

PROFESSIONAL DIGITAL TWO-WAY RADIO



# MOTOTRBO™ PORTABLE DETAILED SERVICE MANUAL

**XPR™ 6550 DISPLAY PORTABLE (WITH GPS)**

**XPR™ 6500 DISPLAY PORTABLE**

**XPR™ 6350 NON-DISPLAY PORTABLE (WITH GPS)**

**XPR™ 6300 NON-DISPLAY PORTABLE**

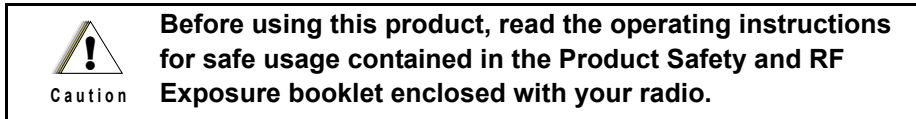
**XPR™ 6100 NON-DISPLAY PORTABLE**



# Foreword

This manual covers all models of the XPR series Portable Radios, unless otherwise specified. It includes all the information necessary to maintain peak product performance and maximum working time, using levels 1 and 2 maintenance procedures. This level of service goes down to the board replacement level and is typical of some local service centers, Motorola Authorized Dealers, self-maintained customers, and distributors.

## 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 RF energy awareness information and operating instructions in the Product Safety and RF Exposure booklet enclosed with your radio (Motorola Publication part number 6881095C98) to ensure compliance with RF energy exposure limits.**

**For a list of Motorola-approved antennas, batteries, and other accessories, visit the following web site which lists approved accessories: <http://www.motorolasolutions.com/governmentandenterprise>**

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## Document History

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

Edition	Description	Date
6880309T31-A	Initial Release	May 2007
6880309T31-B	Added VHF band information.	June 2007
6880309T31-C	Updated front cover. Updated Maintenance chapter.	Oct. 2007
6880309T31-D	Added UHF2 band information.	June 2008
6880309T31-E	Added new Schematics for UHF and VHF Updated Partslist for UHF and VHF Added Controller Schematic for 8415113H13 Updated parts list.	Sept. 2011
6880309T31-F	XPR 6100 model information added Added PCB and parts list for UHF1 and VHF Added controller schematics for 8486716Z23, 8486716Z24, 8415113H19, 8415113H20	Jan. 2012

## Notes

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## Related Publications

IMPRES Adaptive Single-Unit Charger User Manual .....	6816787H01
IMPRES Adaptive Multi-Unit Charger User Manual .....	6816789H01
IMPRES Adaptive Multi-Unit Charger Service Manual .....	6871357L01
Remote Speaker Microphone User Manual .....	6871003L01
IMPRES Remote Speaker Microphone User Manual .....	6871004L01
Factory Mutual Approval Manual .....	6871532L01
*MOTOTRBO™ Portable User Guide CD .....	HKLN4282_

\*CD consists of:

- XPR™ 6300/6350 User Guide
- XPR™ 6300/6350 Quick Reference Card
- XPR™ 6500/6550 User Guide
- XPR™ 6500/6550 Quick Reference Card
- Safety Leaflet

**NOTE** XPR 6100 User Guide is only available via download and not part of the HKLN4282 CD kit.



# Commercial Warranty

## Limited Warranty

### MOTOROLA COMMUNICATION PRODUCTS

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Product Accessories (Excluding Batteries and Chargers)	One (1) Year

The portables additionally ship with a standard 1-year Repair Service Advantage (RSA) (for U.S. customers) or 1-year Extended Warranty (for Canada customers). However, at the time of order, you may choose to omit these warranties. For more RSA or Extended Warranty information, please refer to the portable price pages or Motorola Online (<https://businessonline.motorola.com>) > Resource Center > Services > Service Product Offerings > Repair Service Advantage or Extended Warranty.

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- G. Rechargeable batteries if:
  - any of the seals on the battery enclosure or cells are broken or show evidence of tampering.
  - the damage or defect is caused by charging or using the battery in equipment or service other than the Product for which it is specified.
- H. Freight costs to the repair depot.



- I. 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.
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- A. that MOTOROLA will be notified promptly in writing by such purchaser of any notice of such claim;
- B. that MOTOROLA will have sole control of the defense of such suit and all negotiations for its settlement or compromise; and
- C. should the Product or parts become, or in MOTOROLA's opinion be likely to become, the subject of a claim of infringement of a United States patent, that such purchaser will permit MOTOROLA, at its option and expense, either to procure for such purchaser the right to continue using the Product or parts or to replace or modify the same so that it becomes noninfringing or to grant such purchaser a credit for the Product or parts as depreciated and accept its return. The depreciation will be an equal amount per year over the lifetime of the Product or parts as established by MOTOROLA.

MOTOROLA will have no liability with respect to any claim of patent infringement which is based upon the combination of the Product or parts furnished hereunder with software, apparatus or devices not furnished by MOTOROLA, nor will MOTOROLA have any liability for the use of ancillary equipment or software not furnished by MOTOROLA which is attached to or used in connection with the Product. The foregoing states the entire liability of MOTOROLA with respect to infringement of patents by the Product or any parts thereof.

Laws in the United States and other countries preserve for MOTOROLA certain exclusive rights for copyrighted MOTOROLA software such as the exclusive rights to reproduce in copies and distribute copies of such Motorola software. MOTOROLA software may be used in only the Product in which the software was originally embodied and such software in such Product may not be replaced, copied, distributed, modified in any way, or used to produce any derivative thereof. No other use including, without limitation, alteration, modification, reproduction, distribution, or reverse engineering of such MOTOROLA software or exercise of rights in such MOTOROLA software is permitted. No license is granted by implication, estoppel or otherwise under MOTOROLA patent rights or copyrights.

## VII. Governing Law

This Warranty is governed by the laws of the State of Illinois, USA.

# Battery and Charger Warranty

## Workmanship Warranty

The workmanship warranty guarantees against defects in workmanship under normal use and service.

All MOTOTRBO Batteries	Two (2) Years
IMPRES Chargers (Single-Unit and Multi-Unit, Non-Display)	Two (2) Years
IMPRES Chargers (Multi-Unit with Display)	One (1) Year

## Capacity Warranty

The capacity warranty guarantees 80% of the rated capacity for the warranty duration.

Nickel Metal-Hydride (NiMH) or Lithium-Ion (Li-Ion) Batteries	12 Months
IMPRES Batteries, When Used Exclusively with IMPRES Chargers	18 Months

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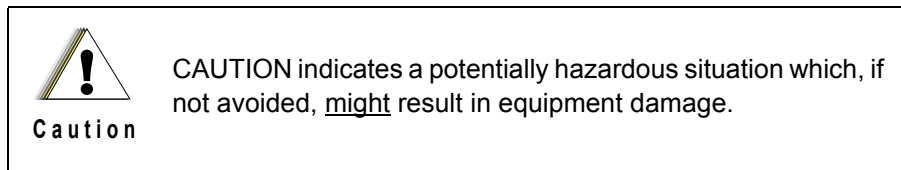
# Section 1

## INTRODUCTION

### 1.0 Notations Used in This Manual

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

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



### 2.0 Radio Description

The XPR series portable radios are available in the following frequency ranges and power levels.

*Table 1-1. Radio Frequency Ranges and Power Levels*

Frequency Band	Bandwidth	Power Level
UHF R1	403–470 MHz	1 or 3.5, 4 Watt
UHF R2	450–512 MHz	1 or 4 Watt
VHF	136–174 MHz	1 or 3.5, 5 Watt

These radios are among the most sophisticated two-way radios available. They have a robust design for radio users who need high performance, quality, and reliability in their daily communications. This architecture provides the capability of supporting a multitude of legacy and advanced features resulting in a more cost-effective two-way radio communications solution.

## Notes

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## Section 2

# MAINTENANCE

### 1.0 Introduction

This chapter provides details about the following

- Preventive maintenance (inspection and cleaning).
- Safe handling of CMOS and LDMOS devices.
- Repair procedures and techniques

### 2.0 Preventive Maintenance

Periodic visual inspection and cleaning is recommended.

#### 2.1 Inspection

Check that the external surfaces of the radio are clean, and that all external controls and switches are functional. It is not recommended to inspect the interior electronic circuitry.

#### 2.2 Cleaning Procedures

The following procedures describe the recommended cleaning agents and the methods to be used when cleaning the external and internal surfaces of the radio. External surfaces include the front cover, housing assembly and battery case. These surfaces should be cleaned whenever a periodic visual inspection reveals the presence of smudges, grease, and/or grime.

**NOTE** Internal surfaces should be cleaned only when the radio is disassembled for service or repair.

The only recommended agent for cleaning the external radio surfaces is a 0.5% solution of a mild dishwashing detergent in water. The only factory recommended liquid for cleaning the printed circuit boards and their components is isopropyl alcohol (100% by volume).



**Caution**

The effects of certain chemicals and their vapors can have harmful results on certain plastics. Avoid using aerosol sprays, tuner cleaners and other chemicals.

#### Cleaning External Plastic Surfaces

Apply the 0.5% detergent-water solution sparingly with a stiff, non-metallic, short-bristled brush to work all loose dirt away from the radio. Use a soft, absorbent, lintless cloth or tissue to remove the

solution and dry the radio. Make sure that no water remains entrapped near the connectors, cracks, or crevices.

### **Cleaning Internal Circuit Boards and Components**

Isopropyl alcohol (100%) may be applied with a stiff, non-metallic, short-bristled brush to dislodge embedded or caked materials located in hard-to-reach areas. The brush stroke should direct the dislodged material out and away from the inside of the radio. Make sure that controls or tunable components are not soaked with alcohol. Do not use high-pressure air to hasten the drying process since this could cause the liquid to collect in unwanted places. After completing of the cleaning process, use a soft, absorbent, lintless cloth to dry the area. Do not brush or apply any isopropyl alcohol to the frame, front cover or back cover.

**NOTE** Always use a fresh supply of alcohol and a clean container to prevent contamination by dissolved material (from previous usage).

## **2.3 Safe Handling of CMOS and LDMOS Devices**

Complementary metal-oxide semiconductor (CMOS) devices are used in this family of radios, and are susceptible to damage by electrostatic 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 CMOS circuits and are especially important in low humidity conditions.

DO NOT attempt to disassemble the radio without first referring to the following CAUTION statement.

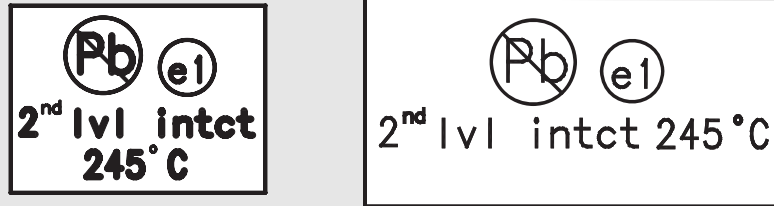
**Caution**

**This radio contains static-sensitive devices. Do not open the radio unless you are properly grounded. Take the following precautions when working on this unit:**

- Store and transport all CMOS devices in conductive material so that all exposed leads are shorted together. Do not insert CMOS devices into conventional plastic “snow” trays used for storage and transportation of other semiconductor devices.
- Ground the working surface of the service bench to protect the CMOS device. We recommend using a wrist strap, two ground cords, a table mat, and a floor mat.
- Wear a conductive wrist strap in series with a 100k resistor to ground. (Replacement wrist straps that connect to the bench top covering are Motorola part number 4280385A59).
- Do not wear nylon clothing while handling CMOS devices.
- Do not insert or remove CMOS devices with power applied. Check all power supplies used for testing CMOS devices to be certain that there are no voltage transients present.
- When straightening CMOS pins, provide ground straps for the apparatus used.
- When soldering, use a grounded soldering iron.
- If at all possible, handle CMOS devices by the package and not by the leads. Prior to touching the unit, touch an electrical ground to remove any static charge that you may have accumulated. The package and substrate may be electrically common. If so, the reaction of a discharge to the case would cause the same damage as touching the leads.

### 3.0 Repair Procedures and Techniques — General

**NOTE** Environmentally Preferred Products (EPP) (refer to the marking on the printed circuit boards — examples shown below) were developed and assembled using environmentally preferred components and solder assembly techniques to comply with the European Union’s **Restriction of Hazardous Substances (ROHS) Directive 2002/95/EC** and **Waste Electrical and Electronic Equipment (WEEE) Directive 2002/96/EC**. To maintain product compliance and reliability, use only the Motorola specified parts in this manual.



Any rework or repair on Environmentally Preferred Products must be done using the appropriate lead-free solder wire and lead-free solder paste as stated in the following table:

Table 2-2. Lead Free Solder Wire Part Number List

Motorola Part Number	Alloy	Flux Type	Flux Content by Weight	Melting Point	Supplier Part number	Diameter	Weight
1088929Y01	95.5Sn/3.8Ag/0.7Cu	RMA Version	2.7-3.2%	217C	52171	0.015"	1lb spool

Table 2-3. Lead Free Solder Paste Part Number List

Motorola Part Number	Manufacturer Part Number	Viscosity	Type	Composition & Percent Metal	Liquid Temperature
1085674C03	NC-SMQ230	900-1000KCPs Brookfield (5rpm)	Type 3 (-325/+500)	(95.5%Sn-3.8%Ag-0.7%Cu) 89.3%	217°C

#### Parts Replacement and Substitution

When damaged parts are replaced, identical parts should be used. If the identical replacement part is not locally available, check the parts list for the proper Motorola part number and order the part from the nearest Motorola Radio Products and Solutions Organization (RPSO) listed in Appendix A of this manual.

#### Rigid Circuit Boards

The family of radios uses bonded, multi-layer, printed circuit boards. Since the inner layers are not accessible, some special considerations are required when soldering and unsoldering components. The printed through holes may interconnect multiple layers of the printed circuit. Therefore, exercise care to avoid pulling the plated circuit out of the hole.

When soldering near connector:

- Avoid accidentally getting solder in the connector.
- Be careful not to form solder bridges between the connector pins.
- Examine your work closely for shorts due to solder bridges.



## Chip Components

Use the RLN4062 Hot-Air Repair Station for chip component replacement. Adjust the temperature control to 370°C (700°F), and adjust the airflow to a minimum setting. Airflow can vary due to component density.

- **To remove a chip component:**

1. Use a hot-air hand piece and position the nozzle of the hand piece approximately 0.3 cm (1/8") above the component to be removed.
2. Begin applying the hot air. Once the solder reflows, remove the component using a pair of tweezers.
3. Using a solder wick and a soldering iron or a power desoldering station, remove the excess solder from the pads.

- **To replace a chip component using a soldering iron:**

1. Select the appropriate micro-tipped soldering iron and apply fresh solder to one of the solder pads.
2. Using a pair of tweezers, position the new chip component in place while heating the fresh solder.
3. Once solder wicks onto the new component, remove the heat from the solder.
4. Heat the remaining pad with the soldering iron and apply solder until it wicks to the component. If necessary, touch up the first side. All solder joints should be smooth and shiny.

- **To replace a chip component using hot air:**

1. Use the hot-air hand piece and reflow the solder on the solder pads to smooth it.
2. Apply a drop of solder paste flux to each pad.
3. Using a pair of tweezers, position the new component in place.
4. Position the hot-air hand piece approximately 0.3 cm (1/8") above the component and begin applying heat.
5. Once the solder wicks to the component, remove the heat and inspect the repair. All joints should be smooth and shiny.

## 4.0 Notes For All Schematics and Circuit Boards

\* Component is frequency sensitive. Refer to the Electrical Parts List for value and usage.

1. Unless otherwise stated, resistances are in Ohms (k = 1000), and capacitances are in picofarads (pF) or microfarads (μF).
2. DC voltages are measured from point indicated to chassis ground using a Motorola DC multimeter or equivalent. Transmitter measurements should be made with a 1.2 μH choke in series with the voltage probe to prevent circuit loading.

3. Reference Designators are assigned in the following manner:

- 700/900 Series = Transmitter
- 000/200 Series = Frequency Generation
- 400/600 Series = Receiver
- 1000/2000/3000 Series = Controller
- 6000 Series = Keypad Board
- 8000 Series = GPS
- 9000 Series = Switches and User Interfaces

4. Interconnect Tie Point Legend:

- UNSWB+ = Unswitch Battery Voltage (7.5V)
- SWB+ = Switch Battery Voltage (7.5V)
- R5 = Receiver Five Volts
- CLK = Clock
- Vdda = Regulated 3.3 Volts (for analog)
- Vddd = Regulated 3.3 Volts (for digital)
- SYN = Synthesizer
- DACRX = Digital to Analog Voltage (For Receiver Front End Filter)
- VSF = Voltage Super Filtered (5 volts)
- VR = Voltage Regulator

### 12-LAYER CIRCUIT BOARD DETAIL VIEWING COPPER STEPS IN PROPER LAYER SEQUENCE

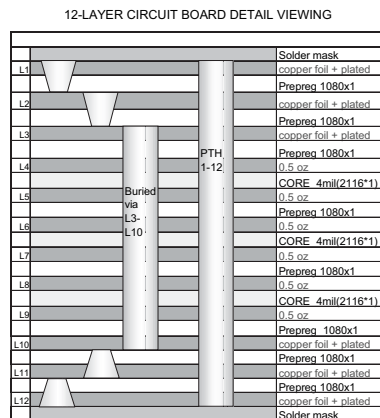


Figure 2-1: 12-Layer Circuit Board Detail Viewing

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## Section 3

# TEST EQUIPMENT AND SERVICE AIDS

### 1.0 Recommended Test Equipment

The list of equipment contained in Table 3-1 includes most of the standard test equipment required for servicing Motorola portable radios.

*Table 3-1. Recommended Test Equipment*

Equipment	Characteristics	Example	Application
Service Monitor	Can be used as a substitute for items marked with an asterisk (*)	Aeroflex 2975 ( <a href="http://www.aeroflex.com">www.aeroflex.com</a> ), Motorola R2670, or equivalent	Frequency/deviation meter and signal generator for wide-range troubleshooting and alignment
Digital RMS Multimeter *	100 $\mu$ V to 300 V 5 Hz to 1 MHz 10 Mega Ohm Impedance	Fluke 179 or equivalent ( <a href="http://www.fluke.com">www.fluke.com</a> )	AC/DC voltage and current measurements. Audio voltage measurements
RF Signal Generator *	100 MHz to 1 GHz -130 dBm to +10 dBm FM Modulation 0 kHz to 10 kHz Audio Frequency 100 Hz to 10 kHz	Agilent N5181A ( <a href="http://www.agilent.com">www.agilent.com</a> ), Ramsey RSG1000B ( <a href="http://www.ramseyelectronics.com">www.ramseyelectronics.com</a> ), or equivalent	Receiver measurements
Oscilloscope *	2 Channel 50 MHz Bandwidth 5 mV/div to 20 V/div	Leader LS8050 ( <a href="http://www.leaderusa.com">www.leaderusa.com</a> ), Tektronix TDS1001b ( <a href="http://www.tektronix.com">www.tektronix.com</a> ), or equivalent	Waveform measurements
Power Meter and Sensor *	5% Accuracy 100 MHz to 500 MHz 50 Watts	Bird 43 ThruLine Watt Meter ( <a href="http://www.bird-electronic.com">www.bird-electronic.com</a> ) or equivalent	Transmitter power output measurements
RF Millivolt Meter	100 mV to 3 V RF 10 kHz to 1 GHz	Boonton 92EA ( <a href="http://www.boonton.com">www.boonton.com</a> ) or equivalent	RF level measurements
Power Supply	0 V to 32 V 0 A to 20 A	B&K Precision 1790 ( <a href="http://www.bkprecision.com">www.bkprecision.com</a> ) or equivalent	Voltage supply

## 2.0 Service Aids

Table 3-2 lists the service aids recommended for working on the radio. While all of these items are available from Motorola, most are standard workshop equipment items, and any equivalent item capable of the same performance may be substituted for the item listed.

Table 3-2. Service Aids

Motorola Part No.	Description	Application
RLN4460_	Portable Test Set	Enables connection to the audio/accessory jack. Allows switching for radio testing.
Service Aids	Customer Programming Software on CD-ROM	Allows servicer to program radio parameters, tune and troubleshoot radios.
PMKN4012_	Portable Programming Cable	This cable connects the radio to a USB port for radio programming and data applications.
PMKN4013_	Portable Programming, Testing & Alignment Cable	This cable connects the radio to a USB port for radio programming, testing and alignment.
PMNN4076_	7.5V Universal Battery Eliminator	Connects to radio via battery eliminator cable.
5880348B33	DMR SMA to BNC RF Adaptor	Adapts radio's antenna port to BNC cabling of test equipment.
PMHN4085_	Bench Test Housing Eliminator	Interconnects radio to power supply. Provides for troubleshooting of the radio when the housing is removed.
NLN9839_	Vacuum Pump Kit	Allows servicer to test for leakages.
NTN4265_	Pressure Pump Kit	Allows servicer to locate leakages.
5871134M01	Connector Fitting	This connector allows the vacuum hose to be connected to the radio chassis.
3271133M01	Fitting Seal	This seal secures the connector fitting to the radio chassis.

### 3.0 Programming, Testing and Alignment Cable

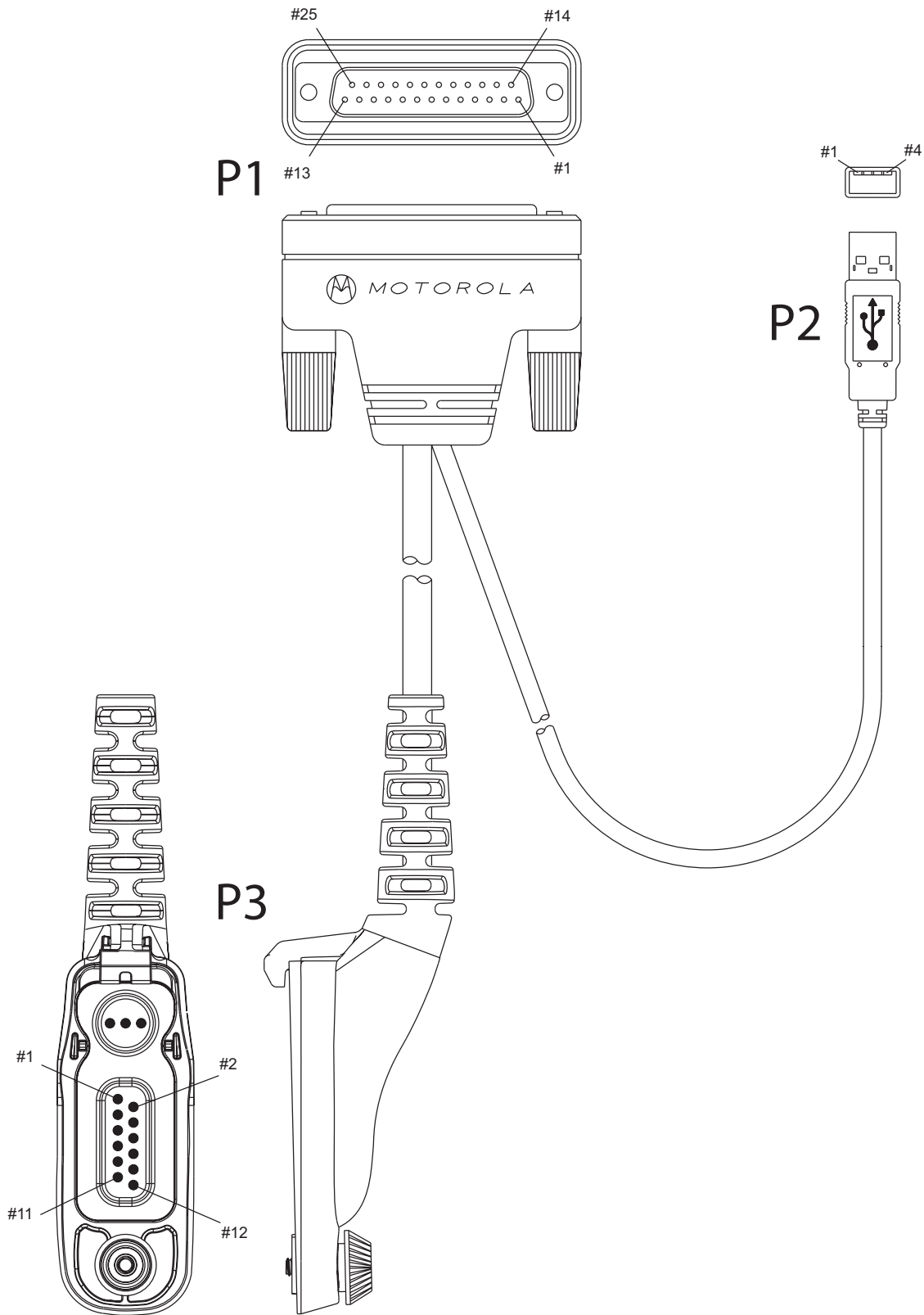


Figure 3-1. Programming, Testing and Alignment Cable

Table 3-3. Pin Configuration of Side Connector

<b>CONNECTION</b>			
<b>P1</b>	<b>P2</b>	<b>P3</b>	
<b>Pin</b>	<b>Pin</b>	<b>Pin</b>	<b>Function</b>
	1	3	VCC (5V)
	3	4	DATA +
	2	5	DATA -
16		6	GROUND
7		8	SPEAKER -
17		10	EXTERNAL MIC +
16		11	EXTERNAL MIC -
20		9	EXTERNAL PTT
1		7	SPEAKER +
	4	1 (Coax Connector)	GROUND

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## Section 4

# POWER UP SELF-TEST

### 1.0 Power-Up Error Codes (Display Model only)

Upon powering up, the radio performs certain tests to determine if its basic electronics and software are in working order. Any error detected has an associated error code that is presented on the radio display. These error codes are intended to be used by a service technician when the radio generates the Self Test Fail Tone. If these tests are successfully completed, the radio will generate the Self Test Tone.

There are two classes of detectable errors, fatal and non-fatal. If it is considered as a fatal error, then the normal radio operation will be inhibited. Fatal errors include hardware errors detected by the microprocessor and certain memory errors. These memory errors include incorrect ROM checksum, incorrect RAM checksum, and incorrect checksums of codeplug (Persistent Storage) blocks that contain operating parameters. If the codeplug block operating parameters are corrupted, operation of the unit on the proper frequency, system, and group are in question. Attempts to use this information could provide the user with a false sense of security that others are receiving his messages. Corrupted codeplug blocks of call IDs, or their associated aliases are considered non-fatal errors. While the user may be inconvenienced, normal communication is still possible.

Table 4-4. Power-Up Error Codes

Error Code	Description	Error Type	Corrective Action
ERROR 01/02	Call ID or associated aliases codeplug block checksum is wrong.	Non-Fatal	Normal communication is still possible, but the user may be inconvenienced. Reprogram codeplug.
ERROR 01/22	Tuning Codeplug block checksum is wrong.	Non-Fatal	Normal communication is still possible.
FAIL 01/82	External Codeplug block checksum is wrong.	Fatal	Reprogram codeplug.
FAIL 01/92	Secure Codeplug checksum error	Fatal	Reprogram codeplug.
FAIL 01/A2	Tuning Codeplug block checksum is wrong.	Fatal	Reprogram codeplug.
FAIL 01/81	ROM Checksum is wrong.	Fatal	Reprogram FLASH Memory, then retest. If message reoccurs, replace main board or send radio to nearest Motorola Depot.
FAIL 01/88	Radio RAM Test Failure.	Fatal	Retest radio by turning it off and turning it on again. If message reoccurs, replace main board or send radio to nearest Motorola Depot.
FAIL 01/90 or FAIL 02/90	General hardware test failure.	Fatal	Retest radio by turning it off and turning it on again. If message reoccurs, replace main board or send radio to nearest Motorola Depot.

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

Error Code	Description	Error Type	Corrective Action
FAIL 02/81	DSP ROM Checksum is wrong.	Fatal	Reprogram FLASH Memory, then retest. If message reoccurs, replace main board or send radio to nearest Motorola Depot.
FAIL 02/82	DSP RAM1 test failure.	Fatal	Retest radio by turning it off and turning it on again. If message reoccurs, replace main board or send radio to nearest Motorola Depot.
FAIL 02/84	DSP RAM2 test failure.	Fatal	Retest radio by turning it off and turning it on again. If message reoccurs, replace main board or send radio to nearest Motorola Depot.
FAIL 02/88	DSP RAM test failure.	Fatal	Retest radio by turning it off and turning it on again. If message reoccurs, replace main board or send radio to nearest Motorola Depot.
FAIL 02/C0	DSP ROM Checksum is wrong.	Fatal	Retest radio by turning it off and turning it on again. If message reoccurs, replace main board or send radio to nearest Motorola Depot.
No Display	Display module is not connected properly. Display module is damaged.	Fatal	Check connection between main board and display module. Replace with new display module.

NOTE A non-display radio emits only the Self Test Fail Tone if it fails the self-test.

## 2.0 Operational Error Codes

During radio operation, the radio performs dynamic tests to determine if the radio is working properly. Problems detected during these tests are presented as error codes on the radio's display. The presence of an error code should prompt a user that a problem exists and that a Motorola Authorized MOTOTRBO dealer should be contacted. Use Table 4-5. to aid in understanding particular operational error codes.

Table 4-5. Operational Error Codes

Error Code	Description	Error Type	Corrective Action
FAIL 001	Synthesizer Out-of-Lock	NON-FATAL	1. Reprogram the codeplug. 2. Refer to Detailed Service Manual.
FAIL 002	Personality checksum or system block error	NON-FATAL	Reprogram the codeplug.



## Section 5

# CONTROLLER INFORMATION

### 1.0 General Controller Block

The controller board is the central interface between the various subsystems of the radio. The controller section consists of 4 main ICs. These are the OMAP1710 Host/DSP Processor, Flash, SDRAM memories and the MAKO Audio/Power Management chip.

Figure 5-1 shows how the controller interfaces with the RF Section and the supporting controls, switches and display. The Controller, RF sections, volume port, frequency selection switch and the universal connector are placed on a single "Transceiver" board. LCD Display is mounted directly to the Transceiver board and keypad is designed on the flex. The Option Board is a separate board that hosts the line/connections to the flex keypad. The physical interface between the Transceiver board and keypad board is via flex through board to board connector on the option board.

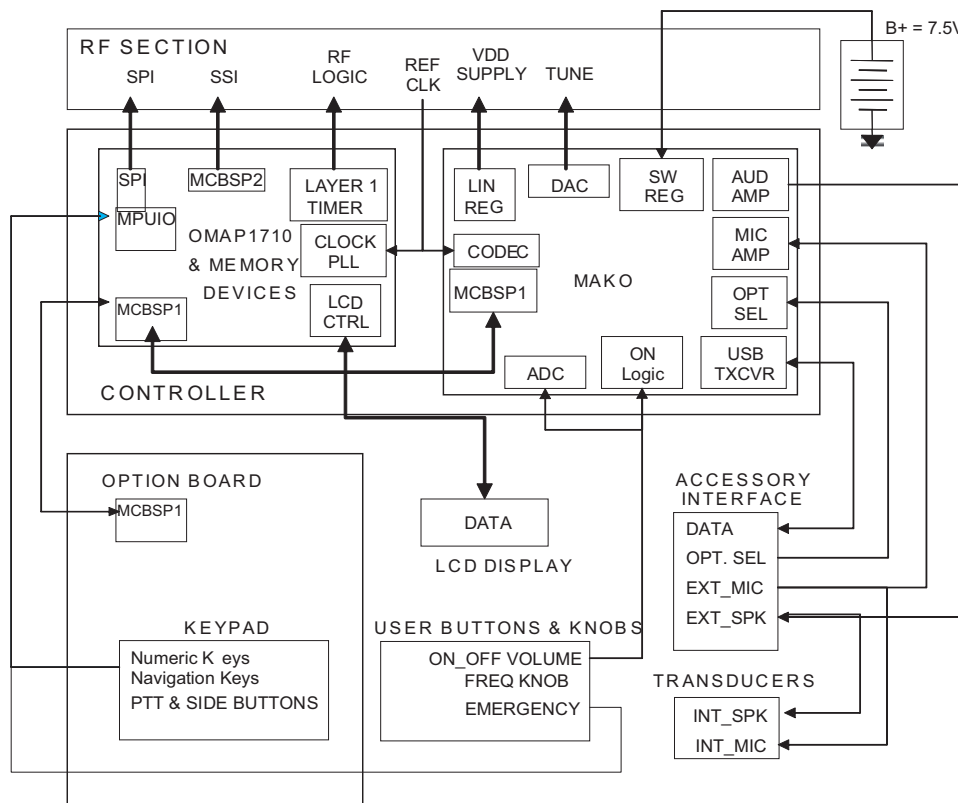


Figure 5-1: Controller Block Diagram

### 1.1 OMAP1710 Processor (U1000)

The OMAP processor (U1000) has a dual-core architecture which incorporates a TMS320C55x DSP core and a high-performance ARM926EJS core. The OMAP is supplied with two voltages: 1.4V for Core and 1.8V for Peripheral and I/O Interfaces.

The OMAP processor controls the operation of the transmitter, receiver, synthesizer and MAKO IC. It also uses Flash and SDRAM, both located externally.

### 1.2 Flash Memory (U2000)

The Flash memory IC is a 64Mbit CMOS device. It is supplied with 1.8V. The Flash memory has its 23 address lines and 16 data lines connected to the External Interface Module (EIM) of the OMAP IC through the EMIFS\_ADDR(23:1) and EMIFS\_DATA(15:0) busses. The Flash memory contains host firmware, DSP firmware, codeplug data, and tuning values.

### 1.3 SDRAM (U2001)

The Synchronous DRAM (SDRAM) is 128Mb high-speed CMOS device. It is designed to operate in 1.8V, low-power memory system. The SDRAM has 13 address lines and 16 data lines connected to the EIM of OMAP IC through SDRAM\_ADDR(12:0) and SDRAM\_DATA(15:0) busses.

### 1.4 MAKO IC (U3000)

The MAKO IC handles DC power distribution and audio processing (i.e. audio amplification and analog-to-digital/ digital-to-analog conversions). It contains Switching and Linear regulators, 1W audio amplifiers, 16-bit Voice CODEC, 11-channel 10-bit A/D Converter, 10 bit D/A Converter, support 2xUSB “OTG” transceivers, One-Wire Option Detect, and GCAI ports.

## 2.0 Controller Board

### 2.1 Radio Power Distribution

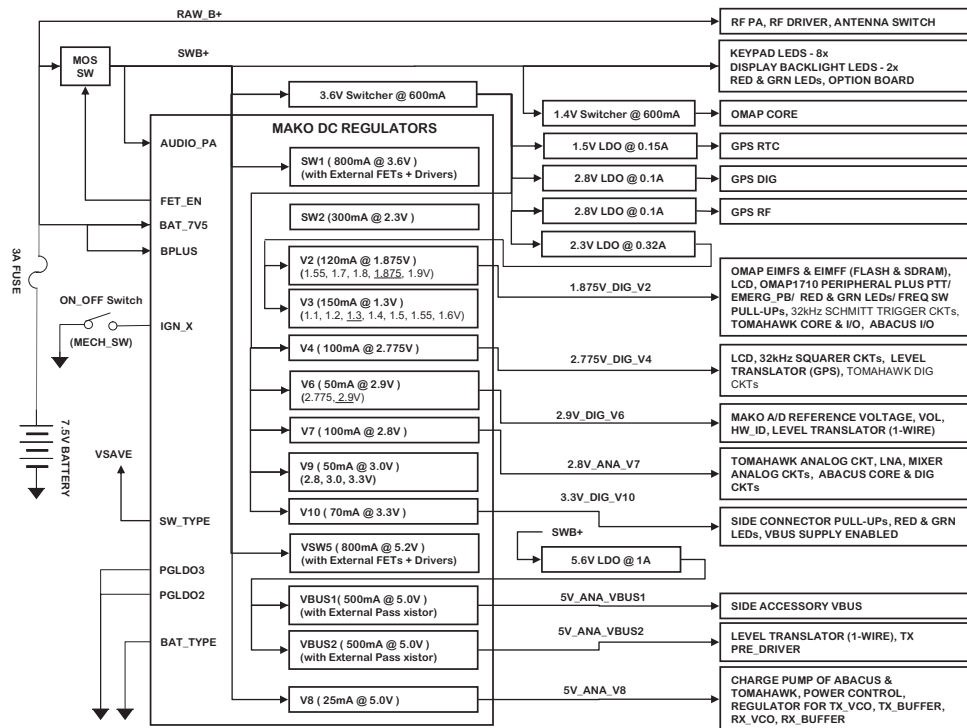


Figure 5-2: DC Power Distribution Block Diagram

Figure 5-2 illustrates the DC distribution to various ICs and devices in the radio. The power management architecture is centered on the MAKO IC (U3000). A battery supply is routed via a 3A fuse (F9000) which goes directly to the electronic ON/OFF control (PMOS power FET Q3003) as

RAWB+. When the radio is turned ON, MECH\_SW (ON/OFF/volume control) will trigger the MAKO FET\_ENX to low thus turning ON the PMOSFET device, and SWB+ is then distributed as shown in Figure 5-2. SWB+ will continue to support the whole board until the radio is turned OFF.

### 2.1.1 Voltage Regulation

- Switcher U3020

Switcher (U3020) in conjunction with the MAKO power management IC (U3000) is a highly efficient dc-dc buck converter. External components L3020 and C3202 are needed to filter out the dc-dc converter output. In this application, it is configured as a Pulse Skipping Mode (PSM) with maximum output current of 600mA. It generates an accurate 3.6V output, which supplies directly to the MAKO internal VSW2 switcher circuit as well as other MAKO internal LDOs.

- Switcher U3021

Switcher (U3021) is a highly efficient dc-dc buck converter and same as switcher U3020. It is used solely for OMAP processor core.

- Low Drop Out (LDO) Regulator U3008

LDO regulator (U3008) is an adjustable output voltage regulator which can supply 200mA load current. It has an excellent Ripple Rejection Ratio and Short Circuit Protection. In this application, LDO U3008 output is 2.3V which is set by the resistor divider R3028 and R3029. It supplies directly to MAKO internal LDOs.

- Low Drop Out (LDO) Regulator U3002

LDO regulator (U3002) is an adjustable output voltage regulator which can supply 1A load current. In this application, LDO U3002 generates an accurate 5.6V output which is set by the resistor divider R3017 and R3018. It supplies directly to both VBUS1 and VBUS2 supplies. Q3005 and Q3006 prevent internal voltage leakage onto VBUS\_SUPPLY (U3002 pin 5).

- MAKO LDO VBUS1

VBUS1 is a voltage regulation module that can be used to provide 5V with either 50mA or 500mA load current suited for accessory and USB supply. Q3001 and Q3002 are used to control the low current limit (50mA) or high current limit (500mA) of Vbus1.

When USB\_CONNECT is toggled LOW, the PMOSFET (Q3001) is disabled and this will limit the max load supply to 50mA. If a high current limit is desired, i.e. USB HOST mode, USB\_CONNECT is toggled HIGH turning ON the PMOSFET (Q3001) through Q3002 inverter, and this will limit the max load supply to 500mA.

- MAKO LDO VBUS2

VBUS2 is a voltage regulation module that can be used to provide 5V and with only 500mA load current. This supply is used for PA Pre-driver.

- MAKO LDOs

The MAKO power management IC (U3000) provides eight more LDOs. Some LDOs are programmable to meet the requirement of various ASIC devices. V2, V3, and V9 are programmable via SPI while V4, V5, V6, V8, and V10 are fixed. See Figure 5-2 for details.

### 2.1.2 Power ON/OFF

The radio can be switched ON in only one condition:

1. MECH\_SW turned ON

Turning the rotary switch (S9001) ON will cause MAKO (U3000) to turn ON SWB+. After application of power to SWB+, MAKO regulators are sequenced to turn ON power to all MAKO internal blocks and external system including OMAP processor (U1000), FLASH (U2000), SDRAM (U2001), and radio RF section.

Radio can be turned OFF in one of the three conditions:

1. MECH\_SW turned OFF

If the radio is manually turned OFF, MAKO (U3000) will start a 125ms watchdog timer. The OMAP processor (U1000) may tickle the watchdog timer as needed to keep DC power ON as it shuts down the radio. Once the watchdog timer expires, MAKO turns OFF the DC regulators and SWB+.

2. Low Battery

While the radio is ON, if battery voltage drops to low level threshold, OMAP processor (U1000) will initiate a shutdown process. It will store the radio personality data to the FLASH (U2000) before turning OFF.

3. Thermal Shutdown

Hard and Soft limits for thermal shutdown are implemented into MAKO IC (U3000). When MAKO die temperature reaches Soft Thermal Limit (135 °C), microprocessor will be interrupted to begin shutdown procedures. If Hard Thermal Limit (155 °C) is reached before OMAP processor (U1000) can finish shutdown tasks, the radio will turn OFF immediately.

### 2.2 Clocks

Figure 5-3 illustrates the controller clocks used throughout the radio.

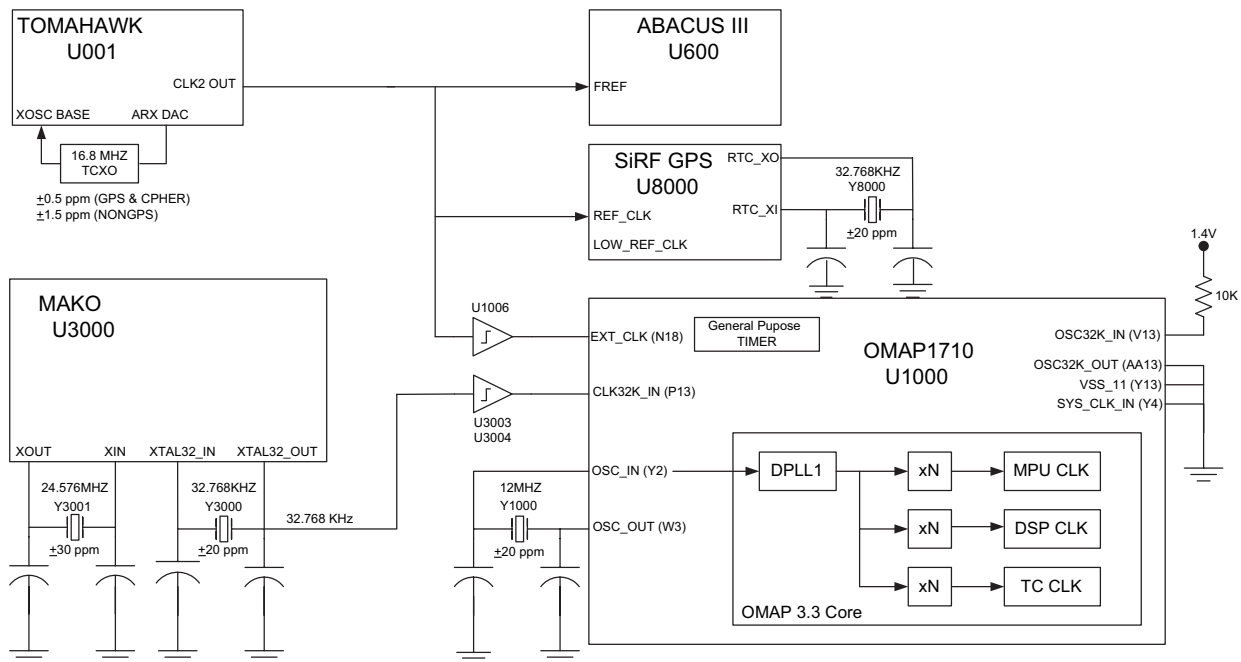


Figure 5-3: Clock Connections

The OMAP processor (U1000), which consists of an ARM and DSP core, needs three clocks for operation: a 32.768kHz square-wave, a 12MHz sine-wave, and a 16.8MHz square-wave clock.

The 16.8MHz clock source is provided from the Tomahawk TCXO routes to a squarer-circuit (U1006) and feed to EXT\_CLK (U1000 pin N18).

The 32.768kHz clock is generated by the MAKO crystal (Y3000) oscillator, converted to a gated clock by U3003 and U3004 circuitry. It is then directly fed to OMAP CLK32\_IN (U1000 pin P13). The OMAP processor needs the 32.768kHz to determine the input reference clock applied to OSC\_IN (U1000 pin Y2). Without this 32kHz clock, the OMAP will potentially program all the wrong dividers for USB and UART booting. External pull-up on OSC32K\_IN (U1000 pin V13) and grounding both OSC32K\_OUT (pin AA13) and VSS\_11 (pin Y13) indicates that an external 32kHz clock is used.

The 12MHz sine-wave is the main system reference clock for the OMAP which all the internal clocks are derived from.

The 24.576MHz crystal (Y3001) oscillator is the reference clock for MAKO CODEC and SSI clock.

## 2.3 Serial Peripheral Interface (SPI)

Figure 5-4 illustrates the controller SPI used throughout the radio.

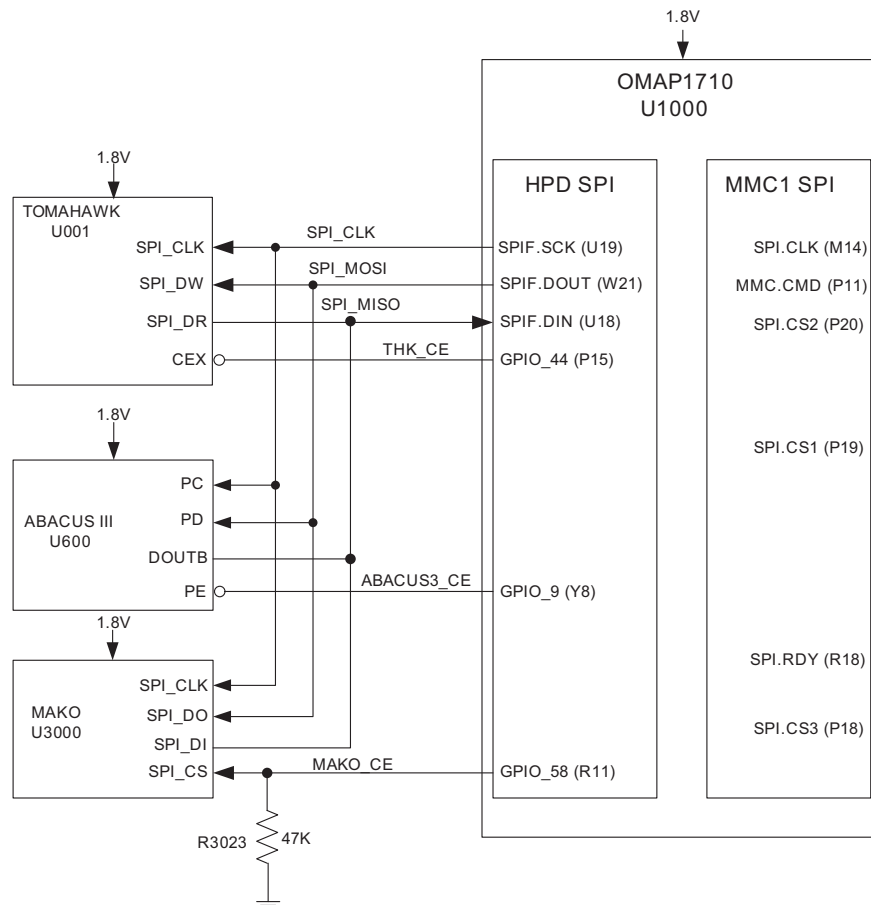


Figure 5-4: SPI Connections

The OMAP processor (U1000) has two SPI busses that it uses to communicate with the various peripheral IC's. The first is the High Performance Data (HPD) SPI bus and the second is the multi-media card (MMC) SPI.

The HPD SPI is a synchronous serial bus made up of four lines, SPI\_CLK, SPI\_MOSI, SPI\_MISO, and chip select. The SPI\_CLK line is used to control the speed of the data to/from the peripheral IC's and the OMAP processor. This clock can be adjusted to different speed based on the IC's specification.

HPD SPI module is used to interface to Tomahawk (U001), Abacus III (U600), and the MAKO (U3000). This interface operates at 1.875V logic level. SPI\_MOSI, or commonly known as TRANSMIT Data, is a data string from OMAP while SPI\_MISO or RECEIVE Data is data string to the OMAP.

The MMC SPI is not used in portable radio.

## 2.4 Serial Synchronous Interface (SSI)

Figure 5-5 illustrates the controller SSI used in the radio controller design.

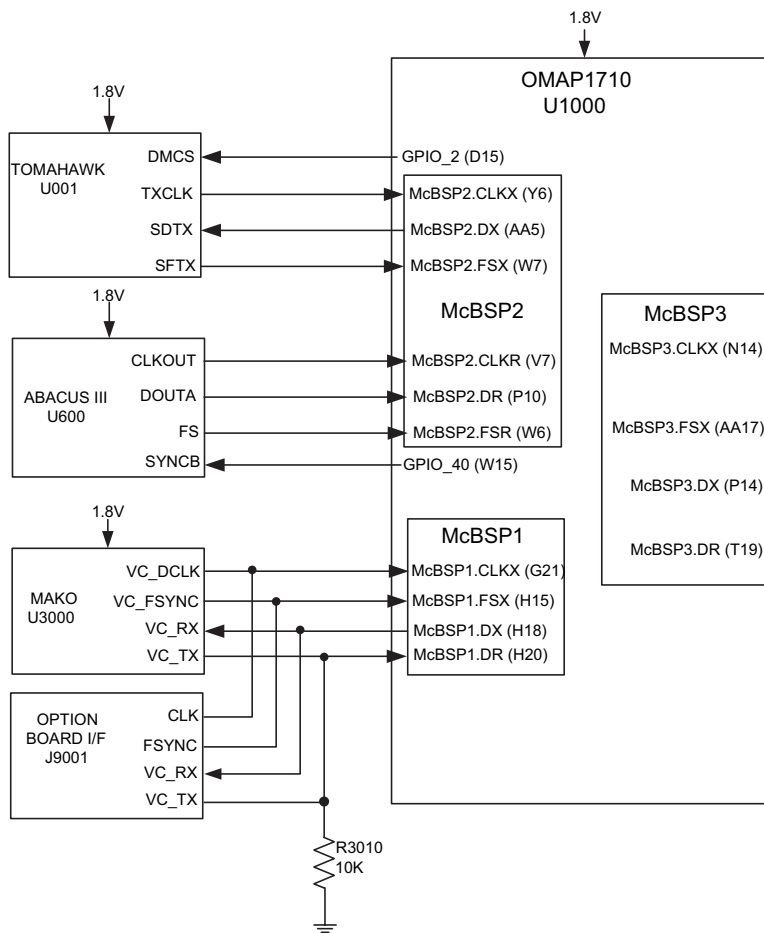


Figure 5-5: SSI Connections

The OMAP processor (U1000) has a total of three SSI or multi-channel buffer serial ports (McBSP) modules that are used to directly interface to the CODECs in the Tomahawk, Abacus, and MAKO, as well as command/ data connections to the Option Board, and between Tx and Rx radios within a Repeater.

As shown in Figure 5-5, McBSP1 is a 4-wire bus and interface to the MAKO CODEC as well as the Option Board. McBSP2 is 6-wire bus; 3-wire dedicated to the Tomahawk Tx audio and the other 3-

wire to Abacus Rx audio. McBSP3 is a 4-wire bus, and used primarily to interface between Tx and Rx radios within a Repeater.

## 2.5 ACC\_ID Interface

Smart accessories use the Accessory ID (ACC\_ID) Interface to help the radio determine which smart accessory, if any, are attached to the radio. Figure 5-6 illustrate the ACC\_ID connections used within the radio.

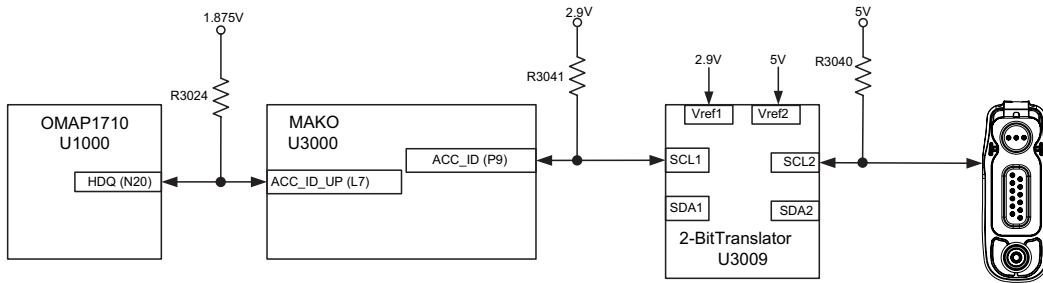


Figure 5-6: ACC\_ID Interface Connections

## 2.6 USB Interface

The OMAP processor (U1000) supports two USB ports. The radio makes use of one USB port to communicate with smart accessories, and connection to a host computer for radio programming via CPS and tuning via Tuner Tool.

**Note:** The USB ports are designed to support Motorola accessories only and will not support third party “Plug-n-Play” USB devices.

Figure 5-7 shows the details of the HSSI connections within the radio.

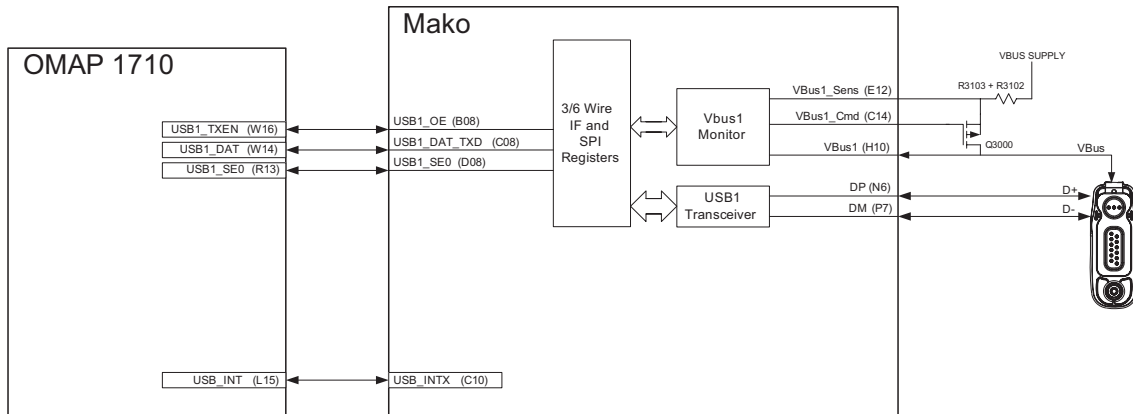


Figure 5-7: USB Interface Connections

The OMAP processor USB host controller communicates with accessories at either 1.5 Mbps or 12 Mbps data rates depending on the accessory. The USB port can be used as a host or a device.

In the portable radio, only one of the two MAKO USB transceivers is used to provide the physical layer signaling for the USB port. The transceiver generates and receives the DP and DM differential signals of the port. The MAKO transceiver interfaces to the OMAP processor through a three-wire interface consisting of two bi-directional signals (SE0 and DAT), and one uni-directional signal (TXEN). The MAKO also includes a Vbus monitor that senses the connection or removal of a device and determines whether or not to supply current to that device via Q3000 up to a high current limit of 500mA.

The USB host/device mode assignment is determined when a user attaches a USB device to the port. The accessory contains information about what the USB mode assignment should be, this information is sent to the radio via the ACC\_ID. See section 2.5 on page 5-7 for more details on the ACC\_ID implementation. When configured as a host, VBUS is turned ON by MAKO and set to high current limit, when configured as a device, VBUS will be shut OFF and the external host supplies the VBUS power.

## 2.7 Universal Connector (Side Connector)

The universal connector is located on the side of the radio. It is the external port of interface used for programming and interfacing to external accessories. The universal connector is connected to the main board via a flex through option board. This radio UC is a newly defined Motorola accessory port that contains audio, digital I/O, serial interfaces, and accessory supply lines; and is similar in function to Motorola's legacy microphone connectors. The multiplexing of these functions is handled by circuitry internal to the MAKO (U3000).

The UC includes 2 serial interfaces: an USB port and an ACC\_ID interface. The USB port can be used as either a device (radio is device) or as a host (radio is host). When configured as a device, the radio can be programmed using the MOTOTRBO CPS or tuned using the Tuner software. When configured as a host, various smart accessories can be used with the radio. See section 2.6 on page 5-7 for more information on the USB interface.

The ACC\_ID interface is used by accessories to provide the radio with information needed to configure the interface for that accessory. See section 2.5 on page 5-7 for more information on the ACC\_ID interface.

**Note:** The USB port is designed to support Motorola accessories only and will not support third part "Plug-n-Play" USB devices.

## 2.8 Keypad Module

The keypad module is connected to the main board through option board. This unit is not considered field-repairable. The keypad interface is a standard pulsed 4 row by 4 column configuration controlled directly by the OMAP processor (U1000). Each of the 4 column output lines is toggled high in sequence and the 4 row input lines are monitored to detect if a button has been pressed. The OMAP processor then decodes which button was pressed using the appropriate column and row stimulus and response information.

## 2.9 Display Module

This display is Film-compensated Super Twisted Nematic (FSTN), 132x34 pixel dot matrix with transfective mode and yellow-green LEDs backlighting Liquid Crystal Display (LCD) module custom to Motorola.

This display module is constructed of glass by sandwiched with polarizers, TAB (Tape Automated Bonding) IC driver, LED backlighting, display control circuitry flex with 16-lines receptacle connector connected to the main board display connector (P9000). The LED and backlights are controlled via serial connection with OMAP processor (U1000). The serial interface consists of clock, data, and chip select lines that are connected directly from the OMAP processor.



## 2.10 Audio

The audio circuitry consists of both analog and digital audio paths. Figure 5-8 shows the basic block diagram of the audio interconnections.

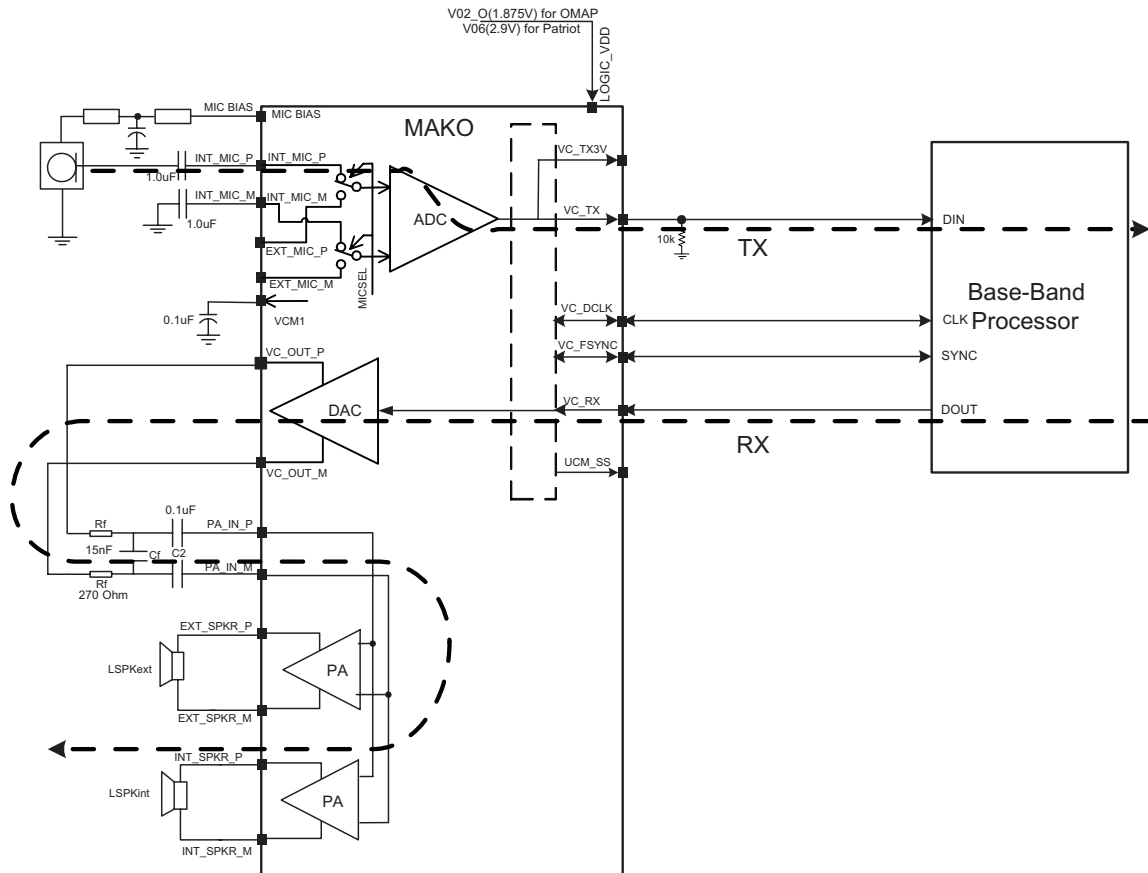


Figure 5-8: Audio Block Diagram

### 2.10.1 Receive Audio

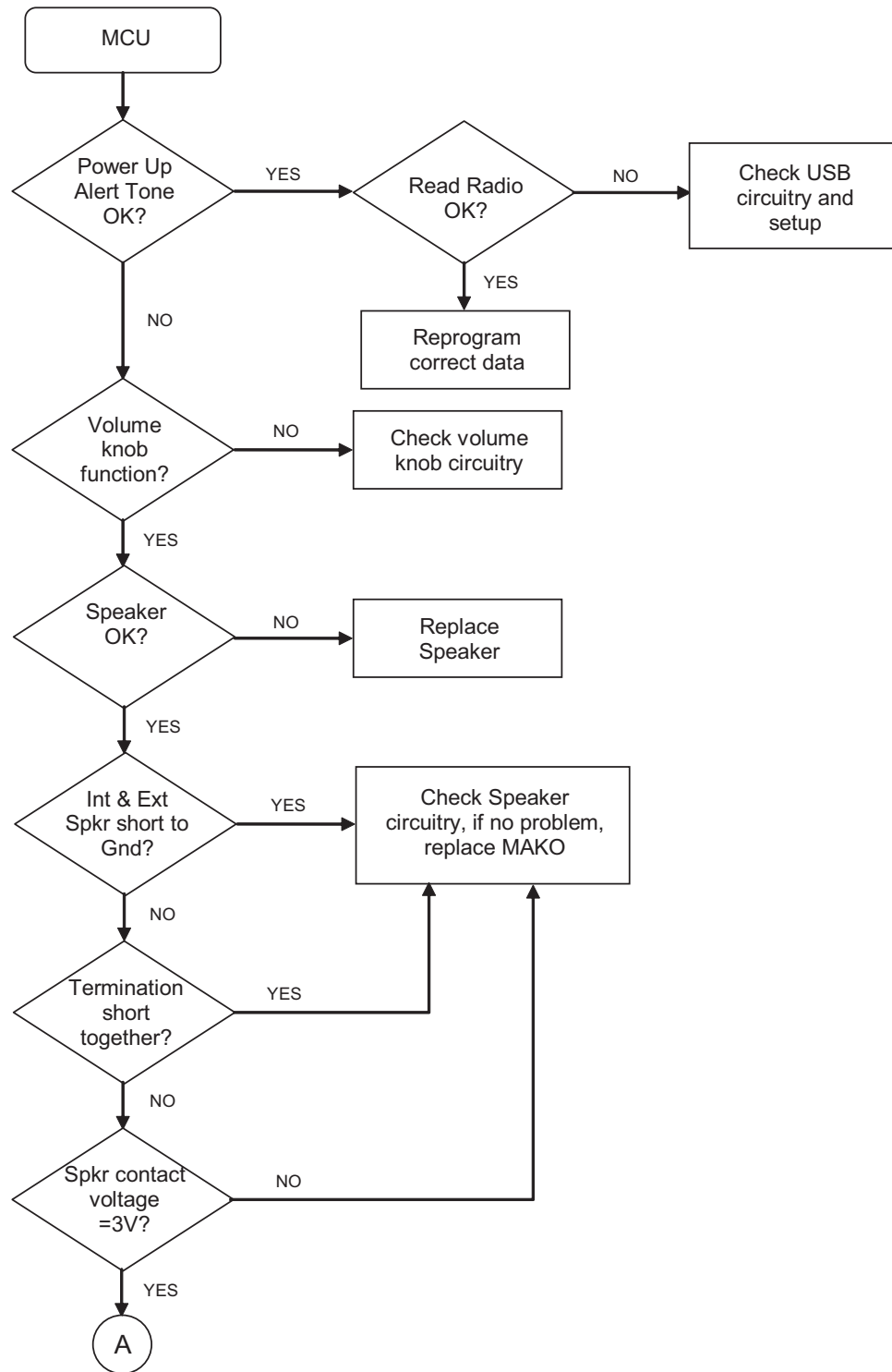
The receive audio data comes from the ABACUS III IC (U600) to the OMAP McBSP2 pin. The DSP decodes the data and sends it out through SSI lines to MAKO SSI pin. The SSI bus is comprised of four lines: clock, frame sync, Rx data, and Tx data. These four lines provide data to the MAKO (U3000) using a packet frame structure consisting of four slots. The actual audio data is transferred to the MAKO in the first slot of each frame using 16-bit pulse-code modulated PCM audio. The MAKO codec filters and converts the digital data into an analog audio signal, and this signal is sent to a programmable gain amplifier. The analog audio circuitry routes the audio to the internal or external port.

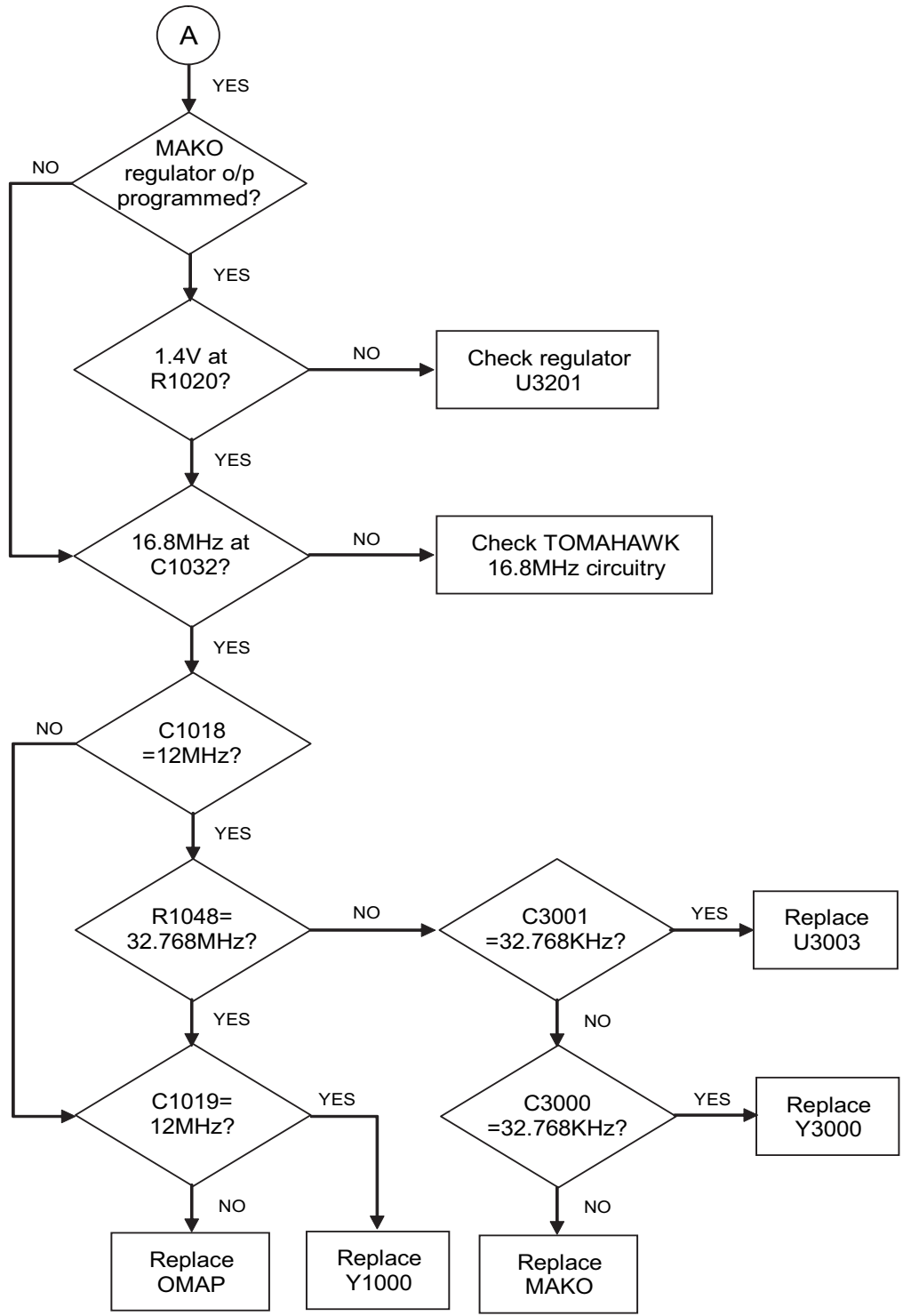
## 2.10.2 Transmit Audio

Transmit audio can be sourced from either internal or external microphone path. Both the internal and external microphone carries a 5V bias through a resistor to MAKO MIC\_BIAS pin. The MAKO, through SPI, selects the appropriate microphone path to route to the necessary gain stages and converter that will send 16-bit PCM audio to the OMAP for signal processing via the SSI bus.

The transmit gain stages in the MAKO is calibrated based on an 8mV input under standard test conditions. The microphone sensitivity is programmable through the use of CPS.

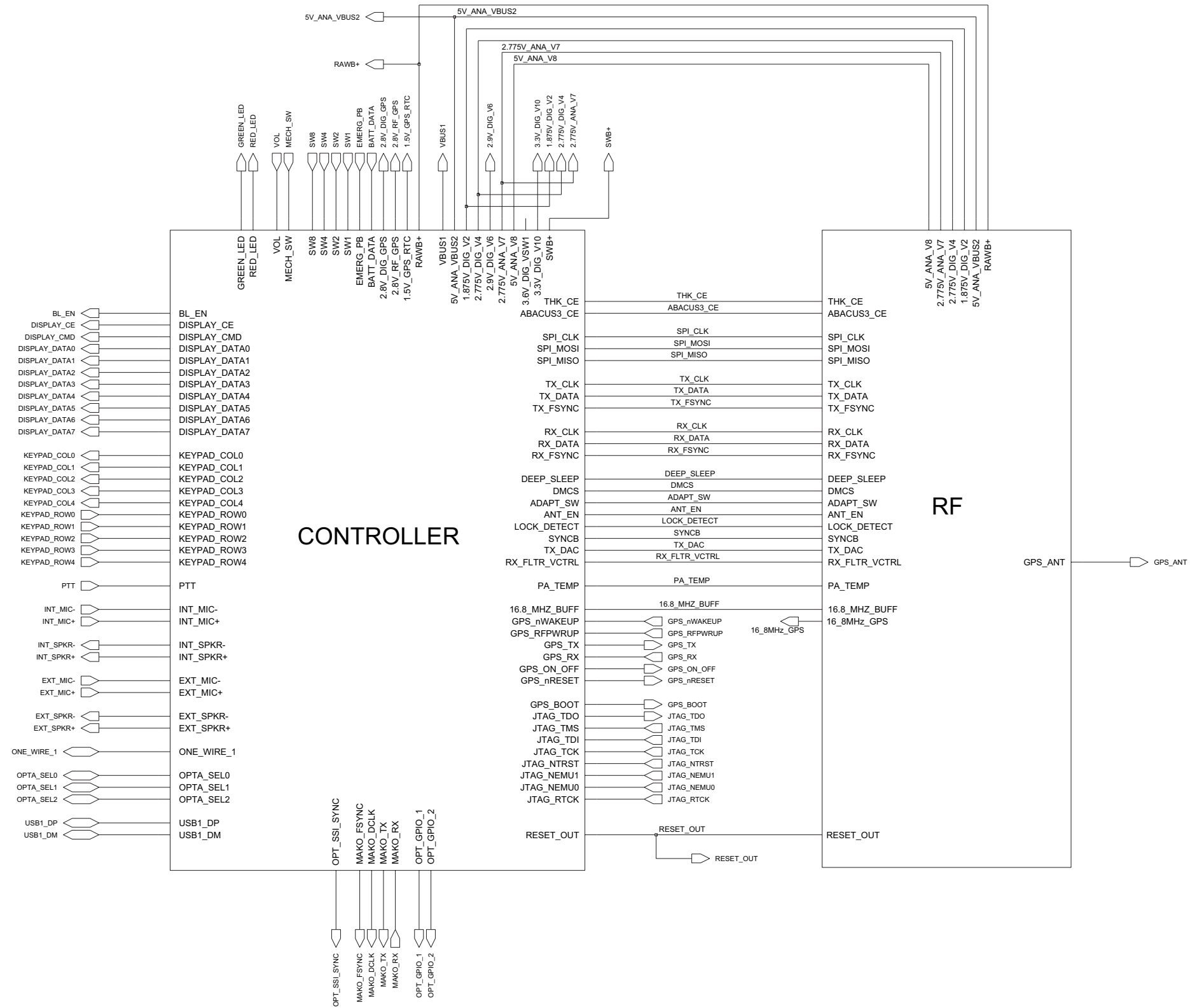
## 2.11 Troubleshooting Charts



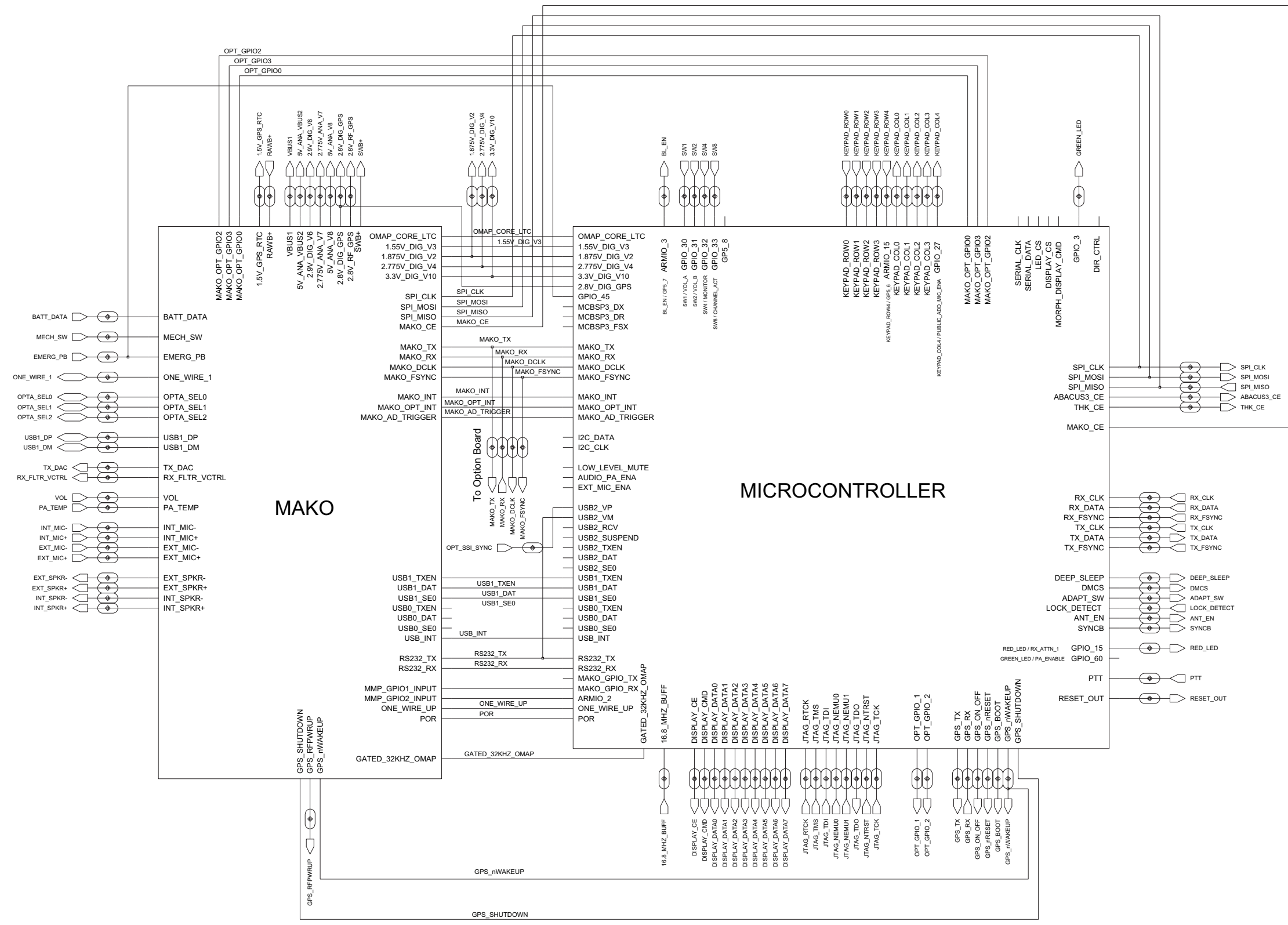


**Troubleshooting Flow Chart for Controller  
(Sheet 2 of 2)**

2.12 Controller Schematics

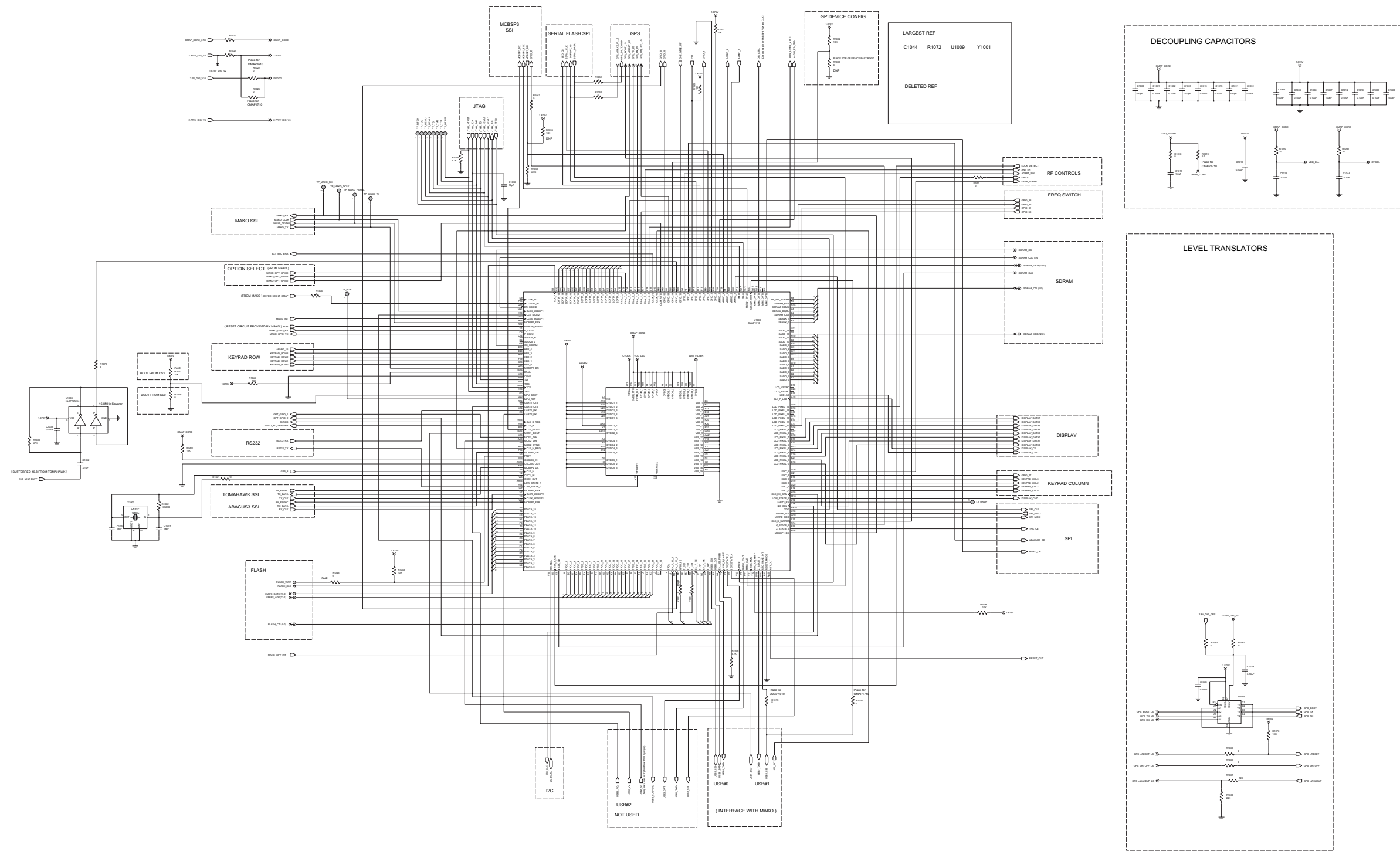


Complete Controller Schematic Diagram



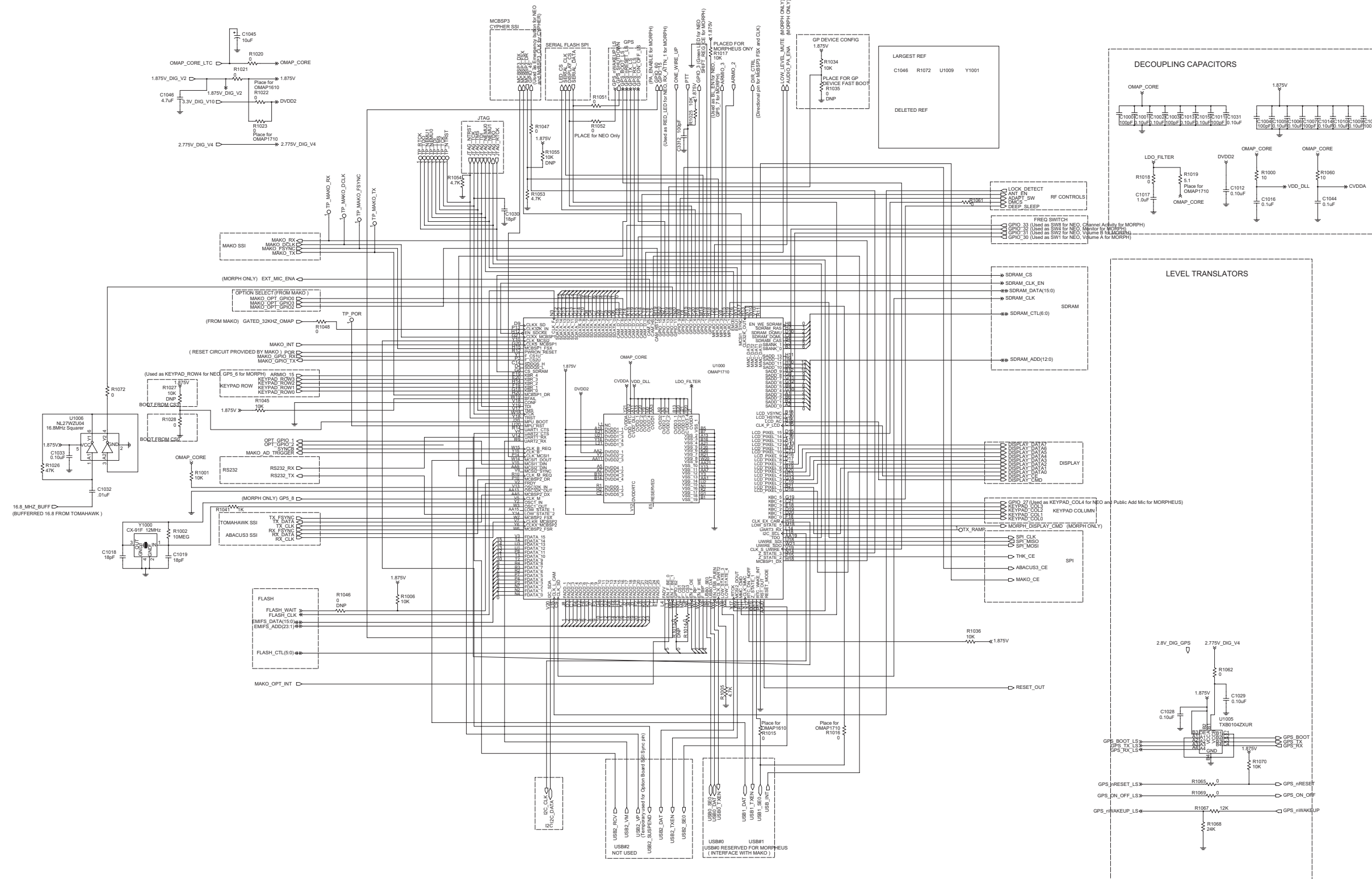
MAKO-Controller Schematic Diagram

# OMAP1710 / 1610



Complete Controller Microprocessor Schematic Diagram

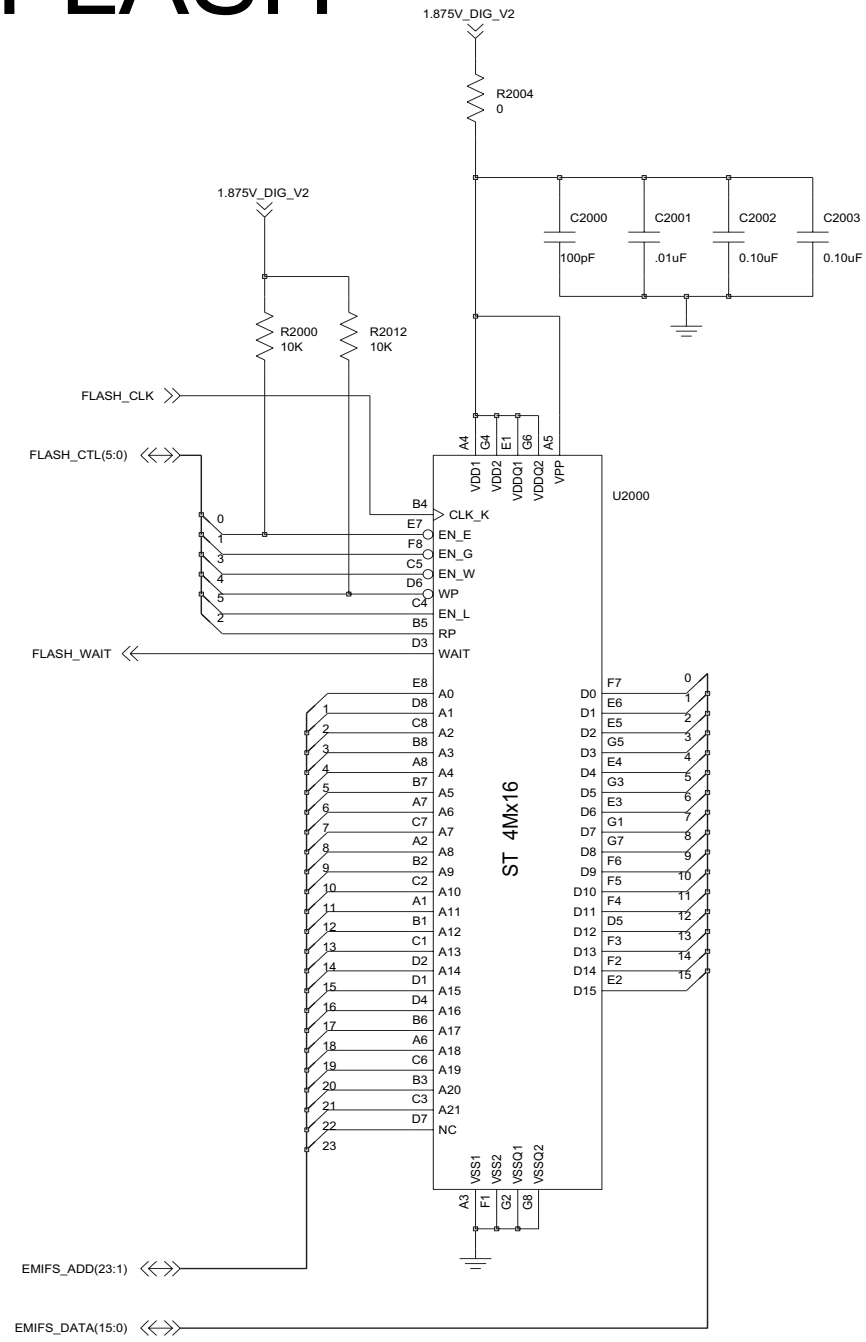
# OMAP1710 / 1610



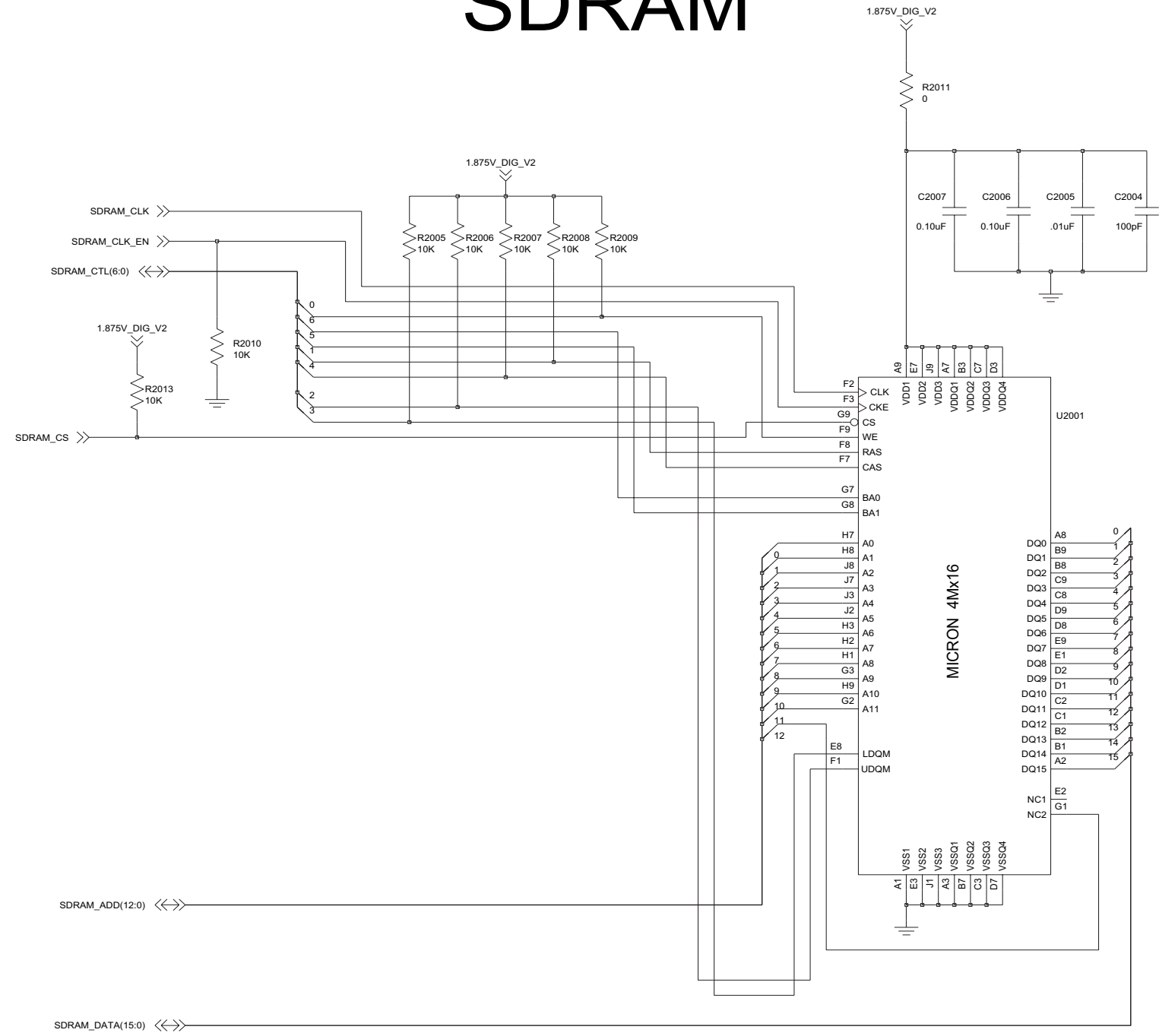
Complete Controller Microprocessor Schematic Diagram (for 8475130M01)



# FLASH



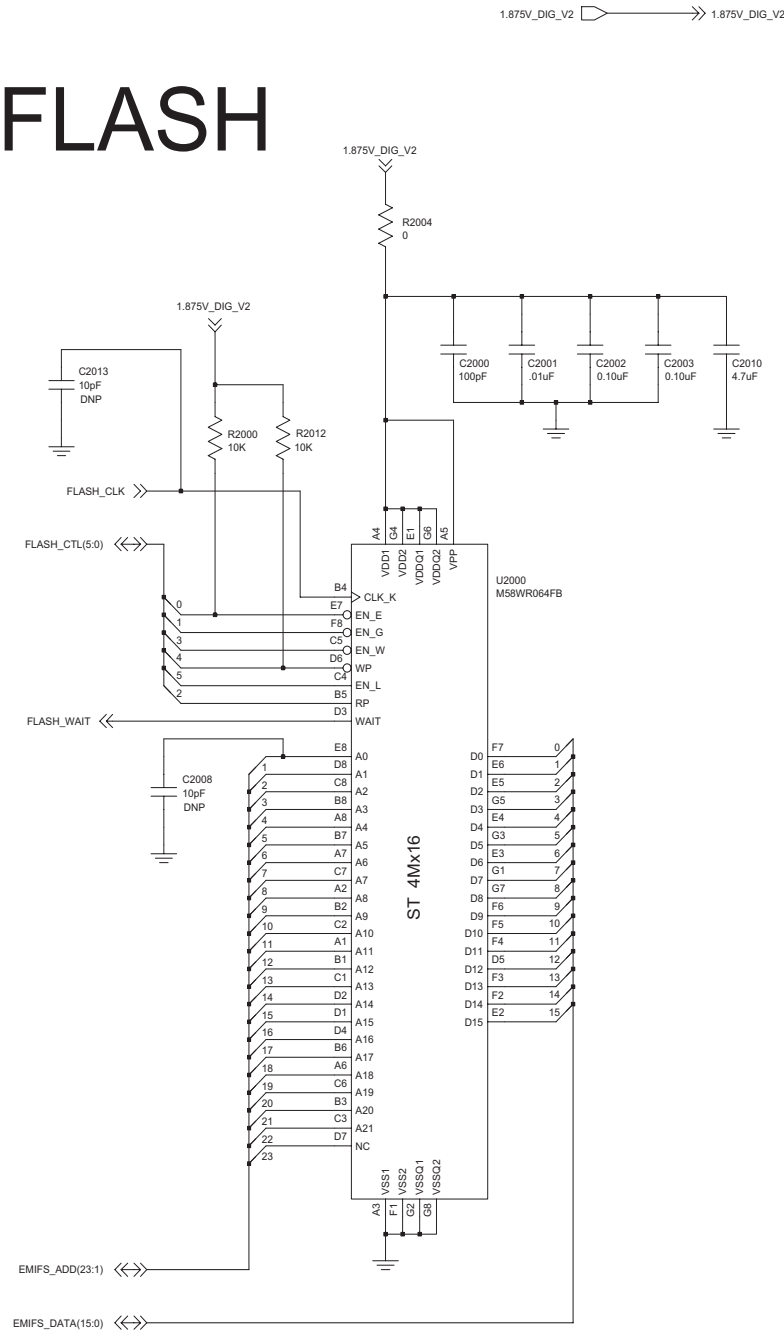
# SDRAM



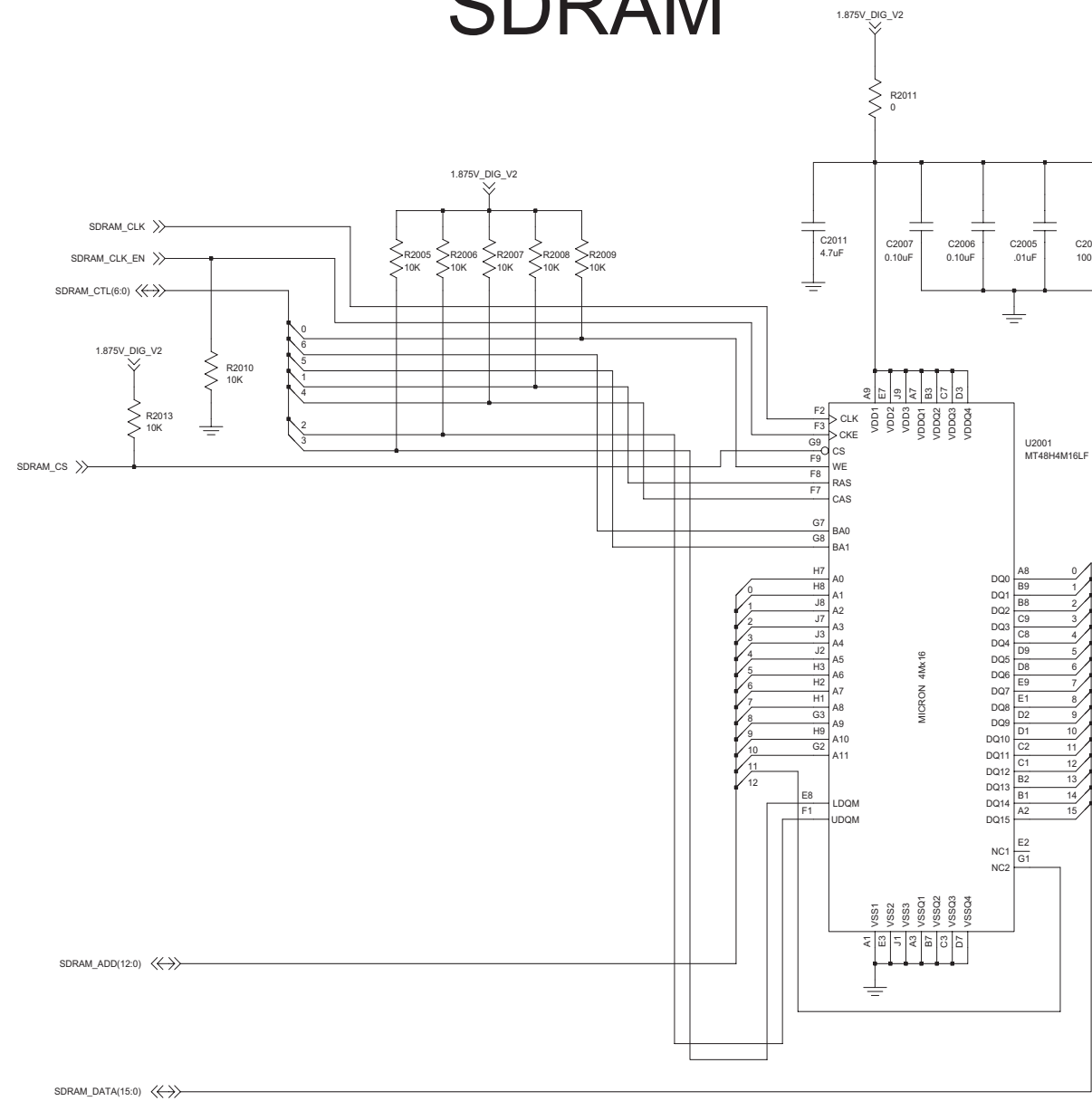
# EXTERNAL MEMORIES

LARGEST REF		
C2013	R2013	U2001

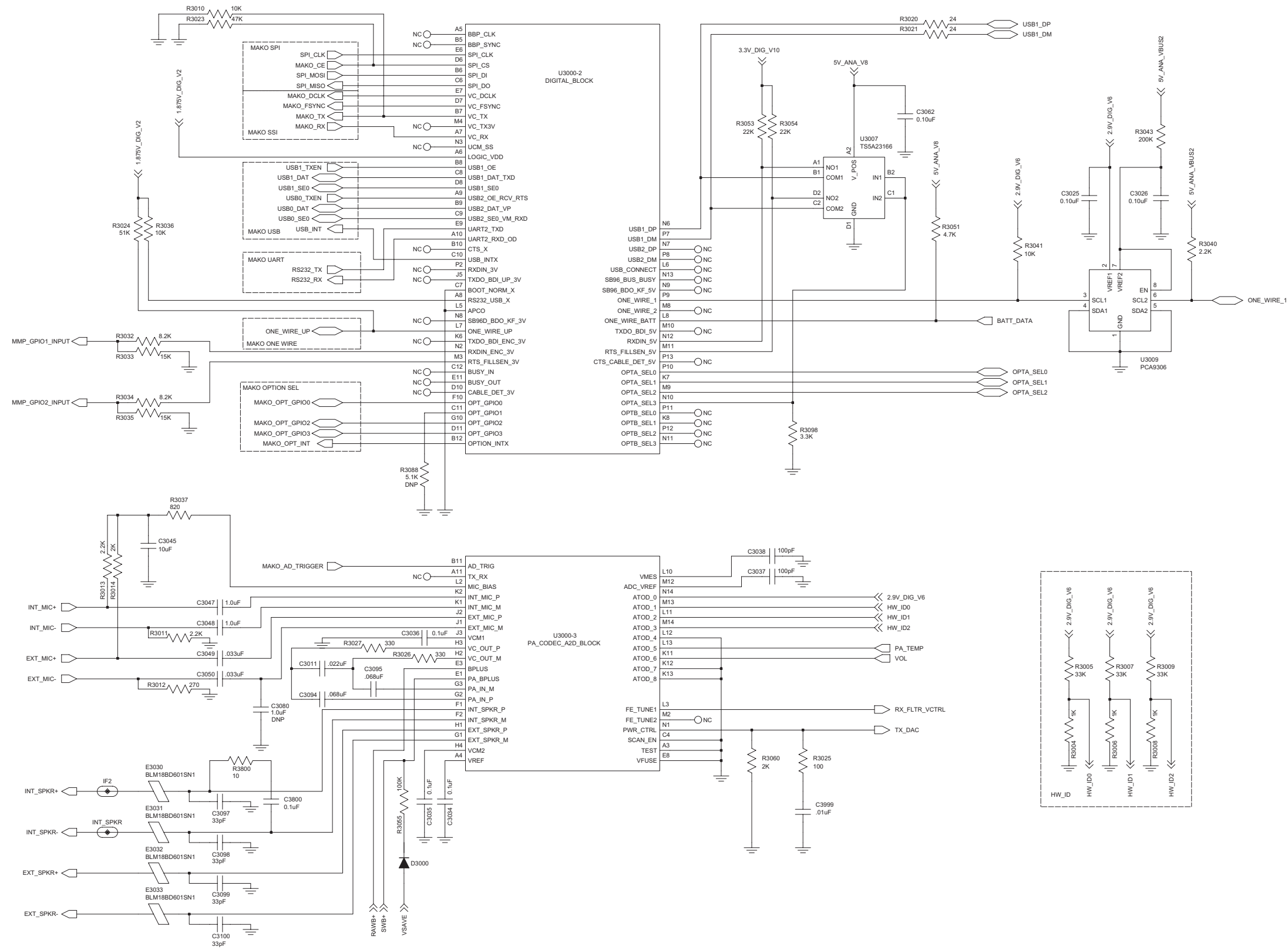
## FLASH



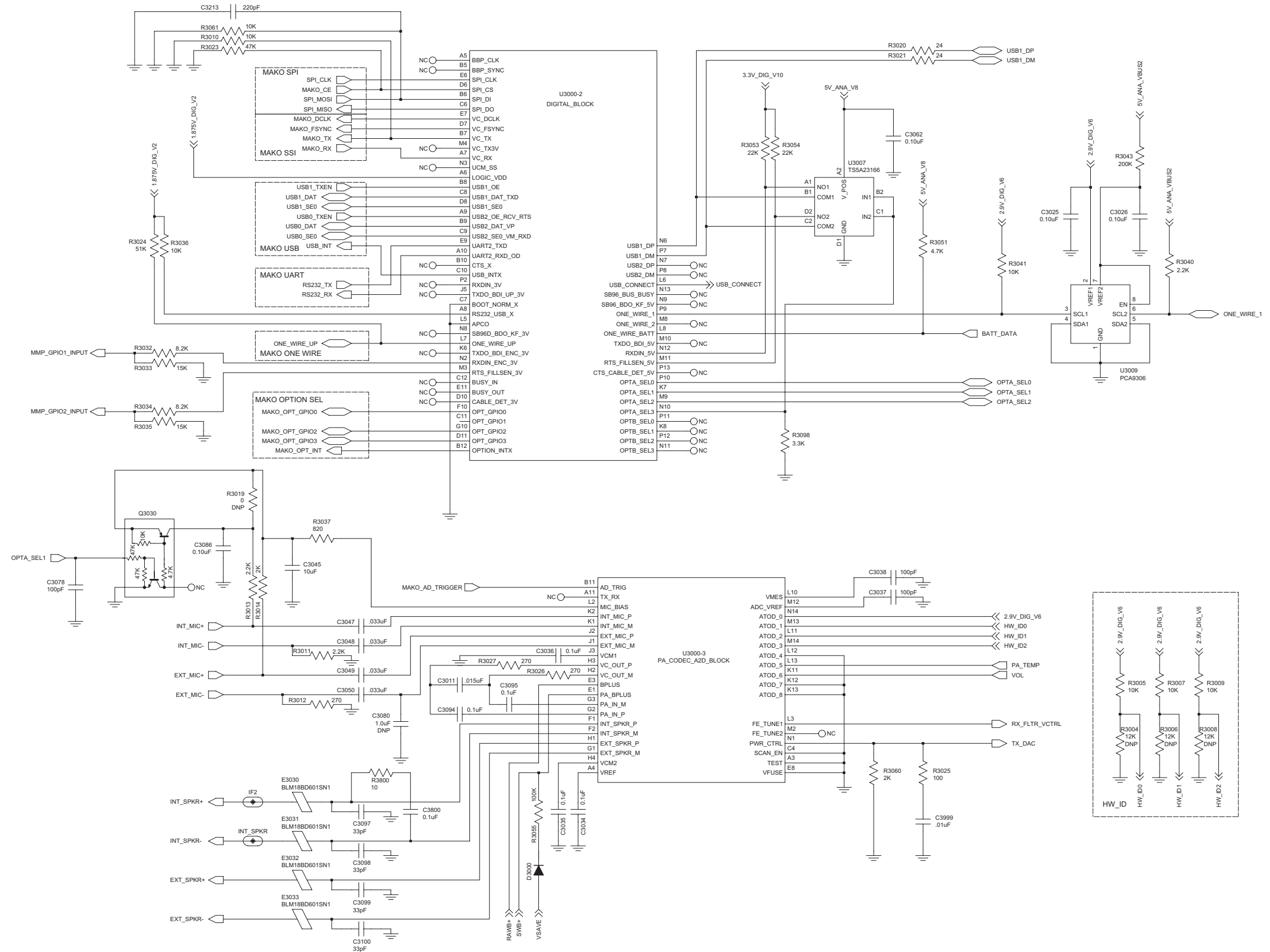
## SDRAM



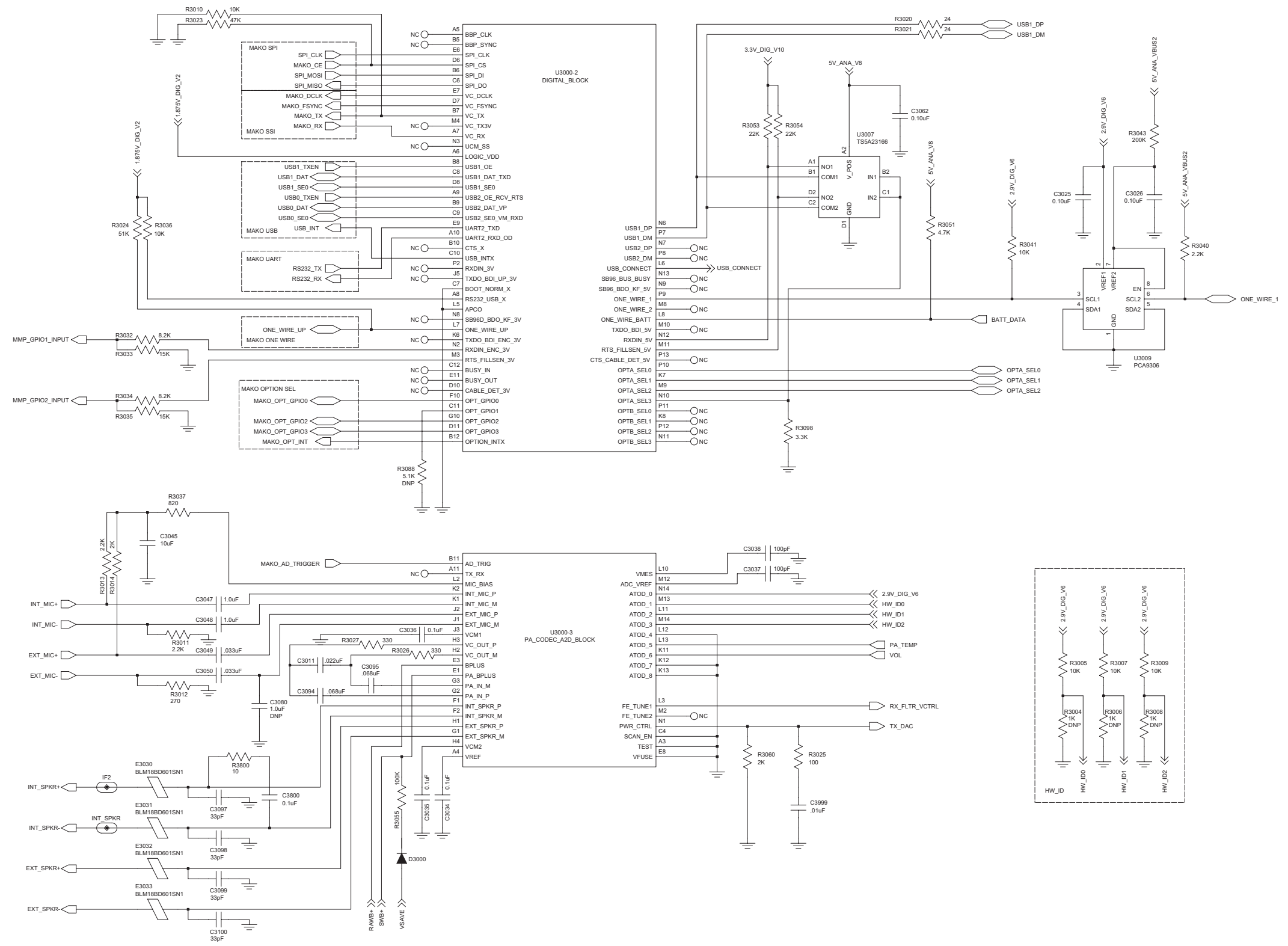
Controller Memory Schematic Diagram (for 8475130M01)



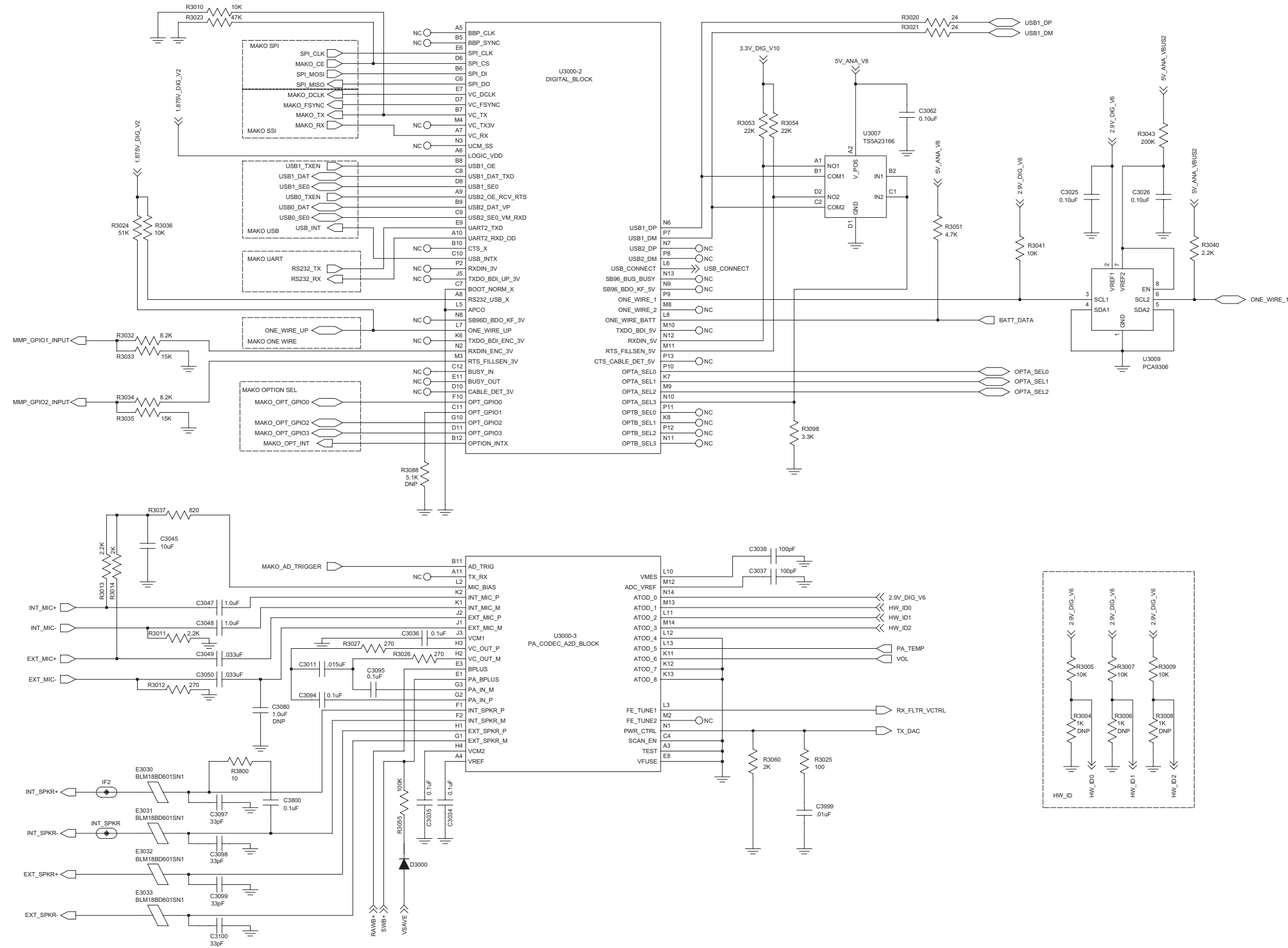
Controller Audio and Digital Interface Schematic Diagram (for 8486716Z04)



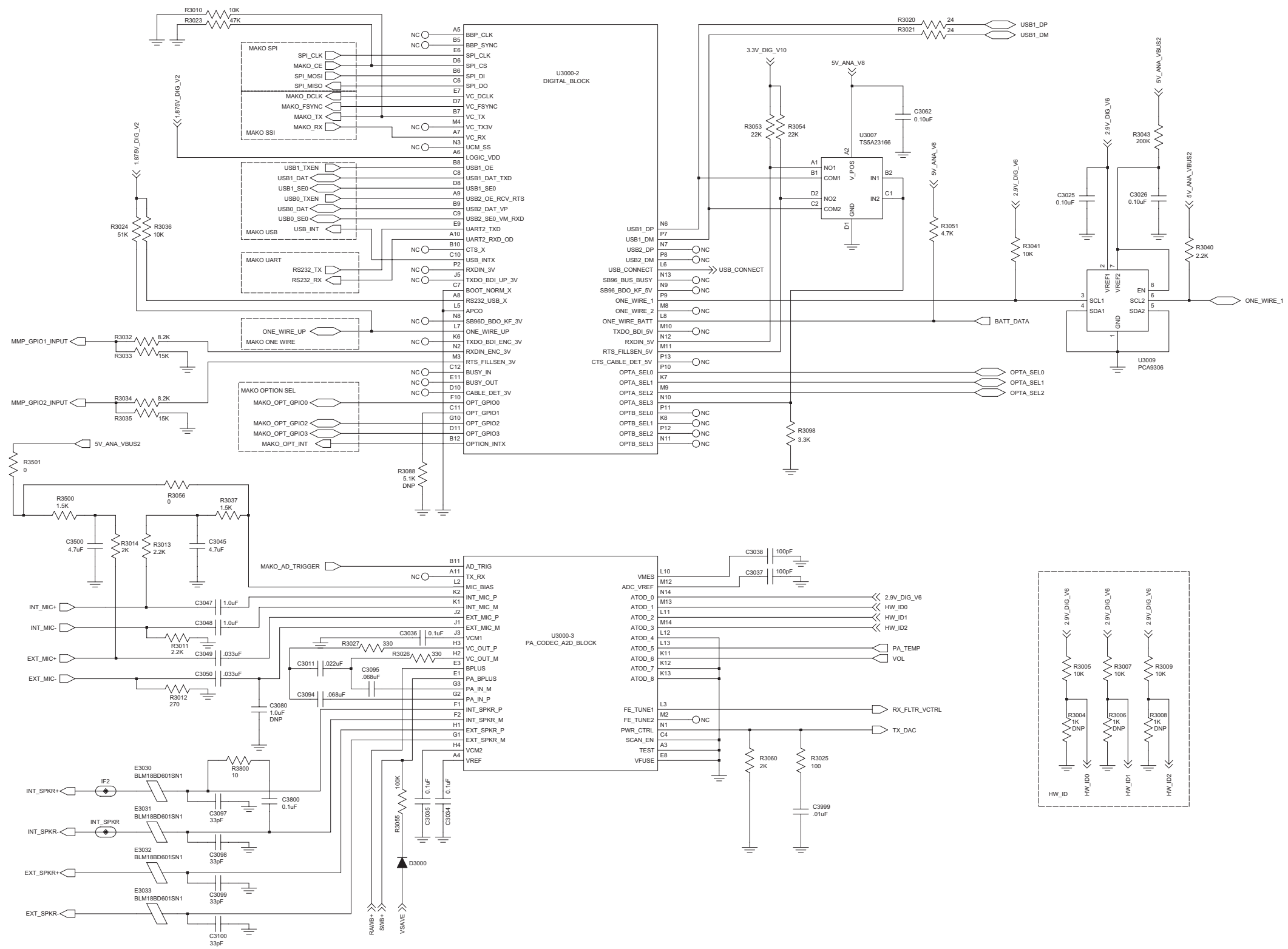
Controller Audio and Digital Interface Schematic Diagram (for 8475130M01)



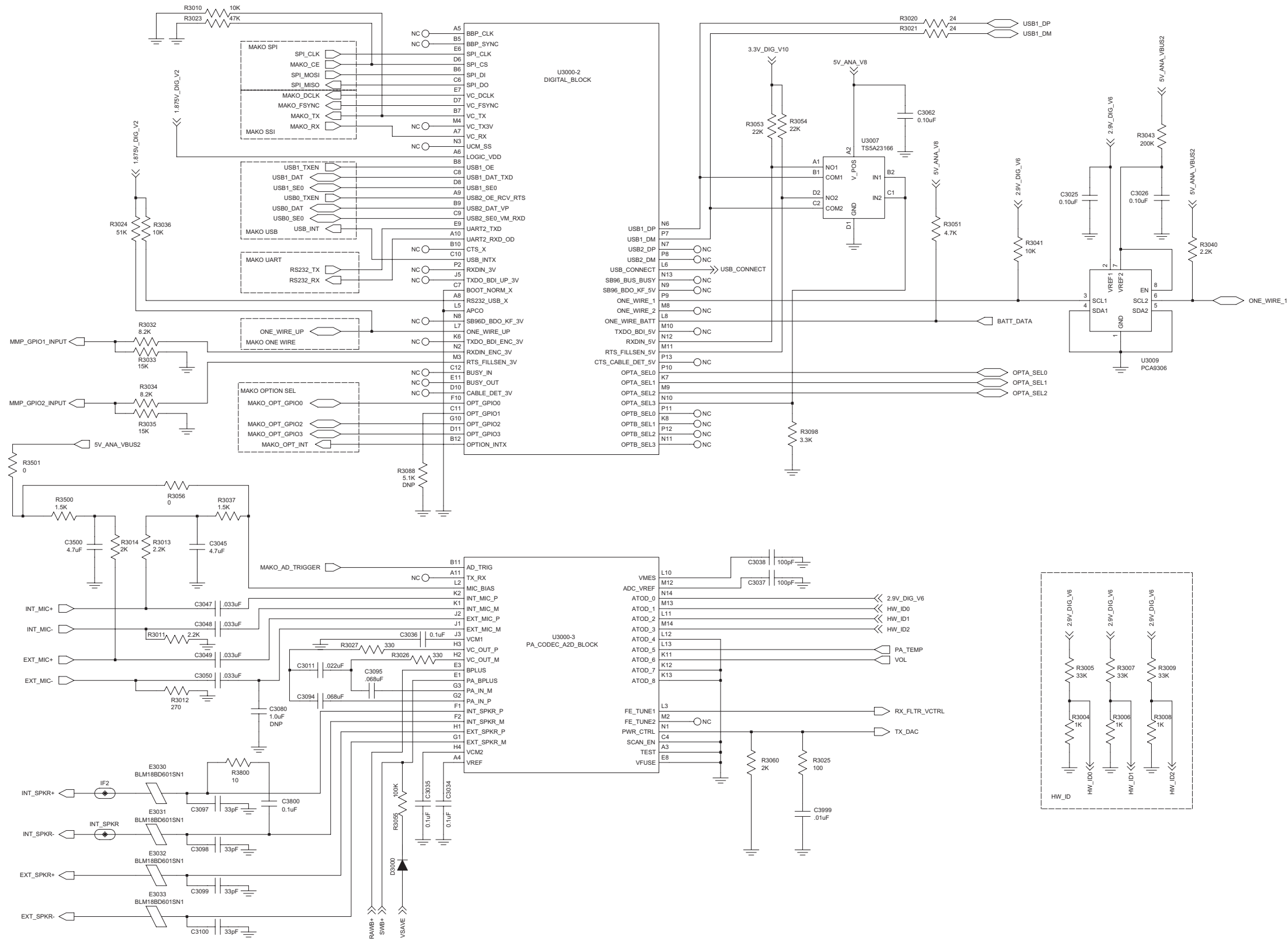
Controller Audio and Digital Interface Schematic Diagram (for 8486716Z07/8486716Z13, 8486716Z08 & 8415113H03)



Controller Audio and Digital Interface Schematic Diagram (for 8415113H05)

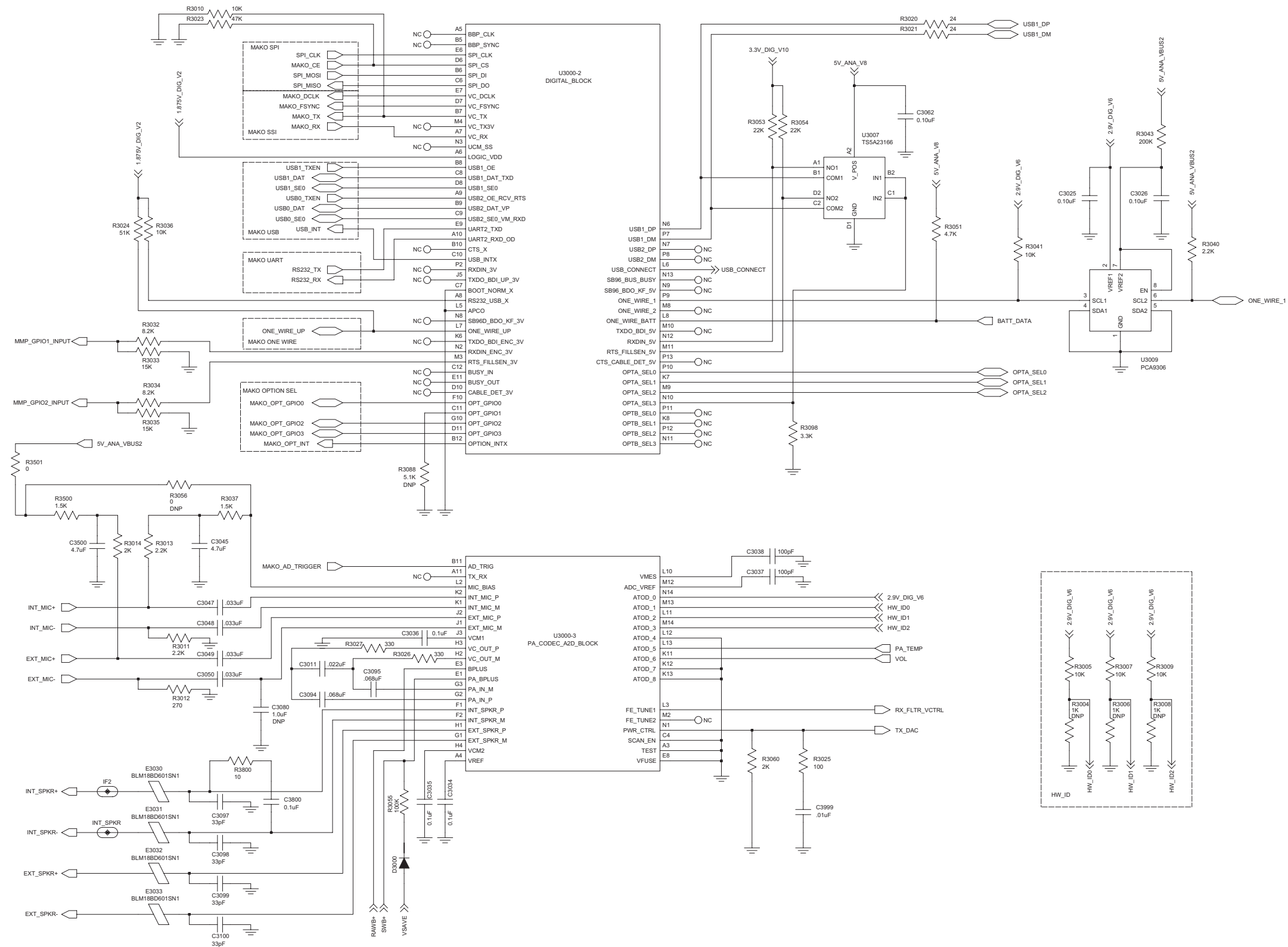


Controller Audio and Digital Interface Schematic Diagram (for 8486716Z16 & 8415113H13)

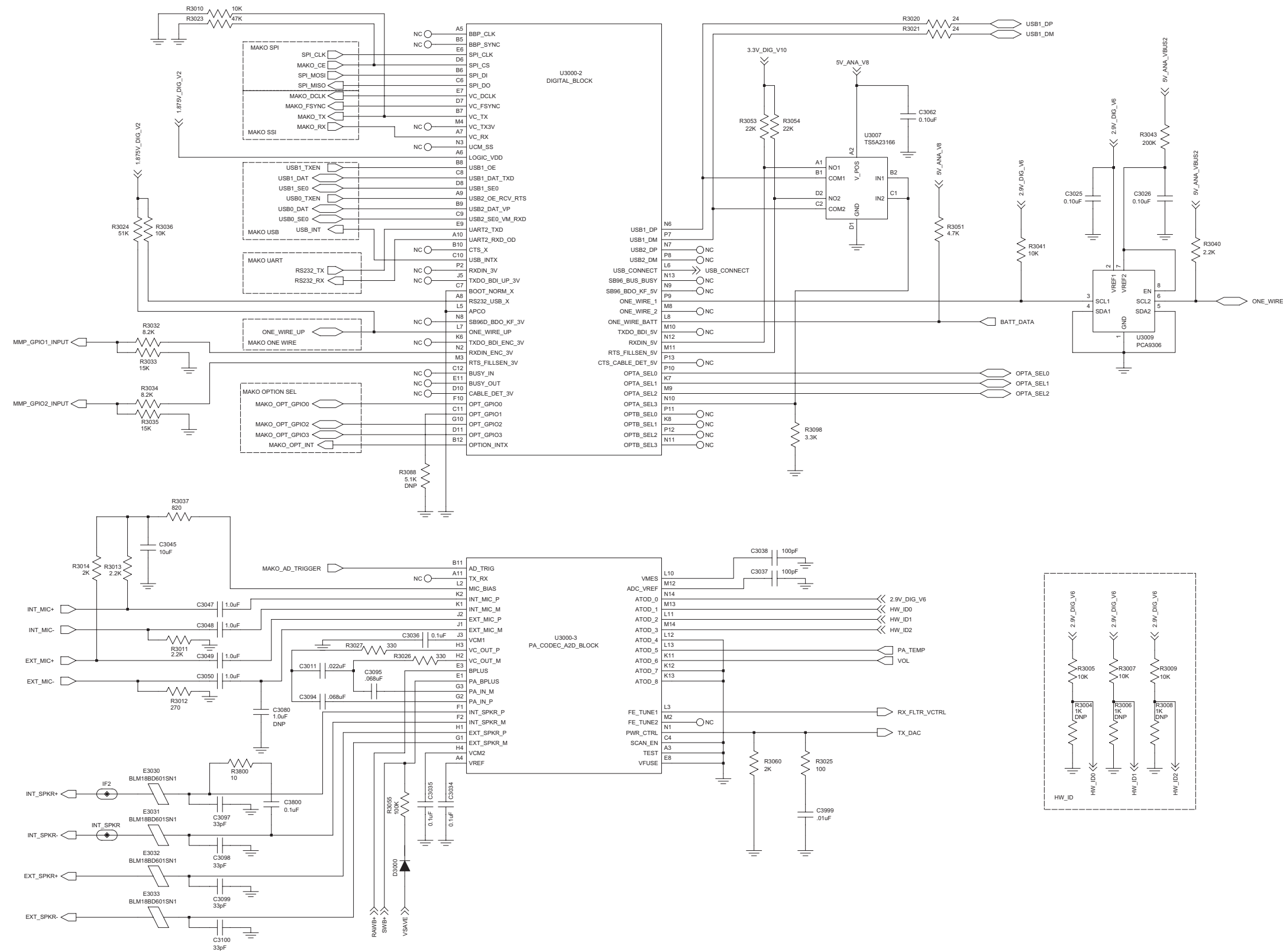


Controller Audio and Digital Interface Schematic Diagram (for 8486716Z23)

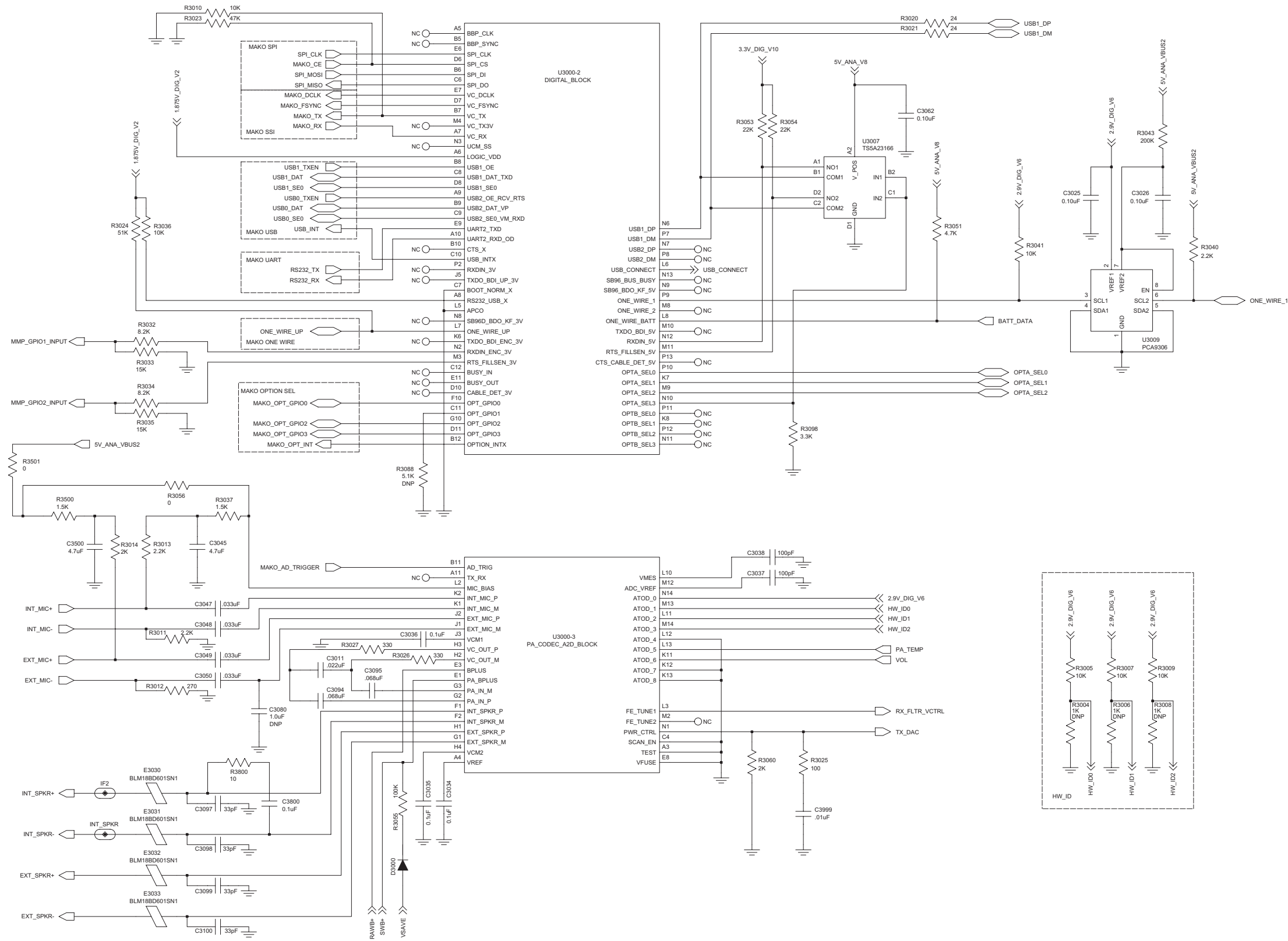




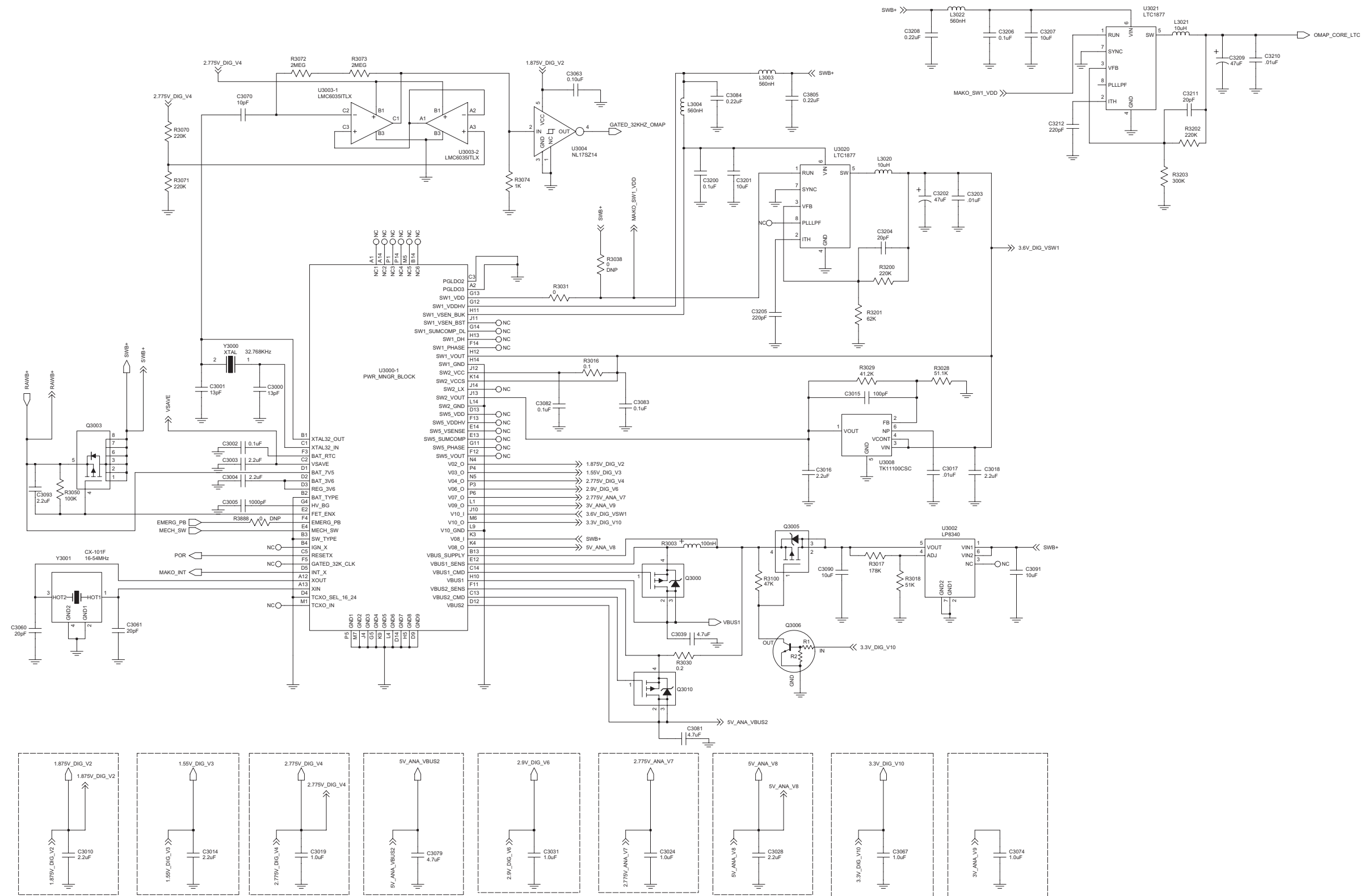
Controller Audio and Digital Interface Schematic Diagram (for 8486716Z24)



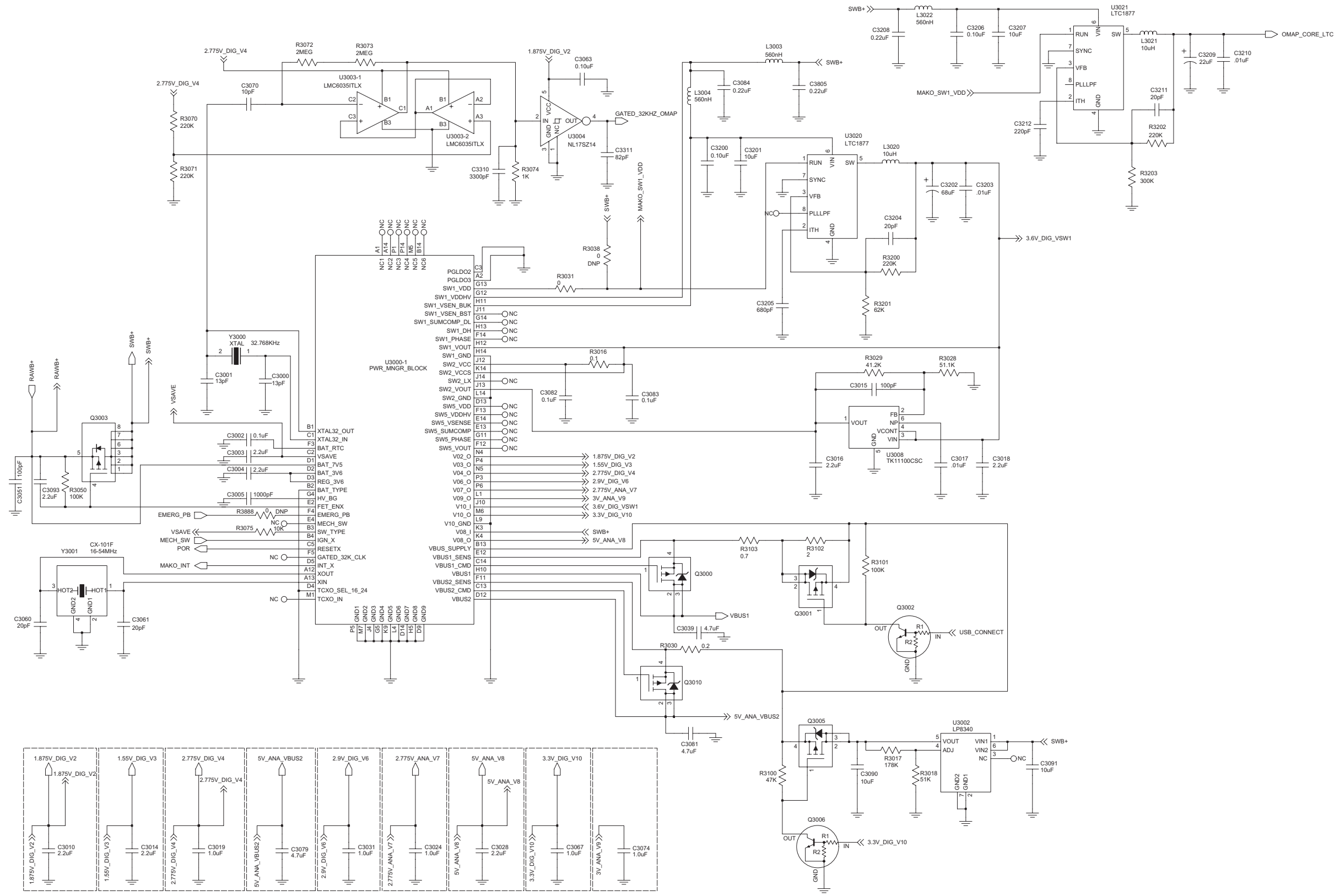
Controller Audio and Digital Interface Schematic Diagram (for 8415113H19)



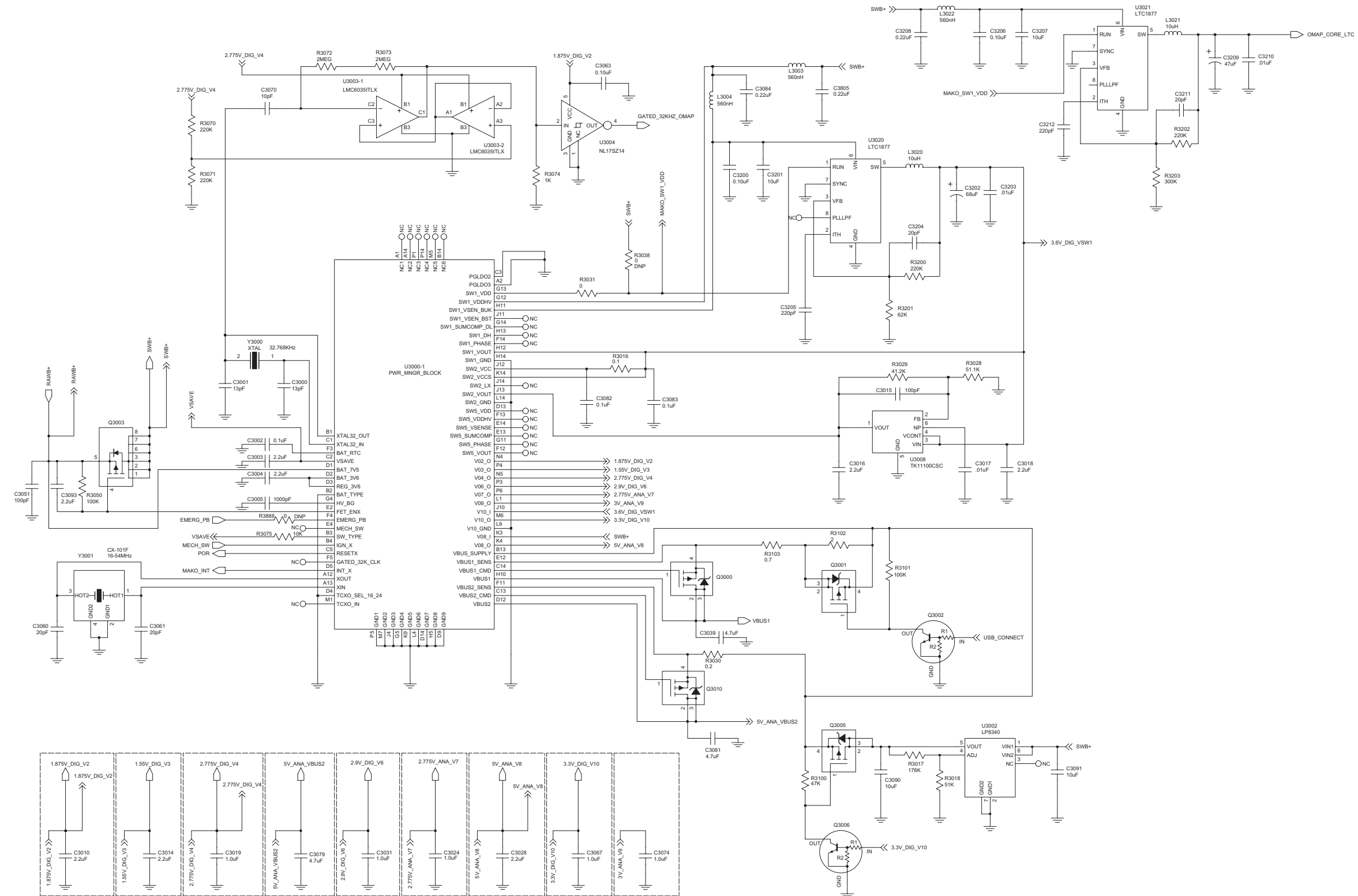
Controller Audio and Digital Interface Schematic Diagram (for 8415113H20)



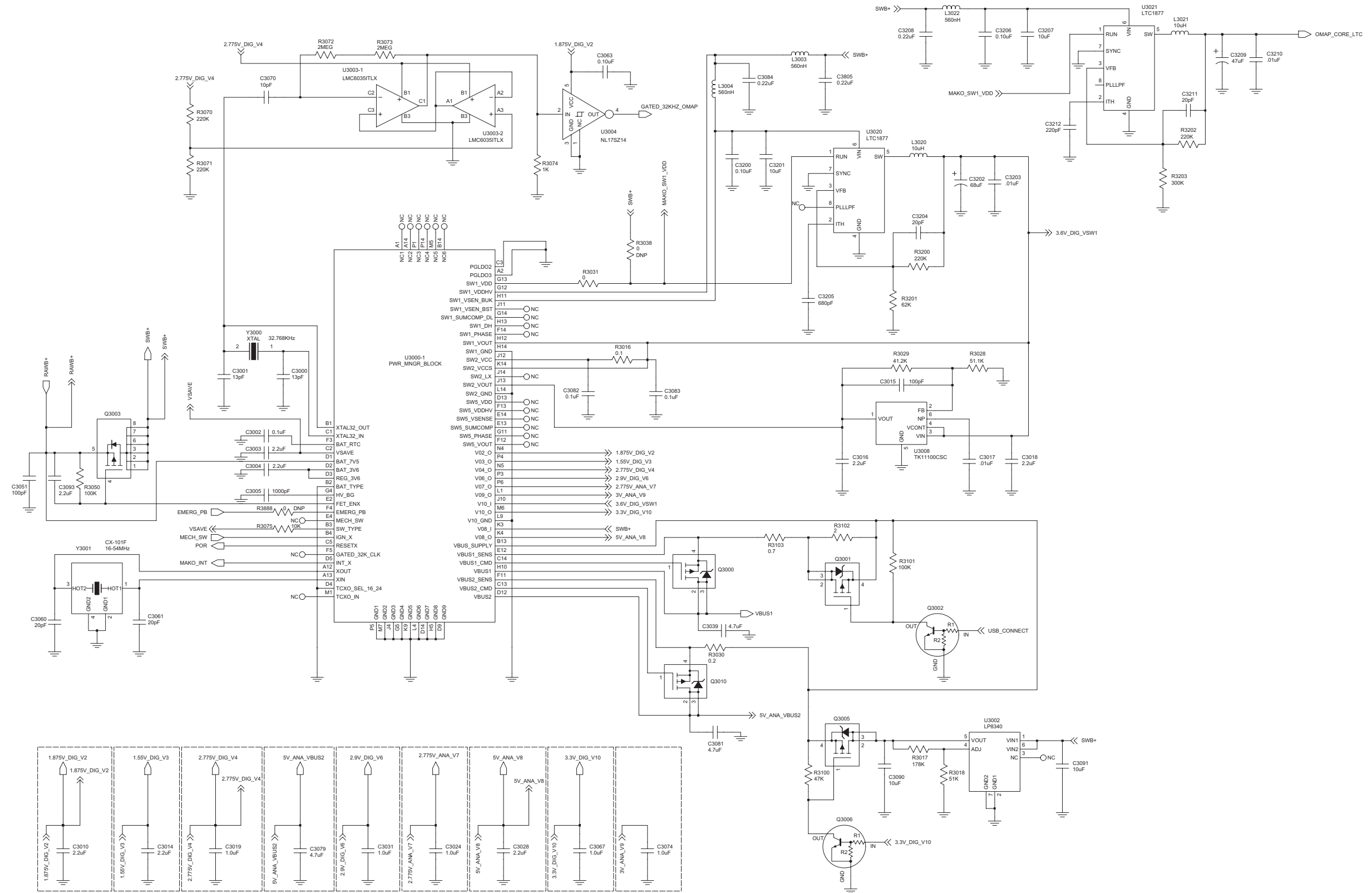
Controller Power Management Block Schematic Diagram (for 8486716Z04)



