

HYT

SERVICE MANUAL MOBILE RADIO

TM-610

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8130M61000020

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Revision History

Material No.	Date of Issue	Changes
8130M61000000	October, 2006	Initial Release
8130M61000010	September, 2007	Software: function keys, adjustment items and channel initialization data tables for all models are added. Circuit: 1. New frequency bands (470-520MHz, 350-400MHz and 440-470MHz) are added; 2. Tuning Description, Parts List 1, Schematic Diagrams and PCB View are updated; 3. Definition of J503 (port for further development) are supplemented. Structure: Exploded View and Parts List 2 are updated.
8130M61000020	December, 2009	Circuit: The PCB is updated. 1. Tuning Description, Parts List 1, Schematic Diagrams and PCB View are updated; 2. Definition of J503 (further expansion port) is updated; 3. DI circuit and reset IC are added.

Introduction

Manual Scope

This manual is intended for use by experienced technicians familiar with similar types of communication equipment. It contains all service information required for the equipment and is current as of the publication date.

TM-610	VHF	Mobile radio with PCB No. 410M6001007H0
	U1-U4	Mobile radio with PCB No. 410M6001008K0
	U5	Mobile radio with PCB No. 410M600100870

Safety Information

The following safety precautions shall always be observed during operation, service and repair of this equipment.

- This mobile radio shall be serviced by qualified technicians only.
- Do not modify the mobile radio for any reason.
- Use only HYT supplied or approved antenna.
- Antenna gain must not exceed 3dBi for VHF or 5.5dBi for UHF.
- Mobile antenna Installation: Install the mobile antenna at least 82cm (32 inches) away from your body, in accordance with the requirements of the antenna manufacturer/supplier.
- Transmit only when people inside and outside the vehicle are at least the minimum distance away from a properly installed, externally mounted antenna.
- Mobile antenna substitution: Don't substitute HYT supplied or approved antenna, or excessive radio frequency radiation will result. Please contact the dealer or the manufacturer for further instructions.
- Please make sure there's no stress on the antenna joint during transportation or installation.
- To avoid electromagnetic interference and/or compatibility conflicts, turn off the mobile radio in any area where posted notices instruct you to do so.
- For vehicles with an air bag, do not place the mobile radio over the air bag or in its deployment area.
- Turn off the mobile radio prior to entering any area with explosive and flammable materials.
- Do not expose the mobile radio to direct sunlight for a long time, nor place it close to a heating source.

■ Operation Guidelines

For vehicles equipped with electronic devices such as anti-skid braking systems, electronic ignition systems or electronic fuel injection systems, interferences may occur during radio transmission. If the foregoing electronic devices are installed on your vehicle, please contact the dealer for further assistance to make sure that radio transmission will not interfere with these devices.

For radio installation in vehicles fueled by LP gas with LP gas container within interior of the vehicles, the following precautions are recommended for personal safety.

- Any space containing radio equipment shall be isolated by a seal from the space in which the LP gas container and its fittings are located.
- Remote (outside) fitting connections shall be used.

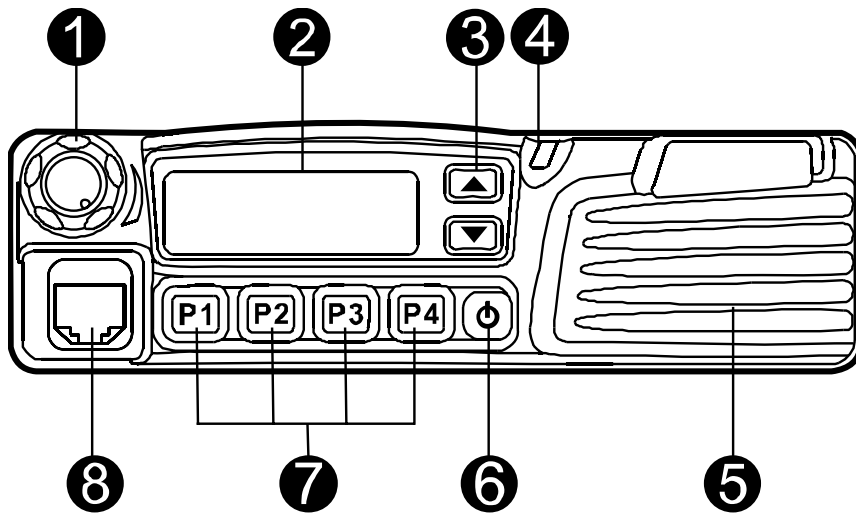
- Good ventilation is required for the container space.

■ Installation Guidelines

- Vehicle installation: The antenna can be mounted at the center of a vehicle metal roof or trunk lid if the minimum safe distance is observed.
- Do not mount the mobile radio overhead or on a sidewall unless you take special precautions.
- If the mobile radio is not properly installed, road shock could bump the radio loose, and the falling radio could, in some circumstances, cause serious injury to the driver or a passenger. In case of vehicle accidents, even when properly installed, the radio could break loose and become a dangerous projectile.

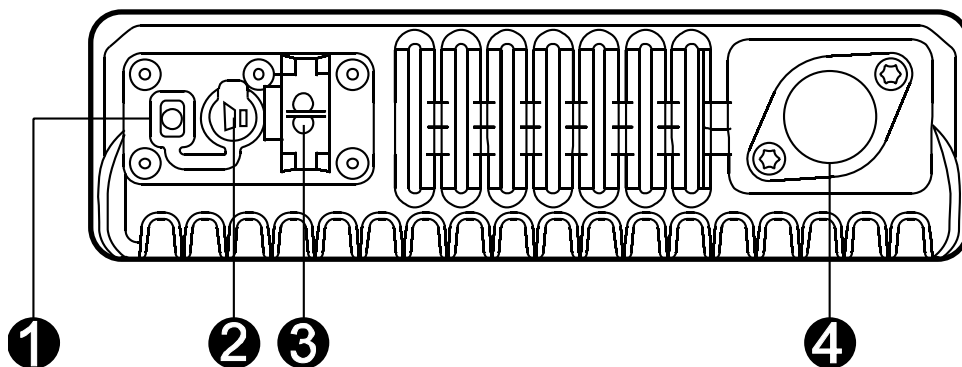
Radio Overview

■ Front Panel



- ① Volume Control Knob
- ② LCD Display
- ③ Programmable Function Keys ▲/▼
- ④ LED Indicator
- ⑤ Speaker
- ⑥ Power Switch
- ⑦ Programmable Function Key **P1/P2/P3/P4**
- ⑧ Microphone Jack

■ Rear Panel



- ① 15-Pin Connector (for external accessories)

② External Speaker Jack

Used to connect the external speaker (for the 3.5mm plug only).

Note: Please refer to “Test Cable for Speaker Output” in “Tuning Description” for details.

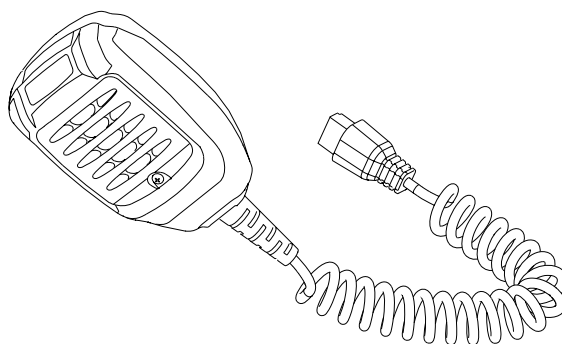
③ Power Inlet

Used to access DC power of 13.6V through HYT supplied power cord.

④ Antenna Connector

Used to connect the external antenna.

■ Palm Microphone



■ LED Indicator

Indicator	Description
Solidly glows red	The radio is transmitting signals.
Solidly glows green	The radio is receiving signals.
Flashes orange	The radio has received encoding squelch, select calls or 2-tone calls.

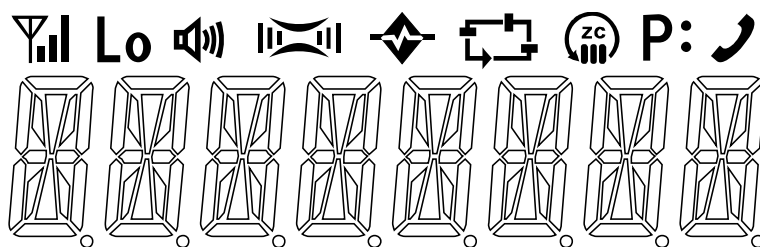
■ Programmable Function Keys

The **P1-P4** and **▲/▼** keys can be programmed with auxiliary functions below:

1. Off
2. CH Up
3. CH Down
4. Zone Up
5. Zone Down

6. MONI A
7. MONI B
8. MONI C
9. MONI D
10. Display Frequency
11. Display Mode Switch
12. User Selectable Tone
13. Sel 2-Tone
14. TX Power
15. Scan
16. Add/Del
17. Reverse frequency
18. TalkAround
19. Selectable Squelch Level
20. Home Channel
21. Public Address
22. Scrambler
23. Compander
24. Emergency Call
25. HDC Encode
26. Lone Worker
27. Whisper
28. Short Message
29. Rent Time Inquiry
30. AUX A
31. AUX B

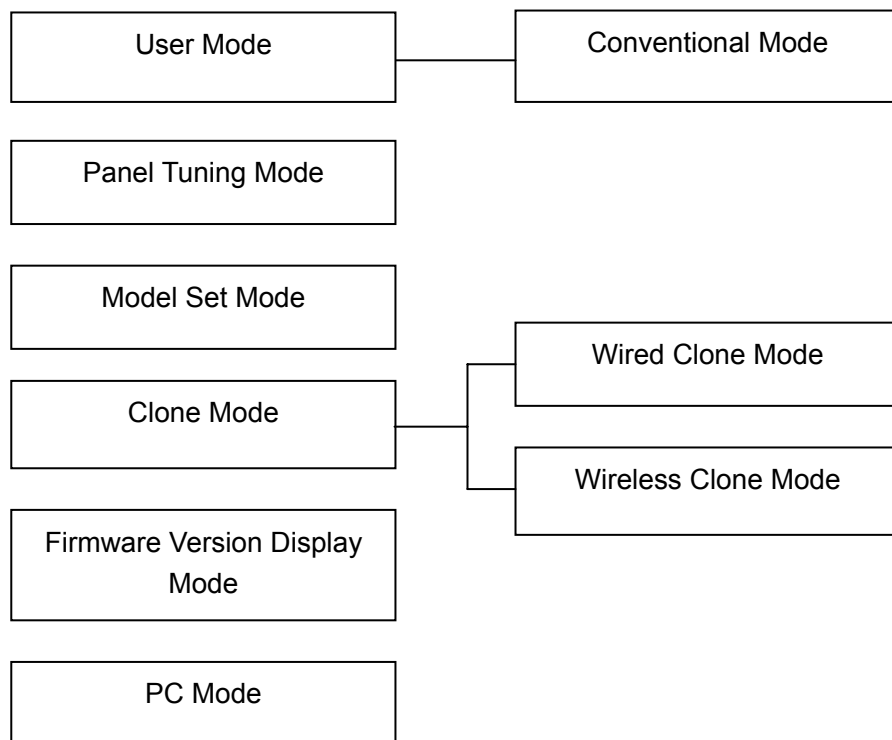
■ LCD Display



Indicator	Description
	Indicates the CH number, CH label, zone number, zone label, DTMF digit, CH frequency, menu and setting items, etc.
Lo	Appears when the TX power is low.
	Press the programmed Monitor key, and  appears when CTCSS/CDCSS or 2-Tone decoding is disabled.  appears when the speaker is unmuted.
	Appears when busy channel (non-priority channel) is scanned.
	Appears when you start to send a call.
	C indicates your selected channel is included in the scan list. Z indicates multiple groups scan.
	Appears when the scrambler function is enabled.
	Appears when the compander function is enabled.
	Appears when your selected channel is busy.
P:	Appears when your selected channel is programmed to be priority channel. P• indicates the priority channel 1, P. indicates the priority channel 2, and P: Indicates priority channel 1 and 2.

Software Specifications

■ Frame of Radio Modes



Keypad Entry for Mode Startup

Mode	Display	Operation	Remarks
User Mode	Welcome Screen and then CH number	The radio enters User Mode upon power-on.	Conventional Mode
Panel Tuning Mode	TXHIGH	Power the radio on while holding down P1 .	
Model Set Mode	DESTINA0	Power the radio on while holding down P2 .	
Clone Mode	CLONE	Power the radio on while holding down P3 .	
Firmware Version Display Mode	Firmware Version VX.XX.XX	Power the radio on while holding down P4 .	
PC Mode	PROGRAM	Connect the mobile radio to PC via the programming cable, and then send commands via PC.	

User Mode

Power on the radio and you will enter this conventional mode.

Panel Tuning Mode

You can perform tuning in the following steps:

- 1) Power on the radio while holding down **P1** to enter the tuning mode.
- 2) Use **▲/▼** to select the tuning item, and press **P4** to enter.
- 3) After you enter the sub-item by pressing **P4**, use **▲/▼** to adjust the parameter, and press **P4** to save and enter the next sub-item; or press **P1** to return to the previous menu without saving the settings.

Tuning items and display (***: 1-256): Please go to *Tuning Description---Panel Tuning Mode---Tuning items and Display* for details.

Model Set Mode

You can go with operations in this mode as follows:

- 1) Power on the radio while holding down **P2** to enter the Model Set mode. At this time, the LCD displays "DESTINA.*", where "*" represents the model number.
- 2) Use **▲/▼** to select the model number 0-5.
- 3) Press **P4** to confirm your selected model number. The LED glows orange and the LCD displays "WAIT". After reset, the radio enters User mode.

Note:

1. Once a new model is set by pressing **P4**, the previously stored channel information (such as frequency, CTCSS/CDCSS and functions assigned to each channel) will be cleared, and some functions will also be changed. Therefore, do not perform this operation unless it's very necessary (e.g. when EEPROM is replaced).
2. The table below shows frequency range (L: lowest frequency; H: highest frequency; C: center frequency) of each model and initial frequency of each channel upon setting model number.

Model No.	RX/TX	1 (C)	2 (L)	3 (H)	4	5	6	7	8
0 (V)	RX (MHz)	155.15	136.15	173.85	145.55	164.50	155.00	155.20	155.40
	TX (MHz)	155.00	136.00	174.00	145.50	164.50	155.00	155.20	155.40
1 (U1)	RX (MHz)	435.15	400.15	469.85	417.55	452.50	435.00	435.20	435.40
	TX (MHz)	435.00	400.00	470.00	417.50	452.50	435.00	435.20	435.40
2 (U2)	RX (MHz)	475.15	450.15	499.85	462.55	487.50	475.00	475.20	475.40
	TX (MHz)	475.00	450.00	500.00	462.50	487.50	475.00	475.20	475.40
3 (U3)	RX (MHz)	495.15	470.15	519.85	482.55	507.50	495.00	495.20	495.40
	TX (MHz)	495.00	470.00	520.00	482.50	507.50	495.00	495.20	495.40
4 (U4)	RX (MHz)	375.15	350.15	399.85	362.55	387.50	375.00	375.20	375.40
	TX (MHz)	375.00	350.00	400.00	362.50	387.50	375.00	375.20	375.40
5 (U5)	RX (MHz)	455.15	440.15	469.85	447.55	462.50	455.00	455.20	455.40
	TX (MHz)	455.00	440.00	470.00	447.50	462.50	455.00	455.20	455.40

TM-610 V: 136-174;

TM-610 U1: 400-470;

TM-610 U2: 450-500;

TM-610 U3: 470-520;

TM-610 U4: 350-400;

TM-610 U5: 440-470;

CH		1	2	3	4	5	6	7	8
CTCSS	RX	OFF	OFF	OFF	OFF	CTS67.0HZ	DI454	151.4	DI454
CDCSS	TX	OFF	OFF	OFF	OFF	CTS67.0HZ	DI454	151.4	DI454
PWR	TX	H	H	H	L	L	L	L	L
CH		CH 1	CH 2	CH 3	CH 4	CH 5	CH 6	CH 7	CH 8
NAME		Wide	Wide	Wide	Narrow	Wide	Wide	Narrow	Narrow

Clone Mode

Data can be transferred from radio to radio either by wired cloning or wireless cloning. Operation methods are given in the following paragraphs.

Wired Clone Mode

- 1) Power on the source radio while holding down **P3**. The radio displays “CLONE” and enters Clone mode or enters User Mode if Clone Mode is set OFF by the dealer.
- 2) Press **P3** to switch between Dealer Clone Mode and Factory Clone Mode, with “DEACLONE” and “FACCLONE” displayed respectively. The radio restores its original display mode in 5 seconds. Dealer Clone Mode is the default mode in which tuning data and embedded messages will not be cloned. However, in Factory Clone Mode, all data will be cloned.
- 3) Connect two radios using a clone cable, and then turn on the target radio.
- 4) Press **P4** on the source radio to start cloning. LED on the source radio glows red, and it begins to transmit data to the target radio. During the cloning process, LCD of the target radio displays “PROGRAM” and its LED glows green. Upon completion of cloning, LCD of the source radio displays “END”. And the target radio automatically enters User Mode after receiving all data.
- 5) Press **P4** on the source radio to return to Clone Mode, and “CLONE” is displayed. Repeat the above steps for further wired cloning.

Wireless Clone Mode

- 1) Power on the source radio while holding down **P3**. The radio displays “CLONE” and enters Clone mode or enters User Mode if Clone Mode is set OFF by the dealer.
- 2) Press **P1** to enter Wireless Clone Mode. The LCD displays “WIRELESS” for about two seconds, and then displays its channel frequency (wireless cloning is performed at this frequency). Press **P1** again to return to Clone Mode, or press ▼ to switch the channel for wireless cloning.

- 3) Press **P3** to switch between Dealer Clone Mode and Factory Clone Mode, with “DEACLONE” and “FACCLONE” displayed respectively. The radio restores its original display mode in 5 seconds. Dealer Clone Mode is the default mode in which tuning data and embedded messages will not be cloned. However, in Factory Clone Mode, all data will be cloned.
- 4) For the target radio, repeat the above steps 1) and 2), and set its cloning frequency the same as that of the source radio. Place the target radio close to the source radio, and press **P4** of the source radio to start cloning.
- 5) The source radio is transmitting data to the target radio. During data transmission, the source radio displays the percentage of the transmitted data, with red LED glowing. During data receiving, the target radio displays the percentage of the received data and a “BUSY” icon, with orange LED glowing.
- 6) Upon completing of data transmission, LCD of the source radio displays “END” and the LED flashes red. Press **P1** to read the cloning frequency and repeat the above steps to continue. The target radio enters User Mode automatically after receiving all data.

Note: Clone Mode can be enabled or disabled by the dealer. You can perform cloning only when such mode is enabled by the dealer.

Firmware Version Display Mode

Power on the radio while holding down **P4**. The LCD displays the firmware version accordingly. Release **P4** to enter User Mode automatically.

PC Mode

Connect the mobile radio to a PC using a programming cable. Data can be transmitted to the mobile radio and saved in the EEPROM.

You can configure the parameters and tune the mobile radio via the programming software.

- 1) Once PC starts to transfer data to the mobile radio, “PROGRAMM” will be displayed on the LCD. When the data is written to the mobile radio, the LED glows green; and when the data is read from the mobile radio, the LED glows red. The mobile radio will reset automatically when programming is completed.
- 2) The following items can be set via programming software:
 - TX High Power

- TX Low Power
- Maximum Frequency Deviation
- CDCSS Balance
- CTCSS Deviation (67.0Hz)
- CTCSS Deviation (151.4Hz)
- CTCSS Deviation (254.1Hz)
- CDCSS Deviation
- DTMF Deviation
- MSK Deviation
- Single Tone Deviation
- RX Sensitivity
- Squelch ON Level (9)
- Squelch ON Level (3)
- Squelch OFF Level (9)
- Squelch OFF Level (3)

■ Key Assignment

The dealer may assign one of the following functions to the programmable key (**P1/ P2/ P3/ P4/ ▲/ ▼**).

See the table below for reference.

Key Assignment				
No.	Function Key	Settings	Display	Remarks
1	P1-P4 & ▲/▼	Off		No function
		CH Up	CH Information	Channel up
		CH Down	CH Information	Channel down
		Zone Up	Zone Information	Zone up
		Zone Down	Zone Information	Zone down
		MONI A	MoniA Icon	Monitor A: Monitor Unmute – Momentary
		MONI B	MoniB Icon	Monitor B: Monitor Unmute – Toggle
		MONI C (default)	MoniC Icon	Monitor C: Carrier Unmute – Momentary
		MONI D	MoniD Icon	Monitor D: Carrier Unmute – Toggle
		Display Frequency	CH Frequency	Displays the channel frequency

		Display Mode Switch	Mode Information	Displays the channel number, channel label, zone number, zone label and channel frequency.
		User Selectable Tone	UST Information	Tone 01-32 (CTCSS/CDCSS)
		Sel 2-Tone	2-Tone Information	Selects 2-Tone encode
		TX Power	Power Icon	Displays when the TX power is low
		Scan	SCAN and Icon	Scan
		Add/Delete	CH Information	Adds or deletes scan channel in non-scan status
				Temporarily deletes nuisance channel
		Reverse	RE and CH Number	Reverse frequency
		Talk Around	TA and CH Number	Talk Around
		SEL SQL	SQL Level	Selects squelch level
		Home CH	HOME and CH Number	Home Channel
		Public Address	PA	Public Address
		Scrambler	Scrambler Icon	Scrambler
		Compander	Compander Icon	Compander
		Emergency Call	Emergency	Emergency Call
		HDC Encode	HDC Menu	HDC call
		Lone Worker	LONE ON/OFF	Lone Worker
		Whisper	WHISP ON/OFF	Whisper
		Short Message	Message Menu	Short Message
		Remaining Rental Time Inquiry	Remaining Time	Inquires about the remaining rental time
		AUX A	AUX A	AUX A
		AUX B	AUX B	AUX B
2	HOOK/ MONI	Hook Check		This option should be selected when palm microphone is used.
		Monitor		This option should be selected when desktop microphone is used.
3	Selector Knob	Selector Knob		For controlling the volume as well as selecting the channel and zone

Circuit Description

1. Frequency Configuration

The receiver utilizes double conversion superheterodyne techniques. The first IF is 49.95MHz and the second IF is 450KHz. The first LO signal is supplied by the PLL circuit, and the second LO signal (50.4MHz) is generated by frequency tripling of TCXO (16.8MHz). The PLL circuit also generates frequencies required by the transmitter. See Figure 1.

TM-610 Frequency Range VHF: 136MHz - 174MHz;

UHF: 400MHz - 470MHz:

450MHz - 500MHz:

470MHz - 520MHz:

350MHz - 400MHz:

440MHz - 470MHz.

2. Receiver Circuit

Configuration of the receiver section is shown as the figure below.

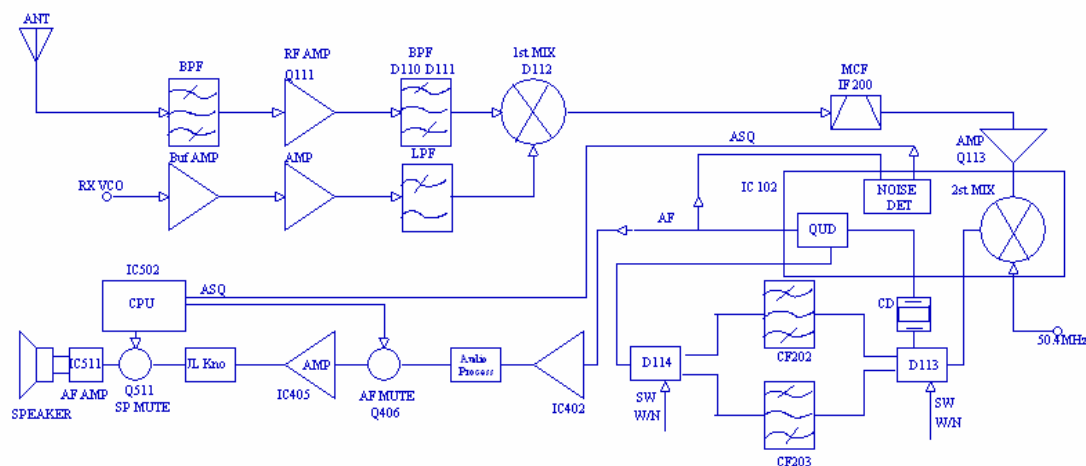


Figure 1 RX Circuit

2.1 RF AMP BPF

The circuit consists of front-stage BPF, RF amplifier (Q111) and final-stage BPF (D110 and D111). The bandpass frequency range varies with the radio models. The BPF is used to eliminate unwanted signals and let only wanted signals go to the mixer.

2.2 First Mixer Circuit

The signal output from RF AMP&BPF is mixed with the first LO signal from the PLL circuit at the mixer

(D112) to generate a 49.95MHz first IF signal. Then the first IF signal will feed through a crystal filter (IF200) to further remove spurious signals.

2.3 IF Amplifier Circuit

After amplified at Q113, the first IF signal enters IC102 (TA31136FN), where it is mixed with the second LO signal (50.4MHz) to generate a 450KHz second IF signal. Then the second IF signal feeds through a pair of ceramic filters (N: CF202; W: CF203) where unwanted signals are removed. Finally the signal goes to the frequency discriminating circuit of IC102 to output audio signal from Pin 9.

2.4 Audio Amplifier Circuit

The audio signal from IC102 is amplified and filtered at IC402, and then amplified again at IC401 (the received signaling is separated and sent to CPU for decoding). Then the signal passes through Q406 (AF MUTE), and enters IC405 for further amplification. After the volume is controlled at K301 on the control panel, and SP MUTE is controlled at Q511, the signal feeds into IC511 to output audio signal to drive the speaker.

2.5 Squelch Control Circuit

One flow of the audio signals from IC102 feeds into IC102 (from Pin8) for amplification, filtering and rectification, and then a SQL level is derived. Then the SQL level is sent to CPU (IC502) for comparison with the reference level to generate a level which controls AFMUTE and SP MUTE. The level controls Q406 and Q511 to open or close the audio channel.

3. Transmitter Circuit

The transmitter circuit consists of MIC circuit, demodulation circuit, RF driver and final-stage PA circuit and APC circuit.

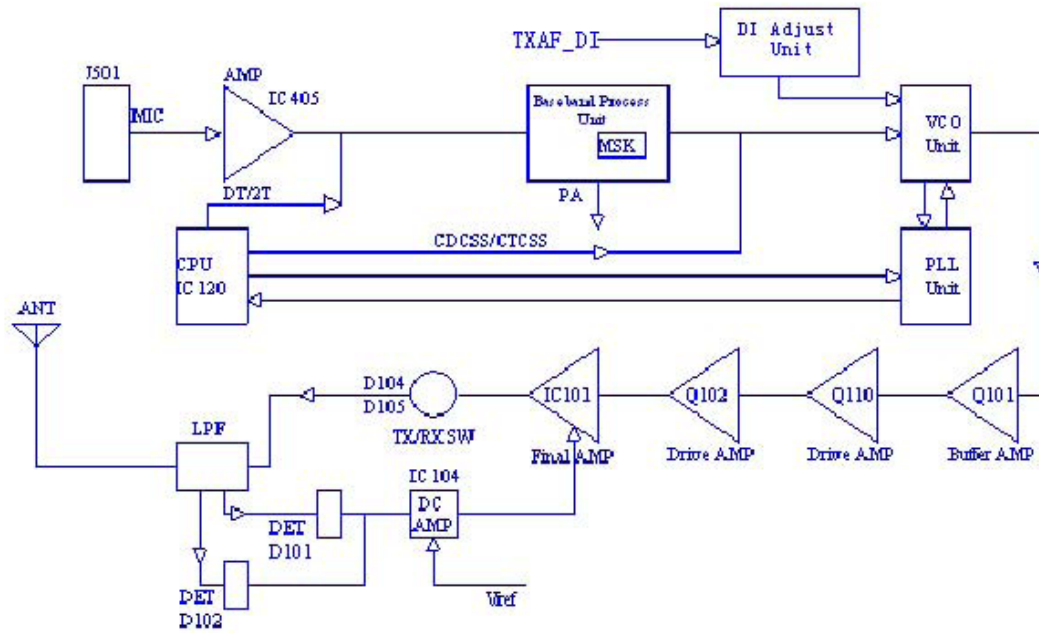


Figure 2 TX Circuit

3.1 MIC and Modulation Circuit

The audio signal from MIC is amplified at IC405, and further amplified, pre-emphasized and encoded at IC 401. It is added with signaling before going to VCO for modulation.

The DI modulation circuit is composed of IC407 and peripheral circuits (see the figure above). The signal goes to the DI modulation circuit via the TXAF_DI port, and then goes to the VCO unit. The signal amplitude can be adjusted manually via VR802, allowing accurate modulation of DI without any distortion. This circuit can serve as input or output port for GPS and encryption, promoting the radio functions to be further expanded.

3.2 RF Driver and Final-stage PA Circuit

TX-RF signal output from Q703 in the VCO circuit is amplified at Q101, driver PA Q110 and Q109, and final-stage PA IC101. The signal passes through LPF and goes to the antenna for transmission.

3.3 APC Circuit

The circuit is used to keep output power at a constant preset value. In this circuit, D101 and D102 convert the signal from detector into DC voltage, which is then compared with the reference voltage from CPU in IC104 to output a DC voltage. The DC voltage controls gate electrode of IC101, so as to control the output power.

4. PLL Circuit

PLL circuit supplies frequency to receive the first LO signal and TX signal. The circuit consists of TX

frequency oscillator (Q701), RX frequency oscillator (Q702), buffer amplifier (Q703), RF amplifier (Q102), PLL IC (IC801), LPF and TX/RX VCO switch (Q704/Q706).

In TX mode, IC502 provides the frequency data to and activates PLL IC. Meanwhile, Q704 is turned on to activate TX VCO. The output signal is amplified by Q703 and Q102. Then PLL IC divides the signal into 2.5KHz, 5KHz or 6.25KHz. And phase of it is compared with that of reference frequencies 2.5KHz, 5KHz or 6.25KHz from the 16.8MHz crystal oscillator. The crystal oscillator has operating frequency of 16.8MHz and frequency stability of 2.5ppm. The frequency control voltage output from the phase comparator passes through LPF (Q802 and Q803), and then is sent to TX VCO. In the meantime, TX modulation signal is passed to TX VCO for frequency modulation.

The working principle of RX mode is similar to that of TX mode.

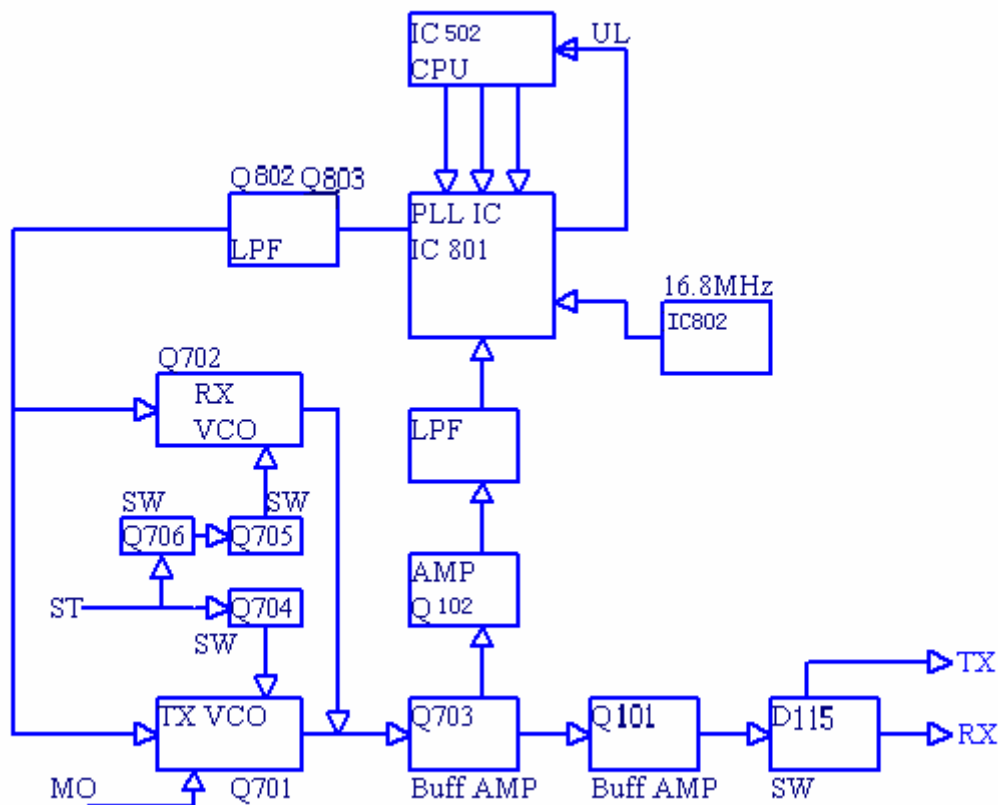


Figure 3 PLL Circuit

5. Control Circuit

The circuit comprises CPU circuit, reset circuit and power control circuit.

5.1 CPU

IC502 (CPU) operates at 9.8304MHz, and controls EEPROM (IC501), RX circuit, TX circuit, control

circuit and display circuit, as well as data transmission with peripheral equipment.

