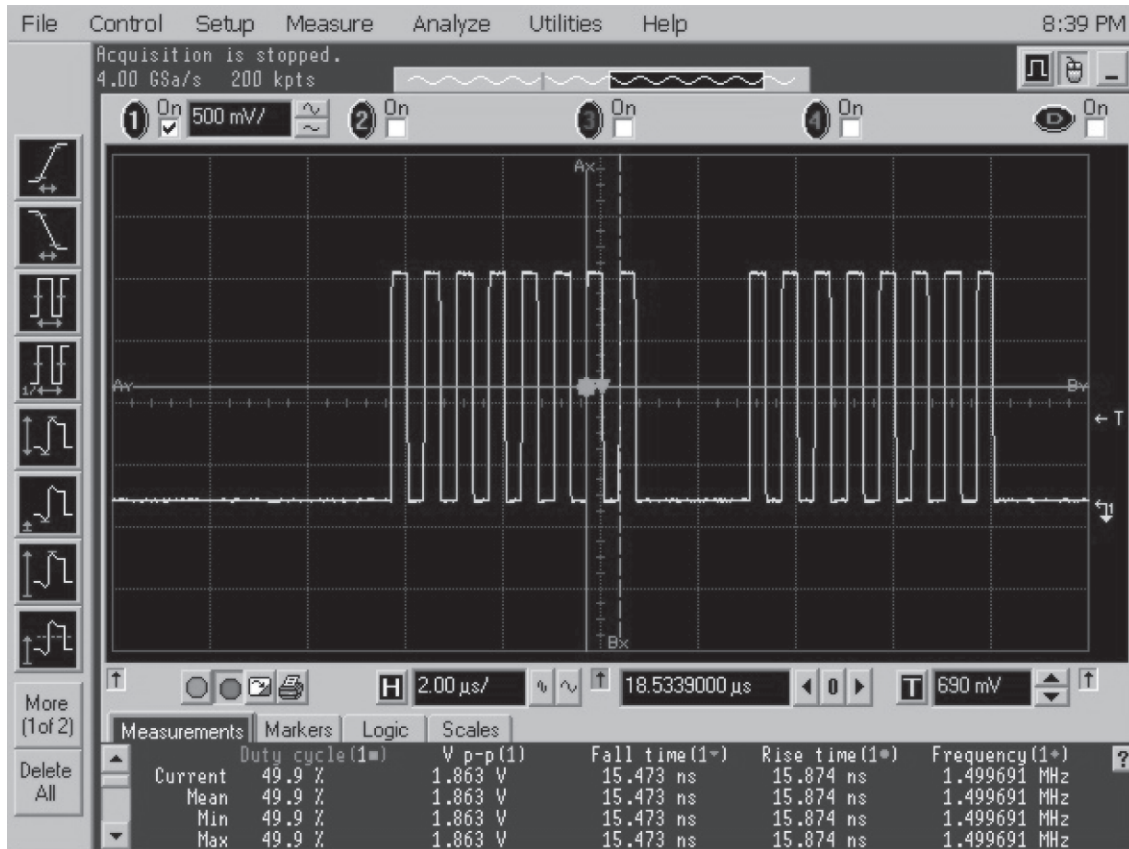


Trace 1: Trace recorded at R2807.

Figure 6-15. TX SSI – FSync. Waveform

## 6.6 SPI

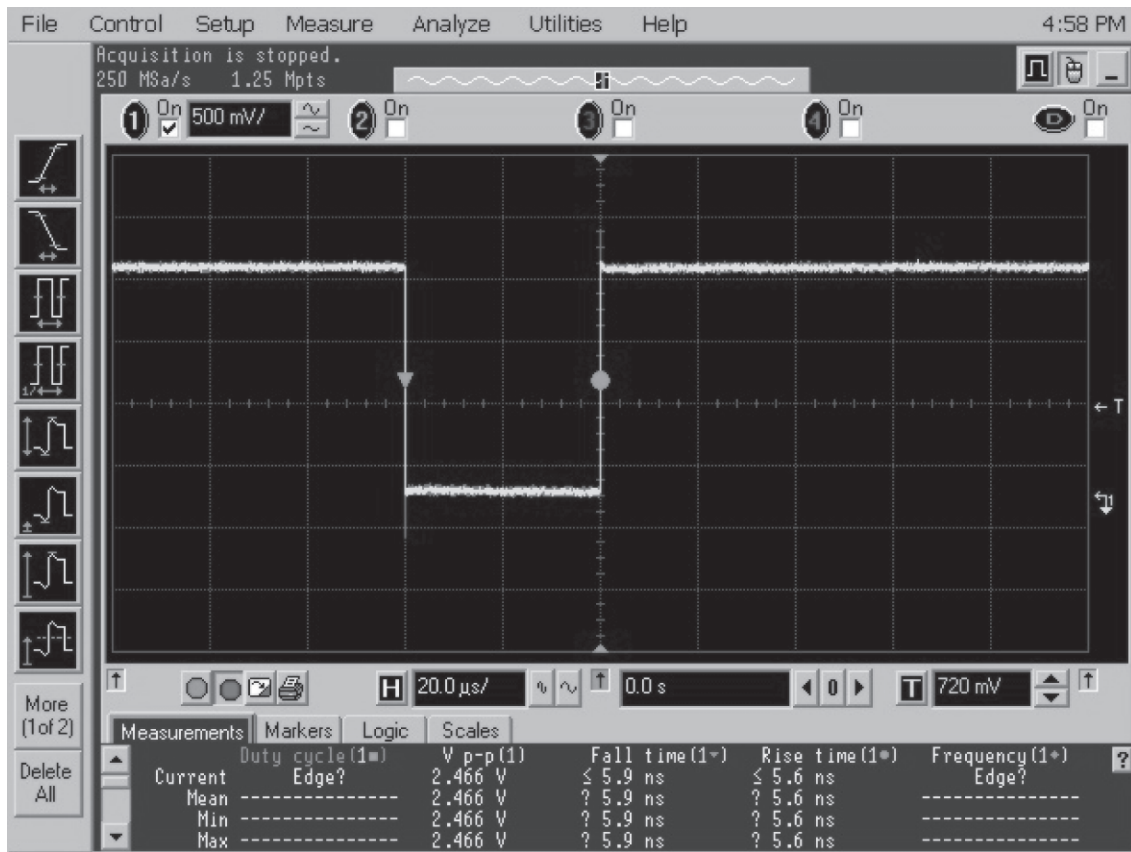
### 6.6.1 CLK



Trace 1: Trace recorded at R2803.

Figure 6-16. SPI – CLK Waveform

### 6.6.2 CS



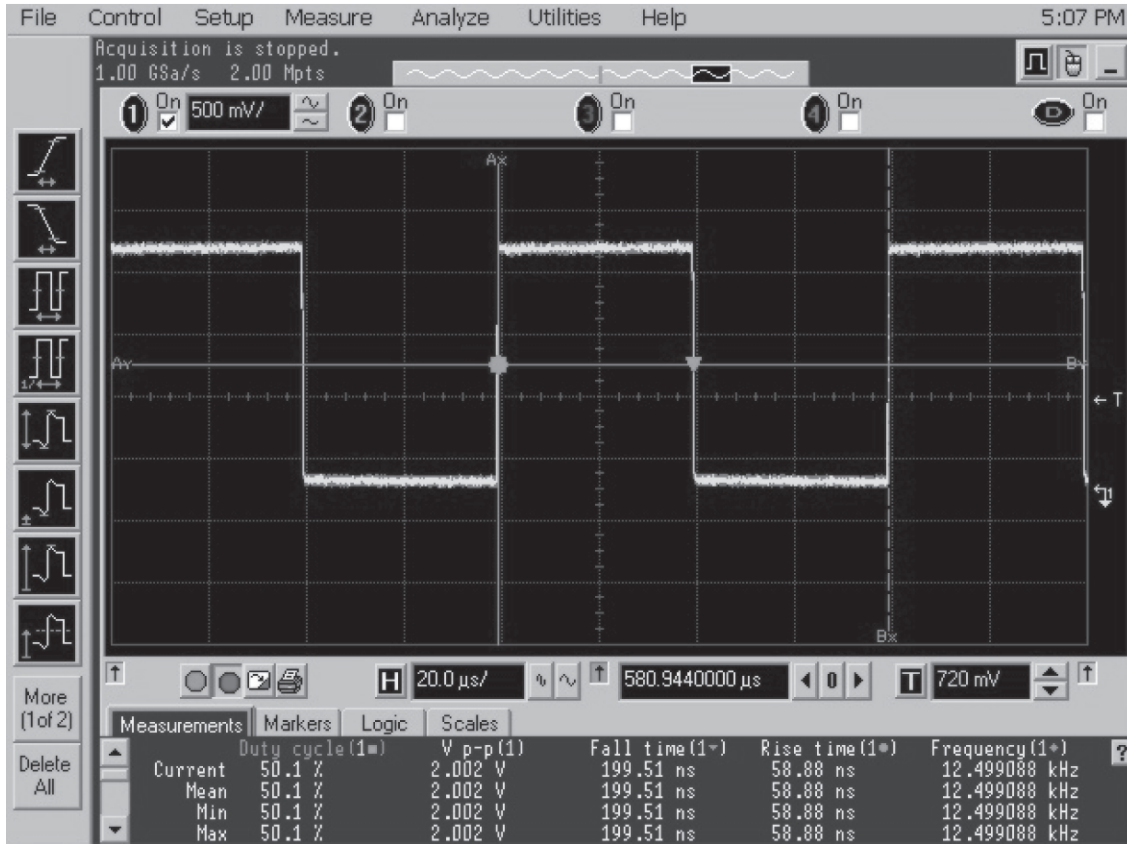
Trace 1: Trace recorded at R6602.

Figure 6-17. CS Waveform



## 6.7 I2C BUS

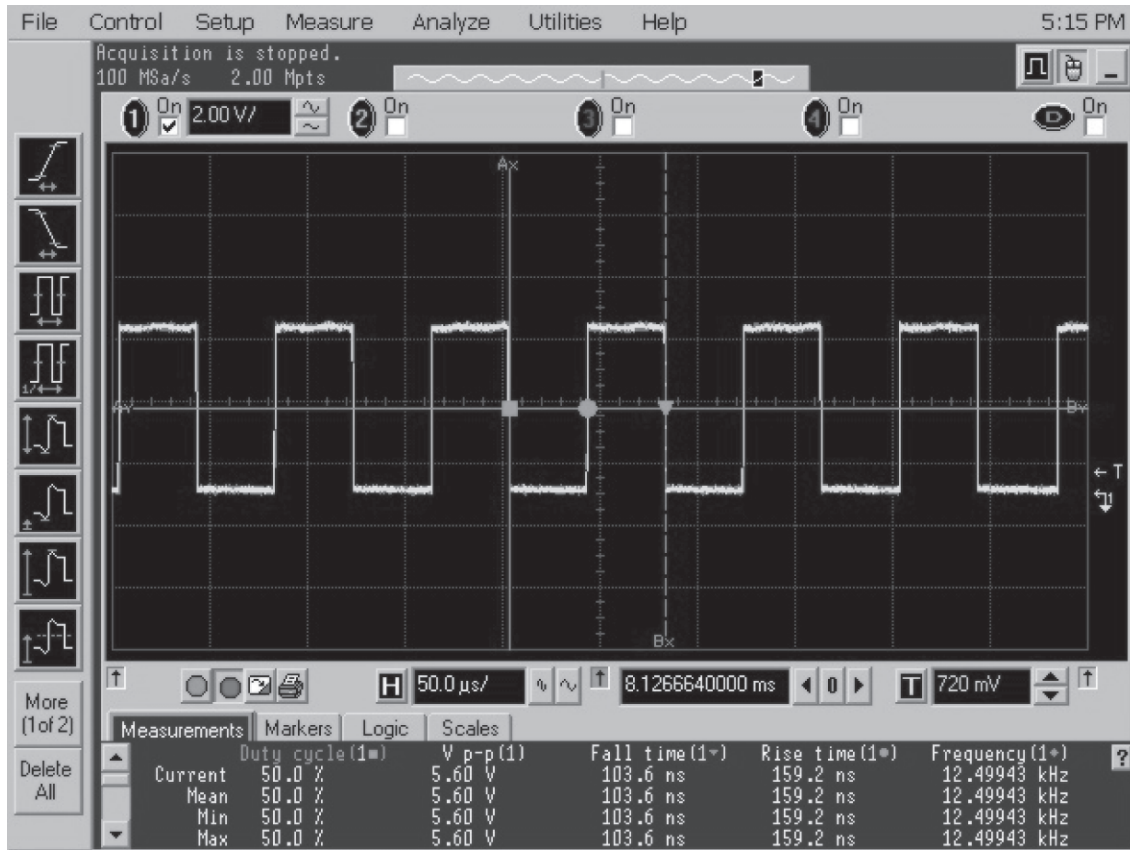
### 6.7.1 SCL



Trace 1: Trace recorded at R6208.

Figure 6-18. I2C Bus – SCA Waveform

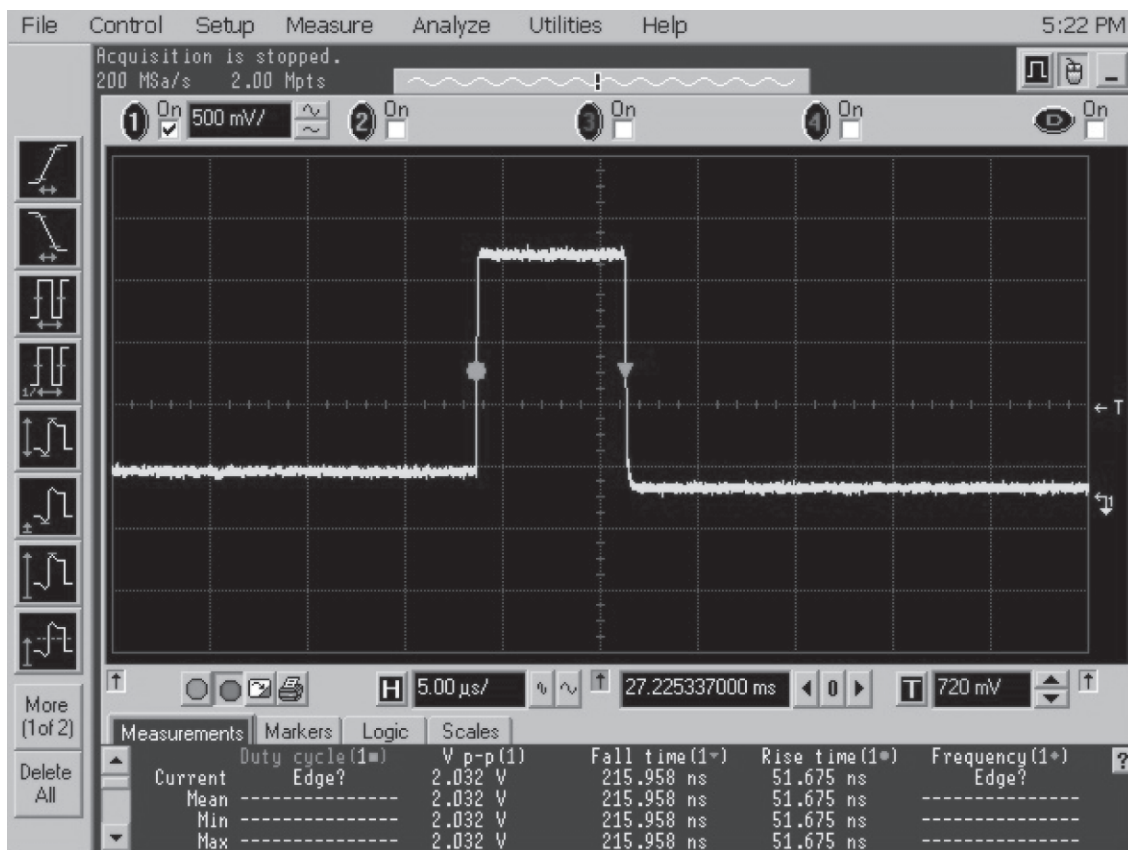
### 6.7.2 SCL 5V



Trace 1: Trace recorded at R2204.

Figure 6-19. I2C Bus – SCA 5V Waveform

### 6.7.3 SDA

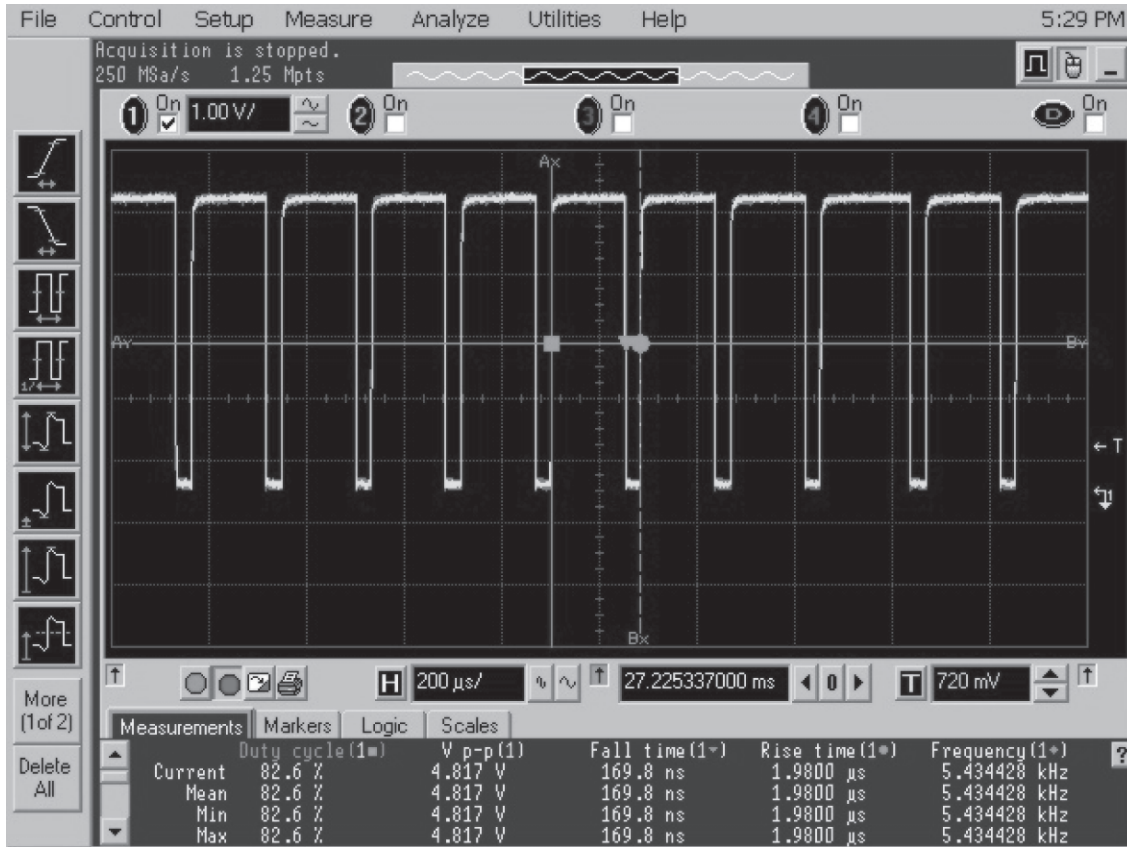


Trace 1: Trace recorded at R6209.

Figure 6-20. I2C Bus – SDA Waveform

## 6.8 One Wire

### 6.8.1 1-Wire

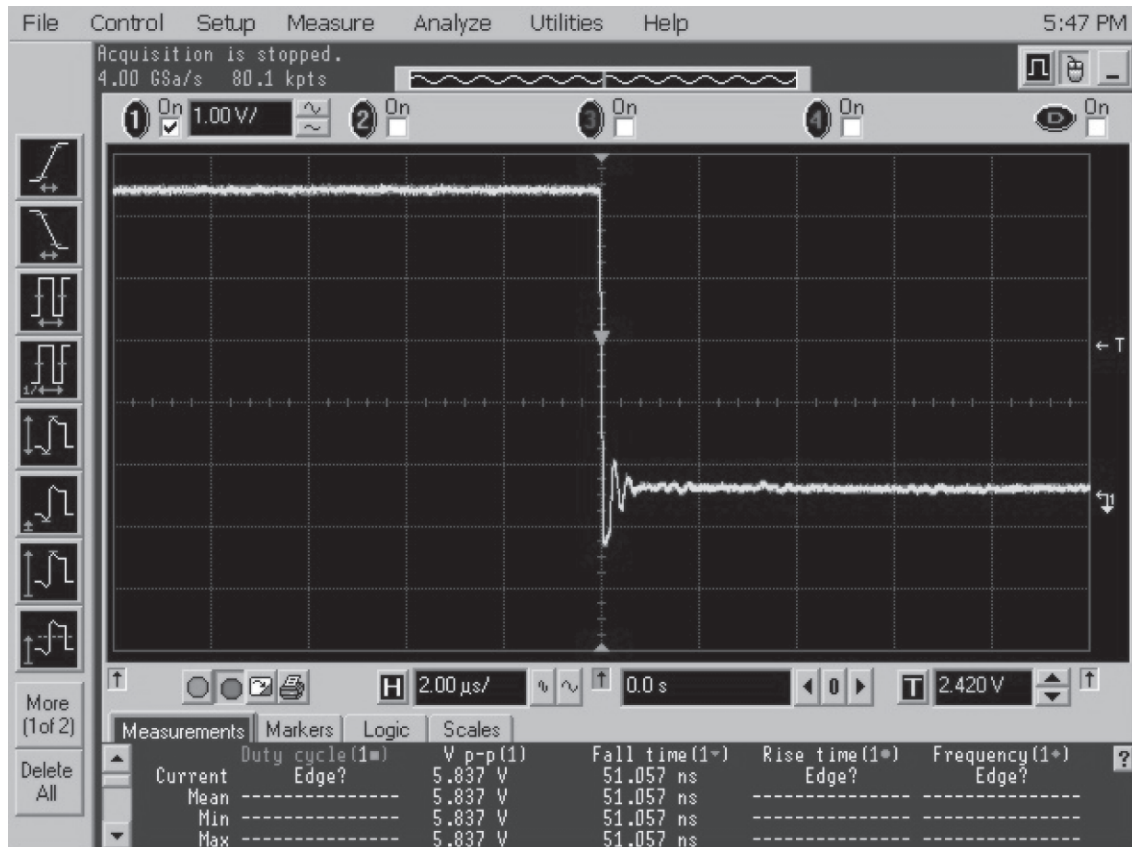


Trace 1: Trace recorded at R4009.

Figure 6-21. 1-Wire Waveform

## 6.9 GCAI

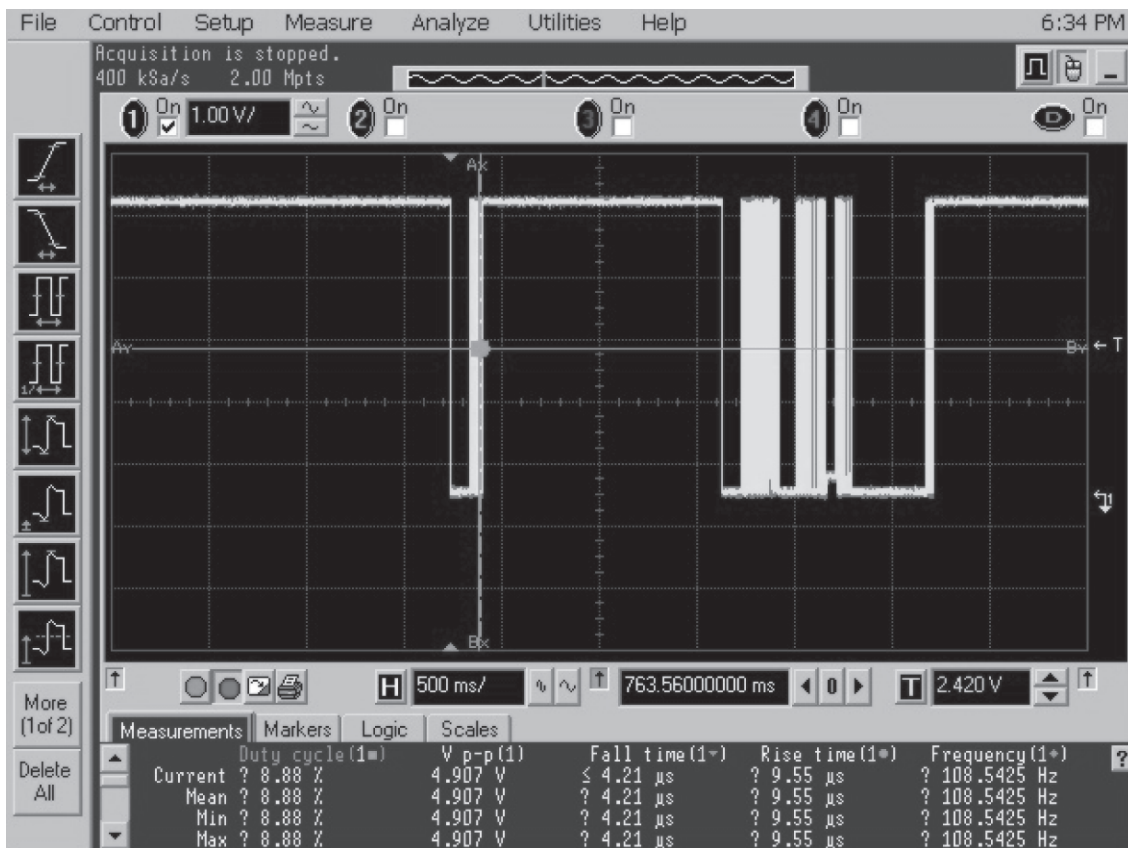
### 6.9.1 GPIO0



Trace 1: Trace recorded at D4001 (test point GPIO0).

Figure 6-22. GCAI – GPIO0 Waveform

## 6.9.2 GPIO4 / Keyfail during Keyload

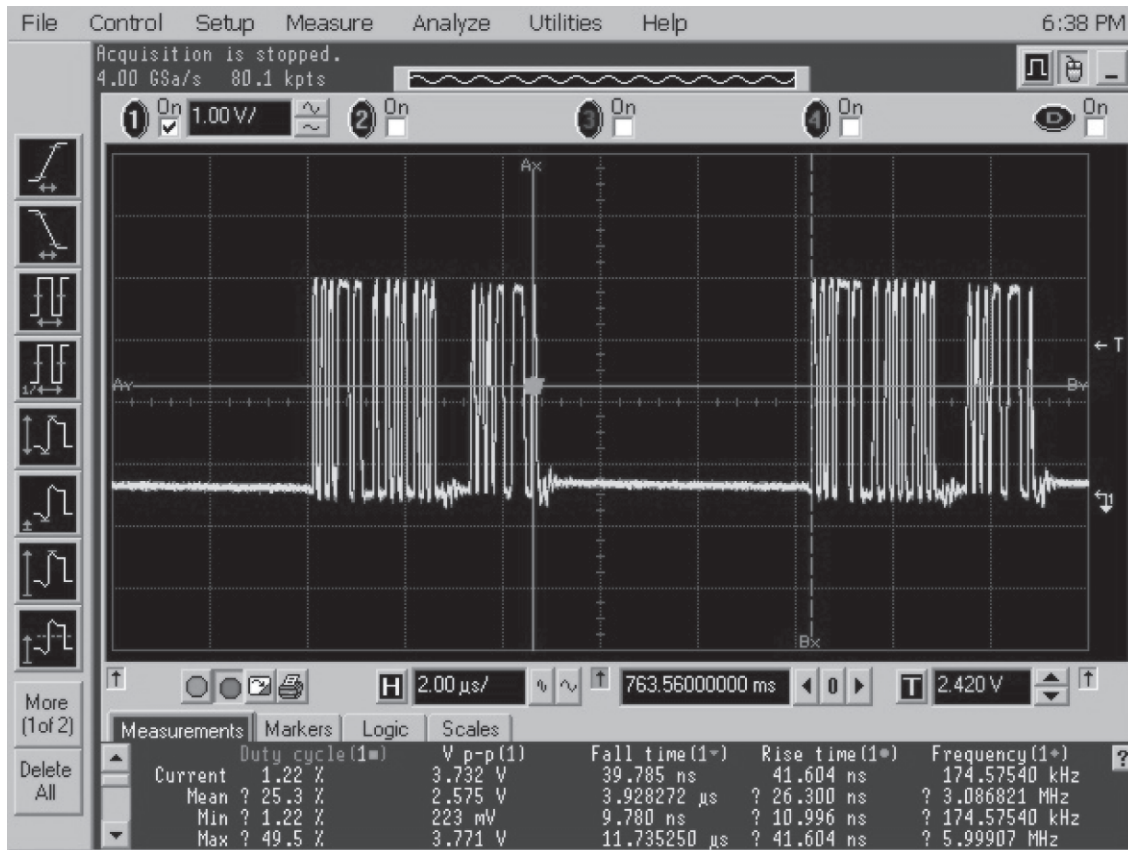


Trace 1: Trace recorded at P2001\_21 or R2005 or C2006 (DNP).

Figure 6-23. GCAI – GPIO4 Waveform

## 6.10 USB

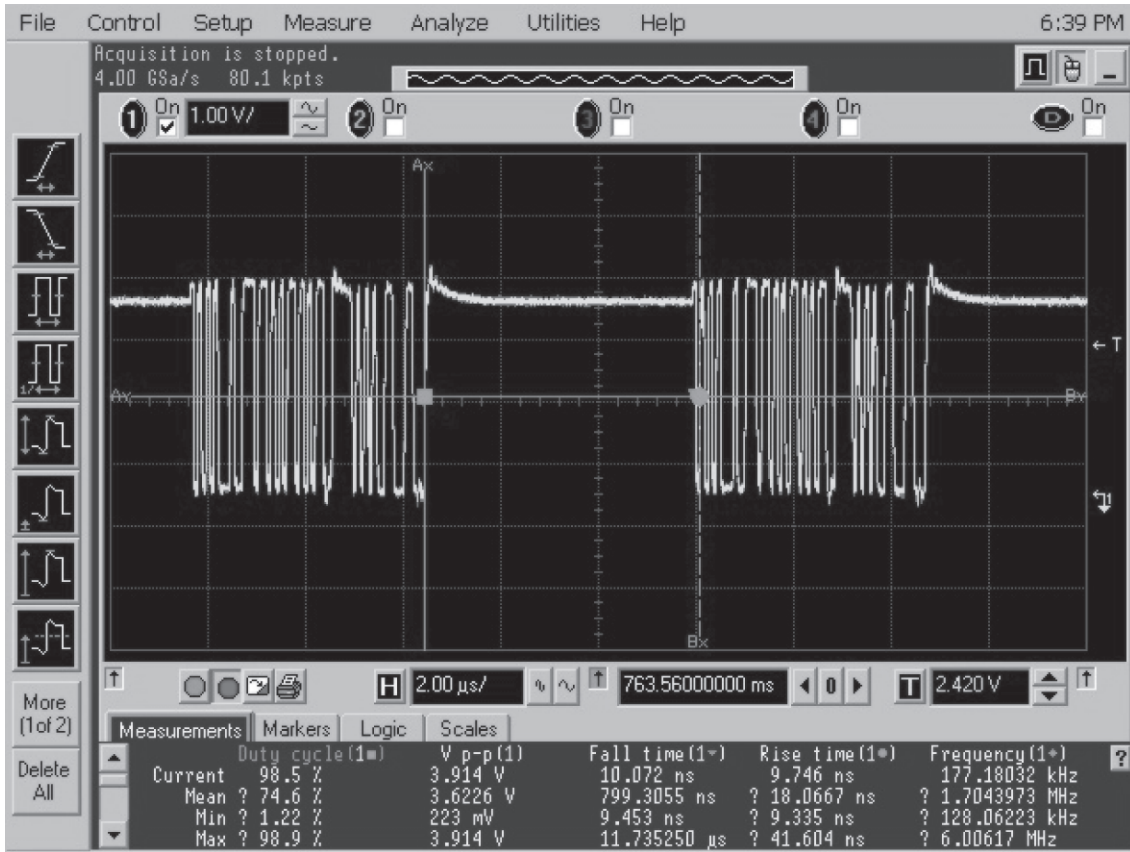
### 6.10.1 D-



Trace 1: Trace recorded at TP F\_GCAI\_USB-.

Figure 6-24. USB – D- Waveform

6.10.2 D+



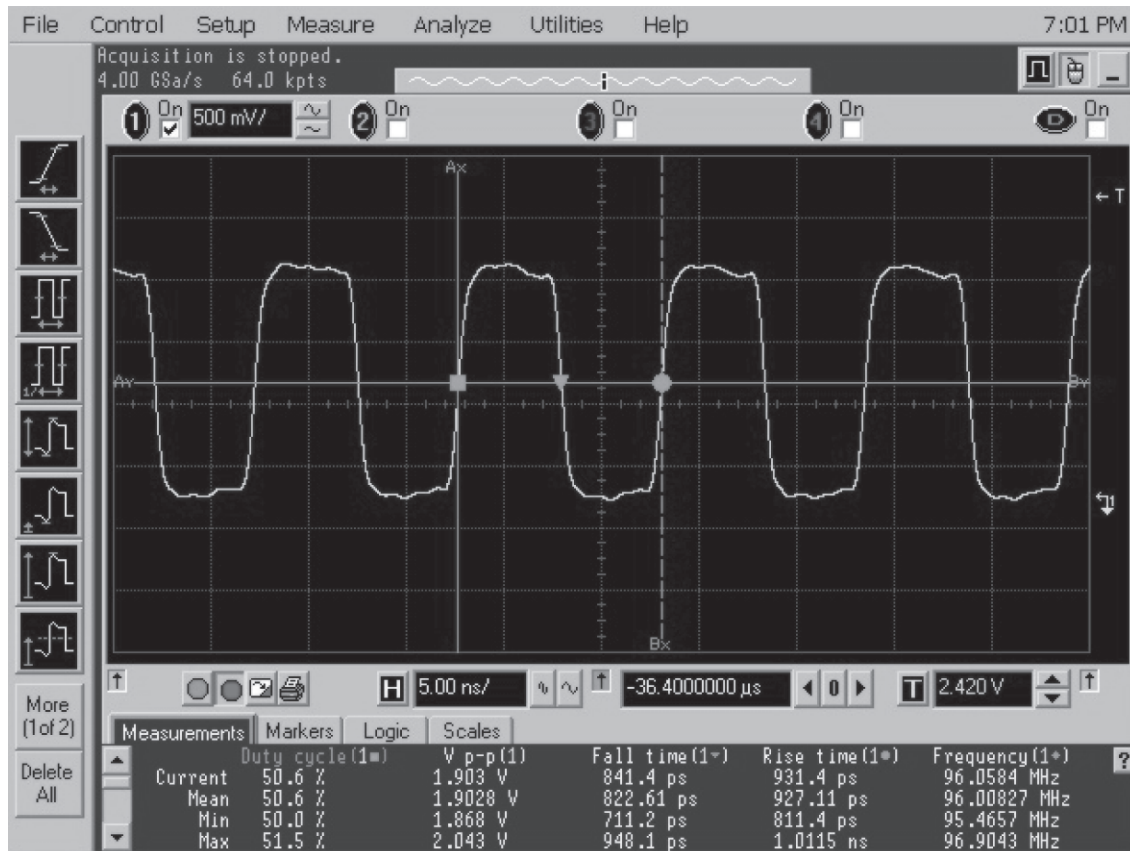
Trace 1: Trace recorded at TP F\_GCAI\_USB+.

Figure 6-25. USB – D+ Waveform



## 6.11 SDRAM

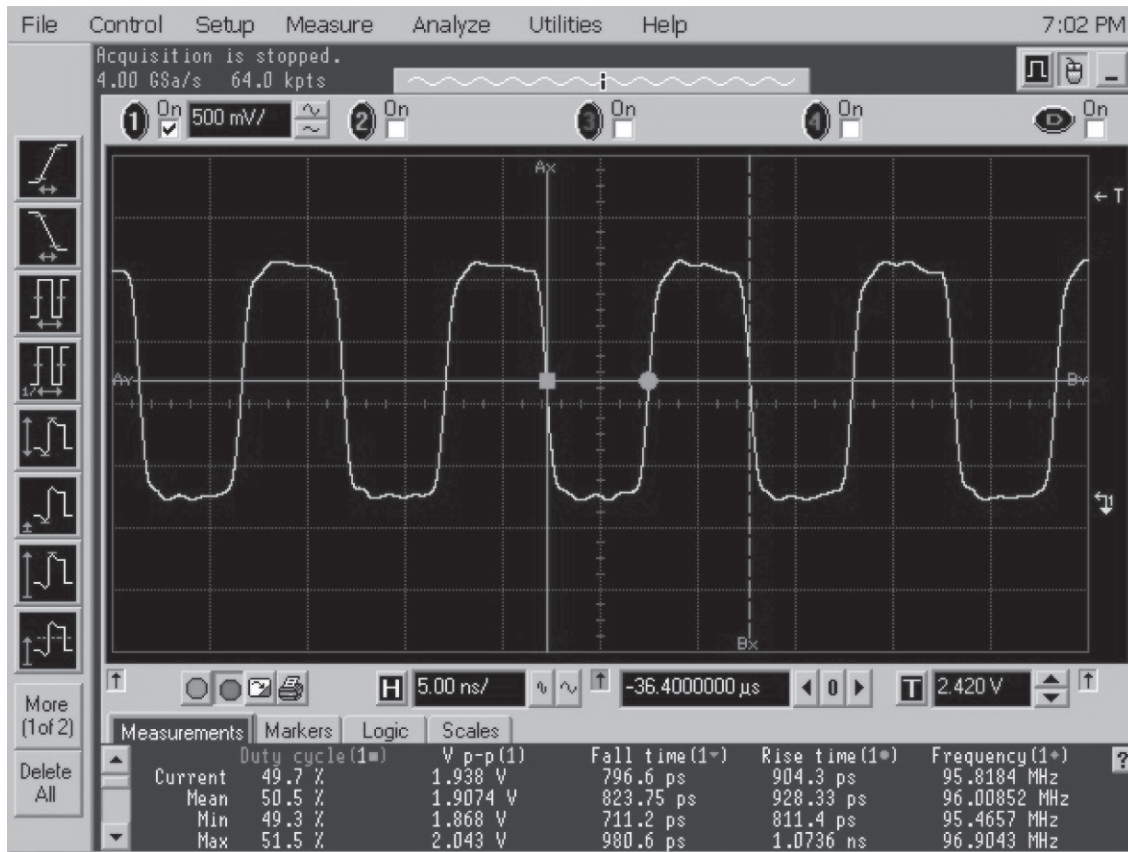
### 6.11.1 CLK



Trace 1: Trace recorded at TP6307.

Figure 6-26. SDRAM – CLK Waveform

### 6.11.2 CLKX

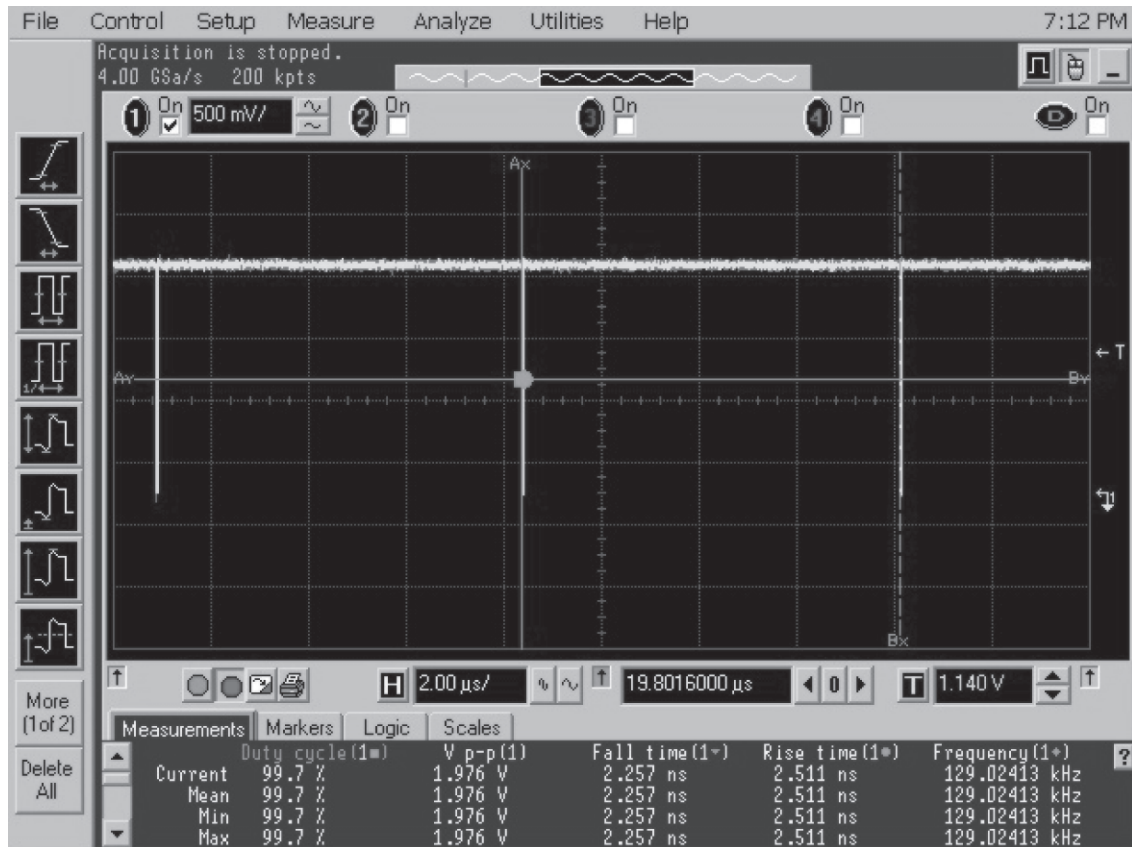


Trace 1: Trace recorded at TP6308.

Figure 6-27. SDRAM – CLKX Waveform

## 6.12 FLASH CONTROL

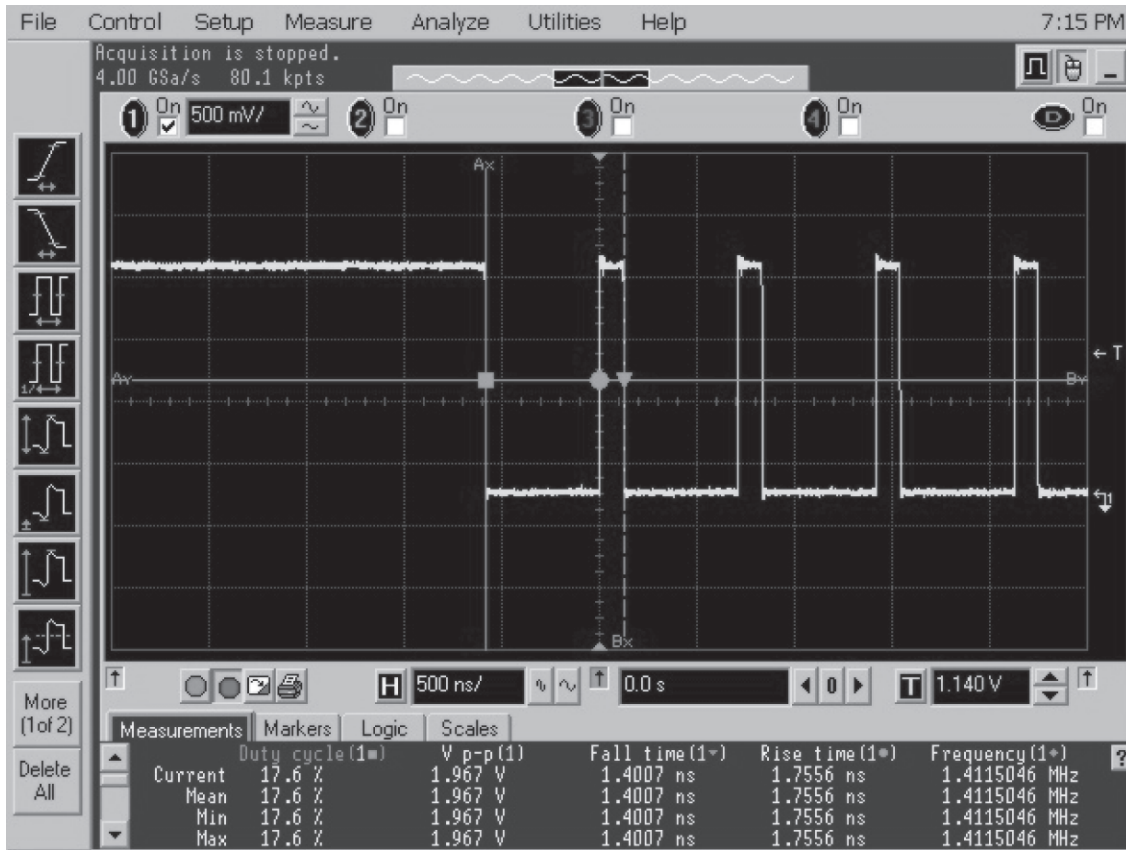
### 6.12.1 ADV



Trace 1: Trace recorded at R6314.

Figure 6-28. FLASH CONTROL – ADV Waveform

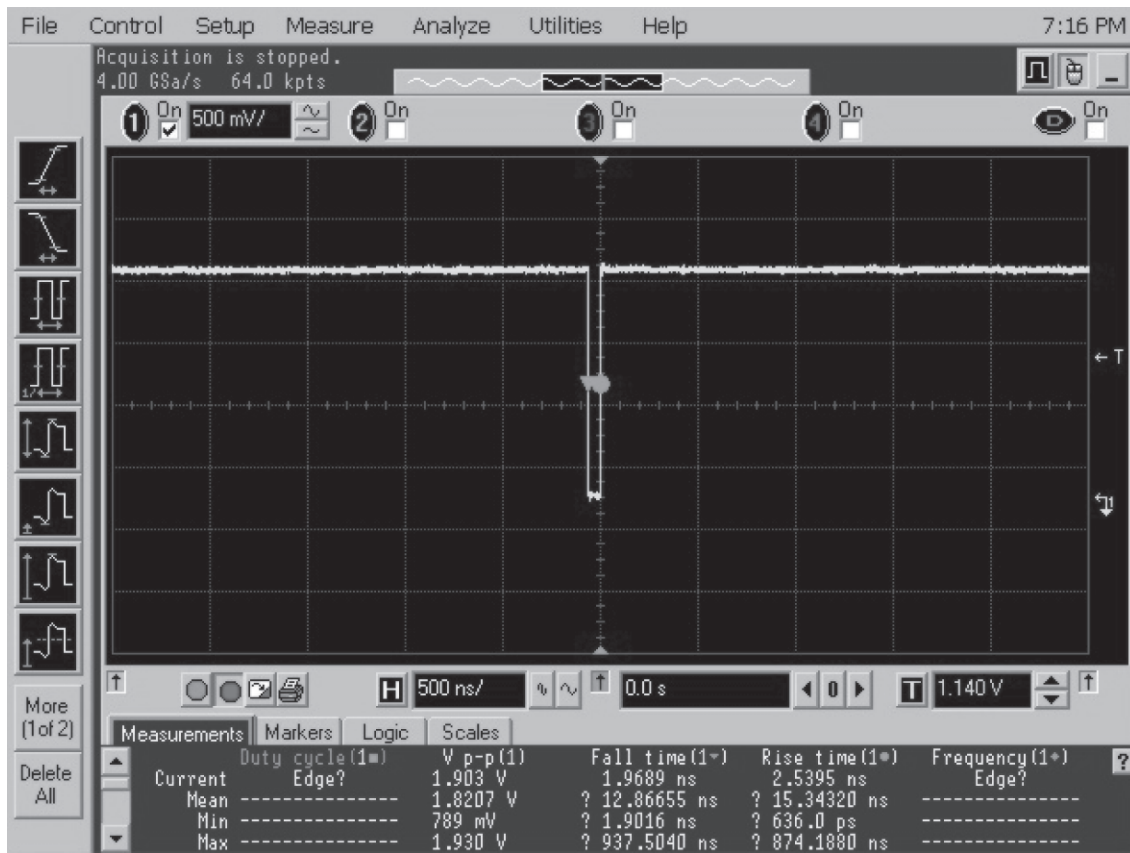
6.12.2 CS3



Trace 1: Trace recorded at R6311.

Figure 6-29. FLASH CONTROL – CS3 Waveform

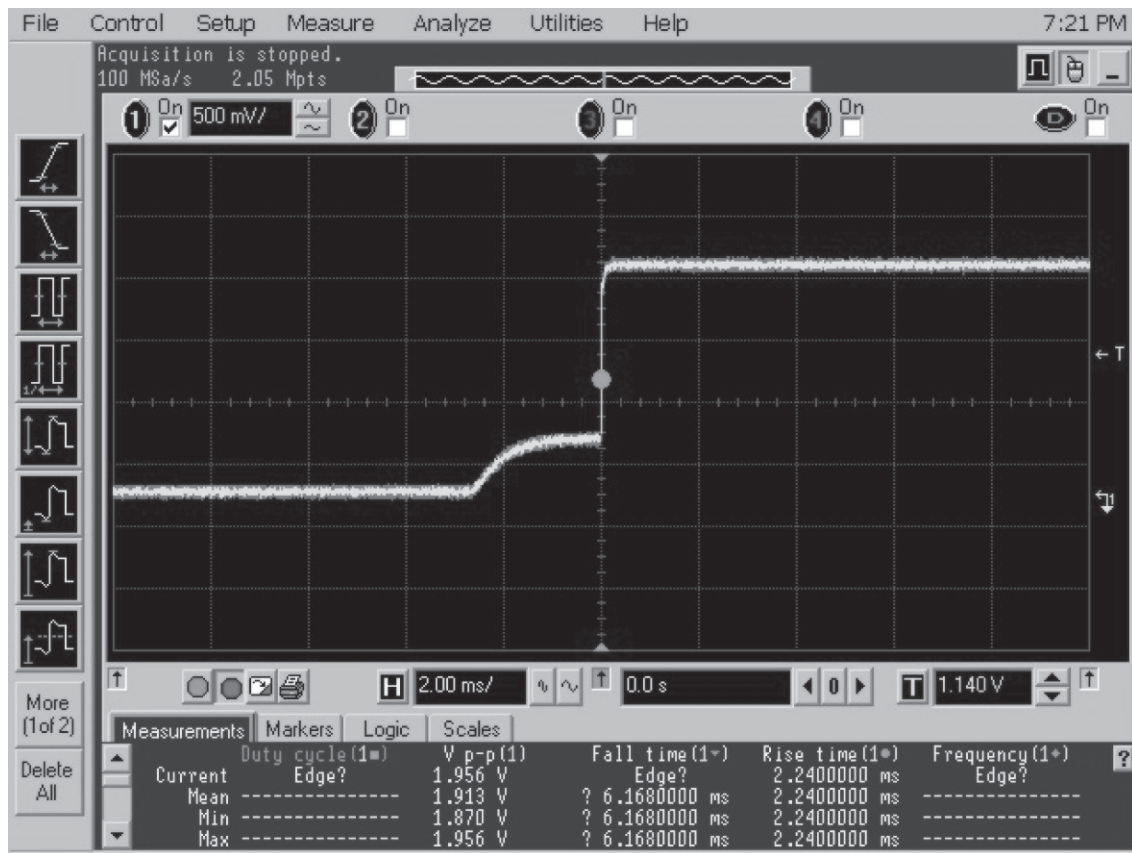
6.12.3 OE



Trace 1: Trace recorded at R6312.

Figure 6-30. FLASH CONTROL – OE Waveform

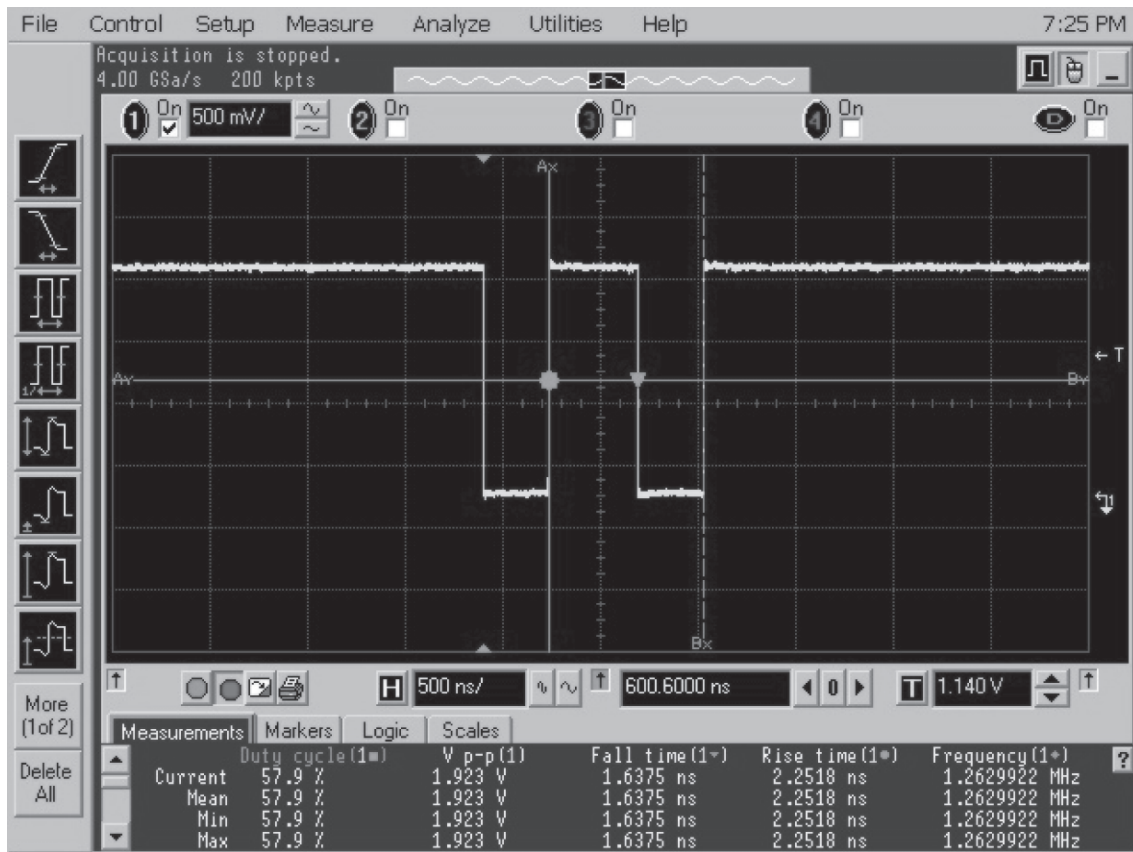
6.12.4 RDY



Trace 1: Trace recorded at R6316.

Figure 6-31. FLASH CONTROL – RDY Waveform

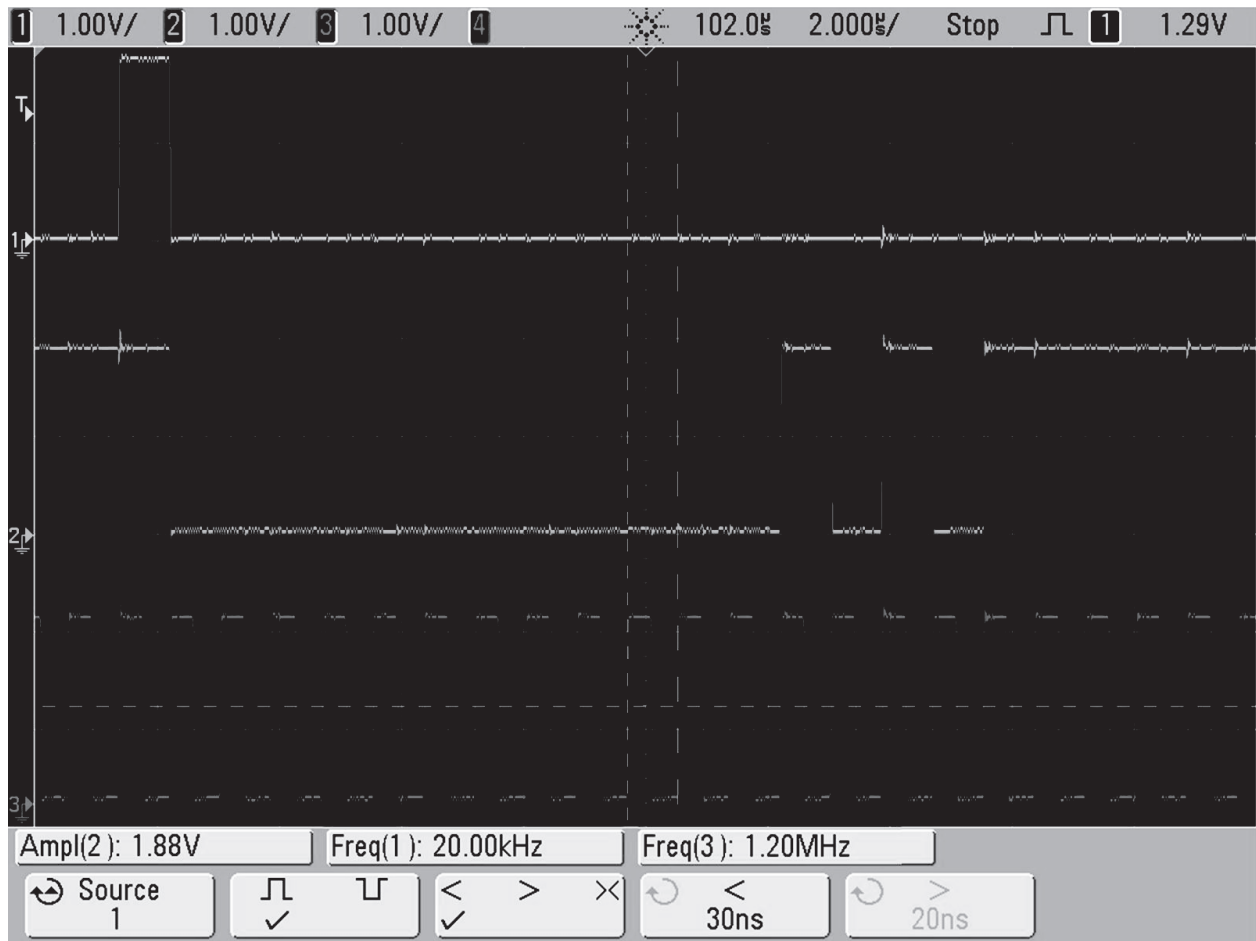
6.12.5 WE



Trace 1: Trace recorded at R6313.

Figure 6-32. FLASH CONTROL – WE Waveform

## 6.13 Receive Baseband Signals



**Trace 1: DIG\_DATA\_SSI\_RX\_FS at R616.**  
**Trace 2: DIG\_DATA\_SSI\_RX\_DOUTA at R617.**  
**Trace 3: CLK\_SSI\_RX at R618.**

*Figure 6-33. Received Baseband Waveforms*



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# Chapter 7 Troubleshooting Tables

## 7.1 List of Board and IC Signals

Due to the nature of the schematic-generating program, signal names might be different when they are not directly connected to the same point. The tables in this chapter provide a cross reference to the various pinouts for these signals. [Table 7-1](#) lists and provides links to each of the tables in this chapter.

*Table 7-1. List of Tables of Board and IC Signals*

Table No.	Table Name	Page No.
<a href="#">7-2</a>	<a href="#">Mainboard to Keypad flex connector interface Pin-Out</a>	<a href="#">7-2</a>
<a href="#">7-3</a>	<a href="#">Main Keypad flex connector to main board connector Interface Pin-Out</a>	<a href="#">7-5</a>
<a href="#">7-4</a>	<a href="#">Main Keypad flex connector to keypad board connector Interface Pin-Out</a>	<a href="#">7-8</a>
<a href="#">7-5</a>	<a href="#">Keypad board connector to mainboard Interface Pin-Out</a>	<a href="#">7-11</a>
<a href="#">7-6</a>	<a href="#">Keypad board connector to front kit flex Interface Pin-Out</a>	<a href="#">7-14</a>
<a href="#">7-7</a>	<a href="#">Front kit connector Interface Pin-Out</a>	<a href="#">7-16</a>
<a href="#">7-8</a>	<a href="#">GCAI flex connector Interface Pin-Out</a>	<a href="#">7-21</a>
<a href="#">7-9</a>	<a href="#">PTT flex connector Interface Pin-Out</a>	<a href="#">7-23</a>
<a href="#">7-10</a>	<a href="#">Overall GPIO pin functions</a>	<a href="#">7-24</a>
<a href="#">7-11</a>	<a href="#">Primary IC Reference Designator</a>	<a href="#">7-32</a>

Table 7-2. Mainboard to Keypad flex connector interface Pin-Out

Test Place	MainBoard		Test Place	MainBoard	
	Signal Name	Pin #		Signal Name	Pin #
chassis	GND	J2302-1	chassis	GND	J2301-1
R2135	F_DISP_RW	J2302-2	chassis	GND	J2301-2
R4005	PTT	J2302-3	C6544	VBUS1	J2301-3
R2139	F_DISP_DATA_0	J2302-4	R6118	SSI_MACE_TX_DIN	J2301-4
R4006	SIDE_1	J2302-5	None	BT_AVR_RESET	J2301-5
R2145	F_DISP_DATA_1	J2302-6	None	SSI_RED_RX_MACE	J2301-6
R4007	SIDE_2	J2302-7	chassis	GND	J2301-7
R2153	F_DISP_DATA_2	J2302-8	R6102	HIGH_SECURE_DATA_GATE	J2301-8
R6101	MONITOR	J2302-9	R6114	GPS_BT_32KHZ	J2301-9
R2148	F_DISP_DATA_3	J2302-10	None	SECURE_HIGH_NORM	J2301-10
chassis	GND	J2302-11	chassis	GND	J2301-11
R2154	F_DISP_DATA_4	J2302-12	None	SSI_BLACK_TX_MACE	J2301-12
None	GPIO_3_RTS_FILLSE NSE	J2302-13	None	BT_PTT	J2301-13
R2149	F_DISP_DATA_5	J2302-14	R6606	SSI_BLACK_RX	J2301-14
F_GCAI_USB-	GPIO_2_DM_RXDC_FI LLDATA	J2302-15	None	BT_SPARE_1.8	J2301-15
R2138	F_DISP_DATA_6	J2302-16	chassis	GND	J2301-16
F_GCAI_USB+	GPIO_1_DP_TXDC_FI LLREQ	J2302-17	None	ACC_SPKR_UNMUTE	J2301-17
R2146	F_DISP_DATA_7	J2302-18	R6107	SSI_OPT_CLK	J2301-18
F_GCAI_1WIRE	GCAI_1WIRE_5V	J2302-19	None	AVR_STATUS_1.8V	J2301-19
chassis	GND	J2302-20	chassis	GND	J2301-20
None	GPIO_4_CTS_KEYFAI L_FILLCLK	J2302-21	None	USB_BOOT_1.8V	J2301-21
R2142	F_DISP_RW_EN	J2302-22	R6570	V_EXT_1.85	J2301-22
F_VBUS2	VBUS2	J2302-23	R6542	V_SW_3.60	J2301-23
chassis	GND	J2302-24	C6590	VRTC	J2301-24
F_VBUS2	VBUS2	J2302-25	TP1309	BT_HOST_WAKEUP_1.8V	J2301-25
R2147	F_DISP_DATA_CMD	J2302-26	R6420	V_SAVE	J2301-26
GPIO0	GPIO_0	J2302-27	TP1310	BT_WAKEUP_1.8V	J2301-27
R6563	V_2.775D	J2302-28	None	KEYFAIL	J2301-28

Table 7-2. Mainboard to Keypad flex connector interface Pin-Out (Continued)

Test Place	MainBoard		Test Place	MainBoard	
	Signal Name	Pin #		Signal Name	Pin #
None	Ext_MIC_Neg_DP	J2302-29	TP1311	BT_SHUTDOWN	J2301-29
chassis	GND	J2302-30	None	OPT_SSI_SYNC	J2301-30
TP6102	Ext_Mic_Pos_DP	J2302-31	TP1312	BT_UART_TX_1.8V	J2301-31
R2136	MAIN_DISPLAY_LED1	J2302-32	None	MACE_WAKEUP	J2301-32
SPKR-	Ext_SPKR_Neg_DP	J2302-33	TP1313	BT_UART_RX_1.8V	J2301-33
R2144	MAIN_DISD2	J2302-34	None	MACE_RESET	J2301-34
SPKR+	Ext_SPKR_Pos_DP	J2302-35	TP1314	BT_UART_RTS_1.8V	J2301-35
R2137	MAIN_DISPLAY_LED3	J2302-36			J2301-36
chassis	GND	J2302-37	TP1315	BT_UART_CTS_1.8V	J2301-37
R2192	MAIN_DISPLAY_LED4	J2302-38	R1101	TX_INHIBIT	J2301-38
TP6405	INT_SPKR_POS_MP	J2302-39	chassis	GND	J2301-39
R6424	F_DISP_BD_ID	J2302-40	C2115	EMERG_BTN	J2301-40
TP6405	INT_SPKR_POS_MP	J2302-41	R6622	USB1_POS_DP	J2301-41
chassis	GND	J2302-42	R6409	EXP_BRD_ID	J2301-42
TP6406	INT_SPKR_NEG_MP	J2302-43	R6623	USB1_NEG_DP	J2301-43
TP2112	RSW_A	J2302-44	R6113	4MHZ_MACE_CLK	J2301-44
TP6406	INT_SPKR_NEG_MP	J2302-45	chassis	GND	J2301-45
TP2113	RSW_B	J2302-46	chassis	GND	J2301-46
F_AUDIO_MICP	INT_MIC_POS_MP	J2302-47	None	KP_COL_0	J2301-47
TP6210	ON_OFF_SWITCH	J2302-48	C6567	V_SW_5	J2301-48
None	INT_MIC_NEG_MP	J2302-49	None	KP_COL_1	J2301-49
chassis	GND	J2302-50	C2126	KP_ROW_0	J2301-50
chassis	GND	J2302-51	None	KP_COL_2	J2301-51
chassis	GND	J2302-52	C2127	KP_ROW_1	J2301-52
E2244	Top_LightBar_Red_Led	J2302-53	None	KP_COL_3	J2301-53
chassis	GND	J2302-54	C2128	KP_ROW_2	J2301-54
E2245	Top_LightBar_Green_Led	J2302-55	None	KP_COL_4	J2301-55
R2246	TX_RX_AMBER_LED	J2302-56	C2129	KP_ROW_3	J2301-56
E2246	Top_LightBar_Amber_Led	J2302-57	E2242	KEYPAD_WHITE_LED	J2301-57

Table 7-2. Mainboard to Keypad flex connector interface Pin-Out (Continued)

Test Place	MainBoard		Test Place	MainBoard	
	Signal Name	Pin #		Signal Name	Pin #
R2244	TX_RX_RED_LED	J2302-58	C2130	KP_ROW_4	J2301-58
R2235	V_SW_5	J2302-59	chassis	GND	J2301-59
R2245	TX_RX_GREEN_LED	J2302-60	chassis	GND	J2301-60

Table 7-3. Main Keypad flex connector to main board connector Interface Pin-Out

Test Place	Keypad_Flex		Test Place	Keypad_Flex	
	Signal Name	Pin #		Signal Name	Pin #
	GND	P2000-1		GND	P2001-1
	F_DISP_RW	P2000-2		GND	P2001-2
	PTT	P2000-3		VBUS1	P2001-3
	F_DISP_DATA_0	P2000-4		SSI_MACE_TX_DIN	P2001-4
	SIDE_1	P2000-5		BT_AVR_RESET	P2001-5
	F_DISP_DATA_1	P2000-6		SSI_RED_RX_MACE	P2001-6
	SIDE_2	P2000-7		GND	P2001-7
	F_DISP_DATA_2	P2000-8		HIGH_SECURE_DATA_MACE	P2001-8
	MONITOR	P2000-9		GPS_BT_32KHZ	P2001-9
	F_DISP_DATA_3	P2000-10		SECURE_HIGH_NORM	P2001-10
	GND	P2000-11		GND	P2001-11
	F_DISP_DATA_4	P2000-12		SSI_BLACK_TX_MACE	P2001-12
	GPIO_3_RTS_FILLSENSE	P2000-13		BT_PTT	P2001-13
	F_DISP_DATA_5	P2000-14		SSI_BLACK_RX	P2001-14
	GPIO_2_DM_RXDC_FILLDATA	P2000-15		BT_SPARE_1.8	P2001-15
	F_DISP_DATA_6	P2000-16		GND	P2001-16
	GPIO_1_DP_TXDC_FILLREQ	P2000-17		ACC_SPKR_UNMUTE	P2001-17
	F_DISP_DATA_7	P2000-18		SSI_OPT_CLK	P2001-18
	GCAI_1WIRE_5V	P2000-19		AVR_STATUS_1.8V	P2001-19
	GND	P2000-20		GND	P2001-20
	GPIO_4_CTS_KEYFAIL_FILLCLK	P2000-21		USB_BOOT_1.8V	P2001-21
	F_DISP_RW_EN	P2000-22		V_EXT_1.85	P2001-22
	VBUS2	P2000-23		V_SW_3.60	P2001-23
	GND	P2000-24		VRTC	P2001-24
	VBUS2	P2000-25		BT_HOST_WAKEUP_1.8V	P2001-25
	F-DISP_DATA_CMD	P2000-26		V_SAFE	P2001-26
	GPIO_0	P2000-27		BT_WAKEUP_1.8V	P2001-27
	V_2.755D	P2000-28		KEYFAIL	P2001-28

Table 7-3. Main Keypad flex connector to main board connector Interface Pin-Out (Continued)

Test Place	Keypad_Flex		Test Place	Keypad_Flex	
	Signal Name	Pin #		Signal Name	Pin #
	EXT_MIC_NEG_DP	P2000-29		BT_SHUTDOWN	P2001-29
	GND	P2000-30		OPT_SSI_SYNC	P2001-30
	EXT_MIC_POS_DP	P2000-31		BT_UART_TX_1.8V	P2001-31
	MAIN_DISPLAY_LED1	P2000-32		MACE_WAKEUP	P2001-32
	EXT_SPKR_POS_DP	P2000-33		BT_UART_RX_1.8V	P2001-33
	MAIN_DISPLAY_LED2	P2000-34		MACE_RESET	P2001-34
	EXT_SPKR_NEG_DP	P2000-35		BT_UART_RTS_1.8V	P2001-35
	MAIN_DISPLAY_LED3	P2000-36		OMAP_RESET	P2001-36
	GND	P2000-37		BT_UART_CTS_1.8V	P2001-37
	MAIN_DISPLAY_LED4	P2000-38		TX_INHIBIT	P2001-38
	SPKR+	P2000-39		GND	P2001-39
	F_DISP_BD_ID	P2000-40		EMERG_BTN	P2001-40
	SPKR+	P2000-41		USB1_POS_DP	P2001-41
	GND	P2000-42		EXP_BRD_ID	P2001-42
	SPKR-	P2000-43		USB1_NED_DP	P2001-43
	SWITCH_KNOB_A	P2000-44		4MHZ_MACE_CLK	P2001-44
	SPKR-	P2000-45		GND	P2001-45
	SWITCH_KNOB_B	P2000-46		GND	P2001-46
	MIC+	P2000-47		KP_COL_0	P2001-47
	SWITCH_KNOB_C	P2000-48		V_SW_5	P2001-48
	MIC-	P2000-49		KP_COL_1	P2001-49
	GND	P2000-50		KP_ROW_0	P2001-50
	GND	P2000-51		KP_COL_2	P2001-51
	GND	P2000-52		KP_ROW_1	P2001-52
	SPEAKER_RED_1	P2000-53		KP_COL_3	P2001-53
	GND	P2000-54		KP_ROW_2	P2001-54
	SPEAKER_GREEN_1	P2000-55		KP_COL_4	P2001-55
	TX_RX_LED_AMBER	P2000-56		KP_ROW_3	P2001-56
	SPEAKER_AMBER_1	P2000-57		KEYPAD_WHITE_LED	P2001-57
	TX_RX_LED_RED	P2000-58		KP_ROW_4	P2001-58

Table 7-3. Main Keypad flex connector to main board connector Interface Pin-Out (Continued)

Test Place	Keypad_Flex		Test Place	Keypad_Flex	
	Signal Name	Pin #		Signal Name	Pin #
	SW_5+	P2000-59		GND	P2001-59
	TX_RX_LED_GREEN	P2000-60		GND	P2001-60

Table 7-4. Main Keypad flex connector to keypad board connector Interface Pin-Out

Test Place	Keypad_Flex		Test Place	Keypad_Flex	
	Signal Name	Pin #		Signal Name	Pin #
chassis	GND	P1000-1		GND	P1001-1
	F_DISP_RW	P1000-2		GND	P1001-2
	PTT	P1000-3		VBUS1	P1001-3
	F_DISP_DATA_0	P1000-4		SSI_MACE_TX_DI N	P1001-4
	SIDE_1	P1000-5		BT_AVR_RESET	P1001-5
	F_DISP_DATA_1	P1000-6		SSI_RED_RX_MAC E	P1001-6
	SIDE_2	P1000-7		GND	P1001-7
	F_DISP_DATA_2	P1000-8		HIGH_SECURE_D ATA_MACE	P1001-8
	MONITOR	P1000-9		GPS_BT_32KHZ	P1001-9
	F_DISP_DATA_3	P1000-10		SECURE_HIGH_N ORM	P1001-10
	GND	P1000-11		GND	P1001-11
	F_DISP_DATA_4	P1000-12		SSI_BLACK_TX_M ACE	P1001-12
	GPIO_3_RTS_FILLSENSE	P1000-13		BT_PTT	P1001-13
	F_DISP_DATA_5	P1000-14		SSI_BLACK_RX	P1001-14
	GPIO_2_DM_RXDC_FILL DATA	P1000-15		BT_SPARE_1.8	P1001-15
	F_DISP_DATA_6	P1000-16		GND	P1001-16
	GPIO_1_DP_TXDC_FILLR EQ	P1000-17		ACC_SPKR_UNMU TE	P1001-17
	F_DISP_DATA_7	P1000-18		SSI_OPT_CLK	P1001-18
	GCAI_1WIRE_5V	P1000-19		AVR_STATUS_1.8V	P1001-19
	GND	P1000-20		GND	P1001-20
	GPIO_4_CTS_KEYFAIL_F ILLCLK	P1000-21		USB_BOOT_1.8V	P1001-21
	F_DISP_RW_EN	P1000-22		V_EXT_1.85	P1001-22
	VBUS2	P1000-23		V_SW_3.60	P1001-23
	GND	P1000-24		VRTC	P1001-24
	VBUS2	P1000-25		BT_HOST_WAKEU P_1.8V	P1001-25



Table 7-4. Main Keypad flex connector to keypad board connector Interface Pin-Out (Continued)

Test Place	Keypad_Flex		Test Place	Keypad_Flex	
	Signal Name	Pin #		Signal Name	Pin #
	F-DISP_DATA_CMD	P1000-26		V_SAFE	P1001-26
	GPIO_0	P1000-27		BT_WAKEUP_1.8V	P1001-27
	V_2.755D	P1000-28		KEYFAIL	P1001-28
	EXT_MIC_NEG_DP	P1000-29		BT_SHUTDOWN	P1001-29
	GND	P1000-30		OPT_SSI_SYNC	P1001-30
	EXT_MIC_POS_DP	P1000-31		BT_UART_TX_1.8V	P1001-31
	MAIN_DISPLAY_LED1	P1000-32		MACE_WAKEUP	P1001-32
	EXT_SPKR_POS_DP	P1000-33		BT_UART_RX_1.8V	P1001-33
	MAIN_DISPLAY_LED2	P1000-34		MACE_RESET	P1001-34
	EXT_SPKR_NEG_DP	P1000-35		BT_UART_RTS_1.8V	P1001-35
	MAIN_DISPLAY_LED3	P1000-36		OMAP_RESET	P1001-36
	GND	P1000-37		BT_UART_CTS_1.8V	P1001-37
	MAIN_DISPLAY_LED4	P1000-38		TX_INHIBIT	P1001-38
	SPKR+	P1000-39		GND	P1001-39
	F_DISP_BD_ID	P1000-40		EMERG_BTN	P1001-40
	SPKR+	P1000-41		USB1_POS_DP	P1001-41
	GND	P1000-42		EXP_BRD_ID	P1001-42
	SPKR-	P1000-43		USB1_NED_DP	P1001-43
	SWITCH_KNOB_A	P1000-44		4MHZ_MACE_CLK	P1001-44
	SPKR-	P1000-45		GND	P1001-45
	SWITCH_KNOB_B	P1000-46		GND	P1001-46
	MIC+	P1000-47		KP_COL_0	P1001-47
	SWITCH_KNOB_C	P1000-48		V_SW_5	P1001-48
	MIC-	P1000-49		KP_COL_1	P1001-49
	GND	P1000-50		KP_ROW_0	P1001-50
	GND	P1000-51		KP_COL_2	P1001-51
	GND	P1000-52		KP_ROW_1	P1001-52
	SPEAKER_RED_1	P1000-53		KP_COL_3	P1001-53
	GND	P1000-54		KP_ROW_2	P1001-54

Table 7-4. Main Keypad flex connector to keypad board connector Interface Pin-Out (Continued)

Test Place	Keypad_Flex		Test Place	Keypad_Flex	
	Signal Name	Pin #		Signal Name	Pin #
	SPEAKER_GREEN_1	P1000-55		KP_COL_4	P1001-55
	TX_RX_LED_AMBER	P1000-56		KP_ROW_3	P1001-56
	SPEAKER_AMBER_1	P1000-57		KEYPAD_WHITE_LED	P1001-57
	TX_RX_LED_RED	P1000-58		KP_ROW_4	P1001-58
	SW_5+	P1000-59		GND	P1001-59
	TX_RX_LED_GREEN	P1000-60		GND	P1001-60

Table 7-5. Keypad board connector to mainboard Interface Pin-Out

Test Place	KeyBoard		Test Place	KeyBoard	
	Signal Name	Pin #		Signal Name	Pin #
chassis	GND	P1000-1	chassis	GND	P2001-1
none	F_DISP_RW	P1000-2	chassis	GND	P2001-2
C21	PTT	P1000-3	none	UNNAMED_1_C ONNJ60PIN_I67 1_X	P2001-3
none	F_DISP_DATA_0	P1000-4	none	SSI_MACE_TX_ DIN	P2001-4
C20	SIDE_1	P1000-5	none	UNNAMED_1_C ONNJ60PIN_I67 0_X	P2001-5
none	F_DISP_DATA_1	P1000-6	none	SSI_RED_RX_M ACE	P2001-6
C19	SIDE_2	P1000-7	chassis	GND	P2001-7
none	F_DISP_DATA_2	P1000-8	none	BLOCK_SSI_RE D	P2001-8
C18	MONITOR	P1000-9	none	32KHZ	P2001-9
none	F_DISP_DATA_3	P1000-10	none	MACE_SEC_CL R_MODE	P2001-10
chassis	GND	P1000-11	chassis	GND	P2001-11
none	F_DISP_DATA_4	P1000-12	none	SSI_BLACK_TX _MACE	P2001-12
R2007	GPIO_3_RTS_FILL SENSE	P1000-13	none	UNNAMED_1_C ONNJ60PIN_I66 6_X	P2001-13
none	F_DISP_DATA_5	P1000-14	none	SSI_BLACK_RX	P2001-14
E3	GPIO_2_DM_RXDC _FILLDATA	P1000-15	none	BT_SPARE_1.8	P2001-15
none	F_DISP_DATA_6	P1000-16	chassis	GND	P2001-16
E5	GPIO_1_DP_TXDC _FILLREQ	P1000-17	none	ACC_SPKR_UN MUTE_1.8	P2001-17
none	F_DISP_DATA_7	P1000-18	R2503	OPT_SSI_CLK	P2001-18
R2006	GCAI_1WIRE_5V	P1000-19	none	UNNAMED_1_C ONNJ60PIN_I66 3_X	P2001-19
chassis	GND	P1000-20	chassis	GND	P2001-20

Table 7-5. Keypad board connector to mainboard Interface Pin-Out (Continued)

Test Place	KeyBoard		Test Place	KeyBoard	
	Signal Name	Pin #		Signal Name	Pin #
R2005	GPIO_4_CTS_KEY FAIL_FILLCLK	P1000-21	none	UNNAMED_1_C ONNJ60PIN_I66 2_X	P2001-21
none	F_DISP_RW_EN	P1000-22	TP2005	VCC_1.85	P2001-22
D13	VBUS2	P1000-23	TP2007	VSW_3.6	P2001-23
chassis	GND	P1000-24	none	VRTC	P2001-24
none	VBUS2	P1000-25	none	BT_HOST_WAK EUP_1.8V	P2001-25
none	F- DISP_DATA_CMD	P1000-26	none	VSAVE	P2001-26
R2004	GPIO_0	P1000-27	none	BT_WAKEUP_1. 8V	P2001-27
none	V_2.755D	P1000-28	none	KEYFAIL	P2001-28
C17	EXT_MIC_NEG_DP	P1000-29	none	BT_SHUTDOW N_1.8V	P2001-29
chassis	GND	P1000-30	R2513	OPT_SSI_FSYN C	P2001-30
R2003	EXT_MIC_POS_DP	P1000-31	none	BT_UART_TX_1 .8V	P2001-31
none	MAIN_DISPLAY_LE D1	P1000-32	none	MACE_WAKEU P	P2001-32
R2013	EXT_SPKR_POS_ DP	P1000-33	none	BT_UART_RX_1 .8V	P2001-33
none	MAIN_DISPLAY_LE D2	P1000-34	none	MACE_RESET	P2001-34
R2014	EXT_SPKR_NEG_ DP	P1000-35	none	BT_UART_RTS_ 1.8V	P2001-35
none	MAIN_DISPLAY_LE D3	P1000-36	none	OMAP_RESET_ OUT	P2001-36
chassis	GND	P1000-37	none	BT_UART_CTS_ 1.8V	P2001-37
none	MAIN_DISPLAY_LE D4	P1000-38	none	TX_INHIBIT	P2001-38
C2	SPKR+	P1000-39	chassis	GND	P2001-39
none	F_DISP_BD_ID	P1000-40	none	EMERG_BTN	P2001-40
none	SPKR+	P1000-41	none	UNNAMED_1_C ONNJ60PIN_I65 2_X	P2001-41

Table 7-5. Keypad board connector to mainboard Interface Pin-Out (Continued)

Test Place	KeyBoard		Test Place	KeyBoard	
	Signal Name	Pin #		Signal Name	Pin #
chassis	GND	P1000-42	R2531	EXP_BRD_TYP E	P2001-42
C4	SPKR-	P1000-43	none	UNNAMED_1_C ONNJ60PIN_I65 1_X	P2001-43
E10	SWITCH_KNOB_A	P1000-44	none	MACE_CLOCK	P2001-44
none	SPKR-	P1000-45	chassis	GND	P2001-45
E7	SWITCH_KNOB_B	P1000-46	chassis	GND	P2001-46
E6	MIC+	P1000-47	C22	KP_COL_A	P2001-47
E4	SWITCH_KNOB_S	P1000-48	R2531	VCC5V	P2001-48
E2	MIC-	P1000-49	C24	KP_COL_B	P2001-49
chassis	GND	P1000-50	C27	KP_ROW_A	P2001-50
chassis	GND	P1000-51	C26	KP_COL_C	P2001-51
chassis	GND	P1000-52	C28	KP_ROW_B	P2001-52
none	SPEAKER_RED_1	P1000-53	C23	KP_COL_D	P2001-53
chassis	GND	P1000-54	C29	KP_ROW_C	P2001-54
none	SPEAKER_GREEN _1	P1000-55	C25	KP_COL_E	P2001-55
C11	TX_RX_LED_AMBE R	P1000-56	C30	KP_ROW_D	P2001-56
none	SPEAKER_AMBER _1	P1000-57	R19	KEYPAD_WHIT E_LED	P2001-57
C12	TX_RX_LED_RED	P1000-58	C31	KP_ROW_E	P2001-58
E2003	SW_5+	P1000-59	chassis	GND	P2001-59
C13	TX_RX_LED_GREE N	P1000-60	chassis	GND	P2001-60

Table 7-6. Keypad board connector to front kit flex Interface Pin-Out

Test Place	KeyBoard	
	Signal Name	Pin #
chassis	GND	P2000-1
None	F_DISP_RW	P2000-2
C21	PTT	P2000-3
None	F_DISP_DATA_0	P2000-4
C20	SIDE_1	P2000-5
None	F_DISP_DATA_1	P2000-6
C19	SIDE_2	P2000-7
None	F_DISP_DATA_2	P2000-8
C18	MONITOR	P2000-9
None	F_DISP_DATA_3	P2000-10
chassis	GND	P2000-11
None	F_DISP_DATA_4	P2000-12
R2007	GPIO_3_RTS_FILLSENSE	P2000-13
None	F_DISP_DATA_5	P2000-14
E3	GPIO_2_DM_RXDC_FILLDATA	P2000-15
None	F_DISP_DATA_6	P2000-16
E5	GPIO_1_DP_TXDC_FILLREQ	P2000-17
None	F_DISP_DATA_7	P2000-18
R2006	GCAI_1WIRE_5V	P2000-19
chassis	GND	P2000-20
R2005	GPIO_4_CTS_KEYFAIL_FILLCLK	P2000-21
None	F_DISP_RW_EN	P2000-22
C2009	VBUS2	P2000-23
chassis	GND	P2000-24
None	VBUS2	P2000-25
None	F-DISP_DATA_CMD	P2000-26
R2004	GPIO_0	P2000-27
None	V_2.755D	P2000-28
E14	EXT_MIC_NEG_DP	P2000-29
None	OMAP_RESET_OUT	P2000-30

Table 7-6. Keypad board connector to front kit flex Interface Pin-Out (Continued)

Test Place	KeyBoard	
	Signal Name	Pin #
C16	EXT_MIC_POS_DP	P2000-31
None	MAIN_DISPLAY_LED1	P2000-32
R2013	EXT_SPKR_POS_DP	P2000-33
None	MAIN_DISPLAY_LED2	P2000-34
R2014	EXT_SPKR_NEG_DP	P2000-35
None	MAIN_DISPLAY_LED3	P2000-36
chassis	GND	P2000-37
None	MAIN_DISPLAY_LED4	P2000-38
C2	SPKR+	P2000-39
None	F_DISP_BD_ID	P2000-40
None	SPKR+	P2000-41
chassis	GND	P2000-42
C4	SPKR-	P2000-43
D3	SWITCH_KNOB_A	P2000-44
None	SPKR-	P2000-45
D4	SWITCH_KNOB_B	P2000-46
D5	MIC+	P2000-47
D6	SWITCH_KNOB_S	P2000-48
D7	MIC-	P2000-49
None	VCC_1.85	P2000-50
chassis	GND	P2000-51
None	NFC	P2000-52
None	SPEAKER_RED_1	P2000-53
chassis	GND	P2000-54
None	SPEAKER_GREEN_1	P2000-55
C11	TX_RX_LED_AMBER	P2000-56
None	SPEAKER_AMBER_1	P2000-57
C12	TX_RX_LED_RED	P2000-58
E2003	SW_5+	P2000-59
C13	TX_RX_LED_GREEN	P2000-60

Table 7-7. Front kit connector Interface Pin-Out

Test Place	Front Kit Flex	
	Signal Name	Pin #
	GND	J1-1
	GND	J1-2
	SIDE_1	J1-3
	PTT	J1-4
	GND	J1-5
	GND	J1-6
	SIDE_2	J1-7
	MONITOR	J1-8
	GND	J1-9
	GND	J1-10
	GND	J1-G1
	GND	J1-G2
	GND	J1-G3
	GND	J1-G4

Test Place	Front Kit Flex	
	Signal Name	Pin #
	GND	J2-1
	SPEAKER_RED_1	J2-2
	GPIO_3_RTS_FILLSENSE	J2-3
	SPEAKER_GREEN_1	J2-4
	GPIO_2_DM_RXDC_FILLDATA	J2-5
	SPEAKER_AMBER_1	J2-6
	GPIO_1_DP_TXDC_FILLREQ	J2-7
	SW_5+	J2-8
	GCAI_1WIRE_5V	J2-9
	SW_5+	J2-10
	GPIO_4_CTS_KEYFAIL_FILLCLK	J2-11



Test Place	Front Kit Flex	
	Signal Name	Pin #
	TX_RX_LED_AMBER	J2-12
	GPIO_0	J2-13
	TX_RX_LED_RED	J2-14
	GND	J2-15
	TX_RX_LED_GREEN	J2-16
	EXT_MIC_NEG_DP	J2-17
	GND	J2-18
	EXT_MIC_POS_DP	J2-19
	MIC+	J2-20
	GND	J2-21
	MIC-	J2-22
	EXT_SPKR_POS_DP	J2-23
	GND	J2-24
	EXT_SPKR_NEG_DP	J2-25
	VBUS2	J2-26
	GND	J2-27
	VBUS2	J2-28
	NFC	J2-29
	GND	J2-30
	GND	J2-G1
	GND	J2-G2
	GND	J2-G3
	GND	J2-G4

Test Place	Front Kit Flex	
	Signal Name	Pin #
	GND	J3-1
	V_2.775D	J3-2
	F_DISP_RW	J3-3
	GND	J3-4
	F_DISP_DATA_1	J3-5
	F_DISP_DATA_3	J3-6
	F_DISP_DATA_5	J3-7
	F_DISP_DATA_7	J3-8
	GND	J3-9
	F_DISP_DATA_CMD	J3-10
	GND	J3-11
	SW_5+	J3-12
	MAIN_DISPLAY_LED3	J3-13
	F_DISP_BD_ID	J3-14
	GND	J3-15
	GND	J3-16
	MAIN_DISPLAY_LED4	J3-17
	MAIN_DISPLAY_LED2	J3-18
	MAIN_DISPLAY_LED1	J3-19
	OMAP_RESET	J3-20
	GND	J3-21
	F_DISP_RW_EN	J3-22
	GND	J3-23
	F_DISP_DATA_6	J3-24
	F_DISP_DATA_4	J3-25
	F_DISP_DATA_2	J3-26
	F_DISP_DATA_0	J3-27
	GND	J3-28
	V_EXT_1.85	J3-29
	GND	J3-30

Test Place	Front Kit Flex	
	Signal Name	Pin #
	GND	P1-1
	F_DISP_RW	P1-2
	PTT	P1-3
	F_DISP_DATA_0	P1-4
	SIDE_1	P1-5
	F_DISP_DATA_1	P1-6
	SIDE_2	P1-7
	F_DISP_DATA_2	P1-8
	MONITOR	P1-9
	F_DISP_DATA_3	P1-10
	GND	P1-11
	F_DISP_DATA_4	P1-12
	GPIO_3_RTS_FILLSENSE	P1-13
	F_DISP_DATA_5	P1-14
	GPIO_2_DM_RXDC_FILLDATA	P1-15
	F_DISP_DATA_6	P1-16
	GPIO_1_DP_TXDC_FILLREQ	P1-17
	F_DISP_DATA_7	P1-18
	GCAI_1WIRE_5V	P1-19
	GND	P1-20
	GPIO_4_CTS_KEYFAIL_FILLCLK	P1-21
	F_DISP_RW_EN	P1-22
	VBUS2	P1-23
	GND	P1-24
	VBUS2	P1-25
	F_DISP_DATA_CMD	P1-26
	GPIO_0	P1-27
	V_2.775D	P1-28
	EXT_MIC_NEG_DP	P1-29
	OMAP_RESET	P1-30

Test Place	Front Kit Flex	
	Signal Name	Pin #
	EXT_MIC_POS_DP	P1-31
	MAIN_DISPLAY_LED1	P1-32
	EXT_SPKR_POS_DP	P1-33
	MAIN_DISPLAY_LED2	P1-34
	EXT_SPKR_NEG_DP	P1-35
	MAIN_DISPLAY_LED3	P1-36
	GND	P1-37
	MAIN_DISPLAY_LED4	P1-38
	SPKR+	P1-39
	F_DISP_BD_ID	P1-40
LS1	SPKR+	P1-41
	GND	P1-42
LS1	SPKR-	P1-43
C2	SWITCH_KNOB_A	P1-44
	SPKR-	P1-45
C3	SWITCH_KNOB_B	P1-46
	MIC+	P1-47
R4	PUSH_BUTTON_S	P1-48
	MIC-	P1-49
	V_EXT_1.85	P1-50
	GND	P1-51
	NFC	P1-52
	SPEAKER_RED_1	P1-53
	GND	P1-54
	SPEAKER_GREEN_1	P1-55
	TX_RX_LED_AMBER	P1-56
	SPEAKER_AMBER_1	P1-57
	TX_RX_LED_RED	P1-58
	SW_5+	P1-59
	TX_RX_LED_GREEN	P1-60

Table 7-8. GCAI flex connector Interface Pin-Out

Test Place	GCAI	
	Signal Name	Pin #
	GND	P1-1
	LIGHTBAR_RED	P1-2
	GCAI_RTS_GPIO3	P1-3
	LIGHTBAR_GREEN	P1-4
	GCAI_USB_N_GPIO2	P1-5
	LIGHTBAR_AMBER	P1-6
	GCAI_USB_P_GPIO1	P1-7
	V_SW_5	P1-8
	GCAI_ONE_WIRE	P1-9
	V_SW_5	P1-10
	GCAI_GPIO4_CTS	P1-11
	TX_RX_LED_AMBER	P1-12
	GCAI_GPIO0	P1-13
	TX_RX_LED_RED	P1-14
	GND	P1-15
	TX_RX_LED_GREEN	P1-16
	GCAI_EXT_MIC_N	P1-17
	GND	P1-18
	GCAI_EXT_MIC_P	P1-19
	UNNAMED_1_CONNP30PIN4GND_I168_X	P1-20
	GND	P1-21
	UNNAMED_1_CONNP30PIN4GND_I166_X	P1-22
	GCAI_EXT_SPKR_P	P1-23
	GND	P1-24
	GCAI_EXT_SPKR_N	P1-25
	GCAI_VBUS_5V	P1-26
	GND	P1-27
	GCAI_VBUS_5V	P1-28
	UNNAMED_1_CONNP30PIN4GND_I159_X	P1-29
	GND	P1-30

*Table 7-8. GCAI flex connector Interface Pin-Out (Continued)*

Test Place	GCAI	
	Signal Name	Pin #
	GND	P1-G1
	GND	P1-G2
	GND	P1-G3
	GND	P1-G4

Table 7-9. PTT flex connector Interface Pin-Out

Test Place	PTT	
	Signal Name	Pin #
	GND	P1-1
	GND	P1-2
	CONN_SB1	P1-3
	CONN_INT_PTT	P1-4
	GND	P1-5
	GND	P1-6
	CONN_SB2	P1-7
	MONITOR	P1-8
	GND	P1-9
	GND	P1-10
	GND	P1-G1
	GND	P1-G2
	GND	P1-G3
	GND	P1-G4

Table 7-10. Overall GPIO pin functions

Signal Name	Description	Pin or Ball #	Active State	SW Initialized		HW Reset		
				Direction	*PU	State	Direction	*PU or PD
NC	NC	M8		Output		0	Output	
codec_cs	DSP SPI chip select for TI dual CODEC	Y1	0	Output		1	Output	
abacus_cs	DSP SPI chipselect for Abacus IC	L3	0	Output		0	Output	
trident_cs	DSP SPI chipselect for Trident IC	V6	0	Output		0	Output	
synthesizer_lock	RF synthesizer lock detect	V15	1=Lock	Input	None		Input	None
f2_timer_dmcs	Timer output compare for DMCS or SYNCB	M20	1	Output			Input	Pull-down
mako_tx_rx	Trigger for Mako DAC ramp	L14	1=TX	Output			*Input	None
On_Off_Switch	Radio On_Off detection	G19	0	Output		0	Output	
option_spi_cs	Option board SPI chip select	W9	0	Output		0	Output	
dac_cs	RF DAC chip select	T19	0	Output			Input	Pull-down
push_to_talk	Push to talk button input	T20	0	Input	None		Input	Pull-down
mako_intx	Mako main interrupt	P15	0	Input	None		Input	None
mako_usb_intx	Mako USB interrupt	AA9	0	Input	None		Input	Pull-down
mako_option_intx	Mako Option interrupt	Y12	0	Input	None		Input	None
	Unused and Unwired OMAP Pin	M14		Input	Pull-down		Input	Pull-down
top_display_cs	Top LCD SPI chip select	P3	0	Output		1	Output	
	Unused and Unwired OMAP Pin	V19		Output		0	Output	
mako_cs	Mako IC SPI chip select	N15	1	Output			Input	Pull-down
mortable	Specifies Mobile or Portable hardware	W13	0=Portable	Input	None	0	Output	
gcai_gpio3	GPIO3	AA15		Input	None	0	Output	



Table 7-10. Overall GPIO pin functions (Continued)

Signal Name	Description	Pin or Ball #	Active State	SW Initialized		HW Reset		
				Direction	*PU	State	Direction	*PU or PD
gcai_gpio4	GPIO4	R14		Input	None		Input	Pull-down
bluetooth_ptt	PTT signal from Bluetooth AVR	Y5	0=Pressed	Input	Pull-up		Input	Pull-down
f2_timer_input_capture	"Receives one of three timing signals mux'ed through CPLD - Abacus Sync, DMCS, Ramp DAC Trigger.	"P20		Input	Pull-down		Input	Pull-down
bt_avr_status	AVR status read by OMAP	P18		Input	Pull-up		Input	Pull-down
enc_wakeup	MACE encryption wakeup	A6	1	Output		1	Output	
enc_reset	MACE encryption reset	B6	0	I/O	Pull-up	1	I/O	Pull-up
5V_pwm_en	Forces SW5 to PWM	P14	1	Output	Pull-up	0	Output	Pull-up
gcai_gpio2	GPIO2	C13		Input	None		Input	None
gcai_gpio1	GPIO1	C11		Input	None		Input	None
gcai_gpio0	GPIO0	M7		Input	None		Input	None
gcai_vbus_i_limit	Current limit select for GCAI VBUS	C6	1=500mA	Output		0	Output	
f2_paramon_mon	Factory use to test F2 transmit timing. Allows TX/RX signal to appear on GCAI GPIO3.	C5	1=Factory Test	Output	Pull-up	0	Output	Pull-up
top_disp_data_ctrl	Select for data or control on top display(Not Used in WWP)	P12	1=data	Output		0	Output	
top_display_reset	Reset for color front display( Not Used in WWP)	M12	0	Output		1	Output	
	Unused and Unwired OMAP Pin	N13		Output		0	Output	
	Unused and Unwired OMAP Pin	M14		Output		0	Output	
	Unused and Unwired OMAP Pin	N14		Output		0	Output	
gps_shutdown	Shutdown to GPS	D12	0	Output		0	Output	

Table 7-10. Overall GPIO pin functions (Continued)

Signal Name	Description	Pin or Ball #	Active State	SW Initialized		HW Reset		
				Direction	*PU	State	Direction	*PU or PD
rf_reset	Reset to RF board	A8	0	Output		0	Output	
	Unused and Unwired OMAP Pin	B7		Output		0	Output	
	Unused and Unwired OMAP Pin	B8		Output		1	Output	
		C7	0	Output	None	1	Output	None
	Unused and Unwired OMAP Pin	J2		Input	None		Input	None
	Unused and Unwired OMAP Pin	M8		Input	None		Input	None
bt_usb_boot	Bluetooth 'boot' signal	P8	0	Output	None		Input	None
bt_avr_reset	Bluetooth AVR32 Reset signal	M13	0	Output	None		Input	
key_fail_switch	Enables keyload path for MACE secure.	A12	1	Output		0	Output	
NC	Not Used	M6	TBD	Input	Pul-lup		Input	None
NC	Not Used	N11		Input	None		Input	3
NC	Not Used	K14		Input	None		Input	None
NC	Not Used	J13		Input	None		Input	None
NC	Not Used	K13		Input	None		Input	None
emergency	Emergency pushbutton	N7	0=Pressed	Input	Pul-lup		Input	Pul-lup
NC	NC	N6		Input	Pul-lup		Input	Pul-lup
NC	NC	N8		Input	Pul-lup		Input	Pul-lup
sb2	Side button #2	N5	0=Pressed	Input	Pul-lup		Input	Pul-lup
sb1	Side button #1	M5	0=Pressed	Input	Pul-lup		Input	Pul-lup
monitor	Monitor button	P11	0=Pressed	Input	Pul-lup		Input	Pul-lup
cpld_ver4	CPLD version identifier bit 4	(REG)		Register			Register	

Table 7-10. Overall GPIO pin functions (Continued)

Signal Name	Description	Pin or Ball #	Active State	SW Initialized		HW Reset		
				Direction	*PU	State	Direction	*PU or PD
cpld_ver3	CPLD version identifier bit 3	(REG)		Register			Register	
cpld_ver2	CPLD version identifier bit 2	(REG)		Register			Register	
cpld_ver1	CPLD version identifier bit 1	(REG)		Register			Register	
cpld_ver0	CPLD version identifier bit 0	(REG)		Register			Register	
board_id8	Controller Board ID bit 8	H12		Input	Pull-up		Input	Pull-up
board_id7	Controller Board ID bit 7	H13		Input	Pull-up		Input	Pull-up
board_id6	Controller Board ID bit 6	G13		Input	Pull-up		Input	Pull-up
board_id5	Controller Board ID bit 5	F13		Input	Pull-up		Input	Pull-up
board_id4	Controller Board ID bit 4	D13		Input	Pull-up		Input	Pull-up
board_id3	Controller Board ID bit 3	E13		Input	Pull-up		Input	Pull-up
board_id2	Controller Board ID bit 2	C14		Input	Pull-up		Input	Pull-up
board_id1	Controller Board ID bit 1	D14		Input	Pull-up		Input	Pull-up
board_id0	Controller Board ID bit 0	F14		Input	Pull-up		Input	Pull-up
none	OMAP GPIO1 determines default state of some EMIFS pins. Latched on rising edge of PWR_ON_RESET. Pulled low on PCB	R19		Input	Pull-down	0	Input	Pull-down
none	"Unused, defaults to UART2.BCLK in reset mode 0. Pulldown on PCB	"Y4		Output	None	0	Output	None

Table 7-10. Overall GPIO pin functions (Continued)

Signal Name	Description	Pin or Ball #	Active State	SW Initialized		HW Reset		
				Direction	*PU	State	Direction	*PU or PD
omap_mpu_boot	Pin pulled high on PCB to select external boot on EMIFS CS3 (flash memory)	J20		Input	None	1	Input	None
reset_mode	Determines reset mode of OMAP. Latched on rising edge of PWR_ON_RESET. Pulled low on PCB (mode 0).	P12		Input	None	0	Input	None
mako_resetx	"Master cold reset input for entire 1710 chip, controlled by Mako IC	"R12	0	Input	None		Input	None
mako_resetx	"MPU (ARM9) subsystem reset input, tied to PWRON_RESET (R12) on PCB	"U20	0	Input	None		Input	None
omap_reset	"Reset output from OMAP used for CODEC, CPLD, Front Display, Lighting Controllers, MACE Tamper ckt.	"AA20	0	Output	None	0	Output	None
RSW_Int	Rotary Interrupt to OMAP	Y10		Input	Pull-down		Input	Pull-down
RSW_A	Rotary knob input to OMAP	V11		Input	Pull-down		Input	Pull-down
RSW_B	Rotary knob input to OMAP	R11		Input	Pull-down		Input	Pull-down
NC	NC	R18		Input	Pull-down		Input	Pull-down
NC	NC	Y8		I/O	Pull-up		Input	Pull-down
NC	NC	W8		I/O	Pull-up		Input	Pull-down
NC	NC	V8		I/O	Pull-up		Input	Pull-down
NC	NC	W15		I/O	Pull-up		Input	Pull-down

Table 7-10. Overall GPIO pin functions (Continued)

Signal Name	Description	Pin or Ball #	Active State	SW Initialized		HW Reset		
				Direction	*PU	State	Direction	*PU or PD
NC	NC	R10		I/O	Pull-up		Input	Pull-down
uart1_tx	UART1 Serial Transmit Data	Y14		Output	None	0	Output	Pull-down
uart1_rx	UART1 Serial Receive Data	V14		Input	Pull-up		Input	Pull-down
uart1_rts	UART1 Request To Send (output)	AA15		Output	None	0	Output	Pull-down
uart1_cts	UART1 Clear To Send (input)	R14		Input	Pull-up		Input	Pull-down
uart3_tx	UART3 Serial Transmit Data	M18		Output	None	0	Output	Pull-down
uart3_rx	UART3 Serial Receive Data	L14		Input	Pull-up		Input	Pull-down
usb1_txen	USB1 Transmit Enable	W16	0	Output	None		Input	None
usb1_data	USB1 Bidirectional Data	W14		I/O	None	0	Output	Pull-down
usb1_se0	USB1 Bidirectional Single Ended Zero	R13		I/O	None	U	Output	Pull-down
usb0_txen	USB0 Transmit Enable	W4	0	Output	None	1	Output	Pull-down
usb0_data	USB0 Bidirectional Data	P9		I/O	None		Input	None
usb0_se0	USB0 Bidirectional Single Ended Zero	R8		I/O	None		Input	None
ssi_omap_clock	SSI Clock into OMAP	G21		Input	None		Input	None
ssi_omap_sync	SSI Sync into OMAP	H15		Input	None		Input	None
ssi_omap_txd	SSI Serial Data from CODEC	H20		Input	None		Input	Pull-down
ssi_omap_rxd	SSI Serial Data to CODEC	H18		Output	None	0	Output	Pull-down
spi_arm_clk	ARM SPI Clock from OMAP	U19		I/O	Pull-down		Input	None
spi_arm_mosi	ARM SPI Data from OMAP	W21		I/O	Pull-down	0	Output	Pull-down
spi_arm_miso	ARM SPI Data into OMAP	U18		Input	Pull-down		Input	Pull-down

Table 7-10. Overall GPIO pin functions (Continued)

Signal Name	Description	Pin or Ball #	Active State	SW Initialized		HW Reset		
				Direction	*PU	State	Direction	*PU or PD
spi_dsp_clk	DSP SPI Clock from OMAP	N14		I/O	Pull-down		Input	None
spi_dsp_mosi	DSP SPI Data from OMAP	P14		Output	Pull-down		Input	Pull-down
spi_dsp_miso	DSP SPI Data into OMAP	AA17		Input	Pull-down		Input	Pull-down
gps_uart_tx	UART Data from OMAP to GPS IC	M18		Output	None	0	Output	Pull-down
gps_uart_rx	UART Data from GPS IC to OMAP	R9		Input	Pull-up		Input	Pull-down
16.8_mhz_clk	Timer Reference Clock Input	N18		Input	None		Input	Pull-down
trident_ssi[0]	Transmit SSI Clock from RF Board	Y6		Input	Pull-down		Input	Pull-down
trident_ssi[1]	Transmit SSI Frame Sync from RF Board	W7		Input	Pull-down		Input	Pull-down
trident_ssi[2]	Transmit SSI Data from OMAP	AA5		Output	Pull-down	0	Output	Pull-down
abacus_ssi[0]	Receive SSI Clock from RF Board	V7		I/O	Pull-down		Input	None
abacus_ssi[1]	Receive SSI Frame Sync from RF Board	W6		I/O	Pull-down		Input	None
abacus_ssi[2]	Receive SSI Data from RF Board	P10		Input	Pull-down		Input	Pull-down
scl	I2C Clock	T18		I/O	None		Input	None
sda	I2C Data	V20		I/O	None		Input	None
rtck	JTAG Clock from Controller	Y17		I/O	None	U	Unknown	None
tck	JTAG Clock from JTAG box to Controller	W18		Input	None		Input	Pull-down
ntrst	JTAG Reset from JTAG box	Y18		Input	None		Input	
omap_tms	JTAG Test Mode Select from JTAG box	V17		Input			Input	Pull-down
omap_tdo	JTAG Data out from Controller	AA19		Output		0	Output	None

Table 7-10. Overall GPIO pin functions (Continued)

Signal Name	Description	Pin or Ball #	Active State	SW Initialized		HW Reset		
				Direction	*PU	State	Direction	*PU or PD
tdi	JTAD Data in from JTAG box to Controller	Y19		Input			Input	Pull-down
nemu0	"Emulation pin 0, not used, pulled high on PCB	"V16		I/O			Input	Pull-up
nemu1	"Emulation pin 1, not used, pulled high on PCB	"W17		I/O			Input	Pull-up

Note:

- \* PU = Pull Up
- \* PD = Pull Down

Table 7-11. Primary IC Reference Designator

Primary IC	Reference Designator	Component Location
OMAP 1710	U6302	MAIN BOARD (top-side)
DDR memory	U6301	MAIN BOARD (top-side)
FLASH	U6304	MAIN BOARD (top-side)
CPLD	U6101	MAIN BOARD (top-side)
Audio Codec	U6405	MAIN BOARD (top-side)
Front Lighting controller	U2204	MAIN BOARD (top-side)
MAKO	U6501	MAIN BOARD (bottom-side)
Top Lighting controller	U2201	MAIN BOARD (bottom-side)
Class D Audio PA audio controller	U2101	MAIN BOARD (bottom-side)
BLUETOOTH & GPS combination IC	U2401	MAIN BOARD (bottom-side)
Battery contact springs	M101	MAIN BOARD (bottom-side)
VCO (UHF1)	Q3123	MAIN BOARD (bottom-side)
VCO (UHF1)	Q3156	MAIN BOARD (bottom-side)
VCO (7800)	Q3038	MAIN BOARD (bottom-side)
VCO (7800)	Q3062	MAIN BOARD (bottom-side)
VCO (7800)	Q3039	MAIN BOARD (bottom-side)
PA Final stage device	Q1001	MAIN BOARD (bottom-side)
Mixer	U507	MAIN BOARD (top-side)
Trident	U702	MAIN BOARD (top-side)
Abacus III	U601	MAIN BOARD (top-side)



## Chapter 8 Schematics, Boards Overlays, and Parts Lists

This chapter contains the schematics, board overlays, and parts lists for the APX 1000 radio. Use them in conjunction with the theory of operation and the troubleshooting procedures, charts, and waveforms to isolate a problem to the component level.

When schematics are viewed on line or as a PDF file, colors can be seen that denote power and signal paths. The red color denotes voltage paths, blue denotes the receive path, and green denotes the transmit path.

The following tables list the pages where the schematics and board overlays for the APX 1000 radio are found.