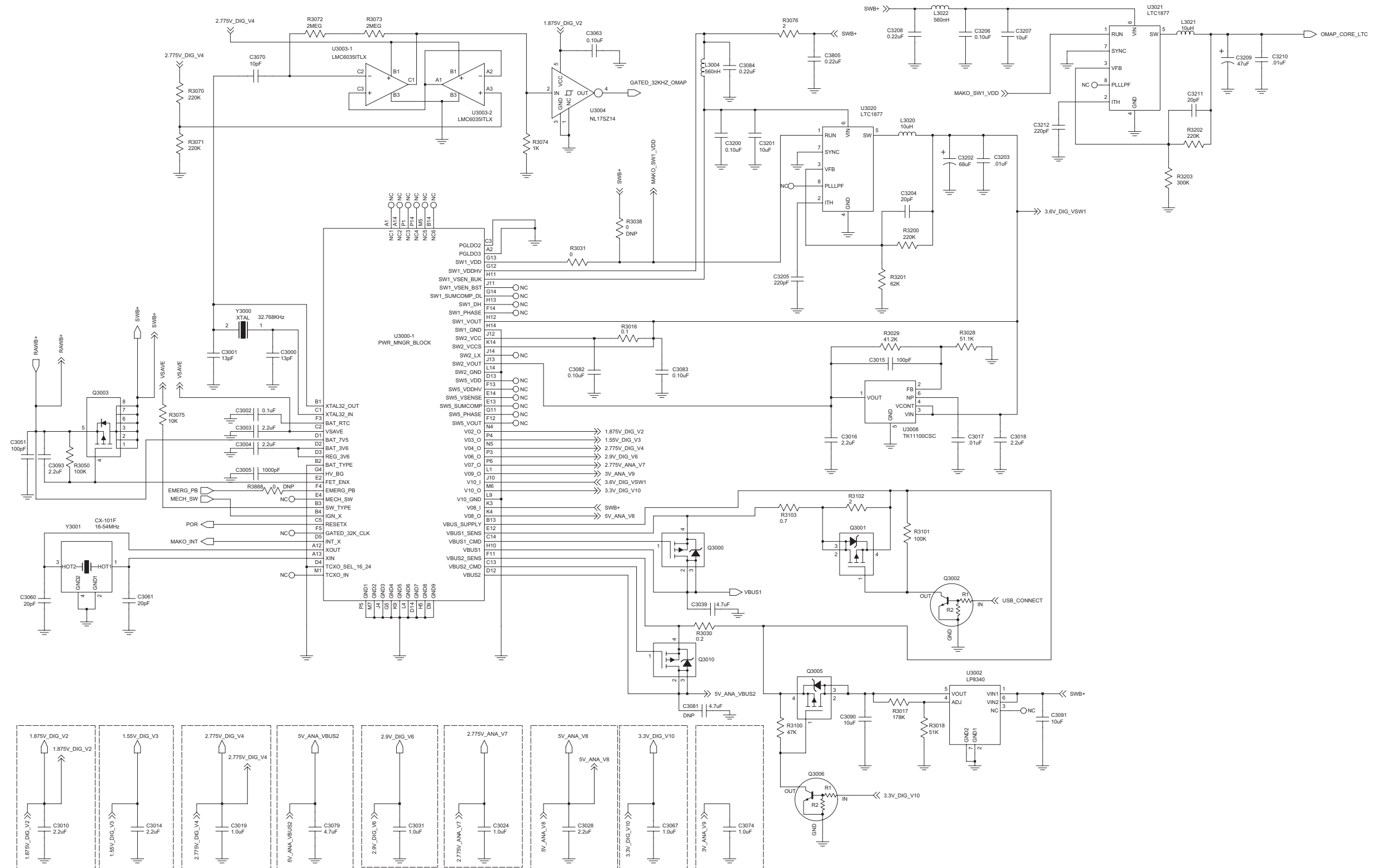
Controller Power Management Block Schematic Diagram (for 8475130M01)



Controller Power Management Block Schematic Diagram (for 8486716Z07/8486716Z13)

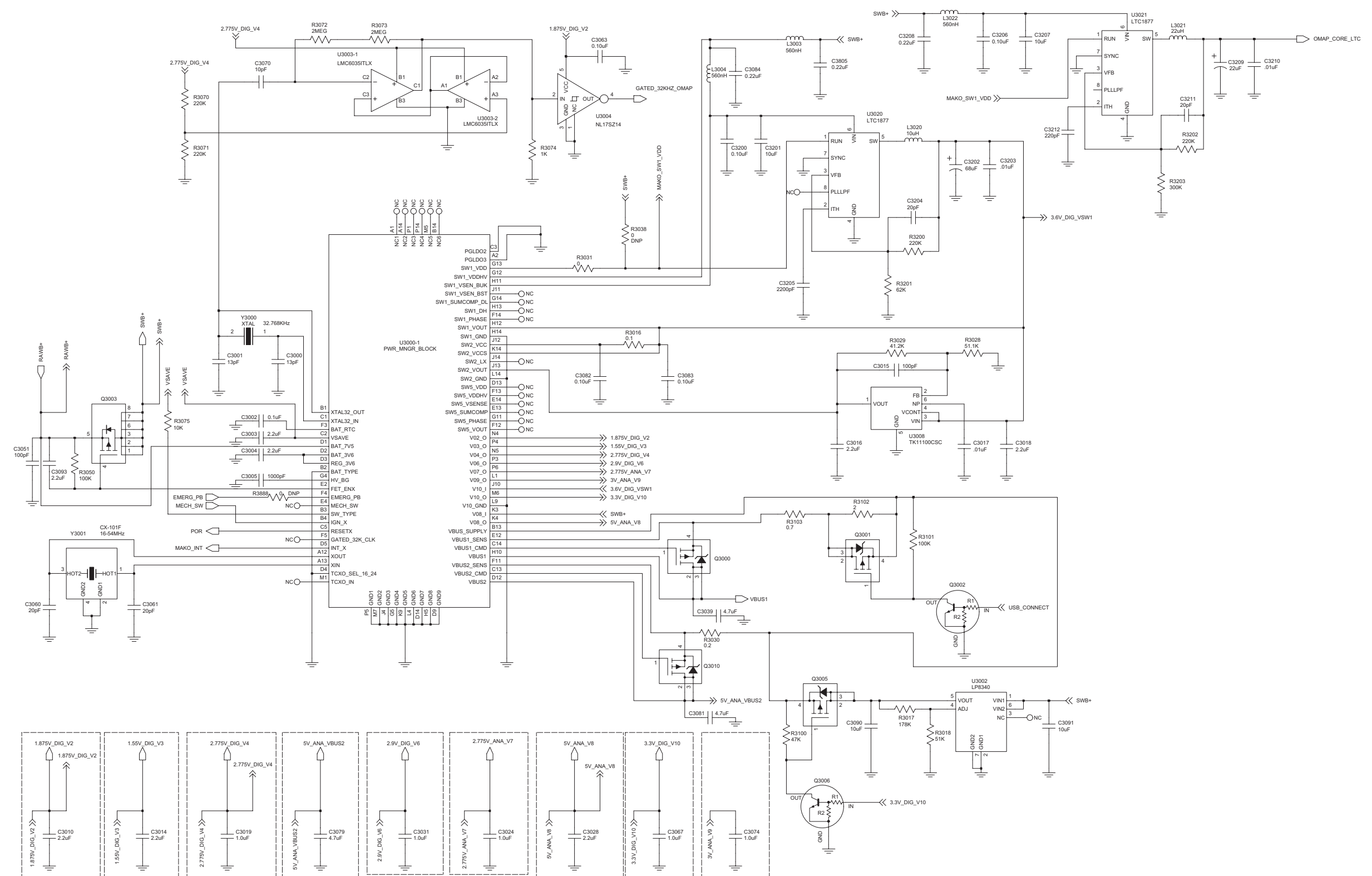


Controller Power Management Block Schematic Diagram (for 8486716Z08)

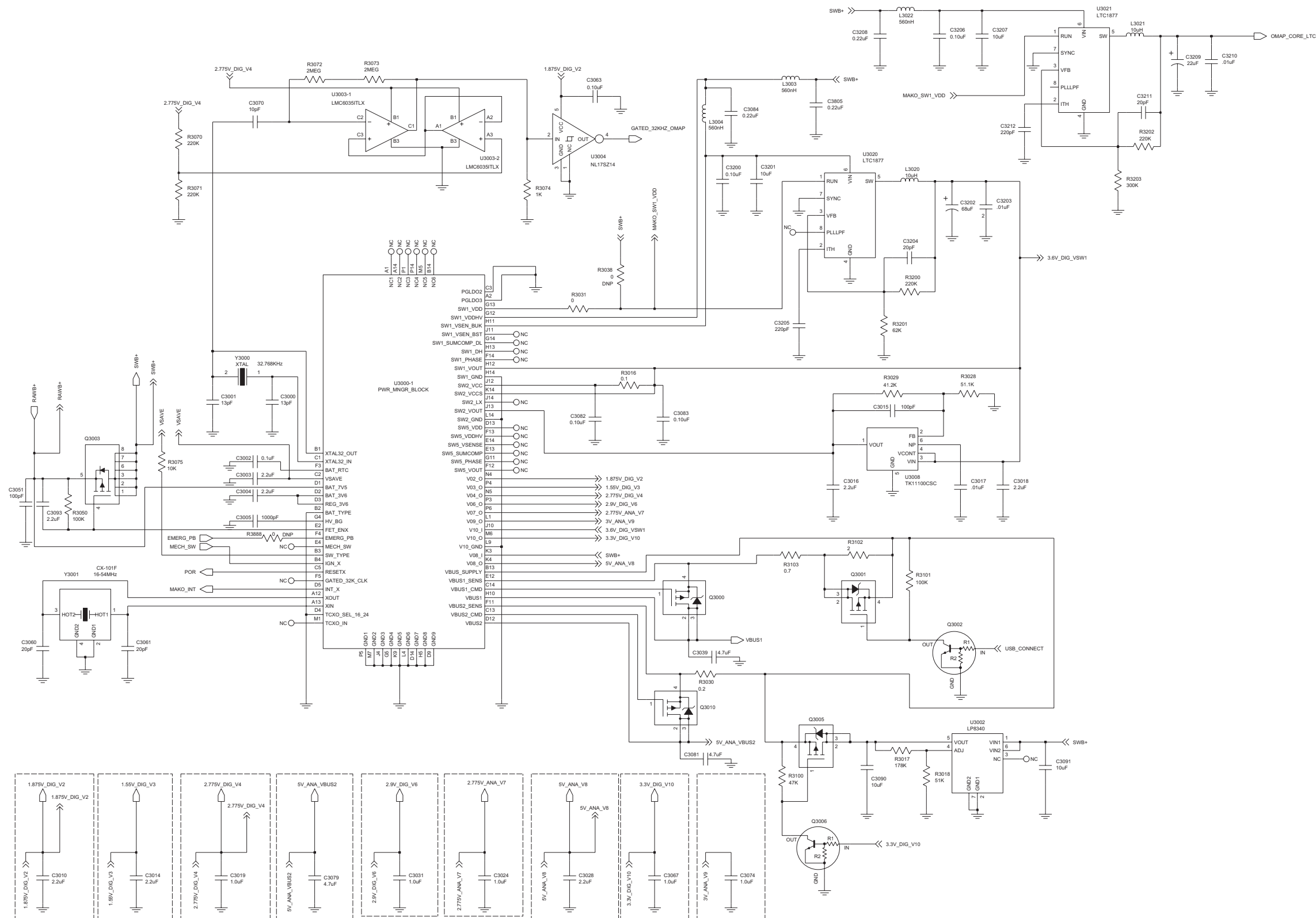


Controller Power Management Block Schematic Diagram (for 8415113H03)

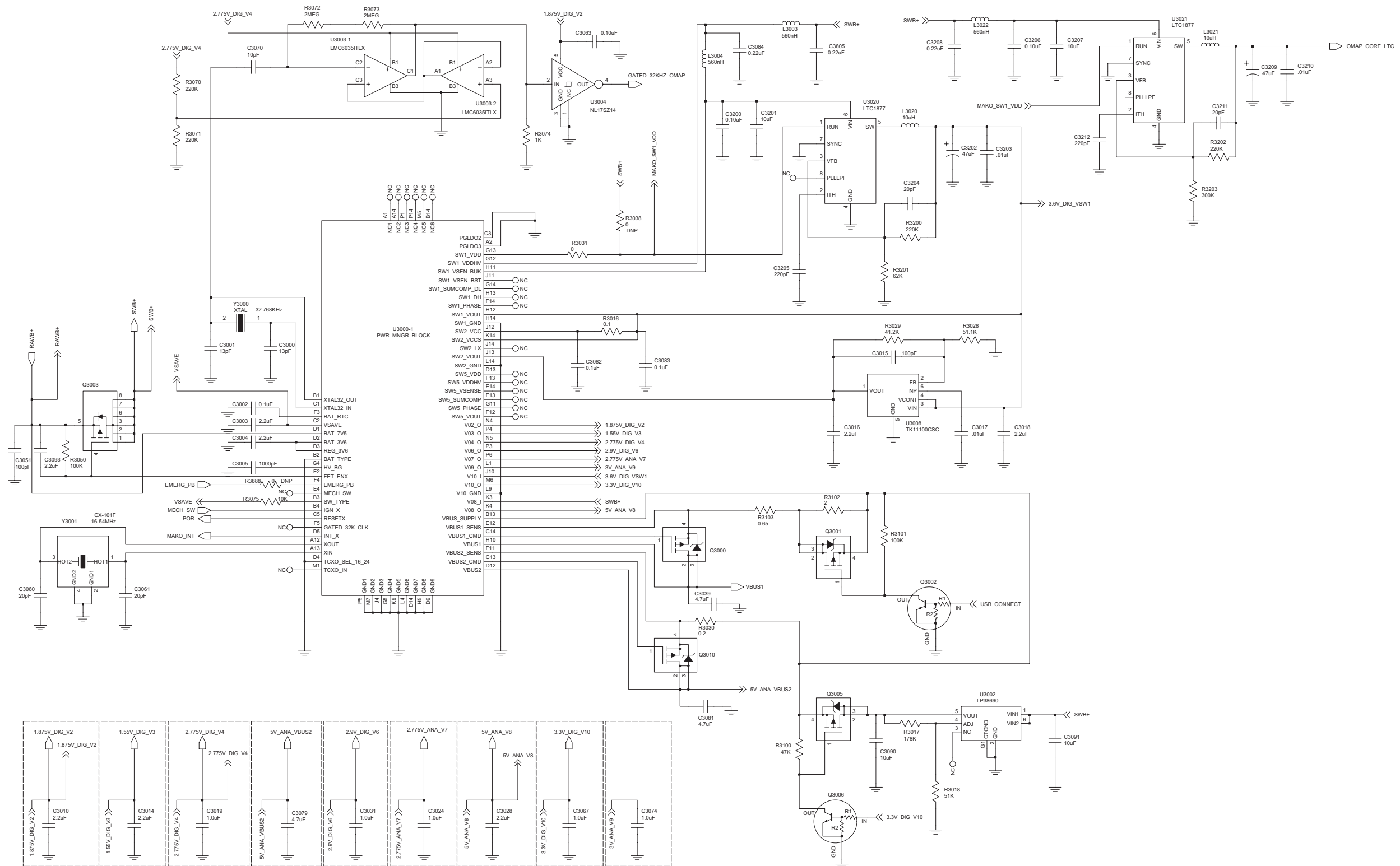




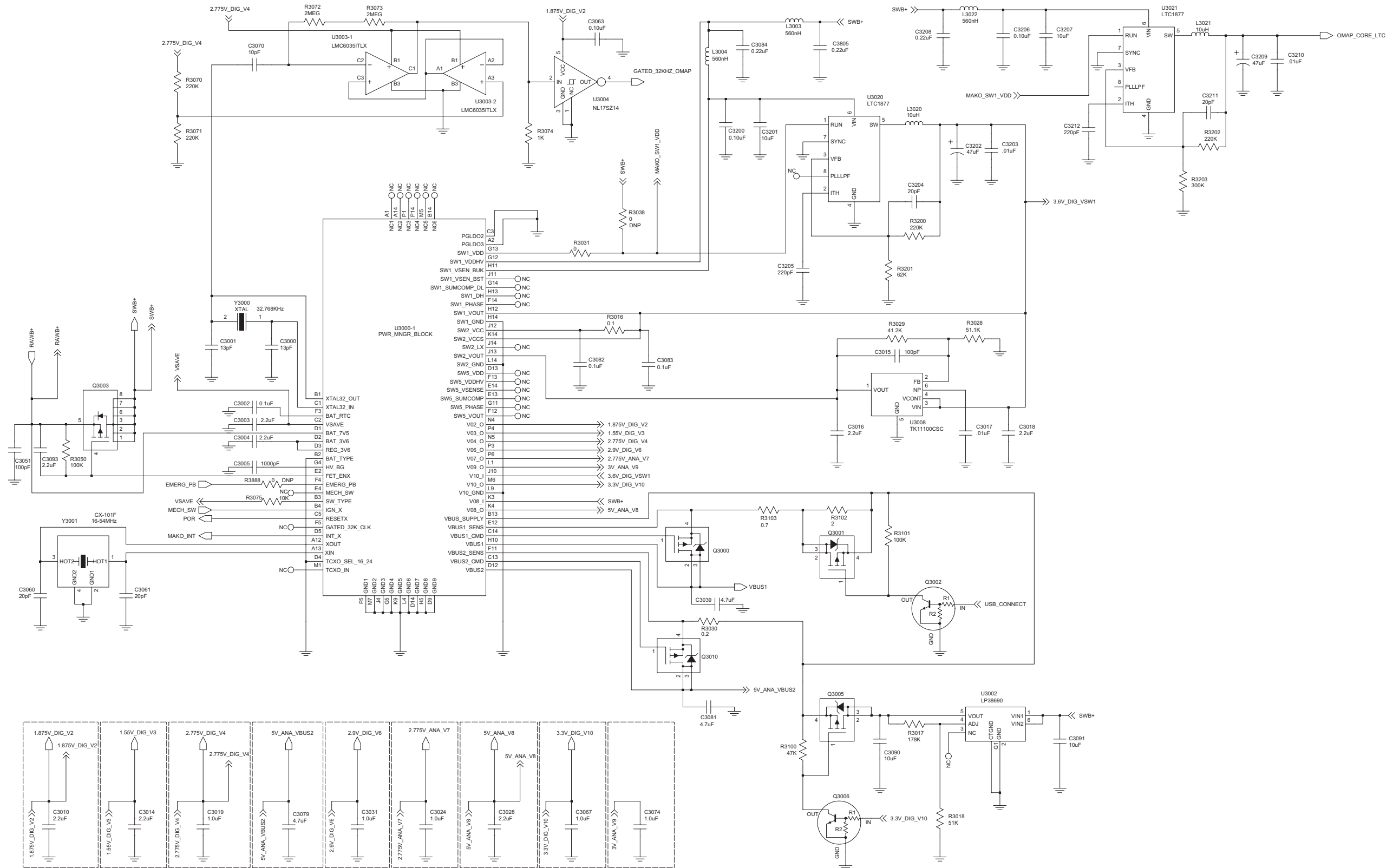
Controller Power Management Block Schematic Diagram (for 8415113H05)



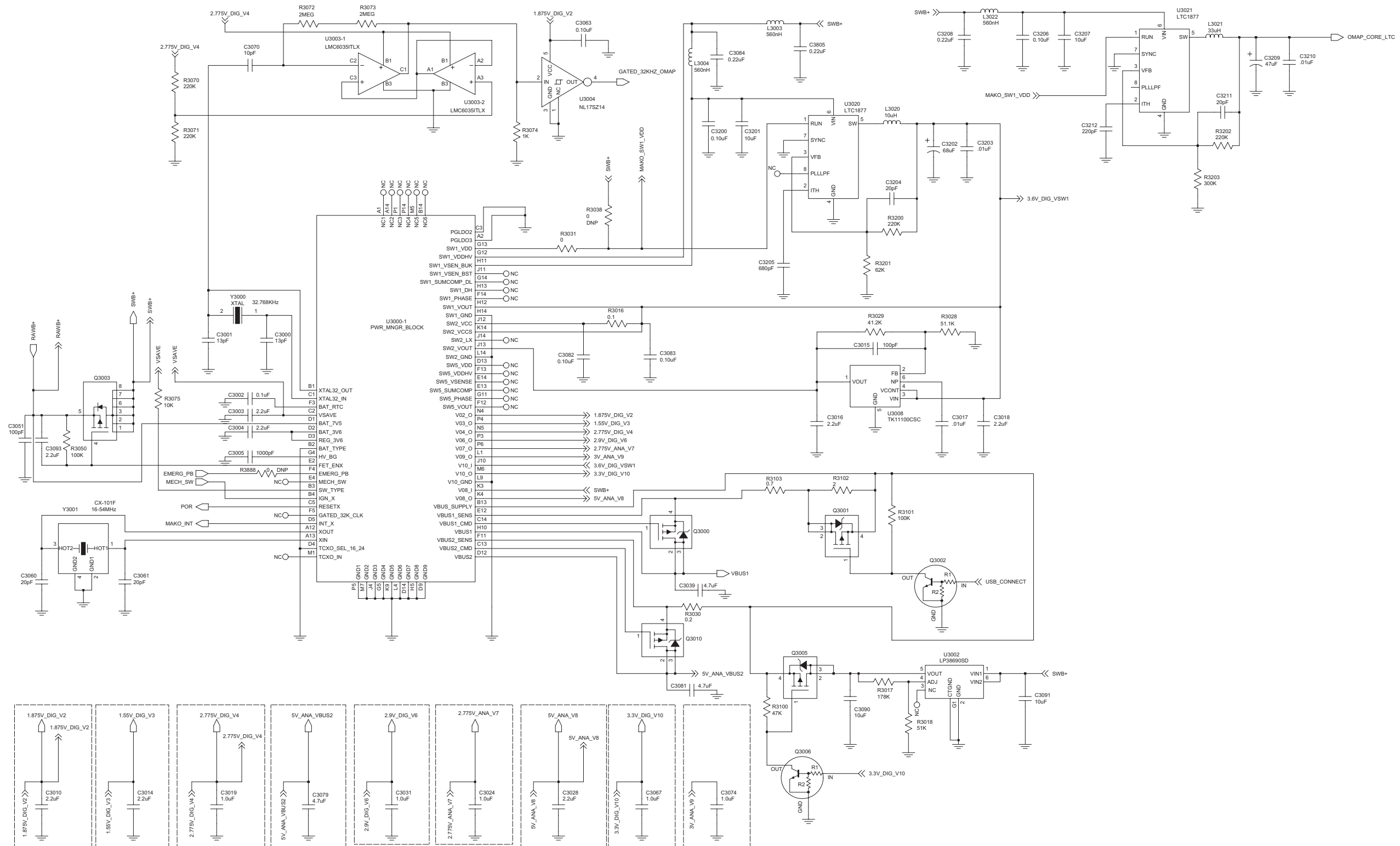
Controller Power Management Block Schematic Diagram (for 8415113H13)



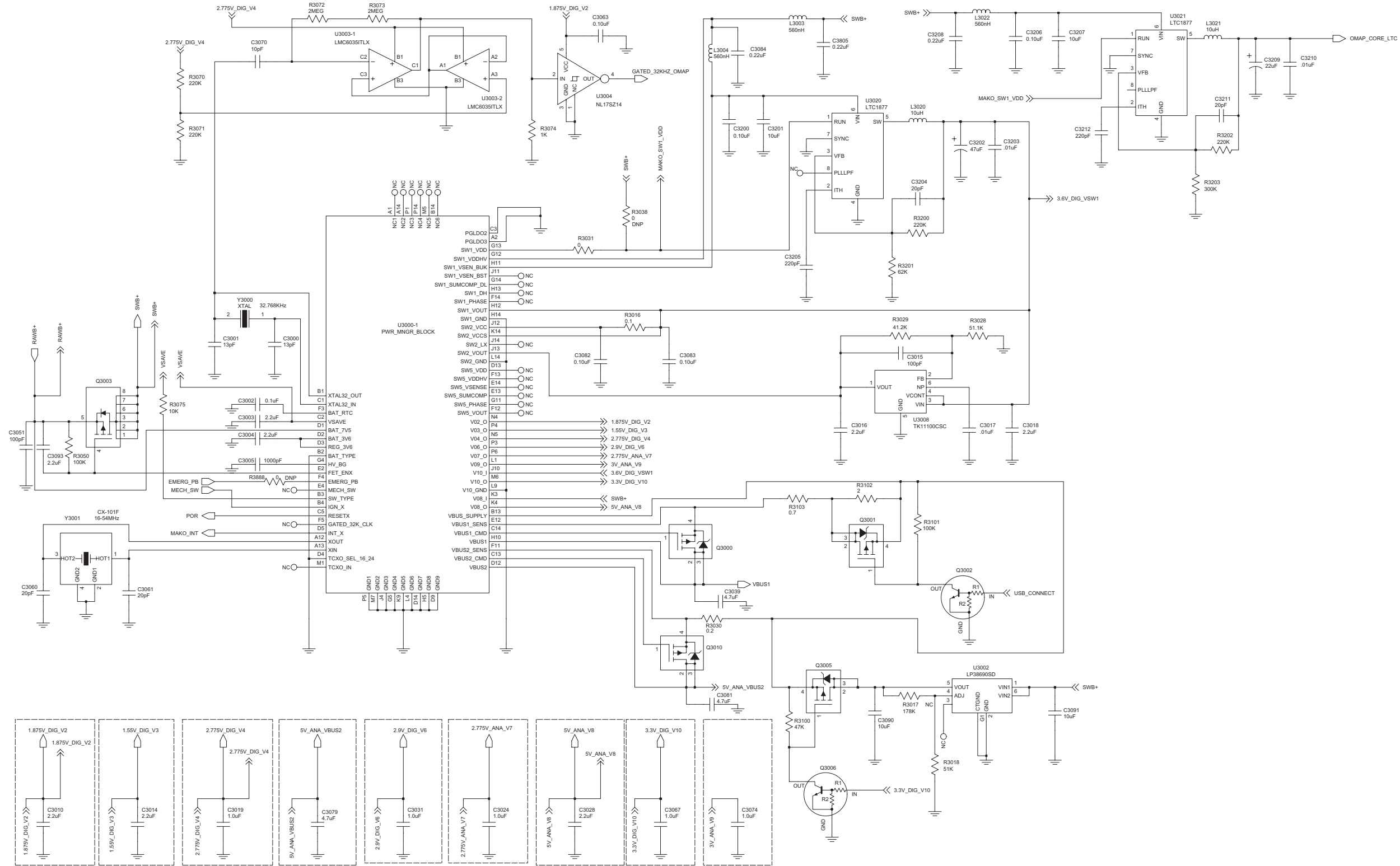
Controller Power Management Block Schematic Diagram (for 8486716Z23)



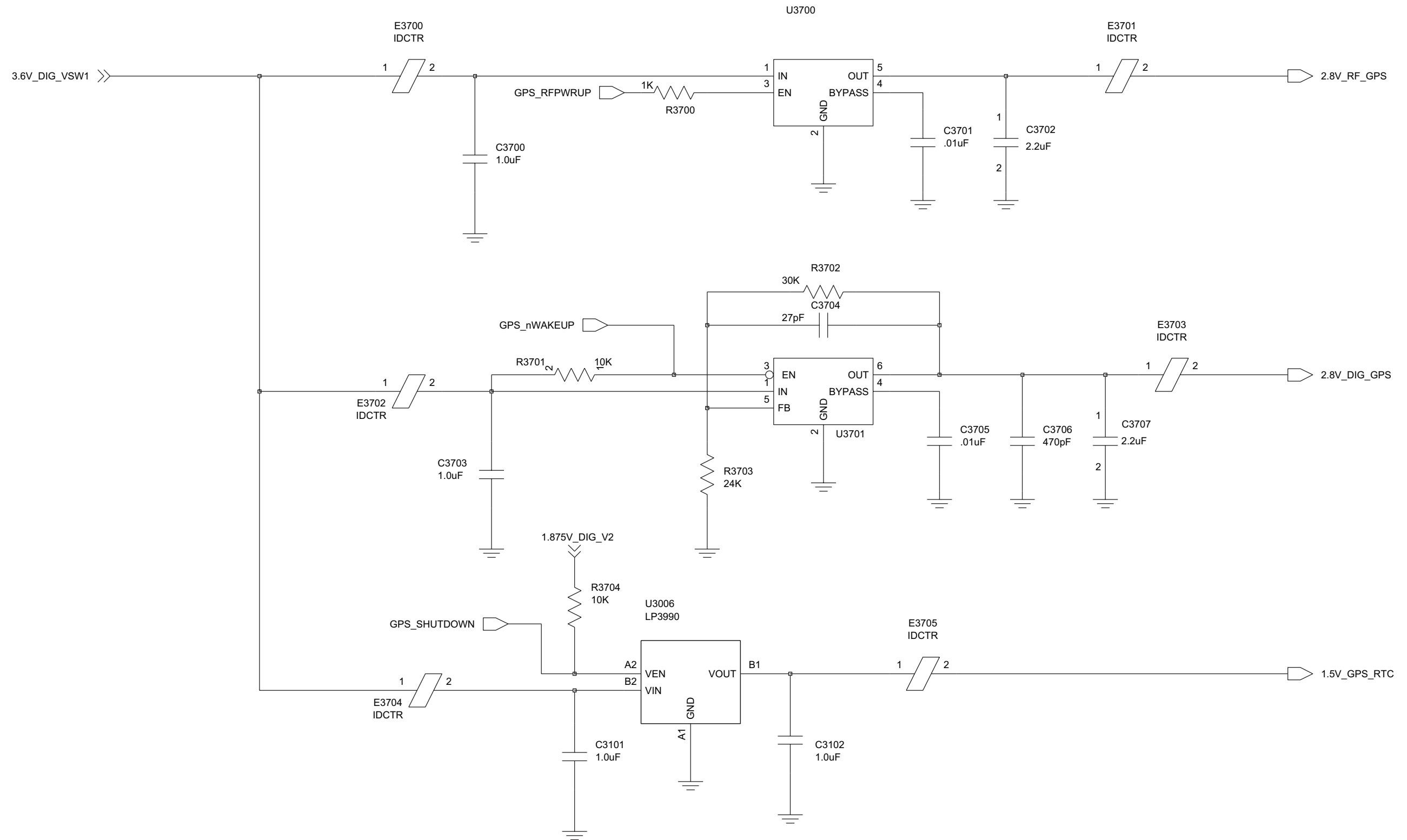
Controller Power Management Block Schematic Diagram (for 8486716Z24)



Controller Power Management Block Schematic Diagram (for 8415113H19)

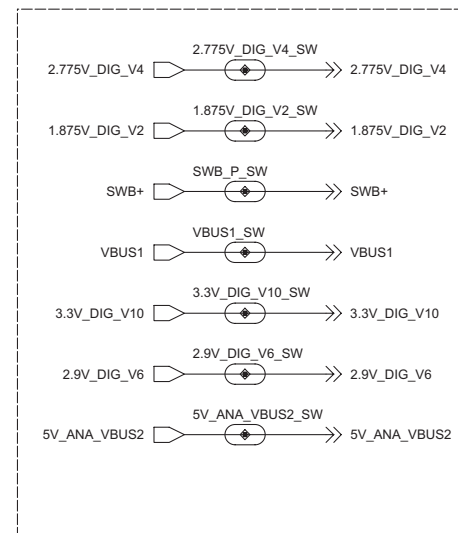
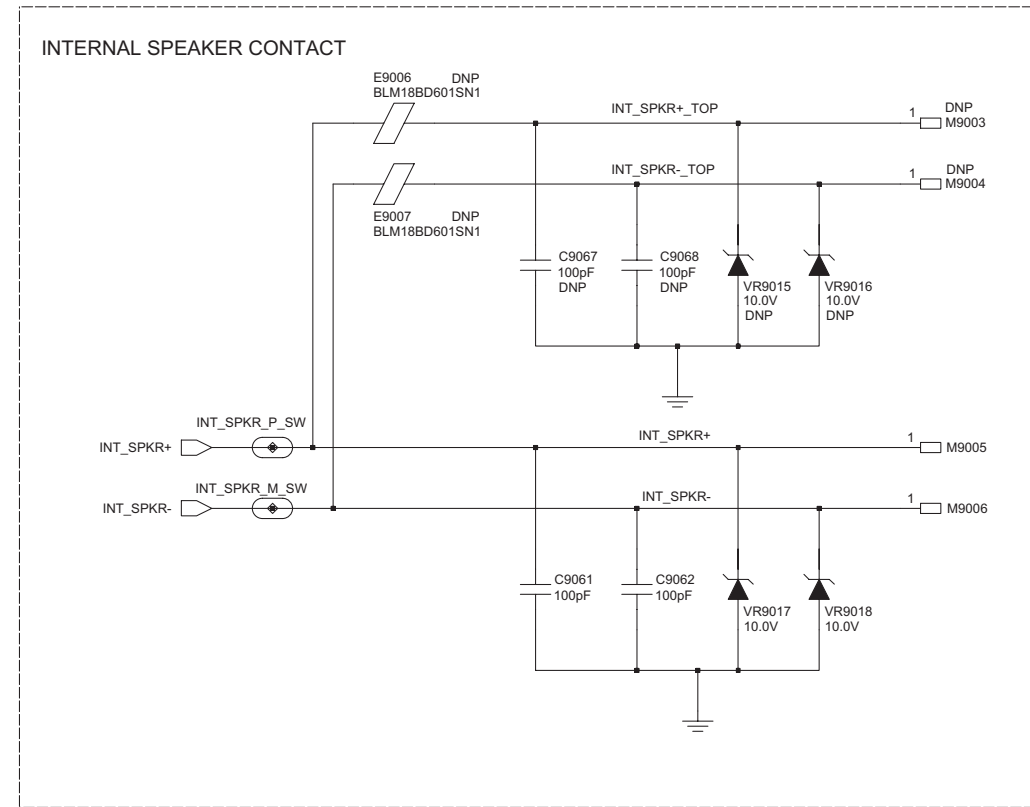
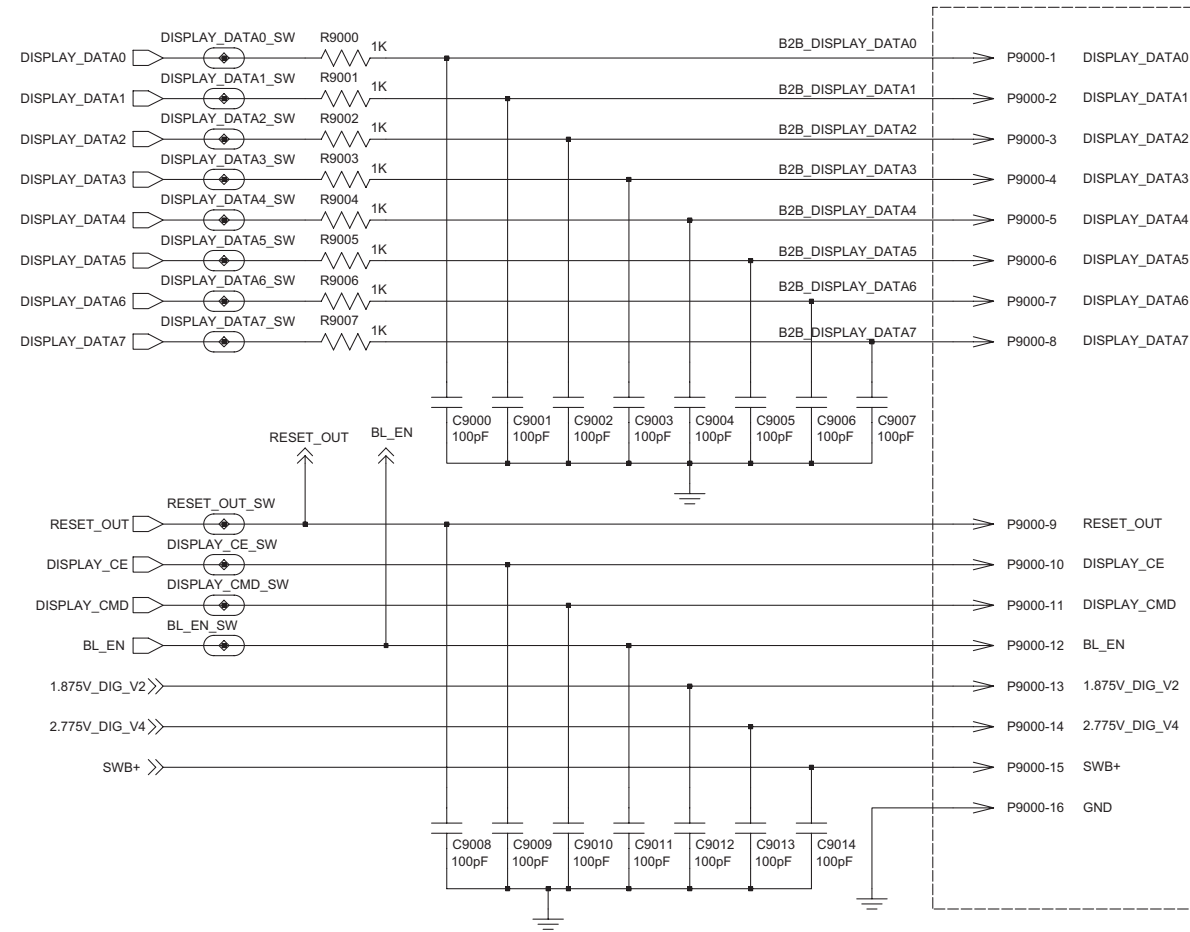


Controller Power Management Block Schematic Diagram (for 8415113H20)



Controller Line Regulators for GPS Schematic Diagram

DISPLAY B2B 16 PINS CONNECTOR (2887818K02)



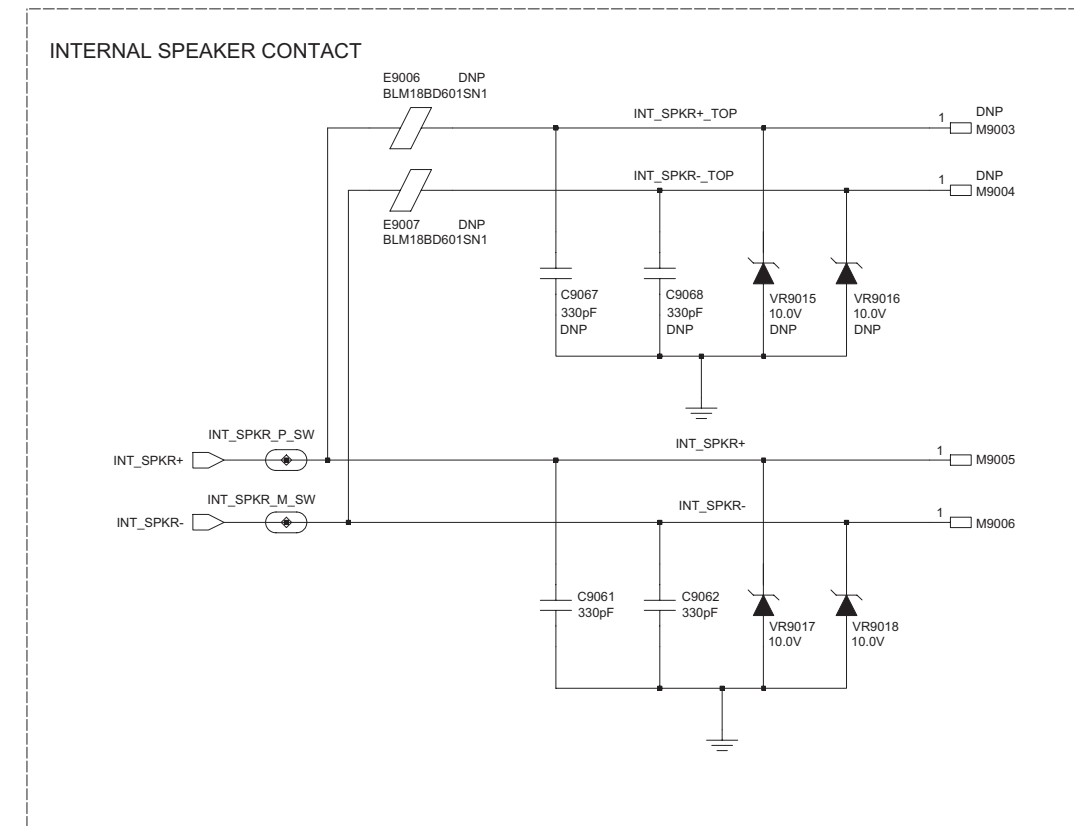
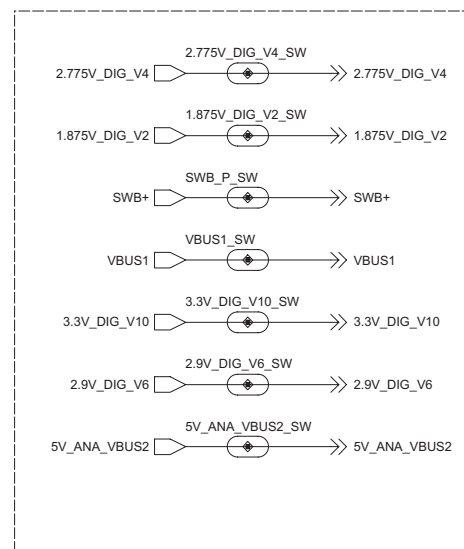
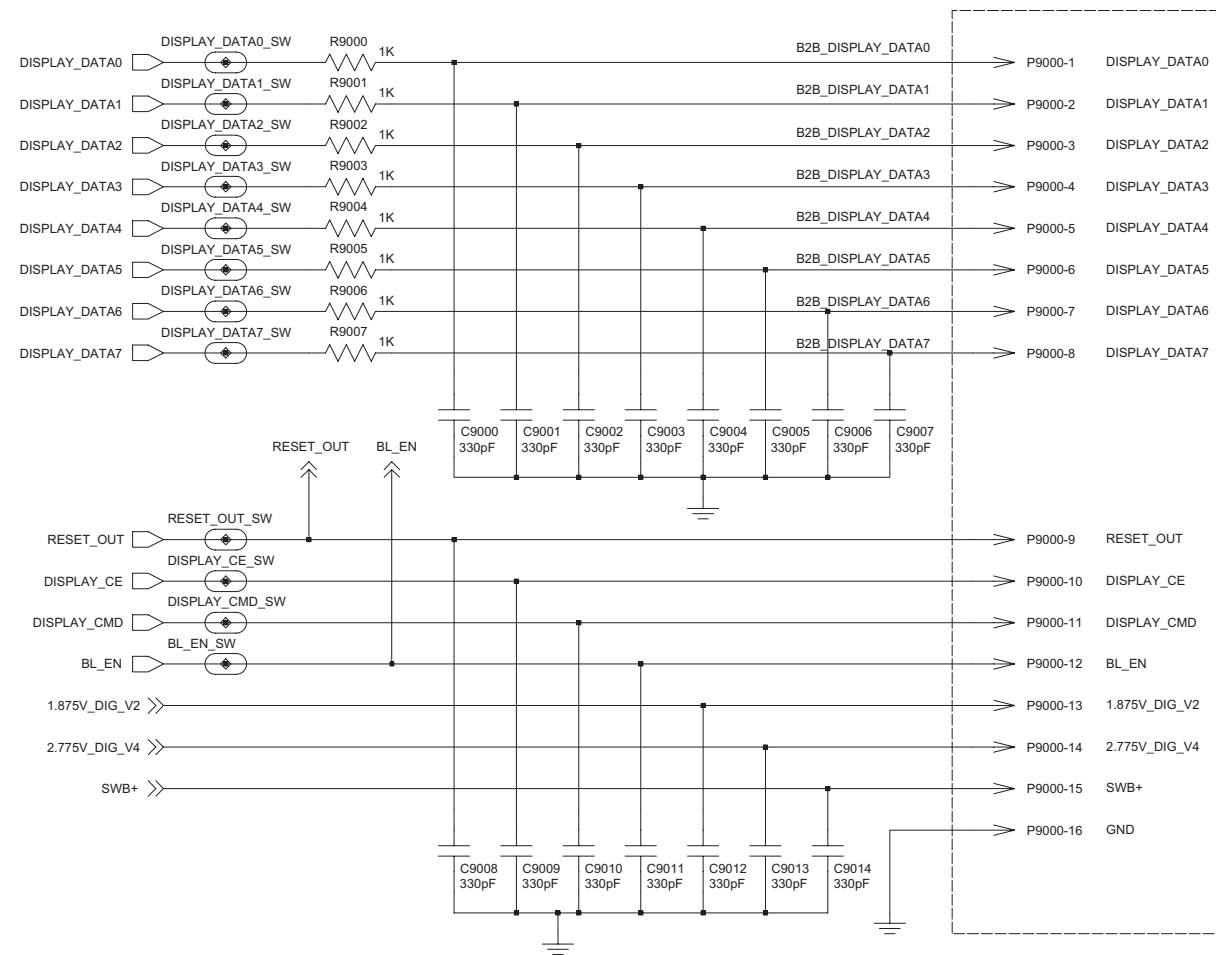
Largest reference designator

R9018	Q9003	M9007
C9068	E9007	J9001
VR9018	FL9000	P9000
D9000	L9008	
S9002		

Controller LCD and Speaker Interface Schematic Diagram (for 8486716Z04, 8486716Z07/8486716Z13, 8486716Z08 & 8475130M01)



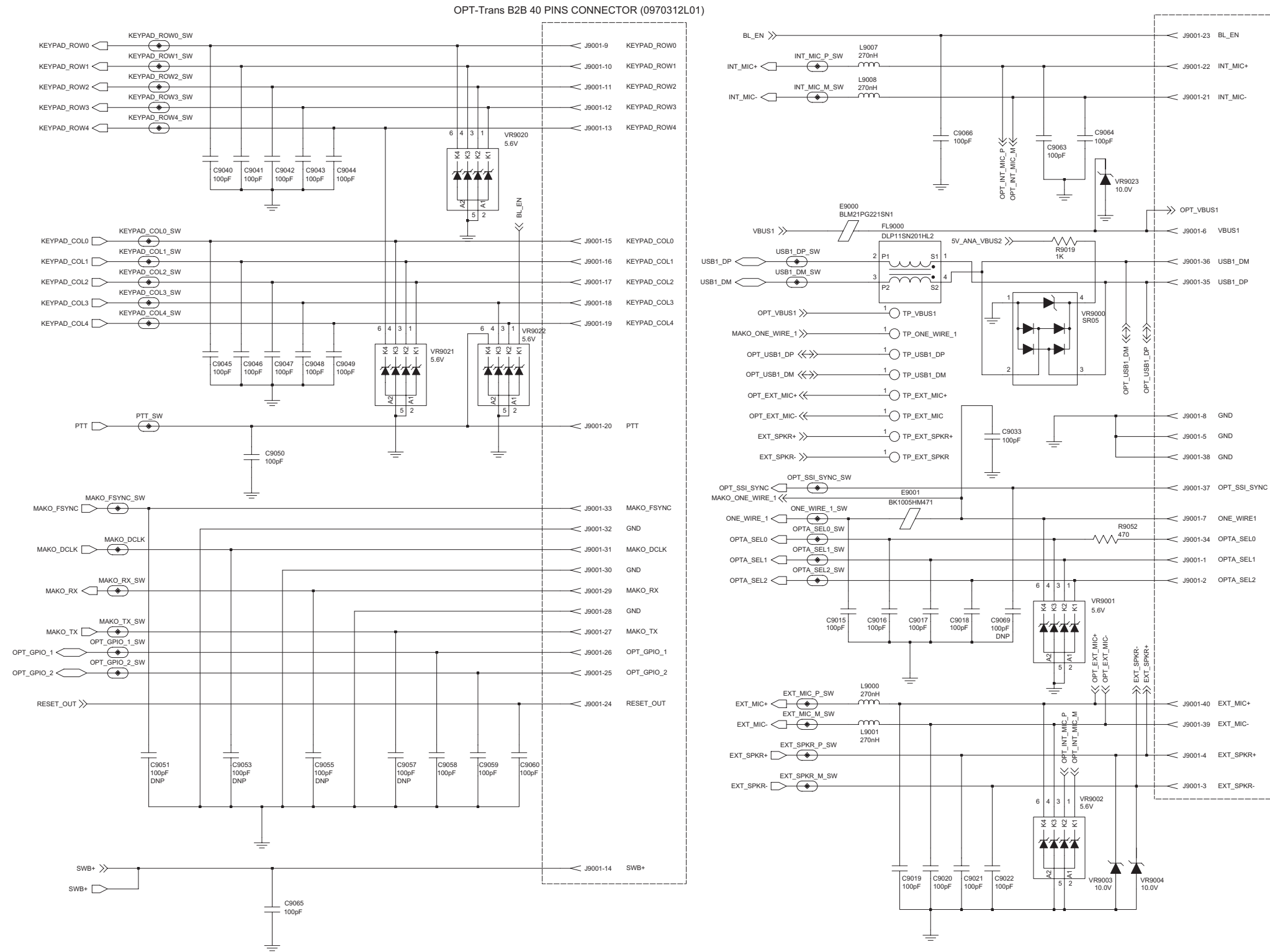
DISPLAY B2B 16 PINS CONNECTOR (2887818K02)



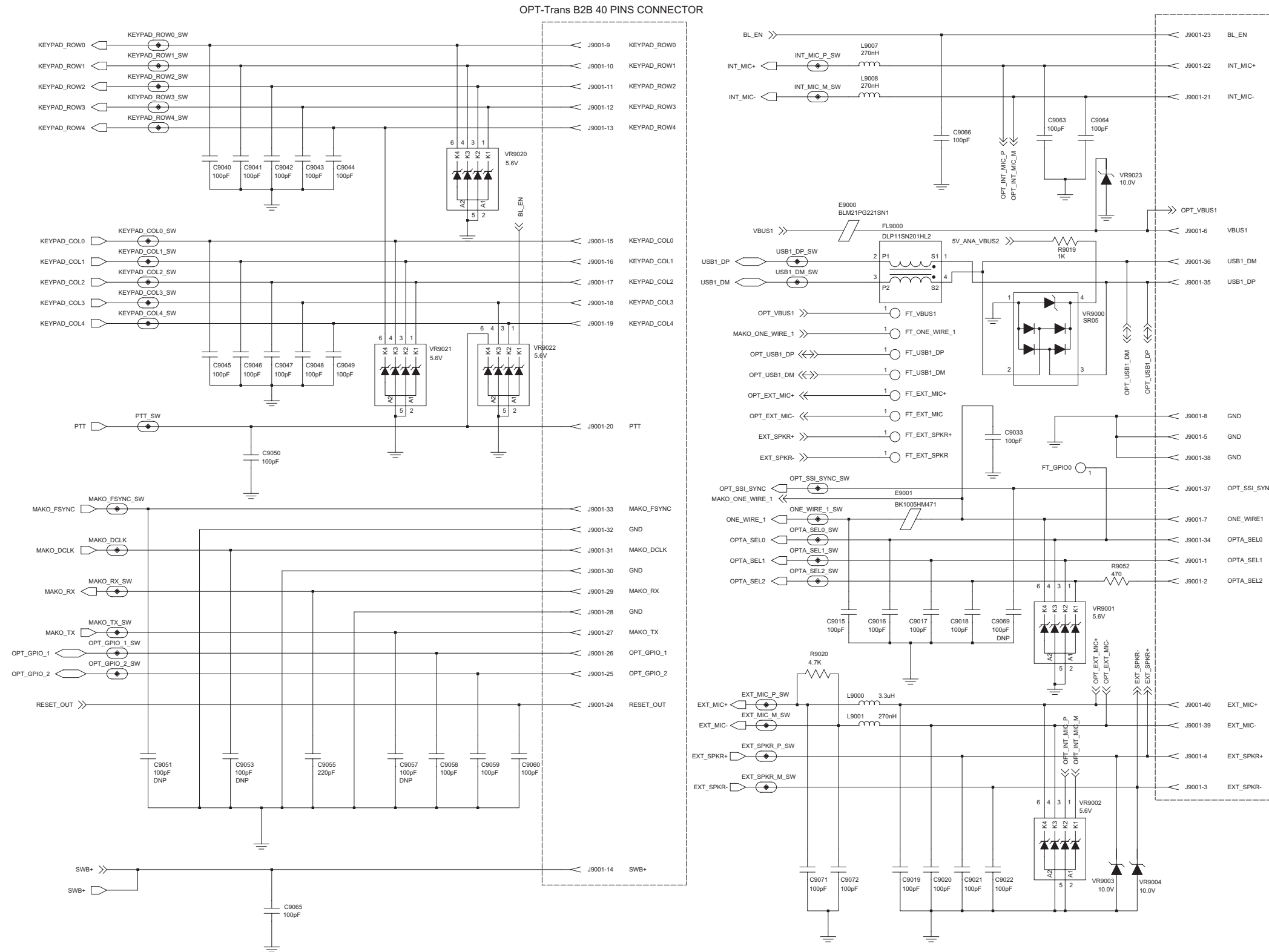
Largest reference designator

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C9070	E9007	J9001
VR9018	FL9000	P9000
D9000	L9008	
S9002		

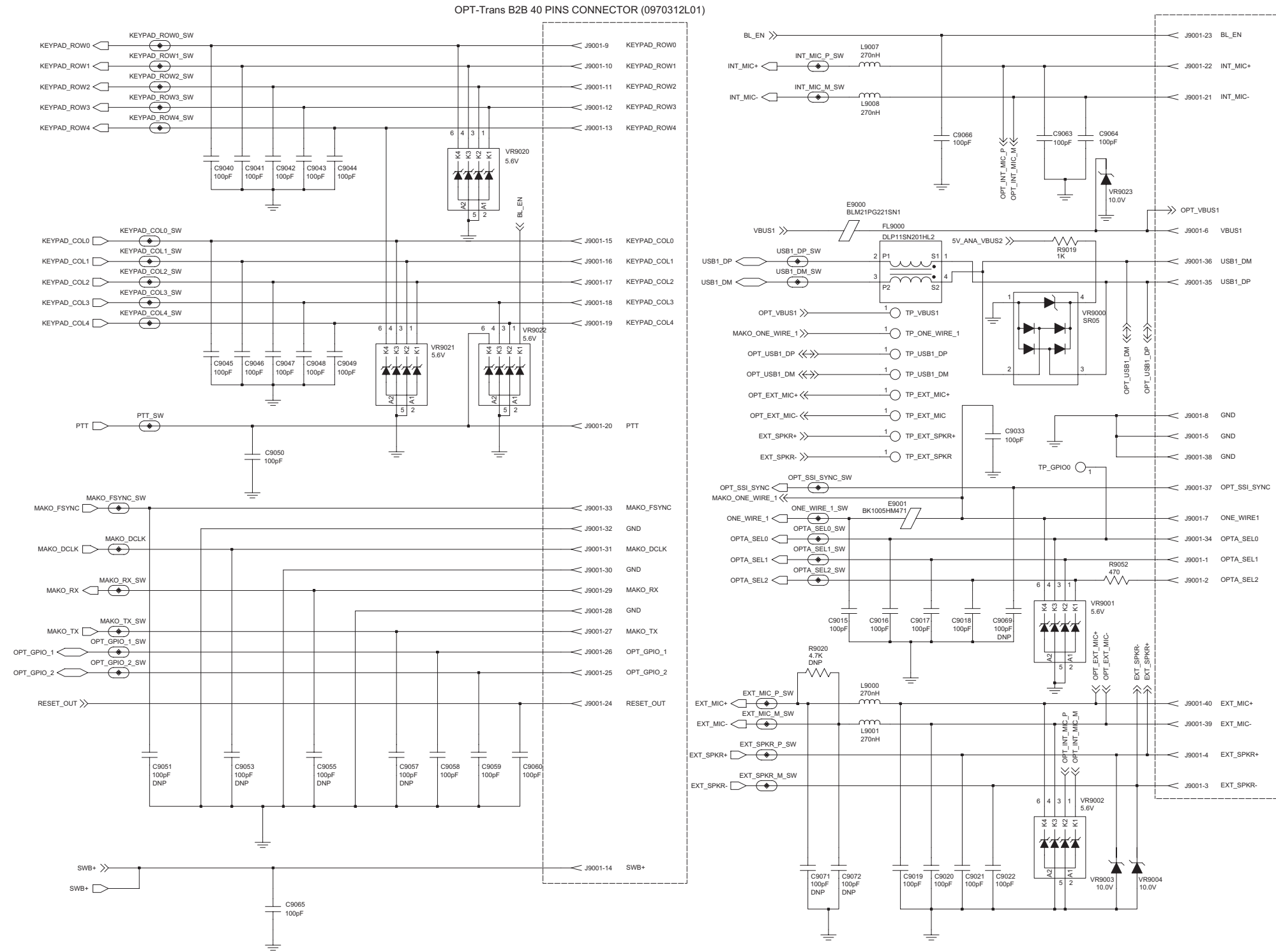
Controller LCD and Speaker Interface Schematic Diagram (for 8415113H03 & 8415113H05)



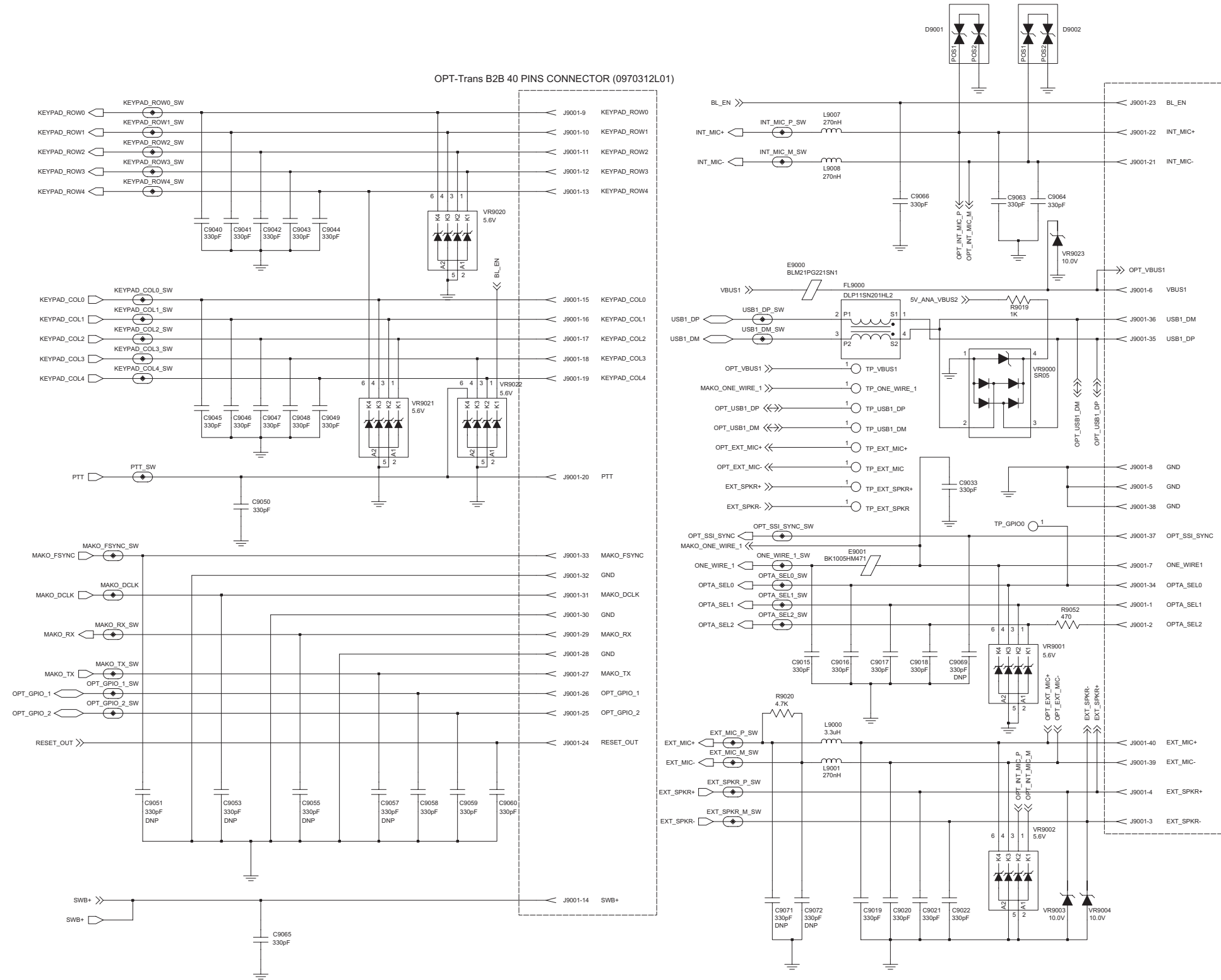
Controller UC Interface Schematic Diagram (for 8486716Z04 & 8486716Z07/8486716Z13)



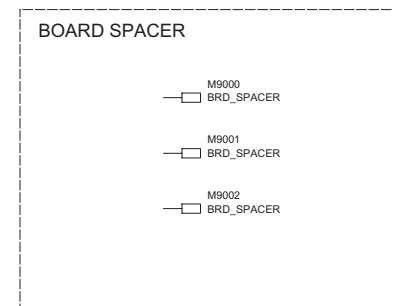
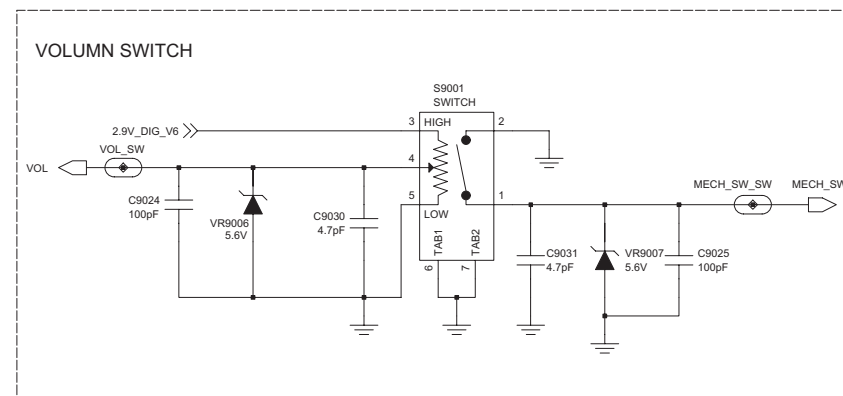
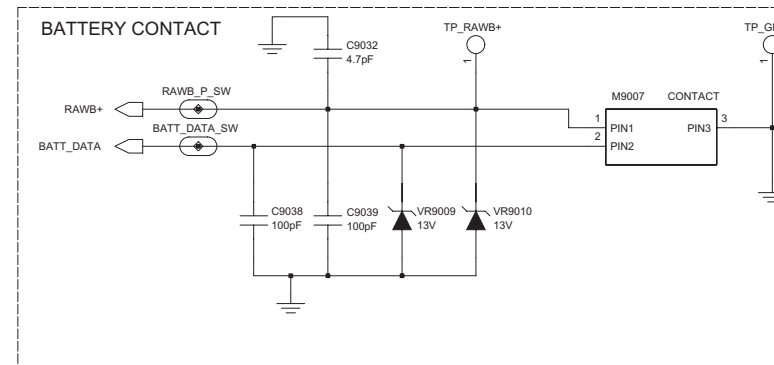
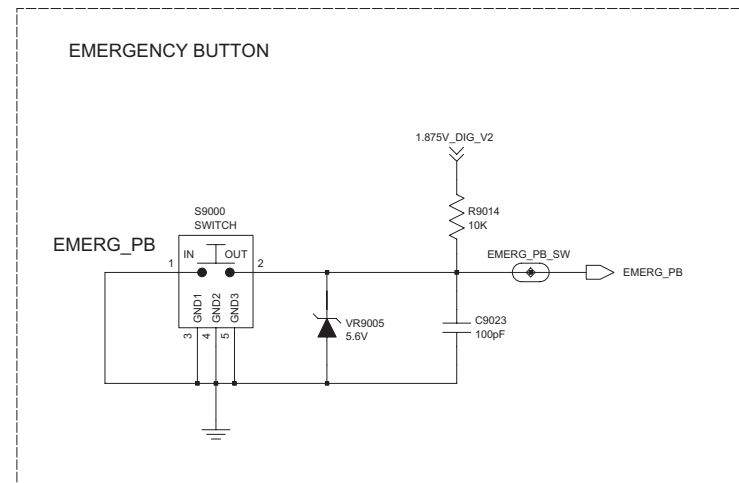
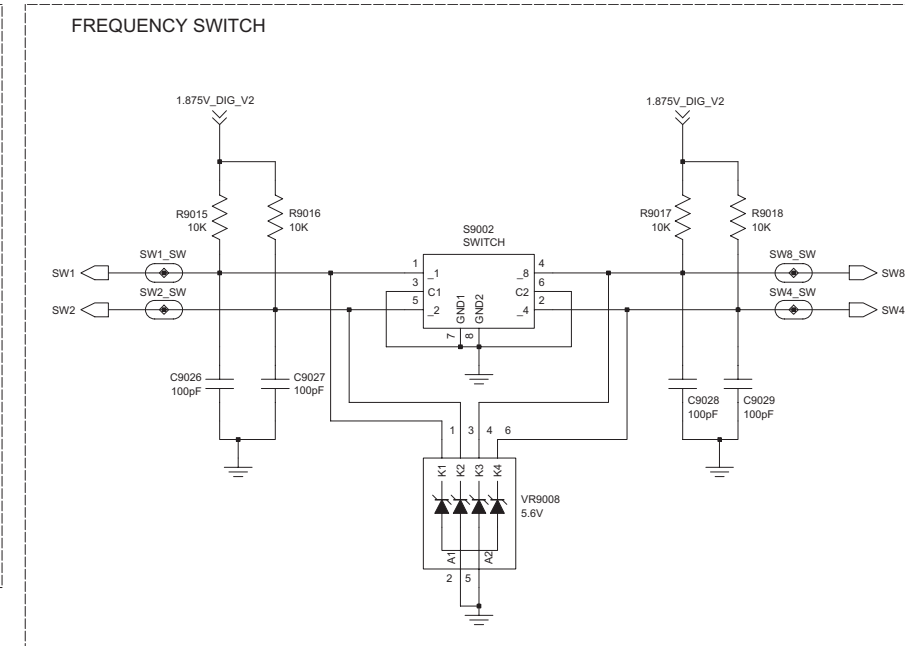
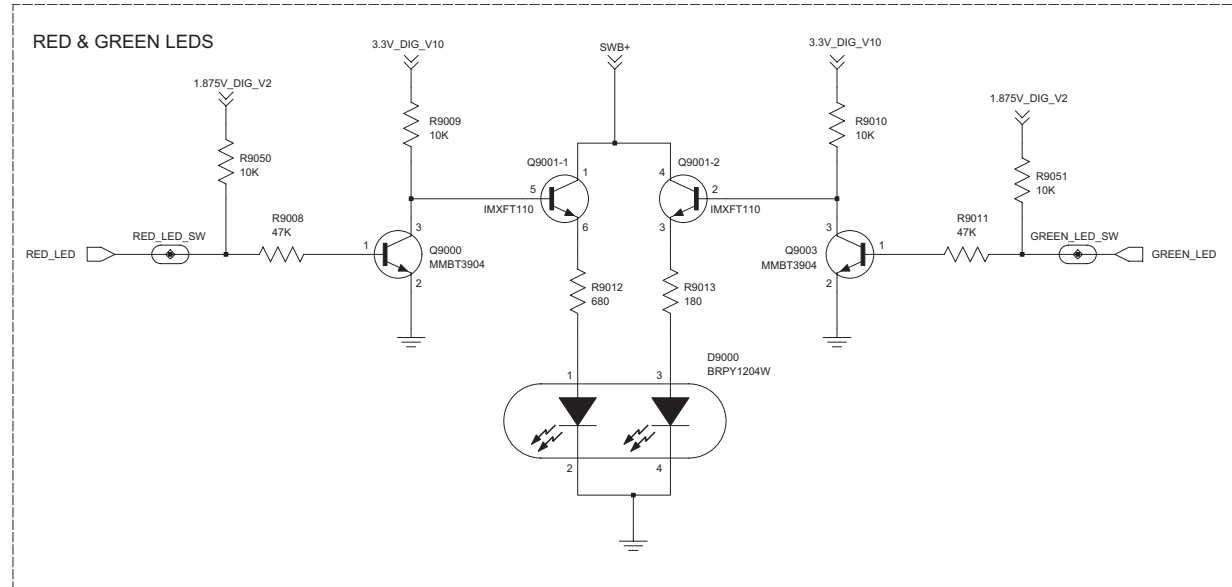
Controller UC Interface Schematic Diagram (for 8475130M01)



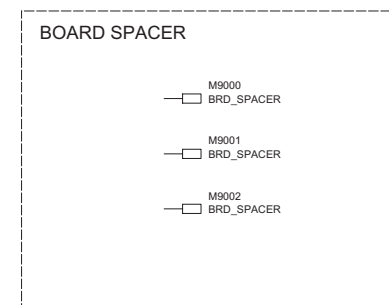
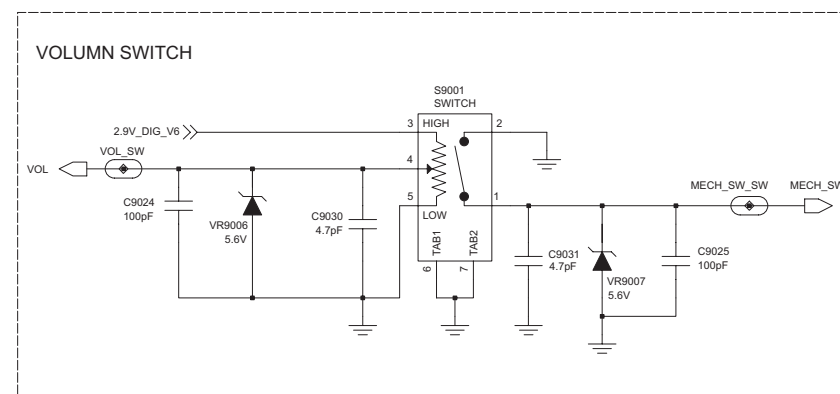
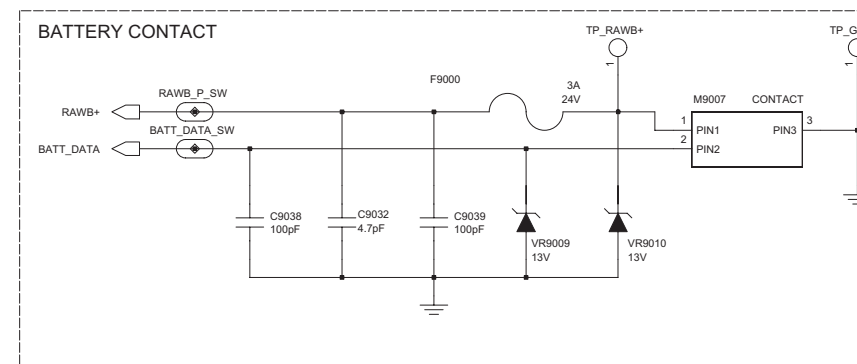
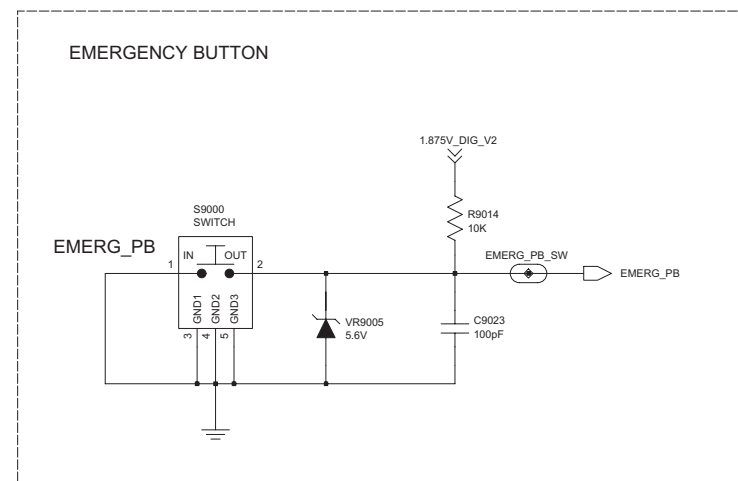
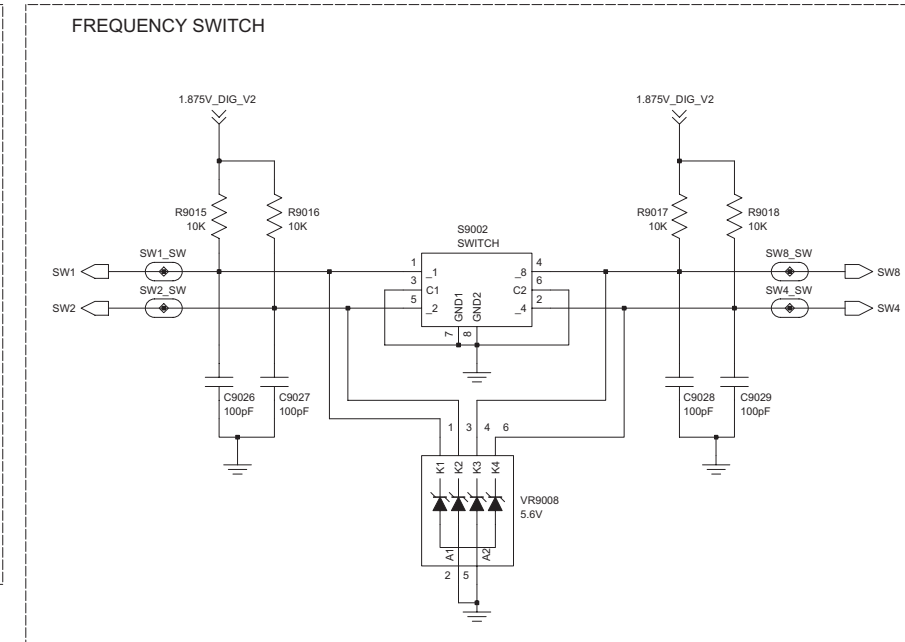
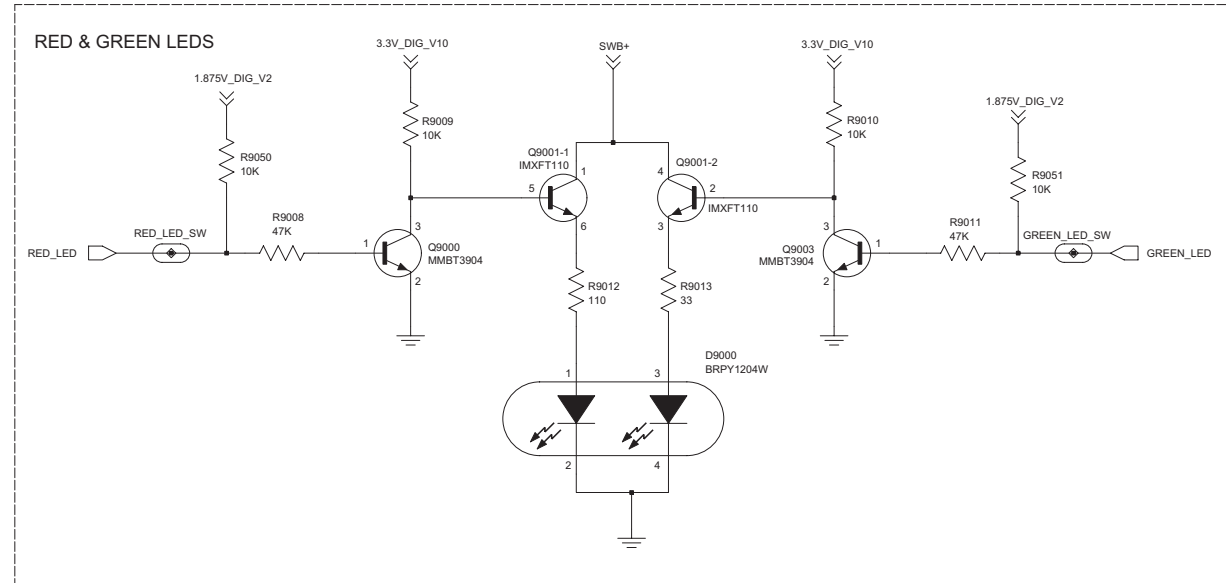
Controller UC Interface Schematic Diagram (for 8486716Z08)



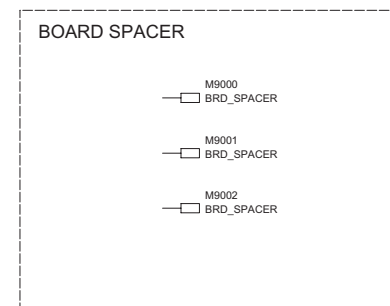
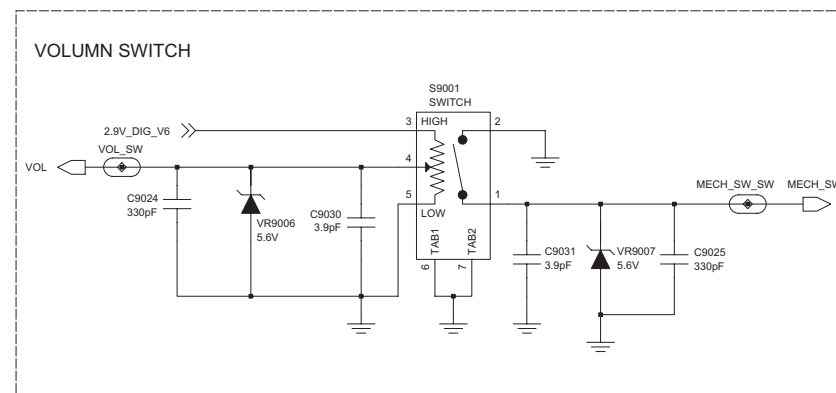
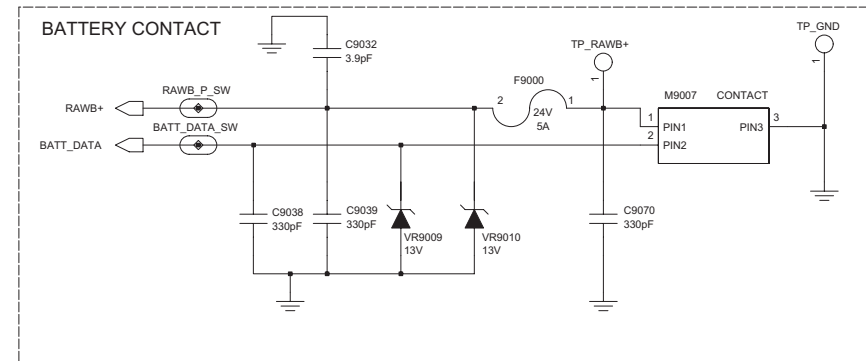
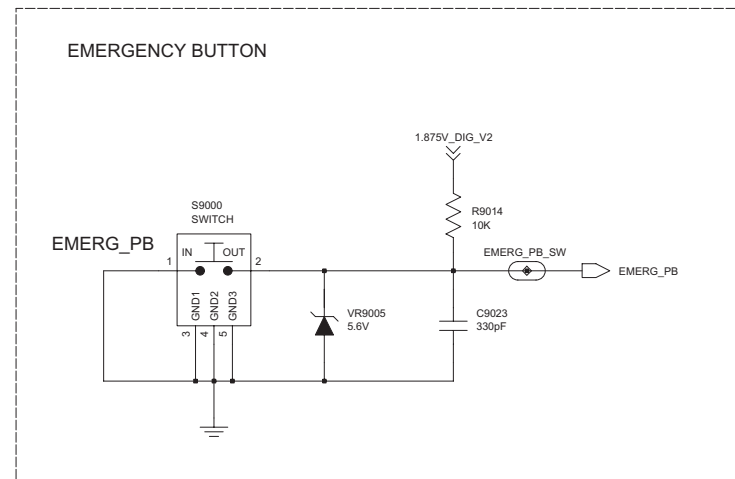
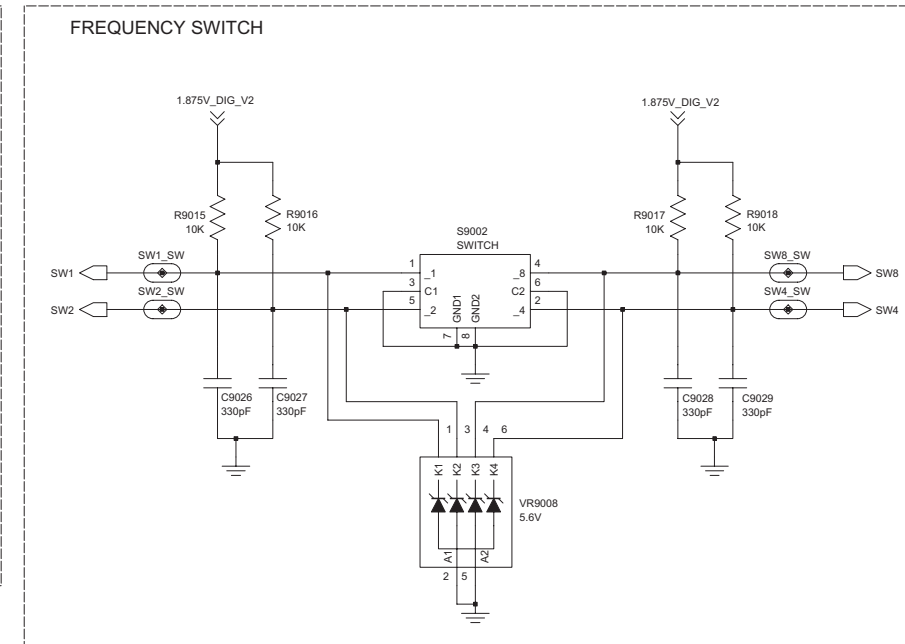
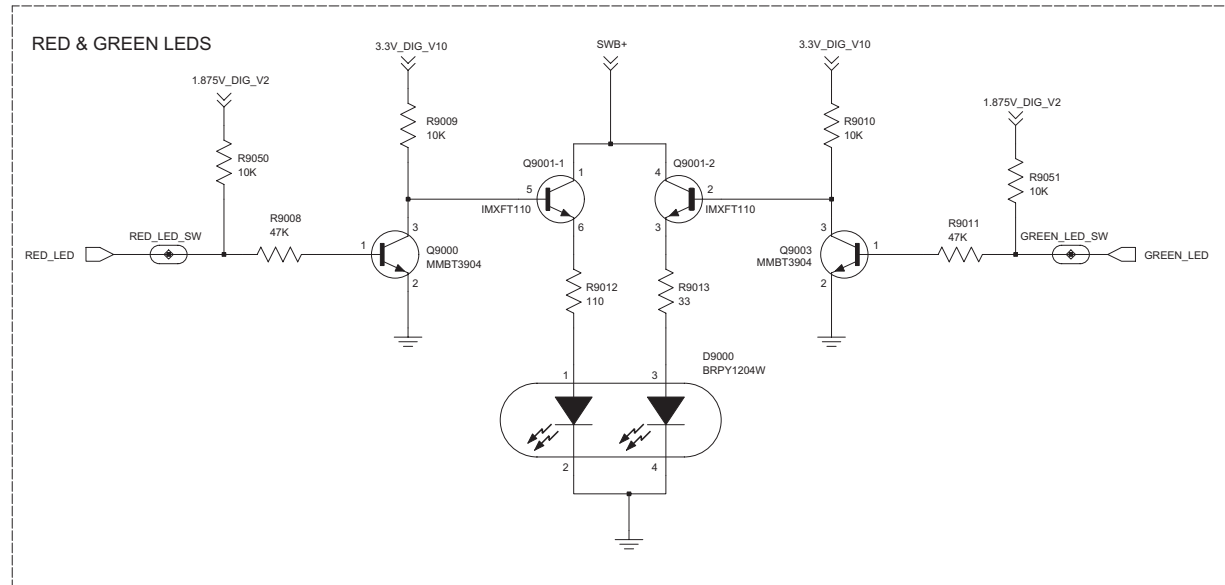
Controller UC Interface Schematic Diagram (for 8415113H03 & 8415113H05)



Controls and Switches Schematic Diagram (for 8486716Z04)

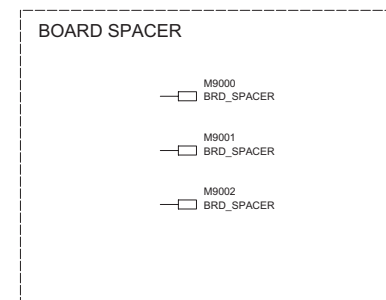
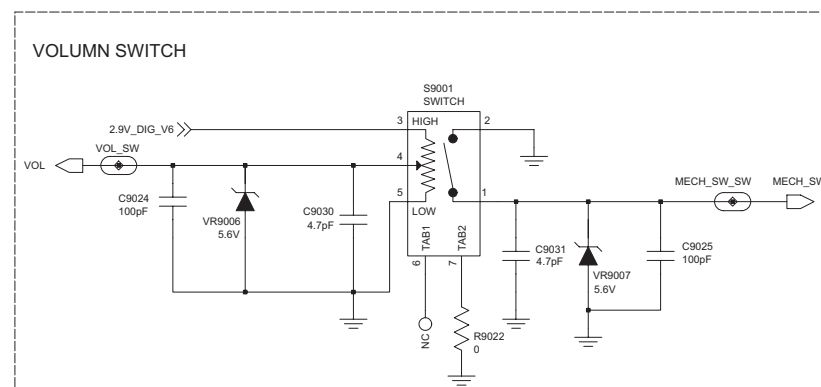
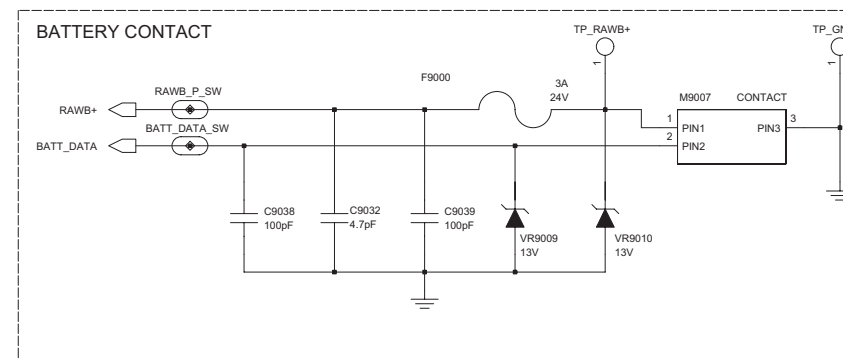
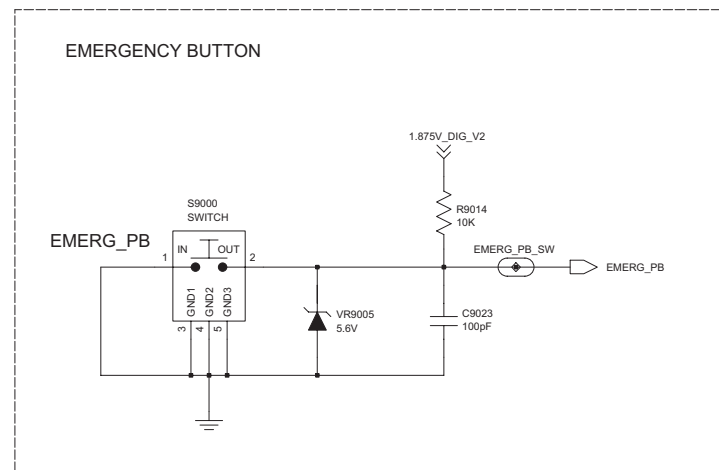
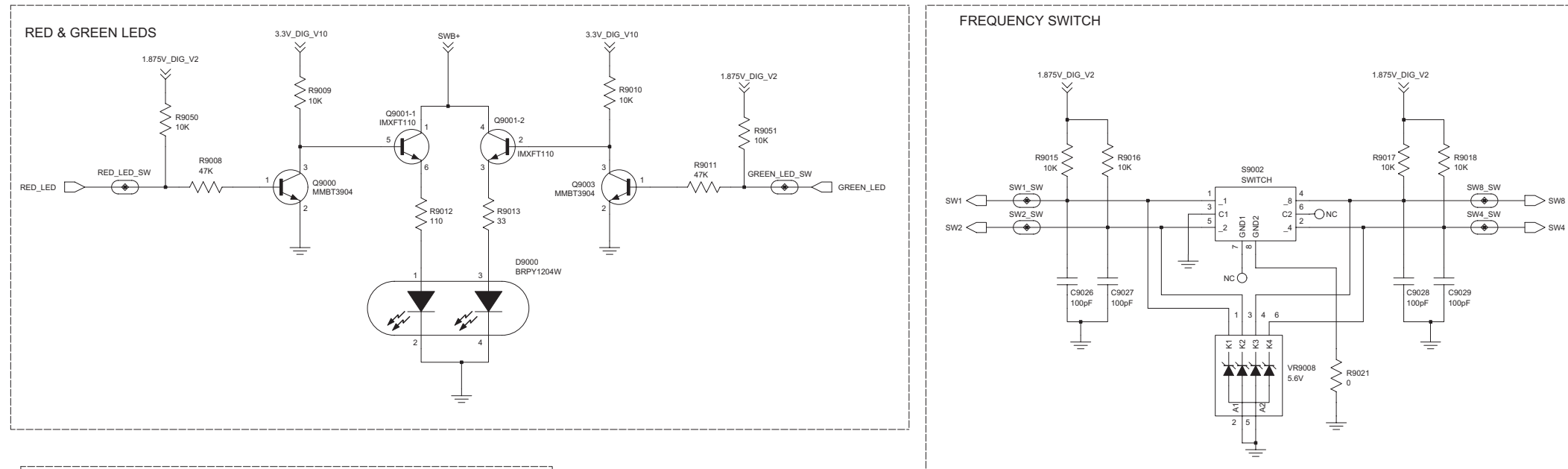


**Controls and Switches Schematic Diagram (for 8486716Z07/8486716Z13, 8486716Z08 & 8475130M01) \*Emergency Button not applicable for XPR 6100\***

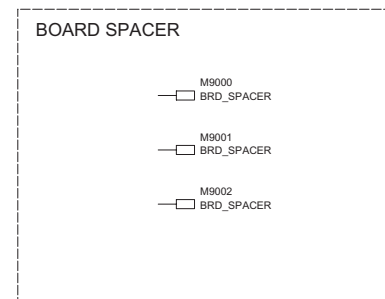
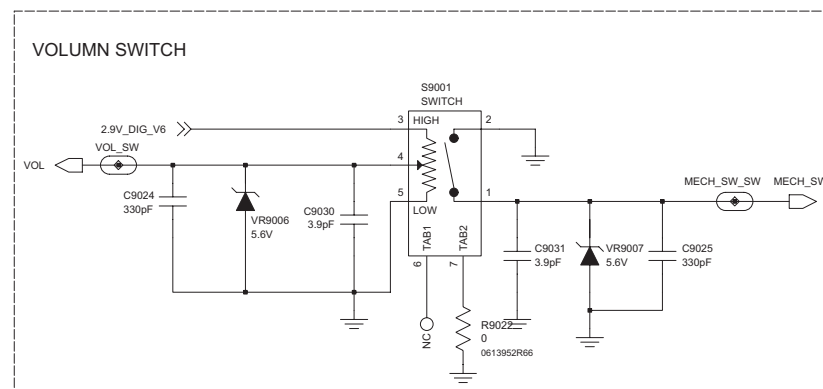
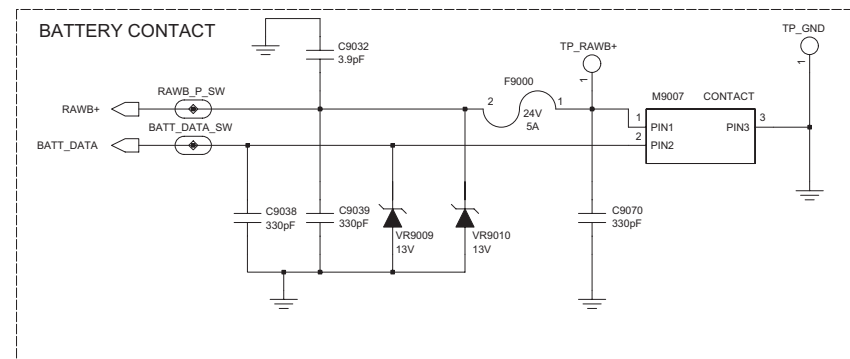
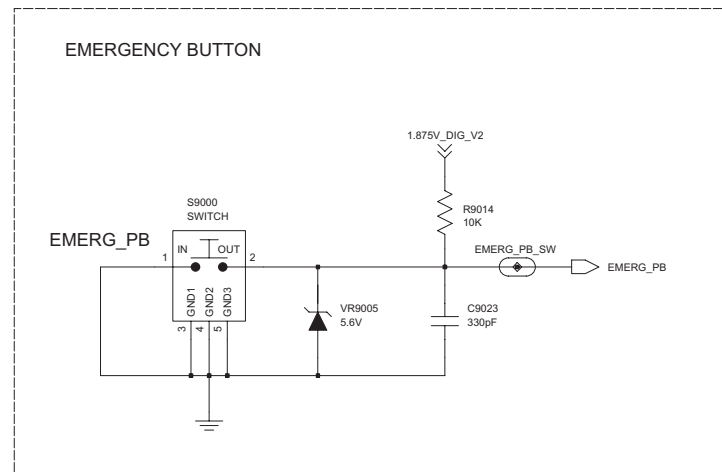
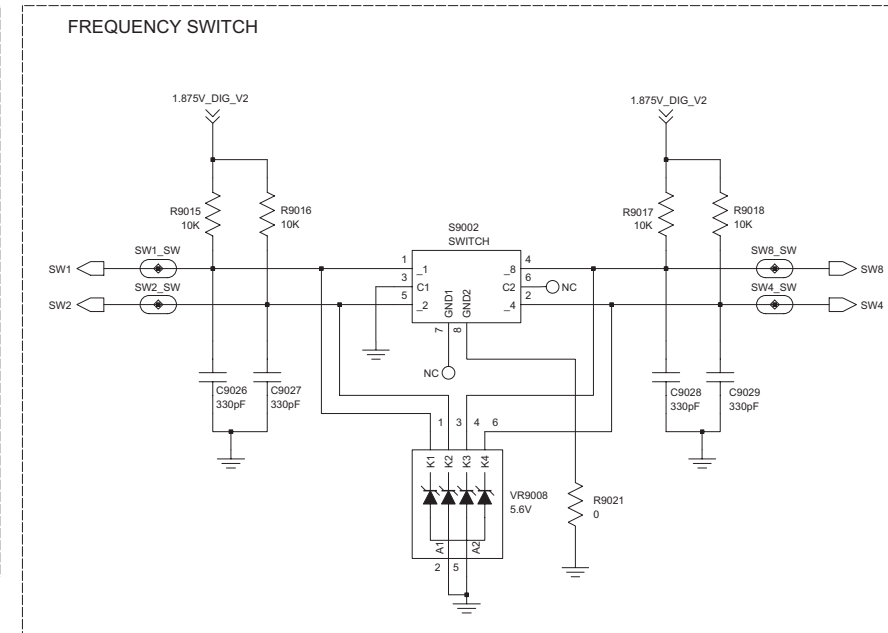
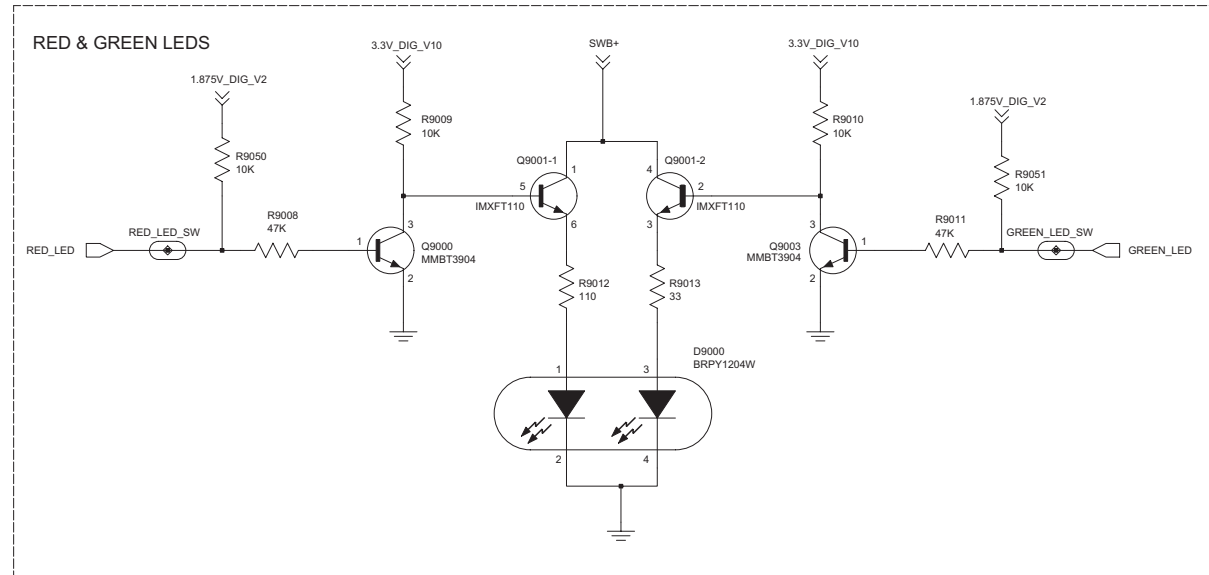


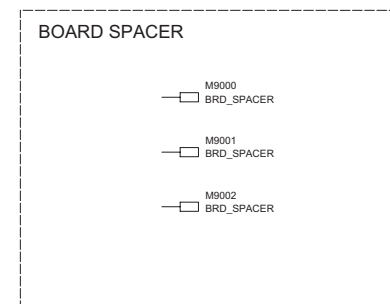
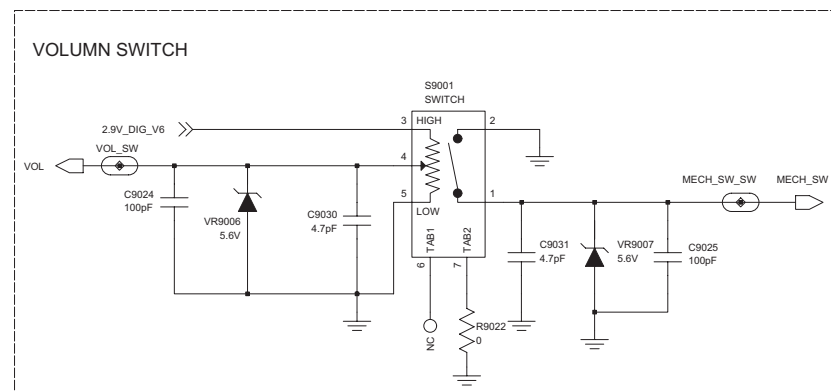
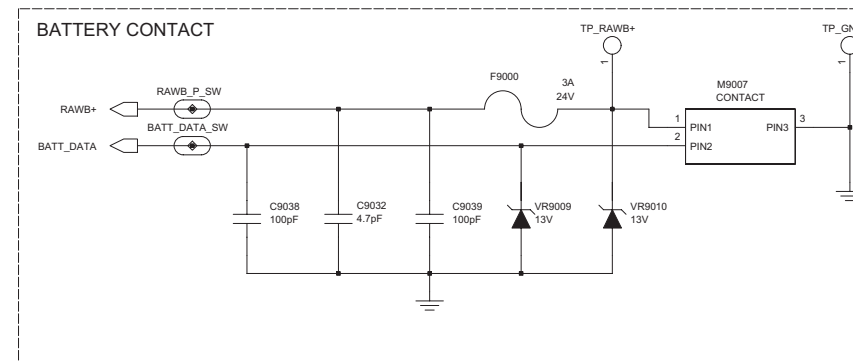
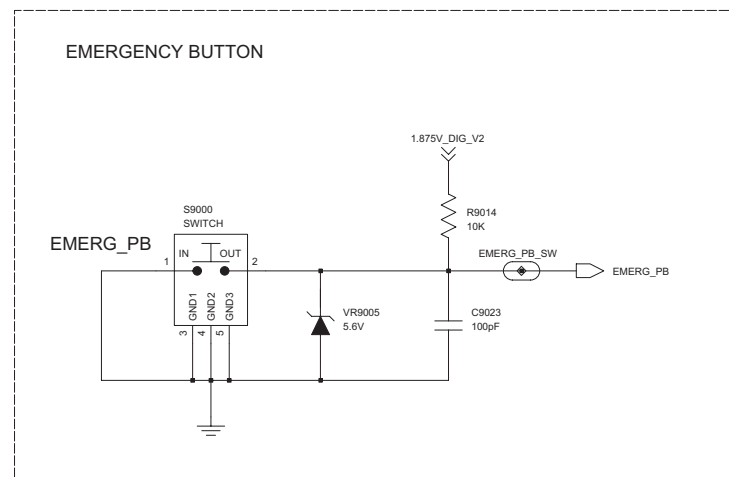
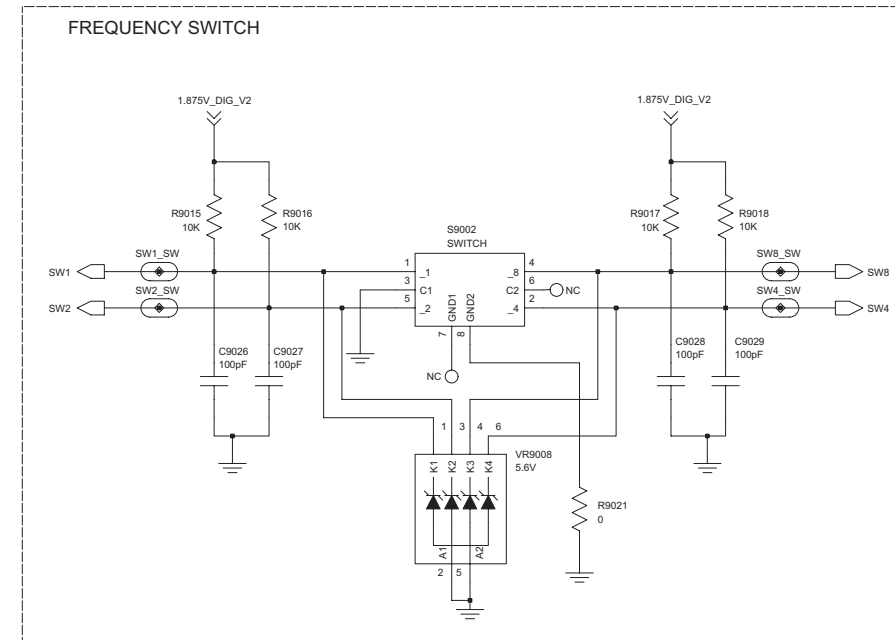
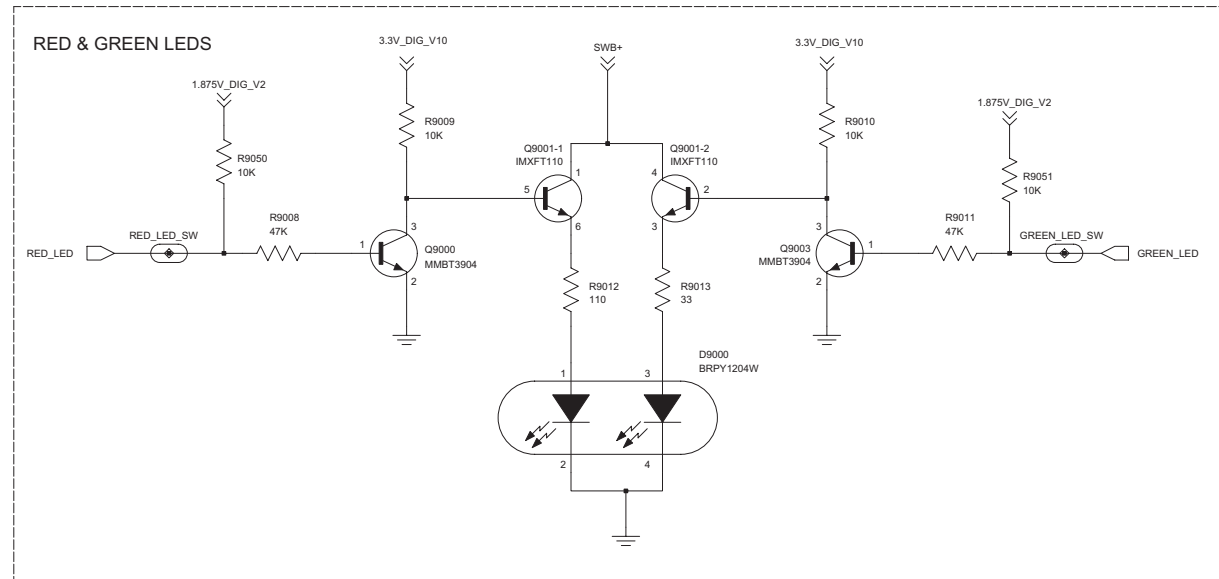
Controls and Switches Schematic Diagram (for 8415113H03 & 8415113H05)





Controls and Switches Schematic Diagram (for 8486716Z16) \*Emergency Button not applicable for XPR 6100\*





**Notes**

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## Section 6

# UHF1 (403–470 MHz) INFORMATION

## 1.0 Transmitter

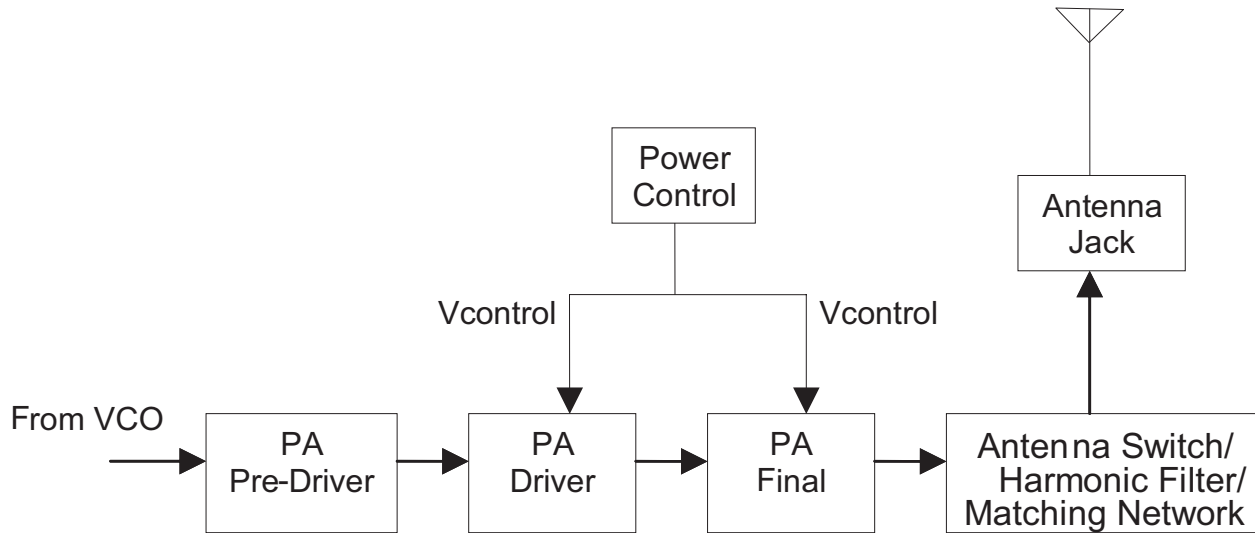


Figure 6-1: UHF Transmitter Block diagram

### 1.1 General

The UHF transmitter contains five basic circuits:

1. Power Amplifier
2. Antenna Switch
3. Harmonic Filter
4. Antenna Matching Network
5. Power Control

#### 1.1.1 Power Amplifier

The power amplifier is a 3-stage discrete design consisting of:

1. Pre-driver, ADA4743 (U700)
2. Driver, RD01MUS1 (Q703)
3. Final PA, RD07MVS1 (Q704)

The pre-driver is a 50 Ohm gain block with a supply voltage of 5V. The supply is ramped to eliminate feed-through power due to the fixed gain of the device. The pre-driver is biased in Class A region with a typical current drain of 60mA and power gain of 16.5dB.

The driver is a 1W, LDMOS in a SOT-89 package. this stage typically drains 150mA of current at rated output power, 4W. The driver is biased in Class AB region and has a power gain of 14dB.

The final PA is a 7W, LDMOS device. The gate threshold of this device is very close to the driver. Hence, the traditional PA bias tuning is eliminated. The current drain would typically be 1400mA. The final PA is biased in Class AB region and has a power gain of 10dB.

### 1.1.2 Antenna Switch

The antenna switch comprises of 2 ports: standard port and remote port.

**NOTE** Remote port is not supported in XPR 6100 and the related components are not loaded.

The antenna switch consist of:

1. Four PIN diodes:
  - a. CR902 and CR903 biased during standard and remote port operation.
  - b. CR900 and CR901 biased during remote port operation.
2. Six current limiting resistors:
  - a. R904, R905 and R9053 for standard and remote port operation.
  - b. R902, R903 and R9054 for remote port operation.
3. Two pi networks:
  - a. C915, L908, C916 to determine TX or RX mode.
  - b. C911, L906, C912 to determine standard port or remote port operation.

In the transmit mode of standard port operation, ANT\_EN signal (from MAKO) turns on Q702 (bias Power Amplifier) and Q900(antenna switch circuit). RAWB+ bias is applied to the standard port antenna switch circuit to bias CR902 and CR903 "ON". Hence, the following occurs:

1. Shunt diode (CR903) shorts out the receiver port, and the pi network(C915, L908, C916), which operates as a quarter wave transmission line, transforms low impedance of the shunt diode to a high impedance at the input of the harmonic filter. In the receive mode, the diodes are "OFF" and hence, there exists a low attenuation path between the antenna and the receiver ports.
2. Both CR900 and CR901 is biased "OFF", and the pi network(C911, L906, C912), which operates as a quarter wave transmission line, transfers the 50ohm impedance of the harmonic filter to CR902 and hence, forces PA\_OUT to take the standard port circuit path.

In the transmit mode of remote port operation, ANT\_EN signal (from MAKO) turns on Q702(bias Power Amplifier) and Q900(antenna switch circuit) and GP02 signal (from TOMAHAWK) turns on Q901. RAWB+ bias is applied to the standard and remote port antenna switch circuit to bias CR900, CR901, CR902 and CR903 "ON". Hence, the following occurs:

1. Shunt diode(CR903) shorts out the receiver port, and the pi network(C915, L908, C916), which operates as a quarter wave transmission line, transforms low impedance of the shunt diode to a high impedance at the input of the harmonic filter. In the receive mode, the diodes are off and hence, there exists a low attenuation path between the antenna and the receiver ports.
2. Shunt diode(CR901) shorts out the standard port, and the pi network(C911, L906, C912), which operates as a quarter wave transmission line, transforms the low impedance of the shunt diode to a high impedance at the input of the standard port circuit and hence, forces PA\_OUT to take the remote port circuit path.

### 1.1.3 Harmonic Filter

The harmonic filter consists of C906, C907, C908, L904 and L905. The design of the harmonic filter for UHF is a five pole Chebyshev design using lumped LC elements in order to realize greater attenuation in the stop band for a given ripple level. The harmonic filter insertion loss is typically less than 1.3dB.

### 1.1.4 Antenna Matching Network

A matching network which is made up of L911 is used to match the antenna's impedance to the harmonic filter. This will optimize the performance of the transmitter and receiver into an antenna.

### 1.1.5 Power Control

The transmitter power control uses discrete integrator approach, the current is sensing both PA stages namely, Driver Power Amplifier (Q703) and Final Power Amplifier (Q704).

The basic block diagram of the power control is shown in Figure 6-2. A single sensing resistor (R700) is tied to sense both PA stages current. The power control consists of 2 comparators, U701-1 and U701-2. U701 is a dual-package op-amp in SOT-8 package. The first stage is an I-V converter converts current drained by Power Amplifier Driver (Q703) and Power Amplifier Final (Q704) across R700 into a voltage drop and the second stage is an integrator used to shape the output Vcontrol to bias both PAs. The slope of the Vcontrol is controlled by the RC time constant of the integrator and also the ramping slope of reference signal, TX\_DAC generated by MAKO IC. The final TX\_DAC value determines the transmit power level and is a factory tuned parameter which is stored inside the codeplug.

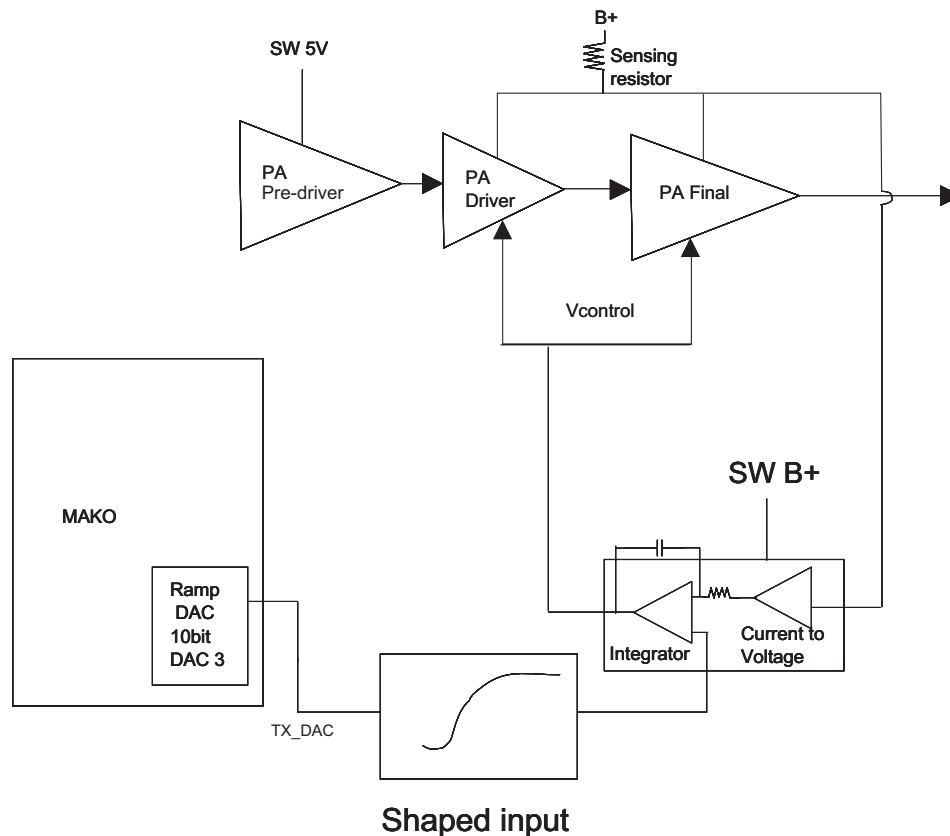


Figure 6-2: Power Control Scheme Basic Block Diagram

## 2.0 Receiver

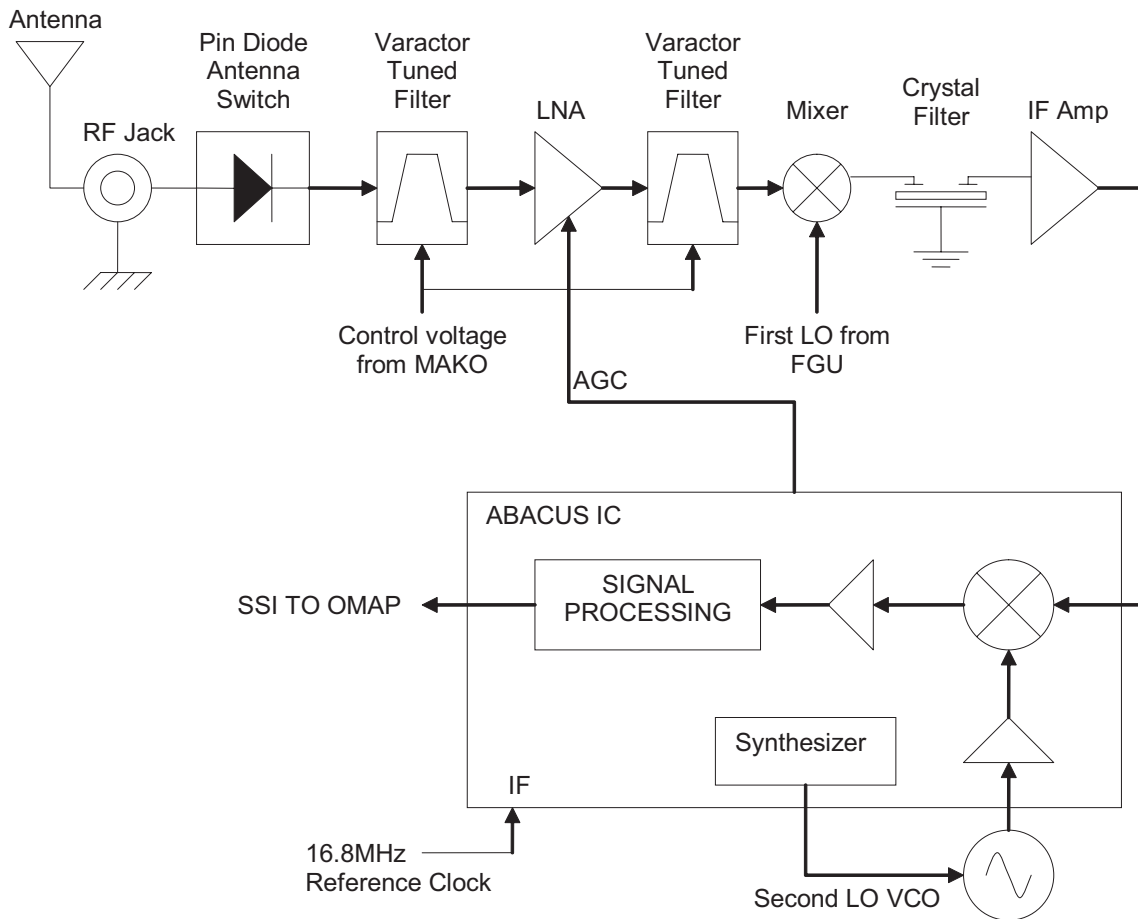


Figure 6-3: UHF Receiver Block Diagram

### 2.1 Receiver Front-End

The RF signal is received by the antenna and applied to a low-pass filter. For UHF, the filter consists of C906, C907, C908, L904 and L905. The filtered RF signal is passed through the antenna switch and then applied to a varactor tuned bandpass filter. The bandpass filter comprises of C400, C401, C402, C403, C404, C405, L400, L401, R400, R499, D400 and D401. C400 and C405 are 50ohm points. The bandpass filter is tuned by applying a control voltage to the varactor diodes D400 and D401.

The bandpass filter is electronically tuned by the MAKO DAC. Depending on the carrier frequency, the MAKO DAC will supply the tuned voltage to the varactor diodes in the filter. Wideband operation of the filter is achieved by shifting the bandpass filter across the band.

The output of the bandpass filter is passed through a RF step attenuator (D402) to limit the amount RF power fed into the LNA (U400). After being amplified, the RF signal is further filtered by a second varactor tuned bandpass filter. This bandpass filter is electronically tuned by the MAKO DAC and comprises of C419, C420, C421, C422, C423, C424, L408, L409, R405, R406, D403 and D404. C419 and C423 are 50 Ohm points.

The output of the second bandpass filter is passed to a mixer. The mixer is a passive double balanced quad diode mixer (D405) comprising of 2 transformers (T400 and T401). The 50 Ohm matching for



the mixer is provided by C426 and L410. After mixing with the first LO signal from the voltage control oscillator (VCO) using low side injection, the RF signal is down converted to the 73.35 MHz IF signal.

The IF signal coming out of the mixer is applied to the crystal filter (FL400) through a resistor pad and a diplexer (L411 and C427). Matching to the input of the crystal filter is provided by L412 and C428. The crystal filter provides the necessary adjacent channel selectivity and inter-modulation protection.

The output of the crystal filter (FL400) is matched to the input of the IF amplifier transistor by C432, C433, L415 and L416. Voltage supply to the IF amplifier is 5V\_RX, taken from RX VCO. The IF amplifier provides a gain of 25 dB. The IF amplifier output is directly matched at the IF amplifier output to ABACUS (U600) pin 47 via C601.

## 2.2 Receiver Back-End

ABACUS (U600) is tuned via software at radio start-up. The IF signal applied to pin 47 of U600 is down-converted to a second IF of 2.25 MHz. The second IF of 2.25 MHz will then be fed into an ADC, generating the Is and Qs data. This data is in the form of SSI (Serial Synchronous Interface) at pin 29 of U600, which will then be sent to the DSP (OMAP1710) for further processing.

The second VCO is a Colpitts oscillator built around transistor Q602. The VCO has a varactor diode, D600 to adjust the VCO frequency. The second LO frequency could either be 71.1 MHz or 75.6 MHz, depending on the system requirement. The control signal is derived from a loop filter consisting of C617, C618, C619, R605 and R606. The RSSI circuitry is achieved via software programming.

## 3.0 Frequency Generation Circuitry

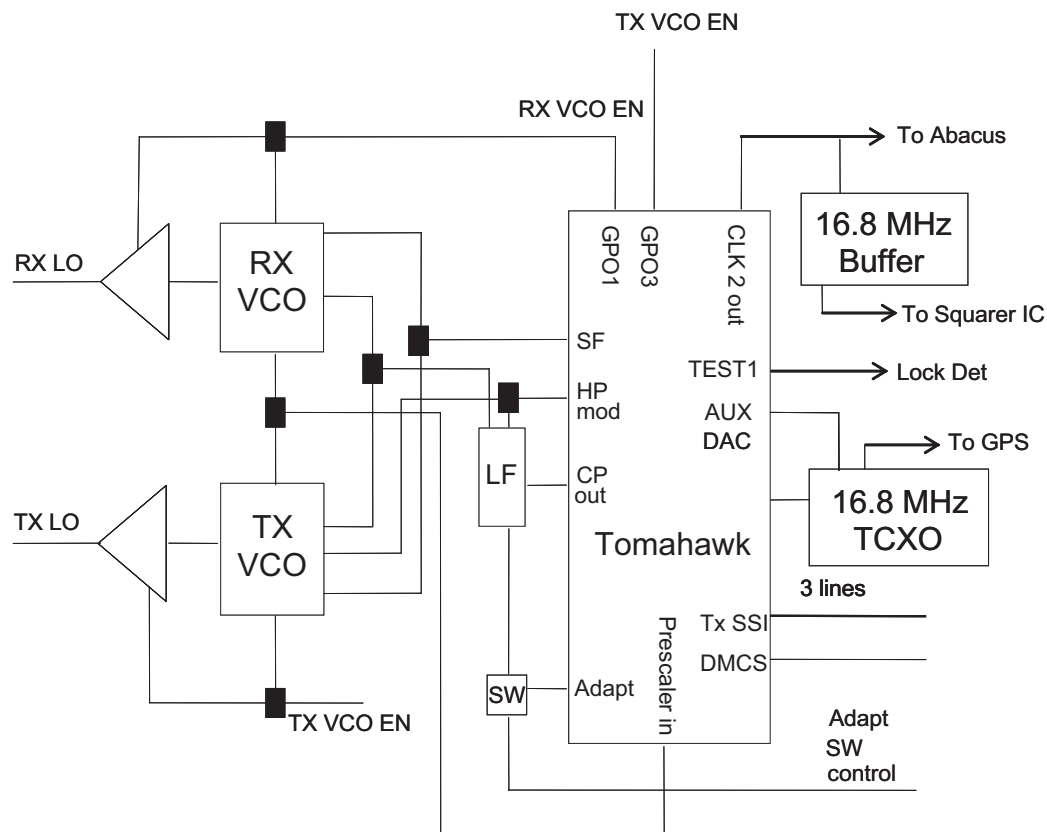


Figure 6-4: Frequency Generating Unit Block Diagram

The Frequency Generating Unit is centered on one main IC, Tomahawk (U001). The main synthesizer on the Tomahawk functions as a modulation interface to the DSP area via the 3 TX SSI lines. The

block diagram illustrates the interconnect and support circuitry used in the Frequency Generating Unit. Refer to the relevant schematics for the reference designators.

The synthesizer is powered by 2.8V ANA, 2.8V DIG, 1.875V DIG and 5V ANA supplied from the U3000-1. The synthesizer in turns generates a superfiltered 2.5V which powers up the TX VCO & RX VCO.

In addition to the VCO, the synthesizer interfaces with the microcontroller. Programming of the synthesizer is accomplished through the 4 lines; SPI\_MISO, THK\_CE, SPI\_MOSI and SPI\_CLK via pin D10, D8, D9 and D11 respectively. A 1.875 dc signal from the synthesizer lock detect line indicates to the microprocessor that the synthesizer is locked.

U001 has dual port modulation capability. The microprocessor supplies low port and high port words to pin F11 of U001. For high port modulation, the audio runs through an internal attenuator for modulation balancing purpose before it goes out to the VCO and loop filter via pin K8. For the low port modulation, the audio is fed into the main synthesizer, where it is summed with the main\_num channel frequency word, then supplied to the accumulator of the Fractional-N synthesizer before going out to the VCO.

### 3.1 Synthesizer

U001 uses a 16.8 MHz crystal (Y001) to provide a reference for the system. The synthesizer further divides this to 8.4MHz for nominal frequencies and 5.6 MHz for alternate frequencies. Together with R006, R007, R008, C013, C014, C015 and C016, they build up the reference oscillator which is capable of 1.5ppm (non-GPS) / 0.5ppm (GPS) stability over temperature of -30°C to 85 °C. It also provides 16.8MHz at pin J11 of U001 to be used by ABACUS.

The loop filter which consists of R013, R014, R016, C024, C025, C026 and C027 provides the necessary dc steering voltage for the VCO and determines the amount of noise and spur passing through.

In achieving fast locking for the synthesizer, an internal adapt charge pump provides higher current (~10mA) at pin H1 and an additional 2mA from a current mirror (Q002, R010, R011 and R012). The required frequency is then locked by normal mode charge pump at pin G3. An external adapt switch (U002) is used to control the ON/OFF of the adapt mode. Both the normal and adapt charge pumps get their supply from the 5V ANA supplied by U3000-1.

### 3.2 VCO - Voltage Controlled Oscillator

The VCO in conjunction with the synthesizer generates RF in both the receive and transmit modes of operation.

The RX VCO comprises of a Colpitts oscillator built around Q200, a cascaded buffer, built up of a buffer IC, U200 cascaded with a discrete buffer built around Q208 and a 3dB resistive pad (R220, R221 and R222). Vcontrol is supplied to two pairs of back-to-back varactors (D200, D201, D202 and D203). The LC tank comprises of C203 and L202. The oscillator is supplied with a 2.5V superfiltered supply from the synthesizer, U001. The cascaded buffer is supplied with a 5V ANA supply from MAKO, U3000-1. The buffer IC in conjunction with the resistive pad provides sufficient isolation from the mixer whilst the discrete buffer provides sufficient gain for the first LO signal. The output of the cascaded buffer is match to the mixer by C216, C217, C241 and L207. The output power level of RX\_1<sup>ST</sup>\_LO\_INJ is 6dB.

The TX VCO comprises of a Colpitts oscillator built around Q204 and a discrete buffer built around Q205. Vcontrol is supplied to two pairs of back-to-back varactors (D204, D205, D206 and D207). The LC tank comprises of C222 and L210. The oscillator is supplied with a 2.5V superfiltered supply from the synthesizer, U001. The discrete buffer is supplied with a 5V ANA supply from MAKO, U3000-1. The output of the discrete buffer is match to the mixer by C236, C237 and L215. The output power level of TX\_BUFF is 3dB.

## 4.0 Global Positioning System (GPS) Receiver

The GPS device is an embedded receiver that provides the location of the subscriber in terms of latitude, longitude, velocity, direction and altitude.

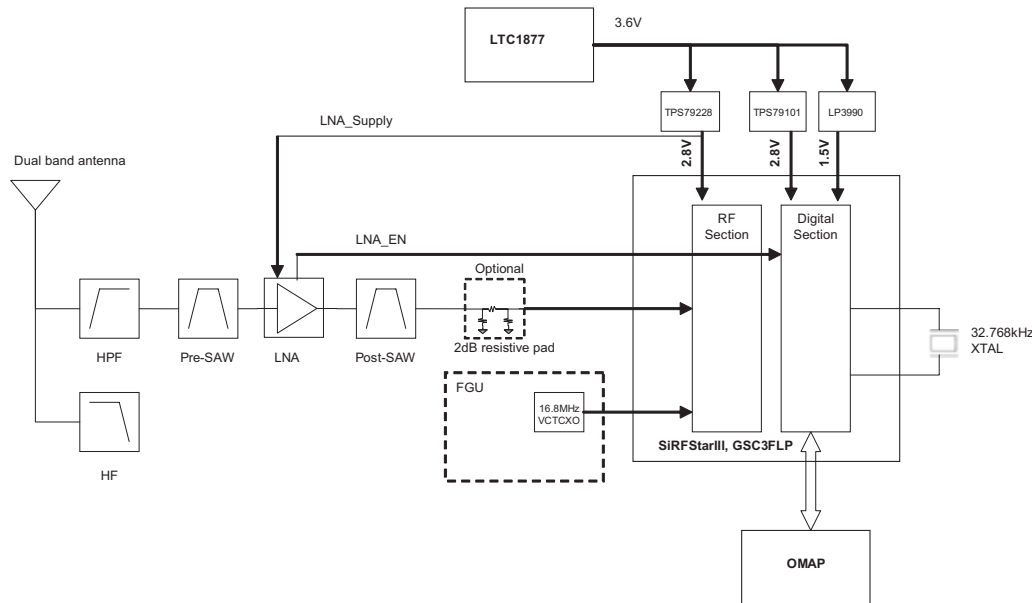


Figure 6-5: GPS Receiver Block Diagram

The RF signal is received by the antenna and applied to a high-pass filter. The filter consists of C924, C925, C926, L912 and L913. The filtered RF signal is then applied to a SAW filter, FL8001.

The output of the SAW filter is fed into the LNA (U8001). The LNA biasing is controlled by SIRF\_LNA\_EN (pin A4 of the GPS IC, U8000). The LNA input match comprises of C8013, C8014 and L8001. The LNA output match comprises of L8003 and C8017. After being amplified, the RF signal is further filtered by a second SAW filter, FL8002.

The output of the second SAW filter is passed to pin P6 of the GPS IC. The input match for pin P6 comprises of C8018, C8019 and L8004. The control and data lines for the GPS IC are GPS\_nRESET, GPS\_ON\_OFF, GPS\_TX, GPS\_RX and GPS\_BOOT. GPS\_nWAKEUP line is fed into the microcontroller to indicate the state (full power or hibernate state) of the GPS IC so that the microcontroller will never trigger a GPS\_ON\_OFF when the GPS IC is in full power state.

A dedicated 32.768kHz quartz crystal oscillator (Y8000) is used to provide RTC clock to the RTC circuit inside the GPS IC. The second input frequency is a 16.8MHz reference, used by the StarIII to synthesize the internal LO. This reference will be supplied by a VCTCXO (Y001) located in the synthesizer block, which will be shared by the TOMAHAWK and ABACUS ICs.

The GPS IC is powered by 2.8V\_DIG\_GPS, 2.8V\_RF\_GPS and 1.5V\_GPS\_RTC supplied from 3 discrete external regulators (U3701, U3700 & U3006). The input of these regulators is sourced from a switching regulator (U3020) which regulates the SWB+ to 3.6V.

## 5.0 Allocation of Schematics and Circuit Boards

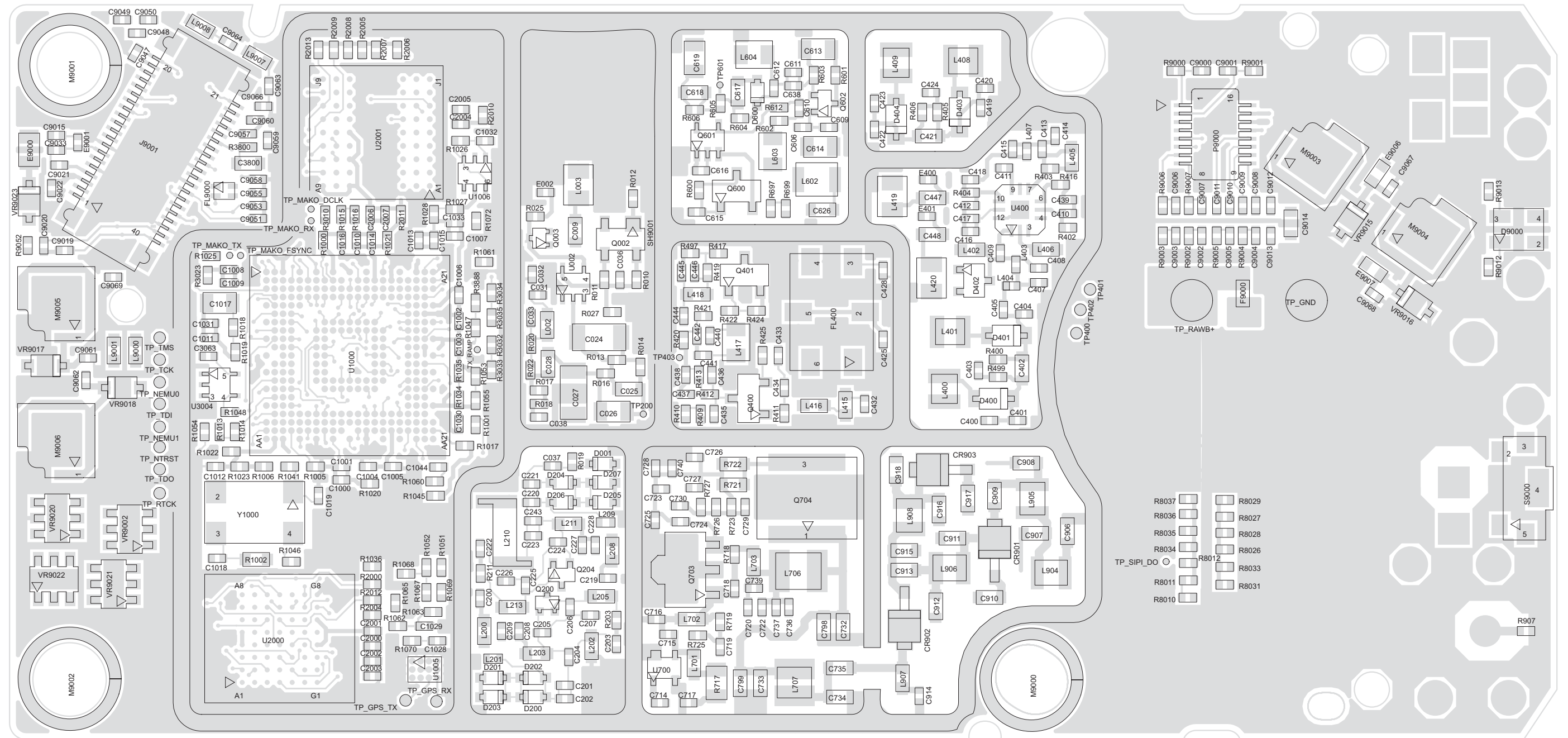
### 5.1 Controller Circuits

The UHF circuits are contained on the Printed Circuit Board (PCB) which also contains the Controller circuits. This Chapter shows the schematics for the UHF circuits only, refer to the Controller section for details of the related Controller circuits. The PCB component layouts in this Chapter show both the Controller and UHF circuit components. The UHF schematics and the related PCB and parts list are shown in the tables below.