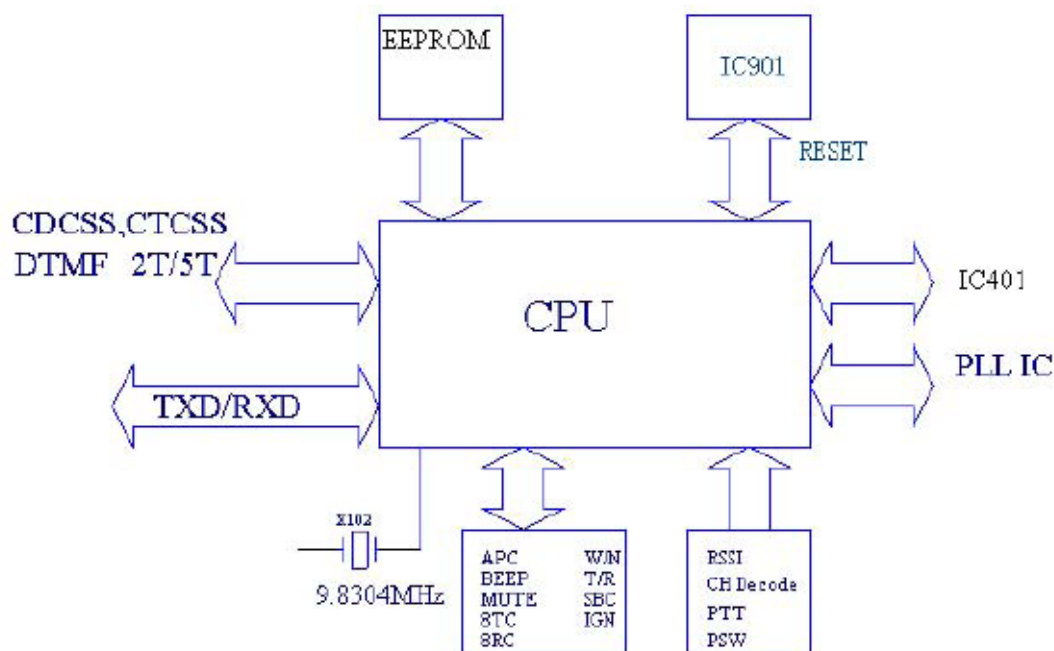


Figure 4 Control Circuit

5.2 Reset Circuit

The reset circuit consists of a reset IC (CN813LESA) and peripheral circuits. When a breakdown occurs due to change of external voltage, the CPU would automatically reboot your radio through the reset IC (IC901).

5.3 Power Control Circuit

Power supply of the radio is derived from +B. D515 and D516 are diodes for over-voltage protection. The power can be switched on or off via software (see the figure below):

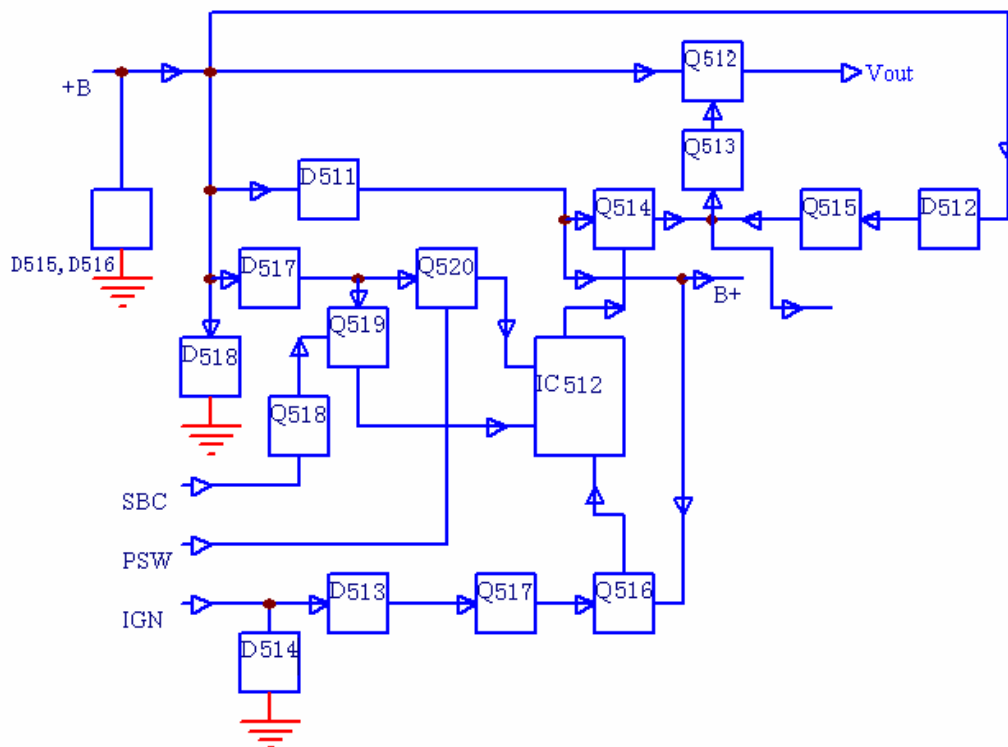


Figure 5 Power Control Circuit

Vout supplies power for IC601, IC602 and IC803, which generate 8V, 5V and 3.3V voltage respectively to supply the whole circuit.

6. Display Circuit

Display circuit comprises CPU (IC502), LCD, LED and other components. Application can be operated manually through programmable keys **P1-P4** as well as **▲** and **▼**. Channel information is displayed on the 14-segment display.

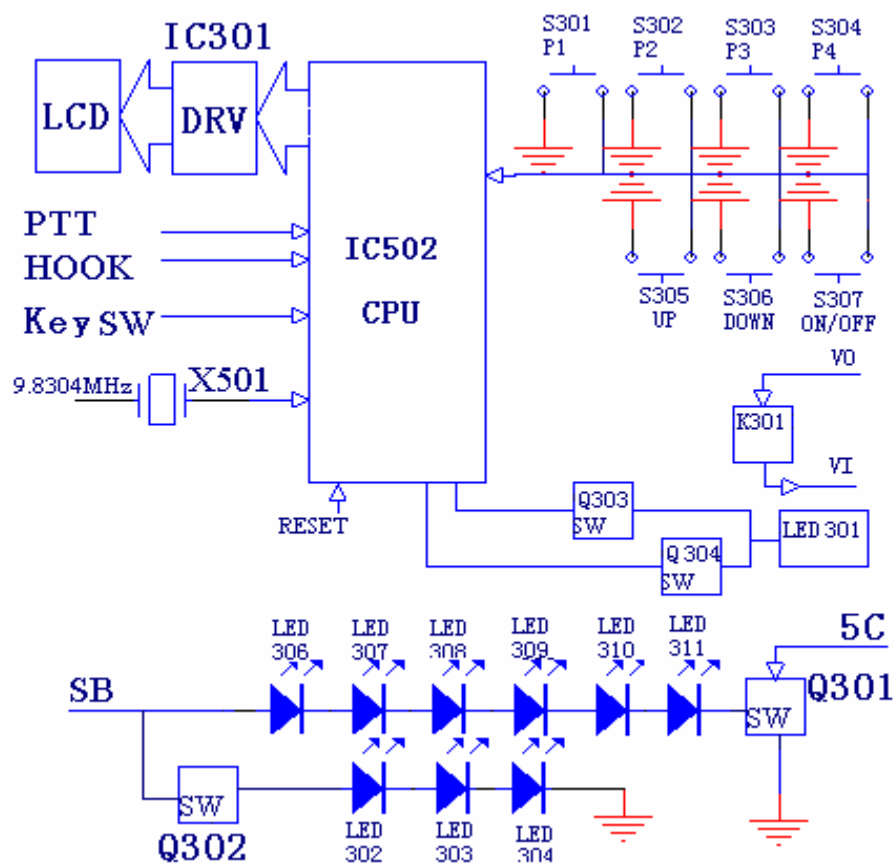


Figure 6 Display Circuit

Semiconductor Data

1. Positive voltage regulator: TA7805F (Power Unit IC602), TA7808S (Power Unit IC601)
2. EEPROM: CAT24C256WI 256K CATALYST (CPU Unit IC501)

2-1. Pin Function

Pin No.	Pin Name	I/O	Function
1~3	A0~A2	I	Address input
4	GND		Ground
5	SDA	I/O	Serial data
6	SCL	I	Serial clock input
7	Write Protect		Write Protect
8	VCC		+5V

3. Audio processor: AK2346 (AFPwr Unit IC404)

3-1. Pin Function

Pin No.	Pin Name	I/O	Function
1	AGNDIN	I	Analog ground input
2	AGND	O	Analog ground output
3	TXIN	I	TX audio signal input
4	TXINO	O	TXA1 feedback output
5	LIMLV	I	Limit level tuning
6	EXTLIMIN	I	External signal input for pre-limiter
7	MOD	O	Modulated TX signal output
8	VSS		Ground
9	TCLK	O	Clock output pin for MSK transmission data
10	TDATA	I	MSK transmission data input Data are latched synchronizing with the TCLK rising edge.
11	DI/O	I/O	Serial data input and output Input for register setting data and output for MSK receiving data
12	RDF/FC	O	Rx flag, frame detection signal output pin
13	SCLK	I	Clock input
14	DIR	I	Serial data input
15	XOUT	I	Crystal oscillator input pin
16	XIN	I/O	Crystal oscillator input/output pin
17	VDD		Positive power supply pin
18	EXPOUT	O	Signal output (after audio processing)
19	RXAFIN	I	RX audio input pin
20	RXAF	O	RX audio output pin
21	RXLPFO	O	Rx LPF output pin
22	RXINO	O	RXA1 feedback output pin
23	RXIN	I	Demodulated signal input pin
24	TEST	I	Test register control input pin

4. Audio Power Amplifier: TDA7297D (AFPwr Unit IC511)

4-1. Pin Function

Pin No.	Pin Name	I/O	Function
1	PW GND		Power ground 1
2	OUT1+	O	Output 1+
3	NC		
4	NC		
5	OUT1-	O	Output 1-
6	VCC	I	Supply voltage
7	IN1	I	Input 1
8	MUT	I	Operating switch
9	STAND-BY	I	Operating switch
10	PW GND		Power ground 2
11	PW GND		Power ground 3
12	NC		
13	SGND		Signal ground
14	IN2	I	Input 2
15	VCC	I	Supply voltage
16	OUT2-	O	Output 2-
17	NC		
18	NC		
19	OUT2+	O	Output 2+
20	PW GND		Power ground

5. LCD driver: PCF8576DH (Display Unit IC501)

5-1. Pin Function

Pin No.	Pin Name	I/O	Function
1	NC		
2~7	S34~S39	O	LCD output
8~9	NC		
10	SDA	I/O	I ² C bus serial data input/output
11	SCL	O	I ² C bus clock output
12	NC		
13	NC		
14	V _{DD}		Power Supply
15	OSC	I	Internal quartz crystal oscillator enable input
16~18	A0~A2	I	Address line
19	SA0	I	I ² C bus slave address (bit 0)
20	V _{ss}		Ground
21	V _{LCD}		5C power supply
22~24	NC		
25~28	BP0~BP3	O	LCD bottom board output
29~32	S0~S4	O	LCD output

33	NC		
34~47	S5~S18	O	LCD output
48	NC		
49, 50	S19, S20	O	LCD output
51~64	S21~S34	O	LCD output

6. Amplifier: TA75W558FU (AFPwr Unit IC404), TC75W51FU (AFPwr Unit IC402, AFPwr Unit IC405, AFPwr Unit IC403), TA75S01F (RF Unit IC1037), TA75W01FU (RF Unit IC404)
7. IF detector: TA31136FN (RF Unit IC102)
8. Dual D-type trigger: TC4013BF (AFPwr Unit IC512)
9. RF PLL frequency synthesizer: MB15A02 (PLL Unit IC801)
10. Reset IC: CN813LESA (Reset Unit IC901)
11. CPU: SCM M3062LFGPGP (CPU Unit IC502)

11-1. Pin Function

Pin No.	Port	Pin Name	I/O	Function
1	P94/DA1	APC	O	Modulation sensitivity output
2	P93/DA0	DTMF	O	DTMF/2-Tone/5-Tone/BEEP output
3	P92/TB2in	2TN/5TN	I	2-Tone/5-Tone decoded pulse input
4	P91	AFDIO	I/O	AK2346 data input/output
5	P90	AFSCLK	O	AK2346 Clock output
6	BYTE	BYTE	I	+5V (5C)
7	CNVSS	CNVSS	I	Ground (via 0 resistance)
8	P87	PA	O	MIC PA switch control H: PA
9	P86	HMBL	O	Palm MIC backlight control
10	RESET	RESET	I	Reset
11	XOUT	XOUT	O	Clock output
12	VSS	VSS	I	Ground
13	XIN	XIN	I	Clock input
14	VCC	VCC	I	+5V
15	P85/NMI	NMI	I	NMI
16	P84/INT2	AFRDF	I	MSK RX detect for baseband chip
17	P83/INT1	DTMFSTD		Not used (left open)
18	P82/INT0	AUX1	I/O	AUX 1
19	P81/TA4in	SBC		Power switch control H: Off L: On
20	P80/TA4out	CTC_OUT	O	CDCSS balance output
21	P77/TA3in	SPMUTE	O	SP Mute control H: Mute
22	P76/TA3out	CTC_PLL	O	CTCSS/CDCSS modulation output
23	P75/TA2in	EMICC	O	External MIC control H: External MIC
24	P74/TA2out	AFTDATA	O	MSK serial data output of baseband chip
25	P73/TA1in	AFTCLK	I	MSK clock input of baseband chip
26	P72/TA1out	AFDIR	O	Baseband chip control

27	P71/RXD2	RXD2		Not used
28	P70/TXD2	TXD2		Not used
29	P67/TXD1	TXD1	O	Serial data output L: PTT On
30	P66/RXD1	RXD1	I	Palm MIC HOOK input/serial data input L: On
31	P65	AUX4	I/O	AUX 4
32	P64	AUX5	I/O	AUX 5
33	P63	TXD2	O	Acc comm0 (serial data output)
34	P62	RXD2	I	Acc comm0 (serial data input)
35	P61	MICDAT	O	Palm MIC key code output
36	P60	AUX2	I/O	AUX 2
37	P57	RDY	I	Pulled Up
38	P56	NC		Not used (left open)
39	P55	HOLD		Not used (left open) (used for downloading)
40	P54	NC		Not used (left open)
41	P53	NC		Not used (left open)
42	P52	RD	O	External expansion for reading signal (not used)
43	P51	NC		Not used (left open)
44	P50	WR	O	External expansion for writing signal (not used)
45	P47	HNC	O	Horn alert control H: On (not used)
46	P46	SHIFT	O	Clock frequency shift H: On
47	P45	W/N	O	Wideband/Narrowband switch H: Wideband
48	P44	CS0		Not used (left open)
49	P43	MicMute	O	MIC Mute H: Mute
50	P42	KEYBL	O	Keypad backlight control
51	P41	UP/LED4	O	UP/LED4
52	P40	LED6	O	LED6
53	P37	LCDCl/LED3	I/O	LCD Driver Cl PIN/LED3
54	P36	DOWN/LED5	O	DOWN/LED5
55	P35	LCDCL/LED2	O	LCD Driver CL PIN/LED2
56	P34	LCDBL/LED0	O	LCD Driver BL PIN/LED0
57	P33	LED7	O	LED7
58	P32	LCDCE/LED1	O	LCD Driver CE PIN/LED1
59	P31	RLED	O	Red indicator
60	VCC	VCC	I	+5V
61	P30	GLLED	O	Green indicator
62	VSS	VSS	I	Ground
63~66	A7~A4	A7~A4		Not used (left open)
67	P23	PLLDAT	O	PLL data output
68	P22	PLLCLK	O	PLL clock output
69	P21	SLED	O	Scan status indicator
70	P20	PLED	O	High/Low power indicator
71	P17	8RC	O	8R power supply control H: RX
72	P16	8TC	O	8T power supply control H: TX

73	P15	RX	O	TX/RX VCO switch	L: RX
74	P14	EEPDAT	I/O	EEPROM data input/output	
75	P13	EEPCLK	O	EEPROM clock output	
76	P12	PLLUL	I	PLL unlock detect	L: Unlock
77	P11	PLLSTB	O	PLL strobe output	L: Lock
78	P10	AFMUTE	O	RX audio mute	H: Mute
79	P07	/IGN	I	Ignition sensor input	H: Off L: On
80	P06	PWR	I	Power On/Off key	L: On
81	P05	TYPE	I	TM-600/TM-610 selection input	H: TM-600; L: TM-610
82	P04	NC		Not used (left open)	
83	P03	P4	I	P4 key input	L: On (external resistor pulled up)
84	P02	P3	I	P3 key input	L: On (external resistor pulled up)
85	P01	P2	I	P2 key input	L: On (external resistor pulled up)
86	P00	P1	I	P1 key input	L: On (external resistor pulled up)
87	AN7			Not used (left open)	
88	AN6			Not used (left open)	
89	AN5			Reserved for DTMF decoding	
90	AN4			Reserved for DTMF decoding	
91	AN3	Temp	I	Temperature data input	
92	AN2	RSSI	I	RSSI input	
93	AN1	SQL	I	SQL analog input	
94	AVss	AVss		Ground	
95	AN0	TI	I	CTCSS/CDCSS signal input	
96	VREF	VREF	I	Reference voltage input	
97	AVCC	AVCC	I	+5V	
98	P97/Sin4	AUX3	I/O	AUX 3	
99	P96/Sout4	AUX6	I/O	AUX 6	
100	P95/Clk4	APCO	O	Audio PA control	

Component Description

1. TX-RX Unit

Ref. No.	Part Name	Type	Description
IC101	IC	Power module	Power module
IC501	IC	AT2408N12.5S	EROM
IC401	IC	AK2346	Audio processor
IC404	IC	TA75W558FU	Dual operational amplifier
IC403	IC	TC75W51FU	Dual operational amplifier
IC803	IC	XC62FP3302P	Positive voltage regulator
IC602	IC	TA7805F	Positive voltage regulator
IC103	IC	TA75S01F	Single operational amplifier
IC104	IC	TA75W01FU	Dual operational amplifier
IC102	IC	TA31136FN	IF detector
IC502	IC	M30624FCPGP#U5C	CPU
IC121	IC	BU4066BCFV	Quad analog switch
IC122	IC	LC73872M	DTMF Receiver
IC125	IC	M62364FP	D/A converter with buffer amplifier
IC126	IC	TDA8561Q	Power amplifier
IC127	IC	TC4013BF	Dual D-type trigger
IC301	IC	PCF8576DH	LCD driver
IC901	IC	CN813LESA	Reset IC

TM-610 Parts List 1

TM-610 U1-U4 Parts List 1 (Main Board Unit)

No.	Material No.	Description	Qty.	Ref. No	Print No.	Remarks
1	3001050000000	Chip resistor 0402 0Ω J 1/16W (RoHS)	1	C404	B5E	
2	3001050000000	Chip resistor 0402 0Ω J 1/16W (RoHS)	1	R106	T2B	
3	3001050000000	Chip resistor 0402 0Ω J 1/16W (RoHS)	1	R110	T3B	
4	3001050000000	Chip resistor 0402 0Ω J 1/16W (RoHS)	1	R448	B5F	
5	3001050000000	Chip resistor 0402 0Ω J 1/16W (RoHS)	1	R451	B5F	
6	3001050000000	Chip resistor 0402 0Ω J 1/16W (RoHS)	1	R455	T5F	
7	3001050000000	Chip resistor 0402 0Ω J 1/16W (RoHS)	1	R457	B5C	
8	3001050000000	Chip resistor 0402 0Ω J 1/16W (RoHS)	1	R484	B4B	
9	3001050000000	Chip resistor 0402 0Ω J 1/16W (RoHS)	1	R485	T4F	
10	3001050000000	Chip resistor 0402 0Ω J 1/16W (RoHS)	1	R501	T4C	
11	3001050000000	Chip resistor 0402 0Ω J 1/16W (RoHS)	1	R510	T4C	
12	3001050000000	Chip resistor 0402 0Ω J 1/16W (RoHS)	1	R513	T4C	
13	3001050000000	Chip resistor 0402 0Ω J 1/16W (RoHS)	1	R518	T5E	
14	3001050000000	Chip resistor 0402 0Ω J 1/16W (RoHS)	1	R520	T5E	
15	3001050000000	Chip resistor 0402 0Ω J 1/16W (RoHS)	1	R521	T5E	
16	3001050000000	Chip resistor 0402 0Ω J 1/16W (RoHS)	1	R522	T5E	
17	3001050000000	Chip resistor 0402 0Ω J 1/16W (RoHS)	1	R590	T5F	
18	3001050000000	Chip resistor 0402 0Ω J 1/16W (RoHS)	1	R591	T5F	
19	3001050000000	Chip resistor 0402 0Ω J 1/16W (RoHS)	1	R600	T5F	
20	3001050000000	Chip resistor 0402 0Ω J 1/16W (RoHS)	1	R605	B2F	
21	3001050000000	Chip resistor 0402 0Ω J 1/16W (RoHS)	1	R608	T5F	
22	3001050000000	Chip resistor 0402 0Ω J 1/16W (RoHS)	1	R625	T5F	
23	3001050000000	Chip resistor 0402 0Ω J 1/16W (RoHS)	1	R627	T4C	
24	3001050000000	Chip resistor 0402 0Ω J 1/16W (RoHS)	1	R908	T4E	
25	3001050000000	Chip resistor 0402 0Ω J 1/16W (RoHS)	1	R909	T5E	
26	3001050000000	Chip resistor 0402 0Ω J 1/16W (RoHS)	1	R910	T4E	
27	3001050000000	Chip resistor 0402 0Ω J 1/16W (RoHS)	1	R912	T4E	
28	3001050000000	Chip resistor 0402 0Ω J 1/16W (RoHS)	1	R913	T5E	
29	3001050000000	Chip resistor 0402 0Ω J 1/16W (RoHS)	1	R919	T4E	
30	3001050000000	Chip resistor 0402 0Ω J 1/16W (RoHS)	1	R921	T4E	
31	3001050000000	Chip resistor 0402 0Ω J 1/16W (RoHS)	1	R922	T4E	
32	3001050000000	Chip resistor 0402 0Ω J 1/16W (RoHS)	1	R923	T5E	
33	3001050000000	Chip resistor 0402 0Ω J 1/16W (RoHS)	1	R153	T4A	U1:400-470MHz
34	3001053320000	Chip resistor 0402 3.3KΩ J 1/16W(RoHS)	1	R153	B4A	U2:450-500MHz
35	3001050000000	Chip resistor 0402 0Ω J 1/16W(RoHS)	1	R153	T4A	U3:470-520MHz
36	3001050000000	Chip resistor 0402 0Ω J 1/16W (RoHS)	1	R153	T4A	U4:350-400MHz
37	3001050000000	Chip resistor 0402 0Ω J 1/16W (RoHS)	1	R154	T4A	U1:400-470MHz
38	3001053030010	Chip resistor 0402 30KΩ J 1/16W(RoHS)	1	R154	T4A	U2:450-500MHz
39	3001050000000	Chip resistor 0402 0Ω J 1/16W (RoHS)	1	R154	T4A	U3:470-520MHz
40	3001050000000	Chip resistor 0402 0Ω J 1/16W (RoHS)	1	R154	T4A	U4:350-400MHz
41	3001051010000	Chip resistor 0402 100Ω J 1/16W (RoHS)	1	R146	T2D	
42	3001051010000	Chip resistor 0402 100Ω J 1/16W (RoHS)	1	R197	T3A	
43	3001051020010	Chip resistor 0402 1KΩ J 1/16W(RoHS)	1	R145	B3A	
44	3001051020010	Chip resistor 0402 1KΩ J 1/16W(RoHS)	1	R200	T4A	
45	3001051020010	Chip resistor 0402 1KΩ J 1/16W(RoHS)	1	R419	B5E	
46	3001051020010	Chip resistor 0402 1KΩ J 1/16W(RoHS)	1	R439	B5E	
47	3001051020010	Chip resistor 0402 1KΩ J 1/16W(RoHS)	1	R453	B4F	

48	3001051020010	Chip resistor 0402 1KΩ J 1/16W(RoHS)	1	R476	B5B	
49	3001051020010	Chip resistor 0402 1KΩ J 1/16W(RoHS)	1	R503	T4C	
50	3001051020010	Chip resistor 0402 1KΩ J 1/16W(RoHS)	1	R504	T4C	
51	3001051020010	Chip resistor 0402 1KΩ J 1/16W(RoHS)	1	R505	T3D	
52	3001051020010	Chip resistor 0402 1KΩ J 1/16W(RoHS)	1	R506	T3D	
53	3001051020010	Chip resistor 0402 1KΩ J 1/16W(RoHS)	1	R609	T4D	U1:400-470MHz
54	3001061020010	Chip resistor 0603 1KΩ J 1/10W(RoHS)	1	R609	T4D	U2:450-500MHz
55	3001051020010	Chip resistor 0402 1KΩ J 1/16W(RoHS)	1	R609	T4D	U3:470-520MHz
56	3001051020010	Chip resistor 0402 1KΩ J 1/16W(RoHS)	1	R609	T4D	U4:350-400MHz
57	3001051020010	Chip resistor 0402 1KΩ J 1/16W(RoHS)	1	R610	T4D	
58	3001051020010	Chip resistor 0402 1KΩ J 1/16W(RoHS)	1	R611	T4E	
59	3001051020010	Chip resistor 0402 1KΩ J 1/16W(RoHS)	1	R612	T4D	
60	3001051020010	Chip resistor 0402 1KΩ J 1/16W(RoHS)	1	R632	T4D	
61	3001051020010	Chip resistor 0402 1KΩ J 1/16W(RoHS)	1	R802	T3D	
62	3001051020010	Chip resistor 0402 1KΩ J 1/16W(RoHS)	1	R823	T3D	
63	3001051020010	Chip resistor 0402 1KΩ J 1/16W(RoHS)	1	R824	T3D	
64	3001051020010	Chip resistor 0402 1KΩ J 1/16W(RoHS)	1	R825	T3D	
65	3001051020010	Chip resistor 0402 1KΩ J 1/16W(RoHS)	1	R826	T3D	
66	3001051020010	Chip resistor 0402 1KΩ J 1/16W(RoHS)	1	R906	T3E	
67	3001051030000	Chip resistor 0402 10KΩ J 1/16W(RoHS)	1	R112	T2B	
68	3001051030000	Chip resistor 0402 10KΩ J 1/16W(RoHS)	1	R198	T3A	
69	3001051030000	Chip resistor 0402 10KΩ J 1/16W(RoHS)	1	R402	B4E	
70	3001051030000	Chip resistor 0402 10KΩ J 1/16W(RoHS)	1	R403	B4E	
71	3001051030000	Chip resistor 0402 10KΩ J 1/16W(RoHS)	1	R423	B4E	
72	3001051030000	Chip resistor 0402 10KΩ J 1/16W(RoHS)	1	R424	B4E	
73	3001051030000	Chip resistor 0402 10KΩ J 1/16W(RoHS)	1	R428	B4D	
74	3001051030000	Chip resistor 0402 10KΩ J 1/16W(RoHS)	1	R449	B5F	
75	3001051030000	Chip resistor 0402 10KΩ J 1/16W(RoHS)	1	R450	B5F	
76	3001051030000	Chip resistor 0402 10KΩ J 1/16W(RoHS)	1	R464	B4C	
77	3001051030000	Chip resistor 0402 10KΩ J 1/16W(RoHS)	1	R470	B5B	
78	3001051030000	Chip resistor 0402 10KΩ J 1/16W(RoHS)	1	R472	B5B	
79	3001051030000	Chip resistor 0402 10KΩ J 1/16W(RoHS)	1	R477	B5B	
80	3001051030000	Chip resistor 0402 10KΩ J 1/16W(RoHS)	1	R509	T5F	
81	3001051030000	Chip resistor 0402 10KΩ J 1/16W(RoHS)	1	R804	T2D	
82	3001051030000	Chip resistor 0402 10KΩ J 1/16W(RoHS)	1	R902	B5C	
83	3001051030000	Chip resistor 0402 10KΩ J 1/16W(RoHS)	1	R904	B5C	
84	3001051040010	Chip resistor 0402 100KΩ J 1/16W(RoHS)	1	R104	T2B	
85	3001051040010	Chip resistor 0402 100KΩ J 1/16W(RoHS)	1	R107	T3B	
86	3001051040010	Chip resistor 0402 100KΩ J 1/16W(RoHS)	1	R115	T3B	
87	3001051040010	Chip resistor 0402 100KΩ J 1/16W(RoHS)	1	R116	T3B	
88	3001051040010	Chip resistor 0402 100KΩ J 1/16W(RoHS)	1	R148	T2D	
89	3001051040010	Chip resistor 0402 100KΩ J 1/16W(RoHS)	1	R149	T3A	
90	3001051040010	Chip resistor 0402 100KΩ J 1/16W(RoHS)	1	R180	T2D	
91	3001051040010	Chip resistor 0402 100KΩ J 1/16W(RoHS)	1	R427	B4D	
92	3001051040010	Chip resistor 0402 100KΩ J 1/16W(RoHS)	1	R467	B5B	
93	3001051040010	Chip resistor 0402 100KΩ J 1/16W(RoHS)	1	R468	B5B	
94	3001051040010	Chip resistor 0402 100KΩ J 1/16W(RoHS)	1	R490	T5D	
95	3001051040010	Chip resistor 0402 100KΩ J 1/16W(RoHS)	1	R514	T4E	
96	3001051040010	Chip resistor 0402 100KΩ J 1/16W(RoHS)	1	R565	T5G	
97	3001051040010	Chip resistor 0402 100KΩ J 1/16W(RoHS)	1	R566	T5G	
98	3001051040010	Chip resistor 0402 100KΩ J 1/16W(RoHS)	1	R801	T3D	

99	3001051040010	Chip resistor 0402 100KΩ J 1/16W(RoHS)	1	R806	T3C	
100	3001051040010	Chip resistor 0402 100KΩ J 1/16W(RoHS)	1	R820	T3F	
101	3001051050020	Chip resistor 0402 1MΩ J 1/16W(RoHS)	1	R118	B3A	
102	3001051050020	Chip resistor 0402 1MΩ J 1/16W(RoHS)	1	R119	B3B	
103	3001051050020	Chip resistor 0402 1MΩ J 1/16W(RoHS)	1	R120	B2B	
104	3001051050020	Chip resistor 0402 1MΩ J 1/16W(RoHS)	1	R130	B3A	
105	3001051050020	Chip resistor 0402 1MΩ J 1/16W(RoHS)	1	R131	B3B	
106	3001051050020	Chip resistor 0402 1MΩ J 1/16W(RoHS)	1	R473	B5B	
107	3001051050020	Chip resistor 0402 1MΩ J 1/16W(RoHS)	1	R901	B5C	
108	3001051230000	Chip resistor 0402 12KΩ J 1/16W(RoHS)	1	R152	T4B	
109	3001051230000	Chip resistor 0402 12KΩ J 1/16W(RoHS)	1	R418	B5E	U1:400-470MHz
110	3001051830000	Chip resistor 0402 18KΩ J 1/16W(RoHS)	1	R418	B5E	U2:450-500MHz
111	3001051830000	Chip resistor 0402 18KΩ J 1/16W(RoHS)	1	R418	B5E	U3:470-520MHz
112	3001051230000	Chip resistor 0402 12KΩ J 1/16W(RoHS)	1	R418	B5E	U4:350-400MHz
113	3001051230000	Chip resistor 0402 12KΩ J 1/16W(RoHS)	1	R471	B5C	
114	3001051530000	Chip resistor 0402 15KΩ J 1/16W(RoHS)	1	R111	T2B	
115	3001051530000	Chip resistor 0402 15KΩ J 1/16W(RoHS)	1	R404	B4E	
116	3001051530000	Chip resistor 0402 15KΩ J 1/16W(RoHS)	1	R408	B5E	
117	3001051530000	Chip resistor 0402 15KΩ J 1/16W(RoHS)	1	R465	B5C	
118	3001051530000	Chip resistor 0402 15KΩ J 1/16W(RoHS)	1	R830	T3D	
119	3001051540020	Chip resistor 0402 150KΩ J 1/16W(RoHS)	1	R475	B5B	
120	3001051540020	Chip resistor 0402 150KΩ J 1/16W(RoHS)	1	R478	B5B	
121	3001051830000	Chip resistor 0402 18KΩ J 1/16W(RoHS)	1	R414	B5E	U1:400-470MHz
122	3001053030010	Chip resistor 0402 30KΩ J 1/16W(RoHS)	1	R414	B5E	U2:450-500MHz
123	3001054730000	Chip resistor 0402 47KΩ J 1/16W(RoHS)	1	R414	B5E	U3:470-520MHz
124	3001051830000	Chip resistor 0402 18KΩ J 1/16W(RoHS)	1	R414	B5E	U4:350-400MHz
125	3001051830000	Chip resistor 0402 18KΩ J 1/16W(RoHS)	1	R432	B4D	
126	3001051830000	Chip resistor 0402 18KΩ J 1/16W(RoHS)	1	R434	B5B	
127	3001051830000	Chip resistor 0402 18KΩ J 1/16W(RoHS)	1	R435	B4C	
128	3001051840000	Chip resistor 0402 180KΩ J 1/16W(RoHS)	1	R446	B5F	
129	3001051840000	Chip resistor 0402 180KΩ J 1/16W(RoHS)	1	R459	B5C	
130	3001051840000	Chip resistor 0402 180KΩ J 1/16W(RoHS)	1	R460	B5C	
131	3001051840000	Chip resistor 0402 180KΩ J 1/16W(RoHS)	1	R461	B4C	
132	3001051840000	Chip resistor 0402 180KΩ J 1/16W(RoHS)	1	R807	T2D	
133	3001052200000	Chip resistor 0402 22Ω J 1/16W(RoHS)	1	R803	T3D	
134	3001052200000	Chip resistor 0402 22Ω J 1/16W(RoHS)	1	R808	T2D	
135	3001052210000	Chip resistor 0402 220Ω J 1/16W(RoHS)	1	R117	T3B	
136	3001052220000	Chip resistor 0402 2.2KΩ J 1/16W(RoHS)	1	R805	T3D	
137	3001052230010	Chip resistor 0402 22KΩ J 1/16W(RoHS)	1	R101	T2A	
138	3001052230010	Chip resistor 0402 22KΩ J 1/16W(RoHS)	1	R102	T3A	
139	3001052230010	Chip resistor 0402 22KΩ J 1/16W(RoHS)	1	R158	T4B	
140	3001052230010	Chip resistor 0402 22KΩ J 1/16W(RoHS)	1	R159	T4A	
141	3001052230010	Chip resistor 0402 22KΩ J 1/16W(RoHS)	1	R161	T4A	
142	3001052230010	Chip resistor 0402 22KΩ J 1/16W(RoHS)	1	R162	T4B	
143	3001052230010	Chip resistor 0402 22KΩ J 1/16W(RoHS)	1	R409	B5E	
144	3001052230010	Chip resistor 0402 22KΩ J 1/16W(RoHS)	1	R441	B5E	
145	3001052230010	Chip resistor 0402 22KΩ J 1/16W(RoHS)	1	R442	T5E	
146	3001052230010	Chip resistor 0402 22KΩ J 1/16W(RoHS)	1	R445	B5F	
147	3001052230010	Chip resistor 0402 22KΩ J 1/16W(RoHS)	1	R452	B5F	
148	3001052230010	Chip resistor 0402 22KΩ J 1/16W(RoHS)	1	R458	B5C	
149	3001052230010	Chip resistor 0402 22KΩ J 1/16W(RoHS)	1	R466	B5C	