### 8.1 List of Transceiver Schematics and Board Overlays

Table 8-1. List of Transceiver Schematics and Board Overlays

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## 8.2 Transceiver (RF) Boards: VHF (84012618001)

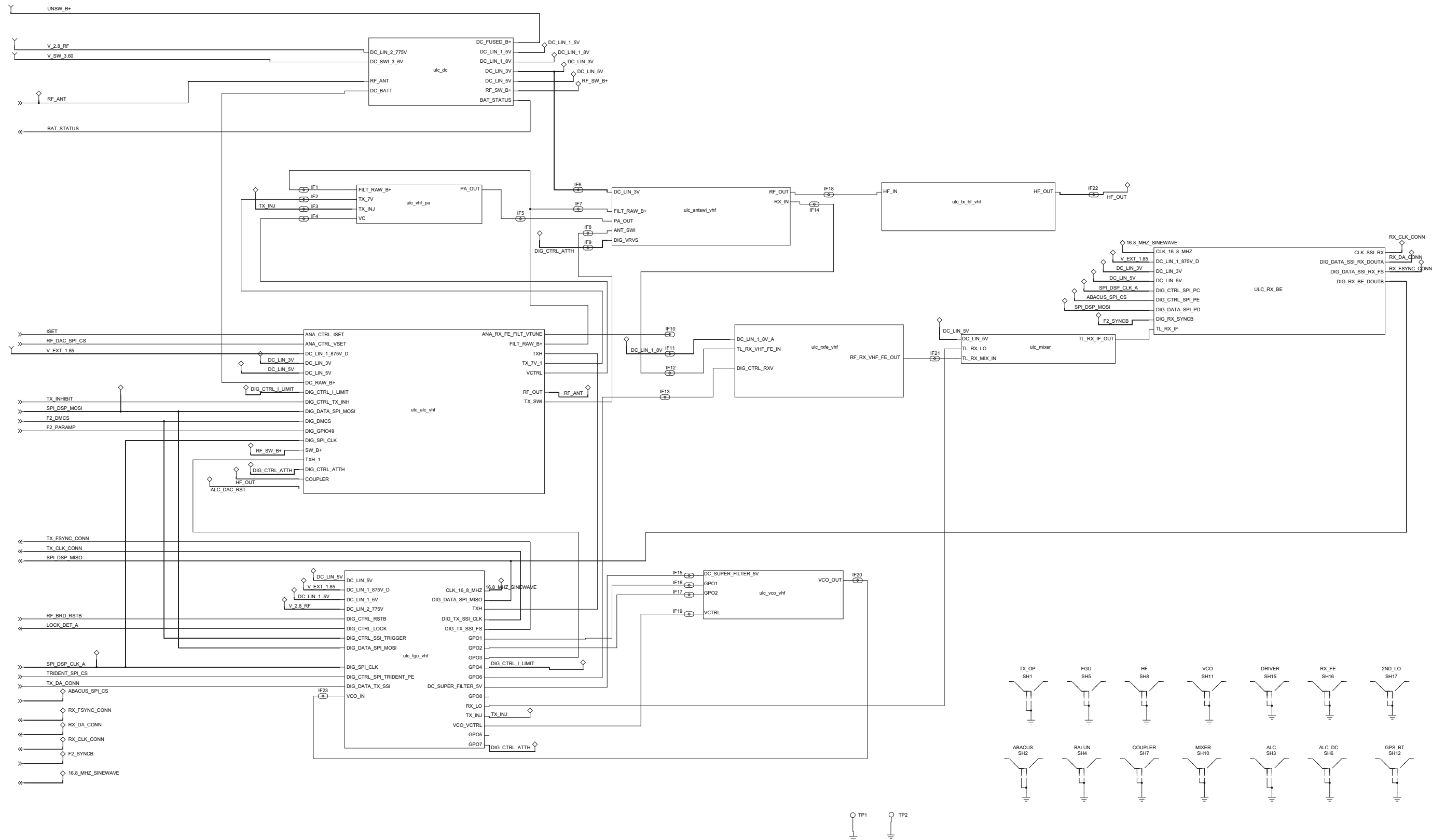


Figure 8-1. Transceiver (RF) Mainboard Overall Schematic

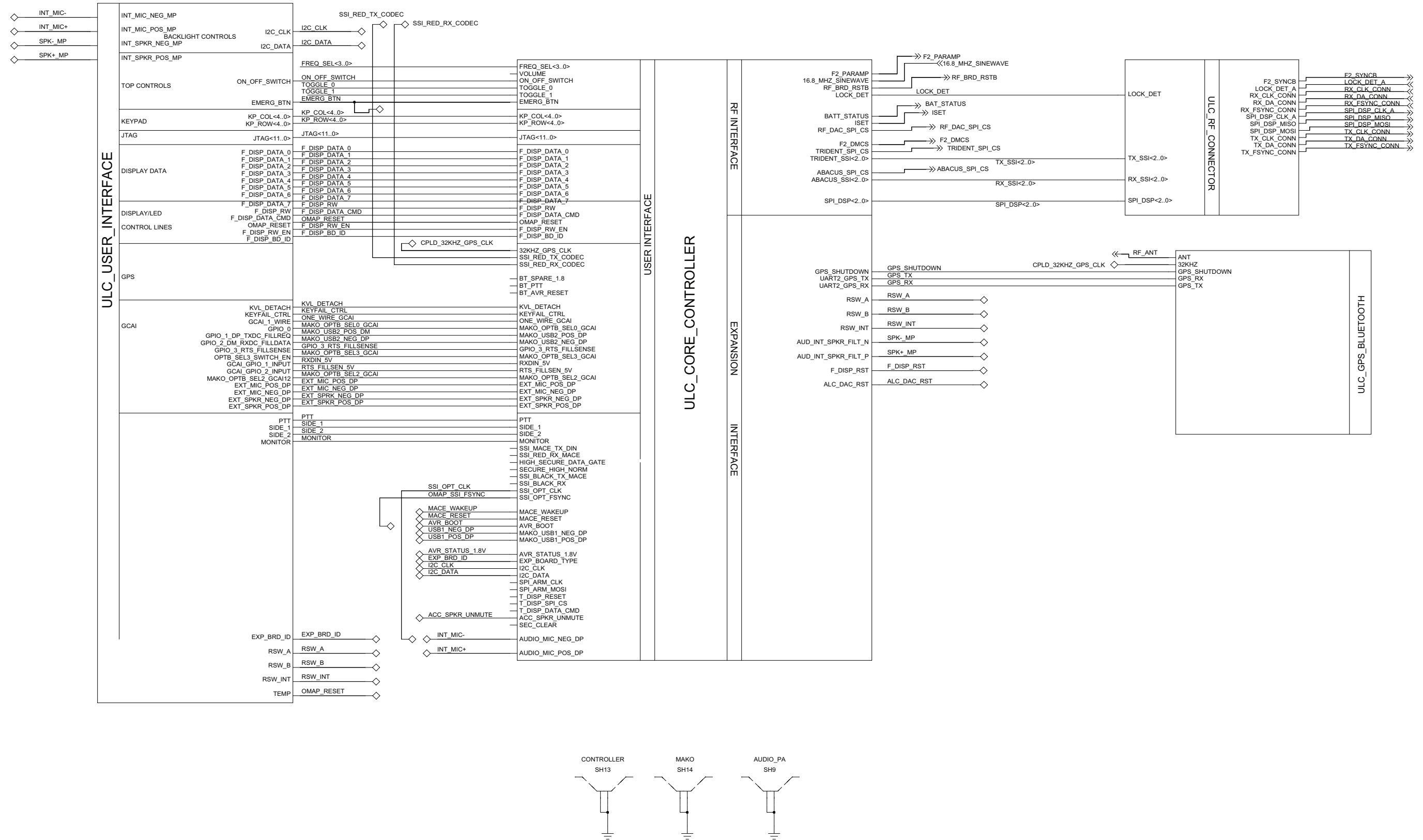


Figure 8-2. Controller Mainboard Circuit

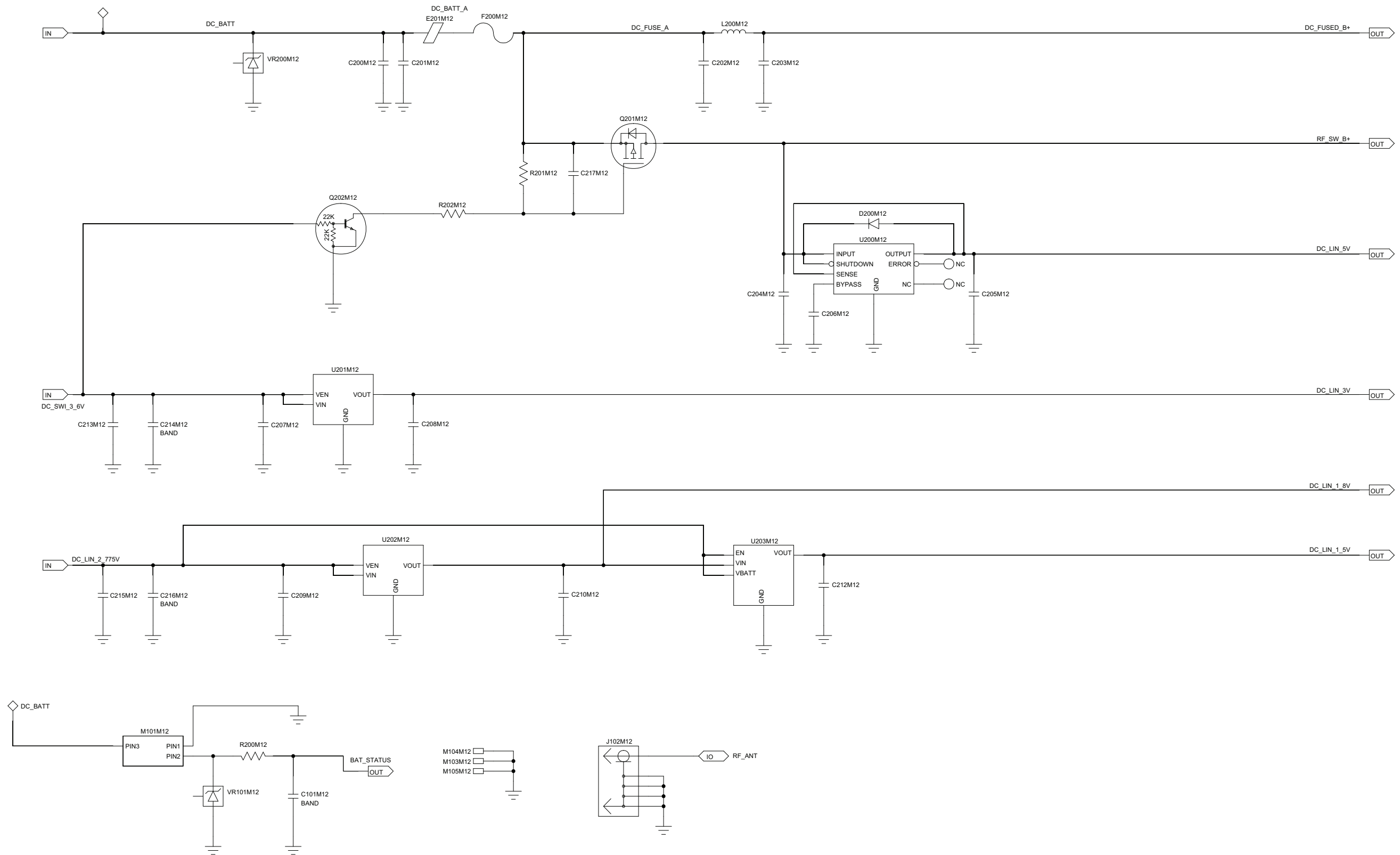


Figure 8-3. DC Circuit

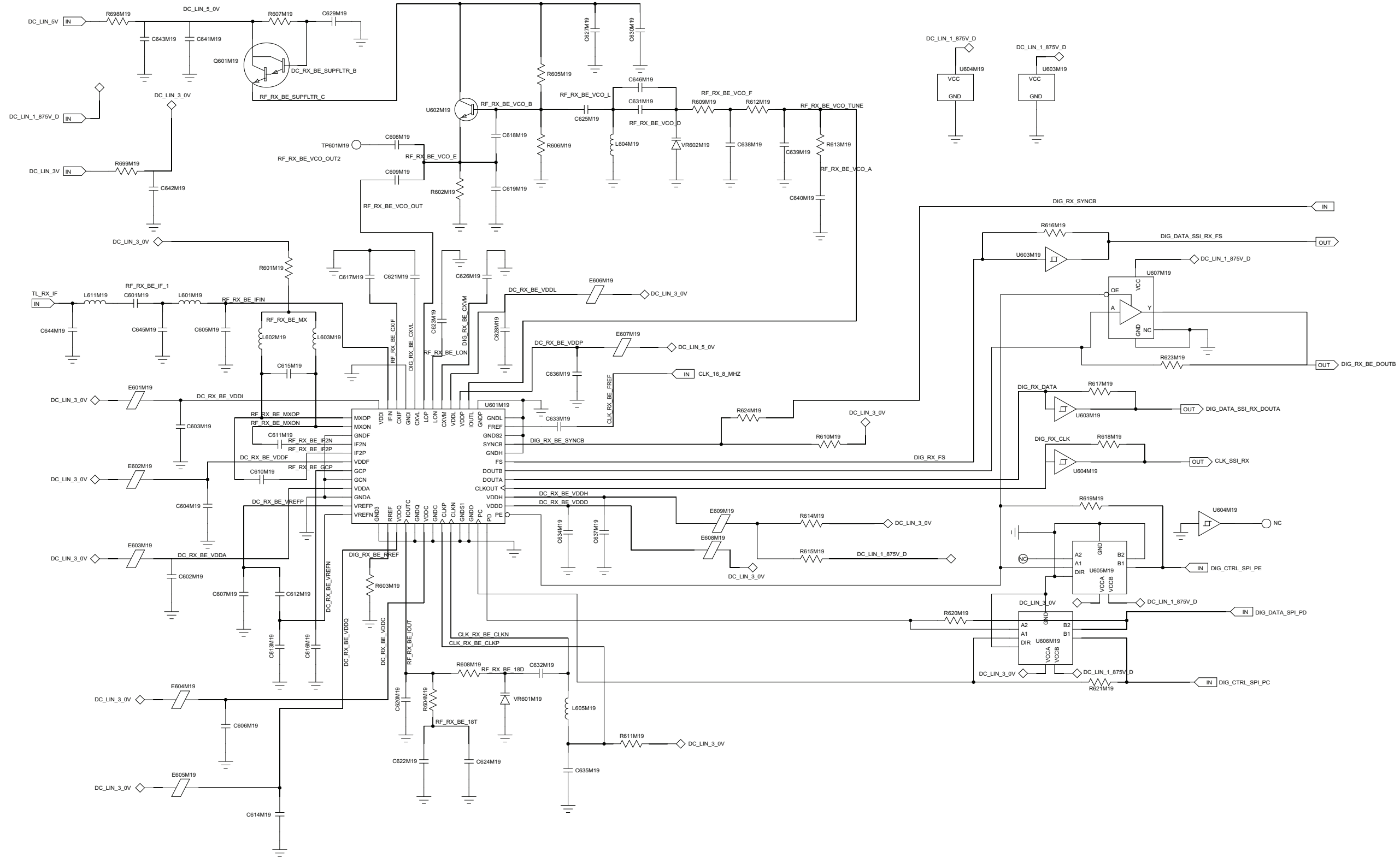


Figure 8-4. Receiver Back End Circuit

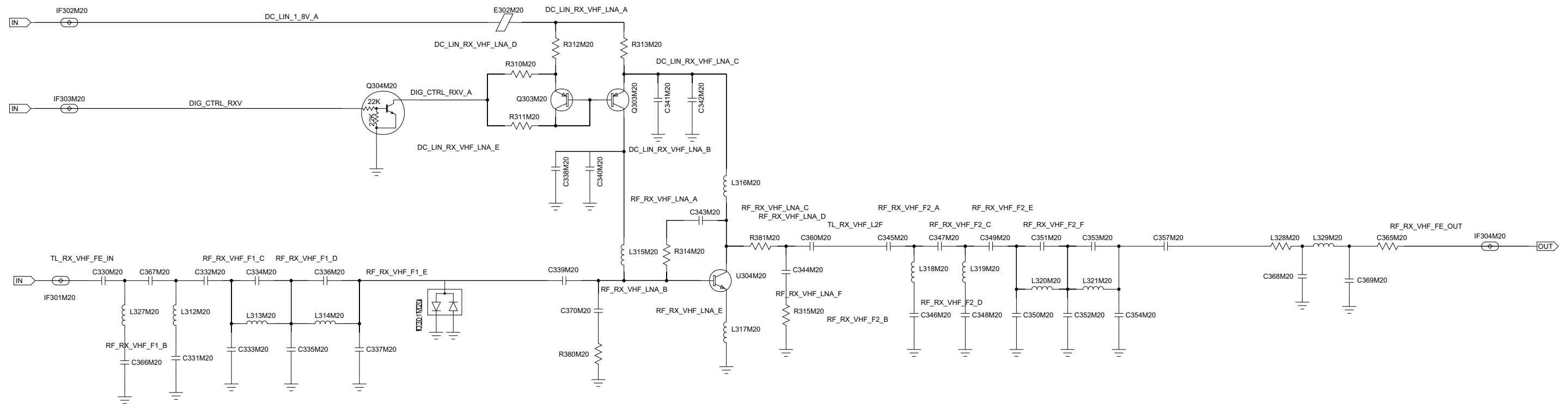


Figure 8-5. Receiver Front End Circuit

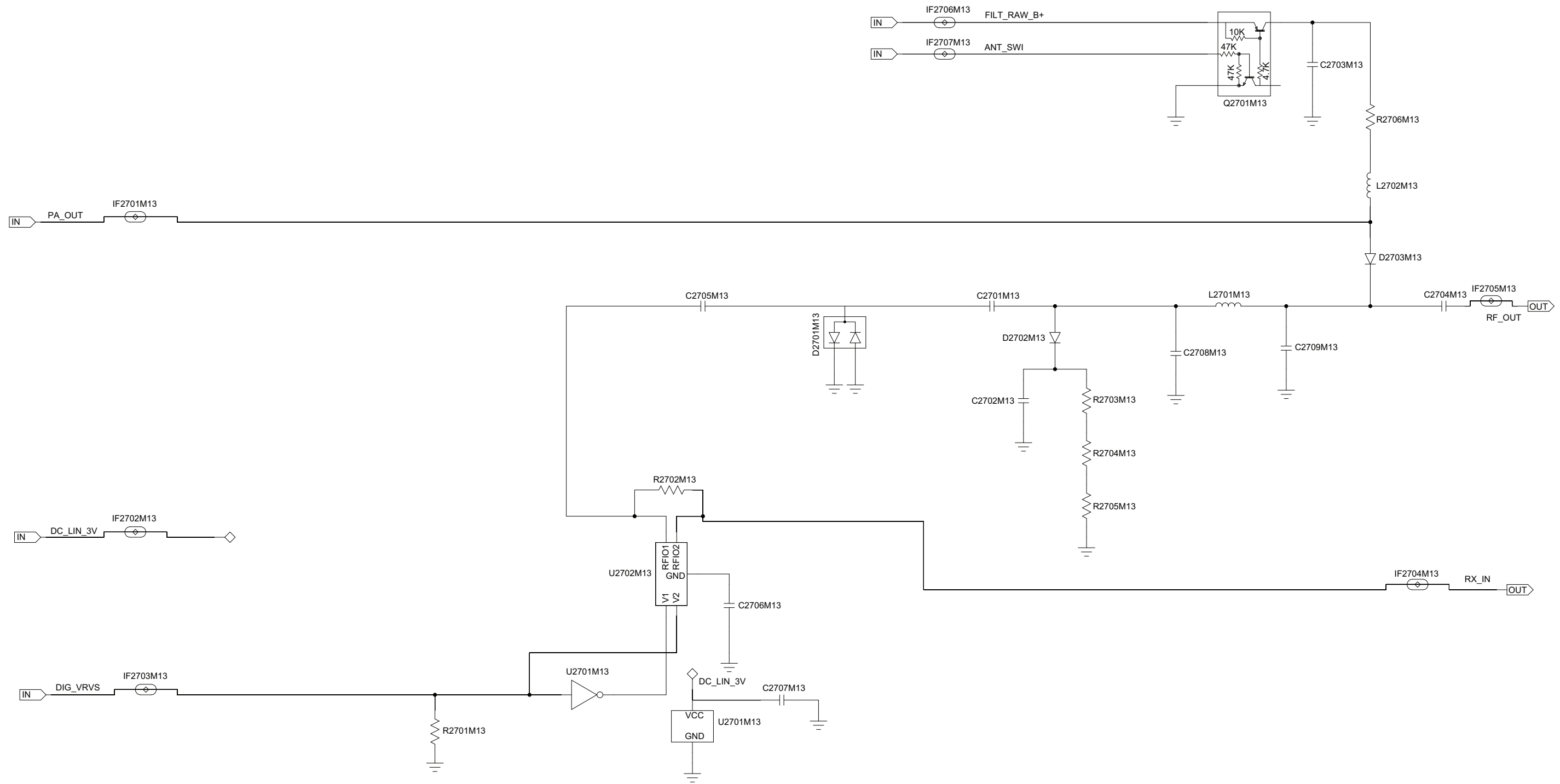


Figure 8-6. ANTSWI Circuit



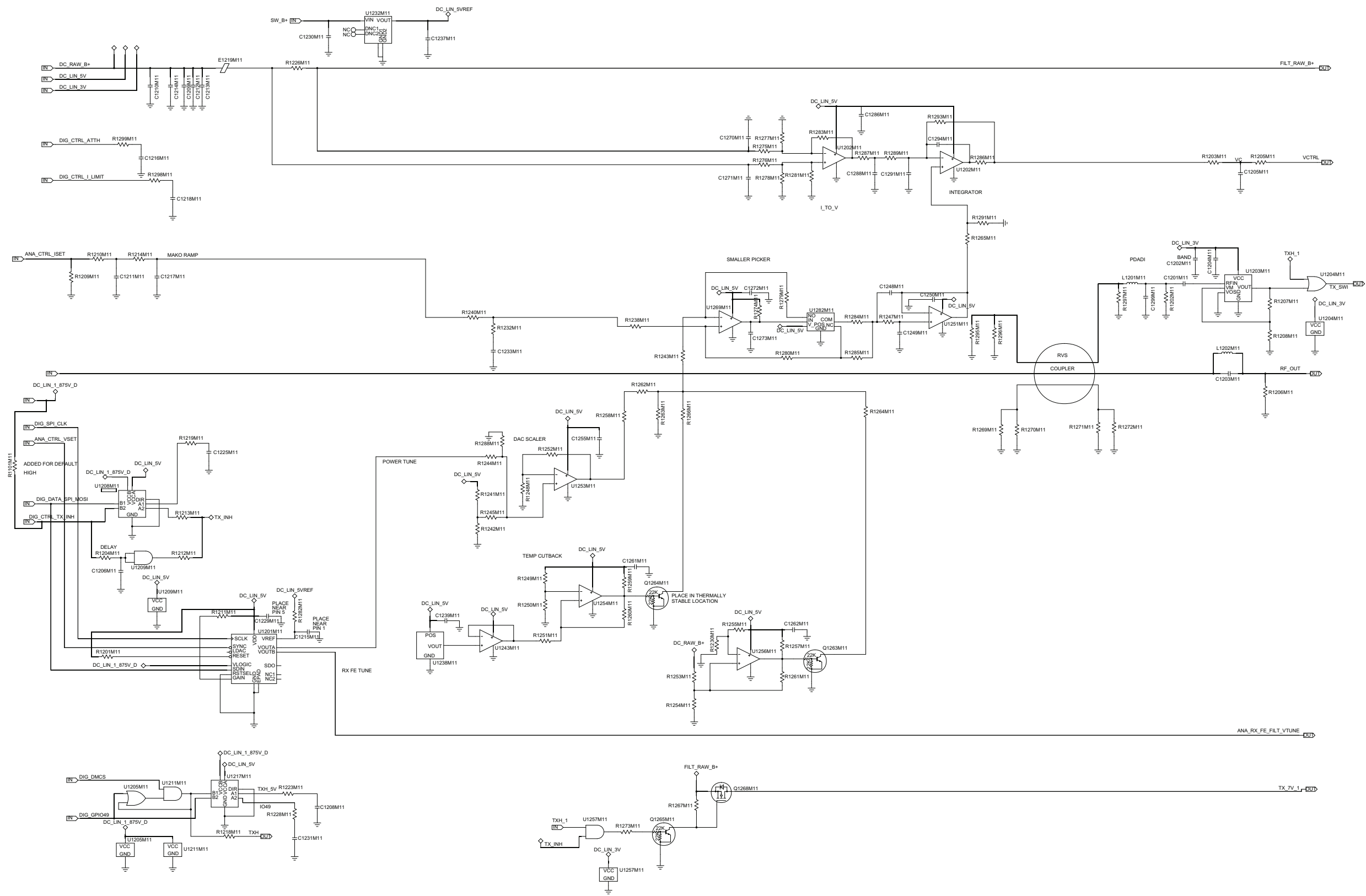


Figure 8-7. Automatic Level Control Circuit

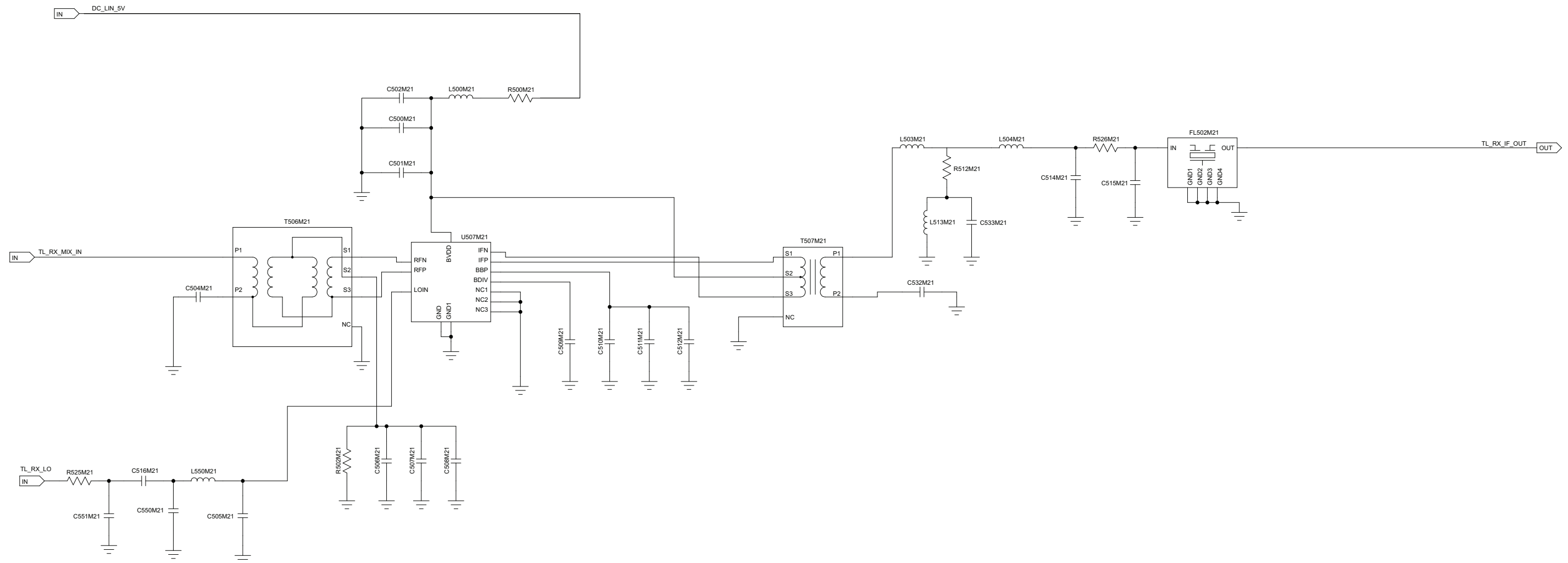


Figure 8-8. Receiver Back End Circuit

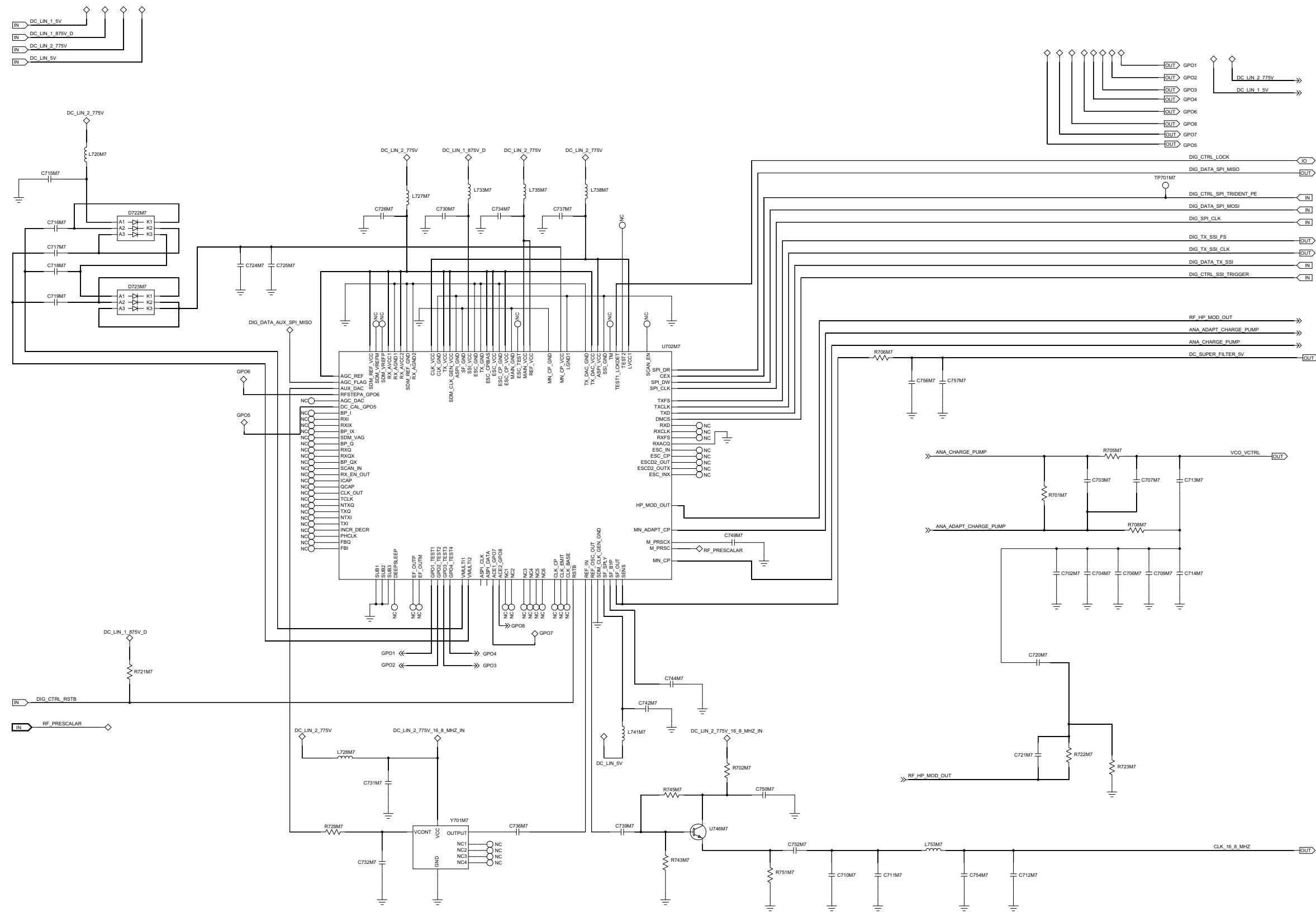


Figure 8-9. Trident Frequency Generation Unit

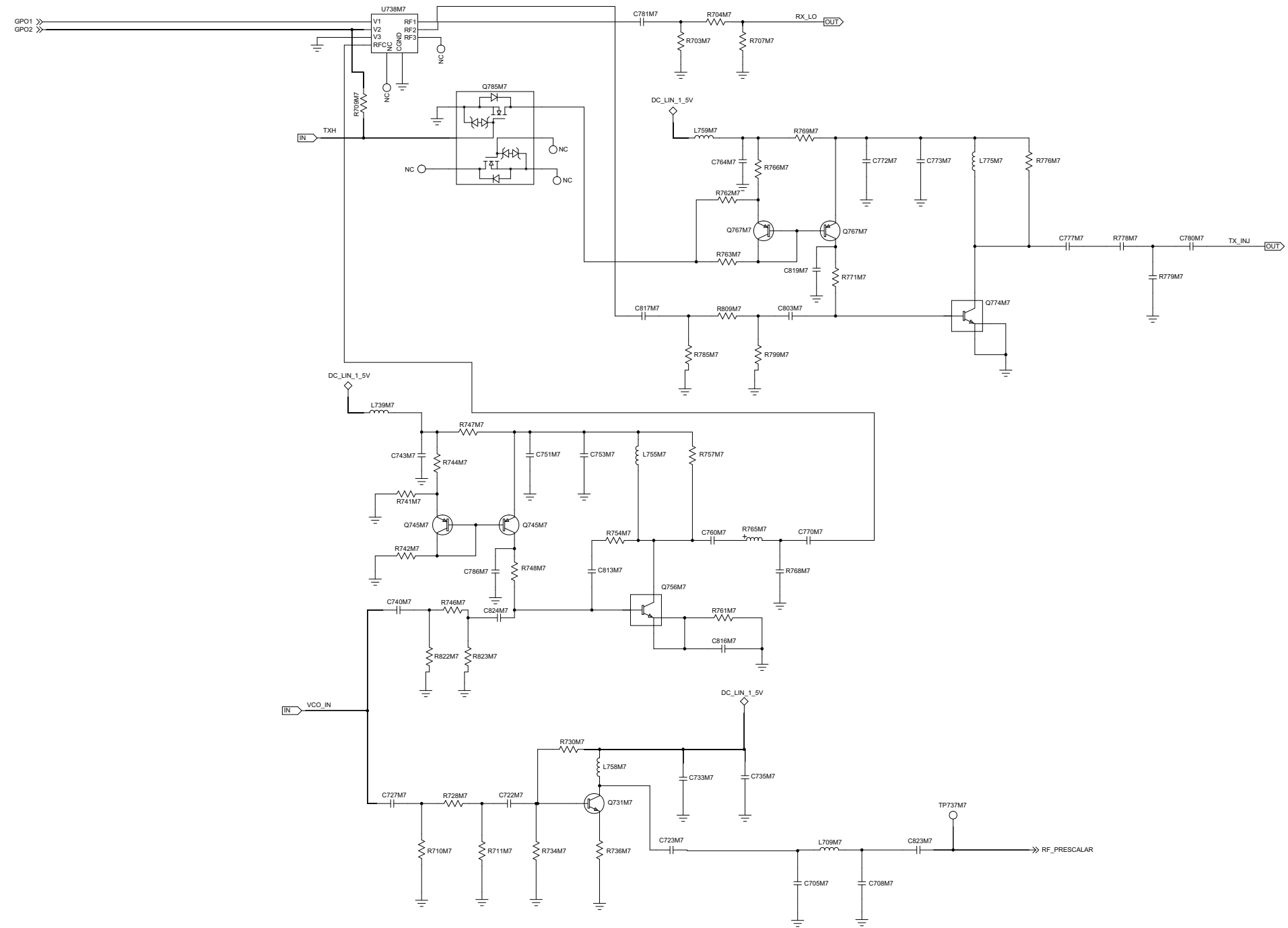
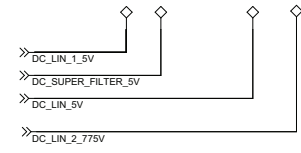


Figure 8-10. Buffer Frequency Generation Unit

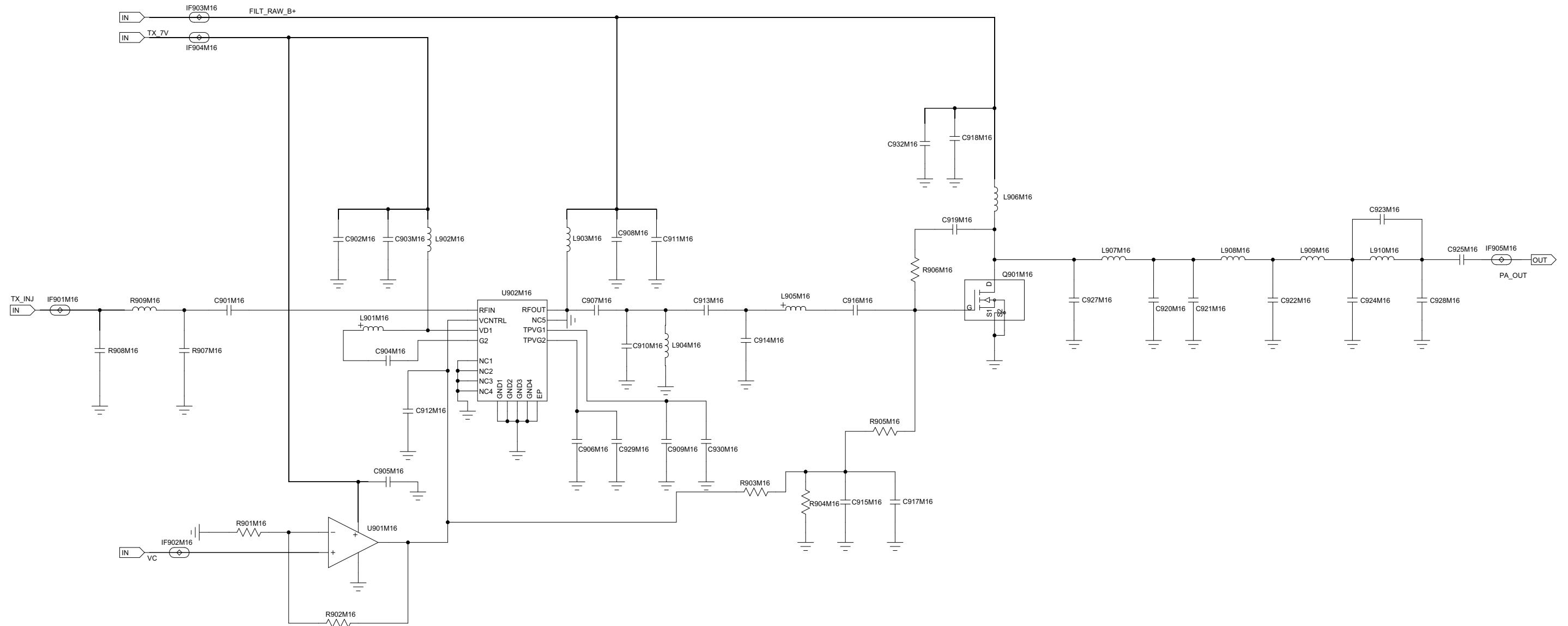


Figure 8-11. Power Amplifier Circuit

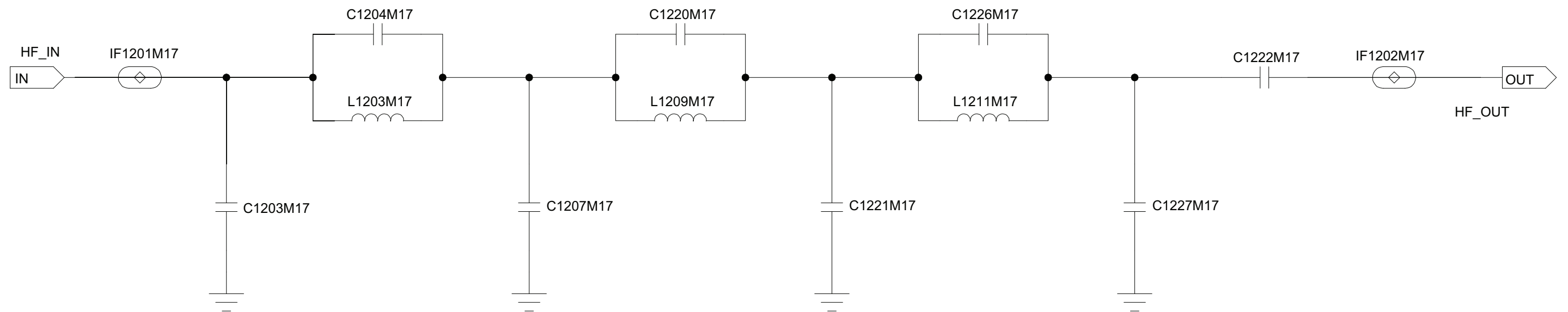


Figure 8-12. Transmitter HF Circuit

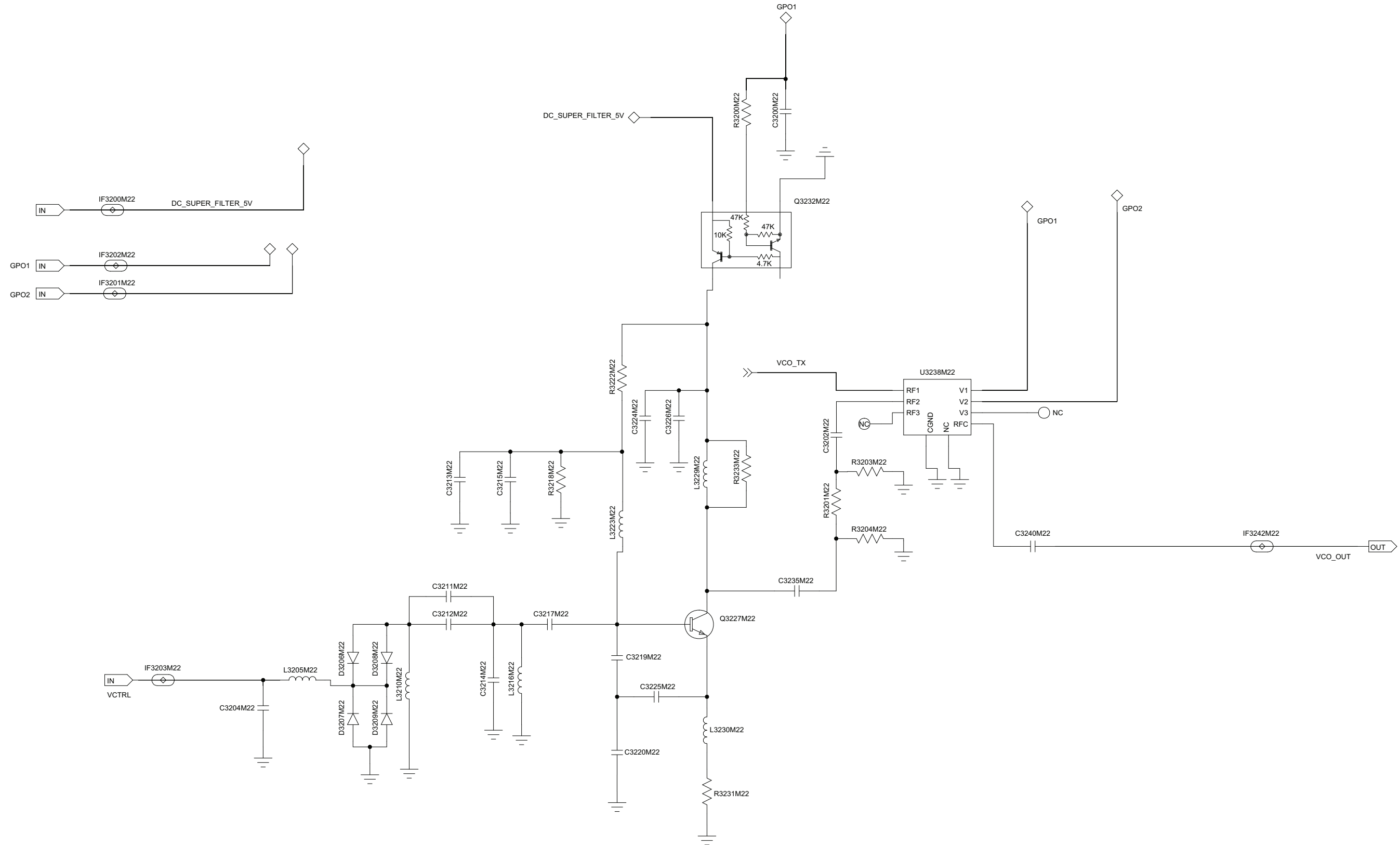


Figure 8-13. Receiver VCO Circuit

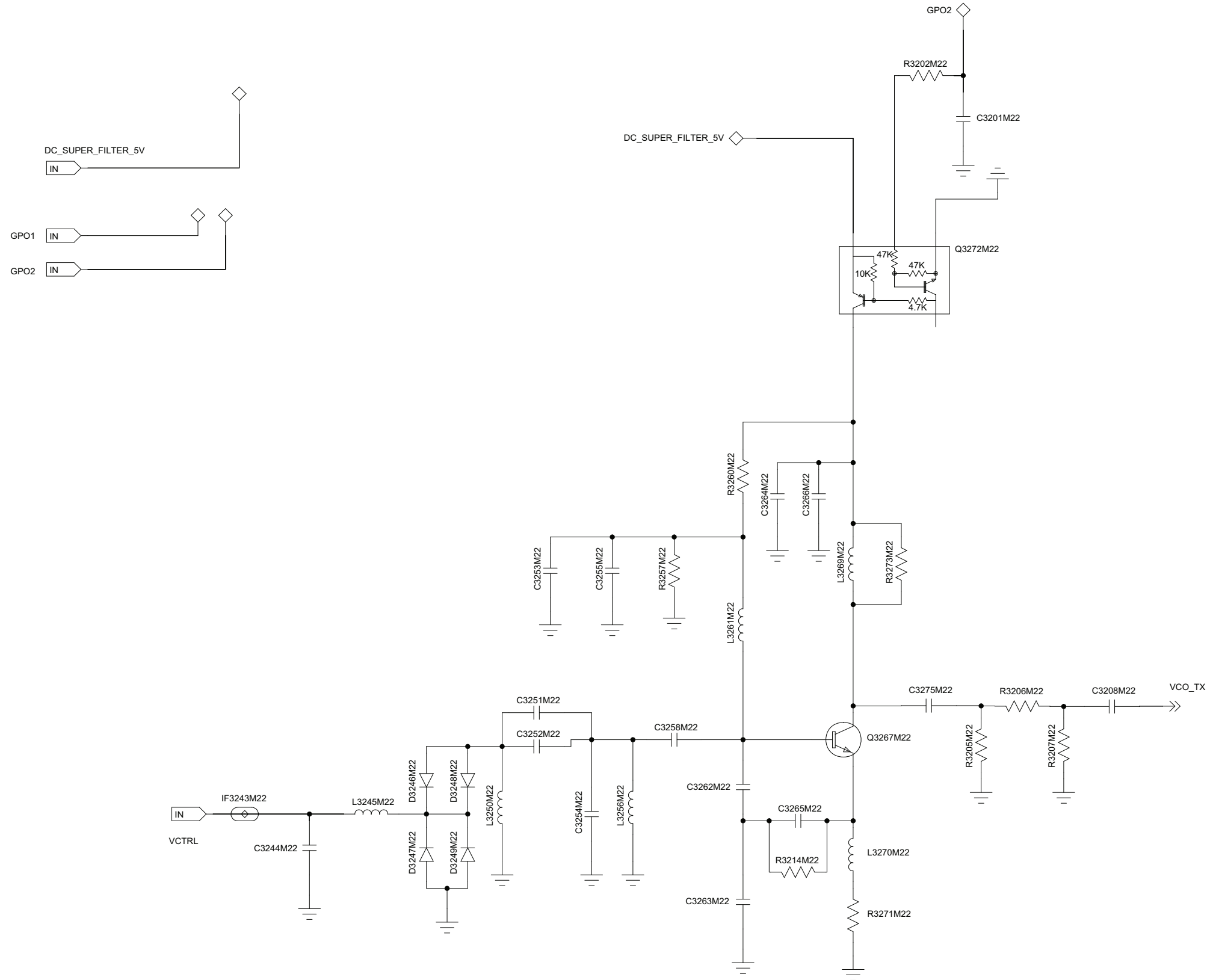


Figure 8-14. Transmitter VCO Circuit



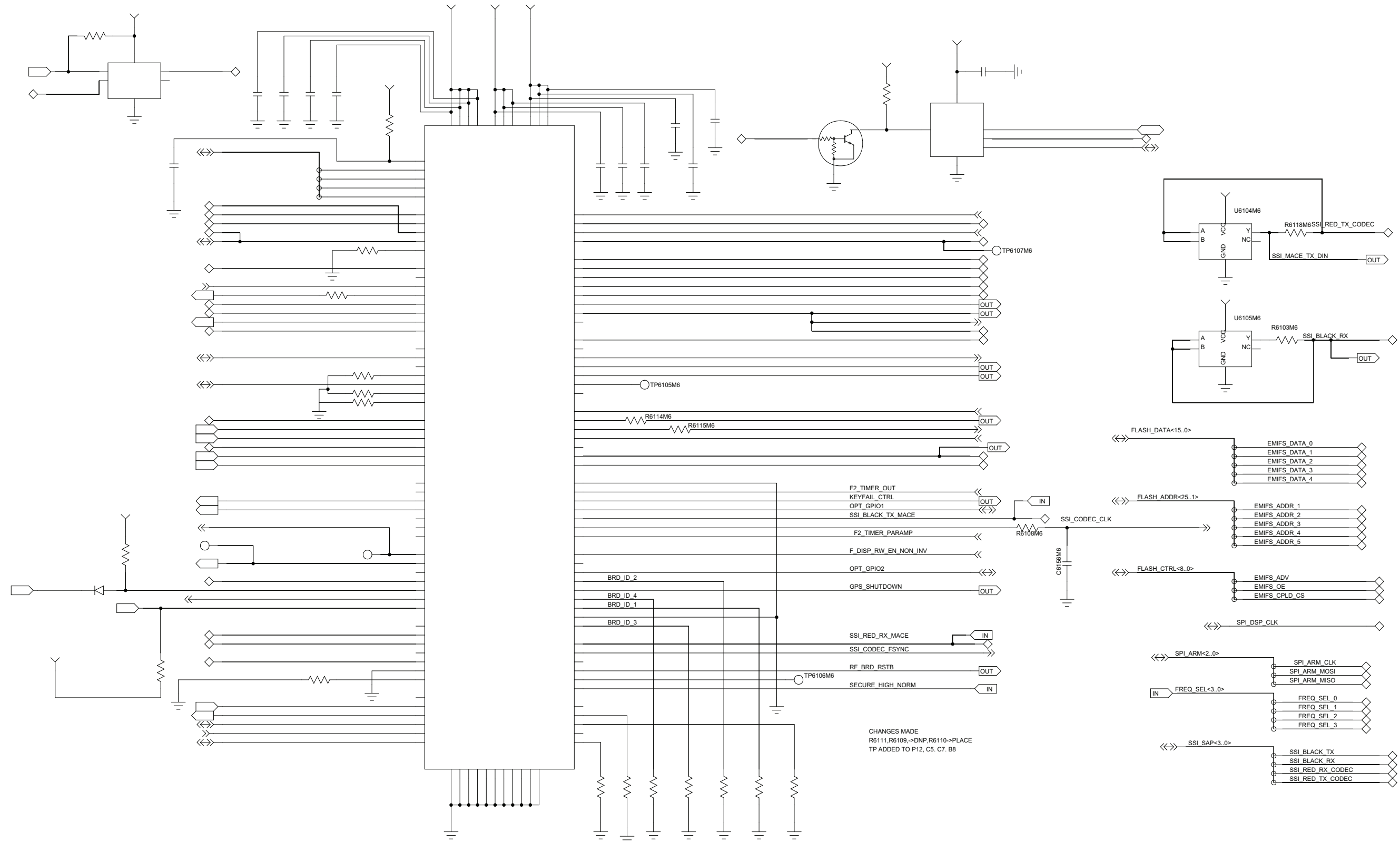


Figure 8-15. CPLD Circuit

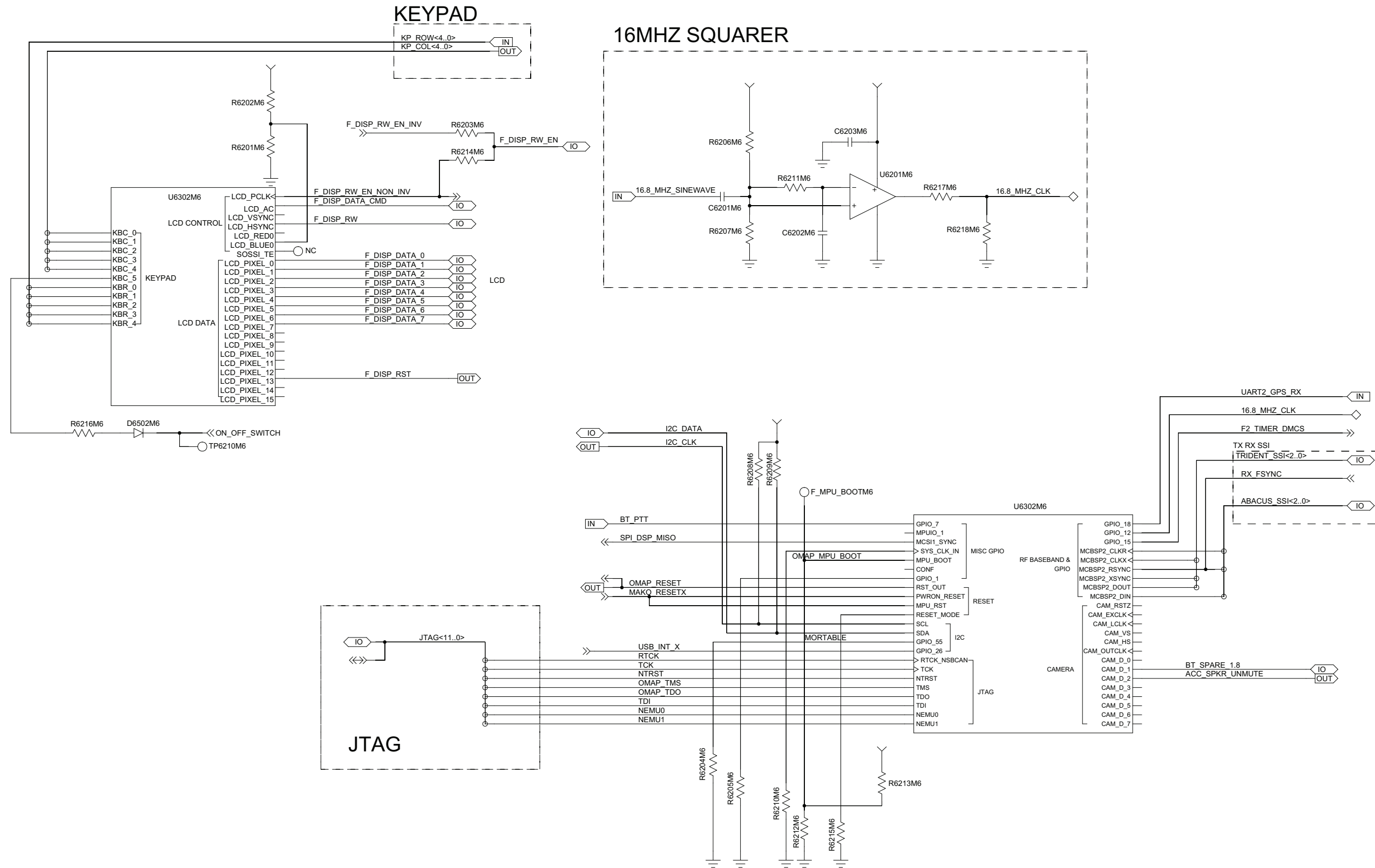
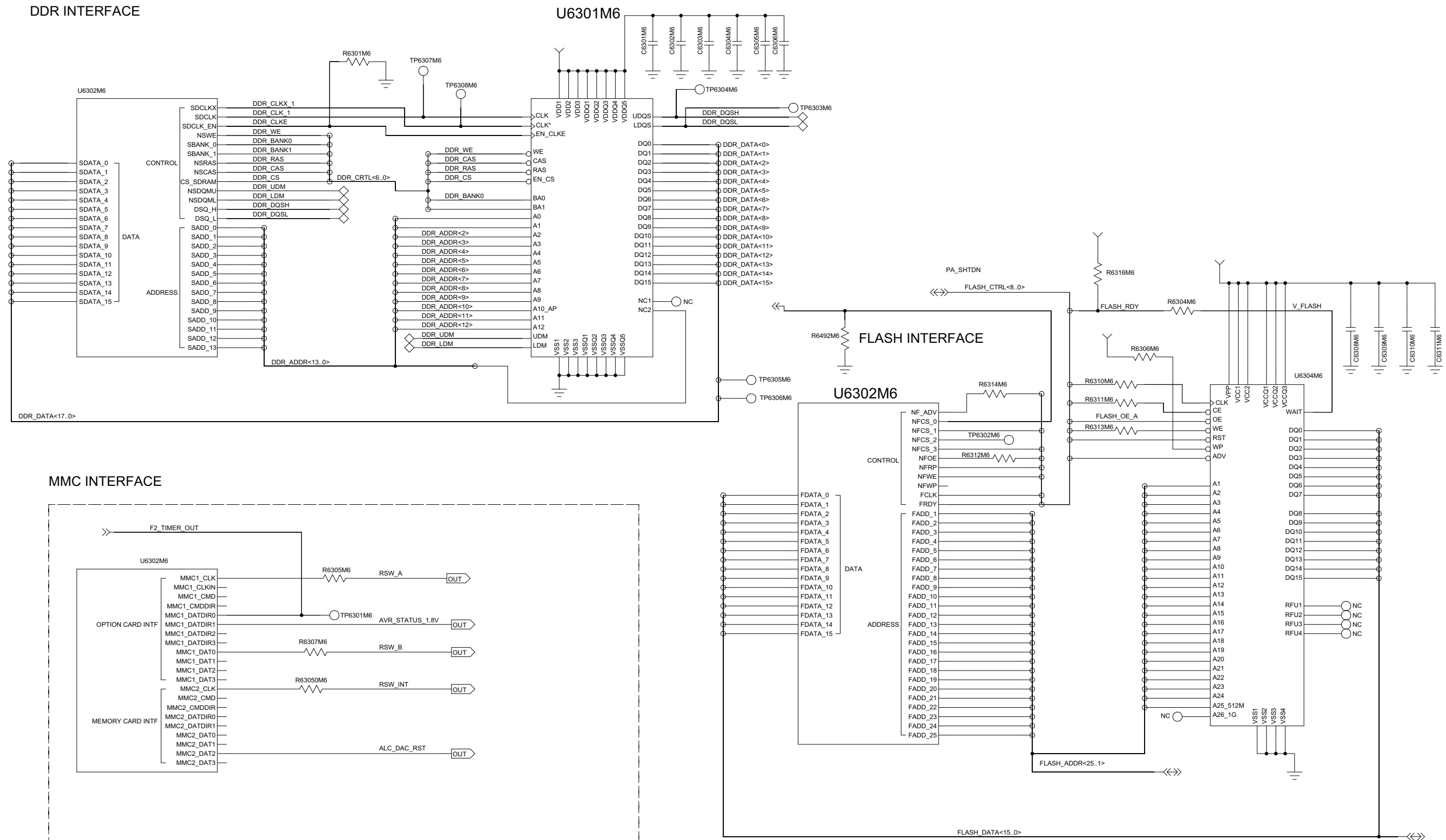


Figure 8-16. OMAP User Interface Circuit



CHANGES MADE  
ADDED PA\_SHTDN TO PORT M7 & R6492

Figure 8-17. Memory Interface Circuit

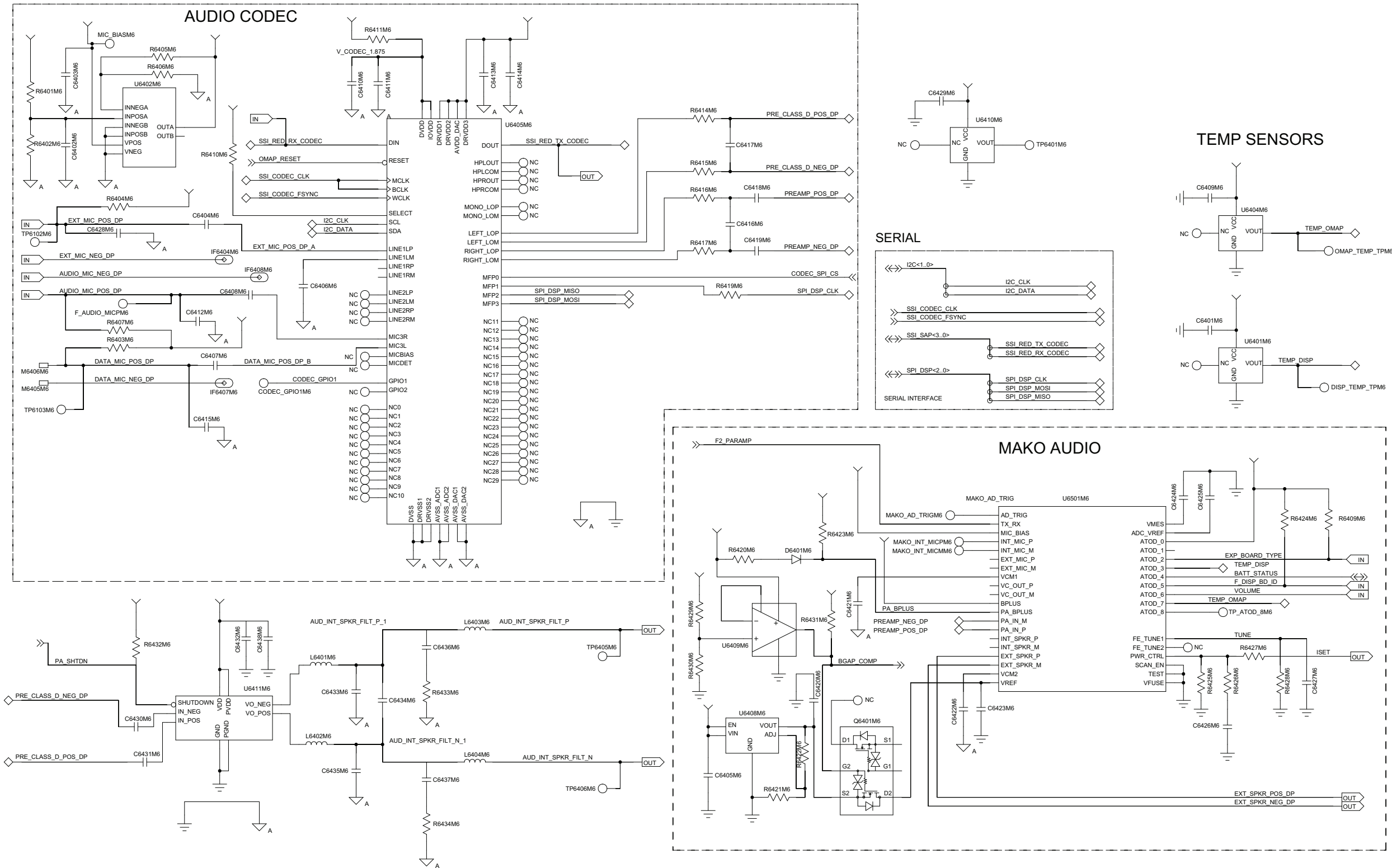


Figure 8-18. Audio Circuit

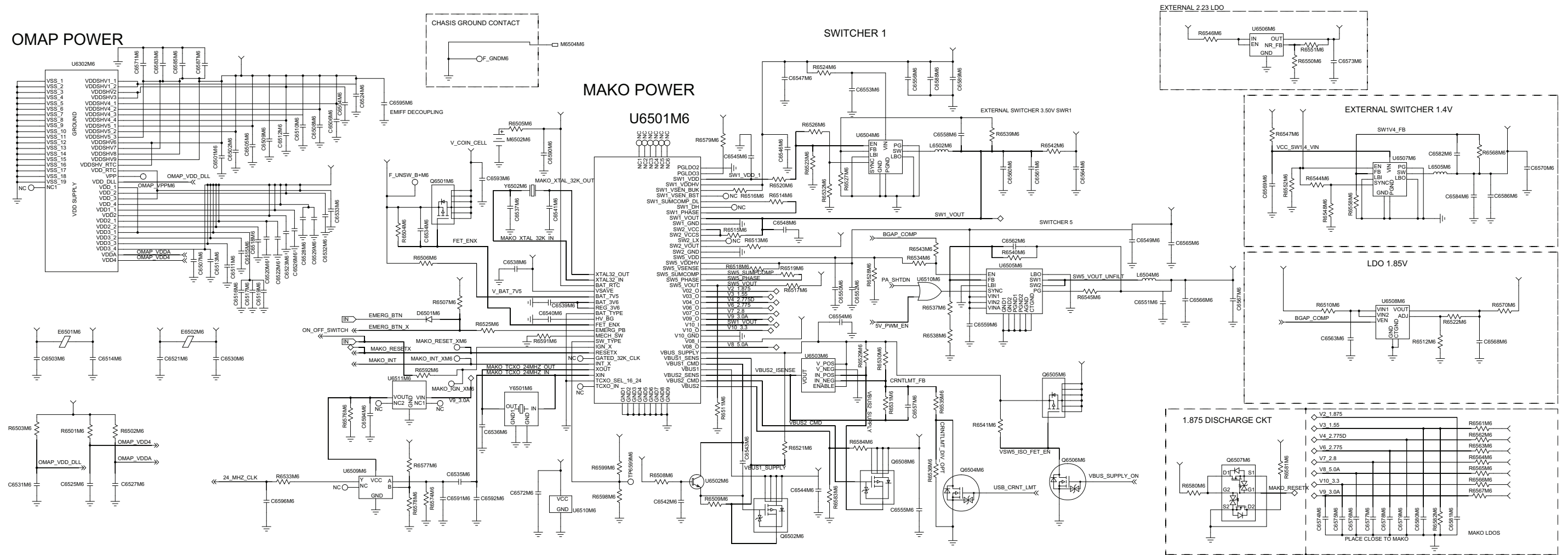


Figure 8-19. MAKO/DC Distribution Circuit

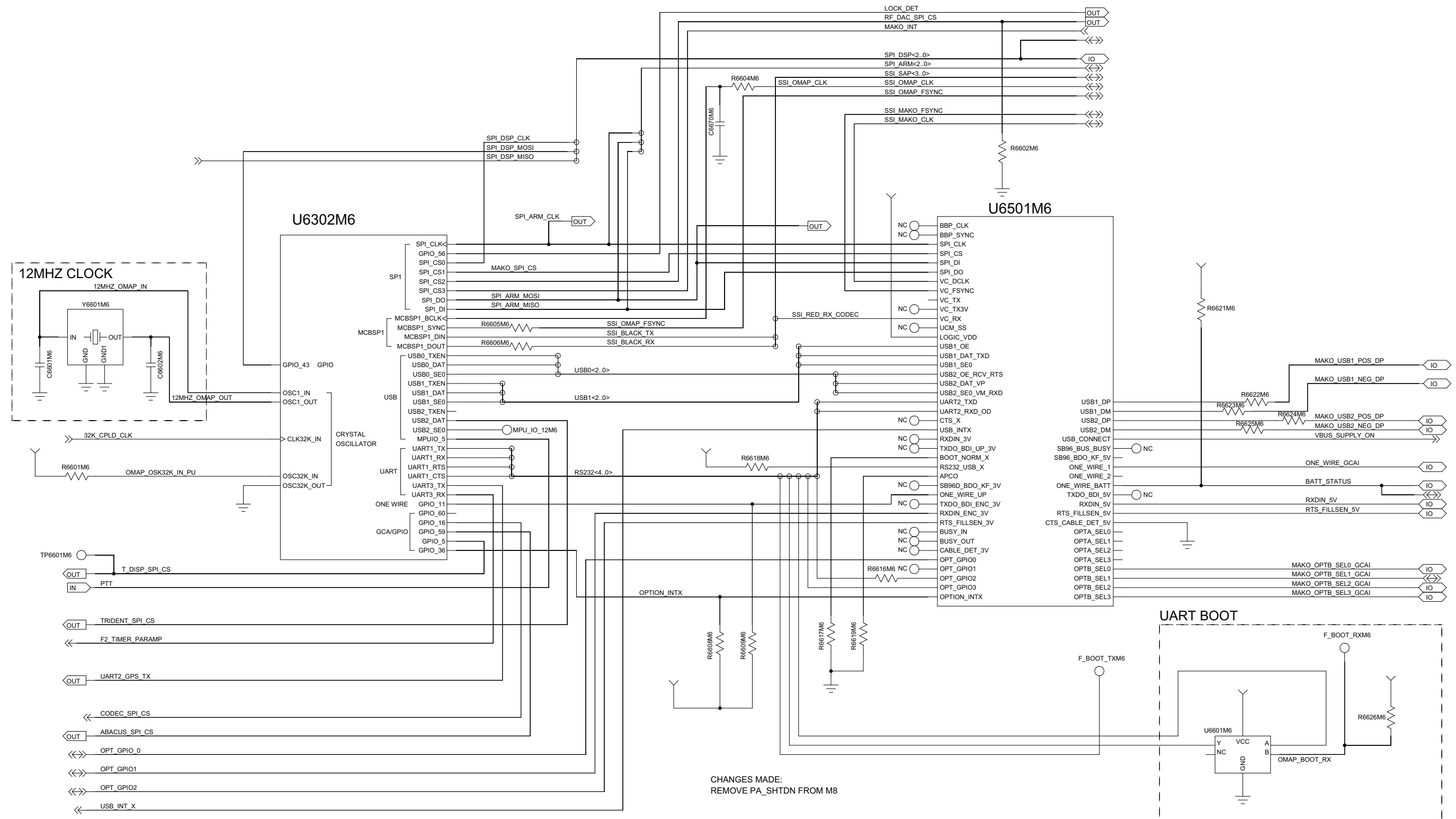


Figure 8-20. Serial Interface Circuit

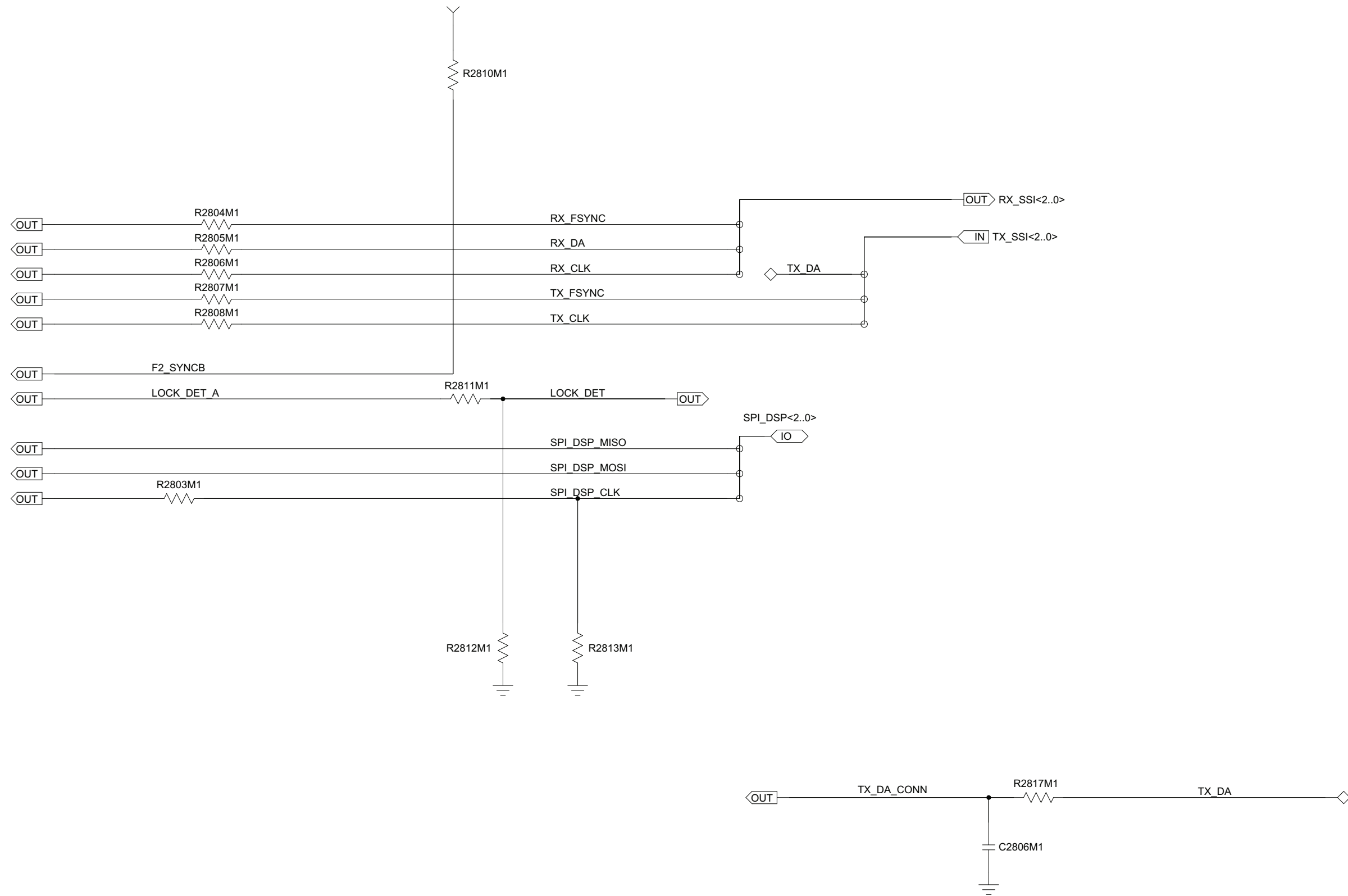


Figure 8-21. RF Interconnects Circuit

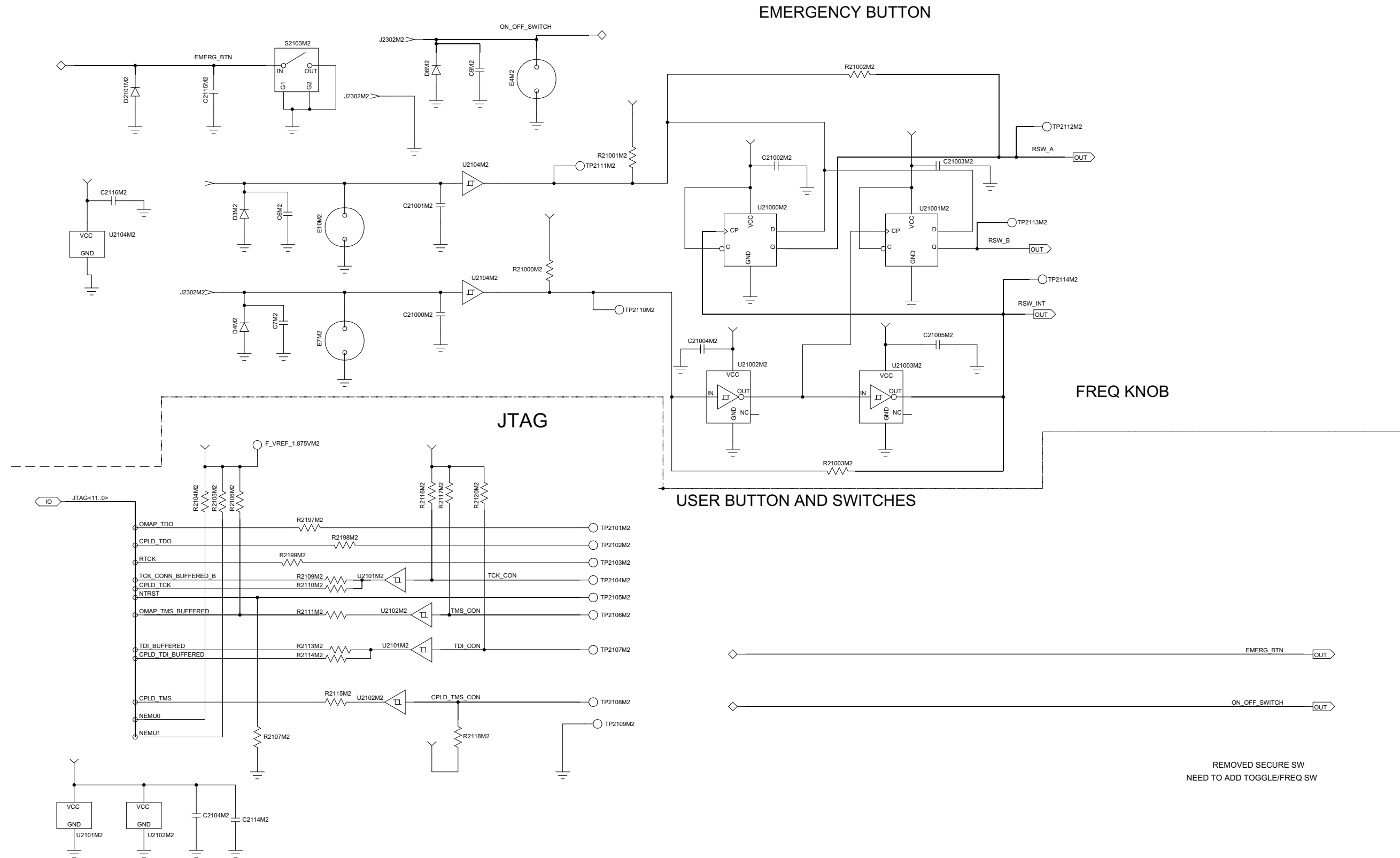


Figure 8-22. Controller Circuit

REMOVED SECURE SW  
NEED TO ADD TOGGLE/FREQ SW



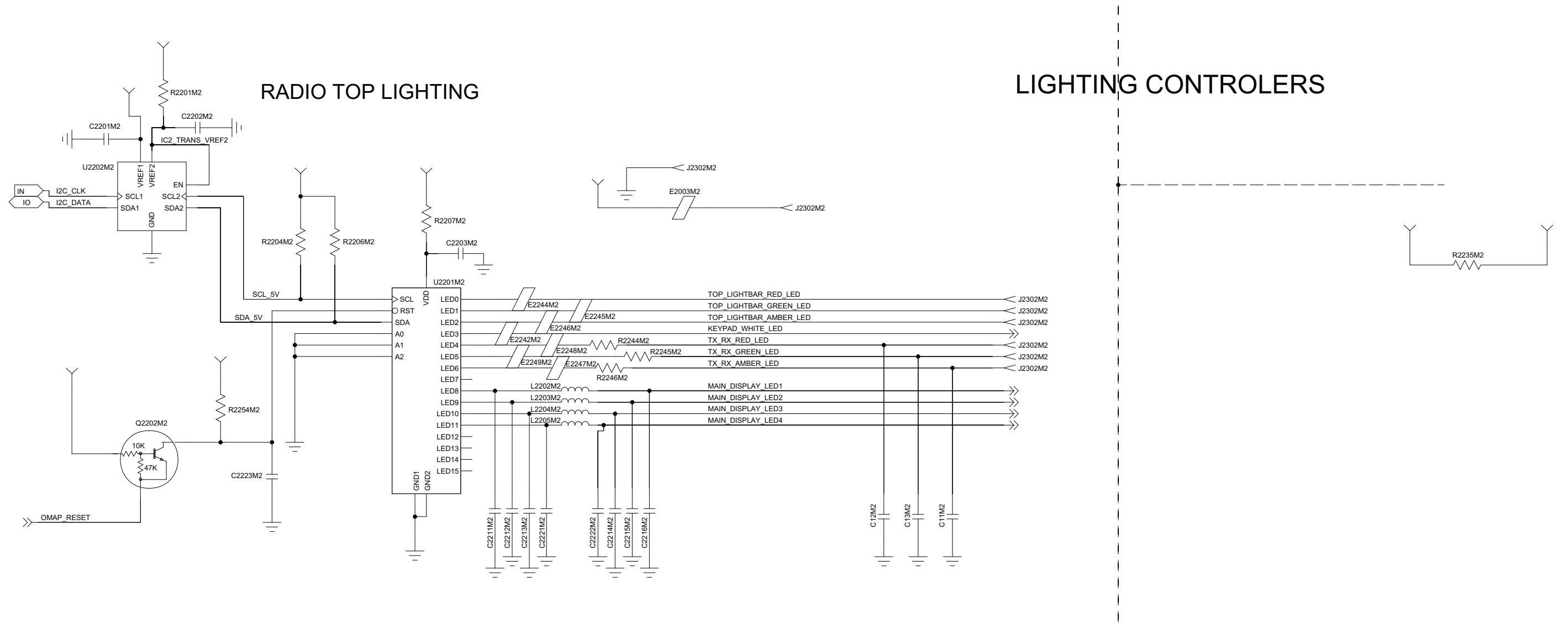


Figure 8-23. Display/Keypad Lighting Control Circuit

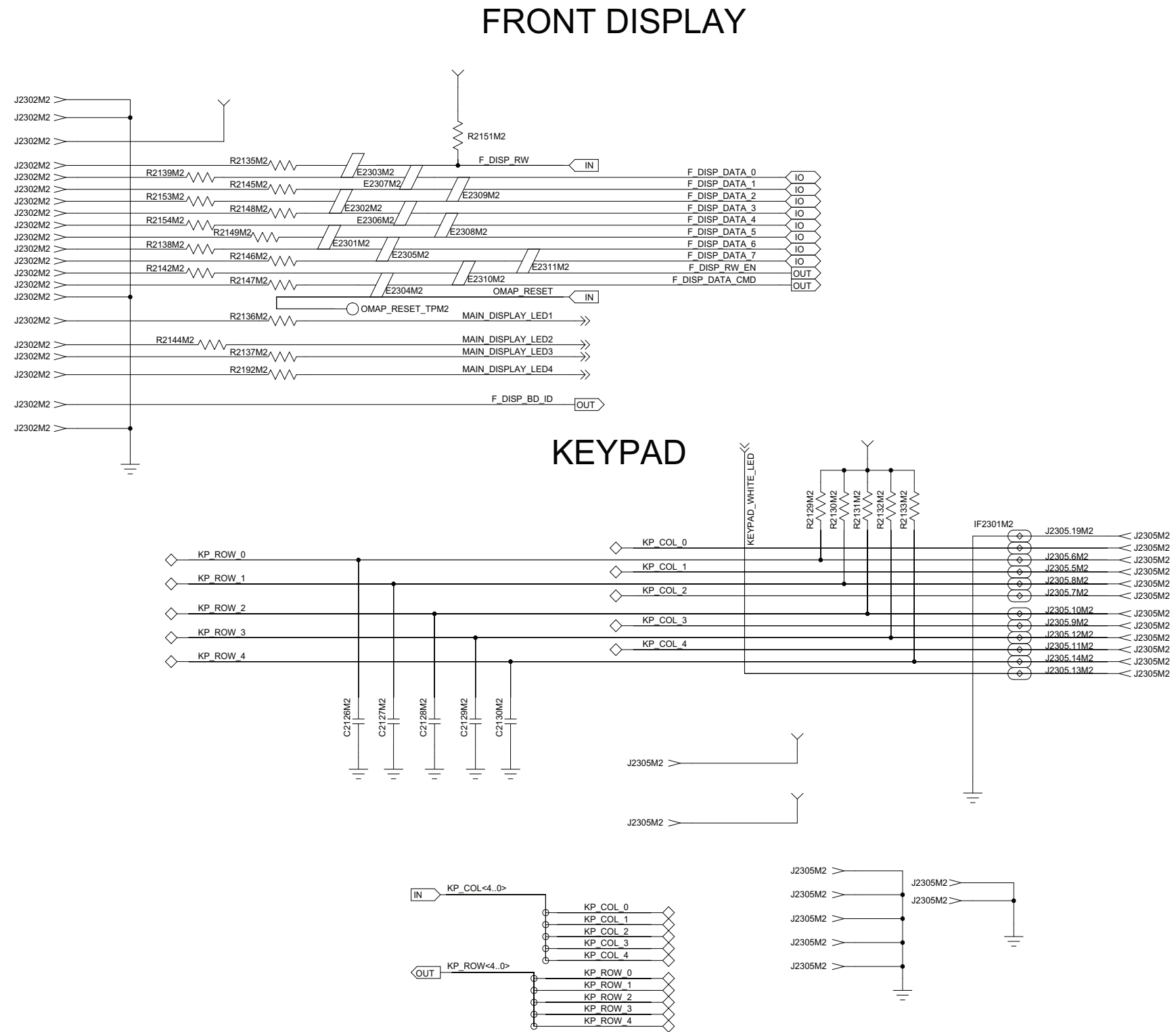


Figure 8-24. LCD and Keypad Connector Circuit

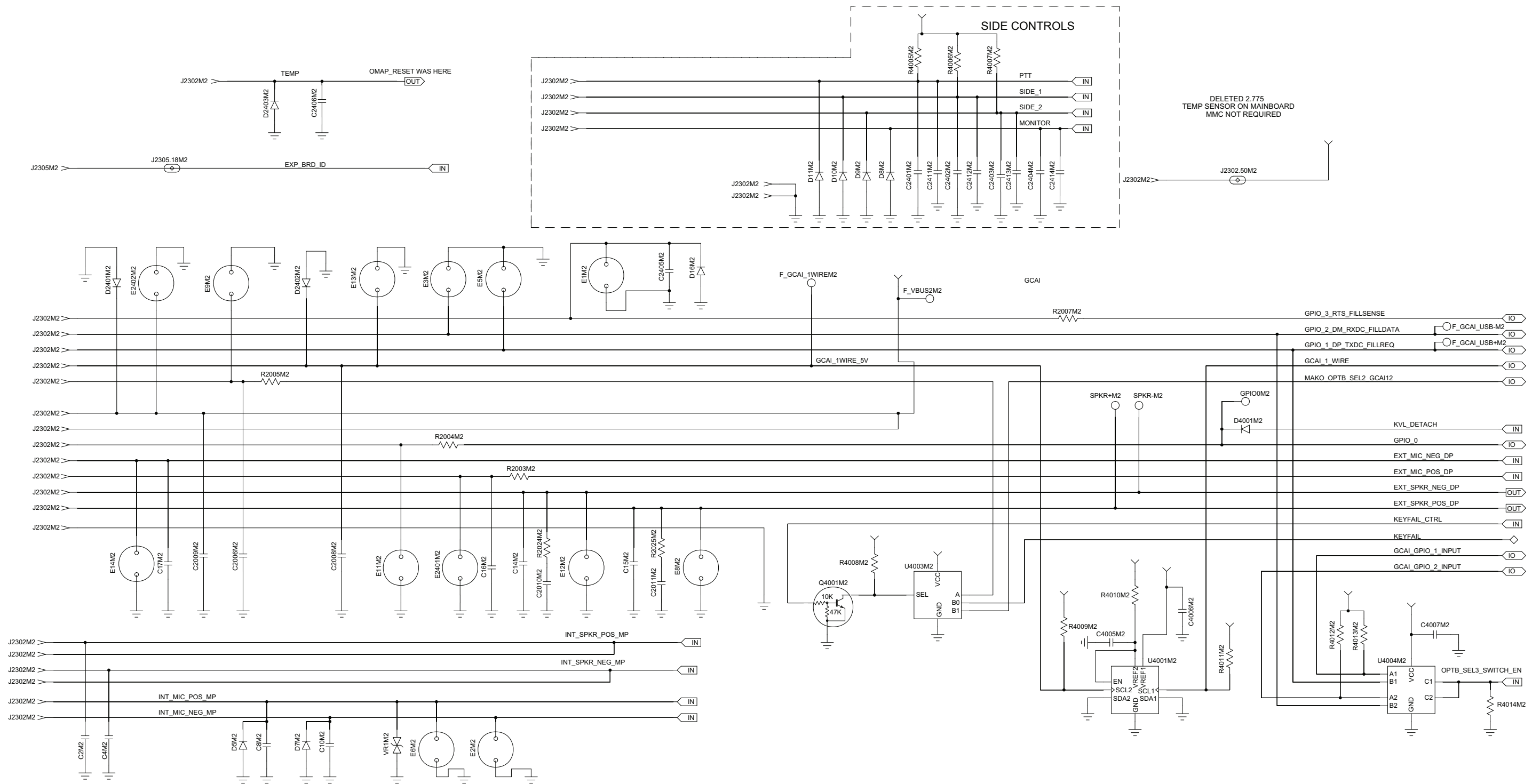


Figure 8-25. GCAI MACE BT Interconnect Circuit

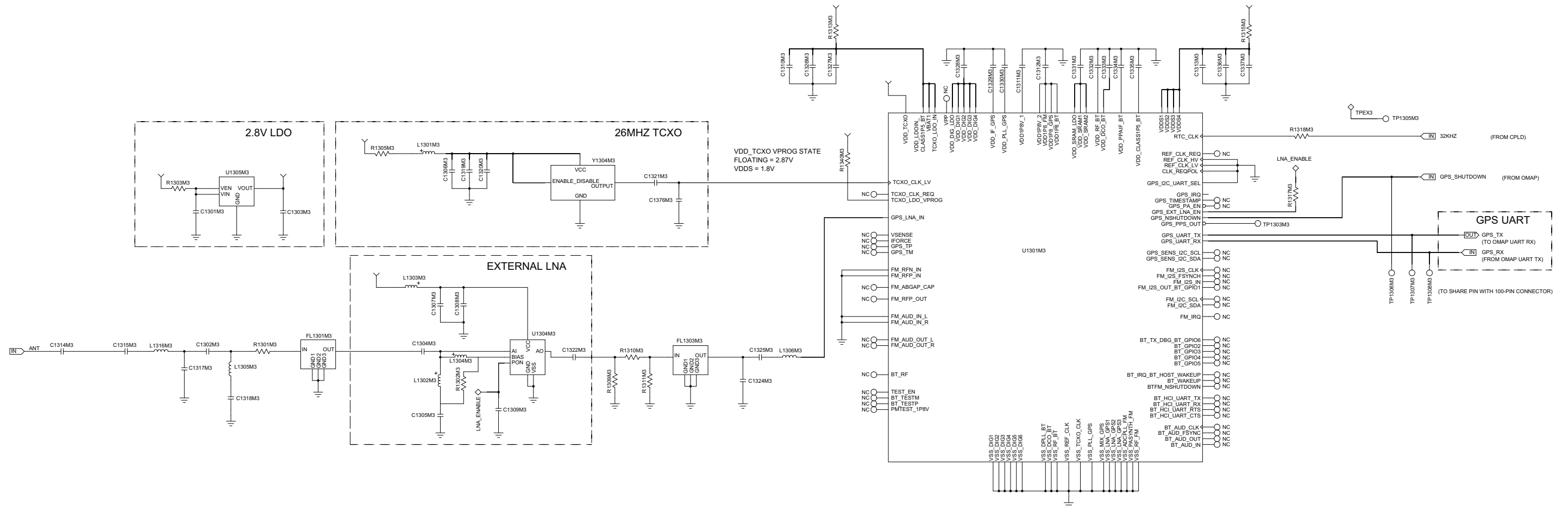


Figure 8-26. GPS Circuit

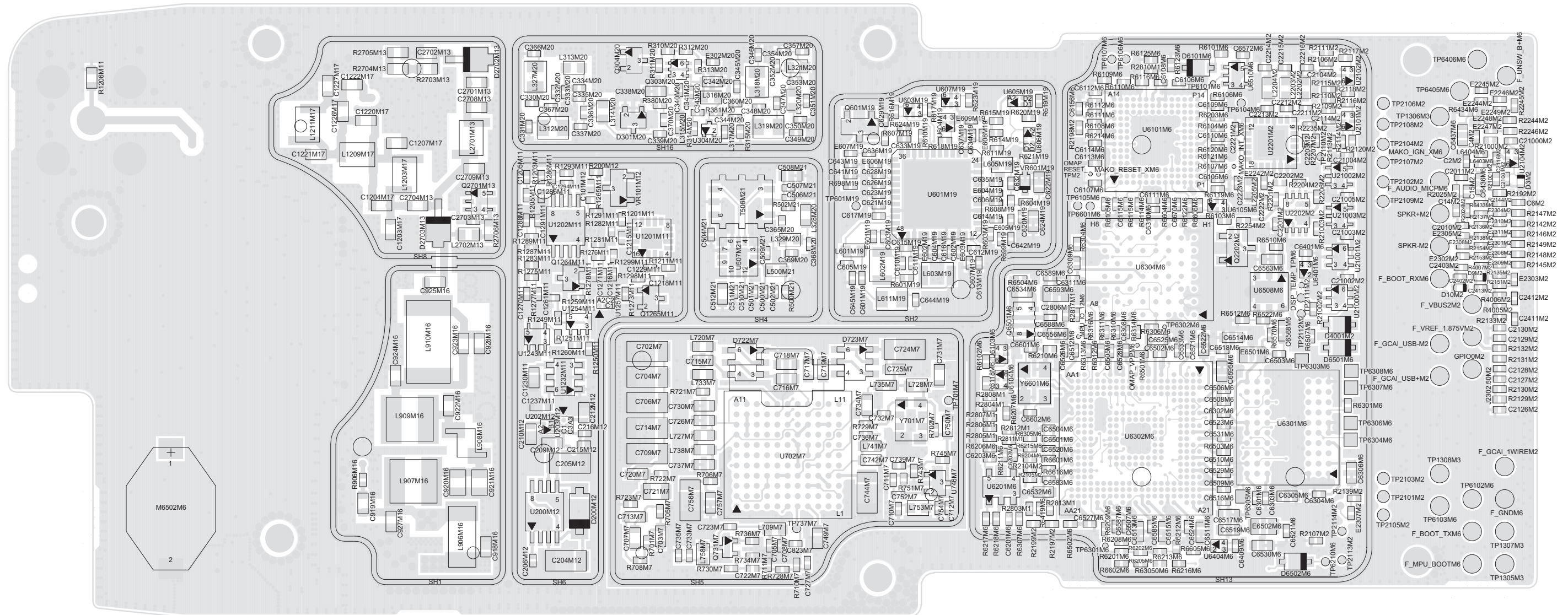


Figure 8-27. Transceiver (RF) Board Layout – Top Side



## VHF Transceiver (RF) Board Parts List – 84012618001

Ref. Des.	Part Number	Description
C101M12	2113944A46	CAP:CHIP,330PF,+5%,-5%,50V-DC,0402,C0G,*
C10M2	2113944A40	CAP:CHIP,100PF,+5%,-5%,50V-DC,0402*
C11M2	2113944A40	CAP:CHIP,100PF,+5%,-5%,50V-DC,0402*
C1201M11	2113944A40	CAP:CHIP,100PF,+5%,-5%,50V-DC,0402*
C1202M11	2113944A31	CAP:CHIP,33PF,+5%,-5%,50V-DC,0402,C0G,*
C1203M11	21667011421	CAP,CER,2.2PF,.1PF+/-,50V-DC,0603,C0G,-55DEG CMIN,125DEG CMAX
C1203M17	21667011356	CAP,CER,5.6PF,.05PF+/-,50V-DC,0603,C0G,-55DEG CMIN,125DEG CMAX
C1204M11	2113945B02	CAP:CHIP,.01UF,+10%,-10%,25V-DC*
C1204M17	21667011442	CAP,CER,4.3PF,.1PF+/-,50V-DC,0603,C0G,-55DEG CMIN,125DEG CMAX
C1205M11	2113945Y02	CAP:X7R,0402,10%,16V,0.1 UF
C1206M11	NOTPLACED	-
C1207M17	2113944M28	CAP,FXD,27PF,+2%,-2%,50V-DC,0603,C0G,-55DEG CMIN,125DEG CMAX,PB
C1208M11	NOTPLACED	-
C1209M11	NOTPLACED	-
C1210M11	2113945B02	CAP:CHIP,.01UF,+10%,-10%,25V-DC*
C1211M11	NOTPLACED	-
C1212M11	2113944A28	CAPACITOR, FIXED, CERAMIC, 0402, 0.000027UF, +/-1%, 50V, C0G
C1213M11	NOTPLACED	-

Ref. Des.	Part Number	Description
C1214M11	21012118001	CAP,FXD,1UF,10%,25V-DC,X7R,0805,LEAD-FREE/ROHS COMPLIANT
C1215M11	2113945Y02	CAP:X7R,0402,10%,16V,0.1 UF
C1216M11	NOTPLACED	-
C1217M11	NOTPLACED	-
C1218M11	NOTPLACED	-
C1220M17	21667011471	CAP,CER,8.2PF,.1PF+/-,50V-DC,0603,C0G,-55DEG CMIN,125DEG CMAX
C1221M17	2113944M27	CAP,FXD,24PF,+2%,-2%,50V-DC,0603,C0G,-55DEG CMIN,125DEG CMAX,PB
C1222M17	2113944C04	CAP:C0G,0603,5%,50V,330 PF
C1225M11	NOTPLACED	-
C1226M17	2175662M26	CAPACITOR 4.3 0.1PF, CERAMIC, 100V
C1227M17	21667011480	CAP,CER,9.1PF,.1PF+/-,50V-DC,0603,C0G,-55DEG CMIN,125DEG CMAX
C1229M11	2113945Y02	CAP:X7R,0402,10%,16V,0.1 UF
C1230M11	NOTPLACED	-
C1231M11	NOTPLACED	-
C1233M11	NOTPLACED	-
C1237M11	NOTPLACED	-
C1239M11	2113945B02	CAP:CHIP,.01UF,+10%,-10%,25V-DC*
C1248M11	NOTPLACED	-
C1249M11	2113945B01	CAP CER CHP 6800PF 25V 10%
C1250M11	2113945Y02	CAP:X7R,0402,10%,16V,0.1 UF
C1255M11	2113945B02	CAP:CHIP,.01UF,+10%,-10%,25V-DC*
C1261M11	2113945B02	CAP:CHIP,.01UF,+10%,-10%,25V-DC*

Ref. Des.	Part Number	Description
C1262M11	2113945B02	CAP:CHIP,.01UF,+10%,-10%,25V-DC*
C1270M11	2113944A31	CAP:CHIP,33PF,+5%,-5%,50V-DC,0402,C0G,*
C1271M11	2113944A31	CAP:CHIP,33PF,+5%,-5%,50V-DC,0402,C0G,*
C1272M11	2113945B02	CAP:CHIP,.01UF,+10%,-10%,25V-DC*
C1273M11	2113945A13	CAP:CHIP,4700PF,+10%,-10%,50V-DC,0402,*
C1286M11	2113944A31	CAP:CHIP,33PF,+5%,-5%,50V-DC,0402,C0G,*
C1288M11	2113946B02	CAP CER CHP 0.047UF 10V 10,
C1291M11	NOTPLACED	-
C1294M11	CA000098A0 1	CAPACITOR, FIXED, CERAMIC, 0402/ M1005, 0.22 UF, 16 V
C1299M11	2113944A19	CAP CER CHP 5.6PF 50V +/- 0.5PF
C12M2	2113944A40	CAP:CHIP,100PF,+5%,-5%,50V-DC,0402*
C1301M3	21012119001	CAP,FXD,2.2UF,20%,6.3V-DC,-55DEG CMIN,85DEG CM,X5R,0402
C1302M3	2113944A21	CAP:CHIP,6.8PF,.5PF+/-,50V-DC,0402*
C1303M3	2113956A51	CAP:FXD,1UF,+10%,-10%,6.3V-DC*
C1304M3	2113944A26	CAP CER CHP 12.0PF 50V 5%
C1305M3	2113945B02	CAP:CHIP,.01UF,+10%,-10%,25V-DC*
C1306M3	2187893N01	CAP 1UF, 6.3V, X5R, 0402 PACKAGE
C1307M3	2113944A26	CAP CER CHP 12.0PF 50V 5%
C1308M3	2113945A09	CAP:CHIP,1000PF,+10%,-10%*
C1309M3	2113944A26	CAP CER CHP 12.0PF 50V 5%

Ref. Des.	Part Number	Description
C1310M3	2187893N01	CAP 1UF, 6.3V, X5R, 0402 PACKAGE
C1311M3	2113956A51	CAP:FXD,1UF,+10%,-10%,6.3V-DC*
C1312M3	2113956A51	CAP:FXD,1UF,+10%,-10%,6.3V-DC*
C1313M3	2187893N01	CAP 1UF, 6.3V, X5R, 0402 PACKAGE
C1314M3	2113944M20	CAP,FXD,12PF,+2%,-2%,50V-DC,0603,C0G,-55DEG CMIN,125DEG CMAX,PB
C1315M3	2175389H01	CAP,.5PF,CHIP,0402,CERAMIC,50V
C1317M3	2188881Y12	CAPACITOR CERAMIC NPO HIGH FREQUENCY 16 VOLT (REPLACES 2104801Z12)
C1318M3	2113944A13	CAP CER CHP 3.3PF 50V +/- 0.25PF
C1319M3	2113945Y02	CAP:X7R,0402,10%,16V,0.1 UF
C1320M3	2113944A28	CAP:CHIP,18PF,+5%,-5%,50V-DC,0402*
C1321M3	2113944A29	CAP:CHIP,22PF,+5%,-5%,50V-DC,0402*
C1322M3	2113944A29	CAP:CHIP,22PF,+5%,-5%,50V-DC,0402*
C1324M3	21667009274	CAPACITOR, FIXED, CERAMIC, 0402, 0.000001UF, 0.1PF, 50V, C0G
C1325M3	2113944A29	CAP:CHIP,22PF,+5%,-5%,50V-DC,0402*
C1326M3	2113945Y02	CAP:X7R,0402,10%,16V,0.1 UF
C1327M3	2113944A28	CAP:CHIP,18PF,+5%,-5%,50V-DC,0402*
C1328M3	2113945Y02	CAP:X7R,0402,10%,16V,0.1 UF
C1329M3	2113945Y02	CAP:X7R,0402,10%,16V,0.1 UF

Ref. Des.	Part Number	Description
C1330M3	2113945Y02	CAP:X7R,0402,10%,16V,0.1UF
C1331M3	2113945Y02	CAP:X7R,0402,10%,16V,0.1UF
C1332M3	2113945Y02	CAP:X7R,0402,10%,16V,0.1UF
C1333M3	2113945Y02	CAP:X7R,0402,10%,16V,0.1UF
C1334M3	2113945Y02	CAP:X7R,0402,10%,16V,0.1UF
C1335M3	2113945Y02	CAP:X7R,0402,10%,16V,0.1UF
C1336M3	2113945Y02	CAP:X7R,0402,10%,16V,0.1UF
C1337M3	2113944A28	CAP:CHIP,18PF,+5%,-5%,50V-DC,0402*
C1376M3	2113944A25	CAP:CHIP,10PF,.5PF+/-,50V-DC,0402*
C13M2	2113944A40	CAP:CHIP,100PF,+5%,-5%,50V-DC,0402*
C14M2	2113944A40	CAP:CHIP,100PF,+5%,-5%,50V-DC,0402*
C15M2	2113944A40	CAP:CHIP,100PF,+5%,-5%,50V-DC,0402*
C16M2	2113944A40	CAP:CHIP,100PF,+5%,-5%,50V-DC,0402*
C17M2	2113944A40	CAP:CHIP,100PF,+5%,-5%,50V-DC,0402*
C2006M2	NOTPLACED	-
C2008M2	NOTPLACED	-
C2009M2	2113944A40	CAP:CHIP,100PF,+5%,-5%,50V-DC,0402*
C200M12	2113945B02	CAP:CHIP,.01UF,+10%,-10%,25V-DC*
C2010M2	2113946B04	CAP:CHIP,.1UF,+10%,-10%,10V-DC*
C2011M2	2113946B04	CAP:CHIP,.1UF,+10%,-10%,10V-DC*
C201M12	21012118001	CAP:FXD,1UF,10%,25V-DC,X7R,0805,LEAD-FREE/ROHS COMPLIANT

Ref. Des.	Part Number	Description
C202M12	21012118001	CAP:FXD,1UF,10%,25V-DC,X7R,0805,LEAD-FREE/ROHS COMPLIANT
C203M12	21012118001	CAP:FXD,1UF,10%,25V-DC,X7R,0805,LEAD-FREE/ROHS COMPLIANT
C204M12	2113955D35	CAP:FXD,4.7UF,+10%,-10%,16V-DC,1206,X7R,-55DEG CMIN,125DEG CMAX
C205M12	2113955D35	CAP:FXD,4.7UF,+10%,-10%,16V-DC,1206,X7R,-55DEG CMIN,125DEG CMAX
C206M12	2113945B02	CAP:CHIP,.01UF,+10%,-10%,25V-DC*
C207M12	2113956B91	CAP:FXD,1UF,+10%,-10%,16V-DC,0603,X5R,-55DEG CMIN,85DEG CMAX,PB
C208M12	2113956B91	CAP:FXD,1UF,+10%,-10%,16V-DC,0603,X5R,-55DEG CMIN,85DEG CMAX,PB
C209M12	2113956B91	CAP:FXD,1UF,+10%,-10%,16V-DC,0603,X5R,-55DEG CMIN,85DEG CMAX,PB
C21000M2	2113945Y02	CAP:X7R,0402,10%,16V,0.1UF
C21001M2	2113945Y02	CAP:X7R,0402,10%,16V,0.1UF
C21002M2	2113946B04	CAP:CHIP,.1UF,+10%,-10%,10V-DC*
C21003M2	2113946B04	CAP:CHIP,.1UF,+10%,-10%,10V-DC*
C21004M2	2113945Y02	CAP:X7R,0402,10%,16V,0.1UF
C21005M2	2113946B04	CAP:CHIP,.1UF,+10%,-10%,10V-DC*
C2104M2	2113946B04	CAP:CHIP,.1UF,+10%,-10%,10V-DC*

Ref. Des.	Part Number	Description
C210M12	2113956B91	CAP:FXD,1UF,+10%,-10%,16V-DC,0603,X5R,-55DEG CMIN,85DEG CMAX,PB
C2114M2	2113946B04	CAP:CHIP,.1UF,+10%,-10%,10V-DC*
C2115M2	2113944A40	CAP:CHIP,100PF,+5%,-5%,50V-DC,0402*
C2116M2	2113946B04	CAP:CHIP,.1UF,+10%,-10%,10V-DC*
C2126M2	2113944A46	CAP:CHIP,330PF,+5%,-5%,50V-DC,0402,C0G,*
C2127M2	2113944A46	CAP:CHIP,330PF,+5%,-5%,50V-DC,0402,C0G,*
C2128M2	2113944A46	CAP:CHIP,330PF,+5%,-5%,50V-DC,0402,C0G,*
C2129M2	2113944A46	CAP:CHIP,330PF,+5%,-5%,50V-DC,0402,C0G,*
C212M12	2113946D07	CAP:CHIP,4.7UF,+10%,-10%,6.3V-DC,0603*
C2130M2	2113944A46	CAP:CHIP,330PF,+5%,-5%,50V-DC,0402,C0G,*
C213M12	2113944A46	CAP:CHIP,330PF,+5%,-5%,50V-DC,0402,C0G,*
C214M12	2113944A46	CAP:CHIP,330PF,+5%,-5%,50V-DC,0402,C0G,*
C215M12	2113944A46	CAP:CHIP,330PF,+5%,-5%,50V-DC,0402,C0G,*
C216M12	2113944A46	CAP:CHIP,330PF,+5%,-5%,50V-DC,0402,C0G,*
C217M12	2113956B91	CAP:FXD,1UF,+10%,-10%,16V-DC,0603,X5R,-55DEG CMIN,85DEG CMAX,PB
C2201M2	2113946B04	CAP:CHIP,.1UF,+10%,-10%,10V-DC*
C2202M2	2113946B04	CAP:CHIP,.1UF,+10%,-10%,10V-DC*
C2203M2	2113946B04	CAP:CHIP,.1UF,+10%,-10%,10V-DC*
C2211M2	2113946B04	CAP:CHIP,.1UF,+10%,-10%,10V-DC*

Ref. Des.	Part Number	Description
C2212M2	2113946B04	CAP:CHIP,.1UF,+10%,-10%,10V-DC*
C2213M2	2113946B04	CAP:CHIP,.1UF,+10%,-10%,10V-DC*
C2214M2	2113946B04	CAP:CHIP,.1UF,+10%,-10%,10V-DC*
C2215M2	2113946B04	CAP:CHIP,.1UF,+10%,-10%,10V-DC*
C2216M2	2113946B04	CAP:CHIP,.1UF,+10%,-10%,10V-DC*
C2221M2	2113946B04	CAP:CHIP,.1UF,+10%,-10%,10V-DC*
C2222M2	2113946B04	CAP:CHIP,.1UF,+10%,-10%,10V-DC*
C2223M2	2113944A40	CAP:CHIP,100PF,+5%,-5%,50V-DC,0402*
C2401M2	2113944A40	CAP:CHIP,100PF,+5%,-5%,50V-DC,0402*
C2402M2	2113944A40	CAP:CHIP,100PF,+5%,-5%,50V-DC,0402*
C2403M2	2113944A40	CAP:CHIP,100PF,+5%,-5%,50V-DC,0402*
C2404M2	2113944A40	CAP:CHIP,100PF,+5%,-5%,50V-DC,0402*
C2405M2	NOTPLACED	-
C2406M2	21667009274	CAPACITOR, FIXED, CERAMIC, 0402, 0.000001UF, 0.1PF, 50V, C0G
C2411M2	2113944A40	CAP:CHIP,100PF,+5%,-5%,50V-DC,0402*
C2412M2	2113944A40	CAP:CHIP,100PF,+5%,-5%,50V-DC,0402*
C2413M2	2113944A40	CAP:CHIP,100PF,+5%,-5%,50V-DC,0402*
C2414M2	2113944A40	CAP:CHIP,100PF,+5%,-5%,50V-DC,0402*
C2701M13	2113944C04	CAP:C0G,0603,5%,50V,330PF
C2702M13	2113944C48	CAP CER CHP 560.OPF 50V 5%



Ref. Des.	Part Number	Description
C2703M13	2113944A46	CAP:CHIP,330PF,+5%,-5%,50V-DC,0402,C0G,*
C2704M13	2113944C04	CAP:C0G,0603,5%,50V,330PF
C2705M13	2113944A46	CAP:CHIP,330PF,+5%,-5%,50V-DC,0402,C0G,*
C2706M13	2113944A46	CAP:CHIP,330PF,+5%,-5%,50V-DC,0402,C0G,*
C2707M13	2113946K02	CAP CER CHP 0.10UF 16V
C2708M13	2113944M27	CAP,FXD,24PF,+2%,-2%,50V-DC,0603,C0G,-55DEG CMIN,125DEG CMAX,PB
C2709M13	2113944C36	CAP,CHIP,33PF,+5%,-5%,50V-DC,0603,C0G*
C2806M1	NOTPLACED	-
C2M2	2113944A40	CAP:CHIP,100PF,+5%,-5%,50V-DC,0402*
C3200M22	2113944A40	CAP:CHIP,100PF,+5%,-5%,50V-DC,0402*
C3201M22	2113944A40	CAP:CHIP,100PF,+5%,-5%,50V-DC,0402*
C3202M22	2113944A46	CAP:CHIP,330PF,+5%,-5%,50V-DC,0402,C0G,*
C3204M22	2113944A52	CAP:CG,0402,5%,50V,.001UF
C3208M22	2113944A46	CAP:CHIP,330PF,+5%,-5%,50V-DC,0402,C0G,*
C3211M22	2113944M20	CAP,FXD,12PF,+2%,-2%,50V-DC,0603,C0G,-55DEG CMIN,125DEG CMAX,PB
C3212M22	2113944M22	CAP:FXD,15PF,+2%,-2%,50V-DC,0603,C0G*
C3213M22	2113946B04	CAP:CHIP,.1UF,+10%,-10%,10V-DC*
C3214M22	2115153H29	CAP, CERAMIC, COG
C3215M22	2113944A42	CAP:CHIP,150PF,+5%,-5%,50V-DC,0402,C0G,*

Ref. Des.	Part Number	Description
C3217M22	2113944M36	CAP,FXD,56PF,+2%,-2%,50V-DC,0603,C0G,-55DEG CMIN,125DEG CMAX,PB
C3219M22	2113944M32	CAP,FXD,39PF,+2%,-2%,50V-DC,0603,C0G,-55DEG CMIN,125DEG CMAX,PB
C3220M22	2113944M28	CAP,FXD,27PF,+2%,-2%,50V-DC,0603,C0G,-55DEG CMIN,125DEG CMAX,PB
C3224M22	2113946B04	CAP:CHIP,.1UF,+10%,-10%,10V-DC*
C3225M22	2113944M38	CAP,FXD,68PF,+2%,-2%,50V-DC,0603,C0G,-55DEG CMIN,125DEG CMAX,PB
C3226M22	2113944A42	CAP:CHIP,150PF,+5%,-5%,50V-DC,0402,C0G,*
C3235M22	2113944A31	CAP:CHIP,33PF,+5%,-5%,50V-DC,0402,C0G,*
C3240M22	2113944A40	CAP:CHIP,100PF,+5%,-5%,50V-DC,0402*
C3244M22	2113944A52	CAP:CG,0402,5%,50V,.001UF
C3251M22	21667011480	CAP,CER,9.1PF,.1PF+/-,50V-DC,0603,C0G,-55DEG CMIN,125DEG CMAX
C3252M22	21667011480	CAP,CER,9.1PF,.1PF+/-,50V-DC,0603,C0G,-55DEG CMIN,125DEG CMAX
C3253M22	2113946B04	CAP:CHIP,.1UF,+10%,-10%,10V-DC*
C3254M22	21667009373	CAPACITOR, FIXED, CERAMIC, 0402, 0.000024UF, +/- 1%, 50V, C0G
C3255M22	2113944A40	CAP:CHIP,100PF,+5%,-5%,50V-DC,0402*
C3258M22	2113944M36	CAP,FXD,56PF,+2%,-2%,50V-DC,0603,C0G,-55DEG CMIN,125DEG CMAX,PB

Ref. Des.	Part Number	Description
C3262M22	2113944M30	CAP,FXD,33PF,+2%,-2%,50V-DC,0603,C0G,-55DEG CMIN,125DEG CMAX,PB
C3263M22	2113944M26	CAP,FXD,22PF,+2%,-2%,50V-DC,0603,C0G,-55DEG CMIN,125DEG CMAX,PB
C3264M22	2113946B04	CAP:CHIP,.1UF,+10%,-10%,10V-DC*
C3265M22	2113944M38	CAP,FXD,68PF,+2%,-2%,50V-DC,0603,C0G,-55DEG CMIN,125DEG CMAX,PB
C3266M22	2113944A40	CAP:CHIP,100PF,+5%,-5%,50V-DC,0402*
C3275M22	2113944A31	CAP:CHIP,33PF,+5%,-5%,50V-DC,0402,C0G,*
C330M20	2113944A30	CAP CER CHP 27.0PF 50V 5%
C331M20	2113944A28	CAP:CHIP,18PF,+5%,-5%,50V-DC,0402*
C332M20	2113944A30	CAP CER CHP 27.0PF 50V 5%
C333M20	2113944A30	CAP CER CHP 27.0PF 50V 5%
C334M20	2113944A19	CAP CER CHP 5.6PF 50V +/- 0.5PF
C335M20	2113944A84	CAP,FXD,43PF,+5%,-5%,50V-DC,0402,C0G,-55DEG CMIN,125DEG CMAX,PB
C336M20	2113944A21	CAP:CHIP,6.8PF,.5PF+/-,50V-DC,0402*
C337M20	2113944A28	CAP:CHIP,18PF,+5%,-5%,50V-DC,0402*
C338M20	2113946D07	CAP:CHIP,4.7UF,+10%,-10%,6.3V-DC,0603*
C339M20	2113944A29	CAP:CHIP,22PF,+5%,-5%,50V-DC,0402*
C340M20	2113944A46	CAP:CHIP,330PF,+5%,-5%,50V-DC,0402,C0G,*

Ref. Des.	Part Number	Description
C341M20	2113944A46	CAP:CHIP,330PF,+5%,-5%,50V-DC,0402,C0G,*
C342M20	2113946D07	CAP:CHIP,4.7UF,+10%,-10%,6.3V-DC,0603*
C343M20	2113944A46	CAP:CHIP,330PF,+5%,-5%,50V-DC,0402,C0G,*
C344M20	21012043009	CAPACITOR, CERAMIC, 1.0PF, 50V-DC, C0G,
C345M20	2113944A30	CAP CER CHP 27.0PF 50V 5%
C346M20	2113944A28	CAP:CHIP,18PF,+5%,-5%,50V-DC,0402*
C347M20	2113944A27	CAP:CHIP,15PF,+5%,-5%,50V-DC,0402,C0G*
C348M20	2113944A28	CAP:CHIP,18PF,+5%,-5%,50V-DC,0402*
C349M20	2113944A30	CAP CER CHP 27.0PF 50V 5%
C350M20	2113944A30	CAP CER CHP 27.0PF 50V 5%
C351M20	2113944A19	CAP CER CHP 5.6PF 50V +/- 0.5PF
C352M20	21667009379	CAPACITOR, FIXED, CERAMIC, 0402, 0.000043UF, +/- 1%, 50V, C0G
C353M20	2113944A21	CAP:CHIP,6.8PF,.5PF+/-,50V-DC,0402*
C354M20	2113944A28	CAP:CHIP,18PF,+5%,-5%,50V-DC,0402*
C357M20	2113944A46	CAP:CHIP,330PF,+5%,-5%,50V-DC,0402,C0G,*
C360M20	21667009368	CAPACITOR, FIXED, CERAMIC, 0402, 0.000015UF, +/- 1%, 50V, C0G
C365M20	0613952R66	RES:MF,0OHM,5%,.0625W, SM,0402*
C366M20	2113944A28	CAP:CHIP,18PF,+5%,-5%,50V-DC,0402*
C367M20	2113944A27	CAP:CHIP,15PF,+5%,-5%,50V-DC,0402,C0G*

Ref. Des.	Part Number	Description
C368M20	21667009373	CAPACITOR, FIXED, CERAMIC, 0402, 0.000024UF, +/- 1%, 50V, C0G
C369M20	NOTPLACED	-
C370M20	21012043009	CAPACITOR, CERAMIC, 1.0PF, 50V-DC, C0G,
C4005M2	2113946B04	CAP:CHIP,.1UF,+10%,-10%,10V-DC*
C4006M2	2113946B04	CAP:CHIP,.1UF,+10%,-10%,10V-DC*
C4007M2	2113946B04	CAP:CHIP,.1UF,+10%,-10%,10V-DC*
C4M2	2113944A40	CAP:CHIP,100PF,+5%,-5%,50V-DC,0402*
C500M21	2113945B05	CAP,FXD,.033UF,+10%,-10%,25V-DC,0402,X7R,-55DEG CMIN,125DEG CMA
C501M21	2113944A32	CAP:CHIP,39PF,+5%,-5%,50V-DC,0402,C0G,*
C502M21	2113945B05	CAP,FXD,.033UF,+10%,-10%,25V-DC,0402,X7R,-55DEG CMIN,125DEG CMA
C504M21	2113944A40	CAP:CHIP,100PF,+5%,-5%,50V-DC,0402*
C505M21	2113944A09	CAP:CHIP,2.2PF,.25PF+/-,50V-DC,0402*
C506M21	2113944A32	CAP:CHIP,39PF,+5%,-5%,50V-DC,0402,C0G,*
C507M21	2113945B05	CAP,FXD,.033UF,+10%,-10%,25V-DC,0402,X7R,-55DEG CMIN,125DEG CMA
C508M21	2113946D07	CAP:CHIP,4.7UF,+10%,-10%,6.3V-DC,0603*
C509M21	2113945B05	CAP,FXD,.033UF,+10%,-10%,25V-DC,0402,X7R,-55DEG CMIN,125DEG CMA
C510M21	2113944A32	CAP:CHIP,39PF,+5%,-5%,50V-DC,0402,C0G,*
C511M21	2113945B05	CAP,FXD,.033UF,+10%,-10%,25V-DC,0402,X7R,-55DEG CMIN,125DEG CMA

Ref. Des.	Part Number	Description
C512M21	2113946D07	CAP:CHIP,4.7UF,+10%,-10%,6.3V-DC,0603*
C514M21	NOTPLACED	-
C515M21	21667009300	CAPACITOR, FIXED, CERAMIC, 0402, 0.0000036UF, 0.1PF, 50V, C0G
C516M21	2113944C04	CAP:C0G,0603,5%,50V,330PF
C532M21	2113944A32	CAP:CHIP,39PF,+5%,-5%,50V-DC,0402,C0G,*
C533M21	21667009383	CAPACITOR, FIXED, CERAMIC, 0402, 0.000062UF, +/- 1%, 50V, C0G
C550M21	NOTPLACED	-
C551M21	NOTPLACED	-
C601M19	2113945B02	CAP:CHIP,.01UF,+10%,-10%,25V-DC*
C602M19	2113945B02	CAP:CHIP,.01UF,+10%,-10%,25V-DC*
C603M19	2113945B02	CAP:CHIP,.01UF,+10%,-10%,25V-DC*
C604M19	2113945B02	CAP:CHIP,.01UF,+10%,-10%,25V-DC*
C605M19	2113944A21	CAP:CHIP,6.8PF,.5PF+/-,50V-DC,0402*
C606M19	2113946B04	CAP:CHIP,.1UF,+10%,-10%,10V-DC*
C607M19	2113944A40	CAP:CHIP,100PF,+5%,-5%,50V-DC,0402*
C608M19	2113944A12	CAP CER CHP 3.0PF 50V +/- 0.25PF
C609M19	2113944A30	CAP CER CHP 27.0PF 50V 5%
C6104M6	2113946B04	CAP:CHIP,.1UF,+10%,-10%,10V-DC*
C6105M6	2113946B04	CAP:CHIP,.1UF,+10%,-10%,10V-DC*
C6106M6	2113946B04	CAP:CHIP,.1UF,+10%,-10%,10V-DC*

Ref. Des.	Part Number	Description
C6107M6	2113946B04	CAP:CHIP,.1UF,+10%,-10%,10V-DC*
C6108M6	2113946B04	CAP:CHIP,.1UF,+10%,-10%,10V-DC*
C6109M6	2113946B04	CAP:CHIP,.1UF,+10%,-10%,10V-DC*
C610M19	2113944A40	CAP:CHIP,100PF,+5%,-5%,50V-DC,0402*
C6110M6	2113946B04	CAP:CHIP,.1UF,+10%,-10%,10V-DC*
C6111M6	2113946B04	CAP:CHIP,.1UF,+10%,-10%,10V-DC*
C6112M6	2113946B04	CAP:CHIP,.1UF,+10%,-10%,10V-DC*
C6113M6	2113946B04	CAP:CHIP,.1UF,+10%,-10%,10V-DC*
C6114M6	2113946B04	CAP:CHIP,.1UF,+10%,-10%,10V-DC*
C6115M6	2113946B04	CAP:CHIP,.1UF,+10%,-10%,10V-DC*
C611M19	2113944A40	CAP:CHIP,100PF,+5%,-5%,50V-DC,0402*
C612M19	2113945B02	CAP:CHIP,.01UF,+10%,-10%,25V-DC*
C613M19	2113944A40	CAP:CHIP,100PF,+5%,-5%,50V-DC,0402*
C614M19	2113945B02	CAP:CHIP,.01UF,+10%,-10%,25V-DC*
C6156M6	NOTPLACED	-
C615M19	2113944A42	CAP:CHIP,150PF,+5%,-5%,50V-DC,0402,C0G,*
C616M19	2113945A11	CAP:CHIP,2200PF,+10%,-10%,50V-DC,0402,*
C617M19	2113946B04	CAP:CHIP,.1UF,+10%,-10%,10V-DC*
C618M19	2113944A31	CAP:CHIP,33PF,+5%,-5%,50V-DC,0402,C0G,*
C619M19	2113944A35	CAP CER CHP 62.0PF 50V 5%
C6201M6	2113944A40	CAP:CHIP,100PF,+5%,-5%,50V-DC,0402*

Ref. Des.	Part Number	Description
C6202M6	2113945A09	CAP:CHIP,1000PF,+10%,-10%*
C6203M6	2113946B04	CAP:CHIP,.1UF,+10%,-10%,10V-DC*
C620M19	2113946B04	CAP:CHIP,.1UF,+10%,-10%,10V-DC*
C621M19	2113946B04	CAP:CHIP,.1UF,+10%,-10%,10V-DC*
C622M19	2113946C07	CAP:FXD,.33UF,+10%,-10%,10V-DC,0603*
C623M19	2113945B02	CAP:CHIP,.01UF,+10%,-10%,25V-DC*
C624M19	2113946C07	CAP:FXD,.33UF,+10%,-10%,10V-DC,0603*
C625M19	21667009370	CAPACITOR, FIXED, CERAMIC, 0402, 0.000018UF, +/- 1%, 50V, C0G
C626M19	2113945A09	CAP:CHIP,1000PF,+10%,-10%*
C627M19	2113945A09	CAP:CHIP,1000PF,+10%,-10%*
C628M19	2113945B02	CAP:CHIP,.01UF,+10%,-10%,25V-DC*
C629M19	2113946B04	CAP:CHIP,.1UF,+10%,-10%,10V-DC*
C6301M6	2113946B04	CAP:CHIP,.1UF,+10%,-10%,10V-DC*
C6302M6	2113946B04	CAP:CHIP,.1UF,+10%,-10%,10V-DC*
C6303M6	2113946B04	CAP:CHIP,.1UF,+10%,-10%,10V-DC*
C6304M6	2113946B04	CAP:CHIP,.1UF,+10%,-10%,10V-DC*
C6305M6	2113946S35	CAP:CHIP,1UF,+10%,-10%,16V-DC,0603,*
C6306M6	2113946S35	CAP:CHIP,1UF,+10%,-10%,16V-DC,0603,*
C6308M6	2113946B04	CAP:CHIP,.1UF,+10%,-10%,10V-DC*
C6309M6	2113946B04	CAP:CHIP,.1UF,+10%,-10%,10V-DC*

Ref. Des.	Part Number	Description	Ref. Des.	Part Number	Description	Ref. Des.	Part Number	Description	Ref. Des.	Part Number	Description
C630M19	2113946B04	CAP:CHIP,.1UF,+10%,-10%,10V-DC*	C6409M6	2113946B04	CAP:CHIP,.1UF,+10%,-10%,10V-DC*	C6427M6	2113944A50	CAP CER CHP 680.0 PF 50V 5%	C6503M6	2113944A46	CAP:CHIP,330PF,+5%,-5%,50V-DC,0402,C0G,*
C6310M6	2113946B04	CAP:CHIP,.1UF,+10%,-10%,10V-DC*	C640M19	2113946B04	CAP:CHIP,.1UF,+10%,-10%,10V-DC*	C6428M6	2113944A40	CAP:CHIP,100PF,+5%,-5%,50V-DC,0402*	C6504M6	2113946B04	CAP:CHIP,.1UF,+10%,-10%,10V-DC*
C6311M6	2113946B04	CAP:CHIP,.1UF,+10%,-10%,10V-DC*	C6410M6	2113946B04	CAP:CHIP,.1UF,+10%,-10%,10V-DC*	C6429M6	2113946B04	CAP:CHIP,.1UF,+10%,-10%,10V-DC*	C6505M6	2113946B04	CAP:CHIP,.1UF,+10%,-10%,10V-DC*
C631M19	21667009334	CAPACI-TOR, FIXED, CERAMIC, 0402, 0.000007UF, 0.1PF, 50V, C0G	C6411M6	2113946B04	CAP:CHIP,.1UF,+10%,-10%,10V-DC*	C642M19	2113944A48	CAP:CHIP,470PF,+5%,-5%,50V-DC,0402,C0G,*	C6506M6	2113946B04	CAP:CHIP,.1UF,+10%,-10%,10V-DC*
C632M19	2113944A40	CAP:CHIP,100PF,+5%,-5%,50V-DC,0402*	C6412M6	NOTPLACED	-	C6430M6	2113946B04	CAP:CHIP,.1UF,+10%,-10%,10V-DC*	C6507M6	2113946B04	CAP:CHIP,.1UF,+10%,-10%,10V-DC*
C633M19	2113945B02	CAP:CHIP,.01UF,+10%,-10%,25V-DC*	C6413M6	2113946B04	CAP:CHIP,.1UF,+10%,-10%,10V-DC*	C6431M6	2113946B04	CAP:CHIP,.1UF,+10%,-10%,10V-DC*	C6508M6	2113946B04	CAP:CHIP,.1UF,+10%,-10%,10V-DC*
C634M19	2113946B04	CAP:CHIP,.1UF,+10%,-10%,10V-DC*	C6414M6	2113946B04	CAP:CHIP,.1UF,+10%,-10%,10V-DC*	C6432M6	2113956B54	CAP:MLCC,X5R,0603,20%,6.3V,10UF	C6509M6	2113946B04	CAP:CHIP,.1UF,+10%,-10%,10V-DC*
C635M19	2113945B02	CAP:CHIP,.01UF,+10%,-10%,25V-DC*	C6415M6	NOTPLACED	-	C6433M6	2113946S35	CAP:CHIP,1UF,+10%,-10%,16V-DC,0603,*	C6510M6	2113946B04	CAP:CHIP,.1UF,+10%,-10%,10V-DC*
C636M19	2113946B04	CAP:CHIP,.1UF,+10%,-10%,10V-DC*	C6416M6	2113945B04	CAP,FXD,.022UF,+10%,-10%,25V-DC,0402,X7R,-55DEG CMIN,125DEG CMA	C6434M6	2113946L05	CAP,FXD,.33UF,+80%,-20%,16V-DC,0603,Y5V,-30DEG CMIN,85DEG CMAX	C6511M6	2113946S35	CAP:CHIP,1UF,+10%,-10%,16V-DC,0603,*
C637M19	2113946B04	CAP:CHIP,.1UF,+10%,-10%,10V-DC*	C6417M6	2113945B04	CAP,FXD,.022UF,+10%,-10%,25V-DC,0402,X7R,-55DEG CMIN,125DEG CMA	C6435M6	2113946S35	CAP:CHIP,1UF,+10%,-10%,16V-DC,0603,*	C6512M6	2113946B04	CAP:CHIP,.1UF,+10%,-10%,10V-DC*
C638M19	2113945A12	CAP:CHIP,3300PF,+10%,-10%,50V-DC,0402,*	C6418M6	2113946B04	CAP:CHIP,.1UF,+10%,-10%,10V-DC*	C6436M6	2113946C08	CAP,FXD,.47UF,+10%,-10%,10V-DC,0603,X5R,-55DEG CMIN,85DEG CMAX	C6513M6	2113946S35	CAP:CHIP,1UF,+10%,-10%,16V-DC,0603,*
C639M19	2113945B02	CAP:CHIP,.01UF,+10%,-10%,25V-DC*	C6419M6	2113946B04	CAP:CHIP,.1UF,+10%,-10%,10V-DC*	C6437M6	2113946C08	CAP,FXD,.47UF,+10%,-10%,10V-DC,0603,X5R,-55DEG CMIN,85DEG CMAX	C6514M6	2113946S35	CAP:CHIP,1UF,+10%,-10%,16V-DC,0603,*
C6401M6	2113946B04	CAP:CHIP,.1UF,+10%,-10%,10V-DC*	C641M19	2113944A31	CAP:CHIP,33PF,+5%,-5%,50V-DC,0402,C0G,*	C6438M6	2113944A40	CAP:CHIP,100PF,+5%,-5%,50V-DC,0402*	C6515M6	2113946S35	CAP:CHIP,1UF,+10%,-10%,16V-DC,0603,*
C6402M6	2113956A51	CAP:FXD,1UF,+10%,-10%,6.3V-DC*	C6420M6	2113945B04	CAP,FXD,.022UF,+10%,-10%,25V-DC,0402,X7R,-55DEG CMIN,125DEG CMA	C643M19	2113944A48	CAP:CHIP,470PF,+5%,-5%,50V-DC,0402,C0G,*	C6516M6	2113946B04	CAP:CHIP,.1UF,+10%,-10%,10V-DC*
C6403M6	2113946B04	CAP:CHIP,.1UF,+10%,-10%,10V-DC*	C6421M6	2113946B04	CAP:CHIP,.1UF,+10%,-10%,10V-DC*	C644M19	2113944A11	CAP:CHIP,2.7PF,.25PF,+/-,50V-DC,0402*	C6517M6	2113946S35	CAP:CHIP,1UF,+10%,-10%,16V-DC,0603,*
C6404M6	2113946B04	CAP:CHIP,.1UF,+10%,-10%,10V-DC*	C6422M6	2113946C02	CAP:CHIP,.22UF,+10%,-10%,10V-DC,0603*	C645M19	NOTPLACED	-	C6518M6	2113946B04	CAP:CHIP,.1UF,+10%,-10%,10V-DC*
C6405M6	2113946B04	CAP:CHIP,.1UF,+10%,-10%,10V-DC*	C6423M6	2113946B04	CAP:CHIP,.1UF,+10%,-10%,10V-DC*	C646M19	21667009344	CAPACI-TOR, FIXED, CERAMIC, 0402, 0.000008UF, 0.1PF, 50V, C0G	C6519M6	2113946S35	CAP:CHIP,1UF,+10%,-10%,16V-DC,0603,*
C6406M6	2113946B04	CAP:CHIP,.1UF,+10%,-10%,10V-DC*	C6424M6	2113944A40	CAP:CHIP,100PF,+5%,-5%,50V-DC,0402*	C6501M6	2113946B04	CAP:CHIP,.1UF,+10%,-10%,10V-DC*	C6520M6	2113946B04	CAP:CHIP,.1UF,+10%,-10%,10V-DC*
C6407M6	2113946B04	CAP:CHIP,.1UF,+10%,-10%,10V-DC*	C6425M6	2113944A40	CAP:CHIP,100PF,+5%,-5%,50V-DC,0402*	C6502M6	2113946B04	CAP:CHIP,.1UF,+10%,-10%,10V-DC*	C6521M6	2113944A46	CAP:CHIP,330PF,+5%,-5%,50V-DC,0402,C0G,*
C6408M6	2113946B04	CAP:CHIP,.1UF,+10%,-10%,10V-DC*	C6426M6	2113945B02	CAP:CHIP,.01UF,+10%,-10%,25V-DC*				C6522M6	2113946S35	CAP:CHIP,1UF,+10%,-10%,16V-DC,0603,*

Ref. Des.	Part Number	Description	Ref. Des.	Part Number	Description	Ref. Des.	Part Number	Description	Ref. Des.	Part Number	Description
C6523M6	2113946B04	CAP:CHIP,.1UF,+10%,-10%,10V-DC*	C6542M6	2113946B04	CAP:CHIP,.1UF,+10%,-10%,10V-DC*	C6560M6	2113956C37	CAP:FXD,10UF,+10%,-10%,16V-DC,0805,*	C6577M6	2113946S35	CAP:CHIP,1UF,+10%,-10%,16V-DC,0603,*
C6524M6	2113946B04	CAP:CHIP,.1UF,+10%,-10%,10V-DC*	C6543M6	2113946B04	CAP:CHIP,.1UF,+10%,-10%,10V-DC*	C6561M6	2113956C37	CAP:FXD,10UF,+10%,-10%,16V-DC,0805,*	C6578M6	2113946S35	CAP:CHIP,1UF,+10%,-10%,16V-DC,0603,*
C6525M6	2113946S35	CAP:CHIP,1UF,+10%,-10%,16V-DC,0603,*	C6544M6	2113945D04	CAP:CHIP,.1UF,+10%,-10%,25V-DC,0603,X7R*	C6562M6	2113944A25	CAP:CHIP,10PF,.5PF+/-,50V-DC,0402*	C6579M6	2113946S35	CAP:CHIP,1UF,+10%,-10%,16V-DC,0603,*
C6526M6	2113946B04	CAP:CHIP,.1UF,+10%,-10%,10V-DC*	C6545M6	2113945D04	CAP:CHIP,.1UF,+10%,-10%,25V-DC,0603,X7R*	C6563M6	2113945D04	CAP:CHIP,.1UF,+10%,-10%,25V-DC,0603,X7R*	C6580M6	2113946S35	CAP:CHIP,1UF,+10%,-10%,16V-DC,0603,*
C6527M6	2113946B04	CAP:CHIP,.1UF,+10%,-10%,10V-DC*	C6546M6	2113946B04	CAP:CHIP,.1UF,+10%,-10%,10V-DC*	C6564M6	2113944A46	CAP:CHIP,330PF,+5%,-5%,50V-DC,0402,C0G,*	C6581M6	2113956B33	CAP,FXD,2.2UF,+10%,-10%,16V-DC,0603,X5R,-55DEG CMIN,85DEG CMAX
C6528M6	2113946B04	CAP:CHIP,.1UF,+10%,-10%,10V-DC*	C6547M6	2113944A46	CAP:CHIP,330PF,+5%,-5%,50V-DC,0402,C0G,*	C6565M6	2113956B33	CAP,FXD,2.2UF,+10%,-10%,16V-DC,0603,X5R,-55DEG CMIN,85DEG CMAX	C6582M6	2113944A21	CAP:CHIP,6.8PF,.5PF+/-,50V-DC,0402*
C6529M6	2113946B04	CAP:CHIP,.1UF,+10%,-10%,10V-DC*	C6548M6	NOTPLACED	-	C6566M6	2113956E91	CAP,FXD,10UF,+10%,-10%,16V-DC,1210,X5R,-55DEG CMIN,85DEG CMAX,P	C6583M6	2113946B04	CAP:CHIP,.1UF,+10%,-10%,10V-DC*
C6530M6	2113946S35	CAP:CHIP,1UF,+10%,-10%,16V-DC,0603,*	C6549M6	2113944A46	CAP:CHIP,330PF,+5%,-5%,50V-DC,0402,C0G,*	C6567M6	2113956E91	CAP,FXD,10UF,+10%,-10%,16V-DC,1210,X5R,-55DEG CMIN,85DEG CMAX,P	C6584M6	2113956C37	CAP:FXD,10UF,+10%,-10%,16V-DC,0805,*
C6531M6	2113946B04	CAP:CHIP,.1UF,+10%,-10%,10V-DC*	C6550M6	2113945D04	CAP:CHIP,.1UF,+10%,-10%,25V-DC,0603,X7R*	C6568M6	2113956B33	CAP,FXD,2.2UF,+10%,-10%,16V-DC,0603,X5R,-55DEG CMIN,85DEG CMAX	C6585M6	2113946B04	CAP:CHIP,.1UF,+10%,-10%,10V-DC*
C6532M6	2113946S35	CAP:CHIP,1UF,+10%,-10%,16V-DC,0603,*	C6551M6	2113944A46	CAP:CHIP,330PF,+5%,-5%,50V-DC,0402,C0G,*	C6569M6	2113956E91	CAP,FXD,10UF,+10%,-10%,16V-DC,1210,X5R,-55DEG CMIN,85DEG CMAX,P	C6586M6	2113956C35	CAP,FXD,4.7UF,+10%,-10%,16V-DC,0805,X5R,-55DEG CMIN,85DEG CMAX
C6533M6	2113946B04	CAP:CHIP,.1UF,+10%,-10%,10V-DC*	C6552M6	2113956E91	CAP,FXD,10UF,+10%,-10%,16V-DC,1210,X5R,-55DEG CMIN,85DEG CMAX,P	C6570M6	2113944A46	CAP:CHIP,330PF,+5%,-5%,50V-DC,0402,C0G,*	C6587M6	2113946B04	CAP:CHIP,.1UF,+10%,-10%,10V-DC*
C6534M6	2113956B33	CAP,FXD,2.2UF,+10%,-10%,16V-DC,0603,X5R,-55DEG CMIN,85DEG CMAX	C6553M6	2113956E91	CAP,FXD,10UF,+10%,-10%,16V-DC,1210,X5R,-55DEG CMIN,85DEG CMAX,P	C6571M6	2113944A46	CAP:CHIP,330PF,+5%,-5%,50V-DC,0402,C0G,*	C6588M6	2113944A46	CAP:CHIP,330PF,+5%,-5%,50V-DC,0402,C0G,*
C6535M6	2113944A40	CAP:CHIP,100PF,+5%,-5%,50V-DC,0402*	C6554M6	2113946B04	CAP:CHIP,.1UF,+10%,-10%,10V-DC*	C6572M6	2113946B04	CAP:CHIP,.1UF,+10%,-10%,10V-DC*	C6589M6	2113944A40	CAP:CHIP,100PF,+5%,-5%,50V-DC,0402*
C6536M6	2113944A26	CAP CER CHP 12.0PF 50V 5%	C6555M6	2113955D45	CAP,FXD,4.7UF,+10%,-10%,10V-DC,1206,X7R,-55DEG CMIN,125DEG CMAX	C6573M6	2113946B04	CAP:CHIP,.1UF,+10%,-10%,10V-DC*	C6590M6	2113946B04	CAP:CHIP,.1UF,+10%,-10%,10V-DC*
C6537M6	2113944A19	CAP CER CHP 5.6PF 50V +/- 0.5PF	C6556M6	2113956B33	CAP,FXD,2.2UF,+10%,-10%,16V-DC,0603,X5R,-55DEG CMIN,85DEG CMAX	C6574M6	2113946S35	CAP:CHIP,1UF,+10%,-10%,16V-DC,0603,*	C6591M6	2113944A26	CAP CER CHP 12.0PF 50V 5%
C6538M6	2113956B33	CAP,FXD,2.2UF,+10%,-10%,16V-DC,0603,X5R,-55DEG CMIN,85DEG CMAX	C6557M6	2113945D04	CAP:CHIP,.1UF,+10%,-10%,25V-DC,0603,X7R*	C6575M6	2113946S35	CAP:CHIP,1UF,+10%,-10%,16V-DC,0603,*	C6592M6	2113944A09	CAP:CHIP,2.2PF,.25PF+/-,50V-DC,0402*
C6539M6	2113956B33	CAP,FXD,2.2UF,+10%,-10%,16V-DC,0603,X5R,-55DEG CMIN,85DEG CMAX	C6558M6	2113944A21	CAP:CHIP,6.8PF,.5PF+/-,50V-DC,0402*	C6576M6	2113956B33	CAP,FXD,2.2UF,+10%,-10%,16V-DC,0603,X5R,-55DEG CMIN,85DEG CMAX	C6593M6	2113956C37	CAP:FXD,10UF,+10%,-10%,16V-DC,0805,*
C6540M6	2113945A09	CAP:CHIP,1000PF,+10%,-10%*	C6559M6	2113946S35	CAP:CHIP,1UF,+10%,-10%,16V-DC,0603,*				C6594M6	2113946C07	CAP:FXD,.33UF,+10%,-10%,10V-DC,0603*
C6541M6	2113944A19	CAP CER CHP 5.6PF 50V +/- 0.5PF							C6595M6	2113946S35	CAP:CHIP,1UF,+10%,-10%,16V-DC,0603,*
									C6596M6	NOTPLACED	-

Ref. Des.	Part Number	Description
C6601M6	2113944A28	CAP:CHIP,18PF,+5%,-5%,50V-DC,0402*
C6602M6	2113944A28	CAP:CHIP,18PF,+5%,-5%,50V-DC,0402*
C6670M6	2113944A78	CAP,FXD,13PF,+5%,-5%,50V-DC,0402,C0G,-55DEG CMIN,125DEG CMAX,PB
C6M2	2113944A40	CAP:CHIP,100PF,+5%,-5%,50V-DC,0402*
C702M7	2113944G97	CAP,FXD,.082UF,+5%,-5%,50V-DC,1206,C0G,-55DEG CMIN,125DEG CMAX
C703M7	2113945C26	CAP:FXD,.039UF,+10%,-10%,50V-DC,0603,X7*
C704M7	2113944G97	CAP,FXD,.082UF,+5%,-5%,50V-DC,1206,C0G,-55DEG CMIN,125DEG CMAX
C705M7	2113944A43	CAP CER CHP 180.0PF 50V 5%
C706M7	2113944G97	CAP,FXD,.082UF,+5%,-5%,50V-DC,1206,C0G,-55DEG CMIN,125DEG CMAX
C707M7	2113945C01	CAP CER CHP 6800PF 50V 10%
C708M7	NOTPLACED	-
C709M7	2185419D06	CAP CER SUPER L/D 0.1UF
C710M7	NOTPLACED	-
C711M7	NOTPLACED	-
C712M7	NOTPLACED	-
C713M7	2113945C20	CAP,FXD,.016UF,+10%,-10%,50V-DC,0603,X7R,-55DEG CMIN,125DEG CMA
C714M7	2113944G97	CAP,FXD,.082UF,+5%,-5%,50V-DC,1206,C0G,-55DEG CMIN,125DEG CMAX

Ref. Des.	Part Number	Description
C715M7	2113945C31	CAP,FXD,.1UF,+10%,-10%,50V-DC,0603,X7R,-55DEG CMIN,125DEG CMAX
C716M7	2113945C31	CAP,FXD,.1UF,+10%,-10%,50V-DC,0603,X7R,-55DEG CMIN,125DEG CMAX
C717M7	2113945C31	CAP,FXD,.1UF,+10%,-10%,50V-DC,0603,X7R,-55DEG CMIN,125DEG CMAX
C718M7	2113945C31	CAP,FXD,.1UF,+10%,-10%,50V-DC,0603,X7R,-55DEG CMIN,125DEG CMAX
C719M7	2113945C31	CAP,FXD,.1UF,+10%,-10%,50V-DC,0603,X7R,-55DEG CMIN,125DEG CMAX
C720M7	2113944C54	CAP CER CHP 1800.OPF 50V 5%
C721M7	2113945G95	CAP:FXD,.22UF,+10%,-10%,50V-DC,0805,X7R*
C722M7	2113944A52	CAP:CG,0402,5%,50V,.001 UF
C723M7	2113944A52	CAP:CG,0402,5%,50V,.001 UF
C724M7	2113955D37	CAP,FXD,10UF,+10%,-10%,16V-DC,1206,X7R,-55DEG CMIN,125DEG CMAX
C725M7	2113945C31	CAP,FXD,.1UF,+10%,-10%,50V-DC,0603,X7R,-55DEG CMIN,125DEG CMAX
C726M7	2113945C31	CAP,FXD,.1UF,+10%,-10%,50V-DC,0603,X7R,-55DEG CMIN,125DEG CMAX
C727M7	2113944A52	CAP:CG,0402,5%,50V,.001 UF
C730M7	2113945C31	CAP,FXD,.1UF,+10%,-10%,50V-DC,0603,X7R,-55DEG CMIN,125DEG CMAX