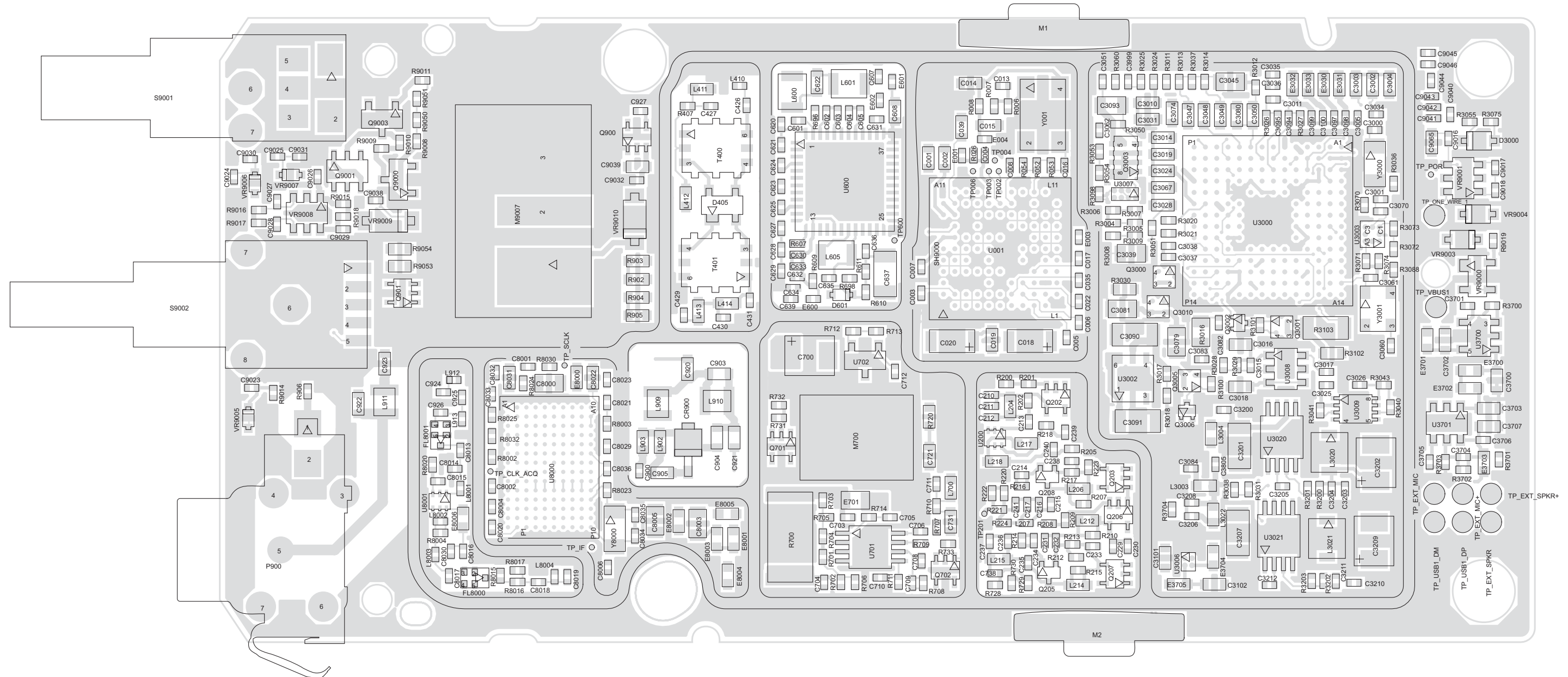
*Table 6-1. UHF1 Diagrams and Parts List*

<b>PCB:</b>	
<b>8486716Z04</b> Main Board Top Side	Page 6-9
<b>8486716Z04</b> Main Board Bottom Side	Page 6-10
<b>8486716Z07</b> Main Board Top Side	Page 6-11
<b>8486716Z07</b> Main Board Bottom Side	Page 6-12
<b>8486716Z08</b> Main Board Top Side	Page 6-13
<b>8486716Z08</b> Main Board Bottom Side	Page 6-14
<b>8486716Z16</b> Main Board Top Side	Page 6-15
<b>8486716Z16</b> Main Board Bottom Side	Page 6-16
<b>SCHEMATICS</b>	
<b>Complete Radio</b>	<b>Page 6-21</b>
<b>Complete UHF1 RF</b>	<b>Page 6-22</b>
<b>Complete UHF1 Transmitter</b>	<b>Page 6-23</b>
<b>UHF1 Transmitter</b>	<b>Page 6-24</b>
<b>UHF1 Harmonic Filter and Antenna Switch</b>	<b>Page 6-25</b>
<b>Complete UHF1 Receiver</b>	<b>Page 6-26</b>
<b>UHF1 Receiver Front End</b>	<b>Page 6-27</b>
<b>UHF1 Receiver Back End</b>	<b>Page 6-28</b>
<b>Complete UHF1 Frequency Generating Unit</b>	<b>Page 6-29</b>
<b>UHF1 Synthesizer</b>	<b>Page 6-30</b>
<b>UHF1 Voltage Controlled Oscillator</b>	<b>Page 6-31</b>
<b>UHF1 GPS Block</b>	<b>Page 6-32</b>
<b>Parts List</b>	
<b>8486716Z04</b>	<b>Page 6-33</b>
<b>8486716Z07</b>	<b>Page 6-38</b>
<b>8486716Z08</b>	<b>Page 6-43</b>
<b>8486716Z16</b>	<b>Page 6-48</b>

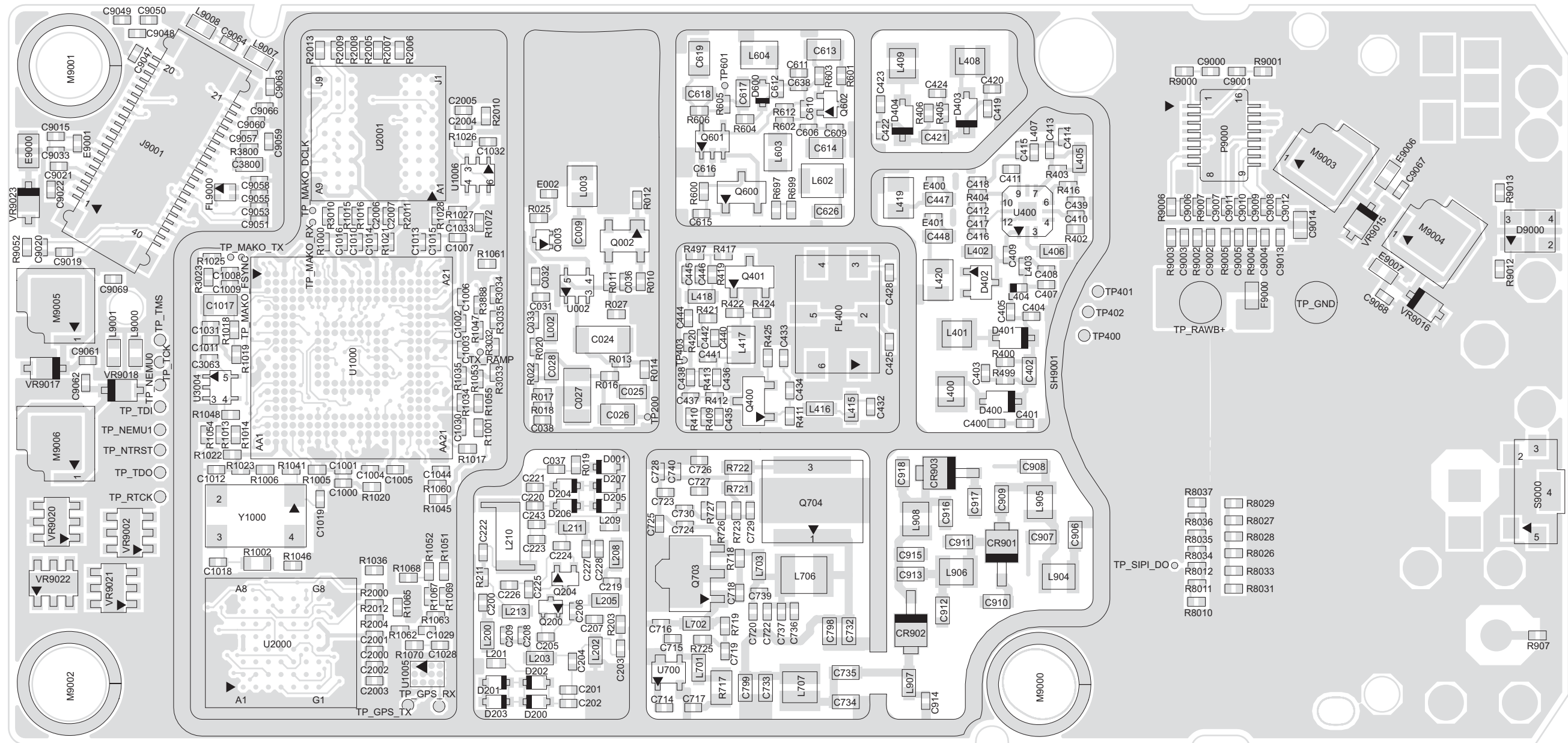
## 6.0 Circuit Board/Schematic Diagrams and Parts List



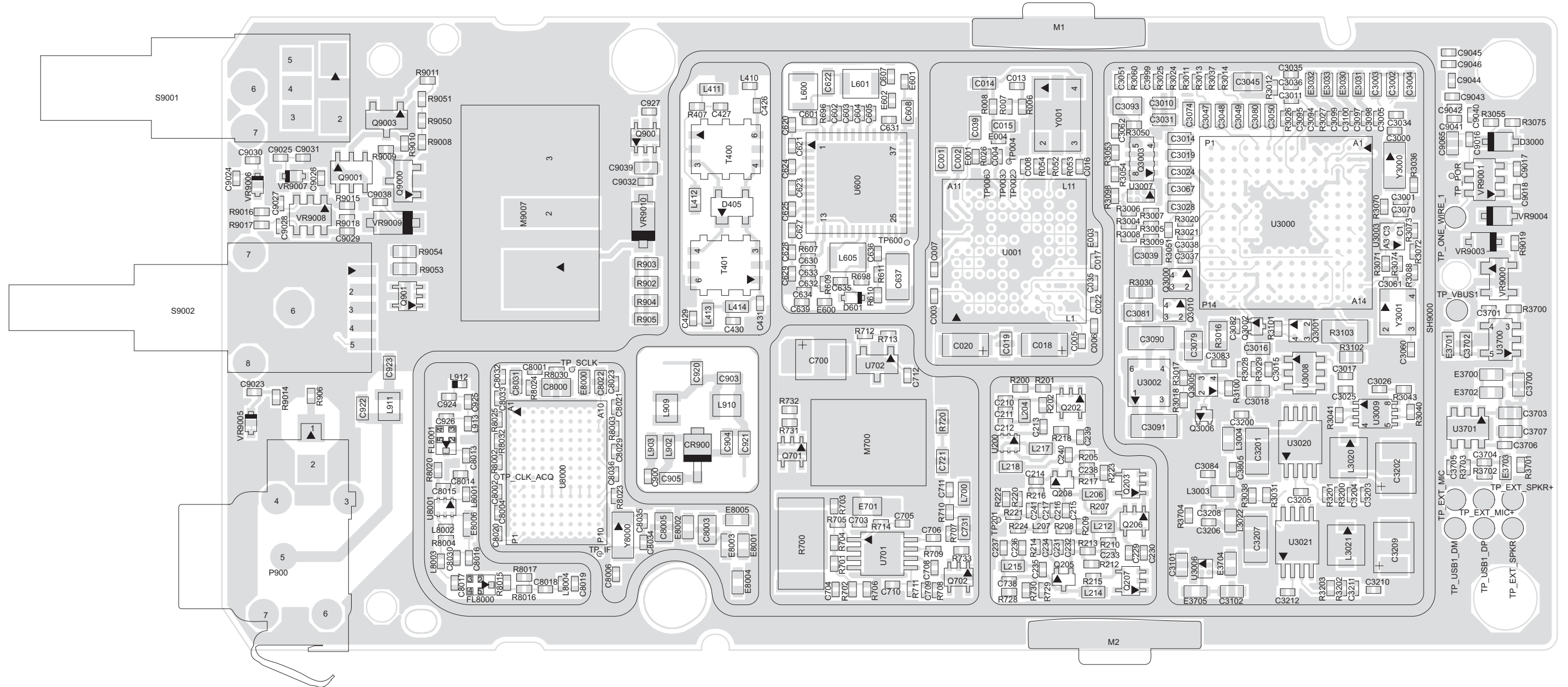
UHF1 (403-470 MHz) Main Board Top Side PCB No. 8486716Z04



UHF1 (403–470 MHz) Main Board Bottom Side PCB No. 8486716Z04

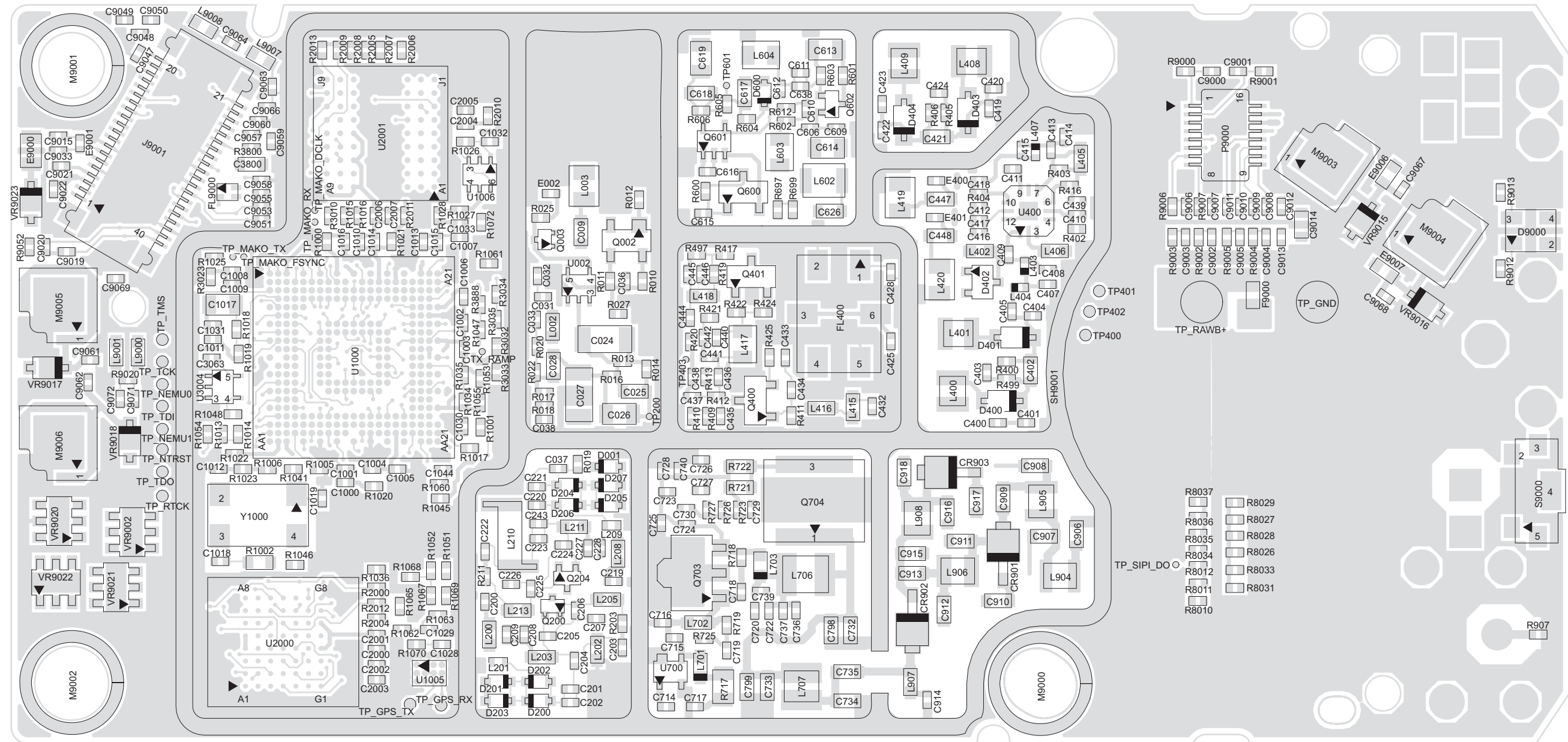


UHF1 (403-470 MHz) Main Board Top Side PCB No. 8486716Z07/

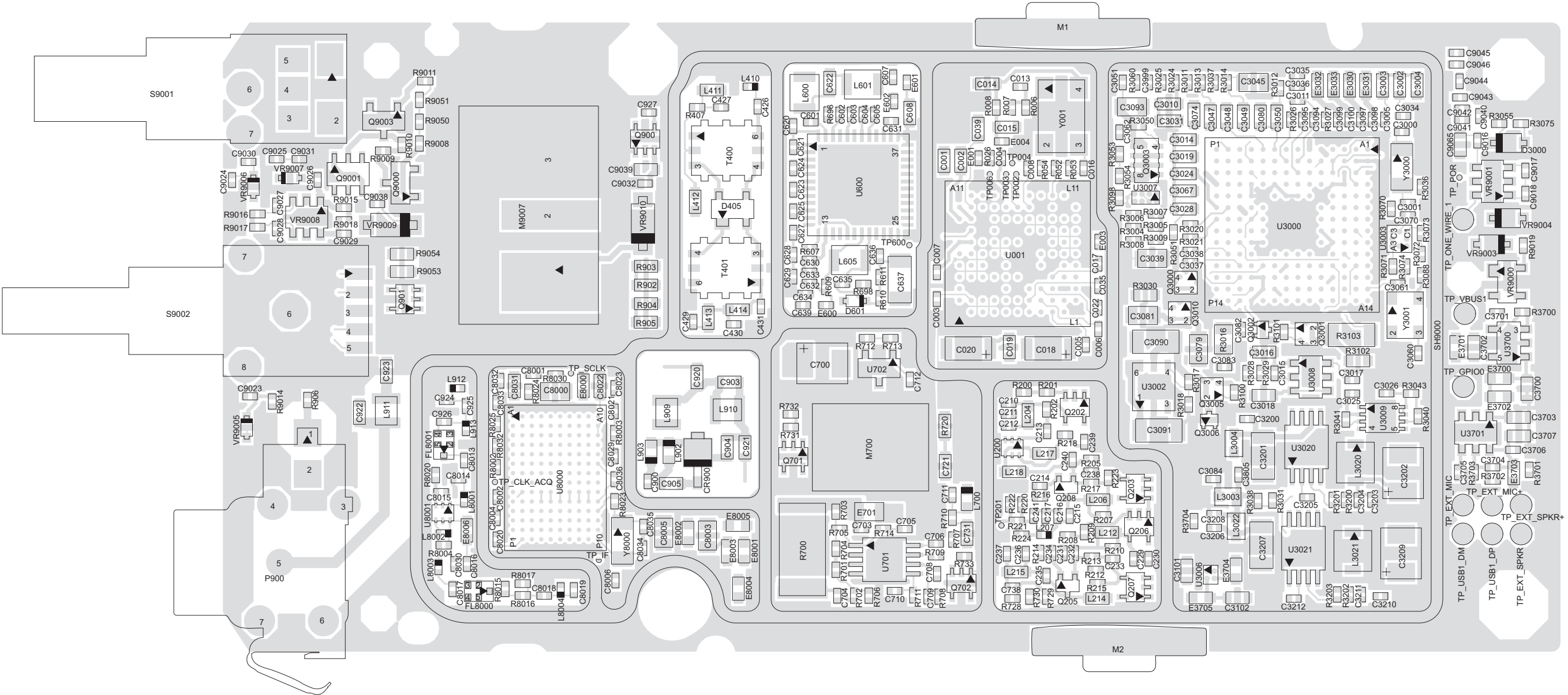


UHF1 (403–470 MHz) Main Board Bottom Side PCB No. 8486716Z07/



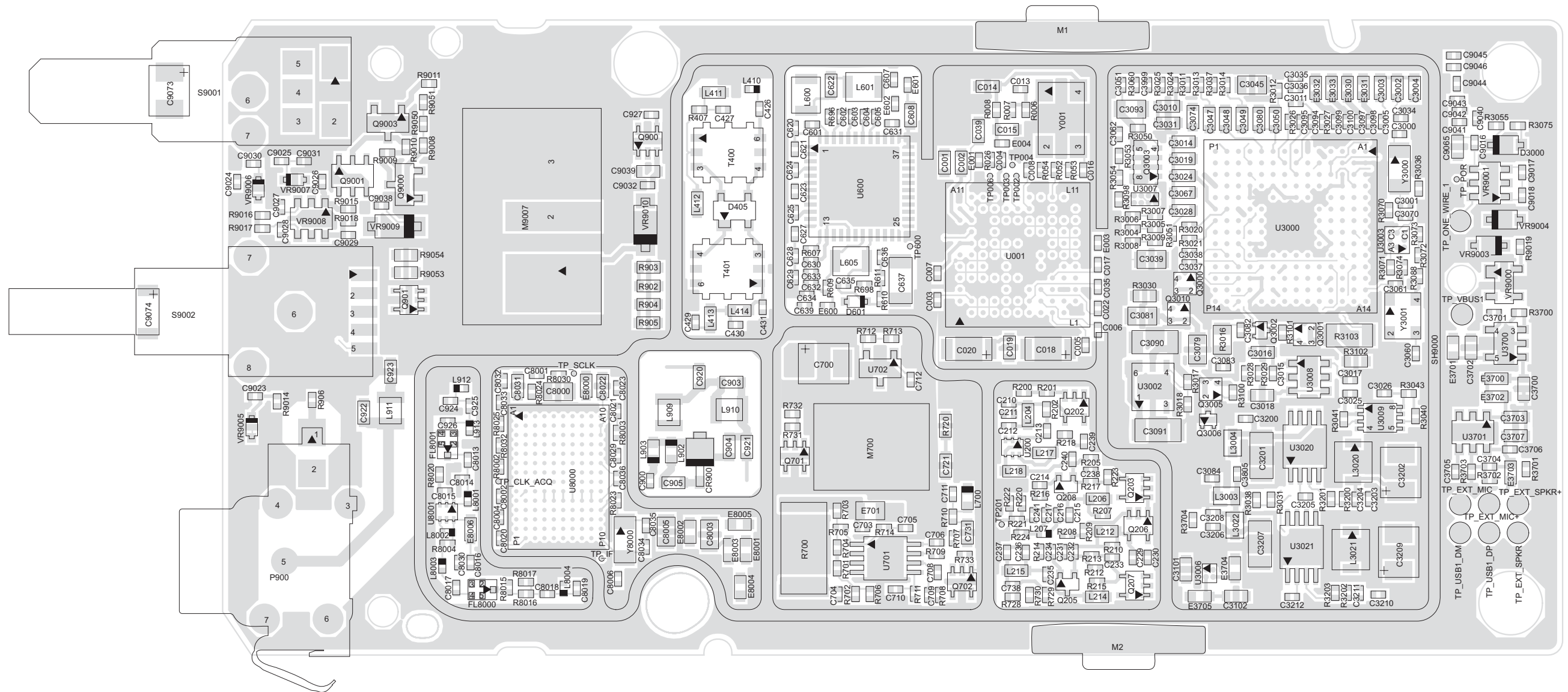


UHF1 (403-470 MHz) Main Board Top Side PCB No. 8486716Z08

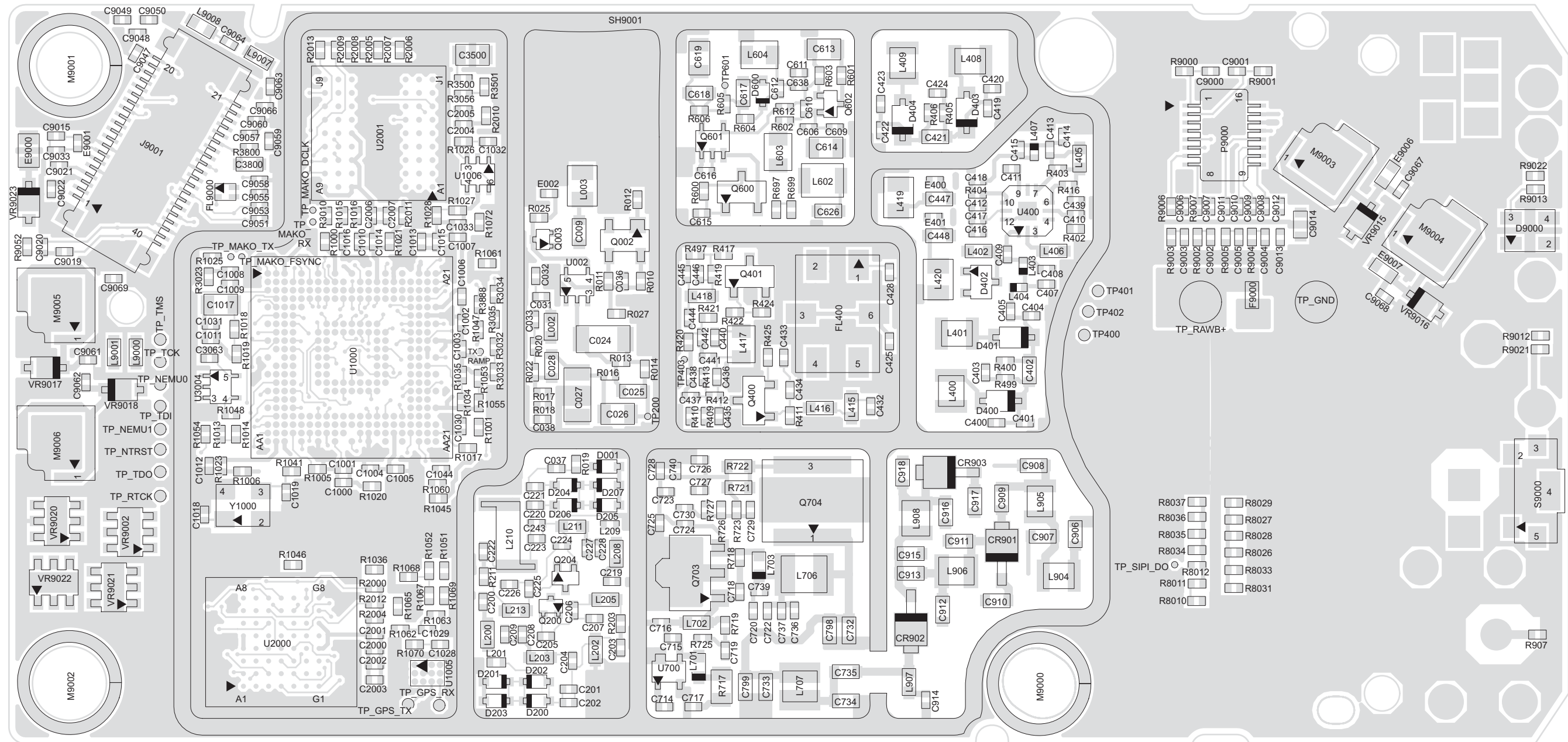


UHF1 (403–470 MHz) Main Board Bottom Side PCB No. 8486716Z08

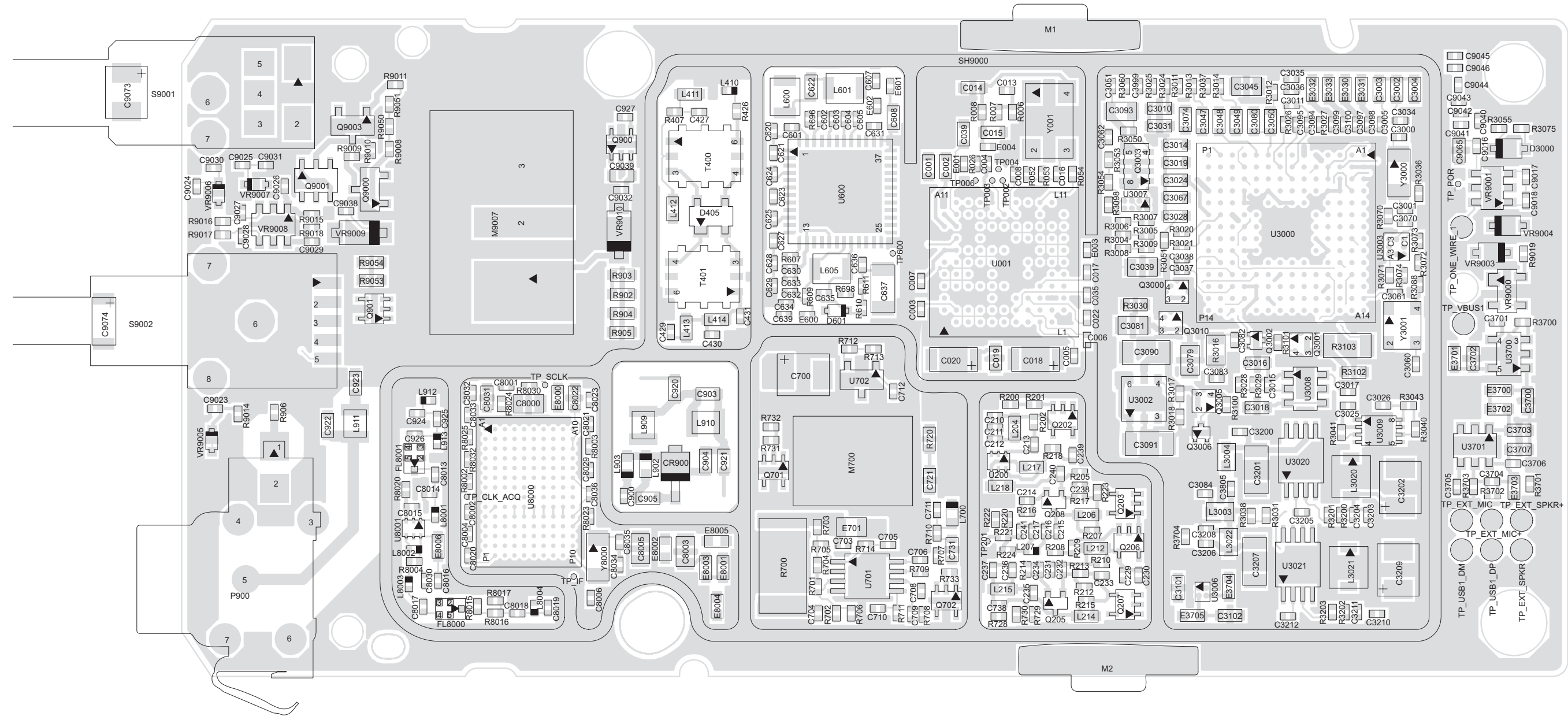




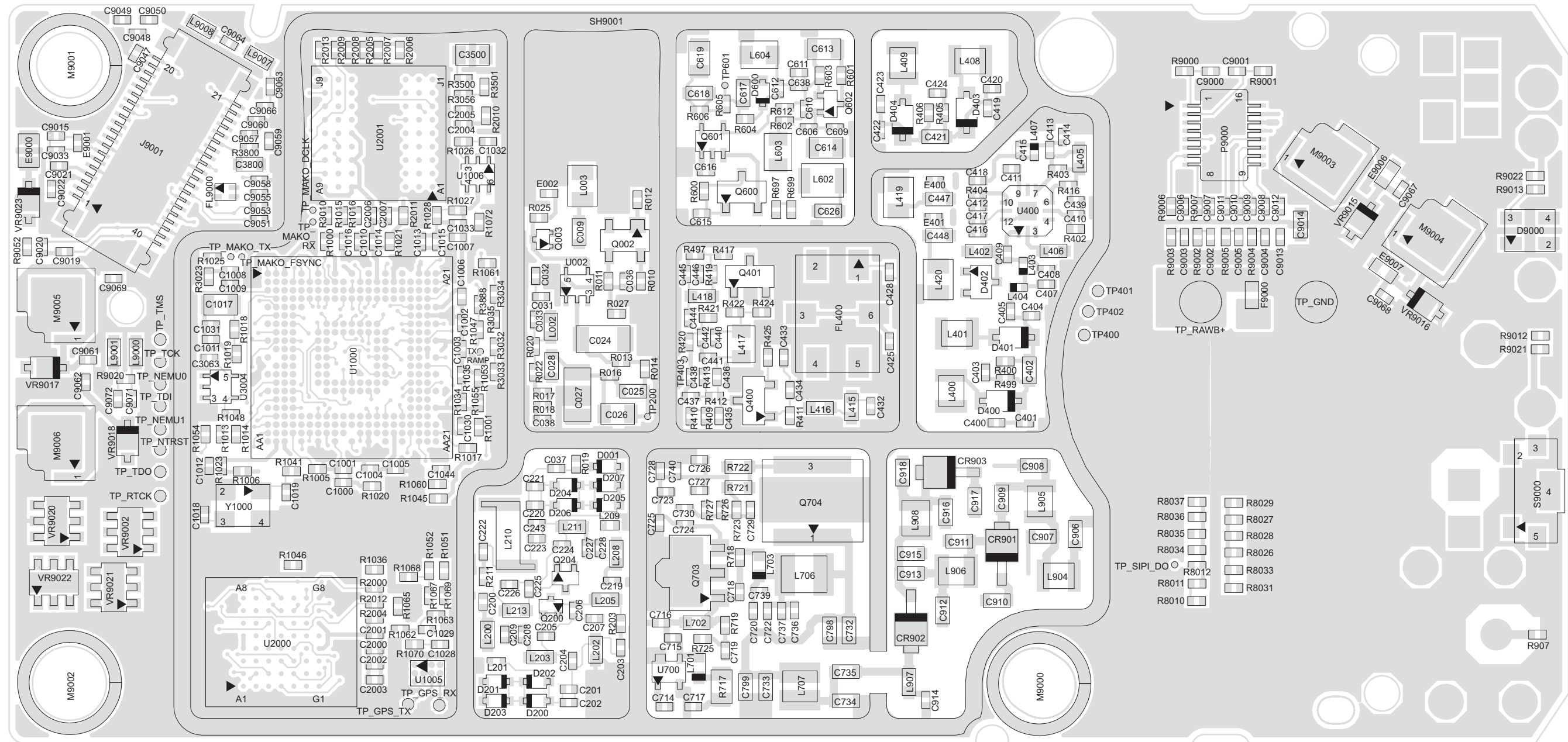
**UHF1 (403–470 MHz) Main Board Bottom Side PCB No. 8486716Z16**



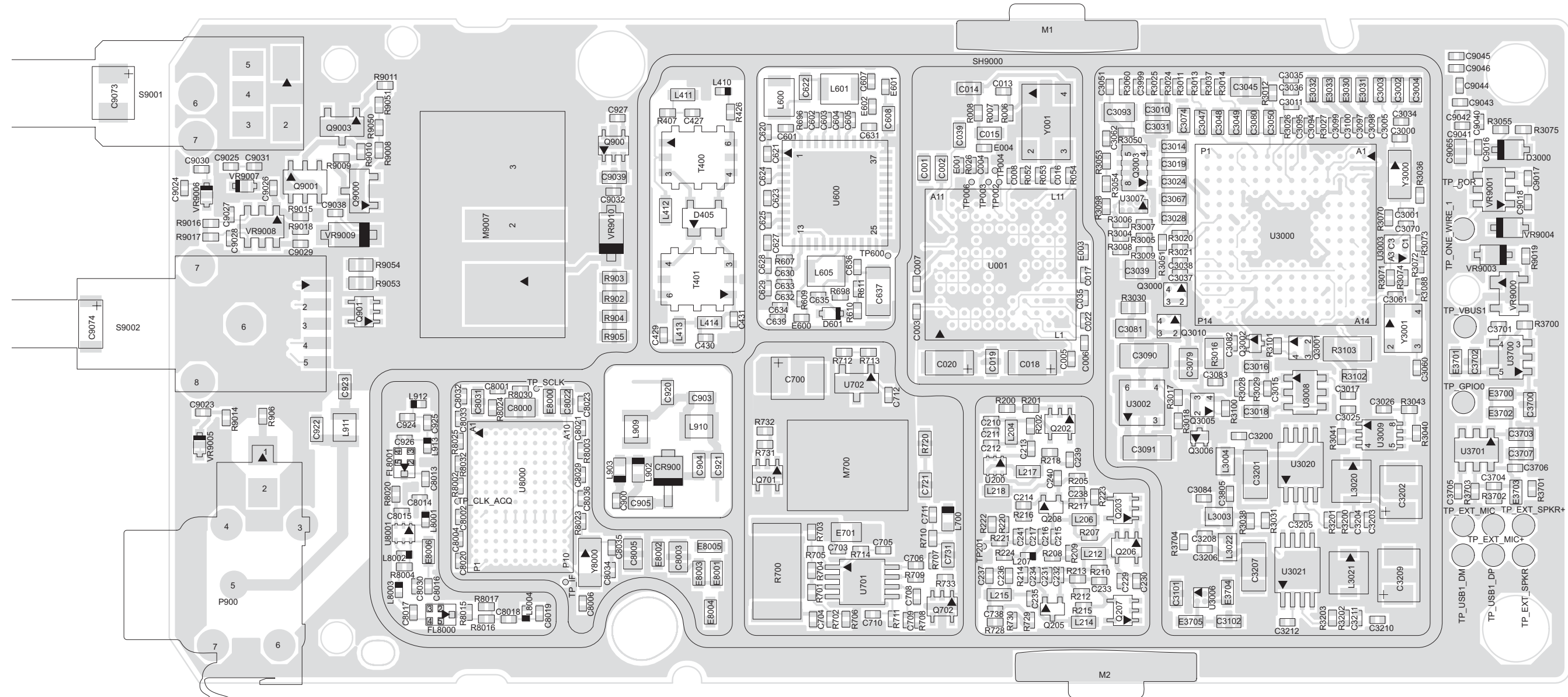
UHF1 (403-470 MHz) Main Board Top Side PCB No. 8486716Z23



UHF1 (403-470 MHz) Main Board Bottom Side PCB No. 8486716Z23

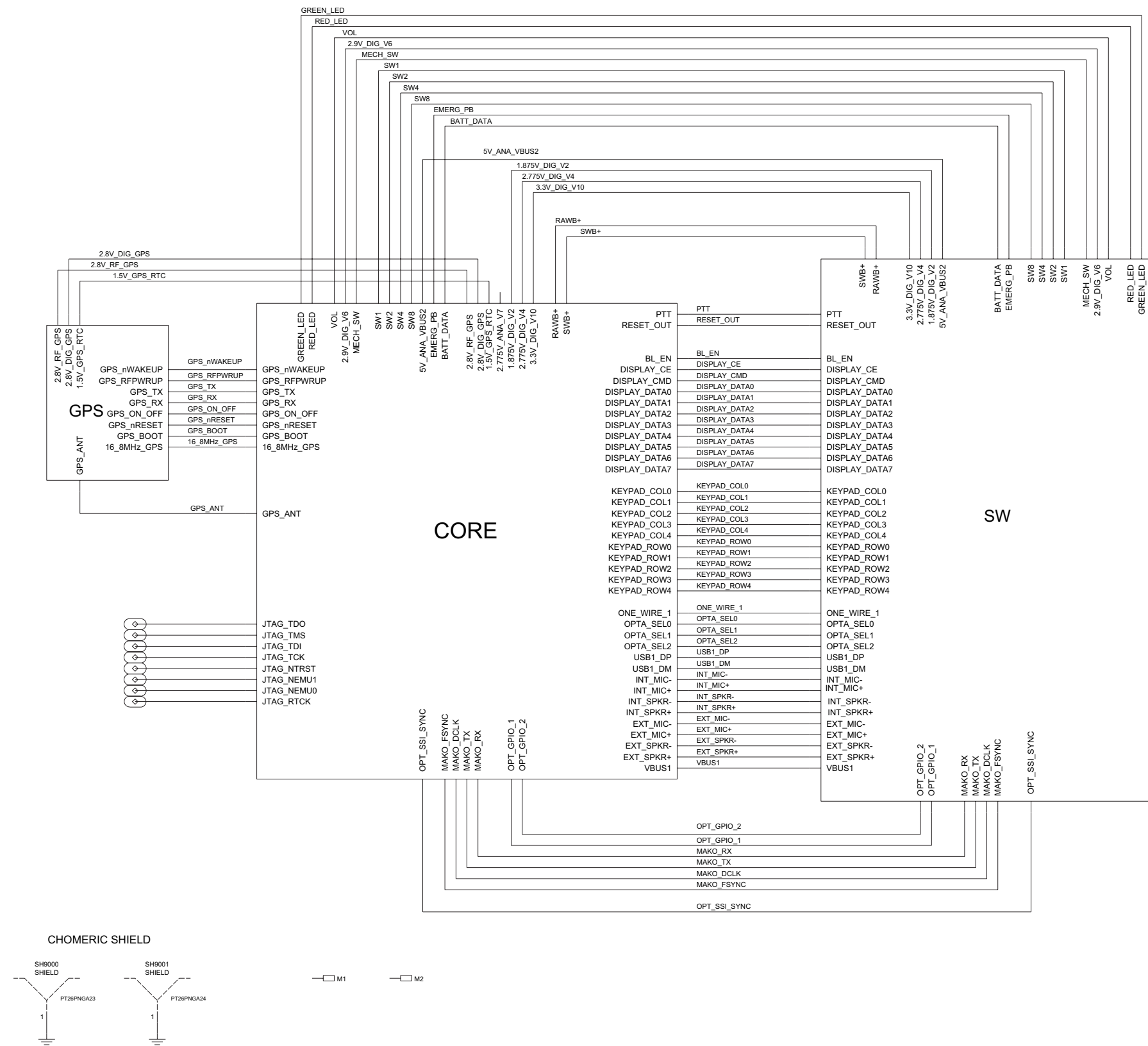


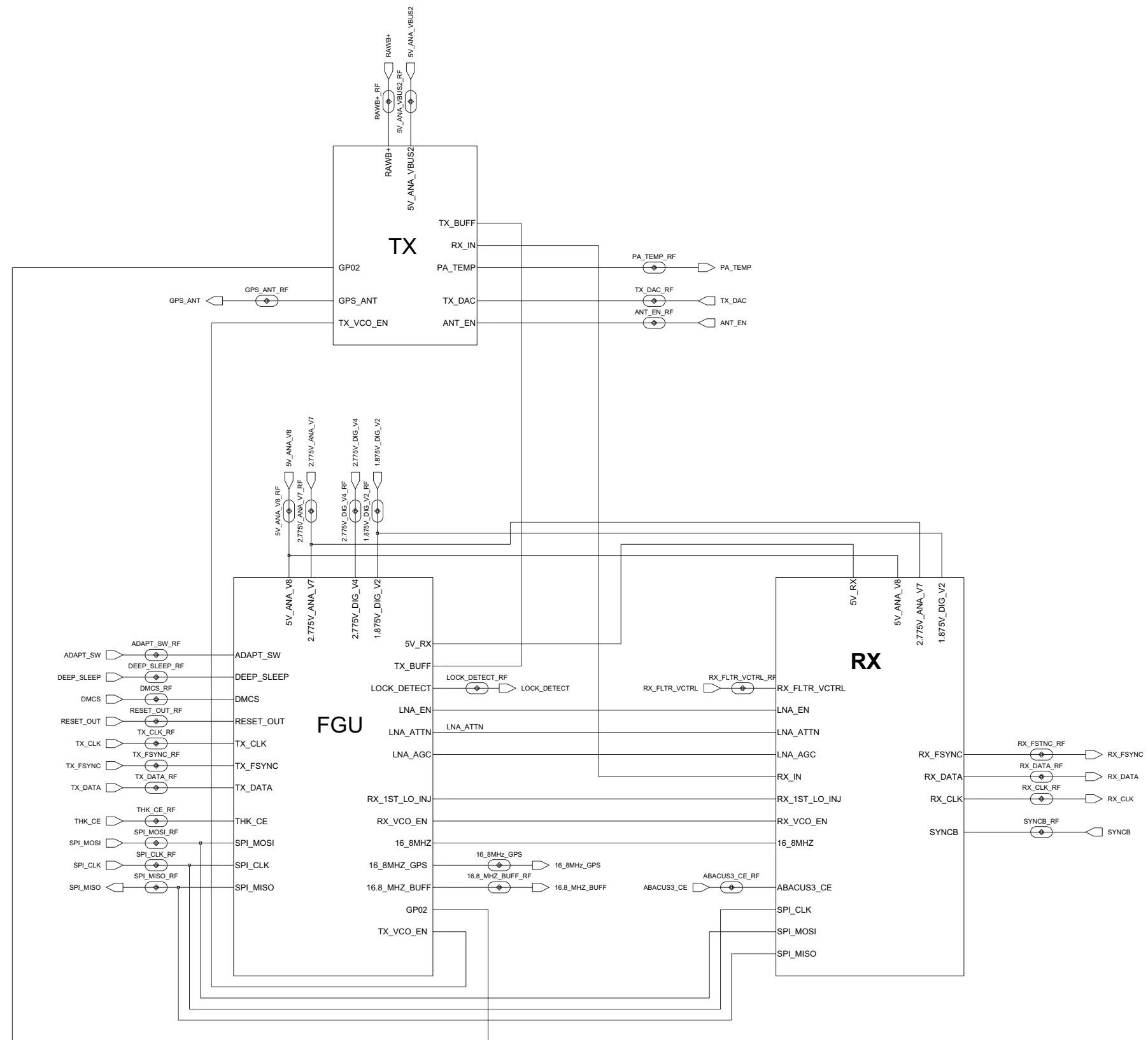
UHF1 (403-470 MHz) Main Board Top Side PCB No. 8486716Z24



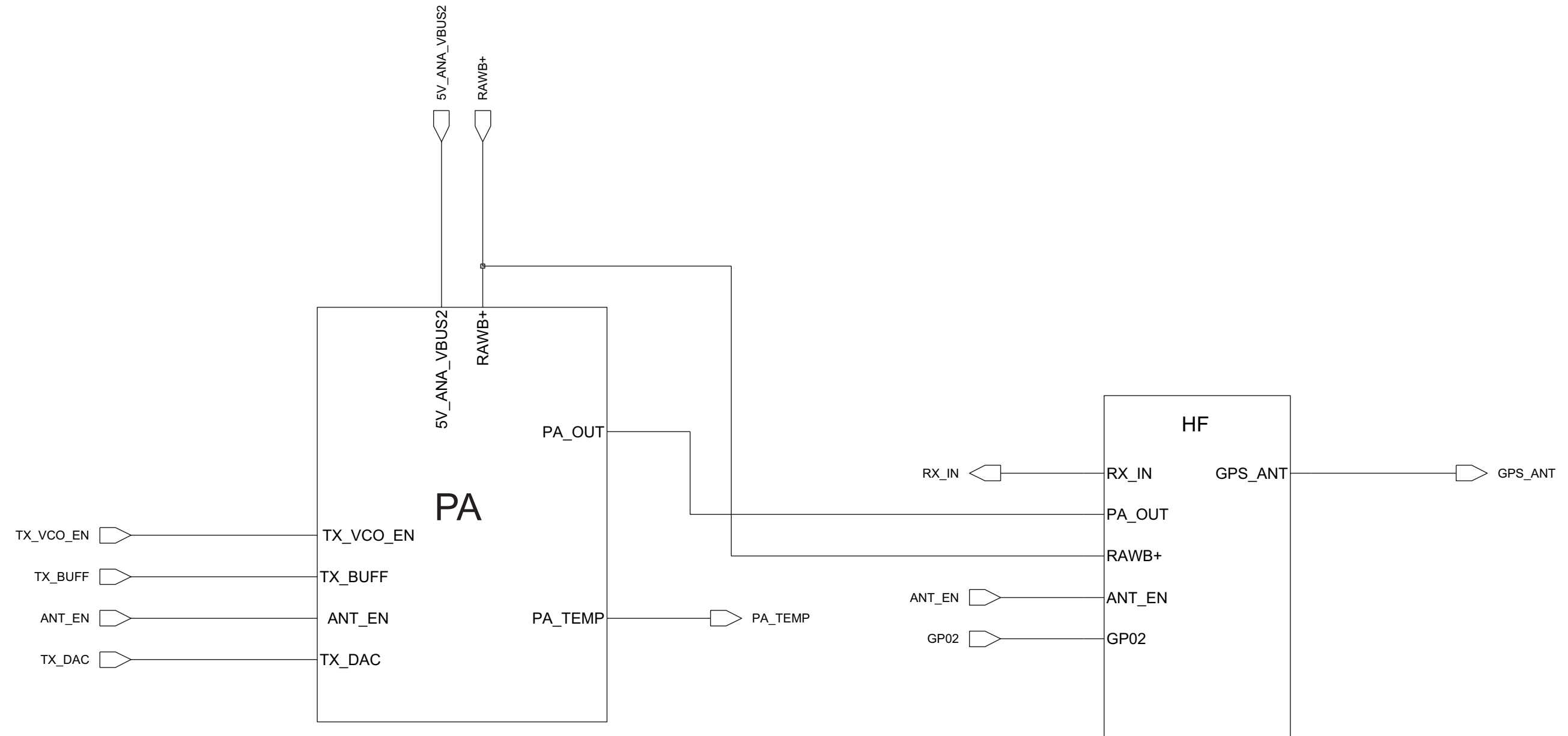
UHF1 (403-470 MHz) Main Board Bottom Side PCB No. 8486716Z24



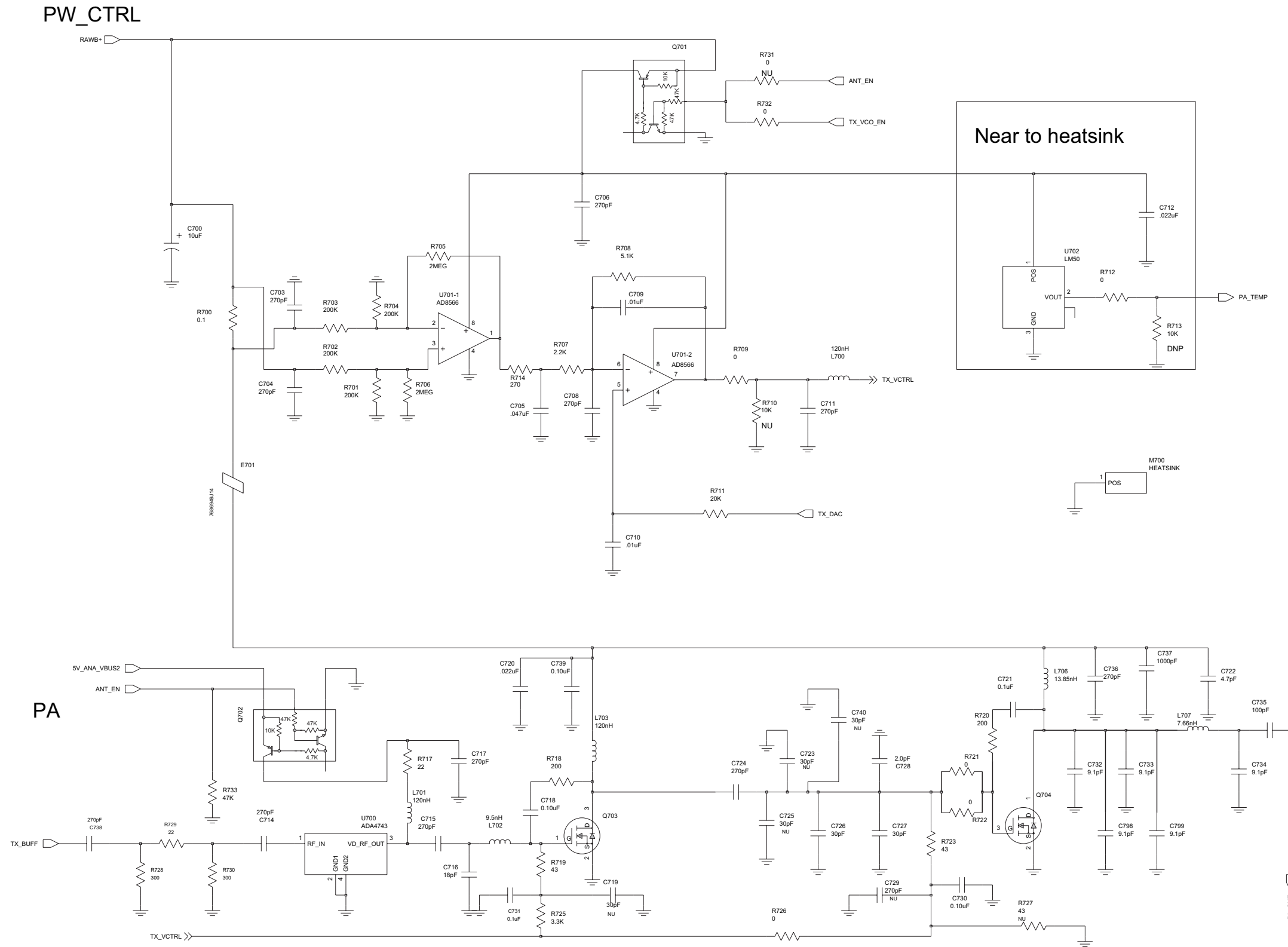




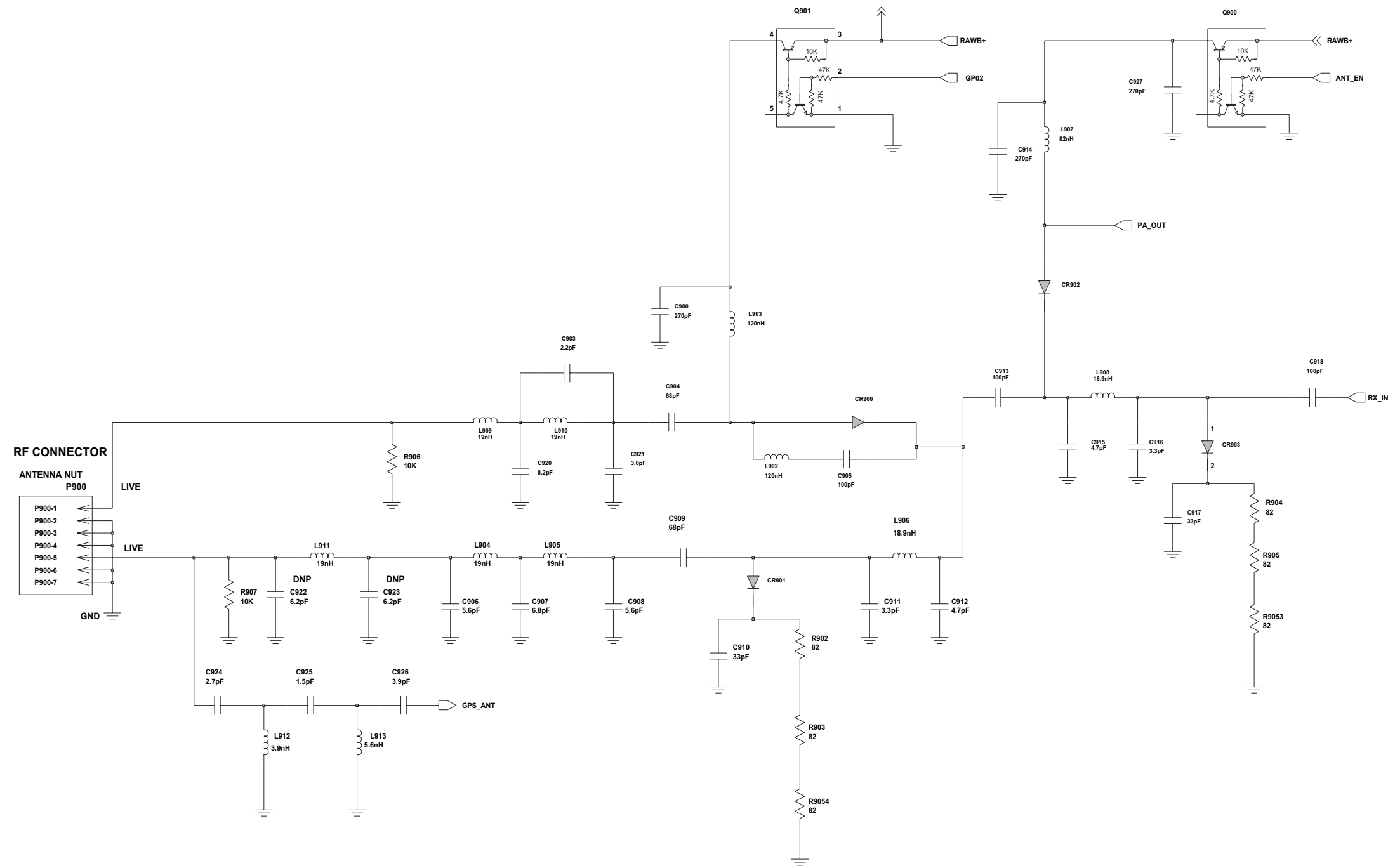
Complete UHF1 RF Schematic Diagram



Complete UHF1 Transmitter Schematic Diagram

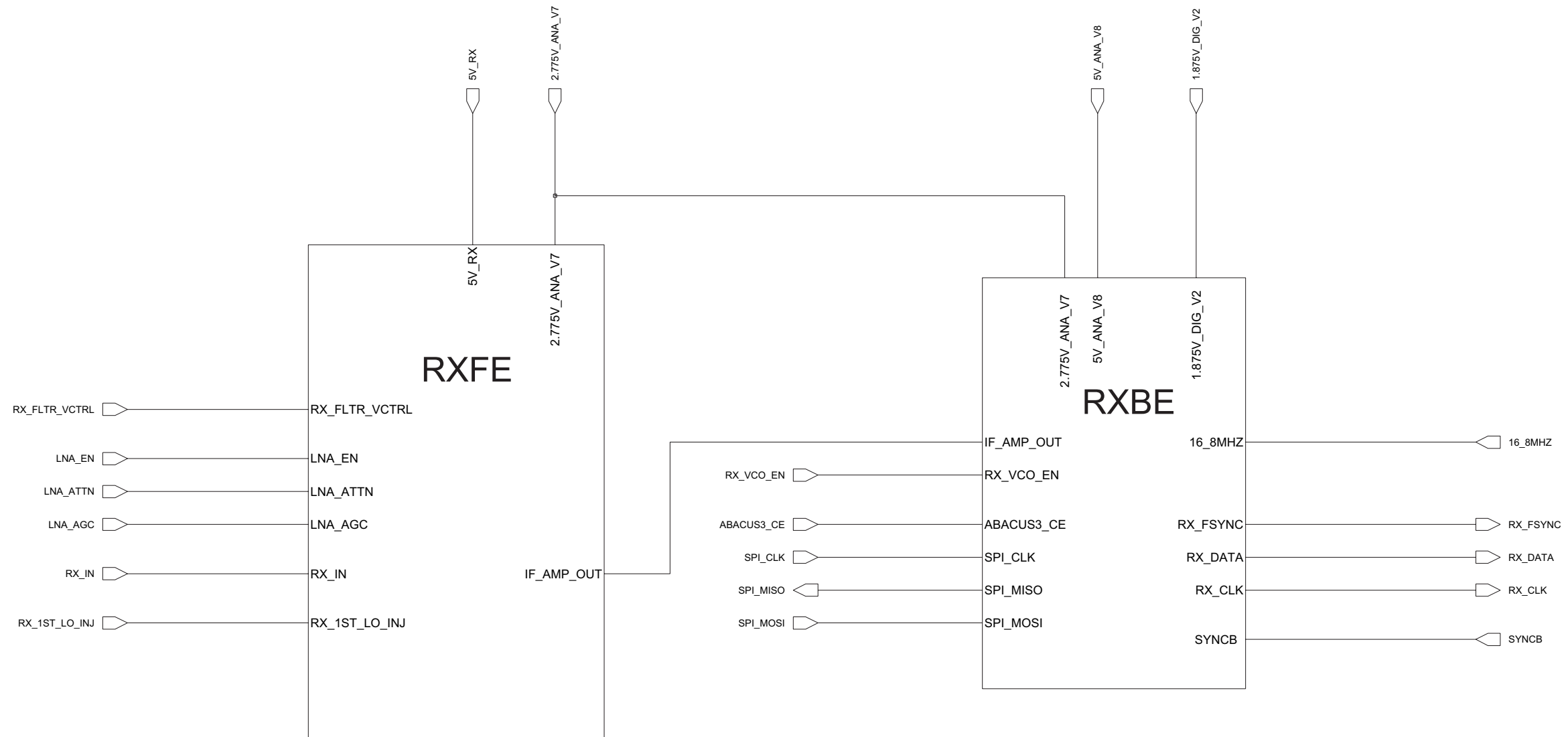


UHF1 Transmitter Schematic Diagram



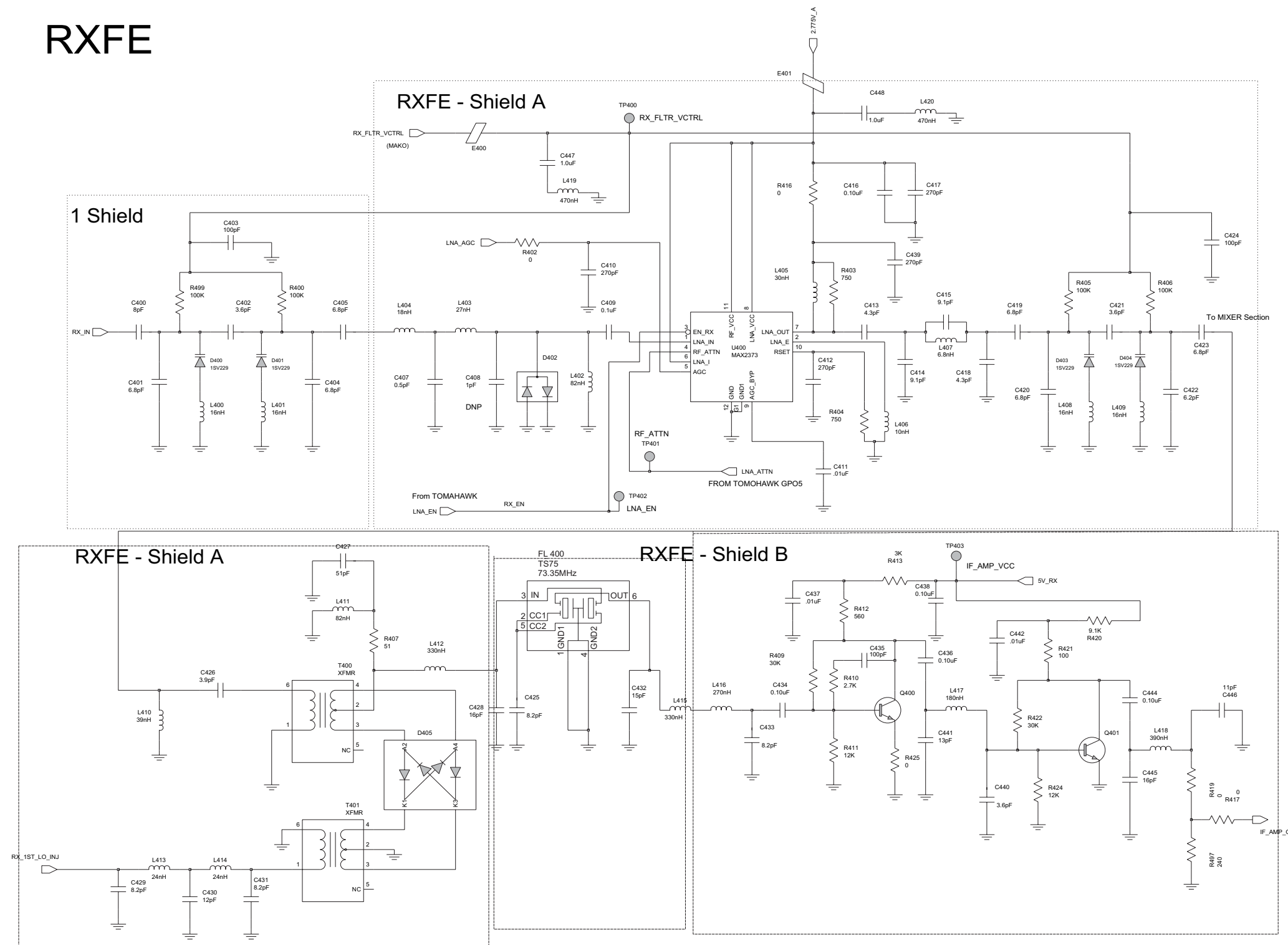
Q901	R907
P900	L913
M901	C927

**UHF1 Harmonic Filter and Antenna Switch Schematic Diagram**



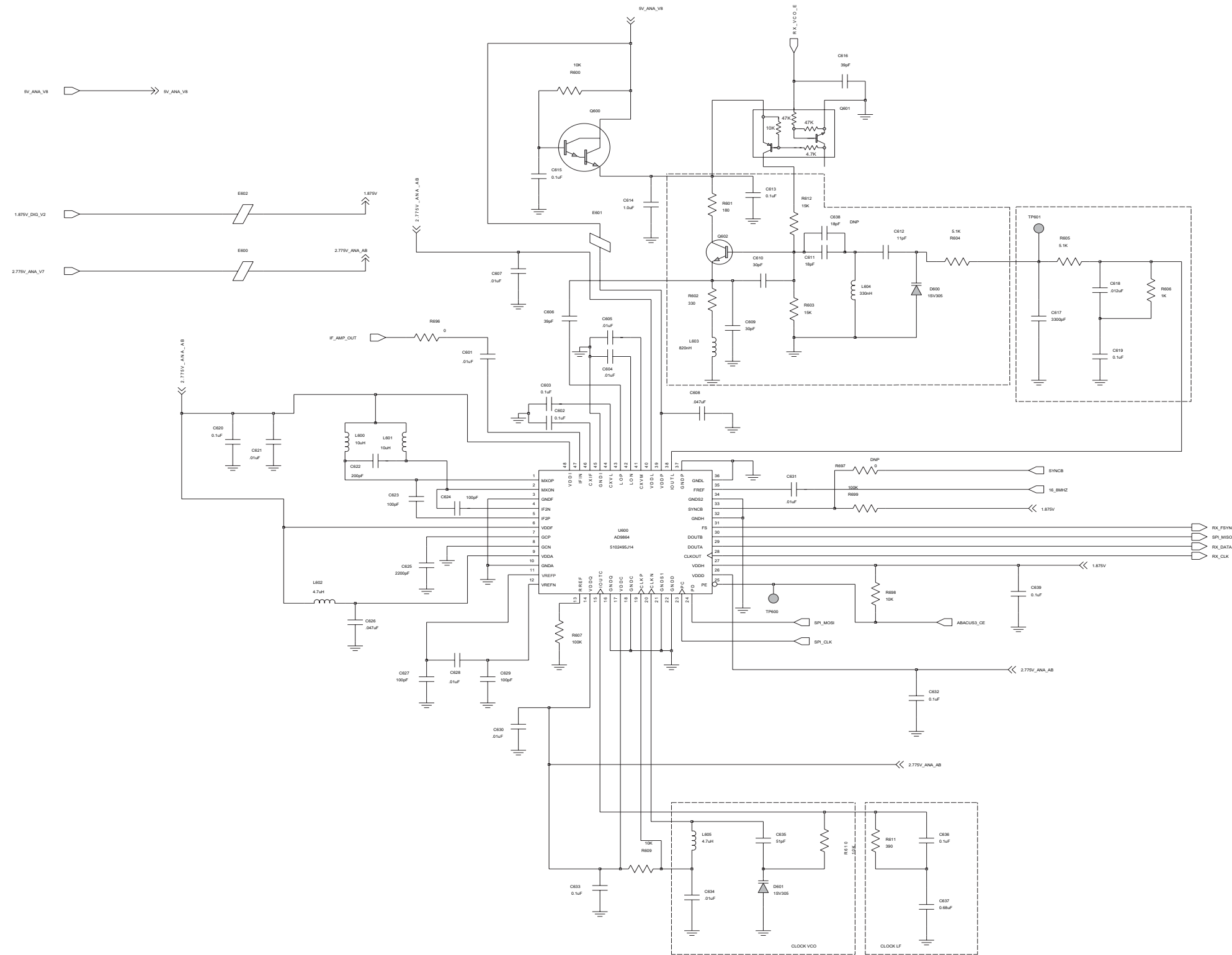
Complete UHF1 Receiver Schematic Diagram

# RXFE



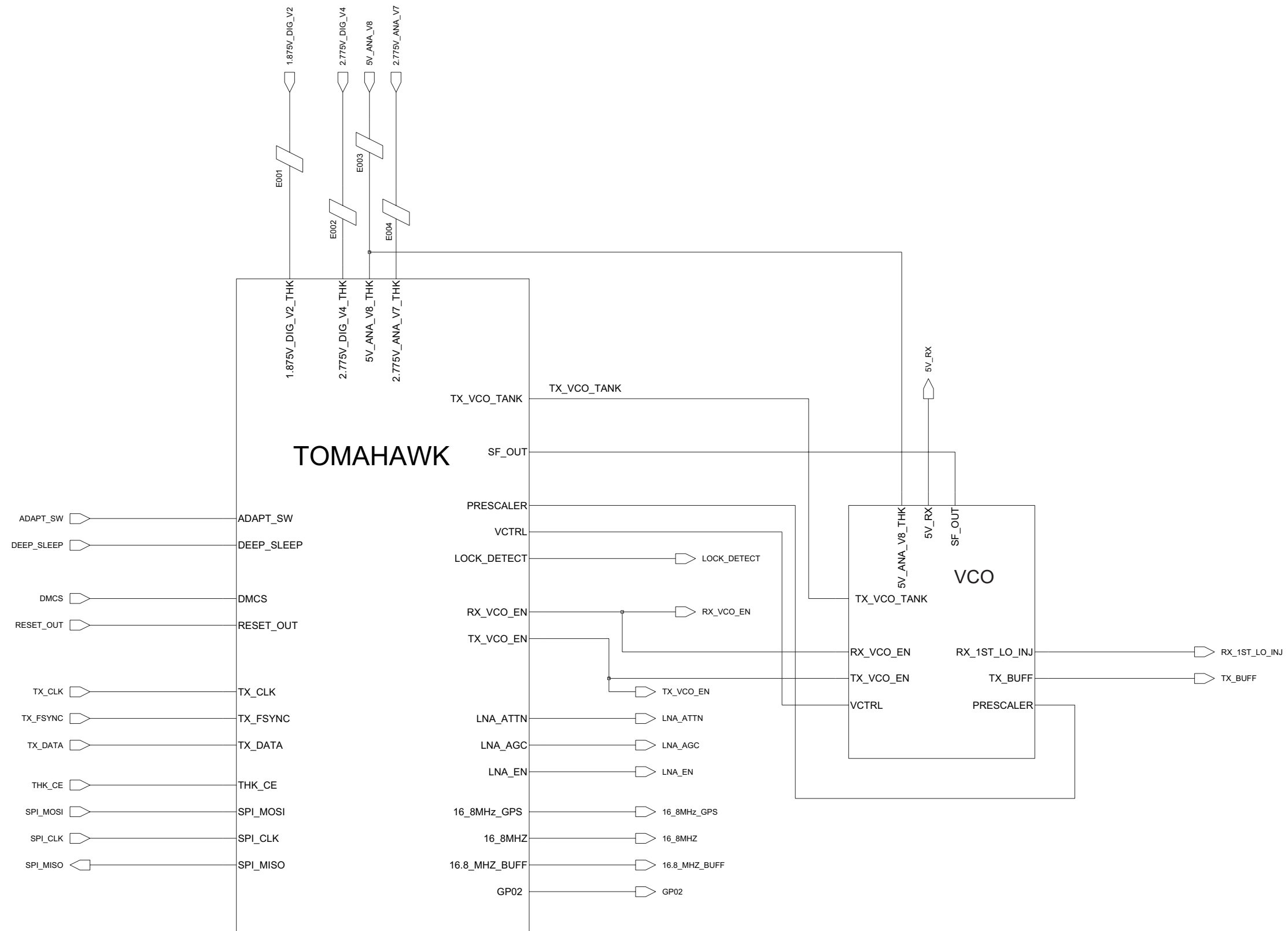
UHF1 Receiver Front End Schematic Diagram

# RXBE

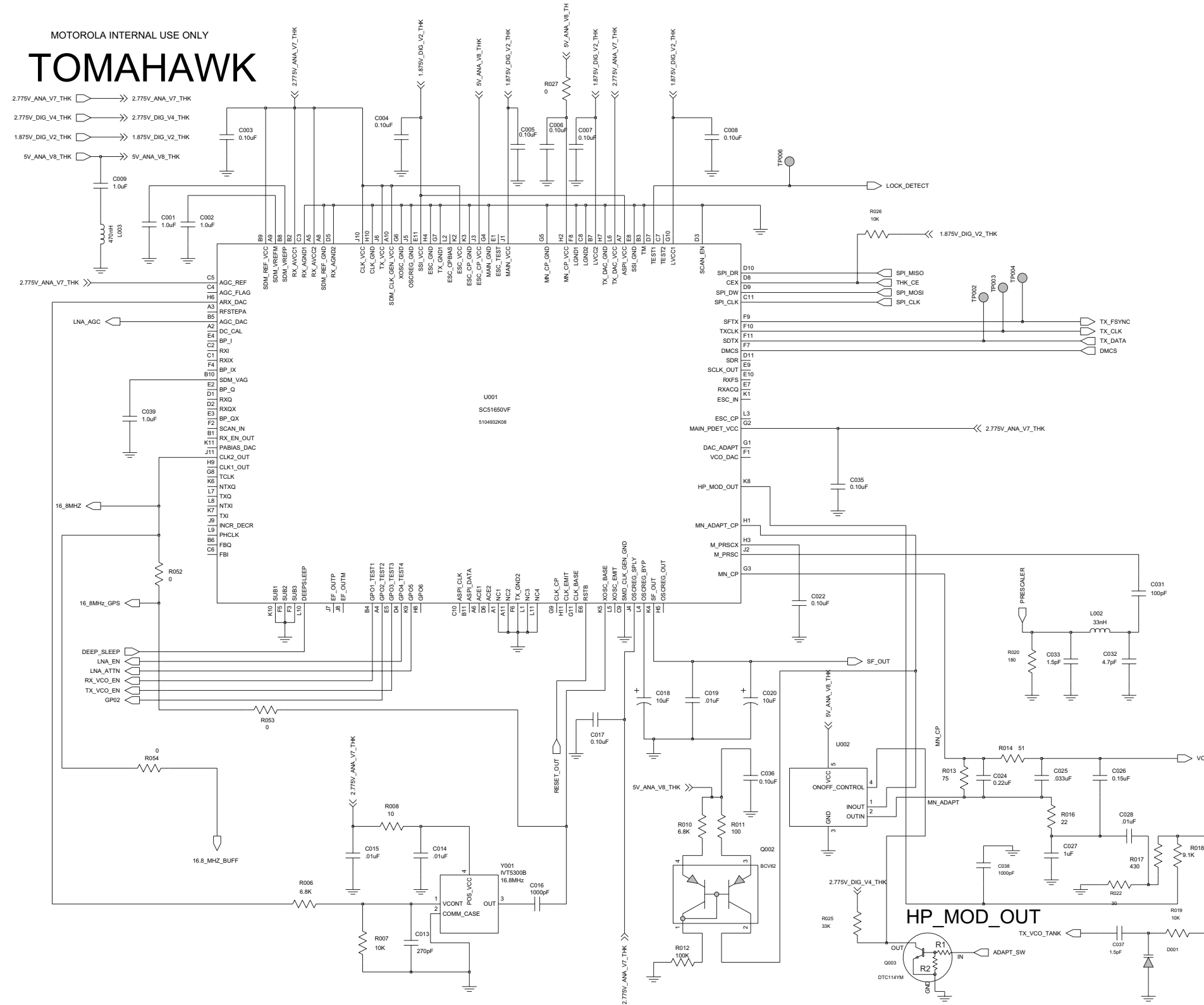


UHF1 Receiver Back End Schematic Diagram



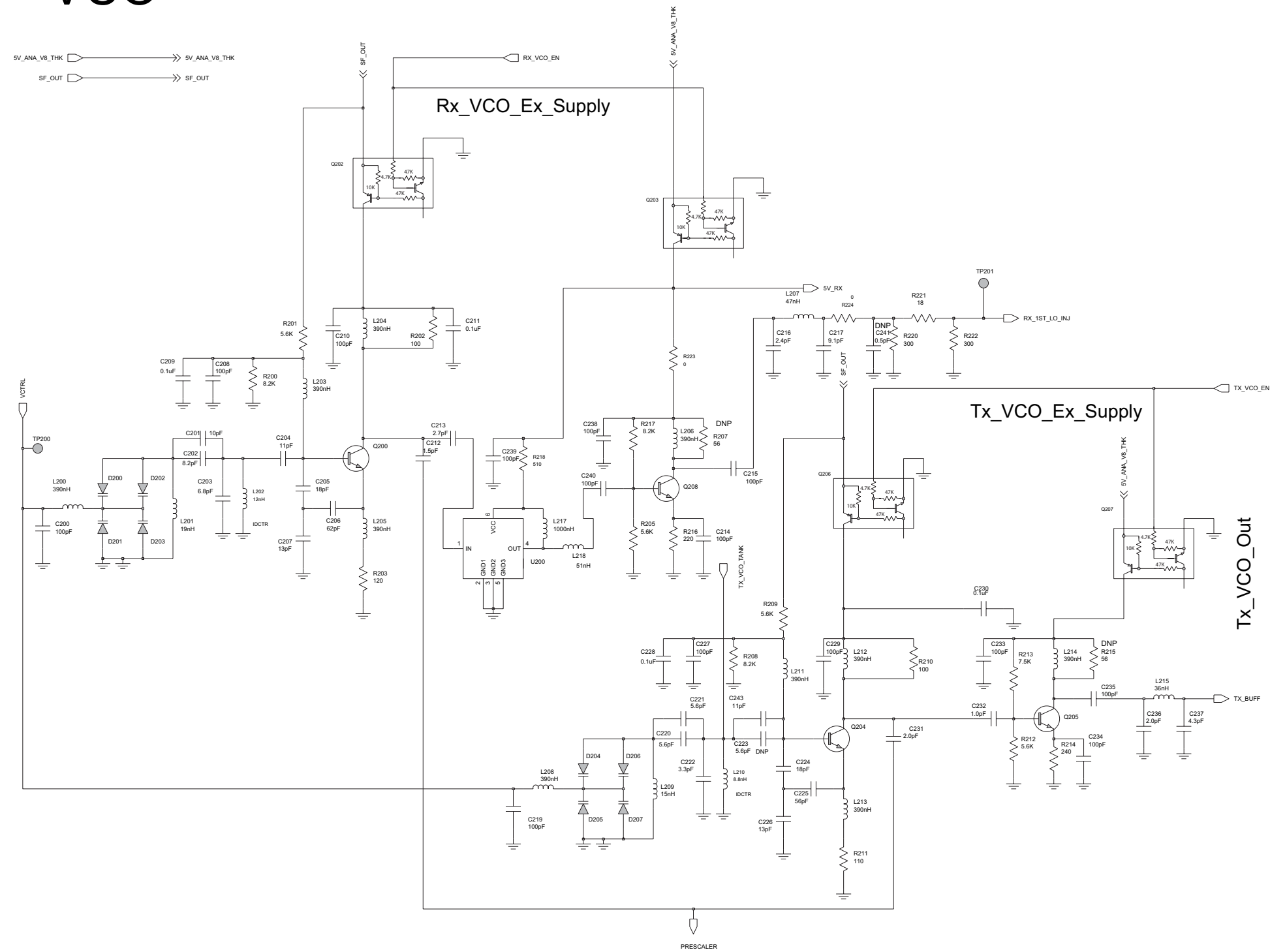


**Complete UHF1 Frequency Generating Unit Schematic Diagram**



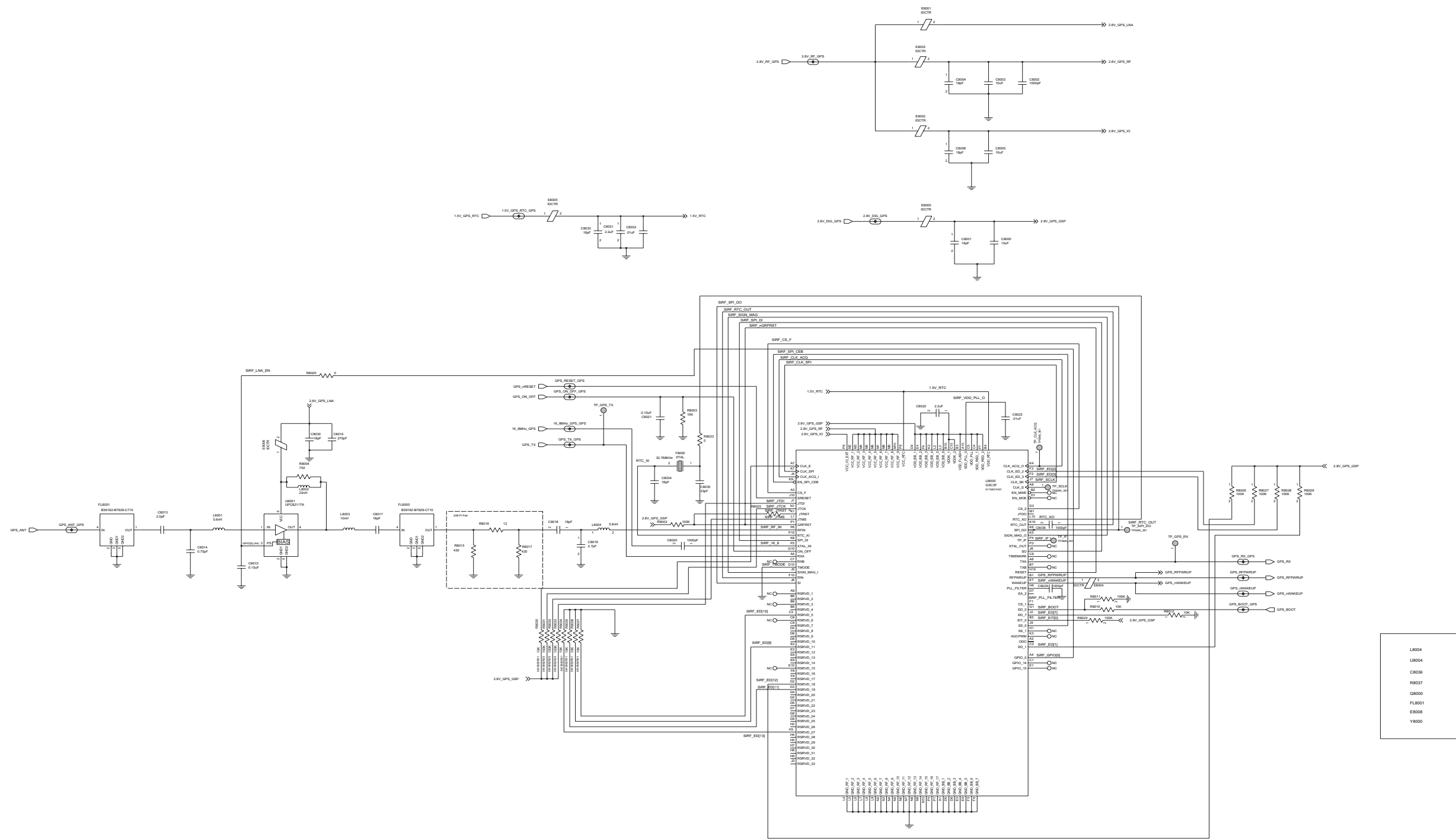
UHF1 Synthesizer Schematic Diagram

# VCO



UHF1 Voltage Controlled Oscillator Schematic Diagram

### GPS Block



UHF1 GPS Block Schematic Diagram

## UHF1 Radio Parts List (8486716Z04)

Circuit Ref	Motorola Part No.	Description
C001	2113946D02	CAP, 1.0uF
C002	2113946D02	CAP, 1.0uF
C003	2113946K02	CAP, 0.10uF
C004	2113946K02	CAP, 0.10uF
C005	2113946K02	CAP, 0.10uF
C006	2113946K02	CAP, 0.10uF
C007	2113946K02	CAP, 0.10uF
C008	2113946K02	CAP, 0.10uF
C009	NOTPLACED	NOTPLACED
C013	2113945A02	CAP, 270pF
C014	2113945L49	CAP,.01uF
C015	2113945L49	CAP,.01uF
C016	2113945A09	CAP, 1000pF
C017	2113946K02	CAP, 0.10uF
C018	2313960B57	CAPP, 10uF
C019	2113945L49	CAP,.01uF
C020	2313960B57	CAPP, 10uF
C022	2113946K02	CAP, 0.10uF
C024	2115358H17	CAP, 0.22uF
C025	2115358H07	CAP,.033uF
C026	2115358H15	CAP, 0.15uF
C027	2115358H25	CAP, 1uF
C028	2115358H01	CAP,.01uF
C031	2113944A40	CAP, 100pF
C032	2113944A17	CAP, 4.7pF
C033	2113944A05	CAP, 1.5pF
C035	2113946K02	CAP, 0.10uF
C036	2113946K02	CAP, 0.10uF
C037	2115153H08	CAP, 1.5pF
C038	NOTPLACED	NOTPLACED
C039	2113946D02	CAP, 1.0uF
C200	2113944A40	CAP, 100pF
C201	2115153H27	CAP, 10pF
C202	2115153H25	CAP, 8.2pF
C203	2115153H23	CAP, 6.8pF
C204	2115153H34	CAP, 11pF
C205	2115153H39	CAP, 18pF
C206	2115153H52	CAP, 62pF
C207	2115153H36	CAP, 13pF
C208	2113944A40	CAP, 100pF
C209	2113946B04	CAP, 0.1uF
C210	2113944A40	CAP, 100pF
C211	2113946B04	CAP, 0.1uF
C212	2115153H08	CAP, 1.5pF
C213	2115153H13	CAP, 2.7pF

Circuit Ref	Motorola Part No.	Description
C214	2113944A40	CAP, 100pF
C215	2113944A40	CAP, 100pF
C216	2115153H12	CAP, 2.4pF
C217	2115153H26	CAP, 9.1pF
C219	2113944A40	CAP, 100pF
C220	2115153H21	CAP, 5.6pF
C221	2115153H21	CAP, 5.6pF
C222	2115153H15	CAP, 3.3pF
C223	NOTPLACED	NOTPLACED
C224	2115153H39	CAP, 18pF
C225	2115153H51	CAP, 56pF
C226	2115153H36	CAP, 13pF
C227	2113944A40	CAP, 100pF
C228	2113946B04	CAP, 0.1uF
C229	2113944A40	CAP, 100pF
C230	2113946B04	CAP, 0.1uF
C231	2115153H10	CAP, 2.0pF
C232	2115153H03	CAP, 1.0pF
C233	2113944A40	CAP, 100pF
C234	2113944A40	CAP, 100pF
C235	2113944A40	CAP, 100pF
C236	2115153H10	CAP, 2.0pF
C237	2115153H18	CAP, 4.3pF
C238	2113944A40	CAP, 100pF
C239	2113944A40	CAP, 100pF
C240	2113944A40	CAP, 100pF
C241	NOTPLACED	NOTPLACED
C243	2115153H34	CAP, 11pF
C400	2113944A73	CAP, 8pF
C401	2113944A21	CAP, 6.8pF
C402	2113944M07	CAP, 3.6pF
C403	2113944A40	CAP, 100pF
C404	2113944A21	CAP, 6.8pF
C405	2113944A21	CAP, 6.8pF
C407	2113944A61	CAP, 0.5pF
C408	NOTPLACED	NOTPLACED
C409	2113946B04	CAP, 0.1uF
C410	2113945A02	CAP, 270pF
C411	2113945B02	CAP,.01uF
C412	2113945A02	CAP, 270pF
C413	2113944A16	CAP, 4.3pF
C414	2113944A24	CAP, 9.1pF
C415	2113944A24	CAP, 9.1pF
C416	2113946K02	CAP, 0.10uF
C417	2113945A02	CAP, 270pF
C418	2113944A16	CAP, 4.3pF

Circuit Ref	Motorola Part No.	Description
C419	2113944A21	CAP, 6.8pF
C420	2113944A21	CAP, 6.8pF
C421	2113944M07	CAP, 3.6pF
C422	2113944A20	CAP, 6.2pF
C423	2113944A21	CAP, 6.8pF
C424	2113944A40	CAP, 100pF
C425	2113944A20	CAP, 6.2pF
C426	0613952R66	RES,0
C427	2113944A85	CAP, 51pF
C428	2113944A78	CAP,13pF
C429	2113944A23	CAP, 8.2pF
C430	2113944A26	CAP, 12pF
C431	2113944A23	CAP, 8.2pF
C432	2113944A78	CAP,13pF
C433	2113944A21	CAP,6.8pF
C434	2113946K02	CAP, 0.10uF
C435	2113944A40	CAP, 100pF
C436	2113946K02	CAP, 0.10uF
C437	2113945B02	CAP,.01uF
C438	2113946K02	CAP, 0.10uF
C439	2113945A02	CAP, 270pF
C440	2113944A11	CAP,2.7pF
C441	2113944A16	CAP,4.3pF
C442	2113945B02	CAP,.01uF
C444	2113946K02	CAP, 0.10uF
C445	NOTPLACED	NOTPLACED
C446	2113944A77	CAP, 11pF
C447	NOTPLACED	NOTPLACED
C448	2113946S35	CAP, 1.0uF
C601	2113945B02	CAP,.01uF
C602	2113946B04	CAP, 0.1uF
C603	2113946B04	CAP, 0.1uF
C604	2113945B02	CAP,.01uF
C605	2113945B02	CAP,.01uF
C606	2113944A32	CAP, 39pF
C607	2113945B02	CAP,.01uF
C608	2113945D02	CAP,.047uF
C609	2115153H44	CAP,30pF
C610	2115153H44	CAP,30pF
C611	NOTPLACED	NOTPLACED
C612	2113944A25	CAP, 10pF
C613	2113945G91	CAP, 0.1uF
C614	2113946E02	CAP, 1.0uF
C615	2113946B04	CAP, 0.1uF
C616	2113944A32	CAP, 39pF
C617	2113945L37	CAP, 3300pF

Circuit Ref	Motorola Part No.	Description
C618	2113945C18	CAP,.012uF
C619	2115358H13	CAP, 0.1uF
C620	2113946B04	CAP, 0.1uF
C621	2113945B02	CAP,.01uF
C622	2113944C89	CAP, 200pF
C623	2113944A40	CAP, 100pF
C624	2113944A40	CAP, 100pF
C625	2113945A11	CAP, 2200pF
C626	2113945D02	CAP,.047uF
C627	2113944A40	CAP, 100pF
C628	2113945B02	CAP,.01uF
C629	2113944A40	CAP, 100pF
C630	2113945B02	CAP,.01uF
C631	2113945B02	CAP,.01uF
C632	2113946B04	CAP, 0.1uF
C633	2113946B04	CAP, 0.1uF
C634	2113945B02	CAP,.01uF
C635	2113944A85	CAP, 51pF
C636	2113946B04	CAP, 0.1uF
C637	2113946G04	CAP, 0.68uF
C638	2115153H38	CAP, 16pF
C639	2113946B04	CAP, 0.1uF
C700	2316410H03	CAPP, 10uF
C703	2113945A02	CAP, 270pF
C704	2113945A02	CAP, 270pF
C705	2113946B02	CAP,.047uF
C706	2113945A02	CAP, 270pF
C708	2113945A02	CAP, 270pF
C709	2113945B02	CAP,.01uF
C710	2113945B02	CAP,.01uF
C711	2113945A02	CAP, 270pF
C712	2113945B04	CAP,.022uF
C714	2113945A02	CAP, 270pF
C715	2113945A02	CAP, 270pF
C716	2113944A28	CAP, 18pF
C717	2113945A02	CAP, 270pF
C718	2113946K02	CAP, 0.10uF
C719	NOTPLACED	NOTPLACED
C720	2113945B04	CAP,.022uF
C721	2113945D04	CAP, 0.1uF
C722	2113944A17	CAP, 4.7pF
C723	NOTPLACED	NOTPLACED
C724	2113945A02	CAP, 270pF
C725	NOTPLACED	NOTPLACED
C726	2113944A82	CAP, 30pF
C727	2113944A82	CAP, 30pF

Circuit Ref	Motorola Part No.	Description
C728	2113944A08	CAP, 2.0pF
C729	NOTPLACED	NOTPLACED
C730	2113946K02	CAP, 0.10uF
C731	2113945D04	CAP, 0.1uF
C732	2116173H17	CAP, 24pF
C733	2116636H04	CAP, 20pF
C734	2116001H01	CAP, 13pF
C735	2116173H17	CAP, 24pF
C736	2113945A02	CAP, 270pF
C737	2113945A09	CAP, 1000pF
C738	2113945A02	CAP, 270pF
C739	2113946K02	CAP, 0.10uF
C740	NOTPLACED	NOTPLACED
C798	2116173H17	CAP, 24pF
C799	2116636H04	CAP, 20pF
C900	2113945A02	CAP, 270pF
C903	2113944C14	CAP, 2.2pF
C904	2113944C41	CAP, 68pF
C905	2113944C45	CAP, 100pF
C906	2113944C71	CAP, 5.6pF
C907	2113944C73	CAP, 6.8pF
C908	2113944C71	CAP, 5.6pF
C909	2113944C41	CAP, 68pF
C910	2113944M30	CAP, 33pF
C911	2113944C18	CAP, 3.3pF
C912	2113944C22	CAP, 4.7pF
C913	2113944C45	CAP, 100pF
C914	2113945A02	CAP, 270pF
C915	2113944C22	CAP, 4.7pF
C916	2113944C18	CAP, 3.3pF
C917	2113944M30	CAP, 33pF
C918	2113944C45	CAP, 100pF
C920	2113944C28	CAP, 8.2pF
C921	2113944C17	CAP, 3.0pF
C922	NOTPLACED	NOTPLACED
C923	NOTPLACED	NOTPLACED
C924	2113944A11	CAP, 2.7pF
C925	2113944V07	CAP, 1.5pF
C926	2113944A15	CAP, 3.9pF
C927	2113945A02	CAP, 270pF
C1000	2113944A40	CAP, 100pF
C1001	2113946K02	CAP, 0.10uF
C1002	2113946K02	CAP, 0.10uF
C1003	2113944A40	CAP, 100pF
C1004	2113944A40	CAP, 100pF
C1005	2113946K02	CAP, 0.10uF

Circuit Ref	Motorola Part No.	Description
C1006	2113946K02	CAP, 0.10uF
C1007	2113944A40	CAP, 100pF
C1008	2113944A40	CAP, 100pF
C1009	2113946K02	CAP, 0.10uF
C1010	2113946K02	CAP, 0.10uF
C1011	2113944A40	CAP, 100pF
C1012	2113946K02	CAP, 0.10uF
C1013	2113946K02	CAP, 0.10uF
C1014	2113946K02	CAP, 0.10uF
C1015	2113946K02	CAP, 0.10uF
C1016	2113946B04	CAP, 0.1uF
C1017	2113946E02	CAP, 1.0uF
C1018	2113944A28	CAP, 18pF
C1019	2113944A28	CAP, 18pF
C1028	2113946K02	CAP, 0.10uF
C1029	2113946K02	CAP, 0.10uF
C1030	2113944A28	CAP, 18pF
C1031	2113946K02	CAP, 0.10uF
C1032	2113945B02	CAP, .01uF
C1033	2113946K02	CAP, 0.10uF
C1044	2113946B04	CAP, 0.1uF
C2000	2113944A40	CAP, 100pF
C2001	2113945B02	CAP, .01uF
C2002	2113946K02	CAP, 0.10uF
C2003	2113946K02	CAP, 0.10uF
C2004	2113944A40	CAP, 100pF
C2005	2113945B02	CAP, .01uF
C2006	2113946K02	CAP, 0.10uF
C2007	2113946K02	CAP, 0.10uF
C3000	2113944A78	CAP, 13pF
C3001	2113944A78	CAP, 13pF
C3002	2113945D04	CAP, 0.1uF
C3003	2113946D05	CAP, 2.2uF
C3004	2113946D05	CAP, 2.2uF
C3005	2113945A09	CAP, 1000pF
C3010	2113946D05	CAP, 2.2uF
C3011	2113946A02	CAP, .022uF
C3014	2113946D05	CAP, 2.2uF
C3015	2115153H57	CAP, 100pF
C3016	2113946D05	CAP, 2.2uF
C3017	2113945B02	CAP, .01uF
C3018	2113946D05	CAP, 2.2uF
C3019	2113946D02	CAP, 1.0uF
C3024	2113946D02	CAP, 1.0uF
C3025	2113946K02	CAP, 0.10uF
C3026	2113946K02	CAP, 0.10uF

Circuit Ref	Motorola Part No.	Description
C3028	2113946D05	CAP, 2.2uF
C3031	2113946D02	CAP, 1.0uF
C3034	2113946B04	CAP, 0.1uF
C3035	2113946B04	CAP, 0.1uF
C3036	2113946B04	CAP, 0.1uF
C3037	2113944A40	CAP, 100pF
C3038	2113944A40	CAP, 100pF
C3039	2113946F03	CAP, 4.7uF
C3045	2113946F05	CAP, 10uF
C3047	2113946D02	CAP, 1.0uF
C3048	2113946D02	CAP, 1.0uF
C3049	2113743E10	CAP, 0.033uF
C3050	2113743E10	CAP, 0.033uF
C3051	2113944A40	CAP, 100pF
C3060	2113944A80	CAP, 20pF
C3061	2113944A80	CAP, 20pF
C3062	2113946K02	CAP, 0.10uF
C3063	2113946K02	CAP, 0.10uF
C3067	2113946D02	CAP, 1.0uF
C3070	2113944A25	CAP, 10pF
C3074	2113946D02	CAP, 1.0uF
C3079	2113946F03	CAP, 4.7uF
C3080	NOTPLACED	NOTPLACED
C3081	2113946F03	CAP, 4.7uF
C3082	2113946B04	CAP, 0.1uF
C3083	2113946B04	CAP, 0.1uF
C3084	2113946K03	CAP, 0.22uF
C3090	2113955D37	CAP, 10uF
C3091	2113955D37	CAP, 10uF
C3093	2113946N03	CAP, 2.2uF
C3094	2113946B03	CAP, .068uF
C3095	2113946B03	CAP, .068uF
C3097	2113944A31	CAP, 33pF
C3098	2113944A31	CAP, 33pF
C3099	2113944A31	CAP, 33pF
C3100	2113944A31	CAP, 33pF
C3101	2113946D02	CAP, 1.0uF
C3102	2113946D02	CAP, 1.0uF
C3200	2113945Y02	CAP, 0.10uF
C3201	2113955D37	CAP, 10uF
C3202	2371572L01	CAPP, 47uF
C3203	2113945B02	CAP, .01uF
C3204	2115153H40	CAP, 20pF
C3205	2113944A44	CAP, 220pF
C3206	2113945Y02	CAP, 0.10uF
C3207	2113955D37	CAP, 10uF

Circuit Ref	Motorola Part No.	Description
C3208	2113946K03	CAP, 0.22uF
C3209	2371572L01	CAPP, 47uF
C3210	2113945B02	CAP, .01uF
C3211	2115153H40	CAP, 20pF
C3212	2113944A44	CAP, 220pF
C3700	2113946D02	CAP, 1.0uF
C3701	2113945B02	CAP, .01uF
C3702	2113946D05	CAP, 2.2uF
C3703	2113946D02	CAP, 1.0uF
C3704	2113944A30	CAP, 27pF
C3705	2113945B02	CAP, .01uF
C3706	2113945A05	CAP, 470pF
C3707	2113946D05	CAP, 2.2uF
C3800	2113945D04	CAP, 0.1uF
C3805	2113946K03	CAP, 0.22uF
C3999	2113945B02	CAP, .01uF
C8000	2113946F05	CAP, 10uF
C8001	2113944A28	CAP, 18pF
C8002	2113944A52	CAP, 1000pF
C8003	2113946F05	CAP, 10uF
C8004	2113944A28	CAP, 18pF
C8005	2113946F05	CAP, 10uF
C8006	2113944A28	CAP, 18pF
C8013	2113944A08	CAP, 2.0pF
C8014	2113944A62	CAP, 0.75pF
C8015	2113946K02	CAP, 0.10uF
C8016	2113945A02	CAP, 270pF
C8017	2113944A28	CAP, 18pF
C8018	2113944A28	CAP, 18pF
C8019	2113944A11	CAP, 2.7pF
C8020	2113944A52	CAP, 1000pF
C8021	2113946K02	CAP, 0.10uF
C8022	2113946D05	CAP, 2.2uF
C8023	2113945B02	CAP, .01uF
C8029	2113944A52	CAP, 1000pF
C8030	2113944A28	CAP, 18pF
C8031	2113946D05	CAP, 2.2uF
C8032	2113945B02	CAP, .01uF
C8033	2113944A28	CAP, 18pF
C8034	2113944A28	CAP, 18pF
C8035	2113944A31	CAP, 33pF
C8036	2113944A52	CAP, 1000pF
C9000	2113944A40	CAP, 100pF
C9001	2113944A40	CAP, 100pF
C9002	2113944A40	CAP, 100pF
C9003	2113944A40	CAP, 100pF

Circuit Ref	Motorola Part No.	Description	Circuit Ref	Motorola Part No.	Description	Circuit Ref	Motorola Part No.	Description	Circuit Ref	Motorola Part No.	Description
C9004	2113944A40	CAP, 100pF	C9057	NOTPLACED	NOTPLACED	E3030	2409134J04	BLM18BD601SN1	L218	2415429H31	IDCTR, 51nH
C9005	2113944A40	CAP, 100pF	C9058	2113944A40	CAP, 100pF	E3031	2409134J04	BLM18BD601SN1	L400	2416201H01	IDCTR, 16nH
C9006	2113944A40	CAP, 100pF	C9059	2113944A40	CAP, 100pF	E3032	2409134J04	BLM18BD601SN1	L401	2416201H01	IDCTR, 16nH
C9007	2113944A40	CAP, 100pF	C9060	2113944A40	CAP, 100pF	E3033	2409134J04	BLM18BD601SN1	L402	2415429H35	IDCTR, 82nH
C9008	2113944A40	CAP, 100pF	C9061	2113944A40	CAP, 100pF	E3700	7686949J08	IDCTR	L403	2415427H34	IDCTR, 27nH
C9009	2113944A40	CAP, 100pF	C9062	2113944A40	CAP, 100pF	E3701	7686949J08	IDCTR	L404	2415427H29	IDCTR, 19nH
C9010	2113944A40	CAP, 100pF	C9063	2113944A40	CAP, 100pF	E3702	7686949J08	IDCTR	L405	2415429H25	IDCTR, 30nH
C9011	2113944A40	CAP, 100pF	C9064	2113944A40	CAP, 100pF	E3703	7686949J08	IDCTR	L406	2415429H10	IDCTR, 6.8nH
C9012	2113944A40	CAP, 100pF	C9065	2113944C45	CAP, 100pF	E3704	7686949J08	IDCTR	L407	2415427H16	IDCTR, 7.5nH
C9013	2113944A40	CAP, 100pF	C9066	2113944A40	CAP, 100pF	E3705	7686949J08	IDCTR	L408	2416201H01	IDCTR, 16nH
C9014	2113944C45	CAP, 100pF	C9067	NOTPLACED	NOTPLACED	E8000	7686949J08	IDCTR	L409	2416201H01	IDCTR, 16nH
C9015	2113944A40	CAP, 100pF	C9068	NOTPLACED	NOTPLACED	E8001	7686949J08	IDCTR	L410	NOTPLACED	NOTPLACED
C9016	2113944A40	CAP, 100pF	C9069	NOTPLACED	NOTPLACED	E8002	7686949J08	IDCTR	L411	2415429H35	IDCTR, 82nH
C9017	2113944A40	CAP, 100pF	CR900	4815897H01	UPP9401E3	E8003	7686949J08	IDCTR	L412	2414017N29	IDCTR, 270nH
C9018	2113944A40	CAP, 100pF	CR901	4815897H01	UPP9401E3	E8004	7686949J08	IDCTR	L413	2415429H23	IDCTR, 24nH
C9019	2113944A40	CAP, 100pF	CR902	4815897H01	UPP9401E3	E8005	7686949J08	IDCTR	L414	2415429H23	IDCTR, 24nH
C9020	2113944A40	CAP, 100pF	CR903	4815897H01	UPP9401E3	E8006	7686949J08	IDCTR	L415	2415429H46	IDCTR, 330nH
C9021	2113944A40	CAP, 100pF	D001	4815059H01	1SV325	E9000	7686949J14	BLM21PG221SN1	L416	2414017N29	IDCTR, 270nH
C9022	2113944A40	CAP, 100pF	D200	4815096H01	1SV305	E9001	2480640Z01	BK1005HM471	L417	2415718H37	IDCTR, 820nH
C9023	2113944A40	CAP, 100pF	D201	4815096H01	1SV305	E9006	NOTPLACED	NOTPLACED	L418	2415429H47	IDCTR, 390nH
C9024	2113944A40	CAP, 100pF	D202	4815096H01	1SV305	E9007	NOTPLACED	NOTPLACED	L419	NOTPLACED	NOTPLACED
C9025	2113944A40	CAP, 100pF	D203	4815096H01	1SV305	F9000	6515076H01	FUSE	L420	2414032F42	IDCTR, 470nH
C9026	2113944A40	CAP, 100pF	D204	4815096H01	1SV305	FL400	9116854H01	-	L600	2466505A01	IDCTR, 10uH
C9027	2113944A40	CAP, 100pF	D205	4815096H01	1SV305	FL8000	9180310L38	B39162-B7829-C710	L601	2466505A01	IDCTR, 10uH
C9028	2113944A40	CAP, 100pF	D206	4815096H01	1SV305	FL8001	9180310L38	B39162-B7829-C710	L602	2415569H01	IDCTR, 4.7uH
C9029	2113944A40	CAP, 100pF	D207	4815096H01	1SV305	FL9000	2515003H02	DLP11SN201HL2	L603	2415718H37	IDCTR, 820nH
C9030	2113944A17	CAP, 4.7pF	D400	4885055Y01	1SV229	J9001	0970312L02	CONN_J	L604	2414015B26	IDCTR, 330nH
C9031	2113944A17	CAP, 4.7pF	D401	4885055Y01	1SV229	L002	2415429H26	IDCTR, 33nH	L605	2415569H01	IDCTR, 4.7uH
C9032	2113944A17	CAP, 4.7pF	D402	4813974A19	MMBD352	L003	NOTPLACED	NOTPLACED	L700	2414017N25	IDCTR, 120nH
C9033	2113944A40	CAP, 100pF	D403	4885055Y01	1SV229	L200	2415429H47	IDCTR, 390nH	L701	2414017N25	IDCTR, 120nH
C9038	2113944A40	CAP, 100pF	D404	4885055Y01	1SV229	L201	2415427H29	IDCTR, 19nH	L702	2415429H14	IDCTR, 9.5nH
C9039	2113944C45	CAP, 100pF	D405	4815923H01	HSMS2829	L202	2416540H13	IDCTR, 12nH	L703	2414017N25	IDCTR, 120nH
C9040	2113944A40	CAP, 100pF	D600	4815096H01	1SV305	L203	2415429H47	IDCTR, 390nH	L706	2460591E64	IDCTR, 30.51nH
C9041	2113944A40	CAP, 100pF	D601	4815096H01	1SV305	L204	2415429H47	IDCTR, 390nH	L707	2471406L02	IDCTR, 11.03nH
C9042	2113944A40	CAP, 100pF	D3000	4813978A25	BAT54HT1G	L205	2415429H47	IDCTR, 390nH	L902	2414017N25	IDCTR, 120nH
C9043	2113944A40	CAP, 100pF	D9000	4805729G49	BRPY1204W	L206	2415429H47	IDCTR, 390nH	L903	2414017N25	IDCTR, 120nH
C9044	2113944A40	CAP, 100pF	E001	2480640Z01	BK1005HM471	L207	2415427H42	IDCTR, 51nH	L904	2416201H01	IDCTR, 16nH
C9045	2113944A40	CAP, 100pF	E002	2480640Z01	BK1005HM471	L208	2415429H47	IDCTR, 390nH	L905	2416201H01	IDCTR, 16nH
C9046	2113944A40	CAP, 100pF	E003	2480640Z01	BK1005HM471	L209	2415427H26	IDCTR, 15nH	L906	2416201H02	IDCTR, 19nH
C9047	2113944A40	CAP, 100pF	E004	2480640Z01	BK1005HM471	L210	2415428H07	IDCTR, 8.8nH	L907	2415429H35	IDCTR, 82nH
C9048	2113944A40	CAP, 100pF	E400	2480640Z01	BK1005HM471	L211	2415429H47	IDCTR, 390nH	L908	2416201H02	IDCTR, 19nH
C9049	2113944A40	CAP, 100pF	E401	2480640Z01	BK1005HM471	L212	2415429H47	IDCTR, 390nH	L909	2416201H01	IDCTR, 16nH
C9050	2113944A40	CAP, 100pF	E600	2480640Z01	BK1005HM471	L213	2415429H47	IDCTR, 390nH	L910	2416201H01	IDCTR, 16nH
C9051	NOTPLACED	NOTPLACED	E601	2480640Z01	BK1005HM471	L214	2415429H47	IDCTR, 390nH	L911	2416201H01	IDCTR, 16nH
C9053	NOTPLACED	NOTPLACED	E602	2480640Z01	BK1005HM471	L215	2415429H27	IDCTR, 36nH	L912	2414017P08	IDCTR, 3.9nH
C9055	NOTPLACED	NOTPLACED	E701	7686949J14	BLM21PG221SN1	L217	2415347H01	IDCTR, 1000nH	L913	2414017P10	IDCTR, 5.6nH

Circuit Ref	Motorola Part No.	Description
L3003	2464675H01	IDCTR, 560nH
L3004	2464675H01	IDCTR, 560nH
L3020	2489846Y06	IDCTR, 10uH
L3021	2489846Y06	IDCTR, 10uH
L3022	2464675H01	IDCTR, 560nH
L8001	2414017P10	IDCTR, 5.6nH
L8002	2414017P17	IDCTR, 22nH
L8003	2414017P13	IDCTR, 10nH
L8004	2414017P10	IDCTR, 5.6nH
L9000	2415429H45	IDCTR, 270nH
L9001	2415429H45	IDCTR, 270nH
L9007	2415429H45	IDCTR, 270nH
L9008	2415429H45	IDCTR, 270nH
M1	4271321L01	RETAINER
M2	4271321L01	RETAINER
M700	2615193H01	HEATSINK
M9000	4371105L01	BRD_SPACER
M9001	4371105L01	BRD_SPACER
M9002	4371105L01	BRD_SPACER
M9003	NOTPLACED	NOTPLACED
M9004	NOTPLACED	NOTPLACED
M9005	3915478H01	CONTACT
M9006	3915478H01	CONTACT
M9007	0915184H01	CONTACT
P900	2815696H01	CONN_P
P9000	2887818K02	CONN_P
Q002	4815359H01	BCV62
Q003	4816134H01	DTC114YM
Q200	4815029H01	NE851M03
Q202	4815055H01	UMC5NT2G
Q203	4815055H01	UMC5NT2G
Q204	4885061Y01	NE68519
Q205	4885061Y01	NE68519
Q206	4815055H01	UMC5NT2G
Q207	4815055H01	UMC5NT2G
Q208	4885061Y01	NE68519
Q400	4816531H01	QSBT_0038
Q401	4816531H01	QSBT_0038
Q600	4813973A04	73A04
Q601	4815055H01	UMC5NT2G
Q602	4885061Y01	NE68519
Q701	4815055H01	UMC5NT2G
Q702	4815055H01	UMC5NT2G
Q703	4816547H01	RD01MUS1
Q704	4816548H01	RD07MVS1
Q900	4815055H01	UMC5NT2G

Circuit Ref	Motorola Part No.	Description
Q901	4815055H01	UMC5NT2G
Q3000	4805585Q23	SI8401DB
Q3001	4805585Q23	SI8401DB
Q3002	4816134H01	DTC114YM
Q3003	4813970A62	NTHS5441T1
Q3005	4805585Q23	SI8401DB
Q3006	4816134H01	DTC114YM
Q3010	4805585Q23	SI8401DB
Q9000	4813973M07	MMBT3904
Q9001	4815154H01	IMXFT110
Q9003	4813973M07	MMBT3904
R006	0613952Q93	RES, 6.8K
R007	0613952R01	RES, 10K
R008	0613952Q25	RES, 10
R010	0613952Q93	RES, 6.8K
R011	0613952Q49	RES, 100
R012	0613952R25	RES, 100K
R013	0613952Q46	RES, 75
R014	0613952Q42	RES, 51
R016	0613952Q33	RES, 22
R017	0613952Q64	RES, 430
R018	0613952Q96	RES, 9.1K
R019	0613952R01	RES, 10K
R020	0613952Q55	RES, 180
R022	0613952Q36	RES, 30
R025	0613952R13	RES, 33K
R026	0613952R01	RES, 10K
R027	0613952R66	RES, 0
R052	NOTPLACED	NOTPLACED
R053	0613952R66	RES, 0
R054	0613952R66	RES, 0
R200	0613952Q95	RES, 8.2K
R201	0613952Q91	RES, 5.6K
R202	0613952Q49	RES, 100
R203	0613952Q51	RES, 120
R205	0613952Q91	RES, 5.6K
R207	NOTPLACED	NOTPLACED
R208	0613952Q95	RES, 8.2K
R209	0613952Q91	RES, 5.6K
R210	0613952Q49	RES, 100
R211	0613952Q50	RES, 110
R212	0613952Q91	RES, 5.6K
R213	0613952Q94	RES, 7.5K
R214	0613952Q58	RES, 240
R215	NOTPLACED	NOTPLACED
R216	0613952Q57	RES, 220

Circuit Ref	Motorola Part No.	Description
R217	0613952Q95	RES, 8.2K
R218	0613952Q66	RES, 510
R220	0613952Q60	RES, 300
R221	0613952Q31	RES, 18
R222	0613952Q60	RES, 300
R223	0613952R66	RES, 0
R224	0613952R66	RES, 0
R400	0613952R25	RES, 100K
R402	0613952R66	RES, 0
R403	0613952Q70	RES, 750
R404	0613952Q72	RES, 910
R405	0613952R25	RES, 100K
R406	0613952R25	RES, 100K
R407	0613952Q42	RES, 51
R409	0613952R05	RES, 15K
R410	0613952Q83	RES, 2.7K
R411	0613952R19	RES, 56K
R412	0613952Q63	RES, 390
R413	0613952Q77	RES, 1.5K
R416	0613952R66	RES, 0
R417	0613952R66	RES, 0
R419	0613952R66	RES, 0
R420	0613952Q95	RES, 8.2K
R421	0613952Q49	RES, 100
R422	0613952R01	RES, 10K
R424	0613952R01	RES, 10K
R425	0613952R66	RES, 0
R497	NOTPLACED	NOTPLACED
R499	0613952R25	RES, 100K
R600	0613952R01	RES, 10K
R601	0613952Q55	RES, 180
R602	0613952Q61	RES, 330
R603	0613952R05	RES, 15K
R604	0613952Q90	RES, 5.1K
R605	0613952Q90	RES, 5.1K
R606	0613952Q75	RES, 1.2K
R607	0613952R25	RES, 100K
R609	0613952R01	RES, 10K
R610	0613952R01	RES, 10K
R611	0613952Q63	RES, 390
R612	0613952R08	RES, 20K
R696	0613952R66	RES, 0
R697	0613952R66	RES, 0
R698	0613952R01	RES, 10K
R699	0613952R25	RES, 100K
R700	0615043C01	RES, 0.1

Circuit Ref	Motorola Part No.	Description
R701	NOTPLACED	NOTPLACED
R702	0613952Z80	RES, 330K
R703	0613952Z80	RES, 330K
R704	NOTPLACED	NOTPLACED
R705	0613952R56	RES, 2MEG
R706	0613952R56	RES, 2MEG
R707	0613952Q81	RES, 2.2K
R708	0613952Q90	RES, 5.1K
R709	0613952R66	RES, 0
R710	NOTPLACED	NOTPLACED
R711	0613952R08	RES, 20K
R712	0613952R66	RES, 0
R713	NOTPLACED	NOTPLACED
R714	0613952Q59	RES, 270
R717	0613958H33	RES, 22
R718	0613952Q56	RES, 200
R719	0613952Q40	RES, 43
R720	0613952H56	RES, 200
R721	0613952G67	RES, 0
R722	0613952G67	RES, 0
R723	0613952Q40	RES, 43
R725	0613952Q85	RES, 3.3K
R726	0613952R66	RES, 0
R727	NOTPLACED	NOTPLACED
R728	0613952Q60	RES, 300
R729	0613952Q33	RES, 22
R730	0613952Q60	RES, 300
R731	NOTPLACED	NOTPLACED
R732	0613952R66	RES, 0
R733	0613952R17	RES, 47K
R902	0613952H47	RES, 82
R903	0613952H47	RES, 82
R904	0613952H47	RES, 82
R905	0613952H47	RES, 82
R906	0613952R01	RES, 10K
R907	0613952R01	RES, 10K
R1000	0613952Q25	RES, 10
R1001	0613952R01	RES, 10K
R1002	0613952J73	RES, 10MEG
R1005	0613952Q89	RES, 4.7K
R1006	0613952R01	RES, 10K
R1013	NOTPLACED	NOTPLACED
R1014	0613952R66	RES, 0
R1015	NOTPLACED	NOTPLACED
R1016	0613952R66	RES, 0
R1017	NOTPLACED	NOTPLACED



Circuit Ref	Motorola Part No.	Description
R1018	0613952R66	RES, 0
R1019	0613952Q18	RES, 5.1
R1020	0613952R66	RES, 0
R1021	0613952R66	RES, 0
R1022	NOTPLACED	NOTPLACED
R1023	0613952R66	RES, 0
R1025	0613952R01	RES, 10K
R1026	0613952R17	RES, 47K
R1027	NOTPLACED	NOTPLACED
R1028	0613952R66	RES, 0
R1034	0613952R01	RES, 10K
R1035	NOTPLACED	NOTPLACED
R1036	0613952R01	RES, 10K
R1041	0613952Q73	RES, 1K
R1045	0613952R01	RES, 10K
R1046	NOTPLACED	NOTPLACED
R1047	0613952R66	RES, 0
R1048	0613952R66	RES, 0
R1051	0613952R66	RES, 0
R1052	0613952R66	RES, 0
R1053	0613952Q89	RES, 4.7K
R1054	0613952Q89	RES, 4.7K
R1055	NOTPLACED	NOTPLACED
R1060	0613952Q25	RES, 10
R1061	0613952R66	RES, 0
R1062	0613952R66	RES, 0
R1063	NOTPLACED	NOTPLACED
R1065	0613952R66	RES, 0
R1067	0613952R03	RES, 12K
R1068	0613952R10	RES, 24K
R1069	0613952R66	RES, 0
R1070	0613952R01	RES, 10K
R1072	0613952R66	RES, 0
R2000	0613952R01	RES, 10K
R2004	0613952R66	RES, 0
R2005	0613952R01	RES, 10K
R2006	0613952R01	RES, 10K
R2007	0613952R01	RES, 10K
R2008	0613952R01	RES, 10K
R2009	0613952R01	RES, 10K
R2010	0613952R01	RES, 10K
R2011	0613952R66	RES, 0
R2012	0613952R01	RES, 10K
R2013	0613952R01	RES, 10K
R3004	NOTPLACED	NOTPLACED
R3005	0613952N01	RES, 10K

Circuit Ref	Motorola Part No.	Description
R3006	NOTPLACED	NOTPLACED
R3007	0613952N01	RES, 10K
R3008	NOTPLACED	NOTPLACED
R3009	0613952N01	RES, 10K
R3010	0613952N01	RES, 10K
R3011	0613952Q81	RES, 2.2K
R3012	0613952Q59	RES, 270
R3013	0613952Q81	RES, 2.2K
R3014	0613952M30	RES, 2K
R3016	0616416H01	RES, 0.1
R3017	0613952P25	RES, 178K
R3018	0613952R18	RES, 51K
R3020	0613952Q34	RES, 24
R3021	0613952Q34	RES, 24
R3023	0613952R17	RES, 47K
R3024	0613952Z67	RES, 51K
R3025	0613952Q49	RES, 100
R3026	0613952Q61	RES, 330
R3027	0613952Q61	RES, 330
R3028	0613952N69	RES, 51.1K
R3029	0613952N60	RES, 41.2K
R3030	0686135Z02	RES, 0.2
R3031	0613952R66	RES, 0
R3032	0613952Q95	RES, 8.2K
R3033	0613952R05	RES, 15K
R3034	0613952Q95	RES, 8.2K
R3035	0613952R05	RES, 15K
R3036	0613952N01	RES, 10K
R3037	0613952Q71	RES, 820
R3038	NOTPLACED	NOTPLACED
R3040	0613952Q81	RES, 2.2K
R3041	0613952N01	RES, 10K
R3043	0613952R32	RES, 200K
R3050	0613952R25	RES, 100K
R3051	0613952Q89	RES, 4.7K
R3053	0613952Z58	RES, 22K
R3054	0613952Z58	RES, 22K
R3055	0613952R25	RES, 100K
R3060	0613952M30	RES, 2K
R3070	0613952R33	RES, 220K
R3071	0613952R33	RES, 220K
R3072	0613952R56	RES, 2MEG
R3073	0613952R56	RES, 2MEG
R3074	0613952Q73	RES, 1K
R3075	0613952N01	RES, 10K
R3088	NOTPLACED	NOTPLACED

Circuit Ref	Motorola Part No.	Description
R3098	0613952Q85	RES, 3.3K
R3100	0613952R17	RES, 47K
R3101	0613952R25	RES, 100K
R3102	0613952A30	RES, 2
R3103	0615049H16	RES, 0.70
R3200	0613952R33	RES, 220K
R3201	0613952R20	RES, 62K
R3202	0613952R33	RES, 220K
R3203	0613952R36	RES, 300K
R3700	0613952Q73	RES, 1K
R3701	0613952R01	RES, 10K
R3702	0613952R12	RES, 30K
R3703	0613952R10	RES, 24K
R3704	0613952R01	RES, 10K
R3800	0613952Q25	RES, 10
R3888	NOTPLACED	NOTPLACED
R8002	0613952R25	RES, 100K
R8003	0613952R01	RES, 10K
R8004	0613952Q70	RES, 750
R8010	0613952R05	RES, 15K
R8011	0613952R25	RES, 100K
R8012	0613952R01	RES, 10K
R8015	NOTPLACED	NOTPLACED
R8016	0613952R66	RES, 0
R8017	NOTPLACED	NOTPLACED
R8020	0613952R66	RES, 0
R8023	0613952R66	RES, 0
R8024	0613952R25	RES, 100K
R8025	0613952R66	RES, 0
R8026	0613952R25	RES, 100K
R8027	0613952R25	RES, 100K
R8028	0613952R25	RES, 100K
R8029	0613952R25	RES, 100K
R8030	0613952R01	RES, 10K
R8031	0613952R25	RES, 100K
R8032	0613952R25	RES, 100K
R8033	0613952R25	RES, 100K
R8034	0613952R01	RES, 10K
R8035	0613952R01	RES, 10K
R8036	0613952R01	RES, 10K
R8037	0613952R01	RES, 10K
R9000	0613952Q73	RES, 1K
R9001	0613952Q73	RES, 1K
R9002	0613952Q73	RES, 1K
R9003	0613952Q73	RES, 1K
R9004	0613952Q73	RES, 1K

Circuit Ref	Motorola Part No.	Description
R9005	0613952Q73	RES, 1K
R9006	0613952Q73	RES, 1K
R9007	0613952Q73	RES, 1K
R9008	0613952R17	RES, 47K
R9009	0613952R01	RES, 10K
R9010	0613952R01	RES, 10K
R9011	0613952R17	RES, 47K
R9012	0613952Q50	RES, 110
R9013	0613952Q37	RES, 33
R9014	0613952R01	RES, 10K
R9015	0613952R01	RES, 10K
R9016	0613952R01	RES, 10K
R9017	0613952R01	RES, 10K
R9018	0613952R01	RES, 10K
R9019	0613952Q73	RES, 1K
R9050	0613952R01	RES, 10K
R9051	0613952R01	RES, 10K
R9052	0613952Q65	RES, 470
R9053	0613952H47	RES, 82
R9054	0613952H47	RES, 82
S9000	4086470Z01	SWITCH
S9001	4015186H01	SWITCH
S9002	4015203H01	SWITCH
SH9000	NOTPLACED	NOTPLACED
SH9001	NOTPLACED	NOTPLACED
T400	2515396H01	XFMR
T401	2515396H01	XFMR
U001	5104932K08	SC51650VF
U002	5114000B59	MC74VHC1GT66
U200	5116014H01	UPC8179TK
U400	5115443H01	MAX2373
U600	5102495J14	AD9864
U700	4802246J29	ADA4743
U701	5115147H01	AD8566
U702	5115022H01	LM50
U1000	5102495J13	OMAP1710
U1005	5116324H01	ADG3304
U1006	5115001H02	NL27WZU04
U2000	0104024J27	M58WR064FB
U2001	5171614M01	MT48H8M16LFB4-8
U3000	5185143E77	PWR_MNGR_BLOCK
U3002	5115616H01	LP8340
U3003	5115453H01	LMC6035ITLX
U3004	5114007A43	NL17SZ14
U3006	5115974H01	LP3990
U3007	5171395L01	TS5A23166

Circuit Ref	Motorola Part No.	Description
U3008	5115391H01	TK11100CSC
U3009	5164852H47	PCA9306
U3020	5171428L01	LTC1877
U3021	5171428L01	LTC1877
U3700	5116282H01	TPS79228
U3701	5116283H01	TPS79101
U8000	0104024J41	GSC3F/LP
U8001	5164015H55	UPC8211TK
VR9000	4866544A01	SR05
VR9001	4813979P10	MMQA5V6T1
VR9002	4813979P10	MMQA5V6T1
VR9003	4815040H01	MM3Z12VT1G
VR9004	4815040H01	MM3Z12VT1G
VR9005	4805656W76	MM5Z5V6
VR9006	4805656W76	MM5Z5V6
VR9007	4805656W76	MM5Z5V6
VR9008	4813979P10	MMQA5V6T1
VR9009	4813977C23	MMSZ5243
VR9010	4813977C23	MMSZ5243
VR9015	NOTPLACED	NOTPLACED
VR9016	NOTPLACED	NOTPLACED
VR9017	4815040H01	MM3Z12VT1G
VR9018	4815040H01	MM3Z12VT1G
VR9020	4813979P10	MMQA5V6T1
VR9021	4813979P10	MMQA5V6T1
VR9022	4813979P10	MMQA5V6T1
VR9023	4815040H01	MM3Z12VT1G
Y001	5116032H01	IVT5300B
Y1000	4809612J45	CX-91F
Y3000	4802582S80	XTAL
Y3001	4815028H01	CX-101F
Y8000	4802582S80	XTAL

## UHF1 Radio Parts List (8486716Z07/)

Circuit Ref	Motorola Part No.	Description
C001	2113946D02	CAP,1.0uF
C002	2113946D02	CAP,1.0uF
C003	2113946K02	CAP,0.10uF
C004	2113946K02	CAP,0.10uF
C005	2113946K02	CAP,0.10uF
C006	2113946K02	CAP,0.10uF
C007	2113946K02	CAP,0.10uF
C008	2113946K02	CAP,0.10uF
C009	NOTPLACED	NOTPLACED
C013	2113945A02	CAP,270pF
C014	2113945L49	CAP,.01uF
C015	2113945L49	CAP,.01uF
C016	2113945A09	CAP,1000pF
C017	2113946K02	CAP,0.10uF
C018	2313960B57	CAPP,10uF
C019	2113945L49	CAP,.01uF
C020	2313960B57	CAPP,10uF
C022	2113946K02	CAP,0.10uF
C024	2115358H17	CAP,0.22uF
C025	2115358H07	CAP,.033uF
C026	2115358H15	CAP,0.15uF
C027	2115358H25	CAP,1uF
C028	2115358H01	CAP,.01uF
C031	2113944A40	CAP,100pF
C032	2113944A17	CAP,4.7pF
C033	2113944A05	CAP,1.5pF
C035	2113946K02	CAP,0.10uF
C036	2113946K02	CAP,0.10uF
C037	2115153H08	CAP,1.5pF
C038	NOTPLACED	NOTPLACED
C039	2113946D02	CAP,1.0uF
C200	2113944A40	CAP,100pF
C201	2115153H27	CAP,10pF
C202	2115153H25	CAP,8.2pF
C203	2115153H23	CAP,6.8pF
C204	2115153H34	CAP,11pF
C205	2115153H39	CAP,18pF
C206	2115153H52	CAP,62pF
C207	2115153H36	CAP,13pF
C208	2113944A40	CAP,100pF
C209	2113946B04	CAP,0.1uF
C210	2113944A40	CAP,100pF
C211	2113946B04	CAP,0.1uF
C212	2115153H08	CAP,1.5pF
C213	2115153H13	CAP,2.7pF

Circuit Ref	Motorola Part No.	Description
C214	2113944A40	CAP,100pF
C215	2113944A40	CAP,100pF
C216	2115153H12	CAP,2.4pF
C217	2115153H26	CAP,9.1pF
C219	2113944A40	CAP,100pF
C220	2115153H21	CAP,5.6pF
C221	2115153H21	CAP,5.6pF
C222	2115153H15	CAP,3.3pF
C223	NOTPLACED	NOTPLACED
C224	2115153H39	CAP,18pF
C225	2115153H51	CAP,56pF
C226	2115153H36	CAP,13pF
C227	2113944A40	CAP,100pF
C228	2113946B04	CAP,0.1uF
C229	2113944A40	CAP,100pF
C230	2113946B04	CAP,0.1uF
C231	2115153H10	CAP,2.0pF
C232	2115153H03	CAP,1.0pF
C233	2113944A40	CAP,100pF
C234	2113944A40	CAP,100pF
C235	2113944A40	CAP,100pF
C236	2115153H10	CAP,2.0pF
C237	2115153H18	CAP,4.3pF
C238	2113944A40	CAP,100pF
C239	2113944A40	CAP,100pF
C240	2113944A40	CAP,100pF
C241	NOTPLACED	NOTPLACED
C243	2115153H34	CAP,11pF
C400	2113944A73	CAP,8pF
C401	2113944A21	CAP,6.8pF
C402	2113944M07	CAP,3.6pF
C403	2113944A40	CAP,100pF
C404	2113944A21	CAP,6.8pF
C405	2113944A21	CAP,6.8pF
C407	2113944A61	CAP,0.5pF
C408	NOTPLACED	NOTPLACED
C409	2113946B04	CAP,0.1uF
C410	2113945A02	CAP,270pF
C411	2113945B02	CAP,.01uF
C412	2113945A02	CAP,270pF
C413	2113944A16	CAP,4.3pF
C414	2113944A24	CAP,9.1pF
C415	2113944A24	CAP,9.1pF
C416	2113946K02	CAP,0.10uF
C417	2113945A02	CAP,270pF
C418	2113944A16	CAP,4.3pF

Circuit Ref	Motorola Part No.	Description
C419	2113944A21	CAP,6.8pF
C420	2113944A21	CAP,6.8pF
C421	2113944M07	CAP,3.6pF
C422	2113944A20	CAP,6.2pF
C423	2113944A21	CAP,6.8pF
C424	2113944A40	CAP,100pF
C425	2113944A20	CAP,6.2pF
C426	0613952R66	RES,0
C427	2113944A85	CAP,51pF
C428	2113944A78	CAP,13pF
C429	2113944A23	CAP,8.2pF
C430	2113944A26	CAP,12pF
C431	2113944A23	CAP,8.2pF
C432	2113944A78	CAP,13pF
C433	2113944A21	CAP,6.8pF
C434	2113946K02	CAP,0.10uF
C435	2113944A40	CAP,100pF
C436	2113946K02	CAP,0.10uF
C437	2113945B02	CAP,.01uF
C438	2113946K02	CAP,0.10uF
C439	2113945A02	CAP,270pF
C440	2113944A11	CAP,2.7pF
C441	2113944A16	CAP,4.3pF
C442	2113945B02	CAP,.01uF
C444	2113946K02	CAP,0.10uF
C445	NOTPLACED	NOTPLACED
C446	2113944A77	CAP,11pF
C447	2113946S35	CAP,1.0uF
C448	2113946S35	CAP,1.0uF
C601	2113945B02	CAP,.01uF
C602	2113946B04	CAP,0.1uF
C603	2113946B04	CAP,0.1uF
C604	2113945B02	CAP,.01uF
C605	2113945B02	CAP,.01uF
C606	2113944A32	CAP,39pF
C607	2113945B02	CAP,.01uF
C608	2113945D02	CAP,.047uF
C609	2115153H44	CAP,30pF
C610	2115153H44	CAP,30pF
C611	NOTPLACED	NOTPLACED
C612	2113944A25	CAP,10pF
C613	2113945G91	CAP,0.1uF
C614	2113946E02	CAP,1.0uF
C615	2113946B04	CAP,0.1uF
C616	2113944A32	CAP,39pF
C617	2113945L37	CAP,3300pF

Circuit Ref	Motorola Part No.	Description
C618	2113945C18	CAP,.012uF
C619	2115358H13	CAP,0.1uF
C620	2113946B04	CAP,0.1uF
C621	2113945B02	CAP,.01uF
C622	2113944C89	CAP,200pF
C623	2113944A40	CAP,100pF
C624	2113944A40	CAP,100pF
C625	2113945A11	CAP,2200pF
C626	2113945D02	CAP,.047uF
C627	2113944A40	CAP,100pF
C628	2113945B02	CAP,.01uF
C629	2113944A40	CAP,100pF
C630	2113945B02	CAP,.01uF
C631	2113945B02	CAP,.01uF
C632	2113946B04	CAP,0.1uF
C633	2113946B04	CAP,0.1uF
C634	2113945B02	CAP,.01uF
C635	2113944A85	CAP,51pF
C636	2113946B04	CAP,0.1uF
C637	2113946G04	CAP,0.68uF
C638	2115153H38	CAP,16pF
C639	2113946B04	CAP,0.1uF
C700	2316410H03	CAPP,10uF
C703	2113945A02	CAP,270pF
C704	2113945A02	CAP,270pF
C705	2113946B02	CAP,.047uF
C706	2113945A02	CAP,270pF
C708	2113945A02	CAP,270pF
C709	2113945B02	CAP,.01uF
C710	2113945B02	CAP,.01uF
C711	2113945A02	CAP,270pF
C712	2113945B04	CAP,.022uF
C714	2113945A02	CAP,270pF
C715	2113945A02	CAP,270pF
C716	2113944A28	CAP,18pF
C717	2113945A02	CAP,270pF
C718	2113946K02	CAP,0.10uF
C719	NOTPLACED	NOTPLACED
C720	2113945B04	CAP,.022uF
C721	2113945D04	CAP,0.1uF
C722	2113944A17	CAP,4.7pF
C723	NOTPLACED	NOTPLACED
C724	2113945A02	CAP,270pF
C725	NOTPLACED	NOTPLACED
C726	2113944A82	CAP,30pF
C727	2113944A82	CAP,30pF
C728	2113944A08	CAP,2.0pF

Circuit Ref	Motorola Part No.	Description
C729	NOTPLACED	NOTPLACED
C730	2113946K02	CAP,0.10uF
C731	2113945D04	CAP,0.1uF
C732	2116173H17	CAP,24pF
C733	2116636H04	CAP,20pF
C734	2116001H01	CAP,13pF
C735	2116173H17	CAP,24pF
C736	2113945A02	CAP,270pF
C737	2113945A09	CAP,1000pF
C738	2113945A02	CAP,270pF
C739	2113946K02	CAP,0.10uF
C740	NOTPLACED	NOTPLACED
C798	2116173H17	CAP,24pF
C799	2116636H04	CAP,20pF
C900	2113945A02	CAP,270pF
C903	2113944C14	CAP,2.2pF
C904	2113944C41	CAP,68pF
C905	2113944C45	CAP,100pF
C906	2113944C71	CAP,5.6pF
C907	2113944C73	CAP,6.8pF
C908	2113944C71	CAP,5.6pF
C909	2113944C41	CAP,68pF
C910	2113944M30	CAP,33pF
C911	2113944C18	CAP,3.3pF
C912	2113944C22	CAP,4.7pF
C913	2113944C45	CAP,100pF
C914	2113945A02	CAP,270pF
C915	2113944C22	CAP,4.7pF
C916	2113944C18	CAP,3.3pF
C917	2113944M30	CAP,33pF
C918	2113944C45	CAP,100pF
C920	2113944C28	CAP,8.2pF
C921	2113944C17	CAP,3.0pF
C922	NOTPLACED	NOTPLACED
C923	NOTPLACED	NOTPLACED
C924	2113944A11	CAP,2.7pF
C925	2113944V07	CAP,1.5pF
C926	2113944A15	CAP,3.9pF
C927	2113945A02	CAP,270pF
C1000	2113944A40	CAP,100pF
C1001	2113946K02	CAP,0.10uF
C1002	2113946K02	CAP,0.10uF
C1003	2113944A40	CAP,100pF
C1004	2113944A40	CAP,100pF
C1005	2113946K02	CAP,0.10uF
C1006	2113946K02	CAP,0.10uF

Circuit Ref	Motorola Part No.	Description
C1007	2113944A40	CAP,100pF
C1008	2113944A40	CAP,100pF
C1009	2113946K02	CAP,0.10uF
C1010	2113946K02	CAP,0.10uF
C1011	2113944A40	CAP,100pF
C1012	2113946K02	CAP,0.10uF
C1013	2113946K02	CAP,0.10uF
C1014	2113946K02	CAP,0.10uF
C1015	2113946K02	CAP,0.10uF
C1016	2113946B04	CAP,0.1uF
C1017	2113946E02	CAP,1.0uF
C1018	2113944A28	CAP,18pF
C1019	2113944A28	CAP,18pF
C1028	2113946K02	CAP,0.10uF
C1029	2113946K02	CAP,0.10uF
C1030	2113944A28	CAP,18pF
C1031	2113946K02	CAP,0.10uF
C1032	2113945B02	CAP,.01uF
C1033	2113946K02	CAP,0.10uF
C1044	2113946B04	CAP,0.1uF
C2000	2113944A40	CAP,100pF
C2001	2113945B02	CAP,.01uF
C2002	2113946K02	CAP,0.10uF
C2003	2113946K02	CAP,0.10uF
C2004	2113944A40	CAP,100pF
C2005	2113945B02	CAP,.01uF
C2006	2113946K02	CAP,0.10uF
C2007	2113946K02	CAP,0.10uF
C3000	2113944A78	CAP,13pF
C3001	2113944A78	CAP,13pF
C3002	2113945D04	CAP,0.1uF
C3003	2113946D05	CAP,2.2uF
C3004	2113946D05	CAP,2.2uF
C3005	2113945A09	CAP,1000pF
C3010	2113946D05	CAP,2.2uF
C3011	2113946A02	CAP,.022uF
C3014	2113946D05	CAP,2.2uF
C3015	2115153H57	CAP,100pF
C3016	2113946D05	CAP,2.2uF
C3017	2113945B02	CAP,.01uF
C3018	2113946D05	CAP,2.2uF
C3019	2113946D02	CAP,1.0uF
C3024	2113946D02	CAP,1.0uF
C3025	2113946K02	CAP,0.10uF
C3026	2113946K02	CAP,0.10uF
C3028	2113946D05	CAP,2.2uF

Circuit Ref	Motorola Part No.	Description
C3031	2113946D02	CAP,1.0uF
C3034	2113946B04	CAP,0.1uF
C3035	2113946B04	CAP,0.1uF
C3036	2113946B04	CAP,0.1uF
C3037	2113944A40	CAP,100pF
C3038	2113944A40	CAP,100pF
C3039	2113946F03	CAP,4.7uF
C3045	2113946F05	CAP,10uF
C3047	2113946D02	CAP,1.0uF
C3048	2113946D02	CAP,1.0uF
C3049	2113945C25	CAP,0.033uF
C3050	2113945C25	CAP,0.033uF
C3051	2113944A40	CAP,100pF
C3060	2113944A80	CAP,20pF
C3061	2113944A80	CAP,20pF
C3062	2113946K02	CAP,0.10uF
C3063	2113946K02	CAP,0.10uF
C3067	2113946D02	CAP,1.0uF
C3070	2113944A25	CAP,10pF
C3074	2113946D02	CAP,1.0uF
C3079	2113946F03	CAP,4.7uF
C3080	NOTPLACED	NOTPLACED
C3081	2113946F03	CAP,4.7uF
C3082	2113946B04	CAP,0.1uF
C3083	2113946B04	CAP,0.1uF
C3084	2113946K03	CAP,0.22uF
C3090	2113955D37	CAP,10uF
C3091	2113955D37	CAP,10uF
C3093	2113946N03	CAP,2.2uF
C3094	2113946B03	CAP,.068uF
C3095	2113946B03	CAP,.068uF
C3097	2113944A31	CAP,33pF
C3098	2113944A31	CAP,33pF
C3099	2113944A31	CAP,33pF
C3100	2113944A31	CAP,33pF
C3101	2113946D02	CAP,1.0uF
C3102	2113946D02	CAP,1.0uF
C3200	2113945Y02	CAP,0.10uF
C3201	2113955D37	CAP,10uF
C3202	2371572L02	CAPP,68uF
C3203	2113945B02	CAP,.01uF
C3204	2115153H40	CAP,20pF
C3205	2113944A44	CAP,220pF
C3206	2113945Y02	CAP,0.10uF
C3207	2113955D37	CAP,10uF
C3208	2113946K03	CAP,0.22uF

Circuit Ref	Motorola Part No.	Description
C3209	2371572L01	CAPP,47uF
C3210	2113945B02	CAP,.01uF
C3211	2115153H40	CAP,20pF
C3212	2113944A44	CAP,220pF
C3700	2113946D02	CAP,1.0uF
C3701	2113945B02	CAP,.01uF
C3702	2113946D05	CAP,2.2uF
C3703	2113946D02	CAP,1.0uF
C3704	2113944A30	CAP,27pF
C3705	2113945B02	CAP,.01uF
C3706	2113945A05	CAP,470pF
C3707	2113946D05	CAP,2.2uF
C3800	2113945D04	CAP,0.1uF
C3805	2113946K03	CAP,0.22uF
C3999	2113945B02	CAP,.01uF
C8000	2113946F05	CAP,10uF
C8001	2113944A28	CAP,18pF
C8002	2113944A52	CAP,1000pF
C8003	2113946F05	CAP,10uF
C8004	2113944A28	CAP,18pF
C8005	NOTPLACED	NOTPLACED
C8006	NOTPLACED	NOTPLACED
C8013	2113944A08	CAP,2.0pF
C8014	2113944A62	CAP,0.75pF
C8015	2113946K02	CAP,0.10uF
C8016	2113945A02	CAP,270pF
C8017	2113944A28	CAP,18pF
C8018	2113944A28	CAP,18pF
C8019	2113944A11	CAP,2.7pF
C8020	2113944A52	CAP,1000pF
C8021	2113946K02	CAP,0.10uF
C8022	2113946D05	CAP,2.2uF
C8023	2113945B02	CAP,.01uF
C8029	2113944A52	CAP,1000pF
C8030	2113944A28	CAP,18pF
C8031	2113946D05	CAP,2.2uF
C8032	2113945B02	CAP,.01uF
C8033	2113944A28	CAP,18pF
C8034	2113944A28	CAP,18pF
C8035	2113944A31	CAP,33pF
C8036	2113944A52	CAP,1000pF
C9000	2113944A40	CAP,100pF
C9001	2113944A40	CAP,100pF
C9002	2113944A40	CAP,100pF
C9003	2113944A40	CAP,100pF
C9004	2113944A40	CAP,100pF

Circuit Ref	Motorola Part No.	Description
C9005	2113944A40	CAP,100pF
C9006	2113944A40	CAP,100pF
C9007	2113944A40	CAP,100pF
C9008	2113944A40	CAP,100pF
C9009	2113944A40	CAP,100pF
C9010	2113944A40	CAP,100pF
C9011	2113944A40	CAP,100pF
C9012	2113944A40	CAP,100pF
C9013	2113944A40	CAP,100pF
C9014	2113944C45	CAP,100pF
C9015	2113944A40	CAP,100pF
C9016	2113944A40	CAP,100pF
C9017	2113944A40	CAP,100pF
C9018	2113944A40	CAP,100pF
C9019	2113944A40	CAP,100pF
C9020	2113944A40	CAP,100pF
C9021	2113944A40	CAP,100pF
C9022	2113944A40	CAP,100pF
C9023	2113944A40	CAP,100pF
C9024	2113944A40	CAP,100pF
C9025	2113944A40	CAP,100pF
C9026	2113944A40	CAP,100pF
C9027	2113944A40	CAP,100pF
C9028	2113944A40	CAP,100pF
C9029	2113944A40	CAP,100pF
C9030	2113944A17	CAP,4.7pF
C9031	2113944A17	CAP,4.7pF
C9032	2113944A17	CAP,4.7pF
C9033	2113944A40	CAP,100pF
C9038	2113944A40	CAP,100pF
C9039	2113944C45	CAP,100pF
C9040	2113944A40	CAP,100pF
C9041	2113944A40	CAP,100pF
C9042	2113944A40	CAP,100pF
C9043	2113944A40	CAP,100pF
C9044	2113944A40	CAP,100pF
C9045	2113944A40	CAP,100pF
C9046	2113944A40	CAP,100pF
C9047	2113944A40	CAP,100pF
C9048	2113944A40	CAP,100pF
C9049	2113944A40	CAP,100pF
C9050	2113944A40	CAP,100pF
C9051	NOTPLACED	NOTPLACED
C9053	NOTPLACED	NOTPLACED
C9055	NOTPLACED	NOTPLACED
C9057	NOTPLACED	NOTPLACED

Circuit Ref	Motorola Part No.	Description
C9058	2113944A40	CAP,100pF
C9059	2113944A40	CAP,100pF
C9060	2113944A40	CAP,100pF
C9061	2113944A40	CAP,100pF
C9062	2113944A40	CAP,100pF
C9063	2113944A40	CAP,100pF
C9064	2113944A40	CAP,100pF
C9065	2113944C45	CAP,100pF
C9066	2113944A40	CAP,100pF
C9067	NOTPLACED	NOTPLACED
C9068	NOTPLACED	NOTPLACED
C9069	NOTPLACED	NOTPLACED
CR900	4815897H01	UPP9401E3
CR901	4815897H01	UPP9401E3
CR902	4815897H01	UPP9401E3
CR903	4815897H01	UPP9401E3
D001	4815059H01	1SV325
D200	4815096H01	1SV305
D201	4815096H01	1SV305
D202	4815096H01	1SV305
D203	4815096H01	1SV305
D204	4815096H01	1SV305
D205	4815096H01	1SV305
D206	4815096H01	1SV305
D207	4815096H01	1SV305
D400	4885055Y01	1SV229
D401	4885055Y01	1SV229
D402	4813974A19	MMBD352
D403	4885055Y01	1SV229
D404	4885055Y01	1SV229
D405	4815923H01	HSMS2829
D600	4815096H01	1SV305
D601	4815096H01	1SV305
D3000	4813978A25	BAT54HT1G
D9000	4805729G49	BRPY1204W
E001	2480640Z01	BK1005HM471
E002	2480640Z01	BK1005HM471
E003	2480640Z01	BK1005HM471
E004	2480640Z01	BK1005HM471
E400	2480640Z01	BK1005HM471
E401	2480640Z01	BK1005HM471
E600	2480640Z01	BK1005HM471
E601	2480640Z01	BK1005HM471
E602	2480640Z01	BK1005HM471
E701	7686949J14	BLM21PG221SN1
E3030	2409134J04	BLM18BD601SN1

Circuit Ref	Motorola Part No.	Description
E3031	2409134J04	BLM18BD601SN1
E3032	2409134J04	BLM18BD601SN1
E3033	2409134J04	BLM18BD601SN1
E3700	7686949J08	IDCTR
E3701	7686949J08	IDCTR
E3702	7686949J08	IDCTR
E3703	7686949J08	IDCTR
E3704	7686949J08	IDCTR
E3705	7686949J08	IDCTR
E8000	7686949J08	IDCTR
E8001	7686949J08	IDCTR
E8002	NOTPLACED	NOTPLACED
E8003	7686949J08	IDCTR
E8004	7686949J08	IDCTR
E8005	7686949J08	IDCTR
E8006	7686949J08	IDCTR
E9000	7686949J14	BLM21PG221SN1
E9001	2480640Z01	BK1005HM471
E9006	NOTPLACED	NOTPLACED
E9007	NOTPLACED	NOTPLACED
F9000	6515076H01	FUSE
FL400	9116854H01	-
FL8000	9180310L38	B39162-B7829-C710
FL8001	9180310L38	B39162-B7829-C710
FL9000	2515003H02	DLP11SN201HL2
J9001	0970312L02	CONN_J
L002	2415429H26	IDCTR,33nH
L003	NOTPLACED	NOTPLACED
L200	2415429H47	IDCTR,390nH
L201	2415427H29	IDCTR,19nH
L202	2416540H13	IDCTR,12nH
L203	2415429H47	IDCTR,390nH
L204	2415429H47	IDCTR,390nH
L205	2415429H47	IDCTR,390nH
L206	2415429H47	IDCTR,390nH
L207	2415427H42	IDCTR,51nH
L208	2415429H47	IDCTR,390nH
L209	2415427H26	IDCTR,15nH
L210	2415428H07	IDCTR,8.8nH
L211	2415429H47	IDCTR,390nH
L212	2415429H47	IDCTR,390nH
L213	2415429H47	IDCTR,390nH
L214	2415429H47	IDCTR,390nH
L215	2415429H27	IDCTR,36nH
L217	2415347H01	IDCTR,1000nH
L218	2415429H31	IDCTR,51nH

Circuit Ref	Motorola Part No.	Description
L400	2416201H01	IDCTR,16nH
L401	2416201H01	IDCTR,16nH
L402	2415429H35	IDCTR,82nH
L403	2415427H34	IDCTR,27nH
L404	2415427H29	IDCTR,19nH
L405	2415429H25	IDCTR,30nH
L406	2415429H10	IDCTR,6.8nH
L407	2415427H16	IDCTR,7.5nH
L408	2416201H01	IDCTR,16nH
L409	2416201H01	IDCTR,16nH
L410	NOTPLACED	NOTPLACED
L411	2415429H35	IDCTR,82nH
L412	2414017N29	IDCTR,270nH
L413	2415429H23	IDCTR,24nH
L414	2415429H23	IDCTR,24nH
L415	2415429H46	IDCTR,330nH
L416	2414017N29	IDCTR,270nH
L417	2415718H37	IDCTR,820nH
L418	2415429H47	IDCTR,390nH
L419	2414032F42	IDCTR,470nH
L420	2414032F42	IDCTR,470nH
L600	2466505A01	IDCTR,10uH
L601	2466505A01	IDCTR,10uH
L602	2415569H01	IDCTR,4.7uH
L603	2415718H37	IDCTR,820nH
L604	2414015B26	IDCTR,330nH
L605	2415569H01	IDCTR,4.7uH
L700	2414017N25	IDCTR,120nH
L701	2414017N25	IDCTR,120nH
L702	2415429H14	IDCTR,9.5nH
L703	2414017N25	IDCTR,120nH
L706	2460591E64	IDCTR,30.51nH
L707	2471406L02	IDCTR,11.03nH
L902	2414017N25	IDCTR,120nH
L903	2414017N25	IDCTR,120nH
L904	2416201H01	IDCTR,16nH
L905	2416201H01	IDCTR,16nH
L906	2416201H02	IDCTR,19nH
L907	2415429H35	IDCTR,82nH
L908	2416201H02	IDCTR,19nH
L909	2416201H01	IDCTR,16nH
L910	2416201H01	IDCTR,16nH
L911	2416201H01	IDCTR,16nH
L912	2414017P08	IDCTR,3.9nH
L913	2414017P10	IDCTR,5.6nH
L3003	2464675H01	IDCTR,560nH

Circuit Ref	Motorola Part No.	Description
L3004	2464675H01	IDCTR,560nH
L3020	2489846Y06	IDCTR,10uH
L3021	2489846Y06	IDCTR,10uH
L3022	2464675H01	IDCTR,560nH
L8001	2414017P10	IDCTR,5.6nH
L8002	2414017P17	IDCTR,22nH
L8003	2414017P13	IDCTR,10nH
L8004	2414017P10	IDCTR,5.6nH
L9000	2415429H45	IDCTR,270nH
L9001	2415429H45	IDCTR,270nH
L9007	2415429H45	IDCTR,270nH
L9008	2415429H45	IDCTR,270nH
M1	4271321L01	RETAINER
M2	4271321L01	RETAINER
M700	2615193H01	HEATSINK
M9000	4371105L01	BRD_SPACER
M9001	4371105L01	BRD_SPACER
M9002	4371105L01	BRD_SPACER
M9003	NOTPLACED	NOTPLACED
M9004	NOTPLACED	NOTPLACED
M9005	3915478H01	CONTACT
M9006	3915478H01	CONTACT
M9007	0915184H01	CONTACT
P900	2815696H01	CONN_P
P9000	2887818K02	CONN_P
Q002	4815359H01	BCV62
Q003	4816134H01	DTC114YM
Q200	4815029H01	NE851M03
Q202	4815055H01	UMC5NT2G
Q203	4815055H01	UMC5NT2G
Q204	4885061Y01	NE68519
Q205	4885061Y01	NE68519
Q206	4815055H01	UMC5NT2G
Q207	4815055H01	UMC5NT2G
Q208	4885061Y01	NE68519
Q400	4816531H01	QSBT_0038
Q401	4816531H01	QSBT_0038
Q600	4813973A04	73A04
Q601	4815055H01	UMC5NT2G
Q602	4885061Y01	NE68519
Q701	4815055H01	UMC5NT2G
Q702	4815055H01	UMC5NT2G
Q703	4816547H01	RD01MUS1
Q704	4816548H01	RD07MVS1
Q900	4815055H01	UMC5NT2G
Q901	4815055H01	UMC5NT2G

Circuit Ref	Motorola Part No.	Description
Q3000	4805585Q23	SI8401DB
Q3001	4805585Q23	SI8401DB
Q3002	4816134H01	DTC114YM
Q3003	4813970A62	NTHS5441T1
Q3005	4805585Q23	SI8401DB
Q3006	4816134H01	DTC114YM
Q3010	4805585Q23	SI8401DB
Q9000	4813973M07	MMBT3904
Q9001	4815154H01	IMXFT110
Q9003	4813973M07	MMBT3904
R006	0613952Q93	RES,6.8K
R007	0613952R01	RES,10K
R008	0613952Q25	RES,10
R010	0613952Q93	RES,6.8K
R011	0613952Q49	RES,100
R012	0613952R25	RES,100K
R013	0613952Q46	RES,75
R014	0613952Q42	RES,51
R016	0613952Q33	RES,22
R017	0613952Q64	RES,430
R018	0613952Q96	RES,9.1K
R019	0613952R01	RES,10K
R020	0613952Q55	RES,180
R022	0613952Q36	RES,30
R025	0613952R13	RES,33K
R026	0613952R01	RES,10K
R027	0613952R66	RES,0
R052	NOTPLACED	NOTPLACED
R053	0613952R66	RES,0
R054	0613952R66	RES,0
R200	0613952Q95	RES,8.2K
R201	0613952Q91	RES,5.6K
R202	0613952Q49	RES,100
R203	0613952Q51	RES,120
R205	0613952Q91	RES,5.6K
R207	NOTPLACED	NOTPLACED
R208	0613952Q95	RES,8.2K
R209	0613952Q91	RES,5.6K
R210	0613952Q49	RES,100
R211	0613952Q50	RES,110
R212	0613952Q91	RES,5.6K
R213	0613952Q94	RES,7.5K
R214	0613952Q58	RES,240
R215	NOTPLACED	NOTPLACED
R216	0613952Q57	RES,220
R217	0613952Q95	RES,8.2K

Circuit Ref	Motorola Part No.	Description
R218	0613952Q66	RES,510
R220	0613952Q60	RES,300
R221	0613952Q31	RES,18
R222	0613952Q60	RES,300
R223	0613952R66	RES,0
R224	0613952R66	RES,0
R400	0613952R25	RES,100K
R402	0613952R66	RES,0
R403	0613952Q65	RES,470
R404	0613952Q72	RES,910
R405	0613952R25	RES,100K
R406	0613952R25	RES,100K
R407	0613952Q42	RES,51
R409	0613952R05	RES,15K
R410	0613952Q83	RES,2.7K
R411	0613952R19	RES,56K
R412	0613952Q63	RES,390
R413	0613952Q77	RES,1.5K
R416	0613952R66	RES,0
R417	0613952R66	RES,0
R419	0613952R66	RES,0
R420	0613952Q95	RES,8.2K
R421	0613952Q49	RES,100
R422	0613952R01	RES,10K
R424	0613952R01	RES,10K
R425	0613952R66	RES,0
R497	NOTPLACED	NOTPLACED
R499	0613952R25	RES,100K
R600	0613952R01	RES,10K
R601	0613952Q55	RES,180
R602	0613952Q61	RES,330
R603	0613952R05	RES,15K
R604	0613952Q90	RES,5.1K
R605	0613952Q90	RES,5.1K
R606	0613952Q75	RES,1.2K
R607	0613952R25	RES,100K
R609	0613952R01	RES,10K
R610	0613952R01	RES,10K
R611	0613952Q63	RES,390
R612	0613952R08	RES,20K
R696	0613952R66	RES,0
R697	0613952R66	RES,0
R698	0613952R01	RES,10K
R699	0613952R25	RES,100K
R700	0615043C01	RES,0.1
R701	NOTPLACED	NOTPLACED

Circuit Ref	Motorola Part No.	Description
R702	0613952Z80	RES,330K
R703	0613952Z80	RES,330K
R704	NOTPLACED	NOTPLACED
R705	0613952R56	RES,2MEG
R706	0613952R56	RES,2MEG
R707	0613952Q81	RES,2.2K
R708	0613952Q90	RES,5.1K
R709	0613952R66	RES,0
R710	NOTPLACED	NOTPLACED
R711	0613952R08	RES,20K
R712	0613952R66	RES,0
R713	NOTPLACED	NOTPLACED
R714	0613952Q59	RES,270
R717	0613958H33	RES,22
R718	0613952Q56	RES,200
R719	0613952Q40	RES,43
R720	0613952H56	RES,200
R721	0613952G67	RES,0
R722	0613952G67	RES,0
R723	0613952Q40	RES,43
R725	0613952Q85	RES,3.3K
R726	0613952R66	RES,0
R727	NOTPLACED	NOTPLACED
R728	0613952Q60	RES,300
R729	0613952Q33	RES,22
R730	0613952Q60	RES,300
R731	NOTPLACED	NOTPLACED
R732	0613952R66	RES,0
R733	0613952R17	RES,47K
R902	0613952H47	RES,82
R903	0613952H47	RES,82
R904	0613952H47	RES,82
R905	0613952H47	RES,82
R906	0613952R01	RES,10K
R907	0613952R01	RES,10K
R1000	0613952Q25	RES,10
R1001	0613952R01	RES,10K
R1002	0613952J73	RES,10MEG
R1005	0613952Q89	RES,4.7K
R1006	0613952R01	RES,10K
R1013	NOTPLACED	NOTPLACED
R1014	0613952R66	RES,0
R1015	NOTPLACED	NOTPLACED
R1016	0613952R66	RES,0
R1017	NOTPLACED	NOTPLACED
R1018	0613952R66	RES,0

Circuit Ref	Motorola Part No.	Description
R1019	0613952Q18	RES,5.1
R1020	0613952R66	RES,0
R1021	0613952R66	RES,0
R1022	NOTPLACED	NOTPLACED
R1023	0613952R66	RES,0
R1025	0613952R01	RES,10K
R1026	0613952R17	RES,47K
R1027	NOTPLACED	NOTPLACED
R1028	0613952R66	RES,0
R1034	0613952R01	RES,10K
R1035	NOTPLACED	NOTPLACED
R1036	0613952R01	RES,10K
R1041	0613952Q73	RES,1K
R1045	0613952R01	RES,10K
R1046	NOTPLACED	NOTPLACED
R1047	0613952R66	RES,0
R1048	0613952R66	RES,0
R1051	0613952R66	RES,0
R1052	0613952R66	RES,0
R1053	0613952Q89	RES,4.7K
R1054	0613952Q89	RES,4.7K
R1055	NOTPLACED	NOTPLACED
R1060	0613952Q25	RES,10
R1061	0613952R66	RES,0
R1062	0613952R66	RES,0
R1063	NOTPLACED	NOTPLACED
R1065	0613952R66	RES,0
R1067	0613952R03	RES,12K
R1068	0613952R10	RES,24K
R1069	0613952R66	RES,0
R1070	0613952R01	RES,10K
R1072	0613952R66	RES,0
R2000	0613952R01	RES,10K
R2004	0613952R66	RES,0
R2005	0613952R01	RES,10K
R2006	0613952R01	RES,10K
R2007	0613952R01	RES,10K
R2008	0613952R01	RES,10K
R2009	0613952R01	RES,10K
R2010	0613952R01	RES,10K
R2011	0613952R66	RES,0
R2012	0613952R01	RES,10K
R2013	0613952R01	RES,10K
R3004	NOTPLACED	NOTPLACED
R3005	0613952N01	RES,10K
R3006	NOTPLACED	NOTPLACED