150	3001052230010	Chip resistor 0402 22KΩ J 1/16W(RoHS)	1	R829	T3D	
151	3001052240000	Chip resistor 0402 220KΩ J 1/16W(RoHS)	1	R105	T2A	
152	3001052240000	Chip resistor 0402 220KΩ J 1/16W(RoHS)	1	R828	T3C	U1:400-470MHz
153	NA	NA		R828	T3C	U2:450-500MHz
154	3001052240000	Chip resistor 0402 220KΩ J 1/16W(RoHS)	1	R828	T3C	U3:470-520MHz
155	3001052240000	Chip resistor 0402 220KΩ J 1/16W(RoHS)	1	R828	T3C	U4:350-400MHz
156	3001052240000	Chip resistor 0402 220KΩ J 1/16W(RoHS)	1	R832	T5C	
157	3001052720000	Chip resistor 0402 2.7KΩ J 1/16W(RoHS)	1	R407	B5E	
158	3001053330010	Chip resistor 0402 33KΩ J 1/16W(RoHS)	1	R421	B4D	
159	3001053330010	Chip resistor 0402 33KΩ J 1/16W(RoHS)	1	R433	B4B	
160	3001053330010	Chip resistor 0402 33KΩ J 1/16W(RoHS)	1	R436	B5B	
161	3001053330010	Chip resistor 0402 33KΩ J 1/16W(RoHS)	1	R438	B4B	U1:400-470MHz
162	3001053030010	Chip resistor 0402 30KΩ J 1/16W(RoHS)	1	R438	B4B	U2:450-500MHz
163	3001053330010	Chip resistor 0402 33KΩ J 1/16W(RoHS)	1	R438	B4B	U3:470-520MHz
164	3001053330010	Chip resistor 0402 33KΩ J 1/16W(RoHS)	1	R438	B4B	U4:350-400MHz
165	3001053330010	Chip resistor 0402 33KΩ J 1/16W(RoHS)	1	R516	T4E	
166	3001053330010	Chip resistor 0402 33KΩ J 1/16W(RoHS)	1	R563	T3G	
167	3001053340000	Chip resistor 0402 330KΩ J 1/16W(RoHS)	1	R108	T3B	
168	3001053340000	Chip resistor 0402 330KΩ J 1/16W(RoHS)	1	R422	B4D	
169	3001053930000	Chip resistor 0402 39KΩ J 1/16W(RoHS)	1	R410	T5E	U1:400-470MHz
170	NA	NA		R410	T5E	U2:450-500MHz
171	3001051530000	Chip resistor 0402 15KΩ J 1/16W(RoHS)	1	R410	T5E	U3:470-520MHz
172	3001053930000	Chip resistor 0402 39KΩ J 1/16W(RoHS)	1	R410	T5E	U4:350-400MHz
173	3001053940000	Chip resistor 0402 390KΩ J 1/16W(RoHS)	1	R431	B5D	
174	3001053940000	Chip resistor 0402 390KΩ J 1/16W(RoHS)	1	R463	B4C	
175	3001054720000	Chip resistor 0402 4.7KΩ J 1/16W(RoHS)	1	R160	T4A	
176	3001054720000	Chip resistor 0402 4.7KΩ J 1/16W(RoHS)	1	R163	T4A	
177	3001054720000	Chip resistor 0402 4.7KΩ J 1/16W(RoHS)	1	R401	B4E	
178	3001054720000	Chip resistor 0402 4.7KΩ J 1/16W(RoHS)	1	R447	B5F	
179	3001054720000	Chip resistor 0402 4.7KΩ J 1/16W(RoHS)	1	R469	B5B	
180	3001054720000	Chip resistor 0402 4.7KΩ J 1/16W(RoHS)	1	R502	T4C	
181	3001054720000	Chip resistor 0402 4.7KΩ J 1/16W(RoHS)	1	R507	T3D	
182	3001054720000	Chip resistor 0402 4.7KΩ J 1/16W(RoHS)	1	R508	B4D	
183	3001054720000	Chip resistor 0402 4.7KΩ J 1/16W(RoHS)	1	R511	T4C	
184	3001054720000	Chip resistor 0402 4.7KΩ J 1/16W(RoHS)	1	R543	B4F	
185	3001054720000	Chip resistor 0402 4.7KΩ J 1/16W(RoHS)	1	R571	B4F	
186	3001054720000	Chip resistor 0402 4.7KΩ J 1/16W(RoHS)	1	R573	B4F	
187	3001054720000	Chip resistor 0402 4.7KΩ J 1/16W(RoHS)	1	R822	T3E	
188	3001054730000	Chip resistor 0402 47KΩ J 1/16W(RoHS)	1	R103	T3A	
189	3001054730000	Chip resistor 0402 47KΩ J 1/16W(RoHS)	1	R144	B3A	
190	3001054730000	Chip resistor 0402 47KΩ J 1/16W(RoHS)	1	R199	T3A	
191	3001054730000	Chip resistor 0402 47KΩ J 1/16W(RoHS)	1	R202	T3A	
192	3001054730000	Chip resistor 0402 47KΩ J 1/16W(RoHS)	1	R405	B4E	
193	3001054730000	Chip resistor 0402 47KΩ J 1/16W(RoHS)	1	R454	B4E	
194	3001054730000	Chip resistor 0402 47KΩ J 1/16W(RoHS)	1	R489	T5D	
195	3001054730000	Chip resistor 0402 47KΩ J 1/16W(RoHS)	1	R492	T5D	U1:400-470MHz
196	3001054730000	Chip resistor 0402 47KΩ J 1/16W(RoHS)	1	R492	T5D	U2:450-500MHz
197	3001052230000	Chip resistor 0402 22KΩ F 1/16W(RoHS)	1	R492	T5D	U3:470-520MHz
198	3001054730000	Chip resistor 0402 47KΩ J 1/16W(RoHS)	1	R492	T5D	U4:350-400MHz
199	3001054730000	Chip resistor 0402 47KΩ J 1/16W(RoHS)	1	R517	T4E	
200	3001054730000	Chip resistor 0402 47KΩ J 1/16W(RoHS)	1	R519	T5E	

201	3001054730000	Chip resistor 0402 47KΩ J 1/16W(RoHS)	1	R523	T5D	
202	3001054730000	Chip resistor 0402 47KΩ J 1/16W(RoHS)	1	R524	T5D	
203	3001054730000	Chip resistor 0402 47KΩ J 1/16W(RoHS)	1	R544	B4F	
204	3001054730000	Chip resistor 0402 47KΩ J 1/16W(RoHS)	1	R545	B5F	
205	3001054730000	Chip resistor 0402 47KΩ J 1/16W(RoHS)	1	R550	B4F	
206	3001054730000	Chip resistor 0402 47KΩ J 1/16W(RoHS)	1	R562	T3G	
207	3001054730000	Chip resistor 0402 47KΩ J 1/16W(RoHS)	1	R567	T5G	
208	3001054730000	Chip resistor 0402 47KΩ J 1/16W(RoHS)	1	R572	B4F	
209	3001054730000	Chip resistor 0402 47KΩ J 1/16W(RoHS)	1	R905	T4F	U1:400-470MHz
210	3001054730000	Chip resistor 0402 47KΩ J 1/16W(RoHS)	1	R905	T4F	U2:450-500MHz
211	NA	NA		R905	T4F	U3:470-520MHz
212	3001054730000	Chip resistor 0402 47KΩ J 1/16W(RoHS)	1	R905	T4F	U4:350-400MHz
213	3001055130010	Chip resistor 0402 51KΩ J 1/16W(RoHS)	1	R420	B4D	
214	3001055630000	Chip resistor 0402 56KΩ J 1/16W(RoHS)	1	R413	B5E	U1:400-470MHz
215	3001051040010	Chip resistor 0402 100KΩ J 1/16W(RoHS)	1	R413	B5E	U2:450-500MHz
216	3001055630000	Chip resistor 0402 56KΩ J 1/16W(RoHS)	1	R413	B5E	U3:470-520MHz
217	3001056830000	Chip resistor 0402 68KΩ J 1/16W(RoHS)	1	R413	B5E	U4:350-400MHz
218	3001055630000	Chip resistor 0402 56KΩ J 1/16W(RoHS)	1	R429	B5D	
219	3001055630000	Chip resistor 0402 56KΩ J 1/16W(RoHS)	1	R430	B5D	
220	3001056820000	Chip resistor 0402 6.8KΩ J 1/16W(RoHS)	1	R416	B5E	U1:400-470MHz
221	NA	NA		R416	B5E	U2:450-500MHz
222	3001051830000	Chip resistor 0402 18KΩ J 1/16W(RoHS)	1	R416	B5E	U3:470-520MHz
223	3001056820000	Chip resistor 0402 6.8KΩ J 1/16W(RoHS)	1	R416	B5E	U4:350-400MHz
224	3001056820000	Chip resistor 0402 6.8KΩ J 1/16W(RoHS)	1	R417	B5E	
225	3001056830000	Chip resistor 0402 68KΩ J 1/16W(RoHS)	1	R411	B5E	U1:400-470MHz
226	3001058230000	Chip resistor 0402 82KΩ J 1/16W(RoHS)	1	R411	B5E	U2:450-500MHz
227	3001056830000	Chip resistor 0402 68KΩ J 1/16W(RoHS)	1	R411	B5E	U3:470-520MHz
228	3001058230000	Chip resistor 0402 82KΩ J 1/16W(RoHS)	1	R411	B5E	U4:350-400MHz
229	3001056830000	Chip resistor 0402 68KΩ J 1/16W(RoHS)	1	R444	B5E	
230	3001056830000	Chip resistor 0402 68KΩ J 1/16W(RoHS)	1	R456	B4B	
231	3001056830000	Chip resistor 0402 68KΩ J 1/16W(RoHS)	1	R482	B4B	
232	3001058220000	Chip resistor 0402 8.2KΩ J 1/16W(RoHS)	1	R474	B5B	
233	3001058230000	Chip resistor 0402 82KΩ J 1/16W(RoHS)	1	R462	B4C	
234	3001059130000	Chip resistor 0402 91KΩ F 1/16W(RoHS)	1	R443	T4A	
235	3001060000000	Chip resistor 0603 0Ω J 1/10W(RoHS)	1	R126	B3A	
236	3001060000000	Chip resistor 0603 0Ω J 1/10W(RoHS)	1	R140	B3B	
237	3001060000000	Chip resistor 0603 0Ω J 1/10W(RoHS)	1	R425	T5E	
238	3001060000000	Chip resistor 0603 0Ω J 1/10W(RoHS)	1	R481	T4B	
239	3001060000000	Chip resistor 0603 0Ω J 1/10W(RoHS)	1	R553	T4F	
240	3001060000000	Chip resistor 0603 0Ω J 1/10W(RoHS)	1	R564	T5G	
241	3001060000000	Chip resistor 0603 0Ω J 1/10W(RoHS)	1	R569	T4G	
242	3001060000000	Chip resistor 0603 0Ω J 1/10W(RoHS)	1	R570	T3F	
243	3001060000000	Chip resistor 0603 0Ω J 1/10W(RoHS)	1	R575	B5F	
244	3001060000000	Chip resistor 0603 0Ω J 1/10W(RoHS)	1	R620	T5F	
245	3001060000000	Chip resistor 0603 0Ω J 1/10W(RoHS)	1	R623	T5G	U1:400-470MHz
246	3001060000000	Chip resistor 0603 0Ω J 1/10W(RoHS)	1	R623	T5G	U2:450-500MHz
247	3001060000000	Chip resistor 0603 0Ω J 1/10W(RoHS)	1	R623	T5G	U3:470-520MHz
248	3001050000000	Chip resistor 04020Ω J 1/16W(RoHS)	1	R623	T5G	U4:350-400MHz
249	3001060000000	Chip resistor 0603 0Ω J 1/10W(RoHS)	1	R629	T5F	U1:400-470MHz
250	3001060000000	Chip resistor 0603 0Ω J 1/10W(RoHS)	1	R629	T5F	U2:450-500MHz
251	3001060000000	Chip resistor 0603 0Ω J 1/10W(RoHS)	1	R629	T5F	U3:470-520MHz

252	3001050000000	Chip resistor 0402 0Ω J 1/16W(RoHS)	1	R629	T5F	U4:350-400MHz
253	3001060000000	Chip resistor 0603 0Ω J 1/10W(RoHS)	1	R809	T3E	
254	3001060000000	Chip resistor 0603 0Ω J 1/10W(RoHS)	1	R812	T2E	
255	3001060000000	Chip resistor 0603 0Ω J 1/10W(RoHS)	1	R815	T2E	
256	3001060000000	Chip resistor 0603 0Ω J 1/10W(RoHS)	1	R821	T3F	
257	3001061000000	Chip resistor 0603 10Ω J 1/10W(RoHS)	1	R157	T3A	
258	3001061000000	Chip resistor 0603 10Ω J 1/10W(RoHS)	1	R546	B1F	
259	3001061000000	Chip resistor 0603 10Ω J 1/10W(RoHS)	1	R547	B4G	
260	3001061000000	Chip resistor 0603 10Ω J 1/10W(RoHS)	1	R548	B5G	
261	3001061000000	Chip resistor 0603 10Ω J 1/10W(RoHS)	1	R549	B5G	
262	3001061020010	Chip resistor 0603 1KΩ J 1/10W(RoHS)	1	R557	T4F	
263	3001061020010	Chip resistor 0603 1KΩ J 1/10W(RoHS)	1	R560	T4F	
264	3001061020010	Chip resistor 0603 1KΩ J 1/10W(RoHS)	1	R568	T3F	
265	3001061020010	Chip resistor 0603 1KΩ J 1/10W(RoHS)	1	R816	T3E	U1:400-470MHz
266	3001061020010	Chip resistor 0603 1KΩ J 1/10W(RoHS)	1	R816	T3E	U2:450-500MHz
267	3001061020010	Chip resistor 0603 1KΩ J 1/10W(RoHS)	1	R816	T3E	U3:470-520MHz
268	3001061520000	Chip resistor 0603 1.5KΩ J 1/10W(RoHS)	1	R816	T3E	U4:350-400MHz
269	3001061020010	Chip resistor 0603 1KΩ J 1/10W(RoHS)	1	R817	T3E	
270	3001061030010	Chip resistor 0603 10KΩ J 1/10W(RoHS)	1	R186	B2D	
271	3001061030010	Chip resistor 0603 10KΩ J 1/10W(RoHS)	1	R426	B4D	
272	3001061030010	Chip resistor 0603 10KΩ J 1/10W(RoHS)	1	R554	T4F	
273	3001061030010	Chip resistor 0603 10KΩ J 1/10W(RoHS)	1	R558	T4F	
274	3001061030010	Chip resistor 0603 10KΩ J 1/10W(RoHS)	1	R810	T3E	
275	3001061030010	Chip resistor 0603 10KΩ J 1/10W(RoHS)	1	R814	T2E	
276	3001061040010	Chip resistor 0603 100KΩ J 1/10W(RoHS)	1	R122	B2A	
277	3001061040010	Chip resistor 0603 100KΩ J 1/10W(RoHS)	1	R133	B3B	
278	3001061040010	Chip resistor 0603 100KΩ J 1/10W(RoHS)	1	R134	B4B	
279	3001061040010	Chip resistor 0603 100KΩ J 1/10W(RoHS)	1	R135	B4B	
280	3001061040010	Chip resistor 0603 100KΩ J 1/10W(RoHS)	1	R136	B3B	
281	3001061040010	Chip resistor 0603 100KΩ J 1/10W(RoHS)	1	R559	T4F	
282	3001061050010	Chip resistor 0603 1MΩ J 1/10W(RoHS)	1	R147	T3C	
283	3001061220000	Chip resistor 0603 1.2KΩ J 1/10W(RoHS)	1	L802	T3D	
284	3001061220000	Chip resistor 0603 1.2KΩ J 1/10W(RoHS)	1	R188	T2D	
285	3001061220000	Chip resistor 0603 1.2KΩ J 1/10W(RoHS)	1	R818	T3E	
286	3001061520000	Chip resistor 0603 1.5KΩ J 1/10W(RoHS)	1	R109	T2D	U1:400-470MHz
287	3001061520000	Chip resistor 0603 1.5KΩ J 1/10W(RoHS)	1	R109	T2D	U2:450-500MHz
288	3001061520000	Chip resistor 0603 1.5KΩ J 1/10W(RoHS)	1	R109	T2D	U3:470-520MHz
289	3001064720000	Chip resistor 0603 4.7KΩ J 1/10W(RoHS)	1	R109	T2D	U4:350-400MHz
290	3001061520000	Chip resistor 0603 1.5KΩ J 1/10W(RoHS)	1	R819	T3E	U1:400-470MHz
291	3001061520000	Chip resistor 0603 1.5KΩ J 1/10W(RoHS)	1	R819	T3E	U2:450-500MHz
292	3001061520000	Chip resistor 0603 1.5KΩ J 1/10W(RoHS)	1	R819	T3E	U3:470-520MHz
293	3001062220000	Chip resistor 0603 2.2KΩ J 1/10W(RoHS)	1	R819	T3E	U4:350-400MHz
294	3001061800000	Chip resistor 0603 18Ω J 1/10W(RoHS)	1	R187	T2D	
295	3001061810000	Chip resistor 0603 180Ω J 1/10W(RoHS)	1	R143	B4B	
296	3001061840000	Chip resistor 0603 180KΩ J 1/10W(RoHS)	1	R121	B2A	
297	3001061840000	Chip resistor 0603 180KΩ J 1/10W(RoHS)	1	R123	B3B	
298	3001062200000	Chip resistor 0603 22Ω J 1/10W(RoHS)	1	R127	B4B	
299	3001062200000	Chip resistor 0603 22Ω J 1/10W(RoHS)	1	R189	T2D	
300	3001062220000	Chip resistor 0603 2.2KΩ J 1/10W(RoHS)	1	R185	T2D	
301	3001062220000	Chip resistor 0603 2.2KΩ J 1/10W(RoHS)	1	R604	B2F	
302	3001062230000	Chip resistor 0603 22KΩ J 1/10W(RoHS)	1	R811	T3E	

303	3001062230000	Chip resistor 0603 22KΩ J 1/10W(RoHS)	1	R813	T2E	
304	3001062700000	Chip resistor 0603 27Ω J 1/10W(RoHS)	1	R125	B2A	U1:400-470MHz
305	3001060000000	Chip resistor 0603 0Ω J 1/10W(RoHS)	1	R125	B2A	U2:450-500MHz
306	3001061000000	Chip resistor 0603 10Ω J 1/10W(RoHS)	1	R125	B2A	U3:470-520MHz
307	3001062210000	Chip resistor 0603 220Ω J 1/10W(RoHS)	1	R125	B2A	U4:350-400MHz
308	3001063310000	Chip resistor 0603 330Ω F 1/10W(RoHS)	1	R137	B3B	U1:400-470MHz
309	3001061510000	Chip resistor 0603 150Ω J 1/10W(RoHS)	1	R137	B3B	U2:450-500MHz
310	3001063310000	Chip resistor 0603 330Ω F 1/10W(RoHS)	1	R137	B3B	U3:470-520MHz
311	3001062710000	Chip resistor 0603 270Ω J 1/10W(RoHS)	1	R137	B3B	U4:350-400MHz
312	3001062720000	Chip resistor 0603 2.7KΩ J 1/10W(RoHS)	1	R190	T2E	U1:400-470MHz
313	3001062720000	Chip resistor 0603 2.7KΩ J 1/10W(RoHS)	1	R190	T2E	U2:450-500MHz
314	3001062720000	Chip resistor 0603 2.7KΩ J 1/10W(RoHS)	1	R190	T2E	U3:470-520MHz
315	3001061520000	Chip resistor 0603 1.5KΩ J 1/10W(RoHS)	1	R190	T2E	U4:350-400MHz
316	NA	NA		R204	B2A	U1:400-470MHz
317	3001062720000	Chip resistor 0603 2.7KΩ J 1/10W(RoHS)	1	R204	B2A	U2:450-500MHz
318	3001062720000	Chip resistor 0603 2.7KΩ J 1/10W(RoHS)	1	R204	B2A	U3:470-520MHz
319	3001062720000	Chip resistor 0603 2.7KΩ J 1/10W(RoHS)	1	R204	B2A	U4:350-400MHz
320	3001063300000	Chip resistor 0603 33Ω J 1/10W (RoHS)	1	R139	B4B	
321	3001063330010	Chip resistor 0603 33KΩ J 1/10W(RoHS)	1	R555	T4F	
322	3001062210000	Chip resistor 0603 220Ω J 1/10W(RoHS)	1	R141	B4A	U1:400-470MHz
323	3001062210000	Chip resistor 0603 220Ω J 1/10W(RoHS)	1	R141	B4A	U2:450-500MHz
324	3001062210000	Chip resistor 0603 220Ω J 1/10W(RoHS)	1	R141	B4A	U3:470-520MHz
325	3001063310000	Chip resistor 0603 2.2KΩ J 1/10W(RoHS)	1	R141	B4A	U4:350-400MHz
326	3001062210000	Chip resistor 0603 220Ω J 1/10W(RoHS)	1	R142	B3A	U1:400-470MHz
327	3001062210000	Chip resistor 0603 220Ω J 1/10W(RoHS)	1	R142	B3A	U2:450-500MHz
328	3001062210000	Chip resistor 0603 220Ω J 1/10W(RoHS)	1	R142	B3A	U3:470-520MHz
329	3001063310000	Chip resistor 0603 2.2KΩ J 1/10W(RoHS)	1	R142	B3A	U4:350-400MHz
330	3001064710000	Chip resistor 0603 470Ω J 1/10W(RoHS)	1	R192	T2E	
331	3001064710000	Chip resistor 0603 470Ω J 1/10W(RoHS)	1	R556	T4F	
332	3001064720000	Chip resistor 0603 4.7KΩ J 1/10W(RoHS)	1	R138	B4B	
333	3001064720000	Chip resistor 0603 4.7KΩ J 1/10W(RoHS)	1	R602	B4G	
334	3001064730000	Chip resistor 0603 47KΩ J 1/10W(RoHS)	1	R551	T3F	
335	3001064730000	Chip resistor 0603 47KΩ J 1/10W(RoHS)	1	R561	T3G	
336	3001064730000	Chip resistor 0603 47KΩ J 1/10W(RoHS)	1	R601	B4G	
337	3001064730000	Chip resistor 0603 47KΩ J 1/10W(RoHS)	1	R603	B2F	
338	3001071800000	Chip resistor 0805 18Ω J 1/8W(RoHS)	1	R191	T2E	
339	3001075690000	Chip resistor 0805 5.6Ω J 1/8W(RoHS)	1	R195	T1E	
340	3001078210000	Chip resistor 0805 820Ω J 1/8W(RoHS)	1	R194	T1E	
341	3001078210000	Chip resistor 0805 820Ω J 1/8W(RoHS)	1	R196	T1E	
342	3001161210000	Chip resistor 2010 120Ω J 1/2W(RoHS)	1	R201	T2C	
343	3001162200000	Chip resistor 2010 22Ω J 1/2W(RoHS)	1	R193	T2E	
344	3001164720000	Chip resistor 2010 4.7KΩ J 1/2W(RoHS)	1	R552	T3F	
345	3005051020000	Integrated resistor RTA02-2D102JTH 1K J 1/16W (RoHS)	1	CP501	T5C	
346	3005051020000	Integrated resistor RTA02-2D102JTH 1K J 1/16W (RoHS)	1	CP502	T4C	
347	3005051020000	Integrated resistor RTA02-2D102JTH 1K J 1/16W (RoHS)	1	CP503	T4C	
348	3005051020000	Integrated resistor RTA02-2D102JTH 1K J 1/16W (RoHS)	1	CP504	T4C	
349	3005051020000	Integrated resistor RTA02-2D102JTH 1K J 1/16W (RoHS)	1	CP505	T4C	
350	3005051020000	Integrated resistor RTA02-2D102JTH 1K J 1/16W (RoHS)	1	CP506	T3C	
351	3005051020000	Integrated resistor RTA02-2D102JTH 1K J 1/16W (RoHS)	1	CP508	T4D	
352	3005051020000	Integrated resistor RTA02-2D102JTH 1K J 1/16W (RoHS)	1	CP509	T4E	
353	3005051020000	Integrated resistor RTA02-2D102JTH 1K J 1/16W (RoHS)	1	CP510	T4E	

354	3005051020000	Integrated resistor RTA02-2D102JTH 1K J 1/16W (RoHS)	1	CP512	T4E	
355	3005051020000	Integrated resistor RTA02-2D102JTH 1K J 1/16W (RoHS)	1	CP513	T4D	
356	3005051020000	Integrated resistor RTA02-2D102JTH 1K J 1/16W (RoHS)	1	CP514	T5D	
357	3005051020000	Integrated resistor RTA02-2D102JTH 1K J 1/16W (RoHS)	1	CP515	T5D	
358	3005051020000	Integrated resistor RTA02-2D102JTH 1K J 1/16W (RoHS)	1	CP516	T5C	
359	3005051020000	Integrated resistor RTA02-2D102JTH 1K J 1/16W (RoHS)	1	CP517	T5C	
360	3005051020000	Integrated resistor RTA02-2D102JTH 1K J 1/16W (RoHS)	1	CP518	T5C	
361	3005051020000	Integrated resistor RTA02-2D102JTH 1K J 1/16W (RoHS)	1	CP519	T5D	
362	3005051020000	Integrated resistor RTA02-2D102JTH 1K J 1/16W (RoHS)	1	CP520	T5C	
363	3005051020000	Integrated resistor RTA02-2D102JTH 1K J 1/16W (RoHS)	1	CP521	T4C	
364	3101051000020	Chip capacitor GRM1555C1H100JZ01D 10PF J 50V(RoHS)	1	C173	T4A	
365	3101051000020	Chip capacitor GRM1555C1H100JZ01D 10PF J 50V(RoHS)	1	C826	T2D	
366	3101051000020	Chip capacitor GRM1555C1H100JZ01D 10PF J 50V(RoHS)	1	C827	T3C	
367	3101051020010	Chip capacitor GRM36X7R102K50PT 1000PF K 50V(RoHS)	1	C180	T4B	
368	3101051020010	Chip capacitor GRM36X7R102K50PT 1000PF K 50V(RoHS)	1	C225	T3B	
369	3101051020010	Chip capacitor GRM36X7R102K50PT 1000PF K 50V(RoHS)	1	C238	T3B	
370	3101051020010	Chip capacitor GRM36X7R102K50PT 1000PF K 50V(RoHS)	1	C441	B5E	
371	3101051020010	Chip capacitor GRM36X7R102K50PT 1000PF K 50V(RoHS)	1	C445	B5B	
372	3101051020010	Chip capacitor GRM36X7R102K50PT 1000PF K 50V(RoHS)	1	C458	B5B	
373	3101051020010	Chip capacitor GRM36X7R102K50PT 1000PF K 50V(RoHS)	1	C462	B5C	
374	3101051020010	Chip capacitor GRM36X7R102K50PT 1000PF K 50V(RoHS)	1	C538	T4D	
375	3101051020010	Chip capacitor GRM36X7R102K50PT 1000PF K 50V(RoHS)	1	C805	T3D	
376	3101051020010	Chip capacitor GRM36X7R102K50PT 1000PF K 50V(RoHS)	1	C806	T3D	
377	3101051020010	Chip capacitor GRM36X7R102K50PT 1000PF K 50V(RoHS)	1	C807	T3D	
378	3101051020010	Chip capacitor GRM36X7R102K50PT 1000PF K 50V(RoHS)	1	C808	T3C	
379	3101051020010	Chip capacitor GRM36X7R102K50PT 1000PF K 50V(RoHS)	1	C809	T3C	
380	3101051020010	Chip capacitor GRM36X7R102K50PT 1000PF K 50V(RoHS)	1	C810	T3C	
381	3101051020010	Chip capacitor GRM36X7R102K50PT 1000PF K 50V(RoHS)	1	C830	T3E	
382	3101051020010	Chip capacitor GRM36X7R102K50PT 1000PF K 50V(RoHS)	1	C916	T5E	
383	3101051020010	Chip capacitor GRM36X7R102K50PT 1000PF K 50V(RoHS)	1	C917	T4E	
384	3101051020010	Chip capacitor GRM36X7R102K50PT 1000PF K 50V(RoHS)	1	C918	T4E	
385	3101051020010	Chip capacitor GRM36X7R102K50PT 1000PF K 50V(RoHS)	1	C919	T4E	
386	3101051020010	Chip capacitor GRM36X7R102K50PT 1000PF K 50V(RoHS)	1	C920	T4E	
387	3101051020010	Chip capacitor GRM36X7R102K50PT 1000PF K 50V(RoHS)	1	C921	T4E	
388	3101051020010	Chip capacitor GRM36X7R102K50PT 1000PF K 50V(RoHS)	1	C922	T4E	
389	3101051020010	Chip capacitor GRM36X7R102K50PT 1000PF K 50V(RoHS)	1	C923	T4E	
390	3101051020010	Chip capacitor GRM36X7R102K50PT 1000PF K 50V(RoHS)	1	C924	T4E	
391	3101051020010	Chip capacitor GRM36X7R102K50PT 1000PF K 50V(RoHS)	1	C925	T5E	
392	3101051020010	Chip capacitor GRM36X7R102K50PT 1000PF K 50V(RoHS)	1	C926	T4E	
393	3101051020010	Chip capacitor GRM36X7R102K50PT 1000PF K 50V(RoHS)	1	C929	T4E	
394	3101051030020	Chip capacitor GRM155R71E103KA01D 0.01UF K 25V(RoHS)	1	C160	T2D	
395	3101051030020	Chip capacitor GRM155R71E103KA01D 0.01UF K 25V(RoHS)	1	C163	T4A	
396	3101051030020	Chip capacitor GRM155R71E103KA01D 0.01UF K 25V(RoHS)	1	C239	T2B	
397	3101051030020	Chip capacitor GRM155R71E103KA01D 0.01UF K 25V(RoHS)	1	C240	T3B	
398	3101051030020	Chip capacitor GRM155R71E103KA01D 0.01UF K 25V(RoHS)	1	C243	B4C	
399	3101051030020	Chip capacitor GRM155R71E103KA01D 0.01UF K 25V(RoHS)	1	C401	B4E	
400	3101051030020	Chip capacitor GRM155R71E103KA01D 0.01UF K 25V(RoHS)	1	C456	B5C	
401	3101051030020	Chip capacitor GRM155R71E103KA01D 0.01UF K 25V(RoHS)	1	C461	B5B	
402	3101051030020	Chip capacitor GRM155R71E103KA01D 0.01UF K 25V(RoHS)	1	C465	B5B	
403	3101051030020	Chip capacitor GRM155R71E103KA01D 0.01UF K 25V(RoHS)	1	C506	T5E	
404	3101051030020	Chip capacitor GRM155R71E103KA01D 0.01UF K 25V(RoHS)	1	C512	B4F	