Ref. Des.	Part Number	Description
C731M7	2113945C31	CAP,FXD,.1UF,+10%,-10%,50V-DC,0603,X7R,-55DEG CMIN,125DEG CMAX
C732M7	2113944A32	CAP:CHIP,39PF,+5%,-5%,50V-DC,0402,C0G,*
C733M7	2113945A09	CAP:CHIP,1000PF,+10%,-10%*
C734M7	2113945C31	CAP,FXD,.1UF,+10%,-10%,50V-DC,0603,X7R,-55DEG CMIN,125DEG CMAX
C735M7	2113944A31	CAP:CHIP,33PF,+5%,-5%,50V-DC,0402,C0G,*
C736M7	2113945B02	CAP:CHIP,.01UF,+10%,-10%,25V-DC*
C737M7	2113945C31	CAP,FXD,.1UF,+10%,-10%,50V-DC,0603,X7R,-55DEG CMIN,125DEG CMAX
C739M7	2113944A17	CAP:CHIP,4.7PF,.25PF+/-,50V-DC,0402*
C740M7	2113944A44	CAP:CG,0402,5%,50V,220P F
C742M7	2113945C31	CAP,FXD,.1UF,+10%,-10%,50V-DC,0603,X7R,-55DEG CMIN,125DEG CMAX
C743M7	2113946B06	CAP:CHIP,.22UF,+10%,-10%,10V-DC,0402*
C744M7	2113955D37	CAP,FXD,10UF,+10%,-10%,16V-DC,1206,X7R,-55DEG CMIN,125DEG CMAX
C749M7	2113945C31	CAP,FXD,.1UF,+10%,-10%,50V-DC,0603,X7R,-55DEG CMIN,125DEG CMAX
C750M7	2113945C31	CAP,FXD,.1UF,+10%,-10%,50V-DC,0603,X7R,-55DEG CMIN,125DEG CMAX
C751M7	2113945A09	CAP:CHIP,1000PF,+10%,-10%*

Ref. Des.	Part Number	Description
C752M7	2113944A43	CAP CER CHP 180.0PF 50V 5%
C753M7	2113945Y02	CAP:X7R,0402,10%,16V,0.1 UF
C754M7	2113944A34	CAP CER CHP 56.0PF 50V 5%
C756M7	2113955D37	CAP,FXD,10UF,+10%,-10%,16V-DC,1206,X7R,-55DEG CMIN,125DEG CMAX
C757M7	2113945C31	CAP,FXD,.1UF,+10%,-10%,50V-DC,0603,X7R,-55DEG CMIN,125DEG CMAX
C760M7	2113944A44	CAP:CG,0402,5%,50V,220P F
C764M7	2113946B06	CAP:CHIP,.22UF,+10%,-10%,10V-DC,0402*
C770M7	2113944A44	CAP:CG,0402,5%,50V,220P F
C772M7	2113945A09	CAP:CHIP,1000PF,+10%,-10%*
C773M7	2113944A33	CAP:CHIP,47PF,+5%,-5%,50V-DC,0402,C0G,*
C777M7	2113944A44	CAP:CG,0402,5%,50V,220P F
C780M7	2113944A33	CAP:CHIP,47PF,+5%,-5%,50V-DC,0402,C0G,*
C781M7	2113944A44	CAP:CG,0402,5%,50V,220P F
C786M7	2113944A44	CAP:CG,0402,5%,50V,220P F
C7M2	2113944A40	CAP:CHIP,100PF,+5%,-5%,50V-DC,0402*
C803M7	2113944A44	CAP:CG,0402,5%,50V,220P F
C813M7	2113944A13	CAP CER CHP 3.3PF 50V +/- 0.25PF
C816M7	2113944A35	CAP CER CHP 62.0PF 50V 5%
C817M7	2113944A44	CAP:CG,0402,5%,50V,220P F

Ref. Des.	Part Number	Description	Ref. Des.	Part Number	Description	Ref. Des.	Part Number	Description	Ref. Des.	Part Number	Description
C819M7	2113944A44	CAP:CG,0402,5%,50V,220PF	C915M16	2113944C04	CAP:C0G,0603,5%,50V,330PF	D200M12	4813978A19	DIODE,RECT,MBR120,SM,SOD-123,1A,20V,SHTK,PB-FREE	D5M2	4870359B01	DIODE:SUPPRES-SOR,ESD,BI-DIR,7.82V,1W
C823M7	2113944A52	CAP:CG,0402,5%,50V,.001UF	C916M16	2113944M39	CAP,FXD,75PF,+2%,-2%,50V-DC,0603,C0G,-55DEG CMIN,125DEG CMAX,PB	D2101M2	4870359B01	DIODE:SUPPRES-SOR,ESD,BI-DIR,7.82V,1W	D6101M6	4813978A25	SCHOTTKY 30V SOD-323 T&R PB FREE
C824M7	2113944A44	CAP:CG,0402,5%,50V,220PF	C917M16	NOTPLACED	-	D2401M2	4870359B01	DIODE:SUPPRES-SOR,ESD,BI-DIR,7.82V,1W	D6401M6	4813978A25	SCHOTTKY 30V SOD-323 T&R PB FREE
C8M2	2113944A40	CAP:CHIP,100PF,+5%,-5%,50V-DC,0402*	C918M16	2113944C48	CAP CER CHP 560.OPF 50V 5%	D2402M2	4870359B01	DIODE:SUPPRES-SOR,ESD,BI-DIR,7.82V,1W	D6501M6	4813978A25	SCHOTTKY 30V SOD-323 T&R PB FREE
C901M16	2113944M49	CAP,FXD,1000PF,+1%,-1%,50V-DC,C0G,-55DEG CMIN,125DEG CMAX,PB-F	C919M16	2113944M22	CAP:FXD,15PF,+2%,-2%,50V-DC,0603,C0G*	D2403M2	4870359B01	DIODE:SUPPRES-SOR,ESD,BI-DIR,7.82V,1W	D6502M6	4813978A25	SCHOTTKY 30V SOD-323 T&R PB FREE
C902M16	2113944C04	CAP:C0G,0603,5%,50V,330PF	C920M16	2113742J10	CAP 39.0 PF 5%	D2701M13	4813974A19	DIODE ARRAY,MXR,SM,SOT-323,7V,2W,SHTK,2,PB-FREE	D6M2	4870359B01	DIODE:SUPPRES-SOR,ESD,BI-DIR,7.82V,1W
C903M16	2113945L49	CAP,FXD,.01UF,+5%,-5%,50V-DC,0603,X7R,-*	C921M16	2113742J10	CAP 39.0 PF 5%	D2702M13	4815897H01	DIODE: UPP9401E ,PIN,50V,2.5W,DO-216	D722M7	4815011H01	DIODE TRIPLE
C904M16	2113944M28	CAP,FXD,27PF,+2%,-2%,50V-DC,0603,C0G,-55DEG CMIN,125DEG CMAX,PB	C922M16	2113944M24	CAP,FXD,18PF,+2%,-2%,50V-DC,0603,C0G,-55DEG CMIN,125DEG CMAX,PB	D2703M13	4815897H01	DIODE: UPP9401E ,PIN,50V,2.5W,DO-216	D723M7	4815011H01	DIODE TRIPLE
C905M16	2113945L49	CAP,FXD,.01UF,+5%,-5%,50V-DC,0603,X7R,-*	C923M16	NOTPLACED	-	D301M20	NOTPLACED	-	D7M2	4870359B01	DIODE:SUPPRES-SOR,ESD,BI-DIR,7.82V,1W
C906M16	2113944C04	CAP:C0G,0603,5%,50V,330PF	C924M16	2113944M18	CAP,FXD,10PF,+2.5%,-2.5%,50V-DC,0603,C0G,-55DEG CMIN,125DEG CMA	D3206M22	4815002H03	DIODE,VCTR, @ 34V,SILICON EPITAXIAL	D8M2	4870359B01	DIODE:SUPPRES-SOR,ESD,BI-DIR,7.82V,1W
C907M16	2113944C04	CAP:C0G,0603,5%,50V,330PF	C925M16	2113944C04	CAP:C0G,0603,5%,50V,330PF	D3207M22	4815002H03	DIODE,VCTR, @ 34V,SILICON EPITAXIAL	D9M2	4870359B01	DIODE:SUPPRES-SOR,ESD,BI-DIR,7.82V,1W
C908M16	2113944C04	CAP:C0G,0603,5%,50V,330PF	C927M16	NOTPLACED	-	D3208M22	4815002H03	DIODE,VCTR, @ 34V,SILICON EPITAXIAL	E1219M11	2405688Z01	INDUCTOR FERRITE BEAD
C909M16	2113944C04	CAP:C0G,0603,5%,50V,330PF	C928M16	2113944M25	CAP,FXD,20PF,+2%,-2%,50V-DC,0603,C0G,-55DEG CMIN,125DEG CMAX,PB	D3209M22	4815002H03	DIODE,VCTR, @ 34V,SILICON EPITAXIAL	E2003M2	'7685268E01	FERRITE BEAD 20X40 200 MA MAX CHIP
C910M16	21667011446	CAP,CER,4.7PF,.1PF+/-,50V-DC,0603,C0G,-55DEG CMIN,125DEG CMAX	C929M16	2113945B02	CAP:CHIP,.01UF,+10%,-10%,25V-DC*	D3246M22	4815002H03	DIODE,VCTR, @ 34V,SILICON EPITAXIAL	E201M12	7686949J14	FLTR:FERRITE BEAD,2A,SM,0805,CHIP,22 0OHM
C911M16	2113945L49	CAP,FXD,.01UF,+5%,-5%,50V-DC,0603,X7R,-*	C930M16	2113945A12	CAP:CHIP,3300PF,+10%,-10%,50V-DC,0402,*	D3247M22	4815002H03	DIODE,VCTR, @ 34V,SILICON EPITAXIAL	E2242M2	'7685268E01	FERRITE BEAD 20X40 200 MA MAX CHIP
C912M16	NOTPLACED	-	C932M16	NOTPLACED	-	D3248M22	4815002H03	DIODE,VCTR, @ 34V,SILICON EPITAXIAL	E2244M2	'7685268E01	FERRITE BEAD 20X40 200 MA MAX CHIP
C913M16	21667011517	CAP,CER,150PF,+2%,-2%,50V-DC,0603,C0G,-55DEG CMIN,125DEG CMAX	C9M2	2113944A40	CAP:CHIP,100PF,+5%,-5%,50V-DC,0402*	D3249M22	4815002H03	DIODE,VCTR, @ 34V,SILICON EPITAXIAL	E2245M2	'7685268E01	FERRITE BEAD 20X40 200 MA MAX CHIP
C914M16	2113944M32	CAP,FXD,39PF,+2%,-2%,50V-DC,0603,C0G,-55DEG CMIN,125DEG CMAX,PB	D10M2	4870359B01	DIODE:SUPPRES-SOR,ESD,BI-DIR,7.82V,1W	D3M2	4870359B01	DIODE:SUPPRES-SOR,ESD,BI-DIR,7.82V,1W	E2246M2	'7685268E01	FERRITE BEAD 20X40 200 MA MAX CHIP
			D11M2	4870359B01	DIODE:SUPPRES-SOR,ESD,BI-DIR,7.82V,1W	D4001M2	4813978A25	SCHOTTKY 30V SOD-323 T&R PB FREE	E2247M2	'7685268E01	FERRITE BEAD 20X40 200 MA MAX CHIP
			D16M2	4870359B01	DIODE:SUPPRES-SOR,ESD,BI-DIR,7.82V,1W	D4M2	4870359B01	DIODE:SUPPRES-SOR,ESD,BI-DIR,7.82V,1W	E2248M2	'7685268E01	FERRITE BEAD 20X40 200 MA MAX CHIP
									E2249M2	'7685268E01	FERRITE BEAD 20X40 200 MA MAX CHIP

Ref. Des.	Part Number	Description
E2301M2	91012036001	FILTER,EMI/ RFI,300MA,SM,0402,PB FREE
E2302M2	91012036001	FILTER,EMI/ RFI,300MA,SM,0402,PB FREE
E2303M2	91012036001	FILTER,EMI/ RFI,300MA,SM,0402,PB FREE
E2304M2	91012036001	FILTER,EMI/ RFI,300MA,SM,0402,PB FREE
E2305M2	91012036001	FILTER,EMI/ RFI,300MA,SM,0402,PB FREE
E2306M2	91012036001	FILTER,EMI/ RFI,300MA,SM,0402,PB FREE
E2307M2	91012036001	FILTER,EMI/ RFI,300MA,SM,0402,PB FREE
E2308M2	91012036001	FILTER,EMI/ RFI,300MA,SM,0402,PB FREE
E2309M2	91012036001	FILTER,EMI/ RFI,300MA,SM,0402,PB FREE
E2310M2	91012036001	FILTER,EMI/ RFI,300MA,SM,0402,PB FREE
E2311M2	91012036001	FILTER,EMI/ RFI,300MA,SM,0402,PB FREE
E302M20	2471132D14	IDCTR,FXD,470OHM,200M A,FER,0402,BEA
E601M19	2471132D14	IDCTR,FXD,470OHM,200M A,FER,0402,BEA
E602M19	2471132D14	IDCTR,FXD,470OHM,200M A,FER,0402,BEA
E603M19	2471132D14	IDCTR,FXD,470OHM,200M A,FER,0402,BEA
E604M19	2471132D14	IDCTR,FXD,470OHM,200M A,FER,0402,BEA

Ref. Des.	Part Number	Description
E605M19	2471132D14	IDCTR,FXD,470OHM,200M A,FER,0402,BEA
E606M19	2471132D14	IDCTR,FXD,470OHM,200M A,FER,0402,BEA
E607M19	2471132D14	IDCTR,FXD,470OHM,200M A,FER,0402,BEA
E608M19	2471132D14	IDCTR,FXD,470OHM,200M A,FER,0402,BEA
E609M19	2471132D14	IDCTR,FXD,470OHM,200M A,FER,0402,BEA
E6501M6	2480067M02	CHK RF CHIP BEAD INDUCTOR
E6502M6	2480067M02	CHK RF CHIP BEAD INDUCTOR
F200M12	6575834B01	FUSE SURFACE MOUNT
FL1301M3	9102190J23	FLTR,SAW,BAND- PASS,1.57542GHZ NOM,SM,1.4X1.0MM,SMD, PB-FREE
FL1303M3	9102190J23	FLTR,SAW,BAND- PASS,1.57542GHZ NOM,SM,1.4X1.0MM,SMD, PB-FREE
FL502M21	91009300001	FILTER,MONOLITHIC CRYSTAL,BAND- PASS,109.65MHZ NOM
J102M12	2880658Z08	CONNECTOR SMA
J2302M2	0970312N01	CONN,BTB,RCPT,60CONT., 4MM,GLD,1 STACK HGT
J2305M2	0985909E01	CONNECTOR RECEPTA- CLE 20 PIN
L1201M11	24009315011	WW CHIP INDUCTOR, HIGH Q, 5%, 0603
L1202M11	2415428H02	AIR WOUND INDUCTOR
L1203M17	2416066H02	INDUCTOR
L1209M17	2416066H02	INDUCTOR
L1211M17	2416066H02	INDUCTOR
L1301M3	2475122C28	IND, MULTI-LAYER, 18NH 5%, 0402,
L1302M3	2475122C13	IND, MULTI-LAY, 3.3NH 0.3%, 0402,

Ref. Des.	Part Number	Description
L1303M3	2475122C28	IND, MULTI-LAYER, 18NH 5%, 0402,
L1304M3	2488090Y25	INDUCTOR,MULTI- LAYER,100NH,1005,SMD,P B FREE
L1305M3	24010062002	INDUCTOR, 5.6NH, 0402, 2%
L1306M3	2475122C26	IND, MULTI-LAYER, 12NH 5%, 0402,
L1316M3	24010062009	INDUCTOR, 13NH, 0402, 2%
L200M12	2571269C01	INDUCTOR WW POWER 20%
L2202M2	24009315046	WW CHIP INDUCTOR, HIGH Q, 5%, 0603
L2203M2	24009315046	WW CHIP INDUCTOR, HIGH Q, 5%, 0603
L2204M2	24009315046	WW CHIP INDUCTOR, HIGH Q, 5%, 0603
L2205M2	24009315046	WW CHIP INDUCTOR, HIGH Q, 5%, 0603
L2701M13	2416066H02	INDUCTOR
L2702M13	24009315041	WW CHIP INDUCTOR, HIGH Q, 5%, 0603
L312M20	24009344010	INDUCTOR, WIRE WOUND
L313M20	2415429H28	CHIP INDUCTOR
L314M20	2415429H28	CHIP INDUCTOR
L315M20	2414017N22	IDCTR,CHIP,68NH,5%,400 MA,1.2OHM,CER,14 Q,800MHZ SRF,SM,0603
L316M20	2415429H34	CHIP INDUCTOR
L317M20	2475122C25	IND, MULTI-LAYER, 10NH 5%, 0402,
L318M20	24009344010	INDUCTOR, WIRE WOUND
L319M20	24009344010	INDUCTOR, WIRE WOUND
L3205M22	2414032F44	IDCTR,WW,680NH,10%,130 MA,4OHM,CER,30 Q,570MHZ SRF,SM,PB-FRE
L320M20	2415429H28	CHIP INDUCTOR
L3210M22	2415429H27	CHIP INDUCTOR

Ref. Des.	Part Number	Description
L3216M22	2415010H04	AIRWOUND COIL
L321M20	2415429H28	CHIP INDUCTOR
L3223M22	2414032F44	IDCTR,WW,680NH,10%,130 MA,4OHM,CER,30 Q,570MHZ SRF,SM,PB-FRE
L3229M22	2414032F44	IDCTR,WW,680NH,10%,130 MA,4OHM,CER,30 Q,570MHZ SRF,SM,PB-FRE
L3230M22	2414032F44	IDCTR,WW,680NH,10%,130 MA,4OHM,CER,30 Q,570MHZ SRF,SM,PB-FRE
L3245M22	2414032F44	IDCTR,WW,680NH,10%,130 MA,4OHM,CER,30 Q,570MHZ SRF,SM,PB-FRE
L3250M22	2415429H30	CHIP INDUCTOR
L3256M22	2414015C05	IDCTR,FXD,33NH,2%,1.3M A,.09OHM,CER,75 Q,1.7GHZ SRF,SM,1008,P
L3261M22	2414032F44	IDCTR,WW,680NH,10%,130 MA,4OHM,CER,30 Q,570MHZ SRF,SM,PB-FRE
L3269M22	2414032F44	IDCTR,WW,680NH,10%,130 MA,4OHM,CER,30 Q,570MHZ SRF,SM,PB-FRE
L3270M22	2414032F44	IDCTR,WW,680NH,10%,130 MA,4OHM,CER,30 Q,570MHZ SRF,SM,PB-FRE
L327M20	24009344010	INDUCTOR, WIRE WOUND
L328M20	0613952G67	RES,MF,0OHM,1%,.1W,SM, 0603,PB-FREE
L329M20	2478057A30	0306 HIGH Q CHIP INDUC- TOR
L500M21	24009315044	WW CHIP INDUCTOR, HIGH Q, 5%, 0603
L503M21	24667001026	IDCTR,FXD,100NH,5%,300 MA,1.2OHM,12 Q,770MHZ SRF,SM,0603
L504M21	24009342049	INDUCTOR, WIRE WOUND
L513M21	NOTPLACED	-
L550M21	2414017N20	IDCTR,CHIP,47NH,5%,500 MA,.86OHM,CER,14 Q,900MHZ SRF,SM,0603

Ref. Des.	Part Number	Description
L601M19	24009315044	WW CHIP INDUCTOR, HIGH Q, 5%, 0603
L602M19	2466505A01	COIL INDUCTOR
L603M19	2466505A01	COIL INDUCTOR
L604M19	24009345005	INDUCTOR, WIRE WOUND
L605M19	24012050001	0603LS CHIP INDUCTORS, 1608, 3900NH
L611M19	2414032F39	IDCTR,WW,270NH,10%,280MA,1OHM,CER,40Q,800MHZ SRF,SM,PB-FRE
L6401M6	2471189M03	SHIELDED SMT POWER INDUCTOR 10UH
L6402M6	2471189M03	SHIELDED SMT POWER INDUCTOR 10UH
L6403M6	24009271001	20NH HIGH CURRENT CHIP INDUCTOR
L6404M6	24009271001	20NH HIGH CURRENT CHIP INDUCTOR
L6502M6	2471678H01	10UH INDCUTOR
L6504M6	24009268001	10UH 2.1A SHIELDED INDUCTOR
L6505M6	2471678H01	10UH INDCUTOR
L709M7	24009315018	WW CHIP INDUCTOR, HIGH Q, 5%, 0603
L720M7	24012100001	IDCTR,2.2UH,10%,15MA,S M,MAGNETICALLY SHIELDED CHIP
L727M7	24012100001	IDCTR,2.2UH,10%,15MA,S M,MAGNETICALLY SHIELDED CHIP
L728M7	24009315048	WW CHIP INDUCTOR, HIGH Q, 5%, 0603
L733M7	24012100001	IDCTR,2.2UH,10%,15MA,S M,MAGNETICALLY SHIELDED CHIP
L735M7	24012100001	IDCTR,2.2UH,10%,15MA,S M,MAGNETICALLY SHIELDED CHIP
L738M7	24012100001	IDCTR,2.2UH,10%,15MA,S M,MAGNETICALLY SHIELDED CHIP

Ref. Des.	Part Number	Description
L739M7	24009315048	WW CHIP INDUCTOR, HIGH Q, 5%, 0603
L741M7	24012100001	IDCTR,2.2UH,10%,15MA,S M,MAGNETICALLY SHIELDED CHIP
L753M7	2415347H06	IDCTR, 2200NH
L755M7	24009315048	WW CHIP INDUCTOR, HIGH Q, 5%, 0603
L758M7	24009315048	WW CHIP INDUCTOR, HIGH Q, 5%, 0603
L759M7	24009315048	WW CHIP INDUCTOR, HIGH Q, 5%, 0603
L775M7	24009315048	WW CHIP INDUCTOR, HIGH Q, 5%, 0603
L901M16	24009341101	INDUCTOR, 6.8NH, 100MHZ, 430MA, 0603
L902M16	24009315038	WW CHIP INDUCTOR, HIGH Q, 5%, 0603
L903M16	24009343018	IDCTR,WW,120NH,2%,CER,1.7GHZ SRF,PCMT,120NH
L904M16	2414017N17	IDCTR,CHIP,27NH,5%,600MA,.62OHM,CER,12Q,1.2GHZ SRF,SM,0603
L905M16	2414017N11	IDCTR,CHIP,8.2NH,5%,600MA,.26OHM,CER,10Q,2.5GHZ SRF,SM,0603
L906M16	2460591K40	COIL AIR WOUND INDUC 59.71
L907M16	2471968L13	LOW PROFILE MINI SPRING INDUCTOR
L908M16	2415428H01	AIR WOUND INDUCTOR
L909M16	2471968L10	9.0NH 2% LP AIRWOUND INDUCTOR
L910M16	2471968L07	LOW PROFILE MINI SPRING INDUCTOR
M101M12	39012039001	CONNECTOR, BATTERY CONTACT
M103M12	3987977Y04	CONT,CONN,,1CONT,,ANT UNIV 4.5MM,UC 1.8
M104M12	NOTPLACED	-

Ref. Des.	Part Number	Description
M105M12	3987977Y04	CONT,CONN,,1CONT,,ANT UNIV 4.5MM,UC 1.8
M6405M6	3987977Y04	CONT,CONN,,1CONT,,ANT UNIV 4.5MM,UC 1.8
M6406M6	3987977Y04	CONT,CONN,,1CONT,,ANT UNIV 4.5MM,UC 1.8
M6502M6	0985888K02	SKT RTC BTTY LEAP
M6504M6	3987977Y04	CONT,CONN,,1CONT,,ANT UNIV 4.5MM,UC 1.8
PASTE1	BU000032A01	SOLDER,SOLDER,SOLDER PASTE, LEAD FREE, INDIUM 9.0E, HALOGEN FREE (GRAM)
PASTE2	BU000032A01	SOLDER,SOLDER,SOLDER PASTE, LEAD FREE, INDIUM 9.0E, HALOGEN FREE (GRAM)
PASTE3	BU000032A01	SOLDER,SOLDER,SOLDER PASTE, LEAD FREE, INDIUM 9.0E, HALOGEN FREE (GRAM)
PCB	84012618001	RIGID,BOARD, PC, VHF MAIN BOARD
Q1263M11	4813973A32	XSTR,BIP GP SS,NPN,SM,SC-70,SMT,50V,.202W,100MA, PB-FREE
Q1264M11	4813973A32	XSTR,BIP GP SS,NPN,SM,SC-70,SMT,50V,.202W,100MA, PB-FREE
Q1265M11	4813973A32	XSTR,BIP GP SS,NPN,SM,SC-70,SMT,50V,.202W,100MA, PB-FREE
Q1268M11	4813970A59	P-CH FET 1.0A 20V SOT-23 T&R
Q201M12	4813970A59	P-CH FET 1.0A 20V SOT-23 T&R
Q202M12	4813973A32	XSTR,BIP GP SS,NPN,SM,SC-70,SMT,50V,.202W,100MA, PB-FREE

Ref. Des.	Part Number	Description
Q2202M2	4815261H01	TRANSISTOR,BIP GENERAL PURPOSE SMALL NPN
Q2701M13	4815055H01	TSTR DUAL NPN/PNP UMH 5
Q303M20	4813973M75	XSTR,BIP GP SS,PNP,BC858,SOT-563,SMT,-30V,.357W,-100MA,100MHZ
Q304M20	4813973A32	XSTR,BIP GP SS,NPN,SM,SC-70,SMT,50V,.202W,100MA, PB-FREE
Q3227M22	4885061Y01	XSTR NPN 6V 30UA 12GHZ PB-FREE
Q3232M22	4815055H01	TSTR DUAL NPN/PNP UMH 5
Q3267M22	4885061Y01	XSTR NPN 6V 30UA 12GHZ PB-FREE
Q3272M22	4815055H01	TSTR DUAL NPN/PNP UMH 5
Q4001M2	4815261H01	TRANSISTOR,BIP GENERAL PURPOSE SMALL NPN
Q601M19	4813973A04	XSTR,BIP GP SS,NPN,TA13,SM,SOT-23,SMT,30V,.225W,300MA,125MHZ,P
Q6101M6	4815261H01	TRANSISTOR,BIP GENERAL PURPOSE SMALL NPN
Q6401M6	48012170001	FET
Q6501M6	4813970A62	XSTR,FET GP PWR,MOS-FET,P-CH,ENHN,CF,-20V,1.3W,PB-FREE
Q6502M6	48012154001	FET
Q6504M6	4809579E77	FET, NCH MOS FET, 1.2MM X 1.2MM PACKAGE, SMD, W18 COMPLIANT
Q6505M6	4813970A62	XSTR,FET GP PWR,MOS-FET,P-CH,ENHN,CF,-20V,1.3W,PB-FREE



Ref. Des.	Part Number	Description
Q6506M6	4809579E77	FET, NCH MOS FET, 1.2MM X 1.2MM PACKAGE, SMD, W18 COMPLIANT
Q6507M6	48012170001	FET
Q6508M6	48012154001	FET
Q731M7	4885061Y01	XSTR NPN 6V 30UA 12GHZ PB-FREE
Q745M7	4813973M75	XSTR,BIP GP SS,PNP,BC858,SOT-563,SMT,-30V,.357W,-100MA,100MHZ
Q756M7	4805585Q32	TRANSITOR, NPN RF
Q767M7	4813973M75	XSTR,BIP GP SS,PNP,BC858,SOT-563,SMT,-30V,.357W,-100MA,100MHZ
Q774M7	4805585Q32	TRANSITOR, NPN RF
Q785M7	4889394V04	XSTR,FET GP SS,MOS-FET,N-CH, ENHN, SM,20V
Q901M16	48012094001	MOD,XSTR,FET RF PWR, 135-941MHZ
R1101M11	0613952R01	RES:MF,10KOHM,5%,.0625 W,SM,0402*
R1201M11	0613952R01	RES:MF,10KOHM,5%,.0625 W,SM,0402*
R1202M11	NOTPLACED	-
R1203M11	0613952Q48	CER CHIP RES 91.0 OHM 5 0402
R1204M11	NOTPLACED	-
R1205M11	0613952N01	RES:MF,10KOHM,1%,.0625 W,SM,0402*
R1206M11	0613952J01	RES:MF,10KOHM,5%,.1W,SM,0603,200PPM*
R1207M11	0613952R22	CER CHIP RES 75K OHM 5 0402
R1208M11	0613952R01	RES:MF,10KOHM,5%,.0625 W,SM,0402*
R1209M11	0613952P01	RES:MF,100KOHM,1%,.0625 W,SM,0402*
R1210M11	0613952R66	RES:MF,0OHM,5%,.0625W, SM,0402*

Ref. Des.	Part Number	Description
R1211M11	0613952R01	RES:MF,10KOHM,5%,.0625 W,SM,0402*
R1212M11	NOTPLACED	-
R1213M11	0613952R66	RES:MF,0OHM,5%,.0625W, SM,0402*
R1214M11	0613952Q89	RES:MF,4.7KOHM,5%,.0625 W,SM,0402*
R1218M11	0613952R66	RES:MF,0OHM,5%,.0625W, SM,0402*
R1219M11	NOTPLACED	-
R1223M11	NOTPLACED	-
R1226M11	0615043C01	RES POWER METAL STRIP W18 COMPLIANT
R1228M11	NOTPLACED	-
R1230M11	0613952N85	CER CHIP RES, 75.0K OHM, 1%, 0402
R1232M11	NOTPLACED	-
R1238M11	0613952R66	RES:MF,0OHM,5%,.0625W, SM,0402*
R1240M11	0613952R66	RES:MF,0OHM,5%,.0625W, SM,0402*
R1241M11	0613952Z61	RES:MF,30KOHM,1%,.0625 W,SM,0402,200PPM/ CEL,PB-FREE
R1242M11	0613952Q83	RES:MF,2.7KOHM,5%,.0625 W,SM,0402*
R1243M11	0613952R66	RES:MF,0OHM,5%,.0625W, SM,0402*
R1244M11	0613952R25	RES:MF,100KOHM,5%,.0625 W,SM,0402*
R1245M11	0613952R25	RES:MF,100KOHM,5%,.0625 W,SM,0402*
R1247M11	0613952Z55	RES:MF,12KOHM,1%,.0625 W,SM,0402,200PPM/ CEL,PB-FREE
R1248M11	0613952R01	RES:MF,10KOHM,5%,.0625 W,SM,0402*
R1249M11	0613952R20	CER CHIP RES, 62K OHM, 5%, 0402

Ref. Des.	Part Number	Description
R1250M11	0613952Z60	RES,MF,27KOHM,1%,.0625 W,SM,0402,200PPM/ CEL,PB-FREE
R1251M11	0613952Q56	CER CHIP RES 200 OHM 5 0402
R1252M11	0613952Q75	RES:MF,1.2KOHM,5%,.0625 W,SM,0402*
R1253M11	0613952Z67	RES,MF,51KOHM,1%,.0625 W,SM,0402,200
R1254M11	0613952Z67	RES,MF,51KOHM,1%,.0625 W,SM,0402,200
R1255M11	0613952Z57	RES,MF,18KOHM,1%,.0625 W,SM,0402,200PPM/ CEL,PB-FREE
R1257M11	0613952R01	RES:MF,10KOHM,5%,.0625 W,SM,0402*
R1258M11	0613952R66	RES:MF,0OHM,5%,.0625W, SM,0402*
R1259M11	NOTPLACED	-
R1260M11	0613952R01	RES:MF,10KOHM,5%,.0625 W,SM,0402*
R1261M11	NOTPLACED	-
R1262M11	0613952M30	CER CHIP RES 2000 OHM 1 0402
R1263M11	0613952N18	CER CHIP RES 15.0K OHM 1 0402
R1264M11	0613952P01	RES:MF,100KOHM,1%,.0625 W,SM,0402
R1265M11	0613952R01	RES:MF,10KOHM,5%,.0625 W,SM,0402*
R1266M11	0613922Z54	RES,MF,9.1KOHM,1%,.0625 W,SM,0402,200PPM/ CEL,PB-FREE
R1267M11	0613952R25	RES:MF,100KOHM,5%,.0625 W,SM,0402*
R1269M11	0613952Q49	CER CHIP RES 100 OHM 5 0402
R1270M11	0613952Q49	CER CHIP RES 100 OHM 5 0402
R1271M11	0613952Q49	CER CHIP RES 100 OHM 5 0402

Ref. Des.	Part Number	Description
R1272M11	0613952Q49	CER CHIP RES 100 OHM 5 0402
R1273M11	0613952R66	RES:MF,0OHM,5%,.0625W, SM,0402*
R1274M11	0613952R01	RES:MF,10KOHM,5%,.0625 W,SM,0402*
R1275M11	0613952Z80	RES,MF,330KOHM,1%,.0625 W,SM,0402,200PPM/ CEL,PB-FREE
R1276M11	0613952Z80	RES,MF,330KOHM,1%,.0625 W,SM,0402,200PPM/ CEL,PB-FREE
R1277M11	0613952Z85	RES,MF,510KOHM,1%,.0625 W,SM,0402,200PPM/ CEL,PB-FREE
R1278M11	0613952Z85	RES,MF,510KOHM,1%,.0625 W,SM,0402,200PPM/ CEL,PB-FREE
R1279M11	0613952R01	RES:MF,10KOHM,5%,.0625 W,SM,0402*
R1280M11	0613952R01	RES:MF,10KOHM,5%,.0625 W,SM,0402*
R1281M11	0675679M01	KAMAYA 2MOHM -/+1% -55 +155 DEG. C
R1282M11	NOTPLACED	-
R1283M11	0675679M01	KAMAYA 2MOHM -/+1% -55 +155 DEG. C
R1284M11	0613952R66	RES:MF,0OHM,5%,.0625W, SM,0402*
R1285M11	NOTPLACED	-
R1286M11	0613952R66	RES:MF,0OHM,5%,.0625W, SM,0402*
R1287M11	0613952Q59	CER CHIP RES 270 OHM 5 0402
R1288M11	NOTPLACED	-
R1289M11	0613952M43	CER CHIP RES 2740 OHM 1 0402
R1291M11	NOTPLACED	-
R1293M11	0613952Z47	RES,MF,4.3KOHM,1%,.0625 W,SM,0402,200PPM/ CEL,PB-FREE

Ref. Des.	Part Number	Description
R1295M11	0613952Q49	CER CHIP RES 100 OHM 5 0402
R1296M11	0613952Q49	CER CHIP RES 100 OHM 5 0402
R1297M11	0613952Q45	CER CHIP RES 68.0 OHM 5 0402
R1298M11	NOTPLACED	-
R1299M11	NOTPLACED	-
R1301M3	0613952R66	RES:MF,0OHM,5%,.0625W, SM,0402*
R1302M3	NOTPLACED	-
R1303M3	0613952R66	RES:MF,0OHM,5%,.0625W, SM,0402*
R1305M3	0613952R66	RES:MF,0OHM,5%,.0625W, SM,0402*
R1309M3	NOTPLACED	-
R1310M3	0613952R66	RES:MF,0OHM,5%,.0625W, SM,0402*
R1311M3	NOTPLACED	-
R1313M3	0613952R66	RES:MF,0OHM,5%,.0625W, SM,0402*
R1315M3	0613952R66	RES:MF,0OHM,5%,.0625W, SM,0402*
R1317M3	0613952R66	RES:MF,0OHM,5%,.0625W, SM,0402*
R1318M3	0613952R66	RES:MF,0OHM,5%,.0625W, SM,0402*
R1340M3	0613952R66	RES:MF,0OHM,5%,.0625W, SM,0402*
R2003M2	0613952Q53	RES:MF,150OHM,5%,.0625 W,SM,0402*
R2004M2	0613952Q49	CER CHIP RES 100 OHM 5 0402
R2005M2	0613952Q66	CER CHIP RES 510 OHM 5 0402
R2007M2	0613952Q49	CER CHIP RES 100 OHM 5 0402
R200M12	0613952R66	RES:MF,0OHM,5%,.0625W, SM,0402*

Ref. Des.	Part Number	Description
R201M12	0613952R25	RES:MF,100KOHM,5%,.062 5W,SM,0402*
R2024M2	0613952Q09	CER CHIP RES 2.2 OHM 5 0402
R2025M2	0613952Q09	CER CHIP RES 2.2 OHM 5 0402
R202M12	0613952Q89	RES:MF,4.7KOHM,5%,.062 5W,SM,0402*
R21000M2	NOTPLACED	-
R21001M2	NOTPLACED	-
R21002M2	NOTPLACED	-
R21003M2	NOTPLACED	-
R2104M2	0613952Q89	RES:MF,4.7KOHM,5%,.062 5W,SM,0402*
R2105M2	0613952Q89	RES:MF,4.7KOHM,5%,.062 5W,SM,0402*
R2106M2	NOTPLACED	-
R2107M2	0613952Q73	CER CHIP RES 1000 OHM 5 0402
R2109M2	0613952Q25	RES:MF,10OHM,5%,.0625 W,SM,0402*
R2110M2	0613952Q33	RES:MF,22OHM,5%,.0625 W,SM,0402*
R2111M2	0613952Q25	RES:MF,10OHM,5%,.0625 W,SM,0402*
R2113M2	0613952Q25	RES:MF,10OHM,5%,.0625 W,SM,0402*
R2114M2	0613952Q33	RES:MF,22OHM,5%,.0625 W,SM,0402*
R2115M2	0613952Q25	RES:MF,10OHM,5%,.0625 W,SM,0402*
R2116M2	0613952R01	RES:MF,10KOHM,5%,.0625 W,SM,0402*
R2117M2	0613952R01	RES:MF,10KOHM,5%,.0625 W,SM,0402*
R2118M2	0613952R01	RES:MF,10KOHM,5%,.0625 W,SM,0402*
R2120M2	0613952R01	RES:MF,10KOHM,5%,.0625 W,SM,0402*

Ref. Des.	Part Number	Description
R2129M2	0613952R01	RES:MF,10KOHM,5%,.0625 W,SM,0402*
R2130M2	0613952R01	RES:MF,10KOHM,5%,.0625 W,SM,0402*
R2131M2	0613952R01	RES:MF,10KOHM,5%,.0625 W,SM,0402*
R2132M2	0613952R01	RES:MF,10KOHM,5%,.0625 W,SM,0402*
R2133M2	0613952R01	RES:MF,10KOHM,5%,.0625 W,SM,0402*
R2135M2	0613952Q41	RES:MF,47OHM,5%,.0625 W,SM,0402*
R2136M2	0613952Q61	CER CHIP RES 330 OHM 5 0402
R2137M2	0613952Q61	CER CHIP RES 330 OHM 5 0402
R2138M2	0613952Q41	RES:MF,47OHM,5%,.0625 W,SM,0402*
R2139M2	0613952Q41	RES:MF,47OHM,5%,.0625 W,SM,0402*
R2142M2	0613952Q41	RES:MF,47OHM,5%,.0625 W,SM,0402*
R2144M2	0613952Q61	CER CHIP RES 330 OHM 5 0402
R2145M2	0613952Q41	RES:MF,47OHM,5%,.0625 W,SM,0402*
R2146M2	0613952Q41	RES:MF,47OHM,5%,.0625 W,SM,0402*
R2147M2	0613952Q41	RES:MF,47OHM,5%,.0625 W,SM,0402*
R2148M2	0613952Q41	RES:MF,47OHM,5%,.0625 W,SM,0402*
R2149M2	0613952Q41	RES:MF,47OHM,5%,.0625 W,SM,0402*
R2151M2	NOTPLACED	-
R2153M2	0613952Q41	RES:MF,47OHM,5%,.0625 W,SM,0402*
R2154M2	0613952Q41	RES:MF,47OHM,5%,.0625 W,SM,0402*
R2192M2	0613952Q61	CER CHIP RES 330 OHM 5 0402

Ref. Des.	Part Number	Description
R2197M2	0613952R66	RES:MF,0OHM,5%,.0625W, SM,0402*
R2198M2	0613952R66	RES:MF,0OHM,5%,.0625W, SM,0402*
R2199M2	0613952R66	RES:MF,0OHM,5%,.0625W, SM,0402*
R2201M2	0613952R32	CER CHIP RES 200K OHM 5 0402
R2204M2	0613952Q85	CER CHIP RES 3300 OHM 5 0402
R2206M2	0613952Q85	CER CHIP RES 3300 OHM 5 0402
R2207M2	0613952R66	RES:MF,0OHM,5%,.0625W, SM,0402*
R2235M2	0613952R66	RES:MF,0OHM,5%,.0625W, SM,0402*
R2244M2	0613952Q65	RES,MF,470OHM,5%,.0625 W,SM,0402,200PPM/*
R2245M2	0613952Q60	CER CHIP RES 300 OHM 5 0402
R2246M2	0613952Q65	RES,MF,470OHM,5%,.0625 W,SM,0402,200PPM/*
R2254M2	0613952R01	RES:MF,10KOHM,5%,.0625 W,SM,0402*
R2701M13	0613952R25	RES:MF,100KOHM,5%,.062 5W,SM,0402*
R2702M13	NOTPLACED	-
R2703M13	0613952H47	CER CHIP RES 82.0 OHM 5 0603
R2704M13	0613952H47	CER CHIP RES 82.0 OHM 5 0603
R2705M13	0613952H47	CER CHIP RES 82.0 OHM 5 0603
R2706M13	0613952G67	RES,MF,0OHM,1%,.1W,SM, 0603,PB-FREE
R2803M1	0613952Q37	RES:MF,33OHM,5%,.0625 W,SM,0402*
R2804M1	0613952Q49	CER CHIP RES 100 OHM 5 0402
R2805M1	0613952Q49	CER CHIP RES 100 OHM 5 0402

Ref. Des.	Part Number	Description
R2806M1	0613952Q59	CER CHIP RES 270 OHM 5 0402
R2807M1	0613952Q56	CER CHIP RES 200 OHM 5 0402
R2808M1	0613952Q49	CER CHIP RES 100 OHM 5 0402
R2810M1	0613952R01	RES:MF,10KOHM,5%,.0625 W,SM,0402*
R2811M1	0613952Q89	RES:MF,4.7KOHM,5%,.0625W,SM,0402*
R2812M1	0613952R01	RES:MF,10KOHM,5%,.0625 W,SM,0402*
R2813M1	NOTPLACED	-
R2817M1	0613952Q41	RES:MF,47OHM,5%,.0625 W,SM,0402*
R310M20	0613952R22	CER CHIP RES 75K OHM 5 0402
R311M20	0613952R27	CER CHIP RES 120K OHM 5% 0402
R312M20	0613952R01	RES:MF,10KOHM,5%,.0625 W,SM,0402*
R313M20	0613952Q37	RES:MF,33OHM,5%,.0625 W,SM,0402*
R314M20	0613952Q75	RES:MF,1.2KOHM,5%,.0625W,SM,0402*
R315M20	0613952Q25	RES:MF,10OHM,5%,.0625 W,SM,0402*
R3200M22	0613952R66	RES:MF,0OHM,5%,.0625W, SM,0402*
R3201M22	0613952Q23	CER CHIP RES 8.2 OHM 5 0402
R3202M22	0613952R66	RES:MF,0OHM,5%,.0625W, SM,0402*
R3203M22	0613952Q69	CER CHIP RES 680 OHM 5 0402
R3204M22	0613952Q69	CER CHIP RES 680 OHM 5 0402
R3205M22	0613952Q69	CER CHIP RES 680 OHM 5 0402
R3206M22	0613952Q23	CER CHIP RES 8.2 OHM 5 0402

Ref. Des.	Part Number	Description
R3207M22	0613952Q69	CER CHIP RES 680 OHM 5 0402
R3214M22	NOTPLACED	-
R3218M22	0613952Q93	CER CHIP RES 6800 OHM 5 0402
R3222M22	0613952Q96	CER CHIP RES 9100 OHM 5 0402
R3231M22	0613952Q58	CER CHIP RES 240 OHM 5 0402
R3233M22	0613952Q53	RES:MF,150OHM,5%,.0625 W,SM,0402*
R3257M22	0613952Q96	CER CHIP RES 9100 OHM 5 0402
R3260M22	0613952Q96	CER CHIP RES 9100 OHM 5 0402
R3271M22	0613952Q53	RES:MF,150OHM,5%,.0625 W,SM,0402*
R3273M22	0613952Q53	RES:MF,150OHM,5%,.0625 W,SM,0402*
R380M20	0613952Q25	RES:MF,10OHM,5%,.0625 W,SM,0402*
R381M20	0613952Q25	RES:MF,10OHM,5%,.0625 W,SM,0402*
R4005M2	0613952R01	RES:MF,10KOHM,5%,.0625 W,SM,0402*
R4006M2	0613952R01	RES:MF,10KOHM,5%,.0625 W,SM,0402*
R4007M2	0613952R01	RES:MF,10KOHM,5%,.0625 W,SM,0402*
R4008M2	0613952R01	RES:MF,10KOHM,5%,.0625 W,SM,0402*
R4009M2	0613952Q85	CER CHIP RES 3300 OHM 5 0402
R4010M2	0613952R32	CER CHIP RES 200K OHM 5 0402
R4011M2	0613952R17	RESISTOR,METAL FILM,47KOHM,5%,.0625W, SM,0402,200PPM/CEL,PB-FREE
R4012M2	0613952R09	CER CHIP RES 22K OHM 5% 0402

Ref. Des.	Part Number	Description
R4013M2	0613952R09	CER CHIP RES 22K OHM 5% 0402
R4014M2	0613952Q85	CER CHIP RES 3300 OHM 5 0402
R500M21	0613952Q37	RES:MF,33OHM,5%,.0625 W,SM,0402*
R502M21	0613952Q36	CER CHIP RES 30.0 OHM 5 0402
R512M21	0613952R66	RES:MF,0OHM,5%,.0625W, SM,0402*
R525M21	0613952R66	RES:MF,0OHM,5%,.0625W, SM,0402*
R526M21	0613958J74	RES:MF,0OHM,5%,.125W,S M,0805,PB-FREE
R601M19	0613952Q41	RES:MF,47OHM,5%,.0625 W,SM,0402*
R602M19	0613952Q63	RES:MF,390OHM,5%,.0625 W,SM,0402*
R603M19	0613952R25	RES:MF,100KOHM,5%,.0625 W,SM,0402*
R604M19	0613952Q63	RES:MF,390OHM,5%,.0625 W,SM,0402*
R605M19	0613952R01	RES:MF,10KOHM,5%,.0625 W,SM,0402*
R606M19	0613952R01	RES:MF,10KOHM,5%,.0625 W,SM,0402*
R607M19	0613952R25	RES:MF,100KOHM,5%,.0625 W,SM,0402*
R608M19	0613952R01	RES:MF,10KOHM,5%,.0625 W,SM,0402*
R609M19	0613952Q81	RES:MF,2.2KOHM,5%,.0625 W,SM,0402*
R6101M6	0613952R01	RES:MF,10KOHM,5%,.0625 W,SM,0402*
R6102M6	0613952R09	CER CHIP RES 22K OHM 5% 0402
R6103M6	0613952R09	CER CHIP RES 22K OHM 5% 0402
R6104M6	NOTPLACED	-
R6105M6	0613952R66	RES:MF,0OHM,5%,.0625W, SM,0402*

Ref. Des.	Part Number	Description
R6106M6	0613952Q73	CER CHIP RES 1000 OHM 5 0402
R6107M6	0613952Q55	RES:MF,180OHM,5%,.0625 W,SM,0402*
R6108M6	0613952Q61	CER CHIP RES 330 OHM 5 0402
R6109M6	0613952Q73	CER CHIP RES 1000 OHM 5 0402
R610M19	0613952R25	RES:MF,100KOHM,5%,.0625 W,SM,0402*
R6110M6	0613952Q73	CER CHIP RES 1000 OHM 5 0402
R6111M6	0613952Q73	CER CHIP RES 1000 OHM 5 0402
R6112M6	NOTPLACED	-
R6114M6	0613952Q49	CER CHIP RES 100 OHM 5 0402
R6115M6	0613952Q49	CER CHIP RES 100 OHM 5 0402
R6116M6	0613952Q73	CER CHIP RES 1000 OHM 5 0402
R6117M6	0613952R01	RES:MF,10KOHM,5%,.0625 W,SM,0402*
R6118M6	0613952R09	CER CHIP RES 22K OHM 5% 0402
R6119M6	0613952R01	RES:MF,10KOHM,5%,.0625 W,SM,0402*
R611M19	0613952R01	RES:MF,10KOHM,5%,.0625 W,SM,0402*
R6120M6	0613952R01	RES:MF,10KOHM,5%,.0625 W,SM,0402*
R6121M6	0613952R01	RES:MF,10KOHM,5%,.0625 W,SM,0402*
R6122M6	0613952R01	RES:MF,10KOHM,5%,.0625 W,SM,0402*
R6123M6	NOTPLACED	-
R6125M6	NOTPLACED	-
R612M19	0613952Q94	CER CHIP RES 7500 OHM 5 0402
R613M19	0613952Q82	CER CHIP RES 2400 OHM 5 0402

Ref. Des.	Part Number	Description
R614M19	0613952R66	RES:MF,0OHM,5%,.0625W,SM,0402*
R615M19	NOTPLACED	-
R616M19	NOTPLACED	-
R617M19	NOTPLACED	-
R618M19	NOTPLACED	-
R619M19	NOTPLACED	-
R6201M6	NOTPLACED	-
R6202M6	0613952R01	RES:MF,10KOHM,5%,.0625W,SM,0402*
R6203M6	0613952R66	RES:MF,0OHM,5%,.0625W,SM,0402*
R6204M6	0613952R01	RES:MF,10KOHM,5%,.0625W,SM,0402*
R6205M6	0613952R01	RES:MF,10KOHM,5%,.0625W,SM,0402*
R6206M6	0613952R25	RES:MF,100KOHM,5%,.0625W,SM,0402*
R6207M6	0613952R25	RES:MF,100KOHM,5%,.0625W,SM,0402*
R6208M6	0613952Q89	RES:MF,4.7KOHM,5%,.0625W,SM,0402*
R6209M6	0613952Q89	RES:MF,4.7KOHM,5%,.0625W,SM,0402*
R620M19	NOTPLACED	-
R6210M6	0613952Q89	RES:MF,4.7KOHM,5%,.0625W,SM,0402*
R6211M6	0613952R01	RES:MF,10KOHM,5%,.0625W,SM,0402*
R6212M6	NOTPLACED	-
R6213M6	0613952R01	RES:MF,10KOHM,5%,.0625W,SM,0402*
R6214M6	NOTPLACED	-
R6215M6	0613952R01	RES:MF,10KOHM,5%,.0625W,SM,0402*
R6216M6	0613952R66	RES:MF,0OHM,5%,.0625W,SM,0402*
R6217M6	0613952Q73	CER CHIP RES 1000 OHM 5 0402

Ref. Des.	Part Number	Description
R6218M6	0613952Q80	CER CHIP RES 2000 OHM 5 0402
R621M19	NOTPLACED	-
R623M19	NOTPLACED	-
R624M19	NOTPLACED	-
R6301M6	0613952R01	RES:MF,10KOHM,5%,.0625W,SM,0402*
R6304M6	0613952R66	RES:MF,0OHM,5%,.0625W,SM,0402*
R63050M6	0613952R66	RES:MF,0OHM,5%,.0625W,SM,0402*
R6305M6	0613952R66	RES:MF,0OHM,5%,.0625W,SM,0402*
R6306M6	0613952R01	RES:MF,10KOHM,5%,.0625W,SM,0402*
R6307M6	0613952R66	RES:MF,0OHM,5%,.0625W,SM,0402*
R6310M6	0613952Q37	RES:MF,33OHM,5%,.0625W,SM,0402*
R6311M6	0613952Q37	RES:MF,33OHM,5%,.0625W,SM,0402*
R6312M6	0613952Q37	RES:MF,33OHM,5%,.0625W,SM,0402*
R6313M6	0613952Q37	RES:MF,33OHM,5%,.0625W,SM,0402*
R6314M6	0613952Q37	RES:MF,33OHM,5%,.0625W,SM,0402*
R6316M6	0613952R01	RES:MF,10KOHM,5%,.0625W,SM,0402*
R6401M6	0613952R18	RES:MF,51KOHM,5%,.0625W,SM,0402*
R6402M6	0613952R32	CER CHIP RES 200K OHM 5 0402
R6403M6	0613952Q81	RES:MF,2.2KOHM,5%,.0625W,SM,0402*
R6404M6	0613952Q81	RES:MF,2.2KOHM,5%,.0625W,SM,0402*
R6405M6	0613952Q75	RES:MF,1.2KOHM,5%,.0625W,SM,0402*
R6406M6	0613952R01	RES:MF,10KOHM,5%,.0625W,SM,0402*

Ref. Des.	Part Number	Description
R6407M6	0613952Q81	RES:MF,2.2KOHM,5%,.0625W,SM,0402*
R6409M6	0613952N01	RES:MF,10KOHM,1%,.0625W,SM,0402*
R6410M6	0613952R01	RES:MF,10KOHM,5%,.0625W,SM,0402*
R6411M6	0613952R66	RES:MF,0OHM,5%,.0625W,SM,0402*
R6414M6	0613952Q61	CER CHIP RES 330 OHM 5 0402
R6415M6	0613952Q61	CER CHIP RES 330 OHM 5 0402
R6416M6	0613952Q61	CER CHIP RES 330 OHM 5 0402
R6417M6	0613952Q61	CER CHIP RES 330 OHM 5 0402
R6419M6	0613952Q37	RES:MF,33OHM,5%,.0625W,SM,0402*
R6420M6	0613952R17	RESISTOR,METAL FILM,47KOHM,5%,.0625W,SM,0402,200PPM/CEL,PB-FREE
R6421M6	0613952R01	RES:MF,10KOHM,5%,.0625W,SM,0402*
R6422M6	0613952Q51	CER CHIP RES 120 OHM 5 0402
R6423M6	0613952R66	RES:MF,0OHM,5%,.0625W,SM,0402*
R6424M6	0613952N01	RES:MF,10KOHM,1%,.0625W,SM,0402*
R6425M6	NOTPLACED	-
R6426M6	0613952Q49	CER CHIP RES 100 OHM 5 0402
R6427M6	0613952R11	CER CHIP RES 27K OHM 5% 0402
R6428M6	0613952R25	RES:MF,100KOHM,5%,.0625W,SM,0402*
R6429M6	0613952R17	RESISTOR,METAL FILM,47KOHM,5%,.0625W,SM,0402,200PPM/CEL,PB-FREE

Ref. Des.	Part Number	Description
R6430M6	0613952R09	CER CHIP RES 22K OHM 5% 0402
R6431M6	0613952Q81	RES:MF,2.2KOHM,5%,.0625W,SM,0402*
R6432M6	0613952R25	RES:MF,100KOHM,5%,.0625W,SM,0402*
R6433M6	0613952Q32	CER CHIP RES 20.0 OHM 5 0402
R6434M6	0613952Q32	CER CHIP RES 20.0 OHM 5 0402
R6492M6	0613952Q79	CER CHIP RES 1800 OHM 5 0402
R6501M6	0613952Q25	RES:MF,10OHM,5%,.0625W,SM,0402*
R6502M6	0613952Q25	RES:MF,10OHM,5%,.0625W,SM,0402*
R6503M6	0613952Q25	RES:MF,10OHM,5%,.0625W,SM,0402*
R6504M6	0613952R09	CER CHIP RES 22K OHM 5% 0402
R6505M6	0613952Q80	CER CHIP RES 2000 OHM 5 0402
R6506M6	0613952R66	RES:MF,0OHM,5%,.0625W,SM,0402*
R6507M6	0613952R01	RES:MF,10KOHM,5%,.0625W,SM,0402*
R6508M6	0613952R17	RESISTOR,METAL FILM,47KOHM,5%,.0625W,SM,0402,200PPM/CEL,PB-FREE
R6509M6	0613952R25	RES:MF,100KOHM,5%,.0625W,SM,0402*
R6510M6	0613952R66	RES:MF,0OHM,5%,.0625W,SM,0402*
R6511M6	0613952R01	RES:MF,10KOHM,5%,.0625W,SM,0402*
R6512M6	0613952N01	RES:MF,10KOHM,1%,.0625W,SM,0402*
R6513M6	0613952R66	RES:MF,0OHM,5%,.0625W,SM,0402*
R6514M6	0613952Q89	RES:MF,4.7KOHM,5%,.0625W,SM,0402*



Ref. Des.	Part Number	Description	Ref. Des.	Part Number	Description	Ref. Des.	Part Number	Description	Ref. Des.	Part Number	Description
R703M7	0613952Q67	CER CHIP RES 560 OHM 5 0402	R744M7	0613952Q91	CER CHIP RES 5600 OHM 5 0402	R799M7	0613952Q44	CER CHIP RES 62.0 OHM 5% 0402	SH3	26012149001	SHIELD, ALC
R704M7	0613952Q25	RES:MF,10OHM,5%,.0625 W,SM,0402*	R745M7	0613952R09	CER CHIP RES 22K OHM 5% 0402	R809M7	0613952Q51	CER CHIP RES 120 OHM 5 0402	SH4	26012157002	SHIELD,STEEL,TIN PLATED,SHIELD, BALUN ULC M3
R705M7	0613952Q75	RES:MF,1.2KOHM,5%,.062 5W,SM,0402*	R746M7	0613952Q34	CER CHIP RES 24.0 OHM 5 0402	R822M7	NOTPLACED	-	SH5	26012153001	SHIELD, FGU
R706M7	0613952R66	RES:MF,0OHM,5%,.0625W, SM,0402*	R747M7	0613952Q39	CER CHIP RES 39.0 OHM 5 0402	R823M7	NOTPLACED	-	SH6	26012150001	SHIELD, ALC/DC
R707M7	0613952Q67	CER CHIP RES 560 OHM 5 0402	R748M7	0613952Q47	CER CHIP RES 82.0 OHM 5% 0402	R901M16	0613952R01	RES:MF,10KOHM,5%,.0625 W,SM,0402*	SH7	26012158001	SHIELD, COUPLER
R708M7	0613952Q45	CER CHIP RES 68.0 OHM 5 0402	R751M7	0613952Q59	CER CHIP RES 270 OHM 5 0402	R902M16	0613952R01	RES:MF,10KOHM,5%,.0625 W,SM,0402*	SH8	26012162002	SHIELD HF
R709M7	NOTPLACED	-	R754M7	0613952Q71	CER CHIP RES 820 OHM 5 0402	R903M16	0613952N85	CER CHIP RES 75.0K OHM 1 0402	SH9	26012151001	SHIELD, AUDIO PA
R710M7	0613952Q64	CER CHIP RES 430 OHM 5 0402	R757M7	0613952Q59	CER CHIP RES 270 OHM 5 0402	R904M16	0613952R13	CER CHIP RES 33K OHM 5% 0402	T506M21	2575851B01	RF TRANSFORMER BALUN
R711M7	0613952Q64	CER CHIP RES 430 OHM 5 0402	R761M7	0613952Q23	CER CHIP RES 8.2 OHM 5 0402	R905M16	0613952Q73	CER CHIP RES 1000 OHM 5 0402	T507M21	2575851B02	RF TRANSFORMER BALUN
R721M7	0613952R01	RES:MF,10KOHM,5%,.0625 W,SM,0402*	R762M7	0613952R08	CER CHIP RES 20K OHM 5 0402	R906M16	0613952L01	RES:MF,100OHM,1%,.0625 W,SM,0402*	U1201M11	51007702001	D/A CON- VERTER,AD5313R DUAL, 10-BIT DAC WITH 2 PPM REFERENCE, SPI INTER- FACE
R722M7	0613952Q56	CER CHIP RES 200 OHM 5 0402	R763M7	0613952R19	CER CHIP RES 56K OHM 5% 0402	R907M16	2113944A26	CAP CER CHP 12.0PF 50V 5%	U1202M11	51012154001	OPERATIONAL AMPLIFI- ERS RAIL-TO-RAIL
R723M7	0613952Q82	CER CHIP RES 2400 OHM 5 0402	R765M7	2414017P23	IDCTR,CHIP,68NH,5%,180 MA,2.2OHM,CER,8 Q,800MHZ SRF,SM,0402,P	R908M16	2113944A26	CAP CER CHP 12.0PF 50V 5%	U1203M11	5175772B05	PRECISION RF DETEC- TOR
R728M7	0613952Q26	CER CHIP RES 11.0 OHM 5 0402	R766M7	0613952Q92	CER CHIP RES 6200 OHM 5 0402	R909M16	IN000122A41	INDUCTOR,0.043 UH,0402/ M1005,CERAMIC,0402HP 43NH 5%	U1204M11	5109522E93	2 INPUT OR GATE IN NANO PACKAGE (C87)
R729M7	0613952R09	CER CHIP RES 22K OHM 5% 0402	R768M7	2113944A25	CAP:CHIP,10PF,.5PF+/- .50V-DC,0402*	S2103M2	40012069001	TACT SWITCH, EMER- GENCY	U1205M11	5109522E93	2 INPUT OR GATE IN NANO PACKAGE (C87)
R730M7	0613952Q79	CER CHIP RES 1800 OHM 5 0402	R769M7	0613952Q29	CER CHIP RES 15.0 OHM 5 0402	SH1	26012144002	SHIELD TX-O/P	U1208M11	5164852H16	IC:TRANSLATING,2PER PKG,LVC2T45,*
R734M7	0613952Q86	CER CHIP RES 3600 OHM 5 0402	R771M7	0613952Q49	CER CHIP RES 100 OHM 5 0402	SH10	26012156001	SHIELD, MIXER	U1209M11	NOTPLACED	-
R736M7	0613952R66	RES:MF,0OHM,5%,.0625W, SM,0402*	R776M7	0613952Q67	CER CHIP RES 560 OHM 5 0402	SH11	26012159001	SHIELD, VCO	U1211M11	5109522E94	2 INPUT AND GATE IN NANO PACKAGE (C87)
R741M7	0613952R09	CER CHIP RES 22K OHM 5% 0402	R778M7	2113944A30	CAP CER CHP 27.0PF 50V 5%	SH12	26012152001	SHIELD, GPS/BT	U1217M11	NOTPLACED	-
R742M7	0613952R23	CER CHIP RES 82K OHM 5% 0402	R779M7	NOTPLACED	-	SH13	26012161002	SHIELD CONTROLLER	U1232M11	NOTPLACED	-
R743M7	0613952R17	RESISTOR,METAL FILM,47KOHM,5%,.0625W, SM,0402,200PPM/CEL,PB- FREE	R785M7	0613952Q44	CER CHIP RES 62.0 OHM 5% 0402	SH14	26012143001	SHIELD, MAKO	U1238M11	5185070Y01	IC TEMPERATURE SEN- SOR PB-FREE
						SH15	26012160001	SHIELD, DRIVER	U1243M11	5185941F56	IC SINGLE LV LP OP AMPLIFIER
						SH16	26012163001	SHIELD, RXFE	U1251M11	5185941F56	IC SINGLE LV LP OP AMPLIFIER
						SH17	26012155001	SHIELD, 2ND_LO			
						SH2	26012154002	SHIELD,STEEL,TIN PLATED,SHIELD, ABACUS ULC			

Ref. Des.	Part Number	Description	Ref. Des.	Part Number	Description	Ref. Des.	Part Number	Description	Ref. Des.	Part Number	Description
U1253M11	5185941F56	IC SINGLE LV LP OP AMPLIFIER	U2102M2	5109522E84	IC DUAL SCHMITT TRIG MICRO PAK	U6102M6	5188691V01	IC,MUX/ DEMUX,,NC7SB3157P6X,S M,SC70-6,1PER PKG,,BUS,,PB FREE	U6504M6	5171682H01	800MA BUCK REGULATOR
U1254M11	5185941F56	IC SINGLE LV LP OP AMPLIFIER	U2104M2	5109522E84	IC DUAL SCHMITT TRIG MICRO PAK	U6103M6	5175114H01	SINGLE AND GATE MICROPAC	U6505M6	5189631P01	IC,SYNC STEP-DOWN CONV
U1256M11	5185941F56	IC SINGLE LV LP OP AMPLIFIER	U2201M2	5171679H01	LED LIGHT DRIVER	U6104M6	5175114H01	SINGLE AND GATE MICROPAC	U6506M6	5184790Y04	IC,400MA ADJ VREG LDO,SOT23
U1257M11	5109522E94	2 INPUT AND GATE IN NANO PACKAGE (C87)	U2202M2	5164852H47	IC, I2C LEVEL TRANSLATOR	U6105M6	5175114H01	SINGLE AND GATE MICROPAC	U6507M6	5171682H01	800MA BUCK REGULATOR
U1269M11	5109817F77	IC COMPTR LM7275 5SC70 (D54)	U2701M13	5103535B53	IC,INVTR,DL,NC7WZ04L6X ,2PER PKG,SC70	U6201M6	5185941F26	IC,COMPTR,LMV7219,NOP B	U6508M6	51009366001	500MA LOW DROPOUT CMOS LINEAR REG.
U1282M11	5171779H01	SPDT ANALOG SWITCH	U2702M13	5185941F45	ATTEN,VAR,14.4DBMIN,15.6DBMAX,0-2000 MHZ-FREQ,50OHM,PCMT,,SOT	U6301M6	51012058002	IC:MT46H32M16,SDRAM,L PDDR,8MX16,VFBGA-60	U6509M6	5175114H01	SINGLE AND GATE MICROPAC
U1301M3	51007377001	IC:XCVR,GPS,RX/TX,B/ TOOTH,WSP-107	U304M20	4885316E32	TRANSISTOR,TRANSIS- TOR, RF	U6302M6	5102495J13	IC,MICROP,P1710ZZGE,BG A,,12MHZ,32BITS	U6510M6	5114007A47	IC,OR,17SZ32,1PER PKG,SOT-353,PB FREE
U1304M3	51007599001	AMP,20.0DB,1.58GHZMIN,1.58GHZMAX,SLCN GER- MANIUM GPS LOW NOISE AM	U3238M22	5171972L01	SP3T RF SWITCH	U6302M6	5102495J13	IC,MICROP,P1710ZZGE,BG A,,12MHZ,32BITS	U6511M6	5171339H01	MICROPOWER VOLTAGE REGULATOR
U1305M3	5187344N09	LOW NOISE, 100MA LIN- EAR REGULATOR 2.8V	U4001M2	5164852H47	IC, I2C LEVEL TRANSLATOR	U6401M6	5175772B38	IC ANALOG TEMPERA- TURE SENSOR	U6601M6	5175114H01	SINGLE AND GATE MICROPAC
U200M12	5188493T01	IC,VREG/ SWG,LP2989,SM,MINI SO- 8 HI PRCN REG 5V	U4003M2	5188691V01	IC,MUX/ DEMUX,,NC7SB3157P6X,S M,SC70-6,1PER PKG,,BUS,,PB FREE	U6402M6	5115453H01	RAIL TO RAIL OUTPUT, 8 PIN BGA	U702M7	5164015H28	IC:XCVR,AT46000,TRI- DENT,BGA-121
U201M12	5175771A99	LOW NOISE, 100MA LIN- EAR REGULATOR	U4004M2	5116783H01	SN74LVC2G66 ANALOG SWITCH	U6404M6	5175772B38	IC ANALOG TEMPERA- TURE SENSOR	U738M7	5171972L01	SP3T RF SWITCH
U202M12	5175772B02	LINEAR REGULATOR 100MA 1.8V	U507M21	5164015H81	IC,MXR,DBL BAL GIL- BERT,CELL,,SM	U6405M6	5188348V06	IC,AUDIO CODEC,SM,,AUDIO CODEC	U746M7	4805218N63	RF TRANS SOT 323 BFG67W
U203M12	5175772B01	LINEAR VOLTAGE REGU- LATOR 350MA	U601M19	5102495J14	IC,IF,,IF DIGITILIZING SUB- SYSTEM IC,AD9864,QFN	U6408M6	5188521T01	IC,VREF,SM,SOT23,1PER PKG,.5%,1.25 TO 13.75,PRCN BANDGAP ADJUS	U901M16	5175143H01	WIDE SUPPLY RANGE OP AMP
U21000M2	5188690V02	IC:F-F/D,1PER PKG,7SZ175,SC70-6,PB FREE	U602M19	4885316E32	TRANSISTOR,TRANSIS- TOR, RF	U6409M6	51009000001	NANOPOWER, 1.8V, SOT23 COMPARTOR	U902M16	51012101001	VHF/UHF/800/900 MHZ LD MOS DRIVER IC
U21001M2	5188690V02	IC:F-F/D,1PER PKG,7SZ175,SC70-6,PB FREE	U603M19	5109522E84	IC DUAL SCHMITT TRIG MICRO PAK	U6410M6	5175772B38	IC ANALOG TEMPERA- TURE SENSOR	VR101M12	4813977M29	DIODE,VREF,MBZ5250,SM, SOT-23,20V,.225W,ZEN
U21002M2	5188690V01	IC:SCHMITT INVERTER,7SZ14,1PER PKG,*	U604M19	5109522E84	IC DUAL SCHMITT TRIG MICRO PAK	U6411M6	5109731C55	IC 2.75 FIXED GAIN MONO FILTER-FREE AMPLFR	VR1M2	4888116D01	VSTR,150V,24V-DC,SM,PB FREE
U21003M2	5188690V01	IC:SCHMITT INVERTER,7SZ14,1PER PKG,*	U605M19	5164852H16	IC:TRANSLATING,2PER PKG,LVC2T45,*	U6501M6	5185143E77	IC, MAKO ASIC, CMOS PWR MGMT	VR200M12	4813977M29	DIODE,VREF,MBZ5250,SM, SOT-23,20V,.225W,ZEN
U2101M2	5109522E84	IC DUAL SCHMITT TRIG MICRO PAK	U606M19	5164852H16	IC:TRANSLATING,2PER PKG,LVC2T45,*	U6502M6	4871987H01	LOW FREQUENCY TRAN- SISTOR	VR601M19	4805656W87	DIODE,VCTR, @ 15V,1SV279,,SOD-523/SC- 79
			U607M19	5186311J24	IC:BFR,1PER PKG,NC7SZ125,ACTIVE HIGH,*	U6503M6	5171674H01	OP AMP	VR602M19	4805656W87	DIODE,VCTR, @ 15V,1SV279,,SOD-523/SC- 79
			U6101M6	0180706J18	PROGRAMMED CPLD				Y1304M3	48014600001	OSC,TCXO,26.0

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Ref. Des.	Part Number	Description
Y6502M6	4809995L15	XTAL 32KHZ 20PPM 3.2X2.1MM SMD
Y6601M6	93012046001	12MHZ CRYATAL UNIT
Y701M7	4875188M01	CRYSTAL OSCILLATOR



### 8.3 Transceiver (RF) Boards: UHF1 (84012620001)

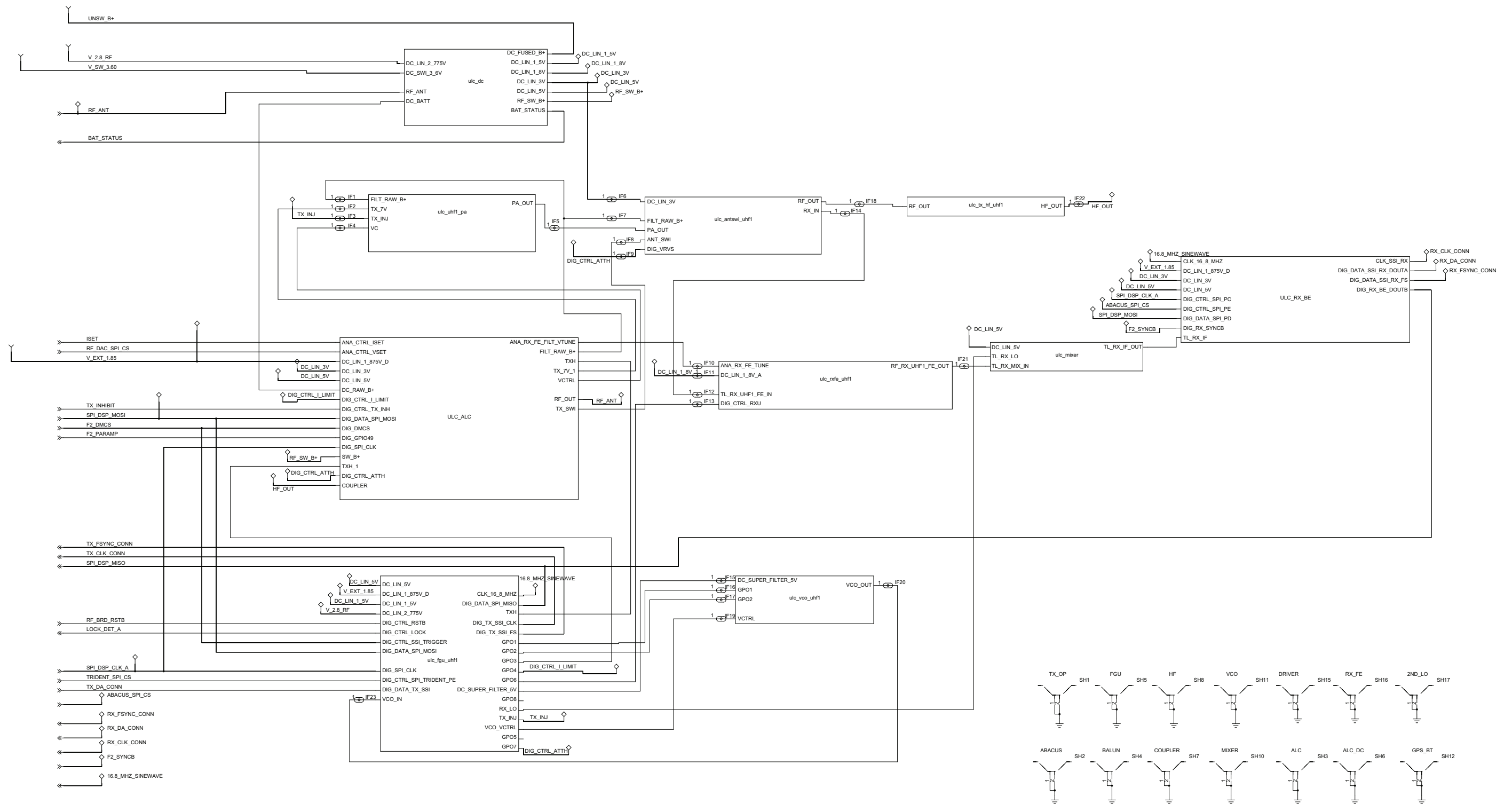


Figure 8-29. Transceiver (RF) Mainboard Overall Schematic

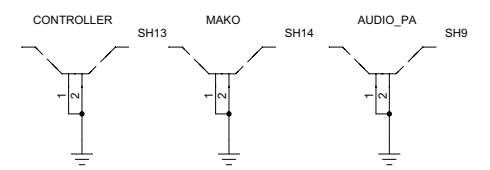
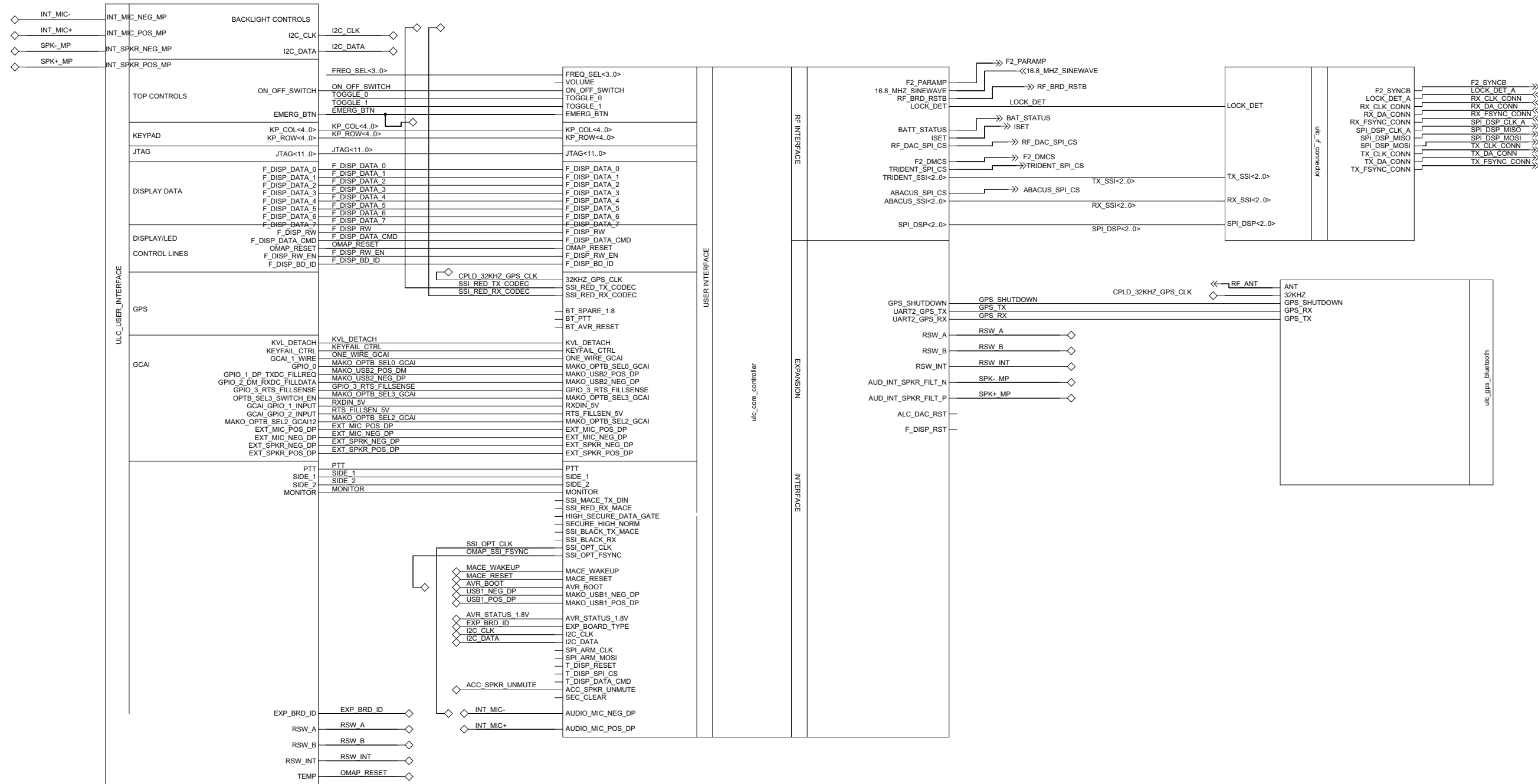


Figure 8-30. Controller Mainboard Circuit

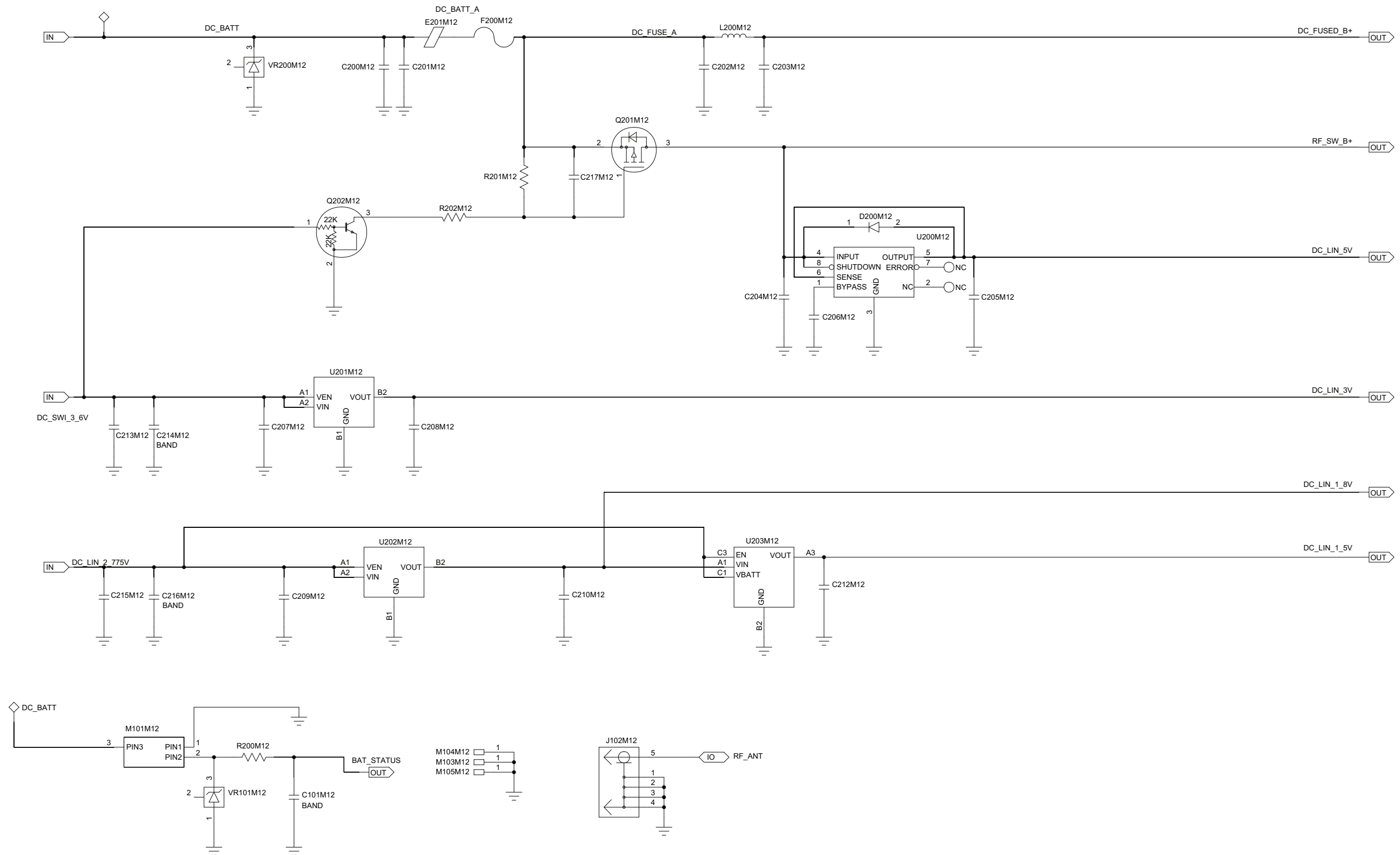


Figure 8-31. DC Circuit

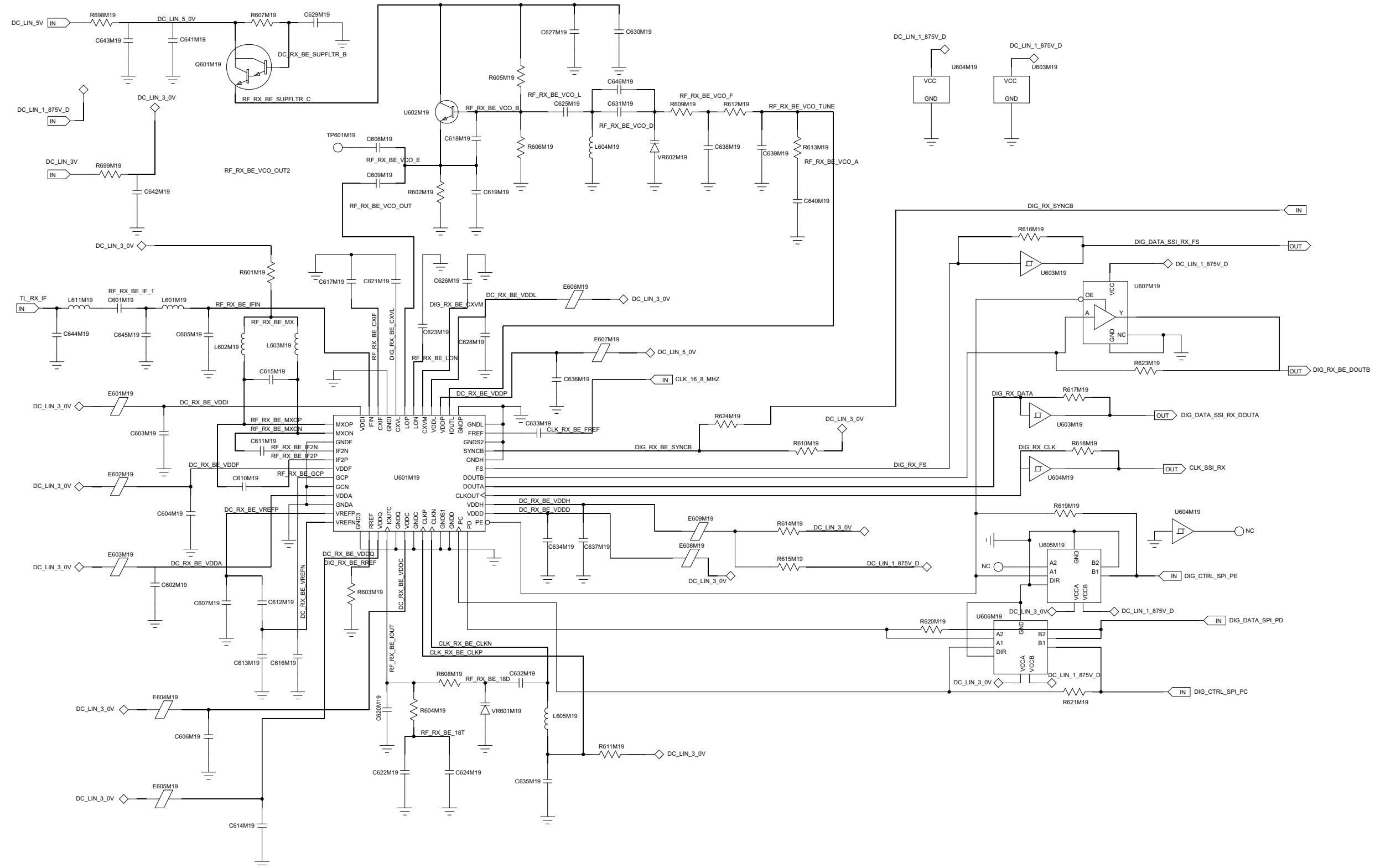


Figure 8-32. Receiver Back End Circuit

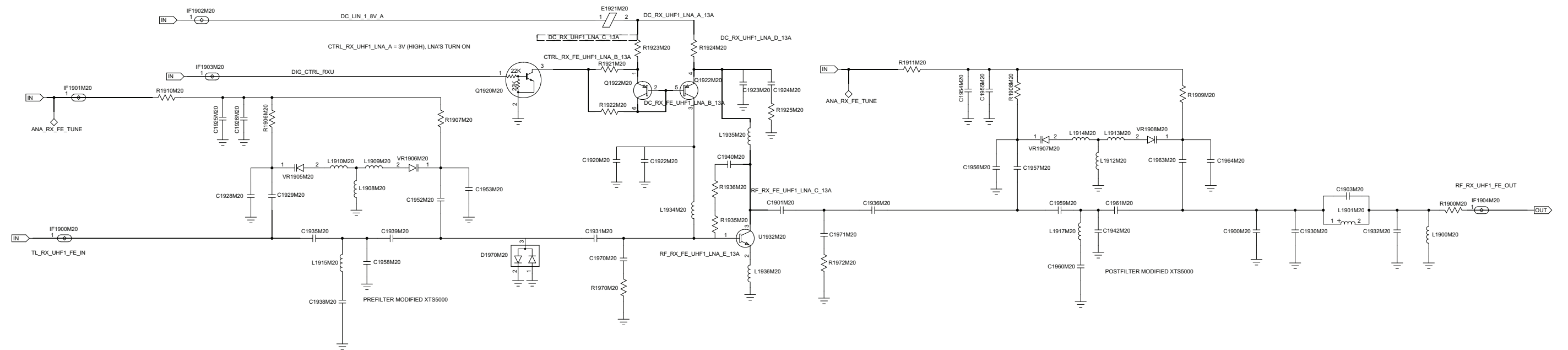


Figure 8-33. Receiver Front End Circuit

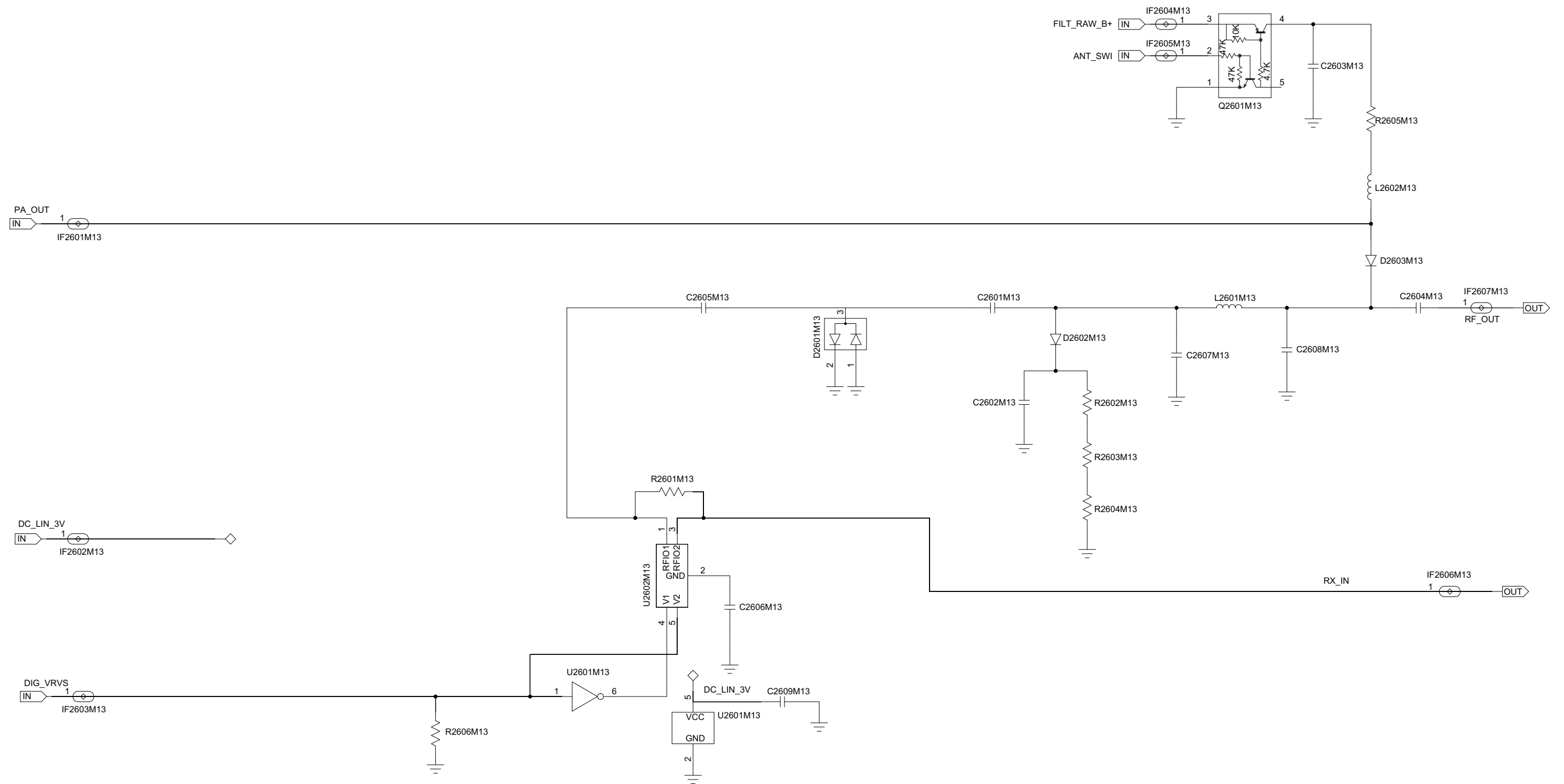


Figure 8-34. ANTSWI Circuit

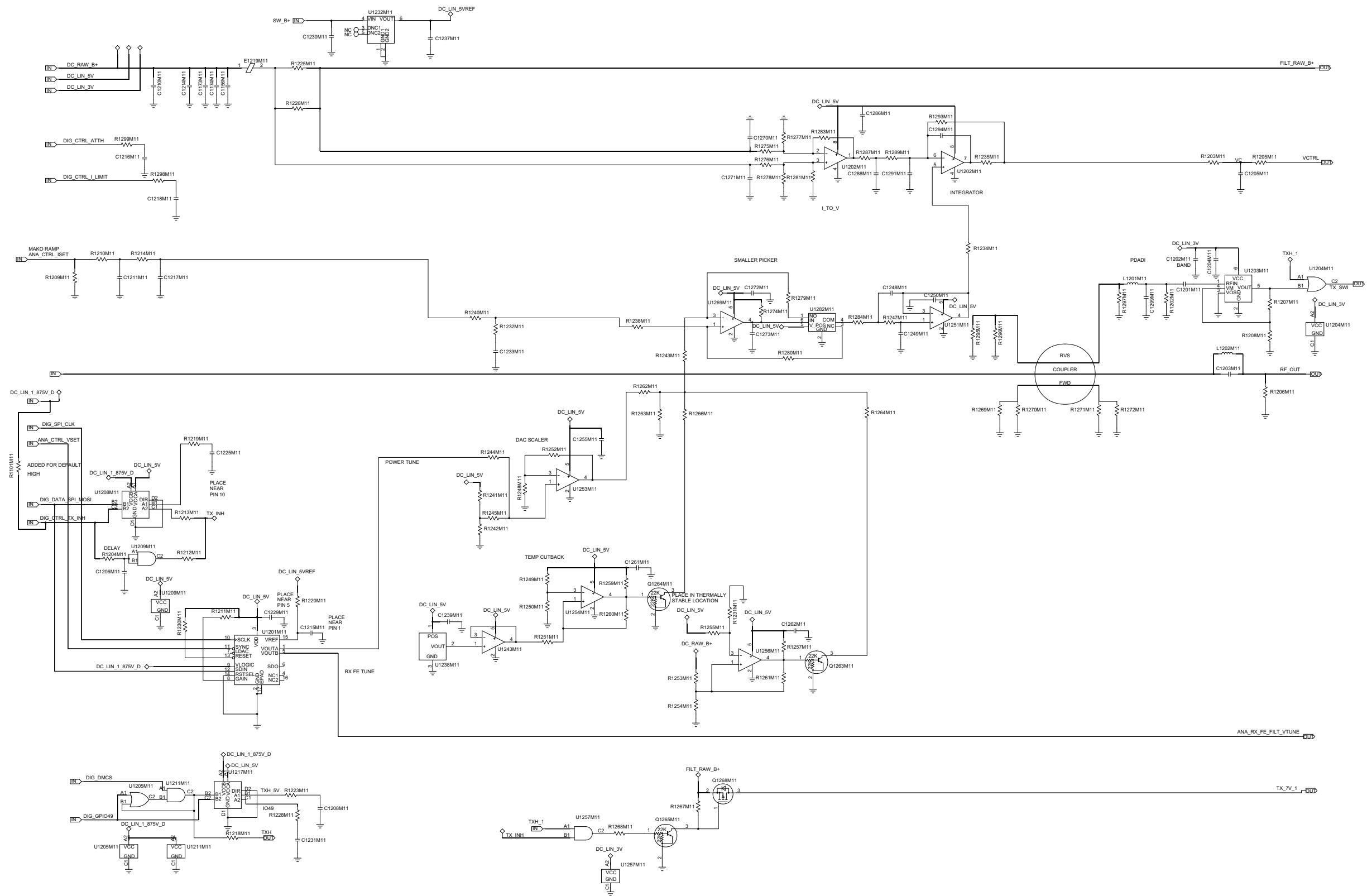


Figure 8-35. Automatic Level Control Circuit

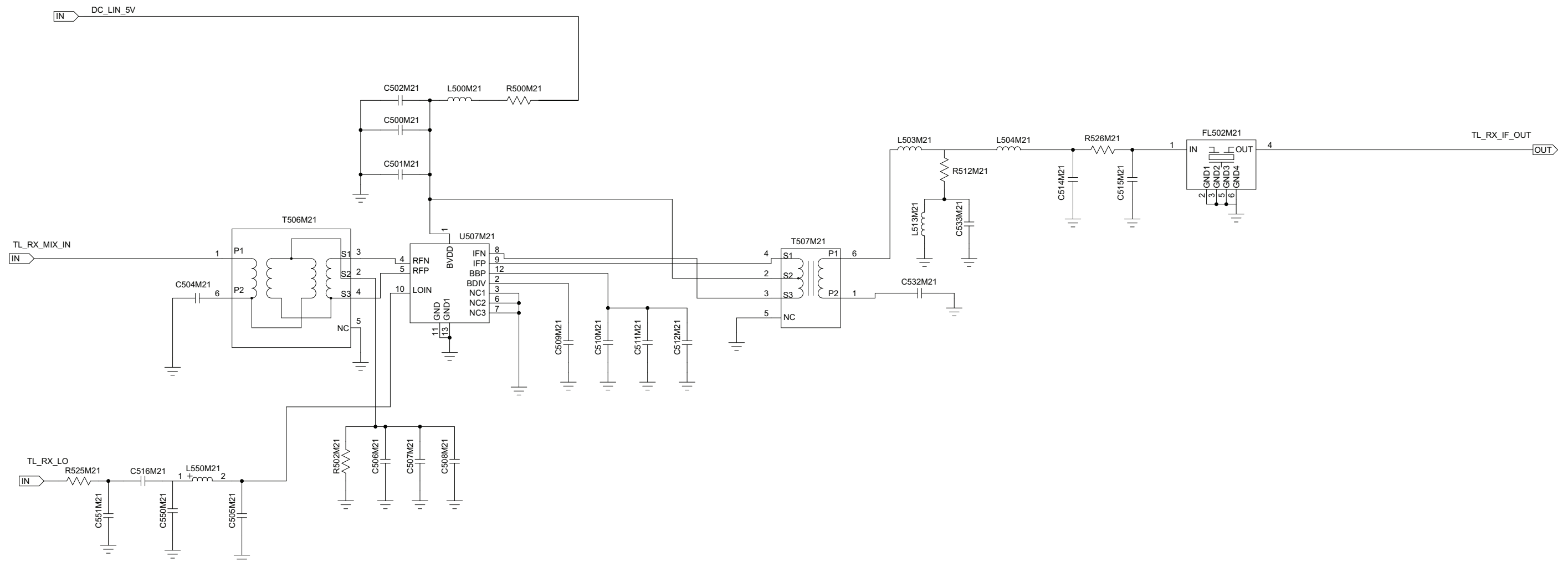


Figure 8-36. Receiver Back End Circuit



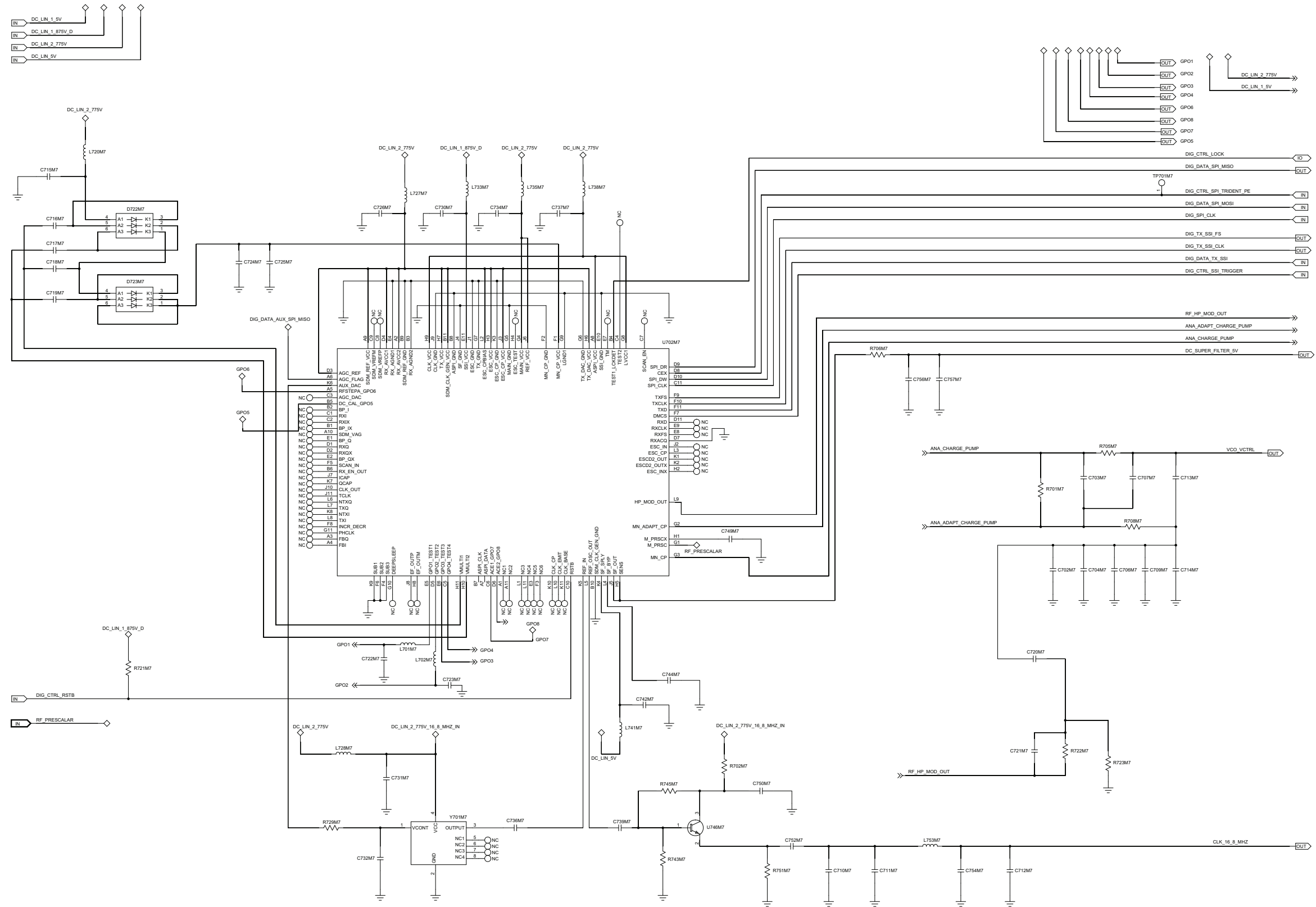


Figure 8-37. Frequency Generation Unit Circuit – 1 of 2

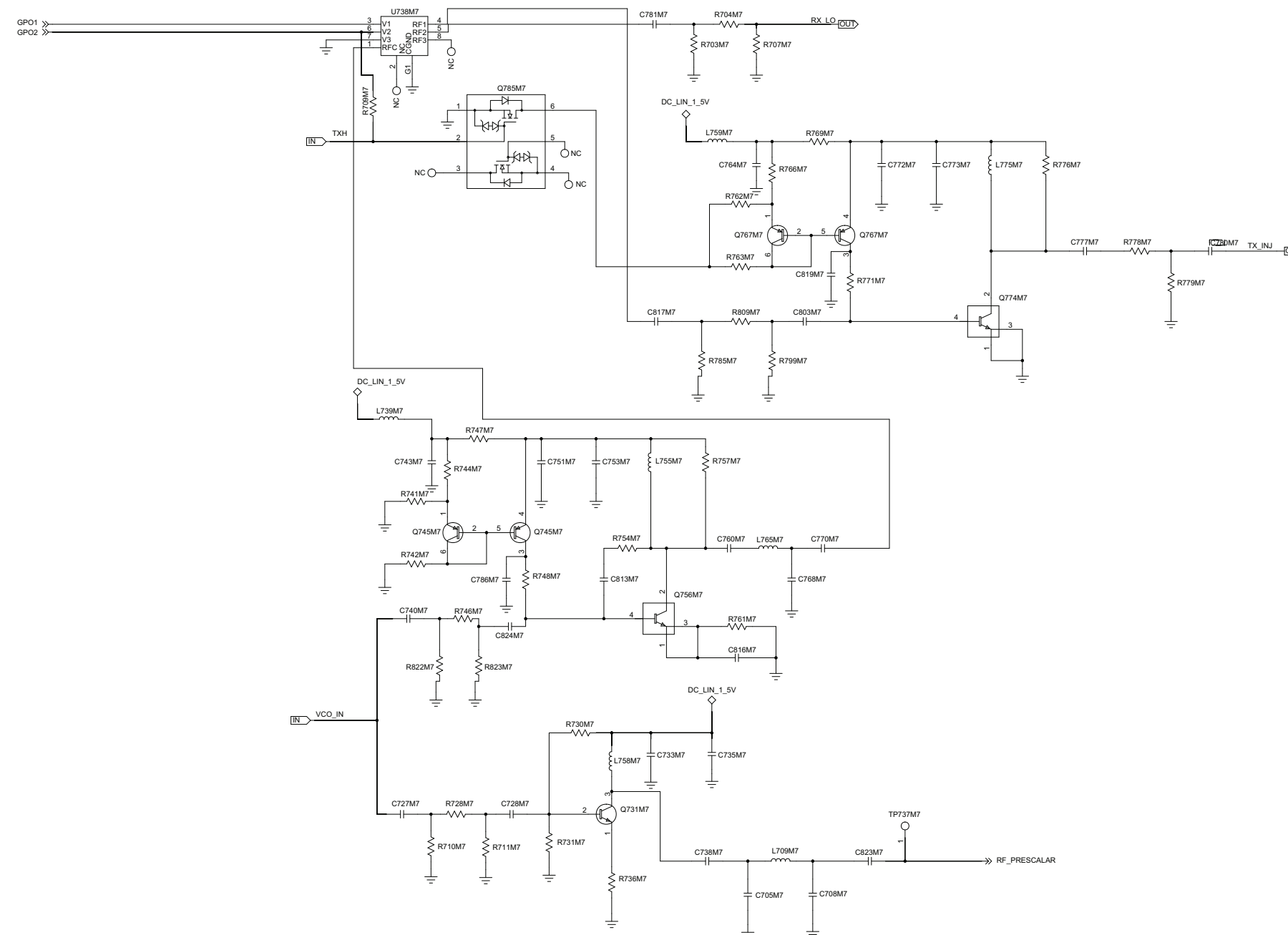
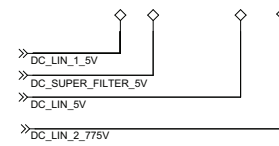