Circuit Ref	Motorola Part No.	Description
R3007	0613952N01	RES,10K
R3008	NOTPLACED	NOTPLACED
R3009	0613952N01	RES,10K
R3010	0613952N01	RES,10K
R3011	0613952Q81	RES,2.2K
R3012	0613952Q59	RES,270
R3013	0613952Q81	RES,2.2K
R3014	0613952M30	RES,2K
R3016	0616416H01	RES,0.1
R3017	0613952P25	RES,178K
R3018	0613952R18	RES,51K
R3020	0613952Q34	RES,24
R3021	0613952Q34	RES,24
R3023	0613952R17	RES,47K
R3024	0613952Z67	RES,51K
R3025	0613952Q49	RES,100
R3026	0613952Q61	RES,330
R3027	0613952Q61	RES,330
R3028	0613952N69	RES,51.1K
R3029	0613952N60	RES,41.2K
R3030	0686135Z02	RES,0.2
R3031	0613952R66	RES,0
R3032	0613952Q95	RES,8.2K
R3033	0613952R05	RES,15K
R3034	0613952Q95	RES,8.2K
R3035	0613952R05	RES,15K
R3036	0613952N01	RES,10K
R3037	0613952Q71	RES,820
R3038	NOTPLACED	NOTPLACED
R3040	0613952Q81	RES,2.2K
R3041	0613952N01	RES,10K
R3043	0613952R32	RES,200K
R3050	0613952R25	RES,100K
R3051	0613952Q89	RES,4.7K
R3053	0613952Z58	RES,22K
R3054	0613952Z58	RES,22K
R3055	0613952R25	RES,100K
R3060	0613952M30	RES,2K
R3070	0613952R33	RES,220K
R3071	0613952R33	RES,220K
R3072	0613952R56	RES,2MEG
R3073	0613952R56	RES,2MEG
R3074	0613952Q73	RES,1K
R3075	0613952N01	RES,10K
R3088	NOTPLACED	NOTPLACED
R3098	0613952Q85	RES,3.3K

Circuit Ref	Motorola Part No.	Description
R3100	0613952R17	RES,47K
R3101	0613952R25	RES,100K
R3102	0613952A30	RES,2
R3103	0615049H16	RES,0.70
R3200	0613952R33	RES,220K
R3201	0613952R20	RES,62K
R3202	0613952R33	RES,220K
R3203	0613952R36	RES,300K
R3700	0613952Q73	RES,1K
R3701	0613952R01	RES,10K
R3702	0613952R12	RES,30K
R3703	0613952R10	RES,24K
R3704	0613952R01	RES,10K
R3800	0613952Q25	RES,10
R3888	NOTPLACED	NOTPLACED
R8002	0613952R25	RES,100K
R8003	0613952R01	RES,10K
R8004	0613952Q70	RES,750
R8010	0613952R05	RES,15K
R8011	0613952R25	RES,100K
R8012	0613952R01	RES,10K
R8015	NOTPLACED	NOTPLACED
R8016	0613952R66	RES,0
R8017	NOTPLACED	NOTPLACED
R8020	0613952R66	RES,0
R8023	0613952R66	RES,0
R8024	0613952R25	RES,100K
R8025	0613952R66	RES,0
R8026	0613952R25	RES,100K
R8027	0613952R25	RES,100K
R8028	0613952R25	RES,100K
R8029	0613952R25	RES,100K
R8030	0613952R01	RES,10K
R8031	0613952R25	RES,100K
R8032	0613952R25	RES,100K
R8033	0613952R25	RES,100K
R8034	0613952R01	RES,10K
R8035	0613952R01	RES,10K
R8036	0613952R01	RES,10K
R8037	0613952R01	RES,10K
R9000	0613952Q73	RES,1K
R9001	0613952Q73	RES,1K
R9002	0613952Q73	RES,1K
R9003	0613952Q73	RES,1K
R9004	0613952Q73	RES,1K
R9005	0613952Q73	RES,1K

Circuit Ref	Motorola Part No.	Description
R9006	0613952Q73	RES,1K
R9007	0613952Q73	RES,1K
R9008	0613952R17	RES,47K
R9009	0613952R01	RES,10K
R9010	0613952R01	RES,10K
R9011	0613952R17	RES,47K
R9012	0613952Q50	RES,110
R9013	0613952Q37	RES,33
R9014	0613952R01	RES,10K
R9015	0613952R01	RES,10K
R9016	0613952R01	RES,10K
R9017	0613952R01	RES,10K
R9018	0613952R01	RES,10K
R9019	0613952Q73	RES,1K
R9050	0613952R01	RES,10K
R9051	0613952R01	RES,10K
R9052	0613952Q65	RES,470
R9053	0613952H47	RES,82
R9054	0613952H47	RES,82
S9000	4086470Z01	SWITCH
S9001	4015186H01	SWITCH
S9002	4015203H01	SWITCH
SH9000	NOTPLACED	NOTPLACED
SH9001	NOTPLACED	NOTPLACED
T400	2515396H01	XFMR
T401	2515396H01	XFMR
U001	5104932K08	SC51650VF
U002	5114000B59	MC74VHC1GT66
U200	5116014H01	UPC8179TK
U400	5115443H01	MAX2373
U600	5102495J14	AD9864
U700	4802246J29	ADA4743
U701	5115147H01	AD8566
U702	5115022H01	LM50
U1000	5102495J13	OMAP1710
U1005	5171209L01	TXB0104ZXUR
U1006	5115001H02	NL27WZU04
U2000	0104024J27	M58WR064FB
U2001	5185941F17	MT48H4M16LF
U3000	5185143E77	PWR_MNGR_BLOCK
U3002	5115616H01	LP8340
U3003	5115453H01	LMC6035ITLX
U3004	5114007A43	NL17SZ14
U3006	5115974H01	LP3990
U3007	5171395L01	TS5A23166
U3008	5115391H01	TK11100CSC

Circuit Ref	Motorola Part No.	Description
U3009	5164852H47	PCA9306
U3020	5171428L01	LTC1877
U3021	5171428L01	LTC1877
U3700	5116282H01	TPS79228
U3701	5116283H01	TPS79101
U8000	0104024J41	GSC3F/LP
U8001	5164015H55	UPC8211TK
VR9000	4866544A01	SR05
VR9001	4813979P10	MMQA5V6T1
VR9002	4813979P10	MMQA5V6T1
VR9003	4815040H01	MM3Z12VT1G
VR9004	4815040H01	MM3Z12VT1G
VR9005	4805656W76	MM5Z5V6
VR9006	4805656W76	MM5Z5V6
VR9007	4805656W76	MM5Z5V6
VR9008	4813979P10	MMQA5V6T1
VR9009	4813977C23	MMSZ5243
VR9010	4813977C23	MMSZ5243
VR9015	NOTPLACED	NOTPLACED
VR9016	NOTPLACED	NOTPLACED
VR9017	4815040H01	MM3Z12VT1G
VR9018	4815040H01	MM3Z12VT1G
VR9020	4813979P10	MMQA5V6T1
VR9021	4813979P10	MMQA5V6T1
VR9022	4813979P10	MMQA5V6T1
VR9023	4815040H01	MM3Z12VT1G
Y001	5116032H01	IVT5300B
Y1000	4809612J45	CX-91F
Y3000	4802582S80	XTAL
Y3001	4815028H01	CX-101F
Y8000	4802582S80	XTAL

## UHF1 Radio Parts List (8486716Z08)

Circuit Ref	Motorola Part No.	Description
C001	2113946D02	CAP, 1.0uF
C002	2113946D02	CAP, 1.0uF
C003	2113946K02	CAP, 0.10uF
C004	2113946K02	CAP, 0.10uF
C005	2113946K02	CAP, 0.10uF
C006	2113946K02	CAP, 0.10uF
C007	2113946K02	CAP, 0.10uF
C008	2113946K02	CAP, 0.10uF
C009	NOTPLACED	NOTPLACED
C013	2113945A02	CAP, 270pF
C014	2113945L49	CAP, .01uF
C015	2113945L49	CAP, .01uF
C016	2113945A09	CAP, 1000pF
C017	2113946K02	CAP, 0.10uF
C018	2313960B57	CAPP, 10uF
C019	2113945L49	CAP, .01uF
C020	2313960B57	CAPP, 10uF
C022	2113946K02	CAP, 0.10uF
C024	2115358H17	CAP, 0.22uF
C025	2115358H07	CAP, .033uF
C026	2115358H15	CAP, 0.15uF
C027	2115358H25	CAP, 1uF
C028	2115358H01	CAP, .01uF
C031	2113944A40	CAP, 100pF
C032	2113944A17	CAP, 4.7pF
C033	2113944A05	CAP, 1.5pF
C035	2113946K02	CAP, 0.10uF
C036	2113946K02	CAP, 0.10uF
C037	2115153H08	CAP, 1.5pF
C038	NOTPLACED	NOTPLACED
C039	2113946D02	CAP, 1.0uF
C200	2113944A40	CAP, 100pF
C201	2115153H27	CAP, 10pF
C202	2115153H25	CAP, 8.2pF
C203	2115153H23	CAP, 6.8pF
C204	2115153H34	CAP, 11pF
C205	2115153H39	CAP, 18pF
C206	2115153H52	CAP, 62pF
C207	2115153H36	CAP, 13pF
C208	2113944A40	CAP, 100pF
C209	2113946B04	CAP, 0.1uF
C210	2113944A40	CAP, 100pF
C211	2113946B04	CAP, 0.1uF
C212	2115153H08	CAP, 1.5pF
C213	2115153H13	CAP, 2.7pF

Circuit Ref	Motorola Part No.	Description
C214	2113944A40	CAP, 100pF
C215	2113944A40	CAP, 100pF
C216	2115153H12	CAP, 2.4pF
C217	2115153H26	CAP, 9.1pF
C219	2113944A40	CAP, 100pF
C220	2115153H21	CAP, 5.6pF
C221	2115153H21	CAP, 5.6pF
C222	2115153H15	CAP, 3.3pF
C223	NOTPLACED	NOTPLACED
C224	2115153H39	CAP, 18pF
C225	2115153H51	CAP, 56pF
C226	2115153H36	CAP, 13pF
C227	2113944A40	CAP, 100pF
C228	2113946B04	CAP, 0.1uF
C229	2113944A40	CAP, 100pF
C230	2113946B04	CAP, 0.1uF
C231	2115153H10	CAP, 2.0pF
C232	2115153H03	CAP, 1.0pF
C233	2113944A40	CAP, 100pF
C234	2113944A40	CAP, 100pF
C235	2113944A40	CAP, 100pF
C236	2115153H10	CAP, 2.0pF
C237	2115153H18	CAP, 4.3pF
C238	2113944A40	CAP, 100pF
C239	2113944A40	CAP, 100pF
C240	2113944A40	CAP, 100pF
C241	NOTPLACED	NOTPLACED
C243	2115153H34	CAP, 11pF
C400	2113944A73	CAP, 8pF
C401	2113944A21	CAP, 6.8pF
C402	2113944M07	CAP, 3.6pF
C403	2113944A40	CAP, 100pF
C404	2113944A21	CAP, 6.8pF
C405	2113944A21	CAP, 6.8pF
C407	2113944A61	CAP, 0.5pF
C408	NOTPLACED	NOTPLACED
C409	2113946B04	CAP, 0.1uF
C410	2113945A02	CAP, 270pF
C411	2113945B02	CAP, .01uF
C412	2113945A02	CAP, 270pF
C413	2113944A16	CAP, 4.3pF
C414	2113944A24	CAP, 9.1pF
C415	2113944A24	CAP, 9.1pF
C416	2113946K02	CAP, 0.10uF
C417	2113945A02	CAP, 270pF
C418	2113944A16	CAP, 4.3pF

Circuit Ref	Motorola Part No.	Description
C419	2113944A21	CAP, 6.8pF
C420	2113944A21	CAP, 6.8pF
C421	2113944M07	CAP, 3.6pF
C422	2113944A20	CAP, 6.2pF
C423	2113944A21	CAP, 6.8pF
C424	2113944A40	CAP, 100pF
C425	2113944A20	CAP, 6.2pF
C426	0613952R66	RES,0
C427	2113944A85	CAP, 51pF
C428	2113944A78	CAP, 13pF
C429	2113944A23	CAP, 8.2pF
C430	2113944A26	CAP, 12pF
C431	2113944A23	CAP, 8.2pF
C432	2113944A78	CAP, 13pF
C433	2113944A21	CAP, 6.8pF
C434	2113946K02	CAP, 0.10uF
C435	2113944A40	CAP, 100pF
C436	2113946K02	CAP, 0.10uF
C437	2113945B02	CAP, .01uF
C438	2113946K02	CAP, 0.10uF
C439	2113945A02	CAP, 270pF
C440	2113944A11	CAP, 2.7pF
C441	2113944A16	CAP, 4.3pF
C442	2113945B02	CAP, .01uF
C444	2113946K02	CAP, 0.10uF
C445	NOTPLACED	NOTPLACED
C446	2113944A77	CAP, 11pF
C447	2113946S35	CAP, 1.0uF
C448	2113946S35	CAP, 1.0uF
C601	2113945B02	CAP, .01uF
C602	2113946B04	CAP, 0.1uF
C603	2113946B04	CAP, 0.1uF
C604	2113945B02	CAP, .01uF
C605	2113945B02	CAP, .01uF
C606	2113944A32	CAP, 39pF
C607	2113945B02	CAP, .01uF
C608	2113945D02	CAP, .047uF
C609	2115153H44	CAP, 30pF
C610	2115153H44	CAP, 30pF
C611	NOTPLACED	NOTPLACED
C612	2113944A25	CAP, 10pF
C613	2113945G91	CAP, 0.1uF
C614	2113946E02	CAP, 1.0uF
C615	2113946B04	CAP, 0.1uF
C616	2113944A32	CAP, 39pF
C617	2113945L37	CAP, 3300pF

Circuit Ref	Motorola Part No.	Description
C618	2113945C18	CAP, .012uF
C619	2115358H13	CAP, 0.1uF
C620	2113946B04	CAP, 0.1uF
C621	2113945B02	CAP, .01uF
C622	2113944C89	CAP, 200pF
C623	2113944A40	CAP, 100pF
C624	2113944A40	CAP, 100pF
C625	2113945A11	CAP, 2200pF
C626	2113945D02	CAP, .047uF
C627	2113944A40	CAP, 100pF
C628	2113945B02	CAP, .01uF
C629	2113944A40	CAP, 100pF
C630	2113945B02	CAP, .01uF
C631	2113945B02	CAP, .01uF
C632	2113946B04	CAP, 0.1uF
C633	2113946B04	CAP, 0.1uF
C634	2113945B02	CAP, .01uF
C635	2113944A85	CAP, 51pF
C636	2113946B04	CAP, 0.1uF
C637	2113946G04	CAP, 0.68uF
C638	2115153H38	CAP, 16pF
C639	2113946B04	CAP, 0.1uF
C700	2316410H03	CAPP, 10uF
C703	2113945A02	CAP, 270pF
C704	2113945A02	CAP, 270pF
C705	2113946B02	CAP, .047uF
C706	2113945A02	CAP, 270pF
C708	2113945A02	CAP, 270pF
C709	2113945B02	CAP, .01uF
C710	2113945B02	CAP, .01uF
C711	2113945A02	CAP, 270pF
C712	2113945B04	CAP, .022uF
C714	2113945A02	CAP, 270pF
C715	2113945A02	CAP, 270pF
C716	2113944A28	CAP, 18pF
C717	2113945A02	CAP, 270pF
C718	2113946K02	CAP, 0.10uF
C719	NOTPLACED	NOTPLACED
C720	2113945B04	CAP, .022uF
C721	2113945D04	CAP, 0.1uF
C722	2113944A17	CAP, 4.7pF
C723	NOTPLACED	NOTPLACED
C724	2113945A02	CAP, 270pF
C725	NOTPLACED	NOTPLACED
C726	2113944A82	CAP, 30pF
C727	2113944A82	CAP, 30pF
C728	2113944A08	CAP, 2.0pF

Circuit Ref	Motorola Part No.	Description
C729	NOTPLACED	NOTPLACED
C730	2113946K02	CAP, 0.10uF
C731	2113945D04	CAP, 0.1uF
C732	2116173H17	CAP, 24pF
C733	2116636H04	CAP, 20pF
C734	2116001H01	CAP, 13pF
C735	2116173H17	CAP, 24pF
C736	2113945A02	CAP, 270pF
C737	2113945A09	CAP, 1000pF
C738	2113945A02	CAP, 270pF
C739	2113946K02	CAP, 0.10uF
C740	NOTPLACED	NOTPLACED
C798	2116173H17	CAP, 24pF
C799	2116636H04	CAP, 20pF
C900	2113945A02	CAP, 270pF
C903	2113944C14	CAP, 2.2pF
C904	2113944C41	CAP, 68pF
C905	2113944C45	CAP, 100pF
C906	2113944C71	CAP, 5.6pF
C907	2113944C73	CAP, 6.8pF
C908	2113944C71	CAP, 5.6pF
C909	2113944C41	CAP, 68pF
C910	2113944M30	CAP, 33pF
C911	2113944C18	CAP, 3.3pF
C912	2113944C22	CAP, 4.7pF
C913	2113944C45	CAP, 100pF
C914	2113945A02	CAP, 270pF
C915	2113944C22	CAP, 4.7pF
C916	2113944C18	CAP, 3.3pF
C917	2113944M30	CAP, 33pF
C918	2113944C45	CAP, 100pF
C920	2113944C28	CAP, 8.2pF
C921	2113944C17	CAP, 3.0pF
C922	NOTPLACED	NOTPLACED
C923	NOTPLACED	NOTPLACED
C924	2113944A11	CAP, 2.7pF
C925	2113944V07	CAP, 1.5pF
C926	2113944A15	CAP, 3.9pF
C927	2113945A02	CAP, 270pF
C1000	2113944A40	CAP, 100pF
C1001	2113946K02	CAP, 0.10uF
C1002	2113946K02	CAP, 0.10uF
C1003	2113944A40	CAP, 100pF
C1004	2113944A40	CAP, 100pF
C1005	2113946K02	CAP, 0.10uF
C1006	2113946K02	CAP, 0.10uF

Circuit Ref	Motorola Part No.	Description
C1007	2113944A40	CAP, 100pF
C1008	2113944A40	CAP, 100pF
C1009	2113946K02	CAP, 0.10uF
C1010	2113946K02	CAP, 0.10uF
C1011	2113944A40	CAP, 100pF
C1012	2113946K02	CAP, 0.10uF
C1013	2113946K02	CAP, 0.10uF
C1014	2113946K02	CAP, 0.10uF
C1015	2113946K02	CAP, 0.10uF
C1016	2113946B04	CAP, 0.1uF
C1017	2113946E02	CAP, 1.0uF
C1018	2113944A28	CAP, 18pF
C1019	2113944A28	CAP, 18pF
C1028	2113946K02	CAP, 0.10uF
C1029	2113946K02	CAP, 0.10uF
C1030	2113944A28	CAP, 18pF
C1031	2113946K02	CAP, 0.10uF
C1032	2113945B02	CAP, .01uF
C1033	2113946K02	CAP, 0.10uF
C1044	2113946B04	CAP, 0.1uF
C2000	2113944A40	CAP, 100pF
C2001	2113945B02	CAP, .01uF
C2002	2113946K02	CAP, 0.10uF
C2003	2113946K02	CAP, 0.10uF
C2004	2113944A40	CAP, 100pF
C2005	2113945B02	CAP, .01uF
C2006	2113946K02	CAP, 0.10uF
C2007	2113946K02	CAP, 0.10uF
C3000	2113944A78	CAP, 13pF
C3001	2113944A78	CAP, 13pF
C3002	2113945D04	CAP, 0.1uF
C3003	2113946D05	CAP, 2.2uF
C3004	2113946D05	CAP, 2.2uF
C3005	2113945A09	CAP, 1000pF
C3010	2113946D05	CAP, 2.2uF
C3011	2113946A02	CAP, .022uF
C3014	2113946D05	CAP, 2.2uF
C3015	2115153H57	CAP, 100pF
C3016	2113946D05	CAP, 2.2uF
C3017	2113945B02	CAP, .01uF
C3018	2113946D05	CAP, 2.2uF
C3019	2113946D02	CAP, 1.0uF
C3024	2113946D02	CAP, 1.0uF
C3025	2113946K02	CAP, 0.10uF
C3026	2113946K02	CAP, 0.10uF
C3028	2113946D05	CAP, 2.2uF



Circuit Ref	Motorola Part No.	Description	Circuit Ref	Motorola Part No.	Description	Circuit Ref	Motorola Part No.	Description	Circuit Ref	Motorola Part No.	Description
C3031	2113946D02	CAP, 1.0uF	C3209	2371572L01	CAPP, 47uF	C9005	2113944A40	CAP, 100pF	C9058	2113944A40	CAP, 100pF
C3034	2113946B04	CAP, 0.1uF	C3210	2113945B02	CAP, .01uF	C9006	2113944A40	CAP, 100pF	C9059	2113944A40	CAP, 100pF
C3035	2113946B04	CAP, 0.1uF	C3211	2115153H40	CAP, 20pF	C9007	2113944A40	CAP, 100pF	C9060	2113944A40	CAP, 100pF
C3036	2113946B04	CAP, 0.1uF	C3212	2113944A44	CAP, 220pF	C9008	2113944A40	CAP, 100pF	C9061	2113944A40	CAP, 100pF
C3037	2113944A40	CAP, 100pF	C3700	2113946D02	CAP, 1.0uF	C9009	2113944A40	CAP, 100pF	C9062	2113944A40	CAP, 100pF
C3038	2113944A40	CAP, 100pF	C3701	2113945B02	CAP, .01uF	C9010	2113944A40	CAP, 100pF	C9063	2113944A40	CAP, 100pF
C3039	2113946F03	CAP, 4.7uF	C3702	2113946D05	CAP, 2.2uF	C9011	2113944A40	CAP, 100pF	C9064	2113944A40	CAP, 100pF
C3045	2113946F05	CAP, 10uF	C3703	2113946D02	CAP, 1.0uF	C9012	2113944A40	CAP, 100pF	C9065	2113944C45	CAP, 100pF
C3047	2113946D02	CAP, 1.0uF	C3704	2113944A30	CAP, 27pF	C9013	2113944A40	CAP, 100pF	C9066	2113944A40	CAP, 100pF
C3048	2113946D02	CAP, 1.0uF	C3705	2113945B02	CAP, .01uF	C9014	2113944C45	CAP, 100pF	C9067	NOTPLACED	NOTPLACED
C3049	2113945C25	CAP, 0.033uF	C3706	2113945A05	CAP, 470pF	C9015	2113944A40	CAP, 100pF	C9068	NOTPLACED	NOTPLACED
C3050	2113945C25	CAP, 0.033uF	C3707	2113946D05	CAP, 2.2uF	C9016	2113944A40	CAP, 100pF	C9069	NOTPLACED	NOTPLACED
C3051	2113944A40	CAP, 100pF	C3800	2113945D04	CAP, 0.1uF	C9017	2113944A40	CAP, 100pF	C9071	NOTPLACED	NOTPLACED
C3060	2113944A80	CAP, 20pF	C3805	2113946K03	CAP, 0.22uF	C9018	2113944A40	CAP, 100pF	C9072	NOTPLACED	NOTPLACED
C3061	2113944A80	CAP, 20pF	C3999	2113945B02	CAP, .01uF	C9019	2113944A40	CAP, 100pF	CR900	4815897H01	UPP9401E3
C3062	2113946K02	CAP, 0.10uF	C8000	2113946F05	CAP, 10uF	C9020	2113944A40	CAP, 100pF	CR901	4815897H01	UPP9401E3
C3063	2113946K02	CAP, 0.10uF	C8001	2113944A28	CAP, 18pF	C9021	2113944A40	CAP, 100pF	CR902	4815897H01	UPP9401E3
C3067	2113946D02	CAP, 1.0uF	C8002	2113944A52	CAP, 1000pF	C9022	2113944A40	CAP, 100pF	CR903	4815897H01	UPP9401E3
C3070	2113944A25	CAP, 10pF	C8003	2113946F05	CAP, 10uF	C9023	2113944A40	CAP, 100pF	D001	4815059H01	1SV325
C3074	2113946D02	CAP, 1.0uF	C8004	2113944A28	CAP, 18pF	C9024	2113944A40	CAP, 100pF	D200	4815096H01	1SV305
C3079	2113946F03	CAP, 4.7uF	C8005	2113946F05	CAP, 10uF	C9025	2113944A40	CAP, 100pF	D201	4815096H01	1SV305
C3080	NOTPLACED	NOTPLACED	C8006	2113944A28	CAP, 18pF	C9026	2113944A40	CAP, 100pF	D202	4815096H01	1SV305
C3081	2113946F03	CAP, 4.7uF	C8013	2113944A08	CAP, 2.0pF	C9027	2113944A40	CAP, 100pF	D203	4815096H01	1SV305
C3082	2113946B04	CAP, 0.1uF	C8014	2113944A62	CAP, 0.75pF	C9028	2113944A40	CAP, 100pF	D204	4815096H01	1SV305
C3083	2113946B04	CAP, 0.1uF	C8015	2113946K02	CAP, 0.10uF	C9029	2113944A40	CAP, 100pF	D205	4815096H01	1SV305
C3084	2113946K03	CAP, 0.22uF	C8016	2113945A02	CAP, 270pF	C9030	2113944A17	CAP, 4.7pF	D206	4815096H01	1SV305
C3090	2113955D37	CAP, 10uF	C8017	2113944A28	CAP, 18pF	C9031	2113944A17	CAP, 4.7pF	D207	4815096H01	1SV305
C3091	2113955D37	CAP, 10uF	C8018	2113944A28	CAP, 18pF	C9032	2113944A17	CAP, 4.7pF	D400	4885055Y01	1SV229
C3093	2113946N03	CAP, 2.2uF	C8019	2113944A11	CAP, 2.7pF	C9033	2113944A40	CAP, 100pF	D401	4885055Y01	1SV229
C3094	2113946B03	CAP, .068uF	C8020	2113944A52	CAP, 1000pF	C9038	2113944A40	CAP, 100pF	D402	4813974A19	MMBD352
C3095	2113946B03	CAP, .068uF	C8021	2113946K02	CAP, 0.10uF	C9039	2113944C45	CAP, 100pF	D403	4885055Y01	1SV229
C3097	2113944A31	CAP, 33pF	C8022	2113946D05	CAP, 2.2uF	C9040	2113944A40	CAP, 100pF	D404	4885055Y01	1SV229
C3098	2113944A31	CAP, 33pF	C8023	2113945B02	CAP, .01uF	C9041	2113944A40	CAP, 100pF	D405	4815923H01	HSMS2829
C3099	2113944A31	CAP, 33pF	C8029	2113944A52	CAP, 1000pF	C9042	2113944A40	CAP, 100pF	D600	4815096H01	1SV305
C3100	2113944A31	CAP, 33pF	C8030	2113944A28	CAP, 18pF	C9043	2113944A40	CAP, 100pF	D601	4815096H01	1SV305
C3101	2113946D02	CAP, 1.0uF	C8031	2113946D05	CAP, 2.2uF	C9044	2113944A40	CAP, 100pF	D3000	4813978A25	BAT54HT1G
C3102	2113946D02	CAP, 1.0uF	C8032	2113945B02	CAP, .01uF	C9045	2113944A40	CAP, 100pF	D9000	4805729G49	BRPY1204W
C3200	2113945Y02	CAP, 0.10uF	C8033	2113944A28	CAP, 18pF	C9046	2113944A40	CAP, 100pF	E001	2480640Z01	BK1005HM471
C3201	2113955D37	CAP, 10uF	C8034	2113944A28	CAP, 18pF	C9047	2113944A40	CAP, 100pF	E002	2480640Z01	BK1005HM471
C3202	2371572L02	CAPP, 68uF	C8035	2113944A31	CAP, 33pF	C9048	2113944A40	CAP, 100pF	E003	2480640Z01	BK1005HM471
C3203	2113945B02	CAP, .01uF	C8036	2113944A52	CAP, 1000pF	C9049	2113944A40	CAP, 100pF	E004	2480640Z01	BK1005HM471
C3204	2115153H40	CAP, 20pF	C9000	2113944A40	CAP, 100pF	C9050	2113944A40	CAP, 100pF	E400	2480640Z01	BK1005HM471
C3205	2113944A50	CAP, 680pF	C9001	2113944A40	CAP, 100pF	C9051	NOTPLACED	NOTPLACED	E401	2480640Z01	BK1005HM471
C3206	2113945Y02	CAP, 0.10uF	C9002	2113944A40	CAP, 100pF	C9053	NOTPLACED	NOTPLACED	E600	2480640Z01	BK1005HM471
C3207	2113955D37	CAP, 10uF	C9003	2113944A40	CAP, 100pF	C9055	NOTPLACED	NOTPLACED	E601	2480640Z01	BK1005HM471
C3208	2113946K03	CAP, 0.22uF	C9004	2113944A40	CAP, 100pF	C9057	NOTPLACED	NOTPLACED	E602	2480640Z01	BK1005HM471

Circuit Ref	Motorola Part No.	Description
E701	7686949J14	BLM21PG221SN1
E3030	2409134J04	BLM18BD601SN1
E3031	2409134J04	BLM18BD601SN1
E3032	2409134J04	BLM18BD601SN1
E3033	2409134J04	BLM18BD601SN1
E3700	7686949J08	IDCTR
E3701	7686949J08	IDCTR
E3702	7686949J08	IDCTR
E3703	7686949J08	IDCTR
E3704	7686949J08	IDCTR
E3705	7686949J08	IDCTR
E8000	7686949J08	IDCTR
E8001	7686949J08	IDCTR
E8002	7686949J08	IDCTR
E8003	7686949J08	IDCTR
E8004	7686949J08	IDCTR
E8005	7686949J08	IDCTR
E8006	7686949J08	IDCTR
E9000	7686949J14	BLM21PG221SN1
E9001	2480640Z01	BK1005HM471
E9006	NOTPLACED	NOTPLACED
E9007	NOTPLACED	NOTPLACED
F9000	6515076H01	FUSE
FL400	9116854H01	-
FL8000	9180310L38	B39162-B7829-C710
FL8001	9180310L38	B39162-B7829-C710
FL9000	2515003H02	DLP11SN201HL2
J9001	0970312L02	CONN_J
L002	2415429H26	IDCTR, 33nH
L003	NOTPLACED	NOTPLACED
L200	2415429H47	IDCTR, 390nH
L201	2415427H29	IDCTR, 19nH
L202	2416540H13	IDCTR, 12nH
L203	2415429H47	IDCTR, 390nH
L204	2415429H47	IDCTR, 390nH
L205	2415429H47	IDCTR, 390nH
L206	2415429H47	IDCTR, 390nH
L207	2415427H42	IDCTR, 51nH
L208	2415429H47	IDCTR, 390nH
L209	2415427H26	IDCTR, 15nH
L210	2415428H07	IDCTR, 8.8nH
L211	2415429H47	IDCTR, 390nH
L212	2415429H47	IDCTR, 390nH
L213	2415429H47	IDCTR, 390nH
L214	2415429H47	IDCTR, 390nH
L215	2415429H27	IDCTR, 36nH

Circuit Ref	Motorola Part No.	Description
L217	2415347H01	IDCTR, 1000nH
L218	2415429H31	IDCTR, 51nH
L400	2416201H01	IDCTR, 16nH
L401	2416201H01	IDCTR, 16nH
L402	2415429H35	IDCTR, 82nH
L403	2415427H34	IDCTR, 27nH
L404	2415427H29	IDCTR, 19nH
L405	2415429H25	IDCTR, 30nH
L406	2415429H15	IDCTR, 10nH
L407	2415427H16	IDCTR, 7.5nH
L408	2416201H01	IDCTR, 16nH
L409	2416201H01	IDCTR, 16nH
L410	NOTPLACED	NOTPLACED
L411	2415429H35	IDCTR, 82nH
L412	2414017N29	IDCTR, 270nH
L413	2415429H23	IDCTR, 24nH
L414	2415429H23	IDCTR, 24nH
L415	2415429H46	IDCTR, 330nH
L416	2414017N29	IDCTR, 270nH
L417	2415718H37	IDCTR, 820nH
L418	2415429H47	IDCTR, 390nH
L419	2414032F42	IDCTR, 470nH
L420	2414032F42	IDCTR, 470nH
L600	2466505A01	IDCTR, 10uH
L601	2466505A01	IDCTR, 10uH
L602	2415569H01	IDCTR, 4.7uH
L603	2415718H37	IDCTR, 820nH
L604	2414015B26	IDCTR, 330nH
L605	2415569H01	IDCTR, 4.7uH
L700	2414017N25	IDCTR, 120nH
L701	2414017N25	IDCTR, 120nH
L702	2415429H14	IDCTR, 9.5nH
L703	2414017N25	IDCTR, 120nH
L706	2460591E64	IDCTR, 30.51nH
L707	2471406L02	IDCTR, 11.03nH
L902	2414017N25	IDCTR, 120nH
L903	2414017N25	IDCTR, 120nH
L904	2416201H01	IDCTR, 16nH
L905	2416201H01	IDCTR, 16nH
L906	2416201H02	IDCTR, 19nH
L907	2415429H35	IDCTR, 82nH
L908	2416201H02	IDCTR, 19nH
L909	2416201H01	IDCTR, 16nH
L910	2416201H01	IDCTR, 16nH
L911	2416201H01	IDCTR, 16nH
L912	2414017P08	IDCTR, 3.9nH

Circuit Ref	Motorola Part No.	Description
L913	2414017P10	IDCTR, 5.6nH
L3003	2464675H01	IDCTR, 560nH
L3004	2464675H01	IDCTR, 560nH
L3020	2489846Y06	IDCTR, 10uH
L3021	2489846Y06	IDCTR, 10uH
L3022	2464675H01	IDCTR, 560nH
L8001	2414017P10	IDCTR, 5.6nH
L8002	2414017P17	IDCTR, 22nH
L8003	2414017P13	IDCTR, 10nH
L8004	2414017P10	IDCTR, 5.6nH
L9000	2415429H45	IDCTR, 270nH
L9001	2415429H45	IDCTR, 270nH
L9007	2415429H45	IDCTR, 270nH
L9008	2415429H45	IDCTR, 270nH
M1	4271321L01	RETAINER
M2	4271321L01	RETAINER
M700	2615193H01	HEATSINK
M9000	4371105L01	BRD_SPACER
M9001	4371105L01	BRD_SPACER
M9002	4371105L01	BRD_SPACER
M9003	NOTPLACED	NOTPLACED
M9004	NOTPLACED	NOTPLACED
M9005	3915478H01	CONTACT
M9006	3915478H01	CONTACT
M9007	0915184H01	CONTACT
P900	2815696H01	CONN_P
P9000	2887818K02	CONN_P
Q002	4815359H01	BCV62
Q003	4816134H01	DTC114YM
Q200	4815029H01	NE851M03
Q202	4815055H01	UMC5NT2G
Q203	4815055H01	UMC5NT2G
Q204	4885061Y01	NE68519
Q205	4885061Y01	NE68519
Q206	4815055H01	UMC5NT2G
Q207	4815055H01	UMC5NT2G
Q208	4885061Y01	NE68519
Q400	4816531H01	QSBT_0038
Q401	4816531H01	QSBT_0038
Q600	4813973A04	73A04
Q601	4815055H01	UMC5NT2G
Q602	4885061Y01	NE68519
Q701	4815055H01	UMC5NT2G
Q702	4815055H01	UMC5NT2G
Q703	4816547H01	RD01MUS1
Q704	4816548H01	RD07MVS1

Circuit Ref	Motorola Part No.	Description
Q900	4815055H01	UMC5NT2G
Q901	4815055H01	UMC5NT2G
Q3000	4805585Q23	SI8401DB
Q3001	4805585Q23	SI8401DB
Q3002	4816134H01	DTC114YM
Q3003	4813970A62	NTHS5441T1
Q3005	4805585Q23	SI8401DB
Q3006	4816134H01	DTC114YM
Q3010	4805585Q23	SI8401DB
Q9000	4813973M07	MMBT3904
Q9001	4815154H01	IMXFT110
Q9003	4813973M07	MMBT3904
R006	0613952Q93	RES, 6.8K
R007	0613952R01	RES, 10K
R008	0613952Q25	RES, 10
R010	0613952Q93	RES, 6.8K
R011	0613952Q49	RES, 100
R012	0613952R25	RES, 100K
R013	0613952Q46	RES, 75
R014	0613952Q42	RES, 51
R016	0613952Q33	RES, 22
R017	0613952Q64	RES, 430
R018	0613952Q96	RES, 9.1K
R019	0613952R01	RES, 10K
R020	0613952Q55	RES, 180
R022	0613952Q36	RES, 30
R025	0613952R13	RES, 33K
R026	0613952R01	RES, 10K
R027	0613952R66	RES, 0
R052	NOTPLACED	NOTPLACED
R053	0613952R66	RES, 0
R054	0613952R66	RES, 0
R200	0613952Q95	RES, 8.2K
R201	0613952Q91	RES, 5.6K
R202	0613952Q49	RES, 100
R203	0613952Q51	RES, 120
R205	0613952Q91	RES, 5.6K
R207	NOTPLACED	NOTPLACED
R208	0613952Q95	RES, 8.2K
R209	0613952Q91	RES, 5.6K
R210	0613952Q49	RES, 100
R211	0613952Q50	RES, 110
R212	0613952Q91	RES, 5.6K
R213	0613952Q94	RES, 7.5K
R214	0613952Q58	RES, 240
R215	NOTPLACED	NOTPLACED

Circuit Ref	Motorola Part No.	Description
R216	0613952Q57	RES, 220
R217	0613952Q95	RES, 8.2K
R218	0613952Q66	RES, 510
R220	0613952Q60	RES, 300
R221	0613952Q31	RES, 18
R222	0613952Q60	RES, 300
R223	0613952R66	RES, 0
R224	0613952R66	RES, 0
R400	0613952R25	RES, 100K
R402	0613952R66	RES, 0
R403	0613952Q70	RES, 750
R404	0613952Q72	RES, 910
R405	0613952R25	RES, 100K
R406	0613952R25	RES, 100K
R407	0613952Q42	RES, 51
R409	0613952R05	RES, 15K
R410	0613952Q83	RES, 2.7K
R411	0613952R19	RES, 56K
R412	0613952Q63	RES, 390
R413	0613952Q77	RES, 1.5K
R416	0613952R66	RES, 0
R417	0613952R66	RES, 0
R419	0613952R66	RES, 0
R420	0613952Q95	RES, 8.2K
R421	0613952Q49	RES, 100
R422	0613952R01	RES, 10K
R424	0613952R01	RES, 10K
R425	0613952R66	RES, 0
R497	NOTPLACED	NOTPLACED
R499	0613952R25	RES, 100K
R600	0613952R01	RES, 10K
R601	0613952Q55	RES, 180
R602	0613952Q61	RES, 330
R603	0613952R05	RES, 15K
R604	0613952Q90	RES, 5.1K
R605	0613952Q90	RES, 5.1K
R606	0613952Q75	RES, 1.2K
R607	0613952R25	RES, 100K
R609	0613952R01	RES, 10K
R610	0613952R01	RES, 10K
R611	0613952Q63	RES, 390
R612	0613952R08	RES, 20K
R696	0613952R66	RES, 0
R697	0613952R66	RES, 0
R698	0613952R01	RES, 10K
R699	0613952R25	RES, 100K

Circuit Ref	Motorola Part No.	Description
R700	0615043C01	RES, 0.1
R701	NOTPLACED	NOTPLACED
R702	0613952Z80	RES, 330K
R703	0613952Z80	RES, 330K
R704	NOTPLACED	NOTPLACED
R705	0613952R56	RES, 2MEG
R706	0613952R56	RES, 2MEG
R707	0613952Q81	RES, 2.2K
R708	0613952Q90	RES, 5.1K
R709	0613952R66	RES, 0
R710	NOTPLACED	NOTPLACED
R711	0613952R08	RES, 20K
R712	0613952R66	RES, 0
R713	NOTPLACED	NOTPLACED
R714	0613952Q59	RES, 270
R717	0613958H33	RES, 22
R718	0613952Q56	RES, 200
R719	0613952Q40	RES, 43
R720	0613952H56	RES, 200
R721	0613952G67	RES, 0
R722	0613952G67	RES, 0
R723	0613952Q40	RES, 43
R725	0613952Q85	RES, 3.3K
R726	0613952R66	RES, 0
R727	NOTPLACED	NOTPLACED
R728	0613952Q60	RES, 300
R729	0613952Q33	RES, 22
R730	0613952Q60	RES, 300
R731	NOTPLACED	NOTPLACED
R732	0613952R66	RES, 0
R733	0613952R17	RES, 47K
R902	0613952H47	RES, 82
R903	0613952H47	RES, 82
R904	0613952H47	RES, 82
R905	0613952H47	RES, 82
R906	0613952R01	RES, 10K
R907	0613952R01	RES, 10K
R1000	0613952Q25	RES, 10
R1001	0613952R01	RES, 10K
R1002	0613952J73	RES, 10MEG
R1005	0613952Q89	RES, 4.7K
R1006	0613952R01	RES, 10K
R1013	NOTPLACED	NOTPLACED
R1014	0613952R66	RES, 0
R1015	NOTPLACED	NOTPLACED
R1016	0613952R66	RES, 0

Circuit Ref	Motorola Part No.	Description
R1017	NOTPLACED	NOTPLACED
R1018	0613952R66	RES, 0
R1019	0613952Q18	RES, 5.1
R1020	0613952R66	RES, 0
R1021	0613952R66	RES, 0
R1022	NOTPLACED	NOTPLACED
R1023	0613952R66	RES, 0
R1025	0613952R01	RES, 10K
R1026	0613952R17	RES, 47K
R1027	NOTPLACED	NOTPLACED
R1028	0613952R66	RES, 0
R1034	0613952R01	RES, 10K
R1035	NOTPLACED	NOTPLACED
R1036	0613952R01	RES, 10K
R1041	0613952Q73	RES, 1K
R1045	0613952R01	RES, 10K
R1046	NOTPLACED	NOTPLACED
R1047	0613952R66	RES, 0
R1048	0613952R66	RES, 0
R1051	0613952R66	RES, 0
R1052	0613952R66	RES, 0
R1053	0613952Q89	RES, 4.7K
R1054	0613952Q89	RES, 4.7K
R1055	NOTPLACED	NOTPLACED
R1060	0613952Q25	RES, 10
R1061	0613952R66	RES, 0
R1062	0613952R66	RES, 0
R1063	NOTPLACED	NOTPLACED
R1065	0613952R66	RES, 0
R1067	0613952R03	RES, 12K
R1068	0613952R10	RES, 24K
R1069	0613952R66	RES, 0
R1070	0613952R01	RES, 10K
R1072	0613952R66	RES, 0
R2000	0613952R01	RES, 10K
R2004	0613952R66	RES, 0
R2005	0613952R01	RES, 10K
R2006	0613952R01	RES, 10K
R2007	0613952R01	RES, 10K
R2008	0613952R01	RES, 10K
R2009	0613952R01	RES, 10K
R2010	0613952R01	RES, 10K
R2011	0613952R66	RES, 0
R2012	0613952R01	RES, 10K
R2013	0613952R01	RES, 10K
R3004	NOTPLACED	NOTPLACED

Circuit Ref	Motorola Part No.	Description
R3005	0613952N01	RES, 10K
R3006	NOTPLACED	NOTPLACED
R3007	0613952N01	RES, 10K
R3008	NOTPLACED	NOTPLACED
R3009	0613952N01	RES, 10K
R3010	0613952N01	RES, 10K
R3011	0613952Q81	RES, 2.2K
R3012	0613952Q59	RES, 270
R3013	0613952Q81	RES, 2.2K
R3014	0613952M30	RES, 2K
R3016	0616416H01	RES, 0.1
R3017	0613952P25	RES, 178K
R3018	0613952R18	RES, 51K
R3020	0613952Q34	RES, 24
R3021	0613952Q34	RES, 24
R3023	0613952R17	RES, 47K
R3024	0613952Z67	RES, 51K
R3025	0613952Q49	RES, 100
R3026	0613952Q61	RES, 330
R3027	0613952Q61	RES, 330
R3028	0613952N69	RES, 51.1K
R3029	0613952N60	RES, 41.2K
R3030	0686135Z02	RES, 0.2
R3031	0613952R66	RES, 0
R3032	0613952Q95	RES, 8.2K
R3033	0613952R05	RES, 15K
R3034	0613952Q95	RES, 8.2K
R3035	0613952R05	RES, 15K
R3036	0613952N01	RES, 10K
R3037	0613952Q71	RES, 820
R3038	NOTPLACED	NOTPLACED
R3040	0613952Q81	RES, 2.2K
R3041	0613952N01	RES, 10K
R3043	0613952R32	RES, 200K
R3050	0613952R25	RES, 100K
R3051	0613952Q89	RES, 4.7K
R3053	0613952Z58	RES, 22K
R3054	0613952Z58	RES, 22K
R3055	0613952R25	RES, 100K
R3060	0613952M30	RES, 2K
R3070	0613952R33	RES, 220K
R3071	0613952R33	RES, 220K
R3072	0613952R56	RES, 2MEG
R3073	0613952R56	RES, 2MEG
R3074	0613952Q73	RES, 1K
R3075	0613952N01	RES, 10K

Circuit Ref	Motorola Part No.	Description
R3088	NOTPLACED	NOTPLACED
R3098	0613952Q85	RES, 3.3K
R3100	0613952R17	RES, 47K
R3101	0613952R25	RES, 100K
R3102	0613952A30	RES, 2
R3103	0615049H16	RES, 0.70
R3200	0613952R33	RES, 220K
R3201	0613952R20	RES, 62K
R3202	0613952R33	RES, 220K
R3203	0613952R36	RES, 300K
R3700	0613952Q73	RES, 1K
R3701	0613952R01	RES, 10K
R3702	0613952R12	RES, 30K
R3703	0613952R10	RES, 24K
R3704	0613952R01	RES, 10K
R3800	0613952Q25	RES, 10
R3888	NOTPLACED	NOTPLACED
R8002	0613952R25	RES, 100K
R8003	0613952R01	RES, 10K
R8004	0613952Q70	RES, 750
R8010	0613952R05	RES, 15K
R8011	0613952R25	RES, 100K
R8012	0613952R01	RES, 10K
R8015	NOTPLACED	NOTPLACED
R8016	0613952R66	RES, 0
R8017	NOTPLACED	NOTPLACED
R8020	0613952R66	RES, 0
R8023	0613952R66	RES, 0
R8024	0613952R25	RES, 100K
R8025	0613952R66	RES, 0
R8026	0613952R25	RES, 100K
R8027	0613952R25	RES, 100K
R8028	0613952R25	RES, 100K
R8029	0613952R25	RES, 100K
R8030	0613952R01	RES, 10K
R8031	0613952R25	RES, 100K
R8032	0613952R25	RES, 100K
R8033	0613952R25	RES, 100K
R8034	0613952R01	RES, 10K
R8035	0613952R01	RES, 10K
R8036	0613952R01	RES, 10K
R8037	0613952R01	RES, 10K
R9000	0613952Q73	RES, 1K
R9001	0613952Q73	RES, 1K
R9002	0613952Q73	RES, 1K
R9003	0613952Q73	RES, 1K

Circuit Ref	Motorola Part No.	Description
R9004	0613952Q73	RES, 1K
R9005	0613952Q73	RES, 1K
R9006	0613952Q73	RES, 1K
R9007	0613952Q73	RES, 1K
R9008	0613952R17	RES, 47K
R9009	0613952R01	RES, 10K
R9010	0613952R01	RES, 10K
R9011	0613952R17	RES, 47K
R9012	0613952Q50	RES, 110
R9013	0613952Q37	RES, 33
R9014	0613952R01	RES, 10K
R9015	0613952R01	RES, 10K
R9016	0613952R01	RES, 10K
R9017	0613952R01	RES, 10K
R9018	0613952R01	RES, 10K
R9019	0613952Q73	RES, 1K
R9020	NOTPLACED	NOTPLACED
R9050	0613952R01	RES, 10K
R9051	0613952R01	RES, 10K
R9052	0613952Q65	RES, 470
R9053	0613952H47	RES, 82
R9054	0613952H47	RES, 82
S9000	4086470Z01	SWITCH
S9001	4015186H01	SWITCH
S9002	4015203H01	SWITCH
SH9000	NOTPLACED	NOTPLACED
SH9001	NOTPLACED	NOTPLACED
T400	2515396H01	XFMR
T401	2515396H01	XFMR
U001	5104932K08	SC51650VF
U002	5114000B59	MC74VHC1GT66
U200	5116014H01	UPC8179TK
U400	5115443H01	MAX2373
U600	5102495J14	AD9864
U700	4802246J29	ADA4743
U701	5115147H01	AD8566
U702	5115022H01	LM50
U1000	5102495J13	OMAP1710
U1005	5116324H01	ADG3304
U1006	5115001H02	NL27WZU04
U2000	0104024J27	M58WR064FB
U2001	5171614M01	MT48H4M16LF
U3000	5185143E77	PWR_MNGR_BLOCK
U3002	5115616H01	LP8340
U3003	5115453H01	LMC6035ITLX
U3004	5114007A43	NL17SZ14

Circuit Ref	Motorola Part No.	Description
U3006	5115974H01	LP3990
U3007	5171395L01	TS5A23166
U3008	5115391H01	TK11100CSC
U3009	5164852H47	PCA9306
U3020	5171428L01	LTC1877
U3021	5171428L01	LTC1877
U3700	5116282H01	TPS79228
U3701	5116283H01	TPS79101
U8000	0104024J41	GSC3F/LP
U8001	5164015H55	UPC8211TK
VR9000	4866544A01	SR05
VR9001	4813979P10	MMQA5V6T1
VR9002	4813979P10	MMQA5V6T1
VR9003	4815040H01	MM3Z12VT1G
VR9004	4815040H01	MM3Z12VT1G
VR9005	4805656W76	MM5Z5V6
VR9006	4805656W76	MM5Z5V6
VR9007	4805656W76	MM5Z5V6
VR9008	4813979P10	MMQA5V6T1
VR9009	4813977C23	MMSZ5243
VR9010	4813977C23	MMSZ5243
VR9015	NOTPLACED	NOTPLACED
VR9016	NOTPLACED	NOTPLACED
VR9017	4815040H01	MM3Z12VT1G
VR9018	4815040H01	MM3Z12VT1G
VR9020	4813979P10	MMQA5V6T1
VR9021	4813979P10	MMQA5V6T1
VR9022	4813979P10	MMQA5V6T1
VR9023	4815040H01	MM3Z12VT1G
Y001	5116032H01	IVT5300B
Y1000	4809612J45	CX-91F
Y3000	4802582S80	XTAL
Y3001	4815028H01	CX-101F
Y8000	4802582S80	XTAL

## UHF1 Radio Parts List (8486716Z16)

Circuit Ref	Motorola Part No.	Description
C001	2113946D02	CAP, 1uF
C002	2113946D02	CAP, 1uF
C003	2113946K02	CAP, 0.1uF
C004	2113946K02	CAP, 0.1uF
C005	2113946K02	CAP, 0.1uF
C006	2113946K02	CAP, 0.1uF
C007	2113946K02	CAP, 0.1uF
C008	2113946K02	CAP, 0.1uF
C009	NOTPLACED	NOTPLACED
C013	2113945A02	CAP, 270PF
C014	2113945L49	CAP, 0.01uF
C015	2113945L49	CAP, 0.01uF
C016	2113945A09	CAP, 1000PF
C017	2113946K02	CAP, 0.1uF
C018	2313960B57	CAP, 10UF
C019	2113945L49	CAP, 0.01uF
C020	2313960B57	CAP, 10UF
C022	2113946K02	CAP, 0.1uF
C024	2115358H17	CAP, 0.22uF
C025	2115358H07	CAP, .033uF
C026	2115358H15	CAP, 0.15uF
C027	2115358H25	CAP, 1uF
C028	2115358H01	CAP, .01uF
C031	2113944A40	CAP, 100pF
C032	2113944A17	CAP, 4.7pF
C033	2113944A05	CAP, 1.5pF
C035	2113946K02	CAP, 0.1uF
C036	2113946K02	CAP, 0.1uF
C037	2115153H08	CAP, 1.5pF
C038	NOTPLACED	NOTPLACED
C039	2113946D02	CAP, 1uF
C200	2113944A40	CAP, 100pF
C201	2115153H27	CAP, 10pF
C202	2115153H25	CAP, 8.2pF
C203	2115153H23	CAP, 6.8pF
C204	2115153H34	CAP, 11pF
C205	2115153H39	CAP, 18pF
C206	2115153H52	CAP, 62pF
C207	2115153H36	CAP, 13pF
C208	2113944A40	CAP, 100pF
C209	2113946B04	CAP, 0.1uF
C210	2113944A40	CAP, 100pF
C211	2113946B04	CAP, 0.1uF
C212	2115153H08	CAP, 1.5pF
C213	2115153H13	CAP, 2.7pF

Circuit Ref	Motorola Part No.	Description	Circuit Ref	Motorola Part No.	Description	Circuit Ref	Motorola Part No.	Description	Circuit Ref	Motorola Part No.	Description
C214	2113944A40	CAP, 100pF	C419	2113944A21	CAP, 6.8pF	C618	2113945C18	CAP, .012uF	C728	2113944A08	CAP, 2pF
C215	2113944A40	CAP, 100pF	C420	2113944A21	CAP, 6.8pF	C619	2115358H13	CAP, 0.1uF	C729	NOTPLACED	NOTPLACED
C216	2115153H12	CAP, 2.4pF	C421	2113944M07	CAP, 3.6pF	C620	2113946B04	CAP, 0.1uF	C730	2113946K02	CAP, 0.1uF
C217	2115153H26	CAP, 9.1pF	C422	2113944A20	CAP, 6.2pF	C621	2113945B02	CAP, .01uF	C731	2113945D04	CAP, 0.1uF
C219	2113944A40	CAP, 100pF	C423	2113944A21	CAP, 6.8pF	C622	2113944C89	CAP, 200pF	C732	2116173H17	CAP, 24pF
C220	2115153H21	CAP, 5.6pF	C424	2113944A40	CAP, 100pF	C623	2113944A40	CAP, 100pF	C733	2116636H04	CAP, 20pF
C221	2115153H21	CAP, 5.6pF	C425	2113944A20	CAP, 6.2pF	C624	2113944A40	CAP, 100pF	C734	2116001H01	CAP, 13pF
C222	2115153H15	CAP, 3.3pF	C426	0613952R66	RES, 0	C625	2113945A11	CAP, 2200PF	C735	2113944C37	CAP, 39pF
C223	NOTPLACED	NOTPLACED	C427	2113944A85	CAP, 51pF	C626	2113945D02	CAP, .047uF	C736	2113945A02	CAP, 270PF
C224	2115153H39	CAP, 18pF	C428	2113944A78	CAP, 13pF	C627	2113944A40	CAP, 100pF	C737	2113945A09	CAP, 1000PF
C225	2115153H51	CAP, 56pF	C429	2113944A23	CAP, 8.2pF	C628	2113945B02	CAP, .01uF	C738	2113945A02	CAP, 270PF
C226	2115153H36	CAP, 13pF	C430	2113944A26	CAP, 12pF	C629	2113944A40	CAP, 100pF	C739	2113946K02	CAP, 0.1uF
C227	2113944A40	CAP, 100pF	C431	2113944A23	CAP, 8.2pF	C630	2113945B02	CAP, .01uF	C740	NOTPLACED	NOTPLACED
C228	2113946B04	CAP, 0.1uF	C432	2113944A78	CAP, 13pF	C631	2113945B02	CAP, .01uF	C798	2116173H17	CAP, 24pF
C229	2113944A40	CAP, 100pF	C433	2113944A21	CAP, 6.8pF	C632	2113946B04	CAP, 0.1uF	C799	2116636H04	CAP, 20pF
C230	2113946B04	CAP, 0.1uF	C434	2113946K02	CAP, 0.1uF	C633	2113946B04	CAP, 0.1uF	C900	2113945A02	CAP, 270PF
C231	2115153H10	CAP, 2.0pF	C435	2113944A40	CAP, 100pF	C634	2113945B02	CAP, .01uF	C903	2113944C14	CAP, 2.2pF
C232	2115153H03	CAP, 1.0pF	C436	2113946K02	CAP, 0.1uF	C635	2113944A85	CAP, 51pF	C904	2113944C41	CAP, 68pF
C233	2113944A40	CAP, 100pF	C437	2113945B02	CAP, .01uF	C636	2113946B04	CAP, 0.1uF	C905	2113944C45	CAP, 100pF
C234	2113944A40	CAP, 100pF	C438	2113946K02	CAP, 0.1uF	C637	2113946G04	CAP, 0.68uF	C906	2113944C71	CAP, 5.6pF
C235	2113944A40	CAP, 100pF	C439	2113945A02	CAP, 270PF	C638	2115153H38	CAP, 16pF	C907	2113944C73	CAP, 6.8pF
C236	2115153H10	CAP, 2.0pF	C440	2113944A11	CAP, 2.7pF	C639	2113946B04	CAP, 0.1uF	C908	2113944C71	CAP, 5.6pF
C237	2115153H18	CAP, 4.3pF	C441	2113944A16	CAP, 4.3pF	C700	2316410H03	CAP, 10uF	C909	2113944C41	CAP, 68pF
C238	2113944A40	CAP, 100pF	C442	2113945B02	CAP, .01uF	C703	2113945A02	CAP, 270PF	C910	2113944M30	CAP, 33pF
C239	2113944A40	CAP, 100pF	C444	2113946K02	CAP, 0.1uF	C704	2113945A02	CAP, 270PF	C911	2113944C18	CAP, 3.3pF
C240	2113944A40	CAP, 100pF	C445	NOTPLACED	NOTPLACED	C705	2113946B02	CAP, 0.047uF	C912	2113944C22	CAP, 4.7pF
C241	NOTPLACED	NOTPLACED	C446	2113944A77	CAP, 11pF	C706	2113945A02	CAP, 270PF	C913	2113944C45	CAP, 100pF
C243	2115153H34	CAP, 11pF	C447	2113946S35	CAP, 1uF	C708	2113945A02	CAP, 270PF	C914	2113945A02	CAP, 270PF
C400	2113944A73	CAP, 8pF	C448	2113946S35	CAP, 1uF	C709	2113945B02	CAP, .01uF	C915	2113944C22	CAP, 4.7pF
C401	2113944A21	CAP, 6.8pF	C601	2113945B02	CAP, .01uF	C710	2113945B02	CAP, .01uF	C916	2113944C18	CAP, 3.3pF
C402	2113944M07	CAP, 3.6pF	C602	2113946B04	CAP, 0.1uF	C711	2113945A02	CAP, 270PF	C917	2113944M30	CAP, 33pF
C403	2113944A40	CAP, 100pF	C603	2113946B04	CAP, 0.1uF	C712	2113945B04	CAP, .022uF	C918	2113944C45	CAP, 100pF
C404	2113944A21	CAP, 6.8pF	C604	2113945B02	CAP, .01uF	C714	2113945A02	CAP, 270PF	C920	2113944C28	CAP, 8.2pF
C405	2113944A21	CAP, 6.8pF	C605	2113945B02	CAP, .01uF	C715	2113945A02	CAP, 270PF	C921	2113944C17	CAP, 3pF
C407	2113944A61	CAP, 0.5pF	C606	2113944A32	CAP, 39pF	C716	2113944A28	CAP, 18pF	C922	NOTPLACED	NOTPLACED
C408	NOTPLACED	NOTPLACED	C607	2113945B02	CAP, .01uF	C717	2113945A02	CAP, 270PF	C923	NOTPLACED	NOTPLACED
C409	2113946B04	CAP, 0.1uF	C608	2113945D02	CAP, .047uF	C718	2113946K02	CAP, 0.1uF	C924	2113944A11	CAP, 2.7pF
C410	2113945A02	CAP, 270PF	C609	2115153H44	CAP, 30pF	C719	NOTPLACED	NOTPLACED	C925	2113944V07	CAP, 1.5pF
C411	2113945B02	CAP, .01uF	C610	2115153H44	CAP, 30pF	C720	2113945B04	CAP, .022uF	C926	2113944A15	CAP, 3.9pF
C412	2113945A02	CAP, 270PF	C611	NOTPLACED	NOTPLACED	C721	2113945D04	CAP, 0.1uF	C927	2113945A02	CAP, 270PF
C413	2113944A16	CAP, 4.3pF	C612	2113944A25	CAP, 10pF	C722	2113944A17	CAP, 4.7pF	C1000	2113944A40	CAP, 100pF
C414	2113944A24	CAP, 9.1pF	C613	2113945G91	CAP, 0.1uF	C723	NOTPLACED	NOTPLACED	C1001	2113946K02	CAP, 0.1uF
C415	2113944A24	CAP, 9.1pF	C614	2113946E02	CAP, 1.0UF	C724	2113945A02	CAP, 270PF	C1002	2113946K02	CAP, 0.1uF
C416	2113946K02	CAP, 0.1uF	C615	2113946B04	CAP, 0.1uF	C725	NOTPLACED	NOTPLACED	C1003	2113944A40	CAP, 100pF
C417	2113945A02	CAP, 270PF	C616	2113944A32	CAP, 39pF	C726	2113944A82	CAP, 30pF	C1004	2113944A40	CAP, 100pF
C418	2113944A16	CAP, 4.3pF	C617	2113945L37	CAP, 3300pF	C727	2113944A82	CAP, 30pF	C1005	2113946K02	CAP, 0.1uF

Circuit Ref	Motorola Part No.	Description
C1006	2113946K02	CAP, 0.1uF
C1007	2113944A40	CAP, 100pF
C1008	2113944A40	CAP, 100pF
C1009	2113946K02	CAP, 0.1uF
C1010	2113946K02	CAP, 0.1uF
C1011	2113944A40	CAP, 100pF
C1012	2113946K02	CAP, 0.1uF
C1013	2113946K02	CAP, 0.1uF
C1014	2113946K02	CAP, 0.1uF
C1015	2113946K02	CAP, 0.1uF
C1016	2113946B04	CAP, 0.1uF
C1017	2113946E02	CAP, 1.0UF
C1018	2113944A28	CAP, 18pF
C1019	2113944A28	CAP, 18pF
C1028	2113946K02	CAP, 0.1uF
C1029	2113946K02	CAP, 0.1uF
C1030	2113944A28	CAP, 18pF
C1031	2113946K02	CAP, 0.1uF
C1032	2113945B02	CAP, .01uF
C1033	2113946K02	CAP, 0.1uF
C1044	2113946B04	CAP, 0.1uF
C2000	2113944A40	CAP, 100pF
C2001	2113945B02	CAP, .01uF
C2002	2113946K02	CAP, 0.1uF
C2003	2113946K02	CAP, 0.1uF
C2004	2113944A40	CAP, 100pF
C2005	2113945B02	CAP, .01uF
C2006	2113946K02	CAP, 0.1uF
C2007	2113946K02	CAP, 0.1uF
C3000	2113944A78	CAP, 13pF
C3001	2113944A78	CAP, 13pF
C3002	2113945D04	CAP, 0.1uF
C3003	2113946D05	CAP, 2.2uF
C3004	2113946D05	CAP, 2.2uF
C3005	2113945A09	CAP, 1000PF
C3010	2113946D05	CAP, 2.2uF
C3011	2113946A01	CAP, 0.015uF
C3014	2113946D05	CAP, 2.2uF
C3015	2115153H57	CAP, 100pF
C3016	2113946D05	CAP, 2.2uF
C3017	2113945B02	CAP, .01uF
C3018	2113946D05	CAP, 2.2uF
C3019	2113946D02	CAP, 1uF
C3024	2113946D02	CAP, 1uF
C3025	2113946K02	CAP, 0.1uF
C3026	2113946K02	CAP, 0.1uF

Circuit Ref	Motorola Part No.	Description
C3028	2113946D05	CAP, 2.2uF
C3031	2113946D02	CAP, 1uF
C3034	2113946B04	CAP, 0.1uF
C3035	2113946B04	CAP, 0.1uF
C3036	2113946B04	CAP, 0.1uF
C3037	2113944A40	CAP, 100pF
C3038	2113944A40	CAP, 100pF
C3039	2113946F03	CAP, 4.7uF
C3045	2113946F03	CAP, 4.7uF
C3047	2113946D02	CAP, 1uF
C3048	2113946D02	CAP, 1uF
C3049	2113945C25	CAP, .033uF
C3050	2113945C25	CAP, .033uF
C3051	2113944A40	CAP, 100pF
C3060	2113944A80	CAP, 20pF
C3061	2113944A80	CAP, 20pF
C3062	2113946K02	CAP, 0.1uF
C3063	2113946K02	CAP, 0.1uF
C3067	2113946D02	CAP, 1uF
C3070	2113944A25	CAP, 10pF
C3074	2113946D02	CAP, 1uF
C3079	2113946F03	CAP, 4.7uF
C3080	NOTPLACED	NOTPLACED
C3081	2113946F03	CAP, 4.7uF
C3082	2113946B04	CAP, 0.1uF
C3083	2113946B04	CAP, 0.1uF
C3084	2113946K03	CAP, 0.22uF
C3090	2113955D37	CAP, 10uF
C3091	2113955D37	CAP, 10uF
C3093	2113946N03	CAP, 2.2uF
C3094	2113946B04	CAP, 0.1uF
C3095	2113946B04	CAP, 0.1uF
C3097	2113944A31	CAP, 33pF
C3098	2113944A31	CAP, 33pF
C3099	2113944A31	CAP, 33pF
C3100	2113944A31	CAP, 33pF
C3101	2113946D02	CAP, 1uF
C3102	2113946D02	CAP, 1uF
C3200	2113945Y02	CAP, 0.01uF
C3201	2113955D37	CAP, 10uF
C3202	2371572L02	CAP, 68uF
C3203	2113945B02	CAP, .01uF
C3204	2115153H40	CAP, 20pF
C3205	2113944A44	CAP, 220pF
C3206	2113945Y02	CAP, 0.01uF
C3207	2113955D37	CAP, 10uF

Circuit Ref	Motorola Part No.	Description
C3208	2113946K03	CAP, 0.22uF
C3209	2371572L01	CAP, 47uF
C3210	2113945B02	CAP, .01uF
C3211	2115153H40	CAP, 20pF
C3212	2113944A44	CAP, 220pF
C3500	2113946F03	CAP, 4.7uF
C3700	2113946D02	CAP, 1uF
C3701	2113945B02	CAP, .01uF
C3702	2113946D05	CAP, 2.2uF
C3703	2113946D02	CAP, 1uF
C3704	2113944A30	CAP, 27pF
C3705	2113945B02	CAP, .01uF
C3706	2113945A05	CAP, 470PF
C3707	2113946D05	CAP, 2.2uF
C3800	2113945D04	CAP, 0.1uF
C3805	2113946K03	CAP, 0.22uF
C3999	2113945B02	CAP, .01uF
C8000	2113946F05	CAP, 10uF
C8001	2113944A28	CAP, 18pF
C8002	2113944A52	CAP, 1000pF
C8003	2113946F05	CAP, 10uF
C8004	2113944A28	CAP, 18pF
C8005	NOTPLACED	NOTPLACED
C8006	NOTPLACED	NOTPLACED
C8013	2113944A08	CAP, 2pF
C8014	2113944A62	CAP, 0.75pF
C8015	2113946K02	CAP, 0.1uF
C8016	2113945A02	CAP, 270PF
C8017	2113944A28	CAP, 18pF
C8018	2113944A28	CAP, 18pF
C8019	2113944A11	CAP, 2.7pF
C8020	2113944A52	CAP, 1000pF
C8021	2113946K02	CAP, 0.1uF
C8022	2113946D05	CAP, 2.2uF
C8023	2113945B02	CAP, .01uF
C8029	2113944A52	CAP, 1000pF
C8030	2113944A28	CAP, 18pF
C8031	2113946D05	CAP, 2.2uF
C8032	2113945B02	CAP, .01uF
C8033	2113944A28	CAP, 18pF
C8034	2113944A28	CAP, 18pF
C8035	2113944A31	CAP, 33pF
C8036	2113944A52	CAP, 1000pF
C9000	2113944A40	CAP, 100pF
C9001	2113944A40	CAP, 100pF
C9002	2113944A40	CAP, 100pF

Circuit Ref	Motorola Part No.	Description
C9003	2113944A40	CAP, 100pF
C9004	2113944A40	CAP, 100pF
C9005	2113944A40	CAP, 100pF
C9006	2113944A40	CAP, 100pF
C9007	2113944A40	CAP, 100pF
C9008	2113944A40	CAP, 100pF
C9009	2113944A40	CAP, 100pF
C9010	2113944A40	CAP, 100pF
C9011	2113944A40	CAP, 100pF
C9012	2113944A40	CAP, 100pF
C9013	2113944A40	CAP, 100pF
C9014	2113944C45	CAP, 100pF
C9015	2113944A40	CAP, 100pF
C9016	2113944A40	CAP, 100pF
C9017	2113944A40	CAP, 100pF
C9018	2113944A40	CAP, 100pF
C9019	2113944A40	CAP, 100pF
C9020	2113944A40	CAP, 100pF
C9021	2113944A40	CAP, 100pF
C9022	2113944A40	CAP, 100pF
C9023	2113944A40	CAP, 100pF
C9024	2113944A40	CAP, 100pF
C9025	2113944A40	CAP, 100pF
C9026	2113944A40	CAP, 100pF
C9027	2113944A40	CAP, 100pF
C9028	2113944A40	CAP, 100pF
C9029	2113944A40	CAP, 100pF
C9030	2113944A17	CAP, 4.7pF
C9031	2113944A17	CAP, 4.7pF
C9032	2113944A17	CAP, 4.7pF
C9033	2113944A40	CAP, 100pF
C9038	2113944A40	CAP, 100pF
C9039	2113944C45	CAP, 100pF
C9040	2113944A40	CAP, 100pF
C9041	2113944A40	CAP, 100pF
C9042	2113944A40	CAP, 100pF
C9043	2113944A40	CAP, 100pF
C9044	2113944A40	CAP, 100pF
C9045	2113944A40	CAP, 100pF
C9046	2113944A40	CAP, 100pF
C9047	2113944A40	CAP, 100pF
C9048	2113944A40	CAP, 100pF
C9049	2113944A40	CAP, 100pF
C9050	2113944A40	CAP, 100pF
C9051	NOTPLACED	NOTPLACED
C9053	NOTPLACED	NOTPLACED

Circuit Ref	Motorola Part No.	Description	Circuit Ref	Motorola Part No.	Description	Circuit Ref	Motorola Part No.	Description	Circuit Ref	Motorola Part No.	Description
C9055	NOTPLACED	NOTPLACED	E601	2480640Z01	BK1005HM471	L214	2415429H47	IDCTR, 390nH	L911	2471912M04	IDCTR, 16nH
C9057	NOTPLACED	NOTPLACED	E602	2480640Z01	BK1005HM471	L215	2415429H27	IDCTR, 36nH	L912	2414017P08	IDCTR, 3.9nH
C9058	2113944A40	CAP, 100pF	E701	7686949J14	BLM21PG221SN1	L217	2415347H01	IDCTR, 1UH	L913	2414017P10	IDCTR, 5.6nH
C9059	2113944A40	CAP, 100pF	E3030	2409134J04	BLM18BD601SN1	L218	2415429H31	IDCTR, 51nH	L3003	2464675H01	IDCTR, 560nH
C9060	2113944A40	CAP, 100pF	E3031	2409134J04	BLM18BD601SN1	L400	2471912M04	IDCTR, 16nH	L3004	2464675H01	IDCTR, 560nH
C9061	2113944A40	CAP, 100pF	E3032	2409134J04	BLM18BD601SN1	L401	2471912M04	IDCTR, 16nH	L3020	2489846Y06	IDCTR, 10uH
C9062	2113944A40	CAP, 100pF	E3033	2409134J04	BLM18BD601SN1	L402	2415429H35	IDCTR, 82nH	L3021	2489846Y06	IDCTR, 10uH
C9063	2113944A40	CAP, 100pF	E3700	7686949J08	IDCTR	L403	2415427H34	IDCTR, 27nH	L3022	2464675H01	IDCTR, 560nH
C9064	2113944A40	CAP, 100pF	E3701	7686949J08	IDCTR	L404	2415427H29	IDCTR, 19nH	L8001	2414017P10	IDCTR, 5.6nH
C9065	2113944C45	CAP, 100pF	E3702	7686949J08	IDCTR	L405	2415429H25	IDCTR, 30nH	L8002	2414017P17	IDCTR, 22nH
C9066	2113944A40	CAP, 100pF	E3703	7686949J08	IDCTR	L406	2415429H10	IDCTR, 6.8nH	L8003	2414017P13	IDCTR, 10nH
C9067	NOTPLACED	NOTPLACED	E3704	7686949J08	IDCTR	L407	2415427H16	IDCTR, 7.5nH	L8004	2414017P10	IDCTR, 5.6nH
C9068	NOTPLACED	NOTPLACED	E3705	7686949J08	IDCTR	L408	2471912M04	IDCTR, 16nH	L9000	2415429H45	IDCTR, 270nH
C9069	NOTPLACED	NOTPLACED	E8000	7686949J08	IDCTR	L409	2471912M04	IDCTR, 16nH	L9001	2415429H45	IDCTR, 270nH
C9073	NOTPLACED	NOTPLACED	E8001	7686949J08	IDCTR	L410	NOTPLACED	NOTPLACED	L9007	2415429H45	IDCTR, 270nH
C9074	NOTPLACED	NOTPLACED	E8002	NOTPLACED	NOTPLACED	L411	2415429H35	IDCTR, 82nH	L9008	2415429H45	IDCTR, 270nH
CR900	4815897H01	UPP9401E3	E8003	7686949J08	IDCTR	L412	2414017N29	IDCTR, 270nH	M1	4271321L01	RETAINER
CR901	4815897H01	UPP9401E3	E8004	7686949J08	IDCTR	L413	2415429H23	IDCTR, 24nH	M2	4271321L01	RETAINER
CR902	4815897H01	UPP9401E3	E8005	7686949J08	IDCTR	L414	2415429H23	IDCTR, 24nH	M700	2615193H01	HEATSINK
CR903	4815897H01	UPP9401E3	E8006	7686949J08	IDCTR	L415	2415429H46	IDCTR, 330nH	M9000	4371105L01	BRD_SPACER
D001	4815059H01	1SV325	E9000	7686949J14	BLM21PG221SN1	L416	2414017N29	IDCTR, 270nH	M9001	4371105L01	BRD_SPACER
D200	4815096H01	1SV305	E9001	2480640Z01	BK1005HM471	L417	2415718H37	IDCTR, 820nH	M9002	4371105L01	BRD_SPACER
D201	4815096H01	1SV305	E9006	NOTPLACED	NOTPLACED	L418	2415429H47	IDCTR, 390nH	M9003	NOTPLACED	NOTPLACED
D202	4815096H01	1SV305	E9007	NOTPLACED	NOTPLACED	L419	2414032F42	IDCTR, 470nH	M9004	NOTPLACED	NOTPLACED
D203	4815096H01	1SV305	F9000	6515076H01	FUSE	L420	2414032F42	IDCTR, 470nH	M9005	3915478H01	CONTACT
D204	4815096H01	1SV305	FL400	9116854H01	D73312GQ1	L600	2466505A01	IDCTR, 10uH	M9006	3915478H01	CONTACT
D205	4815096H01	1SV305	FL8000	9180310L38	B39162-B7829-C710	L601	2466505A01	IDCTR, 10uH	M9007	0915184H01	CONTACT
D206	4815096H01	1SV305	FL8001	9180310L38	B39162-B7829-C710	L602	2415569H01	IDCTR, 4.7uH	P900	2815696H01	CONN_P
D207	4815096H01	1SV305	FL9000	2515003H02	DLP11SN201HL2	L603	2415718H37	IDCTR, 820nH	P9000	2887818K02	CONN_P
D400	4885055Y01	1SV229	J9001	0970312L02	CONN_J	L604	2414015B26	IDCTR, 330nH	Q002	4815359H01	BCV62
D401	4885055Y01	1SV229	L002	2415429H26	IDCTR, 33nH	L605	2415569H01	IDCTR, 4.7uH	Q003	4816134H01	DTC114YM
D402	4813974A19	MMBD352	L003	NOTPLACED	NOTPLACED	L700	2414017N25	IDCTR, 120nH	Q200	4815029H01	NE851M03
D403	4885055Y01	1SV229	L200	2415429H47	IDCTR, 390nH	L701	2414017N25	IDCTR, 120nH	Q202	4815055H01	UMC5NT2G
D404	4885055Y01	1SV229	L201	2415427H29	IDCTR, 19nH	L702	2415429H14	IDCTR, 9.5nH	Q203	4815055H01	UMC5NT2G
D405	4815923H01	HSMS2829	L202	2416540H13	IDCTR, 12nH	L703	2414017N25	IDCTR, 120nH	Q204	4885061Y01	NE68519
D600	4815096H01	1SV305	L203	2415429H47	IDCTR, 390nH	L706	2460591E64	IDCTR, 30.51nH	Q205	4885061Y01	NE68519
D601	4815096H01	1SV305	L204	2415429H47	IDCTR, 390nH	L707	2471406L02	IDCTR, 10nH	Q206	4815055H01	UMC5NT2G
D3000	4813978A25	BAT54HT1G	L205	2415429H47	IDCTR, 390nH	L902	2414017N25	IDCTR, 120nH	Q207	4815055H01	UMC5NT2G
D9000	4805729G49	BRPY1204W	L206	2415429H47	IDCTR, 390nH	L903	2414017N25	IDCTR, 120nH	Q208	4885061Y01	NE68519
E001	2480640Z01	BK1005HM471	L207	2415427H42	IDCTR, 51nH	L904	2471912M04	IDCTR, 16nH	Q400	4816531H01	QSBT_0038
E002	2480640Z01	BK1005HM471	L208	2415429H47	IDCTR, 390nH	L905	2471912M04	IDCTR, 16nH	Q401	4816531H01	QSBT_0038
E003	2480640Z01	BK1005HM471	L209	2415427H26	IDCTR, 15nH	L906	2471912M03	IDCTR, 18.9nH	Q600	4813973A04	73A04
E004	2480640Z01	BK1005HM471	L210	2415428H07	IDCTR, 8.8nH	L907	2415429H35	IDCTR, 82nH	Q601	4815055H01	UMC5NT2G
E400	2480640Z01	BK1005HM471	L211	2415429H47	IDCTR, 390nH	L908	2471912M03	IDCTR, 18.9nH	Q602	4885061Y01	NE68519
E401	2480640Z01	BK1005HM471	L212	2415429H47	IDCTR, 390nH	L909	2471912M04	IDCTR, 16nH	Q701	4815055H01	UMC5NT2G
E600	2480640Z01	BK1005HM471	L213	2415429H47	IDCTR, 390nH	L910	2471912M04	IDCTR, 16nH	Q702	4815055H01	UMC5NT2G

Circuit Ref	Motorola Part No.	Description
Q703	4816547H01	RD01MUS1
Q704	4816548H01	RD07MVS1
Q900	4815055H01	UMC5NT2G
Q901	4815055H01	UMC5NT2G
Q3000	4805585Q23	SI8401DB
Q3001	4805585Q23	SI8401DB
Q3002	4816134H01	DTC114YM
Q3003	4813970A62	NTHS5441T1
Q3005	4805585Q23	SI8401DB
Q3006	4816134H01	DTC114YM
Q3010	4805585Q23	SI8401DB
Q9000	4813973M07	MMBT3904
Q9001	4815154H01	IMXFT110
Q9003	4813973M07	MMBT3904
R006	0613952Q93	RES, 6.8k
R007	0613952R01	RES, 10k
R008	0613952Q25	RES, 10
R010	0613952Q93	RES, 6.8k
R011	0613952Q49	RES, 100
R012	0613952R25	RES, 100k
R013	0613952Q46	RES, 75
R014	0613952Q42	RES, 51
R016	0613952Q33	RES, 22
R017	0613952Q64	RES, 430
R018	0613952Q96	RES, 9.1k
R019	0613952R01	RES, 10k
R020	0613952Q55	RES, 180
R022	0613952Q36	RES, 30
R025	0613952R13	RES, 33k
R026	0613952R01	RES, 10k
R027	0613952R66	RES, 0
R052	NOTPLACED	NOTPLACED
R053	0613952R66	RES, 0
R054	0613952R66	RES, 0
R200	0613952Q95	RES, 8.2k
R201	0613952Q91	RES, 5.6k
R202	0613952Q49	RES, 100
R203	0613952Q51	RES, 120
R205	0613952Q91	RES, 5.6k
R207	NOTPLACED	NOTPLACED
R208	0613952Q95	RES, 8.2k
R209	0613952Q91	RES, 5.6k
R210	0613952Q49	RES, 100
R211	0613952Q50	RES, 110
R212	0613952Q91	RES, 5.6k
R213	0613952Q94	RES, 7.5k

Circuit Ref	Motorola Part No.	Description
R214	0613952Q58	RES, 240
R215	NOTPLACED	NOTPLACED
R216	0613952Q57	RES, 220
R217	0613952Q95	RES, 8.2k
R218	0613952Q66	RES, 510
R220	0613952Q60	RES, 300
R221	0613952Q31	RES, 18
R222	0613952Q60	RES, 300
R223	0613952R66	RES, 0
R224	0613952R66	RES, 0
R400	0613952R01	RES, 10k
R402	0613952R66	RES, 0
R403	0613952Q65	RES, 470
R404	0613952Q72	RES, 910
R405	0613952R25	RES, 100k
R406	0613952R25	RES, 100k
R407	0613952Q42	RES, 51
R409	0613952R05	RES, 15k
R410	0613952Q83	RES, 2.7k
R411	0613952R19	RES, 56k
R412	0613952Q63	RES, 390
R413	0613952Q77	RES, 1.5k
R416	0613952R66	RES, 0
R417	0613952R66	RES, 0
R419	0613952R66	RES, 0
R420	0613952Q95	RES, 8.2k
R421	0613952Q49	RES, 100
R422	0613952R01	RES, 10k
R424	0613952R01	RES, 10k
R425	0613952R66	RES, 0
R497	NOTPLACED	NOTPLACED
R499	0613952R01	RES, 10k
R600	0613952R01	RES, 10k
R601	0613952Q55	RES, 180
R602	0613952Q61	RES, 330
R603	0613952R05	RES, 15k
R604	0613952Q90	RES, 5.1k
R605	0613952Q90	RES, 5.1k
R606	0613952Q75	RES, 1.2k
R607	0613952R25	RES, 100k
R609	0613952R01	RES, 10k
R610	0613952R01	RES, 10k
R611	0613952Q63	RES, 390
R612	0613952R08	RES, 20k
R696	0613952R66	RES, 0
R697	0613952R66	RES, 0

Circuit Ref	Motorola Part No.	Description
R698	0613952R01	RES, 10k
R699	0613952R25	RES, 100k
R700	0615043C01	RES, 0.1
R701	NOTPLACED	NOTPLACED
R702	0613952Z80	RES, 330k
R703	0613952Z80	RES, 330k
R704	NOTPLACED	NOTPLACED
R705	0613952R56	RES, 2M
R706	0613952R56	RES, 2M
R707	0613952Q81	RES, 2.2k
R708	0613952Q90	RES, 5.1k
R709	0613952R66	RES, 0
R710	NOTPLACED	NOTPLACED
R711	0613952R08	RES, 20k
R712	0613952R66	RES, 0
R713	NOTPLACED	NOTPLACED
R714	0613952Q59	RES, 270
R717	0613958H33	RES, 22
R718	0613952Q56	RES, 200
R719	0613952Q40	RES, 43
R720	0613952H56	RES, 200
R721	0613952G67	RES, 0
R722	0613952G67	RES, 1
R723	0613952Q40	RES, 44
R725	0613952Q85	RES, 3.3k
R726	0613952R66	RES, 0
R727	NOTPLACED	NOTPLACED
R728	0613952Q60	RES, 300
R729	0613952Q33	RES, 22
R730	0613952Q60	RES, 300
R731	NOTPLACED	NOTPLACED
R732	0613952R66	RES, 0
R733	0613952R17	RES, 47k
R902	0613952H47	RES, 82
R903	0613952H47	RES, 83
R904	0613952H47	RES, 84
R905	0613952H47	RES, 85
R906	0613952R01	RES, 10k
R907	0613952R01	RES, 10k
R1000	0613952Q25	RES, 10
R1001	0613952R01	RES, 10k
R1002	0613952J73	RES, 10M
R1005	0613952Q89	RES, 4.7k
R1006	0613952R01	RES, 10k
R1013	NOTPLACED	NOTPLACED
R1014	0613952R66	RES, 0

Circuit Ref	Motorola Part No.	Description
R1015	NOTPLACED	NOTPLACED
R1016	0613952R66	RES, 0
R1017	NOTPLACED	NOTPLACED
R1018	0613952R66	RES, 0
R1019	0613952Q18	RES, 5.1k
R1020	0613952R66	RES, 0
R1021	0613952R66	RES, 0
R1022	NOTPLACED	NOTPLACED
R1023	0613952R66	RES, 0
R1025	0613952R01	RES, 10k
R1026	0613952R17	RES, 47k
R1027	NOTPLACED	NOTPLACED
R1028	0613952R66	RES, 0
R1034	0613952R01	RES, 10k
R1035	NOTPLACED	NOTPLACED
R1036	0613952R01	RES, 10k
R1041	0613952Q73	RES, 1k
R1045	0613952R01	RES, 10k
R1046	NOTPLACED	NOTPLACED
R1047	0613952R66	RES, 0
R1048	0613952R66	RES, 0
R1051	0613952R66	RES, 0
R1052	0613952R66	RES, 0
R1053	0613952Q89	RES, 4.7k
R1054	0613952Q89	RES, 4.7k
R1055	NOTPLACED	NOTPLACED
R1060	0613952Q25	RES, 10
R1061	0613952R66	RES, 0
R1062	0613952R66	RES, 0
R1063	NOTPLACED	NOTPLACED
R1065	0613952R66	RES, 0
R1067	0613952R03	RES, 12k
R1068	0613952R10	RES, 24k
R1069	0613952R66	RES, 0
R1070	0613952R01	RES, 10k
R1072	0613952R66	RES, 0
R2000	0613952R01	RES, 10k
R2004	0613952R66	RES, 0
R2005	0613952R01	RES, 10k
R2006	0613952R01	RES, 10k
R2007	0613952R01	RES, 10k
R2008	0613952R01	RES, 10k
R2009	0613952R01	RES, 10k
R2010	0613952R01	RES, 10k
R2011	0613952R66	RES, 0
R2012	0613952R01	RES, 10k



Circuit Ref	Motorola Part No.	Description
R2013	0613952R01	RES, 10k
R3004	NOTPLACED	NOTPLACED
R3005	0613952N01	RES, 10k
R3006	NOTPLACED	NOTPLACED
R3007	0613952N01	RES, 10k
R3008	NOTPLACED	NOTPLACED
R3009	0613952N01	RES, 10k
R3010	0613952N01	RES, 10k
R3011	0613952Q81	RES, 2.2k
R3012	0613952Q59	RES, 270
R3013	0613952Q81	RES, 2.2k
R3014	0613952M30	RES, 2k
R3016	0616416H01	RES, 0.1
R3017	0613952P25	RES, 178k
R3018	0613952R18	RES, 51k
R3020	0613952Q34	RES, 24
R3021	0613952Q34	RES, 24
R3023	0613952R17	RES, 47k
R3024	0613952Z67	RES, 51k
R3025	0613952Q49	RES, 100
R3026	0613952Q59	RES, 270
R3027	0613952Q59	RES, 270
R3028	0613952N69	RES, 51.1k
R3029	0613952N60	RES, 41.2k
R3030	0686135Z02	RES, 0.2
R3031	0613952R66	RES, 0
R3032	0613952Q95	RES, 8.2k
R3033	0613952R05	RES, 15k
R3034	0613952Q95	RES, 8.2k
R3035	0613952R05	RES, 15k
R3036	0613952N01	RES, 10k
R3037	0613952Q77	RES, 1.5k
R3038	NOTPLACED	NOTPLACED
R3040	0613952Q81	RES, 2.2k
R3041	0613952N01	RES, 10k
R3043	0613952R32	RES, 200k
R3050	0613952R25	RES, 100k
R3051	0613952Q89	RES, 4.7k
R3053	0613952Z58	RES, 22k
R3054	0613952Z58	RES, 22k
R3055	0613952R25	RES, 100k
R3056	NOTPLACED	NOTPLACED
R3060	0613952M30	RES, 2k
R3070	0613952R33	RES, 220k
R3071	0613952R33	RES, 220k
R3072	0613952R56	RES, 2M

Circuit Ref	Motorola Part No.	Description
R3073	0613952R56	RES, 2M
R3074	0613952Q73	RES, 1k
R3075	0613952N01	RES, 10k
R3088	NOTPLACED	NOTPLACED
R3098	0613952Q85	RES, 3.3k
R3100	0613952R17	RES, 47k
R3101	0613952R25	RES, 100k
R3102	0613952A30	RES, 2
R3103	0615049H16	RES, 0.70
R3200	0613952R33	RES, 220k
R3201	0613952R20	RES, 62k
R3202	0613952R33	RES, 220k
R3203	0613952R36	RES, 300k
R3500	0613952Q77	RES, 1.5k
R3501	0613952R66	RES, 0
R3700	0613952Q73	RES, 1k
R3701	0613952R01	RES, 10k
R3702	0613952N48	RES, 30.9k
R3703	0613952N38	RES, 24.3k
R3704	0613952R01	RES, 10k
R3800	0613952Q25	RES, 10
R3888	NOTPLACED	NOTPLACED
R8002	0613952R25	RES, 100k
R8003	0613952R01	RES, 10k
R8004	0613952Q70	RES, 750
R8010	0613952R05	RES, 15k
R8011	0613952R25	RES, 100k
R8012	0613952R01	RES, 10k
R8015	NOTPLACED	NOTPLACED
R8016	0613952R66	RES, 0
R8017	NOTPLACED	NOTPLACED
R8020	0613952R66	RES, 0
R8023	0613952R66	RES, 0
R8024	0613952R25	RES, 100k
R8025	0613952R66	RES, 0
R8026	0613952R25	RES, 100k
R8027	0613952R25	RES, 100k
R8028	0613952R25	RES, 100k
R8029	0613952R25	RES, 100k
R8030	0613952R01	RES, 10k
R8031	0613952R25	RES, 100k
R8032	0613952R25	RES, 100k
R8033	0613952R25	RES, 100k
R8034	0613952R01	RES, 10k
R8035	0613952R01	RES, 10k
R8036	0613952R01	RES, 10k

Circuit Ref	Motorola Part No.	Description
R8037	0613952R01	RES, 10k
R9000	0613952Q73	RES, 1k
R9001	0613952Q73	RES, 1k
R9002	0613952Q73	RES, 1k
R9003	0613952Q73	RES, 1k
R9004	0613952Q73	RES, 1k
R9005	0613952Q73	RES, 1k
R9006	0613952Q73	RES, 1k
R9007	0613952Q73	RES, 1k
R9008	0613952R17	RES, 47k
R9009	0613952R01	RES, 10k
R9010	0613952R01	RES, 10k
R9011	0613952R17	RES, 47k
R9012	0613952Q50	RES, 110
R9013	0613952Q37	RES, 33
R9014	0613952R01	RES, 10k
R9015	0613952R01	RES, 10k
R9016	0613952R01	RES, 10k
R9017	0613952R01	RES, 10k
R9018	0613952R01	RES, 10k
R9019	0613952Q73	RES, 1k
R9021	NOTPLACED	NOTPLACED
R9022	NOTPLACED	NOTPLACED
R9050	0613952R01	RES, 10k
R9051	0613952R01	RES, 10k
R9052	0613952Q65	RES, 470
R9053	0613952H47	RES, 86
R9054	0613952H47	RES, 87
S9000	4086470Z01	SWITCH
S9001	4015186H01	SWITCH
S9002	4015203H02	SWITCH
SH9000	NOTPLACED	NOTPLACED
SH9001	NOTPLACED	NOTPLACED
T400	2515396H01	XFMR
T401	2515396H01	XFMR
U001	5104932K08	SC51650VF
U002	5114000B59	MC74VHC1GT66
U200	5116014H01	UPC8179TK
U400	5115443H01	MAX2373
U600	5102495J14	AD9864
U700	4802246J29	ADA4743
U701	5115147H01	AD8566
U702	5115022H01	LM50
U1000	5102495J13	OMAP1710
U1005	5171209L01	TXB0104ZXUR
U1006	5115001H02	NL27WZU04

Circuit Ref	Motorola Part No.	Description
U2000	0104024J27	M58WR064FB
U2001	5171614M02	MT48H8M16LFB4-8
U3000	5185143E77	PWR_MNGR_BLOCK
U3002	5115616H01	LP8340
U3003	5115453H01	LMC6035ITLX
U3004	5114007A43	NL17SZ14
U3006	5115974H01	LP3990
U3007	5171395L01	TS5A23166
U3008	5115391H01	TK11100CSC
U3009	5164852H47	PCA9306
U3020	5171428L01	LTC1877
U3021	5171428L01	LTC1877
U3700	5116282H01	TPS79228
U3701	5116283H01	TPS79101
U8000	0104024J41	GSC3F/LP
U8001	5164015H55	UPC8211TK
VR9000	4866544A01	SR05
VR9001	4813979P10	MMQA5V6T1
VR9002	4813979P10	MMQA5V6T1
VR9003	4815040H01	MM3Z12VT1G
VR9004	4815040H01	MM3Z12VT1G
VR9005	4805656W76	MM5Z5V6
VR9006	4805656W76	MM5Z5V6
VR9007	4805656W76	MM5Z5V6
VR9008	4813979P10	MMQA5V6T1
VR9009	4813977C23	MMSZ5243
VR9010	4813977C23	MMSZ5243
VR9015	NOTPLACED	NOTPLACED
VR9016	NOTPLACED	NOTPLACED
VR9017	4815040H01	MM3Z12VT1G
VR9018	4815040H01	MM3Z12VT1G
VR9020	4813979P10	MMQA5V6T1
VR9021	4813979P10	MMQA5V6T1
VR9022	4813979P10	MMQA5V6T1
VR9023	4815040H01	MM3Z12VT1G
Y001	5116032H01	IVT5300B
Y1000	4809612J45	CX-91F
Y3000	4802582S80	XTAL
Y3001	4815028H01	CX-101F
Y8000	4802582S80	XTAL

† For XPR 6100, P900 is changed to 2815696H02 and the following parts are not loaded: S9000, VR9005, C9023, R906, L909, C920, L910, C903, C921, C904, L902, C905, CR900, L903, C900, Q901.

## UHF1 Radio Parts List (8486716Z23)

Circuit Ref	Motorola Part Num	Description
C001	2113946D02	CAP CER CHP 1.0UF 6.3V 10%
C002	2113946D02	CAP CER CHP 1.0UF 6.3V 10%
C003	2113946K02	CAP CER CHP 0.10UF 16V
C004	2113946K02	CAP CER CHP 0.10UF 16V
C005	2113946K02	CAP CER CHP 0.10UF 16V
C006	2113946K02	CAP CER CHP 0.10UF 16V
C007	2113946K02	CAP CER CHP 0.10UF 16V
C008	2113946K02	CAP CER CHP 0.10UF 16V
C009	NOTPLACED	64AM DUMMY PART NUMBER
C013	2113945A02	CAP CER CHP 270PF 50V 10, CAP,FXD,.01UF,+5%,-5%,50V-DC,0603,X7R,-55DEG CMIN,125DEG CMAX,P
C014	2113945L49	CAP,FXD,.01UF,+5%,-5%,50V-DC,0603,X7R,-55DEG CMIN,125DEG CMAX,P
C015	2113945L49	CAP,FXD,.01UF,+5%,-5%,50V-DC,0603,X7R,-55DEG CMIN,125DEG CMAX,P
C016	2113945A09	CAP CER CHP 1000PF 50V 10%
C017	2113946K02	CAP CER CHP 0.10UF 16V CAP,FXD,10UF,+10%,-10%,6.3V-DC,SM,-55DEG CMIN,125DEG CMAX,137MA
C018	2313960B57	CAP,FXD,.01UF,+5%,-5%,50V-DC,0603,X7R,-55DEG CMIN,125DEG CMAX,P
C019	2113945L49	CAP,FXD,10UF,+10%,-10%,6.3V-DC,SM,-55DEG CMIN,125DEG CMAX,137MA
C020	2313960B57	CAP CER CHP 0.10UF 16V
C022	2113946K02	PLASTIC FILM CAPACITORS
C024	2115358H17	PLASTIC FILM CAPACITORS
C025	2115358H07	PLASTIC FILM CAPACITORS
C026	2115358H15	PLASTIC FILM CAPACITORS
C027	2115358H25	PLASTIC FILM CAPACITORS
C028	2115358H01	PLASTIC FILM CAPACITORS
C031	2113944A40	CAP CER CHP 100.0PF 50V 5%
C032	2113944A17	CAP CER CHP 4.7PF 50V +/-0.25PF

Circuit Ref	Motorola Part Num	Description
C033	2113944A05	CAP CER CHP 1.5PF 50V +/-0.25PF
C035	2113946K02	CAP CER CHP 0.10UF 16V
C036	2113946K02	CAP CER CHP 0.10UF 16V
C037	2115153H08	CAP, CERAMIC, COG 64AM DUMMY PART NUMBER
C038	NOTPLACED	NUMBER
C039	2113946D02	CAP CER CHP 1.0UF 6.3V 10% CAP CER CHP 100.0PF 50V 5%
C200	2113944A40	CAP CER CHP 100.0PF 50V 5%
C201	2115153H27	CAP, CERAMIC, COG
C202	2115153H25	CAP, CERAMIC, COG
C203	2115153H23	CAP, CERAMIC, COG
C204	2115153H34	CAP, CERAMIC, COG
C205	2115153H39	CAP, CERAMIC, COG
C206	2115153H52	CAP, CERAMIC, COG
C207	2115153H36	CAP, CERAMIC, COG
C208	2113944A40	CAP CER CHP 100.0PF 50V 5%
C209	2113946B04	CAP CER CHP 0.10UF 10V 10% CAP CER CHP 100.0PF 50V 5%
C210	2113944A40	CAP CER CHP 0.10UF 10V 10%
C211	2113946B04	CAP CER CHP 0.10UF 10V 10%
C212	2115153H08	CAP, CERAMIC, COG
C213	2115153H13	CAP, CERAMIC, COG
C214	2113944A40	CAP CER CHP 100.0PF 50V 5% CAP CER CHP 100.0PF 50V 5%
C215	2113944A40	CAP CER CHP 100.0PF 50V 5%
C216	2115153H12	CAP, CERAMIC, COG
C217	2115153H26	CAP, CERAMIC, COG
C219	2113944A40	CAP CER CHP 100.0PF 50V 5%
C220	2115153H21	CAP, CERAMIC, COG
C221	2115153H21	CAP, CERAMIC, COG
C222	2115153H15	CAP, CERAMIC, COG
C223	NOTPLACED	64AM DUMMY PART NUMBER
C224	2115153H39	CAP, CERAMIC, COG
C225	2115153H51	CAP, CERAMIC, COG
C226	2115153H36	CAP, CERAMIC, COG
C227	2113944A40	CAP CER CHP 100.0PF 50V 5%

Circuit Ref	Motorola Part Num	Description
C228	2113946B04	CAP CER CHP 0.10UF 10V 10% CAP CER CHP 100.0PF 50V 5%
C229	2113944A40	CAP CER CHP 0.10UF 10V 10%
C230	2113946B04	CAP CER CHP 100.0PF 50V 5%
C231	2115153H10	CAP, CERAMIC, COG
C232	2115153H03	CAP, CERAMIC, COG
C233	2113944A40	CAP CER CHP 100.0PF 50V 5% CAP CER CHP 100.0PF 50V 5%
C234	2113944A40	CAP CER CHP 100.0PF 50V 5%
C235	2113944A40	CAP CER CHP 100.0PF 50V 5%
C236	2115153H10	CAP, CERAMIC, COG
C237	2115153H18	CAP, CERAMIC, COG
C238	2113944A40	CAP CER CHP 100.0PF 50V 5% CAP CER CHP 100.0PF 50V 5%
C239	2113944A40	CAP CER CHP 100.0PF 50V 5%
C240	2113944A40	CAP CER CHP 100.0PF 50V 5% 64AM DUMMY PART NUMBER
C241	NOTPLACED	NUMBER
C243	2115153H34	CAP, CERAMIC, COG CAP,FXD,8PF,.5PF+/-,50V-DC,0402,C0G,-55DEG CMIN,125DEG CMAX,PB
C400	2113944A73	CAP CER CHP 6.8PF 50V +/-0.5PF
C401	2113944A21	CAP CER CHP 6.8PF 50V +/-0.5PF CAP,FXD,3.6PF,.1PF+/-,50V-DC,0603,C0G,-55DEG CMIN,125DEG CMAX
C402	2113944M07	CAP CER CHP 100.0PF 50V 5%
C403	2113944A40	CAP CER CHP 6.8PF 50V +/-0.5PF
C404	2113944A21	CAP CER CHP 6.8PF 50V +/-0.5PF
C405	2113944A21	CAP CER CHP 6.8PF 50V +/-0.5PF CAP,FXD,.5PF,.25PF+/-,50V-DC,0402,C0G,-55DEG CMIN,125DEG CMAX
C407	2113944A61	64AM DUMMY PART NUMBER
C408	NOTPLACED	NUMBER
C409	2113946B04	CAP CER CHP 0.10UF 10V 10%

Circuit Ref	Motorola Part Num	Description
C410	2113945A02	CAP CER CHP 270PF 50V 10, CAP CER CHP 10,000PF 25V 10%
C411	2113945B02	CAP CER CHP 270PF 50V 10, CAP CER CHP 4.3PF 50V +/-0.25PF
C412	2113945A02	CAP CER CHP 270PF 50V 10, CAP CER CHP 9.1PF 50V +/-0.5PF
C413	2113944A16	CAP CER CHP 9.1PF 50V +/-0.5PF
C414	2113944A24	CAP CER CHP 9.1PF 50V +/-0.5PF
C415	2113944A24	CAP CER CHP 9.1PF 50V +/-0.5PF
C416	2113946K02	CAP CER CHP 0.10UF 16V CAP CER CHP 270PF 50V 10, CAP CER CHP 4.3PF 50V +/-0.25PF
C417	2113945A02	CAP CER CHP 4.3PF 50V +/-0.25PF
C418	2113944A16	CAP CER CHP 6.8PF 50V +/-0.5PF
C419	2113944A21	CAP CER CHP 6.8PF 50V +/-0.5PF
C420	2113944A21	CAP CER CHP 6.8PF 50V +/-0.5PF CAP,FXD,3.6PF,.1PF+/-,50V-DC,0603,C0G,-55DEG CMIN,125DEG CMAX
C421	2113944M07	CAP CER CHP 6.2PF 50V +/-0.5PF
C422	2113944A20	CAP CER CHP 6.8PF 50V +/-0.5PF
C423	2113944A21	CAP CER CHP 100.0PF 50V 5%
C424	2113944A40	CAP CER CHP 6.2PF 50V +/-0.5PF
C425	2113944A20	CAP CER CHP 6.2PF 50V +/-0.5PF CAP,FXD,51PF,+5%,-5%,50V-DC,0402,C0G,-55DEG CMIN,125DEG CMAX,PB
C427	2113944A85	CAP,FXD,13PF,+5%,-5%,50V-DC,0402,C0G,-55DEG CMIN,125DEG CMAX,PB
C428	2113944A78	CAP CER CHP 8.2PF 50V +/-0.5PF
C429	2113944A23	CAP CER CHP 12.0PF 50V 5%
C430	2113944A26	CAP CER CHP 8.2PF 50V +/-0.5PF
C431	2113944A23	CAP CER CHP 8.2PF 50V +/-0.5PF



Circuit Ref	Motorola Part Num	Description
C737	2113945A09	CAP CER CHP 1000PF 50V 10%
C738	2113945A02	CAP CER CHP 270PF 50V 10,
C739	2113946K02	CAP CER CHP 0.10UF 16V 64AM DUMMY PART
C740	NOTPLACED	NUMBER
C798	2116173H17	CERAMIC CAPACITOR-EPP PART
C799	2116636H04	CERAMIC CAPACITOR-EPP PART
C900	2113945A02	CAP CER CHP 270PF 50V 10,
C903	2113944C14	CAP CER CHP 2.2PF 50V +/- 0.25PF
C904	2113944C41	CAP CER CHP 68.0PF 50V 5%
C905	2113944C45	CAP CER CHP 100.0PF 50V 5%
C906	2113944C71	CAP,FXD,5.6PF,.25PF+/-,50V-DC,0603,C0G,-55DEG CMIN,125DEG CMAX
C907	2113944C73	CAP,FXD,6.8PF,.25PF+/-,50V-DC,0603,C0G,-55DEG CMIN,125DEG CMAX
C908	2113944C71	CAP,FXD,5.6PF,.25PF+/-,50V-DC,0603,C0G,-55DEG CMIN,125DEG CMAX
C909	2113944C41	CAP CER CHP 68.0PF 50V 5%
C910	2113944M30	CAP,FXD,33PF,+2%,-2%,50V-DC,0603,C0G,-55DEG CMIN,125DEG CMAX,PB
C911	2113944C18	CAP CER CHP 3.3PF 50V +/- 0.25PF
C912	2113944C22	CAP CER CHP 4.7PF 50V +/- 0.25PF
C913	2113944C45	CAP CER CHP 100.0PF 50V 5%
C914	2113945A02	CAP CER CHP 270PF 50V 10,
C915	2113944C22	CAP CER CHP 4.7PF 50V +/- 0.25PF
C916	2113944C18	CAP CER CHP 3.3PF 50V +/- 0.25PF

Circuit Ref	Motorola Part Num	Description
C917	2113944M30	CAP,FXD,33PF,+2%,-2%,50V-DC,0603,C0G,-55DEG CMIN,125DEG CMAX,PB
C918	2113944C45	CAP CER CHP 100.0PF 50V 5%
C920	2113944C28	CAP CER CHP 8.2PF 50V +/- 0.5PF
C921	2113944C17	CAP CER CHP 3.0PF 50V +/- 0.25PF
C922	NOTPLACED	64AM DUMMY PART NUMBER
C923	NOTPLACED	64AM DUMMY PART NUMBER
C924	2113944A11	CAP CER CHP 2.7PF 50V +/- 0.25PF
C925	2113944V07	CAP,FXD,1.5PF,.1PF+/-,50V-DC,0402,C0G,-55DEG CMIN,125DEG CMAX
C926	2113944A15	CAP CER CHP 3.9PF 50V +/- 0.25PF
C927	2113945A02	CAP CER CHP 270PF 50V 10,
C1000	2113944A40	CAP CER CHP 100.0PF 50V 5%
C1001	2113946K02	CAP CER CHP 0.10UF 16V
C1002	2113946K02	CAP CER CHP 0.10UF 16V
C1003	2113944A40	CAP CER CHP 100.0PF 50V 5%
C1004	2113944A40	CAP CER CHP 100.0PF 50V 5%
C1005	2113946K02	CAP CER CHP 0.10UF 16V
C1006	2113946K02	CAP CER CHP 0.10UF 16V
C1007	2113944A40	CAP CER CHP 100.0PF 50V 5%
C1008	2113944A40	CAP CER CHP 100.0PF 50V 5%
C1009	2113946K02	CAP CER CHP 0.10UF 16V
C1010	2113946K02	CAP CER CHP 0.10UF 16V
C1011	2113944A40	CAP CER CHP 100.0PF 50V 5%
C1012	2113946K02	CAP CER CHP 0.10UF 16V
C1013	2113946K02	CAP CER CHP 0.10UF 16V
C1014	2113946K02	CAP CER CHP 0.10UF 16V
C1015	2113946K02	CAP CER CHP 0.10UF 16V

Circuit Ref	Motorola Part Num	Description
C1016	2113946B04	CAP CER CHP 0.10UF 10V 10%
C1017	2113946E02	CAP CER CHP 1.0UF 16V 10%
C1018	2113944A28	CAP CER CHP 18.0PF 50V 5%
C1019	2113944A28	CAP CER CHP 18.0PF 50V 5%
C1028	2113946K02	CAP CER CHP 0.10UF 16V
C1029	2113946K02	CAP CER CHP 0.10UF 16V
C1030	2113944A28	CAP CER CHP 18.0PF 50V 5%
C1031	2113946K02	CAP CER CHP 0.10UF 16V
C1032	2113945B02	CAP CER CHP 10,000PF 25V 10%
C1033	2113946K02	CAP CER CHP 0.10UF 16V
C1044	2113946B04	CAP CER CHP 0.10UF 10V 10%
C2000	2113944A40	CAP CER CHP 100.0PF 50V 5%
C2001	2113945B02	CAP CER CHP 10,000PF 25V 10%
C2002	2113946K02	CAP CER CHP 0.10UF 16V
C2003	2113946K02	CAP CER CHP 0.10UF 16V
C2004	2113944A40	CAP CER CHP 100.0PF 50V 5%
C2005	2113945B02	CAP CER CHP 10,000PF 25V 10%
C2006	2113946K02	CAP CER CHP 0.10UF 16V
C2007	2113946K02	CAP CER CHP 0.10UF 16V
C3000	2113944A78	CAP,FXD,13PF,+5%,-5%,50V-DC,0402,C0G,-55DEG CMIN,125DEG CMAX,PB
C3001	2113944A78	CAP,FXD,13PF,+5%,-5%,50V-DC,0402,C0G,-55DEG CMIN,125DEG CMAX,PB
C3002	2113945D04	CAP CER CHP 100,000PF 25V 10%
C3003	2113946D05	CAP,CHIP,2.2UF,+10%,-10%,6.3V-DC,0603,X5R,-55DEG CMIN,85DEG CMA
C3004	2113946D05	CAP,CHIP,2.2UF,+10%,-10%,6.3V-DC,0603,X5R,-55DEG CMIN,85DEG CMA

Circuit Ref	Motorola Part Num	Description
C3005	2113945A09	CAP CER CHP 1000PF 50V 10%
C3010	2113946D05	CAP,CHIP,2.2UF,+10%,-10%,6.3V-DC,0603,X5R,-55DEG CMIN,85DEG CMA
C3011	2113946A01	CAP CER CHP 0.015UF 16V 10%
C3014	2113946D05	CAP,CHIP,2.2UF,+10%,-10%,6.3V-DC,0603,X5R,-55DEG CMIN,85DEG CMA
C3015	2115153H57	CAP, CERAMIC, COG
C3016	2113946D05	CAP,CHIP,2.2UF,+10%,-10%,6.3V-DC,0603,X5R,-55DEG CMIN,85DEG CMA
C3017	2113945B02	CAP CER CHP 10,000PF 25V 10%
C3018	2113946D05	CAP,CHIP,2.2UF,+10%,-10%,6.3V-DC,0603,X5R,-55DEG CMIN,85DEG CMA
C3019	2113946D02	CAP CER CHP 1.0UF 6.3V 10%
C3024	2113946D02	CAP CER CHP 1.0UF 6.3V 10%
C3025	2113946K02	CAP CER CHP 0.10UF 16V
C3026	2113946K02	CAP CER CHP 0.10UF 16V
C3028	2113946D05	CAP,CHIP,2.2UF,+10%,-10%,6.3V-DC,0603,X5R,-55DEG CMIN,85DEG CMA
C3031	2113946D02	CAP CER CHP 1.0UF 6.3V 10%
C3034	2113946B04	CAP CER CHP 0.10UF 10V 10%
C3035	2113946B04	CAP CER CHP 0.10UF 10V 10%
C3036	2113946B04	CAP CER CHP 0.10UF 10V 10%
C3037	2113944A40	CAP CER CHP 100.0PF 50V 5%
C3038	2113944A40	CAP CER CHP 100.0PF 50V 5%
C3039	2113946F03	CAP CER CHP 4.7UF 6.3V 10%
C3045	2113946F03	CAP CER CHP 4.7UF 6.3V 10%
C3047	2113946D02	CAP CER CHP 1.0UF 6.3V 10%

Circuit Ref	Motorola Part Num	Description
C3048	2113946D02	CAP CER CHP 1.0UF 6.3V 10%
C3049	2113945C25	CAP,FXD,.033UF,+10%,-10%,50V-DC,0603,X7R,-55DEG CMIN,125DEG CMA
C3050	2113945C25	CAP,FXD,.033UF,+10%,-10%,50V-DC,0603,X7R,-55DEG CMIN,125DEG CMA
C3051	2113944A40	CAP CER CHP 100.0PF 50V 5%
C3060	2113944A80	CAP,FXD,20PF,+5%,-5%,50V-DC,0402,C0G,-55DEG CMIN,125DEG CMAX,PB
C3061	2113944A80	CAP,FXD,20PF,+5%,-5%,50V-DC,0402,C0G,-55DEG CMIN,125DEG CMAX,PB
C3062	2113946K02	CAP CER CHP 0.10UF 16V
C3063	2113946K02	CAP CER CHP 0.10UF 16V
C3067	2113946D02	CAP CER CHP 1.0UF 6.3V 10%
C3070	2113944A25	CAP CER CHP 10.0PF 50V +/- 0.5PF
C3074	2113946D02	CAP CER CHP 1.0UF 6.3V 10%
C3079	2113946F03	CAP CER CHP 4.7UF 6.3V 10%
C3080	NOTPLACED	64AM DUMMY PART NUMBER
C3081	2113946F03	CAP CER CHP 4.7UF 6.3V 10%
C3082	2113946B04	CAP CER CHP 0.10UF 10V 10%
C3083	2113946B04	CAP CER CHP 0.10UF 10V 10%
C3084	2113946K03	CAP,FXD,.22UF,+80%,-20%,16V-DC,0402,Y5V,-30DEG CMIN,85DEG CMAX
C3090	2113955D37	CAP,FXD,10UF,+10%,-10%,16V-DC,1206,X7R,-55DEG CMIN,125DEG CMAX
C3091	2113955D37	CAP,FXD,10UF,+10%,-10%,16V-DC,1206,X7R,-55DEG CMIN,125DEG CMAX
C3093	2113946N03	CAP CER CHP 2.2UF 16V

Circuit Ref	Motorola Part Num	Description
C3094	2113946B04	CAP CER CHP 0.10UF 10V 10%
C3095	2113946B04	CAP CER CHP 0.10UF 10V 10%
C3097	2113944A31	CAP CER CHP 33.0PF 50V 5%
C3098	2113944A31	CAP CER CHP 33.0PF 50V 5%
C3099	2113944A31	CAP CER CHP 33.0PF 50V 5%
C3100	2113944A31	CAP CER CHP 33.0PF 50V 5%
C3101	2113946D02	CAP CER CHP 1.0UF 6.3V 10%
C3102	2113946D02	CAP CER CHP 1.0UF 6.3V 10%
C3200	2113945Y02	CAP,FXD,.1UF,+10%,-10%,16V-DC,0402,X7R,-55DEG CMIN,125DEG CMAX
C3201	2113955D37	CAP,FXD,10UF,+10%,-10%,16V-DC,1206,X7R,-55DEG CMIN,125DEG CMAX
C3202	2371572L02	POSCAP 68UF 6TPB68M
C3203	2113945B02	CAP CER CHP 10,000PF 25V 10%
C3204	2115153H40	CAP, CERAMIC, COG
C3205	2113944A44	CAP CER CHP 220.0 PF 50V 5%
C3206	2113945Y02	CAP,FXD,.1UF,+10%,-10%,16V-DC,0402,X7R,-55DEG CMIN,125DEG CMAX
C3207	2113955D37	CAP,FXD,10UF,+10%,-10%,16V-DC,1206,X7R,-55DEG CMIN,125DEG CMAX
C3208	2113946K03	CAP,FXD,.22UF,+80%,-20%,16V-DC,0402,Y5V,-30DEG CMIN,85DEG CMAX
C3209	2371572L01	POSCAD 47UF
C3210	2113945B02	CAP CER CHP 10,000PF 25V 10%
C3211	2115153H40	CAP, CERAMIC, COG
C3212	2113944A44	CAP CER CHP 220.0 PF 50V 5%
C3500	2113946F03	CAP CER CHP 4.7UF 6.3V 10%

Circuit Ref	Motorola Part Num	Description
C3700	2113946D02	CAP CER CHP 1.0UF 6.3V 10%
C3701	2113945B02	CAP CER CHP 10,000PF 25V 10%
C3702	2113946D05	CAP,CHIP,2.2UF,+10%,-10%,6.3V-DC,0603,X5R,-55DEG CMIN,85DEG CMA
C3703	2113946D02	CAP CER CHP 1.0UF 6.3V 10%
C3704	2113944A30	CAP CER CHP 27.0PF 50V 5%
C3705	2113945B02	CAP CER CHP 10,000PF 25V 10%
C3706	2113945A05	CAP CER CHP 470PF 50V 10%
C3707	2113946D05	CAP,CHIP,2.2UF,+10%,-10%,6.3V-DC,0603,X5R,-55DEG CMIN,85DEG CMA
C3800	2113945D04	CAP CER CHP 100,000PF 25V 10%
C3805	2113946K03	CAP,FXD,.22UF,+80%,-20%,16V-DC,0402,Y5V,-30DEG CMIN,85DEG CMAX
C3999	2113945B02	CAP CER CHP 10,000PF 25V 10%
C8000	2113946F05	CAP,CHIP,10UF,+10%,-10%,6.3V-DC,0805,X5R,-55DEG CMIN,85DEG CMAX
C8001	2113944A28	CAP CER CHP 18.0PF 50V 5%
C8002	2113944A52	CAP CER CHP 1000.0 PF 50V 5%
C8003	2113946F05	CAP,CHIP,10UF,+10%,-10%,6.3V-DC,0805,X5R,-55DEG CMIN,85DEG CMAX
C8004	2113944A28	CAP CER CHP 18.0PF 50V 5%
C8005	NOTPLACED	64AM DUMMY PART NUMBER
C8006	NOTPLACED	64AM DUMMY PART NUMBER
C8013	2113944A08	CAP CER CHP 2.0PF 50V +/- 0.25PF
C8014	2113944A62	CAP,FXD,.75PF,.25PF+/-50V-DC,0402,C0G,-55DEG CMIN,125DEG CMAX

Circuit Ref	Motorola Part Num	Description
C8015	2113946K02	CAP CER CHP 0.10UF 16V
C8016	2113945A02	CAP CER CHP 270PF 50V 10,
C8017	2113944A28	CAP CER CHP 18.0PF 50V 5%
C8018	2113944A09	Capacitor 2.2pF
C8019	NOTPLACED	64AM DUMMY PART NUMBER
C8020	2113944A52	CAP CER CHP 1000.0 PF 50V 5%
C8021	2113946K02	CAP CER CHP 0.10UF 16V
C8022	2113946D05	CAP,CHIP,2.2UF,+10%,-10%,6.3V-DC,0603,X5R,-55DEG CMIN,85DEG CMA
C8023	2113945B02	CAP CER CHP 10,000PF 25V 10%
C8029	2113944A52	CAP CER CHP 1000.0 PF 50V 5%
C8030	2113944A28	CAP CER CHP 18.0PF 50V 5%
C8031	2113946D05	CAP,CHIP,2.2UF,+10%,-10%,6.3V-DC,0603,X5R,-55DEG CMIN,85DEG CMA
C8032	2113945B02	CAP CER CHP 10,000PF 25V 10%
C8033	2113944A28	CAP CER CHP 18.0PF 50V 5%
C8034	2113944A28	CAP CER CHP 18.0PF 50V 5%
C8035	2113944A31	CAP CER CHP 33.0PF 50V 5%
C8036	2113944A52	CAP CER CHP 1000.0 PF 50V 5%
C9000	2113944A40	CAP CER CHP 100.0PF 50V 5%
C9001	2113944A40	CAP CER CHP 100.0PF 50V 5%
C9002	2113944A40	CAP CER CHP 100.0PF 50V 5%
C9003	2113944A40	CAP CER CHP 100.0PF 50V 5%
C9004	2113944A40	CAP CER CHP 100.0PF 50V 5%
C9005	2113944A40	CAP CER CHP 100.0PF 50V 5%

Circuit Ref	Motorola Part Num	Description
C9006	2113944A40	CAP CER CHP 100.0PF 50V 5%
C9007	2113944A40	CAP CER CHP 100.0PF 50V 5%
C9008	2113944A40	CAP CER CHP 100.0PF 50V 5%
C9009	2113944A40	CAP CER CHP 100.0PF 50V 5%
C9010	2113944A40	CAP CER CHP 100.0PF 50V 5%
C9011	2113944A40	CAP CER CHP 100.0PF 50V 5%
C9012	2113944A40	CAP CER CHP 100.0PF 50V 5%
C9013	2113944A40	CAP CER CHP 100.0PF 50V 5%
C9014	2113944C45	CAP CER CHP 100.0PF 50V 5%
C9015	2113944A40	CAP CER CHP 100.0PF 50V 5%
C9016	2113944A40	CAP CER CHP 100.0PF 50V 5%
C9017	2113944A40	CAP CER CHP 100.0PF 50V 5%
C9018	2113944A40	CAP CER CHP 100.0PF 50V 5%
C9019	2113944A40	CAP CER CHP 100.0PF 50V 5%
C9020	2113944A40	CAP CER CHP 100.0PF 50V 5%
C9021	2113944A40	CAP CER CHP 100.0PF 50V 5%
C9022	2113944A40	CAP CER CHP 100.0PF 50V 5%
C9023	2113944A40	CAP CER CHP 100.0PF 50V 5%
C9024	2113944A40	CAP CER CHP 100.0PF 50V 5%
C9025	2113944A40	CAP CER CHP 100.0PF 50V 5%
C9026	2113944A40	CAP CER CHP 100.0PF 50V 5%
C9027	2113944A40	CAP CER CHP 100.0PF 50V 5%
C9028	2113944A40	CAP CER CHP 100.0PF 50V 5%

Circuit Ref	Motorola Part Num	Description
C9029	2113944A40	CAP CER CHP 100.0PF 50V 5%
C9030	2113944A17	CAP CER CHP 4.7PF 50V +/- 0.25PF
C9031	2113944A17	CAP CER CHP 4.7PF 50V +/- 0.25PF
C9032	2113944A17	CAP CER CHP 4.7PF 50V +/- 0.25PF
C9033	2113944A40	CAP CER CHP 100.0PF 50V 5%
C9038	2113944A40	CAP CER CHP 100.0PF 50V 5%
C9039	2113944C45	CAP CER CHP 100.0PF 50V 5%
C9040	2113944A40	CAP CER CHP 100.0PF 50V 5%
C9041	2113944A40	CAP CER CHP 100.0PF 50V 5%
C9042	2113944A40	CAP CER CHP 100.0PF 50V 5%
C9043	2113944A40	CAP CER CHP 100.0PF 50V 5%
C9044	2113944A40	CAP CER CHP 100.0PF 50V 5%
C9045	2113944A40	CAP CER CHP 100.0PF 50V 5%
C9046	2113944A40	CAP CER CHP 100.0PF 50V 5%
C9047	2113944A40	CAP CER CHP 100.0PF 50V 5%
C9048	2113944A40	CAP CER CHP 100.0PF 50V 5%
C9049	2113944A40	CAP CER CHP 100.0PF 50V 5%
C9050	2113944A40	CAP CER CHP 100.0PF 50V 5%
C9051	NOTPLACED	64AM DUMMY PART NUMBER
C9053	NOTPLACED	64AM DUMMY PART NUMBER
C9055	NOTPLACED	64AM DUMMY PART NUMBER
C9057	NOTPLACED	64AM DUMMY PART NUMBER
C9058	2113944A40	CAP CER CHP 100.0PF 50V 5%

Circuit Ref	Motorola Part Num	Description
C9059	2113944A40	CAP CER CHP 100.0PF 50V 5%
C9060	2113944A40	CAP CER CHP 100.0PF 50V 5%
C9061	2113944A40	CAP CER CHP 100.0PF 50V 5%
C9062	2113944A40	CAP CER CHP 100.0PF 50V 5%
C9063	2113944A40	CAP CER CHP 100.0PF 50V 5%
C9064	2113944A40	CAP CER CHP 100.0PF 50V 5%
C9065	2113944C45	CAP CER CHP 100.0PF 50V 5%
C9066	2113944A40	CAP CER CHP 100.0PF 50V 5%
C9067	NOTPLACED	64AM DUMMY PART NUMBER
C9068	NOTPLACED	64AM DUMMY PART NUMBER
C9069	NOTPLACED	64AM DUMMY PART NUMBER
C9073	2313960C26	CAP,FXD,1UF,+10%,-10%,35V-DC,SM,-55DEG CMIN,125DEG CMAX,114MA,E
C9074	2313960A55	CAP,FXD,.47UF,+10%,-10%,25V-DC,SM,-55DEG CMIN,125DEG CMAX,73MA
CR900	4815897H01	PIN DIODE
CR901	4815897H01	PIN DIODE
CR902	4815897H01	PIN DIODE
CR903	4815897H01	PIN DIODE
D001	4815059H01	TOSHIBA VARACTOR DIODE
D200	4815096H01	VARACTOR DIODE 1SV305
D201	4815096H01	VARACTOR DIODE 1SV305
D202	4815096H01	VARACTOR DIODE 1SV305
D203	4815096H01	VARACTOR DIODE 1SV305
D204	4815096H01	VARACTOR DIODE 1SV305
D205	4815096H01	VARACTOR DIODE 1SV305
D206	4815096H01	VARACTOR DIODE 1SV305
D207	4815096H01	VARACTOR DIODE 1SV305
D400	4885055Y01	DIODE VARACTOR PB-FREE

Circuit Ref	Motorola Part Num	Description
D401	4885055Y01	DIODE VARACTOR PB-FREE
D402	4813974A19	DIODE ARRAY,MXR,SM,SOT-323,7V,-2W,SHTK,2,PB-FREE
D403	4885055Y01	DIODE VARACTOR PB-FREE
D404	4885055Y01	DIODE VARACTOR PB-FREE
D405	4815923H01	SCHOTTKY DIODE-NEW LEADFREE
D600	4815096H01	VARACTOR DIODE 1SV305
D601	4815096H01	VARACTOR DIODE 1SV305
D3000	4813978A25	SCHOTTKY 30V SOD-323 T&R PB FREE
D9000	4805729G49	DIODE RED/YEL SURFACE MOUNT FERRITE BEAD
E001	2480640Z01	SURFACE MOUNT FERRITE BEAD
E002	2480640Z01	SURFACE MOUNT FERRITE BEAD
E003	2480640Z01	SURFACE MOUNT FERRITE BEAD
E004	2480640Z01	SURFACE MOUNT FERRITE BEAD
E400	2480640Z01	SURFACE MOUNT FERRITE BEAD
E401	2480640Z01	SURFACE MOUNT FERRITE BEAD
E600	2480640Z01	SURFACE MOUNT FERRITE BEAD
E601	2480640Z01	SURFACE MOUNT FERRITE BEAD
E602	2480640Z01	SURFACE MOUNT FERRITE BEAD
E701	7686949J14	FLTR,FERRITE BEAD,,,2A,,,,SM,0805,,CHIP ,220OHM
E3030	2409134J04	IND CHIP FER FLTR 600 0603 (000)
E3031	2409134J04	IND CHIP FER FLTR 600 0603 (000)
E3032	2409134J04	IND CHIP FER FLTR 600 0603 (000)
E3033	2409134J04	IND CHIP FER FLTR 600 0603 (000)

Circuit Ref	Motorola Part Num	Description	Circuit Ref	Motorola Part Num	Description	Circuit Ref	Motorola Part Num	Description	Circuit Ref	Motorola Part Num	Description
E3700	7686949J08	FLTR,FERR,,,,1A,,,,SM,0603	L206	2415429H47	CHIP INDUCTOR			IDCTR,FXD,330NH,2%,310M			IDCTR,WW,10UH,20,490MA,.
E3701	7686949J08	FLTR,FERR,,,,1A,,,,SM,0603	L207	2415427H42	CHIP INDUCTOR			A,1.4OHM,CER,48	L3021	2489846Y06	0.67OHM,FERR,,,,,SM,,,PW
E3702	7686949J08	FLTR,FERR,,,,1A,,,,SM,0603	L208	2415429H47	CHIP INDUCTOR	L604	2414015B26	Q,600MHZ SRF,SM,0805			R, 3X2.8X1.0MM
E3703	7686949J08	FLTR,FERR,,,,1A,,,,SM,0603	L209	2415427H26	CHIP INDUCTOR	L605	2415569H01	INDUCTOR 4.7UH	L3022	2464675H01	IDCTR,WW,560NH,5%,550M
E3704	7686949J08	FLTR,FERR,,,,1A,,,,SM,0603	L210	2415428H07	AIR WOUND INDUCTOR			IDCTR,CHIP,120NH,5%,200			A
E3705	7686949J08	FLTR,FERR,,,,1A,,,,SM,0603	L211	2415429H47	CHIP INDUCTOR	L700	2414017N25	MA,2.4OHM,CER,12	L8001	2414017P10	IDCTR,CHIP,5.6NH,300MA,.2
E8000	7686949J08	FLTR,FERR,,,,1A,,,,SM,0603	L212	2415429H47	CHIP INDUCTOR			Q,600MHZ SRF,SM,0603			90HM,CER,9 Q,3.28GHZ
E8001	7686949J08	FLTR,FERR,,,,1A,,,,SM,0603	L213	2415429H47	CHIP INDUCTOR			IDCTR,CHIP,120NH,5%,200			SRF,SM,0402,P
		64AM DUMMY PART	L214	2415429H47	CHIP INDUCTOR	L701	2414017N25	MA,2.4OHM,CER,12			IDCTR,CHIP,22NH,5%,300M
E8002	NOTPLACED	NUMBER	L215	2415429H27	CHIP INDUCTOR	L702	2415429H14	Q,600MHZ SRF,SM,0603	L8002	2414017P17	A,.88OHM,CER,9 Q,1.8GHZ
E8003	7686949J08	FLTR,FERR,,,,1A,,,,SM,0603	L217	2415347H01	IDCTR, 1UH			CHIP INDUCTOR			SRF,SM,0402,P
E8004	7686949J08	FLTR,FERR,,,,1A,,,,SM,0603	L218	2415429H31	CHIP INDUCTOR	L703	2414017N25	IDCTR,CHIP,120NH,5%,200			IDCTR,CHIP,10NH,5%,300M
E8005	7686949J08	FLTR,FERR,,,,1A,,,,SM,0603	L400	2471912M04	INDUCTOR			MA,2.4OHM,CER,12	L8003	2414017P13	A,.46OHM,CER,9 Q,2.5GHZ
E8006	7686949J08	FLTR,FERR,,,,1A,,,,SM,0603	L401	2471912M04	INDUCTOR			Q,600MHZ SRF,SM,0603			SRF,SM,0402,P
		FLTR,FERRITE	L402	2415429H35	CHIP INDUCTOR	L706	2460591E64	COIL AIR WOUND INDUC			IDCTR,CHIP,5.6NH,300MA,.2
E9000	7686949J14	BEAD,,,,,2A,,,,,SM,0805,,CHIP	L403	2415427H34	CHIP INDUCTOR	L707	2471406L02	30.51	L8004	2414017P10	90HM,CER,9 Q,3.28GHZ
		,220OHM	L404	2415427H29	CHIP INDUCTOR			RF AIR WOUND COIL 10NH	L9000	2415429H45	SRF,SM,0402,P
		SURFACE MOUNT FERRITE	L405	2415429H25	CHIP INDUCTOR	L902	2414017N25	IDCTR,CHIP,120NH,5%,200	L9001	2415429H45	CHIP INDUCTOR
E9001	2480640Z01	BEAD	L406	2415429H10	CHIP INDUCTOR			MA,2.4OHM,CER,12	L9007	2415429H45	CHIP INDUCTOR
		64AM DUMMY PART	L407	2415427H16	CHIP INDUCTOR	L903	2414017N25	Q,600MHZ SRF,SM,0603	L9008	2415429H45	CHIP INDUCTOR
E9006	NOTPLACED	NUMBER	L408	2471912M04	INDUCTOR	L904	2471912M04	IDCTR,CHIP,120NH,5%,200	M1	4271321L01	TOP SHIELD METAL LOCK/
		64AM DUMMY PART	L409	2471912M04	INDUCTOR	L905	2471912M04	MA,2.4OHM,CER,12	M2	4271321L01	RETAINER
E9007	NOTPLACED	NUMBER			64AM DUMMY PART	L906	2471912M03	Q,600MHZ SRF,SM,0603			TOP SHIELD METAL LOCK/
F9000	6515076H01	FUSE CHIP SMT TR/1608FF	L410	NOTPLACED	NUMBER	L907	2415429H35	INDUCTOR	M700	2615193H01	RETAINER
		3A	L411	2415429H35	CHIP INDUCTOR			INDUCTOR	M9000	4371105L01	HEAT SPREADER COPPER
		73.35 MHZ 4 POLE			IDCTR,CHIP,270NH,5%,150	L908	2471912M03	SQUARE AIR CORE	M9001	4371105L01	BLOCK
FL400	9116854H02	CRYSTAL FILTER	L412	2414017N29	Q,400MHZ SRF,SM,0603	L909	2415429H35	INDUCTORS	M9002	4371105L01	BOARD SPACER
		PASSIVE	L413	2415429H23	CHIP INDUCTOR	L910	2471912M04	CHIP INDUCTOR			BOARD SPACER
FL8000	9180310L38	FILTER,SAW,BANDPASS,1.5	L414	2415429H23	CHIP INDUCTOR	L911	2471912M04	SQUARE AIR CORE	M9003	NOTPLACED	64AM DUMMY PART
		7542	L415	2415429H46	CHIP INDUCTOR			INDUCTORS			NUMBER
		PASSIVE			IDCTR,CHIP,270NH,5%,150	L912	2414017P08	INDUCTOR	M9004	NOTPLACED	64AM DUMMY PART
FL8001	9180310L38	FILTER,SAW,BANDPASS,1.5	L416	2414017N29	Q,400MHZ SRF,SM,0603			INDUCTOR	M9005	3915478H01	NUMBER
		7542	L417	2415718H37	CHIP INDUCTOR	L913	2414017P10	SQUARE AIR CORE	M9006	3915478H01	SPEAKER CONTACT PAD
FL9000	2515003H02	CHIP COMMON MODE	L418	2415429H47	CHIP INDUCTOR			INDUCTOR			SPEAKER CONTACT PAD
		CHOKE COILS			IDCTR,WW,470NH,10%,170			INDUCTOR	M9007	0915184H01	CONNECTOR, BATTERY
J9001	0970312L02	40 PIN BOARD-TO-BOARD	L419	2414032F42	Q,665MHZ SRF,SM,PB-F	L3003	2464675H01	INDUCTOR			CONTACT
L002	2415429H26	CONNECTOR			MA,2.5OHM,CER,40	L3004	2464675H01	INDUCTOR	P900	2815696H01	SMA ANTENNA NUT CUM
		CHIP INDUCTOR	L420	2414032F42	Q,665MHZ SRF,SM,PB-F			INDUCTOR	P9000	2887818K02	RF CONTACTS
L003	NOTPLACED	64AM DUMMY PART	L600	2466505A01	COIL INDUCTOR			INDUCTOR	PASTE	1085674C03	PLUG 0.5 PITCH 16 CKT
L200	2415429H47	NUMBER	L601	2466505A01	COIL INDUCTOR			INDUCTOR			PASTE/NC-SMQ230
L201	2415427H29	CHIP INDUCTOR	L602	2415569H01	INDUCTOR 4.7UH			INDUCTOR	Q002	4815359H01	PNP
L202	2416540H13	CHIP INDUCTOR	L603	2415718H37	CHIP INDUCTOR	L3020	2489846Y06	INDUCTOR	Q003	4816134H01	GENERALPURPOSEDOUBL
L203	2415429H47	CHIP INDUCTOR			IDCTR,WW,470NH,10%,170			INDUCTOR			ETRANSISTOR
L204	2415429H47	CHIP INDUCTOR			MA,2.5OHM,CER,40			INDUCTOR			DIGITAL TRANSISTORS
L205	2415429H47	CHIP INDUCTOR			Q,665MHZ SRF,SM,PB-F			INDUCTOR			

Circuit Ref	Motorola Part Num	Description
Q200	4815029H01	NPN SILICON TRANSISTOR TSTR DUAL NPN/PNP UMH
Q202	4815055H01	5 TSTR DUAL NPN/PNP UMH
Q203	4815055H01	5 XSTR NPN 6V 30UA 12GHZ PB-FREE
Q204	4885061Y01	XSTR NPN 6V 30UA 12GHZ PB-FREE
Q205	4885061Y01	TSTR DUAL NPN/PNP UMH
Q206	4815055H01	5 TSTR DUAL NPN/PNP UMH
Q207	4815055H01	5 XSTR NPN 6V 30UA 12GHZ PB-FREE
Q208	4885061Y01	NPN SILICON BIPOLAR TRANSISTOR
Q400	4816531H01	NPN SILICON BIPOLAR TRANSISTOR
Q401	4816531H01	XSTR,BIP GP SS,NPN,TA13,SM,SOT- 23,SMT,30V,.225W,300MA,1 25MHZ,P
Q600	4813973A04	TSTR DUAL NPN/PNP UMH
Q601	4815055H01	5 XSTR NPN 6V 30UA 12GHZ PB-FREE
Q602	4885061Y01	TSTR DUAL NPN/PNP UMH
Q701	4815055H01	5 TSTR DUAL NPN/PNP UMH
Q702	4815055H01	5 PRE DRIVER EPP PART
Q703	4816547H01	FINAL PA - EPP PART
Q704	4816548H01	TSTR DUAL NPN/PNP UMH
Q900	4815055H01	5 TSTR DUAL NPN/PNP UMH
Q901	4815055H01	5 XSTR,FET GEN PURP,PB- FREE
Q3000	4805585Q23	XSTR,FET GEN PURP,PB- FREE
Q3001	4805585Q23	DIGITAL TRANSISTORS
Q3002	4816134H01	XSTR,FET GP PWR,MOSFET,P- CH,ENHN,CF,-20V,1.3W,PB- FREE
Q3003	4813970A62	

Circuit Ref	Motorola Part Num	Description
Q3005	4805585Q23	XSTR,FET GEN PURP,PB- FREE
Q3006	4816134H01	DIGITAL TRANSISTORS
Q3010	4805585Q23	XSTR,FET GEN PURP,PB- FREE
Q9000	4813973M07	XSTR,BIP GP SS,NPN,T3904,SM,SOT- 23,SMT,40V,.225W,200MA,3 00MHZ
Q9001	4815154H01	DUAL TRANS NPN XSTR,BIP GP SS,NPN,T3904,SM,SOT- 23,SMT,40V,.225W,200MA,3 00MHZ
Q9003	4813973M07	CER CHIP RES 6800 OHM 5 0402
R006	0613952Q93	CER CHIP RES 10K OHM 5% 0402
R007	0613952R01	CER CHIP RES 10.0 OHM 5 0402
R008	0613952Q25	CER CHIP RES 6800 OHM 5 0402
R010	0613952Q93	CER CHIP RES 100 OHM 5 0402
R011	0613952Q49	CER CHIP RES 100K OHM 5% 0402
R012	0613952R25	CER CHIP RES 75.0 OHM 5 0402
R013	0613952Q46	CER CHIP RES 51.0 OHM 5 0402
R014	0613952Q42	CER CHIP RES 22.0 OHM 5 0402
R016	0613952Q33	CER CHIP RES 430 OHM 5 0402
R017	0613952Q64	CER CHIP RES 9100 OHM 5 0402
R018	0613952Q96	CER CHIP RES 10K OHM 5% 0402
R019	0613952R01	CER CHIP RES 180 OHM 5 0402
R020	0613952Q55	CER CHIP RES 30.0 OHM 5 0402
R022	0613952Q36	CER CHIP RES 33K OHM 5% 0402
R025	0613952R13	CER CHIP RES 10K OHM 5% 0402
R026	0613952R01	CER CHIP RES 10K OHM 5% 0402

Circuit Ref	Motorola Part Num	Description
R027	0613952R66	CER CHIP RES 0.0 +/-0.050 OHM
R052	0613952R66	CER CHIP RES 0.0 +/-0.050 OHM
R053	0613952R66	CER CHIP RES 0.0 +/-0.050 OHM
R054	0613952R66	CER CHIP RES 0.0 +/-0.050 OHM
R200	0613952Q95	CER CHIP RES 8200 OHM 5 0402
R201	0613952Q91	CER CHIP RES 5600 OHM 5 0402
R202	0613952Q49	CER CHIP RES 100 OHM 5 0402
R203	0613952Q51	CER CHIP RES 120 OHM 5 0402
R205	0613952Q91	CER CHIP RES 5600 OHM 5 0402
R207	NOTPLACED	64AM DUMMY PART NUMBER
R208	0613952Q95	CER CHIP RES 8200 OHM 5 0402
R209	0613952Q91	CER CHIP RES 5600 OHM 5 0402
R210	0613952Q49	CER CHIP RES 100 OHM 5 0402
R211	0613952Q50	CER CHIP RES 110 OHM 5 0402
R212	0613952Q91	CER CHIP RES 5600 OHM 5 0402
R213	0613952Q94	CER CHIP RES 7500 OHM 5 0402
R214	0613952Q58	CER CHIP RES 240 OHM 5 0402
R215	NOTPLACED	64AM DUMMY PART NUMBER
R216	0613952Q57	CER CHIP RES 220 OHM 5 0402
R217	0613952Q95	CER CHIP RES 8200 OHM 5 0402
R218	0613952Q66	CER CHIP RES 510 OHM 5 0402
R220	0613952Q60	CER CHIP RES 300 OHM 5 0402
R221	0613952Q31	CER CHIP RES 18.0 OHM 5 0402

Circuit Ref	Motorola Part Num	Description
R222	0613952Q60	CER CHIP RES 300 OHM 5 0402
R223	0613952R66	CER CHIP RES 0.0 +/-0.050 OHM
R224	0613952R66	CER CHIP RES 0.0 +/-0.050 OHM
R400	0613952R01	CER CHIP RES 10K OHM 5% 0402
R402	0613952R66	CER CHIP RES 0.0 +/-0.050 OHM
R403	0613952Q65	CER CHIP RES 470 OHM 5 0402
R404	0613952Q72	CER CHIP RES 910 OHM 5 0402
R405	0613952R25	CER CHIP RES 100K OHM 5% 0402
R406	0613952R25	CER CHIP RES 100K OHM 5% 0402
R407	0613952Q42	CER CHIP RES 51.0 OHM 5 0402
R409	0613952R05	CER CHIP RES 15K OHM 5% 0402
R410	0613952Q83	CER CHIP RES 2700 OHM 5 0402
R411	0613952R19	CER CHIP RES 56K OHM 5% 0402
R412	0613952Q63	CER CHIP RES 390 OHM 5 0402
R413	0613952Q77	CER CHIP RES 1500 OHM 5 0402
R416	0613952R66	CER CHIP RES 0.0 +/-0.050 OHM
R417	0613952R66	CER CHIP RES 0.0 +/-0.050 OHM
R419	0613952R66	CER CHIP RES 0.0 +/-0.050 OHM
R420	0613952Q95	CER CHIP RES 8200 OHM 5 0402
R421	0613952Q49	CER CHIP RES 100 OHM 5 0402
R422	0613952R01	CER CHIP RES 10K OHM 5% 0402
R424	0613952R01	CER CHIP RES 10K OHM 5% 0402
R425	0613952R66	CER CHIP RES 0.0 +/-0.050 OHM



Circuit Ref	Motorola Part Num	Description
R426	0613952R66	CER CHIP RES 0.0 +/-0.050 OHM
R497	NOTPLACED	64AM DUMMY PART NUMBER
R499	0613952R01	CER CHIP RES 10K OHM 5% 0402
R600	0613952R01	CER CHIP RES 10K OHM 5% 0402
R601	0613952Q55	CER CHIP RES 180 OHM 5 0402
R602	0613952Q61	CER CHIP RES 330 OHM 5 0402
R603	0613952R05	CER CHIP RES 15K OHM 5% 0402
R604	0613952Q90	CER CHIP RES 5100 OHM 5 0402
R605	0613952Q90	CER CHIP RES 5100 OHM 5 0402
R606	0613952Q75	CER CHIP RES 1200 OHM 5 0402
R607	0613952R25	CER CHIP RES 100K OHM 5% 0402
R609	0613952R01	CER CHIP RES 10K OHM 5% 0402
R610	0613952R01	CER CHIP RES 10K OHM 5% 0402
R611	0613952Q63	CER CHIP RES 390 OHM 5 0402
R612	0613952R08	CER CHIP RES 20K OHM 5 0402
R696	0613952R66	CER CHIP RES 0.0 +/-0.050 OHM
R697	0613952R66	CER CHIP RES 0.0 +/-0.050 OHM
R698	0613952R01	CER CHIP RES 10K OHM 5% 0402
R699	0613952R25	CER CHIP RES 100K OHM 5% 0402
R700	0615043C01	RES POWER METAL STRIP W18 COMPLIANT
R701	NOTPLACED	64AM DUMMY PART NUMBER
R702	0613952Z80	RES,MF,330KOHM,1%,.0625 W,SM,0402,200PPM/CEL,PB-FREE

Circuit Ref	Motorola Part Num	Description
R703	0613952Z80	RES,MF,330KOHM,1%,.0625 W,SM,0402,200PPM/CEL,PB-FREE
R704	NOTPLACED	64AM DUMMY PART NUMBER
R705	0613952R56	CER CHIP RES 2.0M OHM 5 0402
R706	0613952R56	CER CHIP RES 2.0M OHM 5 0402
R707	0613952Q81	CER CHIP RES 2200 OHM 5 0402
R708	0613952Q90	CER CHIP RES 5100 OHM 5 0402
R709	0613952R66	CER CHIP RES 0.0 +/-0.050 OHM
R710	NOTPLACED	64AM DUMMY PART NUMBER
R711	0613952R08	CER CHIP RES 20K OHM 5 0402
R712	0613952R66	CER CHIP RES 0.0 +/-0.050 OHM
R713	NOTPLACED	64AM DUMMY PART NUMBER
R714	0613952Q59	CER CHIP RES 270 OHM 5 0402
R717	0613958H33	CER CHIP RES 22.0 OHM 5% 0805
R718	0613952Q56	CER CHIP RES 200 OHM 5 0402
R719	0613952Q40	CER CHIP RES 43.0 OHM 5 0402
R720	0613952H56	CER CHIP RES 200 OHM 5 0603
R721	0613952G67	CER CHIP RES 0.0 +/-0.050 OHM
R722	0613952G67	CER CHIP RES 0.0 +/-0.050 OHM
R723	0613952Q40	CER CHIP RES 43.0 OHM 5 0402
R725	0613952Q85	CER CHIP RES 3300 OHM 5 0402
R726	0613952R66	CER CHIP RES 0.0 +/-0.050 OHM
R727	NOTPLACED	64AM DUMMY PART NUMBER

Circuit Ref	Motorola Part Num	Description
R728	0613952Q60	CER CHIP RES 300 OHM 5 0402
R729	0613952Q33	CER CHIP RES 22.0 OHM 5 0402
R730	0613952Q60	CER CHIP RES 300 OHM 5 0402
R731	NOTPLACED	64AM DUMMY PART NUMBER
R732	0613952R66	CER CHIP RES 0.0 +/-0.050 OHM
R733	0613952R17	CER CHIP RES 47K OHM 5% 0402
R902	0613952H47	CER CHIP RES 82.0 OHM 5 0603
R903	0613952H47	CER CHIP RES 82.0 OHM 5 0603
R904	0613952H47	CER CHIP RES 82.0 OHM 5 0603
R905	0613952H47	CER CHIP RES 82.0 OHM 5 0603
R906	0613952R01	CER CHIP RES 10K OHM 5% 0402
R907	0613952R01	CER CHIP RES 10K OHM 5% 0402
R1000	0613952Q25	CER CHIP RES 10.0 OHM 5 0402
R1001	0613952R01	CER CHIP RES 10K OHM 5% 0402
R1005	0613952Q89	CER CHIP RES 4700 OHM 5 0402
R1006	0613952R01	CER CHIP RES 10K OHM 5% 0402
R1013	NOTPLACED	64AM DUMMY PART NUMBER
R1014	0613952R66	CER CHIP RES 0.0 +/-0.050 OHM
R1015	NOTPLACED	64AM DUMMY PART NUMBER
R1016	0613952R66	CER CHIP RES 0.0 +/-0.050 OHM
R1017	NOTPLACED	64AM DUMMY PART NUMBER
R1018	0613952R66	CER CHIP RES 0.0 +/-0.050 OHM
R1019	0613952Q18	CER CHIP RES 5.1 OHM 5 0402