405	3101051030020	Chip capacitor GRM155R71E103KA01D 0.01UF K 25V(RoHS)	1	C604	B4G	
406	3101051030020	Chip capacitor GRM155R71E103KA01D 0.01UF K 25V(RoHS)	1	C903	B5C	
407	3101051030020	Chip capacitor GRM155R71E103KA01D 0.01UF K 25V(RoHS)	1	C905	B5C	
408	3101051040010	Chip capacitor GRM36Y5V104Z25PT 0.1UF Z 25V(RoHS)	1	C154	B4B	
409	3101051040010	Chip capacitor GRM36Y5V104Z25PT 0.1UF Z 25V(RoHS)	1	C165	T4A	
410	3101051040010	Chip capacitor GRM36Y5V104Z25PT 0.1UF Z 25V(RoHS)	1	C167	T4A	
411	3101051040010	Chip capacitor GRM36Y5V104Z25PT 0.1UF Z 25V(RoHS)	1	C168	T4A	
412	3101051040010	Chip capacitor GRM36Y5V104Z25PT 0.1UF Z 25V(RoHS)	1	C169	T4B	
413	3101051040010	Chip capacitor GRM36Y5V104Z25PT 0.1UF Z 25V(RoHS)	1	C174	T4A	
414	3101051040010	Chip capacitor GRM36Y5V104Z25PT 0.1UF Z 25V(RoHS)	1	C175	T3A	
415	3101051040010	Chip capacitor GRM36Y5V104Z25PT 0.1UF Z 25V(RoHS)	1	C176	T4A	
416	3101051040010	Chip capacitor GRM36Y5V104Z25PT 0.1UF Z 25V(RoHS)	1	C179	T4B	
417	3101051040010	Chip capacitor GRM36Y5V104Z25PT 0.1UF Z 25V(RoHS)	1	C403	B4E	
418	3101051040010	Chip capacitor GRM36Y5V104Z25PT 0.1UF Z 25V(RoHS)	1	C405	B5E	
419	3101051040010	Chip capacitor GRM36Y5V104Z25PT 0.1UF Z 25V(RoHS)	1	C406	B5E	
420	3101051040010	Chip capacitor GRM36Y5V104Z25PT 0.1UF Z 25V(RoHS)	1	C407	B5E	
421	3101051040010	Chip capacitor GRM36Y5V104Z25PT 0.1UF Z 25V(RoHS)	1	C430	B5D	
422	3101051040010	Chip capacitor GRM36Y5V104Z25PT 0.1UF Z 25V(RoHS)	1	C431	B5B	
423	3101051040010	Chip capacitor GRM36Y5V104Z25PT 0.1UF Z 25V(RoHS)	1	C440	B5E	
424	3101051040010	Chip capacitor GRM36Y5V104Z25PT 0.1UF Z 25V(RoHS)	1	C453	B4C	
425	3101051040010	Chip capacitor GRM36Y5V104Z25PT 0.1UF Z 25V(RoHS)	1	C463	B5B	
426	3101051040010	Chip capacitor GRM36Y5V104Z25PT 0.1UF Z 25V(RoHS)	1	C466	B4D	
427	3101051040010	Chip capacitor GRM36Y5V104Z25PT 0.1UF Z 25V(RoHS)	1	C504	T4E	
428	3101051040010	Chip capacitor GRM36Y5V104Z25PT 0.1UF Z 25V(RoHS)	1	C505	T5D	
429	3101051040010	Chip capacitor GRM36Y5V104Z25PT 0.1UF Z 25V(RoHS)	1	C511	B4F	
430	3101051040010	Chip capacitor GRM36Y5V104Z25PT 0.1UF Z 25V(RoHS)	1	C525	T4G	
431	3101051040010	Chip capacitor GRM36Y5V104Z25PT 0.1UF Z 25V(RoHS)	1	C537	B4F	
432	3101051040010	Chip capacitor GRM36Y5V104Z25PT 0.1UF Z 25V (RoHS)	1	C539	T4C	U1:400-470MHz
433	3101051030020	Chip capacitor GRM155R71E103KA01D 0.01UF K 25V (RoHS)	1	C539	T3C	U2:450-500MHz
434	3101051040010	Chip capacitor GRM36Y5V104Z25PT 0.1UF Z 25V (RoHS)	1	C539	T4C	U3:470-520MHz
435	3101051040010	Chip capacitor GRM36Y5V104Z25PT 0.1UF Z 25V (RoHS)	1	C539	T4C	U4:350-400MHz
436	3101051040010	Chip capacitor GRM36Y5V104Z25PT 0.1UF Z 25V (RoHS)	1	C801	T3D	
437	3101051040010	Chip capacitor GRM36Y5V104Z25PT 0.1UF Z 25V (RoHS)	1	C803	T3D	
438	3101051040010	Chip capacitor GRM36Y5V104Z25PT 0.1UF Z 25V (RoHS)	1	C829	T3E	
439	3101051040010	Chip capacitor GRM36Y5V104Z25PT 0.1UF Z 25V (RoHS)	1	C911	B5C	
440	3101051050000	Chip capacitor GRM155R60J105K6.3PT 1UF K 6.3V(RoHS)	1	C438	B5E	
441	3101051050000	Chip capacitor GRM155R60J105K6.3PT 1UF K 6.3V(RoHS)	1	C444	B5E	
442	3101051050000	Chip capacitor GRM155R60J105K6.3PT 1UF K 6.3V(RoHS)	1	C449	B4B	
443	3101051050000	Chip capacitor GRM155R60J105K6.3PT 1UF K 6.3V(RoHS)	1	C450	B4B	
444	3101051050000	Chip capacitor GRM155R60J105K6.3PT 1UF K 6.3V(RoHS)	1	C467	B4B	
445	3101051050000	Chip capacitor GRM155R60J105K6.3PT 1UF K 6.3V(RoHS)	1	C468	T4F	
446	3101051050000	Chip capacitor GRM155R60J105K6.3PT 1UF K 6.3V(RoHS)	1	C470	T5D	
447	3101051050000	Chip capacitor GRM155R60J105K6.3PT 1UF K 6.3V(RoHS)	1	C927	T4E	
448	3101051050000	Chip capacitor GRM155R60J105K6.3PT 1UF K 6.3V(RoHS)	1	C928	T4E	
449	3101051230000	Chip capacitor C1005X7R1E123K 0.012UF K 25V(RoHS)	1	C454	B5C	
450	3101051500020	Chip capacitor GRM36COG150J50PT 15PF J 50V(RoHS)	1	C501	T4C	
451	3101051510000	Chip capacitor GRM36COG151J50 150PF J 50V(RoHS)	1	C425	B5D	
452	3101051830000	Chip capacitor C1005X7R1C183KT 0.018UF K 16V(RoHS)	1	C409	B5D	
453	3101051830000	Chip capacitor C1005X7R1C183KT 0.018UF K 16V(RoHS)	1	C823	T3D	
454	3101052200010	Chip capacitor GRM36C0G220J50PT 22PF J 50V(RoHS)	1	C427	B5D	
455	3101052200010	Chip capacitor GRM36C0G220J50PT 22PF J 50V(RoHS)	1	C428	B5D	

456	3101052210010	Chip capacitor GRM155R71H221KA01D 220PF K 50V(RoHS)	1	C170	T4A	
457	3101052210010	Chip capacitor GRM155R71H221KA01D 220PF K 50V(RoHS)	1	C171	T4A	
458	3101052220010	Chip capacitor GRM155R71H222KA01D 2200pF K 50V(RoHS)	1	C455	B5C	
459	3101052700000	Chip capacitor GRM1555C1H270J 27PF J 50V(RoHS)	1	C502	T4C	
460	3101052700000	Chip capacitor GRM1555C1H270J 27PF J 50V(RoHS)	1	C503	T4C	
461	3101052720000	Chip capacitor 0402 2700PF K 50V(RoHS)	1	C460	B5C	
462	3101052730000	Chip capacitor GRM155R71C273KA01D 0.027UF K 16V(RoHS)	1	C426	B5D	
463	3101052730000	Chip capacitor GRM155R71C273KA01D 0.027UF K 16V(RoHS)	1	C436	B5F	U1:400-470MHz
464	3101052730000	Chip capacitor GRM155R71C273KA01D 0.027UF K 16V(RoHS)	1	C436	B5F	U2:450-500MHz
465	3101052730000	Chip capacitor GRM155R71C273KA01D 0.027UF K 16V(RoHS)	1	C436	B5F	U3:470-520MHz
466	3101052230000	Chip capacitor GRM155R71C223KA01D 0.022UF K 16V(RoHS)	1	C436	B5F	U4:350-400MHz
467	3101053300000	Chip capacitor GRM1555C1H330JZ01D 33PF J 50V(RoHS)	1	C153	B3A	
468	3101053300000	Chip capacitor GRM1555C1H330JZ01D 33PF J 50V(RoHS)	1	C415	B4E	
469	3101053300000	Chip capacitor GRM1555C1H330JZ01D 33PF J 50V(RoHS)	1	C423	B4D	
470	3101053300000	Chip capacitor GRM1555C1H330JZ01D 33PF J 50V(RoHS)	1	C908	B5C	
471	3101053310030	Chip capacitor GRM1555C1H331JA01D 330PF(RoHS)	1	C439	B5E	
472	3101053310030	Chip capacitor GRM1555C1H331JA01D 330PF(RoHS)	1	C471	T5D	
473	3101054700010	Chip capacitor GRM36COG470J50PT 47PF J 50V (RoHS)	1	C433	B5F	
474	3101054700010	Chip capacitor GRM36COG470J50PT 47PF J 50V (RoHS)	1	C435	B5F	
475	3101054700010	Chip capacitor GRM36COG470J50PT 47PF J 50V (RoHS)	1	C447	B5C	
476	3101054710010	Chip capacitor GRM155R71H471KA01D 470PF K 50V(RoHS)	1	C115	T3A	
477	3101054710010	Chip capacitor GRM155R71H471KA01D 470PF K 50V(RoHS)	1	C123	B3B	
478	3101054710010	Chip capacitor GRM155R71H471KA01D 470PF K 50V(RoHS)	1	C125	B2B	
479	3101054710010	Chip capacitor GRM155R71H471KA01D 470PF K 50V(RoHS)	1	C126	B3A	
480	3101054710010	Chip capacitor GRM155R71H471KA01D 470PF K 50V(RoHS)	1	C140	B3B	
481	3101054710010	Chip capacitor GRM155R71H471KA01D 470PF K 50V(RoHS)	1	C172	T4A	
482	3101054710010	Chip capacitor GRM155R71H471KA01D 470PF K 50V(RoHS)	1	C209	T2D	
483	3101054710010	Chip capacitor GRM155R71H471KA01D 470PF K 50V(RoHS)	1	C211	T2E	
484	3101054710010	Chip capacitor GRM155R71H471KA01D 470PF K 50V(RoHS)	1	C214	T2E	
485	3101054710010	Chip capacitor GRM155R71H471KA01D 470PF K 50V(RoHS)	1	C248	B3B	
486	3101054710010	Chip capacitor GRM155R71H471KA01D 470PF K 50V(RoHS)	1	C249	B3A	
487	3101054710010	Chip capacitor GRM155R71H471KA01D 470PF K 50V(RoHS)	1	C432	B5F	
488	3101054710010	Chip capacitor GRM155R71H471KA01D 470PF K 50V(RoHS)	1	C442	B4E	
489	3101054710010	Chip capacitor GRM155R71H471KA01D 470PF K 50V(RoHS)	1	C443	B4E	
490	3101054710010	Chip capacitor GRM155R71H471KA01D 470PF K 50V(RoHS)	1	C802	T3D	
491	3101054710010	Chip capacitor GRM155R71H471KA01D 470PF K 50V(RoHS)	1	C817	T3E	
492	3101054710010	Chip capacitor GRM155R71H471KA01D 470PF K 50V(RoHS)	1	C818	T3E	
493	3101054710010	Chip capacitor GRM155R71H471KA01D 470PF K 50V(RoHS)	1	C820	T3D	
494	3101054710010	Chip capacitor GRM155R71H471KA01D 470PF K 50V(RoHS)	1	C821	T3D	
495	3101054710010	Chip capacitor GRM155R71H471KA01D 470PF K 50V(RoHS)	1	C822	T3D	
496	3101054720000	Chip capacitor GRM36X7R472K50PT 4700PF K 50V(RoHS)	1	C402	B4E	
497	3101054740020	Chip capacitor GRM155R61A474KE15D 0.47uF K 10V(RoHS)	1	C420	B4E	U1:400-470MHz
498	3101054740000	Chip capacitor C1005Y5V1A474ZT 0.47UF Z 6.3V(RoHS)	1	C420	B4E	U2:450-500MHz
499	3101054740000	Chip capacitor C1005Y5V1A474ZT 0.47UF Z 6.3V(RoHS)	1	C420	B4E	U3:470-520MHz
500	3101054740000	Chip capacitor C1005Y5V1A474ZT 0.47UF Z 6.3V(RoHS)	1	C420	B4E	U4:350-400MHz
501	3101054740020	Chip capacitor GRM155R61A474KE15D 0.47uF K 10V(RoHS)	1	C422	T4B	U1:400-470MHz
502	3101054740000	Chip capacitor C1005Y5V1A474ZT 0.47UF Z 6.3V(RoHS)	1	C422	T4B	U2:450-500MHz
503	3101054740000	Chip capacitor C1005Y5V1A474ZT 0.47UF Z 6.3V(RoHS)	1	C422	T4B	U3:470-520MHz
504	3101054740000	Chip capacitor C1005Y5V1A474ZT 0.47UF Z 6.3V(RoHS)	1	C422	T4B	U4:350-400MHz
505	3101054740020	Chip capacitor GRM155R61A474KE15D 0.47uF K 10V(RoHS)	1	C909	B5C	U1:400-470MHz
506	3101054740000	Chip capacitor C1005Y5V1A474ZT 0.47UF Z 6.3V(RoHS)	1	C909	B5C	U2:450-500MHz

507	#####	Chip capacitor C1005Y5V1A474ZT 0.47UF Z 6.3V(RoHS)	1	C909	B5C	U3:470-520MHz
508	#####	Chip capacitor C1005Y5V1A474ZT 0.47UF Z 6.3V(RoHS)	1	C909	B5C	U4:350-400MHz
509	#####	Chip capacitor GRM155R61A474KE15D 0.47uF K 10V(RoHS)	1	C912	T4E	U1:400-470MHz
510	#####	Chip capacitor C1005Y5V1A474ZT 0.47UF Z 6.3V(RoHS)	1	C912	T4E	U2:450-500MHz
511	#####	Chip capacitor C1005Y5V1A474ZT 0.47UF Z 6.3V(RoHS)	1	C912	T4E	U3:470-520MHz
512	#####	Chip capacitor C1005Y5V1A474ZT 0.47UF Z 6.3V(RoHS)	1	C912	T4E	U4:350-400MHz
513	#####	Chip capacitor C1005X7R1H561KT 560PF K 50V(RoHS)	1	C421	B4D	
514	#####	Chip capacitor C1005X7R1H561KT 560PF K 50V(RoHS)	1	C910	B5D	
515	#####	Chip capacitor C1005X5R1A683KT 0.068UF K 6.3V(RoHS)	1	C452	B5C	
516	#####	Chip capacitor GRM36Y5V684Z10PN 0.68UF Z 10V (RoHS)	1	C419	B4E	
517	#####	Chip capacitor GRM1555C1H820J 82PF J 50V(RoHS)	1	C178	T4A	
518	#####	Chip capacitor GRM1885C1H2R0BZ01D 2PF B 50V(RoHS)	1	C112	T2A	
519	#####	Chip capacitor GRM1885C1H2R0BZ01D 2PF B 50V(RoHS)	1	C121	B2B	U1:400-470MHz
520	#####	Chip capacitor GRM1885C1H2R0BZ01D 2PF B 50V(RoHS)	1	C121	B2B	U2:450-500MHz
521	#####	Chip capacitor GRM1885C1H2R0BZ01D 2PF B 50V(RoHS)	1	C121	B2B	U3:470-520MHz
522	#####	Chip capacitor GRM1885C1H3R0BZ01D 3PF B 50V(RoHS)	1	C121	B2B	U4:350-400MHz
523	#####	Chip capacitor GRM1885C1H2R0BZ01D 2PF B 50V(RoHS)	1	C219	T1E	
524	NA	NA		C119	B2C	U1:400-470MHz
525	#####	Chip capacitor GRM1885C1H2R0BZ01D 2PF B 50V(RoHS)	1	C119	B2C	U2:450-500MHz
526	NA	NA		C119	B2C	U3:470-520MHz
527	NA	NA		C119	B2C	U4:350-400MHz
528	#####	Chip capacitor GRM1885C1H3R0BZ01D 3PF B 50V(RoHS)	1	C813	T2E	
529	#####	Chip capacitor GRM1885C1HR30BZ01D 0.3PF B 50V(RoHS)	1	C109	T2A	
530	#####	Chip capacitor GRM1885C1HR30BZ01D 0.3PF B 50V(RoHS)	1	C110	T2A	
531	#####	Chip capacitor GRM1885C1H4R0BZ01D 4PF B 50V(RoHS)	1	C146	B4B	
532	#####	Chip capacitor GRM1885C1H4R0BZ01D 4PF B 50V(RoHS)	1	C151	B3A	
533	#####	Chip capacitor GRM1885C1H120JA01D 12PF J 50V(RoHS)	1	C133	B2A	U1:400-470MHz
534	#####	Chip capacitor 0603 5.6PF C 50V(RoHS)	1	C133	B2A	U2:450-500MHz
535	#####	Chip capacitor GRM1885C1H5R0BZ01D 5PF B 50V(RoHS)	1	C133	B2A	U3:470-520MHz
536	#####	Chip capacitor GRM1885C1H120JA01D 12PF J 50V(RoHS)	1	C133	B2A	U4:350-400MHz
537	#####	Chip capacitor GRM1885C1H120JA01D 12PF J 50V(RoHS)	1	C212	T2E	U1:400-470MHz
538	#####	Chip capacitor GRM1885C1H9R0BZ01D 9PF B 50V(RoHS)	1	C212	T2E	U2:450-500MHz
539	#####	Chip capacitor GRM1885C1H120JA01D 12PF J 50V(RoHS)	1	C212	T2E	U3:470-520MHz
540	#####	Chip capacitor GRM1885C1H120JA01D 12PF J 50V(RoHS)	1	C212	T2E	U4:350-400MHz
541	#####	Chip capacitor GRM1885C1H5R0BZ01D 5PF B 50V(RoHS)	1	C128	B2B	U1:400-470MHz
542	#####	Chip capacitor GRM1885C1H5R0BZ01D 5PF B 50V (RoHS)	1	C128	B2B	U2:450-500MHz
543	#####	Chip capacitor 0603 5.6PF C 50V(RoHS)	1	C128	B2B	U3:470-520MHz
544	#####	Chip capacitor GRM1885C1H5R0BZ01D 5PF B 50V (RoHS)	1	C128	B2B	U4:350-400MHz
545	#####	Chip capacitor GRM1885C1H5R0BZ01D 5PF B 50V (RoHS)	1	C199	B3B	U1:400-470MHz
546	#####	Chip capacitor GRM1885C1H4R0BZ01D 4PF B 50V(RoHS)	1	C199	B3B	U2:450-500MHz
547	#####	Chip capacitor GRM1885C1H5R0BZ01D 5PF B 50V (RoHS)	1	C199	B3B	U3:470-520MHz
548	#####	Chip capacitor GRM1885C1H5R0BZ01D 5PF B 50V (RoHS)	1	C199	B3B	U4:350-400MHz
549	#####	Chip capacitor GRM1885C1HR50BZ01D 0.5PF B 50V (RoHS)	1	C111	T2A	
550	#####	Chip capacitor GRM1885C1HR50BZ01D 0.5PF B 50V (RoHS)	1	C196	B3C	U1:400-470MHz
551	NA	NA		C196	B3C	U2:450-500MHz
552	NA	NA		C196	B3C	U3:470-520MHz
553	NA	NA		C196	B3C	U4:350-400MHz
554	#####	Chip capacitor GRM1885C1H6R0BZ01D 6PF B 50V(RoHS)	1	C218	T2E	
555	#####	Chip capacitor 0603 10PF J 50V(RoHS)	1	C194	B3B	
556	#####	Chip capacitor 0603 10PF J 50V(RoHS)	1	C197	B3B	
557	#####	Chip capacitor GRM188R71H102KA01D 1000PF K 50V(RoHS)	1	C158	T2C	

558	3101061020000	Chip capacitor GRM188R71H102KA01D 1000PF K 50V(RoHS)	1	C220	T1E	
559	3101061020000	Chip capacitor GRM188R71H102KA01D 1000PF K 50V(RoHS)	1	C236	B2A	
560	3101061020000	Chip capacitor GRM188R71H102KA01D 1000PF K 50V(RoHS)	1	C526	T1F	
561	3101061020000	Chip capacitor GRM188R71H102KA01D 1000PF K 50V(RoHS)	1	C529	T3F	
562	3101061020000	Chip capacitor GRM188R71H102KA01D 1000PF K 50V(RoHS)	1	C532	T3F	
563	3101061020000	Chip capacitor GRM188R71H102KA01D 1000PF K 50V(RoHS)	1	C605	B3G	
564	3101061030010	Chip capacitor GRM188R71H103KA01D 0.01UF K 25V(RoHS)	1	C143	B3B	
565	3101061030010	Chip capacitor GRM188R71H103KA01D 0.01UF K 25V(RoHS)	1	C148	B4B	
566	3101061030010	Chip capacitor GRM188R71H103KA01D 0.01UF K 25V(RoHS)	1	C152	B3A	
567	3101061030010	Chip capacitor GRM188R71H103KA01D 0.01UF K 25V(RoHS)	1	C227	T2D	
568	3101061030010	Chip capacitor GRM188R71H103KA01D 0.01UF K 25V(RoHS)	1	C228	T2C	
569	3101061030010	Chip capacitor GRM188R71H103KA01D 0.01UF K 25V(RoHS)	1	C242	T4A	
570	3101061030010	Chip capacitor GRM188R71H103KA01D 0.01UF K 25V(RoHS)	1	C606	B1F	
571	3101061040010	Chip capacitor 0603 0.1UF K 16V (RoHS)	1	C135	B2A	
572	3101061040010	Chip capacitor 0603 0.1UF K 16V (RoHS)	1	C145	B3B	
573	3101061040010	Chip capacitor 0603 0.1UF K 16V (RoHS)	1	C222	T1E	
574	3101061040010	Chip capacitor 0603 0.1UF K 16V (RoHS)	1	C235	T1C	
575	3101061040010	Chip capacitor 0603 0.1UF K 16V (RoHS)	1	C507	T5D	
576	3101061040010	Chip capacitor 0603 0.1UF K 16V (RoHS)	1	C518	B5G	
577	3101061040010	Chip capacitor 0603 0.1UF K 16V (RoHS)	1	C519	B5G	
578	3101061040010	Chip capacitor 0603 0.1UF K 16V (RoHS)	1	C520	B4G	
579	3101061040010	Chip capacitor 0603 0.1UF K 16V (RoHS)	1	C521	B1F	
580	3101061040010	Chip capacitor 0603 0.1UF K 16V (RoHS)	1	C528	T3G	
581	3101061040010	Chip capacitor 0603 0.1UF K 16V (RoHS)	1	C534	T3F	
582	3101061040010	Chip capacitor 0603 0.1UF K 16V (RoHS)	1	C536	B4G	
583	3101061040010	Chip capacitor 0603 0.1UF K 16V (RoHS)	1	C602	B3F	
584	3101061050000	Chip capacitor GRM188F51E105ZA12D 1UF Z 25V (RoHS)	1	C408	B5D	
585	3101061050000	Chip capacitor GRM188F51E105ZA12D 1UF Z 25V (RoHS)	1	C412	B5E	
586	3101061050000	Chip capacitor GRM188F51E105ZA12D 1UF Z 25V (RoHS)	1	C434	B5F	
587	3101061050000	Chip capacitor GRM188F51E105ZA12D 1UF Z 25V (RoHS)	1	C437	T5F	
588	3101061050000	Chip capacitor GRM188F51E105ZA12D 1UF Z 25V (RoHS)	1	C513	B4F	
589	3101061050000	Chip capacitor GRM188F51E105ZA12D 1UF Z 25V (RoHS)	1	C514	B5F	
590	3101061050000	Chip capacitor GRM188F51E105ZA12D 1UF Z 25V (RoHS)	1	C609	T5F	U1:400-470MHz
591	3101051050000	Chip capacitor GRM155R60J105K6.3PT 1UF K 6.3V(RoHS)	1	C609	T5F	U2:450-500MHz
592	3101061050000	Chip capacitor GRM188F51E105ZA12D 1UF Z 25V (RoHS)	1	C609	T5F	U3:470-520MHz
593	3101051050000	Chip capacitor GRM155R60J105K6.3PT 1UF K 6.3V(RoHS)	1	C609	T5F	U4:350-400MHz
594	3101061500010	Chip capacitor GRM1885C1H150JA01D 15PF J 50V(RoHS)	1	C150	B3B	
595	3101062220010	Chip capacitor GRM39X7R222K50PFT 2200PF K 50V(RoHS)	1	C416	B4D	
596	3101062240000	Chip capacitor GRM188R71A224KA01D 0.22UF K 10V(RoHS)	1	C237	T2B	
597	3101062240000	Chip capacitor GRM188R71A224KA01D 0.22UF K 10V(RoHS)	1	C414	B5D	U1:400-470MHz
598	3101062240050	Chip capacitor GRM188F51C224ZA01D 0.22UF Z 16V(RoHS)	1	C414	B5D	U2:450-500MHz
599	3101062240000	Chip capacitor GRM188R71A224KA01D 0.22UF K 10V(RoHS)	1	C414	B5D	U3:470-520MHz
600	3101062240000	Chip capacitor GRM188R71A224KA01D 0.22UF K 10V(RoHS)	1	C414	B5D	U4:350-400MHz
601	3101062240000	Chip capacitor GRM188R71A224KA01D 0.22UF K 10V(RoHS)	1	C522	T4F	
602	NA	NA		C213	T2E	U1:400-470MHz
603	NA	NA		C213	T2E	U2:450-500MHz
604	NA	NA		C213	T2E	U3:470-520MHz
605	3101061600000	Chip capacitor 0603 16PF J 50V (RoHS)	1	C213	T2E	U4:350-400MHz
606	3101062710000	Chip capacitor 0603 270PF J 50V(RoHS)	1	C159	T3C	
607	3101063000010	Chip capacitor 0603 30PF J 50V (RoHS)	1	C155	T4A	
608	3101064710000	Chip capacitor GRM188R71H471KA01D 470PF K 50V (RoHS)	1	C113	B2A	

609	3101064710000	Chip capacitor GRM188R71H471KA01D 470PF K 50V (RoHS)	1	C114	T2A	
610	3101064710000	Chip capacitor GRM188R71H471KA01D 470PF K 50V (RoHS)	1	C130	B3B	
611	3101064710000	Chip capacitor GRM188R71H471KA01D 470PF K 50V (RoHS)	1	C131	B3B	
612	3101064710000	Chip capacitor GRM188R71H471KA01D 470PF K 50V (RoHS)	1	C132	B2A	
613	3101064710000	Chip capacitor GRM188R71H471KA01D 470PF K 50V (RoHS)	1	C136	B2A	
614	3101064710000	Chip capacitor GRM188R71H471KA01D 470PF K 50V (RoHS)	1	C141	B3B	
615	3101064710000	Chip capacitor GRM188R71H471KA01D 470PF K 50V (RoHS)	1	C144	B3B	
616	3101064710000	Chip capacitor GRM188R71H471KA01D 470PF K 50V (RoHS)	1	C147	B4B	
617	3101064710000	Chip capacitor GRM188R71H471KA01D 470PF K 50V (RoHS)	1	C192	B3B	
618	3101064710000	Chip capacitor GRM188R71H471KA01D 470PF K 50V (RoHS)	1	C208	T2D	
619	3101064710000	Chip capacitor GRM188R71H471KA01D 470PF K 50V (RoHS)	1	C210	T2D	
620	3101064710000	Chip capacitor GRM188R71H471KA01D 470PF K 50V (RoHS)	1	C215	T2E	
621	3101064710000	Chip capacitor GRM188R71H471KA01D 470PF K 50V (RoHS)	1	C216	T2F	
622	3101064710000	Chip capacitor GRM188R71H471KA01D 470PF K 50V (RoHS)	1	C217	T2F	
623	3101064710000	Chip capacitor GRM188R71H471KA01D 470PF K 50V (RoHS)	1	C223	T1E	
624	3101064710000	Chip capacitor GRM188R71H471KA01D 470PF K 50V (RoHS)	1	C226	T2C	
625	3101064710000	Chip capacitor GRM188R71H471KA01D 470PF K 50V (RoHS)	1	C232	T1C	
626	3101064710000	Chip capacitor GRM188R71H471KA01D 470PF K 50V (RoHS)	1	C244	B2A	
627	3101064710000	Chip capacitor GRM188R71H471KA01D 470PF K 50V (RoHS)	1	C530	T3F	
628	3101064710000	Chip capacitor GRM188R71H471KA01D 470PF K 50V (RoHS)	1	C531	T2F	
629	3101064710000	Chip capacitor GRM188R71H471KA01D 470PF K 50V (RoHS)	1	C812	T3E	
630	3101066800000	Chip capacitor 0603 68PF J 50V(RoHS)	1	C156	T3C	
631	3101066800000	Chip capacitor 0603 68PF J 50V(RoHS)	1	C157	T3C	
632	3101074730000	Chip capacitor GRM21BR71E473KA01L 0.047UF K 25V (RoHS)	1	C814	T2E	
633	3102992000000	Trimmer capacitor TZY2Z060A001 6pF ± 2.5 pF 55V (RoHS)	1	TC101	B2B	
634	3102992000000	Trimmer capacitor TZY2Z060A001 6pF ± 2.5 pF 55V (RoHS)	1	TC102	B3A	
635	3104071050070	Tantalum capacitor TEESVP1C105M8R 1UF M 16V (RoHS)	1	C241	T3B	
636	3104071050070	Tantalum capacitor TEESVP1C105M8R 1UF M 16V (RoHS)	1	C417	B4D	
637	3104071050070	Tantalum capacitor TEESVP1C105M8R 1UF M 16V (RoHS)	1	C418	B4E	
638	3104071050070	Tantalum capacitor TEESVP1C105M8R 1UF M 16V (RoHS)	1	C517	B4F	
639	3104071050070	Tantalum capacitor TEESVP1C105M8R 1UF M 16V (RoHS)	1	C608	B2F	
640	3104071060080	Tantalum capacitor TEESVP0J106M8R 10UF M 6.3V (RoHS)	1	C164	T4A	
641	3104071560040	Tantalum capacitor F920J156MPA 15UF M 6.3V (RoHS)	1	C429	B5D	
642	3104072250060	Tantalum capacitor TEESVP1A225M8R 2.2UF M 10V (RoHS)	1	C250	T2B	
643	3104074750070	Tantalum capacitor TEESVP1A475M8R 4.7UF M 10V(RoHS)	1	C247	B4B	
644	3104074750070	Tantalum capacitor TEESVP1A475M8R 4.7UF M 10V (RoHS)	1	C411	B5E	
645	3104074750070	Tantalum capacitor TEESVP1A475M8R 4.7UF M 10V (RoHS)	1	C424	B4D	
646	3104074750070	Tantalum capacitor TEESVP1A475M8R 4.7UF M 10V (RoHS)	1	C448	B4C	
647	3104074750070	Tantalum capacitor TEESVP1A475M8R 4.7UF M 10V (RoHS)	1	C457	B5C	
648	3104074750070	Tantalum capacitor TEESVP1A475M8R 4.7UF M 10V (RoHS)	1	C464	B5B	
649	3104074750070	Tantalum capacitor TEESVP1A475M8R 4.7UF M 10V (RoHS)	1	C469	T5E	
650	3104074750070	Tantalum capacitor TEESVP1A475M8R 4.7UF M 10V (RoHS)	1	C603	B4G	
651	3104074750070	Tantalum capacitor TEESVP1A475M8R 4.7UF M 10V (RoHS)	1	C804	T3D	
652	3104074750070	Tantalum capacitor TEESVP1A475M8R 4.7UF M 10V (RoHS)	1	C811	T3C	
653	3104074750070	Tantalum capacitor TEESVP1A475M8R 4.7UF M 10V (RoHS)	1	C825	T3C	
654	3104074750070	Tantalum capacitor TEESVP1A475M8R 4.7UF M 10V (RoHS)	1	C828	T3E	
655	3104074750070	Tantalum capacitor TEESVP1A475M8R 4.7UF M 10V (RoHS)	1	C831	T5C	
656	NA	NA		C904	B4C	U1:400-470MHz
657	3104074750070	Tantalum capacitor TEESVP1A475M8R 4.7UF M 10V (RoHS)	1	C904	B4C	U2:450-500MHz
658	3104074750070	Tantalum capacitor TEESVP1A475M8R 4.7UF M 10V (RoHS)	1	C904	B4C	U3:470-520MHz
659	3104074750070	Tantalum capacitor TEESVP1A475M8R 4.7UF M 10V (RoHS)	1	C904	B4C	U4:350-400MHz