Figure 8-38. Frequency Generation Unit Circuit – 2 of 2

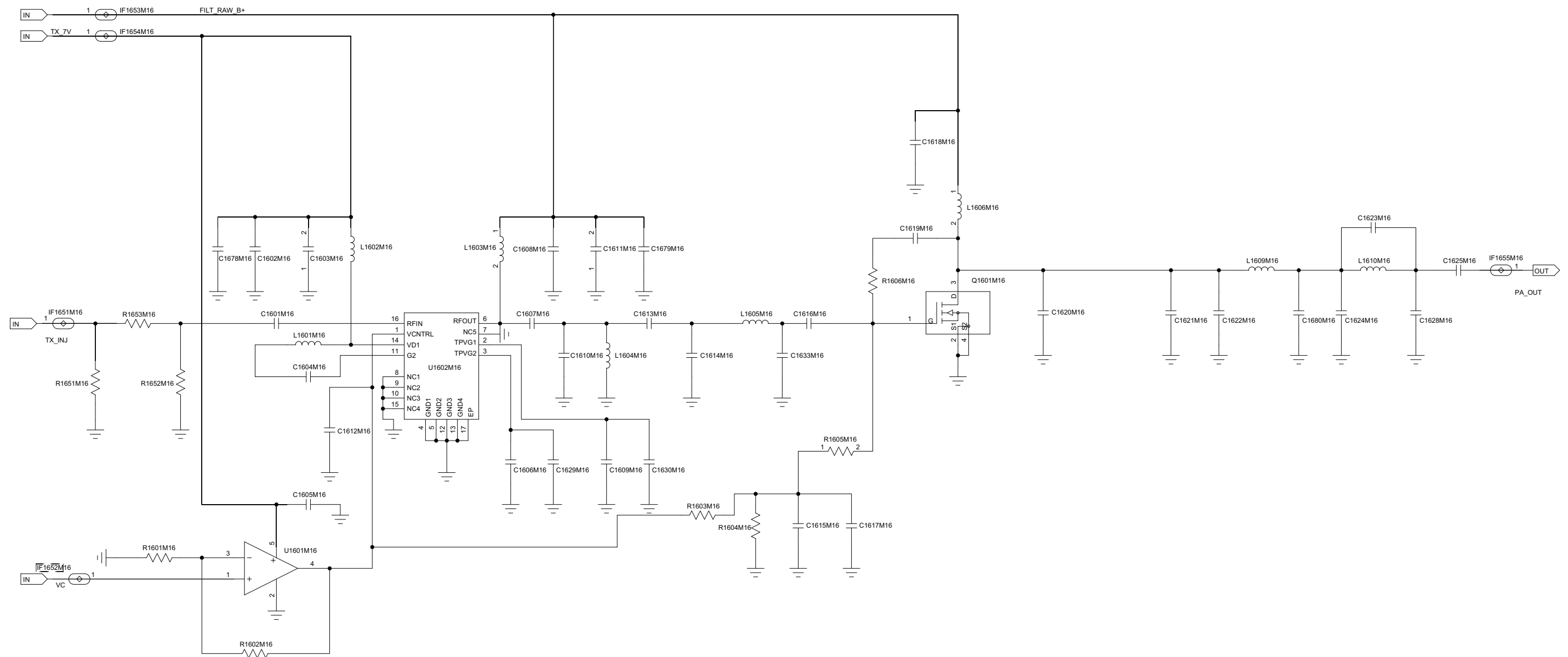


Figure 8-39. Power Amplifier Circuit

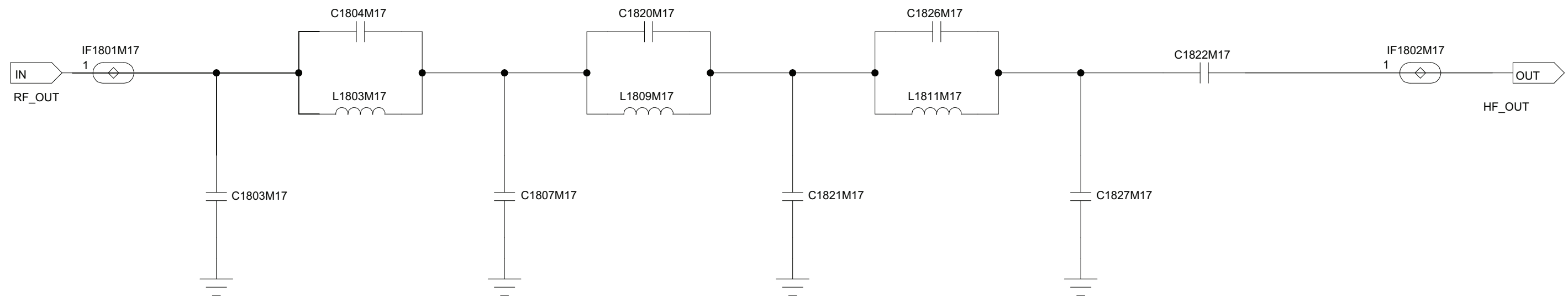


Figure 8-40. Transmitter HF Circuit

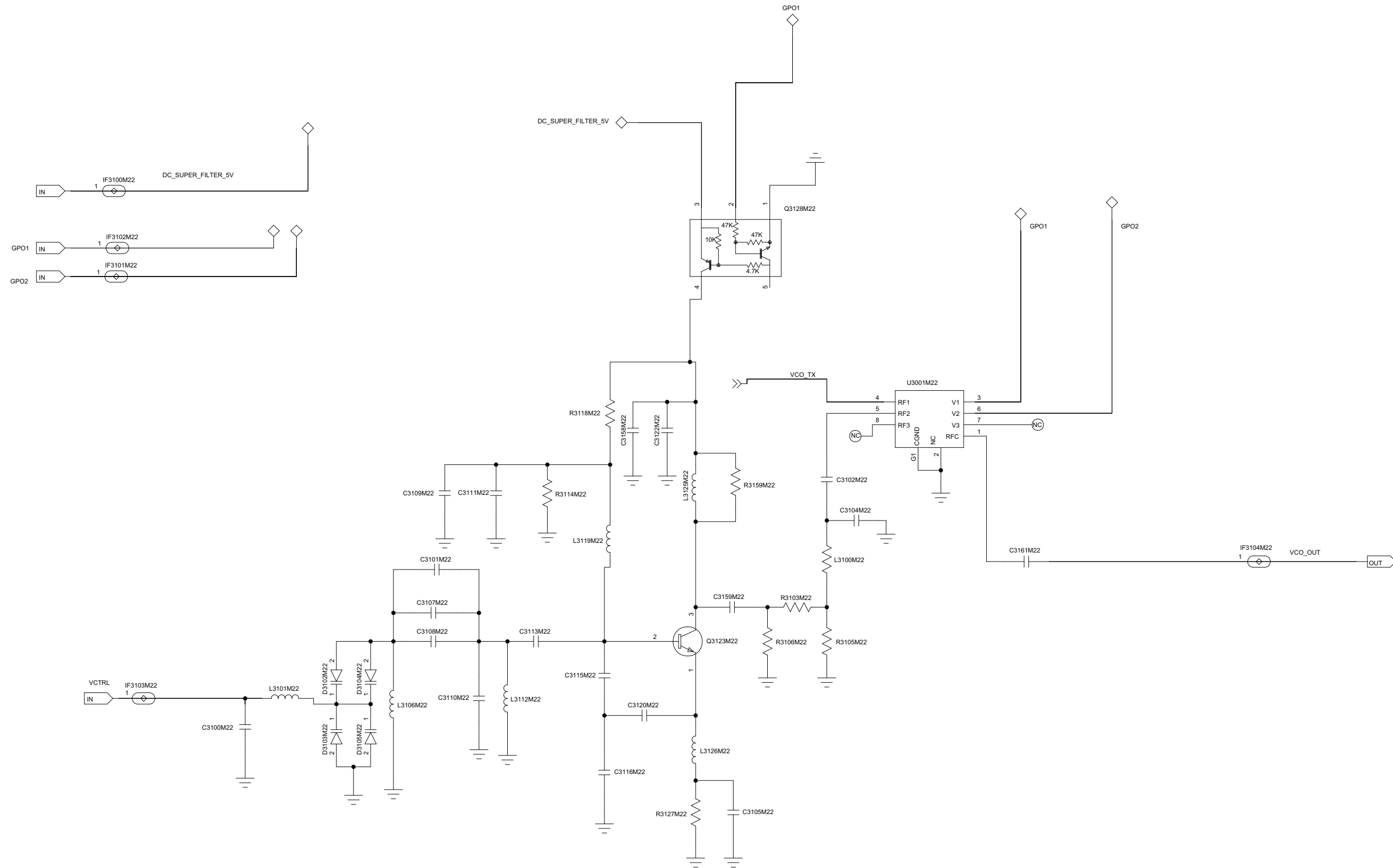


Figure 8-41. Receiver VCO Circuit

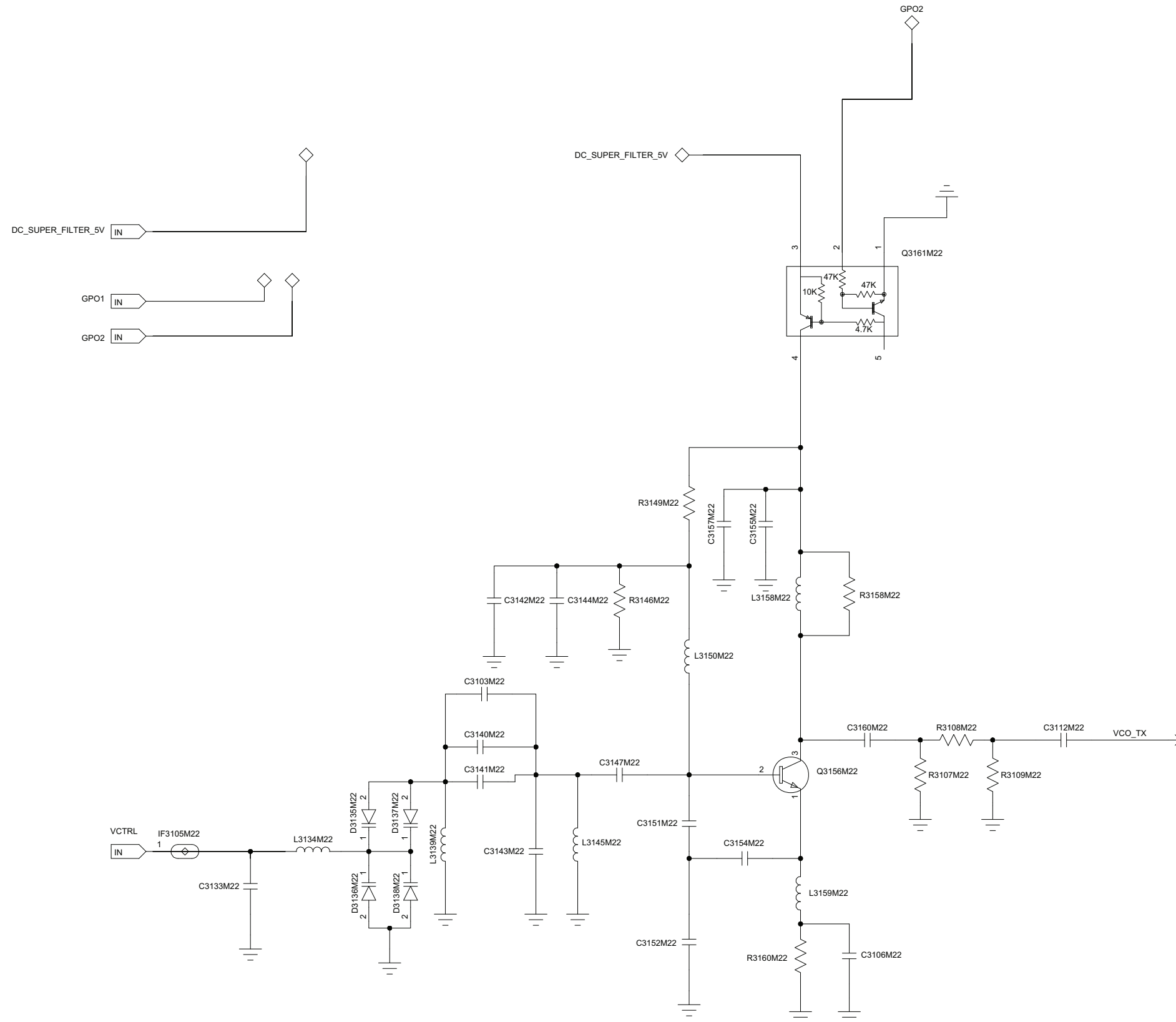


Figure 8-42. Transmitter VCO Circuit

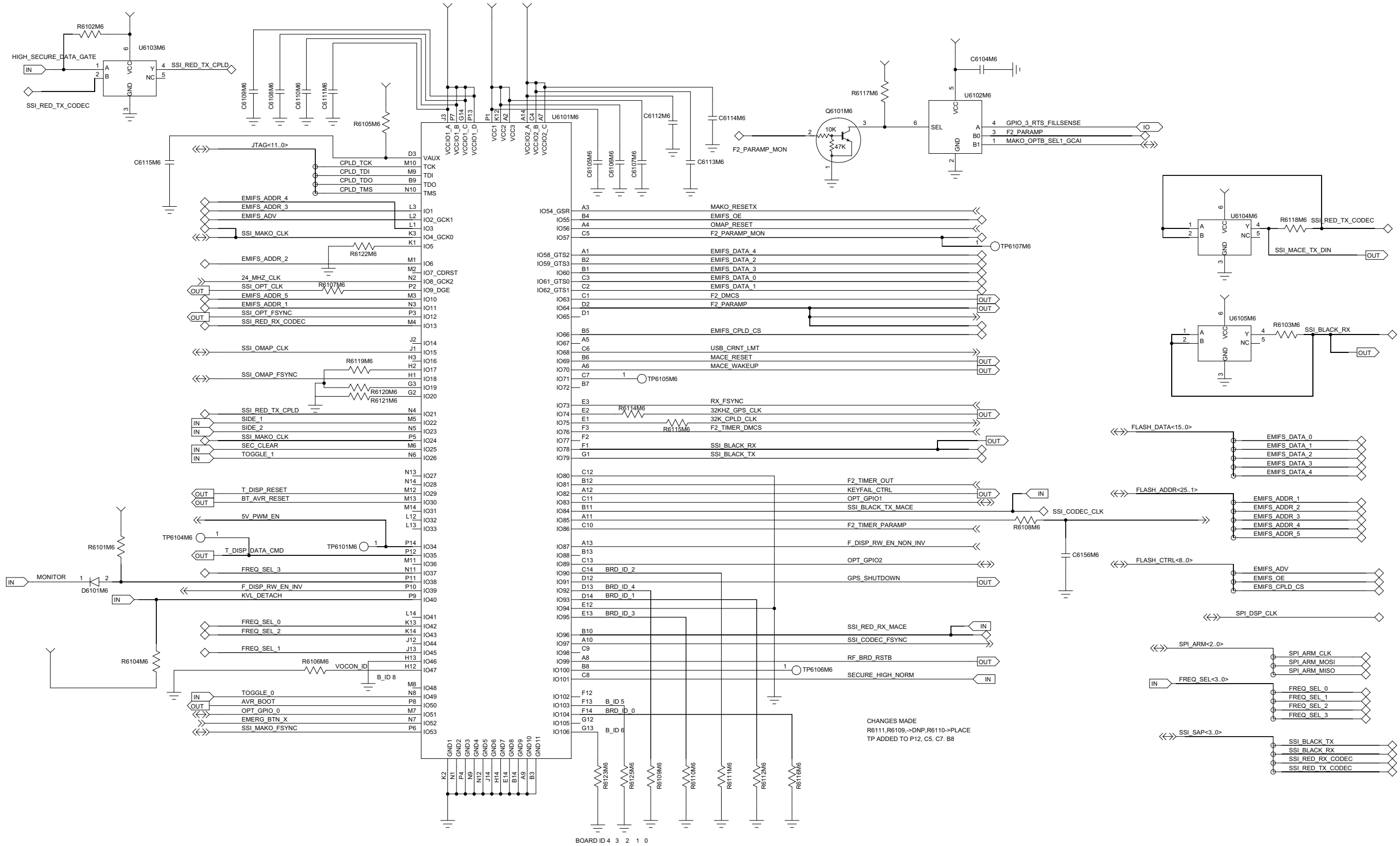


Figure 8-43. CPLD Circuit

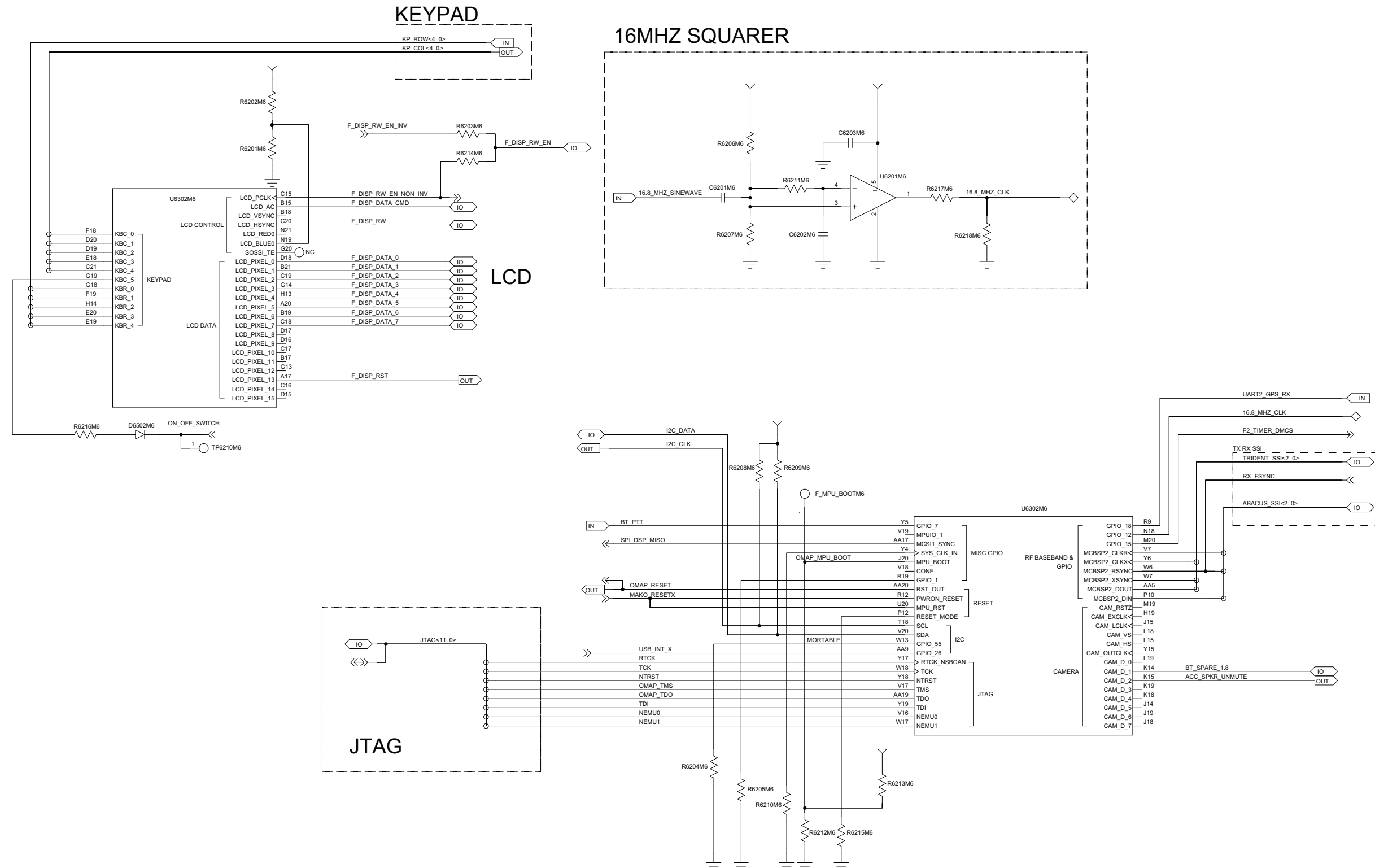


Figure 8-44. OMAP User Interface Circuit



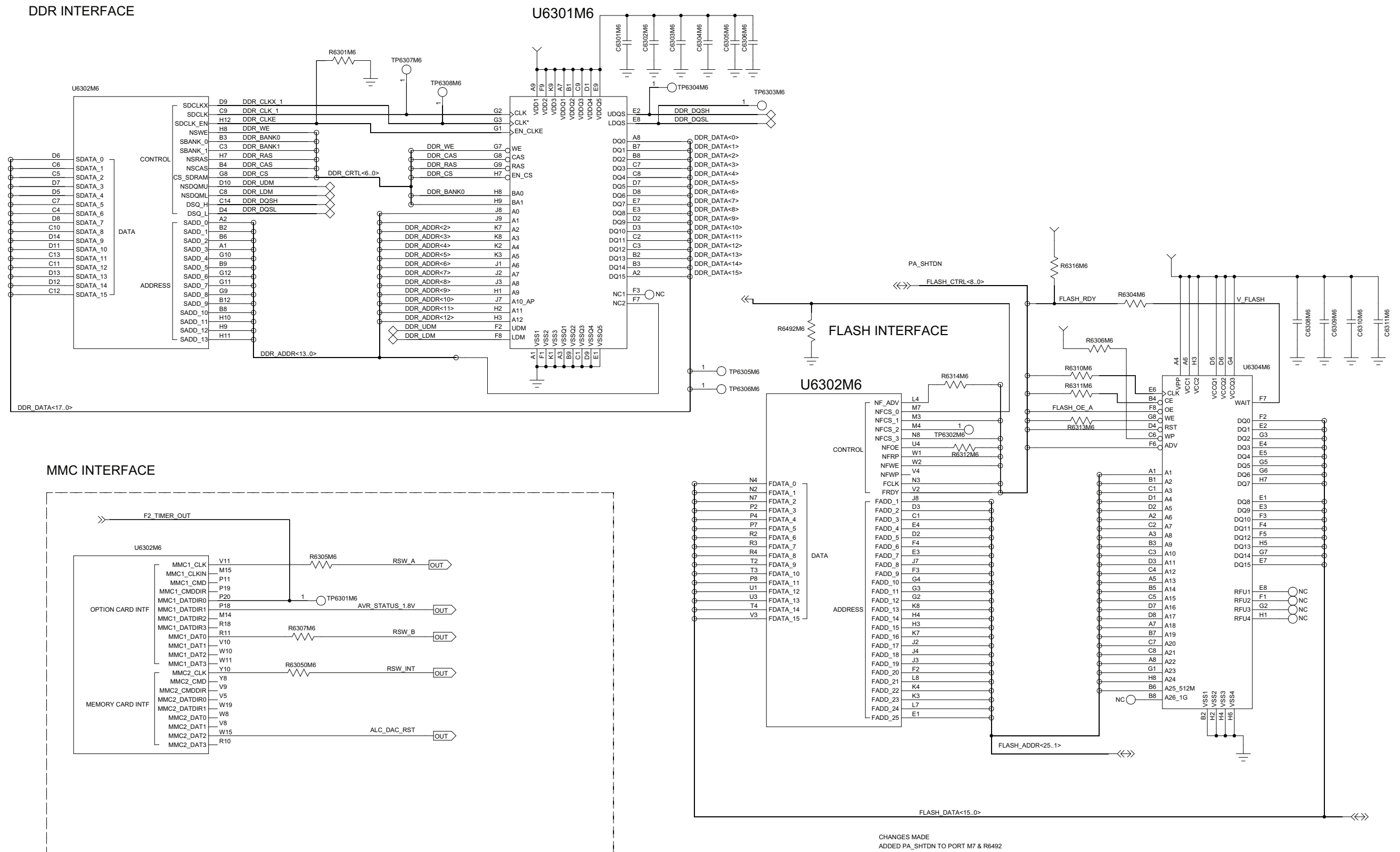


Figure 8-45. Memory Interface Circuit

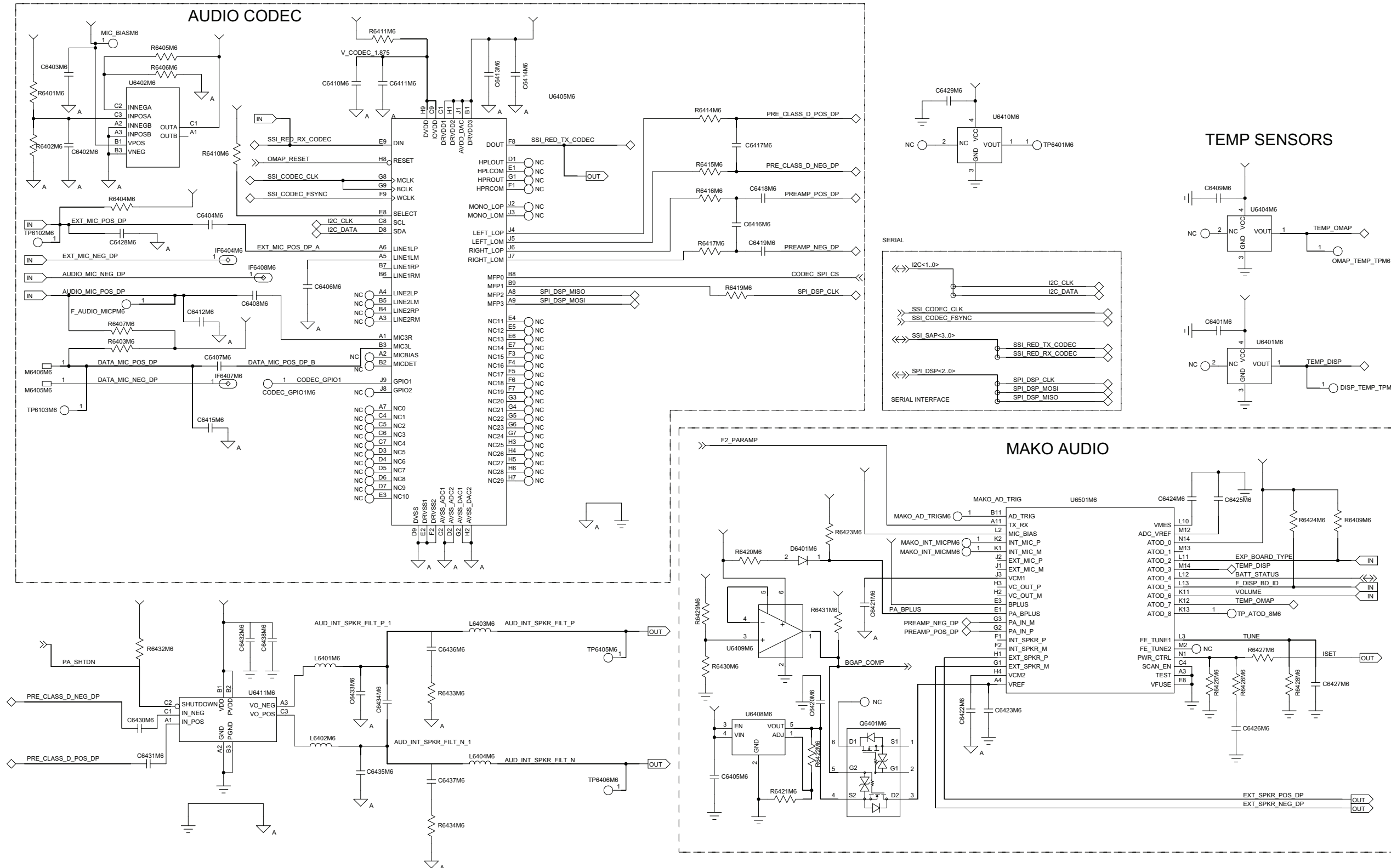


Figure 8-46. Audio Circuit

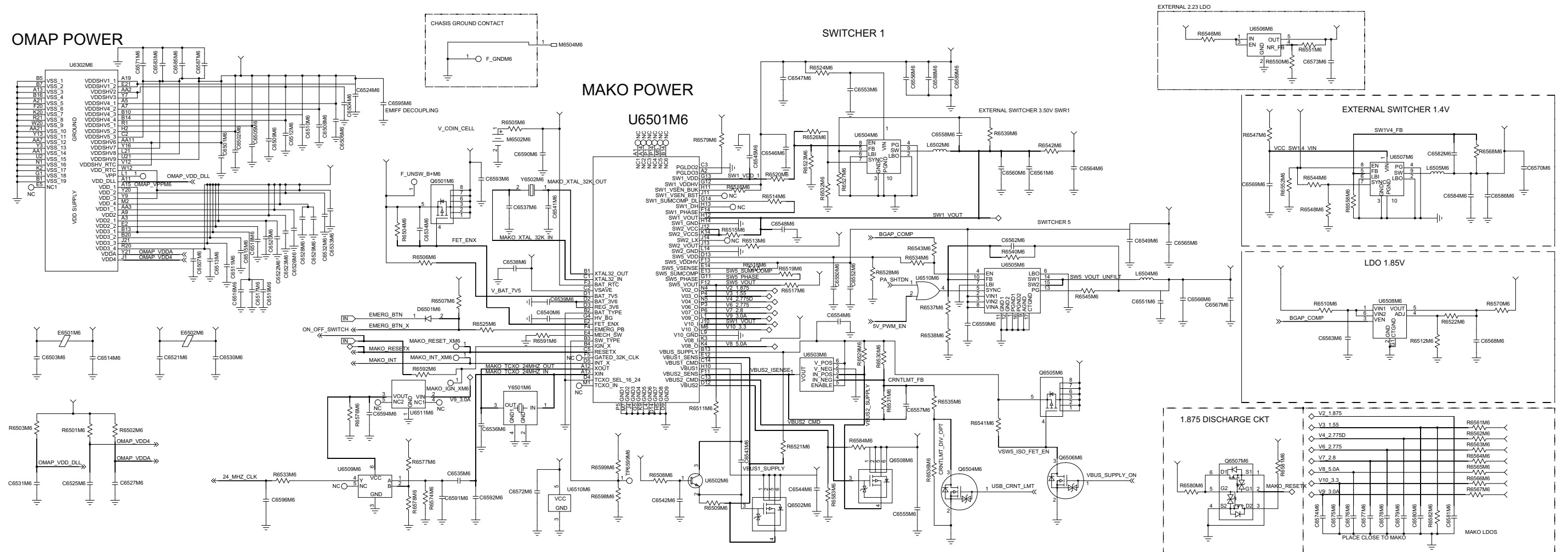


Figure 8-47. MAKO/DC Distribution Circuit

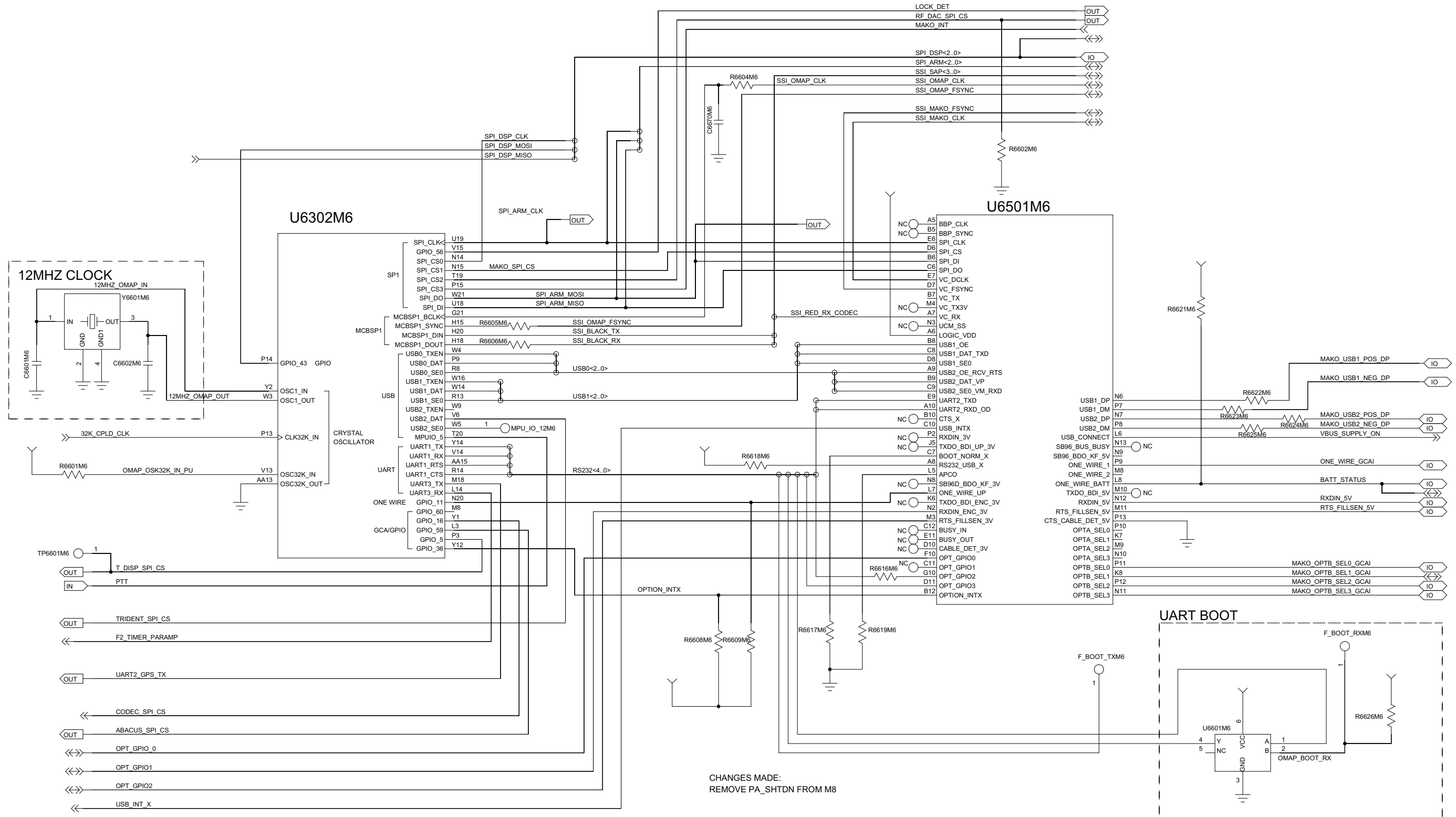


Figure 8-48. Serial Interface Circuit

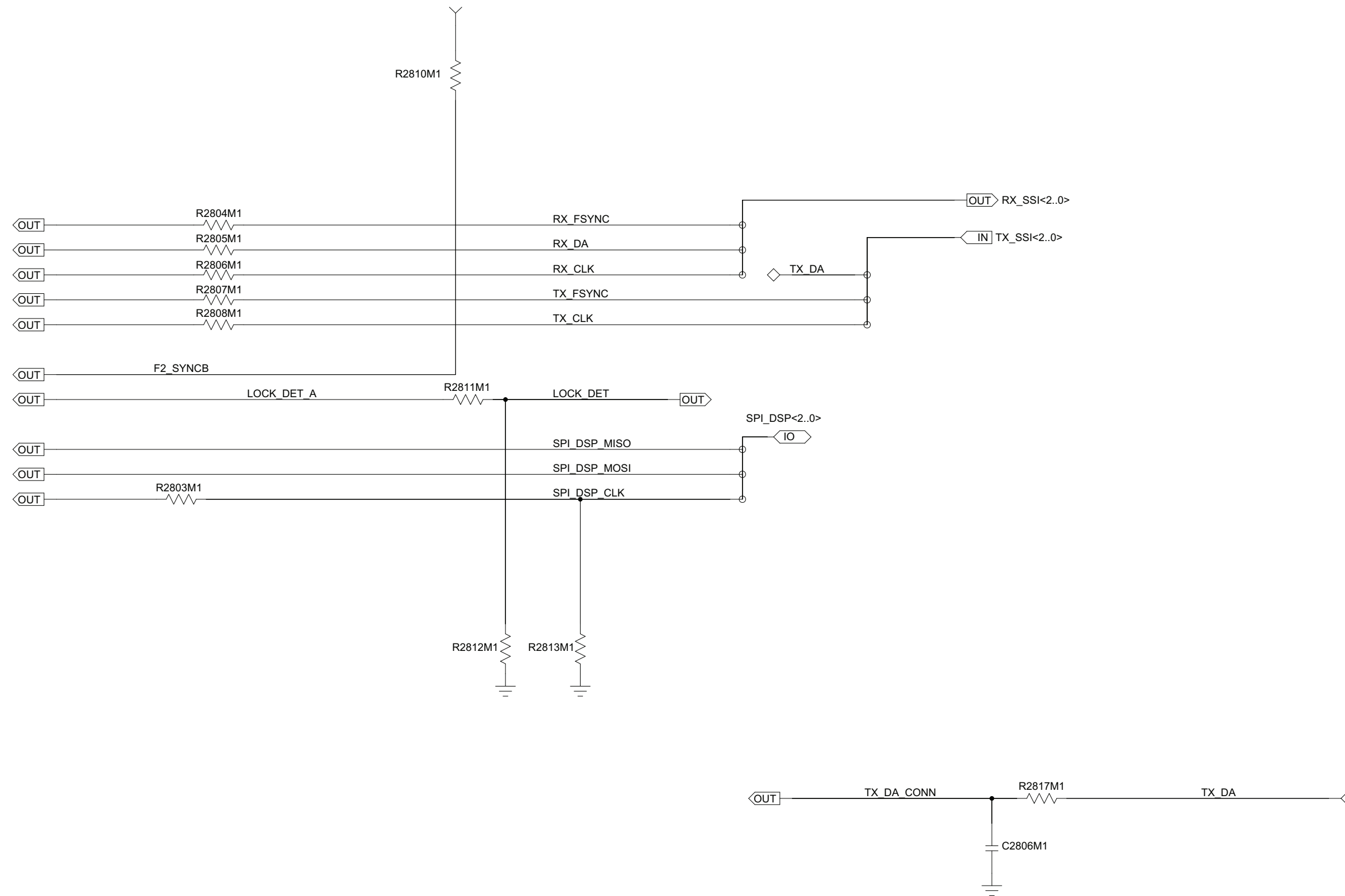


Figure 8-49. RF Interconnects Circuit

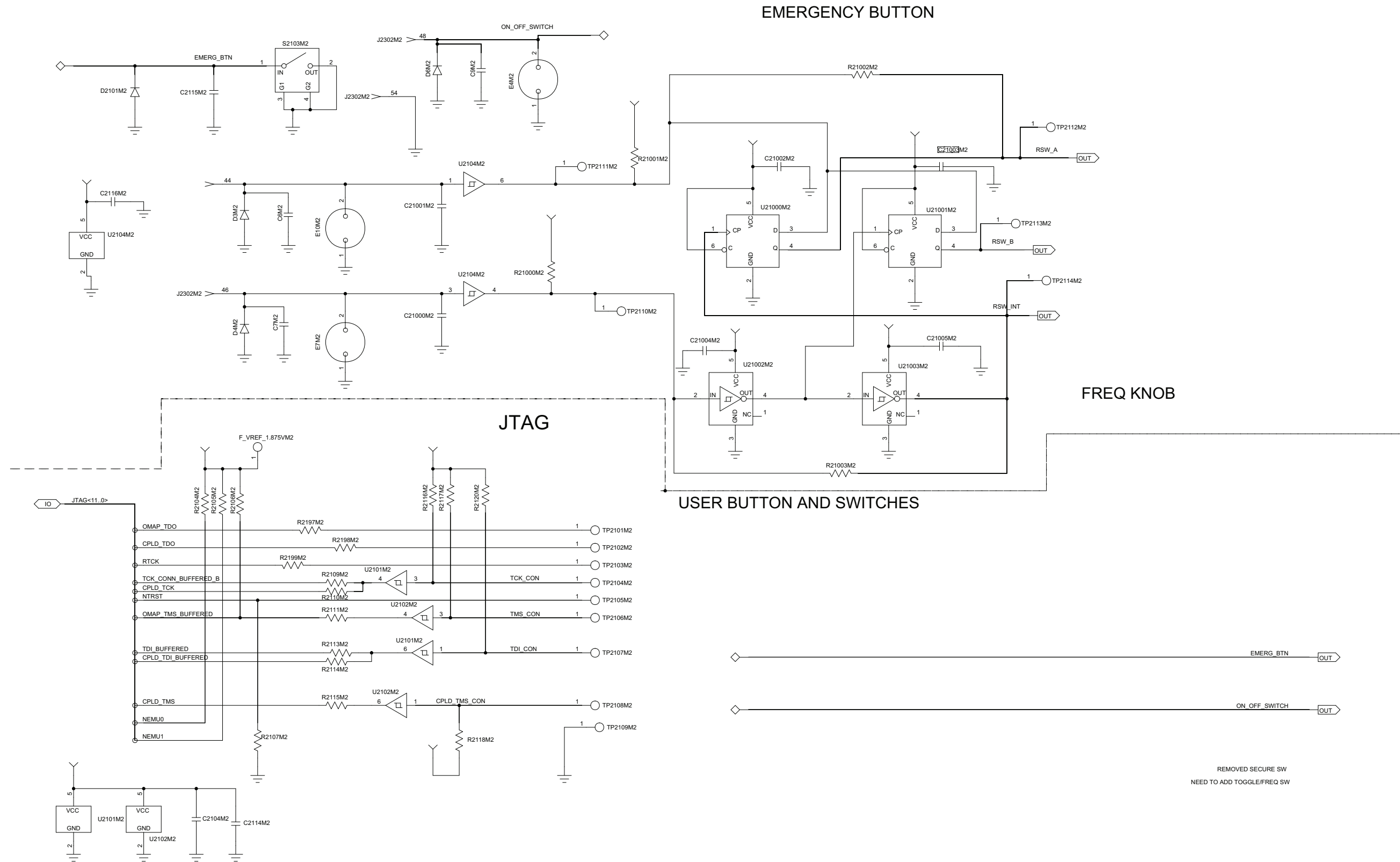


Figure 8-50. Controller Circuit

REMOVED SECURE SW  
NEED TO ADD TOGGLE/FREQ SW

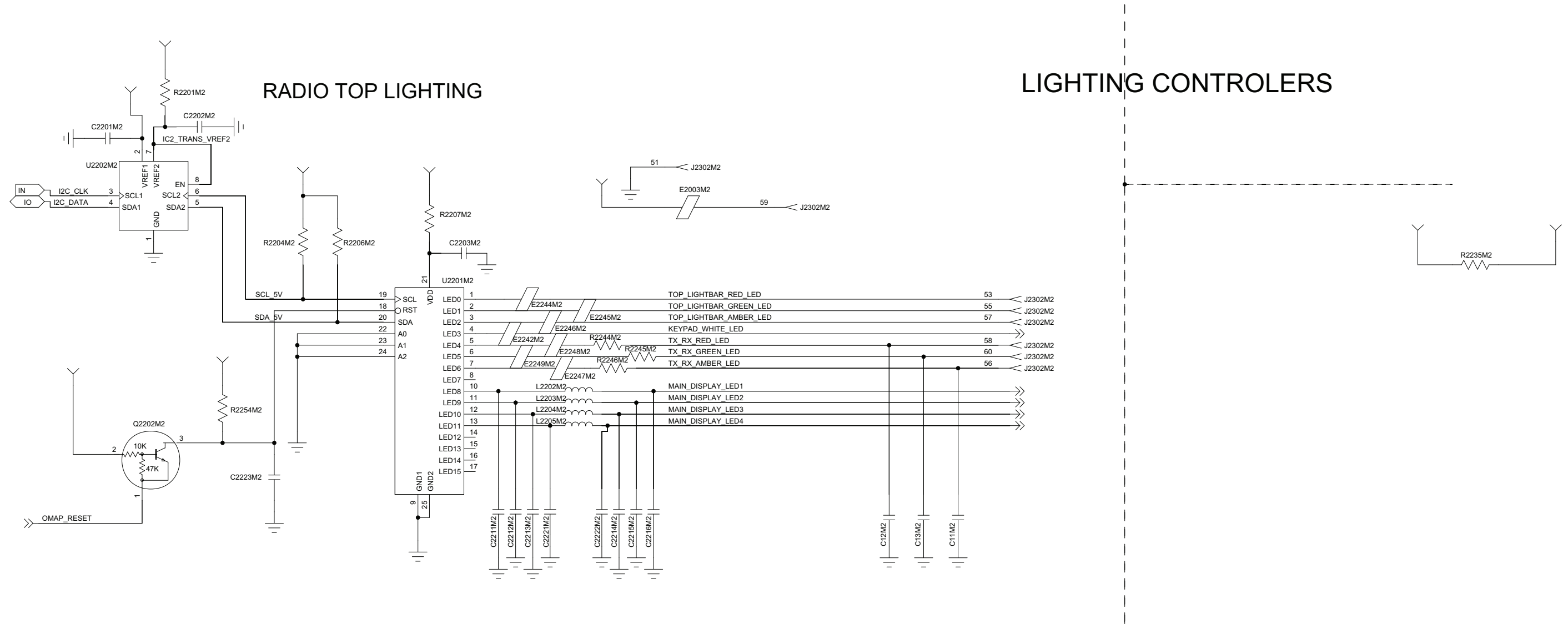
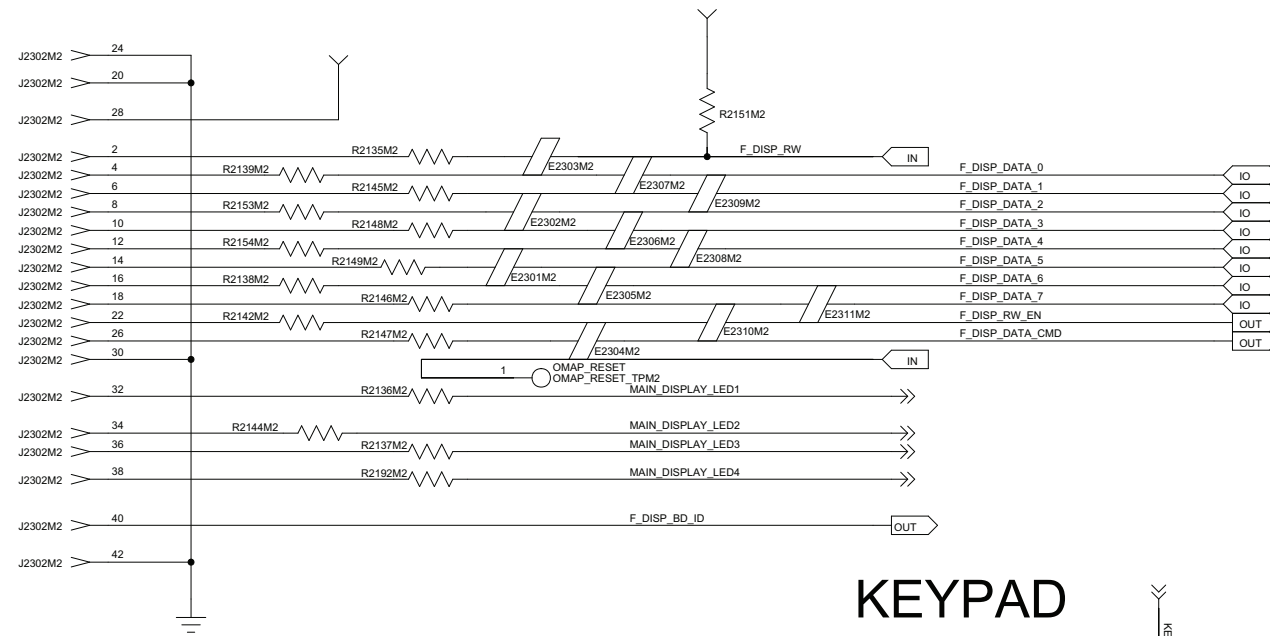


Figure 8-51. Display/Keypad Lighting Control Circuit

# FRONT DISPLAY



# KEYPAD

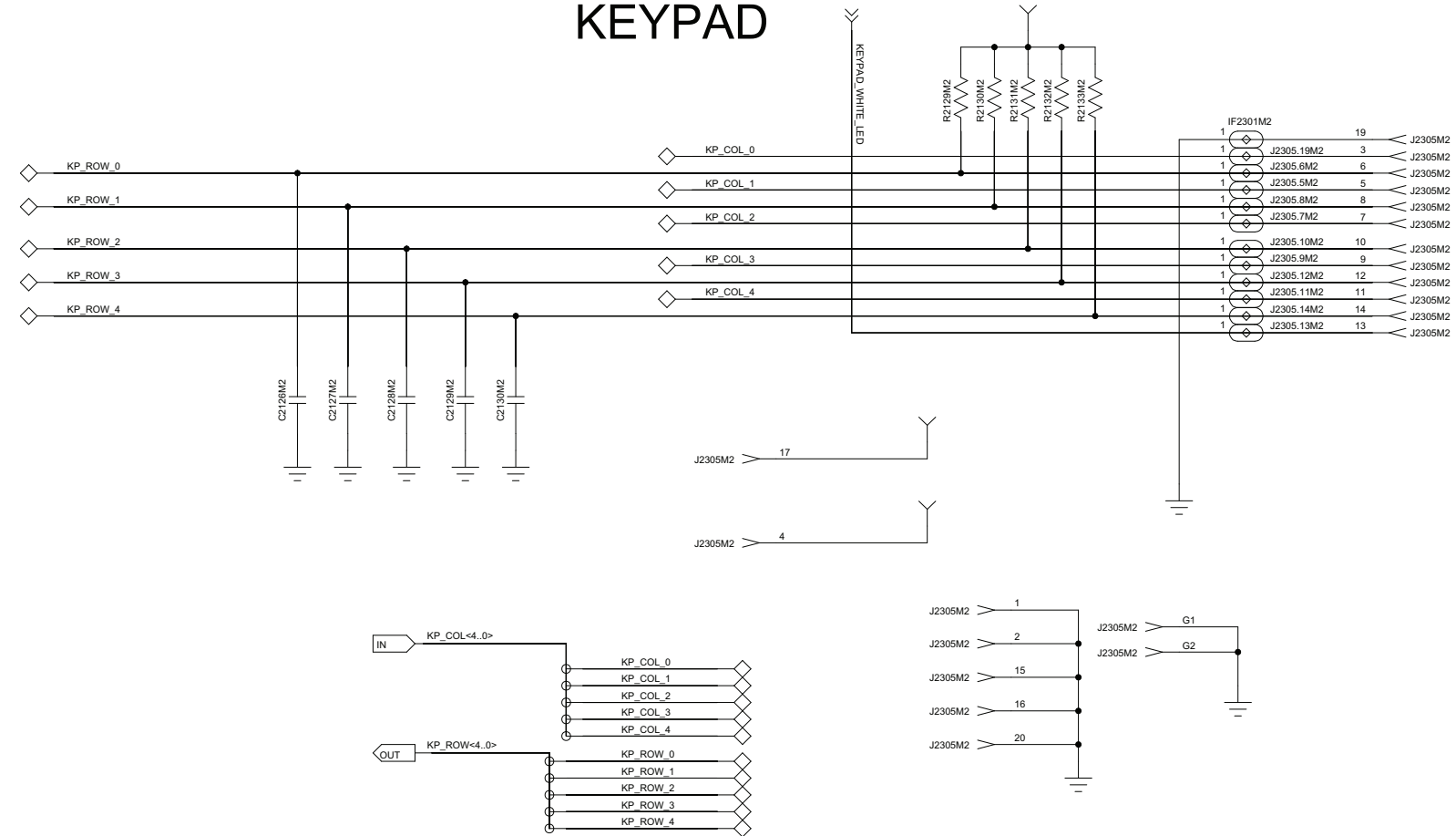


Figure 8-52. LCD and Keypad Connector Circuit



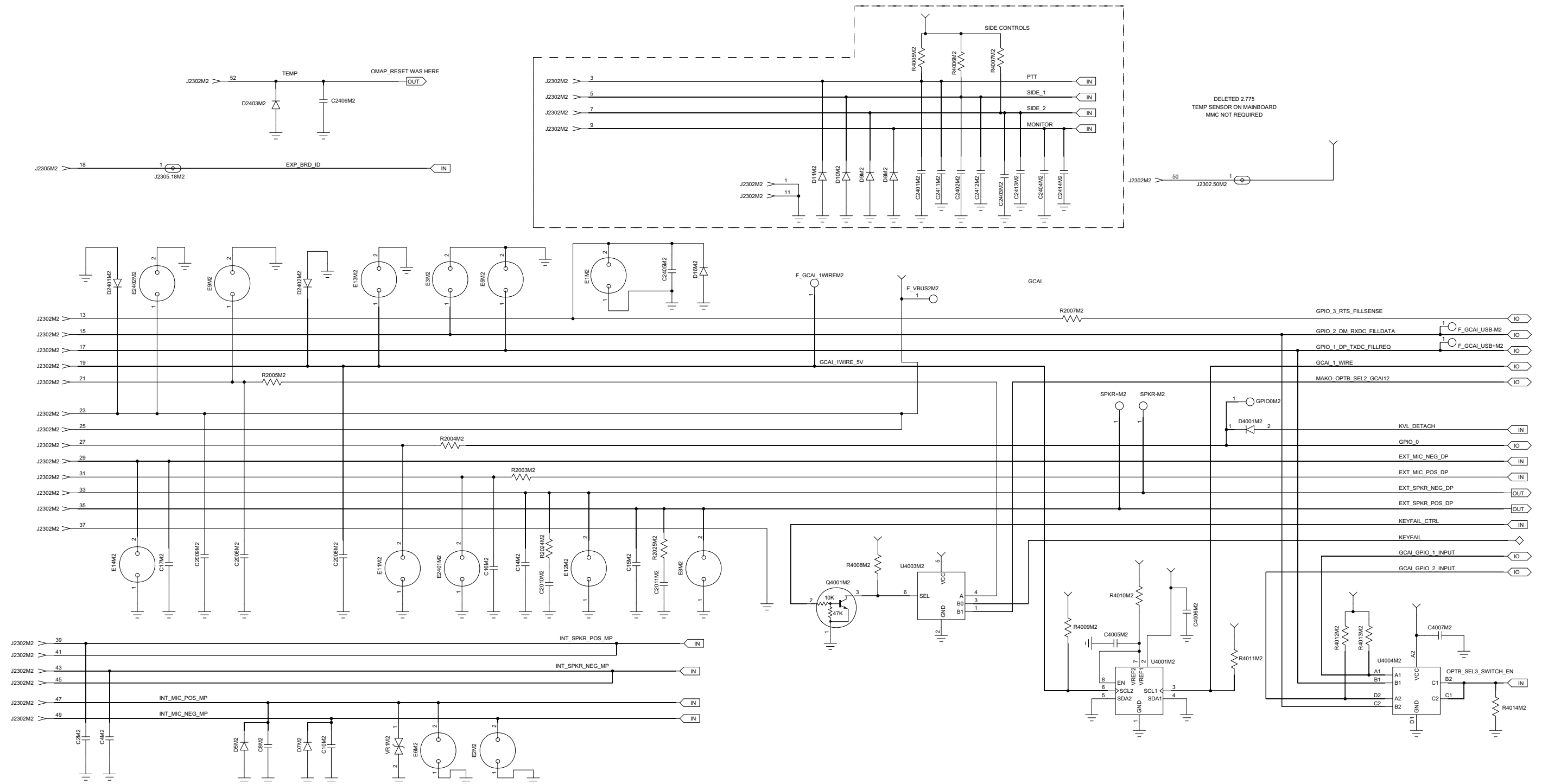


Figure 8-53. GCAI MACE BT Interconnect Circuit

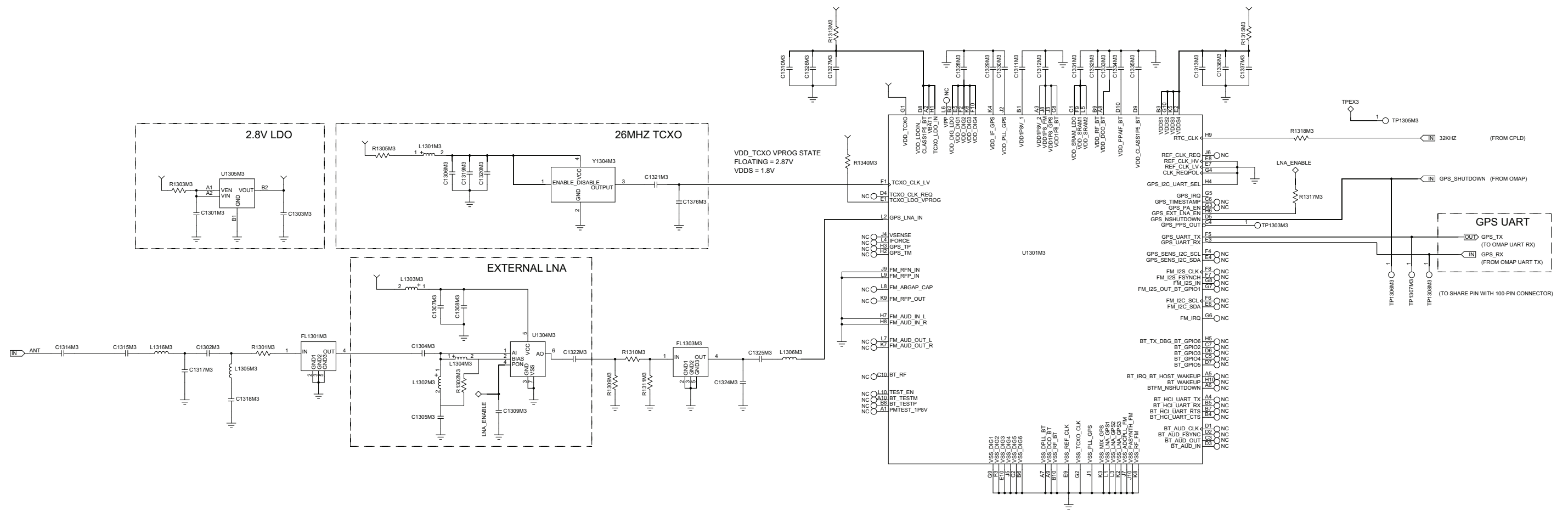


Figure 8-54. GPS Circuit





## UHF1 Transceiver (RF) Board Parts List – 84012620001

Ref. Des.	Part Number	Description
C101M12	2113944A40	CAP:CHIP,100PF,+5%,-5%,50V-DC,0402*
C10M2	2113944A40	CAP:CHIP,100PF,+5%,-5%,50V-DC,0402*
C1156M11	21667009376	CAPACITOR, FIXED, CERAMIC, 0402, 0.000033UF, +/-1%, 50V, COG
C1173M11	21667009386	CAPACITOR, FIXED, CERAMIC, 0402, 0.000082UF, +/-1%, 50V, COG
C1174M11	21667009386	CAPACITOR, FIXED, CERAMIC, 0402, 0.000082UF, +/-1%, 50V, COG
C11M2	2113944A40	CAP:CHIP,100PF,+5%,-5%,50V-DC,0402*
C1201M11	2113944A40	CAP:CHIP,100PF,+5%,-5%,50V-DC,0402*
C1202M11	2113944A40	CAP:CHIP,100PF,+5%,-5%,50V-DC,0402*
C1203M11	21667011426	CAP,CER,2.7PF,.1PF+/-,50V-DC,0603,COG,-55DEG CMIN,125DEG CMAX
C1204M11	2113945B02	CAP:CHIP,.01UF,+10%,-10%,25V-DC*
C1205M11	CA000085A01	CAPACITOR, FIXED, CERAMIC, 0402/M1005, 0.068 UF, PF, 50 V
C1206M11	NOTPLACED	N/A
C1208M11	NOTPLACED	N/A
C1210M11	2113945B02	CAP:CHIP,.01UF,+10%,-10%,25V-DC*
C1211M11	NOTPLACED	N/A
C1214M11	21012118001	CAP,FXD,1UF,10%,25V-DC,X7R,0805,LEAD-FREE/ROHS COMPLIANT
C1215M11	2113945Y02	CAP:X7R,0402,10%,16V,0.1UF

Ref. Des.	Part Number	Description
C1216M11	NOTPLACED	N/A
C1217M11	NOTPLACED	N/A
C1218M11	NOTPLACED	N/A
C1225M11	NOTPLACED	N/A
C1229M11	2113945Y02	CAP:X7R,0402,10%,16V,0.1UF
C1230M11	NOTPLACED	N/A
C1231M11	NOTPLACED	N/A
C1233M11	2113945B02	CAP:CHIP,.01UF,+10%,-10%,25V-DC*
C1237M11	NOTPLACED	N/A
C1239M11	2113945B02	CAP:CHIP,.01UF,+10%,-10%,25V-DC*
C1248M11	NOTPLACED	N/A
C1249M11	2113945A09	CAP:CHIP,1000PF,+10%,-10%*
C1250M11	2113945Y02	CAP:X7R,0402,10%,16V,0.1UF
C1255M11	2113945B02	CAP:CHIP,.01UF,+10%,-10%,25V-DC*
C1261M11	2113945B02	CAP:CHIP,.01UF,+10%,-10%,25V-DC*
C1262M11	2113945B02	CAP:CHIP,.01UF,+10%,-10%,25V-DC*
C1270M11	2113944A31	CAP:CHIP,33PF,+5%,-5%,50V-DC,0402,COG,*
C1271M11	2113944A31	CAP:CHIP,33PF,+5%,-5%,50V-DC,0402,COG,*
C1272M11	2113945B02	CAP:CHIP,.01UF,+10%,-10%,25V-DC*
C1273M11	2113945A13	CAP:CHIP,4700PF,+10%,-10%,50V-DC,0402,*
C1286M11	2113944A31	CAP:CHIP,33PF,+5%,-5%,50V-DC,0402,COG,*
C1288M11	2113946B02	CAP CER CHP 0.047UF 10V 10,
C1291M11	NOTPLACED	N/A
C1294M11	2113945Y02	CAP:X7R,0402,10%,16V,0.1UF

Ref. Des.	Part Number	Description
C1299M11	2113944A19	CAP CER CHP 5.6PF 50V +/- 0.5PF
C12M2	2113944A40	CAP:CHIP,100PF,+5%,-5%,50V-DC,0402*
C1301M3	21012119001	CAP,FXD,2.2UF,20%,6.3V-DC,-55DEG CMIN,85DEG CM,X5R,0402
C1302M3	2113944A21	CAP:CHIP,6.8PF,.5PF+/-,50V-DC,0402*
C1303M3	2113956A51	CAP:FXD,1UF,+10%,-10%,6.3V-DC*
C1304M3	2113944A26	CAP CER CHP 12.0PF 50V 5%
C1305M3	2113945B02	CAP:CHIP,.01UF,+10%,-10%,25V-DC*
C1306M3	2187893N01	CAP 1UF, 6.3V, X5R, 0402 PACKAGE
C1307M3	2113944A26	CAP CER CHP 12.0PF 50V 5%
C1308M3	2113945A09	CAP:CHIP,1000PF,+10%,-10%*
C1309M3	2113944A26	CAP CER CHP 12.0PF 50V 5%
C1310M3	2187893N01	CAP 1UF, 6.3V, X5R, 0402 PACKAGE
C1311M3	2113956A51	CAP:FXD,1UF,+10%,-10%,6.3V-DC*
C1312M3	2113956A51	CAP:FXD,1UF,+10%,-10%,6.3V-DC*
C1313M3	2187893N01	CAP 1UF, 6.3V, X5R, 0402 PACKAGE
C1314M3	2113944M20	CAP,FXD,12PF,+2%,-2%,50V-DC,0603,COG,-55DEG CMIN,125DEG CMAX,PB
C1315M3	2175389H01	CAP,.5PF, CHIP, 0402, CERAMIC, 50 V
C1317M3	2188881Y12	CAPACITOR CERAMIC NPO HIGH FREQUENCY 16 VOLT (REPLACES 2104801Z12)
C1318M3	2113944A13	CAP CER CHP 3.3PF 50V +/- 0.25PF

Ref. Des.	Part Number	Description
C1319M3	2113945Y02	CAP:X7R,0402,10%,16V,0.1UF
C1320M3	2113944A28	CAP:CHIP,18PF,+5%,-5%,50V-DC,0402*
C1321M3	2113944A29	CAP:CHIP,22PF,+5%,-5%,50V-DC,0402*
C1322M3	2113944A29	CAP:CHIP,22PF,+5%,-5%,50V-DC,0402*
C1324M3	21667009274	CAPACITOR, FIXED, CERAMIC, 0402, 0.000001UF, 0.1PF, 50V, COG
C1325M3	2113944A29	CAP:CHIP,22PF,+5%,-5%,50V-DC,0402*
C1326M3	2113945Y02	CAP:X7R,0402,10%,16V,0.1UF
C1327M3	2113944A28	CAP:CHIP,18PF,+5%,-5%,50V-DC,0402*
C1328M3	2113945Y02	CAP:X7R,0402,10%,16V,0.1UF
C1329M3	2113945Y02	CAP:X7R,0402,10%,16V,0.1UF
C1330M3	2113945Y02	CAP:X7R,0402,10%,16V,0.1UF
C1331M3	2113945Y02	CAP:X7R,0402,10%,16V,0.1UF
C1332M3	2113945Y02	CAP:X7R,0402,10%,16V,0.1UF
C1333M3	2113945Y02	CAP:X7R,0402,10%,16V,0.1UF
C1334M3	2113945Y02	CAP:X7R,0402,10%,16V,0.1UF
C1335M3	2113945Y02	CAP:X7R,0402,10%,16V,0.1UF
C1336M3	2113945Y02	CAP:X7R,0402,10%,16V,0.1UF
C1337M3	2113944A28	CAP:CHIP,18PF,+5%,-5%,50V-DC,0402*
C1376M3	2113944A25	CAP:CHIP,10PF,.5PF+/-,50V-DC,0402*
C13M2	2113944A40	CAP:CHIP,100PF,+5%,-5%,50V-DC,0402*

Ref. Des.	Part Number	Description
C14M2	2113944A40	CAP:CHIP,100PF,+5%,-5%,50V-DC,0402*
C15M2	2113944A40	CAP:CHIP,100PF,+5%,-5%,50V-DC,0402*
C1601M16	2113944M42	CAP,FXD,100PF,+2%,-2%,50V-DC,0603,C0G,-55DEG CMIN,125DEG CMAX,P
C1602M16	2113944M42	CAP,FXD,100PF,+2%,-2%,50V-DC,0603,C0G,-55DEG CMIN,125DEG CMAX,P
C1603M16	2113945L49	CAP,FXD,.01UF,+5%,-5%,50V-DC,0603,X7R,-*
C1604M16	2113944M42	CAP,FXD,100PF,+2%,-2%,50V-DC,0603,C0G,-55DEG CMIN,125DEG CMAX,P
C1605M16	2113945B02	CAP:CHIP,.01UF,+10%,-10%,25V-DC*
C1606M16	2113944A40	CAP:CHIP,100PF,+5%,-5%,50V-DC,0402*
C1607M16	2113944M42	CAP,FXD,100PF,+2%,-2%,50V-DC,0603,C0G,-55DEG CMIN,125DEG CMAX,P
C1608M16	2113944M42	CAP,FXD,100PF,+2%,-2%,50V-DC,0603,C0G,-55DEG CMIN,125DEG CMAX,P
C1609M16	2113944A40	CAP:CHIP,100PF,+5%,-5%,50V-DC,0402*
C1610M16	21667011471	CAP,CER,8.2PF,.1PF+/-,50V-DC,0603,C0G,-55DEG CMIN,125DEG CMAX
C1611M16	2113945L49	CAP,FXD,.01UF,+5%,-5%,50V-DC,0603,X7R,-*
C1612M16	NOTPLACED	N/A
C1613M16	2113944M31	CAP,FXD,36PF,+2%,-2%,50V-DC,0603,C0G,-55DEG CMIN,125DEG CMAX,PB

Ref. Des.	Part Number	Description
C1614M16	2113944M33	CAP,FXD,43PF,+2%,-2%,50V-DC,0603,C0G,-55DEG CMIN,125DEG CMAX,PB
C1615M16	2113944A40	CAP:CHIP,100PF,+5%,-5%,50V-DC,0402*
C1616M16	2113944M32	CAP,FXD,39PF,+2%,-2%,50V-DC,0603,C0G,-55DEG CMIN,125DEG CMAX,PB
C1617M16	NOTPLACED	N/A
C1618M16	2113944M42	CAP,FXD,100PF,+2%,-2%,50V-DC,0603,C0G,-55DEG CMIN,125DEG CMAX,P
C1619M16	2113945C02	CAP,CHIP,.01UF,+10%,-10%,50V-DC,0603,X7*
C1620M16	2171741M09	CAP,CER CHIP,68PF,50V-DC,HI Q CAP,68 PF,0805,C0G,5%
C1621M16	2171741M10	CAP,CER CHIP,12PF,100V-DC,HI Q CAP,12 PF,0805,C0G,5%
C1622M16	2113944M25	CAP,FXD,20PF,+2%,-2%,50V-DC,0603,C0G,-55DEG CMIN,125DEG CMAX,PB
C1623M16	NOTPLACED	N/A
C1624M16	2113944M24	CAP,FXD,18PF,+2%,-2%,50V-DC,0603,C0G,-55DEG CMIN,125DEG CMAX,PB
C1625M16	2113944M42	CAP,FXD,100PF,+2%,-2%,50V-DC,0603,C0G,-55DEG CMIN,125DEG CMAX,P
C1628M16	2113944M10	CAP,FXD,4.7PF,.1PF+/-,50V-DC,0603,C0G,-55DEG CMIN,125DEG CMAX
C1629M16	2113945A12	CAP:CHIP,3300PF,+10%,-10%,50V-DC,0402,*
C1630M16	2113945A12	CAP:CHIP,3300PF,+10%,-10%,50V-DC,0402,*
C1633M16	NOTPLACED	N/A

Ref. Des.	Part Number	Description
C1678M16	2113944M30	CAP,FXD,33PF,+2%,-2%,50V-DC,0603,C0G,-55DEG CMIN,125DEG CMAX,PB
C1679M16	2113944M30	CAP,FXD,33PF,+2%,-2%,50V-DC,0603,C0G,-55DEG CMIN,125DEG CMAX,PB
C1680M16	NOTPLACED	N/A
C16M2	2113944A40	CAP:CHIP,100PF,+5%,-5%,50V-DC,0402*
C17M2	2113944A40	CAP:CHIP,100PF,+5%,-5%,50V-DC,0402*
C1803M17	2113944C17	CAP CER CHP 3.0PF 50V +/- 0.25PF
C1804M17	2113951C05	CAP,FXD,.5PF,.05PF+/-,250V-DC,0603,C0G,-55DEG CMIN,125DEG CMAX
C1807M17	2113951C26	CAP,FXD,4.7PF,.05PF+/-,250V-DC,0603,C0G,-55DEG CMIN,125DEG CMA
C1820M17	2113944C16	CAP CER CHP 2.7PF 50V +/- 0.25PF
C1821M17	2113944C26	CAP CER CHP 6.8PF 50V +/- 0.5PF
C1822M17	2113944C45	CAP:CG,0603,5%,50V,100PF
C1826M17	2113944C16	CAP CER CHP 2.7PF 50V +/- 0.25PF
C1827M17	2113944C14	CAP CER CHP 2.2PF 50V +/- 0.25PF
C1900M20	21667009346	CAPACI-TOR,FIXED,CERAMIC,0402,0.0000082UF,0.1PF,50V,C0G
C1901M20	21667009388	CAPACI-TOR,FIXED,CERAMIC,0402,0.0001UF,+/-1%,50V,C0G
C1903M20	NOTPLACED	N/A
C1920M20	2113946D07	CAP:CHIP,4.7UF,+10%,-10%,6.3V-DC,0603*

Ref. Des.	Part Number	Description
C1922M20	2113944A40	CAP:CHIP,100PF,+5%,-5%,50V-DC,0402*
C1923M20	2113944A40	CAP:CHIP,100PF,+5%,-5%,50V-DC,0402*
C1924M20	2113946D07	CAP:CHIP,4.7UF,+10%,-10%,6.3V-DC,0603*
C1925M20	2113944A40	CAP:CHIP,100PF,+5%,-5%,50V-DC,0402*
C1926M20	2113946B04	CAP:CHIP,.1UF,+10%,-10%,10V-DC*
C1928M20	21667009320	CAPACI-TOR,FIXED,CERAMIC,0402,0.0000056UF,0.1PF,50V,C0G
C1929M20	21667009364	CAPACI-TOR,FIXED,CERAMIC,0402,0.00001UF,+/-1%,50V,C0G
C1930M20	NOTPLACED	N/A
C1931M20	21667009385	CAPACI-TOR,FIXED,CERAMIC,0402,0.000075UF,+/-1%,50V,C0G
C1932M20	NOTPLACED	N/A
C1935M20	21667009291	CAPACI-TOR,FIXED,CERAMIC,0402,0.0000027UF,0.1PF,50V,C0G
C1936M20	21667009355	CAPACI-TOR,FIXED,CERAMIC,0402,0.0000091UF,0.1PF,50V,C0G
C1938M20	21667009297	CAPACI-TOR,FIXED,CERAMIC,0402,0.0000033UF,0.1PF,50V,C0G
C1939M20	21667009291	CAPACI-TOR,FIXED,CERAMIC,0402,0.0000027UF,0.1PF,50V,C0G
C1940M20	2113944A40	CAP:CHIP,100PF,+5%,-5%,50V-DC,0402*
C1942M20	21667009332	CAPACI-TOR,FIXED,CERAMIC,0402,0.0000068UF,0.1PF,50V,C0G

Ref. Des.	Part Number	Description	Ref. Des.	Part Number	Description	Ref. Des.	Part Number	Description	Ref. Des.	Part Number	Description
C1952M20	21667009364	CAPACITOR, FIXED, CERAMIC, 0402, 0.00001UF, +/-1%, 50V, C0G	C1971M20	21667009279	CAPACITOR, FIXED, CERAMIC, 0402, 0.0000015UF, 0.1PF, 50V, C0G	C21000M2	2113945Y02	CAP: X7R, 0402, 10%, 16V, 0.1UF	C216M12	2113944A40	CAP: CHIP, 100PF, +5%, -5%, 50V-DC, 0402*
C1953M20	21667009320	CAPACITOR, FIXED, CERAMIC, 0402, 0.0000056UF, 0.1PF, 50V, C0G	C2006M2	NOTPLACED	N/A	C21001M2	2113945Y02	CAP: X7R, 0402, 10%, 16V, 0.1UF	C217M12	2113956B91	CAP, FXD, 1UF, +10%, -10%, 16V-DC, 0603, X5R, -55DEG CMIN, 85DEG CMAX, PB
C1954M20	2113944A40	CAP: CHIP, 100PF, +5%, -5%, 50V-DC, 0402*	C2008M2	NOTPLACED	N/A	C21002M2	2113946B04	CAP: CHIP, .1UF, +10%, -10%, 10V-DC*	C2201M2	2113946B04	CAP: CHIP, .1UF, +10%, -10%, 10V-DC*
C1955M20	2113946B04	CAP: CHIP, .1UF, +10%, -10%, 10V-DC*	C2009M2	2113944A40	CAP: CHIP, 100PF, +5%, -5%, 50V-DC, 0402*	C21003M2	2113946B04	CAP: CHIP, .1UF, +10%, -10%, 10V-DC*	C2202M2	2113946B04	CAP: CHIP, .1UF, +10%, -10%, 10V-DC*
C1956M20	21667009320	CAPACITOR, FIXED, CERAMIC, 0402, 0.0000056UF, 0.1PF, 50V, C0G	C200M12	2113945B02	CAP: CHIP, .01UF, +10%, -10%, 25V-DC*	C21004M2	2113945Y02	CAP: X7R, 0402, 10%, 16V, 0.1UF	C2203M2	2113946B04	CAP: CHIP, .1UF, +10%, -10%, 10V-DC*
C1957M20	21667009364	CAPACITOR, FIXED, CERAMIC, 0402, 0.00001UF, +/-1%, 50V, C0G	C2010M2	2113946B04	CAP: CHIP, .1UF, +10%, -10%, 10V-DC*	C21005M2	2113946B04	CAP: CHIP, .1UF, +10%, -10%, 10V-DC*	C2211M2	2113946B04	CAP: CHIP, .1UF, +10%, -10%, 10V-DC*
C1958M20	21667009332	CAPACITOR, FIXED, CERAMIC, 0402, 0.0000068UF, 0.1PF, 50V, C0G	C2011M2	2113946B04	CAP: CHIP, .1UF, +10%, -10%, 10V-DC*	C2104M2	2113946B04	CAP: CHIP, .1UF, +10%, -10%, 10V-DC*	C2212M2	2113946B04	CAP: CHIP, .1UF, +10%, -10%, 10V-DC*
C1959M20	21667009291	CAPACITOR, FIXED, CERAMIC, 0402, 0.0000027UF, 0.1PF, 50V, C0G	C201M12	21012118001	CAP, FXD, 1UF, 10%, 25V-DC, X7R, 0805, LEAD-FREE/ROHS COMPLIANT	C210M12	2113956B91	CAP, FXD, 1UF, +10%, -10%, 16V-DC, 0603, X5R, -55DEG CMIN, 85DEG CMAX, PB	C2213M2	2113946B04	CAP: CHIP, .1UF, +10%, -10%, 10V-DC*
C1960M20	21667009324	CAPACITOR, FIXED, CERAMIC, 0402, 0.000006UF, 0.1PF, 50V, C0G	C202M12	21012118001	CAP, FXD, 1UF, 10%, 25V-DC, X7R, 0805, LEAD-FREE/ROHS COMPLIANT	C2114M2	2113946B04	CAP: CHIP, .1UF, +10%, -10%, 10V-DC*	C2214M2	2113946B04	CAP: CHIP, .1UF, +10%, -10%, 10V-DC*
C1961M20	21667009291	CAPACITOR, FIXED, CERAMIC, 0402, 0.0000027UF, 0.1PF, 50V, C0G	C203M12	21012118001	CAP, FXD, 1UF, 10%, 25V-DC, X7R, 0805, LEAD-FREE/ROHS COMPLIANT	C2115M2	2113944A40	CAP: CHIP, 100PF, +5%, -5%, 50V-DC, 0402*	C2215M2	2113946B04	CAP: CHIP, .1UF, +10%, -10%, 10V-DC*
C1963M20	21667009364	CAPACITOR, FIXED, CERAMIC, 0402, 0.00001UF, +/-1%, 50V, C0G	C204M12	2113955D35	CAP, FXD, 4.7UF, +10%, -10%, 16V-DC, 1206, X7R, -55DEG CMIN, 125DEG CMAX	C2116M2	2113946B04	CAP: CHIP, .1UF, +10%, -10%, 10V-DC*	C2216M2	2113946B04	CAP: CHIP, .1UF, +10%, -10%, 10V-DC*
C1964M20	21667009320	CAPACITOR, FIXED, CERAMIC, 0402, 0.0000056UF, 0.1PF, 50V, C0G	C205M12	2113955D35	CAP, FXD, 4.7UF, +10%, -10%, 16V-DC, 1206, X7R, -55DEG CMIN, 125DEG CMAX	C2126M2	2113944A46	CAP: CHIP, 330PF, +5%, -5%, 50V-DC, 0402, C0G,*	C2221M2	2113946B04	CAP: CHIP, .1UF, +10%, -10%, 10V-DC*
C1970M20	21667009288	CAPACITOR, FIXED, CERAMIC, 0402, 0.0000024UF, 0.1PF, 50V, C0G	C206M12	2113945B02	CAP: CHIP, .01UF, +10%, -10%, 25V-DC*	C2127M2	2113944A46	CAP: CHIP, 330PF, +5%, -5%, 50V-DC, 0402, C0G,*	C2222M2	2113946B04	CAP: CHIP, .1UF, +10%, -10%, 10V-DC*
			C207M12	2113956B91	CAP, FXD, 1UF, +10%, -10%, 16V-DC, 0603, X5R, -55DEG CMIN, 85DEG CMAX, PB	C2128M2	2113944A46	CAP: CHIP, 330PF, +5%, -5%, 50V-DC, 0402, C0G,*	C2223M2	2113944A40	CAP: CHIP, 100PF, +5%, -5%, 50V-DC, 0402*
			C208M12	2113956B91	CAP, FXD, 1UF, +10%, -10%, 16V-DC, 0603, X5R, -55DEG CMIN, 85DEG CMAX, PB	C2129M2	2113944A46	CAP: CHIP, 330PF, +5%, -5%, 50V-DC, 0402, C0G,*	C2401M2	2113944A40	CAP: CHIP, 100PF, +5%, -5%, 50V-DC, 0402*
			C209M12	2113956B91	CAP, FXD, 1UF, +10%, -10%, 16V-DC, 0603, X5R, -55DEG CMIN, 85DEG CMAX, PB	C212M12	2113946D07	CAP: CHIP, 4.7UF, +10%, -10%, 6.3V-DC, 0603*	C2402M2	2113944A40	CAP: CHIP, 100PF, +5%, -5%, 50V-DC, 0402*
						C2130M2	2113944A46	CAP: CHIP, 330PF, +5%, -5%, 50V-DC, 0402, C0G,*	C2403M2	2113944A40	CAP: CHIP, 100PF, +5%, -5%, 50V-DC, 0402*
						C213M12	2113944A46	CAP: CHIP, 330PF, +5%, -5%, 50V-DC, 0402, C0G,*	C2404M2	2113944A40	CAP: CHIP, 100PF, +5%, -5%, 50V-DC, 0402*
						C214M12	2113944A40	CAP: CHIP, 100PF, +5%, -5%, 50V-DC, 0402*	C2405M2	NOTPLACED	N/A
						C215M12	2113944A46	CAP: CHIP, 330PF, +5%, -5%, 50V-DC, 0402, C0G,*			

Ref. Des.	Part Number	Description
C2406M2	21667009274	CAPACITOR, FIXED, CERAMIC, 0402, 0.000001UF, 0.1PF, 50V, C0G
C2411M2	2113944A40	CAP:CHIP, 100PF, +5%, -5%, 50V-DC, 0402*
C2412M2	2113944A40	CAP:CHIP, 100PF, +5%, -5%, 50V-DC, 0402*
C2413M2	2113944A40	CAP:CHIP, 100PF, +5%, -5%, 50V-DC, 0402*
C2414M2	2113944A40	CAP:CHIP, 100PF, +5%, -5%, 50V-DC, 0402*
C2601M13	2113944C45	CAP:CG, 0603, 5%, 50V, 100PF
C2602M13	2113944C45	CAP:CG, 0603, 5%, 50V, 100PF
C2603M13	2113944A40	CAP:CHIP, 100PF, +5%, -5%, 50V-DC, 0402*
C2604M13	2113944C45	CAP:CG, 0603, 5%, 50V, 100PF
C2605M13	2113944A40	CAP:CHIP, 100PF, +5%, -5%, 50V-DC, 0402*
C2606M13	2113944A40	CAP:CHIP, 100PF, +5%, -5%, 50V-DC, 0402*
C2607M13	2113944C20	CAP CER CHP 3.9PF 50V +/- 0.25PF
C2608M13	2113944C20	CAP CER CHP 3.9PF 50V +/- 0.25PF
C2609M13	2113946K02	CAP CER CHP 0.10UF 16V
C2806M1	NOTPLACED	N/A
C2M2	2113944A40	CAP:CHIP, 100PF, +5%, -5%, 50V-DC, 0402*
C3100M22	2113944A40	CAP:CHIP, 100PF, +5%, -5%, 50V-DC, 0402*
C3101M22	21667009320	CAPACITOR, FIXED, CERAMIC, 0402, 0.0000056UF, 0.1PF, 50V, C0G
C3102M22	2113944A40	CAP:CHIP, 100PF, +5%, -5%, 50V-DC, 0402*
C3103M22	NOTPLACED	N/A

Ref. Des.	Part Number	Description
C3104M22	NOTPLACED	N/A
C3105M22	NOTPLACED	N/A
C3106M22	2113944A40	CAP:CHIP, 100PF, +5%, -5%, 50V-DC, 0402*
C3107M22	21667009332	CAPACITOR, FIXED, CERAMIC, 0402, 0.0000068UF, 0.1PF, 50V, C0G
C3108M22	NOTPLACED	N/A
C3109M22	2113946B04	CAP:CHIP, .1UF, +10%, -10%, 10V-DC*
C3110M22	21667009210	CAPACITOR, FIXED, CERAMIC, 0402, 0.0000036UF, 0.05PF, 50V, C0G
C3111M22	2113944A40	CAP:CHIP, 100PF, +5%, -5%, 50V-DC, 0402*
C3112M22	2113944A40	CAP:CHIP, 100PF, +5%, -5%, 50V-DC, 0402*
C3113M22	21667011464	CAP, CER, 7.5PF, .1PF +/- .50V-DC, 0603, C0G, -55DEG CMIN, 125DEG CMAX
C3115M22	21667011457	CAP, CER, 6.8PF, .1PF +/- .50V-DC, 0603, C0G, -55DEG CMIN, 125DEG CMAX
C3116M22	21667011457	CAP, CER, 6.8PF, .1PF +/- .50V-DC, 0603, C0G, -55DEG CMIN, 125DEG CMAX
C3120M22	2113944M42	CAP, FXD, 100PF, +2%, -2%, 50V-DC, 0603, C0G, -55DEG CMIN, 125DEG CMAX, P
C3122M22	2113944A40	CAP:CHIP, 100PF, +5%, -5%, 50V-DC, 0402*
C3133M22	2113944A40	CAP:CHIP, 100PF, +5%, -5%, 50V-DC, 0402*
C3140M22	21667009311	CAPACITOR, FIXED, CERAMIC, 0402, 0.0000047UF, 0.1PF, 50V, C0G
C3141M22	21667009311	CAPACITOR, FIXED, CERAMIC, 0402, 0.0000047UF, 0.1PF, 50V, C0G

Ref. Des.	Part Number	Description
C3142M22	2113946B04	CAP:CHIP, .1UF, +10%, -10%, 10V-DC*
C3143M22	21667009213	CAPACITOR, FIXED, CERAMIC, 0402, 0.0000039UF, 0.05PF, 50V, C0G
C3144M22	2113944A40	CAP:CHIP, 100PF, +5%, -5%, 50V-DC, 0402*
C3147M22	21667011442	CAP, CER, 4.3PF, .1PF +/- .50V-DC, 0603, C0G, -55DEG CMIN, 125DEG CMAX
C3151M22	21667011471	CAP, CER, 8.2PF, .1PF +/- .50V-DC, 0603, C0G, -55DEG CMIN, 125DEG CMAX
C3152M22	21667011356	CAP, CER, 5.6PF, .05PF +/- .50V-DC, 0603, C0G, -55DEG CMIN, 125DEG CMAX
C3154M22	2113944M35	CAP, FXD, 51PF, +2%, -2%, 50V-DC, 0603, C0G, -55DEG CMIN, 125DEG CMAX, PB
C3155M22	2113944A40	CAP:CHIP, 100PF, +5%, -5%, 50V-DC, 0402*
C3157M22	2113946B04	CAP:CHIP, .1UF, +10%, -10%, 10V-DC*
C3158M22	2113946B04	CAP:CHIP, .1UF, +10%, -10%, 10V-DC*
C3159M22	2113944A09	CAP:CHIP, 2.2PF, .25PF +/- .50V-DC, 0402*
C3160M22	2113944A17	CAP:CHIP, 4.7PF, .25PF +/- .50V-DC, 0402*
C3161M22	2113944A40	CAP:CHIP, 100PF, +5%, -5%, 50V-DC, 0402*
C4005M2	2113946B04	CAP:CHIP, .1UF, +10%, -10%, 10V-DC*
C4006M2	2113946B04	CAP:CHIP, .1UF, +10%, -10%, 10V-DC*
C4007M2	2113946B04	CAP:CHIP, .1UF, +10%, -10%, 10V-DC*
C4M2	2113944A40	CAP:CHIP, 100PF, +5%, -5%, 50V-DC, 0402*
C500M21	2113945B05	CAP, FXD, .033UF, +10%, -10%, 25V-DC, 0402, X7R, -55DEG CMIN, 125DEG CMA

Ref. Des.	Part Number	Description
C501M21	2113944A32	CAP:CHIP, 39PF, +5%, -5%, 50V-DC, 0402, C0G, *
C502M21	2113945B05	CAP, FXD, .033UF, +10%, -10%, 25V-DC, 0402, X7R, -55DEG CMIN, 125DEG CMA
C504M21	2113944A40	CAP:CHIP, 100PF, +5%, -5%, 50V-DC, 0402*
C505M21	NOTPLACED	N/A
C506M21	2113944A32	CAP:CHIP, 39PF, +5%, -5%, 50V-DC, 0402, C0G, *
C507M21	2113945B05	CAP, FXD, .033UF, +10%, -10%, 25V-DC, 0402, X7R, -55DEG CMIN, 125DEG CMA
C508M21	2113946D07	CAP:CHIP, 4.7UF, +10%, -10%, 6.3V-DC, 0603*
C509M21	2113945B05	CAP, FXD, .033UF, +10%, -10%, 25V-DC, 0402, X7R, -55DEG CMIN, 125DEG CMA
C510M21	2113944A32	CAP:CHIP, 39PF, +5%, -5%, 50V-DC, 0402, C0G, *
C511M21	2113945B05	CAP, FXD, .033UF, +10%, -10%, 25V-DC, 0402, X7R, -55DEG CMIN, 125DEG CMA
C512M21	2113946D07	CAP:CHIP, 4.7UF, +10%, -10%, 6.3V-DC, 0603*
C514M21	NOTPLACED	N/A
C515M21	2113944A14	CAP CER CHP 3.6PF 50V +/- 0.25PF
C516M21	2113944M42	CAP, FXD, 100PF, +2%, -2%, 50V-DC, 0603, C0G, -55DEG CMIN, 125DEG CMAX, P
C532M21	2113944A32	CAP:CHIP, 39PF, +5%, -5%, 50V-DC, 0402, C0G, *
C533M21	21667009383	CAPACITOR, FIXED, CERAMIC, 0402, 0.000062UF, +/- 1%, 50V, C0G
C550M21	NOTPLACED	N/A
C551M21	NOTPLACED	N/A
C601M19	2113945B02	CAP:CHIP, .01UF, +10%, -10%, 25V-DC*



Ref. Des.	Part Number	Description	Ref. Des.	Part Number	Description	Ref. Des.	Part Number	Description	Ref. Des.	Part Number	Description
C602M19	2113945B02	CAP:CHIP,.01UF,+10%,-10%,25V-DC*	C6115M6	2113946B04	CAP:CHIP,.1UF,+10%,-10%,10V-DC*	C626M19	2113945A09	CAP:CHIP,1000PF,+10%,-10%*	C636M19	2113946B04	CAP:CHIP,.1UF,+10%,-10%,10V-DC*
C603M19	2113945B02	CAP:CHIP,.01UF,+10%,-10%,25V-DC*	C611M19	2113944A40	CAP:CHIP,100PF,+5%,-5%,50V-DC,0402*	C627M19	2113945A09	CAP:CHIP,1000PF,+10%,-10%*	C637M19	2113946B04	CAP:CHIP,.1UF,+10%,-10%,10V-DC*
C604M19	2113945B02	CAP:CHIP,.01UF,+10%,-10%,25V-DC*	C612M19	2113945B02	CAP:CHIP,.01UF,+10%,-10%,25V-DC*	C628M19	2113945B02	CAP:CHIP,.01UF,+10%,-10%,25V-DC*	C638M19	2113945A12	CAP:CHIP,3300PF,+10%,-10%,50V-DC,0402,*
C605M19	2113944A21	CAP:CHIP,6.8PF,.5PF+/-,50V-DC,0402*	C613M19	2113944A40	CAP:CHIP,100PF,+5%,-5%,50V-DC,0402*	C629M19	2113946B04	CAP:CHIP,.1UF,+10%,-10%,10V-DC*	C639M19	2113945B02	CAP:CHIP,.01UF,+10%,-10%,25V-DC*
C606M19	2113946B04	CAP:CHIP,.1UF,+10%,-10%,10V-DC*	C614M19	2113945B02	CAP:CHIP,.01UF,+10%,-10%,25V-DC*	C6301M6	2113946B04	CAP:CHIP,.1UF,+10%,-10%,10V-DC*	C6401M6	2113946B04	CAP:CHIP,.1UF,+10%,-10%,10V-DC*
C607M19	2113944A40	CAP:CHIP,100PF,+5%,-5%,50V-DC,0402*	C6156M6	NOTPLACED	N/A	C6302M6	2113946B04	CAP:CHIP,.1UF,+10%,-10%,10V-DC*	C6402M6	2113956A51	CAP:FXD,1UF,+10%,-10%,6.3V-DC*
C608M19	2113944A12	CAP CER CHP 3.0PF 50V +/- 0.25PF	C615M19	2113944A42	CAP:CHIP,150PF,+5%,-5%,50V-DC,0402,C0G,*	C6303M6	2113946B04	CAP:CHIP,.1UF,+10%,-10%,10V-DC*	C6403M6	2113946B04	CAP:CHIP,.1UF,+10%,-10%,10V-DC*
C609M19	2113944A30	CAP CER CHP 27.0PF 50V 5%	C616M19	2113945A11	CAP:CHIP,2200PF,+10%,-10%,50V-DC,0402,*	C6304M6	2113946B04	CAP:CHIP,.1UF,+10%,-10%,10V-DC*	C6404M6	2113946B04	CAP:CHIP,.1UF,+10%,-10%,10V-DC*
C6104M6	2113946B04	CAP:CHIP,.1UF,+10%,-10%,10V-DC*	C617M19	2113946B04	CAP:CHIP,.1UF,+10%,-10%,10V-DC*	C6305M6	2113946S35	CAP:CHIP,1UF,+10%,-10%,16V-DC,0603,*	C6405M6	2113946B04	CAP:CHIP,.1UF,+10%,-10%,10V-DC*
C6105M6	2113946B04	CAP:CHIP,.1UF,+10%,-10%,10V-DC*	C618M19	2113944A31	CAP:CHIP,33PF,+5%,-5%,50V-DC,0402,C0G,*	C6306M6	2113946S35	CAP:CHIP,1UF,+10%,-10%,16V-DC,0603,*	C6406M6	2113946B04	CAP:CHIP,.1UF,+10%,-10%,10V-DC*
C6106M6	2113946B04	CAP:CHIP,.1UF,+10%,-10%,10V-DC*	C619M19	2113944A35	CAP CER CHP 62.0PF 50V 5%	C6308M6	2113946B04	CAP:CHIP,.1UF,+10%,-10%,10V-DC*	C6407M6	2113946B04	CAP:CHIP,.1UF,+10%,-10%,10V-DC*
C6107M6	2113946B04	CAP:CHIP,.1UF,+10%,-10%,10V-DC*	C6201M6	2113944A40	CAP:CHIP,100PF,+5%,-5%,50V-DC,0402*	C6309M6	2113946B04	CAP:CHIP,.1UF,+10%,-10%,10V-DC*	C6408M6	2113946B04	CAP:CHIP,.1UF,+10%,-10%,10V-DC*
C6108M6	2113946B04	CAP:CHIP,.1UF,+10%,-10%,10V-DC*	C6202M6	2113945A09	CAP:CHIP,1000PF,+10%,-10%*	C630M19	2113946B04	CAP:CHIP,.1UF,+10%,-10%,10V-DC*	C6409M6	2113946B04	CAP:CHIP,.1UF,+10%,-10%,10V-DC*
C6109M6	2113946B04	CAP:CHIP,.1UF,+10%,-10%,10V-DC*	C6203M6	2113946B04	CAP:CHIP,.1UF,+10%,-10%,10V-DC*	C6310M6	2113946B04	CAP:CHIP,.1UF,+10%,-10%,10V-DC*	C640M19	2113946B04	CAP:CHIP,.1UF,+10%,-10%,10V-DC*
C610M19	2113944A40	CAP:CHIP,100PF,+5%,-5%,50V-DC,0402*	C620M19	2113946B04	CAP:CHIP,.1UF,+10%,-10%,10V-DC*	C6311M6	2113946B04	CAP:CHIP,.1UF,+10%,-10%,10V-DC*	C6410M6	2113946B04	CAP:CHIP,.1UF,+10%,-10%,10V-DC*
C6110M6	2113946B04	CAP:CHIP,.1UF,+10%,-10%,10V-DC*	C621M19	2113946B04	CAP:CHIP,.1UF,+10%,-10%,10V-DC*	C631M19	21667009334	CAPACI-TOR,FIXED,CERAMIC,0402,0.000007UF,0.1PF,50V,C0G	C6411M6	2113946B04	CAP:CHIP,.1UF,+10%,-10%,10V-DC*
C6111M6	2113946B04	CAP:CHIP,.1UF,+10%,-10%,10V-DC*	C622M19	2113946C07	CAP:FXD,.33UF,+10%,-10%,10V-DC,0603*	C632M19	2113944A40	CAP:CHIP,100PF,+5%,-5%,50V-DC,0402*	C6412M6	NOTPLACED	N/A
C6112M6	2113946B04	CAP:CHIP,.1UF,+10%,-10%,10V-DC*	C623M19	2113945B02	CAP:CHIP,.01UF,+10%,-10%,25V-DC*	C633M19	2113945B02	CAP:CHIP,.01UF,+10%,-10%,25V-DC*	C6413M6	2113946B04	CAP:CHIP,.1UF,+10%,-10%,10V-DC*
C6113M6	2113946B04	CAP:CHIP,.1UF,+10%,-10%,10V-DC*	C624M19	2113946C07	CAP:FXD,.33UF,+10%,-10%,10V-DC,0603*	C634M19	2113946B04	CAP:CHIP,.1UF,+10%,-10%,10V-DC*	C6414M6	2113946B04	CAP:CHIP,.1UF,+10%,-10%,10V-DC*
C6114M6	2113946B04	CAP:CHIP,.1UF,+10%,-10%,10V-DC*	C625M19	21667009370	CAPACI-TOR,FIXED,CERAMIC,0402,0.000018UF,+/-1%,50V,C0G	C635M19	2113945B02	CAP:CHIP,.01UF,+10%,-10%,25V-DC*	C6415M6	NOTPLACED	N/A
									C6416M6	2113945B04	CAP,FXD,.022UF,+10%,-10%,25V-DC,0402,X7R,-55DEG CMIN,125DEG CMA

Ref. Des.	Part Number	Description
C6417M6	2113945B04	CAP:FXD,.022UF,+10%,-10%,25V-DC,0402,X7R,-55DEG CMIN,125DEG CMA
C6418M6	2113946B04	CAP:CHIP,.1UF,+10%,-10%,10V-DC*
C6419M6	2113946B04	CAP:CHIP,.1UF,+10%,-10%,10V-DC*
C641M19	2113944A31	CAP:CHIP,33PF,+5%,-5%,50V-DC,0402,C0G,*
C6420M6	2113945B04	CAP:FXD,.022UF,+10%,-10%,25V-DC,0402,X7R,-55DEG CMIN,125DEG CMA
C6421M6	2113946B04	CAP:CHIP,.1UF,+10%,-10%,10V-DC*
C6422M6	2113946C02	CAP:CHIP,.22UF,+10%,-10%,10V-DC,0603*
C6423M6	2113946B04	CAP:CHIP,.1UF,+10%,-10%,10V-DC*
C6424M6	2113944A40	CAP:CHIP,100PF,+5%,-5%,50V-DC,0402*
C6425M6	2113944A40	CAP:CHIP,100PF,+5%,-5%,50V-DC,0402*
C6426M6	2113945B02	CAP:CHIP,.01UF,+10%,-10%,25V-DC*
C6427M6	2113944A50	CAP CER CHP 680.0 PF 50V 5%
C6428M6	2113944A40	CAP:CHIP,100PF,+5%,-5%,50V-DC,0402*
C6429M6	2113946B04	CAP:CHIP,.1UF,+10%,-10%,10V-DC*
C642M19	2113944A48	CAP:CHIP,470PF,+5%,-5%,50V-DC,0402,C0G,*
C6430M6	2113946B04	CAP:CHIP,.1UF,+10%,-10%,10V-DC*
C6431M6	2113946B04	CAP:CHIP,.1UF,+10%,-10%,10V-DC*
C6432M6	2113956B54	CAP:MLCC,X5R,0603,20%,6.3V,10UF
C6433M6	2113946S35	CAP:CHIP,1UF,+10%,-10%,16V-DC,0603,*

Ref. Des.	Part Number	Description
C6434M6	2113946L05	CAP:FXD,.33UF,+80%,-20%,16V-DC,0603,Y5V,-30DEG CMIN,85DEG CMAX
C6435M6	2113946S35	CAP:CHIP,1UF,+10%,-10%,16V-DC,0603,*
C6436M6	2113946C08	CAP:FXD,.47UF,+10%,-10%,10V-DC,0603,X5R,-55DEG CMIN,85DEG CMAX
C6437M6	2113946C08	CAP:FXD,.47UF,+10%,-10%,10V-DC,0603,X5R,-55DEG CMIN,85DEG CMAX
C6438M6	2113944A40	CAP:CHIP,100PF,+5%,-5%,50V-DC,0402*
C643M19	2113944A48	CAP:CHIP,470PF,+5%,-5%,50V-DC,0402,C0G,*
C644M19	2113944A11	CAP:CHIP,2.7PF,.25PF+/-,50V-DC,0402*
C645M19	NOTPLACED	N/A
C646M19	21667009344	CAPACITOR, FIXED, CERAMIC, 0402, 0.000008UF, 0.1PF, 50V, C0G
C6501M6	2113946B04	CAP:CHIP,.1UF,+10%,-10%,10V-DC*
C6502M6	2113946B04	CAP:CHIP,.1UF,+10%,-10%,10V-DC*
C6503M6	2113944A46	CAP:CHIP,330PF,+5%,-5%,50V-DC,0402,C0G,*
C6504M6	2113946B04	CAP:CHIP,.1UF,+10%,-10%,10V-DC*
C6505M6	2113946B04	CAP:CHIP,.1UF,+10%,-10%,10V-DC*
C6506M6	2113946B04	CAP:CHIP,.1UF,+10%,-10%,10V-DC*
C6507M6	2113946B04	CAP:CHIP,.1UF,+10%,-10%,10V-DC*
C6508M6	2113946B04	CAP:CHIP,.1UF,+10%,-10%,10V-DC*
C6509M6	2113946B04	CAP:CHIP,.1UF,+10%,-10%,10V-DC*
C6510M6	2113946B04	CAP:CHIP,.1UF,+10%,-10%,10V-DC*

Ref. Des.	Part Number	Description
C6511M6	2113946S35	CAP:CHIP,1UF,+10%,-10%,16V-DC,0603,*
C6512M6	2113946B04	CAP:CHIP,.1UF,+10%,-10%,10V-DC*
C6513M6	2113946S35	CAP:CHIP,1UF,+10%,-10%,16V-DC,0603,*
C6514M6	2113946S35	CAP:CHIP,1UF,+10%,-10%,16V-DC,0603,*
C6515M6	2113946S35	CAP:CHIP,1UF,+10%,-10%,16V-DC,0603,*
C6516M6	2113946B04	CAP:CHIP,.1UF,+10%,-10%,10V-DC*
C6517M6	2113946S35	CAP:CHIP,1UF,+10%,-10%,16V-DC,0603,*
C6518M6	2113946B04	CAP:CHIP,.1UF,+10%,-10%,10V-DC*
C6519M6	2113946S35	CAP:CHIP,1UF,+10%,-10%,16V-DC,0603,*
C6520M6	2113946B04	CAP:CHIP,.1UF,+10%,-10%,10V-DC*
C6521M6	2113944A46	CAP:CHIP,330PF,+5%,-5%,50V-DC,0402,C0G,*
C6522M6	2113946S35	CAP:CHIP,1UF,+10%,-10%,16V-DC,0603,*
C6523M6	2113946B04	CAP:CHIP,.1UF,+10%,-10%,10V-DC*
C6524M6	2113946B04	CAP:CHIP,.1UF,+10%,-10%,10V-DC*
C6525M6	2113946S35	CAP:CHIP,1UF,+10%,-10%,16V-DC,0603,*
C6526M6	2113946B04	CAP:CHIP,.1UF,+10%,-10%,10V-DC*
C6527M6	2113946B04	CAP:CHIP,.1UF,+10%,-10%,10V-DC*
C6528M6	2113946B04	CAP:CHIP,.1UF,+10%,-10%,10V-DC*
C6529M6	2113946B04	CAP:CHIP,.1UF,+10%,-10%,10V-DC*
C6530M6	2113946S35	CAP:CHIP,1UF,+10%,-10%,16V-DC,0603,*

Ref. Des.	Part Number	Description
C6531M6	2113946B04	CAP:CHIP,.1UF,+10%,-10%,10V-DC*
C6532M6	2113946S35	CAP:CHIP,1UF,+10%,-10%,16V-DC,0603,*
C6533M6	2113946B04	CAP:CHIP,.1UF,+10%,-10%,10V-DC*
C6534M6	2113956B33	CAP:FXD,2.2UF,+10%,-10%,16V-DC,0603,X5R,-55DEG CMIN,85DEG CMAX
C6535M6	2113944A40	CAP:CHIP,100PF,+5%,-5%,50V-DC,0402*
C6536M6	2113944A26	CAP CER CHP 12.0PF 50V 5%
C6537M6	2113944A19	CAP CER CHP 5.6PF 50V +/- 0.5PF
C6538M6	2113956B33	CAP:FXD,2.2UF,+10%,-10%,16V-DC,0603,X5R,-55DEG CMIN,85DEG CMAX
C6539M6	2113956B33	CAP:FXD,2.2UF,+10%,-10%,16V-DC,0603,X5R,-55DEG CMIN,85DEG CMAX
C6540M6	2113945A09	CAP:CHIP,1000PF,+10%,-10%*
C6541M6	2113944A19	CAP CER CHP 5.6PF 50V +/- 0.5PF
C6542M6	2113946B04	CAP:CHIP,.1UF,+10%,-10%,10V-DC*
C6543M6	2113946B04	CAP:CHIP,.1UF,+10%,-10%,10V-DC*
C6544M6	2113945D04	CAP:CHIP,.1UF,+10%,-10%,25V-DC,0603,X7R*
C6545M6	2113945D04	CAP:CHIP,.1UF,+10%,-10%,25V-DC,0603,X7R*
C6546M6	2113946B04	CAP:CHIP,.1UF,+10%,-10%,10V-DC*
C6547M6	2113944A46	CAP:CHIP,330PF,+5%,-5%,50V-DC,0402,C0G,*
C6548M6	NOTPLACED	N/A
C6549M6	2113944A46	CAP:CHIP,330PF,+5%,-5%,50V-DC,0402,C0G,*
C6550M6	2113945D04	CAP:CHIP,.1UF,+10%,-10%,25V-DC,0603,X7R*

Ref. Des.	Part Number	Description	Ref. Des.	Part Number	Description	Ref. Des.	Part Number	Description	Ref. Des.	Part Number	Description
C6551M6	2113944A46	CAP:CHIP,330PF,+5%,-5%,50V-DC,0402,C0G,*	C6567M6	2113956E91	CAP,FXD,10UF,+10%,-10%,16V-DC,1210,X5R,-55DEG CMIN,85DEG CMAX,P	C6585M6	2113946B04	CAP:CHIP,.1UF,+10%,-10%,10V-DC*	C706M7	2185419D06	CAP CER SUPER L/D 0.1UF
C6552M6	2113956E91	CAP,FXD,10UF,+10%,-10%,16V-DC,1210,X5R,-55DEG CMIN,85DEG CMAX,P	C6568M6	2113956B33	CAP,FXD,2.2UF,+10%,-10%,16V-DC,0603,X5R,-55DEG CMIN,85DEG CMAX	C6586M6	2113956C35	CAP,FXD,4.7UF,+10%,-10%,16V-DC,0805,X5R,-55DEG CMIN,85DEG CMAX	C707M7	2113945C01	CAP CER CHP 6800PF 50V 10%
C6553M6	2113956E91	CAP,FXD,10UF,+10%,-10%,16V-DC,1210,X5R,-55DEG CMIN,85DEG CMAX,P	C6569M6	2113956E91	CAP,FXD,10UF,+10%,-10%,16V-DC,1210,X5R,-55DEG CMIN,85DEG CMAX,P	C6587M6	2113946B04	CAP:CHIP,.1UF,+10%,-10%,10V-DC*	C708M7	21667009365	CAPACI-TOR,FIXED,CERAMIC,0402,0.000011UF,+/-1%,50V,C0G
C6554M6	2113946B04	CAP:CHIP,.1UF,+10%,-10%,10V-DC*	C6570M6	2113944A46	CAP:CHIP,330PF,+5%,-5%,50V-DC,0402,C0G,*	C6588M6	2113944A46	CAP:CHIP,330PF,+5%,-5%,50V-DC,0402,C0G,*	C709M7	2171051Y11	CAP,FXD,.1UF,+5%,-5%,1206,-55DEG CMIN,125DEG CMAX,PB-FREE
C6555M6	2113955D45	CAP,FXD,4.7UF,+10%,-10%,10V-DC,1206,X7R,-55DEG CMIN,125DEG CMAX	C6571M6	2113946B04	CAP:CHIP,.1UF,+10%,-10%,10V-DC*	C6589M6	2113944A40	CAP:CHIP,100PF,+5%,-5%,50V-DC,0402*	C710M7	NOTPLACED	N/A
C6556M6	2113956B33	CAP,FXD,2.2UF,+10%,-10%,16V-DC,0603,X5R,-55DEG CMIN,85DEG CMAX	C6572M6	2113946B04	CAP:CHIP,.1UF,+10%,-10%,10V-DC*	C6590M6	2113946B04	CAP:CHIP,.1UF,+10%,-10%,10V-DC*	C711M7	NOTPLACED	N/A
C6557M6	2113945D04	CAP:CHIP,.1UF,+10%,-10%,25V-DC,0603,X7R*	C6573M6	2113946S35	CAP:CHIP,1UF,+10%,-10%,16V-DC,0603,*	C6591M6	2113944A26	CAP CER CHP 12.0PF 50V 5%	C712M7	NOTPLACED	N/A
C6558M6	2113944A21	CAP:CHIP,6.8PF,.5PF+/-,50V-DC,0402*	C6574M6	2113946S35	CAP:CHIP,1UF,+10%,-10%,16V-DC,0603,*	C6592M6	2113944A09	CAP:CHIP,2.2PF,.25PF+/-,50V-DC,0402*	C713M7	2113945C26	CAP:FXD,.039UF,+10%,-10%,50V-DC,0603,X7*
C6559M6	2113946S35	CAP:CHIP,1UF,+10%,-10%,16V-DC,0603,*	C6575M6	2113946S35	CAP:CHIP,1UF,+10%,-10%,16V-DC,0603,*	C6593M6	2113956C37	CAP:FXD,10UF,+10%,-10%,16V-DC,0805,*	C714M7	2171051Y11	CAP,FXD,.1UF,+5%,-5%,1206,-55DEG CMIN,125DEG CMAX,PB-FREE
C6560M6	2113956C37	CAP:FXD,10UF,+10%,-10%,16V-DC,0805,*	C6576M6	2113956B33	CAP,FXD,2.2UF,+10%,-10%,16V-DC,0603,X5R,-55DEG CMIN,85DEG CMAX	C6594M6	2113946C07	CAP:FXD,.33UF,+10%,-10%,10V-DC,0603*	C715M7	2113945C31	CAP,FXD,.1UF,+10%,-10%,50V-DC,0603,X7R,-55DEG CMIN,125DEG CMAX
C6561M6	2113956C37	CAP:FXD,10UF,+10%,-10%,16V-DC,0805,*	C6577M6	2113946S35	CAP:CHIP,1UF,+10%,-10%,16V-DC,0603,*	C6595M6	2113946S35	CAP:CHIP,1UF,+10%,-10%,16V-DC,0603,*	C716M7	2113945C31	CAP,FXD,.1UF,+10%,-10%,50V-DC,0603,X7R,-55DEG CMIN,125DEG CMAX
C6562M6	2113944A25	CAP:CHIP,10PF,.5PF+/-,50V-DC,0402*	C6578M6	2113946S35	CAP:CHIP,1UF,+10%,-10%,16V-DC,0603,*	C6596M6	NOTPLACED	N/A	C717M7	2113945C31	CAP,FXD,.1UF,+10%,-10%,50V-DC,0603,X7R,-55DEG CMIN,125DEG CMAX
C6563M6	2113945D04	CAP:CHIP,.1UF,+10%,-10%,25V-DC,0603,X7R*	C6579M6	2113946S35	CAP:CHIP,1UF,+10%,-10%,16V-DC,0603,*	C6601M6	2113944A28	CAP:CHIP,18PF,+5%,-5%,50V-DC,0402*	C718M7	2113945C31	CAP,FXD,.1UF,+10%,-10%,50V-DC,0603,X7R,-55DEG CMIN,125DEG CMAX
C6564M6	2113944A46	CAP:CHIP,330PF,+5%,-5%,50V-DC,0402,C0G,*	C6580M6	2113946S35	CAP:CHIP,1UF,+10%,-10%,16V-DC,0603,*	C6602M6	2113944A28	CAP:CHIP,18PF,+5%,-5%,50V-DC,0402*	C719M7	2113945C31	CAP,FXD,.1UF,+10%,-10%,50V-DC,0603,X7R,-55DEG CMIN,125DEG CMAX
C6565M6	2113956B33	CAP,FXD,2.2UF,+10%,-10%,16V-DC,0603,X5R,-55DEG CMIN,85DEG CMAX	C6581M6	2113956B33	CAP,FXD,2.2UF,+10%,-10%,16V-DC,0603,X5R,-55DEG CMIN,85DEG CMAX	C6670M6	NOTPLACED	N/A	C720M7	2113944C53	CAP CER CHP 1500.OPF 50V 5
C6566M6	2113956E91	CAP,FXD,10UF,+10%,-10%,16V-DC,1210,X5R,-55DEG CMIN,85DEG CMAX,P	C6582M6	2113944A21	CAP:CHIP,6.8PF,.5PF+/-,50V-DC,0402*	C6M2	2113944A40	CAP:CHIP,100PF,+5%,-5%,50V-DC,0402*	C721M7	NOTPLACED	N/A
			C6583M6	2113946B04	CAP:CHIP,.1UF,+10%,-10%,10V-DC*	C702M7	2185419D06	CAP CER SUPER L/D 0.1UF			
			C6584M6	2113956C37	CAP:FXD,10UF,+10%,-10%,16V-DC,0805,*	C703M7	2113945C26	CAP:FXD,.039UF,+10%,-10%,50V-DC,0603,X7*			
						C704M7	2185419D06	CAP CER SUPER L/D 0.1UF			
						C705M7	21667009365	CAPACI-TOR,FIXED,CERAMIC,0402,0.000011UF,+/-1%,50V,C0G			

Ref. Des.	Part Number	Description	Ref. Des.	Part Number	Description	Ref. Des.	Part Number	Description	Ref. Des.	Part Number	Description
C722M7	2113944A40	CAP:CHIP,100PF,+5%,-5%,50V-DC,0402*	C738M7	2113944A40	CAP:CHIP,100PF,+5%,-5%,50V-DC,0402*	C768M7	21667009364	CAPACI-TOR,FIXED,CERAMIC,0402,0.00001UF,+/-1%,50V,C0G	D16M2	4870359B01	DIODE:SUPPRES-SOR,ESD,BI-DIR,7.82V,1W
C723M7	2113944A40	CAP:CHIP,100PF,+5%,-5%,50V-DC,0402*	C739M7	2113944A17	CAP:CHIP,4.7PF,.25PF+/-,50V-DC,0402*	C770M7	2113944A44	CAP:CG,0402,5%,50V,220P F	D1970M20	NOTPLACED	N/A
C724M7	2113955D37	CAP,FXD,10UF,+10%,-10%,16V-DC,1206,X7R,-55DEG CMIN,125DEG CMAX	C740M7	2113944A44	CAP:CG,0402,5%,50V,220P F	C772M7	2113945A09	CAP:CHIP,1000PF,+10%,-10%*	D200M12	4813978A19	DIODE,RECT,MBR120,SM,SOD-123,1A,20V,SHTK,PB-FREE
C725M7	2113945C31	CAP,FXD,.1UF,+10%,-10%,50V-DC,0603,X7R,-55DEG CMIN,125DEG CMAX	C742M7	2113945C31	CAP,FXD,.1UF,+10%,-10%,50V-DC,0603,X7R,-55DEG CMIN,125DEG CMAX	C773M7	2113944A33	CAP:CHIP,47PF,+5%,-5%,50V-DC,0402,C0G,*	D2101M2	4870359B01	DIODE:SUPPRES-SOR,ESD,BI-DIR,7.82V,1W
C726M7	2113945C31	CAP,FXD,.1UF,+10%,-10%,50V-DC,0603,X7R,-55DEG CMIN,125DEG CMAX	C743M7	2113946B06	CAP:CHIP,.22UF,+10%,-10%,10V-DC,0402*	C777M7	2113944A44	CAP:CG,0402,5%,50V,220P F	D2401M2	4870359B01	DIODE:SUPPRES-SOR,ESD,BI-DIR,7.82V,1W
C727M7	2113944A40	CAP:CHIP,100PF,+5%,-5%,50V-DC,0402*	C744M7	2113955D37	CAP,FXD,10UF,+10%,-10%,16V-DC,1206,X7R,-55DEG CMIN,125DEG CMAX	C780M7	2113944A33	CAP:CHIP,47PF,+5%,-5%,50V-DC,0402,C0G,*	D2402M2	4870359B01	DIODE:SUPPRES-SOR,ESD,BI-DIR,7.82V,1W
C728M7	2113944A40	CAP:CHIP,100PF,+5%,-5%,50V-DC,0402*	C749M7	2113945C31	CAP,FXD,.1UF,+10%,-10%,50V-DC,0603,X7R,-55DEG CMIN,125DEG CMAX	C781M7	21667009388	CAPACI-TOR,FIXED,CERAMIC,0402,0.0001UF,+/-1%,50V,C0G	D2403M2	4870359B01	DIODE:SUPPRES-SOR,ESD,BI-DIR,7.82V,1W
C730M7	2113945C31	CAP,FXD,.1UF,+10%,-10%,50V-DC,0603,X7R,-55DEG CMIN,125DEG CMAX	C750M7	2113945C31	CAP,FXD,.1UF,+10%,-10%,50V-DC,0603,X7R,-55DEG CMIN,125DEG CMAX	C786M7	2113944A44	CAP:CG,0402,5%,50V,220P F	D2601M13	4813974A19	DIODE ARRAY,MXR,SM,SOT-323,7V,.2W,SHTK,2,PB-FREE
C731M7	2113945C31	CAP,FXD,.1UF,+10%,-10%,50V-DC,0603,X7R,-55DEG CMIN,125DEG CMAX	C751M7	2113945A09	CAP:CHIP,1000PF,+10%,-10%*	C7M2	2113944A40	CAP:CHIP,100PF,+5%,-5%,50V-DC,0402*	D2602M13	4815897H01	DIODE: UPP9401E ,PIN,50V,2.5W,DO-216
C732M7	2113944A32	CAP:CHIP,39PF,+5%,-5%,50V-DC,0402,C0G,*	C752M7	2113944A43	CAP CER CHP 180.0PF 50V 5%	C803M7	2113944A44	CAP:CG,0402,5%,50V,220P F	D2603M13	4815897H01	DIODE: UPP9401E ,PIN,50V,2.5W,DO-216
C733M7	2113945A09	CAP:CHIP,1000PF,+10%,-10%*	C753M7	2113944A31	CAP:CHIP,33PF,+5%,-5%,50V-DC,0402,C0G,*	C813M7	NOTPLACED	N/A	D3102M22	4805656W87	DIODE,VCTR, @ 15V,1SV279,,SOD-523/SC-79
C734M7	2113945C31	CAP,FXD,.1UF,+10%,-10%,50V-DC,0603,X7R,-55DEG CMIN,125DEG CMAX	C754M7	2113944A34	CAP CER CHP 56.0PF 50V 5%	C816M7	2113944A35	CAP CER CHP 62.0PF 50V 5%	D3103M22	4805656W87	DIODE,VCTR, @ 15V,1SV279,,SOD-523/SC-79
C735M7	2113944A31	CAP:CHIP,33PF,+5%,-5%,50V-DC,0402,C0G,*	C756M7	2113955D37	CAP,FXD,10UF,+10%,-10%,16V-DC,1206,X7R,-55DEG CMIN,125DEG CMAX	C817M7	2113944A44	CAP:CG,0402,5%,50V,220P F	D3104M22	4805656W87	DIODE,VCTR, @ 15V,1SV279,,SOD-523/SC-79
C736M7	2113945B02	CAP:CHIP,.01UF,+10%,-10%,25V-DC*	C757M7	2113945C31	CAP,FXD,.1UF,+10%,-10%,50V-DC,0603,X7R,-55DEG CMIN,125DEG CMAX	C819M7	2113944A44	CAP:CG,0402,5%,50V,220P F	D3105M22	4805656W87	DIODE,VCTR, @ 15V,1SV279,,SOD-523/SC-79
C737M7	2113945C31	CAP,FXD,.1UF,+10%,-10%,50V-DC,0603,X7R,-55DEG CMIN,125DEG CMAX	C760M7	2113944A44	CAP:CG,0402,5%,50V,220P F	C823M7	2113944A40	CAP:CHIP,100PF,+5%,-5%,50V-DC,0402*	D3135M22	4805656W87	DIODE,VCTR, @ 15V,1SV279,,SOD-523/SC-79
			C764M7	2113946B06	CAP:CHIP,.22UF,+10%,-10%,10V-DC,0402*	C824M7	2113944A44	CAP:CG,0402,5%,50V,220P F	D3136M22	4805656W87	DIODE,VCTR, @ 15V,1SV279,,SOD-523/SC-79
						C8M2	2113944A40	CAP:CHIP,100PF,+5%,-5%,50V-DC,0402*	D3137M22	4805656W87	DIODE,VCTR, @ 15V,1SV279,,SOD-523/SC-79
						C9M2	2113944A40	CAP:CHIP,100PF,+5%,-5%,50V-DC,0402*			
						D10M2	4870359B01	DIODE:SUPPRES-SOR,ESD,BI-DIR,7.82V,1W			
						D11M2	4870359B01	DIODE:SUPPRES-SOR,ESD,BI-DIR,7.82V,1W			

Ref. Des.	Part Number	Description
D3138M22	4805656W87	DIODE,VCTR, @ 15V,1SV279,,SOD-523/SC-79
D3M2	4870359B01	DIODE:SUPPRES-SOR,ESD,BI-DIR,7.82V,1W
D4001M2	4813978A25	SCHOTTKY 30V SOD-323 T&R PB FREE
D4M2	4870359B01	DIODE:SUPPRES-SOR,ESD,BI-DIR,7.82V,1W
D5M2	4870359B01	DIODE:SUPPRES-SOR,ESD,BI-DIR,7.82V,1W
D6101M6	4813978A25	SCHOTTKY 30V SOD-323 T&R PB FREE
D6401M6	4813978A25	SCHOTTKY 30V SOD-323 T&R PB FREE
D6501M6	4813978A25	SCHOTTKY 30V SOD-323 T&R PB FREE
D6502M6	4813978A25	SCHOTTKY 30V SOD-323 T&R PB FREE
D6M2	4870359B01	DIODE:SUPPRES-SOR,ESD,BI-DIR,7.82V,1W
D722M7	4815011H01	DIODE TRIPLE
D723M7	4815011H01	DIODE TRIPLE
D7M2	4870359B01	DIODE:SUPPRES-SOR,ESD,BI-DIR,7.82V,1W
D8M2	4870359B01	DIODE:SUPPRES-SOR,ESD,BI-DIR,7.82V,1W
D9M2	4870359B01	DIODE:SUPPRES-SOR,ESD,BI-DIR,7.82V,1W
E1219M11	2405688Z01	INDUCTOR FERRITE BEAD
E1921M20	2471132D14	IDCTR,FXD,470OHM,200M A,FER,0402,BEA
E2003M2	7685268E01	FERRITE BEAD 20X40 200 MA MAX CHIP
E201M12	7686949J14	FLTR:FERRITE BEAD,2A,SM,0805,CHIP,22 0OHM
E2242M2	7685268E01	FERRITE BEAD 20X40 200 MA MAX CHIP
E2244M2	7685268E01	FERRITE BEAD 20X40 200 MA MAX CHIP

Ref. Des.	Part Number	Description
E2245M2	7685268E01	FERRITE BEAD 20X40 200 MA MAX CHIP
E2246M2	7685268E01	FERRITE BEAD 20X40 200 MA MAX CHIP
E2247M2	7685268E01	FERRITE BEAD 20X40 200 MA MAX CHIP
E2248M2	7685268E01	FERRITE BEAD 20X40 200 MA MAX CHIP
E2249M2	7685268E01	FERRITE BEAD 20X40 200 MA MAX CHIP
E2301M2	91012036001	FILTER,EMI/ RFI,300MA,SM,0402,PB FREE
E2302M2	91012036001	FILTER,EMI/ RFI,300MA,SM,0402,PB FREE
E2303M2	91012036001	FILTER,EMI/ RFI,300MA,SM,0402,PB FREE
E2304M2	91012036001	FILTER,EMI/ RFI,300MA,SM,0402,PB FREE
E2305M2	91012036001	FILTER,EMI/ RFI,300MA,SM,0402,PB FREE
E2306M2	91012036001	FILTER,EMI/ RFI,300MA,SM,0402,PB FREE
E2307M2	91012036001	FILTER,EMI/ RFI,300MA,SM,0402,PB FREE
E2308M2	91012036001	FILTER,EMI/ RFI,300MA,SM,0402,PB FREE
E2309M2	91012036001	FILTER,EMI/ RFI,300MA,SM,0402,PB FREE
E2310M2	91012036001	FILTER,EMI/ RFI,300MA,SM,0402,PB FREE
E2311M2	91012036001	FILTER,EMI/ RFI,300MA,SM,0402,PB FREE

Ref. Des.	Part Number	Description
E601M19	2471132D14	IDCTR,FXD,470OHM,200M A,FER,0402,BEA
E602M19	2471132D14	IDCTR,FXD,470OHM,200M A,FER,0402,BEA
E603M19	2471132D14	IDCTR,FXD,470OHM,200M A,FER,0402,BEA
E604M19	2471132D14	IDCTR,FXD,470OHM,200M A,FER,0402,BEA
E605M19	2471132D14	IDCTR,FXD,470OHM,200M A,FER,0402,BEA
E606M19	2471132D14	IDCTR,FXD,470OHM,200M A,FER,0402,BEA
E607M19	2471132D14	IDCTR,FXD,470OHM,200M A,FER,0402,BEA
E608M19	2471132D14	IDCTR,FXD,470OHM,200M A,FER,0402,BEA
E609M19	2471132D14	IDCTR,FXD,470OHM,200M A,FER,0402,BEA
E6501M6	2480067M02	CHK RF CHIP BEAD INDUCTOR
E6502M6	2480067M02	CHK RF CHIP BEAD INDUCTOR
F200M12	6575834B01	FUSE SURFACE MOUNT
FL1301M3	9102190J23	FLTR,SAW,BAND-PASS,1.57542GHZ NOM,SM,1.4X1.0MM,SMD, PB-FREE
FL1303M3	9102190J23	FLTR,SAW,BAND-PASS,1.57542GHZ NOM,SM,1.4X1.0MM,SMD, PB-FREE
FL502M21	91009300001	FILTER,MONOLITHIC CRYSTAL,BAND-PASS,109.65MHZ NOM
J102M12	2880658Z08	CONNECTOR SMA
J2302M2	0970312N01	CONN,BTB,RCPT,60CONT,.4MM,GLD,1 STACK HGT
J2305M2	0985909E01	CONNECTOR RECEPTACLE 20 PIN
L1201M11	24009315011	WW CHIP INDUCTOR, HIGH Q, 5%, 0603
L1202M11	2415428H01	AIR WOUND INDUCTOR

Ref. Des.	Part Number	Description
L1301M3	2475122C28	IND, MULTI-LAYER, 18NH 5%, 0402,
L1302M3	2475122C13	IND, MULTI-LAY, 3.3NH 0.3%, 0402,
L1303M3	2475122C28	IND, MULTI-LAYER, 18NH 5%, 0402,
L1304M3	2488090Y25	INDUCTOR,MULTI-LAYER,100NH,1005,SMD,P B FREE
L1305M3	24010062002	INDUCTOR, 5.6NH, 0402, 2%
L1306M3	2475122C26	IND, MULTI-LAYER, 12NH 5%, 0402,
L1316M3	24010062009	INDUCTOR, 13NH, 0402, 2%
L1601M16	2414017H14	IDCTR,CHIP,15NH,5%,3A,.3 2OHM,CER,12 Q,1.5GHZ SRF,SM,0603,PB-
L1602M16	24009315038	WW CHIP INDUCTOR, HIGH Q, 5%, 0603
L1603M16	24009343004	INDUCTOR, FIXED
L1604M16	2414017H07	IDCTR,CHIP,3.9NH,300MA,.14OHM,CER,10 Q,3.4GHZ SRF,SM,0603,P
L1605M16	2414017H07	IDCTR,CHIP,3.9NH,300MA,.14OHM,CER,10 Q,3.4GHZ SRF,SM,0603,P
L1606M16	2460591E24	COIL AIR WOUND INDUC 23.75
L1609M16	2415428H02	AIR WOUND INDUCTOR
L1610M16	2471968L10	9.0NH 2% LP AIRWOUND INDUCTOR
L1803M17	24012026006	ULTRA-MINIATURE AIR CORE INDUCTORS
L1809M17	24012026006	ULTRA-MINIATURE AIR CORE INDUCTORS
L1811M17	24012026006	ULTRA-MINIATURE AIR CORE INDUCTORS
L1900M20	NOTPLACED	N/A
L1901M20	2414017N07	IDCTR,CHIP,3.9NH,1A,.150 HM,CER,10 Q,3.5GHZ SRF,SM,0603,PB-F

Ref. Des.	Part Number	Description	Ref. Des.	Part Number	Description	Ref. Des.	Part Number	Description	Ref. Des.	Part Number	Description
L1908M20	2478057A04	3.6 NH SURFACE MOUNT INDUCTOR	L3106M22	24009342019	INDUCTOR, WIRE WOUND	L605M19	24012050001	0603LS CHIP INDUCTORS, 1608, 3900NH	L753M7	2415347H06	IDCTR, 2200NH
L1909M20	2478057A23	18 NH SURFACE MOUNT INDUCTOR	L3112M22	24009316003	AIR CORE,MICRO,5.4NH,1.6A,1%,SM,5T	L611M19	2414032F39	IDCTR,WW,270NH,10%,280MA,1OHM,CER,40Q,800MHZ SRF,SM,PB-FRE	L755M7	2415429H47	CHIP INDUCTOR
L1910M20	2478057A23	18 NH SURFACE MOUNT INDUCTOR	L3119M22	2414032F61	IDCTR,WW,470NH,5%,250MA,1.76OHM,CER,33Q,375MHZ SRF,SM,PB-F	L6401M6	2471189M03	SHIELDED SMT POWER INDUCTOR 10UH	L758M7	2415429H47	CHIP INDUCTOR
L1912M20	2478057A04	3.6 NH SURFACE MOUNT INDUCTOR	L3125M22	2414032F41	IDCTR,WW,390NH,10%,200MA,1.5OHM,CER,40Q,730MHZ SRF,SM,PB-F	L6402M6	2471189M03	SHIELDED SMT POWER INDUCTOR 10UH	L759M7	2415429H47	CHIP INDUCTOR
L1913M20	2478057A23	18 NH SURFACE MOUNT INDUCTOR	L3126M22	24009344015	INDUCTOR, WIRE WOUND	L6403M6	24009271001	20NH HIGH CURRENT CHIP INDUCTOR	L765M7	24009314035	WW CHIP INDUCTOR, HIGH Q, 5%, 0402
L1914M20	2478057A23	18 NH SURFACE MOUNT INDUCTOR	L3134M22	2414032F41	IDCTR,WW,390NH,10%,200MA,1.5OHM,CER,40Q,730MHZ SRF,SM,PB-F	L6404M6	24009271001	20NH HIGH CURRENT CHIP INDUCTOR	L775M7	2415429H47	CHIP INDUCTOR
L1915M20	2478057A12	7.2NH SURFACE MOUNT INDUCTOR	L3139M22	24009342019	INDUCTOR, WIRE WOUND	L6502M6	2471678H01	10UH INDCUTOR	M101M12	39012039001	CONNECTOR, BATTERY CONTACT
L1917M20	2478057A04	3.6 NH SURFACE MOUNT INDUCTOR	L3145M22	2471968L11	13.0NH 2% LP AIRWOUND INDUCTOR	L6504M6	24009268001	10UH 2.1A SHIELDED INDUCTOR	M103M12	3987977Y04	CONT,CONN,,1CONT,,,ANT UNIV 4.5MM,UC 1.8
L1934M20	2478057A35	0306 HIGH Q CHIP INDUCTOR	L3150M22	2414032F41	IDCTR,WW,390NH,10%,200MA,1.5OHM,CER,40Q,730MHZ SRF,SM,PB-F	L6505M6	2471678H01	10UH INDCUTOR	M104M12	NOTPLACED	N/A
L1935M20	2478057A23	18 NH SURFACE MOUNT INDUCTOR	L3158M22	2414032F41	IDCTR,WW,390NH,10%,200MA,1.5OHM,CER,40Q,730MHZ SRF,SM,PB-F	L701M7	2415429H47	CHIP INDUCTOR	M105M12	3987977Y04	CONT,CONN,,1CONT,,,ANT UNIV 4.5MM,UC 1.8
L1936M20	24009315001	WW CHIP INDUCTOR, HIGH Q, 5%, 0603	L3159M22	2414032F39	IDCTR,WW,270NH,10%,280MA,1OHM,CER,40Q,800MHZ SRF,SM,PB-FRE	L702M7	2415429H47	CHIP INDUCTOR	M6405M6	3987977Y04	CONT,CONN,,1CONT,,,ANT UNIV 4.5MM,UC 1.8
L200M12	2571269C01	INDUCTOR WW POWER 20%	L500M21	24009315044	WW CHIP INDUCTOR, HIGH Q, 5%, 0603	L709M7	2475122C26	IND, MULTI-LAYER, 12NH 5%, 0402,	M6406M6	3987977Y04	CONT,CONN,,1CONT,,,ANT UNIV 4.5MM,UC 1.8
L2202M2	24009315046	WW CHIP INDUCTOR, HIGH Q, 5%, 0603	L503M21	24667001026	IDCTR,FXD,100NH,5%,300MA,1.2OHM,12Q,770MHZ SRF,SM,0603	L720M7	24012100001	IDCTR,2.2UH,10%,15MA,S M,MAGNETICALLY SHIELDED CHIP	M6502M6	0985888K02	SKT RTC BTTY LEAP
L2203M2	24009315046	WW CHIP INDUCTOR, HIGH Q, 5%, 0603	L504M21	24009342049	INDUCTOR, WIRE WOUND	L727M7	24012100001	IDCTR,2.2UH,10%,15MA,S M,MAGNETICALLY SHIELDED CHIP	M6504M6	3987977Y04	CONT,CONN,,1CONT,,,ANT UNIV 4.5MM,UC 1.8
L2204M2	24009315046	WW CHIP INDUCTOR, HIGH Q, 5%, 0603	L513M21	NOTPLACED	N/A	L728M7	2415429H47	CHIP INDUCTOR	PASTE	11012015001	SOLDER PASTE - 9.0A, LOW VOID (GRAM)
L2205M2	24009315046	WW CHIP INDUCTOR, HIGH Q, 5%, 0603	L550M21	24667001015	IDCTR,FXD,15NH,5%,600MA,.32OHM,12Q,2.5GHZ SRF,SM,0603	L733M7	24012100001	IDCTR,2.2UH,10%,15MA,S M,MAGNETICALLY SHIELDED CHIP	PCB	84012620001	RIGID,BOARD, PC, UHF1 MAIN BOARD
L2601M13	2471912M03	SQUARE AIR CORE INDUCTORS	L601M19	24009315044	WW CHIP INDUCTOR, HIGH Q, 5%, 0603	L735M7	24012100001	IDCTR,2.2UH,10%,15MA,S M,MAGNETICALLY SHIELDED CHIP	Q1263M11	4813973A32	XSTR,BIP GP SS,NPN,SM,SC-70,SMT,50V,.202W,100MA, PB-FREE
L2602M13	24009315041	WW CHIP INDUCTOR, HIGH Q, 5%, 0603	L602M19	2466505A01	COIL INDUCTOR	L738M7	24012100001	IDCTR,2.2UH,10%,15MA,S M,MAGNETICALLY SHIELDED CHIP	Q1264M11	4813973A32	XSTR,BIP GP SS,NPN,SM,SC-70,SMT,50V,.202W,100MA, PB-FREE
L3100M22	0613952R66	RES:MF,0OHM,5%,.0625W, SM,0402*	L603M19	2466505A01	COIL INDUCTOR	L739M7	2415429H47	CHIP INDUCTOR	Q1265M11	4813973A32	XSTR,BIP GP SS,NPN,SM,SC-70,SMT,50V,.202W,100MA, PB-FREE
L3101M22	2414032F41	IDCTR,WW,390NH,10%,200MA,1.5OHM,CER,40Q,730MHZ SRF,SM,PB-F	L604M19	24009345005	INDUCTOR, WIRE WOUND	L741M7	24012100001	IDCTR,2.2UH,10%,15MA,S M,MAGNETICALLY SHIELDED CHIP	Q1268M11	4813970A59	P-CH FET 1.0A 20V SOT-23 T&R

Ref. Des.	Part Number	Description
Q1920M20	4813973A32	XSTR,BIP GP SS,NPN,SM,SC-70,SMT,50V,.202W,100MA,PB-FREE
Q1922M20	4813973M75	XSTR,BIP GP SS,PNP,BC858,SOT-563,SMT,-30V,.357W,-100MA,100MHZ
Q201M12	4813970A59	P-CH FET 1.0A 20V SOT-23 T&R
Q202M12	4813973A32	XSTR,BIP GP SS,NPN,SM,SC-70,SMT,50V,.202W,100MA,PB-FREE
Q2202M2	4815261H01	TRANSISTOR,BIP GENERAL PURPOSE SMALL NPN
Q2601M13	4815055H01	TSTR DUAL NPN/PNP UMH 5
Q3123M22	4871915M01	XSTR,BIP RF SML SGNL,NPN,SM,4.5GHZ
Q3128M22	4815055H01	TSTR DUAL NPN/PNP UMH 5
Q3156M22	4871915M01	XSTR,BIP RF SML SGNL,NPN,SM,4.5GHZ
Q3161M22	4815055H01	TSTR DUAL NPN/PNP UMH 5
Q4001M2	4815261H01	TRANSISTOR,BIP GENERAL PURPOSE SMALL NPN
Q601M19	4813973A04	XSTR,BIP GP SS,NPN,TA13,SM,SOT-23,SMT,30V,.225W,300MA,125MHZ,P
Q6101M6	4815261H01	TRANSISTOR,BIP GENERAL PURPOSE SMALL NPN
Q6401M6	48012170001	FET
Q6501M6	4813970A62	XSTR,FET GP PWR,MOS-FET,P-CH,ENHN,CF,-20V,1.3W,PB-FREE
Q6502M6	48012154001	FET

Ref. Des.	Part Number	Description
Q6504M6	4809579E77	FET,NCH MOS FET, 1.2MM X 1.2MM PACKAGE, SMD, W18 COMPLIANT
Q6505M6	4813970A62	XSTR,FET GP PWR,MOS-FET,P-CH,ENHN,CF,-20V,1.3W,PB-FREE
Q6506M6	4809579E77	FET,NCH MOS FET, 1.2MM X 1.2MM PACKAGE, SMD, W18 COMPLIANT
Q6507M6	48012170001	FET
Q6508M6	48012154001	FET
Q731M7	4885061Y01	XSTR NPN 6V 30UA 12GHZ PB-FREE
Q745M7	4813973M75	XSTR,BIP GP SS,PNP,BC858,SOT-563,SMT,-30V,.357W,-100MA,100MHZ
Q756M7	4805585Q32	TRANSITOR, NPN RF
Q767M7	4813973M75	XSTR,BIP GP SS,PNP,BC858,SOT-563,SMT,-30V,.357W,-100MA,100MHZ
Q774M7	4805585Q32	TRANSITOR, NPN RF
Q785M7	4889394V04	XSTR,FET GP SS,MOS-FET,N-CH, ENHN, SM,20V
R1101M11	0613952R01	RES:MF,10KOHM,5%,.0625W,SM,0402*
R1202M11	NOTPLACED	N/A
R1203M11	0613952Z50	RES,MF,5.6KOHM,1%,.0625W,SM,0402,200PPM/CEL,PB-FREE
R1204M11	NOTPLACED	N/A
R1205M11	0613952N01	RES:MF,10KOHM,1%,.0625W,SM,0402*
R1206M11	0613952J01	CER CHIP RES 10K OHM 5% 0603
R1207M11	0613952R22	CER CHIP RES 75K OHM 5 0402
R1208M11	0613952R01	RES:MF,10KOHM,5%,.0625W,SM,0402*
R1209M11	NOTPLACED	N/A

Ref. Des.	Part Number	Description
R1210M11	0613952R66	RES:MF,0OHM,5%,.0625W,SM,0402*
R1211M11	0613952R01	RES:MF,10KOHM,5%,.0625W,SM,0402*
R1212M11	NOTPLACED	N/A
R1213M11	0613952R66	RES:MF,0OHM,5%,.0625W,SM,0402*
R1214M11	0613952R66	RES:MF,0OHM,5%,.0625W,SM,0402*
R1218M11	0613952R66	RES:MF,0OHM,5%,.0625W,SM,0402*
R1219M11	NOTPLACED	N/A
R1220M11	NOTPLACED	N/A
R1223M11	NOTPLACED	N/A
R1225M11	NOTPLACED	N/A
R1226M11	0615043C01	RES POWER METAL STRIP W18 COMPLIANT
R1228M11	NOTPLACED	N/A
R1230M11	0613952R01	RES:MF,10KOHM,5%,.0625W,SM,0402*
R1231M11	0613952R16	CER CHIP RES 43K OHM 5 0402
R1232M11	0613952M73	CER CHIP RES 5620 OHM 1% 0402
R1234M11	0613952R01	RES:MF,10KOHM,5%,.0625W,SM,0402*
R1235M11	0613952R66	RES:MF,0OHM,5%,.0625W,SM,0402*
R1238M11	0613952R66	RES:MF,0OHM,5%,.0625W,SM,0402*
R1240M11	0613952R66	RES:MF,0OHM,5%,.0625W,SM,0402*
R1241M11	0613952N05	CER CHIP RES 11.0K OHM 1 0402
R1242M11	0613952N48	CER CHIP RES 30.9K OHM 1 0402
R1243M11	0613952R66	RES:MF,0OHM,5%,.0625W,SM,0402*
R1244M11	0613952R25	RES:MF,100KOHM,5%,.0625W,SM,0402*

Ref. Des.	Part Number	Description
R1245M11	0613952R25	RES:MF,100KOHM,5%,.0625W,SM,0402*
R1247M11	0613952R01	RES:MF,10KOHM,5%,.0625W,SM,0402*
R1248M11	0613952R01	RES:MF,10KOHM,5%,.0625W,SM,0402*
R1249M11	0613952Z60	RES,MF,27KOHM,1%,.0625W,SM,0402,200PPM/CEL,PB-FREE
R1250M11	0613952N12	CER CHIP RES 13.0K OHM 1 0402
R1251M11	0613952Q56	CER CHIP RES 200 OHM 5 0402
R1252M11	0613952Q75	RES:MF,1.2KOHM,5%,.0625W,SM,0402*
R1253M11	0613952N51	RES:MF,33.2KOHM,1%,.0625W,SM,0402*
R1254M11	0613952N55	CER CHIP RES 36.5K OHM 1 0402
R1255M11	0613952N02	CER CHIP RES 10.2K OHM 1 0402
R1257M11	0613952R01	RES:MF,10KOHM,5%,.0625W,SM,0402*
R1259M11	NOTPLACED	N/A
R1260M11	0613952R01	RES:MF,10KOHM,5%,.0625W,SM,0402*
R1261M11	NOTPLACED	N/A
R1262M11	0613952Z65	RES,MF,43KOHM,1%,.0625W,SM,0402,200PPM/CEL,PB-FREE
R1263M11	0613952N51	RES:MF,33.2KOHM,1%,.0625W,SM,0402*
R1264M11	0675679M01	KAMAYA 2MOHM +/-1% -55 +155 DEG. C
R1266M11	0613952P12	CER CHIP RES 130K OHM 1 0402
R1267M11	0613952R25	RES:MF,100KOHM,5%,.0625W,SM,0402*
R1268M11	0613952R66	RES:MF,0OHM,5%,.0625W,SM,0402*

Ref. Des.	Part Number	Description	Ref. Des.	Part Number	Description	Ref. Des.	Part Number	Description	Ref. Des.	Part Number	Description
R1269M11	0613952Q49	CER CHIP RES 100 OHM 5 0402	R1297M11	0613952Q45	CER CHIP RES 68.0 OHM 5 0402	R1652M16	0613952Q60	CER CHIP RES 300 OHM 5 0402	R2005M2	0613952Q66	CER CHIP RES 510 OHM 5 0402
R1270M11	0613952Q49	CER CHIP RES 100 OHM 5 0402	R1298M11	NOTPLACED	N/A	R1653M16	0613952Z03	RES,MF,18OHM,1%,.0625 W,SM,0402,200PPM/ CEL,PB-FREE	R2007M2	0613952Q49	CER CHIP RES 100 OHM 5 0402
R1271M11	0613952Q49	CER CHIP RES 100 OHM 5 0402	R1299M11	NOTPLACED	N/A	R1900M20	0613952R66	RES:MF,0OHM,5%,.0625W, SM,0402*	R200M12	0613952R66	RES:MF,0OHM,5%,.0625W, SM,0402*
R1272M11	0613952Q49	CER CHIP RES 100 OHM 5 0402	R1301M3	0613952R66	RES:MF,0OHM,5%,.0625W, SM,0402*	R1906M20	0613952R01	RES:MF,10KOHM,5%,.0625 W,SM,0402*	R201M12	0613952R25	RES:MF,100KOHM,5%,.062 5W,SM,0402*
R1274M11	0613952R01	RES:MF,10KOHM,5%,.0625 W,SM,0402*	R1302M3	NOTPLACED	N/A	R1907M20	0613952R01	RES:MF,10KOHM,5%,.0625 W,SM,0402*	R2024M2	0613952Q09	CER CHIP RES 2.2 OHM 5 0402
R1275M11	0613952Z80	RES,MF,330KOHM,1%,.062 5W,SM,0402,200PPM/ CEL,PB-FREE	R1303M3	0613952R66	RES:MF,0OHM,5%,.0625W, SM,0402*	R1908M20	0613952R01	RES:MF,10KOHM,5%,.0625 W,SM,0402*	R2025M2	0613952Q09	CER CHIP RES 2.2 OHM 5 0402
R1276M11	0613952Z80	RES,MF,330KOHM,1%,.062 5W,SM,0402,200PPM/ CEL,PB-FREE	R1305M3	0613952R66	RES:MF,0OHM,5%,.0625W, SM,0402*	R1909M20	0613952R01	RES:MF,10KOHM,5%,.0625 W,SM,0402*	R202M12	0613952Q89	RES:MF,4.7KOHM,5%,.062 5W,SM,0402*
R1277M11	0613952P68	CER CHIP RES 499K OHM 1 0402	R1309M3	NOTPLACED	N/A	R1910M20	0613952R01	RES:MF,10KOHM,5%,.0625 W,SM,0402*	R21000M2	NOTPLACED	N/A
R1278M11	0613952P68	CER CHIP RES 499K OHM 1 0402	R1310M3	0613952R66	RES:MF,0OHM,5%,.0625W, SM,0402*	R1911M20	0613952Q96	CER CHIP RES 9100 OHM 5 0402	R21001M2	NOTPLACED	N/A
R1279M11	0613952R01	RES:MF,10KOHM,5%,.0625 W,SM,0402*	R1311M3	NOTPLACED	N/A	R1921M20	0613952R22	CER CHIP RES 75K OHM 5 0402	R21002M2	NOTPLACED	N/A
R1280M11	0613952R01	RES:MF,10KOHM,5%,.0625 W,SM,0402*	R1313M3	0613952R66	RES:MF,0OHM,5%,.0625W, SM,0402*	R1922M20	0613952R27	CER CHIP RES 120K OHM 5% 0402	R21003M2	NOTPLACED	N/A
R1281M11	0675679M01	KAMAYA 2MOHM +/-1% -55 +155 DEG. C	R1315M3	0613952R66	RES:MF,0OHM,5%,.0625W, SM,0402*	R1923M20	0613952R01	RES:MF,10KOHM,5%,.0625 W,SM,0402*	R2104M2	0613952Q89	RES:MF,4.7KOHM,5%,.062 5W,SM,0402*
R1283M11	0675679M01	KAMAYA 2MOHM +/-1% -55 +155 DEG. C	R1317M3	0613952R66	RES:MF,0OHM,5%,.0625W, SM,0402*	R1924M20	0613952R01	RES:MF,10KOHM,5%,.0625 W,SM,0402*	R2105M2	0613952Q89	RES:MF,4.7KOHM,5%,.062 5W,SM,0402*
R1284M11	0613952R66	RES:MF,0OHM,5%,.0625W, SM,0402*	R1318M3	0613952R66	RES:MF,0OHM,5%,.0625W, SM,0402*	R1925M20	0613952Q37	RES:MF,33OHM,5%,.0625 W,SM,0402*	R2106M2	NOTPLACED	N/A
R1287M11	0613952L62	CER CHIP RES 432 OHM 1 0402	R1340M3	0613952R66	RES:MF,0OHM,5%,.0625W, SM,0402*	R1925M20	0613952Q11	CER CHIP RES 2.7 OHM 5 0402	R2107M2	0613952Q73	CER CHIP RES 1000 OHM 5 0402
R1289M11	0613952M43	CER CHIP RES 2740 OHM 1 0402	R1601M16	0613952Q96	CER CHIP RES 9100 OHM 5 0402	R1935M20	0613952Q75	RES:MF,1.2KOHM,5%,.062 5W,SM,0402*	R2109M2	0613952Q25	RES:MF,10OHM,5%,.0625 W,SM,0402*
R1293M11	0613952Z46	RES,MF,3.9KOHM,1%,.062 5W,SM,0402,200PPM/ CEL,PB-FREE	R1602M16	0613952R01	RES:MF,10KOHM,5%,.0625 W,SM,0402*	R1936M20	0613952R66	RES:MF,0OHM,5%,.0625W, SM,0402*	R2110M2	0613952Q33	RES:MF,22OHM,5%,.0625 W,SM,0402*
R1295M11	0613952Q49	CER CHIP RES 100 OHM 5 0402	R1603M16	0613952N85	CER CHIP RES 75.0K OHM 1 0402	R1970M20	0613952Q25	RES:MF,10OHM,5%,.0625 W,SM,0402*	R2111M2	0613952Q25	RES:MF,10OHM,5%,.0625 W,SM,0402*
R1296M11	0613952Q49	CER CHIP RES 100 OHM 5 0402	R1604M16	0613952N51	RES:MF,33.2KOHM,1%,.06 25W,SM,0402*	R1972M20	0613952Q25	RES:MF,10OHM,5%,.0625 W,SM,0402*	R2113M2	0613952Q25	RES:MF,10OHM,5%,.0625 W,SM,0402*
			R1605M16	0613952Q73	CER CHIP RES 1000 OHM 5 0402	R2003M2	0613952Q53	RES:MF,150OHM,5%,.0625 W,SM,0402*	R2114M2	0613952Q33	RES:MF,22OHM,5%,.0625 W,SM,0402*
			R1606M16	0613952H53	RES:MF,150OHM,5%,.1W,S M,0603,200PPM/CEL*	R2004M2	0613952Q49	CER CHIP RES 100 OHM 5 0402	R2115M2	0613952Q25	RES:MF,10OHM,5%,.0625 W,SM,0402*
			R1651M16	0613952Q60	CER CHIP RES 300 OHM 5 0402				R2116M2	0613952R01	RES:MF,10KOHM,5%,.0625 W,SM,0402*



