

PROFESSIONAL DIGITAL TWO-WAY RADIO



# MOTOTRBO™ MOBILE

XPR™ 5350e NUMERIC DISPLAY MOBILE  
(WITH BLUETOOTH/Wi-Fi & GNSS)

XPR™ 5550e COLOR DISPLAY MOBILE  
(WITH BLUETOOTH/Wi-Fi & GNSS)

XPR™ 5380e NUMERIC DISPLAY MOBILE  
(WITH BLUETOOTH/Wi-Fi & GNSS)

XPR™ 5580e COLOR DISPLAY MOBILE  
(WITH BLUETOOTH/Wi-Fi & GNSS)

## DETAILED SERVICE MANUAL





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## Foreword

This manual covers all XPR™ 5000e Series Mobiles, unless otherwise specified. This manual provides sufficient information to enable qualified service technicians to troubleshoot and repair XPR™ 5000e Series Mobiles to the component level.

For details on radio operation or basic troubleshooting, refer to the applicable manuals available separately.



**These servicing instructions are for use by qualified personnel only. To reduce the risk of electric shock, do not perform any servicing other than that contained in the Operating Instructions unless you are qualified to do so. Refer all servicing to qualified service personnel.**

## Product Safety and RF Exposure Compliance

### ATTENTION!

**Before using the mobile two-way product, XPR™ 5000e Series Mobiles, read the RF Exposure and Safety guide that ships with the radio which contains important operating instructions for safe usage and RF energy awareness and control for Compliance with applicable Standards and Regulations.**

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## Notes

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## Document History

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

Edition	Description	Date
MN002205A01-AA	Initial Release.	Nov. 2015

## Notes

# Commercial Warranty

## Limited Warranty

### MOTOROLA COMMUNICATION PRODUCTS

#### I. What This Warranty Covers And For How Long

MOTOROLA SOLUTIONS INC. ("MOTOROLA") warrants the MOTOROLA manufactured Communication Products listed below ("Product") against defects in material and workmanship under normal use and service for a period of time from the date of purchase as scheduled below:

XPR Series Digital Mobile Radios	Two (2) Years
Product Accessories	One (1) Year

The mobiles 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 price pages or Motorola Online (<http://www.motorola.com/businessonline>) > Resource Center > Services > Service Product Offerings > Repair Service Advantage or Extended Warranty.

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You must provide proof of purchase (bearing the date of purchase and Product item serial number) in order to receive warranty service and, also, deliver or send the Product item, transportation and insurance prepaid, to an authorized warranty service location. Warranty service will be provided by Motorola through one of its authorized warranty service locations. If you first contact the company which sold you the Product, it can facilitate your obtaining warranty service. You can also call Motorola at 1-888-567-7347 US/Canada.

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- A. Defects or damage resulting from use of the Product in other than its normal and customary manner.
- B. Defects or damage from misuse, accident, water, or neglect.
- C. Defects or damage from improper testing, operation, maintenance, installation, alteration, modification, or adjustment.
- D. Breakage or damage to antennas unless caused directly by defects in material workmanship.
- E. A Product subjected to unauthorized Product modifications, disassemblies or repairs (including, without limitation, the addition to the Product of non-Motorola supplied equipment) which adversely affect performance of the Product or interfere with Motorola's normal warranty inspection and testing of the Product to verify any warranty claim.
- F. Product which has had the serial number removed or made illegible.
- G. Freight costs to the repair depot.
- H. 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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- B. that MOTOROLA will have sole control of the defense of such suit and all negotiations for its settlement or compromise; and
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This Warranty is governed by the laws of the State of Illinois, USA.

## Notes

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# **XPR 5350e/XPR 5550e Mobile Radios**

## **Detailed Service Manual**

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## Summary of Printed Circuit Boards and Bands available:

Table below lists all the bands available in this manual and the revision of the Printed Circuit Boards used. For details, please refer to the respective chapters.

Chapter	Description	PC Board Part Number	Board Revision
3	Numeric Display Control Head	84012212002	B
3	Color Display Control Head	84012211002	B
4	Bluetooth/Wi-Fi/GNSS Expansion Board	PC000942A01	AA
5	Generic Option Board (GOB)	PC000957A01	CA
7	VHF Low Power 136–174 MHz, 1–25 W	84012734001	A
8	VHF High Power 136–174 MHz, 25–45 W	84012736001	A
9	UHF1 Low Power 403–470 MHz, 1–25 W	84012735001	A
10	UHF1 High Power 403–470 MHz, 25–40 W	84012737001	A
11	UHF2 450–512 MHz, 1–40 W	84012728001	A
12	800/900 MHz 806–941 MHz, 10–35/30 W	84012657001	A

## Notes



# **XPR 5350e/XPR 5550e Mobile Radios**

## **Chapter 1**

### **Service Maintainability**

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# Chapter 1 – Service Maintainability

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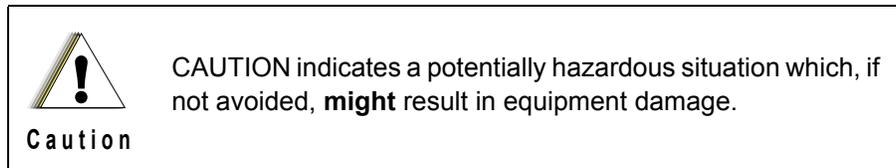
# Section 1

## 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 5000e series mobile radios are available in the following frequency ranges and power levels.

Freq. Band	Bandwidth	Power Level
VHF	136–174 MHz	1–25 Watts 25–45 Watts
UHF B1	403–470 MHz	1–25 Watts 25–40 Watts
UHF B2	450–512 MHz	1–40 Watts
800/900M	806–870 MHz 896–941 MHz	10–35 Watts 10–30 Watts

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
- Pre-baking of Integrated Circuits

### 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 control head and housing assembly. 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**

Use all chemicals as prescribed by the manufacturer. Be sure to follow all safety precautions as defined on the label or material safety data sheet.

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. Once the cleaning process is complete, use a soft, absorbent, lintless cloth to dry the area. Do not brush or apply any isopropyl alcohol to the frame, control head and housing assembly.

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

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

Complementary Metal Oxide Semiconductor (CMOS) and Laterally Diffused Metal Oxide Semiconductor (LDMOS) 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/LDMOS circuits and are especially important in low humidity conditions.

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

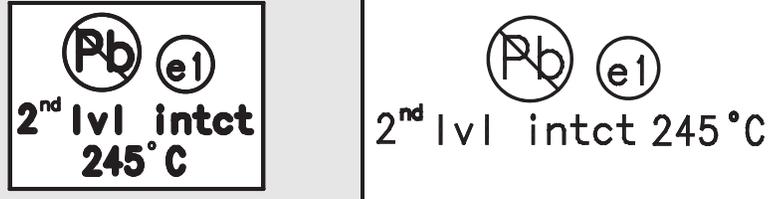
**Caution**

**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/LDMOS devices in conductive material so that all exposed leads are shorted together. Do not insert CMOS/LDMOS 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/LDMOS device. We recommend using a wrist strap, two ground cords, a table mat, a floor mat, ESD shoes, and an ESD chair.
- 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/LDMOS devices.
- Do not insert or remove CMOS/LDMOS devices with power applied. Check all power supplies used for testing CMOS/LDMOS devices to be certain that there are no voltage transients present.
- When straightening CMOS/LDMOS pins, provide ground straps for the apparatus used.
- When soldering, use a grounded soldering iron.
- If at all possible, handle CMOS/LDMOS 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.

## 4.0 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 2) Directive 2011/65/EU and Waste Electrical and Electronic Equipment (WEEE) Directive 2012/19/EU. 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 2-1 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%	217 °C	52171	0.015"	1lb spool

Table 2-2 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

Check the parts list for the proper Motorola part number and order the part from the nearest Motorola Radio Products and Solutions Organization listed in Appendix A of this manual.

### Rigid Circuit Boards

This 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 a 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

For soldering components with Hot-Air or infra red solder systems, please check your user guide of the solder system to get information on solder temperature and time for the different housings of the integrated circuits and other components.

## 5.0 Pre-baking of Integrated Circuits

Electronic components are generally coated with plastic material which has the nature of not being waterproof. If kept unsealed, the components can absorb humidity. When soldered to the board (especially with reflow techniques) a sudden change in temperature can cause fissures or cracks which can result in malfunction or damage. Therefore, service should temper in a Desiccant Cabinet (12 hours at 50 degree Celsius) the radio PCB, before heating up areas around MS components.

To avoid this problem, these Moisture Sensitive (MS) components should be stored and shipped in a sealed wrapping (dry pack). Processing must take place only with dry components when an uninterrupted dry storage can be guaranteed, otherwise the components have to be pre-baked.

If a reflow procedure takes place close to MS components the whole board must be pre-baked.

Please refer to the following table:

*Table 2-3 MS Components and Location*

Location	Circuit Ref.	Motorola Part No.	MSL
Numeric Display Control Head	D6001	4815809H02	2
Numeric Display Control Head	D6000 D6004	4815809H04	2
Color Display Control Head	D6400 D6401		
Numeric Display Control Head	D6003 D6005	48012173001	2a
Color Display Control Head	D6404 D6405 D6406		
Color Display Control Head	U6400		
Color Display Control Head	D6403	4815809H03	2
Color Display Control Head	U6404	5171774H01	3
GOB	U5102	IC000643A01	3
GOB	U5103	51012009003	3
Controller	U1001M1	51012295001	3
Controller	U3103M1	51012142001	2
Controller	U3104M1	5171590Y73	2
Controller	U3105M1	5114610F01	2
Controller	U3108M1	51012138001	3
Controller	U3200M1	51009415001	3
Controller	U3204M1	51009509001	3
VHF 1–25 W VHF 25–45 W	Q0702M5	48012067002	3
UHF1 1–25 W UHF1 25–40 W	Q0705M5	48012067002	3
VHF 1–25 W VHF 25–45 W UHF2 1–40 W 8/900 10–35/30 W	Q0705M6	48012022001	3
VHF 1–25 W VHF 25–45 W UHF1 1–25 W UHF1 25–40 W UHF2 1–40 W 8/900 10–35/30 W	U0000M2	51009277001	3

### 5.1 IPC/JEDEC J-STD-020D.1 (March 2008) Chart

Table 2-4 Moisture Sensitivity Levels

LEVEL	FLOOR LIFE		SOAK REQUIREMENTS				
			STANDARD		ACCELERATED EQUIVALENT <sup>1</sup>		
					eV 0.40–0.48	eV 0.30–0.39	CONDITION
					TIME (hours)	TIME (hours)	
1	Unlimited	≤30 °C/85% RH	168 +5/-0	85 °C/85% RH	NA	NA	NA
2	1 year	≤30 °C/60% RH	168 +5/-0	85 °C/60% RH	NA	NA	NA
2a	4 weeks	≤30 °C/60% RH	696 <sup>2</sup> +5/-0	30 °C/60% RH	120 +1/-0	168 +1/-0	60 °C/60% RH
3	168 hours	≤30 °C/60% RH	192 <sup>2</sup> +5/-0	30 °C/60% RH	40 +1/-0	52 +1/-0	60 °C/60% RH
4	72 hours	≤30 °C/60% RH	96 <sup>2</sup> +2/-0	30 °C/60% RH	20 +5/-0	24 +0.5/-0	60 °C/60% RH
5	48 hours	≤30 °C/60% RH	72 <sup>2</sup> +2/-0	30 °C/60% RH	15 +5/-0	20 +0.5/-0	60 °C/60% RH
5a	24 hours	≤30 °C/60% RH	48 <sup>2</sup> +2/-0	30 °C/60% RH	10 +0.5/-0	13 +0.5/-0	60 °C/60% RH
6	Time on Label (TOL)	≤30 °C/60% RH	TOL	30 °C/60% RH	NA	NA	NA

Note 1: CAUTION – To use the “accelerated equivalent” soak conditions, correlation of damage response (including electrical, after soak and reflow), should be established with the “standard” soak conditions. Alternatively, if the known activation energy for moisture diffusion of the package materials is in the range of 0.40–0.48 eV or 0.30–0.39 eV, the “accelerated equivalent” may be used. Accelerated soak times may vary due to material properties (e.g. mold compound, encapsulant, etc.). JEDEC document JESD22-A120 provides a method for determining the diffusion coefficient.

Note 2: The standard soak time includes a default value of 24 hours for semiconductor Manufacturer’s Exposure Time (MET) between bake and bag and includes the maximum time allowed out of the bag at the distributor’s facility.

If the actual MET is less than 24 hours, the soak time may be reduced. For soak conditions of 30 °C/60% RH, the soak time is reduced by 1 hour for each hour the MET is less than 24 hours. For soak conditions of 60 °C/60% RH, the soak time is reduced by 1 hour for each 5 hours the MET is less than 24 hours.

If the actual MET is greater than 24 hours the soak time must be increased. If soak conditions are 30 °C/60% RH, the soak time is increased 1 hour for each hour that the actual MET exceeds 24 hours. If soak conditions are 60 °C/60% RH, the soak time is increased 1 hour for each 5 hours that the actual MET exceeds 24 hours.

Note 3: Supplier may extend the soak times at their own risk.

## 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 mobile radios.

*Table 3-1 Recommended Test Equipment*

Equipment	Characteristic	Example	Application
Service Monitor	Can be used as a substitute for items marked with an asterisk (*)	Aeroflex 3920, 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 (www.fluke.com)	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	Agilent N5181 (www.agilent.com) or equivalent	Receiver measurements
Oscilloscope*	2 Channels 50 MHz Bandwidth 5 mV/div to 20 V/div	Tektronix TDS1001b (www.tektronix.com) or equivalent	Waveform measurements
Power Meter and Sensor*	5% Accuracy 100 MHz to 500 MHz 50 Watts	Bird 43 Thruline Watt Meter (www.bird-electronic.com) or equivalent	Transmitter power output measurements
RF Millivolt Meter	100 mV to 3 V RF 10 kHz to 1 GHz	Boonton 92EA (www.boonton.com) or equivalent	RF level measurements
Power Supply	0 V to 32 V 0 A to 20 A	B&K Precision 1790 (www.bkprecision.com) 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 Number	Description	Application
RLN4460_	Test Box	Enables connection to audio/accessory jack. Allows switching for radio testing.
RVN5115_	Customer Programming Software on CD-ROM	Allows servicer to program radio parameters, tune and troubleshoot radios.
PMKN4010_	Mobile & Repeater Rear Programming Cable	Connects the radio's rear connector to a USB port for radio programming and data applications.
PMKN4016_	Mobile & Repeater Rear Accessory Programming and Test Cable	Connects the radio's rear connector to a USB port for radio programming, data applications, testing and alignment.
PMKN4018_	Mobile & Repeater Rear Accessory Connector Universal Cable	Connects the radio's rear connector to accessory devices such as desk sets. Cable contains all 26 wires and is unterminated at the user end.
HKN6184_	Mobile Front Programming Cable	Connects the radio's front connector to a USB port for radio programming and data applications.
HPN4007_	Power Supply	Provides the radio with power when bench testing.
PMEN4027_	Housing Eliminator	Test Fixture used to bench test the radio PCB.
6686119B01	Control Head Dismantling Tool	Assists in the removal of radio control head.
66012025001	Volume/Channel Knob Removal Tool	Assists in the removal of the Volume/Channel knob.
66012020001	RFIC (U0000) Repair Stencil	Fixture to screen solder paste onto the IC leads for replacement.

### 3.0 Programming Cables



Figure 3-1 Mobile Front Programming Cable HKN6184\_



Figure 3-2 Mobile & Repeater Rear Programming Cable PMKN4010\_

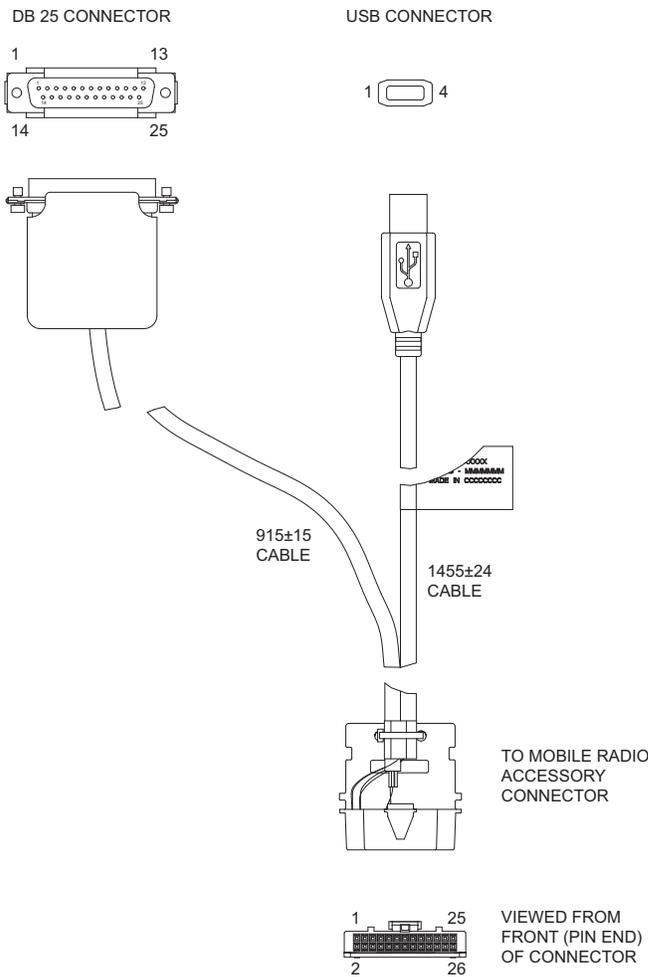


TABLE 3-3: WIRE DIAGRAM

26 PIN ACCESSORY PORT CONNECTOR		USB	DB25P
PIN NO.	DESCRIPTION		
3	VCC (5v)	1	
2	DATA -	2	
1	DATA +	3	
4	GND	4	
	DRAIN WIRE AND BRAID	SHELL	
9	SPEAKER -		7
11	EXT MIC		17
17	DIGI IN 1 (EXT PTT)		20
16	GND		16
10	SPEAKER +		1

Figure 3-3 Mobile & Repeater Rear Accessory Programming and Test Cable PMKN4016\_

## Notes

## Section 4

# POWER-UP SELF TEST

**NOTE:** This section is for reference only. If at any time one of the error codes is present, the radio should be returned to a qualified Motorola Service Center.

### 1.0 Power-Up Error Codes

When the radio is turned on (powered-up), the radio performs cursory tests to determine if its basic electronics and software are in working order. Problems detected during these tests are presented as error codes on the radio's display. The presence of an error should prompt the user that a problem exists and that a service technician should be contacted.

Self-test errors are classified as either fatal or non-fatal. Fatal errors inhibit user operation; non-fatal errors do not. Use the following table to aid in understanding particular power-up error code displays.

*Table 4-1 Power-Up Error Codes*

<b>Error Code</b>	<b>Description</b>	<b>Error Type</b>	<b>Corrective Action</b>
ERROR 01/02	FLASH ROM Codeplug Checksum	NON-FATAL	Reprogram the codeplug.
ERROR 01/22	Tuning Codeplug Checksum	NON-FATAL	Reprogram the tuning partition.
FAIL 01/82	FLASH ROM Codeplug Checksum	FATAL	Reprogram the codeplug.
FAIL 01/90	General Hardware Error	FATAL	Turn the radio off, then on. If problem persists, send radio to the nearest Motorola Solutions Depot.
FAIL 01/92	Security Partition Checksum	FATAL	Reprogram the security partition.
FAIL 01/93	FlashPORT AUTHENT CODE Failure	FATAL	Contact the depot.
FAIL 01/A2	Tuning Codeplug Checksum	FATAL	Reprogram the tuning partition.
FAIL 02/90	RF Hardware Error	FATAL	Send radio to the nearest Motorola Solutions Depot.

## Notes



# **XPR 5350e/XPR 5550e Mobile Radios**

## Chapter 2

### Mobile Radio Block Diagram

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---

# Chapter 2 – MOTOTRBO XPR 5350e/XPR 5550e Mobile Radio Block Diagram

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### Section 1

1.0 MOTOTRBO XPR 5350e/XPR 5550e Mobile Radio Block Diagram..... 1-1

## Notes

# Section 1

## 1.0 MOTOTRBO XPR 5350e/XPR 5550e Mobile Radio Block Diagram

Figure 1-1 shows the MOTOTRBO XPR 5350e/XPR 5550e Mobile Radio Block Diagram. This block diagram should be used for reference for all subsequent chapters.

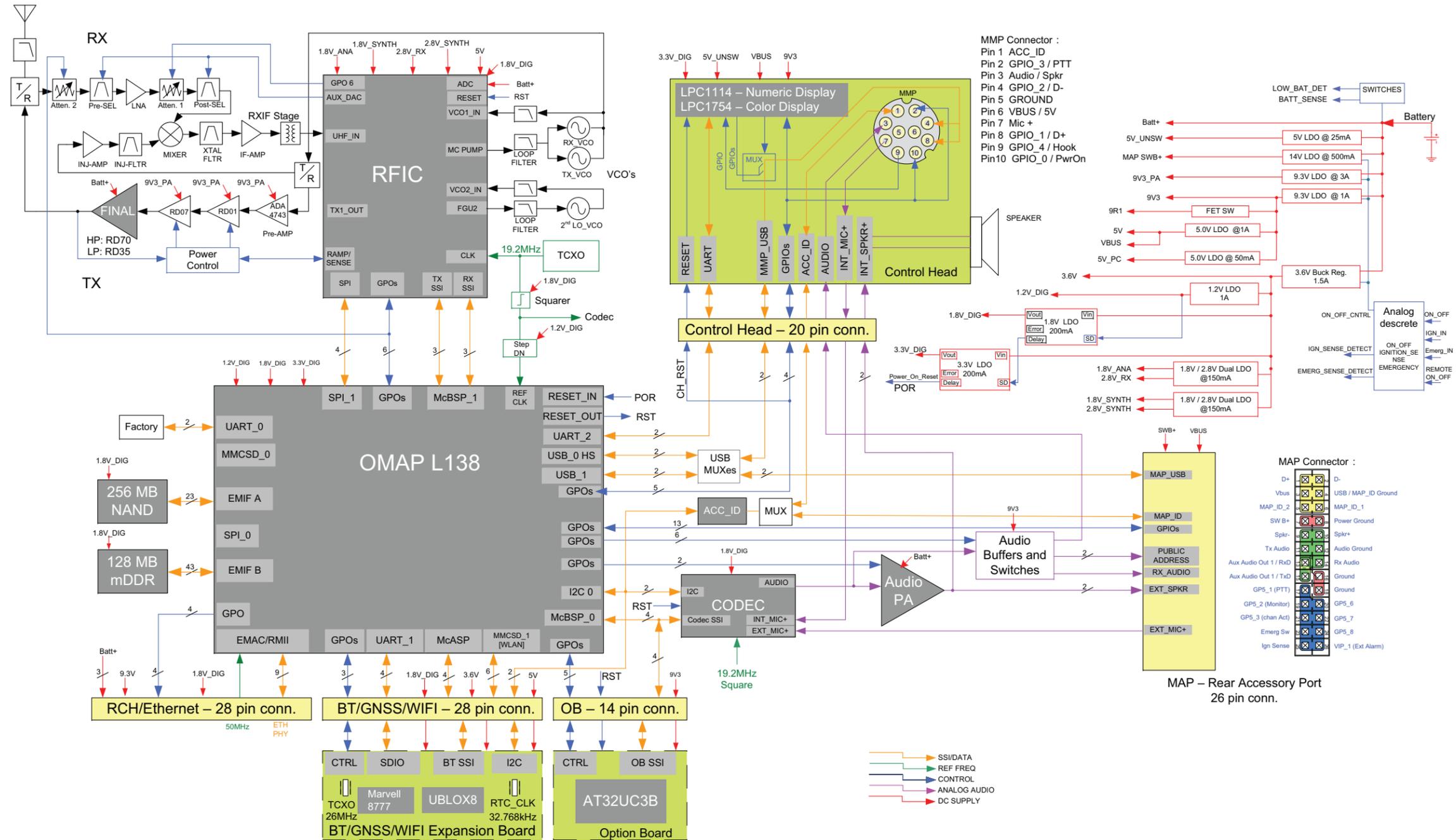


Figure 1-1 Top Level Block Diagram (for PCB PC000942A01-AA)

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**Notes**



# **XPR 5350e/XPR 5550e Mobile Radios**

Chapter 3

Control Head

Service Information

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## Chapter 3 – Control Head Service Information

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## Notes

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## Section 1

### OVERVIEW

#### 1.0 Numeric Display Model

The Control Head contains the internal speaker, the On/Off button, the Volume/Channel knob, the microphone connector, several buttons to operate the radio and several indicator Light Emitting Diodes (LED) to inform the user about the radio status and channel. The switches and indicators on the Control Head are indirectly controlled by the processor in the radio.



## 2.0 Color Display Model

The Control Head contains the internal speaker, the On/Off button, the Volume/Channel knob, the microphone connector, several buttons to operate the radio, several indicator Light Emitting Diodes (LED) to inform the user about the radio status, and a Color Liquid Crystal Display (LCD) for alphanumeric information e.g., channel number or call address name. The switches, indicators, and LCD on the Control Head are indirectly controlled by the processor in the radio.

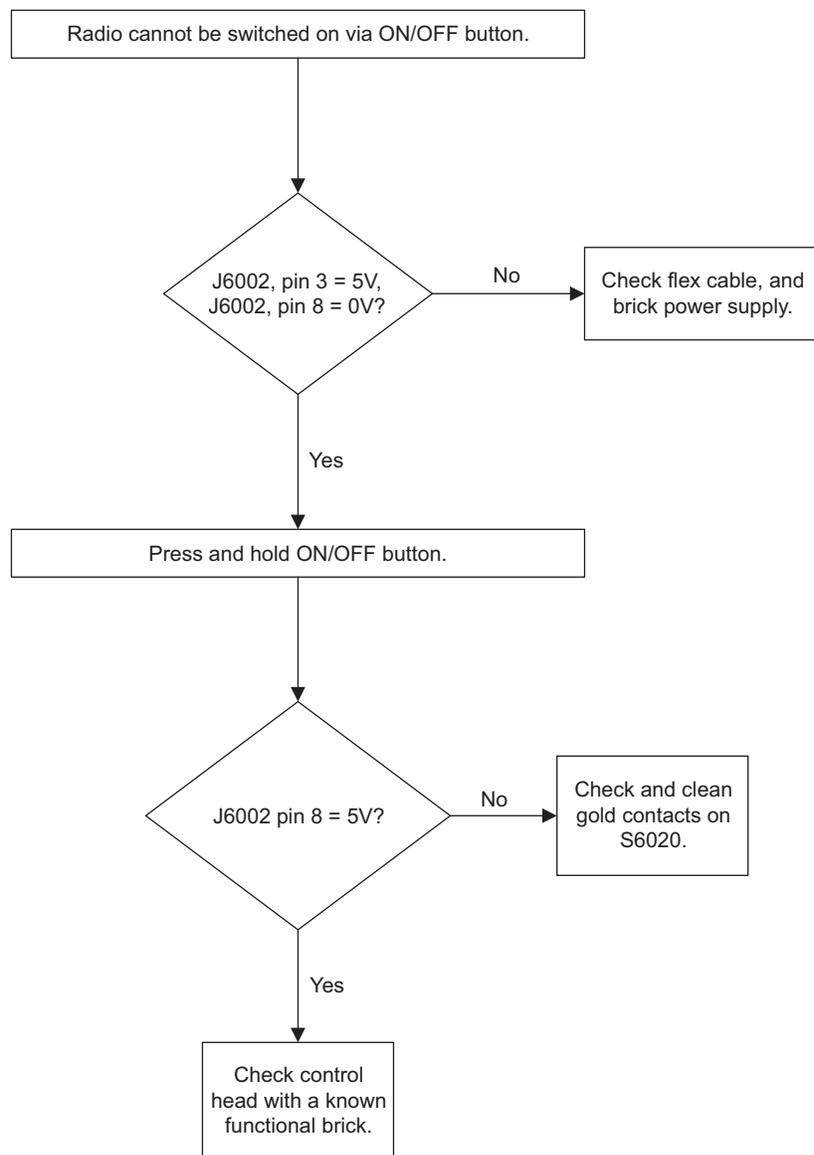


## Section 2

# TROUBLESHOOTING CHARTS

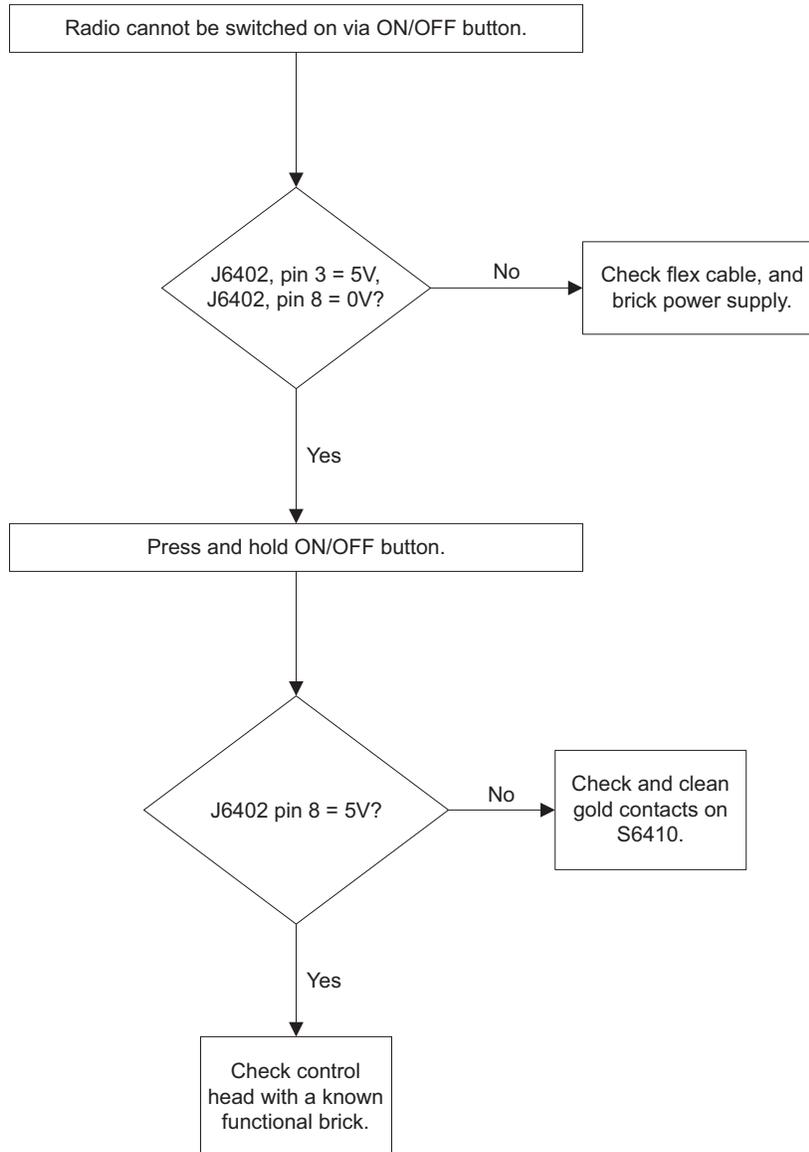
### 1.0 Numeric Display Model Control Head Troubleshooting Flow Chart

#### 1.1 On/Off

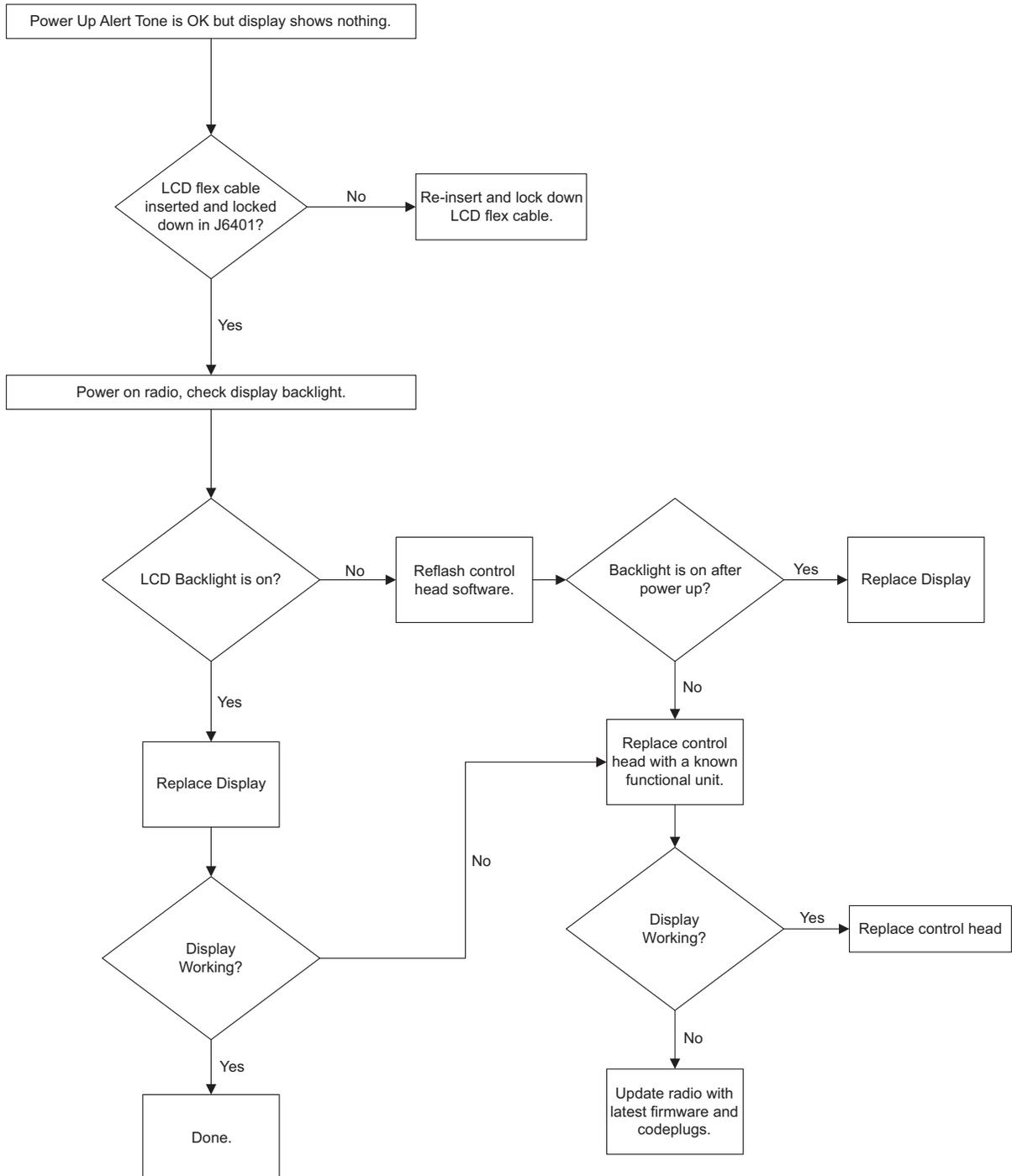


## 2.0 Color Display Model Control Head Troubleshooting Flow Chart

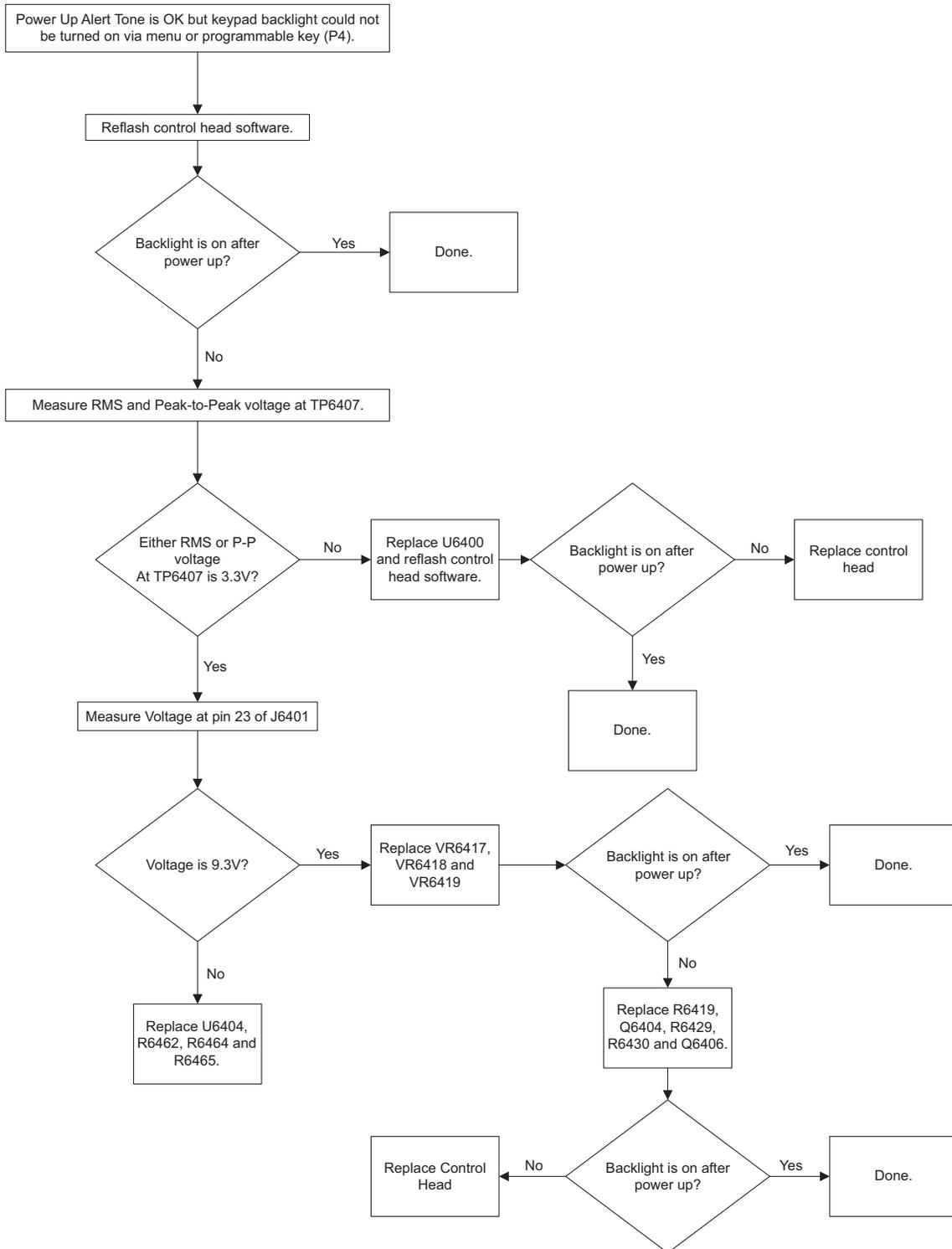
### 2.1 On/Off



## 2.2 Display



### 2.3 Backlight



## Section 3

# CONTROL HEAD PCBS/SCHEMATICS/PARTS LISTS

### 1.0 Allocation of Schematics and Circuit Boards

*Table 3-1 Numeric Display Control Head Schematic Diagram and Parts List*

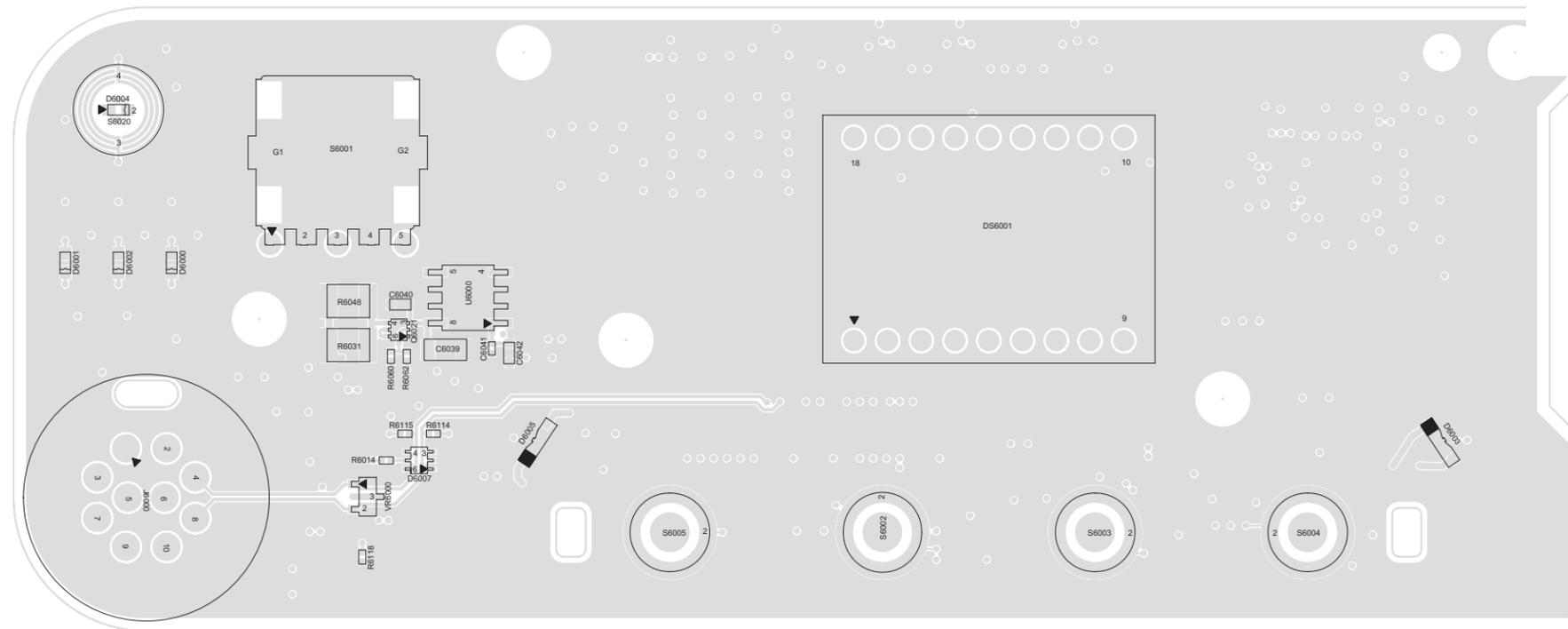
<b>PCB :</b> Numeric Display Control Head <b>84012212002-B</b> Main Board Top Side <b>84012212002-B</b> Main Board Bottom Side	Page 3-3 Page 3-3
<b>SCHEMATICS</b> Numeric Display Control Head Schematic Diagram	Page 3-4
<b>Parts List</b> <b>84012212002-B</b>	Page 3-5

*Table 3-2 Color Display Control Head Schematic Diagram and Parts List*

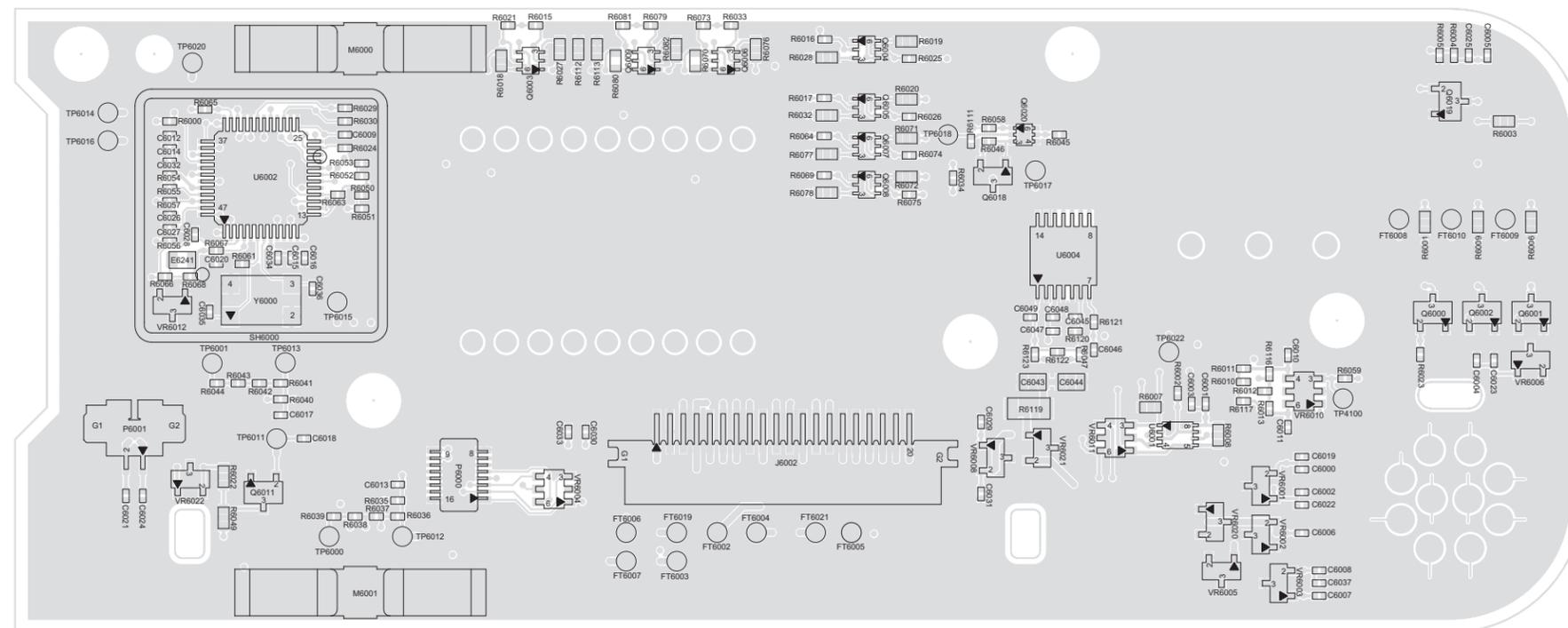
<b>PCB :</b> Color Display Control Head <b>84012211002-B</b> Main Board Top Side <b>84012211002-B</b> Main Board Bottom Side	Page 3-6 Page 3-6
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## Notes

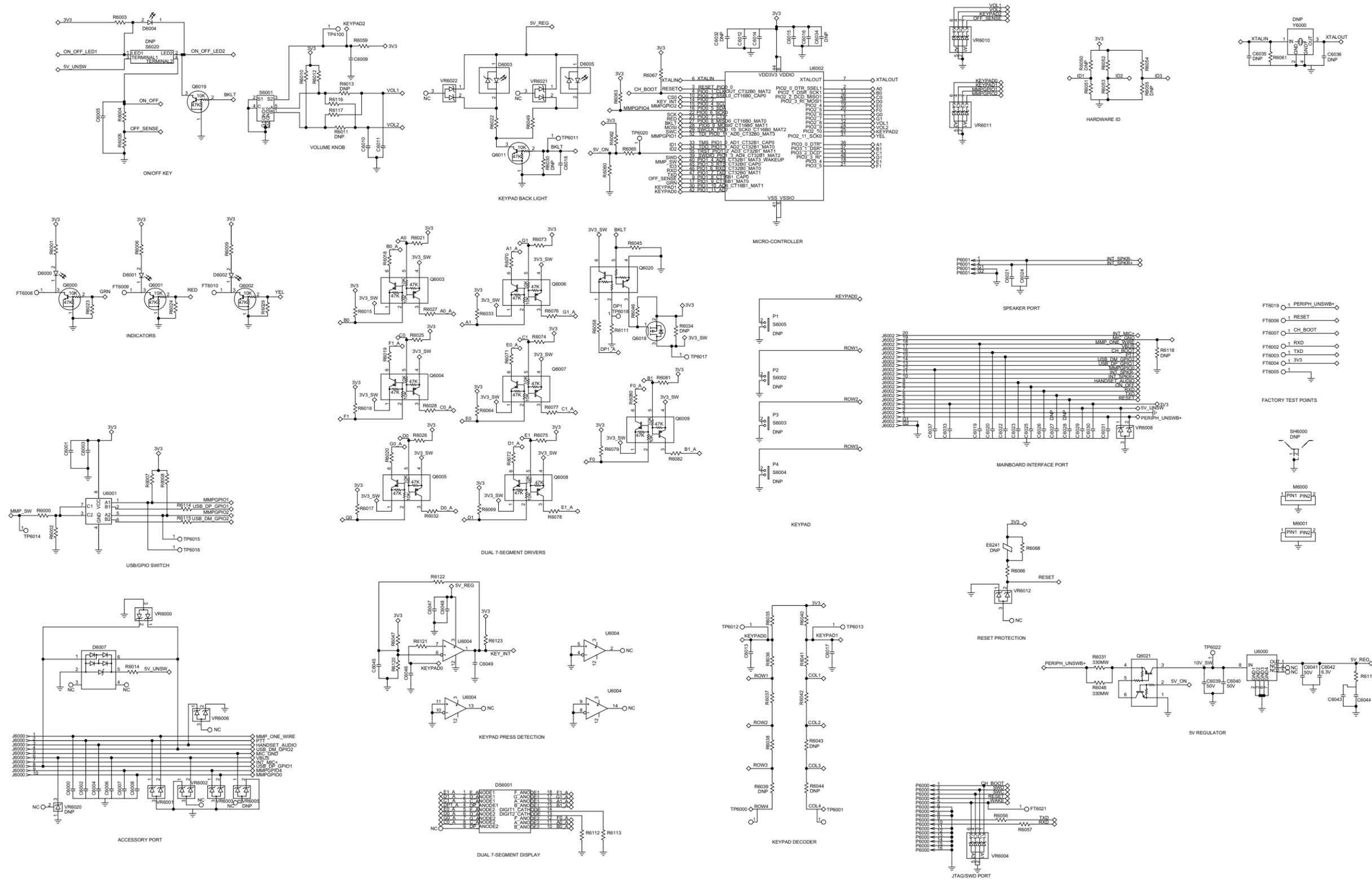
## 2.0 Numeric Display Control Head – PCB 84012212002-B/Schematics



*Top Side View*



*Bottom Side View*



Numeric Display Control Head Schematic Diagram

**3.0 Numeric Display Control Head Parts List (Rev. B)**

Circuit Ref.	Motorola Part No.
C6000	2113945A05
C6001	2113945B02
C6002	2113945A05
C6003	2113946B04
C6004	2113945A05
C6005	2113945B02
C6006	2113945A05
C6007	2113945A05
C6008	2113945A05
C6009	2113945B02
C6010	2113945B02
C6011	2113945B02
C6012	2113946B04
C6013	2113945B02
C6014	2113945B02
C6015	2113946B04
C6016	2113945B02
C6017	2113945B02
C6018	2113946B04
C6019	2113945A05
C6020	2113945A05
C6021	2113945A05
C6022	2113945A05
C6023	2113945A05
C6024	2113945A05
C6025	2113945A05
C6026	NOT PLACED
C6027	NOT PLACED
C6028	2113945A05
C6029	2113945A05
C6030	2113945A05
C6031	2113945A05
C6032	NOT PLACED
C6033	2113956A51
C6034	NOT PLACED

Circuit Ref.	Motorola Part No.
C6035	NOT PLACED
C6036	NOT PLACED
C6037	2113945A05
C6039	2113955D13
C6040	2113944C06
C6041	2113944A44
C6042	2113946D05
C6043	2113956C37
C6044	2113956C37
C6045	2113945A05
C6046	2113945A05
C6047	2113945B02
C6048	2113946B04
C6049	2113945A05
D6000	4815809H04
D6001	4815809H02
D6002	4815809H03
D6003	48012173001
D6004	4815809H04
D6005	48012173001
D6007	48012049001
DS6001	7216958H01
E6241	NOT PLACED
J6000	0964501H04
J6002	0915767H01
M6000	39012078001
M6001	39012078001
P6000	2887818K02
P6001	2815162H01
Q6000	4815261H01
Q6001	4815261H01
Q6002	4815261H01
Q6003	48012232001
Q6004	48012232001
Q6005	48012232001
Q6006	48012232001
Q6007	48012232001
Q6008	48012232001

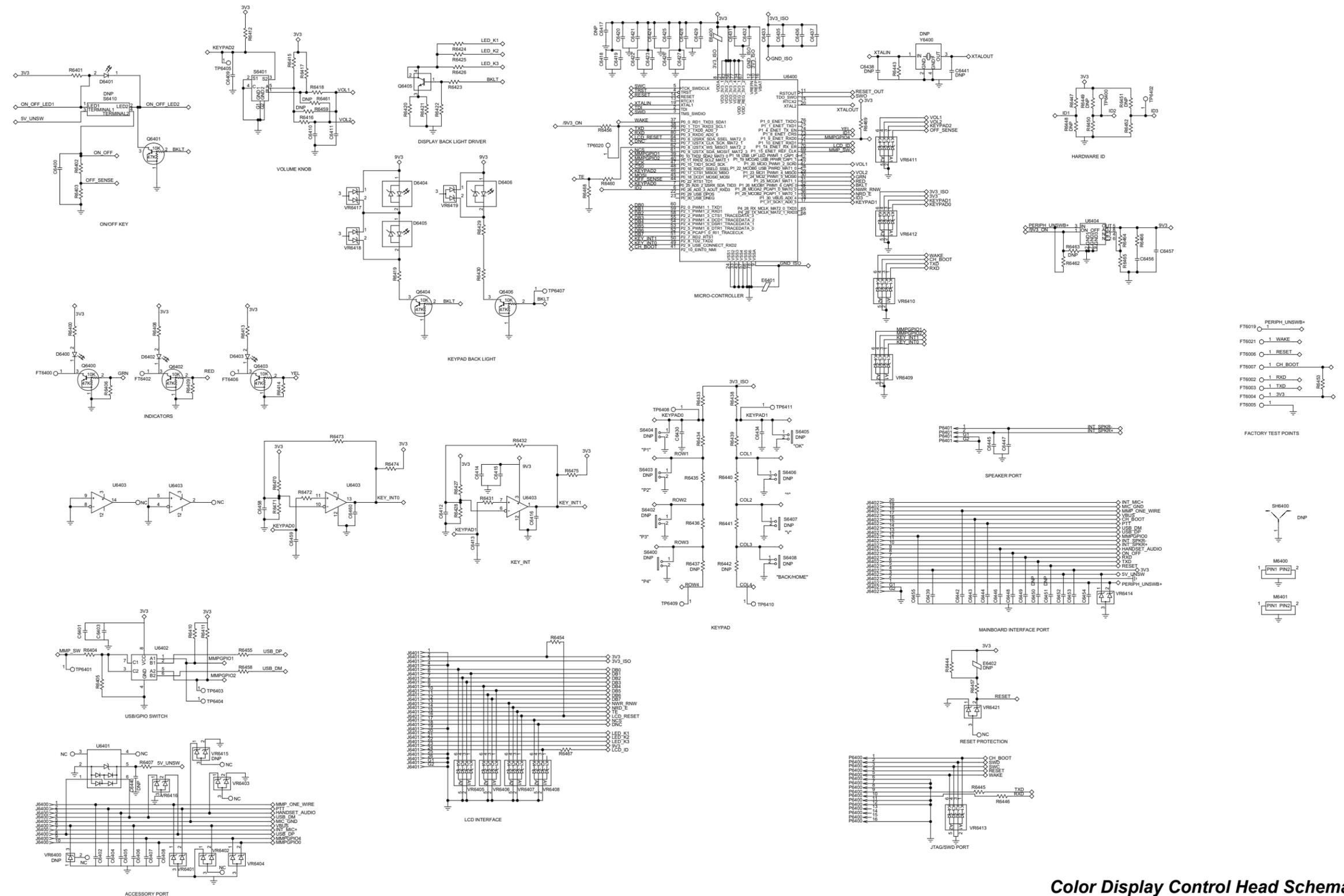
Circuit Ref.	Motorola Part No.
Q6009	48012232001
Q6011	4815261H01
Q6018	4885065Y01
Q6019	4815261H01
Q6020	4809939C47
Q6021	4815272H01
R6000	0613952R66
R6001	0613952H47
R6002	0613952Q85
R6003	0613952H47
R6004	0613952Q85
R6005	0613952Q93
R6006	0613952H47
R6007	0613952J09
R6008	0613952J09
R6009	0613952H47
R6010	0613952R01
R6011	NOT PLACED
R6012	0613952R01
R6013	NOT PLACED
R6014	0613952R01
R6015	0613952R01
R6016	0613952R01
R6017	0613952R01
R6018	0613952H44
R6019	0613952H44
R6020	0613952H44
R6021	0613952R01
R6022	0613952C01
R6023	0613952R01
R6024	0613952R01
R6025	0613952R01
R6026	0613952R01
R6027	0613952H44
R6028	0613952H44
R6029	0613952R01
R6030	NOT PLACED
R6031	0613959G57

Circuit Ref.	Motorola Part No.
R6032	0613952H44
R6033	0613952R01
R6034	NOT PLACED
R6036	0613952R04
R6037	0613952R09
R6038	0613952R17
R6039	NOT PLACED
R6040	0613952R18
R6041	0613952R04
R6042	0613952R09
R6043	NOT PLACED
R6044	NOT PLACED
R6045	0613952Q89
R6046	0613952Q89
R6047	0613952R18
R6048	0613959G57
R6049	0613952C01
R6050	NOT PLACED
R6051	0613952R66
R6052	0613952N01
R6053	0613952Z44
R6054	0613952R66
R6055	NOT PLACED
R6056	0613952R66
R6057	0613952R66
R6058	0613952Q25
R6059	0613952R01
R6060	0613952R01
R6061	0613952R66
R6062	0613952Q85
R6063	0613952R09
R6064	0613952R01
R6065	0613952R66
R6066	0613952Q73
R6067	0613952R17
R6068	0613952R66
R6069	0613952R01
R6070	0613952H44

Circuit Ref.	Motorola Part No.
R6071	0613952H44
R6072	0613952H44
R6073	0613952R01
R6074	0613952R01
R6075	0613952R01
R6076	0613952H44
R6077	0613952H44
R6078	0613952H44
R6079	0613952R01
R6080	0613952H44
R6081	0613952R01
R6082	0613952H44
R6111	0613952R01
R6112	0613952G67
R6113	0613952G67
R6114	0613952Q73
R6115	0613952Q73
R6116	0613952R66
R6117	0613952R66
R6118	NOT PLACED
R6119	0615871H01
R6120	0613952R43
R6121	0613952R01
R6122	0613952R49
R6123	0613952Q73
S6001	40012062001
S6002	NOT PLACED
S6003	NOT PLACED
S6004	NOT PLACED
S6005	NOT PLACED
S6020	NOT PLACED
SH6000	NOT PLACED
U6000	5114014A03
U6001	51012327001
U6002	51012145002
U6004	5188691V50
VR6000	48012153001
VR6001	4813977A43

Circuit Ref.	Motorola Part No.
VR6002	4813977A43
VR6003	4813977A43
VR6004	4813979P10
VR6005	NOT PLACED
VR6006	4813977A43
VR6008	4813977A50
VR6010	4813979P10
VR6011	4813979P10
VR6012	4813977A43
VR6020	NOT PLACED
VR6021	4813977A43
VR6022	4813977A43
Y6000	NOT PLACED





Color Display Control Head Schematic Diagram

## 5.0 Color Display Control Head Parts List (Rev. B)

Circuit Ref.	Motorola Part No.
C6400	2113945B02
C6401	2113945B02
C6402	2113945A05
C6403	2113946B04
C6404	2113945A05
C6405	2113945A05
C6406	2113945A05
C6407	2113945A05
C6408	2113945A05
C6409	2113945B02
C6410	2113945B02
C6411	2113945B02
C6412	2113945A05
C6413	2113945A05
C6414	2113946B04
C6415	2113945B02
C6416	2113945A05
C6417	NOT PLACED
C6418	2113946B04
C6419	2113945B02
C6420	2113946B04
C6421	2113945B02
C6422	2113946B04
C6423	2113945B02
C6424	2113946B04
C6425	2113945B02
C6426	2113946B04
C6427	2113945B02
C6428	2113946B04
C6429	2113945B02
C6430	2113945B02
C6431	2113946B04
C6432	2113945B02
C6433	2113946B04
C6434	2113945B02

Circuit Ref.	Motorola Part No.
C6435	2113945B02
C6436	2113946B04
C6437	2113945B02
C6438	NOT PLACED
C6439	2113956A51
C6440	NOT PLACED
C6441	NOT PLACED
C6442	2113945A05
C6443	2113945A05
C6444	2113945A05
C6445	2113945A05
C6446	2113945A05
C6447	2113945A05
C6448	2113945A05
C6449	NOT PLACED
C6450	NOT PLACED
C6451	2113945A05
C6452	2113945A05
C6453	2113945A05
C6454	2113945A05
C6455	2113945A05
C6456	2113946J04
C6457	2113945Y02
C6458	2113945A05
C6459	2113945A05
C6460	2113945A05
D6400	4815809H04
D6401	4815809H04
D6402	4815809H02
D6403	4815809H03
D6404	48012173001
D6405	48012173001
D6406	48012173001
E6400	2485410Y02
E6401	2485410Y02
E6402	NOT PLACED
J6400	0964501H04
J6401	0916769H02

Circuit Ref.	Motorola Part No.
J6402	0915767H01
M6400	39012078001
M6401	39012078001
P6400	2887818K02
P6401	2815162H01
Q6400	4815261H01
Q6401	4815261H01
Q6402	4815261H01
Q6403	4815261H01
Q6404	4815261H01
Q6405	4813973B01
Q6406	4815261H01
R6400	0613952H47
R6401	0613952H47
R6402	0613952Q85
R6403	0613952Q93
R6404	0613952R66
R6405	0613952Q85
R6406	0613952R01
R6407	0613952R01
R6408	0613952H47
R6409	0613952R01
R6410	0613952R09
R6411	0613952R09
R6412	0613952R01
R6413	0613952H47
R6414	0613952R01
R6415	0613952R01
R6416	0613952R66
R6417	0613952R01
R6418	0613952R66
R6419	0613952H53
R6420	0613952H25
R6421	0613952H25
R6422	0613952R01
R6423	0613952H92
R6424	0613952G67
R6425	0613952G67

Circuit Ref.	Motorola Part No.
R6426	0613952G67
R6427	0613952R18
R6428	0613952R43
R6429	0613952H53
R6430	0613952H53
R6431	0613952R01
R6432	0613952R49
R6433	0613952R18
R6434	0613952R04
R6435	0613952R09
R6436	0613952R17
R6437	NOT PLACED
R6438	0613952R18
R6439	0613952R04
R6440	0613952R09
R6441	0613952R17
R6442	NOT PLACED
R6443	0613952R66
R6444	0613952R66
R6445	0613952R66
R6446	0613952R66
R6447	0613952R66
R6448	NOT PLACED
R6449	NOT PLACED
R6450	0613952R66
R6451	NOT PLACED
R6452	0613952R66
R6453	0613952R17
R6454	0613952Q73
R6455	0613952Q73
R6456	0613952R66
R6457	0613952Q73
R6458	0613952Q73
R6459	NOT PLACED
R6460	0613952R66
R6461	NOT PLACED
R6462	0613952R17
R6463	NOT PLACED

Circuit Ref.	Motorola Part No.
R6464	0613952M85
R6465	0613952M09
R6466	0613952A01
R6467	0613952R01
R6468	0613952R01
R6469	0613952R09
R6470	0613952R18
R6471	0613952R43
R6472	0613952R01
R6473	0613952R49
R6474	0613952Q73
R6475	0613952Q73
S6400	NOT PLACED
S6401	40012062001
S6402	NOT PLACED
S6403	NOT PLACED
S6404	NOT PLACED
S6405	NOT PLACED
S6406	NOT PLACED
S6407	NOT PLACED
S6408	NOT PLACED
S6410	NOT PLACED
SH6400	NOT PLACED
U6400	51012180001
U6401	48012049001
U6402	51012327001
U6403	5188691V50
U6404	5171774H01
VR6400	NOT PLACED
VR6401	4813977A43
VR6402	4813977A43
VR6403	4813977A43
VR6404	4813977A43
VR6405	4813979P10
VR6406	4813979P10
VR6407	4813979P10
VR6408	4813979P10
VR6409	4813979P10

Circuit Ref.	Motorola Part No.
VR6410	4813979P10
VR6411	4813979P10
VR6412	4813979P10
VR6413	4813979P10
VR6414	4813977A50
VR6415	NOT PLACED
VR6416	48012153001
VR6417	4813977A43
VR6418	4813977A43
VR6419	4813977A43
VR6421	4813977A43
Y6400	NOT PLACED



# **XPR 5350e/XPR 5550e Mobile Radios**

## **Chapter 4**

**Bluetooth<sup>®</sup>/Wi-Fi/GNSS Expansion Board**

**Service Information**

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# Chapter 4 – Bluetooth/Wi-Fi/GNSS Expansion Board Service Information

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### Section 2 Bluetooth/Wi-Fi/GNSS PCBs/Schematics/Parts Lists

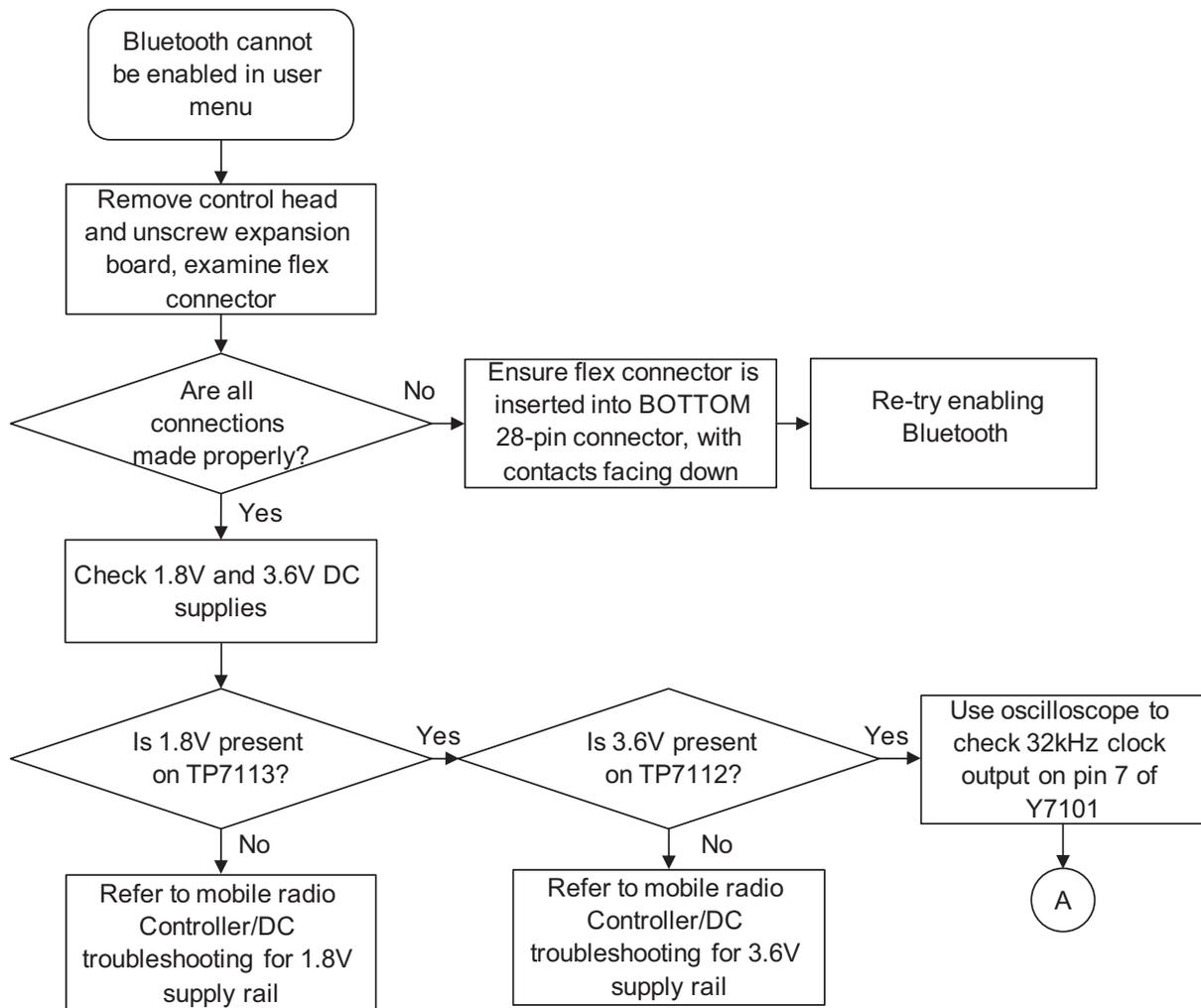
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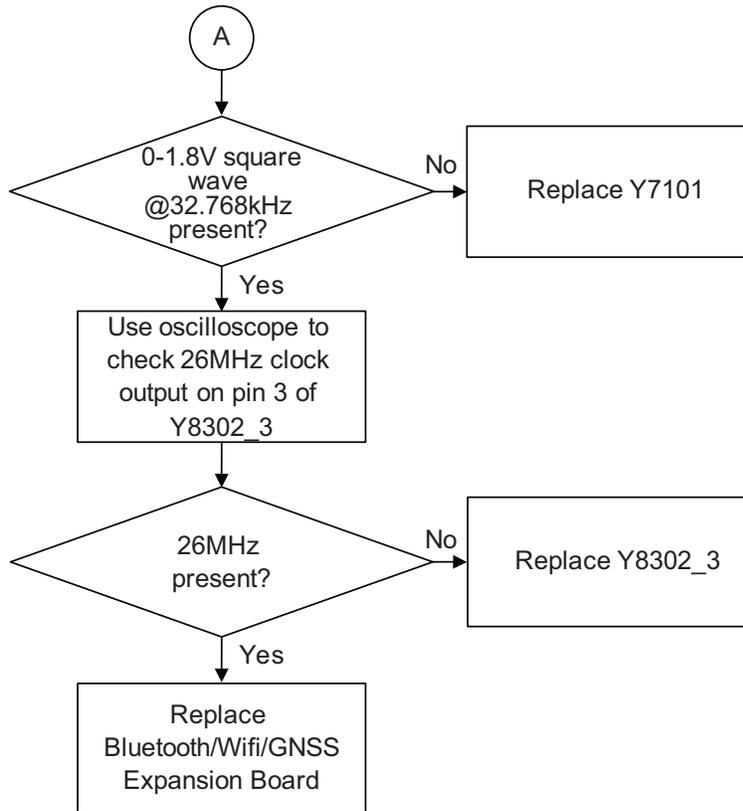
## Section 1

# TROUBLESHOOTING CHARTS

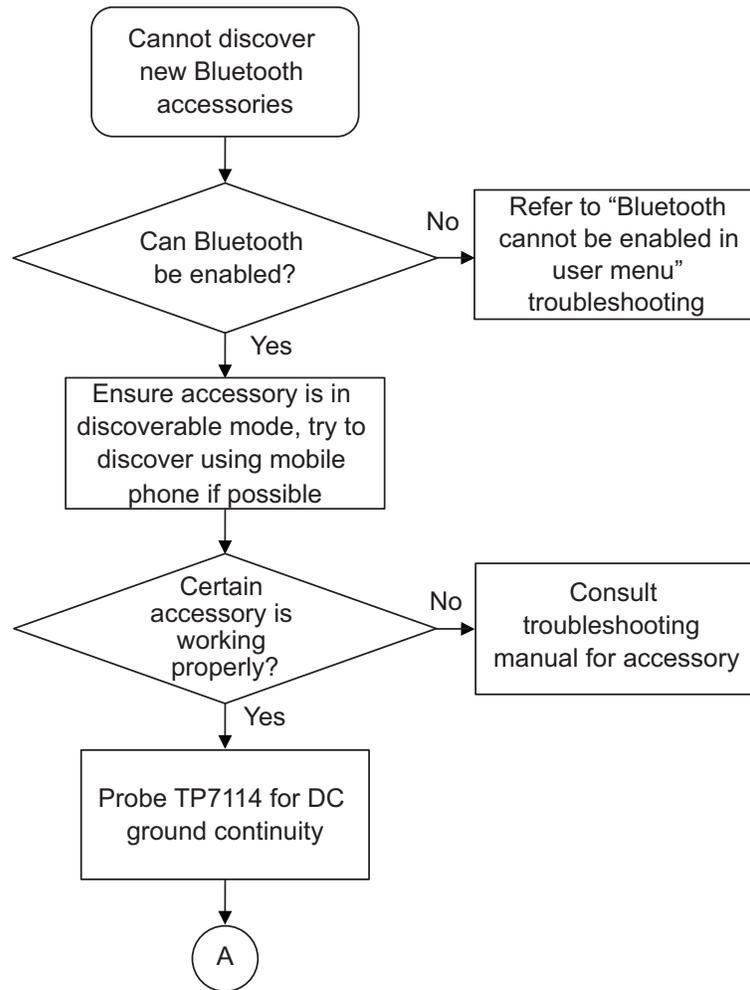
### 1.0 Bluetooth (PMLN7252\_S) Troubleshooting Chart (Sheet 1 of 4)



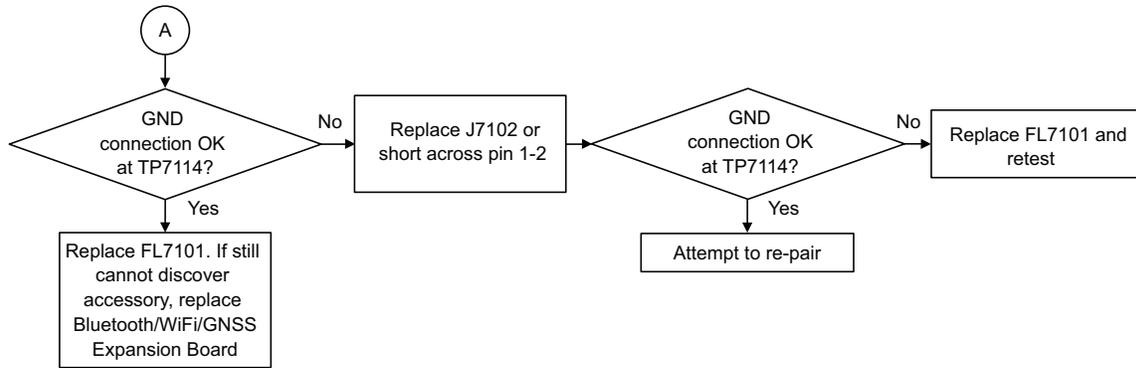
### 1.1 Bluetooth (PMLN7252\_S) Troubleshooting Chart (Sheet 2 of 4)



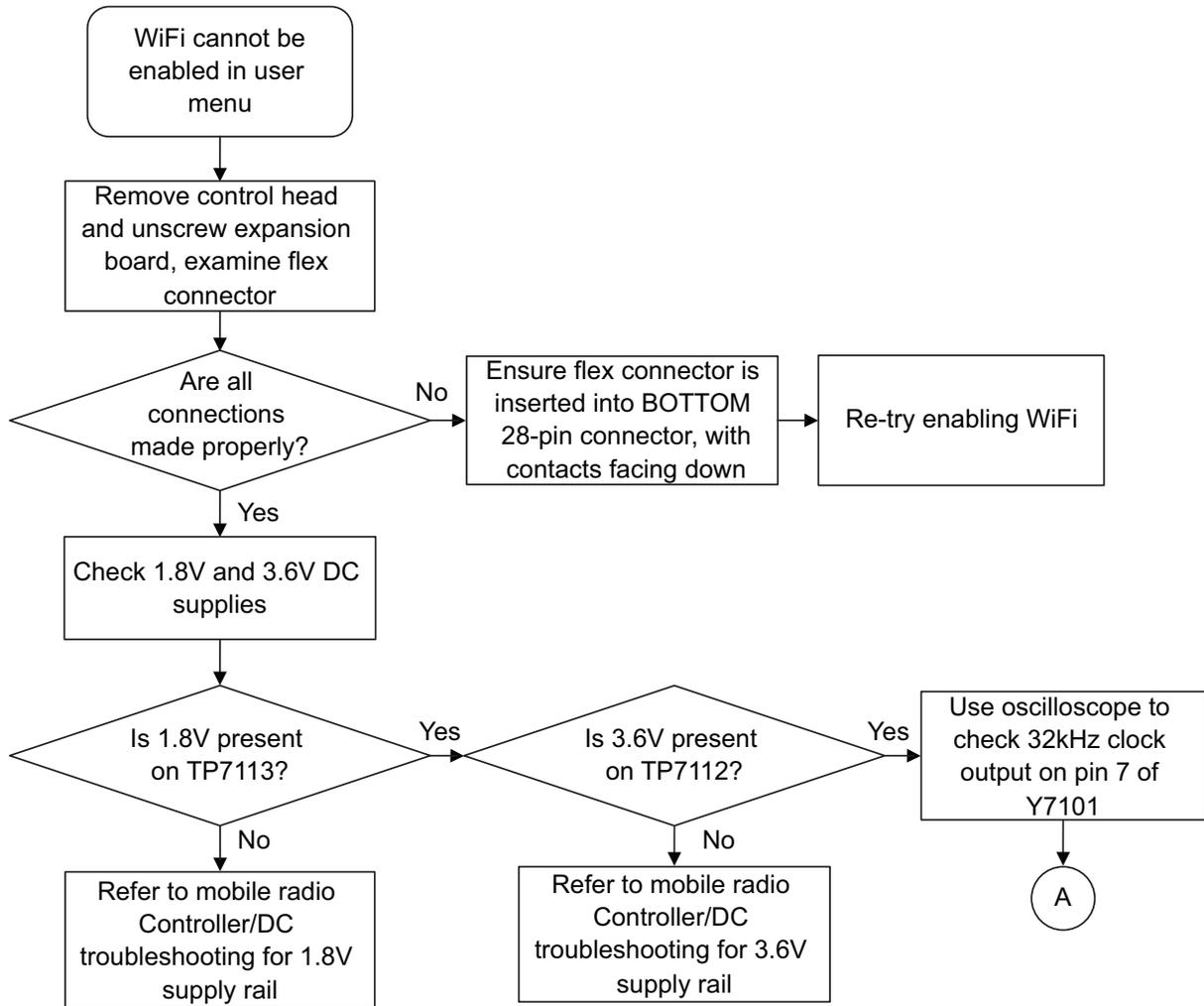
## 1.2 Bluetooth (PMLN7252\_S) Troubleshooting Chart (Sheet 3 of 4)



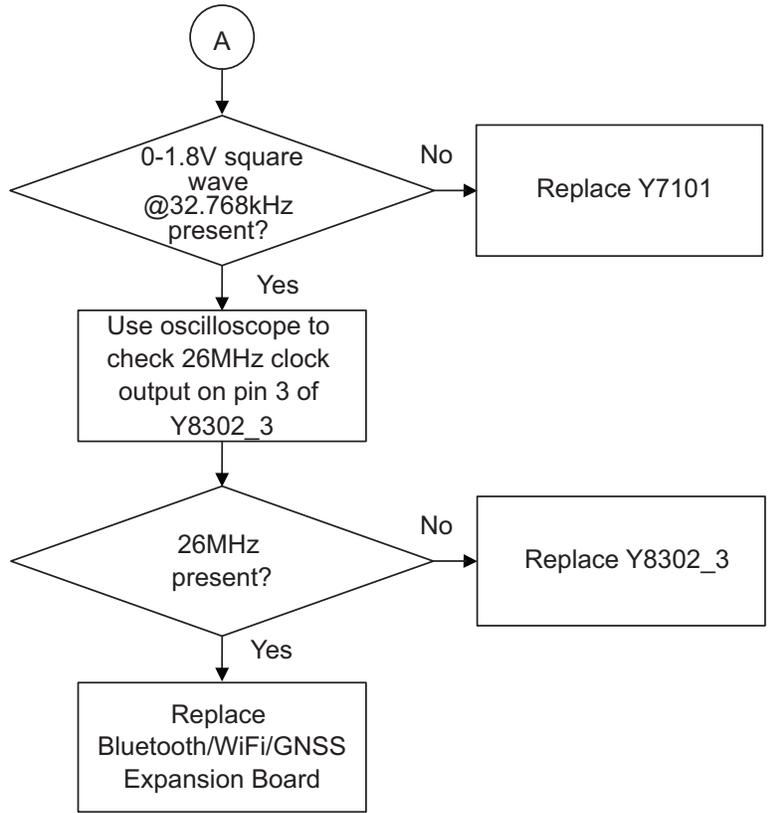
### 1.3 Bluetooth (PMLN7252\_S) Troubleshooting Chart (Sheet 4 of 4)



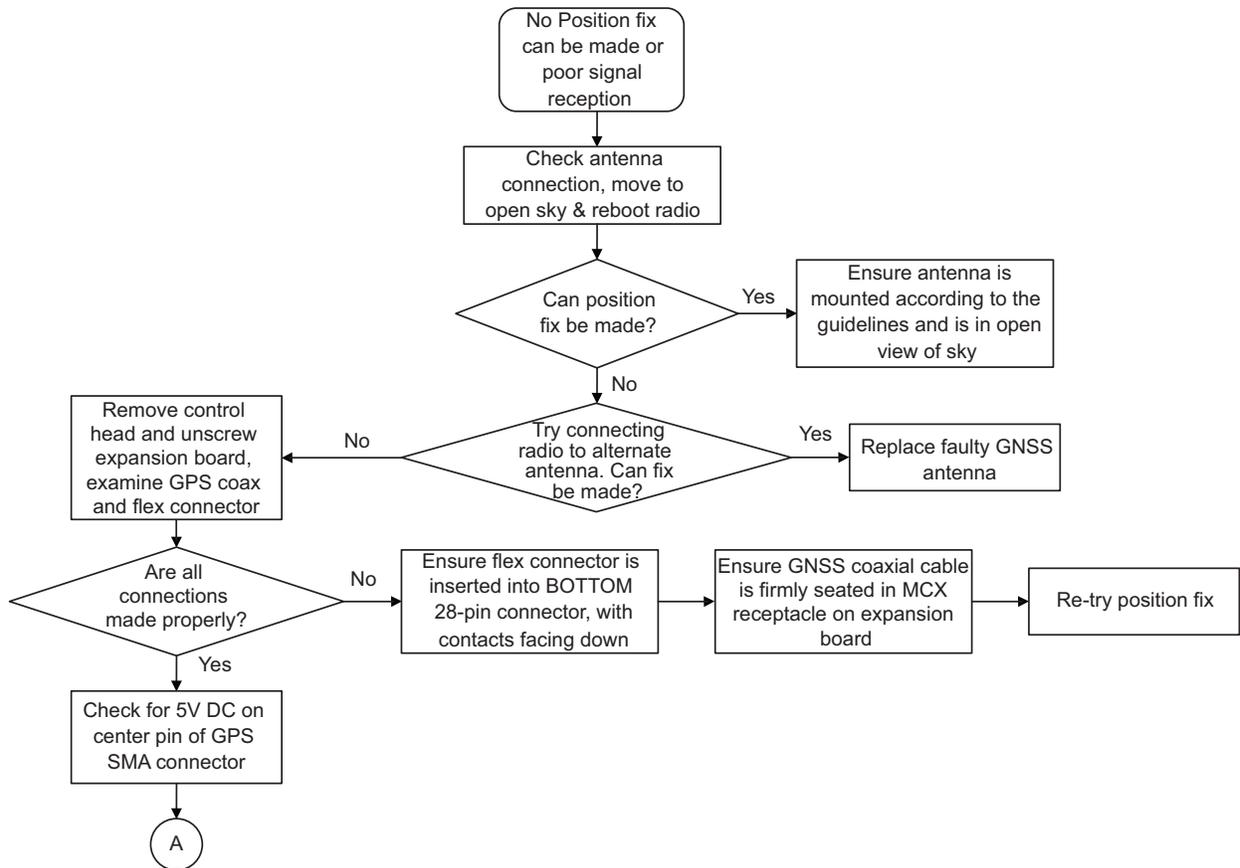
## 2.0 Wi-Fi (PMLN7252\_S) Troubleshooting Chart (Sheet 1 of 2)



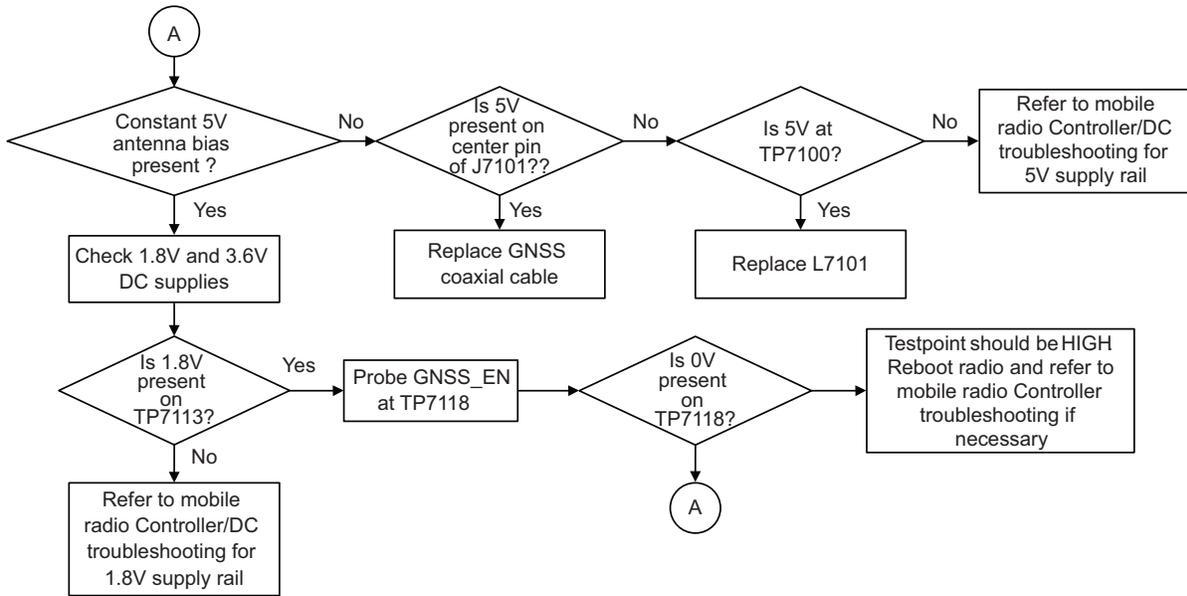
### 2.1 Wi-Fi (PMLN7252\_S) Troubleshooting Chart (Sheet 2 of 2)



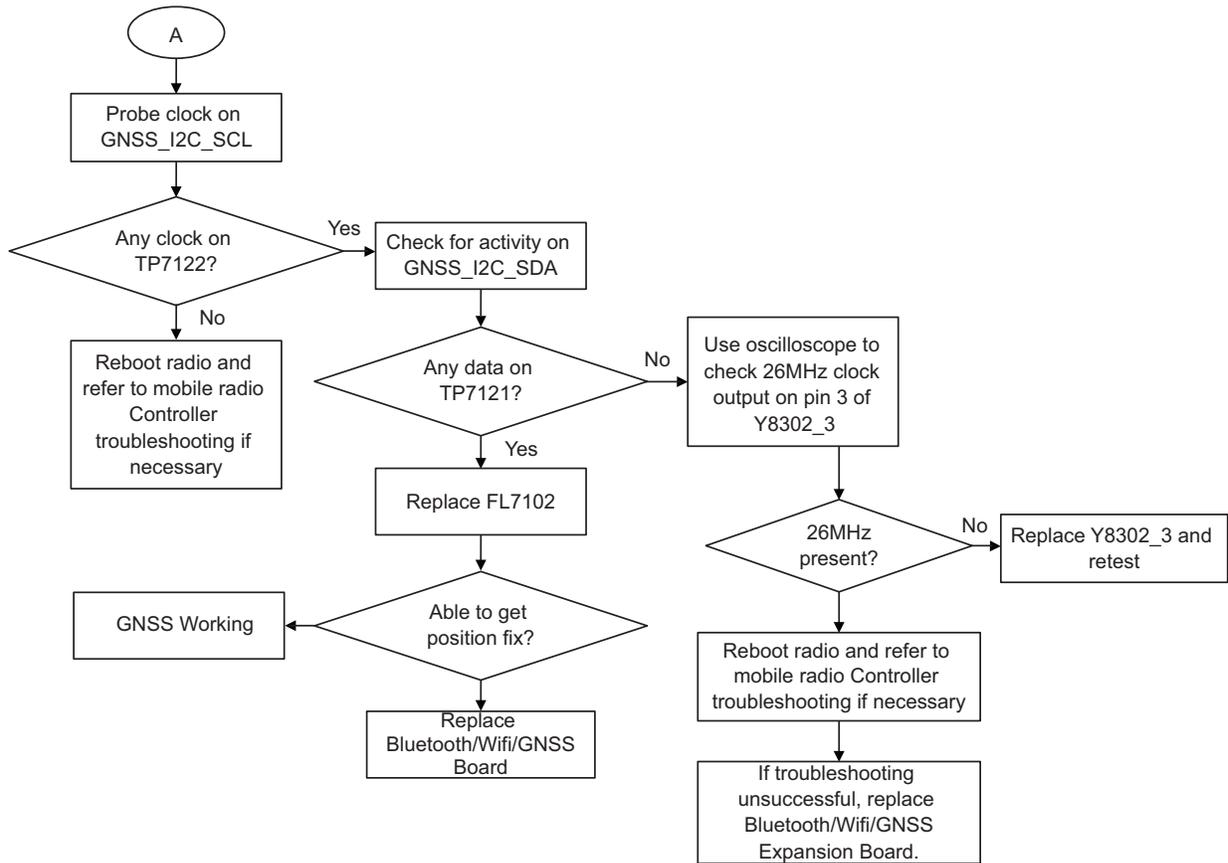
### 3.0 GNSS (PMLN7252\_S) Troubleshooting Chart (Sheet 1 of 3)



### 3.1 GNSS (PMLN7252\_S) Troubleshooting Chart (Sheet 2 of 3)



### 3.2 GNSS (PMLN7252\_S) Troubleshooting Chart (Sheet 3 of 3)



## Notes

## Section 2

# BLUETOOTH/WI-FI/GNSS PCBS/SCHEMATICS/PARTS LISTS

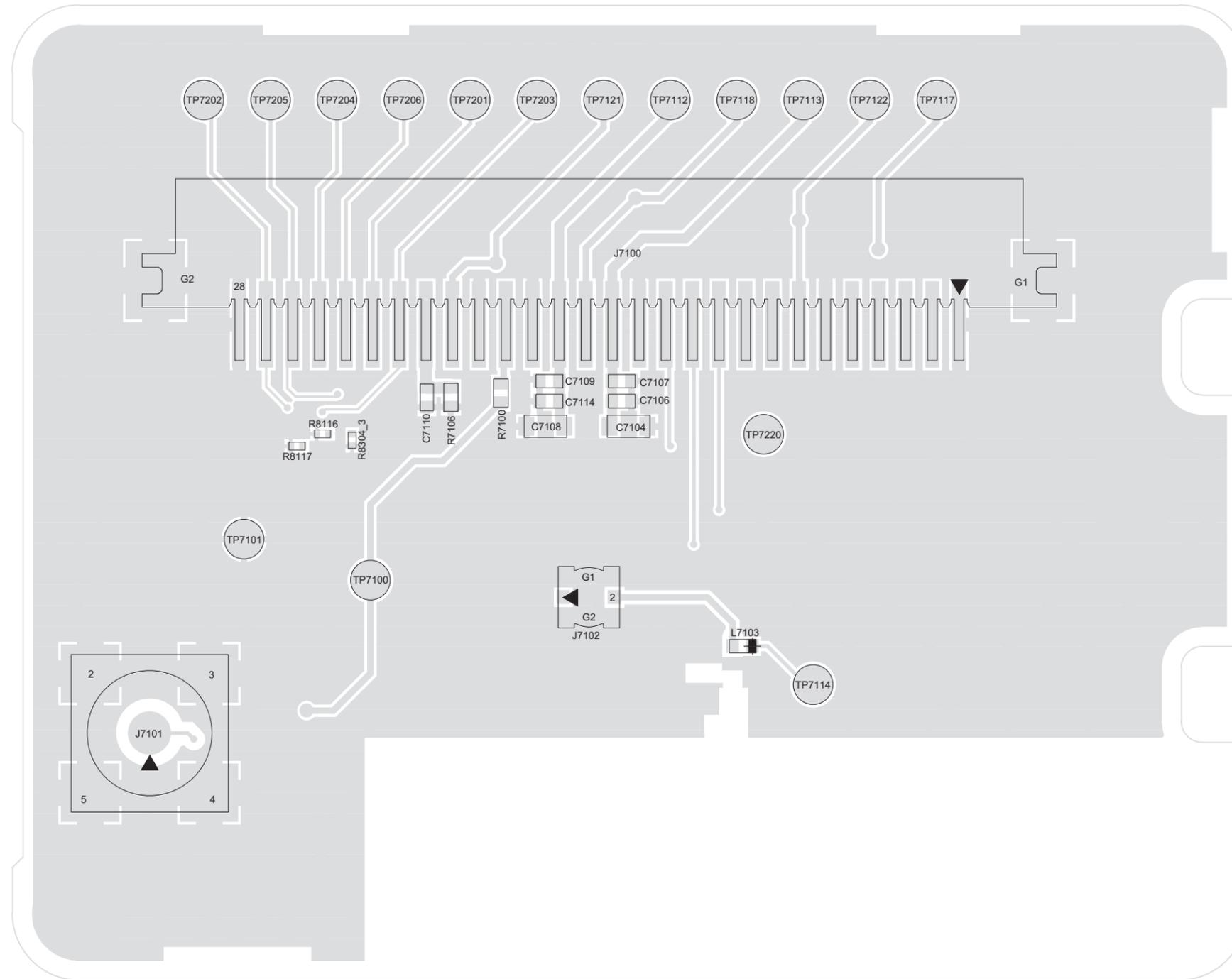
### 1.0 Allocation of Schematic and Circuit Board

*Table 2-1 Bluetooth/Wi-Fi/GNSS (PMLN7252\_S) Schematic Diagram and Parts List*

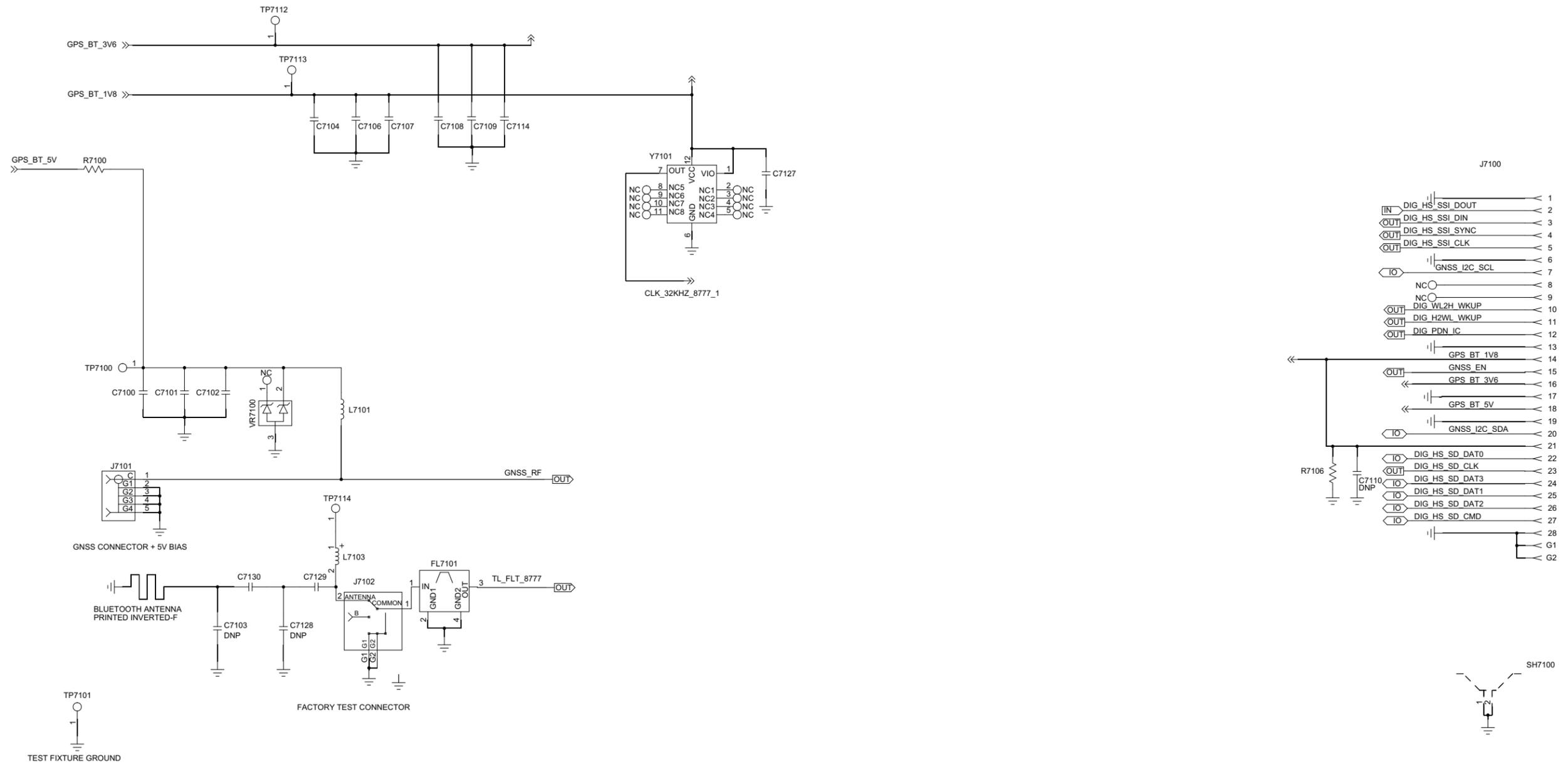
<b>PCB:</b> Bluetooth/Wi-Fi/GNSS (PMLN7252_S) PC000942A01-AA Main Board Top Side PC000942A01-AA Main Board Bottom Side	Page 2-3 Page 2-4
<b>Schematic</b> Bluetooth/Wi-Fi/GNSS (PMLN7252_S) Schematic Diagram	<b>Page 2-5</b>
<b>Parts List</b> PC000942A01-AA	<b>Page 2-9</b>

## Notes



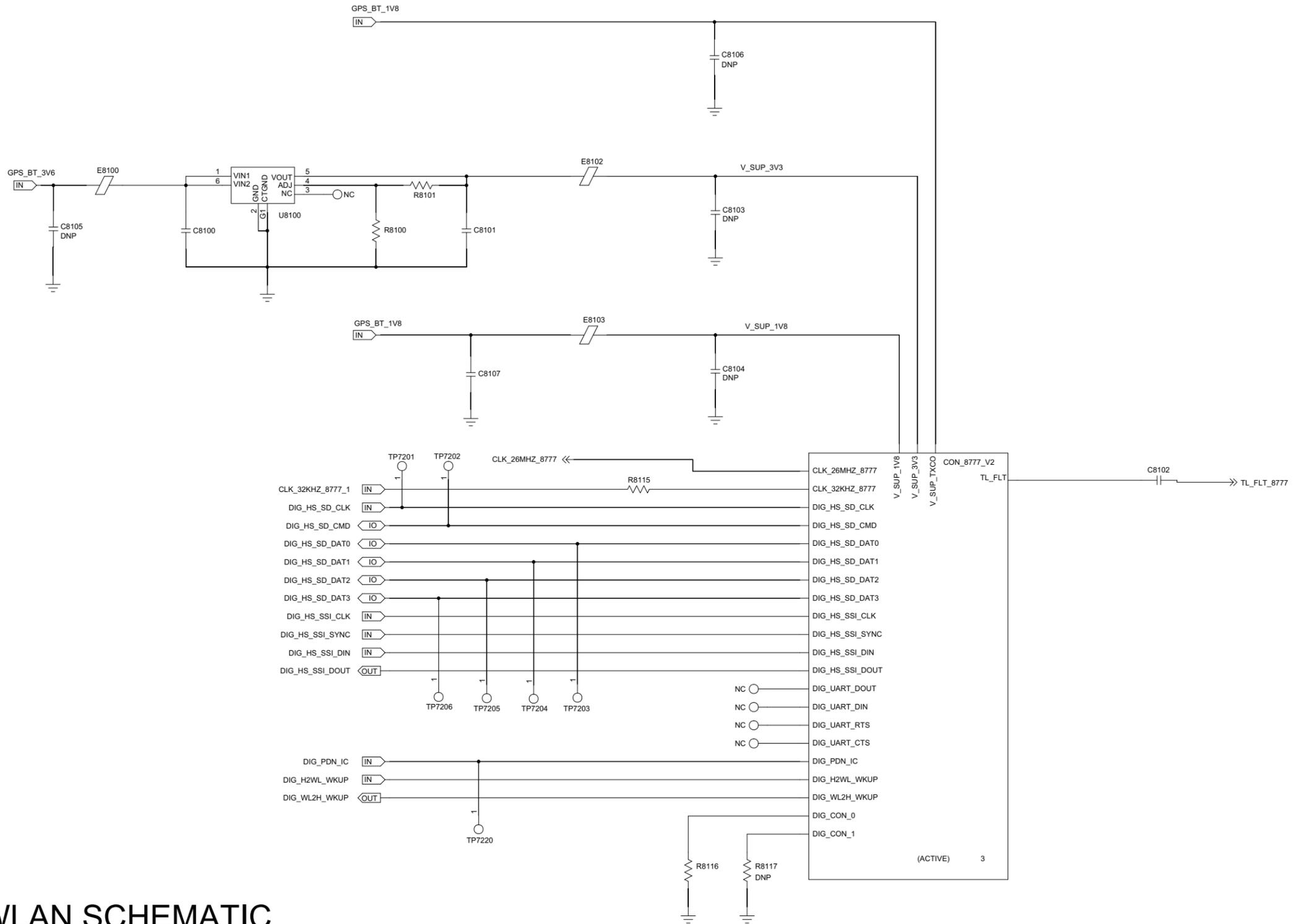


Bluetooth/Wi-Fi/GNSS (PMLN7252\_S) Expansion Board – PCB PC000942A01-AA Bottom Side



Bluetooth/Wi-Fi/GNSS (PMLN7252\_S) Expansion Board Schematic Diagram (sheet 1 of 4)





BT\_WLAN SCHEMATIC



### 3.0 Bluetooth/Wi-Fi/ GNSS (PMLN7252\_S) Expansion Board Parts List – PCB PC000942A01-AA

Circuit Ref.	Motorola Part No.
C7100	21667009370
C7101	21667009174
C7102	2113946S35
C7103	NOT PLACED
C7104	2113946S35
C7106	2113945Y02
C7107	21667009370
C7108	2113946S35
C7109	2113945Y02
C7110	NOT PLACED
C7114	21667009370
C7127	2113945Y02
C7128	NOT PLACED
C7129	21667009355
C7130	21667009355
C7131	21012182001
C7132	21012043035
C7133	2113956A51
C7134	2113956A51
C7135	2113956A51
C7136	2113956A51
C7137	2113956A51
C7138	2170282H06
C7139	2113956A51
C7140	2113956A51

Circuit Ref.	Motorola Part No.
C7141	21667009370
C7142	2113944A52
C8100	2187893N01
C8101	2187893N01
C8102	21667013140
C8103	NOT PLACED
C8104	NOT PLACED
C8105	NOT PLACED
C8106	NOT PLACED
C8107	2113946D05
C8300_3	21009304001
C8305_3	21667012146
C8306_3	21009304001
C8311_3	21009304001
C8312_3	2113946U01
C8315_3	21012129001
C8316_3	21009304001
C8319_3	2113946U01
C8320_3	2113946U01
C8321_3	2113946U01
C8322_3	2113946U01
C8323_3	2113946U01
C8324_3	2113946U01
C8325_3	2113946U01
C8327_3	2113945F07
C8328_3	2113946U01
C8329_3	21013048001
C8331_3	2113946U01
C8332_3	2113946U01
C8334_3	CA000445A01

Circuit Ref.	Motorola Part No.
C8335_3	21667013140
E7100	7688697V14
E8100	7686949J22
E8102	7688697V04
E8103	7688697V04
E8300_3	7688697V14
FL7101	9109674L58
FL7102	91012057001
J7100	09012053001
J7101	0909901V02
J7102	CN000512A01
L7101	24009344027
L7103	2475122C29
L7104	2475122C12
L8301_3	2475122C28
L8330_3	IN000095A01
L8333_3	IN000095A01
R7100	0613952R66
R7105	0613952N01
R7106	0613952N01
R8100	0613952V09
R8101	0613952V30
R8115	0613952R66
R8116	0613952V69
R8117	NOT PLACED
R8300_3	0613952R66
R8301_3	0613952Y66
R8304_3	0613952X73
R8305_3	0613952Y66
R8314_3	0613952Y66

Circuit Ref.	Motorola Part No.
SH7100	2680514Z02
TP8310_3	NOT PLACED
TP8313_3	NOT PLACED
TP8317_3	NOT PLACED
TP8318_3	NOT PLACED
TP8326_3	NOT PLACED
U7103	IC000128A01
U8100	5171734H01
U8300_3	IC000285A01
U8336_3	HZ000243A01
VR7100	4813977A43
Y7101	93012017001
Y8302_3	HZ000202A01
PCB	PC000942A01

**Notes**



# **XPR 5350e/XPR 5550e Mobile Radios**

## Chapter 5

### Generic Option Board (GOB)

### Service Information

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### **Section 2 Generic Option Board (GOB) PCBs/Schematics/Parts List**

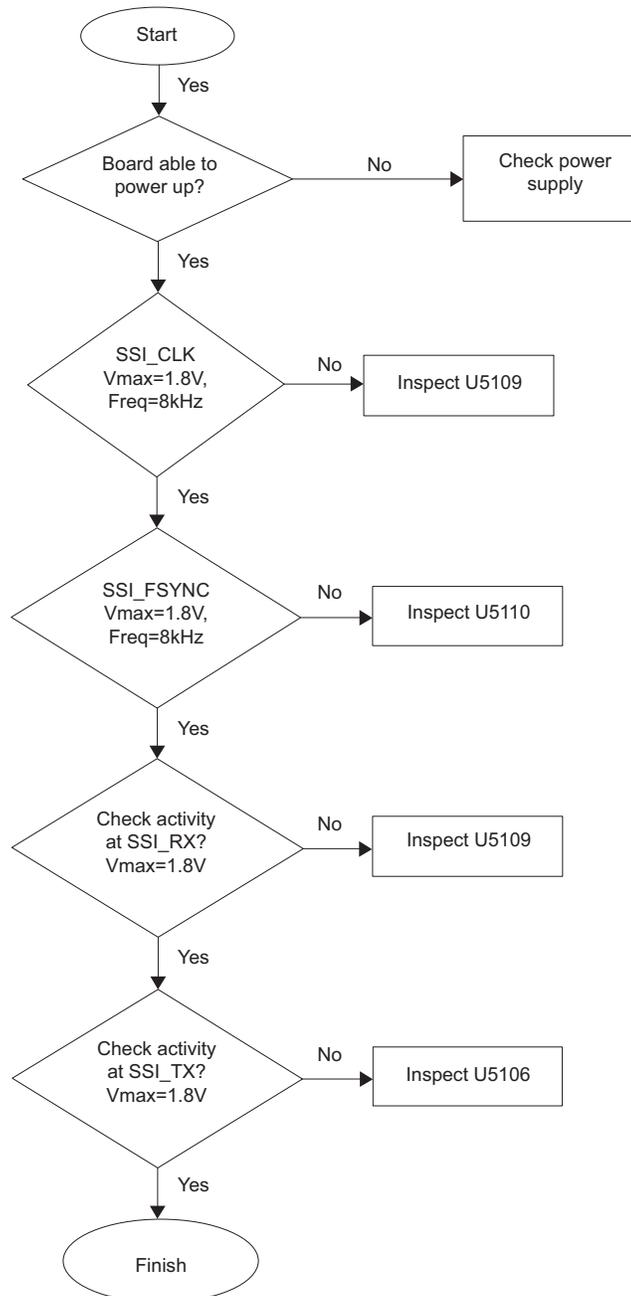
1.0 Allocation of Schematic and Circuit Board..... 2-1  
2.0 Generic Option Board (GOB) – PCB PC000957A01-CA/Schematic..... 2-3  
3.0 GOB Parts List ..... 2-6

## Notes

## Section 1

# TROUBLESHOOTING CHART

### 1.0 Generic Option Board (GOB) Troubleshooting Chart



\* To check SSI lines, GOB needs to connect with radio  
\* All the SSI lines must probe with oscilloscope

## Notes

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## Section 2

# GENERIC OPTION BOARD (GOB) PCBS/SCHEMATICS/PARTS LIST

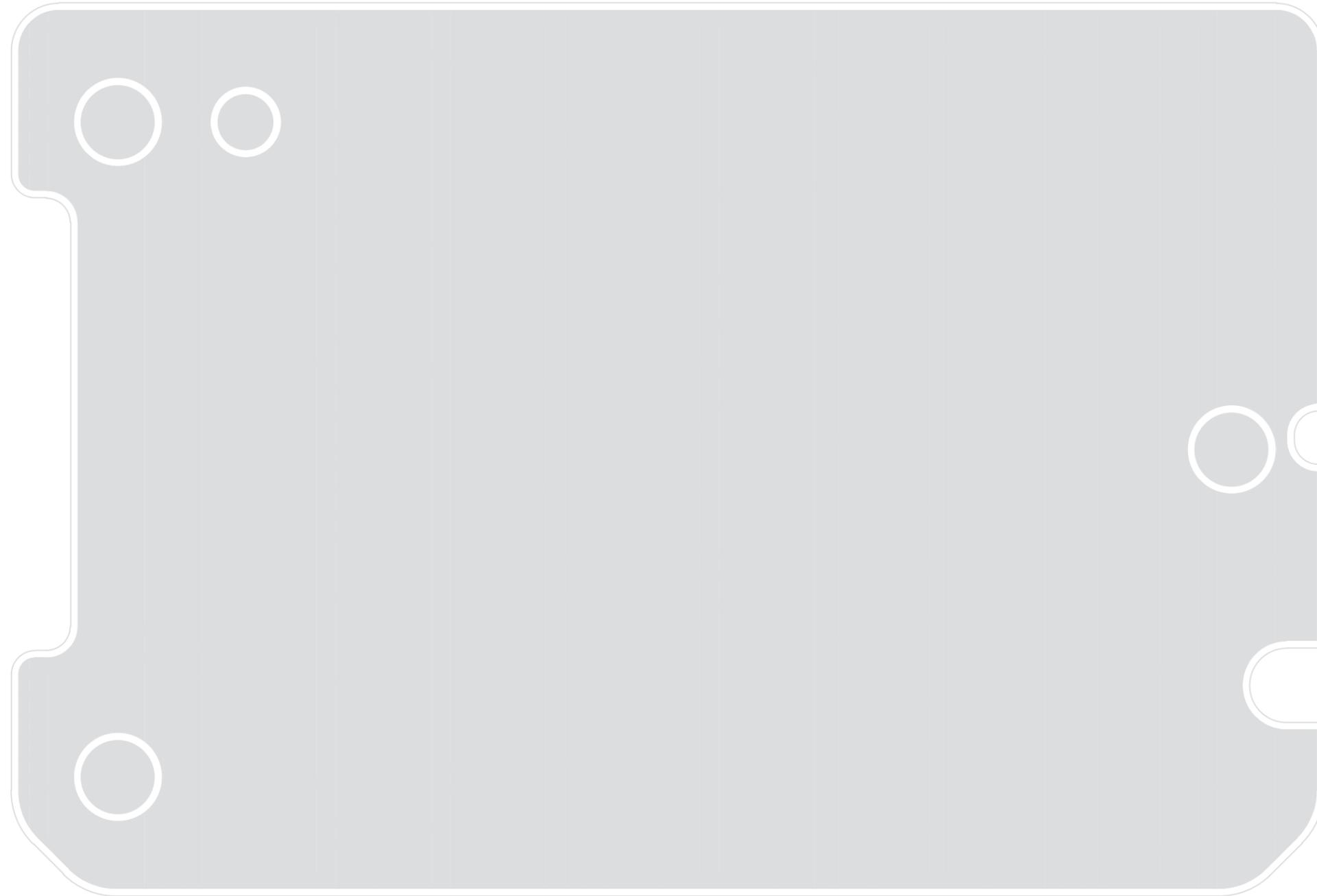
### 1.0 Allocation of Schematic and Circuit Board

*Table 2-1 GOB Schematic Diagram and Parts List*

<b>PCB:</b> GOB  PC000957A01-CA Main Board Top Side PC000957A01-CA Main Board Bottom Side	  Page 2-3 Page 2-4
<b>Schematic</b> GOB Schematic Diagram	<b>Page 2-5</b>
<b>Parts List</b> PC000957A01-CA	<b>Page 2-6</b>

## Notes

## 2.0 Generic Option Board (GOB) – PCB PC000957A01-CA/Schematic



**GOB – PCB PC000957A01-CA Top Side**





## 3.0 GOB Parts List

Circuit Ref.	Motorola Part No.
C5100	2113946S35
C5101	2113945A05
C5102	2113946S35
C5103	2113945Y02
C5104	2113945D01
C5105	2113945A11
C5106	2113945D01
C5107	2113956B21
C5108	2113956B21
C5109	2113741F49
C5110	2113945A11
C5111	2113945D01
C5112	2113945Y02
C5113	2113956B21
C5114	2113956B21
C5115	2113945Y02
C5116	2113945D01
C5117	2113945D01
C5118	2113945Y02
C5119	2113956B21
C5120	2113946B04
C5121	2113944A46
C5125	2113945Y02
C5126	2115153H22
C5127	2115153H22
C5128	2113945Y02
C5129	2113945Y02
C5130	2113945Y02
C5131	2113945Y02

Circuit Ref.	Motorola Part No.
C5132	2113945A05
C5134	2113945Y02
C5135	2113945Y02
C5136	2113945Y02
C5139	2113945Y02
C5140	2113945Y02
C5200	2113945Y02
C5201	2113945Y02
C6000	21667009156
C6001	21667009166
C6002	2113945A11
C6003	21667009156
C6004	21667009166
C6005	2113945A11
C6006	2113945A11
C6007	21667009166
C6008	21667009156
E5100	7686949J08
E5101	530004-001-00
E5102	530004-001-00
E5200	24001720002
J4202	CN000225A01
J5000	09012068001
J5004	2887818K02
Q5001	48012274001
Q5002	4888695V01
Q5004	48012088001
Q5005	4870370A72
Q5006	4816134H01
Q5007	4816134H01

Circuit Ref.	Motorola Part No.
Q5008	48012088001
Q5009	48012088001
Q5010	4870370A72
R5104	0613952G67
R5105	0613952R01
R5106	0613952R01
R5110	0613952R01
R5112	0613952R25
R5113	0613952R25
R5114	0613952R25
R5122	0613952Q25
R5123	0613952Q25
R5124	0613952R01
R5125	0613952R01
R5128	NOT PLACED
R5129	NOT PLACED
R5130	0613952R01
R5131	0613952R01
R5133	0613952G67
R5134	0613952R01
R5135	NOT PLACED
R5136	0613952R01
R5137	0613952R66
R5138	NOT PLACED
R5140	0613952R01
R5141	0613952R01
R5200	NOT PLACED
R5201	0613952R01
R5202	NOT PLACED
R5203	NOT PLACED

Circuit Ref.	Motorola Part No.
R5204	0613952R01
R5206	0613952K58
R5207	0613952K58
R5208	0613952R01
R5300	0613952Q33
R5301	0613952Q33
R5302	0613952Q33
R5303	0613952Q73
R6001	0613952R01
R6002	0613952P01
R6003	0613952P01
R6004	0613952R66
R6005	0613952R66
R6006	0613952R01
R6200	0613952R01
R9001	NOT PLACED
SH5000	26012099001
U5101	5171417N02
U5102	IC000643A01
U5103	51012009003
U5104	51012266001
U5105	51012336001
U5106	5188085K03
U5107	51012205001
U5109	5171767H01
U5110	5171767H01
U6000	NOT PLACED
VR5100	48012131001
VR5101	4815040H01
Y5101	93012000001

Circuit Ref.	Motorola Part No.
PCB	PC000957A01



# **XPR 5350e/XPR 5550e Mobile Radios**

Chapter 6

Controller

Service Information

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5.0	MMP USB (Host Mode) Troubleshooting Chart.....	1-5
6.0	Audio Troubleshooting Chart.....	1-6

#### Section 2 Controller Schematics/Parts Lists

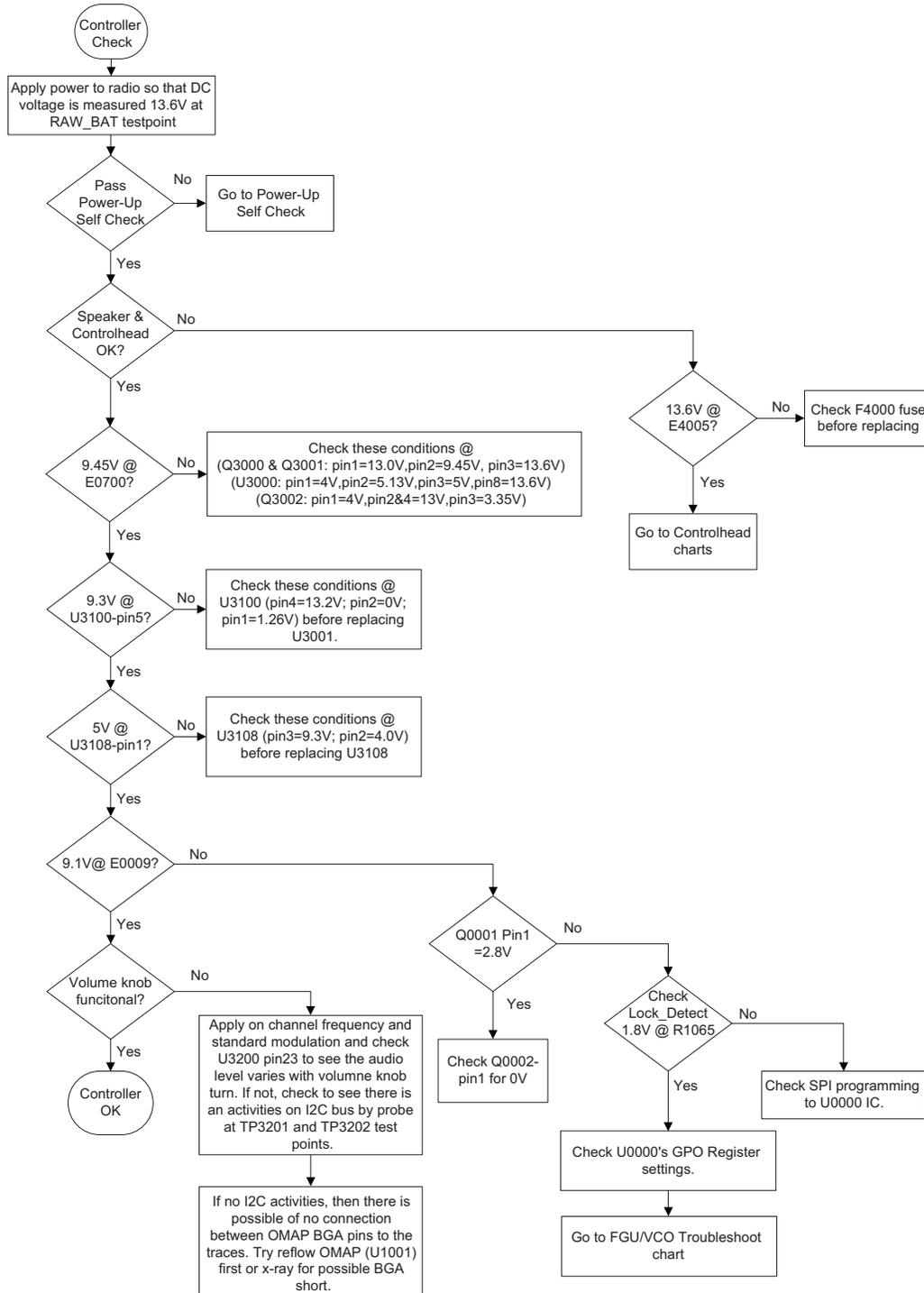
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## Notes

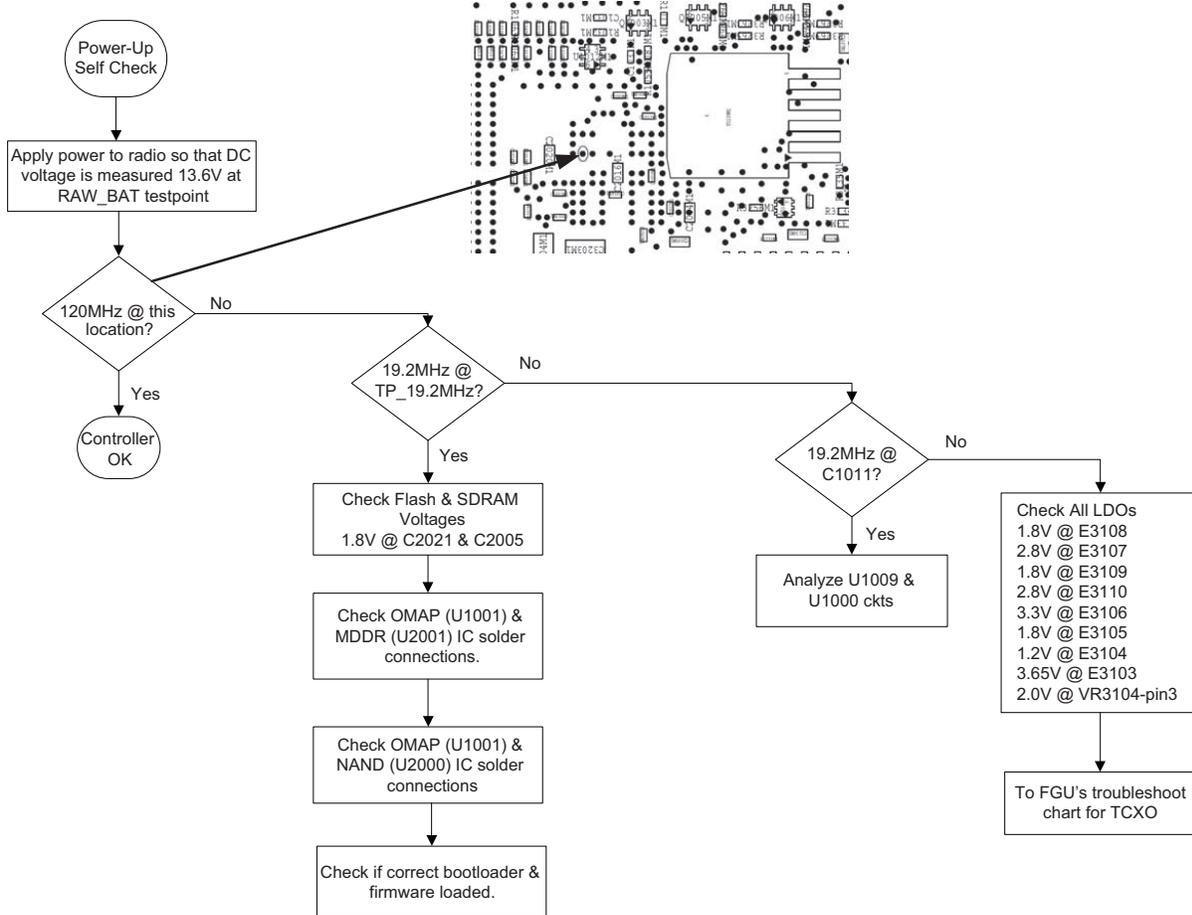
# Section 1

## TROUBLESHOOTING CHARTS

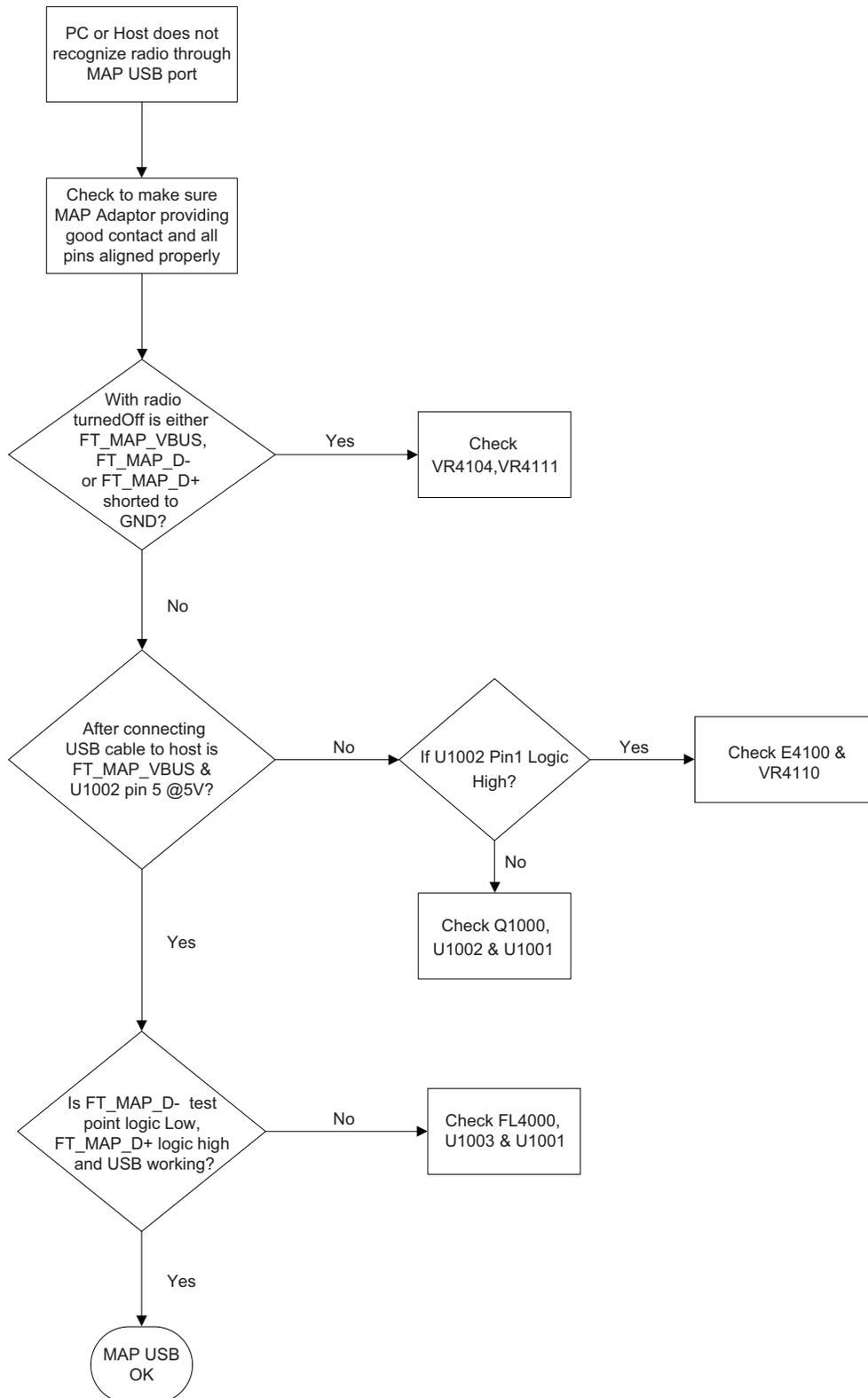
### 1.0 Controller Troubleshooting Chart



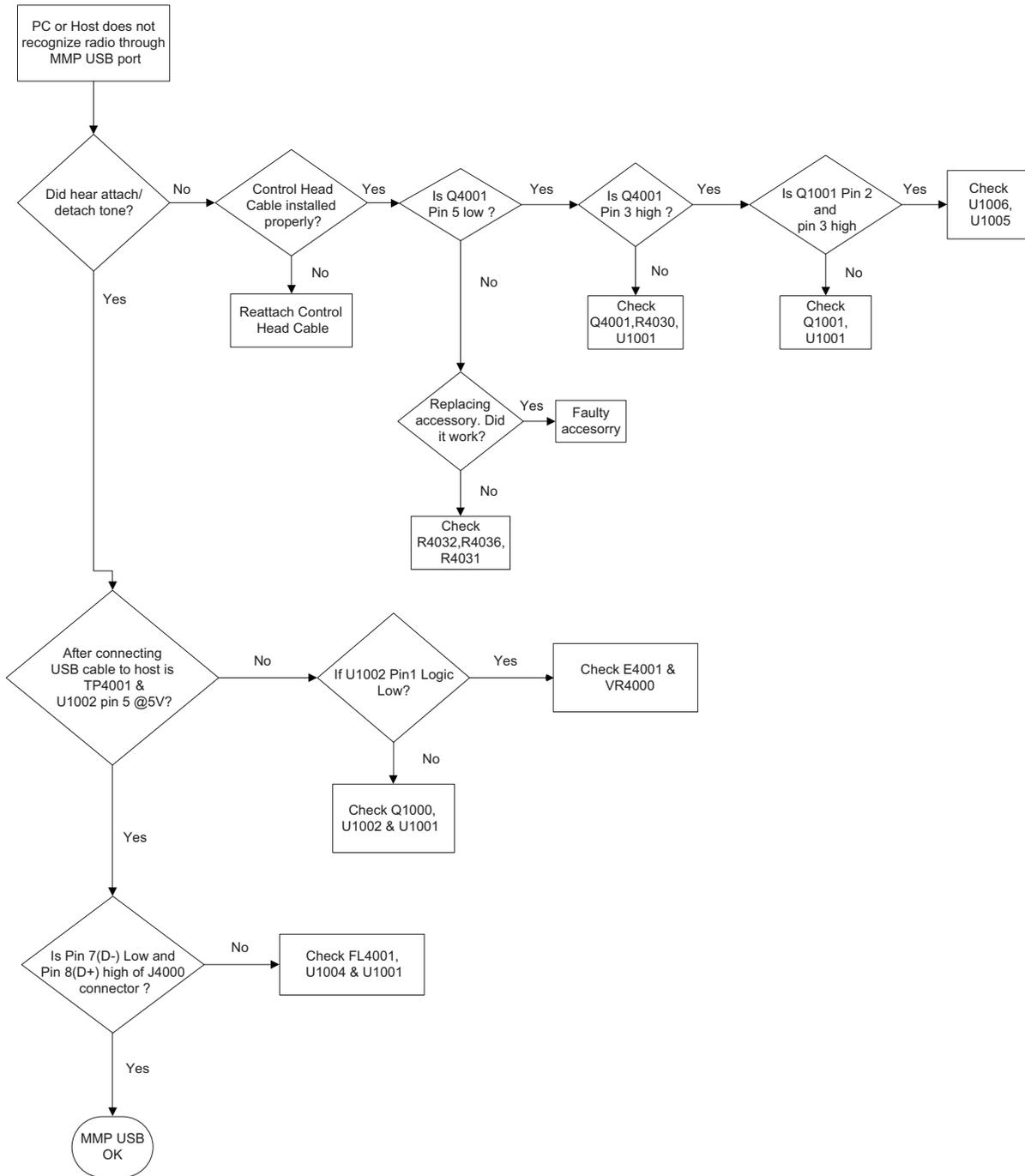
## 2.0 Power-Up Troubleshooting Chart



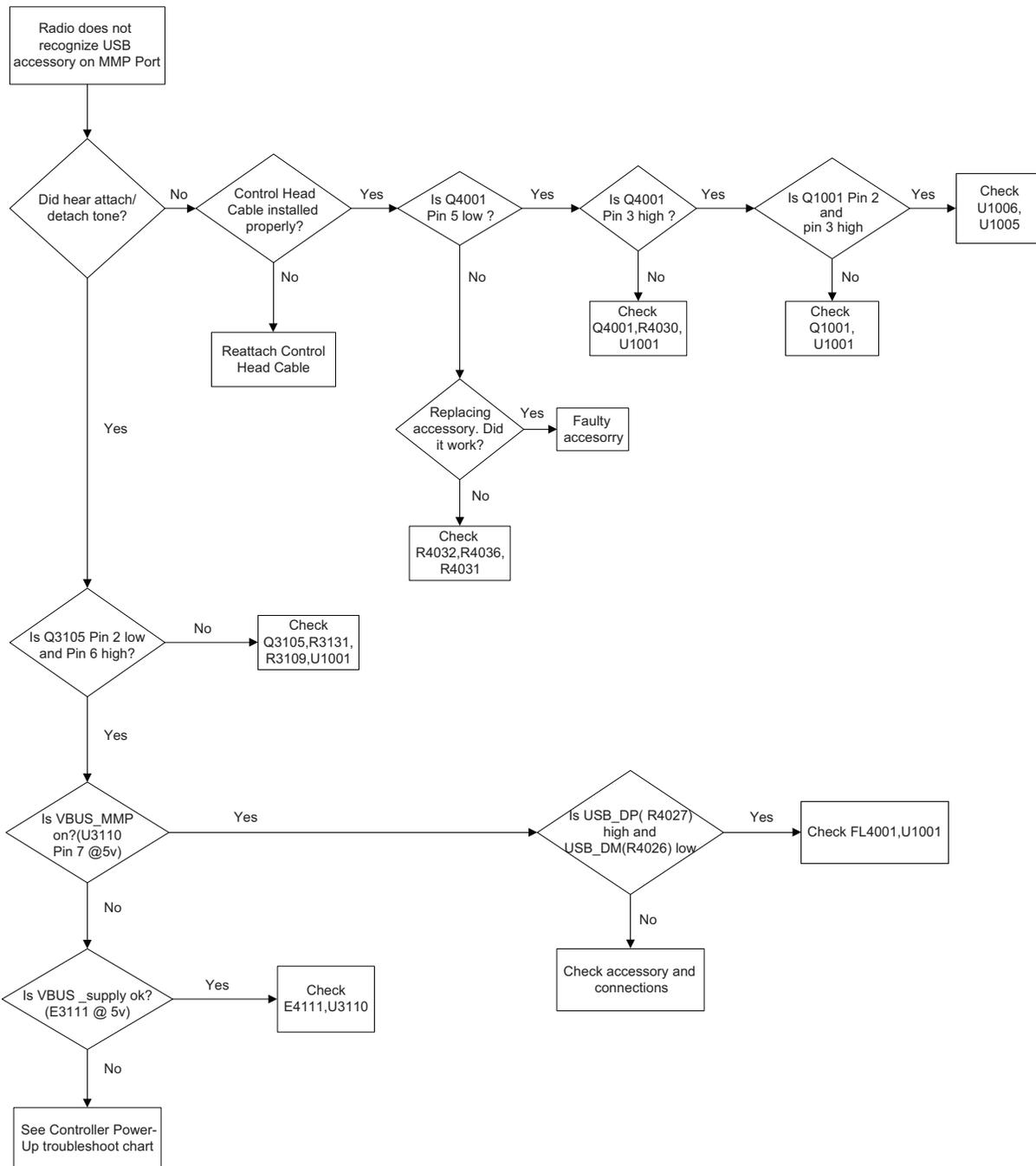
### 3.0 MAP USB (Device Mode) Troubleshooting Chart



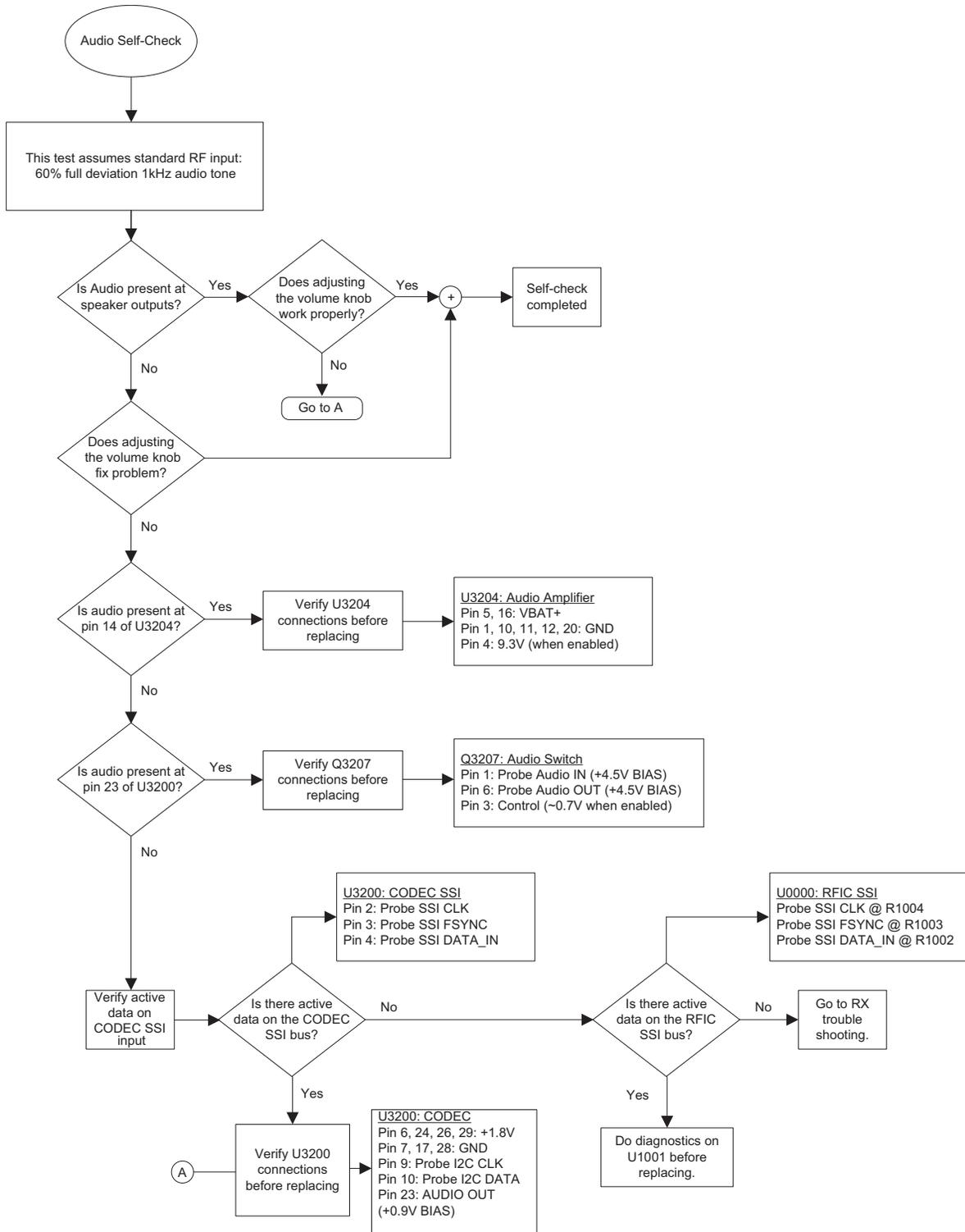
### 4.0 MMP USB (Device Mode) Troubleshooting Chart



## 5.0 MMP USB (Host Mode) Troubleshooting Chart



# 6.0 Audio Troubleshooting Chart



## Section 2

# CONTROLLER SCHEMATICS/PARTS LISTS

## 1.0 Allocation of Schematics and Parts Lists

### 1.1 Controller Circuits

This Chapter shows the Schematics and the Parts Lists for the Controller circuits.