660	3104081040020	Tantalum capacitor TEESVA1V104M8R 0.1UF M 35V (RoHS)	1	C221	T1D	
661	3104081040020	Tantalum capacitor TEESVA1V104M8R 0.1UF M 35V (RoHS)	1	C816	T3F	
662	3104081060120	Tantalum capacitor TEESVA1C106M8R 10UF M 16V (RoHS)	1	C523	T3G	
663	3104081060120	Tantalum capacitor TEESVA1C106M8R 10UF M 16V (RoHS)	1	C607	B1F	U1:400-470MHz
664	3104081060120	Tantalum capacitor TEESVA1C106M8R 10UF M 16V (RoHS)	1	C607	B1F	U2:450-500MHz
665	3104081060120	Tantalum capacitor TEESVA1C106M8R 10UF M 16V (RoHS)	1	C607	B1F	U3:470-520MHz
666	3104081550030	Tantalum capacitor TEESVA1C155M8R 1.5UF M 16V(RoHS)	1	C607	B1F	U4:350-400MHz
667	3104081060120	Tantalum capacitor TEESVA1C106M8R 10UF M 16V (RoHS)	1	C819	T3E	
668	3104083350050	Tantalum capacitor F931C335MAA 3.3UF M 16V (RoHS)	1	C815	T3E	U1:400-470MHz
669	3104083350050	Tantalum capacitor F931C335MAA 3.3UF M 16V (RoHS)	1	C815	T3E	U2:450-500MHz
670	3104083350050	Tantalum capacitor F931C335MAA 3.3UF M 16V(RoHS)	1	C815	T3E	U3:470-520MHz
671	3104084750040	Tantalum capacitor1206 4.7uF K 16V (RoHS)	1	C815	T3E	U4:350-400MHz
672	3104086850040	Tantalum capacitor F931A685MAA 6.8UF M 10V (RoHS)	1	C181	T4B	
673	3210306180000	Chip inductor LQG18HN18NJ00 18nH J (RoHS)	1	L123	B3C	
674	3210306180000	Chip inductor LQG18HN18NJ00 18nH J (RoHS)	1	L138	B3B	
675	3210306220000	Chip inductor LQG18HN22NJ00 22nH J (RoHS)	1	L109	B3A	
676	3210306220000	Chip inductor LQG18HN22NJ00 22nH J (RoHS)	1	L124	B3B	
677	3210306390000	Chip inductor LQG18HN39NJ00 39nH J (RoHS)	1	L139	B3A	
678	3213212100000	Chip inductor NLV25T-010J 10nH J (RoHS)	1	L127	T2E	
679	3213212100000	Chip inductor NLV25T-010J 10nH J (RoHS)	1	L128	T1F	
680	3213212103000	Chip inductor NLV25T-100J-PF 10uH J (RoHS)	1	L134	B4C	
681	3221506601000	Bead BLM18AG601SN1 600Ω 100MHz (RoHS)	1	L129	T1E	
682	3221506601000	Bead BLM18AG601SN1 600Ω 100MHz (RoHS)	1	L135	B3B	
683	3221506601000	Bead BLM18AG601SN1 600Ω 100MHz (RoHS)	1	L137	B4B	
684	3221506601000	Bead BLM18AG601SN1 600Ω 100MHz (RoHS)	1	L501	T4E	
685	3221506601000	Bead BLM18AG601SN1 600Ω 100MHz (RoHS)	1	L502	T4C	
686	3221506601000	Bead BLM18AG601SN1 600Ω 100MHz (RoHS)	1	L503	T4E	
687	3221506601000	Bead BLM18AG601SN1 600Ω 100MHz (RoHS)	1	L504	T4E	
688	3221506601000	Bead BLM18AG601SN1 600Ω 100MHz (RoHS)	1	L505	T4E	
689	3221506601000	Bead BLM18AG601SN1 600Ω 100MHz (RoHS)	1	L801	T3D	
690	3221506601000	Bead BLM18AG601SN1 600Ω 100MHz (RoHS)	1	L803	T2D	
691	3221506601000	Bead BLM18AG601SN1 600Ω 100MHz (RoHS)	1	L804	T3E	
692	3231132830000	Air-core inductor 1.3*2.8*3TR RoHS)	1	L102	B1A	
693	3231132830000	Air-core inductor 1.3*2.8*3TR RoHS)	1	L103	B1A	
694	3231132830000	Air-core inductor 1.3*2.8*3TR RoHS)	1	L105	T1C	
695	3231803011000	Air-core inductor 0.8*3.0*11TR (RoHS)	1	L101	B1B	
696	3231803060000	Air-core inductor 0.8*3.0*6TR (RoHS)	1	L133	T1C	
697	3301060400000	Rectifier diode DSM3MA1TRF-E 100V (RoHS)	1	D515	T1G	
698	3302030500000	Zener diode UDZSTE(1710B) 10V (RoHS)	1	D514	T5F	
699	3302030500010	Zener diode UDZSTE(1715B) 15V (RoHS)	1	D518	T3F	
700	3302030500030	Zener diode UDZSTE(175.1B) 5.1V (RoHS)	1	D112	B4B	
701	3302030500030	Zener diode UDZSTE(175.1B) 5.1V (RoHS)	1	D118	B1D	
702	3302180100000	Zener diode HZU5ALL-E 5V (RoHS)	1	D802	T3D	
703	3303010500040	Switching diode 1SS355(TE17) 80V (RoHS)	1	D103	T3A	
704	3303010500040	Switching diode 1SS355(TE17) 80V (RoHS)	1	D116	T2D	
705	3303010500040	Switching diode 1SS355(TE17) 80V (RoHS)	1	D511	T4F	
706	3303010500040	Switching diode 1SS355(TE17) 80V (RoHS)	1	D513	T4F	
707	3303010500040	Switching diode 1SS355(TE17) 80V (RoHS)	1	D517	T3F	
708	3303020100020	Switching diode MA2S11100L 80V 100mA 0.95V/100mA (RoHS)	1	D501	T4E	
709	3303020100020	Switching diode MA2S11100L 80V 100mA 0.95V/100mA (RoHS)	1	D801	T3D	
710	3303020100020	Switching diode MA2S11100L 80V 100mA 0.95V/100mA (RoHS)	1	D803	T3E	

711	3303020100060	Switching diode MA3J74200L 30V 30mA 0.8V/30mA (RoHS)	1	D101	T2A	
712	3303020100060	Switching diode MA3J74200L 30V 30mA 0.8V/30mA (RoHS)	1	D102	T2A	
713	3303020100060	Switching diode MA3J74200L 30V 30mA 0.8V/30mA (RoHS)	1	D117	T2E	
714	3303020100060	Switching diode MA3J74200L 30V 30mA 0.8V/30mA (RoHS)	1	D401	B4C	
715	3303030100010	Switching diode DAN222(TL) 80V 100mA 1V/100mA (RoHS)	1	D113	T4A	
716	3303030100010	Switching diode DAN222(TL) 80V 100mA 1V/100mA (RoHS)	1	D114	T4B	
717	3303210100000	Switching diode MA4P1250 50V 1V/50mA (RoHS)	1	D104	T1C	
718	3303210100000	Switching diode MA4P1250 50V 1V/50mA (RoHS)	1	D105	T2C	
719	3399990000240	Zener diode UDZSTE(174.7B) 4.7V (RoHS)	1	D119	T3A	
720	3401001000490	Transistor 2SA1832-GR(TE85L.F) 50V 150mA (RoHS)	1	Q802	T3E	
721	3401002000140	Transistor 2SC4215-Y(TE85L.F) 30V 20mA (RoHS)	1	Q113	B4A	
722	3401002000290	Transistor 2SC4116-GR(T5L.F.H) 50V 150mA (RoHS)	1	Q404	B5F	
723	3401002000990	Transistor 2SC5108-Y(TE85L.F) 10V 30mA(RoHS)	1	Q107	T3C	
724	3403002000000	Transistor 2SB1132FD5T100R 32V 1A (RoHS)	1	Q601	B4G	
725	3403002000000	Transistor 2SB1132FD5T100R 32V 1A (RoHS)	1	Q603	B1F	
726	3403003000000	Transistor 2SC2412K 50V 150mA(RoHS)	1	Q114	T3A	
727	3403003000060	Transistor 2SC4617TLS 50V 150mA (RoHS)	1	Q401	B5E	
728	3403007000000	BRT DTA114EE(TL) (RoHS)	1	Q105	T4B	
729	3403007000000	BRT DTA114EE(TL) (RoHS)	1	Q106	T3A	
730	3403007000000	BRT DTA114EE(TL) (RoHS)	1	Q514	T4F	
731	3403007000000	BRT DTA114EE(TL) (RoHS)	1	Q516	T4F	
732	3403007000000	BRT DTA114EE(TL) (RoHS)	1	Q519	T4G	
733	3403007000000	BRT DTA114EE(TL) (RoHS)	1	Q520	T4G	
734	3408002000010	Transistor 2SC3357-T1-A-RF 12V 100mA (RoHS)	1	Q109	T2E	
735	3408002000010	Transistor 2SC3357-T1-A-RF 12V 100mA (RoHS)	1	Q110	T2D	
736	3501030000000	P-MOSFET 2SJ506STR-E (RoHS)	1	Q512	T3F	
737	3411002000020	Transistor 2SC5343EG 50V 150mA (RoHS)	1	Q801	T3E	
738	3411002000020	Transistor 2SC5343EG 50V 150mA (RoHS)	1	Q901	T3E	
739	3501020000030	N-MOSFET 3SK318YB-TL-E-Q (RoHS)	1	Q111	B3A	
740	3501020000030	N-MOSFET 3SK318YB-TL-E-Q (RoHS)	1	Q112	B3B	
741	3503020000030	N-MOSFET 2SK1824-T1-A (RoHS)	1	Q403	B5E	
742	3503020000030	N-MOSFET 2SK1824-T1-A (RoHS)	1	Q405	B4E	
743	3503020000030	N-MOSFET 2SK1824-T1-A (RoHS)	1	Q406	B4E	
744	3503020000030	N-MOSFET 2SK1824-T1-A (RoHS)	1	Q502	T4E	
745	3503020000030	N-MOSFET 2SK1824-T1-A (RoHS)	1	Q511	B4F	
746	3503020000030	N-MOSFET 2SK1824-T1-A (RoHS)	1	Q521	B5F	
747	3602017006350	Audio amplifier TDA7297D 10W+10W 6.5~18V 32dB (RoHS)	1	IC511	B4G	
748	3603002005440	Audio processor TA31136FNG(EL.HZ) 455MHz (RoHS)	1	IC102	B4A	
749	3605002054790	Operational amplifier TA75W558FU(TE12L.F) (RoHS)	1	IC404	B4C	
750	3605002057090	Operational amplifier TA75S01F(TE85L.F) (RoHS)	1	IC103	T3B	
751	3605002057090	Operational amplifier TA75S01F(TE85L.F) (RoHS)	1	IC407	T5D	
752	3605002057290	Operational amplifier TC75W51FU(TE12.F) (RoHS)	1	IC402	B4B	
753	3605002057290	Operational amplifier TC75W51FU(TE12.F) (RoHS)	1	IC403	B5B	
754	3605002057290	Operational amplifier TC75W51FU(TE12.F) (RoHS)	1	IC405	B5E	
755	3607002000180	Logic IC TC4013BF(EL,N,F) D-trigger (RoHS)	1	IC512	T4G	
756	3608002020890	Power management IC TA7805F(TE16L.F) 5V 1.0A (RoHS)	1	IC602	B4F	
757	3608015005600	Power management IC XC62FP3502PR 3V 250mA (RoHS)	1	IC803	T2D	
758	3609007001590	Audio processor MB15A02PFV1-E1 1.1GHz (RoHS)	1	IC801	T3D	
759	3612022000000	Memory CAT24C256WI-G EEPROM 256K (RoHS)	1	IC501	T5E	
760	3613034001060	Baseband processor AK2346-E2 (RoHS)	1	IC401	B4D	
761	3701098340010	Crystal DSX530GA-9.8304M 9.8304MHz (RoHS)	1	X501	T4C	

762	3701368630000	Crystal NX1255GB 3.6864MHz (RoHS)	1	X402	B5D	
763	3802499540070	Crystal filter DSF753SDF 49.95MHz (RoHS)	1	XF200	B3A	
764	3213212331000	Chip inductor NLV25T-R33J-PF 330nH J (RoHS)	1	L116	T2C	
765	3213212331000	Chip inductor NLV25T-R33J-PF 330nH J (RoHS)	1	L117	T3C	
766	3213212331000	Chip inductor NLV25T-R33J-PF 330nH J (RoHS)	1	L118	T2C	
767	3403008000010	BRT DTC114EE(TL) (RoHS)	1	Q402	B5E	
768	3403008000010	BRT DTC114EE(TL) (RoHS)	1	Q501	T3C	
769	3403008000010	BRT DTC114EE(TL) (RoHS)	1	Q503	T5E	
770	3403008000010	BRT DTC114EE(TL) (RoHS)	1	Q513	T4F	
771	3403008000010	BRT DTC114EE(TL) (RoHS)	1	Q515	T4F	
772	3403008000010	BRT DTC114EE(TL) (RoHS)	1	Q517	T4F	
773	3403008000010	BRT DTC114EE(TL) (RoHS)	1	Q518	T4G	
774	3403008000010	BRT DTC114EE(TL) (RoHS)	1	Q602	B4G	
775	3403008000010	BRT DTC114EE(TL) (RoHS)	1	Q604	B2F	
776	3701016850020	TCXO ENE3148A 16.8MHz (RoHS)	1	IC802	T3C	
777	3210306561010	Chip inductor LQM18NNR56K00 560nH K (RoHS)	1	L114	B4B	
778	3003061040000	Thermistor 0603 100KΩ J (RoHS)	1	TH101	B2A	
779	3221513600000	Bead BLM41PG600SN1 60Ω 100MHz (RoHS)	1	L131	T1D	
780	3221513600000	Bead BLM41PG600SN1 60Ω 100MHz (RoHS)	1	L132	T1D	
781	3304060300010	Varactor HVC376BTRF-E (RoHS)	1	D107	B3A	
782	3304060300010	Varactor HVC376BTRF-E (RoHS)	1	D108	B3B	
783	3304060300010	Varactor HVC376BTRF-E (RoHS)	1	D109	B2B	
784	3304060300010	Varactor HVC376BTRF-E (RoHS)	1	D110	B3A	
785	3001061210000	Chip resistor 0603 120Ω J 1/10W(RoHS)	1	R181	T2E	
786	3001055640000	Chip resistor 0402 560KΩ J 1/16W(RoHS)	1	R156	T4A	
787	3001055640000	Chip resistor 0402 560KΩ J 1/16W(RoHS)	1	R406	B5E	U1:400-470MHz
788	3001053340000	Chip resistor 0402 330KΩ J 1/16W(RoHS)	1	R406	B5E	U2:450-500MHz
789	3001054740000	Chip resistor 0402 470KΩ J 1/16W(RoHS)	1	R406	B5E	U3:470-520MHz
790	3001054740000	Chip resistor 0402 68KΩ J 1/16W(RoHS)	1	R406	B5E	U4:350-400MHz
791	3101061800000	Chip capacitor GRM1885C1H180JA01D 18PF J 50V (RoHS)	1	C122	B3A	U1:400-470MHz
792	3101060800010	Chip capacitor GRM1885C1H8R0BZ01D 8PF B 50V(RoHS)	1	C122	B3A	U2:450-500MHz
793	3101061800000	Chip capacitor GRM1885C1H180JA01D 18PF J 50V (RoHS)	1	C122	B3A	U3:470-520MHz
794	3101061800000	Chip capacitor GRM1885C1H180JA01D 18PF J 50V (RoHS)	1	C122	B3A	U4:350-400MHz
795	3101061800000	Chip capacitor GRM1885C1H180JA01D 18PF J 50V (RoHS)	1	C245	B3B	U1:400-470MHz
796	3101060800010	Chip capacitor GRM1885C1H8R0BZ01D 8PF B 50V(RoHS)	1	C245	B3B	U2:450-500MHz
797	3101060800010	Chip capacitor GRM1885C1H8R0BZ01D 8PF B 50V(RoHS)	1	C245	B3B	U3:470-520MHz
798	3101060800010	Chip capacitor GRM1885C1H8R0BZ01D 8PF B 50V(RoHS)	1	C245	B3B	U4:350-400MHz
799	3001053920010	Chip resistor RTT02392JTP 3.9KΩ J 1/16W (RoHS)	1	R155	T4A	
800	5205015000000	15PIN socket 1251S-15-SM1 1.25PITCH (RoHS)	1	J503	T5F	
801	5207032000000	FFC/FPC connector 52559-3272 32PIN (RoHS)	1	J501	T5D	
802	3101051530010	Chip capacitor C1005X7R1E153K 0.015UF K 16V (RoHS)	1	C410	B5E	
803	3101051530010	Chip capacitor C1005X7R1E153K 0.015UF K 16V (RoHS)	1	C824	T3D	
804	3401002000150	Transistor 2SC4738F-GR(T5L,F) 50V 150mA RoHS)	1	Q803	T3E	
805	3605002054590	Operational amplifier TA75W01FU(TE12L.F) 6~12V 250mW 100dB (RoHS)	1	IC104	T3B	
806	3220107689000	Chip inductor LQW2BHN6N8D03L 6.8nH D (RoHS)	1	L107	B3B	U1:400-470MHz
807	3220107829000	Chip inductor LQW2BHN8N2D03L 8.2nH D (RoHS)	1	L107	B3B	U2:450-500MHz
808	3220107689000	Chip inductor LQW2BHN6N8D03L 6.8nH D (RoHS)	1	L107	B3B	U3:470-520MHz
809	3220107100000	Chip inductor LQW2BHN10NJ03L 10nH J (RoHS)	1	L107	B3B	U4:350-400MHz
810	3220107689000	Chip inductor LQW2BHN6N8D03L 6.8nH D (RoHS)	1	L108	B2B	U1:400-470MHz
811	3220107829000	Chip inductor LQW2BHN8N2D03L 8.2nH D (RoHS)	1	L108	B2B	U2:450-500MHz

812	3220107689000	Chip inductor LQW2BHN6N8D03L 6.8nH D (RoHS)	1	L108	B2B	U3:470-520MHz
813	3220107100000	Chip inductor LQW2BHN10NJ03L 10nH J (RoHS)	1	L108	B2B	U4:350-400MHz
814	3220107689000	Chip inductor LQW2BHN6N8D03L 6.8nH D (RoHS)	1	L110	B3A	U1:400-470MHz
815	3220107829000	Chip inductor LQW2BHN8N2D03L 8.2nH D (RoHS)	1	L110	B3A	U2:450-500MHz
816	3220107689000	Chip inductor LQW2BHN6N8D03L 6.8nH D (RoHS)	1	L110	B3A	U3:470-520MHz
817	3220107100000	Chip inductor LQW2BHN10NJ03L 10nH J (RoHS)	1	L110	B3A	U4:350-400MHz
818	3220107689000	Chip inductor LQW2BHN6N8D03L 6.8nH D (RoHS)	1	L136	B3A	U1:400-470MHz
819	3220107829000	Chip inductor LQW2BHN8N2D03L 8.2nH D (RoHS)	1	L136	B3A	U2:450-500MHz
820	3220107689000	Chip inductor LQW2BHN6N8D03L 6.8nH D (RoHS)	1	L136	B3A	U3:470-520MHz
821	3220107100000	Chip inductor LQW2BHN10NJ03L 10nH J (RoHS)	1	L136	B3A	U4:350-400MHz
822	3101062700010	Chip capacitor GRM1885C1H270JA01D 27PF J 50V (RoHS)	1	C124	B3B	U1:400-470MHz
823	3101065690000	Chip capacitor 0603 5.6PF C 50V(RoHS)	1	C124	B3B	U2:450-500MHz
824	3101065690000	Chip capacitor 0603 5.6PF C 50V(RoHS)	1	C124	B3B	U3:470-520MHz
825	3101063000010	Chip capacitor 0603 30PF J 50V (RoHS)	1	C124	B3B	U4:350-400MHz
826	3101062700010	Chip capacitor GRM1885C1H270JA01D 27PF J 50V (RoHS)	1	C129	B2B	U1:400-470MHz
827	3101065690000	Chip capacitor 0603 5.6PF C 50V(RoHS)	1	C129	B2B	U2:450-500MHz
828	3101065690000	Chip capacitor 0603 5.6PF C 50V(RoHS)	1	C129	B2B	U3:470-520MHz
829	3101062700010	Chip capacitor GRM1885C1H270JA01D 27PF J 50V (RoHS)	1	C129	B2B	U4:350-400MHz
830	3101062700010	Chip capacitor GRM1885C1H270JA01D 27PF J 50V (RoHS)	1	C134	B3A	U1:400-470MHz
831	3101065690000	Chip capacitor 0603 5.6PF C 50V(RoHS)	1	C134	B3A	U2:450-500MHz
832	3101061000000	Chip capacitor 0603 10PF J 50V (RoHS)	1	C134	B3A	U3:470-520MHz
833	3101062700010	Chip capacitor GRM1885C1H270JA01D 27PF J 50V (RoHS)	1	C134	B3A	U4:350-400MHz
834	3101062700010	Chip capacitor GRM1885C1H270JA01D 27PF J 50V (RoHS)	1	C246	B3A	U1:400-470MHz
835	3101065690000	Chip capacitor 0603 5.6PF C 50V(RoHS)	1	C246	B3A	U2:450-500MHz
836	3101060800010	Chip capacitor GRM1885C1H8R0BZ01D 8PF B 50V(RoHS)	1	C246	B3A	U3:470-520MHz
837	3101062700010	Chip capacitor GRM1885C1H270JA01D 27PF J 50V (RoHS)	1	C246	B3A	U4:350-400MHz
838	3101080200010	Chip capacitor 501R18N2R0CV4E 2pF C 500V (RoHS)	1	C101	B1B	
839	3101080200010	Chip capacitor 501R18N2R0CV4E 2pF C 500V (RoHS)	1	C105	B2B	U1:400-470MHz
840	3101080200010	Chip capacitor 501R18N2R0CV4E 2pF C 500V (RoHS)	1	C105	B2B	U2:450-500MHz
841	NA	NA		C105	B2B	U3:470-520MHz
842	NA	NA		C105	B2B	U4:350-400MHz
843	3101080200010	Chip capacitor 501R18N2R0CV4E 2pF C 500V (RoHS)	1	C116	T2C	
844	3101080200010	Chip capacitor 501R18N2R0CV4E 2pF C 500V (RoHS)	1	C230	B1B	U1:400-470MHz
845	NA	NA		C230	B1B	U2:450-500MHz
846	3101080200010	Chip capacitor 501R18N2R0CV4E 2pF C 500V (RoHS)	1	C230	B1B	U3:470-520MHz
847	3101080200010	Chip capacitor 501R18N2R0CV4E 2pF C 500V (RoHS)	1	C230	B1B	U4:350-400MHz
848	3101080100010	Chip capacitor 501R18N1R0CV4E 1pF C 500V (RoHS)	1	C102	B1A	U1:400-470MHz
849	3101080100010	Chip capacitor 501R18N1R0CV4E 1pF C 500V (RoHS)	1	C102	B1A	U2:450-500MHz
850	3101080100010	Chip capacitor 501R18N1R0CV4E 1pF C 500V (RoHS)	1	C102	B1A	U3:470-520MHz
851	3101080200010	Chip capacitor 501R18N2R0CV4E 2pF C 500V (RoHS)	1	C102	B1A	U4:350-400MHz
852	NA	NA		C231	T1C	U1:400-470MHz
853	3101080100010	Chip capacitor 501R18N1R0CV4E 1pF C 500V (RoHS)	1	C231	T1C	U2:450-500MHz
854	NA	NA		C231	T1C	U3:470-520MHz
855	3101080500010	Chip capacitor 501R18N5R0CV4E 5pF C 500V (RoHS)	1	C231	T1C	U4:350-400MHz
856	3101080100010	Chip capacitor 501R18N1R0CV4E 1pF C 500V (RoHS)	1	C104	B1A	
857	3101080100010	Chip capacitor 501R18N1R0CV4E 1pF C 500V (RoHS)	1	C117	T2C	
858	NA	NA		C100	B1A	U1:400-470MHz
859	NA	NA		C100	B1A	U2:450-500MHz
860	3101080100010	Chip capacitor 501R18N1R0CV4E 1pF C 500V (RoHS)	1	C100	B1A	U3:470-520MHz
861	3101080100010	Chip capacitor 501R18N1R0CV4E 1pF C 500V (RoHS)	1	C100	B1B	U4:350-400MHz
862	3101084710010	Chip capacitor 631R18N471KV4E 470pF K 630V (RoHS)	1	C108	T2B	

863	3101084710010	Chip capacitor 631R18N471KV4E 470pF K 630V (RoHS)	1	C229	T2C	
864	3101084710010	Chip capacitor 631R18N471KV4E 470pF K 630V (RoHS)	1	L130	T1C	
865	3101080500010	Chip capacitor 501R18N5R0CV4E 5pF C 500V (RoHS)	1	C103	B1A	U1:400-470MHz
866	3101080400010	Chip capacitor 501R18N4R0CV4E 4pF C 500V (RoHS)	1	C103	B1A	U2:450-500MHz
867	3101080400010	Chip capacitor 501R18N4R0CV4E 4pF C 500V (RoHS)	1	C103	B1A	U3:470-520MHz
868	3101080400010	Chip capacitor 501R18N4R0CV4E 4pF C 500V (RoHS)	1	C103	B1A	U4:350-400MHz
869	3101061590010	Chip capacitor GRM1885C1H1R5BZ01D 1.5PF B 50V (RoHS)	1	C127	B3B	U1:400-470MHz
870	3199060758000	Chip capacitor 0603 0.75PF B 50V(RoHS)	1	C127	B3B	U2:450-500MHz
871	3101060100010	Chip capacitor GRM1885C1H1R0BZ01D 1PF B 50V(RoHS)	1	C127	B3B	U3:470-520MHz
872	3101061590010	Chip capacitor GRM1885C1H1R5BZ01D 1.5PF B 50V (RoHS)	1	C127	B3B	U4:350-400MHz
873	3101061590010	Chip capacitor GRM1885C1H1R5BZ01D 1.5PF B 50V (RoHS)	1	C137	B3A	U1:400-470MHz
874	3199060758000	Chip capacitor 0603 0.75PF B 50V (RoHS)	1	C137	B3A	U2:450-500MHz
875	3101060100010	Chip capacitor GRM1885C1H1R0BZ01D 1PF B 50V(RoHS)	1	C137	B3A	U3:470-520MHz
876	3101061590010	Chip capacitor GRM1885C1H1R5BZ01D 1.5PF B 50V (RoHS)	1	C137	B3A	U4:350-400MHz
877	3001052230000	Chip resistor RTT022202FTP 22KΩ F 1/16W (RoHS)	1	R491	T5D	U1:400-470MHz
878	3001052230010	Chip resistor 0402 22KΩ J 1/16W(RoHS)	1	R491	T5D	U2:450-500MHz
879	3001052230010	Chip resistor 0402 22KΩ J 1/16W(RoHS)	1	R491	T5D	U3:470-520MHz
880	3001052230010	Chip resistor 0402 22KΩ J 1/16W(RoHS)	1	R491	T5D	U4:350-400MHz
881	3001052230000	Chip resistor RTT022202FTP 22KΩ F 1/16W (RoHS)	1	VR101	T3A	U1:400-470MHz
882	3001051830000	Chip resistor 0402 18KΩ J 1/16W(RoHS)	1	VR101	T3A	U2:450-500MHz
883	3001051530000	Chip resistor 0402 15KΩ J 1/16W(RoHS)	1	VR101	T3A	U3:470-520MHz
884	3001051530000	Chip resistor 0402 15KΩ J 1/16W(RoHS)	1	VR101	T3A	U4:350-400MHz
885	3001051510000	Chip resistor RTT02151JTP 150Ω J 1/16W (RoHS)	1	R412	B5E	U1:400-470MHz
886	3001052210000	Chip resistor 0402 220Ω J 1/16W(RoHS)	1	R412	B5E	U2:450-500MHz
887	3001051510000	Chip resistor RTT02151JTP 150Ω J 1/16W (RoHS)	1	R412	B5E	U3:470-520MHz
888	3001051510000	Chip resistor RTT02151JTP 150Ω J 1/16W (RoHS)	1	R412	B5E	U4:350-400MHz
889	3220107150000	Chip inductor LQW2BHN15NJ03L 15nH J(RoHS)	1	L106	B2B	U1:400-470MHz
890	3220107829000	Chip inductor LQW2BHN8N2D03L 8.2nH D(RoHS)	1	L106	B3C	U2:450-500MHz
891	3210107120000	Chip inductor LQW2BHN12NJ03L 12nH J (RoHS)	1	L106	B2B	U3:470-520MHz
892	3220107100000	Chip inductor LQW2BHN10NJ03L 10nH J (RoHS)	1	L106	B2B	U4:350-400MHz
893	3101061100010	Chip capacitor GRM1885C1H110JA01D 11PF J 50V (RoHS)	1	C118	B2B	
894	410M6001008K0	PCB FR4 1.6T/4L/2P K (RoHS)	1			
895	3101051810010	Chip capacitor GRM1555C1H181JA1J 180p J (RoHS)	1	C451	B4C	
896	3001051240000	Chip resistor 0402 120KΩ J 1/16W(RoHS)	1	R437	B5C	
897	3610045000200	MCU M3062LFGPGP 16位 (RoHS)	1	IC502	T4D	
898	3302030500020	Zener diode UDZSTE(1718B) 18V (RoHS)	1	D512	T4G	
899	4002000000300	Chip fuse 0603-FF 0.25A-32V (RoHS)	1	FP101	T5D	
900	4002000000300	Chip fuse 0603-FF 0.25A-32V (RoHS)	1	FP102	T5D	
901	3001061500000	Chip resistor 0603 15Ω J 1/10W(RoHS)	1	R129	B2A	U1:400-470MHz
902	3001062700000	Chip resistor 0603 27Ω J 1/10W(RoHS)	1	R129	B2A	U2:450-500MHz
903	3001062200000	Chip resistor 0603 22Ω J 1/10W(RoHS)	1	R129	B2A	U3:470-520MHz
904	3001061000000	Chip resistor 0603 10Ω J 1/10W(RoHS)	1	R129	B2A	U4:350-400MHz
905	3210406331000	Chip inductor LQM18NNR33K00 330nH K (RoHS)	1	L113	B4B	U1:400-470MHz
906	3210406331000	Chip inductor LQM18NNR33K00 330nH K (RoHS)	1	L113	B4B	U2:450-500MHz
907	3210406331000	Chip inductor LQM18NNR33K00 330nH K (RoHS)	1	L113	B4B	U3:470-520MHz
908	3210306221000	Chip inductor LQM18NNR22K00 220nH K (RoHS)	1	L113	B4B	U4:350-400MHz
909	3101060100010	Chip capacitor GRM1885C1H1R0BZ01D 1PF B 50V(RoHS)	1	C198	B3B	U1:400-470MHz
910	3101060200010	Chip capacitor GRM1885C1H2R0BZ01D 2PF B 50V(RoHS)	1	C198	B3B	U2:450-500MHz
911	3101060200010	Chip capacitor GRM1885C1H2R0BZ01D 2PF B 50V(RoHS)	1	C198	B3B	U3:470-520MHz
912	3101060200010	Chip capacitor GRM1885C1H2R0BZ01D 2PF B 50V(RoHS)	1	C198	B3B	U4:350-400MHz
913	3101054730000	Chip capacitor GRM155R71A473KA01D 0.047UF K (RoHS)	1	C224	T3B	U1:400-470MHz

914	3101053330000	Chip capacitor GRM155R71C333KA01D 0.033UF K(RoHS)	1	C224	T3B	U2:450-500MHz
915	3101053330000	Chip capacitor GRM155R71C333KA01D 0.033UF K(RoHS)	1	C224	T3B	U3:470-520MHz
916	3101051030020	Chip capacitor GRM155R71E103KA01D 0.01UF K 25V(RoHS)	1	C224	T3B	U4:350-400MHz
917	3001052030000	Chip resistor 0402 20KΩ J 1/16W(RoHS)	1	R440	B5E	U1:400-470MHz
918	3001051530000	Chip resistor 0402 15KΩ J 1/16W(RoHS)	1	R440	B5E	U2:450-500MHz
919	3001051830000	Chip resistor 0402 18KΩ J 1/16W(RoHS)	1	R440	B5E	U3:470-520MHz
920	3001052030000	Chip resistor 0402 20KΩ J 1/16W(RoHS)	1	R440	B5E	U4:350-400MHz
921	3001051520010	Chip resistor 0402 1.5KΩ F 1/16W(RoHS)	1	R151	T4B	
922	3001051820010	Chip resistor 0402 1.8KΩ F 1/16W(RoHS)	1	R150	T4B	
923	3101050400010	Chip capacitor GRM1555C1H4R0BZ01D 4PF B (RoHS)	1	C182	B2B	U1:400-470MHz
924	3101050500010	Chip capacitor GRM1555C1H5R0BZ01D 5PF B (RoHS)	1	C182	B2C	U2:450-500MHz
925	3101050100030	Chip capacitor GRM1555C1H1R0BZ01D 1PF B (RoHS)	1	C182	B2B	U3:470-520MHz
926	3101050700010	Chip capacitor GRM1555C1H7R0BZ01D 7PF B 50V(RoHS)	1	C182	B2B	U4:350-400MHz
927	3101053920000	Chip capacitor GRM155R71H392KA01D 3900PF K 50V(RoHS)	1	C542	T5D	
928	3101061040020	Chip capacitor GRM188F11E104ZA01B 0.1UF Z 25V(RoHS)	1	C540	T4F	U1:400-470MHz
929	3101061040010	Chip capacitor GRM1885C1H4R0BZ01D 4PF B 50V(RoHS)	1	C540	T4F	U2:450-500MHz
930	3101061040010	Chip capacitor 0603 0.1UF K 16V (RoHS)	1	C540	T4F	U3:470-520MHz
931	3101061040010	Chip capacitor 0603 0.1UF K 16V (RoHS)	1	C540	T4F	U4:350-400MHz
932	3101061040020	Chip capacitor GRM188F11E104ZA01B 0.1UF Z 25V(RoHS)	1	C541	T4F	U1:400-470MHz
933	3101061040010	Chip capacitor GRM1885C1H4R0BZ01D 4PF B 50V(RoHS)	1	C541	T4F	U2:450-500MHz
934	3101061040010	Chip capacitor 0603 0.1UF K 16V (RoHS)	1	C541	T4F	U3:470-520MHz
935	3101061040010	Chip capacitor 0603 0.1UF K 16V (RoHS)	1	C541	T4F	U4:350-400MHz
936	9900000001340	Lead-free solder paste (conventional) FLY905-T1(RoHS)	0			
937	3104084750040	Tantalum capacitor1206 4.7uF K 16V TAJA475K016RNJ(RoHS)	1	C524	T4G	
938	3104084750040	Tantalum capacitor1206 4.7uF K 16V TAJA475K016RNJ(RoHS)	1	C601	B3F	
939	3609999000330	Reset IC CN813LESA 4.65V (RoHS)	1	IC901	T4E	
940	3101081060010	Chip capacitor GRM31CR61E106KA12L 10UF K 25V (RoHS)	1	C535	B4G	
941	3002996830060	Trimmer resistor EVM2NSX80BS4 68K ±25% 0.15W(RoHS)	1	VR801	T2D	
942	3002996830060	Trimmer resistor EVM2NSX80BS4 68K ±25% 0.15W(RoHS)	1	VR802	T5E	
943	3103994760080	Electrolytic capacitor VH1E470MF3R 47U M 25V (RoHS)	1	C234	T1D	U1:400-470MHz
944	3103994760080	Electrolytic capacitor VH1E470MF3R 47U M 25V(RoHS)	1	C234	T1D	U2:450-500MHz
945	3103994760080	Electrolytic capacitor VH1E470MF3R 47U M 25V(RoHS)	1	C234	T1D	U3:470-520MHz
946	3103994760180	Electrolytic capacitor EEEFK1E470P 47uf M 25V(RoHS)	1	C234	T1D	U4:350-400MHz
947	3103994760080	Electrolytic capacitor VH1E470MF3R 47U M 25V(RoHS)	1	C533	T1F	U1:400-470MHz
948	3103994760080	Electrolytic capacitor VH1E470MF3R 47U M 25V(RoHS)	1	C533	T1F	U2:450-500MHz
949	3103994760080	Electrolytic capacitor VH1E470MF3R 47U M 25V(RoHS)	1	C533	T1F	U3:470-520MHz
950	3103994760180	Electrolytic capacitor EEEFK1E470P 47uf M 25V(RoHS)	1	C533	T1F	U4:350-400MHz