Ref. Des.	Part Number	Description	Ref. Des.	Part Number	Description	Ref. Des.	Part Number	Description	Ref. Des.	Part Number	Description
R2117M2	0613952R01	RES:MF,10KOHM,5%,.0625 W,SM,0402*	R2153M2	0613952Q41	RES:MF,47OHM,5%,.0625 W,SM,0402*	R2803M1	0613952Q37	RES:MF,33OHM,5%,.0625 W,SM,0402*	R3149M22	0613952Q93	CER CHIP RES 6800 OHM 5 0402
R2118M2	0613952R01	RES:MF,10KOHM,5%,.0625 W,SM,0402*	R2154M2	0613952Q41	RES:MF,47OHM,5%,.0625 W,SM,0402*	R2804M1	0613952Q49	CER CHIP RES 100 OHM 5 0402	R3158M22	0613952Q53	RES:MF,150OHM,5%,.0625 W,SM,0402*
R2120M2	0613952R01	RES:MF,10KOHM,5%,.0625 W,SM,0402*	R2192M2	0613952Q61	CER CHIP RES 330 OHM 5 0402	R2805M1	0613952Q49	CER CHIP RES 100 OHM 5 0402	R3159M22	0613952Q45	CER CHIP RES 68.0 OHM 5 0402
R2129M2	0613952R01	RES:MF,10KOHM,5%,.0625 W,SM,0402*	R2197M2	0613952R66	RES:MF,0OHM,5%,.0625W, SM,0402*	R2806M1	0613952Q59	CER CHIP RES 270 OHM 5 0402	R3160M22	0613952Q53	RES:MF,150OHM,5%,.0625 W,SM,0402*
R2130M2	0613952R01	RES:MF,10KOHM,5%,.0625 W,SM,0402*	R2198M2	0613952R66	RES:MF,0OHM,5%,.0625W, SM,0402*	R2807M1	0613952Q56	CER CHIP RES 200 OHM 5 0402	R4005M2	0613952R01	RES:MF,10KOHM,5%,.0625 W,SM,0402*
R2131M2	0613952R01	RES:MF,10KOHM,5%,.0625 W,SM,0402*	R2199M2	0613952R66	RES:MF,0OHM,5%,.0625W, SM,0402*	R2808M1	0613952Q49	CER CHIP RES 100 OHM 5 0402	R4006M2	0613952R01	RES:MF,10KOHM,5%,.0625 W,SM,0402*
R2132M2	0613952R01	RES:MF,10KOHM,5%,.0625 W,SM,0402*	R2201M2	0613952R32	CER CHIP RES 200K OHM 5 0402	R2810M1	0613952R01	RES:MF,10KOHM,5%,.0625 W,SM,0402*	R4007M2	0613952R01	RES:MF,10KOHM,5%,.0625 W,SM,0402*
R2133M2	0613952R01	RES:MF,10KOHM,5%,.0625 W,SM,0402*	R2204M2	0613952Q85	CER CHIP RES 3300 OHM 5 0402	R2811M1	0613952Q89	RES:MF,4.7KOHM,5%,.062 5W,SM,0402*	R4008M2	0613952R01	RES:MF,10KOHM,5%,.0625 W,SM,0402*
R2135M2	0613952Q41	RES:MF,47OHM,5%,.0625 W,SM,0402*	R2206M2	0613952Q85	CER CHIP RES 3300 OHM 5 0402	R2812M1	0613952R01	RES:MF,10KOHM,5%,.0625 W,SM,0402*	R4009M2	0613952Q85	CER CHIP RES 3300 OHM 5 0402
R2136M2	0613952Q61	CER CHIP RES 330 OHM 5 0402	R2207M2	0613952R66	RES:MF,0OHM,5%,.0625W, SM,0402*	R2813M1	NOTPLACED	N/A	R4010M2	0613952R32	CER CHIP RES 200K OHM 5 0402
R2137M2	0613952Q61	CER CHIP RES 330 OHM 5 0402	R2235M2	0613952R66	RES:MF,0OHM,5%,.0625W, SM,0402*	R2817M1	0613952Q41	RES:MF,47OHM,5%,.0625 W,SM,0402*	R4011M2	0613952R17	RESISTOR,METAL FILM,47KOHM,5%,.0625W, SM,0402,200PPM/CEL,PB-FREE
R2138M2	0613952Q41	RES:MF,47OHM,5%,.0625 W,SM,0402*	R2244M2	0613952Q65	RES,MF,470OHM,5%,.0625 W,SM,0402,200PPM/*	R3103M22	0613952Q31	CER CHIP RES 18.0 OHM 5 0402	R4012M2	0613952R09	CER CHIP RES 22K OHM 5% 0402
R2139M2	0613952Q41	RES:MF,47OHM,5%,.0625 W,SM,0402*	R2245M2	0613952Q60	CER CHIP RES 300 OHM 5 0402	R3105M22	0613952Q60	CER CHIP RES 300 OHM 5 0402	R4013M2	0613952R09	CER CHIP RES 22K OHM 5% 0402
R2142M2	0613952Q41	RES:MF,47OHM,5%,.0625 W,SM,0402*	R2246M2	0613952Q65	RES,MF,470OHM,5%,.0625 W,SM,0402,200PPM/*	R3106M22	0613952Q60	CER CHIP RES 300 OHM 5 0402	R4014M2	0613952Q85	CER CHIP RES 3300 OHM 5 0402
R2144M2	0613952Q61	CER CHIP RES 330 OHM 5 0402	R2254M2	0613952R01	RES:MF,10KOHM,5%,.0625 W,SM,0402*	R3107M22	0613952Q60	CER CHIP RES 300 OHM 5 0402	R500M21	0613952Q37	RES:MF,33OHM,5%,.0625 W,SM,0402*
R2145M2	0613952Q41	RES:MF,47OHM,5%,.0625 W,SM,0402*	R2601M13	NOTPLACED	N/A	R3108M22	0613952Q31	CER CHIP RES 18.0 OHM 5 0402	R502M21	0613952Q36	CER CHIP RES 30.0 OHM 5 0402
R2146M2	0613952Q41	RES:MF,47OHM,5%,.0625 W,SM,0402*	R2602M13	0613952H47	CER CHIP RES 82.0 OHM 5 0603	R3109M22	0613952Q60	CER CHIP RES 300 OHM 5 0402	R512M21	0613952R66	RES:MF,0OHM,5%,.0625W, SM,0402*
R2147M2	0613952Q41	RES:MF,47OHM,5%,.0625 W,SM,0402*	R2603M13	0613952H47	CER CHIP RES 82.0 OHM 5 0603	R3114M22	0613952Q95	CER CHIP RES 8200 OHM 5 0402	R525M21	0613952R66	RES:MF,0OHM,5%,.0625W, SM,0402*
R2148M2	0613952Q41	RES:MF,47OHM,5%,.0625 W,SM,0402*	R2604M13	0613952H47	CER CHIP RES 82.0 OHM 5 0603	R3118M22	0613952Q95	CER CHIP RES 8200 OHM 5 0402	R526M21	0613958J74	RES:MF,0OHM,5%,.125W,S M,0805,PB-FREE
R2149M2	0613952Q41	RES:MF,47OHM,5%,.0625 W,SM,0402*	R2605M13	0613952G67	RES,MF,0OHM,1%,.1W,SM, 0603,PB-FREE	R3127M22	0613952Q54	CER CHIP RES 160 OHM 5 0402	R601M19	0613952Q41	RES:MF,47OHM,5%,.0625 W,SM,0402*
R2151M2	NOTPLACED	N/A	R2606M13	0613952R25	RES:MF,100KOHM,5%,.062 5W,SM,0402*	R3146M22	0613952Q95	CER CHIP RES 8200 OHM 5 0402			

Ref. Des.	Part Number	Description	Ref. Des.	Part Number	Description	Ref. Des.	Part Number	Description	Ref. Des.	Part Number	Description
R602M19	0613952Q63	RES:MF,390OHM,5%,.0625 W,SM,0402*	R6114M6	0613952Q49	CER CHIP RES 100 OHM 5 0402	R6204M6	0613952R01	RES:MF,10KOHM,5%,.0625 W,SM,0402*	R6306M6	0613952R01	RES:MF,10KOHM,5%,.0625 W,SM,0402*
R603M19	0613952R25	RES:MF,100KOHM,5%,.062 5W,SM,0402*	R6115M6	0613952Q49	CER CHIP RES 100 OHM 5 0402	R6205M6	0613952R01	RES:MF,10KOHM,5%,.0625 W,SM,0402*	R6307M6	0613952R66	RES:MF,0OHM,5%,.0625W, SM,0402*
R604M19	0613952Q63	RES:MF,390OHM,5%,.0625 W,SM,0402*	R6116M6	0613952Q73	CER CHIP RES 1000 OHM 5 0402	R6206M6	0613952R25	RES:MF,100KOHM,5%,.062 5W,SM,0402*	R6310M6	0613952Q37	RES:MF,33OHM,5%,.0625 W,SM,0402*
R605M19	0613952R01	RES:MF,10KOHM,5%,.0625 W,SM,0402*	R6117M6	0613952R01	RES:MF,10KOHM,5%,.0625 W,SM,0402*	R6207M6	0613952R25	RES:MF,100KOHM,5%,.062 5W,SM,0402*	R6311M6	0613952Q37	RES:MF,33OHM,5%,.0625 W,SM,0402*
R606M19	0613952R01	RES:MF,10KOHM,5%,.0625 W,SM,0402*	R6118M6	0613952R09	CER CHIP RES 22K OHM 5% 0402	R6208M6	0613952Q89	RES:MF,4.7KOHM,5%,.062 5W,SM,0402*	R6312M6	0613952Q37	RES:MF,33OHM,5%,.0625 W,SM,0402*
R607M19	0613952R25	RES:MF,100KOHM,5%,.062 5W,SM,0402*	R6119M6	0613952R01	RES:MF,10KOHM,5%,.0625 W,SM,0402*	R6209M6	0613952Q89	RES:MF,4.7KOHM,5%,.062 5W,SM,0402*	R6313M6	0613952Q37	RES:MF,33OHM,5%,.0625 W,SM,0402*
R608M19	0613952R01	RES:MF,10KOHM,5%,.0625 W,SM,0402*	R611M19	0613952R01	RES:MF,10KOHM,5%,.0625 W,SM,0402*	R620M19	NOTPLACED	N/A	R6314M6	0613952Q37	RES:MF,33OHM,5%,.0625 W,SM,0402*
R609M19	0613952Q81	RES:MF,2.2KOHM,5%,.062 5W,SM,0402*	R6120M6	0613952R01	RES:MF,10KOHM,5%,.0625 W,SM,0402*	R6210M6	0613952Q89	RES:MF,4.7KOHM,5%,.062 5W,SM,0402*	R6316M6	0613952R01	RES:MF,10KOHM,5%,.0625 W,SM,0402*
R6101M6	0613952R01	RES:MF,10KOHM,5%,.0625 W,SM,0402*	R6121M6	0613952R01	RES:MF,10KOHM,5%,.0625 W,SM,0402*	R6211M6	0613952R01	RES:MF,10KOHM,5%,.0625 W,SM,0402*	R6401M6	0613952R18	RES:MF,51KOHM,5%,.0625 W,SM,0402*
R6102M6	0613952R09	CER CHIP RES 22K OHM 5% 0402	R6122M6	0613952R01	RES:MF,10KOHM,5%,.0625 W,SM,0402*	R6212M6	NOTPLACED	N/A	R6402M6	0613952R32	CER CHIP RES 200K OHM 5 0402
R6103M6	0613952R09	CER CHIP RES 22K OHM 5% 0402	R6123M6	NOTPLACED	N/A	R6213M6	0613952R01	RES:MF,10KOHM,5%,.0625 W,SM,0402*	R6403M6	0613952Q81	RES:MF,2.2KOHM,5%,.062 5W,SM,0402*
R6104M6	NOTPLACED	N/A	R6125M6	NOTPLACED	N/A	R6214M6	NOTPLACED	N/A	R6404M6	0613952Q81	RES:MF,2.2KOHM,5%,.062 5W,SM,0402*
R6105M6	0613952R66	RES:MF,0OHM,5%,.0625W, SM,0402*	R612M19	0613952Q94	CER CHIP RES 7500 OHM 5 0402	R6215M6	0613952R01	RES:MF,10KOHM,5%,.0625 W,SM,0402*	R6405M6	0613952Q75	RES:MF,1.2KOHM,5%,.062 5W,SM,0402*
R6106M6	0613952Q73	CER CHIP RES 1000 OHM 5 0402	R613M19	0613952Q82	CER CHIP RES 2400 OHM 5 0402	R6216M6	0613952R66	RES:MF,0OHM,5%,.0625W, SM,0402*	R6406M6	0613952R01	RES:MF,10KOHM,5%,.0625 W,SM,0402*
R6107M6	0613952Q55	RES:MF,180OHM,5%,.0625 W,SM,0402*	R614M19	0613952R66	RES:MF,0OHM,5%,.0625W, SM,0402*	R6217M6	0613952Q73	CER CHIP RES 1000 OHM 5 0402	R6407M6	0613952Q81	RES:MF,2.2KOHM,5%,.062 5W,SM,0402*
R6108M6	0613952Q61	CER CHIP RES 330 OHM 5 0402	R615M19	NOTPLACED	N/A	R6218M6	0613952Q80	CER CHIP RES 2000 OHM 5 0402	R6409M6	0613952N01	RES:MF,10KOHM,1%,.0625 W,SM,0402*
R6109M6	0613952Q73	CER CHIP RES 1000 OHM 5 0402	R616M19	NOTPLACED	N/A	R621M19	NOTPLACED	N/A	R6410M6	0613952R01	RES:MF,10KOHM,5%,.0625 W,SM,0402*
R610M19	0613952R25	RES:MF,100KOHM,5%,.062 5W,SM,0402*	R617M19	NOTPLACED	N/A	R623M19	NOTPLACED	N/A	R6411M6	0613952R66	RES:MF,0OHM,5%,.0625W, SM,0402*
R6110M6	NOTPLACED	N/A	R618M19	NOTPLACED	N/A	R624M19	NOTPLACED	N/A	R6414M6	0613952Q61	CER CHIP RES 330 OHM 5 0402
R6111M6	0613952Q73	CER CHIP RES 1000 OHM 5 0402	R619M19	NOTPLACED	N/A	R6301M6	0613952R01	RES:MF,10KOHM,5%,.0625 W,SM,0402*	R6415M6	0613952Q61	CER CHIP RES 330 OHM 5 0402
R6112M6	0613952Q73	CER CHIP RES 1000 OHM 5 0402	R6201M6	NOTPLACED	N/A	R6304M6	0613952R66	RES:MF,0OHM,5%,.0625W, SM,0402*			
			R6202M6	0613952R01	RES:MF,10KOHM,5%,.0625 W,SM,0402*	R63050M6	0613952R66	RES:MF,0OHM,5%,.0625W, SM,0402*			
			R6203M6	0613952R66	RES:MF,0OHM,5%,.0625W, SM,0402*	R6305M6	0613952R66	RES:MF,0OHM,5%,.0625W, SM,0402*			

Ref. Des.	Part Number	Description	Ref. Des.	Part Number	Description	Ref. Des.	Part Number	Description	Ref. Des.	Part Number	Description
R6416M6	0613952Q61	CER CHIP RES 330 OHM 5 0402	R6501M6	0613952Q25	RES:MF,10OHM,5%,.0625 W,SM,0402*	R6521M6	0615049H01	KAMAYA 0.2 OHM CHIP RESISTOR	R6543M6	0613952R66	RES:MF,0OHM,5%,.0625W, SM,0402*
R6417M6	0613952Q61	CER CHIP RES 330 OHM 5 0402	R6502M6	0613952Q25	RES:MF,10OHM,5%,.0625 W,SM,0402*	R6522M6	0613952M66	CER CHIP RES 4750 OHM 1% 0402	R6544M6	0613952R66	RES:MF,0OHM,5%,.0625W, SM,0402*
R6419M6	0613952Q37	RES:MF,330OHM,5%,.0625 W,SM,0402*	R6503M6	0613952Q25	RES:MF,10OHM,5%,.0625 W,SM,0402*	R6523M6	0613952R09	CER CHIP RES 22K OHM 5% 0402	R6545M6	0613952R25	RES:MF,100KOHM,5%,.062 5W,SM,0402*
R6420M6	0613952R17	RESISTOR,METAL FILM,47KOHM,5%,.0625W, SM,0402,200PPM/CEL,PB-FREE	R6504M6	0613952R09	CER CHIP RES 22K OHM 5% 0402	R6524M6	0613952R66	RES:MF,0OHM,5%,.0625W, SM,0402*	R6546M6	0613952R66	RES:MF,0OHM,5%,.0625W, SM,0402*
R6421M6	0613952R01	RES:MF,10KOHM,5%,.0625 W,SM,0402*	R6505M6	0613952Q80	CER CHIP RES 2000 OHM 5 0402	R6525M6	NOTPLACED	N/A	R6547M6	0613952R66	RES:MF,0OHM,5%,.0625W, SM,0402*
R6422M6	0613952Q51	CER CHIP RES 120 OHM 5 0402	R6506M6	0613952R66	RES:MF,0OHM,5%,.0625W, SM,0402*	R6526M6	0613952R66	RES:MF,0OHM,5%,.0625W, SM,0402*	R6548M6	NOTPLACED	N/A
R6423M6	0613952R66	RES:MF,0OHM,5%,.0625W, SM,0402*	R6507M6	0613952R01	RES:MF,10KOHM,5%,.0625 W,SM,0402*	R6527M6	0613952N87	CER CHIP RES 78.7K OHM 1 0402	R6550M6	0613952Z64	RES,MF,39KOHM,1%,.0625 W,SM,0402,200PPM/ CEL,PB-FREE
R6424M6	0613952N01	RES:MF,10KOHM,1%,.0625 W,SM,0402*	R6508M6	0613952R17	RESISTOR,METAL FILM,47KOHM,5%,.0625W, SM,0402,200PPM/CEL,PB-FREE	R6528M6	0613952R25	RES:MF,100KOHM,5%,.062 5W,SM,0402*	R6551M6	0613952Z62	RES,MF,33KOHM,1%,.0625 W,SM,0402,200PPM/ CEL,PB-FREE
R6425M6	0613952Q80	CER CHIP RES 2000 OHM 5 0402	R6509M6	0613952R25	RES:MF,100KOHM,5%,.062 5W,SM,0402*	R6529M6	0615049H01	KAMAYA 0.2 OHM CHIP RESISTOR	R6552M6	0613952R25	RES:MF,100KOHM,5%,.062 5W,SM,0402*
R6426M6	0613952Q49	CER CHIP RES 100 OHM 5 0402	R6510M6	0613952R66	RES:MF,0OHM,5%,.0625W, SM,0402*	R6530M6	0613952L30	CER CHIP RES 200 OHM 1 0402	R6558M6	0613952P22	RES:MF,165KOHM,1%,.062 5W,SM,0402*
R6427M6	0613952R11	CER CHIP RES 27K OHM 5% 0402	R6511M6	0613952R01	RES:MF,10KOHM,5%,.0625 W,SM,0402*	R6531M6	0613952R01	RES:MF,10KOHM,5%,.0625 W,SM,0402*	R6561M6	0613952R66	RES:MF,0OHM,5%,.0625W, SM,0402*
R6428M6	0613952R25	RES:MF,100KOHM,5%,.062 5W,SM,0402*	R6512M6	0613952N01	RES:MF,10KOHM,1%,.0625 W,SM,0402*	R6532M6	NOTPLACED	N/A	R6562M6	0613952R66	RES:MF,0OHM,5%,.0625W, SM,0402*
R6429M6	0613952R17	RESISTOR,METAL FILM,47KOHM,5%,.0625W, SM,0402,200PPM/CEL,PB-FREE	R6513M6	0613952R66	RES:MF,0OHM,5%,.0625W, SM,0402*	R6533M6	0613952R66	RES:MF,0OHM,5%,.0625W, SM,0402*	R6563M6	0613952R66	RES:MF,0OHM,5%,.0625W, SM,0402*
R6430M6	0613952R09	CER CHIP RES 22K OHM 5% 0402	R6514M6	0613952Q89	RES:MF,4.7KOHM,5%,.062 5W,SM,0402*	R6534M6	NOTPLACED	N/A	R6564M6	0613952R66	RES:MF,0OHM,5%,.0625W, SM,0402*
R6431M6	0613952Q81	RES:MF,2.2KOHM,5%,.062 5W,SM,0402*	R6515M6	0613952R66	RES:MF,0OHM,5%,.0625W, SM,0402*	R6535M6	0613952N01	RES:MF,10KOHM,1%,.0625 W,SM,0402*	R6565M6	0613952R66	RES:MF,0OHM,5%,.0625W, SM,0402*
R6432M6	0613952R25	RES:MF,100KOHM,5%,.062 5W,SM,0402*	R6516M6	0613952R66	RES:MF,0OHM,5%,.0625W, SM,0402*	R6536M6	0613952Z72	RES:MF,91KOHM,1%,.0625 W,SM,0402,200PPM/*	R6566M6	0613952R66	RES:MF,0OHM,5%,.0625W, SM,0402*
R6433M6	0613952Q32	CER CHIP RES 20.0 OHM 5 0402	R6517M6	0613952Q63	RES:MF,390OHM,5%,.0625 W,SM,0402*	R6537M6	0613952P09	CER CHIP RES 121K OHM 1 0402	R6567M6	0613952R66	RES:MF,0OHM,5%,.0625W, SM,0402*
R6434M6	0613952Q32	CER CHIP RES 20.0 OHM 5 0402	R6518M6	0613952R66	RES:MF,0OHM,5%,.0625W, SM,0402*	R6538M6	0613952Q95	CER CHIP RES 8200 OHM 5 0402	R6568M6	0613952P47	CER CHIP RES 301K OHM 1 0402
R6492M6	0613952Q79	CER CHIP RES 1800 OHM 5 0402	R6519M6	0613952Q89	RES:MF,4.7KOHM,5%,.062 5W,SM,0402*	R6539M6	0613952P66	CER CHIP RES 475K OHM 1 0402	R6570M6	0613952R66	RES:MF,0OHM,5%,.0625W, SM,0402*
			R6520M6	0613952Q73	CER CHIP RES 1000 OHM 5 0402	R6540M6	0613952P66	CER CHIP RES 475K OHM 1 0402	R6574M6	0613952R25	RES:MF,100KOHM,5%,.062 5W,SM,0402*
						R6541M6	0613952R25	RES:MF,100KOHM,5%,.062 5W,SM,0402*			
						R6542M6	0613952R66	RES:MF,0OHM,5%,.0625W, SM,0402*			

Ref. Des.	Part Number	Description
R6576M6	0613952R01	RES:MF,10KOHM,5%,.0625 W,SM,0402*
R6577M6	0613952Q89	RES:MF,4.7KOHM,5%,.0625 W,SM,0402*
R6578M6	0613952Q89	RES:MF,4.7KOHM,5%,.0625 W,SM,0402*
R6579M6	0613952R01	RES:MF,10KOHM,5%,.0625 W,SM,0402*
R6580M6	0613952R17	RESISTOR,METAL FILM,47KOHM,5%,.0625W, SM,0402,200PPM/CEL,PB-FREE
R6581M6	0613952Q49	CER CHIP RES 100 OHM 5 0402
R6582M6	0613952Q89	RES:MF,4.7KOHM,5%,.0625 W,SM,0402*
R6583M6	0613952R03	CER CHIP RES 12K OHM 5% 0402
R6584M6	0613952Q56	CER CHIP RES 200 OHM 5 0402
R6591M6	0613952R66	RES:MF,0OHM,5%,.0625W, SM,0402*
R6592M6	0613952R66	RES:MF,0OHM,5%,.0625W, SM,0402*
R6598M6	NOTPLACED	N/A
R6599M6	0613952R01	RES:MF,10KOHM,5%,.0625 W,SM,0402*
R6601M6	0613952R01	RES:MF,10KOHM,5%,.0625 W,SM,0402*
R6602M6	0613952R01	RES:MF,10KOHM,5%,.0625 W,SM,0402*
R6604M6	0613952Q51	CER CHIP RES 120 OHM 5 0402
R6605M6	0613952Q33	RES:MF,22OHM,5%,.0625 W,SM,0402*
R6606M6	0613952Q37	RES:MF,33OHM,5%,.0625 W,SM,0402*
R6608M6	0613952R01	RES:MF,10KOHM,5%,.0625 W,SM,0402*
R6609M6	0613952R25	RES:MF,100KOHM,5%,.0625 W,SM,0402*

Ref. Des.	Part Number	Description
R6616M6	0613952Q80	CER CHIP RES 2000 OHM 5 0402
R6617M6	0613952R01	RES:MF,10KOHM,5%,.0625 W,SM,0402*
R6618M6	0613952R01	RES:MF,10KOHM,5%,.0625 W,SM,0402*
R6619M6	0613952R01	RES:MF,10KOHM,5%,.0625 W,SM,0402*
R6621M6	0613952Q89	RES:MF,4.7KOHM,5%,.0625 W,SM,0402*
R6622M6	0613952Q35	CER CHIP RES 27.0 OHM 5 0402
R6623M6	0613952Q35	CER CHIP RES 27.0 OHM 5 0402
R6624M6	0613952Q35	CER CHIP RES 27.0 OHM 5 0402
R6625M6	0613952Q35	CER CHIP RES 27.0 OHM 5 0402
R6626M6	0613952R01	RES:MF,10KOHM,5%,.0625 W,SM,0402*
R698M19	0613952R66	RES:MF,0OHM,5%,.0625W, SM,0402*
R699M19	0613952R66	RES:MF,0OHM,5%,.0625W, SM,0402*
R701M7	0613952Q64	CER CHIP RES 430 OHM 5 0402
R702M7	0613952R66	RES:MF,0OHM,5%,.0625W, SM,0402*
R703M7	0613952Q67	CER CHIP RES 560 OHM 5 0402
R704M7	0613952Q25	RES:MF,10OHM,5%,.0625 W,SM,0402*
R705M7	0613952Q71	CER CHIP RES 820 OHM 5 0402
R706M7	0613952R66	RES:MF,0OHM,5%,.0625W, SM,0402*
R707M7	0613952Q67	CER CHIP RES 560 OHM 5 0402
R708M7	0613952Q45	CER CHIP RES 68.0 OHM 5 0402
R709M7	NOTPLACED	N/A

Ref. Des.	Part Number	Description
R710M7	NOTPLACED	N/A
R711M7	NOTPLACED	N/A
R721M7	0613952R01	RES:MF,10KOHM,5%,.0625 W,SM,0402*
R722M7	0613952Q71	CER CHIP RES 820 OHM 5 0402
R723M7	0613952Q79	CER CHIP RES 1800 OHM 5 0402
R728M7	0613952Q63	RES:MF,390OHM,5%,.0625 W,SM,0402*
R729M7	0613952R09	CER CHIP RES 22K OHM 5% 0402
R730M7	0613952Q79	CER CHIP RES 1800 OHM 5 0402
R731M7	0613952Q86	CER CHIP RES 3600 OHM 5 0402
R736M7	0613952R66	RES:MF,0OHM,5%,.0625W, SM,0402*
R741M7	0613952R09	CER CHIP RES 22K OHM 5% 0402
R742M7	0613952R23	CER CHIP RES 82K OHM 5% 0402
R743M7	0613952R17	RESISTOR,METAL FILM,47KOHM,5%,.0625W, SM,0402,200PPM/CEL,PB-FREE
R744M7	0613952Q91	CER CHIP RES 5600 OHM 5 0402
R745M7	0613952R09	CER CHIP RES 22K OHM 5% 0402
R746M7	0613952Q34	CER CHIP RES 24.0 OHM 5 0402
R747M7	0613952Q37	RES:MF,33OHM,5%,.0625 W,SM,0402*
R748M7	0613952Q47	CER CHIP RES 82.0 OHM 5% 0402
R751M7	0613952Q59	CER CHIP RES 270 OHM 5 0402
R754M7	NOTPLACED	N/A
R757M7	0613952Q59	CER CHIP RES 270 OHM 5 0402

Ref. Des.	Part Number	Description
R761M7	0613952Q23	CER CHIP RES 8.2 OHM 5 0402
R762M7	0613952R08	CER CHIP RES 20K OHM 5 0402
R763M7	0613952R19	CER CHIP RES 56K OHM 5% 0402
R766M7	0613952Q92	CER CHIP RES 6200 OHM 5 0402
R769M7	0613952Q31	CER CHIP RES 18.0 OHM 5 0402
R771M7	0613952Q49	CER CHIP RES 100 OHM 5 0402
R776M7	0613952Q67	CER CHIP RES 560 OHM 5 0402
R778M7	0613952Q32	CER CHIP RES 20.0 OHM 5 0402
R779M7	0613952Q49	CER CHIP RES 100 OHM 5 0402
R785M7	0613952Q53	RES:MF,150OHM,5%,.0625 W,SM,0402*
R799M7	0613952Q53	RES:MF,150OHM,5%,.0625 W,SM,0402*
R809M7	0613952Q38	CER CHIP RES 36.0 OHM 5 0402
R822M7	NOTPLACED	N/A
R823M7	NOTPLACED	N/A
S2103M2	40012069001	TACT SWITCH, EMERGENCY
SH1	26012144002	SHIELD TX-O/P
SH10	26012156001	SHIELD, MIXER
SH11	26012159001	SHIELD, VCO
SH12	26012152001	SHIELD, GPS/BT
SH13	26012161002	SHIELD CONTROLLER
SH14	26012143001	SHIELD, MAKO
SH15	26012160001	SHIELD, DRIVER
SH16	26012163001	SHIELD, RXFE
SH17	26012155001	SHIELD, 2ND_LO



Ref. Des.	Part Number	Description
U6501M6	5185143E77	IC, MAKO ASIC, CMOS PWR MGMT
U6502M6	4871987H01	LOW FREQUENCY TRANSISTOR
U6503M6	5171674H01	OP AMP
U6504M6	5171682H01	800MA BUCK REGULATOR
U6505M6	5189631P01	IC,SYNC STEP-DOWN CONV
U6506M6	5184790Y04	IC,400MA ADJ VREG LDO,SOT23
U6507M6	5171682H01	800MA BUCK REGULATOR
U6508M6	51009366001	500MA LOW DROPOUT CMOS LINEAR REG.
U6509M6	5175114H01	SINGLE AND GATE MICROPAK
U6510M6	5114007A47	IC,OR,17SZ32,1PER PKG,SOT-353,PB FREE
U6511M6	5171339H01	MICROPOWER VOLTAGE REGULATOR
U6601M6	5175114H01	SINGLE AND GATE MICROPAK
U702M7	5164015H28	IC:XCVR,AT46000,TRIDENT,BGA-121
U738M7	5171972L01	SP3T RF SWITCH
U746M7	4805218N63	RF TRANS SOT 323 BFQ67W
VR101M12	4813977M29	DIODE,VREF,MBZ5250,SM, SOT-23,20V,.225W,ZEN
VR1905M20	4815096H01	VARACTOR DIODE 1SV305
VR1906M20	4815096H01	VARACTOR DIODE 1SV305
VR1907M20	4815096H01	VARACTOR DIODE 1SV305
VR1908M20	4815096H01	VARACTOR DIODE 1SV305
VR1M2	4888116D01	VSTR, 150V,24V-DC, SM, PB FREE
VR200M12	4813977M29	DIODE,VREF,MBZ5250,SM, SOT-23,20V,.225W,ZEN
VR601M19	4805656W87	DIODE,VCTR, @ 15V,1SV279,,SOD-523/SC-79

Ref. Des.	Part Number	Description
VR602M19	4805656W87	DIODE,VCTR, @ 15V,1SV279,,SOD-523/SC-79
Y1304M3	48014600001	OSC,TCXO,26.0
Y6501M6	93012062001	CRYSTAL UNIT SMD 2.5X3.2 24.576MHZ
Y6502M6	4809995L15	XTAL 32KHZ 20PPM 3.2X2.1MM SMD
Y6601M6	93012046001	12MHZ CRYSTAL UNIT
Y701M7	4875188M01	CRYSTAL OSCILLATOR

### 8.4 Transceiver (RF) Boards: UHF2 (84012621001)

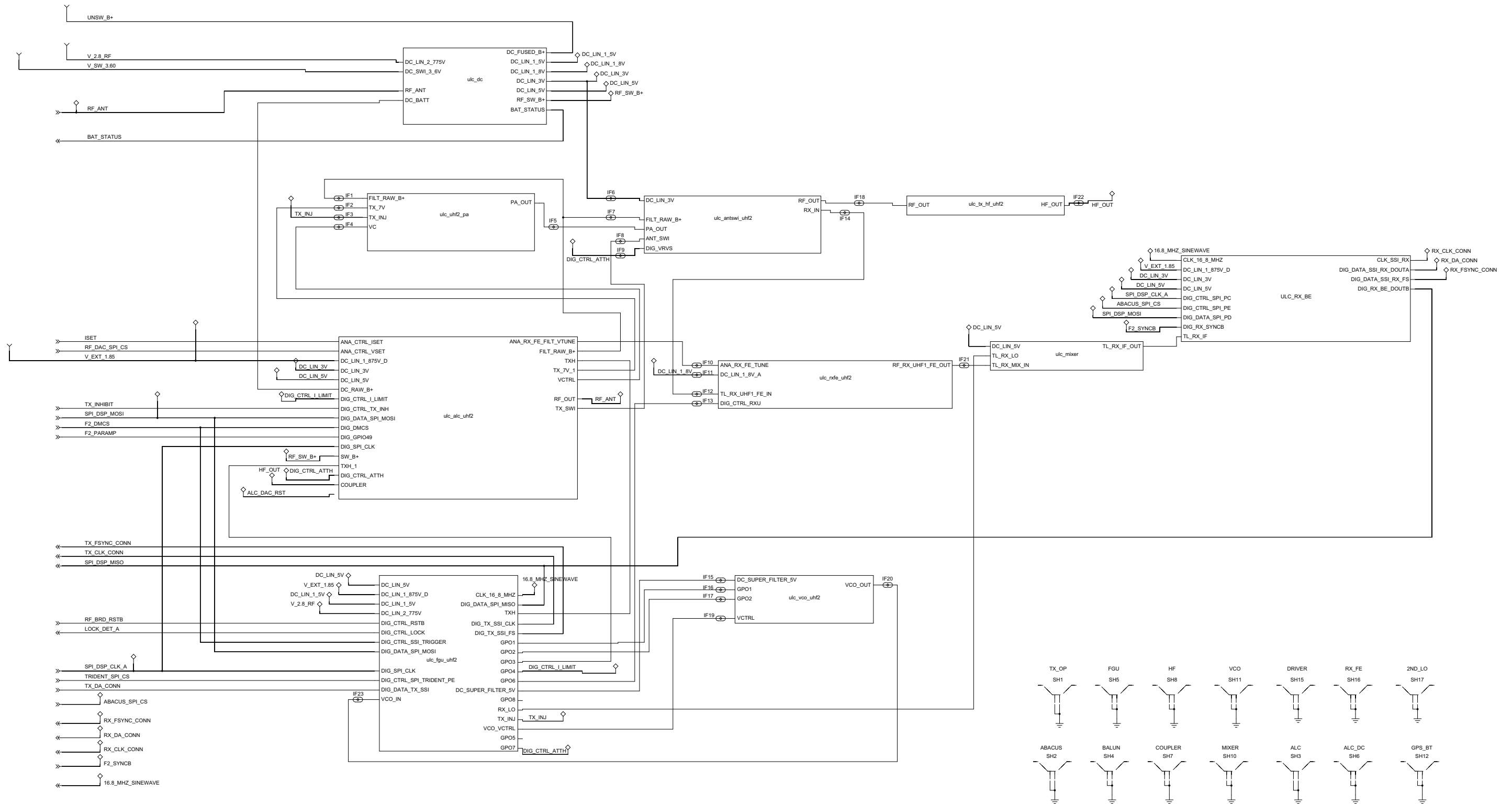


Figure 8-57. Transceiver (RF) Mainboard Overall Schematic

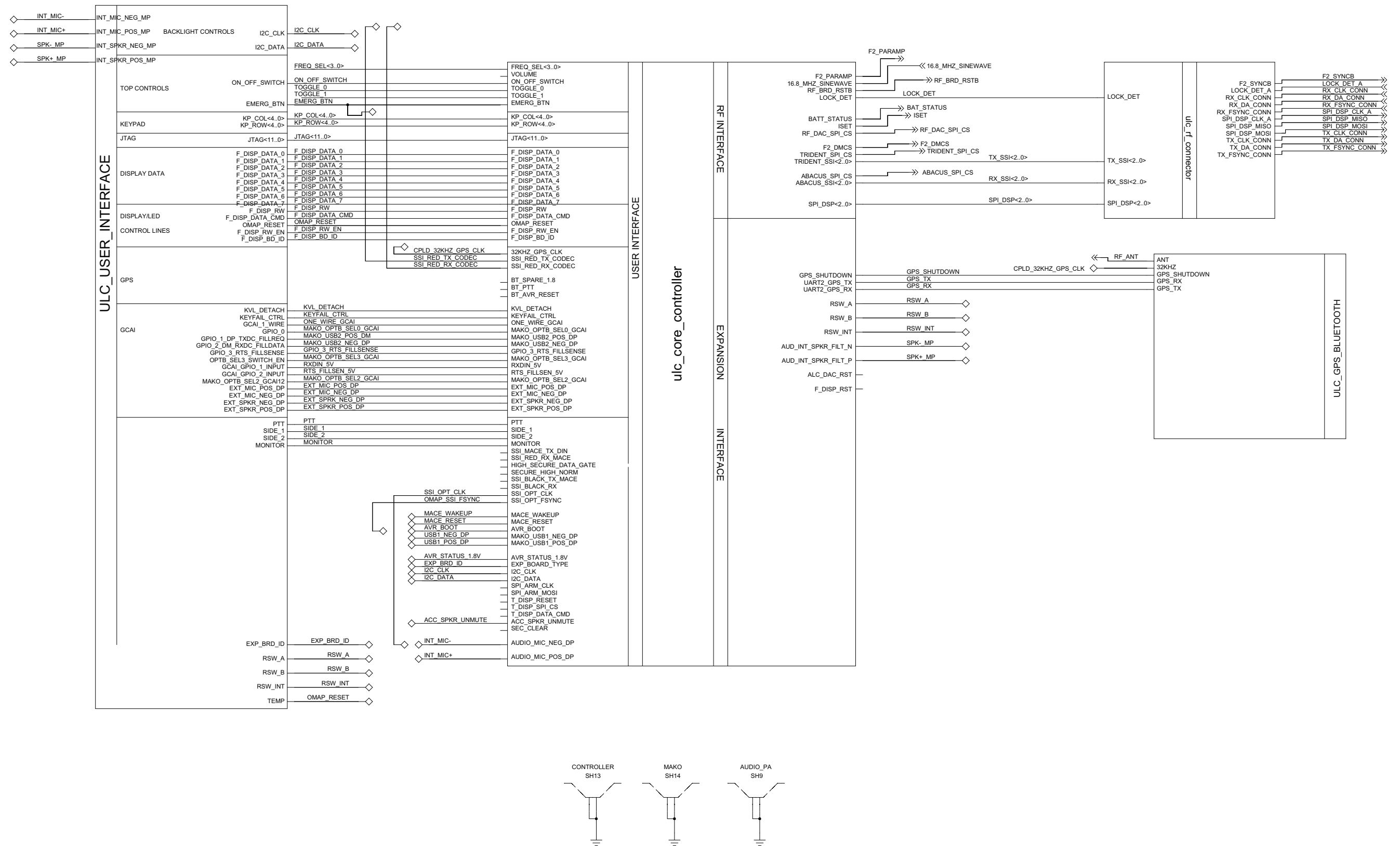


Figure 8-58. Controller Mainboard Circuit



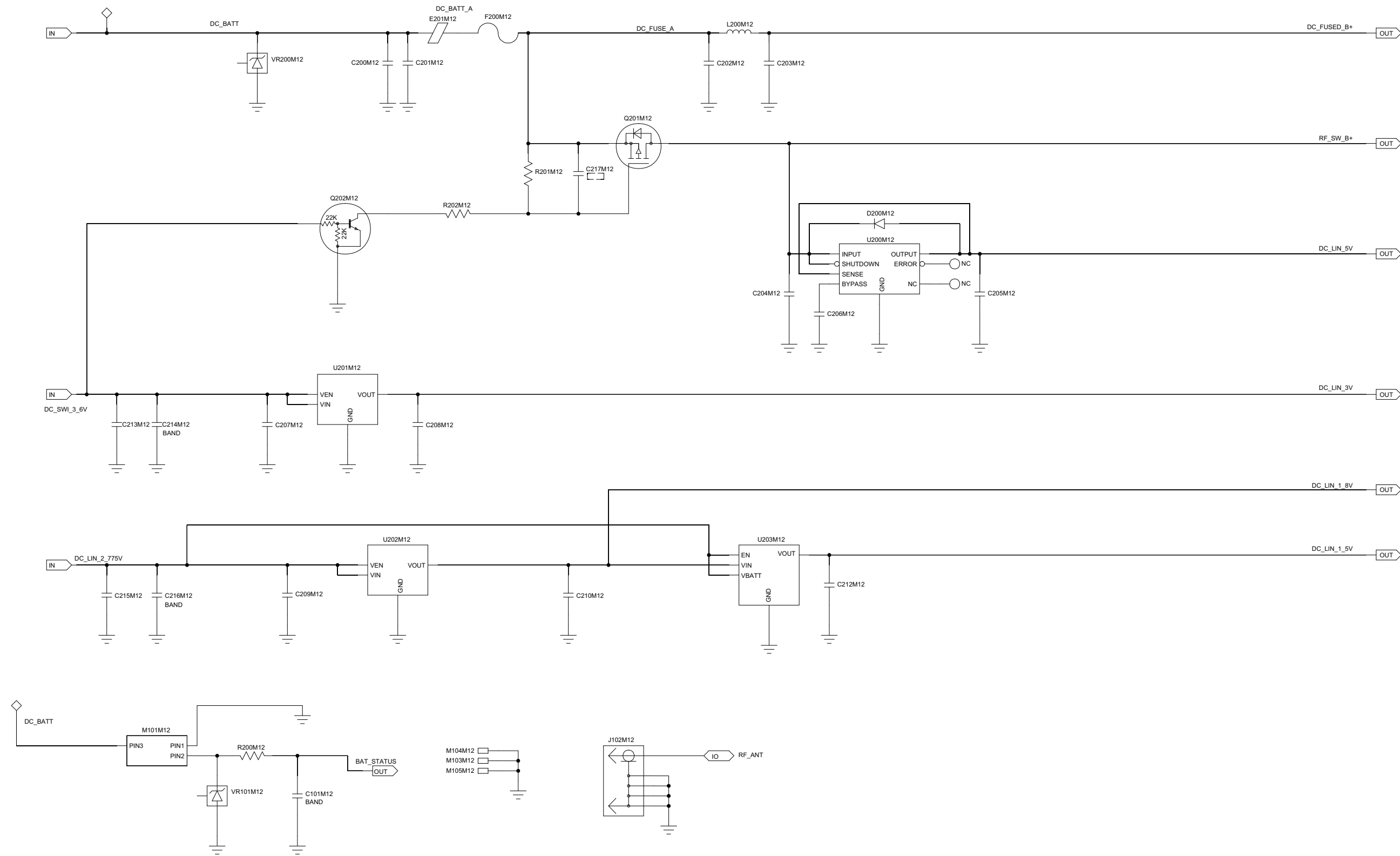


Figure 8-59. DC Circuit

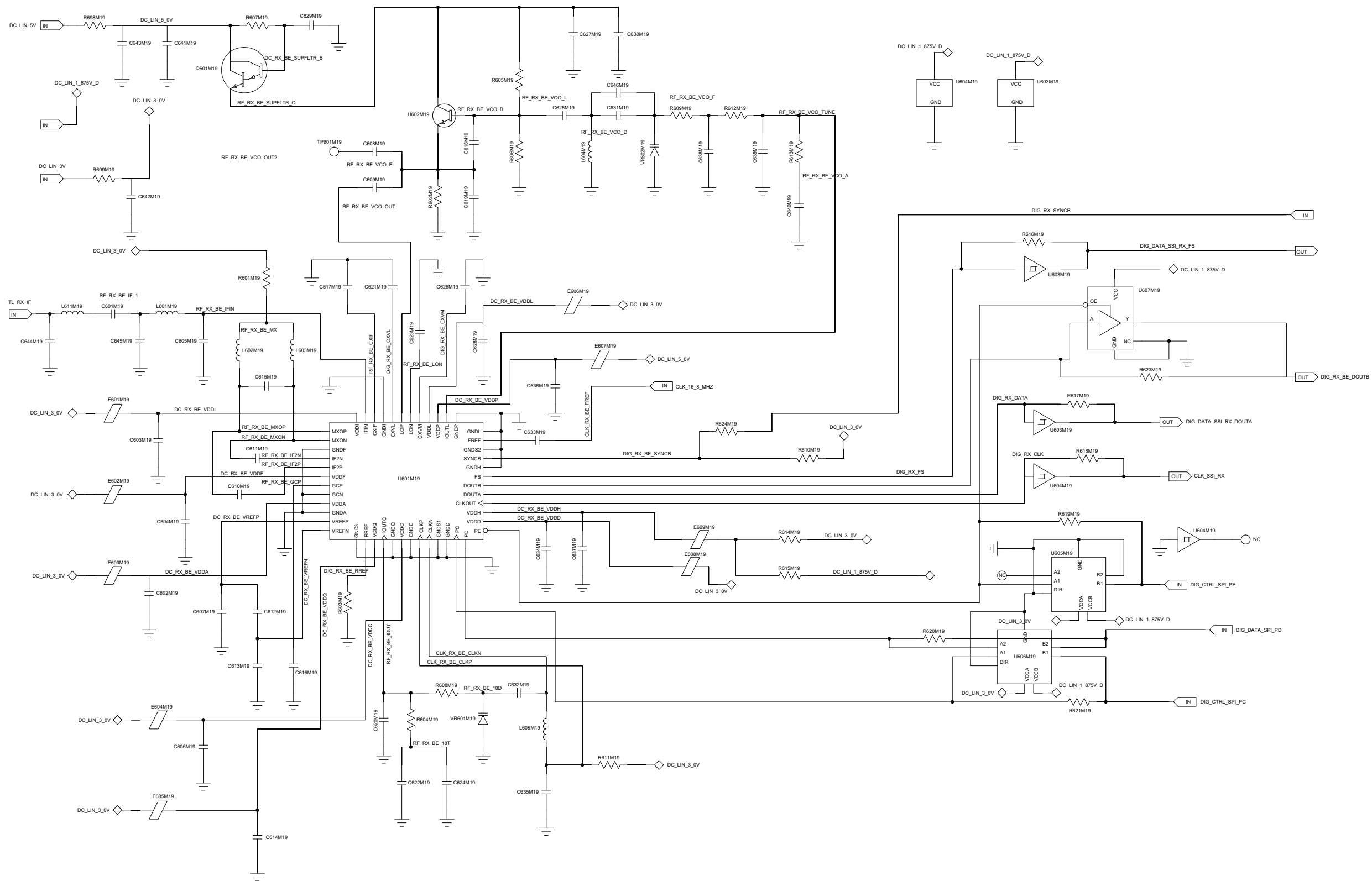


Figure 8-60. Receiver Back End Circuit

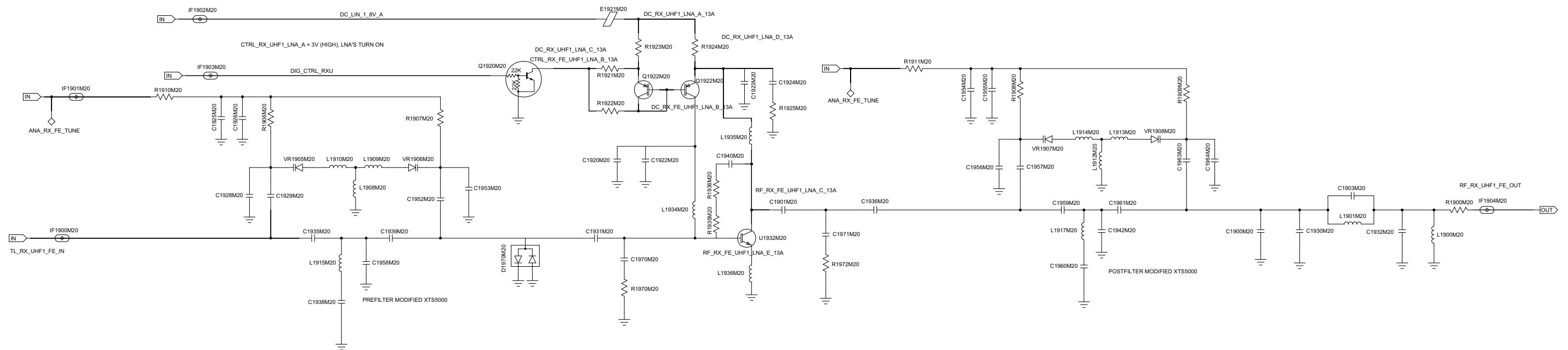


Figure 8-61. Receiver Front End Circuit

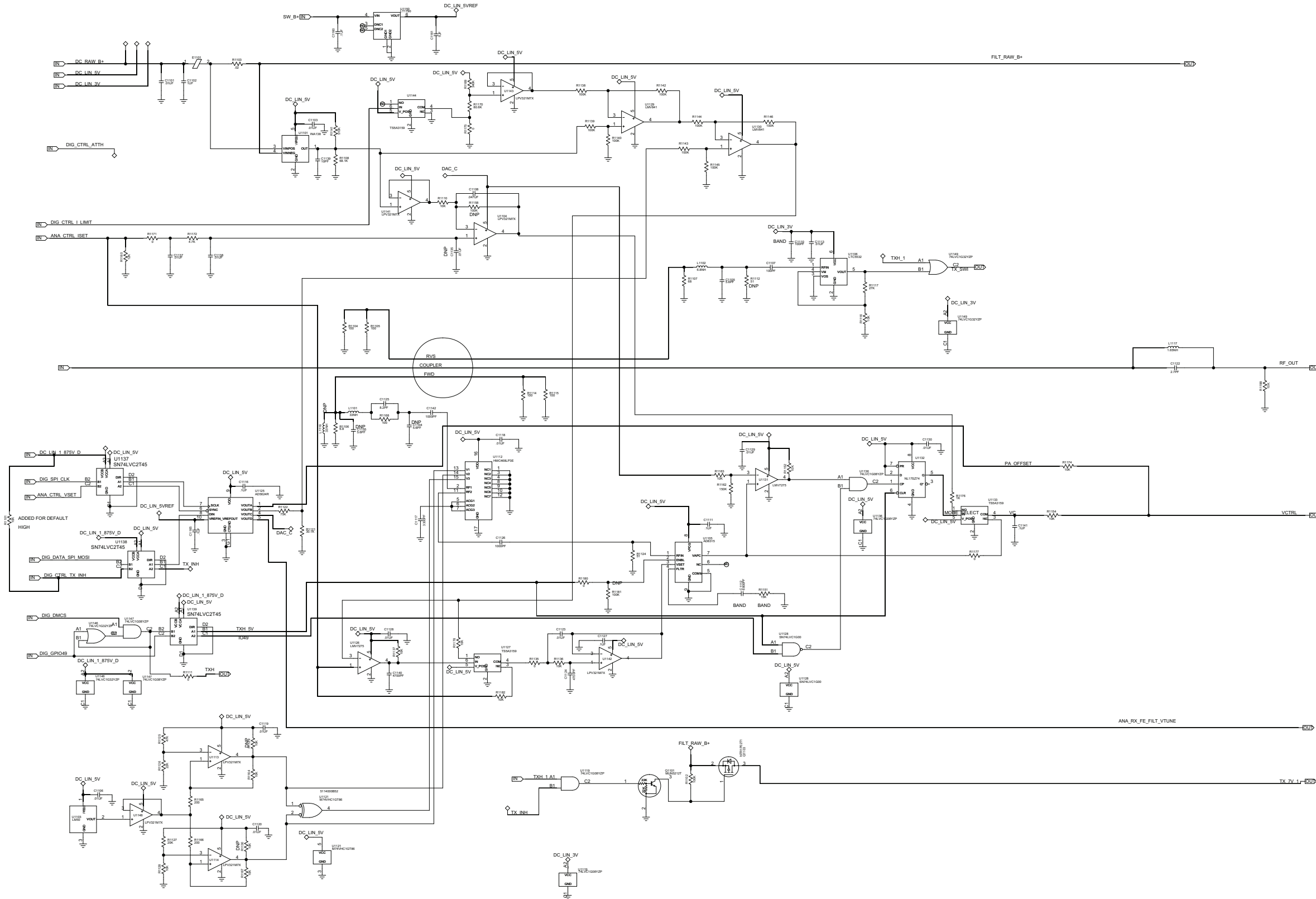


Figure 8-62. ANTSWI Circuit

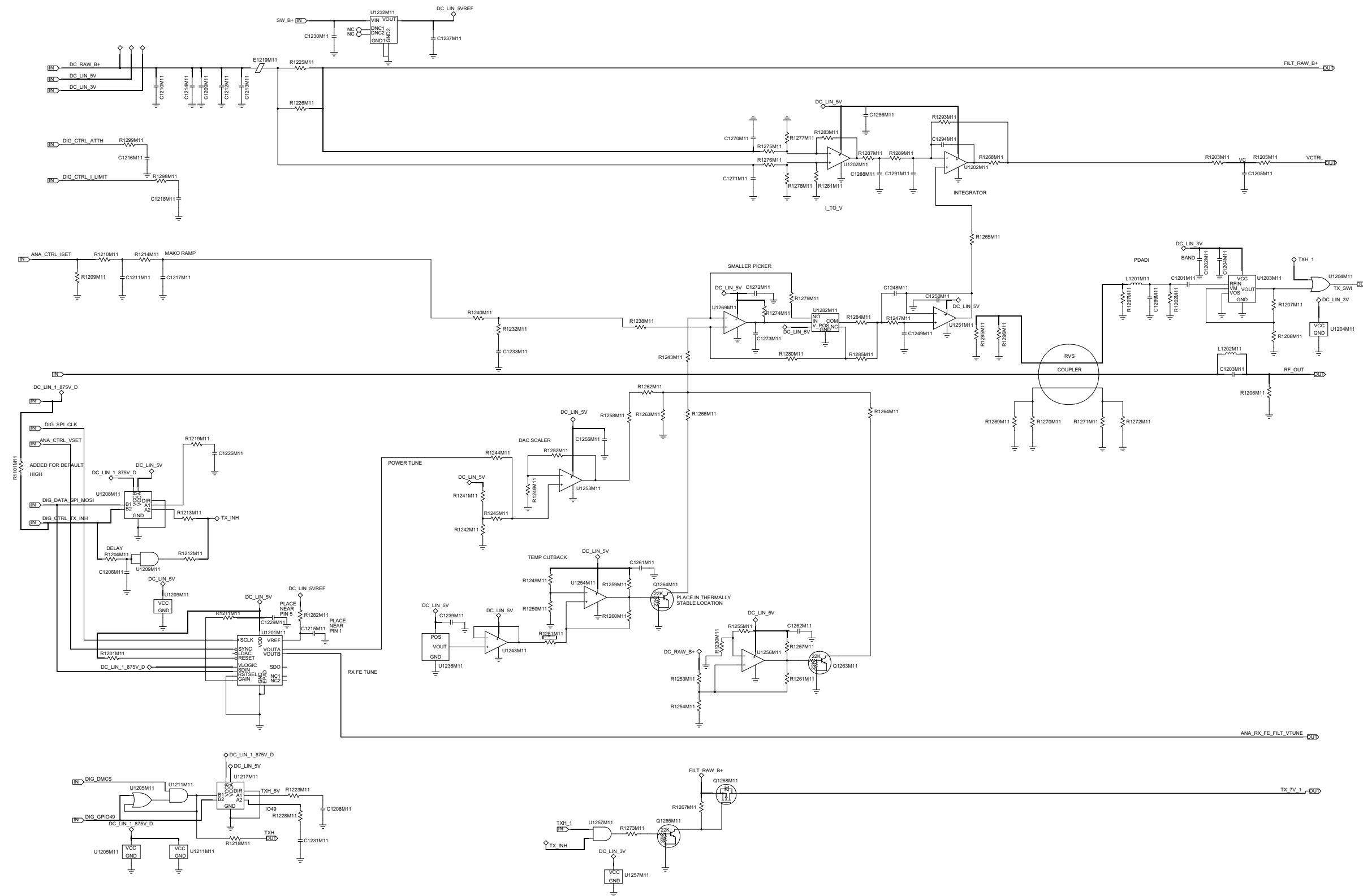


Figure 8-63. Automatic Level Control Circuit

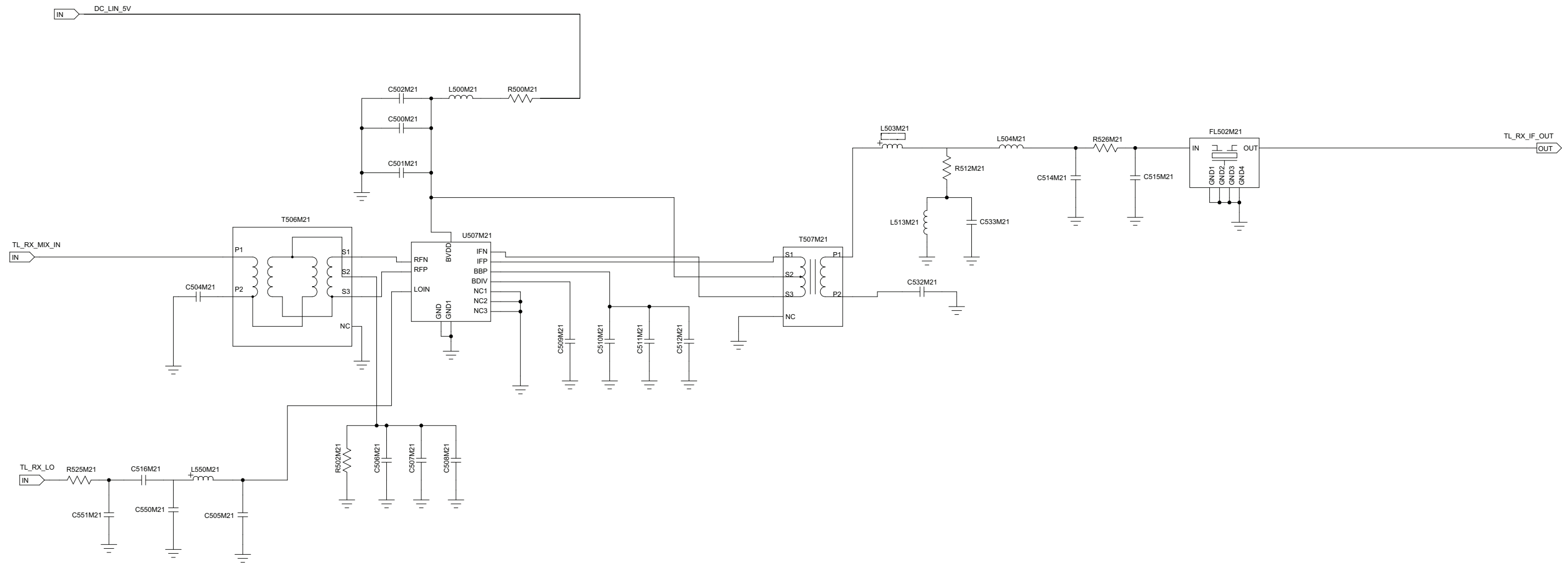


Figure 8-64. Receiver Back End Circuit

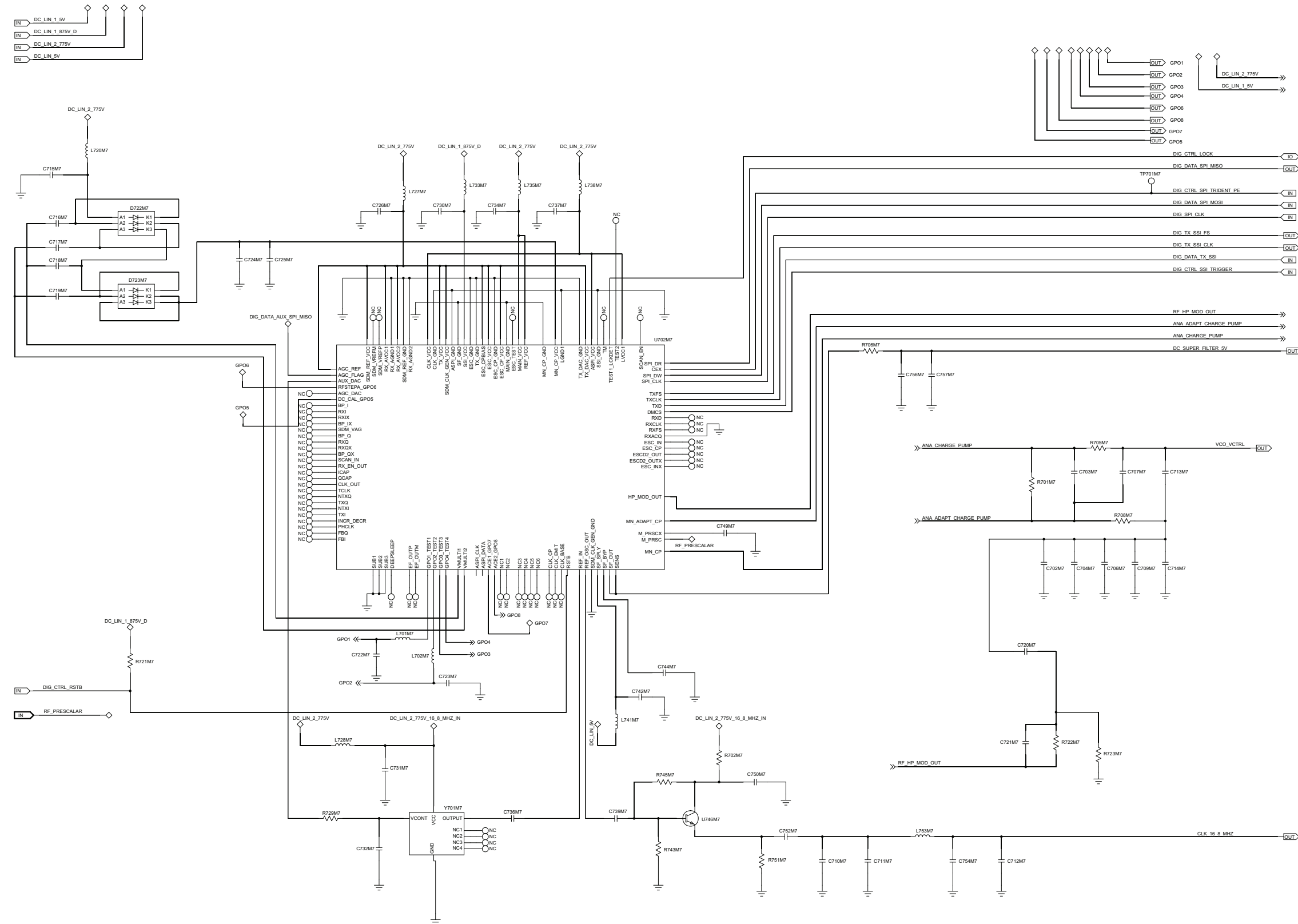


Figure 8-65. Trident Frequency Generation Unit

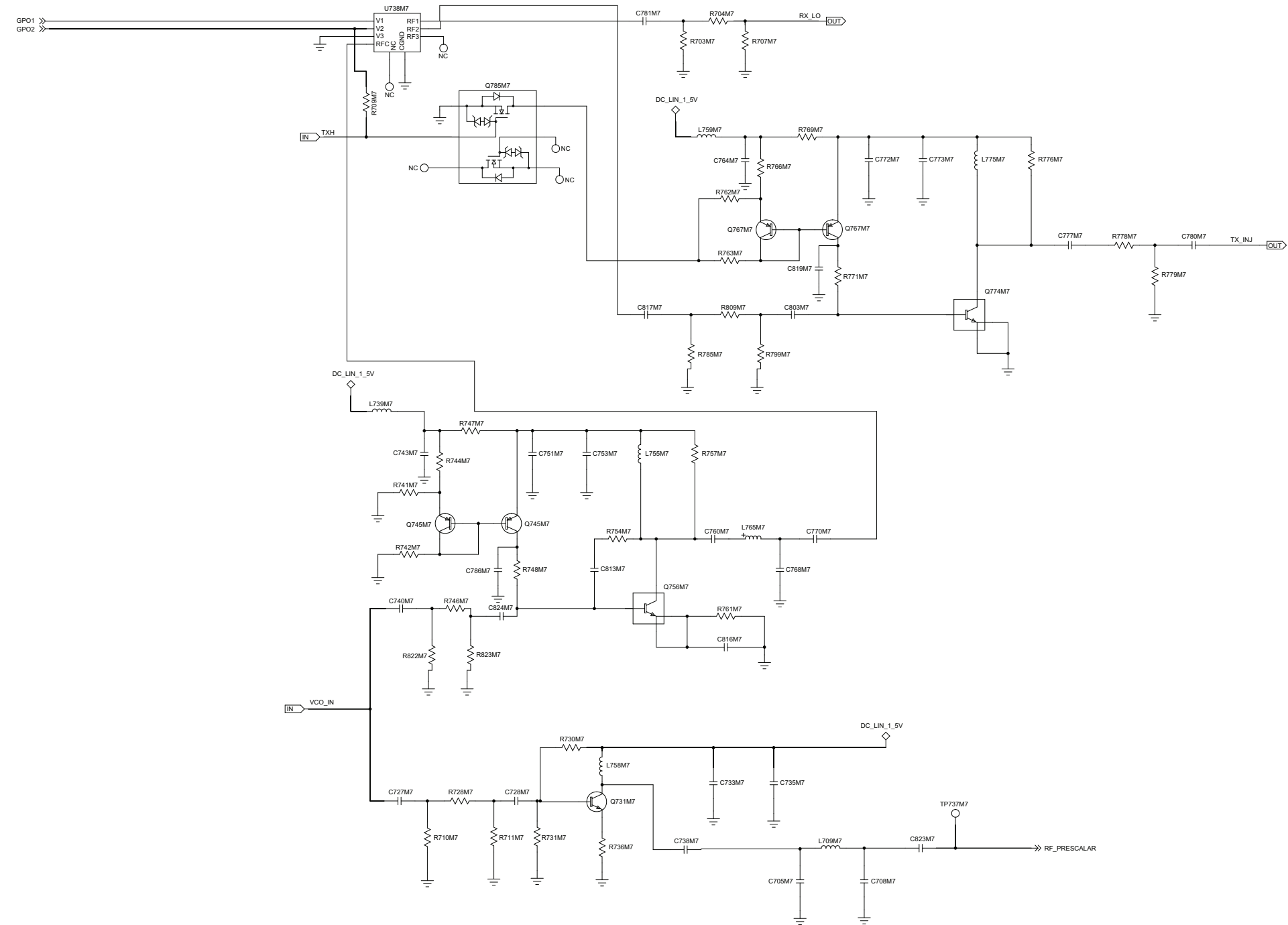
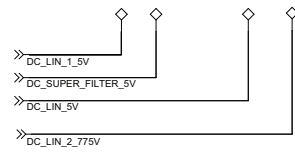


Figure 8-66. Buffer Frequency Generation Unit



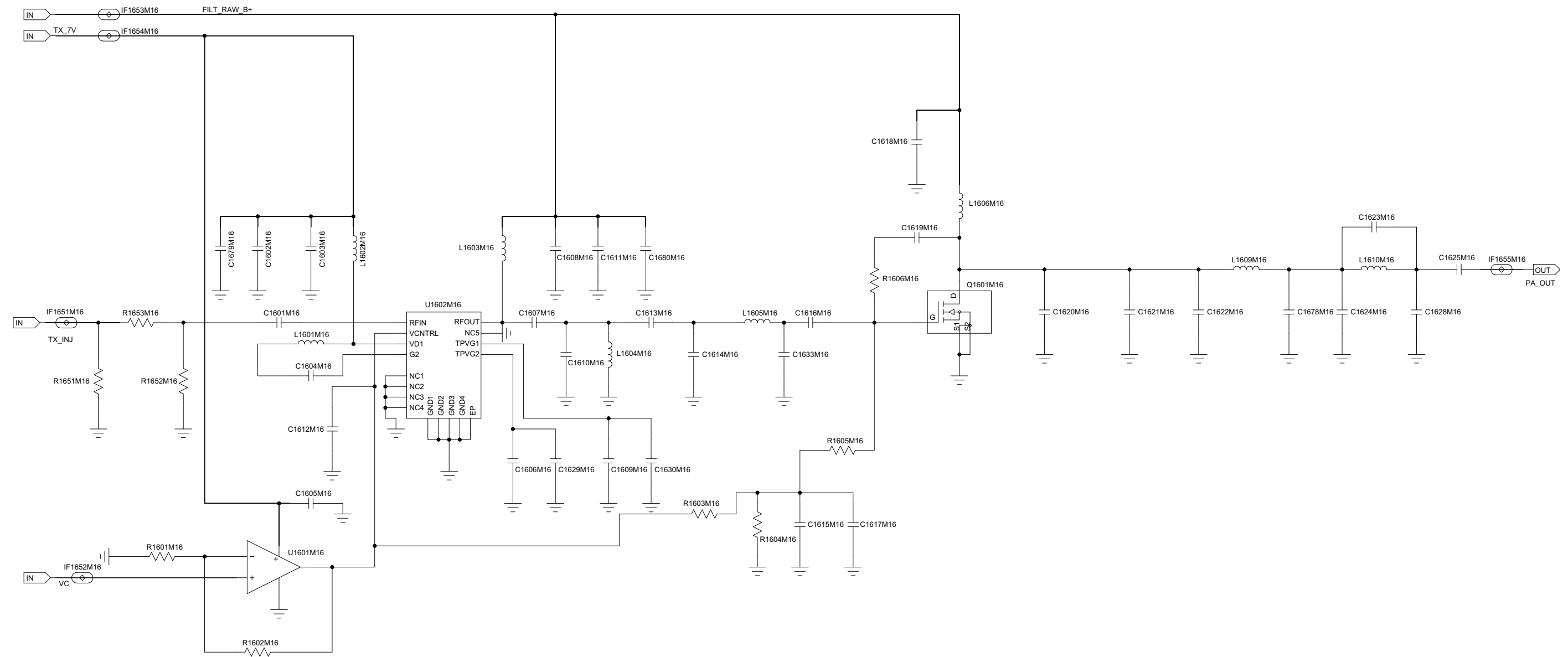


Figure 8-67. Power Amplifier Circuit

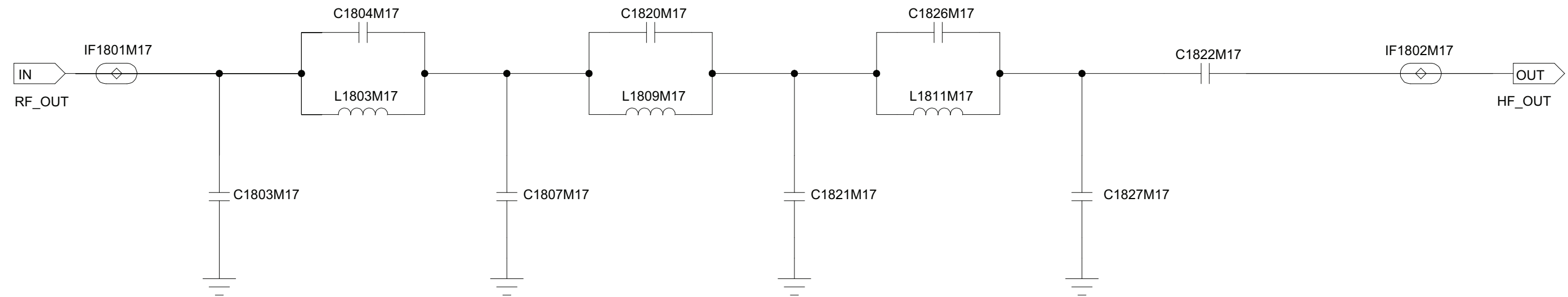


Figure 8-68. Transmitter HF Circuit

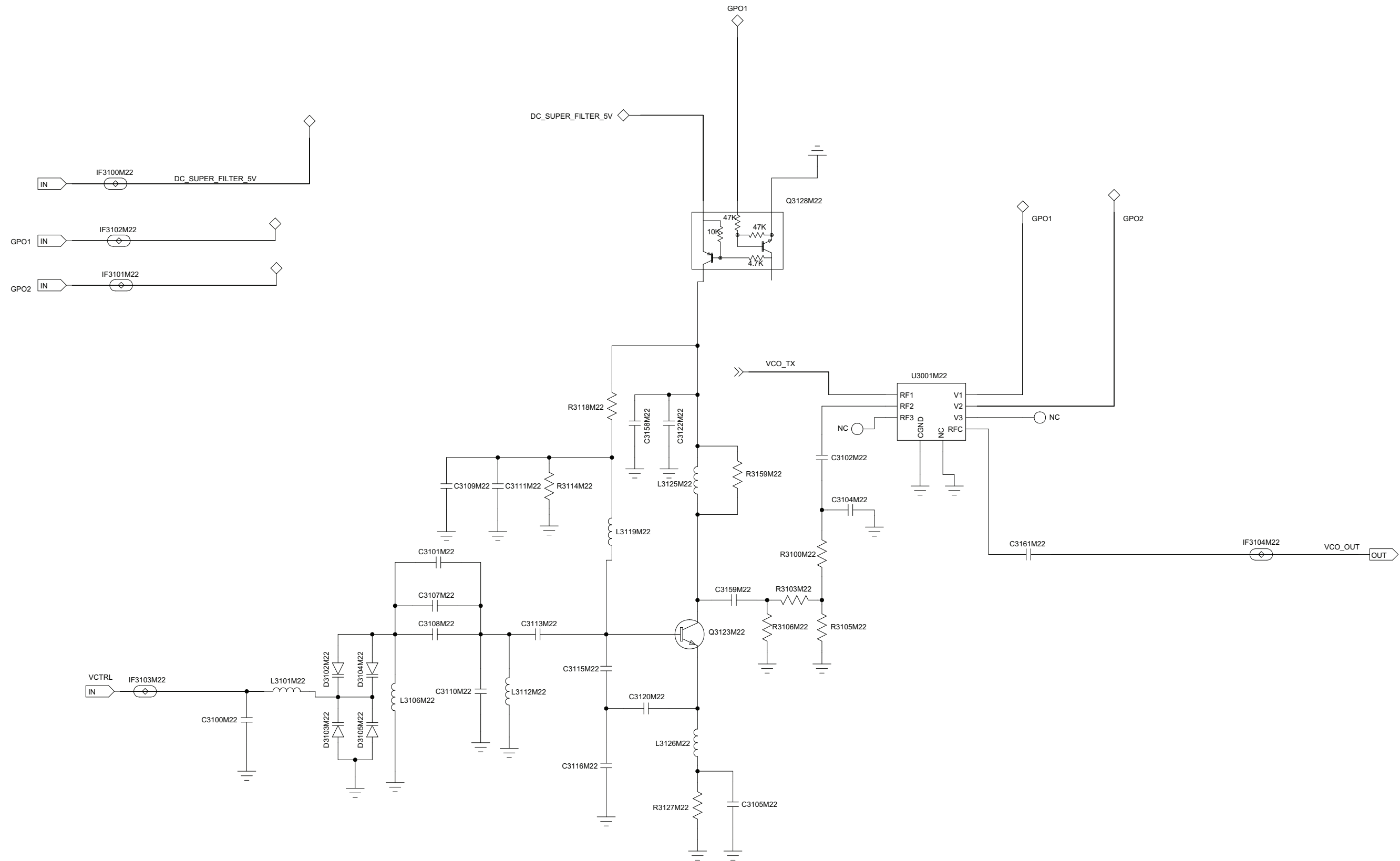


Figure 8-69. Receiver VCO Circuit

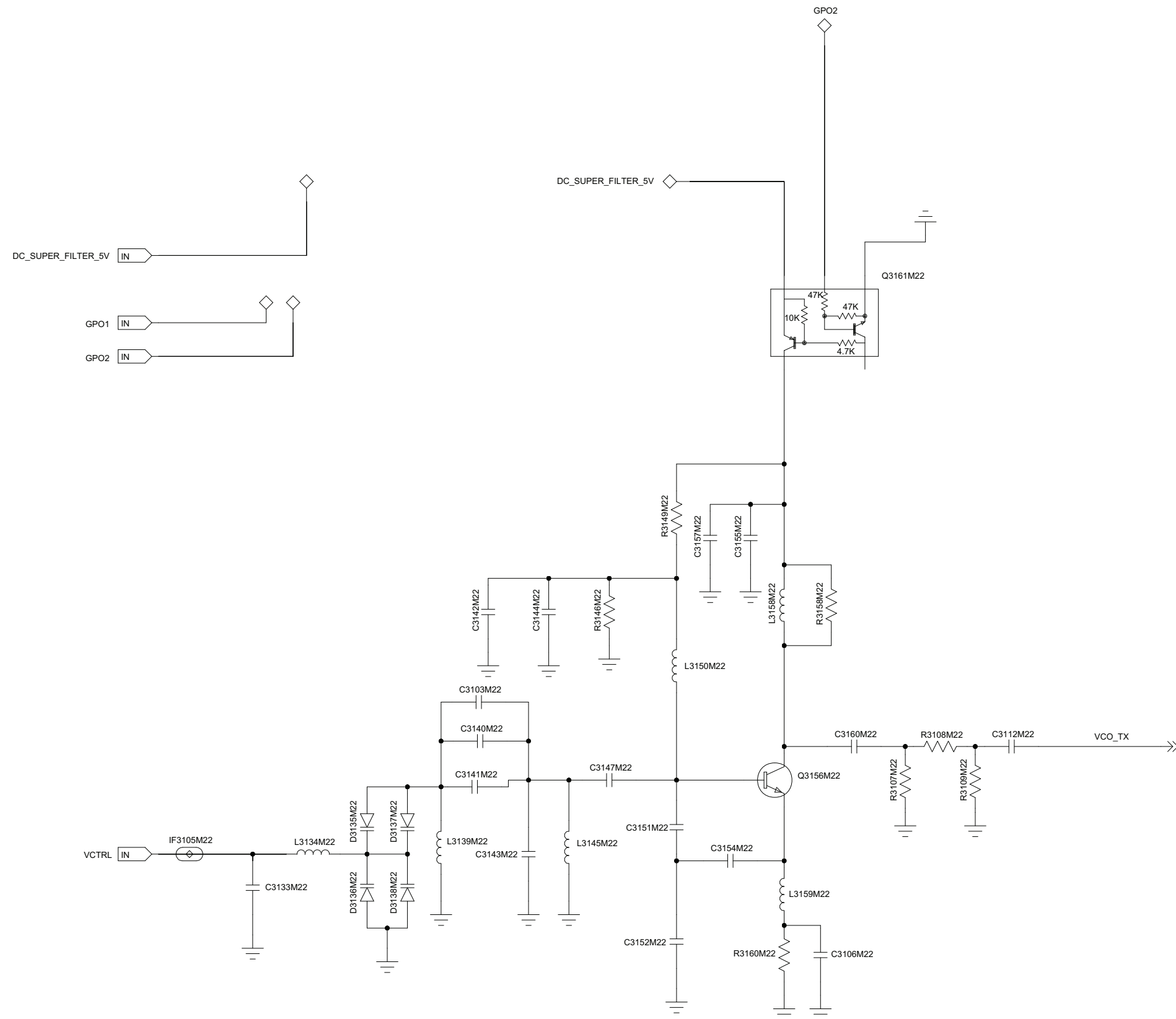


Figure 8-70. Transmitter VCO Circuit

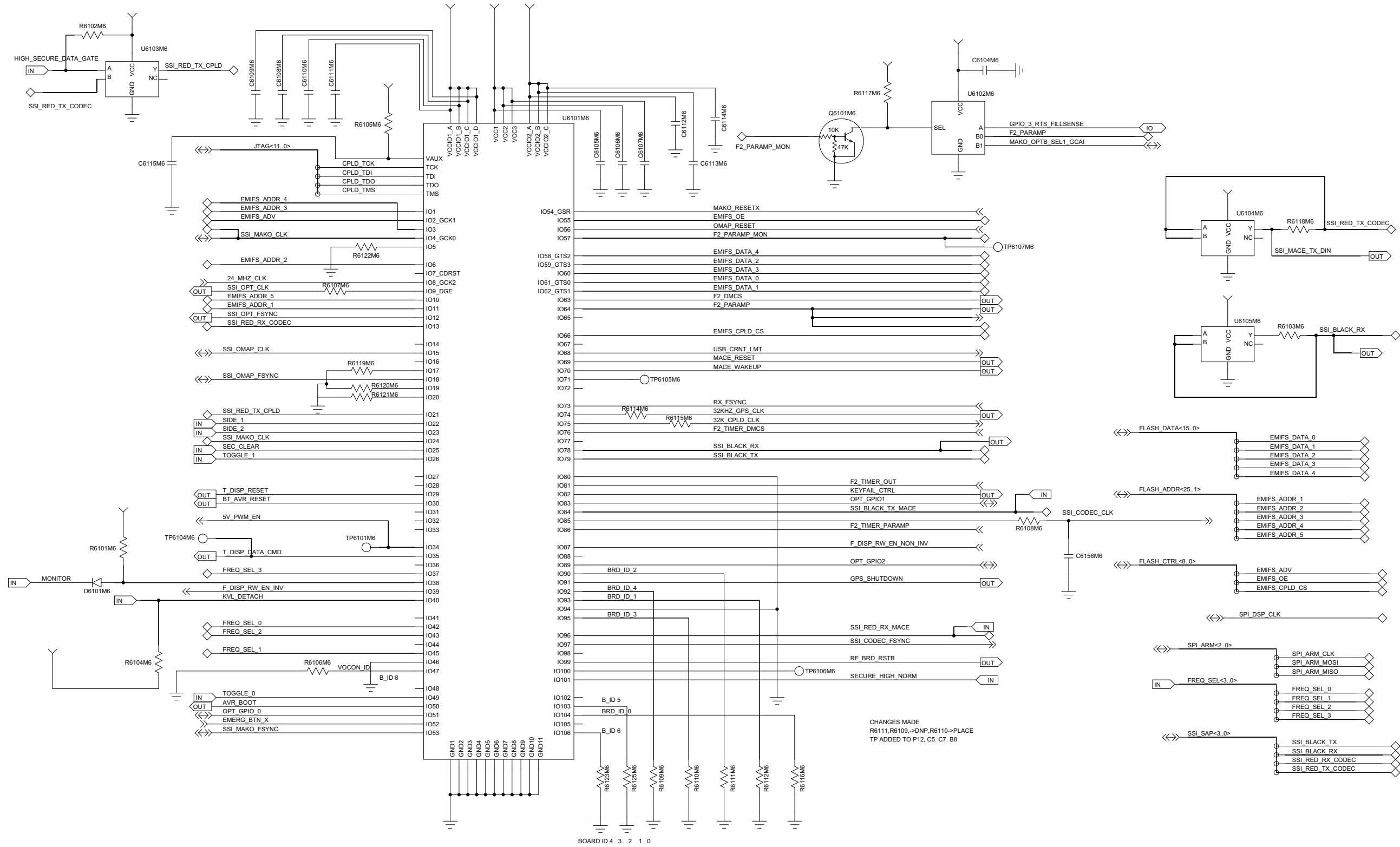


Figure 8-71. CPLD Circuit

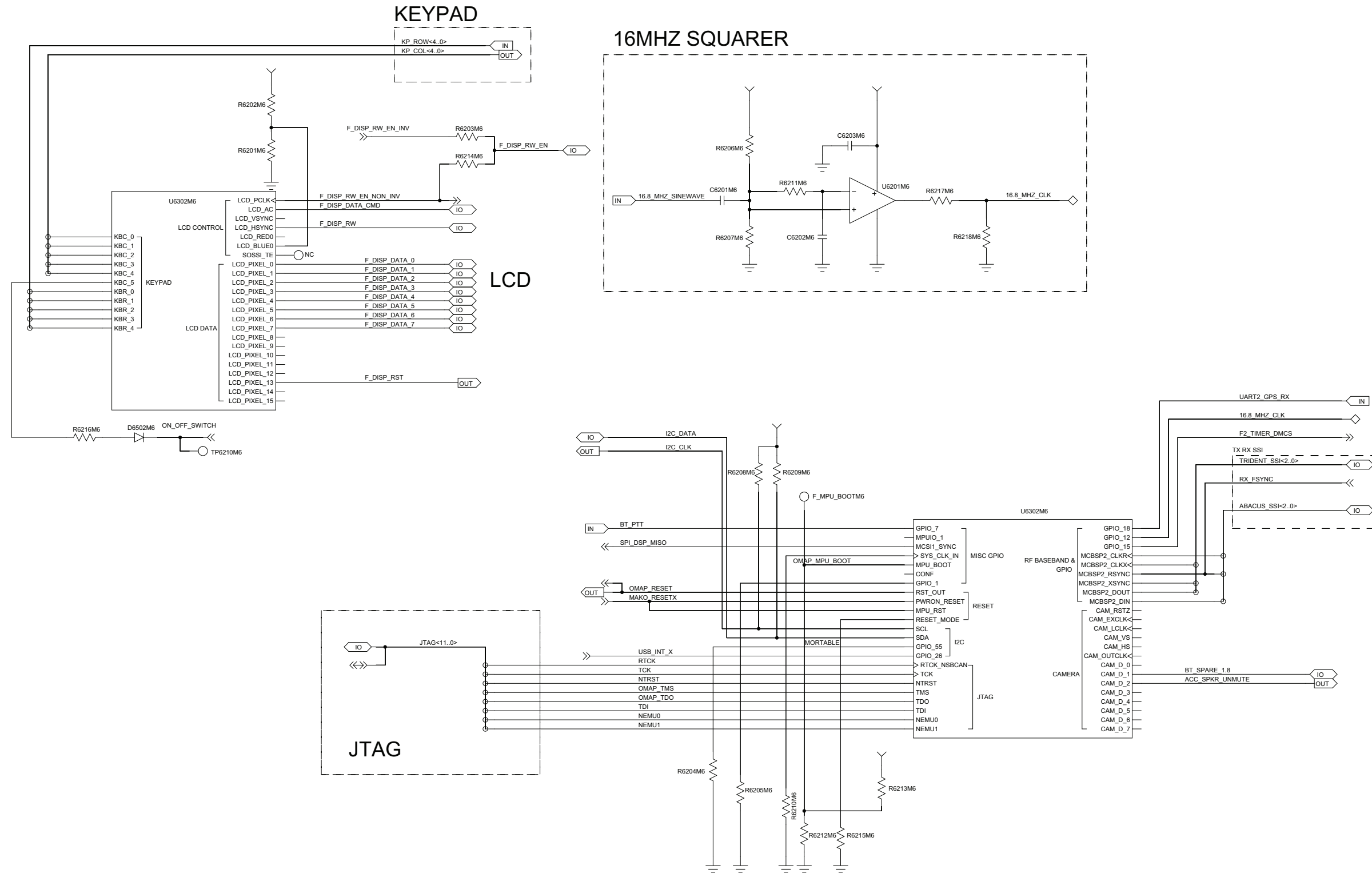
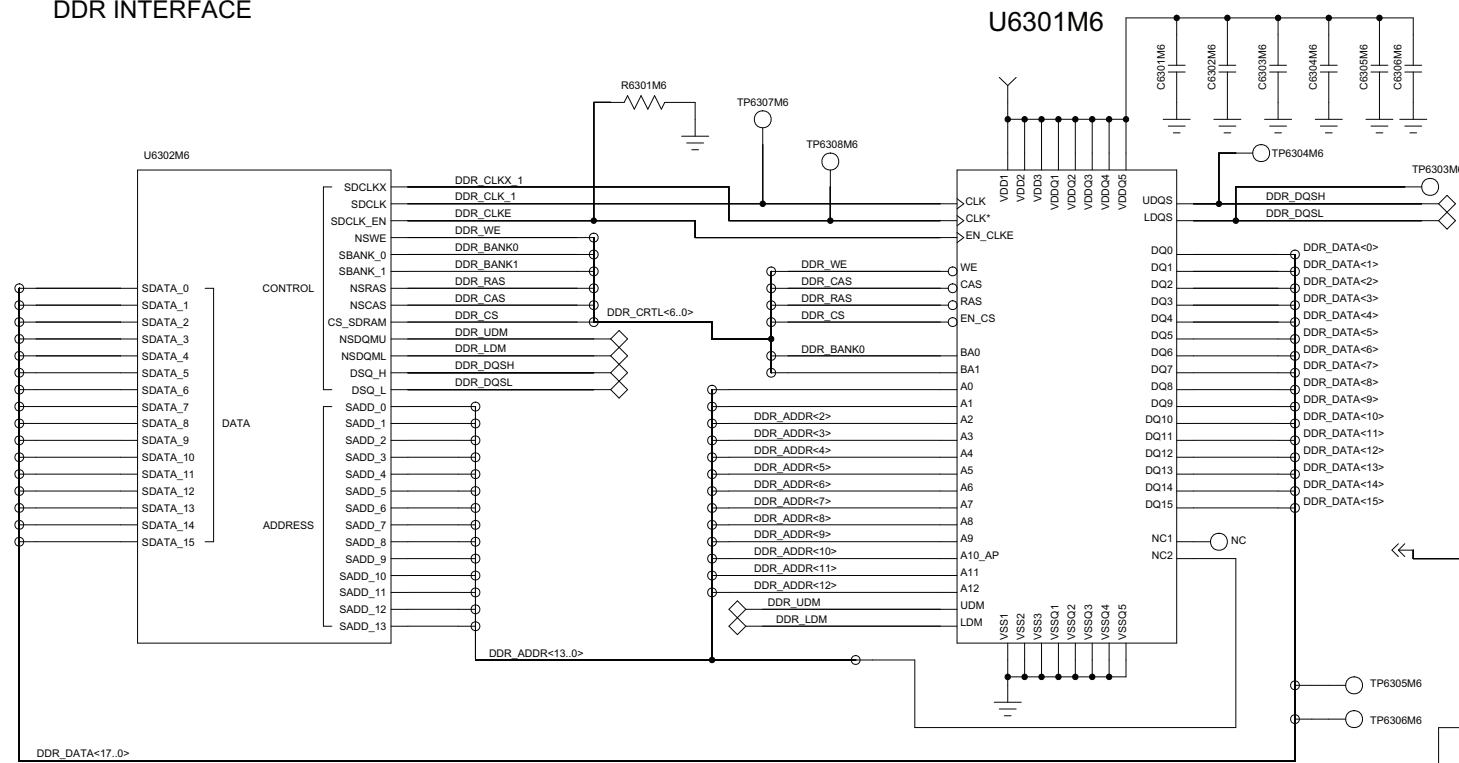
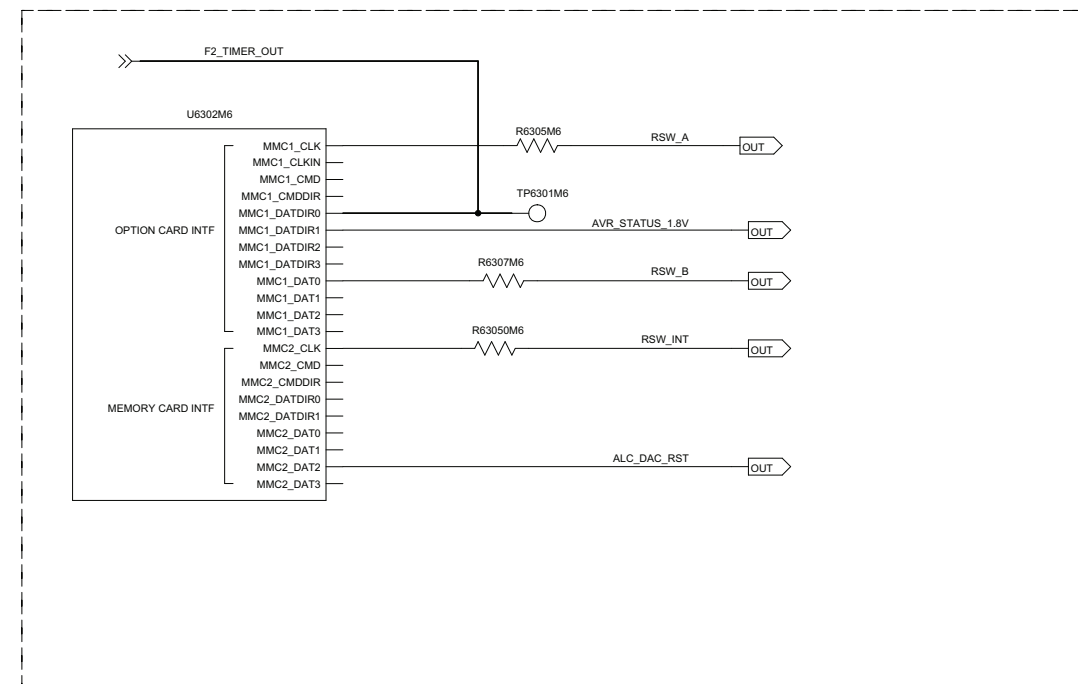


Figure 8-72. OMAP User Interface Circuit

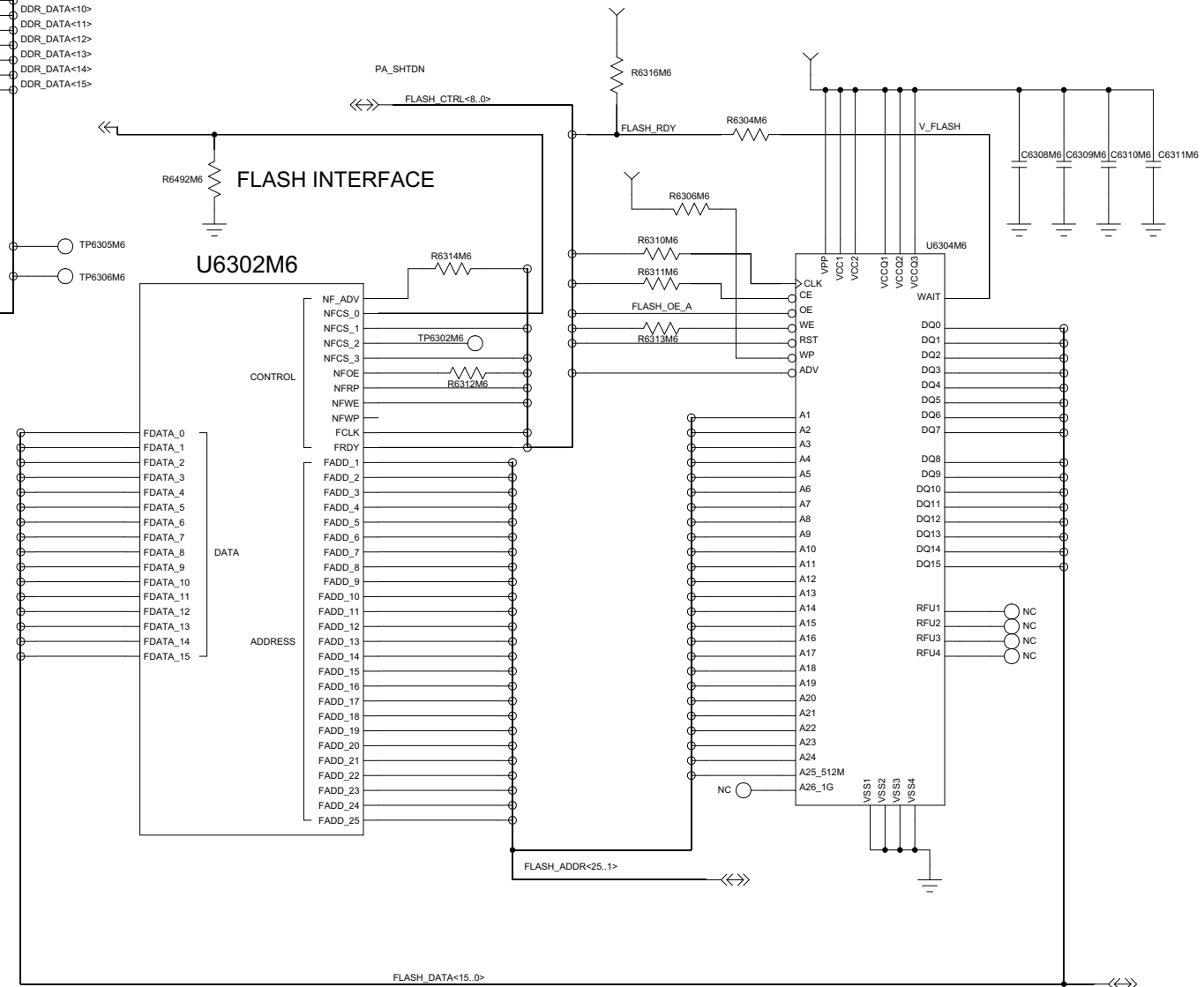
DDR INTERFACE



MMC INTERFACE



FLASH INTERFACE



CHANGES MADE  
ADDED PA\_SHTDN TO PORT M7 & R6492

Figure 8-73. Memory Interface Circuit

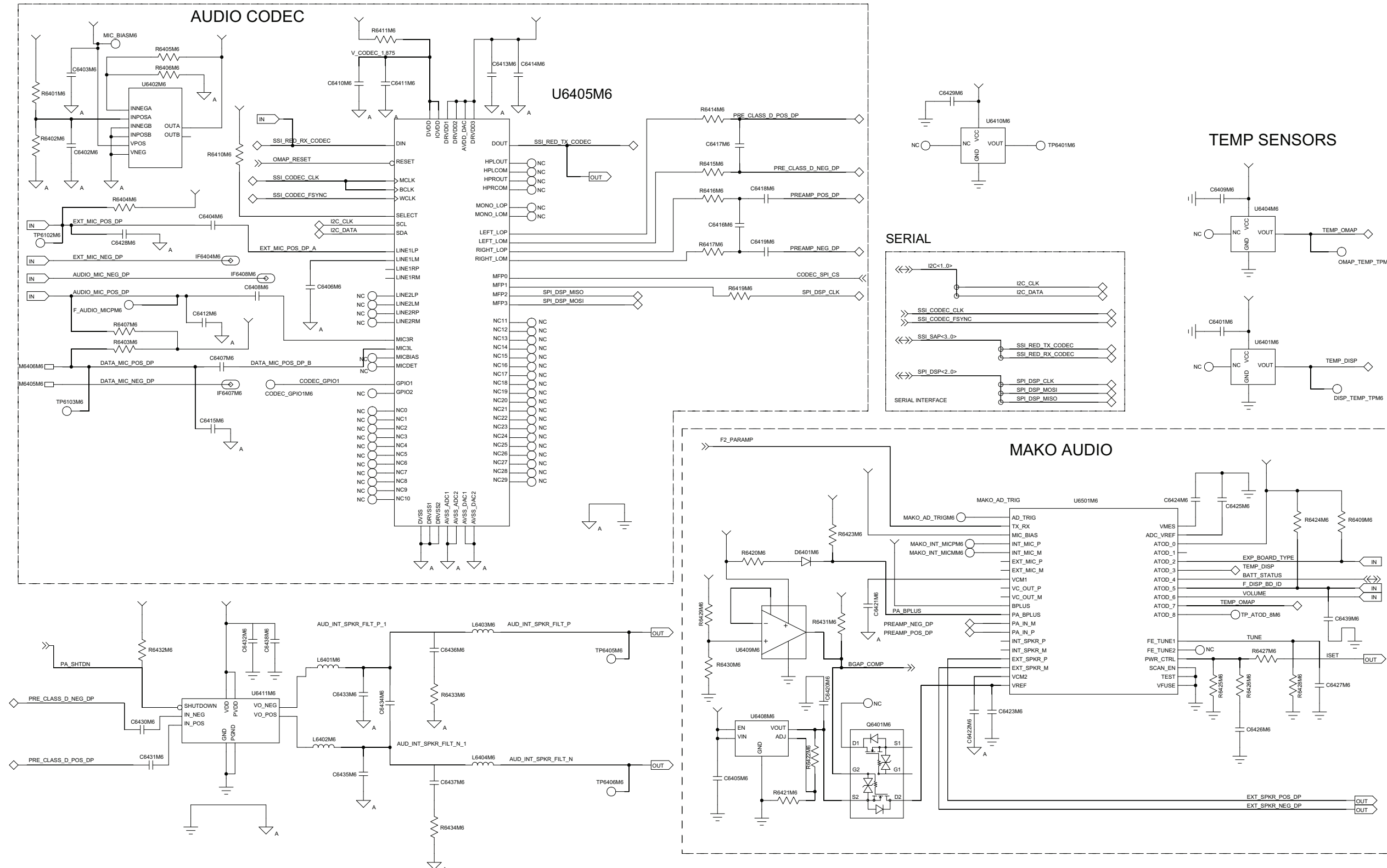


Figure 8-74. Audio Circuit



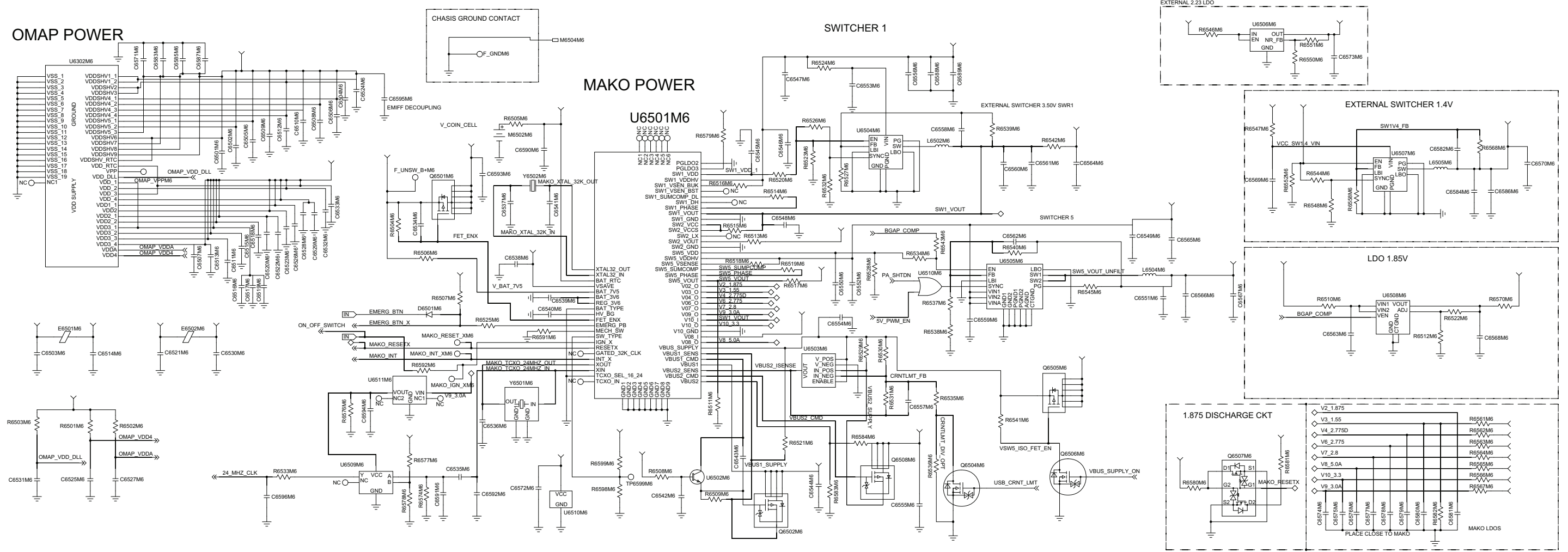


Figure 8-75. MAKO/DC Distribution Circuit

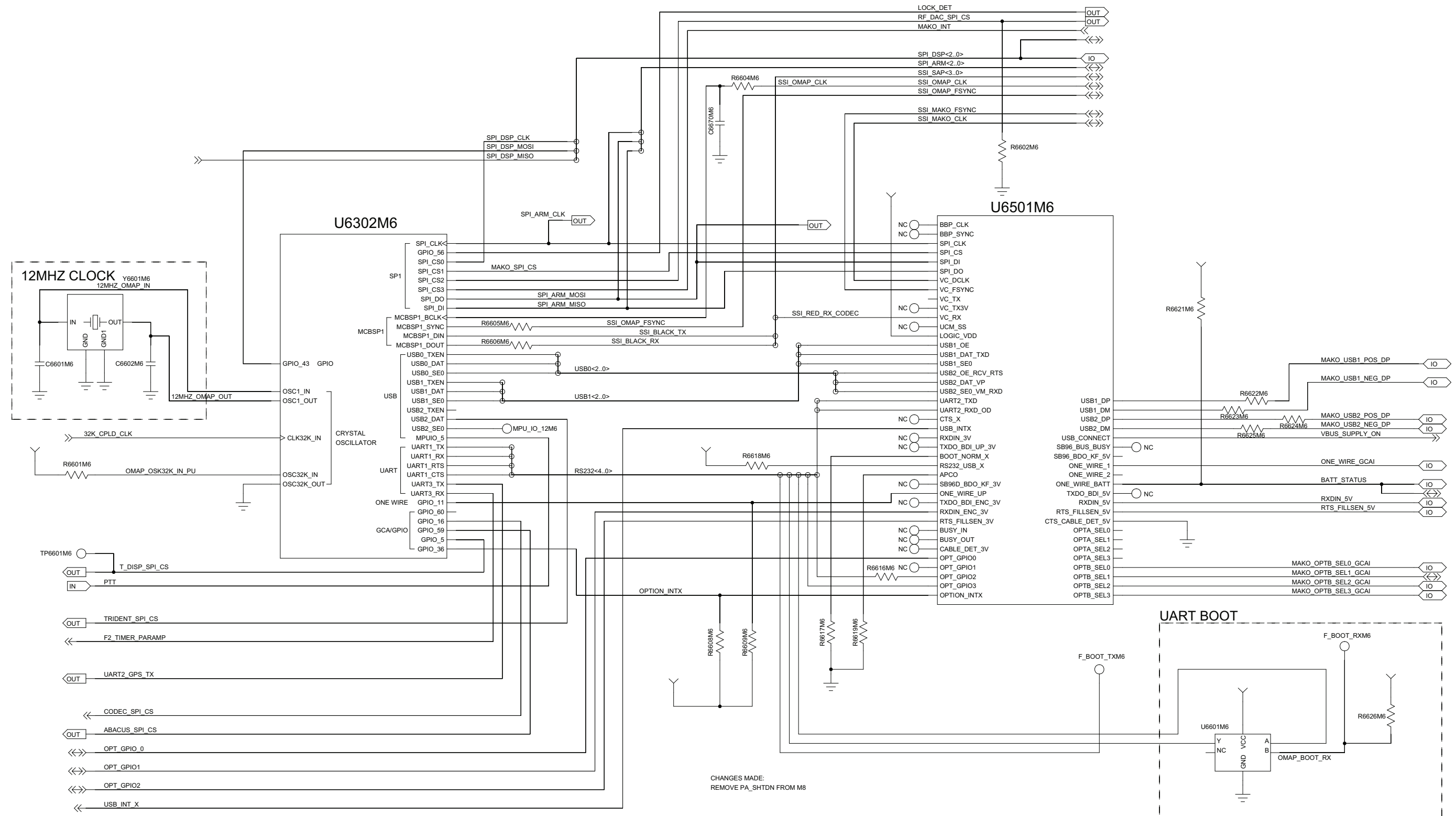


Figure 8-76. Serial Interface Circuit

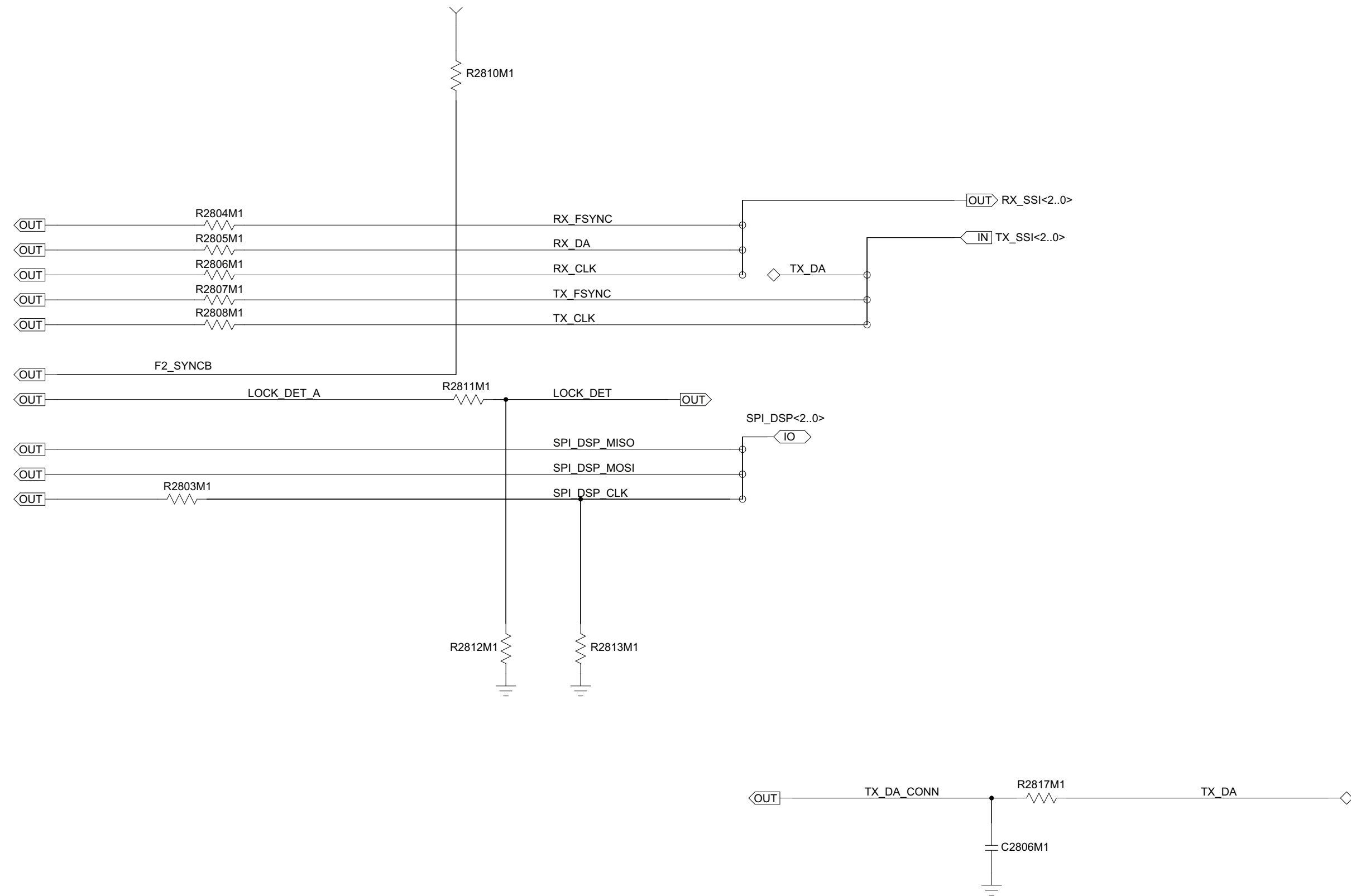


Figure 8-77. RF Interconnects Circuit

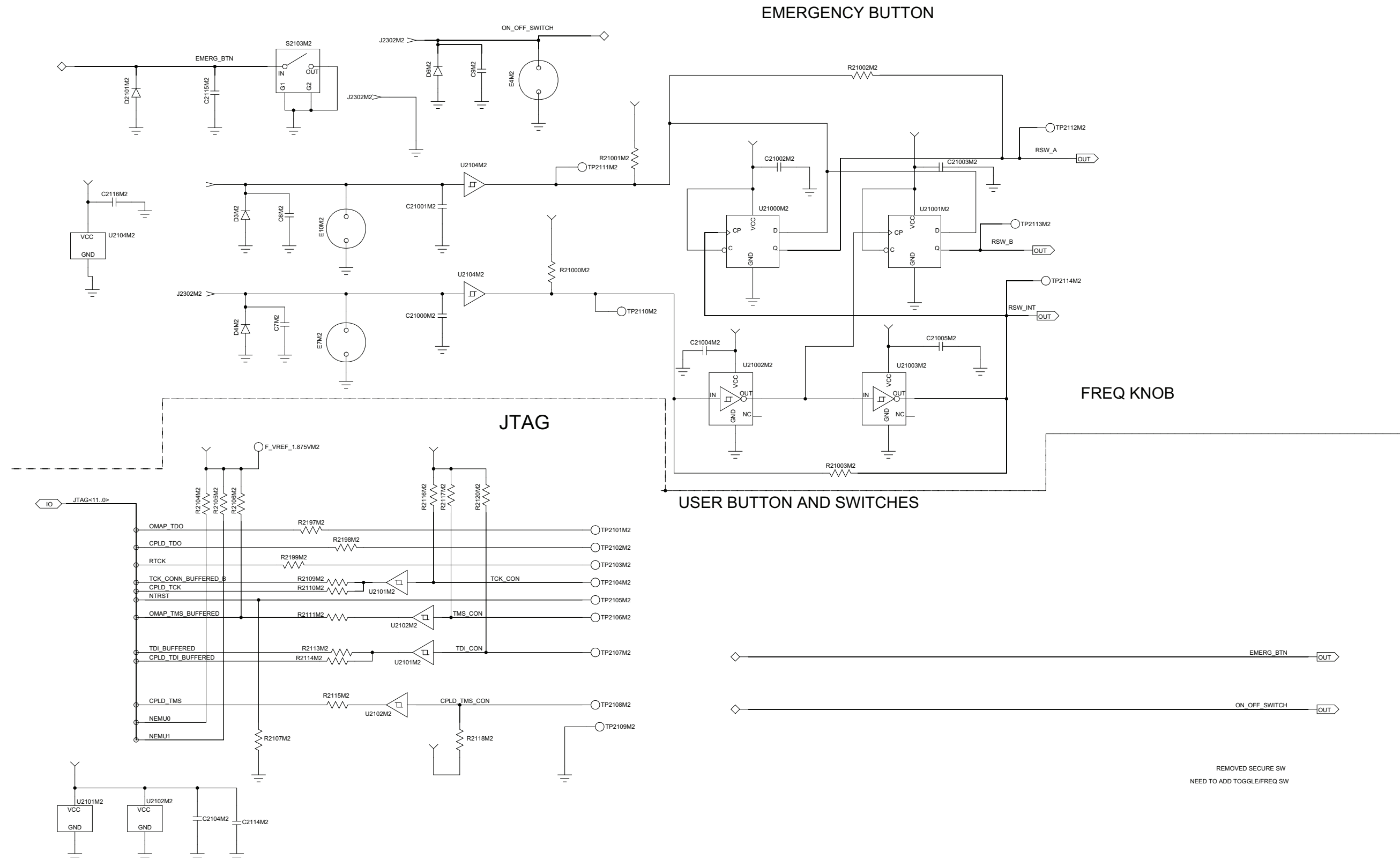


Figure 8-78. Controller Circuit

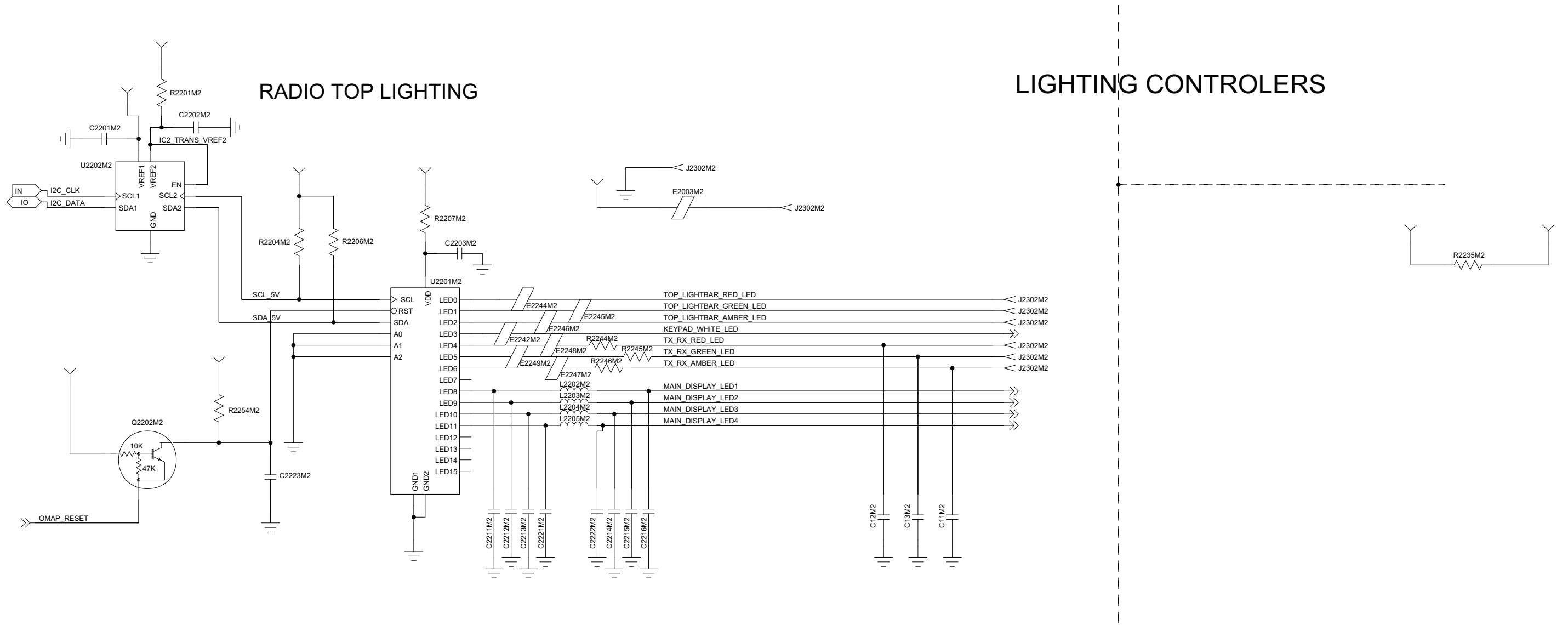
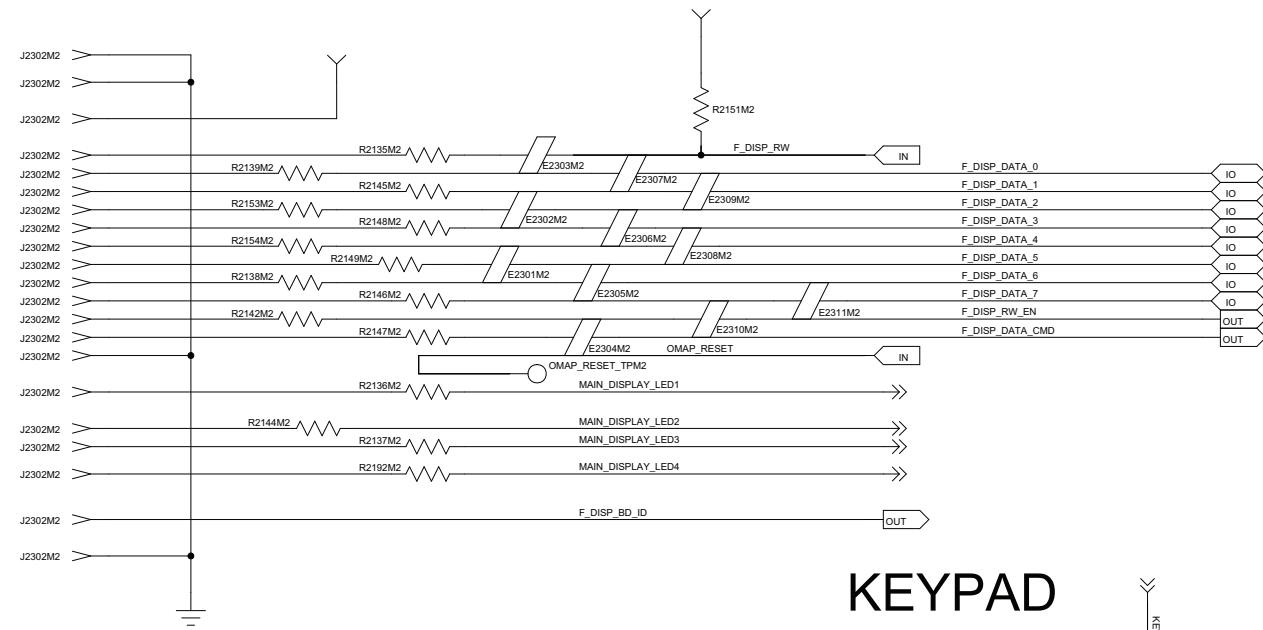