Circuit Ref	Motorola Part Num	Description
R1020	0613952R66	CER CHIP RES 0.0 +/-0.050 OHM
R1021	0613952R66	CER CHIP RES 0.0 +/-0.050 OHM
R1023	0613952R66	CER CHIP RES 0.0 +/-0.050 OHM
R1025	0613952R01	CER CHIP RES 10K OHM 5% 0402
R1026	0613952R17	CER CHIP RES 47K OHM 5% 0402
R1027	NOTPLACED	64AM DUMMY PART NUMBER
R1028	0613952R66	CER CHIP RES 0.0 +/-0.050 OHM
R1034	0613952R01	CER CHIP RES 10K OHM 5% 0402
R1035	NOTPLACED	64AM DUMMY PART NUMBER
R1036	0613952R01	CER CHIP RES 10K OHM 5% 0402
R1041	0613952Q73	CER CHIP RES 1000 OHM 5 0402
R1045	0613952R01	CER CHIP RES 10K OHM 5% 0402
R1046	NOTPLACED	64AM DUMMY PART NUMBER
R1047	0613952R66	CER CHIP RES 0.0 +/-0.050 OHM
R1048	0613952R66	CER CHIP RES 0.0 +/-0.050 OHM
R1051	0613952R66	CER CHIP RES 0.0 +/-0.050 OHM
R1052	0613952R66	CER CHIP RES 0.0 +/-0.050 OHM
R1053	0613952Q89	CER CHIP RES 4700 OHM 5 0402
R1054	0613952Q89	CER CHIP RES 4700 OHM 5 0402
R1055	NOTPLACED	64AM DUMMY PART NUMBER
R1060	0613952Q25	CER CHIP RES 10.0 OHM 5 0402
R1061	0613952R66	CER CHIP RES 0.0 +/-0.050 OHM
R1062	0613952R66	CER CHIP RES 0.0 +/-0.050 OHM

Circuit Ref	Motorola Part Num	Description
R1063	NOTPLACED	64AM DUMMY PART NUMBER
R1065	0613952R66	CER CHIP RES 0.0 +/-0.050 OHM
R1067	0613952R03	CER CHIP RES 12K OHM 5% 0402
R1068	0613952R10	CER CHIP RES 24K OHM 5 0402
R1069	0613952R66	CER CHIP RES 0.0 +/-0.050 OHM
R1070	0613952R01	CER CHIP RES 10K OHM 5% 0402
R1072	0613952R66	CER CHIP RES 0.0 +/-0.050 OHM
R2000	0613952R01	CER CHIP RES 10K OHM 5% 0402
R2004	0613952R66	CER CHIP RES 0.0 +/-0.050 OHM
R2005	0613952R01	CER CHIP RES 10K OHM 5% 0402
R2006	0613952R01	CER CHIP RES 10K OHM 5% 0402
R2007	0613952R01	CER CHIP RES 10K OHM 5% 0402
R2008	0613952R01	CER CHIP RES 10K OHM 5% 0402
R2009	0613952R01	CER CHIP RES 10K OHM 5% 0402
R2010	0613952R01	CER CHIP RES 10K OHM 5% 0402
R2011	0613952R66	CER CHIP RES 0.0 +/-0.050 OHM
R2012	0613952R01	CER CHIP RES 10K OHM 5% 0402
R2013	0613952R01	CER CHIP RES 10K OHM 5% 0402
R3004	NOTPLACED	64AM DUMMY PART NUMBER
R3005	0613952N01	CER CHIP RES 10.0K OHM 1 0402
R3006	NOTPLACED	64AM DUMMY PART NUMBER
R3007	0613952N01	CER CHIP RES 10.0K OHM 1 0402
R3008	NOTPLACED	64AM DUMMY PART NUMBER

Circuit Ref	Motorola Part Num	Description
R3009	0613952N01	CER CHIP RES 10.0K OHM 1 0402
R3010	0613952N01	CER CHIP RES 10.0K OHM 1 0402
R3011	0613952Q81	CER CHIP RES 2200 OHM 5 0402
R3012	0613952Q59	CER CHIP RES 270 OHM 5 0402
R3013	0613952Q81	CER CHIP RES 2200 OHM 5 0402
R3014	0613952M30	CER CHIP RES 2000 OHM 1 0402
R3016	0616416H01	KAMAYA 0.1 OHM RLC20-R100FTP
R3017	0613952P25	CER CHIP RES 178K OHM 1 0402
R3018	0613952R18	CER CHIP RES 51K OHM 5 0402
R3020	0613952Q34	CER CHIP RES 24.0 OHM 5 0402
R3021	0613952Q34	CER CHIP RES 24.0 OHM 5 0402
R3023	0613952R17	CER CHIP RES 47K OHM 5% 0402
R3024	0613952Z67	RES,MF,51KOHM,1%,.0625 W,SM,0402,200
R3025	0613952Q49	CER CHIP RES 100 OHM 5 0402
R3026	0613952Q59	CER CHIP RES 270 OHM 5 0402
R3027	0613952Q59	CER CHIP RES 270 OHM 5 0402
R3028	0613952N69	CER CHIP RES 51.1K OHM 1 0402
R3029	0613952N60	CER CHIP RES 41.2K OHM 1 0402
R3030	0686135Z02	KAMAYA 0.2 OHM RLC16-R200FTP
R3031	0613952R66	CER CHIP RES 0.0 +/-0.050 OHM
R3032	0613952Q95	CER CHIP RES 8200 OHM 5 0402
R3033	0613952R05	CER CHIP RES 15K OHM 5% 0402
R3034	0613952Q95	CER CHIP RES 8200 OHM 5 0402

Circuit Ref	Motorola Part Num	Description
R3035	0613952R05	CER CHIP RES 15K OHM 5% 0402
R3036	0613952N01	CER CHIP RES 10.0K OHM 1 0402
R3037	0613952Q77	CER CHIP RES 1500 OHM 5 0402
R3038	NOTPLACED	64AM DUMMY PART NUMBER
R3040	0613952Q81	CER CHIP RES 2200 OHM 5 0402
R3041	0613952N01	CER CHIP RES 10.0K OHM 1 0402
R3043	0613952R32	CER CHIP RES 200K OHM 5 0402
R3050	0613952R25	CER CHIP RES 100K OHM 5% 0402
R3051	0613952Q89	CER CHIP RES 4700 OHM 5 0402
R3053	0613952Z58	RES,MF,22KOHM,1%,.0625 W,SM,0402,200PPM/CEL,PB-FREE
R3054	0613952Z58	RES,MF,22KOHM,1%,.0625 W,SM,0402,200PPM/CEL,PB-FREE
R3055	0613952R25	CER CHIP RES 100K OHM 5% 0402
R3056	0613952R66	CER CHIP RES 0.0 +/-0.050 OHM
R3060	0613952M30	CER CHIP RES 2000 OHM 1 0402
R3070	0613952R33	CER CHIP RES 220K OHM 5% 0402
R3071	0613952R33	CER CHIP RES 220K OHM 5% 0402
R3072	0613952R56	CER CHIP RES 2.0M OHM 5 0402
R3073	0613952R56	CER CHIP RES 2.0M OHM 5 0402
R3074	0613952Q73	CER CHIP RES 1000 OHM 5 0402
R3075	0613952N01	CER CHIP RES 10.0K OHM 1 0402
R3088	NOTPLACED	64AM DUMMY PART NUMBER
R3098	0613952Q85	CER CHIP RES 3300 OHM 5 0402

Circuit Ref	Motorola Part Num	Description
R3100	0613952R17	CER CHIP RES 47K OHM 5% 0402
R3101	0613952R25	CER CHIP RES 100K OHM 5% 0402
R3102	0613952A30	CER CHIP RES 2.00 OHM 1% 0603
R3103	0615049H16	KAMAYA RLC32 CURRENT SENSE RESISTOR
R3200	0613952R33	CER CHIP RES 220K OHM 5% 0402
R3201	0613952R20	CER CHIP RES 62K OHM 5 0402
R3202	0613952R33	CER CHIP RES 220K OHM 5% 0402
R3203	0613952R36	CER CHIP RES 300K OHM 5 0402
R3500	0613952Q77	CER CHIP RES 1500 OHM 5 0402
R3501	NOTPLACED	64AM DUMMY PART NUMBER
R3700	0613952Q73	CER CHIP RES 1000 OHM 5 0402
R3701	0613952R01	CER CHIP RES 10K OHM 5% 0402
R3702	0613952N48	CER CHIP RES 30.9K OHM 1 0402
R3703	0613952N38	CER CHIP RES 24.3K OHM 1 0402
R3704	0613952R01	CER CHIP RES 10K OHM 5% 0402
R3800	0613952Q25	CER CHIP RES 10.0 OHM 5 0402
R3888	NOTPLACED	64AM DUMMY PART NUMBER
R8002	0613952R25	CER CHIP RES 100K OHM 5% 0402
R8003	0613952R01	CER CHIP RES 10K OHM 5% 0402
R8004	0613952Q70	CER CHIP RES 750 OHM 5 0402
R8010	0613952R05	CER CHIP RES 15K OHM 5% 0402
R8011	0613952R25	CER CHIP RES 100K OHM 5% 0402
R8012	0613952R01	CER CHIP RES 10K OHM 5% 0402

Circuit Ref	Motorola Part Num	Description	Circuit Ref	Motorola Part Num	Description	Circuit Ref	Motorola Part Num	Description	Circuit Ref	Motorola Part Num	Description
R8015	NOTPLACED	64AM DUMMY PART NUMBER	R9004	0613952Q73	CER CHIP RES 1000 OHM 5 0402	S9000	4086470Z01	TACT SWITCH	U3007	5171395L01	TI DUAL ANALOG SWITCH TS5A23166
R8016	0613952R66	CER CHIP RES 0.0 +/-0.050 OHM	R9005	0613952Q73	CER CHIP RES 1000 OHM 5 0402	S9001	4015186H02	SWITCH, VOLUME	U3008	5115391H01	LINEAR REGULATOR IC
R8017	NOTPLACED	64AM DUMMY PART NUMBER	R9006	0613952Q73	CER CHIP RES 1000 OHM 5 0402	S9002	4015203H05	SWITCH, FREQUENCY	U3009	5164852H47	IC, I2C LEVEL TRANSLATOR
R8020	0613952R66	CER CHIP RES 0.0 +/-0.050 OHM	R9007	0613952Q73	CER CHIP RES 1000 OHM 5 0402	SH9000	NOTPLACED	64AM DUMMY PART NUMBER	U3020	5171428L01	LINEAR TECH SYN BUCK DC CONVERTER
R8023	0613952R66	CER CHIP RES 0.0 +/-0.050 OHM	R9008	0613952R17	CER CHIP RES 47K OHM 5% 0402	SH9001	NOTPLACED	64AM DUMMY PART NUMBER	U3021	5171428L01	LINEAR TECH SYN BUCK DC CONVERTER
R8024	0613952R25	CER CHIP RES 100K OHM 5% 0402	R9009	0613952R01	CER CHIP RES 10K OHM 5% 0402	T400	2515396H01	BALUN, TRANSFORMER	U3700	5116282H01	100MA LDO LINEAR REGULATOR
R8025	0613952R66	CER CHIP RES 0.0 +/-0.050 OHM	R9010	0613952R01	CER CHIP RES 10K OHM 5% 0402	T401	2515396H01	BALUN, TRANSFORMER	U3701	5116283H01	100MA LDO LINEAR REGULATOR
R8026	0613952R25	CER CHIP RES 100K OHM 5% 0402	R9011	0613952R17	CER CHIP RES 47K OHM 5% 0402	U001	5104932K08	IC,CUST,,,1PER PKG,BGA,,,ABL TRAMSCEOVER OC	U8000	0104024J41	PRE-FLASHED SIRF SINGLE CHIP GPS IC
R8027	0613952R25	CER CHIP RES 100K OHM 5% 0402	R9012	0613952Q50	CER CHIP RES 110 OHM 5 0402	U002	5114000B59	IC,ANLG SW,SM,SOT-353,1CHANNELS,SPST,PB-FREE	U8001	5164015H55	IC,RF AMPLIFIER,,UPC8211TK,SM,,,18.5DB,1.57GHZMIN,1.57GHZMAX
R8028	0613952R25	CER CHIP RES 100K OHM 5% 0402	R9013	0613952Q37	CER CHIP RES 33.0 OHM 5 0402	U200	5116014H01	IC,IF,,IF DIGITILIZING SUBSYSTEM	VR9000	4866544A01	DIODE ARRAY,ZEN,SR05.TCT,SM,,,5V,,,5,LOW CAPACITANCE TVS DIO
R8029	0613952R25	CER CHIP RES 100K OHM 5% 0402	R9014	0613952R01	CER CHIP RES 10K OHM 5% 0402	U400	5115443H01	IC,AD9864,QFN XSTR,BIP RF	VR9001	4813979P10	DIODE ARRAY,TRNSNT PROT,SM,SOT-457,5.6V,,225W,ZEN,4,PB-FREE
R8030	0613952R01	CER CHIP RES 10K OHM 5% 0402	R9015	0613952R01	CER CHIP RES 10K OHM 5% 0402	U600	5102495J14	IC,MAXIM EPP LNA LIFE MAX2373EGC+T	VR9002	4813979P10	DIODE ARRAY,TRNSNT PROT,SM,SOT-457,5.6V,,225W,ZEN,4,PB-FREE
R8031	0613952R25	CER CHIP RES 100K OHM 5% 0402	R9016	0613952R01	CER CHIP RES 10K OHM 5% 0402	U700	4802246J29	IC,IF,,IF DIGITILIZING SUBSYSTEM	VR9003	4815040H01	ZENER DIODE-12V
R8032	0613952R25	CER CHIP RES 100K OHM 5% 0402	R9017	0613952R01	CER CHIP RES 10K OHM 5% 0402	U701	5115147H01	IC,AD9864,QFN XSTR,BIP RF	VR9004	4815040H01	ZENER DIODE-12V
R8033	0613952R25	CER CHIP RES 100K OHM 5% 0402	R9018	0613952R01	CER CHIP RES 10K OHM 5% 0402	U702	5115022H01	POWER,,,ADA4743,,,,,37W OPERATIONAL AMPLIFIER, IC	VR9005	4805656W76	DIODE,ZEN,,SM,SOD-523,,,,,5.6V
R8034	0613952R01	CER CHIP RES 10K OHM 5% 0402	R9019	0613952Q73	CER CHIP RES 1000 OHM 5 0402	U1000	5102495J13	IC TEMPERATURE SENSOR IC,MICROP,P1710ZZGE,BG A,,12MHZ,32BITS	VR9006	4805656W76	DIODE,ZEN,,SM,SOD-523,,,,,5.6V
R8035	0613952R01	CER CHIP RES 10K OHM 5% 0402	R9021	NOTPLACED	64AM DUMMY PART NUMBER	U1005	5171209L01	4-BIT BIDIRECTION LEVEL TRANSLATOR	VR9007	4805656W76	DIODE,ZEN,,SM,SOD-523,,,,,5.6V
R8036	0613952R01	CER CHIP RES 10K OHM 5% 0402	R9022	NOTPLACED	64AM DUMMY PART NUMBER	U1006	5115001H02	NL27WZU04DFT2G	VR9008	4813979P10	DIODE ARRAY,TRNSNT PROT,SM,SOT-457,5.6V,,225W,ZEN,4,PB-FREE
R8037	0613952R01	CER CHIP RES 10K OHM 5% 0402	R9050	0613952R01	CER CHIP RES 10K OHM 5% 0402	U2000	0104032J61	INVERTER (EPP)	VR9009	4813977C23	DIODE,ZEN,MMSZ5243,SM,SOD-123,13V,10MA,.5W,ZEN,PB-FREE
R9000	0613952Q73	CER CHIP RES 1000 OHM 5 0402	R9051	0613952R01	CER CHIP RES 10K OHM 5% 0402	U2001	5171614M03	PRE-FLASHED FLASH IC			
R9001	0613952Q73	CER CHIP RES 1000 OHM 5 0402	R9052	0613952Q65	CER CHIP RES 470 OHM 5 0402	U3000	5185143E77	MICRON 16MB SDR SDRAM Y35M			
R9002	0613952Q73	CER CHIP RES 1000 OHM 5 0402	R9053	0613952H47	CER CHIP RES 82.0 OHM 5 0603	U3002	5189680C06	IC, MAKO ASIC, CMOS PWR MGMT			
R9003	0613952Q73	CER CHIP RES 1000 OHM 5 0402	R9054	0613952H47	CER CHIP RES 82.0 OHM 5 0603	U3003	5115453H01	NS LP8340 1.0A LINEAR REGULATOR			
						U3004	5114007A43	RAIL TO RAIL OUTPUT, 8 PIN BGA			
						U3006	5115974H01	IC,INVTR,1PER PKG,SOT-353,VCC RANGE 1.65 TO 5.5 V, PB-FREE			
								1.5V LINEAR VOLTAGE REGULATOR			

Circuit Ref	Motorola Part Num	Description
VR9010	4813977C23	DIODE,ZEN,MMSZ5243,SM,SOD-123,13V,10MA,.5W,ZEN,PB-FREE
VR9015	NOTPLACED	64AM DUMMY PART NUMBER
VR9016	NOTPLACED	64AM DUMMY PART NUMBER
VR9017	4815040H01	ZENER DIODE-12V
VR9018	4815040H01	ZENER DIODE-12V
VR9020	4813979P10	DIODE ARRAY,TRNSNT PROT,SM,SOT-457,5.6V,.225W,ZEN,4,PB-FREE
VR9021	4813979P10	DIODE ARRAY,TRNSNT PROT,SM,SOT-457,5.6V,.225W,ZEN,4,PB-FREE
VR9022	4813979P10	DIODE ARRAY,TRNSNT PROT,SM,SOT-457,5.6V,.225W,ZEN,4,PB-FREE
VR9023	4815040H01	ZENER DIODE-12V
Y001	5116032H01	CRYSTAL OSCILLATOR XTAL 12MHZ 20PPM
Y1000	93012000001	6X3.7X1MM SMD RESON,QRTZ,.032768MHZ,20PPM
Y3000	4802582S80	TOL,,,SM,,PAR,,12.5PF LOAD CAP,-40DE
Y3001	4815028H01	CX-101F 24.57MHZ KSS XTAL
Y8000	4802582S80	RESON,QRTZ,.032768MHZ,20PPM TOL,,,SM,,PAR,,12.5PF LOAD CAP,-40DE

## UHF1 Radio Parts List (8486716Z24)

Circuit Ref	Motorola Part Num	Description
C001	2113946D02	CAP CER CHP 1.0UF 6.3V 10%
C002	2113946D02	CAP CER CHP 1.0UF 6.3V 10%
C003	2113946K02	CAP CER CHP 0.10UF 16V
C004	2113946K02	CAP CER CHP 0.10UF 16V
C005	2113946K02	CAP CER CHP 0.10UF 16V
C006	2113946K02	CAP CER CHP 0.10UF 16V
C007	2113946K02	CAP CER CHP 0.10UF 16V
C008	2113946K02	CAP CER CHP 0.10UF 16V
C009	NOTPLACED	64AM DUMMY PART NUMBER
C013	2113945A02	CAP CER CHP 270PF 50V 10,
C014	2113945L49	CAP,FXD,.01UF,+5%,-5%,50V-DC,0603,X7R,-55DEG CMIN,125DEG CMAX,P
C015	2113945L49	CAP,FXD,.01UF,+5%,-5%,50V-DC,0603,X7R,-55DEG CMIN,125DEG CMAX,P
C016	2113945A09	CAP CER CHP 1000PF 50V 10%
C017	2113946K02	CAP CER CHP 0.10UF 16V
C018	2313960B57	CAP,FXD,10UF,+10%,-10%,6.3V-DC,SM,-55DEG CMIN,125DEG CMAX,137MA
C019	2113945L49	CAP,FXD,.01UF,+5%,-5%,50V-DC,0603,X7R,-55DEG CMIN,125DEG CMAX,P
C020	2313960B57	CAP,FXD,10UF,+10%,-10%,6.3V-DC,SM,-55DEG CMIN,125DEG CMAX,137MA
C022	2113946K02	CAP CER CHP 0.10UF 16V
C024	2115358H17	PLASTIC FILM CAPACITORS
C025	2115358H07	PLASTIC FILM CAPACITORS
C026	2115358H15	PLASTIC FILM CAPACITORS
C027	2115358H25	PLASTIC FILM CAPACITORS
C028	2115358H01	PLASTIC FILM CAPACITORS
C031	2113944A40	CAP CER CHP 100.0PF 50V 5%
C032	2113944A17	CAP CER CHP 4.7PF 50V +/-0.25PF

Circuit Ref	Motorola Part Num	Description
C033	2113944A05	CAP CER CHP 1.5PF 50V +/-0.25PF
C035	2113946K02	CAP CER CHP 0.10UF 16V
C036	2113946K02	CAP CER CHP 0.10UF 16V
C037	2115153H08	CAP, CERAMIC, COG
C038	NOTPLACED	64AM DUMMY PART NUMBER
C039	2113946D02	CAP CER CHP 1.0UF 6.3V 10%
C200	2113944A40	CAP CER CHP 100.0PF 50V 5%
C201	2115153H27	CAP, CERAMIC, COG
C202	2115153H25	CAP, CERAMIC, COG
C203	2115153H23	CAP, CERAMIC, COG
C204	2115153H34	CAP, CERAMIC, COG
C205	2115153H39	CAP, CERAMIC, COG
C206	2115153H52	CAP, CERAMIC, COG
C207	2115153H36	CAP, CERAMIC, COG
C208	2113944A40	CAP CER CHP 100.0PF 50V 5%
C209	2113946B04	CAP CER CHP 0.10UF 10V 10%
C210	2113944A40	CAP CER CHP 100.0PF 50V 5%
C211	2113946B04	CAP CER CHP 0.10UF 10V 10%
C212	2115153H08	CAP, CERAMIC, COG
C213	2115153H13	CAP, CERAMIC, COG
C214	2113944A40	CAP CER CHP 100.0PF 50V 5%
C215	2113944A40	CAP CER CHP 100.0PF 50V 5%
C216	2115153H12	CAP, CERAMIC, COG
C217	2115153H26	CAP, CERAMIC, COG
C219	2113944A40	CAP CER CHP 100.0PF 50V 5%
C220	2115153H21	CAP, CERAMIC, COG
C221	2115153H21	CAP, CERAMIC, COG
C222	2115153H15	CAP, CERAMIC, COG
C223	NOTPLACED	64AM DUMMY PART NUMBER
C224	2115153H39	CAP, CERAMIC, COG
C225	2115153H51	CAP, CERAMIC, COG
C226	2115153H36	CAP, CERAMIC, COG
C227	2113944A40	CAP CER CHP 100.0PF 50V 5%

Circuit Ref	Motorola Part Num	Description
C228	2113946B04	CAP CER CHP 0.10UF 10V 10%
C229	2113944A40	CAP CER CHP 100.0PF 50V 5%
C230	2113946B04	CAP CER CHP 0.10UF 10V 10%
C231	2115153H10	CAP, CERAMIC, COG
C232	2115153H03	CAP, CERAMIC, COG
C233	2113944A40	CAP CER CHP 100.0PF 50V 5%
C234	2113944A40	CAP CER CHP 100.0PF 50V 5%
C235	2113944A40	CAP CER CHP 100.0PF 50V 5%
C236	2115153H10	CAP, CERAMIC, COG
C237	2115153H18	CAP, CERAMIC, COG
C238	2113944A40	CAP CER CHP 100.0PF 50V 5%
C239	2113944A40	CAP CER CHP 100.0PF 50V 5%
C240	2113944A40	CAP CER CHP 100.0PF 50V 5%
C241	NOTPLACED	64AM DUMMY PART NUMBER
C243	2115153H34	CAP, CERAMIC, COG
C400	2113944A73	CAP,FXD,8PF,-.5PF+/-,50V-DC,0402,C0G,-55DEG CMIN,125DEG CMAX,PB
C401	2113944A21	CAP CER CHP 6.8PF 50V +/-0.5PF
C402	2113944M07	CAP,FXD,3.6PF,.1PF+/-,50V-DC,0603,C0G,-55DEG CMIN,125DEG CMAX
C403	2113944A40	CAP CER CHP 100.0PF 50V 5%
C404	2113944A21	CAP CER CHP 6.8PF 50V +/-0.5PF
C405	2113944A21	CAP CER CHP 6.8PF 50V +/-0.5PF
C407	2113944A61	CAP,FXD,.5PF,.25PF+/-,50V-DC,0402,C0G,-55DEG CMIN,125DEG CMAX
C408	NOTPLACED	64AM DUMMY PART NUMBER
C409	2113946B04	CAP CER CHP 0.10UF 10V 10%

Circuit Ref	Motorola Part Num	Description	Circuit Ref	Motorola Part Num	Description	Circuit Ref	Motorola Part Num	Description	Circuit Ref	Motorola Part Num	Description
C410	2113945A02	CAP CER CHP 270PF 50V 10,				C608	2113945D02	CAP CER CHP 47,000PF 25V 10%	C630	2113945B02	CAP CER CHP 10,000PF 25V 10%
C411	2113945B02	CAP CER CHP 10,000PF 25V 10%	C432	2113944A78	CAP,FXD,13PF,+5%,-5%,50V-DC,0402,C0G,-55DEG CMIN,125DEG CMAX,PB	C609	2115153H44	CAP, CERAMIC, COG	C631	2113945B02	CAP CER CHP 10,000PF 25V 10%
C412	2113945A02	CAP CER CHP 270PF 50V 10,	C433	2113944A21	CAP CER CHP 6.8PF 50V +/-0.5PF	C610	2115153H44	CAP, CERAMIC, COG 64AM DUMMY PART	C632	2113946B04	CAP CER CHP 0.10UF 10V 10%
C413	2113944A16	CAP CER CHP 4.3PF 50V +/-0.25PF	C434	2113946K02	CAP CER CHP 0.10UF 16V	C611	NOTPLACED	NUMBER	C633	2113946B04	CAP CER CHP 0.10UF 10V 10%
C414	2113944A24	CAP CER CHP 9.1PF 50V +/-0.5PF	C435	2113944A40	CAP CER CHP 100.0PF 50V 5%	C612	2113944A25	CAP CER CHP 10.0PF 50V +/-0.5PF	C634	2113945B02	CAP CER CHP 10,000PF 25V 10%
C415	2113944A24	CAP CER CHP 9.1PF 50V +/-0.5PF	C436	2113946K02	CAP CER CHP 0.10UF 16V	C613	2113945G91	CAP,FXD,.1UF,+10%,-10%,50V-DC,0805,X7R,-55DEG CMIN,125DEG CMAX			CAP,FXD,51PF,+5%,-5%,50V-DC,0402,C0G,-55DEG CMIN,125DEG CMAX,PB
C416	2113946K02	CAP CER CHP 0.10UF 16V	C437	2113945B02	CAP CER CHP 10,000PF 25V 10%	C614	2113946E02	CAP CER CHP 1.0UF 16V 10%	C635	2113944A85	CAP CER CHP 0.10UF 10V 10%
C417	2113945A02	CAP CER CHP 270PF 50V 10,	C438	2113946K02	CAP CER CHP 0.10UF 16V	C615	2113946B04	CAP CER CHP 0.10UF 10V 10%	C636	2113946B04	CAP CER CHP 0.10UF 10V 10%
C418	2113944A16	CAP CER CHP 4.3PF 50V +/-0.25PF	C439	2113945A02	CAP CER CHP 270PF 50V 10,	C616	2113944A32	CAP CER CHP 39.0PF 50V 5%			CAP,FXD,.68UF,+10%,-10%,16V-DC,1206,X5R,-55DEG CMIN,85DEG CMAX
C419	2113944A21	CAP CER CHP 6.8PF 50V +/-0.5PF	C440	2113944A11	CAP CER CHP 2.7PF 50V +/-0.25PF	C617	2113945L37	CAP,FXD,3300PF,+5%,-5%,50V-DC,0603,X7R,-55DEG CMIN,125DEG CMAX	C637	2113946G04	CAP CER CHP 0.10UF 10V 10%
C420	2113944A21	CAP CER CHP 6.8PF 50V +/-0.5PF	C441	2113944A16	CAP CER CHP 4.3PF 50V +/-0.25PF	C618	2113945C18	CAP,FXD,.012UF,+10%,-10%,50V-DC,0603,X7R,-55DEG CMIN,125DEG CMA	C638	2115153H38	CAP, CERAMIC, COG
C421	2113944M07	CAP,FXD,3.6PF,.1PF+/-,50V-DC,0603,C0G,-55DEG CMIN,125DEG CMAX	C442	2113945B02	CAP CER CHP 10,000PF 25V 10%	C619	2115358H13	PLASTIC FILM CAPACITORS	C639	2113946B04	CAP CER CHP 0.10UF 10V 10%
C422	2113944A20	CAP CER CHP 6.2PF 50V +/-0.5PF	C444	2113946K02	CAP CER CHP 0.10UF 16V 64AM DUMMY PART	C620	2113946B04	CAP CER CHP 0.10UF 10V 10%	C700	2316410H03	EPP POSCAP
C423	2113944A21	CAP CER CHP 6.8PF 50V +/-0.5PF	C445	NOTPLACED	NUMBER	C621	2113945B02	CAP CER CHP 10,000PF 25V 10%	C703	2113945A02	CAP CER CHP 270PF 50V 10,
C424	2113944A40	CAP CER CHP 100.0PF 50V 5%	C446	2113944A77	CAP,FXD,11PF,+5%,-5%,50V-DC,0402,C0G,-55DEG CMIN,125DEG CMAX,PB	C622	2113945B02	CAP CER CHP 10,000PF 25V 10%	C704	2113945A02	CAP CER CHP 270PF 50V 10,
C425	2113944A20	CAP CER CHP 6.2PF 50V +/-0.5PF	C447	2113946S35	CAP CER CHP 1.0UF 16V 10%	C623	2113944A40	CAP CER CHP 100.0PF 50V 5%	C705	2113946B02	CAP CER CHP 0.047UF 10V 10,
C427	2113944A85	CAP,FXD,51PF,+5%,-5%,50V-DC,0402,C0G,-55DEG CMIN,125DEG CMAX,PB	C448	2113946S35	CAP CER CHP 1.0UF 16V 10%	C624	2113944A40	CAP CER CHP 100.0PF 50V 5%	C706	2113945A02	CAP CER CHP 270PF 50V 10,
C428	2113944A78	CAP,FXD,13PF,+5%,-5%,50V-DC,0402,C0G,-55DEG CMIN,125DEG CMAX,PB	C601	2113945B02	CAP CER CHP 10,000PF 25V 10%	C625	2113945A11	CAP CER CHP 2200PF 50V 10%	C708	2113945A02	CAP CER CHP 10,000PF 25V 10%
C429	2113944A23	CAP CER CHP 8.2PF 50V +/-0.5PF	C602	2113946B04	CAP CER CHP 0.10UF 10V 10%	C626	2113945D02	CAP CER CHP 47,000PF 25V 10%	C709	2113945B02	CAP CER CHP 10,000PF 25V 10%
C430	2113944A26	CAP CER CHP 12.0PF 50V 5%	C603	2113946B04	CAP CER CHP 0.10UF 10V 10%	C627	2113944A40	CAP CER CHP 100.0PF 50V 5%	C710	2113945B02	CAP CER CHP 10,000PF 25V 10%
C431	2113944A23	CAP CER CHP 8.2PF 50V +/-0.5PF	C604	2113945B02	CAP CER CHP 10,000PF 25V 10%	C628	2113945B02	CAP CER CHP 10,000PF 25V 10%	C711	2113945A02	CAP CER CHP 270PF 50V 10,
			C605	2113945B02	CAP CER CHP 10,000PF 25V 10%	C629	2113944A40	CAP CER CHP 100.0PF 50V 5%	C712	2113945B04	CAP,FXD,.022UF,+10%,-10%,25V-DC,0402,X7R,-55DEG CMIN,125DEG CMA
			C606	2113944A32	CAP CER CHP 39.0PF 50V 5%				C714	2113945A02	CAP CER CHP 270PF 50V 10,
			C607	2113945B02	CAP CER CHP 10,000PF 25V 10%				C715	2113945A02	CAP CER CHP 270PF 50V 10,

Circuit Ref	Motorola Part Num	Description
C716	2113944A28	CAP CER CHP 18.0PF 50V 5%
C717	2113945A02	CAP CER CHP 270PF 50V 10,
C718	2113946K02	CAP CER CHP 0.10UF 16V 64AM DUMMY PART
C719	NOTPLACED	NUMBER
C720	2113945B04	CAP,FXD,.022UF,+10%,-10%,25V-DC,0402,X7R,-55DEG CMIN,125DEG CMA
C721	2113945D04	CAP CER CHP 100,000PF 25V 10%
C722	2113944A17	CAP CER CHP 4.7PF 50V +/-0.25PF
C723	NOTPLACED	64AM DUMMY PART NUMBER
C724	2113945A02	CAP CER CHP 270PF 50V 10,
C725	NOTPLACED	64AM DUMMY PART NUMBER
C726	2113944A82	CAP,FXD,30PF,+5%,-5%,50V-DC,0402,C0G,-55DEG CMIN,125DEG CMAX,PB
C727	2113944A82	CAP,FXD,30PF,+5%,-5%,50V-DC,0402,C0G,-55DEG CMIN,125DEG CMAX,PB
C728	2113944A08	CAP CER CHP 2.0PF 50V +/-0.25PF
C729	NOTPLACED	64AM DUMMY PART NUMBER
C730	2113946K02	CAP CER CHP 0.10UF 16V
C731	2113945D04	CAP CER CHP 100,000PF 25V 10%
C732	2116173H17	CERAMIC CAPACITOR-EPP PART
C733	2116636H04	CERAMIC CAPACITOR-EPP PART
C734	2116001H01	CHIP CAPACITOR-EPP PART
C735	2113944C37	CAP CER CHP 39.0PF 50V 5%
C736	2113945A02	CAP CER CHP 270PF 50V 10,

Circuit Ref	Motorola Part Num	Description
C737	2113945A09	CAP CER CHP 1000PF 50V 10%
C738	2113945A02	CAP CER CHP 270PF 50V 10,
C739	2113946K02	CAP CER CHP 0.10UF 16V 64AM DUMMY PART
C740	NOTPLACED	NUMBER
C798	2116173H17	CERAMIC CAPACITOR-EPP PART
C799	2116636H04	CERAMIC CAPACITOR-EPP PART
C900	2113945A02	CAP CER CHP 270PF 50V 10,
C903	2113944C14	CAP CER CHP 2.2PF 50V +/-0.25PF
C904	2113944C41	CAP CER CHP 68.0PF 50V 5%
C905	2113944C45	CAP CER CHP 100.0PF 50V 5%
C906	2113944C71	CAP,FXD,5.6PF,.25PF+/-,50V-DC,0603,C0G,-55DEG CMIN,125DEG CMAX
C907	2113944C73	CAP,FXD,6.8PF,.25PF+/-,50V-DC,0603,C0G,-55DEG CMIN,125DEG CMAX
C908	2113944C71	CAP,FXD,5.6PF,.25PF+/-,50V-DC,0603,C0G,-55DEG CMIN,125DEG CMAX
C909	2113944C41	CAP CER CHP 68.0PF 50V 5%
C910	2113944M30	CAP,FXD,33PF,+2%,-2%,50V-DC,0603,C0G,-55DEG CMIN,125DEG CMAX,PB
C911	2113944C18	CAP CER CHP 3.3PF 50V +/-0.25PF
C912	2113944C22	CAP CER CHP 4.7PF 50V +/-0.25PF
C913	2113944C45	CAP CER CHP 100.0PF 50V 5%
C914	2113945A02	CAP CER CHP 270PF 50V 10,
C915	2113944C22	CAP CER CHP 4.7PF 50V +/-0.25PF
C916	2113944C18	CAP CER CHP 3.3PF 50V +/-0.25PF

Circuit Ref	Motorola Part Num	Description
C917	2113944M30	CAP,FXD,33PF,+2%,-2%,50V-DC,0603,C0G,-55DEG CMIN,125DEG CMAX,PB
C918	2113944C45	CAP CER CHP 100.0PF 50V 5%
C920	2113944C28	CAP CER CHP 8.2PF 50V +/-0.5PF
C921	2113944C17	CAP CER CHP 3.0PF 50V +/-0.25PF
C922	NOTPLACED	64AM DUMMY PART NUMBER
C923	NOTPLACED	64AM DUMMY PART NUMBER
C924	2113944A11	CAP CER CHP 2.7PF 50V +/-0.25PF
C925	2113944V07	CAP,FXD,1.5PF,.1PF+/-,50V-DC,0402,C0G,-55DEG CMIN,125DEG CMAX
C926	2113944A15	CAP CER CHP 3.9PF 50V +/-0.25PF
C927	2113945A02	CAP CER CHP 270PF 50V 10,
C1000	2113944A40	CAP CER CHP 100.0PF 50V 5%
C1001	2113946K02	CAP CER CHP 0.10UF 16V
C1002	2113946K02	CAP CER CHP 0.10UF 16V
C1003	2113944A40	CAP CER CHP 100.0PF 50V 5%
C1004	2113944A40	CAP CER CHP 100.0PF 50V 5%
C1005	2113946K02	CAP CER CHP 0.10UF 16V
C1006	2113946K02	CAP CER CHP 0.10UF 16V
C1007	2113944A40	CAP CER CHP 100.0PF 50V 5%
C1008	2113944A40	CAP CER CHP 100.0PF 50V 5%
C1009	2113946K02	CAP CER CHP 0.10UF 16V
C1010	2113946K02	CAP CER CHP 0.10UF 16V
C1011	2113944A40	CAP CER CHP 100.0PF 50V 5%
C1012	2113946K02	CAP CER CHP 0.10UF 16V
C1013	2113946K02	CAP CER CHP 0.10UF 16V
C1014	2113946K02	CAP CER CHP 0.10UF 16V
C1015	2113946K02	CAP CER CHP 0.10UF 16V

Circuit Ref	Motorola Part Num	Description
C1016	2113946B04	CAP CER CHP 0.10UF 10V 10%
C1017	2113946E02	CAP CER CHP 1.0UF 16V 10%
C1018	2113944A28	CAP CER CHP 18.0PF 50V 5%
C1019	2113944A28	CAP CER CHP 18.0PF 50V 5%
C1028	2113946K02	CAP CER CHP 0.10UF 16V
C1029	2113946K02	CAP CER CHP 0.10UF 16V
C1030	2113944A28	CAP CER CHP 18.0PF 50V 5%
C1031	2113946K02	CAP CER CHP 0.10UF 16V
C1032	2113945B02	CAP CER CHP 10,000PF 25V 10%
C1033	2113946K02	CAP CER CHP 0.10UF 16V
C1044	2113946B04	CAP CER CHP 0.10UF 10V 10%
C2000	2113944A40	CAP CER CHP 100.0PF 50V 5%
C2001	2113945B02	CAP CER CHP 10,000PF 25V 10%
C2002	2113946K02	CAP CER CHP 0.10UF 16V
C2003	2113946K02	CAP CER CHP 0.10UF 16V
C2004	2113944A40	CAP CER CHP 100.0PF 50V 5%
C2005	2113945B02	CAP CER CHP 10,000PF 25V 10%
C2006	2113946K02	CAP CER CHP 0.10UF 16V
C2007	2113946K02	CAP CER CHP 0.10UF 16V
C3000	2113944A78	CAP,FXD,13PF,+5%,-5%,50V-DC,0402,C0G,-55DEG CMIN,125DEG CMAX,PB
C3001	2113944A78	CAP,FXD,13PF,+5%,-5%,50V-DC,0402,C0G,-55DEG CMIN,125DEG CMAX,PB
C3002	2113945D04	CAP CER CHP 100,000PF 25V 10%
C3003	2113946D05	CAP,CHIP,2.2UF,+10%,-10%,6.3V-DC,0603,X5R,-55DEG CMIN,85DEG CMA
C3004	2113946D05	CAP,CHIP,2.2UF,+10%,-10%,6.3V-DC,0603,X5R,-55DEG CMIN,85DEG CMA

Circuit Ref	Motorola Part Num	Description	Circuit Ref	Motorola Part Num	Description	Circuit Ref	Motorola Part Num	Description	Circuit Ref	Motorola Part Num	Description
C3005	2113945A09	CAP CER CHP 1000PF 50V 10%	C3048	2113946D02	CAP CER CHP 1.0UF 6.3V 10%	C3094	2113946B03	CAP CER CHP 0.068UF 10V 10	C3700	2113946D02	CAP CER CHP 1.0UF 6.3V 10%
C3010	2113946D05	CAP,CHIP,2.2UF,+10%,-10%,6.3V-DC,0603,X5R,-55DEG CMIN,85DEG CMA	C3049	2113945C25	CAP,FXD,.033UF,+10%,-10%,50V-DC,0603,X7R,-55DEG CMIN,125DEG CMA	C3095	2113946B03	CAP CER CHP 0.068UF 10V 10	C3701	2113945B02	CAP CER CHP 10,000PF 25V 10%
C3011	2113946A02	CAP CER CHP 0.022UF 16V 10,	C3050	2113945C25	CAP,FXD,.033UF,+10%,-10%,50V-DC,0603,X7R,-55DEG CMIN,125DEG CMA	C3097	2113944A31	CAP CER CHP 33.0PF 50V 5%	C3702	2113946D05	CAP,CHIP,2.2UF,+10%,-10%,6.3V-DC,0603,X5R,-55DEG CMIN,85DEG CMA
C3014	2113946D05	CAP,CHIP,2.2UF,+10%,-10%,6.3V-DC,0603,X5R,-55DEG CMIN,85DEG CMA	C3051	2113944A40	CAP CER CHP 100.0PF 50V 5%	C3098	2113944A31	CAP CER CHP 33.0PF 50V 5%	C3703	2113946D02	CAP CER CHP 1.0UF 6.3V 10%
C3015	2115153H57	CAP, CERAMIC, COG	C3060	2113944A80	CAP,FXD,20PF,+5%,-5%,50V-DC,0402,C0G,-55DEG CMIN,125DEG CMAX,PB	C3099	2113944A31	CAP CER CHP 33.0PF 50V 5%	C3704	2113944A30	CAP CER CHP 27.0PF 50V 5%
C3016	2113946D05	CAP,CHIP,2.2UF,+10%,-10%,6.3V-DC,0603,X5R,-55DEG CMIN,85DEG CMA	C3061	2113944A80	CAP,FXD,20PF,+5%,-5%,50V-DC,0402,C0G,-55DEG CMIN,125DEG CMAX,PB	C3100	2113944A31	CAP CER CHP 33.0PF 50V 5%	C3705	2113945B02	CAP CER CHP 10,000PF 25V 10%
C3017	2113945B02	CAP CER CHP 10,000PF 25V 10%	C3062	2113946K02	CAP CER CHP 0.10UF 16V	C3101	2113946D02	CAP CER CHP 1.0UF 6.3V 10%	C3706	2113945A05	CAP CER CHP 470PF 50V 10%
C3018	2113946D05	CAP,CHIP,2.2UF,+10%,-10%,6.3V-DC,0603,X5R,-55DEG CMIN,85DEG CMA	C3063	2113946K02	CAP CER CHP 0.10UF 16V	C3102	2113946D02	CAP CER CHP 1.0UF 6.3V 10%	C3707	2113946D05	CAP,CHIP,2.2UF,+10%,-10%,6.3V-DC,0603,X5R,-55DEG CMIN,85DEG CMA
C3019	2113946D02	CAP CER CHP 1.0UF 6.3V 10%	C3067	2113946D02	CAP CER CHP 1.0UF 6.3V 10%	C3200	2113945Y02	CAP,FXD,.1UF,+10%,-10%,16V-DC,0402,X7R,-55DEG CMIN,125DEG CMAX	C3800	2113945D04	CAP CER CHP 100,000PF 25V 10%
C3024	2113946D02	CAP CER CHP 1.0UF 6.3V 10%	C3070	2113944A25	CAP CER CHP 10.0PF 50V +/- 0.5PF	C3201	2113955D37	CAP,FXD,10UF,+10%,-10%,16V-DC,1206,X7R,-55DEG CMIN,125DEG CMAX	C3805	2113946K03	CAP,FXD,.22UF,+80%,-20%,16V-DC,0402,Y5V,-30DEG CMIN,85DEG CMAX
C3025	2113946K02	CAP CER CHP 0.10UF 16V	C3074	2113946D02	CAP CER CHP 1.0UF 6.3V 10%	C3202	2371572L02	POSCAP 68UF 6TPB68M	C3999	2113945B02	CAP CER CHP 10,000PF 25V 10%
C3026	2113946K02	CAP CER CHP 0.10UF 16V	C3079	2113946F03	CAP CER CHP 4.7UF 6.3V 10%	C3203	2113945B02	CAP CER CHP 10,000PF 25V 10%	C8000	2113946F05	CAP,CHIP,10UF,+10%,-10%,6.3V-DC,0805,X5R,-55DEG CMIN,85DEG CMAX
C3028	2113946D05	CAP,CHIP,2.2UF,+10%,-10%,6.3V-DC,0603,X5R,-55DEG CMIN,85DEG CMA	C3080	NOTPLACED	64AM DUMMY PART NUMBER	C3204	2115153H40	CAP CER CHP 680.0 PF 50V 5%	C8001	2113944A28	CAP CER CHP 18.0PF 50V 5%
C3031	2113946D02	CAP CER CHP 1.0UF 6.3V 10%	C3081	2113946F03	CAP CER CHP 4.7UF 6.3V 10%	C3205	2113944A50	CAP,FXD,.1UF,+10%,-10%,16V-DC,0402,X7R,-55DEG CMIN,125DEG CMAX	C8002	2113944A52	CAP CER CHP 1000.0 PF 50V 5%
C3034	2113946B04	CAP CER CHP 0.10UF 10V 10%	C3082	2113946B04	CAP CER CHP 0.10UF 10V 10%	C3206	2113945Y02	CAP,FXD,10UF,+10%,-10%,16V-DC,1206,X7R,-55DEG CMIN,125DEG CMAX	C8003	2113946F05	CAP,CHIP,10UF,+10%,-10%,6.3V-DC,0805,X5R,-55DEG CMIN,85DEG CMAX
C3035	2113946B04	CAP CER CHP 0.10UF 10V 10%	C3083	2113946B04	CAP CER CHP 0.10UF 10V 10%	C3207	2113955D37	CAP,FXD,.22UF,+80%,-20%,16V-DC,0402,Y5V,-30DEG CMIN,85DEG CMAX	C8004	2113944A28	CAP CER CHP 18.0PF 50V 5%
C3036	2113946B04	CAP CER CHP 0.10UF 10V 10%	C3084	2113946K03	CAP,FXD,.22UF,+80%,-20%,16V-DC,0402,Y5V,-30DEG CMIN,85DEG CMAX	C3208	2113946K03	CAP,FXD,.22UF,+80%,-20%,16V-DC,0402,Y5V,-30DEG CMIN,85DEG CMAX	C8005	NOTPLACED	64AM DUMMY PART NUMBER
C3037	2113944A40	CAP CER CHP 100.0PF 50V 5%	C3090	2113955D37	CAP,FXD,10UF,+10%,-10%,16V-DC,1206,X7R,-55DEG CMIN,125DEG CMAX	C3209	2371572L01	POSCAD 47UF	C8006	NOTPLACED	64AM DUMMY PART NUMBER
C3038	2113944A40	CAP CER CHP 100.0PF 50V 5%	C3091	2113955D37	CAP,FXD,10UF,+10%,-10%,16V-DC,1206,X7R,-55DEG CMIN,125DEG CMAX	C3210	2113945B02	CAP CER CHP 10,000PF 25V 10%	C8013	2113944A08	CAP CER CHP 2.0PF 50V +/- 0.25PF
C3039	2113946F03	CAP CER CHP 4.7UF 6.3V 10%	C3093	2113946N03	CAP CER CHP 2.2UF 16V	C3211	2115153H40	CAP, CERAMIC, COG	C8014	2113944A62	CAP,FXD,.75PF,.25PF+/-,50V-DC,0402,C0G,-55DEG CMIN,125DEG CMAX
C3045	2113946F03	CAP CER CHP 4.7UF 6.3V 10%				C3212	2113944A44	CAP CER CHP 220.0 PF 50V 5%			
C3047	2113946D02	CAP CER CHP 1.0UF 6.3V 10%				C3500	2113946F03	CAP CER CHP 4.7UF 6.3V 10%			

Circuit Ref	Motorola Part Num	Description
C8015	2113946K02	CAP CER CHP 0.10UF 16V
C8016	2113945A02	CAP CER CHP 270PF 50V 10,
C8017	2113944A28	CAP CER CHP 18.0PF 50V 5%
C8018	2113944A09	CAP CER CHP 2.2PF 50V +/- 0.25PF
C8019	NOTPLACED	64AM DUMMY PART NUMBER
C8020	2113944A52	CAP CER CHP 1000.0 PF 50V 5%
C8021	2113946K02	CAP CER CHP 0.10UF 16V
C8022	2113946D05	CAP,CHIP,2.2UF,+10%,-10%,6.3V-DC,0603,X5R,-55DEG CMIN,85DEG CMA
C8023	2113945B02	CAP CER CHP 10,000PF 25V 10%
C8029	2113944A52	CAP CER CHP 1000.0 PF 50V 5%
C8030	2113944A28	CAP CER CHP 18.0PF 50V 5%
C8031	2113946D05	CAP,CHIP,2.2UF,+10%,-10%,6.3V-DC,0603,X5R,-55DEG CMIN,85DEG CMA
C8032	2113945B02	CAP CER CHP 10,000PF 25V 10%
C8033	2113944A28	CAP CER CHP 18.0PF 50V 5%
C8034	2113944A28	CAP CER CHP 18.0PF 50V 5%
C8035	2113944A31	CAP CER CHP 33.0PF 50V 5%
C8036	2113944A52	CAP CER CHP 1000.0 PF 50V 5%
C9000	2113944A40	CAP CER CHP 100.0PF 50V 5%
C9001	2113944A40	CAP CER CHP 100.0PF 50V 5%
C9002	2113944A40	CAP CER CHP 100.0PF 50V 5%
C9003	2113944A40	CAP CER CHP 100.0PF 50V 5%
C9004	2113944A40	CAP CER CHP 100.0PF 50V 5%
C9005	2113944A40	CAP CER CHP 100.0PF 50V 5%

Circuit Ref	Motorola Part Num	Description
C9006	2113944A40	CAP CER CHP 100.0PF 50V 5%
C9007	2113944A40	CAP CER CHP 100.0PF 50V 5%
C9008	2113944A40	CAP CER CHP 100.0PF 50V 5%
C9009	2113944A40	CAP CER CHP 100.0PF 50V 5%
C9010	2113944A40	CAP CER CHP 100.0PF 50V 5%
C9011	2113944A40	CAP CER CHP 100.0PF 50V 5%
C9012	2113944A40	CAP CER CHP 100.0PF 50V 5%
C9013	2113944A40	CAP CER CHP 100.0PF 50V 5%
C9014	2113944C45	CAP CER CHP 100.0PF 50V 5%
C9015	2113944A40	CAP CER CHP 100.0PF 50V 5%
C9016	2113944A40	CAP CER CHP 100.0PF 50V 5%
C9017	2113944A40	CAP CER CHP 100.0PF 50V 5%
C9018	2113944A40	CAP CER CHP 100.0PF 50V 5%
C9019	2113944A40	CAP CER CHP 100.0PF 50V 5%
C9020	2113944A40	CAP CER CHP 100.0PF 50V 5%
C9021	2113944A40	CAP CER CHP 100.0PF 50V 5%
C9022	2113944A40	CAP CER CHP 100.0PF 50V 5%
C9023	2113944A40	CAP CER CHP 100.0PF 50V 5%
C9024	2113944A40	CAP CER CHP 100.0PF 50V 5%
C9025	2113944A40	CAP CER CHP 100.0PF 50V 5%
C9026	2113944A40	CAP CER CHP 100.0PF 50V 5%
C9027	2113944A40	CAP CER CHP 100.0PF 50V 5%
C9028	2113944A40	CAP CER CHP 100.0PF 50V 5%

Circuit Ref	Motorola Part Num	Description
C9029	2113944A40	CAP CER CHP 100.0PF 50V 5%
C9030	2113944A17	CAP CER CHP 4.7PF 50V +/- 0.25PF
C9031	2113944A17	CAP CER CHP 4.7PF 50V +/- 0.25PF
C9032	2113944A17	CAP CER CHP 4.7PF 50V +/- 0.25PF
C9033	2113944A40	CAP CER CHP 100.0PF 50V 5%
C9038	2113944A40	CAP CER CHP 100.0PF 50V 5%
C9039	2113944C45	CAP CER CHP 100.0PF 50V 5%
C9040	2113944A40	CAP CER CHP 100.0PF 50V 5%
C9041	2113944A40	CAP CER CHP 100.0PF 50V 5%
C9042	2113944A40	CAP CER CHP 100.0PF 50V 5%
C9043	2113944A40	CAP CER CHP 100.0PF 50V 5%
C9044	2113944A40	CAP CER CHP 100.0PF 50V 5%
C9045	2113944A40	CAP CER CHP 100.0PF 50V 5%
C9046	2113944A40	CAP CER CHP 100.0PF 50V 5%
C9047	2113944A40	CAP CER CHP 100.0PF 50V 5%
C9048	2113944A40	CAP CER CHP 100.0PF 50V 5%
C9049	2113944A40	CAP CER CHP 100.0PF 50V 5%
C9050	2113944A40	CAP CER CHP 100.0PF 50V 5%
C9051	NOTPLACED	64AM DUMMY PART NUMBER
C9053	NOTPLACED	64AM DUMMY PART NUMBER
C9055	NOTPLACED	64AM DUMMY PART NUMBER
C9057	NOTPLACED	64AM DUMMY PART NUMBER
C9058	2113944A40	CAP CER CHP 100.0PF 50V 5%

Circuit Ref	Motorola Part Num	Description
C9059	2113944A40	CAP CER CHP 100.0PF 50V 5%
C9060	2113944A40	CAP CER CHP 100.0PF 50V 5%
C9061	2113944A40	CAP CER CHP 100.0PF 50V 5%
C9062	2113944A40	CAP CER CHP 100.0PF 50V 5%
C9063	2113944A40	CAP CER CHP 100.0PF 50V 5%
C9064	2113944A40	CAP CER CHP 100.0PF 50V 5%
C9065	2113944C45	CAP CER CHP 100.0PF 50V 5%
C9066	2113944A40	CAP CER CHP 100.0PF 50V 5%
C9067	NOTPLACED	64AM DUMMY PART NUMBER
C9068	NOTPLACED	64AM DUMMY PART NUMBER
C9069	NOTPLACED	64AM DUMMY PART NUMBER
C9071	NOTPLACED	64AM DUMMY PART NUMBER
C9072	NOTPLACED	64AM DUMMY PART NUMBER
C9073	2313960C26	CAP,FXD,1UF,+10%,-10%,35V-DC,SM,-55DEG CMIN,125DEG CMAX,114MA,E
C9074	2313960A55	CAP,FXD,.47UF,+10%,-10%,25V-DC,SM,-55DEG CMIN,125DEG CMAX,73MA
CR900	4815897H01	PIN DIODE
CR901	4815897H01	PIN DIODE
CR902	4815897H01	PIN DIODE
CR903	4815897H01	PIN DIODE
D001	4815059H01	TOSHIBA VARACTOR DIODE
D200	4815096H01	VARACTOR DIODE 1SV305
D201	4815096H01	VARACTOR DIODE 1SV305
D202	4815096H01	VARACTOR DIODE 1SV305
D203	4815096H01	VARACTOR DIODE 1SV305
D204	4815096H01	VARACTOR DIODE 1SV305
D205	4815096H01	VARACTOR DIODE 1SV305
D206	4815096H01	VARACTOR DIODE 1SV305



Circuit Ref	Motorola Part Num	Description
D207	4815096H01	VARACTOR DIODE 1SV305
D400	4885055Y01	DIODE VARACTOR PB-FREE
D401	4885055Y01	DIODE VARACTOR PB-FREE
D402	4813974A19	DIODE ARRAY,MXR,SM,SOT-323,7V,.2W,SHTK,2,PB-FREE
D403	4885055Y01	DIODE VARACTOR PB-FREE
D404	4885055Y01	DIODE VARACTOR PB-FREE
D405	4815923H01	SCHOTTKY DIODE-NEW LEADFREE
D600	4815096H01	VARACTOR DIODE 1SV305
D601	4815096H01	VARACTOR DIODE 1SV305
D3000	4813978A25	SCHOTTKY 30V SOD-323 T&R PB FREE
D9000	4805729G49	DIODE RED/YEL
E001	2480640Z01	SURFACE MOUNT FERRITE BEAD
E002	2480640Z01	SURFACE MOUNT FERRITE BEAD
E003	2480640Z01	SURFACE MOUNT FERRITE BEAD
E004	2480640Z01	SURFACE MOUNT FERRITE BEAD
E400	2480640Z01	SURFACE MOUNT FERRITE BEAD
E401	2480640Z01	SURFACE MOUNT FERRITE BEAD
E600	2480640Z01	SURFACE MOUNT FERRITE BEAD
E601	2480640Z01	SURFACE MOUNT FERRITE BEAD
E602	2480640Z01	SURFACE MOUNT FERRITE BEAD
E701	7686949J14	FLTR,FERRITE BEAD,,,2A,,,,SM,0805,,CHIP ,220OHM
E3030	2409134J04	IND CHIP FER FLTR 600 0603 (000)
E3031	2409134J04	IND CHIP FER FLTR 600 0603 (000)

Circuit Ref	Motorola Part Num	Description
E3032	2409134J04	IND CHIP FER FLTR 600 0603 (000)
E3033	2409134J04	IND CHIP FER FLTR 600 0603 (000)
E3700	7686949J08	FLTR,FERR,,,,1A,,,,SM,0603
E3701	7686949J08	FLTR,FERR,,,,1A,,,,SM,0603
E3702	7686949J08	FLTR,FERR,,,,1A,,,,SM,0603
E3703	7686949J08	FLTR,FERR,,,,1A,,,,SM,0603
E3704	7686949J08	FLTR,FERR,,,,1A,,,,SM,0603
E3705	7686949J08	FLTR,FERR,,,,1A,,,,SM,0603
E8000	7686949J08	FLTR,FERR,,,,1A,,,,SM,0603
E8001	7686949J08	FLTR,FERR,,,,1A,,,,SM,0603
E8002	NOTPLACED	64AM DUMMY PART NUMBER
E8003	7686949J08	FLTR,FERR,,,,1A,,,,SM,0603
E8004	7686949J08	FLTR,FERR,,,,1A,,,,SM,0603
E8005	7686949J08	FLTR,FERR,,,,1A,,,,SM,0603
E8006	7686949J08	FLTR,FERR,,,,1A,,,,SM,0603
E9000	7686949J14	FLTR,FERRITE BEAD,,,2A,,,,SM,0805,,CHIP ,220OHM
E9001	2480640Z01	SURFACE MOUNT FERRITE BEAD
E9006	NOTPLACED	64AM DUMMY PART NUMBER
E9007	NOTPLACED	64AM DUMMY PART NUMBER
F9000	6515076H01	FUSE CHIP SMT TR/1608FF 3A
FL400	9116854H02	73.35 MHZ 4 POLE CRYSTAL FILTER PASSIVE
FL8000	9180310L38	FILTER,SAW,BANDPASS,1.5 7542
FL8001	9180310L38	FILTER,SAW,BANDPASS,1.5 7542
FL9000	2515003H02	CHIP COMMON MODE CHOKO COILS
J9001	0970312L02	40 PIN BOARD-TO-BOARD CONNECTOR
L002	2415429H26	CHIP INDUCTOR
L003	NOTPLACED	64AM DUMMY PART NUMBER
L200	2415429H47	CHIP INDUCTOR
L201	2415427H29	CHIP INDUCTOR

Circuit Ref	Motorola Part Num	Description
L202	2416540H13	CHIP INDUCTOR
L203	2415429H47	CHIP INDUCTOR
L204	2415429H47	CHIP INDUCTOR
L205	2415429H47	CHIP INDUCTOR
L206	2415429H47	CHIP INDUCTOR
L207	2415427H42	CHIP INDUCTOR
L208	2415429H47	CHIP INDUCTOR
L209	2415427H26	CHIP INDUCTOR
L210	2415428H07	AIR WOUND INDUCTOR
L211	2415429H47	CHIP INDUCTOR
L212	2415429H47	CHIP INDUCTOR
L213	2415429H47	CHIP INDUCTOR
L214	2415429H47	CHIP INDUCTOR
L215	2415429H27	CHIP INDUCTOR
L217	2415347H01	IDCTR, 1UH
L218	2415429H31	CHIP INDUCTOR
L400	2471912M04	INDUCTOR
L401	2471912M04	INDUCTOR
L402	2415429H35	CHIP INDUCTOR
L403	2415427H34	CHIP INDUCTOR
L404	2415427H29	CHIP INDUCTOR
L405	2415429H25	CHIP INDUCTOR
L406	2415429H10	CHIP INDUCTOR
L407	2415427H16	CHIP INDUCTOR
L408	2471912M04	INDUCTOR
L409	2471912M04	INDUCTOR
L410	NOTPLACED	64AM DUMMY PART NUMBER
L411	2415429H35	CHIP INDUCTOR
L412	2414017N29	IDCTR,CHIP,270NH,5%,150 MA,3.5OHM,CER,8
L413	2415429H23	Q,400MHZ SRF,SM,0603
L414	2415429H23	CHIP INDUCTOR
L415	2415429H46	CHIP INDUCTOR
L416	2414017N29	IDCTR,CHIP,270NH,5%,150 MA,3.5OHM,CER,8
L417	2415718H37	Q,400MHZ SRF,SM,0603
L418	2415429H47	CHIP INDUCTOR
L419	2414032F42	IDCTR,WW,470NH,10%,170 MA,2.5OHM,CER,40
L420	2414032F42	Q,665MHZ SRF,SM,PB-F

Circuit Ref	Motorola Part Num	Description
L600	2466505A01	COIL INDUCTOR
L601	2466505A01	COIL INDUCTOR
L602	2415569H01	INDUCTOR 4.7UH
L603	2415718H37	CHIP INDUCTOR
L604	2414015B26	IDCTR,FXD,330NH,2%,310M A,1.4OHM,CER,48
L605	2415569H01	Q,600MHZ SRF,SM,0805
L700	2414017N25	INDUCTOR 4.7UH
L701	2414017N25	IDCTR,CHIP,120NH,5%,200 MA,2.4OHM,CER,12
L702	2415429H14	Q,600MHZ SRF,SM,0603
L703	2414017N25	IDCTR,CHIP,120NH,5%,200 MA,2.4OHM,CER,12
L706	2460591E64	Q,600MHZ SRF,SM,0603
L707	2471406L02	COIL AIR WOUND INDUC 30.51
L902	2414017N25	RF AIR WOUND COIL 10NH
L903	2414017N25	IDCTR,CHIP,120NH,5%,200 MA,2.4OHM,CER,12
L904	2471912M04	Q,600MHZ SRF,SM,0603
L905	2471912M04	IDCTR,CHIP,120NH,5%,200 MA,2.4OHM,CER,12
L906	2414017N25	Q,600MHZ SRF,SM,0603
L907	2471912M03	INDUCTOR
L908	2415429H35	SQUARE AIR CORE
L909	2471912M03	INDUCTORS
L910	2471912M04	INDUCTORS
L911	2471912M04	INDUCTOR
L912	2414017P08	INDUCTOR
L913	2414017P10	IDCTR,CHIP,3.9NH,300MA,2 20HM,CER,8 Q,4GHZ
L3003	2464675H01	SRF,SM,0402,PB-F
		IDCTR,CHIP,5.6NH,300MA,2 90HM,CER,9 Q,3.28GHZ
		SRF,SM,0402,P
		IDCTR,WW,560NH,5%,550M A

Circuit Ref	Motorola Part Num	Description
L3004	2464675H01	IDCTR,WW,560NH,5%,550MA
L3020	2489846Y06	IDCTR,WW,10UH,20,490MA,.0.67OHM,FERR,,,,,SM,,,PWR, 3X2.8X1.0MM
L3021	2489846Y06	IDCTR,WW,10UH,20,490MA,.0.67OHM,FERR,,,,,SM,,,PWR, 3X2.8X1.0MM
L3022	2464675H01	IDCTR,WW,560NH,5%,550MA
L8001	2414017P10	IDCTR,CHIP,5.6NH,300MA,.29OHM,CER,9 Q,3.28GHZ SRF,SM,0402,P
L8002	2414017P17	IDCTR,CHIP,22NH,5%,300MA,.88OHM,CER,9 Q,1.8GHZ SRF,SM,0402,P
L8003	2414017P13	IDCTR,CHIP,10NH,5%,300MA,.46OHM,CER,9 Q,2.5GHZ SRF,SM,0402,P
L8004	2414017P10	IDCTR,CHIP,5.6NH,300MA,.29OHM,CER,9 Q,3.28GHZ SRF,SM,0402,P
L9000	2415429H45	CHIP INDUCTOR
L9001	2415429H45	CHIP INDUCTOR
L9007	2415429H45	CHIP INDUCTOR
L9008	2415429H45	CHIP INDUCTOR
M1	4271321L01	TOP SHIELD METAL LOCK/RETAINER
M2	4271321L01	TOP SHIELD METAL LOCK/RETAINER
M700	2615193H01	HEAT SPREADER COPPER BLOCK
M9000	4371105L01	BOARD SPACER
M9001	4371105L01	BOARD SPACER
M9002	4371105L01	BOARD SPACER
M9003	NOTPLACED	64AM DUMMY PART NUMBER
M9004	NOTPLACED	64AM DUMMY PART NUMBER
M9005	3915478H01	SPEAKER CONTACT PAD
M9006	3915478H01	SPEAKER CONTACT PAD
M9007	0915184H01	CONNECTOR, BATTERY CONTACT
P900	2815696H01	SMA ANTENNA NUT CUM RF CONTACTS
P9000	2887818K02	PLUG 0.5 PITCH 16 CKT

Circuit Ref	Motorola Part Num	Description
Q002	4815359H01	PNP GENERALPURPOSEDOUBLE TRANSISTOR
Q003	4816134H01	DIGITAL TRANSISTORS
Q200	4815029H01	NPN SILICON TRANSISTOR TSTR DUAL NPN/PNP UMH 5
Q202	4815055H01	TSTR DUAL NPN/PNP UMH 5
Q203	4815055H01	TSTR DUAL NPN/PNP UMH 5
Q204	4885061Y01	XSTR NPN 6V 30UA 12GHZ PB-FREE
Q205	4885061Y01	XSTR NPN 6V 30UA 12GHZ PB-FREE
Q206	4815055H01	TSTR DUAL NPN/PNP UMH 5
Q207	4815055H01	TSTR DUAL NPN/PNP UMH 5
Q208	4885061Y01	XSTR NPN 6V 30UA 12GHZ PB-FREE
Q400	4816531H01	NPN SILICON BIPOLAR TRANSISTOR
Q401	4816531H01	NPN SILICON BIPOLAR TRANSISTOR
Q600	4813973A04	XSTR,BIP GP SS,NPN,TA13,SM,SOT-23,SMT,30V,.225W,300MA,125MHZ,P
Q601	4815055H01	TSTR DUAL NPN/PNP UMH 5
Q602	4885061Y01	XSTR NPN 6V 30UA 12GHZ PB-FREE
Q701	4815055H01	TSTR DUAL NPN/PNP UMH 5
Q702	4815055H01	TSTR DUAL NPN/PNP UMH 5
Q703	4816547H01	PRE DRIVER EPP PART
Q704	4816548H01	FINAL PA - EPP PART
Q900	4815055H01	TSTR DUAL NPN/PNP UMH 5
Q901	4815055H01	TSTR DUAL NPN/PNP UMH 5
Q3000	4805585Q23	XSTR,FET GEN PURP,PB-FREE
Q3001	4805585Q23	XSTR,FET GEN PURP,PB-FREE
Q3002	4816134H01	DIGITAL TRANSISTORS

Circuit Ref	Motorola Part Num	Description
Q3003	4813970A62	XSTR,FET GP PWR,MOSFET,P-CH,ENHN,CF,-20V,1.3W,PB-FREE
Q3005	4805585Q23	XSTR,FET GEN PURP,PB-FREE
Q3006	4816134H01	DIGITAL TRANSISTORS
Q3010	4805585Q23	XSTR,FET GEN PURP,PB-FREE
Q9000	4813973M07	XSTR,BIP GP SS,NPN,T3904,SM,SOT-23,SMT,40V,.225W,200MA,300MHZ
Q9001	4815154H01	DUAL TRANS NPN XSTR,BIP GP SS,NPN,T3904,SM,SOT-23,SMT,40V,.225W,200MA,300MHZ
Q9003	4813973M07	XSTR,BIP GP SS,NPN,T3904,SM,SOT-23,SMT,40V,.225W,200MA,300MHZ
R006	0613952Q93	CER CHIP RES 6800 OHM 5 0402
R007	0613952R01	CER CHIP RES 10K OHM 5% 0402
R008	0613952Q25	CER CHIP RES 10.0 OHM 5 0402
R010	0613952Q93	CER CHIP RES 6800 OHM 5 0402
R011	0613952Q49	CER CHIP RES 100 OHM 5 0402
R012	0613952R25	CER CHIP RES 100K OHM 5% 0402
R013	0613952Q46	CER CHIP RES 75.0 OHM 5 0402
R014	0613952Q42	CER CHIP RES 51.0 OHM 5 0402
R016	0613952Q33	CER CHIP RES 22.0 OHM 5 0402
R017	0613952Q64	CER CHIP RES 430 OHM 5 0402
R018	0613952Q96	CER CHIP RES 9100 OHM 5 0402
R019	0613952R01	CER CHIP RES 10K OHM 5% 0402
R020	0613952Q55	CER CHIP RES 180 OHM 5 0402
R022	0613952Q36	CER CHIP RES 30.0 OHM 5 0402

Circuit Ref	Motorola Part Num	Description
R025	0613952R13	CER CHIP RES 33K OHM 5% 0402
R026	0613952R01	CER CHIP RES 10K OHM 5% 0402
R027	0613952R66	CER CHIP RES 0.0 +/-0.050 OHM
R052	0613952R66	CER CHIP RES 0.0 +/-0.050 OHM
R053	0613952R66	CER CHIP RES 0.0 +/-0.050 OHM
R054	0613952R66	CER CHIP RES 0.0 +/-0.050 OHM
R200	0613952Q95	CER CHIP RES 8200 OHM 5 0402
R201	0613952Q91	CER CHIP RES 5600 OHM 5 0402
R202	0613952Q49	CER CHIP RES 100 OHM 5 0402
R203	0613952Q51	CER CHIP RES 120 OHM 5 0402
R205	0613952Q91	CER CHIP RES 5600 OHM 5 0402
R207	NOTPLACED	64AM DUMMY PART NUMBER
R208	0613952Q95	CER CHIP RES 8200 OHM 5 0402
R209	0613952Q91	CER CHIP RES 5600 OHM 5 0402
R210	0613952Q49	CER CHIP RES 100 OHM 5 0402
R211	0613952Q50	CER CHIP RES 110 OHM 5 0402
R212	0613952Q91	CER CHIP RES 5600 OHM 5 0402
R213	0613952Q94	CER CHIP RES 7500 OHM 5 0402
R214	0613952Q58	CER CHIP RES 240 OHM 5 0402
R215	NOTPLACED	64AM DUMMY PART NUMBER
R216	0613952Q57	CER CHIP RES 220 OHM 5 0402
R217	0613952Q95	CER CHIP RES 8200 OHM 5 0402
R218	0613952Q66	CER CHIP RES 510 OHM 5 0402

Circuit Ref	Motorola Part Num	Description	Circuit Ref	Motorola Part Num	Description	Circuit Ref	Motorola Part Num	Description	Circuit Ref	Motorola Part Num	Description
R220	0613952Q60	CER CHIP RES 300 OHM 5 0402	R424	0613952R01	CER CHIP RES 10K OHM 5% 0402	R702	0613952Z80	RES,MF,330KOHM,1%,.0625 W,SM,0402,200PPM/CEL,PB-FREE	R727	NOTPLACED	64AM DUMMY PART NUMBER
R221	0613952Q31	CER CHIP RES 18.0 OHM 5 0402	R425	0613952R66	CER CHIP RES 0.0 +/-0.050 OHM	R703	0613952Z80	RES,MF,330KOHM,1%,.0625 W,SM,0402,200PPM/CEL,PB-FREE	R728	0613952Q60	CER CHIP RES 300 OHM 5 0402
R222	0613952Q60	CER CHIP RES 300 OHM 5 0402	R426	0613952R66	CER CHIP RES 0.0 +/-0.050 OHM	R704	NOTPLACED	64AM DUMMY PART NUMBER	R729	0613952Q33	CER CHIP RES 22.0 OHM 5 0402
R223	0613952R66	CER CHIP RES 0.0 +/-0.050 OHM	R497	NOTPLACED	64AM DUMMY PART NUMBER	R705	0613952R56	CER CHIP RES 2.0M OHM 5 0402	R730	0613952Q60	CER CHIP RES 300 OHM 5 0402
R224	0613952R66	CER CHIP RES 0.0 +/-0.050 OHM	R499	0613952R01	CER CHIP RES 10K OHM 5% 0402	R706	0613952R56	CER CHIP RES 2.0M OHM 5 0402	R731	NOTPLACED	64AM DUMMY PART NUMBER
R400	0613952R01	CER CHIP RES 10K OHM 5% 0402	R600	0613952R01	CER CHIP RES 10K OHM 5% 0402	R707	0613952Q81	CER CHIP RES 2200 OHM 5 0402	R732	0613952R66	CER CHIP RES 0.0 +/-0.050 OHM
R402	0613952R66	CER CHIP RES 0.0 +/-0.050 OHM	R601	0613952Q55	CER CHIP RES 180 OHM 5 0402	R708	0613952Q90	CER CHIP RES 5100 OHM 5 0402	R733	0613952R17	CER CHIP RES 47K OHM 5% 0402
R403	0613952Q65	CER CHIP RES 470 OHM 5 0402	R602	0613952Q61	CER CHIP RES 330 OHM 5 0402	R709	0613952R66	CER CHIP RES 0.0 +/-0.050 OHM	R902	0613952H47	CER CHIP RES 82.0 OHM 5 0603
R404	0613952Q72	CER CHIP RES 910 OHM 5 0402	R603	0613952R05	CER CHIP RES 15K OHM 5% 0402	R710	NOTPLACED	64AM DUMMY PART NUMBER	R903	0613952H47	CER CHIP RES 82.0 OHM 5 0603
R405	0613952R25	CER CHIP RES 100K OHM 5% 0402	R604	0613952Q90	CER CHIP RES 5100 OHM 5 0402	R711	0613952R08	CER CHIP RES 20K OHM 5 0402	R904	0613952H47	CER CHIP RES 82.0 OHM 5 0603
R406	0613952R25	CER CHIP RES 100K OHM 5% 0402	R605	0613952Q90	CER CHIP RES 5100 OHM 5 0402	R712	0613952R66	CER CHIP RES 0.0 +/-0.050 OHM	R905	0613952H47	CER CHIP RES 82.0 OHM 5 0603
R407	0613952Q42	CER CHIP RES 51.0 OHM 5 0402	R606	0613952Q75	CER CHIP RES 1200 OHM 5 0402	R713	NOTPLACED	64AM DUMMY PART NUMBER	R906	0613952R01	CER CHIP RES 10K OHM 5% 0402
R409	0613952R05	CER CHIP RES 15K OHM 5% 0402	R607	0613952R25	CER CHIP RES 100K OHM 5% 0402	R714	0613952Q59	CER CHIP RES 270 OHM 5 0402	R907	0613952R01	CER CHIP RES 10K OHM 5% 0402
R410	0613952Q83	CER CHIP RES 2700 OHM 5 0402	R609	0613952R01	CER CHIP RES 10K OHM 5% 0402	R717	0613958H33	CER CHIP RES 22.0 OHM 5% 0805	R1000	0613952Q25	CER CHIP RES 10.0 OHM 5 0402
R411	0613952R19	CER CHIP RES 56K OHM 5% 0402	R610	0613952R01	CER CHIP RES 10K OHM 5% 0402	R718	0613952Q56	CER CHIP RES 200 OHM 5 0402	R1001	0613952R01	CER CHIP RES 10K OHM 5% 0402
R412	0613952Q63	CER CHIP RES 390 OHM 5 0402	R611	0613952Q63	CER CHIP RES 390 OHM 5 0402	R719	0613952Q40	CER CHIP RES 43.0 OHM 5 0402	R1005	0613952Q89	CER CHIP RES 4700 OHM 5 0402
R413	0613952Q77	CER CHIP RES 1500 OHM 5 0402	R612	0613952R08	CER CHIP RES 20K OHM 5 0402	R720	0613952H56	CER CHIP RES 200 OHM 5 0603	R1006	0613952R01	CER CHIP RES 10K OHM 5% 0402
R416	0613952R66	CER CHIP RES 0.0 +/-0.050 OHM	R696	0613952R66	CER CHIP RES 0.0 +/-0.050 OHM	R721	0613952G67	CER CHIP RES 200 OHM 5 0603	R1013	NOTPLACED	64AM DUMMY PART NUMBER
R417	0613952R66	CER CHIP RES 0.0 +/-0.050 OHM	R697	0613952R66	CER CHIP RES 0.0 +/-0.050 OHM	R722	0613952G67	CER CHIP RES 0.0 +/-0.050 OHM	R1014	0613952R66	CER CHIP RES 0.0 +/-0.050 OHM
R419	0613952R66	CER CHIP RES 0.0 +/-0.050 OHM	R698	0613952R01	CER CHIP RES 10K OHM 5% 0402	R723	0613952Q40	CER CHIP RES 0.0 +/-0.050 OHM	R1015	NOTPLACED	64AM DUMMY PART NUMBER
R420	0613952Q95	CER CHIP RES 8200 OHM 5 0402	R699	0613952R25	CER CHIP RES 100K OHM 5% 0402	R725	0613952Q85	CER CHIP RES 43.0 OHM 5 0402	R1016	0613952R66	CER CHIP RES 0.0 +/-0.050 OHM
R421	0613952Q49	CER CHIP RES 100 OHM 5 0402	R700	0615043C01	RES POWER METAL STRIP W18 COMPLIANT	R726	0613952R66	CER CHIP RES 3300 OHM 5 0402	R1017	NOTPLACED	64AM DUMMY PART NUMBER
R422	0613952R01	CER CHIP RES 10K OHM 5% 0402	R701	NOTPLACED	64AM DUMMY PART NUMBER			CER CHIP RES 0.0 +/-0.050 OHM	R1018	0613952R66	CER CHIP RES 0.0 +/-0.050 OHM

Circuit Ref	Motorola Part Num	Description
R1019	0613952Q18	CER CHIP RES 5.1 OHM 5 0402
R1020	0613952R66	CER CHIP RES 0.0 +/-0.050 OHM
R1021	0613952R66	CER CHIP RES 0.0 +/-0.050 OHM
R1023	0613952R66	CER CHIP RES 0.0 +/-0.050 OHM
R1025	0613952R01	CER CHIP RES 10K OHM 5% 0402
R1026	0613952R17	CER CHIP RES 47K OHM 5% 0402
R1027	NOTPLACED	64AM DUMMY PART NUMBER
R1028	0613952R66	CER CHIP RES 0.0 +/-0.050 OHM
R1034	0613952R01	CER CHIP RES 10K OHM 5% 0402
R1035	NOTPLACED	64AM DUMMY PART NUMBER
R1036	0613952R01	CER CHIP RES 10K OHM 5% 0402
R1041	0613952Q73	CER CHIP RES 1000 OHM 5 0402
R1045	0613952R01	CER CHIP RES 10K OHM 5% 0402
R1046	NOTPLACED	64AM DUMMY PART NUMBER
R1047	0613952R66	CER CHIP RES 0.0 +/-0.050 OHM
R1048	0613952R66	CER CHIP RES 0.0 +/-0.050 OHM
R1051	0613952R66	CER CHIP RES 0.0 +/-0.050 OHM
R1052	0613952R66	CER CHIP RES 0.0 +/-0.050 OHM
R1053	0613952Q89	CER CHIP RES 4700 OHM 5 0402
R1054	0613952Q89	CER CHIP RES 4700 OHM 5 0402
R1055	NOTPLACED	64AM DUMMY PART NUMBER
R1060	0613952Q25	CER CHIP RES 10.0 OHM 5 0402
R1061	0613952R66	CER CHIP RES 0.0 +/-0.050 OHM

Circuit Ref	Motorola Part Num	Description
R1062	0613952R66	CER CHIP RES 0.0 +/-0.050 OHM
R1063	NOTPLACED	64AM DUMMY PART NUMBER
R1065	0613952R66	CER CHIP RES 0.0 +/-0.050 OHM
R1067	0613952R03	CER CHIP RES 12K OHM 5% 0402
R1068	0613952R10	CER CHIP RES 24K OHM 5 0402
R1069	0613952R66	CER CHIP RES 0.0 +/-0.050 OHM
R1070	0613952R01	CER CHIP RES 10K OHM 5% 0402
R1072	0613952R66	CER CHIP RES 0.0 +/-0.050 OHM
R2000	0613952R01	CER CHIP RES 10K OHM 5% 0402
R2004	0613952R66	CER CHIP RES 0.0 +/-0.050 OHM
R2005	0613952R01	CER CHIP RES 10K OHM 5% 0402
R2006	0613952R01	CER CHIP RES 10K OHM 5% 0402
R2007	0613952R01	CER CHIP RES 10K OHM 5% 0402
R2008	0613952R01	CER CHIP RES 10K OHM 5% 0402
R2009	0613952R01	CER CHIP RES 10K OHM 5% 0402
R2010	0613952R01	CER CHIP RES 10K OHM 5% 0402
R2011	0613952R66	CER CHIP RES 0.0 +/-0.050 OHM
R2012	0613952R01	CER CHIP RES 10K OHM 5% 0402
R2013	0613952R01	CER CHIP RES 10K OHM 5% 0402
R3004	NOTPLACED	64AM DUMMY PART NUMBER
R3005	0613952N01	CER CHIP RES 10.0K OHM 1 0402
R3006	NOTPLACED	64AM DUMMY PART NUMBER
R3007	0613952N01	CER CHIP RES 10.0K OHM 1 0402

Circuit Ref	Motorola Part Num	Description
R3008	NOTPLACED	64AM DUMMY PART NUMBER
R3009	0613952N01	CER CHIP RES 10.0K OHM 1 0402
R3010	0613952N01	CER CHIP RES 10.0K OHM 1 0402
R3011	0613952Q81	CER CHIP RES 2200 OHM 5 0402
R3012	0613952Q59	CER CHIP RES 270 OHM 5 0402
R3013	0613952Q81	CER CHIP RES 2200 OHM 5 0402
R3014	0613952M30	CER CHIP RES 2000 OHM 1 0402
R3016	0616416H01	KAMAYA 0.1 OHM RLC20-R100FTP
R3017	0613952P25	CER CHIP RES 178K OHM 1 0402
R3018	0613952R18	CER CHIP RES 51K OHM 5 0402
R3020	0613952Q34	CER CHIP RES 24.0 OHM 5 0402
R3021	0613952Q34	CER CHIP RES 24.0 OHM 5 0402
R3023	0613952R17	CER CHIP RES 47K OHM 5% 0402
R3024	0613952Z67	RES,MF,51KOHM,1%,.0625 W,SM,0402,200
R3025	0613952Q49	CER CHIP RES 100 OHM 5 0402
R3026	0613952Q61	CER CHIP RES 330 OHM 5 0402
R3027	0613952Q61	CER CHIP RES 330 OHM 5 0402
R3028	0613952N69	CER CHIP RES 51.1K OHM 1 0402
R3029	0613952N60	CER CHIP RES 41.2K OHM 1 0402
R3030	0686135Z02	KAMAYA 0.2 OHM RLC16-R200FTP
R3031	0613952R66	CER CHIP RES 0.0 +/-0.050 OHM
R3032	0613952Q95	CER CHIP RES 8200 OHM 5 0402
R3033	0613952R05	CER CHIP RES 15K OHM 5% 0402

Circuit Ref	Motorola Part Num	Description
R3034	0613952Q95	CER CHIP RES 8200 OHM 5 0402
R3035	0613952R05	CER CHIP RES 15K OHM 5% 0402
R3036	0613952N01	CER CHIP RES 10.0K OHM 1 0402
R3037	0613952Q77	CER CHIP RES 1500 OHM 5 0402
R3038	NOTPLACED	64AM DUMMY PART NUMBER
R3040	0613952Q81	CER CHIP RES 2200 OHM 5 0402
R3041	0613952N01	CER CHIP RES 10.0K OHM 1 0402
R3043	0613952R32	CER CHIP RES 200K OHM 5 0402
R3050	0613952R25	CER CHIP RES 100K OHM 5% 0402
R3051	0613952Q89	CER CHIP RES 4700 OHM 5 0402
R3053	0613952Z58	RES,MF,22KOHM,1%,.0625 W,SM,0402,200PPM/CEL,PB-FREE
R3054	0613952Z58	RES,MF,22KOHM,1%,.0625 W,SM,0402,200PPM/CEL,PB-FREE
R3055	0613952R25	CER CHIP RES 100K OHM 5% 0402
R3056	0613952R66	CER CHIP RES 0.0 +/-0.050 OHM
R3060	0613952M30	CER CHIP RES 2000 OHM 1 0402
R3070	0613952R33	CER CHIP RES 220K OHM 5% 0402
R3071	0613952R33	CER CHIP RES 220K OHM 5% 0402
R3072	0613952R56	CER CHIP RES 2.0M OHM 5 0402
R3073	0613952R56	CER CHIP RES 2.0M OHM 5 0402
R3074	0613952Q73	CER CHIP RES 1000 OHM 5 0402
R3075	0613952N01	CER CHIP RES 10.0K OHM 1 0402
R3088	NOTPLACED	64AM DUMMY PART NUMBER

Circuit Ref	Motorola Part Num	Description	Circuit Ref	Motorola Part Num	Description	Circuit Ref	Motorola Part Num	Description	Circuit Ref	Motorola Part Num	Description
R3098	0613952Q85	CER CHIP RES 3300 OHM 5 0402	R8012	0613952R01	CER CHIP RES 10K OHM 5% 0402	R9003	0613952Q73	CER CHIP RES 1000 OHM 5 0402	R9053	0613952H47	CER CHIP RES 82.0 OHM 5 0603
R3100	0613952R17	CER CHIP RES 47K OHM 5% 0402	R8015	NOTPLACED	64AM DUMMY PART NUMBER	R9004	0613952Q73	CER CHIP RES 1000 OHM 5 0402	R9054	0613952H47	CER CHIP RES 82.0 OHM 5 0603
R3101	0613952R25	CER CHIP RES 100K OHM 5% 0402	R8016	0613952R66	CER CHIP RES 0.0 +/-0.050 OHM	R9005	0613952Q73	CER CHIP RES 1000 OHM 5 0402	S9000	4086470Z01	TACT SWITCH
R3102	0613952A30	CER CHIP RES 2.00 OHM 1% 0603	R8017	NOTPLACED	64AM DUMMY PART NUMBER	R9006	0613952Q73	CER CHIP RES 1000 OHM 5 0402	S9001	4015186H02	SWITCH, VOLUME
R3103	0615049H16	KAMAYA RLC32 CURRENT SENSE RESISTOR	R8020	0613952R66	CER CHIP RES 0.0 +/-0.050 OHM	R9007	0613952Q73	CER CHIP RES 1000 OHM 5 0402	S9002	4015203H05	SWITCH, FREQUENCY
R3200	0613952R33	CER CHIP RES 220K OHM 5% 0402	R8023	0613952R66	CER CHIP RES 0.0 +/-0.050 OHM	R9008	0613952R17	CER CHIP RES 47K OHM 5% 0402	SH9000	NOTPLACED	64AM DUMMY PART NUMBER
R3201	0613952R20	CER CHIP RES 62K OHM 5 0402	R8024	0613952R25	CER CHIP RES 100K OHM 5% 0402	R9009	0613952R01	CER CHIP RES 10K OHM 5% 0402	SH9001	NOTPLACED	64AM DUMMY PART NUMBER
R3202	0613952R33	CER CHIP RES 220K OHM 5% 0402	R8025	0613952R66	CER CHIP RES 0.0 +/-0.050 OHM	R9010	0613952R01	CER CHIP RES 10K OHM 5% 0402	T400	2515396H01	BALUN, TRANSFORMER
R3203	0613952R36	CER CHIP RES 300K OHM 5 0402	R8026	0613952R25	CER CHIP RES 100K OHM 5% 0402	R9011	0613952R17	CER CHIP RES 47K OHM 5% 0402	T401	2515396H01	BALUN, TRANSFORMER
R3500	0613952Q77	CER CHIP RES 1500 OHM 5 0402	R8027	0613952R25	CER CHIP RES 100K OHM 5% 0402	R9012	0613952Q50	CER CHIP RES 110 OHM 5 0402	U001	5104932K08	IC,CUST,,,1PER PKG,BGA,,,ABL TRAMSCEOVER OC
R3501	NOTPLACED	64AM DUMMY PART NUMBER	R8028	0613952R25	CER CHIP RES 100K OHM 5% 0402	R9013	0613952Q37	CER CHIP RES 33.0 OHM 5 0402	U002	5114000B59	IC,ANLG SW,SM,SOT-353,1CHANNELS,SPST,PB-FREE
R3700	0613952Q73	CER CHIP RES 1000 OHM 5 0402	R8029	0613952R25	CER CHIP RES 100K OHM 5% 0402	R9014	0613952R01	CER CHIP RES 10K OHM 5% 0402	U200	5116014H01	BUFFER IC
R3701	0613952R01	CER CHIP RES 10K OHM 5% 0402	R8030	0613952R01	CER CHIP RES 10K OHM 5% 0402	R9015	0613952R01	CER CHIP RES 10K OHM 5% 0402	U400	5115443H01	MAXIM EPP LNA LIFE MAX2373EGC+T
R3702	0613952N48	CER CHIP RES 30.9K OHM 1 0402	R8031	0613952R25	CER CHIP RES 100K OHM 5% 0402	R9016	0613952R01	CER CHIP RES 10K OHM 5% 0402	U600	5102495J14	IC,AD9864,QFN XSTR,BIP RF
R3703	0613952N38	CER CHIP RES 24.3K OHM 1 0402	R8032	0613952R25	CER CHIP RES 100K OHM 5% 0402	R9017	0613952R01	CER CHIP RES 10K OHM 5% 0402	U700	4802246J29	POWER,,,ADA4743,,,,,37W OPERATIONAL AMPLIFIER, IC
R3704	0613952R01	CER CHIP RES 10K OHM 5% 0402	R8033	0613952R25	CER CHIP RES 100K OHM 5% 0402	R9018	0613952R01	CER CHIP RES 10K OHM 5% 0402	U701	5115147H01	IC TEMPERATURE SENSOR
R3800	0613952Q25	CER CHIP RES 10.0 OHM 5 0402	R8034	0613952R01	CER CHIP RES 10K OHM 5% 0402	R9019	0613952Q73	CER CHIP RES 1000 OHM 5 0402	U702	5115022H01	IC,MICROP,P1710ZZGE,BG A,,,12MHZ,32BITS
R3888	NOTPLACED	64AM DUMMY PART NUMBER	R8035	0613952R01	CER CHIP RES 10K OHM 5% 0402	R9020	NOTPLACED	64AM DUMMY PART NUMBER	U1000	5102495J13	4-BIT BIDIRECTION LEVEL TRANSLATOR
R8002	0613952R25	CER CHIP RES 100K OHM 5% 0402	R8036	0613952R01	CER CHIP RES 10K OHM 5% 0402	R9021	NOTPLACED	64AM DUMMY PART NUMBER	U1005	5171209L01	NL27WZU04DFT2G
R8003	0613952R01	CER CHIP RES 10K OHM 5% 0402	R8037	0613952R01	CER CHIP RES 10K OHM 5% 0402	R9022	NOTPLACED	64AM DUMMY PART NUMBER	U1006	5115001H02	INVERTER (EPP)
R8004	0613952Q70	CER CHIP RES 750 OHM 5 0402	R9000	0613952Q73	CER CHIP RES 1000 OHM 5 0402	R9050	0613952R01	CER CHIP RES 10K OHM 5% 0402	U2000	0104032J61	PRE-FLASHED FLASH IC
R8010	0613952R05	CER CHIP RES 15K OHM 5% 0402	R9001	0613952Q73	CER CHIP RES 1000 OHM 5 0402	R9051	0613952R01	CER CHIP RES 10K OHM 5% 0402	U2001	5171614M03	MICRON 16MB SDR SDRAM Y35M
R8011	0613952R25	CER CHIP RES 100K OHM 5% 0402	R9002	0613952Q73	CER CHIP RES 1000 OHM 5 0402	R9052	0613952Q65	CER CHIP RES 470 OHM 5 0402	U3000	5185143E77	IC, MAKO ASIC, CMOS PWR MGMT
									U3002	5189680C06	NS LP8340 1.0A LINEAR REGULATOR
									U3003	5115453H01	RAIL TO RAIL OUTPUT, 8 PIN BGA

Circuit Ref	Motorola Part Num	Description
U3004	5114007A43	IC,INVTR,1PER PKG,SOT-353,VCC RANGE 1.65 TO 5.5 V, PB-FREE
U3006	5115974H01	1.5V LINEAR VOLTAGE REGULATOR
U3007	5171395L01	TI DUAL ANALOG SWITCH
U3008	5115391H01	TS5A23166
U3009	5164852H47	LINEAR REGULATOR IC
U3020	5171428L01	IC, I2C LEVEL TRANSLATOR
U3021	5171428L01	LINEAR TECH SYN BUCK DC CONVERTER
U3700	5116282H01	LINEAR TECH SYN BUCK DC CONVERTER
U3701	5116283H01	100MA LDO LINEAR REGULATOR
U8000	0104024J41	100MA LDO LINEAR REGULATOR
U8001	5164015H55	PRE-FLASHED SIRF SINGLE CHIP GPS IC
VR9000	4866544A01	IC,RF AMPLIFIER,,UPC8211TK,SM,,,18.5DB,1.57GHZMIN,1.57GHZMAX
VR9001	4813979P10	DIODE ARRAY,ZEN,SR05.TCT,SM,,,5V,,,5,LOW CAPACITANCE TVS DIO
VR9002	4813979P10	DIODE ARRAY,TRNSNT PROT,SM,SOT-457,5.6V,.225W,ZEN,4,PB-FREE
VR9003	4815040H01	DIODE ARRAY,TRNSNT PROT,SM,SOT-457,5.6V,.225W,ZEN,4,PB-FREE
VR9004	4815040H01	ZENER DIODE-12V
VR9005	4805656W76	ZENER DIODE-12V
VR9006	4805656W76	DIODE,ZEN,,SM,SOD-523,,,,,5.6V
VR9007	4805656W76	DIODE,ZEN,,SM,SOD-523,,,,,5.6V

Circuit Ref	Motorola Part Num	Description
VR9008	4813979P10	DIODE ARRAY,TRNSNT PROT,SM,SOT-457,5.6V,.225W,ZEN,4,PB-FREE
VR9009	4813977C23	DIODE,ZEN,MMSZ5243,SM,SOD-123,13V,10MA,.5W,ZEN,PB-FREE
VR9010	4813977C23	DIODE,ZEN,MMSZ5243,SM,SOD-123,13V,10MA,.5W,ZEN,PB-FREE
VR9015	NOTPLACED	64AM DUMMY PART NUMBER
VR9016	NOTPLACED	64AM DUMMY PART NUMBER
VR9017	4815040H01	ZENER DIODE-12V
VR9018	4815040H01	ZENER DIODE-12V
VR9020	4813979P10	DIODE ARRAY,TRNSNT PROT,SM,SOT-457,5.6V,.225W,ZEN,4,PB-FREE
VR9021	4813979P10	DIODE ARRAY,TRNSNT PROT,SM,SOT-457,5.6V,.225W,ZEN,4,PB-FREE
VR9022	4813979P10	DIODE ARRAY,TRNSNT PROT,SM,SOT-457,5.6V,.225W,ZEN,4,PB-FREE
VR9023	4815040H01	ZENER DIODE-12V
Y001	5116032H01	CRYSTAL OSCILLATOR XTAL 12MHZ 20PPM
Y1000	93012000001	6X3.7X1MM SMD
Y3000	4802582S80	RESON,QRTZ,.032768MHZ,20PPM
Y3001	4815028H01	TOL,,,SM,,PAR,,12.5PF LOAD CAP,-40DE
Y8000	4802582S80	CX-101F 24.57MHZ KSS XTAL
		RESON,QRTZ,.032768MHZ,20PPM
		TOL,,,SM,,PAR,,12.5PF LOAD CAP,-40DE

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## Section 7

# UHF2 (450–512 MHz) INFORMATION

## 1.0 Transmitter

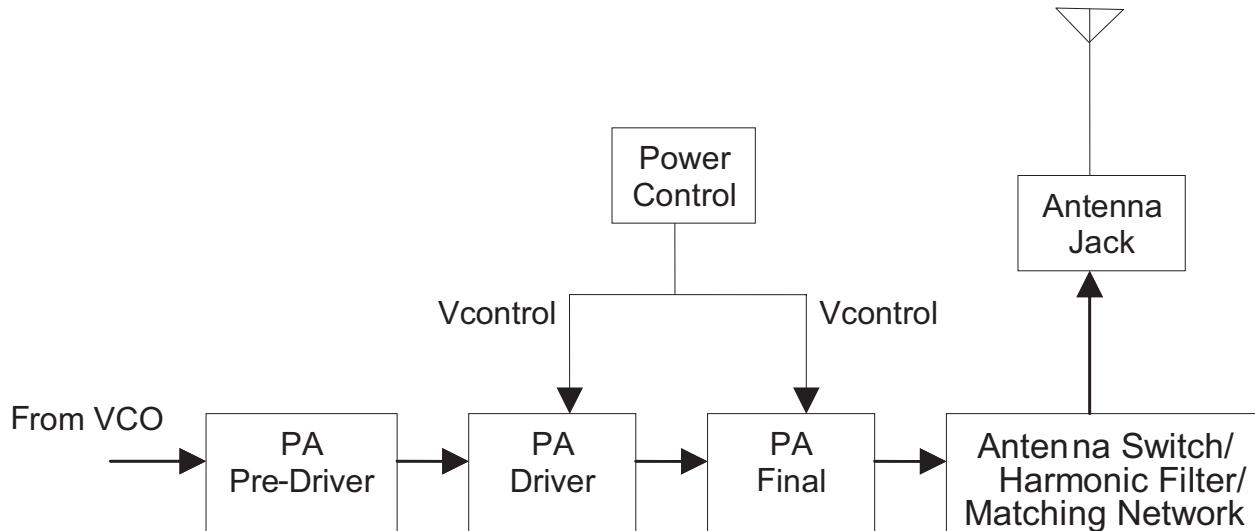


Figure 7-1: UHF Transmitter Block diagram

### 1.1 General

The UHF transmitter contains five basic circuits:

1. Power Amplifier
2. Antenna Switch
3. Harmonic Filter
4. Antenna Matching Network
5. Power Control

#### 1.1.1 Power Amplifier

The power amplifier is a 3-stage discrete design consisting of:

1. Pre-driver, ADA4743 (U700)
2. Driver, RD01MUS1 (Q703)
3. Final PA, RD07MVS1 (Q704)

The pre-driver is a 50 Ohm gain block with a supply voltage of 5V. The supply is ramped to eliminate feed-through power due to the fixed gain of the device. The pre-driver is biased in Class A region with a typical current drain of 60mA and power gain of 16.5dB.

The driver is a 1W, LDMOS in a SOT-89 package. this stage typically drains 150mA of current at rated output power, 4W. The driver is biased in Class AB region and has a power gain of 14dB.

The final PA is a 7W, LDMOS device. The gate threshold of this device is very close to the driver. Hence, the traditional PA bias tuning is eliminated. The current drain would typically be 1400mA. The final PA is biased in Class AB region and has a power gain of 10dB.

### 1.1.2 Antenna Switch

The antenna switch comprises of 2 ports: standard port and remote port.

**NOTE** Remote port is not supported in XPR 6100 and the related components are not loaded

The antenna switch consist of:

1. Four PIN diodes:
  - c. CR902 and CR903 biased during standard and remote port operation.
  - d. CR900 and CR901 biased during remote port operation.
2. Six current limiting resistors:
  - a. R904, R905 and R9053 for standard and remote port operation.
  - b. R902, R903 and R9054 for remote port operation.
3. Two pi networks:
  - a. C915, L908, C916 to determine TX or RX mode.
  - b. C911, L906, C912 to determine standard port or remote port operation.

In the transmit mode of standard port operation, ANT\_EN signal (from MAKO) turns on Q702 (bias Power Amplifier) and Q900(antenna switch circuit). RAWB+ bias is applied to the standard port antenna switch circuit to bias CR902 and CR903 "ON". Hence, the following occurs:

1. Shunt diode (CR903) shorts out the receiver port, and the pi network(C915, L908, C916), which operates as a quarter wave transmission line, transforms low impedance of the shunt diode to a high impedance at the input of the harmonic filter. In the receive mode, the diodes are "OFF" and hence, there exists a low attenuation path between the antenna and the receiver ports.
2. Both CR900 and CR901 is biased "OFF", and the pi network(C911, L906, C912), which operates as a quarter wave transmission line, transfers the 50ohm impedance of the harmonic filter to CR902 and hence, forces PA\_OUT to take the standard port circuit path.

In the transmit mode of remote port operation, ANT\_EN signal (from MAKO) turns on Q702(bias Power Amplifier) and Q900(antenna switch circuit) and GP02 signal (from TOMAHAWK) turns on Q901. RAWB+ bias is applied to the standard and remote port antenna switch circuit to bias CR900, CR901, CR902 and CR903 "ON". Hence, the following occurs:

1. Shunt diode(CR903) shorts out the receiver port, and the pi network(C915, L908, C916), which operates as a quarter wave transmission line, transforms low impedance of the shunt diode to a high impedance at the input of the harmonic filter. In the receive mode, the diodes are off and hence, there exists a low attenuation path between the antenna and the receiver ports.
2. Shunt diode(CR901) shorts out the standard port, and the pi network(C911, L906, C912), which operates as a quarter wave transmission line, transforms the low impedance of the shunt diode to a high impedance at the input of the standard port circuit and hence, forces PA\_OUT to take the remote port circuit path.

### 1.1.3 Harmonic Filter

The harmonic filter consists of C906, C907, C908, L904 and L905. The design of the harmonic filter for UHF is a five pole Chebyshev design using lumped LC elements in order to realize greater attenuation in the stop band for a given ripple level. The harmonic filter insertion loss is typically less than 1.3dB.



### 1.1.4 Antenna Matching Network

A matching network which is made up of L911 is used to match the antenna's impedance to the harmonic filter. This will optimize the performance of the transmitter and receiver into an antenna.

### 1.1.5 Power Control

The transmitter power control uses discrete integrator approach, the current is sensing both PA stages namely, Driver Power Amplifier (Q703) and Final Power Amplifier (Q704).

The basic block diagram of the power control is shown in Figure 7-2. A single sensing resistor (R700) is tied to sense both PA stages current. The power control consists of 2 comparators, U701-1 and U701-2. U701 is a dual-package op-amp in SOT-8 package. The first stage is an I-V converter converts current drained by Power Amplifier Driver (Q703) and Power Amplifier Final (Q704) across R700 into a voltage drop and the second stage is an integrator used to shape the output Vcontrol to bias both PAs. The slope of the Vcontrol is controlled by the RC time constant of the integrator and also the ramping slope of reference signal, TX\_DAC generated by MAKO IC. The final TX\_DAC value determines the transmit power level and is a factory tuned parameter which is stored inside the codeplug.

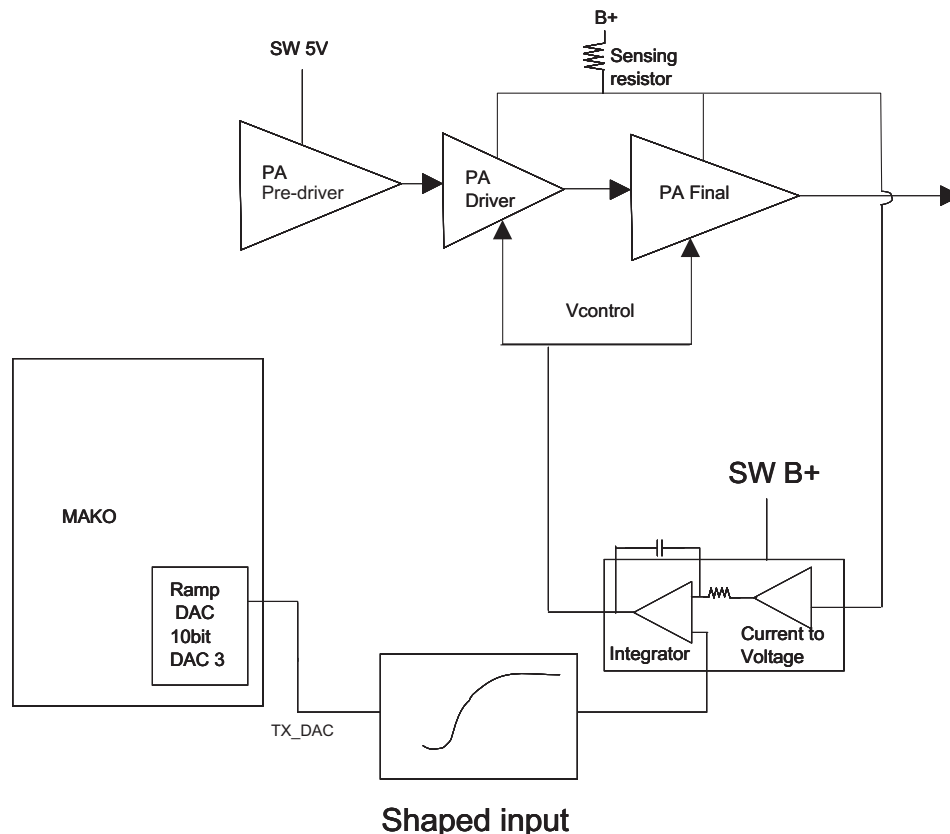


Figure 7-2: Power Control Scheme Basic Block Diagram

## 2.0 Receiver

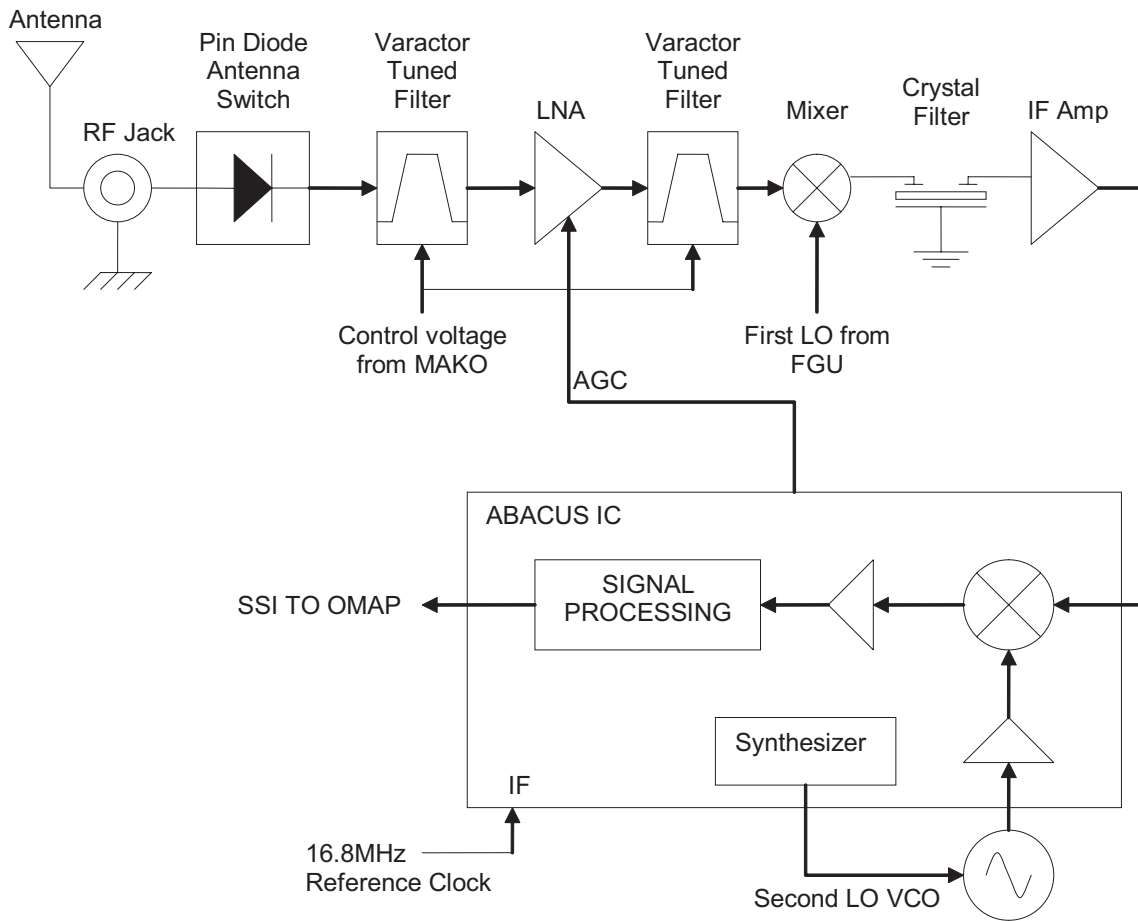


Figure 7-3: UHF Receiver Block Diagram

### 2.1 Receiver Front-End

The RF signal is received by the antenna and applied to a low-pass filter. For UHF, the filter consists of C906, C907, C908, L904 and L905. The filtered RF signal is passed through the antenna switch and then applied to a varactor tuned bandpass filter. The bandpass filter comprises of C400, C401, C402, C403, C404, C405, L400, L401, R400, R499, D400 and D401. C400 and C405 are 50ohm points. The bandpass filter is tuned by applying a control voltage to the varactor diodes D400 and D401.

The bandpass filter is electronically tuned by the MAKO DAC. Depending on the carrier frequency, the MAKO DAC will supply the tuned voltage to the varactor diodes in the filter. Wideband operation of the filter is achieved by shifting the bandpass filter across the band.

The output of the bandpass filter is passed through a RF step attenuator (D402) to limit the amount RF power fed into the LNA (U400). After being amplified, the RF signal is further filtered by a second varactor tuned bandpass filter. This bandpass filter is electronically tuned by the MAKO DAC and comprises of C419, C420, C421, C422, C423, C424, L408, L409, R405, R406, D403 and D404. C419 and C423 are 50 Ohm points.

The output of the second bandpass filter is passed to a mixer. The mixer is a passive double balanced quad diode mixer (D405) comprising of 2 transformers (T400 and T401). The 50 Ohm matching for

the mixer is provided by C426 and L410. After mixing with the first LO signal from the voltage control oscillator (VCO) using low side injection, the RF signal is down converted to the 73.35 MHz IF signal.

The IF signal coming out of the mixer is applied to the crystal filter (FL400) through a resistor pad and a diplexer (L411 and C427). Matching to the input of the crystal filter is provided by L412 and C428. The crystal filter provides the necessary adjacent channel selectivity and inter-modulation protection.

The output of the crystal filter (FL400) is matched to the input of the IF amplifier transistor by C432, C433, L415 and L416. Voltage supply to the IF amplifier is 5V\_RX, taken from RX VCO. The IF amplifier provides a gain of 25 dB. The IF amplifier output is directly matched at the IF amplifier output to ABACUS (U600) pin 47 via C601.

## 2.2 Receiver Back-End

ABACUS (U600) is tuned via software at radio start-up. The IF signal applied to pin 47 of U600 is down-converted to a second IF of 2.25 MHz. The second IF of 2.25 MHz will then be fed into an ADC, generating the Is and Qs data. This data is in the form of SSI (Serial Synchronous Interface) at pin 29 of U600, which will then be sent to the DSP (OMAP1710) for further processing.

The second VCO is a Colpitts oscillator built around transistor Q602. The VCO has a varactor diode, D600 to adjust the VCO frequency. The second LO frequency could either be 71.1 MHz or 75.6 MHz, depending on the system requirement. The control signal is derived from a loop filter consisting of C617, C618, C619, R605 and R606. The RSSI circuitry is achieved via software programming.

## 3.0 Frequency Generation Circuitry

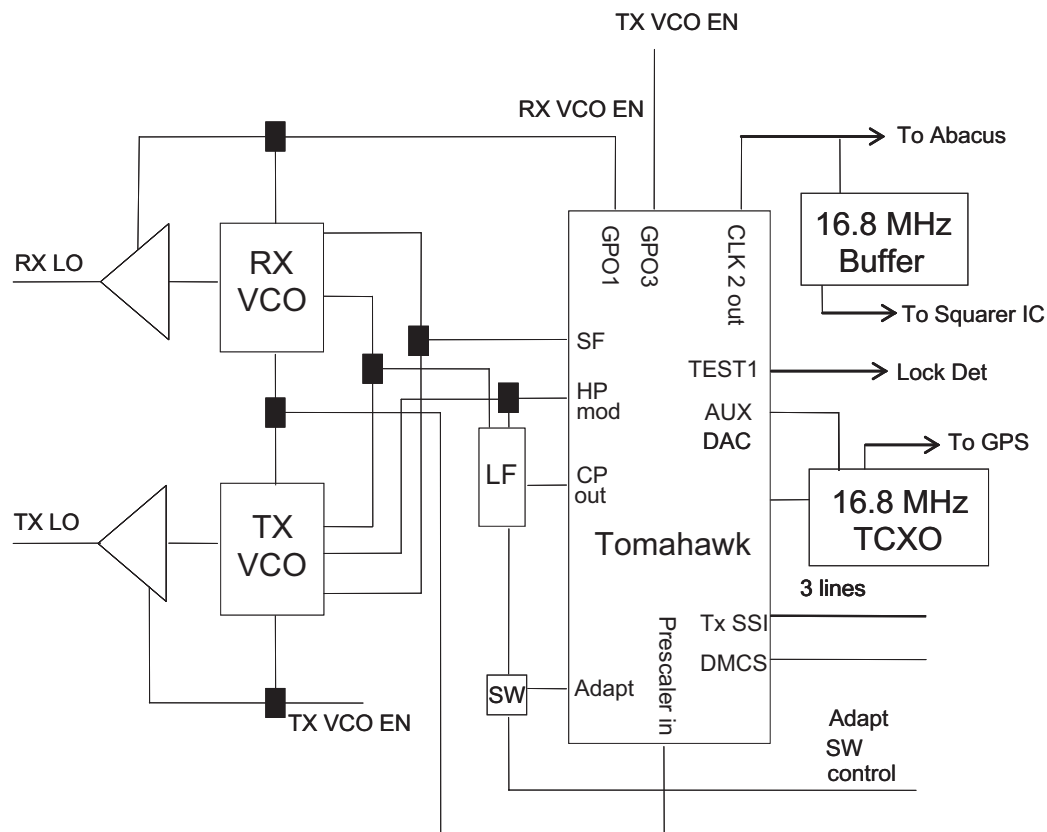


Figure 7-4: Frequency Generating Unit Block Diagram

The Frequency Generating Unit is centered on one main IC, Tomahawk (U001). The main synthesizer on the Tomahawk functions as a modulation interface to the DSP area via the 3 TX SSI lines. The

block diagram illustrates the interconnect and support circuitry used in the Frequency Generating Unit. Refer to the relevant schematics for the reference designators.

The synthesizer is powered by 2.8V ANA, 2.8V DIG, 1.875V DIG and 5V ANA supplied from the U3000-1. The synthesizer in turns generates a superfiltered 2.5V which powers up the TX VCO & RX VCO.

In addition to the VCO, the synthesizer interfaces with the microcontroller. Programming of the synthesizer is accomplished through the 4 lines; SPI\_MISO, THK\_CE, SPI\_MOSI and SPI\_CLK via pin D10, D8, D9 and D11 respectively. A 1.875 dc signal from the synthesizer lock detect line indicates to the microprocessor that the synthesizer is locked.

U001 has dual port modulation capability. The microprocessor supplies low port and high port words to pin F11 of U001. For high port modulation, the audio runs through an internal attenuator for modulation balancing purpose before it goes out to the VCO and loop filter via pin K8. For the low port modulation, the audio is fed into the main synthesizer, where it is summed with the main\_num channel frequency word, then supplied to the accumulator of the Fractional-N synthesizer before going out to the VCO.

### 3.1 Synthesizer

U001 uses a 16.8 MHz crystal (Y001) to provide a reference for the system. The synthesizer further divides this to 8.4MHz for nominal frequencies and 5.6 MHz for alternate frequencies. Together with R006, R007, R008, C013, C014, C015 and C016, they build up the reference oscillator which is capable of 1.5ppm (non-GPS) / 0.5ppm (GPS) stability over temperature of -30°C to 85 °C. It also provides 16.8MHz at pin J11 of U001 to be used by ABACUS.

The loop filter which consists of R013, R014, R016, C024, C025, C026 and C027 provides the necessary dc steering voltage for the VCO and determines the amount of noise and spur passing through.

In achieving fast locking for the synthesizer, an internal adapt charge pump provides higher current (~10mA) at pin H1 and an additional 2mA from a current mirror (Q002, R010, R011 and R012). The required frequency is then locked by normal mode charge pump at pin G3. An external adapt switch (U002) is used to control the ON/OFF of the adapt mode. Both the normal and adapt charge pumps get their supply from the 5V ANA supplied by U3000-1.

### 3.2 VCO – Voltage Controlled Oscillator

The VCO in conjunction with the synthesizer generates RF in both the receive and transmit modes of operation.

The RX VCO comprises of a Colpitts oscillator built around Q200, a cascaded buffer, built up of a buffer IC, U200 cascaded with a discrete buffer built around Q208 and a 3dB resistive pad (R220, R221 and R222). Vcontrol is supplied to two pairs of back-to-back varactors (D200, D201, D202 and D203). The LC tank comprises of C203 and L202. The oscillator is supplied with a 2.5V superfiltered supply from the synthesizer, U001. The cascaded buffer is supplied with a 5V ANA supply from MAKO, U3000-1. The buffer IC in conjunction with the resistive pad provides sufficient isolation from the mixer whilst the discrete buffer provides sufficient gain for the first LO signal. The output of the cascaded buffer is match to the mixer by C216, C217, C241 and L207. The output power level of RX\_1<sup>ST</sup>\_LO\_INJ is 6dB.

The TX VCO comprises of a Colpitts oscillator built around Q204 and a discrete buffer built around Q205. Vcontrol is supplied to two pairs of back-to-back varactors (D204, D205, D206 and D207). The LC tank comprises of C222 and L210. The oscillator is supplied with a 2.5V superfiltered supply from the synthesizer, U001. The discrete buffer is supplied with a 5V ANA supply from MAKO, U3000-1. The output of the discrete buffer is match to the mixer by C236, C237 and L215. The output power level of TX\_BUFF is 3dB.

## 4.0 Global Positioning System (GPS) Receiver

The GPS device is an embedded receiver that provides the location of the subscriber in terms of latitude, longitude, velocity, direction and altitude.

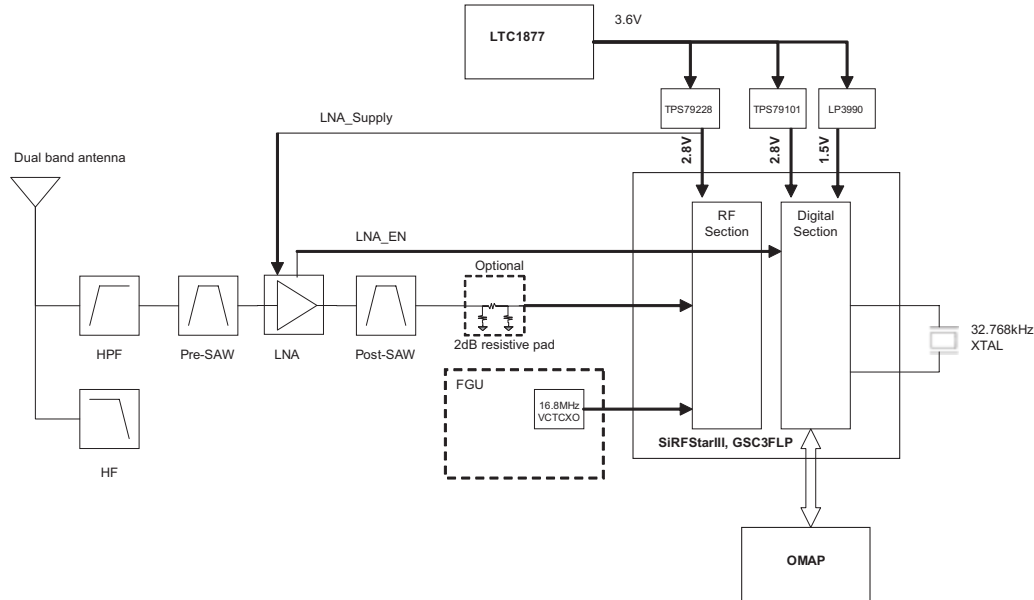


Figure 7-5: GPS Receiver Block Diagram

The RF signal is received by the antenna and applied to a high-pass filter. The filter consists of C924, C925, C926, L912 and L913. The filtered RF signal is then applied to a SAW filter, FL8001.

The output of the SAW filter is fed into the LNA (U8001). The LNA biasing is controlled by SIRF\_LNA\_EN (pin A4 of the GPS IC, U8000). The LNA input match comprises of C8013, C8014 and L8001. The LNA output match comprises of L8003 and C8017. After being amplified, the RF signal is further filtered by a second SAW filter, FL8002.

The output of the second SAW filter is passed to pin P6 of the GPS IC. The input match for pin P6 comprises of C8018, C8019 and L8004. The control and data lines for the GPS IC are GPS\_nRESET, GPS\_ON\_OFF, GPS\_TX, GPS\_RX and GPS\_BOOT. GPS\_nWAKEUP line is fed into the microcontroller to indicate the state (full power or hibernate state) of the GPS IC so that the microcontroller will never trigger a GPS\_ON\_OFF when the GPS IC is in full power state.

A dedicated 32.768kHz quartz crystal oscillator (Y8000) is used to provide RTC clock to the RTC circuit inside the GPS IC. The second input frequency is a 16.8MHz reference, used by the StarIII to synthesize the internal LO. This reference will be supplied by a VCTCXO (Y001) located in the synthesizer block, which will be shared by the TOMAHAWK and ABACUS ICs.

The GPS IC is powered by 2.8V\_DIG\_GPS, 2.8V\_RF\_GPS and 1.5V\_GPS\_RTC supplied from 3 discrete external regulators (U3701, U3700 & U3006). The input of these regulators is sourced from a switching regulator (U3020) which regulates the SWB+ to 3.6V.

## 5.0 Allocation of Schematics and Circuit Boards

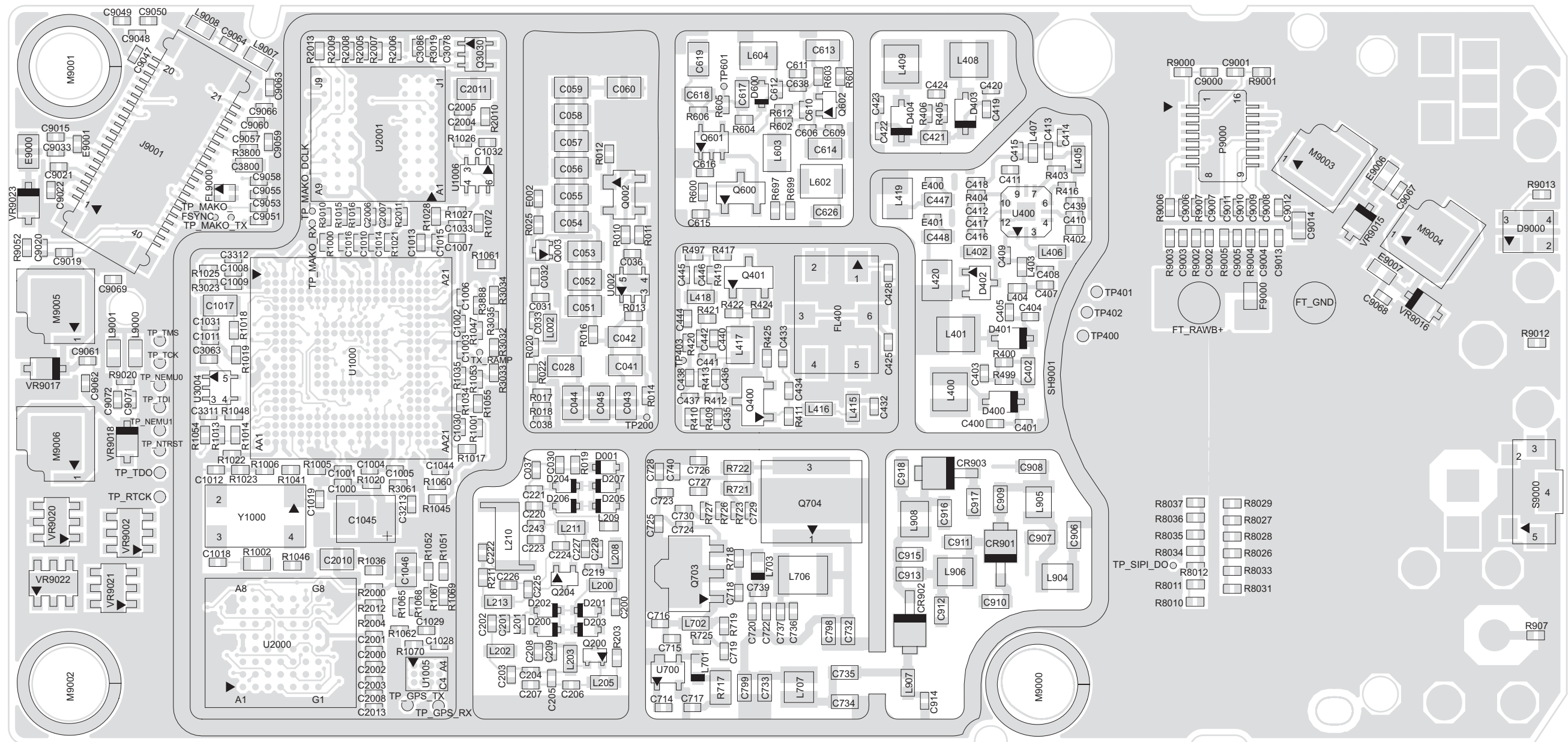
### 5.1 Controller Circuits

The UHF circuits are contained on the Printed Circuit Board (PCB) which also contains the Controller circuits. This Chapter shows the schematics for the UHF circuits only, refer to the Controller section for details of the related Controller circuits. The PCB component layouts in this Chapter show both the Controller and UHF circuit components. The UHF schematics and the related PCB and parts list are shown in the tables below.

*Table 7-2. UHF2 Diagrams and Parts List*

<b>PCB:</b>	
8475130M01 Main Board Top Side	Page 7-9
8475130M01 Main Board Bottom Side	Page 7-10
<b>SCHEMATICS</b>	
Complete Radio	Page 7-11
Complete UHF2 RF	Page 7-12
Complete UHF2 Transmitter	Page 7-13
UHF2 Transmitter	Page 7-14
UHF2 Harmonic Filter and Antenna Switch	Page 7-15
Complete UHF2 Receiver	Page 7-16
UHF2 Receiver Front End	Page 7-17
UHF2 Receiver Back End	Page 7-18
Complete UHF2 Frequency Generating Unit	Page 7-19
UHF2 Synthesizer	Page 7-20
UHF2 Voltage Controlled Oscillator	Page 7-21
UHF2 GPS Block	Page 7-22
<b>Parts List</b>	
8475130M01	Page 7-23

### 6.0 Circuit Board/Schematic Diagrams and Parts List

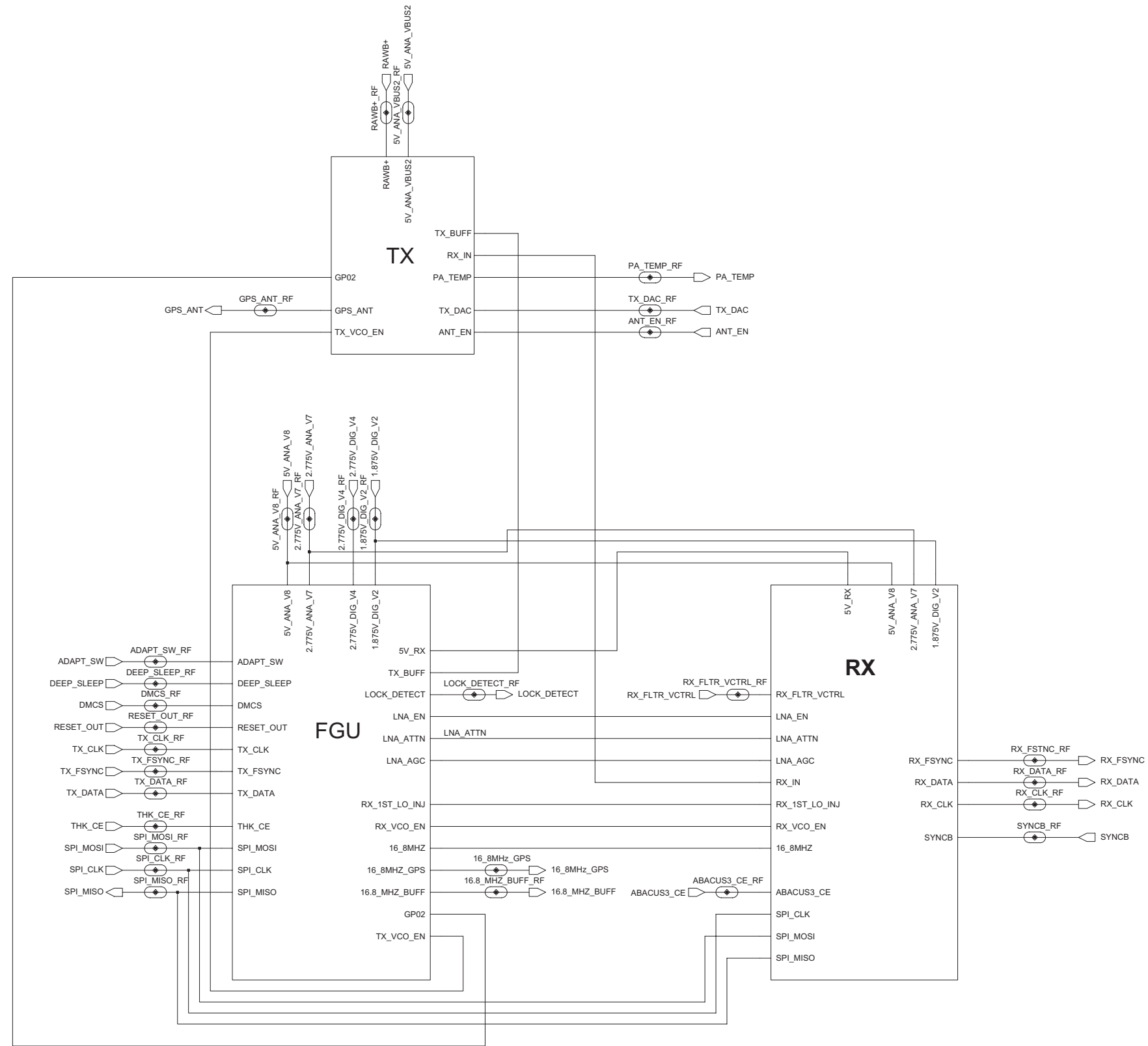


UHF2 (450–512 MHz) Main Board Top Side PCB No. 8475130M01/8475130M02

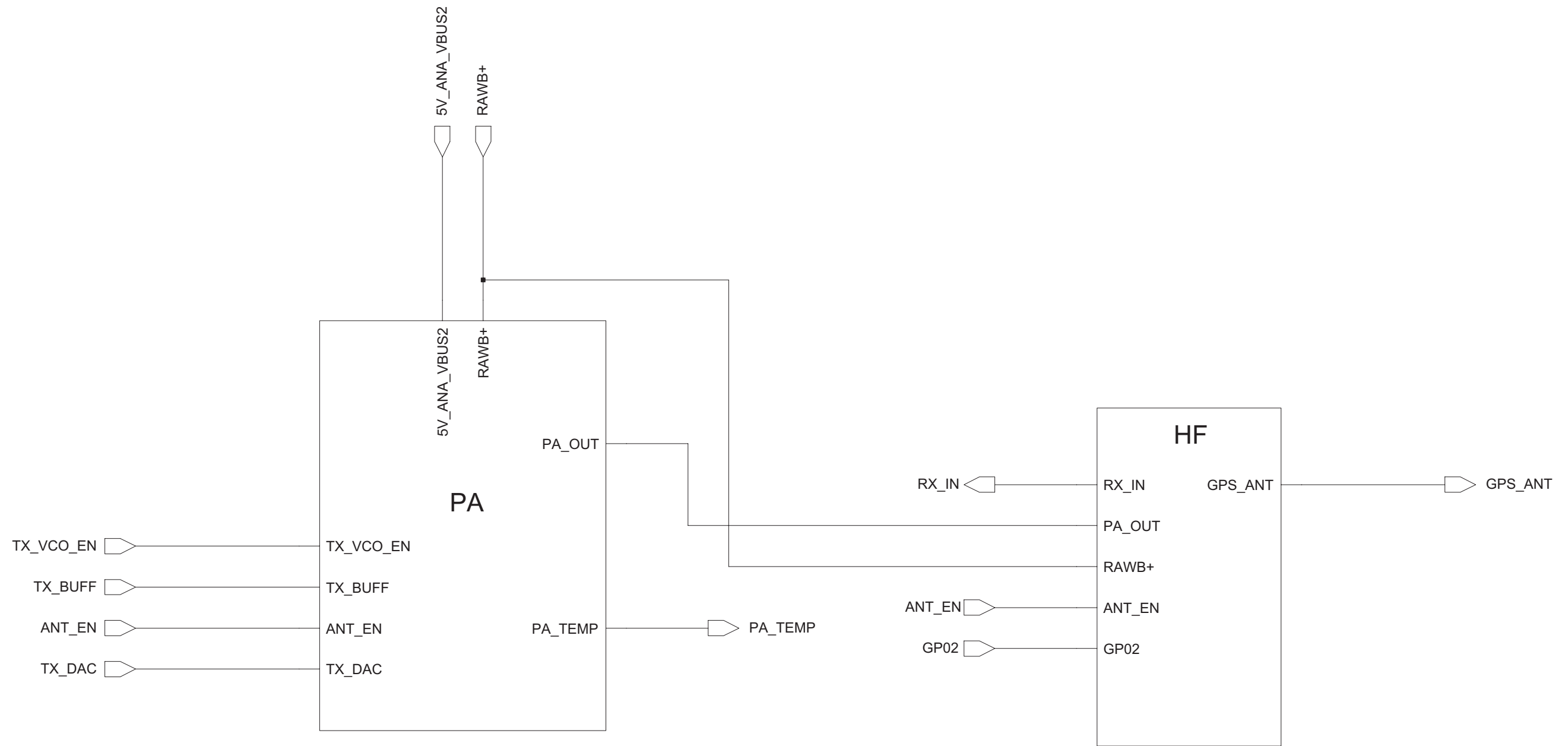




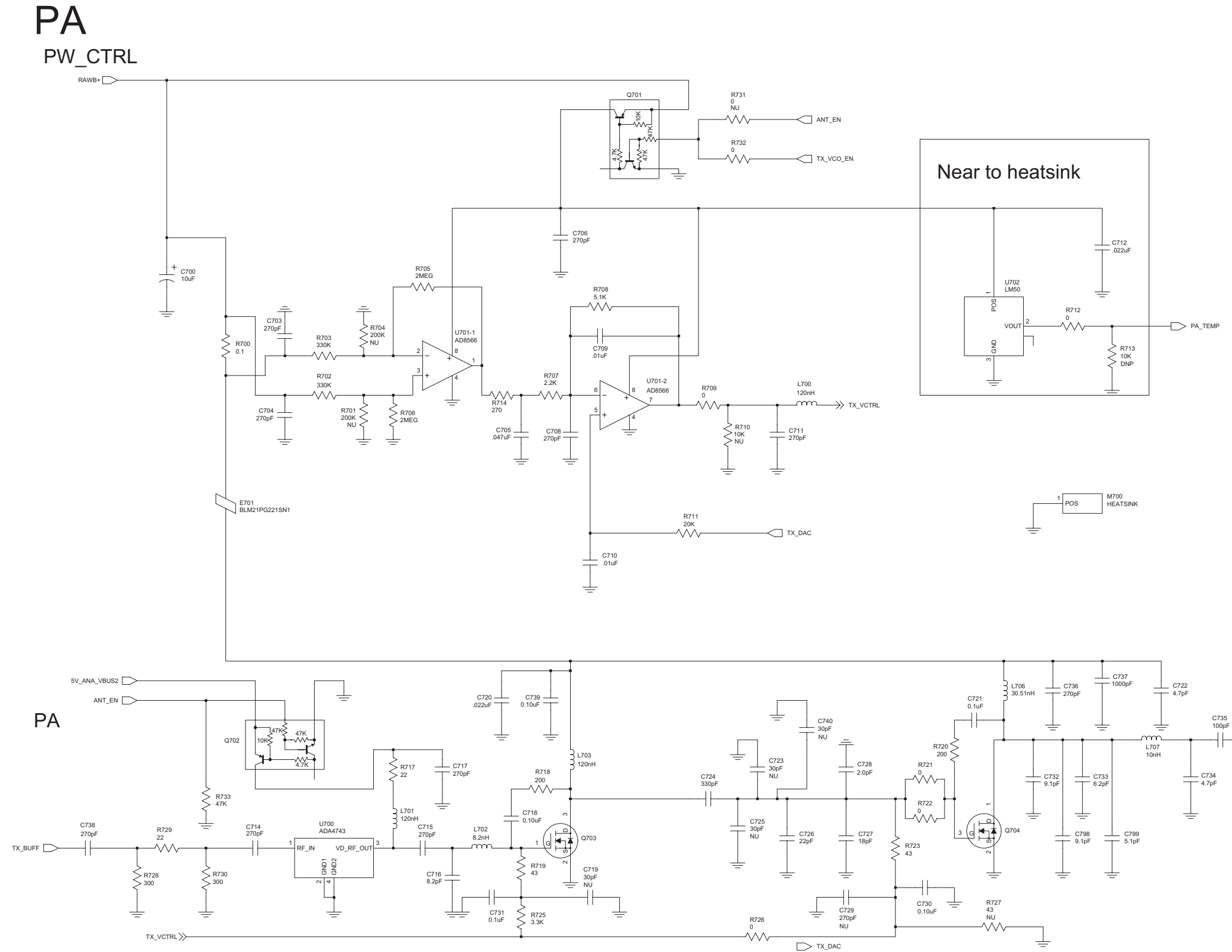




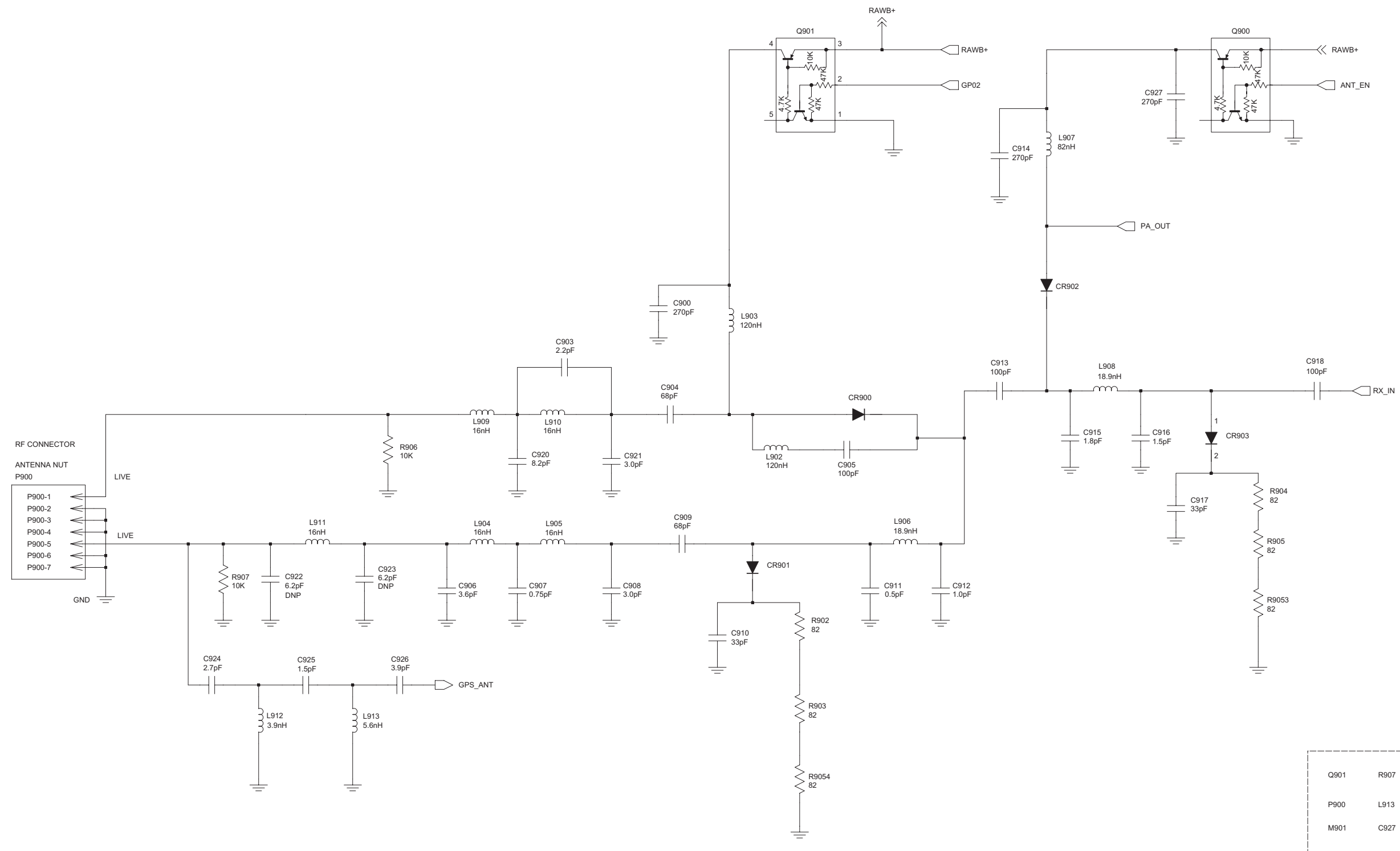
Complete UHF2 RF Schematic Diagram



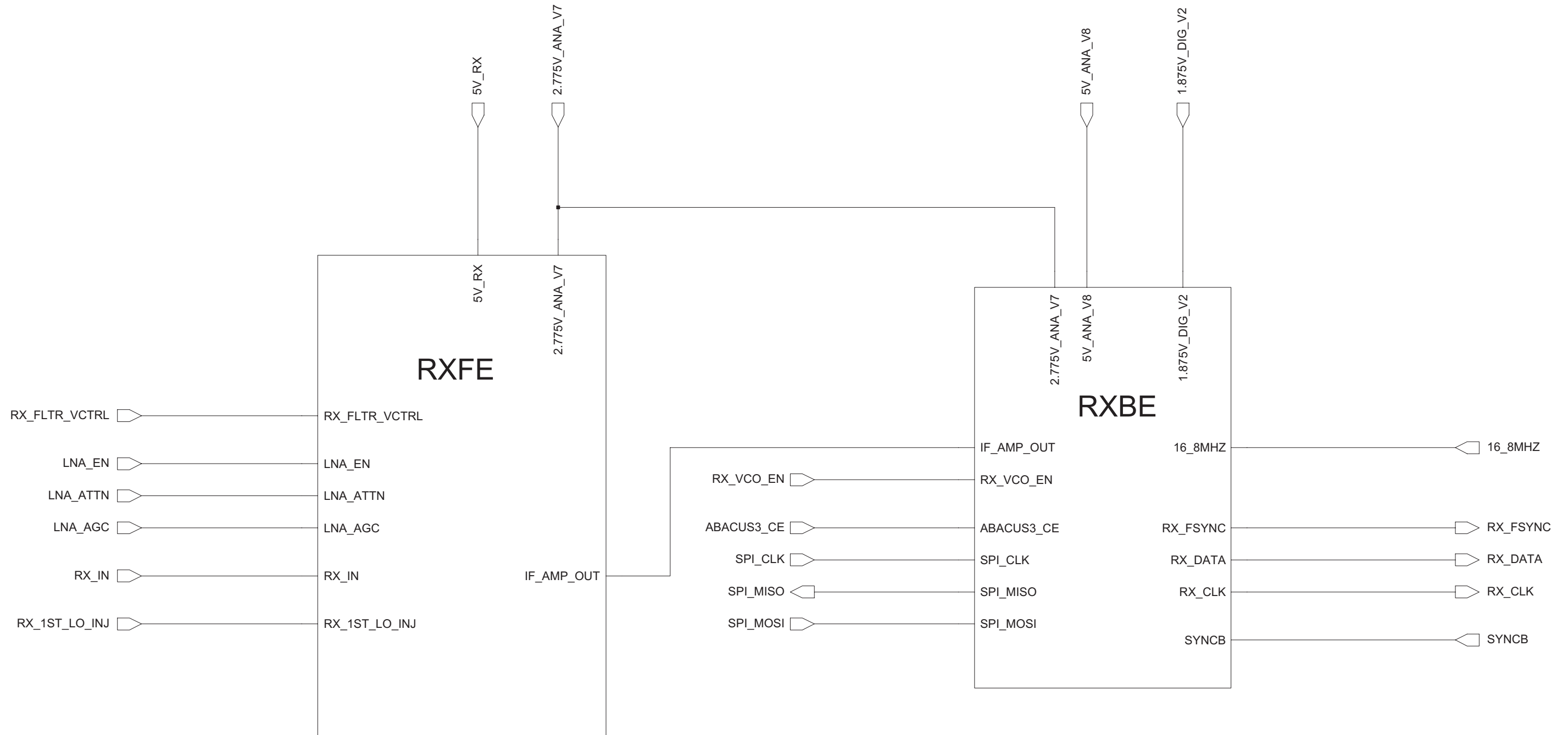
**Complete UHF2 Transmitter Schematic Diagram**



UHF2 Transmitter Schematic Diagram

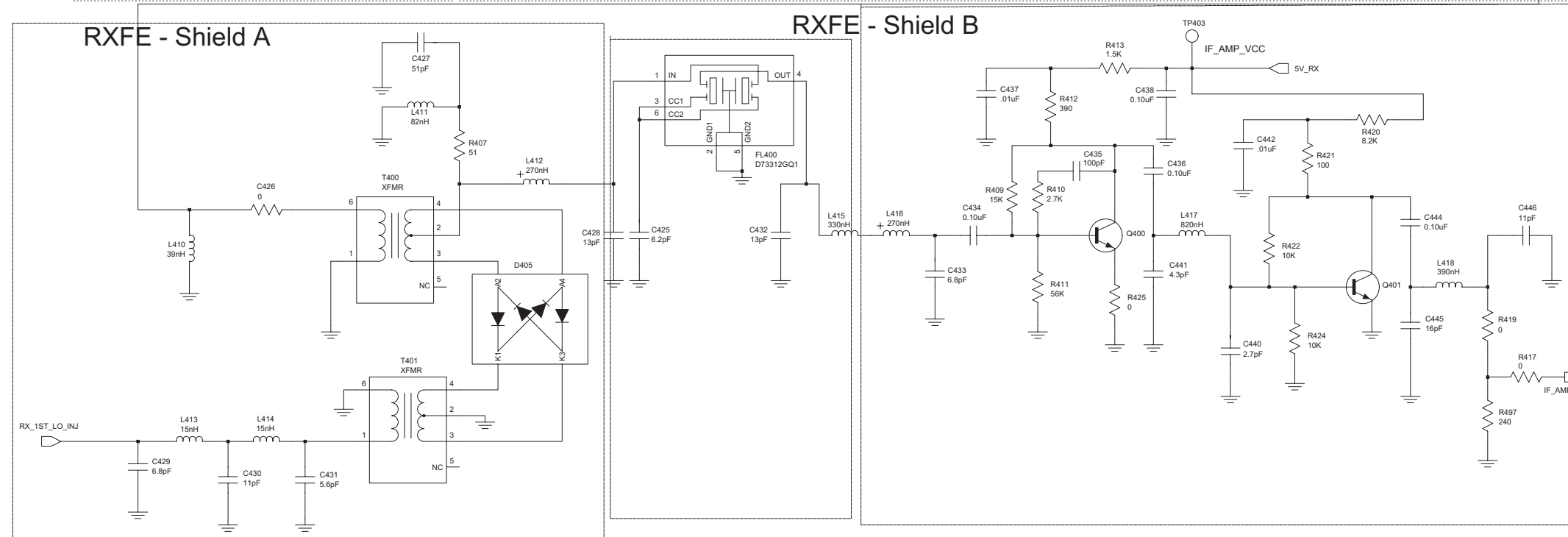
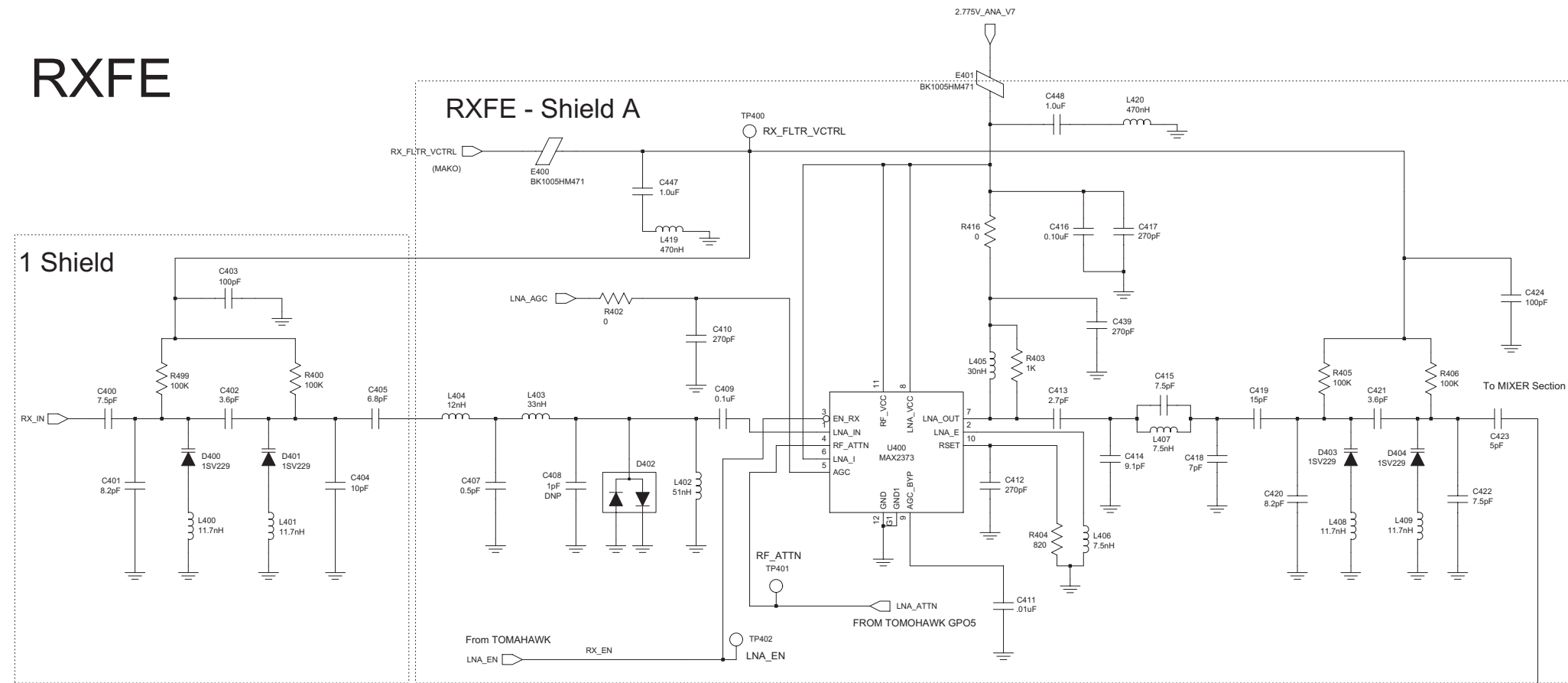