TM-610 U5 Parts List 1 (Main Board Unit)					
No.	Material No.	Description	Qty.	Ref. No.	Print No.
1	3001050000000	Chip resistor 0402 0Ω	1	C404	B5E
2	3001050000000	Chip resistor 0402 0Ω	1	R106	T2B
3	3001050000000	Chip resistor 0402 0Ω	1	R110	T3B
4	3001050000000	Chip resistor 0402 0Ω	1	R419	B5E
5	3001050000000	Chip resistor 0402 0Ω	1	R448	B5F
6	3001050000000	Chip resistor 0402 0Ω	1	R451	B5F
7	3001050000000	Chip resistor 0402 0Ω	1	R455	T5F
8	3001050000000	Chip resistor 0402 0Ω	1	R457	B5C
9	3001050000000	Chip resistor 0402 0Ω	1	R480	T4B
10	3001050000000	Chip resistor 0402 0Ω	1	R483	B4B
11	3001050000000	Chip resistor 0402 0Ω	1	R485	T4F
12	3001050000000	Chip resistor 0402 0Ω	1	R501	T4C
13	3001050000000	Chip resistor 0402 0Ω	1	R509	T5F
14	3001050000000	Chip resistor 0402 0Ω	1	R510	T4C
15	3001050000000	Chip resistor 0402 0Ω	1	R513	T4C
16	3001050000000	Chip resistor 0402 0Ω	1	R518	T5E
17	3001050000000	Chip resistor 0402 0Ω	1	R520	T5E
18	3001050000000	Chip resistor 0402 0Ω	1	R521	T5E
19	3001050000000	Chip resistor 0402 0Ω	1	R522	T5E
20	3001050000000	Chip resistor 0402 0Ω	1	R591	T5F
21	3001050000000	Chip resistor 0402 0Ω	1	R600	T5F
22	3001050000000	Chip resistor 0402 0Ω	1	R605	B2F
23	3001050000000	Chip resistor 0402 0Ω	1	R608	T5F
24	3001050000000	Chip resistor 0402 0Ω	1	R611	T4C
25	3001050000000	Chip resistor 0402 0Ω	1	R620	T5F
26	3001050000000	Chip resistor 0402 0Ω	1	R625	T5F
27	3001050000000	Chip resistor 0402 0Ω	1	R627	T4C
28	3001051040010	Chip resistor 0402 100KΩ	1	R154	T4A
29	3001053320000	Chip resistor 0402 3.3KΩ	1	R153	T4A
30	3001051010000	Chip resistor 0402 100Ω	1	R146	T2D
31	3001051010000	Chip resistor 0402 100Ω	1	R197	T3A
32	3001051020010	Chip resistor 0402 1KΩ	1	R145	B3A
33	3001051020010	Chip resistor 0402 1KΩ	1	R200	T4A
34	3001051020010	Chip resistor 0402 1KΩ	1	R439	B5E
35	3001051020010	Chip resistor 0402 1KΩ	1	R453	B4F
36	3001051020010	Chip resistor 0402 1KΩ	1	R476	B5B
37	3001051020010	Chip resistor 0402 1KΩ	1	R503	T4C
38	3001051020010	Chip resistor 0402 1KΩ	1	R504	T4C
39	3001051020010	Chip resistor 0402 1KΩ	1	R505	T3D
40	3001051020010	Chip resistor 0402 1KΩ	1	R506	T3D
41	3001051020010	Chip resistor 0402 1KΩ	1	R609	T4D
42	3001051020010	Chip resistor 0402 1KΩ	1	R610	T4D
43	3001051020010	Chip resistor 0402 1KΩ	1	R612	T4D
44	3001051020010	Chip resistor 0402 1KΩ	1	R632	T4D

45	3001051020010	Chip resistor 0402 1KΩ	1	R802	T3D
46	3001051020010	Chip resistor 0402 1KΩ	1	R823	T3D
47	3001051020010	Chip resistor 0402 1KΩ	1	R824	T3D
48	3001051020010	Chip resistor 0402 1KΩ	1	R825	T3D
49	3001051020010	Chip resistor 0402 1KΩ	1	R826	T3D
50	3001051030000	Chip resistor 0402 10KΩ	1	R112	T2B
51	3001051030000	Chip resistor 0402 10KΩ	1	R198	T3A
52	3001051030000	Chip resistor 0402 10KΩ	1	R402	B4E
53	3001051030000	Chip resistor 0402 10KΩ	1	R403	B4E
54	3001051030000	Chip resistor 0402 10KΩ	1	R904	B5C
55	3001051030000	Chip resistor 0402 10KΩ	1	R423	B4E
56	3001051030000	Chip resistor 0402 10KΩ	1	R424	B4E
57	3001051030000	Chip resistor 0402 10KΩ	1	R428	B4D
58	3001051030000	Chip resistor 0402 10KΩ	1	R449	B5F
59	3001051030000	Chip resistor 0402 10KΩ	1	R450	B5F
60	3001051030000	Chip resistor 0402 10KΩ	1	R464	B4C
61	3001051030000	Chip resistor 0402 10KΩ	1	R470	B5B
62	3001051030000	Chip resistor 0402 10KΩ	1	R472	B5B
63	3001051030000	Chip resistor 0402 10KΩ	1	R477	B5B
64	3001051030000	Chip resistor 0402 10KΩ	1	R804	T2D
65	3001051030000	Chip resistor 0402 10KΩ	1	R902	B5C
66	3001051830000	Chip resistor 0402 18KΩ	1	R418	B5E
67	3001051040010	Chip resistor 0402 100KΩ	1	R104	T2B
68	3001051040010	Chip resistor 0402 100KΩ	1	R107	T3B
69	3001051040010	Chip resistor 0402 100KΩ	1	R115	T3B
70	3001051040010	Chip resistor 0402 100KΩ	1	R116	T3B
71	3001051040010	Chip resistor 0402 100KΩ	1	R148	T2D
72	3001051040010	Chip resistor 0402 100KΩ	1	R149	T3A
73	3001051040010	Chip resistor 0402 100KΩ	1	R180	T2D
74	3001051040010	Chip resistor 0402 100KΩ	1	R427	B4D
75	3001051040010	Chip resistor 0402 100KΩ	1	R467	B5B
76	3001051040010	Chip resistor 0402 100KΩ	1	R468	B5B
77	3001051040010	Chip resistor 0402 100KΩ	1	R514	T4E
78	3001051040010	Chip resistor 0402 100KΩ	1	R565	T5G
79	3001051040010	Chip resistor 0402 100KΩ	1	R566	T5G
80	3001051040010	Chip resistor 0402 100KΩ	1	R801	T3D
81	3001051040010	Chip resistor 0402 100KΩ	1	R806	T3C
82	3001051040010	Chip resistor 0402 100KΩ	1	R820	T3F
83	3001051050020	Chip resistor 0402 1MΩ	1	R118	B3A
84	3001051050020	Chip resistor 0402 1MΩ	1	R119	B3B
85	3001051050020	Chip resistor 0402 1MΩ	1	R120	B2B
86	3001051050020	Chip resistor 0402 1MΩ	1	R130	B3A
87	3001051050020	Chip resistor 0402 1MΩ	1	R131	B3B
88	3001051050020	Chip resistor 0402 1MΩ	1	R473	B5B
89	3001051050020	Chip resistor 0402 1MΩ	1	R901	B5C
90	3001051230000	Chip resistor 0402 12KΩ	1	R152	T4B

91	3001051230000	Chip resistor 0402 12K Ω	1	R471	B5C
92	3001051520000	Chip resistor 0402 1.5K Ω	1	R151	T4B
93	3001051530000	Chip resistor 0402 15K Ω	1	R111	T2B
94	3001051530000	Chip resistor 0402 15K Ω	1	R404	B4E
95	3001051530000	Chip resistor 0402 15K Ω	1	R408	B5E
96	3001051530000	Chip resistor 0402 15K Ω	1	R410	B5E
97	3001051530000	Chip resistor 0402 15K Ω	1	R465	B5C
98	3001051530000	Chip resistor 0402 15K Ω	1	R830	T3D
99	3001051540020	Chip resistor 0402 150K Ω	1	R475	B5B
100	3001051540020	Chip resistor 0402 150K Ω	1	R478	B5B
101	3001051820000	Chip resistor 0402 1.8K Ω	1	R150	T4B
102	3001051830000	Chip resistor 0402 18K Ω	1	R432	B4D
103	3001051830000	Chip resistor 0402 18K Ω	1	R434	B5B
104	3001051830000	Chip resistor 0402 18K Ω	1	R435	B4C
105	3001051840000	Chip resistor 0402 180K Ω	1	R807	T2D
106	3001051840000	Chip resistor 0402 180K Ω	1	R459	B5C
107	3001051840000	Chip resistor 0402 180K Ω	1	R460	B5C
108	3001051840000	Chip resistor 0402 180K Ω	1	R461	B4C
109	3001051540020	Chip resistor 0402 150K Ω	1	R446	B5F
110	3001052200000	Chip resistor 0402 22 Ω	1	R803	T3D
111	3001052200000	Chip resistor 0402 22 Ω	1	R808	T2D
112	3001052210000	Chip resistor 0402 220 Ω	1	R117	T3B
113	3001052220000	Chip resistor 0402 2.2K Ω	1	R805	T3D
114	3001052230010	Chip resistor 0402 22K Ω	1	R101	T2A
115	3001052230010	Chip resistor 0402 22K Ω	1	R102	T3A
116	3001052230010	Chip resistor 0402 22K Ω	1	R158	T4B
117	3001052230010	Chip resistor 0402 22K Ω	1	R159	T4A
118	3001052230010	Chip resistor 0402 22K Ω	1	R161	T4A
119	3001052230010	Chip resistor 0402 22K Ω	1	R162	T4B
120	3001052230010	Chip resistor 0402 22K Ω	1	R409	B5E
121	3001052230010	Chip resistor 0402 22K Ω	1	R441	B5E
122	3001052230010	Chip resistor 0402 22K Ω	1	R442	T5E
123	3001052230010	Chip resistor 0402 22K Ω	1	R445	B5F
124	3001052230010	Chip resistor 0402 22K Ω	1	R452	B5F
125	3001052230010	Chip resistor 0402 22K Ω	1	R458	B5C
126	3001052230010	Chip resistor 0402 22K Ω	1	R466	B5C
127	3001052230010	Chip resistor 0402 22K Ω	1	R829	T3D
128	3001052230010	Chip resistor 0402 22K Ω	1	R440	B5E
129	3001052240000	Chip resistor 0402 220K Ω	1	R105	T2A
130	3001052240000	Chip resistor 0402 220K Ω	1	R828	T3C
131	3001052240000	Chip resistor 0402 220K Ω	1	R832	T5C
132	3001052720000	Chip resistor 0402 2.7K Ω	1	R407	B5E
133	3001053330010	Chip resistor 0402 33K Ω	1	R421	B4D
134	3001053330010	Chip resistor 0402 33K Ω	1	R433	B4B
135	3001053330010	Chip resistor 0402 33K Ω	1	R436	B5B
136	3001053330010	Chip resistor 0402 33K Ω	1	R438	B4B

137	3001053330010	Chip resistor 0402 33KΩ	1	R516	T4E
138	3001053330010	Chip resistor 0402 33KΩ	1	R563	T3G
139	3001053340000	Chip resistor 0402 330KΩ	1	R108	T3B
140	3001053340000	Chip resistor 0402 330KΩ	1	R422	B4D
141	3001053940000	Chip resistor 0402 390KΩ	1	R431	B5D
142	3001053940000	Chip resistor 0402 390KΩ	1	R463	B4C
143	3001054720000	Chip resistor 0402 4.7KΩ	1	R160	T4A
144	3001054720000	Chip resistor 0402 4.7KΩ	1	R163	T4A
145	3001054720000	Chip resistor 0402 4.7KΩ	1	R401	B4E
146	3001054720000	Chip resistor 0402 4.7KΩ	1	R447	B5F
147	3001054720000	Chip resistor 0402 4.7KΩ	1	R469	B5B
148	3001054720000	Chip resistor 0402 4.7KΩ	1	R502	T4C
149	3001054720000	Chip resistor 0402 4.7KΩ	1	R507	T3D
150	3001054720000	Chip resistor 0402 4.7KΩ	1	R508	B4D
151	3001054720000	Chip resistor 0402 4.7KΩ	1	R511	T4C
152	3001054720000	Chip resistor 0402 4.7KΩ	1	R543	B4F
153	3001054720000	Chip resistor 0402 4.7KΩ	1	R571	B4F
154	3001054720000	Chip resistor 0402 4.7KΩ	1	R573	B4F
155	3001054720000	Chip resistor 0402 4.7KΩ	1	R822	T3E
156	3001054730000	Chip resistor 0402 47KΩ	1	R103	T3A
157	3001054730000	Chip resistor 0402 47KΩ	1	R144	B3A
158	3001054730000	Chip resistor 0402 47KΩ	1	R199	T3A
159	3001054730000	Chip resistor 0402 47KΩ	1	R202	T3A
160	3001054730000	Chip resistor 0402 47KΩ	1	R405	B4E
161	3001054730000	Chip resistor 0402 47KΩ	1	R454	B4E
162	3001054730000	Chip resistor 0402 47KΩ	1	R517	T4E
163	3001054730000	Chip resistor 0402 47KΩ	1	R519	T5E
164	3001054730000	Chip resistor 0402 47KΩ	1	R523	T5D
165	3001054730000	Chip resistor 0402 47KΩ	1	R524	T5D
166	3001054730000	Chip resistor 0402 47KΩ	1	R544	B4F
167	3001054730000	Chip resistor 0402 47KΩ	1	R545	B5F
168	3001054730000	Chip resistor 0402 47KΩ	1	R550	B4F
169	3001054730000	Chip resistor 0402 47KΩ	1	R562	T3G
170	3001054730000	Chip resistor 0402 47KΩ	1	R567	T5G
171	3001054730000	Chip resistor 0402 47KΩ	1	R572	B4F
172	3001055130010	Chip resistor 0402 51KΩ	1	R420	B4D
173	3001055630000	Chip resistor 0402 56KΩ	1	R429	B5D
174	3001055630000	Chip resistor 0402 56KΩ	1	R430	B5D
175	3001056820000	Chip resistor 0402 6.8KΩ	1	R417	B5E
176	3001056830000	Chip resistor 0402 68KΩ	1	R482	B4B
177	3001056830000	Chip resistor 0402 68KΩ	1	R444	B5E
178	3001056830000	Chip resistor 0402 68KΩ	1	R456	B4B
179	3001051040010	Chip resistor 0402 100KΩ	1	R413	B5E
180	3001058220000	Chip resistor 0402 8.2KΩ	1	R474	B5B
181	3001051830000	Chip resistor 0402 18KΩ	1	R416	B5E
182	3001058230000	Chip resistor 0402 82KΩ	1	R411	B5E

183	3001058230000	Chip resistor 0402 82KΩ	1	R462	B4C
184	3001059130000	Chip resistor 0402 91KΩ	1	R443	T4A
185	3001061510000	Chip resistor 0603 150Ω	1	R125	B2A
186	3001060000000	Chip resistor 0603 0Ω	1	R126	B3A
187	3001060000000	Chip resistor 0603 0Ω	1	R140	B3B
188	3001060000000	Chip resistor 0603 0Ω	1	R425	T5E
189	3001060000000	Chip resistor 0603 0Ω	1	R553	T4F
190	3001060000000	Chip resistor 0603 0Ω	1	R564	T5G
191	3001060000000	Chip resistor 0603 0Ω	1	R569	T4G
192	3001060000000	Chip resistor 0603 0Ω	1	R570	T3F
193	3001060000000	Chip resistor 0603 0Ω	1	R575	B5F
194	3001060000000	Chip resistor 0603 0Ω	1	R809	T3E
195	3001060000000	Chip resistor 0603 0Ω	1	R812	T2E
196	3001060000000	Chip resistor 0603 0Ω	1	R815	T2E
197	3001060000000	Chip resistor 0603 0Ω	1	R821	T3F
198	3001061000000	Chip resistor 0603 10Ω	1	R157	T3A
199	3001061000000	Chip resistor 0603 10Ω	1	R546	B1F
200	3001061000000	Chip resistor 0603 10Ω	1	R547	B4G
201	3001061000000	Chip resistor 0603 10Ω	1	R548	B5G
202	3001061000000	Chip resistor 0603 10Ω	1	R549	B5G
203	3001061020010	Chip resistor 0603 1KΩ	1	R557	T4F
204	3001061020010	Chip resistor 0603 1KΩ	1	R560	T4F
205	3001061020010	Chip resistor 0603 1KΩ	1	R568	T3F
206	3001061020010	Chip resistor 0603 1KΩ	1	R817	T3E
207	3001061020010	Chip resistor 0603 1KΩ	1	R816	T3E
208	3001061030010	Chip resistor 0603 10KΩ	1	R186	B2D
209	3001061030010	Chip resistor 0603 10KΩ	1	R426	B4D
210	3001061030010	Chip resistor 0603 10KΩ	1	R554	T4F
211	3001061030010	Chip resistor 0603 10KΩ	1	R558	T4F
212	3001061030010	Chip resistor 0603 10KΩ	1	R810	T3E
213	3001061030010	Chip resistor 0603 10KΩ	1	R814	T2E
214	3001061040010	Chip resistor 0603 100KΩ	1	R122	B2A
215	3001061040010	Chip resistor 0603 100KΩ	1	R133	B3B
216	3001061040010	Chip resistor 0603 100KΩ	1	R134	B4B
217	3001061040010	Chip resistor 0603 100KΩ	1	R135	B4B
218	3001061040010	Chip resistor 0603 100KΩ	1	R136	B3B
219	3001061040010	Chip resistor 0603 100KΩ	1	R559	T4F
220	3001061050010	Chip resistor 0603 1MΩ	1	R147	T3C
221	3001061220000	Chip resistor 0603 1.2KΩ	1	L802	T3D
222	3001061220000	Chip resistor 0603 1.2KΩ	1	R188	T2D
223	3001061220000	Chip resistor 0603 1.2KΩ	1	R818	T3E
224	3001061520000	Chip resistor 0603 1.5KΩ	1	R109	T2D
225	3001061520000	Chip resistor 0603 1.5KΩ	1	R819	T3E
226	3001061800000	Chip resistor 0603 18Ω	1	R187	T2D
227	3001061810000	Chip resistor 0603 180Ω	1	R143	B4B
228	3001061840000	Chip resistor 0603 180KΩ	1	R121	B2A

229	3001061840000	Chip resistor 0603 180K Ω	1	R123	B3B
230	3001062200000	Chip resistor 0603 22 Ω	1	R127	B4B
231	3001062200000	Chip resistor 0603 22 Ω	1	R189	T2D
232	3001062220000	Chip resistor 0603 2.2K Ω	1	R185	T2D
233	3001062220000	Chip resistor 0603 2.2K Ω	1	R604	B2F
234	3001062230000	Chip resistor 0603 22K Ω	1	R811	T3E
235	3001062230000	Chip resistor 0603 22K Ω	1	R813	T2E
236	3001062700000	Chip resistor 0603 27 Ω	1	R129	B2A
237	3001062710000	Chip resistor 0603 270 Ω	1	R137	B3B
238	3001062720000	Chip resistor 0603 2.7K Ω	1	R190	T2E
239	3001062720000	Chip resistor 0603 2.7K Ω	1	R204	B2A
240	3001063300000	Chip resistor 0603 33 Ω	1	R139	B4B
241	3001063330010	Chip resistor 0603 33K Ω	1	R555	T4F
242	3001064710000	Chip resistor 0603 470 Ω	1	R142	B3A
243	3001064710000	Chip resistor 0603 470 Ω	1	R141	B4A
244	3001064710000	Chip resistor 0603 470 Ω	1	R192	T2E
245	3001064710000	Chip resistor 0603 470 Ω	1	R556	T4F
246	3001064720000	Chip resistor 0603 4.7K Ω	1	R138	B4B
247	3001064720000	Chip resistor 0603 4.7K Ω	1	R602	B4G
248	3001064730000	Chip resistor 0603 47K Ω	1	R551	T3F
249	3001064730000	Chip resistor 0603 47K Ω	1	R561	T3G
250	3001064730000	Chip resistor 0603 47K Ω	1	R601	B4G
251	3001064730000	Chip resistor 0603 47K Ω	1	R603	B2F
252	3001071800000	Chip resistor 0805 18 Ω	1	R191	T2E
253	3001075690000	Chip resistor 0805 5.6 Ω	1	R195	T1E
254	3001078210000	Chip resistor 0805 820 Ω	1	R194	T1E
255	3001078210000	Chip resistor 0805 820 Ω	1	R196	T1E
256	3001161210000	Chip resistor 2010 120 Ω	1	R201	T2C
257	3001162200000	Chip resistor 2010 22 Ω	1	R193	T2E
258	3001164720000	Chip resistor 2010 4.7K Ω	1	R552	T3F
259	3002996830000	Trimmer resistor (2*2) 68K Ω (+25%)	1	VR801	T2D
260	3005051020000	Resistor array 0402 1K*2	1	CP501	T5C
261	3005051020000	Resistor array 0402 1K*2	1	CP502	T4C
262	3005051020000	Resistor array 0402 1K*2	1	CP504	T4C
263	3005051020000	Resistor array 0402 1K*2	1	CP505	T4C
264	3005051020000	Resistor array 0402 1K*2	1	CP506	T3C
265	3005051020000	Resistor array 0402 1K*2	1	CP508	T4D
266	3005051020000	Resistor array 0402 1K*2	1	CP509	T4E
267	3005051020000	Resistor array 0402 1K*2	1	CP510	T4E
268	3005051020000	Resistor array 0402 1K*2	1	CP512	T4E
269	3005051020000	Resistor array 0402 1K*2	1	CP513	T4D
270	3005051020000	Resistor array 0402 1K*2	1	CP514	T5D
271	3005051020000	Resistor array 0402 1K*2	1	CP515	T5D
272	3005051020000	Resistor array 0402 1K*2	1	CP516	T5C
273	3005051020000	Resistor array 0402 1K*2	1	CP517	T5C
274	3005051020000	Resistor array 0402 1K*2	1	CP518	T5C

275	3005051020000	Resistor array 0402 1K*2	1	CP519	T5D
276	3005051020000	Resistor array 0402 1K*2	1	CP520	T5C
277	3005051020000	Resistor array 0402 1K*2	1	CP521	T4C
278	3101051000020	Chip capacitor 0402 10PF	1	C827	T3C
279	3101051000020	Chip capacitor 0402 10PF	1	C826	T2D
280	3101052000020	Chip capacitor 0402 20PF	1	C173	T4A
281	3101051020010	Chip capacitor 0402 1000PF	1	C180	T4B
282	3101051020010	Chip capacitor 0402 1000PF	1	C225	T3B
283	3101051020010	Chip capacitor 0402 1000PF	1	C238	T3B
284	3101051020010	Chip capacitor 0402 1000PF	1	C441	B5E
285	3101051020010	Chip capacitor 0402 1000PF	1	C445	B5B
286	3101051020010	Chip capacitor 0402 1000PF	1	C458	B5B
287	3101051020010	Chip capacitor 0402 1000PF	1	C462	B5C
288	3101051020010	Chip capacitor 0402 1000PF	1	C538	T4D
289	3101051020010	Chip capacitor 0402 1000PF	1	C805	T3D
290	3101051020010	Chip capacitor 0402 1000PF	1	C806	T3D
291	3101051020010	Chip capacitor 0402 1000PF	1	C807	T3D
292	3101051020010	Chip capacitor 0402 1000PF	1	C808	T3C
293	3101051020010	Chip capacitor 0402 1000PF	1	C809	T3C
294	3101051020010	Chip capacitor 0402 1000PF	1	C810	T3C
295	3101051020010	Chip capacitor 0402 1000PF	1	C830	T3E
296	3101051030020	Chip capacitor 0402 0.01UF	1	C160	T2D
297	3101051030020	Chip capacitor 0402 0.01UF	1	C163	T4A
298	3101051030020	Chip capacitor 0402 0.01UF	1	C239	T2B
299	3101051030020	Chip capacitor 0402 0.01UF	1	C240	T3B
300	3101051030020	Chip capacitor 0402 0.01UF	1	C243	B4C
301	3101051030020	Chip capacitor 0402 0.01UF	1	C401	B4E
302	3101051030020	Chip capacitor 0402 0.01UF	1	C456	B5C
303	3101051030020	Chip capacitor 0402 0.01UF	1	C461	B5B
304	3101051030020	Chip capacitor 0402 0.01UF	1	C465	B5B
305	3101051030020	Chip capacitor 0402 0.01UF	1	C506	T5E
306	3101051030020	Chip capacitor 0402 0.01UF	1	C512	B4F
307	3101051030020	Chip capacitor 0402 0.01UF	1	C604	B4G
308	3101051030020	Chip capacitor 0402 0.01UF	1	C903	B5C
309	3101051030020	Chip capacitor 0402 0.01UF	1	C905	B5C
310	3101051030020	Chip capacitor 0402 0.01UF	1	C224	T3B
311	3101051040010	Chip capacitor 0402 0.1UF	1	C154	B4B
312	3101051040010	Chip capacitor 0402 0.1UF	1	C165	T4A
313	3101051040010	Chip capacitor 0402 0.1UF	1	C167	T4A
314	3101051040010	Chip capacitor 0402 0.1UF	1	C168	T4A
315	3101051040010	Chip capacitor 0402 0.1UF	1	C169	T4B
316	3101051040010	Chip capacitor 0402 0.1UF	1	C174	T4A
317	3101051040010	Chip capacitor 0402 0.1UF	1	C175	T3A
318	3101051040010	Chip capacitor 0402 0.1UF	1	C176	T4A
319	3101051040010	Chip capacitor 0402 0.1UF	1	C179	T4B
320	3101051040010	Chip capacitor 0402 0.1UF	1	C403	B4E

321	3101051040010	Chip capacitor 0402 0.1UF	1	C405	B5E
322	3101051040010	Chip capacitor 0402 0.1UF	1	C406	B5E
323	3101051040010	Chip capacitor 0402 0.1UF	1	C407	B5E
324	3101051040010	Chip capacitor 0402 0.1UF	1	C430	B5D
325	3101051040010	Chip capacitor 0402 0.1UF	1	C431	B5C
326	3101051040010	Chip capacitor 0402 0.1UF	1	C440	B5E
327	3101051040010	Chip capacitor 0402 0.1UF	1	C453	B4C
328	3101051040010	Chip capacitor 0402 0.1UF	1	C463	B5B
329	3101051040010	Chip capacitor 0402 0.1UF	1	C466	B4D
330	3101051040010	Chip capacitor 0402 0.1UF	1	C504	T4E
331	3101051040010	Chip capacitor 0402 0.1UF	1	C505	T5D
332	3101051040010	Chip capacitor 0402 0.1UF	1	C511	B4F
333	3101051040010	Chip capacitor 0402 0.1UF	1	C525	T4G
334	3101051040010	Chip capacitor 0402 0.1UF	1	C537	B4F
335	3101051040010	Chip capacitor 0402 0.1UF	1	C539	T4C
336	3101051040010	Chip capacitor 0402 0.1UF	1	C801	T3D
337	3101051040010	Chip capacitor 0402 0.1UF	1	C803	T3D
338	3101051040010	Chip capacitor 0402 0.1UF	1	C829	T3E
339	3101051040010	Chip capacitor 0402 0.1UF	1	C911	B5C
340	3101051050000	Chip capacitor 0402 1UF	1	C438	B5E
341	3101051050000	Chip capacitor 0402 1UF	1	C444	B5E
342	3101051050000	Chip capacitor 0402 1UF	1	C449	B4B
343	3101051050000	Chip capacitor 0402 1UF	1	C450	B4B
344	3101051050000	Chip capacitor 0402 1UF	1	C467	B4B
345	3101051050000	Chip capacitor 0402 1UF	1	C468	T4F
346	3101051230000	Chip capacitor 0402 0.012UF	1	C454	B5C
347	3101051500020	Chip capacitor 0402 15PF	1	C501	T4C
348	3101051510000	Chip capacitor 0402 150PF(±5%)	1	C425	B5D
349	3101051830000	Chip capacitor 0402 0.018UF	1	C409	B5D
350	3101051830000	Chip capacitor 0402 0.018UF	1	C823	T3D
351	3101052200010	Chip capacitor 0402 22PF	1	C427	B5D
352	3101052200010	Chip capacitor 0402 22PF	1	C428	B5D
353	3101052210010	Chip capacitor 0402 220PF	1	C170	T4A
354	3101052210010	Chip capacitor 0402 220PF	1	C171	T4A
355	3101052220010	Chip capacitor 0402 2200pF	1	C455	B5C
356	3101052700000	Chip capacitor 0402 27PF	1	C502	T4C
357	3101052700000	Chip capacitor 0402 27PF	1	C503	T4C
358	3101052720000	Chip capacitor 0402 2700PF	1	C460	B5C
359	3101052730000	Chip capacitor 0402 0.027UF	1	C426	B5D
360	3101052730000	Chip capacitor 0402 0.027UF	1	C436	B5F
361	3101053300000	Chip capacitor 0402 33PF	1	C153	B3A
362	3101053300000	Chip capacitor 0402 33PF	1	C415	B4E
363	3101053300000	Chip capacitor 0402 33PF	1	C423	B4D
364	3101053300000	Chip capacitor 0402 33PF	1	C908	B5C
365	3101053310030	Capacitor 0402 330PF	1	C439	B5E
366	3101054700010	Chip capacitor 0402 47PF	1	C433	B5F

367	3101054700010	Chip capacitor 0402 47PF	1	C435	B5F
368	3101054700010	Chip capacitor 0402 47PF	1	C447	B5C
369	3101054710010	Chip capacitor 0402 470PF	1	C115	T3A
370	3101054710010	Chip capacitor 0402 470PF	1	C123	B3B
371	3101054710010	Chip capacitor 0402 470PF	1	C125	B2B
372	3101054710010	Chip capacitor 0402 470PF	1	C126	B3A
373	3101054710010	Chip capacitor 0402 470PF	1	C140	B3B
374	3101054710010	Chip capacitor 0402 470PF	1	C172	T4A
375	3101054710010	Chip capacitor 0402 470PF	1	C209	T2D
376	3101054710010	Chip capacitor 0402 470PF	1	C211	T2E
377	3101054710010	Chip capacitor 0402 470PF	1	C214	T2E
378	3101054710010	Chip capacitor 0402 470PF	1	C248	B3B
379	3101054710010	Chip capacitor 0402 470PF	1	C249	B3A
380	3101054710010	Chip capacitor 0402 470PF	1	C432	B5F
381	3101054710010	Chip capacitor 0402 470PF	1	C442	B4E
382	3101054710010	Chip capacitor 0402 470PF	1	C443	B4E
383	3101054710010	Chip capacitor 0402 470PF	1	C802	T3D
384	3101054710010	Chip capacitor 0402 470PF	1	C817	T3E
385	3101054710010	Chip capacitor 0402 470PF	1	C818	T3E
386	3101054710010	Chip capacitor 0402 470PF	1	C820	T3D
387	3101054710010	Chip capacitor 0402 470PF	1	C821	T3D
388	3101054710010	Chip capacitor 0402 470PF	1	C822	T3D
389	3101054720000	Chip capacitor 0402 4700PF	1	C402	B4E
390	3101054740000	Chip capacitor 0402 0.47UF	1	C420	B4E
391	3101054740000	Chip capacitor 0402 0.47UF	1	C422	T4B
392	3101054740000	Chip capacitor 0402 0.47UF	1	C909	B5C
393	3101055610000	Chip capacitor 0402 560PF	1	C421	B4D
394	3101055610000	Chip capacitor 0402 560PF	1	C910	B5D
395	3101056830000	Chip capacitor 0402 0.068UF	1	C452	B5C
396	3101056840010	Chip capacitor 0402 0.68UF	1	C419	B4E
397	3101058200000	Chip capacitor 0402 82PF	1	C178	T4A
398	3101060200010	Chip capacitor 0603 2PF	1	C112	T2A
399	3101060200010	Chip capacitor 0603 2PF	1	C198	B3B
400	3101060200010	Chip capacitor 0603 2PF	1	C219	T1E
401	3199060758000	Chip capacitor 0603 0.75PF	1	C121	B2B
402	3101060300010	Chip capacitor 0603 3PF	1	C813	T2E
403	3101060390000	Chip capacitor 0603 0.3PF	1	C109	T2A
404	3101060390000	Chip capacitor 0603 0.3PF	1	C110	T2A
405	3101061500010	Chip capacitor 0603 15PF	1	C146	B4B
406	3101060400010	Chip capacitor 0603 4PF	1	C151	B3A
407	3101060900010	Chip capacitor 0603 9PF	1	C212	T2E
408	3101060500010	Chip capacitor 0603 5PF	1	C199	B3B
409	3101060300010	Chip capacitor 0603 3PF	1	C128	B2B
410	3101060590010	Chip capacitor 0603 0.5PF	1	C111	T2A
411	3101060600010	Chip capacitor 0603 6PF	1	C218	T2E
412	3101061000000	Chip capacitor 0603 10PF	1	C194	B3B