Figure 8-79. Display/Keypad Lighting Control Circuit

# FRONT DISPLAY



# KEYPAD

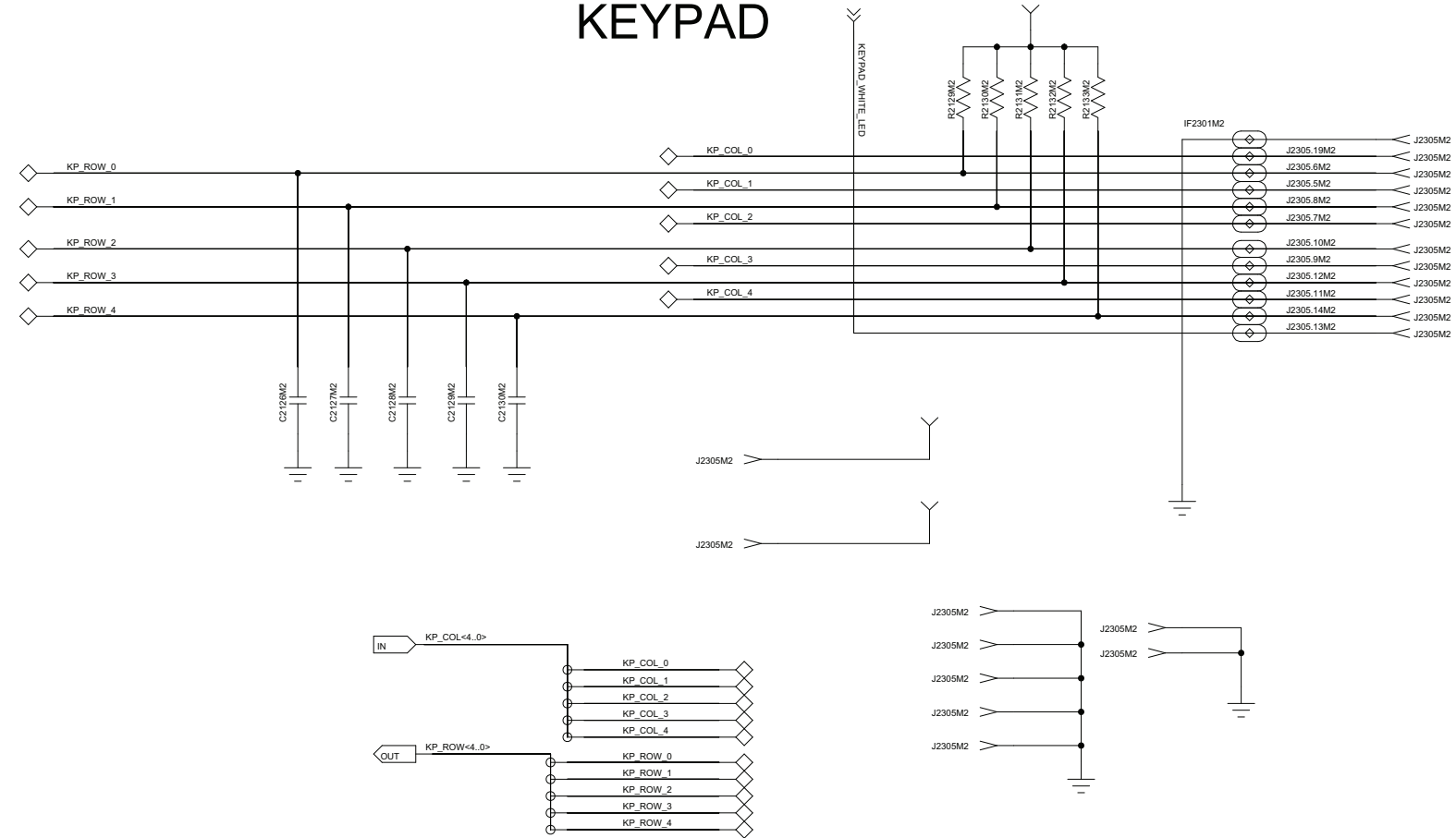


Figure 8-80. LCD and Keypad Connector Circuit

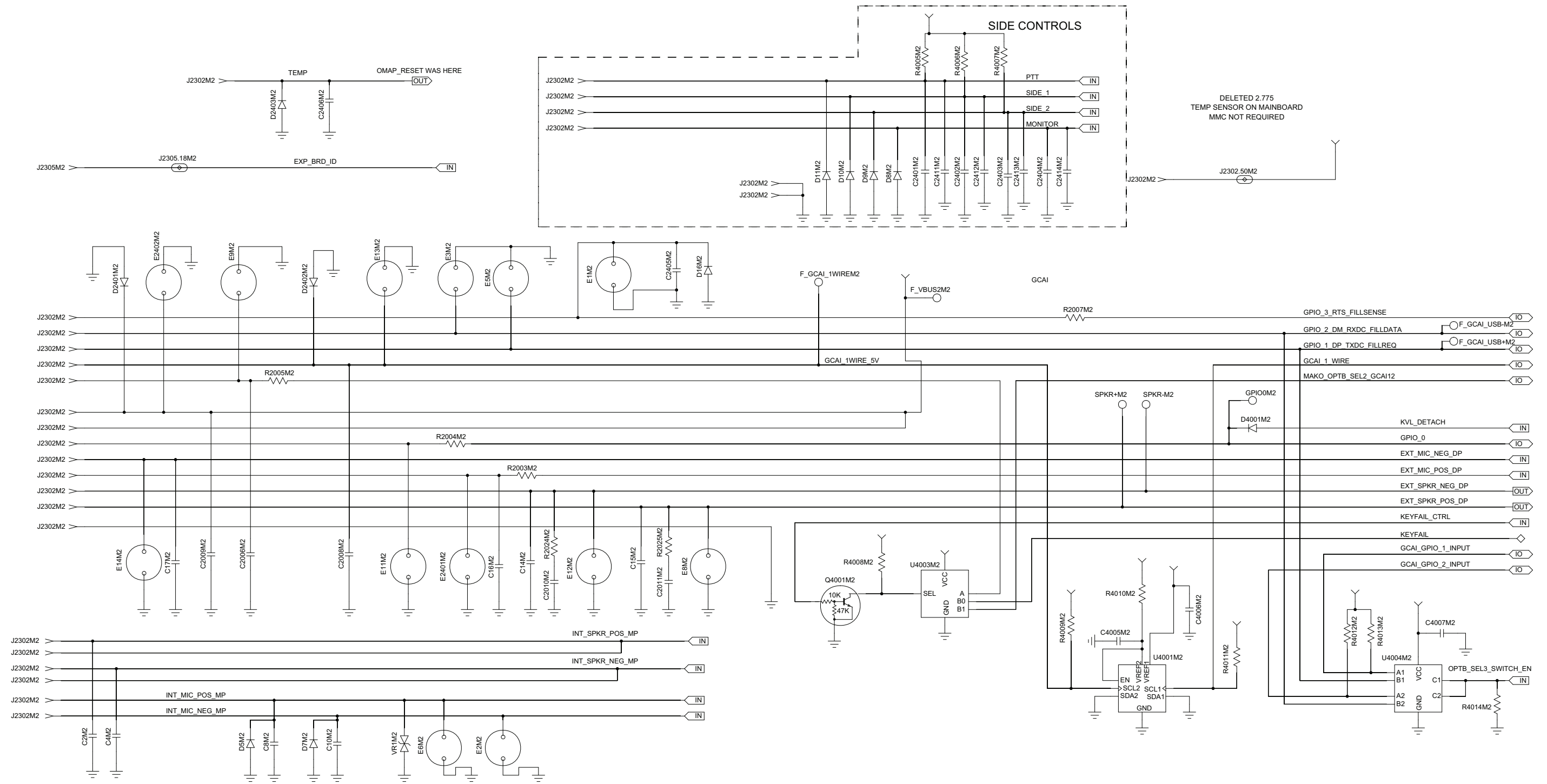


Figure 8-81. GCAI MACE BT Interconnect Circuit

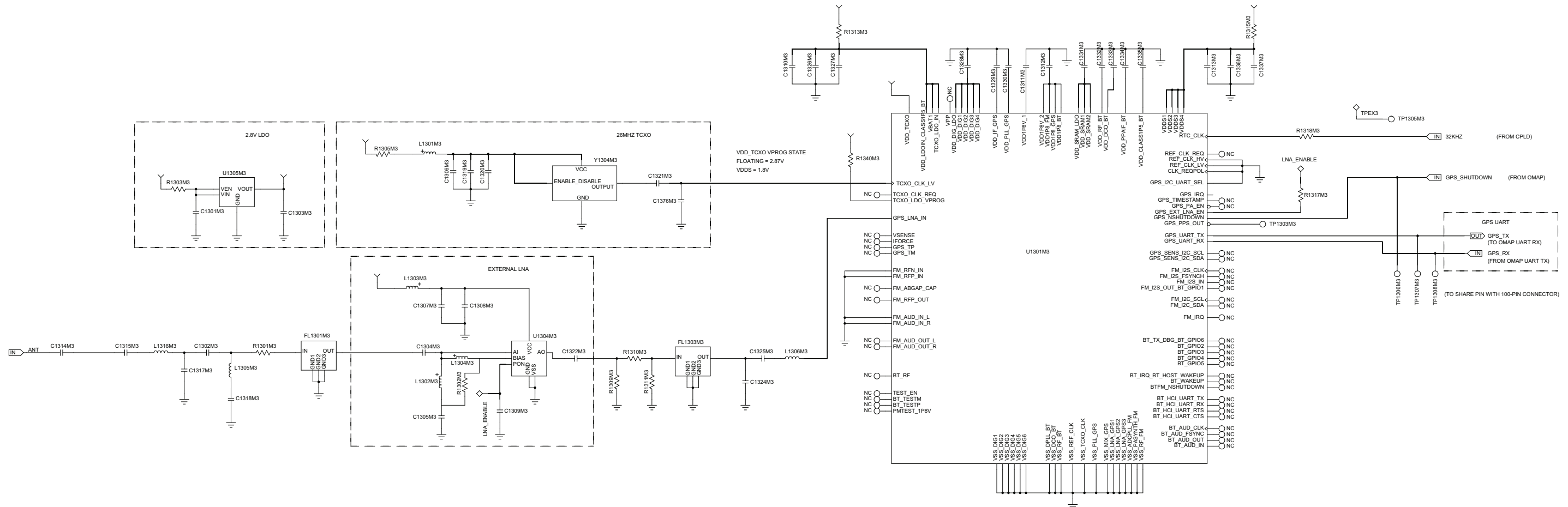


Figure 8-82. GPS Circuit



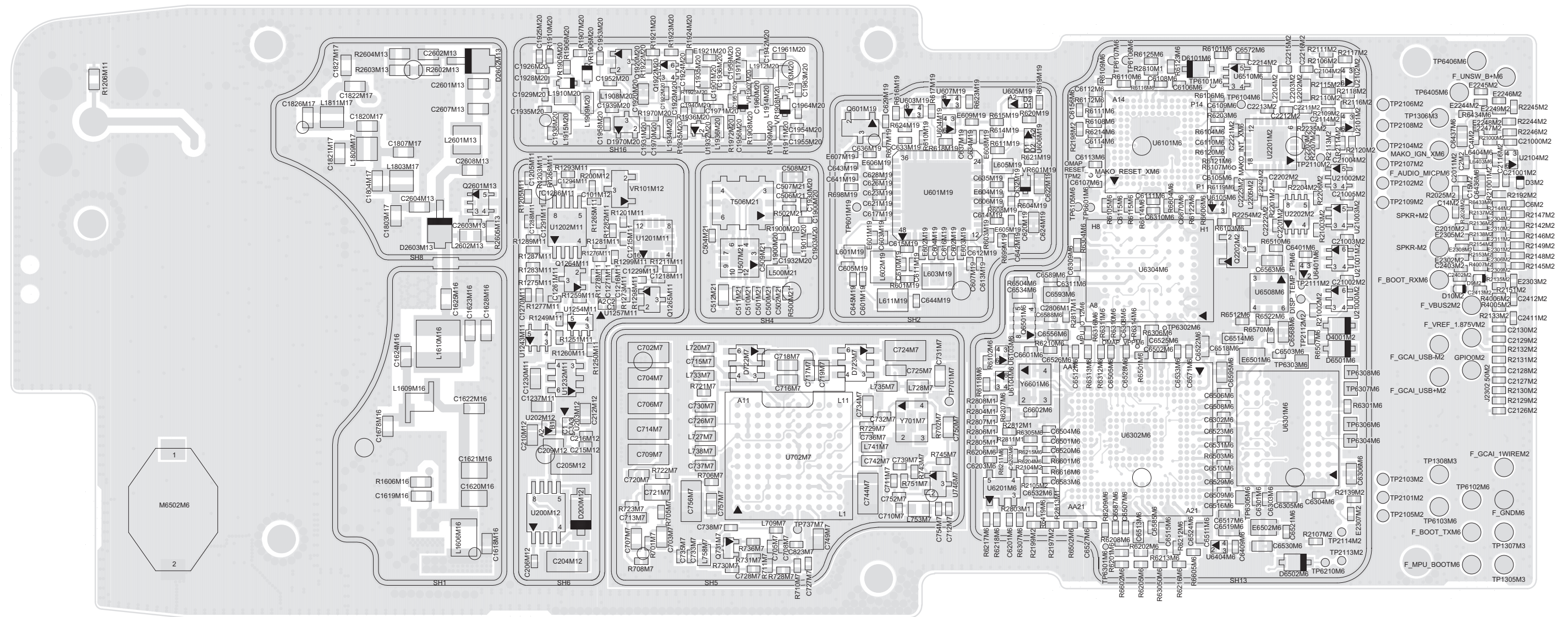


Figure 8-83. Transceiver (RF) Board Layout – Top Side

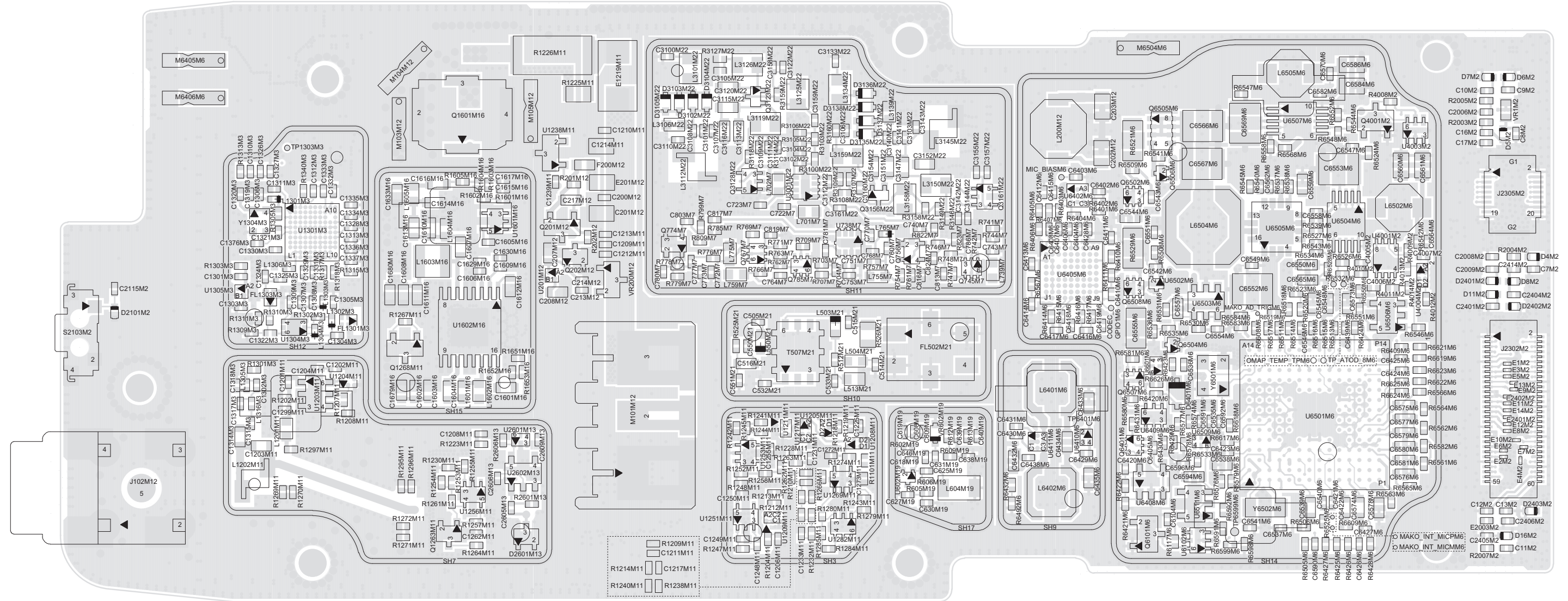


Figure 8-84. Transceiver (RF) Board Layout – Bottom Side

## UHF2 Transceiver (RF) Board Parts List – 84012621001

Ref. Des.	Part Number	Description
C1319M3	2113945Y02	CAP:X7R,0402,10%,16V,0.1UF
C1320M3	2113944A28	CAP:CHIP,18PF,+5%,-5%,50V-DC,0402*
C1321M3	2113944A29	CAP:CHIP,22PF,+5%,-5%,50V-DC,0402*
C1322M3	2113944A29	CAP:CHIP,22PF,+5%,-5%,50V-DC,0402*
C1324M3	21667009274	CAPACITOR, FIXED, CERAMIC, 0402, 0.000001UF, 0.1PF, 50V, COG
C1325M3	2113944A29	CAP:CHIP,22PF,+5%,-5%,50V-DC,0402*
C1326M3	2113945Y02	CAP:X7R,0402,10%,16V,0.1UF
C1327M3	2113944A28	CAP:CHIP,18PF,+5%,-5%,50V-DC,0402*
C1328M3	2113945Y02	CAP:X7R,0402,10%,16V,0.1UF
C1329M3	2113945Y02	CAP:X7R,0402,10%,16V,0.1UF
C1330M3	2113945Y02	CAP:X7R,0402,10%,16V,0.1UF
C1331M3	2113945Y02	CAP:X7R,0402,10%,16V,0.1UF
C1332M3	2113945Y02	CAP:X7R,0402,10%,16V,0.1UF
C1333M3	2113945Y02	CAP:X7R,0402,10%,16V,0.1UF
C1334M3	2113945Y02	CAP:X7R,0402,10%,16V,0.1UF
C1335M3	2113945Y02	CAP:X7R,0402,10%,16V,0.1UF
C1336M3	2113945Y02	CAP:X7R,0402,10%,16V,0.1UF
C1337M3	2113944A28	CAP:CHIP,18PF,+5%,-5%,50V-DC,0402*

Ref. Des.	Part Number	Description
C1376M3	2113944A25	CAP:CHIP,10PF,.5PF+/-,50V-DC,0402*
C13M2	2113944A40	CAP:CHIP,100PF,+5%,-5%,50V-DC,0402*
C14M2	2113944A40	CAP:CHIP,100PF,+5%,-5%,50V-DC,0402*
C15M2	2113944A40	CAP:CHIP,100PF,+5%,-5%,50V-DC,0402*
C1601M16	2113944M42	CAP,FXD,100PF,+2%,-2%,50V-DC,0603,C0G,-55DEG CMIN,125DEG CMAX,P
C1602M16	2113944M42	CAP,FXD,100PF,+2%,-2%,50V-DC,0603,C0G,-55DEG CMIN,125DEG CMAX,P
C1603M16	2113945L49	CAP,FXD,.01UF,+5%,-5%,50V-DC,0603,X7R,-*
C1604M16	2113944M42	CAP,FXD,100PF,+2%,-2%,50V-DC,0603,C0G,-55DEG CMIN,125DEG CMAX,P
C1605M16	2113945B02	CAP:CHIP,.01UF,+10%,-10%,25V-DC*
C1606M16	2113944A40	CAP:CHIP,100PF,+5%,-5%,50V-DC,0402*
C1607M16	2113944M42	CAP,FXD,100PF,+2%,-2%,50V-DC,0603,C0G,-55DEG CMIN,125DEG CMAX,P
C1608M16	2113944M42	CAP,FXD,100PF,+2%,-2%,50V-DC,0603,C0G,-55DEG CMIN,125DEG CMAX,P
C1609M16	2113944A40	CAP:CHIP,100PF,+5%,-5%,50V-DC,0402*
C1610M16	2113944M14	CAP,FXD,6.8PF,.1PF+/-,50V-DC,0603,C0G,-55DEG CMIN,125DEG CMAX
C1611M16	2113945L49	CAP,FXD,.01UF,+5%,-5%,50V-DC,0603,X7R,-*
C1612M16	NOTPLACED	-

Ref. Des.	Part Number	Description
C1613M16	2113944M30	CAP,FXD,33PF,+2%,-2%,50V-DC,0603,C0G,-55DEG CMIN,125DEG CMAX,PB
C1614M16	2113944M31	CAP,FXD,36PF,+2%,-2%,50V-DC,0603,C0G,-55DEG CMIN,125DEG CMAX,PB
C1615M16	2113944A40	CAP:CHIP,100PF,+5%,-5%,50V-DC,0402*
C1616M16	2113944M30	CAP,FXD,33PF,+2%,-2%,50V-DC,0603,C0G,-55DEG CMIN,125DEG CMAX,PB
C1617M16	NOTPLACED	-
C1618M16	2113944M42	CAP,FXD,100PF,+2%,-2%,50V-DC,0603,C0G,-55DEG CMIN,125DEG CMAX,P
C1619M16	2113945C02	CAP,CHIP,.01UF,+10%,-10%,50V-DC,0603,X7*
C1620M16	2171741M06	HIGH Q CAP, 39 PF
C1621M16	2171741M03	HIGH Q CAP
C1622M16	2113944M20	CAP,FXD,12PF,+2%,-2%,50V-DC,0603,C0G,-55DEG CMIN,125DEG CMAX,PB
C1623M16	NOTPLACED	-
C1624M16	2113944M18	CAP,FXD,10PF,+2.5%,-2.5%,50V-DC,0603,C0G,-55DEG CMIN,125DEG CMA
C1625M16	2113944M42	CAP,FXD,100PF,+2%,-2%,50V-DC,0603,C0G,-55DEG CMIN,125DEG CMAX,P
C1628M16	21667011426	CAP,CER,2.7PF,.1PF+/-,50V-DC,0603,C0G,-55DEG CMIN,125DEG CMAX
C1629M16	2113945A12	CAP:CHIP,3300PF,+10%,-10%,50V-DC,0402,*
C1630M16	2113945A12	CAP:CHIP,3300PF,+10%,-10%,50V-DC,0402,*
C1633M16	NOTPLACED	-

Ref. Des.	Part Number	Description
C1678M16	21667011417	CAP,CER,1.8PF,.1PF+/-,50V-DC,0603,C0G,-55DEG CMIN,125DEG CMAX
C1679M16	NOTPLACED	-
C1680M16	NOTPLACED	-
C16M2	2113944A40	CAP:CHIP,100PF,+5%,-5%,50V-DC,0402*
C17M2	2113944A40	CAP:CHIP,100PF,+5%,-5%,50V-DC,0402*
C1803M17	21012158015	CAPACITOR,CHIP,4.7PF,.25PF+/-,50V-DC,0603,C0G,-55DEG CMIN,125DEG CMAX,
C1804M17	2113944C20	CAP CER CHP 3.9PF 50V +/- 0.25PF
C1807M17	21667011096	CAP,CER,5.6PF,.5PF+/-,50V-DC,0603,C0G,-55DEG CMIN,125DEG CMAX
C1820M17	21667011024	CAP,CER,3.3PF,.25PF+/-,50V-DC,0603,C0G,-55DEG CMIN,125DEG CMAX
C1821M17	2113944C25	CAP CER CHP 6.2PF 50V +/- 0.5PF
C1822M17	2113944C45	CAP:CG,0603,5%,50V,100PF
C1826M17	2113944C13	CAP CER CHP 2.0PF 50V +/- 0.25PF
C1827M17	21667011024	CAP,CER,3.3PF,.25PF+/-,50V-DC,0603,C0G,-55DEG CMIN,125DEG CMAX
C1900M20	21667009346	CAPACITOR, FIXED, CERAMIC, 0402, 0.0000082UF, 0.1PF, 50V, COG
C1901M20	21667009388	CAPACITOR, FIXED, CERAMIC, 0402, 0.0001UF, +/-1%, 50V, COG
C1903M20	NOTPLACED	-
C1920M20	2113946D07	CAP:CHIP,4.7UF,+10%,-10%,6.3V-DC,0603*
C1922M20	2113944A40	CAP:CHIP,100PF,+5%,-5%,50V-DC,0402*

Ref. Des.	Part Number	Description
C1923M20	2113944A40	CAP:CHIP,100PF,+5%,-5%,50V-DC,0402*
C1924M20	2113946D07	CAP:CHIP,4.7UF,+10%,-10%,6.3V-DC,0603*
C1925M20	2113944A40	CAP:CHIP,100PF,+5%,-5%,50V-DC,0402*
C1926M20	2113946B04	CAP:CHIP,.1UF,+10%,-10%,10V-DC*
C1928M20	21667009297	CAPACI-TOR,FIXED,CERAMIC,0402,0.0000033UF,0.1PF,50V,C0G
C1929M20	21667009311	CAPACI-TOR,FIXED,CERAMIC,0402,0.0000047UF,0.1PF,50V,C0G
C1930M20	NOTPLACED	-
C1931M20	21667009385	CAPACI-TOR,FIXED,CERAMIC,0402,0.000075UF,+/-1%,50V,C0G
C1932M20	NOTPLACED	-
C1935M20	21667009291	CAPACI-TOR,FIXED,CERAMIC,0402,0.0000027UF,0.1PF,50V,C0G
C1936M20	21667009355	CAPACI-TOR,FIXED,CERAMIC,0402,0.0000091UF,0.1PF,50V,C0G
C1938M20	21667009304	CAPACI-TOR,FIXED,CERAMIC,0402,0.000004UF,0.1PF,50V,C0G
C1939M20	21667009291	CAPACI-TOR,FIXED,CERAMIC,0402,0.0000027UF,0.1PF,50V,C0G
C1940M20	2113944A40	CAP:CHIP,100PF,+5%,-5%,50V-DC,0402*
C1942M20	21667009368	CAPACI-TOR,FIXED,CERAMIC,0402,0.000015UF,+/-1%,50V,C0G

Ref. Des.	Part Number	Description
C1952M20	21667009311	CAPACI-TOR,FIXED,CERAMIC,0402,0.0000047UF,0.1PF,50V,C0G
C1953M20	21667009297	CAPACI-TOR,FIXED,CERAMIC,0402,0.0000033UF,0.1PF,50V,C0G
C1954M20	2113944A40	CAP:CHIP,100PF,+5%,-5%,50V-DC,0402*
C1955M20	2113946B04	CAP:CHIP,.1UF,+10%,-10%,10V-DC*
C1956M20	21667009297	CAPACI-TOR,FIXED,CERAMIC,0402,0.0000033UF,0.1PF,50V,C0G
C1957M20	2115153H29	CAP, CERAMIC, COG
C1958M20	21667009366	CAPACI-TOR,FIXED,CERAMIC,0402,0.000012UF,+/-1%,50V,C0G
C1959M20	21667009291	CAPACI-TOR,FIXED,CERAMIC,0402,0.0000027UF,0.1PF,50V,C0G
C1960M20	21667009324	CAPACI-TOR,FIXED,CERAMIC,0402,0.000006UF,0.1PF,50V,C0G
C1961M20	21667009291	CAPACI-TOR,FIXED,CERAMIC,0402,0.0000027UF,0.1PF,50V,C0G
C1963M20	2115153H29	CAP, CERAMIC, COG
C1964M20	21667009297	CAPACI-TOR,FIXED,CERAMIC,0402,0.0000033UF,0.1PF,50V,C0G
C1970M20	21667009288	CAPACI-TOR,FIXED,CERAMIC,0402,0.0000024UF,0.1PF,50V,C0G
C1971M20	21667009279	CAPACI-TOR,FIXED,CERAMIC,0402,0.0000015UF,0.1PF,50V,C0G

Ref. Des.	Part Number	Description
C2006M2	NOTPLACED	-
C2008M2	NOTPLACED	-
C2009M2	2113944A40	CAP:CHIP,100PF,+5%,-5%,50V-DC,0402*
C200M12	2113945B02	CAP:CHIP,.01UF,+10%,-10%,25V-DC*
C2010M2	2113946B04	CAP:CHIP,.1UF,+10%,-10%,10V-DC*
C2011M2	2113946B04	CAP:CHIP,.1UF,+10%,-10%,10V-DC*
C201M12	21012118001	CAP,FXD,1UF,10%,25V-DC,X7R,0805,LEAD-FREE/ROHS COMPLIANT
C202M12	21012118001	CAP,FXD,1UF,10%,25V-DC,X7R,0805,LEAD-FREE/ROHS COMPLIANT
C203M12	21012118001	CAP,FXD,1UF,10%,25V-DC,X7R,0805,LEAD-FREE/ROHS COMPLIANT
C204M12	2113955D35	CAP,FXD,4.7UF,+10%,-10%,16V-DC,1206,X7R,-55DEG CMIN,125DEG CMAX
C205M12	2113955D35	CAP,FXD,4.7UF,+10%,-10%,16V-DC,1206,X7R,-55DEG CMIN,125DEG CMAX
C206M12	2113945B02	CAP:CHIP,.01UF,+10%,-10%,25V-DC*
C207M12	2113956B91	CAP,FXD,1UF,+10%,-10%,16V-DC,0603,X5R,-55DEG CMIN,85DEG CMAX,PB
C208M12	2113956B91	CAP,FXD,1UF,+10%,-10%,16V-DC,0603,X5R,-55DEG CMIN,85DEG CMAX,PB
C209M12	2113956B91	CAP,FXD,1UF,+10%,-10%,16V-DC,0603,X5R,-55DEG CMIN,85DEG CMAX,PB
C2100M2	2113945Y02	CAP:X7R,0402,10%,16V,0.1UF

Ref. Des.	Part Number	Description
C21001M2	2113945Y02	CAP:X7R,0402,10%,16V,0.1UF
C21002M2	2113946B04	CAP:CHIP,.1UF,+10%,-10%,10V-DC*
C21003M2	2113946B04	CAP:CHIP,.1UF,+10%,-10%,10V-DC*
C21004M2	2113945Y02	CAP:X7R,0402,10%,16V,0.1UF
C21005M2	2113946B04	CAP:CHIP,.1UF,+10%,-10%,10V-DC*
C2104M2	2113946B04	CAP:CHIP,.1UF,+10%,-10%,10V-DC*
C210M12	2113956B91	CAP,FXD,1UF,+10%,-10%,16V-DC,0603,X5R,-55DEG CMIN,85DEG CMAX,PB
C2114M2	2113946B04	CAP:CHIP,.1UF,+10%,-10%,10V-DC*
C2115M2	2113944A40	CAP:CHIP,100PF,+5%,-5%,50V-DC,0402*
C2116M2	2113946B04	CAP:CHIP,.1UF,+10%,-10%,10V-DC*
C2126M2	2113944A46	CAP:CHIP,330PF,+5%,-5%,50V-DC,0402,C0G,*
C2127M2	2113944A46	CAP:CHIP,330PF,+5%,-5%,50V-DC,0402,C0G,*
C2128M2	2113944A46	CAP:CHIP,330PF,+5%,-5%,50V-DC,0402,C0G,*
C2129M2	2113944A46	CAP:CHIP,330PF,+5%,-5%,50V-DC,0402,C0G,*
C212M12	2113946D07	CAP:CHIP,4.7UF,+10%,-10%,6.3V-DC,0603*
C2130M2	2113944A46	CAP:CHIP,330PF,+5%,-5%,50V-DC,0402,C0G,*
C213M12	2113944A46	CAP:CHIP,330PF,+5%,-5%,50V-DC,0402,C0G,*
C214M12	2113944A40	CAP:CHIP,100PF,+5%,-5%,50V-DC,0402*
C215M12	2113944A46	CAP:CHIP,330PF,+5%,-5%,50V-DC,0402,C0G,*
C216M12	2113944A40	CAP:CHIP,100PF,+5%,-5%,50V-DC,0402*

Ref. Des.	Part Number	Description
C217M12	2113956B91	CAP,FXD,1UF,+10%,-10%,16V-DC,0603,X5R,-55DEG CMIN,85DEG CMAX,PB
C2201M2	2113946B04	CAP:CHIP,.1UF,+10%,-10%,10V-DC*
C2202M2	2113946B04	CAP:CHIP,.1UF,+10%,-10%,10V-DC*
C2203M2	2113946B04	CAP:CHIP,.1UF,+10%,-10%,10V-DC*
C2211M2	2113946B04	CAP:CHIP,.1UF,+10%,-10%,10V-DC*
C2212M2	2113946B04	CAP:CHIP,.1UF,+10%,-10%,10V-DC*
C3160M22	21667009286	CAPACITOR, FIXED, CERAMIC, 0402, 0.0000022UF, 0.1PF, 50V, C0G
C3161M22	2113944A44	CAP:CG,0402,5%,50V,220PF
C4005M2	2113946B04	CAP:CHIP,.1UF,+10%,-10%,10V-DC*
C4006M2	2113946B04	CAP:CHIP,.1UF,+10%,-10%,10V-DC*
C4007M2	2113946B04	CAP:CHIP,.1UF,+10%,-10%,10V-DC*
C4M2	2113944A40	CAP:CHIP,100PF,+5%,-5%,50V-DC,0402*
C500M21	2113945B05	CAP,FXD,.033UF,+10%,-10%,25V-DC,0402,X7R,-55DEG CMIN,125DEG CMA
C501M21	2113944A32	CAP:CHIP,39PF,+5%,-5%,50V-DC,0402,C0G,*
C502M21	2113945B05	CAP,FXD,.033UF,+10%,-10%,25V-DC,0402,X7R,-55DEG CMIN,125DEG CMA
C504M21	2113944A40	CAP:CHIP,100PF,+5%,-5%,50V-DC,0402*
C505M21	NOTPLACED	-
C506M21	2113944A32	CAP:CHIP,39PF,+5%,-5%,50V-DC,0402,C0G,*

Ref. Des.	Part Number	Description
C507M21	2113945B05	CAP,FXD,.033UF,+10%,-10%,25V-DC,0402,X7R,-55DEG CMIN,125DEG CMA
C508M21	2113946D07	CAP:CHIP,4.7UF,+10%,-10%,6.3V-DC,0603*
C509M21	2113945B05	CAP,FXD,.033UF,+10%,-10%,25V-DC,0402,X7R,-55DEG CMIN,125DEG CMA
C510M21	2113944A32	CAP:CHIP,39PF,+5%,-5%,50V-DC,0402,C0G,*
C511M21	2113945B05	CAP,FXD,.033UF,+10%,-10%,25V-DC,0402,X7R,-55DEG CMIN,125DEG CMA
C512M21	2113946D07	CAP:CHIP,4.7UF,+10%,-10%,6.3V-DC,0603*
C514M21	NOTPLACED	-
C515M21	2113944A14	CAP CER CHP 3.6PF 50V +/- 0.25PF
C516M21	2113944M42	CAP,FXD,100PF,+2%,-2%,50V-DC,0603,C0G,-55DEG CMIN,125DEG CMAX,P
C532M21	2113944A32	CAP:CHIP,39PF,+5%,-5%,50V-DC,0402,C0G,*
C533M21	21667009383	CAPACITOR, FIXED, CERAMIC, 0402, 0.000062UF, +/- 1%, 50V, C0G
C550M21	NOTPLACED	-
C551M21	NOTPLACED	-
C601M19	2113945B02	CAP:CHIP,.01UF,+10%,-10%,25V-DC*
C602M19	2113945B02	CAP:CHIP,.01UF,+10%,-10%,25V-DC*
C603M19	2113945B02	CAP:CHIP,.01UF,+10%,-10%,25V-DC*
C604M19	2113945B02	CAP:CHIP,.01UF,+10%,-10%,25V-DC*
C605M19	2113944A21	CAP:CHIP,6.8PF,.5PF+/-,50V-DC,0402*
C606M19	2113946B04	CAP:CHIP,.1UF,+10%,-10%,10V-DC*

Ref. Des.	Part Number	Description
C607M19	2113944A40	CAP:CHIP,100PF,+5%,-5%,50V-DC,0402*
C608M19	2113944A12	CAP CER CHP 3.0PF 50V +/- 0.25PF
C609M19	2113944A30	CAP CER CHP 27.0PF 50V 5%
C6104M6	2113946B04	CAP:CHIP,.1UF,+10%,-10%,10V-DC*
C6105M6	2113946B04	CAP:CHIP,.1UF,+10%,-10%,10V-DC*
C6106M6	2113946B04	CAP:CHIP,.1UF,+10%,-10%,10V-DC*
C6107M6	2113946B04	CAP:CHIP,.1UF,+10%,-10%,10V-DC*
C6108M6	2113946B04	CAP:CHIP,.1UF,+10%,-10%,10V-DC*
C6109M6	2113946B04	CAP:CHIP,.1UF,+10%,-10%,10V-DC*
C610M19	2113944A40	CAP:CHIP,100PF,+5%,-5%,50V-DC,0402*
C6110M6	2113946B04	CAP:CHIP,.1UF,+10%,-10%,10V-DC*
C6111M6	2113946B04	CAP:CHIP,.1UF,+10%,-10%,10V-DC*
C6112M6	2113946B04	CAP:CHIP,.1UF,+10%,-10%,10V-DC*
C6113M6	2113946B04	CAP:CHIP,.1UF,+10%,-10%,10V-DC*
C6114M6	2113946B04	CAP:CHIP,.1UF,+10%,-10%,10V-DC*
C6115M6	2113946B04	CAP:CHIP,.1UF,+10%,-10%,10V-DC*
C611M19	2113944A40	CAP:CHIP,100PF,+5%,-5%,50V-DC,0402*
C612M19	2113945B02	CAP:CHIP,.01UF,+10%,-10%,25V-DC*
C613M19	2113944A40	CAP:CHIP,100PF,+5%,-5%,50V-DC,0402*
C614M19	2113945B02	CAP:CHIP,.01UF,+10%,-10%,25V-DC*
C615M6	NOTPLACED	-

Ref. Des.	Part Number	Description
C615M19	2113944A42	CAP:CHIP,150PF,+5%,-5%,50V-DC,0402,C0G,*
C616M19	2113945A11	CAP:CHIP,2200PF,+10%,-10%,50V-DC,0402,*
C617M19	2113946B04	CAP:CHIP,.1UF,+10%,-10%,10V-DC*
C618M19	2113944A31	CAP:CHIP,33PF,+5%,-5%,50V-DC,0402,C0G,*
C619M19	2113944A35	CAP CER CHP 62.0PF 50V 5%
C6201M6	2113944A40	CAP:CHIP,100PF,+5%,-5%,50V-DC,0402*
C6202M6	2113945A09	CAP:CHIP,1000PF,+10%,-10%*
C6203M6	2113946B04	CAP:CHIP,.1UF,+10%,-10%,10V-DC*
C620M19	2113946B04	CAP:CHIP,.1UF,+10%,-10%,10V-DC*
C621M19	2113946B04	CAP:CHIP,.1UF,+10%,-10%,10V-DC*
C622M19	2113946C07	CAP:FXD,.33UF,+10%,-10%,10V-DC,0603*
C623M19	2113945B02	CAP:CHIP,.01UF,+10%,-10%,25V-DC*
C624M19	2113946C07	CAP:FXD,.33UF,+10%,-10%,10V-DC,0603*
C625M19	21667009370	CAPACITOR, FIXED, CERAMIC, 0402, 0.000018UF, +/- 1%, 50V, C0G
C626M19	2113945A09	CAP:CHIP,1000PF,+10%,-10%*
C627M19	2113945A09	CAP:CHIP,1000PF,+10%,-10%*
C628M19	2113945B02	CAP:CHIP,.01UF,+10%,-10%,25V-DC*
C629M19	2113946B04	CAP:CHIP,.1UF,+10%,-10%,10V-DC*
C6301M6	2113946B04	CAP:CHIP,.1UF,+10%,-10%,10V-DC*
C6302M6	2113946B04	CAP:CHIP,.1UF,+10%,-10%,10V-DC*

Ref. Des.	Part Number	Description	Ref. Des.	Part Number	Description	Ref. Des.	Part Number	Description	Ref. Des.	Part Number	Description
C6303M6	2113946B04	CAP:CHIP,.1UF,+10%,-10%,10V-DC*	C6403M6	2113946B04	CAP:CHIP,.1UF,+10%,-10%,10V-DC*	C6421M6	2113946B04	CAP:CHIP,.1UF,+10%,-10%,10V-DC*	C6439M6	2113944A40	CAP:CHIP,100PF,+5%,-5%,50V-DC,0402*
C6304M6	2113946B04	CAP:CHIP,.1UF,+10%,-10%,10V-DC*	C6404M6	2113946B04	CAP:CHIP,.1UF,+10%,-10%,10V-DC*	C6422M6	2113946C02	CAP:CHIP,.22UF,+10%,-10%,10V-DC,0603*	C643M19	2113944A48	CAP:CHIP,470PF,+5%,-5%,50V-DC,0402,C0G,*
C6305M6	2113946S35	CAP:CHIP,1UF,+10%,-10%,16V-DC,0603,*	C6405M6	2113946B04	CAP:CHIP,.1UF,+10%,-10%,10V-DC*	C6423M6	2113946B04	CAP:CHIP,.1UF,+10%,-10%,10V-DC*	C644M19	2113944A11	CAP:CHIP,2.7PF,.25PF+/-,50V-DC,0402*
C6306M6	2113946S35	CAP:CHIP,1UF,+10%,-10%,16V-DC,0603,*	C6406M6	2113946B04	CAP:CHIP,.1UF,+10%,-10%,10V-DC*	C6424M6	2113944A40	CAP:CHIP,100PF,+5%,-5%,50V-DC,0402*	C645M19	NOTPLACED	-
C6308M6	2113946B04	CAP:CHIP,.1UF,+10%,-10%,10V-DC*	C6407M6	2113946B04	CAP:CHIP,.1UF,+10%,-10%,10V-DC*	C6425M6	2113944A40	CAP:CHIP,100PF,+5%,-5%,50V-DC,0402*	C646M19	21667009344	CAPACI-TOR,FIXED,CERAMIC,0402,0.000008UF,0.1PF,50V,C0G
C6309M6	2113946B04	CAP:CHIP,.1UF,+10%,-10%,10V-DC*	C6408M6	2113946B04	CAP:CHIP,.1UF,+10%,-10%,10V-DC*	C6426M6	2113945B02	CAP:CHIP,.01UF,+10%,-10%,25V-DC*	C6501M6	2113946B04	CAP:CHIP,.1UF,+10%,-10%,10V-DC*
C630M19	2113946B04	CAP:CHIP,.1UF,+10%,-10%,10V-DC*	C6409M6	2113946B04	CAP:CHIP,.1UF,+10%,-10%,10V-DC*	C6427M6	2113944A50	CAP CER CHP 680.0 PF 50V 5%	C6502M6	2113946B04	CAP:CHIP,.1UF,+10%,-10%,10V-DC*
C6310M6	2113946B04	CAP:CHIP,.1UF,+10%,-10%,10V-DC*	C640M19	2113946B04	CAP:CHIP,.1UF,+10%,-10%,10V-DC*	C6428M6	2113944A40	CAP:CHIP,100PF,+5%,-5%,50V-DC,0402*	C6503M6	2113944A46	CAP:CHIP,330PF,+5%,-5%,50V-DC,0402,C0G,*
C6311M6	2113946B04	CAP:CHIP,.1UF,+10%,-10%,10V-DC*	C6410M6	2113946B04	CAP:CHIP,.1UF,+10%,-10%,10V-DC*	C6429M6	2113946B04	CAP:CHIP,.1UF,+10%,-10%,10V-DC*	C6504M6	2113946B04	CAP:CHIP,.1UF,+10%,-10%,10V-DC*
C631M19	21667009334	CAPACI-TOR,FIXED,CERAMIC,0402,0.000007UF,0.1PF,50V,C0G	C6411M6	2113946B04	CAP:CHIP,.1UF,+10%,-10%,10V-DC*	C642M19	2113944A48	CAP:CHIP,470PF,+5%,-5%,50V-DC,0402,C0G,*	C6565M6	2113956B33	CAP,FXD,2.2UF,+10%,-10%,16V-DC,0603,X5R,-55DEG CMIN,85DEG CMAX
C632M19	2113944A40	CAP:CHIP,100PF,+5%,-5%,50V-DC,0402*	C6412M6	NOTPLACED	-	C6430M6	2113946B04	CAP:CHIP,.1UF,+10%,-10%,10V-DC*	C6566M6	2113956E91	CAP,FXD,10UF,+10%,-10%,16V-DC,1210,X5R,-55DEG CMIN,85DEG CMAX,P
C633M19	2113945B02	CAP:CHIP,.01UF,+10%,-10%,25V-DC*	C6413M6	2113946B04	CAP:CHIP,.1UF,+10%,-10%,10V-DC*	C6431M6	2113946B04	CAP:CHIP,.1UF,+10%,-10%,10V-DC*	C6567M6	2113956E91	CAP,FXD,10UF,+10%,-10%,16V-DC,1210,X5R,-55DEG CMIN,85DEG CMAX,P
C634M19	2113946B04	CAP:CHIP,.1UF,+10%,-10%,10V-DC*	C6414M6	2113946B04	CAP:CHIP,.1UF,+10%,-10%,10V-DC*	C6432M6	2113956B54	CAP:MLCC,X5R,0603,20%,6.3V,10UF	C6568M6	2113956B33	CAP,FXD,2.2UF,+10%,-10%,16V-DC,0603,X5R,-55DEG CMIN,85DEG CMAX
C635M19	2113945B02	CAP:CHIP,.01UF,+10%,-10%,25V-DC*	C6415M6	NOTPLACED	-	C6433M6	2113946S35	CAP:CHIP,1UF,+10%,-10%,16V-DC,0603,*	C6569M6	2113956E91	CAP,FXD,10UF,+10%,-10%,16V-DC,1210,X5R,-55DEG CMIN,85DEG CMAX,P
C636M19	2113946B04	CAP:CHIP,.1UF,+10%,-10%,10V-DC*	C6416M6	2113945B04	CAP,FXD,.022UF,+10%,-10%,25V-DC,0402,X7R,-55DEG CMIN,125DEG CMA	C6434M6	2113946L05	CAP,FXD,.33UF,+80%,-20%,16V-DC,0603,Y5V,-30DEG CMIN,85DEG CMAX	C6570M6	2113944A46	CAP:CHIP,330PF,+5%,-5%,50V-DC,0402,C0G,*
C637M19	2113946B04	CAP:CHIP,.1UF,+10%,-10%,10V-DC*	C6417M6	2113945B04	CAP,FXD,.022UF,+10%,-10%,25V-DC,0402,X7R,-55DEG CMIN,125DEG CMA	C6435M6	2113946S35	CAP:CHIP,1UF,+10%,-10%,16V-DC,0603,*	C6571M6	2113946B04	CAP:CHIP,.1UF,+10%,-10%,10V-DC*
C638M19	2113945A12	CAP:CHIP,3300PF,+10%,-10%,50V-DC,0402,*	C6418M6	2113946B04	CAP:CHIP,.1UF,+10%,-10%,10V-DC*	C6436M6	2113946C08	CAP,FXD,.47UF,+10%,-10%,10V-DC,0603,X5R,-55DEG CMIN,85DEG CMAX	C6572M6	2113946B04	CAP:CHIP,.1UF,+10%,-10%,10V-DC*
C639M19	2113945B02	CAP:CHIP,.01UF,+10%,-10%,25V-DC*	C6419M6	2113946B04	CAP:CHIP,.1UF,+10%,-10%,10V-DC*	C6437M6	2113946C08	CAP,FXD,.47UF,+10%,-10%,10V-DC,0603,X5R,-55DEG CMIN,85DEG CMAX			
C6401M6	2113946B04	CAP:CHIP,.1UF,+10%,-10%,10V-DC*	C641M19	2113944A31	CAP:CHIP,33PF,+5%,-5%,50V-DC,0402,C0G,*	C6438M6	2113944A40	CAP:CHIP,100PF,+5%,-5%,50V-DC,0402*			
C6402M6	2113956A51	CAP:FXD,1UF,+10%,-10%,6.3V-DC*	C6420M6	2113945B04	CAP,FXD,.022UF,+10%,-10%,25V-DC,0402,X7R,-55DEG CMIN,125DEG CMA						

Ref. Des.	Part Number	Description	Ref. Des.	Part Number	Description	Ref. Des.	Part Number	Description	Ref. Des.	Part Number	Description
C6573M6	2113946S35	CAP:CHIP,1UF,+10%,-10%,16V-DC,0603,*	C6592M6	2113944A09	CAP:CHIP,2.2PF,.25PF+/-,50V-DC,0402*	C713M7	2113945C26	CAP:FXD,.039UF,+10%,-10%,50V-DC,0603,X7*	C727M7	2113944A40	CAP:CHIP,100PF,+5%,-5%,50V-DC,0402*
C6574M6	2113946S35	CAP:CHIP,1UF,+10%,-10%,16V-DC,0603,*	C6593M6	2113956C37	CAP:FXD,10UF,+10%,-10%,16V-DC,0805,*	C714M7	2171051Y11	CAP,FXD,.1UF,+5%,-5%,1206,-55DEG CMIN,125DEG CMAX,PB-FREE	C728M7	2113944A40	CAP:CHIP,100PF,+5%,-5%,50V-DC,0402*
C6575M6	2113946S35	CAP:CHIP,1UF,+10%,-10%,16V-DC,0603,*	C6594M6	2113946C07	CAP:FXD,.33UF,+10%,-10%,10V-DC,0603*	C715M7	2113945C31	CAP,FXD,.1UF,+10%,-10%,50V-DC,0603,X7R,-55DEG CMIN,125DEG CMAX	C730M7	2113945C31	CAP,FXD,.1UF,+10%,-10%,50V-DC,0603,X7R,-55DEG CMIN,125DEG CMAX
C6576M6	2113956B33	CAP,FXD,2.2UF,+10%,-10%,16V-DC,0603,X5R,-55DEG CMIN,85DEG CMAX	C6595M6	2113946S35	CAP:CHIP,1UF,+10%,-10%,16V-DC,0603,*	C716M7	2113945C31	CAP,FXD,.1UF,+10%,-10%,50V-DC,0603,X7R,-55DEG CMIN,125DEG CMAX	C731M7	2113945C31	CAP,FXD,.1UF,+10%,-10%,50V-DC,0603,X7R,-55DEG CMIN,125DEG CMAX
C6577M6	2113946S35	CAP:CHIP,1UF,+10%,-10%,16V-DC,0603,*	C6596M6	NOTPLACED	-	C717M7	2113945C31	CAP,FXD,.1UF,+10%,-10%,50V-DC,0603,X7R,-55DEG CMIN,125DEG CMAX	C732M7	2113944A32	CAP:CHIP,39PF,+5%,-5%,50V-DC,0402,C0G,*
C6578M6	2113946S35	CAP:CHIP,1UF,+10%,-10%,16V-DC,0603,*	C6601M6	2113944A28	CAP:CHIP,18PF,+5%,-5%,50V-DC,0402*	C718M7	2113945C31	CAP,FXD,.1UF,+10%,-10%,50V-DC,0603,X7R,-55DEG CMIN,125DEG CMAX	C733M7	2113945A09	CAP:CHIP,1000PF,+10%,-10%*
C6579M6	2113946S35	CAP:CHIP,1UF,+10%,-10%,16V-DC,0603,*	C6602M6	2113944A28	CAP:CHIP,18PF,+5%,-5%,50V-DC,0402*	C719M7	2113945C31	CAP,FXD,.1UF,+10%,-10%,50V-DC,0603,X7R,-55DEG CMIN,125DEG CMAX	C734M7	2113945C31	CAP,FXD,.1UF,+10%,-10%,50V-DC,0603,X7R,-55DEG CMIN,125DEG CMAX
C6580M6	2113946S35	CAP:CHIP,1UF,+10%,-10%,16V-DC,0603,*	C6670M6	NOTPLACED	-	C720M7	2113944C55	CAP CER CHP 1200.OPF 50V 5%	C735M7	2113944A31	CAP:CHIP,33PF,+5%,-5%,50V-DC,0402,C0G,*
C6581M6	2113956B33	CAP,FXD,2.2UF,+10%,-10%,16V-DC,0603,X5R,-55DEG CMIN,85DEG CMAX	C6M2	2113944A40	CAP:CHIP,100PF,+5%,-5%,50V-DC,0402*	C721M7	NOTPLACED	-	C736M7	2113945B02	CAP:CHIP,.01UF,+10%,-10%,25V-DC*
C6582M6	2113944A21	CAP:CHIP,6.8PF,.5PF+/-,50V-DC,0402*	C702M7	2185419D06	CAP,CER SUPER L/D 0.1UF	C722M7	2113944A40	CAP:CHIP,100PF,+5%,-5%,50V-DC,0402*	C737M7	2113945C31	CAP,FXD,.1UF,+10%,-10%,50V-DC,0603,X7R,-55DEG CMIN,125DEG CMAX
C6583M6	2113946B04	CAP:CHIP,.1UF,+10%,-10%,10V-DC*	C703M7	2113945C26	CAP:FXD,.039UF,+10%,-10%,50V-DC,0603,X7*	C723M7	2113944A40	CAP:CHIP,100PF,+5%,-5%,50V-DC,0402*	C738M7	2113944A40	CAP:CHIP,100PF,+5%,-5%,50V-DC,0402*
C6584M6	2113956C37	CAP:FXD,10UF,+10%,-10%,16V-DC,0805,*	C704M7	2185419D06	CAP,CER SUPER L/D 0.1UF	C724M7	2113955D37	CAP,FXD,10UF,+10%,-10%,16V-DC,1206,X7R,-55DEG CMIN,125DEG CMAX	C739M7	2113944A17	CAP:CHIP,4.7PF,.25PF+/-,50V-DC,0402*
C6585M6	2113946B04	CAP:CHIP,.1UF,+10%,-10%,10V-DC*	C705M7	21667009346	CAPACITOR, FIXED, CERAMIC, 0402, 0.0000082UF, 0.1PF, 50V, C0G	C725M7	2113945C31	CAP,FXD,.1UF,+10%,-10%,50V-DC,0603,X7R,-55DEG CMIN,125DEG CMAX	C740M7	2113944A44	CAP:CG,0402,5%,50V,220PF
C6586M6	2113956C35	CAP,FXD,4.7UF,+10%,-10%,16V-DC,0805,X5R,-55DEG CMIN,85DEG CMAX	C706M7	2185419D06	CAP,CER SUPER L/D 0.1UF	C726M7	2113945C31	CAP,FXD,.1UF,+10%,-10%,50V-DC,0603,X7R,-55DEG CMIN,125DEG CMAX	C742M7	2113945C31	CAP,FXD,.1UF,+10%,-10%,50V-DC,0603,X7R,-55DEG CMIN,125DEG CMAX
C6587M6	2113946B04	CAP:CHIP,.1UF,+10%,-10%,10V-DC*	C707M7	2113945C01	CAP CER CHP 6800PF 50V 10%				C743M7	2113946B06	CAP:CHIP,.22UF,+10%,-10%,10V-DC,0402*
C6588M6	2113944A46	CAP:CHIP,330PF,+5%,-5%,50V-DC,0402,C0G,*	C708M7	21667009346	CAPACITOR, FIXED, CERAMIC, 0402, 0.0000082UF, 0.1PF, 50V, C0G				C744M7	2113955D37	CAP,FXD,10UF,+10%,-10%,16V-DC,1206,X7R,-55DEG CMIN,125DEG CMAX
C6589M6	2113944A40	CAP:CHIP,100PF,+5%,-5%,50V-DC,0402*	C709M7	2171051Y11	CAP,FXD,.1UF,+5%,-5%,1206,-55DEG CMIN,125DEG CMAX,PB-FREE						
C6590M6	2113946B04	CAP:CHIP,.1UF,+10%,-10%,10V-DC*	C710M7	NOTPLACED	-						
C6591M6	2113944A26	CAP CER CHP 12.0PF 50V 5%	C711M7	NOTPLACED	-						
			C712M7	NOTPLACED	-						

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C749M7	2113945C31	CAP,FXD,.1UF,+10%,-10%,50V-DC,0603,X7R,-55DEG CMIN,125DEG CMAX
C750M7	2113945C31	CAP,FXD,.1UF,+10%,-10%,50V-DC,0603,X7R,-55DEG CMIN,125DEG CMAX
C751M7	2113945A09	CAP:CHIP,1000PF,+10%,-10%*
C752M7	2113944A43	CAP CER CHP 180.0PF 50V 5%
C753M7	2113944A31	CAP:CHIP,33PF,+5%,-5%,50V-DC,0402,C0G,*
C754M7	2113944A34	CAP CER CHP 56.0PF 50V 5%
C756M7	2113955D37	CAP,FXD,10UF,+10%,-10%,16V-DC,1206,X7R,-55DEG CMIN,125DEG CMAX
C757M7	2113945C31	CAP,FXD,.1UF,+10%,-10%,50V-DC,0603,X7R,-55DEG CMIN,125DEG CMAX
C760M7	2113944A44	CAP:CG,0402,5%,50V,220PF
C764M7	2113946B06	CAP:CHIP,.22UF,+10%,-10%,10V-DC,0402*
C768M7	21667009279	CAPACITOR,FIXED,CERAMIC,0402,0.0000015UF,0.1PF,50V,C0G
C770M7	2113944A44	CAP:CG,0402,5%,50V,220PF
C772M7	2113945A09	CAP:CHIP,1000PF,+10%,-10%*
C773M7	2113944A33	CAP:CHIP,47PF,+5%,-5%,50V-DC,0402,C0G,*
C777M7	2113944A44	CAP:CG,0402,5%,50V,220PF
C780M7	2113944A33	CAP:CHIP,47PF,+5%,-5%,50V-DC,0402,C0G,*

Ref. Des.	Part Number	Description
C781M7	21667009388	CAPACITOR,FIXED,CERAMIC,0402,0.0001UF,+/-1%,50V,C0G
C786M7	2113944A44	CAP:CG,0402,5%,50V,220PF
C7M2	2113944A40	CAP:CHIP,100PF,+5%,-5%,50V-DC,0402*
C803M7	2113944A44	CAP:CG,0402,5%,50V,220PF
C813M7	NOTPLACED	-
C816M7	2113944A35	CAP CER CHP 62.0PF 50V 5%
C817M7	2113944A44	CAP:CG,0402,5%,50V,220PF
C819M7	2113944A44	CAP:CG,0402,5%,50V,220PF
C823M7	2113944A40	CAP:CHIP,100PF,+5%,-5%,50V-DC,0402*
C824M7	2113944A44	CAP:CG,0402,5%,50V,220PF
C8M2	2113944A40	CAP:CHIP,100PF,+5%,-5%,50V-DC,0402*
C9M2	2113944A40	CAP:CHIP,100PF,+5%,-5%,50V-DC,0402*
D10M2	4870359B01	DIODE:SUPPRESSOR,ESD,BI-DIR,7.82V,1W
D11M2	4870359B01	DIODE:SUPPRESSOR,ESD,BI-DIR,7.82V,1W
D16M2	4870359B01	DIODE:SUPPRESSOR,ESD,BI-DIR,7.82V,1W
D1970M20	NOTPLACED	-
D200M12	4813978A19	DIODE,RECT,MBR120,SM,SOD-123,1A,20V,SHTK,PB-FREE
D2101M2	4870359B01	DIODE:SUPPRESSOR,ESD,BI-DIR,7.82V,1W
D2401M2	4870359B01	DIODE:SUPPRESSOR,ESD,BI-DIR,7.82V,1W
D2402M2	4870359B01	DIODE:SUPPRESSOR,ESD,BI-DIR,7.82V,1W

Ref. Des.	Part Number	Description
D2403M2	4870359B01	DIODE:SUPPRESSOR,ESD,BI-DIR,7.82V,1W
D2601M13	4813974A19	DIODE ARRAY,MXR,SM,SOT-323,7V,.2W,SHTK,2,PB-FREE
D2602M13	4815897H01	DIODE: UPP9401E ,PIN,50V,2.5W,DO-216
D2603M13	4815897H01	DIODE: UPP9401E ,PIN,50V,2.5W,DO-216
D3102M22	4805656W87	DIODE,VCTR, @ 15V,1SV279,,SOD-523/SC-79
D3103M22	4805656W87	DIODE,VCTR, @ 15V,1SV279,,SOD-523/SC-79
D3104M22	4805656W87	DIODE,VCTR, @ 15V,1SV279,,SOD-523/SC-79
D3105M22	4805656W87	DIODE,VCTR, @ 15V,1SV279,,SOD-523/SC-79
D3135M22	4805656W87	DIODE,VCTR, @ 15V,1SV279,,SOD-523/SC-79
D3136M22	4805656W87	DIODE,VCTR, @ 15V,1SV279,,SOD-523/SC-79
D3137M22	4805656W87	DIODE,VCTR, @ 15V,1SV279,,SOD-523/SC-79
D3138M22	4805656W87	DIODE,VCTR, @ 15V,1SV279,,SOD-523/SC-79
D3M2	4870359B01	DIODE:SUPPRESSOR,ESD,BI-DIR,7.82V,1W
D4001M2	4813978A25	SCHOTTKY 30V SOD-323 T&R PB FREE
D4M2	4870359B01	DIODE:SUPPRESSOR,ESD,BI-DIR,7.82V,1W
D5M2	4870359B01	DIODE:SUPPRESSOR,ESD,BI-DIR,7.82V,1W
D6101M6	4813978A25	SCHOTTKY 30V SOD-323 T&R PB FREE

Ref. Des.	Part Number	Description
D6401M6	4813978A25	SCHOTTKY 30V SOD-323 T&R PB FREE
D6501M6	4813978A25	SCHOTTKY 30V SOD-323 T&R PB FREE
D6502M6	4813978A25	SCHOTTKY 30V SOD-323 T&R PB FREE
D6M2	4870359B01	DIODE:SUPPRESSOR,ESD,BI-DIR,7.82V,1W
D722M7	4815011H01	DIODE TRIPLE
D723M7	4815011H01	DIODE TRIPLE
D7M2	4870359B01	DIODE:SUPPRESSOR,ESD,BI-DIR,7.82V,1W
D8M2	4870359B01	DIODE:SUPPRESSOR,ESD,BI-DIR,7.82V,1W
D9M2	4870359B01	DIODE:SUPPRESSOR,ESD,BI-DIR,7.82V,1W
E1219M11	2405688Z01	INDUCTOR FERRITE BEAD
L1901M20	24009331005	INDUCTOR, 3.9NH, +/-0.5NH, 0603
L1908M20	24009342002	INDUCTOR, WIRE WOUND
L1909M20	24009342021	INDUCTOR, WIRE WOUND
L1910M20	24009342021	INDUCTOR, WIRE WOUND
L1912M20	24009342002	INDUCTOR, WIRE WOUND
L1913M20	24009342021	INDUCTOR, WIRE WOUND
L1914M20	24009342021	INDUCTOR, WIRE WOUND
L1915M20	24009342010	INDUCTOR, WIRE WOUND
L1917M20	24009342002	INDUCTOR, WIRE WOUND
L1934M20	24009342033	INDUCTOR, WIRE WOUND
L1935M20	24009342021	INDUCTOR, WIRE WOUND
L1936M20	24009315001	WW CHIP INDUCTOR, HIGH Q, 5%, 0603
L200M12	2571269C01	INDUCTOR WW POWER 20%
L2202M2	24009315046	WW CHIP INDUCTOR, HIGH Q, 5%, 0603
L2203M2	24009315046	WW CHIP INDUCTOR, HIGH Q, 5%, 0603



Ref. Des.	Part Number	Description
L2204M2	24009315046	WW CHIP INDUCTOR, HIGH Q, 5%, 0603
L2205M2	24009315046	WW CHIP INDUCTOR, HIGH Q, 5%, 0603
L2601M13	24012026011	ULTRA-MINIATURE AIR CORE INDUCTORS
L2602M13	24009315041	WW CHIP INDUCTOR, HIGH Q, 5%, 0603
L3101M22	24009344045	IDCTR,WW,820,5%,CER,1.7GHZ SRF,PCMT,820NH
L3106M22	24009315017	WW CHIP INDUCTOR, HIGH Q, 5%, 0603
L3112M22	2415428H04	AIR WOUND INDUCTOR
L3119M22	24009344045	IDCTR,WW,820,5%,CER,1.7GHZ SRF,PCMT,820NH
L3125M22	24009344045	IDCTR,WW,820,5%,CER,1.7GHZ SRF,PCMT,820NH
L3126M22	24009344045	IDCTR,WW,820,5%,CER,1.7GHZ SRF,PCMT,820NH
L3134M22	24009344013	INDUCTOR, WIRE WOUND
L3139M22	24009315021	WW CHIP INDUCTOR, HIGH Q, 5%, 0603
L3145M22	2415428H04	AIR WOUND INDUCTOR
L3150M22	24009344013	INDUCTOR, WIRE WOUND
L3158M22	24009344013	INDUCTOR, WIRE WOUND
L3159M22	24009344013	INDUCTOR, WIRE WOUND
L500M21	24009315044	WW CHIP INDUCTOR, HIGH Q, 5%, 0603
L503M21	24667001026	IDCTR,FXD,100NH,5%,300MA,1.2OHM,12 Q,770MHZ SRF,SM,0603
L504M21	24009342049	INDUCTOR, WIRE WOUND
L513M21	NOTPLACED	-
L550M21	24667001015	IDCTR,FXD,15NH,5%,600MA,.32OHM,12 Q,2.5GHZ SRF,SM,0603
L601M19	24009315044	WW CHIP INDUCTOR, HIGH Q, 5%, 0603

Ref. Des.	Part Number	Description
L602M19	24012154001	INDUCTOR,10 UH, NH,CHIP INDUC-TOR,CHIP,10UH,20%,700M A
L603M19	24012154001	INDUCTOR,10 UH, NH,CHIP INDUC-TOR,CHIP,10UH,20%,700M A
L604M19	24009345005	INDUCTOR, WIRE WOUND
L605M19	24012050001	0603LS CHIP INDUC-TORS, 1608, 3900NH
L611M19	24009344014	INDUCTOR, WIRE WOUND
L6401M6	2471189M03	SHIELDED SMT POWER INDUCTOR 10UH
L6402M6	2471189M03	SHIELDED SMT POWER INDUCTOR 10UH
L6403M6	24009271001	20NH HIGH CURRENT CHIP INDUCTOR
L6404M6	24009271001	20NH HIGH CURRENT CHIP INDUCTOR
L6502M6	2471678H01	10UH INDCUTOR
L6504M6	24009268001	10UH 2.1A SHIELDED INDUCTOR
L6505M6	2471678H01	10UH INDCUTOR
L701M7	24009315048	WW CHIP INDUCTOR, HIGH Q, 5%, 0603
L702M7	24009315048	WW CHIP INDUCTOR, HIGH Q, 5%, 0603
L709M7	2475122C26	IND, MULTI-LAYER, 12NH 5%, 0402,
L720M7	24012100001	IDCTR,2.2UH,10%,15MA,S M,MAGNETICALLY SHIELDED CHIP
L727M7	24012100001	IDCTR,2.2UH,10%,15MA,S M,MAGNETICALLY SHIELDED CHIP
L728M7	24009315048	WW CHIP INDUCTOR, HIGH Q, 5%, 0603
L733M7	24012100001	IDCTR,2.2UH,10%,15MA,S M,MAGNETICALLY SHIELDED CHIP

Ref. Des.	Part Number	Description
L735M7	24012100001	IDCTR,2.2UH,10%,15MA,S M,MAGNETICALLY SHIELDED CHIP
L738M7	24012100001	IDCTR,2.2UH,10%,15MA,S M,MAGNETICALLY SHIELDED CHIP
L739M7	24009315048	WW CHIP INDUCTOR, HIGH Q, 5%, 0603
L741M7	24012100001	IDCTR,2.2UH,10%,15MA,S M,MAGNETICALLY SHIELDED CHIP
L753M7	2415347H06	IDCTR, 2200NH
L755M7	24009315048	WW CHIP INDUCTOR, HIGH Q, 5%, 0603
L758M7	24009315048	WW CHIP INDUCTOR, HIGH Q, 5%, 0603
L759M7	24009315048	WW CHIP INDUCTOR, HIGH Q, 5%, 0603
L765M7	2475122C29	IND, MULTI-LAYER, 22NH 5%, 0402,
L775M7	24009315048	WW CHIP INDUCTOR, HIGH Q, 5%, 0603
M101M12	39012039001	CONNECTOR, BATTERY CONTACT
M103M12	3987977Y04	CONT,CONN,,1CONT,,,ANT UNIV 4.5MM,UC 1.8
M104M12	NOTPLACED	-
M105M12	3987977Y04	CONT,CONN,,1CONT,,,ANT UNIV 4.5MM,UC 1.8
M6405M6	3987977Y04	CONT,CONN,,1CONT,,,ANT UNIV 4.5MM,UC 1.8
M6406M6	3987977Y04	CONT,CONN,,1CONT,,,ANT UNIV 4.5MM,UC 1.8
M6502M6	0985888K02	SKT RTC BTTY LEAP
M6504M6	3987977Y04	CONT,CONN,,1CONT,,,ANT UNIV 4.5MM,UC 1.8
PASTE1	11012015001	SOLDER PASTE - 9.0A, LOW VOID
PASTE2	11012015001	SOLDER PASTE - 9.0A, LOW VOID

Ref. Des.	Part Number	Description
PASTE3	11012015001	SOLDER PASTE - 9.0A, LOW VOID
PCB	84012621001	BOARD, PC, UHF2 MAIN BOARD
Q1263M11	4813973A32	XSTR,BIP GP SS,NPN,SM,SC-70,SMT,50V,.202W,100MA, PB-FREE
Q1264M11	4813973A32	XSTR,BIP GP SS,NPN,SM,SC-70,SMT,50V,.202W,100MA, PB-FREE
Q1265M11	4813973A32	XSTR,BIP GP SS,NPN,SM,SC-70,SMT,50V,.202W,100MA, PB-FREE
Q1268M11	4813970A59	P-CH FET 1.0A 20V SOT-23 T&R
Q1601M16	48012094001	MOD,XSTR,FET RF PWR, 135-941MHZ
Q1920M20	4813973A32	XSTR,BIP GP SS,NPN,SM,SC-70,SMT,50V,.202W,100MA, PB-FREE
Q1922M20	4813973M75	XSTR,BIP GP SS,PNP,BC858,SOT-563,SMT,-30V,.357W,-100MA,100MHZ
Q201M12	4813970A59	P-CH FET 1.0A 20V SOT-23 T&R
Q202M12	4813973A32	XSTR,BIP GP SS,NPN,SM,SC-70,SMT,50V,.202W,100MA, PB-FREE
Q2202M2	4815261H01	TRANSISTOR,BIP GENERAL PURPOSE SMALL NPN
Q2601M13	4815055H01	TSTR DUAL NPN/PNP UMH 5
Q3123M22	4871915M01	XSTR,BIP RF SML SGNL,NPN,SM,4.5GHZ
Q3128M22	4815055H01	TSTR DUAL NPN/PNP UMH 5
Q3156M22	4871915M01	XSTR,BIP RF SML SGNL,NPN,SM,4.5GHZ

Ref. Des.	Part Number	Description
Q3161M22	4815055H01	TSTR DUAL NPN/PNP UMH 5
Q4001M2	4815261H01	TRANSISTOR,BIP GENERAL PURPOSE SMALL NPN
Q601M19	4813973A04	XSTR,BIP GP SS,NPN,TA13,SM,SOT-23,SMT,30V,.225W,300MA,125MHZ,P
Q6101M6	4815261H01	TRANSISTOR,BIP GENERAL PURPOSE SMALL NPN
Q6401M6	48012170001	FET
Q6501M6	4813970A62	XSTR,FET GP PWR,MOS-FET,P-CH,ENHN,CF,-20V,1.3W,PB-FREE
Q6502M6	48012154001	FET
Q6504M6	4809579E77	FET, NCH MOS FET, 1.2MM X 1.2MM PACKAGE, SMD, W18 COMPLIANT
Q6505M6	4813970A62	XSTR,FET GP PWR,MOS-FET,P-CH,ENHN,CF,-20V,1.3W,PB-FREE
Q6506M6	4809579E77	FET, NCH MOS FET, 1.2MM X 1.2MM PACKAGE, SMD, W18 COMPLIANT
Q6507M6	48012170001	FET
Q6508M6	48012154001	FET
Q731M7	4885061Y01	XSTR NPN 6V 30UA 12GHZ PB-FREE
Q745M7	4813973M75	XSTR,BIP GP SS,PNP,BC858,SOT-563,SMT,-30V,.357W,-100MA,100MHZ
Q756M7	4805585Q32	TRANSITOR, NPN RF
Q767M7	4813973M75	XSTR,BIP GP SS,PNP,BC858,SOT-563,SMT,-30V,.357W,-100MA,100MHZ
Q774M7	4805585Q32	TRANSITOR, NPN RF
Q785M7	4889394V04	XSTR,FET GP SS,MOS-FET,N-CH, ENHN, SM,20V

Ref. Des.	Part Number	Description
R1101M11	0613952R01	RES:MF,10KOHM,5%,.0625W,SM,0402*
R1201M11	0613952R01	RES:MF,10KOHM,5%,.0625W,SM,0402*
R1202M11	NOTPLACED	-
R1203M11	0613952M85	RES:MF,7.5KOHM,1%,.0625W,SM,0402*
R1204M11	NOTPLACED	-
R1205M11	0613952N01	RES:MF,10KOHM,1%,.0625W,SM,0402*
R1206M11	0613952J01	RES:MF,10KOHM,5%,.1W,SM,0603,200PPM*
R1207M11	0613952R22	CER CHIP RES 75K OHM 5 0402
R1208M11	0613952R01	RES:MF,10KOHM,5%,.0625W,SM,0402*
R1209M11	NOTPLACED	-
R1210M11	0613952R66	RES:MF,0OHM,5%,.0625W,SM,0402*
R1211M11	0613952R01	RES:MF,10KOHM,5%,.0625W,SM,0402*
R1212M11	NOTPLACED	-
R1213M11	0613952R66	RES:MF,0OHM,5%,.0625W,SM,0402*
R1214M11	0613952R66	RES:MF,0OHM,5%,.0625W,SM,0402*
R1218M11	0613952R66	RES:MF,0OHM,5%,.0625W,SM,0402*
R1219M11	NOTPLACED	-
R1223M11	NOTPLACED	-
R1225M11	NOTPLACED	-
R1226M11	0615043C01	RES POWER METAL STRIP W18 COMPLIANT
R1228M11	NOTPLACED	-
R1230M11	0613952Z54	RES:MF,9.1KOHM,1%,.0625W,SM,0402,200PPM/CEL,PB-FREE
R1232M11	0613952Z50	RES:MF,5.6KOHM,1%,.0625W,SM,0402,200PPM/CEL,PB-FREE

Ref. Des.	Part Number	Description
R1238M11	0613952R66	RES:MF,0OHM,5%,.0625W,SM,0402*
R1240M11	0613952R66	RES:MF,0OHM,5%,.0625W,SM,0402*
R1241M11	0613952Z60	RES,MF,27KOHM,1%,.0625W,SM,0402,200PPM/CEL,PB-FREE
R1242M11	0613952Z66	RES,MF,47KOHM,1%,.0625W,SM,0402,200PPM/CEL,PB-FREE
R1243M11	0613952R66	RES:MF,0OHM,5%,.0625W,SM,0402*
R1244M11	0613952Z67	RES,MF,51KOHM,1%,.0625W,SM,0402,200
R1245M11	0613952R25	RES:MF,100KOHM,5%,.0625W,SM,0402*
R1603M16	0613952N85	CER CHIP RES 75.0K OHM 1 0402
R1604M16	0613952Z62	RES,MF,33KOHM,1%,.0625W,SM,0402,200PPM/CEL,PB-FREE
R1605M16	0613952Q73	CER CHIP RES 1000 OHM 5 0402
R1606M16	0613952H53	RES,MF,150OHM,5%,.1W,SM,0603,200PPM/CEL*
R1651M16	NOTPLACED	-
R1652M16	NOTPLACED	-
R1653M16	0613952R66	RES:MF,0OHM,5%,.0625W,SM,0402*
R1900M20	0613952R66	RES:MF,0OHM,5%,.0625W,SM,0402*
R1906M20	0613952R01	RES:MF,10KOHM,5%,.0625W,SM,0402*
R1907M20	0613952R01	RES:MF,10KOHM,5%,.0625W,SM,0402*
R1908M20	0613952R01	RES:MF,10KOHM,5%,.0625W,SM,0402*
R1909M20	0613952R01	RES:MF,10KOHM,5%,.0625W,SM,0402*
R1910M20	0613952Q96	CER CHIP RES 9100 OHM 5 0402

Ref. Des.	Part Number	Description
R1911M20	0613952Q96	CER CHIP RES 9100 OHM 5 0402
R1921M20	0613952R22	CER CHIP RES 75K OHM 5 0402
R1922M20	0613952R27	CER CHIP RES 120K OHM 5% 0402
R1923M20	0613952R01	RES:MF,10KOHM,5%,.0625W,SM,0402*
R1924M20	0613952Q37	RES:MF,33OHM,5%,.0625W,SM,0402*
R1925M20	0613952Q11	CER CHIP RES 2.7 OHM 5 0402
R1935M20	0613952Q75	RES:MF,1.2KOHM,5%,.0625W,SM,0402*
R1936M20	0613952R66	RES:MF,0OHM,5%,.0625W,SM,0402*
R1970M20	0613952Q25	RES:MF,10OHM,5%,.0625W,SM,0402*
R1972M20	0613952Q25	RES:MF,10OHM,5%,.0625W,SM,0402*
R2003M2	0613952Q53	RES:MF,150OHM,5%,.0625W,SM,0402*
R2004M2	0613952Q49	CER CHIP RES 100 OHM 5 0402
R2005M2	0613952Q66	CER CHIP RES 510 OHM 5 0402
R2007M2	0613952Q49	CER CHIP RES 100 OHM 5 0402
R200M12	0613952R66	RES:MF,0OHM,5%,.0625W,SM,0402*
R201M12	0613952R25	RES:MF,100KOHM,5%,.0625W,SM,0402*
R2024M2	0613952Q09	CER CHIP RES 2.2 OHM 5 0402
R2025M2	0613952Q09	CER CHIP RES 2.2 OHM 5 0402
R202M12	0613952Q89	RES:MF,4.7KOHM,5%,.0625W,SM,0402*
R21000M2	NOTPLACED	-
R21001M2	NOTPLACED	-
R21002M2	NOTPLACED	-

Ref. Des.	Part Number	Description
R21003M2	NOTPLACED	-
R2104M2	0613952Q89	RES:MF,4.7KOHM,5%,.0625W,SM,0402*
R2105M2	0613952Q89	RES:MF,4.7KOHM,5%,.0625W,SM,0402*
R2106M2	NOTPLACED	-
R2107M2	0613952Q73	CER CHIP RES 1000 OHM 5 0402
R2109M2	0613952Q25	RES:MF,10OHM,5%,.0625W,SM,0402*
R2110M2	0613952Q33	RES:MF,22OHM,5%,.0625W,SM,0402*
R2111M2	0613952Q25	RES:MF,10OHM,5%,.0625W,SM,0402*
R2113M2	0613952Q25	RES:MF,10OHM,5%,.0625W,SM,0402*
R2114M2	0613952Q33	RES:MF,22OHM,5%,.0625W,SM,0402*
R2115M2	0613952Q25	RES:MF,10OHM,5%,.0625W,SM,0402*
R2116M2	0613952R01	RES:MF,10KOHM,5%,.0625W,SM,0402*
R2117M2	0613952R01	RES:MF,10KOHM,5%,.0625W,SM,0402*
R2118M2	0613952R01	RES:MF,10KOHM,5%,.0625W,SM,0402*
R2120M2	0613952R01	RES:MF,10KOHM,5%,.0625W,SM,0402*
R2129M2	0613952R01	RES:MF,10KOHM,5%,.0625W,SM,0402*
R2130M2	0613952R01	RES:MF,10KOHM,5%,.0625W,SM,0402*
R2131M2	0613952R01	RES:MF,10KOHM,5%,.0625W,SM,0402*
R2132M2	0613952R01	RES:MF,10KOHM,5%,.0625W,SM,0402*
R2133M2	0613952R01	RES:MF,10KOHM,5%,.0625W,SM,0402*
R2135M2	0613952Q41	RES:MF,47OHM,5%,.0625W,SM,0402*

Ref. Des.	Part Number	Description
R2136M2	0613952Q61	CER CHIP RES 330 OHM 5 0402
R2137M2	0613952Q61	CER CHIP RES 330 OHM 5 0402
R2138M2	0613952Q41	RES:MF,47OHM,5%,.0625W,SM,0402*
R2139M2	0613952Q41	RES:MF,47OHM,5%,.0625W,SM,0402*
R2142M2	0613952Q41	RES:MF,47OHM,5%,.0625W,SM,0402*
R2144M2	0613952Q61	CER CHIP RES 330 OHM 5 0402
R2145M2	0613952Q41	RES:MF,47OHM,5%,.0625W,SM,0402*
R2146M2	0613952Q41	RES:MF,47OHM,5%,.0625W,SM,0402*
R2147M2	0613952Q41	RES:MF,47OHM,5%,.0625W,SM,0402*
R2148M2	0613952Q41	RES:MF,47OHM,5%,.0625W,SM,0402*
R2149M2	0613952Q41	RES:MF,47OHM,5%,.0625W,SM,0402*
R2151M2	NOTPLACED	-
R2153M2	0613952Q41	RES:MF,47OHM,5%,.0625W,SM,0402*
R2154M2	0613952Q41	RES:MF,47OHM,5%,.0625W,SM,0402*
R2192M2	0613952Q61	CER CHIP RES 330 OHM 5 0402
R2197M2	0613952R66	RES:MF,0OHM,5%,.0625W,SM,0402*
R2198M2	0613952R66	RES:MF,0OHM,5%,.0625W,SM,0402*
R2199M2	0613952R66	RES:MF,0OHM,5%,.0625W,SM,0402*
R2201M2	0613952R32	CER CHIP RES 200K OHM 5 0402
R2204M2	0613952Q85	CER CHIP RES 3300 OHM 5 0402
R2206M2	0613952Q85	CER CHIP RES 3300 OHM 5 0402

Ref. Des.	Part Number	Description
R2207M2	0613952R66	RES:MF,0OHM,5%,.0625W,SM,0402*
R2235M2	0613952R66	RES:MF,0OHM,5%,.0625W,SM,0402*
R2244M2	0613952Q65	RES,MF,470OHM,5%,.0625W,SM,0402,200PPM/*
R2245M2	0613952Q60	CER CHIP RES 300 OHM 5 0402
R2246M2	0613952Q65	RES,MF,470OHM,5%,.0625W,SM,0402,200PPM/*
R2254M2	0613952R01	RES:MF,10KOHM,5%,.0625W,SM,0402*
R2601M13	NOTPLACED	-
R2602M13	0613952H47	CER CHIP RES 82.0 OHM 5 0603
R2603M13	0613952H47	CER CHIP RES 82.0 OHM 5 0603
R2604M13	0613952H47	CER CHIP RES 82.0 OHM 5 0603
R2605M13	0613952G67	RES,MF,0OHM,1%,.1W,SM,0603,PB-FREE
R2606M13	0613952R25	RES:MF,100KOHM,5%,.0625W,SM,0402*
R2803M1	0613952Q37	RES:MF,33OHM,5%,.0625W,SM,0402*
R2804M1	0613952Q49	CER CHIP RES 100 OHM 5 0402
R2805M1	0613952Q49	CER CHIP RES 100 OHM 5 0402
R2806M1	0613952Q59	CER CHIP RES 270 OHM 5 0402
R2807M1	0613952Q56	CER CHIP RES 200 OHM 5 0402
R2808M1	0613952Q49	CER CHIP RES 100 OHM 5 0402
R2810M1	0613952R01	RES:MF,10KOHM,5%,.0625W,SM,0402*
R2811M1	0613952Q89	RES:MF,4.7KOHM,5%,.0625W,SM,0402*
R2812M1	0613952R01	RES:MF,10KOHM,5%,.0625W,SM,0402*

Ref. Des.	Part Number	Description
R2813M1	NOTPLACED	-
R2817M1	0613952Q41	RES:MF,47OHM,5%,.0625W,SM,0402*
R3100M22	0613952R66	RES:MF,0OHM,5%,.0625W,SM,0402*
R3103M22	0613952Q31	CER CHIP RES 18.0 OHM 5 0402
R3105M22	0613952Q60	CER CHIP RES 300 OHM 5 0402
R3106M22	0613952Q60	CER CHIP RES 300 OHM 5 0402
R3107M22	0613952Q53	RES:MF,150OHM,5%,.0625W,SM,0402*
R3108M22	0613952Q38	CER CHIP RES 36.0 OHM 5 0402
R3109M22	0613952Q53	RES:MF,150OHM,5%,.0625W,SM,0402*
R3114M22	0613952R11	CER CHIP RES 27K OHM 5% 0402
R3118M22	0613952R03	CER CHIP RES 12K OHM 5% 0402
R3127M22	0613952Q52	CER CHIP RES 130 OHM 5 0402
R3146M22	0613952R11	CER CHIP RES 27K OHM 5% 0402
R3149M22	0613952R07	CER CHIP RES 18K OHM 5% 0402
R3158M22	0613952Q46	CER CHIP RES 75.0 OHM 5 0402
R3159M22	0613952Q40	CER CHIP RES 43.0 OHM 5 0402
R3160M22	0613952Q49	CER CHIP RES 100 OHM 5 0402
R4005M2	0613952R01	RES:MF,10KOHM,5%,.0625W,SM,0402*
R4006M2	0613952R01	RES:MF,10KOHM,5%,.0625W,SM,0402*
R4007M2	0613952R01	RES:MF,10KOHM,5%,.0625W,SM,0402*
R4008M2	0613952R01	RES:MF,10KOHM,5%,.0625W,SM,0402*

Ref. Des.	Part Number	Description
R4009M2	0613952Q85	CER CHIP RES 3300 OHM 5 0402
R4010M2	0613952R32	CER CHIP RES 200K OHM 5 0402
R4011M2	0613952R17	RESISTOR,METAL FILM,47KOHM,5%,.0625W, SM,0402,200PPM/CEL,PB-FREE
R4012M2	0613952R09	CER CHIP RES 22K OHM 5% 0402
R4013M2	0613952R09	CER CHIP RES 22K OHM 5% 0402
R4014M2	0613952Q85	CER CHIP RES 3300 OHM 5 0402
R500M21	0613952Q37	RES:MF,33OHM,5%,.0625 W,SM,0402*
R502M21	0613952Q36	CER CHIP RES 30.0 OHM 5 0402
R512M21	0613952R66	RES:MF,0OHM,5%,.0625W, SM,0402*
R525M21	0613952R66	RES:MF,0OHM,5%,.0625W, SM,0402*
R526M21	0613958J74	RES:MF,0OHM,5%,.125W,S M,0805,PB-FREE
R601M19	0613952Q41	RES:MF,47OHM,5%,.0625 W,SM,0402*
R602M19	0613952Q63	RES:MF,390OHM,5%,.0625 W,SM,0402*
R603M19	0613952R25	RES:MF,100KOHM,5%,.062 5W,SM,0402*
R604M19	0613952Q63	RES:MF,390OHM,5%,.0625 W,SM,0402*
R605M19	0613952R01	RES:MF,10KOHM,5%,.0625 W,SM,0402*
R606M19	0613952R01	RES:MF,10KOHM,5%,.0625 W,SM,0402*
R607M19	0613952R25	RES:MF,100KOHM,5%,.062 5W,SM,0402*
R608M19	0613952R01	RES:MF,10KOHM,5%,.0625 W,SM,0402*
R609M19	0613952Q81	RES:MF,2.2KOHM,5%,.062 5W,SM,0402*

Ref. Des.	Part Number	Description
R6101M6	0613952R01	RES:MF,10KOHM,5%,.0625 W,SM,0402*
R6310M6	0613952Q37	RES:MF,33OHM,5%,.0625 W,SM,0402*
R6311M6	0613952Q37	RES:MF,33OHM,5%,.0625 W,SM,0402*
R6312M6	0613952Q37	RES:MF,33OHM,5%,.0625 W,SM,0402*
R6313M6	0613952Q37	RES:MF,33OHM,5%,.0625 W,SM,0402*
R6314M6	0613952Q37	RES:MF,33OHM,5%,.0625 W,SM,0402*
R6316M6	0613952R01	RES:MF,10KOHM,5%,.0625 W,SM,0402*
R6401M6	0613952R18	RES:MF,51KOHM,5%,.0625 W,SM,0402*
R6402M6	0613952R32	CER CHIP RES 200K OHM 5 0402
R6403M6	0613952Q81	RES:MF,2.2KOHM,5%,.062 5W,SM,0402*
R6404M6	0613952Q81	RES:MF,2.2KOHM,5%,.062 5W,SM,0402*
R6405M6	0613952Q75	RES:MF,1.2KOHM,5%,.062 5W,SM,0402*
R6406M6	0613952R01	RES:MF,10KOHM,5%,.0625 W,SM,0402*
R6407M6	0613952Q81	RES:MF,2.2KOHM,5%,.062 5W,SM,0402*
R6409M6	0613952N01	RES:MF,10KOHM,1%,.0625 W,SM,0402*
R6410M6	0613952R01	RES:MF,10KOHM,5%,.0625 W,SM,0402*
R6411M6	0613952R66	RES:MF,0OHM,5%,.0625W, SM,0402*
R6414M6	0613952Q61	CER CHIP RES 330 OHM 5 0402
R6415M6	0613952Q61	CER CHIP RES 330 OHM 5 0402
R6416M6	0613952Q61	CER CHIP RES 330 OHM 5 0402

Ref. Des.	Part Number	Description
R6417M6	0613952Q61	CER CHIP RES 330 OHM 5 0402
R6419M6	0613952Q37	RES:MF,33OHM,5%,.0625 W,SM,0402*
R6420M6	0613952R17	RESISTOR,METAL FILM,47KOHM,5%,.0625W, SM,0402,200PPM/CEL,PB-FREE
R6421M6	0613952R01	RES:MF,10KOHM,5%,.0625 W,SM,0402*
R6422M6	0613952Q51	CER CHIP RES 120 OHM 5 0402
R6423M6	0613952R66	RES:MF,0OHM,5%,.0625W, SM,0402*
R6424M6	0613952N01	RES:MF,10KOHM,1%,.0625 W,SM,0402*
R6425M6	0613952Q80	CER CHIP RES 2000 OHM 5 0402
R6426M6	0613952Q49	CER CHIP RES 100 OHM 5 0402
R6427M6	0613952R11	CER CHIP RES 27K OHM 5% 0402
R6428M6	0613952R25	RES:MF,100KOHM,5%,.062 5W,SM,0402*
R6429M6	0613952R17	RESISTOR,METAL FILM,47KOHM,5%,.0625W, SM,0402,200PPM/CEL,PB-FREE
R6430M6	0613952R09	CER CHIP RES 22K OHM 5% 0402
R6431M6	0613952Q81	RES:MF,2.2KOHM,5%,.062 5W,SM,0402*
R6432M6	0613952R25	RES:MF,100KOHM,5%,.062 5W,SM,0402*
R6433M6	0613952Q32	CER CHIP RES 20.0 OHM 5 0402
R6434M6	0613952Q32	CER CHIP RES 20.0 OHM 5 0402
R6492M6	0613952Q79	CER CHIP RES 1800 OHM 5 0402
R6501M6	0613952Q25	RES:MF,10OHM,5%,.0625 W,SM,0402*

Ref. Des.	Part Number	Description
R6502M6	0613952Q25	RES:MF,10OHM,5%,.0625 W,SM,0402*
R6503M6	0613952Q25	RES:MF,10OHM,5%,.0625 W,SM,0402*
R6504M6	0613952R09	CER CHIP RES 22K OHM 5% 0402
R6505M6	0613952Q80	CER CHIP RES 2000 OHM 5 0402
R6506M6	0613952R66	RES:MF,0OHM,5%,.0625W, SM,0402*
R6507M6	0613952R01	RES:MF,10KOHM,5%,.0625 W,SM,0402*
R6508M6	0613952R17	RESISTOR,METAL FILM,47KOHM,5%,.0625W, SM,0402,200PPM/CEL,PB-FREE
R6509M6	0613952R25	RES:MF,100KOHM,5%,.062 5W,SM,0402*
R6510M6	0613952R66	RES:MF,0OHM,5%,.0625W, SM,0402*
R6511M6	0613952R01	RES:MF,10KOHM,5%,.0625 W,SM,0402*
R6512M6	0613952N01	RES:MF,10KOHM,1%,.0625 W,SM,0402*
R6513M6	0613952R66	RES:MF,0OHM,5%,.0625W, SM,0402*
R6514M6	0613952Q89	RES:MF,4.7KOHM,5%,.062 5W,SM,0402*
R6515M6	0613952R66	RES:MF,0OHM,5%,.0625W, SM,0402*
R6516M6	0613952R66	RES:MF,0OHM,5%,.0625W, SM,0402*
R6517M6	0613952Q63	RES:MF,390OHM,5%,.0625 W,SM,0402*
R6518M6	0613952R66	RES:MF,0OHM,5%,.0625W, SM,0402*
R6519M6	0613952Q89	RES:MF,4.7KOHM,5%,.062 5W,SM,0402*
R6520M6	0613952Q73	CER CHIP RES 1000 OHM 5 0402
R6521M6	0615049H01	KAMAYA 0.2 OHM CHIP RESISTOR



Ref. Des.	Part Number	Description
U1209M11	NOTPLACED	-
U1211M11	5109522E94	2 INPUT AND GATE IN NANO PACKAGE (C87)
U1217M11	NOTPLACED	-
U1232M11	NOTPLACED	-
U1238M11	5185070Y01	IC TEMPERATURE SENSOR PB-FREE
U1243M11	5185941F56	IC SINGLE LV LP OP AMPLIFIER
U1251M11	5185941F56	IC SINGLE LV LP OP AMPLIFIER
U1253M11	5185941F56	IC SINGLE LV LP OP AMPLIFIER
U1254M11	5185941F56	IC SINGLE LV LP OP AMPLIFIER
U1256M11	5185941F56	IC SINGLE LV LP OP AMPLIFIER
U1257M11	5109522E94	2 INPUT AND GATE IN NANO PACKAGE (C87)
U1269M11	5109817F77	IC COMPTR LM7275 5SC70 (D54)
U1282M11	5171779H01	SPDT ANALOG SWITCH
U1301M3	51007377001	IC:XCVR,GPS,RX/TX,B/TOOTH,WSP-107
U1304M3	51007599001	AMP,20.0DB,1.58GHZMIN,1.58GHZMAX,SLCN GERMANIUM GPS LOW NOISE AM
U1305M3	5187344N09	LOW NOISE, 100MA LINEAR REGULATOR 2.8V
U1601M16	5175143H01	WIDE SUPPLY RANGE OP AMP
U1602M16	51012101001	VHF/UHF/800/900 MHZ LD MOS DRIVER IC
U1932M20	4885316E32	TRANSISTOR,TRANSISTOR, RF
U200M12	5188493T01	IC,VREG/SWG,LP2989,SM,MINI SO-8 HI PRCN REG 5V
U201M12	5175771A99	LOW NOISE, 100MA LINEAR REGULATOR

Ref. Des.	Part Number	Description
U202M12	5175772B02	LINEAR REGULATOR 100MA 1.8V
U203M12	5175772B01	LINEAR VOLTAGE REGULATOR 350MA
U21000M2	5188690V02	IC:F-F/D,1PER PKG,7SZ175,SC70-6,PB FREE
U21001M2	5188690V02	IC:F-F/D,1PER PKG,7SZ175,SC70-6,PB FREE
U21002M2	5188690V01	IC:SCHMITT INVERTER,7SZ14,1PER PKG,*
U21003M2	5188690V01	IC:SCHMITT INVERTER,7SZ14,1PER PKG,*
U2101M2	5109522E84	IC DUAL SCHMITT TRIG MICRO PAK
U2102M2	5109522E84	IC DUAL SCHMITT TRIG MICRO PAK
U2104M2	5109522E84	IC DUAL SCHMITT TRIG MICRO PAK
U2201M2	5171679H01	LED LIGHT DRIVER
U2202M2	5164852H47	IC, I2C LEVEL TRANSLATOR
U2601M13	5103535B53	IC,INVTR,DL,NC7WZ04L6X,2PER PKG,SC70
U2602M13	5185941F45	ATTEN,VAR,14.4DBMIN,15.6DBMAX,0-2000 MHZ-FREQ,50OHM,PCMT,,SOT
U3001M22	5171972L01	SP3T RF SWITCH
U4001M2	5164852H47	IC, I2C LEVEL TRANSLATOR
U4003M2	5188691V01	IC,MUX/DEMUX,,NC7SB3157P6X,SM,SC70-6,1PER PKG,BUS,,PB FREE
U4004M2	5116783H01	SN74LVC2G66 ANALOG SWITCH
U507M21	5164015H81	IC,MXR,DBL BAL GILBERT,CELL,,SM
U601M19	5102495J14	IC,IF,,IF DIGITILIZING SUB-SYSTEM IC,AD9864,QFN

Ref. Des.	Part Number	Description
U602M19	4885316E32	TRANSISTOR,TRANSISTOR, RF
U603M19	5109522E84	IC DUAL SCHMITT TRIG MICRO PAK
U604M19	5109522E84	IC DUAL SCHMITT TRIG MICRO PAK
U605M19	5164852H16	IC:TRANSLATING,2PER PKG,LVC2T45,*
U606M19	5164852H16	IC:TRANSLATING,2PER PKG,LVC2T45,*
U607M19	5186311J24	IC:BFR,1PER PKG,NC7SZ125,ACTIVE HIGH,*
U6101M6	0180706J18	PROGRAMMED CPLD
U6102M6	5188691V01	IC,MUX/DEMUX,,NC7SB3157P6X,SM,SC70-6,1PER PKG,BUS,,PB FREE
U6103M6	5175114H01	SINGLE AND GATE MICROPAK
U6104M6	5175114H01	SINGLE AND GATE MICROPAK
U6105M6	5175114H01	SINGLE AND GATE MICROPAK
U6201M6	5185941F26	IC,COMPTR,LMV7219,NOP B
U6301M6	51012058002	IC:MT46H32M16,SDRAM,L PDDR,8MX16,VFBGA-60
U6302M6	5102495J13	IC,MICROP,P1710ZZGE,BG A,,12MHZ,32BITS
U6304M6	0105955U25	ASSY,IC,BGA SPEC PROG, FLASH MEMORY
U6401M6	5175772B38	IC ANALOG TEMPERATURE SENSOR
U6402M6	5115453H01	RAIL TO RAIL OUTPUT, 8 PIN BGA
U6404M6	5175772B38	IC ANALOG TEMPERATURE SENSOR
U6405M6	5188348V06	IC,AUDIO CODEC,SM,,AUDIO CODEC

Ref. Des.	Part Number	Description
U6408M6	5188521T01	IC,VREF,SM,SOT23,1PER PKG,.5%,1.25 TO 13.75,PRCN BANDGAP ADJUS
U6409M6	51009000001	NANOPOWER, 1.8V, SOT23 COMPARATOR
U6410M6	5175772B38	IC ANALOG TEMPERATURE SENSOR
U6411M6	5109731C55	IC 2.75 FIXED GAIN MONO FILTER-FREE AMPLFR
U6501M6	5185143E77	IC, MAKO ASIC, CMOS PWR MGMT
U6502M6	4871987H01	LOW FREQUENCY TRANSISTOR
U6503M6	5171674H01	OP AMP
U6504M6	5171682H01	800MA BUCK REGULATOR
U6505M6	5189631P01	IC,SYNC STEP-DOWN CONV
U6506M6	5184790Y04	IC,400MA ADJ VREG LDO,SOT23
U6507M6	5171682H01	800MA BUCK REGULATOR
U6508M6	51009366001	500MA LOW DROPOUT CMOS LINEAR REG.
U6509M6	5175114H01	SINGLE AND GATE MICROPAK
U6510M6	5114007A47	IC,OR,17SZ32,1PER PKG,SOT-353,PB FREE
U6511M6	5171339H01	MICROPOWER VOLTAGE REGULATOR
U6601M6	5175114H01	SINGLE AND GATE MICROPAK
U702M7	5164015H28	IC:XCVR,AT46000,TRIDENT,BGA-121
U738M7	5171972L01	SP3T RF SWITCH
U746M7	4805218N63	RF TRANS SOT 323 BFO67W
VR101M12	4813977M29	DIODE,VREF,MBZ5250,SM, SOT-23,20V,.225W,ZEN
VR1905M20	4815096H01	VARACTOR DIODE 1SV305
VR1906M20	4815096H01	VARACTOR DIODE 1SV305

Ref. Des.	Part Number	Description
VR1907M20	4815096H01	VARACTOR DIODE 1SV305
VR1908M20	4815096H01	VARACTOR DIODE 1SV305
VR1M2	4888116D01	VSTR,150V,24V-DC,SM,PB FREE
VR200M12	4813977M29	DIODE,VREF,MBZ5250,SM, SOT-23,20V,.225W,ZEN
VR601M19	4805656W87	DIODE,VCTR, @ 15V,1SV279,,SOD-523/SC- 79
VR602M19	4805656W87	DIODE,VCTR, @ 15V,1SV279,,SOD-523/SC- 79
Y1304M3	48014600001	OSC,TCXO,26.0
Y6501M6	93012062001	CRYSTAL UNIT SMD 2.5X3.2 24.576MHZ
Y6502M6	4809995L15	XTAL 32KHZ 20PPM 3.2X2.1MM SMD
Y6601M6	93012046001	12MHZ CRYATAL UNIT
Y701M7	4875188M01	CRYSTAL OSCILLATOR