**UHF2 Harmonic Filter and Antenna Switch Schematic Diagram**

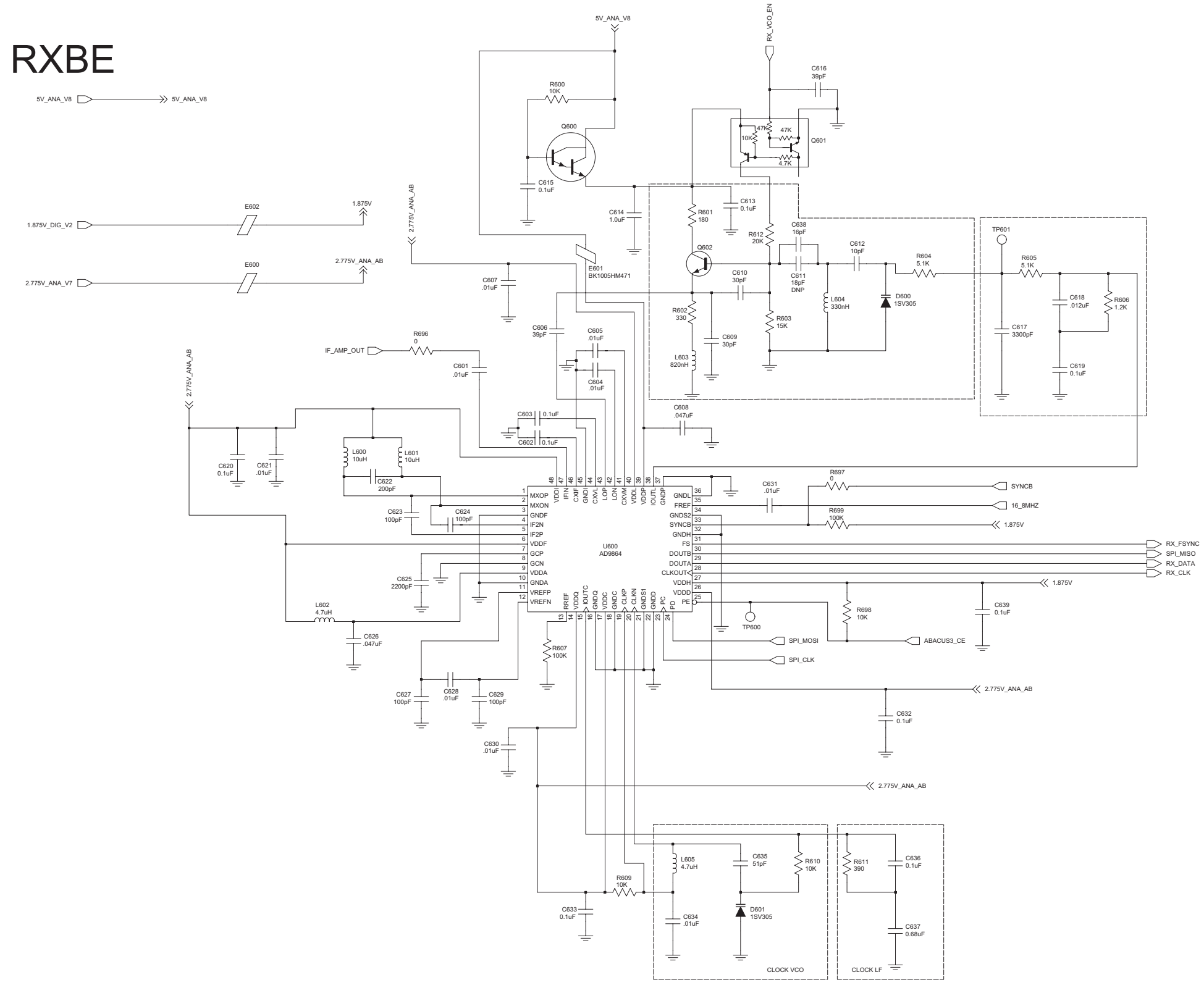


**Complete UHF2 Receiver Schematic Diagram**

# RXFE

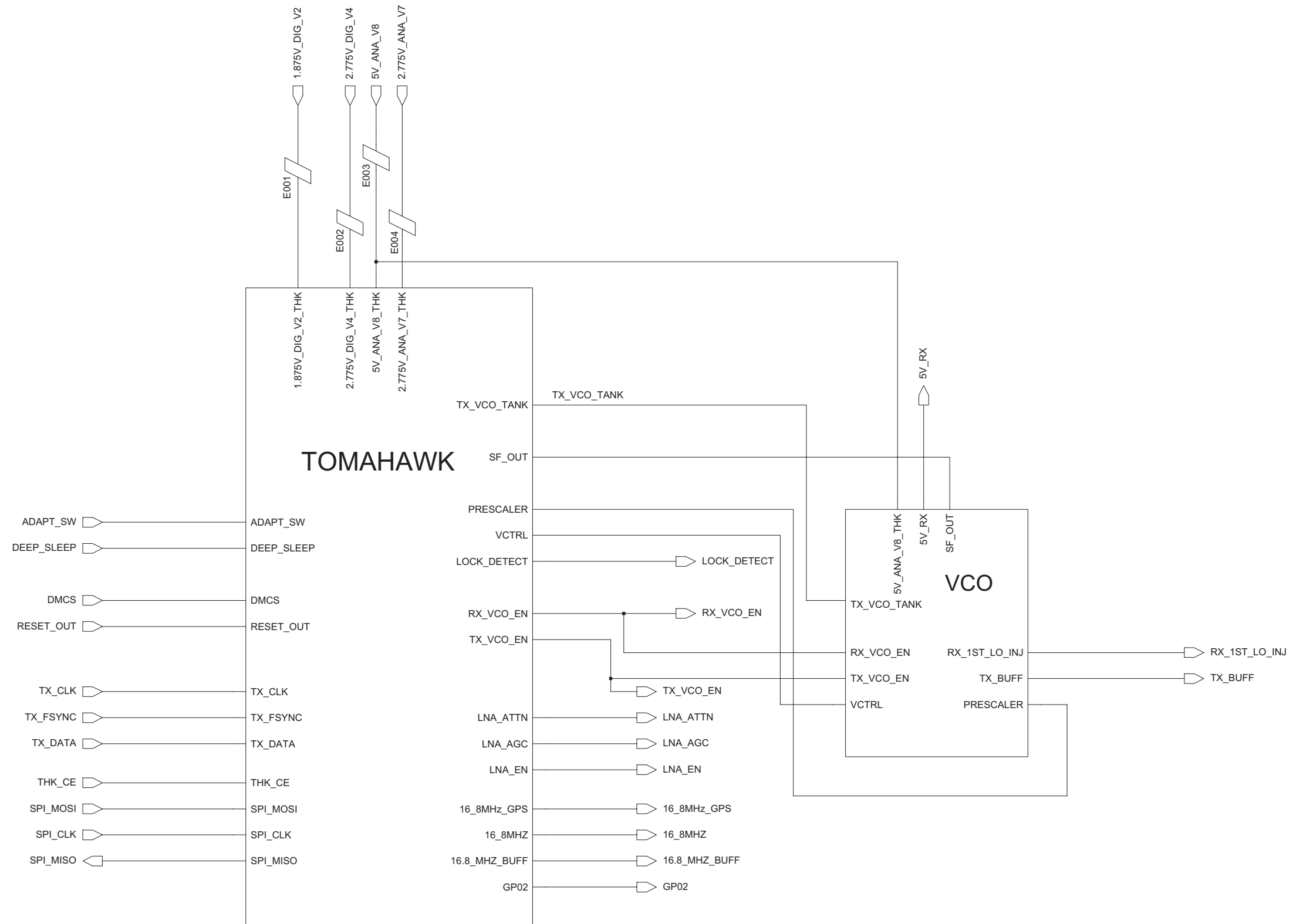


UHF2 Receiver Front End Schematic Diagram



UHF2 Receiver Back End Schematic Diagram





Complete UHF2 Frequency Generating Unit Schematic Diagram







**UHF2 Radio Parts List (8475130M01/  
8475130M02)**

Circuit Ref	Motorola Part No.	Description
C001	2113946D02	CAP, 1.0uF
C002	2113946D02	CAP, 1.0uF
C003	2113946K02	CAP, 0.10uF
C004	2113946K02	CAP, 0.10uF
C005	2113946K02	CAP, 0.10uF
C006	2113946K02	CAP, 0.10uF
C007	2113946K02	CAP, 0.10uF
C008	2113946K02	CAP, 0.10uF
C013	2113945A02	CAP, 270pF
C014	2113945L49	CAP, .01uF
C015	2113945L49	CAP, .01uF
C016	2113945A09	CAP, 1000pF
C017	2113946K02	CAP, 0.10uF
C018	2313960B57	CAPP, 10uF
C019	2113945L49	CAP, .01uF
C020	2313960B57	CAPP, 10uF
C022	2113946K02	CAP, 0.10uF
C028	2185419D03	CAP, .01uF
C030	NOTPLACED	NOTPLACED
C031	2113944A40	CAP, 100pF
C032	2113944A20	CAP, 6.2pF
C033	2113944A19	CAP, 5.6pF
C035	2113946K02	CAP, 0.10uF
C036	2113946K02	CAP, 0.10uF
C037	2115153H08	CAP, 1.6pF
C038	NOTPLACED	NOTPLACED
C039	2113946D02	CAP, 1.0uF
C041	2185419D28	CAP, 0.1uF
C042	2185419D28	CAP, 0.1uF
C043	2185419D20	CAP, .027uF
C044	2185419D28	CAP, 0.1uF
C045	2185419D20	CAP, .027uF
C051	2185419D28	CAP, 0.1uF
C052	2185419D28	CAP, 0.1uF
C053	2185419D28	CAP, 0.1uF
C054	2185419D28	CAP, 0.1uF
C055	2185419D28	CAP, 0.1uF
C056	2185419D28	CAP, 0.1uF
C057	2185419D28	CAP, 0.1uF
C058	2185419D28	CAP, 0.1uF
C059	2185419D28	CAP, 0.1uF
C060	2185419D28	CAP, 0.1uF
C200	2113944A40	CAP, 100pF
C201	2115153H20	CAP, 5.1pF

Circuit Ref	Motorola Part No.	Description
C202	2115153H19	CAP, 4.7pF
C203	2115153H21	CAP, 5.6pF
C204	2115153H21	CAP, 5.6pF
C205	2115153H39	CAP, 18pF
C206	2115153H52	CAP, 62pF
C207	2115153H37	CAP, 15pF
C208	2113944A40	CAP, 100pF
C209	2113946B04	CAP, 0.1uF
C210	2113944A40	CAP, 100pF
C211	2113946B04	CAP, 0.1uF
C212	2115153H03	CAP, 1.0pF
C213	2115153H13	CAP, 2.7pF
C214	2113944A40	CAP, 100pF
C215	2113944A40	CAP, 100pF
C216	2115153H09	CAP, 1.8pF
C217	2115153H20	CAP, 5.1pF
C219	2113944A40	CAP, 100pF
C220	2115153H21	CAP, 5.6pF
C221	2115153H30	CAP, 6pF
C222	2115153H18	CAP, 4.3pF
C223	NOTPLACED	NOTPLACED
C224	2115153H39	CAP, 18pF
C225	2115153H51	CAP, 56pF
C226	2115153H36	CAP, 13pF
C227	2113944A40	CAP, 100pF
C228	2113946B04	CAP, 0.1uF
C229	2113944A40	CAP, 100pF
C230	2113946B04	CAP, 0.1uF
C231	2115153H10	CAP, 2.0pF
C232	2115153H03	CAP, 1.0pF
C233	2113944A40	CAP, 100pF
C234	2113944A40	CAP, 100pF
C235	2113944A40	CAP, 100pF
C236	2115153H10	CAP, 2.0pF
C237	2115153H18	CAP, 4.3pF
C238	2113944A40	CAP, 100pF
C239	2113944A40	CAP, 100pF
C240	2113944A40	CAP, 100pF
C241	NOTPLACED	NOTPLACED
C243	2115153H34	CAP, 11pF
C400	2113944A22	CAP, 7.5pF
C401	2113944A23	CAP, 8.2pF
C402	2113944M07	CAP, 3.6pF
C403	2113944A40	CAP, 100pF
C404	2113944A25	CAP, 10pF
C405	2113944A21	CAP, 6.8pF

Circuit Ref	Motorola Part No.	Description
C407	2113944A61	CAP, 0.5pF
C408	NOTPLACED	NOTPLACED
C409	2113946B04	CAP, 0.1uF
C410	2113945A02	CAP, 270pF
C411	2113945B02	CAP, .01uF
C412	2113945A02	CAP, 270pF
C413	2113944A11	CAP, 2.7pF
C414	2113944A24	CAP, 9.1pF
C415	2113944A22	CAP, 7.5pF
C416	2113946K02	CAP, 0.10uF
C417	2113945A02	CAP, 270pF
C418	2113944A72	CAP, 7pF
C419	2113944A27	CAP, 15pF
C420	2113944A23	CAP, 8.2pF
C421	2113944M07	CAP, 3.6pF
C422	2113944A22	CAP, 7.5pF
C423	2113944A68	CAP, 5pF
C424	2113944A40	CAP, 100pF
C425	2113944A20	CAP, 6.2pF
C426	0613952R66	RES,0
C427	2113944A85	CAP, 51pF
C428	2113944A78	CAP, 13pF
C429	2113944A21	CAP, 6.8pF
C430	2113944A77	CAP, 11pF
C431	2113944A19	CAP, 5.6pF
C432	2113944A78	CAP, 13pF
C433	2113944A21	CAP,6.8pF
C434	2113946K02	CAP, 0.10uF
C435	2113944A40	CAP, 100pF
C436	2113946K02	CAP, 0.10uF
C437	2113945B02	CAP, .01uF
C438	2113946K02	CAP, 0.10uF
C439	2113945A02	CAP, 270pF
C440	2113944A11	CAP,2.7pF
C441	2113944A16	CAP,4.3pF
C442	2113945B02	CAP, .01uF
C444	2113946K02	CAP, 0.10uF
C445	NOTPLACED	NOTPLACED
C446	2113944A77	CAP, 11pF
C447	NOTPLACED	NOTPLACED
C448	NOTPLACED	NOTPLACED
C601	2113945B02	CAP, .01uF
C602	2113946B04	CAP, 0.1uF
C603	2113946B04	CAP, 0.1uF
C604	2113945B02	CAP, .01uF
C605	2113945B02	CAP, .01uF

Circuit Ref	Motorola Part No.	Description
C606	2113944A32	CAP, 39pF
C607	2113945B02	CAP, .01uF
C608	2113945D02	CAP, .047uF
C609	2115153H44	CAP, 30pF
C610	2115153H44	CAP, 30pF
C611	NOTPLACED	NOTPLACED
C612	2115153H27	CAP, 10pF
C613	2113945G91	CAP, 0.1uF
C614	2113946E02	CAP, 1.0uF
C615	2113946B04	CAP, 0.1uF
C616	2113944A32	CAP, 39pF
C617	2113945L37	CAP, 3300pF
C618	2113945C18	CAP, .012uF
C619	2185419D28	CAP, 0.1uF
C620	2113946B04	CAP, 0.1uF
C621	2113945B02	CAP, .01uF
C622	2113944C89	CAP, 200pF
C623	2113944A40	CAP, 100pF
C624	2113944A40	CAP, 100pF
C625	2113945A11	CAP, 2200pF
C626	2113945D02	CAP, .047uF
C627	2113944A40	CAP, 100pF
C628	2113945B02	CAP, .01uF
C629	2113944A40	CAP, 100pF
C630	2113945B02	CAP, .01uF
C631	2113945B02	CAP, .01uF
C632	2113946B04	CAP, 0.1uF
C633	2113946B04	CAP, 0.1uF
C634	2113945B02	CAP, .01uF
C635	2113944A85	CAP, 51pF
C636	2113946B04	CAP, 0.1uF
C637	2113946G04	CAP, 0.68uF
C638	2115153H38	CAP, 16pF
C639	2113946B04	CAP, 0.1uF
C700	2316410H03	CAPP, 10uF
C703	2113945A02	CAP, 270pF
C704	2113945A02	CAP, 270pF
C705	2113946B02	CAP, .047uF
C706	2113945A02	CAP, 270pF
C708	2113945A02	CAP, 270pF
C709	2113945B02	CAP, .01uF
C710	2113945B02	CAP, .01uF
C711	2113945A02	CAP, 270pF
C712	2113945B04	CAP, .022uF
C714	2113945A02	CAP, 270pF
C715	2113945A02	CAP, 270pF

Circuit Ref	Motorola Part No.	Description
C716	2113944A23	CAP, 8.2pF
C717	2113945A02	CAP, 270pF
C718	2113945B02	CAP, 0.01uF
C719	NOTPLACED	NOTPLACED
C720	2113945B04	CAP, .022uF
C721	2113945D04	CAP, 0.1uF
C722	2113944A17	CAP, 4.7pF
C723	NOTPLACED	NOTPLACED
C724	2113945A03	CAP, 330pF
C725	NOTPLACED	NOTPLACED
C726	2113944A29	CAP, 22pF
C727	2113944A28	CAP, 18pF
C728	NOTPLACED	NOTPLACED
C729	NOTPLACED	NOTPLACED
C730	2113946K02	CAP, 0.10uF
C731	2113945D04	CAP, 0.1uF
C732	2175662M05	CAP, 27pF
C733	2175662M02	CAP, 12pF
C734	2175745M01	CAP, 4.7pF
C735	2175745M03	CAP, 5.1pF
C736	2113945A02	CAP, 270pF
C737	2113945A09	CAP, 1000pF
C738	2113945A02	CAP, 270pF
C739	2113946K02	CAP, 0.10uF
C740	NOTPLACED	NOTPLACED
C798	2175662M05	CAP, 27pF
C799	2175745M03	CAP, 5.1pF
C900	2113945A02	CAP, 270pF
C903	2113944C14	CAP, 2.2pF
C904	2113944C41	CAP, 68pF
C905	2113944C45	CAP, 100pF
C906	2113944C19	CAP, 3.6pF
C907	2113944C62	CAP, 0.75pF
C908	2113944C17	CAP, 3.0pF
C909	2113944C41	CAP, 68pF
C910	2113944M30	CAP, 33pF
C911	2113944C61	CAP, 0.5pF
C912	2113944C63	CAP, 1.0pF
C913	2113944C45	CAP, 100pF
C914	2113945A02	CAP, 270pF
C915	2113944C12	CAP, 1.8pF
C916	2113944C10	CAP, 1.5pF
C917	2113944M30	CAP, 33pF
C918	2113944C45	CAP, 100pF
C920	2113944C25	CAP, 6.2pF
C921	2113944C24	CAP, 5.6pF

Circuit Ref	Motorola Part No.	Description
C922	NOTPLACED	NOTPLACED
C923	NOTPLACED	NOTPLACED
C924	2113944A11	CAP, 2.7pF
C925	2113944V07	CAP, 1.5pF
C926	2113944A15	CAP, 3.9pF
C927	2113945A02	CAP, 270pF
C1000	2113944A40	CAP, 100pF
C1001	2113946K02	CAP, 0.10uF
C1002	2113946K02	CAP, 0.10uF
C1003	2113944A40	CAP, 100pF
C1004	2113944A40	CAP, 100pF
C1005	2113946K02	CAP, 0.10uF
C1006	2113946K02	CAP, 0.10uF
C1007	2113944A40	CAP, 100pF
C1008	2113944A40	CAP, 100pF
C1009	2113946K02	CAP, 0.10uF
C1010	2113946K02	CAP, 0.10uF
C1011	2113944A40	CAP, 100pF
C1012	2113946K02	CAP, 0.10uF
C1013	2113946K02	CAP, 0.10uF
C1014	2113946K02	CAP, 0.10uF
C1015	2113946K02	CAP, 0.10uF
C1016	2113946B04	CAP, 0.1uF
C1017	2113946E02	CAP, 1.0uF
C1018	2113944A28	CAP, 18pF
C1019	2113944A28	CAP, 18pF
C1028	2113946K02	CAP, 0.10uF
C1029	2113946K02	CAP, 0.10uF
C1030	2113944A28	CAP, 18pF
C1031	2113946K02	CAP, 0.10uF
C1032	2113945B02	CAP, .01uF
C1033	2113946K02	CAP, 0.10uF
C1044	2113946B04	CAP, 0.1uF
C1045	2316410H03	CAPP, 10uF
C1046	2113946F03	CAP, 4.7uF
C2000	2113944A40	CAP, 100pF
C2001	2113945B02	CAP, .01uF
C2002	2113946K02	CAP, 0.10uF
C2003	2113946K02	CAP, 0.10uF
C2004	2113944A40	CAP, 100pF
C2005	2113945B02	CAP, .01uF
C2006	2113946K02	CAP, 0.10uF
C2007	2113946K02	CAP, 0.10uF
C2008	NOTPLACED	NOTPLACED
C2010	2113946F03	CAP, 4.7uF
C2011	2113946F03	CAP, 4.7uF

Circuit Ref	Motorola Part No.	Description
C2013	NOTPLACED	NOTPLACED
C3000	2113944A78	CAP, 13pF
C3001	2113944A78	CAP, 13pF
C3002	2113945D04	CAP, 0.1uF
C3003	2113946D05	CAP, 2.2uF
C3004	2113946D05	CAP, 2.2uF
C3005	2113945A09	CAP, 1000pF
C3010	2113946D05	CAP, 2.2uF
C3011	2113946A01	CAP, .015uF
C3014	2113946D05	CAP, 2.2uF
C3015	2115153H57	CAP, 100pF
C3016	2113946D05	CAP, 2.2uF
C3017	2113945B02	CAP, .01uF
C3018	2113946D05	CAP, 2.2uF
C3019	2113946D02	CAP, 1.0uF
C3024	2113946D02	CAP, 1.0uF
C3025	2113946K02	CAP, 0.10uF
C3026	2113946K02	CAP, 0.10uF
C3028	2113946D05	CAP, 2.2uF
C3031	2113946D02	CAP, 1.0uF
C3034	2113946B04	CAP, 0.1uF
C3035	2113946B04	CAP, 0.1uF
C3036	2113946B04	CAP, 0.1uF
C3037	2113944A40	CAP, 100pF
C3038	2113944A40	CAP, 100pF
C3039	2113946F03	CAP, 4.7uF
C3045	2113946F05	CAP, 10uF
C3047	2113945C25	CAP, .033uF
C3048	2113945C25	CAP, .033uF
C3049	2113945C25	CAP, .033uF
C3050	2113945C25	CAP, .033uF
C3051	2113944A40	CAP, 100pF
C3060	2113944A80	CAP, 20pF
C3061	2113944A80	CAP, 20pF
C3062	2113946K02	CAP, 0.10uF
C3063	2113946K02	CAP, 0.10uF
C3067	2113946D02	CAP, 1.0uF
C3070	2113944A25	CAP, 10pF
C3074	2113946D02	CAP, 1.0uF
C3078	2113944A40	CAP, 100pF
C3079	2113946F03	CAP, 4.7uF
C3080	NOTPLACED	NOTPLACED
C3081	2113946F03	CAP, 4.7uF
C3082	2113946B04	CAP, 0.1uF
C3083	2113946B04	CAP, 0.1uF
C3084	2113946K03	CAP, 0.22uF

Circuit Ref	Motorola Part No.	Description
C3086	2113946K02	CAP, 0.10uF
C3090	2113955D37	CAP, 10uF
C3091	2113955D37	CAP, 10uF
C3093	2113946N03	CAP, 2.2uF
C3094	2113946B04	CAP, 0.1uF
C3095	2113946B04	CAP, 0.1uF
C3097	2113944A31	CAP, 33pF
C3098	2113944A31	CAP, 33pF
C3099	2113944A31	CAP, 33pF
C3100	2113944A31	CAP, 33pF
C3101	2113946D02	CAP, 1.0uF
C3102	2113946D02	CAP, 1.0uF
C3200	2113945Y02	CAP, 0.10uF
C3201	2113955D37	CAP, 10uF
C3202	2371572L02	CAPP, 68uF
C3203	2113945B02	CAP, .01uF
C3204	2115153H40	CAP, 20pF
C3205	2113944A50	CAP, 680pF
C3206	2113945Y02	CAP, 0.10uF
C3207	2113955D37	CAP, 10uF
C3208	2113946K03	CAP, 0.22uF
C3209	2316410H01	CAPP, 22uF
C3210	2113945B02	CAP, .01uF
C3211	2115153H40	CAP, 20pF
C3212	2113944A44	CAP, 220pF
C3213	2113944A44	CAP, 220pF
C3310	2113945A12	CAP, 3300pF
C3311	2113944A38	CAP, 82pF
C3312	2113944A40	CAP, 100pF
C3700	2113946D02	CAP, 1.0uF
C3701	2113945B02	CAP, .01uF
C3702	2113946D05	CAP, 2.2uF
C3703	2113946D02	CAP, 1.0uF
C3704	2113944A30	CAP, 27pF
C3705	2113945B02	CAP, .01uF
C3706	2113945A05	CAP, 470pF
C3707	2113946D05	CAP, 2.2uF
C3800	2113945D04	CAP, 0.1uF
C3805	2113946K03	CAP, 0.22uF
C3999	2113945B02	CAP, .01uF
C8000	2113946F05	CAP, 10uF
C8001	2113944A28	CAP, 18pF
C8002	2113944A52	CAP, 1000pF
C8003	2113946F05	CAP, 10uF
C8004	2113944A28	CAP, 18pF
C8005	NOTPLACED	NOTPLACED

Circuit Ref	Motorola Part No.	Description
C8006	NOTPLACED	NOTPLACED
C8013	2113944A08	CAP, 2.0pF
C8014	2113944A62	CAP, 0.75pF
C8015	2113946K02	CAP, 0.10uF
C8016	2113945A02	CAP, 270pF
C8017	2113944A28	CAP, 18pF
C8018	2113944A09	CAP, 2.2pF
C8019	NOTPLACED	NOTPLACED
C8020	2113944A52	CAP, 1000pF
C8021	2113946K02	CAP, 0.10uF
C8022	2113946D05	CAP, 2.2uF
C8023	2113945B02	CAP, .01uF
C8029	2113944A52	CAP, 1000pF
C8030	2113944A28	CAP, 18pF
C8031	2113946D05	CAP, 2.2uF
C8032	2113945B02	CAP, .01uF
C8033	2113944A28	CAP, 18pF
C8034	2113944A28	CAP, 18pF
C8035	2113944A31	CAP, 33pF
C8036	2113944A52	CAP, 1000pF
C9000	2113944A40	CAP, 100pF
C9001	2113944A40	CAP, 100pF
C9002	2113944A40	CAP, 100pF
C9003	2113944A40	CAP, 100pF
C9004	2113944A40	CAP, 100pF
C9005	2113944A40	CAP, 100pF
C9006	2113944A40	CAP, 100pF
C9007	2113944A40	CAP, 100pF
C9008	2113944A40	CAP, 100pF
C9009	2113944A40	CAP, 100pF
C9010	2113944A40	CAP, 100pF
C9011	2113944A40	CAP, 100pF
C9012	2113944A40	CAP, 100pF
C9013	2113944A40	CAP, 100pF
C9014	2113944C45	CAP, 100pF
C9015	2113944A40	CAP, 100pF
C9016	2113944A40	CAP, 100pF
C9017	2113944A40	CAP, 100pF
C9018	2113944A40	CAP, 100pF
C9019	2113944A40	CAP, 100pF
C9020	2113944A40	CAP, 100pF
C9021	2113944A40	CAP, 100pF
C9022	2113944A40	CAP, 100pF
C9023	2113944A40	CAP, 100pF
C9024	2113944A40	CAP, 100pF
C9025	2113944A40	CAP, 100pF

Circuit Ref	Motorola Part No.	Description
C9026	2113944A40	CAP, 100pF
C9027	2113944A40	CAP, 100pF
C9028	2113944A40	CAP, 100pF
C9029	2113944A40	CAP, 100pF
C9030	2113944A17	CAP, 4.7pF
C9031	2113944A17	CAP, 4.7pF
C9032	2113944A17	CAP, 4.7pF
C9033	2113944A40	CAP, 100pF
C9038	2113944A40	CAP, 100pF
C9039	2113944C45	CAP, 100pF
C9040	2113944A40	CAP, 100pF
C9041	2113944A40	CAP, 100pF
C9042	2113944A40	CAP, 100pF
C9043	2113944A40	CAP, 100pF
C9044	2113944A40	CAP, 100pF
C9045	2113944A40	CAP, 100pF
C9046	2113944A40	CAP, 100pF
C9047	2113944A40	CAP, 100pF
C9048	2113944A40	CAP, 100pF
C9049	2113944A40	CAP, 100pF
C9050	2113944A40	CAP, 100pF
C9051	NOTPLACED	NOTPLACED
C9053	NOTPLACED	NOTPLACED
C9055	2113944A44	CAP, 220pF
C9057	NOTPLACED	NOTPLACED
C9058	2113944A40	CAP, 100pF
C9059	2113944A40	CAP, 100pF
C9060	2113944A40	CAP, 100pF
C9061	2113944A40	CAP, 100pF
C9062	2113944A40	CAP, 100pF
C9063	2113944A40	CAP, 100pF
C9064	2113944A40	CAP, 100pF
C9065	2113944C45	CAP, 100pF
C9066	2113944A40	CAP, 100pF
C9067	NOTPLACED	NOTPLACED
C9068	NOTPLACED	NOTPLACED
C9069	NOTPLACED	NOTPLACED
C9071	2113944A40	CAP, 100pF
C9072	2113944A40	CAP, 100pF
C9073	2313960C26	CAPP, 1uF
C9074	2313960A55	CAPP, 0.47uF
CR900	4815897H01	UPP9401E3
CR901	4815897H01	UPP9401E3
CR902	4815897H01	UPP9401E3
CR903	4815897H01	UPP9401E3
D001	4815059H01	1SV325

Circuit Ref	Motorola Part No.	Description
D200	4815096H01	1SV305
D201	4815096H01	1SV305
D202	4815096H01	1SV305
D203	4815096H01	1SV305
D204	4815096H01	1SV305
D205	4815096H01	1SV305
D206	4815096H01	1SV305
D207	4815096H01	1SV305
D400	4885055Y01	1SV229
D401	4885055Y01	1SV229
D402	4813974A19	MMBD352
D403	4885055Y01	1SV229
D404	4885055Y01	1SV229
D405	4815923H01	HSMS2829
D600	4815096H01	1SV305
D601	4815096H01	1SV305
D3000	4813978A25	BAT54HT1G
D9000	4805729G49	BRPY1204W
E001	2480640Z01	BK1005HM471
E002	2480640Z01	BK1005HM471
E003	2480640Z01	BK1005HM471
E004	2480640Z01	BK1005HM471
E400	2480640Z01	BK1005HM471
E401	2480640Z01	BK1005HM471
E600	2480640Z01	BK1005HM471
E601	2480640Z01	BK1005HM471
E602	2480640Z01	BK1005HM471
E701	7686949J14	BLM21PG221SN1
E3030	2409134J04	BLM18BD601SN1
E3031	2409134J04	BLM18BD601SN1
E3032	2409134J04	BLM18BD601SN1
E3033	2409134J04	BLM18BD601SN1
E3700	7686949J08	IDCTR
E3701	7686949J08	IDCTR
E3702	7686949J08	IDCTR
E3703	7686949J08	IDCTR
E3704	7686949J08	IDCTR
E3705	7686949J08	IDCTR
E8000	7686949J08	IDCTR
E8001	7686949J08	IDCTR
E8002	NOTPLACED	NOTPLACED
E8003	7686949J08	IDCTR
E8004	7686949J08	IDCTR
E8005	7686949J08	IDCTR
E8006	7686949J08	IDCTR
E9000	7686949J14	BLM21PG221SN1

Circuit Ref	Motorola Part No.	Description
E9001	2480640Z01	BK1005HM471
E9006	NOTPLACED	NOTPLACED
E9007	NOTPLACED	NOTPLACED
F9000	6515076H01	FUSE
FL400	9116854H01	D73312GQ1
FL8000	9180310L38	B39162-B7829-C710
FL8001	9180310L38	B39162-B7829-C711
FL9000	2515003H02	DLP11SN201HL2
J9001	0970312L02	CONN_J
L002	2415429H24	IDCTR, 27nH
L200	2415429H47	IDCTR, 390nH
L201	2415427H31	IDCTR, 22nH
L202	2416540H12	IDCTR, 11nH
L203	2415429H47	IDCTR, 390nH
L204	2415429H47	IDCTR, 390nH
L205	2415429H47	IDCTR, 390nH
L206	2415429H47	IDCTR, 390nH
L207	2415427H40	IDCTR, 43nH
L208	2415429H47	IDCTR, 390nH
L209	2415427H26	IDCTR, 15nH
L210	2415428H05	IDCTR, 5.6nH
L211	2415429H47	IDCTR, 390nH
L212	2415429H47	IDCTR, 390nH
L213	2415429H47	IDCTR, 390nH
L214	2415429H47	IDCTR, 390nH
L215	2415429H25	IDCTR, 30nH
L217	2415347H01	IDCTR, 1000nH
L218	2415429H31	IDCTR, 51nH
L400	2471912M01	IDCTR, 11.7nH
L401	2471912M01	IDCTR, 11.7nH
L402	2415429H31	IDCTR, 51nH
L403	2415427H36	IDCTR, 33nH
L404	2415427H23	IDCTR, 12nH
L405	2415429H25	IDCTR, 30nH
L406	2415429H11	IDCTR, 7.5nH
L407	2415427H16	IDCTR, 7.5nH
L408	2471912M01	IDCTR, 11.7nH
L409	2471912M01	IDCTR, 11.7nH
L410	NOTPLACED	NOTPLACED
L411	2415429H35	IDCTR, 82nH
L412	2414017N29	IDCTR, 270nH
L413	2415429H18	IDCTR, 15nH
L414	2415429H18	IDCTR, 15nH
L415	2415429H46	IDCTR, 330nH
L416	2414017N29	IDCTR, 270nH
L417	2415718H37	IDCTR, 820nH

Circuit Ref	Motorola Part No.	Description
L418	2415429H47	IDCTR, 390nH
L419	NOTPLACED	NOTPLACED
L420	NOTPLACED	NOTPLACED
L600	2466505A01	IDCTR, 10uH
L601	2466505A01	IDCTR, 10uH
L602	2415569H01	IDCTR, 4.7uH
L603	2415718H37	IDCTR, 820nH
L604	2414015B26	IDCTR, 330nH
L605	2415569H01	IDCTR, 4.7uH
L700	2414017N25	IDCTR, 120nH
L701	2414017N25	IDCTR, 120nH
L702	2415429H12	IDCTR, 8.2nH
L703	2414017N25	IDCTR, 120nH
L706	2460591E64	IDCTR, 30.51nH
L707	2471406L02	IDCTR, 10nH
L902	2414017N25	IDCTR, 120nH
L903	2414017N25	IDCTR, 120nH
L904	2471912M04	IDCTR, 16nH
L905	2471912M04	IDCTR, 16nH
L906	2471912M03	IDCTR, 18.9nH
L907	2415429H35	IDCTR, 82nH
L908	2471912M03	IDCTR, 18.9nH
L909	2471912M04	IDCTR, 16nH
L910	2471912M04	IDCTR, 16nH
L911	2471912M04	IDCTR, 16nH
L912	2414017P08	IDCTR, 3.9nH
L913	2414017P10	IDCTR, 5.6nH
L3003	2464675H01	IDCTR, 560nH
L3004	2464675H01	IDCTR, 560nH
L3020	2471189M03	IDCTR, 10uH
L3021	2471189M03	IDCTR, 10uH
L3022	2464675H01	IDCTR, 560nH
L8001	2414017P10	IDCTR, 5.6nH
L8002	2414017P17	IDCTR, 22nH
L8003	2414017P13	IDCTR, 10nH
L8004	2414017P10	IDCTR, 5.6nH
L9000	2471698M01	IDCTR, 3.3uH
L9001	2415429H45	IDCTR, 270nH
L9007	2415429H45	IDCTR, 270nH
L9008	2415429H45	IDCTR, 270nH
M1	4271321L01	RETAINER
M2	4271321L01	RETAINER
M700	2615193H01	HEATSINK
M9000	4371105L01	BRD_SPACER
M9001	4371105L01	BRD_SPACER
M9002	4371105L01	BRD_SPACER

Circuit Ref	Motorola Part No.	Description
M9003	NOTPLACED	NOTPLACED
M9004	NOTPLACED	NOTPLACED
M9005	3915478H01	CONTACT
M9006	3915478H01	CONTACT
M9007	0915184H01	CONTACT
P900	2815696H01	CONN_P
P9000	2887818K02	CONN_P
Q002	4815359H01	BCV62
Q003	4816134H01	DTC114YM
Q200	4815029H01	NE851M03
Q202	4815055H01	UMC5NT2G
Q203	4815055H01	UMC5NT2G
Q204	4885061Y01	NE68519
Q205	4885061Y01	NE68519
Q206	4815055H01	UMC5NT2G
Q207	4815055H01	UMC5NT2G
Q208	4885061Y01	NE68519
Q400	4816531H01	QSBT_0038
Q401	4816531H01	QSBT_0038
Q600	4813973A04	73A04
Q601	4815055H01	UMC5NT2G
Q602	4885061Y01	NE68519
Q701	4815055H01	UMC5NT2G
Q702	4815055H01	UMC5NT2G
Q703	4816547H01	RD01MUS1
Q704	4816548H01	RD07MVS1
Q900	4815055H01	UMC5NT2G
Q901	4815055H01	UMC5NT2G
Q3000	4805585Q23	SI8401DB
Q3001	4805585Q23	SI8401DB
Q3002	4816134H01	DTC114YM
Q3003	4813970A62	NTHS5441T1
Q3005	4805585Q23	SI8401DB
Q3006	4816134H01	DTC114YM
Q3010	4805585Q23	SI8401DB
Q3030	4815055H01	UMC5NT2G
Q9000	4813973M07	MMBT3904
Q9001	4815154H01	IMXFT110
Q9003	4813973M07	MMBT3904
R006	0613952Q93	RES, 6.8K
R007	0613952R01	RES, 10K
R008	0613952Q25	RES, 10
R010	0613952Q93	RES, 6.8K
R011	0613952Q49	RES, 100
R012	0613952R25	RES, 100K
R013	0613952Q46	RES, 75

Circuit Ref	Motorola Part No.	Description
R014	0613952Q42	RES, 51
R016	0613952Q33	RES, 22
R017	0613952Q62	RES, 360
R018	0613952R07	RES, 18K
R019	0613952R01	RES, 10K
R020	0613952Q46	RES, 75
R022	0613952Q58	RES, 240
R025	0613952R13	RES, 33K
R026	0613952R01	RES, 10K
R027	0613952R66	RES, 0
R052	0613952R66	RES, 0
R053	0613952R66	RES, 0
R054	NOTPLACED	NOTPLACED
R200	0613952Q95	RES, 8.2K
R201	0613952Q90	RES, 5.1K
R202	0613952Q49	RES, 100
R203	0613952Q43	RES, 56
R205	0613952Q93	RES, 6.8K
R207	NOTPLACED	NOTPLACED
R208	0613952Q95	RES, 8.2K
R209	0613952Q86	RES, 3.6K
R210	0613952Q49	RES, 100
R211	0613952Q46	RES, 75
R212	0613952Q91	RES, 5.6K
R213	0613952Q94	RES, 7.5K
R214	0613952Q58	RES, 240
R215	NOTPLACED	NOTPLACED
R216	0613952Q57	RES, 220
R217	0613952Q95	RES, 8.2K
R218	0613952Q66	RES, 510
R220	0613952Q60	RES, 300
R221	0613952Q31	RES, 18
R222	0613952Q60	RES, 300
R223	0613952R66	RES, 0
R224	0613952R66	RES, 0
R400	0613952R25	RES, 100K
R402	0613952R66	RES, 0
R403	0613952Q73	RES, 1K
R404	0613952Q71	RES, 820
R405	0613952R25	RES, 100K
R406	0613952R25	RES, 100K
R407	0613952Q42	RES, 51
R409	0613952R05	RES, 15K
R410	0613952Q83	RES, 2.7K
R411	0613952R19	RES, 56K
R412	0613952Q63	RES, 390

Circuit Ref	Motorola Part No.	Description
R413	0613952Q77	RES, 1.5K
R416	0613952R66	RES, 0
R417	0613952R66	RES, 0
R419	0613952R66	RES, 0
R420	0613952Q95	RES, 8.2K
R421	0613952Q49	RES, 100
R422	0613952R01	RES, 10K
R424	0613952R01	RES, 10K
R425	0613952R66	RES, 0
R497	NOTPLACED	NOTPLACED
R499	0613952R25	RES, 100K
R600	0613952R01	RES, 10K
R601	0613952Q55	RES, 180
R602	0613952Q61	RES, 330
R603	0613952R05	RES, 15K
R604	0613952Q90	RES, 5.1K
R605	0613952Q90	RES, 5.1K
R606	0613952Q75	RES, 1.2K
R607	0613952R25	RES, 100K
R609	0613952R01	RES, 10K
R610	0613952R01	RES, 10K
R611	0613952Q63	RES, 390
R612	0613952R08	RES, 20K
R696	0613952R66	RES, 0
R697	0613952R66	RES, 0
R698	0613952R01	RES, 10K
R699	0613952R25	RES, 100K
R700	0615043C01	RES, 0.1
R701	NOTPLACED	NOTPLACED
R702	0613952Z80	RES, 330K
R703	0613952Z80	RES, 330K
R704	NOTPLACED	NOTPLACED
R705	0675679M01	RES, 2MEG
R706	0675679M01	RES, 2MEG
R707	0613952Q81	RES, 2.2K
R708	0613952Q90	RES, 5.1K
R709	0613952R66	RES, 0
R710	NOTPLACED	NOTPLACED
R711	0613952R08	RES, 20K
R712	0613952R66	RES, 0
R713	NOTPLACED	NOTPLACED
R714	0613952Q59	RES, 270
R717	0613958H33	RES, 22
R718	0613952Q56	RES, 200
R719	0613952Q40	RES, 43
R720	0613952H56	RES, 200



Circuit Ref	Motorola Part No.	Description	Circuit Ref	Motorola Part No.	Description	Circuit Ref	Motorola Part No.	Description	Circuit Ref	Motorola Part No.	Description
R721	0613952G67	RES, 0	R1051	0613952R66	RES, 0	R3027	0613952Q59	RES, 270	R8004	0613952Q70	RES, 750
R722	0613952G67	RES, 0	R1052	0613952R66	RES, 0	R3028	0613952N69	RES, 51.1K	R8010	0613952R05	RES, 15K
R723	0613952Q40	RES, 43	R1053	0613952Q89	RES, 4.7K	R3029	0613952N60	RES, 41.2K	R8011	0613952R25	RES, 100K
R725	0613952Q85	RES, 3.3K	R1054	0613952Q89	RES, 4.7K	R3030	0686135Z02	RES, 0.2	R8012	0613952R01	RES, 10K
R726	0613952R66	RES, 0	R1055	NOTPLACED	NOTPLACED	R3031	0613952R66	RES, 0	R8015	NOTPLACED	NOTPLACED
R727	NOTPLACED	NOTPLACED	R1060	0613952Q25	RES, 10	R3032	0613952Q95	RES, 8.2K	R8016	0613952R66	RES, 0
R728	0613952Q60	RES, 300	R1061	0613952R66	RES, 0	R3033	0613952R05	RES, 15K	R8017	NOTPLACED	NOTPLACED
R729	0613952Q33	RES, 22	R1062	0613952R66	RES, 0	R3034	0613952Q95	RES, 8.2K	R8020	0613952R66	RES, 0
R730	0613952Q60	RES, 300	R1065	0613952R66	RES, 0	R3035	0613952R05	RES, 15K	R8023	0613952R66	RES, 0
R731	NOTPLACED	NOTPLACED	R1067	0613952R03	RES, 12K	R3036	0613952N01	RES, 10K	R8024	0613952R25	RES, 100K
R732	0613952R66	RES, 0	R1068	0613952R10	RES, 24K	R3037	0613952Q71	RES, 820	R8025	0613952R66	RES, 0
R733	0613952R17	RES, 47K	R1069	0613952R66	RES, 0	R3038	NOTPLACED	NOTPLACED	R8026	0613952R25	RES, 100K
R902	0613952H47	RES, 82	R1070	0613952R01	RES, 10K	R3040	0613952Q81	RES, 2.2K	R8027	0613952R25	RES, 100K
R903	0613952H47	RES, 82	R1072	0613952R66	RES, 0	R3041	0613952N01	RES, 10K	R8028	0613952R25	RES, 100K
R904	0613952H47	RES, 82	R2000	0613952R01	RES, 10K	R3043	0613952R32	RES, 200K	R8029	0613952R25	RES, 100K
R905	0613952H47	RES, 82	R2004	0613952R66	RES, 0	R3050	0613952R25	RES, 100K	R8030	0613952R01	RES, 10K
R906	0613952R01	RES, 10K	R2005	0613952R01	RES, 10K	R3051	0613952Q89	RES, 4.7K	R8031	0613952R25	RES, 100K
R907	0613952R01	RES, 10K	R2006	0613952R01	RES, 10K	R3053	0613952Z58	RES, 22K	R8032	0613952R25	RES, 100K
R1000	0613952Q25	RES, 10	R2007	0613952R01	RES, 10K	R3054	0613952Z58	RES, 22K	R8033	0613952R25	RES, 100K
R1001	0613952R01	RES, 10K	R2008	0613952R01	RES, 10K	R3055	0613952R25	RES, 100K	R8034	0613952R01	RES, 10K
R1002	0613952J73	RES, 10MEG	R2009	0613952R01	RES, 10K	R3060	0613952M30	RES, 2K	R8035	0613952R01	RES, 10K
R1005	0613952Q89	RES, 4.7K	R2010	0613952R01	RES, 10K	R3061	0613952N01	RES, 10K	R8036	0613952R01	RES, 10K
R1006	0613952R01	RES, 10K	R2011	0613952R66	RES, 0	R3070	0613952R33	RES, 220K	R8037	0613952R01	RES, 10K
R1013	NOTPLACED	NOTPLACED	R2012	0613952R01	RES, 10K	R3071	0613952R33	RES, 220K	R9000	0613952Q73	RES, 1K
R1014	0613952R66	RES, 0	R2013	0613952R01	RES, 10K	R3072	0613952R56	RES, 2MEG	R9001	0613952Q73	RES, 1K
R1015	NOTPLACED	NOTPLACED	R3004	NOTPLACED	NOTPLACED	R3073	0613952R56	RES, 2MEG	R9002	0613952Q73	RES, 1K
R1016	0613952R66	RES, 0	R3005	0613952N01	RES, 10K	R3074	0613952Q73	RES, 1K	R9003	0613952Q73	RES, 1K
R1017	NOTPLACED	NOTPLACED	R3006	NOTPLACED	NOTPLACED	R3075	0613952N01	RES, 10K	R9004	0613952Q73	RES, 1K
R1018	0613952R66	RES, 0	R3007	0613952N01	RES, 10K	R3098	0613952Q85	RES, 3.3K	R9005	0613952Q73	RES, 1K
R1019	0613952Q18	RES, 5.1	R3008	NOTPLACED	NOTPLACED	R3100	0613952R17	RES, 47K	R9006	0613952Q73	RES, 1K
R1020	0613952R66	RES, 0	R3009	0613952N01	RES, 10K	R3101	0613952R25	RES, 100K	R9007	0613952Q73	RES, 1K
R1021	0613952R66	RES, 0	R3010	0613952N01	RES, 10K	R3102	0613952A30	RES, 2	R9008	0613952R17	RES, 47K
R1022	NOTPLACED	NOTPLACED	R3011	0613952Q81	RES, 2.2K	R3103	0615049H16	RES, 0.7	R9009	0613952R01	RES, 10K
R1023	0613952R66	RES, 0	R3012	0613952Q59	RES, 270	R3200	0613952R33	RES, 220K	R9010	0613952R01	RES, 10K
R1025	0613952R01	RES, 10K	R3013	0613952Q81	RES, 2.2K	R3201	0613952R20	RES, 62K	R9011	0613952R17	RES, 47K
R1026	0613952R17	RES, 47K	R3014	0613952M30	RES, 2K	R3202	0613952R33	RES, 220K	R9012	0613952Q50	RES, 110
R1027	NOTPLACED	NOTPLACED	R3016	0616416H01	RES, 0.1	R3203	0613952R36	RES, 300K	R9013	0613952Q37	RES, 33
R1028	0613952R66	RES, 0	R3017	0613952P25	RES, 178K	R3700	0613952Q73	RES, 1K	R9014	0613952R01	RES, 10K
R1034	0613952R01	RES, 10K	R3018	0613952R18	RES, 51K	R3701	0613952R01	RES, 10K	R9015	0613952R01	RES, 10K
R1035	NOTPLACED	NOTPLACED	R3019	NOTPLACED	NOTPLACED	R3702	0613952R12	RES, 30K	R9016	0613952R01	RES, 10K
R1036	0613952R01	RES, 10K	R3020	0613952Q34	RES, 24	R3703	0613952R10	RES, 24K	R9017	0613952R01	RES, 10K
R1041	0613952Q73	RES, 1K	R3021	0613952Q34	RES, 24	R3704	0613952R01	RES, 10K	R9018	0613952R01	RES, 10K
R1045	0613952R01	RES, 10K	R3023	0613952R17	RES, 47K	R3800	0613952Q25	RES, 10	R9019	0613952Q73	RES, 1K
R1046	NOTPLACED	NOTPLACED	R3024	0613952Z67	RES, 51K	R3888	NOTPLACED	NOTPLACED	R9020	0613952Q89	RES, 4.7K
R1047	0613952R66	RES, 0	R3025	0613952Q49	RES, 100	R8002	0613952R25	RES, 100K	R9050	0613952R01	RES, 10K
R1048	0613952R66	RES, 0	R3026	0613952Q59	RES, 270	R8003	0613952R01	RES, 10K	R9051	0613952R01	RES, 10K

Circuit Ref	Motorola Part No.	Description
R9052	0613952Q65	RES, 470
R9053	0613952H47	RES, 82
R9054	0613952H47	RES, 82
S9000	4086470Z01	SWITCH
S9001	4015186H01	SWITCH
S9002	4015203H02	SWITCH
SH9000	NOTPLACED	NOTPLACED
SH9001	NOTPLACED	NOTPLACED
T400	2515396H01	XFMR
T401	2515396H01	XFMR
U001	5104932K08	SC51650VF
U002	5114000B59	MC74VHC1GT66
U200	5116014H01	UPC8179TK
U400	5115443H01	MAX2373
U600	5102495J14	AD9864
U700	4802246J29	ADA4743
U701	5115147H01	AD8566
U702	5115022H01	LM50
U1000	5102495J13	OMAP1710
U1005	5171209L01	TXB0104ZXUR
U1006	5115001H02	NL27WZU04
U2000	0104024J27	M58WR064FB
U2001	5171614M01	MT48H4M16LF
U3000	5185143E77	PWR_MNGR_BLOCK
U3002	5115616H01	LP8340
U3003	5115453H01	LMC6035ITLX
U3004	5114007A43	NL17SZ14
U3006	5115974H01	LP3990
U3007	5171395L01	TS5A23166
U3008	5115391H01	TK11100CSC
U3009	5164852H47	PCA9306
U3020	5171428L01	LTC1877
U3021	5171428L01	LTC1877
U3700	5116282H01	TPS79228
U3701	5116283H01	TPS79101
U8000	0104024J41	GSC3F/LP
U8001	5164015H55	UPC8211TK
VR9000	4866544A01	SR05
VR9001	4813979P10	MMQA5V6T1
VR9002	4813979P10	MMQA5V6T1
VR9003	4815040H01	MM3Z12VT1G
VR9004	4815040H01	MM3Z12VT1G
VR9005	4805656W76	MM5Z5V6
VR9006	4805656W76	MM5Z5V6
VR9007	4805656W76	MM5Z5V6
VR9008	4813979P10	MMQA5V6T1

Circuit Ref	Motorola Part No.	Description
VR9009	4813977C23	MMSZ5243
VR9010	4813977C23	MMSZ5243
VR9015	NOTPLACED	NOTPLACED
VR9016	NOTPLACED	NOTPLACED
VR9017	4815040H01	MM3Z12VT1G
VR9018	4815040H01	MM3Z12VT1G
VR9020	4813979P10	MMQA5V6T1
VR9021	4813979P10	MMQA5V6T1
VR9022	4813979P10	MMQA5V6T1
VR9023	4815040H01	MM3Z12VT1G
Y001	5116032H01	IVT5300B
Y1000	4809612J45	CX-91F
Y3000	4802582S80	XTAL
Y3001	4815028H01	CX-101F
Y8000	4802582S80	XTAL

† For XPR6100, P900 is changed to 2815696H02, C924 is changed to 2113944A12 (CAP, 3pF), L912 is changed to 2414017P11 (IDCTR, 6.8nH), and the following parts are not loaded: S9000, VR9005, C9023, R906, L909, C920, L910, C903, C921, C904, L902, C905, CR900, L903, C900, Q901, C925, C926, L913.

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## Section 9

# VHF (136–174 MHz) INFORMATION

## 1.0 Transmitter

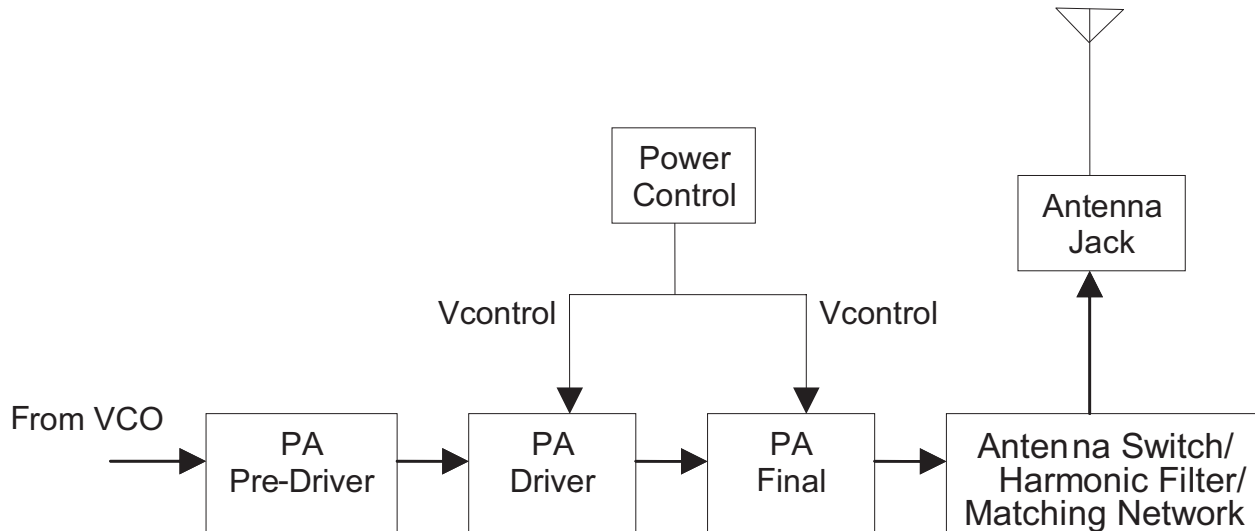


Figure 9-1: VHF Transmitter Block diagram

### 1.1 General

The VHF transmitter contains five basic circuits:

1. Power Amplifier
2. Antenna Switch
3. Harmonic Filter
4. Antenna Matching Network
5. Power Control

#### 1.1.1 Power Amplifier

The power amplifier is a 3-stage discrete design consisting of:

1. Pre-driver, ADA4743 (U700)
2. Driver, RD01MUS1 (Q703)
3. Final PA, RD07MVS1 (Q704)

The pre-driver is a 50 Ohm gain block with a supply voltage of 5V. the supply is ramped to eliminate feed-through power due to the fixed gain of the device. The pre-driver is biased in Class A region with a typical current drain of 60mA and power gain of 16.5dB.

The driver is a 1W, LDMOS in a SOT-89 package. this stage typically drains 110mA of current at rated output power, 5W. The driver is biased in Class AB region and has a power gain of 14dB.

The final PA is a 7W, LDMOS device. The gate threshold of this device is very close to the driver. Hence, the traditional PA bias tuning is eliminated. The current drain would typically be 1600mA. The final PA is biased in Class AB region and has a power gain of 10dB.

### 1.1.2 Antenna Switch

The antenna switch comprises of 2 ports: standard port and remote port.

**NOTE** Remote port is not supported in XPR 6100 and the related components are not loaded

The antenna switch consist of:

1. Four PIN diodes:
  - c. CR902 and CR903 biased during standard port operation at transmit mode.
  - d. CR900 and CR901 biased during remote port operation at receive mode.
  - e. CR900, CR901, CR902 and CR903 biased during remote port operation at transmit mode.
2. Six current limiting resistors:
  - a. R904, R905 and R909 for standard port operation at transmit mode.
  - b. R902, R903 and R906 for remote port operation at receive mode.
  - c. R902, R903, R906, R904, R905 and R909 for remote port operation at transmit mode.
3. Two pi networks:
  - a. C915, L908, C916 to determine TX or RX mode.
  - b. C911, L906, C912 to determine standard port or remote port operation.

In the transmit mode of standard port operation, ANT\_EN signal (from MAKO) turns on Q702(bias Power Amplifier) and Q900(antenna switch circuit). RAWB+ bias is applied to the standard port antenna switch circuit to bias CR902 and CR903 “on”. Hence, the following occurs:

1. Shunt diode (CR903) shorts out the receiver port, and the pi network(C915, L908, C916), which operates as a quarter wave transmission line, transforms low impedance of the shunt diode to a high impedance at the input of the harmonic filter. In the receive mode, the diodes are “off” and hence, there exists a low attenuation path between the antenna and the receiver ports.
2. Both CR900 and CR901 is biased “off”, and the pi network(C911, L906, C912), which operates as a quarter wave transmission line, transfers the 50ohm impedance of the harmonic filter to C902 and hence, forces PA\_OUT to take the standard port circuit path.

In the transmit mode of remote port operation, ANT\_EN signal (from MAKO) turns on Q702(bias Power Amplifier) and Q900(antenna switch circuit) and GP02 signal (from TOMAHAWK) turns on Q901. RAWB+ bias is applied to the standard and remote port antenna switch circuit to bias CR900, CR901, CR902 and CR903 “on”. Hence, the following occurs:

1. Shunt diode(CR903) shorts out the receiver port, and the pi network(C915, L908, C916), which operates as a quarter wave transmission line, transforms low impedance of the shunt diode to a high impedance at the input of the harmonic filter. In the receive mode, the diodes are off and hence, there exists a low attenuation path between the antenna and the receiver ports.
2. Shunt diode(CR901) shorts out the standard port, and the pi network(C911, L906, C912), which operates as a quarter wave transmission line, transforms the low impedance of the shunt diode to a high impedance at the input of the standard port circuit and hence, forces PA\_OUT to take the remote port circuit path.

### 1.1.3 Harmonic Filter

The harmonic filter consists of C906, C907, C929, C931, L904 and L905. The design of the harmonic filter for VHF is a fourpole Elliptical design using lumped LC elements in order to realize greater attenuation in the stop band for a given ripple level. The harmonic filter insertion loss is typically less than 1.3dB.

### 1.1.4 Power Control

The transmitter power control uses discrete integrator approach, the current is sensing both PA stages namely, Driver Power Amplifier (Q703) and Final Power Amplifier (Q704).

The basic block diagram of the power control is shown in Figure 9-2. A single sensing resistor (R700) is tied to sense both PA stages current. The power control consists of 2 comparators, U701-1 and U701-2. U701 is a dual-package op-amp in SOT-8 package. The first stage is an I-V converter converts current drained by Power Amplifier Driver (Q703) and Power Amplifier Final (Q704) across R700 into a voltage drop and the second stage is an integrator used to shape the output Vcontrol to bias both PAs. The slope of the Vcontrol is controlled by the RC time constant of the integrator and also the ramping slope of reference signal, TX\_DAC generated by MAKO IC. The final TX\_DAC value determines the transmit power level and is a factory tuned parameter which is stored inside the codeplug.

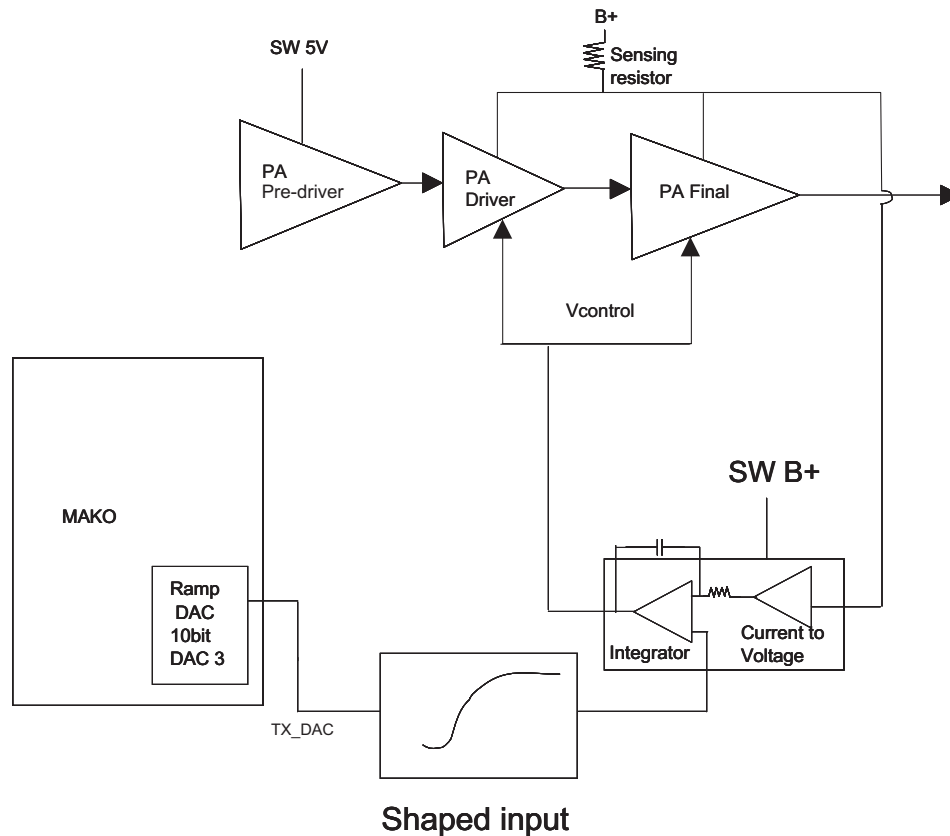


Figure 9-2: Power Control Scheme Basic Block Diagram

## 2.0 Receiver

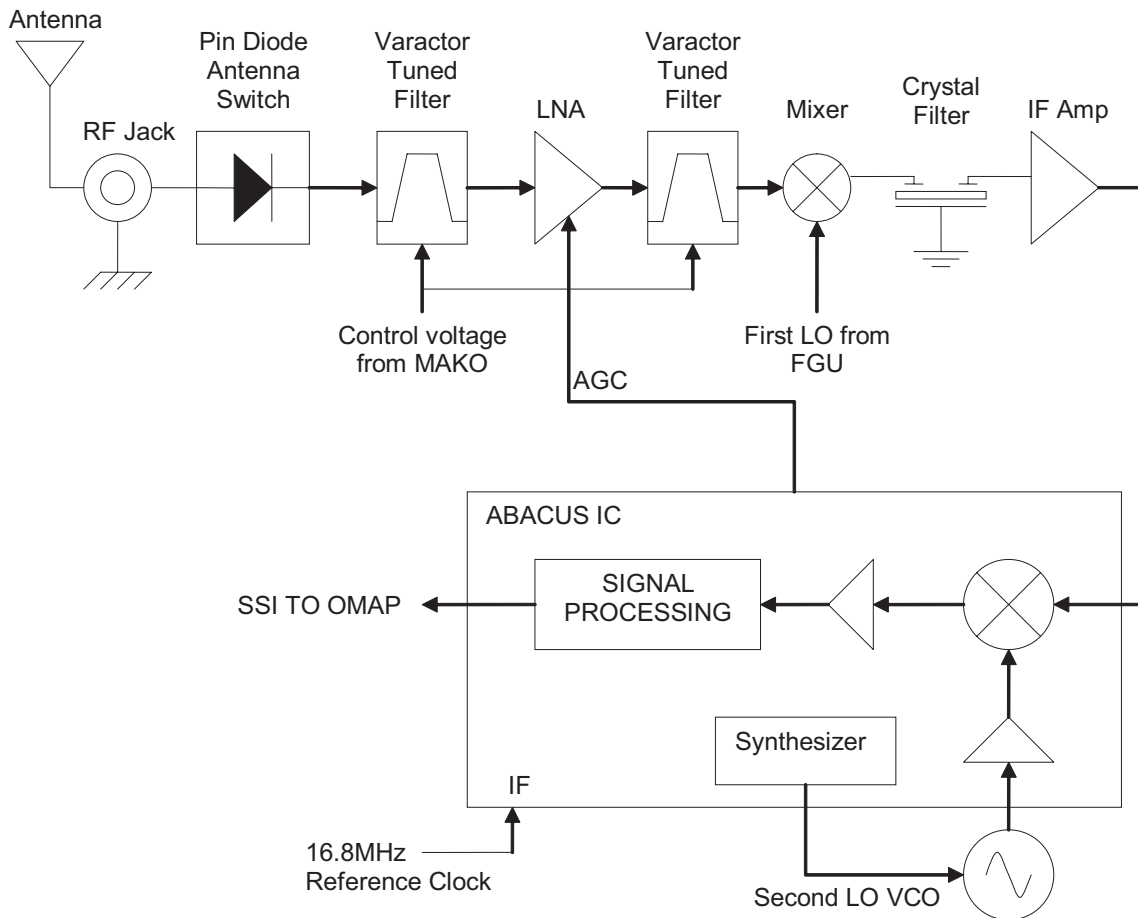


Figure 9-3: UHF Receiver Block Diagram

### 2.1 Receiver Front-End

The RF signal is received by the antenna and applied to a low-pass filter. For VHF, the filter consists of C906, C907, C908, L904 and L905. The filtered RF signal is passed through the antenna switch and then applied to a varactor tuned bandpass filter. The bandpass filter comprises of C400, C401, C402, C403, C404, C405, L400, L401, R400, R499, D400 and D401. C400 and C405 are 50ohm points. The bandpass filter is tuned by applying a control voltage to the varactor diodes D400 and D401.

The bandpass filter is electronically tuned by the MAKO DAC. Depending on the carrier frequency, the MAKO DAC will supply the tuned voltage to the varactor diodes in the filter. Wideband operation of the filter is achieved by shifting the bandpass filter across the band.

The output of the bandpass filter is passed through a RF step attenuator (D402) to limit the amount RF power fed into the LNA (U400). After being amplified, the RF signal is further filtered by a second varactor tuned bandpass filter. This bandpass filter is electronically tuned by the MAKO DAC and comprises of C419, C420, C421, C422, C423, C424, L408, L409, R405, R406, D403 and D404. C419 and C423 are 50 Ohm points.

The output of the second bandpass filter is passed to a mixer. The mixer is a passive double balanced quad diode mixer (D405) comprising of 2 transformers (T400 and T401). The 50 Ohm matching for the mixer is provided by C426 and L410. After mixing with the first LO signal from the voltage control oscillator (VCO) using high side injection, the RF signal is down converted to the 44.85 MHz IF signal.

The IF signal coming out of the mixer is applied to the crystal filter (FL400) through a resistor pad and a diplexer (L411 and C427). Matching to the input of the crystal filter is provided by L412 and C428. The crystal filter provides the necessary adjacent channel selectivity and inter-modulation protection.

The output of the crystal filter (FL400) is matched to the input of the IF amplifier transistor by C432, C433, L415 and L416. Voltage supply to the IF amplifier is 5V\_RX, taken from RX VCO. The IF amplifier provides a gain of 19 dB minimum. The IF amplifier output is directly matched at the IF amplifier output to ABACUS (U600) pin 47 via C601.

## 2.2 Receiver Back-End

ABACUS (U600) is tuned via software at radio start-up. The IF signal applied to pin 47 of U600 is down-converted to a second IF of 2.25 MHz. The second IF of 2.25 MHz will then be fed into an ADC, generating the Is and Qs data. This data is in the form of SSI (Serial Synchronous Interface) at pin 29 of U600, which will then be sent to the DSP (OMAP1710) for further processing.

The second VCO is a Colpitts oscillator built around transistor Q602. The VCO has a varactor diode, D600 to adjust the VCO frequency. The second LO frequency could either be 42.6 MHz or 47.1 MHz, depending on the system requirement. The control signal is derived from a loop filter consisting of C617, C618, C619, R605 and R606. The RSSI circuitry is achieved via software programming.

## 3.0 Frequency Generation Circuitry

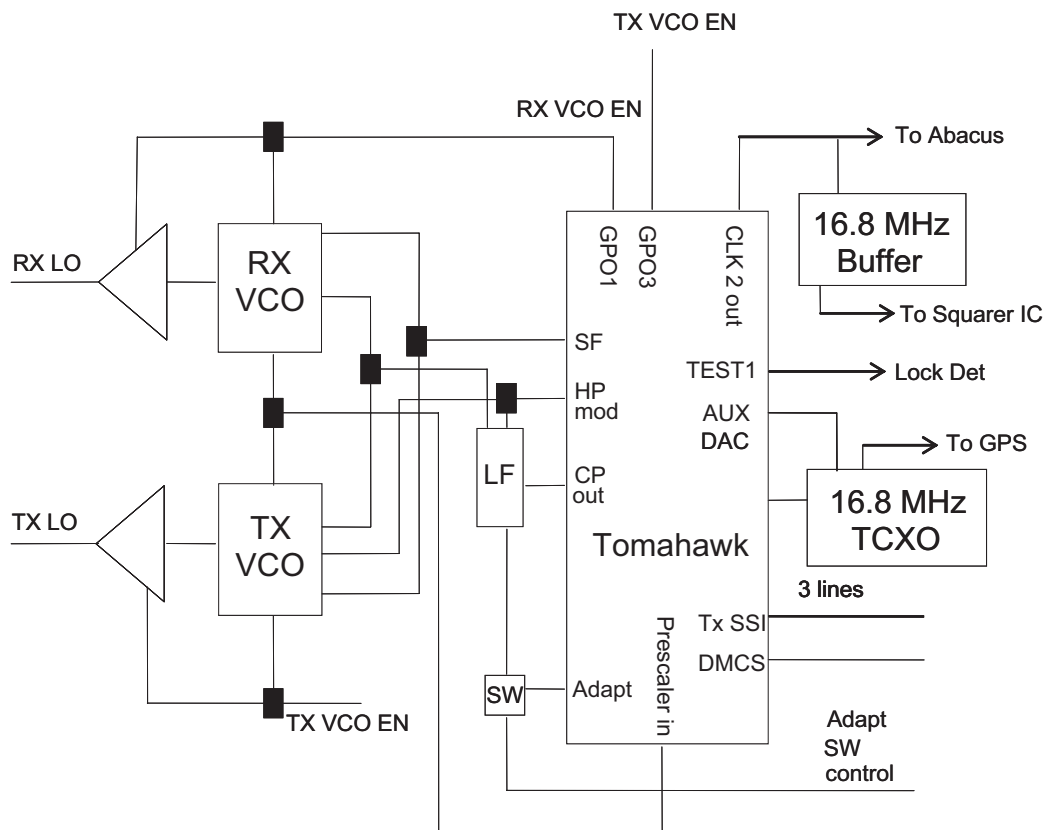


Figure 9-4: Frequency Generating Unit Block Diagram

The Frequency Generating Unit is centered on one main IC, Tomahawk (U001). The main synthesizer on the Tomahawk eases modulation interface to the DSP area via the 3 TX SSI lines. The block diagram illustrates the interconnect and support circuitry used in the Frequency Generating Unit. Refer to the relevant schematics for the reference designators.

The synthesizer is powered by 2.8V ANA, 2.8V DIG, 1.875V DIG and 5V ANA supplied from the U3000-1. The synthesizer in turns generates a superfiltered 2.5V which powers up the TX VCO & RX VCO.

In addition to the VCO, the synthesizer interfaces with the microcontroller. Programming of the synthesizer is accomplished through the 4 lines; SPI\_MISO, THK\_CE, SPI\_MOSI and SPI\_CLK via pin D10, D8, D9 and D11 respectively. A 1.875 dc signal from the synthesizer lock detect line indicates to the microprocessor that the synthesizer is locked.

U001 has dual port modulation capability. The microprocessor supplies low port and high port words to pin F11 of U001. For high port modulation, the audio runs through an internal attenuator for modulation balancing purpose before it goes out to the VCO and loop filter via pin K8. For the low port modulation, the audio is fed into the main synthesizer, where it is summed with the main\_num channel frequency word, then supplied to the accumulator of the Fractional-N synthesizer before going out to the VCO.

### 3.1 Synthesizer

U001 uses a 16.8 MHz crystal (Y001) to provide a reference for the system. The synthesizer further divides this to 4.2 MHz for nominal frequencies and 3.36 MHz for alternate frequencies. Together with R006, R007, R008, C013, C014, C015 and C016, they build up the reference oscillator which is capable of 1.5ppm (non-GPS) / 0.5ppm (GPS) stability over temperature of -30°C to 85 °C. It also provides 16.8MHz at pin J11 of U001 to be used by ABACUS.

The loop filter which consists of R013, R014, R016, C024, C025, C026 and C027 provides the necessary dc steering voltage for the VCO and determines the amount of noise and spur passing through.

In achieving fast locking for the synthesizer, an internal adapt charge pump provides higher current (~10mA) at pin H1 and an additional 2mA from a current mirror (Q002, R010, R011 and R012). The required frequency is then locked by normal mode charge pump at pin G3. An external adapt switch (U002) is used to control the on/off of the adapt mode. Both the normal and adapt charge pumps get their supply from the 5V ANA supplied by U3000-1.

### 3.2 VCO - Voltage Controlled Oscillator

The VCO in conjunction with the synthesizer generates RF in both the receive and transmit modes of operation.

The RX VCO comprises of a Colpitts oscillator built around Q200, a cascaded buffer, built up of a buffer IC, U200 cascaded with a discrete buffer built around Q208 and a 3dB resistive pad (R220, R221 and R222). Vcontrol is supplied to two pairs of back-to-back varactors (D200, D201, D202 and D203). The LC tank comprises of C203 and L202. The oscillator is supplied with a 2.5V superfiltered supply from the synthesizer, U001. The cascaded buffer is supplied with a 5V ANA supply from MAKO, U3000-1. The buffer IC in conjunction with the resistive pad provides sufficient isolation from the mixer whilst the discrete buffer provides sufficient gain for the first LO signal. The output of the cascaded buffer is match to the mixer by C216, C217, C241 and L207. The output power level of RX\_1<sup>ST</sup>\_LO\_INJ is 6dBm.

The TX VCO comprises of a Colpitts oscillator built around Q204 and a discrete buffer built around Q205. Vcontrol is supplied to two pairs of back-to-back varactors (D204, D205, D206 and D207). The LC tank comprises of C222 and L210. The oscillator is supplied with a 2.5V superfiltered supply from the synthesizer, U001. The discrete buffer is supplied with a 5V ANA supply from MAKO, U3000-1. The output of the discrete buffer is match to the PA by C236, C237 and L215. The output power level of TX\_BUFF is 3dBm.



## 4.0 Global Positioning System (GPS) Receiver

The GPS device is an embedded receiver that provides the location of the subscriber in terms of latitude, longitude, velocity, direction and altitude.

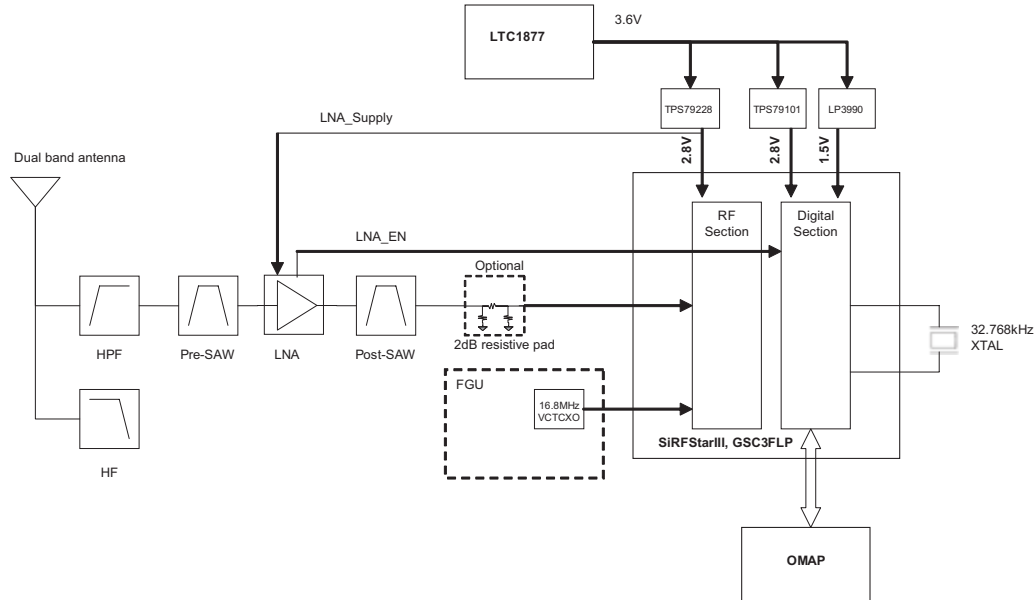


Figure 9-5: GPS Receiver Block Diagram

The RF signal is received by the antenna and applied to a high-pass filter. The filter consists of C924, C925, C926, L912 and L913. The filtered RF signal is then applied to a SAW filter, FL8001.

The output of the SAW filter is fed into the LNA (U8001). The LNA biasing is controlled by SIRF\_LNA\_EN (pin A4 of the GPS IC, U8000). The LNA input match comprises of C8013, C8014 and L8001. The LNA output match comprises of L8003 and C8017. After being amplified, the RF signal is further filtered by a second SAW filter, FL8000.

The output of the second SAW filter is passed to pin P6 of the GPS IC. The input match for pin P6 comprises of C8018, C8019 and L8004. The control and data lines for the GPS IC are GPS\_nRESET, GPS\_ON\_OFF, GPS\_TX, GPS\_RX and GPS\_BOOT. GPS\_nWAKEUP line is fed into the microcontroller to indicate the state (full power or hibernate state) of the GPS IC so that the microcontroller will never trigger a GPS\_ON\_OFF when the GPS IC is in full power state.

A dedicated 32.768kHz quartz crystal oscillator (Y8000) is used to provide RTC clock to the RTC circuit inside the GPS IC. The second input frequency is a 16.8MHz reference, used by the StarIII to synthesize the internal LO. This reference will be supplied by a VCTCXO (Y001) located in the synthesizer block, which will be shared by the TOMAHAWK and ABACUS ICs.

The GPS IC is powered by 2.8V\_DIG\_GPS, 2.8V\_RF\_GPS and 1.5V\_GPS\_RTC supplied from 3 discrete external regulators (U3701, U3700 & U3006). The input of these regulators is sourced from a switching regulator (U3020) which regulates the SWB+ to 3.6V.

## 5.0 Allocation of Schematics and Circuit Boards

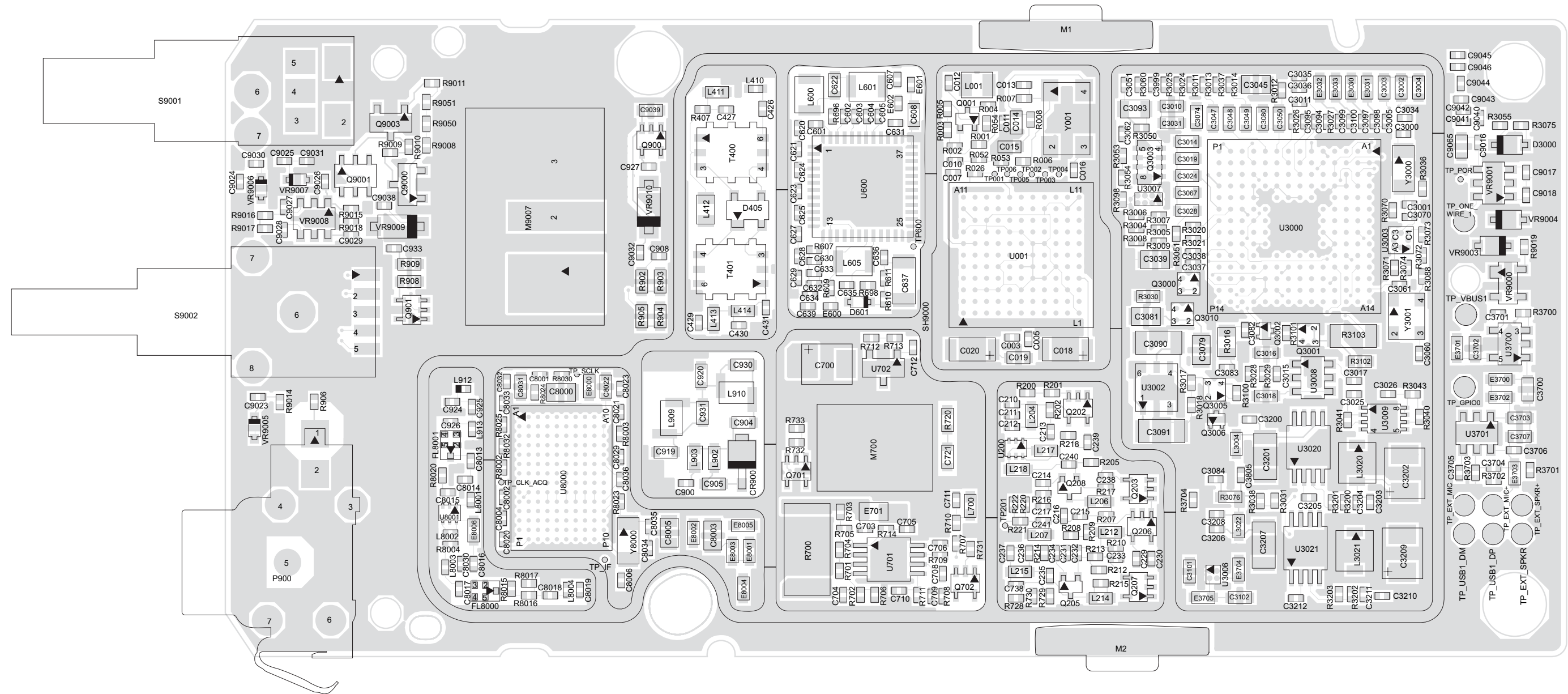
### 5.1 Controller Circuits

The VHF circuits are contained on the Printed Circuit Board (PCB) which also contains the Controller circuits. This Chapter shows the schematics for the VHF circuits only, refer to the Controller section for details of the related Controller circuits. The PCB component layouts in this Chapter show both the Controller and VHF circuit components. The VHF schematics and the related PCB and parts list are shown in the tables below.

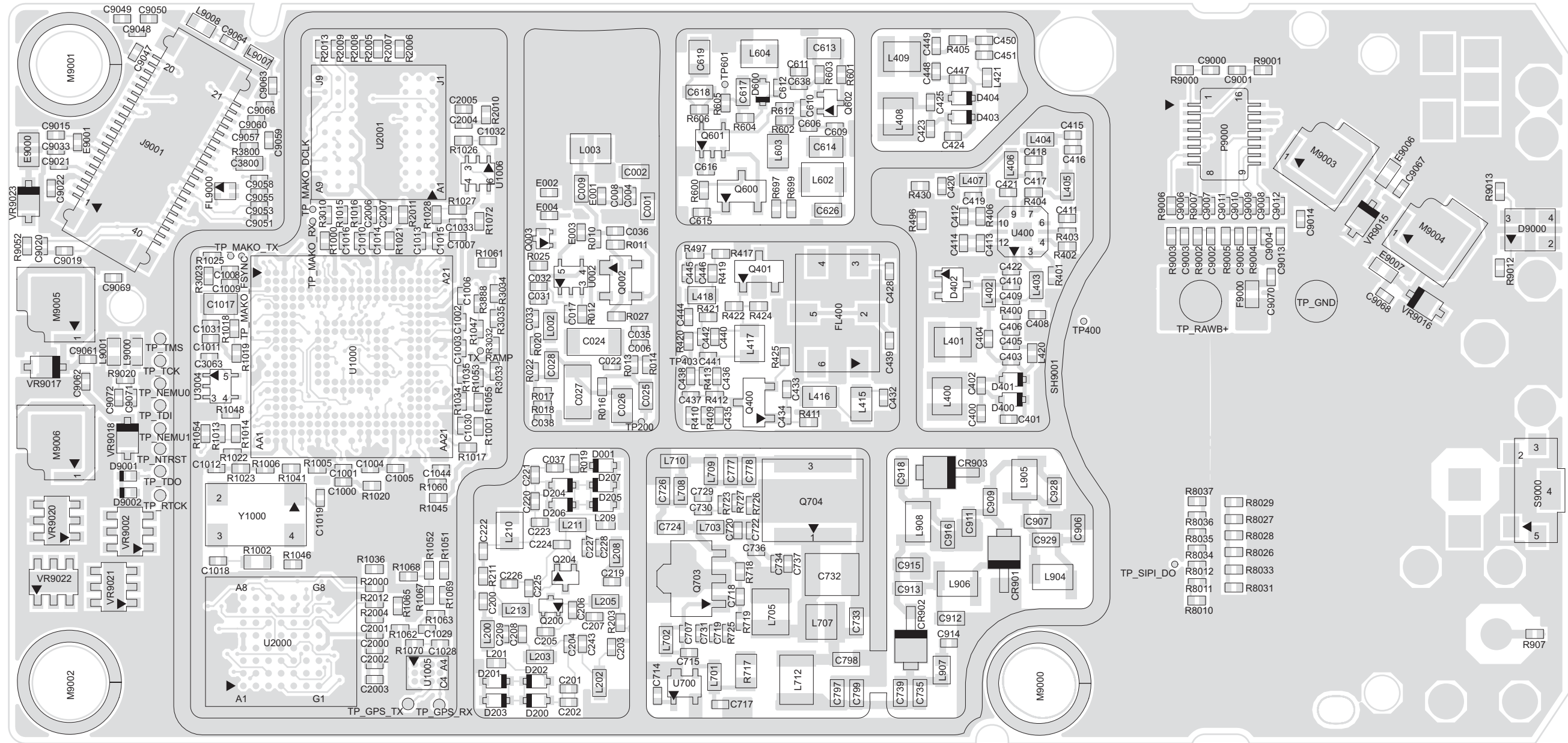
*Table 8-6. VHF Diagrams and Parts List*

<b>PCB:</b>	
8415113H03 Main Board Top Side	Page 8-9
8415113H03 Main Board Bottom Side	Page 8-10
8415113H05 Main Board Top Side	Page 8-11
8415113H05 Main Board Bottom Side	Page 8-12
8415113H13 Main Board Top Side	Page 8-13
8415113H13 Main Board Bottom Side	Page 8-14
<b>SCHEMATICS</b>	
Complete Radio	Page 8-19
Complete VHF RF	Page 8-20
Complete VHF Transmitter	Page 8-21
VHF Transmitter	Page 8-22
VHF Harmonic Filter and Antenna Switch	Page 8-23
Complete UHF1 Receiver	Page 8-24
VHF Receiver Front End	Page 8-25
VHF Receiver Back End	Page 8-26
Complete UHF1 Frequency Generating Unit	Page 8-27
VHF Synthesizer	Page 8-28
VHF Voltage Controlled Oscillator	Page 8-29
VHF GPS Block	Page 8-30
<b>Parts List</b>	
8415113H03	Page 8-31
8415113H05	Page 8-36
8415113H13	Page 8-41

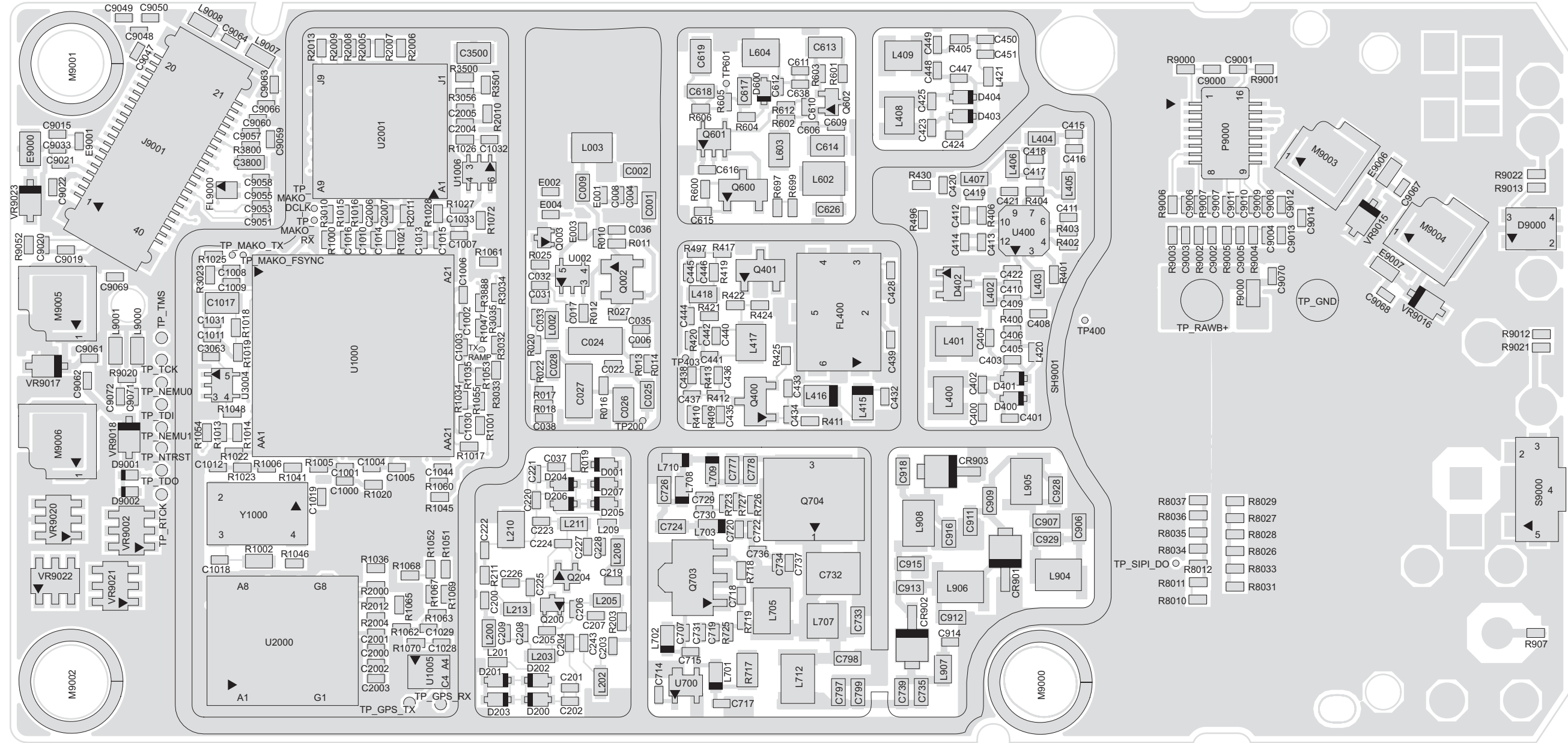




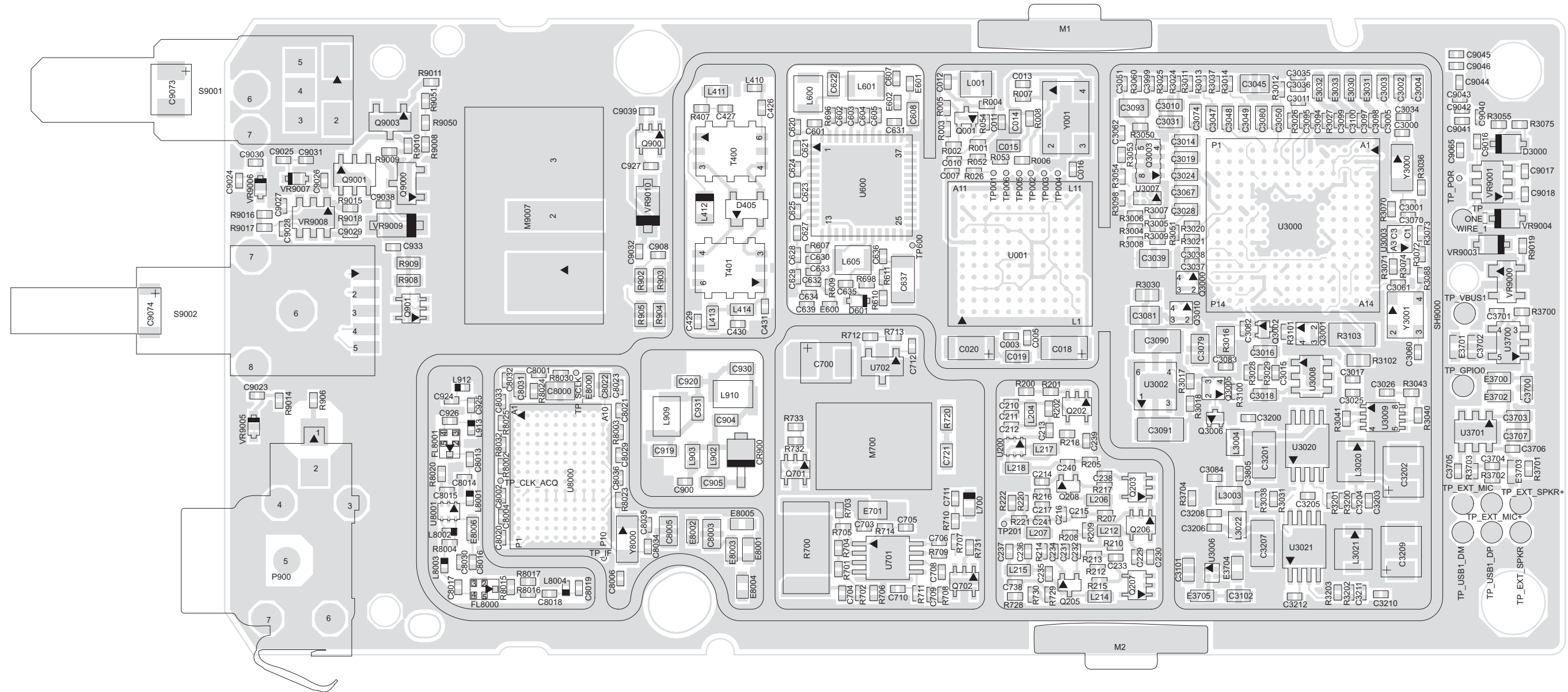
VHF (136-174 MHz) Main Board Bottom Side PCB No. 8415113H03





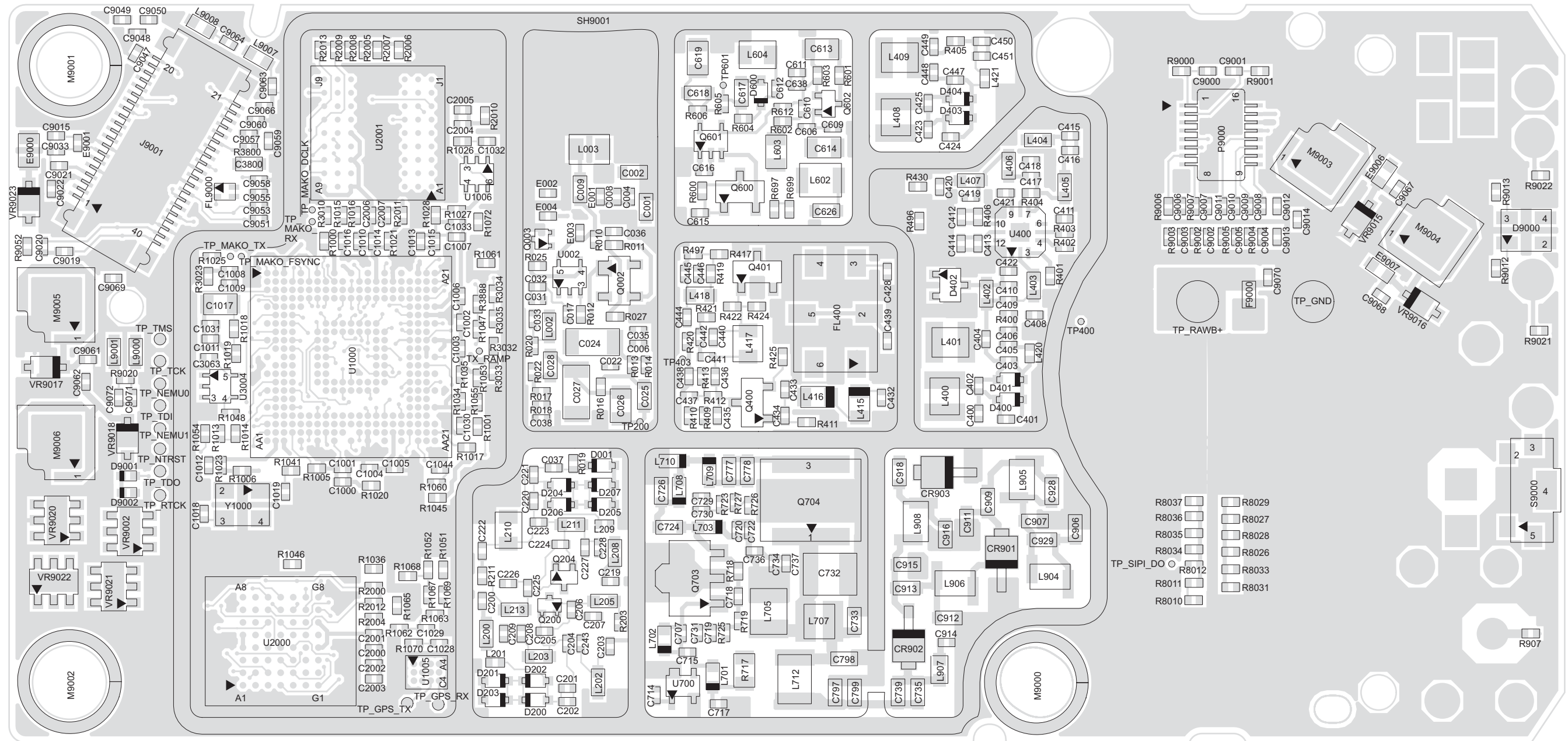


VHF (136-174 MHz) Main Board Top Side PCB No. 8415113H13



VHF (136-174 MHz) Main Board Bottom Side PCB No. 8415113H13



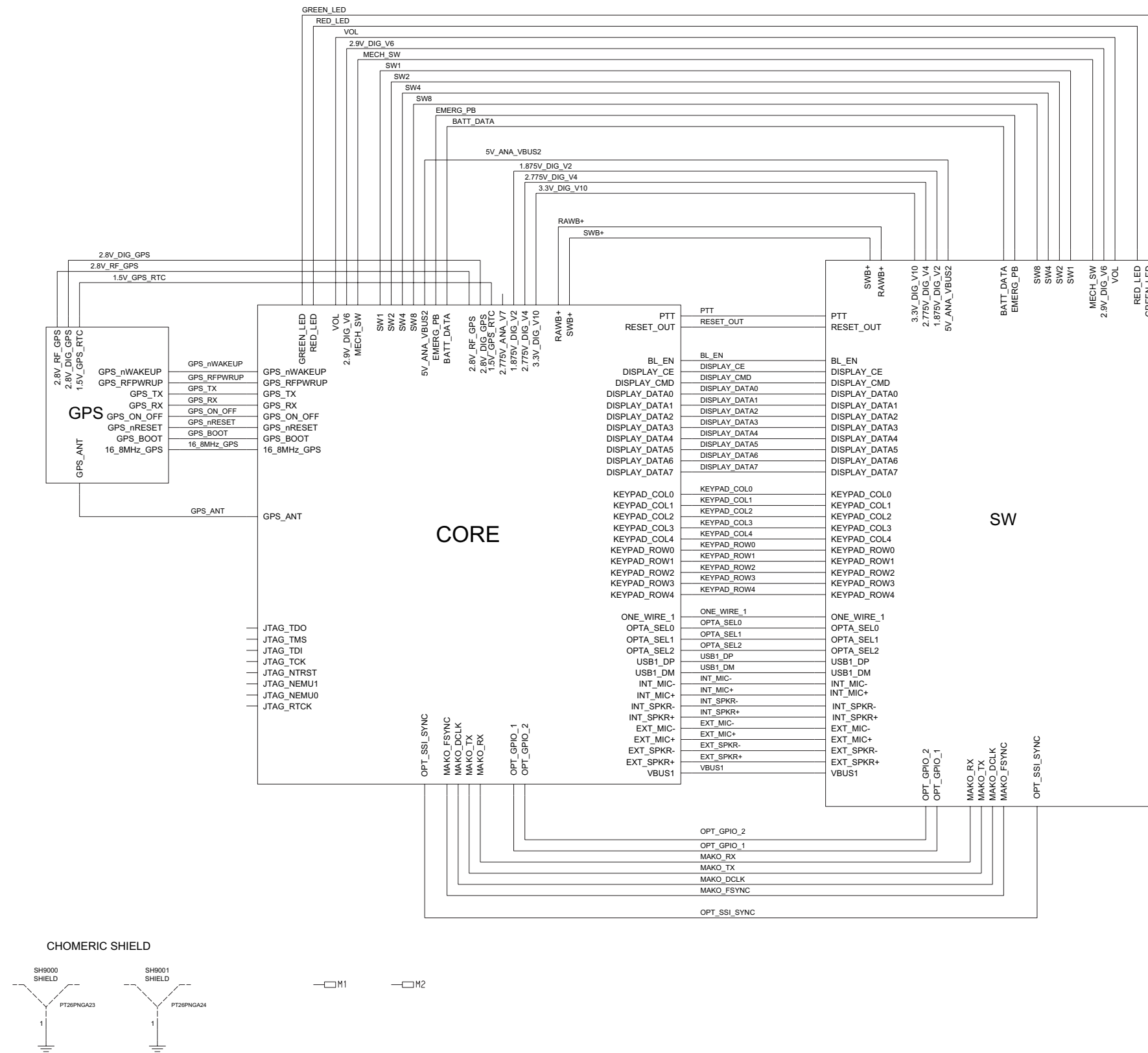


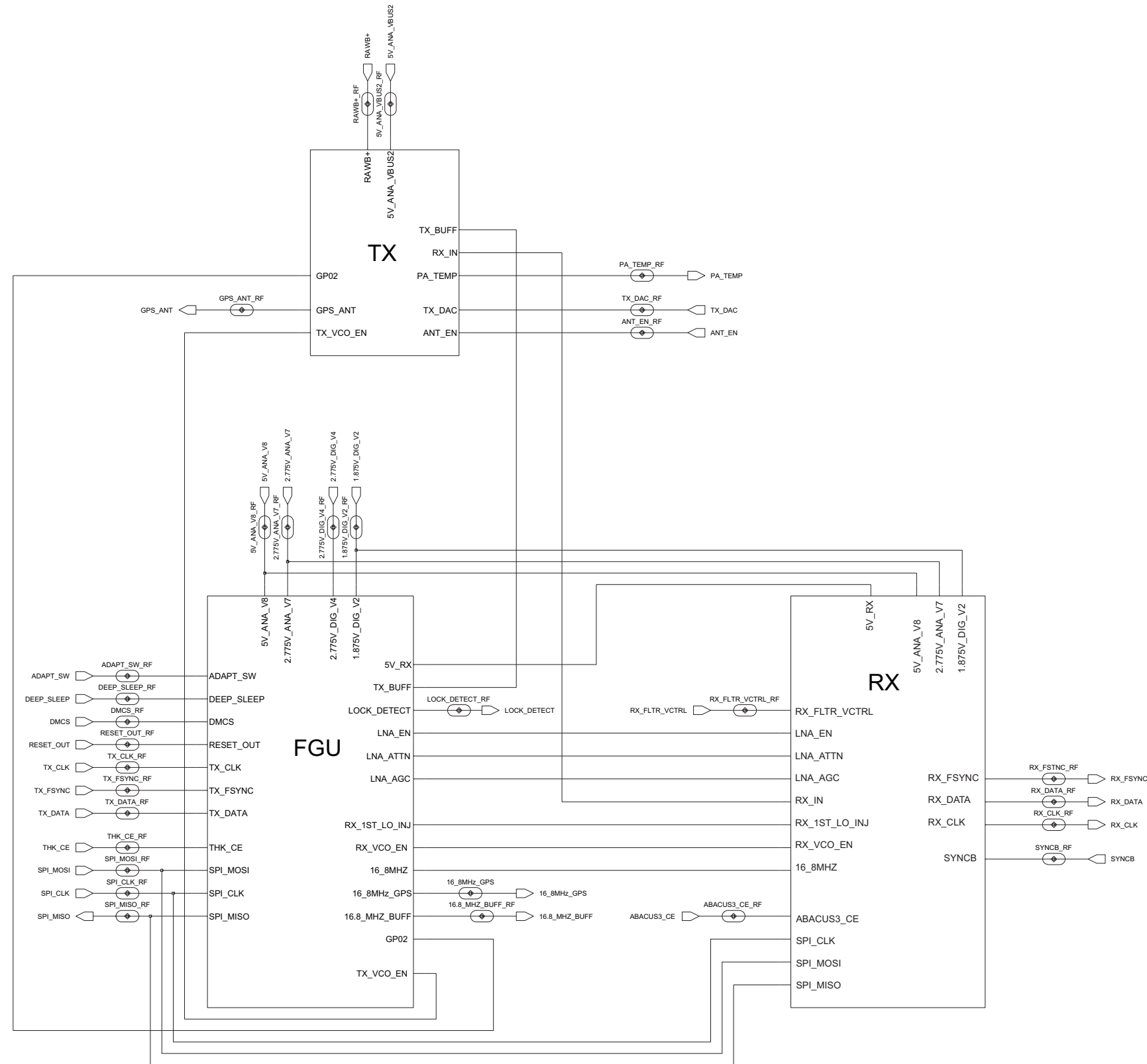
VHF (136-174 MHz) Main Board Top Side PCB No. 8415113H19



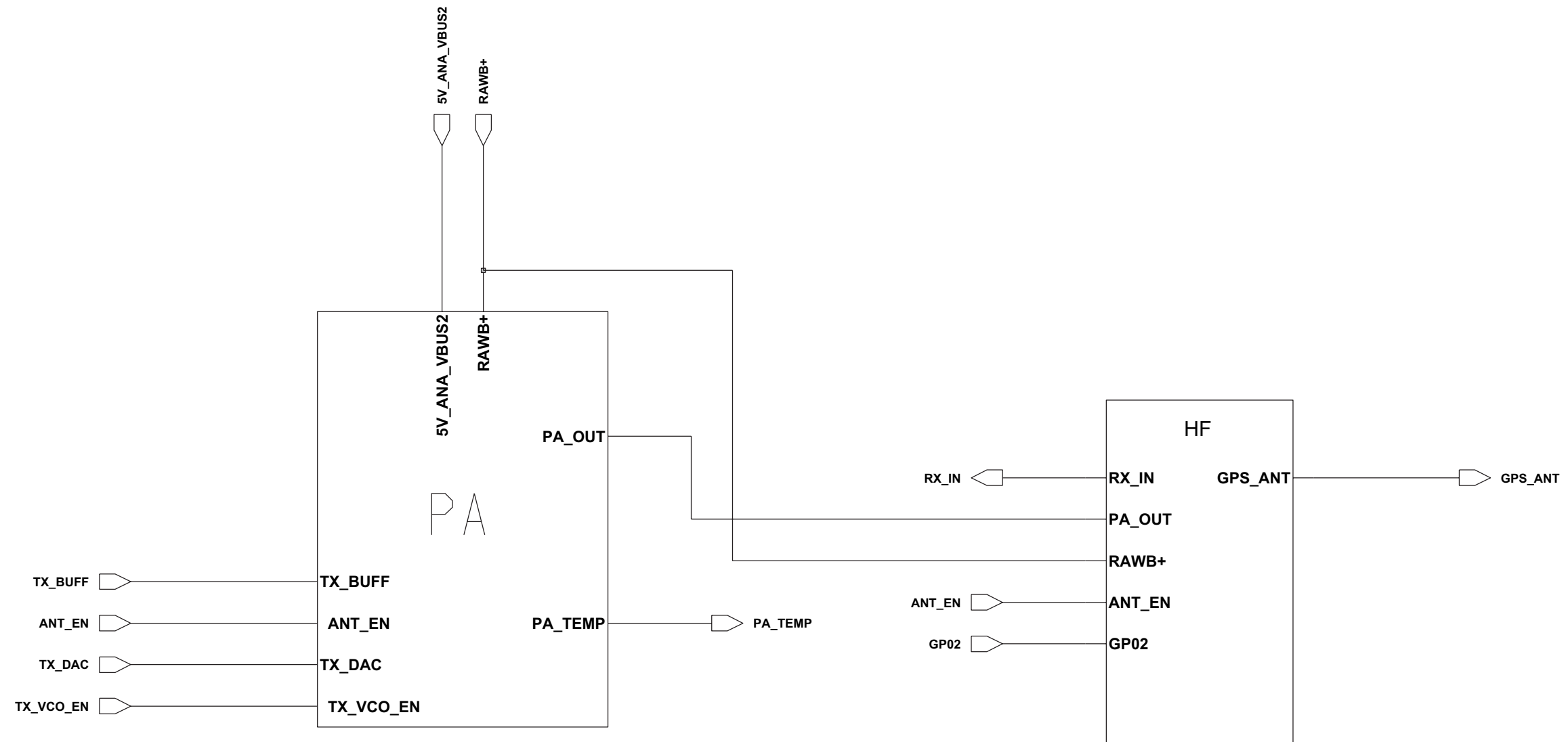








Complete VHF RF Schematic Diagram

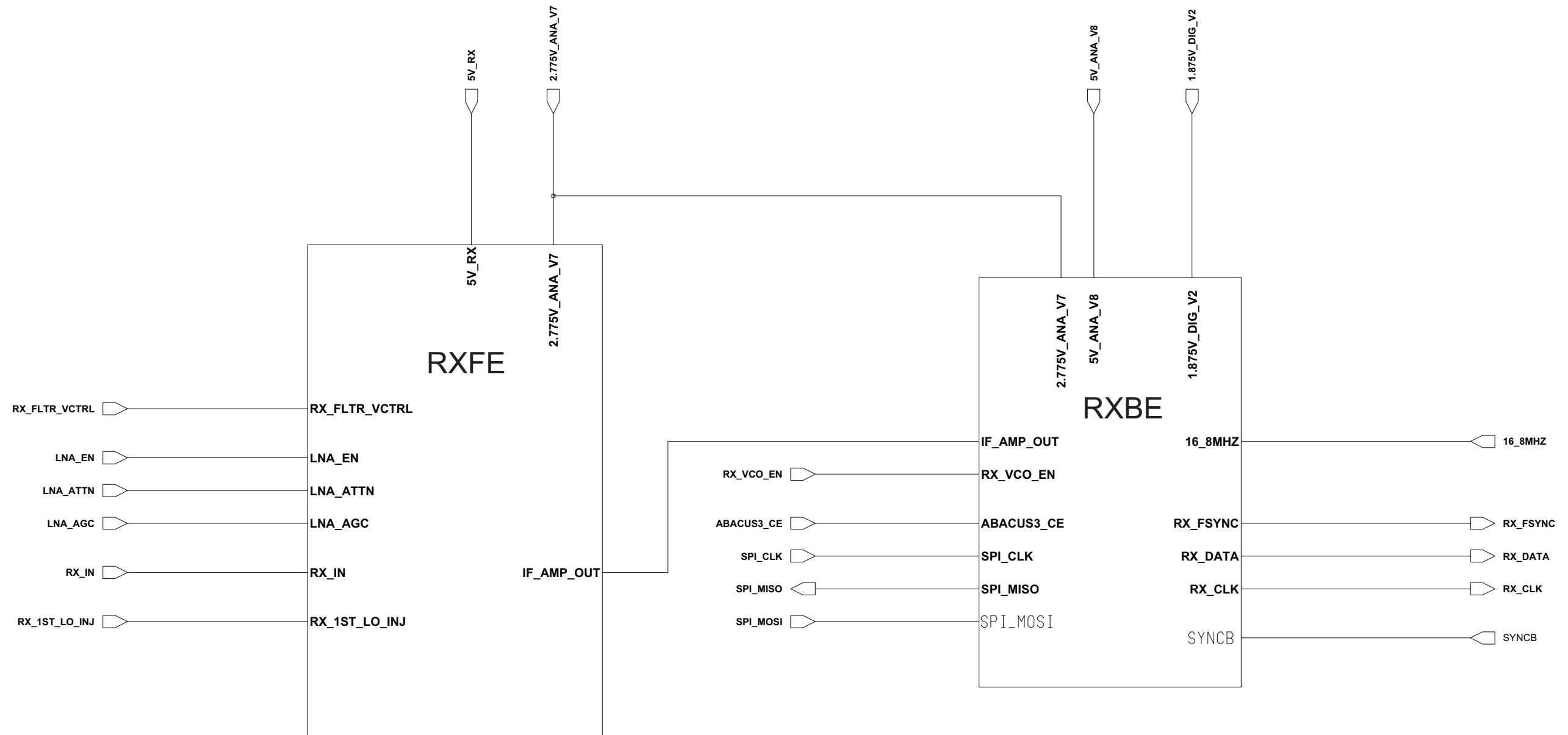


Complete VHF Transmitter Schematic Diagram



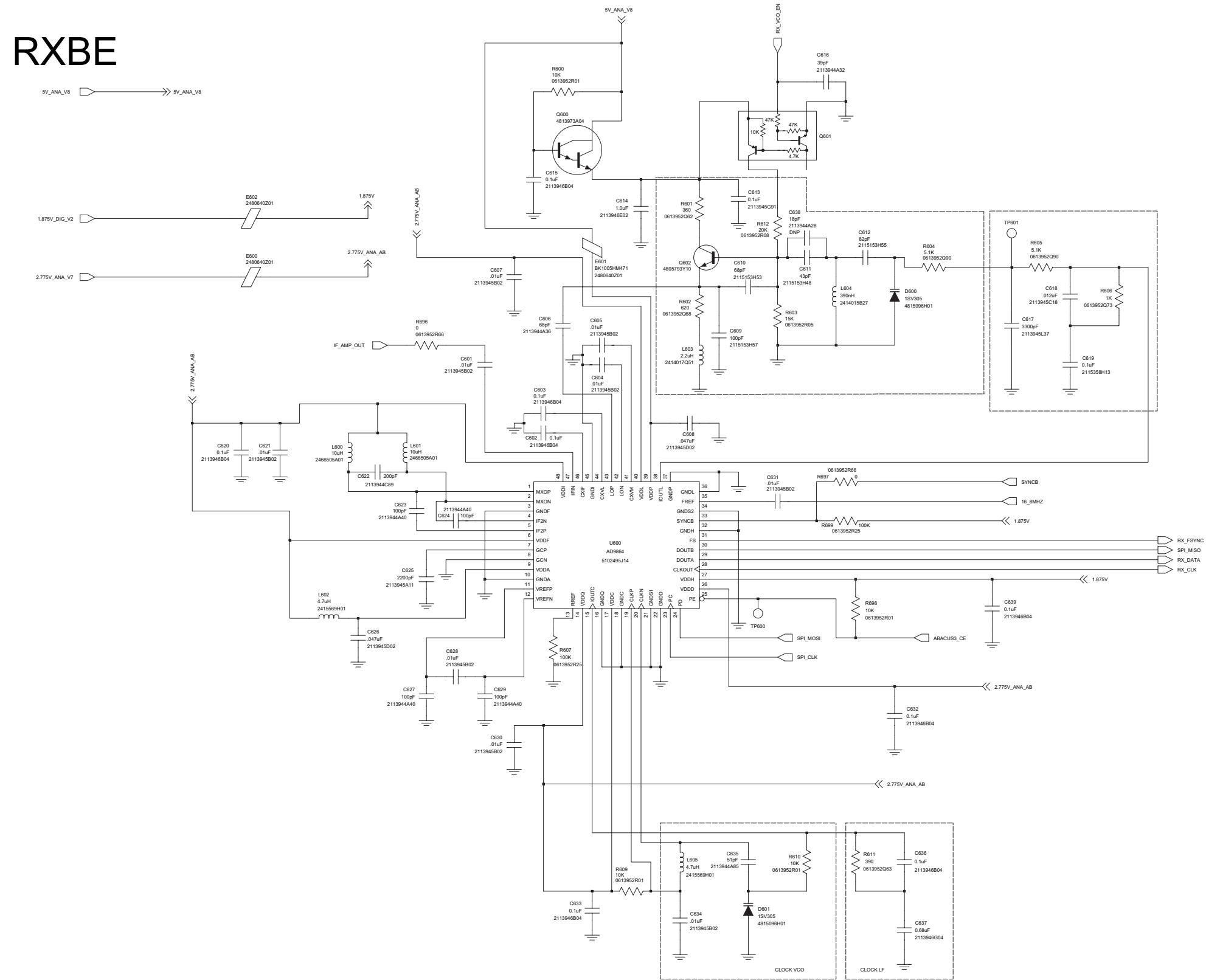




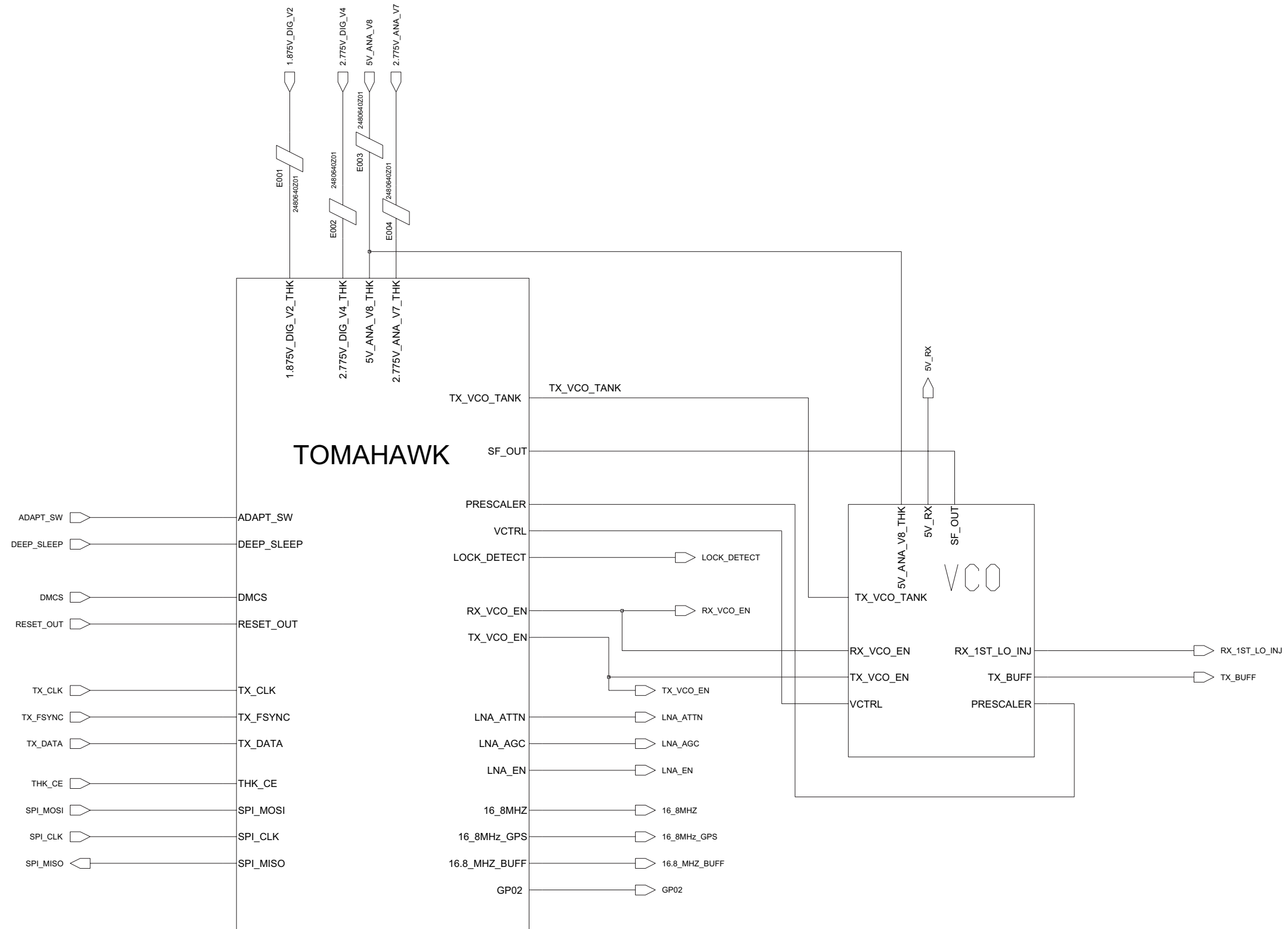


Complete VHF Receiver Schematic Diagram

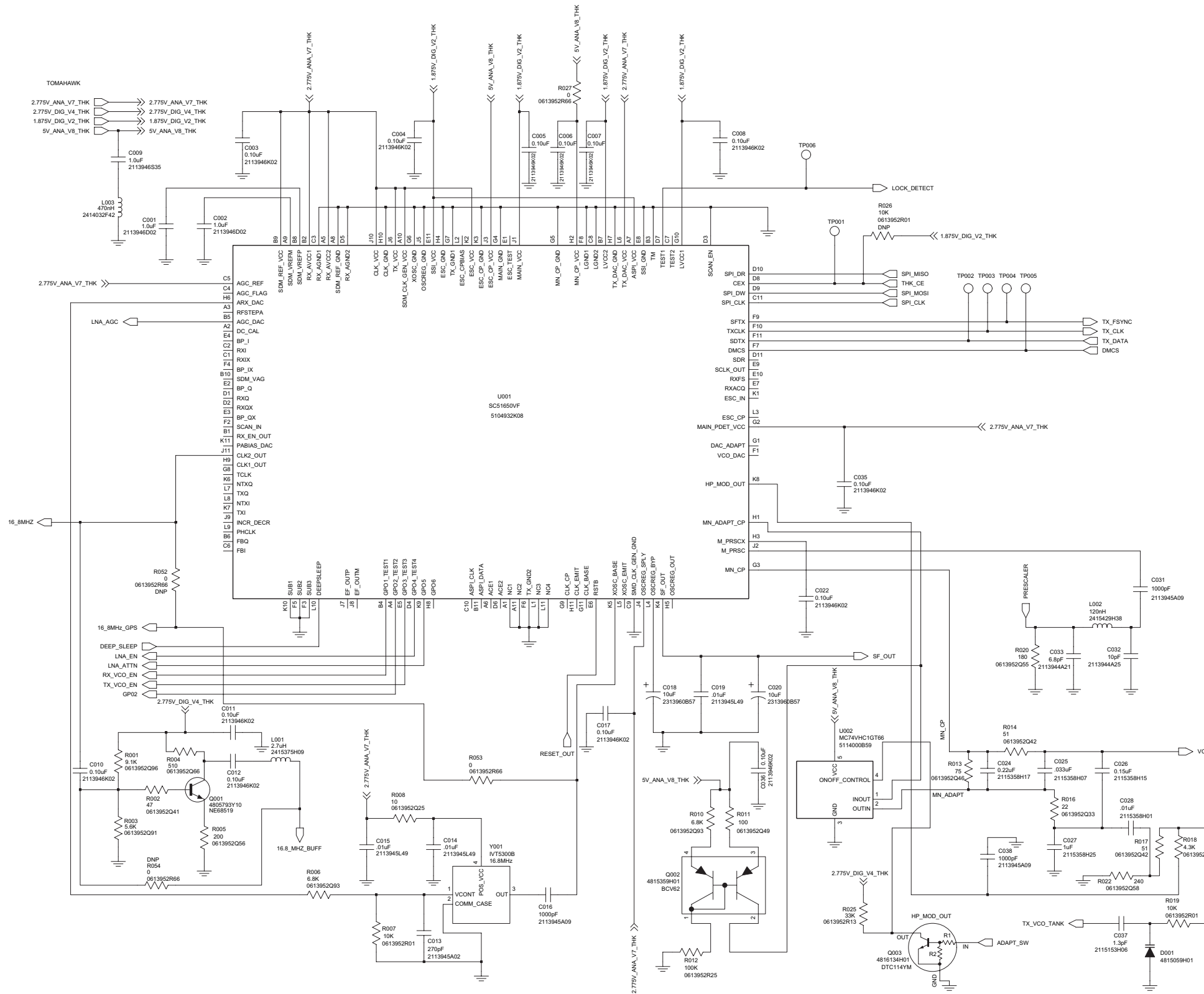




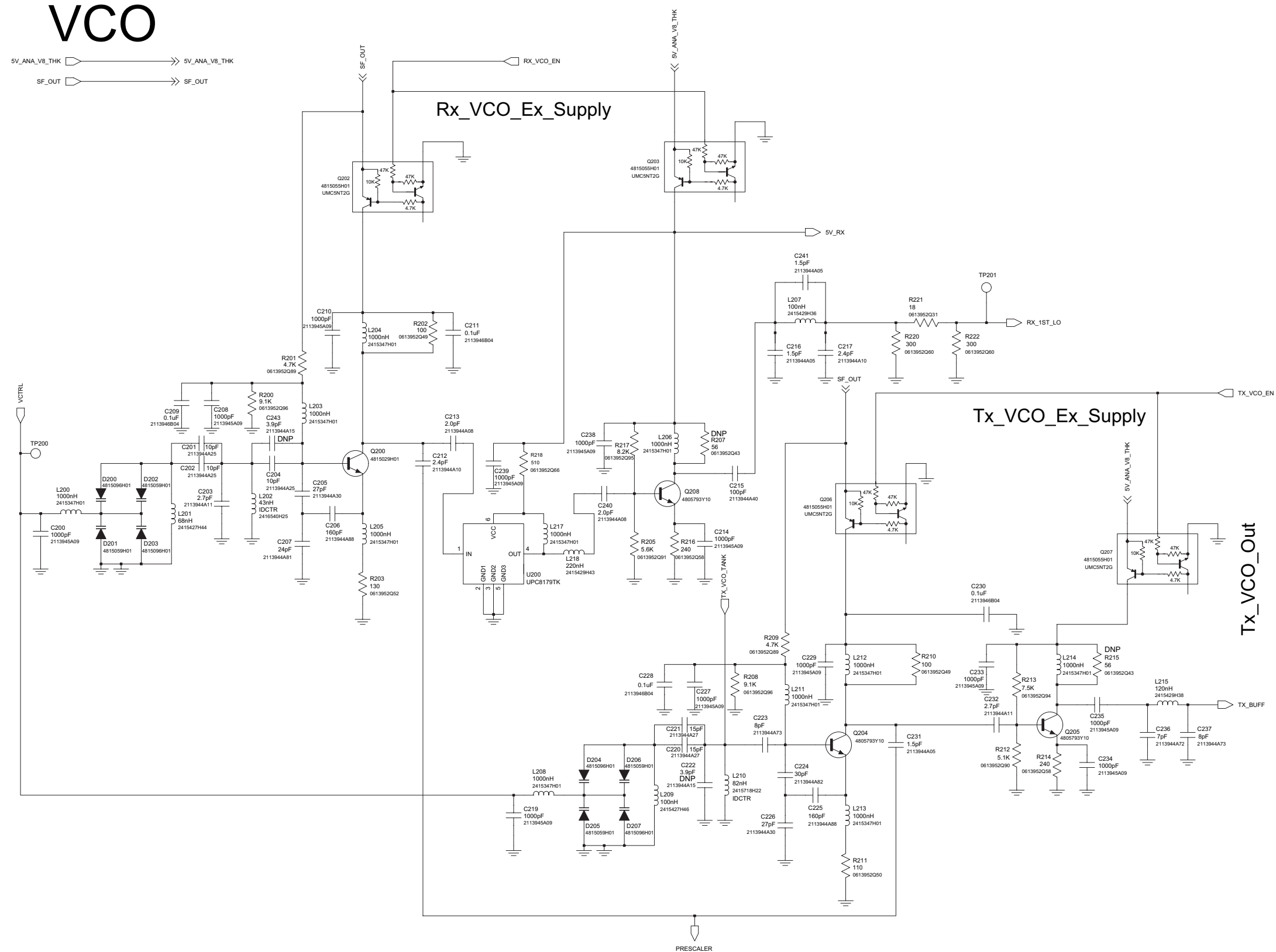
VHF Receiver Back End Schematic Diagram



Complete VHF Frequency Generating Unit Schematic Diagram

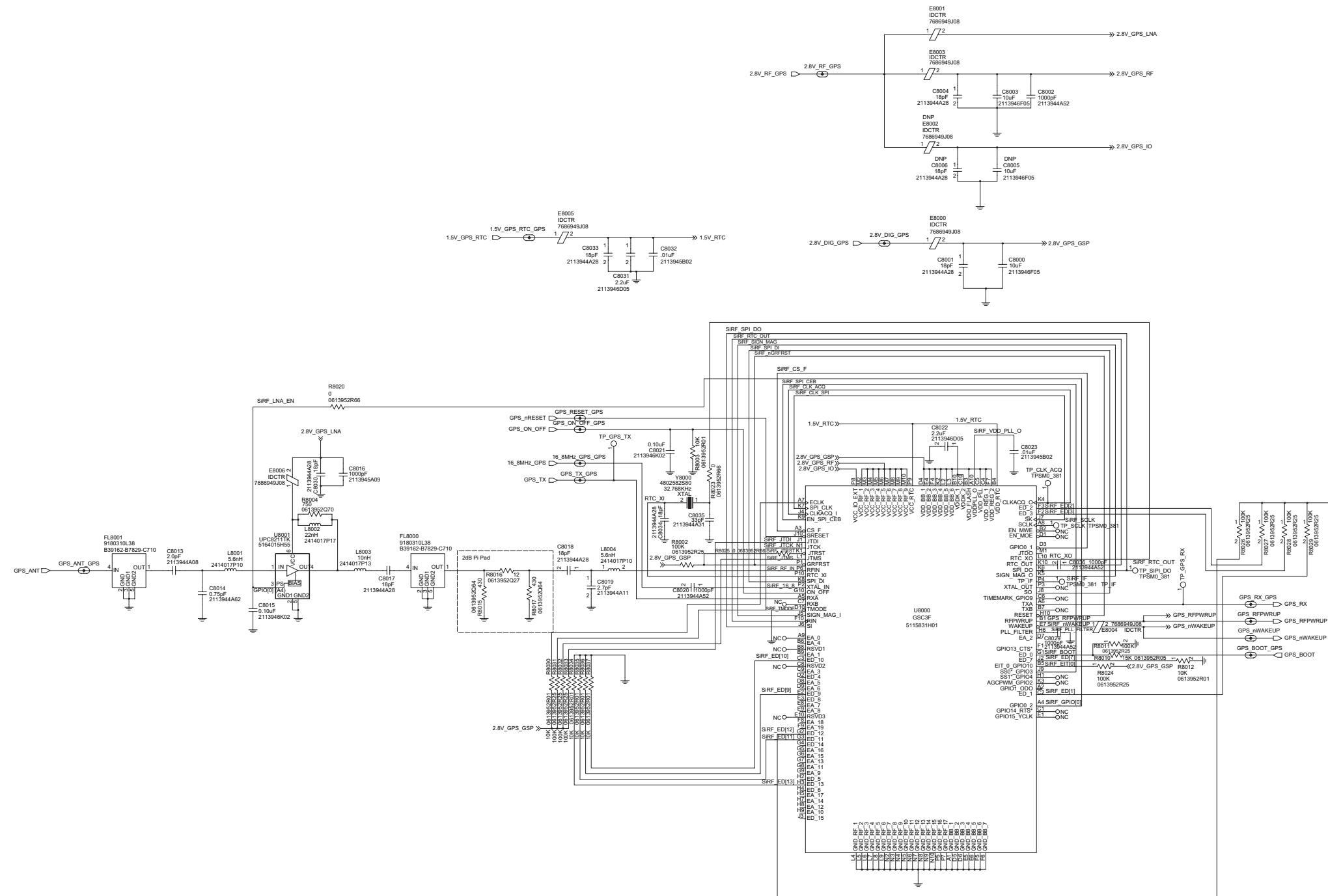


VHF Synthesizer Schematic Diagram



VHF Voltage Controlled Oscillator Schematic Diagram

### GPS Block



MS LOO	22th November 2004	P2
MS LOO	1st December 2004	
MS LOO	11th March 2005	8486716Z01_REV P8
MS LOO	6th May 2005	8486716Z01_REV P9
MS LOO	17th May 2005	8415113H01_REV P2
MS LOO	16th June 2005	8486716Z01_REV P10
MS LOO	21th June 2005	8486716Z01_REV P10
MS LOO	1st August 2005	8486716Z01_REV P12
MS LOO	23rd November 2005	8486716Z01_REV P17
MS LOO	7th February 2006	8486716Z01_REV P19
TK WAN	6th October 2006	8471405L01_4

- L8004
- U8004
- C8036
- R8037
- Q8000
- FL8001
- E8008
- Y8000



**VHF Radio Parts List (8415113H03)**

Circuit Ref	Motorola Part No.	Description
C001	2113946D02	CAP, 1.0uF
C002	2113946D02	CAP, 1.0uF
C003	2113946K02	CAP, 0.10uF
C004	2113946K02	CAP, 0.10uF
C005	2113946K02	CAP, 0.10uF
C006	2113946K02	CAP, 0.10uF
C007	2113946K02	CAP, 0.10uF
C008	2113946K02	CAP, 0.10uF
C009	NOTPLACED	NOTPLACED
C010	2113946K02	CAP, 0.10uF
C011	2113946K02	CAP, 0.10uF
C012	2113946K02	CAP, 0.10uF
C013	2113945A02	CAP, 270pF
C014	2113945L49	CAP, .01uF
C015	2113945L49	CAP, .01uF
C016	2113945A09	CAP, 1000pF
C017	2113946K02	CAP, 0.10uF
C018	2313960B57	CAPP, 10uF
C019	2113945L49	CAP, .01uF
C020	2313960B57	CAPP, 10uF
C022	2113946K02	CAP, 0.10uF
C024	2115358H17	CAP, 0.22uF
C025	2115358H07	CAP, .033uF
C026	2115358H15	CAP, 0.15uF
C027	2115358H25	CAP, 1uF
C028	2115358H01	CAP, .01uF
C031	2113945A09	CAP, 1000pF
C032	2113944A25	CAP, 10pF
C033	2113944A21	CAP, 6.8pF
C035	2113946K02	CAP, 0.10uF
C036	2113946K02	CAP, 0.10uF
C037	2115153H06	CAP, 1.3pF
C038	NOTPLACED	NOTPLACED
C1000	2113945A03	CAP, 330pF
C1001	2113946K02	CAP, 0.10uF
C1002	2113946K02	CAP, 0.10uF
C1003	2113945A03	CAP, 330pF
C1004	2113945A03	CAP, 330pF
C1005	2113946K02	CAP, 0.10uF
C1006	2113946K02	CAP, 0.10uF
C1007	2113945A03	CAP, 330pF
C1008	2113945A03	CAP, 330pF
C1009	2113946K02	CAP, 0.10uF
C1010	2113946K02	CAP, 0.10uF
C1011	2113945A03	CAP, 330pF

Circuit Ref	Motorola Part No.	Description
C1012	2113946K02	CAP, 0.10uF
C1013	2113946K02	CAP, 0.10uF
C1014	2113946K02	CAP, 0.10uF
C1015	2113946K02	CAP, 0.10uF
C1016	2113946B04	CAP, 0.1uF
C1017	2113946E02	CAP, 1.0uF
C1018	2113944A28	CAP, 18pF
C1019	2113944A28	CAP, 18pF
C1028	2113946K02	CAP, 0.10uF
C1029	2113946K02	CAP, 0.10uF
C1030	2113944A28	CAP, 18pF
C1031	2113946K02	CAP, 0.10uF
C1032	2113945B02	CAP, .01uF
C1033	2113946K02	CAP, 0.10uF
C1044	2113946B04	CAP, 0.1uF
C200	2113945A09	CAP, 1000pF
C2000	2113945A03	CAP, 330pF
C2001	2113945B02	CAP, .01uF
C2002	2113946K02	CAP, 0.10uF
C2003	2113946K02	CAP, 0.10uF
C2004	2113945A03	CAP, 330pF
C2005	2113945B02	CAP, .01uF
C2006	2113946K02	CAP, 0.10uF
C2007	2113946K02	CAP, 0.10uF
C201	2113944A25	CAP, 10pF
C202	2113944A25	CAP, 10pF
C203	2113944A11	CAP, 2.7pF
C204	2113944A25	CAP, 10pF
C205	2113944A30	CAP, 27pF
C206	2113944A88	CAP, 160pF
C207	2113944A81	CAP, 24pF
C208	2113945A09	CAP, 1000pF
C209	2113946B04	CAP, 0.1uF
C210	2113945A09	CAP, 1000pF
C211	2113946B04	CAP, 0.1uF
C212	2113944A10	CAP, 2.4pF
C213	2113944A08	CAP, 2.0pF
C214	2113945A09	CAP, 1000pF
C215	2113944A40	CAP, 100pF
C216	2113944A05	CAP, 1.5pF
C217	2113944A10	CAP, 2.4pF
C219	2113945A09	CAP, 1000pF
C220	2113944A27	CAP, 15pF
C221	2113944A27	CAP, 15pF
C222	NOTPLACED	NOTPLACED
C223	2113944A73	CAP, 8pF

Circuit Ref	Motorola Part No.	Description
C224	2113944A82	CAP, 30pF
C225	2113944A88	CAP, 160pF
C226	2113944A30	CAP, 27pF
C227	2113945A09	CAP, 1000pF
C228	2113946B04	CAP, 0.1uF
C229	2113945A09	CAP, 1000pF
C230	2113946B04	CAP, 0.1uF
C231	2113944A05	CAP, 1.5pF
C232	2113944A11	CAP, 2.7pF
C233	2113945A09	CAP, 1000pF
C234	2113945A09	CAP, 1000pF
C235	2113945A09	CAP, 1000pF
C236	2113944A72	CAP, 7pF
C237	2113944A73	CAP, 8pF
C238	2113945A09	CAP, 1000pF
C239	2113945A09	CAP, 1000pF
C240	2113944A08	CAP, 2.0pF
C241	2113944A05	CAP, 1.5pF
C243	NOTPLACED	NOTPLACED
C3000	2113944A78	CAP, 13pF
C3001	2113944A78	CAP, 13pF
C3002	2113945D04	CAP, 0.1uF
C3003	2113946D05	CAP, 2.2uF
C3004	2113946D05	CAP, 2.2uF
C3005	2113945A09	CAP, 1000pF
C3010	2113946D05	CAP, 2.2uF
C3011	2113946A02	CAP, .022uF
C3014	2113946D05	CAP, 2.2uF
C3015	2115153H57	CAP, 100pF
C3016	2113946D05	CAP, 2.2uF
C3017	2113945B02	CAP, .01uF
C3018	2113946D05	CAP, 2.2uF
C3019	2113946D02	CAP, 1.0uF
C3024	2113946D02	CAP, 1.0uF
C3025	2113946K02	CAP, 0.10uF
C3026	2113946K02	CAP, 0.10uF
C3028	2113946D05	CAP, 2.2uF
C3031	2113946D02	CAP, 1.0uF
C3034	2113946B04	CAP, 0.1uF
C3035	2113946B04	CAP, 0.1uF
C3036	2113946B04	CAP, 0.1uF
C3037	2113944A40	CAP, 100pF
C3038	2113944A40	CAP, 100pF
C3039	2113946F03	CAP, 4.7uF
C3045	2113946F05	CAP, 10uF
C3047	2113946D02	CAP, 1.0uF

Circuit Ref	Motorola Part No.	Description
C3048	2113946D02	CAP, 1.0uF
C3049	2113945C25	CAP, .033uF
C3050	2113945C25	CAP, .033uF
C3051	2113944A40	CAP, 100pF
C3060	2113944A80	CAP, 20pF
C3061	2113944A80	CAP, 20pF
C3062	2113946K02	CAP, 0.10uF
C3063	2113946K02	CAP, 0.10uF
C3067	2113946D02	CAP, 1.0uF
C3070	2113944A25	CAP, 10pF
C3074	2113946D02	CAP, 1.0uF
C3079	2113946F03	CAP, 4.7uF
C3080	NOTPLACED	NOTPLACED
C3081	NOTPLACED	NOTPLACED
C3082	2113945Y02	CAP, 0.10uF
C3083	2113945Y02	CAP, 0.10uF
C3084	2113946K03	CAP, 0.22uF
C3090	2113955D37	CAP, 10uF
C3091	2113955D37	CAP, 10uF
C3093	2113946N03	CAP, 2.2uF
C3094	2113946B03	CAP, .068uF
C3095	2113946B03	CAP, .068uF
C3097	2113944A31	CAP, 33pF
C3098	2113944A31	CAP, 33pF
C3099	2113944A31	CAP, 33pF
C3100	2113944A31	CAP, 33pF
C3101	2113946D02	CAP, 1.0uF
C3102	2113946D02	CAP, 1.0uF
C3200	2113945Y02	CAP, 0.10uF
C3201	2113955D37	CAP, 10uF
C3202	2371572L02	CAPP, 68uF
C3203	2113945B02	CAP, .01uF
C3204	2115153H40	CAP, 20pF
C3205	2113944A44	CAP, 220pF
C3206	2113945Y02	CAP, 0.10uF
C3207	2113955D37	CAP, 10uF
C3208	2113946K03	CAP, 0.22uF
C3209	2371572L01	CAPP, 47uF
C3210	2113945B02	CAP, .01uF
C3211	2115153H40	CAP, 20pF
C3212	2113944A44	CAP, 220pF
C3700	2113946D02	CAP, 1.0uF
C3701	2113945B02	CAP, .01uF
C3702	2113946D05	CAP, 2.2uF
C3703	2113946D02	CAP, 1.0uF
C3704	2113944A30	CAP, 27pF

Circuit Ref	Motorola Part No.	Description
C3705	2113945B02	CAP, .01uF
C3706	2113945A05	CAP, 470pF
C3707	2113946D05	CAP, 2.2uF
C3800	2113945D04	CAP, 0.1uF
C3805	2113946K03	CAP, 0.22uF
C3999	2113945B02	CAP, .01uF
C400	2113944A36	CAP, 68pF
C401	2113944A30	CAP, 27pF
C402	2113944A26	CAP, 12pF
C403	2113944A30	CAP, 27pF
C404	2113944A36	CAP, 68pF
C405	2113944A41	CAP, 120pF
C406	2113944A41	CAP, 120pF
C408	2113944A52	CAP, 1000pF
C409	2113944A17	CAP, 4.7pF
C410	2113944A63	CAP, 1pF
C411	2113944A52	CAP, 1000pF
C412	2113944A52	CAP, 1000pF
C413	2113946K02	CAP, 0.10uF
C414	2113944A52	CAP, 1000pF
C415	2113946K02	CAP, 0.10uF
C416	2113944A52	CAP, 1000pF
C417	2113944A09	CAP, 2.2pF
C418	2113944A19	CAP, 5.6pF
C419	2113944A77	CAP, 11pF
C420	2113944A24	CAP, 9.1pF
C421	2113945B02	CAP, .01uF
C422	2113946K02	CAP, 0.10uF
C423	2113944A36	CAP, 68pF
C424	2113944A30	CAP, 27pF
C425	2113944A26	CAP, 12pF
C426	0613952R66	RES, 0
C427	2113944A88	CAP, 160pF
C428	2113944A28	CAP, 18pF
C429	2113944A77	CAP, 11pF
C430	2113944A29	CAP, 22pF
C431	2113944A77	CAP, 11pF
C432	2113944A80	CAP, 20pF
C433	2113944A80	CAP, 20pF
C434	2113946K02	CAP, 0.10uF
C435	2113944A40	CAP, 100pF
C436	2113946K02	CAP, 0.10uF
C437	2113945B02	CAP, .01uF
C438	2113946K02	CAP, 0.10uF
C439	2113944A22	CAP, 7.5pF
C440	2113944A82	CAP, 30pF

Circuit Ref	Motorola Part No.	Description
C441	NOTPLACED	NOTPLACED
C442	2113945B02	CAP, .01uF
C444	2113946K02	CAP, 0.10uF
C445	NOTPLACED	NOTPLACED
C446	2113944A27	CAP, 15pF
C447	2113944A30	CAP, 27pF
C448	2113944A36	CAP, 68pF
C449	2113944A52	CAP, 1000pF
C450	2113944A41	CAP, 120pF
C451	2113944A41	CAP, 120pF
C601	2113945B02	CAP, .01uF
C602	2113946B04	CAP, 0.1uF
C603	2113946B04	CAP, 0.1uF
C604	2113945B02	CAP, .01uF
C605	2113945B02	CAP, .01uF
C606	2113944A36	CAP, 68pF
C607	2113945B02	CAP, .01uF
C608	2113945D02	CAP, .047uF
C609	2115153H57	CAP, 100pF
C610	2115153H53	CAP, 68pF
C611	2115153H48	CAP, 43pF
C612	2115153H55	CAP, 82pF
C613	2113945G91	CAP, 0.1uF
C614	2113946E02	CAP, 1.0uF
C615	2113946B04	CAP, 0.1uF
C616	2113944A32	CAP, 39pF
C617	2113945L37	CAP, 3300pF
C618	2113945C18	CAP, .012uF
C619	2115358H13	CAP, 0.1uF
C620	2113946B04	CAP, 0.1uF
C621	2113945B02	CAP, .01uF
C622	2113944C89	CAP, 200pF
C623	2113944A40	CAP, 100pF
C624	2113944A40	CAP, 100pF
C625	2113945A11	CAP, 2200pF
C626	2113945D02	CAP, .047uF
C627	2113944A40	CAP, 100pF
C628	2113945B02	CAP, .01uF
C629	2113944A40	CAP, 100pF
C630	2113945B02	CAP, .01uF
C631	2113945B02	CAP, .01uF
C632	2113946B04	CAP, 0.1uF
C633	2113946B04	CAP, 0.1uF
C634	2113945B02	CAP, .01uF
C635	2113944A85	CAP, 51pF
C636	2113946B04	CAP, 0.1uF