*Table 2-1 Controller R3 Schematic Diagrams and Parts Lists*

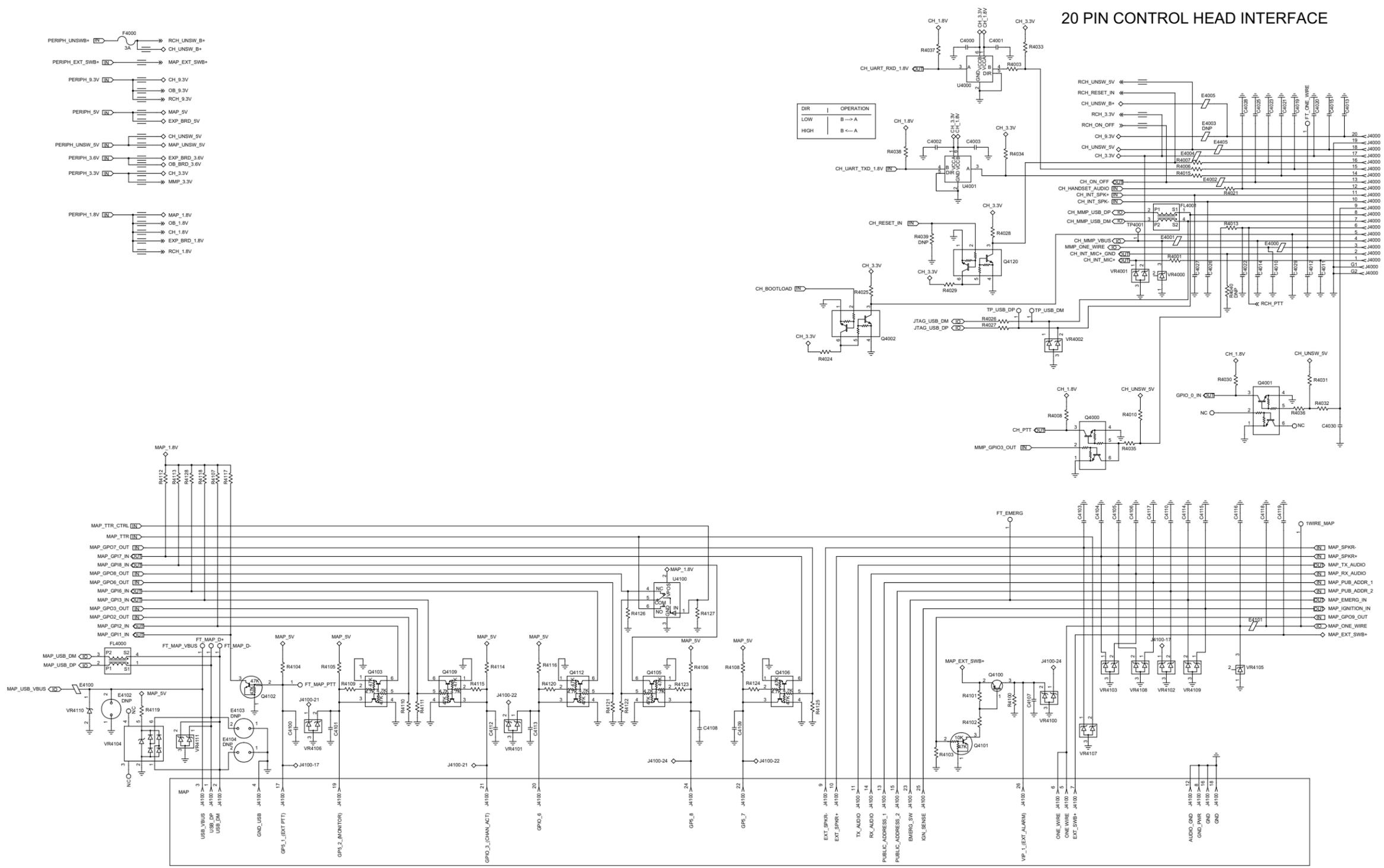
<b>Controller R3 used on PCB:</b> 84012736001_A VHF (136–174 MHz), 25–45 W 84012734001_A VHF (136–174 MHz), 1–25 W 84012737001_A UHF1 (403–470 MHz), 25–40 W 84012735001_A UHF1 (403–470 MHz), 1–25 W 84012728001_A UHF2 (450–512 MHz), 1–40 W 84012657001_A 800/900 MHz (806–941 MHz), 10–35/30 W	
<b>SCHEMATICS</b> Controller Top Level Controller DC Supply Controller Audio Controller Peripheral (sheet 1 of 2) Controller Peripheral (sheet 2 of 2) Controller Microprocessor Controller Memories	Page 2-3 Page 2-4 Page 2-5 Page 2-6 Page 2-7 Page 2-8 Page 2-9
<b>Parts Lists</b> Controller R3	Page 2-10

## Notes



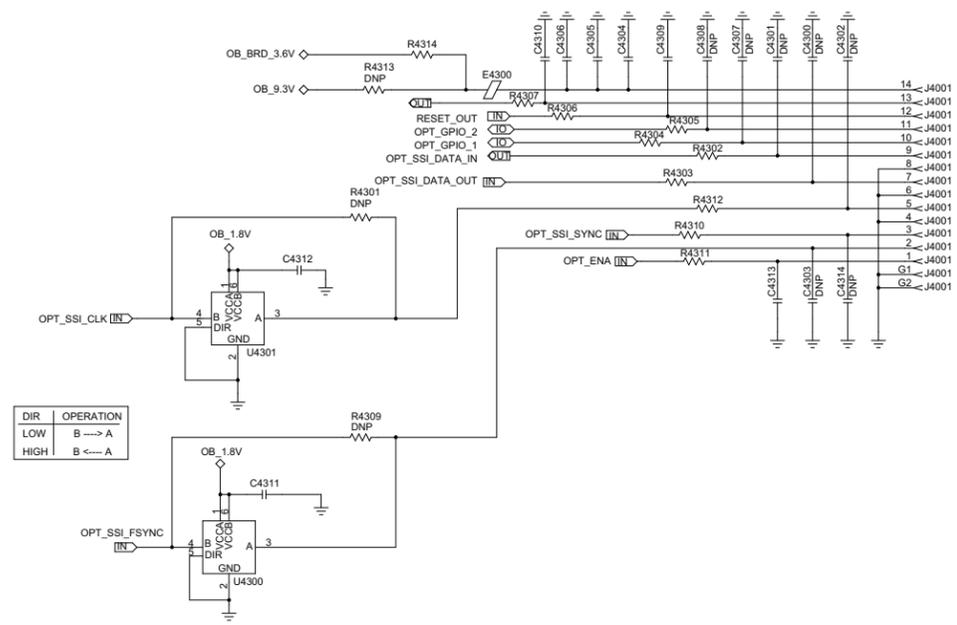




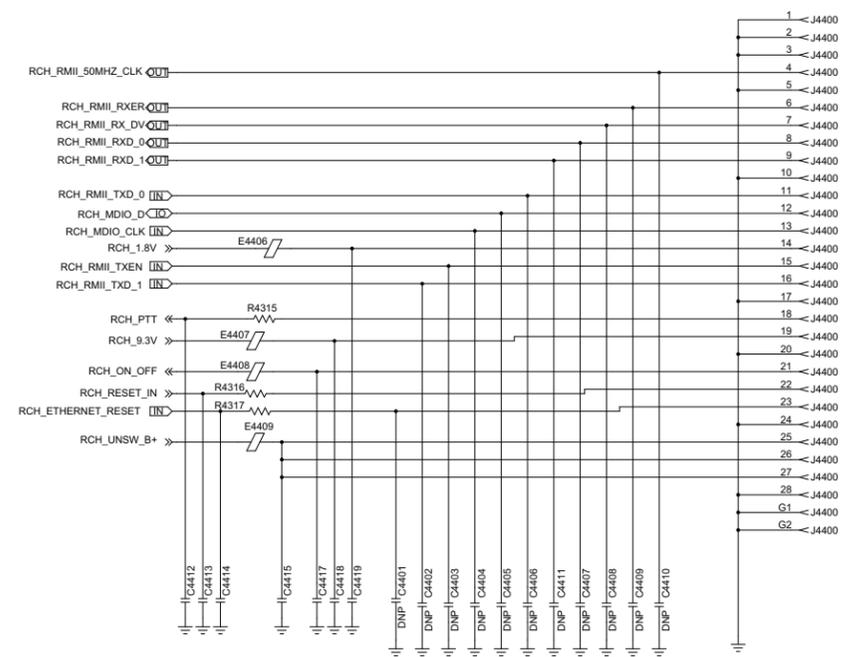


26-PIN REAR ACCESSORY INTERFACES

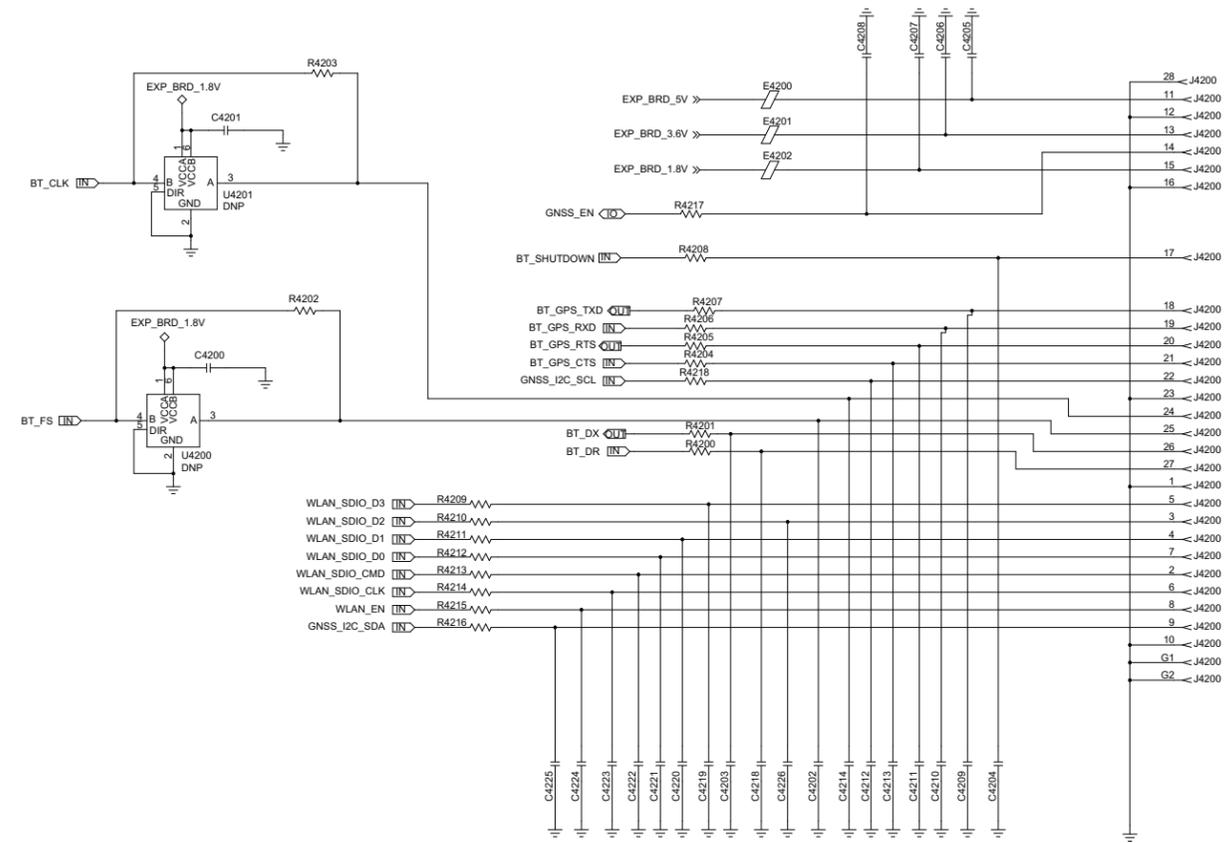
### 14-PIN OPTION BOARD INTERFACE



### 28 PIN REMOTE CONTROL HEAD CONNECTOR



### 28 PIN BLUETOOTH GPS CONNECTOR







### 3.0 Controller R3 Parts List

Circuit Ref.	Motorola Part No.
C1000M1	2113945Y02
C1001M1	2113945Y02
C1002M1	2113946K03
C1003M1	2113945Y02
C1004M1	2113945Y02
C1005M1	2113945Y02
C1006M1	2113945Y02
C1007M1	2113945Y02
C1008M1	2113946D05
C1009M1	2113945Y02
C1010M1	2113945Y02
C1011M1	2113945B02
C1012M1	2113945Y02
C1013M1	2113945Y02
C1014M1	2113945Y02
C1015M1	2113945B02
C1016M1	21667009166
C1017M1	21667009162
C1018M1	21667009162
C1019M1	21667009162
C1020M1	21667009162
C1021M1	2113945Y02
C1022M1	2113945Y02
C1023M1	2113945Y02
C1024M1	2113945Y02
C1025M1	2113945Y02
C1026M1	2113945Y02
C1027M1	NOT PLACED

Circuit Ref.	Motorola Part No.
C1028M1	2113945Y02
C1029M1	2113956B54
C1032M1	2113956B54
C1035M1	2113945B02
C1036M1	2113946D05
C1040M1	2113945Y02
C1041M1	2113945B02
C1042M1	2113945Y02
C1043M1	2113956B54
C1044M1	2113945B02
C1045M1	2113945B02
C1047M1	2113945Y02
C1048M1	2113945B02
C2000M1	2113945Y02
C2001M1	2113945Y02
C2002M1	2113945B02
C2003M1	21667009162
C2004M1	2113956B54
C2005M1	2113946D05
C2006M1	2113945Y02
C2007M1	2113945Y02
C2008M1	2113945B02
C2009M1	21667009162
C2010M1	2113945Y02
C2011M1	2113945Y02
C2012M1	2113945Y02
C2013M1	2113945Y02
C2014M1	2113945B02
C2015M1	21667009162
C2016M1	2113956B54

Circuit Ref.	Motorola Part No.
C2020M1	2113956B54
C2021M1	2113956D59
C2022M1	2113956D59
C3102M1	21009337414
C3103M1	21667009166
C3104M1	2113946F08
C3105M1	2113946J04
C3106M1	2113945C31
C3107M1	2113944C38
C3109M1	21667009166
C3110M1	2113944C06
C3111M1	2113946J04
C3112M1	2113945Y02
C3113M1	2113946S35
C3115M1	2113944C06
C3116M1	2113955D13
C3117M1	2113955D13
C3118M1	2113945Y02
C3119M1	2113945Y02
C3120M1	2113956E60
C3121M1	2113956D58
C3122M1	2113956A51
C3123M1	2113956A51
C3124M1	2113946D07
C3125M1	2113946D05
C3126M1	2113944C06
C3127M1	2113946S35
C3128M1	2113946D05
C3129M1	2113945Y02
C3130M1	2113946D05

Circuit Ref.	Motorola Part No.
C3131M1	2113946A02
C3132M1	2113946D05
C3133M1	2113946D05
C3134M1	2113946S35
C3135M1	2113956A51
C3136M1	21012095001
C3137M1	2113946D05
C3139M1	2113956A51
C3140M1	21012095001
C3141M1	2113945Y02
C3142M1	21012102001
C3143M1	21667009366
C3144M1	2113945Y02
C3145M1	2113944C06
C3146M1	21012102001
C3149M1	2113956A51
C3150M1	2113956C37
C3151M1	2113945B02
C3152M1	2113944C06
C3153M1	2113946J04
C3154M1	2113955D13
C3155M1	2113945Y02
C3156M1	2113945Y02
C3157M1	2113945Y02
C3160M1	2113945Y02
C3161M1	NOT PLACED
C3171M1	2113946D07
C3173M1	2113946D07
C3175M1	2113946A01
C3176M1	2113944C48

Circuit Ref.	Motorola Part No.
C3177M1	2113946F08
C3200M1	21667009166
C3201M1	21667009166
C3203M1	2113955D37
C3204M1	2113955D37
C3205M1	21667009166
C3206M1	21667009166
C3208M1	2113956C37
C3209M1	2113945Y02
C3210M1	2113945Y02
C3211M1	2113945A11
C3212M1	2113955D37
C3213M1	2113945A03
C3214M1	2113955D37
C3215M1	2113956F49
C3216M1	2113945Y02
C3217M1	2113956B91
C3218M1	2113956A51
C3219M1	2113956A51
C3220M1	2113946F05
C3221M1	2113945Y02
C3222M1	2113956A51
C3223M1	2113945Y02
C3224M1	2113946F05
C3225M1	2113945Y02
C3226M1	NOT PLACED
C3227M1	2113946F05
C3228M1	2113945Y02
C3229M1	2113956A51
C3230M1	2113945Y02

Circuit Ref.	Motorola Part No.
C3231M1	2113945Y02
C3232M1	2113945Y02
C3233M1	2113945A09
C3234M1	2113945Y02
C3235M1	21012102001
C3236M1	2113945C31
C3237M1	21009337414
C3238M1	2113945A09
C3239M1	2113945A09
C3240M1	2113956B91
C3241M1	2113956B91
C3242M1	2113945C31
C3243M1	2113955D37
C3244M1	2113956B91
C3245M1	2113955D37
C3246M1	2113945C31
C3247M1	2113945Y02
C3248M1	2113945Y02
C3249M1	2113956B91
C3250M1	2113956B91
C4000M1	2113945Y02
C4001M1	2113945Y02
C4002M1	2113945Y02
C4003M1	2113945Y02
C4010M1	21667009166
C4011M1	21667009166
C4012M1	21667009166
C4013M1	21667009166
C4014M1	21667009166
C4015M1	21667009166

Circuit Ref.	Motorola Part No.
C4019M1	21667009166
C4020M1	21667009166
C4021M1	21667009166
C4022M1	21667009166
C4023M1	21667009166
C4025M1	21667009166
C4026M1	21667009166
C4027M1	21667009166
C4028M1	21667009166
C4029M1	21667009166
C4030M1	21667009166
C4100M1	21667009166
C4101M1	21667009166
C4103M1	21667009166
C4104M1	21667009166
C4105M1	21667009166
C4106M1	21667009166
C4107M1	21667009166
C4108M1	21667009166
C4109M1	21667009166
C4110M1	21667009166
C4112M1	21667009166
C4113M1	21667009166
C4114M1	21667009166
C4115M1	21667009166
C4116M1	21667009166
C4117M1	21667009166
C4118M1	21667009166
C4119M1	21667009166
C4200M1	2113945Y02

Circuit Ref.	Motorola Part No.
C4201M1	2113945Y02
C4202M1	21667009166
C4203M1	21667009166
C4204M1	21667009166
C4205M1	21667009166
C4206M1	21667009166
C4207M1	21667009166
C4208M1	21667009166
C4209M1	21667009166
C4210M1	21667009166
C4211M1	21667009166
C4212M1	21667009166
C4213M1	21667009166
C4214M1	21667009166
C4218M1	21667009166
C4219M1	21667009166
C4220M1	21667009166
C4221M1	21667009166
C4222M1	21667009166
C4223M1	21667009166
C4224M1	21667009166
C4225M1	21667009166
C4226M1	21667009166
C4300M1	NOT PLACED
C4301M1	NOT PLACED
C4302M1	NOT PLACED
C4303M1	NOT PLACED
C4304M1	21667009166
C4305M1	21667009376
C4306M1	21667009381

Circuit Ref.	Motorola Part No.
C4307M1	NOT PLACED
C4308M1	NOT PLACED
C4309M1	21667009166
C4310M1	21667009166
C4311M1	2113945Y02
C4312M1	2113945Y02
C4313M1	21667009166
C4314M1	NOT PLACED
C4401M1	NOT PLACED
C4402M1	NOT PLACED
C4403M1	NOT PLACED
C4404M1	NOT PLACED
C4405M1	NOT PLACED
C4406M1	NOT PLACED
C4407M1	NOT PLACED
C4408M1	NOT PLACED
C4409M1	NOT PLACED
C4410M1	NOT PLACED
C4411M1	NOT PLACED
C4412M1	21667009166
C4413M1	21667009166
C4414M1	21667009166
C4415M1	21667009166
C4417M1	21667009166
C4418M1	21667009166
C4419M1	21667009166
D3104M1	4885489Y01
D3160M1	4813978C02
D3161M1	4813978C02
E1000M1	7686949J15

Circuit Ref.	Motorola Part No.
E1001M1	7686949J15
E1002M1	7686949J15
E1003M1	7686949J15
E1004M1	7686949J15
E1005M1	7686949J15
E1006M1	7685268E01
E3100M1	24012102001
E3101M1	2485410Y02
E3102M1	2485410Y02
E3103M1	2485410Y02
E3104M1	7686949J22
E3105M1	7686949J22
E3106M1	7686949J22
E3107M1	7686949J22
E3108M1	7686949J22
E3109M1	7686949J22
E3110M1	7686949J22
E3111M1	7686949J22
E3113M1	7686949J22
E3200M1	24012102001
E3201M1	24012102001
E3202M1	24012107027
E3203M1	24012102001
E3204M1	24012102001
E4000M1	24012107027
E4001M1	7688697V05
E4002M1	24012107027
E4003M1	NOT PLACED
E4004M1	24012102001
E4005M1	2485410Y02

Circuit Ref.	Motorola Part No.
E4100M1	7686949J14
E4101M1	24012107027
E4102M1	NOT PLACED
E4103M1	NOT PLACED
E4104M1	NOT PLACED
E4200M1	24012107027
E4201M1	24012107027
E4202M1	24012107027
E4300M1	24012107027
E4405M1	24012107027
E4406M1	7686949J22
E4407M1	7686949J22
E4408M1	24012107027
E4409M1	24012102001
F4000M1	65012019001
FL4000M1	24012038001
FL4001M1	24012038001
J4000M1	0915767H01
J4001M1	0915556H01
J4100M1	0916017H01
J4200M1	09012053001
J4400M1	09012053001
L3100M1	24012091002
P1000M1	NOT PLACED
Q1000M1	4815263H01
Q1001M1	4815272H01
Q1002M1	4815261H01
Q1004M1	4815261H01
Q1005M1	4815261H01
Q3100M1	4815272H01

Circuit Ref.	Motorola Part No.
Q3101M1	4809939C47
Q3102M1	4809939C47
Q3103M1	48009494001
Q3105M1	4809939C47
Q3160M1	48009494001
Q3161M1	4815272H01
Q3162M1	4813973M07
Q3163M1	48009494001
Q3200M1	4815270H01
Q3201M1	4815272H01
Q3202M1	4815270H01
Q3203M1	4815270H01
Q3204M1	4815270H01
Q3205M1	4815270H01
Q3206M1	4815270H01
Q3207M1	4815270H01
Q3208M1	4815263H01
Q4000M1	4809939C47
Q4001M1	4809939C47
Q4002M1	4809939C47
Q4100M1	4816023H01
Q4101M1	4815261H01
Q4102M1	4815263H01
Q4103M1	48012271001
Q4105M1	48012271001
Q4106M1	48012271001
Q4109M1	48012271001
Q4112M1	48012271001
Q4120M1	4809939C47
R1000M1	0613952R66

Circuit Ref.	Motorola Part No.
R1001M1	0613952M66
R1002M1	0613952R66
R1003M1	0613952R66
R1004M1	0613952R66
R1005M1	0613952M66
R1007M1	0613952R66
R1008M1	0613952R66
R1009M1	0613952R66
R1010M1	0613952M66
R1011M1	0613952M66
R1012M1	0613952R66
R1013M1	0613952M66
R1014M1	NOT PLACED
R1016M1	NOT PLACED
R1018M1	NOT PLACED
R1019M1	0613952R66
R1020M1	0613952M66
R1021M1	0613952Q73
R1022M1	NOT PLACED
R1023M1	0613952R66
R1024M1	NOT PLACED
R1025M1	0613952Q73
R1026M1	0613952R66
R1027M1	NOT PLACED
R1028M1	0613952R66
R1029M1	0613952R66
R1030M1	NOT PLACED
R1031M1	0613952R66
R1033M1	0613952Q73
R1034M1	0613952R17

Circuit Ref.	Motorola Part No.
R1035M1	NOT PLACED
R1036M1	NOT PLACED
R1037M1	0613952M66
R1038M1	0613952R66
R1039M1	0613952R66
R1040M1	NOT PLACED
R1041M1	0613952R66
R1042M1	0613952M66
R1043M1	0613952R66
R1044M1	0613952M66
R1045M1	0613952M66
R1046M1	0613952M66
R1047M1	0613952R66
R1048M1	0613952R66
R1049M1	0613952Q73
R1050M1	0613952Q73
R1051M1	0613952K68
R1052M1	0613952M66
R1053M1	0613952R66
R1054M1	0613952M66
R1056M1	0613952Q73
R1057M1	0613952Q73
R1058M1	0613952M66
R1059M1	0613952R66
R1060M1	0613952R66
R1061M1	0613952R66
R1062M1	NOT PLACED
R1063M1	NOT PLACED
R1064M1	NOT PLACED
R1065M1	0613952R66

Circuit Ref.	Motorola Part No.
R1066M1	0613952M66
R1067M1	0613952M66
R1068M1	0613952R32
R1069M1	0613952M66
R1070M1	0613952Q77
R1071M1	0613952Q77
R1072M1	0613952Q49
R1073M1	0613952R01
R1074M1	0613952R66
R1075M1	0613952R66
R1076M1	0613952R66
R1077M1	0613952R66
R1078M1	0613952R66
R1079M1	0613952R66
R1080M1	0613952Q32
R1081M1	0613952Q32
R1082M1	0613952Q32
R1084M1	0613952R66
R1088M1	NOT PLACED
R1089M1	0613952R05
R1090M1	0613952R05
R1091M1	NOT PLACED
R1092M1	0613952M43
R1093M1	0613952Q73
R1094M1	0613952M66
R1095M1	0613952Q34
R1096M1	0613952Q34
R1097M1	0613952R66
R1098M1	0613952R66
R2000M1	0613952M66

Circuit Ref.	Motorola Part No.
R2002M1	0613952M66
R2003M1	0613952M30
R3101M1	0613952Z66
R3102M1	0613952M66
R3103M1	0613952N62
R3104M1	0613952M30
R3105M1	0613952R01
R3106M1	0613952M09
R3107M1	0613952M85
R3108M1	0613952R17
R3109M1	0613952R17
R3110M1	0613952N55
R3111M1	0613952R32
R3112M1	0613952P12
R3113M1	0613952R17
R3114M1	0613952N01
R3115M1	0613952Z63
R3116M1	0613952E83
R3117M1	0613952Q73
R3118M1	0613952R10
R3119M1	0613952Q73
R3120M1	0613952R66
R3121M1	0613952R66
R3122M1	0613952M43
R3123M1	0613952M54
R3124M1	0613952R66
R3125M1	0613952R66
R3126M1	0613952R66
R3127M1	0613959Y09
R3128M1	0613952M10

Circuit Ref.	Motorola Part No.
R3129M1	0613952M58
R3130M1	0613952R25
R3131M1	0613952R01
R3132M1	0613952R01
R3133M1	0613952R29
R3134M1	NOT PLACED
R3135M1	0613952R66
R3136M1	0613952R17
R3137M1	0613952R17
R3138M1	0613952R17
R3139M1	0613952R66
R3140M1	0613952Q91
R3141M1	0613959Y13
R3142M1	NOT PLACED
R3143M1	0613952Q91
R3144M1	0613952R66
R3145M1	0613959Y09
R3146M1	0613952M85
R3147M1	0613952M43
R3148M1	0613952R66
R3149M1	0613952R01
R3150M1	0613952N62
R3151M1	0613952R25
R3153M1	0613952R66
R3154M1	0613952Q89
R3155M1	0613952Q89
R3156M1	0613952R17
R3157M1	0613952R01
R3158M1	0613952R66
R3159M1	0613952R01

Circuit Ref.	Motorola Part No.
R3160M1	0613952Q89
R3161M1	0613952Q73
R3162M1	0613952Q85
R3163M1	0613952R01
R3164M1	0613952Q75
R3165M1	0613952R01
R3166M1	0613952R17
R3167M1	0613952R01
R3168M1	0613952Q73
R3169M1	0613952R01
R3170M1	0613952R01
R3171M1	NOT PLACED
R3172M1	NOT PLACED
R3173M1	0613952R66
R3174M1	0613952R66
R3175M1	0689774Y02
R3176M1	0689774Y02
R3177M1	0613952R66
R3178M1	0615871H01
R3179M1	0613952R17
R3180M1	0613952R01
R3181M1	NOT PLACED
R3182M1	0613952R66
R3183M1	0613952H92
R3184M1	0613952M30
R3200M1	0613952C44
R3201M1	0613952Q49
R3202M1	0613952C44
R3203M1	0613952Q49
R3204M1	0613952C44

Circuit Ref.	Motorola Part No.
R3205M1	0613952C44
R3206M1	0613952R01
R3207M1	0613952R01
R3208M1	0613952N30
R3209M1	0613952R03
R3210M1	0613952Q67
R3211M1	0613952N30
R3212M1	0613952R03
R3213M1	0613952Q42
R3214M1	0613952J25
R3215M1	0613952R01
R3216M1	0613952R17
R3217M1	0613952R01
R3218M1	0613952R01
R3219M1	NOT PLACED
R3220M1	0613952R01
R3221M1	NOT PLACED
R3222M1	0613952R01
R3223M1	0613952R66
R3224M1	NOT PLACED
R3225M1	NOT PLACED
R3226M1	0613952R01
R3229M1	0613952R01
R3230M1	0613952R10
R3231M1	0613952R10
R3232M1	0613952R10
R3233M1	0613952R01
R3234M1	NOT PLACED
R3235M1	0613952R01
R3236M1	0613952R10

Circuit Ref.	Motorola Part No.
R3237M1	NOT PLACED
R3238M1	0613952R01
R3239M1	0613952Q49
R3240M1	0613952R01
R3241M1	0613952M54
R3242M1	0613952R01
R3243M1	0613952R01
R3244M1	0613952R10
R3245M1	NOT PLACED
R3246M1	0613952R01
R3247M1	0613952Q49
R3248M1	0613952R66
R3249M1	0613952R66
R3250M1	0613952R66
R3251M1	0613952R66
R3252M1	0613952R66
R3253M1	0613952R66
R3254M1	0613952R01
R3255M1	0613952R66
R3256M1	0613952M66
R3257M1	0613952R01
R3258M1	0613952M66
R3259M1	0613952M66
R3260M1	0613952M66
R3261M1	0613952R01
R3262M1	0613952R10
R3263M1	NOT PLACED
R3264M1	0613952R01
R3265M1	0613952M66
R3266M1	0613952R01

Circuit Ref.	Motorola Part No.
R3267M1	NOT PLACED
R3268M1	0613952R01
R3269M1	0613952M66
R3270M1	0613952R01
R3271M1	NOT PLACED
R3272M1	0613952R01
R3273M1	0613952M66
R3274M1	0613952R10
R3275M1	0613952R10
R3276M1	0613952R10
R3277M1	0613952R10
R3278M1	0613952R01
R3279M1	NOT PLACED
R3280M1	NOT PLACED
R3281M1	NOT PLACED
R3282M1	0613952R66
R3283M1	0613952R66
R3285M1	0613952R01
R3286M1	0613952R66
R3287M1	0613952R66
R3288M1	0613952R01
R3289M1	0613952R01
R3290M1	NOT PLACED
R3291M1	NOT PLACED
R3292M1	0613952R66
R3293M1	0613952R66
R4001M1	0613952R66
R4003M1	0613952R66
R4006M1	0613952Q37
R4007M1	0613952Q37

Circuit Ref.	Motorola Part No.
R4008M1	0613952R01
R4010M1	0613952R01
R4013M1	0613952Q42
R4015M1	0613952Q37
R4021M1	0613952R66
R4024M1	0613952R01
R4025M1	0613952R01
R4026M1	0613952R66
R4027M1	0613952R66
R4028M1	0613952R01
R4029M1	0613952R01
R4030M1	0613952R01
R4031M1	0613952R01
R4032M1	0613952R66
R4033M1	0613952M43
R4034M1	0613952M43
R4035M1	0613952R66
R4036M1	0613952R66
R4037M1	0613952R01
R4038M1	0613952R01
R4039M1	NOT PLACED
R4040M1	NOT PLACED
R4041M1	NOT PLACED
R4100M1	0613952R01
R4101M1	0613952Q77
R4102M1	0613958H83
R4103M1	0613952Q85
R4104M1	0613952Q89
R4105M1	0613952Q89
R4106M1	0613952Q89

Circuit Ref.	Motorola Part No.
R4107M1	0613952R01
R4108M1	0613952Q89
R4109M1	0613952N58
R4110M1	0613952Q85
R4111M1	0613952Q85
R4112M1	0613952R01
R4113M1	0613952R01
R4114M1	0613952Q89
R4115M1	0613952N58
R4116M1	0613952Q89
R4117M1	0613952R01
R4118M1	0613952R01
R4119M1	0613952R01
R4120M1	0613952N58
R4121M1	0613952Q85
R4122M1	0613952Q85
R4123M1	0613952N58
R4124M1	0613952N58
R4125M1	0613952Q85
R4126M1	0613952Q85
R4127M1	0613952Q85
R4128M1	0613952R01
R4200M1	0613952R66
R4201M1	0613952R66
R4202M1	0613952R66
R4203M1	0613952R66
R4204M1	0613952R66
R4205M1	0613952R66
R4206M1	0613952R66
R4207M1	0613952R66

Circuit Ref.	Motorola Part No.
R4208M1	0613952R66
R4209M1	0613952R66
R4210M1	0613952R66
R4211M1	0613952R66
R4212M1	0613952R66
R4213M1	0613952R66
R4214M1	0613952R66
R4215M1	0613952R66
R4216M1	0613952R66
R4217M1	0613952R66
R4218M1	0613952R66
R4301M1	NOT PLACED
R4302M1	0613952R66
R4303M1	0613952R66
R4304M1	0613952R66
R4305M1	0613952R66
R4306M1	0613952R66
R4307M1	0613952R66
R4309M1	NOT PLACED
R4310M1	0613952R66
R4311M1	0613952R66
R4312M1	0613952R66
R4313M1	NOT PLACED
R4314M1	0613952R66
R4315M1	0613952R66
R4316M1	0613952R66
R4317M1	0613952R66
SH3100M1	NOT PLACED
U1000M1	5171320H01
U1001M1	51012295001

Circuit Ref.	Motorola Part No.
U1002M1	5189139P01
U1003M1	5175772B56
U1004M1	5175772B56
U1005M1	5164852H47
U1006M1	5185493Y01
U1007M1	5189139P01
U1008M1	5189139P01
U1009M1	5115001H02
U1010M1	5171320H01
U2000M1	51012239006
U2001M1	51012058005
U3100M1	0104039J08
U3101M1	5114014A01
U3102M1	51012069001
U3103M1	51012142001
U3104M1	5114610F01
U3105M1	5114610F01
U3106M1	51012140001
U3107M1	51012140001
U3108M1	51012138001
U3109M1	5164015H94
U3110M1	51012208001
U3111M1	5188690V02
U3112M1	5114004A35
U3113M1	5188690V02
U3114M1	NOT PLACED
U3115M1	5185937Y01
U3200M1	51009415001
U3201M1	5114016A18
U3204M1	51009509001

Circuit Ref.	Motorola Part No.
U3205M1	5114016A18
U4000M1	51012082001
U4001M1	51012082001
U4100M1	5189139P01
U4200M1	NOT PLACED
U4201M1	NOT PLACED
U4300M1	51012082001
U4301M1	51012082001
VR3103M1	48012095001
VR3104M1	48012095002
VR3105M1	4813977M10
VR3200M1	48012049001
VR3201M1	4813977A48
VR3202M1	4813977A48
VR4000M1	4813977M13
VR4001M1	4813977A48
VR4002M1	48012153001
VR4100M1	4813977A48
VR4101M1	4813977A48
VR4102M1	4813977A48
VR4103M1	4813977A48
VR4104M1	48012049001
VR4105M1	4813977M13
VR4106M1	4813977A48
VR4107M1	4813977A48
VR4108M1	4813977A48
VR4109M1	4813977A50
VR4110M1	4815040H01
VR4111M1	48012153001

Note: The suffix "M1", "M2", etc. from the Circuit Ref is removed from the schematics and overlays.



# **XPR 5350e/XPR 5550e Mobile Radios**

Chapter 7

VHF (136–174 MHz)

1–25W

Service Information

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## Chapter 7 – VHF Low Power Service Information

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#### Section 2 VHF PCB/Schematics/Parts List

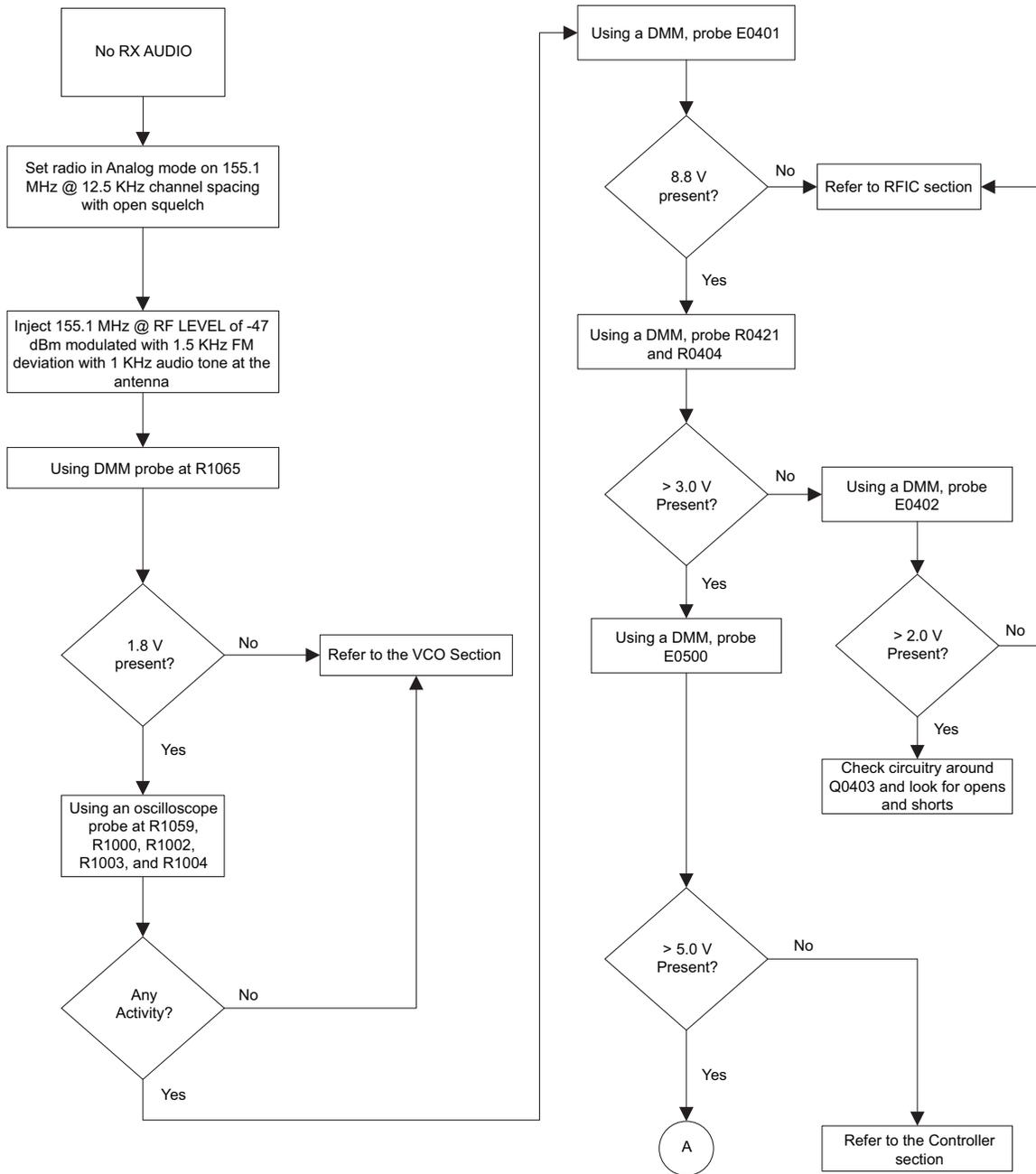
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	VHF (136–174 MHz) 1–25W VCO Buffer Schematic Diagram .....	2-14
	VHF PCB 84012734001-A Parts List 1–25W .....	2-15

## Notes

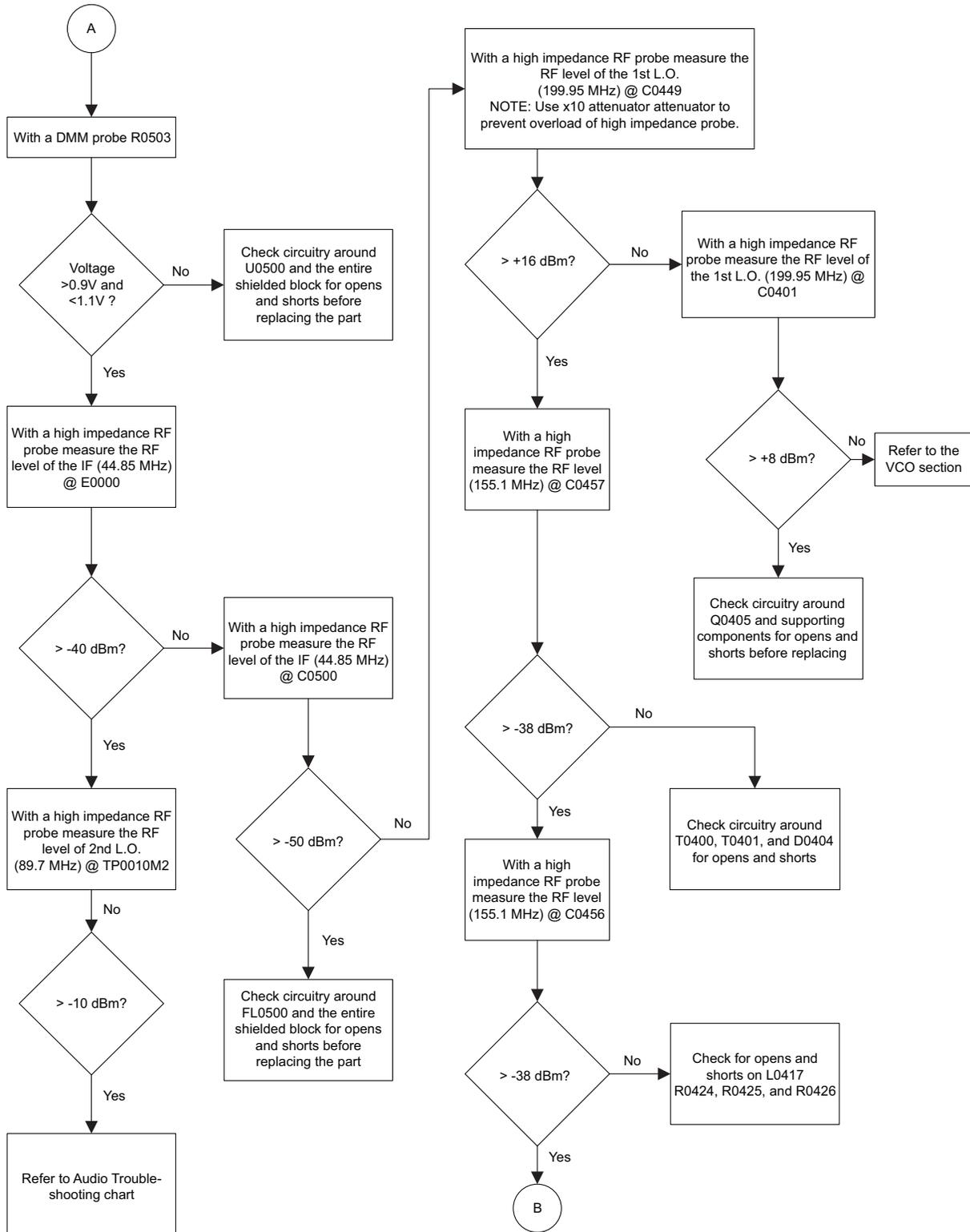
# Section 1

## TROUBLESHOOTING CHARTS

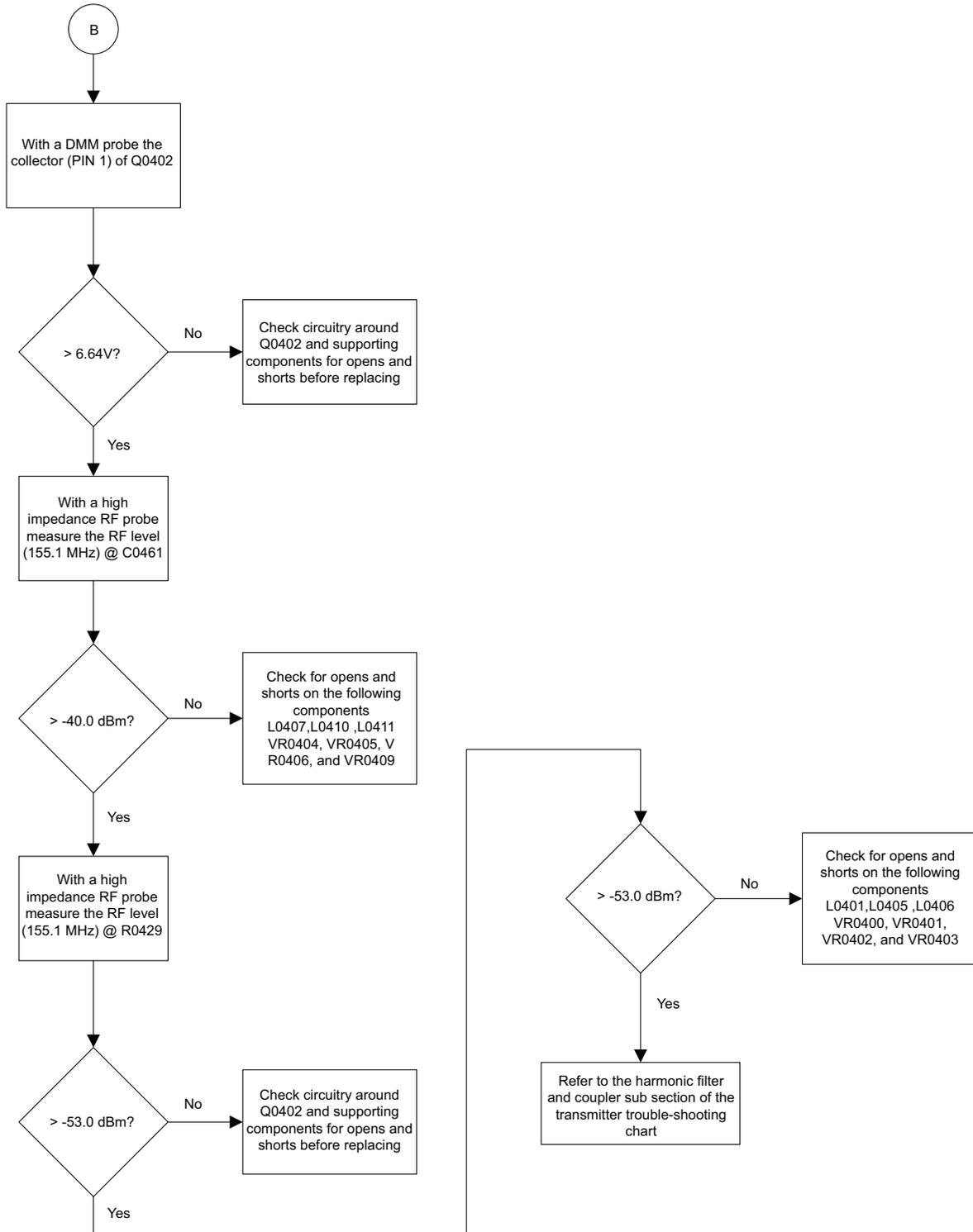
### 1.0 Troubleshooting Flow Chart for Receiver (Sheet 1 of 3)



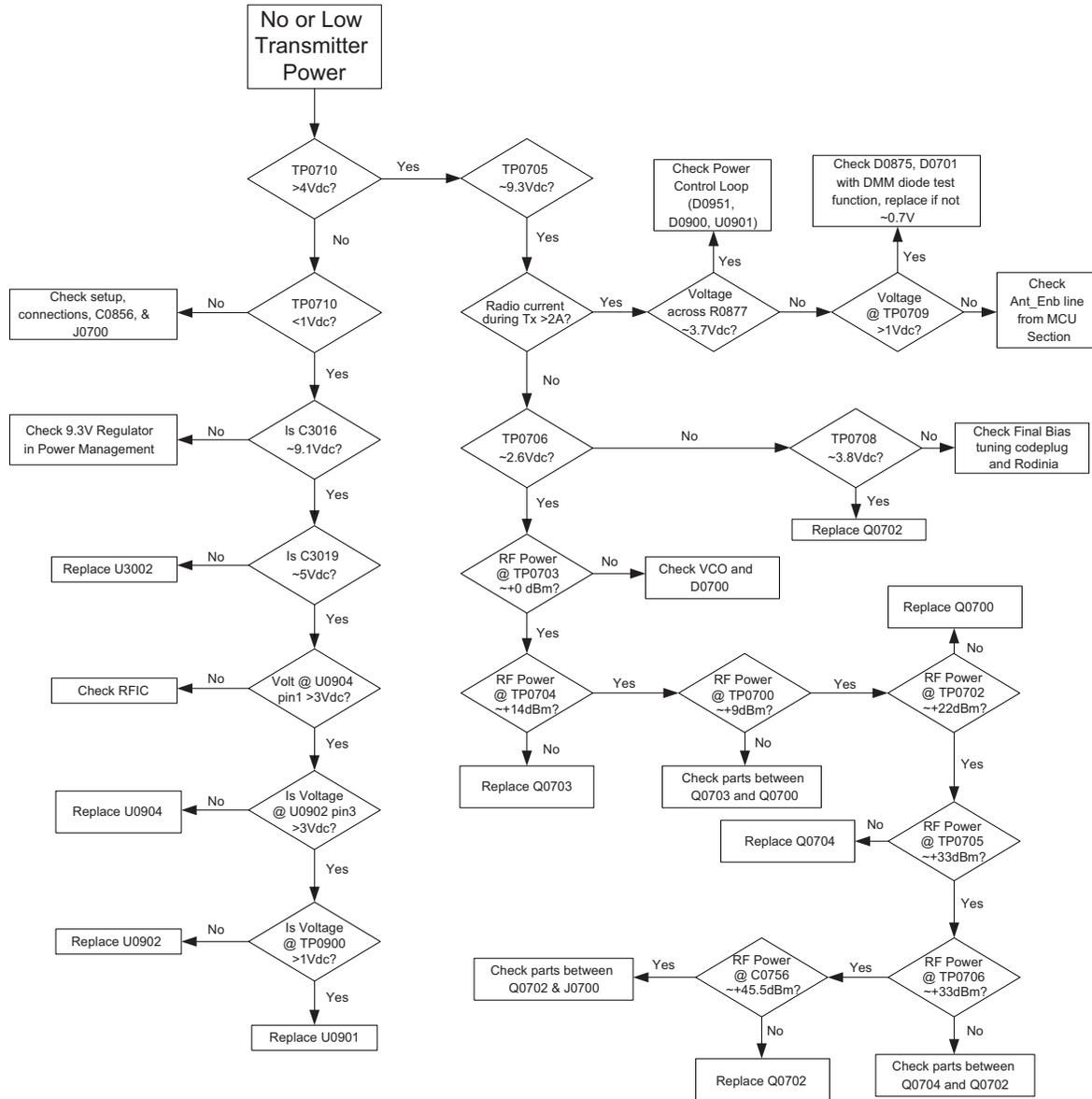
# 1.1 Troubleshooting Flow Chart for Receiver (Sheet 2 of 3)



## 1.2 Troubleshooting Flow Chart for Receiver (Sheet 3 of 3)



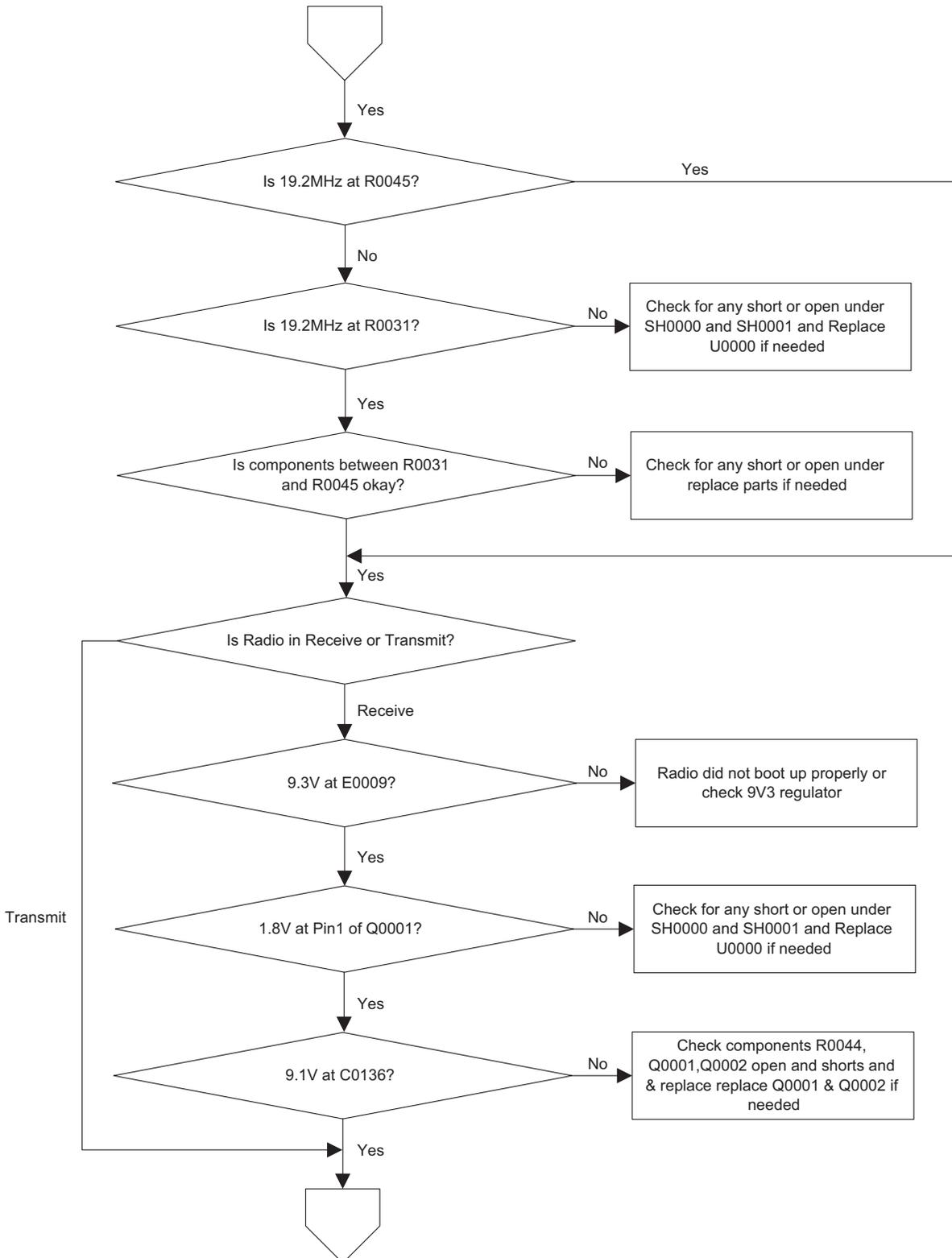
## 2.0 Troubleshooting Flow Chart for 25W Transmitter



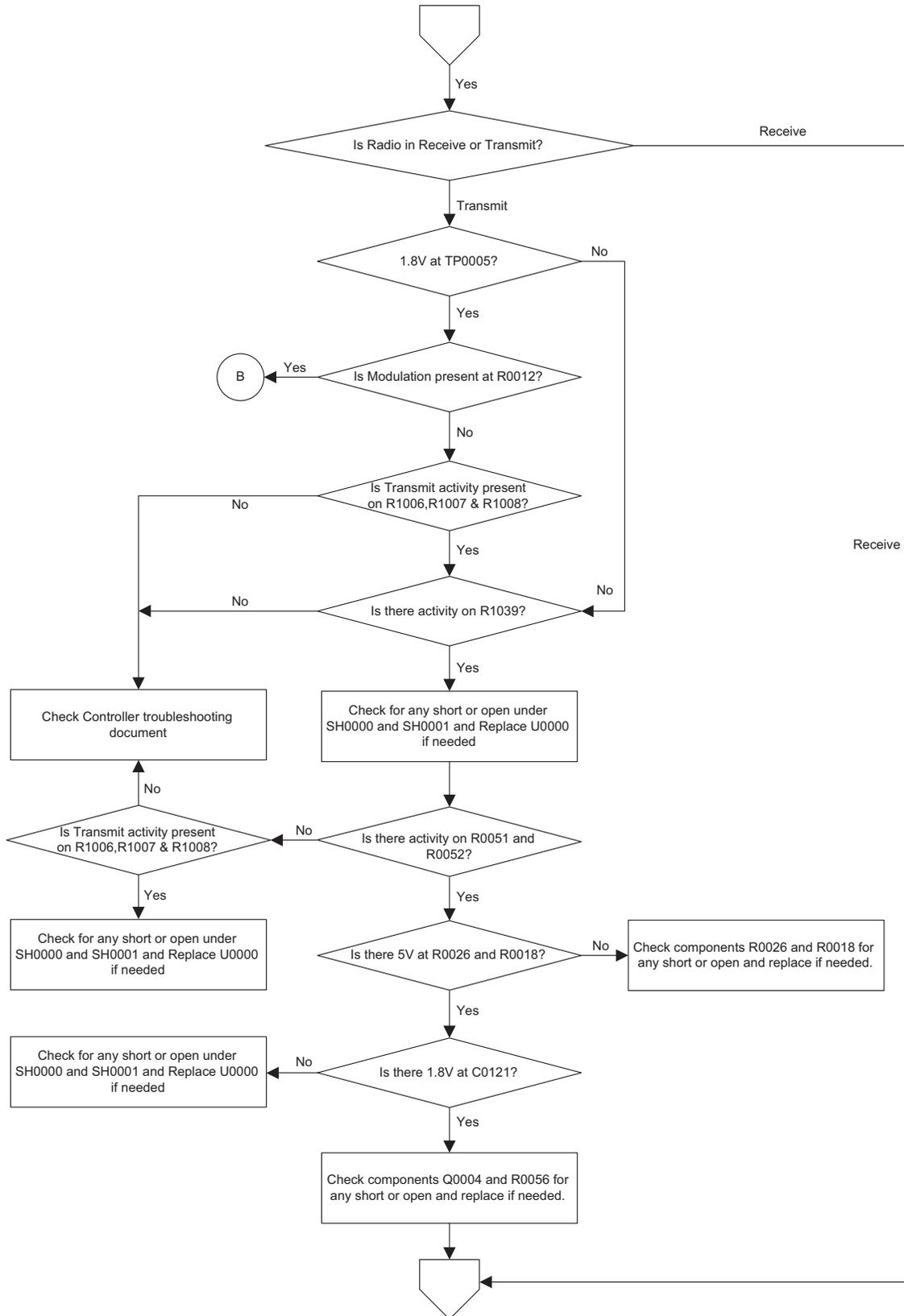
### 3.0 Troubleshooting Flow Chart for RFIC (Sheet 1 of 5)



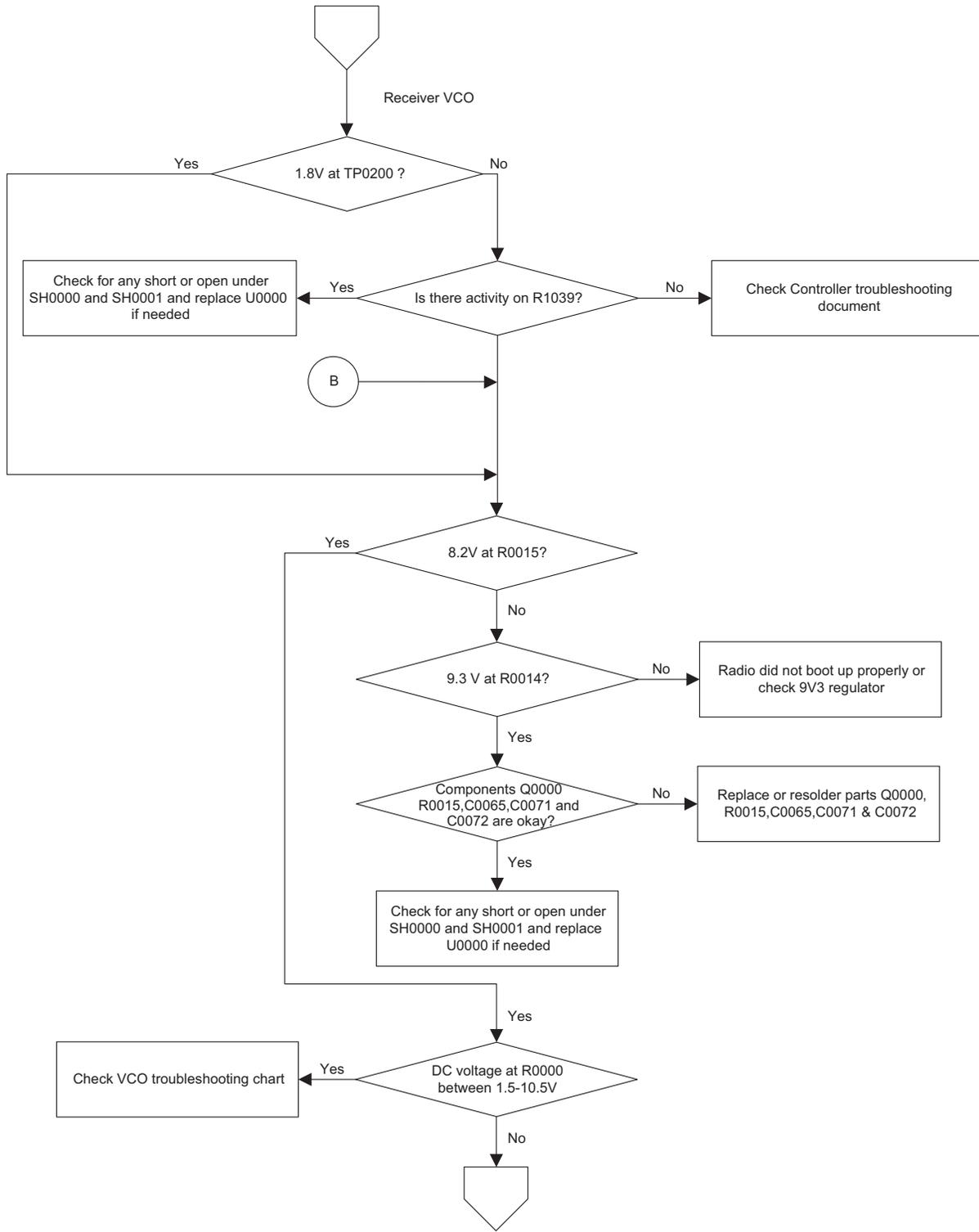
### 3.1 Troubleshooting Flow Chart for RFIC (Sheet 2 of 5)



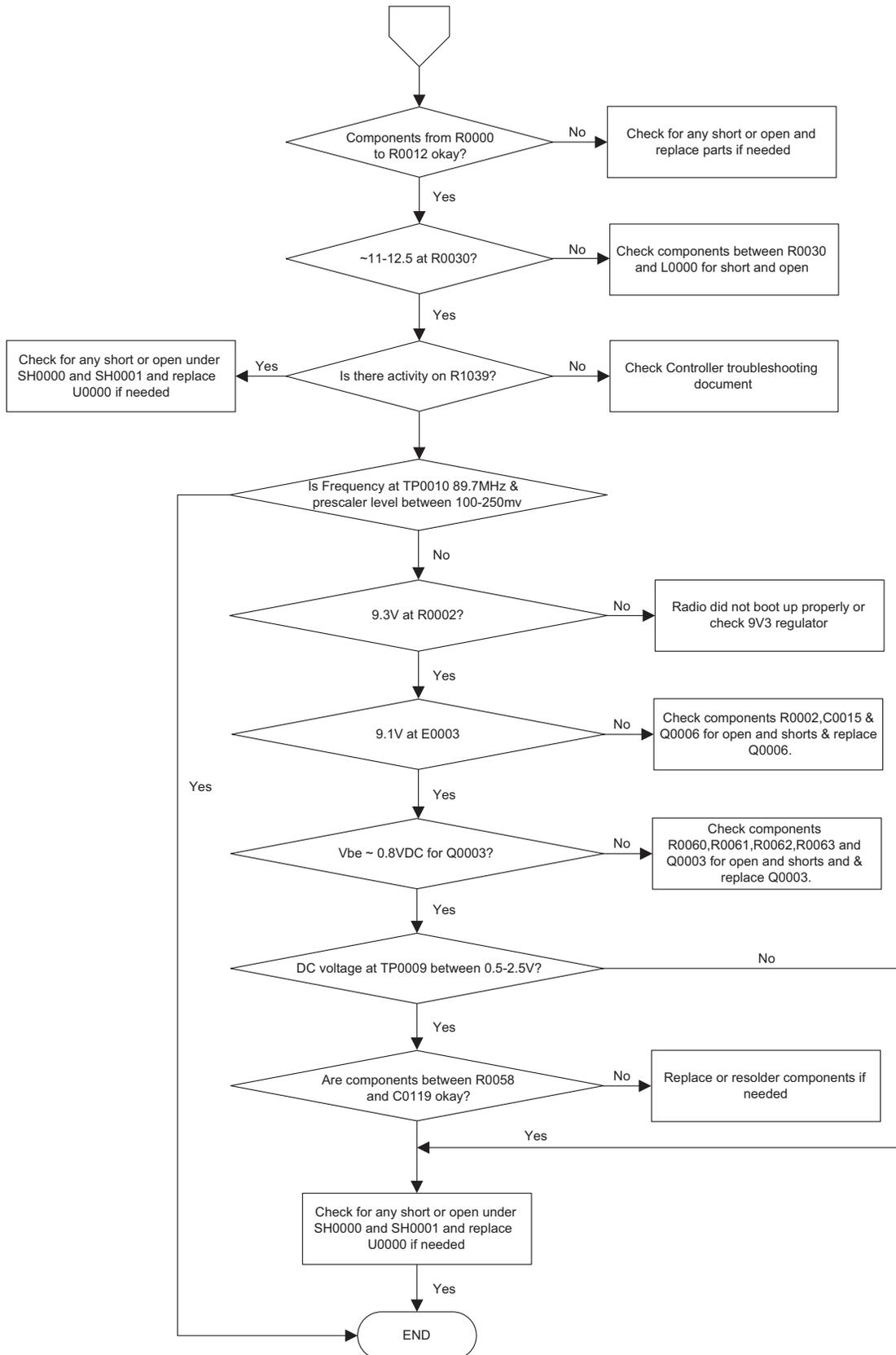
### 3.2 Troubleshooting Flow Chart for RFIC (Sheet 3 of 5)



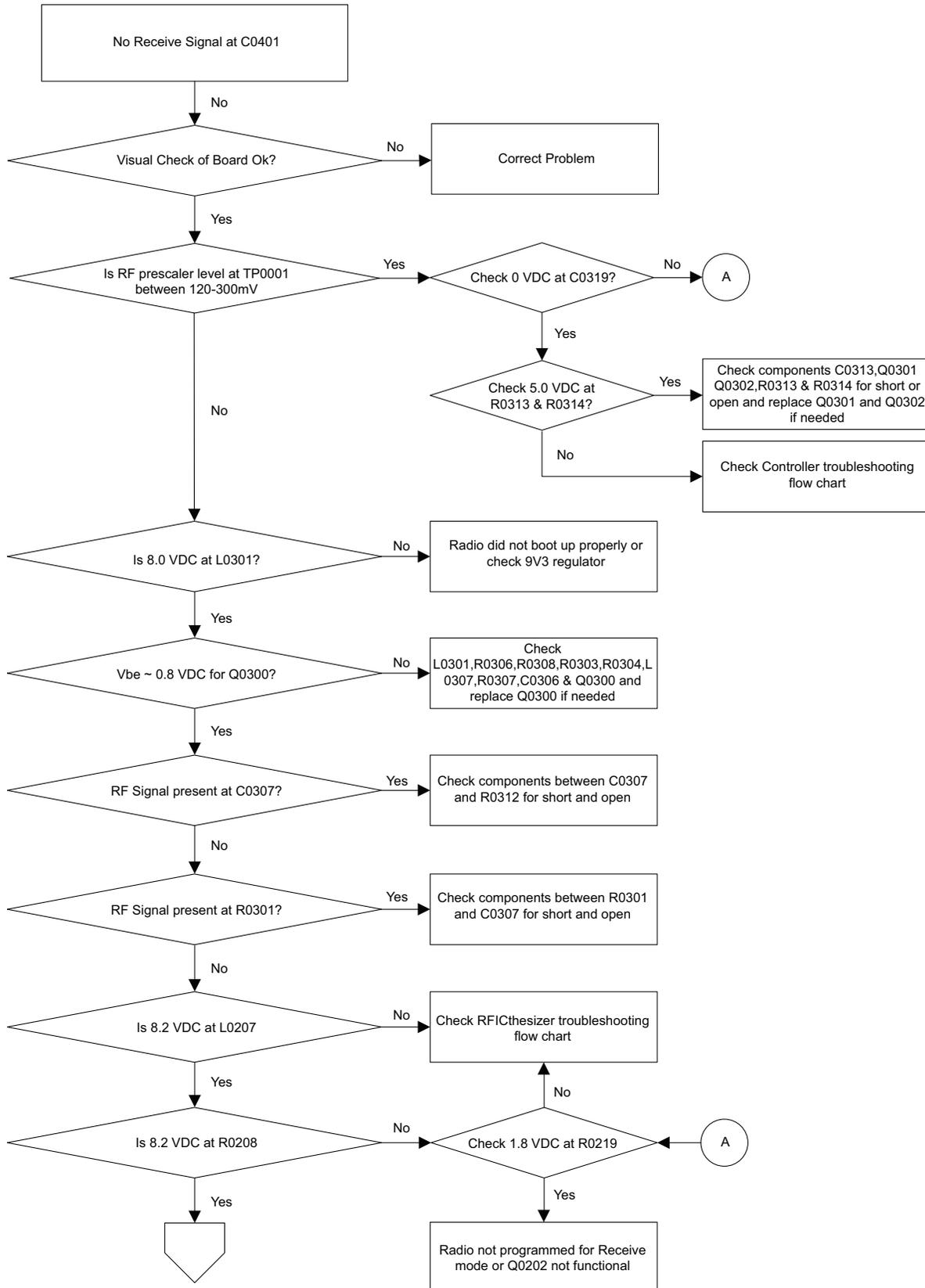
### 3.3 Troubleshooting Flow Chart for RFIC (Sheet 4 of 5)



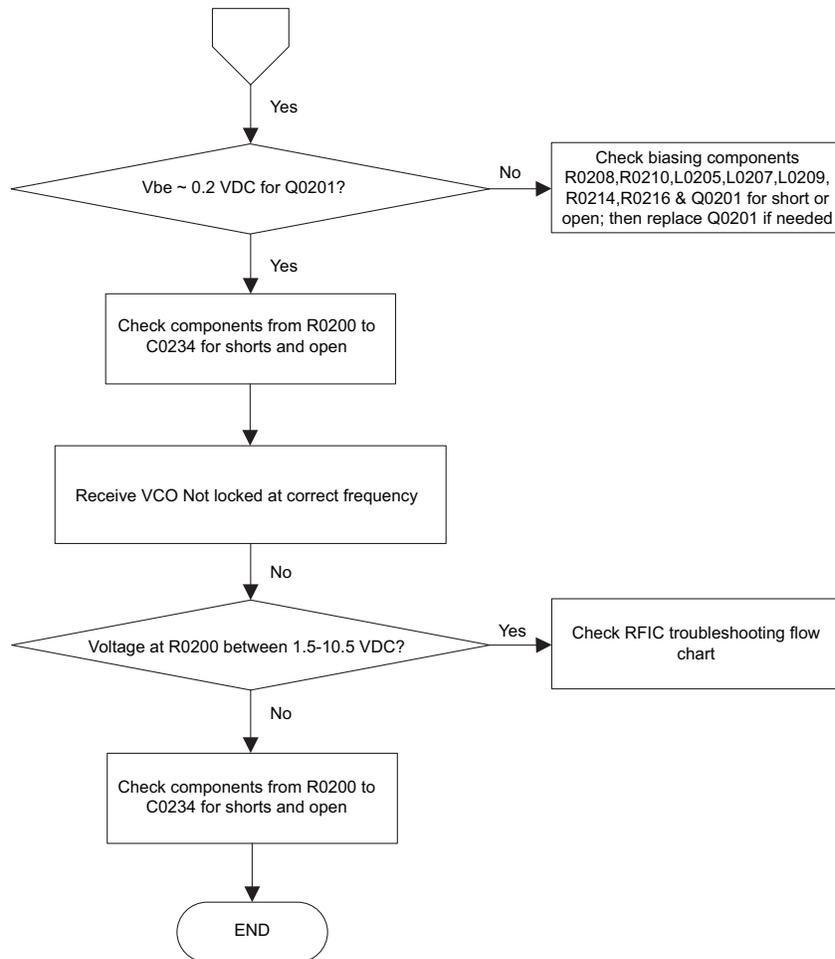
### 3.4 Troubleshooting Flow Chart for RFIC (Sheet 5 of 5)



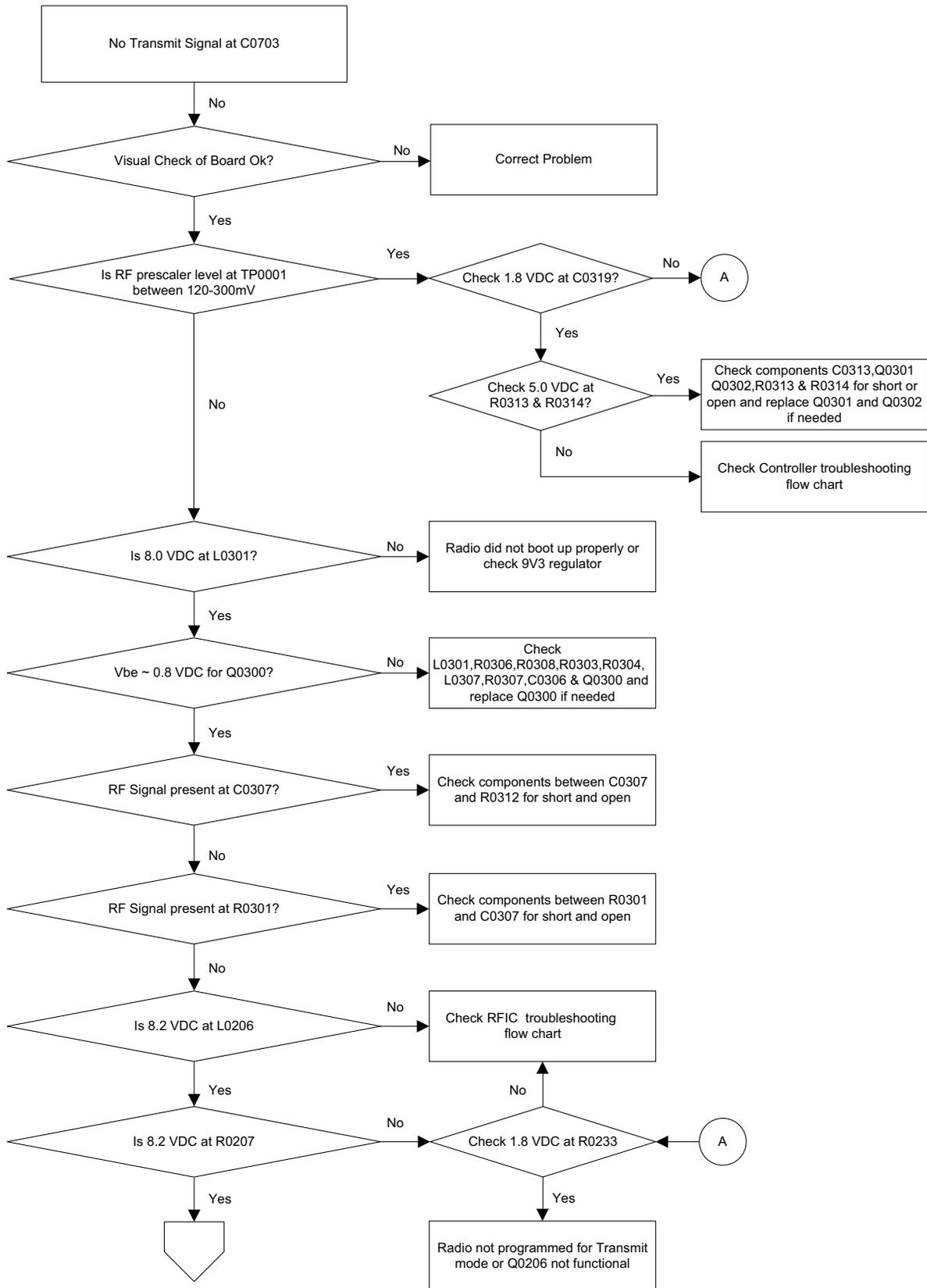
### 4.0 Troubleshooting Flow Chart for Rx VCO (Sheet 1 of 2)



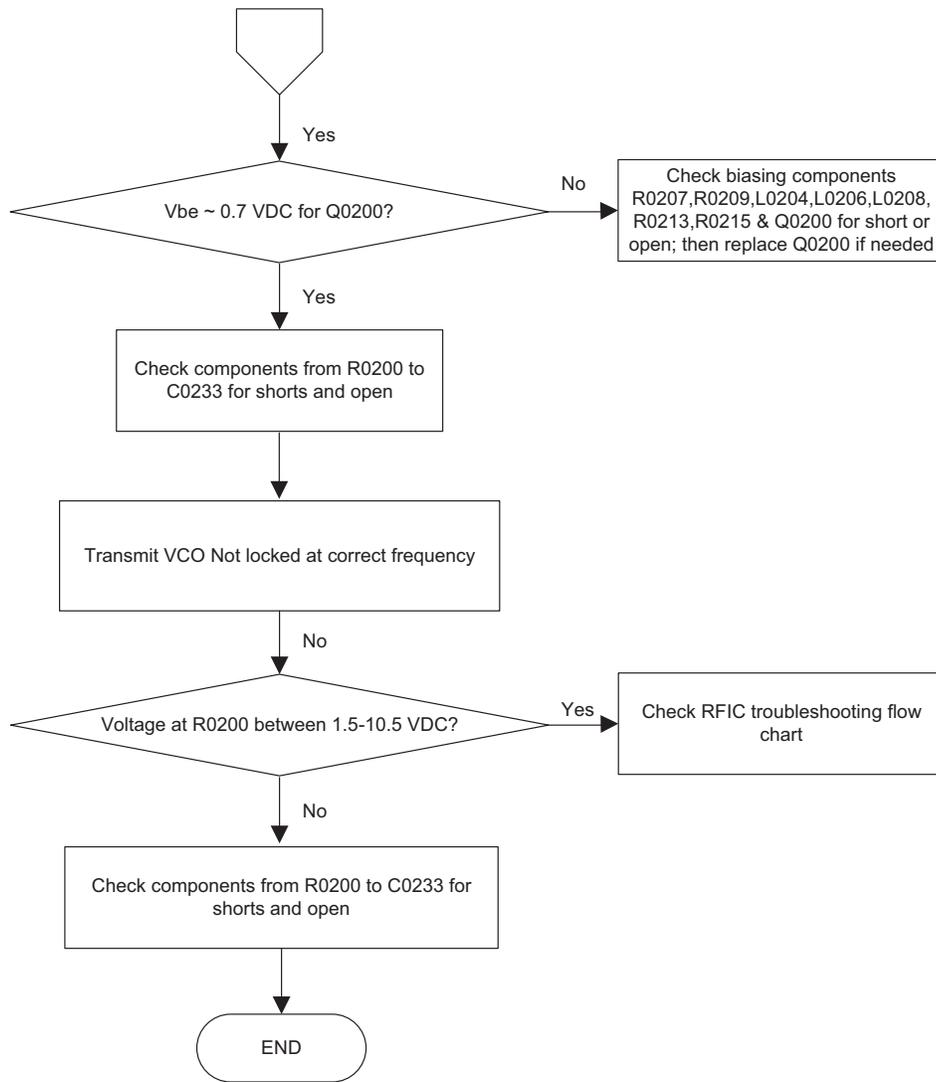
### 4.1 Troubleshooting Flow Chart for Rx VCO (Sheet 2 of 2)



### 5.0 Troubleshooting Flow Chart for Tx VCO (Sheet 1 of 2)



### 5.1 Troubleshooting Flow Chart for Tx VCO (Sheet 2 of 2)



## Notes

## Section 2

### VHF PCB/SCHEMATICS/PARTS LIST

#### 1.0 Allocation of Schematics and Circuit Boards

##### 1.1 VHF 25W Circuits

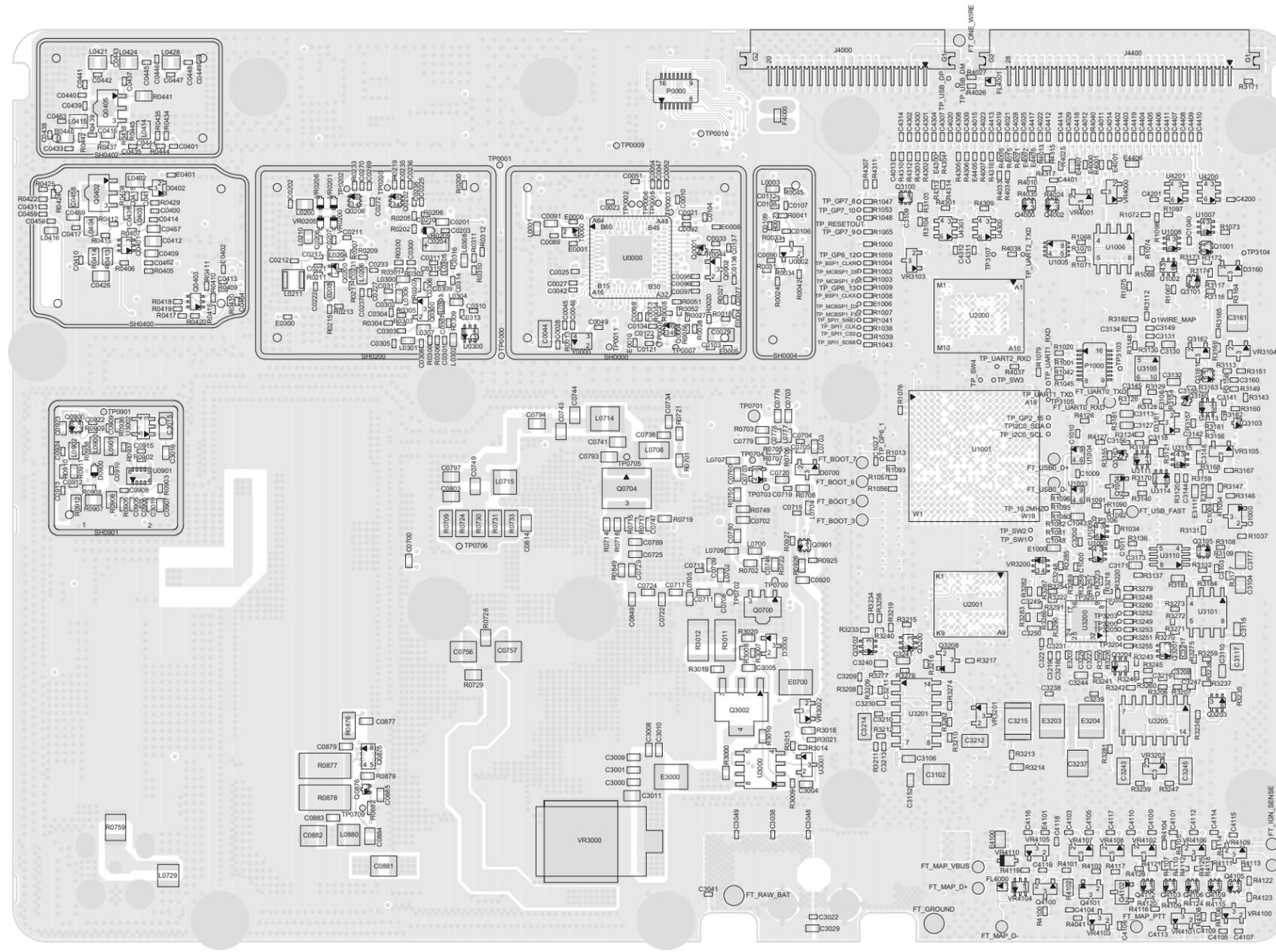
The VHF circuits are contained on the Printed Circuit Board (PCB) which also contains the Controller circuits. This chapter shows the schematics for the VHF 25W circuits only, refer to the Controller section for details of the related Controller circuits. The PCB component layouts and the Parts List in this chapter show both the Controller and VHF 25W circuit components. The VHF 25W schematics and the related PCB and parts list are shown in the table below.

*Table 2-1 VHF 1–25W Schematic Diagrams and Parts List*

<b>PCB :</b>	
<b>84012734001-A</b> Main Board Top Side	Page 2-3
<b>84012734001-A</b> Main Board Bottom Side	Page 2-4
<b>SCHEMATICS</b>	
Overall	<b>Page 2-5</b>
Receiver Front- End	<b>Page 2-6</b>
Receiver IF Amp	<b>Page 2-7</b>
Transmitter Power Amplifier	<b>Page 2-8</b>
Power Control	<b>Page 2-9</b>
Transmitter Power Amplifier DC Distribution	<b>Page 2-10</b>
RFIC	<b>Page 2-11</b>
Receiver VCO	<b>Page 2-12</b>
Transmit VCO	<b>Page 2-13</b>
VCO Buffer	<b>Page 2-14</b>
<b>Parts List</b>	
<b>84012734001-A (VHF 25W Only)</b>	<b>Page 2-15</b>

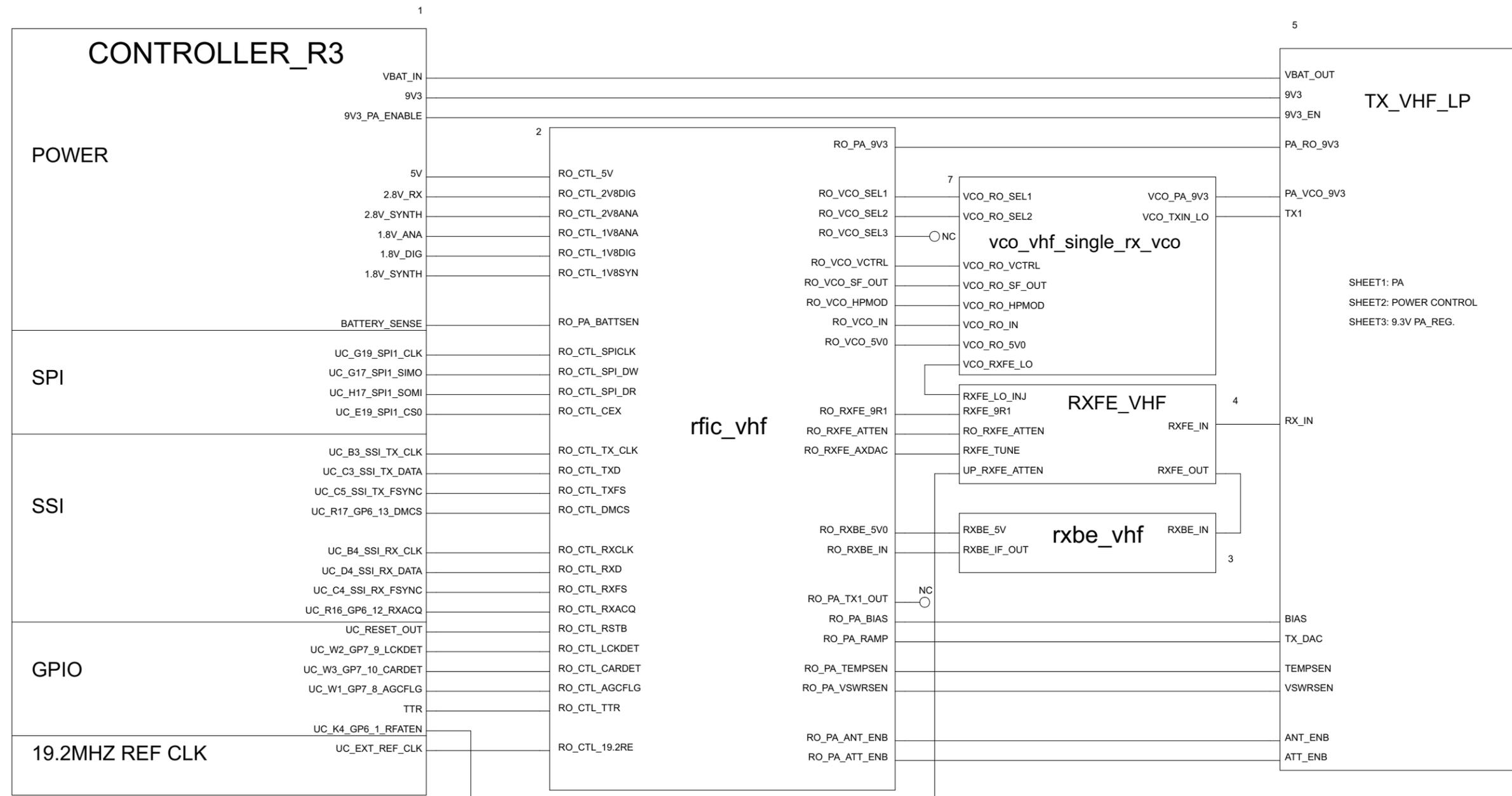
## Notes



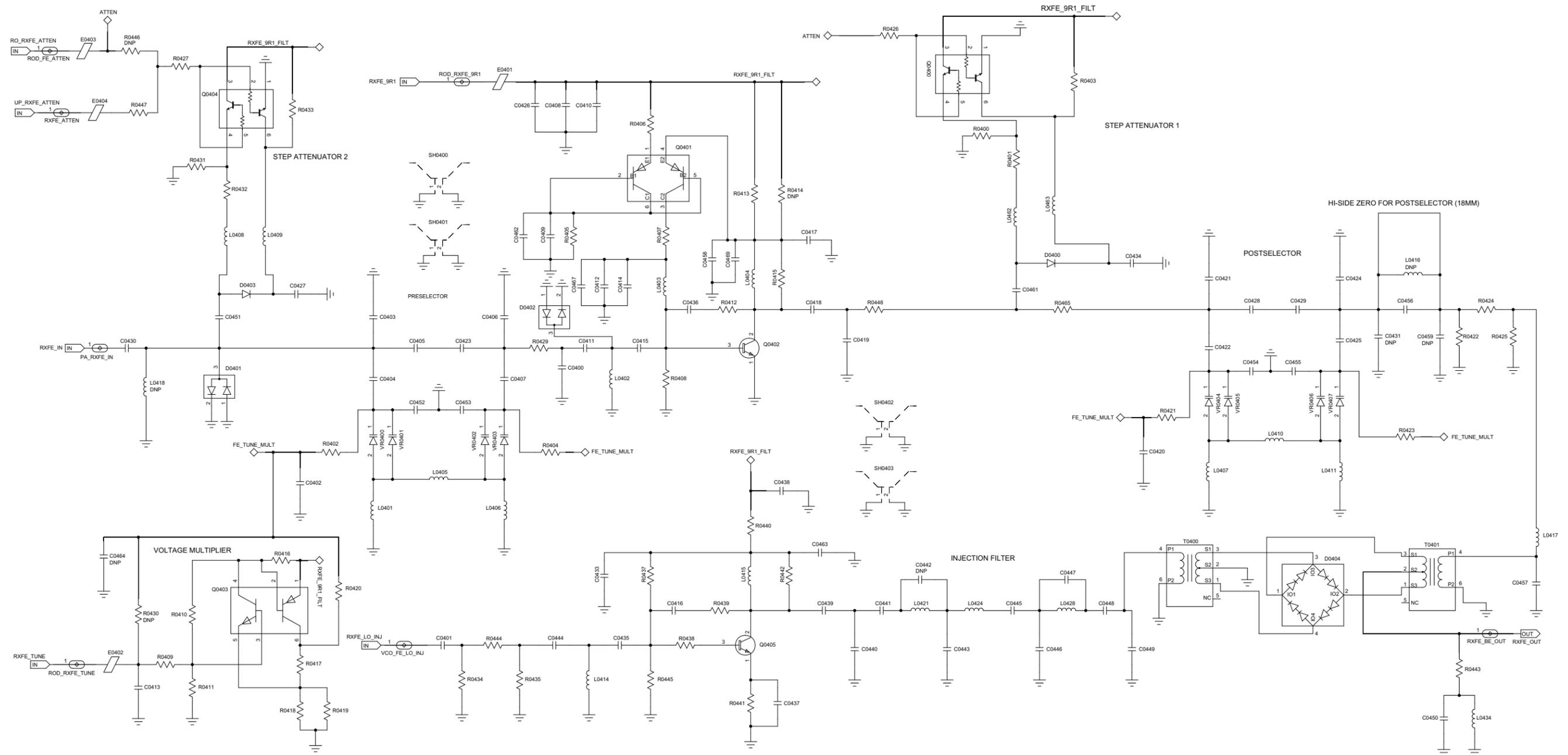


VHF (136–174 MHz) 1–25W 84012734001-A Bottom Side

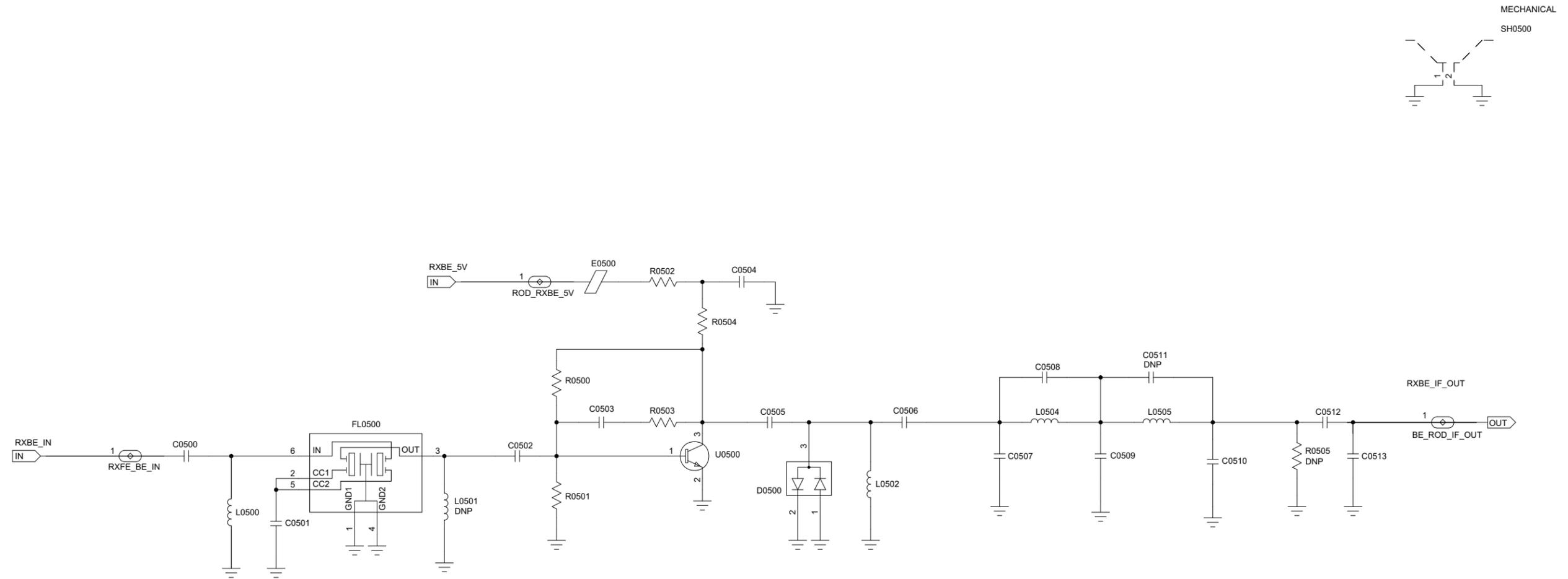
RFIC:	0000 - 0199
VCO:	0200 - 0399
RXFE:	0400 - 0499
RXBE:	0500 - 0699
TX:	0700 - 0999
MICRO_PROCESSOR:	1000 - 2999
PM_AUDIO_DIGITAL:	3000 - 3999
PERIPHERALS:	4000 - 4999
OPTION_BOARD:	5000 - 5999
CONTROL_HEAD:	6000 - 6999
BT_GPS:	7000 - 8999
CONNECTORS:	9000 - 9999 (RESERVE)



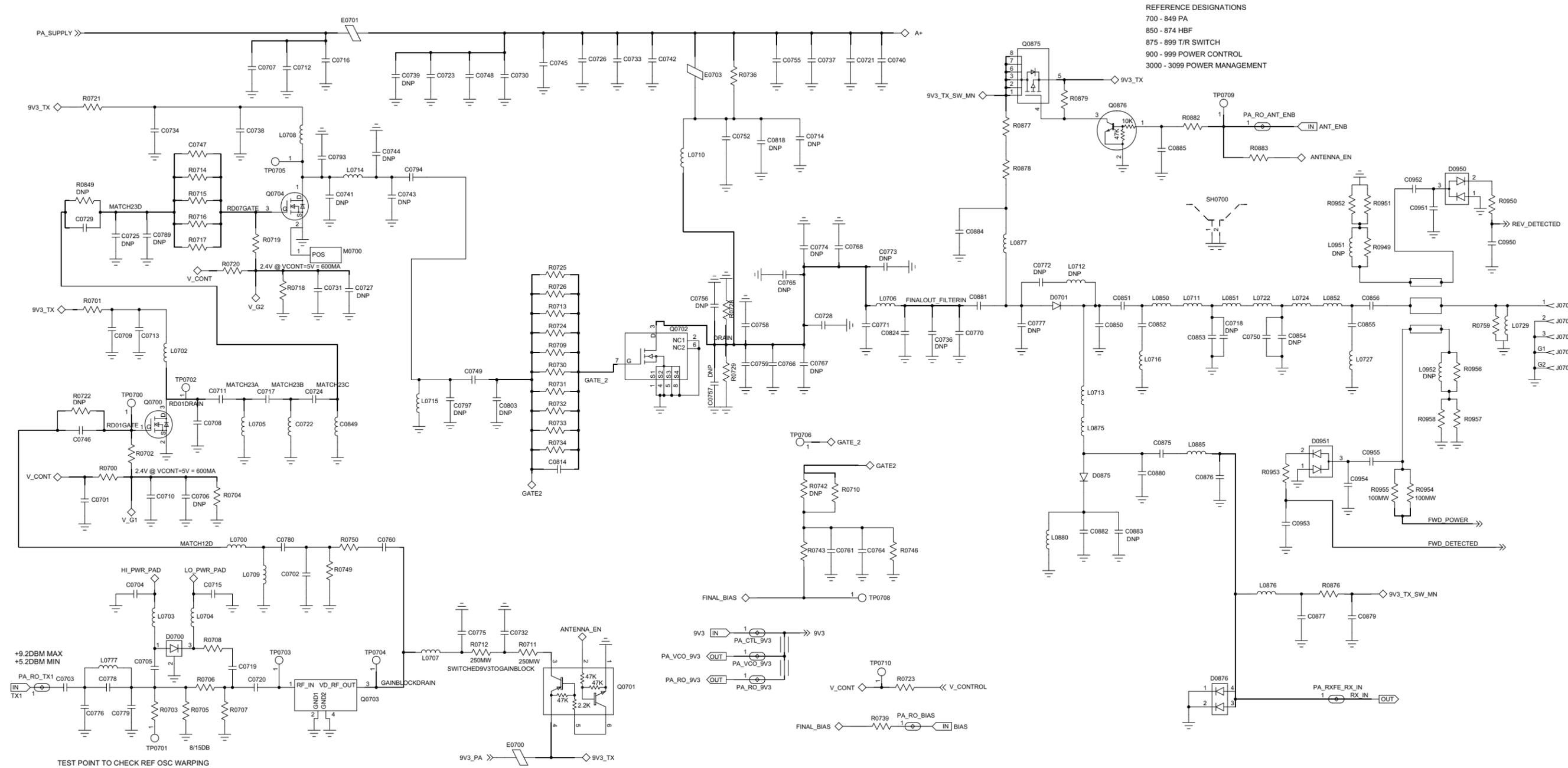
VHF (136–174 MHz) 1–25W Overall Schematic Diagram



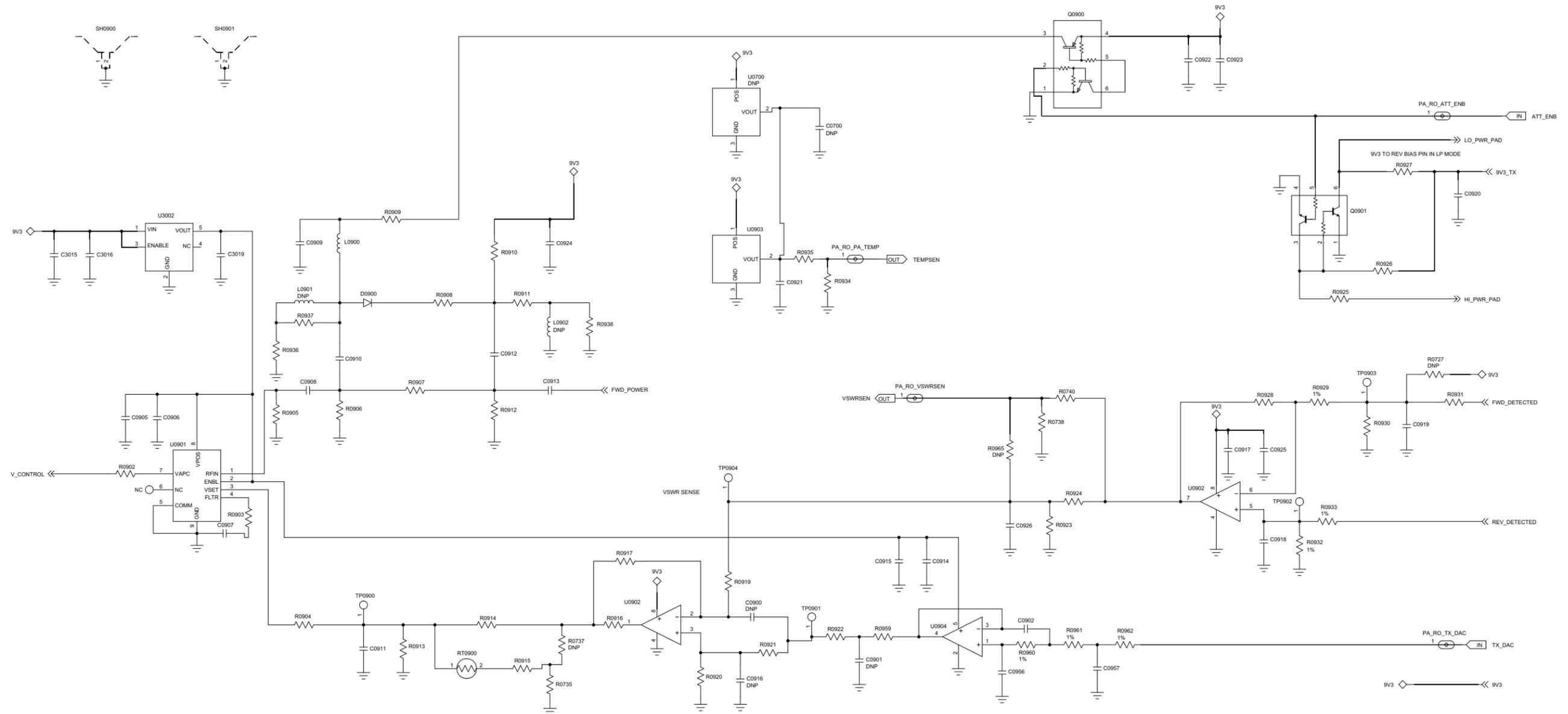
VHF (136-174 MHz) 1-25W Receiver Front-End Schematic Diagram



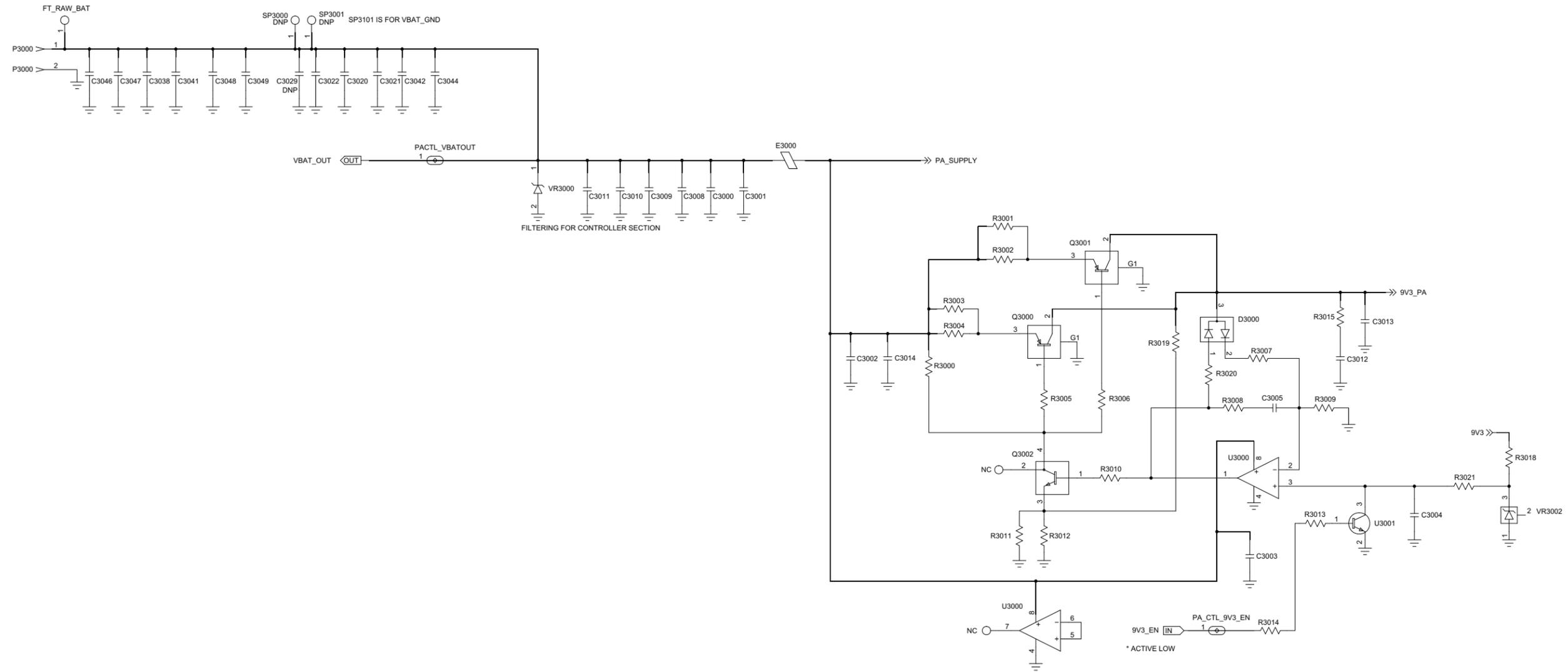
VHF (136–174 MHz) 1–25W Receiver IF Amp Schematic Diagram



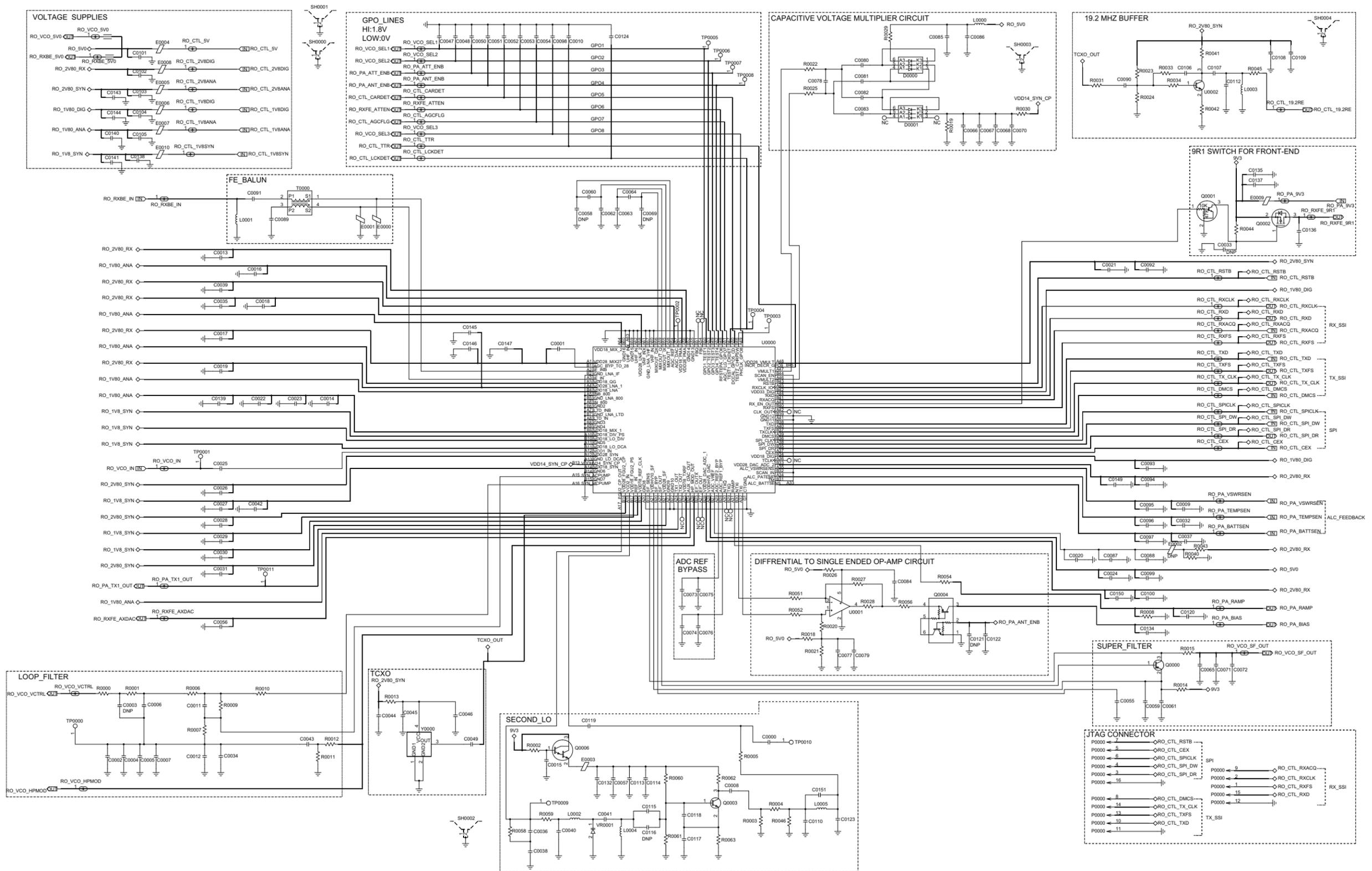
VHF (136-174 MHz) 1-25W Transmitter Power Amplifier Schematic Diagram



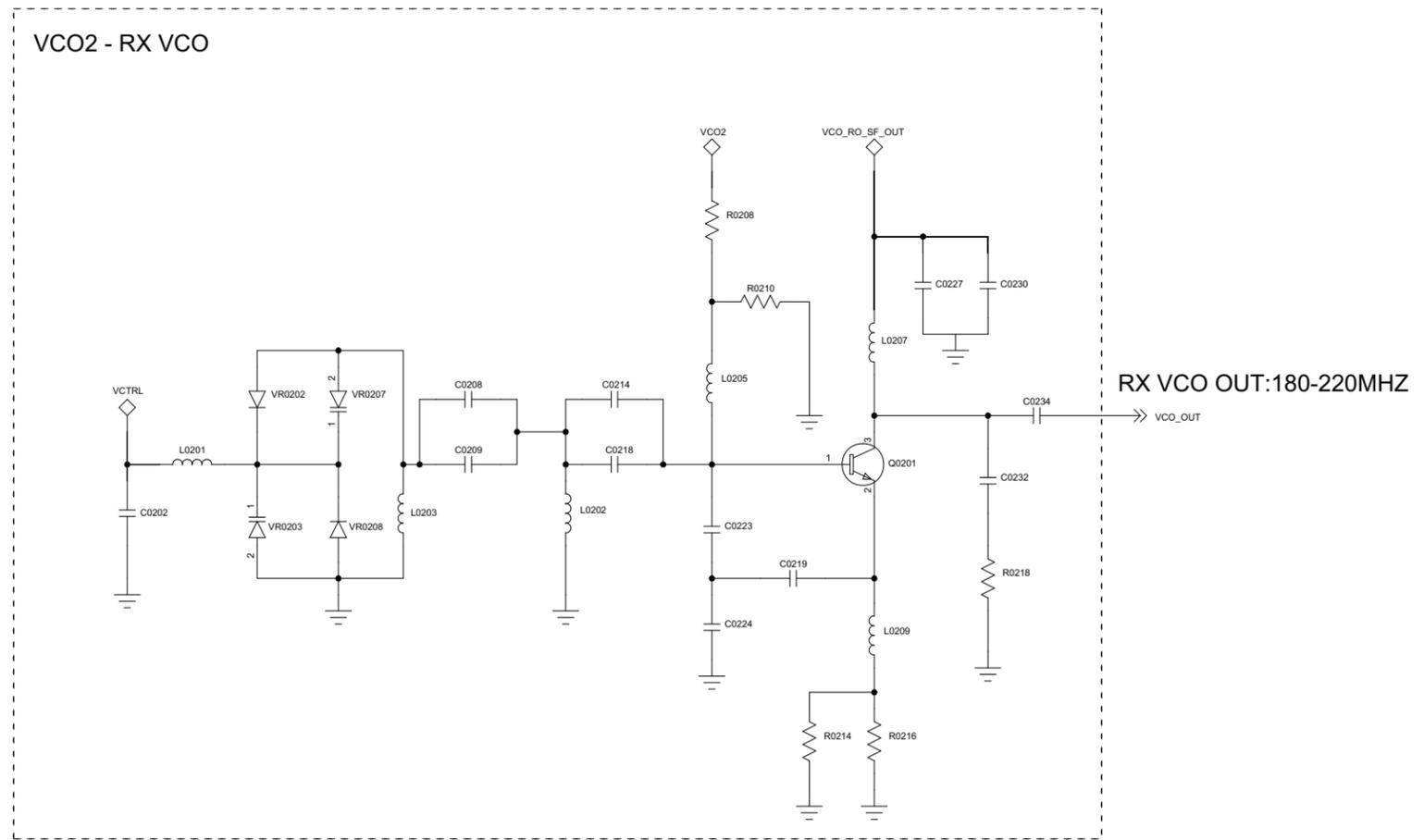
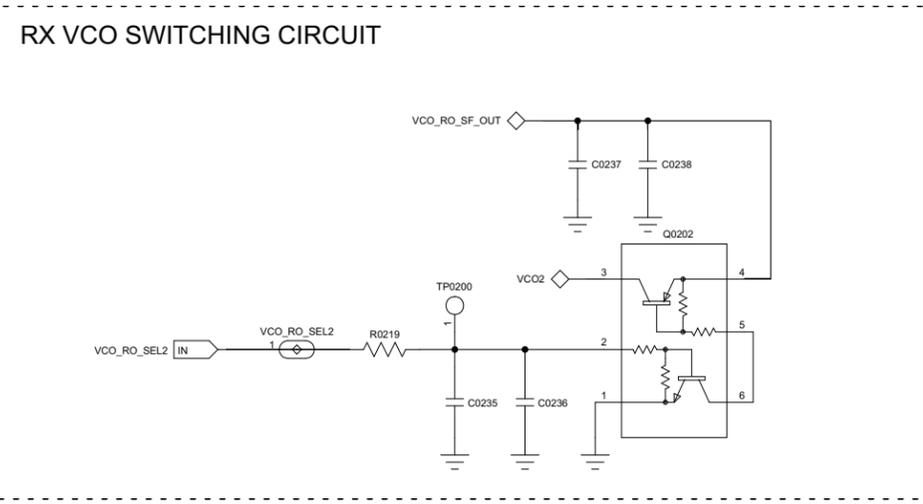
VHF (136–174 MHz) 1–25W Power Control Schematic Diagram