## Notes



### 8.5 Transceiver (RF) Boards: 700 – 800 MHz (84012619001)

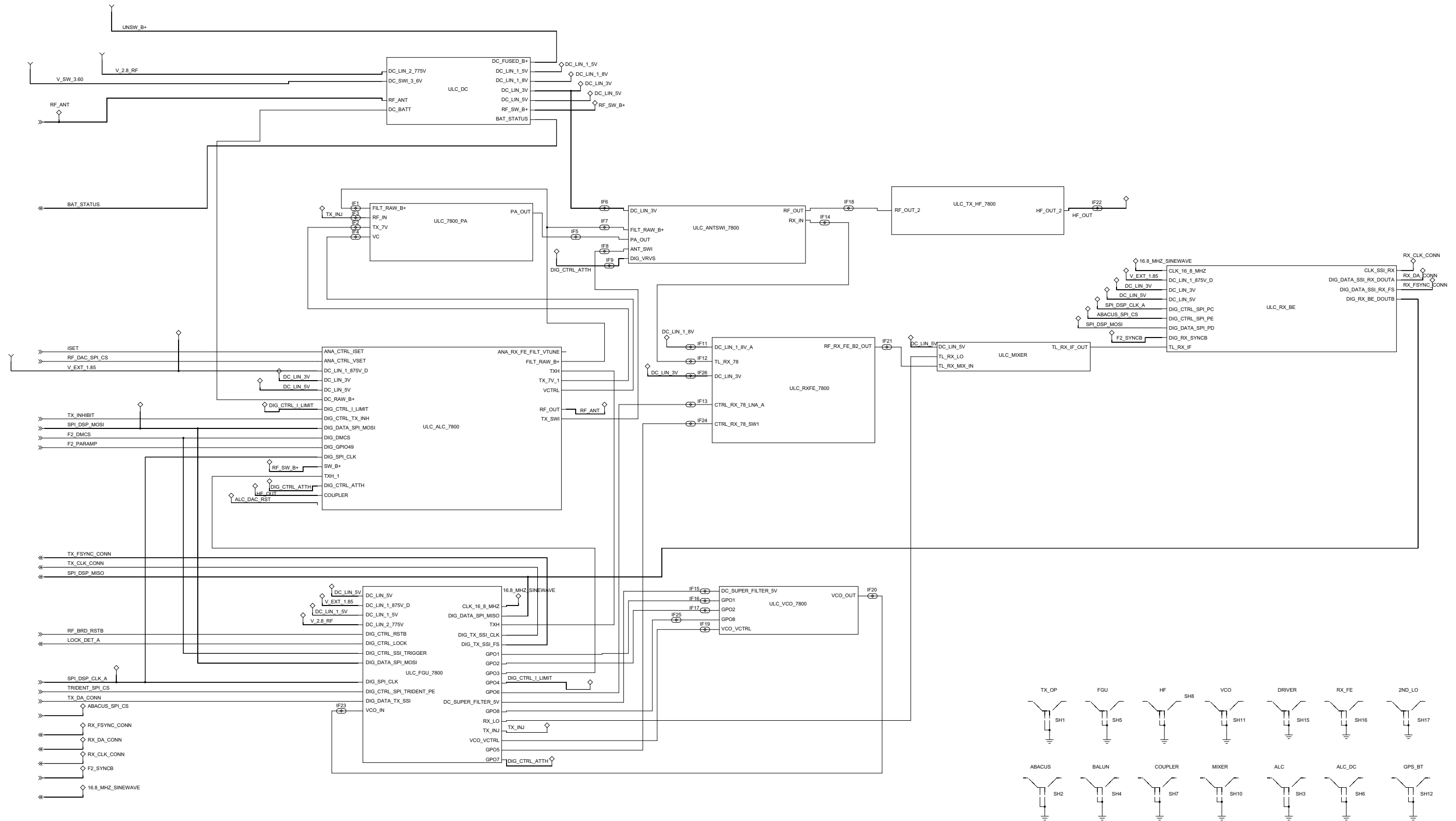


Figure 8-85. Transceiver (RF) Board Overall Schematic

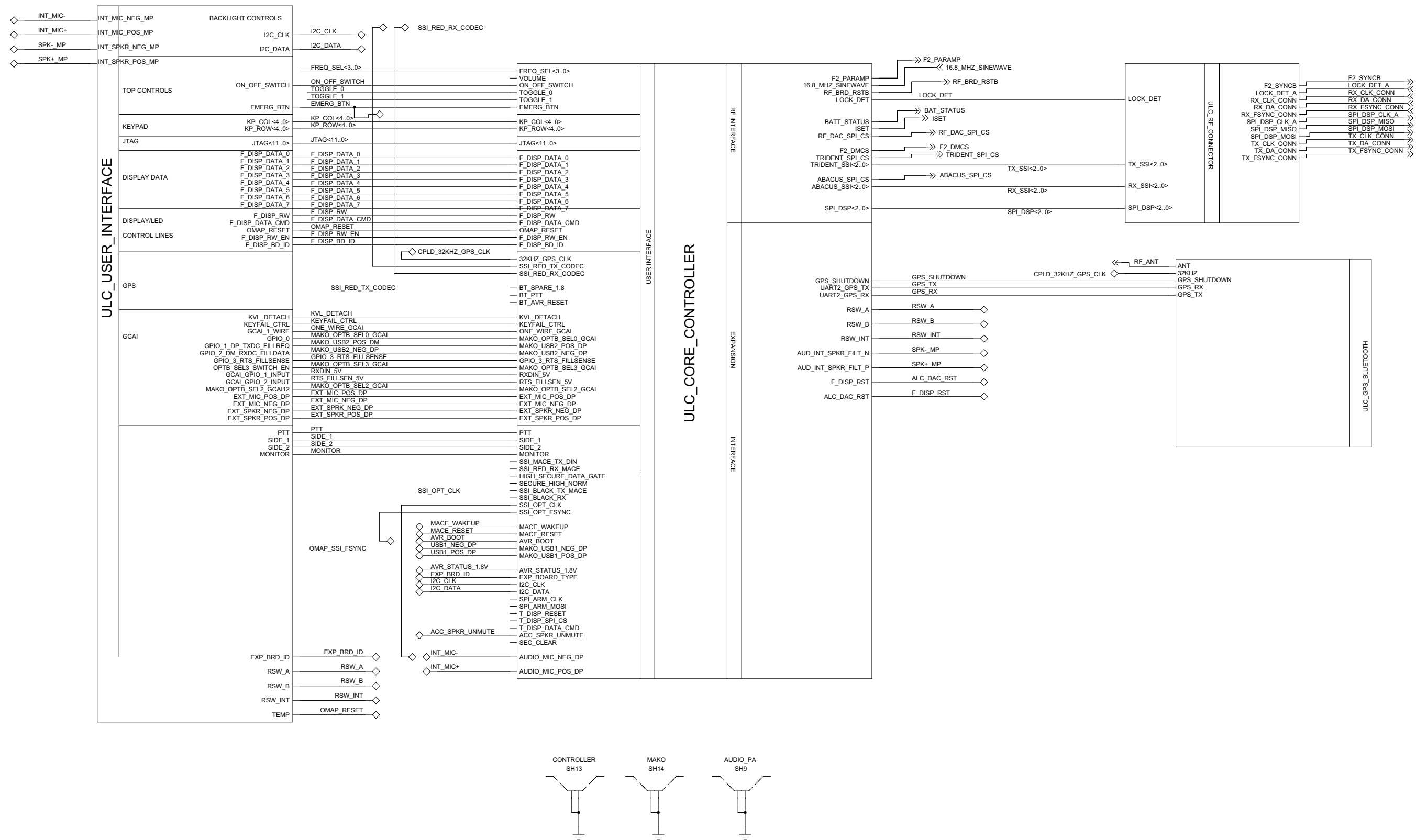


Figure 8-86. Controller Mainboard Circuit

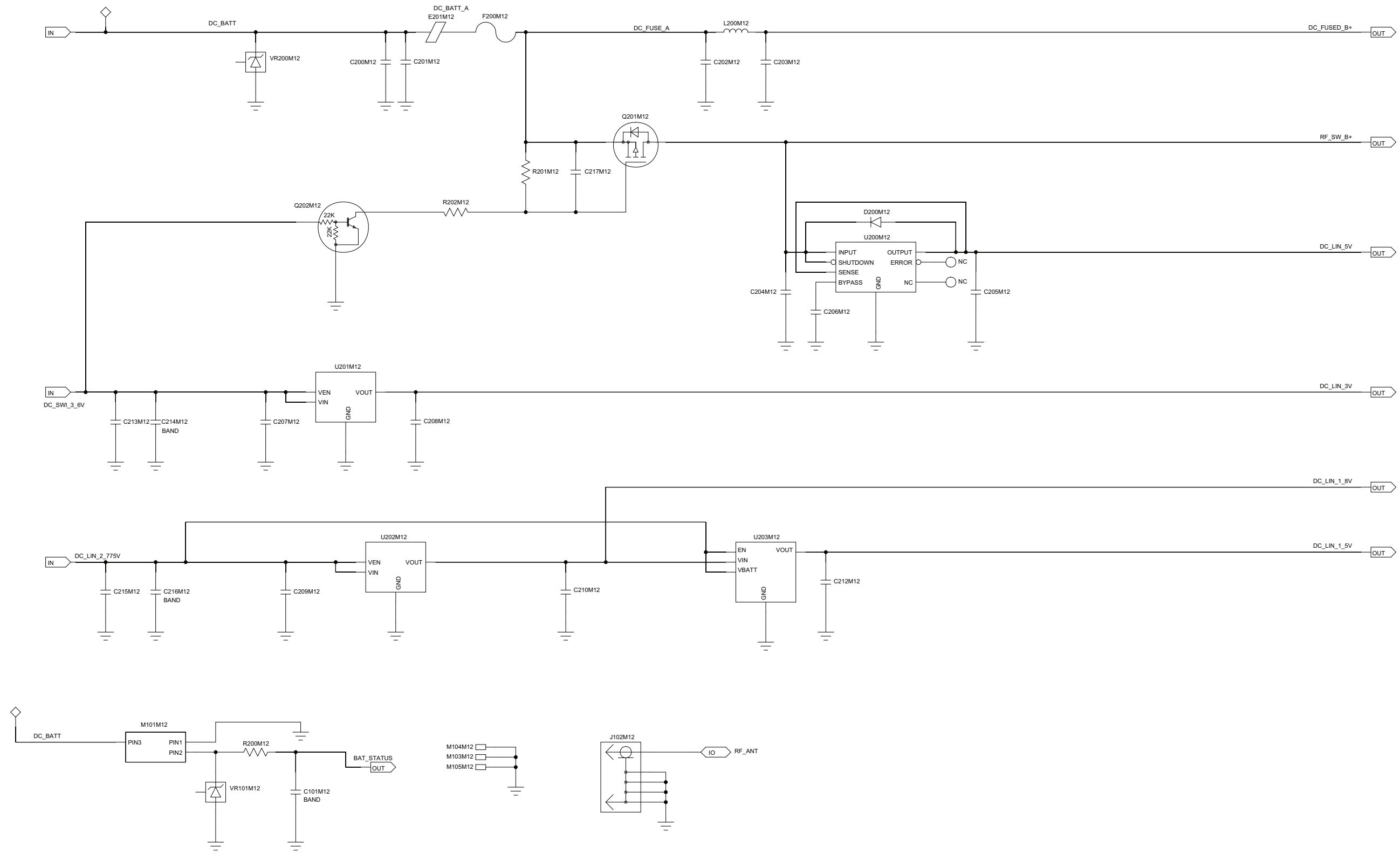


Figure 8-87. DC Circuit

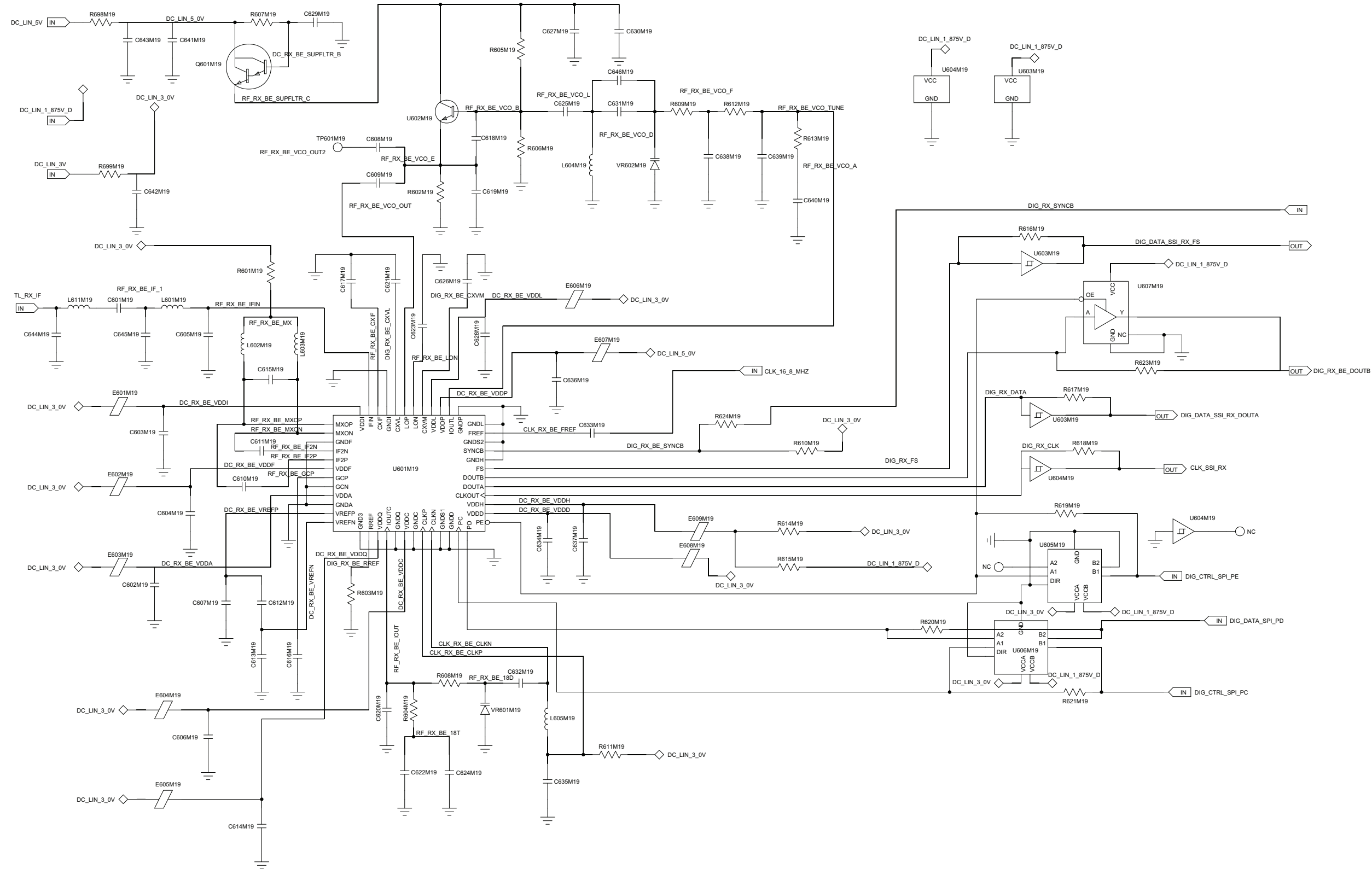


Figure 8-88. Receiver Back End Circuit

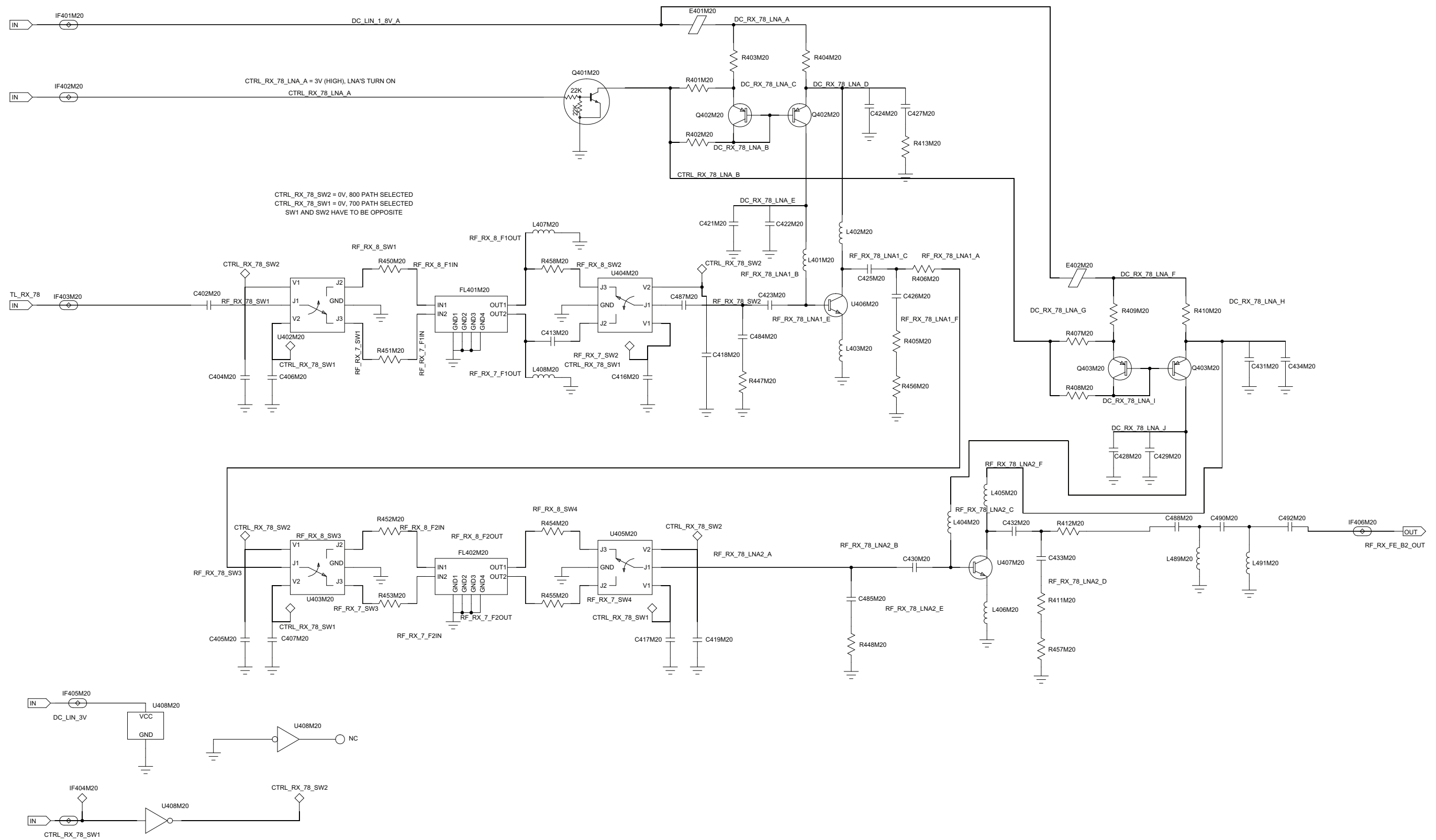


Figure 8-89. Receiver Front End Circuit

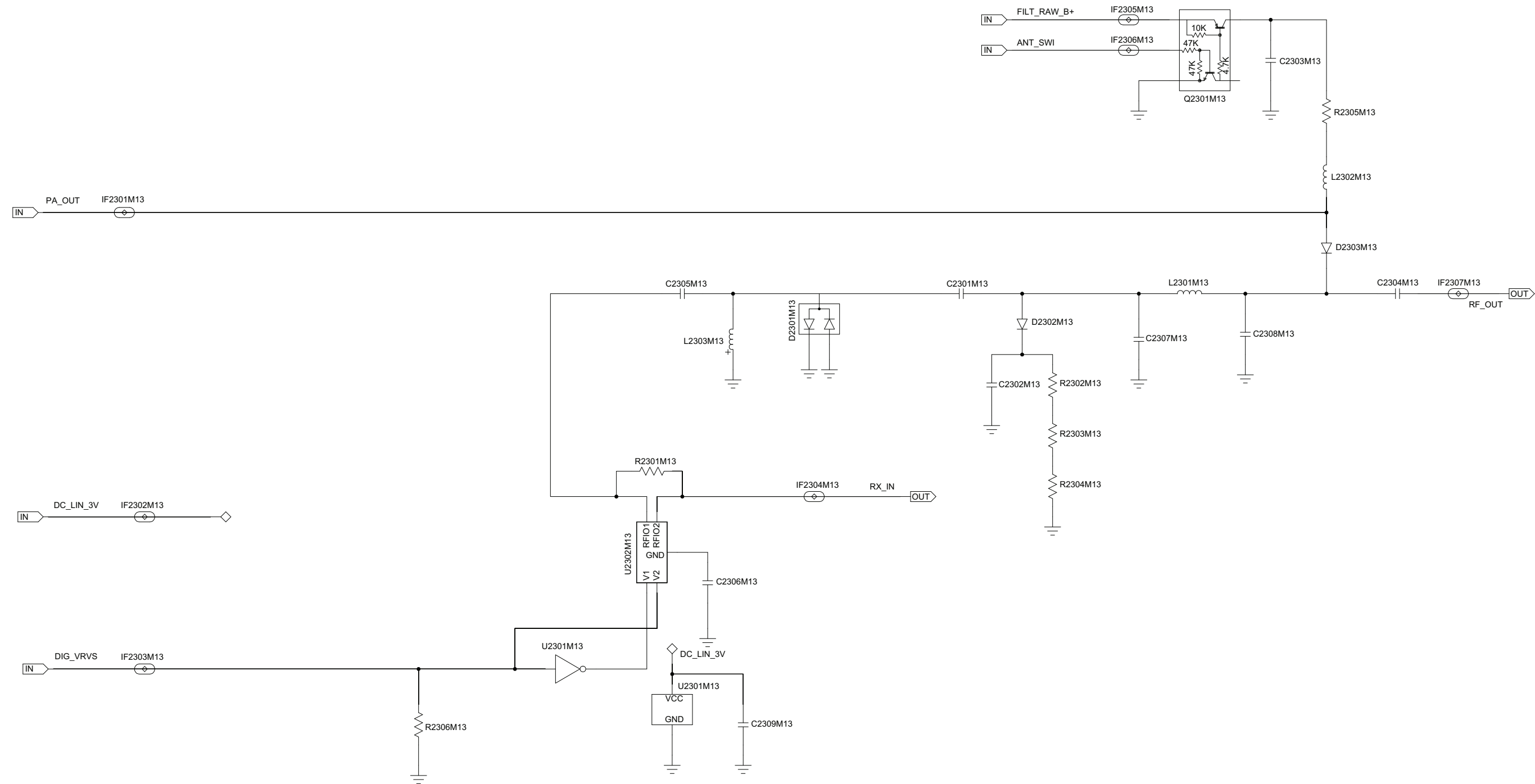


Figure 8-90. ANTSWI Circuit

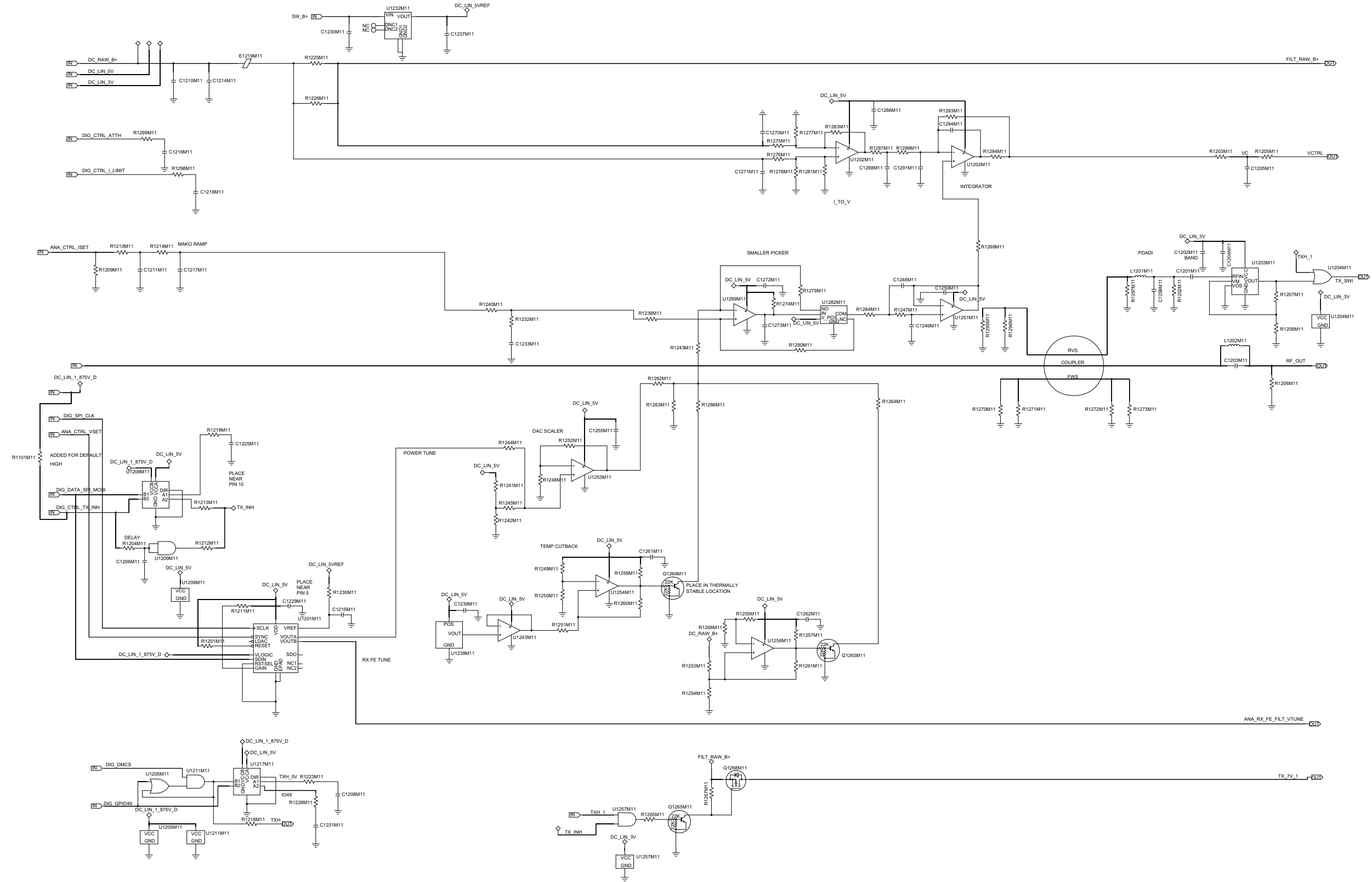


Figure 8-91. Automatic Level Control Circuit

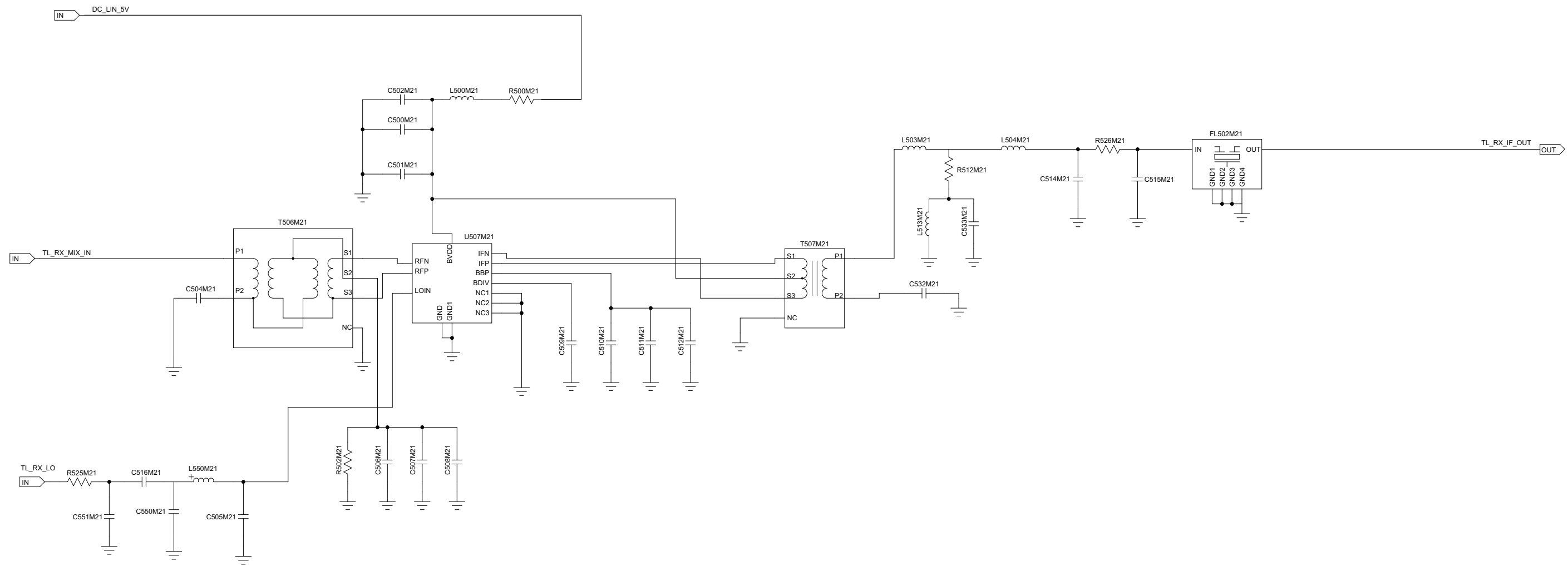


Figure 8-92. Receiver Back End Circuit



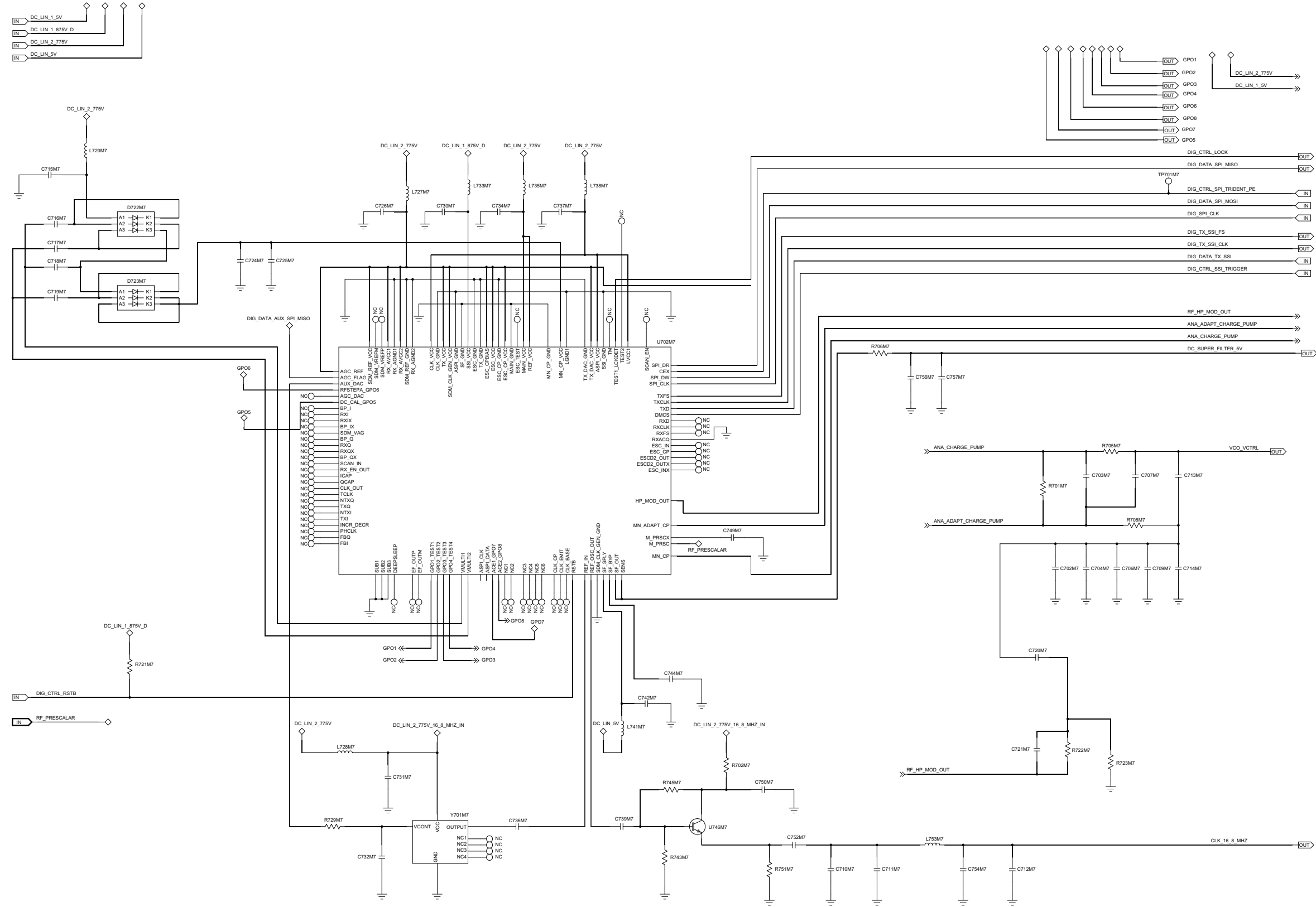


Figure 8-93. Frequency Generation Unit Circuit – 1 of 2



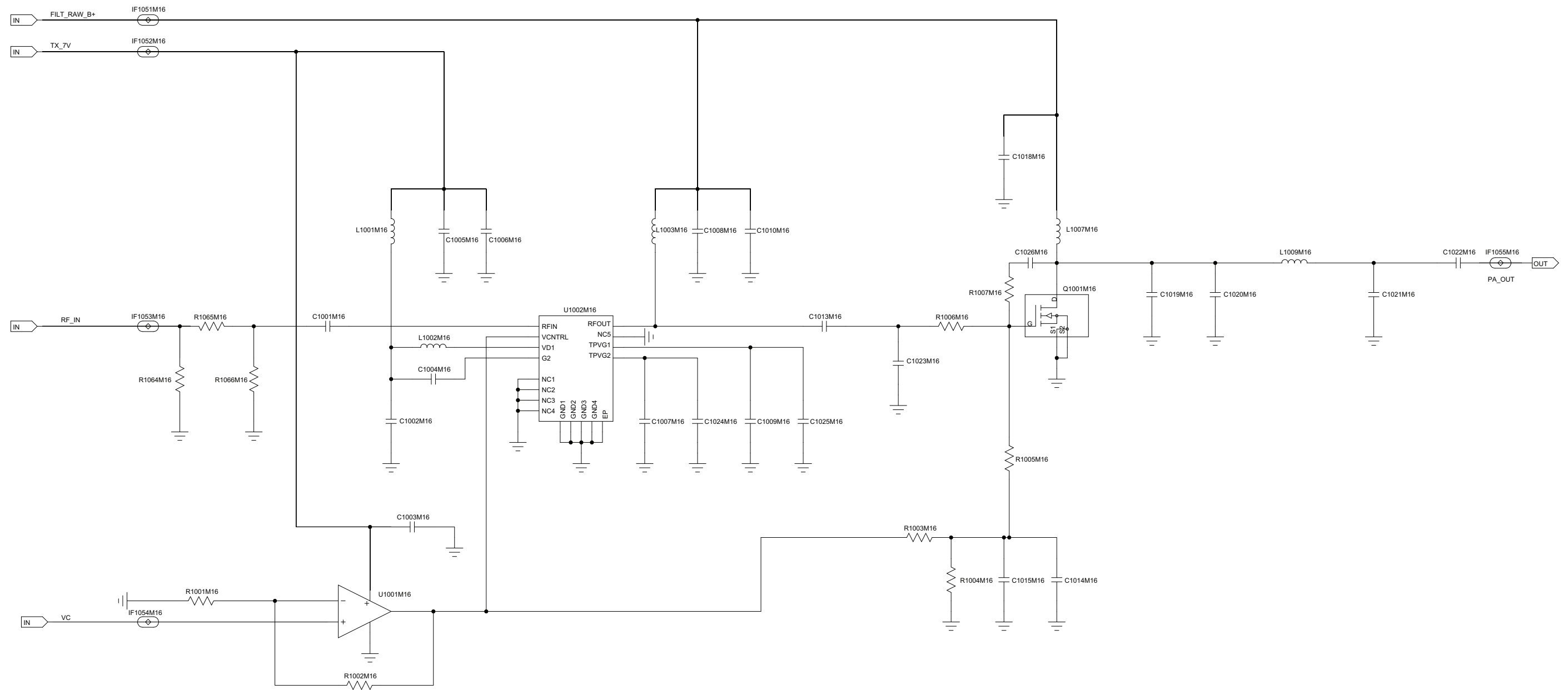


Figure 8-95. Power Amplifier Circuit

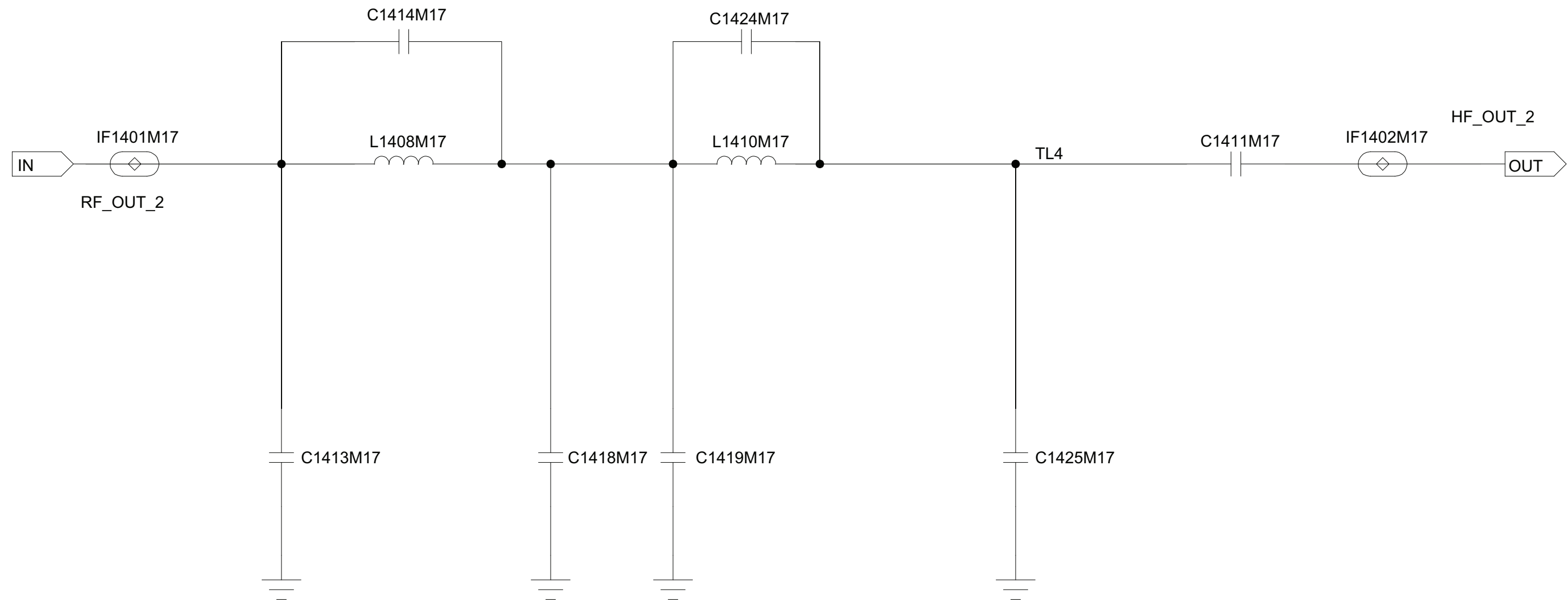


Figure 8-96. Transmitter HF Circuit

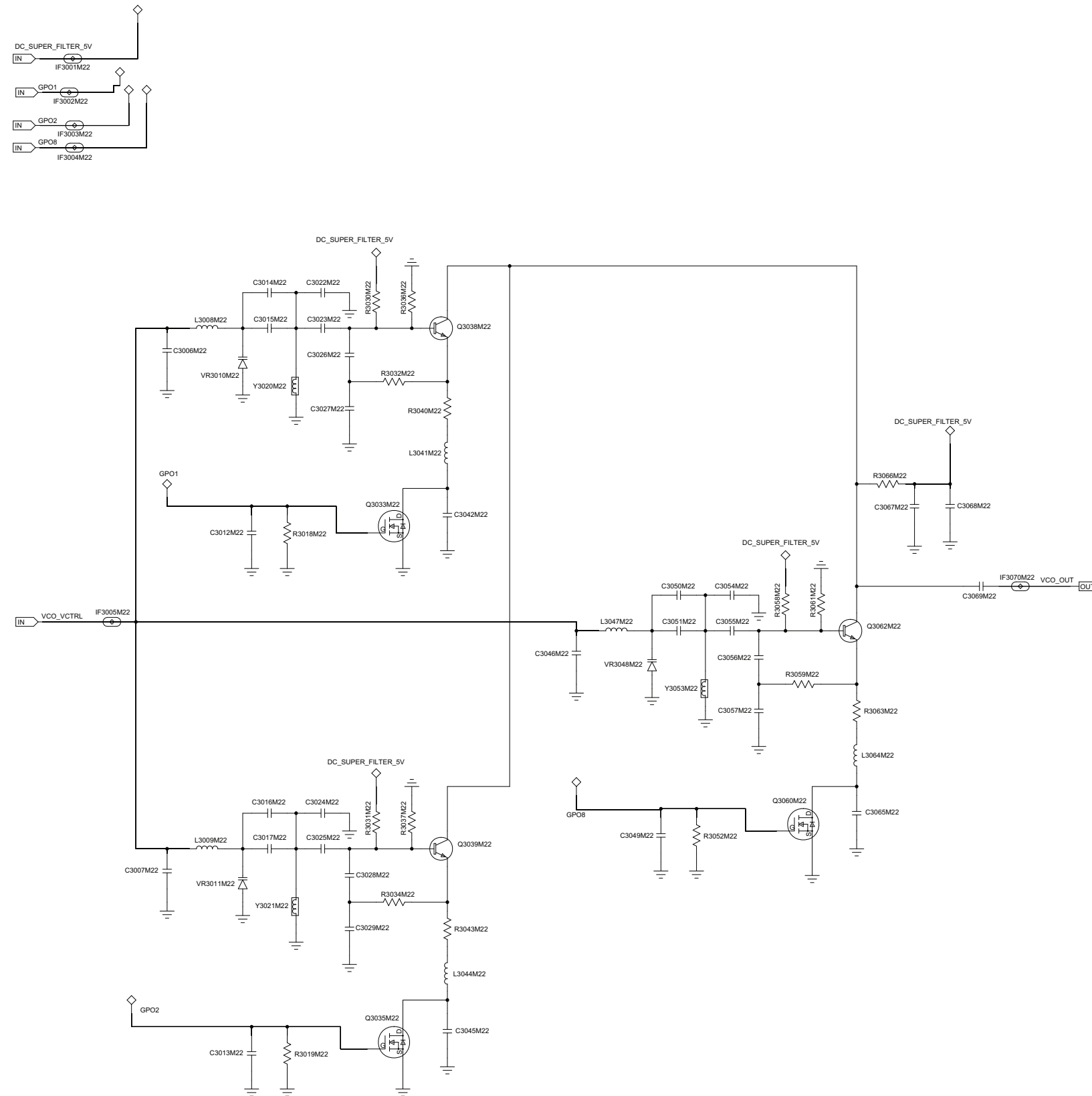


Figure 8-97. VCO Circuit

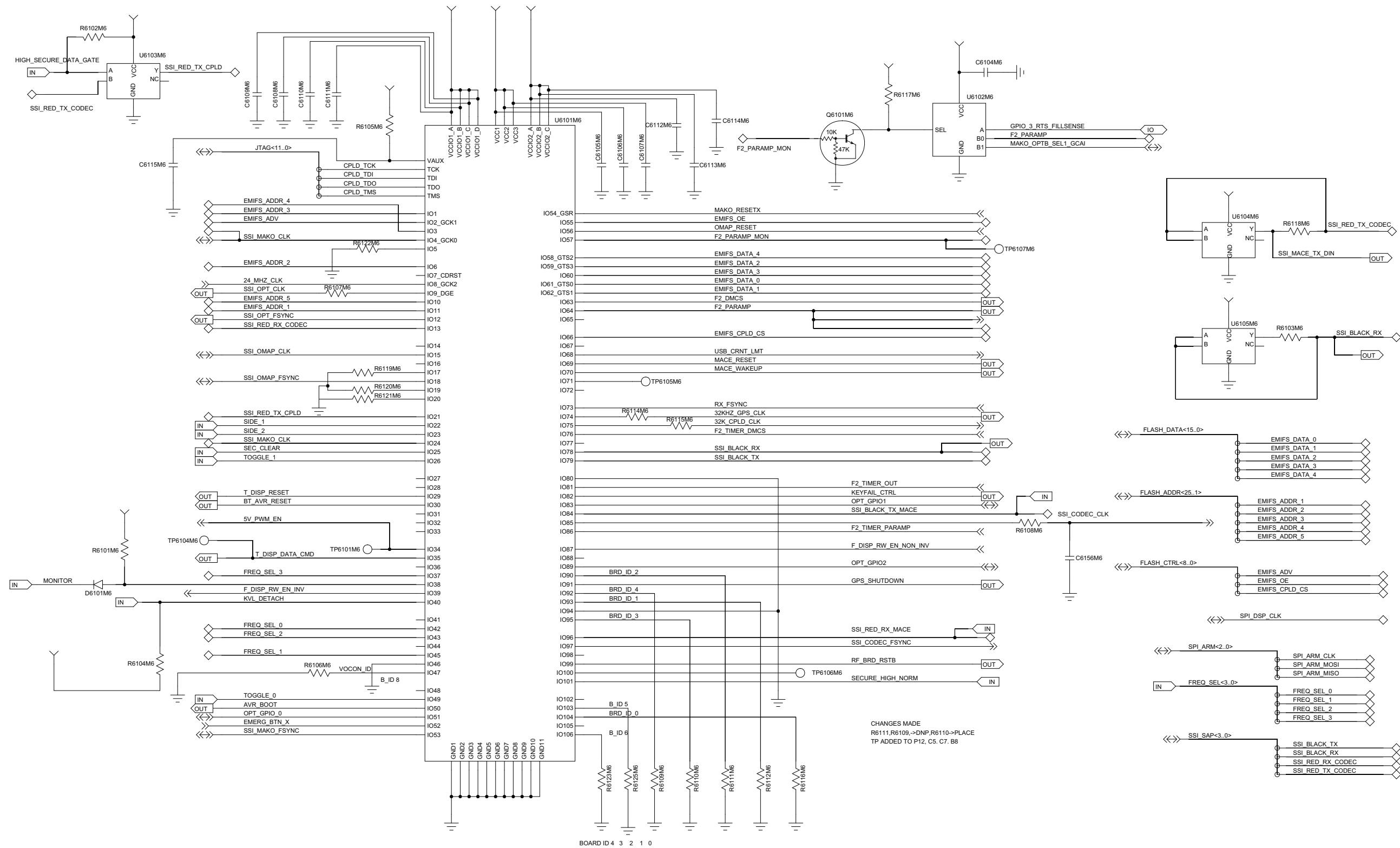


Figure 8-98. CPLD Circuit

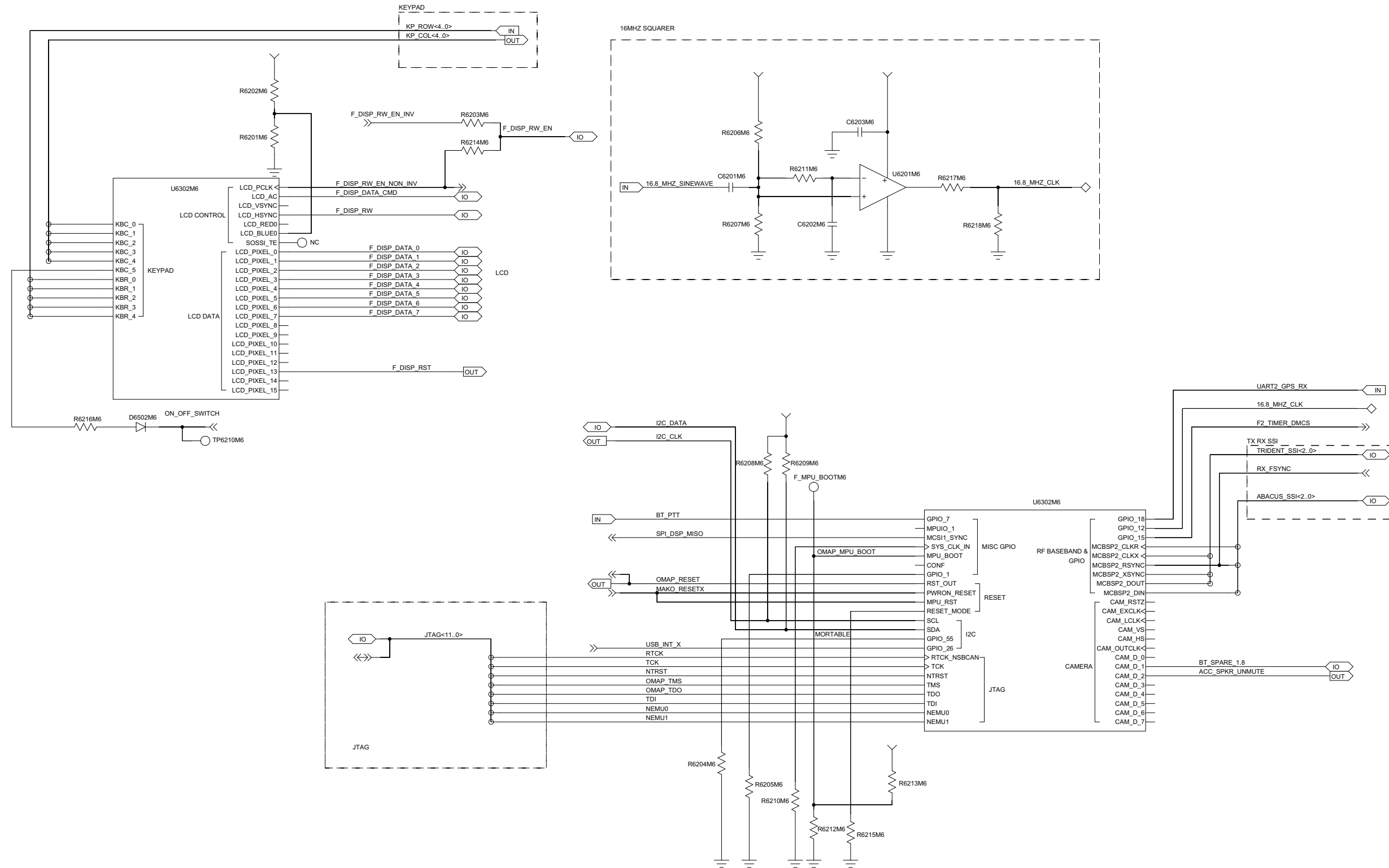


Figure 8-99. OMAP User Interface Circuit

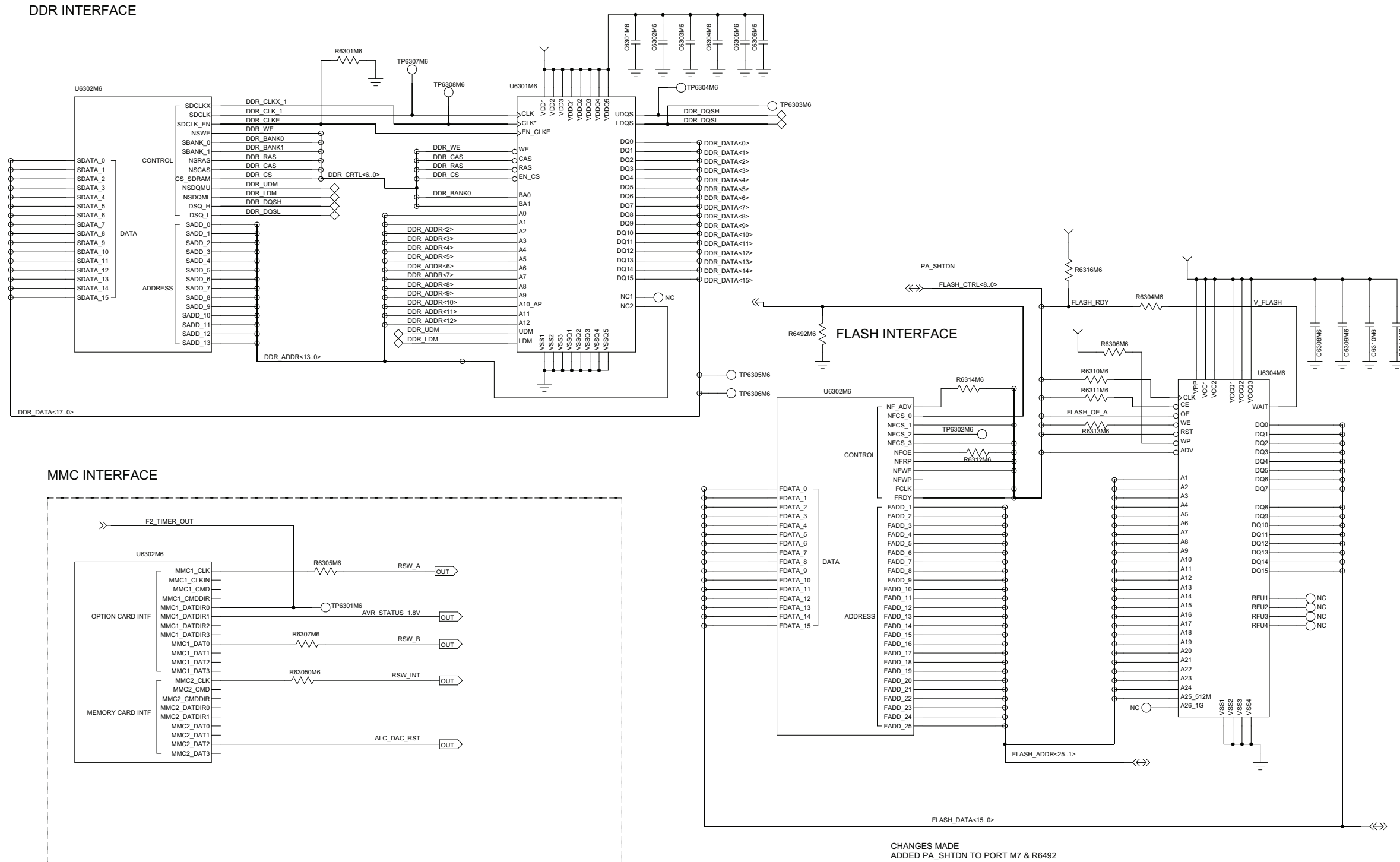


Figure 8-100. Memory Interface Circuit



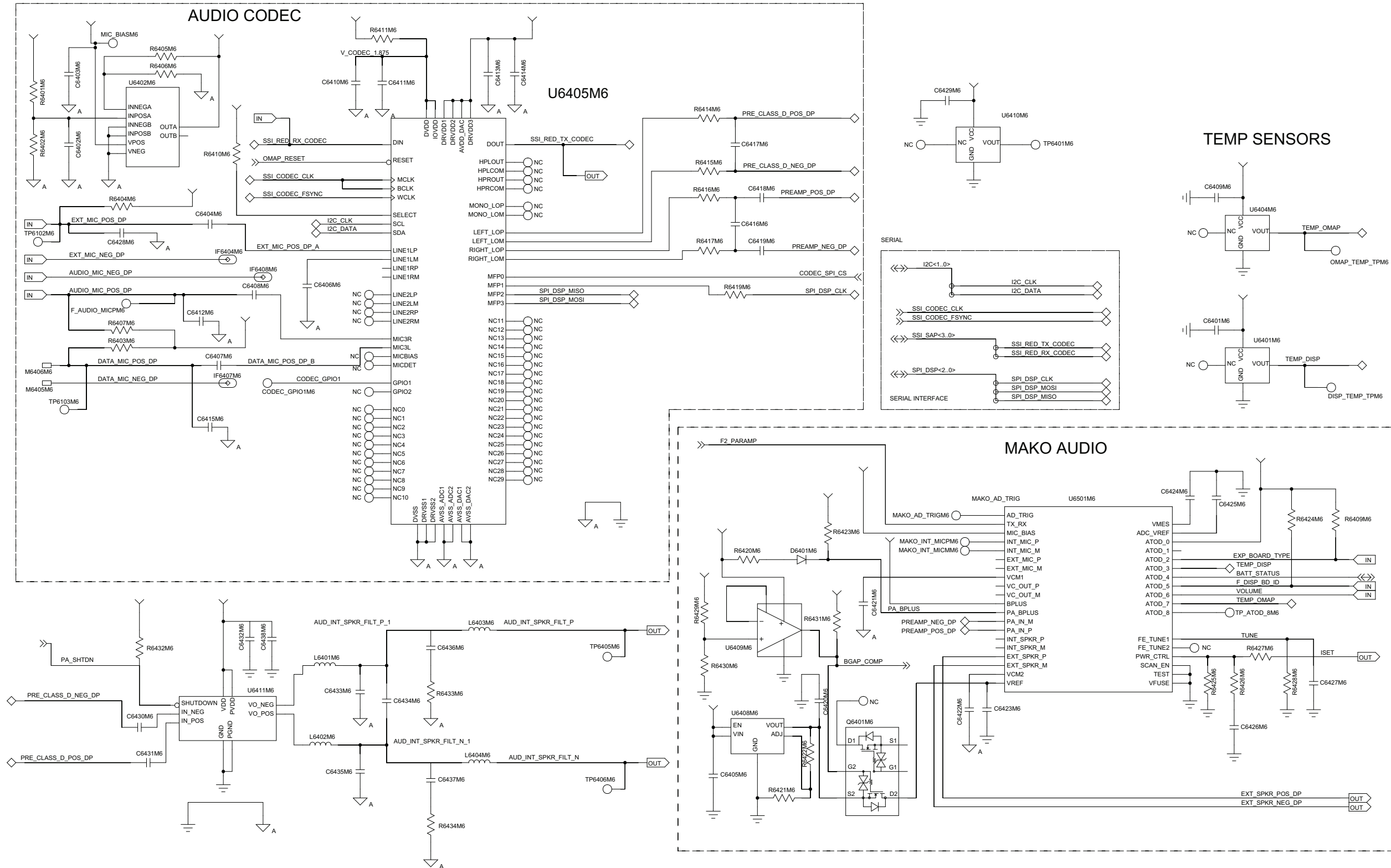


Figure 8-101. Audio Circuit/MAKO/DC Distribution Circuit

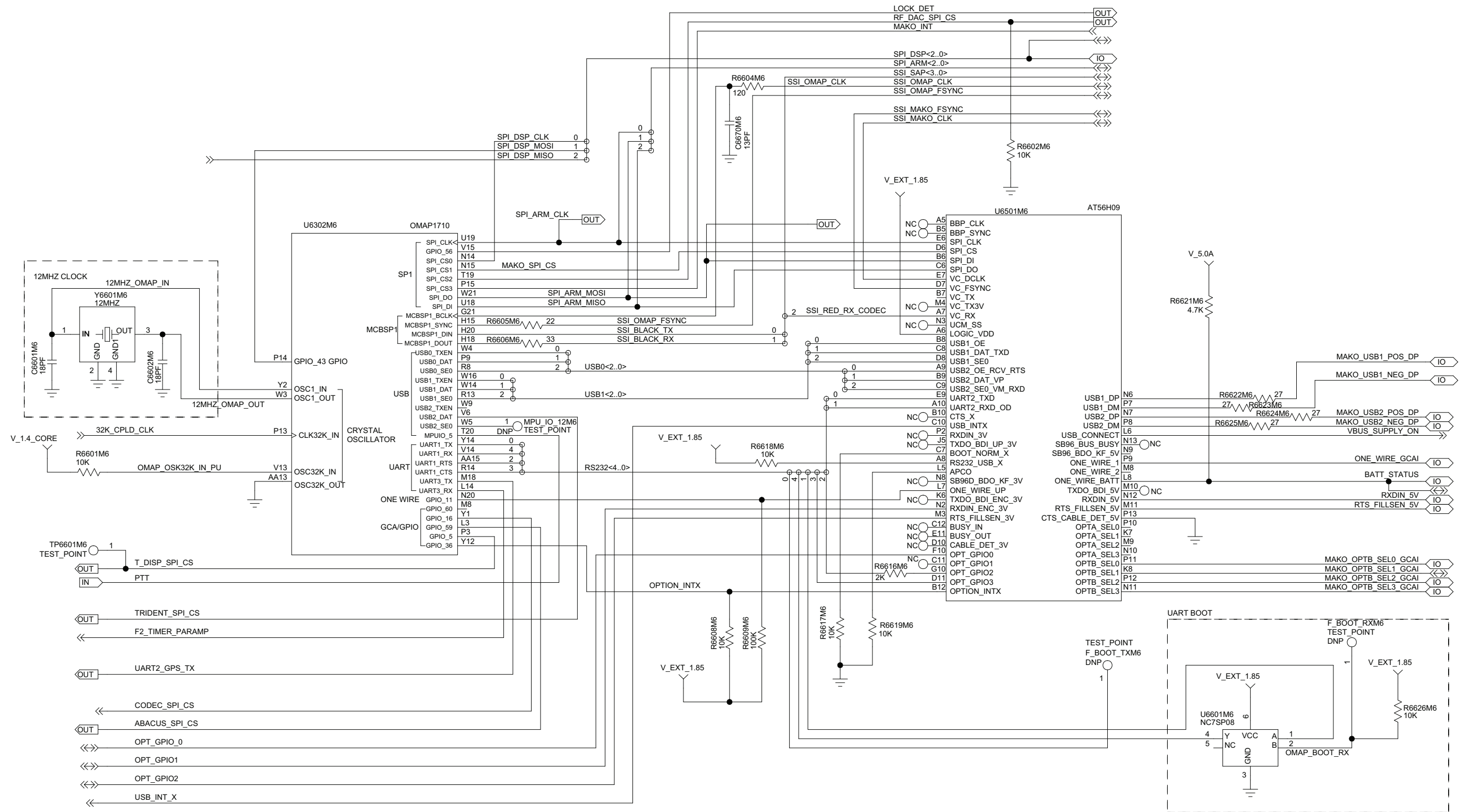


Figure 8-102. Serial Interface Circuit

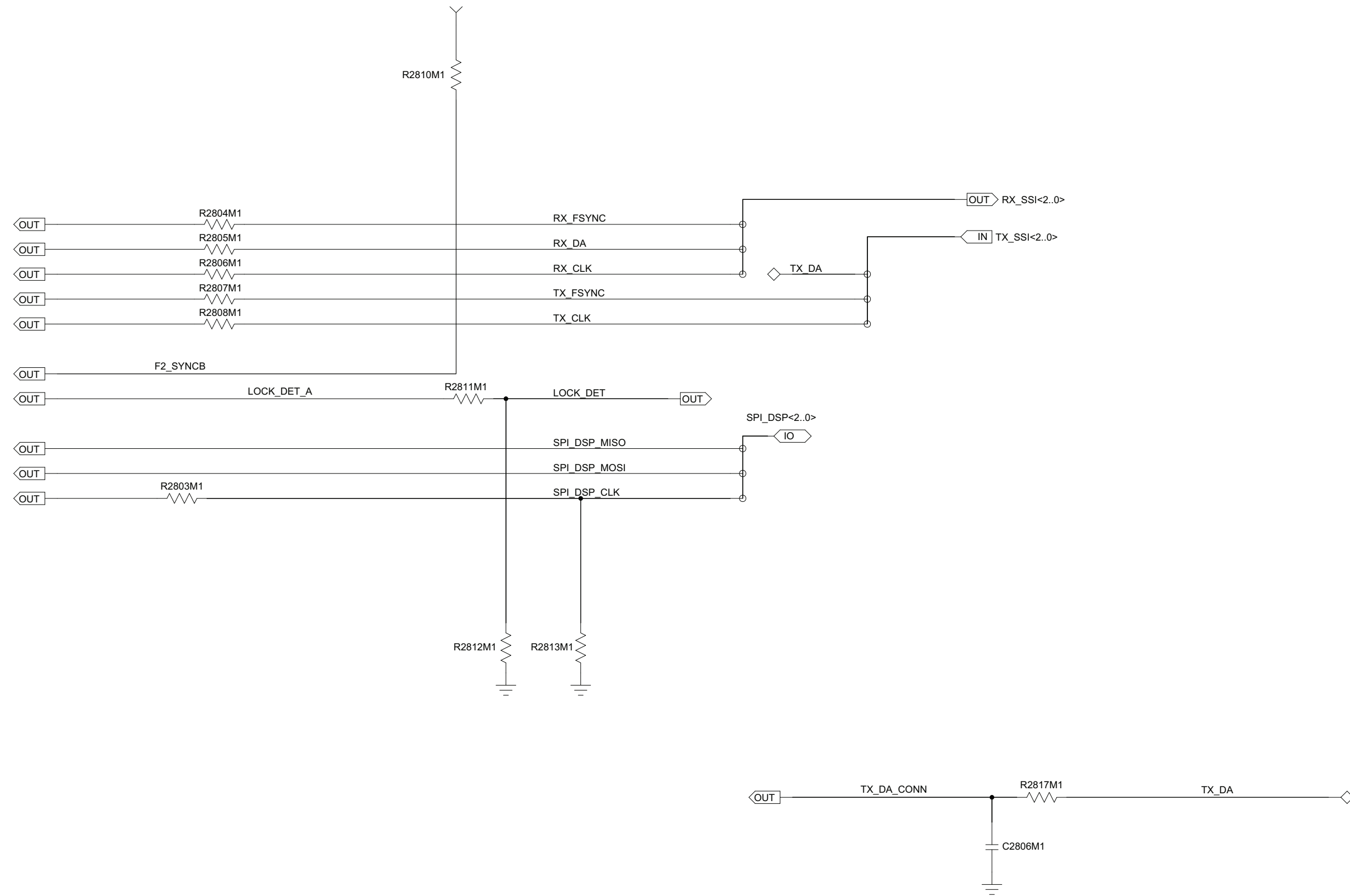


Figure 8-103. RF Interconnects Circuit



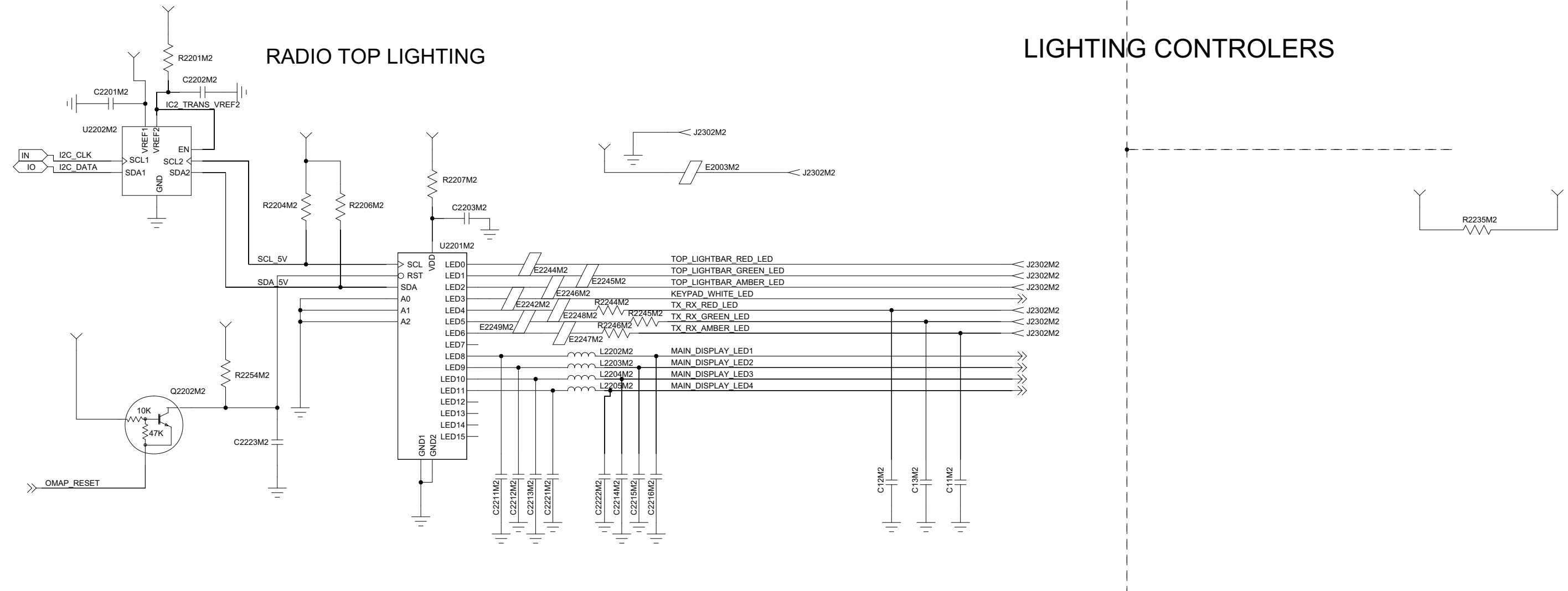
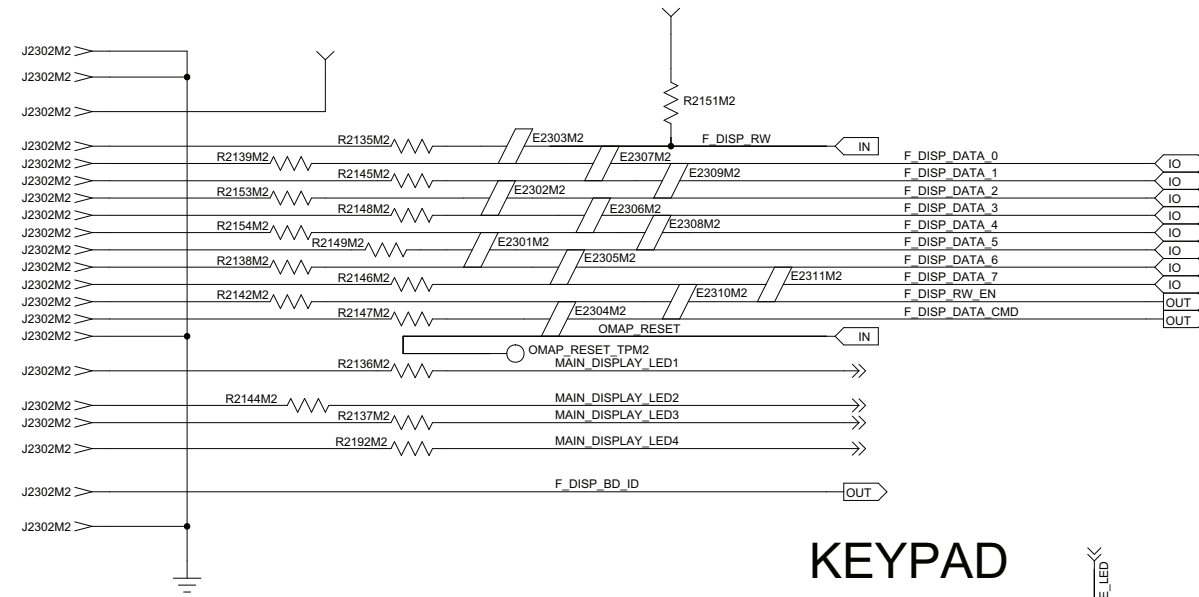


Figure 8-105. Display/Keypad Lighting Control Circuit

# FRONT DISPLAY



# KEYPAD

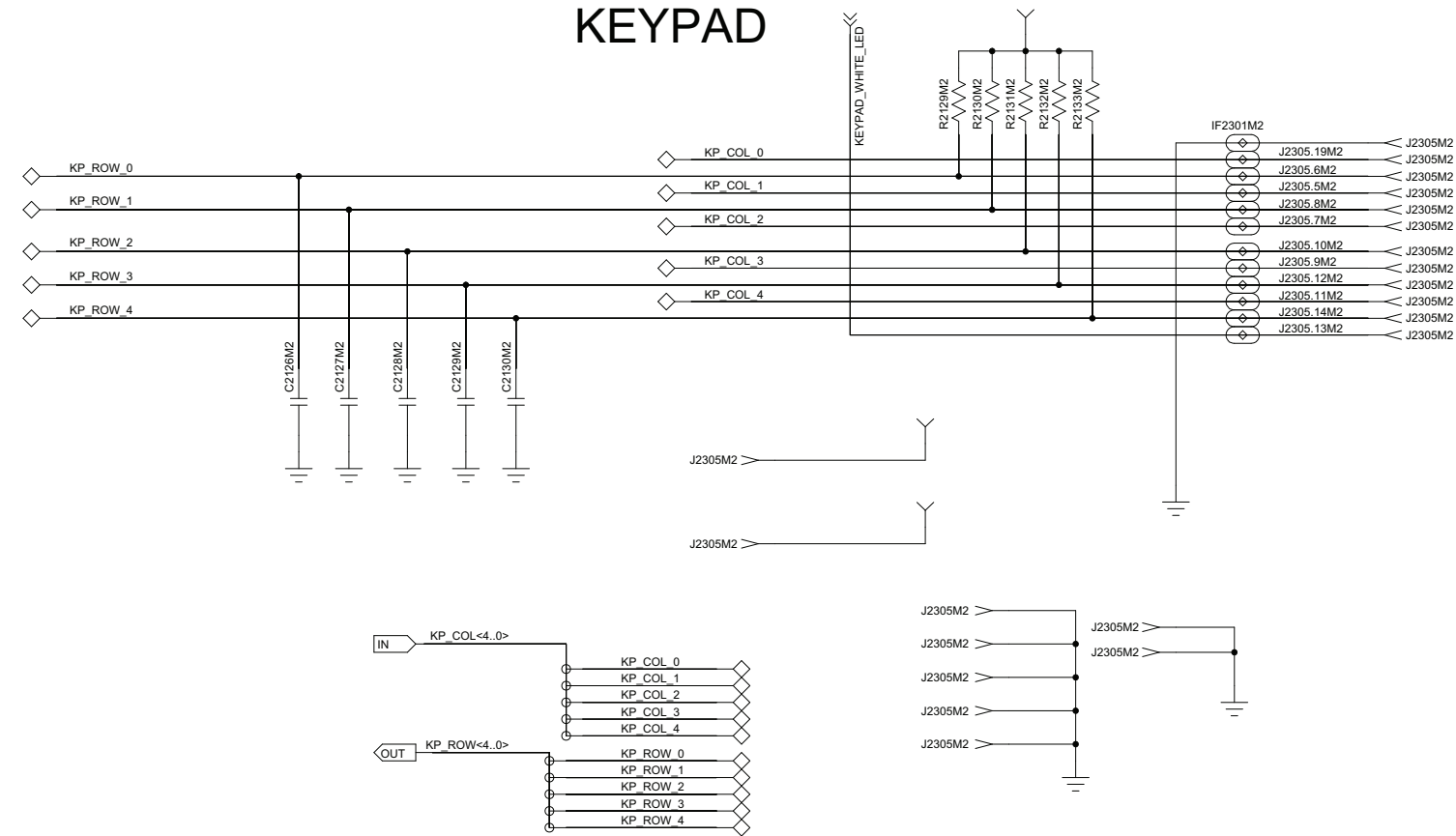


Figure 8-106. LCD and Keypad Connector Circuit

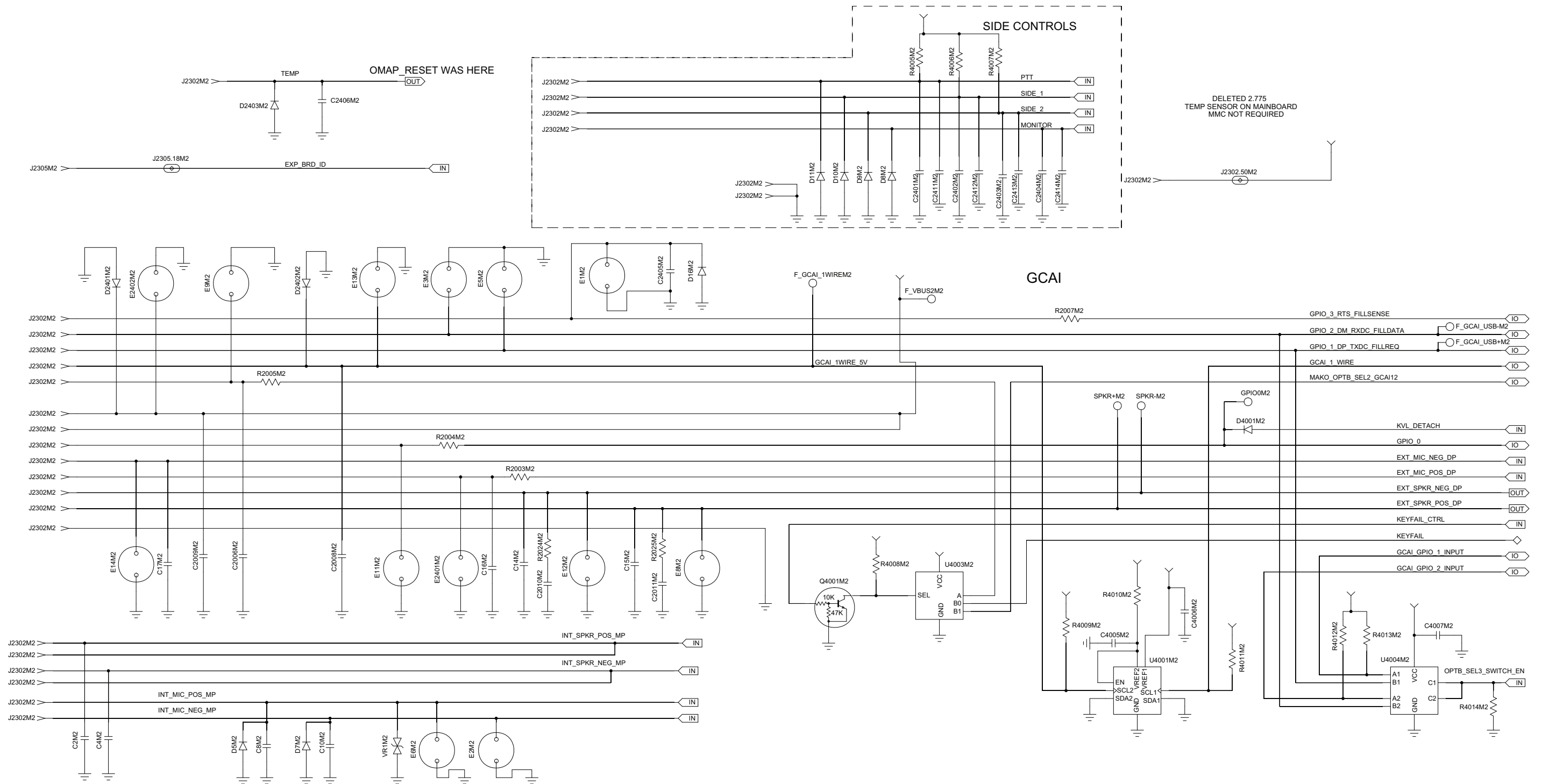


Figure 8-107. GCAI MACE BT Interconnect Circuit

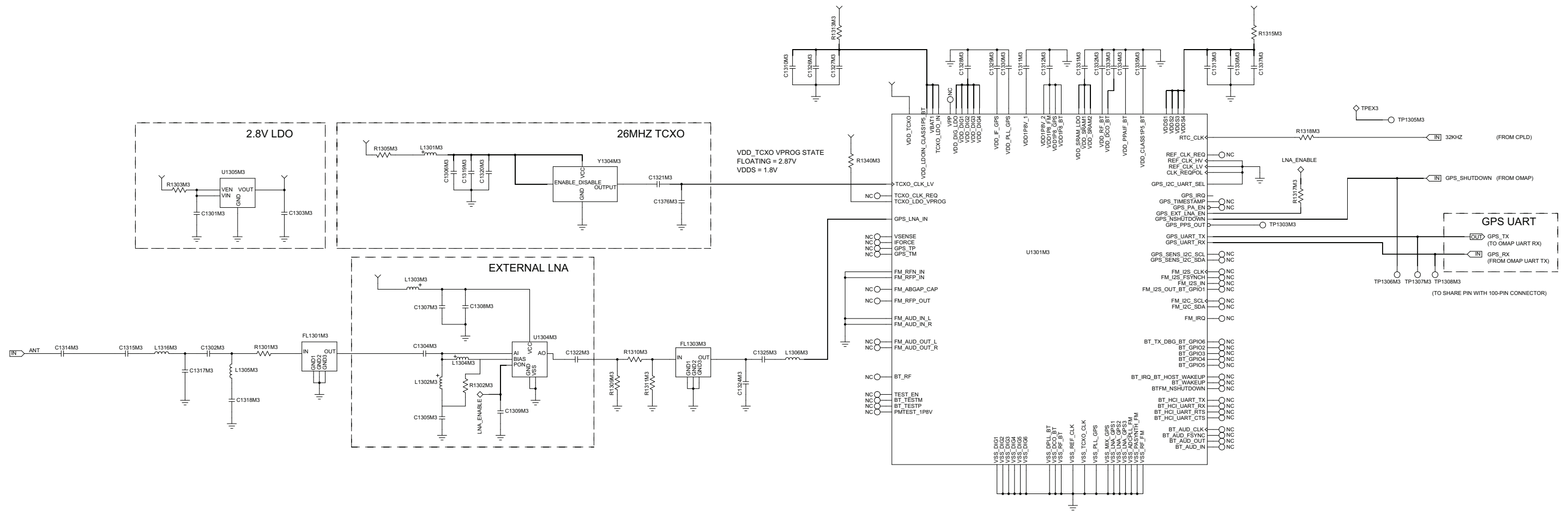


Figure 8-108. GPS Circuit







700/800 MHz Transceiver (RF) Board Parts List  
– 84012619001

Ref. Des.	Part Number	Description
C1001M16	2113944M30	CAP,FXD,33PF,+2%,-2%,50V-DC,0603,C0G,-55DEG CMIN,125DEG CMAX,PB
C1002M16	2113944C18	CAP CER CHP 3.3PF 50V +/- 0.25PF
C1003M16	2113945C02	CAP,CHIP,.01UF,+10%,-10%,50V-DC,0603,X7*
C1004M16	2113944M30	CAP,FXD,33PF,+2%,-2%,50V-DC,0603,C0G,-55DEG CMIN,125DEG CMAX,PB
C1005M16	2113944M30	CAP,FXD,33PF,+2%,-2%,50V-DC,0603,C0G,-55DEG CMIN,125DEG CMAX,PB
C1006M16	2113945C02	CAP,CHIP,.01UF,+10%,-10%,50V-DC,0603,X7*
C1007M16	2113944M30	CAP,FXD,33PF,+2%,-2%,50V-DC,0603,C0G,-55DEG CMIN,125DEG CMAX,PB
C1008M16	2113944M30	CAP,FXD,33PF,+2%,-2%,50V-DC,0603,C0G,-55DEG CMIN,125DEG CMAX,PB
C1009M16	2113944M30	CAP,FXD,33PF,+2%,-2%,50V-DC,0603,C0G,-55DEG CMIN,125DEG CMAX,PB
C1010M16	2113945C02	CAP,CHIP,.01UF,+10%,-10%,50V-DC,0603,X7*
C1013M16	2113944M20	CAP,FXD,12PF,+2%,-2%,50V-DC,0603,C0G,-55DEG CMIN,125DEG CMAX,PB
C1014M16	NOTPLACED	N/A
C1015M16	2113944M30	CAP,FXD,33PF,+2%,-2%,50V-DC,0603,C0G,-55DEG CMIN,125DEG CMAX,PB

Ref. Des.	Part Number	Description
C1018M16	2113944M30	CAP,FXD,33PF,+2%,-2%,50V-DC,0603,C0G,-55DEG CMIN,125DEG CMAX,PB
C1019M16	2171741M03	HIGH Q CAP
C101M12	2113944A31	CAP:CHIP,33PF,+5%,-5%,50V-DC,0402,C0G,*
C1020M16	2113944M08	CAP,FXD,3.9PF,.1PF+/-,50V-DC,0603,C0G,-55DEG CMIN,125DEG CMAX
C1021M16	21667011414	CAP,CER,1.5PF,.1PF+/-,50V-DC,0603,C0G,-55DEG CMIN,125DEG CMAX
C1022M16	2113944M30	CAP,FXD,33PF,+2%,-2%,50V-DC,0603,C0G,-55DEG CMIN,125DEG CMAX,PB
C1023M16	2113944M21	CAP,FXD,13PF,+2%,-2%,50V-DC,0603,C0G,-55DEG CMIN,125DEG CMAX,PB
C1024M16	2113945A12	CAP:CHIP,3300PF,+10%,-10%,50V-DC,0402,*
C1025M16	2113945A12	CAP:CHIP,3300PF,+10%,-10%,50V-DC,0402,*
C1026M16	2113945C07	CAP CER CHP 330PF 50V 10%
C10M2	2113944A40	CAP:CHIP,100PF,+5%,-5%,50V-DC,0402*
C11M2	2113944A40	CAP:CHIP,100PF,+5%,-5%,50V-DC,0402*
C1201M11	2113944A40	CAP:CHIP,100PF,+5%,-5%,50V-DC,0402*
C1202M11	2113944A31	CAP:CHIP,33PF,+5%,-5%,50V-DC,0402,C0G,*
C1203M11	21667011421	CAP,CER,2.2PF,.1PF+/-,50V-DC,0603,C0G,-55DEG CMIN,125DEG CMAX
C1204M11	2113945B02	CAP:CHIP,.01UF,+10%,-10%,25V-DC*

Ref. Des.	Part Number	Description
C1205M11	2113945A09	CAP:CHIP,1000PF,+10%,-10%*
C1206M11	NOTPLACED	N/A
C1208M11	NOTPLACED	N/A
C1210M11	2113945B02	CAP:CHIP,.01UF,+10%,-10%,25V-DC*
C1211M11	NOTPLACED	N/A
C1214M11	21012118001	CAP,FXD,1UF,10%,25V-DC,X7R,0805,LEAD-FREE/ROHS COMPLIANT
C1215M11	2113945Y02	CAP:X7R,0402,10%,16V,0.1UF
C1216M11	NOTPLACED	N/A
C1217M11	NOTPLACED	N/A
C1218M11	NOTPLACED	N/A
C1225M11	NOTPLACED	N/A
C1229M11	2113945Y02	CAP:X7R,0402,10%,16V,0.1UF
C1230M11	NOTPLACED	N/A
C1231M11	NOTPLACED	N/A
C1233M11	2113945B02	CAP:CHIP,.01UF,+10%,-10%,25V-DC*
C1237M11	NOTPLACED	N/A
C1239M11	2113945B02	CAP:CHIP,.01UF,+10%,-10%,25V-DC*
C1248M11	NOTPLACED	N/A
C1249M11	2113945B02	CAP:CHIP,.01UF,+10%,-10%,25V-DC*
C1250M11	2113945Y02	CAP:X7R,0402,10%,16V,0.1UF
C1255M11	2113945B02	CAP:CHIP,.01UF,+10%,-10%,25V-DC*
C1261M11	2113945B02	CAP:CHIP,.01UF,+10%,-10%,25V-DC*
C1262M11	2113945B02	CAP:CHIP,.01UF,+10%,-10%,25V-DC*
C1270M11	2113944A31	CAP:CHIP,33PF,+5%,-5%,50V-DC,0402,C0G,*

Ref. Des.	Part Number	Description
C1271M11	2113944A31	CAP:CHIP,33PF,+5%,-5%,50V-DC,0402,C0G,*
C1272M11	2113945B02	CAP:CHIP,.01UF,+10%,-10%,25V-DC*
C1273M11	2113945A13	CAP:CHIP,4700PF,+10%,-10%,50V-DC,0402,*
C1286M11	2113944A31	CAP:CHIP,33PF,+5%,-5%,50V-DC,0402,C0G,*
C1288M11	2113946B02	CAP CER CHP 0.047UF 10V 10,
C1291M11	2113944A31	CAP:CHIP,33PF,+5%,-5%,50V-DC,0402,C0G,*
C1294M11	CA000097A01	CAPACITOR, FIXED,CERAMIC,0402/M1005,0.15 UF,16 V
C1299M11	2113944A19	CAP CER CHP 5.6PF 50V +/- 0.5PF
C12M2	2113944A40	CAP:CHIP,100PF,+5%,-5%,50V-DC,0402*
C1301M3	21012119001	CAP,FXD,2.2UF,20%,6.3V-DC,-55DEG CMIN,85DEG CM,X5R,0402
C1302M3	2113944A21	CAP:CHIP,6.8PF,.5PF+/-,50V-DC,0402*
C1303M3	2113956A51	CAP:FXD,1UF,+10%,-10%,6.3V-DC*
C1304M3	2113944A26	CAP CER CHP 12.0PF 50V 5%
C1305M3	2113945B02	CAP:CHIP,.01UF,+10%,-10%,25V-DC*
C1306M3	2187893N01	CAP 1UF, 6.3V, X5R, 0402 PACKAGE
C1307M3	2113944A26	CAP CER CHP 12.0PF 50V 5%
C1308M3	2113945A09	CAP:CHIP,1000PF,+10%,-10%*
C1309M3	2113944A26	CAP CER CHP 12.0PF 50V 5%
C1310M3	2187893N01	CAP 1UF, 6.3V, X5R, 0402 PACKAGE
C1311M3	2113956A51	CAP:FXD,1UF,+10%,-10%,6.3V-DC*

Ref. Des.	Part Number	Description
C1312M3	2113956A51	CAP:FXD,1UF,+10%,-10%,6.3V-DC*
C1313M3	2187893N01	CAP 1UF, 6.3V, X5R, 0402 PACKAGE
C1314M3	2113944M20	CAP,FXD,12PF,+2%,-2%,50V-DC,0603,C0G,-55DEG CMIN,125DEG CMAX,PB
C1315M3	2175389H01	CAP,.5PF, CHIP, 0402, CERAMIC, 50 V
C1317M3	2188881Y12	CAPACITOR CERAMIC NPO HIGH FREQUENCY 16 VOLT (REPLACES 2104801Z12)
C1318M3	2113944A13	CAP CER CHP 3.3PF 50V +/- 0.25PF
C1319M3	2113945Y02	CAP:X7R,0402,10%,16V,0.1UF
C1320M3	2113944A28	CAP:CHIP,18PF,+5%,-5%,50V-DC,0402*
C1321M3	2113944A29	CAP:CHIP,22PF,+5%,-5%,50V-DC,0402*
C1322M3	2113944A29	CAP:CHIP,22PF,+5%,-5%,50V-DC,0402*
C1324M3	21667009274	CAPACITOR, FIXED, CERAMIC, 0402, 0.000001UF, 0.1PF, 50V, C0G
C1325M3	2113944A29	CAP:CHIP,22PF,+5%,-5%,50V-DC,0402*
C1326M3	2113945Y02	CAP:X7R,0402,10%,16V,0.1UF
C1327M3	2113944A28	CAP:CHIP,18PF,+5%,-5%,50V-DC,0402*
C1328M3	2113945Y02	CAP:X7R,0402,10%,16V,0.1UF
C1329M3	2113945Y02	CAP:X7R,0402,10%,16V,0.1UF
C1330M3	2113945Y02	CAP:X7R,0402,10%,16V,0.1UF
C1331M3	2113945Y02	CAP:X7R,0402,10%,16V,0.1UF

Ref. Des.	Part Number	Description
C1332M3	2113945Y02	CAP:X7R,0402,10%,16V,0.1UF
C1333M3	2113945Y02	CAP:X7R,0402,10%,16V,0.1UF
C1334M3	2113945Y02	CAP:X7R,0402,10%,16V,0.1UF
C1335M3	2113945Y02	CAP:X7R,0402,10%,16V,0.1UF
C1336M3	2113945Y02	CAP:X7R,0402,10%,16V,0.1UF
C1337M3	2113944A28	CAP:CHIP,18PF,+5%,-5%,50V-DC,0402*
C1376M3	2113944A25	CAP:CHIP,10PF,.5PF+/-,50V-DC,0402*
C13M2	2113944A40	CAP:CHIP,100PF,+5%,-5%,50V-DC,0402*
C1411M17	2113944C36	CAP,CHIP,33PF,+5%,-5%,50V-DC,0603,C0G*
C1413M17	21667011006	CAP,CER,1.5PF,.25PF+/-,50V-DC,0603,C0G,-55DEG CMIN,125DEG CMAX
C1414M17	NOTPLACED	N/A
C1418M17	2113944C08	CAP CER CHP 1.2PF 50V +/- 0.25PF
C1419M17	21667011414	CAP,CER,1.5PF,.1PF+/-,50V-DC,0603,C0G,-55DEG CMIN,125DEG CMAX
C1424M17	2113742C09	CAP CER CHP 0.9PF +/- .10PF 100V
C1425M17	21667011009	CAP,CER,1.8PF,.25PF+/-,50V-DC,0603,C0G,-55DEG CMIN,125DEG CMAX
C14M2	2113944A40	CAP:CHIP,100PF,+5%,-5%,50V-DC,0402*
C15M2	2113944A40	CAP:CHIP,100PF,+5%,-5%,50V-DC,0402*
C16M2	2113944A40	CAP:CHIP,100PF,+5%,-5%,50V-DC,0402*
C17M2	2113944A40	CAP:CHIP,100PF,+5%,-5%,50V-DC,0402*

Ref. Des.	Part Number	Description
C2006M2	NOTPLACED	N/A
C2008M2	NOTPLACED	N/A
C2009M2	2113944A40	CAP:CHIP,100PF,+5%,-5%,50V-DC,0402*
C200M12	2113945B02	CAP:CHIP,.01UF,+10%,-10%,25V-DC*
C2010M2	2113946B04	CAP:CHIP,.1UF,+10%,-10%,10V-DC*
C2011M2	2113946B04	CAP:CHIP,.1UF,+10%,-10%,10V-DC*
C201M12	21012118001	CAP,FXD,1UF,10%,25V-DC,X7R,0805,LEAD-FREE/ROHS COMPLIANT
C202M12	21012118001	CAP,FXD,1UF,10%,25V-DC,X7R,0805,LEAD-FREE/ROHS COMPLIANT
C203M12	21012118001	CAP,FXD,1UF,10%,25V-DC,X7R,0805,LEAD-FREE/ROHS COMPLIANT
C204M12	2113955D35	CAP,FXD,4.7UF,+10%,-10%,16V-DC,1206,X7R,-55DEG CMIN,125DEG CMAX
C205M12	2113955D35	CAP,FXD,4.7UF,+10%,-10%,16V-DC,1206,X7R,-55DEG CMIN,125DEG CMAX
C206M12	2113945B02	CAP:CHIP,.01UF,+10%,-10%,25V-DC*
C207M12	2113956B91	CAP,FXD,1UF,+10%,-10%,16V-DC,0603,X5R,-55DEG CMIN,85DEG CMAX,PB
C208M12	2113956B91	CAP,FXD,1UF,+10%,-10%,16V-DC,0603,X5R,-55DEG CMIN,85DEG CMAX,PB
C209M12	2113956B91	CAP,FXD,1UF,+10%,-10%,16V-DC,0603,X5R,-55DEG CMIN,85DEG CMAX,PB
C21000M2	2113945Y02	CAP:X7R,0402,10%,16V,0.1UF

Ref. Des.	Part Number	Description
C21001M2	2113945Y02	CAP:X7R,0402,10%,16V,0.1UF
C21002M2	2113946B04	CAP:CHIP,.1UF,+10%,-10%,10V-DC*
C21003M2	2113946B04	CAP:CHIP,.1UF,+10%,-10%,10V-DC*
C21004M2	2113945Y02	CAP:X7R,0402,10%,16V,0.1UF
C21005M2	2113946B04	CAP:CHIP,.1UF,+10%,-10%,10V-DC*
C2104M2	2113946B04	CAP:CHIP,.1UF,+10%,-10%,10V-DC*
C210M12	2113956B91	CAP,FXD,1UF,+10%,-10%,16V-DC,0603,X5R,-55DEG CMIN,85DEG CMAX,PB
C2114M2	2113946B04	CAP:CHIP,.1UF,+10%,-10%,10V-DC*
C2115M2	2113944A40	CAP:CHIP,100PF,+5%,-5%,50V-DC,0402*
C2116M2	2113946B04	CAP:CHIP,.1UF,+10%,-10%,10V-DC*
C2126M2	2113944A46	CAP:CHIP,330PF,+5%,-5%,50V-DC,0402,C0G,*
C2127M2	2113944A46	CAP:CHIP,330PF,+5%,-5%,50V-DC,0402,C0G,*
C2128M2	2113944A46	CAP:CHIP,330PF,+5%,-5%,50V-DC,0402,C0G,*
C2129M2	2113944A46	CAP:CHIP,330PF,+5%,-5%,50V-DC,0402,C0G,*
C212M12	2113946D07	CAP:CHIP,4.7UF,+10%,-10%,6.3V-DC,0603*
C2130M2	2113944A46	CAP:CHIP,330PF,+5%,-5%,50V-DC,0402,C0G,*
C213M12	2113944A46	CAP:CHIP,330PF,+5%,-5%,50V-DC,0402,C0G,*
C214M12	2113944A31	CAP:CHIP,33PF,+5%,-5%,50V-DC,0402,C0G,*
C215M12	2113944A46	CAP:CHIP,330PF,+5%,-5%,50V-DC,0402,C0G,*
C216M12	2113944A31	CAP:CHIP,33PF,+5%,-5%,50V-DC,0402,C0G,*

Ref. Des.	Part Number	Description
C217M12	2113956B91	CAP,FXD,1UF,+10%,-10%,16V-DC,0603,X5R,-55DEG CMIN,85DEG CMAX,PB
C2201M2	2113946B04	CAP:CHIP,.1UF,+10%,-10%,10V-DC*
C2202M2	2113946B04	CAP:CHIP,.1UF,+10%,-10%,10V-DC*
C2203M2	2113946B04	CAP:CHIP,.1UF,+10%,-10%,10V-DC*
C2211M2	2113946B04	CAP:CHIP,.1UF,+10%,-10%,10V-DC*
C2212M2	2113946B04	CAP:CHIP,.1UF,+10%,-10%,10V-DC*
C2213M2	2113946B04	CAP:CHIP,.1UF,+10%,-10%,10V-DC*
C2214M2	2113946B04	CAP:CHIP,.1UF,+10%,-10%,10V-DC*
C2215M2	2113946B04	CAP:CHIP,.1UF,+10%,-10%,10V-DC*
C2216M2	2113946B04	CAP:CHIP,.1UF,+10%,-10%,10V-DC*
C2221M2	2113946B04	CAP:CHIP,.1UF,+10%,-10%,10V-DC*
C2222M2	2113946B04	CAP:CHIP,.1UF,+10%,-10%,10V-DC*
C2223M2	2113944A40	CAP:CHIP,100PF,+5%,-5%,50V-DC,0402*
C2301M13	2113944C45	CAP:CG,0603,5%,50V,100PF
C2302M13	2113944M26	CAP,FXD,22PF,+2%,-2%,50V-DC,0603,C0G,-55DEG CMIN,125DEG CMAX,PB
C2303M13	2113944A31	CAP:CHIP,33PF,+5%,-5%,50V-DC,0402,C0G,*
C2304M13	2113944C36	CAP,CHIP,33PF,+5%,-5%,50V-DC,0603,C0G*
C2305M13	21667009387	CAPACI-TOR,FIXED,CERAMIC,040 2,0.000091UF,+/-1%,50V,C0G

Ref. Des.	Part Number	Description
C2306M13	2113944A31	CAP:CHIP,33PF,+5%,-5%,50V-DC,0402,C0G,*
C2307M13	21667011013	CAP,CER,2.2PF,.25PF+/-,50V-DC,0603,C0G,-55DEG CMIN,125DEG CMAX
C2308M13	21667011409	CAP,CER,1PF,.1PF+/-,50V-DC,0603,C0G,-55DEG CMIN,125DEG CMAX
C2309M13	2113946K02	CAP CER CHP 0.10UF 16V
C2401M2	2113944A40	CAP:CHIP,100PF,+5%,-5%,50V-DC,0402*
C2402M2	2113944A40	CAP:CHIP,100PF,+5%,-5%,50V-DC,0402*
C2403M2	2113944A40	CAP:CHIP,100PF,+5%,-5%,50V-DC,0402*
C2404M2	2113944A40	CAP:CHIP,100PF,+5%,-5%,50V-DC,0402*
C2405M2	NOTPLACED	N/A
C2406M2	21667009274	CAPACI-TOR,FIXED,CERAMIC,040 2,0.000001UF,0.1PF,50V,C0G
C2411M2	2113944A40	CAP:CHIP,100PF,+5%,-5%,50V-DC,0402*
C2412M2	2113944A40	CAP:CHIP,100PF,+5%,-5%,50V-DC,0402*
C2413M2	2113944A40	CAP:CHIP,100PF,+5%,-5%,50V-DC,0402*
C2414M2	2113944A40	CAP:CHIP,100PF,+5%,-5%,50V-DC,0402*
C2806M1	NOTPLACED	N/A
C2M2	2113944A40	CAP:CHIP,100PF,+5%,-5%,50V-DC,0402*
C3006M22	2113944A31	CAP:CHIP,33PF,+5%,-5%,50V-DC,0402,C0G,*
C3007M22	2113944A31	CAP:CHIP,33PF,+5%,-5%,50V-DC,0402,C0G,*
C3012M22	2113946K02	CAP CER CHP 0.10UF 16V
C3013M22	2113946K02	CAP CER CHP 0.10UF 16V

Ref. Des.	Part Number	Description
C3014M22	2113944M06	CAP,FXD,3.3PF,.1PF+/-,50V-DC,0603,C0G,-55DEG CMIN,125DEG CMAX
C3015M22	2113944M08	CAP,FXD,3.9PF,.1PF+/-,50V-DC,0603,C0G,-55DEG CMIN,125DEG CMAX
C3016M22	21667011421	CAP,CER,2.2PF,.1PF+/-,50V-DC,0603,C0G,-55DEG CMIN,125DEG CMAX
C3017M22	21667011426	CAP,CER,2.7PF,.1PF+/-,50V-DC,0603,C0G,-55DEG CMIN,125DEG CMAX
C3022M22	21012043014	CAPACI-TOR,CERAMIC,1.8PF,50V-DC,C0G,
C3023M22	21667009288	CAPACI-TOR,FIXED,CERAMIC,040 2,0.0000024UF,0.1PF,50V,C0G
C3024M22	21012043007	CAPACI-TOR,CERAMIC,0.8PF,50V-DC,C0G,
C3025M22	21667009284	CAPACI-TOR,FIXED,CERAMIC,040 2,0.000002UF,0.1PF,50V,C0G
C3026M22	21667009288	CAPACI-TOR,FIXED,CERAMIC,040 2,0.0000024UF,0.1PF,50V,C0G
C3027M22	21667009303	CAPACI-TOR,FIXED,CERAMIC,040 2,0.0000039UF,0.1PF,50V,C0G
C3028M22	21667009288	CAPACI-TOR,FIXED,CERAMIC,040 2,0.0000024UF,0.1PF,50V,C0G
C3029M22	21667009303	CAPACI-TOR,FIXED,CERAMIC,040 2,0.0000039UF,0.1PF,50V,C0G

Ref. Des.	Part Number	Description
C3042M22	2113944A31	CAP:CHIP,33PF,+5%,-5%,50V-DC,0402,C0G,*
C3045M22	2113944A31	CAP:CHIP,33PF,+5%,-5%,50V-DC,0402,C0G,*
C3046M22	2113944A31	CAP:CHIP,33PF,+5%,-5%,50V-DC,0402,C0G,*
C3049M22	2113946K02	CAP CER CHP 0.10UF 16V
C3050M22	2113944M02	CAP,FXD,2.2PF,.1PF+/-,50V-DC,0603,C0G,-55DEG CMIN,125DEG CMAX
C3051M22	2175662M20	CAPACITOR 2.4 0.1PF, CERAMIC, 100V
C3054M22	NOTPLACED	N/A
C3055M22	21667009288	CAPACI-TOR,FIXED,CERAMIC,040 2,0.0000024UF,0.1PF,50V,C0G
C3056M22	21667009300	CAPACI-TOR,FIXED,CERAMIC,040 2,0.0000036UF,0.1PF,50V,C0G
C3057M22	21667009297	CAPACI-TOR,FIXED,CERAMIC,040 2,0.0000033UF,0.1PF,50V,C0G
C3065M22	2113944A31	CAP:CHIP,33PF,+5%,-5%,50V-DC,0402,C0G,*
C3067M22	2113946B04	CAP:CHIP,.1UF,+10%,-10%,10V-DC*
C3068M22	2113944A31	CAP:CHIP,33PF,+5%,-5%,50V-DC,0402,C0G,*
C3069M22	21667009354	CAPACI-TOR,FIXED,CERAMIC,040 2,0.000009UF,0.1PF,50V,C0G
C4005M2	2113946B04	CAP:CHIP,.1UF,+10%,-10%,10V-DC*
C4006M2	2113946B04	CAP:CHIP,.1UF,+10%,-10%,10V-DC*
C4007M2	2113946B04	CAP:CHIP,.1UF,+10%,-10%,10V-DC*

Ref. Des.	Part Number	Description
C402M20	2113944A31	CAP:CHIP,33PF,+5%,-5%,50V-DC,0402,C0G,*
C404M20	2113944A31	CAP:CHIP,33PF,+5%,-5%,50V-DC,0402,C0G,*
C405M20	2113944A31	CAP:CHIP,33PF,+5%,-5%,50V-DC,0402,C0G,*
C406M20	2113944A31	CAP:CHIP,33PF,+5%,-5%,50V-DC,0402,C0G,*
C407M20	2113944A31	CAP:CHIP,33PF,+5%,-5%,50V-DC,0402,C0G,*
C413M20	2113944A33	CAP:CHIP,47PF,+5%,-5%,50V-DC,0402,C0G,*
C416M20	2113944A31	CAP:CHIP,33PF,+5%,-5%,50V-DC,0402,C0G,*
C417M20	2113944A31	CAP:CHIP,33PF,+5%,-5%,50V-DC,0402,C0G,*
C418M20	2113944A31	CAP:CHIP,33PF,+5%,-5%,50V-DC,0402,C0G,*
C419M20	2113944A31	CAP:CHIP,33PF,+5%,-5%,50V-DC,0402,C0G,*
C421M20	2113946D07	CAP:CHIP,4.7UF,+10%,-10%,6.3V-DC,0603*
C422M20	2113944A31	CAP:CHIP,33PF,+5%,-5%,50V-DC,0402,C0G,*
C423M20	21667009375	CAP,CER,30PF,+1%,-1%,50V-DC,0402,C0G,-55DEG CMIN,125DEG CMAX
C424M20	2113944A31	CAP:CHIP,33PF,+5%,-5%,50V-DC,0402,C0G,*
C425M20	21667009346	CAPACI-TOR,FIXED,CERAMIC,0402,0.0000082UF,0.1PF,50V,C0G
C426M20	2113944A63	CAP:FXD,1PF,.25PF+/-,50V-DC,0402,C0G,-5*
C427M20	2113946D07	CAP:CHIP,4.7UF,+10%,-10%,6.3V-DC,0603*
C428M20	2113946D07	CAP:CHIP,4.7UF,+10%,-10%,6.3V-DC,0603*
C429M20	2113944A31	CAP:CHIP,33PF,+5%,-5%,50V-DC,0402,C0G,*

Ref. Des.	Part Number	Description
C430M20	21667009375	CAP,CER,30PF,+1%,-1%,50V-DC,0402,C0G,-55DEG CMIN,125DEG CMAX
C431M20	2113944A31	CAP:CHIP,33PF,+5%,-5%,50V-DC,0402,C0G,*
C432M20	21667009315	CAPACI-TOR,FIXED,CERAMIC,0402,0.0000051UF,0.1PF,50V,C0G
C433M20	2113944A63	CAP:FXD,1PF,.25PF+/-,50V-DC,0402,C0G,-5*
C434M20	2113946D07	CAP:CHIP,4.7UF,+10%,-10%,6.3V-DC,0603*
C484M20	21667009274	CAPACI-TOR,FIXED,CERAMIC,0402,0.000001UF,0.1PF,50V,C0G
C485M20	2113944A63	CAP:FXD,1PF,.25PF+/-,50V-DC,0402,C0G,-5*
C487M20	2113944A31	CAP:CHIP,33PF,+5%,-5%,50V-DC,0402,C0G,*
C488M20	21667009023	CAPACI-TOR,FIXED,CERAMIC,0402,0.0000022UF,0.25PF,50V,C0G
C490M20	2113944V07	CAP,FXD,1.5PF,.1PF+/-,50V-DC,0402,C0G,-55DEG CMIN,125DEG CMAX
C492M20	21667009023	CAPACI-TOR,FIXED,CERAMIC,0402,0.0000022UF,0.25PF,50V,C0G
C4M2	2113944A40	CAP:CHIP,100PF,+5%,-5%,50V-DC,0402*
C500M21	2113945B05	CAP,FXD,.033UF,+10%,-10%,25V-DC,0402,X7R,-55DEG CMIN,125DEG CMA
C501M21	2113944A32	CAP:CHIP,39PF,+5%,-5%,50V-DC,0402,C0G,*
C502M21	2113945B05	CAP,FXD,.033UF,+10%,-10%,25V-DC,0402,X7R,-55DEG CMIN,125DEG CMA

Ref. Des.	Part Number	Description
C504M21	2113944A70	CAP,FXD,6PF,.5PF+/-,50V-DC,0402,C0G,-55DEG CMIN,125DEG CMAX,PB
C505M21	NOTPLACED	N/A
C506M21	2113944A32	CAP:CHIP,39PF,+5%,-5%,50V-DC,0402,C0G,*
C507M21	2113945B05	CAP,FXD,.033UF,+10%,-10%,25V-DC,0402,X7R,-55DEG CMIN,125DEG CMA
C508M21	2113946D07	CAP:CHIP,4.7UF,+10%,-10%,6.3V-DC,0603*
C509M21	2113945B05	CAP,FXD,.033UF,+10%,-10%,25V-DC,0402,X7R,-55DEG CMIN,125DEG CMA
C510M21	2113944A32	CAP:CHIP,39PF,+5%,-5%,50V-DC,0402,C0G,*
C511M21	2113945B05	CAP,FXD,.033UF,+10%,-10%,25V-DC,0402,X7R,-55DEG CMIN,125DEG CMA
C512M21	2113946D07	CAP:CHIP,4.7UF,+10%,-10%,6.3V-DC,0603*
C514M21	NOTPLACED	N/A
C515M21	2113944A14	CAP CER CHP 3.6PF 50V +/- 0.25PF
C516M21	2113944M30	CAP,FXD,33PF,+2%,-2%,50V-DC,0603,C0G,-55DEG CMIN,125DEG CMAX,PB
C532M21	2113944A32	CAP:CHIP,39PF,+5%,-5%,50V-DC,0402,C0G,*
C533M21	21667009383	CAPACI-TOR,FIXED,CERAMIC,0402,0.0000062UF,+/-1%,50V,C0G
C550M21	NOTPLACED	N/A
C551M21	NOTPLACED	N/A
C601M19	2113945B02	CAP:CHIP,.01UF,+10%,-10%,25V-DC*
C602M19	2113945B02	CAP:CHIP,.01UF,+10%,-10%,25V-DC*

Ref. Des.	Part Number	Description
C603M19	2113945B02	CAP:CHIP,.01UF,+10%,-10%,25V-DC*
C604M19	2113945B02	CAP:CHIP,.01UF,+10%,-10%,25V-DC*
C605M19	2113944A21	CAP:CHIP,6.8PF,.5PF+/-,50V-DC,0402*
C606M19	2113946B04	CAP:CHIP,.1UF,+10%,-10%,10V-DC*
C607M19	2113944A40	CAP:CHIP,100PF,+5%,-5%,50V-DC,0402*
C608M19	2113944A12	CAP CER CHP 3.0PF 50V +/- 0.25PF
C609M19	2113944A30	CAP CER CHP 27.0PF 50V 5%
C6104M6	2113946B04	CAP:CHIP,.1UF,+10%,-10%,10V-DC*
C6105M6	2113946B04	CAP:CHIP,.1UF,+10%,-10%,10V-DC*
C6106M6	2113946B04	CAP:CHIP,.1UF,+10%,-10%,10V-DC*
C6107M6	2113946B04	CAP:CHIP,.1UF,+10%,-10%,10V-DC*
C6108M6	2113946B04	CAP:CHIP,.1UF,+10%,-10%,10V-DC*
C6109M6	2113946B04	CAP:CHIP,.1UF,+10%,-10%,10V-DC*
C610M19	2113944A40	CAP:CHIP,100PF,+5%,-5%,50V-DC,0402*
C6110M6	2113946B04	CAP:CHIP,.1UF,+10%,-10%,10V-DC*
C6111M6	2113946B04	CAP:CHIP,.1UF,+10%,-10%,10V-DC*
C6112M6	2113946B04	CAP:CHIP,.1UF,+10%,-10%,10V-DC*
C6113M6	2113946B04	CAP:CHIP,.1UF,+10%,-10%,10V-DC*
C6114M6	2113946B04	CAP:CHIP,.1UF,+10%,-10%,10V-DC*
C6115M6	2113946B04	CAP:CHIP,.1UF,+10%,-10%,10V-DC*

Ref. Des.	Part Number	Description
C611M19	2113944A40	CAP:CHIP,100PF,+5%,-5%,50V-DC,0402*
C612M19	2113945B02	CAP:CHIP,.01UF,+10%,-10%,25V-DC*
C613M19	2113944A40	CAP:CHIP,100PF,+5%,-5%,50V-DC,0402*
C614M19	2113945B02	CAP:CHIP,.01UF,+10%,-10%,25V-DC*
C615M6	NOTPLACED	N/A
C615M19	2113944A42	CAP:CHIP,150PF,+5%,-5%,50V-DC,0402,C0G,*
C616M19	2113945A11	CAP:CHIP,2200PF,+10%,-10%,50V-DC,0402,*
C617M19	2113946B04	CAP:CHIP,.1UF,+10%,-10%,10V-DC*
C618M19	2113944A31	CAP:CHIP,33PF,+5%,-5%,50V-DC,0402,C0G,*
C619M19	2113944A35	CAP CER CHP 62.0PF 50V 5%
C6201M6	2113944A40	CAP:CHIP,100PF,+5%,-5%,50V-DC,0402*
C6202M6	2113945A09	CAP:CHIP,1000PF,+10%,-10%*
C6203M6	2113946B04	CAP:CHIP,.1UF,+10%,-10%,10V-DC*
C620M19	2113946B04	CAP:CHIP,.1UF,+10%,-10%,10V-DC*
C621M19	2113946B04	CAP:CHIP,.1UF,+10%,-10%,10V-DC*
C622M19	2113946C07	CAP:FXD,.33UF,+10%,-10%,10V-DC,0603*
C623M19	2113945B02	CAP:CHIP,.01UF,+10%,-10%,25V-DC*
C624M19	2113946C07	CAP:FXD,.33UF,+10%,-10%,10V-DC,0603*
C625M19	21667009370	CAPACI-TOR,FIXED,CERAMIC,0402,0.000018UF,+/-1%,50V,C0G
C626M19	2113945A09	CAP:CHIP,1000PF,+10%,-10%*

Ref. Des.	Part Number	Description
C627M19	2113945A09	CAP:CHIP,1000PF,+10%,-10%*
C628M19	2113945B02	CAP:CHIP,.01UF,+10%,-10%,25V-DC*
C629M19	2113946B04	CAP:CHIP,.1UF,+10%,-10%,10V-DC*
C6301M6	2113946B04	CAP:CHIP,.1UF,+10%,-10%,10V-DC*
C6302M6	2113946B04	CAP:CHIP,.1UF,+10%,-10%,10V-DC*
C6303M6	2113946B04	CAP:CHIP,.1UF,+10%,-10%,10V-DC*
C6304M6	2113946B04	CAP:CHIP,.1UF,+10%,-10%,10V-DC*
C6305M6	2113946S35	CAP:CHIP,1UF,+10%,-10%,16V-DC,0603,*
C6306M6	2113946S35	CAP:CHIP,1UF,+10%,-10%,16V-DC,0603,*
C6308M6	2113946B04	CAP:CHIP,.1UF,+10%,-10%,10V-DC*
C6309M6	2113946B04	CAP:CHIP,.1UF,+10%,-10%,10V-DC*
C630M19	2113946B04	CAP:CHIP,.1UF,+10%,-10%,10V-DC*
C6310M6	2113946B04	CAP:CHIP,.1UF,+10%,-10%,10V-DC*
C6311M6	2113946B04	CAP:CHIP,.1UF,+10%,-10%,10V-DC*
C631M19	21667009334	CAPACI-TOR,FIXED,CERAMIC,0402,0.000007UF,0.1PF,50V,C0G
C632M19	2113944A40	CAP:CHIP,100PF,+5%,-5%,50V-DC,0402*
C633M19	2113945B02	CAP:CHIP,.01UF,+10%,-10%,25V-DC*
C634M19	2113946B04	CAP:CHIP,.1UF,+10%,-10%,10V-DC*
C635M19	2113945B02	CAP:CHIP,.01UF,+10%,-10%,25V-DC*
C636M19	2113946B04	CAP:CHIP,.1UF,+10%,-10%,10V-DC*

Ref. Des.	Part Number	Description
C637M19	2113946B04	CAP:CHIP,.1UF,+10%,-10%,10V-DC*
C638M19	2113945A12	CAP:CHIP,3300PF,+10%,-10%,50V-DC,0402,*
C639M19	2113945B02	CAP:CHIP,.01UF,+10%,-10%,25V-DC*
C6401M6	2113946B04	CAP:CHIP,.1UF,+10%,-10%,10V-DC*
C6402M6	2113956A51	CAP:FXD,1UF,+10%,-10%,6.3V-DC*
C6403M6	2113946B04	CAP:CHIP,.1UF,+10%,-10%,10V-DC*
C6404M6	2113946B04	CAP:CHIP,.1UF,+10%,-10%,10V-DC*
C6405M6	2113946B04	CAP:CHIP,.1UF,+10%,-10%,10V-DC*
C6406M6	2113946B04	CAP:CHIP,.1UF,+10%,-10%,10V-DC*
C6407M6	2113946B04	CAP:CHIP,.1UF,+10%,-10%,10V-DC*
C6408M6	2113946B04	CAP:CHIP,.1UF,+10%,-10%,10V-DC*
C6409M6	2113946B04	CAP:CHIP,.1UF,+10%,-10%,10V-DC*
C640M19	2113946B04	CAP:CHIP,.1UF,+10%,-10%,10V-DC*
C6410M6	2113946B04	CAP:CHIP,.1UF,+10%,-10%,10V-DC*
C6411M6	2113946B04	CAP:CHIP,.1UF,+10%,-10%,10V-DC*
C6412M6	NOTPLACED	N/A
C6413M6	2113946B04	CAP:CHIP,.1UF,+10%,-10%,10V-DC*
C6414M6	2113946B04	CAP:CHIP,.1UF,+10%,-10%,10V-DC*
C6415M6	NOTPLACED	N/A
C6416M6	2113945B04	CAP:FXD,.022UF,+10%,-10%,25V-DC,0402,X7R,-55DEG CMIN,125DEG CMA

Ref. Des.	Part Number	Description
C6417M6	2113945B04	CAP:FXD,.022UF,+10%,-10%,25V-DC,0402,X7R,-55DEG CMIN,125DEG CMA
C6418M6	2113946B04	CAP:CHIP,.1UF,+10%,-10%,10V-DC*
C6419M6	2113946B04	CAP:CHIP,.1UF,+10%,-10%,10V-DC*
C641M19	2113944A31	CAP:CHIP,33PF,+5%,-5%,50V-DC,0402,C0G,*
C6420M6	2113945B04	CAP:FXD,.022UF,+10%,-10%,25V-DC,0402,X7R,-55DEG CMIN,125DEG CMA
C6421M6	2113946B04	CAP:CHIP,.1UF,+10%,-10%,10V-DC*
C6422M6	2113946C02	CAP:CHIP,.22UF,+10%,-10%,10V-DC,0603*
C6423M6	2113946B04	CAP:CHIP,.1UF,+10%,-10%,10V-DC*
C6424M6	2113944A40	CAP:CHIP,100PF,+5%,-5%,50V-DC,0402*
C6425M6	2113944A40	CAP:CHIP,100PF,+5%,-5%,50V-DC,0402*
C6426M6	2113945B02	CAP:CHIP,.01UF,+10%,-10%,25V-DC*
C6427M6	2113944A50	CAP CER CHP 680.0 PF 50V 5%
C6428M6	2113944A40	CAP:CHIP,100PF,+5%,-5%,50V-DC,0402*
C6429M6	2113946B04	CAP:CHIP,.1UF,+10%,-10%,10V-DC*
C642M19	2113944A48	CAP:CHIP,470PF,+5%,-5%,50V-DC,0402,C0G,*
C6430M6	2113946B04	CAP:CHIP,.1UF,+10%,-10%,10V-DC*
C6431M6	2113946B04	CAP:CHIP,.1UF,+10%,-10%,10V-DC*
C6432M6	2113956B54	CAP:MLCC,X5R,0603,20%,.6.3V,10UF
C6433M6	2113946S35	CAP:CHIP,1UF,+10%,-10%,16V-DC,0603,*

Ref. Des.	Part Number	Description
C6434M6	2113946L05	CAP:FXD,.33UF,+80%,-20%,16V-DC,0603,Y5V,-30DEG CMIN,85DEG CMAX
C6435M6	2113946S35	CAP:CHIP,1UF,+10%,-10%,16V-DC,0603,*
C6436M6	2113946C08	CAP:FXD,.47UF,+10%,-10%,10V-DC,0603,X5R,-55DEG CMIN,85DEG CMAX
C6437M6	2113946C08	CAP:FXD,.47UF,+10%,-10%,10V-DC,0603,X5R,-55DEG CMIN,85DEG CMAX
C6438M6	2113944A40	CAP:CHIP,100PF,+5%,-5%,50V-DC,0402*
C643M19	2113944A48	CAP:CHIP,470PF,+5%,-5%,50V-DC,0402,C0G,*
C644M19	2113944A11	CAP:CHIP,2.7PF,.25PF+/-,50V-DC,0402*
C645M19	NOTPLACED	N/A
C646M19	21667009344	CAPACI-TOR,FIXED,CERAMIC,0402,0.00008UF,0.1PF,50V,C0G
C6501M6	2113946B04	CAP:CHIP,.1UF,+10%,-10%,10V-DC*
C6502M6	2113946B04	CAP:CHIP,.1UF,+10%,-10%,10V-DC*
C6503M6	2113944A46	CAP:CHIP,330PF,+5%,-5%,50V-DC,0402,C0G,*
C6504M6	2113946B04	CAP:CHIP,.1UF,+10%,-10%,10V-DC*
C6505M6	2113946B04	CAP:CHIP,.1UF,+10%,-10%,10V-DC*
C6506M6	2113946B04	CAP:CHIP,.1UF,+10%,-10%,10V-DC*
C6507M6	2113946B04	CAP:CHIP,.1UF,+10%,-10%,10V-DC*
C6508M6	2113946B04	CAP:CHIP,.1UF,+10%,-10%,10V-DC*
C6509M6	2113946B04	CAP:CHIP,.1UF,+10%,-10%,10V-DC*

Ref. Des.	Part Number	Description
C6510M6	2113946B04	CAP:CHIP,.1UF,+10%,-10%,10V-DC*
C6511M6	2113946S35	CAP:CHIP,1UF,+10%,-10%,16V-DC,0603,*
C6512M6	2113946B04	CAP:CHIP,.1UF,+10%,-10%,10V-DC*
C6513M6	2113946S35	CAP:CHIP,1UF,+10%,-10%,16V-DC,0603,*
C6514M6	2113946S35	CAP:CHIP,1UF,+10%,-10%,16V-DC,0603,*
C6515M6	2113946S35	CAP:CHIP,1UF,+10%,-10%,16V-DC,0603,*
C6516M6	2113946B04	CAP:CHIP,.1UF,+10%,-10%,10V-DC*
C6517M6	2113946S35	CAP:CHIP,1UF,+10%,-10%,16V-DC,0603,*
C6518M6	2113946B04	CAP:CHIP,.1UF,+10%,-10%,10V-DC*
C6519M6	2113946S35	CAP:CHIP,1UF,+10%,-10%,16V-DC,0603,*
C6520M6	2113946B04	CAP:CHIP,.1UF,+10%,-10%,10V-DC*
C6521M6	2113944A46	CAP:CHIP,330PF,+5%,-5%,50V-DC,0402,C0G,*
C6522M6	2113946S35	CAP:CHIP,1UF,+10%,-10%,16V-DC,0603,*
C6523M6	2113946B04	CAP:CHIP,.1UF,+10%,-10%,10V-DC*
C6524M6	2113946B04	CAP:CHIP,.1UF,+10%,-10%,10V-DC*
C6525M6	2113946S35	CAP:CHIP,1UF,+10%,-10%,16V-DC,0603,*
C6526M6	2113946B04	CAP:CHIP,.1UF,+10%,-10%,10V-DC*
C6527M6	2113946B04	CAP:CHIP,.1UF,+10%,-10%,10V-DC*
C6528M6	2113946B04	CAP:CHIP,.1UF,+10%,-10%,10V-DC*
C6529M6	2113946B04	CAP:CHIP,.1UF,+10%,-10%,10V-DC*

Ref. Des.	Part Number	Description
C6530M6	2113946S35	CAP:CHIP,1UF,+10%,-10%,16V-DC,0603,*
C6531M6	2113946B04	CAP:CHIP,.1UF,+10%,-10%,10V-DC*
C6532M6	2113946S35	CAP:CHIP,1UF,+10%,-10%,16V-DC,0603,*
C6533M6	2113946B04	CAP:CHIP,.1UF,+10%,-10%,10V-DC*
C6534M6	2113956B33	CAP:FXD,2.2UF,+10%,-10%,16V-DC,0603,X5R,-55DEG CMIN,85DEG CMAX
C6535M6	2113944A40	CAP:CHIP,100PF,+5%,-5%,50V-DC,0402*
C6536M6	2113944A26	CAP CER CHP 12.0PF 50V 5%
C6537M6	2113944A19	CAP CER CHP 5.6PF 50V +/- 0.5PF
C6538M6	2113956B33	CAP:FXD,2.2UF,+10%,-10%,16V-DC,0603,X5R,-55DEG CMIN,85DEG CMAX
C6539M6	2113956B33	CAP:FXD,2.2UF,+10%,-10%,16V-DC,0603,X5R,-55DEG CMIN,85DEG CMAX
C6540M6	2113945A09	CAP:CHIP,1000PF,+10%,-10%*
C6541M6	2113944A19	CAP CER CHP 5.6PF 50V +/- 0.5PF
C6542M6	2113946B04	CAP:CHIP,.1UF,+10%,-10%,10V-DC*
C6543M6	2113946B04	CAP:CHIP,.1UF,+10%,-10%,10V-DC*
C6544M6	2113945D04	CAP:CHIP,.1UF,+10%,-10%,25V-DC,0603,X7R*
C6545M6	2113945D04	CAP:CHIP,.1UF,+10%,-10%,25V-DC,0603,X7R*
C6546M6	2113946B04	CAP:CHIP,.1UF,+10%,-10%,10V-DC*
C6547M6	2113944A46	CAP:CHIP,330PF,+5%,-5%,50V-DC,0402,C0G,*
C6548M6	NOTPLACED	N/A

Ref. Des.	Part Number	Description
C6549M6	2113944A46	CAP:CHIP,330PF,+5%,-5%,50V-DC,0402,C0G,*
C6550M6	2113945D04	CAP:CHIP,.1UF,+10%,-10%,25V-DC,0603,X7R*
C6551M6	2113944A46	CAP:CHIP,330PF,+5%,-5%,50V-DC,0402,C0G,*
C6552M6	2113956E93	CAP:FXD,10UF,+10%,-10%,16V-DC,1210,X5R,-55DEG CMIN,85DEG CMAX,P
C6553M6	2113956E93	CAP:FXD,10UF,+10%,-10%,16V-DC,1210,X5R,-55DEG CMIN,85DEG CMAX,P
C6554M6	2113946B04	CAP:CHIP,.1UF,+10%,-10%,10V-DC*
C6555M6	2113955D45	CAP:FXD,4.7UF,+10%,-10%,10V-DC,1206,X7R,-55DEG CMIN,125DEG CMAX
C6556M6	2113956B33	CAP:FXD,2.2UF,+10%,-10%,16V-DC,0603,X5R,-55DEG CMIN,85DEG CMAX
C6557M6	2113945D04	CAP:CHIP,.1UF,+10%,-10%,25V-DC,0603,X7R*
C6558M6	2113944A21	CAP:CHIP,6.8PF,.5PF+/-,50V-DC,0402*
C6559M6	2113946S35	CAP:CHIP,1UF,+10%,-10%,16V-DC,0603,*
C6560M6	2113956C37	CAP:FXD,10UF,+10%,-10%,16V-DC,0805,*
C6561M6	2113956C37	CAP:FXD,10UF,+10%,-10%,16V-DC,0805,*
C6562M6	2113944A25	CAP:CHIP,10PF,.5PF+/-,50V-DC,0402*
C6563M6	2113945D04	CAP:CHIP,.1UF,+10%,-10%,25V-DC,0603,X7R*
C6564M6	2113944A46	CAP:CHIP,330PF,+5%,-5%,50V-DC,0402,C0G,*
C6565M6	2113956B33	CAP:FXD,2.2UF,+10%,-10%,16V-DC,0603,X5R,-55DEG CMIN,85DEG CMAX



Ref. Des.	Part Number	Description
C6566M6	2113956E93	CAP:FXD,10UF,+10%,-10%,16V-DC,1210,X5R,-55DEG CMIN,85DEG CMAX,P
C6567M6	2113956E93	CAP:FXD,10UF,+10%,-10%,16V-DC,1210,X5R,-55DEG CMIN,85DEG CMAX,P
C6568M6	2113956B33	CAP:FXD,2.2UF,+10%,-10%,16V-DC,0603,X5R,-55DEG CMIN,85DEG CMAX
C6569M6	2113956E93	CAP:FXD,10UF,+10%,-10%,16V-DC,1210,X5R,-55DEG CMIN,85DEG CMAX,P
C6570M6	2113944A46	CAP:CHIP,330PF,+5%,-5%,50V-DC,0402,C0G,*
C6571M6	2113946B04	CAP:CHIP,.1UF,+10%,-10%,10V-DC*
C6572M6	2113946B04	CAP:CHIP,.1UF,+10%,-10%,10V-DC*
C6573M6	2113946S35	CAP:CHIP,1UF,+10%,-10%,16V-DC,0603,*
C6574M6	2113946S35	CAP:CHIP,1UF,+10%,-10%,16V-DC,0603,*
C6575M6	2113946S35	CAP:CHIP,1UF,+10%,-10%,16V-DC,0603,*
C6576M6	2113956B33	CAP:FXD,2.2UF,+10%,-10%,16V-DC,0603,X5R,-55DEG CMIN,85DEG CMAX
C6577M6	2113946S35	CAP:CHIP,1UF,+10%,-10%,16V-DC,0603,*
C6578M6	2113946S35	CAP:CHIP,1UF,+10%,-10%,16V-DC,0603,*
C6579M6	2113946S35	CAP:CHIP,1UF,+10%,-10%,16V-DC,0603,*
C6580M6	2113946S35	CAP:CHIP,1UF,+10%,-10%,16V-DC,0603,*
C6581M6	2113956B33	CAP:FXD,2.2UF,+10%,-10%,16V-DC,0603,X5R,-55DEG CMIN,85DEG CMAX

Ref. Des.	Part Number	Description
C6582M6	2113944A21	CAP:CHIP,6.8PF,.5PF+/-,50V-DC,0402*
C6583M6	2113946B04	CAP:CHIP,.1UF,+10%,-10%,10V-DC*
C6584M6	2113956C37	CAP:FXD,10UF,+10%,-10%,16V-DC,0805,*
C6585M6	2113946B04	CAP:CHIP,.1UF,+10%,-10%,10V-DC*
C6586M6	2113956C35	CAP:FXD,4.7UF,+10%,-10%,16V-DC,0805,X5R,-55DEG CMIN,85DEG CMAX
C6587M6	2113946B04	CAP:CHIP,.1UF,+10%,-10%,10V-DC*
C6588M6	2113944A46	CAP:CHIP,330PF,+5%,-5%,50V-DC,0402,C0G,*
C6589M6	2113944A40	CAP:CHIP,100PF,+5%,-5%,50V-DC,0402*
C6590M6	2113946B04	CAP:CHIP,.1UF,+10%,-10%,10V-DC*
C6591M6	2113944A26	CAP CER CHP 12.0PF 50V 5%
C6592M6	2113944A09	CAP:CHIP,2.2PF,.25PF+/-,50V-DC,0402*
C6593M6	2113956C37	CAP:FXD,10UF,+10%,-10%,16V-DC,0805,*
C6594M6	2113946C07	CAP:FXD,.33UF,+10%,-10%,10V-DC,0603*
C6595M6	2113946S35	CAP:CHIP,1UF,+10%,-10%,16V-DC,0603,*
C6596M6	NOTPLACED	N/A
C6601M6	2113944A28	CAP:CHIP,18PF,+5%,-5%,50V-DC,0402*
C6602M6	2113944A28	CAP:CHIP,18PF,+5%,-5%,50V-DC,0402*
C6670M6	NOTPLACED	N/A
C6M2	2113944A40	CAP:CHIP,100PF,+5%,-5%,50V-DC,0402*
C702M7	2185419D06	CAP CER SUPER L/D 0.1UF

Ref. Des.	Part Number	Description
C703M7	2113945C26	CAP:FXD,.039UF,+10%,-10%,50V-DC,0603,X7*
C704M7	2185419D06	CAP CER SUPER L/D 0.1UF
C705M7	21667009286	CAPACI-TOR,FIXED,CERAMIC,040 2,0.0000022UF,0.1PF,50V, C0G
C706M7	2185419D06	CAP CER SUPER L/D 0.1UF
C707M7	2113945C01	CAP CER CHP 6800PF 50V 10%
C708M7	21667009286	CAPACI-TOR,FIXED,CERAMIC,040 2,0.0000022UF,0.1PF,50V, C0G
C709M7	2185419D06	CAP CER SUPER L/D 0.1UF
C710M7	NOTPLACED	N/A
C711M7	NOTPLACED	N/A
C712M7	NOTPLACED	N/A
C713M7	2113945C25	CAP:FXD,.033UF,+10%,-10%,50V-DC,0603,X7R,-55DEG CMIN,125DEG CMA
C714M7	2185419D06	CAP CER SUPER L/D 0.1UF
C715M7	2113945C31	CAP:FXD,.1UF,+10%,-10%,50V-DC,0603,X7R,-55DEG CMIN,125DEG CMAX
C716M7	2113945C31	CAP:FXD,.1UF,+10%,-10%,50V-DC,0603,X7R,-55DEG CMIN,125DEG CMAX
C717M7	2113945C31	CAP:FXD,.1UF,+10%,-10%,50V-DC,0603,X7R,-55DEG CMIN,125DEG CMAX
C718M7	2113945C31	CAP:FXD,.1UF,+10%,-10%,50V-DC,0603,X7R,-55DEG CMIN,125DEG CMAX

Ref. Des.	Part Number	Description
C719M7	2113945C31	CAP:FXD,.1UF,+10%,-10%,50V-DC,0603,X7R,-55DEG CMIN,125DEG CMAX
C720M7	2113944C55	CAP CER CHP 1200.OPF 50V 5%
C721M7	NOTPLACED	N/A
C724M7	2113955D37	CAP:FXD,10UF,+10%,-10%,16V-DC,1206,X7R,-55DEG CMIN,125DEG CMAX
C725M7	2113945C31	CAP:FXD,.1UF,+10%,-10%,50V-DC,0603,X7R,-55DEG CMIN,125DEG CMAX
C726M7	2113945C31	CAP:FXD,.1UF,+10%,-10%,50V-DC,0603,X7R,-55DEG CMIN,125DEG CMAX
C727M7	2113944A40	CAP:CHIP,100PF,+5%,-5%,50V-DC,0402*
C728M7	2113944A31	CAP:CHIP,33PF,+5%,-5%,50V-DC,0402,C0G,*
C730M7	2113945C31	CAP:FXD,.1UF,+10%,-10%,50V-DC,0603,X7R,-55DEG CMIN,125DEG CMAX
C731M7	2113945C31	CAP:FXD,.1UF,+10%,-10%,50V-DC,0603,X7R,-55DEG CMIN,125DEG CMAX
C732M7	2113944A32	CAP:CHIP,39PF,+5%,-5%,50V-DC,0402,C0G,*
C733M7	2113945A09	CAP:CHIP,1000PF,+10%,-10%*
C734M7	2113945C31	CAP:FXD,.1UF,+10%,-10%,50V-DC,0603,X7R,-55DEG CMIN,125DEG CMAX
C735M7	2113944A31	CAP:CHIP,33PF,+5%,-5%,50V-DC,0402,C0G,*
C736M7	2113945B02	CAP:CHIP,.01UF,+10%,-10%,25V-DC*

Ref. Des.	Part Number	Description
C737M7	2113945C31	CAP,FXD,.1UF,+10%,-10%,50V-DC,0603,X7R,-55DEG CMIN,125DEG CMAX
C738M7	2113944A31	CAP:CHIP,33PF,+5%,-5%,50V-DC,0402,C0G,*
C739M7	2113944A17	CAP:CHIP,4.7PF,.25PF+/-,50V-DC,0402*
C740M7	21667009376	CAPACITOR, FIXED, CERAMIC, 0402, 0.000033UF, +/-1%, 50V, C0G
C742M7	2113945C31	CAP,FXD,.1UF,+10%,-10%,50V-DC,0603,X7R,-55DEG CMIN,125DEG CMAX
C743M7	2113946B06	CAP:CHIP,.22UF,+10%,-10%,10V-DC,0402*
C744M7	2113955D37	CAP,FXD,10UF,+10%,-10%,16V-DC,1206,X7R,-55DEG CMIN,125DEG CMAX
C749M7	2113945C31	CAP,FXD,.1UF,+10%,-10%,50V-DC,0603,X7R,-55DEG CMIN,125DEG CMAX
C750M7	2113945C31	CAP,FXD,.1UF,+10%,-10%,50V-DC,0603,X7R,-55DEG CMIN,125DEG CMAX
C751M7	2113945A09	CAP:CHIP,1000PF,+10%,-10%*
C752M7	2113944A43	CAP CER CHP 180.0PF 50V 5%
C753M7	2113944A31	CAP:CHIP,33PF,+5%,-5%,50V-DC,0402,C0G,*
C754M7	2113944A34	CAP CER CHP 56.0PF 50V 5%
C756M7	2113955D37	CAP,FXD,10UF,+10%,-10%,16V-DC,1206,X7R,-55DEG CMIN,125DEG CMAX
C757M7	2113945C31	CAP,FXD,.1UF,+10%,-10%,50V-DC,0603,X7R,-55DEG CMIN,125DEG CMAX

Ref. Des.	Part Number	Description
C760M7	2113944A44	CAP:CG,0402,5%,50V,220 PF
C764M7	2113946B06	CAP:CHIP,.22UF,+10%,-10%,10V-DC,0402*
C770M7	2113944A44	CAP:CG,0402,5%,50V,220 PF
C772M7	2113945A09	CAP:CHIP,1000PF,+10%,-10%*
C773M7	2113944A33	CAP:CHIP,47PF,+5%,-5%,50V-DC,0402,C0G,*
C777M7	2113944A44	CAP:CG,0402,5%,50V,220 PF
C780M7	2113944A33	CAP:CHIP,47PF,+5%,-5%,50V-DC,0402,C0G,*
C781M7	21667009376	CAPACITOR, FIXED, CERAMIC, 0402, 0.000033UF, +/-1%, 50V, C0G
C786M7	2113944A44	CAP:CG,0402,5%,50V,220 PF
C7M2	2113944A40	CAP:CHIP,100PF,+5%,-5%,50V-DC,0402*
C803M7	21667009376	CAPACITOR, FIXED, CERAMIC, 0402, 0.000033UF, +/-1%, 50V, C0G
C813M7	NOTPLACED	N/A
C816M7	2113944A30	CAP CER CHP 27.0PF 50V 5%
C817M7	2113944A44	CAP:CG,0402,5%,50V,220 PF
C819M7	2113944A44	CAP:CG,0402,5%,50V,220 PF
C823M7	2113944A40	CAP:CHIP,100PF,+5%,-5%,50V-DC,0402*
C824M7	21667009376	CAPACITOR, FIXED, CERAMIC, 0402, 0.000033UF, +/-1%, 50V, C0G
C8M2	2113944A40	CAP:CHIP,100PF,+5%,-5%,50V-DC,0402*
C9M2	2113944A40	CAP:CHIP,100PF,+5%,-5%,50V-DC,0402*

Ref. Des.	Part Number	Description
D10M2	4870359B01	DIODE:SUPPRESSOR,ESD,BI-DIR,7.82V,1W
D11M2	4870359B01	DIODE:SUPPRESSOR,ESD,BI-DIR,7.82V,1W
D16M2	4870359B01	DIODE:SUPPRESSOR,ESD,BI-DIR,7.82V,1W
D200M12	4813978A19	DIODE,RECT,MBR120,SM,SOD-123,1A,20V,SHTK,PB-FREE
D2101M2	4870359B01	DIODE:SUPPRESSOR,ESD,BI-DIR,7.82V,1W
D2301M13	4813974A19	DIODE ARRAY,MXR,SM,SOT-323,7V,.2W,SHTK,2,PB-FREE
D2302M13	4815897H01	DIODE: UPP9401E ,PIN,50V,2.5W,DO-216
D2303M13	4815897H01	DIODE: UPP9401E ,PIN,50V,2.5W,DO-216
D2401M2	4870359B01	DIODE:SUPPRESSOR,ESD,BI-DIR,7.82V,1W
D2402M2	4870359B01	DIODE:SUPPRESSOR,ESD,BI-DIR,7.82V,1W
D2403M2	4870359B01	DIODE:SUPPRESSOR,ESD,BI-DIR,7.82V,1W
D3M2	4870359B01	DIODE:SUPPRESSOR,ESD,BI-DIR,7.82V,1W
D4001M2	4813978A25	SCHOTTKY 30V SOD-323 T&R PB FREE
D4M2	4870359B01	DIODE:SUPPRESSOR,ESD,BI-DIR,7.82V,1W
D5M2	4870359B01	DIODE:SUPPRESSOR,ESD,BI-DIR,7.82V,1W
D6101M6	4813978A25	SCHOTTKY 30V SOD-323 T&R PB FREE
D6401M6	4813978A25	SCHOTTKY 30V SOD-323 T&R PB FREE
D6501M6	4813978A25	SCHOTTKY 30V SOD-323 T&R PB FREE
D6502M6	4813978A25	SCHOTTKY 30V SOD-323 T&R PB FREE

Ref. Des.	Part Number	Description
D6M2	4870359B01	DIODE:SUPPRESSOR,ESD,BI-DIR,7.82V,1W
D722M7	4815011H01	DIODE TRIPLE
D723M7	4815011H01	DIODE TRIPLE
D7M2	4870359B01	DIODE:SUPPRESSOR,ESD,BI-DIR,7.82V,1W
D8M2	4870359B01	DIODE:SUPPRESSOR,ESD,BI-DIR,7.82V,1W
D9M2	4870359B01	DIODE:SUPPRESSOR,ESD,BI-DIR,7.82V,1W
E1219M11	2405688Z01	INDUCTOR FERRITE BEAD
E2003M2	7685268E01	FERRITE BEAD 20X40 200 MA MAX CHIP
E201M12	7686949J14	FLTR:FERRITE BEAD,2A,SM,0805,CHIP,2 20OHM
E2242M2	7685268E01	FERRITE BEAD 20X40 200 MA MAX CHIP
E2244M2	7685268E01	FERRITE BEAD 20X40 200 MA MAX CHIP
E2245M2	7685268E01	FERRITE BEAD 20X40 200 MA MAX CHIP
E2246M2	7685268E01	FERRITE BEAD 20X40 200 MA MAX CHIP
E2247M2	7685268E01	FERRITE BEAD 20X40 200 MA MAX CHIP
E2248M2	7685268E01	FERRITE BEAD 20X40 200 MA MAX CHIP
E2249M2	7685268E01	FERRITE BEAD 20X40 200 MA MAX CHIP
E2301M2	91012036001	FILTER,EMI/RFI,300MA,SM,0402,PB FREE
E2302M2	91012036001	FILTER,EMI/RFI,300MA,SM,0402,PB FREE
E2303M2	91012036001	FILTER,EMI/RFI,300MA,SM,0402,PB FREE

Ref. Des.	Part Number	Description
E2304M2	91012036001	FILTER,EMI/ RFI,300MA,SM,0402,PB FREE
E2305M2	91012036001	FILTER,EMI/ RFI,300MA,SM,0402,PB FREE
E2306M2	91012036001	FILTER,EMI/ RFI,300MA,SM,0402,PB FREE
E2307M2	91012036001	FILTER,EMI/ RFI,300MA,SM,0402,PB FREE
E2308M2	91012036001	FILTER,EMI/ RFI,300MA,SM,0402,PB FREE
E2309M2	91012036001	FILTER,EMI/ RFI,300MA,SM,0402,PB FREE
E2310M2	91012036001	FILTER,EMI/ RFI,300MA,SM,0402,PB FREE
E2311M2	91012036001	FILTER,EMI/ RFI,300MA,SM,0402,PB FREE
E401M20	2471132D14	IDCTR,FXD,470OHM,200 MA,FER,0402,BEA
E402M20	2471132D14	IDCTR,FXD,470OHM,200 MA,FER,0402,BEA
E601M19	2471132D14	IDCTR,FXD,470OHM,200 MA,FER,0402,BEA
E602M19	2471132D14	IDCTR,FXD,470OHM,200 MA,FER,0402,BEA
E603M19	2471132D14	IDCTR,FXD,470OHM,200 MA,FER,0402,BEA
E604M19	2471132D14	IDCTR,FXD,470OHM,200 MA,FER,0402,BEA
E605M19	2471132D14	IDCTR,FXD,470OHM,200 MA,FER,0402,BEA
E606M19	2471132D14	IDCTR,FXD,470OHM,200 MA,FER,0402,BEA
E607M19	2471132D14	IDCTR,FXD,470OHM,200 MA,FER,0402,BEA

Ref. Des.	Part Number	Description
E608M19	2471132D14	IDCTR,FXD,470OHM,200 MA,FER,0402,BEA
E609M19	2471132D14	IDCTR,FXD,470OHM,200 MA,FER,0402,BEA
E6501M6	2480067M02	CHK RF CHIP BEAD INDUCTOR
E6502M6	2480067M02	CHK RF CHIP BEAD INDUCTOR
F200M12	6575834B01	FUSE SURFACE MOUNT
FL1301M3	9102190J23	FLTR,SAW,BAND- PASS,1.57542GHZ NOM,SM,1.4X1.0MM,SMD, PB-FREE
FL1303M3	9102190J23	FLTR,SAW,BAND- PASS,1.57542GHZ NOM,SM,1.4X1.0MM,SMD, PB-FREE
FL401M20	91012052001	SAW FILTER, DUAL BAND 769/860.5
FL402M20	91012052001	SAW FILTER, DUAL BAND 769/860.5
FL502M21	91009300001	FILTER,MONOLITHIC CRYSTAL,BAND- PASS,109.65MHZ NOM
J102M12	2880658Z08	CONNECTOR SMA
J2302M2	0970312N01	CONN,BTB,RCPT,60CONT ,4MM,GLD,1 STACK HGT
J2305M2	0985909E01	CONNECTOR RECEPTA- CLE 20 PIN
L1001M16	24009315038	WW CHIP INDUCTOR, HIGH Q, 5%, 0603
L1002M16	24009315011	WW CHIP INDUCTOR, HIGH Q, 5%, 0603
L1003M16	24009315038	WW CHIP INDUCTOR, HIGH Q, 5%, 0603
L1007M16	2460591K40	COIL AIR WOUND INDUC 59.71
L1009M16	2415428H03	AIR WOUND INDUCTOR
L1201M11	24009315011	WW CHIP INDUCTOR, HIGH Q, 5%, 0603
L1202M11	2415428H02	AIR WOUND INDUCTOR

Ref. Des.	Part Number	Description
L1301M3	2475122C28	IND, MULTI-LAYER, 18NH 5%, 0402,
L1302M3	2475122C13	IND, MULTI-LAY, 3.3NH 0.3%, 0402,
L1303M3	2475122C28	IND, MULTI-LAYER, 18NH 5%, 0402,
L1304M3	2488090Y25	INDUCTOR,MULTI- LAYER,100NH,1005,SMD, PB FREE
L1305M3	24010062002	INDUCTOR, 5.6NH, 0402, 2%
L1306M3	2475122C26	IND, MULTI-LAYER, 12NH 5%, 0402,
L1316M3	24010062009	INDUCTOR, 13NH, 0402, 2%
L1408M17	24012026009	ULTRA-MINIATURE AIR CORE INDUCTORS
L1410M17	24012026009	ULTRA-MINIATURE AIR CORE INDUCTORS
L200M12	2571269C01	INDUCTOR WW POWER 20%
L2202M2	24009315046	WW CHIP INDUCTOR, HIGH Q, 5%, 0603
L2203M2	24009315046	WW CHIP INDUCTOR, HIGH Q, 5%, 0603
L2204M2	24009315046	WW CHIP INDUCTOR, HIGH Q, 5%, 0603
L2205M2	24009315046	WW CHIP INDUCTOR, HIGH Q, 5%, 0603
L2301M13	24012026009	ULTRA-MINIATURE AIR CORE INDUCTORS
L2302M13	24009315030	WW CHIP INDUCTOR, HIGH Q, 5%, 0603
L2303M13	24667001015	IDCTR,FXD,15NH,5%,600 MA,.32OHM,12 Q,2.5GHZ SRF,SM,0603
L3008M22	24009344011	INDUCTOR, WIRE WOUND
L3009M22	24009344011	INDUCTOR, WIRE WOUND
L3041M22	24009344011	INDUCTOR, WIRE WOUND

Ref. Des.	Part Number	Description
L3044M22	24009344011	INDUCTOR, WIRE WOUND
L3047M22	24009344011	INDUCTOR, WIRE WOUND
L3064M22	24009344011	INDUCTOR, WIRE WOUND
L401M20	24009314023	WW CHIP INDUCTOR, HIGH Q, 5%, 0402
L402M20	24009314025	WW CHIP INDUCTOR, HIGH Q, 5%, 0402
L403M20	2414017P07	IDCTR,CHIP,3.3NH,300MA ,190HM,CER,8 Q,4GHZ SRF,SM,0402,PB-F
L404M20	24009314027	WW CHIP INDUCTOR, HIGH Q, 5%, 0402
L405M20	24009314023	WW CHIP INDUCTOR, HIGH Q, 5%, 0402
L406M20	24009314007	WW CHIP INDUCTOR, HIGH Q, 5%, 0402
L407M20	NOTPLACED	N/A
L408M20	24009314023	WW CHIP INDUCTOR, HIGH Q, 5%, 0402
L489M20	24009342012	INDUCTOR, WIRE WOUND
L491M20	24009342012	INDUCTOR, WIRE WOUND
L500M21	24009315044	WW CHIP INDUCTOR, HIGH Q, 5%, 0603
L503M21	2414017N24	IDCTR,CHIP,100NH,5%,30 0MA,2OHM,CER,14 Q,700MHZ SRF,SM,0603,P
L504M21	24009342049	INDUCTOR, WIRE WOUND
L513M21	NOTPLACED	N/A
L550M21	2414017N10	IDCTR,CHIP,6.8NH,5%,60 0MA,.22OHM,CER,10 Q,2.7GHZ SRF,SM,0603
L601M19	24009315044	WW CHIP INDUCTOR, HIGH Q, 5%, 0603
L602M19	2466505A01	COIL INDUCTOR
L603M19	2466505A01	COIL INDUCTOR

Ref. Des.	Part Number	Description
L604M19	24009345005	INDUCTOR, WIRE WOUND
L605M19	24012050001	0603LS CHIP INDUCTORS, 1608, 3900NH
L611M19	2414032F39	IDCTR,WW,270NH,10%,280MA,1OHM,CER,40Q,800MHZ SRF,SM,PB-FRE
L6401M6	2471189M03	SHIELDED SMT POWER INDUCTOR 10UH
L6402M6	2471189M03	SHIELDED SMT POWER INDUCTOR 10UH
L6403M6	24009271001	20NH HIGH CURRENT CHIP INDUCTOR
L6404M6	24009271001	20NH HIGH CURRENT CHIP INDUCTOR
L6502M6	2471678H01	10UH INDCUTOR
L6504M6	24009268001	10UH 2.1A SHIELDED INDUCTOR
L6505M6	2471678H01	10UH INDCUTOR
L701M7	2475122C29	IND, MULTI-LAYER, 22NH 5%, 0402,
L709M7	24009342019	INDUCTOR, WIRE WOUND
L720M7	24012100001	IDCTR,2.2UH,10%,15MA,S M,MAGNETICALLY SHIELDED CHIP
L727M7	24012100001	IDCTR,2.2UH,10%,15MA,S M,MAGNETICALLY SHIELDED CHIP
L728M7	2415429H47	CHIP INDUCTOR
L733M7	24012100001	IDCTR,2.2UH,10%,15MA,S M,MAGNETICALLY SHIELDED CHIP
L735M7	24012100001	IDCTR,2.2UH,10%,15MA,S M,MAGNETICALLY SHIELDED CHIP
L738M7	24012100001	IDCTR,2.2UH,10%,15MA,S M,MAGNETICALLY SHIELDED CHIP
L739M7	2414017N25	IDCTR,CHIP,120NH,5%,200MA,2.4OHM,CER,12Q,600MHZ SRF,SM,0603

Ref. Des.	Part Number	Description
L741M7	24012100001	IDCTR,2.2UH,10%,15MA,S M,MAGNETICALLY SHIELDED CHIP
L753M7	2415347H06	IDCTR, 2200NH
L755M7	24009315039	WW CHIP INDUCTOR, HIGH Q, 5%, 0603
L758M7	2415429H47	CHIP INDUCTOR
L759M7	2414017N25	IDCTR,CHIP,120NH,5%,200MA,2.4OHM,CER,12Q,600MHZ SRF,SM,0603
L768M7	2488090Y25	INDUCTOR,MULTI-LAYER,100NH,1005,SMD, PB FREE
L775M7	24009315039	WW CHIP INDUCTOR, HIGH Q, 5%, 0603
M101M12	39012039001	CONNECTOR, BATTERY CONTACT
M103M12	3987977Y04	CONT,CONN,,1CONT,,AN T UNIV 4.5MM,UC 1.8
M104M12	NOTPLACED	N/A
M105M12	3987977Y04	CONT,CONN,,1CONT,,AN T UNIV 4.5MM,UC 1.8
M6405M6	3987977Y04	CONT,CONN,,1CONT,,AN T UNIV 4.5MM,UC 1.8
M6406M6	3987977Y04	CONT,CONN,,1CONT,,AN T UNIV 4.5MM,UC 1.8
M6502M6	0985888K02	SKT RTC BTTY LEAP
M6504M6	3987977Y04	CONT,CONN,,1CONT,,AN T UNIV 4.5MM,UC 1.8
PASTE1	11012015001	SOLDER PASTE - 9.0A, LOW VOID (GRAM)
PASTE2	11012015001	SOLDER PASTE - 9.0A, LOW VOID (GRAM)
PASTE3	11012015001	SOLDER PASTE - 9.0A, LOW VOID (GRAM)
PCB	84012619001	RIGID,BOARD, PC, 7/800 MAIN BOARD
Q1001M16	48012094001	MOD,XSTR,FET RF PWR, 135-941MHZ

Ref. Des.	Part Number	Description
Q1263M11	4813973A32	XSTR,BIP GP SS,NPN,SM,SC-70,SMT,50V,.202W,100MA, PB-FREE
Q1264M11	4813973A32	XSTR,BIP GP SS,NPN,SM,SC-70,SMT,50V,.202W,100MA, PB-FREE
Q1265M11	4813973A32	XSTR,BIP GP SS,NPN,SM,SC-70,SMT,50V,.202W,100MA, PB-FREE
Q1268M11	4813970A59	P-CH FET 1.0A 20V SOT-23 T&R
Q201M12	4813970A59	P-CH FET 1.0A 20V SOT-23 T&R
Q202M12	4813973A32	XSTR,BIP GP SS,NPN,SM,SC-70,SMT,50V,.202W,100MA, PB-FREE
Q2202M2	4815261H01	TRANSISTOR,BIP GENERAL PURPOSE SMALL NPN
Q2301M13	4815055H01	TSTR DUAL NPN/PNP UMH 5
Q3033M22	4813972A17	TRSTR:MGSF1N02,N-CH,20V,SOT23
Q3035M22	4813972A17	TRSTR:MGSF1N02,N-CH,20V,SOT23
Q3038M22	4871915M01	XSTR,BIP RF SML SGNL,NPN,SM,4.5GHZ
Q3039M22	4871915M01	XSTR,BIP RF SML SGNL,NPN,SM,4.5GHZ
Q3060M22	4813972A17	TRSTR:MGSF1N02,N-CH,20V,SOT23
Q3062M22	4871915M01	XSTR,BIP RF SML SGNL,NPN,SM,4.5GHZ
Q4001M2	4815261H01	TRANSISTOR,BIP GENERAL PURPOSE SMALL NPN
Q401M20	4813973A32	XSTR,BIP GP SS,NPN,SM,SC-70,SMT,50V,.202W,100MA, PB-FREE

Ref. Des.	Part Number	Description
Q402M20	4813973M75	XSTR,BIP GP SS,PNP,BC858,SOT-563,SMT,-30V,.357W,-100MA,100MHZ
Q403M20	4813973M75	XSTR,BIP GP SS,PNP,BC858,SOT-563,SMT,-30V,.357W,-100MA,100MHZ
Q601M19	4813973A04	XSTR,BIP GP SS,NPN,TA13,SM,SOT-23,SMT,30V,.225W,300MA, 125MHZ,P
Q6101M6	4815261H01	TRANSISTOR,BIP GENERAL PURPOSE SMALL NPN
Q6401M6	48012170001	FET
Q6501M6	4813970A62	XSTR,FET GP PWR,MOS-FET,P-CH,ENHN,CF,-20V,1.3W,PB-FREE
Q6502M6	48012154001	FET
Q6504M6	4809579E77	FET, NCH MOS FET, 1.2MM X 1.2MM PACKAGE, SMD, W18 COMPLIANT
Q6505M6	4813970A62	XSTR,FET GP PWR,MOS-FET,P-CH,ENHN,CF,-20V,1.3W,PB-FREE
Q6506M6	4809579E77	FET, NCH MOS FET, 1.2MM X 1.2MM PACKAGE, SMD, W18 COMPLIANT
Q6507M6	48012170001	FET
Q6508M6	48012154001	FET
Q731M7	4885061Y01	XSTR NPN 6V 30UA 12GHZ PB-FREE
Q745M7	4813973M75	XSTR,BIP GP SS,PNP,BC858,SOT-563,SMT,-30V,.357W,-100MA,100MHZ
Q756M7	4805585Q32	TRANSITOR, NPN RF
Q767M7	4813973M75	XSTR,BIP GP SS,PNP,BC858,SOT-563,SMT,-30V,.357W,-100MA,100MHZ

Ref. Des.	Part Number	Description
Q774M7	4805585Q32	TRANSITOR, NPN RF
Q785M7	4889394V04	XSTR,FET GP SS,MOS-FET,N-CH, ENHN, SM,20V
R1001M16	0613952R02	CER CHIP RES 11K OHM 5 0402
R1002M16	0613952R04	CER CHIP RES 13K OHM 5 0402
R1003M16	0613952N81	CER CHIP RES 68.1K OHM 1 0402
R1004M16	0613952N47	CER CHIP RES 30.1K OHM 1 0402
R1005M16	0613952Q73	CER CHIP RES 1000 OHM 5 0402
R1006M16	0613952R66	RES:MF,0OHM,5%,.0625W,SM,0402*
R1007M16	0613952H53	RES,MF,150OHM,5%,.1W,SM,0603,200PPM/CEL*
R1064M16	0613952Q67	CER CHIP RES 560 OHM 5 0402
R1065M16	0613952Q23	CER CHIP RES 8.2 OHM 5 0402
R1066M16	0613952Q67	CER CHIP RES 560 OHM 5 0402
R1101M11	0613952R01	RES:MF,10KOHM,5%,.0625W,SM,0402*
R1201M11	0613952R01	RES:MF,10KOHM,5%,.0625W,SM,0402*
R1202M11	NOTPLACED	N/A
R1203M11	0613952M43	CER CHIP RES 2740 OHM 1 0402
R1204M11	NOTPLACED	N/A
R1205M11	0613952N01	RES:MF,10KOHM,1%,.0625W,SM,0402*
R1206M11	0613952J01	CER CHIP RES 10K OHM 5% 0603
R1207M11	0613952R22	CER CHIP RES 75K OHM 5 0402
R1208M11	0613952R01	RES:MF,10KOHM,5%,.0625W,SM,0402*
R1209M11	NOTPLACED	N/A