Circuit Ref	Motorola Part No.	Description
C637	2113946G04	CAP, 0.68uF
C638	NOTPLACED	NOTPLACED
C639	2113946B04	CAP, 0.1uF
C700	2371878M01	CAPP, 33uF
C703	2113944A52	CAP, 1000pF
C704	2113944A52	CAP, 1000pF
C705	2113946B02	CAP, .047uF
C706	2113944A52	CAP, 1000pF
C707	2113944A31	CAP, 33pF
C708	2113944A52	CAP, 1000pF
C709	2113945B02	CAP, .01uF
C710	2113945B02	CAP, .01uF
C711	2113944A52	CAP, 1000pF
C712	2113945B04	CAP, .022uF
C714	2113945A03	CAP, 330pF
C715	2113944A31	CAP, 33pF
C717	2113945A03	CAP, 330pF
C718	2113946K02	CAP, 0.10uF
C719	2113944A52	CAP, 1000pF
C720	2113945B04	CAP, .022uF
C721	2113945D04	CAP, 0.1uF
C722	2113945A09	CAP, 1000pF
C724	2113944C82	CAP, 30pF
C726	2113944C84	CAP, 43pF
C729	2113944A52	CAP, 1000pF
C730	2113945B04	CAP, .022uF
C731	2113945B04	CAP, .022uF
C732	2111078B53	CAP, 270pF
C733	2113944C43	CAP, 82pF
C734	2113945A03	CAP, 330pF
C735	2113944C82	CAP, 30pF
C736	2113945A03	CAP, 330pF
C737	2113945A09	CAP, 1000pF
C738	2113945A03	CAP, 330pF
C739	2113944C82	CAP, 30pF
C777	2113944C41	CAP, 68pF
C778	2113944C41	CAP, 68pF
C797	2113944C32	CAP, 15pF
C798	2113944C43	CAP, 82pF
C799	2113944C32	CAP, 15pF
C8000	2113946F05	CAP, 10uF
C8001	2113944A28	CAP, 18pF
C8002	2113944A52	CAP, 1000pF
C8003	2113946F05	CAP, 10uF
C8004	2113944A28	CAP, 18pF
C8005	NOTPLACED	NOTPLACED

Circuit Ref	Motorola Part No.	Description
C8006	NOTPLACED	NOTPLACED
C8013	2113944A08	CAP, 2.0pF
C8014	2113944A62	CAP, 0.75pF
C8015	2113946K02	CAP, 0.10uF
C8016	2113945A09	CAP, 1000pF
C8017	2113944A28	CAP, 18pF
C8018	2113944A28	CAP, 18pF
C8019	2113944A11	CAP, 2.7pF
C8020	2113944A52	CAP, 1000pF
C8021	2113946K02	CAP, 0.10uF
C8022	2113946D05	CAP, 2.2uF
C8023	2113945B02	CAP, .01uF
C8029	2113944A52	CAP, 1000pF
C8030	2113944A28	CAP, 18pF
C8031	2113946D05	CAP, 2.2uF
C8032	2113945B02	CAP, .01uF
C8033	2113944A28	CAP, 18pF
C8034	2113944A28	CAP, 18pF
C8035	2113944A31	CAP, 33pF
C8036	2113944A52	CAP, 1000pF
C900	2113945B04	CAP, .022uF
C9000	2113945A03	CAP, 330pF
C9001	2113945A03	CAP, 330pF
C9002	2113945A03	CAP, 330pF
C9003	2113945A03	CAP, 330pF
C9004	2113945A03	CAP, 330pF
C9005	2113945A03	CAP, 330pF
C9006	2113945A03	CAP, 330pF
C9007	2113945A03	CAP, 330pF
C9008	2113945A03	CAP, 330pF
C9009	2113945A03	CAP, 330pF
C9010	2113945A03	CAP, 330pF
C9011	2113945A03	CAP, 330pF
C9012	2113945A03	CAP, 330pF
C9013	2113945A03	CAP, 330pF
C9014	2113945A03	CAP, 330pF
C9015	2113945A03	CAP, 330pF
C9016	2113945A03	CAP, 330pF
C9017	2113945A03	CAP, 330pF
C9018	2113945A03	CAP, 330pF
C9019	2113945A03	CAP, 330pF
C9020	2113945A03	CAP, 330pF
C9021	2113945A03	CAP, 330pF
C9022	2113945A03	CAP, 330pF
C9023	2113945A03	CAP, 330pF
C9024	2113945A03	CAP, 330pF

Circuit Ref	Motorola Part No.	Description
C9025	2113945A03	CAP, 330pF
C9026	2113945A03	CAP, 330pF
C9027	2113945A03	CAP, 330pF
C9028	2113945A03	CAP, 330pF
C9029	2113945A03	CAP, 330pF
C9030	2113944A15	CAP, 3.9pF
C9031	2113944A15	CAP, 3.9pF
C9032	2113944A15	CAP, 3.9pF
C9033	2113945A03	CAP, 330pF
C9038	2113945A03	CAP, 330pF
C9039	2113945A03	CAP, 330pF
C904	2113944C80	CAP, 20pF
C9040	2113945A03	CAP, 330pF
C9041	2113945A03	CAP, 330pF
C9042	2113945A03	CAP, 330pF
C9043	2113945A03	CAP, 330pF
C9044	2113945A03	CAP, 330pF
C9045	2113945A03	CAP, 330pF
C9046	2113945A03	CAP, 330pF
C9047	2113945A03	CAP, 330pF
C9048	2113945A03	CAP, 330pF
C9049	2113945A03	CAP, 330pF
C905	2113944C04	CAP, 330pF
C9050	2113945A03	CAP, 330pF
C9051	NOTPLACED	NOTPLACED
C9053	NOTPLACED	NOTPLACED
C9055	NOTPLACED	NOTPLACED
C9057	NOTPLACED	NOTPLACED
C9058	2113945A03	CAP, 330pF
C9059	2113945A03	CAP, 330pF
C906	2113944C74	CAP, 7.5pF
C9060	2113945A03	CAP, 330pF
C9061	2113945A03	CAP, 330pF
C9062	2113945A03	CAP, 330pF
C9063	2113945A03	CAP, 330pF
C9064	2113945A03	CAP, 330pF
C9065	2113945A03	CAP, 330pF
C9066	2113945A03	CAP, 330pF
C9067	NOTPLACED	NOTPLACED
C9068	NOTPLACED	NOTPLACED
C9069	NOTPLACED	NOTPLACED
C907	2113944C81	CAP, 24pF
C9070	2113945A03	CAP, 330pF
C9071	NOTPLACED	NOTPLACED
C9072	NOTPLACED	NOTPLACED
C908	2113945B04	CAP, .022uF

Circuit Ref	Motorola Part No.	Description
C909	2113944C85	CAP, 51pF
C911	2113944C33	CAP, 18pF
C912	2113944C29	CAP, 9.1pF
C913	2113944C38	CAP, 47pF
C914	2113945B04	CAP, .022uF
C915	2113944C30	CAP, 10pF
C916	2113944C78	CAP, 13pF
C918	2113944C04	CAP, 330pF
C919	2113944C33	CAP, 18pF
C920	2113944C35	CAP, 27pF
C924	2113944A20	CAP, 6.2pF
C925	2113944V07	CAP, 1.5pF
C926	2113944A15	CAP, 3.9pF
C927	2113945A01	CAP, 220pF
C928	2113944C74	CAP, 7.5pF
C929	2113944C22	CAP, 4.7pF
C930	2113944C28	CAP, 8.2pF
C931	2113944C20	CAP, 3.9pF
C933	2113945B04	CAP, .022uF
CR900	4815897H01	UPP9401E3
CR901	4815897H01	UPP9401E3
CR902	4815897H01	UPP9401E3
CR903	4815897H01	UPP9401E3
D001	4815059H01	1SV325
D200	4815096H01	1SV305
D201	4815059H01	1SV325
D202	4815059H01	1SV325
D203	4815096H01	1SV305
D204	4815096H01	1SV305
D205	4815059H01	1SV325
D206	4815059H01	1SV325
D207	4815096H01	1SV305
D3000	4813978A25	BAT54HT1G
D400	4815059H01	1SV325
D401	4815059H01	1SV325
D402	4813974A19	MMBD352
D403	4815059H01	1SV325
D404	4815059H01	1SV325
D405	4815923H01	HSMS2829
D600	4815096H01	1SV305
D601	4815096H01	1SV305
D9000	4805729G49	BRPY1204W
D9001	4871232L01	0402ESDA
D9002	4871232L01	0402ESDA
E001	2480640Z01	BK1005HM471
E002	2480640Z01	BK1005HM471

Circuit Ref	Motorola Part No.	Description
E003	2480640Z01	BK1005HM471
E004	2480640Z01	BK1005HM471
E3030	2409134J04	BLM18BD601SN1
E3031	2409134J04	BLM18BD601SN1
E3032	2409134J04	BLM18BD601SN1
E3033	2409134J04	BLM18BD601SN1
E3700	7686949J08	IDCTR
E3701	7686949J08	IDCTR
E3702	7686949J08	IDCTR
E3703	7686949J08	IDCTR
E3704	7686949J08	IDCTR
E3705	7686949J08	IDCTR
E600	2480640Z01	BK1005HM471
E601	2480640Z01	BK1005HM471
E602	2480640Z01	BK1005HM471
E701	7686949J14	BLM21PG221SN1
E8000	7686949J08	IDCTR
E8001	7686949J08	IDCTR
E8002	NOTPLACED	NOTPLACED
E8003	7686949J08	IDCTR
E8004	7686949J08	IDCTR
E8005	7686949J08	IDCTR
E8006	7686949J08	IDCTR
E9000	7686949J14	BLM21PG221SN1
E9001	2480640Z01	BK1005HM471
E9006	NOTPLACED	NOTPLACED
E9007	NOTPLACED	NOTPLACED
F9000	6515076H02	FUSE
FL400	9180022M11	MXF45
FL8000	9180310L38	B39162-B7829-C710
FL8001	9180310L38	B39162-B7829-C710
FL9000	2515003H02	DLP11SN201HL2
J9001	0970312L02	CONN_J
L001	2415375H09	IDCTR, 2.7uH
L002	2415429H38	IDCTR, 120nH
L003	NOTPLACED	NOTPLACED
L200	2415347H01	IDCTR, 1000nH
L201	2415427H44	IDCTR, 68nH
L202	2416540H25	IDCTR, 43nH
L203	2415347H01	IDCTR, 1000nH
L204	2415347H01	IDCTR, 1000nH
L205	2415347H01	IDCTR, 1000nH
L206	2415347H01	IDCTR, 1000nH
L207	2415429H36	IDCTR, 100nH
L208	2415347H01	IDCTR, 1000nH
L209	2415427H46	IDCTR, 100nH

Circuit Ref	Motorola Part No.	Description
L210	2415718H22	IDCTR, 82nH
L211	2415347H01	IDCTR, 1000nH
L212	2415347H01	IDCTR, 1000nH
L213	2415347H01	IDCTR, 1000nH
L214	2415347H01	IDCTR, 1000nH
L215	2415429H38	IDCTR, 120nH
L217	2415347H01	IDCTR, 1000nH
L218	2415429H43	IDCTR, 220nH
R3076	0613952A30	RES, 2
L3004	2464675H01	IDCTR, 560nH
L3020	2489846Y06	IDCTR, 10uH
L3021	2489846Y06	IDCTR, 10uH
L3022	2464675H01	IDCTR, 560nH
L400	2479990C01	IDCTR, 13.9nH
L401	2479990C01	IDCTR, 13.9nH
L402	2415429H36	IDCTR, 100nH
L403	2414017N22	IDCTR, 68nH
L404	2415429H46	IDCTR, 330nH
L405	2415429H46	IDCTR, 330nH
L406	2415429H38	IDCTR, 120nH
L407	2415429H30	IDCTR, 47nH
L408	2479990C01	IDCTR, 13.9nH
L409	2479990C01	IDCTR, 13.9nH
L410	NOTPLACED	NOTPLACED
L411	2415429H35	IDCTR, 82nH
L412	2414017K32	IDCTR, 560nH
L413	2415429H31	IDCTR, 51nH
L414	2415429H31	IDCTR, 51nH
L415	2414017K33	IDCTR, 680nH
L416	2414017K31	IDCTR, 470nH
L417	2415718H31	IDCTR, 270nH
L418	2415429H47	IDCTR, 390nH
L420	2415427H50	IDCTR, 1.55nH
L421	2415427H50	IDCTR, 1.55nH
L600	2466505A01	IDCTR, 10uH
L601	2466505A01	IDCTR, 10uH
L602	2415569H01	IDCTR, 4.7uH
L603	2414017Q51	IDCTR, 2.2uH
L604	2414015B27	IDCTR, 390nH
L605	2415569H01	IDCTR, 4.7uH
L700	2414017N22	IDCTR, 68nH
L701	2414017N22	IDCTR, 68nH
L702	2414017N09	IDCTR, 5.6nH
L703	2414017N22	IDCTR, 68nH
L705	2479990C03	IDCTR, 13.85nH
L707	2479990A02	IDCTR, 7.66nH

Circuit Ref	Motorola Part No.	Description
L708	2414017N15	IDCTR, 18nH
L709	2414017N11	IDCTR, 8.2nH
L710	2414017N13	IDCTR, 12nH
L712	2479990E01	IDCTR, 23.75nH
L8001	2414017P10	IDCTR, 5.6nH
L8002	2414017P17	IDCTR, 22nH
L8003	2414017P13	IDCTR, 10nH
L8004	2414017P10	IDCTR, 5.6nH
L9000	2471698M01	IDCTR, 3.3uH
L9001	2415429H45	IDCTR, 270nH
L9007	2415429H45	IDCTR, 270nH
L9008	2415429H45	IDCTR, 270nH
L902	2415347H01	IDCTR, 1000nH
L903	2415347H05	IDCTR, 1800nH
L904	2416066H01	IDCTR, 43nH
L905	2416066H01	IDCTR, 43nH
L906	2416066H01	IDCTR, 43nH
L907	2415347H05	IDCTR, 1800nH
L908	2416066H01	IDCTR, 43nH
L909	2416066H01	IDCTR, 43nH
L910	2416066H01	IDCTR, 43nH
L912	2414017P08	IDCTR, 3.9nH
L913	2414017P10	IDCTR, 5.6nH
M1	4271321L01	RETAINER
M2	4271321L01	RETAINER
M700	2615193H01	HEATSINK
M9000	4371105L01	BRD_SPACER
M9001	4371105L01	BRD_SPACER
M9002	4371105L01	BRD_SPACER
M9003	NOTPLACED	NOTPLACED
M9004	NOTPLACED	NOTPLACED
M9005	3915478H01	CONTACT
M9006	3915478H01	CONTACT
M9007	0915184H01	CONTACT
P900	2815696H01	CONN_P
P9000	2887818K02	CONN_P
Q001	4885061Y01	NE68519
Q002	4815359H01	BCV62
Q003	4816134H01	DTC114YM
Q200	4815029H01	NE851M03
Q202	4815055H01	UMC5NT2G
Q203	4815055H01	UMC5NT2G
Q204	4885061Y01	NE68519
Q205	4885061Y01	NE68519
Q206	4815055H01	UMC5NT2G
Q207	4815055H01	UMC5NT2G

Circuit Ref	Motorola Part No.	Description
Q208	4885061Y01	NE68519
Q3000	4805585Q23	SI8401DB
Q3001	4805585Q23	SI8401DB
Q3002	4816134H01	DTC114YM
Q3003	4813970A62	NTHS5441T1
Q3005	4805585Q23	SI8401DB
Q3006	4816134H01	DTC114YM
Q3010	4805585Q23	SI8401DB
Q400	4816531H01	QSBT_0038
Q401	4816531H01	QSBT_0038
Q600	4813973A04	73A04
Q601	4815055H01	UMC5NT2G
Q602	4885061Y01	NE68519
Q701	4815055H01	UMC5NT2G
Q702	4815055H01	UMC5NT2G
Q703	4816547H01	RD01MUS1
Q704	4816548H01	RD07MVS1
Q900	4815055H01	UMC5NT2G
Q9000	4813973M07	MMBT3904
Q9001	4815154H01	IMXFT110
Q9003	4813973M07	MMBT3904
Q901	4815055H01	UMC5NT2G
R001	0613952Q96	RES, 9.1K
R002	0613952Q41	RES, 47
R003	0613952Q91	RES, 5.6K
R004	0613952Q66	RES, 510
R005	0613952Q56	RES, 200
R006	0613952Q93	RES, 6.8K
R007	0613952R01	RES, 10K
R008	0613952Q25	RES, 10
R010	0613952Q93	RES, 6.8K
R011	0613952Q49	RES, 100
R012	0613952R25	RES, 100K
R013	0613952Q46	RES, 75
R014	0613952Q42	RES, 51
R016	0613952Q33	RES, 22
R017	0613952Q42	RES, 51
R018	0613952Q88	RES, 4.3K
R019	0613952R01	RES, 10K
R020	0613952Q55	RES, 180
R022	0613952Q58	RES, 240
R025	0613952R13	RES, 33K
R026	0613952R01	RES, 10K
R027	0613952R66	RES, 0
R052	NOTPLACED	NOTPLACED
R053	0613952R66	RES, 0

Circuit Ref	Motorola Part No.	Description
R054	NOTPLACED	NOTPLACED
R1000	0613952Q25	RES, 10
R1001	0613952R01	RES, 10K
R1002	0613952J73	RES, 10MEG
R1005	0613952Q89	RES, 4.7K
R1006	0613952R01	RES, 10K
R1013	NOTPLACED	NOTPLACED
R1014	0613952R66	RES, 0
R1015	NOTPLACED	NOTPLACED
R1016	0613952R66	RES, 0
R1017	NOTPLACED	NOTPLACED
R1018	0613952R66	RES, 0
R1019	0613952Q18	RES, 5.1
R1020	0613952R66	RES, 0
R1021	0613952R66	RES, 0
R1022	NOTPLACED	NOTPLACED
R1023	0613952R66	RES, 0
R1025	0613952R01	RES, 10K
R1026	0613952R17	RES, 47K
R1027	NOTPLACED	NOTPLACED
R1028	0613952R66	RES, 0
R1034	0613952R01	RES, 10K
R1035	NOTPLACED	NOTPLACED
R1036	0613952R01	RES, 10K
R1041	0613952Q73	RES, 1K
R1045	0613952R01	RES, 10K
R1046	NOTPLACED	NOTPLACED
R1047	0613952R66	RES, 0
R1048	0613952R66	RES, 0
R1051	0613952R66	RES, 0
R1052	0613952R66	RES, 0
R1053	0613952Q89	RES, 4.7K
R1054	0613952Q89	RES, 4.7K
R1055	NOTPLACED	NOTPLACED
R1060	0613952Q25	RES, 10
R1061	0613952R66	RES, 0
R1062	0613952R66	RES, 0
R1063	NOTPLACED	NOTPLACED
R1065	0613952R66	RES, 0
R1067	0613952R03	RES, 12K
R1068	0613952R10	RES, 24K
R1069	0613952R66	RES, 0
R1070	0613952R01	RES, 10K
R1072	0613952R66	RES, 0
R200	0613952Q96	RES, 9.1K
R2000	0613952R01	RES, 10K

Circuit Ref	Motorola Part No.	Description
R2004	0613952R66	RES, 0
R2005	0613952R01	RES, 10K
R2006	0613952R01	RES, 10K
R2007	0613952R01	RES, 10K
R2008	0613952R01	RES, 10K
R2009	0613952R01	RES, 10K
R201	0613952Q89	RES, 4.7K
R2010	0613952R01	RES, 10K
R2011	0613952R66	RES, 0
R2012	0613952R01	RES, 10K
R2013	0613952R01	RES, 10K
R202	0613952Q49	RES, 100
R203	0613952Q52	RES, 130
R205	0613952Q91	RES, 5.6K
R207	NOTPLACED	NOTPLACED
R208	0613952Q96	RES, 9.1K
R209	0613952Q89	RES, 4.7K
R210	0613952Q49	RES, 100
R211	0613952Q50	RES, 110
R212	0613952Q90	RES, 5.1K
R213	0613952Q94	RES, 7.5K
R214	0613952Q58	RES, 240
R215	NOTPLACED	NOTPLACED
R216	0613952Q58	RES, 240
R217	0613952Q95	RES, 8.2K
R218	0613952Q66	RES, 510
R220	0613952Q60	RES, 300
R221	0613952Q31	RES, 18
R222	0613952Q60	RES, 300
R3004	NOTPLACED	NOTPLACED
R3005	0613952N01	RES, 10K
R3006	NOTPLACED	NOTPLACED
R3007	0613952N01	RES, 10K
R3008	NOTPLACED	NOTPLACED
R3009	0613952N01	RES, 10K
R3010	0613952N01	RES, 10K
R3011	0613952Q81	RES, 2.2K
R3012	0613952Q59	RES, 270
R3013	0613952Q81	RES, 2.2K
R3014	0613952M30	RES, 2K
R3016	0616416H01	RES, 0.1
R3017	0613952P25	RES, 178K
R3018	0613952R18	RES, 51K
R3020	0613952Q34	RES, 24
R3021	0613952Q34	RES, 24
R3023	0613952R17	RES, 47K

Circuit Ref	Motorola Part No.	Description
R3024	0613952Z67	RES, 51K
R3025	0613952Q49	RES, 100
R3026	0613952Q61	RES, 330
R3027	0613952Q61	RES, 330
R3028	0613952N69	RES, 51.1K
R3029	0613952N60	RES, 41.2K
R3030	0686135Z02	RES, 0.2
R3031	0613952R66	RES, 0
R3032	0613952Q95	RES, 8.2K
R3033	0613952R05	RES, 15K
R3034	0613952Q95	RES, 8.2K
R3035	0613952R05	RES, 15K
R3036	0613952N01	RES, 10K
R3037	0613952Q71	RES, 820
R3038	NOTPLACED	NOTPLACED
R3040	0613952Q81	RES, 2.2K
R3041	0613952N01	RES, 10K
R3043	0613952R32	RES, 200K
R3050	0613952R25	RES, 100K
R3051	0613952Q89	RES, 4.7K
R3053	0613952Z58	RES, 22K
R3054	0613952Z58	RES, 22K
R3055	0613952R25	RES, 100K
R3060	0613952M30	RES, 2K
R3070	0613952R33	RES, 220K
R3071	0613952R33	RES, 220K
R3072	0613952R56	RES, 2MEG
R3073	0613952R56	RES, 2MEG
R3074	0613952Q73	RES, 1K
R3075	0613952N01	RES, 10K
R3088	NOTPLACED	NOTPLACED
R3098	0613952Q85	RES, 3.3K
R3100	0613952R17	RES, 47K
R3101	0613952R25	RES, 100K
R3102	0613952A30	RES, 2
R3103	0615049H16	RES, 0.7
R3200	0613952R33	RES, 220K
R3201	0613952R20	RES, 62K
R3202	0613952R33	RES, 220K
R3203	0613952R36	RES, 300K
R3700	0613952Q73	RES, 1K
R3701	0613952R01	RES, 10K
R3702	0613952R12	RES, 30K
R3703	0613952R10	RES, 24K
R3704	0613952R01	RES, 10K
R3800	0613952Q25	RES, 10

Circuit Ref	Motorola Part No.	Description
R3888	NOTPLACED	NOTPLACED
R400	0613952R25	RES, 100K
R401	0613952R66	RES, 0
R402	0613952R66	RES, 0
R403	0613952R66	RES, 0
R404	0613952Q75	RES, 1.2K
R405	0613952R25	RES, 100K
R406	0613952Q73	RES, 1K
R407	0613952Q42	RES, 51
R409	0613952R01	RES, 10K
R410	0613952Q77	RES, 1.5K
R411	0613952R03	RES, 12K
R412	0613952Q49	RES, 100
R413	0613952Q77	RES, 1.5K
R417	0613952R66	RES, 0
R419	0613952R66	RES, 0
R420	0613952Q74	RES, 1.1K
R421	0613952Q53	RES, 150
R422	0613952Q62	RES, 360
R424	0613952Q74	RES, 1.1K
R425	0613952R66	RES, 0
R430	0613952R66	RES, 0
R496	0613952R66	RES, 0
R497	NOTPLACED	NOTPLACED
R600	0613952R01	RES, 10K
R601	0613952Q62	RES, 360
R602	0613952Q68	RES, 620
R603	0613952R05	RES, 15K
R604	0613952Q90	RES, 5.1K
R605	0613952Q90	RES, 5.1K
R606	0613952Q73	RES, 1K
R607	0613952R25	RES, 100K
R609	0613952R01	RES, 10K
R610	0613952R01	RES, 10K
R611	0613952Q63	RES, 390
R612	0613952R08	RES, 20K
R696	0613952R66	RES, 0
R697	0613952R66	RES, 0
R698	0613952R01	RES, 10K
R699	0613952R25	RES, 100K
R700	0615043C01	RES, 0.1
R701	NOTPLACED	NOTPLACED
R702	0613952Z80	RES, 330K
R703	0613952Z80	RES, 330K
R704	NOTPLACED	NOTPLACED
R705	0613952R56	RES, 2MEG

Circuit Ref	Motorola Part No.	Description
R706	0613952R56	RES, 2MEG
R707	0613952Q81	RES, 2.2K
R708	0613952Q90	RES, 5.1K
R709	0613952R66	RES, 0
R710	NOTPLACED	NOTPLACED
R711	0613952R08	RES, 20K
R712	0613952R66	RES, 0
R713	NOTPLACED	NOTPLACED
R714	0613952Q59	RES, 270
R717	0613958H33	RES, 22
R718	0613952Q56	RES, 200
R719	0613952Q45	RES, 68
R720	0613952H56	RES, 200
R723	0613952Q50	RES, 110
R725	0613952Q85	RES, 3.3K
R726	0613952R66	RES, 0
R727	NOTPLACED	NOTPLACED
R728	0613952Q60	RES, 300
R729	0613952Q33	RES, 22
R730	0613952Q60	RES, 300
R731	0613952R17	RES, 47K
R732	NOTPLACED	NOTPLACED
R733	0613952R66	RES, 0
R8002	0613952R25	RES, 100K
R8003	0613952R01	RES, 10K
R8004	0613952Q70	RES, 750
R8010	0613952R05	RES, 15K
R8011	0613952R25	RES, 100K
R8012	0613952R01	RES, 10K
R8015	NOTPLACED	NOTPLACED
R8016	0613952R66	RES, 0
R8017	NOTPLACED	NOTPLACED
R8020	0613952R66	RES, 0
R8023	0613952R66	RES, 0
R8024	0613952R25	RES, 100K
R8025	0613952R66	RES, 0
R8026	0613952R25	RES, 100K
R8027	0613952R25	RES, 100K
R8028	0613952R25	RES, 100K
R8029	0613952R25	RES, 100K
R8030	0613952R01	RES, 10K
R8031	0613952R25	RES, 100K
R8032	0613952R25	RES, 100K
R8033	0613952R25	RES, 100K
R8034	0613952R01	RES, 10K
R8035	0613952R01	RES, 10K

Circuit Ref	Motorola Part No.	Description
R8036	0613952R01	RES, 10K
R8037	0613952R01	RES, 10K
R9000	0613952Q73	RES, 1K
R9001	0613952Q73	RES, 1K
R9002	0613952Q73	RES, 1K
R9003	0613952Q73	RES, 1K
R9004	0613952Q73	RES, 1K
R9005	0613952Q73	RES, 1K
R9006	0613952Q73	RES, 1K
R9007	0613952Q73	RES, 1K
R9008	0613952R17	RES, 47K
R9009	0613952R01	RES, 10K
R9010	0613952R01	RES, 10K
R9011	0613952R17	RES, 47K
R9012	0613952Q50	RES, 110
R9013	0613952Q37	RES, 33
R9014	0613952R01	RES, 10K
R9015	0613952R01	RES, 10K
R9016	0613952R01	RES, 10K
R9017	0613952R01	RES, 10K
R9018	0613952R01	RES, 10K
R9019	0613952Q73	RES, 1K
R902	0613952H47	RES, 82
R9020	0613952Q89	RES, 4.7K
R903	0613952H47	RES, 82
R904	0613952H47	RES, 82
R905	0613952H47	RES, 82
R9050	0613952R01	RES, 10K
R9051	0613952R01	RES, 10K
R9052	0613952Q65	RES, 470
R906	0613952R01	RES, 10K
R907	0613952R01	RES, 10K
R908	0613952H47	RES, 82
R909	0613952H47	RES, 82
S9000	4086470Z01	SWITCH
S9001	4015186H01	SWITCH
S9002	4015203H01	SWITCH
SH9000	NOTPLACED	NOTPLACED
SH9001	NOTPLACED	NOTPLACED
T400	2515396H01	XFMR
T401	2515396H01	XFMR
U001	5104932K08	SC51650VF
U002	5114000B59	MC74VHC1GT66
U1000	5102495J13	OMAP1710
U1005	5171209L01	TXB0104ZXUR
U1006	5115001H02	NL27WZU04

Circuit Ref	Motorola Part No.	Description
U200	5116014H01	UPC8179TK
U2000	0104024J27	M58WR064FB
U2001	5171614M01	MT48H4M16LF
U3000	5185143E77	PWR_MNGR_BLOCK
U3002	5115616H01	LP8340
U3003	5115453H01	LMC6035ITLX
U3004	5114007A43	NL17SZ14
U3006	5115974H01	LP3990
U3007	5171395L01	TS5A23166
U3008	5115391H01	TK11100CSC
U3009	5164852H47	PCA9306
U3020	5171428L01	LTC1877
U3021	5171428L01	LTC1877
U3700	5116282H01	TPS79228
U3701	5116283H01	TPS79101
U400	5115442H01	MAX2371
U600	5102495J14	AD9864
U700	4802246J29	ADA4743
U701	5115147H01	AD8566
U702	5115022H01	LM50
U8000	0104024J41	GSC3F/LP
U8001	5164015H55	UPC8211TK
VR9000	4866544A01	SR05
VR9001	4813979P10	MMQA5V6T1
VR9002	4813979P10	MMQA5V6T1
VR9003	4815040H01	MM3Z12VT1G
VR9004	4815040H01	MM3Z12VT1G
VR9005	4805656W76	MM5Z5V6
VR9006	4805656W76	MM5Z5V6
VR9007	4805656W76	MM5Z5V6
VR9008	4813979P10	MMQA5V6T1
VR9009	4813977C23	MMSZ5243
VR9010	4813977C23	MMSZ5243
VR9015	NOTPLACED	NOTPLACED
VR9016	NOTPLACED	NOTPLACED
VR9017	4815040H01	MM3Z12VT1G
VR9018	4815040H01	MM3Z12VT1G
VR9020	4813979P10	MMQA5V6T1
VR9021	4813979P10	MMQA5V6T1
VR9022	4813979P10	MMQA5V6T1
VR9023	4815040H01	MM3Z12VT1G
Y001	5116032H01	IVT5300B
Y1000	4809612J45	CX-91F
Y3000	4802582S80	XTAL
Y3001	4815028H01	CX-101F
Y8000	4802582S80	XTAL

## VHF Radio Parts List (8415113H05)

Circuit Ref	Motorola Part No.	Description
C001	2113946D02	CAP, 1.0uF
C002	2113946D02	CAP, 1.0uF
C003	2113946K02	CAP, 0.10uF
C004	2113946K02	CAP, 0.10uF
C005	2113946K02	CAP, 0.10uF
C006	2113946K02	CAP, 0.10uF
C007	2113946K02	CAP, 0.10uF
C008	2113946K02	CAP, 0.10uF
C009	NOTPLACED	NOTPLACED
C010	2113946K02	CAP, 0.10uF
C011	2113946K02	CAP, 0.10uF
C012	2113946K02	CAP, 0.10uF
C013	2113945A02	CAP, 270pF
C014	2113945L49	CAP, .01uF
C015	2113945L49	CAP, .01uF
C016	2113945A09	CAP, 1000pF
C017	2113946K02	CAP, 0.10uF
C018	2313960B57	CAPP, 10uF
C019	2113945L49	CAP, .01uF
C020	2313960B57	CAPP, 10uF
C022	2113946K02	CAP, 0.10uF
C024	2115358H17	CAP, 0.22uF
C025	2115358H07	CAP, .033uF
C026	2115358H15	CAP, 0.15uF
C027	2115358H25	CAP, 1uF
C028	2115358H01	CAP, .01uF
C031	2113945A09	CAP, 1000pF
C032	2113944A25	CAP, 10pF
C033	2113944A21	CAP, 6.8pF
C035	2113946K02	CAP, 0.10uF
C036	2113946K02	CAP, 0.10uF
C037	2115153H06	CAP, 1.3pF
C038	NOTPLACED	NOTPLACED
C200	2113945A09	CAP, 1000pF
C201	2113944A25	CAP, 10pF
C202	2113944A25	CAP, 10pF
C203	2113944A11	CAP, 2.7pF
C204	2113944A25	CAP, 10pF
C205	2113944A30	CAP, 27pF
C206	2113944A88	CAP, 160pF
C207	2113944A81	CAP, 24pF
C208	2113945A09	CAP, 1000pF
C209	2113946B04	CAP, 0.1uF
C210	2113945A09	CAP, 1000pF
C211	2113946B04	CAP, 0.1uF

Circuit Ref	Motorola Part No.	Description
C212	2113944A10	CAP, 2.4pF
C213	2113944A08	CAP, 2.0pF
C214	2113945A09	CAP, 1000pF
C215	2113944A40	CAP, 100pF
C216	2113944A05	CAP, 1.5pF
C217	2113944A10	CAP, 2.4pF
C219	2113945A09	CAP, 1000pF
C220	2113944A27	CAP, 15pF
C221	2113944A27	CAP, 15pF
C222	NOTPLACED	NOTPLACED
C223	2113944A73	CAP, 8pF
C224	2113944A82	CAP, 30pF
C225	2113944A88	CAP, 160pF
C226	2113944A30	CAP, 27pF
C227	2113945A09	CAP, 1000pF
C228	2113946B04	CAP, 0.1uF
C229	2113945A09	CAP, 1000pF
C230	2113946B04	CAP, 0.1uF
C231	2113944A05	CAP, 1.5pF
C232	2113944A11	CAP, 2.7pF
C233	2113945A09	CAP, 1000pF
C234	2113945A09	CAP, 1000pF
C235	2113945A09	CAP, 1000pF
C236	2113944A72	CAP, 7pF
C237	2113944A73	CAP, 8pF
C238	2113945A09	CAP, 1000pF
C239	2113945A09	CAP, 1000pF
C240	2113944A08	CAP, 2.0pF
C241	2113944A05	CAP, 1.5pF
C243	NOTPLACED	NOTPLACED
C400	2113944A36	CAP, 68pF
C401	2113944A30	CAP, 27pF
C402	2113944A26	CAP, 12pF
C403	2113944A30	CAP, 27pF
C404	2113944A36	CAP, 68pF
C405	2113944A41	CAP, 120pF
C406	2113944A41	CAP, 120pF
C408	2113944A52	CAP, 1000pF
C409	2113944A17	CAP, 4.7pF
C410	2113944A63	CAP, 1pF
C411	2113944A52	CAP, 1000pF
C412	2113944A52	CAP, 1000pF
C413	2113946K02	CAP, 0.10uF
C414	2113944A52	CAP, 1000pF
C415	2113946K02	CAP, 0.10uF
C416	2113944A52	CAP, 1000pF

Circuit Ref	Motorola Part No.	Description
C417	2113944A09	CAP, 2.2pF
C418	2113944A19	CAP, 5.6pF
C419	2113944A77	CAP, 11pF
C420	2113944A24	CAP, 9.1pF
C421	2113945B02	CAP, .01uF
C422	2113946K02	CAP, 0.10uF
C423	2113944A36	CAP, 68pF
C424	2113944A30	CAP, 27pF
C425	2113944A26	CAP, 12pF
C426	0613952R66	RES, 0
C427	2113944A88	CAP, 160pF
C428	2113944A28	CAP, 18pF
C429	2113944A77	CAP, 11pF
C430	2113944A29	CAP, 22pF
C431	2113944A77	CAP, 11pF
C432	2113944A80	CAP, 20pF
C433	2113944A80	CAP, 20pF
C434	2113946K02	CAP, 0.10uF
C435	2113944A40	CAP, 100pF
C436	2113946K02	CAP, 0.10uF
C437	2113945B02	CAP, .01uF
C438	2113946K02	CAP, 0.10uF
C439	2113944A22	CAP, 7.5pF
C440	2113944A82	CAP, 30pF
C441	NOTPLACED	NOTPLACED
C442	2113945B02	CAP, .01uF
C444	2113946K02	CAP, 0.10uF
C445	NOTPLACED	NOTPLACED
C446	2113944A27	CAP, 15pF
C447	2113944A30	CAP, 27pF
C448	2113944A36	CAP, 68pF
C449	2113944A52	CAP, 1000pF
C450	2113944A41	CAP, 120pF
C451	2113944A41	CAP, 120pF
C601	2113945B02	CAP, .01uF
C602	2113946B04	CAP, 0.1uF
C603	2113946B04	CAP, 0.1uF
C604	2113945B02	CAP, .01uF
C605	2113945B02	CAP, .01uF
C606	2113944A36	CAP, 68pF
C607	2113945B02	CAP, .01uF
C608	2113945D02	CAP, .047uF
C609	2115153H57	CAP, 100pF
C610	2115153H53	CAP, 68pF
C611	2115153H48	CAP, 43pF
C612	2115153H55	CAP, 82pF

Circuit Ref	Motorola Part No.	Description
C613	2113945G91	CAP, 0.1uF
C614	2113946E02	CAP, 1.0uF
C615	2113946B04	CAP, 0.1uF
C616	2113944A32	CAP, 39pF
C617	2113945L37	CAP, 3300pF
C618	2113945C18	CAP, .012uF
C619	2115358H13	CAP, 0.1uF
C620	2113946B04	CAP, 0.1uF
C621	2113945B02	CAP, .01uF
C622	2113944C89	CAP, 200pF
C623	2113944A40	CAP, 100pF
C624	2113944A40	CAP, 100pF
C625	2113945A11	CAP, 2200pF
C626	2113945D02	CAP, .047uF
C627	2113944A40	CAP, 100pF
C628	2113945B02	CAP, .01uF
C629	2113944A40	CAP, 100pF
C630	2113945B02	CAP, .01uF
C631	2113945B02	CAP, .01uF
C632	2113946B04	CAP, 0.1uF
C633	2113946B04	CAP, 0.1uF
C634	2113945B02	CAP, .01uF
C635	2113944A85	CAP, 51pF
C636	2113946B04	CAP, 0.1uF
C637	2113946G04	CAP, 0.68uF
C638	NOTPLACED	NOTPLACED
C639	2113946B04	CAP, 0.1uF
C700	2316410H03	CAPP, 10uF
C703	2113944A52	CAP, 1000pF
C704	2113944A52	CAP, 1000pF
C705	2113946B02	CAP, .047uF
C706	2113944A52	CAP, 1000pF
C707	2113944A31	CAP, 33pF
C708	2113944A52	CAP, 1000pF
C709	2113945B02	CAP, .01uF
C710	2113945B02	CAP, .01uF
C711	2113944A52	CAP, 1000pF
C712	2113945B04	CAP, .022uF
C714	2113945A03	CAP, 330pF
C715	2113944A31	CAP, 33pF
C717	2113945A03	CAP, 330pF
C718	2113946K02	CAP, 0.10uF
C719	2113944A52	CAP, 1000pF
C720	2113945B04	CAP, .022uF
C721	2113945D04	CAP, 0.1uF
C722	2113945A09	CAP, 1000pF

Circuit Ref	Motorola Part No.	Description
C724	2113944C82	CAP, 30pF
C726	2113944C84	CAP, 43pF
C729	2113944A52	CAP, 1000pF
C730	2113945B04	CAP, .022uF
C731	2113945B04	CAP, .022uF
C732	2111078B53	CAP, 270pF
C733	2113944C43	CAP, 82pF
C734	2113945A03	CAP, 330pF
C735	2113944C82	CAP, 30pF
C736	2113945A03	CAP, 330pF
C737	2113945A09	CAP, 1000pF
C738	2113945A03	CAP, 330pF
C739	2113944C82	CAP, 30pF
C777	2113944C41	CAP, 68pF
C778	2113944C41	CAP, 68pF
C797	2113944C32	CAP, 15pF
C798	2113944C43	CAP, 82pF
C799	2113944C32	CAP, 15pF
C900	2113945B04	CAP, .022uF
C904	2113944C80	CAP, 20pF
C905	2113944C04	CAP, 330pF
C906	2113944C74	CAP, 7.5pF
C907	2113944C81	CAP, 24pF
C908	2113945B04	CAP, .022uF
C909	2113944C85	CAP, 51pF
C911	2113944C33	CAP, 18pF
C912	2113944C29	CAP, 9.1pF
C913	2113944C38	CAP, 47pF
C914	2113945B04	CAP, .022uF
C915	2113944C30	CAP, 10pF
C916	2113944C78	CAP, 13pF
C918	2113944C04	CAP, 330pF
C919	2113944C33	CAP, 18pF
C920	2113944C35	CAP, 27pF
C924	2113944A20	CAP, 6.2pF
C925	2113944V07	CAP, 1.5pF
C926	2113944A15	CAP, 3.9pF
C927	2113945A01	CAP, 220pF
C928	2113944C74	CAP, 7.5pF
C929	2113944C22	CAP, 4.7pF
C930	2113944C28	CAP, 8.2pF
C931	2113944C20	CAP, 3.9pF
C933	2113945B04	CAP, .022uF
C1000	2113945A03	CAP, 330pF
C1001	2113946K02	CAP, 0.10uF
C1002	2113946K02	CAP, 0.10uF

Circuit Ref	Motorola Part No.	Description
C1003	2113945A03	CAP, 330pF
C1004	2113945A03	CAP, 330pF
C1005	2113946K02	CAP, 0.10uF
C1006	2113946K02	CAP, 0.10uF
C1007	2113945A03	CAP, 330pF
C1008	2113945A03	CAP, 330pF
C1009	2113946K02	CAP, 0.10uF
C1010	2113946K02	CAP, 0.10uF
C1011	2113945A03	CAP, 330pF
C1012	2113946K02	CAP, 0.10uF
C1013	2113946K02	CAP, 0.10uF
C1014	2113946K02	CAP, 0.10uF
C1015	2113946K02	CAP, 0.10uF
C1016	2113946B04	CAP, 0.1uF
C1017	2113946E02	CAP, 1.0uF
C1018	2113944A28	CAP, 18pF
C1019	2113944A28	CAP, 18pF
C1028	2113946K02	CAP, 0.10uF
C1029	2113946K02	CAP, 0.10uF
C1030	2113944A28	CAP, 18pF
C1031	2113946K02	CAP, 0.10uF
C1032	2113945B02	CAP, .01uF
C1033	2113946K02	CAP, 0.10uF
C1044	2113946B04	CAP, 0.1uF
C2000	2113945A03	CAP, 330pF
C2001	2113945B02	CAP, .01uF
C2002	2113946K02	CAP, 0.10uF
C2003	2113946K02	CAP, 0.10uF
C2004	2113945A03	CAP, 330pF
C2005	2113945B02	CAP, .01uF
C2006	2113946K02	CAP, 0.10uF
C2007	2113946K02	CAP, 0.10uF
C3000	2113944A78	CAP, 13pF
C3001	2113944A78	CAP, 13pF
C3002	2113945D04	CAP, 0.1uF
C3003	2113946D05	CAP, 2.2uF
C3004	2113946D05	CAP, 2.2uF
C3005	2113945A09	CAP, 1000pF
C3010	2113946D05	CAP, 2.2uF
C3011	2113946A01	CAP, .015uF
C3014	2113946D05	CAP, 2.2uF
C3015	2115153H57	CAP, 100pF
C3016	2113946D05	CAP, 2.2uF
C3017	2113945B02	CAP, .01uF
C3018	2113946D05	CAP, 2.2uF
C3019	2113946D02	CAP, 1.0uF

Circuit Ref	Motorola Part No.	Description
C3024	2113946D02	CAP, 1.0uF
C3025	2113946K02	CAP, 0.10uF
C3026	2113946K02	CAP, 0.10uF
C3028	2113946D05	CAP, 2.2uF
C3031	2113946D02	CAP, 1.0uF
C3034	2113946B04	CAP, 0.1uF
C3035	2113946B04	CAP, 0.1uF
C3036	2113946B04	CAP, 0.1uF
C3037	2113944A40	CAP, 100pF
C3038	2113944A40	CAP, 100pF
C3039	2113946F03	CAP, 4.7uF
C3045	2113946F05	CAP, 10uF
C3047	2113946D02	CAP, 1.0uF
C3048	2113946D02	CAP, 1.0uF
C3049	2113945C25	CAP, .033uF
C3050	2113945C25	CAP, .033uF
C3051	2113944A40	CAP, 100pF
C3060	2113944A80	CAP, 20pF
C3061	2113944A80	CAP, 20pF
C3062	2113946K02	CAP, 0.10uF
C3063	2113946K02	CAP, 0.10uF
C3067	2113946D02	CAP, 1.0uF
C3070	2113944A25	CAP, 10pF
C3074	2113946D02	CAP, 1.0uF
C3079	2113946F03	CAP, 4.7uF
C3080	NOTPLACED	NOTPLACED
C3081	2113946F03	CAP, 4.7uF
C3082	2113945Y02	CAP, 0.10uF
C3083	2113945Y02	CAP, 0.10uF
C3084	2113946K03	CAP, 0.22uF
C3090	2113955D37	CAP, 10uF
C3091	2113955D37	CAP, 10uF
C3093	2113946N03	CAP, 2.2uF
C3094	2113946B04	CAP, .1uF
C3095	2113946B04	CAP, .1uF
C3097	2113944A31	CAP, 33pF
C3098	2113944A31	CAP, 33pF
C3099	2113944A31	CAP, 33pF
C3100	2113944A31	CAP, 33pF
C3101	2113946D02	CAP, 1.0uF
C3102	2113946D02	CAP, 1.0uF
C3200	2113945Y02	CAP, 0.10uF
C3201	2113955D37	CAP, 10uF
C3202	2371572L02	CAPP, 68uF
C3203	2113945B02	CAP, .01uF
C3204	2115153H40	CAP, 20pF

Circuit Ref	Motorola Part No.	Description
C3205	2113945A11	CAP, 2200pF
C3206	2113945Y02	CAP, 0.10uF
C3207	2113955D37	CAP, 10uF
C3208	2113946K03	CAP, 0.22uF
C3209	2316410H01	CAPP, 22uF
C3210	2113945B02	CAP, .01uF
C3211	2115153H40	CAP, 20pF
C3212	2113944A44	CAP, 220pF
C3700	2113946D02	CAP, 1.0uF
C3701	2113945B02	CAP, .01uF
C3702	2113946D05	CAP, 2.2uF
C3703	2113946D02	CAP, 1.0uF
C3704	2113944A30	CAP, 27pF
C3705	2113945B02	CAP, .01uF
C3706	2113945A05	CAP, 470pF
C3707	2113946D05	CAP, 2.2uF
C3800	2113945D04	CAP, 0.1uF
C3805	2113946K03	CAP, 0.22uF
C3999	2113945B02	CAP, .01uF
C8000	2113946F05	CAP, 10uF
C8001	2113944A28	CAP, 18pF
C8002	2113944A52	CAP, 1000pF
C8003	2113946F05	CAP, 10uF
C8004	2113944A28	CAP, 18pF
C8005	NOTPLACED	NOTPLACED
C8006	NOTPLACED	NOTPLACED
C8013	2113944A08	CAP, 2.0pF
C8014	2113944A62	CAP, 0.75pF
C8015	2113946K02	CAP, 0.10uF
C8016	2113945A09	CAP, 1000pF
C8017	2113944A28	CAP, 18pF
C8018	2113944A28	CAP, 18pF
C8019	2113944A11	CAP, 2.7pF
C8020	2113944A52	CAP, 1000pF
C8021	2113946K02	CAP, 0.10uF
C8022	2113946D05	CAP, 2.2uF
C8023	2113945B02	CAP, .01uF
C8029	2113944A52	CAP, 1000pF
C8030	2113944A28	CAP, 18pF
C8031	2113946D05	CAP, 2.2uF
C8032	2113945B02	CAP, .01uF
C8033	2113944A28	CAP, 18pF
C8034	2113944A28	CAP, 18pF
C8035	2113944A31	CAP, 33pF
C8036	2113944A52	CAP, 1000pF
C9000	2113945A03	CAP, 330pF

Circuit Ref	Motorola Part No.	Description
C9001	2113945A03	CAP, 330pF
C9002	2113945A03	CAP, 330pF
C9003	2113945A03	CAP, 330pF
C9004	2113945A03	CAP, 330pF
C9005	2113945A03	CAP, 330pF
C9006	2113945A03	CAP, 330pF
C9007	2113945A03	CAP, 330pF
C9008	2113945A03	CAP, 330pF
C9009	2113945A03	CAP, 330pF
C9010	2113945A03	CAP, 330pF
C9011	2113945A03	CAP, 330pF
C9012	2113945A03	CAP, 330pF
C9013	2113945A03	CAP, 330pF
C9014	2113945A03	CAP, 330pF
C9015	2113945A03	CAP, 330pF
C9016	2113945A03	CAP, 330pF
C9017	2113945A03	CAP, 330pF
C9018	2113945A03	CAP, 330pF
C9019	2113945A03	CAP, 330pF
C9020	2113945A03	CAP, 330pF
C9021	2113945A03	CAP, 330pF
C9022	2113945A03	CAP, 330pF
C9023	2113945A03	CAP, 330pF
C9024	2113945A03	CAP, 330pF
C9025	2113945A03	CAP, 330pF
C9026	2113945A03	CAP, 330pF
C9027	2113945A03	CAP, 330pF
C9028	2113945A03	CAP, 330pF
C9029	2113945A03	CAP, 330pF
C9030	2113944A15	CAP, 3.9pF
C9031	2113944A15	CAP, 3.9pF
C9032	2113944A15	CAP, 3.9pF
C9033	2113945A03	CAP, 330pF
C9038	2113945A03	CAP, 330pF
C9039	2113945A03	CAP, 330pF
C9040	2113945A03	CAP, 330pF
C9041	2113945A03	CAP, 330pF
C9042	2113945A03	CAP, 330pF
C9043	2113945A03	CAP, 330pF
C9044	2113945A03	CAP, 330pF
C9045	2113945A03	CAP, 330pF
C9046	2113945A03	CAP, 330pF
C9047	2113945A03	CAP, 330pF
C9048	2113945A03	CAP, 330pF
C9049	2113945A03	CAP, 330pF
C9050	2113945A03	CAP, 330pF

Circuit Ref	Motorola Part No.	Description
C9051	NOTPLACED	NOTPLACED
C9053	NOTPLACED	NOTPLACED
C9055	NOTPLACED	NOTPLACED
C9057	NOTPLACED	NOTPLACED
C9058	2113945A03	CAP, 330pF
C9059	2113945A03	CAP, 330pF
C9060	2113945A03	CAP, 330pF
C9061	2113945A03	CAP, 330pF
C9062	2113945A03	CAP, 330pF
C9063	2113945A03	CAP, 330pF
C9064	2113945A03	CAP, 330pF
C9065	2113945A03	CAP, 330pF
C9066	2113945A03	CAP, 330pF
C9067	NOTPLACED	NOTPLACED
C9068	NOTPLACED	NOTPLACED
C9069	NOTPLACED	NOTPLACED
C9070	2113945A03	CAP, 330pF
C9071	2113945A03	CAP, 330pF
C9072	2113945A03	CAP, 330pF
CR900	4815897H01	UPP9401E3
CR901	4815897H01	UPP9401E3
CR902	4815897H01	UPP9401E3
CR903	4815897H01	UPP9401E3
D001	4815059H01	1SV325
D200	4815096H01	1SV305
D201	4815059H01	1SV325
D202	4815059H01	1SV325
D203	4815096H01	1SV305
D204	4815096H01	1SV305
D205	4815059H01	1SV325
D206	4815059H01	1SV325
D207	4815096H01	1SV305
D400	4815059H01	1SV325
D401	4815059H01	1SV325
D402	4813974A19	MMBD352
D403	4815059H01	1SV325
D404	4815059H01	1SV325
D405	4815923H01	HSMS2829
D600	4815096H01	1SV305
D601	4815096H01	1SV305
D3000	4813978A25	BAT54HT1G
D9000	4805729G49	BRPY1204W
D9001	4871232L01	0402ESDA
D9002	4871232L01	0402ESDA
E001	2480640Z01	BK1005HM471
E002	2480640Z01	BK1005HM471

Circuit Ref	Motorola Part No.	Description
E003	2480640Z01	BK1005HM471
E004	2480640Z01	BK1005HM471
E600	2480640Z01	BK1005HM471
E601	2480640Z01	BK1005HM471
E602	2480640Z01	BK1005HM471
E701	7686949J14	BLM21PG221SN1
E3030	2409134J04	BLM18BD601SN1
E3031	2409134J04	BLM18BD601SN1
E3032	2409134J04	BLM18BD601SN1
E3033	2409134J04	BLM18BD601SN1
E3700	7686949J08	IDCTR
E3701	7686949J08	IDCTR
E3702	7686949J08	IDCTR
E3703	7686949J08	IDCTR
E3704	7686949J08	IDCTR
E3705	7686949J08	IDCTR
E8000	7686949J08	IDCTR
E8001	7686949J08	IDCTR
E8002	NOTPLACED	NOTPLACED
E8003	7686949J08	IDCTR
E8004	7686949J08	IDCTR
E8005	7686949J08	IDCTR
E8006	7686949J08	IDCTR
E9000	7686949J14	BLM21PG221SN1
E9001	2480640Z01	BK1005HM471
E9006	NOTPLACED	NOTPLACED
E9007	NOTPLACED	NOTPLACED
F9000	6515076H02	FUSE
FL400	9180022M11	MXF45
FL8000	9180310L38	B39162-B7829-C710
FL8001	9180310L38	B39162-B7829-C710
FL9000	2515003H02	DLP11SN201HL2
J9001	0970312L02	CONN_J
L001	2415375H09	IDCTR, 2.7uH
L002	2415429H38	IDCTR, 120nH
L003	NOTPLACED	NOTPLACED
L200	2415347H01	IDCTR, 1000nH
L201	2415427H44	IDCTR, 68nH
L202	2416540H25	IDCTR, 43nH
L203	2415347H01	IDCTR, 1000nH
L204	2415347H01	IDCTR, 1000nH
L205	2415347H01	IDCTR, 1000nH
L206	2415347H01	IDCTR, 1000nH
L207	2415429H36	IDCTR, 100nH
L208	2415347H01	IDCTR, 1000nH
L209	2415427H46	IDCTR, 100nH



Circuit Ref	Motorola Part No.	Description
L210	2415718H22	IDCTR, 82nH
L211	2415347H01	IDCTR, 1000nH
L212	2415347H01	IDCTR, 1000nH
L213	2415347H01	IDCTR, 1000nH
L214	2415347H01	IDCTR, 1000nH
L215	2415429H38	IDCTR, 120nH
L217	2415347H01	IDCTR, 1000nH
L218	2415429H43	IDCTR, 220nH
L400	2479990C01	IDCTR, 13.9nH
L401	2479990C01	IDCTR, 13.9nH
L402	2415429H36	IDCTR, 100nH
L403	2414017N22	IDCTR, 68nH
L404	2415429H46	IDCTR, 330nH
L405	2415429H46	IDCTR, 330nH
L406	2415429H38	IDCTR, 120nH
L407	2415429H30	IDCTR, 47nH
L408	2479990C01	IDCTR, 13.9nH
L409	2479990C01	IDCTR, 13.9nH
L410	NOTPLACED	NOTPLACED
L411	2415429H35	IDCTR, 82nH
L412	2414017K32	IDCTR, 560nH
L413	2415429H31	IDCTR, 51nH
L414	2415429H31	IDCTR, 51nH
L415	2414017K33	IDCTR, 680nH
L416	2414017K31	IDCTR, 470nH
L417	2415718H31	IDCTR, 270nH
L418	2415429H47	IDCTR, 390nH
L420	2415427H50	IDCTR, 1.55nH
L421	2415427H50	IDCTR, 1.55nH
L600	2466505A01	IDCTR, 10uH
L601	2466505A01	IDCTR, 10uH
L602	2415569H01	IDCTR, 4.7uH
L603	2414017Q51	IDCTR, 2.2uH
L604	2414015B27	IDCTR, 390nH
L605	2415569H01	IDCTR, 4.7uH
L700	2414017N22	IDCTR, 68nH
L701	2414017N22	IDCTR, 68nH
L702	2414017N09	IDCTR, 5.6nH
L703	2414017N22	IDCTR, 68nH
L705	2479990C04	IDCTR, 13.85nH
L707	2479990A04	IDCTR, 5.8nH
L708	2414017N15	IDCTR, 18nH
L709	2414017N11	IDCTR, 8.2nH
L710	2414017N13	IDCTR, 12nH
L712	2479990E02	IDCTR, 23.75nH
L902	2415347H01	IDCTR, 1000nH

Circuit Ref	Motorola Part No.	Description
L903	2415347H05	IDCTR, 1800nH
L904	2416066H01	IDCTR, 43nH
L905	2416066H01	IDCTR, 43nH
L906	2416066H01	IDCTR, 43nH
L907	2415347H05	IDCTR, 1800nH
L908	2416066H01	IDCTR, 43nH
L909	2416066H01	IDCTR, 43nH
L910	2416066H01	IDCTR, 43nH
L912	2414017P08	IDCTR, 3.9nH
L913	2414017P10	IDCTR, 5.6nH
L3003	2464675H01	IDCTR, 560nH
L3004	2464675H01	IDCTR, 560nH
L3020	2489846Y06	IDCTR, 10uH
L3021	2471189M01	IDCTR, 22uH
L3022	2464675H01	IDCTR, 560nH
L8001	2414017P10	IDCTR, 5.6nH
L8002	2414017P17	IDCTR, 22nH
L8003	2414017P13	IDCTR, 10nH
L8004	2414017P10	IDCTR, 5.6nH
L9000	2471698M01	IDCTR, 3.3uH
L9001	2415429H45	IDCTR, 270nH
L9007	2415429H45	IDCTR, 270nH
L9008	2415429H45	IDCTR, 270nH
M1	4271321L01	RETAINER
M2	4271321L01	RETAINER
M700	2615193H01	HEATSINK
M9000	4371105L01	BRD_SPACER
M9001	4371105L01	BRD_SPACER
M9002	4371105L01	BRD_SPACER
M9003	NOTPLACED	NOTPLACED
M9004	NOTPLACED	NOTPLACED
M9005	3915478H01	CONTACT
M9006	3915478H01	CONTACT
M9007	0915184H01	CONTACT
P900	2815696H01	CONN_P
P9000	2887818K02	CONN_P
Q001	4885061Y01	NE68519
Q002	4815359H01	BCV62
Q003	4816134H01	DTC114YM
Q200	4815029H01	NE851M03
Q202	4815055H01	UMC5NT2G
Q203	4815055H01	UMC5NT2G
Q204	4885061Y01	NE68519
Q205	4885061Y01	NE68519
Q206	4815055H01	UMC5NT2G
Q207	4815055H01	UMC5NT2G

Circuit Ref	Motorola Part No.	Description
Q208	4885061Y01	NE68519
Q400	4816531H01	QSBT_0038
Q401	4816531H01	QSBT_0038
Q600	4813973A04	73A04
Q601	4815055H01	UMC5NT2G
Q602	4885061Y01	NE68519
Q701	4815055H01	UMC5NT2G
Q702	4815055H01	UMC5NT2G
Q703	4816547H01	RD01MUS1
Q704	4816548H01	RD07MVS1
Q900	4815055H01	UMC5NT2G
Q901	4815055H01	UMC5NT2G
Q3000	4805585Q23	SI8401DB
Q3001	4805585Q23	SI8401DB
Q3002	4816134H01	DTC114YM
Q3003	4813970A62	NTHS5441T1
Q3005	4805585Q23	SI8401DB
Q3006	4816134H01	DTC114YM
Q3010	4805585Q23	SI8401DB
Q9000	4813973M07	MMBT3904
Q9001	4815154H01	IMXFT110
Q9003	4813973M07	MMBT3904
R001	0613952Q96	RES, 9.1K
R002	0613952Q41	RES, 47
R003	0613952Q91	RES, 5.6K
R004	0613952Q66	RES, 510
R005	0613952Q56	RES, 200
R006	0613952Q93	RES, 6.8K
R007	0613952R01	RES, 10K
R008	0613952Q25	RES, 10
R010	0613952Q93	RES, 6.8K
R011	0613952Q49	RES, 100
R012	0613952R25	RES, 100K
R013	0613952Q46	RES, 75
R014	0613952Q42	RES, 51
R016	0613952Q33	RES, 22
R017	0613952Q42	RES, 51
R018	0613952Q88	RES, 4.3K
R019	0613952R01	RES, 10K
R020	0613952Q55	RES, 180
R022	0613952Q58	RES, 240
R025	0613952R13	RES, 33K
R026	0613952R01	RES, 10K
R027	0613952R66	RES, 0
R052	NOTPLACED	NOTPLACED
R053	0613952R66	RES, 0

Circuit Ref	Motorola Part No.	Description
R054	NOTPLACED	NOTPLACED
R200	0613952Q96	RES, 9.1K
R201	0613952Q89	RES, 4.7K
R202	0613952Q49	RES, 100
R203	0613952Q52	RES, 130
R205	0613952Q91	RES, 5.6K
R207	NOTPLACED	NOTPLACED
R208	0613952Q96	RES, 9.1K
R209	0613952Q89	RES, 4.7K
R210	0613952Q49	RES, 100
R211	0613952Q50	RES, 110
R212	0613952Q90	RES, 5.1K
R213	0613952Q94	RES, 7.5K
R214	0613952Q58	RES, 240
R215	NOTPLACED	NOTPLACED
R216	0613952Q58	RES, 240
R217	0613952Q95	RES, 8.2K
R218	0613952Q66	RES, 510
R220	0613952Q60	RES, 300
R221	0613952Q31	RES, 18
R222	0613952Q60	RES, 300
R400	0613952R25	RES, 100K
R401	0613952R66	RES, 0
R402	0613952R66	RES, 0
R403	0613952R66	RES, 0
R404	0613952Q75	RES, 1.2K
R405	0613952R25	RES, 100K
R406	0613952Q73	RES, 1K
R407	0613952Q42	RES, 51
R409	0613952R01	RES, 10K
R410	0613952Q77	RES, 1.5K
R411	0613952R03	RES, 12K
R412	0613952Q49	RES, 100
R413	0613952Q77	RES, 1.5K
R417	0613952R66	RES, 0
R419	0613952R66	RES, 0
R420	0613952Q74	RES, 1.1K
R421	0613952Q53	RES, 150
R422	0613952Q62	RES, 360
R424	0613952Q74	RES, 1.1K
R425	0613952R66	RES, 0
R430	0613952R66	RES, 0
R496	0613952R66	RES, 0
R497	NOTPLACED	NOTPLACED
R600	0613952R01	RES, 10K
R601	0613952Q62	RES, 360

Circuit Ref	Motorola Part No.	Description
R602	0613952Q68	RES, 620
R603	0613952R05	RES, 15K
R604	0613952Q90	RES, 5.1K
R605	0613952Q90	RES, 5.1K
R606	0613952Q73	RES, 1K
R607	0613952R25	RES, 100K
R609	0613952R01	RES, 10K
R610	0613952R01	RES, 10K
R611	0613952Q63	RES, 390
R612	0613952R08	RES, 20K
R696	0613952R66	RES, 0
R697	0613952R66	RES, 0
R698	0613952R01	RES, 10K
R699	0613952R25	RES, 100K
R700	0615043C01	RES,0.1
R701	NOTPLACED	NOTPLACED
R702	0613952Z80	RES, 330K
R703	0613952Z80	RES, 330K
R704	NOTPLACED	NOTPLACED
R705	0613952R56	RES, 2MEG
R706	0613952R56	RES, 2MEG
R707	0613952Q81	RES, 2.2K
R708	0613952Q90	RES, 5.1K
R709	0613952R66	RES, 0
R710	NOTPLACED	NOTPLACED
R711	0613952R08	RES, 20K
R712	0613952R66	RES, 0
R713	NOTPLACED	NOTPLACED
R714	0613952Q59	RES, 270
R717	0613958H33	RES, 22
R718	0613952Q56	RES, 200
R719	0613952Q45	RES, 68
R720	0613952H56	RES, 200
R723	0613952Q50	RES, 110
R725	0613952Q85	RES, 3.3K
R726	0613952R66	RES, 0
R727	NOTPLACED	NOTPLACED
R728	0613952Q60	RES, 300
R729	0613952Q33	RES, 22
R730	0613952Q60	RES, 300
R731	0613952R17	RES, 47K
R732	NOTPLACED	NOTPLACED
R733	0613952R66	RES, 0
R902	0613952H47	RES, 82
R903	0613952H47	RES, 82
R904	0613952H47	RES, 82

Circuit Ref	Motorola Part No.	Description
R905	0613952H47	RES, 82
R906	0613952R01	RES, 10K
R907	0613952R01	RES, 10K
R908	0613952H47	RES, 82
R909	0613952H47	RES, 82
R1000	0613952Q25	RES, 10
R1001	0613952R01	RES, 10K
R1002	0613952J73	RES, 10MEG
R1005	0613952Q89	RES, 4.7K
R1006	0613952R01	RES, 10K
R1013	NOTPLACED	NOTPLACED
R1014	0613952R66	RES, 0
R1015	NOTPLACED	NOTPLACED
R1016	0613952R66	RES, 0
R1017	NOTPLACED	NOTPLACED
R1018	0613952R66	RES, 0
R1019	0613952Q18	RES, 5.1
R1020	0613952R66	RES, 0
R1021	0613952R66	RES, 0
R1022	NOTPLACED	NOTPLACED
R1023	0613952R66	RES, 0
R1025	0613952R01	RES, 10K
R1026	0613952R17	RES, 47K
R1027	NOTPLACED	NOTPLACED
R1028	0613952R66	RES, 0
R1034	0613952R01	RES, 10K
R1035	NOTPLACED	NOTPLACED
R1036	0613952R01	RES, 10K
R1041	0613952Q73	RES, 1K
R1045	0613952R01	RES, 10K
R1046	NOTPLACED	NOTPLACED
R1047	0613952R66	RES, 0
R1048	0613952R66	RES, 0
R1051	0613952R66	RES, 0
R1052	0613952R66	RES, 0
R1053	0613952Q89	RES, 4.7K
R1054	0613952Q89	RES, 4.7K
R1055	NOTPLACED	NOTPLACED
R1060	0613952Q25	RES, 10
R1061	0613952R66	RES, 0
R1062	0613952R66	RES, 0
R1063	NOTPLACED	NOTPLACED
R1065	0613952R66	RES, 0
R1067	0613952R03	RES, 12K
R1068	0613952R10	RES, 24K
R1069	0613952R66	RES, 0

Circuit Ref	Motorola Part No.	Description
R1070	0613952R01	RES, 10K
R1072	0613952R66	RES, 0
R2000	0613952R01	RES, 10K
R2004	0613952R66	RES, 0
R2005	0613952R01	RES, 10K
R2006	0613952R01	RES, 10K
R2007	0613952R01	RES, 10K
R2008	0613952R01	RES, 10K
R2009	0613952R01	RES, 10K
R2010	0613952R01	RES, 10K
R2011	0613952R66	RES, 0
R2012	0613952R01	RES, 10K
R2013	0613952R01	RES, 10K
R3004	NOTPLACED	NOTPLACED
R3005	0613952N01	RES, 10K
R3006	NOTPLACED	NOTPLACED
R3007	0613952N01	RES, 10K
R3008	NOTPLACED	NOTPLACED
R3009	0613952N01	RES, 10K
R3010	0613952N01	RES, 10K
R3011	0613952Q81	RES, 2.2K
R3012	0613952Q59	RES, 270
R3013	0613952Q81	RES, 2.2K
R3014	0613952M30	RES, 2K
R3016	0616416H01	RES, 0.1
R3017	0613952P25	RES, 178K
R3018	0613952R18	RES, 51K
R3020	0613952Q34	RES, 24
R3021	0613952Q34	RES, 24
R3023	0613952R17	RES, 47K
R3024	0613952Z67	RES, 51K
R3025	0613952Q49	RES, 100
R3026	0613952Q59	RES, 270
R3027	0613952Q59	RES, 270
R3028	0613952N69	RES, 51.1K
R3029	0613952N60	RES, 41.2K
R3030	0686135Z02	RES, 0.2
R3031	0613952R66	RES, 0
R3032	0613952Q95	RES, 8.2K
R3033	0613952R05	RES, 15K
R3034	0613952Q95	RES, 8.2K
R3035	0613952R05	RES, 15K
R3036	0613952N01	RES, 10K
R3037	0613952Q71	RES, 820
R3038	NOTPLACED	NOTPLACED
R3040	0613952Q81	RES, 2.2K

Circuit Ref	Motorola Part No.	Description
R3041	0613952N01	RES, 10K
R3043	0613952R32	RES, 200K
R3050	0613952R25	RES, 100K
R3051	0613952Q89	RES, 4.7K
R3053	0613952Z58	RES, 22K
R3054	0613952Z58	RES, 22K
R3055	0613952R25	RES, 100K
R3060	0613952M30	RES, 2K
R3070	0613952R33	RES, 220K
R3071	0613952R33	RES, 220K
R3072	0613952R56	RES, 2MEG
R3073	0613952R56	RES, 2MEG
R3074	0613952Q73	RES, 1K
R3075	0613952N01	RES, 10K
R3088	NOTPLACED	NOTPLACED
R3098	0613952Q85	RES, 3.3K
R3100	0613952R17	RES, 47K
R3101	0613952R25	RES, 100K
R3102	0613952A30	RES, 2
R3103	0615049H16	RES, 0.7
R3200	0613952R33	RES, 220K
R3201	0613952R20	RES, 62K
R3202	0613952R33	RES, 220K
R3203	0613952R36	RES, 300K
R3700	0613952Q73	RES, 1K
R3701	0613952R01	RES, 10K
R3702	0613952R12	RES, 30K
R3703	0613952R10	RES, 24K
R3704	0613952R01	RES, 10K
R3800	0613952Q25	RES, 10
R3888	NOTPLACED	NOTPLACED
R8002	0613952R25	RES, 100K
R8003	0613952R01	RES, 10K
R8004	0613952Q70	RES, 750
R8010	0613952R05	RES, 15K
R8011	0613952R25	RES, 100K
R8012	0613952R01	RES, 10K
R8015	NOTPLACED	NOTPLACED
R8016	0613952R66	RES, 0
R8017	NOTPLACED	NOTPLACED
R8020	0613952R66	RES, 0
R8023	0613952R66	RES, 0
R8024	0613952R25	RES, 100K
R8025	0613952R66	RES, 0
R8026	0613952R25	RES, 100K
R8027	0613952R25	RES, 100K

Circuit Ref	Motorola Part No.	Description
R8028	0613952R25	RES, 100K
R8029	0613952R25	RES, 100K
R8030	0613952R01	RES, 10K
R8031	0613952R25	RES, 100K
R8032	0613952R25	RES, 100K
R8033	0613952R25	RES, 100K
R8034	0613952R01	RES, 10K
R8035	0613952R01	RES, 10K
R8036	0613952R01	RES, 10K
R8037	0613952R01	RES, 10K
R9000	0613952Q73	RES, 1K
R9001	0613952Q73	RES, 1K
R9002	0613952Q73	RES, 1K
R9003	0613952Q73	RES, 1K
R9004	0613952Q73	RES, 1K
R9005	0613952Q73	RES, 1K
R9006	0613952Q73	RES, 1K
R9007	0613952Q73	RES, 1K
R9008	0613952R17	RES, 47K
R9009	0613952R01	RES, 10K
R9010	0613952R01	RES, 10K
R9011	0613952R17	RES, 47K
R9012	0613952Q50	RES, 110
R9013	0613952Q37	RES, 33
R9014	0613952R01	RES, 10K
R9015	0613952R01	RES, 10K
R9016	0613952R01	RES, 10K
R9017	0613952R01	RES, 10K
R9018	0613952R01	RES, 10K
R9019	0613952Q73	RES, 1K
R9020	0613952Q89	RES, 4.7K
R9050	0613952R01	RES, 10K
R9051	0613952R01	RES, 10K
R9052	0613952Q65	RES, 470
S9000	4086470Z01	SWITCH
S9001	4015186H01	SWITCH
S9002	4015203H02	SWITCH
SH9000	NOTPLACED	NOTPLACED
SH9001	NOTPLACED	NOTPLACED
T400	2515396H01	XFMR
T401	2515396H01	XFMR
U001	5104932K08	SC51650VF
U002	5114000B59	MC74VHC1GT66
U200	5116014H01	UPC8179TK
U400	5115442H01	MAX2371
U600	5102495J14	AD9864

Circuit Ref	Motorola Part No.	Description
U700	4802246J29	ADA4743
U701	5115147H01	AD8566
U702	5115022H01	LM50
U1000	5102495J13	OMAP1710
U1005	5171209L01	TXB0104ZXUR
U1006	5115001H02	NL27WZU04
U2000	0104024J27	M58WR064FB
U2001	5171614M02	MT48H4M16LF
U3000	5185143E77	PWR_MNGR_BLOCK
U3002	5115616H01	LP8340
U3003	5115453H01	LMC6035ITLX
U3004	5114007A43	NL17SZ14
U3006	5115974H01	LP3990
U3007	5171395L01	TS5A23166
U3008	5115391H01	TK11100CSC
U3009	5164852H47	PCA9306
U3020	5171428L01	LTC1877
U3021	5171428L01	LTC1877
U3700	5116282H01	TPS79228
U3701	5116283H01	TPS79101
U8000	0104024J41	GSC3F
U8001	5164015H55	UPC8211TK
VR9000	4866544A01	SR05
VR9001	4813979P10	MMQA5V6T1
VR9002	4813979P10	MMQA5V6T1
VR9003	4815040H01	MM3Z12VT1G
VR9004	4815040H01	MM3Z12VT1G
VR9005	4805656W76	MM5Z5V6
VR9006	4805656W76	MM5Z5V6
VR9007	4805656W76	MM5Z5V6
VR9008	4813979P10	MMQA5V6T1
VR9009	4813977C23	MMSZ5243
VR9010	4813977C23	MMSZ5243
VR9015	NOTPLACED	NOTPLACED
VR9016	NOTPLACED	NOTPLACED
VR9017	4815040H01	MM3Z12VT1G
VR9018	4815040H01	MM3Z12VT1G
VR9020	4813979P10	MMQA5V6T1
VR9021	4813979P10	MMQA5V6T1
VR9022	4813979P10	MMQA5V6T1
VR9023	4815040H01	MM3Z12VT1G
Y001	5116032H01	IVT5300B
Y1000	4809612J45	CX-91F
Y3000	4802582S80	XTAL
Y3001	4815028H01	CX-101F
Y8000	4802582S80	XTAL

## VHF Radio Parts List (8415113H13)

Circuit Ref	Motorola Part No.	Description
C001	2113946D02	CAP, 1.0uF
C002	2113946D02	CAP, 1.0uF
C003	2113946K02	CAP, 0.10uF
C004	2113946K02	CAP, 0.10uF
C005	2113946K02	CAP, 0.10uF
C006	2113946K02	CAP, 0.10uF
C007	2113946K02	CAP, 0.10uF
C008	2113946K02	CAP, 0.10uF
C009	NOTPLACED	NOTPLACED
C010	2113946K02	CAP, 0.10uF
C011	2113946K02	CAP, 0.10uF
C012	2113946K02	CAP, 0.10uF
C013	2113945A02	CAP, 270pF
C014	2113945L49	CAP, .01uF
C015	2113945L49	CAP, .01uF
C016	2113945A09	CAP, 1000pF
C017	2113946K02	CAP, 0.10uF
C018	2313960B57	CAPP, 10uF
C019	2113945L49	CAP, .01uF
C020	2313960B57	CAPP, 10uF
C022	2113946K02	CAP, 0.10uF
C024	2115358H17	CAP, 0.22uF
C025	2115358H07	CAP, .033uF
C026	2115358H15	CAP, 0.15uF
C027	2115358H25	CAP, 1uF
C028	2115358H01	CAP, .01uF
C031	2113945A09	CAP, 1000pF
C032	2113944A25	CAP, 10pF
C033	2113944A21	CAP, 6.8pF
C035	2113946K02	CAP, 0.10uF
C036	2113946K02	CAP, 0.10uF
C037	2115153H06	CAP, 1.3pF
C038	NOTPLACED	NOTPLACED
C200	2113945A09	CAP, 1000pF
C201	2113944A25	CAP, 10pF
C202	2113944A25	CAP, 10pF
C203	2113944A11	CAP, 2.7pF
C204	2113944A25	CAP, 10pF
C205	2113944A30	CAP, 27pF
C206	2113944A88	CAP, 160pF
C207	2113944A81	CAP, 24pF
C208	2113945A09	CAP, 1000pF
C209	2113946B04	CAP, 0.1uF
C210	2113945A09	CAP, 1000pF
C211	2113946B04	CAP, 0.1uF

Circuit Ref	Motorola Part No.	Description
C212	2113944A10	CAP, 2.4pF
C213	2113944A08	CAP, 2pF
C214	2113945A09	CAP, 1000pF
C215	2113944A40	CAP, 100pF
C216	2113944A05	CAP, 1.5pF
C217	2113944A10	CAP, 2.4pF
C219	2113945A09	CAP, 1000pF
C220	2113944A27	CAP, 15pF
C221	2113944A27	CAP, 15pF
C222	NOTPLACED	NOTPLACED
C223	2113944A73	CAP, 8pF
C224	2113944A82	CAP, 30pF
C225	2113944A88	CAP, 160pF
C226	2113944A30	CAP, 27pF
C227	2113945A09	CAP, 1000pF
C228	2113946B04	CAP, 0.1uF
C229	2113945A09	CAP, 1000pF
C230	2113946B04	CAP, 0.1uF
C231	2113944A05	CAP, 1.5pF
C232	2113944A11	CAP, 2.7pF
C233	2113945A09	CAP, 1000pF
C234	2113945A09	CAP, 1000pF
C235	2113945A09	CAP, 1000pF
C236	2113944A72	CAP, 7pF
C237	2113944A73	CAP, 8pF
C238	2113945A09	CAP, 1000pF
C239	2113945A09	CAP, 1000pF
C240	2113944A08	CAP, 2pF
C241	2113944A05	CAP, 1.5pF
C243	NOTPLACED	NOTPLACED
C400	2113944A36	CAP, 68pF
C401	2113944A30	CAP, 27pF
C402	2113944A26	CAP, 12pF
C403	2113944A30	CAP, 27pF
C404	2113944A36	CAP, 68pF
C405	2113944A41	CAP, 120pF
C406	2113944A41	CAP, 120pF
C408	2113944A52	CAP, 1000pF
C409	2113944A17	CAP, 4.7pF
C410	2113944A63	CAP, 1pF
C411	2113944A52	CAP, 1000pF
C412	2113944A52	CAP, 1000pF
C413	2113946K02	CAP, 0.10uF
C414	2113944A52	CAP, 1000pF
C415	2113946K02	CAP, 0.10uF
C416	2113944A52	CAP, 1000pF

Circuit Ref	Motorola Part No.	Description
C417	2113944A09	CAP, 2.2pF
C418	2113944A19	CAP, 5.6pF
C419	2113944A77	CAP, 11pF
C420	2113944A24	CAP, 9.1pF
C421	2113945B02	CAP, .01uF
C422	2113946K02	CAP, 0.10uF
C423	2113944A36	CAP, 68pF
C424	2113944A30	CAP, 27pF
C425	2113944A26	CAP, 12pF
C426	0613952R66	RES, 0
C427	2113944A88	CAP, 160pF
C428	2113944A28	CAP, 18pF
C429	2113944A77	CAP, 11pF
C430	2113944A29	CAP, 22pF
C431	2113944A77	CAP, 11pF
C432	2113944A80	CAP, 20pF
C433	2113944A80	CAP, 20pF
C434	2113946K02	CAP, 0.10uF
C435	2113944A40	CAP, 100pF
C436	2113946K02	CAP, 0.10uF
C437	2113945B02	CAP, .01uF
C438	2113946K02	CAP, 0.10uF
C439	2113944A22	CAP, 7.5pF
C440	2113944A82	CAP, 30pF
C441	NOTPLACED	NOTPLACED
C442	2113945B02	CAP, .01uF
C444	2113946K02	CAP, 0.10uF
C445	NOTPLACED	NOTPLACED
C446	2113944A27	CAP, 15pF
C447	2113944A30	CAP, 27pF
C448	2113944A36	CAP, 68pF
C449	2113944A52	CAP, 1000pF
C450	2113944A41	CAP, 120pF
C451	2113944A41	CAP, 120pF
C601	2113945B02	CAP, .01uF
C602	2113946B04	CAP, 0.1uF
C603	2113946B04	CAP, 0.1uF
C604	2113945B02	CAP, .01uF
C605	2113945B02	CAP, .01uF
C606	2113944A36	CAP, 68pF
C607	2113945B02	CAP, .01uF
C608	2113945D02	CAP, .047uF
C609	2115153H57	CAP, 100pF
C610	2115153H53	CAP, 68pF
C611	2115153H48	CAP, 43pF
C612	2115153H55	CAP, 82pF

Circuit Ref	Motorola Part No.	Description
C613	2113945G91	CAP, 0.1uF
C614	2113946E02	CAP, 1.0uF
C615	2113946B04	CAP, 0.1uF
C616	2113944A32	CAP, 39pF
C617	2113945L37	CAP, 3300pF
C618	2113945C18	CAP, .012uF
C619	2115358H13	CAP, 0.1uF
C620	2113946B04	CAP, 0.1uF
C621	2113945B02	CAP, .01uF
C622	2113944C89	CAP, 200pF
C623	2113944A40	CAP, 100pF
C624	2113944A40	CAP, 100pF
C625	2113945A11	CAP, 2200pF
C626	2113945D02	CAP, .047uF
C627	2113944A40	CAP, 100pF
C628	2113945B02	CAP, .01uF
C629	2113944A40	CAP, 100pF
C630	2113945B02	CAP, .01uF
C631	2113945B02	CAP, .01uF
C632	2113946B04	CAP, 0.1uF
C633	2113946B04	CAP, 0.1uF
C634	2113945B02	CAP, .01uF
C635	2113944A85	CAP, 51pF
C636	2113946B04	CAP, 0.1uF
C637	2113946G04	CAP, 0.68uF
C638	NOTPLACED	NOTPLACED
C639	2113946B04	CAP, 0.1uF
C700	2371878M01	CAP, 33uF
C703	2113944A52	CAP, 1000pF
C704	2113944A52	CAP, 1000pF
C705	2113946B02	CAP, 0.047uF
C706	2113944A52	CAP, 1000pF
C707	2113944A31	CAP, 33pF
C708	2113944A52	CAP, 1000pF
C709	2113945B02	CAP, .01uF
C710	2113945B02	CAP, .01uF
C711	2113944A52	CAP, 1000pF
C712	2113945B04	CAP, .022uF
C714	2113945A03	CAP, 330pF
C715	2113944A31	CAP, 33pF
C717	2113945A03	CAP, 330pF
C718	2113946K02	CAP, 0.10uF
C719	2113944A52	CAP, 1000pF
C720	2113945B04	CAP, .022uF
C721	2113945D04	CAP, 0.1uF
C722	2113945A09	CAP, 1000pF

Circuit Ref	Motorola Part No.	Description
C724	2113944C82	CAP, 30pF
C726	2113944C84	CAP, 43pF
C729	2113944A52	CAP, 1000pF
C730	2113945B04	CAP, .022uF
C731	2113945B04	CAP, .022uF
C732	2111078B53	CAP, 270pF
C733	2113944C43	CAP, 82pF
C734	2113945A03	CAP, 330pF
C735	2113944C82	CAP, 30pF
C736	2113945A03	CAP, 330pF
C737	2113945A09	CAP, 1000pF
C738	2113945A03	CAP, 330pF
C739	2113944C82	CAP, 30pF
C777	2113944C41	CAP, 68pF
C778	2113944C41	CAP, 68pF
C797	2113944C32	CAP, 15pF
C798	2113944C43	CAP, 82pF
C799	2113944C32	CAP, 15pF
C900	2113945B04	CAP, .022uF
C904	2113944C80	CAP, 20pF
C905	2113944C04	CAP, 330pF
C906	2113944C74	CAP, 7.5pF
C907	2113944C81	CAP, 24pF
C908	2113945B04	CAP, .022uF
C909	2113944C85	CAP, 51pF
C911	2113944C33	CAP, 18pF
C912	2113944C29	CAP, 9.1pF
C913	2113944C38	CAP, 56pF
C914	2113945B04	CAP, .022uF
C915	2113944C30	CAP, 10pF
C916	2113944C78	CAP, 13pF
C918	2113944C04	CAP, 330pF
C919	2113944C33	CAP, 18pF
C920	2113944C35	CAP, 27pF
C924	2113944A20	CAP, 6.2pF
C925	2113944V07	CAP, 1.5PF
C926	2113944A15	CAP, 3.9pF
C927	2113945A01	CAP, 220pF
C928	2113944C74	CAP, 7.5pF
C929	2113944C22	CAP, 4.7pF
C930	2113944C28	CAP, 8.2pF
C931	2113944C20	CAP, 3.9pF
C933	2113945B04	CAP, .022uF
C1000	2113945A03	CAP, 330pF
C1001	2113946K02	CAP, 0.10uF
C1002	2113946K02	CAP, 0.10uF

Circuit Ref	Motorola Part No.	Description
C1003	2113945A03	CAP, 330pF
C1004	2113945A03	CAP, 330pF
C1005	2113946K02	CAP, 0.10uF
C1006	2113946K02	CAP, 0.10uF
C1007	2113945A03	CAP, 330pF
C1008	2113945A03	CAP, 330pF
C1009	2113946K02	CAP, 0.10uF
C1010	2113946K02	CAP, 0.10uF
C1011	2113945A03	CAP, 330pF
C1012	2113946K02	CAP, 0.10uF
C1013	2113946K02	CAP, 0.10uF
C1014	2113946K02	CAP, 0.10uF
C1015	2113946K02	CAP, 0.10uF
C1016	2113946B04	CAP, 0.1uF
C1017	2113946E02	CAP, 1.0uF
C1018	2113944A28	CAP, 18pF
C1019	2113944A28	CAP, 18pF
C1028	2113946K02	CAP, 0.10uF
C1029	2113946K02	CAP, 0.10uF
C1030	2113944A28	CAP, 18pF
C1031	2113946K02	CAP, 0.10uF
C1032	2113945B02	CAP, .01uF
C1033	2113946K02	CAP, 0.10uF
C1044	2113946B04	CAP, 0.1uF
C2000	2113945A03	CAP, 330pF
C2001	2113945B02	CAP, .01uF
C2002	2113946K02	CAP, 0.10uF
C2003	2113946K02	CAP, 0.10uF
C2004	2113945A03	CAP, 330pF
C2005	2113945B02	CAP, .01uF
C2006	2113946K02	CAP, 0.10uF
C2007	2113946K02	CAP, 0.10uF
C3000	2113944A78	CAP, 13pF
C3001	2113944A78	CAP, 13pF
C3002	2113945D04	CAP, 0.1uF
C3003	2113946D05	CAP, 2.2uF
C3004	2113946D05	CAP, 2.2uF
C3005	2113945A09	CAP, 1000pF
C3010	2113946D05	CAP, 2.2uF
C3011	2113946A01	CAP, .015uF
C3014	2113946D05	CAP, 2.2uF
C3015	2115153H57	CAP, 100pF
C3016	2113946D05	CAP, 2.2uF
C3017	2113945B02	CAP, .01uF
C3018	2113946D05	CAP, 2.2uF
C3019	2113946D02	CAP, 1.0uF

Circuit Ref	Motorola Part No.	Description
C3024	2113946D02	CAP, 1.0uF
C3025	2113946K02	CAP, 0.10uF
C3026	2113946K02	CAP, 0.10uF
C3028	2113946D05	CAP, 2.2uF
C3031	2113946D02	CAP, 1.0uF
C3034	2113946B04	CAP, 0.1uF
C3035	2113946B04	CAP, 0.1uF
C3036	2113946B04	CAP, 0.1uF
C3037	2113944A40	CAP, 100pF
C3038	2113944A40	CAP, 100pF
C3039	2113946F03	CAP, 4.7uF
C3045	2113946F03	CAP, 4.7uF
C3047	2113945C25	CAP, .033UF
C3048	2113945C25	CAP, .033UF
C3049	2113945C25	CAP, .033UF
C3050	2113945C25	CAP, .033UF
C3051	2113944A40	CAP, 100pF
C3060	2113944A80	CAP, 20pF
C3061	2113944A80	CAP, 20pF
C3062	2113946K02	CAP, 0.10uF
C3063	2113946K02	CAP, 0.10uF
C3067	2113946D02	CAP, 1.0uF
C3070	2113944A25	CAP, 10pF
C3074	2113946D02	CAP, 1.0uF
C3079	2113946F03	CAP, 4.7uF
C3080	NOTPLACED	NOTPLACED
C3081	NOTPLACED	NOTPLACED
C3082	2113945Y02	CAP, 0.10uF
C3083	2113945Y02	CAP, 0.10uF
C3084	2113946K03	CAP, 0.22uF
C3090	2113955D37	CAP, 10uF
C3091	2113955D37	CAP, 10uF
C3093	2113946N03	CAP, 2.2uF
C3094	2113946B04	CAP, 0.1uF
C3095	2113946B04	CAP, 0.1uF
C3097	2113944A31	CAP, 33pF
C3098	2113944A31	CAP, 33pF
C3099	2113944A31	CAP, 33pF
C3100	2113944A31	CAP, 33pF
C3101	2113946D02	CAP, 1.0uF
C3102	2113946D02	CAP, 1.0uF
C3200	2113945Y02	CAP, 0.10uF
C3201	2113955D37	CAP, 10uF
C3202	2371572L02	CAPP, 68uF
C3203	2113945B02	CAP, .01uF
C3204	2115153H40	CAP, 20pF

Circuit Ref	Motorola Part No.	Description
C3205	2113944A44	CAP, 220pF
C3206	2113945Y02	CAP, 0.10uF
C3207	2113955D37	CAP, 10uF
C3208	2113946K03	CAP, 0.22uF
C3209	2316410H01	CAP, 22uF
C3210	2113945B02	CAP, .01uF
C3211	2115153H40	CAP, 20pF
C3212	2113944A44	CAP, 220pF
C3500	2113946F03	CAP, 4.7uF
C3700	2113946D02	CAP, 1.0uF
C3701	2113945B02	CAP, .01uF
C3702	2113946D05	CAP, 2.2uF
C3703	2113946D02	CAP, 1.0uF
C3704	2113944A30	CAP, 27pF
C3705	2113945B02	CAP, .01uF
C3706	2113945A05	CAP, 470pF
C3707	2113946D05	CAP, 2.2uF
C3800	2113945D04	CAP, 0.1uF
C3805	2113946K03	CAP, 0.22uF
C3999	2113945B02	CAP, .01uF
C8000	2113946F05	CAP, 10uF
C8001	2113944A28	CAP, 18pF
C8002	2113944A52	CAP, 1000pF
C8003	2113946F05	CAP, 10uF
C8004	2113944A28	CAP, 18pF
C8005	NOTPLACED	NOTPLACED
C8006	NOTPLACED	NOTPLACED
C8013	2113944A08	CAP, 2pF
C8014	2113944A62	CAP, 0.75pF
C8015	2113946K02	CAP, 0.10uF
C8016	2113945A09	CAP, 1000pF
C8017	2113944A28	CAP, 18pF
C8018	2113944A28	CAP, 18pF
C8019	2113944A11	CAP, 2.7pF
C8020	2113944A52	CAP, 1000pF
C8021	2113946K02	CAP, 0.10uF
C8022	2113946D05	CAP, 2.2uF
C8023	2113945B02	CAP, .01uF
C8029	2113944A52	CAP, 1000pF
C8030	2113944A28	CAP, 18pF
C8031	2113946D05	CAP, 2.2uF
C8032	2113945B02	CAP, .01uF
C8033	2113944A28	CAP, 18pF
C8034	2113944A28	CAP, 18pF
C8035	2113944A31	CAP, 33pF
C8036	2113944A52	CAP, 1000pF

Circuit Ref	Motorola Part No.	Description
C9000	2113945A03	CAP, 330pF
C9001	2113945A03	CAP, 330pF
C9002	2113945A03	CAP, 330pF
C9003	2113945A03	CAP, 330pF
C9004	2113945A03	CAP, 330pF
C9005	2113945A03	CAP, 330pF
C9006	2113945A03	CAP, 330pF
C9007	2113945A03	CAP, 330pF
C9008	2113945A03	CAP, 330pF
C9009	2113945A03	CAP, 330pF
C9010	2113945A03	CAP, 330pF
C9011	2113945A03	CAP, 330pF
C9012	2113945A03	CAP, 330pF
C9013	2113945A03	CAP, 330pF
C9014	2113945A03	CAP, 330pF
C9015	2113945A03	CAP, 330pF
C9016	2113945A03	CAP, 330pF
C9017	2113945A03	CAP, 330pF
C9018	2113945A03	CAP, 330pF
C9019	2113945A03	CAP, 330pF
C9020	2113945A03	CAP, 330pF
C9021	2113945A03	CAP, 330pF
C9022	2113945A03	CAP, 330pF
C9023	2113945A03	CAP, 330pF
C9024	2113945A03	CAP, 330pF
C9025	2113945A03	CAP, 330pF
C9026	2113945A03	CAP, 330pF
C9027	2113945A03	CAP, 330pF
C9028	2113945A03	CAP, 330pF
C9029	2113945A03	CAP, 330pF
C9030	2113944A15	CAP, 3.9pF
C9031	2113944A15	CAP, 3.9pF
C9032	2113944A15	CAP, 3.9pF
C9033	2113945A03	CAP, 330pF
C9038	2113945A03	CAP, 330pF
C9039	2113945A03	CAP, 330pF
C9040	2113945A03	CAP, 330pF
C9041	2113945A03	CAP, 330pF
C9042	2113945A03	CAP, 330pF
C9043	2113945A03	CAP, 330pF
C9044	2113945A03	CAP, 330pF
C9045	2113945A03	CAP, 330pF
C9046	2113945A03	CAP, 330pF
C9047	2113945A03	CAP, 330pF
C9048	2113945A03	CAP, 330pF
C9049	2113945A03	CAP, 330pF

Circuit Ref	Motorola Part No.	Description
C9050	2113945A03	CAP, 330pF
C9051	NOTPLACED	NOTPLACED
C9053	NOTPLACED	NOTPLACED
C9055	NOTPLACED	NOTPLACED
C9057	NOTPLACED	NOTPLACED
C9058	2113945A03	CAP, 330pF
C9059	2113945A03	CAP, 330pF
C9060	2113945A03	CAP, 330pF
C9061	2113945A03	CAP, 330pF
C9062	2113945A03	CAP, 330pF
C9063	2113945A03	CAP, 330pF
C9064	2113945A03	CAP, 330pF
C9065	2113945A03	CAP, 330pF
C9066	2113945A03	CAP, 330pF
C9067	NOTPLACED	NOTPLACED
C9068	NOTPLACED	NOTPLACED
C9069	NOTPLACED	NOTPLACED
C9070	2113945A03	CAP, 330pF
C9071	NOTPLACED	NOTPLACED
C9072	NOTPLACED	NOTPLACED
C9073	NOTPLACED	NOTPLACED
C9074	NOTPLACED	NOTPLACED
CR900	4815897H01	UPP9401E3
CR901	4815897H01	UPP9401E3
CR902	4815897H01	UPP9401E3
CR903	4815897H01	UPP9401E3
D001	4815059H01	1SV325
D200	4815096H01	1SV305
D201	4815059H01	1SV325
D202	4815059H01	1SV325
D203	4815096H01	1SV305
D204	4815096H01	1SV305
D205	4815059H01	1SV325
D206	4815059H01	1SV325
D207	4815096H01	1SV305
D400	4815059H01	1SV325
D401	4815059H01	1SV325
D402	4813974A19	MMBD352
D403	4815059H01	1SV325
D404	4815059H01	1SV325
D405	4815923H01	HSMS2829
D600	4815096H01	1SV305
D601	4815096H01	1SV305
D3000	4813978A25	BAT54HT1G
D9000	4805729G49	BRPY1204W
D9001	4871232L01	0402ESDA

Circuit Ref	Motorola Part No.	Description
D9002	4871232L01	0402ESDA
E001	2480640Z01	BK1005HM471
E002	2480640Z01	BK1005HM472
E003	2480640Z01	BK1005HM473
E004	2480640Z01	BK1005HM474
E600	2480640Z01	BK1005HM475
E601	2480640Z01	BK1005HM476
E602	2480640Z01	BK1005HM477
E701	7686949J14	BLM21PG221SN1
E3030	2409134J04	BLM18BD601SN1
E3031	2409134J04	BLM18BD601SN2
E3032	2409134J04	BLM18BD601SN3
E3033	2409134J04	BLM18BD601SN4
E3700	7686949J08	IDCTR
E3701	7686949J08	IDCTR
E3702	7686949J08	IDCTR
E3703	7686949J08	IDCTR
E3704	7686949J08	IDCTR
E3705	7686949J08	IDCTR
E8000	7686949J08	IDCTR
E8001	7686949J08	IDCTR
E8002	NOTPLACED	NOTPLACED
E8003	7686949J08	IDCTR
E8004	7686949J08	IDCTR
E8005	7686949J08	IDCTR
E8006	7686949J08	IDCTR
E9000	7686949J14	BLM21PG221SN1
E9001	2480640Z01	BK1005HM478
E9006	NOTPLACED	NOTPLACED
E9007	NOTPLACED	NOTPLACED
F9000	6515076H02	FUSE
FL400	9180022M11	MXF45
FL8000	9180310L38	B39162-B7829-C710
FL8001	9180310L38	B39162-B7829-C710
FL9000	2515003H02	DLP11SN201HL2
J9001	0970312L02	CONN_J
L001	2415375H09	IDCTR, 2.7uH
L002	2415429H38	IDCTR, 120nH
L003	NOTPLACED	NOTPLACED
L200	2415347H01	IDCTR, 1000nH
L201	2415427H44	IDCTR, 68nH
L202	2416540H25	IDCTR, 43nH
L203	2415347H01	IDCTR, 1000nH
L204	2415347H01	IDCTR, 1000nH
L205	2415347H01	IDCTR, 1000nH
L206	2415347H01	IDCTR, 1000nH

Circuit Ref	Motorola Part No.	Description
L207	2415429H36	IDCTR, 100nH
L208	2415347H01	IDCTR, 1000nH
L209	2415427H46	IDCTR, 100nH
L210	2415718H22	IDCTR, 82nH
L211	2415347H01	IDCTR, 1000nH
L212	2415347H01	IDCTR, 1000nH
L213	2415347H01	IDCTR, 1000nH
L214	2415347H01	IDCTR, 1000nH
L215	2415429H38	IDCTR, 120nH
L217	2415347H01	IDCTR, 1000nH
L218	2415429H43	IDCTR, 220nH
L400	2479990C01	IDCTR, 13.9nH
L401	2479990C01	IDCTR, 13.9nH
L402	2415429H36	IDCTR, 100nH
L403	2414017N22	IDCTR, 68nH
L404	2415429H46	IDCTR, 330nH
L405	2415429H46	IDCTR, 330nH
L406	2415429H38	IDCTR, 120nH
L407	2415429H30	IDCTR, 47nH
L408	2479990C01	IDCTR, 13.9nH
L409	2479990C01	IDCTR, 13.9nH
L410	NOTPLACED	NOTPLACED
L411	2415429H35	IDCTR, 82nH
L412	2414017K32	IDCTR, 560nH
L413	2415429H31	IDCTR, 51nH
L414	2415429H31	IDCTR, 51nH
L415	2414017K33	IDCTR, 680nH
L416	2414017K31	IDCTR, 470nH
L417	2415718H31	IDCTR, 270nH
L418	2415429H47	IDCTR, 390nH
L420	2415427H50	IDCTR, 1.55nH
L421	2415427H50	IDCTR, 1.55nH
L600	2466505A01	IDCTR, 10uH
L601	2466505A01	IDCTR, 10uH
L602	2415569H01	IDCTR, 4.7uH
L603	2414017Q51	IDCTR, 2.2uH
L604	2414015B27	IDCTR, 390nH
L605	2415569H01	IDCTR, 4.7uH
L700	2414017N22	IDCTR, 68nH
L701	2414017N22	IDCTR, 68nH
L702	2414017N09	IDCTR, 5.6nH
L703	2414017N22	IDCTR, 68nH
L705	2479990C03	IDCTR, 13.85nH
L707	2479990A02	INDCR, .66NH
L708	2414017N15	IDCTR, 18nH
L709	2414017N11	IDCTR, 8.2nH

Circuit Ref	Motorola Part No.	Description
L710	2414017N13	IDCTR, 12nH
L712	2479990E01	IDCTR, 23.75nH
L902	2415347H01	IDCTR, 1000nH
L903	2415347H05	IDCTR, 1800nH
L904	2416066H02	IDCTR, 43nH
L905	2416066H02	IDCTR, 43nH
L906	2416066H02	IDCTR, 43nH
L907	2415347H05	IDCTR, 1800nH
L908	2416066H02	IDCTR, 43nH
L909	2416066H02	IDCTR, 43nH
L910	2416066H02	IDCTR, 43nH
L912	2414017P08	IDCTR, 3.9nH
L913	2414017P10	IDCTR, 5.6nH
L3003	2464675H01	IDCTR, 560nH
L3004	2464675H01	IDCTR, 560nH
L3020	2489846Y06	IDCTR, 10uH
L3021	2489846Y06	IDCTR, 10uH
L3022	2464675H01	IDCTR, 560nH
L8001	2414017P10	IDCTR, 5.6nH
L8002	2414017P17	IDCTR, 22nH
L8003	2414017P13	IDCTR, 10nH
L8004	2414017P10	IDCTR, 5.6nH
L9000	2471698M01	IDCTR, 3.3uH
L9001	2415429H45	IDCTR, 270nH
L9007	2415429H45	IDCTR, 270nH
L9008	2415429H45	IDCTR, 270nH
M1	4271321L01	RETAINER
M2	4271321L01	RETAINER
M700	2615193H01	HEATSINK
M9000	4371105L01	BRD_SPACER
M9001	4371105L01	BRD_SPACER
M9002	4371105L01	BRD_SPACER
M9003	NOTPLACED	NOTPLACED
M9004	NOTPLACED	NOTPLACED
M9005	3915478H01	CONTACT
M9006	3915478H01	CONTACT
M9007	0915184H01	CONTACT
P900	2815696H01	CONN_P
P9000	2887818K02	CONN_P
Q001	4885061Y01	NE68519
Q002	4815359H01	BCV62
Q003	4816134H01	DTC114YM
Q200	4815029H01	NE851M03
Q202	4815055H01	UMC5NT2G
Q203	4815055H01	UMC5NT2G
Q204	4885061Y01	NE68519

Circuit Ref	Motorola Part No.	Description
Q205	4885061Y01	NE68519
Q206	4815055H01	UMC5NT2G
Q207	4815055H01	UMC5NT2G
Q208	4885061Y01	NE68519
Q400	4816531H01	QSBT_0038
Q401	4816531H01	QSBT_0038
Q600	4813973A04	73A04
Q601	4815055H01	UMC5NT2G
Q602	4885061Y01	NE68519
Q701	4815055H01	UMC5NT2G
Q702	4815055H01	UMC5NT2G
Q703	4816547H01	RD01MUS1
Q704	4816548H01	RD07MVS1
Q900	4815055H01	UMC5NT2G
Q901	4815055H01	UMC5NT2G
Q3000	4805585Q23	SI8401DB
Q3001	4805585Q23	SI8401DB
Q3002	4816134H01	DTC114YM
Q3003	4813970A62	NTHS5441T1
Q3005	4805585Q23	SI8401DB
Q3006	4816134H01	DTC114YM
Q3010	4805585Q23	SI8401DB
Q9000	4813973M07	MMBT3904
Q9001	4815154H01	IMXFT110
Q9003	4813973M07	MMBT3904
R001	0613952Q96	RES, 9.1K
R002	0613952Q41	RES, 47
R003	0613952Q91	RES, 5.6K
R004	0613952Q66	RES, 510
R005	0613952Q56	RES, 200
R006	0613952Q93	RES, 6.8K
R007	0613952R01	RES, 10K
R008	0613952Q25	RES, 10
R010	0613952Q93	RES, 6.8K
R011	0613952Q49	RES, 100
R012	0613952R25	RES, 100K
R013	0613952Q46	RES, 75
R014	0613952Q42	RES, 51
R016	0613952Q33	RES, 22
R017	0613952Q42	RES, 51
R018	0613952Q88	RES, 4.3K
R019	0613952R01	RES, 10K
R020	0613952Q55	RES, 180
R022	0613952Q58	RES, 240
R025	0613952R13	RES, 33K
R026	0613952R01	RES, 10K

Circuit Ref	Motorola Part No.	Description
R027	0613952R66	RES, 0
R052	NOTPLACED	NOTPLACED
R053	0613952R66	RES, 0
R054	NOTPLACED	NOTPLACED
R200	0613952Q96	RES, 9.1K
R201	0613952Q89	RES, 4.7K
R202	0613952Q49	RES, 100
R203	0613952Q52	RES, 130
R205	0613952Q91	RES, 5.6K
R207	NOTPLACED	NOTPLACED
R208	0613952Q96	RES, 9.1K
R209	0613952Q89	RES, 4.7K
R210	0613952Q49	RES, 100
R211	0613952Q50	RES, 110
R212	0613952Q90	RES, 5.1K
R213	0613952Q94	RES, 7.5K
R214	0613952Q58	RES, 240
R215	NOTPLACED	NOTPLACED
R216	0613952Q58	RES, 240
R217	0613952Q95	RES, 8.2K
R218	0613952Q66	RES, 510
R220	0613952Q60	RES, 300
R221	0613952Q31	RES, 18
R222	0613952Q60	RES, 300
R400	0613952R25	RES, 100K
R401	0613952R66	RES, 0
R402	0613952R66	RES, 0
R403	0613952R66	RES, 0
R404	0613952Q75	RES, 1.2K
R405	0613952R25	RES, 100K
R406	0613952Q73	RES, 1K
R407	0613952Q42	RES, 51
R409	0613952R01	RES, 10K
R410	0613952Q77	RES, 1.5K
R411	0613952R03	RES, 12K
R412	0613952Q49	RES, 100
R413	0613952Q77	RES, 1.5K
R417	0613952R66	RES, 0
R419	0613952R66	RES, 0
R420	0613952Q74	RES, 1.1K
R421	0613952Q53	RES, 150
R422	0613952Q62	RES, 360
R424	0613952Q74	RES, 1.1K
R425	0613952R66	RES, 0
R430	0613952R66	RES, 0
R496	0613952R66	RES, 0

Circuit Ref	Motorola Part No.	Description
R497	NOTPLACED	NOTPLACED
R600	0613952R01	RES, 10K
R601	0613952Q62	RES, 360
R602	0613952Q68	RES, 620
R603	0613952R05	RES, 15K
R604	0613952Q90	RES, 5.1K
R605	0613952Q90	RES, 5.1K
R606	0613952Q73	RES, 1K
R607	0613952R25	RES, 100K
R609	0613952R01	RES, 10K
R610	0613952R01	RES, 10K
R611	0613952Q63	RES, 390
R612	0613952R08	RES, 20K
R696	0613952R66	RES, 0
R697	0613952R66	RES, 0
R698	0613952R01	RES, 10K
R699	0613952R25	RES, 100K
R700	0615043C01	RES, 0.1
R701	NOTPLACED	NOTPLACED
R702	0613952Z80	RES, 330K
R703	0613952Z80	RES, 330K
R704	NOTPLACED	NOTPLACED
R705	0613952R56	RES, 2MEG
R706	0613952R56	RES, 2MEG
R707	0613952Q81	RES, 2.2K
R708	0613952Q90	RES, 5.1K
R709	0613952R66	RES, 0
R710	NOTPLACED	NOTPLACED
R711	0613952R08	RES, 20K
R712	0613952R66	RES, 0
R713	NOTPLACED	NOTPLACED
R714	0613952Q59	RES, 270
R717	0613958H33	RES, 22
R718	0613952Q56	RES, 200
R719	0613952Q45	RES, 68
R720	0613952H56	RES, 200
R723	0613952Q50	RES, 110
R725	0613952Q85	RES, 3.3K
R726	0613952R66	RES, 0
R727	NOTPLACED	NOTPLACED
R728	0613952Q60	RES, 300
R729	0613952Q33	RES, 22
R730	0613952Q60	RES, 300
R731	0613952R17	RES, 47K
R732	NOTPLACED	NOTPLACED
R733	0613952R66	RES, 0

Circuit Ref	Motorola Part No.	Description
R902	0613952H47	RES, 82
R903	0613952H47	RES, 82
R904	0613952H47	RES, 82
R905	0613952H47	RES, 82
R906	0613952R01	RES, 10K
R907	0613952R01	RES, 10K
R908	0613952H47	RES, 82
R909	0613952H47	RES, 82
R1000	0613952Q25	RES, 10
R1001	0613952R01	RES, 10K
R1002	0613952J73	RES, 10MEG
R1005	0613952Q89	RES, 4.7K
R1006	0613952R01	RES, 10K
R1013	NOTPLACED	NOTPLACED
R1014	0613952R66	RES, 0
R1015	NOTPLACED	NOTPLACED
R1016	0613952R66	RES, 0
R1017	NOTPLACED	NOTPLACED
R1018	0613952R66	RES, 0
R1019	0613952Q18	RES, 5.1
R1020	0613952R66	RES, 0
R1021	0613952R66	RES, 0
R1022	NOTPLACED	NOTPLACED
R1023	0613952R66	RES, 0
R1025	0613952R01	RES, 10K
R1026	0613952R17	RES, 47K
R1027	NOTPLACED	NOTPLACED
R1028	0613952R66	RES, 0
R1034	0613952R01	RES, 10K
R1035	NOTPLACED	NOTPLACED
R1036	0613952R01	RES, 10K
R1041	0613952Q73	RES, 1K
R1045	0613952R01	RES, 10K
R1046	NOTPLACED	NOTPLACED
R1047	0613952R66	RES, 0
R1048	0613952R66	RES, 0
R1051	0613952R66	RES, 0
R1052	0613952R66	RES, 0
R1053	0613952Q89	RES, 4.7K
R1054	0613952Q89	RES, 4.7K
R1055	NOTPLACED	NOTPLACED
R1060	0613952Q25	RES, 10
R1061	0613952R66	RES, 0
R1062	0613952R66	RES, 0
R1063	NOTPLACED	NOTPLACED
R1065	0613952R66	RES, 0

Circuit Ref	Motorola Part No.	Description
R1067	0613952R03	RES, 12K
R1068	0613952R10	RES, 24K
R1069	0613952R66	RES, 0
R1070	0613952R01	RES, 10K
R1072	0613952R66	RES, 0
R2000	0613952R01	RES, 10K
R2004	0613952R66	RES, 0
R2005	0613952R01	RES, 10K
R2006	0613952R01	RES, 10K
R2007	0613952R01	RES, 10K
R2008	0613952R01	RES, 10K
R2009	0613952R01	RES, 10K
R2010	0613952R01	RES, 10K
R2011	0613952R66	RES, 0
R2012	0613952R01	RES, 10K
R2013	0613952R01	RES, 10K
R3004	NOTPLACED	NOTPLACED
R3005	0613952N01	RES, 10K
R3006	NOTPLACED	NOTPLACED
R3007	0613952N01	RES, 10K
R3008	NOTPLACED	NOTPLACED
R3009	0613952N01	RES, 10K
R3010	0613952N01	RES, 10K
R3011	0613952Q81	RES, 2.2K
R3012	0613952Q59	RES, 270
R3013	0613952Q81	RES, 2.2K
R3014	0613952M30	RES, 2K
R3016	0616416H01	RES, 0.1
R3017	0613952P25	RES, 178K
R3018	0613952R18	RES, 51K
R3020	0613952Q34	RES, 24
R3021	0613952Q34	RES, 24
R3023	0613952R17	RES, 47K
R3024	0613952Z67	RES, 51K
R3025	0613952Q49	RES, 100
R3026	0613952Q59	RES, 270
R3027	0613952Q59	RES, 270
R3028	0613952N69	RES, 51.1K
R3029	0613952N60	RES, 41.2K
R3030	0686135Z02	RES, 0.2
R3031	0613952R66	RES, 0
R3032	0613952Q95	RES, 8.2K
R3033	0613952R05	RES, 15K
R3034	0613952Q95	RES, 8.2K
R3035	0613952R05	RES, 15K
R3036	0613952N01	RES, 10K

Circuit Ref	Motorola Part No.	Description
R3037	0613952Q77	RES, 1.5K
R3038	NOTPLACED	NOTPLACED
R3040	0613952Q81	RES, 2.2K
R3041	0613952N01	RES, 10K
R3043	0613952R32	RES, 200K
R3050	0613952R25	RES, 100K
R3051	0613952Q89	RES, 4.7K
R3053	0613952Z58	RES, 22K
R3054	0613952Z58	RES, 22K
R3055	0613952R25	RES, 100K
R3056	NOTPLACED	NOTPLACED
R3060	0613952M30	RES, 2K
R3070	0613952R33	RES, 220K
R3071	0613952R33	RES, 220K
R3072	0613952R56	RES, 2MEG
R3073	0613952R56	RES, 2MEG
R3074	0613952Q73	RES, 1K
R3075	0613952N01	RES, 10K
R3088	NOTPLACED	NOTPLACED
R3098	0613952Q85	RES, 3.3K
R3100	0613952R17	RES, 47K
R3101	0613952R25	RES, 100K
R3102	0613952A30	RES, 2
R3103	0615049H16	RES, 0.7
R3200	0613952R33	RES, 220K
R3201	0613952R20	RES, 62K
R3202	0613952R33	RES, 220K
R3203	0613952R36	RES, 300K
R3500	0613952Q77	RES, 1.5K
R3501	0613952R66	RES, 0
R3700	0613952Q73	RES, 1K
R3701	0613952R01	RES, 10K
R3702	0613952N48	RES, 30.9K
R3703	0613952N38	RES, 24.3K
R3704	0613952R01	RES, 10K
R3800	0613952Q25	RES, 10
R3888	NOTPLACED	NOTPLACED
R8002	0613952R25	RES, 100K
R8003	0613952R01	RES, 10K
R8004	0613952Q70	RES, 750
R8010	0613952R05	RES, 15K
R8011	0613952R25	RES, 100K
R8012	0613952R01	RES, 10K
R8015	NOTPLACED	NOTPLACED
R8016	0613952R66	RES, 0
R8017	NOTPLACED	NOTPLACED

Circuit Ref	Motorola Part No.	Description
R8020	0613952R66	RES, 0
R8023	0613952R66	RES, 0
R8024	0613952R25	RES, 100K
R8025	0613952R66	RES, 0
R8026	0613952R25	RES, 100K
R8027	0613952R25	RES, 100K
R8028	0613952R25	RES, 100K
R8029	0613952R25	RES, 100K
R8030	0613952R01	RES, 10K
R8031	0613952R25	RES, 100K
R8032	0613952R25	RES, 100K
R8033	0613952R25	RES, 100K
R8034	0613952R01	RES, 10K
R8035	0613952R01	RES, 10K
R8036	0613952R01	RES, 10K
R8037	0613952R01	RES, 10K
R9000	0613952Q73	RES, 1K
R9001	0613952Q73	RES, 1K
R9002	0613952Q73	RES, 1K
R9003	0613952Q73	RES, 1K
R9004	0613952Q73	RES, 1K
R9005	0613952Q73	RES, 1K
R9006	0613952Q73	RES, 1K
R9007	0613952Q73	RES, 1K
R9008	0613952R17	RES, 47K
R9009	0613952R01	RES, 10K
R9010	0613952R01	RES, 10K
R9011	0613952R17	RES, 47K
R9012	0613952Q50	RES, 110
R9013	0613952Q37	RES, 33
R9014	0613952R01	RES, 10K
R9015	0613952R01	RES, 10K
R9016	0613952R01	RES, 10K
R9017	0613952R01	RES, 10K
R9018	0613952R01	RES, 10K
R9019	0613952Q73	RES, 1K
R9020	0613952Q89	RES, 4.7K
R9021	NOTPLACED	NOTPLACED
R9022	NOTPLACED	NOTPLACED
R9050	0613952R01	RES, 10K
R9051	0613952R01	RES, 10K
R9052	0613952Q65	RES, 470
S9000	4086470Z01	SWITCH
S9001	4015186H01	SWITCH
S9002	4015203H02	SWITCH
SH9000	NOTPLACED	NOTPLACED

Circuit Ref	Motorola Part No.	Description
SH9001	NOTPLACED	NOTPLACED
T400	2515396H01	XFMR
T401	2515396H01	XFMR
U001	5104932K08	SC51650VF
U002	5114000B59	MC74VHC1GT66
U200	5116014H01	UPC8179TK
U400	5115442H01	MAX2371
U600	5102495J14	AD9864
U700	4802246J29	ADA4743
U701	5115147H01	AD8566
U702	5115022H01	LM50
U1000	5102495J13	OMAP1710
U1005	5171209L01	TXB0104ZXUR
U1006	5115001H02	NL27WZU04
U2000	0104024J27	M58WR064FB
U2001	5171614M02	MT48H4M16LF
U3000	5185143E77	PWR_MNGR_BLOCK
U3002	5115616H01	LP8340
U3003	5115453H01	LMC6035ITLX
U3004	5114007A43	NL17SZ14
U3006	5115974H01	LP3990
U3007	5171395L01	TS5A23166
U3008	5115391H01	TK11100CSC
U3009	5164852H47	PCA9306
U3020	5171428L01	LTC1877
U3021	5171428L01	LTC1877
U3700	5116282H01	TPS79228
U3701	5116283H01	TPS79101
U8000	0104024J41	GSC3F
U8001	5164015H55	UPC8211TK
VR9000	4866544A01	SR05
VR9001	4813979P10	MMQA5V6T1
VR9002	4813979P10	MMQA5V6T1
VR9003	4815040H01	MM3Z12VT1G
VR9004	4815040H01	MM3Z12VT1G
VR9005	4805656W76	MM5Z5V6
VR9006	4805656W76	MM5Z5V6
VR9007	4805656W76	MM5Z5V6
VR9008	4813979P10	MMQA5V6T1
VR9009	4813977C23	MMSZ5243
VR9010	4813977C23	MMSZ5243
VR9015	NOTPLACED	NOTPLACED
VR9016	NOTPLACED	NOTPLACED
VR9017	4815040H01	MM3Z12VT1G
VR9018	4815040H01	MM3Z12VT1G
VR9020	4813979P10	MMQA5V6T1

Circuit Ref	Motorola Part No.	Description
VR9021	4813979P10	MMQA5V6T1
VR9022	4813979P10	MMQA5V6T1
VR9023	4815040H01	MM3Z12VT1G
Y001	5116032H01	IVT5300B
Y1000	4809612J45	CX-91F
Y3000	4802582S80	XTAL
Y3001	4815028H01	CX-101F
Y8000	4802582S80	XTAL

† For XPR 6100, P900 is changed to 2815696H02 and the following parts are not loaded: S9000, VR9005, C9023, R906, C919, L909, C920, C931, L910, C930, C904, L902, C905, CR900, L903, C900, Q901, R908, C908, R902, R903, CR901..



## VHF Radio Parts List (8415113H19)

Circuit Ref	Motorola Part No.	Description
C001	2113946D02	CAP CER CHP 1.0UF 6.3V 10%
C002	2113946D02	CAP CER CHP 1.0UF 6.3V 10%
C003	2113946K02	CAP CER CHP 0.10UF 16V
C004	2113946K02	CAP CER CHP 0.10UF 16V
C005	2113946K02	CAP CER CHP 0.10UF 16V
C006	2113946K02	CAP CER CHP 0.10UF 16V
C007	2113946K02	CAP CER CHP 0.10UF 16V
C008	2113946K02	CAP CER CHP 0.10UF 16V
C009	NOTPLACED	64AM DUMMY PART NUMBER
C010	2113946K02	CAP CER CHP 0.10UF 16V
C011	2113946K02	CAP CER CHP 0.10UF 16V
C012	2113946K02	CAP CER CHP 0.10UF 16V
C013	2113945A02	CAP CER CHP 270PF 50V 10, CAP,FXD,.01UF,+5%,-5%,50V-DC,0603,X7R,-55DEG CMIN,125DEG CMAX,P
C014	2113945L49	CAP,FXD,.01UF,+5%,-5%,50V-DC,0603,X7R,-55DEG CMIN,125DEG CMAX,P
C015	2113945L49	CAP CER CHP 1000PF 50V 10%
C016	2113945A09	CAP CER CHP 0.10UF 16V
C017	2113946K02	CAP,FXD,10UF,+10%,-10%,6.3V-DC,SM,-55DEG CMIN,125DEG CMAX,137MA
C018	2313960B57	CAP,FXD,.01UF,+5%,-5%,50V-DC,0603,X7R,-55DEG CMIN,125DEG CMAX,P
C019	2113945L49	CAP,FXD,10UF,+10%,-10%,6.3V-DC,SM,-55DEG CMIN,125DEG CMAX,137MA
C020	2313960B57	CAP CER CHP 0.10UF 16V
C022	2113946K02	PLASTIC FILM CAPACITORS
C024	2115358H17	PLASTIC FILM CAPACITORS
C025	2115358H07	PLASTIC FILM CAPACITORS
C026	2115358H15	PLASTIC FILM CAPACITORS
C027	2115358H25	PLASTIC FILM CAPACITORS
C028	2115358H01	PLASTIC FILM CAPACITORS

Circuit Ref	Motorola Part No.	Description
C031	2113945A09	CAP CER CHP 1000PF 50V 10%
C032	2113944A25	CAP CER CHP 10.0PF 50V +/- 0.5PF
C033	2113944A21	CAP CER CHP 6.8PF 50V +/- 0.5PF
C035	2113946K02	CAP CER CHP 0.10UF 16V
C036	2113946K02	CAP CER CHP 0.10UF 16V
C037	2115153H06	CAP, CERAMIC, COG
C038	NOTPLACED	64AM DUMMY PART NUMBER
C200	2113945A09	CAP CER CHP 1000PF 50V 10%
C201	2113944A25	CAP CER CHP 10.0PF 50V +/- 0.5PF
C202	2113944A25	CAP CER CHP 10.0PF 50V +/- 0.5PF
C203	2113944A11	CAP CER CHP 2.7PF 50V +/- 0.25PF
C204	2113944A25	CAP CER CHP 10.0PF 50V +/- 0.5PF
C205	2113944A30	CAP CER CHP 27.0PF 50V 5% CAP,FXD,160PF,+5%,-5%,50V-DC,0402,C0G,-55DEG CMIN,125DEG CMAX,P
C206	2113944A88	CAP,FXD,24PF,+5%,-5%,50V-DC,0402,C0G,-55DEG CMIN,125DEG CMAX,PB
C207	2113944A81	CAP CER CHP 1000PF 50V 10%
C208	2113945A09	CAP CER CHP 0.10UF 10V 10%
C209	2113946B04	CAP CER CHP 1000PF 50V 10%
C210	2113945A09	CAP CER CHP 0.10UF 10V 10%
C211	2113946B04	CAP CER CHP 2.4PF 50V +/- 0.25PF
C212	2113944A10	CAP CER CHP 2.0PF 50V +/- 0.25PF
C213	2113944A08	CAP CER CHP 1000PF 50V 10%
C214	2113945A09	CAP CER CHP 1000PF 50V 10%

Circuit Ref	Motorola Part No.	Description
C215	2113944A40	CAP CER CHP 100.0PF 50V 5%
C216	2113944A05	CAP CER CHP 1.5PF 50V +/- 0.25PF
C217	2113944A10	CAP CER CHP 2.4PF 50V +/- 0.25PF
C219	2113945A09	CAP CER CHP 1000PF 50V 10%
C220	2113944A27	CAP CER CHP 15.0PF 50V 5%
C221	2113944A27	CAP CER CHP 15.0PF 50V 5%
C222	NOTPLACED	64AM DUMMY PART NUMBER
C223	2113944A73	CAP,FXD,8PF,.5PF+/-,50V-DC,0402,C0G,-55DEG CMIN,125DEG CMAX,PB CAP,FXD,30PF,+5%,-5%,50V-DC,0402,C0G,-55DEG CMIN,125DEG CMAX,PB
C224	2113944A82	CAP,FXD,160PF,+5%,-5%,50V-DC,0402,C0G,-55DEG CMIN,125DEG CMAX,P
C225	2113944A88	CAP CER CHP 27.0PF 50V 5%
C226	2113944A30	CAP CER CHP 1000PF 50V 10%
C227	2113945A09	CAP CER CHP 0.10UF 10V 10%
C228	2113946B04	CAP CER CHP 1000PF 50V 10%
C229	2113945A09	CAP CER CHP 0.10UF 10V 10%
C230	2113946B04	CAP CER CHP 1.5PF 50V +/- 0.25PF
C231	2113944A05	CAP CER CHP 2.7PF 50V +/- 0.25PF
C232	2113944A11	CAP CER CHP 1000PF 50V 10%
C233	2113945A09	CAP CER CHP 1000PF 50V 10%
C234	2113945A09	CAP CER CHP 1000PF 50V 10%
C235	2113945A09	CAP CER CHP 1000PF 50V 10%

Circuit Ref	Motorola Part No.	Description
C236	2113944A72	CAP,FXD,7PF,.5PF+/-,50V-DC,0402,C0G,-55DEG CMIN,125DEG CMAX,PB
C237	2113944A73	CAP,FXD,8PF,.5PF+/-,50V-DC,0402,C0G,-55DEG CMIN,125DEG CMAX,PB
C238	2113945A09	CAP CER CHP 1000PF 50V 10%
C239	2113945A09	CAP CER CHP 1000PF 50V 10%
C240	2113944A08	CAP CER CHP 2.0PF 50V +/- 0.25PF
C241	2113944A05	CAP CER CHP 1.5PF 50V +/- 0.25PF
C243	NOTPLACED	64AM DUMMY PART NUMBER
C400	2113944A36	CAP CER CHP 68.0PF 50V 5%
C401	2113944A30	CAP CER CHP 27.0PF 50V 5%
C402	2113944A26	CAP CER CHP 12.0PF 50V 5%
C403	2113944A30	CAP CER CHP 27.0PF 50V 5%
C404	2113944A36	CAP CER CHP 68.0PF 50V 5%
C405	2113944A41	CAP CER CHP 120.0PF 50V 5%
C406	2113944A41	CAP CER CHP 120.0PF 50V 5%
C408	2113944A52	CAP CER CHP 1000.0 PF 50V 5%
C409	2113944A17	CAP CER CHP 4.7PF 50V +/- 0.25PF
C410	2113944A63	CAP,FXD,1PF,.25PF+/-,50V-DC,0402,C0G,-55DEG CMIN,125DEG CMAX,P
C411	2113944A52	CAP CER CHP 1000.0 PF 50V 5%
C412	2113944A52	CAP CER CHP 1000.0 PF 50V 5%
C413	2113946K02	CAP CER CHP 0.10UF 16V
C414	2113944A52	CAP CER CHP 1000.0 PF 50V 5%
C415	2113946K02	CAP CER CHP 0.10UF 16V

Circuit Ref	Motorola Part No.	Description
C416	2113944A52	CAP CER CHP 1000.0 PF 50V 5%
C417	2113944A09	CAP CER CHP 2.2PF 50V +/- 0.25PF
C418	2113944A19	CAP CER CHP 5.6PF 50V +/- 0.5PF
C419	2113944A77	CAP,FXD,11PF,+5%,-5%,50V-DC,0402,C0G,-55DEG CMIN,125DEG CMAX,PB
C420	2113944A24	CAP CER CHP 9.1PF 50V +/- 0.5PF
C421	2113945B02	CAP CER CHP 10,000PF 25V 10%
C422	2113946K02	CAP CER CHP 0.10UF 16V
C423	2113944A36	CAP CER CHP 68.0PF 50V 5%
C424	2113944A30	CAP CER CHP 27.0PF 50V 5%
C425	2113944A26	CAP CER CHP 12.0PF 50V 5%
C426	0613952R66	CER CHIP RES 0.0 +/-0.050 OHM
C427	2113944A88	CAP,FXD,160PF,+5%,-5%,50V-DC,0402,C0G,-55DEG CMIN,125DEG CMAX,P
C428	2113944A28	CAP CER CHP 18.0PF 50V 5%
C429	2113944A77	CAP,FXD,11PF,+5%,-5%,50V-DC,0402,C0G,-55DEG CMIN,125DEG CMAX,PB
C430	2113944A29	CAP CER CHP 22.0PF 50V 5%
C431	2113944A77	CAP,FXD,11PF,+5%,-5%,50V-DC,0402,C0G,-55DEG CMIN,125DEG CMAX,PB
C432	2113944A80	CAP,FXD,20PF,+5%,-5%,50V-DC,0402,C0G,-55DEG CMIN,125DEG CMAX,PB

Circuit Ref	Motorola Part No.	Description
C433	2113944A80	CAP,FXD,20PF,+5%,-5%,50V-DC,0402,C0G,-55DEG CMIN,125DEG CMAX,PB
C434	2113946K02	CAP CER CHP 0.10UF 16V
C435	2113944A40	CAP CER CHP 100.0PF 50V 5%
C436	2113946K02	CAP CER CHP 0.10UF 16V
C437	2113945B02	CAP CER CHP 10,000PF 25V 10%
C438	2113946K02	CAP CER CHP 0.10UF 16V
C439	2113944A22	CAP CER CHP 7.5PF 50V +/- 0.5PF
C440	2113944A82	CAP,FXD,30PF,+5%,-5%,50V-DC,0402,C0G,-55DEG CMIN,125DEG CMAX,PB
C441	NOTPLACED	64AM DUMMY PART NUMBER
C442	2113945B02	CAP CER CHP 10,000PF 25V 10%
C444	2113946K02	CAP CER CHP 0.10UF 16V
C445	NOTPLACED	64AM DUMMY PART NUMBER
C446	2113944A27	CAP CER CHP 15.0PF 50V 5%
C447	2113944A30	CAP CER CHP 27.0PF 50V 5%
C448	2113944A36	CAP CER CHP 68.0PF 50V 5%
C449	2113944A52	CAP CER CHP 1000.0 PF 50V 5%
C450	2113944A41	CAP CER CHP 120.0PF 50V 5%
C451	2113944A41	CAP CER CHP 120.0PF 50V 5%
C601	2113945B02	CAP CER CHP 10,000PF 25V 10%
C602	2113946B04	CAP CER CHP 0.10UF 10V 10%
C603	2113946B04	CAP CER CHP 0.10UF 10V 10%
C604	2113945B02	CAP CER CHP 10,000PF 25V 10%
C605	2113945B02	CAP CER CHP 10,000PF 25V 10%

Circuit Ref	Motorola Part No.	Description
C606	2113944A36	CAP CER CHP 68.0PF 50V 5%
C607	2113945B02	CAP CER CHP 10,000PF 25V 10%
C608	2113945D02	CAP CER CHP 47,000PF 25V 10%
C609	2115153H57	CAP, CERAMIC, COG
C610	2115153H53	CAP, CERAMIC, COG
C611	2115153H48	CAP, CERAMIC, COG
C612	2115153H55	CAP, CERAMIC, COG
C613	2113945G91	CAP,FXD,.1UF,+10%,-10%,50V-DC,0805,X7R,-55DEG CMIN,125DEG CMAX
C614	2113946E02	CAP CER CHP 1.0UF 16V 10%
C615	2113946B04	CAP CER CHP 0.10UF 10V 10%
C616	2113944A32	CAP CER CHP 39.0PF 50V 5%
C617	2113945L37	CAP,FXD,3300PF,+5%,-5%,50V-DC,0603,X7R,-55DEG CMIN,125DEG CMAX
C618	2113945C18	CAP,FXD,.012UF,+10%,-10%,50V-DC,0603,X7R,-55DEG CMIN,125DEG CMA
C619	2115358H13	PLASTIC FILM CAPACITORS
C620	2113946B04	CAP CER CHP 0.10UF 10V 10%
C621	2113945B02	CAP CER CHP 10,000PF 25V 10%
C622	2113944C89	CAP,FXD,200PF,+5%,-5%,50V-DC,0603,C0G,-55DEG CMIN,125DEG CMAX,P
C623	2113944A40	CAP CER CHP 100.0PF 50V 5%
C624	2113944A40	CAP CER CHP 100.0PF 50V 5%
C625	2113945A11	CAP CER CHP 2200PF 50V 10%
C626	2113945D02	CAP CER CHP 47,000PF 25V 10%
C627	2113944A40	CAP CER CHP 100.0PF 50V 5%
C628	2113945B02	CAP CER CHP 10,000PF 25V 10%

Circuit Ref	Motorola Part No.	Description
C629	2113944A40	CAP CER CHP 100.0PF 50V 5%
C630	2113945B02	CAP CER CHP 10,000PF 25V 10%
C631	2113945B02	CAP CER CHP 10,000PF 25V 10%
C632	2113946B04	CAP CER CHP 0.10UF 10V 10%
C633	2113946B04	CAP CER CHP 0.10UF 10V 10%
C634	2113945B02	CAP CER CHP 10,000PF 25V 10%
C635	2113944A85	CAP,FXD,51PF,+5%,-5%,50V-DC,0402,C0G,-55DEG CMIN,125DEG CMAX,PB
C636	2113946B04	CAP CER CHP 0.10UF 10V 10%
C637	2113946G04	CAP,FXD,.68UF,+10%,-10%,16V-DC,1206,X5R,-55DEG CMIN,85DEG CMAX
C638	NOTPLACED	64AM DUMMY PART NUMBER
C639	2113946B04	CAP CER CHP 0.10UF 10V 10%
C700	2316410H03	EPP POSCAP
C703	2113944A52	CAP CER CHP 1000.0 PF 50V 5%
C704	2113944A52	CAP CER CHP 1000.0 PF 50V 5%
C705	2113946B02	CAP CER CHP 0.047UF 10V 10,
C706	2113944A52	CAP CER CHP 1000.0 PF 50V 5%
C707	2113944A31	CAP CER CHP 33.0PF 50V 5%
C708	2113944A52	CAP CER CHP 1000.0 PF 50V 5%
C709	2113945B02	CAP CER CHP 10,000PF 25V 10%
C710	2113945B02	CAP CER CHP 10,000PF 25V 10%
C711	2113944A52	CAP CER CHP 1000.0 PF 50V 5%

Circuit Ref	Motorola Part No.	Description
C712	2113945B04	CAP,FXD,.022UF,+10%,-10%,25V-DC,0402,X7R,-55DEG CMIN,125DEG CMA
C714	2113945A03	CAP CER CHP 330PF 50V 10%
C715	2113944A31	CAP CER CHP 33.0PF 50V 5%
C717	2113945A03	CAP CER CHP 330PF 50V 10%
C718	2113946K02	CAP CER CHP 0.10UF 16V
C719	2113944A52	CAP CER CHP 1000.0 PF 50V 5%
C720	2113945B04	CAP,FXD,.022UF,+10%,-10%,25V-DC,0402,X7R,-55DEG CMIN,125DEG CMA
C721	2113945D04	CAP CER CHP 100,000PF 25V 10%
C722	2113945A09	CAP CER CHP 1000PF 50V 10%
C724	2113944C82	CAP,FXD,30PF,+5%,-5%,50V-DC,0603,C0G,-55DEG CMIN,125DEG CMAX,PB
C726	2113944C84	CAP,FXD,43PF,+5%,-5%,50V-DC,0603,C0G,-55DEG CMIN,125DEG CMAX,PB
C729	2113944A52	CAP CER CHP 1000.0 PF 50V 5%
C730	2113946B04	CAP CER CHP 0.10UF 10V 10%
C731	2113946B04	<b>CAP CER CHP 0.10UF 10V 10%</b>
C732	2111078B53	CAP CHIP RF 270 5 NPO 100V
C733	2113944C43	CAP CER CHP 82.0PF 50V 5%
C734	2113945A03	CAP CER CHP 330PF 50V 10%
C735	2113944C82	CAP,FXD,30PF,+5%,-5%,50V-DC,0603,C0G,-55DEG CMIN,125DEG CMAX,PB
C736	2113945A03	CAP CER CHP 330PF 50V 10%
C737	2113945A09	CAP CER CHP 1000PF 50V 10%

Circuit Ref	Motorola Part No.	Description
C738	2113945A03	CAP CER CHP 330PF 50V 10%
C739	2113944C32	CAP CER CHP 15.0PF 50V 5%
C777	2113944C41	CAP CER CHP 68.0PF 50V 5%
C778	2113944C41	CAP CER CHP 68.0PF 50V 5%
C797	2113944C32	CAP CER CHP 15.0PF 50V 5%
C798	2113944C43	CAP CER CHP 82.0PF 50V 5%
C799	2113944C32	CAP CER CHP 15.0PF 50V 5%
C900	2113945B04	CAP,FXD,.022UF,+10%,-10%,25V-DC,0402,X7R,-55DEG CMIN,125DEG CMA
C904	2113944C80	CAP,FXD,20PF,+5%,-5%,50V-DC,0603,C0G,-55DEG CMIN,125DEG CMAX,PB
C905	2113944C04	CAP CER CHP 330.0PF 50V 5%
C906	2113944C74	CAP,FXD,7.5PF,.25PF+/-,50V-DC,0603,C0G,-55DEG CMIN,125DEG CMAX
C907	2113944C81	CAP,FXD,24PF,+5%,-5%,50V-DC,0603,C0G,-55DEG CMIN,125DEG CMAX,PB
C908	2113945B04	CAP,FXD,.022UF,+10%,-10%,25V-DC,0402,X7R,-55DEG CMIN,125DEG CMA
C909	2113944C85	CAP,FXD,51PF,+5%,-5%,50V-DC,0603,C0G,-55DEG CMIN,125DEG CMAX,PB
C911	2113944C33	CAP CER CHP 18.0PF 50V 5%
C912	2113944C29	CAP CER CHP 9.1PF 50V +/- 0.5PF
C913	2113944C38	CAP CER CHP 56.0PF 50V 5%CAP CER CHP 47.0PF 50V 5%

Circuit Ref	Motorola Part No.	Description
C914	2113945B04	CAP,FXD,.022UF,+10%,-10%,25V-DC,0402,X7R,-55DEG CMIN,125DEG CMA
C915	2113944C30	CAP CER CHP 10.0PF 50V +/- 0.5PF
C916	2113944C78	CAP,FXD,13PF,+5%,-5%,50V-DC,0603,C0G,-55DEG CMIN,125DEG CMAX,PB
C918	2113944C04	CAP CER CHP 330.0PF 50V 5%
C919	2113944C33	CAP CER CHP 18.0PF 50V 5%
C920	2113944C35	CAP CER CHP 27.0PF 50V 5%
C924	2113944A20	CAP CER CHP 6.2PF 50V +/- 0.5PF
C925	2113944V07	CAP,FXD,1.5PF,.1PF+/-,50V-DC,0402,C0G,-55DEG CMIN,125DEG CMAX
C926	2113944A15	CAP CER CHP 3.9PF 50V +/- 0.25PF
C927	2113945A01	CAP CER CHP 220PF 50V 10,
C928	2113944C74	CAP,FXD,7.5PF,.25PF+/-,50V-DC,0603,C0G,-55DEG CMIN,125DEG CMAX
C929	2113944C22	CAP CER CHP 4.7PF 50V +/- 0.25PF
C930	2113944C28	CAP CER CHP 8.2PF 50V +/- 0.5PF
C931	2113944C20	CAP CER CHP 3.9PF 50V +/- 0.25PF
C933	2113945B04	CAP,FXD,.022UF,+10%,-10%,25V-DC,0402,X7R,-55DEG CMIN,125DEG CMA
C1000	2113945A03	CAP CER CHP 330PF 50V 10%
C1001	2113946K02	CAP CER CHP 0.10UF 16V
C1002	2113946K02	CAP CER CHP 0.10UF 16V
C1003	2113945A03	CAP CER CHP 330PF 50V 10%
C1004	2113945A03	CAP CER CHP 330PF 50V 10%
C1005	2113946K02	CAP CER CHP 0.10UF 16V
C1006	2113946K02	CAP CER CHP 0.10UF 16V

Circuit Ref	Motorola Part No.	Description
C1007	2113945A03	CAP CER CHP 330PF 50V 10%
C1008	2113945A03	CAP CER CHP 330PF 50V 10%
C1009	2113946K02	CAP CER CHP 0.10UF 16V
C1010	2113946K02	CAP CER CHP 0.10UF 16V
C1011	2113945A03	CAP CER CHP 330PF 50V 10%
C1012	2113946K02	CAP CER CHP 0.10UF 16V
C1013	2113946K02	CAP CER CHP 0.10UF 16V
C1014	2113946K02	CAP CER CHP 0.10UF 16V
C1015	2113946K02	CAP CER CHP 0.10UF 16V
C1016	2113946B04	CAP CER CHP 0.10UF 10V 10%
C1017	2113946E02	CAP CER CHP 1.0UF 16V 10%
C1018	2113944A28	CAP CER CHP 18.0PF 50V 5%
C1019	2113944A28	CAP CER CHP 18.0PF 50V 5%
C1028	2113946K02	CAP CER CHP 0.10UF 16V
C1029	2113946K02	CAP CER CHP 0.10UF 16V
C1030	2113944A28	CAP CER CHP 18.0PF 50V 5%
C1031	2113946K02	CAP CER CHP 0.10UF 16V
C1032	2113945B02	CAP CER CHP 10,000PF 25V 10%
C1033	2113946K02	CAP CER CHP 0.10UF 16V
C1044	2113946B04	CAP CER CHP 0.10UF 10V 10%
C2000	2113945A03	CAP CER CHP 330PF 50V 10%
C2001	2113945B02	CAP CER CHP 10,000PF 25V 10%
C2002	2113946K02	CAP CER CHP 0.10UF 16V
C2003	2113946K02	CAP CER CHP 0.10UF 16V
C2004	2113945A03	CAP CER CHP 330PF 50V 10%
C2005	2113945B02	CAP CER CHP 10,000PF 25V 10%
C2006	2113946K02	CAP CER CHP 0.10UF 16V
C2007	2113946K02	CAP CER CHP 0.10UF 16V
C3000	2113944A78	CAP,FXD,13PF,+5%,-5%,50V-DC,0402,C0G,-55DEG CMIN,125DEG CMAX,PB

Circuit Ref	Motorola Part No.	Description
C3001	2113944A78	CAP,FXD,13PF,+5%,-5%,50V-DC,0402,C0G,-55DEG CMIN,125DEG CMAX,PB
C3002	2113945D04	CAP CER CHP 100,000PF 25V 10%
C3003	2113946D05	CAP,CHIP,2.2UF,+10%,-10%,6.3V-DC,0603,X5R,-55DEG CMIN,85DEG CMA
C3004	2113946D05	CAP,CHIP,2.2UF,+10%,-10%,6.3V-DC,0603,X5R,-55DEG CMIN,85DEG CMA
C3005	2113945A09	CAP CER CHP 1000PF 50V 10%
C3010	2113946D05	CAP,CHIP,2.2UF,+10%,-10%,6.3V-DC,0603,X5R,-55DEG CMIN,85DEG CMA
C3011	2113946A01	CAP CER CHP 0.015UF 16V 10%
C3014	2113946D05	CAP,CHIP,2.2UF,+10%,-10%,6.3V-DC,0603,X5R,-55DEG CMIN,85DEG CMA
C3015	2115153H57	CAP, CERAMIC, COG
C3016	2113946D05	CAP,CHIP,2.2UF,+10%,-10%,6.3V-DC,0603,X5R,-55DEG CMIN,85DEG CMA
C3017	2113945B02	CAP CER CHP 10,000PF 25V 10%
C3018	2113946D05	CAP,CHIP,2.2UF,+10%,-10%,6.3V-DC,0603,X5R,-55DEG CMIN,85DEG CMA
C3019	2113946D02	CAP CER CHP 1.0UF 6.3V 10%
C3024	2113946D02	CAP CER CHP 1.0UF 6.3V 10%
C3025	2113946K02	CAP CER CHP 0.10UF 16V
C3026	2113946K02	CAP CER CHP 0.10UF 16V
C3028	2113946D05	CAP,CHIP,2.2UF,+10%,-10%,6.3V-DC,0603,X5R,-55DEG CMIN,85DEG CMA
C3031	2113946D02	CAP CER CHP 1.0UF 6.3V 10%
C3034	2113946B04	CAP CER CHP 0.10UF 10V 10%
C3035	2113946B04	CAP CER CHP 0.10UF 10V 10%

Circuit Ref	Motorola Part No.	Description
C3036	2113946B04	CAP CER CHP 0.10UF 10V 10%
C3037	2113944A40	CAP CER CHP 100.0PF 50V 5%
C3038	2113944A40	CAP CER CHP 100.0PF 50V 5%
C3039	2113946F03	CAP CER CHP 4.7UF 6.3V 10%
C3045	2113946F05	CAP,CHIP,10UF,+10%,-10%,6.3V-DC,0805,X5R,-55DEG CMIN,85DEG CMAX
C3047	2113946D02	CAP CER CHP 1.0UF 6.3V 10%
C3048	2113946D02	CAP CER CHP 1.0UF 6.3V 10%
C3049	2113945C25	CAP,FXD,.033UF,+10%,-10%,50V-DC,0603,X7R,-55DEG CMIN,125DEG CMA
C3050	2113945C25	CAP,FXD,.033UF,+10%,-10%,50V-DC,0603,X7R,-55DEG CMIN,125DEG CMA
C3051	2113944A40	CAP CER CHP 100.0PF 50V 5%
C3060	2113944A80	CAP,FXD,20PF,+5%,-5%,50V-DC,0402,C0G,-55DEG CMIN,125DEG CMAX,PB
C3061	2113944A80	CAP,FXD,20PF,+5%,-5%,50V-DC,0402,C0G,-55DEG CMIN,125DEG CMAX,PB
C3062	2113946K02	CAP CER CHP 0.10UF 16V
C3063	2113946K02	CAP CER CHP 0.10UF 16V
C3067	2113946D02	CAP CER CHP 1.0UF 6.3V 10%
C3070	2113944A25	CAP CER CHP 10.0PF 50V +/- 0.5PF
C3074	2113946D02	CAP CER CHP 1.0UF 6.3V 10%
C3079	2113946F03	CAP CER CHP 4.7UF 6.3V 10%
C3080	NOTPLACED	64AM DUMMY PART NUMBER
C3081	2113946F03	CAP CER CHP 4.7UF 6.3V 10%

Circuit Ref	Motorola Part No.	Description
C3082	2113945Y02	CAP,FXD,.1UF,+10%,-10%,16V-DC,0402,X7R,-55DEG CMIN,125DEG CMAX
C3083	2113945Y02	CAP,FXD,.1UF,+10%,-10%,16V-DC,0402,X7R,-55DEG CMIN,125DEG CMAX
C3084	2113946K03	CAP,FXD,.22UF,+80%,-20%,16V-DC,0402,Y5V,-30DEG CMIN,85DEG CMAX
C3090	2113955D37	CAP,FXD,10UF,+10%,-10%,16V-DC,1206,X7R,-55DEG CMIN,125DEG CMAX
C3091	2113955D37	CAP,FXD,10UF,+10%,-10%,16V-DC,1206,X7R,-55DEG CMIN,125DEG CMAX
C3093	2113946N03	CAP CER CHP 2.2UF 16V
C3094	2113946B04	CAP CER CHP 0.10UF 10V 10%
C3095	2113946B04	CAP CER CHP 0.10UF 10V 10%
C3097	2113944A31	CAP CER CHP 33.0PF 50V 5%
C3098	2113944A31	CAP CER CHP 33.0PF 50V 5%
C3099	2113944A31	CAP CER CHP 33.0PF 50V 5%
C3100	2113944A31	CAP CER CHP 33.0PF 50V 5%
C3101	2113946D02	CAP CER CHP 1.0UF 6.3V 10%
C3102	2113946D02	CAP CER CHP 1.0UF 6.3V 10%
C3200	2113945Y02	CAP,FXD,.1UF,+10%,-10%,16V-DC,0402,X7R,-55DEG CMIN,125DEG CMAX
C3201	2113955D37	CAP,FXD,10UF,+10%,-10%,16V-DC,1206,X7R,-55DEG CMIN,125DEG CMAX
C3202	2371572L02	POSCAP 68UF 6TPB68M
C3203	2113945B02	CAP CER CHP 10,000PF 25V 10%
C3204	2115153H40	CAP, CERAMIC, COG
C3205	2113945A11	CAP CER CHP 2200PF 50V 10%