VHF (136–174 MHz) 1–25W Transmitter Power Amplifier DC Distribution Schematic Diagram

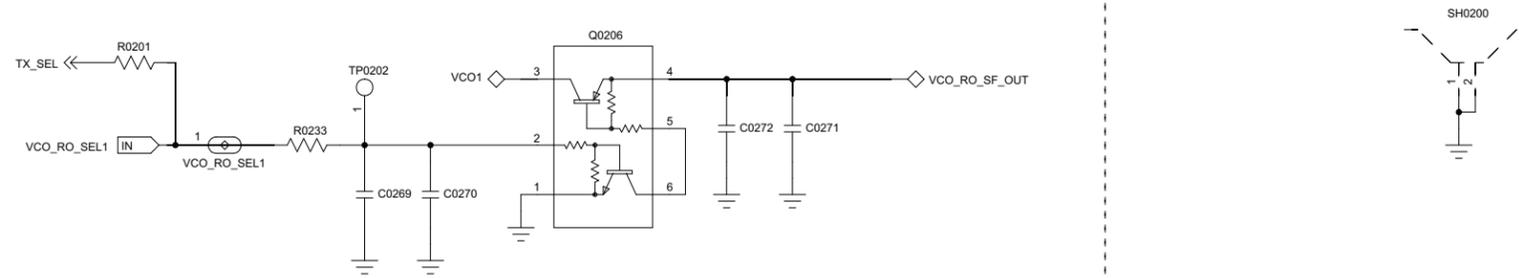


VHF (136–174 MHz) 1–25W RFIC Schematic Diagram

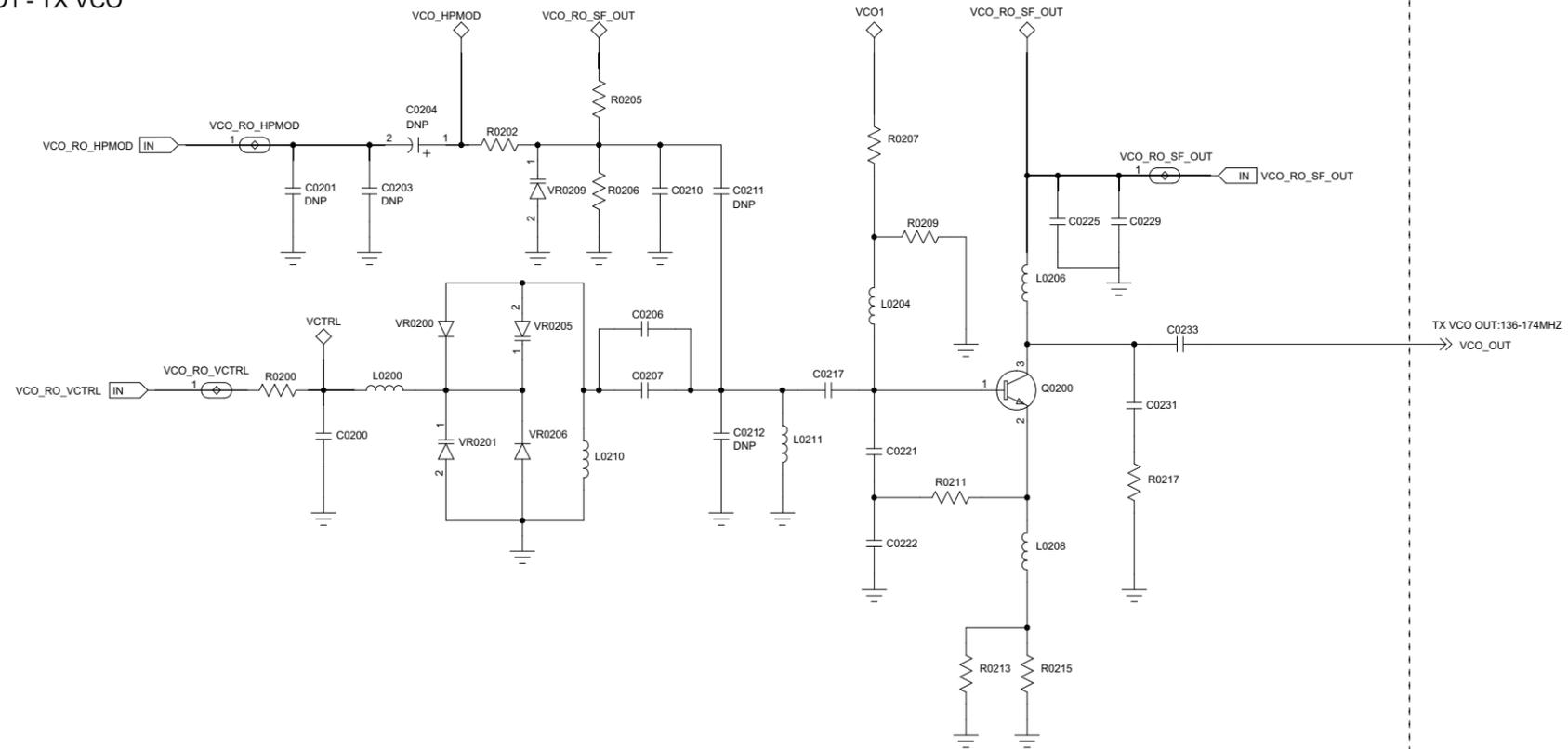


**VHF (136–174 MHz) 1–25W Receiver VCO Schematic Diagram**

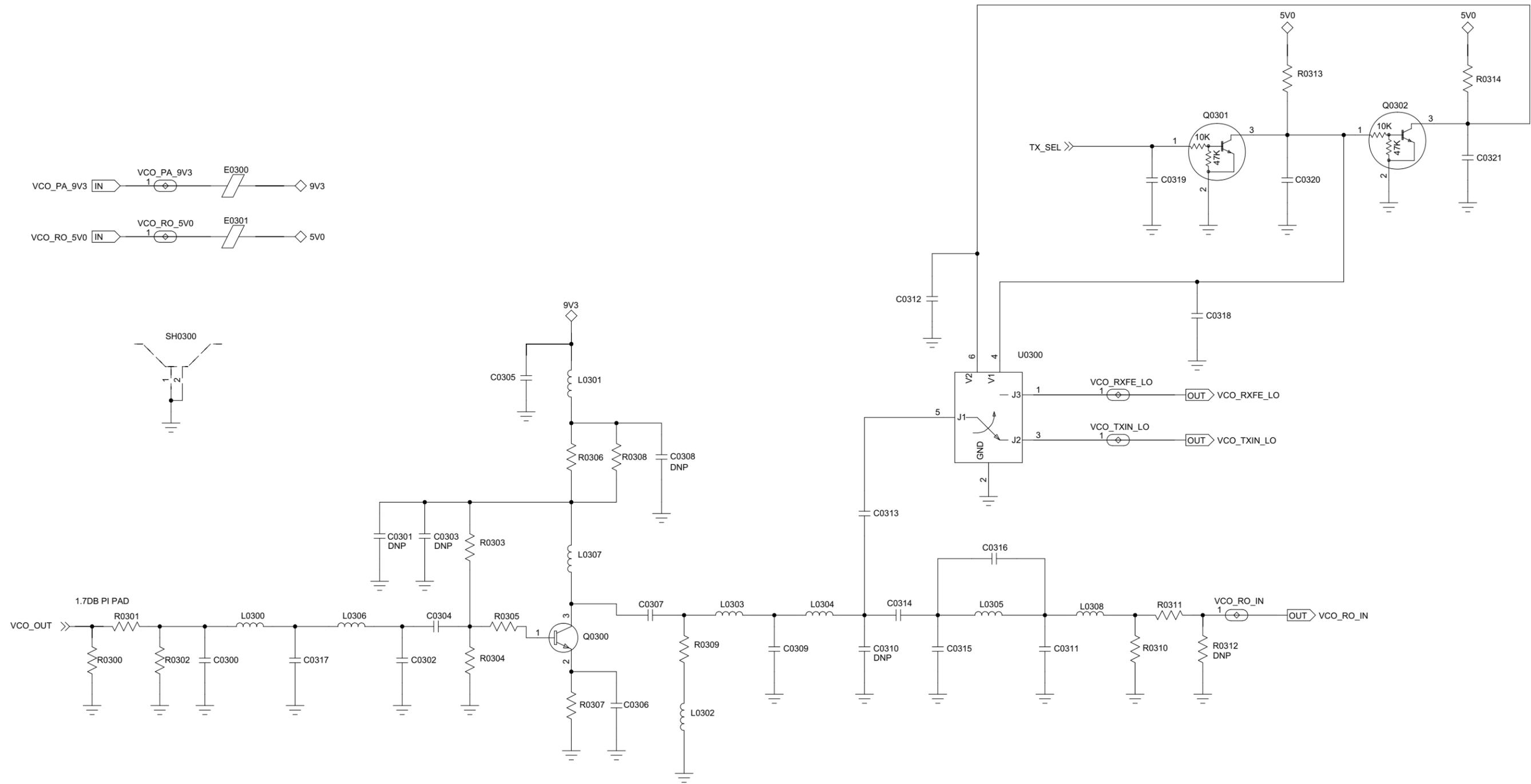
TX VCO SWITCHING CIRCUIT



VCO1 - TX VCO



VHF (136–174 MHz) 1–25W Transmit VCO Schematic Diagram



VHF (136–174 MHz) 1–25W VCO Buffer Schematic Diagram

**VHF PCB 84012734001-A  
Parts List 1–25W**

Circuit Ref.	Motorola Part No.
C0000M2	21667009311
C0000M2	21667009311
C0001M2	21667009170
C0002M2	21012044001
C0003M2	NOT PLACED
C0004M2	21012044001
C0005M2	21012044001
C0006M2	2113945C31
C0007M2	21012044001
C0008M2	21667009355
C0009M2	21667009166
C0010M2	2113945A10
C0011M2	2113945C31
C0012M2	21012044001
C0013M2	2113945Y02
C0014M2	2113945Y02
C0015M2	2113946J03
C0016M2	2113945A10
C0017M2	2113945Y02
C0018M2	2113945A10
C0019M2	2113945Y02
C0020M2	2113945A10
C0021M2	2113945Y02
C0022M2	2113945Y02
C0023M2	2113945Y02
C0024M2	21012102001
C0025M2	2113945A10
C0026M2	21667009174
C0027M2	2113945Y02
C0028M2	2113945Y02
C0029M2	2113945A10
C0030M2	2113945A10
C0031M2	2113945Y02
C0032M2	21667009166
C0033M2	NOT PLACED
C0034M2	21012044001
C0035M2	2113945A10
C0036M2	21012044004
C0037M2	21667009166
C0038M2	21012044001
C0039M2	2113945Y02
C0040M2	2113945A10
C0041M2	21667009366
C0042M2	21667009166
C0043M2	21012044001
C0044M2	2113945D45
C0045M2	2113945Y02
C0046M2	21667009166
C0047M2	2113945A10

Circuit Ref.	Motorola Part No.
C0048M2	2113945A10
C0049M2	2113945B02
C0050M2	2113945A10
C0051M2	2113945A10
C0052M2	2113945A10
C0053M2	2113945A10
C0054M2	2113945A10
C0055M2	2113945D37
C0056M2	2113945Y02
C0057M2	2113945B02
C0058M2	NOT PLACED
C0059M2	21667009166
C0060M2	2113945A69
C0061M2	2113945Y02
C0062M2	NOT PLACED
C0063M2	NOT PLACED
C0064M2	2113945A69
C0065M2	2113945Y02
C0066M2	2113945B02
C0067M2	2113945Y02
C0068M2	2113945D37
C0069M2	NOT PLACED
C0070M2	2113945D37
C0071M2	2113945D37
C0072M2	21667009166
C0073M2	21667009166
C0074M2	21667009166
C0075M2	2113946S35
C0076M2	2113946S35
C0077M2	21667009166
C0078M2	21667009372
C0079M2	2113945D37
C0080M2	2113945B02
C0081M2	2113945B02
C0082M2	2113945B02
C0083M2	2113945B02
C0084M2	21667009166
C0085M2	2113945A10
C0086M2	2113945C31
C0087M2	2113946S35
C0088M2	2113945Y02
C0089M2	2113945Y02
C0090M2	2113945B02
C0091M2	2113944C45
C0092M2	2113945A10
C0093M2	2113945Y02
C0094M2	2113945Y02
C0095M2	2113945A13
C0096M2	2113945B02
C0097M2	2113945B02
C0098M2	2113945A10
C0099M2	2113945Y02

Circuit Ref.	Motorola Part No.
C0100M2	2113945Y02
C0101M2	2113945A10
C0102M2	2113945A10
C0103M2	2113945A10
C0104M2	2113945A10
C0105M2	2113945A10
C0106M2	2113945B02
C0107M2	2113945B02
C0108M2	2113945A10
C0109M2	2113945Y02
C0110M2	21667009381
C0112M2	21667009166
C0113M2	2113945A10
C0114M2	2113945Y02
C0115M2	21667009372
C0116M2	NOT PLACED
C0117M2	21667009388
C0118M2	21667009378
C0119M2	2113945A10
C0120M2	2113945A10
C0121M2	NOT PLACED
C0122M2	21667009166
C0123M2	21667009381
C0124M2	21667009166
C0132M2	2113946J03
C0134M2	2113945A10
C0135M2	21667009166
C0136M2	21667009166
C0137M2	2113945Y02
C0138M2	2113945A10
C0139M2	2113945A10
C0140M2	2113945Y02
C0141M2	2113945Y02
C0143M2	2113945Y02
C0144M2	2113945Y02
C0145M2	21667009166
C0146M2	2113945A10
C0147M2	2113945A10
C0149M2	2113945A10
C0150M2	2113945A10
C0151M2	21667009372
C0200M7	2113945A10
C0201M7	NOT PLACED
C0202M7	2113945A10
C0203M7	NOT PLACED
C0204M7	NOT PLACED
C0206M7	21667009355
C0207M7	21667009355
C0208M7	21667009366
C0209M7	21667009366
C0210M7	21667009274
C0211M7	NOT PLACED

Circuit Ref.	Motorola Part No.
C0212M7	NOT PLACED
C0214M7	21667009315
C0217M7	21667009204
C0218M7	21667009315
C0219M7	2113945A04
C0221M7	21667009371
C0222M7	21667009374
C0223M7	21667009378
C0224M7	21667009377
C0225M7	2113945Y02
C0227M7	2113945Y02
C0229M7	2113945A10
C0230M7	2113945A10
C0231M7	2113945A10
C0232M7	2113945A10
C0233M7	21667009284
C0234M7	21667009284
C0235M7	2113945A10
C0236M7	2113945Y02
C0237M7	2113945A10
C0238M7	2113945Y02
C0269M7	2113945A10
C0270M7	2113945Y02
C0271M7	2113945A10
C0272M7	2113945Y02
C0300M7	21667009378
C0301M7	NOT PLACED
C0302M7	21667009300
C0303M7	NOT PLACED
C0304M7	21667009392
C0305M7	2113945Y02
C0306M7	2113945A09
C0307M7	2113945A02
C0308M7	NOT PLACED
C0309M7	21667009370
C0310M7	NOT PLACED
C0311M7	21667009368
C0312M7	2113945A10
C0313M7	2113945A10
C0314M7	21667009366
C0315M7	21667009315
C0316M7	21667009371
C0317M7	21667009377
C0318M7	2113945A10
C0319M7	2113945A10
C0320M7	2113945A10
C0321M7	2113945A10
C0400M4	21667009279
C0401M4	2113945A10
C0402M4	2113945A10
C0403M4	21667009291
C0404M4	21667009385

Circuit Ref.	Motorola Part No.
C0405M4	21667009282
C0406M4	21667009291
C0407M4	21667009385
C0408M4	2113945C31
C0409M4	2113945C31
C0410M4	2113945A10
C0411M4	2113945A10
C0412M4	2113946F05
C0413M4	21667009166
C0414M4	2113945A10
C0415M4	21667009388
C0416M4	2113945C31
C0417M4	2113945A10
C0418M4	21667009383
C0419M4	21667009315
C0420M4	2113945A10
C0421M4	21667009291
C0422M4	21667009385
C0423M4	21667009282
C0424M4	21667009291
C0425M4	21667009385
C0426M4	2113946F05
C0427M4	2113945A05
C0428M4	21667009282
C0429M4	21667009282
C0430M4	2113945A10
C0431M4	NOT PLACED
C0433M4	2113945A10
C0434M4	2113945A05
C0435M4	21667009388
C0436M4	2113945C31
C0437M4	2113945A10
C0438M4	2113945A10
C0439M4	21667009365
C0440M4	21667009364
C0441M4	21667009373
C0442M4	NOT PLACED
C0443M4	21667009373
C0444M4	21667009388
C0445M4	21667009375
C0446M4	21667009372
C0447M4	21667009303
C0448M4	21667009373
C0449M4	21667009364
C0450M4	21667009386
C0451M4	2113945A10
C0452M4	21667009378
C0453M4	21667009378
C0454M4	21667009378
C0455M4	21667009378
C0456M4	2113945A10
C0457M4	21667009372

Circuit Ref.	Motorola Part No.
C0458M4	2113946F05
C0459M4	NOT PLACED
C0461M4	2113945A10
C0462M4	2113945A10
C0463M4	2113945A10
C0464M4	NOT PLACED
C0467M4	2113956B21
C0469M4	2113956B21
C0500M3	21667009371
C0501M3	21667009355
C0502M3	2113945Y02
C0503M3	2113945Y02
C0504M3	2113945Y02
C0505M3	21667009370
C0506M3	21667009371
C0507M3	21667009307
C0508M3	21667009332
C0509M3	21667009380
C0510M3	21667009307
C0511M3	NOT PLACED
C0512M3	21667009390
C0513M3	21667009378
C0700M5	NOT PLACED
C0701M5	21667009174
C0702M5	2113944C34
C0703M5	2113944C51
C0704M5	21667009174
C0705M5	21667009174
C0706M5	NOT PLACED
C0707M5	2113945C31
C0708M5	21667011438
C0709M5	2113945C04
C0710M5	21667009174
C0711M5	2113944C06
C0712M5	2113945L49
C0713M5	21667009174
C0714M5	NOT PLACED
C0715M5	21667009174
C0716M5	2113944C51
C0717M5	2113944C35
C0718M5	NOT PLACED
C0719M5	21667009174
C0720M5	2113944C51
C0721M5	2113945L37
C0722M5	24667008018
C0723M5	NOT PLACED
C0724M5	2113944C84
C0725M5	NOT PLACED
C0726M5	2113944C51
C0727M5	NOT PLACED
C0728M5	2111078B13
C0729M5	2113944C46

Circuit Ref.	Motorola Part No.										
C0730M5	2113945L49	C0849M5	24667008016	C1001M1	2113945Y02	C2012M1	2113945Y02	C3120M1	2113956E60	C3212M1	2113955D37
C0731M5	21667009174	C0850M5	2111078B22	C1002M1	2113946K03	C2013M1	2113945Y02	C3121M1	2113956D58	C3213M1	2113945A03
C0732M5	2113945A09	C0851M5	2111078B40	C1003M1	2113945Y02	C2014M1	2113945B02	C3122M1	2113956A51	C3214M1	2113955D37
C0733M5	2113944C45	C0852M5	2111078B11	C1004M1	2113945Y02	C2015M1	21667009162	C3123M1	2113956A51	C3215M1	2113956F49
C0734M5	2113944C51	C0853M5	2111078B34	C1005M1	2113945Y02	C2016M1	2113956B54	C3124M1	2113946D07	C3216M1	2113945Y02
C0736M5	NOT PLACED	C0854M5	NOT PLACED	C1006M1	2113945Y02	C2020M1	2113956B54	C3125M1	2113946D05	C3217M1	2113956B91
C0737M5	2113944C04	C0855M5	2111078B08	C1007M1	2113945Y02	C2021M1	2113956D59	C3126M1	2113944C06	C3218M1	2113956A51
C0738M5	2113944C46	C0856M5	2111078B38	C1008M1	2113946D05	C2022M1	2113956D59	C3127M1	2113946S35	C3219M1	2113956A51
C0739M5	NOT PLACED	C0875M5	2113944C47	C1009M1	2113945Y02	C3000M5	2113944C38	C3128M1	2113946D05	C3220M1	2113946F05
C0740M5	2113945C25	C0876M5	2113944C32	C1010M1	2113945Y02	C3001M5	2113944C06	C3129M1	2113945Y02	C3221M1	2113945Y02
C0741M5	NOT PLACED	C0877M5	2113944C06	C1011M1	2113945B02	C3002M5	2113944C06	C3130M1	2113946D05	C3222M1	2113956A51
C0742M5	2113944C30	C0879M5	2113944C06	C1012M1	2113945Y02	C3003M5	2113945C31	C3131M1	2113946A02	C3223M1	2113945Y02
C0743M5	NOT PLACED	C0880M5	2113944C35	C1013M1	2113945Y02	C3004M5	2113945C02	C3132M1	2113946D05	C3224M1	2113946F05
C0744M5	NOT PLACED	C0881M5	2111078B50	C1014M1	2113945Y02	C3005M5	2113945C02	C3133M1	2113946D05	C3225M1	2113945Y02
C0745M5	21009337414	C0882M5	2111078B53	C1015M1	2113945B02	C3008M5	2113944C51	C3134M1	2113946S35	C3226M1	NOT PLACED
C0746M5	2113944C06	C0883M5	NOT PLACED	C1016M1	21667009166	C3009M5	2113945C31	C3135M1	2113956A51	C3227M1	2113946F05
C0747M5	0613952H42	C0884M5	2113944F05	C1017M1	21667009162	C3010M5	2113944C46	C3136M1	21012095001	C3228M1	2113945Y02
C0748M5	2113945C31	C0885M5	2113944C51	C1018M1	21667009162	C3011M5	2113945G53	C3137M1	2113946D05	C3229M1	2113956A51
C0749M5	2113944F05	C0900M5	NOT PLACED	C1019M1	21667009162	C3012M5	2113946J04	C3139M1	2113956A51	C3230M1	2113945Y02
C0750M5	2111078B33	C0901M5	NOT PLACED	C1020M1	21667009162	C3013M5	2113945C31	C3140M1	21012095001	C3231M1	2113945Y02
C0752M5	2113944F05	C0902M5	2113944C51	C1021M1	2113945Y02	C3014M5	21009337414	C3141M1	2113945Y02	C3232M1	2113945Y02
C0755M5	2113944C36	C0905M5	2113945C31	C1022M1	2113945Y02	C3015M5	2113946G01	C3142M1	21012102001	C3233M1	2113945A09
C0756M5	NOT PLACED	C0906M5	2113945A10	C1023M1	2113945Y02	C3016M5	2113945C31	C3143M1	21667009366	C3234M1	2113945Y02
C0757M5	NOT PLACED	C0907M5	2113945L41	C1024M1	2113945Y02	C3019M5	2113946S35	C3144M1	2113945Y02	C3235M1	21012102001
C0758M5	2111078B43	C0908M5	21667009174	C1025M1	2113945Y02	C3020M5	2113945C26	C3145M1	2113944C06	C3236M1	2113945C31
C0759M5	2111078B42	C0909M5	21667009174	C1026M1	2113945Y02	C3021M5	2113944C06	C3146M1	21012102001	C3237M1	21009337414
C0760M5	2113944C51	C0910M5	21667009174	C1027M1	NOT PLACED	C3022M5	2113945A10	C3149M1	2113956A51	C3238M1	2113945A09
C0761M5	2113944C45	C0911M5	2113944C02	C1028M1	2113945Y02	C3029M5	NOT PLACED	C3150M1	2113956C37	C3239M1	2113945A09
C0764M5	2113944C51	C0912M5	21667009174	C1029M1	2113956B54	C3038M5	21667009169	C3151M1	2113945B02	C3240M1	2113956B91
C0765M5	NOT PLACED	C0913M5	21667009174	C1032M1	2113956B54	C3041M5	21667009169	C3152M1	2113944C06	C3241M1	2113956B91
C0766M5	2111078B13	C0914M5	21667009174	C1035M1	2113945B02	C3042M5	21667009169	C3153M1	2113946J04	C3242M1	2113945C31
C0767M5	NOT PLACED	C0915M5	2113946B04	C1036M1	2113946D05	C3044M5	21667009169	C3154M1	2113955D13	C3243M1	2113955D37
C0768M5	2111078B16	C0916M5	NOT PLACED	C1040M1	2113945Y02	C3046M5	21667009174	C3155M1	2113945Y02	C3244M1	2113956B91
C0770M5	2111078B31	C0917M5	21667009174	C1041M1	2113945B02	C3047M5	21667009174	C3156M1	2113945Y02	C3245M1	2113955D37
C0771M5	2111078B46	C0918M5	21667009174	C1042M1	2113945Y02	C3048M5	21667009174	C3157M1	2113945Y02	C3246M1	2113945C31
C0772M5	NOT PLACED	C0919M5	21667009174	C1043M1	2113956B54	C3049M5	21667009174	C3160M1	2113945Y02	C3247M1	2113945Y02
C0773M5	NOT PLACED	C0920M5	2113944C51	C1044M1	2113945B02	C3102M1	21009337414	C3161M1	NOT PLACED	C3248M1	2113945Y02
C0774M5	NOT PLACED	C0921M5	2113944C51	C1045M1	2113945B02	C3103M1	21667009166	C3171M1	2113946D07	C3249M1	2113956B91
C0775M5	2113944C06	C0922M5	2113946B04	C1047M1	2113945Y02	C3104M1	2113946F08	C3173M1	2113946D07	C3250M1	2113956B91
C0776M5	2113944C31	C0923M5	2113944C51	C1048M1	2113945B02	C3105M1	2113946J04	C3175M1	2113946A01	C4000M1	2113945Y02
C0777M5	NOT PLACED	C0924M5	21667009174	C2000M1	2113945Y02	C3106M1	2113945C31	C3176M1	2113944C48	C4001M1	2113945Y02
C0778M5	21667011432	C0925M5	2113946B04	C2001M1	2113945Y02	C3107M1	2113944C38	C3177M1	2113946F08	C4002M1	2113945Y02
C0779M5	2113944C31	C0926M5	2113944C02	C2002M1	2113945B02	C3109M1	21667009166	C3200M1	21667009166	C4003M1	2113945Y02
C0780M5	2113944C06	C0950M5	2113944C51	C2003M1	21667009162	C3110M1	2113944C06	C3201M1	21667009166	C4010M1	21667009166
C0789M5	NOT PLACED	C0951M5	2113944C30	C2004M1	2113956B54	C3111M1	2113946J04	C3203M1	2113955D37	C4011M1	21667009166
C0793M5	21667007045	C0952M5	2113944C51	C2005M1	2113946D05	C3112M1	2113945Y02	C3204M1	2113955D37	C4012M1	21667009166
C0794M5	21667007047	C0953M5	2113944C51	C2006M1	2113945Y02	C3113M1	2113946S35	C3205M1	21667009166	C4013M1	21667009166
C0797M5	NOT PLACED	C0954M5	2113944M27	C2007M1	2113945Y02	C3115M1	2113944C06	C3206M1	21667009166	C4014M1	21667009166
C0803M5	NOT PLACED	C0955M5	2113944C51	C2008M1	2113945B02	C3116M1	2113955D13	C3208M1	2113956C37	C4015M1	21667009166
C0814M5	2113944F67	C0956M5	2113944C01	C2009M1	21667009162	C3117M1	2113955D13	C3209M1	2113945Y02	C4019M1	21667009166
C0818M5	NOT PLACED	C0957M5	2113944C49	C2010M1	2113945Y02	C3118M1	2113945Y02	C3210M1	2113945Y02	C4020M1	21667009166
C0824M5	2111078B13	C1000M1	2113945Y02	C2011M1	2113945Y02	C3119M1	2113945Y02	C3211M1	2113945A11	C4021M1	21667009166

Circuit Ref.	Motorola Part No.										
C4022M1	21667009166	C4302M1	NOT PLACED	E0002M2	NOT PLACED	E4101M1	24012107027	L0404M4	24009344114	L0885M5	2414032B49
C4023M1	21667009166	C4303M1	NOT PLACED	E0003M2	24012107027	E4102M1	NOT PLACED	L0405M4	24009344127	L0900M5	24667000031
C4025M1	21667009166	C4304M1	21667009166	E0004M2	24012107027	E4103M1	NOT PLACED	L0406M4	24009343017	L0901M5	NOT PLACED
C4026M1	21667009166	C4305M1	21667009376	E0005M2	24012107027	E4104M1	NOT PLACED	L0407M4	24009343017	L0902M5	NOT PLACED
C4027M1	21667009166	C4306M1	21667009381	E0006M2	24012107027	E4200M1	24012107027	L0408M4	24667000031	L0951M5	NOT PLACED
C4028M1	21667009166	C4307M1	NOT PLACED	E0007M2	24012107027	E4201M1	24012107027	L0409M4	24667000031	L0952M5	NOT PLACED
C4029M1	21667009166	C4308M1	NOT PLACED	E0008M2	24012107027	E4202M1	24012107027	L0410M4	24009344127	L3100M1	24012091002
C4030M1	21667009166	C4309M1	21667009166	E0009M2	24012107027	E4300M1	24012107027	L0411M4	24009343017	M0700M5	2686201B02
C4100M1	21667009166	C4310M1	21667009166	E0010M2	24012107027	E4405M1	24012107027	L0414M4	24009344113	P0000M2	NOT PLACED
C4101M1	21667009166	C4311M1	2113945Y02	E0300M7	24012107027	E4406M1	7686949J22	L0415M4	24009344114	P1000M1	2887818K02
C4103M1	21667009166	C4312M1	2113945Y02	E0301M7	24012107027	E4407M1	7686949J22	L0416M4	NOT PLACED	P3000M5	09009344001
C4104M1	21667009166	C4313M1	21667009166	E0401M4	24012107027	E4408M1	24012107027	L0417M4	24009344115	Q0000M2	4813973A13
C4105M1	21667009166	C4314M1	NOT PLACED	E0402M4	24012107027	E4409M1	24012102001	L0418M4	NOT PLACED	Q0001M2	48009494001
C4106M1	21667009166	C4401M1	NOT PLACED	E0403M4	24012107027	F4000M1	65012019001	L0421M4	24009344115	Q0002M2	4813970A59
C4107M1	21667009166	C4402M1	NOT PLACED	E0404M4	24012107027	FL0500M3	9180022M11	L0424M4	24009344115	Q0003M2	48012195001
C4108M1	21667009166	C4403M1	NOT PLACED	E0500M3	24012107027	FL4000M1	24012038001	L0428M4	24009344113	Q0004M2	4815272H01
C4109M1	21667009166	C4404M1	NOT PLACED	E0700M5	24012102001	FL4001M1	24012038001	L0434M4	24667008028	Q0006M2	4813973A04
C4110M1	21667009166	C4405M1	NOT PLACED	E0701M5	24012102001	J4000M1	0915767H01	L0462M4	24667000031	Q0200M7	48012195001
C4112M1	21667009166	C4406M1	NOT PLACED	E0703M5	24012102001	J4001M1	0915556H01	L0463M4	24667000031	Q0201M7	48012195001
C4113M1	21667009166	C4407M1	NOT PLACED	E1000M1	7686949J15	J4100M1	0916017H01	L0500M3	24667005045	Q0202M7	4815272H01
C4114M1	21667009166	C4408M1	NOT PLACED	E1001M1	7686949J15	J4200M1	09012053001	L0501M3	NOT PLACED	Q0206M7	4815272H01
C4115M1	21667009166	C4409M1	NOT PLACED	E1002M1	7686949J15	J4400M1	09012053001	L0502M3	24667000031	Q0300M7	4802197J95
C4116M1	21667009166	C4410M1	NOT PLACED	E1003M1	7686949J15	L0000M2	24012154001	L0504M3	24667000031	Q0301M7	48009494001
C4117M1	21667009166	C4411M1	NOT PLACED	E1004M1	7686949J15	L0001M2	24667008031	L0505M3	24667000031	Q0302M7	48009494001
C4118M1	21667009166	C4412M1	21667009166	E1005M1	7686949J15	L0002M2	24667000031	L0700M5	24667008020	Q0400M4	4815271H01
C4119M1	21667009166	C4413M1	21667009166	E1006M1	7685268E01	L0003M2	24667008031	L0702M5	24667008028	Q0401M4	4815267H01
C4200M1	2113945Y02	C4414M1	21667009166	E3000M5	24012102001	L0004M2	24009343004	L0703M5	24667008031	Q0402M4	48012230001
C4201M1	2113945Y02	C4415M1	21667009166	E3100M1	24012102001	L0005M2	24667008021	L0704M5	24667008031	Q0403M4	4815270H01
C4202M1	21667009166	C4417M1	21667009166	E3101M1	2485410Y02	L0200M7	24667000031	L0705M5	24667008025	Q0404M4	4815271H01
C4203M1	21667009166	C4418M1	21667009166	E3102M1	2485410Y02	L0201M7	24667000031	L0706M5	2485873L01	Q0405M4	48012230001
C4204M1	NOT PLACED	C4419M1	21667009166	E3103M1	2485410Y02	L0202M7	2416077H14	L0707M5	24667008031	Q0700M5	4816547H01
C4205M1	21667009166	D0000M2	4815011H01	E3104M1	7686949J22	L0203M7	24009344123	L0708M5	2479990G01	Q0701M5	4816013H01
C4206M1	21667009166	D0001M2	4815011H01	E3105M1	7686949J22	L0204M7	24667005040	L0709M5	24667008022	Q0702M5	48012067002
C4207M1	21667009166	D0400M4	4884800Y03	E3106M1	7686949J22	L0205M7	24667000031	L0710M5	2485873L01	Q0703M5	4802246J29
C4208M1	21667009166	D0401M4	4813974A19	E3107M1	7686949J22	L0206M7	24667005040	L0711M5	2485873L02	Q0704M5	4816548H01
C4209M1	21667009166	D0402M4	4813974A19	E3108M1	7686949J22	L0207M7	24667000031	L0712M5	NOT PLACED	Q0875M5	4813970A62
C4210M1	21667009166	D0403M4	4884800Y03	E3109M1	7686949J22	L0208M7	24667000031	L0713M5	2485873L02	Q0876M5	48009494001
C4211M1	21667009166	D0404M4	4815090H01	E3110M1	7686949J22	L0209M7	24667000031	L0714M5	2460591B73	Q0900M5	4815272H01
C4212M1	21667009166	D0500M3	4813974A19	E3111M1	7686949J22	L0210M7	24009342045	L0715M5	2460591A77	Q0901M5	4815271H01
C4213M1	21667009166	D0700M5	4813974A06	E3113M1	7686949J22	L0211M7	2414015C11	L0716M5	2415385H05	Q1000M1	4815263H01
C4214M1	21667009166	D0701M5	48012160001	E3200M1	24012102001	L0300M7	24667008018	L0722M5	2485873L01	Q1001M1	4815272H01
C4218M1	21667009166	D0875M5	48012160001	E3201M1	24012102001	L0301M7	24667008031	L0724M5	2485873L01	Q1002M1	4815261H01
C4219M1	21667009339	D0876M5	4886622Y06	E3202M1	24012107027	L0302M7	24667008031	L0727M5	2415385H08	Q1004M1	4815261H01
C4220M1	21667009339	D0900M5	48012181001	E3203M1	24012102001	L0303M7	24667008013	L0729M5	2414032B60	Q1005M1	4815261H01
C4221M1	21667009339	D0950M5	4813974A21	E3204M1	24012102001	L0304M7	24667008019	L0777M5	24667008020	Q3000M5	0105959T72
C4222M1	21667009339	D0951M5	4813974A21	E4000M1	24012107027	L0305M7	24667008016	L0850M5	2485873L01	Q3001M5	0105959T72
C4223M1	21667009339	D3000M5	4813978P07	E4001M1	7688697V05	L0306M7	24667008025	L0851M5	2485873L02	Q3002M5	4813973B01
C4224M1	21667009166	D3104M1	4885489Y01	E4002M1	24012107027	L0307M7	24667008031	L0852M5	2485873L02	Q3100M1	4815272H01
C4225M1	21667009166	D3160M1	4813978C02	E4003M1	NOT PLACED	L0308M7	24667008024	L0875M5	2485873L01	Q3101M1	4809939C47
C4226M1	21667009339	D3161M1	4813978C02	E4004M1	24012102001	L0401M4	24009343017	L0876M5	24667008031	Q3102M1	4809939C47
C4300M1	NOT PLACED	E0000M2	24012107027	E4005M1	2485410Y02	L0402M4	24009344115	L0877M5	24009343030	Q3103M1	48009494001
C4301M1	NOT PLACED	E0001M2	24012107027	E4100M1	7686949J14	L0403M4	24667000031	L0880M5	24009343030	Q3105M1	4809939C47

Circuit Ref.	Motorola Part No.										
Q3160M1	48009494001	R0029M2	0613952Q25	R0312M7	NOT PLACED	R0501M3	0613952R03	R0849M5	NOT PLACED	R0958M5	0613958H53
Q3161M1	4815272H01	R0030M2	0613952R66	R0313M7	0613952Q73	R0502M3	0613952Q81	R0876M5	0613958S73	R0959M5	0613952R66
Q3162M1	4813973M07	R0031M2	0613952R66	R0314M7	0613952Q73	R0503M3	0613952Q87	R0877M5	0613959Y37	R0960M5	0613952N58
Q3163M1	48009494001	R0033M2	0613952R01	R0400M4	0613952R01	R0504M3	0613952Q61	R0878M5	0613959Y37	R0961M5	0613952N58
Q3200M1	4815270H01	R0034M2	0613952Q57	R0401M4	0613952H81	R0505M3	NOT PLACED	R0879M5	0613952J25	R0962M5	0613952N58
Q3201M1	4815272H01	R0040M2	0613952Q70	R0402M4	0613952R25	R0700M5	0613952J01	R0882M5	0613952G67	R0965M5	NOT PLACED
Q3202M1	4815270H01	R0041M2	0613952Q58	R0403M4	0613952R01	R0701M5	0613952G67	R0883M5	0613952G67	R1000M1	0613952R66
Q3203M1	4815270H01	R0042M2	0613952Q42	R0404M4	0613952R25	R0702M5	0613952H49	R0902M5	0613952R66	R1001M1	0613952M66
Q3204M1	4815270H01	R0043M2	0613952Q73	R0405M4	0613952R05	R0703M5	0613952J01	R0903M5	0613952N01	R1002M1	0613952R66
Q3205M1	4815270H01	R0044M2	0613952R25	R0406M4	0613952Q91	R0704M5	0613952J01	R0904M5	0613952R66	R1003M1	0613952R66
Q3206M1	4815270H01	R0045M2	0613952R66	R0407M4	0613952Q91	R0705M5	0613952H48	R0905M5	0613952H42	R1004M1	0613952R66
Q3207M1	4815270H01	R0046M2	0613952Q57	R0408M4	0613952Q73	R0706M5	0613952H53	R0906M5	0613958H49	R1005M1	0613952M66
Q3208M1	4815263H01	R0051M2	0613952R01	R0409M4	0613952R66	R0707M5	0613952H48	R0907M5	0613958H56	R1007M1	0613952R66
Q4000M1	4809939C47	R0052M2	0613952R01	R0410M4	0613952R01	R0708M5	0613952H46	R0908M5	0613952H32	R1008M1	0613952R66
Q4001M1	4809939C47	R0054M2	0613952M25	R0411M4	0613952R01	R0709M5	0613958S49	R0909M5	0613952R66	R1009M1	0613952R66
Q4002M1	4809939C47	R0056M2	0613952R66	R0412M4	0613952Q75	R0710M5	0613959Q42	R0910M5	0613952H91	R1010M1	NOT PLACED
Q4100M1	4816023H01	R0058M2	0613952Q81	R0413M4	0613958H44	R0711M5	0613958S49	R0911M5	0613952H85	R1011M1	NOT PLACED
Q4101M1	4815261H01	R0059M2	0613952R66	R0414M4	NOT PLACED	R0712M5	0613958S49	R0912M5	0613958H49	R1012M1	0613952R66
Q4102M1	4815263H01	R0060M2	0613952Q86	R0415M4	0613952Q75	R0713M5	0613958S49	R0913M5	0613952M51	R1013M1	0613952M66
Q4103M1	48012271001	R0061M2	0613952Q85	R0416M4	0613952Q69	R0714M5	0613952H42	R0914M5	0613952M71	R1014M1	NOT PLACED
Q4105M1	48012271001	R0062M2	0613952Q61	R0417M4	0613952Q75	R0715M5	0613952H42	R0915M5	0613952Z76	R1016M1	NOT PLACED
Q4106M1	48012271001	R0063M2	0613952Q64	R0418M4	0613952Q69	R0716M5	0613952H42	R0916M5	0613952R66	R1018M1	NOT PLACED
Q4109M1	48012271001	R0200M7	0613952R66	R0419M4	0613952Q69	R0717M5	0613952H42	R0917M5	0613952P01	R1019M1	0613952R66
Q4112M1	48012271001	R0201M7	0613952R66	R0420M4	0613952R25	R0718M5	0613952H96	R0919M5	0613952P01	R1020M1	0613952M66
Q4120M1	4809939C47	R0202M7	0613952R27	R0421M4	0613952R25	R0719M5	0613952H89	R0920M5	0613952N01	R1021M1	0613952Q73
R0000M2	0613952R66	R0205M7	0613952R07	R0422M4	0613952Q53	R0720M5	0613952J01	R0921M5	0613952N01	R1022M1	NOT PLACED
R0001M2	0613952R66	R0206M7	0613952R05	R0423M4	0613952R25	R0721M5	0613952G67	R0922M5	0613952R66	R1023M1	0613952R66
R0002M2	0613952Q96	R0207M7	0613952Q86	R0424M4	0613952Q39	R0722M5	NOT PLACED	R0923M5	0613952M43	R1024M1	NOT PLACED
R0003M2	0613952Q57	R0208M7	0613952Q78	R0425M4	0613952Q53	R0723M5	0613952G67	R0924M5	0613952N01	R1025M1	0613952Q73
R0004M2	0613952Q34	R0209M7	0613952Q85	R0426M4	0613952Q87	R0724M5	0613958S49	R0925M5	0613952Q59	R1026M1	0613952R66
R0005M2	0613952R66	R0210M7	0613952Q73	R0427M4	0613952Q87	R0725M5	0613958S49	R0926M5	0613952H79	R1027M1	NOT PLACED
R0006M2	0613952Q25	R0211M7	0613952Q18	R0429M4	0613952R66	R0726M5	0613958S49	R0927M5	0613952N01	R1028M1	0613952R66
R0007M2	0613952Q51	R0213M7	0613952Q67	R0430M4	NOT PLACED	R0727M5	NOT PLACED	R0928M5	0613952P30	R1029M1	0613952R66
R0008M2	0613952R01	R0214M7	0613952Q67	R0431M4	0613952R01	R0728M5	0613958J49	R0929M5	0613952N81	R1030M1	NOT PLACED
R0009M2	0613952Q58	R0215M7	0613952Q67	R0432M4	0613952H75	R0729M5	0613958J49	R0930M5	0613952Z61	R1031M1	0613952R66
R0010M2	0613952R66	R0216M7	0613952Q67	R0433M4	0613952R01	R0730M5	0613958S49	R0931M5	0613952Z26	R1033M1	0613952Q73
R0011M2	0613952Q35	R0217M7	0613952Q49	R0434M4	0613952L46	R0731M5	0613958S49	R0932M5	0613952N51	R1034M1	0613952R17
R0012M2	0613952Q81	R0218M7	0613952Q49	R0435M4	0613952L46	R0732M5	0613958S49	R0933M5	0613952M66	R1035M1	NOT PLACED
R0013M2	0613952Q35	R0219M7	0613952R66	R0437M4	0613952Q80	R0733M5	0613958S49	R0934M5	0613952J17	R1036M1	0613952M66
R0014M2	0613952R66	R0233M7	0613952R66	R0438M4	0613952Q25	R0734M5	0613958S49	R0935M5	0613952H91	R1037M1	0613952M66
R0015M2	0613952R66	R0300M7	0613952Q66	R0439M4	0613952Q69	R0735M5	0613952R66	R0936M5	0613952H91	R1038M1	0613952R66
R0018M2	0613952Q80	R0301M7	0613952Q25	R0440M4	0613958H25	R0736M5	0613959Q25	R0937M5	0613952R66	R1039M1	0613952R66
R0019M2	0613952R01	R0302M7	0613952Q66	R0441M4	0613958H44	R0737M5	NOT PLACED	R0938M5	0613952R66	R1040M1	0613952M66
R0020M2	0613952R12	R0303M7	0613952Q94	R0442M4	0613952Q83	R0738M5	0613952N43	R0949M5	0613952G67	R1041M1	0613952R66
R0021M2	0613952Q80	R0304M7	0613952Q89	R0443M4	0613952Q46	R0739M5	0613952H73	R0950M5	0613952G67	R1042M1	0613952M66
R0022M2	0613952R66	R0305M7	0613952Q32	R0444M4	0613952K25	R0740M5	0613952P01	R0951M5	0613958H55	R1043M1	0613952R66
R0023M2	0613952Q83	R0306M7	0613952Q49	R0445M4	0613952Q75	R0742M5	NOT PLACED	R0952M5	0613958H53	R1044M1	0613952M66
R0024M2	0613952Q80	R0307M7	0613952H46	R0446M4	NOT PLACED	R0743M5	0613952J17	R0953M5	0613952G67	R1045M1	0613952M66
R0025M2	0613952R66	R0308M7	0613952Q49	R0447M4	0613952R66	R0746M5	0613952J25	R0954M5	0613952H39	R1046M1	0613952M66
R0026M2	0613952R66	R0309M7	0613952Q42	R0448M4	0613952Q25	R0749M5	0613952H41	R0955M5	0613952H39	R1047M1	0613952R66
R0027M2	0613952R12	R0310M7	0613952Q39	R0465M4	0613952R66	R0750M5	0613952H37	R0956M5	0613952G67	R1048M1	0613952R66
R0028M2	0613952R66	R0311M7	0613952R66	R0500M3	0613952R08	R0759M5	0613959H12	R0957M5	0613958H55	R1049M1	0613952Q73

Circuit Ref.	Motorola Part No.										
R1050M1	0613952Q73	R3005M5	0613952H25	R3138M1	0613952R17	R3206M1	0613952R01	R3260M1	0613952M66	R4034M1	0613952M43
R1051M1	0613952K68	R3006M5	0613952H25	R3139M1	0613952R66	R3207M1	0613952R01	R3261M1	0613952R01	R4035M1	0613952R66
R1052M1	NOT PLACED	R3007M5	0613952M30	R3140M1	0613952Q91	R3208M1	0613952N30	R3262M1	0613952R10	R4036M1	0613952R66
R1053M1	0613952R66	R3008M5	0613952G67	R3141M1	0613959Y13	R3209M1	0613952R03	R3263M1	NOT PLACED	R4037M1	0613952R01
R1054M1	0613952M66	R3009M5	0613952M43	R3142M1	NOT PLACED	R3210M1	0613952Q67	R3264M1	0613952R01	R4038M1	0613952R01
R1056M1	0613952Q73	R3010M5	0613952G67	R3143M1	0613952Q91	R3211M1	0613952N30	R3265M1	0613952M66	R4039M1	NOT PLACED
R1057M1	0613952Q73	R3011M5	0613959Q60	R3144M1	0613952R66	R3212M1	0613952R03	R3266M1	0613952R01	R4040M1	NOT PLACED
R1058M1	0613952M66	R3012M5	0613959Q60	R3145M1	0613959Y09	R3213M1	0613952Q42	R3267M1	NOT PLACED	R4041M1	NOT PLACED
R1059M1	0613952R66	R3013M5	0613952R01	R3146M1	0613952M85	R3214M1	0613952J25	R3268M1	0613952R01	R4100M1	0613952R01
R1060M1	0613952R66	R3014M5	0613952R01	R3147M1	0613952M43	R3215M1	0613952R01	R3269M1	0613952M66	R4101M1	0613952Q77
R1061M1	0613952R66	R3015M5	0615871H01	R3148M1	0613952R66	R3216M1	0613952R17	R3270M1	0613952R01	R4102M1	0613958H83
R1062M1	NOT PLACED	R3018M5	0613952H73	R3149M1	0613952R01	R3217M1	0613952R01	R3271M1	NOT PLACED	R4103M1	0613952Q85
R1063M1	NOT PLACED	R3019M5	0613952H60	R3150M1	0613952N62	R3218M1	0613952R01	R3272M1	0613952R01	R4104M1	0613952Q89
R1064M1	NOT PLACED	R3020M5	0613952G67	R3151M1	0613952R25	R3219M1	NOT PLACED	R3273M1	0613952M66	R4105M1	0613952Q89
R1065M1	0613952R66	R3021M5	0613952R25	R3153M1	0613952R66	R3220M1	0613952R01	R3274M1	0613952R10	R4106M1	0613952Q89
R1066M1	0613952M66	R3101M1	0613952Z66	R3154M1	0613952Q89	R3221M1	NOT PLACED	R3275M1	0613952R10	R4107M1	0613952R01
R1067M1	0613952M66	R3102M1	0613952M66	R3155M1	0613952Q89	R3222M1	0613952R01	R3276M1	0613952R10	R4108M1	0613952Q89
R1068M1	0613952R32	R3103M1	0613952N62	R3156M1	0613952R17	R3223M1	0613952R66	R3277M1	0613952R10	R4109M1	0613952N58
R1069M1	NOT PLACED	R3104M1	0613952M30	R3157M1	0613952R01	R3224M1	NOT PLACED	R3278M1	0613952R01	R4110M1	0613952Q85
R1070M1	0613952Q77	R3105M1	0613952R01	R3158M1	0613952R66	R3225M1	NOT PLACED	R3279M1	NOT PLACED	R4111M1	0613952Q85
R1071M1	0613952Q77	R3106M1	0613952M09	R3159M1	0613952R01	R3226M1	0613952R01	R3280M1	NOT PLACED	R4112M1	0613952R01
R1072M1	0613952Q49	R3107M1	0613952M85	R3160M1	0613952Q89	R3229M1	0613952R01	R3281M1	NOT PLACED	R4113M1	0613952R01
R1073M1	0613952R01	R3108M1	0613952R17	R3161M1	0613952Q73	R3230M1	0613952R10	R3282M1	0613952R66	R4114M1	0613952Q89
R1074M1	0613952R66	R3109M1	0613952R17	R3162M1	0613952Q85	R3231M1	0613952R10	R3283M1	0613952R66	R4115M1	0613952N58
R1075M1	0613952R66	R3110M1	0613952N55	R3163M1	0613952R01	R3232M1	0613952R10	R3285M1	0613952R01	R4116M1	0613952Q89
R1076M1	0613952R66	R3111M1	0613952R32	R3164M1	0613952Q75	R3233M1	0613952R01	R3286M1	0613952R66	R4117M1	0613952R01
R1077M1	0613952R66	R3112M1	0613952P12	R3165M1	0613952R01	R3234M1	NOT PLACED	R3287M1	0613952R66	R4118M1	0613952R01
R1078M1	0613952R66	R3113M1	0613952R17	R3166M1	0613952R17	R3235M1	0613952R01	R3288M1	0613952R01	R4119M1	0613952R01
R1079M1	0613952R66	R3114M1	0613952N01	R3167M1	0613952R01	R3236M1	0613952R10	R3289M1	0613952R01	R4120M1	0613952N58
R1080M1	0613952Q32	R3115M1	0613952Z63	R3168M1	0613952Q73	R3237M1	NOT PLACED	R3290M1	NOT PLACED	R4121M1	0613952Q85
R1081M1	0613952Q32	R3116M1	0613952E83	R3169M1	0613952R01	R3238M1	0613952R01	R3291M1	NOT PLACED	R4122M1	0613952Q85
R1082M1	0613952Q32	R3117M1	0613952Q73	R3170M1	0613952R01	R3239M1	0613952Q49	R3292M1	0613952R66	R4123M1	0613952N58
R1084M1	0613952R66	R3118M1	0613952R10	R3171M1	NOT PLACED	R3240M1	0613952R01	R3293M1	0613952R66	R4124M1	0613952N58
R1088M1	NOT PLACED	R3119M1	0613952Q73	R3172M1	NOT PLACED	R3241M1	0613952M54	R4001M1	0613952R66	R4125M1	0613952Q85
R1089M1	0613952R05	R3120M1	0613952R66	R3173M1	0613952R66	R3242M1	0613952R01	R4003M1	0613952R66	R4126M1	0613952Q85
R1090M1	0613952R05	R3121M1	0613952R66	R3174M1	0613952R66	R3243M1	0613952R01	R4006M1	0613952Q37	R4127M1	0613952Q85
R1091M1	NOT PLACED	R3122M1	0613952M43	R3175M1	0689774Y02	R3244M1	0613952R10	R4007M1	0613952Q37	R4128M1	0613952R01
R1092M1	0613952M43	R3123M1	0613952M54	R3176M1	0689774Y02	R3245M1	NOT PLACED	R4008M1	0613952R01	R4200M1	0613952R66
R1093M1	0613952Q73	R3124M1	0613952R66	R3177M1	0613952R66	R3246M1	0613952R01	R4010M1	0613952R01	R4201M1	0613952R66
R1094M1	0613952M66	R3125M1	0613952R66	R3178M1	0615871H01	R3247M1	0613952Q49	R4013M1	0613952Q42	R4202M1	0613952R66
R1095M1	0613952Q34	R3126M1	0613952R66	R3179M1	0613952R17	R3248M1	0613952R66	R4015M1	0613952Q37	R4203M1	0613952R66
R1096M1	0613952Q34	R3127M1	0613959Y09	R3180M1	0613952R01	R3249M1	0613952R66	R4021M1	0613952R66	R4204M1	0613952R66
R1097M1	0613952R66	R3128M1	0613952M10	R3181M1	NOT PLACED	R3250M1	0613952R66	R4024M1	0613952R01	R4205M1	0613952R66
R1098M1	0613952R66	R3129M1	0613952M58	R3182M1	0613952R66	R3251M1	0613952R66	R4025M1	0613952R01	R4206M1	0613952R66
R2000M1	0613952M66	R3130M1	0613952R25	R3183M1	0613952H92	R3252M1	0613952R66	R4026M1	0613952R66	R4207M1	0613952R66
R2002M1	0613952M66	R3131M1	0613952R01	R3184M1	0613952M30	R3253M1	0613952R66	R4027M1	0613952R66	R4208M1	0613952R66
R2003M1	0613952M30	R3132M1	0613952R01	R3200M1	0613952C44	R3254M1	0613952R01	R4028M1	0613952R01	R4209M1	HZ000375A01
R3000M5	0613952H60	R3133M1	0613952R29	R3201M1	0613952Q49	R3255M1	0613952R66	R4029M1	0613952R01	R4210M1	HZ000375A01
R3001M5	0615871H01	R3134M1	NOT PLACED	R3202M1	0613952C44	R3256M1	0613952M66	R4030M1	0613952R01	R4211M1	HZ000375A01
R3002M5	0615871H01	R3135M1	0613952R66	R3203M1	0613952Q49	R3257M1	0613952R01	R4031M1	0613952R01	R4212M1	HZ000375A01
R3003M5	0615871H01	R3136M1	0613952R17	R3204M1	0613952C44	R3258M1	0613952M66	R4032M1	0613952R66	R4213M1	HZ000375A01
R3004M5	0615871H01	R3137M1	0613952R17	R3205M1	0613952C44	R3259M1	0613952M66	R4033M1	0613952M43	R4214M1	HZ000375A01

Circuit Ref.	Motorola Part No.
R4215M1	0613952R66
R4216M1	0613952R66
R4217M1	0613952R66
R4218M1	0613952R66
R4301M1	NOT PLACED
R4302M1	0613952R66
R4303M1	0613952R66
R4304M1	0613952R66
R4305M1	0613952R66
R4306M1	0613952R66
R4307M1	0613952R66
R4309M1	NOT PLACED
R4310M1	0613952R66
R4311M1	0613952R66
R4312M1	0613952R66
R4313M1	NOT PLACED
R4314M1	0613952R66
R4315M1	0613952R66
R4316M1	0613952R66
R4317M1	0613952R66
RT0900M5	0615585H01
SH0000M2	26012095001
SH0001M2	26012095001
SH0002M2	26012097001
SH0003M2	26012094001
SH0004M2	26012094001
SH0200M7	26012095001
SH0300M7	26012231001
SH0400M4	26012096001
SH0401M4	26012096001
SH0402M4	26012098001
SH0403M4	26012098001
SH0500M3	26012098001
SH0700M5	26012100001
SH0900M5	2686425Z02
SH0901M5	2686425Z02
SH3100M1	NOT PLACED
SP3000M5	NOT PLACED
SP3001M5	NOT PLACED
T0000M2	25012016001
T0400M4	2515121H01
T0401M4	2515121H01
U0000M2	51009877001
U0001M2	5109731C48
U0002M2	4802197J95
U0300M7	5186310Y39
U0500M3	4802197J95
U0700M5	NOT PLACED
U0901M5	5180390L83
U0902M5	51012221001
U0903M5	5115022H01
U0904M5	5109731C48

Circuit Ref.	Motorola Part No.
U1000M1	5171320H01
U1001M1	51012295001
U1002M1	5189139P01
U1003M1	5175772B56
U1004M1	5175772B56
U1005M1	5164852H47
U1006M1	5185493Y01
U1007M1	5189139P01
U1008M1	5189139P01
U1009M1	5115001H02
U1010M1	5171320H01
U2000M1	MM000157A01
U2001M1	MM000129A01
U3000M5	5116525H01
U3001M5	4813973M07
U3002M5	51012133001
U3100M1	0104039J08
U3101M1	5114014A01
U3102M1	51012069001
U3103M1	51012142001
U3104M1	5171590Y73
U3105M1	5114610F01
U3106M1	51012140001
U3107M1	51012140001
U3108M1	51012138001
U3109M1	5164015H94
U3110M1	51012208001
U3111M1	5188690V02
U3112M1	5114004A35
U3113M1	5188690V02
U3114M1	NOT PLACED
U3115M1	5185937Y01
U3200M1	51009415001
U3201M1	5114016A18
U3204M1	51009509001
U3205M1	5114016A18
U4000M1	51012082001
U4001M1	51012082001
U4100M1	5189139P01
U4200M1	NOT PLACED
U4201M1	NOT PLACED
U4300M1	51012082001
U4301M1	51012082001
VR0001M2	4815096H01
VR0200M7	48012260001
VR0201M7	4805656W87
VR0202M7	4815002H03
VR0203M7	4805656W87
VR0205M7	4805656W87
VR0206M7	48012260001
VR0207M7	4805656W87
VR0208M7	4815002H03

Circuit Ref.	Motorola Part No.
VR0209M7	4805656W87
VR0400M4	4805656W87
VR0401M4	4805656W87
VR0402M4	4805656W87
VR0403M4	4805656W87
VR0404M4	4805656W87
VR0405M4	4805656W87
VR0406M4	4805656W87
VR0407M4	4805656W87
VR3000M5	48012202001
VR3002M5	4813977M10
VR3103M1	48012095001
VR3104M1	48012095002
VR3105M1	4813977M10
VR3200M1	48012049001
VR3201M1	4813977A48
VR3202M1	4813977A48
VR4000M1	4813977M13
VR4001M1	4813977A48
VR4002M1	48012153001
VR4100M1	4813977A48
VR4101M1	4813977A48
VR4102M1	4813977A48
VR4103M1	4813977A48
VR4104M1	48012049001
VR4105M1	4813977M13
VR4106M1	4813977A48
VR4107M1	4813977A48
VR4108M1	4813977A48
VR4109M1	4813977A50
VR4110M1	4815040H01
VR4111M1	48012153001
Y0000M2	4875185M05

Note: The suffix "M1", "M2", etc. from the Circuit Ref is removed from the schematic and overlays.



# **XPR 5350e/XPR 5550e Mobile Radios**

Chapter 8

VHF (136–174 MHz)

25–45W

Service Information

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## Chapter 8 – VHF High Power Service Information

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#### Section 2 VHF PCB/Schematics/Parts Lists

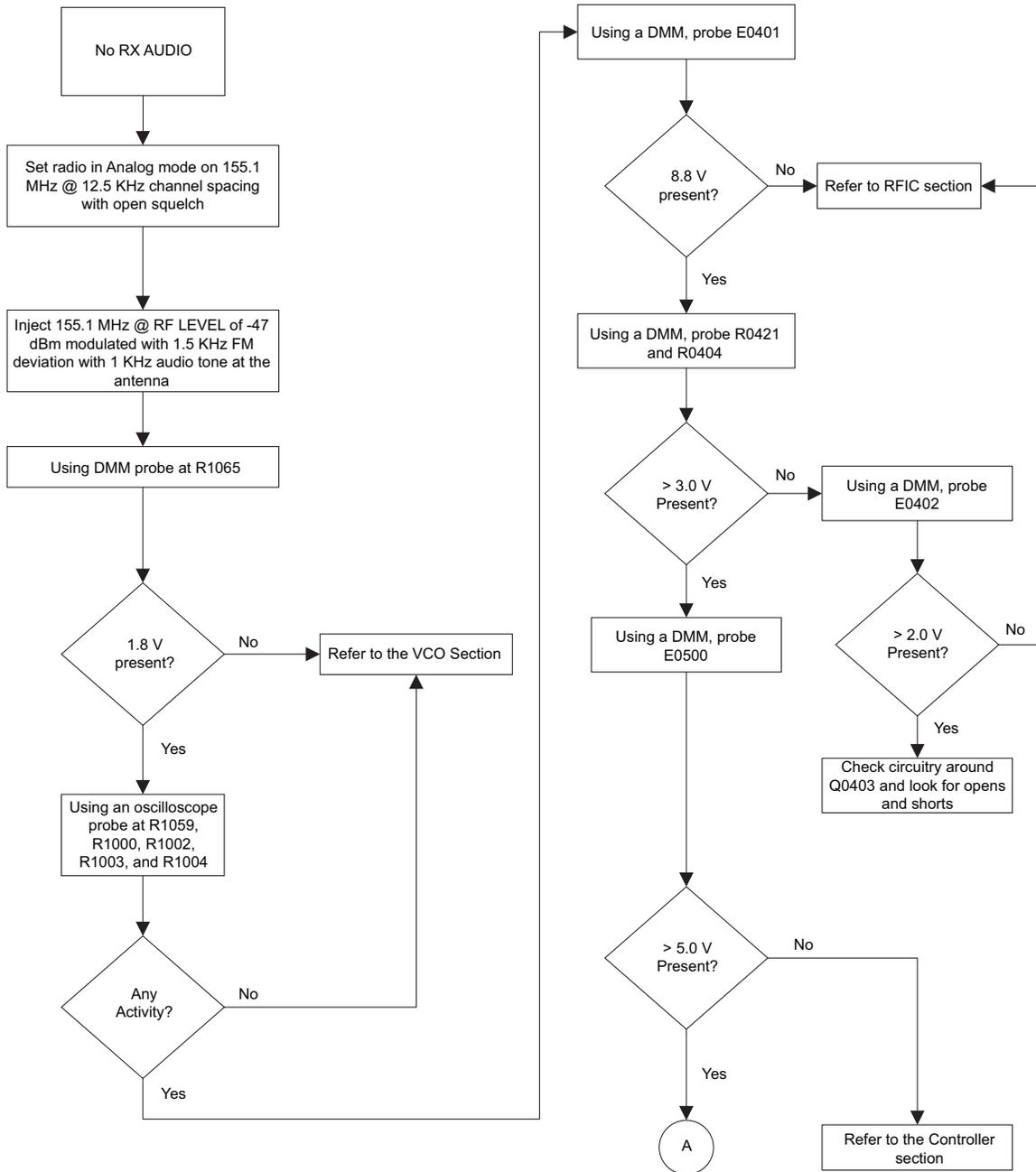
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## Notes

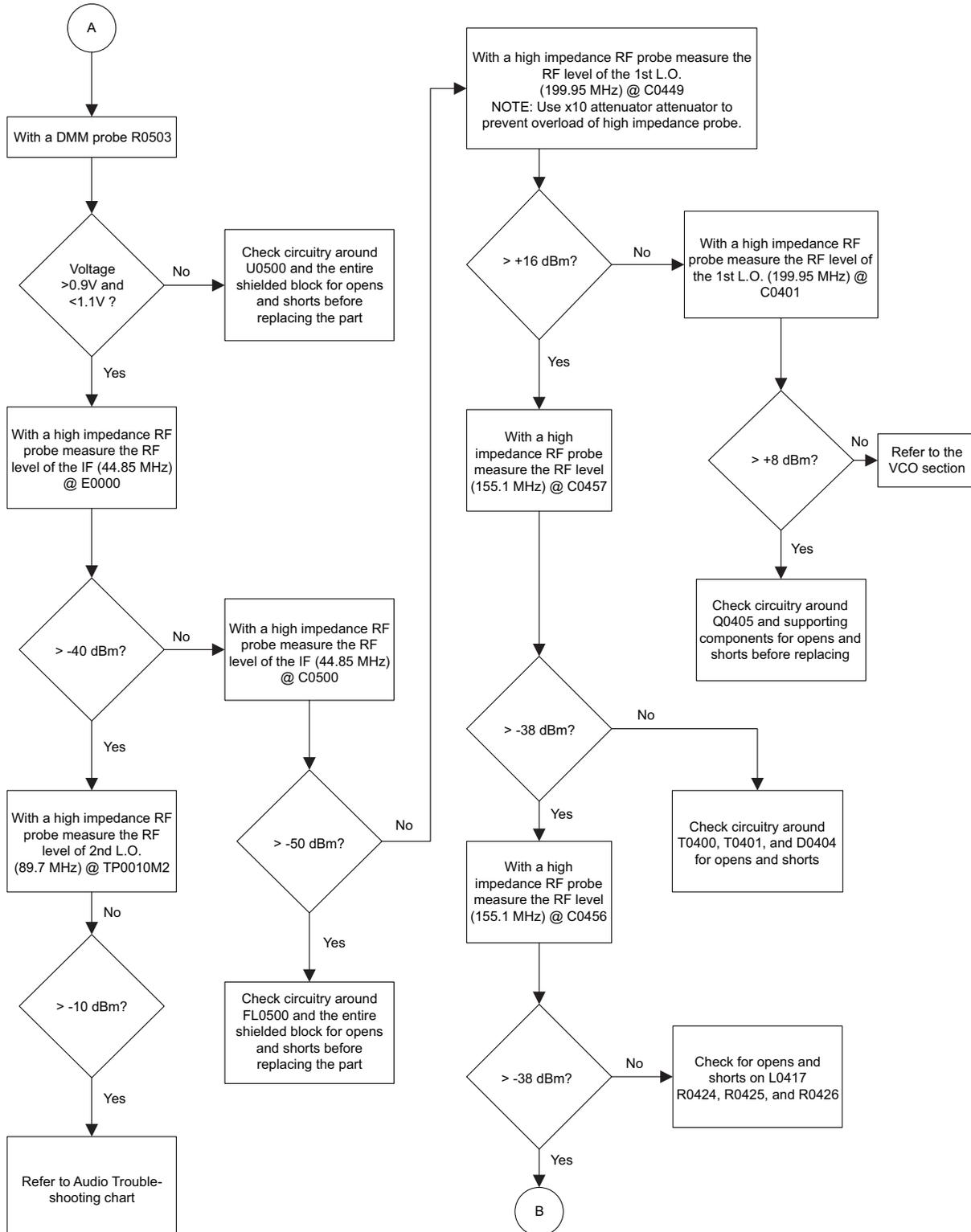
# Section 1

## TROUBLESHOOTING CHARTS

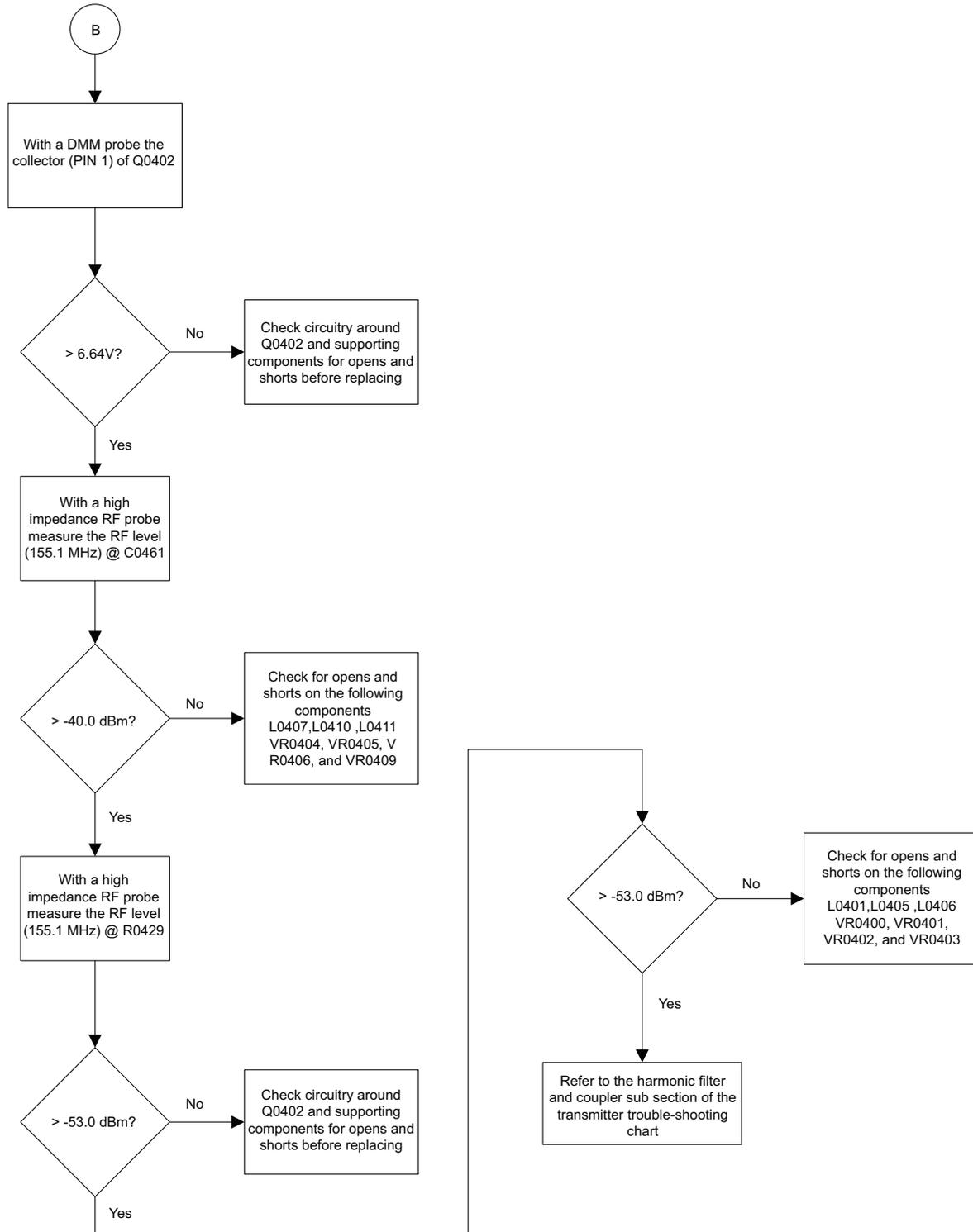
### 1.0 Troubleshooting Flow Chart for Receiver (Sheet 1 of 3)



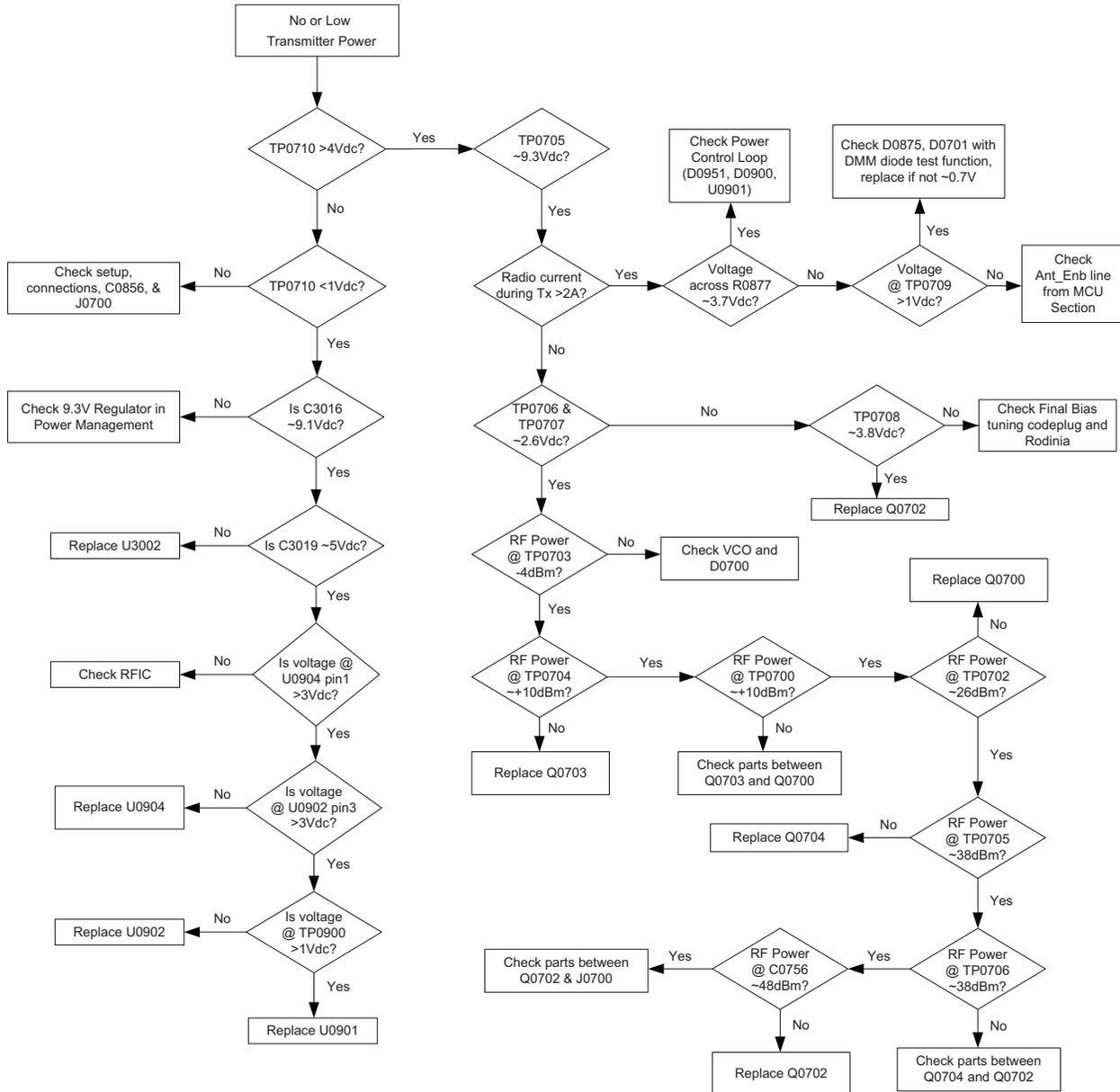
# 1.1 Troubleshooting Flow Chart for Receiver (Sheet 2 of 3)



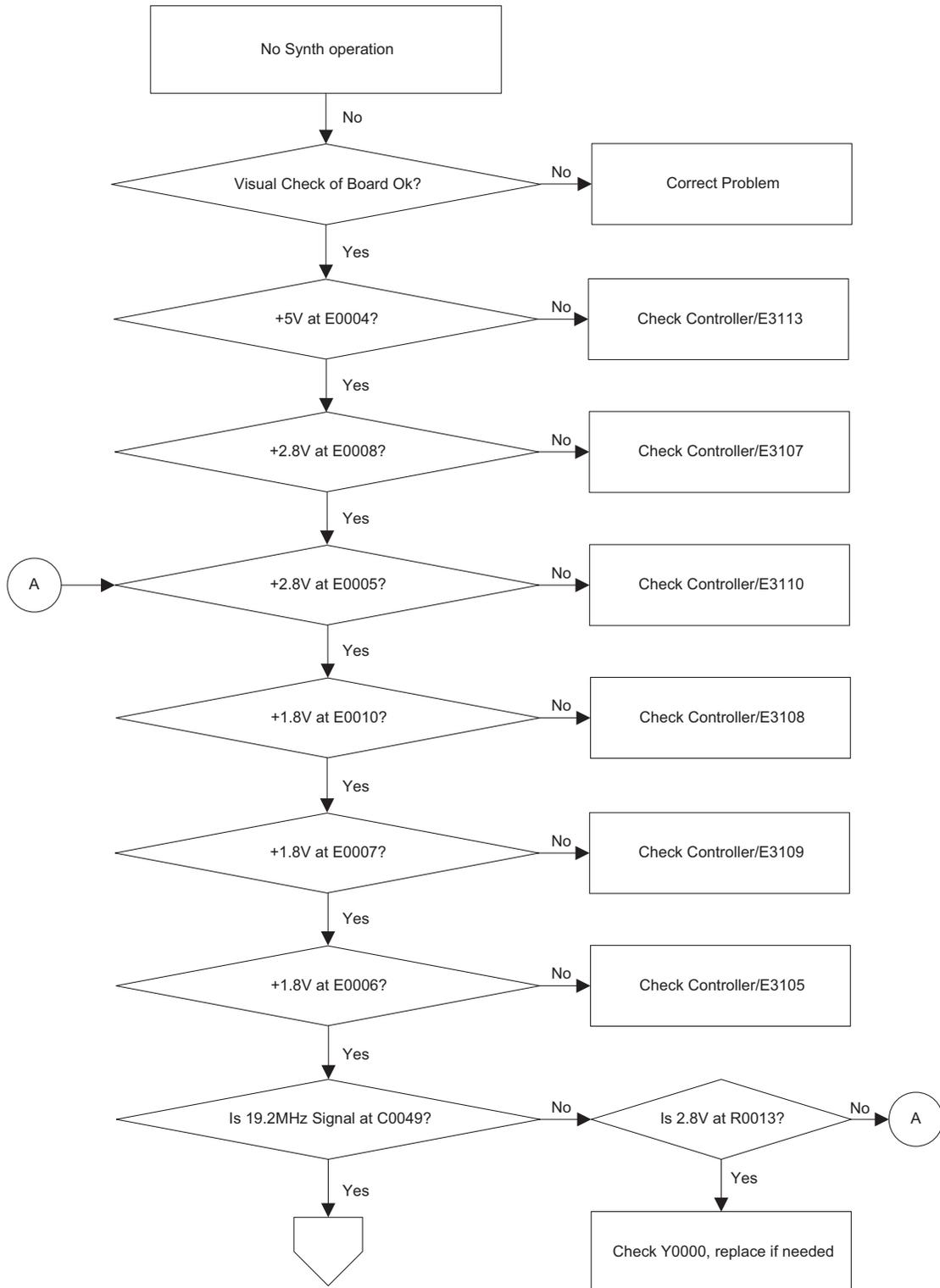
## 1.2 Troubleshooting Flow Chart for Receiver (Sheet 3 of 3)



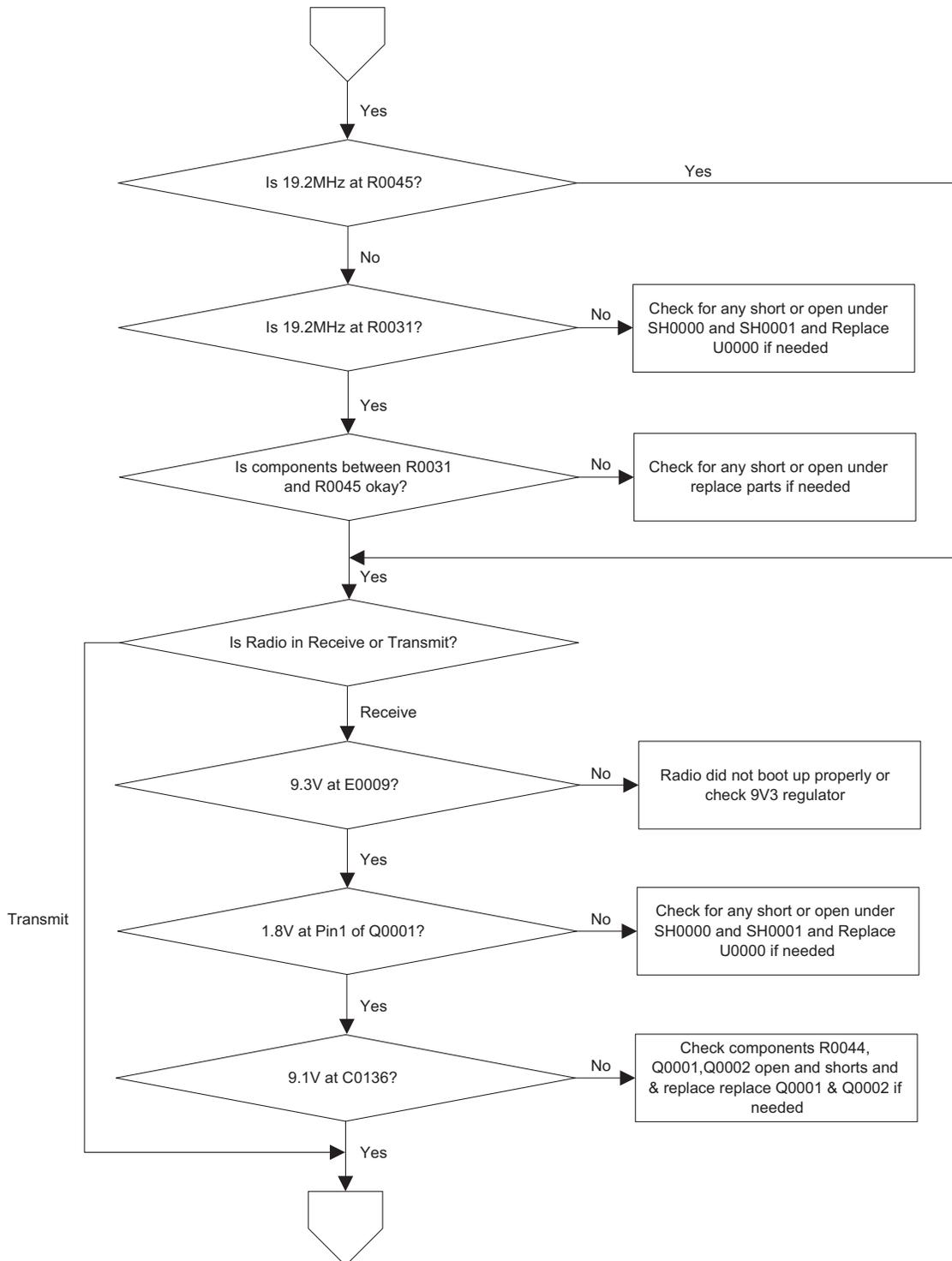
## 2.0 Troubleshooting Flow Chart for 45W Transmitter



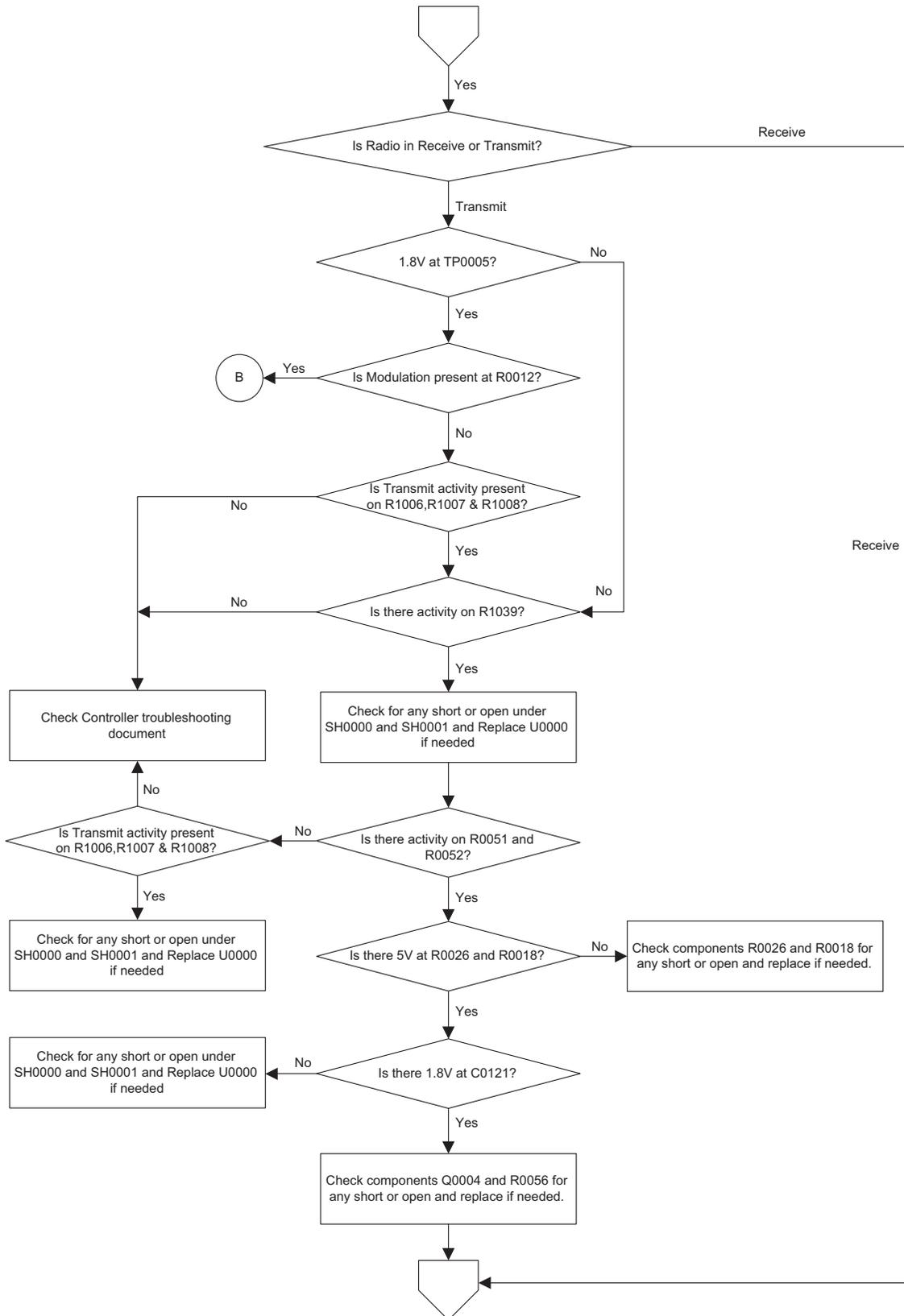
### 3.0 Troubleshooting Flow Chart for RFIC (Sheet 1 of 5)



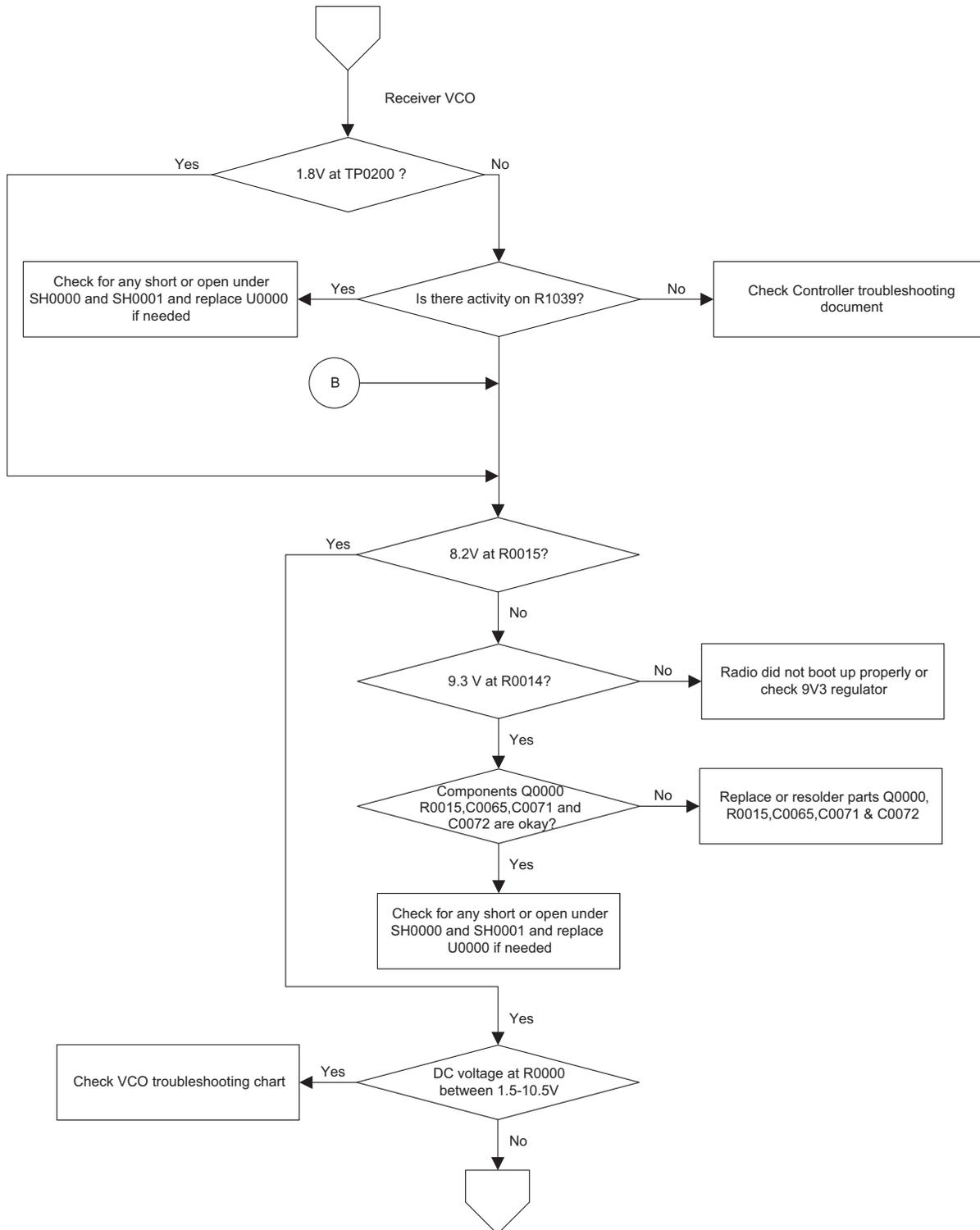
### 3.1 Troubleshooting Flow Chart for RFIC (Sheet 2 of 5)



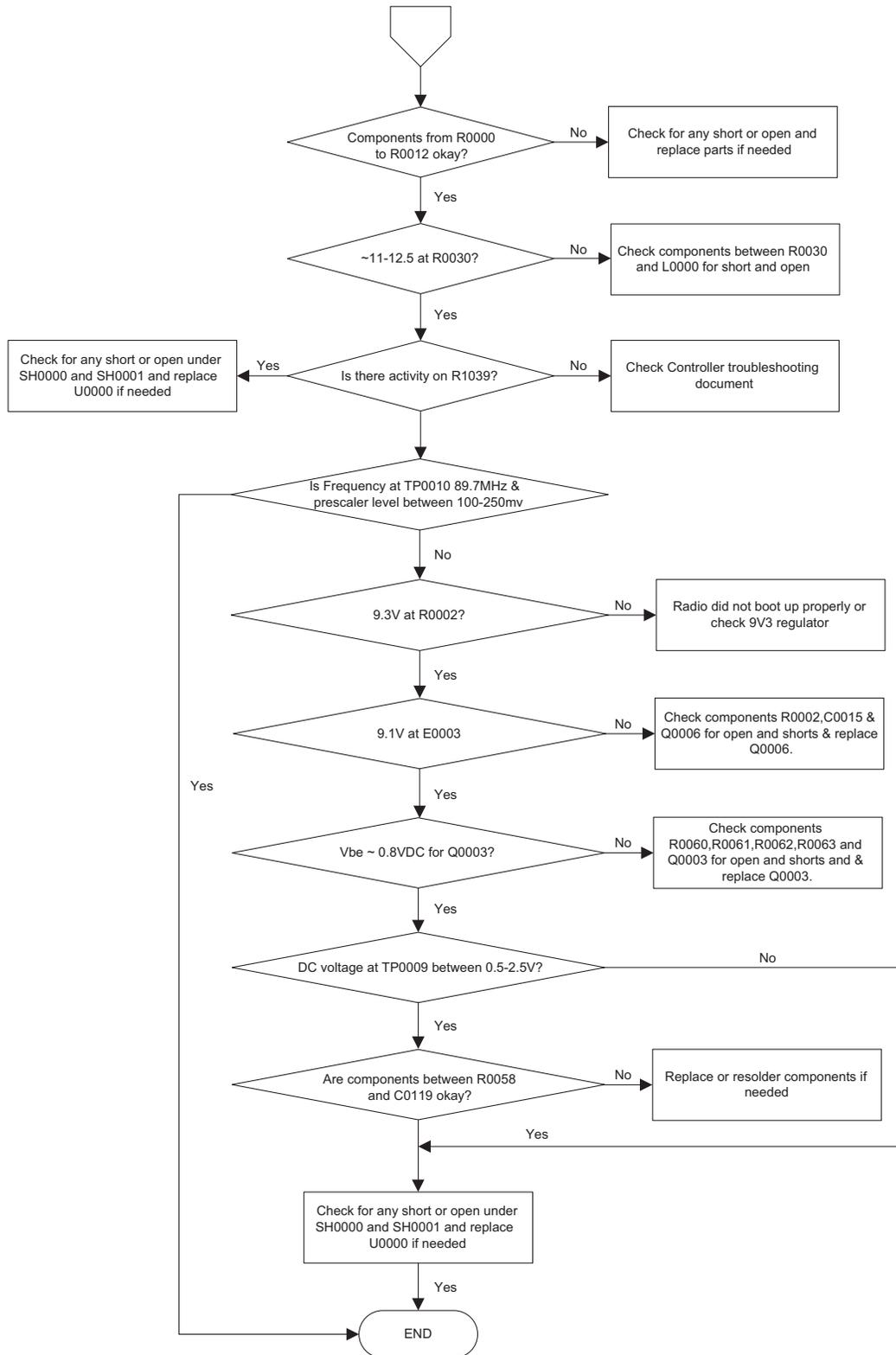
### 3.2 Troubleshooting Flow Chart for RFIC (Sheet 3 of 5)



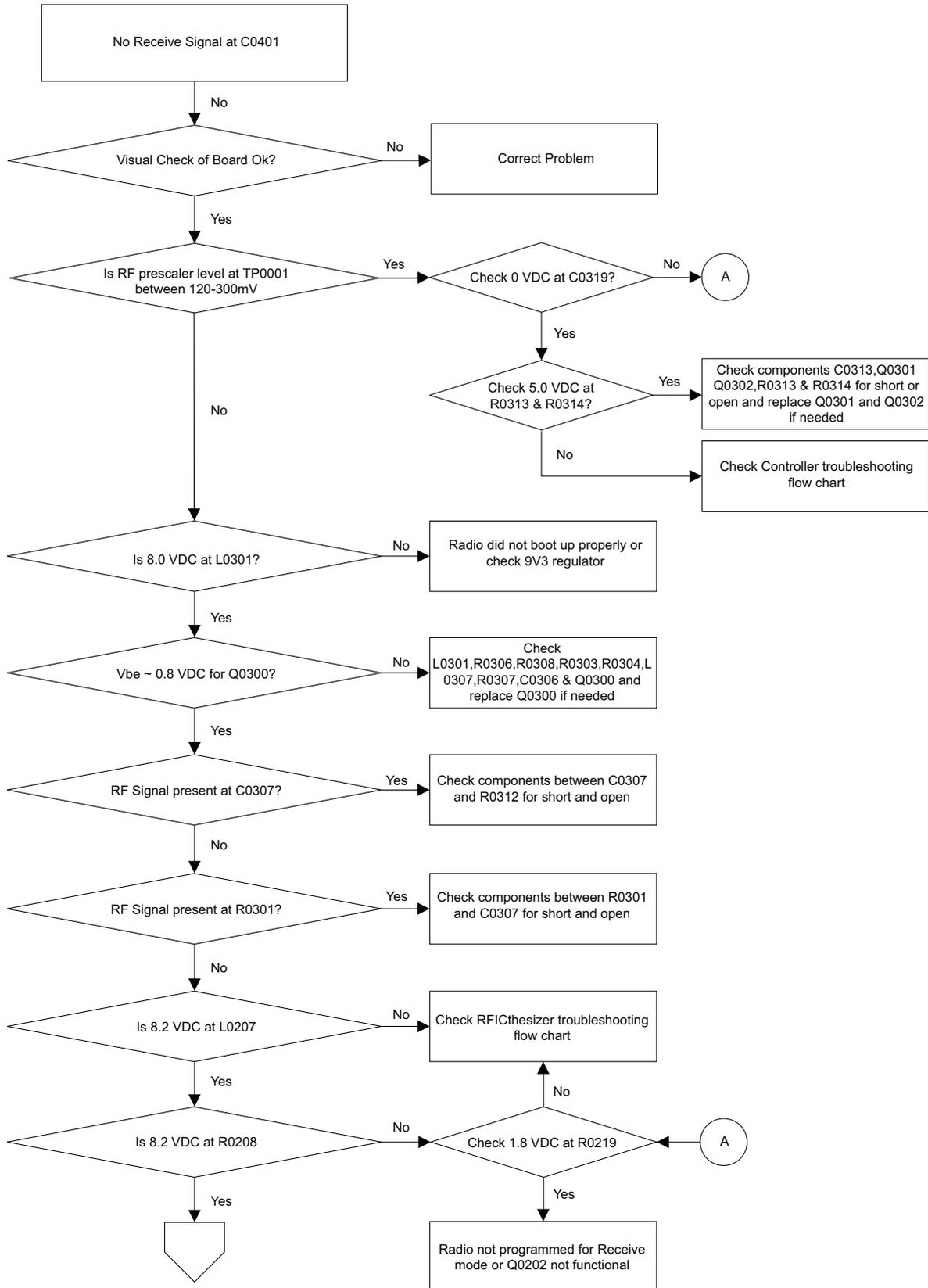
### 3.3 Troubleshooting Flow Chart for RFIC (Sheet 4 of 5)



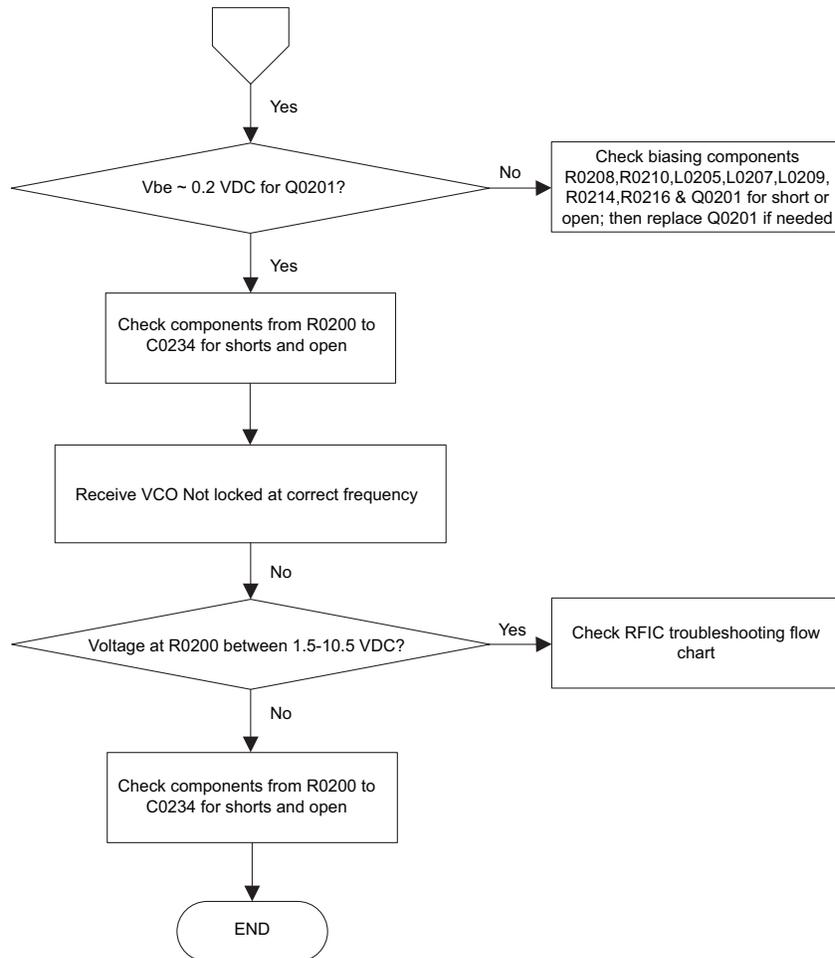
### 3.4 Troubleshooting Flow Chart for RFIC (Sheet 5 of 5)



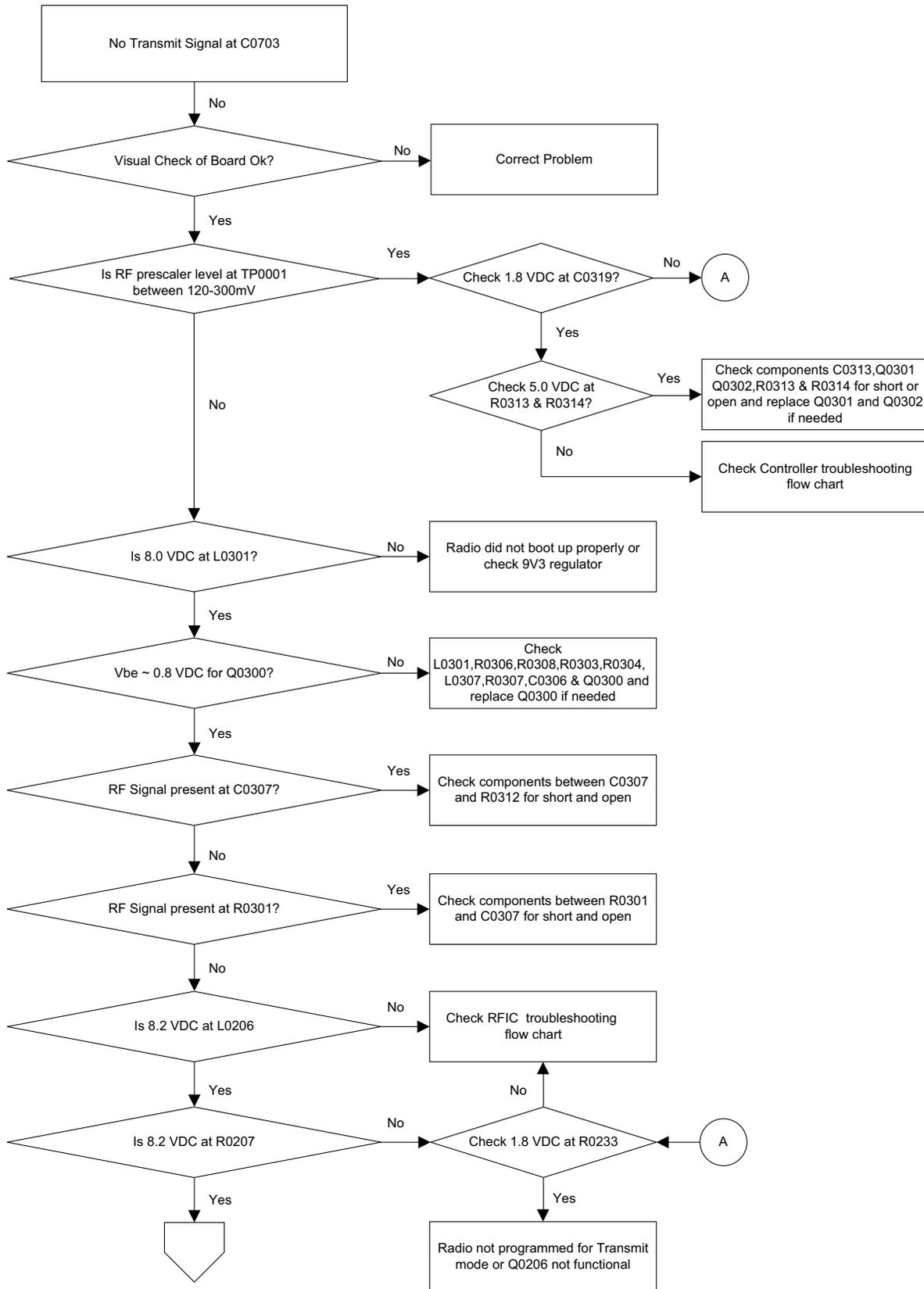
### 4.0 Troubleshooting Flow Chart for Rx VCO (Sheet 1 of 2)



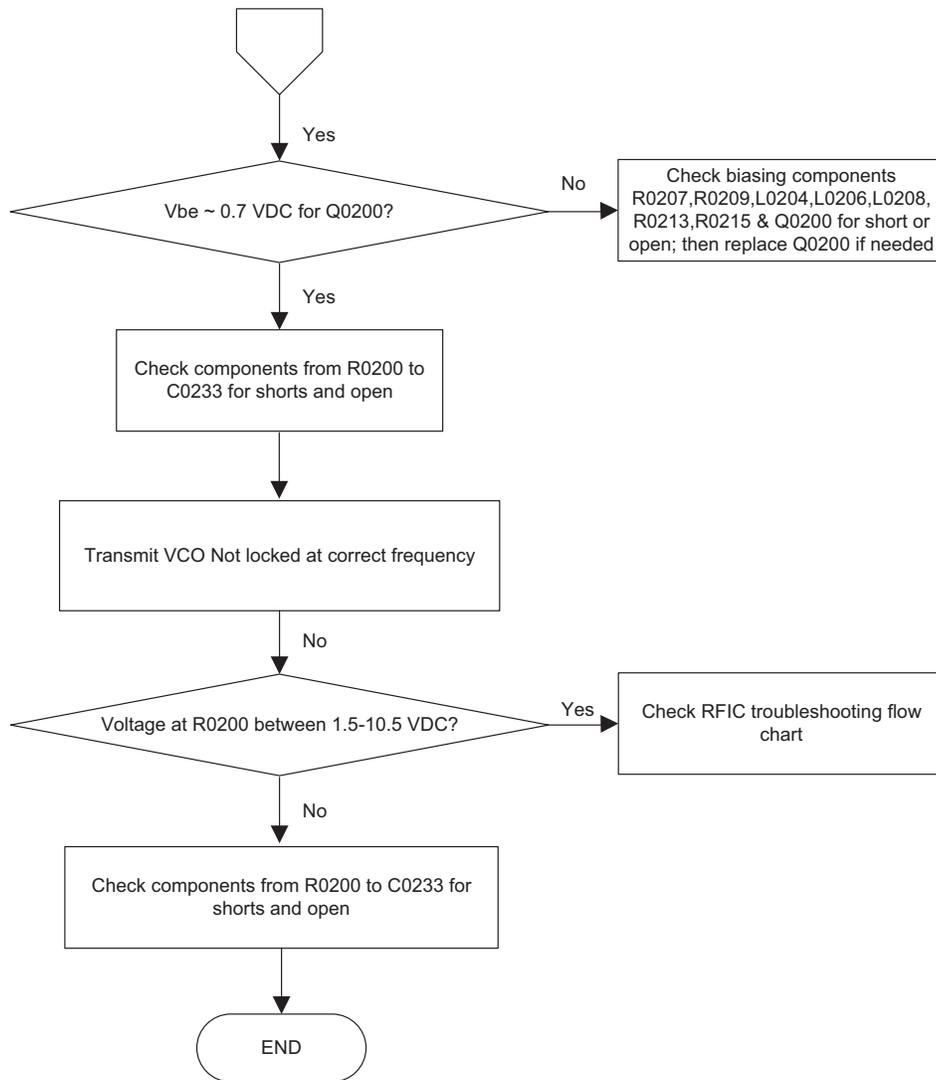
### 4.1 Troubleshooting Flow Chart for Rx VCO (Sheet 2 of 2)



### 5.0 Troubleshooting Flow Chart for Tx VCO (Sheet 1 of 2)



## 5.1 Troubleshooting Flow Chart for Tx VCO (Sheet 2 of 2)



## Notes

## Section 2

# VHF PCB/SCHEMATICS/PARTS LISTS

### 1.0 Allocation of Schematics and Circuit Boards

#### 1.1 VHF 45W Circuits

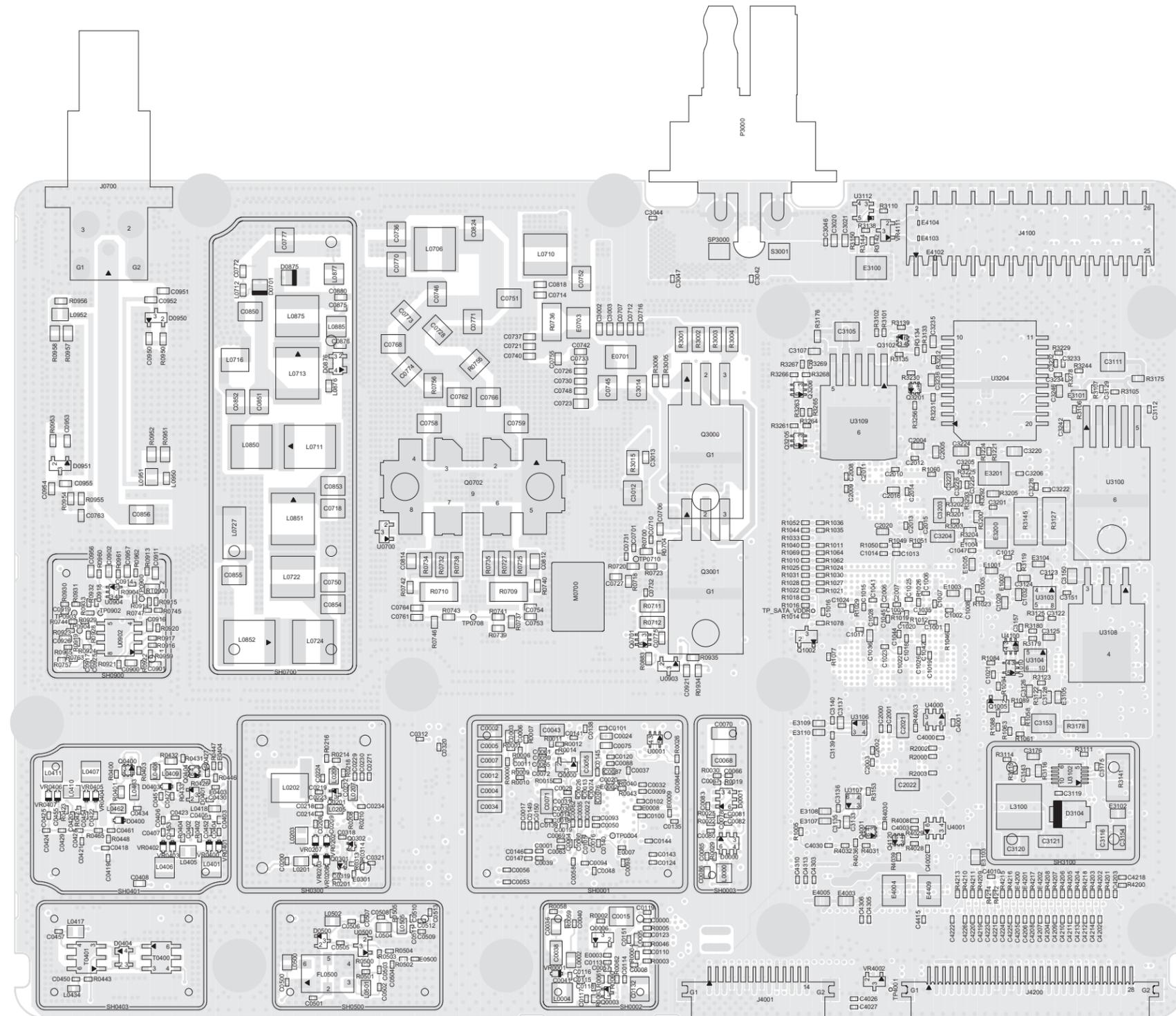
The VHF circuits are contained on the Printed Circuit Board (PCB) which also contains the Controller circuits. This chapter shows the schematics for the VHF 45W circuits only, refer to the Controller section for details of the related Controller circuits. The PCB component layouts and the Parts List in this chapter show both the Controller and VHF 45W circuit components. The VHF 45W schematics and the related PCB and parts list are shown in the table below.