413	3101061000000	Chip capacitor 0603 10PF	1	C197	B3B
414	3101061020000	Chip capacitor 0603 1000PF	1	C158	T2C
415	3101061020000	Chip capacitor 0603 1000PF	1	C220	T1E
416	3101061020000	Chip capacitor 0603 1000PF	1	C236	B2A
417	3101061020000	Chip capacitor 0603 1000PF	1	C526	T1F
418	3101061020000	Chip capacitor 0603 1000PF	1	C529	T3F
419	3101061020000	Chip capacitor 0603 1000PF	1	C532	T3F
420	3101061020000	Chip capacitor 0603 1000PF	1	C605	B3G
421	3101061030010	Chip capacitor 0603 0.01UF	1	C143	B3B
422	3101061030010	Chip capacitor 0603 0.01UF	1	C148	B4B
423	3101061030010	Chip capacitor 0603 0.01UF	1	C152	B3A
424	3101061030010	Chip capacitor 0603 0.01UF	1	C227	T2D
425	3101061030010	Chip capacitor 0603 0.01UF	1	C228	T2C
426	3101061030010	Chip capacitor 0603 0.01UF	1	C242	T4A
427	3101061030010	Chip capacitor 0603 0.01UF	1	C606	B1F
428	3101061040010	Chip capacitor 0603 0.1UF	1	C135	B2A
429	3101061040010	Chip capacitor 0603 0.1UF	1	C145	B3B
430	3101061040010	Chip capacitor 0603 0.1UF	1	C222	T1E
431	3101061040010	Chip capacitor 0603 0.1UF	1	C235	T1C
432	3101061040010	Chip capacitor 0603 0.1UF	1	C507	T5D
433	3101061040010	Chip capacitor 0603 0.1UF	1	C518	B5G
434	3101061040010	Chip capacitor 0603 0.1UF	1	C519	B5G
435	3101061040010	Chip capacitor 0603 0.1UF	1	C520	B4G
436	3101061040010	Chip capacitor 0603 0.1UF	1	C521	B1F
437	3101061040010	Chip capacitor 0603 0.1UF	1	C528	T3G
438	3101061040010	Chip capacitor 0603 0.1UF	1	C534	T3F
439	3101061040010	Chip capacitor 0603 0.1UF	1	C536	B4G
440	3101061040010	Chip capacitor 0603 0.1UF	1	C602	B3F
441	3101061050000	Chip capacitor 0603 1UF	1	C408	B5D
442	3101061050000	Chip capacitor 0603 1UF	1	C412	B5E
443	3101061050000	Chip capacitor 0603 1UF	1	C434	B5F
444	3101061050000	Chip capacitor 0603 1UF	1	C437	T5F
445	3101061050000	Chip capacitor 0603 1UF	1	C513	B4F
446	3101061050000	Chip capacitor 0603 1UF	1	C514	B5F
447	3101061500010	Chip capacitor 0603 15PF	1	C150	B3B
448	3101062220010	Chip capacitor 0603 2200PF	1	C416	B4D
449	3101062240000	Chip capacitor 0603 0.22UF	1	C237	T2B
450	3101062240000	Chip capacitor 0603 0.22UF	1	C414	B5D
451	3101062240000	Chip capacitor 0603 0.22UF	1	C522	T4F
452	3101062710000	Chip capacitor 0603 270PF	1	C159	T3C
453	3101063000010	Chip capacitor 0603 30PF	1	C155	T4A
454	3101064710000	Chip capacitor 0603 470PF	1	C113	B2A
455	3101064710000	Chip capacitor 0603 470PF	1	C114	T2A
456	3101064710000	Chip capacitor 0603 470PF	1	C130	B3B
457	3101064710000	Chip capacitor 0603 470PF	1	C131	B3B
458	3101064710000	Chip capacitor 0603 470PF	1	C132	B2A

459	3101064710000	Chip capacitor 0603 470PF	1	C136	B2A
460	3101064710000	Chip capacitor 0603 470PF	1	C141	B3B
461	3101064710000	Chip capacitor 0603 470PF	1	C144	B3B
462	3101064710000	Chip capacitor 0603 470PF	1	C147	B4B
463	3101064710000	Chip capacitor 0603 470PF	1	C192	B3B
464	3101064710000	Chip capacitor 0603 470PF	1	C208	T2D
465	3101064710000	Chip capacitor 0603 470PF	1	C210	T2D
466	3101064710000	Chip capacitor 0603 470PF	1	C215	T2E
467	3101064710000	Chip capacitor 0603 470PF	1	C216	T2F
468	3101064710000	Chip capacitor 0603 470PF	1	C217	T2F
469	3101064710000	Chip capacitor 0603 470PF	1	C223	T1E
470	3101064710000	Chip capacitor 0603 470PF	1	C226	T2C
471	3101064710000	Chip capacitor 0603 470PF	1	C232	T1C
472	3101064710000	Chip capacitor 0603 470PF	1	C244	B2A
473	3101064710000	Chip capacitor 0603 470PF	1	C530	T3F
474	3101064710000	Chip capacitor 0603 470PF	1	C531	T2F
475	3101064710000	Chip capacitor 0603 470PF	1	C812	T3E
476	3101066800000	Chip capacitor 0603 68PF	1	C156	T3C
477	3101066800000	Chip capacitor 0603 68PF	1	C157	T3C
478	3101074730000	Chip capacitor 0805 0.047UF	1	C814	T2E
479	3102992000000	Trimmer capacitor 3.2*2.5*1.25mm	1	TC101	B2B
480	3102992000000	Trimmer capacitor 3.2*2.5*1.25mm	1	TC102	B3A
481	3103994760080	Electrolytic capacitor 2512 47UF±20%	1	C234	T1D
482	3103994760080	Electrolytic capacitor 2512 47UF±20%	1	C533	T1F
483	3104071050010	Tantalum capacitor 0805 1UF M 16V	1	C241	T3B
484	3104071050010	Tantalum capacitor 0805 1UF M 16V	1	C417	B4D
485	3104071050010	Tantalum capacitor 0805 1UF M 16V	1	C418	B4E
486	3104071050010	Tantalum capacitor 0805 1UF M 16V	1	C517	B4F
487	3104071050010	Tantalum capacitor 0805 1UF M 16V	1	C608	B2F
488	3104071060010	Tantalum capacitor 0805 10UF M 6.3V	1	C164	T4A
489	3104071560020	Tantalum capacitor 0805 15UF M 6.3V	1	C429	B5D
490	3104072250010	Tantalum capacitor 0805 2.2UF M 10V	1	C250	T2B
491	3104074750030	Tantalum capacitor 0805 4.7UF M 10V	1	C247	B4B
492	3104074750030	Tantalum capacitor 0805 4.7UF M 10V	1	C411	B5E
493	3104074750030	Tantalum capacitor 0805 4.7UF M 10V	1	C424	B4D
494	3104074750030	Tantalum capacitor 0805 4.7UF M 10V	1	C448	B4C
495	3104074750030	Tantalum capacitor 0805 4.7UF M 10V	1	C457	B5C
496	3104074750030	Tantalum capacitor 0805 4.7UF M 10V	1	C464	B5B
497	3104074750030	Tantalum capacitor 0805 4.7UF M 10V	1	C603	B4G
498	3104074750030	Tantalum capacitor 0805 4.7UF M 10V	1	C804	T3D
499	3104074750030	Tantalum capacitor 0805 4.7UF M 10V	1	C811	T3C
500	3104074750030	Tantalum capacitor 0805 4.7UF M 10V	1	C825	T3C
501	3104074750030	Tantalum capacitor 0805 4.7UF M 10V	1	C828	T3E
502	3104074750030	Tantalum capacitor 0805 4.7UF M 10V	1	C831	T5C
503	3104074750030	Tantalum capacitor 0805 4.7UF M 10V	1	C904	B4C
504	3104081040000	Tantalum capacitor 1206 0.1UF M 35V	1	C221	T1D

505	3104081040000	Tantalum capacitor 1206 0.1UF M 35V	1	C816	T3F
506	3104081060070	Tantalum capacitor 1206 10UF M 16V	1	C523	T3G
507	3104081060070	Tantalum capacitor 1206 10UF M 16V	1	C535	B4G
508	3104081060070	Tantalum capacitor 1206 10UF M 16V	1	C819	T3E
509	3104081060070	Tantalum capacitor 1206 10UF M 16V	1	C607	B1F
510	3104083350040	Tantalum capacitor 1206 3.3UF M 16V	1	C815	T3E
511	3104084750030	Tantalum capacitor 1206 4.7UF	1	C524	T4G
512	3104084750030	Tantalum capacitor 1206 4.7UF	1	C601	B3F
513	3104086850000	Tantalum capacitor 1206 6.8UF±20%	1	C181	T4B
514	3210306180000	Chip inductor 0603 18nH	1	L123	B3C
515	3210306180000	Chip inductor 0603 18nH	1	L138	B3B
516	3210306220000	Chip inductor 0603 22nH	1	L109	B3A
517	3210306220000	Chip inductor 0603 22nH	1	L124	B3B
518	3210306390000	Chip inductor 0603 39nH	1	L139	B3A
519	3213212100000	Chip inductor 1008 10nH	1	L127	T2E
520	3213212100000	Chip inductor 1008 10nH	1	L128	T1F
521	3213212103000	Chip inductor 1008 10uH	1	L134	B4C
522	3221506601000	Chip ferrite bead 0603 600Ω	1	L129	T1E
523	3221506601000	Chip ferrite bead 0603 600Ω	1	L135	B3B
524	3221506601000	Chip ferrite bead 0603 600Ω	1	L137	B4B
525	3221506601000	Chip ferrite bead 0603 600Ω	1	L501	T4E
526	3221506601000	Chip ferrite bead 0603 600Ω	1	L502	T4C
527	3221506601000	Chip ferrite bead 0603 600Ω	1	L503	T4E
528	3221506601000	Chip ferrite bead 0603 600Ω	1	L504	T4E
529	3221506601000	Chip ferrite bead 0603 600Ω	1	L505	T4E
530	3221506601000	Chip ferrite bead 0603 600Ω	1	L801	T3D
531	3221506601000	Chip ferrite bead 0603 600Ω	1	L803	T2D
532	3221506601000	Chip ferrite bead 0603 600Ω	1	L804	T3E
533	3231132830000	Air-core inductor 1.3*2.8*3TR	1	L102	B1A
534	3231132830000	Air-core inductor 1.3*2.8*3TR	1	L103	B1A
535	3231132830000	Air-core inductor 1.3*2.8*3TR	1	L105	T1C
536	3231803011000	Air-core inductor 0.8*3.0*11TR	1	L101	B1B
537	3231803060000	Air-core inductor 0.8*3.0*6TR	1	L133	T1C
538	3301060400000	Rectifier diode DSM3MA1TRF-E	1	D515	T1G
539	3302030500000	Zener diode UDZSTE(1710B)	1	D514	T5F
540	3302030500010	Zener diode UDZSTE(1715B)	1	D518	T3F
541	3302030500030	Zener diode UDZSTE(175.1B)	1	D112	B4B
542	3302030500030	Zener diode UDZSTE(175.1B)	1	D118	B1D
543	3302180100000	Zener diode HZU5ALL-E	1	D802	T3D
544	3303010500040	Switching diode 1SS355(TE17)	1	D103	T3A
545	3303010500040	Switching diode 1SS355(TE17)	1	D116	T2D
546	3303010500040	Switching diode 1SS355(TE17)	1	D511	T4F
547	3303010500040	Switching diode 1SS355(TE17)	1	D513	T4F
548	3303010500040	Switching diode 1SS355(TE17)	1	D517	T3F
549	3303020100020	Switching diode MA2S11100L	1	D501	T4E
550	3303020100020	Switching diode MA2S11100L	1	D801	T3D

551	3303020100020	Switching diode MA2S11100L	1	D803	T3E
552	3303020100060	Switching diode MA3J74200L	1	D101	T2A
553	3303020100060	Switching diode MA3J74200L	1	D102	T2A
554	3303020100060	Switching diode MA3J74200L	1	D117	T2E
555	3303020100060	Switching diode MA3J74200L	1	D401	B4C
556	3303030100010	Switching diode DAN222(TL)	1	D113	T4A
557	3303030100010	Switching diode DAN222(TL)	1	D114	T4B
558	3303210100000	Switching diode MA4P1250 3*2mm	1	D104	T1C
559	3303210100000	Switching diode MA4P1250 3*2mm	1	D105	T2C
560	3399990000240	Zener diode UDZSTE	1	D119	T3A
561	3401001000490	Transistor 2SA1832-GR	1	Q802	T3E
562	3401002000140	Transistor 2SC4215-Y	1	Q113	B4A
563	3401002000290	Transistor 2SC4116-GR	1	Q404	B5F
564	3401002000990	Transistor 2SC5108-Y(TE85L)	1	Q107	T3C
565	3403002000000	Transistor 2SB1132FD5T100R	1	Q601	B4G
566	3403002000000	Transistor 2SB1132FD5T100R	1	Q603	B1F
567	3403003000000	Transistor 2SC2412K	1	Q114	T3A
568	3403003000060	Transistor 2SC4617TLS	1	Q401	B5E
569	3403007000000	Transistor DTA114EE(TL)	1	Q105	T4B
570	3403007000000	Transistor DTA114EE(TL)	1	Q106	T3A
571	3403007000000	Transistor DTA114EE(TL)	1	Q514	T4F
572	3403007000000	Transistor DTA114EE(TL)	1	Q516	T4F
573	3403007000000	Transistor DTA114EE(TL)	1	Q519	T4G
574	3403007000000	Transistor DTA114EE(TL)	1	Q520	T4G
575	3408002000010	Transistor 2SC3357-T1	1	Q109	T2E
576	3408002000010	Transistor 2SC3357-T1	1	Q110	T2D
577	3501030000000	FET 2SJ506STR	1	Q512	T3F
578	3411002000020	Transistor 2SC5343EG	1	Q801	T3E
579	3501020000030	FET 3SK318YB	1	Q111	B3A
580	3501020000030	FET 3SK318YB	1	Q112	B3B
581	3503020000030	FET 2SK1824	1	Q403	B5E
582	3503020000030	FET 2SK1824	1	Q405	B4E
583	3503020000030	FET 2SK1824	1	Q406	B4E
584	3503020000030	FET 2SK1824	1	Q502	T4E
585	3503020000030	FET 2SK1824	1	Q511	B4F
586	3503020000030	FET 2SK1824	1	Q521	B5F
587	3602017006350	Audio amplifier TDA7297D	1	IC511	B4G
588	3603002005440	IF processor TA31136FNG	1	IC102	B4A
589	3605002054790	Operational amplifier TA75W558FU	1	IC404	B4C
590	3605002057090	Operational amplifier TA75S01F	1	IC103	T3B
591	3605002057290	Operational amplifier TC75W51FU	1	IC402	B4B
592	3605002057290	Operational amplifier TC75W51FU	1	IC403	B5B
593	3605002057290	Operational amplifier TC75W51FU	1	IC405	B5E
594	3607002000180	FLIP-FLOP TC4013BF	1	IC512	T4G
595	3608002020890	Power management IC TA7805F	1	IC602	B4F
596	3608015005600	Power management IC XC62FP3502PR	1	IC803	T2D

597	3609007001590	IC MB15A02PFV1	1	IC801	T3D
598	3612022000000	Memory CAT24C256W1	1	IC501	T5E
599	3613034001060	Baseband processor AK2346-E2	1	IC401	B4D
600	3701098340010	Crystal 9.8304MHz DSX530G	1	X501	T4C
601	3701368630000	Crystal oscillator 3.6864MHz	1	X402	B5D
602	3802499540070	Crystal filter 49.95MHz $\pm 7.5k$	1	XF200	B3A
603	3213212331000	Chip inductor 1008 330nH	1	L116	T2C
604	3213212331000	Chip inductor 1008 330nH	1	L117	T3C
605	3213212331000	Chip inductor 1008 330nH	1	L118	T2C
606	3403008000010	Transistor DTC114EE(TL)	1	Q402	B5E
607	3403008000010	Transistor DTC114EE(TL)	1	Q501	T3C
608	3403008000010	Transistor DTC114EE(TL)	1	Q503	T5E
609	3403008000010	Transistor DTC114EE(TL)	1	Q513	T4F
610	3403008000010	Transistor DTC114EE(TL)	1	Q515	T4F
611	3403008000010	Transistor DTC114EE(TL)	1	Q517	T4F
612	3403008000010	Transistor DTC114EE(TL)	1	Q518	T4G
613	3403008000010	Transistor DTC114EE(TL)	1	Q602	B4G
614	3403008000010	Transistor DTC114EE(TL)	1	Q604	B2F
615	3701016850020	TCXO 16.8MHz	1	IC802	T3C
616	3210306561010	Chip inductor 0603 560nH	1	L114	B4B
617	3210306561010	Chip inductor 0603 560nH	1	L113	B4B
618	3003061040000	Thermistor 0603 100k Ω	1	TH101	B2A
619	3221513600000	Chip ferrite bead 1806 60 Ω	1	L131	T1D
620	3221513600000	Chip ferrite bead 1806 60 Ω	1	L132	T1D
621	3304060300010	Varactor HVC376BTRF	1	D107	B3A
622	3304060300010	Varactor HVC376BTRF	1	D108	B3B
623	3304060300010	Varactor HVC376BTRF	1	D109	B2B
624	3304060300010	Varactor HVC376BTRF	1	D110	B3A
625	3001061210000	Chip resistor 0603 120 Ω	1	R181	T2E
626	3001054740000	Chip resistor 0402 470K Ω	1	R156	T4A
627	3001053340000	Chip resistor 0402 330K Ω	1	R406	B5E
628	3101061200000	Chip capacitor 0603 12PF	1	C122	B3A
629	3101061800000	Chip capacitor 0603 18PF	1	C245	B3B
630	3001051030000	Chip resistor 0402 10K Ω	1	R155	T4A
631	5205015000000	15PIN socket 1251	1	J503	T5F
632	5207032000000	FFC/FPC connector 52559	1	J501	T5D
633	3101051530010	Chip capacitor 0402 0.015UF K	1	C410	B5E
634	3101051530010	Chip capacitor 0402 0.015UF K	1	C824	T3D
635	3401002000150	Transistor 2SC4738F-GR	1	Q803	T3E
636	3605002054590	Operational amplifier TA75W01FU	1	IC104	T3B
637	3220107829000	Filter inductor 0805 8.2nH	1	L136	B3A
638	3220107829000	Filter inductor 0805 8.2nH	1	L110	B3A
639	3220107829000	Filter inductor 0805 8.2nH	1	L108	B2B
640	3220107829000	Filter inductor 0805 8.2nH	1	L107	B3B
641	3101065690000	Chip capacitor 0603 5.6PF	1	C124	B3B
642	3101065690000	Chip capacitor 0603 5.6PF	1	C129	B2B

643	3101065690000	Chip capacitor 0603 5.6PF	1	C134	B3A
644	3101065690000	Chip capacitor 0603 5.6PF	1	C246	B3A
645	3001053030010	Chip resistor 0402 30K Ω	1	R414	B5E
646	3101080200010	Chip capacitor 1206 2pF0V	1	C101	B1B
647	3101080200010	Chip capacitor 1206 2pF0V	1	C116	T2C
648	3101080200010	Chip capacitor 1206 2pF0V	1	C230	B1B
649	3101080200010	Chip capacitor 1206 2pF0V	1	C106	B2A
650	3101080200010	Chip capacitor 1206 2pF0V	1	C102	B1A
651	3101080100010	Chip capacitor 1206 1pF0V	1	C117	T2C
652	3101080200010	Chip capacitor 1206 2pF0V	1	C100	B1B
653	3101084710010	Chip capacitor 1206 470pF	1	C108	T2B
654	3101084710010	Chip capacitor 1206 470pF	1	C229	T2C
655	3101084710010	Chip capacitor 1206 470pF	1	L130	T1C
656	3101080200010	Chip capacitor 1206 2pF0V	1	C103	B1A
657	3199060758000	Chip capacitor 0603 0.75PF	1	C127	B3B
658	3199060758000	Chip capacitor 0603 0.75PF	1	C137	B3A
659	3001052230000	Chip resistor 0402 22K Ω F	1	VR101	T3A
660	3001052210000	Chip resistor 0402 220 Ω	1	R412	B5E
661	3220107829000	Filter inductor 0805 8.2nH	1	L106	B2B
662	3101061100010	Chip capacitor 0603 11PF	1	C118	B2B
663	3101050700010	Chip capacitor 0402 7PF	1	C182	B2B
664	410M600100870	PCB FR4 1.6T	1		
665	3101051810010	Chip capacitor 0402 180p	1	C451	B4C
666	3001051240000	Chip resistor 0402 120K Ω	1	R437	B5C
667	3610045000200	SCM M3062LFGPGP	1	IC502	T4D
668	3302030500020	Zener diode UDZSTE(1718B)	1	D512	T4G
669	4002000000300	Chip fuse0603-FF 0.5A-32V	1	FP101	T5P
670	4002000000300	Chip fuse0603-FF 0.5A-32V	1	FP102	T5P
671	3101060600010	Chip capacitor 0603 6PF	1	C195	B3C
672	3101060200010	Chip capacitor 0603 2PF	1	C196	B3C

TM-610 VHF Parts List 1 (Main Board Unit)					
No.	Material No.	Description	Qty.	Ref. No.	Print No.
1	3001050000000	Chip resistor RTT02000JTP 0Ω J 1/16W (RoHS)	1	C404	B5E
2	3001050000000	Chip resistor RTT02000JTP 0Ω J 1/16W (RoHS)	1	R106	T2B
3	3001050000000	Chip resistor RTT02000JTP 0Ω J 1/16W (RoHS)	1	R419	B5E
4	3001050000000	Chip resistor RTT02000JTP 0Ω J 1/16W (RoHS)	1	R448	B5F
5	3001050000000	Chip resistor RTT02000JTP 0Ω J 1/16W (RoHS)	1	R451	B5F
6	3001050000000	Chip resistor RTT02000JTP 0Ω J 1/16W (RoHS)	1	R455	B5E
7	3001050000000	Chip resistor RTT02000JTP 0Ω J 1/16W (RoHS)	1	R457	B5C
8	3001050000000	Chip resistor RTT02000JTP 0Ω J 1/16W (RoHS)	1	R483	B4B
9	3001050000000	Chip resistor RTT02000JTP 0Ω J 1/16W (RoHS)	1	R484	B4B
10	3001050000000	Chip resistor RTT02000JTP 0Ω J 1/16W (RoHS)	1	R485	T4F
11	3001050000000	Chip resistor RTT02000JTP 0Ω J 1/16W (RoHS)	1	R510	T4C
12	3001050000000	Chip resistor RTT02000JTP 0Ω J 1/16W (RoHS)	1	R513	T4C
13	3001050000000	Chip resistor RTT02000JTP 0Ω J 1/16W (RoHS)	1	R518	T5E
14	3001050000000	Chip resistor RTT02000JTP 0Ω J 1/16W (RoHS)	1	R520	T5E
15	3001050000000	Chip resistor RTT02000JTP 0Ω J 1/16W (RoHS)	1	R521	T5E
16	3001050000000	Chip resistor RTT02000JTP 0Ω J 1/16W (RoHS)	1	R522	T5E
17	3001050000000	Chip resistor RTT02000JTP 0Ω J 1/16W (RoHS)	1	R590	T5F
18	3001050000000	Chip resistor RTT02000JTP 0Ω J 1/16W (RoHS)	1	R591	T5F
19	3001050000000	Chip resistor RTT02000JTP 0Ω J 1/16W (RoHS)	1	R600	T5F
20	3001050000000	Chip resistor RTT02000JTP 0Ω J 1/16W (RoHS)	1	R605	B2F
21	3001050000000	Chip resistor RTT02000JTP 0Ω J 1/16W (RoHS)	1	R608	T5F
22	3001050000000	Chip resistor RTT02000JTP 0Ω J 1/16W (RoHS)	1	R623	T5G
23	3001050000000	Chip resistor RTT02000JTP 0Ω J 1/16W (RoHS)	1	R625	T5F
24	3001050000000	Chip resistor RTT02000JTP 0Ω J 1/16W (RoHS)	1	R627	T4C
25	3001050000000	Chip resistor RTT02000JTP 0Ω J 1/16W (RoHS)	1	R823	T3D
26	3001050000000	Chip resistor RTT02000JTP 0Ω J 1/16W (RoHS)	1	R824	T3D
27	3001050000000	Chip resistor RTT02000JTP 0Ω J 1/16W (RoHS)	1	R825	T3D
28	3001050000000	Chip resistor RTT02000JTP 0Ω J 1/16W (RoHS)	1	R908	T4E
29	3001050000000	Chip resistor RTT02000JTP 0Ω J 1/16W (RoHS)	1	R909	T4E
30	3001050000000	Chip resistor RTT02000JTP 0Ω J 1/16W (RoHS)	1	R910	T4E
31	3001050000000	Chip resistor RTT02000JTP 0Ω J 1/16W (RoHS)	1	R912	T5E
32	3001050000000	Chip resistor RTT02000JTP 0Ω J 1/16W (RoHS)	1	R913	T5E
33	3001050000000	Chip resistor RTT02000JTP 0Ω J 1/16W (RoHS)	1	R919	T4E
34	3001050000000	Chip resistor RTT02000JTP 0Ω J 1/16W (RoHS)	1	R921	T4E
35	3001050000000	Chip resistor RTT02000JTP 0Ω J 1/16W (RoHS)	1	R922	T4E
36	3001050000000	Chip resistor RTT02000JTP 0Ω J 1/16W (RoHS)	1	R923	T4E
37	3001051010000	Chip resistor RTT02101JTP 100Ω J 1/16W (RoHS)	1	R146	T2D
38	3001051010000	Chip resistor RTT02101JTP 100Ω J 1/16W (RoHS)	1	R168	B3D
39	3001051010000	Chip resistor RTT02101JTP 100Ω J 1/16W (RoHS)	1	R173	B3D
40	3001051010000	Chip resistor RTT02101JTP 100Ω J 1/16W (RoHS)	1	R174	B3D
41	3001051010000	Chip resistor RTT02101JTP 100Ω J 1/16W (RoHS)	1	R197	T3A
42	3001051010000	Chip resistor RTT02101JTP 100Ω J 1/16W (RoHS)	1	R501	T4C
43	3001051020010	Chip resistor 0402 1KΩ J 1/16W(RoHS)	1	R145	B3A
44	3001051020010	Chip resistor 0402 1KΩ J 1/16W(RoHS)	1	R200	T4A
45	3001051020010	Chip resistor 0402 1KΩ J 1/16W(RoHS)	1	R439	B4E
46	3001051020010	Chip resistor 0402 1KΩ J 1/16W(RoHS)	1	R453	B4F
47	3001051020010	Chip resistor 0402 1KΩ J 1/16W(RoHS)	1	R476	B5B

48	3001051020010	Chip resistor 0402 1KΩ J 1/16W(RoHS)	1	R503	T4C
49	3001051020010	Chip resistor 0402 1KΩ J 1/16W(RoHS)	1	R504	T4C
50	3001051020010	Chip resistor 0402 1KΩ J 1/16W(RoHS)	1	R505	T3D
51	3001051020010	Chip resistor 0402 1KΩ J 1/16W(RoHS)	1	R506	T3D
52	3001051020010	Chip resistor 0402 1KΩ J 1/16W(RoHS)	1	R609	T4E
53	3001051020010	Chip resistor 0402 1KΩ J 1/16W(RoHS)	1	R610	T4E
54	3001051020010	Chip resistor 0402 1KΩ J 1/16W(RoHS)	1	R611	T4E
55	3001051020010	Chip resistor 0402 1KΩ J 1/16W(RoHS)	1	R612	T3D
56	3001051020010	Chip resistor 0402 1KΩ J 1/16W(RoHS)	1	R632	T5D
57	3001051020010	Chip resistor 0402 1KΩ J 1/16W(RoHS)	1	R802	T3D
58	3001051020010	Chip resistor 0402 1KΩ J 1/16W(RoHS)	1	R826	T3D
59	3001051020010	Chip resistor 0402 1KΩ J 1/16W(RoHS)	1	R906	T4E
60	3001051030000	Chip resistor RTT02103JTP 10KΩ J 1/16W (RoHS)	1	R107	T2B
61	3001051030000	Chip resistor RTT02103JTP 10KΩ J 1/16W (RoHS)	1	R110	T3B
62	3001051030000	Chip resistor RTT02103JTP 10KΩ J 1/16W (RoHS)	1	R170	B3D
63	3001051030000	Chip resistor RTT02103JTP 10KΩ J 1/16W (RoHS)	1	R176	B3D
64	3001051030000	Chip resistor RTT02103JTP 10KΩ J 1/16W (RoHS)	1	R198	T3A
65	3001051030000	Chip resistor RTT02103JTP 10KΩ J 1/16W (RoHS)	1	R402	B4E
66	3001051030000	Chip resistor RTT02103JTP 10KΩ J 1/16W (RoHS)	1	R403	B4E
67	3001051030000	Chip resistor RTT02103JTP 10KΩ J 1/16W (RoHS)	1	R423	B4E
68	3001051030000	Chip resistor RTT02103JTP 10KΩ J 1/16W (RoHS)	1	R424	B4E
69	3001051030000	Chip resistor RTT02103JTP 10KΩ J 1/16W (RoHS)	1	R428	B4C
70	3001051030000	Chip resistor RTT02103JTP 10KΩ J 1/16W (RoHS)	1	R449	B5F
71	3001051030000	Chip resistor RTT02103JTP 10KΩ J 1/16W (RoHS)	1	R450	B5F
72	3001051030000	Chip resistor RTT02103JTP 10KΩ J 1/16W (RoHS)	1	R464	B4C
73	3001051030000	Chip resistor RTT02103JTP 10KΩ J 1/16W (RoHS)	1	R470	B5B
74	3001051030000	Chip resistor RTT02103JTP 10KΩ J 1/16W (RoHS)	1	R472	B5B
75	3001051030000	Chip resistor RTT02103JTP 10KΩ J 1/16W (RoHS)	1	R477	B5B
76	3001051030000	Chip resistor RTT02103JTP 10KΩ J 1/16W (RoHS)	1	R509	T3D
77	3001051030000	Chip resistor RTT02103JTP 10KΩ J 1/16W (RoHS)	1	R515	T4E
78	3001051030000	Chip resistor RTT02103JTP 10KΩ J 1/16W (RoHS)	1	R804	T2D
79	3001051030000	Chip resistor RTT02103JTP 10KΩ J 1/16W (RoHS)	1	R902	B5C
80	3001051030000	Chip resistor RTT02103JTP 10KΩ J 1/16W (RoHS)	1	R904	B5C
81	3001051040000	Chip resistor RTT021003FTP 100KΩ F 1/16W (RoHS)	1	R413	B5E
82	3001051040000	Chip resistor RTT021003FTP 100KΩ F 1/16W (RoHS)	1	R490	T5D
83	3001051040010	Chip resistor RTT02104JTP 100KΩ J 1/16W (RoHS)	1	R104	T2B
84	3001051040010	Chip resistor RTT02104JTP 100KΩ J 1/16W (RoHS)	1	R105	T2A
85	3001051040010	Chip resistor RTT02104JTP 100KΩ J 1/16W (RoHS)	1	R115	T2B
86	3001051040010	Chip resistor RTT02104JTP 100KΩ J 1/16W (RoHS)	1	R116	T2B
87	3001051040010	Chip resistor RTT02104JTP 100KΩ J 1/16W (RoHS)	1	R148	B2D
88	3001051040010	Chip resistor RTT02104JTP 100KΩ J 1/16W (RoHS)	1	R149	T3A
89	3001051040010	Chip resistor RTT02104JTP 100KΩ J 1/16W (RoHS)	1	R180	T2D
90	3001051040010	Chip resistor RTT02104JTP 100KΩ J 1/16W (RoHS)	1	R427	B4D
91	3001051040010	Chip resistor RTT02104JTP 100KΩ J 1/16W (RoHS)	1	R467	B5B
92	3001051040010	Chip resistor RTT02104JTP 100KΩ J 1/16W (RoHS)	1	R468	B5B
93	3001051040010	Chip resistor RTT02104JTP 100KΩ J 1/16W (RoHS)	1	R514	T4E
94	3001051040010	Chip resistor RTT02104JTP 100KΩ J 1/16W (RoHS)	1	R565	T4G
95	3001051040010	Chip resistor RTT02104JTP 100KΩ J 1/16W (RoHS)	1	R566	T4G
96	3001051040010	Chip resistor RTT02104JTP 100KΩ J 1/16W (RoHS)	1	R801	T3D