Circuit Ref	Motorola Part No.	Description
C3206	2113945Y02	CAP,FXD,.1UF,+10%,-10%,16V-DC,0402,X7R,-55DEG CMIN,125DEG CMAX
C3207	2113955D37	CAP,FXD,10UF,+10%,-10%,16V-DC,1206,X7R,-55DEG CMIN,125DEG CMAX
C3208	2113946K03	CAP,FXD,.22UF,+80%,-20%,16V-DC,0402,Y5V,-30DEG CMIN,85DEG CMAX
C3209	2316410H01	POSCAP 22UF 8TPC22M
C3210	2113945B02	CAP CER CHP 10,000PF 25V 10%
C3211	2115153H40	CAP, CERAMIC, COG
C3212	2113944A44	CAP CER CHP 220.0 PF 50V 5%
C3700	2113946D02	CAP CER CHP 1.0UF 6.3V 10%
C3701	2113945B02	CAP CER CHP 10,000PF 25V 10%
C3702	2113946D05	CAP,CHIP,2.2UF,+10%,-10%,6.3V-DC,0603,X5R,-55DEG CMIN,85DEG CMA
C3703	2113946D02	CAP CER CHP 1.0UF 6.3V 10%
C3704	2113944A30	CAP CER CHP 27.0PF 50V 5%
C3705	2113945B02	CAP CER CHP 10,000PF 25V 10%
C3706	2113945A05	CAP CER CHP 470PF 50V 10%
C3707	2113946D05	CAP,CHIP,2.2UF,+10%,-10%,6.3V-DC,0603,X5R,-55DEG CMIN,85DEG CMA
C3800	2113945D04	CAP CER CHP 100,000PF 25V 10%
C3805	2113946K03	CAP,FXD,.22UF,+80%,-20%,16V-DC,0402,Y5V,-30DEG CMIN,85DEG CMAX
C3999	2113945B02	CAP CER CHP 10,000PF 25V 10%
C8000	2113946F05	CAP,CHIP,10UF,+10%,-10%,6.3V-DC,0805,X5R,-55DEG CMIN,85DEG CMAX
C8001	2113944A28	CAP CER CHP 18.0PF 50V 5%

Circuit Ref	Motorola Part No.	Description
C8002	2113944A52	CAP CER CHP 1000.0 PF 50V 5%
C8003	2113946F05	CAP,CHIP,10UF,+10%,-10%,6.3V-DC,0805,X5R,-55DEG CMIN,85DEG CMAX
C8004	2113944A28	CAP CER CHP 18.0PF 50V 5%
C8005	NOTPLACED	64AM DUMMY PART NUMBER
C8006	NOTPLACED	64AM DUMMY PART NUMBER
C8013	2113944A08	CAP CER CHP 2.0PF 50V +/-0.25PF
C8014	2113944A62	CAP,FXD,.75PF,.25PF+/-,50V-DC,0402,C0G,-55DEG CMIN,125DEG CMAX
C8015	2113946K02	CAP CER CHP 0.10UF 16V
C8016	2113945A09	CAP CER CHP 1000PF 50V 10%
C8017	2113944A28	CAP CER CHP 18.0PF 50V 5%
C8018	2113944A28	CAP CER CHP 18.0PF 50V 5%
C8019	2113944A11	CAP CER CHP 2.7PF 50V +/-0.25PF
C8020	2113944A52	CAP CER CHP 1000.0 PF 50V 5%
C8021	2113946K02	CAP CER CHP 0.10UF 16V
C8022	2113946D05	CAP,CHIP,2.2UF,+10%,-10%,6.3V-DC,0603,X5R,-55DEG CMIN,85DEG CMA
C8023	2113945B02	CAP CER CHP 10,000PF 25V 10%
C8029	2113944A52	CAP CER CHP 1000.0 PF 50V 5%
C8030	2113944A28	CAP CER CHP 18.0PF 50V 5%
C8031	2113946D05	CAP,CHIP,2.2UF,+10%,-10%,6.3V-DC,0603,X5R,-55DEG CMIN,85DEG CMA
C8032	2113945B02	CAP CER CHP 10,000PF 25V 10%
C8033	2113944A28	CAP CER CHP 18.0PF 50V 5%
C8034	2113944A28	CAP CER CHP 18.0PF 50V 5%

Circuit Ref	Motorola Part No.	Description
C8035	2113944A31	CAP CER CHP 33.0PF 50V 5%
C8036	2113944A52	CAP CER CHP 1000.0 PF 50V 5%
C9000	2113945A03	CAP CER CHP 330PF 50V 10%
C9001	2113945A03	CAP CER CHP 330PF 50V 10%
C9002	2113945A03	CAP CER CHP 330PF 50V 10%
C9003	2113945A03	CAP CER CHP 330PF 50V 10%
C9004	2113945A03	CAP CER CHP 330PF 50V 10%
C9005	2113945A03	CAP CER CHP 330PF 50V 10%
C9006	2113945A03	CAP CER CHP 330PF 50V 10%
C9007	2113945A03	CAP CER CHP 330PF 50V 10%
C9008	2113945A03	CAP CER CHP 330PF 50V 10%
C9009	2113945A03	CAP CER CHP 330PF 50V 10%
C9010	2113945A03	CAP CER CHP 330PF 50V 10%
C9011	2113945A03	CAP CER CHP 330PF 50V 10%
C9012	2113945A03	CAP CER CHP 330PF 50V 10%
C9013	2113945A03	CAP CER CHP 330PF 50V 10%
C9014	2113945A03	CAP CER CHP 330PF 50V 10%
C9015	2113945A03	CAP CER CHP 330PF 50V 10%
C9016	2113945A03	CAP CER CHP 330PF 50V 10%
C9017	2113945A03	CAP CER CHP 330PF 50V 10%
C9018	2113945A03	CAP CER CHP 330PF 50V 10%
C9019	2113945A03	CAP CER CHP 330PF 50V 10%
C9020	2113945A03	CAP CER CHP 330PF 50V 10%

Circuit Ref	Motorola Part No.	Description
C9021	2113945A03	CAP CER CHP 330PF 50V 10%
C9022	2113945A03	CAP CER CHP 330PF 50V 10%
C9023	2113945A03	CAP CER CHP 330PF 50V 10%
C9024	2113945A03	CAP CER CHP 330PF 50V 10%
C9025	2113945A03	CAP CER CHP 330PF 50V 10%
C9026	2113945A03	CAP CER CHP 330PF 50V 10%
C9027	2113945A03	CAP CER CHP 330PF 50V 10%
C9028	2113945A03	CAP CER CHP 330PF 50V 10%
C9029	2113945A03	CAP CER CHP 330PF 50V 10%
C9030	2113944A15	CAP CER CHP 3.9PF 50V +/-0.25PF
C9031	2113944A15	CAP CER CHP 3.9PF 50V +/-0.25PF
C9032	2113944A15	CAP CER CHP 3.9PF 50V +/-0.25PF
C9033	2113945A03	CAP CER CHP 330PF 50V 10%
C9038	2113945A03	CAP CER CHP 330PF 50V 10%
C9039	2113945A03	CAP CER CHP 330PF 50V 10%
C9040	2113945A03	CAP CER CHP 330PF 50V 10%
C9041	2113945A03	CAP CER CHP 330PF 50V 10%
C9042	2113945A03	CAP CER CHP 330PF 50V 10%
C9043	2113945A03	CAP CER CHP 330PF 50V 10%
C9044	2113945A03	CAP CER CHP 330PF 50V 10%
C9045	2113945A03	CAP CER CHP 330PF 50V 10%
C9046	2113945A03	CAP CER CHP 330PF 50V 10%
C9047	2113945A03	CAP CER CHP 330PF 50V 10%

Circuit Ref	Motorola Part No.	Description
C9048	2113945A03	CAP CER CHP 330PF 50V 10%
C9049	2113945A03	CAP CER CHP 330PF 50V 10%
C9050	2113945A03	CAP CER CHP 330PF 50V 10%
C9051	NOTPLACED	64AM DUMMY PART NUMBER
C9053	NOTPLACED	64AM DUMMY PART NUMBER
C9055	NOTPLACED	64AM DUMMY PART NUMBER
C9057	NOTPLACED	64AM DUMMY PART NUMBER
C9058	2113945A03	CAP CER CHP 330PF 50V 10%
C9059	2113945A03	CAP CER CHP 330PF 50V 10%
C9060	2113945A03	CAP CER CHP 330PF 50V 10%
C9061	2113945A03	CAP CER CHP 330PF 50V 10%
C9062	2113945A03	CAP CER CHP 330PF 50V 10%
C9063	2113945A03	CAP CER CHP 330PF 50V 10%
C9064	2113945A03	CAP CER CHP 330PF 50V 10%
C9065	2113945A03	CAP CER CHP 330PF 50V 10%
C9066	2113945A03	CAP CER CHP 330PF 50V 10%
C9067	NOTPLACED	64AM DUMMY PART NUMBER
C9068	NOTPLACED	64AM DUMMY PART NUMBER
C9069	NOTPLACED	64AM DUMMY PART NUMBER
C9070	2113945A03	CAP CER CHP 330PF 50V 10%
C9071	NOTPLACED	64AM DUMMY PART NUMBER
C9072	NOTPLACED	64AM DUMMY PART NUMBER

Circuit Ref	Motorola Part No.	Description
C9073	2313960C26	CAP,FXD,1UF,+10%,-10%,35V-DC,SM,-55DEG CMIN,125DEG CMAX,114MA
C9074	2313960A55	CAP,FXD,.47UF,+10%,-10%,25V-DC,SM,-55DEG CMIN,125DEG CMAX,73MA
CR900	4815897H01	PIN DIODE
CR901	4815897H01	PIN DIODE
CR902	4815897H01	PIN DIODE
CR903	4815897H01	PIN DIODE
D001	4815059H01	TOSHIBA VARACTOR DIODE
D200	4815096H01	VARACTOR DIODE 1SV305
D201	4815059H01	TOSHIBA VARACTOR DIODE
D202	4815059H01	TOSHIBA VARACTOR DIODE
D203	4815096H01	VARACTOR DIODE 1SV305
D204	4815096H01	VARACTOR DIODE 1SV305
D205	4815059H01	TOSHIBA VARACTOR DIODE
D206	4815059H01	TOSHIBA VARACTOR DIODE
D207	4815096H01	VARACTOR DIODE 1SV305
D400	4815059H01	TOSHIBA VARACTOR DIODE
D401	4815059H01	TOSHIBA VARACTOR DIODE
D402	4813974A19	DIODE ARRAY,MXR,SM,SOT-323,7V,.2W,SHTK,2,PB-FREE
D403	4815059H01	TOSHIBA VARACTOR DIODE
D404	4815059H01	TOSHIBA VARACTOR DIODE
D405	4815923H01	SCHOTTKY DIODE-NEW LEADFREE
D600	4815096H01	VARACTOR DIODE 1SV305
D601	4875539M01	VARACTOR DIODE 1SV323
D3000	4813978A25	SCHOTTKY 30V SOD-323 T&R PB FREE
D9000	4805729G49	DIODE RED/YEL
D9001	4871232L01	COOPER BUSSMANN 0402ESDA-MLP

Circuit Ref	Motorola Part No.	Description
D9002	4871232L01	COOPER BUSSMANN 0402ESDA-MLP
E001	2480640Z01	SURFACE MOUNT FERRITE BEAD
E002	2480640Z01	SURFACE MOUNT FERRITE BEAD
E003	2480640Z01	SURFACE MOUNT FERRITE BEAD
E004	2480640Z01	SURFACE MOUNT FERRITE BEAD
E600	2480640Z01	SURFACE MOUNT FERRITE BEAD
E601	2480640Z01	SURFACE MOUNT FERRITE BEAD
E602	2480640Z01	SURFACE MOUNT FERRITE BEAD
E701	7686949J14	FLTR,FERRITE BEAD,,,,2A,,,,SM,0805,,CHIP ,220OHM
E3030	2409134J04	IND CHIP FER FLTR 600 0603 (000)
E3031	2409134J04	IND CHIP FER FLTR 600 0603 (000)
E3032	2409134J04	IND CHIP FER FLTR 600 0603 (000)
E3033	2409134J04	IND CHIP FER FLTR 600 0603 (000)
E3700	7686949J08	FLTR,FERR,,,,1A,,,,SM,0603
E3701	7686949J08	FLTR,FERR,,,,1A,,,,SM,0603
E3702	7686949J08	FLTR,FERR,,,,1A,,,,SM,0603
E3703	7686949J08	FLTR,FERR,,,,1A,,,,SM,0603
E3704	7686949J08	FLTR,FERR,,,,1A,,,,SM,0603
E3705	7686949J08	FLTR,FERR,,,,1A,,,,SM,0603
E8000	7686949J08	FLTR,FERR,,,,1A,,,,SM,0603
E8001	7686949J08	FLTR,FERR,,,,1A,,,,SM,0603
E8002	NOTPLACED	64AM DUMMY PART NUMBER
E8003	7686949J08	FLTR,FERR,,,,1A,,,,SM,0603
E8004	7686949J08	FLTR,FERR,,,,1A,,,,SM,0603
E8005	7686949J08	FLTR,FERR,,,,1A,,,,SM,0603
E8006	7686949J08	FLTR,FERR,,,,1A,,,,SM,0603
E9000	7686949J14	FLTR,FERRITE BEAD,,,,2A,,,,SM,0805,,CHIP ,220OHM
E9001	2480640Z01	SURFACE MOUNT FERRITE BEAD

Circuit Ref	Motorola Part No.	Description
E9006	NOTPLACED	64AM DUMMY PART NUMBER
E9007	NOTPLACED	64AM DUMMY PART NUMBER
F9000	6515076H02	FUSE CHIP SMT 0630FA5-R 5A
FL400	9180022M11	XTAL FILTER 44.85MHZ PASSIVE FILTER,SAW,BANDPASS,1.5 7542
FL8000	9180310L38	PASSIVE FILTER,SAW,BANDPASS,1.5 7542
FL8001	9180310L38	PASSIVE FILTER,SAW,BANDPASS,1.5 7542
FL9000	2515003H02	CHIP COMMON MODE CHOKE COILS
J9001	0970312L02	40 PIN BOARD-TO-BOARD CONNECTOR
L001	2415375H09	CHIP INDUCTOR
L002	2415429H38	CHIP INDUCTOR
L003	NOTPLACED	64AM DUMMY PART NUMBER
L200	24012023001	MULTILAYER INDUCTOR
L201	2415427H44	CHIP INDUCTOR
L202	2416540H25	CHIP INDUCTOR
L203	24012023001	MULTILAYER INDUCTOR
L204	24012023001	MULTILAYER INDUCTOR
L205	24012023001	MULTILAYER INDUCTOR
L206	24012023001	MULTILAYER INDUCTOR
L207	2415429H36	CHIP INDUCTOR
L208	24012023001	MULTILAYER INDUCTOR
L209	2415427H46	CHIP INDUCTOR
L210	2415718H22	CHIP INDUCTOR
L211	24012023001	MULTILAYER INDUCTOR
L212	24012023001	MULTILAYER INDUCTOR
L213	24012023001	MULTILAYER INDUCTOR
L214	24012023001	MULTILAYER INDUCTOR
L215	2415429H38	CHIP INDUCTOR
L217	24012023001	MULTILAYER INDUCTOR
L218	2415429H43	CHIP INDUCTOR
L400	2479990C01	AIR WND COIL/GREEN COLOR13.9NH
L401	2479990C01	AIR WND COIL/GREEN COLOR13.9NH
L402	2415429H36	CHIP INDUCTOR

Circuit Ref	Motorola Part No.	Description
L403	2414017N22	IDCTR,CHIP,68NH,5%,400M A,1.2OHM,CER,14
L404	2415429H46	Q,800MHZ SRF,SM,0603
L405	2415429H46	CHIP INDUCTOR
L406	2415429H38	CHIP INDUCTOR
L407	2415429H30	CHIP INDUCTOR
L408	2479990C01	AIR WND COIL/GREEN COLOR13.9NH
L409	2479990C01	AIR WND COIL/GREEN COLOR13.9NH
L410	NOTPLACED	64AM DUMMY PART NUMBER
L411	2415429H35	CHIP INDUCTOR
L412	2414017K32	IDCTR,CHIP,560NH,5%,50M A,5OHM,CER,11 Q,150MHZ
L413	2415429H31	SRF,SM,0805,PB
L414	2415429H31	CHIP INDUCTOR
L415	2414017K33	IDCTR,CHIP,680NH,5%,50M A,5.5OHM,CER,11 Q,120MHZ SRF,SM,0805
L416	2414017K31	IDCTR,CHIP,470NH,5%,50M A,4.5OHM,CER,11Q,180MHZ
L417	2415718H31	SRF,SM,0805,PB
L418	2415429H47	CHIP INDUCTOR
L420	2415427H50	CHIP INDUCTOR
L421	2415427H50	CHIP INDUCTOR
L600	2466505A01	COIL INDUCTOR
L601	2466505A01	COIL INDUCTOR
L602	2415569H01	INDUCTOR 4.7UH
L603	2414017Q51	IDCTR,FXD,2.2UH,10%,30M A,.65OHM,FERR,45 Q,50MHZ SRF,SM,0805
L604	2414015B27	IDCTR,FXD,390NH,2%,290M A,1.5OHM,CER,48
L605	2415569H01	Q,560MHZ SRF,SM,0805
L700	2414017N22	INDUCTOR 4.7UH
L701	2414017N22	IDCTR,CHIP,68NH,5%,400M A,1.2OHM,CER,14 Q,800MHZ SRF,SM,0603

Circuit Ref	Motorola Part No.	Description
L702	2414017N09	IDCTR,FXD,5.6NH,5.35%,600MA,.2OHM,CER,10 Q,3GHZ SRF,SM,0603
L703	2414017N22	IDCTR,CHIP,68NH,5%,400MA,1.2OHM,CER,14 Q,800MHZ SRF,SM,0603
L705	2479990C04	INDUCTOR
L707	2479990A04	INDUCTOR
L708	2414017N15	IDCTR,CHIP,18NH,5%,600MA,.47OHM,CER,12 Q,1.5GHZ SRF,SM,0603
L709	2414017N11	IDCTR,CHIP,8.2NH,5%,600MA,.26OHM,CER,10 Q,2.5GHZ SRF,SM,0603
L710	2414017N13	IDCTR,CHIP,12NH,5%,600MA,.35OHM,CER,12 Q,2GHZ SRF,SM,0603,PB
L712	2479990E02	INDUCTOR
L902	2415347H01	IDCTR, 1UH
L903	2415347H05	IDCTR, 1800NH
L904	2416066H01	COIL FORM-EPP
L905	2416066H01	COIL FORM-EPP
L906	2416066H01	COIL FORM-EPP
L907	2415347H05	IDCTR, 1800NH
L908	2416066H01	COIL FORM-EPP
L909	2416066H01	COIL FORM-EPP
L910	2416066H01	COIL FORM-EPP
L912	2414017P08	IDCTR,CHIP,3.9NH,300MA,.22OHM,CER,8 Q,4GHZ SRF,SM,0402,PB-F
L913	2414017P10	IDCTR,CHIP,5.6NH,300MA,.29OHM,CER,9 Q,3.28GHZ SRF,SM,0402,P
L3003	2464675H01	IDCTR,WW,560NH,5%,550MA
L3004	2464675H01	IDCTR,WW,560NH,5%,550MA
L3020	2489846Y06	IDCTR,WW,10UH,20,490MA,.067OHM,FERR,,,,,SM,,,PW R, 3X2.8X1.0MM
L3021	2471189M01	SHIELDED SMT POWER INDUCTORS
L3022	2464675H01	IDCTR,WW,560NH,5%,550MA

Circuit Ref	Motorola Part No.	Description
L8001	2414017P10	IDCTR,CHIP,5.6NH,300MA,.29OHM,CER,9 Q,3.28GHZ SRF,SM,0402,P
L8002	2414017P17	IDCTR,CHIP,22NH,5%,300MA,.88OHM,CER,9 Q,1.8GHZ SRF,SM,0402,P
L8003	2414017P13	IDCTR,CHIP,10NH,5%,300MA,.46OHM,CER,9 Q,2.5GHZ SRF,SM,0402,P
L8004	2414017P10	IDCTR,CHIP,5.6NH,300MA,.29OHM,CER,9 Q,3.28GHZ SRF,SM,0402,P
L9000	2471698M01	TAIYO YUDEN CHIP INDUCTOR 0603 SIZE
L9001	2415429H45	CHIP INDUCTOR
L9007	2415429H45	CHIP INDUCTOR
L9008	2415429H45	CHIP INDUCTOR
M1	4271321L01	TOP SHIELD METAL LOCK/RETAINER
M2	4271321L01	TOP SHIELD METAL LOCK/RETAINER
M700	2615193H01	HEAT SPREADER COPPER BLOCK
M9000	4371105L01	BOARD SPACER
M9001	4371105L01	BOARD SPACER
M9002	4371105L01	BOARD SPACER
M9003	NOTPLACED	64AM DUMMY PART NUMBER
M9004	NOTPLACED	64AM DUMMY PART NUMBER
M9005	3915478H01	SPEAKER CONTACT PAD
M9006	3915478H01	SPEAKER CONTACT PAD
M9007	0915184H01	CONNECTOR, BATTERY CONTACT
P900	2815696H01	SMA ANTENNA NUT CUM RF CONTACTS
P9000	2887818K02	PLUG 0.5 PITCH 16 CKT PASTE/NC-SMQ230
Q001	4885061Y01	XSTR NPN 6V 30UA 12GHZ PB-FREE
Q002	4815359H01	PNP GENERALPURPOSEDOUBL ETRANSISTOR
Q003	4816134H01	DIGITAL TRANSISTORS
Q200	4815029H01	NPN SILICON TRANSISTOR

Circuit Ref	Motorola Part No.	Description
Q202	4815055H01	TSTR DUAL NPN/PNP UMH 5
Q203	4815055H01	TSTR DUAL NPN/PNP UMH 5
Q204	4885061Y01	XSTR NPN 6V 30UA 12GHZ PB-FREE
Q205	4885061Y01	XSTR NPN 6V 30UA 12GHZ PB-FREE
Q206	4815055H01	TSTR DUAL NPN/PNP UMH 5
Q207	4815055H01	TSTR DUAL NPN/PNP UMH 5
Q208	4885061Y01	XSTR NPN 6V 30UA 12GHZ PB-FREE
Q400	4816531H01	NPN SILICON BIPOLAR TRANSISTOR
Q401	4816531H01	NPN SILICON BIPOLAR TRANSISTOR
Q600	4813973A04	XSTR,BIP GP SS,NPN,TA13,SM,SOT-23,SMT,30V,.225W,300MA,1 25MHZ,P
Q601	4815055H01	TSTR DUAL NPN/PNP UMH 5
Q602	4885061Y01	XSTR NPN 6V 30UA 12GHZ PB-FREE
Q701	4815055H01	TSTR DUAL NPN/PNP UMH 5
Q702	4815055H01	TSTR DUAL NPN/PNP UMH 5
Q703	4816547H01	PRE DRIVER EPP PART
Q704	4816548H02	RD07MUS2B FINAL PA
Q900	4815055H01	TSTR DUAL NPN/PNP UMH 5
Q901	4815055H01	TSTR DUAL NPN/PNP UMH 5
Q3000	4805585Q23	XSTR,FET GEN PURP,PB-FREE
Q3001	4805585Q23	XSTR,FET GEN PURP,PB-FREE
Q3002	4816134H01	DIGITAL TRANSISTORS
Q3003	4813970A62	XSTR,FET GP PWR,MOSFET,P-CH,ENHN,CF,-20V,1.3W,PB-FREE

Circuit Ref	Motorola Part No.	Description
Q3005	4805585Q23	XSTR,FET GEN PURP,PB-FREE
Q3006	4816134H01	DIGITAL TRANSISTORS
Q3010	4805585Q23	XSTR,FET GEN PURP,PB-FREE
Q9000	4813973M07	XSTR,BIP GP SS,NPN,T3904,SM,SOT-23,SMT,40V,.225W,200MA,3 00MHZ
Q9001	4815154H01	DUAL TRANS NPN
Q9003	4813973M07	XSTR,BIP GP SS,NPN,T3904,SM,SOT-23,SMT,40V,.225W,200MA,3 00MHZ
R001	0613952Q96	CER CHIP RES 9100 OHM 5 0402
R002	0613952Q41	CER CHIP RES 47.0 OHM 5 0402
R003	0613952Q91	CER CHIP RES 5600 OHM 5 0402
R004	0613952Q66	CER CHIP RES 510 OHM 5 0402
R005	0613952Q56	CER CHIP RES 200 OHM 5 0402
R006	0613952Q93	CER CHIP RES 6800 OHM 5 0402
R007	0613952R01	CER CHIP RES 10K OHM 5% 0402
R008	0613952Q25	CER CHIP RES 10.0 OHM 5 0402
R010	0613952Q93	CER CHIP RES 6800 OHM 5 0402
R011	0613952Q49	CER CHIP RES 100 OHM 5 0402
R012	0613952R25	CER CHIP RES 100K OHM 5% 0402
R013	0613952Q46	CER CHIP RES 75.0 OHM 5 0402
R014	0613952Q42	CER CHIP RES 51.0 OHM 5 0402
R016	0613952Q33	CER CHIP RES 22.0 OHM 5 0402
R017	0613952Q42	CER CHIP RES 51.0 OHM 5 0402
R018	0613952Q88	CER CHIP RES 4300 OHM 5 0402

Circuit Ref	Motorola Part No.	Description
R019	0613952R01	CER CHIP RES 10K OHM 5% 0402
R020	0613952Q55	CER CHIP RES 180 OHM 5 0402
R022	0613952Q58	CER CHIP RES 240 OHM 5 0402
R025	0613952R13	CER CHIP RES 33K OHM 5% 0402
R026	0613952R01	CER CHIP RES 10K OHM 5% 0402
R027	0613952R66	CER CHIP RES 0.0 +/-0.050 OHM
R052	NOTPLACED	64AM DUMMY PART NUMBER
R053	0613952R66	CER CHIP RES 0.0 +/-0.050 OHM
R054	NOTPLACED	64AM DUMMY PART NUMBER
R200	0613952Q96	CER CHIP RES 9100 OHM 5 0402
R201	0613952Q89	CER CHIP RES 4700 OHM 5 0402
R202	0613952Q49	CER CHIP RES 100 OHM 5 0402
R203	0613952Q52	CER CHIP RES 130 OHM 5 0402
R205	0613952Q91	CER CHIP RES 5600 OHM 5 0402
R207	NOTPLACED	64AM DUMMY PART NUMBER
R208	0613952Q96	CER CHIP RES 9100 OHM 5 0402
R209	0613952Q89	CER CHIP RES 4700 OHM 5 0402
R210	0613952Q49	CER CHIP RES 100 OHM 5 0402
R211	0613952Q50	CER CHIP RES 110 OHM 5 0402
R212	0613952Q90	CER CHIP RES 5100 OHM 5 0402
R213	0613952Q94	CER CHIP RES 7500 OHM 5 0402
R214	0613952Q58	CER CHIP RES 240 OHM 5 0402
R215	NOTPLACED	64AM DUMMY PART NUMBER

Circuit Ref	Motorola Part No.	Description
R216	0613952Q58	CER CHIP RES 240 OHM 5 0402
R217	0613952Q95	CER CHIP RES 8200 OHM 5 0402
R218	0613952Q66	CER CHIP RES 510 OHM 5 0402
R220	0613952Q60	CER CHIP RES 300 OHM 5 0402
R221	0613952Q31	CER CHIP RES 18.0 OHM 5 0402
R222	0613952Q60	CER CHIP RES 300 OHM 5 0402
R400	0613952R25	CER CHIP RES 100K OHM 5% 0402
R401	0613952R66	CER CHIP RES 0.0 +/-0.050 OHM
R402	0613952R66	CER CHIP RES 0.0 +/-0.050 OHM
R403	0613952R66	CER CHIP RES 0.0 +/-0.050 OHM
R404	0613952Q75	CER CHIP RES 1200 OHM 5 0402
R405	0613952R25	CER CHIP RES 100K OHM 5% 0402
R406	0613952Q73	CER CHIP RES 1000 OHM 5 0402
R407	0613952Q42	CER CHIP RES 51.0 OHM 5 0402
R409	0613952R01	CER CHIP RES 10K OHM 5% 0402
R410	0613952Q77	CER CHIP RES 1500 OHM 5 0402
R411	0613952R03	CER CHIP RES 12K OHM 5% 0402
R412	0613952Q49	CER CHIP RES 100 OHM 5 0402
R413	0613952Q77	CER CHIP RES 1500 OHM 5 0402
R417	0613952R66	CER CHIP RES 0.0 +/-0.050 OHM
R419	0613952R66	CER CHIP RES 0.0 +/-0.050 OHM
R420	0613952Q74	RES,MF,1.1KOHM,5%,.0625 W,SM,0402,200PPM/ CEL,PB-FREE

Circuit Ref	Motorola Part No.	Description
R421	0613952Q53	CER CHIP RES 150 OHM 5 0402
R422	0613952Q62	CER CHIP RES 360 OHM 5 0402
R424	0613952Q74	RES,MF,1.1KOHM,5%,.0625 W,SM,0402,200PPM/ CEL,PB-FREE
R425	0613952R66	CER CHIP RES 0.0 +/-0.050 OHM
R430	0613952R66	CER CHIP RES 0.0 +/-0.050 OHM
R496	0613952R66	CER CHIP RES 0.0 +/-0.050 OHM
R497	NOTPLACED	64AM DUMMY PART NUMBER
R600	0613952R01	CER CHIP RES 10K OHM 5% 0402
R601	0613952Q62	CER CHIP RES 360 OHM 5 0402
R602	0613952Q68	CER CHIP RES 620 OHM 5 0402
R603	0613952R05	CER CHIP RES 15K OHM 5% 0402
R604	0613952Q90	CER CHIP RES 5100 OHM 5 0402
R605	0613952Q90	CER CHIP RES 5100 OHM 5 0402
R606	0613952Q73	CER CHIP RES 1000 OHM 5 0402
R607	0613952R25	CER CHIP RES 100K OHM 5% 0402
R609	0613952R01	CER CHIP RES 10K OHM 5% 0402
R610	0613952R01	CER CHIP RES 10K OHM 5% 0402
R611	0613952Q63	CER CHIP RES 390 OHM 5 0402
R612	0613952R08	CER CHIP RES 20K OHM 5 0402
R696	0613952R66	CER CHIP RES 0.0 +/-0.050 OHM
R697	0613952R66	CER CHIP RES 0.0 +/-0.050 OHM
R698	0613952R01	CER CHIP RES 10K OHM 5% 0402

Circuit Ref	Motorola Part No.	Description
R699	0613952R25	CER CHIP RES 100K OHM 5% 0402
R700	0615043C01	RES POWER METAL STRIP W18 COMPLIANT
R701	NOTPLACED	64AM DUMMY PART NUMBER
R702	0613952Z83	RES,MF,430KOHM,1%,.0625 W,SM,0402,200PPM/ CEL,PB-FREE
R703	0613952Z83	RES,MF,430KOHM,1%,.0625 W,SM,0402,200PPM/ CEL,PB-FREE
R704	NOTPLACED	64AM DUMMY PART NUMBER
R705	0613952R56	CER CHIP RES 2.0M OHM 5 0402
R706	0613952R56	CER CHIP RES 2.0M OHM 5 0402
R707	0613952Q81	CER CHIP RES 2200 OHM 5 0402
R708	0613952Z52	RES,MF,6.8KOHM,1%,.0625 W,SM,0402,200PPM/ CEL,PB-FREE
R709	0613952Q62	CER CHIP RES 360 OHM 5 0402
R710	0613952Q80	CER CHIP RES 2000 OHM 5 0402
R711	0613952R08	CER CHIP RES 20K OHM 5 0402
R712	0613952R66	CER CHIP RES 0.0 +/-0.050 OHM
R713	NOTPLACED	64AM DUMMY PART NUMBER
R714	0613952Q59	CER CHIP RES 270 OHM 5 0402
R717	0613958H33	CER CHIP RES 22.0 OHM 5% 0805
R718	0613952Q63	CER CHIP RES 390 OHM 5 0402
R719	0613952Q45	CER CHIP RES 68.0 OHM 5 0402
R720	0613952H71	CER CHIP RES 820 OHM 5 0603
R723	0613952Q50	CER CHIP RES 110 OHM 5 0402



Circuit Ref	Motorola Part No.	Description
R725	0613952Q85	CER CHIP RES 3300 OHM 5 0402
R726	0613952R66	CER CHIP RES 0.0 +/-0.050 OHM
R727	NOTPLACED	64AM DUMMY PART NUMBER
R728	0613952Q60	CER CHIP RES 300 OHM 5 0402
R729	0613952Q33	CER CHIP RES 22.0 OHM 5 0402
R730	0613952Q60	CER CHIP RES 300 OHM 5 0402
R731	0613952R17	CER CHIP RES 47K OHM 5% 0402
R732	NOTPLACED	64AM DUMMY PART NUMBER
R733	0613952R66	CER CHIP RES 0.0 +/-0.050 OHM
R902	0613952H47	CER CHIP RES 82.0 OHM 5 0603
R903	0613952H47	CER CHIP RES 82.0 OHM 5 0603
R904	0613952H47	CER CHIP RES 82.0 OHM 5 0603
R905	0613952H47	CER CHIP RES 82.0 OHM 5 0603
R906	0613952R01	CER CHIP RES 10K OHM 5% 0402
R907	0613952R01	CER CHIP RES 10K OHM 5% 0402
R908	0613952H47	CER CHIP RES 82.0 OHM 5 0603
R909	0613952H47	CER CHIP RES 82.0 OHM 5 0603
R1000	0613952Q25	CER CHIP RES 10.0 OHM 5 0402
R1001	0613952R01	CER CHIP RES 10K OHM 5% 0402
R1002	NOTPLACED	64AM DUMMY PART NUMBER
R1005	0613952Q89	CER CHIP RES 4700 OHM 5 0402
R1006	0613952R01	CER CHIP RES 10K OHM 5% 0402
R1013	NOTPLACED	64AM DUMMY PART NUMBER

Circuit Ref	Motorola Part No.	Description
R1014	0613952R66	CER CHIP RES 0.0 +/-0.050 OHM
R1015	NOTPLACED	64AM DUMMY PART NUMBER
R1016	0613952R66	CER CHIP RES 0.0 +/-0.050 OHM
R1017	NOTPLACED	64AM DUMMY PART NUMBER
R1018	0613952R66	CER CHIP RES 0.0 +/-0.050 OHM
R1019	0613952Q18	CER CHIP RES 5.1 OHM 5 0402
R1020	0613952R66	CER CHIP RES 0.0 +/-0.050 OHM
R1021	0613952R66	CER CHIP RES 0.0 +/-0.050 OHM
R1022	NOTPLACED	64AM DUMMY PART NUMBER
R1023	0613952R66	CER CHIP RES 0.0 +/-0.050 OHM
R1025	0613952R01	CER CHIP RES 10K OHM 5% 0402
R1026	0613952R17	CER CHIP RES 47K OHM 5% 0402
R1027	NOTPLACED	64AM DUMMY PART NUMBER
R1028	0613952R66	CER CHIP RES 0.0 +/-0.050 OHM
R1034	0613952R01	CER CHIP RES 10K OHM 5% 0402
R1035	NOTPLACED	64AM DUMMY PART NUMBER
R1036	0613952R01	CER CHIP RES 10K OHM 5% 0402
R1041	0613952Q73	CER CHIP RES 1000 OHM 5 0402
R1045	0613952R01	CER CHIP RES 10K OHM 5% 0402
R1046	NOTPLACED	64AM DUMMY PART NUMBER
R1047	0613952R66	CER CHIP RES 0.0 +/-0.050 OHM
R1048	0613952R66	CER CHIP RES 0.0 +/-0.050 OHM
R1051	0613952R66	CER CHIP RES 0.0 +/-0.050 OHM

Circuit Ref	Motorola Part No.	Description
R1052	0613952R66	CER CHIP RES 0.0 +/-0.050 OHM
R1053	0613952Q89	CER CHIP RES 4700 OHM 5 0402
R1054	0613952Q89	CER CHIP RES 4700 OHM 5 0402
R1055	NOTPLACED	64AM DUMMY PART NUMBER
R1060	0613952Q25	CER CHIP RES 10.0 OHM 5 0402
R1061	0613952R66	CER CHIP RES 0.0 +/-0.050 OHM
R1062	0613952R66	CER CHIP RES 0.0 +/-0.050 OHM
R1063	NOTPLACED	64AM DUMMY PART NUMBER
R1065	0613952R66	CER CHIP RES 0.0 +/-0.050 OHM
R1067	0613952R03	CER CHIP RES 12K OHM 5% 0402
R1068	0613952R10	CER CHIP RES 24K OHM 5 0402
R1069	0613952R66	CER CHIP RES 0.0 +/-0.050 OHM
R1070	0613952R01	CER CHIP RES 10K OHM 5% 0402
R1072	0613952R66	CER CHIP RES 0.0 +/-0.050 OHM
R2000	0613952R01	CER CHIP RES 10K OHM 5% 0402
R2004	0613952R66	CER CHIP RES 0.0 +/-0.050 OHM
R2005	0613952R01	CER CHIP RES 10K OHM 5% 0402
R2006	0613952R01	CER CHIP RES 10K OHM 5% 0402
R2007	0613952R01	CER CHIP RES 10K OHM 5% 0402
R2008	0613952R01	CER CHIP RES 10K OHM 5% 0402
R2009	0613952R01	CER CHIP RES 10K OHM 5% 0402
R2010	0613952R01	CER CHIP RES 10K OHM 5% 0402
R2011	0613952R66	CER CHIP RES 0.0 +/-0.050 OHM

Circuit Ref	Motorola Part No.	Description
R2012	0613952R01	CER CHIP RES 10K OHM 5% 0402
R2013	0613952R01	CER CHIP RES 10K OHM 5% 0402
R3004	0613952R08	CER CHIP RES 20K OHM 5 0402
R3005	0613952Q89	CER CHIP RES 4700 OHM 5 0402
R3006	0613952R08	CER CHIP RES 20K OHM 5 0402
R3007	0613952Q89	CER CHIP RES 4700 OHM 5 0402
R3008	0613952R08	CER CHIP RES 20K OHM 5 0402
R3009	0613952Q89	CER CHIP RES 4700 OHM 5 0402
R3010	0613952N01	CER CHIP RES 10.0K OHM 1 0402
R3011	0613952Q81	CER CHIP RES 2200 OHM 5 0402
R3012	0613952Q59	CER CHIP RES 270 OHM 5 0402
R3013	0613952Q81	CER CHIP RES 2200 OHM 5 0402
R3014	0613952M30	CER CHIP RES 2000 OHM 1 0402
R3016	0616416H01	KAMAYA 0.1 OHM RLC20-R100FTP
R3017	0613952P25	CER CHIP RES 178K OHM 1 0402
R3018	0613952R18	CER CHIP RES 51K OHM 5 0402
R3020	0613952Q34	CER CHIP RES 24.0 OHM 5 0402
R3021	0613952Q34	CER CHIP RES 24.0 OHM 5 0402
R3023	0613952R17	CER CHIP RES 47K OHM 5% 0402
R3024	0613952Z67	RES,MF,51KOHM,1%,.0625 W,SM,0402,200
R3025	0613952Q49	CER CHIP RES 100 OHM 5 0402
R3026	0613952Q59	CER CHIP RES 270 OHM 5 0402
R3027	0613952Q59	CER CHIP RES 270 OHM 5 0402

Circuit Ref	Motorola Part No.	Description
R3028	0613952N69	CER CHIP RES 51.1K OHM 1 0402
R3029	0613952N60	CER CHIP RES 41.2K OHM 1 0402
R3030	0686135Z02	KAMAYA 0.2 OHM RLC16-R200FTP
R3031	0613952R66	CER CHIP RES 0.0 +/-0.050 OHM
R3032	0613952Q95	CER CHIP RES 8200 OHM 5 0402
R3033	0613952R05	CER CHIP RES 15K OHM 5% 0402
R3034	0613952Q95	CER CHIP RES 8200 OHM 5 0402
R3035	0613952R05	CER CHIP RES 15K OHM 5% 0402
R3036	0613952N01	CER CHIP RES 10.0K OHM 1 0402
R3037	0613952Q71	CER CHIP RES 820 OHM 5 0402
R3038	NOTPLACED	64AM DUMMY PART NUMBER
R3040	0613952Q81	CER CHIP RES 2200 OHM 5 0402
R3041	0613952N01	CER CHIP RES 10.0K OHM 1 0402
R3043	0613952R32	CER CHIP RES 200K OHM 5 0402
R3050	0613952R25	CER CHIP RES 100K OHM 5% 0402
R3051	0613952Q89	CER CHIP RES 4700 OHM 5 0402
R3053	0613952Z58	RES,MF,22KOHM,1%,.0625 W,SM,0402,200PPM/CEL,PB-FREE
R3054	0613952Z58	RES,MF,22KOHM,1%,.0625 W,SM,0402,200PPM/CEL,PB-FREE
R3055	0613952R25	CER CHIP RES 100K OHM 5% 0402
R3060	0613952M30	CER CHIP RES 2000 OHM 1 0402
R3070	0613952R33	CER CHIP RES 220K OHM 5% 0402
R3071	0613952R33	CER CHIP RES 220K OHM 5% 0402

Circuit Ref	Motorola Part No.	Description
R3072	0613952R56	CER CHIP RES 2.0M OHM 5 0402
R3073	0613952R56	CER CHIP RES 2.0M OHM 5 0402
R3074	0613952Q73	CER CHIP RES 1000 OHM 5 0402
R3075	0613952N01	CER CHIP RES 10.0K OHM 1 0402
R3088	NOTPLACED	64AM DUMMY PART NUMBER
R3098	0613952Q85	CER CHIP RES 3300 OHM 5 0402
R3100	0613952R17	CER CHIP RES 47K OHM 5% 0402
R3101	0613952R25	CER CHIP RES 100K OHM 5% 0402
R3102	0613952A30	CER CHIP RES 2.00 OHM 1% 0603
R3103	0615049H16	KAMAYA RLC32 CURRENT SENSE RESISTOR
R3200	0613952R33	CER CHIP RES 220K OHM 5% 0402
R3201	0613952R20	CER CHIP RES 62K OHM 5 0402
R3202	0613952R33	CER CHIP RES 220K OHM 5% 0402
R3203	0613952R36	CER CHIP RES 300K OHM 5 0402
R3700	0613952Q73	CER CHIP RES 1000 OHM 5 0402
R3701	0613952R01	CER CHIP RES 10K OHM 5% 0402
R3702	0613952N48	CER CHIP RES 30.9K OHM 1 0402
R3703	0613952N38	CER CHIP RES 24.3K OHM 1 0402
R3704	0613952R01	CER CHIP RES 10K OHM 5% 0402
R3800	0613952Q25	CER CHIP RES 10.0 OHM 5 0402
R3888	NOTPLACED	64AM DUMMY PART NUMBER
R8002	0613952R25	CER CHIP RES 100K OHM 5% 0402
R8003	0613952R01	CER CHIP RES 10K OHM 5% 0402

Circuit Ref	Motorola Part No.	Description
R8004	0613952Q70	CER CHIP RES 750 OHM 5 0402
R8010	0613952R05	CER CHIP RES 15K OHM 5% 0402
R8011	0613952R25	CER CHIP RES 100K OHM 5% 0402
R8012	0613952R01	CER CHIP RES 10K OHM 5% 0402
R8015	NOTPLACED	64AM DUMMY PART NUMBER
R8016	0613952R66	CER CHIP RES 0.0 +/-0.050 OHM
R8017	NOTPLACED	64AM DUMMY PART NUMBER
R8020	0613952R66	CER CHIP RES 0.0 +/-0.050 OHM
R8023	0613952R66	CER CHIP RES 0.0 +/-0.050 OHM
R8024	0613952R25	CER CHIP RES 100K OHM 5% 0402
R8025	0613952R66	CER CHIP RES 0.0 +/-0.050 OHM
R8026	0613952R25	CER CHIP RES 100K OHM 5% 0402
R8027	0613952R25	CER CHIP RES 100K OHM 5% 0402
R8028	0613952R25	CER CHIP RES 100K OHM 5% 0402
R8029	0613952R25	CER CHIP RES 100K OHM 5% 0402
R8030	0613952R01	CER CHIP RES 10K OHM 5% 0402
R8031	0613952R25	CER CHIP RES 100K OHM 5% 0402
R8032	0613952R25	CER CHIP RES 100K OHM 5% 0402
R8033	0613952R25	CER CHIP RES 100K OHM 5% 0402
R8034	0613952R01	CER CHIP RES 10K OHM 5% 0402
R8035	0613952R01	CER CHIP RES 10K OHM 5% 0402
R8036	0613952R01	CER CHIP RES 10K OHM 5% 0402
R8037	0613952R01	CER CHIP RES 10K OHM 5% 0402

Circuit Ref	Motorola Part No.	Description
R9000	0613952Q73	CER CHIP RES 1000 OHM 5 0402
R9001	0613952Q73	CER CHIP RES 1000 OHM 5 0402
R9002	0613952Q73	CER CHIP RES 1000 OHM 5 0402
R9003	0613952Q73	CER CHIP RES 1000 OHM 5 0402
R9004	0613952Q73	CER CHIP RES 1000 OHM 5 0402
R9005	0613952Q73	CER CHIP RES 1000 OHM 5 0402
R9006	0613952Q73	CER CHIP RES 1000 OHM 5 0402
R9007	0613952Q73	CER CHIP RES 1000 OHM 5 0402
R9008	0613952R17	CER CHIP RES 47K OHM 5% 0402
R9009	0613952R01	CER CHIP RES 10K OHM 5% 0402
R9010	0613952R01	CER CHIP RES 10K OHM 5% 0402
R9011	0613952R17	CER CHIP RES 47K OHM 5% 0402
R9012	0613952Q50	CER CHIP RES 110 OHM 5 0402
R9013	0613952Q37	CER CHIP RES 33.0 OHM 5 0402
R9014	0613952R01	CER CHIP RES 10K OHM 5% 0402
R9015	0613952R01	CER CHIP RES 10K OHM 5% 0402
R9016	0613952R01	CER CHIP RES 10K OHM 5% 0402
R9017	0613952R01	CER CHIP RES 10K OHM 5% 0402
R9018	0613952R01	CER CHIP RES 10K OHM 5% 0402
R9019	0613952Q73	CER CHIP RES 1000 OHM 5 0402
R9020	0613952Q89	CER CHIP RES 4700 OHM 5 0402
R9021	NOTPLACED	64AM DUMMY PART NUMBER
R9022	NOTPLACED	64AM DUMMY PART NUMBER

Circuit Ref	Motorola Part No.	Description
R9050	0613952R01	CER CHIP RES 10K OHM 5% 0402
R9051	0613952R01	CER CHIP RES 10K OHM 5% 0402
R9052	0613952Q65	CER CHIP RES 470 OHM 5 0402
S9000	4086470Z01	TACT SWITCH
S9001	4015186H02	SWITCH, VOLUME
S9002	4015203H05	SWITCH, FREQUENCY
SH9000	NOTPLACED	64AM DUMMY PART NUMBER
SH9001	NOTPLACED	64AM DUMMY PART NUMBER
T400	2515396H01	BALUN, TRANSFORMER
T401	2515396H01	BALUN, TRANSFORMER
U001	5104932K08	IC,CUST,,1PER PKG,BGA,,ABL TRAMSCEOVER OC
U002	5114000B59	IC,ANLG SW,SM,SOT-353,1CHANNELS,SPST,PB-FREE
U200	5116014H01	BUFFER IC
U400	5115442H01	MAXIM EPP LNA LIFE MAX2371EGC+T
U600	5102495J14	IC,AD9864,QFN XSTR,BIP RF
U700	4802246J29	POWER,,ADA4743,,,,,37W OPERATIONAL AMPLIFIER, IC
U701	5115147H01	IC TEMPERATURE SENSOR
U702	5115022H01	IC,MICROP,P1710ZZGE,BG A,,12MHZ,32BITS
U1000	5102495J13	4-BIT BIDIRECTION LEVEL TRANSLATOR
U1005	5171209L01	NL27WZU04DFT2G
U1006	5115001H02	INVERTER (EPP)
U2000	0104032J61	PRE-FLASHED FLASH IC
U2001	5171614M03	MICRON 16MB SDR SDRAM Y35M
U3000	5185143E77	IC, MAKO ASIC, CMOS PWR MGMT

Circuit Ref	Motorola Part No.	Description
U3002	5189680C06	LP38690SD-ADJ, REGULATOR, NATIONAL SEMICONDUCTOR,
U3003	5115453H01	LP38690SD-ADJ RAIL TO RAIL OUTPUT, 8 PIN BGA
U3004	5114007A43	IC,INVTR,1PER PKG,SOT-353,VCC RANGE 1.65 TO 5.5 V, PB-FREE
U3006	5115974H01	1.5V LINEAR VOLTAGE REGULATOR
U3007	5171395L01	TI DUAL ANALOG SWITCH TS5A23166
U3008	5115391H01	LINEAR REGULATOR IC
U3009	5164852H47	IC, I2C LEVEL TRANSLATOR
U3020	5171428L01	LINEAR TECH SYN BUCK DC CONVERTER
U3021	5171428L01	LINEAR TECH SYN BUCK DC CONVERTER
U3700	5116282H01	100MA LDO LINEAR REGULATOR
U3701	5116283H01	100MA LDO LINEAR REGULATOR
U8000	0104024J41	PRE-FLASHED SIRF SINGLE CHIP GPS IC
U8001	5164015H55	IC,RF AMPLIFIER,,UPC8211TK,SM,,,18.5DB,1.57GHZMIN,1.57GHZMAX
VR9000	4866544A01	DIODE ARRAY,ZEN,SR05.TCT,SM,,,5V,,,5,LOW CAPACITANCE TVS DIO
VR9001	4813979P10	DIODE ARRAY,TRNSNT PROT,SM,SOT-457,5.6V,.225W,ZEN,4,PB-FREE
VR9002	4813979P10	DIODE ARRAY,TRNSNT PROT,SM,SOT-457,5.6V,.225W,ZEN,4,PB-FREE
VR9003	4815040H01	ZENER DIODE-12V
VR9004	4815040H01	ZENER DIODE-12V
VR9005	4805656W76	DIODE,ZEN,,SM,SOD-523,,,,,5.6V

Circuit Ref	Motorola Part No.	Description
VR9006	4805656W76	DIODE,ZEN,,SM,SOD-523,,,,,5.6V
VR9007	4805656W76	DIODE,ZEN,,SM,SOD-523,,,,,5.6V
VR9008	4813979P10	DIODE ARRAY,TRNSNT PROT,SM,SOT-457,5.6V,.225W,ZEN,4,PB-FREE
VR9009	4813977C23	DIODE,ZEN,MMSZ5243,SM,SOD-123,13V,10MA,.5W,ZEN,PB-FREE
VR9010	4813977C23	DIODE,ZEN,MMSZ5243,SM,SOD-123,13V,10MA,.5W,ZEN,PB-FREE
VR9015	NOTPLACED	64AM DUMMY PART NUMBER
VR9016	NOTPLACED	64AM DUMMY PART NUMBER
VR9017	4815040H01	ZENER DIODE-12V
VR9018	4815040H01	ZENER DIODE-12V
VR9020	4813979P10	DIODE ARRAY,TRNSNT PROT,SM,SOT-457,5.6V,.225W,ZEN,4,PB-FREE
VR9021	4813979P10	DIODE ARRAY,TRNSNT PROT,SM,SOT-457,5.6V,.225W,ZEN,4,PB-FREE
VR9022	4813979P10	DIODE ARRAY,TRNSNT PROT,SM,SOT-457,5.6V,.225W,ZEN,4,PB-FREE
VR9023	4815040H01	ZENER DIODE-12V
Y001	5116032H01	CRYSTAL OSCILLATOR XTAL
Y1000	93012000001	12MHZ,10PPM,3.2X2.5X0.55 MM SMD
Y3000	4802582S80	RESON,QRTZ,.032768MHZ,20PPM TOL,,SM,,PAR,,12.5PF LOAD CAP,-40DE

Circuit Ref	Motorola Part No.	Description
Y3001	4815028H01	CX-101F 24.57MHZ KSS XTAL
Y8000	4802582S80	RESON,QRTZ,.032768MHZ,20PPM TOL,,SM,,PAR,,12.5PF LOAD CAP,-40DE

## VHF Radio Parts List (8415113H20)

Circuit Ref	Motorola Part No.	Description
C001	2113946D02	CAP, 1.0uF
C002	2113946D02	CAP, 1.0uF
C003	2113946K02	CAP, 0.10uF
C004	2113946K02	CAP, 0.10uF
C005	2113946K02	CAP, 0.10uF
C006	2113946K02	CAP, 0.10uF
C007	2113946K02	CAP, 0.10uF
C008	2113946K02	CAP, 0.10uF
C009	NOTPLACED	64AM DUMMY PART NUMBER
C010	2113946K02	CAP, 0.10uF
C011	2113946K02	CAP, 0.10uF
C012	2113946K02	CAP, 0.10uF
C013	2113945A02	CAP, 270pF
C014	2113945L49	CAP, .01uF
C015	2113945L49	CAP, .01uF
C016	2113945A09	CAP, 1000pF
C017	2113946K02	CAP, 0.10uF
C018	2313960B57	CAPP, 10uF
C019	2113945L49	CAP, .01uF
C020	2313960B57	CAPP, 10uF
C022	2113946K02	CAP, 0.10uF
C024	2115358H17	CAP, 0.22uF
C025	2115358H07	CAP, .033uF
C026	2115358H15	CAP, 0.15uF
C027	2115358H25	CAP, 1uF
C028	2115358H01	CAP, .01uF
C031	2113945A09	CAP, 1000pF
C032	2113944A25	CAP, 10pF
C033	2113944A21	CAP, 6.8pF
C035	2113946K02	CAP, 0.10uF
C036	2113946K02	CAP, 0.10uF
C037	2115153H06	CAP, CERAMIC, COG 64AM DUMMY PART
C038	NOTPLACED	NUMBER
C200	2113945A09	CAP, 1000pF
C201	2113944A25	CAP, 10pF
C202	2113944A25	CAP, 10pF
C203	2113944A11	CAP, 2.7pF
C204	2113944A25	CAP, 10pF
C205	2113944A30	CAP, 27pF
C206	2113944A88	CAP, 160pF
C207	2113944A81	CAP, 24pF
C208	2113945A09	CAP, 1000pF
C209	2113946B04	CAP, 0.1uF

Circuit Ref	Motorola Part No.	Description
C210	2113945A09	CAP, 1000pF
C211	2113946B04	CAP, 0.1uF
C212	2113944A10	CAP, 2.4pF
C213	2113944A08	CAP, 2.0pF
C214	2113945A09	CAP, 1000pF
C215	2113944A40	CAP, 100pF
C216	2113944A05	CAP, 1.5pF
C217	2113944A10	CAP, 2.4pF
C219	2113945A09	CAP, 1000pF
C220	2113944A27	CAP, 15pF
C221	2113944A27	CAP, 15pF
C222	NOTPLACED	64AM DUMMY PART NUMBER
C223	2113944A73	CAP, 8pF
C224	2113944A82	CAP, 30pF
C225	2113944A88	CAP, 160pF
C226	2113944A30	CAP, 27pF
C227	2113945A09	CAP, 1000pF
C228	2113946B04	CAP, 0.1uF
C229	2113945A09	CAP, 1000pF
C230	2113946B04	CAP, 0.1uF
C231	2113944A05	CAP, 1.5pF
C232	2113944A11	CAP, 2.7pF
C233	2113945A09	CAP, 1000pF
C234	2113945A09	CAP, 1000pF
C235	2113945A09	CAP, 1000pF
C236	2113944A72	CAP, 7pF
C237	2113944A73	CAP, 8pF
C238	2113945A09	CAP, 1000pF
C239	2113945A09	CAP, 1000pF
C240	2113944A08	CAP, 2.0pF
C241	2113944A05	CAP, 1.5pF
C243	NOTPLACED	64AM DUMMY PART NUMBER
C400	2113944A36	CAP, 68pF
C401	2113944A30	CAP, 27pF
C402	2113944A26	CAP, 12pF
C403	2113944A30	CAP, 27pF
C404	2113944A36	CAP, 68pF
C405	2113944A41	CAP, 120pF
C406	2113944A41	CAP, 120pF
C408	2113944A52	CAP, 1000pF
C409	2113944A17	CAP, 4.7pF
C410	2113944A63	CAP, 1pF
C411	2113944A52	CAP, 1000pF
C412	2113944A52	CAP, 1000pF

Circuit Ref	Motorola Part No.	Description
C413	2113946K02	CAP, 0.10uF
C414	2113944A52	CAP, 1000pF
C415	2113946K02	CAP, 0.10uF
C416	2113944A52	CAP, 1000pF
C417	2113944A09	CAP, 2.2pF
C418	2113944A19	CAP, 5.6pF
C419	2113944A77	CAP, 11pF
C420	2113944A24	CAP, 9.1pF
C421	2113945B02	CAP, .01uF
C422	2113946K02	CAP, 0.10uF
C423	2113944A36	CAP, 68pF
C424	2113944A30	CAP, 27pF
C425	2113944A26	CAP, 12pF
C426	0613952R66	RES, 0
C427	2113944A88	CAP, 160pF
C428	2113944A28	CAP CER CHP 18.0PF 50V 5%
C429	2113944A77	CAP, 11pF
C430	2113944A29	CAP, 22pF
C431	2113944A77	CAP, 11pF
C432	2113944A80	CAP,FXD,20PF,+5%,- 5%,50V-DC,0402,C0G,- 55DEG CMIN,125DEG CMAX,PB
C433	2113944A80	CAP,FXD,20PF,+5%,- 5%,50V-DC,0402,C0G,- 55DEG CMIN,125DEG CMAX,PB
C434	2113946K02	CAP, 0.10uF
C435	2113944A40	CAP, 100pF
C436	2113946K02	CAP, 0.10uF
C437	2113945B02	CAP, .01uF
C438	2113946K02	CAP, 0.10uF
C439	2113944A22	CAP CER CHP 7.5PF 50V +/- 0.5PF
C440	2113944A82	CAP,FXD,30PF,+5%,- 5%,50V-DC,0402,C0G,- 55DEG CMIN,125DEG CMAX,PB
C441	NOTPLACED	64AM DUMMY PART NUMBER
C442	2113945B02	CAP, .01uF
C444	2113946K02	CAP, 0.10uF
C445	NOTPLACED	64AM DUMMY PART NUMBER
C446	2113944A27	CAP, 15pF

Circuit Ref	Motorola Part No.	Description
C447	2113944A30	CAP, 27pF
C448	2113944A36	CAP, 68pF
C449	2113944A52	CAP, 1000pF
C450	2113944A41	CAP, 120pF
C451	2113944A41	CAP, 120pF
C601	2113945B02	CAP, .01uF
C602	2113946B04	CAP, 0.1uF
C603	2113946B04	CAP, 0.1uF
C604	2113945B02	CAP, .01uF
C605	2113945B02	CAP, .01uF
C606	2113944A36	CAP, 68pF
C607	2113945B02	CAP, .01uF
C608	2113945D02	CAP, .047uF
C609	2115153H57	CAP, 100pF
C610	2115153H53	CAP, 68pF
C611	2115153H48	CAP, 43pF
C612	2115153H55	CAP, 82pF
C613	2113945G91	CAP, 0.1uF
C614	2113946E02	CAP, 1.0uF
C615	2113946B04	CAP, 0.1uF
C616	2113944A32	CAP, 39pF
C617	2113945L37	CAP, 3300pF
C618	2113945C18	CAP, .012uF
C619	2115358H13	CAP, 0.1uF
C620	2113946B04	CAP, 0.1uF
C621	2113945B02	CAP, .01uF
C622	2113944C89	CAP, 200pF
C623	2113944A40	CAP, 100pF
C624	2113944A40	CAP, 100pF
C625	2113945A11	CAP, 2200pF
C626	2113945D02	CAP, .047uF
C627	2113944A40	CAP, 100pF
C628	2113945B02	CAP, .01uF
C629	2113944A40	CAP, 100pF
C630	2113945B02	CAP, .01uF
C631	2113945B02	CAP, .01uF
C632	2113946B04	CAP, 0.1uF
C633	2113946B04	CAP, 0.1uF
C634	2113945B02	CAP, .01uF
C635	2113944A85	CAP, 51pF
C636	2113946B04	CAP, 0.1uF
C637	2113946G04	CAP, 0.68uF
C638	NOTPLACED	64AM DUMMY PART NUMBER
C639	2113946B04	CAP, 0.1uF

Circuit Ref	Motorola Part No.	Description
C700	2371878M01	VISHAYSOLID TANTALUM CHIP CAPACITOR
C703	2113944A52	CAP, 1000pF
C704	2113944A52	CAP, 1000pF
C705	2113946B02	CAP, .047uF
C706	2113944A52	CAP, 1000pF
C707	2113944A31	CAP, 33pF
C708	2113944A52	CAP, 1000pF
C709	2113945B02	CAP, .01uF
C710	2113945B02	CAP, .01uF
C711	2113944A52	CAP, 1000pF
C712	2113945B04	CAP, .022uF
C714	2113945A03	CAP, 330pF
C715	2113944A31	CAP, 33pF
C717	2113945A03	CAP, 330pF
C718	2113946K02	CAP, 0.10uF
C719	2113944A52	CAP, 1000pF
C720	2113945B04	CAP, .022uF
C721	2113945D04	CAP, 0.1uF
C722	2113945A09	CAP, 1000pF
C724	2113944C82	CAP, 30pF
C726	2113944C84	CAP, 43pF
C729	2113944A52	CAP, 1000pF
C730	2113946B04	CAP, 0.1uF
C731	2113946B04	CAP, 0.1uF
C732	2111078B53	CAP, 270pF
C733	2113944C43	CAP CER CHP 82.0PF 50V 5%
C734	2113945A03	CAP, 330pF
C735	2113944C82	CAP, 30pF
C736	2113945A03	CAP, 330pF
C737	2113945A09	CAP, 1000pF
C738	2113945A03	CAP, 330pF
C739	2113944C32	CAP, 15pF
C777	2113944C41	CAP, 68pF
C778	2113944C41	CAP, 68pF
C797	2113944C32	CAP, 15pF
C798	2113944C43	CAP, 82pF
C799	2113944C32	CAP, 15pF
C900	2113945B04	CAP, .022uF
C904	2113944C80	CAP, 20pF
C905	2113944C04	CAP, 330pF
C906	2113944C74	CAP, 7.5pF
C907	2113944C81	CAP, 24pF
C908	2113945B04	CAP, .022uF
C909	2113944C85	CAP, 51pF

Circuit Ref	Motorola Part No.	Description
C911	2113944C33	CAP, 18pF
C912	2113944C29	CAP, 9.1pF
C913	2113944C38	CAP, 47pF
C914	2113945B04	CAP, .022uF
C915	2113944C30	CAP, 10pF
C916	2113944C78	CAP, 13pF
C918	2113944C04	CAP, 330pF
C919	2113944C33	CAP, 18pF
C920	2113944C35	CAP, 27pF
C924	2113944A20	CAP, 6.2pF
C925	2113944V07	CAP, 1.5pF
C926	2113944A15	CAP, 3.9pF
C927	2113945A01	CAP, 220pF
C928	2113944C74	CAP, 7.5pF
C929	2113944C22	CAP, 4.7pF
C930	2113944C28	CAP, 8.2pF
C931	2113944C20	CAP, 3.9pF
C933	2113945B04	CAP, .022uF
C1000	2113945A03	CAP CER CHP 330PF 50V 10%
C1001	2113946K02	CAP, 0.10uF
C1002	2113946K02	CAP, 0.10uF
C1003	2113945A03	CAP CER CHP 330PF 50V 10%
C1004	2113945A03	CAP CER CHP 330PF 50V 10%
C1005	2113946K02	CAP, 0.10uF
C1006	2113946K02	CAP, 0.10uF
C1007	2113945A03	CAP CER CHP 330PF 50V 10%
C1008	2113945A03	CAP CER CHP 330PF 50V 10%
C1009	2113946K02	CAP, 0.10uF
C1010	2113946K02	CAP, 0.10uF
C1011	2113945A03	CAP CER CHP 330PF 50V 10%
C1012	2113946K02	CAP, 0.10uF
C1013	2113946K02	CAP, 0.10uF
C1014	2113946K02	CAP, 0.10uF
C1015	2113946K02	CAP, 0.10uF
C1016	2113946B04	CAP, 0.1uF
C1017	2113946E02	CAP, 1.0uF
C1018	2113944A28	CAP, 18pF
C1019	2113944A28	CAP, 18pF
C1028	2113946K02	CAP, 0.10uF
C1029	2113946K02	CAP, 0.10uF

Circuit Ref	Motorola Part No.	Description
C1030	2113944A28	CAP, 18pF
C1031	2113946K02	CAP, 0.10uF
C1032	2113945B02	CAP, .01uF
C1033	2113946K02	CAP, 0.10uF
C1044	2113946B04	CAP, 0.1uF
C2000	2113945A03	CAP CER CHP 330PF 50V 10%
C2001	2113945B02	CAP, .01uF
C2002	2113946K02	CAP, 0.10uF
C2003	2113946K02	CAP, 0.10uF
C2004	2113945A03	CAP CER CHP 330PF 50V 10%
C2005	2113945B02	CAP, .01uF
C2006	2113946K02	CAP, 0.10uF
C2007	2113946K02	CAP, 0.10uF
C3000	2113944A78	CAP, 13pF
C3001	2113944A78	CAP, 13pF
C3002	2113945D04	CAP, 0.1uF
C3003	2113946D05	CAP, 2.2uF
C3004	2113946D05	CAP, 2.2uF
C3005	2113945A09	CAP, 1000pF
C3010	2113946D05	CAP, 2.2uF
C3011	2113946A01	CAP CER CHP 0.015UF 16V 10%
C3014	2113946D05	CAP, 2.2uF
C3015	2115153H57	CAP, 100pF
C3016	2113946D05	CAP, 2.2uF
C3017	2113945B02	CAP, .01uF
C3018	2113946D05	CAP, 2.2uF
C3019	2113946D02	CAP, 1.0uF
C3024	2113946D02	CAP, 1.0uF
C3025	2113946K02	CAP, 0.10uF
C3026	2113946K02	CAP, 0.10uF
C3028	2113946D05	CAP, 2.2uF
C3031	2113946D02	CAP, 1.0uF
C3034	2113946B04	CAP, 0.1uF
C3035	2113946B04	CAP, 0.1uF
C3036	2113946B04	CAP, 0.1uF
C3037	2113944A40	CAP, 100pF
C3038	2113944A40	CAP, 100pF
C3039	2113946F03	CAP, 4.7uF
C3045	2113946F03	CAP, 4.7uF
C3047	2113945C25	CAP, .033uF
C3048	2113945C25	CAP, .033uF
C3049	2113945C25	CAP, .033uF
C3050	2113945C25	CAP, .033uF

Circuit Ref	Motorola Part No.	Description
C3051	2113944A40	CAP, 100pF
C3060	2113944A80	CAP, 20pF
C3061	2113944A80	CAP, 20pF
C3062	2113946K02	CAP, 0.10uF
C3063	2113946K02	CAP, 0.10uF
C3067	2113946D02	CAP, 1.0uF
C3070	2113944A25	CAP, 10pF
C3074	2113946D02	CAP, 1.0uF
C3079	2113946F03	CAP, 4.7uF
C3080	NOTPLACED	64AM DUMMY PART NUMBER
C3081	NOTPLACED	64AM DUMMY PART NUMBER
C3082	2113945Y02	CAP, 0.10uF
C3083	2113945Y02	CAP, 0.10uF
C3084	2113946K03	CAP, 0.22uF
C3090	2113955D37	CAP, 10uF
C3091	2113955D37	CAP, 10uF
C3093	2113946N03	CAP, 2.2uF
C3094	2113946B04	CAP CER CHP 0.10UF 10V 10%
C3095	2113946B04	CAP CER CHP 0.10UF 10V 10%
C3097	2113944A31	CAP, 33pF
C3098	2113944A31	CAP, 33pF
C3099	2113944A31	CAP, 33pF
C3100	2113944A31	CAP, 33pF
C3101	2113946D02	CAP, 1.0uF
C3102	2113946D02	CAP, 1.0uF
C3200	2113945Y02	CAP, 0.10uF
C3201	2113955D37	CAP, 10uF
C3202	2371572L02	POSCAP 68UF 6TPB68M
C3203	2113945B02	CAP, .01uF
C3204	2115153H40	CAP, 20pF
C3205	2113944A44	CAP, 220pF
C3206	2113945Y02	CAP, 0.10uF
C3207	2113955D37	CAP, 10uF
C3208	2113946K03	CAP, 0.22uF
C3209	2316410H01	CAPP, 22uF
C3210	2113945B02	CAP, .01uF
C3211	2115153H40	CAP, 20pF
C3212	2113944A44	CAP, 220pF
C3500	2113946F03	CAP, 4.7uF
C3700	2113946D02	CAP, 1.0uF
C3701	2113945B02	CAP, .01uF
C3702	2113946D05	CAP, 2.2uF

Circuit Ref	Motorola Part No.	Description
C3703	2113946D02	CAP, 1.0uF
C3704	2113944A30	CAP, 27pF
C3705	2113945B02	CAP, .01uF
C3706	2113945A05	CAP, 470pF
C3707	2113946D05	CAP, 2.2uF
C3800	2113945D04	CAP, 0.1uF
C3805	2113946K03	CAP, 0.22uF
C3999	2113945B02	CAP, .01uF
C8000	2113946F05	CAP, 10uF
C8001	2113944A28	CAP, 18pF
C8002	2113944A52	CAP, 1000pF
C8003	2113946F05	CAP, 10uF
C8004	2113944A28	CAP, 18pF
C8005	NOTPLACED	64AM DUMMY PART NUMBER
C8006	NOTPLACED	64AM DUMMY PART NUMBER
C8013	2113944A08	CAP, 2.0pF
C8014	2113944A62	CAP, 0.75pF
C8015	2113946K02	CAP, 0.10uF
C8016	2113945A09	CAP, 1000pF
C8017	2113944A28	CAP, 18pF
C8018	2113944A28	CAP, 18pF
C8019	2113944A11	CAP, 2.7pF
C8020	2113944A52	CAP, 1000pF
C8021	2113946K02	CAP, 0.10uF
C8022	2113946D05	CAP, 2.2uF
C8023	2113945B02	CAP, .01uF
C8029	2113944A52	CAP, 1000pF
C8030	2113944A28	CAP, 18pF
C8031	2113946D05	CAP, 2.2uF
C8032	2113945B02	CAP, .01uF
C8033	2113944A28	CAP, 18pF
C8034	2113944A28	CAP, 18pF
C8035	2113944A31	CAP, 33pF
C8036	2113944A52	CAP, 1000pF
C9000	2113945A03	CAP CER CHP 330PF 50V 10%
C9001	2113945A03	CAP CER CHP 330PF 50V 10%
C9002	2113945A03	CAP CER CHP 330PF 50V 10%
C9003	2113945A03	CAP CER CHP 330PF 50V 10%
C9004	2113945A03	CAP CER CHP 330PF 50V 10%

Circuit Ref	Motorola Part No.	Description
C9005	2113945A03	CAP CER CHP 330PF 50V 10%
C9006	2113945A03	CAP CER CHP 330PF 50V 10%
C9007	2113945A03	CAP CER CHP 330PF 50V 10%
C9008	2113945A03	CAP CER CHP 330PF 50V 10%
C9009	2113945A03	CAP CER CHP 330PF 50V 10%
C9010	2113945A03	CAP CER CHP 330PF 50V 10%
C9011	2113945A03	CAP CER CHP 330PF 50V 10%
C9012	2113945A03	CAP CER CHP 330PF 50V 10%
C9013	2113945A03	CAP CER CHP 330PF 50V 10%
C9014	2113945A03	CAP CER CHP 330PF 50V 10%
C9015	2113945A03	CAP CER CHP 330PF 50V 10%
C9016	2113945A03	CAP CER CHP 330PF 50V 10%
C9017	2113945A03	CAP CER CHP 330PF 50V 10%
C9018	2113945A03	CAP CER CHP 330PF 50V 10%
C9019	2113945A03	CAP CER CHP 330PF 50V 10%
C9020	2113945A03	CAP CER CHP 330PF 50V 10%
C9021	2113945A03	CAP CER CHP 330PF 50V 10%
C9022	2113945A03	CAP CER CHP 330PF 50V 10%
C9023	2113945A03	CAP CER CHP 330PF 50V 10%
C9024	2113945A03	CAP CER CHP 330PF 50V 10%
C9025	2113945A03	CAP CER CHP 330PF 50V 10%
C9026	2113945A03	CAP CER CHP 330PF 50V 10%
C9027	2113945A03	CAP CER CHP 330PF 50V 10%

Circuit Ref	Motorola Part No.	Description
C9028	2113945A03	CAP CER CHP 330PF 50V 10%
C9029	2113945A03	CAP CER CHP 330PF 50V 10%
C9030	2113944A15	CAP, 3.9pF
C9031	2113944A15	CAP, 3.9pF
C9032	2113944A15	CAP, 3.9pF
C9033	2113945A03	CAP CER CHP 330PF 50V 10%
C9038	2113945A03	CAP CER CHP 330PF 50V 10%
C9039	2113945A03	CAP CER CHP 330PF 50V 10%
C9040	2113945A03	CAP CER CHP 330PF 50V 10%
C9041	2113945A03	CAP CER CHP 330PF 50V 10%
C9042	2113945A03	CAP CER CHP 330PF 50V 10%
C9043	2113945A03	CAP CER CHP 330PF 50V 10%
C9044	2113945A03	CAP CER CHP 330PF 50V 10%
C9045	2113945A03	CAP CER CHP 330PF 50V 10%
C9046	2113945A03	CAP CER CHP 330PF 50V 10%
C9047	2113945A03	CAP CER CHP 330PF 50V 10%
C9048	2113945A03	CAP CER CHP 330PF 50V 10%
C9049	2113945A03	CAP CER CHP 330PF 50V 10%
C9050	2113945A03	CAP CER CHP 330PF 50V 10%
C9051	NOTPLACED	64AM DUMMY PART NUMBER
C9053	NOTPLACED	64AM DUMMY PART NUMBER
C9055	NOTPLACED	64AM DUMMY PART NUMBER
C9057	NOTPLACED	64AM DUMMY PART NUMBER
C9058	2113945A03	CAP CER CHP 330PF 50V 10%

Circuit Ref	Motorola Part No.	Description
C9059	2113945A03	CAP CER CHP 330PF 50V 10%
C9060	2113945A03	CAP CER CHP 330PF 50V 10%
C9061	2113945A03	CAP CER CHP 330PF 50V 10%
C9062	2113945A03	CAP CER CHP 330PF 50V 10%
C9063	2113945A03	CAP CER CHP 330PF 50V 10%
C9064	2113945A03	CAP CER CHP 330PF 50V 10%
C9065	2113945A03	CAP CER CHP 330PF 50V 10%
C9066	2113945A03	CAP CER CHP 330PF 50V 10%
C9067	NOTPLACED	64AM DUMMY PART NUMBER
C9068	NOTPLACED	64AM DUMMY PART NUMBER
C9069	NOTPLACED	64AM DUMMY PART NUMBER
C9070	2113945A03	CAP CER CHP 330PF 50V 10%
C9071	NOTPLACED	64AM DUMMY PART NUMBER
C9072	NOTPLACED	64AM DUMMY PART NUMBER
C9073	2313960C26	CAPP, 1uF
C9074	2313960A55	CAPP, 0.47uF
CR900	4815897H01	UPP9401E3
CR901	4815897H01	UPP9401E3
CR902	4815897H01	UPP9401E3
CR903	4815897H01	UPP9401E3
D001	4815059H01	1SV325
D200	4815096H01	1SV305
D201	4815059H01	1SV325
D202	4815059H01	1SV325
D203	4815096H01	1SV305
D204	4815096H01	1SV305
D205	4815059H01	1SV325
D206	4815059H01	1SV325
D207	4815096H01	1SV305
D400	4815059H01	1SV325
D401	4815059H01	1SV325
D402	4813974A19	MMBD352

Circuit Ref	Motorola Part No.	Description
D403	4815059H01	1SV325
D404	4815059H01	1SV325
D405	4815923H01	HSMS2829
D600	4815096H01	1SV305
D601	4875539M01	VARACTOR DIODE 1SV323
D3000	4813978A25	BAT54HT1G
D9000	4805729G49	BRPY1204W
D9001	4871232L01	0402ESDA
D9002	4871232L01	0402ESDA
E001	2480640Z01	BK1005HM471
E002	2480640Z01	BK1005HM471
E003	2480640Z01	BK1005HM471
E004	2480640Z01	BK1005HM471
E600	2480640Z01	BK1005HM471
E601	2480640Z01	BK1005HM471
E602	2480640Z01	BK1005HM471
E701	7686949J14	BLM21PG221SN1
E3030	2409134J04	BLM18BD601SN1
E3031	2409134J04	BLM18BD601SN1
E3032	2409134J04	BLM18BD601SN1
E3033	2409134J04	BLM18BD601SN1
E3700	7686949J08	IDCTR
E3701	7686949J08	IDCTR
E3702	7686949J08	IDCTR
E3703	7686949J08	IDCTR
E3704	7686949J08	IDCTR
E3705	7686949J08	IDCTR
E8000	7686949J08	IDCTR
E8001	7686949J08	IDCTR
E8002	NOTPLACED	64AM DUMMY PART NUMBER
E8003	7686949J08	IDCTR
E8004	7686949J08	IDCTR
E8005	7686949J08	IDCTR
E8006	7686949J08	IDCTR
E9000	7686949J14	BLM21PG221SN1
E9001	2480640Z01	BK1005HM471
E9006	NOTPLACED	64AM DUMMY PART NUMBER
E9007	NOTPLACED	64AM DUMMY PART NUMBER
F9000	6515076H02	FUSE
FL400	9180022M11	TS4-44E01
FL8000	9180310L38	B39162-B7829-C710
FL8001	9180310L38	B39162-B7829-C710
FL9000	2515003H02	DLP11SN201HL2

Circuit Ref	Motorola Part No.	Description
J9001	0970312L02	40 PIN BOARD-TO-BOARD CONNECTOR
L001	2415375H09	IDCTR, 2.7uH
L002	2415429H38	IDCTR, 120nH
L003	NOTPLACED	64AM DUMMY PART NUMBER
L200	24012023001	IDCTR, 1uH
L201	2415427H44	IDCTR, 68nH
L202	2416540H25	CHIP INDUCTOR
L203	24012023001	IDCTR, 1uH
L204	24012023001	IDCTR, 1uH
L205	24012023001	IDCTR, 1uH
L206	24012023001	IDCTR, 1uH
L207	2415429H36	IDCTR, 100nH
L208	24012023001	IDCTR, 1uH
L209	2415427H46	IDCTR, 100nH
L210	2415718H22	IDCTR, 82nH
L211	24012023001	IDCTR, 1uH
L212	24012023001	IDCTR, 1uH
L213	24012023001	IDCTR, 1uH
L214	24012023001	IDCTR, 1uH
L215	2415429H38	IDCTR, 120nH
L217	24012023001	IDCTR, 1uH
L218	2415429H43	IDCTR, 220nH
L400	2479990C01	IDCTR, 13.9nH
L401	2479990C01	IDCTR, 13.9nH
L402	2415429H36	IDCTR, 100nH
L403	2414017N22	IDCTR,CHIP,68NH,5%,400M A,1.2OHM,CER,14 Q,800MHZ SRF,SM,0603
L404	2415429H46	IDCTR, 330nH
L405	2415429H46	IDCTR, 330nH
L406	2415429H38	IDCTR, 120nH
L407	2415429H30	IDCTR, 47nH
L408	2479990C01	IDCTR, 13.9nH
L409	2479990C01	IDCTR, 13.9nH
L410	NOTPLACED	64AM DUMMY PART NUMBER
L411	2415429H35	IDCTR, 82nH
L412	2414017K32	IDCTR, 560nH
L413	2415429H31	IDCTR, 51nH
L414	2415429H31	IDCTR, 51nH
L415	2414017K33	IDCTR, 680nH
L416	2414017K31	IDCTR, 470nH
L417	2415718H31	CHIP INDUCTOR
L418	2415429H47	CHIP INDUCTOR

Circuit Ref	Motorola Part No.	Description
L420	2415427H50	IDCTR, 1.55nH
L421	2415427H50	IDCTR, 1.55nH
L600	2466505A01	IDCTR, 10uH
L601	2466505A01	IDCTR, 10uH
L602	2415569H01	IDCTR, 4.7uH
L603	2414017Q51	IDCTR, 2.2uH
L604	2414015B27	IDCTR, 390nH
L605	2415569H01	IDCTR, 4.7uH
L700	2414017N22	IDCTR,CHIP,68NH,5%,400M A,1.2OHM,CER,14 Q,800MHZ SRF,SM,0603
L701	2414017N22	IDCTR, 68nH
L702	2414017N09	IDCTR, 5.6nH
L703	2414017N22	IDCTR, 68nH
L705	2479990C03	IDCTR, 13.85nH
L707	2479990A02	IDCTR, 7.66nH
L708	2414017N15	IDCTR, 18nH
L709	2414017N11	IDCTR, 8.2nH
L710	2414017N13	IDCTR, 12nH
L712	2479990E02	IDCTR, 23.75nH
L902	2415347H01	IDCTR, 1000nH
L903	2415347H05	IDCTR, 1800nH
L904	2416066H02	IDCTR, 43nH
L905	2416066H02	IDCTR, 43nH
L906	2416066H02	IDCTR, 43nH
L907	2415347H05	IDCTR, 1800nH
L908	2416066H02	IDCTR, 43nH
L909	2416066H02	IDCTR, 43nH
L910	2416066H02	IDCTR, 43nH
L912	2414017P08	IDCTR, 3.9nH
L913	2414017P10	IDCTR, 5.6nH
L3003	2464675H01	IDCTR, 560nH
L3004	2464675H01	IDCTR, 560nH
L3020	2489846Y06	IDCTR, 10uH
L3021	2489846Y06	IDCTR, 10uH
L3022	2464675H01	IDCTR, 560nH
L8001	2414017P10	IDCTR, 5.6nH
L8002	2414017P17	IDCTR, 22nH
L8003	2414017P13	IDCTR, 10nH
L8004	2414017P10	IDCTR, 5.6nH
L9000	2471698M01	TAIYO YUDEN CHIP INDUCTOR 0603 SIZE
L9001	2415429H45	IDCTR, 270nH
L9007	2415429H45	IDCTR, 270nH
L9008	2415429H45	IDCTR, 270nH
M1	4271321L01	RETAINER

Circuit Ref	Motorola Part No.	Description
M2	4271321L01	RETAINER
M700	2615193H01	HEAT SPREADER COPPER BLOCK
M9000	4371105L01	BRD_SPACER
M9001	4371105L01	BRD_SPACER
M9002	4371105L01	BRD_SPACER
M9003	NOTPLACED	64AM DUMMY PART NUMBER
M9004	NOTPLACED	64AM DUMMY PART NUMBER
M9005	3915478H01	CONTACT
M9006	3915478H01	CONTACT
M9007	0915184H01	CONTACT
P900	2815696H01	CONN_P
P9000	2887818K02	CONN_P
PASTE	1085674C03	PASTE/NC-SMQ230 XSTR NPN 6V 30UA 12GHZ PB-FREE
Q001	4885061Y01	PB-FREE
Q002	4815359H01	BCV62
Q003	4816134H01	DTC114YM
Q200	4815029H01	NE851M03
Q202	4815055H01	UMC5NT2G
Q203	4815055H01	UMC5NT2G
Q204	4885061Y01	XSTR NPN 6V 30UA 12GHZ PB-FREE
Q205	4885061Y01	XSTR NPN 6V 30UA 12GHZ PB-FREE
Q206	4815055H01	UMC5NT2G
Q207	4815055H01	UMC5NT2G
Q208	4885061Y01	XSTR NPN 6V 30UA 12GHZ PB-FREE
Q400	4816531H01	QSBT_0038
Q401	4816531H01	QSBT_0038
Q600	4813973A04	73A04
Q601	4815055H01	UMC5NT2G
Q602	4885061Y01	XSTR NPN 6V 30UA 12GHZ PB-FREE
Q701	4815055H01	UMC5NT2G
Q702	4815055H01	UMC5NT2G
Q703	4816547H01	RD01MUS1
Q704	4816548H02	RD07MUS2B
Q900	4815055H01	UMC5NT2G
Q901	4815055H01	UMC5NT2G
Q3000	4805585Q23	SI8401DB
Q3001	4805585Q23	SI8401DB
Q3002	4816134H01	DTC114YM

Circuit Ref	Motorola Part No.	Description
Q3003	4813970A62	NTHS5441T1
Q3005	4805585Q23	SI8401DB
Q3006	4816134H01	DTC114YM
Q3010	4805585Q23	SI8401DB
Q9000	4813973M07	MMBT3904
Q9001	4815154H01	IMXFT110
Q9003	4813973M07	MMBT3904
R001	0613952Q96	RES, 9.1K
R002	0613952Q41	RES, 47
R003	0613952Q91	RES, 5.6K
R004	0613952Q66	RES, 510
R005	0613952Q56	RES, 200
R006	0613952Q93	RES, 6.8K
R007	0613952R01	RES, 10K
R008	0613952Q25	RES, 10
R010	0613952Q93	RES, 6.8K
R011	0613952Q49	RES, 100
R012	0613952R25	RES, 100K
R013	0613952Q46	RES, 75
R014	0613952Q42	RES, 51
R016	0613952Q33	RES, 22
R017	0613952Q42	RES, 51
R018	0613952Q88	RES, 4.3K
R019	0613952R01	RES, 10K
R020	0613952Q55	RES, 180
R022	0613952Q58	RES, 240
R025	0613952R13	RES, 33K
R026	0613952R01	RES, 10K
R027	0613952R66	RES, 0
R053	0613952R66	RES, 0
		64AM DUMMY PART
R054	NOTPLACED	NUMBER
R200	0613952Q96	RES, 9.1K
R201	0613952Q89	RES, 4.7K
R202	0613952Q49	RES, 100
R203	0613952Q52	RES, 130
R205	0613952Q91	RES, 5.6K
		64AM DUMMY PART
R207	NOTPLACED	NUMBER
R208	0613952Q96	RES, 9.1K
R209	0613952Q89	RES, 4.7K
R210	0613952Q49	RES, 100
R211	0613952Q50	RES, 110
R212	0613952Q90	RES, 5.1K
R213	0613952Q94	RES, 7.5K
R214	0613952Q58	RES, 240

Circuit Ref	Motorola Part No.	Description
		64AM DUMMY PART
R215	NOTPLACED	NUMBER
R216	0613952Q58	RES, 240
R217	0613952Q95	RES, 8.2K
R218	0613952Q66	RES, 510
R220	0613952Q60	RES, 300
R221	0613952Q31	RES, 18
R222	0613952Q60	RES, 300
R400	0613952R25	RES, 100K
R401	0613952R66	RES, 0
R402	0613952R66	RES, 0
R403	0613952R66	RES, 0
R404	0613952Q75	RES, 1.2K
R405	0613952R25	RES, 100K
		CER CHIP RES 1000 OHM 5
R406	0613952Q73	0402
R407	0613952Q42	RES, 51
		CER CHIP RES 10K OHM 5%
R409	0613952R01	0402
		CER CHIP RES 1500 OHM 5
R410	0613952Q77	0402
R411	0613952R03	RES, 12K
R412	0613952Q49	RES, 100
		CER CHIP RES 1500 OHM 5
R413	0613952Q77	0402
		CER CHIP RES 0.0 +/-0.050
R417	0613952R66	OHM
		CER CHIP RES 0.0 +/-0.050
R419	0613952R66	OHM
		RES,MF,1.1KOHM,5%,.0625
R420	0613952Q74	W,SM,0402,200PPM/ CEL,PB-FREE
		CER CHIP RES 150 OHM 5
R421	0613952Q53	0402
		CER CHIP RES 360 OHM 5
R422	0613952Q62	0402
		RES,MF,1.1KOHM,5%,.0625
		W,SM,0402,200PPM/ CEL,PB-FREE
R424	0613952Q74	CEL,PB-FREE
R425	0613952R66	RES, 0
R430	0613952R66	RES, 0
R496	0613952R66	RES, 0
		64AM DUMMY PART
R497	NOTPLACED	NUMBER
R600	0613952R01	RES, 10K
R601	0613952Q62	RES, 360

Circuit Ref	Motorola Part No.	Description
R602	0613952Q68	RES, 620
R603	0613952R05	RES, 15K
R604	0613952Q90	RES, 5.1K
R605	0613952Q90	RES, 5.1K
R606	0613952Q73	RES, 1K
R607	0613952R25	RES, 100K
R609	0613952R01	RES, 10K
R610	0613952R01	RES, 10K
R611	0613952Q63	RES, 390
R612	0613952R08	RES, 20K
R696	0613952R66	RES, 0
R697	0613952R66	RES, 0
R698	0613952R01	RES, 10K
R699	0613952R25	RES, 100K
		RES POWER METAL STRIP
R700	0615043C01	W18 COMPLIANT
		64AM DUMMY PART
R701	NOTPLACED	NUMBER
R702	0613952Z83	RES, 430K
R703	0613952Z83	RES, 430K
		64AM DUMMY PART
R704	NOTPLACED	NUMBER
R705	0613952R56	RES, 2MEG
R706	0613952R56	RES, 2MEG
R707	0613952Q81	RES, 2.2K
R708	0613952Z52	RES, 6.8K
R709	0613952Q62	RES, 360
R710	0613952Q80	RES, 2K
R711	0613952R08	RES, 20K
R712	0613952R66	RES, 0
		64AM DUMMY PART
R713	NOTPLACED	NUMBER
R714	0613952Q59	RES, 270
R717	0613958H33	RES, 22
R718	0613952Q63	RES, 390
R719	0613952Q45	RES, 68
R720	0613952H71	RES, 820
R723	0613952Q50	RES, 110
R725	0613952Q85	RES, 3.3K
R726	0613952R66	RES, 0
		64AM DUMMY PART
R727	NOTPLACED	NUMBER
R728	0613952Q60	RES, 300
R729	0613952Q33	RES, 22
R730	0613952Q60	RES, 300
R731	0613952R17	RES, 47K

Circuit Ref	Motorola Part No.	Description
		64AM DUMMY PART
R732	NOTPLACED	NUMBER
R733	0613952R66	RES, 0
R902	0613952H47	RES, 82
R903	0613952H47	RES, 82
R904	0613952H47	RES, 82
R905	0613952H47	RES, 82
R906	0613952R01	RES, 10K
R907	0613952R01	RES, 10K
R908	0613952H47	RES, 82
R909	0613952H47	RES, 82
R1000	0613952Q25	RES, 10
R1001	0613952R01	RES, 10K
R1005	0613952Q89	RES, 4.7K
R1006	0613952R01	RES, 10K
		64AM DUMMY PART
R1013	NOTPLACED	NUMBER
R1014	0613952R66	RES, 0
		64AM DUMMY PART
R1015	NOTPLACED	NUMBER
R1016	0613952R66	RES, 0
		64AM DUMMY PART
R1017	NOTPLACED	NUMBER
R1018	0613952R66	RES, 0
R1019	0613952Q18	RES, 5.1
R1020	0613952R66	RES, 0
R1021	0613952R66	RES, 0
R1023	0613952R66	RES, 0
R1025	0613952R01	RES, 10K
R1026	0613952R17	RES, 47K
		64AM DUMMY PART
R1027	NOTPLACED	NUMBER
R1028	0613952R66	RES, 0
R1034	0613952R01	RES, 10K
		64AM DUMMY PART
R1035	NOTPLACED	NUMBER
R1036	0613952R01	RES, 10K
R1041	0613952Q73	RES, 1K
R1045	0613952R01	RES, 10K
		64AM DUMMY PART
R1046	NOTPLACED	NUMBER
R1047	0613952R66	RES, 0
R1048	0613952R66	RES, 0
R1051	0613952R66	RES, 0
R1052	0613952R66	RES, 0
R1053	0613952Q89	RES, 4.7K



Circuit Ref	Motorola Part No.	Description
R1054	0613952Q89	RES, 4.7K 64AM DUMMY PART
R1055	NOTPLACED	NUMBER
R1060	0613952Q25	RES, 10
R1061	0613952R66	RES, 0
R1062	0613952R66	RES, 0 64AM DUMMY PART
R1063	NOTPLACED	NUMBER
R1065	0613952R66	RES, 0
R1067	0613952R03	RES, 12K
R1068	0613952R10	RES, 24K
R1069	0613952R66	RES, 0
R1070	0613952R01	RES, 10K
R1072	0613952R66	RES, 0
R2000	0613952R01	RES, 10K
R2004	0613952R66	RES, 0
R2005	0613952R01	RES, 10K
R2006	0613952R01	RES, 10K
R2007	0613952R01	RES, 10K
R2008	0613952R01	RES, 10K
R2009	0613952R01	RES, 10K
R2010	0613952R01	RES, 10K
R2011	0613952R66	RES, 0
R2012	0613952R01	RES, 10K
R2013	0613952R01	RES, 10K CER CHIP RES 20K OHM 5
R3004	0613952R08	0402 CER CHIP RES 4700 OHM 5
R3005	0613952Q89	0402 CER CHIP RES 20K OHM 5
R3006	0613952R08	0402 CER CHIP RES 4700 OHM 5
R3007	0613952Q89	0402 CER CHIP RES 20K OHM 5
R3008	0613952R08	0402 CER CHIP RES 4700 OHM 5
R3009	0613952Q89	0402
R3010	0613952N01	RES, 10K
R3011	0613952Q81	RES, 2.2K
R3012	0613952Q59	RES, 270
R3013	0613952Q81	RES, 2.2K
R3014	0613952M30	RES, 2K
R3016	0616416H01	RES, 0.1
R3017	0613952P25	RES, 178K
R3018	0613952R18	RES, 51K
R3020	0613952Q34	RES, 24

Circuit Ref	Motorola Part No.	Description
R3021	0613952Q34	RES, 24
R3023	0613952R17	RES, 47K
R3024	0613952Z67	RES, 51K
R3025	0613952Q49	RES, 100 CER CHIP RES 270 OHM 5
R3026	0613952Q59	0402 CER CHIP RES 270 OHM 5
R3027	0613952Q59	0402
R3028	0613952N69	RES, 51.1K
R3029	0613952N60	RES, 41.2K
R3030	0686135Z02	RES, 0.2
R3031	0613952R66	RES, 0
R3032	0613952Q95	RES, 8.2K
R3033	0613952R05	RES, 15K
R3034	0613952Q95	RES, 8.2K
R3035	0613952R05	RES, 15K
R3036	0613952N01	RES, 10K
R3037	0613952Q77	RES, 1.5K 64AM DUMMY PART
R3038	NOTPLACED	NUMBER
R3040	0613952Q81	RES, 2.2K
R3041	0613952N01	RES, 10K
R3043	0613952R32	RES, 200K
R3050	0613952R25	RES, 100K
R3051	0613952Q89	RES, 4.7K
R3053	0613952Z58	RES, 22K
R3054	0613952Z58	RES, 22K
R3055	0613952R25	RES, 100K
R3056	0613952R66	RES, 0
R3060	0613952M30	RES, 2K
R3070	0613952R33	RES, 220K
R3071	0613952R33	RES, 220K
R3072	0613952R56	RES, 2MEG
R3073	0613952R56	RES, 2MEG
R3074	0613952Q73	RES, 1K
R3075	0613952N01	RES, 10K 64AM DUMMY PART
R3088	NOTPLACED	NUMBER
R3098	0613952Q85	RES, 3.3K
R3100	0613952R17	RES, 47K
R3101	0613952R25	RES, 100K
R3102	0613952A30	RES, 2
R3103	0615049H16	RES, 0.7
R3200	0613952R33	RES, 220K
R3201	0613952R20	RES, 62K
R3202	0613952R33	RES, 220K

Circuit Ref	Motorola Part No.	Description
R3203	0613952R36	RES, 300K
R3500	0613952Q77	RES, 1.5K 64AM DUMMY PART
R3501	NOTPLACED	NUMBER
R3700	0613952Q73	RES, 1K
R3701	0613952R01	RES, 10K CER CHIP RES 30.9K OHM 1
R3702	0613952N48	0402 CER CHIP RES 24.3K OHM 1
R3703	0613952N38	0402
R3704	0613952R01	RES, 10K
R3800	0613952Q25	RES, 10 64AM DUMMY PART
R3888	NOTPLACED	NUMBER
R8002	0613952R25	RES, 100K
R8003	0613952R01	RES, 10K
R8004	0613952Q70	RES, 750
R8010	0613952R05	RES, 15K
R8011	0613952R25	RES, 100K
R8012	0613952R01	RES, 10K 64AM DUMMY PART
R8015	NOTPLACED	NUMBER CER CHIP RES 0.0 +/-0.050
R8016	0613952R66	OHM 64AM DUMMY PART
R8017	NOTPLACED	NUMBER
R8020	0613952R66	RES, 0
R8023	0613952R66	RES, 0
R8024	0613952R25	RES, 100K
R8025	0613952R66	RES, 0
R8026	0613952R25	RES, 100K
R8027	0613952R25	RES, 100K
R8028	0613952R25	RES, 100K
R8029	0613952R25	RES, 100K
R8030	0613952R01	RES, 10K
R8031	0613952R25	RES, 100K
R8032	0613952R25	RES, 100K
R8033	0613952R25	RES, 100K
R8034	0613952R01	RES, 10K
R8035	0613952R01	RES, 10K
R8036	0613952R01	RES, 10K
R8037	0613952R01	RES, 10K
R9000	0613952Q73	RES, 1K
R9001	0613952Q73	RES, 1K
R9002	0613952Q73	RES, 1K
R9003	0613952Q73	RES, 1K

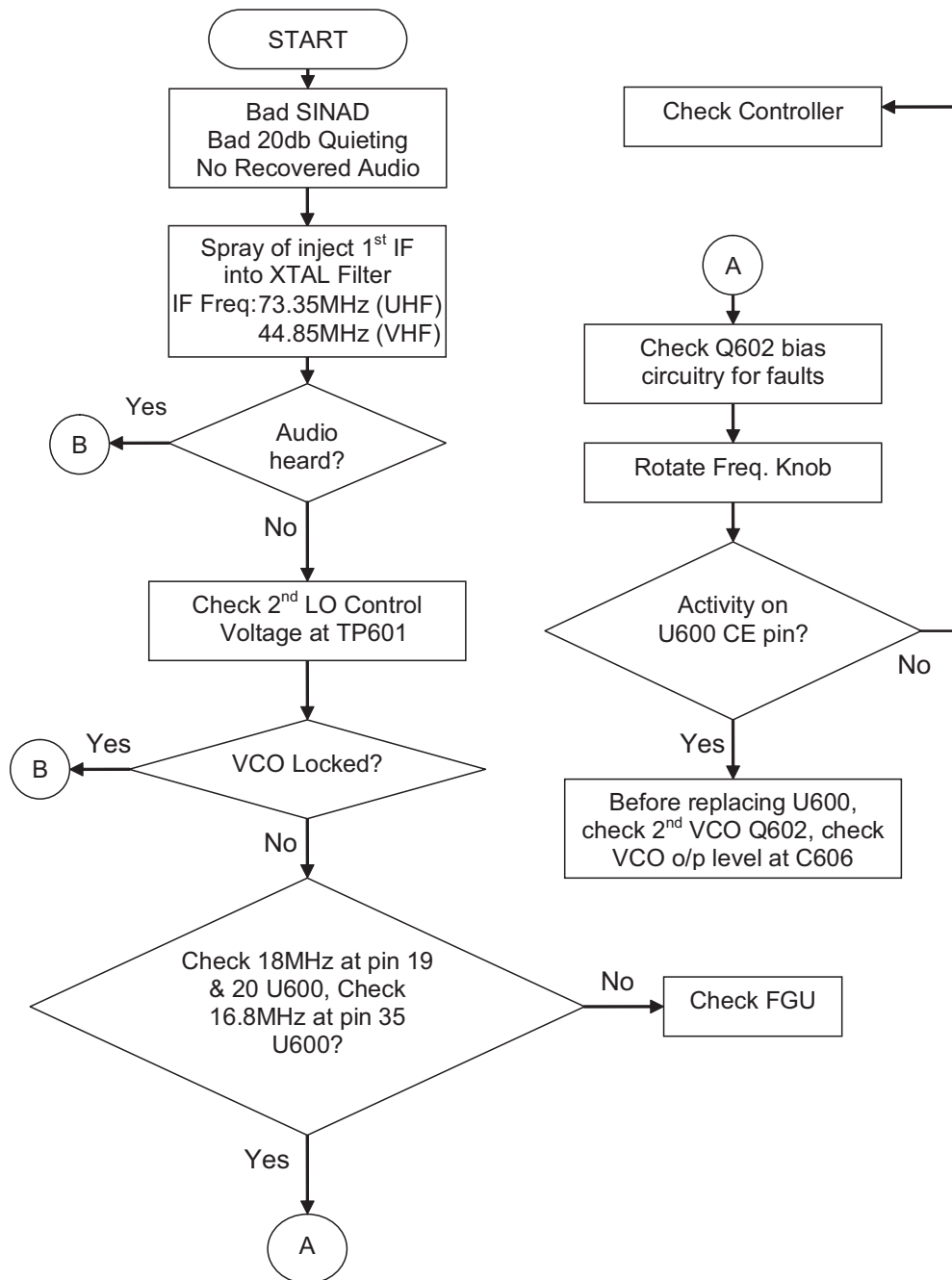
Circuit Ref	Motorola Part No.	Description
R9004	0613952Q73	RES, 1K
R9005	0613952Q73	RES, 1K
R9006	0613952Q73	RES, 1K
R9007	0613952Q73	RES, 1K
R9008	0613952R17	RES, 47K
R9009	0613952R01	RES, 10K
R9010	0613952R01	RES, 10K
R9011	0613952R17	RES, 47K
R9012	0613952Q50	RES, 110
R9013	0613952Q37	RES, 33
R9014	0613952R01	RES, 10K
R9015	0613952R01	RES, 10K
R9016	0613952R01	RES, 10K
R9017	0613952R01	RES, 10K
R9018	0613952R01	RES, 10K
R9019	0613952Q73	RES, 1K
R9020	0613952Q89	RES, 4.7K 64AM DUMMY PART
R9021	NOTPLACED	NUMBER 64AM DUMMY PART
R9022	NOTPLACED	NUMBER
R9050	0613952R01	RES, 10K
R9051	0613952R01	RES, 10K
R9052	0613952Q65	RES, 470
S9000	4086470Z01	SWITCH
S9001	4015186H02	SWITCH, VOLUME
S9002	4015203H05	SWITCH, FREQUENCY 64AM DUMMY PART
SH9000	NOTPLACED	NUMBER 64AM DUMMY PART
SH9001	NOTPLACED	NUMBER
T400	2515396H01	XFMR
T401	2515396H01	XFMR
U001	5104932K08	SC51650VF
U002	5114000B59	MC74VHC1GT66
U200	5116014H01	UPC8179TK
U400	5115442H01	MAX2371
U600	5102495J14	AD9864
U700	4802246J29	ADA4743
U701	5115147H01	AD8566
U702	5115022H01	LM50
U1000	5102495J13	OMAP1710
U1005	5171209L01	TXB0104ZXUR
U1006	5115001H02	NL27WZU04
U2000	0104032J61	PRE-FLASHED FLASH IC

Circuit Ref	Motorola Part No.	Description
U2001	5171614M03	MICRON 16MB SDR SDRAM Y35M
U3000	5185143E77	PWR_MNGR_BLOCK
U3002	5189680C06	LP38690SD
U3003	5115453H01	LMC6035ITLX
U3004	5114007A43	NL17SZ14
U3006	5115974H01	LP3990
U3007	5171395L01	TS5A23166
U3008	5115391H01	TK11100CSC
U3009	5164852H47	PCA9306
U3020	5171428L01	LTC1877
U3021	5171428L01	LTC1877
U3700	5116282H01	TPS79228
U3701	5116283H01	TPS79101
U8000	0104024J41	PRE-FLASHED SIRF SINGLE CHIP GPS IC
U8001	5164015H55	UPC8211TK
VR9000	4866544A01	SR05
VR9001	4813979P10	MMQA5V6T1
VR9002	4813979P10	MMQA5V6T1
VR9003	4815040H01	MM3Z12VT1G
VR9004	4815040H01	MM3Z12VT1G
VR9005	4805656W76	MM5Z5V6
VR9006	4805656W76	MM5Z5V6
VR9007	4805656W76	MM5Z5V6
VR9008	4813979P10	MMQA5V6T1
VR9009	4813977C23	MMSZ5243
VR9010	4813977C23	MMSZ5243
VR9015	NOTPLACED	64AM DUMMY PART NUMBER
VR9016	NOTPLACED	64AM DUMMY PART NUMBER
VR9017	4815040H01	MM3Z12VT1G
VR9018	4815040H01	MM3Z12VT1G
VR9020	4813979P10	MMQA5V6T1
VR9021	4813979P10	MMQA5V6T1
VR9022	4813979P10	MMQA5V6T1
VR9023	4815040H01	MM3Z12VT1G
Y001	5116032H01	IVT5300B
Y1000	93012000001	CX3225SB
Y3000	4802582S80	XTAL
Y3001	4815028H01	CX-101F
Y8000	4802582S80	XTAL

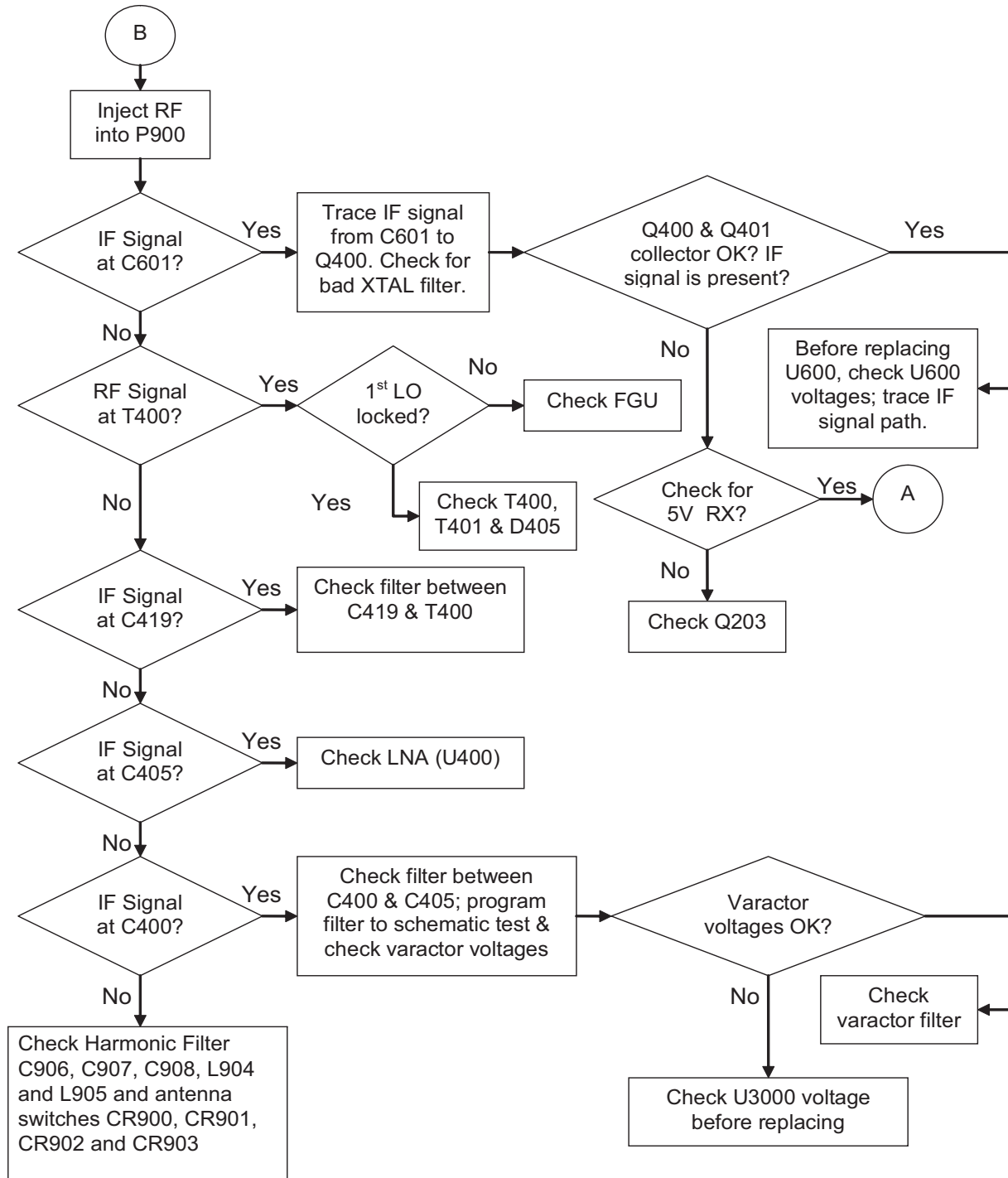
# Section 10

## TROUBLESHOOTING CHARTS

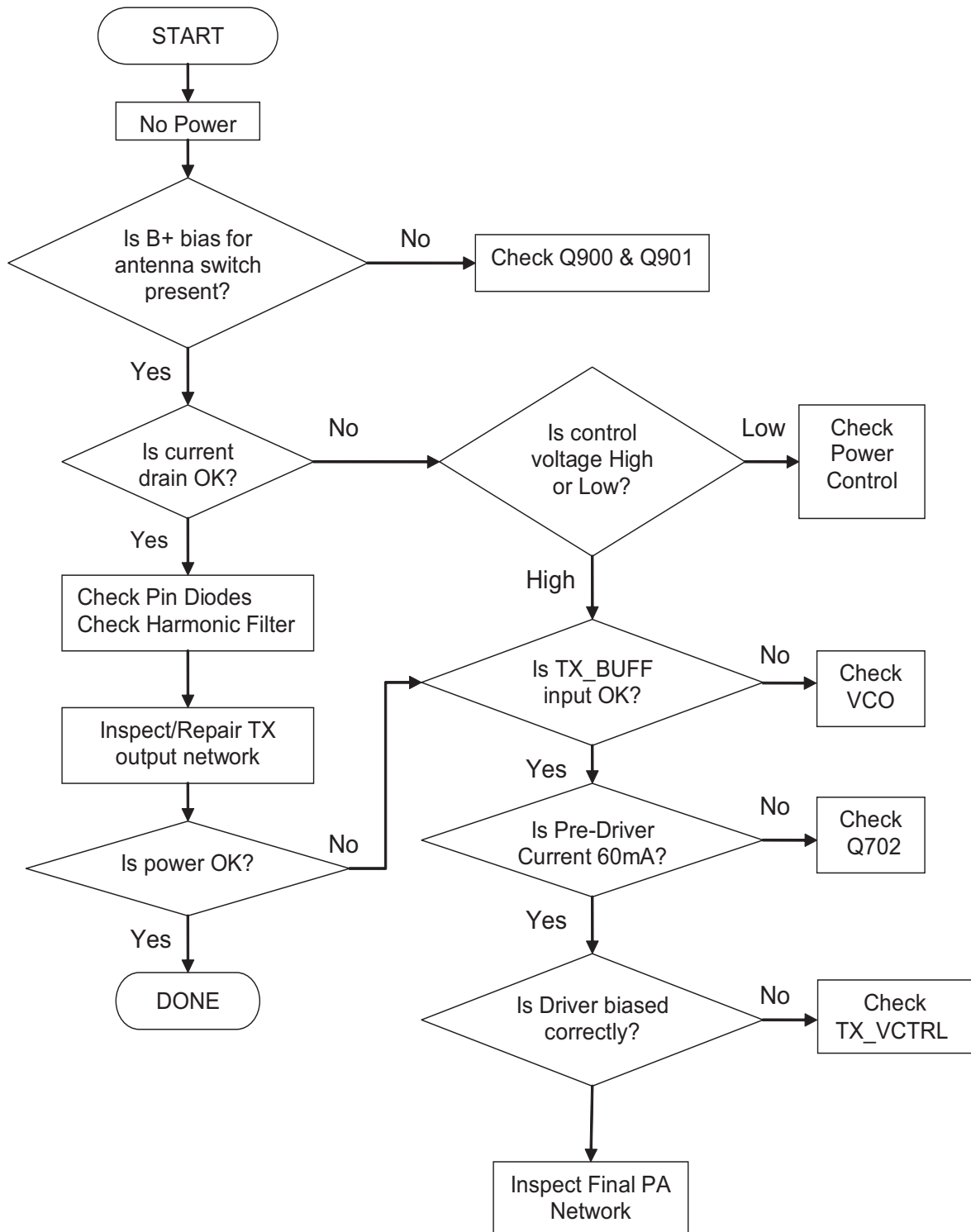
### 1.0 VHF, 350 MHz and UHF1 Troubleshooting Charts



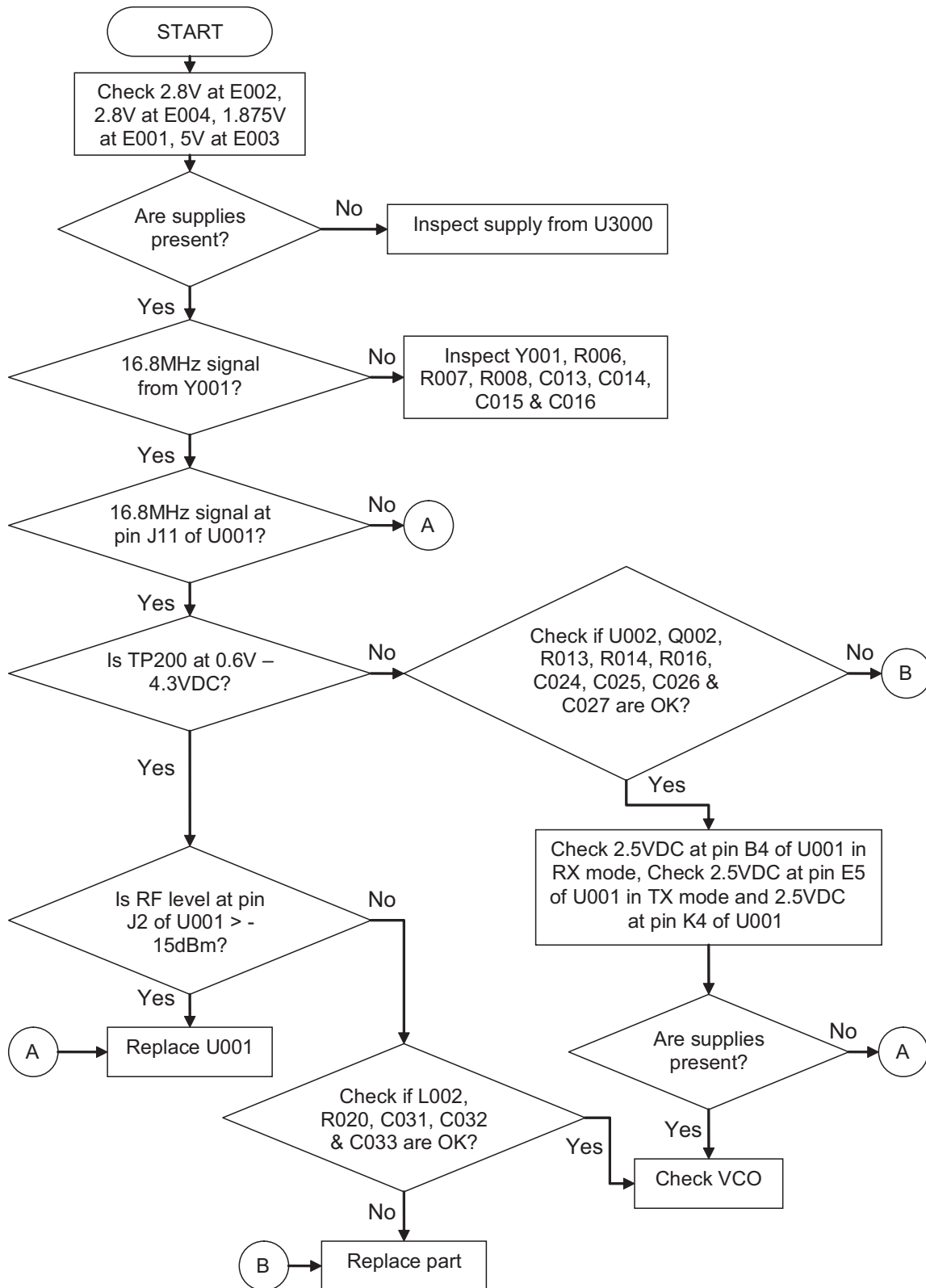
**Troubleshooting Flow Chart for Receiver  
(Sheet 1 of 2)**



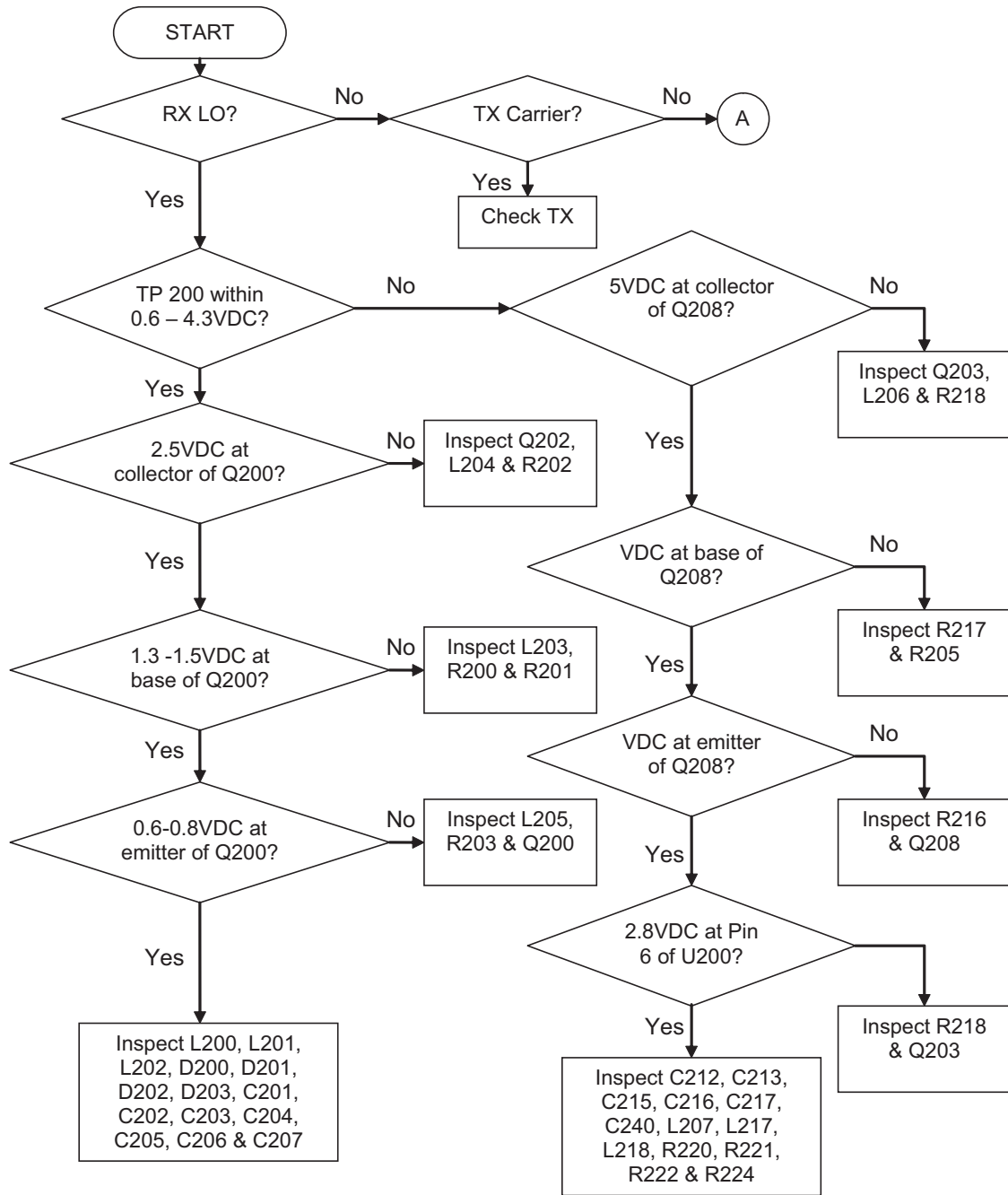
**Troubleshooting Flow Chart for Receiver  
(Sheet 2 of 2)**



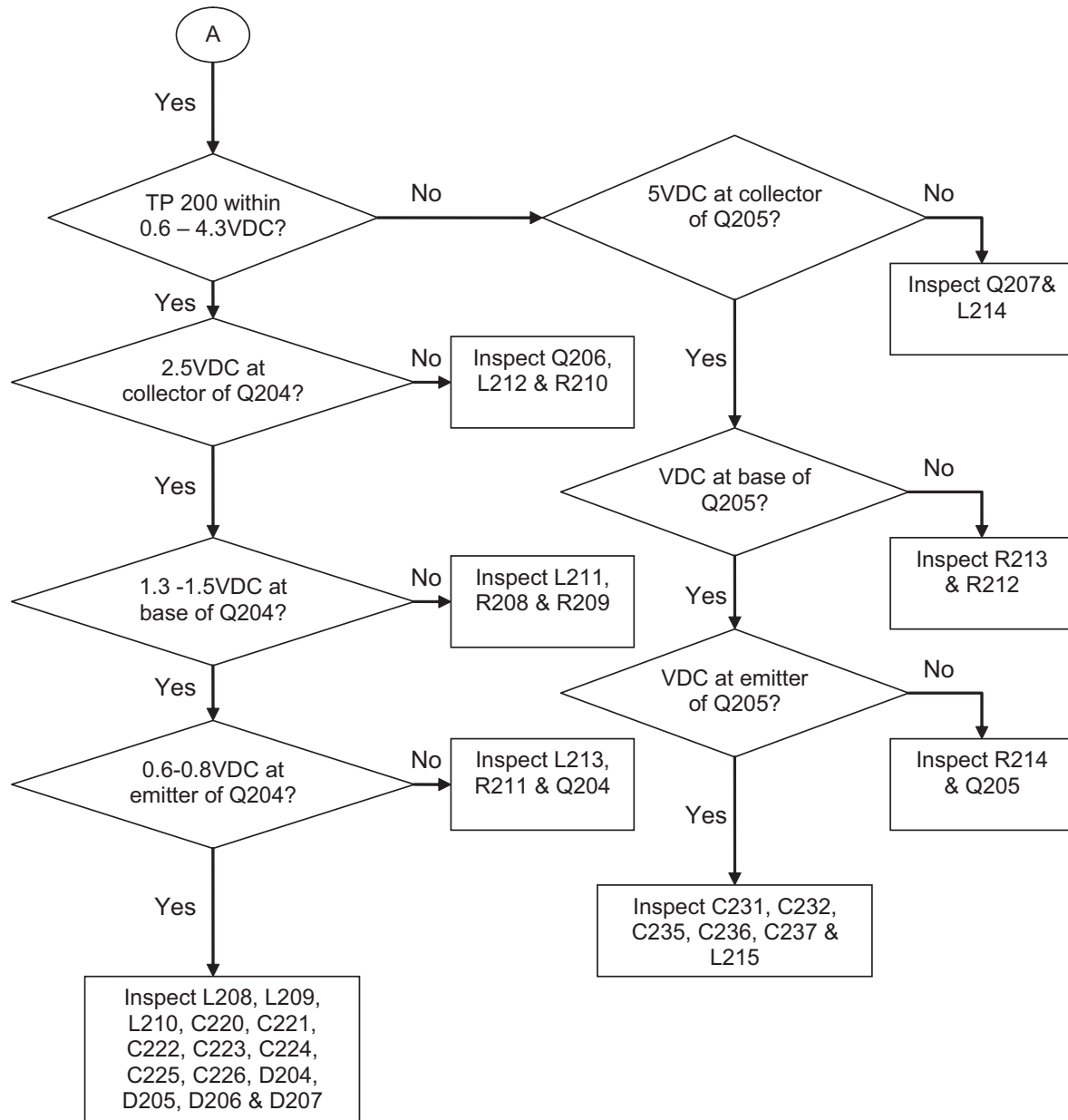
**Troubleshooting Flow Chart for Transmitter**



**Troubleshooting Flow Chart for Synthesizer**

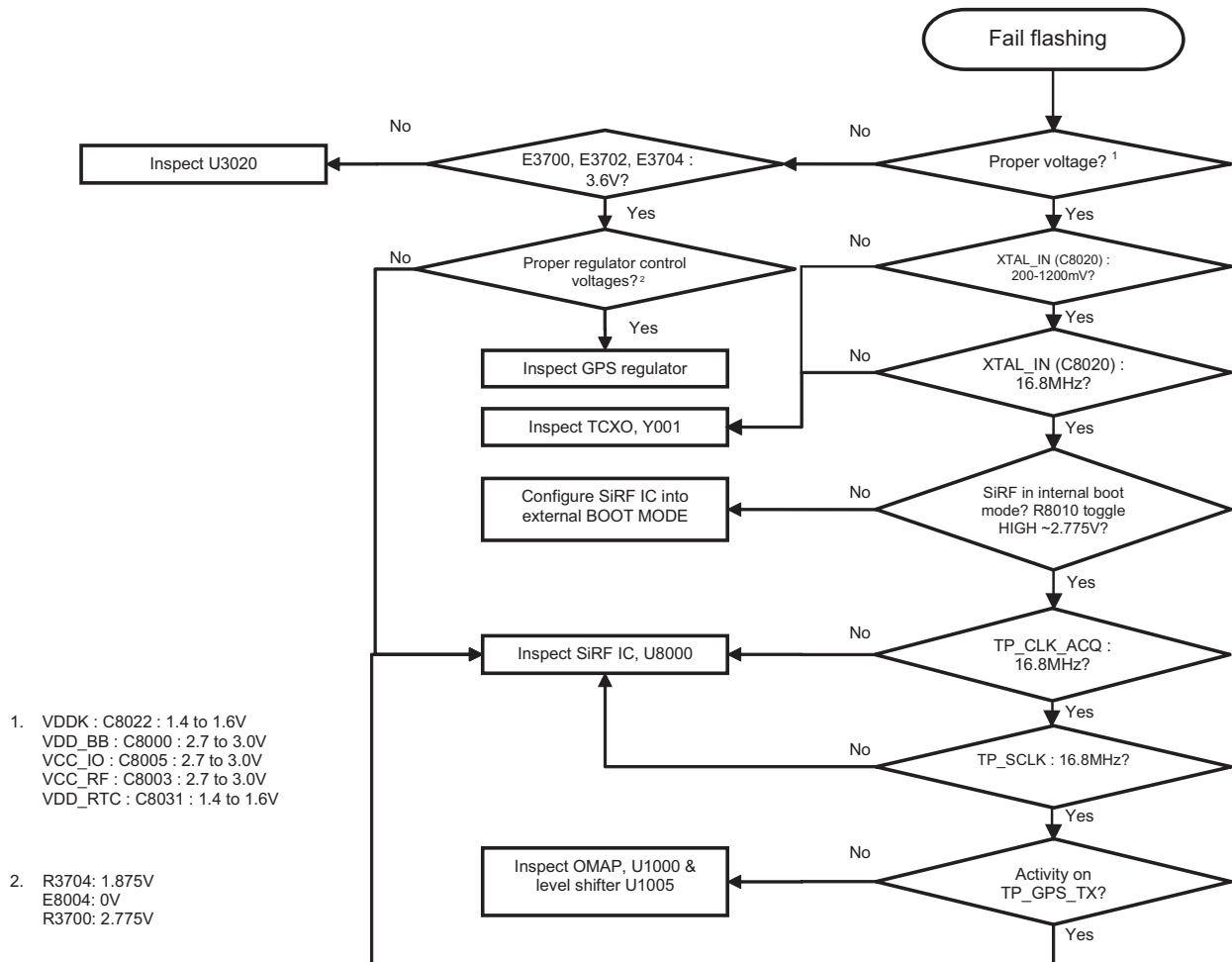


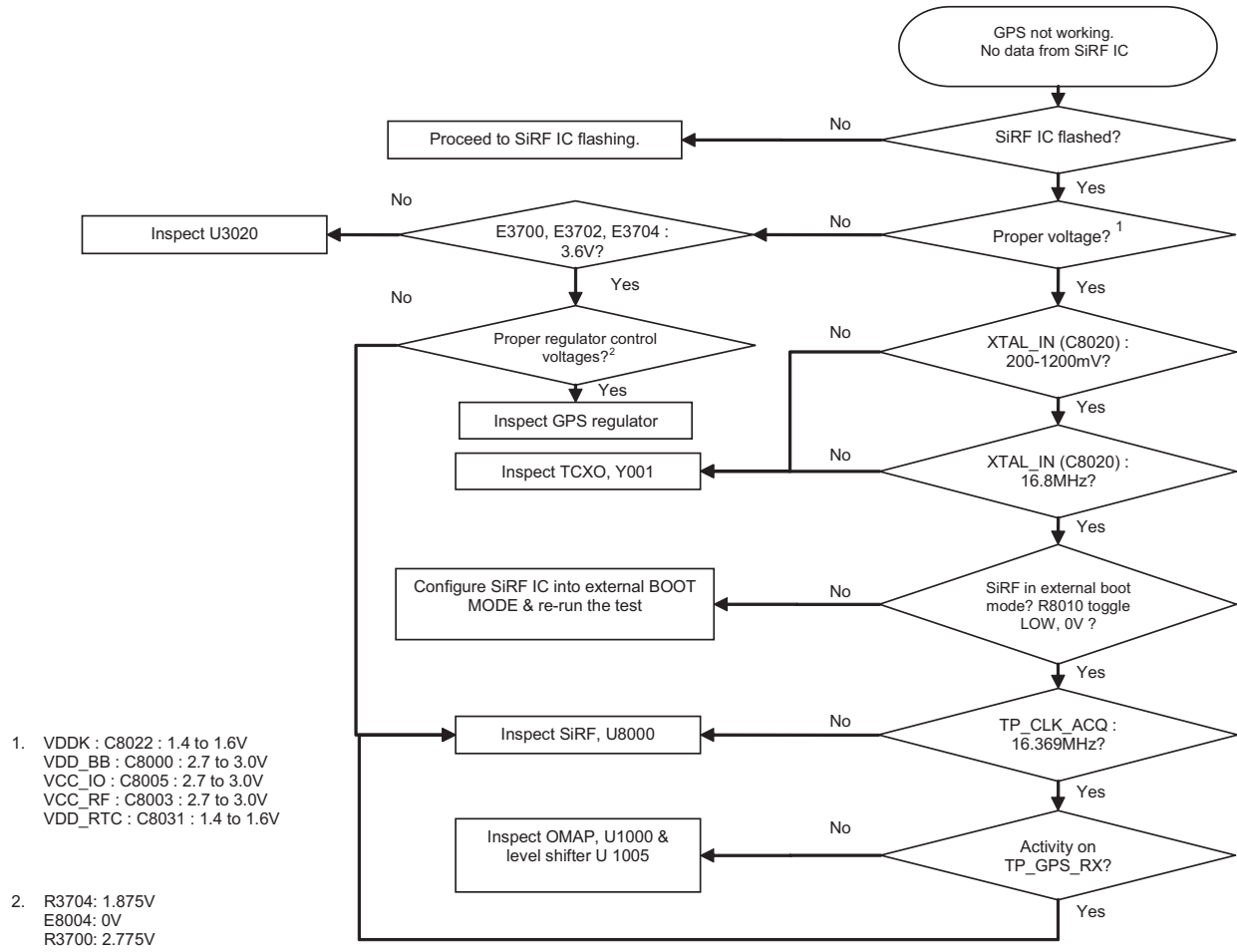
**Troubleshooting Flow Chart for VCO  
(Sheet 1 of 2)**

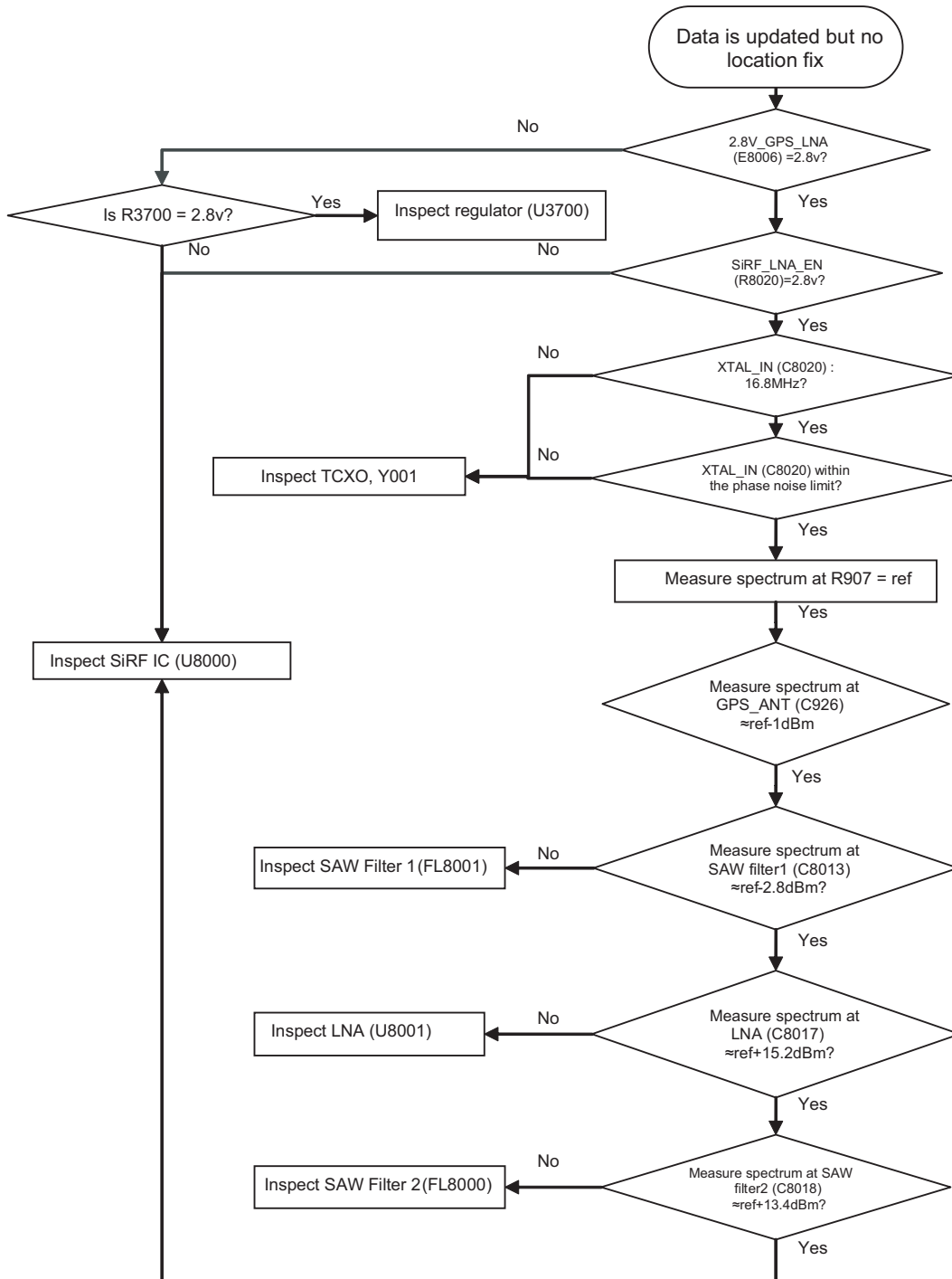


**Troubleshooting Flow Chart for VCO  
(Sheet 2 of 2)**









## Notes

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## Section 11

# OPTION BOARD INFORMATION

### 1.0 Option Board

The option board is an interface board between the main RF board and the keypad and Universal Connector. The option board interfaces signals on 40-pin connector on the main board with signals on keypad flex (keypad, side buttons, microphone, backlight control & supply, PTT) and UC flex/connector of radio side connector (data, USB, accessory device supply, speaker).

The option board also provides test point for each UC signal to allow communication and testing of radio during production testing. Zener diodes are placed on keypad, side buttons, microphone, PTT, data, USB, accessory device supply, speaker, lines for protection of radio from electrostatic discharge (ESD). A transistor is placed here as a switch for backlight LED's for keypad.

### 2.0 Board Layout/Schematic for Option Board

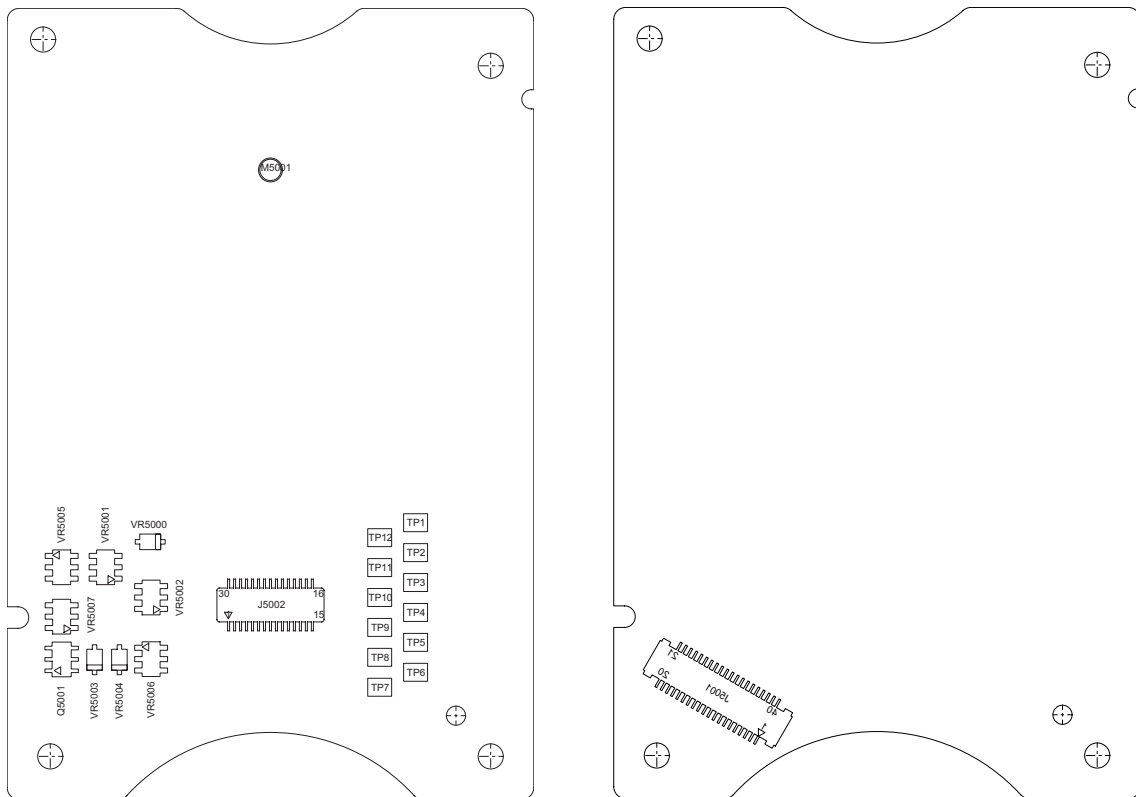


Figure 11-1: Option Board Layout

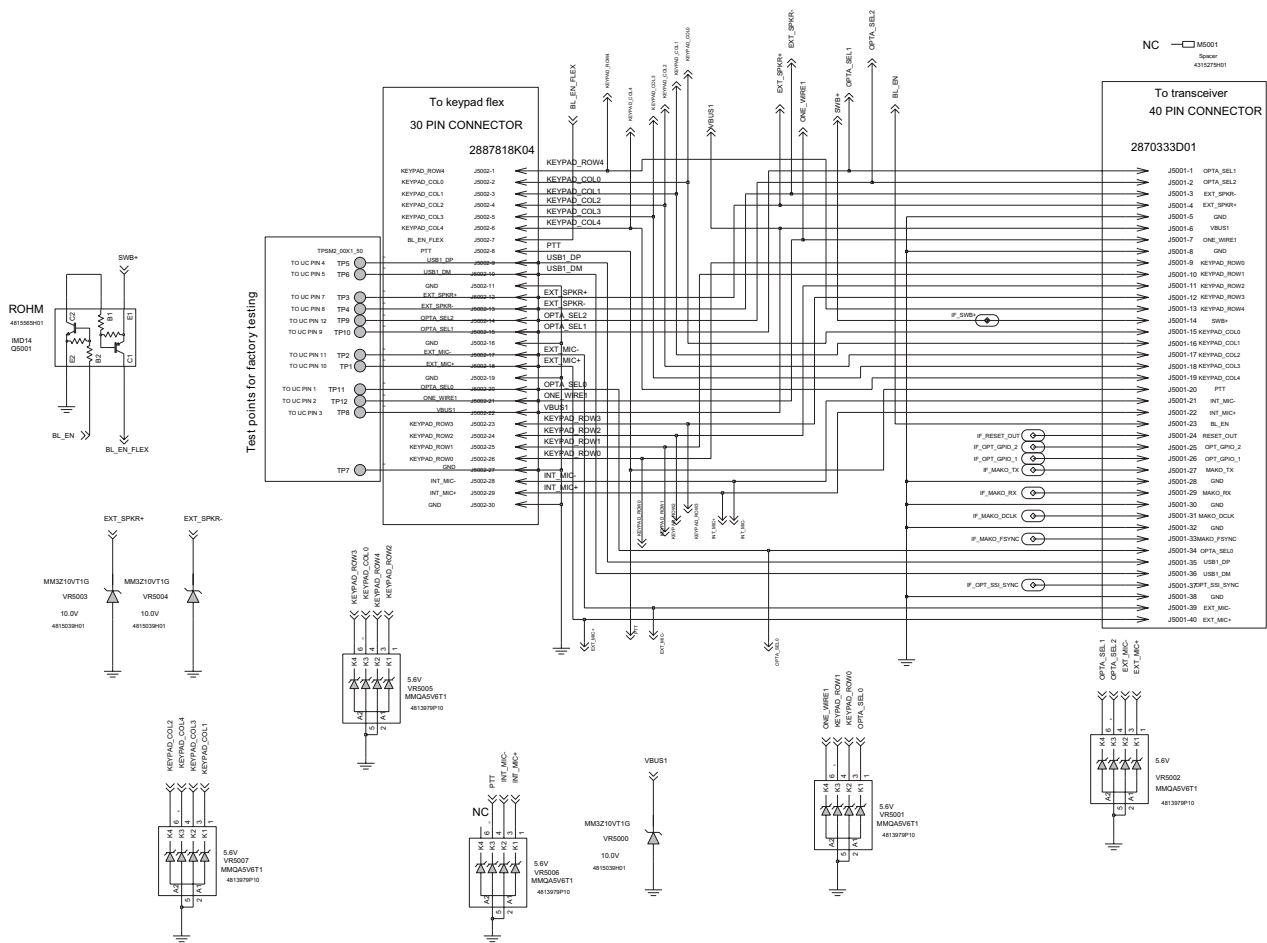


Figure 11-2: Option Board Schematic

## 2.1 Parts List for Option Board

Reference Symbol	Motorola Part No.	Description
J5002	2887818K04	30 pin board-to-board connector, connector_p
J5001	2871741C01	40 pin board-to-board connector, connector_p
Q5001	4815565H01	ROHM IMD14 transistor
VR5001	4813979P10	MMQA5V6T1
VR5002	4813979P10	MMQA5V6T1
VR5005	4813979P10	MMQA5V6T1
VR5006	4813979P10	MMQA5V6T1
VR5007	4813979P10	MMQA5V6T1
VR5003	4815040H01	MM3Z12VT1G
VR5004	4815040H01	MM3Z12VT1G
VR5000	4815040H01	MM3Z12VT1G
M5001	4315275H01	Spacer

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# Appendix A Replacement Parts Ordering

## 1.0 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.

## 2.0 Motorola Online

Motorola Online users can access our online catalog at

<https://www.motorola.com/businessonline>

To register for online access, please call 800-422-4210 (for U.S. and Canada Service Centers only). International customers can obtain assistance at <https://www.motorola.com/businessonline>

## 3.0 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.

## 4.0 Telephone Orders

The 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)  
1-800-826-1913 Federal Government Parts - Credit Cards Only  
8:30 AM to 5:00 PM (Eastern Standard Time)

## 5.0 Fax Orders

The Radio Products and Solutions Organization\*  
(United States and Canada)  
1-800-622-6210  
847-576-3023 (United States and Canada)

USFGMD  
(Federal Government Orders)  
1-800-526-8641 (For Parts and Equipment Purchase Orders)

## 6.0 Parts Identification

The Radio Products and Solutions Organization\*  
(United States and Canada)  
1-800-422-4210

## **7.0 Product Customer Service**

Radio Products and Solutions Organization (United States and Canada)  
1-800-927-2744

\* The Motorola Radio Products and Solutions Organization (RPSO) was formerly known as the Radio Products Services Division (RPSD) and/or the Accessories and Aftermarket Division (AAD).



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## **Appendix B    Motorola Service Centers**

### **1.0    Servicing Information**

If a unit requires further 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.

### **2.0    Motorola Service Center**

45D Butterfield Trail  
El Paso, TX 79906

Tel: 1-800-227-6772

### **3.0    Motorola Canadian Technical Logistics Center**

Motorola Canada Ltd.  
8133 Warden Avenue  
Markham, Ontario, L6G 1B3

Tel: 800-543-3222

Fax: 888-331-9872 / 905-948-5970

### **4.0    Motorola Federal Technical Center**

4395 Nicole Drive  
Lanham, MD 20706

Tel: 800-969-6680

Fax: 800-784-4113

## Notes

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# Glossary

This glossary contains an alphabetical listing of terms and their definitions that are applicable to 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>Analog</b>	Refers to a continuously variable signal or a circuit or device designed to handle such signals.
<b>Band</b>	Frequencies allowed for a specific purpose.
<b>CPS</b>	Customer Programming Software: Software with a graphical user interface containing the feature set of a radio.
<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.
<b>DPL</b>	Digital Private-Line: A type of digital communications that utilizes privacy call, as well as memory channel and busy channel lock out to enhance communication efficiency.
<b>FCC</b>	Federal Communications Commission.
<b>Frequency</b>	Number of times a complete electromagnetic-wave cycle occurs in a fixed unit of time (usually one second).
<b>GPIO</b>	General-Purpose Input/Output: Pins whose function is programmable.
<b>GPS</b>	Global Positioning System
<b>IC</b>	Integrated Circuit: 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>IF</b>	Intermediate Frequency.
<b>kHz</b>	kilohertz: One thousand cycles per second. Used especially as a radio-frequency unit.
<b>LCD</b>	Liquid-Crystal Display: 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>LED</b>	Light Emitting Diode: An electronic device that lights up when electricity is passed through it.
<b>MDC</b>	Motorola Digital Communications.

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Term	Definition
<b>MHz</b>	Megahertz: One million cycles per second. Used especially as a radio-frequency unit.
<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>PL</b>	Private-Line Tone Squelch: A continuous sub-audible tone that is transmitted along with the carrier.
<b>Programming Cable</b>	A cable that allows the CPS to communicate directly with the radio using USB.
<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>Repeater</b>	Remote transmit/receive facility that re-transmits received signals in order to improve communications range and coverage (conventional operation).
<b>RF</b>	Radio Frequency: The portion of the electromagnetic spectrum between audio sound and infrared light (approximately 10 kHz to 10 GHz).
<b>RX</b>	Receive.
<b>Signal</b>	An electrically transmitted electromagnetic wave.
<b>Spectrum</b>	Frequency range within which radiation has specific characteristics.
<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.
<b>TOT</b>	Time-out Timer: A timer that limits the length of a transmission.
<b>TPL</b>	Tone Private Line
<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>TX</b>	Transmit.
<b>UHF</b>	Ultra-High Frequency.
<b>USB</b>	Universal Serial Bus: An external bus standard that supports data transfer rates of 12 Mbps.
<b>VIP</b>	Vehicle Interface Port.
<b>XPR</b>	Refers to Digital Professional Radio model names in the MOTOTRBO Professional Digital Two-Way Radio System.





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