*Table 2-1 VHF 25–45W Schematic Diagrams and Parts List*

<b>PCB:</b>	
84012736001-A Main Board Top Side	Page 2-3
84012736001-A Main Board Bottom Side	Page 2-4
<b>SCHEMATICS</b>	
Overall	Page 2-5
Receiver Front-End	Page 2-6
Receiver IF Amp	Page 2-7
Transmitter Power Amplifier	Page 2-8
Power Control	Page 2-9
Transmitter Power Amplifier DC Distribution	Page 2-10
RFIC	Page 2-11
Receiver VCO	Page 2-12
Transmit VCO	Page 2-13
VCO Buffer	Page 2-14
<b>Parts List</b>	
84012736001-A (VHF 45W Only)	Page 2-15

## Notes

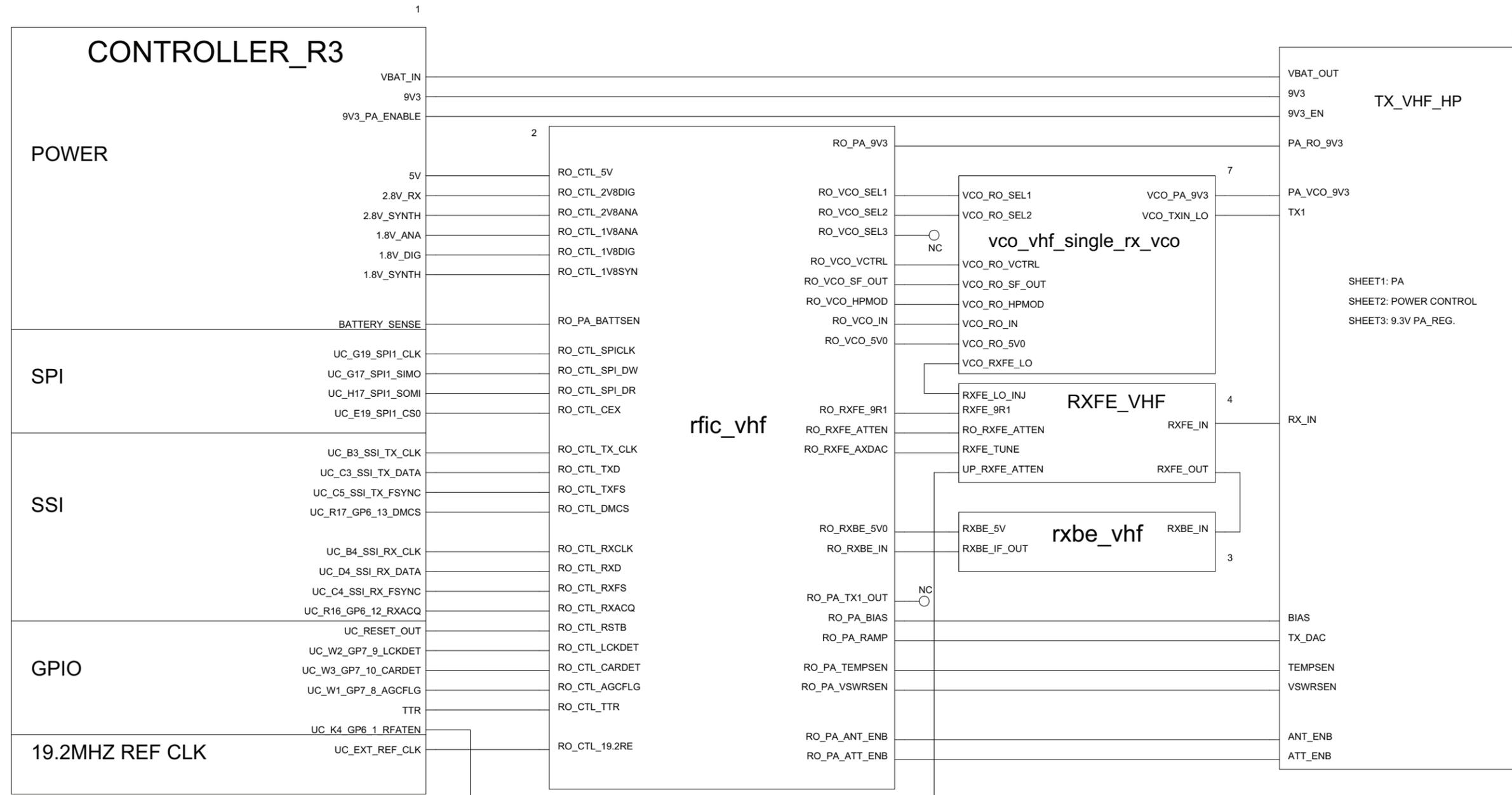
## 2.0 VHF (136–174 MHz) 25–45W PCB/Schematics/Parts List



VHF (136–174 MHz) 25–45W 84012736001-A Top Side

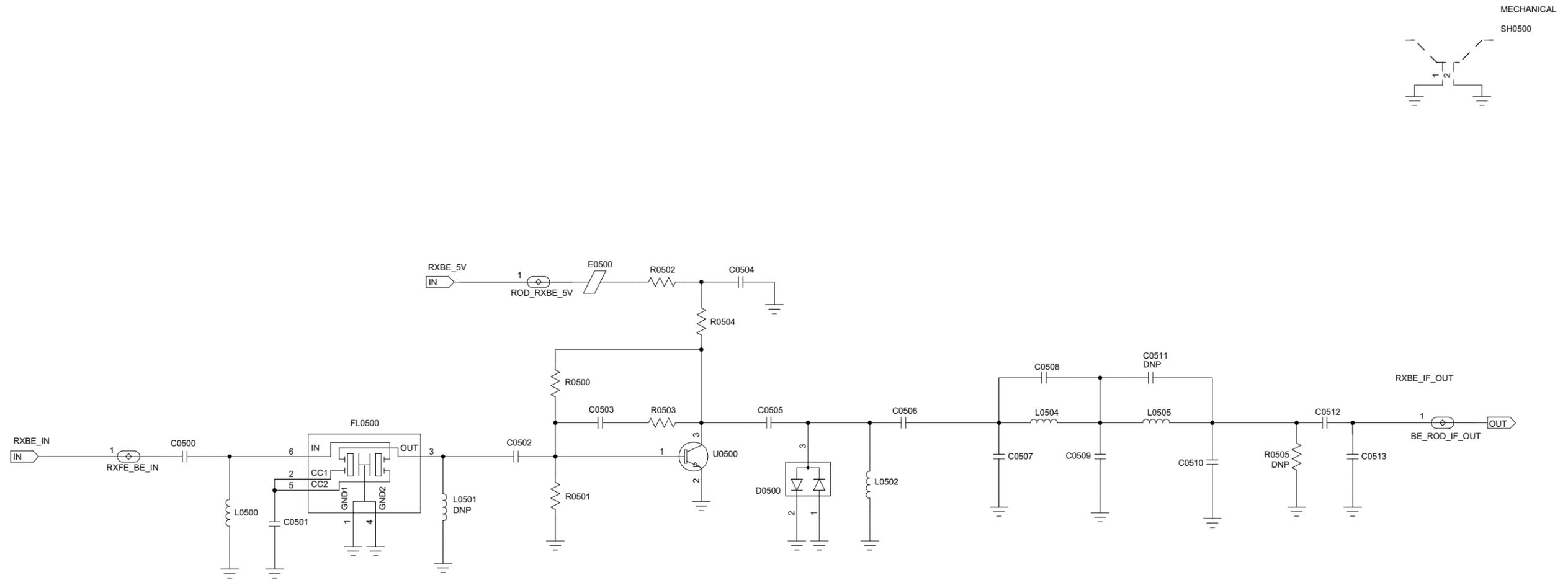


RFIC:	0000 - 0199
VCO:	0200 - 0399
RXFE:	0400 - 0499
RXBE:	0500 - 0699
TX:	0700 - 0999
MICRO_PROCESSOR:	1000 - 2999
PM_AUDIO_DIGITAL:	3000 - 3999
PERIPHERALS:	4000 - 4999
OPTION_BOARD:	5000 - 5999
CONTROL_HEAD:	6000 - 6999
BT_GPS:	7000 - 8999
CONNECTORS:	9000 - 9999 (RESERVE)

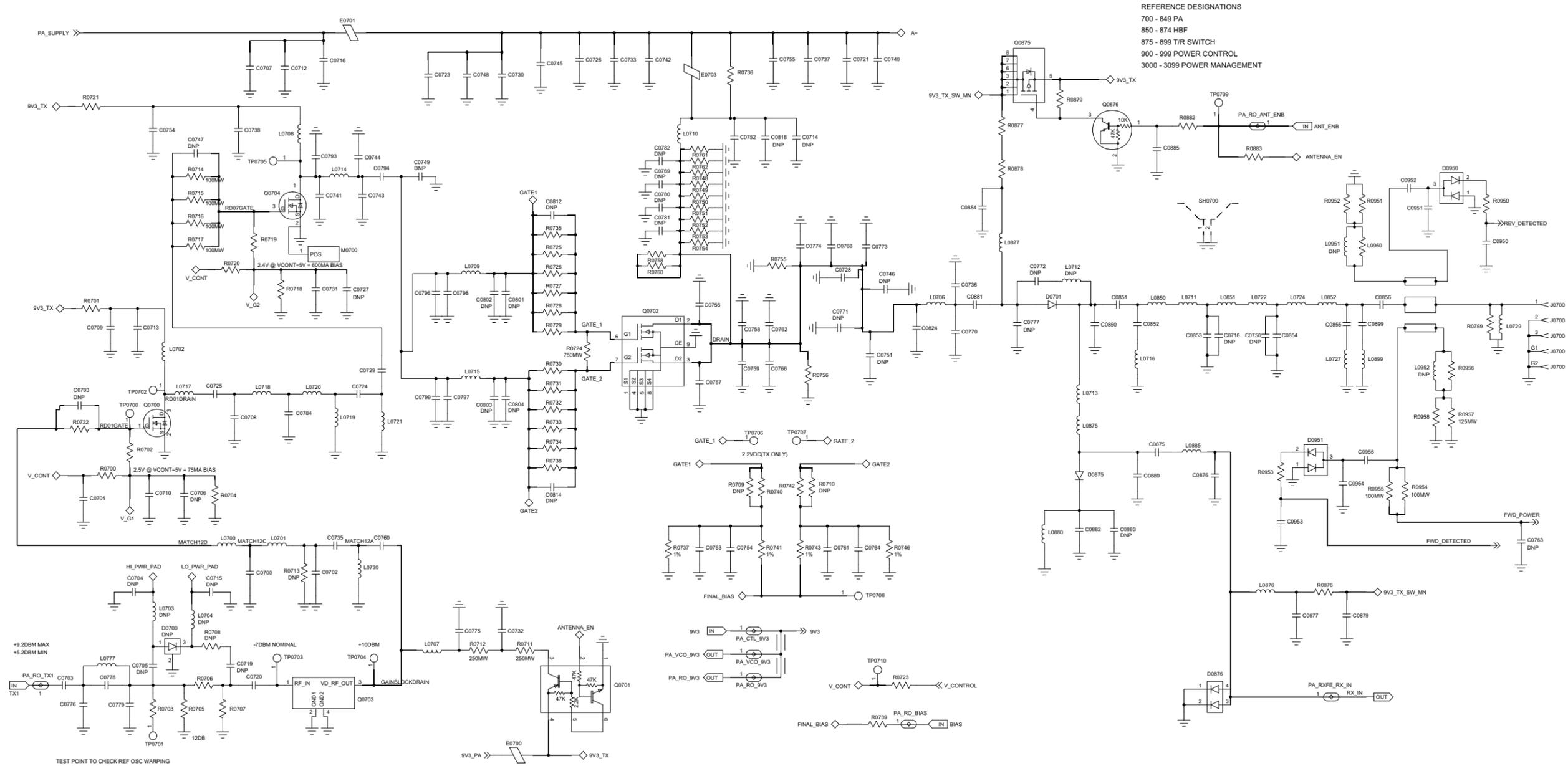


VHF (136–174 MHz) 25–45W Overall Schematic Diagram

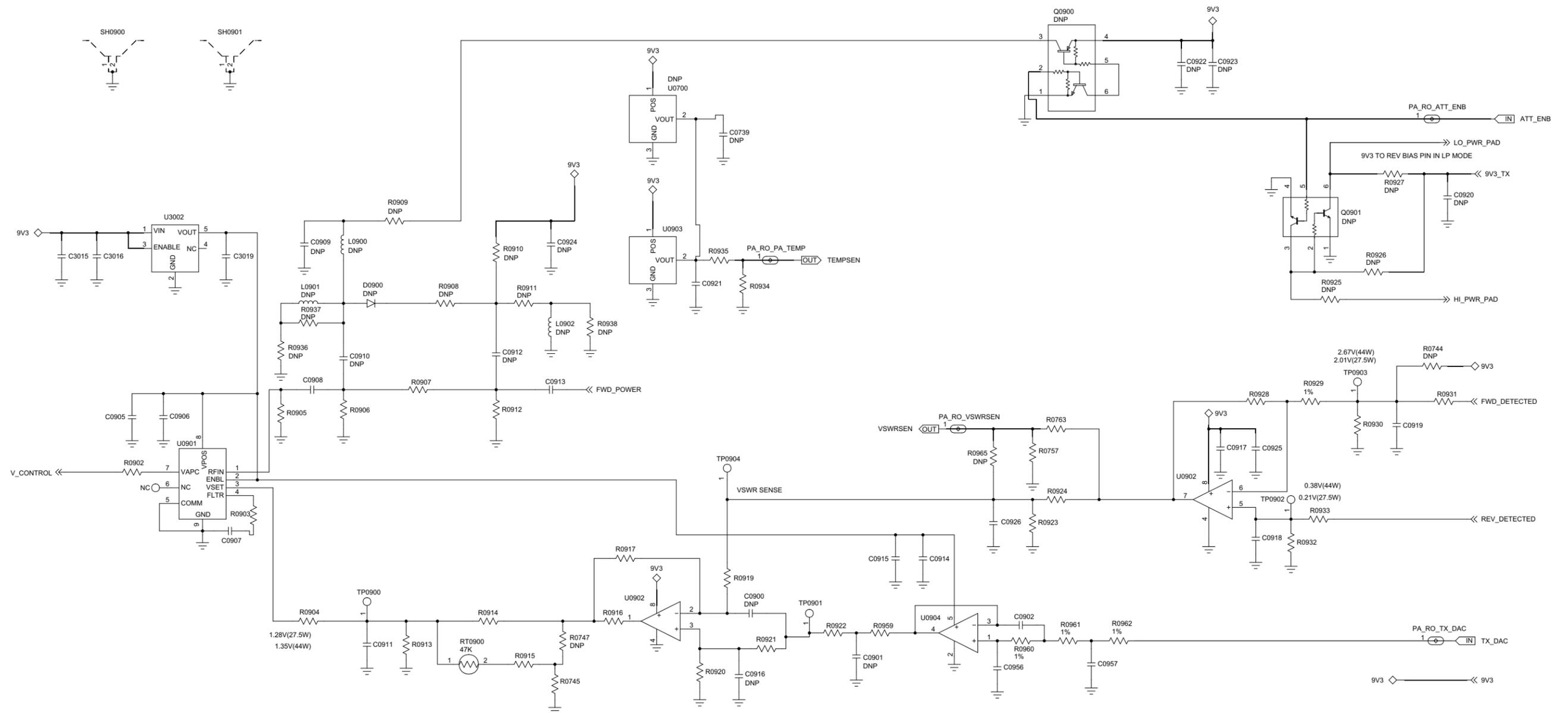




VHF (136–174 MHz) 25–45W Receiver IF Amp Schematic Diagram

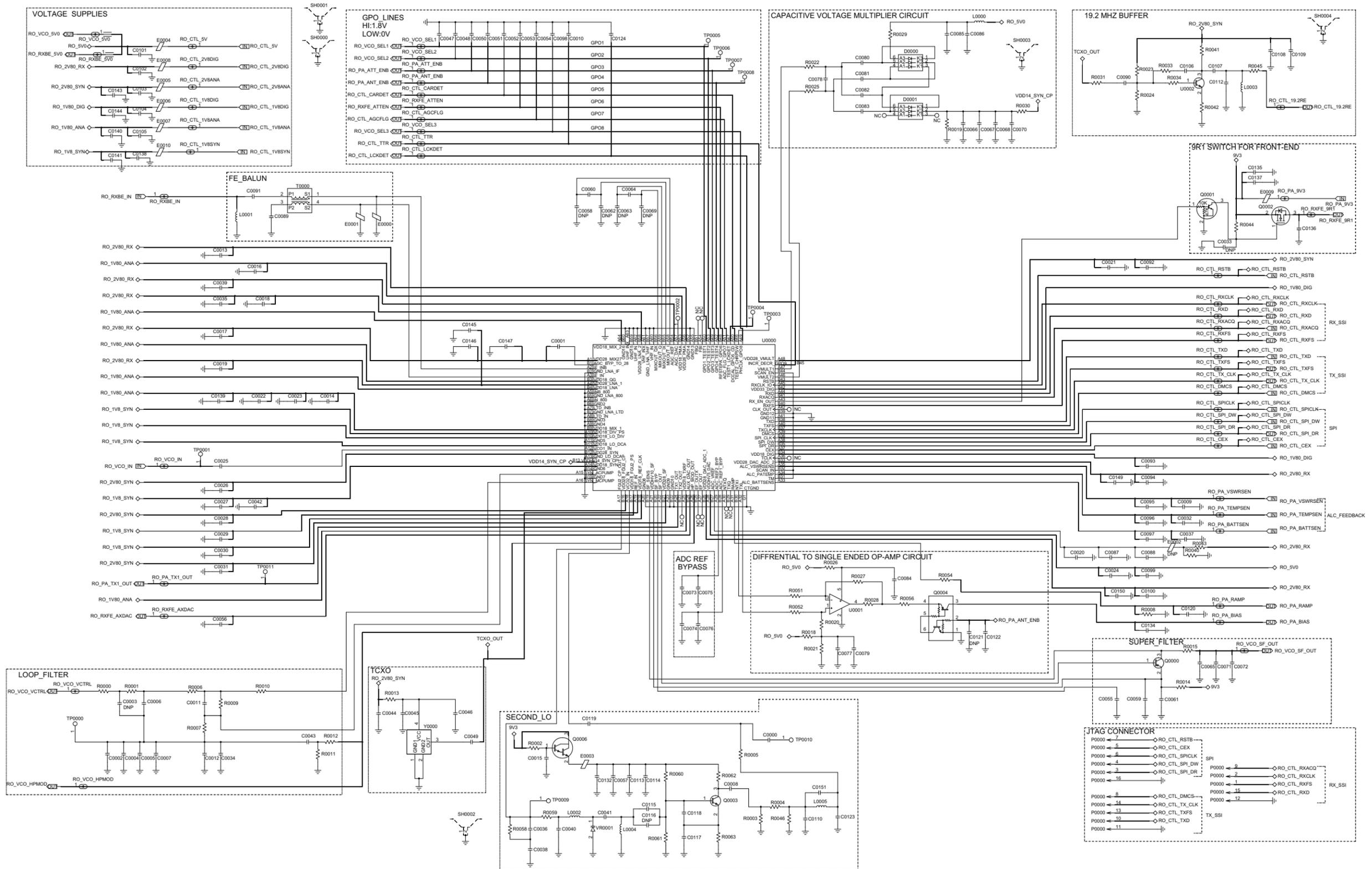


VHF (136–174 MHz) 25–45W Transmitter Power Amplifier Schematic Diagram

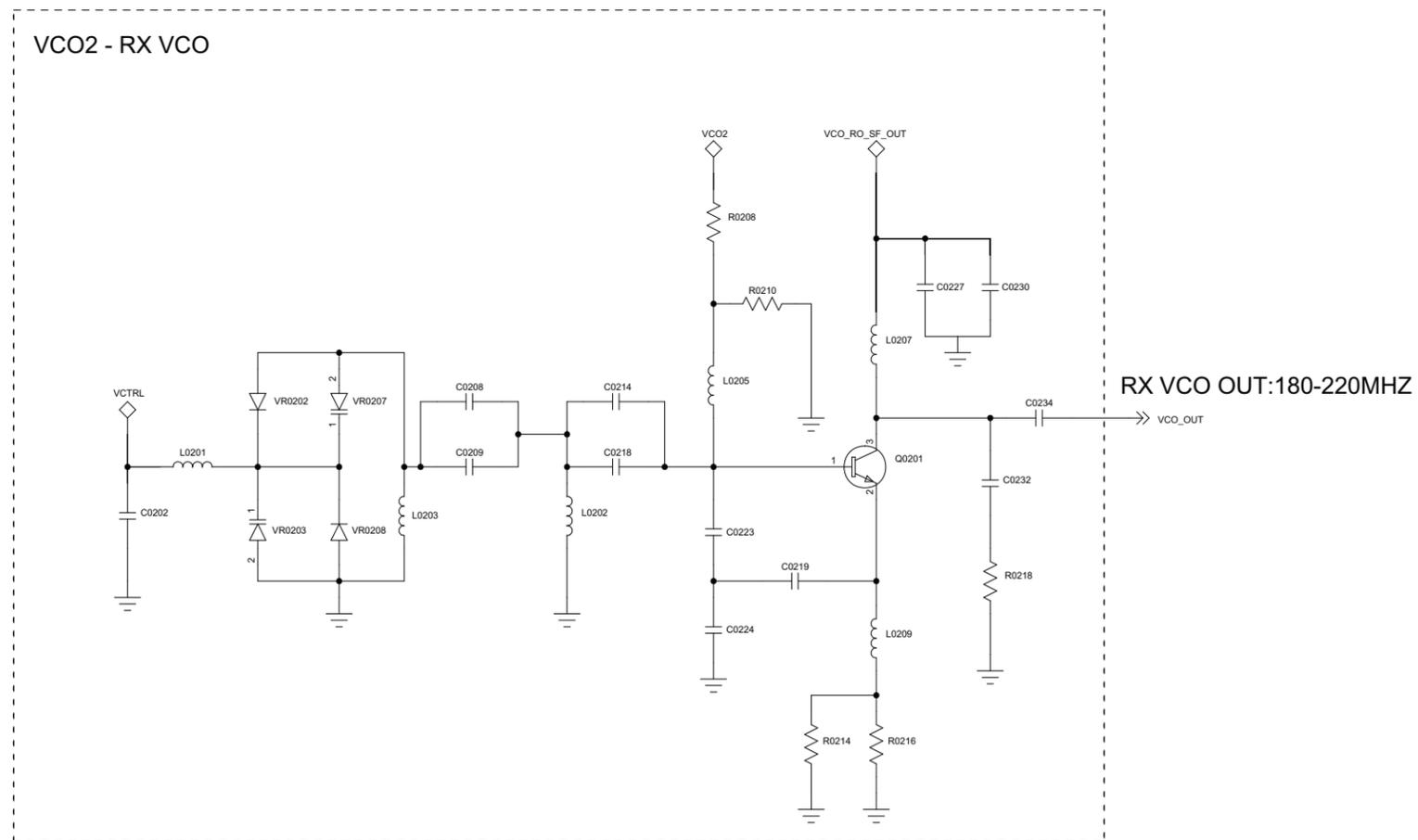
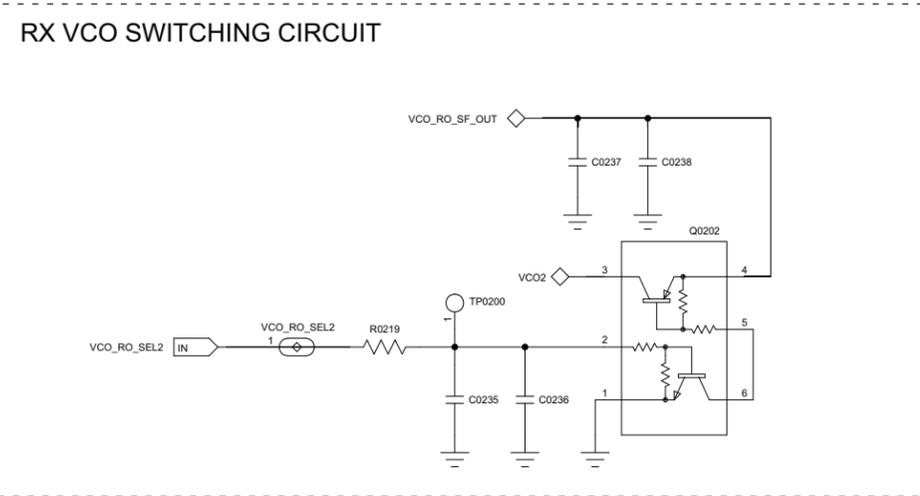


VHF (136–174 MHz) 25–45W Power Control Schematic Diagram





VHF (136–174 MHz) 25–45W RFIC Schematic Diagram



**VHF (136–174 MHz) 25–45W Receiver VCO Schematic Diagram**







Circuit Ref.	Motorola Part No.										
C0729M6	2113944C51	C0782M6	NOT PLACED	C0918M6	21667009174	C1041M1	2113945B02	C3046M6	21667009174	C3154M1	2113955D13
C0730M6	2113945L49	C0783M6	NOT PLACED	C0919M6	21667009174	C1042M1	2113945Y02	C3047M6	21667009174	C3155M1	2113945Y02
C0731M6	21667009174	C0784M6	2113944C85	C0920M6	NOT PLACED	C1043M1	2113956B54	C3048M6	21667009174	C3156M1	2113945Y02
C0732M6	2113945A09	C0793M6	21667007048	C0921M6	2113944C51	C1044M1	2113945B02	C3049M6	21667009174	C3157M1	2113945Y02
C0733M6	2113944C45	C0794M6	2113944F07	C0922M6	NOT PLACED	C1045M1	2113945B02	C3102M1	21009337414	C3160M1	2113945Y02
C0734M6	2113944C51	C0796M6	21667007035	C0923M6	NOT PLACED	C1047M1	2113945Y02	C3103M1	21667009166	C3161M1	NOT PLACED
C0735M6	2113944C33	C0797M6	21667007035	C0924M6	NOT PLACED	C1048M1	2113945B02	C3104M1	2113946F08	C3171M1	2113946D07
C0736M6	2111078B18	C0798M6	21667007035	C0925M6	2113946B04	C2000M1	2113945Y02	C3105M1	2113946J04	C3173M1	2113946D07
C0737M6	2113944C04	C0799M6	21667007035	C0926M6	2113944C02	C2001M1	2113945Y02	C3106M1	2113945C31	C3175M1	2113946A01
C0738M6	2113944C46	C0801M6	NOT PLACED	C0950M6	2113944C51	C2002M1	2113945B02	C3107M1	2113944C38	C3176M1	2113944C48
C0739M6	NOT PLACED	C0802M6	NOT PLACED	C0951M6	2113944C30	C2003M1	21667009162	C3109M1	21667009166	C3177M1	2113946F08
C0740M6	2113945C25	C0803M6	NOT PLACED	C0952M6	2113944C51	C2004M1	2113956B54	C3110M1	2113944C06	C3200M1	21667009166
C0741M6	21667007049	C0804M6	NOT PLACED	C0953M6	2113944C51	C2005M1	2113946D05	C3111M1	2113946J04	C3201M1	21667009166
C0742M6	2113944C30	C0812M6	NOT PLACED	C0954M6	2113944C81	C2006M1	2113945Y02	C3112M1	2113945Y02	C3203M1	2113955D37
C0743M6	2113944F67	C0814M6	NOT PLACED	C0955M6	2113944C51	C2007M1	2113945Y02	C3113M1	2113946S35	C3204M1	2113955D37
C0744M6	2113944F02	C0818M6	NOT PLACED	C0956M6	2113944C01	C2008M1	2113945B02	C3115M1	2113944C06	C3205M1	21667009166
C0745M6	21009337414	C0824M6	2111078B11	C0957M6	2113944C49	C2009M1	21667009162	C3116M1	2113955D13	C3206M1	21667009166
C0746M6	NOT PLACED	C0850M6	2111078B25	C1000M1	2113945Y02	C2010M1	2113945Y02	C3117M1	2113955D13	C3208M1	2113956C37
C0747M6	NOT PLACED	C0851M6	2111078B44	C1001M1	2113945Y02	C2011M1	2113945Y02	C3118M1	2113945Y02	C3209M1	2113945Y02
C0748M6	2113945C31	C0852M6	2111078B11	C1002M1	2113946K03	C2012M1	2113945Y02	C3119M1	2113945Y02	C3210M1	2113945Y02
C0749M6	NOT PLACED	C0853M6	2111078B34	C1003M1	2113945Y02	C2013M1	2113945Y02	C3120M1	2113956E60	C3211M1	2113945A11
C0750M6	NOT PLACED	C0854M6	2111078B34	C1004M1	2113945Y02	C2014M1	2113945B02	C3121M1	2113956D58	C3212M1	2113955D37
C0751M6	NOT PLACED	C0855M6	2111078B11	C1005M1	2113945Y02	C2015M1	21667009162	C3122M1	2113956A51	C3213M1	2113945A03
C0752M6	2111078B59	C0856M6	2111078B49	C1006M1	2113945Y02	C2016M1	2113956B54	C3123M1	2113956A51	C3214M1	2113955D37
C0753M6	2113944C51	C0875M6	2113944C47	C1007M1	2113945Y02	C2020M1	2113956B54	C3124M1	2113946D07	C3215M1	2113956F49
C0754M6	2113944C45	C0876M6	2113944C32	C1008M1	2113946D05	C2021M1	2113956D59	C3125M1	2113946D05	C3216M1	2113945Y02
C0755M6	2113944C36	C0877M6	2113944C06	C1009M1	2113945Y02	C2022M1	2113956D59	C3126M1	2113944C06	C3217M1	2113956B91
C0756M6	2111078B39	C0879M6	2113944C06	C1010M1	2113945Y02	C3000M6	2113944C38	C3127M1	2113946S35	C3218M1	2113956A51
C0757M6	2111078B39	C0880M6	2113944C35	C1011M1	2113945B02	C3001M6	2113944C06	C3128M1	2113946D05	C3219M1	2113956A51
C0758M6	2111078B42	C0881M6	2111078B27	C1012M1	2113945Y02	C3002M6	2113944C06	C3129M1	2113945Y02	C3220M1	2113946F05
C0759M6	2111078B42	C0882M6	2111078B57	C1013M1	2113945Y02	C3003M6	2113945C31	C3130M1	2113946D05	C3221M1	2113945Y02
C0760M6	2113944C79	C0883M6	NOT PLACED	C1014M1	2113945Y02	C3004M6	2113945C02	C3131M1	2113946A02	C3222M1	2113956A51
C0761M6	2113944C45	C0884M6	2113944F05	C1015M1	2113945B02	C3005M6	2113945C02	C3132M1	2113946D05	C3223M1	2113945Y02
C0762M6	2111078B34	C0885M6	2113944C51	C1016M1	21667009166	C3008M6	2113944C51	C3133M1	2113946D05	C3224M1	2113946F05
C0763M6	NOT PLACED	C0899M6	2111078B04	C1017M1	21667009162	C3009M6	2113945C31	C3134M1	2113946S35	C3225M1	2113945Y02
C0764M6	2113944C51	C0900M6	NOT PLACED	C1018M1	21667009162	C3010M6	2113944C46	C3135M1	2113956A51	C3226M1	NOT PLACED
C0766M6	2111078B34	C0901M6	NOT PLACED	C1019M1	21667009162	C3011M6	2113945G53	C3136M1	21012095001	C3227M1	2113946F05
C0768M6	2111078B38	C0902M6	2113944C51	C1020M1	21667009162	C3012M6	2113946J04	C3137M1	2113946D05	C3228M1	2113945Y02
C0769M6	NOT PLACED	C0905M6	2113945C31	C1021M1	2113945Y02	C3013M6	2113945C31	C3139M1	2113956A51	C3229M1	2113956A51
C0770M6	2111078B18	C0906M6	2113945A10	C1022M1	2113945Y02	C3014M6	21009337414	C3140M1	21012095001	C3230M1	2113945Y02
C0771M6	NOT PLACED	C0907M6	2113945L41	C1023M1	2113945Y02	C3015M6	2113946G01	C3141M1	2113945Y02	C3231M1	2113945Y02
C0772M6	NOT PLACED	C0908M6	21667009174	C1024M1	2113945Y02	C3016M6	2113945C31	C3142M1	21012102001	C3232M1	2113945Y02
C0773M6	2111078B39	C0909M6	NOT PLACED	C1025M1	2113945Y02	C3019M6	2113946S35	C3143M1	21667009366	C3233M1	2113945A09
C0774M6	2111078B36	C0910M6	NOT PLACED	C1026M1	2113945Y02	C3020M6	2113945C26	C3144M1	2113945Y02	C3234M1	2113945Y02
C0775M6	2113944C06	C0911M6	2113944C02	C1027M1	NOT PLACED	C3021M6	2113944C06	C3145M1	2113944C06	C3235M1	21012102001
C0776M6	2113944C31	C0912M6	NOT PLACED	C1028M1	2113945Y02	C3022M6	2113945A10	C3146M1	21012102001	C3236M1	2113945C31
C0777M6	NOT PLACED	C0913M6	21667009174	C1029M1	2113956B54	C3029M6	NOT PLACED	C3149M1	2113956A51	C3237M1	21009337414
C0778M6	21667011432	C0914M6	21667009174	C1032M1	2113956B54	C3038M6	21667009169	C3150M1	2113956C37	C3238M1	2113945A09
C0779M6	2113944C31	C0915M6	2113946B04	C1035M1	2113945B02	C3041M6	21667009169	C3151M1	2113945B02	C3239M1	2113945A09
C0780M6	NOT PLACED	C0916M6	NOT PLACED	C1036M1	2113946D05	C3042M6	21667009169	C3152M1	2113944C06	C3240M1	2113956B91
C0781M6	NOT PLACED	C0917M6	21667009174	C1040M1	2113945Y02	C3044M6	21667009169	C3153M1	2113946J04	C3241M1	2113956B91

Circuit Ref.	Motorola Part No.										
C3242M1	2113945C31	C4203M1	21667009166	C4417M1	21667009166	E3100M1	24012102001	L0004M2	24009343004	L0701M6	24667008020
C3243M1	2113955D37	C4204M1	NOT PLACED	C4418M1	21667009166	E3101M1	2485410Y02	L0005M2	24667008021	L0702M6	24667008028
C3244M1	2113956B91	C4205M1	21667009166	C4419M1	21667009166	E3102M1	2485410Y02	L0200M7	24667000031	L0703M6	NOT PLACED
C3245M1	2113955D37	C4206M1	21667009166	D0000M2	4815011H01	E3103M1	2485410Y02	L0201M7	24667000031	L0704M6	NOT PLACED
C3246M1	2113945C31	C4207M1	21667009166	D0001M2	4815011H01	E3104M1	7686949J22	L0202M7	2416077H14	L0706M6	2485873L01
C3247M1	2113945Y02	C4208M1	21667009166	D0400M4	4884800Y03	E3105M1	7686949J22	L0203M7	24009344123	L0707M6	24667008031
C3248M1	2113945Y02	C4209M1	21667009166	D0401M4	4813974A19	E3106M1	7686949J22	L0204M7	24667005040	L0708M6	2479990G01
C3249M1	2113956B91	C4210M1	21667009166	D0402M4	4813974A19	E3107M1	7686949J22	L0205M7	24667000031	L0709M6	2460591A01
C3250M1	2113956B91	C4211M1	21667009166	D0403M4	4884800Y03	E3108M1	7686949J22	L0206M7	24667005040	L0710M6	2485873L01
C4000M1	2113945Y02	C4212M1	21667009166	D0404M4	4815090H01	E3109M1	7686949J22	L0207M7	24667000031	L0711M6	2485873L02
C4001M1	2113945Y02	C4213M1	21667009166	D0500M3	4813974A19	E3110M1	7686949J22	L0208M7	24667000031	L0712M6	NOT PLACED
C4002M1	2113945Y02	C4214M1	21667009166	D0700M6	NOT PLACED	E3111M1	7686949J22	L0209M7	24667000031	L0713M6	2485873L02
C4003M1	2113945Y02	C4218M1	21667009166	D0701M6	48012160001	E3113M1	7686949J22	L0210M7	24009342045	L0714M6	2460591A01
C4010M1	21667009166	C4219M1	21667009339	D0875M6	48012160001	E3200M1	24012102001	L0211M7	2414015C11	L0715M6	2460591A01
C4011M1	21667009166	C4220M1	21667009339	D0876M6	4886622Y06	E3201M1	24012102001	L0300M7	24667008018	L0716M6	2415385H02
C4012M1	21667009166	C4221M1	21667009339	D0900M6	NOT PLACED	E3202M1	24012107027	L0301M7	24667008031	L0717M6	24667008016
C4013M1	21667009166	C4222M1	21667009339	D0950M6	4813974A21	E3203M1	24012102001	L0302M7	24667008031	L0718M6	24667008020
C4014M1	21667009166	C4223M1	21667009339	D0951M6	4813974A21	E3204M1	24012102001	L0303M7	24667008013	L0719M6	24667008019
C4015M1	21667009166	C4224M1	21667009166	D3000M6	4813978P07	E4000M1	24012107027	L0304M7	24667008019	L0720M6	24667008016
C4019M1	21667009166	C4225M1	21667009166	D3104M1	4885489Y01	E4001M1	7688697V05	L0305M7	24667008016	L0721M6	24667008014
C4020M1	21667009166	C4226M1	21667009339	D3160M1	4813978C02	E4002M1	24012107027	L0306M7	24667008025	L0722M6	2485873L01
C4021M1	21667009166	C4300M1	NOT PLACED	D3161M1	4813978C02	E4003M1	NOT PLACED	L0307M7	24667008031	L0724M6	2485873L01
C4022M1	21667009166	C4301M1	NOT PLACED	E0000M2	24012107027	E4004M1	24012102001	L0308M7	24667008024	L0727M6	2415385H07
C4023M1	21667009166	C4302M1	NOT PLACED	E0001M2	24012107027	E4005M1	2485410Y02	L0401M4	24009343017	L0729M6	2414032B60
C4025M1	21667009166	C4303M1	NOT PLACED	E0002M2	NOT PLACED	E4100M1	7686949J14	L0402M4	24009344115	L0730M6	24667008021
C4026M1	21667009166	C4304M1	21667009166	E0003M2	24012107027	E4101M1	24012107027	L0403M4	24667000031	L0777M6	24667008020
C4027M1	21667009166	C4305M1	21667009376	E0004M2	24012107027	E4102M1	NOT PLACED	L0404M4	24009344114	L0850M6	2485873L01
C4028M1	21667009166	C4306M1	21667009381	E0005M2	24012107027	E4103M1	NOT PLACED	L0405M4	24009344127	L0851M6	2485873L02
C4029M1	21667009166	C4307M1	NOT PLACED	E0006M2	24012107027	E4104M1	NOT PLACED	L0406M4	24009343017	L0852M6	2485873L02
C4030M1	21667009166	C4308M1	NOT PLACED	E0007M2	24012107027	E4200M1	24012107027	L0407M4	24009343017	L0875M6	2485873L01
C4100M1	21667009166	C4309M1	21667009166	E0008M2	24012107027	E4201M1	24012107027	L0408M4	24667000031	L0876M6	24667008031
C4101M1	21667009166	C4310M1	21667009166	E0009M2	24012107027	E4202M1	24012107027	L0409M4	24667000031	L0877M6	24009343030
C4103M1	21667009166	C4311M1	2113945Y02	E0010M2	24012107027	E4300M1	24012107027	L0410M4	24009344127	L0880M6	24009343030
C4104M1	21667009166	C4312M1	2113945Y02	E0300M7	24012107027	E4405M1	24012107027	L0411M4	24009343017	L0885M6	2414032B49
C4105M1	21667009166	C4313M1	21667009166	E0301M7	24012107027	E4406M1	7686949J22	L0414M4	24009344113	L0899M6	2416077H16
C4106M1	21667009166	C4314M1	NOT PLACED	E0401M4	24012107027	E4407M1	7686949J22	L0415M4	24009344114	L0900M6	NOT PLACED
C4107M1	21667009166	C4401M1	NOT PLACED	E0402M4	24012107027	E4408M1	24012107027	L0416M4	NOT PLACED	L0901M6	NOT PLACED
C4108M1	21667009166	C4402M1	NOT PLACED	E0403M4	24012107027	E4409M1	24012102001	L0417M4	24009344115	L0902M6	NOT PLACED
C4109M1	21667009166	C4403M1	NOT PLACED	E0404M4	24012107027	F4000M1	65012019001	L0418M4	NOT PLACED	L0950M6	0613952G67
C4110M1	21667009166	C4404M1	NOT PLACED	E0500M3	24012107027	FL0500M3	9180022M11	L0421M4	24009344115	L0951M6	NOT PLACED
C4112M1	21667009166	C4405M1	NOT PLACED	E0700M6	24012102001	FL4000M1	24012038001	L0424M4	24009344115	L0952M6	NOT PLACED
C4113M1	21667009166	C4406M1	NOT PLACED	E0701M6	24012102001	FL4001M1	24012038001	L0428M4	24009344113	L3100M1	24012091002
C4114M1	21667009166	C4407M1	NOT PLACED	E0703M6	24012102001	J4000M1	0915767H01	L0434M4	24667008028	M0700M6	2686201B02
C4115M1	21667009166	C4408M1	NOT PLACED	E1000M1	7686949J15	J4001M1	0915556H01	L0462M4	24667000031	P0000M2	NOT PLACED
C4116M1	21667009166	C4409M1	NOT PLACED	E1001M1	7686949J15	J4100M1	0916017H01	L0463M4	24667000031	P1000M1	2887818K02
C4117M1	21667009166	C4410M1	NOT PLACED	E1002M1	7686949J15	J4200M1	09012053001	L0500M3	24667005045	P3000M6	09009344001
C4118M1	21667009166	C4411M1	NOT PLACED	E1003M1	7686949J15	J4400M1	09012053001	L0501M3	NOT PLACED	Q0000M2	4813973A13
C4119M1	21667009166	C4412M1	21667009166	E1004M1	7686949J15	L0000M2	24012154001	L0502M3	24667000031	Q0001M2	48009494001
C4200M1	2113945Y02	C4413M1	21667009166	E1005M1	7686949J15	L0001M2	24667008031	L0504M3	24667000031	Q0002M2	4813970A59
C4201M1	2113945Y02	C4414M1	21667009166	E1006M1	7685268E01	L0002M2	24667000031	L0505M3	24667000031	Q0003M2	48012195001
C4202M1	21667009166	C4415M1	21667009166	E3000M6	24012102001	L0003M2	24667008031	L0700M6	24667008024	Q0004M2	4815272H01

Circuit Ref.	Motorola Part No.										
Q0006M2	4813973A04	Q4002M1	4809939C47	R0054M2	0613952M25	R0410M4	0613952R01	R0707M6	0613952H47	R0758M6	0613958J49
Q0200M7	48012195001	Q4100M1	4816023H01	R0056M2	0613952R66	R0411M4	0613952R01	R0708M6	NOT PLACED	R0759M6	0613959H12
Q0201M7	48012195001	Q4101M1	4815261H01	R0058M2	0613952Q81	R0412M4	0613952Q75	R0709M6	NOT PLACED	R0760M6	0613958J49
Q0202M7	4815272H01	Q4102M1	4815263H01	R0059M2	0613952R66	R0413M4	0613958H44	R0710M6	NOT PLACED	R0761M6	0613958J49
Q0206M7	4815272H01	Q4103M1	48012271001	R0060M2	0613952Q86	R0414M4	NOT PLACED	R0711M6	0613958S49	R0762M6	0613958J49
Q0300M7	4802197J95	Q4105M1	48012271001	R0061M2	0613952Q85	R0415M4	0613952Q75	R0712M6	0613958S49	R0763M6	0613952P01
Q0301M7	48009494001	Q4106M1	48012271001	R0062M2	0613952Q61	R0416M4	0613952Q69	R0713M6	NOT PLACED	R0876M6	0613958S73
Q0302M7	48009494001	Q4109M1	48012271001	R0063M2	0613952Q64	R0417M4	0613952Q75	R0714M6	0613952H35	R0877M6	0613959Y37
Q0400M4	4815271H01	Q4112M1	48012271001	R0200M7	0613952R66	R0418M4	0613952Q69	R0715M6	0613952H35	R0878M6	0613959Y37
Q0401M4	4815267H01	Q4120M1	4809939C47	R0201M7	0613952R66	R0419M4	0613952Q69	R0716M6	0613952H35	R0879M6	0613952J25
Q0402M4	48012230001	R0000M2	0613952R66	R0202M7	0613952R27	R0420M4	0613952R25	R0717M6	0613952H35	R0882M6	0613952G67
Q0403M4	4815270H01	R0001M2	0613952R66	R0205M7	0613952R07	R0421M4	0613952R25	R0718M6	0613952H96	R0883M6	0613952G67
Q0404M4	4815271H01	R0002M2	0613952Q96	R0206M7	0613952R05	R0422M4	0613952Q53	R0719M6	0613952H89	R0902M6	0613952R66
Q0405M4	48012230001	R0003M2	0613952Q57	R0207M7	0613952Q86	R0423M4	0613952R25	R0720M6	0613952J01	R0903M6	0613952N01
Q0700M6	4816547H01	R0004M2	0613952Q34	R0208M7	0613952Q78	R0424M4	0613952Q39	R0721M6	0613952G67	R0904M6	0613952R66
Q0701M6	4816013H01	R0005M2	0613952R66	R0209M7	0613952Q85	R0425M4	0613952Q53	R0722M6	0613952H25	R0905M6	0613952H42
Q0702M6	48012022001	R0006M2	0613952Q25	R0210M7	0613952Q73	R0426M4	0613952Q87	R0723M6	0613952G67	R0906M6	0613958H46
Q0703M6	4802246J29	R0007M2	0613952Q51	R0211M7	0613952Q18	R0427M4	0613952Q87	R0724M6	0613959Q53	R0907M6	0613958H55
Q0704M6	4816548H01	R0008M2	0613952R01	R0213M7	0613952Q67	R0429M4	0613952R66	R0725M6	0613958S29	R0908M6	NOT PLACED
Q0875M6	4813970A62	R0009M2	0613952Q58	R0214M7	0613952Q67	R0430M4	NOT PLACED	R0726M6	0613958S29	R0909M6	NOT PLACED
Q0876M6	48009494001	R0010M2	0613952R66	R0215M7	0613952Q67	R0431M4	0613952R01	R0727M6	0613958S29	R0910M6	NOT PLACED
Q0900M6	NOT PLACED	R0011M2	0613952Q35	R0216M7	0613952Q67	R0432M4	0613952H75	R0728M6	0613958S29	R0911M6	NOT PLACED
Q0901M6	NOT PLACED	R0012M2	0613952Q81	R0217M7	0613952Q49	R0433M4	0613952R01	R0729M6	0613958S29	R0912M6	0613958H46
Q1000M1	4815263H01	R0013M2	0613952Q35	R0218M7	0613952Q49	R0434M4	0613952L46	R0730M6	0613958S29	R0913M6	0613952M51
Q1001M1	4815272H01	R0014M2	0613952R66	R0219M7	0613952R66	R0435M4	0613952L46	R0731M6	0613958S29	R0914M6	0613952M71
Q1002M1	4815261H01	R0015M2	0613952R66	R0233M7	0613952R66	R0437M4	0613952Q80	R0732M6	0613958S29	R0915M6	0613952Z76
Q1004M1	4815261H01	R0018M2	0613952Q80	R0300M7	0613952Q66	R0438M4	0613952Q25	R0733M6	0613958S29	R0916M6	0613952R66
Q1005M1	4815261H01	R0019M2	0613952R01	R0301M7	0613952Q25	R0439M4	0613952Q69	R0734M6	0613958S29	R0917M6	0613952P01
Q3000M6	0105959T72	R0020M2	0613952R12	R0302M7	0613952Q66	R0440M4	0613958H25	R0735M6	0613958S29	R0919M6	0613952P01
Q3001M6	0105959T72	R0021M2	0613952Q80	R0303M7	0613952Q94	R0441M4	0613958H44	R0736M6	0613959Q25	R0920M6	0613952N01
Q3002M6	4813973B01	R0022M2	0613952R66	R0304M7	0613952Q89	R0442M4	0613952Q83	R0737M6	0613952F01	R0921M6	0613952N01
Q3100M1	4815272H01	R0023M2	0613952Q83	R0305M7	0613952Q32	R0443M4	0613952Q46	R0738M6	0613958S29	R0922M6	0613952R66
Q3101M1	4809939C47	R0024M2	0613952Q80	R0306M7	0613952Q49	R0444M4	0613952K25	R0739M6	0613952H73	R0923M6	0613952M43
Q3102M1	4809939C47	R0025M2	0613952R66	R0307M7	0613952H46	R0445M4	0613952Q75	R0740M6	0613952H73	R0924M6	0613952N01
Q3103M1	48009494001	R0026M2	0613952R66	R0308M7	0613952Q49	R0446M4	NOT PLACED	R0741M6	0613952E66	R0925M6	NOT PLACED
Q3105M1	4809939C47	R0027M2	0613952R12	R0309M7	0613952Q42	R0447M4	0613952R66	R0742M6	0613952H73	R0926M6	NOT PLACED
Q3160M1	48009494001	R0028M2	0613952R66	R0310M7	0613952Q39	R0448M4	0613952Q25	R0743M6	0613952E66	R0927M6	NOT PLACED
Q3161M1	4815272H01	R0029M2	0613952Q25	R0311M7	0613952R66	R0465M4	0613952R66	R0744M6	NOT PLACED	R0928M6	0613952P30
Q3162M1	4813973M07	R0030M2	0613952R66	R0312M7	NOT PLACED	R0500M3	0613952R08	R0745M6	0613952R66	R0929M6	0613952N81
Q3163M1	48009494001	R0031M2	0613952R66	R0313M7	0613952Q73	R0501M3	0613952R03	R0746M6	0613952F01	R0930M6	0613952N51
Q3200M1	4815270H01	R0033M2	0613952R01	R0314M7	0613952Q73	R0502M3	0613952Q81	R0747M6	NOT PLACED	R0931M6	0613952Z26
Q3201M1	4815272H01	R0034M2	0613952Q57	R0400M4	0613952R01	R0503M3	0613952Q87	R0748M6	0613958J49	R0932M6	0613952Z60
Q3202M1	4815270H01	R0040M2	0613952Q70	R0401M4	0613952H81	R0504M3	0613952Q61	R0749M6	0613958J49	R0933M6	0613952Z50
Q3203M1	4815270H01	R0041M2	0613952Q58	R0402M4	0613952R25	R0505M3	NOT PLACED	R0750M6	0613958J49	R0934M6	0613952J17
Q3204M1	4815270H01	R0042M2	0613952Q42	R0403M4	0613952R01	R0700M6	0613952J01	R0751M6	0613958J49	R0935M6	0613952H91
Q3205M1	4815270H01	R0043M2	0613952Q73	R0404M4	0613952R25	R0701M6	0613952G67	R0752M6	0613958J49	R0936M6	NOT PLACED
Q3206M1	4815270H01	R0044M2	0613952R25	R0405M4	0613952R05	R0702M6	0613952H49	R0753M6	0613958J49	R0937M6	NOT PLACED
Q3207M1	4815270H01	R0045M2	0613952R66	R0406M4	0613952Q91	R0703M6	0613952J01	R0754M6	0613958J49	R0938M6	NOT PLACED
Q3208M1	4815263H01	R0046M2	0613952Q57	R0407M4	0613952Q91	R0704M6	0613952J01	R0755M6	0613959H12	R0950M6	0613952G67
Q4000M1	4809939C47	R0051M2	0613952R01	R0408M4	0613952Q73	R0705M6	0613952H47	R0756M6	0613959H12	R0951M6	0613958H55
Q4001M1	4809939C47	R0052M2	0613952R01	R0409M4	0613952R66	R0706M6	0613952H48	R0757M6	0613952N43	R0952M6	0613958H53

Circuit Ref.	Motorola Part No.										
R0953M6	0613952G67	R1044M1	0613952M66	R2002M1	0613952M66	R3130M1	0613952R25	R3182M1	0613952R66	R3250M1	0613952R66
R0954M6	0613952H39	R1045M1	0613952M66	R2003M1	0613952M30	R3131M1	0613952R01	R3183M1	0613952H92	R3251M1	0613952R66
R0955M6	0613952H39	R1046M1	0613952M66	R3000M6	0613952H60	R3132M1	0613952R01	R3184M1	0613952M30	R3252M1	0613952R66
R0956M6	0613952G67	R1047M1	0613952R66	R3001M6	0615871H01	R3133M1	0613952R29	R3200M1	0613952C44	R3253M1	0613952R66
R0957M6	0613958H55	R1048M1	0613952R66	R3002M6	0615871H01	R3134M1	NOT PLACED	R3201M1	0613952Q49	R3254M1	0613952R01
R0958M6	0613958H53	R1049M1	0613952Q73	R3003M6	0615871H01	R3135M1	0613952R66	R3202M1	0613952C44	R3255M1	0613952R66
R0959M6	0613952R66	R1050M1	0613952Q73	R3004M6	0615871H01	R3136M1	0613952R17	R3203M1	0613952Q49	R3256M1	0613952M66
R0960M6	0613952N58	R1051M1	0613952K68	R3005M6	0613952H25	R3137M1	0613952R17	R3204M1	0613952C44	R3257M1	0613952R01
R0961M6	0613952N58	R1052M1	NOT PLACED	R3006M6	0613952H25	R3138M1	0613952R17	R3205M1	0613952C44	R3258M1	0613952M66
R0962M6	0613952N58	R1053M1	0613952R66	R3007M6	0613952M30	R3139M1	0613952R66	R3206M1	0613952R01	R3259M1	0613952M66
R0965M6	NOT PLACED	R1054M1	0613952M66	R3008M6	0613952G67	R3140M1	0613952Q91	R3207M1	0613952R01	R3260M1	0613952M66
R1000M1	0613952R66	R1056M1	0613952Q73	R3009M6	0613952M43	R3141M1	0613959Y13	R3208M1	0613952N30	R3261M1	0613952R01
R1001M1	0613952M66	R1057M1	0613952Q73	R3010M6	0613952G67	R3142M1	NOT PLACED	R3209M1	0613952R03	R3262M1	0613952R10
R1002M1	0613952R66	R1058M1	0613952M66	R3011M6	0613959Q60	R3143M1	0613952Q91	R3210M1	0613952Q67	R3263M1	NOT PLACED
R1003M1	0613952R66	R1059M1	0613952R66	R3012M6	0613959Q60	R3144M1	0613952R66	R3211M1	0613952N30	R3264M1	0613952R01
R1004M1	0613952R66	R1060M1	0613952R66	R3013M6	0613952R01	R3145M1	0613959Y09	R3212M1	0613952R03	R3265M1	0613952M66
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R1007M1	0613952R66	R1062M1	NOT PLACED	R3015M6	0615871H01	R3147M1	0613952M43	R3214M1	0613952J25	R3267M1	NOT PLACED
R1008M1	0613952R66	R1063M1	NOT PLACED	R3018M6	0613952H73	R3148M1	0613952R66	R3215M1	0613952R01	R3268M1	0613952R01
R1009M1	0613952R66	R1064M1	NOT PLACED	R3019M6	0613952H60	R3149M1	0613952R01	R3216M1	0613952R17	R3269M1	0613952M66
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R1012M1	0613952R66	R1067M1	0613952M66	R3101M1	0613952Z66	R3153M1	0613952R66	R3219M1	NOT PLACED	R3272M1	0613952R01
R1013M1	0613952M66	R1068M1	0613952R32	R3102M1	0613952M66	R3154M1	0613952Q89	R3220M1	0613952R01	R3273M1	0613952M66
R1014M1	NOT PLACED	R1069M1	NOT PLACED	R3103M1	0613952N62	R3155M1	0613952Q89	R3221M1	NOT PLACED	R3274M1	0613952R10
R1016M1	NOT PLACED	R1070M1	0613952Q77	R3104M1	0613952M30	R3156M1	0613952R17	R3222M1	0613952R01	R3275M1	0613952R10
R1018M1	NOT PLACED	R1071M1	0613952Q77	R3105M1	0613952R01	R3157M1	0613952R01	R3223M1	0613952R66	R3276M1	0613952R10
R1019M1	0613952R66	R1072M1	0613952Q49	R3106M1	0613952M09	R3158M1	0613952R66	R3224M1	NOT PLACED	R3277M1	0613952R10
R1020M1	0613952M66	R1073M1	0613952R01	R3107M1	0613952M85	R3159M1	0613952R01	R3225M1	NOT PLACED	R3278M1	0613952R01
R1021M1	0613952Q73	R1074M1	0613952R66	R3108M1	0613952R17	R3160M1	0613952Q89	R3226M1	0613952R01	R3279M1	NOT PLACED
R1022M1	NOT PLACED	R1075M1	0613952R66	R3109M1	0613952R17	R3161M1	0613952Q73	R3229M1	0613952R01	R3280M1	NOT PLACED
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R1024M1	NOT PLACED	R1077M1	0613952R66	R3111M1	0613952R32	R3163M1	0613952R01	R3231M1	0613952R10	R3282M1	0613952R66
R1025M1	0613952Q73	R1078M1	0613952R66	R3112M1	0613952P12	R3164M1	0613952Q75	R3232M1	0613952R10	R3283M1	0613952R66
R1026M1	0613952R66	R1079M1	0613952R66	R3113M1	0613952R17	R3165M1	0613952R01	R3233M1	0613952R01	R3285M1	0613952R01
R1027M1	NOT PLACED	R1080M1	0613952Q32	R3114M1	0613952N01	R3166M1	0613952R17	R3234M1	NOT PLACED	R3286M1	0613952R66
R1028M1	0613952R66	R1081M1	0613952Q32	R3115M1	0613952Z63	R3167M1	0613952R01	R3235M1	0613952R01	R3287M1	0613952R66
R1029M1	0613952R66	R1082M1	0613952Q32	R3116M1	0613952E83	R3168M1	0613952Q73	R3236M1	0613952R10	R3288M1	0613952R01
R1030M1	NOT PLACED	R1084M1	0613952R66	R3117M1	0613952Q73	R3169M1	0613952R01	R3237M1	NOT PLACED	R3289M1	0613952R01
R1031M1	0613952R66	R1088M1	NOT PLACED	R3118M1	0613952R10	R3170M1	0613952R01	R3238M1	0613952R01	R3290M1	NOT PLACED
R1033M1	0613952Q73	R1089M1	0613952R05	R3119M1	0613952Q73	R3171M1	NOT PLACED	R3239M1	0613952Q49	R3291M1	NOT PLACED
R1034M1	0613952R17	R1090M1	0613952R05	R3120M1	0613952R66	R3172M1	NOT PLACED	R3240M1	0613952R01	R3292M1	0613952R66
R1035M1	NOT PLACED	R1091M1	NOT PLACED	R3121M1	0613952R66	R3173M1	0613952R66	R3241M1	0613952M54	R3293M1	0613952R66
R1036M1	0613952M66	R1092M1	0613952M43	R3122M1	0613952M43	R3174M1	0613952R66	R3242M1	0613952R01	R4001M1	0613952R66
R1037M1	0613952M66	R1093M1	0613952Q73	R3123M1	0613952M54	R3175M1	0689774Y02	R3243M1	0613952R01	R4003M1	0613952R66
R1038M1	0613952R66	R1094M1	0613952M66	R3124M1	0613952R66	R3176M1	0689774Y02	R3244M1	0613952R10	R4006M1	0613952Q37
R1039M1	0613952R66	R1095M1	0613952Q34	R3125M1	0613952R66	R3177M1	0613952R66	R3245M1	NOT PLACED	R4007M1	0613952Q37
R1040M1	0613952M66	R1096M1	0613952Q34	R3126M1	0613952R66	R3178M1	0615871H01	R3246M1	0613952R01	R4008M1	0613952R01
R1041M1	0613952R66	R1097M1	0613952R66	R3127M1	0613959Y09	R3179M1	0613952R17	R3247M1	0613952Q49	R4010M1	0613952R01
R1042M1	0613952M66	R1098M1	0613952R66	R3128M1	0613952M10	R3180M1	0613952R01	R3248M1	0613952R66	R4013M1	0613952Q42
R1043M1	0613952R66	R2000M1	0613952M66	R3129M1	0613952M58	R3181M1	NOT PLACED	R3249M1	0613952R66	R4015M1	0613952Q37

Circuit Ref.	Motorola Part No.
R4021M1	0613952R66
R4024M1	0613952R01
R4025M1	0613952R01
R4026M1	0613952R66
R4027M1	0613952R66
R4028M1	0613952R01
R4029M1	0613952R01
R4030M1	0613952R01
R4031M1	0613952R01
R4032M1	0613952R66
R4033M1	0613952M43
R4034M1	0613952M43
R4035M1	0613952R66
R4036M1	0613952R66
R4037M1	0613952R01
R4038M1	0613952R01
R4039M1	NOT PLACED
R4040M1	NOT PLACED
R4041M1	NOT PLACED
R4100M1	0613952R01
R4101M1	0613952Q77
R4102M1	0613958H83
R4103M1	0613952Q85
R4104M1	0613952Q89
R4105M1	0613952Q89
R4106M1	0613952Q89
R4107M1	0613952R01
R4108M1	0613952Q89
R4109M1	0613952N58
R4110M1	0613952Q85
R4111M1	0613952Q85
R4112M1	0613952R01
R4113M1	0613952R01
R4114M1	0613952Q89
R4115M1	0613952N58
R4116M1	0613952Q89
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R4118M1	0613952R01
R4119M1	0613952R01
R4120M1	0613952N58
R4121M1	0613952Q85
R4122M1	0613952Q85
R4123M1	0613952N58
R4124M1	0613952N58
R4125M1	0613952Q85
R4126M1	0613952Q85
R4127M1	0613952Q85
R4128M1	0613952R01
R4200M1	0613952R66
R4201M1	0613952R66
R4202M1	0613952R66

Circuit Ref.	Motorola Part No.
R4203M1	0613952R66
R4204M1	0613952R66
R4205M1	0613952R66
R4206M1	0613952R66
R4207M1	0613952R66
R4208M1	0613952R66
R4209M1	HZ000375A01
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R4212M1	HZ000375A01
R4213M1	HZ000375A01
R4214M1	HZ000375A01
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R4216M1	0613952R66
R4217M1	0613952R66
R4218M1	0613952R66
R4301M1	NOT PLACED
R4302M1	0613952R66
R4303M1	0613952R66
R4304M1	0613952R66
R4305M1	0613952R66
R4306M1	0613952R66
R4307M1	0613952R66
R4309M1	NOT PLACED
R4310M1	0613952R66
R4311M1	0613952R66
R4312M1	0613952R66
R4313M1	NOT PLACED
R4314M1	0613952R66
R4315M1	0613952R66
R4316M1	0613952R66
R4317M1	0613952R66
RT0900M6	0615585H01
SH0000M2	26012095001
SH0001M2	26012095001
SH0002M2	26012097001
SH0003M2	26012094001
SH0004M2	26012094001
SH0200M7	26012095001
SH0300M7	26012231001
SH0400M4	26012096001
SH0401M4	26012096001
SH0402M4	26012098001
SH0403M4	26012098001
SH0500M3	26012098001
SH0700M6	26012100001
SH0900M6	2686425Z02
SH0901M6	2686425Z02
SH3100M1	NOT PLACED
SP3000M6	NOT PLACED
SP3001M6	NOT PLACED

Circuit Ref.	Motorola Part No.
T0000M2	25012016001
T0400M4	2515121H01
T0401M4	2515121H01
U0000M2	51009877001
U0001M2	5109731C48
U0002M2	4802197J95
U0300M7	5186310Y39
U0500M3	4802197J95
U0700M6	NOT PLACED
U0901M6	5180390L83
U0902M6	51012221001
U0903M6	5115022H01
U0904M6	5109731C48
U1000M1	5171320H01
U1001M1	51012295001
U1002M1	5189139P01
U1003M1	5175772B56
U1004M1	5175772B56
U1005M1	5164852H47
U1006M1	5185493Y01
U1007M1	5189139P01
U1008M1	5189139P01
U1009M1	5115001H02
U1010M1	5171320H01
U2000M1	MM000157A01
U2001M1	MM000129A01
U3000M6	5116525H01
U3001M6	4813973M07
U3002M6	51012133001
U3100M1	0104039J08
U3101M1	5114014A01
U3102M1	51012069001
U3103M1	51012142001
U3104M1	5171590Y73
U3105M1	5114610F01
U3106M1	51012140001
U3107M1	51012140001
U3108M1	51012138001
U3109M1	5164015H94
U3110M1	51012208001
U3111M1	5188690V02
U3112M1	5114004A35
U3113M1	5188690V02
U3114M1	NOT PLACED
U3115M1	5185937Y01
U3200M1	51009415001
U3201M1	5114016A18
U3204M1	51009509001
U3205M1	5114016A18
U4000M1	51012082001
U4001M1	51012082001

Circuit Ref.	Motorola Part No.
U4100M1	5189139P01
U4200M1	NOT PLACED
U4201M1	NOT PLACED
U4300M1	51012082001
U4301M1	51012082001
VR0001M2	4815096H01
VR0200M7	48012260001
VR0201M7	4805656W87
VR0202M7	4815002H03
VR0203M7	4805656W87
VR0205M7	4805656W87
VR0206M7	48012260001
VR0207M7	4805656W87
VR0208M7	4815002H03
VR0209M7	4805656W87
VR0400M4	4805656W87
VR0401M4	4805656W87
VR0402M4	4805656W87
VR0403M4	4805656W87
VR0404M4	4805656W87
VR0405M4	4805656W87
VR0406M4	4805656W87
VR0407M4	4805656W87
VR3000M6	48012202001
VR3002M6	4813977M10
VR3103M1	48012095001
VR3104M1	48012095002
VR3105M1	4813977M10
VR3200M1	48012049001
VR3201M1	4813977A48
VR3202M1	4813977A48
VR4000M1	4813977M13
VR4001M1	4813977A48
VR4002M1	48012153001
VR4100M1	4813977A48
VR4101M1	4813977A48
VR4102M1	4813977A48
VR4103M1	4813977A48
VR4104M1	48012049001
VR4105M1	4813977M13
VR4106M1	4813977A48
VR4107M1	4813977A48
VR4108M1	4813977A48
VR4109M1	4813977A50
VR4110M1	4815040H01
VR4111M1	48012153001
Y0000M2	4875185M05

Note: The suffix "M1", "M2", etc. from the Circuit Ref is removed from the schematic and overlays.



# **XPR 5350e/XPR 5550e Mobile Radios**

Chapter 9

UHF1 (403–470 MHz)

1–25W

Service Information

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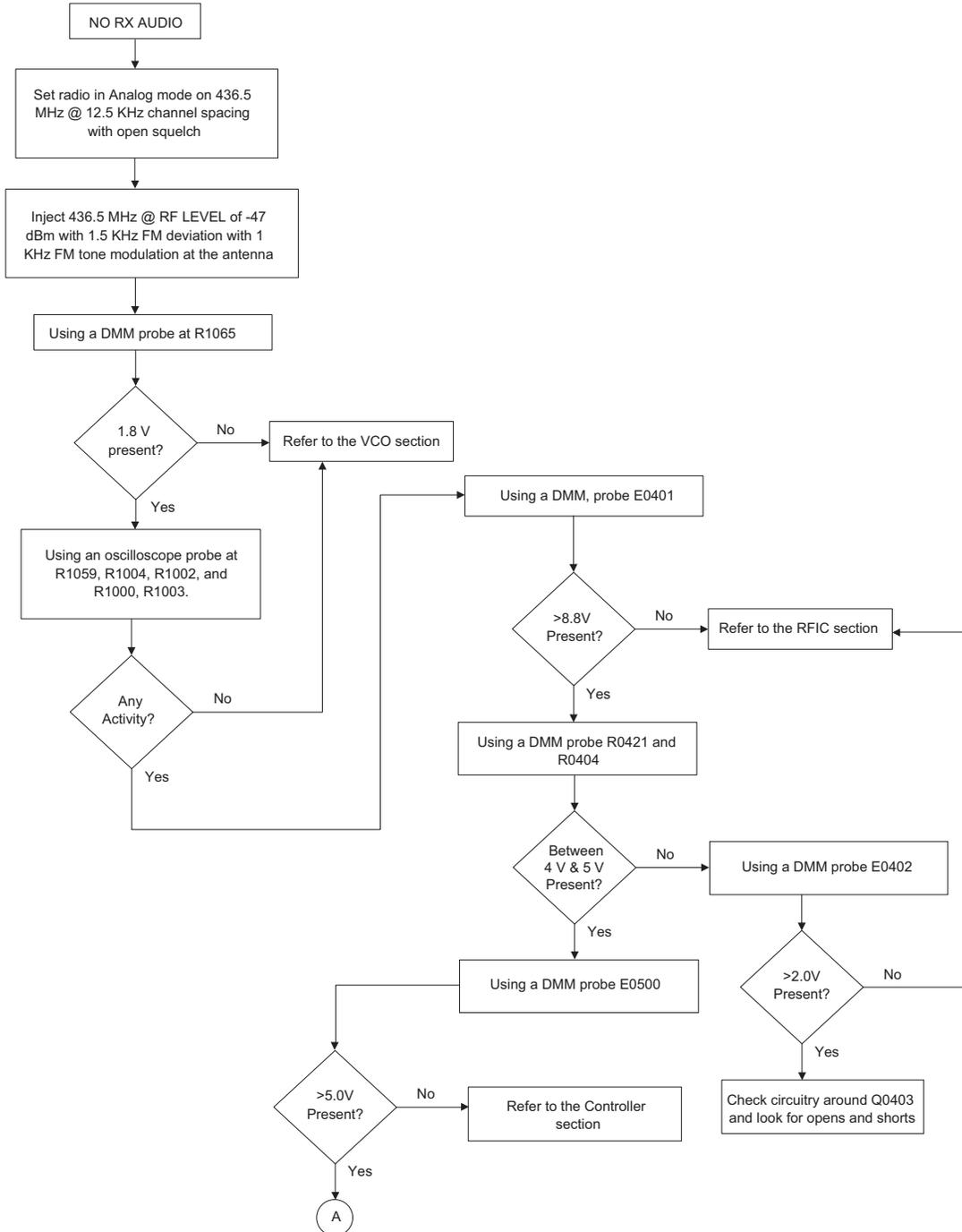
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## Notes

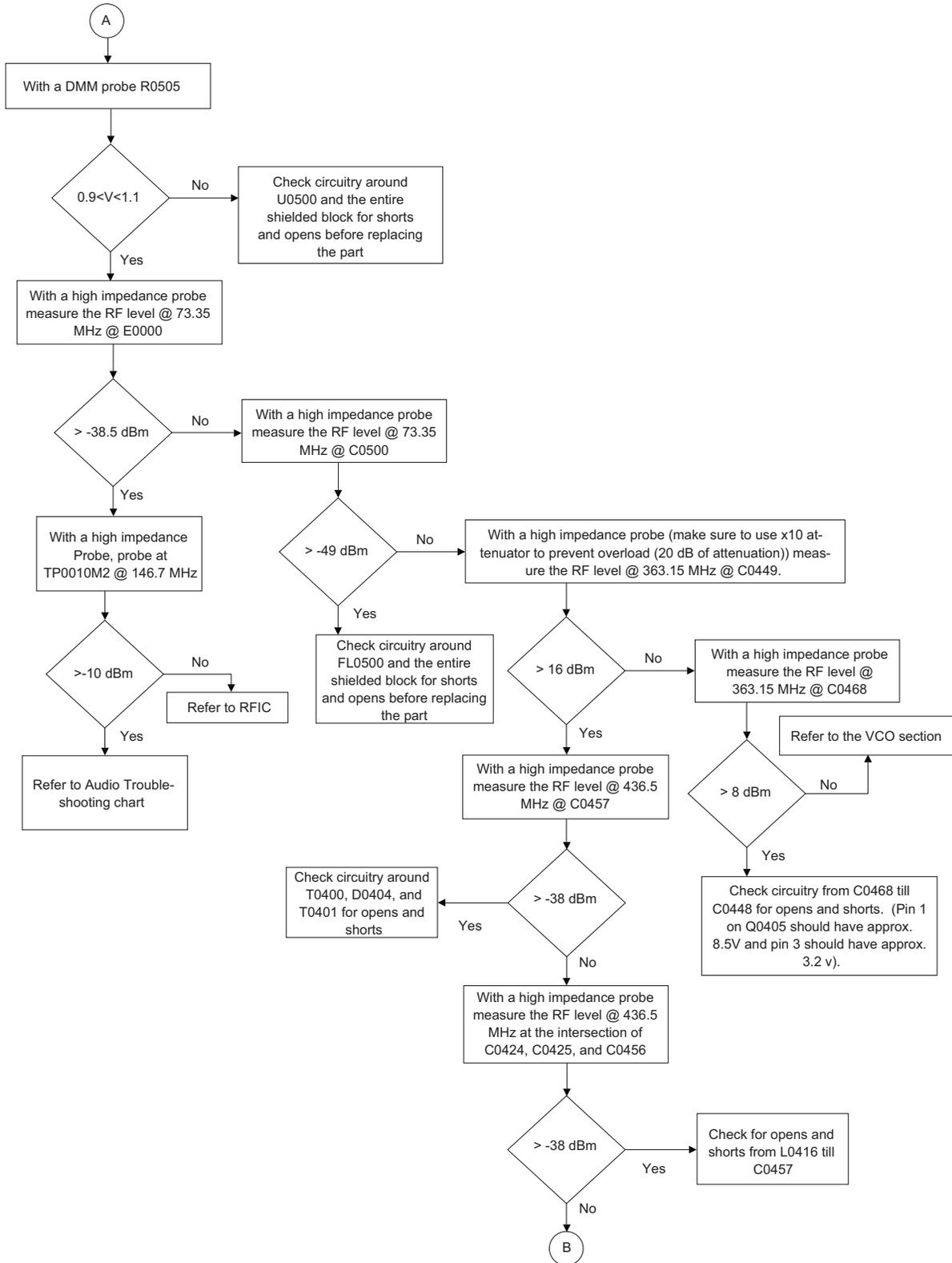
# Section 1

## TROUBLESHOOTING CHARTS

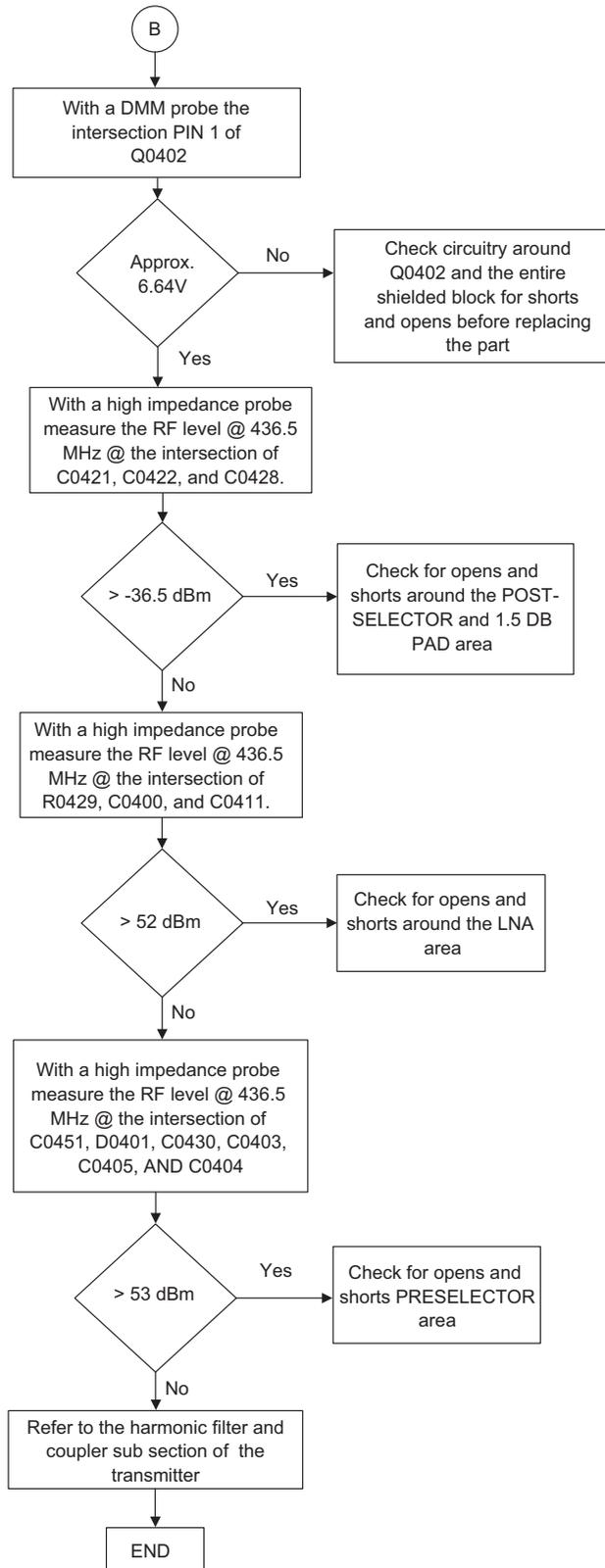
### 1.0 Troubleshooting Flow Chart for Receiver (Sheet 1 of 3)



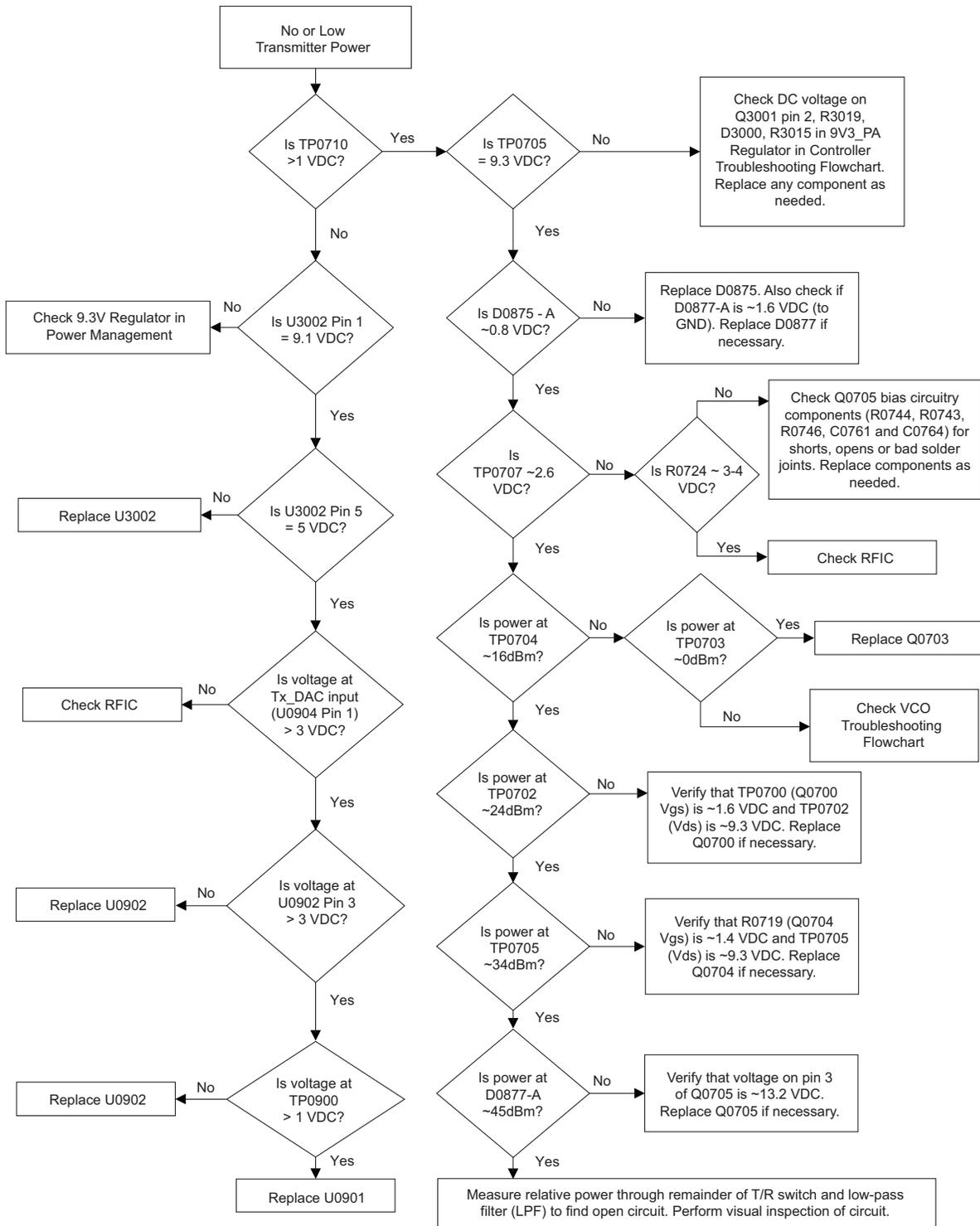
# 1.1 Troubleshooting Flow Chart for Receiver (Sheet 2 of 3)



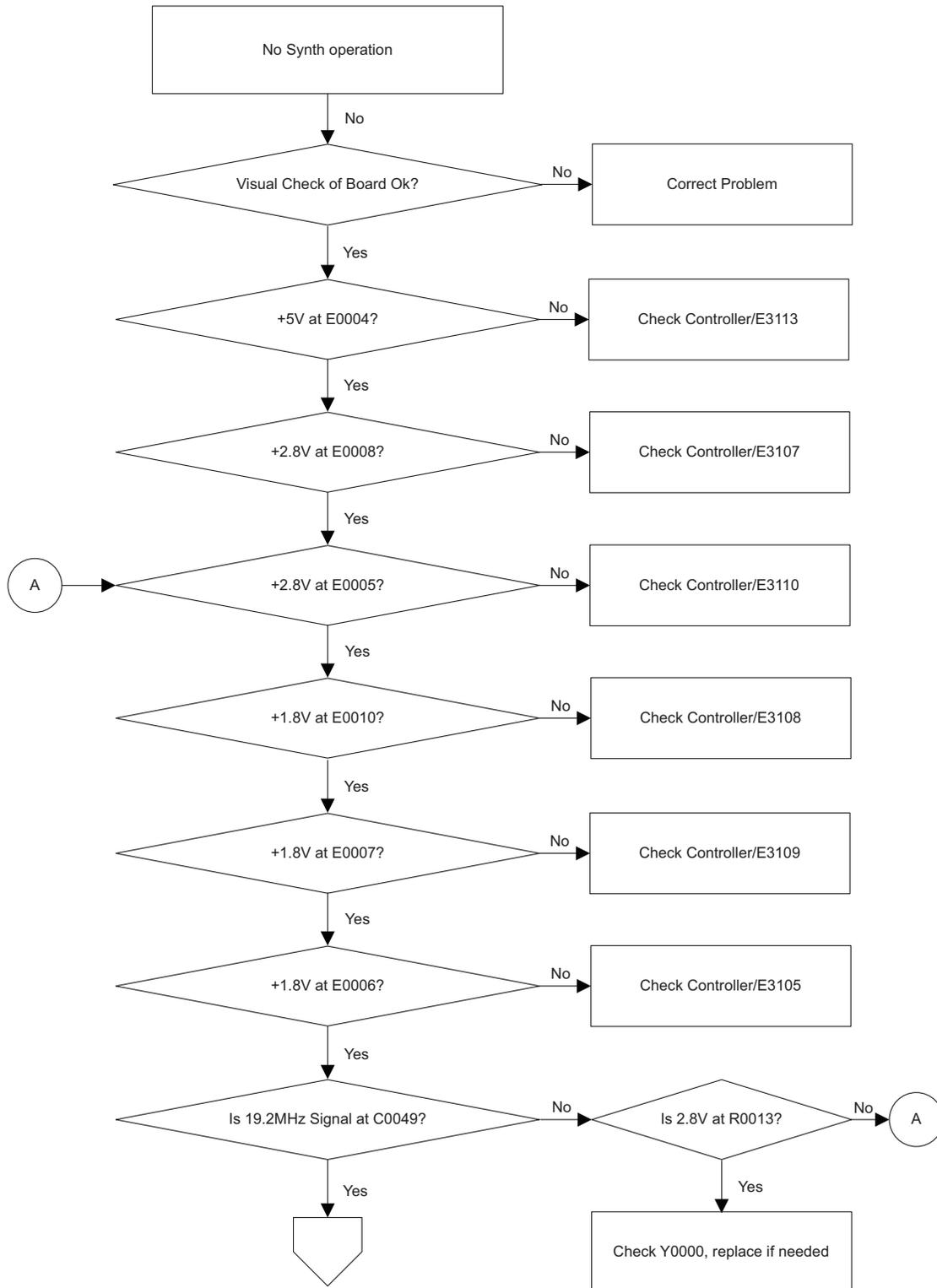
## 1.2 Troubleshooting Flow Chart for Receiver (Sheet 3 of 3)



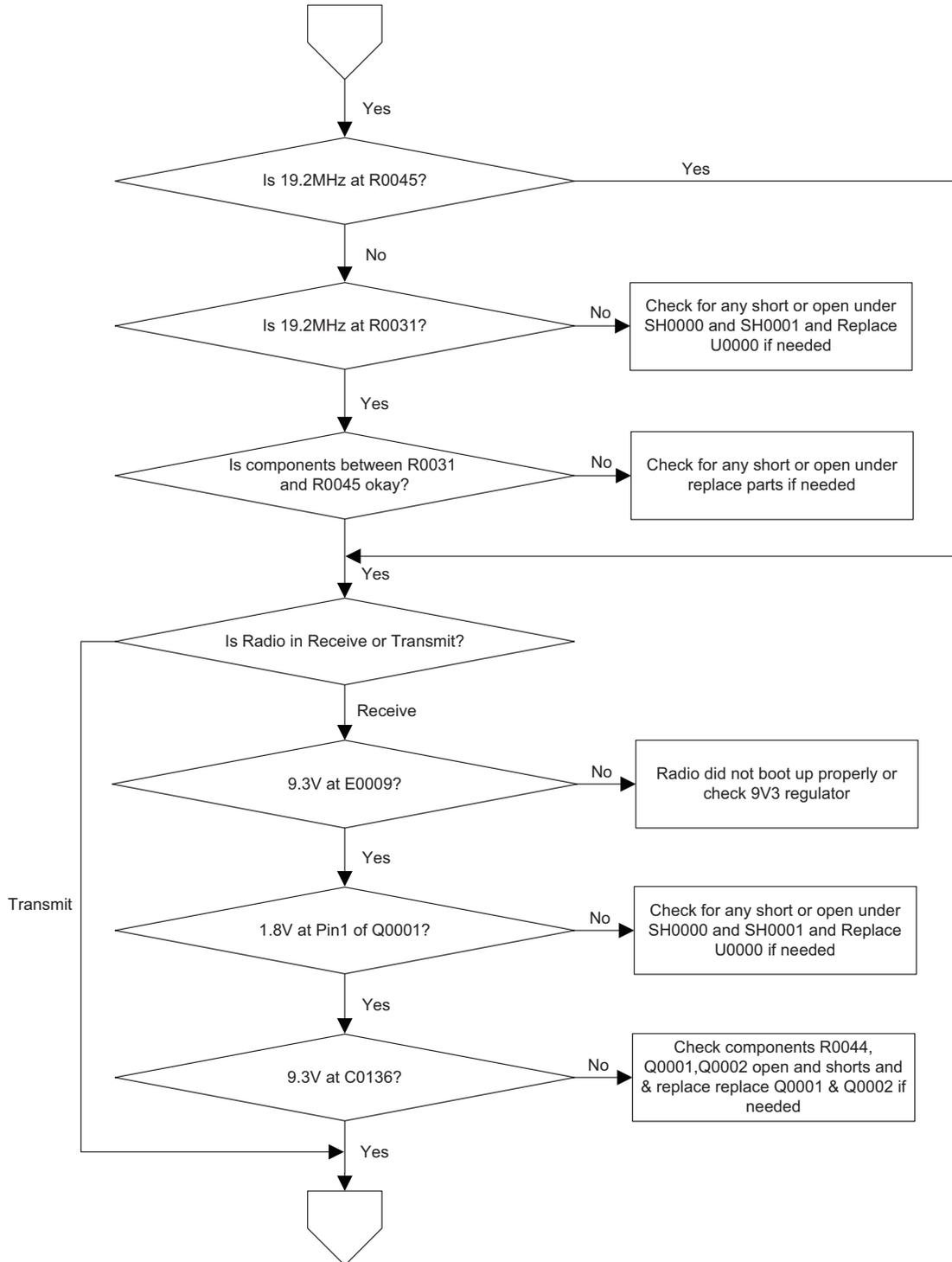
## 2.0 Troubleshooting Flow Chart for 25W Transmitter



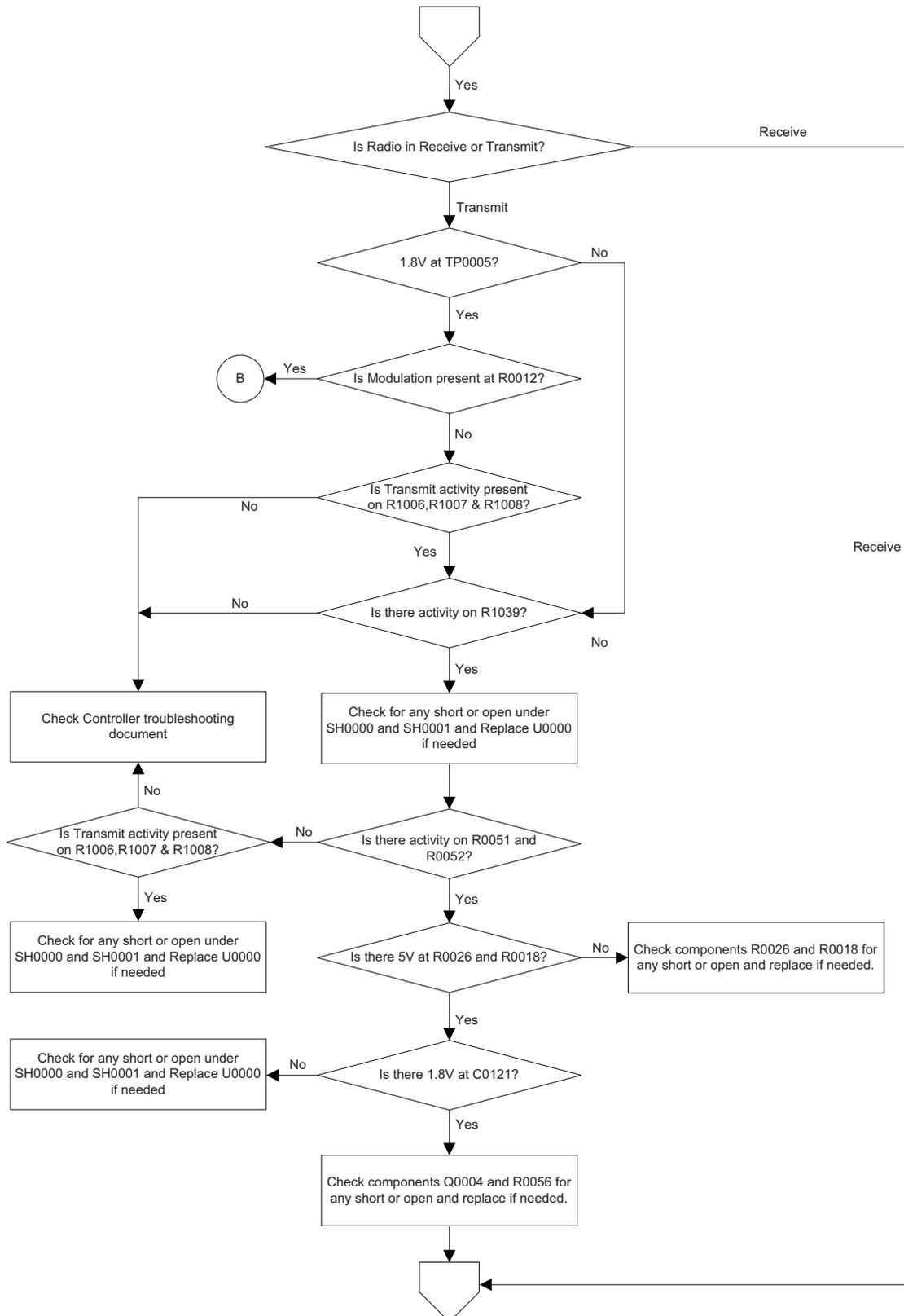
### 3.0 Troubleshooting Flow Chart for RFIC (Sheet 1 of 5)



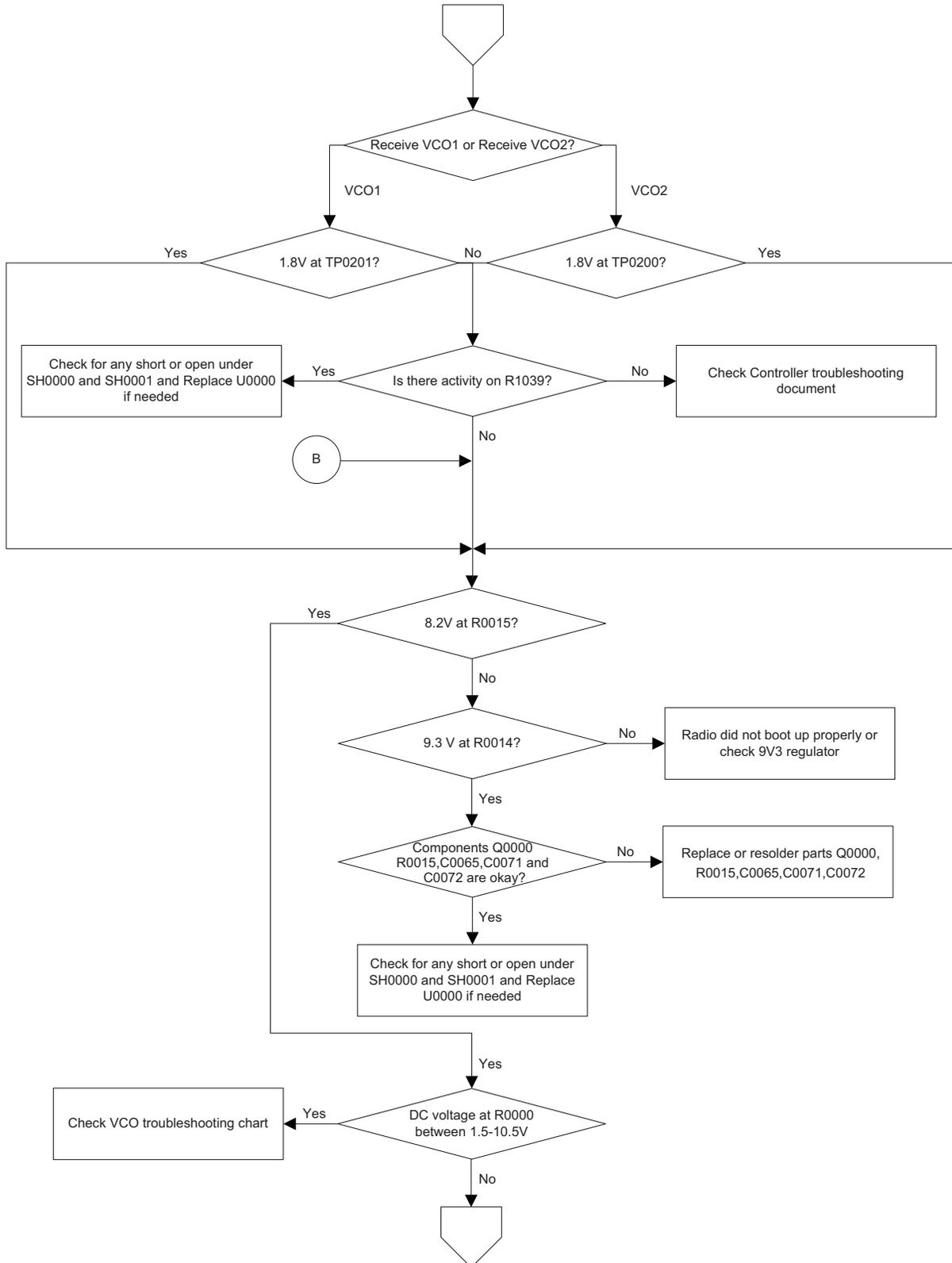
### 3.1 Troubleshooting Flow Chart for RFIC (Sheet 2 of 5)



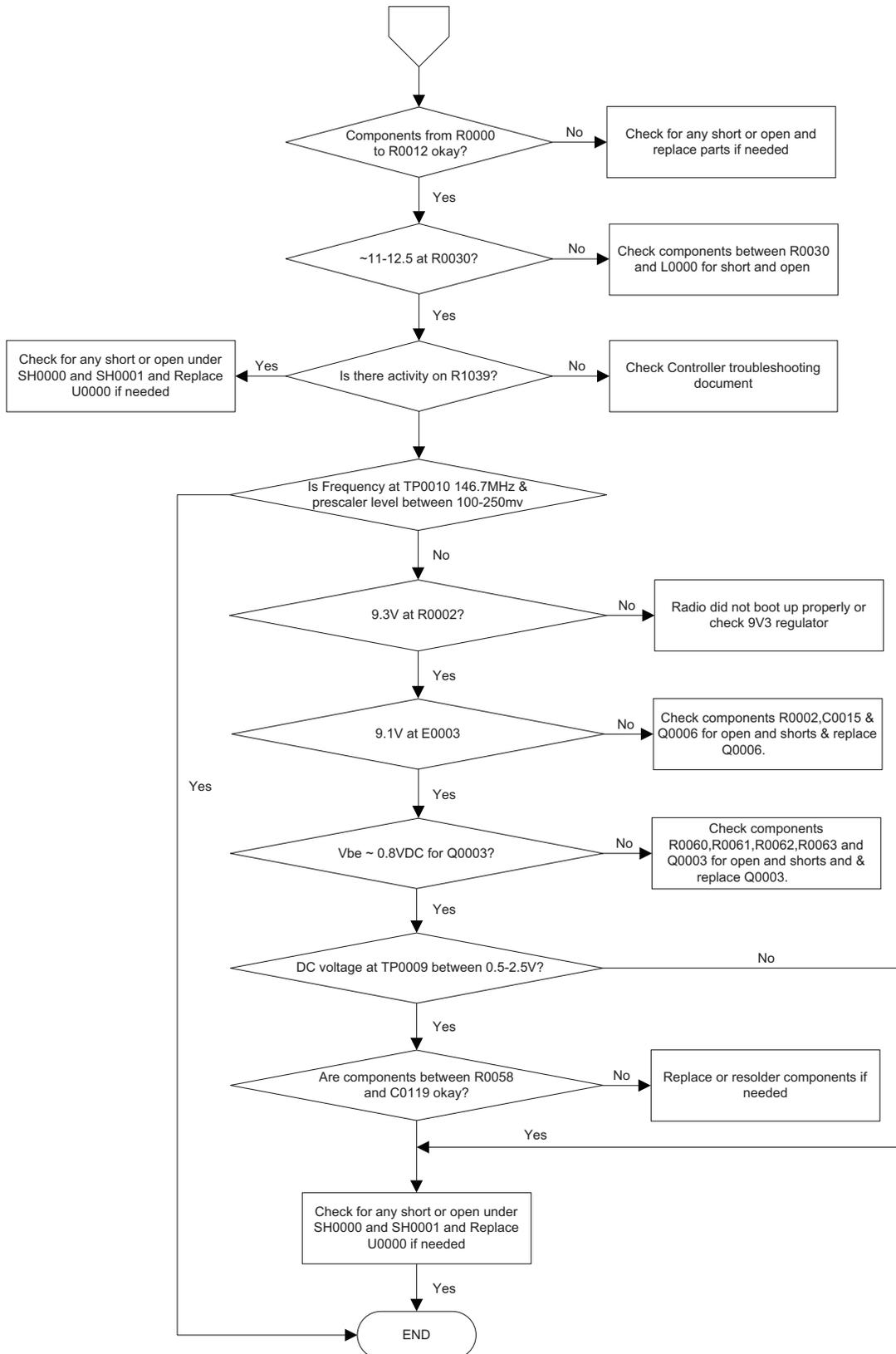
### 3.2 Troubleshooting Flow Chart for RFIC (Sheet 3 of 5)



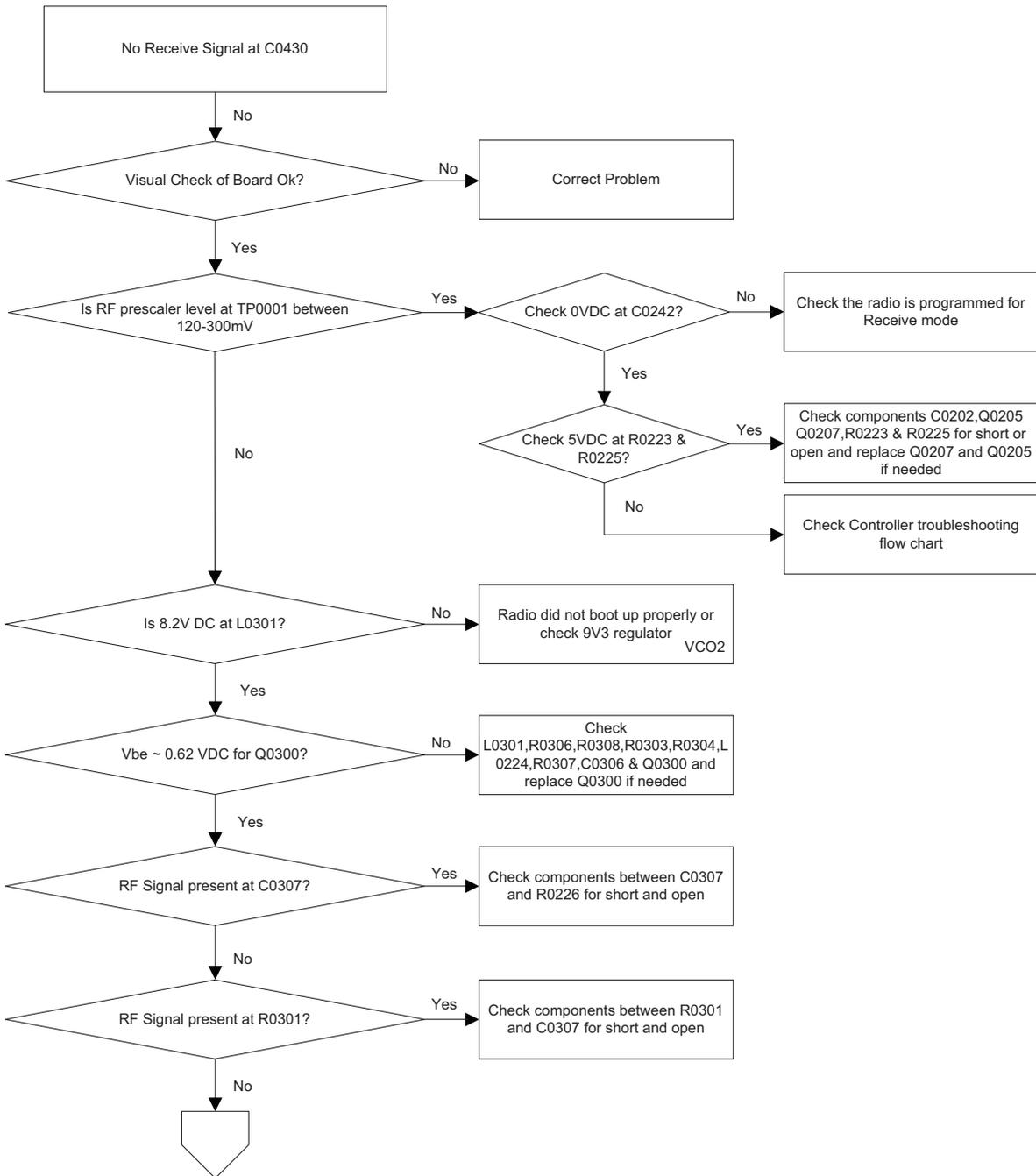
### 3.3 Troubleshooting Flow Chart for RFIC (Sheet 4 of 5)



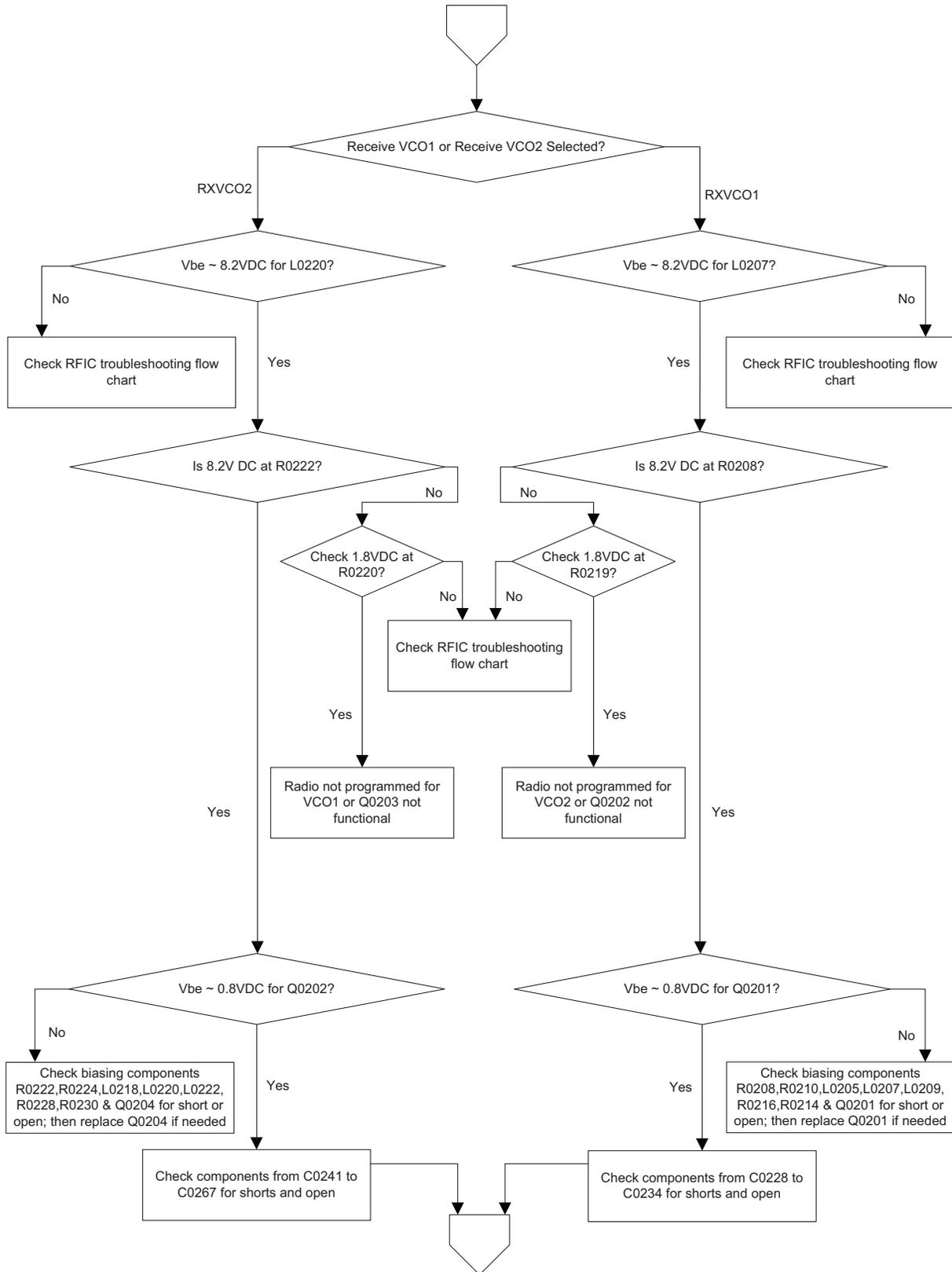
### 3.4 Troubleshooting Flow Chart for RFIC (Sheet 5 of 5)



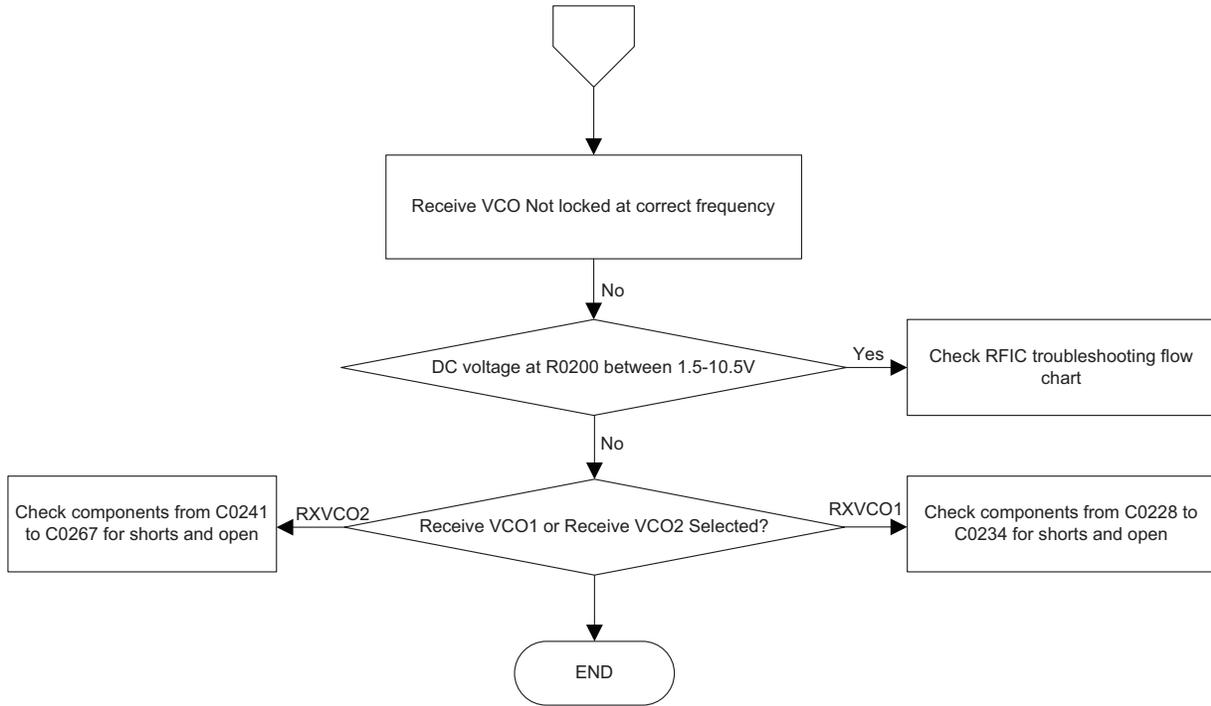
### 4.0 Troubleshooting Flow Chart for Rx VCO (Sheet 1 of 3)



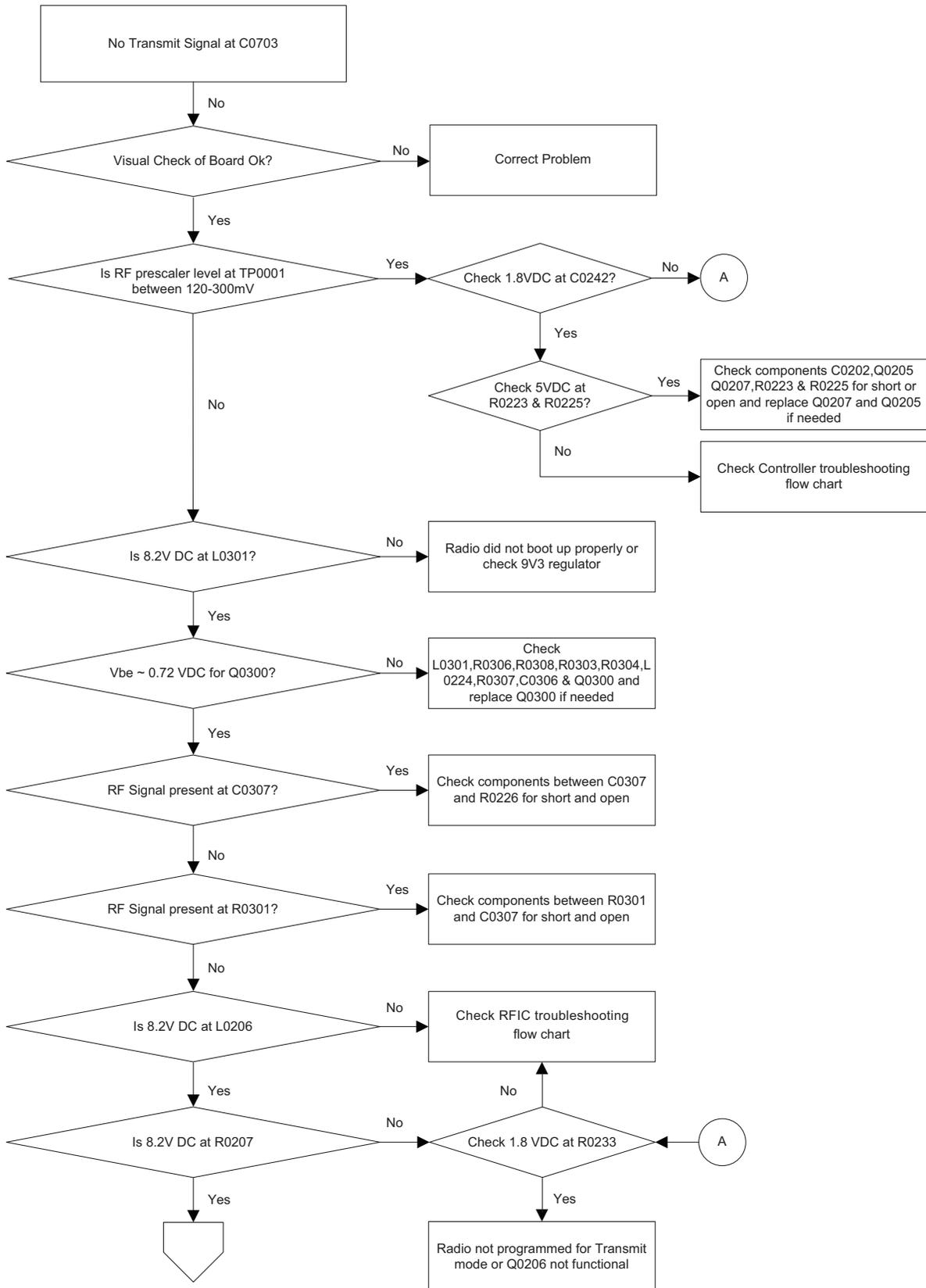
### 4.1 Troubleshooting Flow Chart for Rx VCO (Sheet 2 of 3)



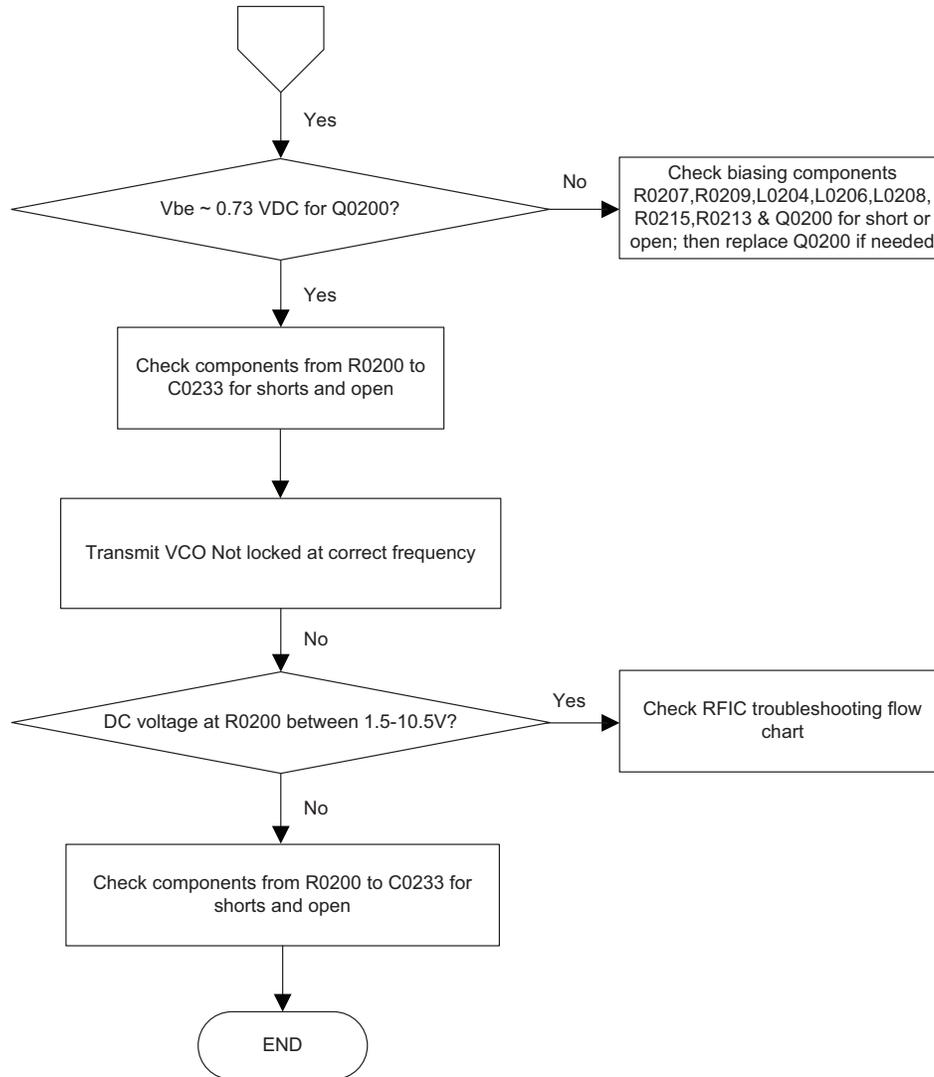
### 4.2 Troubleshooting Flow Chart for Rx VCO (Sheet 3 of 3)



## 5.0 Troubleshooting Flow Chart for Tx VCO (Sheet 1 of 2)



### 5.1 Troubleshooting Flow Chart for Tx VCO (Sheet 2 of 2)



## Section 2

### UHF1 PCB/SCHEMATICS/PARTS LIST

#### 1.0 Allocation of Schematics and Circuit Boards

##### 1.1 UHF1 25W Circuits

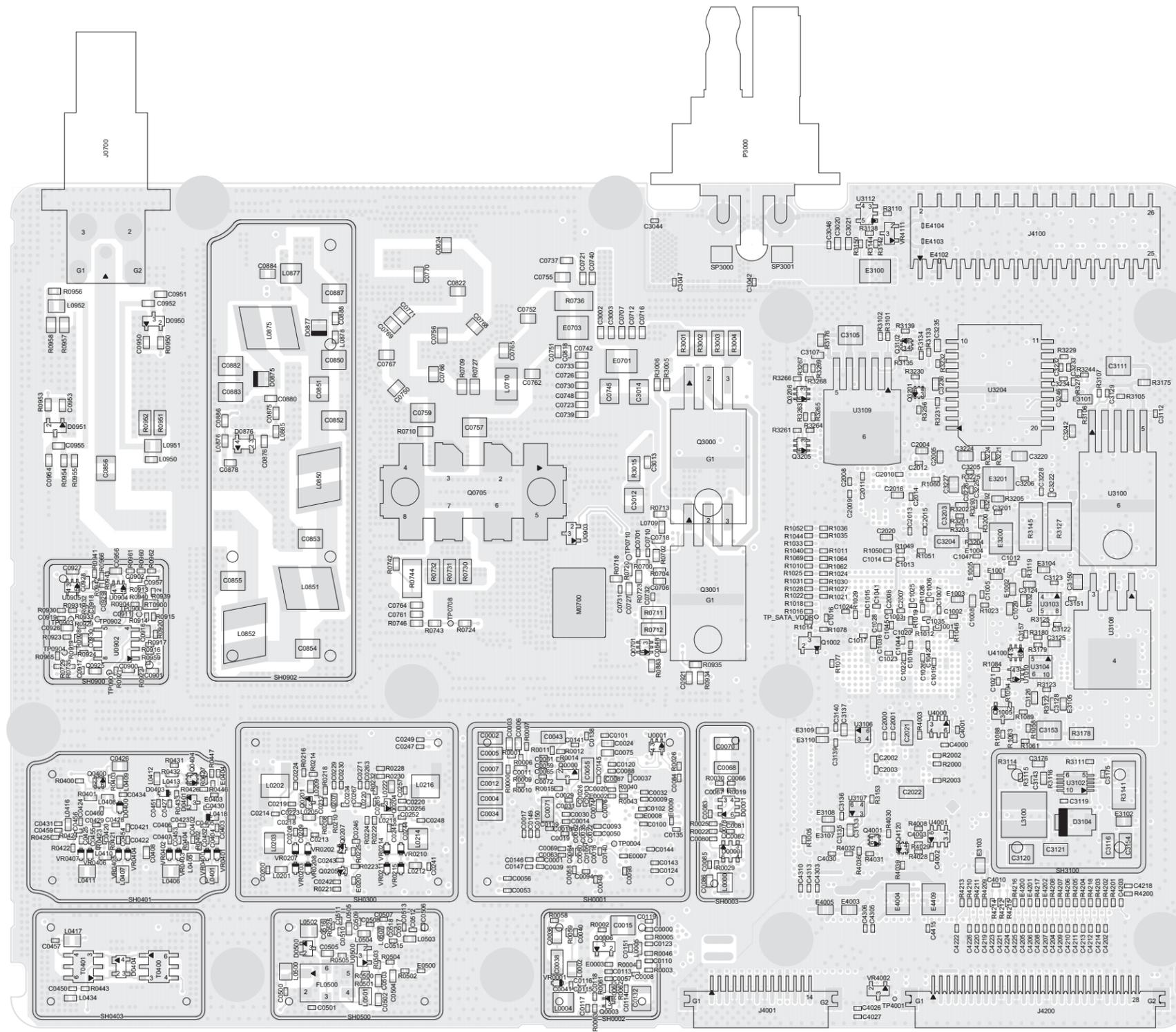
The UHF1 circuits are contained on the Printed Circuit Board (PCB) which also contains the Controller circuits. This chapter shows the schematics for the UHF1 25W circuits only, refer to the Controller section for details of the related Controller circuits. The PCB component layouts and the Parts List in this chapter show both the Controller and UHF1 25W circuit components. The UHF1 25W schematics and the related PCB and parts list are shown in the table below

*Table 2-1 UHF1 1–25W Schematic Diagrams and Parts List*

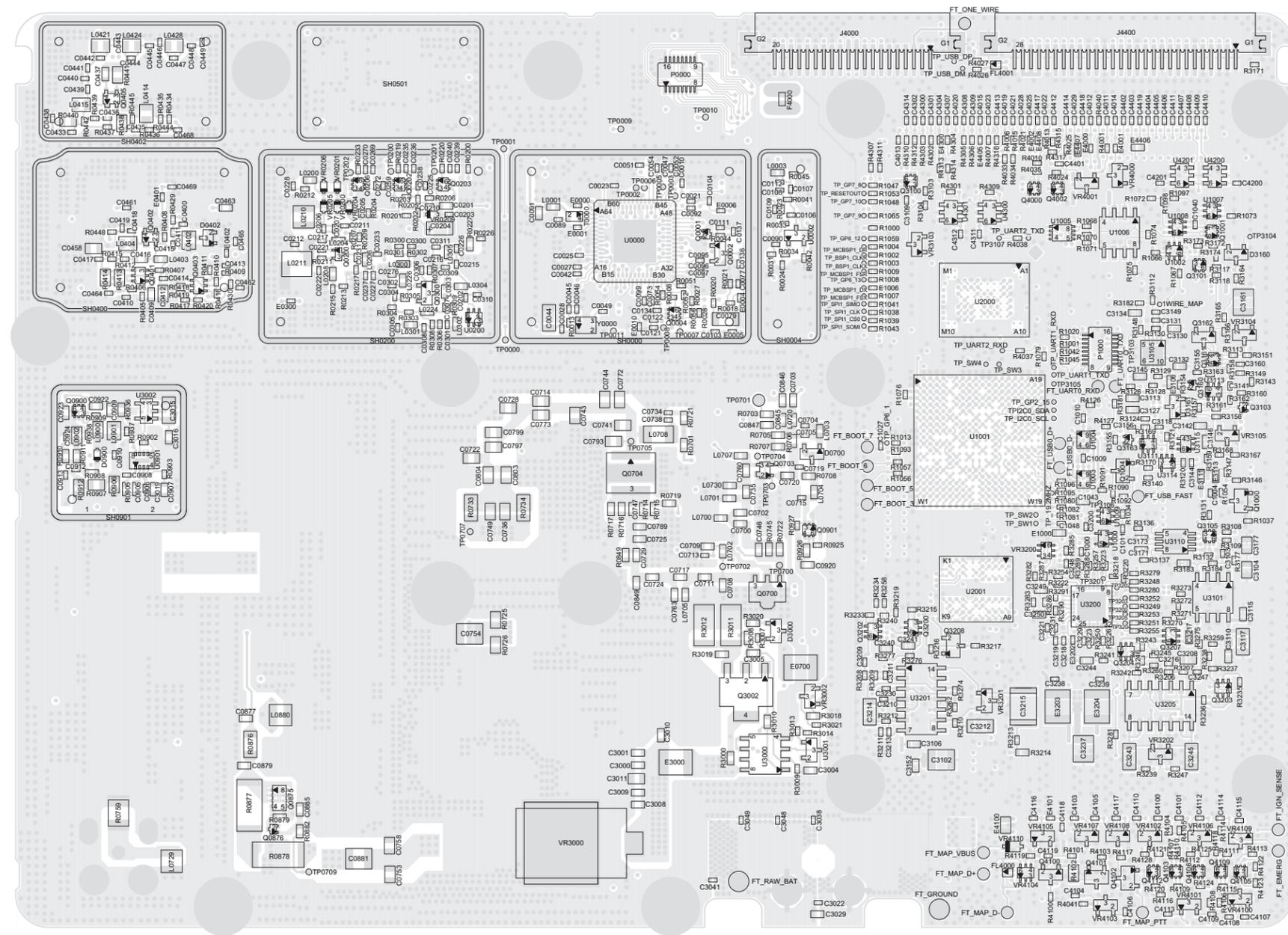
<b>PCB :</b>	
84012735001-A Main Board Top Side	Page 2-3
84012735001-A Main Board Bottom Side	Page 2-4
<b>SCHEMATICS</b>	
Overall	Page 2-5
Receiver Front- End	Page 2-6
Receiver IF Amp	Page 2-7
Transmitter Power Amplifier	Page 2-8
Power Control	Page 2-9
Transmitter Power Amplifier DC Distribution	Page 2-10
RFIC	Page 2-11
Receiver VCO	Page 2-12
Transmit VCO	Page 2-13
VCO Buffer	Page 2-14
<b>Parts List</b>	
84012735001-A (UHF1 25W Only)	Page 2-15

## Notes

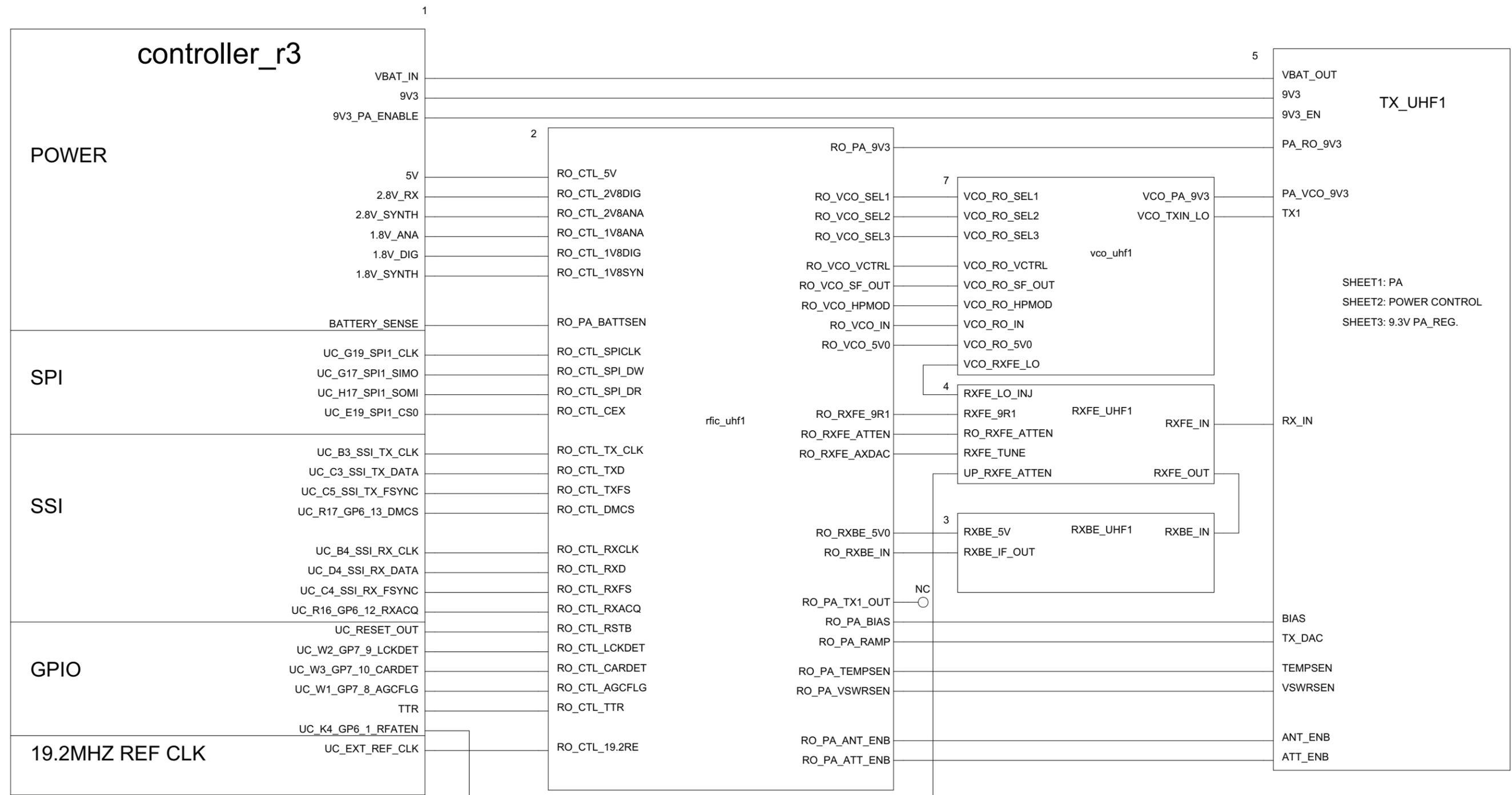
## 2.0 UHF1 (403–470 MHz) 1–25W PCB/Schematics/Parts List



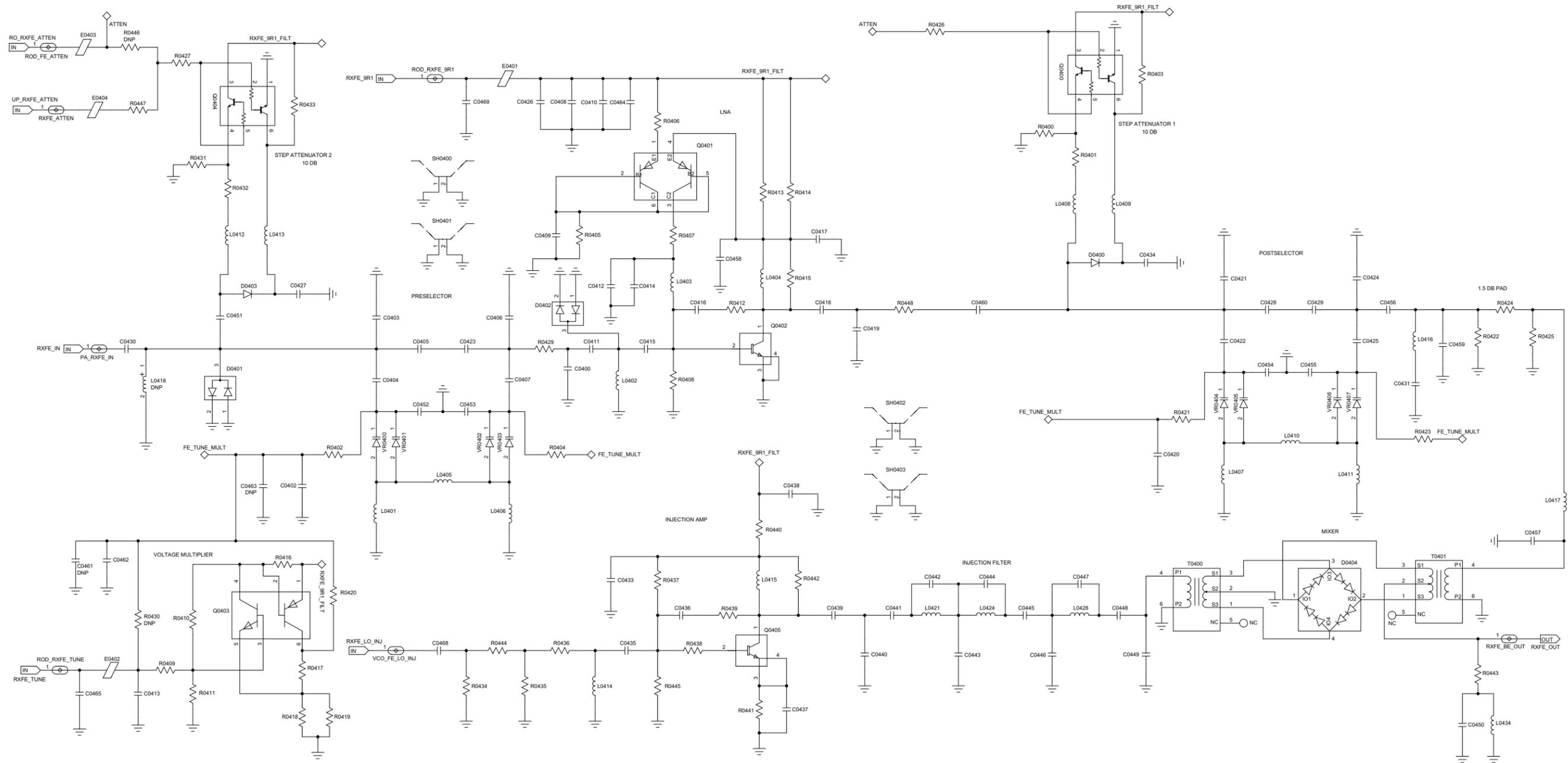
UHF1 (403–470 MHz) 1–25W 84012735001-A Top Side



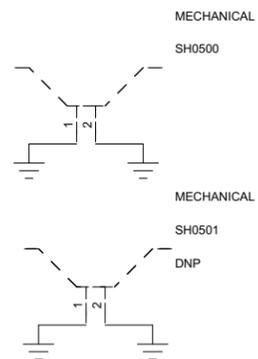
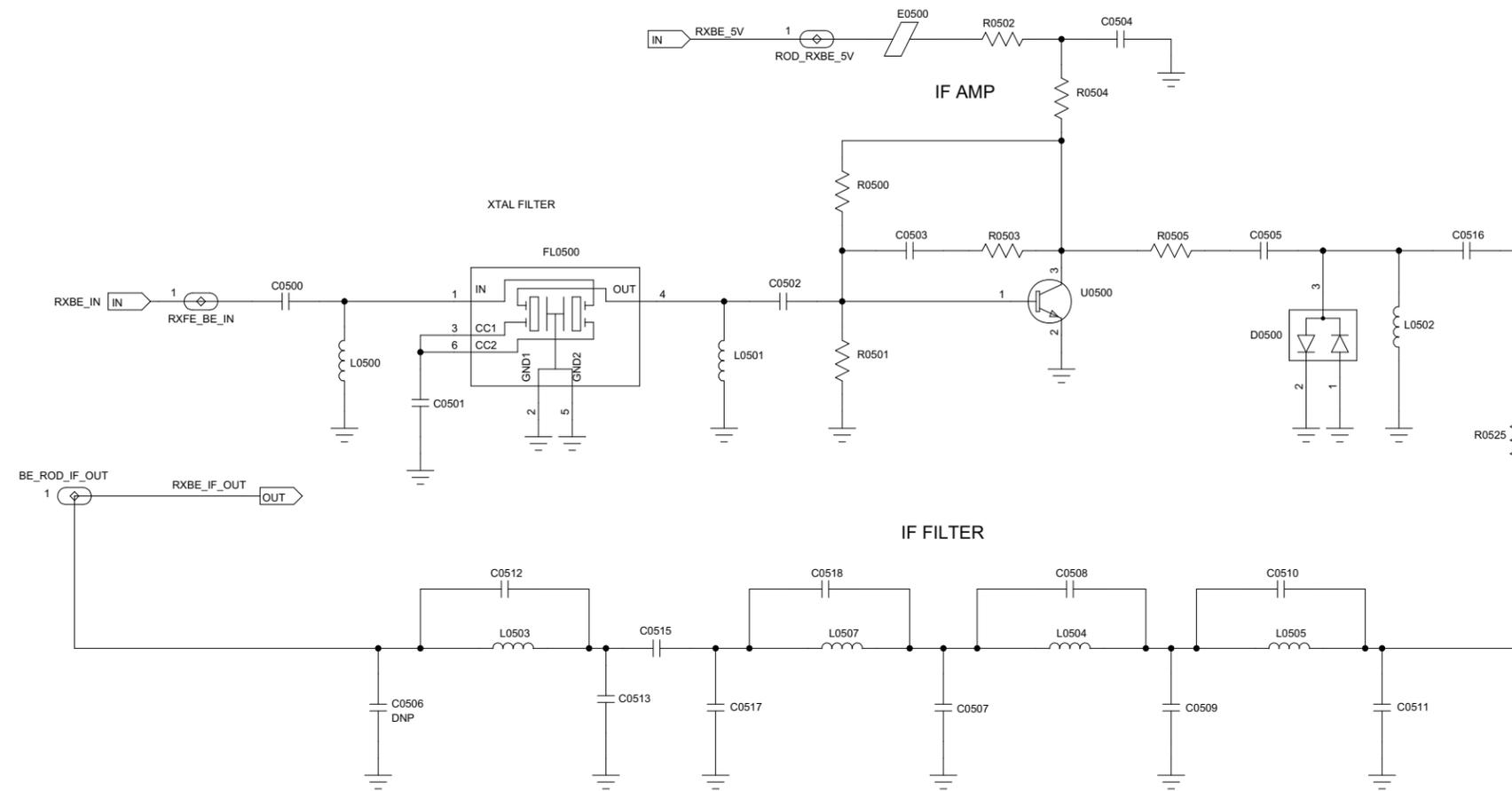
UHF1 (403–470 MHz) 1–25W 84012735001-A Bottom Side



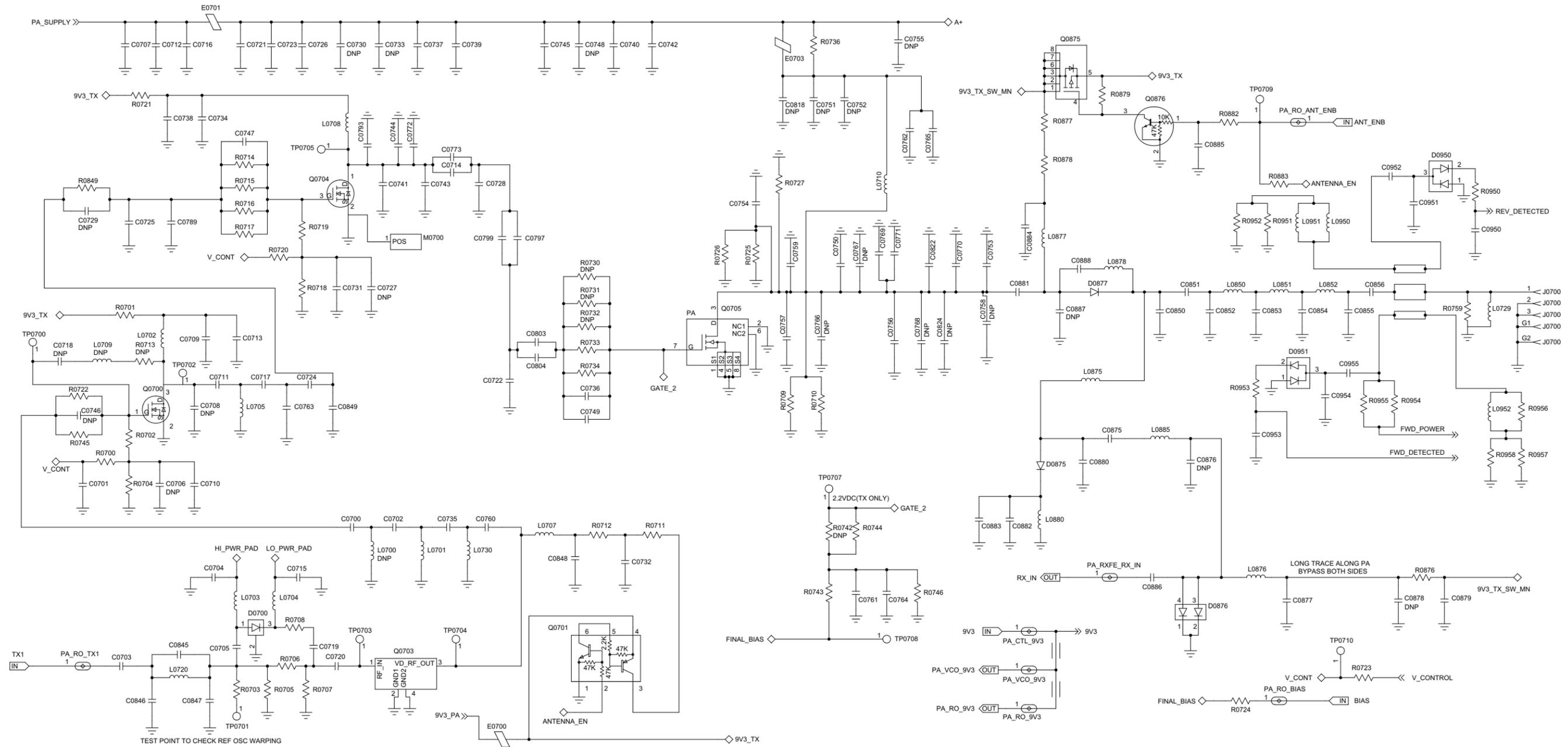
**UHF1 (403–470 MHz) 1–25W Overall Schematic Diagram**