Ref. Des.	Part Number	Description
R1210M11	0613952R66	RES:MF,0OHM,5%,.0625W,SM,0402*
R1211M11	0613952R01	RES:MF,10KOHM,5%,.0625W,SM,0402*
R1212M11	NOTPLACED	N/A
R1213M11	0613952R66	RES:MF,0OHM,5%,.0625W,SM,0402*
R1214M11	0613952R66	RES:MF,0OHM,5%,.0625W,SM,0402*
R1218M11	0613952R66	RES:MF,0OHM,5%,.0625W,SM,0402*
R1219M11	NOTPLACED	N/A
R1223M11	NOTPLACED	N/A
R1225M11	NOTPLACED	N/A
R1226M11	0615043C01	RES POWER METAL STRIP W18 COMPLIANT
R1228M11	NOTPLACED	N/A
R1230M11	NOTPLACED	N/A
R1232M11	0613952R01	RES:MF,10KOHM,5%,.0625W,SM,0402*
R1238M11	0613952R66	RES:MF,0OHM,5%,.0625W,SM,0402*
R1240M11	0613952R66	RES:MF,0OHM,5%,.0625W,SM,0402*
R1241M11	0613952N05	CER CHIP RES 11.0K OHM 1 0402
R1242M11	0613952N05	CER CHIP RES 11.0K OHM 1 0402
R1243M11	0613952R66	RES:MF,0OHM,5%,.0625W,SM,0402*
R1244M11	0613952R25	RES:MF,100KOHM,5%,.0625W,SM,0402*
R1245M11	0613952R25	RES:MF,100KOHM,5%,.0625W,SM,0402*
R1247M11	0613952R01	RES:MF,10KOHM,5%,.0625W,SM,0402*
R1248M11	0613952R01	RES:MF,10KOHM,5%,.0625W,SM,0402*
R1249M11	0613952P18	RES:MF,150KOHM,1%,.0625W,SM,0402*

Ref. Des.	Part Number	Description
R1250M11	0613952N81	CER CHIP RES 68.1K OHM 1 0402
R1251M11	0613952Q56	CER CHIP RES 200 OHM 5 0402
R1252M11	0613952Q75	RES:MF,1.2KOHM,5%,.0625W,SM,0402*
R1253M11	0613952N51	RES:MF,33.2KOHM,1%,.0625W,SM,0402*
R1254M11	0613952N55	CER CHIP RES 36.5K OHM 1 0402
R1255M11	0613952N02	CER CHIP RES 10.2K OHM 1 0402
R1257M11	0613952R01	RES:MF,10KOHM,5%,.0625W,SM,0402*
R1259M11	NOTPLACED	N/A
R1260M11	0613952R01	RES:MF,10KOHM,5%,.0625W,SM,0402*
R1261M11	NOTPLACED	N/A
R1262M11	0613952N38	CER CHIP RES 24.3K OHM 1 0402
R1263M11	0613952N38	CER CHIP RES 24.3K OHM 1 0402
R1264M11	0675679M01	KAMAYA 2MOHM +/-1% - 55 +155 DEG. C
R1265M11	0613952R66	RES:MF,0OHM,5%,.0625W,SM,0402*
R1266M11	0613952R25	RES:MF,100KOHM,5%,.0625W,SM,0402*
R1267M11	0613952R25	RES:MF,100KOHM,5%,.0625W,SM,0402*
R1268M11	0613952R16	CER CHIP RES 43K OHM 5 0402
R1269M11	0613952R66	RES:MF,0OHM,5%,.0625W,SM,0402*
R1270M11	0613952Q49	CER CHIP RES 100 OHM 5 0402
R1271M11	0613952Q49	CER CHIP RES 100 OHM 5 0402
R1272M11	0613952Q49	CER CHIP RES 100 OHM 5 0402

Ref. Des.	Part Number	Description
R1273M11	0613952Q49	CER CHIP RES 100 OHM 5 0402
R1274M11	0613952R01	RES:MF,10KOHM,5%,.0625W,SM,0402*
R1275M11	0613952Z80	RES,MF,330KOHM,1%,.0625W,SM,0402,200PPM/CEL,PB-FREE
R1276M11	0613952Z80	RES,MF,330KOHM,1%,.0625W,SM,0402,200PPM/CEL,PB-FREE
R1277M11	0613952Z76	RES,MF,220KOHM,1%,.0625W,SM,0402,200PPM/CEL,PB-FREE
R1278M11	0613952Z76	RES,MF,220KOHM,1%,.0625W,SM,0402,200PPM/CEL,PB-FREE
R1279M11	0613952R01	RES:MF,10KOHM,5%,.0625W,SM,0402*
R1280M11	0613952R01	RES:MF,10KOHM,5%,.0625W,SM,0402*
R1281M11	0675679M01	KAMAYA 2MOHM +/-1% - 55 +155 DEG. C
R1283M11	0675679M01	KAMAYA 2MOHM +/-1% - 55 +155 DEG. C
R1284M11	0613952R66	RES:MF,0OHM,5%,.0625W,SM,0402*
R1287M11	0613952Q59	CER CHIP RES 270 OHM 5 0402
R1289M11	0613952Q81	RES:MF,2.2KOHM,5%,.0625W,SM,0402*
R1293M11	0613952Q81	RES:MF,2.2KOHM,5%,.0625W,SM,0402*
R1294M11	0613952R66	RES:MF,0OHM,5%,.0625W,SM,0402*
R1295M11	0613952Q49	CER CHIP RES 100 OHM 5 0402
R1296M11	0613952Q49	CER CHIP RES 100 OHM 5 0402
R1297M11	0613952Q45	CER CHIP RES 68.0 OHM 5 0402
R1298M11	NOTPLACED	N/A
R1299M11	NOTPLACED	N/A

Ref. Des.	Part Number	Description
R1301M3	0613952R66	RES:MF,0OHM,5%,.0625W,SM,0402*
R1302M3	NOTPLACED	N/A
R1303M3	0613952R66	RES:MF,0OHM,5%,.0625W,SM,0402*
R1305M3	0613952R66	RES:MF,0OHM,5%,.0625W,SM,0402*
R1309M3	NOTPLACED	N/A
R1310M3	0613952R66	RES:MF,0OHM,5%,.0625W,SM,0402*
R1311M3	NOTPLACED	N/A
R1313M3	0613952R66	RES:MF,0OHM,5%,.0625W,SM,0402*
R1315M3	0613952R66	RES:MF,0OHM,5%,.0625W,SM,0402*
R1317M3	0613952R66	RES:MF,0OHM,5%,.0625W,SM,0402*
R1318M3	0613952R66	RES:MF,0OHM,5%,.0625W,SM,0402*
R1340M3	0613952R66	RES:MF,0OHM,5%,.0625W,SM,0402*
R2003M2	0613952Q53	RES:MF,150OHM,5%,.0625W,SM,0402*
R2004M2	0613952Q49	CER CHIP RES 100 OHM 5 0402
R2005M2	0613952Q66	CER CHIP RES 510 OHM 5 0402
R2007M2	0613952Q49	CER CHIP RES 100 OHM 5 0402
R200M12	0613952R66	RES:MF,0OHM,5%,.0625W,SM,0402*
R201M12	0613952R25	RES:MF,100KOHM,5%,.0625W,SM,0402*
R2024M2	0613952Q09	CER CHIP RES 2.2 OHM 5 0402
R2025M2	0613952Q09	CER CHIP RES 2.2 OHM 5 0402
R202M12	0613952Q89	RES:MF,4.7KOHM,5%,.0625W,SM,0402*
R2100M2	NOTPLACED	N/A

Ref. Des.	Part Number	Description
R21001M2	NOTPLACED	N/A
R21002M2	NOTPLACED	N/A
R21003M2	NOTPLACED	N/A
R2104M2	0613952Q89	RES:MF,4.7KOHM,5%,.0625W,SM,0402*
R2105M2	0613952Q89	RES:MF,4.7KOHM,5%,.0625W,SM,0402*
R2106M2	NOTPLACED	N/A
R2107M2	0613952Q73	CER CHIP RES 1000 OHM 5 0402
R2109M2	0613952Q25	RES:MF,10OHM,5%,.0625W,SM,0402*
R2110M2	0613952Q33	RES:MF,22OHM,5%,.0625W,SM,0402*
R2111M2	0613952Q25	RES:MF,10OHM,5%,.0625W,SM,0402*
R2113M2	0613952Q25	RES:MF,10OHM,5%,.0625W,SM,0402*
R2114M2	0613952Q33	RES:MF,22OHM,5%,.0625W,SM,0402*
R2115M2	0613952Q25	RES:MF,10OHM,5%,.0625W,SM,0402*
R2116M2	0613952R01	RES:MF,10KOHM,5%,.0625W,SM,0402*
R2117M2	0613952R01	RES:MF,10KOHM,5%,.0625W,SM,0402*
R2118M2	0613952R01	RES:MF,10KOHM,5%,.0625W,SM,0402*
R2120M2	0613952R01	RES:MF,10KOHM,5%,.0625W,SM,0402*
R2129M2	0613952R01	RES:MF,10KOHM,5%,.0625W,SM,0402*
R2130M2	0613952R01	RES:MF,10KOHM,5%,.0625W,SM,0402*
R2131M2	0613952R01	RES:MF,10KOHM,5%,.0625W,SM,0402*
R2132M2	0613952R01	RES:MF,10KOHM,5%,.0625W,SM,0402*
R2133M2	0613952R01	RES:MF,10KOHM,5%,.0625W,SM,0402*

Ref. Des.	Part Number	Description
R2135M2	0613952Q41	RES:MF,47OHM,5%,.0625W,SM,0402*
R2136M2	0613952Q61	CER CHIP RES 330 OHM 5 0402
R2137M2	0613952Q61	CER CHIP RES 330 OHM 5 0402
R2138M2	0613952Q41	RES:MF,47OHM,5%,.0625W,SM,0402*
R2139M2	0613952Q41	RES:MF,47OHM,5%,.0625W,SM,0402*
R2142M2	0613952Q41	RES:MF,47OHM,5%,.0625W,SM,0402*
R2144M2	0613952Q61	CER CHIP RES 330 OHM 5 0402
R2145M2	0613952Q41	RES:MF,47OHM,5%,.0625W,SM,0402*
R2146M2	0613952Q41	RES:MF,47OHM,5%,.0625W,SM,0402*
R2147M2	0613952Q41	RES:MF,47OHM,5%,.0625W,SM,0402*
R2148M2	0613952Q41	RES:MF,47OHM,5%,.0625W,SM,0402*
R2149M2	0613952Q41	RES:MF,47OHM,5%,.0625W,SM,0402*
R2151M2	NOTPLACED	N/A
R2153M2	0613952Q41	RES:MF,47OHM,5%,.0625W,SM,0402*
R2154M2	0613952Q41	RES:MF,47OHM,5%,.0625W,SM,0402*
R2192M2	0613952Q61	CER CHIP RES 330 OHM 5 0402
R2197M2	0613952R66	RES:MF,0OHM,5%,.0625W,SM,0402*
R2198M2	0613952R66	RES:MF,0OHM,5%,.0625W,SM,0402*
R2199M2	0613952R66	RES:MF,0OHM,5%,.0625W,SM,0402*
R2201M2	0613952R32	CER CHIP RES 200K OHM 5 0402
R2204M2	0613952Q85	CER CHIP RES 3300 OHM 5 0402

Ref. Des.	Part Number	Description
R2206M2	0613952Q85	CER CHIP RES 3300 OHM 5 0402
R2207M2	0613952R66	RES:MF,0OHM,5%,.0625W,SM,0402*
R2235M2	0613952R66	RES:MF,0OHM,5%,.0625W,SM,0402*
R2244M2	0613952Q65	RES:MF,470OHM,5%,.0625W,SM,0402,200PPM/*
R2245M2	0613952Q60	CER CHIP RES 300 OHM 5 0402
R2246M2	0613952Q65	RES:MF,470OHM,5%,.0625W,SM,0402,200PPM/*
R2254M2	0613952R01	RES:MF,10KOHM,5%,.0625W,SM,0402*
R2301M13	NOTPLACED	N/A
R2302M13	0613952H47	CER CHIP RES 82.0 OHM 5 0603
R2303M13	0613952H47	CER CHIP RES 82.0 OHM 5 0603
R2304M13	0613952H47	CER CHIP RES 82.0 OHM 5 0603
R2305M13	0613952G67	RES:MF,0OHM,1%,.1W,SM,0603,PB-FREE
R2306M13	0613952R25	RES:MF,100KOHM,5%,.0625W,SM,0402*
R2803M1	0613952Q37	RES:MF,33OHM,5%,.0625W,SM,0402*
R2804M1	0613952Q49	CER CHIP RES 100 OHM 5 0402
R2805M1	0613952Q49	CER CHIP RES 100 OHM 5 0402
R2806M1	0613952Q59	CER CHIP RES 270 OHM 5 0402
R2807M1	0613952Q56	CER CHIP RES 200 OHM 5 0402
R2808M1	0613952Q49	CER CHIP RES 100 OHM 5 0402
R2810M1	0613952R01	RES:MF,10KOHM,5%,.0625W,SM,0402*
R2811M1	0613952Q89	RES:MF,4.7KOHM,5%,.0625W,SM,0402*

Ref. Des.	Part Number	Description
R2812M1	0613952R01	RES:MF,10KOHM,5%,.0625W,SM,0402*
R2813M1	NOTPLACED	N/A
R2817M1	0613952Q41	RES:MF,47OHM,5%,.0625W,SM,0402*
R3018M22	0613952R18	RES:MF,51KOHM,5%,.0625W,SM,0402*
R3019M22	0613952R18	RES:MF,51KOHM,5%,.0625W,SM,0402*
R3030M22	0613952R08	CER CHIP RES 20K OHM 5 0402
R3031M22	0613952R08	CER CHIP RES 20K OHM 5 0402
R3032M22	0613952Q22	CER CHIP RES 7.5 OHM 5 0402
R3034M22	0613952Q34	CER CHIP RES 24.0 OHM 5 0402
R3036M22	0613952R08	CER CHIP RES 20K OHM 5 0402
R3037M22	0613952R08	CER CHIP RES 20K OHM 5 0402
R3040M22	0613952Q52	CER CHIP RES 130 OHM 5 0402
R3043M22	0613952Q46	CER CHIP RES 75.0 OHM 5 0402
R3052M22	0613952R18	RES:MF,51KOHM,5%,.0625W,SM,0402*
R3058M22	0613952R07	CER CHIP RES 18K OHM 5% 0402
R3059M22	0613952Q27	CER CHIP RES 12.0 OHM 5 0402
R3061M22	0613952R08	CER CHIP RES 20K OHM 5 0402
R3063M22	0613952Q50	CER CHIP RES 110 OHM 5 0402
R3066M22	0613952Q32	CER CHIP RES 20.0 OHM 5 0402
R4005M2	0613952R01	RES:MF,10KOHM,5%,.0625W,SM,0402*
R4006M2	0613952R01	RES:MF,10KOHM,5%,.0625W,SM,0402*

Ref. Des.	Part Number	Description
R4007M2	0613952R01	RES:MF,10KOHM,5%,.0625W,SM,0402*
R4008M2	0613952R01	RES:MF,10KOHM,5%,.0625W,SM,0402*
R4009M2	0613952Q85	CER CHIP RES 3300 OHM 5 0402
R4010M2	0613952R32	CER CHIP RES 200K OHM 5 0402
R4011M2	0613952R17	RESISTOR,METAL FILM,47KOHM,5%,.0625W,SM,0402,200PPM/CEL,PB-FREE
R4012M2	0613952R09	CER CHIP RES 22K OHM 5% 0402
R4013M2	0613952R09	CER CHIP RES 22K OHM 5% 0402
R4014M2	0613952Q85	CER CHIP RES 3300 OHM 5 0402
R401M20	0613952R09	CER CHIP RES 22K OHM 5% 0402
R402M20	0613952R23	CER CHIP RES 82K OHM 5% 0402
R403M20	0613952Q85	CER CHIP RES 3300 OHM 5 0402
R404M20	0613952Q45	CER CHIP RES 68.0 OHM 5 0402
R405M20	0613952Q25	RES:MF,10OHM,5%,.0625W,SM,0402*
R406M20	0613952R66	RES:MF,0OHM,5%,.0625W,SM,0402*
R407M20	0613952R09	CER CHIP RES 22K OHM 5% 0402
R408M20	0613952R23	CER CHIP RES 82K OHM 5% 0402
R409M20	0613952Q85	CER CHIP RES 3300 OHM 5 0402
R410M20	0613952Q45	CER CHIP RES 68.0 OHM 5 0402
R411M20	0613952Q25	RES:MF,10OHM,5%,.0625W,SM,0402*
R412M20	0613952Q18	CER CHIP RES 5.1 OHM 5 0402

Ref. Des.	Part Number	Description
R413M20	0613952Q11	CER CHIP RES 2.7 OHM 5 0402
R447M20	0613952Q25	RES:MF,10OHM,5%,.0625W,SM,0402*
R448M20	0613952Q25	RES:MF,10OHM,5%,.0625W,SM,0402*
R450M20	0613952R66	RES:MF,0OHM,5%,.0625W,SM,0402*
R451M20	0613952R66	RES:MF,0OHM,5%,.0625W,SM,0402*
R452M20	0613952R66	RES:MF,0OHM,5%,.0625W,SM,0402*
R453M20	0613952R66	RES:MF,0OHM,5%,.0625W,SM,0402*
R454M20	0613952R66	RES:MF,0OHM,5%,.0625W,SM,0402*
R455M20	0613952R66	RES:MF,0OHM,5%,.0625W,SM,0402*
R456M20	0613952R66	RES:MF,0OHM,5%,.0625W,SM,0402*
R457M20	0613952R66	RES:MF,0OHM,5%,.0625W,SM,0402*
R458M20	0613952R66	RES:MF,0OHM,5%,.0625W,SM,0402*
R500M21	0613952Q37	RES:MF,33OHM,5%,.0625W,SM,0402*
R502M21	0613952Q36	CER CHIP RES 30.0 OHM 5 0402
R512M21	0613952R66	RES:MF,0OHM,5%,.0625W,SM,0402*
R525M21	0613952R66	RES:MF,0OHM,5%,.0625W,SM,0402*
R526M21	0613958J74	RES:MF,0OHM,5%,.125W,SM,0805,PB-FREE
R601M19	0613952Q41	RES:MF,47OHM,5%,.0625W,SM,0402*
R602M19	0613952Q63	RES:MF,390OHM,5%,.0625W,SM,0402*
R603M19	0613952R25	RES:MF,100KOHM,5%,.0625W,SM,0402*

Ref. Des.	Part Number	Description
R604M19	0613952Q63	RES:MF,390OHM,5%,.0625W,SM,0402*
R605M19	0613952R01	RES:MF,10KOHM,5%,.0625W,SM,0402*
R606M19	0613952R01	RES:MF,10KOHM,5%,.0625W,SM,0402*
R607M19	0613952R25	RES:MF,100KOHM,5%,.0625W,SM,0402*
R608M19	0613952R01	RES:MF,10KOHM,5%,.0625W,SM,0402*
R609M19	0613952Q81	RES:MF,2.2KOHM,5%,.0625W,SM,0402*
R6101M6	0613952R01	RES:MF,10KOHM,5%,.0625W,SM,0402*
R6102M6	0613952R09	CER CHIP RES 22K OHM 5% 0402
R6103M6	0613952R09	CER CHIP RES 22K OHM 5% 0402
R6104M6	NOTPLACED	N/A
R6105M6	0613952R66	RES:MF,0OHM,5%,.0625W,SM,0402*
R6106M6	0613952Q73	CER CHIP RES 1000 OHM 5 0402
R6107M6	0613952Q55	RES:MF,180OHM,5%,.0625W,SM,0402*
R6108M6	0613952Q61	CER CHIP RES 330 OHM 5 0402
R6109M6	NOTPLACED	N/A
R610M19	0613952R25	RES:MF,100KOHM,5%,.0625W,SM,0402*
R6110M6	0613952Q73	CER CHIP RES 1000 OHM 5 0402
R6111M6	NOTPLACED	N/A
R6112M6	0613952Q73	CER CHIP RES 1000 OHM 5 0402
R6114M6	0613952Q49	CER CHIP RES 100 OHM 5 0402
R6115M6	0613952Q49	CER CHIP RES 100 OHM 5 0402
R6116M6	NOTPLACED	N/A

Ref. Des.	Part Number	Description
R6117M6	0613952R01	RES:MF,10KOHM,5%,.0625W,SM,0402*
R6118M6	0613952R09	CER CHIP RES 22K OHM 5% 0402
R6119M6	0613952R01	RES:MF,10KOHM,5%,.0625W,SM,0402*
R611M19	0613952R01	RES:MF,10KOHM,5%,.0625W,SM,0402*
R6120M6	0613952R01	RES:MF,10KOHM,5%,.0625W,SM,0402*
R6121M6	0613952R01	RES:MF,10KOHM,5%,.0625W,SM,0402*
R6122M6	0613952R01	RES:MF,10KOHM,5%,.0625W,SM,0402*
R6123M6	NOTPLACED	N/A
R6125M6	NOTPLACED	N/A
R612M19	0613952Q94	CER CHIP RES 7500 OHM 5 0402
R613M19	0613952Q82	CER CHIP RES 2400 OHM 5 0402
R614M19	0613952R66	RES:MF,0OHM,5%,.0625W,SM,0402*
R615M19	NOTPLACED	N/A
R616M19	NOTPLACED	N/A
R617M19	NOTPLACED	N/A
R618M19	NOTPLACED	N/A
R619M19	NOTPLACED	N/A
R6201M6	NOTPLACED	N/A
R6202M6	0613952R01	RES:MF,10KOHM,5%,.0625W,SM,0402*
R6203M6	0613952R66	RES:MF,0OHM,5%,.0625W,SM,0402*
R6204M6	0613952R01	RES:MF,10KOHM,5%,.0625W,SM,0402*
R6205M6	0613952R01	RES:MF,10KOHM,5%,.0625W,SM,0402*
R6206M6	0613952R25	RES:MF,100KOHM,5%,.0625W,SM,0402*

Ref. Des.	Part Number	Description
R6207M6	0613952R25	RES:MF,100KOHM,5%,.0625W,SM,0402*
R6208M6	0613952Q89	RES:MF,4.7KOHM,5%,.0625W,SM,0402*
R6209M6	0613952Q89	RES:MF,4.7KOHM,5%,.0625W,SM,0402*
R620M19	NOTPLACED	N/A
R6210M6	0613952Q89	RES:MF,4.7KOHM,5%,.0625W,SM,0402*
R6211M6	0613952R01	RES:MF,10KOHM,5%,.0625W,SM,0402*
R6212M6	NOTPLACED	N/A
R6213M6	0613952R01	RES:MF,10KOHM,5%,.0625W,SM,0402*
R6214M6	NOTPLACED	N/A
R6215M6	0613952R01	RES:MF,10KOHM,5%,.0625W,SM,0402*
R6216M6	0613952R66	RES:MF,0OHM,5%,.0625W,SM,0402*
R6217M6	0613952Q73	CER CHIP RES 1000 OHM 5 0402
R6218M6	0613952Q80	CER CHIP RES 2000 OHM 5 0402
R621M19	NOTPLACED	N/A
R623M19	NOTPLACED	N/A
R624M19	NOTPLACED	N/A
R6301M6	0613952R01	RES:MF,10KOHM,5%,.0625W,SM,0402*
R6304M6	0613952R66	RES:MF,0OHM,5%,.0625W,SM,0402*
R63050M6	0613952R66	RES:MF,0OHM,5%,.0625W,SM,0402*
R6305M6	0613952R66	RES:MF,0OHM,5%,.0625W,SM,0402*
R6306M6	0613952R01	RES:MF,10KOHM,5%,.0625W,SM,0402*
R6307M6	0613952R66	RES:MF,0OHM,5%,.0625W,SM,0402*
R6310M6	0613952Q37	RES:MF,33OHM,5%,.0625W,SM,0402*

Ref. Des.	Part Number	Description
R6311M6	0613952Q37	RES:MF,33OHM,5%,.0625W,SM,0402*
R6312M6	0613952Q37	RES:MF,33OHM,5%,.0625W,SM,0402*
R6313M6	0613952Q37	RES:MF,33OHM,5%,.0625W,SM,0402*
R6314M6	0613952Q37	RES:MF,33OHM,5%,.0625W,SM,0402*
R6316M6	0613952R01	RES:MF,10KOHM,5%,.0625W,SM,0402*
R6401M6	0613952R18	RES:MF,51KOHM,5%,.0625W,SM,0402*
R6402M6	0613952R32	CER CHIP RES 200K OHM 5 0402
R6403M6	0613952Q81	RES:MF,2.2KOHM,5%,.0625W,SM,0402*
R6404M6	0613952Q81	RES:MF,2.2KOHM,5%,.0625W,SM,0402*
R6405M6	0613952Q75	RES:MF,1.2KOHM,5%,.0625W,SM,0402*
R6406M6	0613952R01	RES:MF,10KOHM,5%,.0625W,SM,0402*
R6407M6	0613952Q81	RES:MF,2.2KOHM,5%,.0625W,SM,0402*
R6409M6	0613952N01	RES:MF,10KOHM,1%,.0625W,SM,0402*
R6410M6	0613952R01	RES:MF,10KOHM,5%,.0625W,SM,0402*
R6411M6	0613952R66	RES:MF,0OHM,5%,.0625W,SM,0402*
R6414M6	0613952Q61	CER CHIP RES 330 OHM 5 0402
R6415M6	0613952Q61	CER CHIP RES 330 OHM 5 0402
R6416M6	0613952Q61	CER CHIP RES 330 OHM 5 0402
R6417M6	0613952Q61	CER CHIP RES 330 OHM 5 0402
R6419M6	0613952Q37	RES:MF,33OHM,5%,.0625W,SM,0402*

Ref. Des.	Part Number	Description
R6420M6	0613952R17	RESISTOR,METAL FILM,47KOHM,5%,.0625W,SM,0402,200PPM/CEL,PB-FREE
R6421M6	0613952R01	RES:MF,10KOHM,5%,.0625W,SM,0402*
R6422M6	0613952Q51	CER CHIP RES 120 OHM 5 0402
R6423M6	0613952R66	RES:MF,0OHM,5%,.0625W,SM,0402*
R6424M6	0613952N01	RES:MF,10KOHM,1%,.0625W,SM,0402*
R6425M6	0613952Q80	CER CHIP RES 2000 OHM 5 0402
R6426M6	0613952Q49	CER CHIP RES 100 OHM 5 0402
R6427M6	0613952R11	CER CHIP RES 27K OHM 5% 0402
R6428M6	0613952R25	RES:MF,100KOHM,5%,.0625W,SM,0402*
R6429M6	0613952R17	RESISTOR,METAL FILM,47KOHM,5%,.0625W,SM,0402,200PPM/CEL,PB-FREE
R6430M6	0613952R09	CER CHIP RES 22K OHM 5% 0402
R6431M6	0613952Q81	RES:MF,2.2KOHM,5%,.0625W,SM,0402*
R6432M6	0613952R25	RES:MF,100KOHM,5%,.0625W,SM,0402*
R6433M6	0613952Q32	CER CHIP RES 20.0 OHM 5 0402
R6434M6	0613952Q32	CER CHIP RES 20.0 OHM 5 0402
R6492M6	0613952Q79	CER CHIP RES 1800 OHM 5 0402
R6501M6	0613952Q25	RES:MF,10OHM,5%,.0625W,SM,0402*
R6502M6	0613952Q25	RES:MF,10OHM,5%,.0625W,SM,0402*
R6503M6	0613952Q25	RES:MF,10OHM,5%,.0625W,SM,0402*



Ref. Des.	Part Number	Description
R6504M6	0613952R09	CER CHIP RES 22K OHM 5% 0402
R6505M6	0613952Q80	CER CHIP RES 2000 OHM 5 0402
R6506M6	0613952R66	RES:MF,0OHM,5%,.0625W,SM,0402*
R6507M6	0613952R01	RES:MF,10KOHM,5%,.0625W,SM,0402*
R6508M6	0613952R17	RESISTOR,METAL FILM,47KOHM,5%,.0625W,SM,0402,200PPM/CEL,PB-FREE
R6509M6	0613952R25	RES:MF,100KOHM,5%,.0625W,SM,0402*
R6510M6	0613952R66	RES:MF,0OHM,5%,.0625W,SM,0402*
R6511M6	0613952R01	RES:MF,10KOHM,5%,.0625W,SM,0402*
R6512M6	0613952N01	RES:MF,10KOHM,1%,.0625W,SM,0402*
R6513M6	0613952R66	RES:MF,0OHM,5%,.0625W,SM,0402*
R6514M6	0613952Q89	RES:MF,4.7KOHM,5%,.0625W,SM,0402*
R6515M6	0613952R66	RES:MF,0OHM,5%,.0625W,SM,0402*
R6516M6	0613952R66	RES:MF,0OHM,5%,.0625W,SM,0402*
R6517M6	0613952Q63	RES:MF,390OHM,5%,.0625W,SM,0402*
R6518M6	0613952R66	RES:MF,0OHM,5%,.0625W,SM,0402*
R6519M6	0613952Q89	RES:MF,4.7KOHM,5%,.0625W,SM,0402*
R6520M6	0613952Q73	CER CHIP RES 1000 OHM 5 0402
R6521M6	0615049H01	KAMAYA 0.2 OHM CHIP RESISTOR
R6522M6	0613952M66	CER CHIP RES 4750 OHM 1% 0402
R6523M6	0613952R09	CER CHIP RES 22K OHM 5% 0402

Ref. Des.	Part Number	Description
R6524M6	0613952R66	RES:MF,0OHM,5%,.0625W,SM,0402*
R6525M6	NOTPLACED	N/A
R6526M6	0613952R66	RES:MF,0OHM,5%,.0625W,SM,0402*
R6527M6	0613952N87	CER CHIP RES 78.7K OHM 1 0402
R6528M6	0613952R25	RES:MF,100KOHM,5%,.0625W,SM,0402*
R6529M6	0615049H01	KAMAYA 0.2 OHM CHIP RESISTOR
R6530M6	0613952L30	CER CHIP RES 200 OHM 1 0402
R6531M6	0613952R01	RES:MF,10KOHM,5%,.0625W,SM,0402*
R6532M6	NOTPLACED	N/A
R6533M6	0613952R66	RES:MF,0OHM,5%,.0625W,SM,0402*
R6534M6	NOTPLACED	N/A
R6535M6	0613952N01	RES:MF,10KOHM,1%,.0625W,SM,0402*
R6536M6	0613952Z72	RES:MF,91KOHM,1%,.0625W,SM,0402,200PPM/*
R6537M6	0613952P09	CER CHIP RES 121K OHM 1 0402
R6538M6	0613952Q95	CER CHIP RES 8200 OHM 5 0402
R6539M6	0613952P66	CER CHIP RES 475K OHM 1 0402
R6540M6	0613952P66	CER CHIP RES 475K OHM 1 0402
R6541M6	0613952R25	RES:MF,100KOHM,5%,.0625W,SM,0402*
R6542M6	0613952R66	RES:MF,0OHM,5%,.0625W,SM,0402*
R6543M6	0613952R66	RES:MF,0OHM,5%,.0625W,SM,0402*
R6544M6	0613952R66	RES:MF,0OHM,5%,.0625W,SM,0402*
R6545M6	0613952R25	RES:MF,100KOHM,5%,.0625W,SM,0402*

Ref. Des.	Part Number	Description
R6546M6	0613952R66	RES:MF,0OHM,5%,.0625W,SM,0402*
R6547M6	0613952R66	RES:MF,0OHM,5%,.0625W,SM,0402*
R6548M6	NOTPLACED	N/A
R6550M6	0613952Z64	RES:MF,39KOHM,1%,.0625W,SM,0402,200PPM/CEL,PB-FREE
R6551M6	0613952Z62	RES:MF,33KOHM,1%,.0625W,SM,0402,200PPM/CEL,PB-FREE
R6552M6	0613952R25	RES:MF,100KOHM,5%,.0625W,SM,0402*
R6558M6	0613952P22	RES:MF,165KOHM,1%,.0625W,SM,0402*
R6561M6	0613952R66	RES:MF,0OHM,5%,.0625W,SM,0402*
R6562M6	0613952R66	RES:MF,0OHM,5%,.0625W,SM,0402*
R6563M6	0613952R66	RES:MF,0OHM,5%,.0625W,SM,0402*
R6564M6	0613952R66	RES:MF,0OHM,5%,.0625W,SM,0402*
R6565M6	0613952R66	RES:MF,0OHM,5%,.0625W,SM,0402*
R6566M6	0613952R66	RES:MF,0OHM,5%,.0625W,SM,0402*
R6567M6	0613952R66	RES:MF,0OHM,5%,.0625W,SM,0402*
R6568M6	0613952P47	CER CHIP RES 301K OHM 1 0402
R6570M6	0613952R66	RES:MF,0OHM,5%,.0625W,SM,0402*
R6574M6	0613952R25	RES:MF,100KOHM,5%,.0625W,SM,0402*
R6576M6	0613952R01	RES:MF,10KOHM,5%,.0625W,SM,0402*
R6577M6	0613952Q89	RES:MF,4.7KOHM,5%,.0625W,SM,0402*
R6578M6	0613952Q89	RES:MF,4.7KOHM,5%,.0625W,SM,0402*

Ref. Des.	Part Number	Description
R6579M6	0613952R01	RES:MF,10KOHM,5%,.0625W,SM,0402*
R6580M6	0613952R17	RESISTOR,METAL FILM,47KOHM,5%,.0625W,SM,0402,200PPM/CEL,PB-FREE
R6581M6	0613952Q49	CER CHIP RES 100 OHM 5 0402
R6582M6	0613952Q89	RES:MF,4.7KOHM,5%,.0625W,SM,0402*
R6583M6	0613952R03	CER CHIP RES 12K OHM 5% 0402
R6584M6	0613952Q56	CER CHIP RES 200 OHM 5 0402
R6591M6	0613952R66	RES:MF,0OHM,5%,.0625W,SM,0402*
R6592M6	0613952R66	RES:MF,0OHM,5%,.0625W,SM,0402*
R6598M6	NOTPLACED	N/A
R6599M6	0613952R01	RES:MF,10KOHM,5%,.0625W,SM,0402*
R6601M6	0613952R01	RES:MF,10KOHM,5%,.0625W,SM,0402*
R6602M6	0613952R01	RES:MF,10KOHM,5%,.0625W,SM,0402*
R6604M6	0613952Q51	CER CHIP RES 120 OHM 5 0402
R6605M6	0613952Q33	RES:MF,22OHM,5%,.0625W,SM,0402*
R6606M6	0613952Q37	RES:MF,33OHM,5%,.0625W,SM,0402*
R6608M6	0613952R01	RES:MF,10KOHM,5%,.0625W,SM,0402*
R6609M6	0613952R25	RES:MF,100KOHM,5%,.0625W,SM,0402*
R6616M6	0613952Q80	CER CHIP RES 2000 OHM 5 0402
R6617M6	0613952R01	RES:MF,10KOHM,5%,.0625W,SM,0402*
R6618M6	0613952R01	RES:MF,10KOHM,5%,.0625W,SM,0402*

Ref. Des.	Part Number	Description
R6619M6	0613952R01	RES:MF,10KOHM,5%,.0625W,SM,0402*
R6621M6	0613952Q89	RES:MF,4.7KOHM,5%,.0625W,SM,0402*
R6622M6	0613952Q35	CER CHIP RES 27.0 OHM 5 0402
R6623M6	0613952Q35	CER CHIP RES 27.0 OHM 5 0402
R6624M6	0613952Q35	CER CHIP RES 27.0 OHM 5 0402
R6625M6	0613952Q35	CER CHIP RES 27.0 OHM 5 0402
R6626M6	0613952R01	RES:MF,10KOHM,5%,.0625W,SM,0402*
R698M19	0613952R66	RES:MF,0OHM,5%,.0625W,SM,0402*
R699M19	0613952R66	RES:MF,0OHM,5%,.0625W,SM,0402*
R701M7	0613952Q64	CER CHIP RES 430 OHM 5 0402
R702M7	0613952R66	RES:MF,0OHM,5%,.0625W,SM,0402*
R703M7	0613952Q67	CER CHIP RES 560 OHM 5 0402
R704M7	0613952Q25	RES:MF,10OHM,5%,.0625W,SM,0402*
R705M7	0613952Q75	RES:MF,1.2KOHM,5%,.0625W,SM,0402*
R706M7	0613952R66	RES:MF,0OHM,5%,.0625W,SM,0402*
R707M7	0613952Q67	CER CHIP RES 560 OHM 5 0402
R708M7	0613952Q45	CER CHIP RES 68.0 OHM 5 0402
R709M7	NOTPLACED	N/A
R710M7	NOTPLACED	N/A
R711M7	NOTPLACED	N/A
R721M7	0613952R01	RES:MF,10KOHM,5%,.0625W,SM,0402*
R722M7	0613952Q57	CER CHIP RES 220 OHM 5 0402

Ref. Des.	Part Number	Description
R723M7	0613952R02	CER CHIP RES 11K OHM 5 0402
R728M7	0613952Q52	CER CHIP RES 130 OHM 5 0402
R729M7	0613952R09	CER CHIP RES 22K OHM 5% 0402
R730M7	0613952Q79	CER CHIP RES 1800 OHM 5 0402
R731M7	0613952Q86	CER CHIP RES 3600 OHM 5 0402
R736M7	0613952R66	RES:MF,0OHM,5%,.0625W,SM,0402*
R741M7	0613952R09	CER CHIP RES 22K OHM 5% 0402
R742M7	0613952R23	CER CHIP RES 82K OHM 5% 0402
R743M7	0613952R17	RESISTOR,METAL FILM,47KOHM,5%,.0625W,SM,0402,200PPM/CEL,PB-FREE
R744M7	0613952Q91	CER CHIP RES 5600 OHM 5 0402
R745M7	0613952R09	CER CHIP RES 22K OHM 5% 0402
R746M7	0613952Q12	CER CHIP RES 3.0 OHM 5 0402
R747M7	0613952Q34	CER CHIP RES 24.0 OHM 5 0402
R748M7	0613952Q47	CER CHIP RES 82.0 OHM 5% 0402
R751M7	0613952Q59	CER CHIP RES 270 OHM 5 0402
R754M7	NOTPLACED	N/A
R757M7	NOTPLACED	N/A
R761M7	0613952Q29	CER CHIP RES 15.0 OHM 5 0402
R762M7	0613952R08	CER CHIP RES 20K OHM 5 0402
R763M7	0613952R19	CER CHIP RES 56K OHM 5% 0402

Ref. Des.	Part Number	Description
R766M7	0613952Q92	CER CHIP RES 6200 OHM 5 0402
R769M7	0613952Q29	CER CHIP RES 15.0 OHM 5 0402
R771M7	0613952Q49	CER CHIP RES 100 OHM 5 0402
R776M7	0613952Q67	CER CHIP RES 560 OHM 5 0402
R778M7	0613952Q29	CER CHIP RES 15.0 OHM 5 0402
R779M7	0613952Q49	CER CHIP RES 100 OHM 5 0402
R785M7	0613952Q60	CER CHIP RES 300 OHM 5 0402
R799M7	0613952Q60	CER CHIP RES 300 OHM 5 0402
R809M7	0613952Q31	CER CHIP RES 18.0 OHM 5 0402
R822M7	NOTPLACED	N/A
R823M7	NOTPLACED	N/A
S2103M2	40012069001	TACT SWITCH, EMERGENCY
SH1	26012144002	SHIELD TX-O/P
SH10	26012156001	SHIELD, MIXER
SH11	26012159001	SHIELD, VCO
SH12	26012152001	SHIELD, GPS/BT
SH13	26012161002	SHIELD CONTROLLER
SH14	26012143001	SHIELD, MAKO
SH15	26012160001	SHIELD, DRIVER
SH16	26012163001	SHIELD, RXFE
SH17	26012155001	SHIELD, 2ND_LO
SH2	26012154002	SHIELD,STEEL,TIN PLATED,SHIELD, ABACUS ULC
SH3	26012149001	SHIELD, ALC
SH4	26012157002	SHIELD,STEEL,TIN PLATED,SHIELD, BALUN ULC M3

Ref. Des.	Part Number	Description
SH5	26012153001	SHIELD, FGU
SH6	26012150001	SHIELD, ALC/DC
SH7	26012158001	SHIELD, COUPLER
SH8	26012162002	SHIELD HF
SH9	26012151001	SHIELD, AUDIO PA
T506M21	2575851B01	RF TRANSFORMER BALUN
T507M21	2575851B02	RF TRANSFORMER BALUN
U1001M16	5175143H01	WIDE SUPPLY RANGE OP AMP
U1002M16	51012101001	VHF/UHF/800/900 MHZ LD MOS DRIVER IC
U1201M11	51007702001	D/A CONVERTER,AD5313R DUAL, 10-BIT DAC WITH 2 PPM REFERENCE, SPI INTERFACE
U1202M11	51012154001	OPERATIONAL AMPLIFIERS RAIL-TO-RAIL
U1203M11	5175772B05	PRECISION RF DETECTOR
U1204M11	5109522E93	2 INPUT OR GATE IN NANO PACKAGE (C87)
U1205M11	5109522E93	2 INPUT OR GATE IN NANO PACKAGE (C87)
U1208M11	5164852H16	IC:TRANSLATING,2PER PKG,LVC2T45,*
U1209M11	NOTPLACED	N/A
U1211M11	5109522E94	2 INPUT AND GATE IN NANO PACKAGE (C87)
U1217M11	NOTPLACED	N/A
U1232M11	NOTPLACED	N/A
U1238M11	5185070Y01	IC TEMPERATURE SENSOR PB-FREE
U1243M11	5185941F56	IC SINGLE LV LP OP AMPLIFIER
U1251M11	5185941F56	IC SINGLE LV LP OP AMPLIFIER

Ref. Des.	Part Number	Description
U1253M11	5185941F56	IC SINGLE LV LP OP AMPLIFIER
U1254M11	5185941F56	IC SINGLE LV LP OP AMPLIFIER
U1256M11	5185941F56	IC SINGLE LV LP OP AMPLIFIER
U1257M11	5109522E94	2 INPUT AND GATE IN NANO PACKAGE (C87)
U1269M11	5109817F77	IC COMPTR LM7275 5SC70 (D54)
U1282M11	5171779H01	SPDT ANALOG SWITCH
U1301M3	51007377001	IC:XCVR,GPS,RX/TX,B/TOOTH,WSP-107
U1304M3	51007599001	AMP,20.0DB,1.58GHZMIN,1.58GHZMAX,SLCN GERMANIUM GPS LOW NOISE AM
U1305M3	5187344N09	LOW NOISE, 100MA LINEAR REGULATOR 2.8V
U200M12	5188493T01	IC,VREG/SWG,LP2989,SM,MINI SO-8 HI PRCN REG 5V
U201M12	5175771A99	LOW NOISE, 100MA LINEAR REGULATOR
U202M12	5175772B02	LINEAR REGULATOR 100MA 1.8V
U203M12	5175772B01	LINEAR VOLTAGE REGULATOR 350MA
U2100M2	5188690V02	IC:F-F/D,1PER PKG,7SZ175,SC70-6,PB FREE
U21001M2	5188690V02	IC:F-F/D,1PER PKG,7SZ175,SC70-6,PB FREE
U21002M2	5188690V01	IC:SCHMITT INVERTER,7SZ14,1PER PKG,*
U21003M2	5188690V01	IC:SCHMITT INVERTER,7SZ14,1PER PKG,*
U2101M2	5109522E84	IC DUAL SCHMITT TRIG MICRO PAK

Ref. Des.	Part Number	Description
U2102M2	5109522E84	IC DUAL SCHMITT TRIG MICRO PAK
U2104M2	5109522E84	IC DUAL SCHMITT TRIG MICRO PAK
U2201M2	5171679H01	LED LIGHT DRIVER
U2202M2	5164852H47	IC, I2C LEVEL TRANSLATOR
U2301M13	5103535B53	IC,INVTR,DL,NC7WZ04L6 X,2PER PKG,SC70
U2302M13	5185941F45	ATTEN,VAR,14.4DBMIN,15.6DBMAX,0-2000 MHZ-FREQ,50OHM,PCMT,,SOT
U4001M2	5164852H47	IC, I2C LEVEL TRANSLATOR
U4003M2	5188691V01	IC,MUX/DEMUX,,NC7SB3157P6X,SM,SC70-6,1PER PKG,,BUS,,PB FREE
U4004M2	5116783H01	SN74LVC2G66 ANALOG SWITCH
U402M20	5180428L15	SW,RF SWITCH,SPDT,SMT,6W,3V
U403M20	5180428L15	SW,RF SWITCH,SPDT,SMT,6W,3V
U404M20	5180428L15	SW,RF SWITCH,SPDT,SMT,6W,3V
U405M20	5180428L15	SW,RF SWITCH,SPDT,SMT,6W,3V
U406M20	4885316E32	TRANSISTOR,TRANSISTOR, RF
U407M20	4885316E32	TRANSISTOR,TRANSISTOR, RF
U408M20	5103535B53	IC,INVTR,DL,NC7WZ04L6 X,2PER PKG,SC70
U507M21	5164015H81	IC,MXR,DBL BAL GILBERT,CELL,,SM
U601M19	5102495J14	IC,IF,,IF DIGITILIZING SUBSYSTEM IC,AD9864,QFN
U602M19	4885316E32	TRANSISTOR,TRANSISTOR, RF

Ref. Des.	Part Number	Description
U603M19	5109522E84	IC DUAL SCHMITT TRIG MICRO PAK
U604M19	5109522E84	IC DUAL SCHMITT TRIG MICRO PAK
U605M19	5164852H16	IC:TRANSLATING,2PER PKG,LVC2T45,*
U606M19	5164852H16	IC:TRANSLATING,2PER PKG,LVC2T45,*
U607M19	5186311J24	IC:BFR,1PER PKG,NC7SZ125,ACTIVE HIGH,*
U6101M6	0180706J18	PROGRAMMED CPLD
U6102M6	5188691V01	IC,MUX/DEMUX,,NC7SB3157P6X,SM,SC70-6,1PER PKG,,BUS,,PB FREE
U6103M6	5175114H01	SINGLE AND GATE MICROPAK
U6104M6	5175114H01	SINGLE AND GATE MICROPAK
U6105M6	5175114H01	SINGLE AND GATE MICROPAK
U6201M6	5185941F26	IC,COMPTR,LMV7219,NO PB
U6301M6	51012031001	32MB DIE SHRINK DDR SDRAM IC
U6302M6	5102495J13	IC,MICROP,P1710ZZGE,BGA,,12MHZ,32BITS
U6304M6	0105955U25	ASSY,IC,BGA SPEC PROG, FLASH MEMORY
U6401M6	5175772B38	IC ANALOG TEMPERATURE SENSOR
U6402M6	5115453H01	RAIL TO RAIL OUTPUT, 8 PIN BGA
U6404M6	5175772B38	IC ANALOG TEMPERATURE SENSOR
U6405M6	5188348V06	IC,AUDIO CODEC,SM,,AUDIO CODEC
U6408M6	5188521T01	IC,VREF,SM,SOT23,1PER PKG,5%,1.25 TO 13.75,PRCN BANDGAP ADJUS

Ref. Des.	Part Number	Description
U6409M6	51009000001	NANOPOWER, 1.8V, SOT23 COMPARATOR
U6410M6	5175772B38	IC ANALOG TEMPERATURE SENSOR
U6411M6	5109731C55	IC 2.75 FIXED GAIN MONO FILTER-FREE AMPLFR
U6501M6	5185143E77	IC, MAKO ASIC, CMOS PWR MGMT
U6502M6	4871987H01	LOW FREQUENCY TRANSISTOR
U6503M6	5171674H01	OP AMP
U6504M6	5171682H01	800MA BUCK REGULATOR
U6505M6	5189631P01	IC,SYNC STEP-DOWN CONV
U6506M6	5184790Y04	IC,400MA ADJ VREG LDO,SOT23
U6507M6	5171682H01	800MA BUCK REGULATOR
U6508M6	51009366001	500MA LOW DROPOUT CMOS LINEAR REG.
U6509M6	5175114H01	SINGLE AND GATE MICROPAK
U6510M6	5114007A47	IC,OR,17SZ32,1PER PKG,SOT-353,PB FREE
U6511M6	5171339H01	MICROPOWER VOLTAGE REGULATOR
U6601M6	5175114H01	SINGLE AND GATE MICROPAK
U702M7	5164015H28	IC:XCVR,AT46000,TRIDENT,BGA-121
U738M7	5171972L01	SP3T RF SWITCH
U739M7	5103535B53	IC,INVTR,DL,NC7WZ04L6 X,2PER PKG,SC70
U746M7	4805218N63	RF TRANS SOT 323 BFQ67W
VR101M12	4813977M29	DIODE,VREF,MBZ5250,SM,SOT-23,20V,,225W,ZEN
VR1M2	4888116D01	VSTR, 150V,24V-DC,SM,PB FREE

Ref. Des.	Part Number	Description
VR200M12	4813977M29	DIODE,VREF,MBZ5250,S M,SOT-23,20V,,225W,ZEN
VR3010M2 2	4805656W87	DIODE,VCTR, @ 15V,1SV279,,SOD-523/SC- 79
VR3011M2 2	4805656W87	DIODE,VCTR, @ 15V,1SV279,,SOD-523/SC- 79
VR3048M2 2	4805656W87	DIODE,VCTR, @ 15V,1SV279,,SOD-523/SC- 79
VR601M19	4805656W87	DIODE,VCTR, @ 15V,1SV279,,SOD-523/SC- 79
VR602M19	4805656W87	DIODE,VCTR, @ 15V,1SV279,,SOD-523/SC- 79
Y1304M3	48014600001	OSC,TCXO,26.0
Y3020M22	48012102005	RESONATOR CERAMIC 1025MHZ
Y3021M22	48012102005	RESONATOR CERAMIC 1025MHZ
Y3053M22	48012102006	RESONATOR CERAMIC 1110MHZ
Y6501M6	93012062001	CRYSTAL UNIT SMD 2.5X3.2 24.576MHZ
Y6502M6	4809995L15	XTAL 32KHZ 20PPM 3.2X2.1MM SMD
Y6601M6	93012046001	12MHZ CRYATAL UNIT
Y701M7	4875188M01	CRYSTAL OSCILLATOR

### 8.6 Keypad Board M1.5 (84012686001)

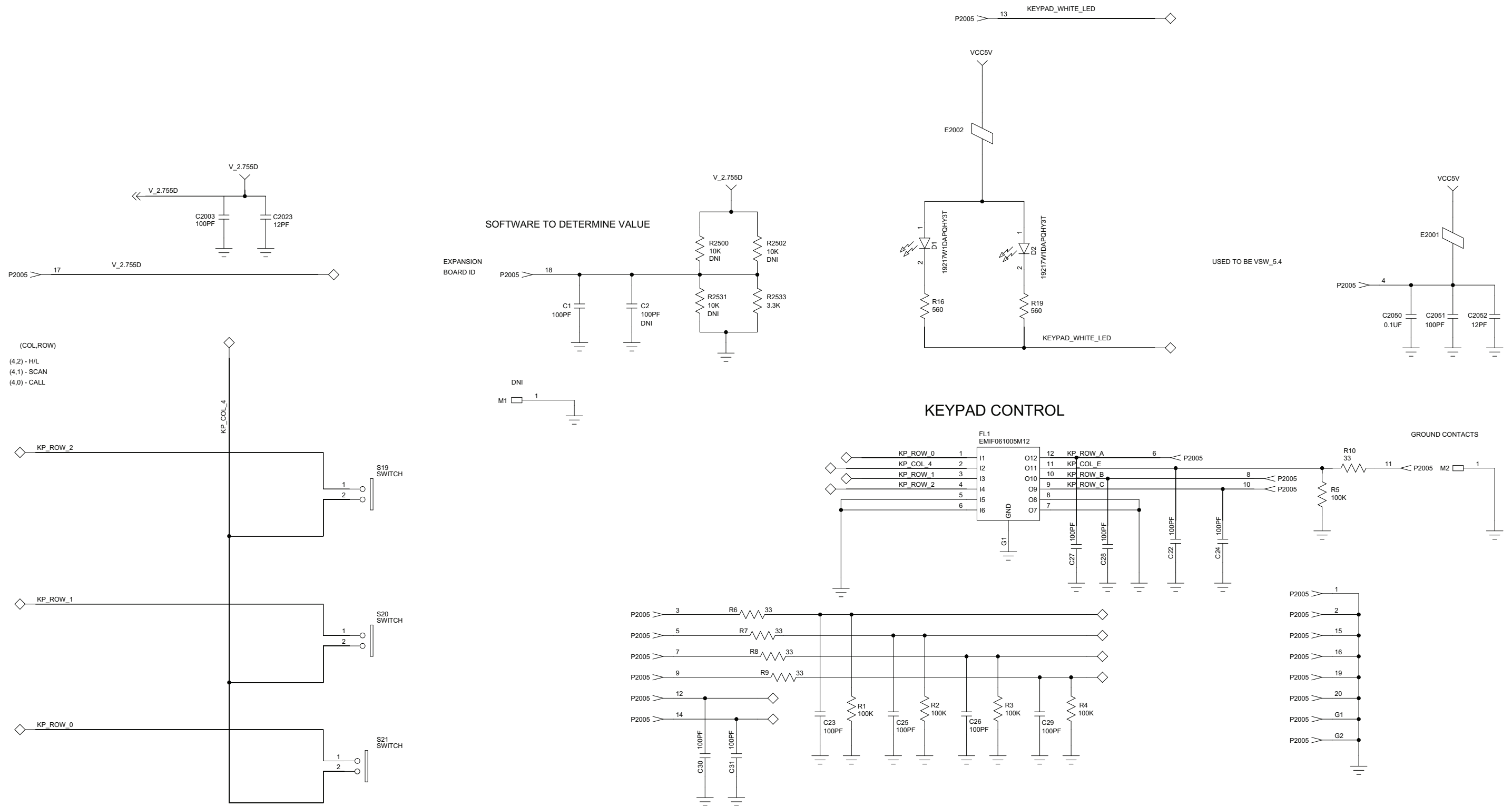


Figure 8-111. Keypad Board Overall Circuit Schematic (Basic)

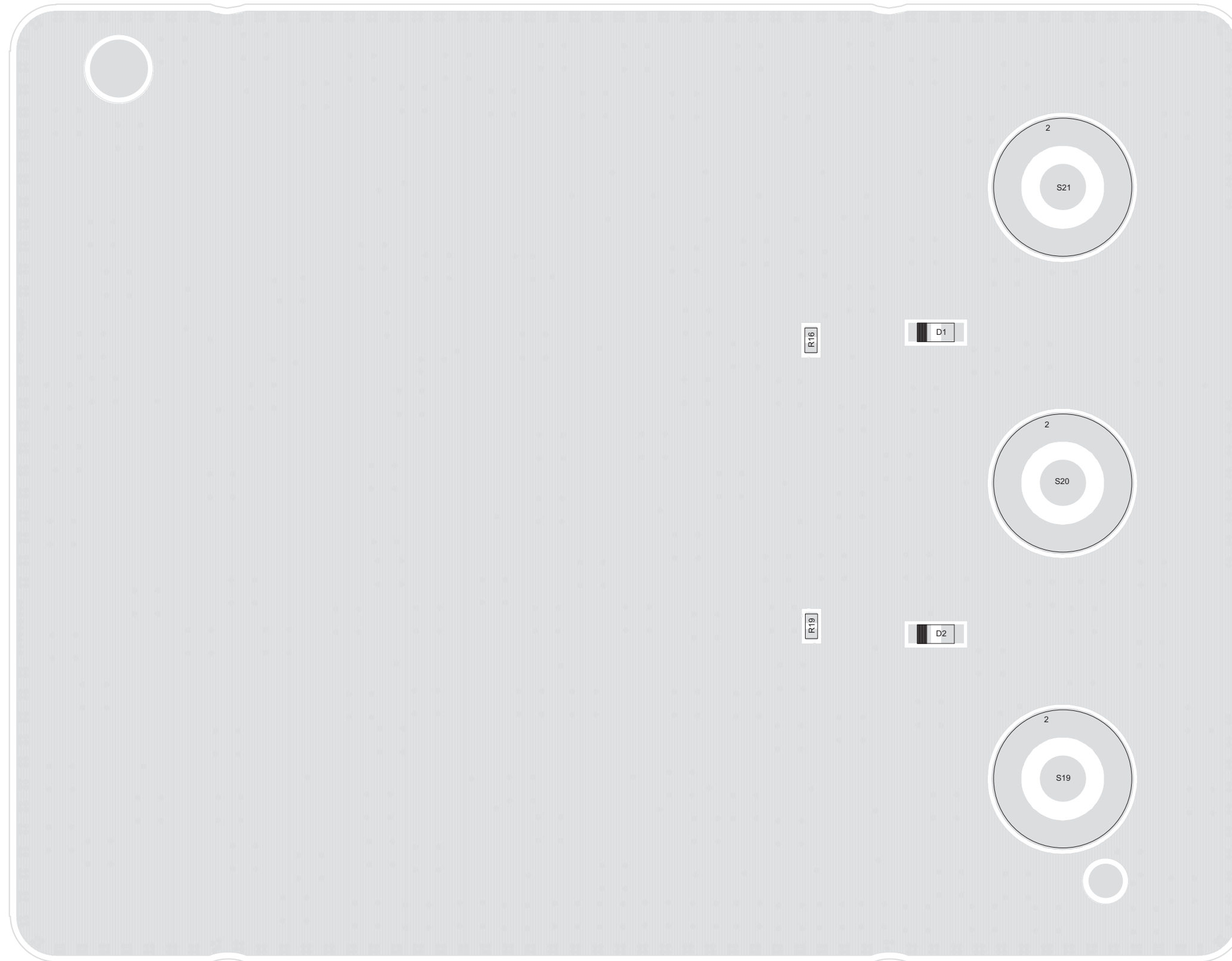


Figure 8-112. Keypad Board Layout – Top Side

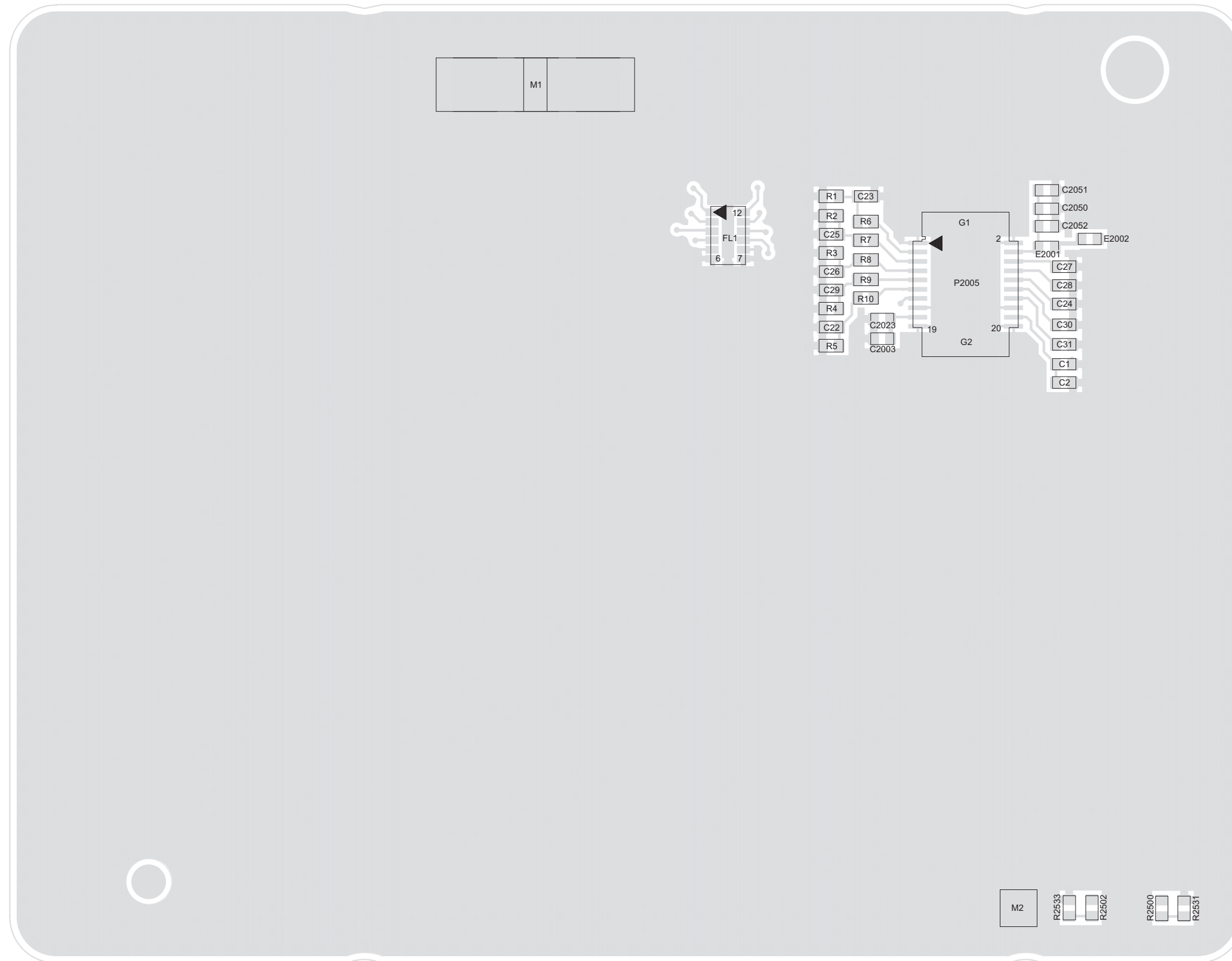


Figure 8-113. Keypad Board Layout – Bottom Side

## PMCN4036A Keypad Board M1.5 Parts List

Ref. Des.	Part Number	Description
C1	2113944A40	CAP,CHIP,100PF,+5%,-5%,50V-DC,0402,C0G,-55DEG CMIN,125DEG CMAX
C2	NOTPLACED	-
C2003	2113944A40	CAP,CHIP,100PF,+5%,-5%,50V-DC,0402,C0G,-55DEG CMIN,125DEG CMAX
C2023	2113944A26	CAP,CHIP,12PF,+5%,-5%,50V-DC,0402,C0G,-55DEG CMIN,125DEG CMAX,P
C2050	2113946B04	CAP,CHIP,.1UF,+10%,-10%,10V-DC,0402,X5R,-55DEG CMIN,85DEG CMAX
C2051	2113944A40	CAP,CHIP,100PF,+5%,-5%,50V-DC,0402,C0G,-55DEG CMIN,125DEG CMAX
C2052	2113944A26	CAP,CHIP,12PF,+5%,-5%,50V-DC,0402,C0G,-55DEG CMIN,125DEG CMAX,P
C22	2113944A40	CAP,CHIP,100PF,+5%,-5%,50V-DC,0402,C0G,-55DEG CMIN,125DEG CMAX
C23	2113944A40	CAP,CHIP,100PF,+5%,-5%,50V-DC,0402,C0G,-55DEG CMIN,125DEG CMAX
C24	2113944A40	CAP,CHIP,100PF,+5%,-5%,50V-DC,0402,C0G,-55DEG CMIN,125DEG CMAX
C25	2113944A40	CAP,CHIP,100PF,+5%,-5%,50V-DC,0402,C0G,-55DEG CMIN,125DEG CMAX
C26	2113944A40	CAP,CHIP,100PF,+5%,-5%,50V-DC,0402,C0G,-55DEG CMIN,125DEG CMAX

Ref. Des.	Part Number	Description
C27	2113944A40	CAP,CHIP,100PF,+5%,-5%,50V-DC,0402,C0G,-55DEG CMIN,125DEG CMAX
C28	2113944A40	CAP,CHIP,100PF,+5%,-5%,50V-DC,0402,C0G,-55DEG CMIN,125DEG CMAX
C29	2113944A40	CAP,CHIP,100PF,+5%,-5%,50V-DC,0402,C0G,-55DEG CMIN,125DEG CMAX
C30	2113944A40	CAP,CHIP,100PF,+5%,-5%,50V-DC,0402,C0G,-55DEG CMIN,125DEG CMAX
C31	2113944A40	CAP,CHIP,100PF,+5%,-5%,50V-DC,0402,C0G,-55DEG CMIN,125DEG CMAX
D1	4875053H01	DIODE,5V,25MA,WHT LED 0603 19-217 SMD 5V
D2	4875053H01	DIODE,5V,25MA,WHT LED 0603 19-217 SMD 5V
E2001	7685268E01	FLTR,FERRITE BEAD,650MA,SM,0402,CHIP,80OHM
E2002	7685268E01	FLTR,FERRITE BEAD,650MA,SM,0402,CHIP,80OHM
FL1	9171981H01	EMI FILTER,EMI/RFI,FLTR 6 CHAN EMI ESD 12PIN
M1	NOTPLACED	-
P2005	0985909E01	CONN,RCPT 20 PIN
R1	0613952R25	RES,MF,100KOHM,5%,.0625W,SM,0402,200PPM/CEL,PB-FREE
R10	0613952Q37	RES,MF,33OHM,5%,.0625W,SM,0402,200PPM/CEL,PB-FREE
R16	0613952Q67	RES,MF,560OHM,5%,.0625W,SM,0402,200PPM/CEL,PB-FREE

Ref. Des.	Part Number	Description
R19	0613952Q67	RES,MF,560OHM,5%,.0625W,SM,0402,200PPM/CEL,PB-FREE
R2	0613952R25	RES,MF,100KOHM,5%,.0625W,SM,0402,200PPM/CEL,PB-FREE
R2500	NOTPLACED	-
R2502	NOTPLACED	-
R2531	NOTPLACED	-
R2533	0613952Q85	RES,MF,3.3KOHM,5%,.0625W,SM,0402,200PPM/CEL,PB-FREE
R3	0613952R25	RES,MF,100KOHM,5%,.0625W,SM,0402,200PPM/CEL,PB-FREE
R4	0613952R25	RES,MF,100KOHM,5%,.0625W,SM,0402,200PPM/CEL,PB-FREE
R5	0613952R25	RES,MF,100KOHM,5%,.0625W,SM,0402,200PPM/CEL,PB-FREE
R6	0613952Q37	RES,MF,33OHM,5%,.0625W,SM,0402,200PPM/CEL,PB-FREE
R7	0613952Q37	RES,MF,33OHM,5%,.0625W,SM,0402,200PPM/CEL,PB-FREE
R8	0613952Q37	RES,MF,33OHM,5%,.0625W,SM,0402,200PPM/CEL,PB-FREE
R9	0613952Q37	RES,MF,33OHM,5%,.0625W,SM,0402,200PPM/CEL,PB-FREE
PASTE	11012015001	SOLDER PASTE
PCB	84012686001	PCB



### 8.7 Keypad Board M2 and M3 (PC000261A01)

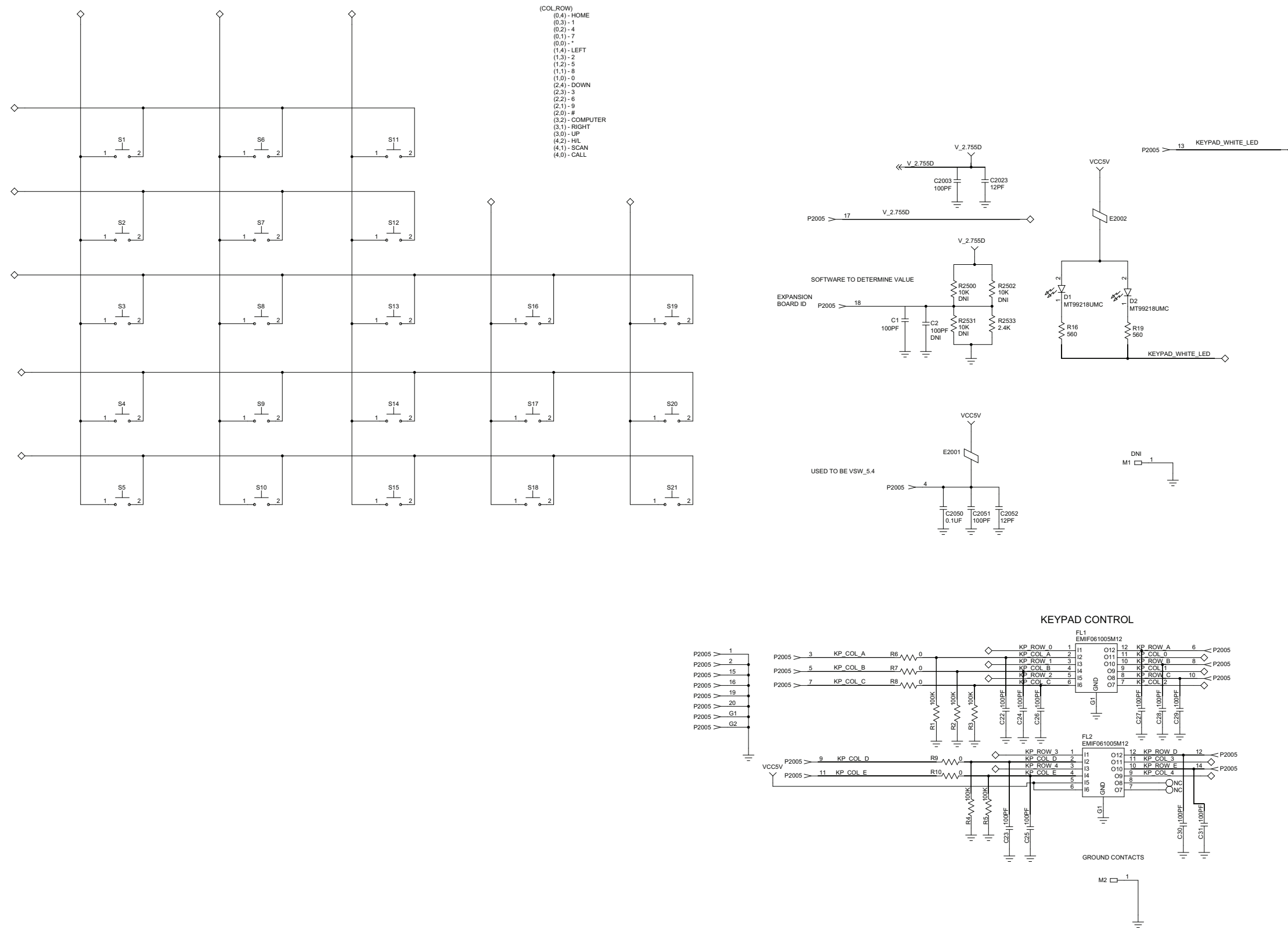


Figure 8-114. Keypad Lite Board Overall Circuit Schematic

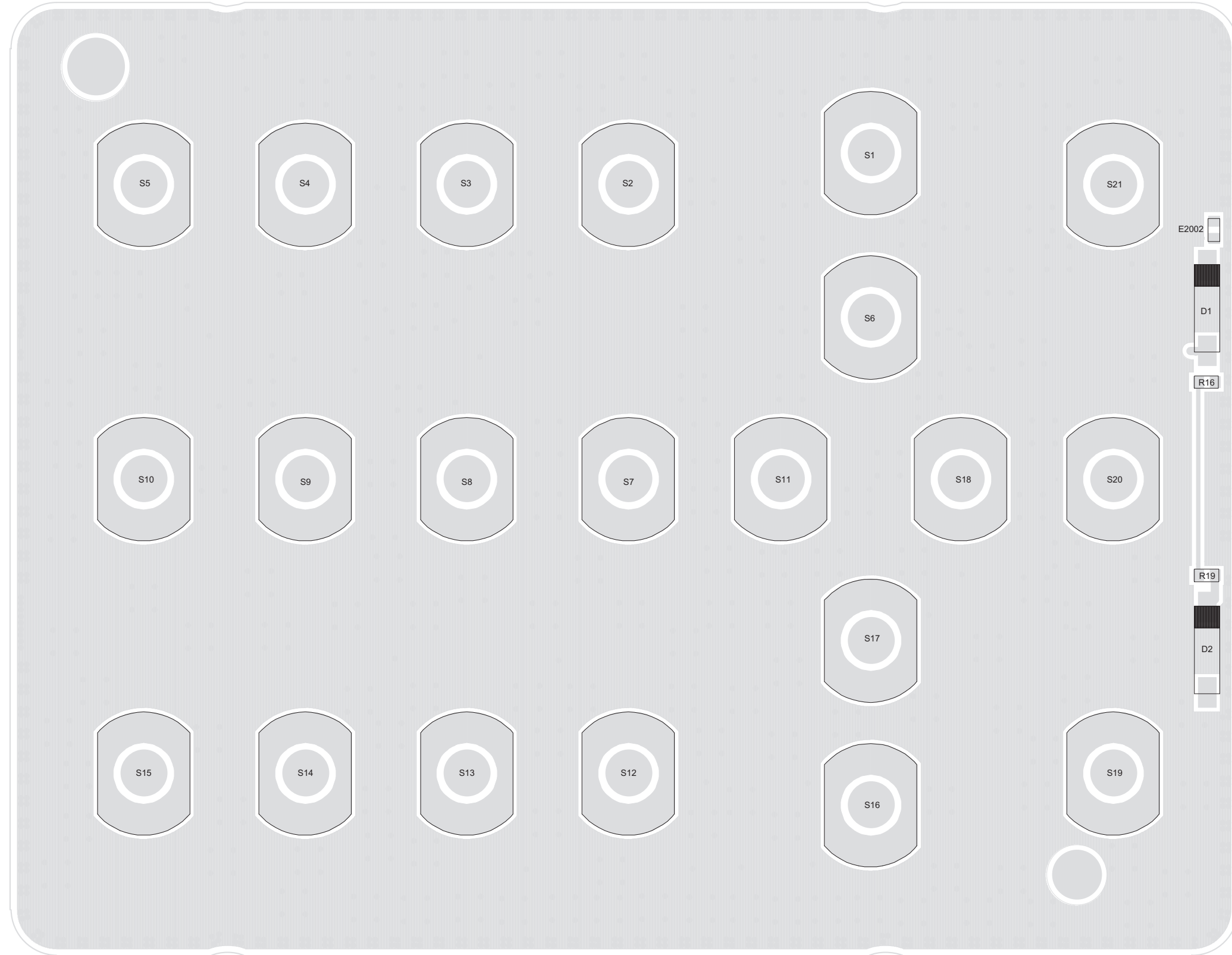


Figure 8-115. Keypad Lite Board Layout – Top Side

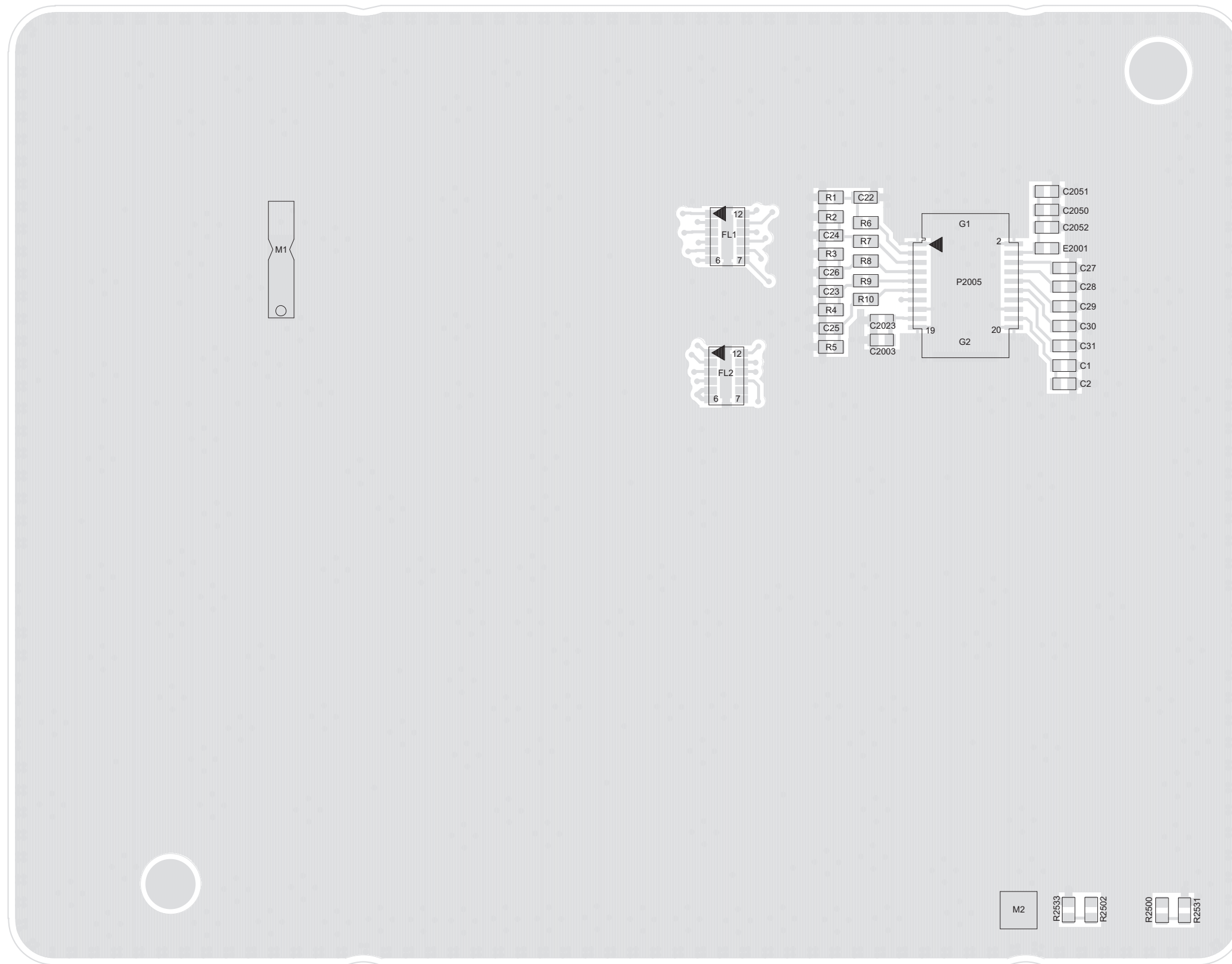


Figure 8-116. Keypad Lite Board Layout – Bottom Side

## PMCN4040A Keypad Board M2 Parts List

Ref. Des.	Part Number	Description
C1	2113944A40	CAP,CHIP,100PF,+5%,-5%,50V-DC,0402,C0G,-55DEG CMIN,125DEG CMAX
C2	NOTPLACED	-
C2003	2113944A40	CAP,CHIP,100PF,+5%,-5%,50V-DC,0402,C0G,-55DEG CMIN,125DEG CMAX
C2023	2113944A26	CAP,CHIP,12PF,+5%,-5%,50V-DC,0402,C0G,-55DEG CMIN,125DEG CMAX,P
C2050	2113946B04	CAP,CHIP,.1UF,+10%,-10%,10V-DC,0402,X5R,-55DEG CMIN,85DEG CMAX
C2051	2113944A40	CAP,CHIP,100PF,+5%,-5%,50V-DC,0402,C0G,-55DEG CMIN,125DEG CMAX
C2052	2113944A26	CAP,CHIP,12PF,+5%,-5%,50V-DC,0402,C0G,-55DEG CMIN,125DEG CMAX,P
C22	2113944A40	CAP,CHIP,100PF,+5%,-5%,50V-DC,0402,C0G,-55DEG CMIN,125DEG CMAX
C23	2113944A40	CAP,CHIP,100PF,+5%,-5%,50V-DC,0402,C0G,-55DEG CMIN,125DEG CMAX
C24	2113944A40	CAP,CHIP,100PF,+5%,-5%,50V-DC,0402,C0G,-55DEG CMIN,125DEG CMAX
C25	2113944A40	CAP,CHIP,100PF,+5%,-5%,50V-DC,0402,C0G,-55DEG CMIN,125DEG CMAX
C26	2113944A40	CAP,CHIP,100PF,+5%,-5%,50V-DC,0402,C0G,-55DEG CMIN,125DEG CMAX

Ref. Des.	Part Number	Description
C27	2113944A40	CAP,CHIP,100PF,+5%,-5%,50V-DC,0402,C0G,-55DEG CMIN,125DEG CMAX
C28	2113944A40	CAP,CHIP,100PF,+5%,-5%,50V-DC,0402,C0G,-55DEG CMIN,125DEG CMAX
C29	2113944A40	CAP,CHIP,100PF,+5%,-5%,50V-DC,0402,C0G,-55DEG CMIN,125DEG CMAX
C30	2113944A40	CAP,CHIP,100PF,+5%,-5%,50V-DC,0402,C0G,-55DEG CMIN,125DEG CMAX
C31	2113944A40	CAP,CHIP,100PF,+5%,-5%,50V-DC,0402,C0G,-55DEG CMIN,125DEG CMAX
D1	48009289001	LED ARRAY,LED,5V,25A,WHITE,SMT,85,WHT 2 PIN SIDE FIRE LED HI
D2	48009289001	LED ARRAY,LED,5V,25A,WHITE,SMT,85,WHT 2 PIN SIDE FIRE LED HI
E2001	7685268E01	FLTR,FERRITE BEAD,650MA,SM,0402,CHIP,80OHM
E2002	7685268E01	FLTR,FERRITE BEAD,650MA,SM,0402,CHIP,80OHM
FL1	9171981H01	EMI FILTER,EMI/RFI,FLTR 6 CHAN EMI ESD 12PIN
FL2	9171981H01	EMI FILTER,EMI/RFI,FLTR 6 CHAN EMI ESD 12PIN
M1	NOTPLACED	-
M2	CONTACT1_6SQ	CONTACT1_6SQ
M3	NOTPLACED	-
P2005	0985909E01	CONN,RCPT 20 PIN

Ref. Des.	Part Number	Description
R1	0613952R25	RES,MF,100KOHM,5%,.0625W,SM,0402,200PPM/CEL,PB-FREE
R10	0613952Q37	RES,MF,33OHM,5%,.0625W,SM,0402,200PPM/CEL,PB-FREE
R16	0613952Q67	RES,MF,560OHM,5%,.0625W,SM,0402,200PPM/CEL,PB-FREE
R19	0613952Q67	RES,MF,560OHM,5%,.0625W,SM,0402,200PPM/CEL,PB-FREE
R2	0613952R25	RES,MF,100KOHM,5%,.0625W,SM,0402,200PPM/CEL,PB-FREE
R2500	NOTPLACED	-
R2502	NOTPLACED	-
R2531	NOTPLACED	-
R2533	0613952Q82	RES,MF,2.4KOHM,5%,.0625W,SM,0402,200PPM/CEL,PB-FREE
R3	0613952R25	RES,MF,100KOHM,5%,.0625W,SM,0402,200PPM/CEL,PB-FREE
R4	0613952R25	RES,MF,100KOHM,5%,.0625W,SM,0402,200PPM/CEL,PB-FREE
R5	0613952R25	RES,MF,100KOHM,5%,.0625W,SM,0402,200PPM/CEL,PB-FREE
R6	0613952Q37	RES,MF,33OHM,5%,.0625W,SM,0402,200PPM/CEL,PB-FREE
R7	0613952Q37	RES,MF,33OHM,5%,.0625W,SM,0402,200PPM/CEL,PB-FREE
R8	0613952Q37	RES,MF,33OHM,5%,.0625W,SM,0402,200PPM/CEL,PB-FREE
R9	0613952Q37	RES,MF,33OHM,5%,.0625W,SM,0402,200PPM/CEL,PB-FREE
PASTE	11012015001	SOLDER PASTE

Ref. Des.	Part Number	Description
PCB	PC000261a01	PCB

## PMCN4037A Keypad Board M3 Parts List

Ref. Des.	Part Number	Description
C1	2113944A40	CAP,CHIP,100PF,+5%,-5%,50V-DC,0402,C0G,-55DEG CMIN,125DEG CMAX
C2	NOTPLACED	-
C2003	2113944A40	CAP,CHIP,100PF,+5%,-5%,50V-DC,0402,C0G,-55DEG CMIN,125DEG CMAX
C2023	2113944A26	CAP,CHIP,12PF,+5%,-5%,50V-DC,0402,C0G,-55DEG CMIN,125DEG CMAX,P
C2050	2113946B04	CAP,CHIP,.1UF,+10%,-10%,10V-DC,0402,X5R,-55DEG CMIN,85DEG CMAX
C2051	2113944A40	CAP,CHIP,100PF,+5%,-5%,50V-DC,0402,C0G,-55DEG CMIN,125DEG CMAX
C2052	2113944A26	CAP,CHIP,12PF,+5%,-5%,50V-DC,0402,C0G,-55DEG CMIN,125DEG CMAX,P
C22	2113944A40	CAP,CHIP,100PF,+5%,-5%,50V-DC,0402,C0G,-55DEG CMIN,125DEG CMAX
C23	2113944A40	CAP,CHIP,100PF,+5%,-5%,50V-DC,0402,C0G,-55DEG CMIN,125DEG CMAX
C24	2113944A40	CAP,CHIP,100PF,+5%,-5%,50V-DC,0402,C0G,-55DEG CMIN,125DEG CMAX
C25	2113944A40	CAP,CHIP,100PF,+5%,-5%,50V-DC,0402,C0G,-55DEG CMIN,125DEG CMAX
C26	2113944A40	CAP,CHIP,100PF,+5%,-5%,50V-DC,0402,C0G,-55DEG CMIN,125DEG CMAX

Ref. Des.	Part Number	Description
C27	2113944A40	CAP,CHIP,100PF,+5%,-5%,50V-DC,0402,C0G,-55DEG CMIN,125DEG CMAX
C28	2113944A40	CAP,CHIP,100PF,+5%,-5%,50V-DC,0402,C0G,-55DEG CMIN,125DEG CMAX
C29	2113944A40	CAP,CHIP,100PF,+5%,-5%,50V-DC,0402,C0G,-55DEG CMIN,125DEG CMAX
C30	2113944A40	CAP,CHIP,100PF,+5%,-5%,50V-DC,0402,C0G,-55DEG CMIN,125DEG CMAX
C31	2113944A40	CAP,CHIP,100PF,+5%,-5%,50V-DC,0402,C0G,-55DEG CMIN,125DEG CMAX
D1	48009289001	LED ARRAY,LED,5V,25A,WHITE, SMT,85,WHT 2 PIN SIDE FIRE LED HI
D2	48009289001	LED ARRAY,LED,5V,25A,WHITE, SMT,85,WHT 2 PIN SIDE FIRE LED HI
E2001	7685268E01	FLTR,FERRITE BEAD,650MA,SM,0402,CHI P,80OHM
E2002	7685268E01	FLTR,FERRITE BEAD,650MA,SM,0402,CHI P,80OHM
FL1	9171981H01	EMI FILTER,EMI/RFI,FLTR 6 CHAN EMI ESD 12PIN
FL2	9171981H01	EMI FILTER,EMI/RFI,FLTR 6 CHAN EMI ESD 12PIN
M1	NOTPLACED	-
M3	NOTPLACED	-
P2005	0985909E01	CONN,RCPT 20 PIN
R1	0613952R25	RES,MF,100KOHM,5%,.062 5W,SM,0402,200PPM/CEL,PB-FREE

Ref. Des.	Part Number	Description
R10	0613952Q37	RES,MF,33OHM,5%,.0625W, SM,0402,200PPM/CEL,PB-FREE
R16	0613952Q67	RES,MF,560OHM,5%,.0625 W,SM,0402,200PPM/CEL,PB-FREE
R19	0613952Q67	RES,MF,560OHM,5%,.0625 W,SM,0402,200PPM/CEL,PB-FREE
R2	0613952R25	RES,MF,100KOHM,5%,.062 5W,SM,0402,200PPM/CEL,PB-FREE
R2500	NOTPLACED	-
R2502	NOTPLACED	-
R2531	0613952Q77	RES,MF,1.5KOHM,5%,.0625 W,SM,0402,200PPM/CEL,PB-FREE
R2533	NOTPLACED	-
R3	0613952R25	RES,MF,100KOHM,5%,.062 5W,SM,0402,200PPM/CEL,PB-FREE
R4	0613952R25	RES,MF,100KOHM,5%,.062 5W,SM,0402,200PPM/CEL,PB-FREE
R5	0613952R25	RES,MF,100KOHM,5%,.062 5W,SM,0402,200PPM/CEL,PB-FREE
R6	0613952Q37	RES,MF,33OHM,5%,.0625W, SM,0402,200PPM/CEL,PB-FREE
R7	0613952Q37	RES,MF,33OHM,5%,.0625W, SM,0402,200PPM/CEL,PB-FREE
R8	0613952Q37	RES,MF,33OHM,5%,.0625W, SM,0402,200PPM/CEL,PB-FREE
R9	0613952Q37	RES,MF,33OHM,5%,.0625W, SM,0402,200PPM/CEL,PB-FREE
PASTE	11012015001	SOLDER PASTE
PCB	PC000261a01	PCB

## Notes

**ASTRO<sup>®</sup> APX<sup>®</sup> 1000/ APX<sup>®</sup> 2000/ APX<sup>®</sup> 4000/ APX<sup>®</sup> 4000 Li  
Digital Portable Radios**

Section 3

Appendices

## Notes



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# Appendix A EMEA Warranty, Service and Technical Support

## A.1 Warranty and Service Support

MOTOROLA SOLUTIONS, INC. ("MOTOROLA") offers long term support for its products. This support includes full exchange and/or repair of the product during the warranty period, and service/repair or spare parts support out of warranty. Any "return for exchange" or "return for repair" by an authorized Motorola Dealer must be accompanied by a Warranty Claim Form. Warranty Claim Forms are obtained by contacting an Authorized Motorola Dealer.

### A.1.1 Warranty Period and Return Instructions

The terms and conditions of warranty are defined fully in the Motorola Dealer or Distributor or Reseller contract. These conditions may change from time to time and the following notes are for guidance purposes only.

In instances where the product is covered under a "return for replacement" or "return for repair" warranty, a check of the product should be performed prior to shipping the unit back to Motorola. This is to ensure that the product has been correctly programmed or has not been subjected to damage outside the terms of the warranty.

Prior to shipping any radio back to the appropriate Motorola warranty depot, please contact Customer Resources (Please see [page A-3](#)). All returns must be accompanied by a Warranty Claim Form, available from your Customer Services representative. Products should be shipped back in the original packaging, or correctly packaged to ensure no damage occurs in transit.

### A.1.2 After Warranty Period

After the Warranty period, Motorola continues to support its products in two ways.

1. Motorola's Managed Technical Services (MTS) offers a repair service to both end users and dealers at competitive prices.
2. MTS supplies individual parts and modules that can be purchased by dealers who are technically capable of performing fault analysis and repair.

## A.2 European Radio Support Centre (ERSC)

The ERSC Customer Information Desk is available through the following service numbers:

Austria:	08 00 29 75 41	Italy:	80 08 77 387
Belgium:	08 00 72 471	Luxemburg:	08 00 23 27
Denmark:	80 88 58 80	Netherlands:	08 00 22 45 13
Finland:	08 00 11 49 910	Norway:	80 01 11 15
France:	08 00 90 30 90	Portugal:	08 00 84 95 70
Germany:	08 00 18 75 240	Spain:	90 09 84 902
Greece:	00 80 04 91 29 020	Sweden:	02 07 94 307
UK :	08 00 96 90 95	Switzerland:	08 00 55 30 82
Ireland:	18 00 55 50 21	Iceland:	80 08 147

Or dial the European Repair and Service Centre:

Tel: +49 30 6686 1555

Fax: +49 30 6686 1579

Email: ERSC@motorolasolutions.com

Please use these numbers for repair enquiries only.

## A.3 Piece Parts

Some replacement parts, spare parts, and/or product information can be ordered directly. If a complete Motorola part number is assigned to the part, it is available from Motorola Radio Products and Solutions Organization (RPSO). If no part number is assigned, the part is not normally available from Motorola. If the part number is appended with an asterisk, the part is serviceable by Motorola Depot only. If a parts list is not included, this generally means that no user-serviceable parts are available for that kit or assembly.

Orders for replacement parts, kits and assemblies should be placed directly on Motorola's local distribution/dealer organisation or via Motorola Online at: <http://www.motorola.com/emeaonline>

\* The Radio Products and Solutions Organization (RPSO) was formerly known as the Radio Products Services Division (RPSD) and/or the Accessories and Aftermarket Division (AAD).

## A.4 Technical Support

Motorola Product Services is available to assist the dealer/distributors in resolving any malfunctions which may be encountered.

**Russia and Belarus** - Andrey Nagornykh  
Telephone: +7 495 787 8910  
Fax: +7 495 785 0185  
Email: MWCB47@motorolasolutions.com

**Germany** - Customer Connect Team  
Telephone: +49 (0) 30 6686 1539  
Fax: +49 (0) 30 6686 1916  
Email: ESSC@motorolasolutions.com

**Middle East and Africa** - Wayne Holmes  
Telephone: +49 (0)6126 957 6237  
Fax: +49 (0)6126 957 6826  
Email: wayne.holmes@motorolasolutions.com

**Italy** - Ugo Gentile  
Telephone: +39 0 2822 0325  
Fax: +39 0 2822 0334  
Email: C13864@motorolasolutions.com

**France** - Armand Roy  
Telephone: +33 1 6935 7868  
Fax: +33 1 6935 7808  
Email: armand.roy@motorolasolutions.com

**France** - Laurent Irrmann  
Telephone: +33 1 6935 7866  
Fax: +33 1 6935 7808  
Email: laurent.irrmann@motorolasolutions.com

**Central and East Europe** - Sigggy Punzenberger  
Telephone: +49 (0) 6128 70 2342  
Fax: +49 (0) 6128 95 1096  
Email: TFG003@motorolasolutions.com

## A.5 Further Assistance From Motorola

You can also contact the Customer Help Desk through the following web address.  
[http://www.motorola.com/Business/US-EN/Pages/Contact\\_Us](http://www.motorola.com/Business/US-EN/Pages/Contact_Us)

## **Notes**

## Appendix B LACR Replacement Parts Ordering and Motorola Service Centers

### B.1 Commercial Warranty

#### Limited Warranty

#### MOTOROLA COMMUNICATION PRODUCTS

##### I. What This Warranty Covers And For How Long

MOTOROLA INC. ("MOTOROLA") warrants the MOTOROLA manufactured Communication Products listed below ("Product") against material defects in material and workmanship under normal use and service for the period of time from the date of purchase as scheduled below:

ASTRO APX 1000 Digital Portable Units	Three (3) Years
Product Accessories	One (1) Year

Motorola will at its option and at no charge either repair the defective Product (with new or reconditioned parts), replace it (with a new or reconditioned Product), or refund the purchase price of the defective Product during the warranty period provided it is returned before the expiration of the warranty period and in accordance with the terms of this warranty. Replaced Product, parts or boards are warranted for the balance of the original applicable warranty period. All replaced Product, parts of boards shall become the property of MOTOROLA.

This express limited warranty is extended by MOTOROLA to the original end user purchasing the Product for commercial, industrial or governmental use only and is not assignable or transferable to any other party. This is the complete warranty for the Product manufactured by MOTOROLA. MOTOROLA assumes no obligations or liability for additions or modifications to this warranty unless made in writing and signed by an officer of MOTOROLA. Unless made in a separate agreement between MOTOROLA and the original purchaser, MOTOROLA does not warrant the installation, maintenance or service of the Product.

MOTOROLA is not responsible in any way for any ancillary equipment not furnished by MOTOROLA which is attached to or used in connection with the Product, or for operation of the Product with any ancillary equipment, and all such equipment is expressly excluded from this warranty. Because each system which may use the Product is unique, MOTOROLA disclaims liability for range, coverage, or operation of the system in part or as a whole under this warranty.

## II. General Provisions

This warranty sets forth the full extent of MOTOROLA'S responsibilities regarding the Product. Repair, replacement or refund of the purchase price, at MOTOROLA'S option, is the exclusive remedy. THIS WARRANTY IS THE COMPLETE WARRANTY FOR THE PRODUCT AND IS GIVEN IN LIEU OF ALL OTHER WARRANTIES. MOTOROLA DISCLAIMS ALL OTHER WARRANTIES OR CONDITIONS, EXPRESS OR IMPLIED, INCLUDING WITHOUT LIMITATION, IMPLIED WARRANTIES OF MERCHANTABILITY AND FITNESS FOR A PARTICULAR PURPOSE. IN NO EVENT SHALL MOTOROLA BE LIABLE FOR DAMAGES IN EXCESS OF THE PURCHASE PRICE OF THE PRODUCT, FOR ANY COMMERCIAL LOSS; INCONVIENCE; LOSS OF USE, TIME, DATA, GOOD WILL, REVENUES, PROFITS OR SAVINGS; OR OTHER SPECIAL, INCIDENTAL, INDIRECT, OR CONSEQUENTIAL DAMAGES IN ANY WAY RELATED TO OR ARISING FROM THE SALE OR USE OF THE PRODUCT.

## III. How To Get Warranty Service

You must provide proof of purchase (bearing the date of purchase and Product item serial number) in order to receive warranty service and deliver or send the Product item, transportation and insurance prepaid, to an authorized warranty service location before the expiration of the warranty period. Warranty service will be provided by Motorola through one of its authorized warranty service locations. If you first contact the company which sold you the Product, it can facilitate your obtaining warranty service. You can also open a *Contact Us* case on Motorola Online (<http://www.motorolasolutions.com/businessonline>).

## IV. What This Warranty Does Not Cover

This warranty does not cover:

- A. Defects or damage resulting from use of the Product in other than its normal customary or authorized manner.
- B. Defects or damage from misuse, accident, liquid, lightning, neglect or act of God.
- C. Defects or damage from testing, maintenance, installation, alteration, modification, or adjustment not provided or authorized in writing by MOTOROLA.
- D. Breakage or damage to antennas unless caused directly by defects in material or workmanship.
- E. A Product subjected to unauthorized Product modifications, disassemblies or repairs (including, without limitation, the addition to the Product of non-Motorola supplied equipment) which adversely affect performance of the Product or interfere with Motorola's normal warranty inspection and testing of the Product to verify any warranty claim.
- F. Product which has had the serial number removed or made illegible.
- G. Freight costs to ship the product to the repair depot.
- H. Batteries (because they carry their own separate limited warranty) or consumables.
- I. Customer's failure to comply with all applicable industry and OSHA standards.
- J. A Product which, due to illegal or unauthorized alteration of the software/firmware in the Product, does not function in accordance with MOTOROLA's published specifications or the FCC type acceptance labeling in effect for the Product at the time the Product was initially distributed from MOTOROLA.
- K. Scratches or other cosmetic damage to Product surfaces that does not affect the operation of the Product.
- L. Normal and customary wear and tear.

## V. Governing Law

This Warranty is governed by the laws of the State of Illinois, USA.

## B.2 Replacement Parts Ordering

### B.2.1 Basic Ordering Information

When ordering replacement parts or equipment information, the complete identification number should be included. This applies to all components, kits, and chassis. If the component part number is not known, the order should include the number of the chassis or kit of which it is a part, and sufficient description of the desired component to identify it.

### B.2.2 Motorola Online

Motorola Online users can access our online catalog at <http://www.motorolasolutions.com/businessonline>

To register for online access:

- Have your Motorola Customer number available.
- Please go to <http://www.motorolasolutions.com/businessonline> and click on "Sign Up Now."
- Complete form and submit it.
- Contact your BDM to complete set-up and it will be done within 24 to 48 hours.

## B.3 Motorola Service Centers

### B.3.1 Servicing Information

If a unit requires further complete testing, knowledge and/or details of component level troubleshooting or service than is customarily performed at the basic level, please send the radio to a Motorola Service Center as listed below.

### B.3.2 Motorola Solutions de México, S.A.

Bosques de Alisos 125  
Col. Bosques de las Lomas CP 05120  
México D.F.  
México  
Tel: +52-55-5257-6700

### B.3.3 Motorola Solutions Colombia Ltda.

Carrera 98 No. 25G-20 Of 105  
Bogota - Colombia  
Tel: +57-1-602-2111

## Notes



# Appendix C NAG Replacement Parts Ordering and Motorola Service Centers

## C.1 Commercial Warranty

### Limited Warranty

#### MOTOROLA COMMUNICATION PRODUCTS

##### I. What This Warranty Covers And For How Long

MOTOROLA INC. ("MOTOROLA") warrants the MOTOROLA manufactured Communication Products listed below ("Product") against material defects in material and workmanship under normal use and service for the period of time from the date of purchase as scheduled below:

ASTRO APX 1000 Digital Portable Units	One (1) Year
Product Accessories	One (1) Year

Motorola will at its option and at no charge either repair the defective Product (with new or reconditioned parts), replace it (with a new or reconditioned Product), or refund the purchase price of the defective Product during the warranty period provided it is returned before the expiration of the warranty period and in accordance with the terms of this warranty. Replaced Product, parts or boards are warranted for the balance of the original applicable warranty period. All replaced Product, parts of boards shall become the property of MOTOROLA.

This express limited warranty is extended by MOTOROLA to the original end user purchasing the Product for commercial, industrial or governmental use only and is not assignable or transferable to any other party. This is the complete warranty for the Product manufactured by MOTOROLA. MOTOROLA assumes no obligations or liability for additions or modifications to this warranty unless made in writing and signed by an officer of MOTOROLA. Unless made in a separate agreement between MOTOROLA and the original purchaser, MOTOROLA does not warrant the installation, maintenance or service of the Product.

MOTOROLA is not responsible in any way for any ancillary equipment not furnished by MOTOROLA which is attached to or used in connection with the Product, or for operation of the Product with any ancillary equipment, and all such equipment is expressly excluded from this warranty. Because each system which may use the Product is unique, MOTOROLA disclaims liability for range, coverage, or operation of the system in part or as a whole under this warranty.

## II. General Provisions

This warranty sets forth the full extent of MOTOROLA'S responsibilities regarding the Product. Repair, replacement or refund of the purchase price, at MOTOROLA'S option, is the exclusive remedy. THIS WARRANTY IS THE COMPLETE WARRANTY FOR THE PRODUCT AND IS GIVEN IN LIEU OF ALL OTHER WARRANTIES. MOTOROLA DISCLAIMS ALL OTHER WARRANTIES OR CONDITIONS, EXPRESS OR IMPLIED, INCLUDING WITHOUT LIMITATION, IMPLIED WARRANTIES OF MERCHANTABILITY AND FITNESS FOR A PARTICULAR PURPOSE. IN NO EVENT SHALL MOTOROLA BE LIABLE FOR DAMAGES IN EXCESS OF THE PURCHASE PRICE OF THE PRODUCT, FOR ANY COMMERCIAL LOSS; INCONVIENCE; LOSS OF USE, TIME, DATA, GOOD WILL, REVENUES, PROFITS OR SAVINGS; OR OTHER SPECIAL, INCIDENTAL, INDIRECT, OR CONSEQUENTIAL DAMAGES IN ANY WAY RELATED TO OR ARISING FROM THE SALE OR USE OF THE PRODUCT.

## III. How To Get Warranty Service

You must provide proof of purchase (bearing the date of purchase and Product item serial number) in order to receive warranty service and deliver or send the Product item, transportation and insurance prepaid, to an authorized warranty service location before the expiration of the warranty period. Warranty service will be provided by Motorola through one of its authorized warranty service locations. If you first contact the company which sold you the Product, it can facilitate your obtaining warranty service. You can also open a *Contact Us* case on Motorola Online (<http://www.motorolasolutions.com/businessonline>).

## IV. What This Warranty Does Not Cover

This warranty does not cover:

- A. Defects or damage resulting from use of the Product in other than its normal customary or authorized manner.
- B. Defects or damage from misuse, accident, liquid, lightning, neglect or act of God.
- C. Defects or damage from testing, maintenance, installation, alteration, modification, or adjustment not provided or authorized in writing by MOTOROLA.
- D. Breakage or damage to antennas unless caused directly by defects in material or workmanship.
- E. A Product subjected to unauthorized Product modifications, disassemblies or repairs (including, without limitation, the addition to the Product of non-Motorola supplied equipment) which adversely affect performance of the Product or interfere with Motorola's normal warranty inspection and testing of the Product to verify any warranty claim.
- F. Product which has had the serial number removed or made illegible.
- G. Freight costs to ship the product to the repair depot.
- H. Batteries (because they carry their own separate limited warranty) or consumables.
- I. Customer's failure to comply with all applicable industry and OSHA standards.
- J. A Product which, due to illegal or unauthorized alteration of the software/firmware in the Product, does not function in accordance with MOTOROLA's published specifications or the FCC type acceptance labeling in effect for the Product at the time the Product was initially distributed from MOTOROLA.
- K. Scratches or other cosmetic damage to Product surfaces that does not affect the operation of the Product.
- L. Normal and customary wear and tear.

## V. Governing Law

This Warranty is governed by the laws of the State of Illinois, USA.

## C.2 Replacement Parts Ordering

### C.2.1 Basic Ordering Information

When ordering replacement parts or equipment information, the complete identification number should be included. This applies to all components, kits, and chassis. If the component part number is not known, the order should include the number of the chassis or kit of which it is a part, and sufficient description of the desired component to identify it.

### C.2.2 Motorola Online

Motorola Online users can access our online catalog at

<http://motorola.com/businessonline>

To register for online access, please call 1-800-422-4210 (for U.S. and Canada Service Centers only). International customers can obtain assistance at <http://motorola.com/businessonline>

### C.2.3 Mail Orders

Mail orders are only accepted by the US Federal Government Markets Division (USFGMD).

Motorola  
7031 Columbia Gateway Drive  
3rd Floor - Order Processing  
Columbia, MD 21046  
U.S.A.

### C.2.4 Telephone Orders

Radio Products and Solutions Organization\*  
(United States and Canada)  
7:00 AM to 7:00 PM (Central Standard Time)  
Monday through Friday (Chicago, U.S.A.)  
1-800-422-4210  
1-847-538-8023 (United States and Canada)

U.S. Federal Government Markets Division (USFGMD)  
1-877-873-4668  
8:30 AM to 5:00 PM (Eastern Standard Time)

### C.2.5 Fax Orders

Radio Products and Solutions Organization\*  
(United States and Canada)  
1-800-622-6210  
1-847-576-3023 (United States and Canada)

USFGMD  
(Federal Government Orders)  
1-800-526-8641 (For Parts and Equipment Purchase Orders)

## **C.2.6 Parts Identification**

Radio Products and Solutions Organization\*  
(United States and Canada)  
1-800-422-4210

## **C.2.7 Product Customer Service**

Radio Products and Solutions Organization (United States and Canada)  
1-800-927-2744

\* The Radio Products and Solutions Organization (RPSO) was formerly known as the Radio Products Services Division (RPSD) and/or the Accessories and Aftermarket Division (AAD).

## **C.3 Motorola Service Centers**

### **C.3.1 Servicing Information**

If a unit requires further complete testing, knowledge and/or details of component level troubleshooting or service than is customarily performed at the basic level, please send the radios to a Motorola Service Center as listed below.

### **C.3.2 Motorola Service Center**

Motorola Repair  
2214 Galvin Drive  
Elgin, IL 60123  
Tel: 1-800-221-7144

### **C.3.3 Motorola Federal Technical Center**

10105 Senate Drive  
Lanham, MD 20706  
Tel: 1-800-969-6680  
Fax: 1-800-784-4133

### **C.3.4 Motorola Canadian Technical Logistics Center**

Motorola Canada Ltd.  
8133 Warden Avenue  
Markham, Ontario, L6G 1B3  
Tel: 1-800-543-3222  
Fax: 1-888-331-9872 or 1-905-948-5970

## Appendix D Asia-Pacific Warranty, Service and Technical Support

### D.1 Replacement Parts Ordering

Some replacement parts, spare parts, and/or product information can be ordered directly. While parts may be assigned with a Motorola part number, this does not guarantee that they are available from Motorola Radio Products and Solutions Organization (RPSO). Some parts may have become obsolete and no longer available in the market due to cancellations by the supplier. If no Motorola part number is assigned, the part is normally not available from Motorola, or is not a user-serviceable part.

Orders for replacement parts should be placed directly on Motorola Online. For Level 2 maintenance, only Motorola Service Centers can perform these functions. Any tampering by nonauthorized Motorola Service Centers voids the warranty of your radio. To find out more about Motorola Service Centers, please visit <http://www.motorolasolutions.com/governmentandenterprise>

### D.2 Warranty Period and Return Instructions

The terms and conditions of warranty are defined fully in the Motorola Dealer or Distributor or Reseller contract. These conditions may change from time to time and the following notes are for guidance purposes only. In instances where the product is covered under a "return for replacement" or "return for repair" warranty, a check of the product should be performed prior to shipping the unit back to Motorola. This is to ensure that the product has been correctly programmed or has not been subjected to damage outside the terms of the warranty.

Prior to shipping any radio back to the appropriate Motorola warranty depot, please contact Customer Resources or your Motorola dealer, distributor or reseller. All returns must be accompanied by a Warranty Claim Form, available from your Customer Service representative or Motorola Online (MOL) or your Motorola dealer, distributor or reseller. Products should be shipped back in the original packaging, or correctly packaged to ensure no damage occurs in transit.

ASTRO APX 1000 Digital Portable Units	One (1) Year
Product Accessories	One (1) Year

## **D.3 Motorola Service Centers**

### **D.3.1 Servicing Information**

If a unit requires further complete testing, knowledge and/or details of component level troubleshooting or service than is customarily performed at the basic level, please send the radios to a Motorola Service Center as listed below.

### **D.3.2 Motorola Solutions Singapore Pte. Ltd.**

c/o Azure Engineering,  
49 Jalan Pemimpin,  
#03-11 APS Industrial Building,  
Singapore 577203

Contact: Mareen Phua  
E-mail: mareen@azure.com.sg  
Tel: +65-6352-6383  
Enquiry: Tay Yong Hock  
E-mail: yonghock.tay@motorolasolutions.com

### **D.3.3 Motorola Solutions Sdn. Bhd.**

Level 14, Persoft Tower,  
No. 68, Pesiaran Tropicana,  
47410 Petaling Jaya,  
Selangor Darul Ehsan,  
Malaysia

Contact: Koh Tiong Eng  
E-mail: A21001@motorolasolutions.com  
Tel: +603-7809-0000

### **D.3.4 PT. Motorola Solutions Indonesia**

30th Floor, Gedung BRI II, Suite 3001,  
Jl. Jend. Sudirman Kav. 44-46,  
Jakarta 10210,  
Indonesia.

Contact: Eko Haryanto  
E-mail: Eko.Haryanto@motorolasolutions.com  
Tel: +62-21-3043-5239

### **D.3.5 Motorola Solutions (Thailand) Ltd.**

142 Two Pacific Place Suite 2201,  
3220 Sukhumvit Road,  
Klongtoey,  
Bangkok 10110.

Contact: Nitas Vatanasupapon  
E-mail: Nitas@motorolasolutions.com  
Tel: +662-653-220  
Fax: +668-254-5922

### **D.3.6 Motorola Solutions India Pvt. Ltd.**

C/o Communication Test Design India Private Limited,  
#4, 5 Maruthi Industrial Estate,  
Rajapalya, Hoodi Village,  
Bangalore - 560048,  
India.

Contact: K. Umamaheswari  
E-mail: [umamaheshwari@motorolasolutions.com](mailto:umamaheshwari@motorolasolutions.com)  
Tel: +91-9844218850

### **D.3.7 Motorola Solutions (China) Co. Ltd.**

No. 1 East of Wang Jing Road,  
Chao Yang District,  
Beijing, 100102,  
P.R. China

Contact: Sophy Wang  
E-mail: [C18170@motorolasolutions.com](mailto:C18170@motorolasolutions.com)  
Tel: +86-10-8473-2106

### **D.3.8 Motorola Solutions Asia Pacific Ltd.**

Unit 1807-1812, 18/F, Two Harbourfront,  
22 Tak Fung Street,  
Hung Hom, Kowloon,  
Hong Kong.

Contact: Judy Leung  
E-mail: [Judy.Leung@motorolasolutions.com](mailto:Judy.Leung@motorolasolutions.com)  
Tel: 852-2966-4823

### **D.3.9 Motorola Communications Philippines, Inc.**

Unit 2102, One Global Place Building,  
5th Ave., Bonifacio Global City,  
Taguig, Philippines 1634.

Contact: Arthur Nieves  
E-mail: [Arthur.Nieves@motorolasolutions.com](mailto:Arthur.Nieves@motorolasolutions.com)  
Tel: +632 858-7500  
Fax: +632 841-0681

**D.3.10 Motorola Solutions Korea, Inc.**

9th Floor, Hibrand Building,  
215, Yangjae-Dong, Seocho-Gu,  
Seoul, 137-924,  
Korea.

Contact: KS Kwak  
E-mail: r45321@motorolasolutions.com  
Tel: +822-3497-3649

**D.3.11 Motorola Solutions Taiwan, Ltd.**

8F, No. 9, Songgao Rd.,  
Taipei 110,  
Taiwan (R.O.C.)

Contact: Michael Chou  
E-mail: ftpe239@motorolasolutions.com  
Tel: +886-2-8729 8000

**D.3.12 Motorola Solutions Australia Pty. Ltd.**

10 Wesley Court,  
Tally Ho Business Park,  
East Burwood Victoria 3151,  
Australia.

Contact: Adrian Connor  
E-mail: c19183@motorolasolutions.com  
Tel: +613-9847-7725



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# Glossary

This glossary contains an alphabetical listing of terms and their definitions that are applicable to ASTRO portable and mobile subscriber radio products. All terms do not necessarily apply to all radios, and some terms are merely generic in nature.

Term	Definition
<b>A/D</b>	<i>See analog-to-digital conversion.</i>
<b>Abacus IC</b>	A custom integrated circuit providing a digital receiver intermediate frequency (IF) backend.
<b>ADC</b>	<i>See analog-to-digital converter.</i>
<b>ADDAG</b>	<i>See Analog-to-Digital, Digital-to-Analog and Glue.</i>
<b>ALC</b>	<i>See automatic level control.</i>
<b>analog</b>	Refers to a continuously variable signal or a circuit or device designed to handle such signals. <i>See also digital.</i>
<b>Analog-to-Digital, Digital-to-Analog and Glue</b>	An integrated circuit designed to be an interface between the radio's DSP, which is digital, and the analog transmitter and receiver ICs.
<b>analog-to-digital conversion</b>	Conversion of an instantaneous dc voltage level to a corresponding digital value. <i>See also D/A.</i>
<b>analog-to-digital converter</b>	A device that converts analog signals into digital data. <i>See also DAC.</i>
<b>automatic level control</b>	A circuit in the transmit RF path that controls RF power amplifier output, provides leveling over frequency and voltage, and protects against high VSWR.
<b>band</b>	Frequencies allowed for a specific purpose.
<b>BBP</b>	<i>See baseband interface port.</i>
<b>baseband interface port</b>	Synchronous serial interface to the transceiver board used to transfer transmit and receive audio data.
<b>BGA</b>	<i>See ball grid array.</i>
<b>ball grid array</b>	A type of IC package characterized by solder balls arranged in a grid that are located on the underside of the package.
<b>CODEC</b>	<i>See coder/decoder.</i>

Term	Definition
<b>codeplug</b>	Firmware that contains the unique personality for a system or device. A codeplug is programmable and allows changes to system and unit parameters. <i>See also firmware.</i>
<b>coder/decoder</b>	A device that encodes or decodes a signal.
<b>CPS</b>	<i>See Customer Programming Software.</i>
<b>Customer Programming Software</b>	Software with a graphical user interface containing the feature set of an ASTRO radio.
<b>D/A</b>	<i>See digital-to-analog conversion.</i>
<b>DAC</b>	<i>See digital-to-analog converter.</i>
<b>Data terminal equipment</b>	Data terminal equipment; for example, a computer.
<b>default</b>	A pre-defined set of parameters.
<b>digital</b>	Refers to data that is stored or transmitted as a sequence of discrete symbols from a finite set; most commonly this means binary data represented using electronic or electromagnetic signals. <i>See also analog.</i>
<b>digital-to-analog conversion</b>	Conversion of a digital signal to a voltage that is proportional to the input value. <i>See also A/D.</i>
<b>digital-to-analog converter</b>	A device that converts digital data into analog signals. <i>See also ADC.</i>
<b>Digital Private-Line</b>	A type of digital communication that utilizes privacy call, as well as memory channel and busy channel lock-out to enhance communication efficiency.
<b>digital signal processor</b>	A microcontroller specifically designed for performing the mathematics involved in manipulating analog information, such as sound, that has been converted into a digital form. DSP also implies the use of a data compression technique.
<b>digital signal processor code</b>	Object code executed by the Digital Signal Processor in an ASTRO subscriber radio. The DSP is responsible for computation-intensive tasks, such as decoding ASTRO signaling.
<b>DPL</b>	<i>See Digital Private-Line. See also PL.</i>
<b>DSP</b>	<i>See digital signal processor.</i>
<b>DSP code</b>	<i>See digital signal processor code.</i>
<b>DTE</b>	<i>See Data terminal equipment.</i>
<b>EEPOT</b>	Electrically Programmable Digital Potentiometer.

Term	Definition
<b>EEPROM</b>	<i>See Electrically Erasable Programmable Read-Only Memory.</i>
<b>Electrically Erasable Programmable Read-Only Memory</b>	A special type of PROM that can be erased by exposing it to an electrical charge. An EEPROM retains its contents even when the power is turned off.
<b>Embedded Multi Media Card</b>	Type of memory used.
<b>eMMC</b>	<i>See Embedded Multi Media Card.</i>
<b>FCC</b>	Federal Communications Commission.
<b>firmware</b>	Code executed by an embedded processor such as the Host or DSP in a subscriber radio. This type of code is typically resident in non-volatile memory and as such is more difficult to change than code executed from RAM.
<b>FGU</b>	<i>See frequency generation unit.</i>
<b>flash</b>	A non-volatile memory device similar to an EEPROM. Flash memory can be erased and reprogrammed in blocks instead of one byte at a time.
<b>FLASHcode</b>	A 13-digit code which uniquely identifies the System Software Package and Software Revenue Options that are enabled in a particular subscriber radio. FLASHcodes are only applicable for radios which are upgradeable through the FLASHport process.
<b>FLASHport</b>	A Motorola term that describes the ability of a radio to change memory. Every FLASHport radio contains a FLASHport EEPROM memory chip that can be software written and rewritten to, again and again.
<b>FMR</b>	<i>See Florida Manual Revision.</i>
<b>Florida Manual Revision</b>	A document that provides interim updates to a publication until the entire publication can be updated and reissued.
<b>FracN</b>	A Motorola-proprietary, CMOS fractional-N frequency synthesizer with built-in, dual-port modulation.
<b>frequency</b>	Number of times a complete electromagnetic-wave cycle occurs in a fixed unit of time (usually one second).
<b>frequency generation unit</b>	This unit generates ultra-stable, low-phase noise master clock and other derived synchronization clocks that are distributed throughout the communication network.
<b>GCAI</b>	Global Connector Accessory Interface.
<b>General-Purpose Input/Output</b>	Pins whose function is programmable.

Term	Definition
<b>Global Control Audio and Power IC</b>	A mixed-signal (analog and digital) integrated circuit that provides control, audio, and voltage regulation functionality for the Controller board.
<b>GPIO</b>	<i>See General-Purpose Input/Output.</i>
<b>host code</b>	Object code executed by the host processor in an ASTRO subscriber radio. The host is responsible for control-oriented tasks such as decoding and responding to user inputs.
<b>IC</b>	<i>See integrated circuit.</i>
<b>IF</b>	Intermediate Frequency.
<b>IMBE</b>	A sub-band, voice-encoding algorithm used in ASTRO digital voice.
<b>inbound signaling word</b>	Data transmitted on the control channel from a subscriber unit to the central control unit.
<b>integrated circuit</b>	An assembly of interconnected components on a small semiconductor chip, usually made of silicon. One chip can contain millions of microscopic components and perform many functions.
<b>ISW</b>	<i>See inbound signaling word.</i>
<b>key-variable loader</b>	A device used to load encryption keys into a radio.
<b>kHz</b>	<i>See kilohertz.</i>
<b>kilohertz</b>	One thousand cycles per second. Used especially as a radio-frequency unit.
<b>KVL</b>	<i>See key-variable loader.</i>
<b>LCD</b>	<i>See liquid-crystal display.</i>
<b>LED</b>	<i>See light emitting diode.</i>
<b>light emitting diode</b>	An electronic device that lights up when electricity is passed through it.
<b>liquid-crystal display</b>	An LCD uses two sheets of polarizing material with a liquid-crystal solution between them. An electric current passed through the liquid causes the crystals to align so that light cannot pass through them.
<b>LO</b>	Local oscillator.
<b>low-speed handshake</b>	150-baud digital data sent to the radio during trunked operation while receiving audio.
<b>LSH</b>	<i>See low-speed handshake.</i>
<b>Master In Slave Out</b>	SPI data line from a peripheral to the MCU.
<b>Master Out Slave In</b>	SPI data line from the MCU to a peripheral.

Term	Definition
<b>MCU</b>	<i>See microcontroller unit.</i>
<b>MDC</b>	Motorola Digital Communications.
<b>MDI</b>	MCU/DSP Interface internal to the Patriot IC.
<b>MHz</b>	<i>See Megahertz.</i>
<b>Megahertz</b>	One million cycles per second. Used especially as a radio-frequency unit.
<b>microcontroller unit</b>	Also written as $\mu\text{C}$ . A microprocessor that contains RAM and ROM components, as well as communications and programming components and peripherals.
<b>MISO</b>	<i>See Master In Slave Out.</i>
<b>MOSI</b>	<i>See Master Out Slave In.</i>
<b>multiplexer</b>	An electronic device that combines several signals for transmission on some shared medium (e.g., a telephone wire).
<b>MUX</b>	<i>See multiplexer.</i>
<b>NiMH</b>	Nickel-metal-hydride.
<b>OMPAC</b>	<i>See over-molded pad-array carrier.</i>
<b>open architecture</b>	A controller configuration that utilizes a microprocessor with extended ROM, RAM, and EEPROM.
<b>oscillator</b>	An electronic device that produces alternating electric current and commonly employs tuned circuits and amplifying components.
<b>OSW</b>	<i>See outbound signaling word.</i>
<b>OTAR</b>	<i>See over-the-air rekeying.</i>
<b>outbound signaling word</b>	Data transmitted on the control channel from the central controller to the subscriber unit.
<b>over-molded pad-array carrier</b>	A Motorola custom IC package, distinguished by the presence of solder balls on the bottom pads.
<b>over-the-air rekeying</b>	Allows the dispatcher to remotely reprogram the encryption keys in the radio.
<b>PA</b>	Power amplifier.
<b>paging</b>	One-way communication that alerts the receiver to retrieve a message.
<b>PC Board</b>	Printed Circuit Board. Also referred to as a PCB.
<b>PCIC</b>	<i>See Power Control IC.</i>

Term	Definition
<b>phase-locked loop</b>	A circuit in which an oscillator is kept in phase with a reference, usually after passing through a frequency divider.
<b>PL</b>	<i>See private-line tone squelch.</i>
<b>PLL</b>	<i>See phase-locked loop.</i>
<b>Power Control IC</b>	The power control IC is intended for closed-loop bias control of power amplifiers. The device facilitates accurate control of the current delivered to the power amplifier (PA) via a control voltage.
<b>private-line tone squelch</b>	A continuous sub-audible tone that is transmitted along with the carrier. <i>See also DPL.</i>
<b>Programmable Read-Only Memory</b>	A memory chip on which data can be written only once. Once data has been written onto a PROM, it remains there forever.
<b>PROM</b>	<i>See Programmable Read-Only Memory.</i>
<b>PTT</b>	<i>See Push-to-Talk.</i>
<b>Push-to-Talk</b>	The switch or button usually located on the left side of the radio which, when pressed, causes the radio to transmit. When the PTT is released, the unit returns to receive operation.
<b>radio frequency</b>	The portion of the electromagnetic spectrum between audio sound and infrared light (approximately 10 kHz to 10 GHz).
<b>radio frequency power amplifier</b>	Amplifier having one or more active devices to amplify radio signals.
<b>RAM</b>	<i>See random access memory.</i>
<b>random access memory</b>	A type of computer memory that can be accessed randomly; that is, any byte of memory can be accessed without touching the preceding bytes.
<b>read-only memory</b>	A type of computer memory on which data has been prerecorded. Once data has been written onto a ROM chip, it cannot be removed and can only be read.
<b>real-time clock</b>	A module that keeps track of elapsed time even when a computer is turned off.
<b>receiver</b>	Electronic device that amplifies RF signals. A receiver separates the audio signal from the RF carrier, amplifies it, and converts it back to the original sound waves.
<b>registers</b>	Short-term data-storage circuits within the microcontroller unit or programmable logic IC.
<b>repeater</b>	Remote transmit/receive facility that re-transmits received signals in order to improve communications range and coverage (conventional operation).

Term	Definition
<b>repeater/talkaround</b>	A conventional radio feature that permits communication through a receive/transmit facility, which re-transmits received signals in order to improve communication range and coverage.
<b>RESET</b>	Reset line: an input to the microcontroller that restarts execution.
<b>RF</b>	<i>See radio frequency.</i>
<b>RF PA</b>	<i>See radio frequency power amplifier.</i>
<b>ROM</b>	<i>See read-only memory.</i>
<b>RPCIC</b>	Regulator/power control IC.
<b>RTC</b>	<i>See real-time clock.</i>
<b>RX</b>	Receive.
<b>RX DATA</b>	Recovered digital data line.
<b>SAP</b>	<i>See Serial Audio CODEC Port.</i>
<b>SCI IN</b>	<i>See Serial Communication Interface Input Line.</i>
<b>Serial Audio CODEC Port</b>	SSI to and from the GCAP II IC CODEC used to transfer transmit and receive audio data.
<b>Serial Communication Interface Input Line</b>	A full-duplex (receiver/transmitter) asynchronous serial interface.
<b>Serial Peripheral Interface</b>	How the microcontroller communicates to modules and ICs through the CLOCK and DATA lines.
<b>signal</b>	An electrically transmitted electromagnetic wave.
<b>Signal Qualifier mode</b>	An operating mode in which the radio is muted, but still continues to analyze receive data to determine RX signal type.
<b>softpot</b>	<i>See software potentiometer.</i>
<b>software</b>	Computer programs, procedures, rules, documentation, and data pertaining to the operation of a system.
<b>software potentiometer</b>	A computer-adjustable electronic attenuator.
<b>spectrum</b>	Frequency range within which radiation has specific characteristics.
<b>SPI</b>	<i>See Serial Peripheral Interface.</i>
<b>squelch</b>	Muting of audio circuits when received signal levels fall below a pre-determined value. With carrier squelch, all channel activity that exceeds the radio's preset squelch level can be heard.

Term	Definition
<b>SRAM</b>	<i>See static RAM.</i>
<b>SSI</b>	<i>See Synchronous Serial Interface.</i>
<b>Standby mode</b>	An operating mode in which the radio is muted but still continues to monitor data.
<b>static RAM</b>	A type of memory used for volatile, program/data memory that does not need to be refreshed.
<b>Synchronous Serial Interface</b>	DSP interface to peripherals that consists of a clock signal line, a frame synchronization signal line, and a data line.
<b>system central controllers</b>	Main control unit of the trunked dispatch system; handles ISW and OSW messages to and from subscriber units ( <i>See ISW and OSW</i> ).
<b>system select</b>	The act of selecting the desired operating system with the system-select switch (also, the name given to this switch).
<b>thin small-outline package</b>	A type of dynamic random-access memory (DRAM) package that is commonly used in memory applications.
<b>time-out timer</b>	A timer that limits the length of a transmission.
<b>TOT</b>	<i>See time-out timer.</i>
<b>transceiver</b>	Transmitter-receiver. A device that both transmits and receives analog or digital signals. Also abbreviated as XCVR.
<b>transmitter</b>	Electronic equipment that generates and amplifies an RF carrier signal, modulates the signal, and then radiates it into space.
<b>TSOP</b>	<i>See thin small-outline package.</i>
<b>TX</b>	Transmit.
<b>UART</b>	<i>See also Universal Asynchronous Receiver Transmitter.</i>
<b>UHF</b>	Ultra-High Frequency.
<b>Universal Asynchronous Receiver Transmitter</b>	A microchip with programming that controls a computer's interface to its attached serial devices.
<b>Universal Connector</b>	Interface point for all accessories to the radio.
<b>Universal Serial Bus</b>	An external bus standard that supports data transfer rates of 12 Mbps.
<b>USB</b>	<i>See Universal Serial Bus.</i>
<b>VCO</b>	<i>See voltage-controlled oscillator.</i>
<b>VC0B IC</b>	Voltage-Controlled Oscillator Buffer IC.



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Term	Definition
<b>vector sum excited linear predictive coding</b>	A voice-encoding technique used in ASTRO digital voice.
<b>VIP</b>	Vehicle Interface Port.
<b>vocoder</b>	An electronic device for synthesizing speech by implementing a compression algorithm particular to voice. <i>See also voice encoder.</i>
<b>vocoder/controller</b>	A PC board that contains an ASTRO radio's microcontroller, DSP, memory, audio and power functions, and interface support circuitry.
<b>voice encoder</b>	The DSP-based system for digitally processing analog signals, and includes the capabilities of performing voice compression algorithms or voice encoding. <i>See also vocoder.</i>
<b>voltage-controlled oscillator</b>	An oscillator in which the frequency of oscillation can be varied by changing a control voltage.
<b>VSELP</b>	<i>See vector sum excited linear predictive coding.</i>

## Notes

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## Notes





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