UHF1 (403-470 MHz) 1-25W Receiver Front-End Schematic Diagram

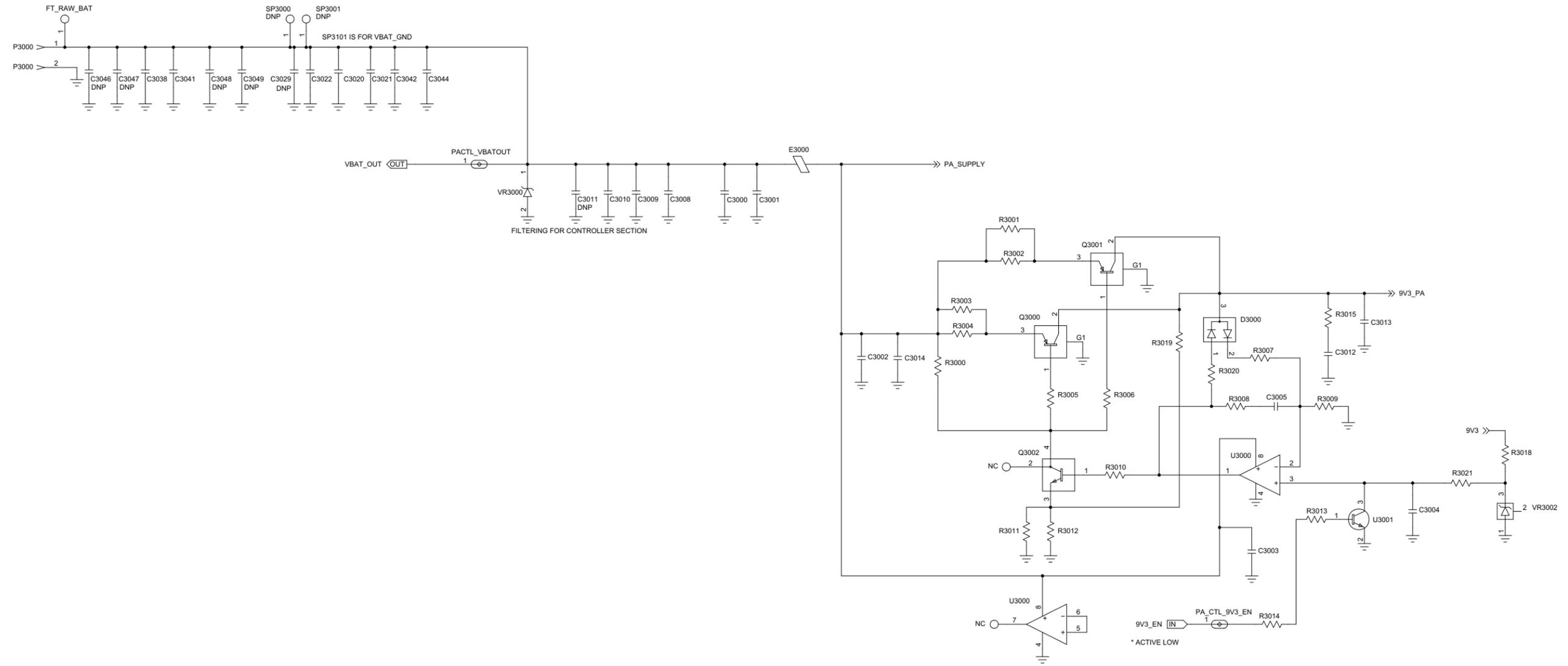


**UHF1 (403–470 MHz) 1–25W Receiver IF Amp Schematic Diagram**

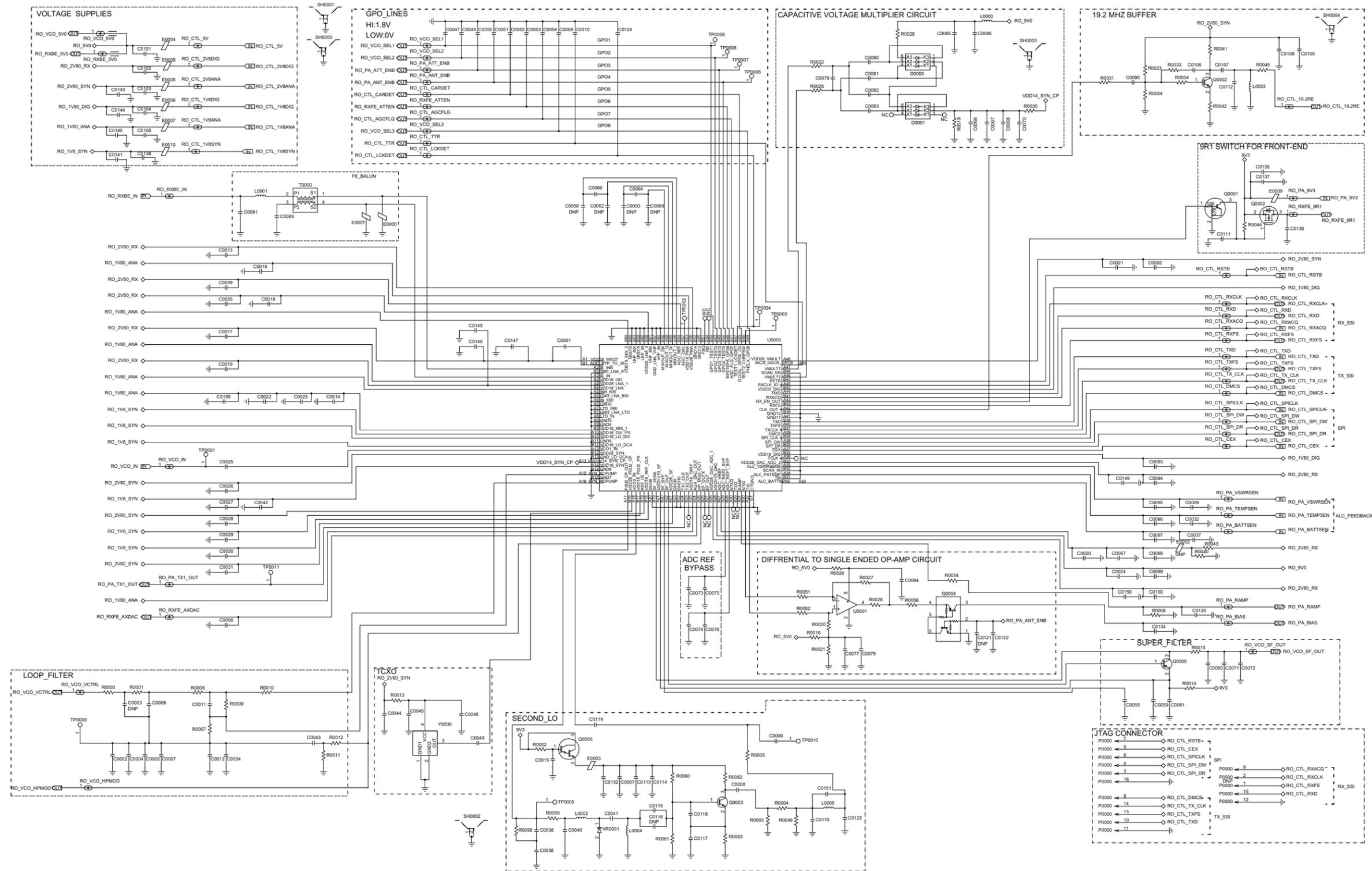


UHF1 (403–470 MHz) 1–25W Transmitter Power Amplifier Schematic Diagram

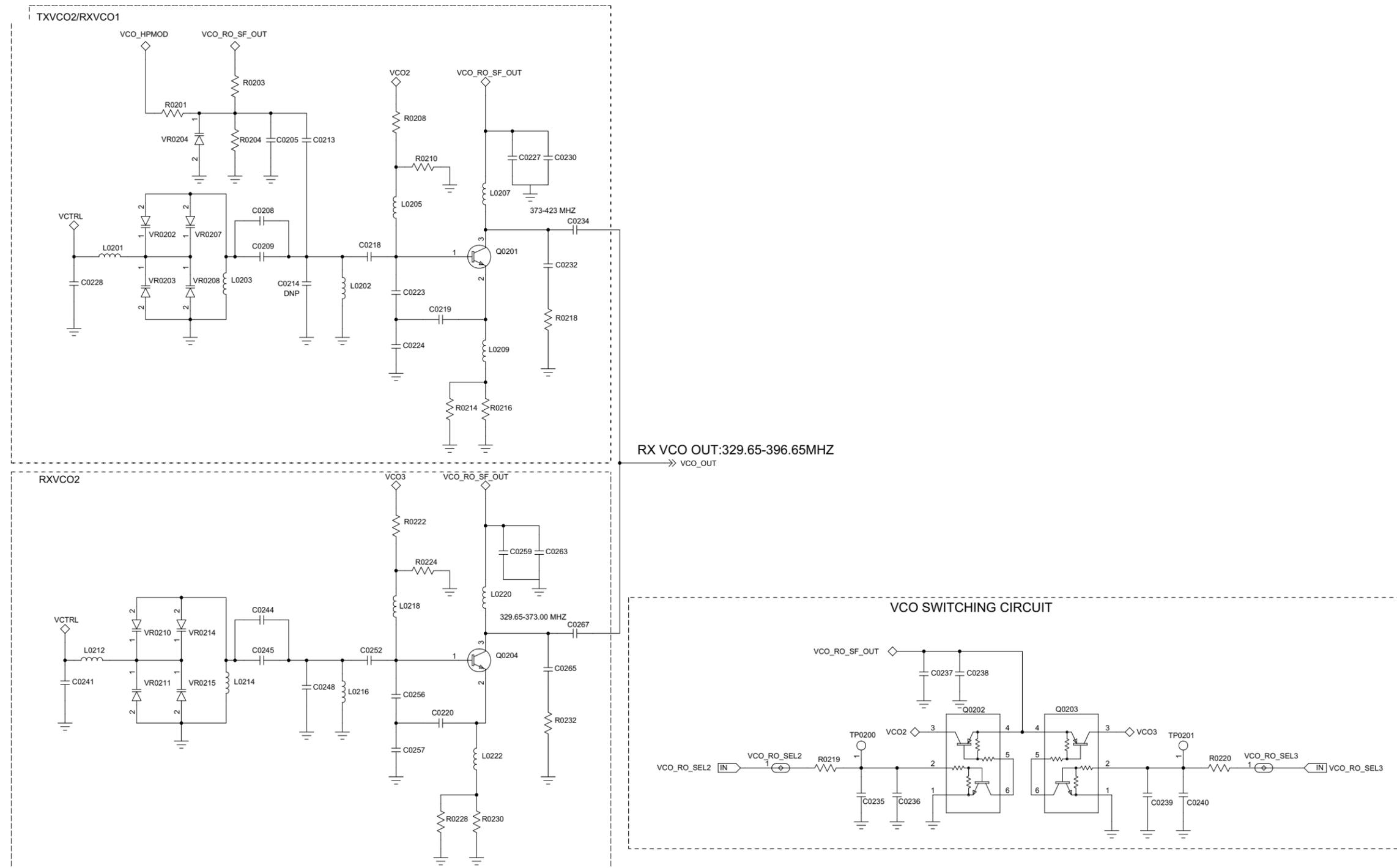




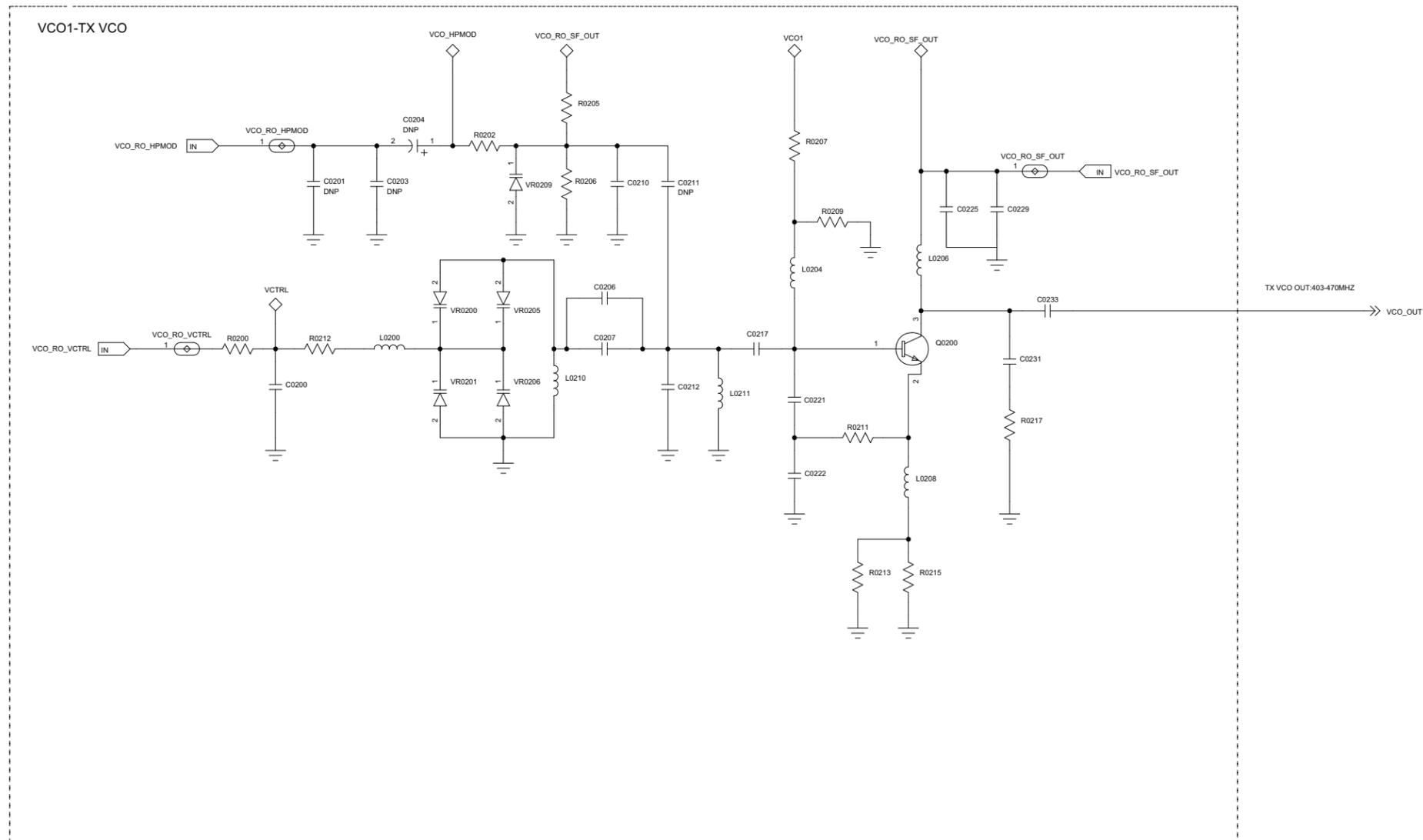
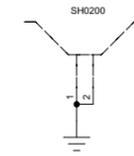
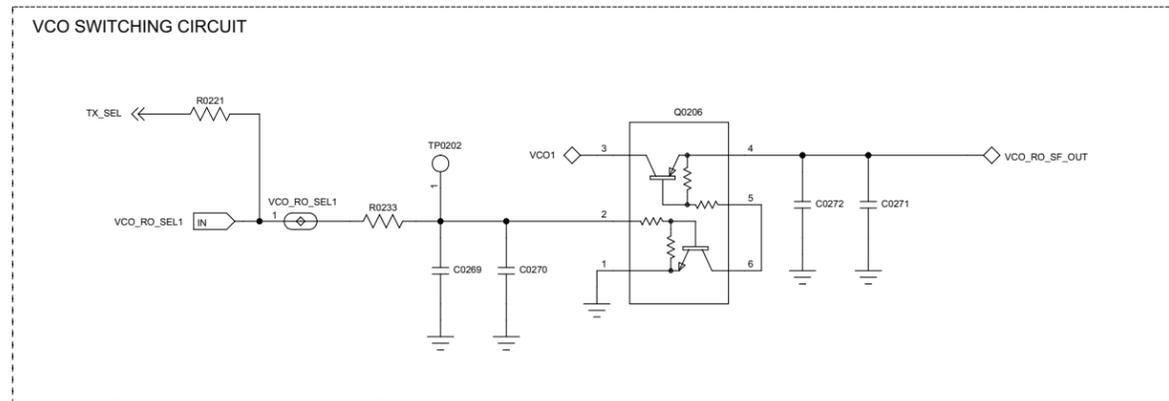
**UHF1 (403–470 MHz) 1–25W Transmitter Power Amplifier DC Distribution Schematic Diagram**



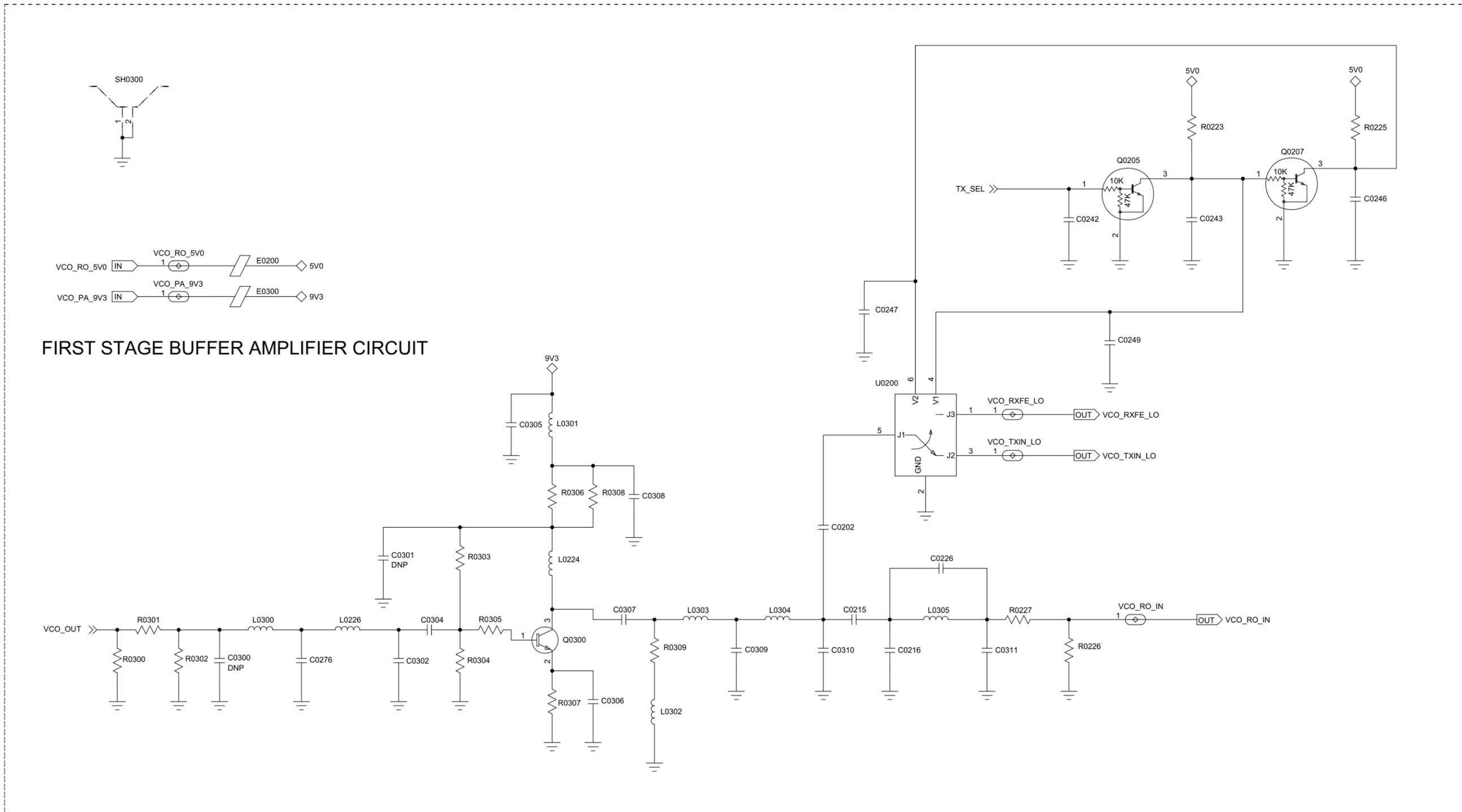
UHF1 (403–470 MHz) 1–25W RFIC Schematic Diagram



UHF1 (403-470 MHz) 1-25W Receiver VCO Schematic Diagram



**UHF1 (403–470 MHz) 1–25W Transmit VCO Schematic Diagram**



UHF1 (403-470 MHz) 1-25W VCO Buffer Schematic Diagram



Circuit Ref.	Motorola Part No.										
C0706M5	NOT PLACED	C0757M5	2111078B32	C0888M5	2113944C42	C1015M1	2113945B02	C3005M5	2113945C02	C3132M1	2113946D05
C0707M5	2113944C82	C0758M5	NOT PLACED	C0900M5	NOT PLACED	C1016M1	21667009166	C3008M5	2113944C51	C3133M1	2113946D05
C0708M5	NOT PLACED	C0759M5	2111078B31	C0901M5	NOT PLACED	C1017M1	21667009162	C3009M5	2113945C31	C3134M1	2113946S35
C0709M5	2113945C04	C0760M5	2113944C80	C0902M5	2113944C51	C1018M1	21667009162	C3010M5	2113944C46	C3135M1	2113956A51
C0710M5	21667009163	C0761M5	2113944C45	C0905M5	2113945C31	C1019M1	21667009162	C3011M5	NOT PLACED	C3136M1	21012095001
C0711M5	2113944C46	C0762M5	2113944F01	C0906M5	2113945A10	C1020M1	21667009162	C3012M5	2113946J04	C3137M1	2113946D05
C0712M5	2113945C04	C0763M5	2113944C34	C0907M5	2113945L41	C1021M1	2113945Y02	C3013M5	2113945C31	C3139M1	2113956A51
C0713M5	21667009163	C0764M5	2113944C51	C0908M5	21667009166	C1022M1	2113945Y02	C3014M5	21009337414	C3140M1	21012095001
C0714M5	2113944F47	C0765M5	2113944F01	C0909M5	2113944C02	C1023M1	2113945Y02	C3015M5	2113946G01	C3141M1	2113945Y02
C0715M5	21667009163	C0766M5	NOT PLACED	C0910M5	21667009166	C1024M1	2113945Y02	C3016M5	2113945C31	C3142M1	21012102001
C0716M5	2113944C55	C0767M5	NOT PLACED	C0911M5	2113944C02	C1025M1	2113945Y02	C3019M5	2113946S35	C3143M1	21667009366
C0717M5	2113944C82	C0768M5	NOT PLACED	C0912M5	21667009166	C1026M1	2113945Y02	C3020M5	2113945C26	C3144M1	2113945Y02
C0718M5	NOT PLACED	C0769M5	2111078A21	C0913M5	21667009166	C1027M1	NOT PLACED	C3021M5	2113944C06	C3145M1	2113944C06
C0719M5	21667009163	C0770M5	2111078A06	C0916M5	NOT PLACED	C1028M1	2113945Y02	C3022M5	2113945A10	C3146M1	21012102001
C0720M5	2113944C42	C0771M5	2111078A21	C0917M5	21667009166	C1029M1	2113956B54	C3029M5	NOT PLACED	C3149M1	2113956A51
C0721M5	2113944C82	C0772M5	2113944F52	C0918M5	21667009166	C1032M1	2113956B54	C3038M5	21667009379	C3150M1	2113956C37
C0722M5	2113944F44	C0773M5	2113944F47	C0919M5	21667009166	C1035M1	2113945B02	C3041M5	21667009379	C3151M1	2113945B02
C0723M5	2113945C04	C0789M5	2113944C38	C0920M5	2113944C02	C1036M1	2113946D05	C3042M5	21667009379	C3152M1	2113944C06
C0724M5	2113944C83	C0793M5	2113944F57	C0921M5	2113944C02	C1040M1	2113945Y02	C3044M5	21667009379	C3153M1	2113946J04
C0725M5	2113944C38	C0797M5	2113944F01	C0922M5	2113945C31	C1041M1	2113945B02	C3046M5	NOT PLACED	C3154M1	2113955D13
C0726M5	2113944C51	C0799M5	2113944F01	C0923M5	2113944C02	C1042M1	2113945Y02	C3047M5	NOT PLACED	C3155M1	2113945Y02
C0727M5	NOT PLACED	C0803M5	2113944F01	C0924M5	21667009166	C1043M1	2113956B54	C3048M5	NOT PLACED	C3156M1	2113945Y02
C0728M5	2113944F39	C0804M5	2113944F02	C0925M5	2113945C31	C1044M1	2113945B02	C3049M5	NOT PLACED	C3157M1	2113945Y02
C0729M5	NOT PLACED	C0818M5	NOT PLACED	C0926M5	2113944C02	C1045M1	2113945B02	C3102M1	21009337414	C3160M1	2113945Y02
C0730M5	NOT PLACED	C0822M5	2111078A17	C0927M5	2113944C01	C1047M1	2113945Y02	C3103M1	21667009166	C3161M1	NOT PLACED
C0731M5	21667009163	C0824M5	NOT PLACED	C0928M5	2113944C51	C1048M1	2113945B02	C3104M1	2113946F08	C3171M1	2113946D07
C0732M5	2113945A09	C0845M5	21667011411	C0929M5	2113944C49	C2000M1	2113945Y02	C3105M1	2113946J04	C3173M1	2113946D07
C0733M5	NOT PLACED	C0846M5	21667011059	C0930M5	NOT PLACED	C2001M1	2113945Y02	C3106M1	2113945C31	C3175M1	2113946A01
C0734M5	2113945A09	C0847M5	21667011059	C0950M5	2113944C47	C2002M1	2113945B02	C3107M1	2113944C38	C3176M1	2113944C48
C0735M5	2113944C30	C0848M5	2113944C45	C0951M5	21667011356	C2003M1	21667009162	C3109M1	21667009166	C3177M1	2113946F08
C0736M5	2113944F64	C0849M5	2113944C35	C0952M5	2113944C47	C2004M1	2113956B54	C3110M1	2113944C06	C3200M1	21667009166
C0737M5	2113944C51	C0850M5	2111078B05	C0953M5	2113944C47	C2005M1	2113946D05	C3111M1	2113946J04	C3201M1	21667009166
C0738M5	21667009163	C0851M5	2111078B21	C0954M5	21667011457	C2006M1	2113945Y02	C3112M1	2113945Y02	C3203M1	2113955D37
C0739M5	2113945C31	C0852M5	2111078B08	C0955M5	2113944C47	C2007M1	2113945Y02	C3113M1	2113946S35	C3204M1	2113955D37
C0740M5	2113944C51	C0853M5	2111078B16	C0956M5	2113944C01	C2008M1	2113945B02	C3115M1	2113944C06	C3205M1	21667009166
C0741M5	2113944F53	C0854M5	2111078B15	C0957M5	2113944C49	C2009M1	21667009162	C3116M1	2113955D13	C3206M1	21667009166
C0742M5	2113945L49	C0855M5	2111078B08	C1000M1	2113945Y02	C2010M1	2113945Y02	C3117M1	2113955D13	C3208M1	2113956C37
C0743M5	2113944F56	C0856M5	2111078B42	C1001M1	2113945Y02	C2011M1	2113945Y02	C3118M1	2113945Y02	C3209M1	2113945Y02
C0744M5	2113944F52	C0875M5	2113944C42	C1002M1	2113946K03	C2012M1	2113945Y02	C3119M1	2113945Y02	C3210M1	2113945Y02
C0745M5	21009337414	C0876M5	NOT PLACED	C1003M1	2113945Y02	C2013M1	2113945Y02	C3120M1	2113956E60	C3211M1	2113945A11
C0746M5	NOT PLACED	C0877M5	2113944C42	C1004M1	2113945Y02	C2014M1	2113945B02	C3121M1	2113956D58	C3212M1	2113955D37
C0747M5	2113944C44	C0878M5	NOT PLACED	C1005M1	2113945Y02	C2015M1	21667009162	C3122M1	2113956A51	C3213M1	2113945A03
C0748M5	NOT PLACED	C0879M5	2113944C42	C1006M1	2113945Y02	C2016M1	2113956B54	C3123M1	2113956A51	C3214M1	2113955D37
C0749M5	2113944F64	C0880M5	21667011073	C1007M1	2113945Y02	C2020M1	2113956B54	C3124M1	2113946D07	C3215M1	2113956F49
C0750M5	2111078A25	C0881M5	2111078B42	C1008M1	2113946D05	C2021M1	2113956D59	C3125M1	2113946D05	C3216M1	2113945Y02
C0751M5	NOT PLACED	C0882M5	2111078B22	C1009M1	2113945Y02	C2022M1	2113956D59	C3126M1	2113944C06	C3217M1	2113956B91
C0752M5	NOT PLACED	C0883M5	2111078B34	C1010M1	2113945Y02	C3000M5	2113944C38	C3127M1	2113946S35	C3218M1	2113956A51
C0753M5	2111078A21	C0884M5	2113944F05	C1011M1	2113945B02	C3001M5	2113944C06	C3128M1	2113946D05	C3219M1	2113956A51
C0754M5	2111078B33	C0885M5	2113944C51	C1012M1	2113945Y02	C3002M5	2113944C06	C3129M1	2113945Y02	C3220M1	2113946F05
C0755M5	NOT PLACED	C0886M5	2113944C47	C1013M1	2113945Y02	C3003M5	2113945C31	C3130M1	2113946D05	C3221M1	2113945Y02
C0756M5	2111078A25	C0887M5	NOT PLACED	C1014M1	2113945Y02	C3004M5	2113945C02	C3131M1	2113946A02	C3222M1	2113956A51

Circuit Ref.	Motorola Part No.										
C3223M1	2113945Y02	C4103M1	21667009166	C4311M1	2113945Y02	E0010M2	24012107027	E4300M1	24012107027	L0405M4	2416540H31
C3224M1	2113946F05	C4104M1	21667009166	C4312M1	2113945Y02	E0200M7	24012107027	E4405M1	24012107027	L0406M4	24012021001
C3225M1	2113945Y02	C4105M1	21667009166	C4313M1	21667009166	E0300M7	24012107027	E4406M1	7686949J22	L0407M4	24012021001
C3226M1	NOT PLACED	C4106M1	21667009166	C4314M1	NOT PLACED	E0401M4	24012107027	E4407M1	7686949J22	L0408M4	24667008030
C3227M1	2113946F05	C4107M1	21667009166	C4401M1	NOT PLACED	E0402M4	24012107027	E4408M1	24012107027	L0409M4	24667008030
C3228M1	2113945Y02	C4108M1	21667009166	C4402M1	NOT PLACED	E0403M4	24012107027	E4409M1	24012102001	L0410M4	24667008025
C3229M1	2113956A51	C4109M1	21667009166	C4403M1	NOT PLACED	E0404M4	24012107027	F4000M1	65012019001	L0411M4	24012021001
C3230M1	2113945Y02	C4110M1	21667009166	C4404M1	NOT PLACED	E0500M3	24012107027	FL0500M3	9116854H02	L0412M4	24667008030
C3231M1	2113945Y02	C4112M1	21667009166	C4405M1	NOT PLACED	E0700M5	24012102001	FL4000M1	24012038001	L0413M4	24667008030
C3232M1	2113945Y02	C4113M1	21667009166	C4406M1	NOT PLACED	E0701M5	24012102001	FL4001M1	24012038001	L0414M4	24009344106
C3233M1	2113945A09	C4114M1	21667009166	C4407M1	NOT PLACED	E0703M5	24012102001	J4000M1	0915767H01	L0415M4	24009344108
C3234M1	2113945Y02	C4115M1	21667009166	C4408M1	NOT PLACED	E1000M1	7686949J15	J4001M1	0915556H01	L0416M4	24667008017
C3235M1	21012102001	C4116M1	21667009166	C4409M1	NOT PLACED	E1001M1	7686949J15	J4100M1	0916017H01	L0417M4	24009344110
C3236M1	2113945C31	C4117M1	21667009166	C4410M1	NOT PLACED	E1002M1	7686949J15	J4200M1	09012053001	L0418M4	NOT PLACED
C3237M1	21009337414	C4118M1	21667009166	C4411M1	NOT PLACED	E1003M1	7686949J15	J4400M1	09012053001	L0421M4	24009344106
C3238M1	2113945A09	C4119M1	21667009166	C4412M1	21667009166	E1004M1	7686949J15	L0000M2	24012154001	L0424M4	24009344106
C3239M1	2113945A09	C4200M1	2113945Y02	C4413M1	21667009166	E1005M1	7686949J15	L0001M2	24667008020	L0428M4	24009344106
C3240M1	2113956B91	C4201M1	2113945Y02	C4414M1	21667009166	E1006M1	7685268E01	L0002M2	24667000031	L0434M4	24667008021
C3241M1	2113956B91	C4202M1	21667009166	C4415M1	21667009166	E3000M5	24012102001	L0003M2	24667008031	L0500M3	24009344127
C3242M1	2113945C31	C4203M1	21667009166	C4417M1	21667009166	E3100M1	24012102001	L0004M2	24009343017	L0501M3	24009344128
C3243M1	2113955D37	C4204M1	NOT PLACED	C4418M1	21667009166	E3101M1	2485410Y02	L0005M2	24667008017	L0502M3	24009344126
C3244M1	2113956B91	C4205M1	21667009166	C4419M1	21667009166	E3102M1	2485410Y02	L0200M7	24667008031	L0503M3	24667008021
C3245M1	2113955D37	C4206M1	21667009166	D0000M2	4815011H01	E3103M1	2485410Y02	L0201M7	24667008031	L0504M3	24667008026
C3246M1	2113945C31	C4207M1	21667009166	D0001M2	4815011H01	E3104M1	7686949J22	L0202M7	2415385H02	L0505M3	24667008026
C3247M1	2113945Y02	C4208M1	21667009166	D0400M4	4884800Y03	E3105M1	7686949J22	L0203M7	24009343013	L0507M3	24667008024
C3248M1	2113945Y02	C4209M1	21667009166	D0401M4	4813974A19	E3106M1	7686949J22	L0204M7	24667008031	L0700M5	NOT PLACED
C3249M1	2113956B91	C4210M1	21667009166	D0402M4	4813974A19	E3107M1	7686949J22	L0205M7	24667008031	L0701M5	24667008007
C3250M1	2113956B91	C4211M1	21667009166	D0403M4	4884800Y03	E3108M1	7686949J22	L0206M7	24667008031	L0702M5	24667008028
C4000M1	2113945Y02	C4212M1	21667009166	D0404M4	4815090H01	E3109M1	7686949J22	L0207M7	24667008031	L0703M5	24667008028
C4001M1	2113945Y02	C4213M1	21667009166	D0500M3	4813974A19	E3110M1	7686949J22	L0208M7	24667008031	L0704M5	24667008028
C4002M1	2113945Y02	C4214M1	21667009166	D0700M5	4813974A06	E3111M1	7686949J22	L0209M7	24667008031	L0705M5	24667008007
C4003M1	2113945Y02	C4218M1	21667009166	D0875M5	48012160001	E3113M1	7686949J22	L0210M7	24009343006	L0707M5	24667008028
C4010M1	21667009166	C4219M1	21667009339	D0876M5	4886622Y06	E3200M1	24012102001	L0211M7	2415385H01	L0708M5	2479990G01
C4011M1	21667009166	C4220M1	21667009339	D0877M5	48012160001	E3201M1	24012102001	L0212M7	24667008031	L0709M5	NOT PLACED
C4012M1	21667009166	C4221M1	21667009339	D0900M5	48012181001	E3202M1	24012107027	L0214M7	24009343006	L0710M5	2460591C53
C4013M1	21667009166	C4222M1	21667009339	D0950M5	4813974A21	E3203M1	24012102001	L0216M7	2415385H02	L0720M5	24667008014
C4014M1	21667009166	C4223M1	21667009339	D0951M5	4813974A21	E3204M1	24012102001	L0218M7	24667008031	L0729M5	2414032B60
C4015M1	21667009166	C4224M1	21667009166	D3000M5	4813978P07	E4000M1	24012107027	L0220M7	24667008031	L0730M5	24667008014
C4019M1	21667009166	C4225M1	21667009166	D3104M1	4885489Y01	E4001M1	7688697V05	L0222M7	24667008031	L0850M5	2460592A01
C4020M1	21667009166	C4226M1	21667009339	D3160M1	4813978C02	E4002M1	24012107027	L0224M7	24667008030	L0851M5	2460592A01
C4021M1	21667009166	C4300M1	NOT PLACED	D3161M1	4813978C02	E4003M1	NOT PLACED	L0226M7	24667008021	L0852M5	2460592A01
C4022M1	21667009166	C4301M1	NOT PLACED	E0000M2	24012107027	E4004M1	24012102001	L0300M7	24667008014	L0875M5	2460592A01
C4023M1	21667009166	C4302M1	NOT PLACED	E0001M2	24012107027	E4005M1	2485410Y02	L0301M7	24667008031	L0876M5	24667008029
C4025M1	21667009166	C4303M1	NOT PLACED	E0002M2	NOT PLACED	E4100M1	7686949J14	L0302M7	24667008030	L0877M5	2414032B49
C4026M1	21667009166	C4304M1	21667009166	E0003M2	24012107027	E4101M1	24012107027	L0303M7	24667008013	L0878M5	24667008024
C4027M1	21667009166	C4305M1	21667009376	E0004M2	24012107027	E4102M1	NOT PLACED	L0304M7	24667008019	L0880M5	2414032B49
C4028M1	21667009166	C4306M1	21667009381	E0005M2	24012107027	E4103M1	NOT PLACED	L0305M7	24667008014	L0885M5	24667008014
C4029M1	21667009166	C4307M1	NOT PLACED	E0006M2	24012107027	E4104M1	NOT PLACED	L0401M4	24012021001	L0900M5	24667000031
C4030M1	21667009166	C4308M1	NOT PLACED	E0007M2	24012107027	E4200M1	24012107027	L0402M4	24009344102	L0901M5	24009344018
C4100M1	21667009166	C4309M1	21667009166	E0008M2	24012107027	E4201M1	24012107027	L0403M4	24667008030	L0902M5	24667000031
C4101M1	21667009166	C4310M1	21667009166	E0009M2	24012107027	E4202M1	24012107027	L0404M4	24009344109	L0950M5	24667008024

Circuit Ref.	Motorola Part No.										
L0951M5	24009344003	Q3161M1	4815272H01	R0029M2	0613952Q25	R0230M7	0613952Q67	R0439M4	0613952Q83	R0735M5	0613952P01
L0952M5	24009344026	Q3162M1	4813973M07	R0030M2	0613952R66	R0232M7	0613952Q49	R0440M4	0613958H25	R0736M5	0613959Q25
L3100M1	24012091002	Q3163M1	48009494001	R0031M2	0613952R66	R0233M7	0613952R66	R0441M4	0613958H49	R0742M5	NOT PLACED
M0700M5	2686201B02	Q3200M1	4815270H01	R0033M2	0613952R01	R0300M7	0613952Q66	R0442M4	0613952Q83	R0743M5	0613952J17
P0000M2	NOT PLACED	Q3201M1	4815272H01	R0034M2	0613952Q57	R0301M7	0613952Q25	R0443M4	0613952Q25	R0744M5	0613959Q42
P1000M1	2887818K02	Q3202M1	4815270H01	R0040M2	0613952Q70	R0302M7	0613952Q66	R0444M4	0613952K25	R0745M5	0613952H25
P3000M5	09009344001	Q3203M1	4815270H01	R0041M2	0613952Q58	R0303M7	0613952R05	R0445M4	0613952Q75	R0746M5	0613952J25
Q0000M2	4813973A13	Q3204M1	4815270H01	R0042M2	0613952Q42	R0304M7	0613952Q89	R0446M4	NOT PLACED	R0759M5	0613959H12
Q0001M2	48009494001	Q3205M1	4815270H01	R0043M2	0613952Q73	R0305M7	0613952Q33	R0447M4	0613952R66	R0849M5	0613952G67
Q0002M2	4813970A59	Q3206M1	4815270H01	R0044M2	0613952R25	R0306M7	0613952Q32	R0448M4	0613952Q25	R0876M5	0613958S73
Q0003M2	48012195001	Q3207M1	4815270H01	R0045M2	0613952R66	R0307M7	0613952Q49	R0500M3	0613952Q87	R0877M5	0613959Y37
Q0004M2	4815272H01	Q3208M1	4815263H01	R0046M2	0613952Q57	R0308M7	0613952Q32	R0501M3	0613952R19	R0878M5	0613959Y37
Q0006M2	4813973A04	Q4000M1	4809939C47	R0051M2	0613952R01	R0309M7	0613952Q42	R0502M3	0613952Q66	R0879M5	0613952J25
Q0200M7	48012195001	Q4001M1	4809939C47	R0052M2	0613952R01	R0400M4	0613952R01	R0503M3	0613952Q88	R0882M5	0613952G67
Q0201M7	48012195001	Q4002M1	4809939C47	R0054M2	0613952M25	R0401M4	0613952H81	R0504M3	0613952Q61	R0883M5	0613952G67
Q0202M7	4815272H01	Q4100M1	4816023H01	R0056M2	0613952R66	R0402M4	0613952R25	R0505M3	0613952R66	R0902M5	0613952R66
Q0203M7	4815272H01	Q4101M1	4815261H01	R0058M2	0613952Q74	R0403M4	0613952R01	R0525M3	0613952R66	R0903M5	0613952N01
Q0204M7	48012195001	Q4102M1	4815263H01	R0059M2	0613952R66	R0404M4	0613952R25	R0700M5	0613952J05	R0904M5	0613952R66
Q0205M7	48009494001	Q4103M1	48012271001	R0060M2	0613952Q89	R0405M4	0613952R05	R0701M5	0613952G67	R0905M5	0613952H42
Q0206M7	4815272H01	Q4105M1	48012271001	R0061M2	0613952Q85	R0406M4	0613952Q91	R0702M5	0613952H89	R0906M5	0613958H46
Q0207M7	48009494001	Q4106M1	48012271001	R0062M2	0613952Q61	R0407M4	0613952Q91	R0703M5	0613952J01	R0907M5	0613958H55
Q0300M7	4802197J95	Q4109M1	48012271001	R0063M2	0613952Q64	R0408M4	0613952Q75	R0704M5	0613952J06	R0908M5	0613952H42
Q0400M4	4815271H01	Q4112M1	48012271001	R0200M7	0613952R66	R0409M4	0613952Q69	R0705M5	0613952H47	R0909M5	0613952R66
Q0401M4	4815267H01	Q4120M1	4809939C47	R0201M7	0613952R27	R0410M4	0613952R01	R0706M5	0613952H54	R0910M5	0613952H91
Q0402M4	4815118H01	R0000M2	0613952R66	R0202M7	0613952R27	R0411M4	0613952R01	R0707M5	0613952H47	R0911M5	0613952H85
Q0403M4	4815270H01	R0001M2	0613952R66	R0203M7	0613952R07	R0412M4	0613952Q83	R0708M5	0613952H45	R0912M5	0613958H46
Q0404M4	4815271H01	R0002M2	0613952Q96	R0204M7	0613952R05	R0413M4	0613958H55	R0709M5	0613958J49	R0913M5	0613952M51
Q0405M4	4815118H01	R0003M2	0613952Q57	R0205M7	0613952R07	R0414M4	0613958H55	R0710M5	0613958J49	R0914M5	0613952M71
Q0700M5	4816547H01	R0004M2	0613952Q34	R0206M7	0613952R05	R0415M4	0613952Q57	R0711M5	0613958S44	R0915M5	NOT PLACED
Q0701M5	4816013H01	R0005M2	0613952R66	R0207M7	0613952Q84	R0416M4	0613952Q69	R0712M5	0613958S44	R0916M5	0613952R66
Q0703M5	4802246J29	R0006M2	0613952Q25	R0208M7	0613952Q87	R0417M4	0613952Q69	R0713M5	NOT PLACED	R0917M5	0613952P01
Q0704M5	4816548H01	R0007M2	0613952Q51	R0209M7	0613952Q85	R0418M4	0613952Q69	R0714M5	0613952H09	R0919M5	0613952P01
Q0705M5	48012067002	R0008M2	0613952R01	R0210M7	0613952Q79	R0419M4	0613952Q69	R0715M5	0613952H09	R0920M5	0613952N01
Q0875M5	4813970A62	R0009M2	0613952Q58	R0211M7	0613952Q18	R0420M4	0613952R25	R0716M5	0613952H09	R0921M5	0613952N01
Q0876M5	48009494001	R0010M2	0613952R66	R0212M7	0613952Q32	R0421M4	0613952R25	R0717M5	0613952H09	R0922M5	0613952R66
Q0900M5	4815272H01	R0011M2	0613952Q36	R0213M7	0613952Q67	R0422M4	0613952Q67	R0718M5	0613952H94	R0923M5	0613952M42
Q0901M5	4815271H01	R0012M2	0613952Q86	R0214M7	0613952Q67	R0423M4	0613952R25	R0719M5	0613952H89	R0924M5	0613952N01
Q1000M1	4815263H01	R0013M2	0613952Q35	R0215M7	0613952Q67	R0424M4	0613952Q23	R0720M5	0613952H95	R0925M5	0613952Q59
Q1001M1	4815272H01	R0014M2	0613952R66	R0216M7	0613952Q67	R0425M4	0613952Q67	R0721M5	0613952G67	R0926M5	0613952H79
Q1002M1	4815261H01	R0015M2	0613952R66	R0217M7	0613952Q49	R0426M4	0613952Q87	R0722M5	0613952H25	R0927M5	0613952N01
Q1004M1	4815261H01	R0018M2	0613952Q80	R0218M7	0613952Q49	R0427M4	0613952Q93	R0723M5	0613952G67	R0928M5	0613952N81
Q1005M1	4815261H01	R0019M2	0613952R01	R0219M7	0613952R66	R0429M4	0613952R66	R0724M5	0613952G67	R0929M5	0613952N85
Q3000M5	0105959T72	R0020M2	0613952R12	R0220M7	0613952R66	R0430M4	NOT PLACED	R0725M5	0613958J49	R0930M5	0613952N42
Q3001M5	0105959T72	R0021M2	0613952Q80	R0221M7	0613952R66	R0431M4	0613952R01	R0726M5	0613958J49	R0931M5	0613952M66
Q3002M5	4813973B01	R0022M2	0613952R66	R0222M7	0613952Q79	R0432M4	0613952H73	R0727M5	0613958J49	R0932M5	0613952N30
Q3100M1	4815272H01	R0023M2	0613952Q83	R0223M7	0613952Q73	R0433M4	0613952R01	R0729M5	0613952N43	R0933M5	0613952N01
Q3101M1	4809939C47	R0024M2	0613952Q80	R0224M7	0613952Q78	R0434M4	0613952L46	R0730M5	NOT PLACED	R0934M5	0613952J17
Q3102M1	4809939C47	R0025M2	0613952R66	R0225M7	0613952Q73	R0435M4	0613952L46	R0731M5	NOT PLACED	R0935M5	0613952H91
Q3103M1	48009494001	R0026M2	0613952R66	R0226M7	0613952Q29	R0436M4	0613952R66	R0732M5	NOT PLACED	R0936M5	0613952H91
Q3105M1	4809939C47	R0027M2	0613952R12	R0227M7	0613952G67	R0437M4	0613952Q77	R0733M5	0613958S29	R0937M5	NOT PLACED
Q3160M1	48009494001	R0028M2	0613952R66	R0228M7	0613952Q67	R0438M4	0613958H25	R0734M5	0613958S29	R0938M5	NOT PLACED

Circuit Ref.	Motorola Part No.										
R0939M5	0613952R66	R1035M1	NOT PLACED	R1091M1	NOT PLACED	R3121M1	0613952R66	R3173M1	0613952R66	R3241M1	0613952M54
R0940M5	0613952Z76	R1036M1	0613952M66	R1092M1	0613952M43	R3122M1	0613952M43	R3174M1	0613952R66	R3242M1	0613952R01
R0941M5	0613952N58	R1037M1	0613952M66	R1093M1	0613952Q73	R3123M1	0613952M54	R3175M1	0689774Y02	R3243M1	0613952R01
R0942M5	0613952N58	R1038M1	0613952R66	R1094M1	0613952M66	R3124M1	0613952R66	R3176M1	0689774Y02	R3244M1	0613952R10
R0943M5	0613952N58	R1039M1	0613952R66	R1095M1	0613952Q34	R3125M1	0613952R66	R3177M1	0613952R66	R3245M1	NOT PLACED
R0950M5	0613952G67	R1040M1	0613952M66	R1096M1	0613952Q34	R3126M1	0613952R66	R3178M1	0615871H01	R3246M1	0613952R01
R0951M5	0613958M18	R1041M1	0613952R66	R1097M1	0613952R66	R3127M1	0613959Y09	R3179M1	0613952R17	R3247M1	0613952Q49
R0952M5	0613958M18	R1042M1	0613952M66	R1098M1	0613952R66	R3128M1	0613952M10	R3180M1	0613952R01	R3248M1	0613952R66
R0953M5	0613952G67	R1043M1	0613952R66	R2000M1	0613952M66	R3129M1	0613952M58	R3181M1	NOT PLACED	R3249M1	0613952R66
R0954M5	0613952H56	R1044M1	0613952M66	R2002M1	0613952M66	R3130M1	0613952R25	R3182M1	0613952R66	R3250M1	0613952R66
R0955M5	0613952H56	R1045M1	0613952M66	R2003M1	0613952M30	R3131M1	0613952R01	R3183M1	0613952H92	R3251M1	0613952R66
R0956M5	0613952H67	R1046M1	0613952M66	R3000M5	0613952H60	R3132M1	0613952R01	R3184M1	0613952M30	R3252M1	0613952R66
R0957M5	0613958C25	R1047M1	0613952R66	R3001M5	0615871H01	R3133M1	0613952R29	R3200M1	0613952C44	R3253M1	0613952R66
R0958M5	0613958C25	R1048M1	0613952R66	R3002M5	0615871H01	R3134M1	NOT PLACED	R3201M1	0613952Q49	R3254M1	0613952R01
R0959M5	0613952R66	R1049M1	0613952Q73	R3003M5	0615871H01	R3135M1	0613952R66	R3202M1	0613952C44	R3255M1	0613952R66
R0960M5	0613952N58	R1050M1	0613952Q73	R3004M5	0615871H01	R3136M1	0613952R17	R3203M1	0613952Q49	R3256M1	0613952M66
R0961M5	0613952N58	R1051M1	0613952K68	R3005M5	0613952H25	R3137M1	0613952R17	R3204M1	0613952C44	R3257M1	0613952R01
R0962M5	0613952N58	R1052M1	NOT PLACED	R3006M5	0613952H25	R3138M1	0613952R17	R3205M1	0613952C44	R3258M1	0613952M66
R0965M5	NOT PLACED	R1053M1	0613952R66	R3007M5	0613952M30	R3139M1	0613952R66	R3206M1	0613952R01	R3259M1	0613952M66
R0966M5	NOT PLACED	R1054M1	0613952M66	R3008M5	0613952G67	R3140M1	0613952Q91	R3207M1	0613952R01	R3260M1	0613952M66
R1000M1	0613952R66	R1056M1	0613952Q73	R3009M5	0613952M43	R3141M1	0613959Y13	R3208M1	0613952N30	R3261M1	0613952R01
R1001M1	0613952M66	R1057M1	0613952Q73	R3010M5	0613952G67	R3142M1	NOT PLACED	R3209M1	0613952R03	R3262M1	0613952R10
R1002M1	0613952R66	R1058M1	0613952M66	R3011M5	0613959Q60	R3143M1	0613952Q91	R3210M1	0613952Q67	R3263M1	NOT PLACED
R1003M1	0613952R66	R1059M1	0613952R66	R3012M5	0613959Q60	R3144M1	0613952R66	R3211M1	0613952N30	R3264M1	0613952R01
R1004M1	0613952R66	R1060M1	0613952R66	R3013M5	0613952R01	R3145M1	0613959Y09	R3212M1	0613952R03	R3265M1	0613952M66
R1005M1	0613952M66	R1061M1	0613952R66	R3014M5	0613952R01	R3146M1	0613952M85	R3213M1	0613952Q42	R3266M1	0613952R01
R1007M1	0613952R66	R1062M1	NOT PLACED	R3015M5	0615871H01	R3147M1	0613952M43	R3214M1	0613952J25	R3267M1	NOT PLACED
R1008M1	0613952R66	R1063M1	NOT PLACED	R3018M5	0613952H73	R3148M1	0613952R66	R3215M1	0613952R01	R3268M1	0613952R01
R1009M1	0613952R66	R1064M1	NOT PLACED	R3019M5	0613952H60	R3149M1	0613952R01	R3216M1	0613952R17	R3269M1	0613952M66
R1010M1	NOT PLACED	R1065M1	0613952R66	R3020M5	0613952G67	R3150M1	0613952N62	R3217M1	0613952R01	R3270M1	0613952R01
R1011M1	NOT PLACED	R1066M1	0613952M66	R3021M5	0613952R25	R3151M1	0613952R25	R3218M1	0613952R01	R3271M1	NOT PLACED
R1012M1	0613952R66	R1067M1	0613952M66	R3101M1	0613952Z66	R3153M1	0613952R66	R3219M1	NOT PLACED	R3272M1	0613952R01
R1013M1	0613952M66	R1068M1	0613952R32	R3102M1	0613952M66	R3154M1	0613952Q89	R3220M1	0613952R01	R3273M1	0613952M66
R1014M1	NOT PLACED	R1069M1	NOT PLACED	R3103M1	0613952N62	R3155M1	0613952Q89	R3221M1	NOT PLACED	R3274M1	0613952R10
R1016M1	NOT PLACED	R1070M1	0613952Q77	R3104M1	0613952M30	R3156M1	0613952R17	R3222M1	0613952R01	R3275M1	0613952R10
R1018M1	NOT PLACED	R1071M1	0613952Q77	R3105M1	0613952R01	R3157M1	0613952R01	R3223M1	0613952R66	R3276M1	0613952R10
R1019M1	0613952R66	R1072M1	0613952Q49	R3106M1	0613952M09	R3158M1	0613952R66	R3224M1	NOT PLACED	R3277M1	0613952R10
R1020M1	0613952M66	R1073M1	0613952R01	R3107M1	0613952M85	R3159M1	0613952R01	R3225M1	NOT PLACED	R3278M1	0613952R01
R1021M1	0613952Q73	R1074M1	0613952R66	R3108M1	0613952R17	R3160M1	0613952Q89	R3226M1	0613952R01	R3279M1	NOT PLACED
R1022M1	NOT PLACED	R1075M1	0613952R66	R3109M1	0613952R17	R3161M1	0613952Q73	R3229M1	0613952R01	R3280M1	NOT PLACED
R1023M1	0613952R66	R1076M1	0613952R66	R3110M1	0613952N55	R3162M1	0613952Q85	R3230M1	0613952R10	R3281M1	NOT PLACED
R1024M1	NOT PLACED	R1077M1	0613952R66	R3111M1	0613952R32	R3163M1	0613952R01	R3231M1	0613952R10	R3282M1	0613952R66
R1025M1	0613952Q73	R1078M1	0613952R66	R3112M1	0613952P12	R3164M1	0613952Q75	R3232M1	0613952R10	R3283M1	0613952R66
R1026M1	0613952R66	R1079M1	0613952R66	R3113M1	0613952R17	R3165M1	0613952R01	R3233M1	0613952R01	R3285M1	0613952R01
R1027M1	NOT PLACED	R1080M1	0613952Q32	R3114M1	0613952N01	R3166M1	0613952R17	R3234M1	NOT PLACED	R3286M1	0613952R66
R1028M1	0613952R66	R1081M1	0613952Q32	R3115M1	0613952Z63	R3167M1	0613952R01	R3235M1	0613952R01	R3287M1	0613952R66
R1029M1	0613952R66	R1082M1	0613952Q32	R3116M1	0613952E83	R3168M1	0613952Q73	R3236M1	0613952R10	R3288M1	0613952R01
R1030M1	NOT PLACED	R1084M1	0613952R66	R3117M1	0613952Q73	R3169M1	0613952R01	R3237M1	NOT PLACED	R3289M1	0613952R01
R1031M1	0613952R66	R1088M1	NOT PLACED	R3118M1	0613952R10	R3170M1	0613952R01	R3238M1	0613952R01	R3290M1	NOT PLACED
R1033M1	0613952Q73	R1089M1	0613952R05	R3119M1	0613952Q73	R3171M1	NOT PLACED	R3239M1	0613952Q49	R3291M1	NOT PLACED
R1034M1	0613952R17	R1090M1	0613952R05	R3120M1	0613952R66	R3172M1	NOT PLACED	R3240M1	0613952R01	R3292M1	0613952R66

Circuit Ref.	Motorola Part No.
R3293M1	0613952R66
R4001M1	0613952R66
R4003M1	0613952R66
R4006M1	0613952Q37
R4007M1	0613952Q37
R4008M1	0613952R01
R4010M1	0613952R01
R4013M1	0613952Q42
R4015M1	0613952Q37
R4021M1	0613952R66
R4024M1	0613952R01
R4025M1	0613952R01
R4026M1	0613952R66
R4027M1	0613952R66
R4028M1	0613952R01
R4029M1	0613952R01
R4030M1	0613952R01
R4031M1	0613952R01
R4032M1	0613952R66
R4033M1	0613952M43
R4034M1	0613952M43
R4035M1	0613952R66
R4036M1	0613952R66
R4037M1	0613952R01
R4038M1	0613952R01
R4039M1	NOT PLACED
R4040M1	NOT PLACED
R4041M1	NOT PLACED
R4100M1	0613952R01
R4101M1	0613952Q77
R4102M1	0613958H83
R4103M1	0613952Q85
R4104M1	0613952Q89
R4105M1	0613952Q89
R4106M1	0613952Q89
R4107M1	0613952R01
R4108M1	0613952Q89
R4109M1	0613952N58
R4110M1	0613952Q85
R4111M1	0613952Q85
R4112M1	0613952R01
R4113M1	0613952R01
R4114M1	0613952Q89
R4115M1	0613952N58
R4116M1	0613952Q89
R4117M1	0613952R01
R4118M1	0613952R01
R4119M1	0613952R01
R4120M1	0613952N58
R4121M1	0613952Q85
R4122M1	0613952Q85

Circuit Ref.	Motorola Part No.
R4123M1	0613952N58
R4124M1	0613952N58
R4125M1	0613952Q85
R4126M1	0613952Q85
R4127M1	0613952Q85
R4128M1	0613952R01
R4200M1	0613952R66
R4201M1	0613952R66
R4202M1	0613952R66
R4203M1	0613952R66
R4204M1	0613952R66
R4205M1	0613952R66
R4206M1	0613952R66
R4207M1	0613952R66
R4208M1	0613952R66
R4209M1	HZ000375A01
R4210M1	HZ000375A01
R4211M1	HZ000375A01
R4212M1	HZ000375A01
R4213M1	HZ000375A01
R4214M1	HZ000375A01
R4215M1	0613952R66
R4216M1	0613952R66
R4217M1	0613952R66
R4218M1	0613952R66
R4301M1	NOT PLACED
R4302M1	0613952R66
R4303M1	0613952R66
R4304M1	0613952R66
R4305M1	0613952R66
R4306M1	0613952R66
R4307M1	0613952R66
R4309M1	NOT PLACED
R4310M1	0613952R66
R4311M1	0613952R66
R4312M1	0613952R66
R4313M1	NOT PLACED
R4314M1	0613952R66
R4315M1	0613952R66
R4316M1	0613952R66
R4317M1	0613952R66
RT0900M5	0615585H01
SH0000M2	26012095001
SH0001M2	26012095001
SH0002M2	26012097001
SH0003M2	26012094001
SH0004M2	26012094001
SH0200M7	26012095001
SH0300M7	26012095001
SH0400M4	26012096001
SH0401M4	26012096001

Circuit Ref.	Motorola Part No.
SH0402M4	26012098001
SH0403M4	26012098001
SH0500M3	26012098001
SH0501M3	NOT PLACED
SH0900M5	2686425Z02
SH0901M5	2686425Z02
SH0902M5	26012100001
SH3100M1	NOT PLACED
SP3000M5	NOT PLACED
SP3001M5	NOT PLACED
T0000M2	25012016001
T0400M4	2515121H01
T0401M4	2515121H01
U0000M2	51009877001
U0001M2	5109731C48
U0002M2	4802197J95
U0200M7	5186310Y39
U0500M3	4802197J95
U0901M5	5180390L83
U0902M5	51012221001
U0903M5	5115022H01
U0904M5	5109731C48
U0905M5	5109731C48
U1000M1	5171320H01
U1001M1	51012295001
U1002M1	5189139P01
U1003M1	5175772B56
U1004M1	5175772B56
U1005M1	5164852H47
U1006M1	5185493Y01
U1007M1	5189139P01
U1008M1	5189139P01
U1009M1	5115001H02
U1010M1	5171320H01
U2000M1	MM000157A01
U2001M1	MM000129A01
U3000M5	5116525H01
U3001M5	4813973M07
U3002M5	51012133001
U3100M1	0104039J08
U3101M1	5114014A01
U3102M1	51012069001
U3103M1	51012142001
U3104M1	5171590Y73
U3105M1	5114610F01
U3106M1	51012140001
U3107M1	51012140001
U3108M1	51012138001
U3109M1	5164015H94
U3110M1	51012208001
U3111M1	5188690V02

Circuit Ref.	Motorola Part No.
U3112M1	5114004A35
U3113M1	5188690V02
U3114M1	NOT PLACED
U3115M1	5185937Y01
U3200M1	51009415001
U3201M1	5114016A18
U3204M1	51009509001
U3205M1	5114016A18
U4000M1	51012082001
U4001M1	51012082001
U4100M1	5189139P01
U4200M1	NOT PLACED
U4201M1	NOT PLACED
U4300M1	51012082001
U4301M1	51012082001
VR0001M2	4815096H01
VR0200M7	4805656W87
VR0201M7	4805656W87
VR0202M7	4805656W87
VR0203M7	4805656W87
VR0204M7	4805656W87
VR0205M7	4805656W87
VR0206M7	4805656W87
VR0207M7	4805656W87
VR0208M7	4805656W87
VR0209M7	4805656W87
VR0210M7	4805656W87
VR0211M7	4805656W87
VR0214M7	4805656W87
VR0215M7	4805656W87
VR0400M4	4805656W87
VR0401M4	4805656W87
VR0402M4	4805656W87
VR0403M4	4805656W87
VR0404M4	4805656W87
VR0405M4	4805656W87
VR0406M4	4805656W87
VR0407M4	4805656W87
VR3000M5	48012202001
VR3002M5	4813977M10
VR3103M1	48012095001
VR3104M1	48012095002
VR3105M1	4813977M10
VR3200M1	48012049001
VR3201M1	4813977A48
VR3202M1	4813977A48
VR4000M1	4813977M13
VR4001M1	4813977A48
VR4002M1	48012153001
VR4100M1	4813977A48
VR4101M1	4813977A48

Circuit Ref.	Motorola Part No.
VR4102M1	4813977A48
VR4103M1	4813977A48
VR4104M1	48012049001
VR4105M1	4813977M13
VR4106M1	4813977A48
VR4107M1	4813977A48
VR4108M1	4813977A48
VR4109M1	4813977A50
VR4110M1	4815040H01
VR4111M1	48012153001
Y0000M2	4875185M05

Note: The suffix "M1", "M2", etc. from the Circuit Ref is removed from the schematic and overlays.



# **XPR 5350e/XPR 5550e Mobile Radios**

Chapter 10

UHF1 (403–470 MHz)

25–40W

Service Information

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# Chapter 10 – UHF1 High Power Service Information

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### Section 2 UHF1 PCB/Schematics/Parts Lists

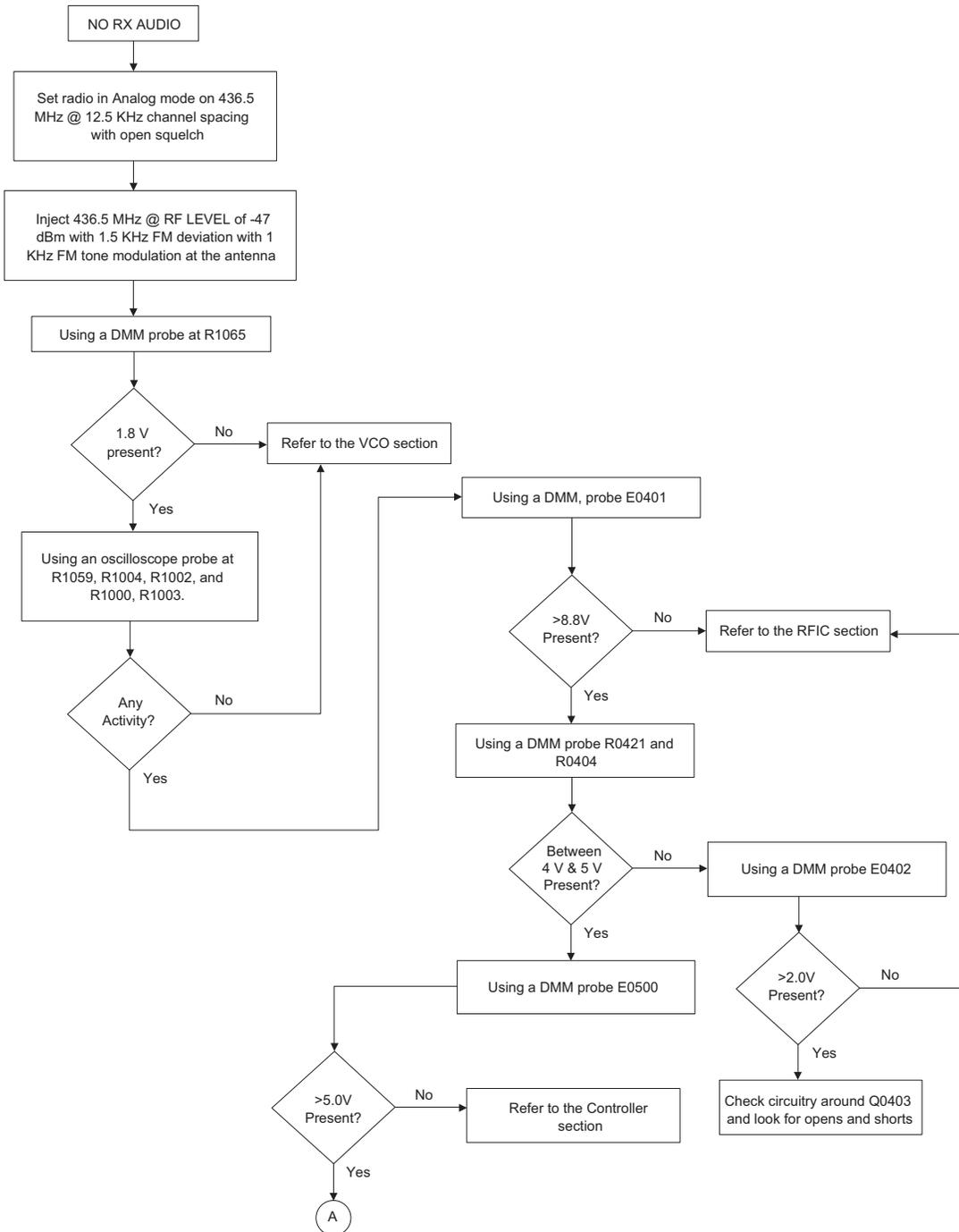
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## Notes

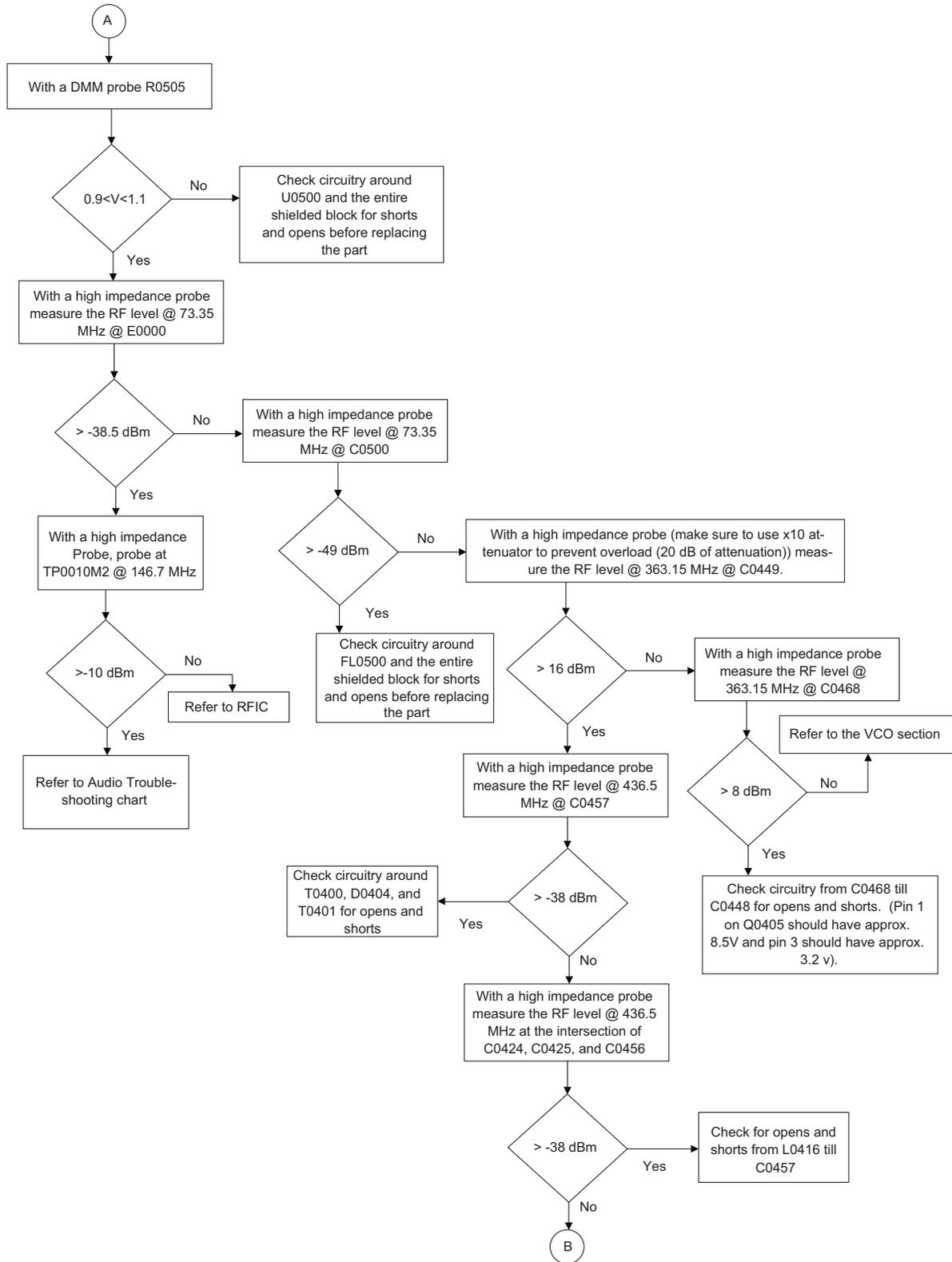
# Section 1

## TROUBLESHOOTING CHARTS

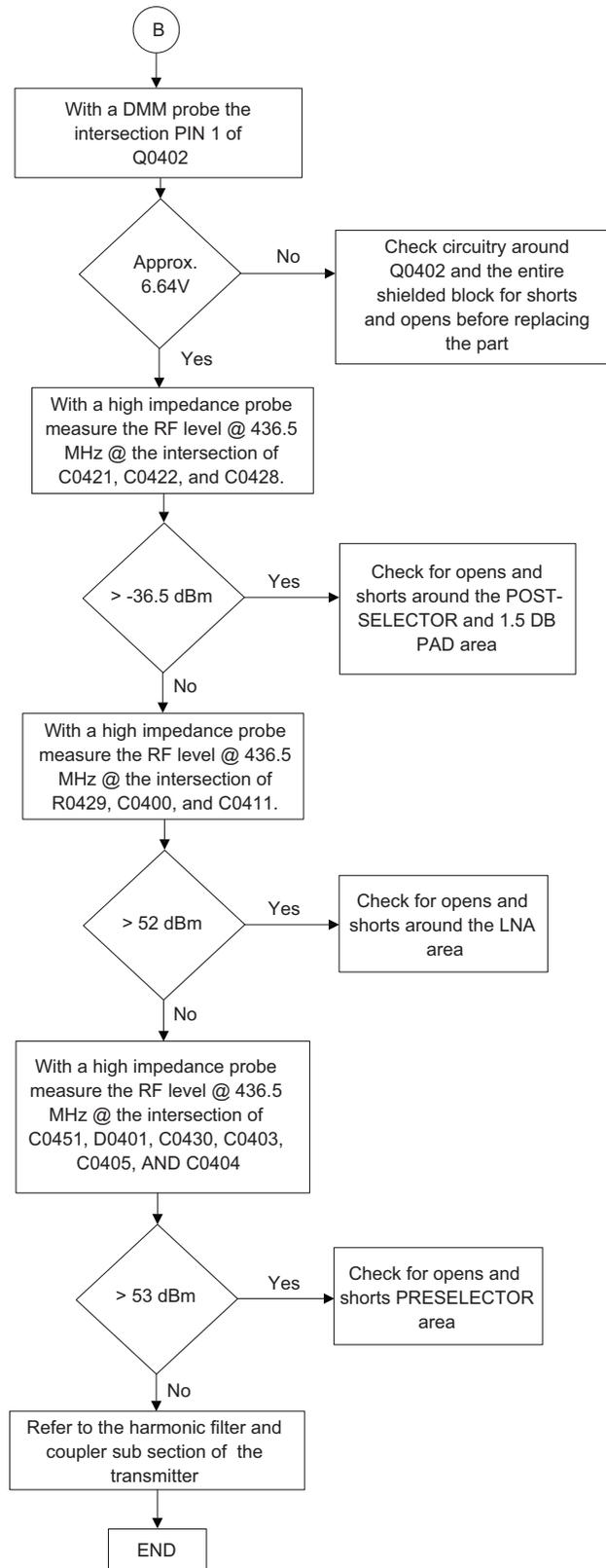
### 1.0 Troubleshooting Flow Chart for Receiver (Sheet 1 of 3)



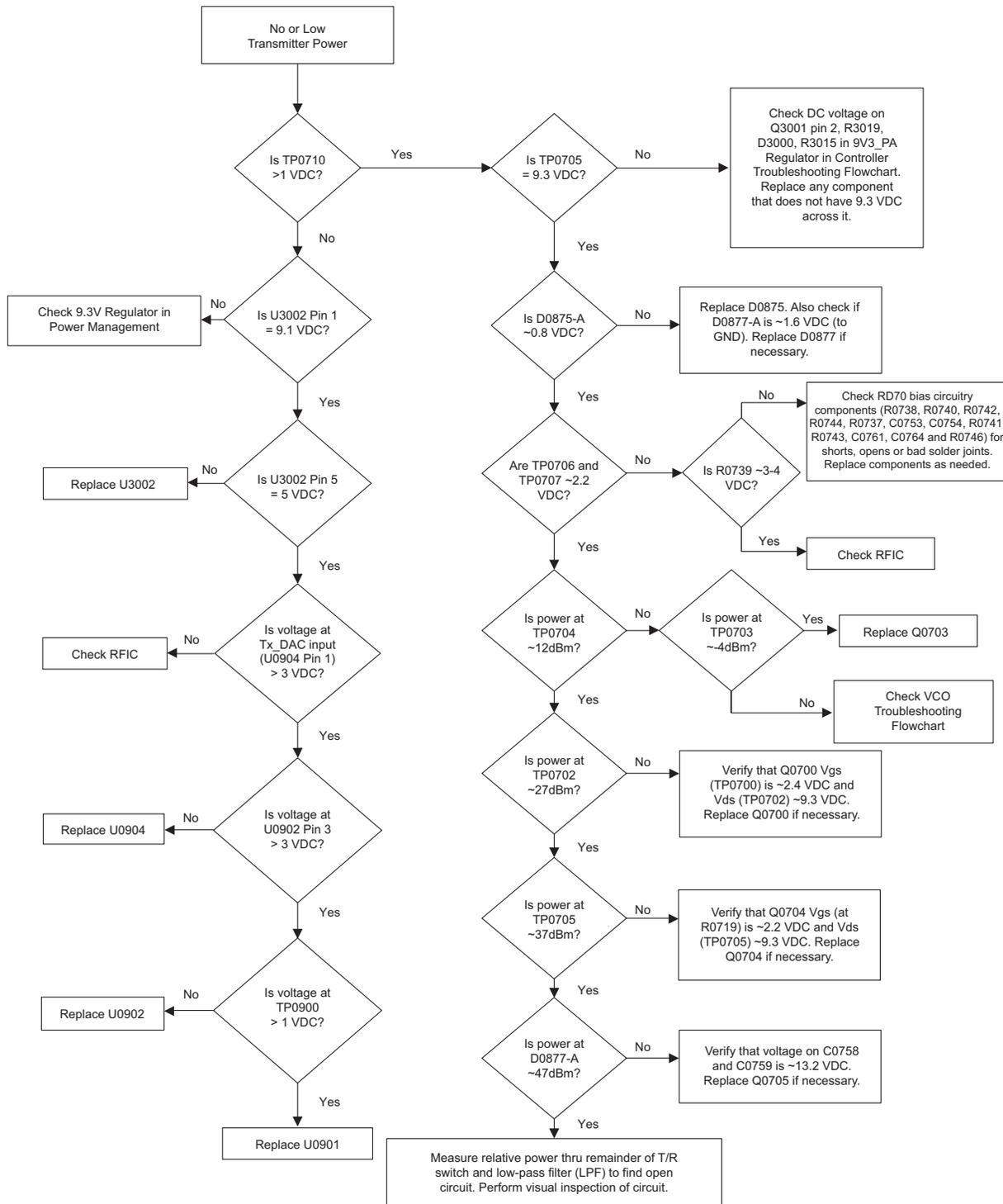
# 1.1 Troubleshooting Flow Chart for Receiver (Sheet 2 of 3)



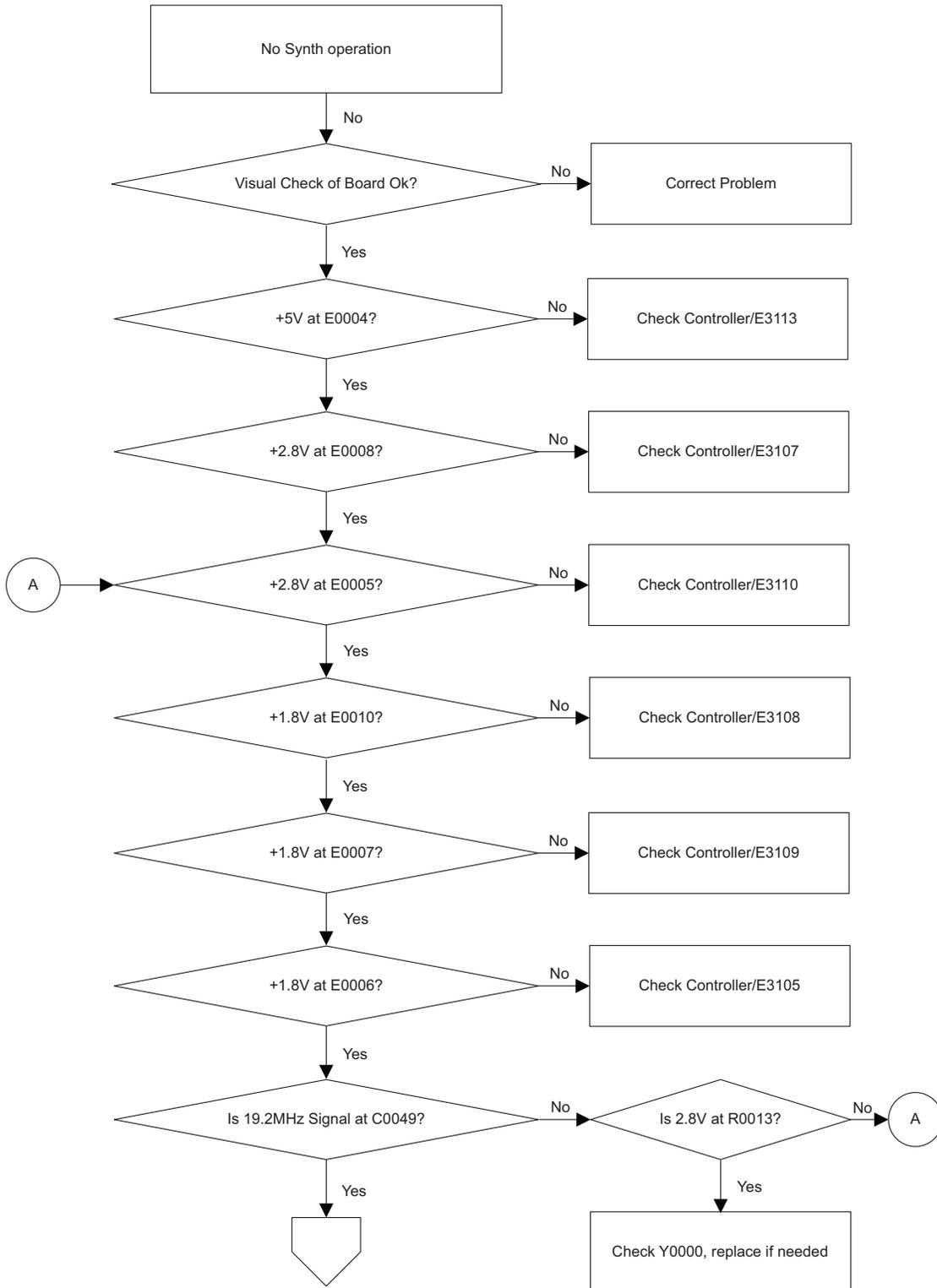
## 1.2 Troubleshooting Flow Chart for Receiver (Sheet 3 of 3)



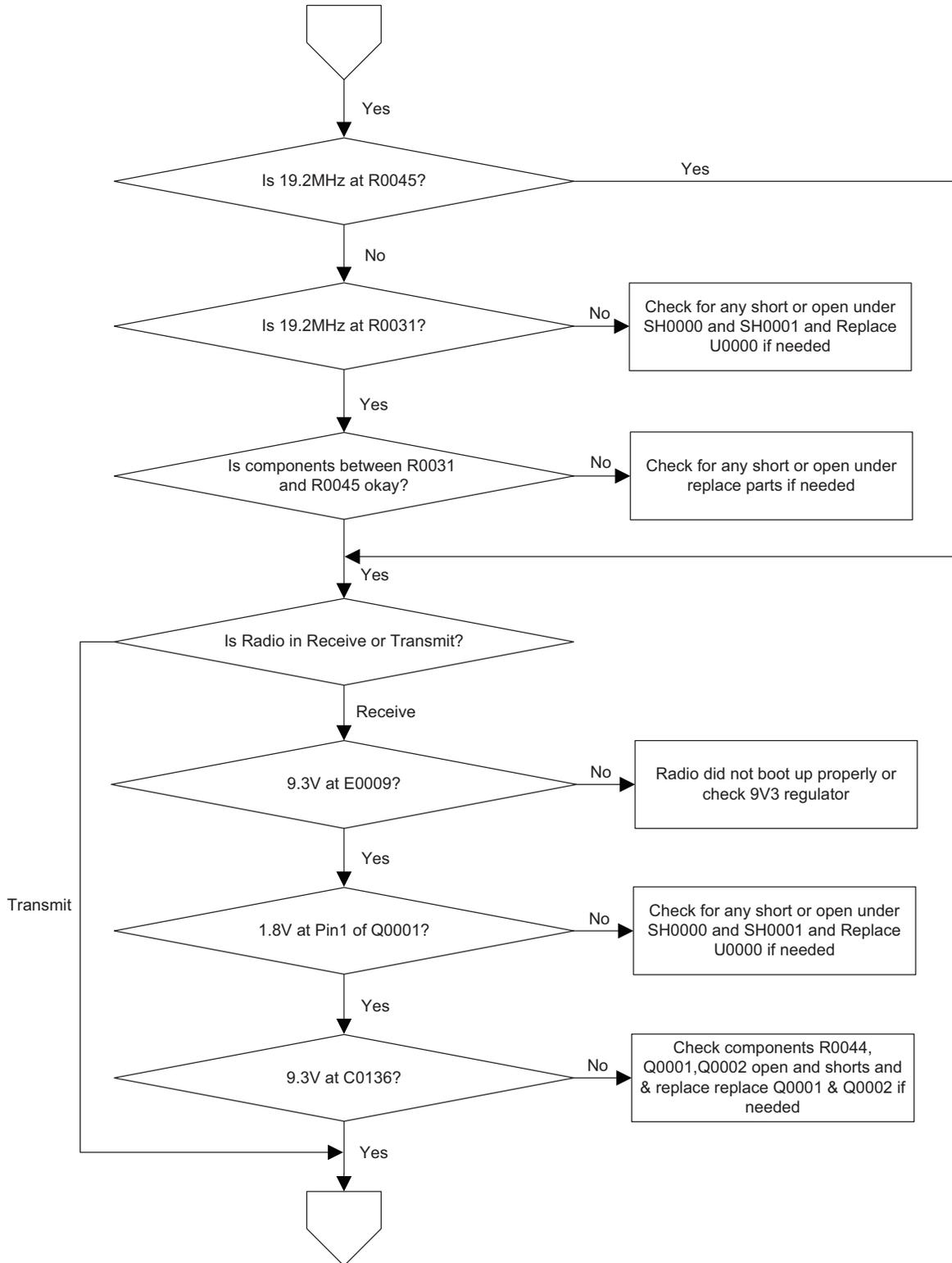
## 2.0 Troubleshooting Flow Chart for 40W Transmitter



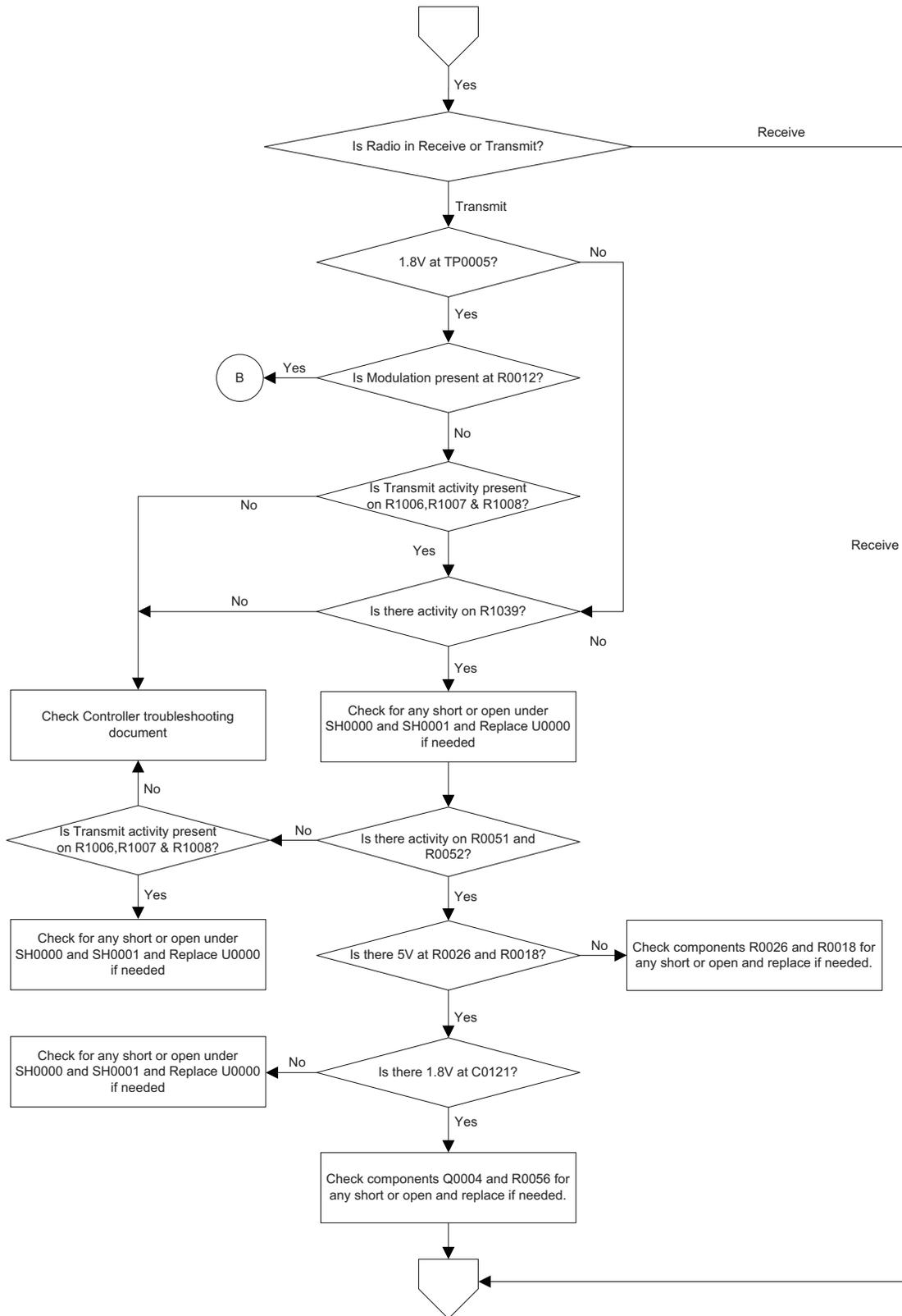
### 3.0 Troubleshooting Flow Chart for RFIC (Sheet 1 of 5)



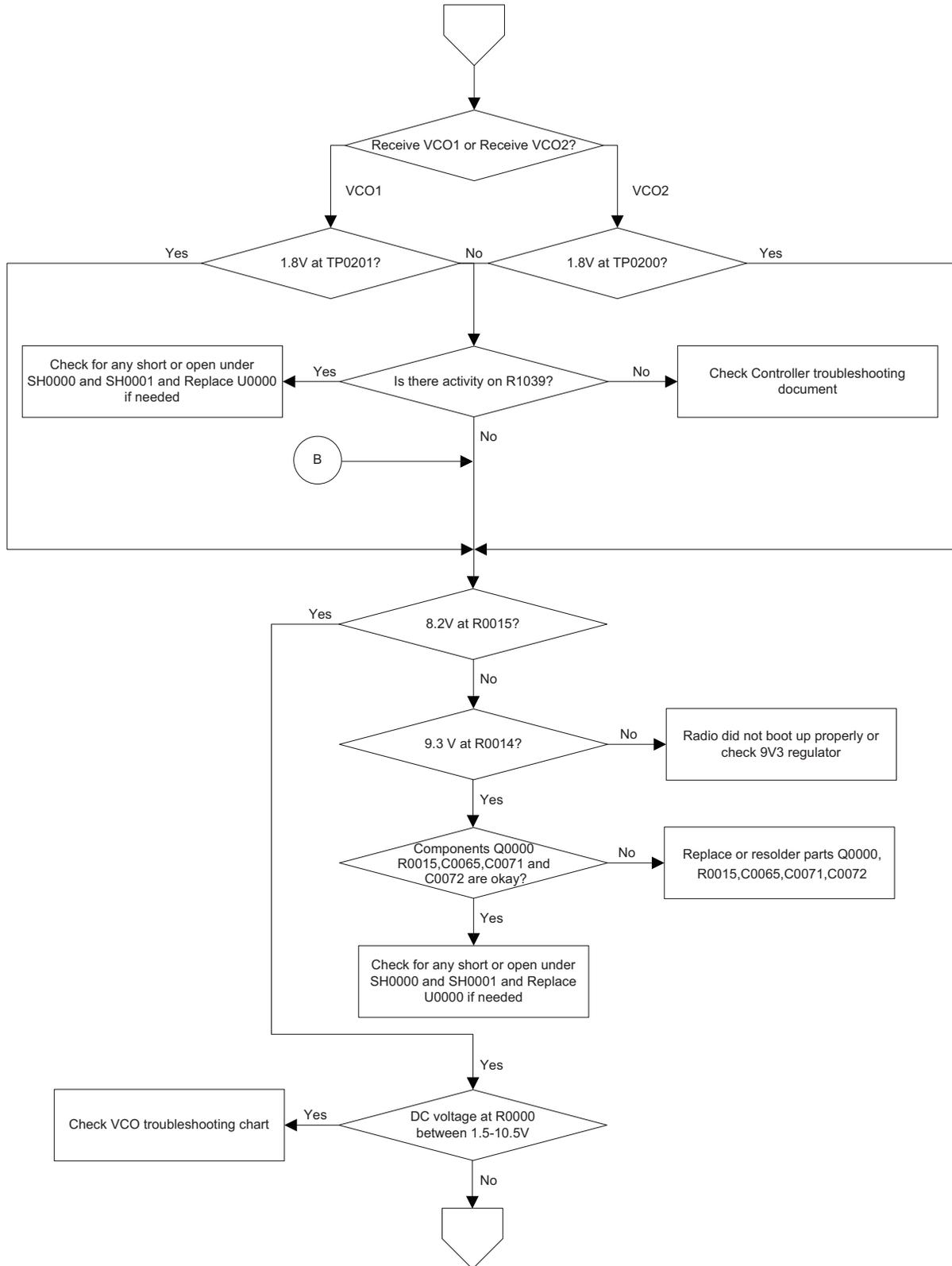
### 3.1 Troubleshooting Flow Chart for RFIC (Sheet 2 of 5)



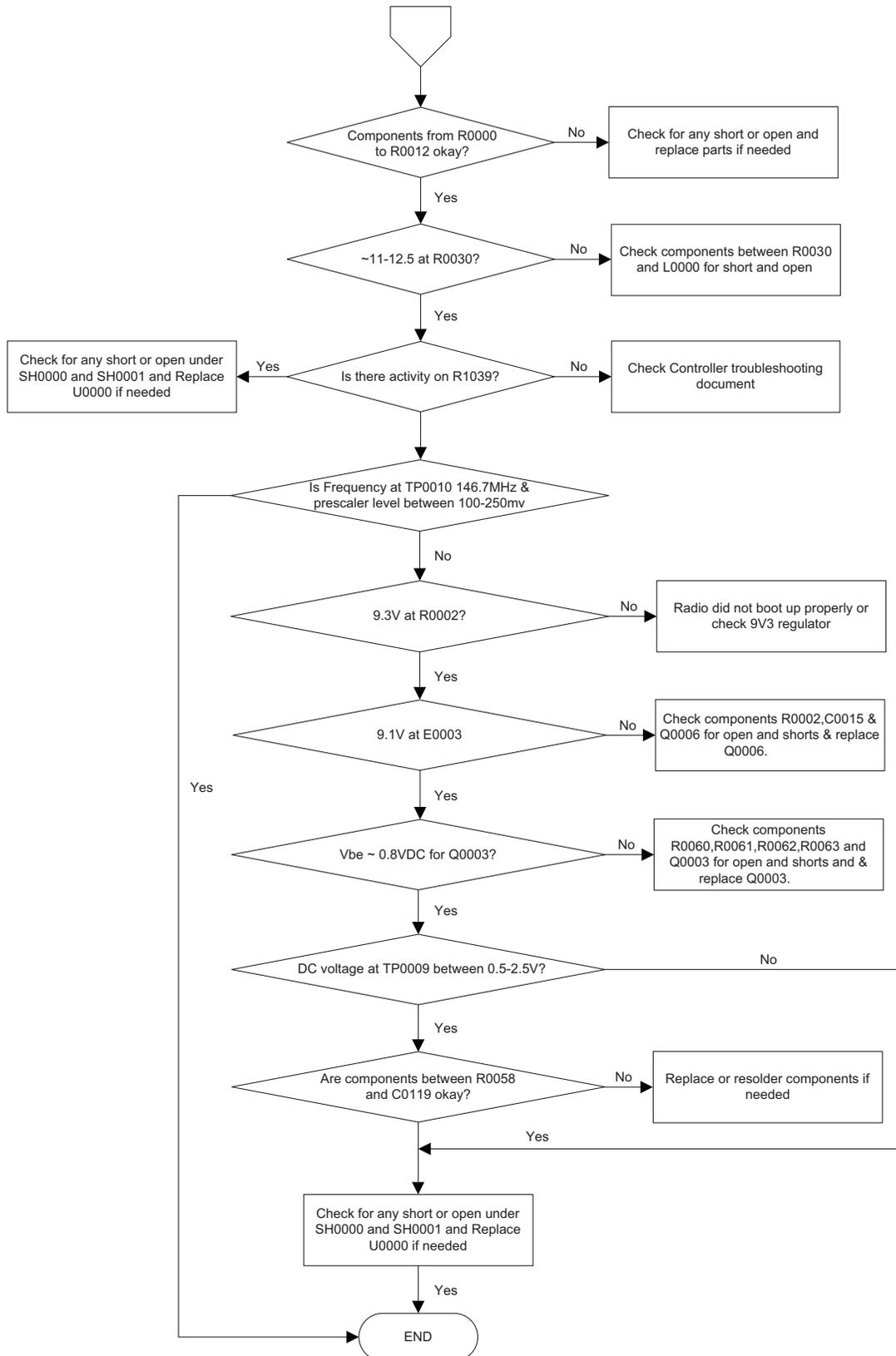
### 3.2 Troubleshooting Flow Chart for RFIC (Sheet 3 of 5)



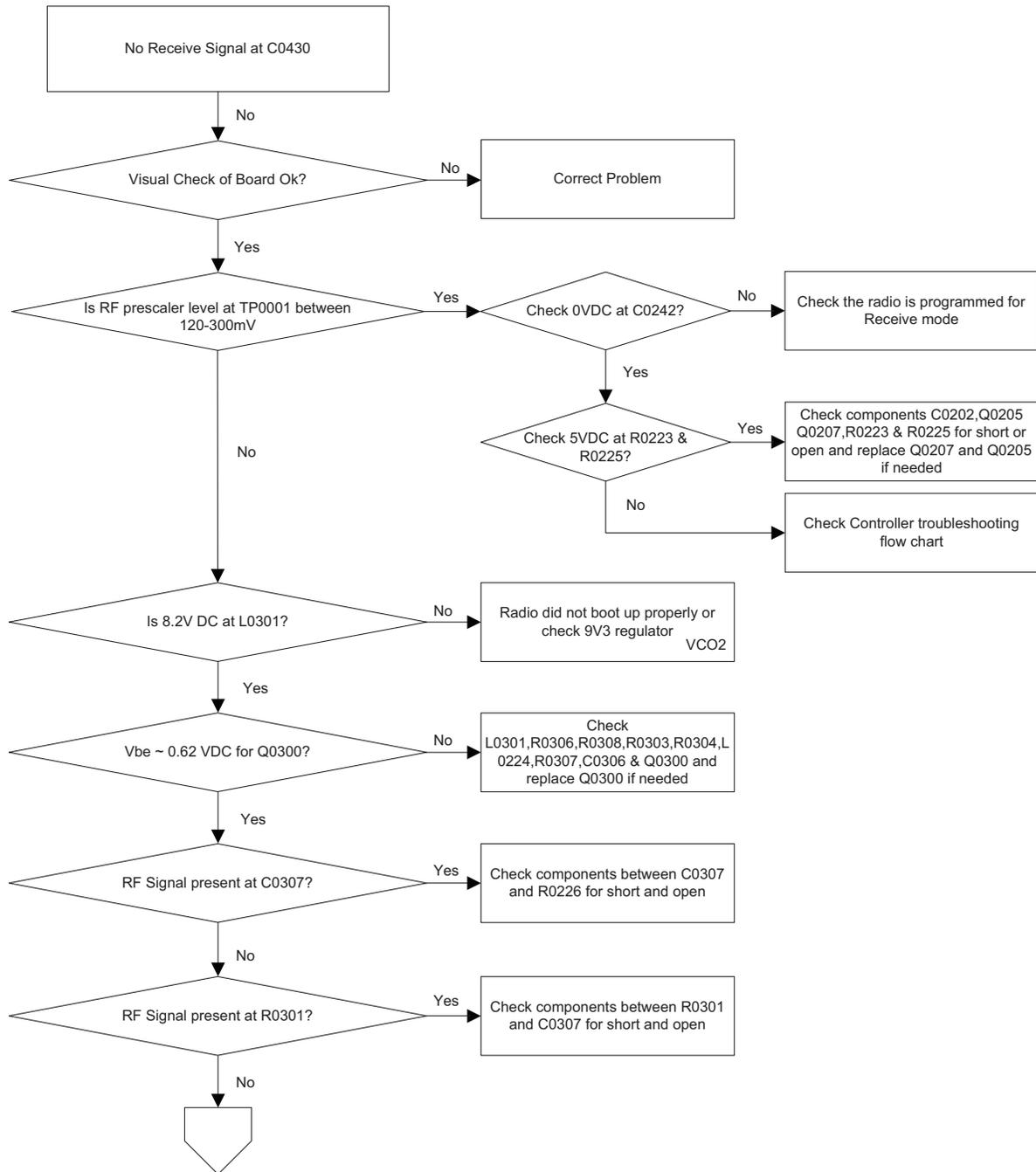
### 3.3 Troubleshooting Flow Chart for RFIC (Sheet 4 of 5)



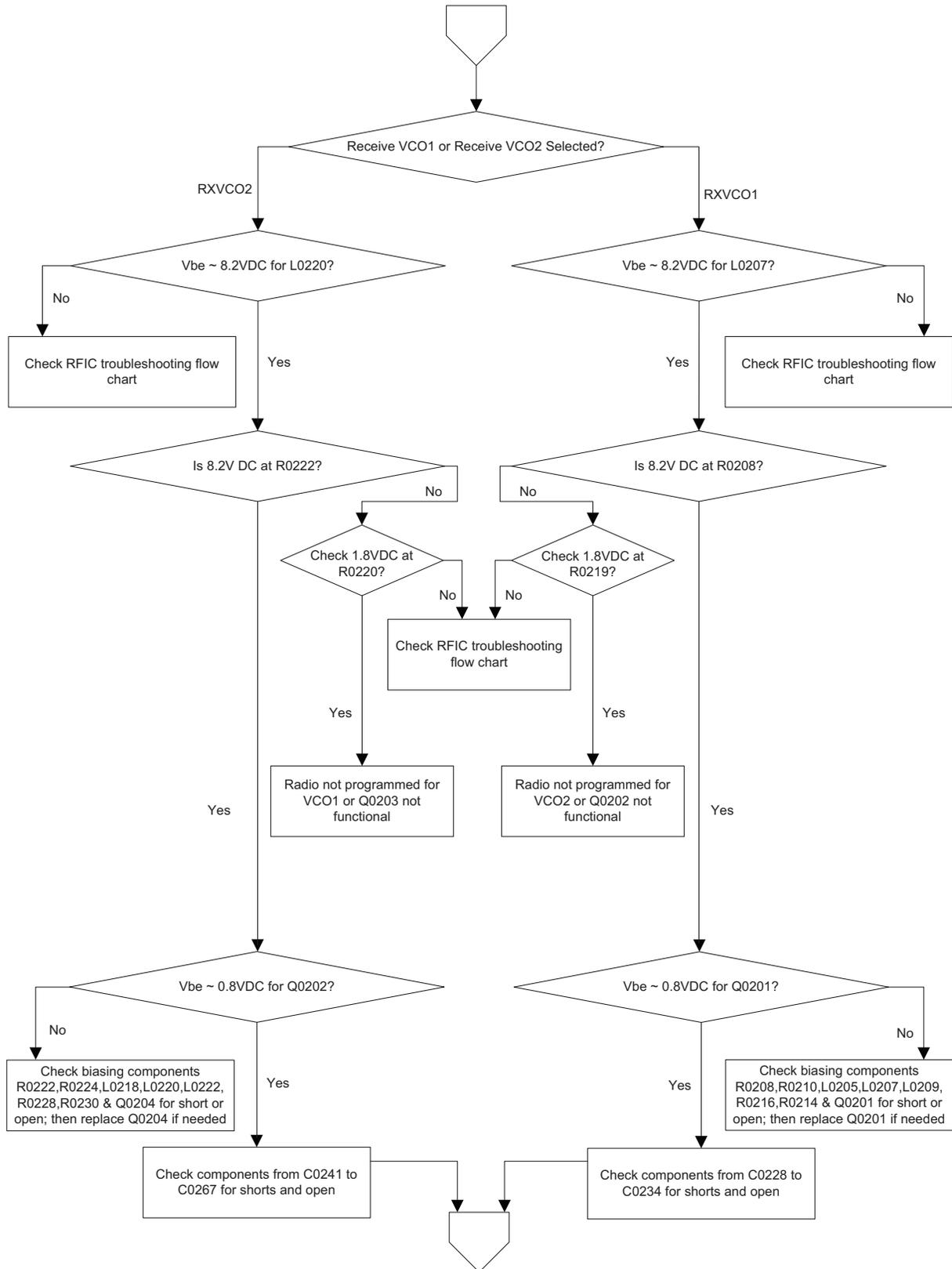
### 3.4 Troubleshooting Flow Chart for RFIC (Sheet 5 of 5)



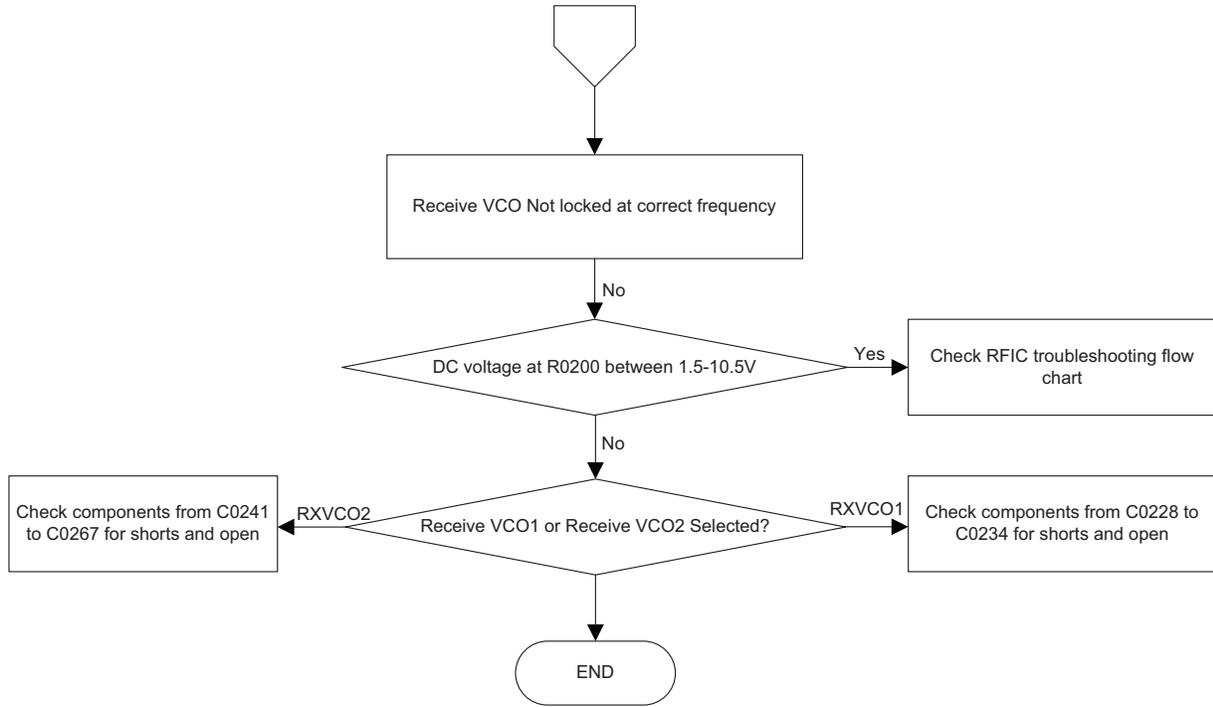
### 4.0 Troubleshooting Flow Chart for Rx VCO (Sheet 1 of 3)



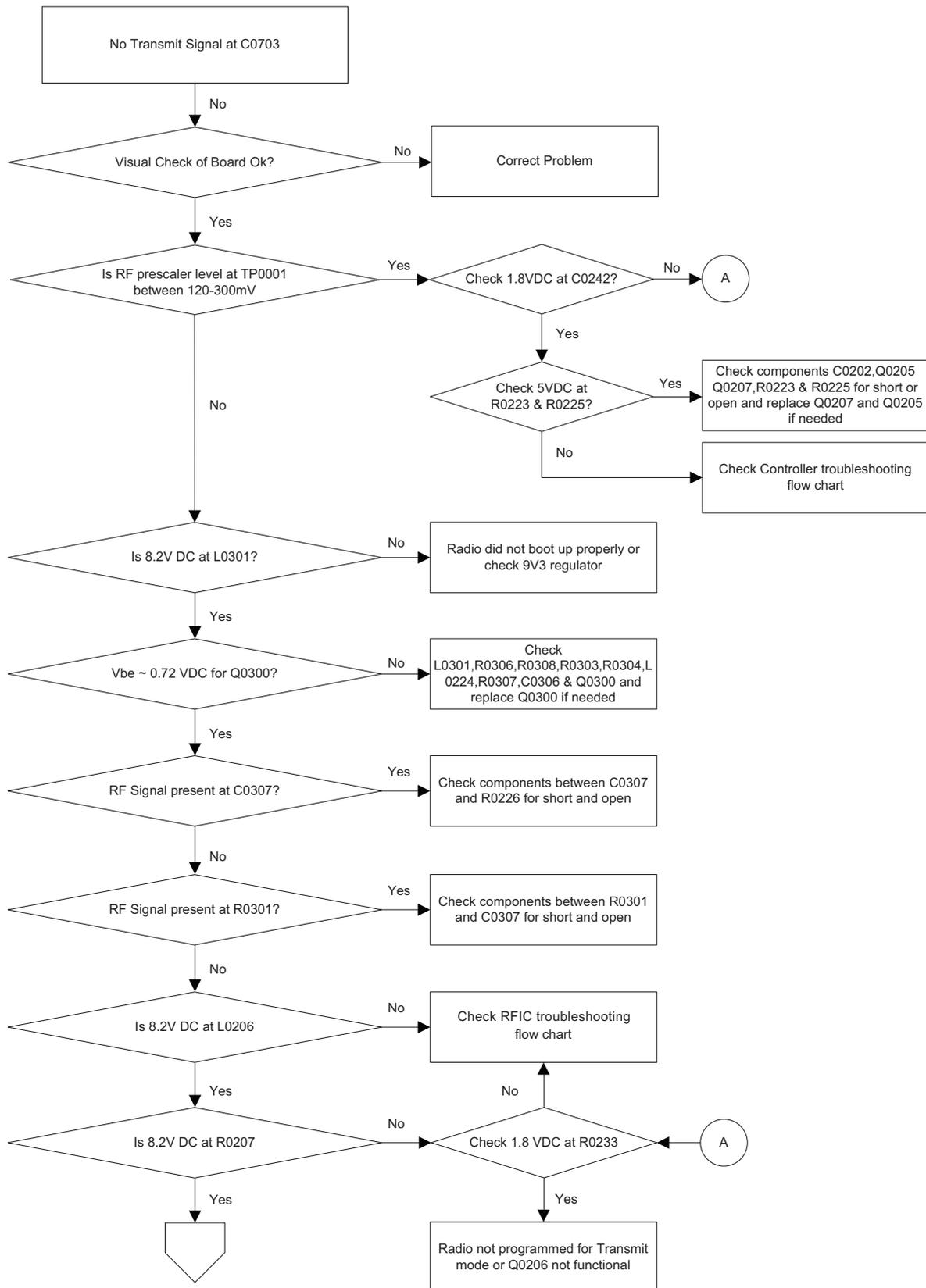
### 4.1 Troubleshooting Flow Chart for Rx VCO (Sheet 2 of 3)



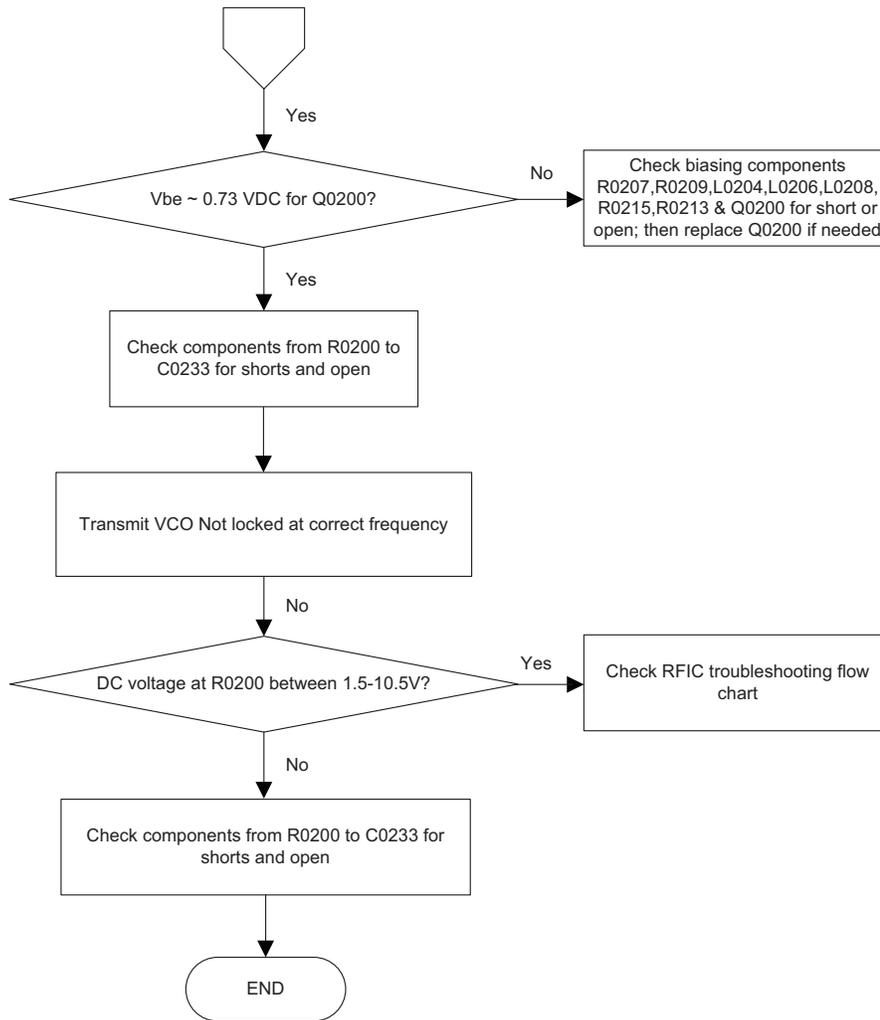
### 4.2 Troubleshooting Flow Chart for Rx VCO (Sheet 3 of 3)



### 5.0 Troubleshooting Flow Chart for Tx VCO (Sheet 1 of 2)



### 5.1 Troubleshooting Flow Chart for Tx VCO (Sheet 2 of 2)



## Section 2

### UHF1 PCB/SCHEMATICS/PARTS LISTS

#### 1.0 Allocation of Schematics and Circuit Boards

##### 1.1 UHF1 40W Circuits

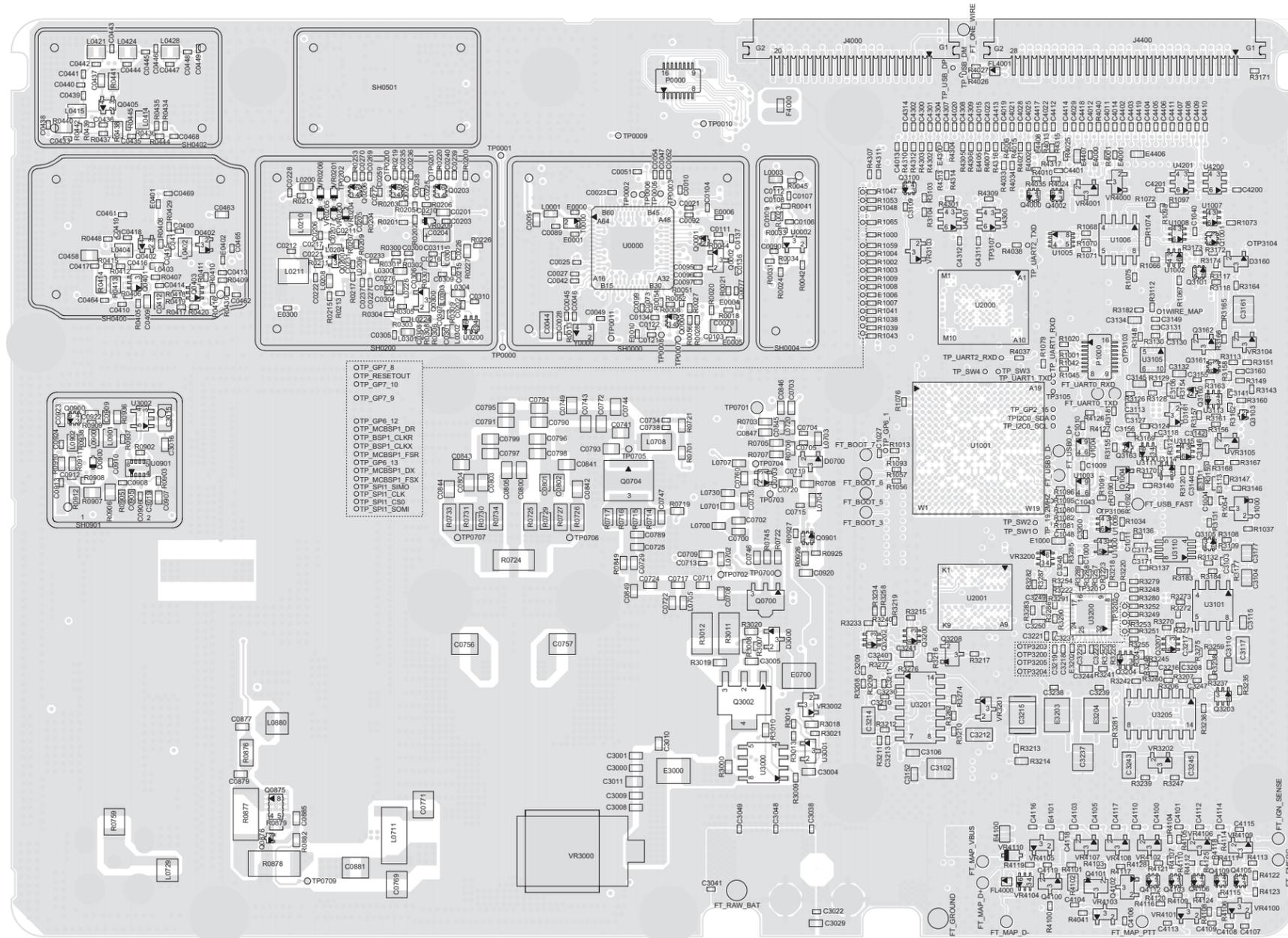
The UHF1 circuits are contained on the Printed Circuit Board (PCB) which also contains the Controller circuits. This chapter shows the schematics for the UHF1 40W circuits only, refer to the Controller section for details of the related Controller circuits. The PCB component layouts and the Parts List in this chapter show both the Controller and UHF1 40W circuit components. The UHF1 40W schematics and the related PCB and parts list are shown in the table below.

*Table 2-1 UHF1 25–40W Schematic Diagrams and Parts List*

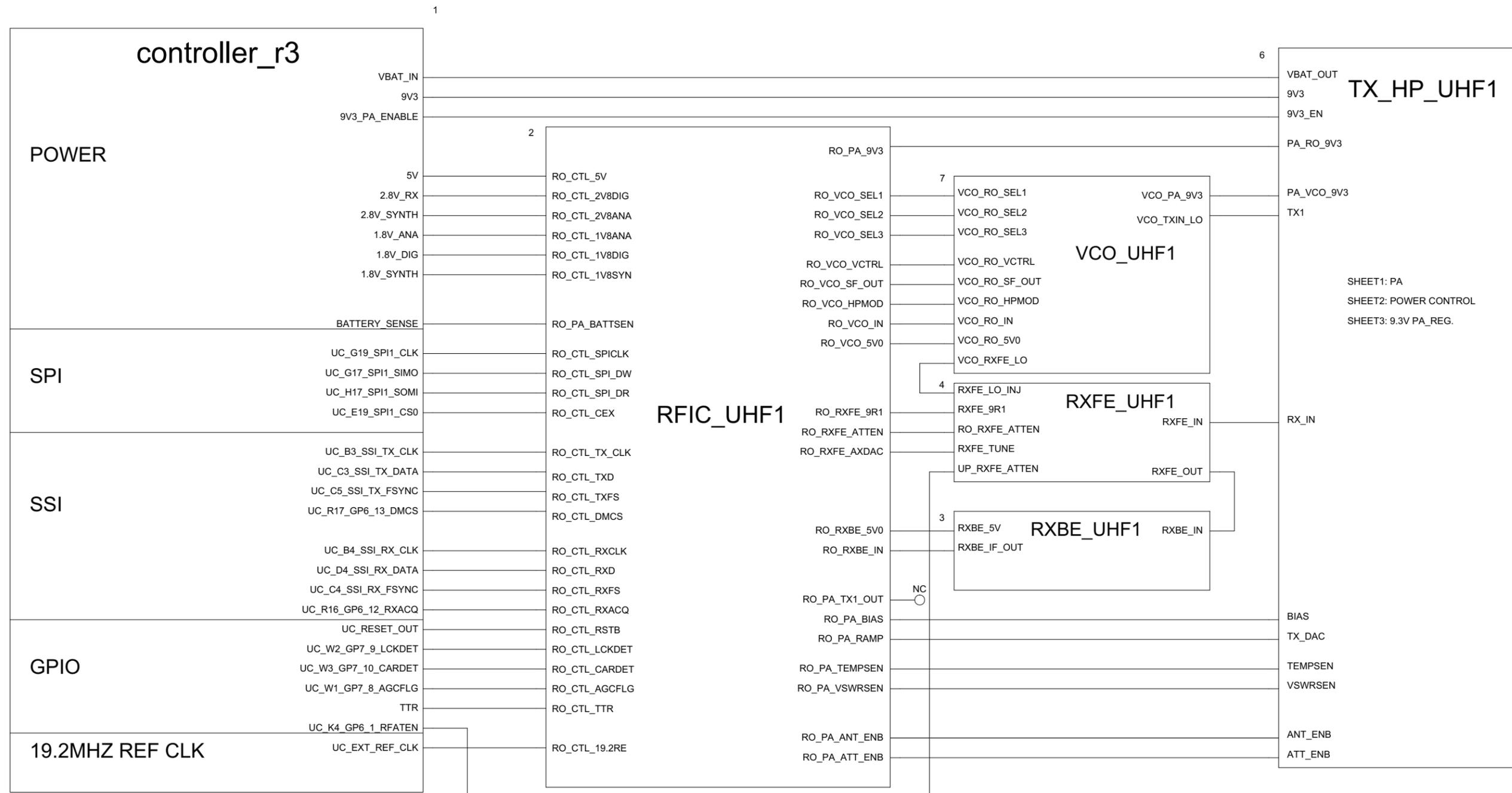
<b>PCB:</b>	
84012737001-A Main Board Top Side	Page 2-3
84012737001-A Main Board Bottom Side	Page 2-4
<b>SCHEMATICS</b>	
Overall	Page 2-5
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Receiver IF Amp	Page 2-7
Transmitter Power Amplifier	Page 2-8
Power Control	Page 2-9
Transmitter Power Amplifier DC Distribution	Page 2-10
RFIC	Page 2-11
Receiver VCO	Page 2-12
Transmit VCO	Page 2-13
VCO Buffer	Page 2-14
<b>Parts List</b>	
84012737001-A (UHF1 40W Only)	Page 2-15

## Notes

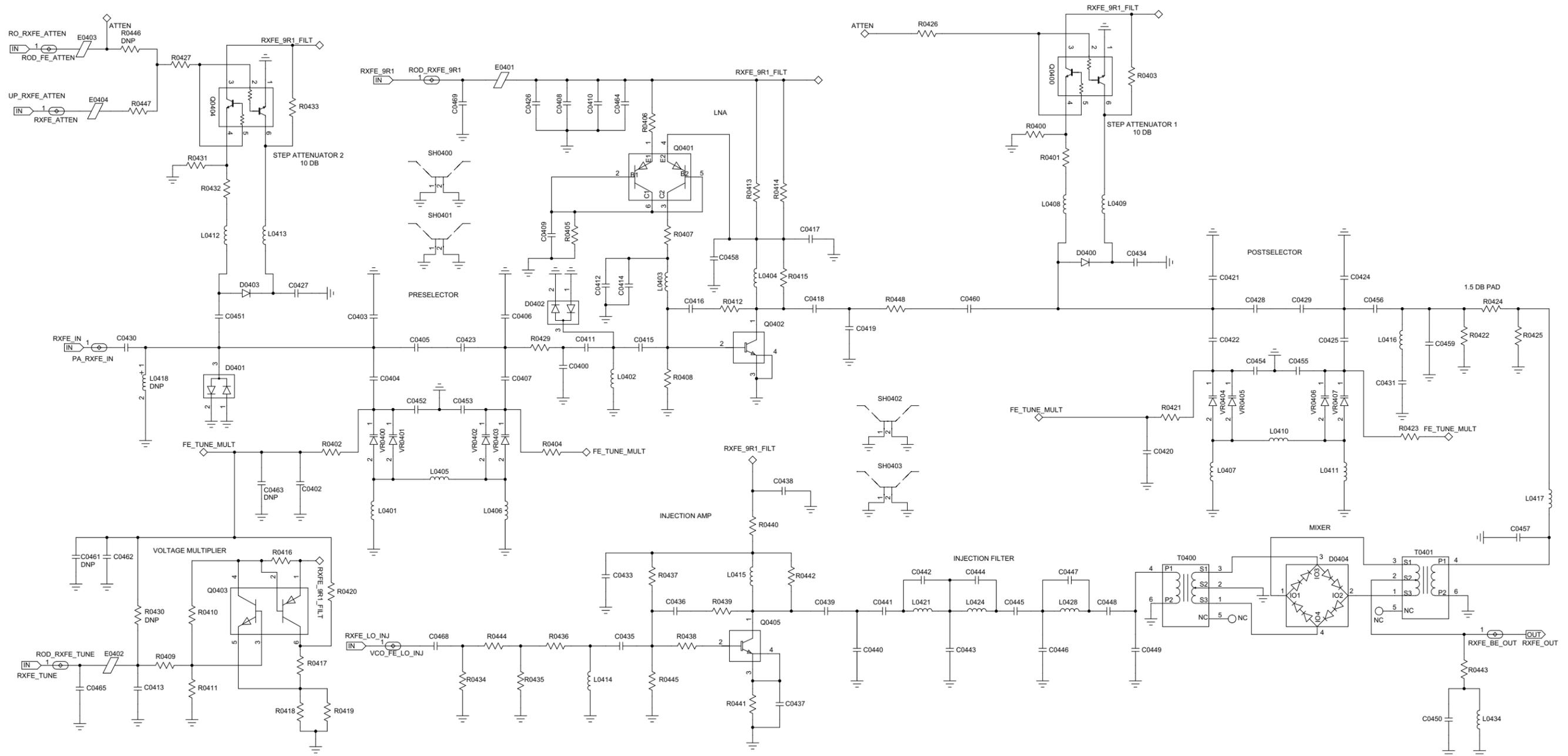




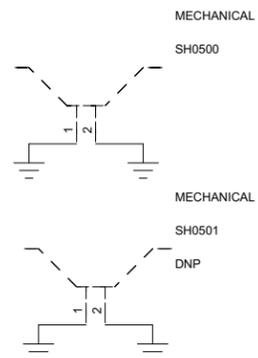
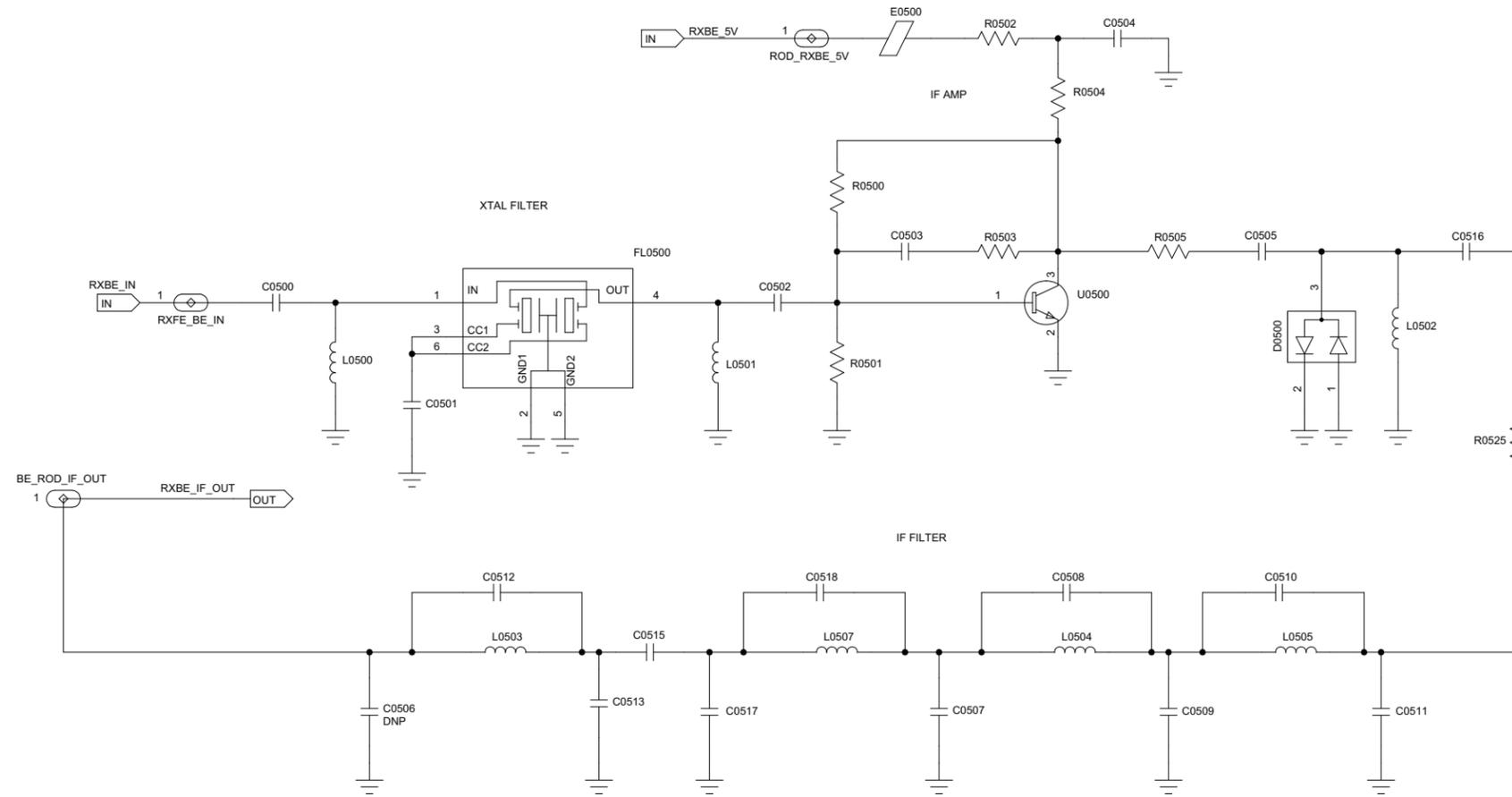
UHF1 (403–470 MHz) 25–40W 84012737001-A Bottom Side



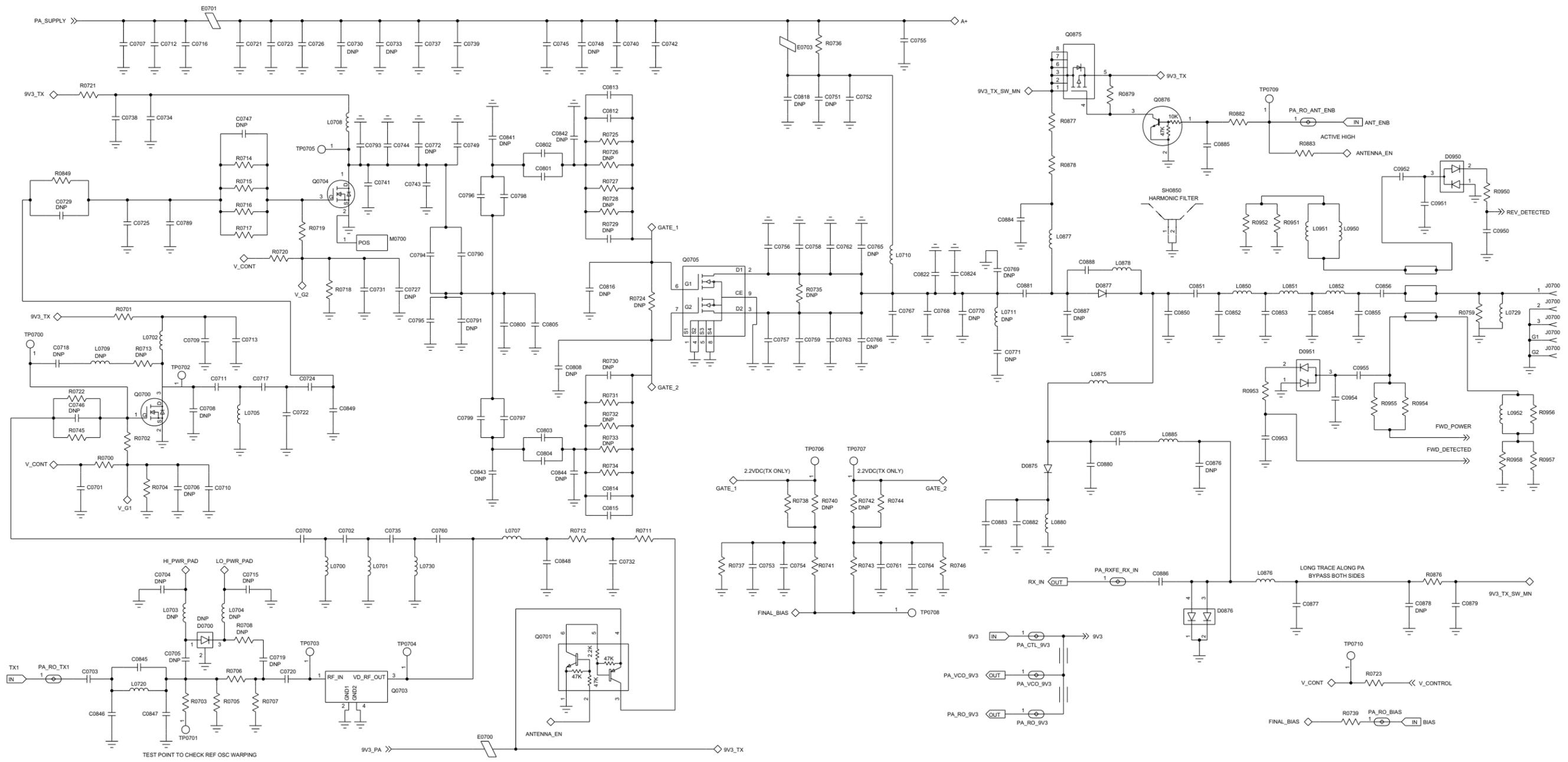
UHF1 (403–470 MHz) 25–40W Overall Schematic Diagram



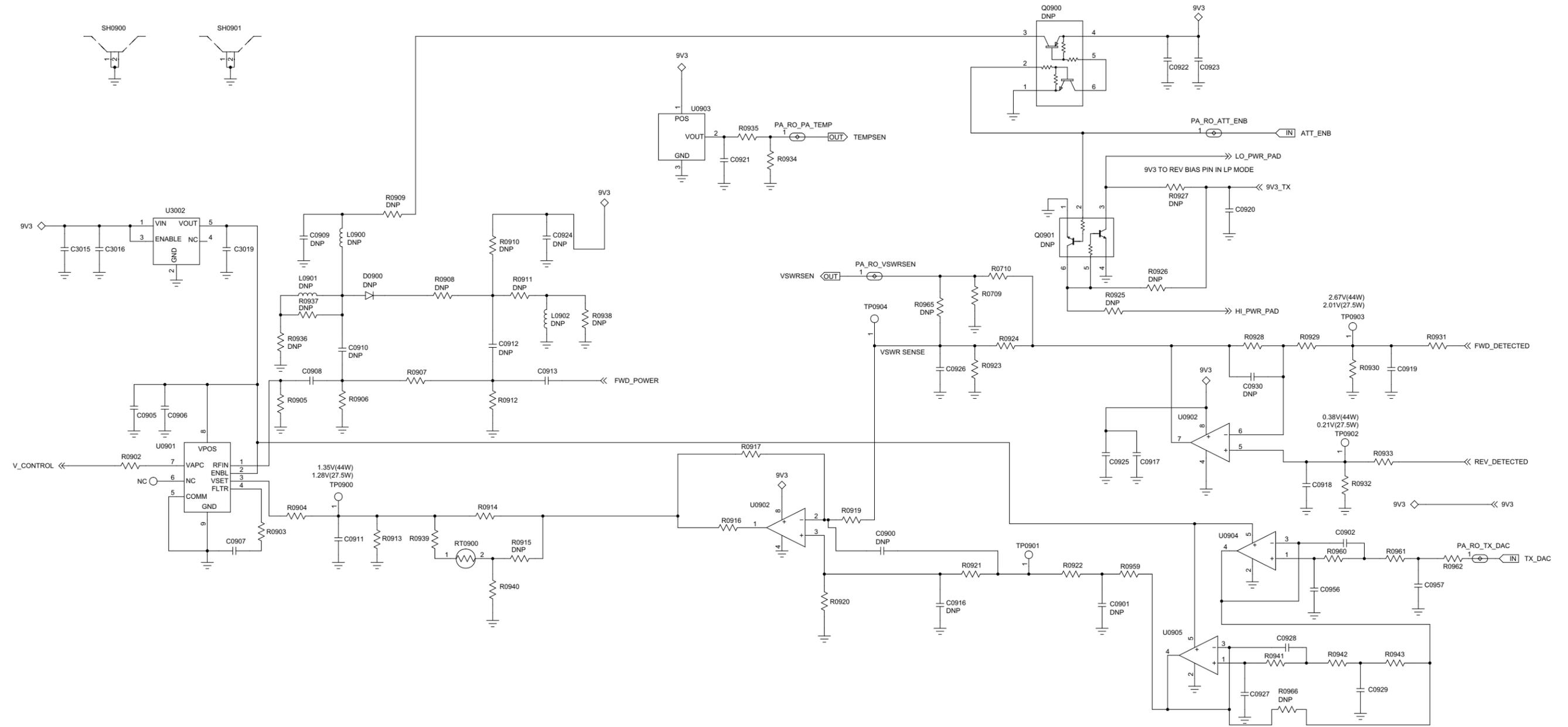
UHF1 (403-470 MHz) 25-40W Receiver Front-End Schematic Diagram



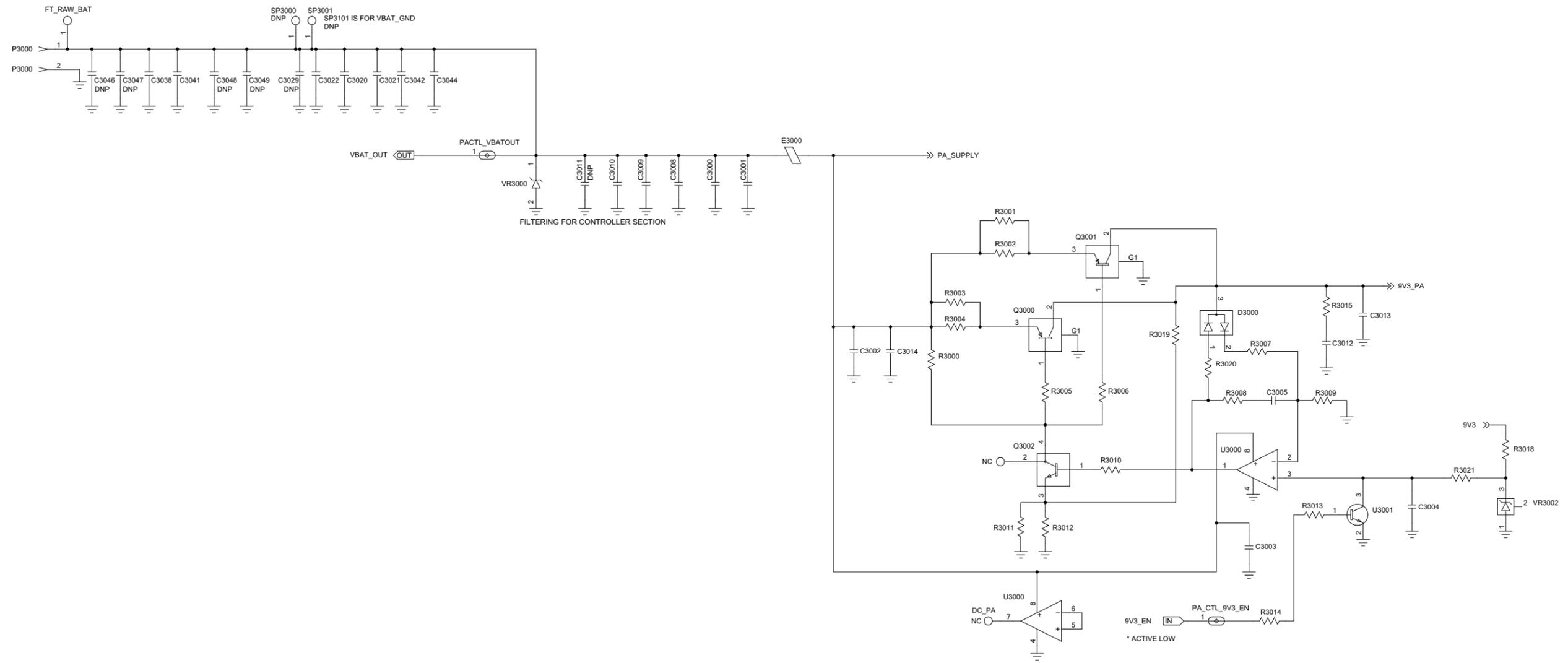
UHF1 (403–470 MHz) 25–40W Receiver IF Amp Schematic Diagram



UHF1 (403-470 MHz) 25-40W Transmitter Power Amplifier Schematic Diagram

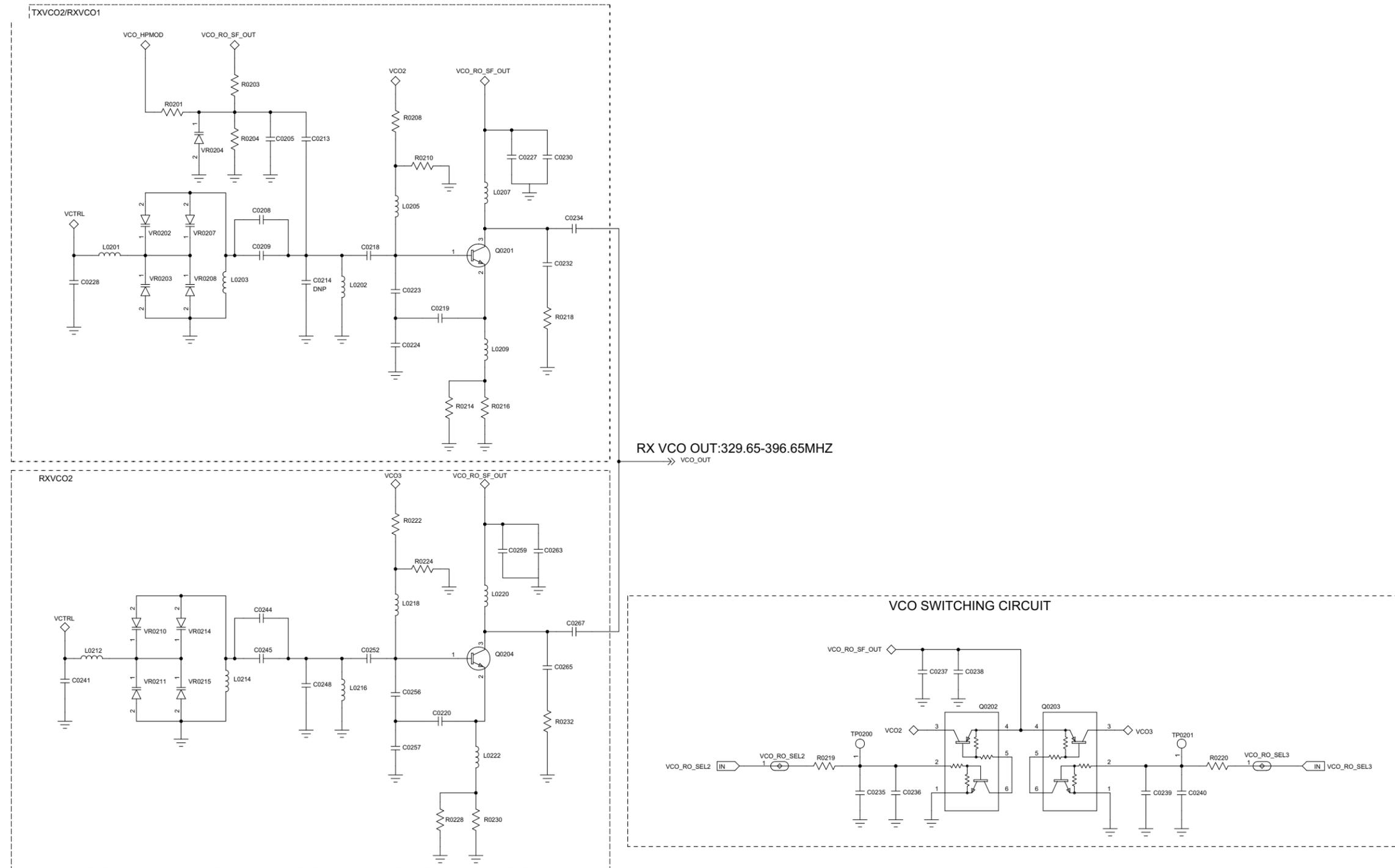


UHF1 (403–470 MHz) 25–40W Power Control Schematic Diagram



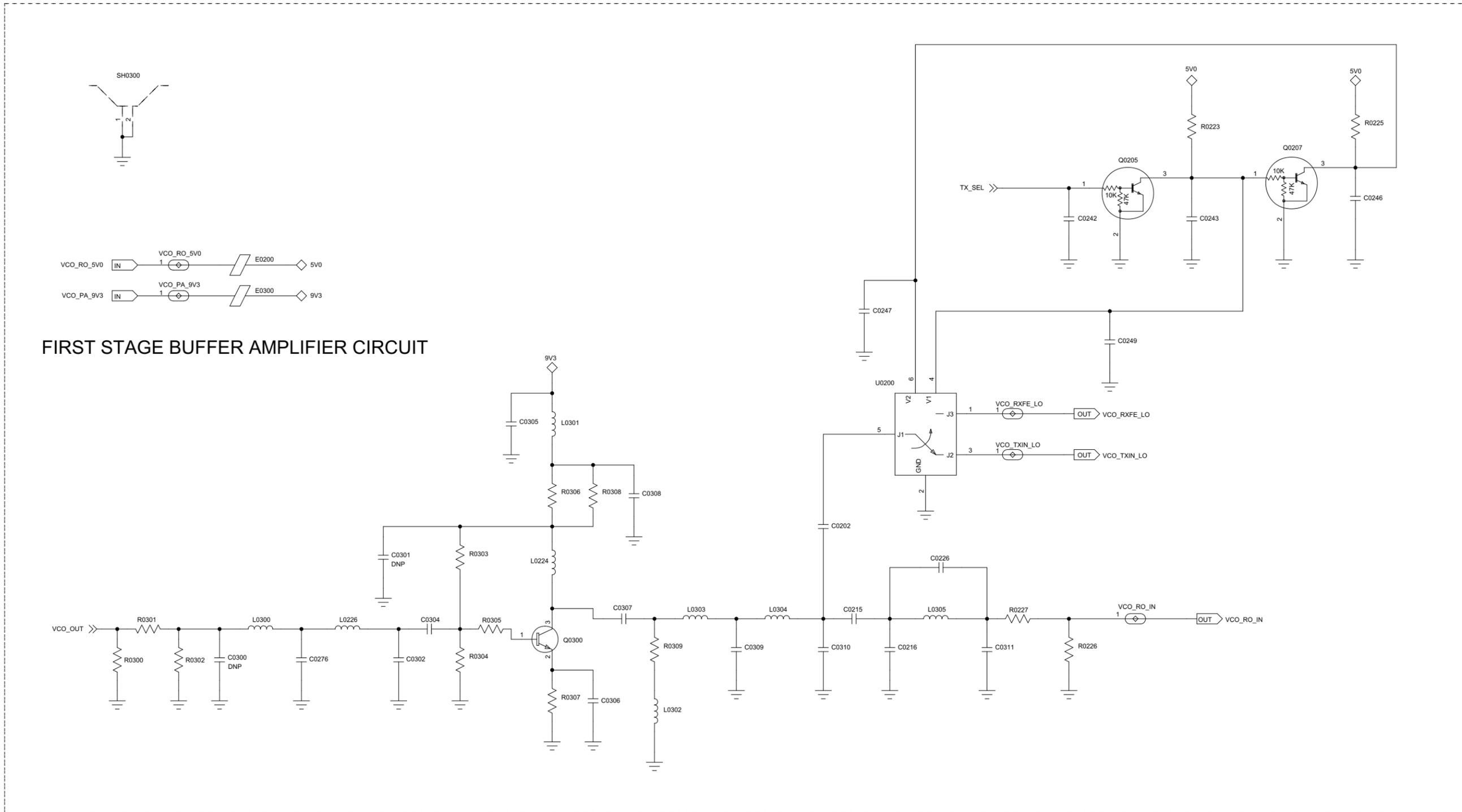
**UHF1 (403-470 MHz) 25-40W Transmitter Power Amplifier DC Distribution Schematic Diagram**





UHF1 (403-470 MHz) 25-40W Receiver VCO Schematic Diagram





FIRST STAGE BUFFER AMPLIFIER CIRCUIT

UHF1 (403-470 MHz) 25-40W VCO Buffer Schematic Diagram

**UHF1 PCB 84012737001-A  
Parts List 25–40W**

Circuit Ref.	Motorola Part No.
C0000M2	21667009311
C0001M2	21667009170
C0002M2	21012044001
C0003M2	NOT PLACED
C0004M2	21012044001
C0005M2	21012044001
C0006M2	2113945C31
C0007M2	21012044001
C0008M2	21667009311
C0009M2	21667009166
C0010M2	21667009166
C0011M2	2113945C31
C0012M2	21012044001
C0013M2	2113945Y02
C0014M2	2113945Y02
C0015M2	2113946J03
C0016M2	2113945A10
C0017M2	2113945Y02
C0018M2	2113945A10
C0019M2	2113945Y02
C0020M2	2113945A10
C0021M2	2113945Y02
C0022M2	2113945Y02
C0023M2	2113945Y02
C0024M2	21012102001
C0025M2	21667009166
C0026M2	21667009174
C0027M2	2113945Y02
C0028M2	2113945Y02
C0029M2	2113945A10
C0030M2	2113945A10
C0031M2	2113945Y02
C0032M2	21667009166
C0034M2	21012044001
C0035M2	21667009166
C0036M2	21012025001
C0037M2	21667009166
C0038M2	21012044001
C0039M2	2113945Y02
C0040M2	2113945A10
C0041M2	21667009364
C0042M2	21667009166
C0043M2	21012044001
C0044M2	2113945D45
C0045M2	2113945Y02
C0046M2	21667009166
C0047M2	21667009166
C0048M2	21667009166
C0049M2	2113945B02

Circuit Ref.	Motorola Part No.
C0050M2	21667009166
C0051M2	21667009166
C0052M2	21667009166
C0053M2	21667009166
C0054M2	21667009166
C0055M2	2113955D37
C0056M2	2113945Y02
C0057M2	2113945B02
C0058M2	NOT PLACED
C0059M2	21667009166
C0060M2	2113945A69
C0061M2	2113945Y02
C0062M2	NOT PLACED
C0063M2	NOT PLACED
C0064M2	2113945A69
C0065M2	2113945Y02
C0066M2	2113945B02
C0067M2	2113945Y02
C0068M2	2113955D37
C0069M2	NOT PLACED
C0070M2	2113955D37
C0071M2	2113955D37
C0072M2	21667009166
C0073M2	21667009166
C0074M2	21667009166
C0075M2	2113946S35
C0076M2	2113946S35
C0077M2	21667009166
C0078M2	21667009372
C0079M2	2113955D37
C0080M2	2113945B02
C0081M2	2113945B02
C0082M2	2113945B02
C0083M2	2113945B02
C0084M2	21667009166
C0085M2	21667009166
C0086M2	2113945C31
C0087M2	2113946S35
C0088M2	2113945Y02
C0089M2	2113945Y02
C0090M2	2113945B02
C0091M2	2113944C82
C0092M2	21667009166
C0093M2	2113945Y02
C0094M2	2113945Y02
C0095M2	2113945A13
C0096M2	2113945B02
C0097M2	2113945B02
C0098M2	21667009166
C0099M2	2113945Y02
C0100M2	2113945Y02

Circuit Ref.	Motorola Part No.
C0101M2	21667009166
C0102M2	21667009166
C0103M2	21667009166
C0104M2	21667009166
C0105M2	21667009166
C0106M2	2113945B02
C0107M2	2113945B02
C0108M2	21667009166
C0109M2	2113945Y02
C0110M2	21667009381
C0111M2	2113945Y02
C0112M2	21667009166
C0113M2	21667009166
C0114M2	2113945Y02
C0115M2	21667009370
C0116M2	NOT PLACED
C0117M2	21667009374
C0118M2	21667009375
C0119M2	2113945A10
C0120M2	21667009166
C0121M2	NOT PLACED
C0122M2	21667009166
C0123M2	21667009381
C0124M2	21667009166
C0132M2	2113946J03
C0134M2	21667009166
C0135M2	21667009166
C0136M2	21667009166
C0137M2	2113945Y02
C0138M2	21667009166
C0139M2	21667009166
C0140M2	2113945Y02
C0141M2	2113945Y02
C0143M2	2113945Y02
C0144M2	2113945Y02
C0145M2	21667009166
C0146M2	2113945A10
C0147M2	2113945A10
C0149M2	21667009166
C0150M2	21667009166
C0151M2	21667009368
C0200M7	21667009166
C0201M7	NOT PLACED
C0202M7	21667009166
C0203M7	NOT PLACED
C0204M7	NOT PLACED
C0205M7	21667009274
C0206M7	21667009366
C0207M7	21667009365
C0208M7	21667009311
C0209M7	21667009311

Circuit Ref.	Motorola Part No.
C0210M7	21667009274
C0211M7	NOT PLACED
C0212M7	21667009294
C0213M7	21667009274
C0214M7	NOT PLACED
C0215M7	21667009315
C0216M7	21667009311
C0217M7	21667009346
C0218M7	21667009339
C0219M7	21667009378
C0220M7	21667009380
C0221M7	21667009371
C0222M7	21667009366
C0223M7	21667009370
C0224M7	21667009369
C0225M7	2113945Y02
C0226M7	21667009311
C0227M7	2113945Y02
C0228M7	21667009166
C0229M7	21667009166
C0230M7	21667009166
C0231M7	21667009166
C0232M7	21667009166
C0233M7	21667009284
C0234M7	21667009315
C0235M7	21667009166
C0236M7	2113945Y02
C0237M7	21667009166
C0238M7	2113945Y02
C0239M7	2113945Y02
C0240M7	21667009166
C0241M7	21667009166
C0242M7	21667009166
C0243M7	21667009166
C0244M7	21667009332
C0245M7	21667009332
C0246M7	21667009166
C0247M7	21667009166
C0248M7	21667009326
C0249M7	21667009166
C0252M7	21667009326
C0256M7	21667009371
C0257M7	21667009366
C0259M7	2113945Y02
C0263M7	21667009166
C0265M7	21667009166
C0267M7	21667009297
C0269M7	21667009166
C0270M7	2113945Y02
C0271M7	21667009166
C0272M7	2113945Y02

Circuit Ref.	Motorola Part No.
C0276M7	21667009311
C0300M7	NOT PLACED
C0301M7	NOT PLACED
C0302M7	21667009286
C0304M7	21667009390
C0305M7	2113945Y02
C0306M7	2113945B02
C0307M7	21667009390
C0308M7	2113945B02
C0309M7	21667009280
C0310M7	21667009279
C0311M7	21667009346
C0400M4	21667009274
C0402M4	21667009166
C0403M4	21667009297
C0404M4	21667009368
C0405M4	21667009284
C0406M4	21667009297
C0407M4	21667009368
C0408M4	2113945C31
C0409M4	2113945C31
C0410M4	21667009166
C0411M4	21667009376
C0412M4	2113946F05
C0413M4	21667009166
C0414M4	21667009166
C0415M4	21667009370
C0416M4	2113945C31
C0417M4	21667009166
C0418M4	21667009166
C0419M4	21667009274
C0420M4	21667009166
C0421M4	21667009297
C0422M4	21667009368
C0423M4	21667009280
C0424M4	21667009297
C0425M4	21667009368
C0426M4	2113946F05
C0427M4	21667009372
C0428M4	21667009284
C0429M4	21667009280
C0430M4	21667009161
C0431M4	21667009368
C0433M4	21667009166
C0434M4	21667009384
C0435M4	21667009380
C0436M4	21667009166
C0437M4	2113945C31
C0438M4	21667009166
C0439M4	21667009346
C0440M4	21667009315

Circuit Ref.	Motorola Part No.
C0441M4	21667009372
C0442M4	21667009277
C0443M4	21667009364
C0444M4	21667009286
C0445M4	21667009368
C0446M4	21667009355
C0447M4	21667009277
C0448M4	21667009372
C0449M4	21667009315
C0450M4	21667009388
C0451M4	21667009166
C0452M4	21667009366
C0453M4	21667009366
C0454M4	21667009366
C0455M4	21667009366
C0456M4	21667009355
C0457M4	21667009307
C0458M4	2113946F05
C0459M4	21667009307
C0460M4	21667009166
C0461M4	NOT PLACED
C0462M4	21667009159
C0463M4	NOT PLACED
C0464M4	21667009158
C0465M4	21667009166
C0468M4	21667009166
C0469M4	21667009166
C0500M3	21667009369
C0501M3	21667009332
C0502M3	2113944M21
C0503M3	2113945C31
C0504M3	2113945C31
C0505M3	21667011351
C0506M3	NOT PLACED
C0507M3	21667009374
C0508M3	21667009366
C0509M3	21667009382
C0510M3	21667009366
C0511M3	21667009355
C0512M3	21667009303
C0513M3	21667009368
C0515M3	21667009383
C0516M3	21667011464
C0517M3	21667009315
C0518M3	21667009339
C0700M6	2113944C45
C0701M6	21667009163
C0702M6	2113944C41
C0703M6	2113944C42
C0704M6	NOT PLACED
C0705M6	NOT PLACED

Circuit Ref.	Motorola Part No.										
C0706M6	NOT PLACED	C0761M6	2113944C45	C0855M6	2111078B08	C1000M1	2113945Y02	C2010M1	2113945Y02	C3117M1	2113955D13
C0707M6	2113944C82	C0762M6	2111078B26	C0856M6	2111078B42	C1001M1	2113945Y02	C2011M1	2113945Y02	C3118M1	2113945Y02
C0708M6	NOT PLACED	C0763M6	2111078B26	C0875M6	2113944C42	C1002M1	2113946K03	C2012M1	2113945Y02	C3119M1	2113945Y02
C0709M6	2113945C04	C0764M6	2113944C51	C0876M6	NOT PLACED	C1003M1	2113945Y02	C2013M1	2113945Y02	C3120M1	2113956E60
C0710M6	21667009163	C0765M6	NOT PLACED	C0877M6	2113944C42	C1004M1	2113945Y02	C2014M1	2113945B02	C3121M1	2113956D58
C0711M6	2113944C46	C0766M6	NOT PLACED	C0878M6	NOT PLACED	C1005M1	2113945Y02	C2015M1	21667009162	C3122M1	2113956A51
C0712M6	2113945C04	C0767M6	2111078B06	C0879M6	2113944C42	C1006M1	2113945Y02	C2016M1	2113956B54	C3123M1	2113956A51
C0713M6	21667009163	C0768M6	2111078B07	C0880M6	21667011073	C1007M1	2113945Y02	C2020M1	2113956B54	C3124M1	2113946D07
C0715M6	NOT PLACED	C0769M6	NOT PLACED	C0881M6	2111078B42	C1008M1	2113946D05	C2021M1	2113956D59	C3125M1	2113946D05
C0716M6	2113944C55	C0770M6	NOT PLACED	C0882M6	2111078B22	C1009M1	2113945Y02	C2022M1	2113956D59	C3126M1	2113944C06
C0717M6	2113944C39	C0771M6	NOT PLACED	C0883M6	2111078B34	C1010M1	2113945Y02	C3000M6	2113944C38	C3127M1	2113946S35
C0718M6	NOT PLACED	C0772M6	NOT PLACED	C0884M6	2113944F05	C1011M1	2113945B02	C3001M6	2113944C06	C3128M1	2113946D05
C0719M6	NOT PLACED	C0789M6	2113944C39	C0885M6	2113944C51	C1012M1	2113945Y02	C3002M6	2113944C06	C3129M1	2113945Y02
C0720M6	2113944C42	C0790M6	21667007032	C0886M6	2113944C47	C1013M1	2113945Y02	C3003M6	2113945C31	C3130M1	2113946D05
C0721M6	2113944C82	C0791M6	NOT PLACED	C0887M6	NOT PLACED	C1014M1	2113945Y02	C3004M6	2113945C02	C3131M1	2113946A02
C0722M6	2113944C34	C0793M6	21667007019	C0888M6	2113944C42	C1015M1	2113945B02	C3005M6	2113945C02	C3132M1	2113946D05
C0723M6	2113945C04	C0794M6	21667007032	C0900M6	NOT PLACED	C1016M1	21667009166	C3008M6	2113944C51	C3133M1	2113946D05
C0724M6	2113944C39	C0795M6	21667007018	C0901M6	NOT PLACED	C1017M1	21667009162	C3009M6	2113945C31	C3134M1	2113946S35
C0725M6	2113944C39	C0796M6	2113944F07	C0902M6	2113944C51	C1018M1	21667009162	C3010M6	2113944C46	C3135M1	2113956A51
C0726M6	2113944C51	C0797M6	2113944F07	C0905M6	2113945C31	C1019M1	21667009162	C3011M6	NOT PLACED	C3136M1	21012095001
C0727M6	NOT PLACED	C0798M6	2113944F07	C0906M6	2113945A10	C1020M1	21667009162	C3012M6	2113946J04	C3137M1	2113946D05
C0729M6	NOT PLACED	C0799M6	2113944F07	C0907M6	2113945L41	C1021M1	2113945Y02	C3013M6	2113945C31	C3139M1	2113956A51
C0730M6	NOT PLACED	C0800M6	21667007033	C0908M6	21667009166	C1022M1	2113945Y02	C3014M6	21009337414	C3140M1	21012095001
C0731M6	21667009163	C0801M6	2113944F07	C0909M6	NOT PLACED	C1023M1	2113945Y02	C3015M6	2113946G01	C3141M1	2113945Y02
C0732M6	2113945A09	C0802M6	2113944F07	C0910M6	NOT PLACED	C1024M1	2113945Y02	C3016M6	2113945C31	C3142M1	21012102001
C0733M6	NOT PLACED	C0803M6	2113944F07	C0911M6	2113944C02	C1025M1	2113945Y02	C3019M6	2113946S35	C3143M1	21667009366
C0734M6	2113945A09	C0804M6	2113944F07	C0912M6	NOT PLACED	C1026M1	2113945Y02	C3020M6	2113945C26	C3144M1	2113945Y02
C0735M6	21667011073	C0805M6	21667007033	C0913M6	21667009166	C1027M1	NOT PLACED	C3021M6	2113944C06	C3145M1	2113944C06
C0737M6	2113944C51	C0808M6	NOT PLACED	C0916M6	NOT PLACED	C1028M1	2113945Y02	C3022M6	2113945A10	C3146M1	21012102001
C0738M6	21667009163	C0812M6	21667007046	C0917M6	21667009166	C1029M1	2113956B54	C3029M6	NOT PLACED	C3149M1	2113956A51
C0739M6	2113945C31	C0813M6	21667007046	C0918M6	21667009166	C1032M1	2113956B54	C3038M6	21667009379	C3150M1	2113956C37
C0740M6	2113944C51	C0814M6	21667007046	C0919M6	21667009166	C1035M1	2113945B02	C3041M6	21667009379	C3151M1	2113945B02
C0741M6	21667007037	C0815M6	21667007046	C0920M6	2113944C02	C1036M1	2113946D05	C3042M6	21667009379	C3152M1	2113944C06
C0742M6	2113945L49	C0816M6	NOT PLACED	C0921M6	2113944C02	C1040M1	2113945Y02	C3044M6	21667009379	C3153M1	2113946J04
C0743M6	21667007036	C0818M6	NOT PLACED	C0922M6	2113945C31	C1041M1	2113945B02	C3046M6	NOT PLACED	C3154M1	2113955D13
C0744M6	21667007037	C0822M6	2111078B11	C0923M6	2113944C02	C1042M1	2113945Y02	C3047M6	NOT PLACED	C3155M1	2113945Y02
C0745M6	2113946J04	C0824M6	2111078B17	C0924M6	NOT PLACED	C1043M1	2113956B54	C3048M6	NOT PLACED	C3156M1	2113945Y02
C0746M6	NOT PLACED	C0841M6	NOT PLACED	C0925M6	2113945C31	C1044M1	2113945B02	C3049M6	NOT PLACED	C3157M1	2113945Y02
C0747M6	NOT PLACED	C0842M6	NOT PLACED	C0926M6	2113944C02	C1045M1	2113945B02	C3102M1	21009337414	C3160M1	2113945Y02
C0748M6	NOT PLACED	C0843M6	NOT PLACED	C0927M6	2113944C01	C1047M1	2113945Y02	C3103M1	21667009166	C3161M1	NOT PLACED
C0749M6	21667007037	C0844M6	NOT PLACED	C0928M6	2113944C51	C1048M1	2113945B02	C3104M1	2113946F08	C3171M1	2113946D07
C0751M6	NOT PLACED	C0845M6	21667011411	C0929M6	2113944C49	C2000M1	2113945Y02	C3105M1	2113946J04	C3173M1	2113946D07
C0752M6	2111078B42	C0846M6	21667011059	C0930M6	NOT PLACED	C2001M1	2113945Y02	C3106M1	2113945C31	C3175M1	2113946A01
C0753M6	2113944C51	C0847M6	21667011059	C0950M6	2113944C47	C2002M1	2113945B02	C3107M1	2113944C38	C3176M1	2113944C48
C0754M6	2113944C45	C0848M6	2113944C45	C0951M6	21667011356	C2003M1	21667009162	C3109M1	21667009166	C3177M1	2113946F08
C0755M6	2111078B42	C0849M6	2113944C39	C0952M6	2113944C47	C2004M1	2113956B54	C3110M1	2113944C06	C3200M1	21667009166
C0756M6	2111078B22	C0850M6	2111078B05	C0953M6	2113944C47	C2005M1	2113946D05	C3111M1	2113946J04	C3201M1	21667009166
C0757M6	2111078B22	C0851M6	2111078B21	C0954M6	21667011457	C2006M1	2113945Y02	C3112M1	2113945Y02	C3203M1	2113955D37
C0758M6	2111078B27	C0852M6	2111078B08	C0955M6	2113944C47	C2007M1	2113945Y02	C3113M1	2113946S35	C3204M1	2113955D37
C0759M6	2111078B27	C0853M6	2111078B16	C0956M6	2113944C01	C2008M1	2113945B02	C3115M1	2113944C06	C3205M1	21667009166
C0760M6	2113944C45	C0854M6	2111078B15	C0957M6	2113944C49	C2009M1	21667009162	C3116M1	2113955D13	C3206M1	21667009166

Circuit Ref.	Motorola Part No.										
C3208M1	2113956C37	C4014M1	21667009166	C4223M1	21667009339	D0951M6	4813974A21	E3204M1	24012102001	L0218M7	24667008031
C3209M1	2113945Y02	C4015M1	21667009166	C4224M1	21667009166	D3000M6	4813978P07	E4000M1	24012107027	L0220M7	24667008031
C3210M1	2113945Y02	C4019M1	21667009166	C4225M1	21667009166	D3104M1	4885489Y01	E4001M1	7688697V05	L0222M7	24667008031
C3211M1	2113945A11	C4020M1	21667009166	C4226M1	21667009339	D3160M1	4813978C02	E4002M1	24012107027	L0224M7	24667008030
C3212M1	2113955D37	C4021M1	21667009166	C4300M1	NOT PLACED	D3161M1	4813978C02	E4003M1	NOT PLACED	L0226M7	24667008021
C3213M1	2113945A03	C4022M1	21667009166	C4301M1	NOT PLACED	E0000M2	24012107027	E4004M1	24012102001	L0300M7	24667008014
C3214M1	2113955D37	C4023M1	21667009166	C4302M1	NOT PLACED	E0001M2	24012107027	E4005M1	2485410Y02	L0301M7	24667008031
C3215M1	2113956F49	C4025M1	21667009166	C4303M1	NOT PLACED	E0002M2	NOT PLACED	E4100M1	7686949J14	L0302M7	24667008030
C3216M1	2113945Y02	C4026M1	21667009166	C4304M1	21667009166	E0003M2	24012107027	E4101M1	24012107027	L0303M7	24667008013
C3217M1	2113956B91	C4027M1	21667009166	C4305M1	21667009376	E0004M2	24012107027	E4102M1	NOT PLACED	L0304M7	24667008019
C3218M1	2113956A51	C4028M1	21667009166	C4306M1	21667009381	E0005M2	24012107027	E4103M1	NOT PLACED	L0305M7	24667008014
C3219M1	2113956A51	C4029M1	21667009166	C4307M1	NOT PLACED	E0006M2	24012107027	E4104M1	NOT PLACED	L0401M4	24012021001
C3220M1	2113946F05	C4030M1	21667009166	C4308M1	NOT PLACED	E0007M2	24012107027	E4200M1	24012107027	L0402M4	24009344102
C3221M1	2113945Y02	C4030M1	21667009166	C4309M1	21667009166	E0008M2	24012107027	E4201M1	24012107027	L0403M4	24667008030
C3222M1	2113956A51	C4100M1	21667009166	C4309M1	21667009166	E0009M2	24012107027	E4202M1	24012107027	L0404M4	24009344109
C3223M1	2113945Y02	C4101M1	21667009166	C4310M1	21667009166	E0010M2	24012107027	E4300M1	24012107027	L0405M4	2416540H31
C3224M1	2113946F05	C4103M1	21667009166	C4311M1	2113945Y02	E0200M7	24012107027	E4405M1	24012107027	L0406M4	24012021001
C3225M1	2113945Y02	C4104M1	21667009166	C4312M1	2113945Y02	E0300M7	24012107027	E4406M1	7686949J22	L0407M4	24012021001
C3226M1	NOT PLACED	C4105M1	21667009166	C4313M1	21667009166	E0401M4	24012107027	E4407M1	7686949J22	L0408M4	24667008030
C3227M1	2113946F05	C4106M1	21667009166	C4314M1	NOT PLACED	E0402M4	24012107027	E4408M1	24012107027	L0409M4	24667008030
C3228M1	2113945Y02	C4107M1	21667009166	C4401M1	NOT PLACED	E0403M4	24012107027	E4409M1	24012102001	L0410M4	24667008025
C3229M1	2113956A51	C4108M1	21667009166	C4402M1	NOT PLACED	E0404M4	24012107027	F4000M1	65012019001	L0411M4	24012021001
C3230M1	2113945Y02	C4109M1	21667009166	C4403M1	NOT PLACED	E0500M3	24012107027	FL0500M3	9116854H02	L0412M4	24667008030
C3231M1	2113945Y02	C4110M1	21667009166	C4404M1	NOT PLACED	E0700M6	24012102001	FL4000M1	24012038001	L0413M4	24667008030
C3232M1	2113945Y02	C4112M1	21667009166	C4405M1	NOT PLACED	E0701M6	24012102001	FL4001M1	24012038001	L0414M4	24009344106
C3233M1	2113945Y02	C4113M1	21667009166	C4406M1	NOT PLACED	E0703M6	24012102001	J4000M1	0915767H01	L0415M4	24009344108
C3234M1	2113945A09	C4114M1	21667009166	C4407M1	NOT PLACED	E1000M1	7686949J15	J4001M1	0915556H01	L0416M4	24667008017
C3235M1	21012102001	C4115M1	21667009166	C4408M1	NOT PLACED	E1001M1	7686949J15	J4100M1	0916017H01	L0417M4	24009344110
C3236M1	2113945C31	C4116M1	21667009166	C4409M1	NOT PLACED	E1002M1	7686949J15	J4200M1	09012053001	L0418M4	NOT PLACED
C3237M1	21009337414	C4117M1	21667009166	C4410M1	NOT PLACED	E1003M1	7686949J15	J4400M1	09012053001	L0421M4	24009344106
C3238M1	2113945A09	C4118M1	21667009166	C4411M1	NOT PLACED	E1004M1	7686949J15	L0000M2	24012154001	L0424M4	24009344106
C3239M1	2113945A09	C4119M1	21667009166	C4412M1	21667009166	E1005M1	7686949J15	L0001M2	24667008020	L0428M4	24009344106
C3240M1	2113956B91	C4200M1	2113945Y02	C4413M1	21667009166	E1006M1	7685268E01	L0002M2	24667000031	L0434M4	24667008021
C3241M1	2113956B91	C4201M1	2113945Y02	C4414M1	21667009166	E3000M6	24012102001	L0003M2	24667008031	L0500M3	24009344127
C3242M1	2113945C31	C4202M1	21667009166	C4415M1	21667009166	E3100M1	24012102001	L0004M2	24009343017	L0501M3	24009344128
C3243M1	2113955D37	C4203M1	21667009166	C4417M1	21667009166	E3101M1	2485410Y02	L0005M2	24667008017	L0502M3	24009344126
C3244M1	2113956B91	C4204M1	NOT PLACED	C4418M1	21667009166	E3102M1	2485410Y02	L0200M7	24667008031	L0503M3	24667008021
C3245M1	2113955D37	C4205M1	21667009166	C4419M1	21667009166	E3103M1	2485410Y02	L0201M7	24667008031	L0504M3	24667008026
C3246M1	2113945C31	C4206M1	21667009166	D0000M2	4815011H01	E3104M1	7686949J22	L0202M7	2415385H02	L0505M3	24667008026
C3247M1	2113945Y02	C4207M1	21667009166	D0001M2	4815011H01	E3105M1	7686949J22	L0203M7	24009343013	L0507M3	24667008024
C3248M1	2113945Y02	C4208M1	21667009166	D0400M4	4884800Y03	E3106M1	7686949J22	L0204M7	24667008031	L0700M6	24667008011
C3249M1	2113956B91	C4209M1	21667009166	D0401M4	4813974A19	E3107M1	7686949J22	L0205M7	24667008031	L0701M6	24667008012
C3250M1	2113956B91	C4210M1	21667009166	D0402M4	4813974A19	E3108M1	7686949J22	L0206M7	24667008031	L0702M6	24667008028
C4000M1	2113945Y02	C4211M1	21667009166	D0403M4	4884800Y03	E3109M1	7686949J22	L0207M7	24667008031	L0703M6	NOT PLACED
C4001M1	2113945Y02	C4212M1	21667009166	D0404M4	4815090H01	E3110M1	7686949J22	L0208M7	24667008031	L0704M6	NOT PLACED
C4002M1	2113945Y02	C4213M1	21667009166	D0500M3	4813974A19	E3111M1	7686949J22	L0209M7	24667008031	L0705M6	24667008007
C4003M1	2113945Y02	C4214M1	21667009166	D0700M6	NOT PLACED	E3113M1	7686949J22	L0210M7	24009343006	L0707M6	24667008028
C4010M1	21667009166	C4218M1	21667009166	D0875M6	48012160001	E3200M1	24012102001	L0211M7	2415385H01	L0708M6	2479990G01
C4011M1	21667009166	C4219M1	21667009339	D0876M6	4886622Y06	E3201M1	24012102001	L0212M7	24667008031	L0709M6	NOT PLACED
C4012M1	21667009166	C4220M1	21667009339	D0877M6	48012160001	E3202M1	24012107027	L0214M7	24009343006	L0710M6	2485873L01
C4013M1	21667009166	C4221M1	21667009339	D0900M6	NOT PLACED	E3203M1	24012102001	L0216M7	2415385H02	L0711M6	NOT PLACED
		C4222M1	21667009339	D0950M6	4813974A21						

Circuit Ref.	Motorola Part No.										
L0720M6	24667008014	Q0900M6	NOT PLACED	R0011M2	0613952Q36	R0213M7	0613952Q67	R0422M4	0613952Q67	R0718M6	0613952H96
L0729M6	2414032B60	Q0901M6	NOT PLACED	R0012M2	0613952Q86	R0214M7	0613952Q67	R0423M4	0613952R25	R0719M6	0613952H89
L0730M6	24667008012	Q1000M1	4815263H01	R0013M2	0613952Q35	R0215M7	0613952Q67	R0424M4	0613952Q23	R0720M6	0613952H95
L0850M6	2460592A01	Q1001M1	4815272H01	R0014M2	0613952R66	R0216M7	0613952Q67	R0425M4	0613952Q67	R0721M6	0613952G67
L0851M6	2460592A01	Q1002M1	4815261H01	R0015M2	0613952R66	R0217M7	0613952Q49	R0426M4	0613952Q87	R0722M6	0613952H29
L0852M6	2460592A01	Q1004M1	4815261H01	R0018M2	0613952Q80	R0218M7	0613952Q49	R0427M4	0613952Q93	R0723M6	0613952G67
L0875M6	2460592A01	Q1005M1	4815261H01	R0019M2	0613952R01	R0219M7	0613952R66	R0429M4	0613952R66	R0724M6	NOT PLACED
L0876M6	24667008029	Q3000M6	0105959T72	R0020M2	0613952R12	R0220M7	0613952R66	R0430M4	NOT PLACED	R0725M6	0613958S29
L0877M6	2414032B49	Q3001M6	0105959T72	R0021M2	0613952Q80	R0221M7	0613952R66	R0431M4	0613952R01	R0726M6	NOT PLACED
L0878M6	24667008024	Q3002M6	4813973B01	R0022M2	0613952R66	R0222M7	0613952Q79	R0432M4	0613952H73	R0727M6	0613958S29
L0880M6	2414032B49	Q3100M1	4815272H01	R0023M2	0613952Q83	R0223M7	0613952Q73	R0433M4	0613952R01	R0728M6	NOT PLACED
L0885M6	24667008014	Q3101M1	4809939C47	R0024M2	0613952Q80	R0224M7	0613952Q78	R0434M4	0613952L46	R0729M6	NOT PLACED
L0900M6	NOT PLACED	Q3102M1	4809939C47	R0025M2	0613952R66	R0225M7	0613952Q73	R0435M4	0613952L46	R0730M6	NOT PLACED
L0901M6	NOT PLACED	Q3103M1	48009494001	R0026M2	0613952R66	R0226M7	0613952Q29	R0436M4	0613952R66	R0731M6	0613958S29
L0902M6	NOT PLACED	Q3105M1	4809939C47	R0027M2	0613952R12	R0227M7	0613952G67	R0437M4	0613952Q77	R0732M6	NOT PLACED
L0950M6	24667008022	Q3160M1	48009494001	R0028M2	0613952R66	R0228M7	0613952Q67	R0438M4	0613958H25	R0733M6	NOT PLACED
L0951M6	24009344022	Q3161M1	4815272H01	R0029M2	0613952Q25	R0230M7	0613952Q67	R0439M4	0613952Q83	R0734M6	0613958S29
L0952M6	24009344006	Q3162M1	4813973M07	R0030M2	0613952R66	R0232M7	0613952Q49	R0440M4	0613958H25	R0735M6	NOT PLACED
L3100M1	24012091002	Q3163M1	48009494001	R0031M2	0613952R66	R0233M7	0613952R66	R0441M4	0613958H49	R0736M6	0613959Q25
M0700M6	2686201B02	Q3200M1	4815270H01	R0033M2	0613952R01	R0300M7	0613952Q66	R0442M4	0613952Q83	R0737M6	0613952F01
P0000M2	NOT PLACED	Q3201M1	4815272H01	R0034M2	0613952Q57	R0301M7	0613952Q25	R0443M4	0613952Q25	R0738M6	0613959Q32
P1000M1	2887818K02	Q3202M1	4815270H01	R0040M2	0613952Q70	R0302M7	0613952Q66	R0444M4	0613952K25	R0739M6	0613952H73
P3000M6	09009344001	Q3203M1	4815270H01	R0041M2	0613952Q58	R0303M7	0613952R05	R0445M4	0613952Q75	R0740M6	NOT PLACED
Q0000M2	4813973A13	Q3204M1	4815270H01	R0042M2	0613952Q42	R0304M7	0613952Q89	R0446M4	NOT PLACED	R0741M6	0613952E66
Q0001M2	48009494001	Q3205M1	4815270H01	R0043M2	0613952Q73	R0305M7	0613952Q33	R0447M4	0613952R66	R0742M6	NOT PLACED
Q0002M2	4813970A59	Q3206M1	4815270H01	R0044M2	0613952R25	R0306M7	0613952Q32	R0448M4	0613952Q25	R0743M6	0613952E66
Q0003M2	48012195001	Q3207M1	4815270H01	R0045M2	0613952R66	R0307M7	0613952Q49	R0500M3	0613952Q87	R0744M6	0613959Q32
Q0004M2	4815272H01	Q3208M1	4815263H01	R0046M2	0613952Q57	R0308M7	0613952Q32	R0501M3	0613952R19	R0745M6	0613952H29
Q0006M2	4813973A04	Q4000M1	4809939C47	R0051M2	0613952R01	R0309M7	0613952Q42	R0502M3	0613952Q66	R0746M6	0613952F01
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Q0201M7	48012195001	Q4002M1	4809939C47	R0054M2	0613952M25	R0401M4	0613952H81	R0504M3	0613952Q61	R0849M6	0613952G67
Q0202M7	4815272H01	Q4100M1	4816023H01	R0056M2	0613952R66	R0402M4	0613952R25	R0505M3	0613952R66	R0876M6	0613958S73
Q0203M7	4815272H01	Q4101M1	4815261H01	R0058M2	0613952Q74	R0403M4	0613952R01	R0525M3	0613952R66	R0877M6	0613959Y37
Q0204M7	48012195001	Q4102M1	4815263H01	R0059M2	0613952R66	R0404M4	0613952R25	R0700M6	0613952J05	R0878M6	0613959Y37
Q0205M7	48009494001	Q4103M1	48012271001	R0060M2	0613952Q89	R0405M4	0613952R05	R0701M6	0613952G67	R0879M6	0613952J25
Q0206M7	4815272H01	Q4105M1	48012271001	R0061M2	0613952Q85	R0406M4	0613952Q91	R0702M6	0613952H89	R0882M6	0613952G67
Q0207M7	48009494001	Q4106M1	48012271001	R0062M2	0613952Q61	R0407M4	0613952Q91	R0703M6	0613952J01	R0883M6	0613952G67
Q0300M7	4802197J95	Q4109M1	48012271001	R0063M2	0613952Q64	R0408M4	0613952Q75	R0704M6	0613952J06	R0902M6	0613952R66
Q0400M4	4815271H01	Q4112M1	48012271001	R0200M7	0613952R66	R0409M4	0613952Q69	R0705M6	0613952H48	R0903M6	0613952N01
Q0401M4	4815267H01	Q4120M1	4809939C47	R0201M7	0613952R27	R0410M4	0613952R01	R0706M6	0613952H45	R0904M6	0613952R66
Q0402M4	4815118H01	R0000M2	0613952R66	R0202M7	0613952R27	R0411M4	0613952R01	R0707M6	0613952H48	R0905M6	0613952H42
Q0403M4	4815270H01	R0001M2	0613952R66	R0203M7	0613952R07	R0412M4	0613952Q83	R0708M6	NOT PLACED	R0906M6	0613958H46
Q0404M4	4815271H01	R0002M2	0613952Q96	R0204M7	0613952R05	R0413M4	0613958H55	R0709M6	0613952N43	R0907M6	0613958H55
Q0405M4	4815118H01	R0003M2	0613952Q57	R0205M7	0613952R07	R0414M4	0613958H55	R0710M6	0613952P01	R0908M6	NOT PLACED
Q0700M6	4816547H01	R0004M2	0613952Q34	R0206M7	0613952R05	R0415M4	0613952Q57	R0711M6	0613958S44	R0909M6	NOT PLACED
Q0701M6	4816013H01	R0005M2	0613952R66	R0207M7	0613952Q84	R0416M4	0613952Q69	R0712M6	0613958S44	R0910M6	NOT PLACED
Q0703M6	4802246J29	R0006M2	0613952Q25	R0208M7	0613952Q87	R0417M4	0613952Q69	R0713M6	NOT PLACED	R0911M6	NOT PLACED
Q0704M6	4816548H01	R0007M2	0613952Q51	R0209M7	0613952Q85	R0418M4	0613952Q69	R0714M6	0613958H15	R0912M6	0613958H46
Q0705M6	48012022001	R0008M2	0613952R01	R0210M7	0613952Q79	R0419M4	0613952Q69	R0715M6	0613958H15	R0913M6	0613952M51
Q0875M6	4813970A62	R0009M2	0613952Q58	R0211M7	0613952Q18	R0420M4	0613952R25	R0716M6	0613958H15	R0914M6	0613952M71
Q0876M6	48009494001	R0010M2	0613952R66	R0212M7	0613952Q32	R0421M4	0613952R25	R0717M6	0613958H15	R0915M6	NOT PLACED

Circuit Ref.	Motorola Part No.										
R0916M6	0613952R66	R1010M1	NOT PLACED	R1065M1	0613952R66	R3020M6	0613952G67	R3150M1	0613952N62	R3217M1	0613952R01
R0917M6	0613952P01	R1011M1	NOT PLACED	R1066M1	0613952M66	R3021M6	0613952R25	R3151M1	0613952R25	R3218M1	0613952R01
R0919M6	0613952P01	R1012M1	0613952R66	R1067M1	0613952M66	R3101M1	0613952Z66	R3153M1	0613952R66	R3219M1	NOT PLACED
R0920M6	0613952N01	R1013M1	0613952M66	R1068M1	0613952R32	R3102M1	0613952M66	R3154M1	0613952Q89	R3220M1	0613952R01
R0921M6	0613952N01	R1014M1	NOT PLACED	R1069M1	NOT PLACED	R3103M1	0613952N62	R3155M1	0613952Q89	R3221M1	NOT PLACED
R0922M6	0613952R66	R1016M1	NOT PLACED	R1070M1	0613952Q77	R3104M1	0613952M30	R3156M1	0613952R17	R3222M1	0613952R01
R0923M6	0613952M42	R1018M1	NOT PLACED	R1071M1	0613952Q77	R3105M1	0613952R01	R3157M1	0613952R01	R3223M1	0613952R66
R0924M6	0613952N01	R1019M1	0613952R66	R1072M1	0613952Q49	R3106M1	0613952M09	R3158M1	0613952R66	R3224M1	NOT PLACED
R0925M6	NOT PLACED	R1020M1	0613952M66	R1073M1	0613952R01	R3107M1	0613952M85	R3159M1	0613952R01	R3225M1	NOT PLACED
R0926M6	NOT PLACED	R1021M1	0613952Q73	R1074M1	0613952R66	R3108M1	0613952R17	R3160M1	0613952Q89	R3226M1	0613952R01
R0927M6	NOT PLACED	R1022M1	NOT PLACED	R1075M1	0613952R66	R3109M1	0613952R17	R3161M1	0613952Q73	R3229M1	0613952R01
R0928M6	0613952N81	R1023M1	0613952R66	R1076M1	0613952R66	R3110M1	0613952N55	R3162M1	0613952Q85	R3230M1	0613952R10
R0929M6	0613952N85	R1024M1	NOT PLACED	R1077M1	0613952R66	R3111M1	0613952R32	R3163M1	0613952R01	R3231M1	0613952R10
R0930M6	0613952N42	R1025M1	0613952Q73	R1078M1	0613952R66	R3112M1	0613952P12	R3164M1	0613952Q75	R3232M1	0613952R10
R0931M6	0613952M66	R1026M1	0613952R66	R1079M1	0613952R66	R3113M1	0613952R17	R3165M1	0613952R01	R3233M1	0613952R01
R0932M6	0613952N30	R1027M1	NOT PLACED	R1080M1	0613952Q32	R3114M1	0613952N01	R3166M1	0613952R17	R3234M1	NOT PLACED
R0933M6	0613952N01	R1028M1	0613952R66	R1081M1	0613952Q32	R3115M1	0613952Z63	R3167M1	0613952R01	R3235M1	0613952R01
R0934M6	0613952J17	R1029M1	0613952R66	R1082M1	0613952Q32	R3116M1	0613952E83	R3168M1	0613952Q73	R3236M1	0613952R10
R0935M6	0613952H91	R1030M1	NOT PLACED	R1084M1	0613952R66	R3117M1	0613952Q73	R3169M1	0613952R01	R3237M1	NOT PLACED
R0936M6	NOT PLACED	R1031M1	0613952R66	R1088M1	NOT PLACED	R3118M1	0613952R10	R3170M1	0613952R01	R3238M1	0613952R01
R0937M6	NOT PLACED	R1033M1	0613952Q73	R1089M1	0613952R05	R3119M1	0613952Q73	R3171M1	NOT PLACED	R3239M1	0613952Q49
R0938M6	NOT PLACED	R1034M1	0613952R17	R1090M1	0613952R05	R3120M1	0613952R66	R3172M1	NOT PLACED	R3240M1	0613952R01
R0939M6	0613952Z76	R1035M1	NOT PLACED	R1091M1	NOT PLACED	R3121M1	0613952R66	R3173M1	0613952R66	R3241M1	0613952M54
R0940M6	0613952R66	R1036M1	0613952M66	R1092M1	0613952M43	R3122M1	0613952M43	R3174M1	0613952R66	R3242M1	0613952R01
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R0943M6	0613952N58	R1039M1	0613952R66	R1095M1	0613952Q34	R3125M1	0613952R66	R3177M1	0613952R66	R3245M1	NOT PLACED
R0950M6	0613952G67	R1040M1	0613952M66	R1096M1	0613952Q34	R3126M1	0613952R66	R3178M1	0615871H01	R3246M1	0613952R01
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R0953M6	0613952G67	R1043M1	0613952R66	R2000M1	0613952M66	R3129M1	0613952M58	R3181M1	NOT PLACED	R3249M1	0613952R66
R0954M6	0613952H56	R1044M1	0613952M66	R2002M1	0613952M66	R3130M1	0613952R25	R3182M1	0613952R66	R3250M1	0613952R66
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R0957M6	0613958C25	R1047M1	0613952R66	R3001M6	0615871H01	R3133M1	0613952R29	R3200M1	0613952C44	R3253M1	0613952R66
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R0960M6	0613952N58	R1050M1	0613952Q73	R3004M6	0615871H01	R3136M1	0613952R17	R3203M1	0613952Q49	R3256M1	0613952M66
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R0965M6	NOT PLACED	R1053M1	0613952R66	R3007M6	0613952M30	R3139M1	0613952R66	R3206M1	0613952R01	R3259M1	0613952M66
R0966M6	NOT PLACED	R1054M1	0613952M66	R3008M6	0613952G67	R3140M1	0613952Q91	R3207M1	0613952R01	R3260M1	0613952M66
R1000M1	0613952R66	R1056M1	0613952Q73	R3009M6	0613952M43	R3141M1	0613959Y13	R3208M1	0613952N30	R3261M1	0613952R01
R1001M1	0613952M66	R1057M1	0613952Q73	R3010M6	0613952G67	R3142M1	NOT PLACED	R3209M1	0613952R03	R3262M1	0613952R10
R1002M1	0613952R66	R1058M1	0613952M66	R3011M6	0613959Q60	R3143M1	0613952Q91	R3210M1	0613952Q67	R3263M1	NOT PLACED
R1003M1	0613952R66	R1059M1	0613952R66	R3012M6	0613959Q60	R3144M1	0613952R66	R3211M1	0613952N30	R3264M1	0613952R01
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R1005M1	0613952M66	R1061M1	0613952R66	R3014M6	0613952R01	R3146M1	0613952M85	R3213M1	0613952Q42	R3266M1	0613952R01
R1007M1	0613952R66	R1062M1	NOT PLACED	R3015M6	0615871H01	R3147M1	0613952M43	R3214M1	0613952J25	R3267M1	NOT PLACED
R1008M1	0613952R66	R1063M1	NOT PLACED	R3018M6	0613952H73	R3148M1	0613952R66	R3215M1	0613952R01	R3268M1	0613952R01
R1009M1	0613952R66	R1064M1	NOT PLACED	R3019M6	0613952H60	R3149M1	0613952R01	R3216M1	0613952R17	R3269M1	0613952M66

Circuit Ref.	Motorola Part No.
R3270M1	0613952R01
R3271M1	NOT PLACED
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R3273M1	0613952M66
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R3275M1	0613952R10
R3276M1	0613952R10
R3277M1	0613952R10
R3278M1	0613952R01
R3279M1	NOT PLACED
R3280M1	NOT PLACED
R3281M1	NOT PLACED
R3282M1	0613952R66
R3283M1	0613952R66
R3285M1	0613952R01
R3286M1	0613952R66
R3287M1	0613952R66
R3288M1	0613952R01
R3289M1	0613952R01
R3290M1	NOT PLACED
R3291M1	NOT PLACED
R3292M1	0613952R66
R3293M1	0613952R66
R4001M1	0613952R66
R4003M1	0613952R66
R4006M1	0613952Q37
R4007M1	0613952Q37
R4008M1	0613952R01
R4010M1	0613952R01
R4013M1	0613952Q42
R4015M1	0613952Q37
R4021M1	0613952R66
R4024M1	0613952R01
R4025M1	0613952R01
R4026M1	0613952R66
R4027M1	0613952R66
R4028M1	0613952R01
R4029M1	0613952R01
R4030M1	0613952R01
R4031M1	0613952R01
R4032M1	0613952R66
R4033M1	0613952M43
R4034M1	0613952M43
R4035M1	0613952R66
R4036M1	0613952R66
R4037M1	0613952R01
R4038M1	0613952R01
R4039M1	NOT PLACED
R4040M1	NOT PLACED
R4041M1	NOT PLACED
R4100M1	0613952R01

Circuit Ref.	Motorola Part No.
R4101M1	0613952Q77
R4102M1	0613958H83
R4103M1	0613952Q85
R4104M1	0613952Q89
R4105M1	0613952Q89
R4106M1	0613952Q89
R4107M1	0613952R01
R4108M1	0613952Q89
R4109M1	0613952N58
R4110M1	0613952Q85
R4111M1	0613952Q85
R4112M1	0613952R01
R4113M1	0613952R01
R4114M1	0613952Q89
R4115M1	0613952N58
R4116M1	0613952Q89
R4117M1	0613952R01
R4118M1	0613952R01
R4119M1	0613952R01
R4120M1	0613952N58
R4121M1	0613952Q85
R4122M1	0613952Q85
R4123M1	0613952N58
R4124M1	0613952N58
R4125M1	0613952Q85
R4126M1	0613952Q85
R4127M1	0613952Q85
R4128M1	0613952R01
R4200M1	0613952R66
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R4202M1	0613952R66
R4203M1	0613952R66
R4204M1	0613952R66
R4205M1	0613952R66
R4206M1	0613952R66
R4207M1	0613952R66
R4208M1	0613952R66
R4209M1	HZ000375A01
R4210M1	HZ000375A01
R4211M1	HZ000375A01
R4212M1	HZ000375A01
R4213M1	HZ000375A01
R4214M1	HZ000375A01
R4215M1	0613952R66
R4216M1	0613952R66
R4217M1	0613952R66
R4218M1	0613952R66
R4301M1	NOT PLACED
R4302M1	0613952R66
R4303M1	0613952R66
R4304M1	0613952R66

Circuit Ref.	Motorola Part No.
R4305M1	0613952R66
R4306M1	0613952R66
R4307M1	0613952R66
R4309M1	NOT PLACED
R4310M1	0613952R66
R4311M1	0613952R66
R4312M1	0613952R66
R4313M1	NOT PLACED
R4314M1	0613952R66
R4315M1	0613952R66
R4316M1	0613952R66
R4317M1	0613952R66
RT0900M6	0615585H01
SH0000M2	26012095001
SH0001M2	26012095001
SH0002M2	26012097001
SH0003M2	26012094001
SH0004M2	26012094001
SH0200M7	26012095001
SH0300M7	26012095001
SH0400M4	26012096001
SH0401M4	26012096001
SH0402M4	26012098001
SH0403M4	26012098001
SH0500M3	26012098001
SH0501M3	NOT PLACED
SH0850M6	26012100001
SH0900M6	2686425Z02
SH0901M6	2686425Z02
SH3100M1	NOT PLACED
SP3000M6	NOT PLACED
SP3001M6	NOT PLACED
T0000M2	25012016001
T0400M4	2515121H01
T0401M4	2515121H01
U0000M2	51009877001
U0001M2	5109731C48
U0002M2	4802197J95
U0200M7	5186310Y39
U0500M3	4802197J95
U0901M6	5180390L83
U0902M6	51012221001
U0903M6	5115022H01
U0904M6	5109731C48
U0905M6	5109731C48
U1000M1	5171320H01
U1001M1	51012295001
U1002M1	5189139P01
U1003M1	5175772B56
U1004M1	5175772B56
U1005M1	5164852H47

Circuit Ref.	Motorola Part No.
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U1007M1	5189139P01
U1008M1	5189139P01
U1009M1	5115001H02
U1010M1	5171320H01
U2000M1	MM000157A01
U2001M1	MM000129A01
U3000M6	5116525H01
U3001M6	4813973M07
U3002M6	51012133001
U3100M1	0104039J08
U3101M1	5114014A01
U3102M1	51012069001
U3103M1	51012142001
U3104M1	5171590Y73
U3105M1	5114610F01
U3106M1	51012140001
U3107M1	51012140001
U3108M1	51012138001
U3109M1	5164015H94
U3110M1	51012208001
U3111M1	5188690V02
U3112M1	5114004A35
U3113M1	5188690V02
U3114M1	NOT PLACED
U3115M1	5185937Y01
U3200M1	51009415001
U3201M1	5114016A18
U3204M1	51009509001
U3205M1	5114016A18
U4000M1	51012082001
U4001M1	51012082001
U4100M1	5189139P01
U4200M1	NOT PLACED
U4201M1	NOT PLACED
U4300M1	51012082001
U4301M1	51012082001
VR0001M2	4815096H01
VR0200M7	4805656W87
VR0201M7	4805656W87
VR0202M7	4805656W87
VR0203M7	4805656W87
VR0204M7	4805656W87
VR0205M7	4805656W87
VR0206M7	4805656W87
VR0207M7	4805656W87
VR0208M7	4805656W87
VR0209M7	4805656W87
VR0210M7	4805656W87
VR0211M7	4805656W87
VR0214M7	4805656W87

Circuit Ref.	Motorola Part No.
VR0215M7	4805656W87
VR0400M4	4805656W87
VR0401M4	4805656W87
VR0402M4	4805656W87
VR0403M4	4805656W87
VR0404M4	4805656W87
VR0405M4	4805656W87
VR0406M4	4805656W87
VR0407M4	4805656W87
VR3000M6	48012202001
VR3002M6	4813977M10
VR3103M1	48012095001
VR3104M1	48012095002
VR3105M1	4813977M10
VR3200M1	48012049001
VR3201M1	4813977A48
VR3202M1	4813977A48
VR4000M1	4813977M13
VR4001M1	4813977A48
VR4002M1	48012153001
VR4100M1	4813977A48
VR4101M1	4813977A48
VR4102M1	4813977A48
VR4103M1	4813977A48
VR4104M1	48012049001
VR4105M1	4813977M13
VR4106M1	4813977A48
VR4107M1	4813977A48
VR4108M1	4813977A48
VR4109M1	4813977A50
VR4110M1	4815040H01
VR4111M1	48012153001
Y0000M2	4875185M05

Note: The suffix "M1", "M2", etc. from the Circuit Ref is removed from the schematic and overlays.



# **XPR 5350e/XPR 5550e Mobile Radios**

Chapter 11

UHF2 (450–512 MHz)

1–40W

Service Information

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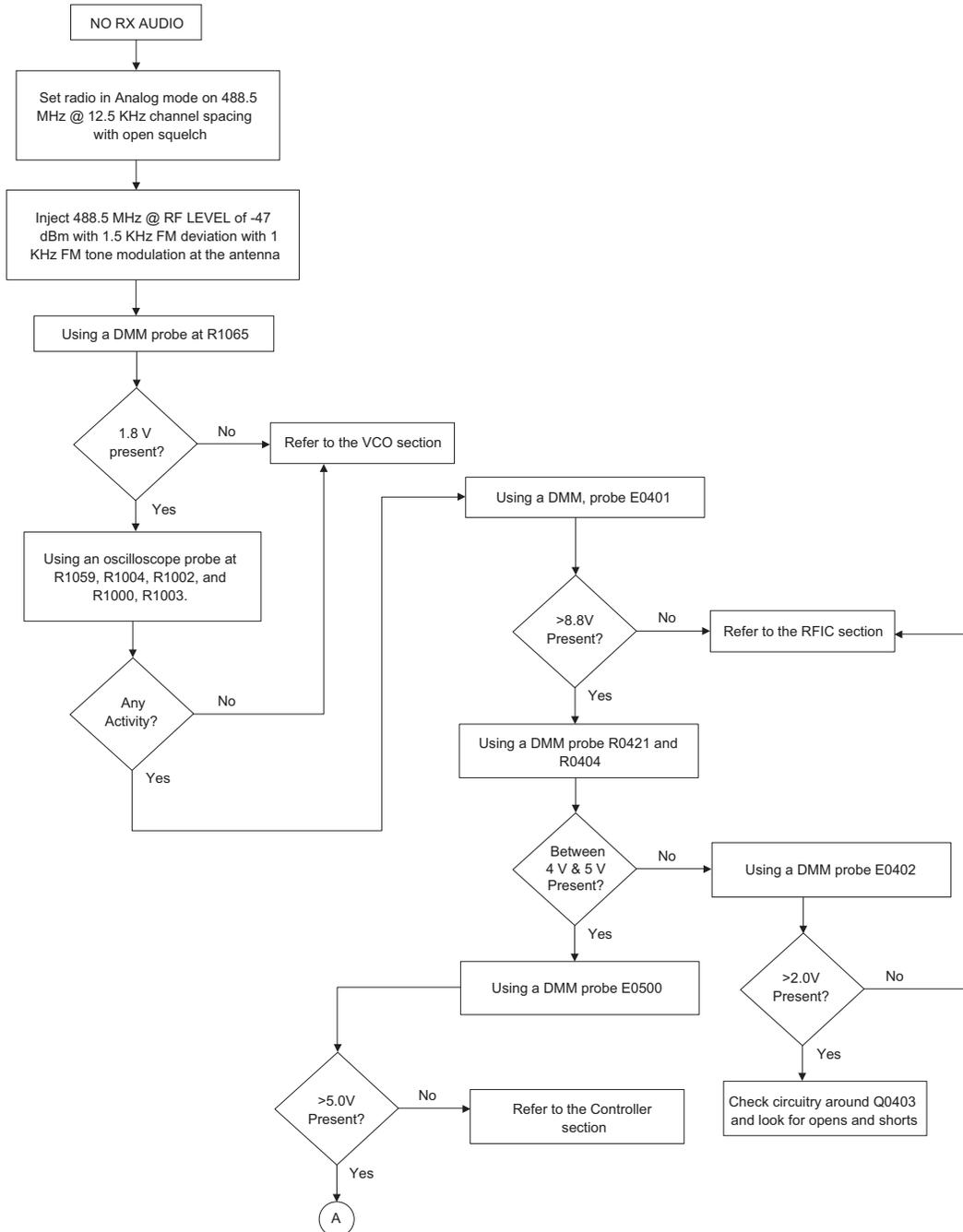
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## Notes

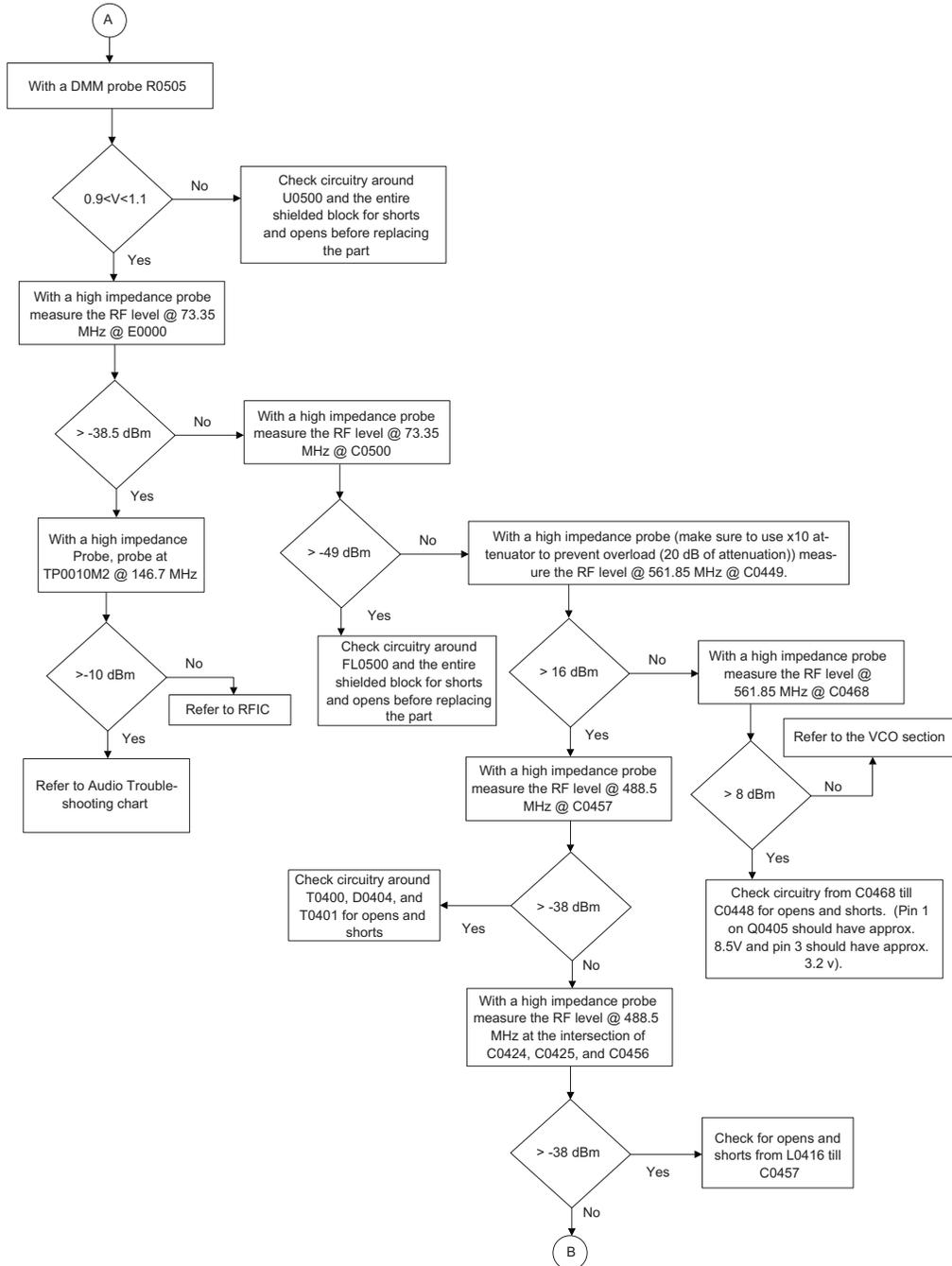
# Section 1

## TROUBLESHOOTING CHARTS

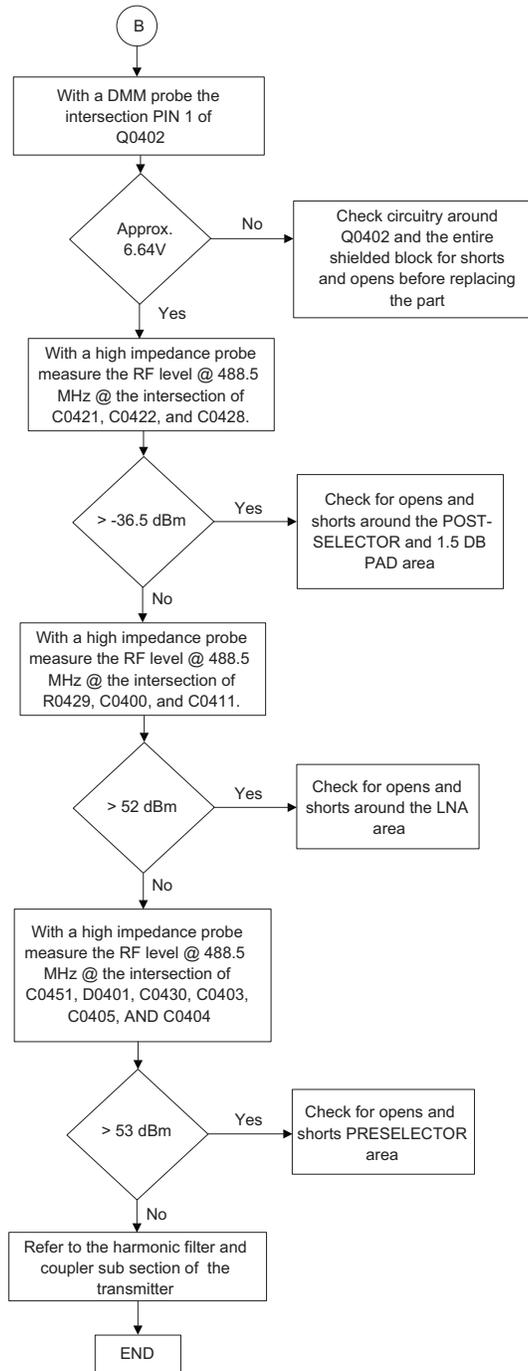
### 1.0 Troubleshooting Flow Chart for Receiver (Sheet 1 of 3)



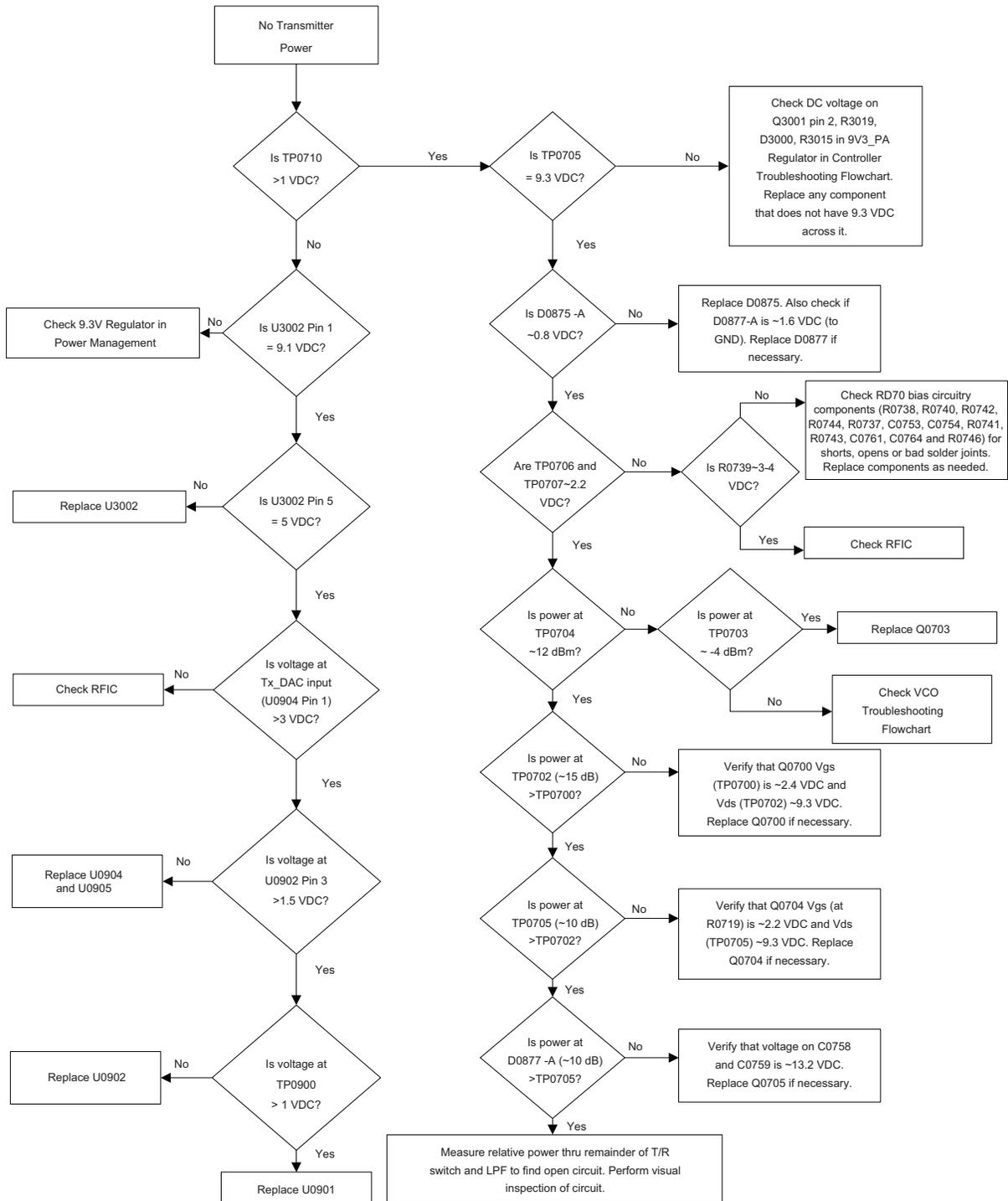
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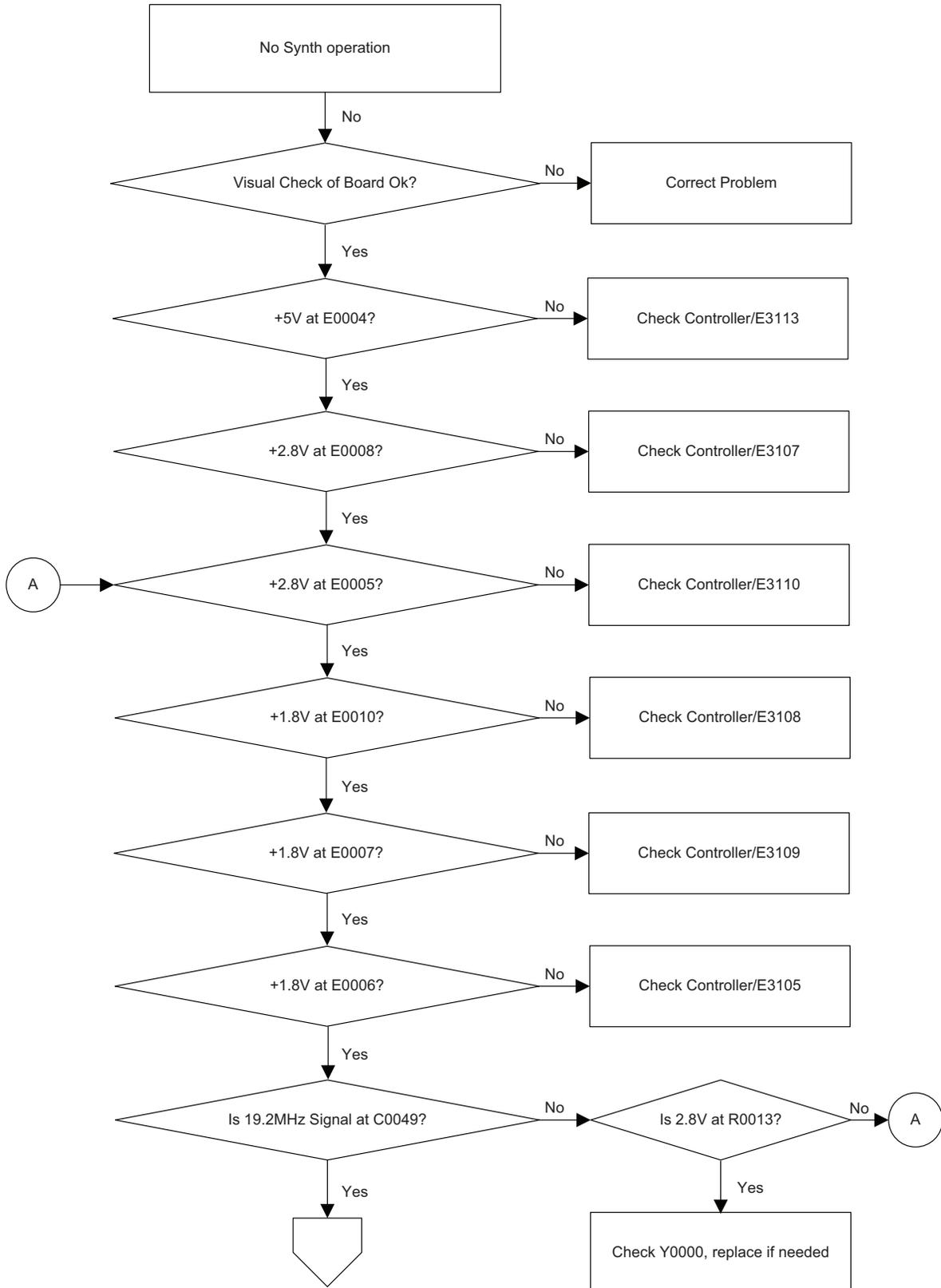
## 1.2 Troubleshooting Flow Chart for Receiver (Sheet 3 of 3)



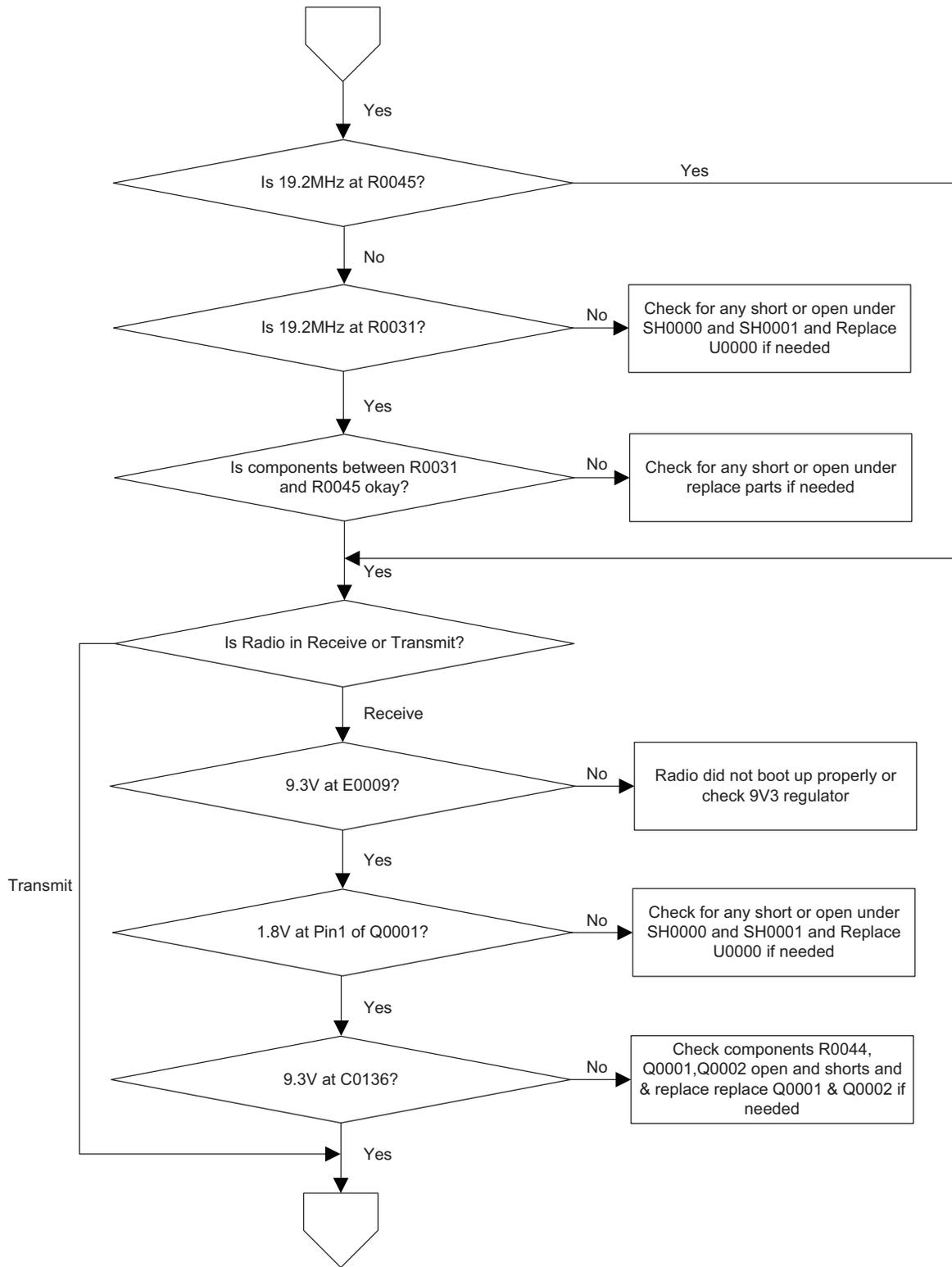
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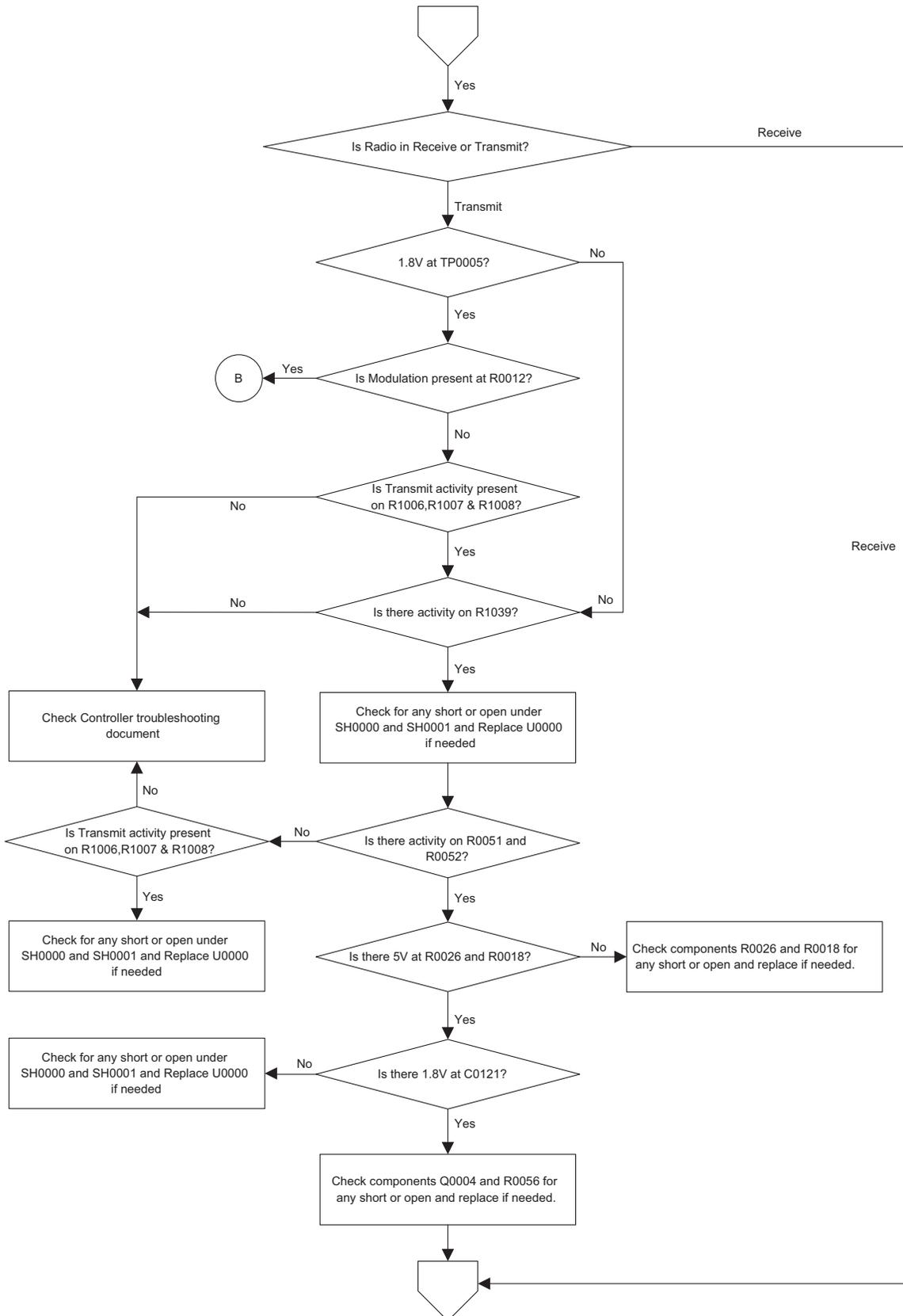
### 3.0 Troubleshooting Flow Chart for RFIC (Sheet 1 of 5)



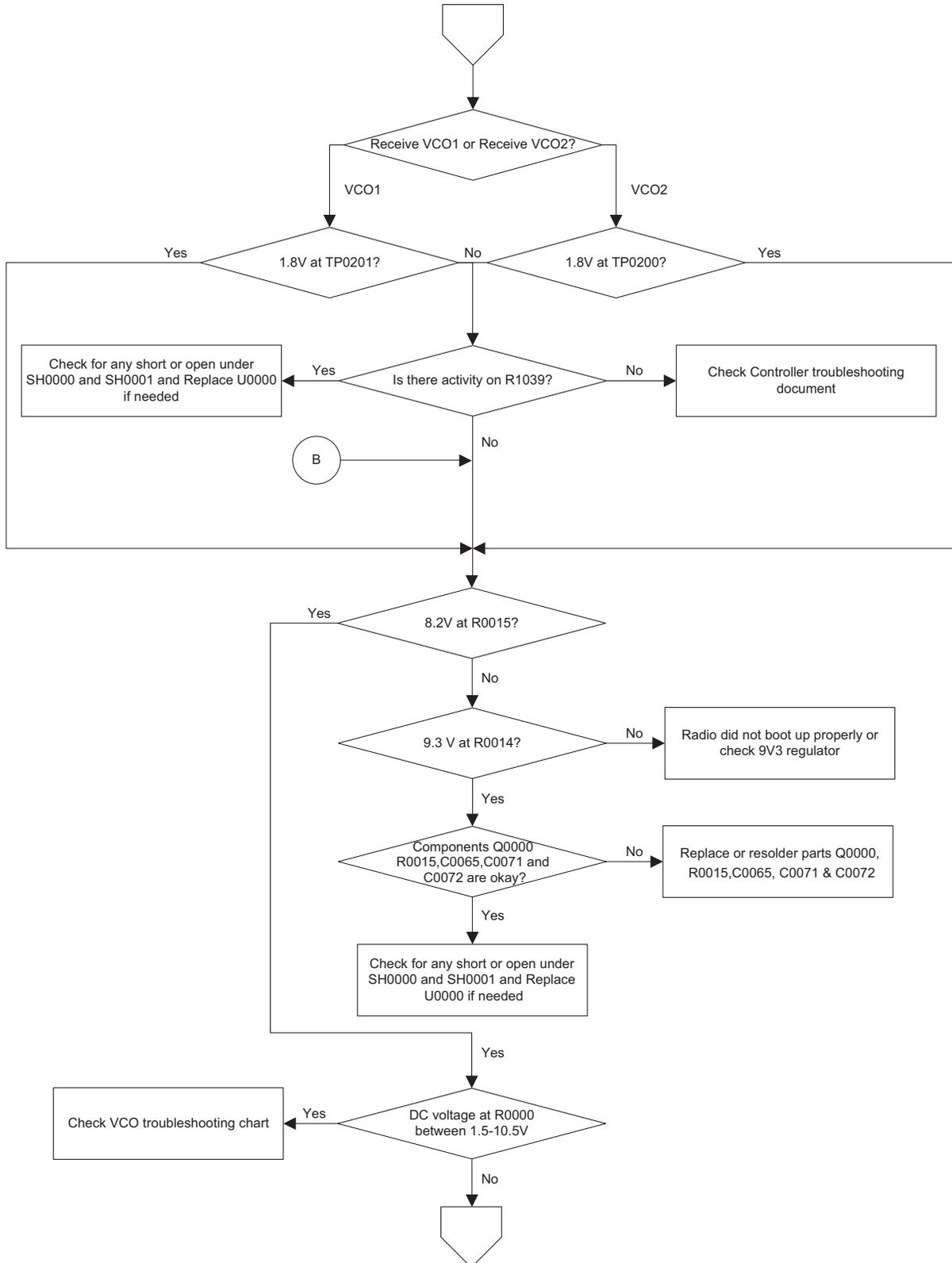
### 3.1 Troubleshooting Flow Chart for RFIC (Sheet 2 of 5)



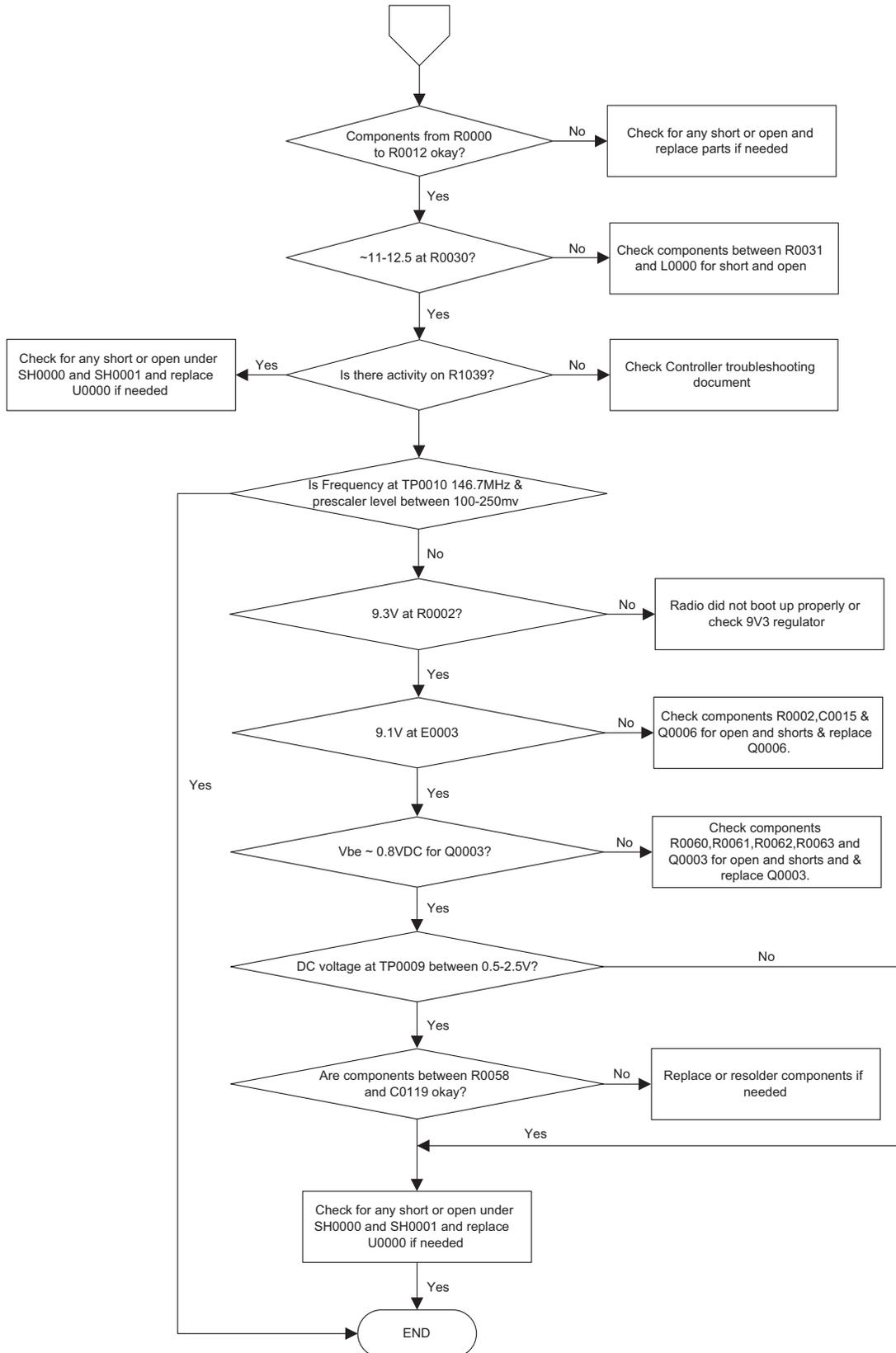
### 3.2 Troubleshooting Flow Chart for RFIC (Sheet 3 of 5)



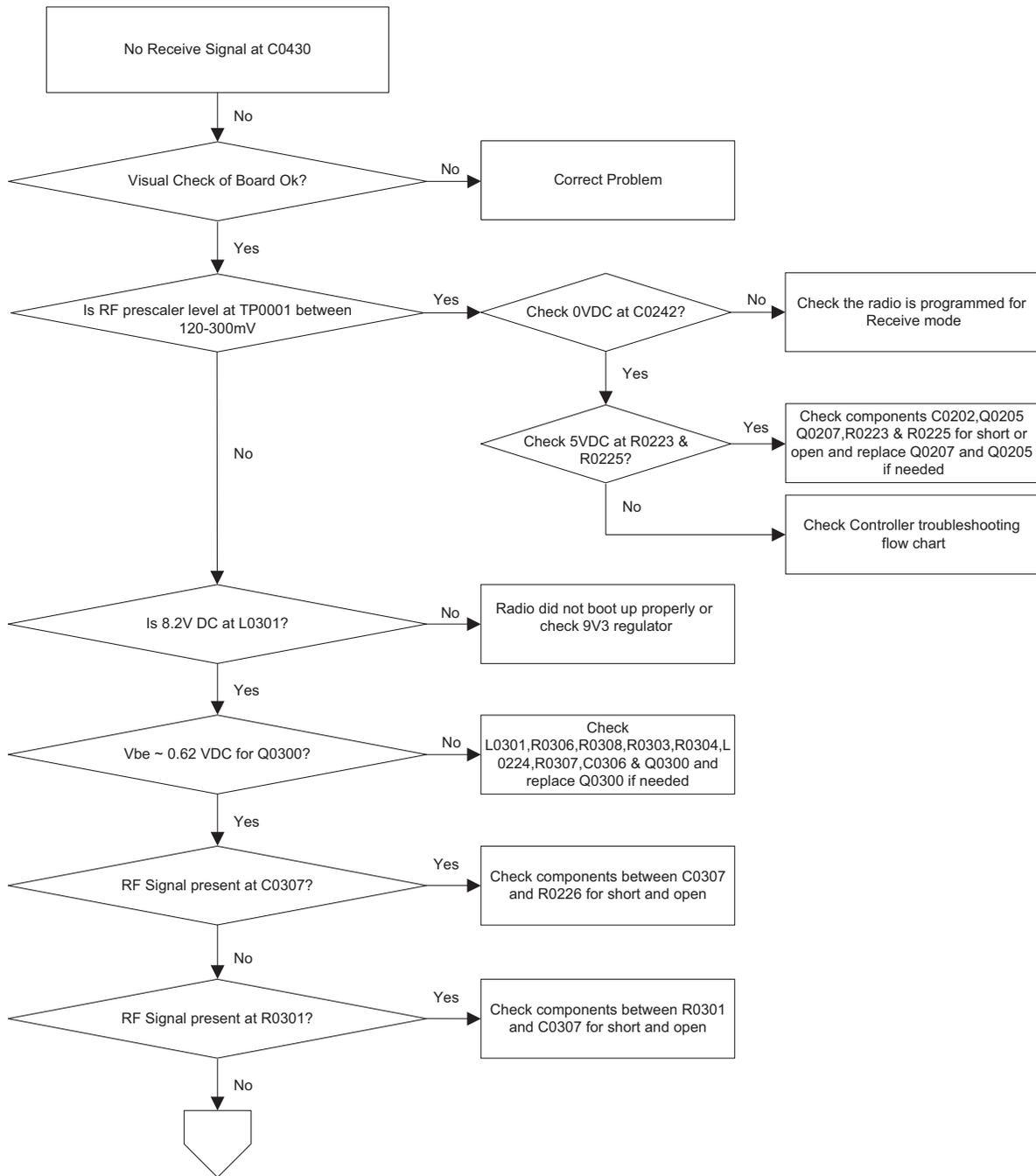
### 3.3 Troubleshooting Flow Chart for RFIC (Sheet 4 of 5)



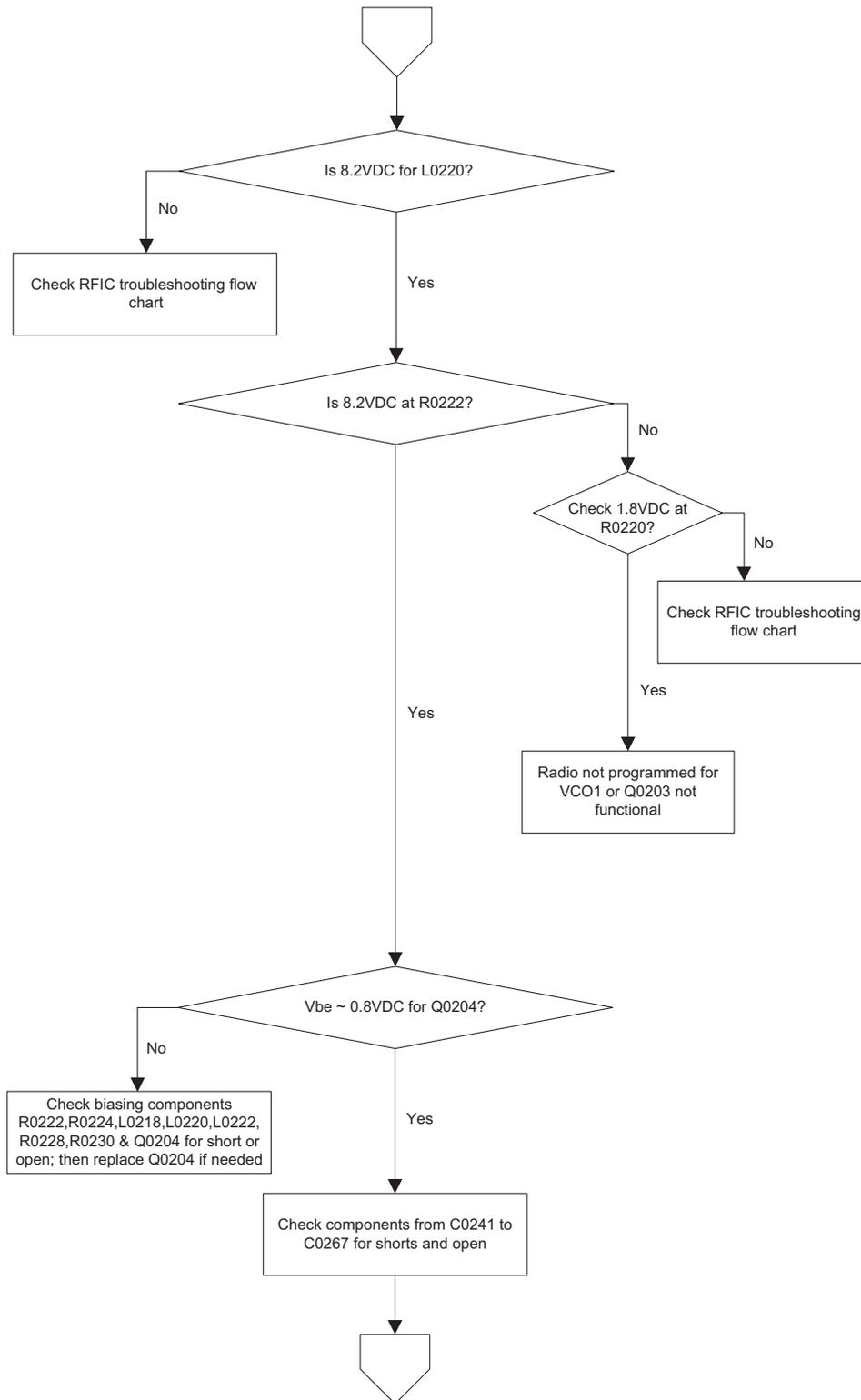
### 3.4 Troubleshooting Flow Chart for RFIC (Sheet 5 of 5)



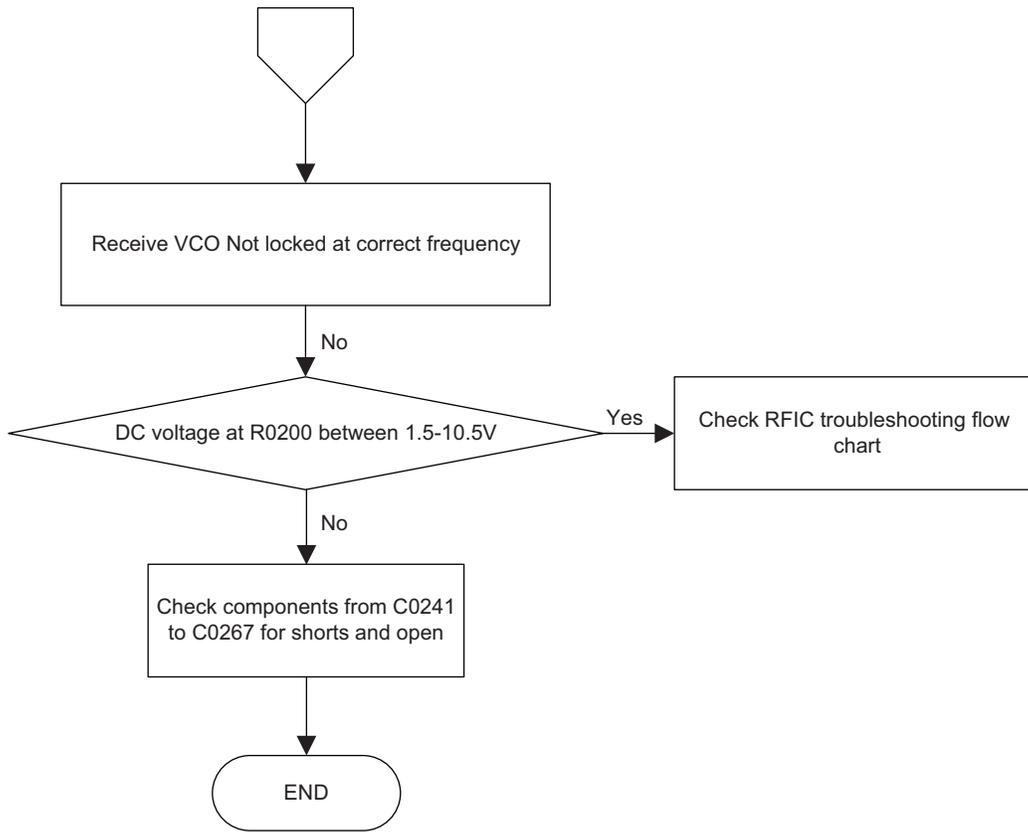
### 4.0 Troubleshooting Flow Chart for Rx VCO (Sheet 1 of 3)



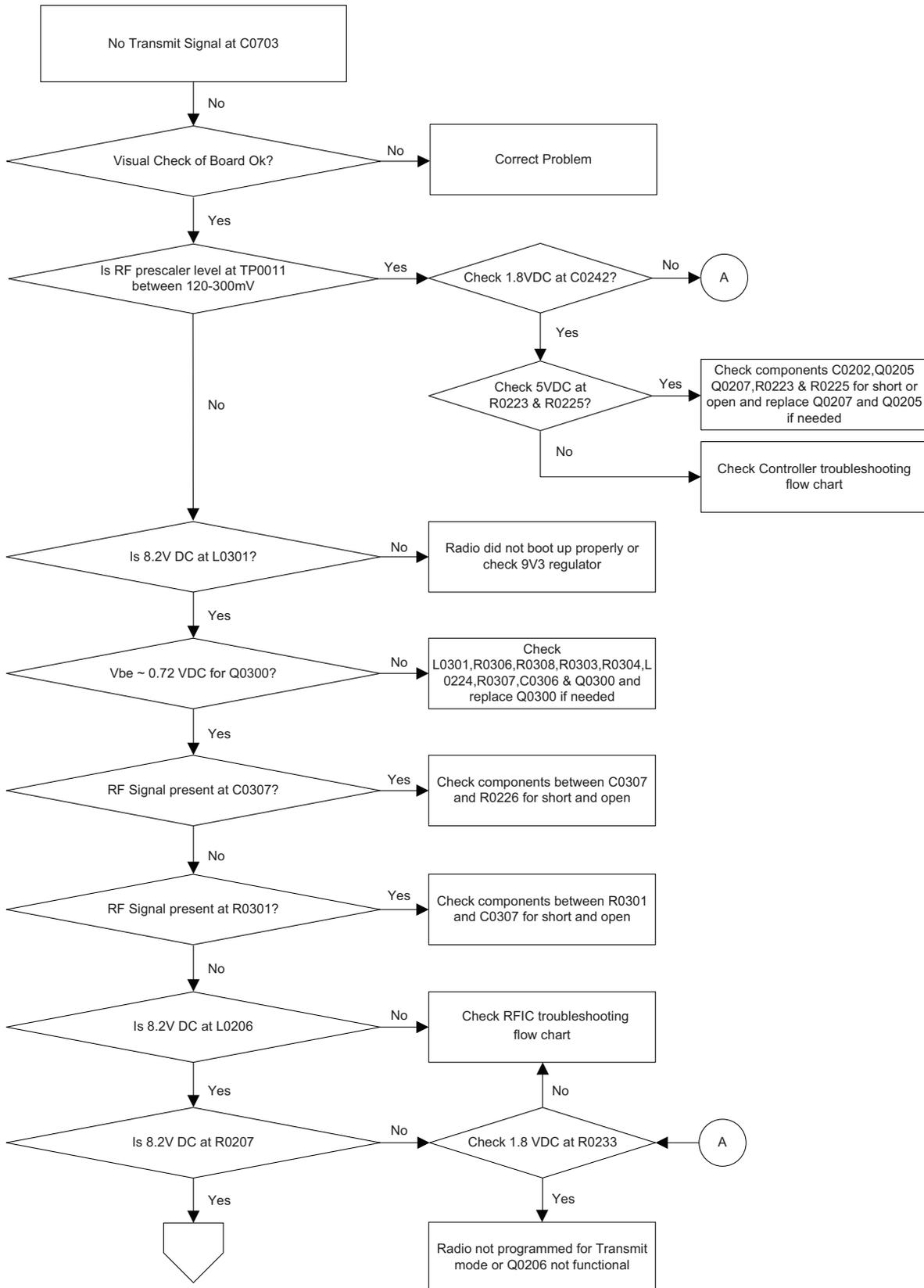
### 4.1 Troubleshooting Flow Chart for Rx VCO (Sheet 2 of 3)



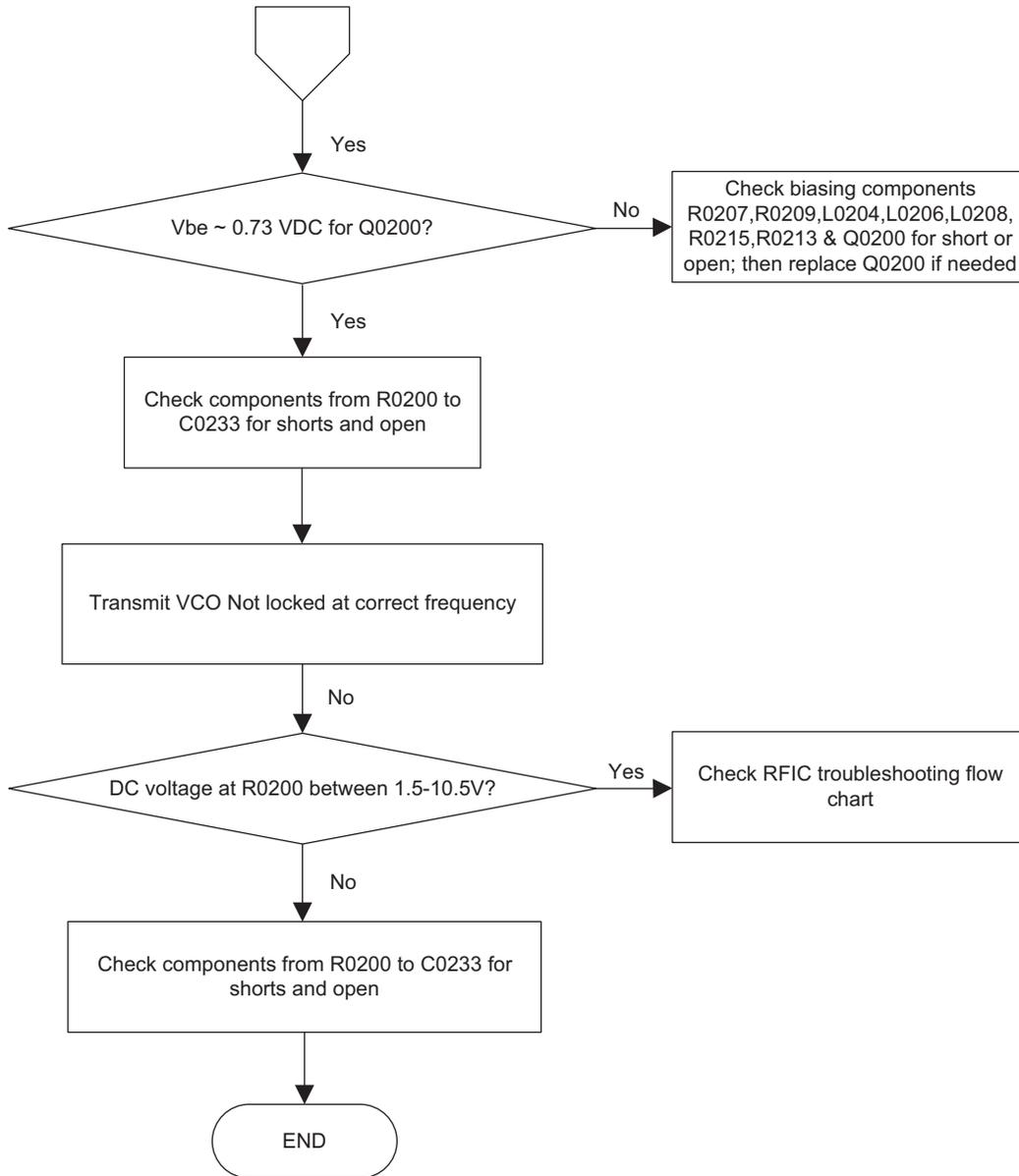
### 4.2 Troubleshooting Flow Chart for Rx VCO (Sheet 3 of 3)



### 5.0 Troubleshooting Flow Chart for Tx VCO (Sheet 1 of 2)



### 5.1 Troubleshooting Flow Chart for Tx VCO (Sheet 2 of 2)



## Section 2

### UHF2 PCB/SCHEMATICS/PARTS LISTS

#### 1.0 Allocation of Schematics and Circuit Boards

##### 1.1 UHF2 40W Circuits

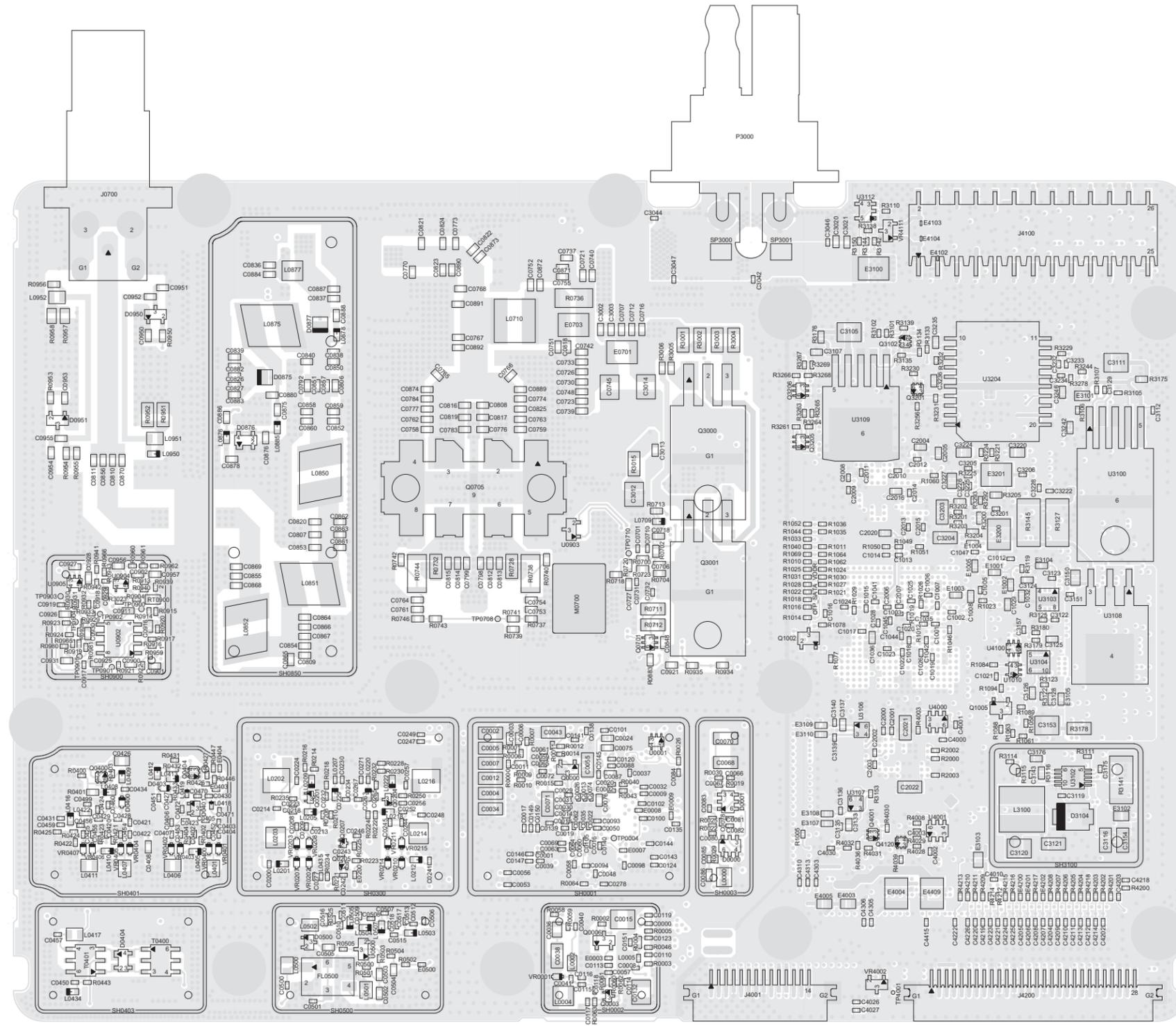
The UHF2 circuits are contained on the Printed Circuit Board (PCB) which also contains the Controller circuits. This chapter shows the schematics for the UHF2 40W circuits only, refer to the Controller section for details of the related Controller circuits. The PCB component layouts and the Parts List in this chapter show both the Controller and UHF2 40W circuit components. The UHF2 40W schematics and the related PCB and parts list are shown in the table below.

*Table 2-1 UHF2 1–40W Schematic Diagrams and Parts List*

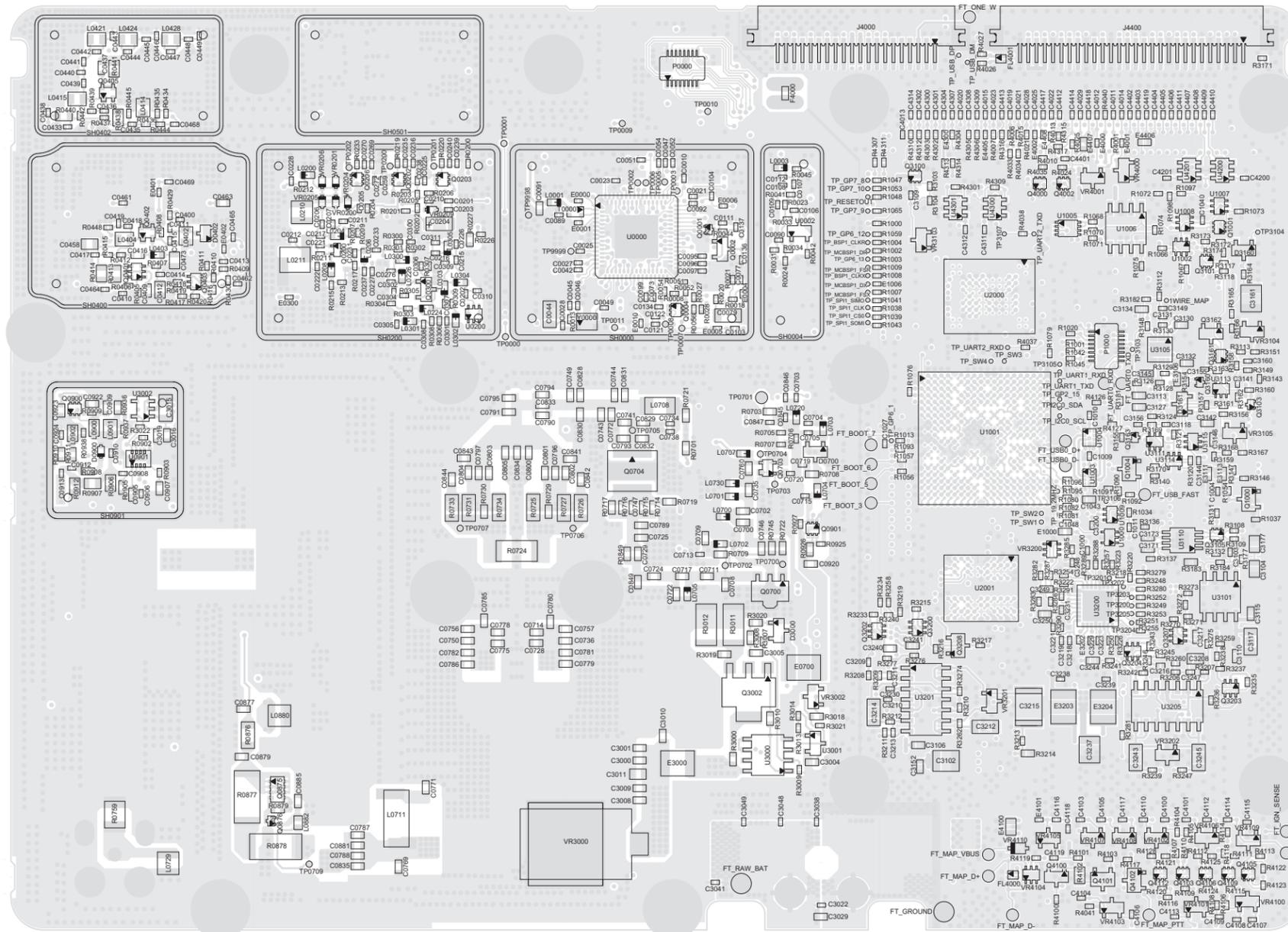
<b>PCB:</b>	
84012728001-A Main Board Top Side	Page 2-3
84012728001-A Main Board Bottom Side	Page 2-4
<b>SCHEMATICS</b>	
Overall	Page 2-5
Receiver Front-End	Page 2-6
Receiver IF Amp	Page 2-7
Transmitter Power Amplifier (sheet 1 of 3)	Page 2-8
Transmitter Power Amplifier (sheet 2 of 3)	Page 2-9
Transmitter Power Amplifier (sheet 3 of 3)	Page 2-10
Power Control	Page 2-11
Transmitter Power Amplifier DC Distribution	Page 2-12
RFIC	Page 2-13
Receiver VCO	Page 2-14
Transmit VCO	Page 2-15
VCO Buffer	Page 2-16
<b>Parts List</b>	
84012728001-A (UHF2 Only)	Page 2-17

## Notes

## 2.0 UHF2 (450–512 MHz) 1–40W PCB/Schematics/Parts List

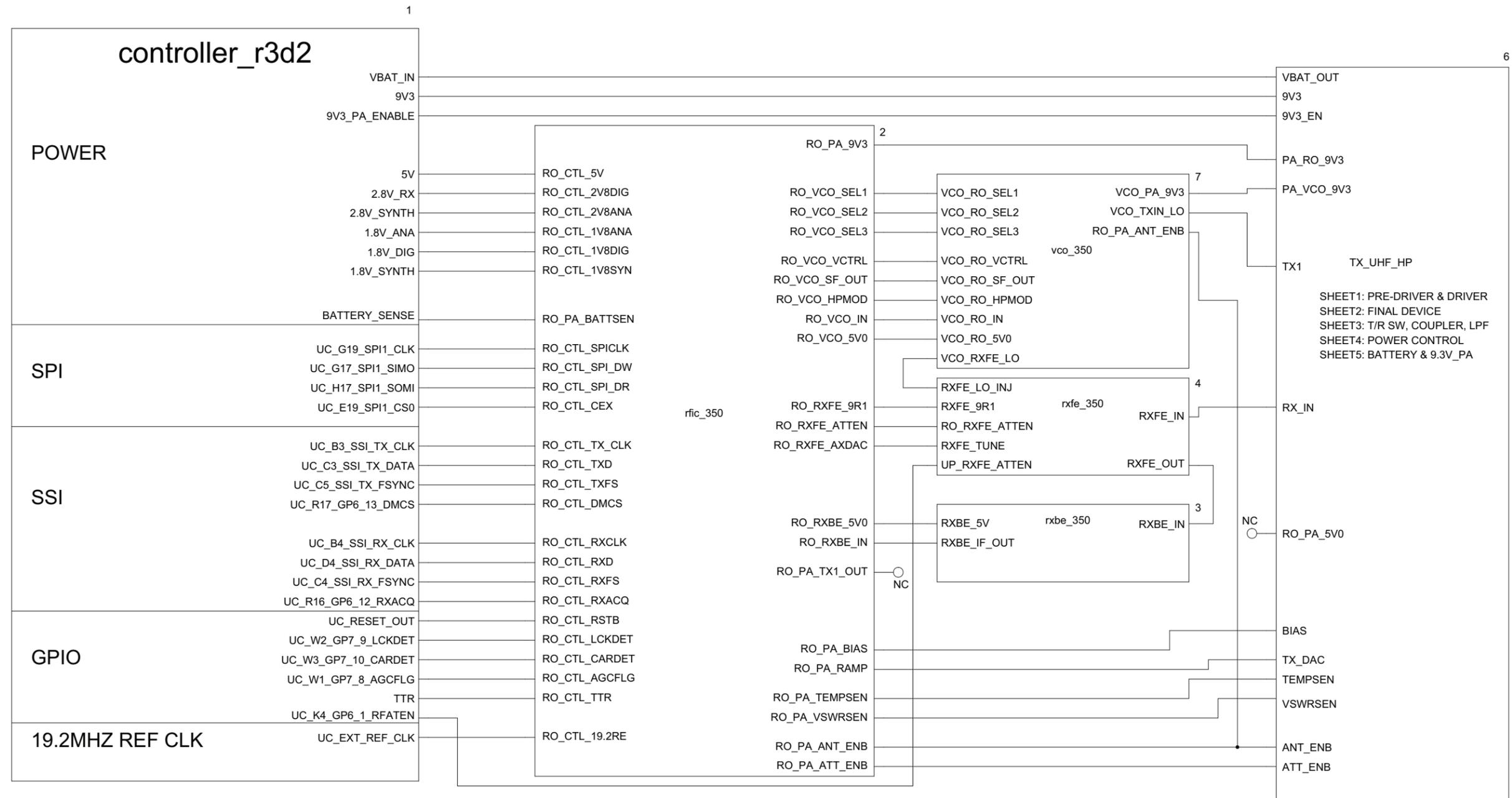


UHF2 (450–512 MHz) 1–40W 84012728001-A Top Side

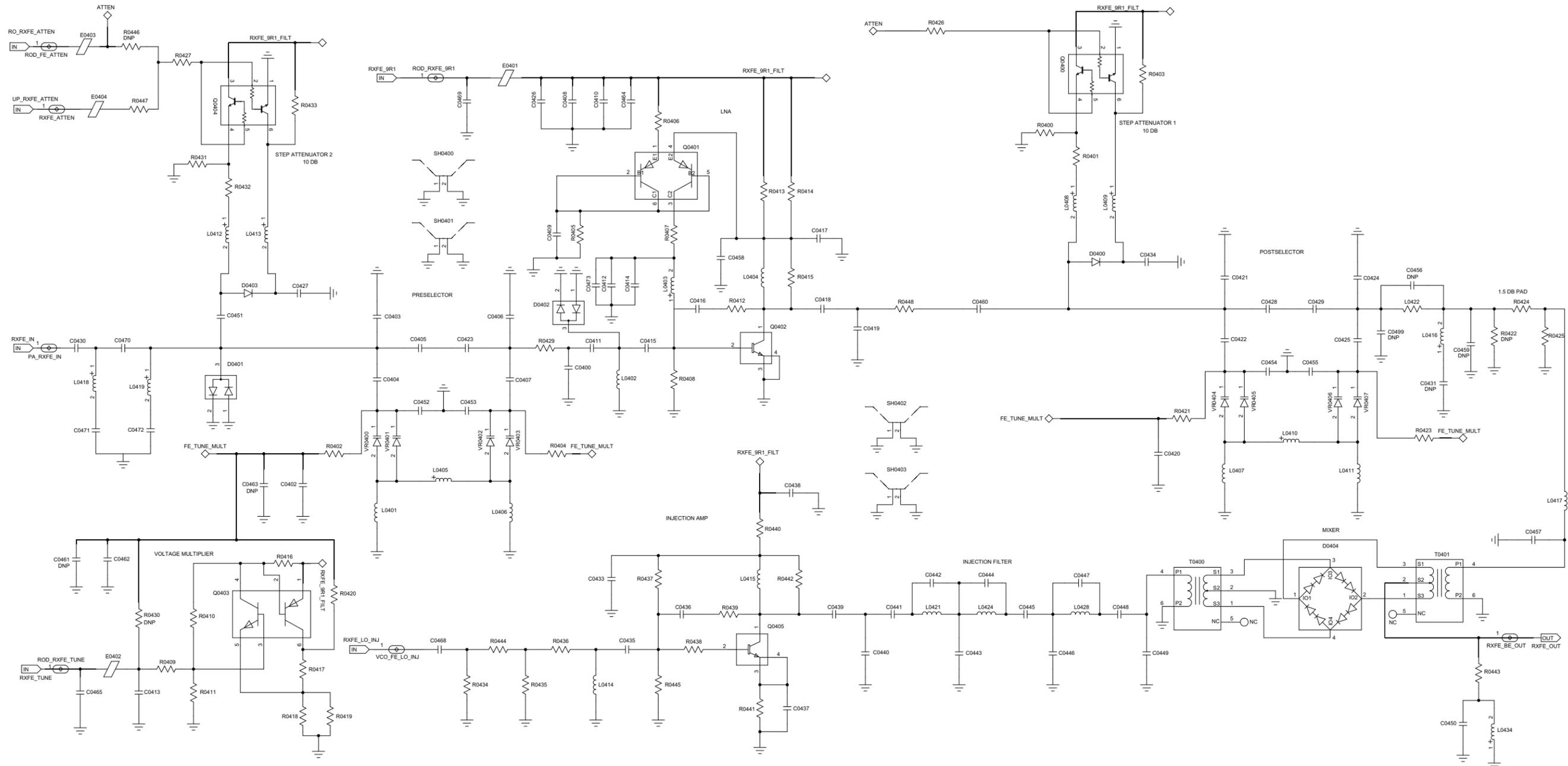


UHF2 (450–512 MHz) 1–40W 84012728001-A Bottom Side

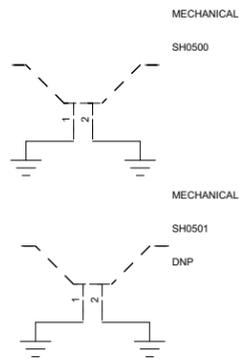
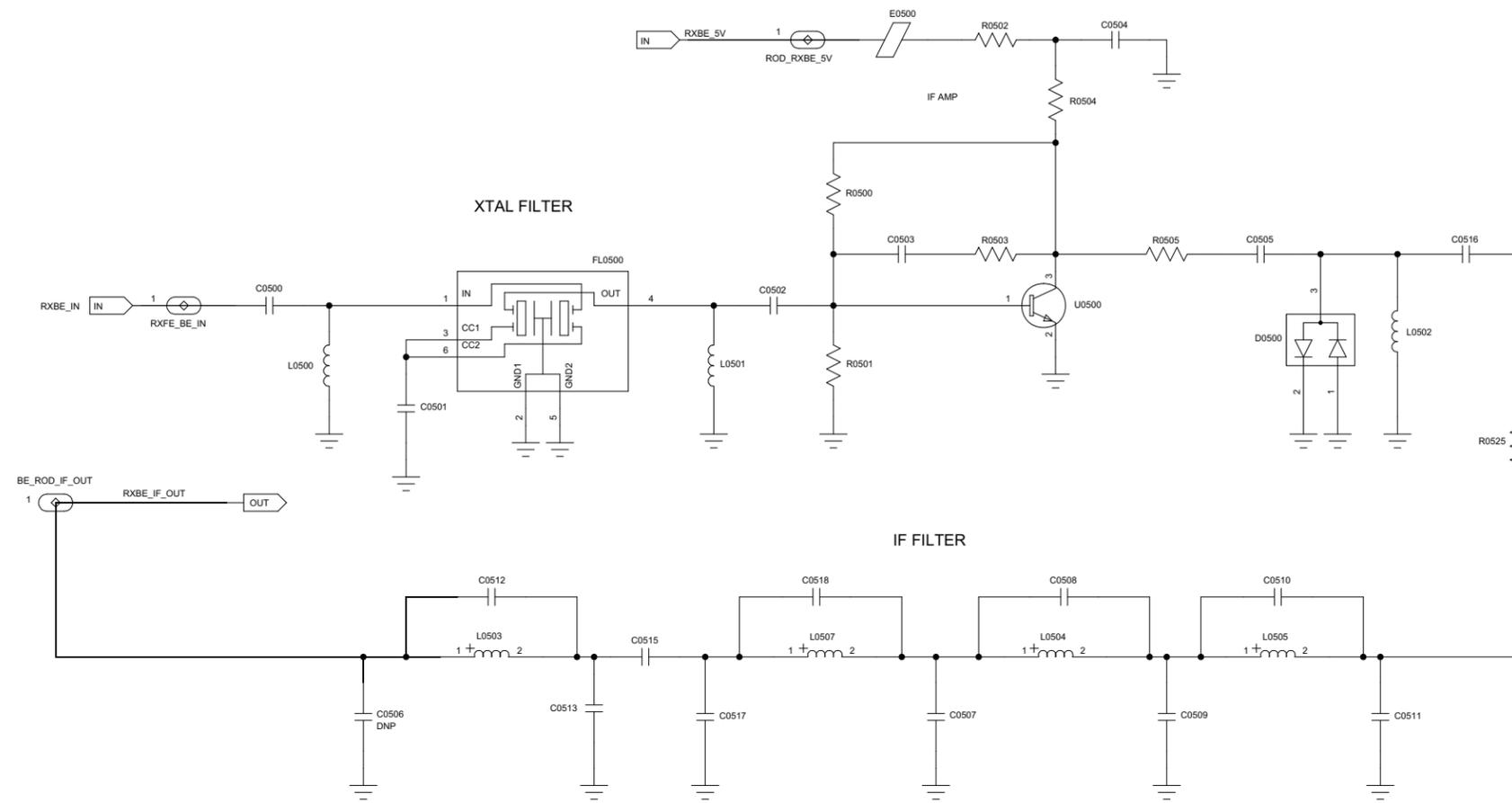
RFIC:	0000 - 0199
VCO:	0200 - 0399
RXFE:	0400 - 0499
RXBE:	0500 - 0699
TX:	0700 - 0999
MICRO_PROCESSOR:	1000 - 2999
PM_AUDIO_DIGITAL:	3000 - 3999
PERIPHERALS:	4000 - 4999
OPTION_BOARD:	5000 - 5999
CONTROL_HEAD:	6000 - 6999
BT_GPS:	7000 - 8999
CONNECTORS:	9000 - 9999 (RESERVE)



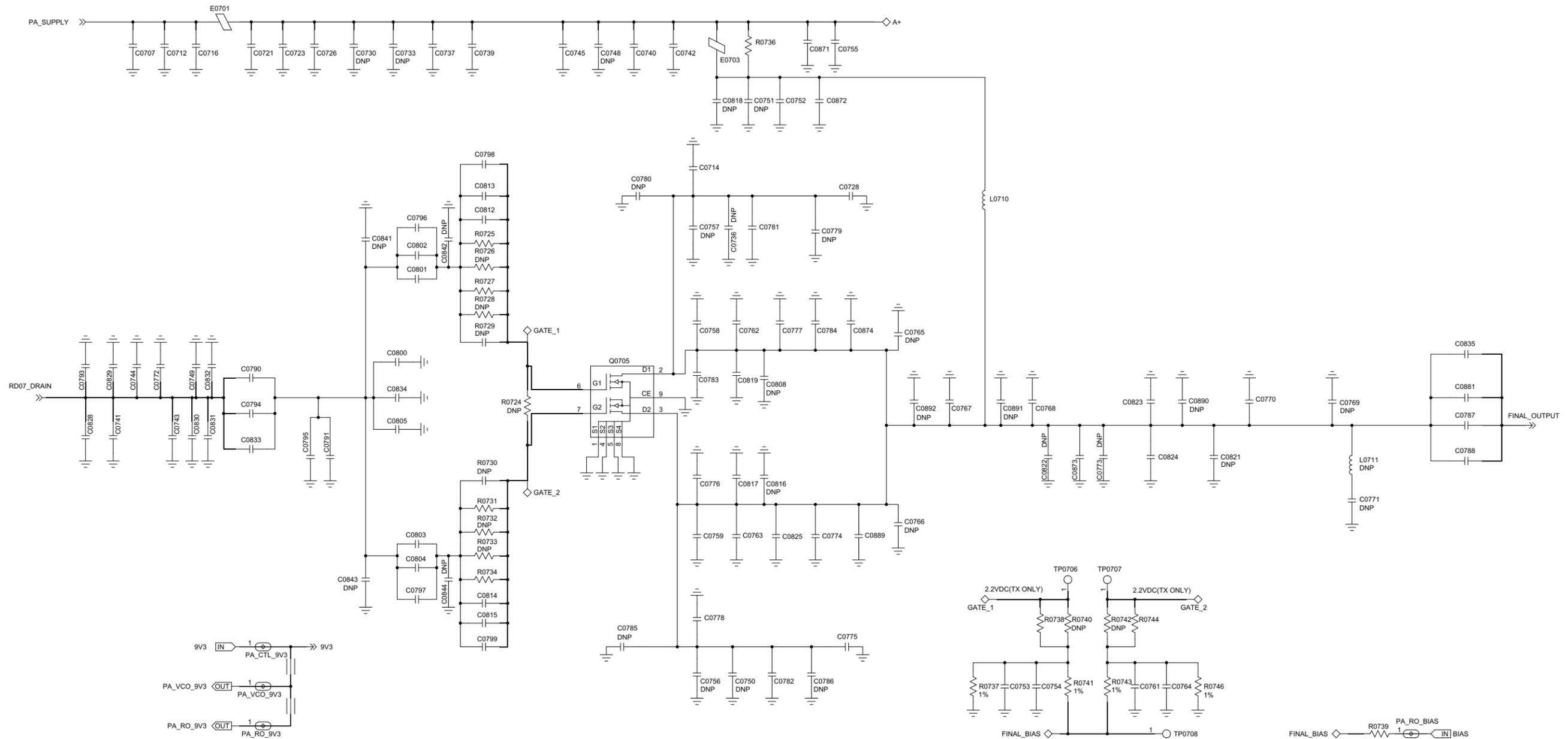
UHF2 (450–512 MHz) 1–40W Overall Schematic Diagram



UHF2 (450-512 MHz) 1-40W Receiver Front-End Schematic Diagram



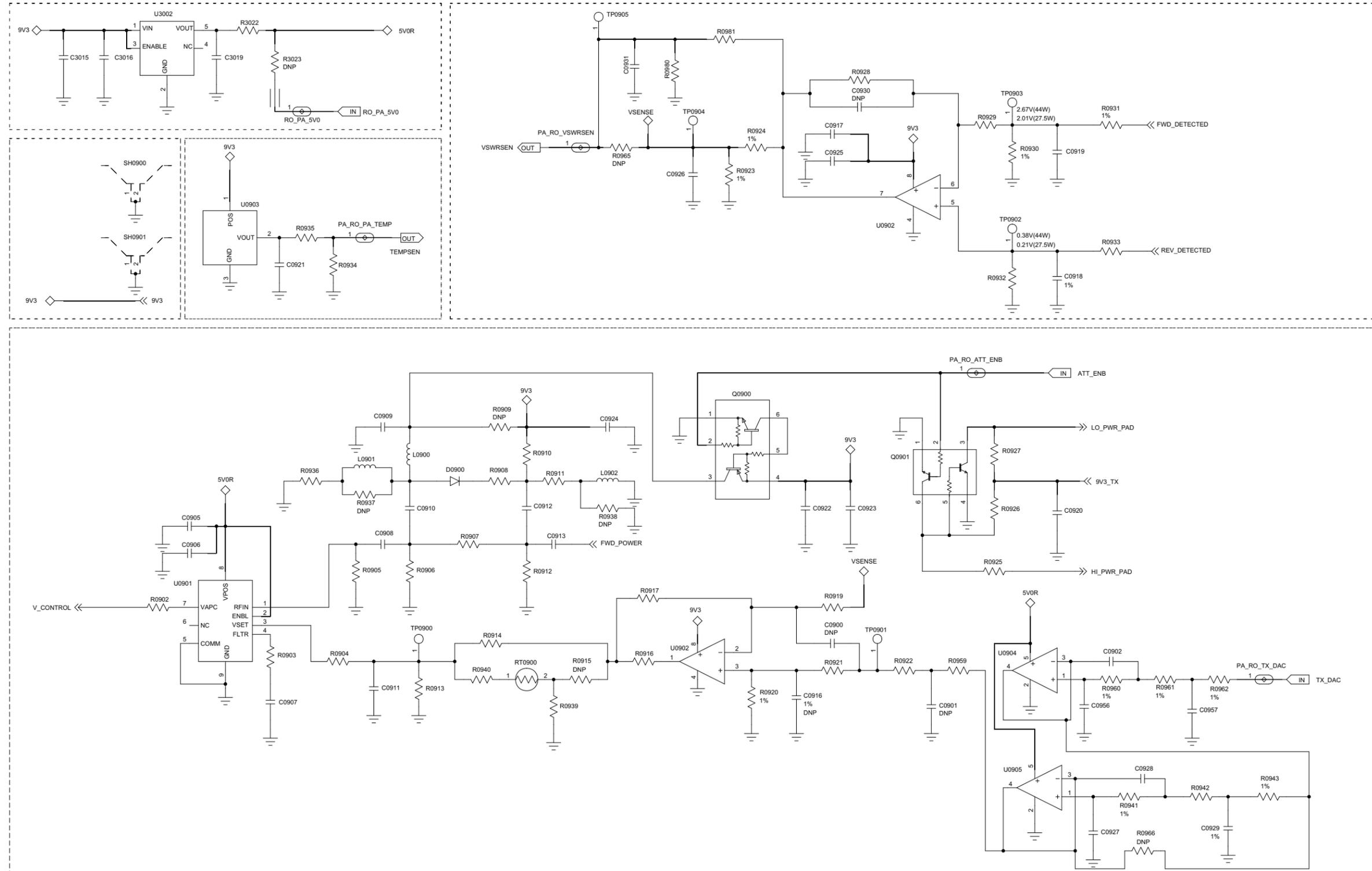
UHF2 (450–512 MHz) 1–40W Receiver IF Amp Schematic Diagram



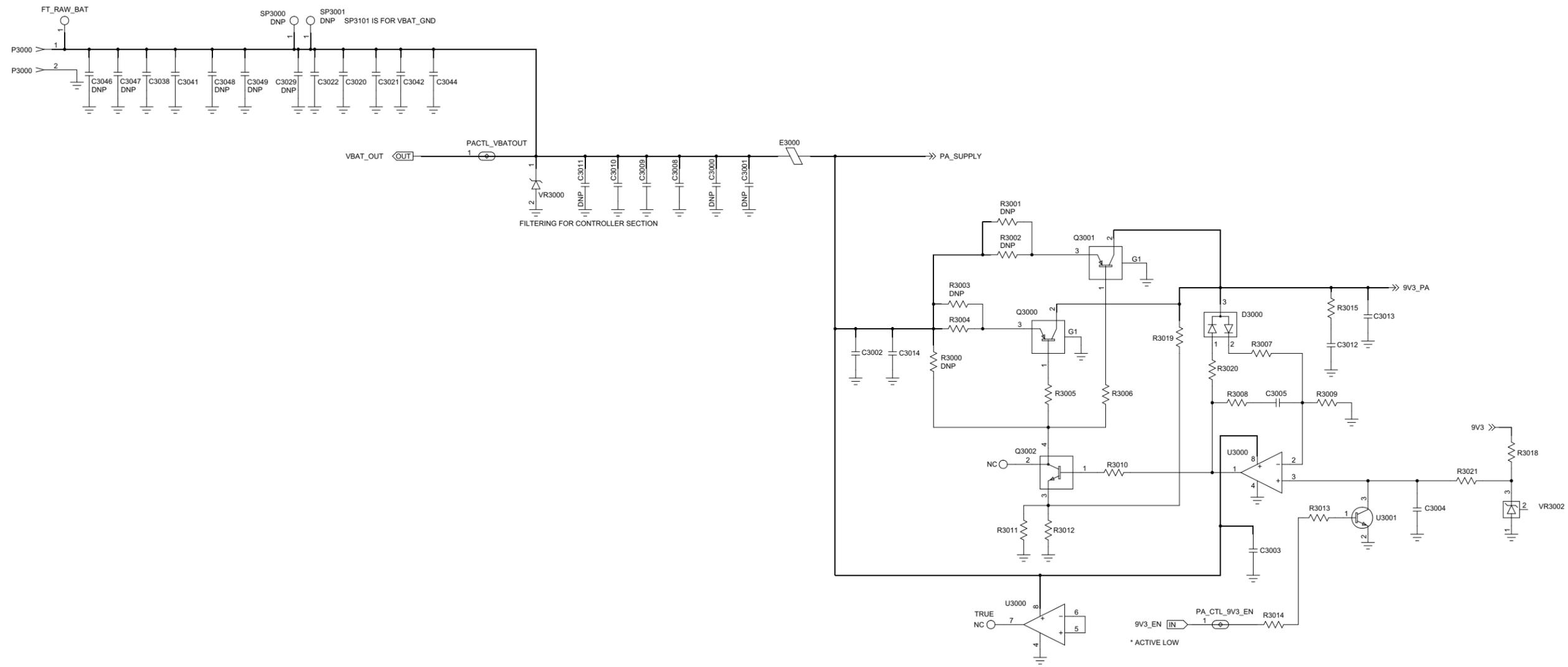
UHF2 (450–512MHz) 1–40W Transmitter Power Amplifier Schematic Diagram (sheet 1 of 3)



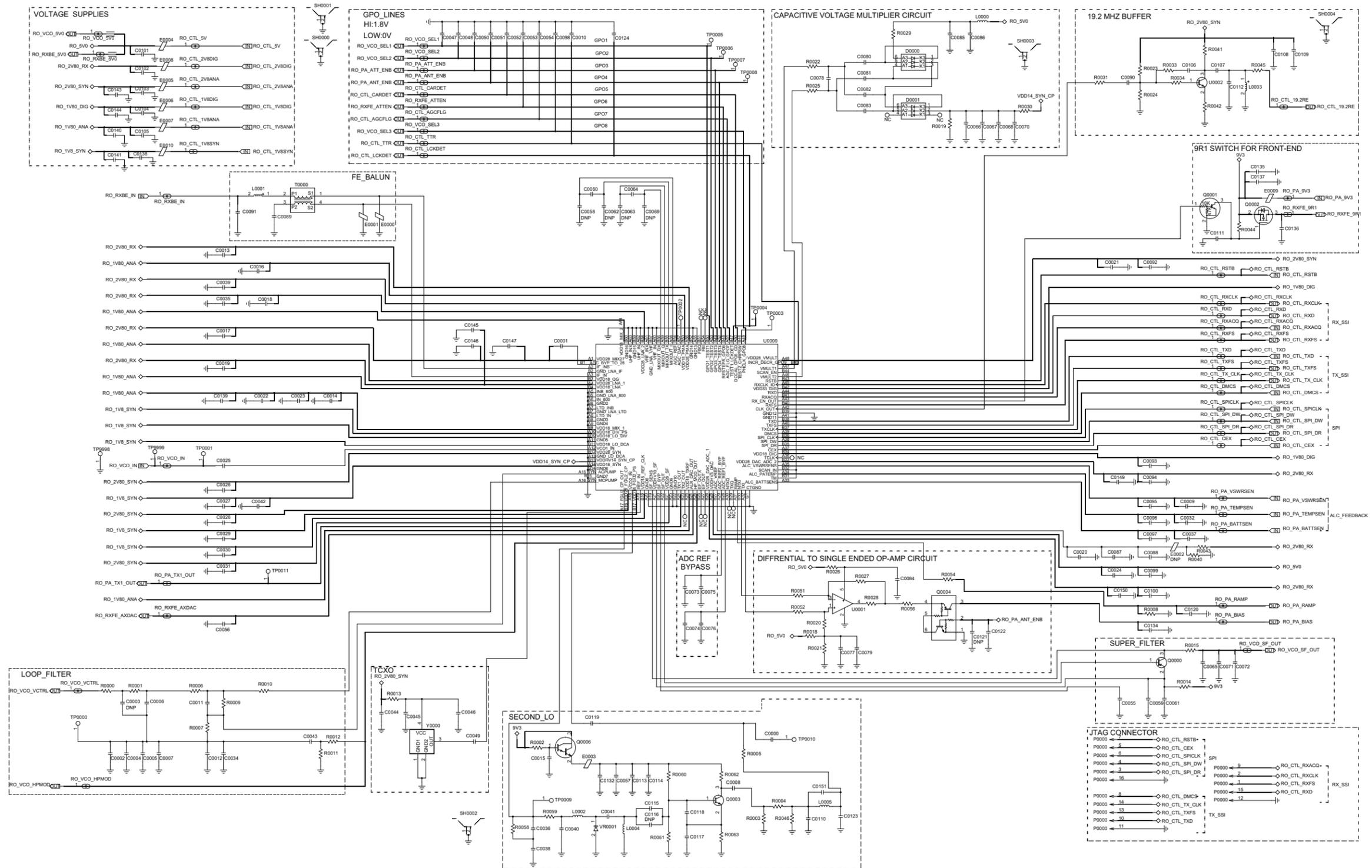




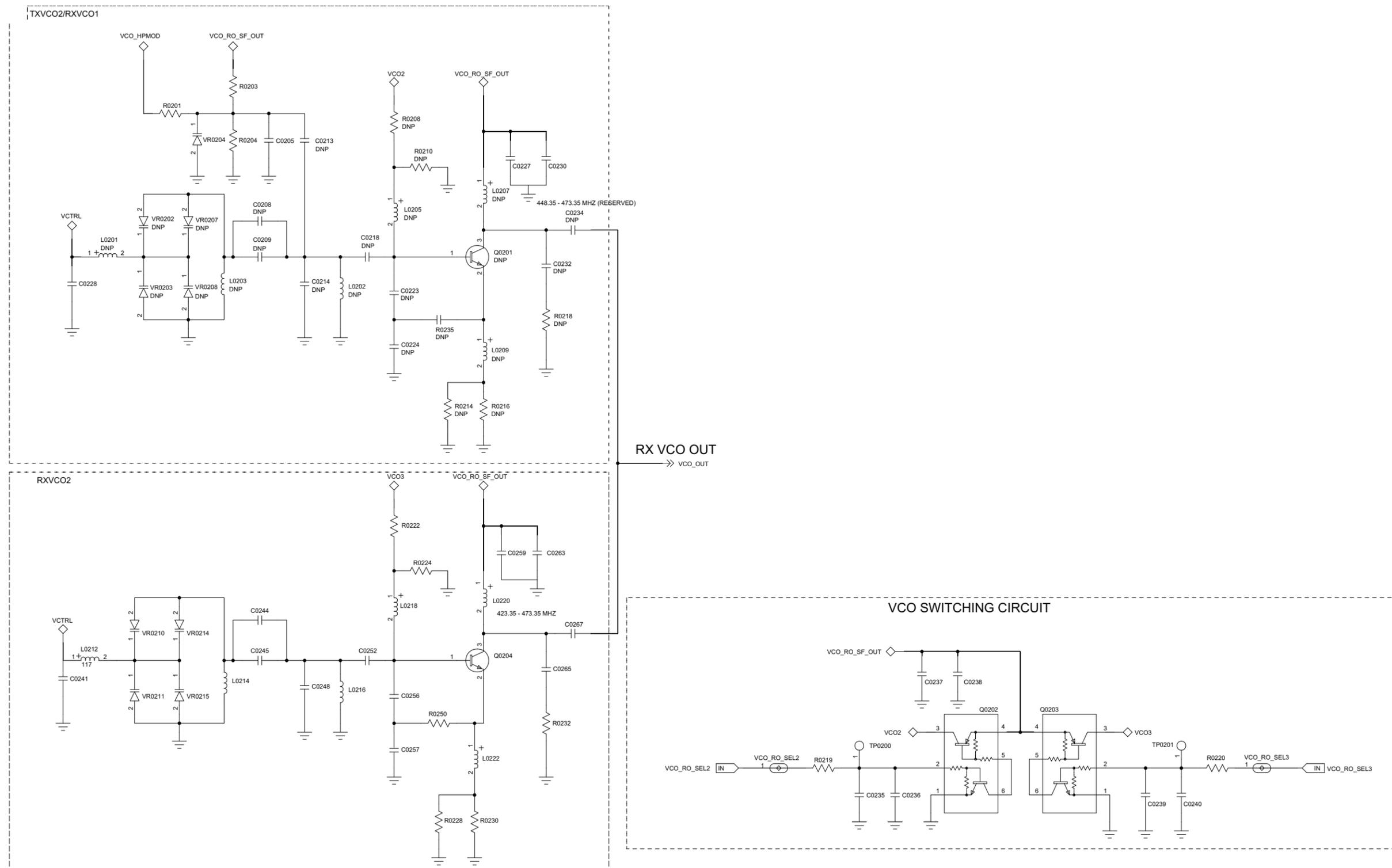
UHF2 (450–512 MHz) 1–40W Power Control Schematic Diagram



UHF2 (450–512 MHz) 1–40W Transmitter Power Amplifier DC Distribution Schematic Diagram

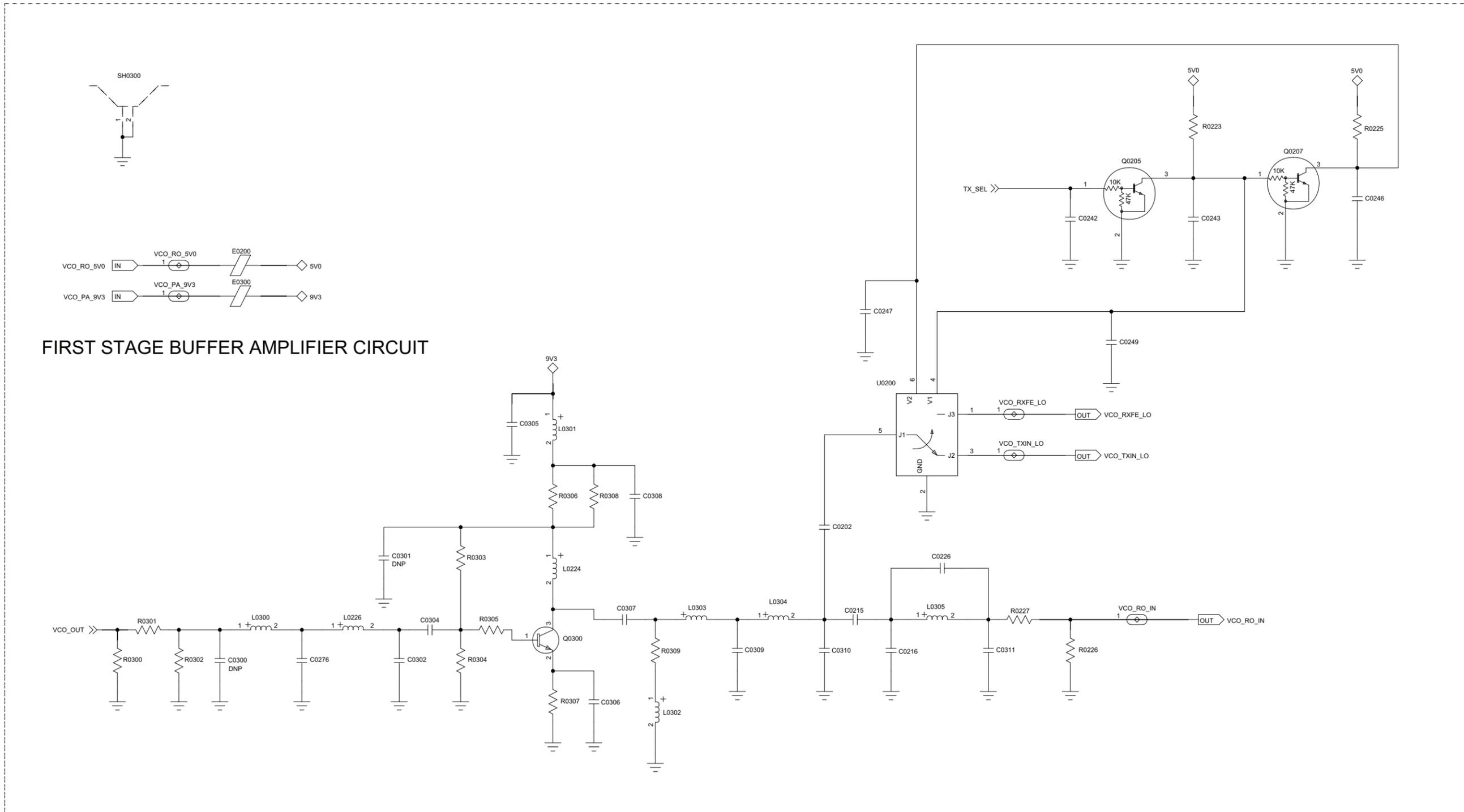


UHF2 (450–512 MHz) 1–40W RFIC Schematic Diagram



UHF2 (450-512 MHz) 1-40W Receiver VCO Schematic Diagram





FIRST STAGE BUFFER AMPLIFIER CIRCUIT

UHF2 (450–512 MHz) 1–40W VCO Buffer Schematic Diagram

**UHF2 PCB 84012728001-A  
Parts List 1–40W**

Circuit Ref.	Motorola Part No.
C0000M2	21667009311
C0000M2	21667009311
C0001M2	21667009170
C0002M2	NOT PLACED
C0003M2	NOT PLACED
C0004M2	21012044001
C0005M2	21012044001
C0006M2	2113945C31
C0007M2	21012044001
C0008M2	21667009311
C0009M2	21667009166
C0010M2	21667009166
C0011M2	2113945C31
C0012M2	21012044001
C0013M2	2113945Y02
C0014M2	2113945Y02
C0015M2	2113946J03
C0016M2	2113945A10
C0017M2	2113945Y02
C0018M2	2113945A10
C0019M2	2113945Y02
C0020M2	2113945A10
C0021M2	2113945Y02
C0022M2	2113945Y02
C0023M2	2113945Y02
C0024M2	21012129001
C0025M2	21667009166
C0026M2	2113944A52
C0027M2	2113945Y02
C0028M2	2113945Y02
C0029M2	2113945A10
C0030M2	2113945A10
C0031M2	2113945Y02
C0032M2	21667009166
C0034M2	21012044001
C0035M2	21667009166
C0036M2	21012025001
C0037M2	21667009166
C0038M2	21012044001
C0039M2	2113945Y02
C0040M2	2113945A10
C0041M2	21667009364
C0042M2	21667009166
C0043M2	21012044001
C0044M2	2113955D45
C0045M2	2113945Y02
C0046M2	21667009166
C0047M2	21667009166
C0048M2	21667009166

Circuit Ref.	Motorola Part No.
C0049M2	2113945B02
C0050M2	21667009166
C0051M2	21667009166
C0052M2	21667009166
C0053M2	21667009166
C0054M2	21667009166
C0055M2	2113955D37
C0056M2	2113945Y02
C0057M2	2113945B02
C0058M2	NOT PLACED
C0059M2	21667009166
C0060M2	2113945A69
C0061M2	2113945Y02
C0062M2	NOT PLACED
C0063M2	NOT PLACED
C0064M2	2113945A69
C0065M2	2113945Y02
C0066M2	2113945B02
C0067M2	2113945Y02
C0068M2	2113955D37
C0069M2	NOT PLACED
C0070M2	2113955D37
C0071M2	2113955D37
C0072M2	21667009166
C0073M2	21667009166
C0074M2	21667009166
C0075M2	2113946S35
C0076M2	2113946S35
C0077M2	21667009166
C0078M2	21667009372
C0079M2	2113955D37
C0080M2	2113945B02
C0081M2	2113945B02
C0082M2	2113945B02
C0083M2	2113945B02
C0084M2	21667009166
C0085M2	21667009166
C0086M2	2113945C31
C0087M2	2113946S35
C0088M2	2113945Y02
C0089M2	2113945Y02
C0090M2	2113945B02
C0091M2	2113944C82
C0092M2	21667009166
C0093M2	2113945Y02
C0094M2	2113945Y02
C0095M2	2113945A13
C0096M2	2113945B02
C0097M2	2113945B02
C0098M2	21667009166
C0099M2	2113945Y02

Circuit Ref.	Motorola Part No.
C0100M2	2113945Y02
C0101M2	21667009166
C0102M2	21667009166
C0103M2	21667009166
C0104M2	21667009166
C0105M2	21667009166
C0106M2	2113945B02
C0107M2	2113945B02
C0108M2	21667009166
C0109M2	2113945Y02
C0110M2	21667009381
C0111M2	2113945Y02
C0112M2	21667009166
C0113M2	21667009166
C0114M2	2113945Y02
C0115M2	21667009370
C0116M2	NOT PLACED
C0117M2	21667009374
C0118M2	21667009375
C0119M2	2113945A10
C0120M2	21667009166
C0121M2	NOT PLACED
C0122M2	21667009166
C0123M2	21667009381
C0124M2	21667009166
C0132M2	2113946J03
C0134M2	21667009166
C0135M2	21667009166
C0136M2	21667009166
C0137M2	2113945Y02
C0138M2	21667009166
C0139M2	21667009166
C0140M2	2113945Y02
C0141M2	2113945Y02
C0143M2	2113945Y02
C0144M2	2113945Y02
C0145M2	21667009166
C0146M2	2113945A10
C0147M2	2113945A10
C0149M2	21667009166
C0150M2	21667009166
C0151M2	21667009368
C0200M7	21667009166
C0201M7	NOT PLACED
C0202M7	21667009166
C0203M7	NOT PLACED
C0204M7	NOT PLACED
C0205M7	21667009274
C0206M7	21667009320
C0207M7	21667009320
C0208M7	21667009303

Circuit Ref.	Motorola Part No.
C0209M7	21667009297
C0210M7	NOT PLACED
C0211M7	NOT PLACED
C0212M7	21667009286
C0213M7	21667009274
C0214M7	21667009303
C0215M7	21667009332
C0216M7	21667009303
C0217M7	21667009332
C0218M7	21667009320
C0221M7	21667009371
C0222M7	21667009366
C0223M7	21667009372
C0224M7	21667009366
C0225M7	2113945Y02
C0226M7	21667009311
C0227M7	2113945Y02
C0228M7	21667009166
C0229M7	21667009166
C0230M7	21667009166
C0231M7	21667009166
C0232M7	21667009166
C0233M7	21667009284
C0234M7	21667009284
C0235M7	21667009166
C0236M7	2113945Y02
C0237M7	21667009166
C0238M7	2113945Y02
C0239M7	2113945Y02
C0240M7	21667009166
C0241M7	21667009166
C0242M7	21667009166
C0243M7	21667009166
C0244M7	21667009297
C0245M7	21667009291
C0246M7	21667009166
C0247M7	21667009166
C0248M7	21667009364
C0249M7	21667009166
C0252M7	21667009320
C0256M7	21667009374
C0257M7	21667009370
C0259M7	2113945Y02
C0263M7	21667009166
C0265M7	21667009166
C0267M7	21667009284
C0269M7	21667009166
C0270M7	2113945Y02
C0271M7	21667009166
C0272M7	2113945Y02
C0276M7	21667009332

Circuit Ref.	Motorola Part No.
C0277M7	NOT PLACED
C0278M7	NOT PLACED
C0300M7	21667009303
C0301M7	NOT PLACED
C0302M7	21667009303
C0304M7	21667009390
C0305M7	2113945Y02
C0306M7	2113945B02
C0307M7	21667009390
C0308M7	2113945B02
C0309M7	21667009297
C0310M7	21667009282
C0311M7	21667009364
C0400M4	21667009005
C0402M4	21667009166
C0403M4	21667009274
C0404M4	21667009332
C0405M4	21667009005
C0406M4	21667009274
C0407M4	21667009332
C0408M4	2113945C31
C0409M4	2113945C31
C0410M4	21667009166
C0411M4	21667009166
C0412M4	2113946F05
C0413M4	21667009166
C0414M4	21667009166
C0415M4	21667009368
C0416M4	2113945C31
C0417M4	21667009166
C0418M4	21667009164
C0419M4	21667009274
C0420M4	21667009166
C0421M4	21667009274
C0422M4	21667009320
C0423M4	21667009368
C0424M4	21667009274
C0425M4	21667009320
C0426M4	2113946F05
C0427M4	21667009372
C0428M4	21667009005
C0429M4	21667009274
C0430M4	21667009161
C0431M4	21667009370
C0433M4	21667009166
C0434M4	21667009384
C0435M4	21667009378
C0436M4	21667009166
C0437M4	2113945C31
C0438M4	21667009166
C0439M4	21667009339

Circuit Ref.	Motorola Part No.
C0440M4	21667009297
C0441M4	21667009339
C0442M4	21667009286
C0443M4	21667009346
C0444M4	21667009274
C0445M4	21667009392
C0446M4	21667009346
C0447M4	21667009282
C0448M4	21667009339
C0449M4	21667009315
C0450M4	21667009388
C0451M4	21667009166
C0452M4	21667009339
C0453M4	21667009339
C0454M4	21667009346
C0455M4	21667009346
C0456M4	21667009366
C0457M4	21667009291
C0458M4	2113946F05
C0459M4	21667009355
C0460M4	21667009384
C0461M4	NOT PLACED
C0462M4	21667009159
C0463M4	NOT PLACED
C0464M4	21667009158
C0465M4	21667009166
C0468M4	21667009166
C0469M4	21667009166
C0470M4	21667009380
C0471M4	NOT PLACED
C0472M4	NOT PLACED
C0473M4	NOT PLACED
C0499M4	NOT PLACED
C0500M3	21667009369
C0501M3	21667009332
C0502M3	2113944M21
C0503M3	2113945C31
C0504M3	2113945C31
C0505M3	21667011351
C0506M3	NOT PLACED
C0507M3	21667009374
C0508M3	21667009366
C0509M3	21667009382
C0510M3	21667009366
C0511M3	21667009355
C0512M3	21667009303
C0513M3	21667009368
C0515M3	21667009383
C0516M3	21667011464
C0517M3	21667009315
C0518M3	21667009339

Circuit Ref.	Motorola Part No.										
C0700M6	2113944C45	C0751M6	NOT PLACED	C0802M6	2113944C38	C0853M6	21012094092	C0913M6	21667009166	C1026M1	2113945Y02
C0701M6	2113944A41	C0752M6	2113944C85	C0803M6	2113944C38	C0854M6	21012094090	C0916M6	NOT PLACED	C1027M1	NOT PLACED
C0702M6	2113944C38	C0753M6	2113944C51	C0804M6	2113944C38	C0855M6	21012094090	C0917M6	21667009166	C1028M1	2113945Y02
C0703M6	21667009163	C0754M6	2113944C45	C0805M6	2113944C32	C0856M6	21012094048	C0918M6	21667009166	C1029M1	2113956B54
C0704M6	2113944A41	C0755M6	2113944C85	C0806M6	21012094089	C0857M6	21012094089	C0919M6	21667009166	C1032M1	2113956B54
C0705M6	2113944A41	C0756M6	NOT PLACED	C0807M6	21012094092	C0858M6	NOT PLACED	C0920M6	2113944C02	C1035M1	2113945B02
C0706M6	NOT PLACED	C0757M6	NOT PLACED	C0808M6	21012094097	C0859M6	21012094086	C0921M6	2113944C02	C1036M1	2113946D05
C0707M6	2113944C82	C0758M6	21667003042	C0809M6	21012094092	C0860M6	21012094086	C0922M6	2113945C31	C1040M1	2113945Y02
C0708M6	2113944C30	C0759M6	21667003042	C0810M6	21012094048	C0861M6	21012094092	C0923M6	2113944C02	C1041M1	2113945B02
C0709M6	2113945C04	C0760M6	2113944C45	C0811M6	21012094048	C0862M6	21012094092	C0924M6	21667009166	C1042M1	2113945Y02
C0710M6	2113944A41	C0761M6	2113944C45	C0812M6	2113944C38	C0863M6	21012094092	C0925M6	2113945C31	C1043M1	2113956B54
C0711M6	2113944C47	C0762M6	21012094096	C0813M6	2113944C38	C0864M6	21012094092	C0926M6	2113944C02	C1044M1	2113945B02
C0712M6	2113945C04	C0763M6	21012094096	C0814M6	2113944C38	C0865M6	NOT PLACED	C0927M6	2113944C01	C1045M1	2113945B02
C0713M6	2113944A41	C0764M6	2113944C51	C0815M6	2113944C38	C0866M6	21012094090	C0928M6	2113944C51	C1047M1	2113945Y02
C0714M6	21012094097	C0765M6	21667003033	C0816M6	21012094097	C0867M6	21012094090	C0929M6	2113944C49	C1048M1	2113945B02
C0715M6	2113944A41	C0766M6	21667003033	C0817M6	21667003033	C0868M6	21012094082	C0930M6	NOT PLACED	C2000M1	2113945Y02
C0716M6	2113944C55	C0767M6	NOT PLACED	C0818M6	NOT PLACED	C0869M6	21012094090	C0931M6	2113944C02	C2001M1	2113945Y02
C0717M6	2113944C39	C0768M6	NOT PLACED	C0819M6	21667003033	C0870M6	21012094048	C0950M6	2113944C47	C2002M1	2113945B02
C0718M6	NOT PLACED	C0769M6	NOT PLACED	C0820M6	21012094092	C0871M6	2113944C85	C0951M6	21667011356	C2003M1	21667009162
C0719M6	2113944A41	C0770M6	21667003029	C0821M6	NOT PLACED	C0872M6	2113944C85	C0952M6	2113944C47	C2004M1	2113956B54
C0720M6	2113944A37	C0771M6	NOT PLACED	C0822M6	NOT PLACED	C0873M6	21667003028	C0953M6	2113944C47	C2005M1	2113946D05
C0721M6	2113944C82	C0772M6	2113944C35	C0823M6	NOT PLACED	C0874M6	NOT PLACED	C0954M6	21667011351	C2006M1	2113945Y02
C0722M6	NOT PLACED	C0773M6	NOT PLACED	C0824M6	21012094089	C0875M6	2113944C46	C0955M6	2113944C47	C2007M1	2113945Y02
C0723M6	2113945C04	C0774M6	NOT PLACED	C0825M6	21012094097	C0876M6	NOT PLACED	C0956M6	2113944C01	C2008M1	2113945B02
C0724M6	2113944C34	C0775M6	NOT PLACED	C0826M6	21667011491	C0877M6	2113944C42	C0957M6	2113944C49	C2009M1	21667009162
C0725M6	NOT PLACED	C0776M6	21667003038	C0827M6	21667011491	C0878M6	NOT PLACED	C1000M1	2113945Y02	C2010M1	2113945Y02
C0726M6	2113944C51	C0777M6	21012094097	C0828M6	2113944C35	C0879M6	2113944C42	C1001M1	2113945Y02	C2011M1	2113945Y02
C0727M6	NOT PLACED	C0778M6	21012094097	C0829M6	2113944C82	C0880M6	21667003028	C1002M1	2113946K03	C2012M1	2113945Y02
C0728M6	NOT PLACED	C0779M6	NOT PLACED	C0830M6	2113944C84	C0881M6	21012094048	C1003M1	2113945Y02	C2013M1	2113945Y02
C0729M6	NOT PLACED	C0780M6	21012094093	C0831M6	2113944C34	C0882M6	21667011146	C1004M1	2113945Y02	C2014M1	2113945B02
C0730M6	NOT PLACED	C0781M6	NOT PLACED	C0832M6	2113944C32	C0883M6	21667011491	C1005M1	2113945Y02	C2015M1	21667009162
C0731M6	2113944A41	C0782M6	NOT PLACED	C0833M6	2113944C82	C0884M6	2113944C90	C1006M1	2113945Y02	C2016M1	2113956B54
C0732M6	2113945A09	C0783M6	21667003038	C0834M6	2113944C33	C0885M6	2113944C51	C1007M1	2113945Y02	C2020M1	2113956B54
C0733M6	NOT PLACED	C0784M6	NOT PLACED	C0835M6	21012094048	C0886M6	2113944C47	C1008M1	2113946D05	C2021M1	2113956D59
C0734M6	2113945A09	C0785M6	21012094093	C0836M6	2113944C90	C0887M6	21012094082	C1009M1	2113945Y02	C2022M1	2113956D59
C0735M6	21012094093	C0786M6	NOT PLACED	C0837M6	NOT PLACED	C0888M6	21012094102	C1010M1	2113945Y02	C3000M6	2113944C38
C0736M6	NOT PLACED	C0787M6	21012094048	C0838M6	21012094085	C0889M6	NOT PLACED	C1011M1	2113945B02	C3001M6	2113944C06
C0737M6	2113944C51	C0788M6	21012094048	C0839M6	21667011146	C0890M6	NOT PLACED	C1012M1	2113945Y02	C3002M6	2113944C06
C0738M6	2113944A41	C0789M6	2113944C36	C0840M6	21012094085	C0891M6	21667003028	C1013M1	2113945Y02	C3003M6	2113945C31
C0739M6	2113945C31	C0790M6	2113944C82	C0841M6	2113944C37	C0892M6	NOT PLACED	C1014M1	2113945Y02	C3004M6	2113945C02
C0740M6	2113944C51	C0791M6	21667011042	C0842M6	NOT PLACED	C0900M6	NOT PLACED	C1015M1	2113945B02	C3005M6	2113945C02
C0741M6	2113944C82	C0792M6	21012094089	C0843M6	2113944C37	C0901M6	NOT PLACED	C1016M1	21667009166	C3008M6	2113944C51
C0742M6	2113945L49	C0793M6	2113944C32	C0844M6	NOT PLACED	C0902M6	2113944C51	C1017M1	21667009162	C3009M6	2113945C31
C0743M6	2113944C35	C0794M6	2113944C82	C0845M6	21667009291	C0905M6	2113945C31	C1018M1	21667009162	C3010M6	2113944C46
C0744M6	2113944C34	C0795M6	21667011042	C0846M6	21667009320	C0906M6	2113945A10	C1019M1	21667009162	C3011M6	NOT PLACED
C0745M6	2113946J04	C0796M6	2113944C39	C0847M6	21667009320	C0907M6	2113945L41	C1020M1	21667009162	C3012M6	2113946J04
C0746M6	NOT PLACED	C0797M6	2113944C39	C0848M6	2113944C45	C0908M6	21667009166	C1021M1	2113945Y02	C3013M6	2113945C31
C0747M6	2113944C45	C0798M6	2113944C38	C0849M6	2113944C08	C0909M6	2113944C02	C1022M1	2113945Y02	C3014M6	21009337414
C0748M6	NOT PLACED	C0799M6	2113944C38	C0850M6	21012094085	C0910M6	21667009166	C1023M1	2113945Y02	C3015M6	2113946G01
C0749M6	2113944C83	C0800M6	2113944C32	C0851M6	21012094089	C0911M6	2113944C02	C1024M1	2113945Y02	C3016M6	2113945C31
C0750M6	NOT PLACED	C0801M6	2113944C38	C0852M6	21012094086	C0912M6	21667009166	C1025M1	2113945Y02	C3019M6	2113946S35

Circuit Ref.	Motorola Part No.										
C3020M6	2113945C26	C3144M1	2113945Y02	C3234M1	2113945Y02	C4115M1	21667009166	C4408M1	NOT PLACED	E1000M1	7686949J15
C3021M6	2113944C06	C3145M1	2113944C06	C3235M1	21012102001	C4116M1	21667009166	C4409M1	NOT PLACED	E1001M1	7686949J15
C3022M6	2113945A10	C3146M1	21012102001	C3236M1	2113945C31	C4117M1	21667009166	C4410M1	NOT PLACED	E1002M1	7686949J15
C3029M6	NOT PLACED	C3149M1	2113956A51	C3237M1	21009337414	C4118M1	21667009166	C4411M1	NOT PLACED	E1003M1	7686949J15
C3038M6	21667009379	C3150M1	2113956C37	C3238M1	2113945A09	C4119M1	21667009166	C4412M1	21667009166	E1004M1	7686949J15
C3041M6	21667009379	C3151M1	2113945B02	C3239M1	2113945A09	C4200M1	2113945Y02	C4413M1	21667009166	E1005M1	7686949J15
C3042M6	21667009379	C3152M1	2113944C06	C3240M1	2113956B91	C4201M1	2113945Y02	C4414M1	21667009166	E1006M1	7685268E01
C3044M6	21667009379	C3153M1	2113946J04	C3241M1	2113956B91	C4202M1	21667009166	C4415M1	21667009166	E3000M6	24012102001
C3046M6	NOT PLACED	C3154M1	2113955D13	C3242M1	2113945C31	C4203M1	21667009166	C4417M1	21667009166	E3100M1	24012102001
C3047M6	NOT PLACED	C3155M1	2113945Y02	C3243M1	2113955D37	C4204M1	NOT PLACED	C4418M1	21667009166	E3101M1	2485410Y02
C3048M6	NOT PLACED	C3156M1	2113945Y02	C3244M1	2113956B91	C4205M1	21667009166	C4419M1	21667009166	E3102M1	2485410Y02
C3049M6	NOT PLACED	C3157M1	2113945Y02	C3245M1	2113955D37	C4206M1	21667009166	D0000M2	4815011H01	E3103M1	2485410Y02
C3102M1	21009337414	C3160M1	2113945Y02	C3246M1	2113945C31	C4207M1	21667009166	D0001M2	4815011H01	E3104M1	7686949J22
C3103M1	21667009166	C3161M1	NOT PLACED	C3247M1	2113945Y02	C4208M1	21667009166	D0400M4	4884800Y03	E3105M1	7686949J22
C3104M1	2113946F08	C3171M1	2113946D07	C3248M1	2113945Y02	C4209M1	21667009166	D0401M4	4813974A19	E3106M1	7686949J22
C3105M1	2113946J04	C3173M1	2113946D07	C3249M1	2113956B91	C4210M1	21667009166	D0402M4	4813974A19	E3107M1	7686949J22
C3106M1	2113945C31	C3175M1	2113946A01	C3250M1	2113956B91	C4211M1	21667009166	D0403M4	4884800Y03	E3108M1	7686949J22
C3107M1	2113944C38	C3176M1	2113944C48	C4000M1	2113945Y02	C4212M1	21667009166	D0404M4	4815090H01	E3109M1	7686949J22
C3109M1	21667009166	C3177M1	2113946F08	C4001M1	2113945Y02	C4213M1	21667009166	D0500M3	4813974A19	E3110M1	7686949J22
C3110M1	2113944C06	C3200M1	21667009166	C4002M1	2113945Y02	C4214M1	21667009166	D0700M6	4813974A06	E3111M1	7686949J22
C3111M1	2113946J04	C3201M1	21667009166	C4003M1	2113945Y02	C4218M1	21667009166	D0875M6	48012160001	E3113M1	7686949J22
C3112M1	2113945Y02	C3203M1	2113955D37	C4010M1	21667009166	C4219M1	21667009339	D0876M6	4886622Y06	E3200M1	24012102001
C3113M1	2113946S35	C3204M1	2113955D37	C4011M1	21667009166	C4220M1	21667009339	D0877M6	48012160001	E3201M1	24012102001
C3115M1	2113944C06	C3205M1	21667009166	C4012M1	21667009166	C4221M1	21667009339	D0900M6	48012181001	E3202M1	24012107027
C3116M1	2113955D13	C3206M1	21667009166	C4013M1	21667009166	C4222M1	21667009339	D0950M6	4813974A21	E3203M1	24012102001
C3117M1	2113955D13	C3208M1	2113956C37	C4014M1	21667009166	C4223M1	21667009339	D0951M6	4813974A21	E3204M1	24012102001
C3118M1	2113945Y02	C3209M1	2113945Y02	C4015M1	21667009166	C4224M1	21667009166	D3000M6	4813978P07	E4000M1	24012107027
C3119M1	2113945Y02	C3210M1	2113945Y02	C4019M1	21667009166	C4225M1	21667009166	D3104M1	4885489Y01	E4001M1	7688697V05
C3120M1	2113956E60	C3211M1	2113945A11	C4020M1	21667009166	C4226M1	21667009339	D3160M1	4813978C02	E4002M1	24012107027
C3121M1	2113956D58	C3212M1	2113955D37	C4021M1	21667009166	C4300M1	NOT PLACED	D3161M1	4813978C02	E4003M1	NOT PLACED
C3122M1	2113956A51	C3213M1	2113945A03	C4022M1	21667009166	C4301M1	NOT PLACED	E0000M2	24012095001	E4004M1	24012102001
C3123M1	2113956A51	C3214M1	2113955D37	C4023M1	21667009166	C4302M1	NOT PLACED	E0001M2	24012095001	E4005M1	2485410Y02
C3124M1	2113946D07	C3215M1	2113956F49	C4025M1	21667009166	C4303M1	NOT PLACED	E0002M2	NOT PLACED	E4100M1	7686949J14
C3125M1	2113946D05	C3216M1	2113945Y02	C4026M1	21667009166	C4304M1	21667009166	E0003M2	24012095001	E4101M1	24012107027
C3126M1	2113944C06	C3217M1	2113956B91	C4027M1	21667009166	C4305M1	21667009376	E0004M2	24012095001	E4102M1	NOT PLACED
C3127M1	2113946S35	C3218M1	2113956A51	C4028M1	21667009166	C4306M1	21667009381	E0005M2	24012095001	E4103M1	NOT PLACED
C3128M1	2113946D05	C3219M1	2113956A51	C4029M1	21667009166	C4307M1	NOT PLACED	E0006M2	24012095001	E4104M1	NOT PLACED
C3129M1	2113945Y02	C3220M1	2113946F05	C4030M1	21667009166	C4308M1	NOT PLACED	E0007M2	24012095001	E4200M1	24012107027
C3130M1	2113946D05	C3221M1	2113945Y02	C4100M1	21667009166	C4309M1	21667009166	E0008M2	24012095001	E4201M1	24012107027
C3131M1	2113946A02	C3222M1	2113956A51	C4101M1	21667009166	C4310M1	21667009166	E0009M2	24012095001	E4202M1	24012107027
C3132M1	2113946D05	C3223M1	2113945Y02	C4103M1	21667009166	C4311M1	2113945Y02	E0010M2	24012095001	E4300M1	24012107027
C3133M1	2113946D05	C3224M1	2113946F05	C4104M1	21667009166	C4312M1	2113945Y02	E0200M7	24012095001	E4405M1	24012107027
C3134M1	2113946S35	C3225M1	2113945Y02	C4105M1	21667009166	C4313M1	21667009166	E0300M7	24012095001	E4406M1	7686949J22
C3135M1	2113956A51	C3226M1	NOT PLACED	C4106M1	21667009166	C4314M1	NOT PLACED	E0401M4	24012107027	E4407M1	7686949J22
C3136M1	21012095001	C3227M1	2113946F05	C4107M1	21667009166	C4401M1	NOT PLACED	E0402M4	24012107027	E4408M1	24012107027
C3137M1	2113946D05	C3228M1	2113945Y02	C4108M1	21667009166	C4402M1	NOT PLACED	E0403M4	24012107027	E4409M1	24012102001
C3139M1	2113956A51	C3229M1	2113956A51	C4109M1	21667009166	C4403M1	NOT PLACED	E0404M4	24012107027	F4000M1	65012019001
C3140M1	21012095001	C3230M1	2113945Y02	C4110M1	21667009166	C4404M1	NOT PLACED	E0500M3	24012095001	FL0500M3	9116854H02
C3141M1	2113945Y02	C3231M1	2113945Y02	C4112M1	21667009166	C4405M1	NOT PLACED	E0700M6	24012102001	FL4000M1	24012038001
C3142M1	21012102001	C3232M1	2113945Y02	C4113M1	21667009166	C4406M1	NOT PLACED	E0701M6	24012102001	FL4001M1	24012038001
C3143M1	21667009366	C3233M1	2113945A09	C4114M1	21667009166	C4407M1	NOT PLACED	E0703M6	24012102001	J0700M6	09009348002

Circuit Ref.	Motorola Part No.										
J4000M1	0915767H01	L0415M4	24009344106	P1000M1	2887818K02	Q3105M1	4809939C47	R0027M2	0613952R12	R0226M7	0613952Q29
J4001M1	0915556H01	L0416M4	24667001014	P3000M6	09009344001	Q3160M1	48009494001	R0028M2	0613952R66	R0227M7	0613952G67
J4100M1	0916017H01	L0417M4	24009344109	PASTE1	BU000032A01	Q3161M1	4815272H01	R0029M2	0613952Q25	R0228M7	0613952Q67
J4200M1	09012053001	L0418M4	NOT PLACED	PASTE2	BU000032A01	Q3162M1	4813973M07	R0030M2	0613952R66	R0230M7	0613952Q67
J4400M1	09012053001	L0419M4	NOT PLACED	PASTE3	BU000032A01	Q3163M1	48009494001	R0031M2	0613952R66	R0232M7	0613952Q49
L0000M2	24012154001	L0421M4	24009344105	PASTE4	BU000032A01	Q3200M1	4815270H01	R0033M2	0613952R01	R0233M7	0613952R66
L0001M2	24667001020	L0422M4	NOT PLACED	PASTE5	BU000032A01	Q3201M1	4815272H01	R0034M2	0613952Q57	R0234M7	NOT PLACED
L0002M2	2414017K32	L0424M4	24009344105	PASTE6	BU000032A01	Q3202M1	4815270H01	R0040M2	0613952Q70	R0235M7	0613952Q18
L0003M2	24667001031	L0428M4	24009344105	PCB	84012728001	Q3203M1	4815270H01	R0041M2	0613952Q58	R0250M7	21667009380
L0004M2	24009343017	L0434M4	24667001021	Q0000M2	4813973A13	Q3204M1	4815270H01	R0042M2	0613952Q42	R0300M7	0613952Q66
L0005M2	24667001017	L0435M7	NOT PLACED	Q0001M2	48009494001	Q3205M1	4815270H01	R0043M2	0613952Q73	R0301M7	0613952Q25
L0200M7	24667001031	L0500M3	24009344127	Q0002M2	4813970A59	Q3206M1	4815270H01	R0044M2	0613952R25	R0302M7	0613952Q66
L0201M7	24667001031	L0501M3	24009344128	Q0003M2	4885061Y01	Q3207M1	4815270H01	R0045M2	0613952R66	R0303M7	0613952R05
L0202M7	2415385H01	L0502M3	24009344126	Q0004M2	4815272H01	Q3208M1	4815263H01	R0046M2	0613952Q57	R0304M7	0613952Q89
L0203M7	24009343013	L0503M3	24667001021	Q0006M2	4813973A04	Q4000M1	4809939C47	R0051M2	0613952R01	R0305M7	0613952Q33
L0204M7	24667001031	L0504M3	24667001026	Q0200M7	4885061Y01	Q4001M1	4809939C47	R0052M2	0613952R01	R0306M7	0613952Q32
L0205M7	24667001031	L0505M3	24667001026	Q0201M7	4885061Y01	Q4002M1	4809939C47	R0054M2	0613952M25	R0307M7	0613952Q49
L0206M7	24667001031	L0507M3	24667001024	Q0202M7	4815272H01	Q4100M1	4816023H01	R0056M2	0613952R66	R0308M7	0613952Q32
L0207M7	24667001031	L0700M6	NOT PLACED	Q0203M7	4815272H01	Q4101M1	4815261H01	R0058M2	0613952Q74	R0309M7	0613952Q42
L0208M7	24667001031	L0701M6	24667001014	Q0204M7	4885061Y01	Q4102M1	4815263H01	R0059M2	0613952R66	R0400M4	0613952R01
L0209M7	24667001031	L0702M6	24667001028	Q0205M7	48009494001	Q4103M1	48012271001	R0060M2	0613952Q86	R0401M4	0613952H73
L0210M7	24009343008	L0703M6	24667001028	Q0206M7	4815272H01	Q4105M1	48012271001	R0061M2	0613952Q85	R0402M4	0613952R25
L0211M7	2415385H01	L0704M6	24667001028	Q0207M7	48009494001	Q4106M1	48012271001	R0062M2	0613952Q61	R0403M4	0613952R01
L0212M7	24667001031	L0705M6	24667001007	Q0300M7	4802197J95	Q4109M1	48012271001	R0063M2	0613952Q64	R0404M4	0613952R25
L0214M7	24009343008	L0707M6	24667001028	Q0400M4	4815271H01	Q4112M1	48012271001	R0064M7	NOT PLACED	R0405M4	0613952R05
L0216M7	2415385H01	L0708M6	2479990G01	Q0401M4	4815267H01	Q4120M1	4809939C47	R0200M7	0613952R66	R0406M4	0613952Q91
L0218M7	24667001031	L0709M6	NOT PLACED	Q0402M4	4815118H01	R0000M2	0613952R66	R0201M7	0613952R27	R0407M4	0613952Q91
L0220M7	24667001031	L0710M6	2485873L01	Q0403M4	4815270H01	R0001M2	0613952R66	R0202M7	NOT PLACED	R0408M4	0613952Q75
L0222M7	24667001031	L0711M6	NOT PLACED	Q0404M4	4815271H01	R0002M2	0613952Q96	R0203M7	0613952R07	R0409M4	0613952Q69
L0224M7	24667001030	L0720M6	24667001013	Q0405M4	4815118H01	R0003M2	0613952Q57	R0204M7	0613952R05	R0410M4	0613952R01
L0226M7	24667001018	L0729M6	2414032B60	Q0700M6	4816547H01	R0004M2	0613952Q34	R0205M7	NOT PLACED	R0411M4	0613952R01
L0300M7	24667001017	L0730M6	24667001013	Q0701M6	4816013H01	R0005M2	0613952R66	R0206M7	NOT PLACED	R0412M4	0613952Q83
L0301M7	24667001031	L0850M6	2460592A01	Q0703M6	4802246J29	R0006M2	0613952Q25	R0207M7	0613952Q84	R0413M4	0613958H55
L0302M7	24667001031	L0851M6	2460592A01	Q0704M6	4816548H01	R0007M2	0613952Q54	R0208M7	0613952Q86	R0414M4	0613958H55
L0303M7	24667001021	L0852M6	2460592A01	Q0705M6	48012022001	R0008M2	0613952R01	R0209M7	0613952Q85	R0415M4	0613952Q57
L0304M7	24667001017	L0875M6	2460592A01	Q0875M6	4813970A62	R0009M2	0613952Q58	R0210M7	0613952Q85	R0416M4	0613952Q69
L0305M7	24667001013	L0876M6	24667001029	Q0876M6	4816134H01	R0010M2	0613952R66	R0211M7	21667009380	R0417M4	0613952Q69
L0401M4	24012021001	L0877M6	2414032B49	Q0900M6	4815272H01	R0011M2	0613952Q36	R0212M7	0613952Q32	R0418M4	0613952Q69
L0402M4	24009344102	L0878M6	24667001027	Q0901M6	4815271H01	R0012M2	0613952Q86	R0213M7	0613952Q67	R0419M4	0613952Q69
L0403M4	24667001030	L0880M6	2414032B49	Q1000M1	4815263H01	R0013M2	0613952Q35	R0214M7	0613952Q67	R0420M4	0613952R25
L0404M4	24009344109	L0882M6	24667001027	Q1001M1	4815272H01	R0014M2	0613952R66	R0215M7	0613952Q67	R0421M4	0613952R25
L0405M4	24009315036	L0885M6	24667001014	Q1002M1	4815261H01	R0015M2	0613952R66	R0216M7	0613952Q67	R0422M4	NOT PLACED
L0406M4	24012021001	L0900M6	24667000031	Q1004M1	4815261H01	R0018M2	0613952Q80	R0217M7	0613952Q49	R0423M4	0613952R25
L0407M4	24012021001	L0901M6	24009344018	Q1005M1	4815261H01	R0019M2	0613952R01	R0218M7	0613952Q49	R0424M4	0613952R66
L0408M4	24667001030	L0902M6	24667000031	Q3000M6	0105959T72	R0020M2	0613952R12	R0219M7	0613952R66	R0425M4	NOT PLACED
L0409M4	24667001030	L0950M6	NOT PLACED	Q3001M6	0105959T72	R0021M2	0613952Q80	R0220M7	0613952R66	R0426M4	0613952Q87
L0410M4	24667001025	L0951M6	24009344003	Q3002M6	4813973B01	R0022M2	0613952R66	R0221M7	0613952R66	R0427M4	0613952Q93
L0411M4	24012021001	L0952M6	24009344005	Q3100M1	4815272H01	R0023M2	0613952Q83	R0222M7	0613952Q84	R0429M4	0613952R66
L0412M4	24667001030	L3100M1	24012091002	Q3101M1	4809939C47	R0024M2	0613952Q80	R0223M7	0613952Q73	R0430M4	NOT PLACED
L0413M4	24667001030	M0700M6	2686201B02	Q3102M1	4809939C47	R0025M2	0613952R66	R0224M7	0613952Q85	R0431M4	0613952R01
L0414M4	24009344105	P0000M2	NOT PLACED	Q3103M1	48009494001	R0026M2	0613952R66	R0225M7	0613952Q73	R0432M4	0613952H73

Circuit Ref.	Motorola Part No.										
R0433M4	0613952R01	R0729M6	NOT PLACED	R0930M6	0613952N37	R1023M1	0613952R66	R1076M1	0613952R66	R3108M1	0613952R17
R0434M4	0613952L46	R0730M6	NOT PLACED	R0931M6	0613952M77	R1024M1	NOT PLACED	R1077M1	0613952R66	R3109M1	0613952R17
R0435M4	0613952L46	R0731M6	0613958S29	R0932M6	0613952N43	R1025M1	0613952Q73	R1078M1	0613952R66	R3110M1	0613952N55
R0436M4	0613952R66	R0732M6	NOT PLACED	R0933M6	0613952M37	R1026M1	0613952R66	R1079M1	0613952R66	R3111M1	0613952R32
R0437M4	0613952Q77	R0733M6	NOT PLACED	R0934M6	0613952J17	R1027M1	NOT PLACED	R1080M1	0613952Q32	R3112M1	0613952P12
R0438M4	0613958H22	R0734M6	0613958S29	R0935M6	0613952H91	R1028M1	0613952R66	R1081M1	0613952Q32	R3113M1	0613952R17
R0439M4	0613952Q83	R0736M6	0613959Q25	R0936M6	0613952H91	R1029M1	0613952R66	R1082M1	0613952Q32	R3114M1	0613952N01
R0440M4	0613958H25	R0737M6	0613952F01	R0937M6	NOT PLACED	R1030M1	NOT PLACED	R1084M1	0613952R66	R3115M1	0613952Z63
R0441M4	0613958H49	R0738M6	0613959Q53	R0938M6	NOT PLACED	R1031M1	0613952R66	R1088M1	NOT PLACED	R3116M1	0613952E83
R0442M4	0613952Q83	R0739M6	0613952H73	R0939M6	0613952R66	R1033M1	0613952Q73	R1089M1	0613952R05	R3117M1	0613952Q73
R0443M4	0613952Q25	R0740M6	NOT PLACED	R0940M6	0613952Z76	R1034M1	0613952R17	R1090M1	0613952R05	R3118M1	0613952R10
R0444M4	0613952K25	R0741M6	0613952E66	R0941M6	0613952N58	R1035M1	NOT PLACED	R1091M1	NOT PLACED	R3119M1	0613952Q73
R0445M4	0613952Q75	R0742M6	NOT PLACED	R0942M6	0613952N58	R1036M1	0613952M66	R1092M1	0613952M43	R3120M1	0613952R66
R0446M4	NOT PLACED	R0743M6	0613952E66	R0943M6	0613952N58	R1037M1	0613952M66	R1093M1	0613952Q73	R3121M1	0613952R66
R0447M4	0613952R66	R0744M6	0613959Q53	R0950M6	0613952G67	R1038M1	0613952R66	R1094M1	0613952M66	R3122M1	0613952M43
R0448M4	0613952Q12	R0745M6	NOT PLACED	R0951M6	0613958M21	R1039M1	0613952R66	R1095M1	0613952Q34	R3123M1	0613952M54
R0500M3	0613952Q87	R0746M6	0613952F01	R0952M6	0613958M21	R1040M1	0613952M66	R1096M1	0613952Q34	R3124M1	0613952R66
R0501M3	0613952R19	R0759M6	0613959H12	R0953M6	0613952G67	R1041M1	0613952R66	R1097M1	0613952R66	R3125M1	0613952R66
R0502M3	0613952Q66	R0849M6	0613952G67	R0954M6	0613952H58	R1042M1	0613952M66	R1098M1	0613952R66	R3126M1	0613952R66
R0503M3	0613952Q88	R0876M6	0613958S73	R0955M6	0613952H58	R1043M1	0613952R66	R2000M1	0613952M66	R3127M1	0613959Y09
R0504M3	0613952Q61	R0877M6	0613959Y37	R0956M6	0613952H67	R1044M1	0613952M66	R2002M1	0613952M66	R3128M1	0613952M10
R0505M3	0613952R66	R0878M6	0613959Y37	R0957M6	0613958C18	R1045M1	0613952M66	R2003M1	0613952M30	R3129M1	0613952M58
R0525M3	0613952R66	R0879M6	0613952J25	R0958M6	0613958C18	R1046M1	0613952M66	R3000M6	0613952H60	R3130M1	0613952R25
R0700M6	0613952H90	R0883M6	0613952G67	R0959M6	0613952R66	R1047M1	0613952R66	R3001M6	0615871H01	R3131M1	0613952R01
R0701M6	0613952G67	R0902M6	0613952R66	R0960M6	0613952N58	R1048M1	0613952R66	R3002M6	0615871H01	R3132M1	0613952R01
R0702M6	0613952H89	R0903M6	0613952N01	R0961M6	0613952N58	R1049M1	0613952Q73	R3003M6	0615871H01	R3133M1	0613952R29
R0703M6	0613952J01	R0904M6	0613952R66	R0962M6	0613952N58	R1050M1	0613952Q73	R3004M6	0615871H01	R3134M1	NOT PLACED
R0704M6	0613952J10	R0905M6	0613952H42	R0965M6	NOT PLACED	R1051M1	0613952K68	R3005M6	0613952H25	R3135M1	0613952R66
R0705M6	0613952Q46	R0906M6	0613958H46	R0966M6	NOT PLACED	R1052M1	NOT PLACED	R3006M6	0613952H25	R3136M1	0613952R17
R0706M6	0613952Q58	R0907M6	0613958H55	R0980M6	0613952N43	R1053M1	0613952R66	R3007M6	0613952M30	R3137M1	0613952R17
R0707M6	0613952Q46	R0908M6	0613952H42	R0981M6	0613952P01	R1054M1	0613952M66	R3008M6	0613952G67	R3138M1	0613952R17
R0708M6	0613952H44	R0909M6	NOT PLACED	R1000M1	0613952R66	R1056M1	0613952Q73	R3009M6	0613952M43	R3139M1	0613952R66
R0709M6	NOT PLACED	R0910M6	0613952H91	R1001M1	0613952M66	R1057M1	0613952Q73	R3010M6	0613952G67	R3140M1	0613952Q91
R0711M6	0613958S44	R0911M6	0613952H85	R1002M1	0613952R66	R1058M1	0613952M66	R3011M6	0613959Q60	R3141M1	0613959Y13
R0712M6	0613958S44	R0912M6	0613958H46	R1003M1	0613952R66	R1059M1	0613952R66	R3012M6	0613959Q60	R3142M1	NOT PLACED
R0713M6	NOT PLACED	R0913M6	0613952M51	R1004M1	0613952R66	R1060M1	0613952R66	R3013M6	0613952R01	R3143M1	0613952Q91
R0714M6	0613952H09	R0914M6	0613952M71	R1005M1	0613952M66	R1061M1	0613952R66	R3014M6	0613952R01	R3144M1	0613952R66
R0715M6	0613952H09	R0915M6	NOT PLACED	R1007M1	0613952R66	R1062M1	NOT PLACED	R3015M6	0615871H01	R3145M1	0613959Y09
R0716M6	0613952H09	R0916M6	0613952R66	R1008M1	0613952R66	R1063M1	NOT PLACED	R3018M6	0613952H73	R3146M1	0613952M85
R0717M6	0613952H09	R0917M6	0613952P01	R1009M1	0613952R66	R1064M1	NOT PLACED	R3019M6	0613952H60	R3147M1	0613952M43
R0718M6	0613952J05	R0919M6	0613952P01	R1010M1	NOT PLACED	R1065M1	0613952R66	R3020M6	0613952G67	R3148M1	0613952R66
R0719M6	0613952H89	R0920M6	0613952N01	R1011M1	NOT PLACED	R1066M1	0613952M66	R3021M6	0613952R25	R3149M1	0613952R01
R0720M6	0613952H95	R0921M6	0613952N01	R1012M1	0613952R66	R1067M1	0613952M66	R3022M6	0613952R66	R3150M1	0613952N62
R0721M6	0613952G67	R0922M6	0613952R66	R1013M1	0613952M66	R1068M1	0613952R32	R3023M6	NOT PLACED	R3151M1	0613952R25
R0722M6	0613952H32	R0923M6	0613952M30	R1014M1	NOT PLACED	R1069M1	NOT PLACED	R3101M1	0613952Z66	R3153M1	0613952R66
R0723M6	0613952G67	R0924M6	0613952N01	R1016M1	NOT PLACED	R1070M1	0613952Q77	R3102M1	0613952M66	R3154M1	0613952Q89
R0724M6	NOT PLACED	R0925M6	0613952Q59	R1018M1	NOT PLACED	R1071M1	0613952Q77	R3103M1	0613952N62	R3155M1	0613952Q89
R0725M6	0613958S29	R0926M6	0613952H79	R1019M1	0613952R66	R1072M1	0613952Q49	R3104M1	0613952M30	R3156M1	0613952R17
R0726M6	NOT PLACED	R0927M6	0613952N01	R1020M1	0613952M66	R1073M1	0613952R01	R3105M1	0613952R01	R3157M1	0613952R01
R0727M6	0613958S29	R0928M6	0613952P18	R1021M1	0613952Q73	R1074M1	0613952R66	R3106M1	0613952M09	R3158M1	0613952R66
R0728M6	NOT PLACED	R0929M6	0613952N85	R1022M1	NOT PLACED	R1075M1	0613952R66	R3107M1	0613952M85	R3159M1	0613952R01

Circuit Ref.	Motorola Part No.										
R3160M1	0613952Q89	R3226M1	0613952R01	R3279M1	NOT PLACED	R4110M1	0613952Q85	R4315M1	0613952R66	U3002M6	51012133001
R3161M1	0613952Q73	R3229M1	0613952R01	R3280M1	NOT PLACED	R4111M1	0613952Q85	R4316M1	0613952R66	U3100M1	0104039J08
R3162M1	0613952Q85	R3230M1	0613952R10	R3281M1	NOT PLACED	R4112M1	0613952R01	R4317M1	0613952R66	U3101M1	5114014A01
R3163M1	0613952R01	R3231M1	0613952R10	R3282M1	0613952R66	R4113M1	0613952R01	RT0900M6	0615585H01	U3102M1	51012069001
R3164M1	0613952Q75	R3232M1	0613952R10	R3283M1	0613952R66	R4114M1	0613952Q89	SH0000M2	26012095001	U3103M1	51012142001
R3165M1	0613952R01	R3233M1	0613952R01	R3285M1	0613952R01	R4115M1	0613952N58	SH0001M2	26012095001	U3104M1	5171590Y73
R3166M1	0613952R17	R3234M1	NOT PLACED	R3286M1	0613952R66	R4116M1	0613952Q89	SH0002M2	26012097001	U3105M1	5114610F01
R3167M1	0613952R01	R3235M1	0613952R01	R3287M1	0613952R66	R4117M1	0613952R01	SH0003M2	26012094001	U3106M1	51012140001
R3168M1	0613952Q73	R3236M1	0613952R10	R3288M1	0613952R01	R4118M1	0613952R01	SH0004M2	26012094001	U3107M1	51012140001
R3169M1	0613952R01	R3237M1	NOT PLACED	R3289M1	0613952R01	R4119M1	0613952R01	SH0200M7	26012095001	U3108M1	51012138001
R3170M1	0613952R01	R3238M1	0613952R01	R3290M1	NOT PLACED	R4120M1	0613952N58	SH0300M7	26012095001	U3109M1	5164015H94
R3171M1	NOT PLACED	R3239M1	0613952Q49	R3291M1	NOT PLACED	R4121M1	0613952Q85	SH0400M4	26012096001	U3110M1	51012208001
R3172M1	NOT PLACED	R3240M1	0613952R01	R3292M1	0613952R66	R4122M1	0613952Q85	SH0401M4	26012096001	U3111M1	5188690V02
R3173M1	0613952R66	R3241M1	0613952M54	R3293M1	0613952R66	R4123M1	0613952N58	SH0402M4	26012098001	U3112M1	5114004A35
R3174M1	0613952R66	R3242M1	0613952R01	R4001M1	0613952R66	R4124M1	0613952N58	SH0403M4	26012098001	U3113M1	5188690V02
R3175M1	0689774Y02	R3243M1	0613952R01	R4003M1	0613952R66	R4125M1	0613952Q85	SH0500M3	26012098001	U3114M1	NOT PLACED
R3176M1	0689774Y02	R3244M1	0613952R10	R4006M1	0613952Q37	R4126M1	0613952Q85	SH0501M3	NOT PLACED	U3115M1	5185937Y01
R3177M1	0613952R66	R3245M1	NOT PLACED	R4007M1	0613952Q37	R4127M1	0613952Q85	SH0850M6	26012100001	U3200M1	51009415001
R3178M1	0615871H01	R3246M1	0613952R01	R4008M1	0613952R01	R4128M1	0613952R01	SH0900M6	2686425Z02	U3201M1	5114016A18
R3179M1	0613952R17	R3247M1	0613952Q49	R4010M1	0613952R01	R4200M1	0613952R66	SH0901M6	2686425Z02	U3204M1	51009509001
R3180M1	0613952R01	R3248M1	0613952R66	R4013M1	0613952Q42	R4201M1	0613952R66	SH3100M1	NOT PLACED	U3205M1	5114016A18
R3181M1	NOT PLACED	R3249M1	0613952R66	R4015M1	0613952Q37	R4202M1	0613952R66	SP3000M6	NOT PLACED	U4000M1	51012082001
R3182M1	0613952R66	R3250M1	0613952R66	R4021M1	0613952R66	R4203M1	0613952R66	SP3001M6	NOT PLACED	U4001M1	51012082001
R3183M1	0613952H92	R3251M1	0613952R66	R4024M1	0613952R01	R4204M1	0613952R66	T0000M2	24012146001	U4100M1	5189139P01
R3184M1	0613952M30	R3252M1	0613952R66	R4025M1	0613952R01	R4205M1	0613952R66	T0400M4	2515121H01	U4200M1	NOT PLACED
R3200M1	0613952C44	R3253M1	0613952R66	R4026M1	0613952R66	R4206M1	0613952R66	T0401M4	2515121H01	U4201M1	NOT PLACED
R3201M1	0613952Q49	R3254M1	0613952R01	R4027M1	0613952R66	R4207M1	0613952R66	U0000M2	51009877001	U4300M1	51012082001
R3202M1	0613952C44	R3255M1	0613952R66	R4028M1	0613952R01	R4208M1	0613952R66	U0001M2	5109731C48	U4301M1	51012082001
R3203M1	0613952Q49	R3256M1	0613952M66	R4029M1	0613952R01	R4209M1	HZ000375A01	U0002M2	4802197J95	VR0001M2	4815096H01
R3204M1	0613952C44	R3257M1	0613952R01	R4030M1	0613952R01	R4210M1	HZ000375A01	U0200M7	5186310Y39	VR0200M7	4805656W87
R3205M1	0613952C44	R3258M1	0613952M66	R4031M1	0613952R01	R4211M1	HZ000375A01	U0500M3	4802197J95	VR0201M7	4805656W87
R3206M1	0613952R01	R3259M1	0613952M66	R4032M1	0613952R66	R4212M1	HZ000375A01	U0901M6	5180390L83	VR0202M7	4805656W87
R3207M1	0613952R01	R3260M1	0613952M66	R4033M1	0613952M43	R4213M1	HZ000375A01	U0902M6	51012221001	VR0203M7	4805656W87
R3208M1	0613952N30	R3261M1	0613952R01	R4034M1	0613952M43	R4214M1	HZ000375A01	U0903M6	5115022H01	VR0204M7	4805656W87
R3209M1	0613952R03	R3262M1	0613952R10	R4035M1	0613952R66	R4215M1	0613952R66	U0904M6	5109731C48	VR0205M7	4805656W87
R3210M1	0613952Q67	R3263M1	NOT PLACED	R4036M1	0613952R66	R4216M1	0613952R66	U0905M6	5109731C48	VR0206M7	4805656W87
R3211M1	0613952N30	R3264M1	0613952R01	R4037M1	0613952R01	R4217M1	0613952R66	U1000M1	5171320H01	VR0207M7	4805656W87
R3212M1	0613952R03	R3265M1	0613952M66	R4038M1	0613952R01	R4218M1	0613952R66	U1001M1	51012295001	VR0208M7	4805656W87
R3213M1	0613952Q42	R3266M1	0613952R01	R4039M1	NOT PLACED	R4301M1	NOT PLACED	U1002M1	5189139P01	VR0209M7	NOT PLACED
R3214M1	0613952J25	R3267M1	NOT PLACED	R4040M1	NOT PLACED	R4302M1	0613952R66	U1003M1	5175772B56	VR0210M7	4805656W87
R3215M1	0613952R01	R3268M1	0613952R01	R4041M1	NOT PLACED	R4303M1	0613952R66	U1004M1	5175772B56	VR0211M7	4805656W87
R3216M1	0613952R17	R3269M1	0613952M66	R4100M1	0613952R01	R4304M1	0613952R66	U1005M1	5164852H47	VR0214M7	4805656W87
R3217M1	0613952R01	R3270M1	0613952R01	R4101M1	0613952Q77	R4305M1	0613952R66	U1006M1	5185493Y01	VR0215M7	4805656W87
R3218M1	0613952R01	R3271M1	NOT PLACED	R4102M1	0613958H83	R4306M1	0613952R66	U1007M1	5189139P01	VR0400M4	4805656W87
R3219M1	NOT PLACED	R3272M1	0613952R01	R4103M1	0613952Q85	R4307M1	0613952R66	U1008M1	5189139P01	VR0401M4	4805656W87
R3220M1	0613952R01	R3273M1	0613952M66	R4104M1	0613952Q89	R4309M1	NOT PLACED	U1009M1	5115001H02	VR0402M4	4805656W87
R3221M1	NOT PLACED	R3274M1	0613952R10	R4105M1	0613952Q89	R4310M1	0613952R66	U1010M1	5171320H01	VR0403M4	4805656W87
R3222M1	0613952R01	R3275M1	0613952R10	R4106M1	0613952Q89	R4311M1	0613952R66	U2000M1	MM000157A01	VR0404M4	4805656W87
R3223M1	0613952R66	R3276M1	0613952R10	R4107M1	0613952R01	R4312M1	0613952R66	U2001M1	MM000129A01	VR0405M4	4805656W87
R3224M1	NOT PLACED	R3277M1	0613952R10	R4108M1	0613952Q89	R4313M1	NOT PLACED	U3000M6	5116525H01	VR0406M4	4805656W87
R3225M1	NOT PLACED	R3278M1	0613952R01	R4109M1	0613952N58	R4314M1	0613952R66	U3001M6	4813973M07	VR0407M4	4805656W87

<b>Circuit Ref.</b>	<b>Motorola Part No.</b>
VR3000M6	48012202001
VR3002M6	4813977M10
VR3103M1	48012095001
VR3104M1	48012095002
VR3105M1	4813977M10
VR3200M1	48012049001
VR3201M1	4813977A48
VR3202M1	4813977A48
VR4000M1	4813977M13
VR4001M1	4813977A48
VR4002M1	48012153001
VR4100M1	4813977A48
VR4101M1	4813977A48
VR4102M1	4813977A48
VR4103M1	4813977A48
VR4104M1	48012049001
VR4105M1	4813977M13
VR4106M1	4813977A48
VR4107M1	4813977A48
VR4108M1	4813977A48
VR4109M1	4813977A50
VR4110M1	4815040H01
VR4111M1	48012153001
Y0000M2	4875185M05

Note: The suffix "M1", "M2", etc. from the Circuit Ref is removed from the schematic and overlays.

**Notes**



**XPR™ 5380e/XPR™ 5580e**

## **Mobile Radios**

Chapter 12

800/900M (806–941MHz)

10–35W/30W

Service Information

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## Chapter 12 – 800/900 MHz Band Service Information

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#### Section 2 800/900 MHz PCB/Schematics/Parts Lists

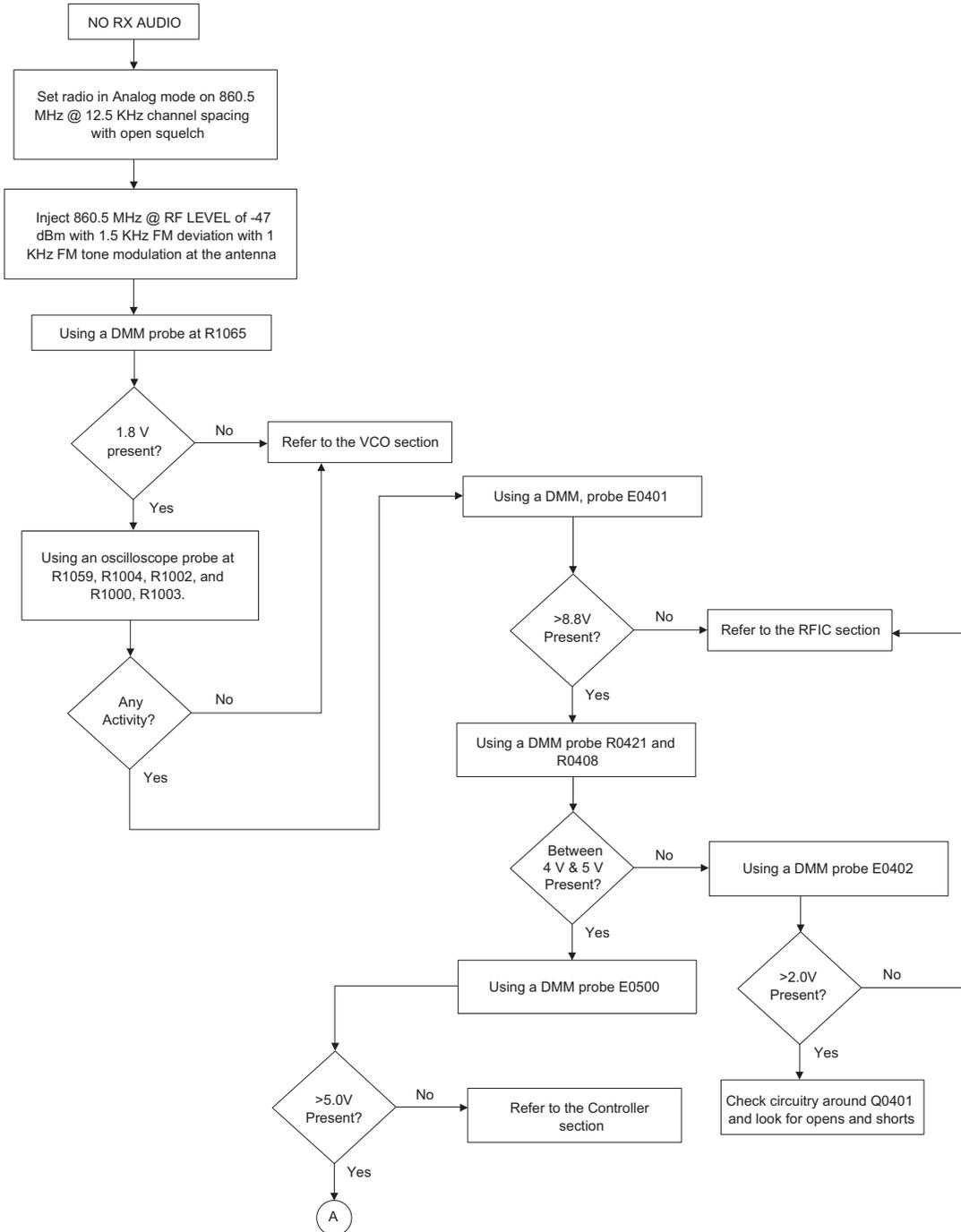
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## Notes

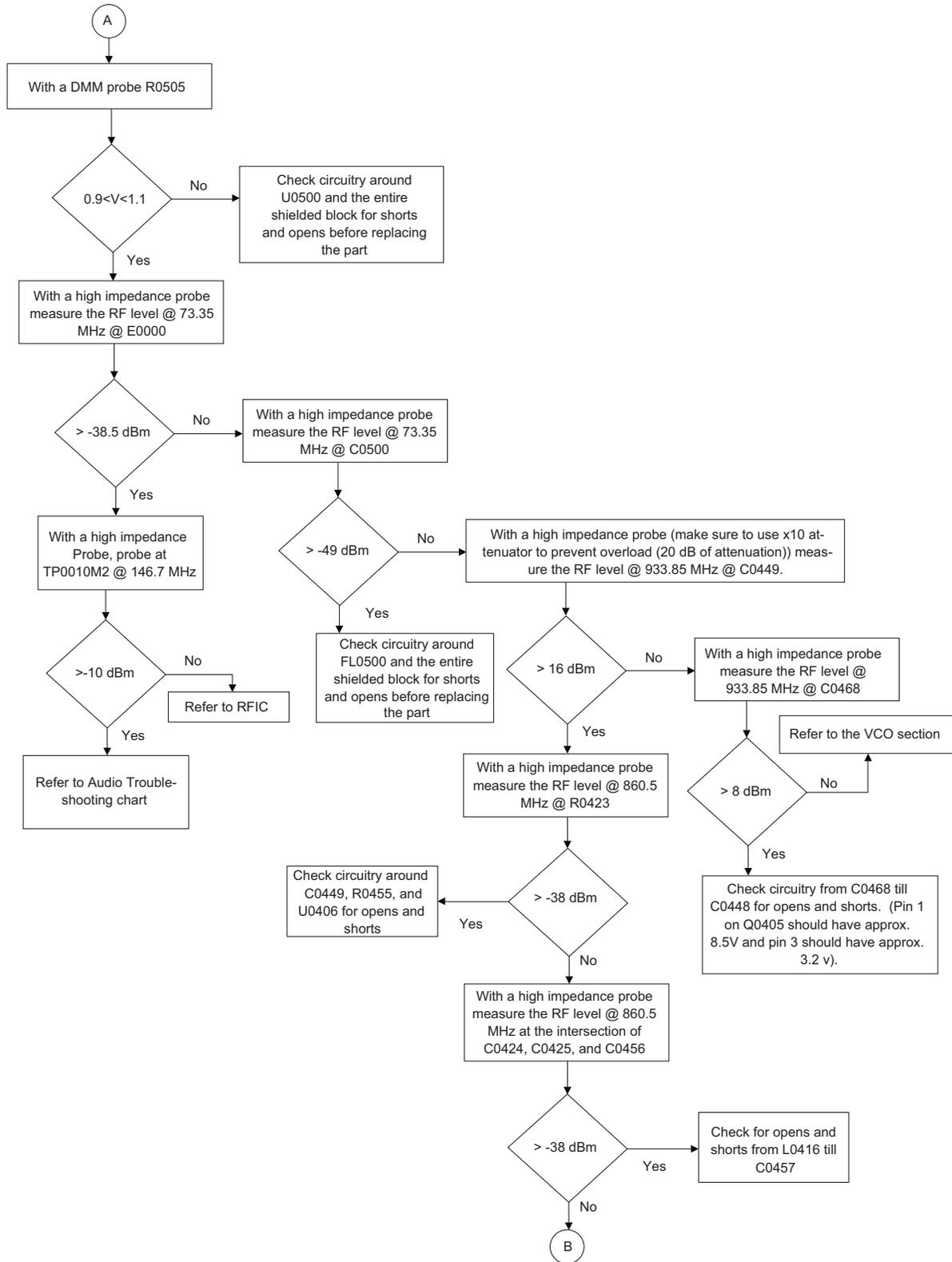
# Section 1

## TROUBLESHOOTING CHARTS

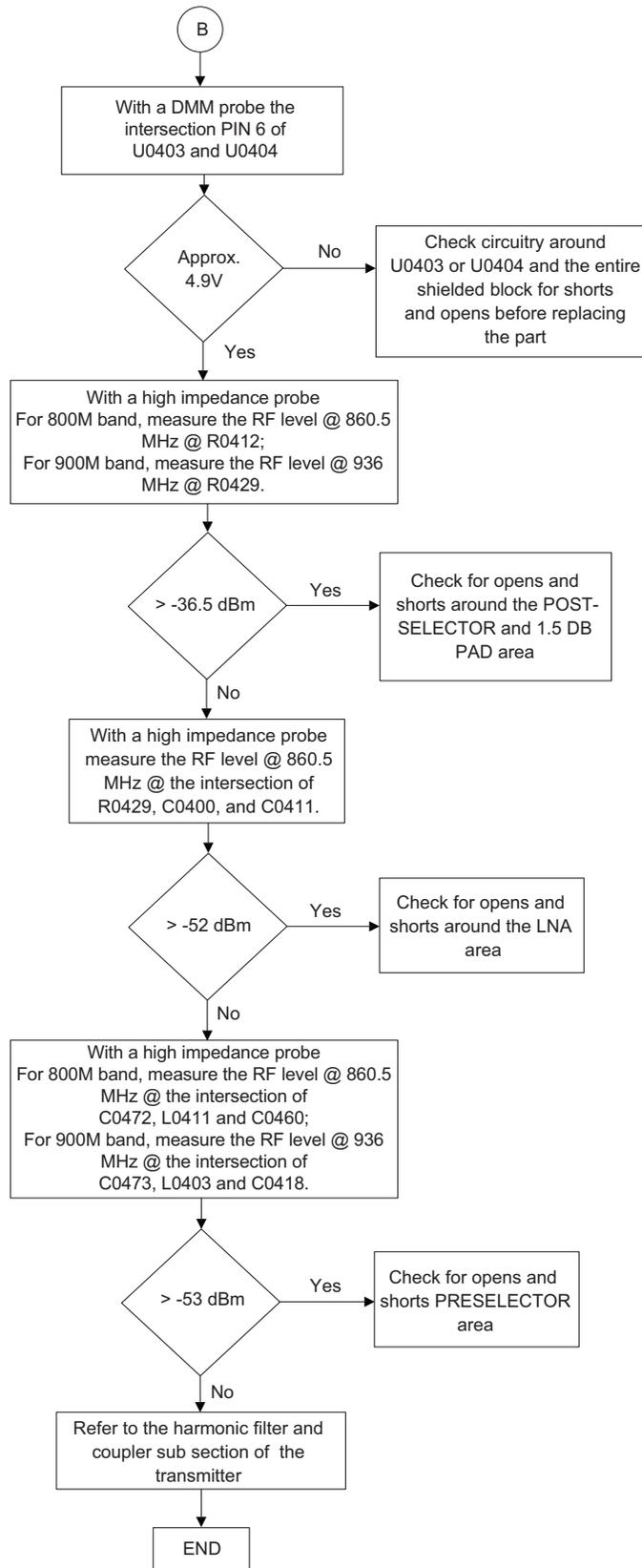
### 1.0 Troubleshooting Flow Chart for Receiver (Sheet 1 of 3)



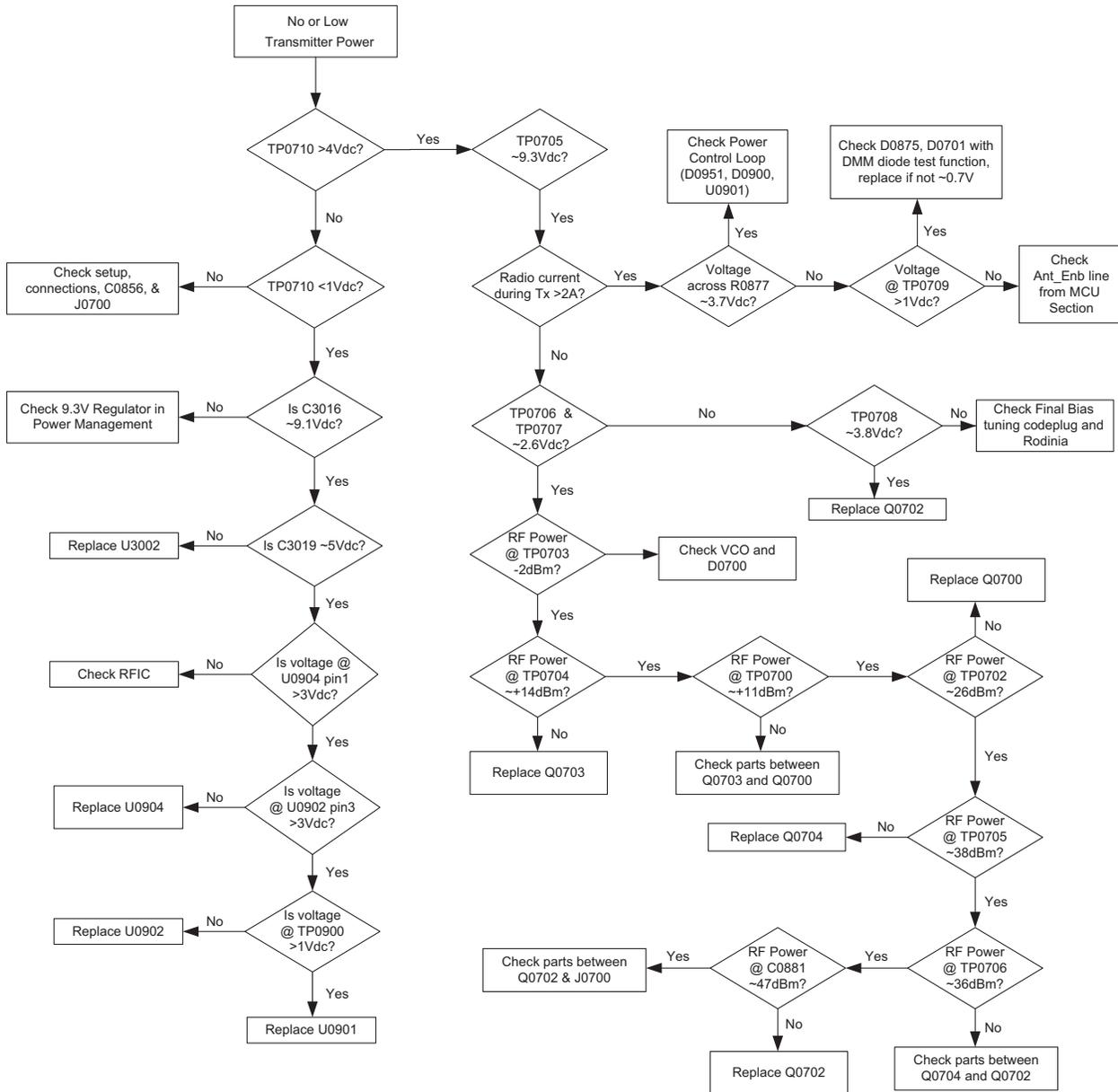
# 1.1 Troubleshooting Flow Chart for Receiver (Sheet 2 of 3)



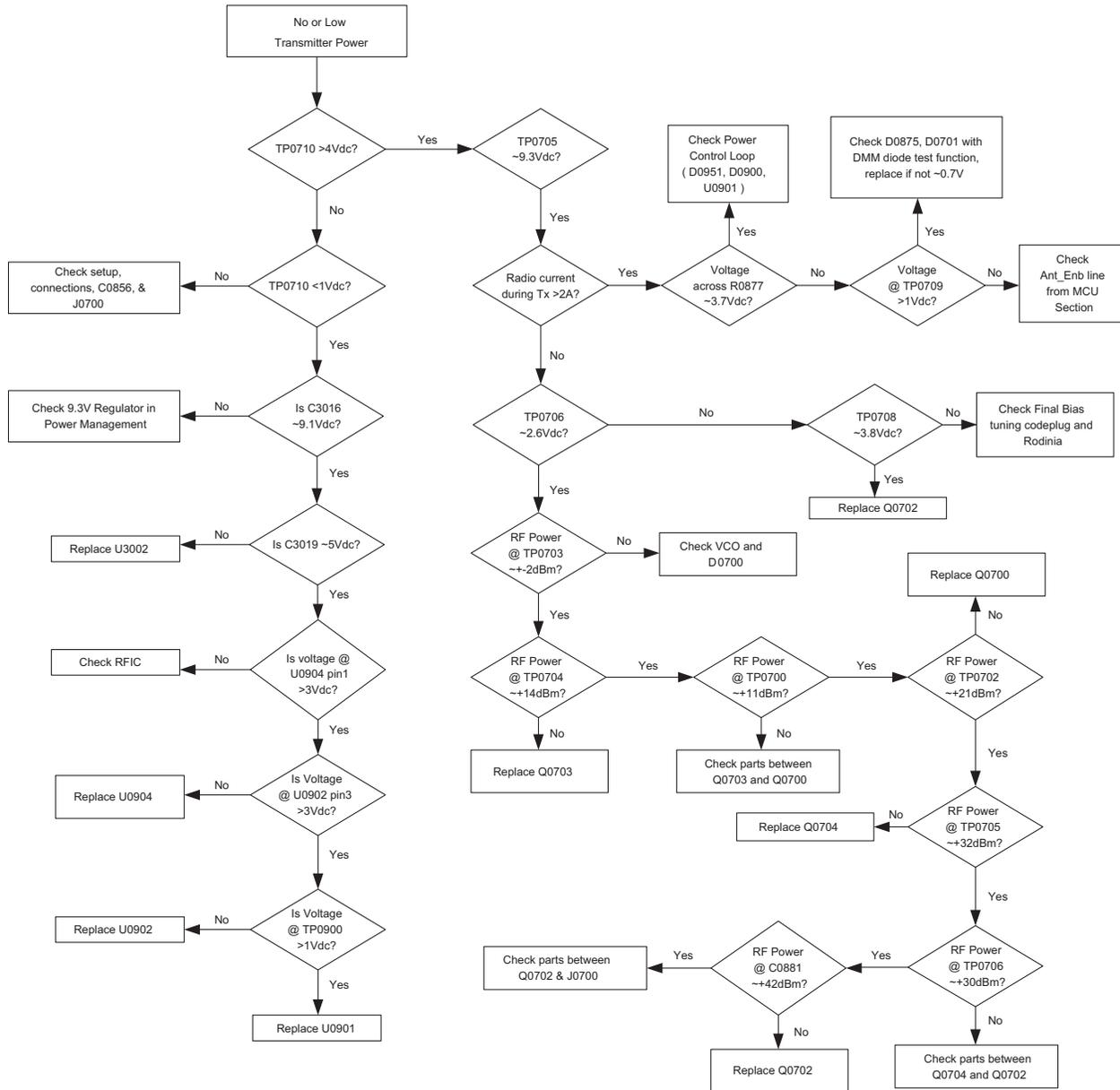
## 1.2 Troubleshooting Flow Chart for Receiver (Sheet 3 of 3)



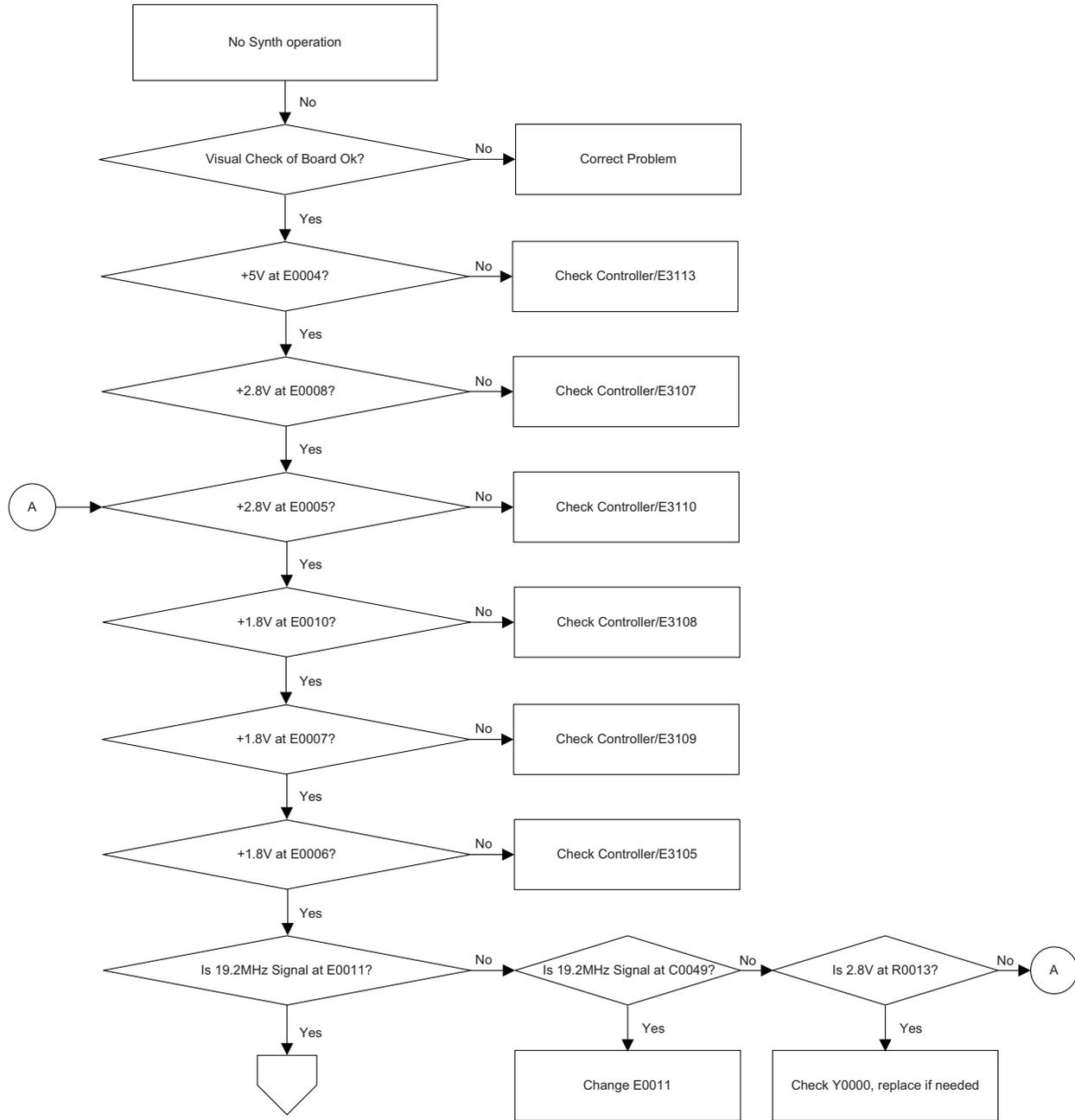
## 2.0 Troubleshooting Flow Chart for 38.5W Transmitter (800 MHz)



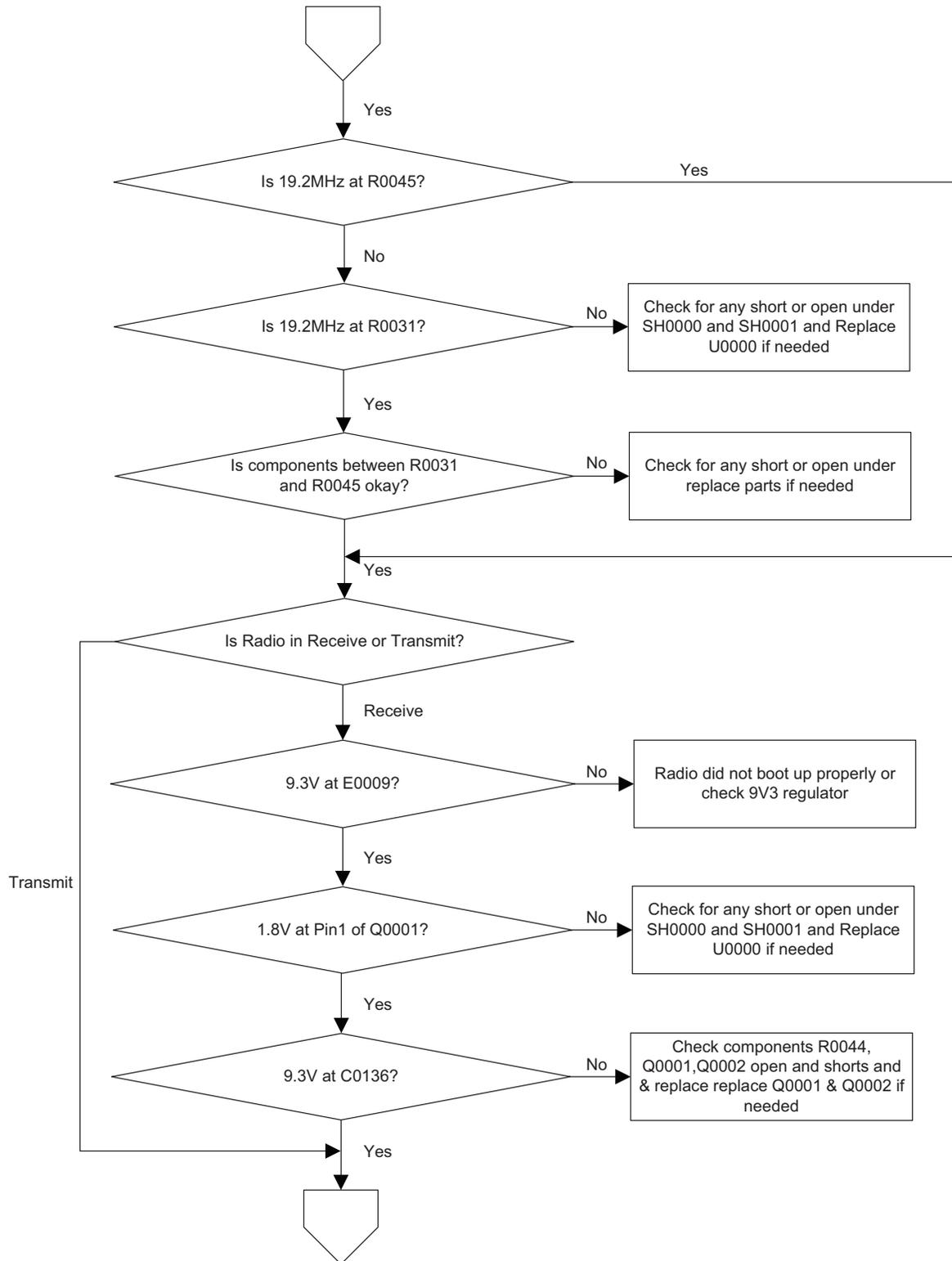
### 3.0 Troubleshooting Flow Chart for 10W Transmitter (800/900 MHz)



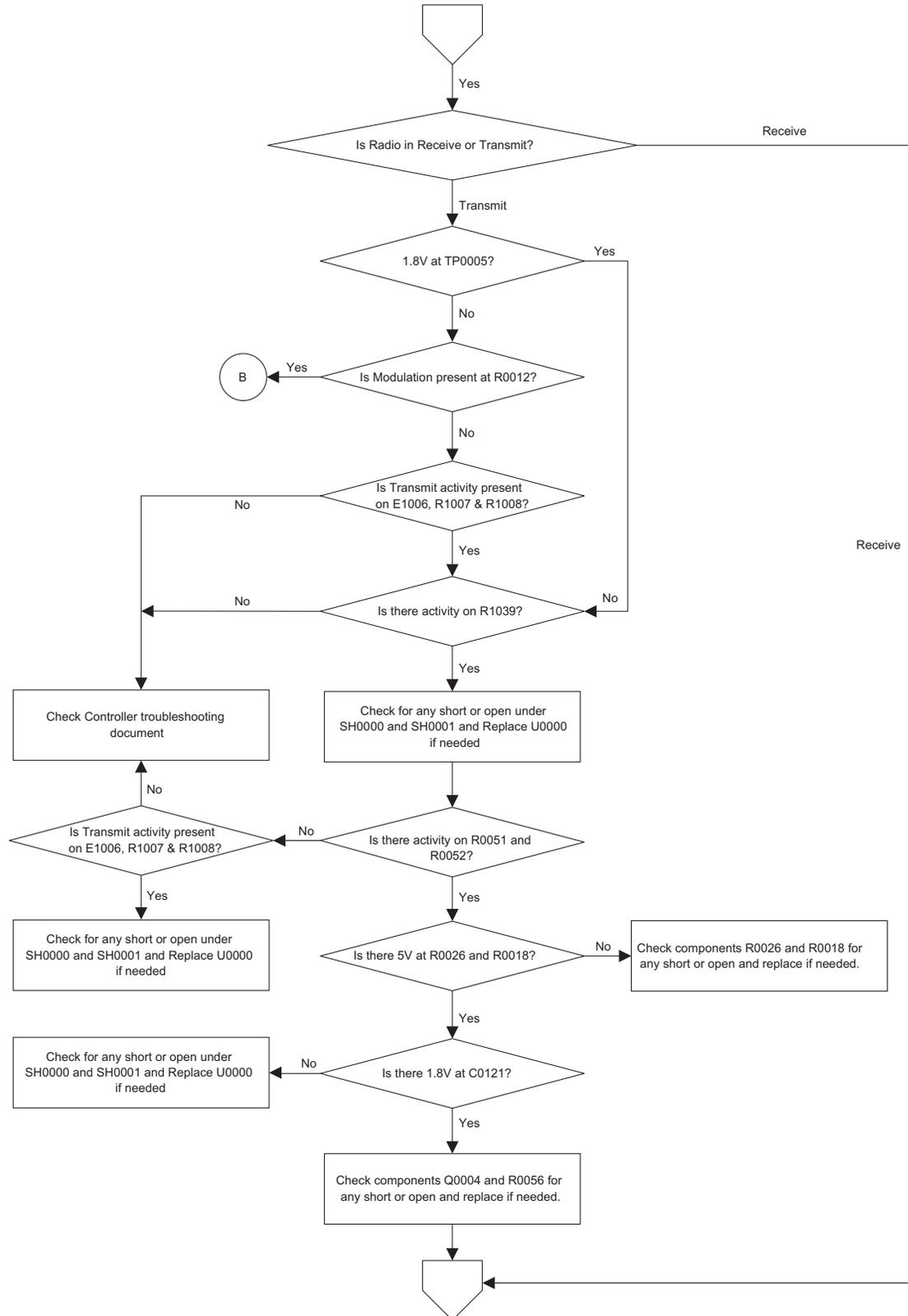
### 4.0 Troubleshooting Flow Chart for RFIC (Sheet 1 of 5)



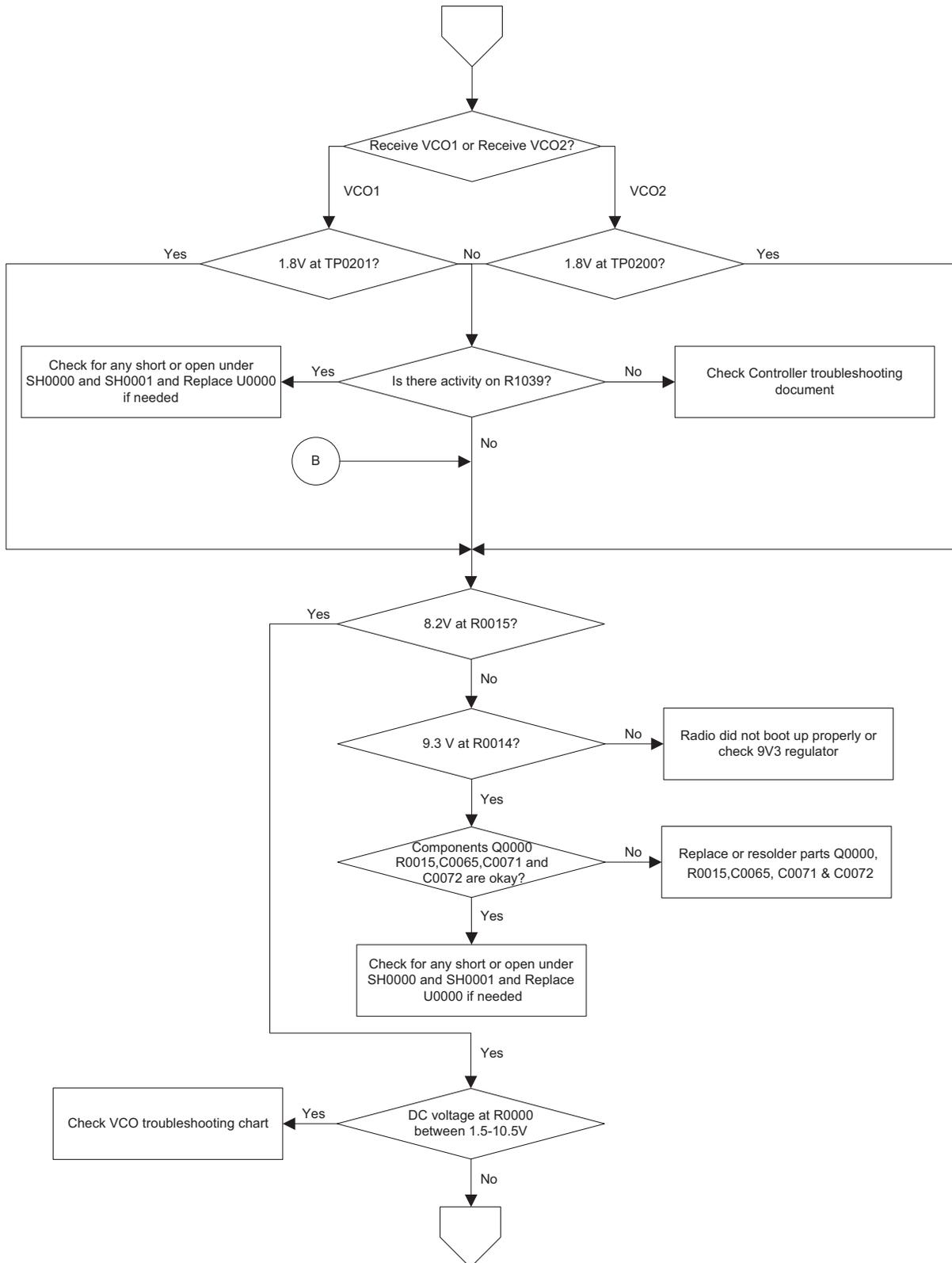
### 4.1 Troubleshooting Flow Chart for RFIC (Sheet 2 of 5)



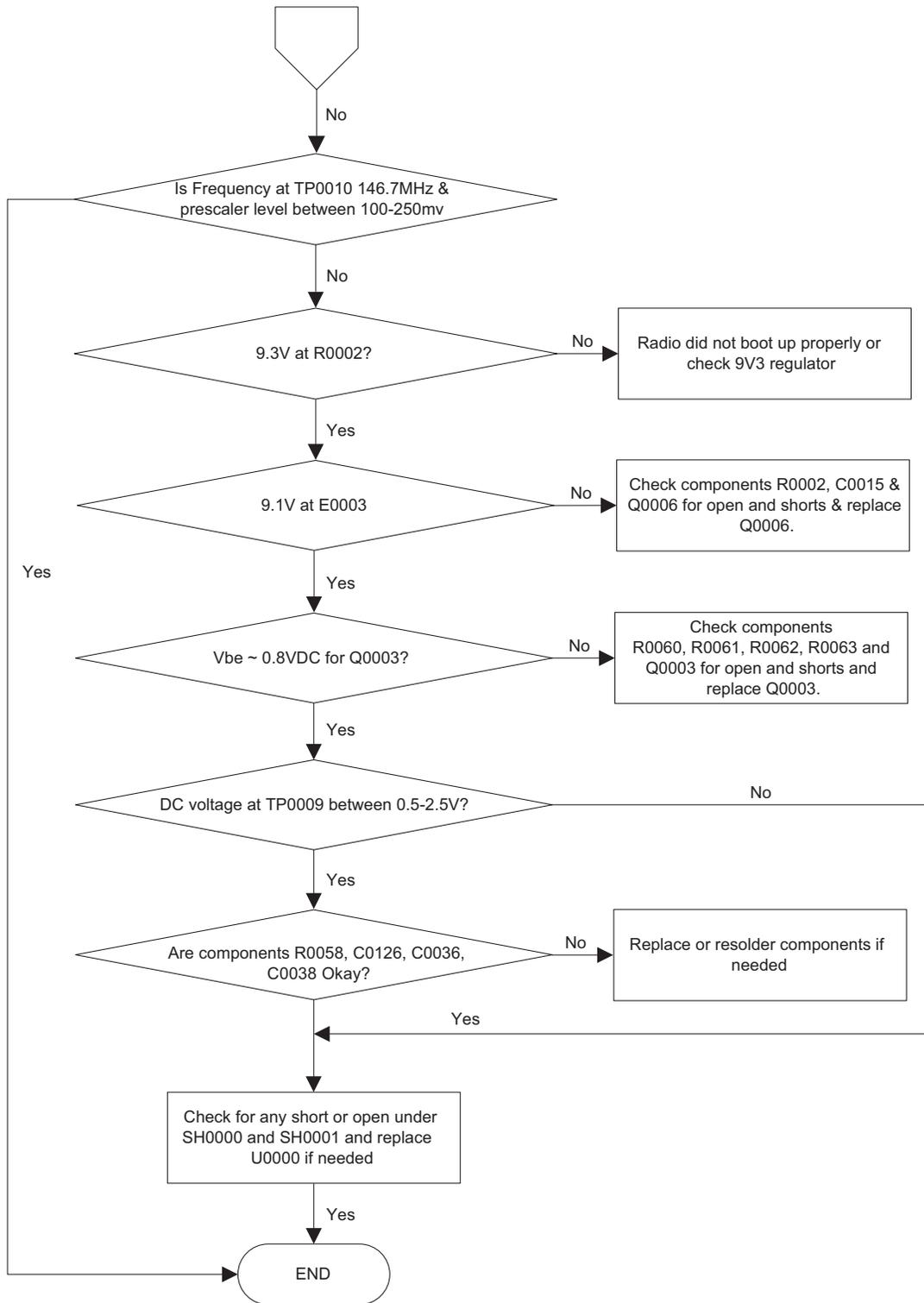
### 4.2 Troubleshooting Flow Chart for RFIC (Sheet 3 of 5)



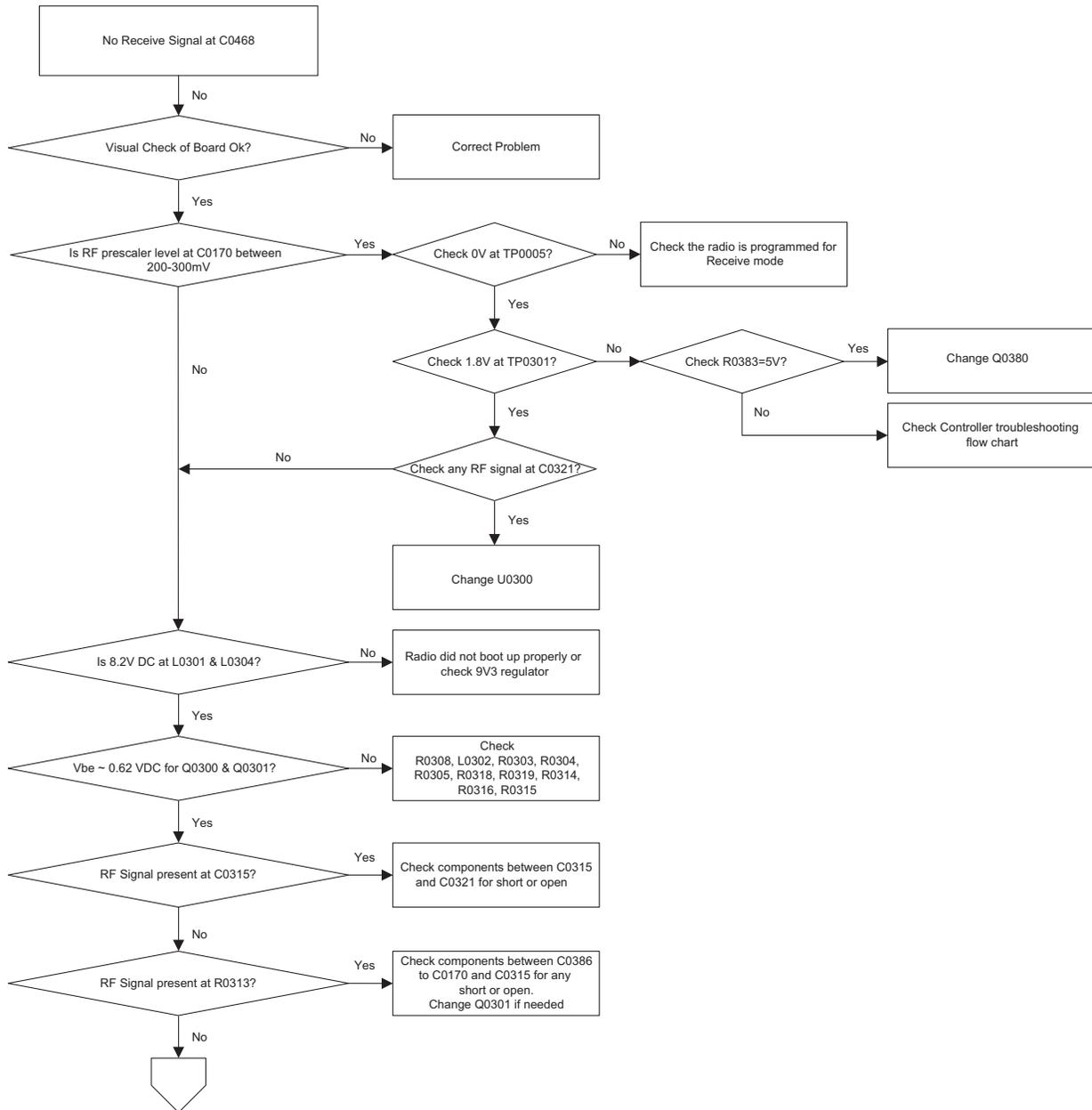
### 4.3 Troubleshooting Flow Chart for RFIC (Sheet 4 of 5)



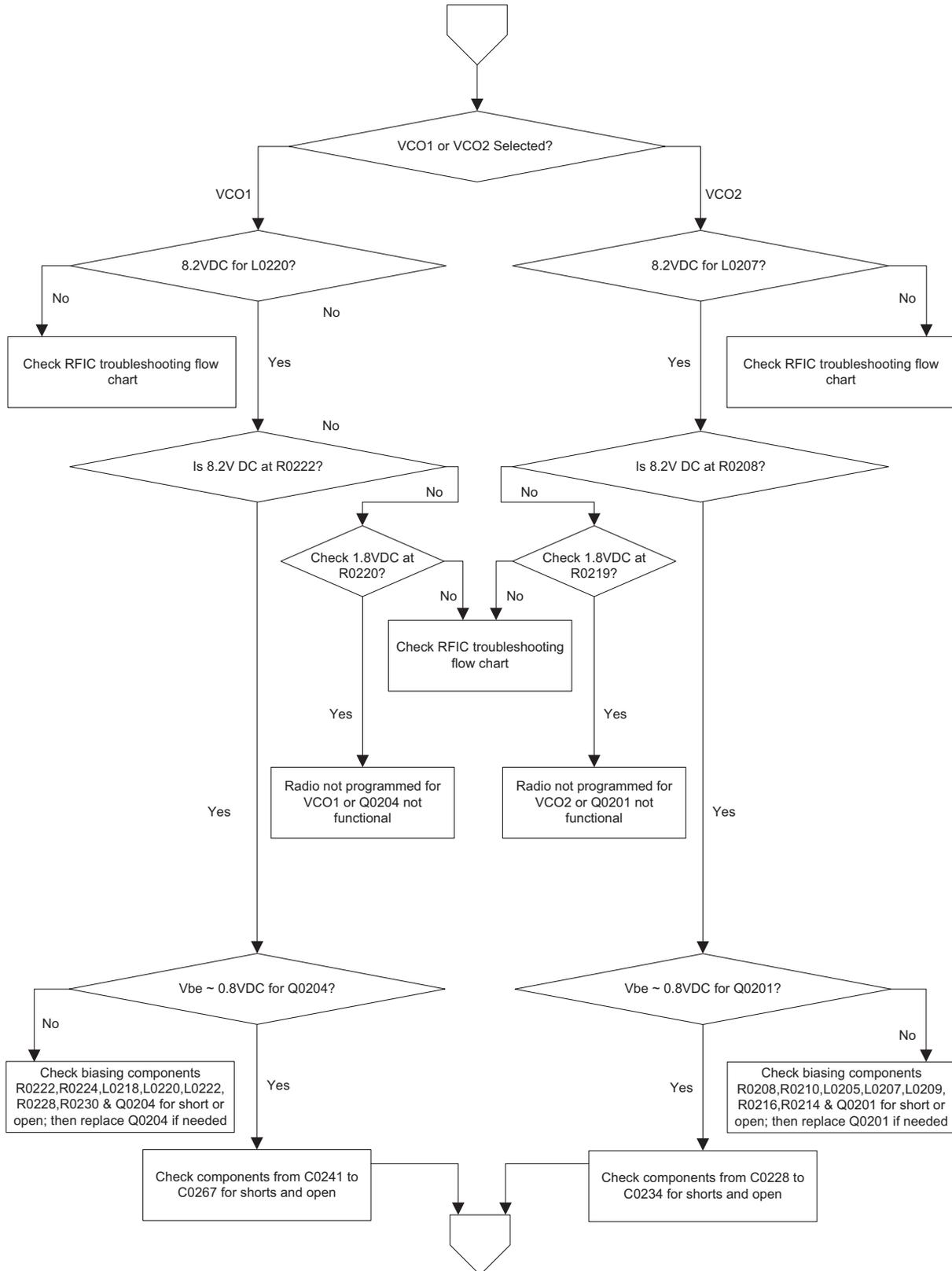
### 4.4 Troubleshooting Flow Chart for RFIC (Sheet 5 of 5)



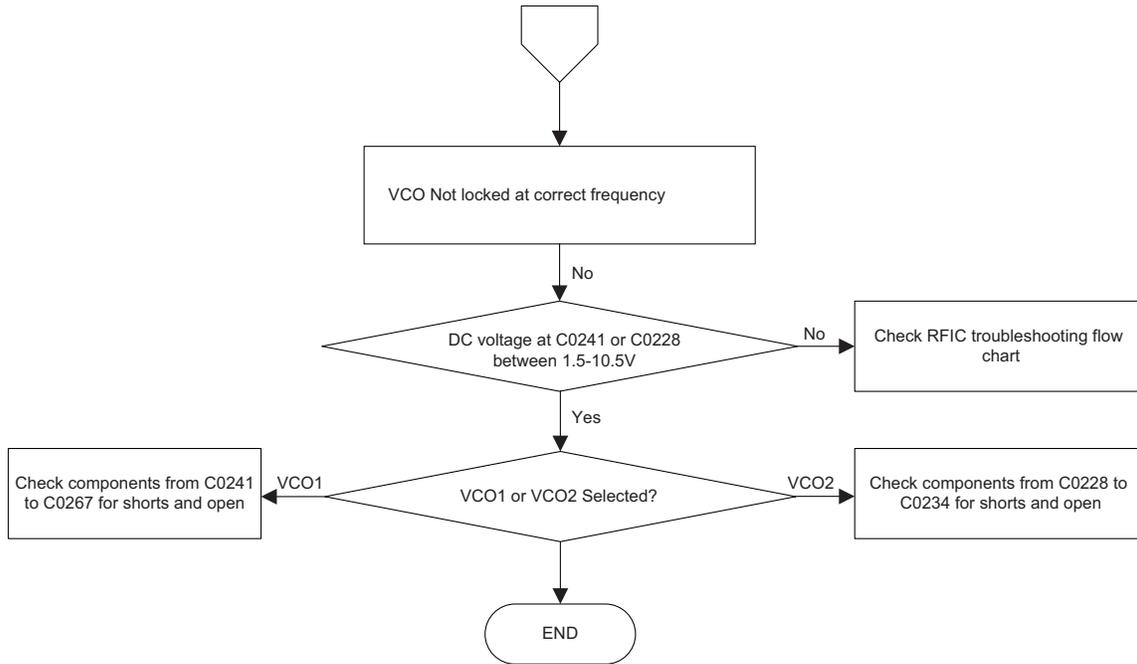
## 5.0 Troubleshooting Flow Chart for Rx VCO (Sheet 1 of 3)



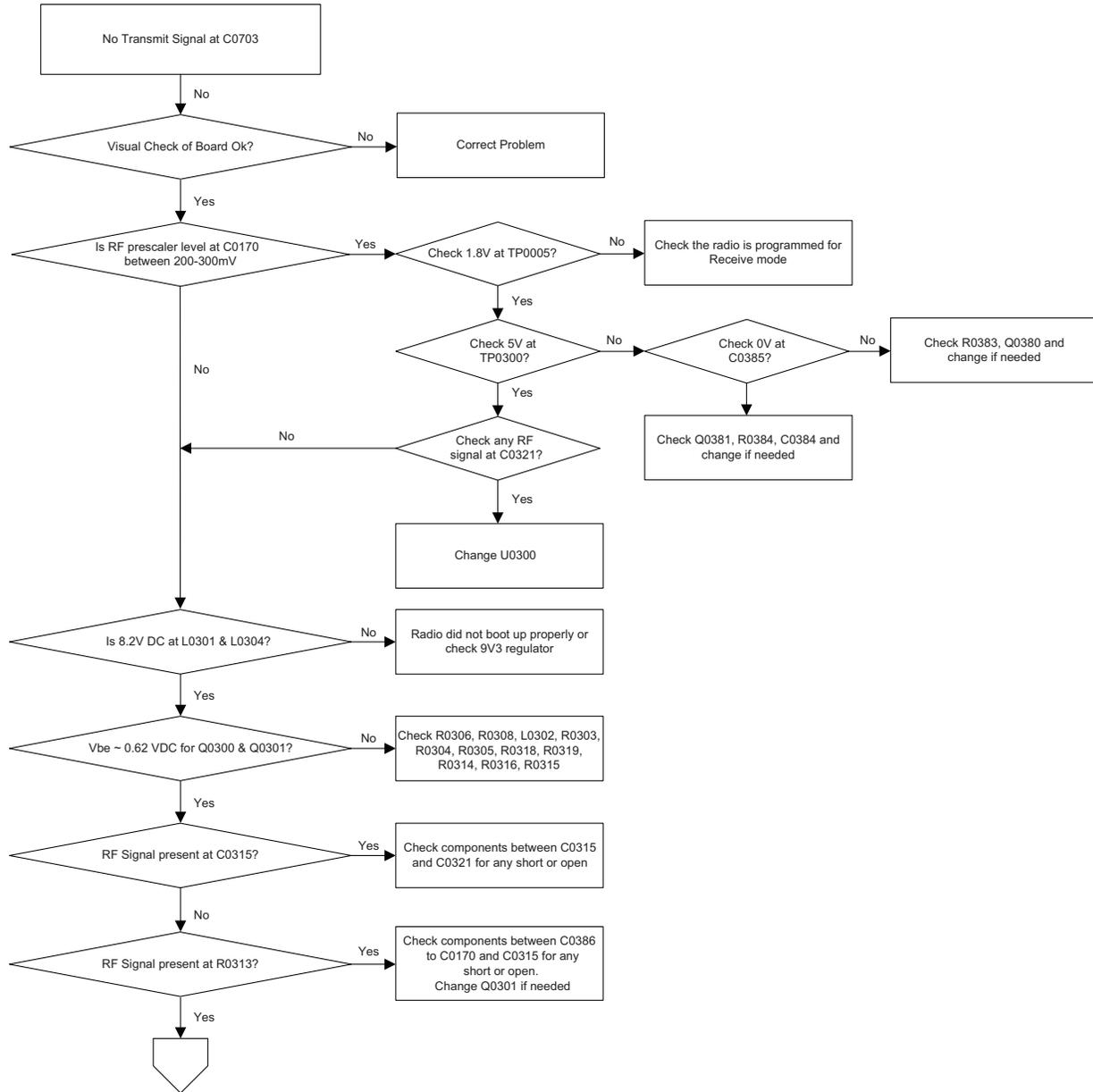
### 5.1 Troubleshooting Flow Chart for Rx VCO (Sheet 2 of 3)



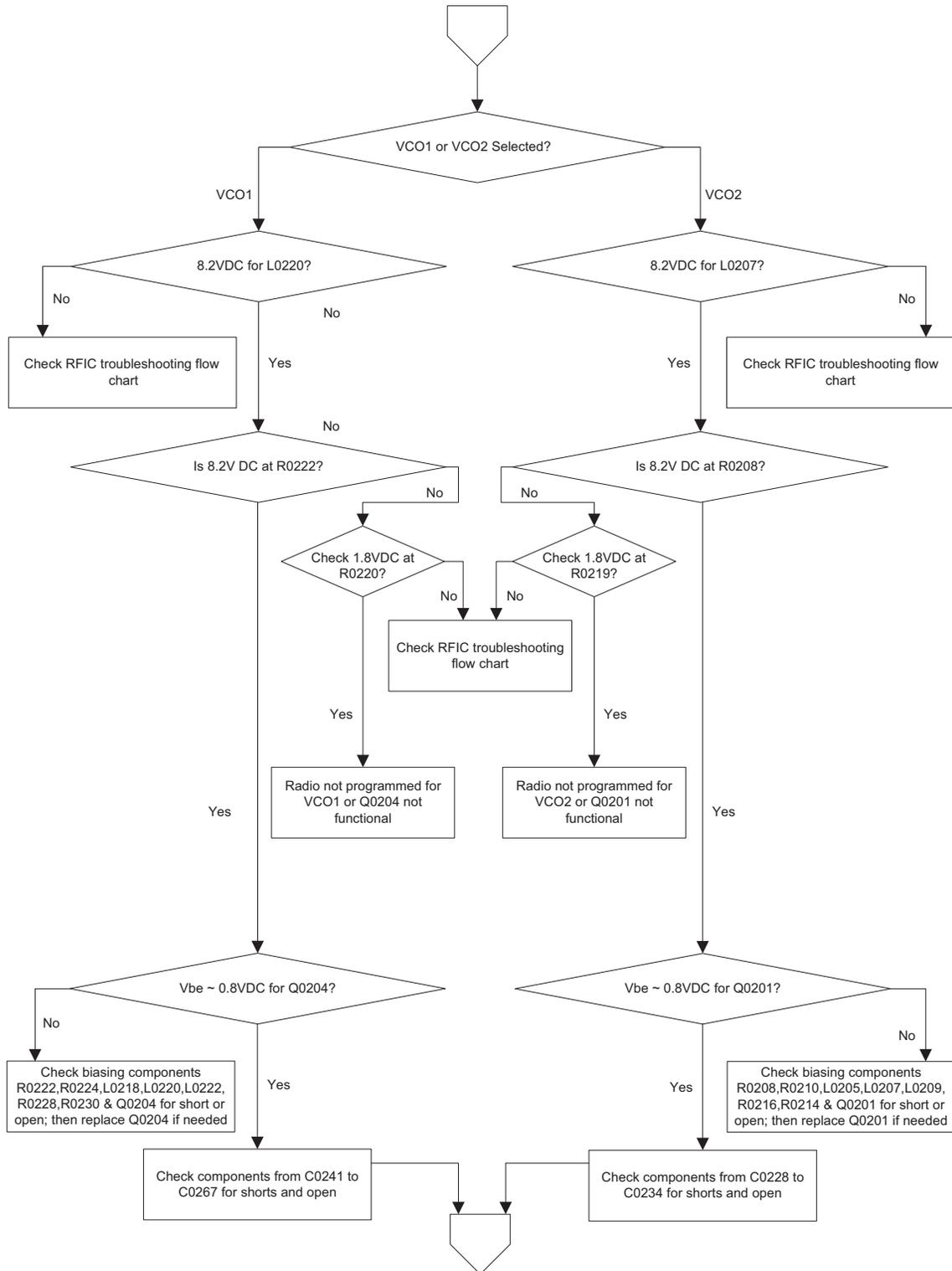
## 5.2 Troubleshooting Flow Chart for Rx VCO (Sheet 3 of 3)



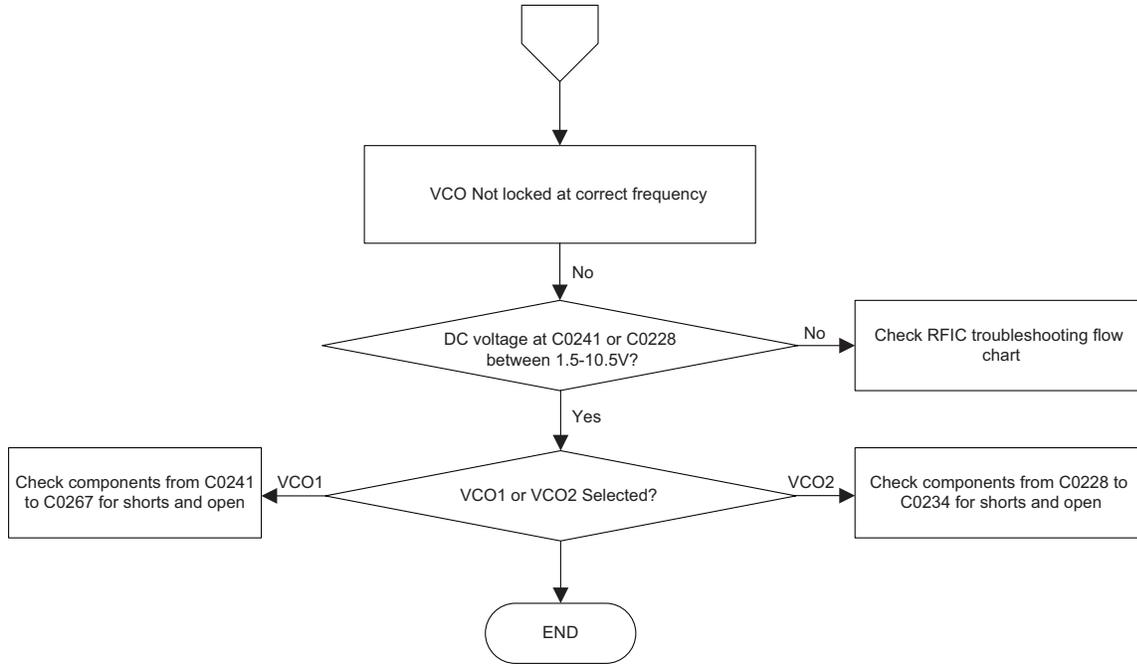
### 6.0 Troubleshooting Flow Chart for Tx VCO (Sheet 1 of 3)



## 6.1 Troubleshooting Flow Chart for Tx VCO (Sheet 2 of 3)



## 6.2 Troubleshooting Flow Chart for Tx VCO (Sheet 3 of 3)



## Section 2

# 800/900 MHz PCB/SCHEMATICS/PARTS LISTS

### 1.0 Allocation of Schematics and Circuit Boards

#### 1.1 800/900 MHz 35W/30W Circuits

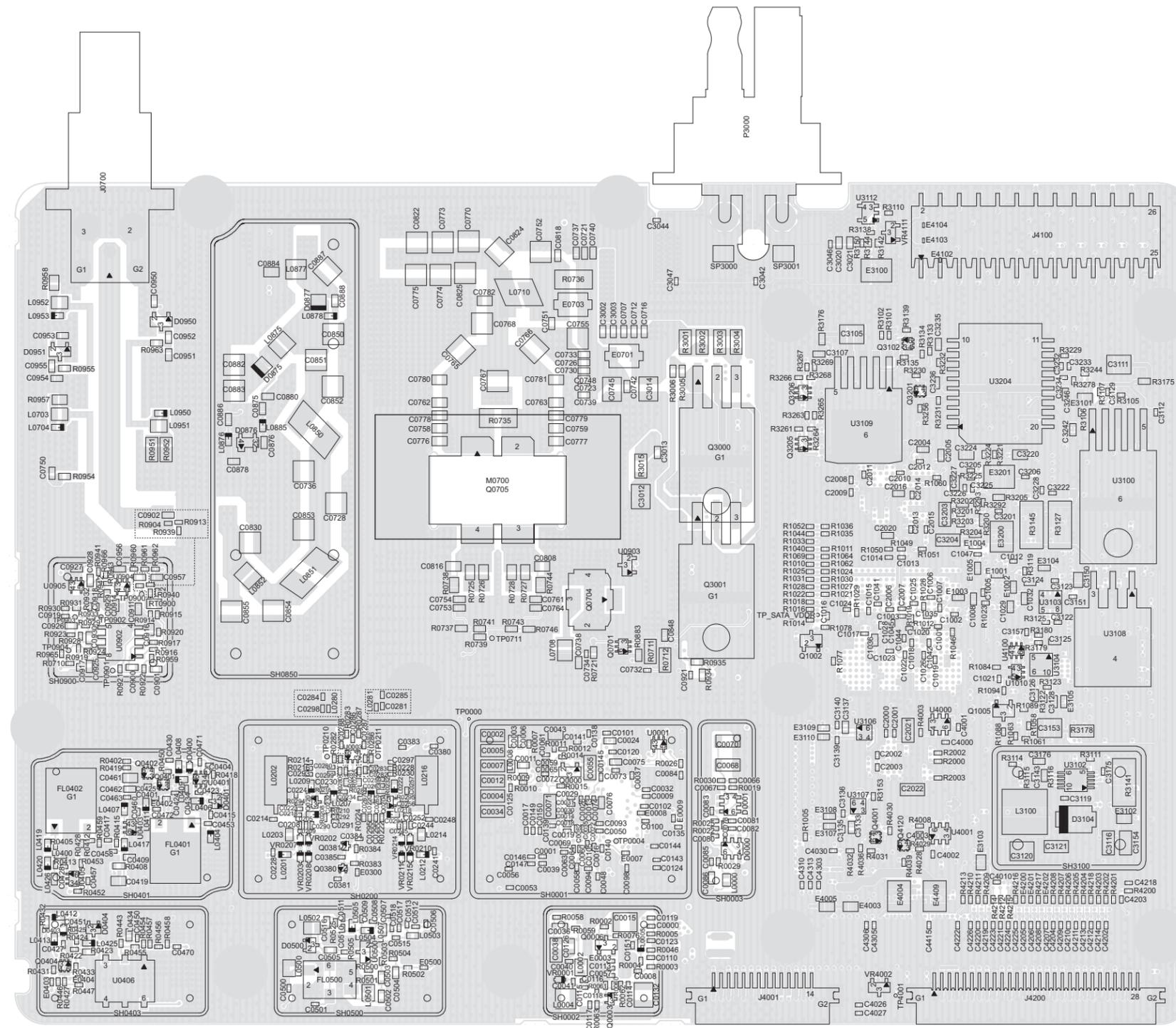
The 800/900 MHz circuits are contained on the Printed Circuit Board (PCB) which also contains the Controller circuits. This chapter shows the schematics for the 800/900 MHz 35W/30W circuits only, refer to the Controller section for details of the related Controller circuits. The PCB component layouts and the Parts List in this chapter show both the Controller and 800/900 MHz 35W/30W circuit components. The 800/900 MHz 35W/30W schematics and the related PCB and parts list are shown in the table below.

*Table 2-1 800/900 MHz 10–35W/30W Schematic Diagrams and Parts List*

<b>PCB:</b> 84012657001-A Main Board Top Side 84012657001-A Main Board Bottom Side	Page 2-3 Page 2-4
<b>SCHEMATICS</b> Overall Receiver Front-End Receiver IF Amp Transmitter Power Amplifier Power Control Transmitter Power Amplifier DC Distribution RFIC Receiver VCO Transmit VCO	Page 2-5 Page 2-6 Page 2-7 Page 2-8 Page 2-9 Page 2-10 Page 2-11 Page 2-12 Page 2-13
<b>Parts List</b> 84012657001-A	Page 2-14

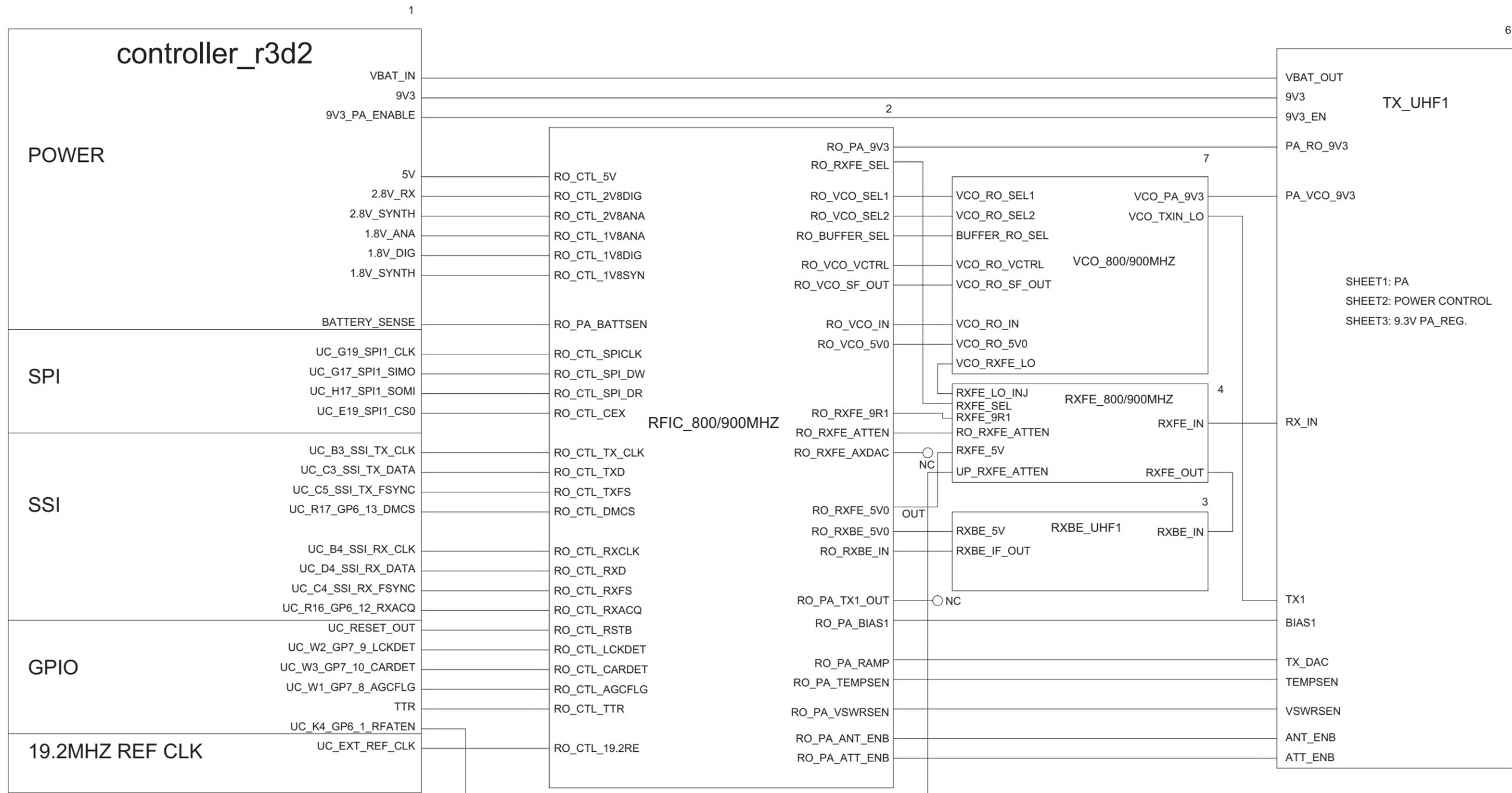
## Notes

## 2.0 800/900 MHz (806–941 MHz) 10–35/30W PCB/Schematics/Parts List

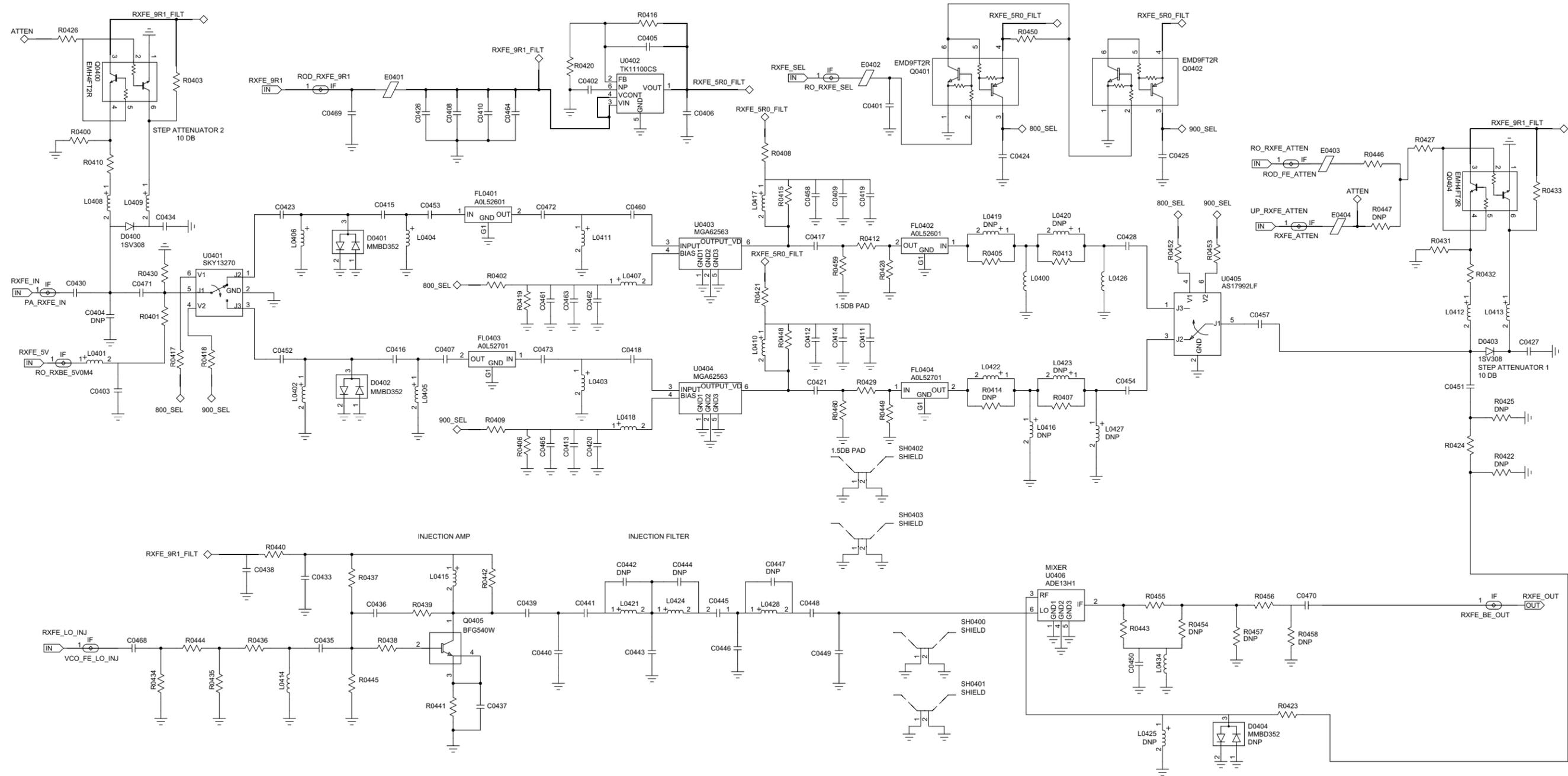


800/900 MHz (806–941 MHz) 10–35/30W 84012657001-A Top Side

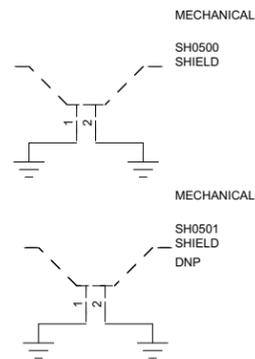
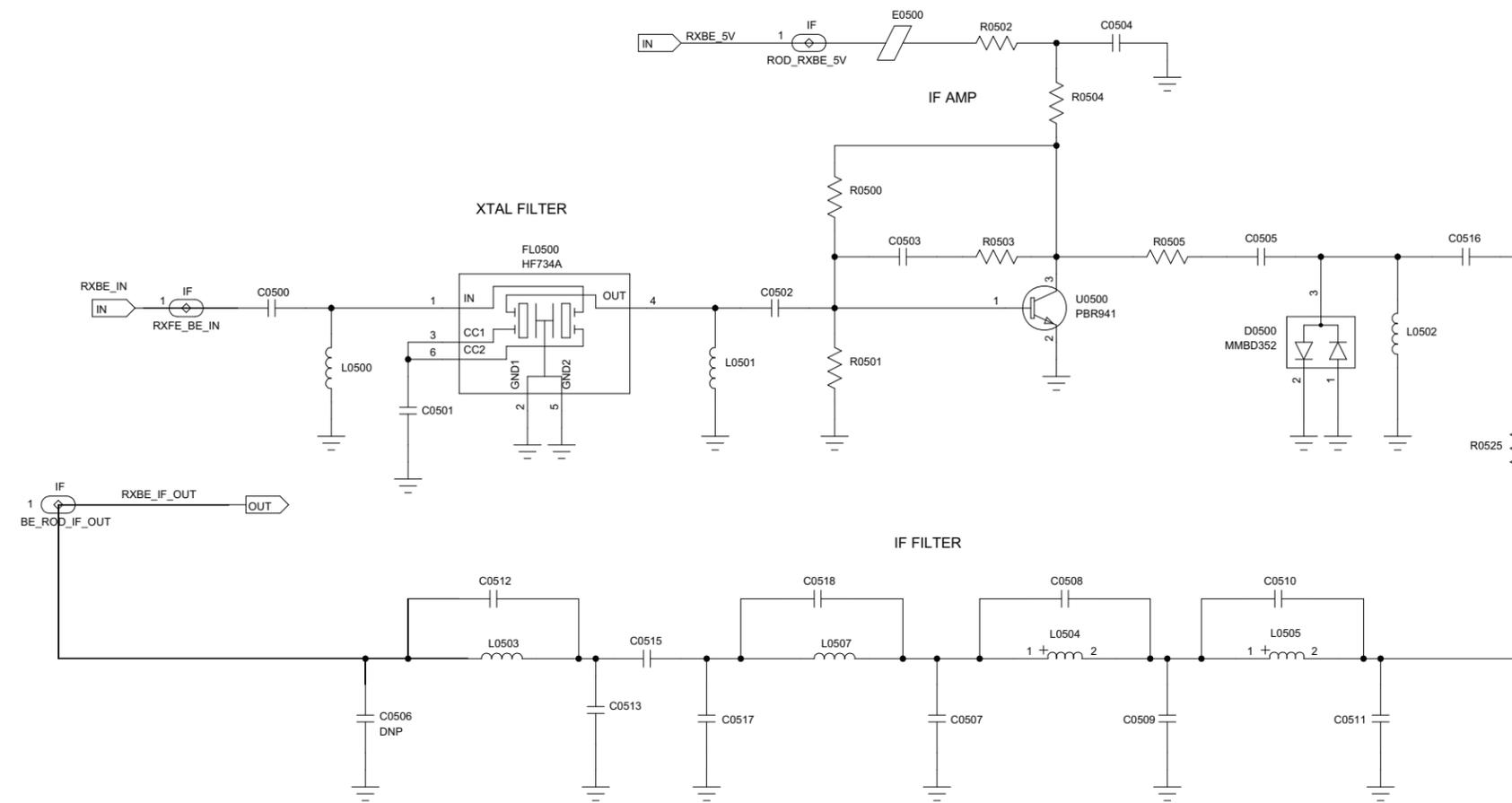




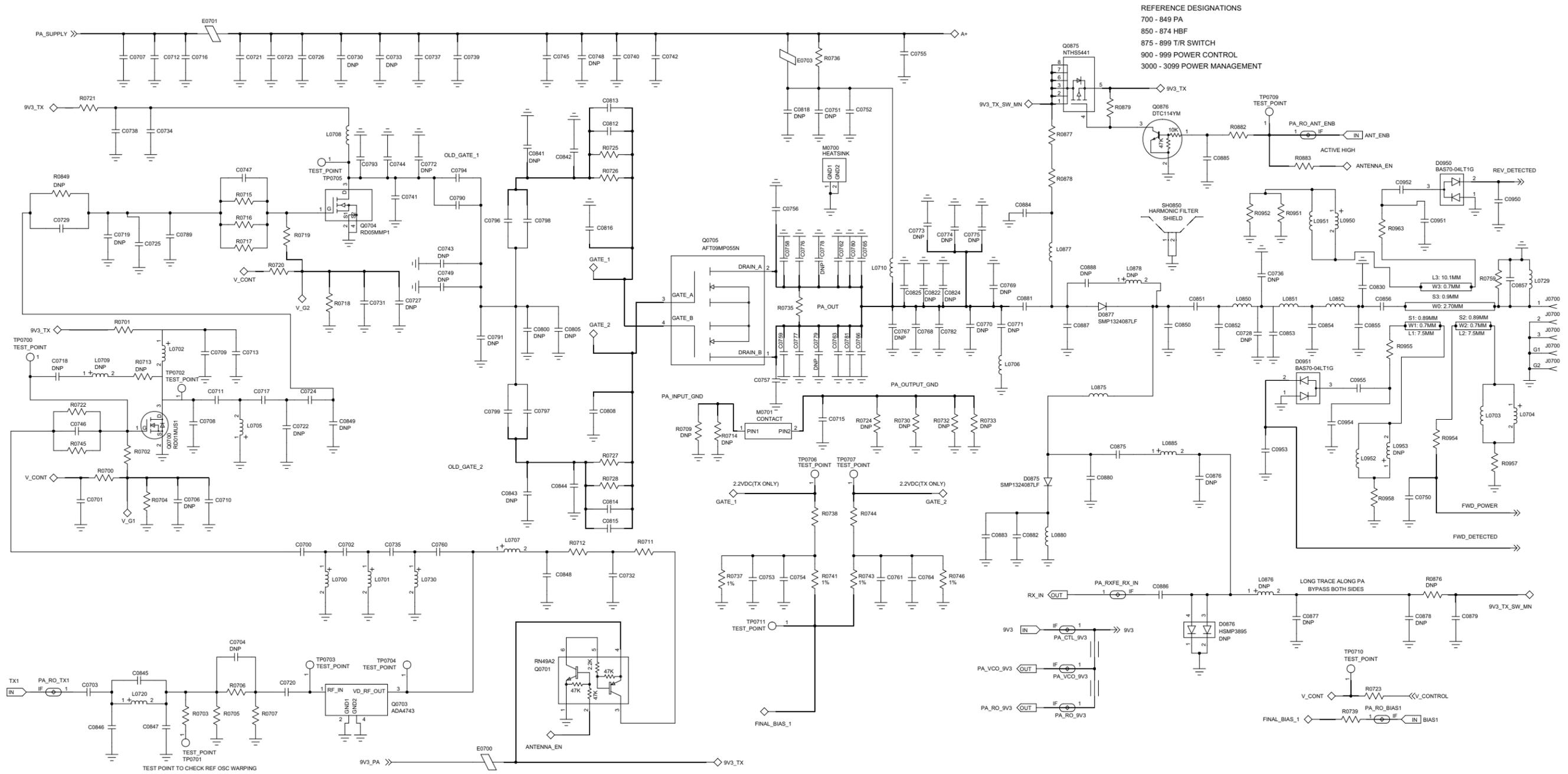
800/900 MHz (806–941 MHz) 10–35/30W Overall Schematic Diagram



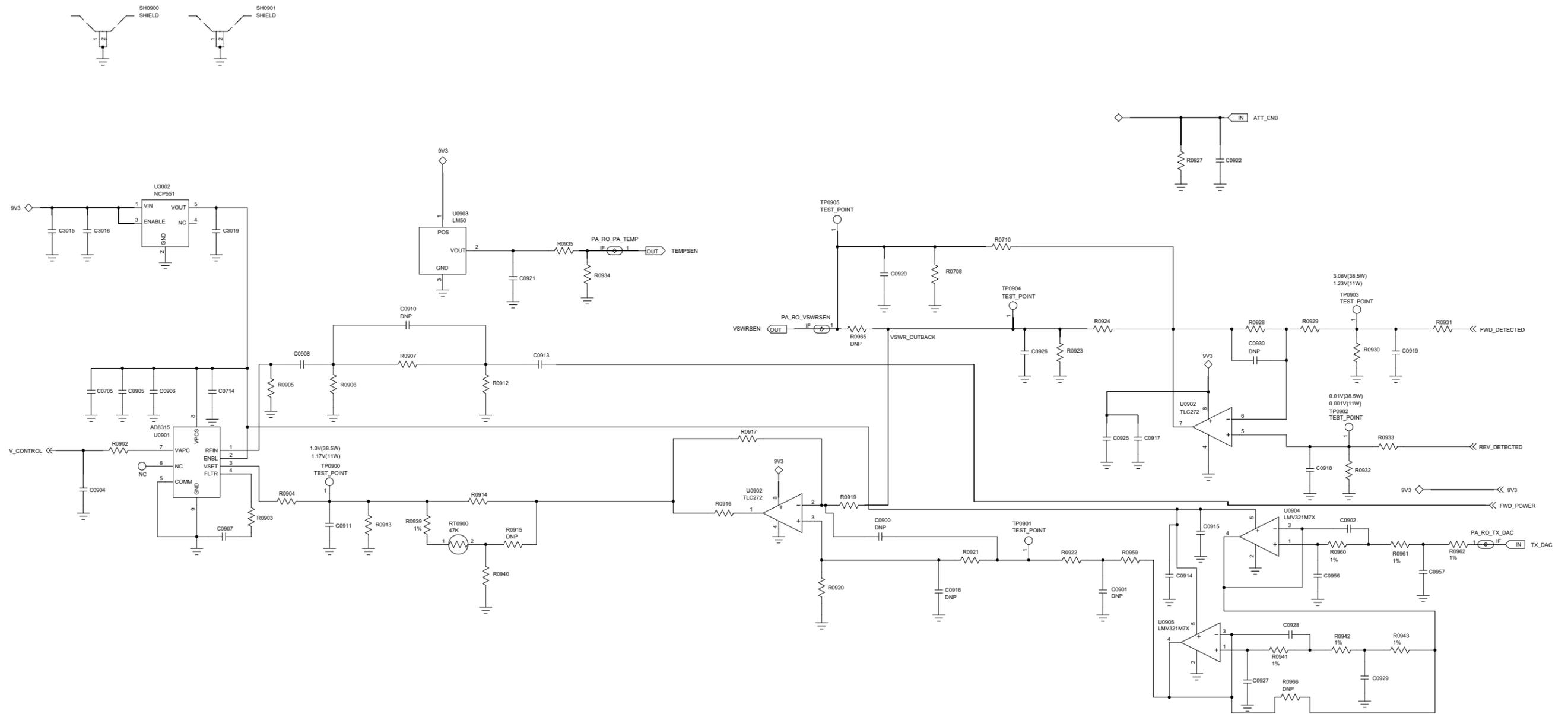
800/900 MHz (806–941 MHz) 10–35/30W Receiver Front-End Schematic Diagram



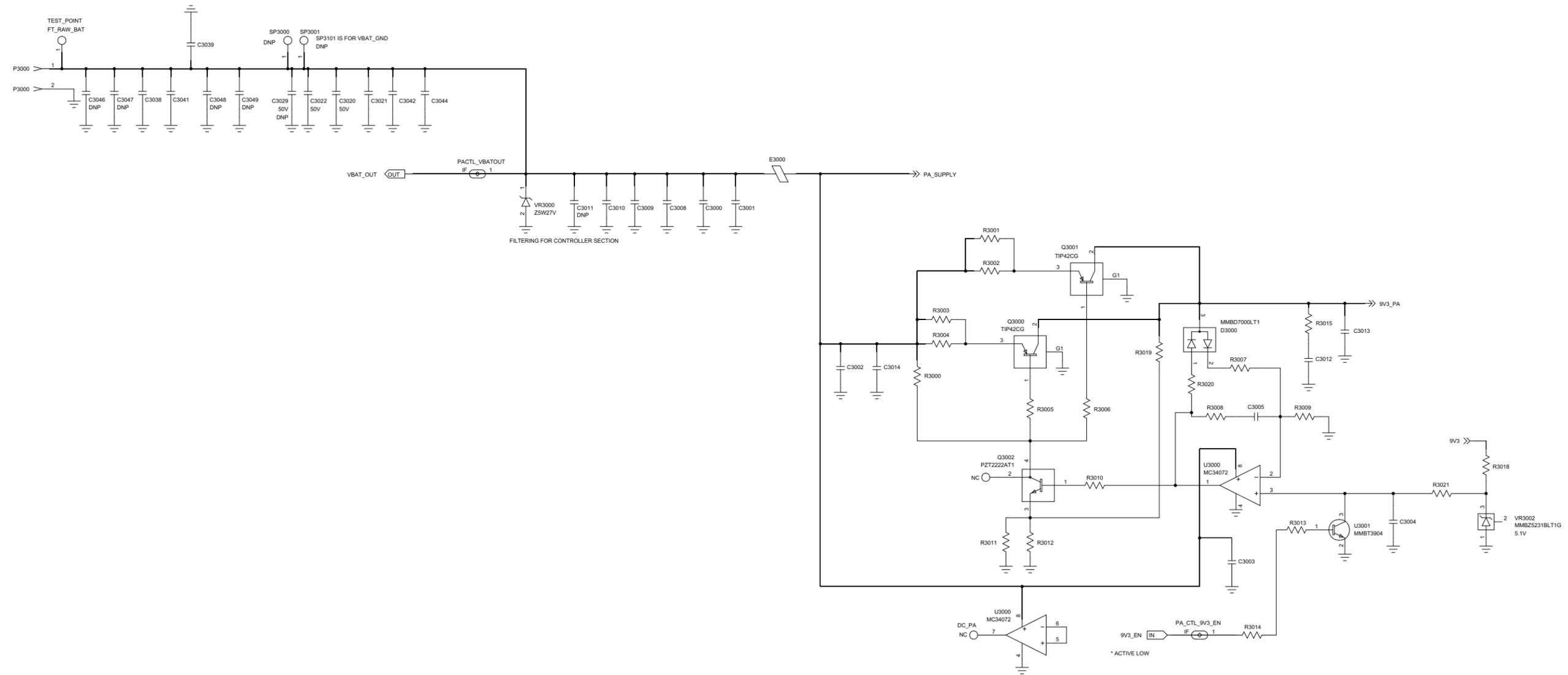
800/900 MHz (806–941 MHz) 10–35/30W Receiver IF Amp Schematic Diagram



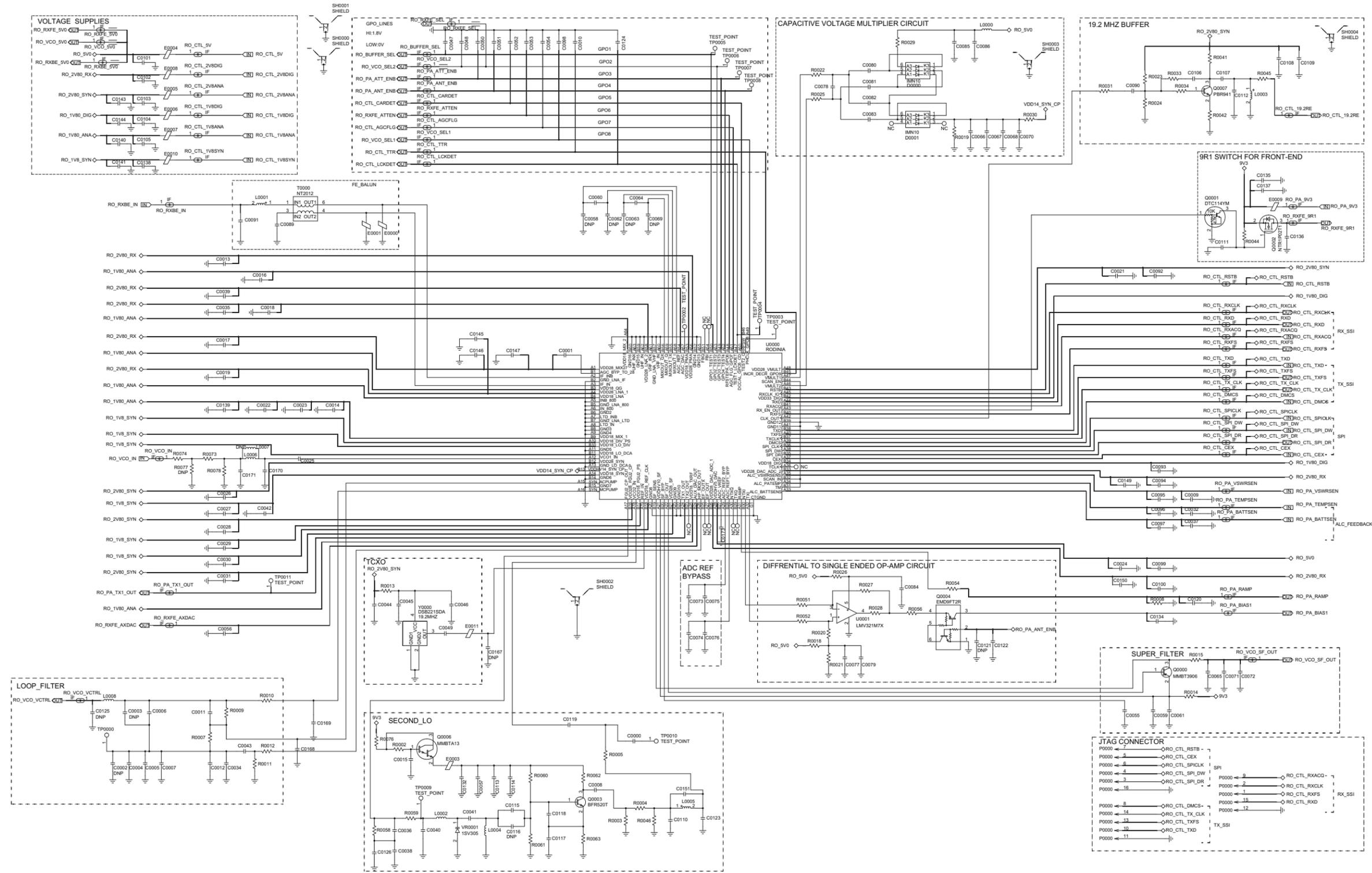
800/900 MHz (806-941 MHz) 10-35/30W Transmitter Power Amplifier Schematic Diagram



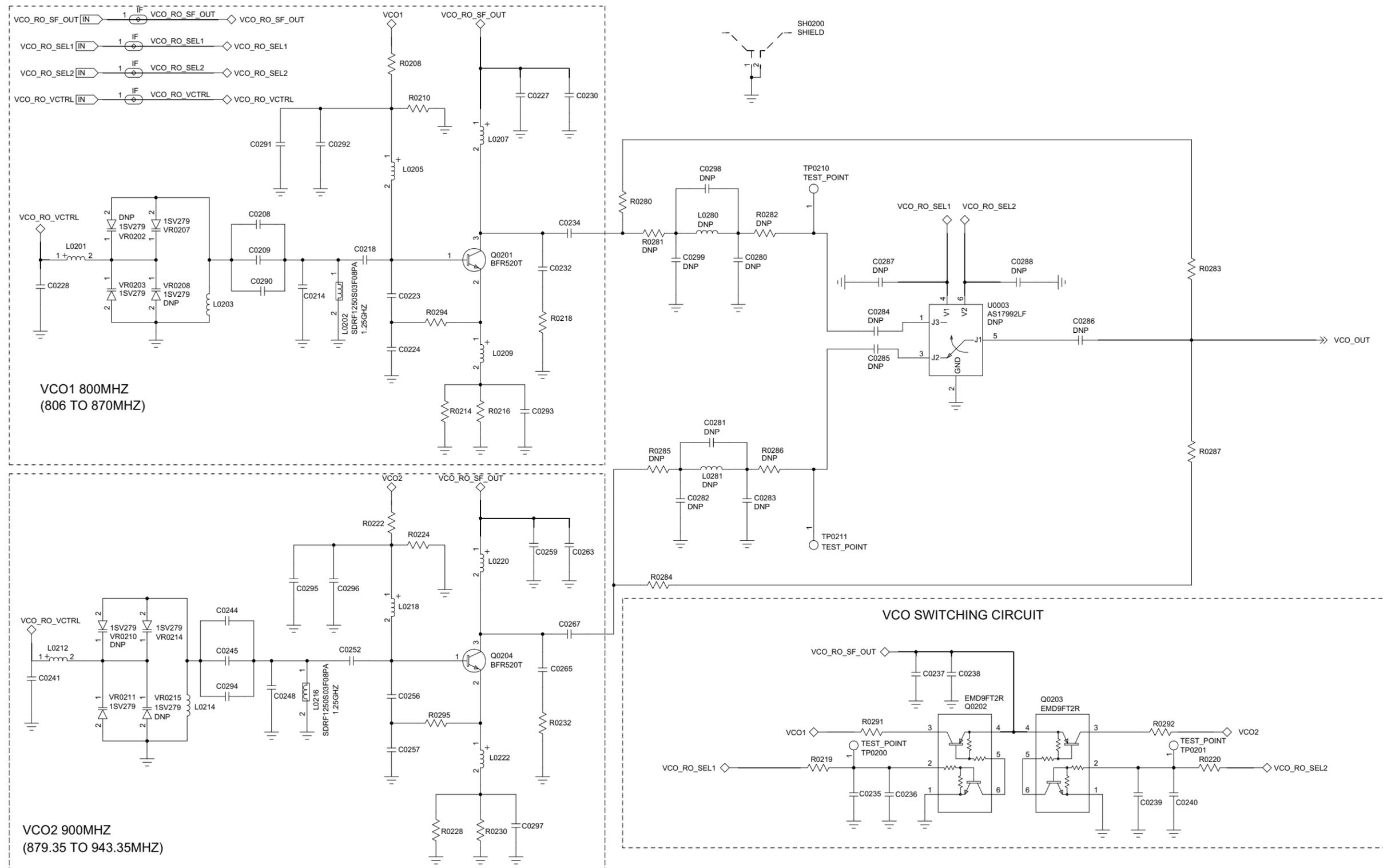
800/900 MHz (806–941 MHz) 10–35/30W Power Control Schematic Diagram



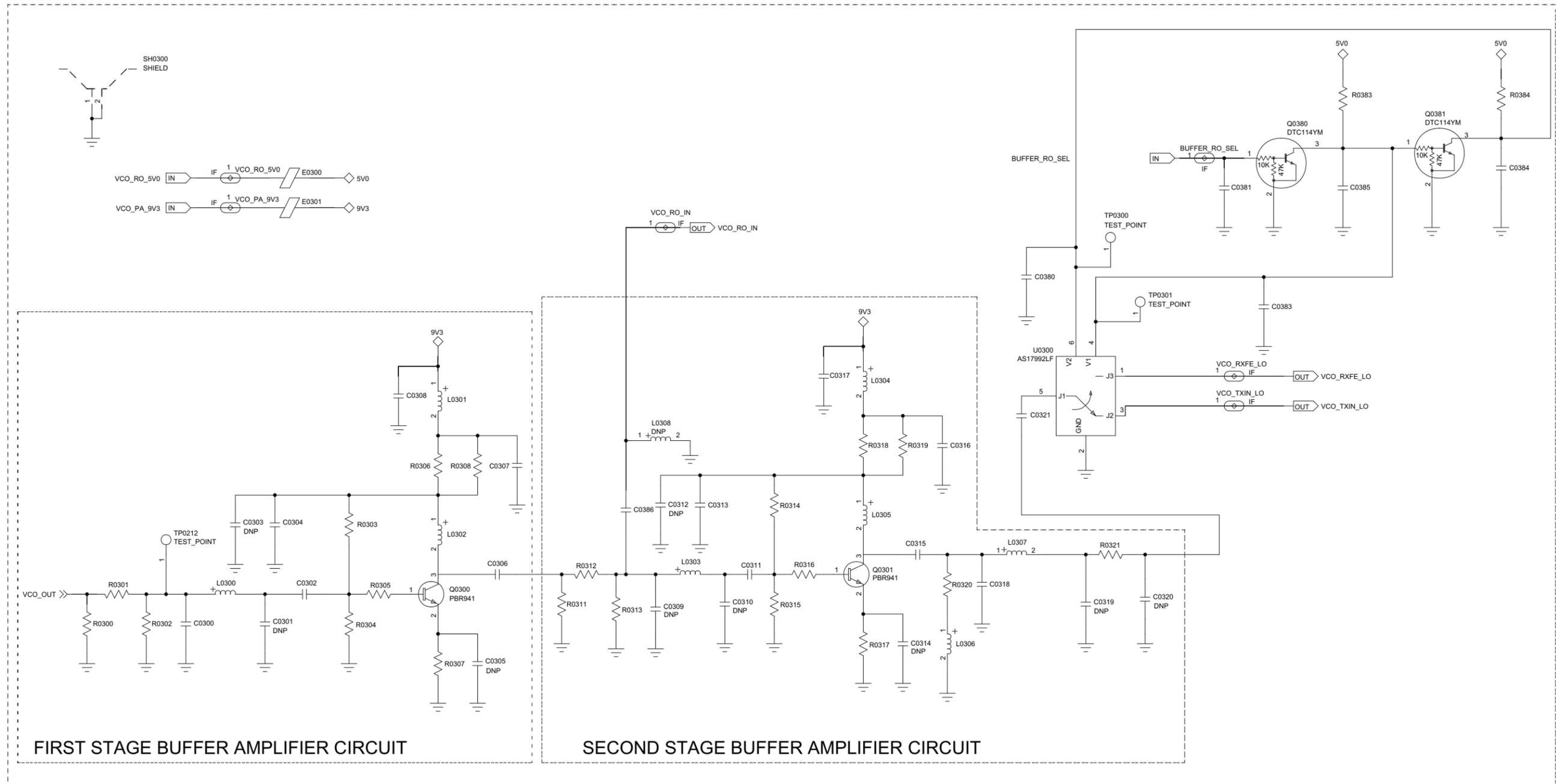
800/900 MHz (806–941 MHz) 10–35/30W Transmitter Power Amplifier DC Distribution Schematic Diagram



800/900 MHz (806–941 MHz) 10–35/30W RFIC Schematic Diagram



800/900 MHz (806–941 MHz) 10–35/30W VCO Schematic Diagram



800/900 MHz (806–941 MHz) 10–35/30W VCO Buffer Schematic Diagram

**800/900 MHz PCB  
84012657001-A Parts List  
10–35/30W**

Circuit Ref.	Motorola Part No.
C0000M2	21667009311
C0001M2	21667009170
C0002M2	NOT PLACED
C0003M2	NOT PLACED
C0004M2	21012044001
C0005M2	21012044001
C0006M2	2113945C31
C0007M2	21012044001
C0008M2	21667009311
C0009M2	21667009166
C0010M2	21667009166
C0011M2	2113945C31
C0012M2	21012044001
C0013M2	2113945Y02
C0014M2	2113945Y02
C0015M2	2113946J03
C0016M2	2113945A10
C0017M2	2113945Y02
C0018M2	2113945A10
C0019M2	2113945Y02
C0020M2	2113945A10
C0021M2	2113945Y02
C0022M2	2113945Y02
C0023M2	2113945Y02
C0024M2	21012129001
C0025M2	21667009166
C0026M2	2113944A52
C0027M2	2113945Y02
C0028M2	2113945Y02
C0029M2	2113945A10
C0030M2	2113945A10
C0031M2	2113945Y02
C0032M2	21667009166
C0034M2	21012044001
C0035M2	21667009166
C0036M2	21012025001
C0037M2	21667009166
C0038M2	21012044001
C0039M2	2113945Y02
C0040M2	2113945A10
C0041M2	21667009364
C0042M2	21667009166
C0043M2	21012044001
C0044M2	2113955D45
C0045M2	2113945Y02
C0046M2	21667009166
C0047M2	21667009166

Circuit Ref.	Motorola Part No.
C0048M2	21667009166
C0049M2	2113945B02
C0050M2	21667009166
C0051M2	21667009166
C0052M2	21667009166
C0053M2	21667009166
C0054M2	21667009166
C0055M2	2113955D37
C0056M2	2113945Y02
C0057M2	2113945B02
C0058M2	NOT PLACED
C0059M2	21667009166
C0060M2	2113945A69
C0061M2	2113945Y02
C0062M2	NOT PLACED
C0063M2	NOT PLACED
C0064M2	2113945A69
C0065M2	2113945Y02
C0066M2	2113945B02
C0067M2	2113945Y02
C0068M2	2113955D37
C0069M2	NOT PLACED
C0070M2	2113955D37
C0071M2	2113955D37
C0072M2	21667009166
C0073M2	21667009166
C0074M2	21667009166
C0075M2	2113946S35
C0076M2	2113946S35
C0077M2	21667009166
C0078M2	21667009372
C0079M2	2113955D37
C0080M2	2113945B02
C0081M2	2113945B02
C0082M2	2113945B02
C0083M2	2113945B02
C0084M2	21667009166
C0085M2	21667009166
C0086M2	2113945C31
C0087M2	2113946S35
C0088M2	2113945Y02
C0089M2	2113945Y02
C0090M2	2113945B02
C0091M2	2113944C82
C0092M2	21667009166
C0093M2	2113945Y02
C0094M2	2113945Y02
C0095M2	2113945A13
C0096M2	2113945B02
C0097M2	2113945B02
C0098M2	21667009166

Circuit Ref.	Motorola Part No.
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C0100M2	2113945Y02
C0101M2	21667009166
C0102M2	21667009166
C0103M2	21667009166
C0104M2	21667009166
C0105M2	21667009166
C0106M2	2113945B02
C0107M2	2113945B02
C0108M2	21667009166
C0109M2	2113945Y02
C0110M2	21667009381
C0111M2	2113945Y02
C0112M2	21667009166
C0113M2	21667009166
C0114M2	2113945Y02
C0115M2	21667009370
C0116M2	NOT PLACED
C0117M2	21667009374
C0118M2	21667009375
C0119M2	2113945A10
C0120M2	21667009166
C0121M2	NOT PLACED
C0122M2	21667009166
C0123M2	21667009381
C0124M2	21667009166
C0132M2	2113946J03
C0134M2	21667009166
C0135M2	21667009166
C0136M2	21667009166
C0137M2	2113945Y02
C0138M2	21667009166
C0139M2	21667009166
C0140M2	2113945Y02
C0141M2	2113945Y02
C0143M2	2113945Y02
C0144M2	2113945Y02
C0145M2	21667009166
C0146M2	2113945A10
C0147M2	2113945A10
C0149M2	21667009166
C0150M2	21667009166
C0151M2	21667009368
C0200M7	21667009166
C0201M7	NOT PLACED
C0202M7	21667009166
C0203M7	NOT PLACED
C0204M7	NOT PLACED
C0205M7	21667009274
C0206M7	21667009320
C0207M7	21667009320

Circuit Ref.	Motorola Part No.
C0208M7	21667009303
C0209M7	21667009297
C0210M7	NOT PLACED
C0211M7	NOT PLACED
C0212M7	21667009286
C0213M7	21667009274
C0214M7	21667009303
C0215M7	21667009332
C0216M7	21667009303
C0217M7	21667009332
C0218M7	21667009320
C0221M7	21667009371
C0222M7	21667009366
C0223M7	21667009372
C0224M7	21667009366
C0225M7	2113945Y02
C0226M7	21667009311
C0227M7	2113945Y02
C0228M7	21667009166
C0229M7	21667009166
C0230M7	21667009166
C0231M7	21667009166
C0232M7	21667009166
C0233M7	21667009284
C0234M7	21667009284
C0235M7	21667009166
C0236M7	2113945Y02
C0237M7	21667009166
C0238M7	2113945Y02
C0239M7	2113945Y02
C0240M7	21667009166
C0241M7	21667009166
C0242M7	21667009166
C0243M7	21667009166
C0244M7	21667009297
C0245M7	21667009291
C0246M7	21667009166
C0247M7	21667009166
C0248M7	21667009364
C0249M7	21667009166
C0252M7	21667009320
C0256M7	21667009374
C0257M7	21667009370
C0259M7	2113945Y02
C0263M7	21667009166
C0265M7	21667009166
C0267M7	21667009284
C0269M7	21667009166
C0270M7	2113945Y02
C0271M7	21667009166
C0272M7	2113945Y02

Circuit Ref.	Motorola Part No.
C0276M7	21667009332
C0277M7	NOT PLACED
C0278M7	NOT PLACED
C0300M7	21667009303
C0301M7	NOT PLACED
C0302M7	21667009303
C0304M7	21667009390
C0305M7	2113945Y02
C0306M7	2113945B02
C0307M7	21667009390
C0308M7	2113945B02
C0309M7	21667009297
C0310M7	21667009282
C0311M7	21667009364
C0400M4	21667009005
C0402M4	21667009166
C0403M4	21667009274
C0404M4	21667009332
C0405M4	21667009005
C0406M4	21667009274
C0407M4	21667009332
C0408M4	2113945C31
C0409M4	2113945C31
C0410M4	21667009166
C0411M4	21667009166
C0412M4	2113946F05
C0413M4	21667009166
C0414M4	21667009166
C0415M4	21667009368
C0416M4	2113945C31
C0417M4	21667009166
C0418M4	21667009164
C0419M4	21667009274
C0420M4	21667009166
C0421M4	21667009274
C0422M4	21667009320
C0423M4	21667009368
C0424M4	21667009274
C0425M4	21667009320
C0426M4	2113946F05
C0427M4	21667009372
C0428M4	21667009005
C0429M4	21667009274
C0430M4	21667009161
C0431M4	21667009370
C0433M4	21667009166
C0434M4	21667009384
C0435M4	21667009378
C0436M4	21667009166
C0437M4	2113945C31
C0438M4	21667009166

Circuit Ref.	Motorola Part No.
C0439M4	21667009339
C0440M4	21667009297
C0441M4	21667009339
C0442M4	21667009286
C0443M4	21667009346
C0444M4	21667009274
C0445M4	21667009392
C0446M4	21667009346
C0447M4	21667009282
C0448M4	21667009339
C0449M4	21667009315
C0450M4	21667009388
C0451M4	21667009166
C0452M4	21667009339
C0453M4	21667009339
C0454M4	21667009346
C0455M4	21667009346
C0456M4	21667009366
C0457M4	21667009291
C0458M4	2113946F05
C0459M4	21667009355
C0460M4	21667009384
C0461M4	NOT PLACED
C0462M4	21667009159
C0463M4	NOT PLACED
C0464M4	21667009158
C0465M4	21667009166
C0468M4	21667009166
C0469M4	21667009166
C0470M4	21667009380
C0471M4	NOT PLACED
C0472M4	NOT PLACED
C0473M4	NOT PLACED
C0499M4	NOT PLACED
C0500M3	21667009369
C0501M3	21667009332
C0502M3	2113944M21
C0503M3	2113945C31
C0504M3	2113945C31
C0505M3	21667011351
C0506M3	NOT PLACED
C0507M3	21667009374
C0508M3	21667009366
C0509M3	21667009382
C0510M3	21667009366
C0511M3	21667009355
C0512M3	21667009303
C0513M3	21667009368
C0515M3	21667009383
C0516M3	21667011464
C0517M3	21667009315

Circuit Ref.	Motorola Part No.										
C0518M3	21667009339	C0750M6	NOT PLACED	C0801M6	2113944C38	C0852M6	21012094086	C0912M6	21667009166	C1025M1	2113945Y02
C0700M6	2113944C45	C0751M6	NOT PLACED	C0802M6	2113944C38	C0853M6	21012094092	C0913M6	21667009166	C1026M1	2113945Y02
C0701M6	2113944A41	C0752M6	2113944C85	C0803M6	2113944C38	C0854M6	21012094090	C0916M6	NOT PLACED	C1027M1	NOT PLACED
C0702M6	2113944C38	C0753M6	2113944C51	C0804M6	2113944C38	C0855M6	21012094090	C0917M6	21667009166	C1028M1	2113945Y02
C0703M6	21667009163	C0754M6	2113944C45	C0805M6	2113944C32	C0856M6	21012094048	C0918M6	21667009166	C1029M1	2113956B54
C0704M6	2113944A41	C0755M6	2113944C85	C0806M6	21012094089	C0857M6	21012094089	C0919M6	21667009166	C1032M1	2113956B54
C0705M6	2113944A41	C0756M6	NOT PLACED	C0807M6	21012094092	C0858M6	NOT PLACED	C0920M6	2113944C02	C1035M1	2113945B02
C0706M6	NOT PLACED	C0757M6	NOT PLACED	C0808M6	21012094097	C0859M6	21012094086	C0921M6	2113944C02	C1036M1	2113946D05
C0707M6	2113944C82	C0758M6	21667003042	C0809M6	21012094092	C0860M6	21012094086	C0922M6	2113945C31	C1040M1	2113945Y02
C0708M6	2113944C30	C0759M6	21667003042	C0810M6	21012094048	C0861M6	21012094092	C0923M6	2113944C02	C1041M1	2113945B02
C0709M6	2113945C04	C0760M6	2113944C45	C0811M6	21012094048	C0862M6	21012094092	C0924M6	21667009166	C1042M1	2113945Y02
C0710M6	2113944A41	C0761M6	2113944C45	C0812M6	2113944C38	C0863M6	21012094092	C0925M6	2113945C31	C1043M1	2113956B54
C0711M6	2113944C47	C0762M6	21012094096	C0813M6	2113944C38	C0864M6	21012094092	C0926M6	2113944C02	C1044M1	2113945B02
C0712M6	2113945C04	C0763M6	21012094096	C0814M6	2113944C38	C0865M6	NOT PLACED	C0927M6	2113944C01	C1045M1	2113945B02
C0713M6	2113944A41	C0764M6	2113944C51	C0815M6	2113944C38	C0866M6	21012094090	C0928M6	2113944C51	C1047M1	2113945Y02
C0714M6	21012094097	C0765M6	21667003033	C0816M6	21012094097	C0867M6	21012094090	C0929M6	2113944C49	C1048M1	2113945B02
C0715M6	2113944A41	C0766M6	21667003033	C0817M6	21667003033	C0868M6	21012094082	C0930M6	NOT PLACED	C2000M1	2113945Y02
C0716M6	2113944C55	C0767M6	NOT PLACED	C0818M6	NOT PLACED	C0869M6	21012094090	C0931M6	2113944C02	C2001M1	2113945Y02
C0717M6	2113944C39	C0768M6	NOT PLACED	C0819M6	21667003033	C0870M6	21012094048	C0950M6	2113944C47	C2002M1	2113945B02
C0718M6	NOT PLACED	C0769M6	NOT PLACED	C0820M6	21012094092	C0871M6	2113944C85	C0951M6	21667011356	C2003M1	21667009162
C0719M6	2113944A41	C0770M6	21667003029	C0821M6	NOT PLACED	C0872M6	2113944C85	C0952M6	2113944C47	C2004M1	2113956B54
C0720M6	2113944A37	C0771M6	NOT PLACED	C0822M6	NOT PLACED	C0873M6	21667003028	C0953M6	2113944C47	C2005M1	2113946D05
C0721M6	2113944C82	C0772M6	2113944C35	C0823M6	NOT PLACED	C0874M6	NOT PLACED	C0954M6	21667011351	C2006M1	2113945Y02
C0722M6	NOT PLACED	C0773M6	NOT PLACED	C0824M6	21012094089	C0875M6	2113944C46	C0955M6	2113944C47	C2007M1	2113945Y02
C0723M6	2113945C04	C0774M6	NOT PLACED	C0825M6	21012094097	C0876M6	NOT PLACED	C0956M6	2113944C01	C2008M1	2113945B02
C0724M6	2113944C34	C0775M6	NOT PLACED	C0826M6	21667011491	C0877M6	2113944C42	C0957M6	2113944C49	C2009M1	21667009162
C0725M6	NOT PLACED	C0776M6	21667003038	C0827M6	21667011491	C0878M6	NOT PLACED	C1000M1	2113945Y02	C2010M1	2113945Y02
C0726M6	2113944C51	C0777M6	21012094097	C0828M6	2113944C35	C0879M6	2113944C42	C1001M1	2113945Y02	C2011M1	2113945Y02
C0727M6	NOT PLACED	C0778M6	21012094097	C0829M6	2113944C82	C0880M6	21667003028	C1002M1	2113946K03	C2012M1	2113945Y02
C0728M6	NOT PLACED	C0779M6	NOT PLACED	C0830M6	2113944C84	C0881M6	21012094048	C1003M1	2113945Y02	C2013M1	2113945Y02
C0729M6	NOT PLACED	C0780M6	21012094093	C0831M6	2113944C34	C0882M6	21667011146	C1004M1	2113945Y02	C2014M1	2113945B02
C0730M6	NOT PLACED	C0781M6	NOT PLACED	C0832M6	2113944C32	C0883M6	21667011491	C1005M1	2113945Y02	C2015M1	21667009162
C0731M6	2113944A41	C0782M6	NOT PLACED	C0833M6	2113944C82	C0884M6	2113944C90	C1006M1	2113945Y02	C2016M1	2113956B54
C0732M6	2113945A09	C0783M6	21667003038	C0834M6	2113944C33	C0885M6	2113944C51	C1007M1	2113945Y02	C2020M1	2113956B54
C0733M6	NOT PLACED	C0784M6	NOT PLACED	C0835M6	21012094048	C0886M6	2113944C47	C1008M1	2113946D05	C2021M1	2113956D59
C0734M6	2113945A09	C0785M6	21012094093	C0836M6	2113944C90	C0887M6	21012094082	C1009M1	2113945Y02	C2022M1	2113956D59
C0735M6	21012094093	C0786M6	NOT PLACED	C0837M6	NOT PLACED	C0888M6	21012094102	C1010M1	2113945Y02	C3000M6	2113944C38
C0736M6	NOT PLACED	C0787M6	21012094048	C0838M6	21012094085	C0889M6	NOT PLACED	C1011M1	2113945B02	C3001M6	2113944C06
C0737M6	2113944C51	C0788M6	21012094048	C0839M6	21667011146	C0890M6	NOT PLACED	C1012M1	2113945Y02	C3002M6	2113944C06
C0738M6	2113944A41	C0789M6	2113944C36	C0840M6	21012094085	C0891M6	21667003028	C1013M1	2113945Y02	C3003M6	2113945C31
C0739M6	2113945C31	C0790M6	2113944C82	C0841M6	2113944C37	C0892M6	NOT PLACED	C1014M1	2113945Y02	C3004M6	2113945C02
C0740M6	2113944C51	C0791M6	21667011042	C0842M6	NOT PLACED	C0900M6	NOT PLACED	C1015M1	2113945B02	C3005M6	2113945C02
C0741M6	2113944C82	C0792M6	21012094089	C0843M6	2113944C37	C0901M6	NOT PLACED	C1016M1	21667009166	C3008M6	2113944C51
C0742M6	2113945L49	C0793M6	2113944C32	C0844M6	NOT PLACED	C0902M6	2113944C51	C1017M1	21667009162	C3009M6	2113945C31
C0743M6	2113944C35	C0794M6	2113944C82	C0845M6	21667009291	C0905M6	2113945C31	C1018M1	21667009162	C3010M6	2113944C46
C0744M6	2113944C34	C0795M6	21667011042	C0846M6	21667009320	C0906M6	2113945A10	C1019M1	21667009162	C3011M6	NOT PLACED
C0745M6	2113946J04	C0796M6	2113944C39	C0847M6	21667009320	C0907M6	2113945L41	C1020M1	21667009162	C3012M6	2113946J04
C0746M6	NOT PLACED	C0797M6	2113944C39	C0848M6	2113944C45	C0908M6	21667009166	C1021M1	2113945Y02	C3013M6	2113945C31
C0747M6	2113944C45	C0798M6	2113944C38	C0849M6	2113944C08	C0909M6	2113944C02	C1022M1	2113945Y02	C3014M6	21009337414
C0748M6	NOT PLACED	C0799M6	2113944C38	C0850M6	21012094085	C0910M6	21667009166	C1023M1	2113945Y02	C3015M6	2113946G01
C0749M6	2113944C83	C0800M6	2113944C32	C0851M6	21012094089	C0911M6	2113944C02	C1024M1	2113945Y02	C3016M6	2113945C31

Circuit Ref.	Motorola Part No.										
C3019M6	2113946S35	C3143M1	21667009366	C3233M1	2113945A09	C4114M1	21667009166	C4407M1	NOT PLACED	E0703M6	24012102001
C3020M6	2113945C26	C3144M1	2113945Y02	C3234M1	2113945Y02	C4115M1	21667009166	C4408M1	NOT PLACED	E1000M1	7686949J15
C3021M6	2113944C06	C3145M1	2113944C06	C3235M1	21012102001	C4116M1	21667009166	C4409M1	NOT PLACED	E1001M1	7686949J15
C3022M6	2113945A10	C3146M1	21012102001	C3236M1	2113945C31	C4117M1	21667009166	C4410M1	NOT PLACED	E1002M1	7686949J15
C3029M6	NOT PLACED	C3149M1	2113956A51	C3237M1	21009337414	C4118M1	21667009166	C4411M1	NOT PLACED	E1003M1	7686949J15
C3038M6	21667009379	C3150M1	2113956C37	C3238M1	2113945A09	C4119M1	21667009166	C4412M1	21667009166	E1004M1	7686949J15
C3041M6	21667009379	C3151M1	2113945B02	C3239M1	2113945A09	C4200M1	2113945Y02	C4413M1	21667009166	E1005M1	7686949J15
C3042M6	21667009379	C3152M1	2113944C06	C3240M1	2113956B91	C4201M1	2113945Y02	C4414M1	21667009166	E1006M1	7685268E01
C3044M6	21667009379	C3153M1	2113946J04	C3241M1	2113956B91	C4202M1	21667009166	C4415M1	21667009166	E3000M6	24012102001
C3046M6	NOT PLACED	C3154M1	2113955D13	C3242M1	2113945C31	C4203M1	21667009166	C4417M1	21667009166	E3100M1	24012102001
C3047M6	NOT PLACED	C3155M1	2113945Y02	C3243M1	2113955D37	C4204M1	NOT PLACED	C4418M1	21667009166	E3101M1	2485410Y02
C3048M6	NOT PLACED	C3156M1	2113945Y02	C3244M1	2113956B91	C4205M1	21667009166	C4419M1	21667009166	E3102M1	2485410Y02
C3049M6	NOT PLACED	C3157M1	2113945Y02	C3245M1	2113955D37	C4206M1	21667009166	D0000M2	4815011H01	E3103M1	2485410Y02
C3102M1	21009337414	C3160M1	2113945Y02	C3246M1	2113945C31	C4207M1	21667009166	D0001M2	4815011H01	E3104M1	7686949J22
C3103M1	21667009166	C3161M1	NOT PLACED	C3247M1	2113945Y02	C4208M1	21667009166	D0400M4	4884800Y03	E3105M1	7686949J22
C3104M1	2113946F08	C3171M1	2113946D07	C3248M1	2113945Y02	C4209M1	21667009166	D0401M4	4813974A19	E3106M1	7686949J22
C3105M1	2113946J04	C3173M1	2113946D07	C3249M1	2113956B91	C4210M1	21667009166	D0402M4	4813974A19	E3107M1	7686949J22
C3106M1	2113945C31	C3175M1	2113946A01	C3250M1	2113956B91	C4211M1	21667009166	D0403M4	4884800Y03	E3108M1	7686949J22
C3107M1	2113944C38	C3176M1	2113944C48	C4000M1	2113945Y02	C4212M1	21667009166	D0404M4	4815090H01	E3109M1	7686949J22
C3109M1	21667009166	C3177M1	2113946F08	C4001M1	2113945Y02	C4213M1	21667009166	D0500M3	4813974A19	E3110M1	7686949J22
C3110M1	2113944C06	C3200M1	21667009166	C4002M1	2113945Y02	C4214M1	21667009166	D0700M6	4813974A06	E3111M1	7686949J22
C3111M1	2113946J04	C3201M1	21667009166	C4003M1	2113945Y02	C4218M1	21667009166	D0875M6	48012160001	E3113M1	7686949J22
C3112M1	2113945Y02	C3203M1	2113955D37	C4010M1	21667009166	C4219M1	21667009339	D0876M6	4886622Y06	E3200M1	24012102001
C3113M1	2113946S35	C3204M1	2113955D37	C4011M1	21667009166	C4220M1	21667009339	D0877M6	48012160001	E3201M1	24012102001
C3115M1	2113944C06	C3205M1	21667009166	C4012M1	21667009166	C4221M1	21667009339	D0900M6	48012181001	E3202M1	24012107027
C3116M1	2113955D13	C3206M1	21667009166	C4013M1	21667009166	C4222M1	21667009339	D0950M6	4813974A21	E3203M1	24012102001
C3117M1	2113955D13	C3208M1	2113956C37	C4014M1	21667009166	C4223M1	21667009339	D0951M6	4813974A21	E3204M1	24012102001
C3118M1	2113945Y02	C3209M1	2113945Y02	C4015M1	21667009166	C4224M1	21667009166	D3000M6	4813978P07	E4000M1	24012107027
C3119M1	2113945Y02	C3210M1	2113945Y02	C4019M1	21667009166	C4225M1	21667009166	D3104M1	4885489Y01	E4001M1	7688697V05
C3120M1	2113956E60	C3211M1	2113945A11	C4020M1	21667009166	C4226M1	21667009339	D3160M1	4813978C02	E4002M1	24012107027
C3121M1	2113956D58	C3212M1	2113955D37	C4021M1	21667009166	C4300M1	NOT PLACED	D3161M1	4813978C02	E4003M1	NOT PLACED
C3122M1	2113956A51	C3213M1	2113945A03	C4022M1	21667009166	C4301M1	NOT PLACED	E0000M2	24012095001	E4004M1	24012102001
C3123M1	2113956A51	C3214M1	2113955D37	C4023M1	21667009166	C4302M1	NOT PLACED	E0001M2	24012095001	E4005M1	2485410Y02
C3124M1	2113946D07	C3215M1	2113956F49	C4025M1	21667009166	C4303M1	NOT PLACED	E0002M2	NOT PLACED	E4100M1	7686949J14
C3125M1	2113946D05	C3216M1	2113945Y02	C4026M1	21667009166	C4304M1	21667009166	E0003M2	24012095001	E4101M1	24012107027
C3126M1	2113944C06	C3217M1	2113956B91	C4027M1	21667009166	C4305M1	21667009376	E0004M2	24012095001	E4102M1	NOT PLACED
C3127M1	2113946S35	C3218M1	2113956A51	C4028M1	21667009166	C4306M1	21667009381	E0005M2	24012095001	E4103M1	NOT PLACED
C3128M1	2113946D05	C3219M1	2113956A51	C4029M1	21667009166	C4307M1	NOT PLACED	E0006M2	24012095001	E4104M1	NOT PLACED
C3129M1	2113945Y02	C3220M1	2113946F05	C4030M1	21667009166	C4308M1	NOT PLACED	E0007M2	24012095001	E4200M1	24012107027
C3130M1	2113946D05	C3221M1	2113945Y02	C4100M1	21667009166	C4309M1	21667009166	E0008M2	24012095001	E4201M1	24012107027
C3131M1	2113946A02	C3222M1	2113956A51	C4101M1	21667009166	C4310M1	21667009166	E0009M2	24012095001	E4202M1	24012107027
C3132M1	2113946D05	C3223M1	2113945Y02	C4103M1	21667009166	C4311M1	2113945Y02	E0010M2	24012095001	E4300M1	24012107027
C3133M1	2113946D05	C3224M1	2113946F05	C4104M1	21667009166	C4312M1	2113945Y02	E0200M7	24012095001	E4405M1	24012107027
C3134M1	2113946S35	C3225M1	2113945Y02	C4105M1	21667009166	C4313M1	21667009166	E0300M7	24012095001	E4406M1	7686949J22
C3135M1	2113956A51	C3226M1	NOT PLACED	C4106M1	21667009166	C4314M1	NOT PLACED	E0401M4	24012107027	E4407M1	7686949J22
C3136M1	21012095001	C3227M1	2113946F05	C4107M1	21667009166	C4401M1	NOT PLACED	E0402M4	24012107027	E4408M1	24012107027
C3137M1	2113946D05	C3228M1	2113945Y02	C4108M1	21667009166	C4402M1	NOT PLACED	E0403M4	24012107027	E4409M1	24012102001
C3139M1	2113956A51	C3229M1	2113956A51	C4109M1	21667009166	C4403M1	NOT PLACED	E0404M4	24012107027	F4000M1	65012019001
C3140M1	21012095001	C3230M1	2113945Y02	C4110M1	21667009166	C4404M1	NOT PLACED	E0500M3	24012095001	FL0500M3	9116854H02
C3141M1	2113945Y02	C3231M1	2113945Y02	C4112M1	21667009166	C4405M1	NOT PLACED	E0700M6	24012102001	FL4000M1	24012038001
C3142M1	21012102001	C3232M1	2113945Y02	C4113M1	21667009166	C4406M1	NOT PLACED	E0701M6	24012102001	FL4001M1	24012038001

Circuit Ref.	Motorola Part No.										
J0700M6	09009348002	L0414M4	24009344105	P0000M2	NOT PLACED	Q3103M1	48009494001	R0026M2	0613952R66	R0225M7	0613952Q73
J4000M1	0915767H01	L0415M4	24009344106	P1000M1	2887818K02	Q3105M1	4809939C47	R0027M2	0613952R12	R0226M7	0613952Q29
J4001M1	0915556H01	L0416M4	24667001014	P3000M6	09009344001	Q3160M1	48009494001	R0028M2	0613952R66	R0227M7	0613952G67
J4100M1	0916017H01	L0417M4	24009344109	PASTE1	BU000032A01	Q3161M1	4815272H01	R0029M2	0613952Q25	R0228M7	0613952Q67
J4200M1	09012053001	L0418M4	NOT PLACED	PASTE2	BU000032A01	Q3162M1	4813973M07	R0030M2	0613952R66	R0230M7	0613952Q67
J4400M1	09012053001	L0419M4	NOT PLACED	PASTE3	BU000032A01	Q3163M1	48009494001	R0031M2	0613952R66	R0232M7	0613952Q49
L0000M2	24012154001	L0421M4	24009344105	PASTE4	BU000032A01	Q3200M1	4815270H01	R0033M2	0613952R01	R0233M7	0613952R66
L0001M2	24667001020	L0422M4	NOT PLACED	PASTE5	BU000032A01	Q3201M1	4815272H01	R0034M2	0613952Q57	R0234M7	NOT PLACED
L0002M2	2414017K32	L0424M4	24009344105	PASTE6	BU000032A01	Q3202M1	4815270H01	R0040M2	0613952Q70	R0235M7	0613952Q18
L0003M2	24667001031	L0428M4	24009344105	PCB	84012728001	Q3203M1	4815270H01	R0041M2	0613952Q58	R0250M7	21667009380
L0004M2	24009343017	L0434M4	24667001021	Q0000M2	4813973A13	Q3204M1	4815270H01	R0042M2	0613952Q42	R0300M7	0613952Q66
L0005M2	24667001017	L0435M7	NOT PLACED	Q0001M2	48009494001	Q3205M1	4815270H01	R0043M2	0613952Q73	R0301M7	0613952Q25
L0200M7	24667001031	L0500M3	24009344127	Q0002M2	4813970A59	Q3206M1	4815270H01	R0044M2	0613952R25	R0302M7	0613952Q66
L0201M7	24667001031	L0501M3	24009344128	Q0003M2	4885061Y01	Q3207M1	4815270H01	R0045M2	0613952R66	R0303M7	0613952R05
L0202M7	2415385H01	L0502M3	24009344126	Q0004M2	4815272H01	Q3208M1	4815263H01	R0046M2	0613952Q57	R0304M7	0613952Q89
L0203M7	24009343013	L0503M3	24667001021	Q0006M2	4813973A04	Q4000M1	4809939C47	R0051M2	0613952R01	R0305M7	0613952Q33
L0204M7	24667001031	L0504M3	24667001026	Q0200M7	4885061Y01	Q4001M1	4809939C47	R0052M2	0613952R01	R0306M7	0613952Q32
L0205M7	24667001031	L0505M3	24667001026	Q0201M7	4885061Y01	Q4002M1	4809939C47	R0054M2	0613952M25	R0307M7	0613952Q49
L0206M7	24667001031	L0507M3	24667001024	Q0202M7	4815272H01	Q4100M1	4816023H01	R0056M2	0613952R66	R0308M7	0613952Q32
L0207M7	24667001031	L0700M6	NOT PLACED	Q0203M7	4815272H01	Q4101M1	4815261H01	R0058M2	0613952Q74	R0309M7	0613952Q42
L0208M7	24667001031	L0701M6	24667001014	Q0204M7	4885061Y01	Q4102M1	4815263H01	R0059M2	0613952R66	R0400M4	0613952R01
L0209M7	24667001031	L0702M6	24667001028	Q0205M7	48009494001	Q4103M1	48012271001	R0060M2	0613952Q86	R0401M4	0613952H73
L0210M7	24009343008	L0703M6	24667001028	Q0206M7	4815272H01	Q4105M1	48012271001	R0061M2	0613952Q85	R0402M4	0613952R25
L0211M7	2415385H01	L0704M6	24667001028	Q0207M7	48009494001	Q4106M1	48012271001	R0062M2	0613952Q61	R0403M4	0613952R01
L0212M7	24667001031	L0705M6	24667001007	Q0300M7	4802197J95	Q4109M1	48012271001	R0063M2	0613952Q64	R0404M4	0613952R25
L0214M7	24009343008	L0707M6	24667001028	Q0400M4	4815271H01	Q4112M1	48012271001	R0064M7	NOT PLACED	R0405M4	0613952R05
L0216M7	2415385H01	L0708M6	2479990G01	Q0401M4	4815267H01	Q4120M1	4809939C47	R0200M7	0613952R66	R0406M4	0613952Q91
L0218M7	24667001031	L0709M6	NOT PLACED	Q0402M4	4815118H01	R0000M2	0613952R66	R0201M7	0613952R27	R0407M4	0613952Q91
L0220M7	24667001031	L0710M6	2485873L01	Q0403M4	4815270H01	R0001M2	0613952R66	R0202M7	NOT PLACED	R0408M4	0613952Q75
L0222M7	24667001031	L0711M6	NOT PLACED	Q0404M4	4815271H01	R0002M2	0613952Q96	R0203M7	0613952R07	R0409M4	0613952Q69
L0224M7	24667001030	L0720M6	24667001013	Q0405M4	4815118H01	R0003M2	0613952Q57	R0204M7	0613952R05	R0410M4	0613952R01
L0226M7	24667001018	L0729M6	2414032B60	Q0700M6	4816547H01	R0004M2	0613952Q34	R0205M7	NOT PLACED	R0411M4	0613952R01
L0300M7	24667001017	L0730M6	24667001013	Q0701M6	4816013H01	R0005M2	0613952R66	R0206M7	NOT PLACED	R0412M4	0613952Q83
L0301M7	24667001031	L0850M6	2460592A01	Q0703M6	4802246J29	R0006M2	0613952Q25	R0207M7	0613952Q84	R0413M4	0613958H55
L0302M7	24667001031	L0851M6	2460592A01	Q0704M6	4816548H01	R0007M2	0613952Q54	R0208M7	0613952Q86	R0414M4	0613958H55
L0303M7	24667001021	L0852M6	2460592A01	Q0705M6	48012022001	R0008M2	0613952R01	R0209M7	0613952Q85	R0415M4	0613952Q57
L0304M7	24667001017	L0875M6	2460592A01	Q0875M6	4813970A62	R0009M2	0613952Q58	R0210M7	0613952Q85	R0416M4	0613952Q69
L0305M7	24667001013	L0876M6	24667001029	Q0876M6	4816134H01	R0010M2	0613952R66	R0211M7	21667009380	R0417M4	0613952Q69
L0401M4	24012021001	L0877M6	2414032B49	Q0900M6	4815272H01	R0011M2	0613952Q36	R0212M7	0613952Q32	R0418M4	0613952Q69
L0402M4	24009344102	L0878M6	24667001027	Q0901M6	4815271H01	R0012M2	0613952Q86	R0213M7	0613952Q67	R0419M4	0613952Q69
L0403M4	24667001030	L0880M6	2414032B49	Q1000M1	4815263H01	R0013M2	0613952Q35	R0214M7	0613952Q67	R0420M4	0613952R25
L0404M4	24009344109	L0882M6	24667001027	Q1001M1	4815272H01	R0014M2	0613952R66	R0215M7	0613952Q67	R0421M4	0613952R25
L0405M4	24009315036	L0885M6	24667001014	Q1002M1	4815261H01	R0015M2	0613952R66	R0216M7	0613952Q67	R0422M4	NOT PLACED
L0406M4	24012021001	L0900M6	24667000031	Q1004M1	4815261H01	R0018M2	0613952Q80	R0217M7	0613952Q49	R0423M4	0613952R25
L0407M4	24012021001	L0901M6	24009344018	Q1005M1	4815261H01	R0019M2	0613952R01	R0218M7	0613952Q49	R0424M4	0613952R66
L0408M4	24667001030	L0902M6	24667000031	Q3000M6	0105959T72	R0020M2	0613952R12	R0219M7	0613952R66	R0425M4	NOT PLACED
L0409M4	24667001030	L0950M6	NOT PLACED	Q3001M6	0105959T72	R0021M2	0613952Q80	R0220M7	0613952R66	R0426M4	0613952Q87
L0410M4	24667001025	L0951M6	24009344003	Q3002M6	4813973B01	R0022M2	0613952R66	R0221M7	0613952R66	R0427M4	0613952Q93
L0411M4	24012021001	L0952M6	24009344005	Q3100M1	4815272H01	R0023M2	0613952Q83	R0222M7	0613952Q84	R0429M4	0613952R66
L0412M4	24667001030	L3100M1	24012091002	Q3101M1	4809939C47	R0024M2	0613952Q80	R0223M7	0613952Q73	R0430M4	NOT PLACED
L0413M4	24667001030	M0700M6	2686201B02	Q3102M1	4809939C47	R0025M2	0613952R66	R0224M7	0613952Q85	R0431M4	0613952R01

Circuit Ref.	Motorola Part No.										
R0432M4	0613952H73	R0728M6	NOT PLACED	R0929M6	0613952N85	R1022M1	NOT PLACED	R1075M1	0613952R66	R3107M1	0613952M85
R0433M4	0613952R01	R0729M6	NOT PLACED	R0930M6	0613952N37	R1023M1	0613952R66	R1076M1	0613952R66	R3108M1	0613952R17
R0434M4	0613952L46	R0730M6	NOT PLACED	R0931M6	0613952M77	R1024M1	NOT PLACED	R1077M1	0613952R66	R3109M1	0613952R17
R0435M4	0613952L46	R0731M6	0613958S29	R0932M6	0613952N43	R1025M1	0613952Q73	R1078M1	0613952R66	R3110M1	0613952N55
R0436M4	0613952R66	R0732M6	NOT PLACED	R0933M6	0613952M37	R1026M1	0613952R66	R1079M1	0613952R66	R3111M1	0613952R32
R0437M4	0613952Q77	R0733M6	NOT PLACED	R0934M6	0613952J17	R1027M1	NOT PLACED	R1080M1	0613952Q32	R3112M1	0613952P12
R0438M4	0613958H22	R0734M6	0613958S29	R0935M6	0613952H91	R1028M1	0613952R66	R1081M1	0613952Q32	R3113M1	0613952R17
R0439M4	0613952Q83	R0736M6	0613959Q25	R0936M6	0613952H91	R1029M1	0613952R66	R1082M1	0613952Q32	R3114M1	0613952N01
R0440M4	0613958H25	R0737M6	0613952F01	R0937M6	NOT PLACED	R1030M1	NOT PLACED	R1084M1	0613952R66	R3115M1	0613952Z63
R0441M4	0613958H49	R0738M6	0613959Q53	R0938M6	NOT PLACED	R1031M1	0613952R66	R1088M1	NOT PLACED	R3116M1	0613952E83
R0442M4	0613952Q83	R0739M6	0613952H73	R0939M6	NOT PLACED	R1033M1	0613952Q73	R1089M1	0613952R05	R3117M1	0613952Q73
R0443M4	0613952Q25	R0740M6	NOT PLACED	R0940M6	0613952Z72	R1034M1	0613952R17	R1090M1	0613952R05	R3118M1	0613952R10
R0444M4	0613952K25	R0741M6	0613952E66	R0941M6	0613952N58	R1035M1	NOT PLACED	R1091M1	NOT PLACED	R3119M1	0613952Q73
R0445M4	0613952Q75	R0742M6	NOT PLACED	R0942M6	0613952N58	R1036M1	0613952M66	R1092M1	0613952M43	R3120M1	0613952R66
R0446M4	NOT PLACED	R0743M6	0613952E66	R0943M6	0613952N58	R1037M1	0613952M66	R1093M1	0613952Q73	R3121M1	0613952R66
R0447M4	0613952R66	R0744M6	0613959Q53	R0950M6	0613952G67	R1038M1	0613952R66	R1094M1	0613952M66	R3122M1	0613952M43
R0448M4	0613952Q12	R0745M6	NOT PLACED	R0951M6	0613958M21	R1039M1	0613952R66	R1095M1	0613952Q34	R3123M1	0613952M54
R0500M3	0613952Q87	R0746M6	0613952F01	R0952M6	0613958M21	R1040M1	0613952M66	R1096M1	0613952Q34	R3124M1	0613952R66
R0501M3	0613952R19	R0759M6	0613959H12	R0953M6	0613952G67	R1041M1	0613952R66	R1097M1	0613952R66	R3125M1	0613952R66
R0502M3	0613952Q66	R0849M6	0613952G67	R0954M6	0613952H58	R1042M1	0613952M66	R1098M1	0613952R66	R3126M1	0613952R66
R0503M3	0613952Q88	R0876M6	0613958S73	R0955M6	0613952H58	R1043M1	0613952R66	R2000M1	0613952M66	R3127M1	0613959Y09
R0504M3	0613952Q61	R0877M6	0613959Y37	R0956M6	0613952H67	R1044M1	0613952M66	R2002M1	0613952M66	R3128M1	0613952M10
R0505M3	0613952R66	R0878M6	0613959Y37	R0957M6	0613958C18	R1045M1	0613952M66	R2003M1	0613952M30	R3129M1	0613952M58
R0525M3	0613952R66	R0879M6	0613952J25	R0958M6	0613958C18	R1046M1	0613952M66	R3000M6	0613952H60	R3130M1	0613952R25
R0700M6	0613952H90	R0883M6	0613952G67	R0959M6	0613952R66	R1047M1	0613952R66	R3001M6	0615871H01	R3131M1	0613952R01
R0701M6	0613952G67	R0902M6	0613952R66	R0960M6	0613952N58	R1048M1	0613952R66	R3002M6	0615871H01	R3132M1	0613952R01
R0702M6	0613952H89	R0903M6	0613952N01	R0961M6	0613952N58	R1049M1	0613952Q73	R3003M6	0615871H01	R3133M1	0613952R29
R0703M6	0613952J01	R0904M6	0613952R66	R0962M6	0613952N58	R1050M1	0613952Q73	R3004M6	0615871H01	R3134M1	NOT PLACED
R0704M6	0613952J10	R0905M6	0613952H42	R0965M6	NOT PLACED	R1051M1	0613952K68	R3005M6	0613952H25	R3135M1	0613952R66
R0705M6	0613952Q46	R0906M6	0613958H46	R0966M6	NOT PLACED	R1052M1	NOT PLACED	R3006M6	0613952H25	R3136M1	0613952R17
R0706M6	0613952Q58	R0907M6	0613958H55	R0980M6	0613952N43	R1053M1	0613952R66	R3007M6	0613952M30	R3137M1	0613952R17
R0707M6	0613952Q46	R0908M6	0613952H42	R0981M6	0613952P01	R1054M1	0613952M66	R3008M6	0613952G67	R3138M1	0613952R17
R0708M6	0613952H44	R0909M6	NOT PLACED	R1000M1	0613952R66	R1056M1	0613952Q73	R3009M6	0613952M43	R3139M1	0613952R66
R0709M6	NOT PLACED	R0910M6	0613952H91	R1001M1	0613952M66	R1057M1	0613952Q73	R3010M6	0613952G67	R3140M1	0613952Q91
R0711M6	0613958S44	R0911M6	0613952H85	R1002M1	0613952R66	R1058M1	0613952M66	R3011M6	0613959Q60	R3141M1	0613959Y13
R0712M6	0613958S44	R0912M6	0613958H46	R1003M1	0613952R66	R1059M1	0613952R66	R3012M6	0613959Q60	R3142M1	NOT PLACED
R0713M6	NOT PLACED	R0913M6	0613952M51	R1004M1	0613952R66	R1060M1	0613952R66	R3013M6	0613952R01	R3143M1	0613952Q91
R0714M6	0613952H09	R0914M6	0613952M71	R1005M1	0613952M66	R1061M1	0613952R66	R3014M6	0613952R01	R3144M1	0613952R66
R0715M6	0613952H09	R0915M6	0613952R66	R1007M1	0613952R66	R1062M1	NOT PLACED	R3015M6	0615871H01	R3145M1	0613959Y09
R0716M6	0613952H09	R0916M6	0613952R66	R1008M1	0613952R66	R1063M1	NOT PLACED	R3018M6	0613952H73	R3146M1	0613952M85
R0717M6	0613952H09	R0917M6	0613952P01	R1009M1	0613952R66	R1064M1	NOT PLACED	R3019M6	0613952H60	R3147M1	0613952M43
R0718M6	0613952J05	R0919M6	0613952P01	R1010M1	NOT PLACED	R1065M1	0613952R66	R3020M6	0613952G67	R3148M1	0613952R66
R0719M6	0613952H89	R0920M6	0613952N01	R1011M1	NOT PLACED	R1066M1	0613952M66	R3021M6	0613952R25	R3149M1	0613952R01
R0720M6	0613952H95	R0921M6	0613952N01	R1012M1	0613952R66	R1067M1	0613952M66	R3022M6	0613952R66	R3150M1	0613952N62
R0721M6	0613952G67	R0922M6	0613952R66	R1013M1	0613952M66	R1068M1	0613952R32	R3023M6	NOT PLACED	R3151M1	0613952R25
R0722M6	0613952H32	R0923M6	0613952M30	R1014M1	NOT PLACED	R1069M1	NOT PLACED	R3101M1	0613952Z66	R3153M1	0613952R66
R0723M6	0613952G67	R0924M6	0613952N01	R1016M1	NOT PLACED	R1070M1	0613952Q77	R3102M1	0613952M66	R3154M1	0613952Q89
R0724M6	NOT PLACED	R0925M6	0613952Q59	R1018M1	NOT PLACED	R1071M1	0613952Q77	R3103M1	0613952N62	R3155M1	0613952Q89
R0725M6	0613958S29	R0926M6	0613952H79	R1019M1	0613952R66	R1072M1	0613952Q49	R3104M1	0613952M30	R3156M1	0613952R17
R0726M6	NOT PLACED	R0927M6	0613952N01	R1020M1	0613952M66	R1073M1	0613952R01	R3105M1	0613952R01	R3157M1	0613952R01
R0727M6	0613958S29	R0928M6	0613952P18	R1021M1	0613952Q73	R1074M1	0613952R66	R3106M1	0613952M09	R3158M1	0613952R66

Circuit Ref.	Motorola Part No.										
R3159M1	0613952R01	R3225M1	NOT PLACED	R3278M1	0613952R01	R4109M1	0613952N58	R4314M1	0613952R66	U3001M6	4813973M07
R3160M1	0613952Q89	R3226M1	0613952R01	R3279M1	NOT PLACED	R4110M1	0613952Q85	R4315M1	0613952R66	U3002M6	51012133001
R3161M1	0613952Q73	R3229M1	0613952R01	R3280M1	NOT PLACED	R4111M1	0613952Q85	R4316M1	0613952R66	U3100M1	0104039J08
R3162M1	0613952Q85	R3230M1	0613952R10	R3281M1	NOT PLACED	R4112M1	0613952R01	R4317M1	0613952R66	U3101M1	5114014A01
R3163M1	0613952R01	R3231M1	0613952R10	R3282M1	0613952R66	R4113M1	0613952R01	RT0900M6	0615585H01	U3102M1	51012069001
R3164M1	0613952Q75	R3232M1	0613952R10	R3283M1	0613952R66	R4114M1	0613952Q89	SH0000M2	26012095001	U3103M1	51012142001
R3165M1	0613952R01	R3233M1	0613952R01	R3285M1	0613952R01	R4115M1	0613952N58	SH0001M2	26012095001	U3104M1	5171590Y73
R3166M1	0613952R17	R3234M1	NOT PLACED	R3286M1	0613952R66	R4116M1	0613952Q89	SH0002M2	26012097001	U3105M1	5114610F01
R3167M1	0613952R01	R3235M1	0613952R01	R3287M1	0613952R66	R4117M1	0613952R01	SH0003M2	26012094001	U3106M1	51012140001
R3168M1	0613952Q73	R3236M1	0613952R10	R3288M1	0613952R01	R4118M1	0613952R01	SH0004M2	26012094001	U3107M1	51012140001
R3169M1	0613952R01	R3237M1	NOT PLACED	R3289M1	0613952R01	R4119M1	0613952R01	SH0200M7	26012095001	U3108M1	51012138001
R3170M1	0613952R01	R3238M1	0613952R01	R3290M1	NOT PLACED	R4120M1	0613952N58	SH0300M7	26012095001	U3109M1	5164015H94
R3171M1	NOT PLACED	R3239M1	0613952Q49	R3291M1	NOT PLACED	R4121M1	0613952Q85	SH0400M4	26012096001	U3110M1	51012208001
R3172M1	NOT PLACED	R3240M1	0613952R01	R3292M1	0613952R66	R4122M1	0613952Q85	SH0401M4	26012096001	U3111M1	5188690V02
R3173M1	0613952R66	R3241M1	0613952M54	R3293M1	0613952R66	R4123M1	0613952N58	SH0402M4	26012098001	U3112M1	5114004A35
R3174M1	0613952R66	R3242M1	0613952R01	R4001M1	0613952R66	R4124M1	0613952N58	SH0403M4	26012098001	U3113M1	5188690V02
R3175M1	0689774Y02	R3243M1	0613952R01	R4003M1	0613952R66	R4125M1	0613952Q85	SH0500M3	26012098001	U3114M1	NOT PLACED
R3176M1	0689774Y02	R3244M1	0613952R10	R4006M1	0613952Q37	R4126M1	0613952Q85	SH0501M3	NOT PLACED	U3115M1	5185937Y01
R3177M1	0613952R66	R3245M1	NOT PLACED	R4007M1	0613952Q37	R4127M1	0613952Q85	SH0850M6	26012100001	U3200M1	51009415001
R3178M1	0615871H01	R3246M1	0613952R01	R4008M1	0613952R01	R4128M1	0613952R01	SH0900M6	2686425Z02	U3201M1	5114016A18
R3179M1	0613952R17	R3247M1	0613952Q49	R4010M1	0613952R01	R4200M1	0613952R66	SH0901M6	2686425Z02	U3204M1	51009509001
R3180M1	0613952R01	R3248M1	0613952R66	R4013M1	0613952Q42	R4201M1	0613952R66	SH3100M1	NOT PLACED	U3205M1	5114016A18
R3181M1	NOT PLACED	R3249M1	0613952R66	R4015M1	0613952Q37	R4202M1	0613952R66	SP3000M6	NOT PLACED	U4000M1	51012082001
R3182M1	0613952R66	R3250M1	0613952R66	R4021M1	0613952R66	R4203M1	0613952R66	SP3001M6	NOT PLACED	U4001M1	51012082001
R3183M1	0613952H92	R3251M1	0613952R66	R4024M1	0613952R01	R4204M1	0613952R66	T0000M2	24012146001	U4100M1	5189139P01
R3184M1	0613952M30	R3252M1	0613952R66	R4025M1	0613952R01	R4205M1	0613952R66	T0400M4	2515121H01	U4200M1	NOT PLACED
R3200M1	0613952C44	R3253M1	0613952R66	R4026M1	0613952R66	R4206M1	0613952R66	T0401M4	2515121H01	U4201M1	NOT PLACED
R3201M1	0613952Q49	R3254M1	0613952R01	R4027M1	0613952R66	R4207M1	0613952R66	U0000M2	51009877001	U4300M1	51012082001
R3202M1	0613952C44	R3255M1	0613952R66	R4028M1	0613952R01	R4208M1	0613952R66	U0001M2	5109731C48	U4301M1	51012082001
R3203M1	0613952Q49	R3256M1	0613952M66	R4029M1	0613952R01	R4209M1	HZ000375A01	U0002M2	4802197J95	VR0001M2	4815096H01
R3204M1	0613952C44	R3257M1	0613952R01	R4030M1	0613952R01	R4210M1	HZ000375A01	U0200M7	5186310Y39	VR0200M7	4805656W87
R3205M1	0613952C44	R3258M1	0613952M66	R4031M1	0613952R01	R4211M1	HZ000375A01	U0500M3	4802197J95	VR0201M7	4805656W87
R3206M1	0613952R01	R3259M1	0613952M66	R4032M1	0613952R66	R4212M1	HZ000375A01	U0901M6	5180390L83	VR0202M7	4805656W87
R3207M1	0613952R01	R3260M1	0613952M66	R4033M1	0613952M43	R4213M1	HZ000375A01	U0902M6	51012221001	VR0203M7	4805656W87
R3208M1	0613952N30	R3261M1	0613952R01	R4034M1	0613952M43	R4214M1	HZ000375A01	U0903M6	5115022H01	VR0204M7	4805656W87
R3209M1	0613952R03	R3262M1	0613952R10	R4035M1	0613952R66	R4215M1	0613952R66	U0904M6	5109731C48	VR0205M7	4805656W87
R3210M1	0613952Q67	R3263M1	NOT PLACED	R4036M1	0613952R66	R4216M1	0613952R66	U0905M6	5109731C48	VR0206M7	4805656W87
R3211M1	0613952N30	R3264M1	0613952R01	R4037M1	0613952R01	R4217M1	0613952R66	U1000M1	5171320H01	VR0207M7	4805656W87
R3212M1	0613952R03	R3265M1	0613952M66	R4038M1	0613952R01	R4218M1	0613952R66	U1001M1	51012295001	VR0208M7	4805656W87
R3213M1	0613952Q42	R3266M1	0613952R01	R4039M1	NOT PLACED	R4301M1	NOT PLACED	U1002M1	5189139P01	VR0209M7	NOT PLACED
R3214M1	0613952J25	R3267M1	NOT PLACED	R4040M1	NOT PLACED	R4302M1	0613952R66	U1003M1	5175772B56	VR0210M7	4805656W87
R3215M1	0613952R01	R3268M1	0613952R01	R4041M1	NOT PLACED	R4303M1	0613952R66	U1004M1	5175772B56	VR0211M7	4805656W87
R3216M1	0613952R17	R3269M1	0613952M66	R4100M1	0613952R01	R4304M1	0613952R66	U1005M1	5164852H47	VR0214M7	4805656W87
R3217M1	0613952R01	R3270M1	0613952R01	R4101M1	0613952Q77	R4305M1	0613952R66	U1006M1	5185493Y01	VR0215M7	4805656W87
R3218M1	0613952R01	R3271M1	NOT PLACED	R4102M1	0613958H83	R4306M1	0613952R66	U1007M1	5189139P01	VR0400M4	4805656W87
R3219M1	NOT PLACED	R3272M1	0613952R01	R4103M1	0613952Q85	R4307M1	0613952R66	U1008M1	5189139P01	VR0401M4	4805656W87
R3220M1	0613952R01	R3273M1	0613952M66	R4104M1	0613952Q89	R4309M1	NOT PLACED	U1009M1	5115001H02	VR0402M4	4805656W87
R3221M1	NOT PLACED	R3274M1	0613952R10	R4105M1	0613952Q89	R4310M1	0613952R66	U1010M1	5171320H01	VR0403M4	4805656W87
R3222M1	0613952R01	R3275M1	0613952R10	R4106M1	0613952Q89	R4311M1	0613952R66	U2000M1	MM000157A01	VR0404M4	4805656W87
R3223M1	0613952R66	R3276M1	0613952R10	R4107M1	0613952R01	R4312M1	0613952R66	U2001M1	MM000129A01	VR0405M4	4805656W87
R3224M1	NOT PLACED	R3277M1	0613952R10	R4108M1	0613952Q89	R4313M1	NOT PLACED	U3000M6	5116525H01	VR0406M4	4805656W87

<b>Circuit Ref.</b>	<b>Motorola Part No.</b>
VR0407M4	4805656W87
VR3000M6	48012202001
VR3002M6	4813977M10
VR3103M1	48012095001
VR3104M1	48012095002
VR3105M1	4813977M10
VR3200M1	48012049001
VR3201M1	4813977A48
VR3202M1	4813977A48
VR4000M1	4813977M13
VR4001M1	4813977A48
VR4002M1	48012153001
VR4100M1	4813977A48
VR4101M1	4813977A48
VR4102M1	4813977A48
VR4103M1	4813977A48
VR4104M1	48012049001
VR4105M1	4813977M13
VR4106M1	4813977A48
VR4107M1	4813977A48
VR4108M1	4813977A48
VR4109M1	4813977A50
VR4110M1	4815040H01
VR4111M1	48012153001
Y0000M2	4875185M05

Note: The suffix "M1", "M2", etc. from the Circuit Ref is removed from the schematic and overlays.

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## Appendix A Replacement Parts Ordering

### A.1 Basic Ordering Information

Some replacement parts, spare parts, and/or product information can be ordered directly. While parts may be assigned with a Motorola part number, this does not guarantee that they are available from Motorola Radio Products and Solutions Organization (RPSO). If no Motorola part number is assigned, the part is normally not available from Motorola, or is not a user-serviceable part. Part numbers appended with an asterisk are serviceable by Motorola Depot only.

### A.2 Motorola Online

Motorola Online users can access our online catalog at

<https://businessonline.motorolasolutions.com>

To register for online access, please call 1-800-422-4210 (for U.S. and Canada Service Centers only). International customers can obtain assistance at <https://businessonline.motorolasolutions.com>

### A.3 Mail Orders

Mail orders are only accepted by the US Federal Government Markets Division (USFGMD).

Motorola  
7031 Columbia Gateway Drive  
3rd Floor - Order Processing  
Columbia, MD 21046  
U.S.A.

### A.4 Telephone Orders

Radio Products and Solutions Organization\*  
(United States and Canada)  
7:00 AM to 7:00 PM (Central Standard Time)  
Monday through Friday (Chicago, U.S.A.)  
1-800-422-4210  
1-847-538-8023 (United States and Canada)

U.S. Federal Government Markets Division (USFGMD)  
1-877-873-4668  
8:30 AM to 5:00 PM (Eastern Standard Time)

### A.5 Fax Orders

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

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

## **A.6 Parts Identification**

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

## **A.7 Product Customer Service**

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

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

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## **Appendix B Motorola Service Centers**

### **B.1 Servicing Information**

If a unit requires further complete testing, knowledge and/or details of component level troubleshooting or service than is customarily performed at the basic level, please send the radio to a Motorola Service Center as listed below or your nearest Authorized Service Center.

### **B.2 Motorola Service Center**

1220 Don Haskins Drive  
Suite A  
El Paso, TX 79936  
Tel: 915-872-8200

### **B.3 Motorola Federal Technical Center**

10105 Senate Drive  
Lanham, MD 20706  
Tel: 1-800-969-6680  
Fax: 1-800-784-4133

### **B.4 Motorola Canadian Technical Logistics Center**

Motorola Canada Ltd.  
8133 Warden Avenue  
Markham, Ontario, L6G 1B3  
Tel: 1-800-543-3222  
Fax: 1-888-331-9872 or 1-905-948-5970

## Notes

# 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>CMOS</b>	Complementary Metal Oxide Semiconductor.
<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 communication 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>GNSS</b>	Global Navigation Satellite 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>LDMOS</b>	Laterally Diffused Metal Oxide Semiconductor.
<b>LED</b>	Light Emitting Diode: An electronic device that lights up when electricity is passed through it.
<b>MDC</b>	Motorola Digital Communications.
<b>MHz</b>	Megahertz: One million cycles per second. Used especially as a radio-frequency unit.

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Term	Definition
<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>	An electronic device that recovers information from a modulated RF signal. 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>USB_DM_MAP</b>	USB D- Connection at the rear accessory connector.
<b>USB_DP_MAP</b>	USB D+ Connection at the rear accessory connector.
<b>VHF</b>	Very High Frequency.
<b>VIP</b>	Vehicle Interface Port.
<b>Wi-Fi</b>	Wireless Fidelity
<b>XPR</b>	Refers to Digital Professional Radio model names in the MOTOTRBO Professional Digital Two-Way Radio System.





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