97	3001051040010	Chip resistor RTT02104JTP 100KΩ J 1/16W (RoHS)	1	R806	T3C
98	3001051040010	Chip resistor RTT02104JTP 100KΩ J 1/16W (RoHS)	1	R820	T3F
99	3001051050020	Chip resistor 0402 1MΩ J 1/16W (RoHS)	1	R118	B3B
100	3001051050020	Chip resistor 0402 1MΩ J 1/16W (RoHS)	1	R119	B3B
101	3001051050020	Chip resistor 0402 1MΩ J 1/16W (RoHS)	1	R120	B3B
102	3001051050020	Chip resistor 0402 1MΩ J 1/16W (RoHS)	1	R130	B2A
103	3001051050020	Chip resistor 0402 1MΩ J 1/16W (RoHS)	1	R131	B3B
104	3001051050020	Chip resistor 0402 1MΩ J 1/16W (RoHS)	1	R431	B5D
105	3001051050020	Chip resistor 0402 1MΩ J 1/16W (RoHS)	1	R473	B5B
106	3001051050020	Chip resistor 0402 1MΩ J 1/16W (RoHS)	1	R901	B5A
107	3001051230000	Chip resistor 0402 12KΩ J 1/16W (RoHS)	1	R152	T4B
108	3001051230000	Chip resistor 0402 12KΩ J 1/16W (RoHS)	1	R471	B5C
109	3001051240000	Chip resistor 0402 120KΩ J 1/16W (RoHS)	1	R437	B5C
110	3001051240000	Chip resistor 0402 120KΩ J 1/16W (RoHS)	1	R827	T3C
111	3001051530000	Chip resistor 0402 15KΩ J 1/16W (RoHS)	1	R404	B4E
112	3001051530000	Chip resistor 0402 15KΩ J 1/16W (RoHS)	1	R408	B5E
113	3001051530000	Chip resistor 0402 15KΩ J 1/16W (RoHS)	1	R465	B5C
114	3001051530000	Chip resistor 0402 15KΩ J 1/16W (RoHS)	1	R830	T3D
115	3001051540020	Chip resistor 0402 150KΩ J 1/16W (RoHS)	1	R446	B5F
116	3001051540020	Chip resistor 0402 150KΩ J 1/16W (RoHS)	1	R475	B5B
117	3001051540020	Chip resistor 0402 150KΩ J 1/16W (RoHS)	1	R478	B5B
118	3001051810010	Chip resistor 0402 180Ω J 1/16W (RoHS)	1	R182	B2D
119	3001051810010	Chip resistor 0402 180Ω J 1/16W (RoHS)	1	R184	B2D
120	3001051830000	Chip resistor 0402 18KΩ J 1/16W (RoHS)	1	R175	B3D
121	3001051830000	Chip resistor 0402 18KΩ J 1/16W (RoHS)	1	R416	B5E
122	3001051830000	Chip resistor 0402 18KΩ J 1/16W (RoHS)	1	R418	B5E
123	3001051830000	Chip resistor 0402 18KΩ J 1/16W (RoHS)	1	R434	B5B
124	3001051830000	Chip resistor 0402 18KΩ J 1/16W (RoHS)	1	R435	B4C
125	3001051840000	Chip resistor 0402 180KΩ J 1/16W (RoHS)	1	R459	B5C
126	3001051840000	Chip resistor 0402 180KΩ J 1/16W (RoHS)	1	R460	B5C
127	3001051840000	Chip resistor 0402 180KΩ J 1/16W (RoHS)	1	R461	B4C
128	3001051840000	Chip resistor 0402 180KΩ J 1/16W (RoHS)	1	R807	T2D
129	3001051840000	Chip resistor 0402 180KΩ J 1/16W (RoHS)	1	R832	T5C
130	3001052200000	Chip resistor 0402 22Ω J 1/16W (RoHS)	1	R803	T3D
131	3001052200000	Chip resistor 0402 22Ω J 1/16W (RoHS)	1	R808	T2D
132	3001052210000	Chip resistor 0402 220Ω J 1/16W (RoHS)	1	R117	T3B
133	3001052210000	Chip resistor 0402 220Ω J 1/16W (RoHS)	1	R172	B3D
134	3001052210000	Chip resistor 0402 220Ω J 1/16W (RoHS)	1	R412	B5E
135	3001052230010	Chip resistor 0402 22KΩ J 1/16W (RoHS)	1	R158	T4B
136	3001052230010	Chip resistor 0402 22KΩ J 1/16W (RoHS)	1	R159	T4A
137	3001052230010	Chip resistor 0402 22KΩ J 1/16W (RoHS)	1	R161	T4A
138	3001052230010	Chip resistor 0402 22KΩ J 1/16W (RoHS)	1	R162	T4B
139	3001052230010	Chip resistor 0402 22KΩ J 1/16W (RoHS)	1	R409	B5E
140	3001052230010	Chip resistor 0402 22KΩ J 1/16W (RoHS)	1	R440	B5E
141	3001052230010	Chip resistor 0402 22KΩ J 1/16W (RoHS)	1	R441	B5E
142	3001052230010	Chip resistor 0402 22KΩ J 1/16W (RoHS)	1	R442	B5E
143	3001052230010	Chip resistor 0402 22KΩ J 1/16W (RoHS)	1	R445	B5F
144	3001052230010	Chip resistor 0402 22KΩ J 1/16W (RoHS)	1	R452	B5F
145	3001052230010	Chip resistor 0402 22KΩ J 1/16W (RoHS)	1	R458	B5C

146	3001052230010	Chip resistor 0402 22KΩ J 1/16W (RoHS)	1	R466	B5C
147	3001052230010	Chip resistor 0402 22KΩ J 1/16W (RoHS)	1	R491	T5D
148	3001052230010	Chip resistor 0402 22KΩ J 1/16W (RoHS)	1	R829	T3D
149	3001052720000	Chip resistor 0402 2.7KΩ J 1/16W (RoHS)	1	R407	B5E
150	3001052730000	Chip resistor 0402 27KΩ J 1/16W (RoHS)	1	R421	B4D
151	3001053030010	Chip resistor 0402 30KΩ J 1/16W (RoHS)	1	R154	T4A
152	3001053030010	Chip resistor 0402 30KΩ J 1/16W (RoHS)	1	R414	B5E
153	3001053300010	Chip resistor 0402 33Ω J 1/16W (RoHS)	1	R167	B3D
154	3001053300010	Chip resistor 0402 33Ω J 1/16W (RoHS)	1	R183	B2D
155	3001053310010	Chip resistor RTT02331JTP 330Ω J 1/16W (RoHS)	1	R177	B3D
156	3001053310010	Chip resistor RTT02331JTP 330Ω J 1/16W (RoHS)	1	R178	B3D
157	3001053320000	Chip resistor 0402 3.3KΩ J 1/16W (RoHS)	1	R111	T2B
158	3001053320000	Chip resistor 0402 3.3KΩ J 1/16W (RoHS)	1	R153	T3A
159	3001053330010	Chip resistor 0402 33KΩ J 1/16W (RoHS)	1	R432	B4D
160	3001053330010	Chip resistor 0402 33KΩ J 1/16W (RoHS)	1	R433	B4B
161	3001053330010	Chip resistor 0402 33KΩ J 1/16W (RoHS)	1	R436	B5B
162	3001053330010	Chip resistor 0402 33KΩ J 1/16W (RoHS)	1	R438	B4B
163	3001053330010	Chip resistor 0402 33KΩ J 1/16W (RoHS)	1	R482	B4B
164	3001053330010	Chip resistor 0402 33KΩ J 1/16W (RoHS)	1	R516	T4D
165	3001053330010	Chip resistor 0402 33KΩ J 1/16W (RoHS)	1	R563	T3G
166	3001053340000	Chip resistor 0402 330KΩ J 1/16W (RoHS)	1	R108	T3B
167	3001053340000	Chip resistor 0402 330KΩ J 1/16W (RoHS)	1	R406	B5E
168	3001053340000	Chip resistor 0402 330KΩ J 1/16W (RoHS)	1	R422	B4D
169	3001053920010	Chip resistor RTT02392JTP 3.9KΩ J 1/16W (RoHS)	1	R155	T4A
170	3001053940000	Chip resistor 0402 390KΩ J 1/16W (RoHS)	1	R463	B4C
171	3001054700000	Chip resistor 0402 47Ω J 1/16W (RoHS)	1	R169	B3D
172	3001054720000	Chip resistor 0402 4.7KΩ J 1/16W (RoHS)	1	R160	T4A
173	3001054720000	Chip resistor 0402 4.7KΩ J 1/16W (RoHS)	1	R163	T4A
174	3001054720000	Chip resistor 0402 4.7KΩ J 1/16W (RoHS)	1	R171	B3D
175	3001054720000	Chip resistor 0402 4.7KΩ J 1/16W (RoHS)	1	R401	B4E
176	3001054720000	Chip resistor 0402 4.7KΩ J 1/16W (RoHS)	1	R447	B5F
177	3001054720000	Chip resistor 0402 4.7KΩ J 1/16W (RoHS)	1	R469	B5B
178	3001054720000	Chip resistor 0402 4.7KΩ J 1/16W (RoHS)	1	R502	T4C
179	3001054720000	Chip resistor 0402 4.7KΩ J 1/16W (RoHS)	1	R507	T3D
180	3001054720000	Chip resistor 0402 4.7KΩ J 1/16W (RoHS)	1	R508	T3D
181	3001054720000	Chip resistor 0402 4.7KΩ J 1/16W (RoHS)	1	R511	T4C
182	3001054720000	Chip resistor 0402 4.7KΩ J 1/16W (RoHS)	1	R543	B4F
183	3001054720000	Chip resistor 0402 4.7KΩ J 1/16W (RoHS)	1	R571	B4F
184	3001054720000	Chip resistor 0402 4.7KΩ J 1/16W (RoHS)	1	R573	B4F
185	3001054720000	Chip resistor 0402 4.7KΩ J 1/16W (RoHS)	1	R822	T3E
186	3001054730000	Chip resistor 0402 47KΩ J 1/16W (RoHS)	1	R101	T2A
187	3001054730000	Chip resistor 0402 47KΩ J 1/16W (RoHS)	1	R102	T2A
188	3001054730000	Chip resistor 0402 47KΩ J 1/16W (RoHS)	1	R103	T3A
189	3001054730000	Chip resistor 0402 47KΩ J 1/16W (RoHS)	1	R144	B3A
190	3001054730000	Chip resistor 0402 47KΩ J 1/16W (RoHS)	1	R179	B3D
191	3001054730000	Chip resistor 0402 47KΩ J 1/16W (RoHS)	1	R199	T3A
192	3001054730000	Chip resistor 0402 47KΩ J 1/16W (RoHS)	1	R202	T3A
193	3001054730000	Chip resistor 0402 47KΩ J 1/16W (RoHS)	1	R405	B4E
194	3001054730000	Chip resistor 0402 47KΩ J 1/16W (RoHS)	1	R454	B4E

195	3001054730000	Chip resistor 0402 47KΩ J 1/16W (RoHS)	1	R489	T5D
196	3001054730000	Chip resistor 0402 47KΩ J 1/16W (RoHS)	1	R492	T5D
197	3001054730000	Chip resistor 0402 47KΩ J 1/16W (RoHS)	1	R517	T4E
198	3001054730000	Chip resistor 0402 47KΩ J 1/16W (RoHS)	1	R519	T4E
199	3001054730000	Chip resistor 0402 47KΩ J 1/16W (RoHS)	1	R523	T5D
200	3001054730000	Chip resistor 0402 47KΩ J 1/16W (RoHS)	1	R524	T5D
201	3001054730000	Chip resistor 0402 47KΩ J 1/16W (RoHS)	1	R544	B4F
202	3001054730000	Chip resistor 0402 47KΩ J 1/16W (RoHS)	1	R545	B5F
203	3001054730000	Chip resistor 0402 47KΩ J 1/16W (RoHS)	1	R550	B4F
204	3001054730000	Chip resistor 0402 47KΩ J 1/16W (RoHS)	1	R562	T3G
205	3001054730000	Chip resistor 0402 47KΩ J 1/16W (RoHS)	1	R567	T5G
206	3001054730000	Chip resistor 0402 47KΩ J 1/16W (RoHS)	1	R572	B4F
207	3001054730000	Chip resistor 0402 47KΩ J 1/16W (RoHS)	1	R905	T4E
208	3001055130010	Chip resistor 0402 51KΩ J 1/16W (RoHS)	1	R420	B4D
209	3001055600000	Chip resistor 0402 56Ω J 1/16W (RoHS)	1	R203	B4D
210	3001055600000	Chip resistor 0402 56Ω J 1/16W (RoHS)	1	R828	T3C
211	3001055630000	Chip resistor 0402 56KΩ J 1/16W (RoHS)	1	R429	B4D
212	3001055630000	Chip resistor 0402 56KΩ J 1/16W (RoHS)	1	R430	B5D
213	3001055640000	Chip resistor 0402 560KΩ J 1/16W (RoHS)	1	R156	T4A
214	3001056820000	Chip resistor 0402 6.8KΩ J 1/16W (RoHS)	1	R112	T2B
215	3001056820000	Chip resistor 0402 6.8KΩ J 1/16W (RoHS)	1	R417	B5E
216	3001055620000	Chip resistor 0402 5.6KΩ J 1/16W (RoHS)	1	R805	T2D
217	3001056830000	Chip resistor 0402 68KΩ J 1/16W (RoHS)	1	R444	B5E
218	3001056830000	Chip resistor 0402 68KΩ J 1/16W (RoHS)	1	R456	B4B
219	3001058220000	Chip resistor 0402 8.2KΩ J 1/16W (RoHS)	1	R474	B5B
220	3001058230000	Chip resistor 0402 82KΩ J 1/16W (RoHS)	1	R410	T5E
221	3001058230000	Chip resistor 0402 82KΩ J 1/16W (RoHS)	1	R411	B5E
222	3001058230000	Chip resistor 0402 82KΩ J 1/16W (RoHS)	1	R462	B4C
223	3001059130000	Chip resistor 0402 91KΩ F 1/16W (RoHS)	1	R443	B5E
224	3001060000000	Chip resistor 0603 0Ω J 1/10W (RoHS)	1	R126	B3A
225	3001060000000	Chip resistor 0603 0Ω J 1/10W (RoHS)	1	R127	B3A
226	3001060000000	Chip resistor 0603 0Ω J 1/10W (RoHS)	1	R132	B3B
227	3001060000000	Chip resistor 0603 0Ω J 1/10W (RoHS)	1	R140	B3B
228	3001060000000	Chip resistor 0603 0Ω J 1/10W (RoHS)	1	R425	T5E
229	3001060000000	Chip resistor 0603 0Ω J 1/10W (RoHS)	1	R481	T4B
230	3001060000000	Chip resistor 0603 0Ω J 1/10W (RoHS)	1	R553	T4F
231	3001060000000	Chip resistor 0603 0Ω J 1/10W (RoHS)	1	R564	T4G
232	3001060000000	Chip resistor 0603 0Ω J 1/10W (RoHS)	1	R569	T4F
233	3001060000000	Chip resistor 0603 0Ω J 1/10W (RoHS)	1	R570	T3F
234	3001060000000	Chip resistor 0603 0Ω J 1/10W (RoHS)	1	R575	B5F
235	3001060000000	Chip resistor 0603 0Ω J 1/10W (RoHS)	1	R620	T5F
236	3001060000000	Chip resistor 0603 0Ω J 1/10W (RoHS)	1	R629	T5F
237	3001060000000	Chip resistor 0603 0Ω J 1/10W (RoHS)	1	R714	B3D
238	3001060000000	Chip resistor 0603 0Ω J 1/10W (RoHS)	1	R812	T2E
239	3001060000000	Chip resistor 0603 0Ω J 1/10W (RoHS)	1	R815	T2E
240	3001060000000	Chip resistor 0603 0Ω J 1/10W (RoHS)	1	R821	T3F
241	3001061000000	Chip resistor 0603 10Ω J 1/10W (RoHS)	1	R546	B5G
242	3001061000000	Chip resistor 0603 10Ω J 1/10W (RoHS)	1	R547	B4G
243	3001061000000	Chip resistor 0603 10Ω J 1/10W (RoHS)	1	R548	B5G

244	3001061000000	Chip resistor 0603 10Ω J 1/10W (RoHS)	1	R549	B5G
245	3001061010000	Chip resistor 0603 100Ω J 1/10W (RoHS)	1	R181	T2E
246	3001061010000	Chip resistor 0603 100Ω J 1/10W (RoHS)	1	R703	B3D
247	3001061010000	Chip resistor 0603 100Ω J 1/10W (RoHS)	1	R706	B3D
248	3001061020010	Chip resistor 0603 1KΩ J 1/10W (RoHS)	1	R128	B3A
249	3001061020010	Chip resistor 0603 1KΩ J 1/10W (RoHS)	1	R557	T4F
250	3001061020010	Chip resistor 0603 1KΩ J 1/10W (RoHS)	1	R560	T4F
251	3001061020010	Chip resistor 0603 1KΩ J 1/10W (RoHS)	1	R568	T3F
252	3001061020010	Chip resistor 0603 1KΩ J 1/10W (RoHS)	1	R704	B3E
253	3001061020010	Chip resistor 0603 1KΩ J 1/10W (RoHS)	1	R705	B3E
254	3001061030010	Chip resistor 0603 10KΩ J 1/10W (RoHS)	1	R186	T2E
255	3001061030010	Chip resistor 0603 10KΩ J 1/10W (RoHS)	1	R426	B4D
256	3001061030010	Chip resistor 0603 10KΩ J 1/10W (RoHS)	1	R554	T4F
257	3001061030010	Chip resistor 0603 10KΩ J 1/10W (RoHS)	1	R558	T4F
258	3001061030010	Chip resistor 0603 10KΩ J 1/10W (RoHS)	1	R701	B3E
259	3001061030010	Chip resistor 0603 10KΩ J 1/10W (RoHS)	1	R709	B3D
260	3001061030010	Chip resistor 0603 10KΩ J 1/10W (RoHS)	1	R814	T2E
261	3001061040000	Chip resistor 0603 100KΩ D 1/10W (RoHS)	1	R122	B2A
262	3001061040000	Chip resistor 0603 100KΩ D 1/10W (RoHS)	1	R559	T4F
263	3001061040000	Chip resistor 0603 100KΩ D 1/10W (RoHS)	1	R716	B3E
264	3001061040000	Chip resistor 0603 100KΩ D 1/10W (RoHS)	1	R717	B3E
265	3001061240010	Chip resistor 0603 120KΩ J 1/10W (RoHS)	1	R135	B3B
266	3001061240010	Chip resistor 0603 120KΩ J 1/10W (RoHS)	1	R136	B3B
267	3001061520000	Chip resistor 0603 1.5KΩ J 1/10W (RoHS)	1	R817	T2E
268	3001061520000	Chip resistor 0603 1.5KΩ J 1/10W (RoHS)	1	R819	T3E
269	3001061810000	Chip resistor 0603 180Ω J 1/10W (RoHS)	1	R137	B3B
270	3001061810000	Chip resistor 0603 180Ω J 1/10W (RoHS)	1	R143	B4B
271	3001061830010	Chip resistor 0603 18KΩ J 1/10W (RoHS)	1	R813	T2E
272	3001061840000	Chip resistor 0603 180KΩ J 1/10W (RoHS)	1	R121	B3A
273	3001061840000	Chip resistor 0603 180KΩ J 1/10W (RoHS)	1	R123	B3A
274	3001062200000	Chip resistor 0603 22Ω J 1/10W (RoHS)	1	R189	T2D
275	3001062210000	Chip resistor 0603 220Ω J 1/10W (RoHS)	1	R707	B3D
276	3001062220000	Chip resistor 0603 2.2KΩ J 1/10W (RoHS)	1	R185	T2E
277	3001062220000	Chip resistor 0603 2.2KΩ J 1/10W (RoHS)	1	R188	T2D
278	3001062220000	Chip resistor 0603 2.2KΩ J 1/10W (RoHS)	1	R604	B2F
279	3001062230000	Chip resistor 0603 22KΩ J 1/10W (RoHS)	1	R811	T3E
280	3001062240010	Chip resistor 0603 220KΩ J 1/10W (RoHS)	1	R147	T3C
281	3001062240010	Chip resistor 0603 220KΩ J 1/10W (RoHS)	1	R713	B3D
282	3001062720000	Chip resistor 0603 2.7KΩ J 1/10W (RoHS)	1	R816	T2E
283	3001062720000	Chip resistor 0603 2.7KΩ J 1/10W (RoHS)	1	R818	T3E
284	3001063300000	Chip resistor 0603 33Ω J 1/10W (RoHS)	1	R139	B4B
285	3001063300000	Chip resistor 0603 33Ω J 1/10W (RoHS)	1	R712	B2D
286	3001063310010	Chip resistor 0603 330Ω J 1/10W (RoHS)	1	R141	B4A
287	3001063310010	Chip resistor 0603 330Ω J 1/10W (RoHS)	1	R142	B3A
288	3001063310010	Chip resistor 0603 330Ω J 1/10W (RoHS)	1	R715	B2D
289	3001063910000	Chip resistor 0603 390Ω J 1/10W (RoHS)	1	R702	B3D
290	3001063930010	Chip resistor 0603 39KΩ J 1/10W (RoHS)	1	R555	T4F
291	3001064700000	Chip resistor 0603 47Ω J 1/10W (RoHS)	1	R129	B3A
292	3001064700000	Chip resistor 0603 47Ω J 1/10W (RoHS)	1	R187	T1E

293	3001064710000	Chip resistor 0603 470Ω J 1/10W (RoHS)	1	R192	T1E
294	3001064710000	Chip resistor 0603 470Ω J 1/10W (RoHS)	1	R556	T4F
295	3001064710000	Chip resistor 0603 470Ω J 1/10W (RoHS)	1	R809	T3E
296	3001064720000	Chip resistor 0603 4.7KΩ J 1/10W (RoHS)	1	R109	T1D
297	3001064720000	Chip resistor 0603 4.7KΩ J 1/10W (RoHS)	1	R138	B4B
298	3001064720000	Chip resistor 0603 4.7KΩ J 1/10W (RoHS)	1	R602	B4G
299	3001064720000	Chip resistor 0603 4.7KΩ J 1/10W (RoHS)	1	R708	B4D
300	3001064720000	Chip resistor 0603 4.7KΩ J 1/10W (RoHS)	1	R710	B3D
301	3001064720000	Chip resistor 0603 4.7KΩ J 1/10W (RoHS)	1	R711	B3D
302	3001064720000	Chip resistor 0603 4.7KΩ J 1/10W (RoHS)	1	R720	B4D
303	3001064730000	Chip resistor 0603 47KΩ J 1/10W (RoHS)	1	R551	T3F
304	3001064730000	Chip resistor 0603 47KΩ J 1/10W (RoHS)	1	R561	T3G
305	3001064730000	Chip resistor 0603 47KΩ J 1/10W (RoHS)	1	R601	B4G
306	3001064730000	Chip resistor 0603 47KΩ J 1/10W (RoHS)	1	R603	B2F
307	3001065620010	Chip resistor 0603 5.6KΩ J 1/10W (RoHS)	1	R810	T3E
308	3001068230010	Chip resistor 0603 82KΩ J 1/10W (RoHS)	1	R719	T3E
309	3001071800000	Chip resistor 0805 18Ω J 1/8W (RoHS)	1	R191	T2E
310	3001072200000	Chip resistor 0805 22Ω J 1/8W (RoHS)	1	R195	T1E
311	3001072710000	Chip resistor 0805 270Ω J 1/8W (RoHS)	1	R194	T1E
312	3001072710000	Chip resistor 0805 270Ω J 1/8W (RoHS)	1	R196	T1E
313	3001161210000	Chip resistor 2010 120Ω J 1/2W (RoHS)	1	R201	T2D
314	3001162200000	Chip resistor 2010 22Ω J 1/2W (RoHS)	1	R193	T2F
315	3001164720000	Chip resistor 2010 4.7KΩ J 1/2W (RoHS)	1	R552	T3F
316	3003061040000	Thermistor NCP18WF104J03RB NTC 100KΩ (RoHS)	1	TH101	B2A
317	3005051020000	Integrated resistor RTA02-2D102JTH 1K J 1/16W (RoHS)	1	CP501	T4C
318	3005051020000	Integrated resistor RTA02-2D102JTH 1K J 1/16W (RoHS)	1	CP502	T4C
319	3005051020000	Integrated resistor RTA02-2D102JTH 1K J 1/16W (RoHS)	1	CP503	T4C
320	3005051020000	Integrated resistor RTA02-2D102JTH 1K J 1/16W (RoHS)	1	CP504	T4C
321	3005051020000	Integrated resistor RTA02-2D102JTH 1K J 1/16W (RoHS)	1	CP505	T4C
322	3005051020000	Integrated resistor RTA02-2D102JTH 1K J 1/16W (RoHS)	1	CP506	T3D
323	3005051020000	Integrated resistor RTA02-2D102JTH 1K J 1/16W (RoHS)	1	CP508	T3D
324	3005051020000	Integrated resistor RTA02-2D102JTH 1K J 1/16W (RoHS)	1	CP509	T4D
325	3005051020000	Integrated resistor RTA02-2D102JTH 1K J 1/16W (RoHS)	1	CP510	T4D
326	3005051020000	Integrated resistor RTA02-2D102JTH 1K J 1/16W (RoHS)	1	CP512	T4D
327	3005051020000	Integrated resistor RTA02-2D102JTH 1K J 1/16W (RoHS)	1	CP513	T4D
328	3005051020000	Integrated resistor RTA02-2D102JTH 1K J 1/16W (RoHS)	1	CP514	T4D
329	3005051020000	Integrated resistor RTA02-2D102JTH 1K J 1/16W (RoHS)	1	CP515	T5D
330	3005051020000	Integrated resistor RTA02-2D102JTH 1K J 1/16W (RoHS)	1	CP516	T5C
331	3005051020000	Integrated resistor RTA02-2D102JTH 1K J 1/16W (RoHS)	1	CP517	T5C
332	3005051020000	Integrated resistor RTA02-2D102JTH 1K J 1/16W (RoHS)	1	CP518	T5C
333	3005051020000	Integrated resistor RTA02-2D102JTH 1K J 1/16W (RoHS)	1	CP519	T5D
334	3005051020000	Integrated resistor RTA02-2D102JTH 1K J 1/16W (RoHS)	1	CP520	T5C
335	3005051020000	Integrated resistor RTA02-2D102JTH 1K J 1/16W (RoHS)	1	CP521	T4C
336	3101050300000	Chip capacitor GRM1555C1H3R0BZ01D 3PF B 50V (RoHS)	1	C187	B3D
337	3101050300000	Chip capacitor GRM1555C1H3R0BZ01D 3PF B 50V (RoHS)	1	C188	B3D
338	3101050300000	Chip capacitor GRM1555C1H3R0BZ01D 3PF B 50V (RoHS)	1	C826	T2D
339	3101051000020	Chip capacitor GRM1555C1H100JZ01D 10PF J 50V (RoHS)	1	C173	T4A
340	3101051020010	Chip capacitor GRM36X7R102K50PT 1000PF K 50V (RoHS)	1	C115	T3A
341	3101051020010	Chip capacitor GRM36X7R102K50PT 1000PF K 50V (RoHS)	1	C122	B3C

342	3101051020010	Chip capacitor GRM36X7R102K50PT 1000PF K 50V (RoHS)	1	C123	B3B
343	3101051020010	Chip capacitor GRM36X7R102K50PT 1000PF K 50V (RoHS)	1	C125	B3B
344	3101051020010	Chip capacitor GRM36X7R102K50PT 1000PF K 50V (RoHS)	1	C126	B2A
345	3101051020010	Chip capacitor GRM36X7R102K50PT 1000PF K 50V (RoHS)	1	C140	B3B
346	3101051020010	Chip capacitor GRM36X7R102K50PT 1000PF K 50V (RoHS)	1	C180	T4B
347	3101051020010	Chip capacitor GRM36X7R102K50PT 1000PF K 50V (RoHS)	1	C182	B3D
348	3101051020010	Chip capacitor GRM36X7R102K50PT 1000PF K 50V (RoHS)	1	C183	B3D
349	3101051020010	Chip capacitor GRM36X7R102K50PT 1000PF K 50V (RoHS)	1	C184	B3D
350	3101051020010	Chip capacitor GRM36X7R102K50PT 1000PF K 50V (RoHS)	1	C191	B3D
351	3101051020010	Chip capacitor GRM36X7R102K50PT 1000PF K 50V (RoHS)	1	C200	B3D
352	3101051020010	Chip capacitor GRM36X7R102K50PT 1000PF K 50V (RoHS)	1	C201	B3D
353	3101051020010	Chip capacitor GRM36X7R102K50PT 1000PF K 50V (RoHS)	1	C203	B3D
354	3101051020010	Chip capacitor GRM36X7R102K50PT 1000PF K 50V (RoHS)	1	C209	T2E
355	3101051020010	Chip capacitor GRM36X7R102K50PT 1000PF K 50V (RoHS)	1	C211	T2D
356	3101051020010	Chip capacitor GRM36X7R102K50PT 1000PF K 50V (RoHS)	1	C214	T2E
357	3101051020010	Chip capacitor GRM36X7R102K50PT 1000PF K 50V (RoHS)	1	C225	T3B
358	3101051020010	Chip capacitor GRM36X7R102K50PT 1000PF K 50V (RoHS)	1	C238	T3B
359	3101051020010	Chip capacitor GRM36X7R102K50PT 1000PF K 50V (RoHS)	1	C441	B5E
360	3101051020010	Chip capacitor GRM36X7R102K50PT 1000PF K 50V (RoHS)	1	C445	B5B
361	3101051020010	Chip capacitor GRM36X7R102K50PT 1000PF K 50V (RoHS)	1	C458	B5B
362	3101051020010	Chip capacitor GRM36X7R102K50PT 1000PF K 50V (RoHS)	1	C462	B5C
363	3101051020010	Chip capacitor GRM36X7R102K50PT 1000PF K 50V (RoHS)	1	C539	T4C
364	3101051020010	Chip capacitor GRM36X7R102K50PT 1000PF K 50V (RoHS)	1	C802	T3D
365	3101051020010	Chip capacitor GRM36X7R102K50PT 1000PF K 50V (RoHS)	1	C805	T3D
366	3101051020010	Chip capacitor GRM36X7R102K50PT 1000PF K 50V (RoHS)	1	C806	T2D
367	3101051020010	Chip capacitor GRM36X7R102K50PT 1000PF K 50V (RoHS)	1	C807	T2D
368	3101051020010	Chip capacitor GRM36X7R102K50PT 1000PF K 50V (RoHS)	1	C808	T2C
369	3101051020010	Chip capacitor GRM36X7R102K50PT 1000PF K 50V (RoHS)	1	C809	T3C
370	3101051020010	Chip capacitor GRM36X7R102K50PT 1000PF K 50V (RoHS)	1	C810	T3C
371	3101051020010	Chip capacitor GRM36X7R102K50PT 1000PF K 50V (RoHS)	1	C817	T3E
372	3101051020010	Chip capacitor GRM36X7R102K50PT 1000PF K 50V (RoHS)	1	C818	T3E
373	3101051020010	Chip capacitor GRM36X7R102K50PT 1000PF K 50V (RoHS)	1	C820	T3D
374	3101051020010	Chip capacitor GRM36X7R102K50PT 1000PF K 50V (RoHS)	1	C821	T3D
375	3101051020010	Chip capacitor GRM36X7R102K50PT 1000PF K 50V (RoHS)	1	C822	T3D
376	3101051020010	Chip capacitor GRM36X7R102K50PT 1000PF K 50V (RoHS)	1	C916	T5E
377	3101051020010	Chip capacitor GRM36X7R102K50PT 1000PF K 50V (RoHS)	1	C917	T4E
378	3101051020010	Chip capacitor GRM36X7R102K50PT 1000PF K 50V (RoHS)	1	C918	T5E
379	3101051020010	Chip capacitor GRM36X7R102K50PT 1000PF K 50V (RoHS)	1	C919	T4E
380	3101051020010	Chip capacitor GRM36X7R102K50PT 1000PF K 50V (RoHS)	1	C920	T4E
381	3101051020010	Chip capacitor GRM36X7R102K50PT 1000PF K 50V (RoHS)	1	C921	T4E
382	3101051020010	Chip capacitor GRM36X7R102K50PT 1000PF K 50V (RoHS)	1	C922	T4E
383	3101051020010	Chip capacitor GRM36X7R102K50PT 1000PF K 50V (RoHS)	1	C923	T4E
384	3101051020010	Chip capacitor GRM36X7R102K50PT 1000PF K 50V (RoHS)	1	C924	T5E
385	3101051020010	Chip capacitor GRM36X7R102K50PT 1000PF K 50V (RoHS)	1	C925	T5E
386	3101051020010	Chip capacitor GRM36X7R102K50PT 1000PF K 50V (RoHS)	1	C926	T4E
387	3101051020010	Chip capacitor GRM36X7R102K50PT 1000PF K 50V (RoHS)	1	C929	T4E
388	3101051030020	Chip capacitor GRM155R71E103KA01D 0.01UF K 25V (RoH	1	C152	B3A
389	3101051030020	Chip capacitor GRM155R71E103KA01D 0.01UF K 25V (RoH	1	C160	T2D
390	3101051030020	Chip capacitor GRM155R71E103KA01D 0.01UF K 25V (RoH	1	C163	T4A

391	3101051030020	Chip capacitor GRM155R71E103KA01D 0.01UF K 25V (RoHS)	1	C239	T2B
392	3101051030020	Chip capacitor GRM155R71E103KA01D 0.01UF K 25V (RoHS)	1	C240	T3B
393	3101051030020	Chip capacitor GRM155R71E103KA01D 0.01UF K 25V (RoHS)	1	C243	B4C
394	3101051030020	Chip capacitor GRM155R71E103KA01D 0.01UF K 25V (RoHS)	1	C401	B4E
395	3101051030020	Chip capacitor GRM155R71E103KA01D 0.01UF K 25V (RoHS)	1	C456	B5C
396	3101051030020	Chip capacitor GRM155R71E103KA01D 0.01UF K 25V (RoHS)	1	C461	B5B
397	3101051030020	Chip capacitor GRM155R71E103KA01D 0.01UF K 25V (RoHS)	1	C465	B5B
398	3101051030020	Chip capacitor GRM155R71E103KA01D 0.01UF K 25V (RoHS)	1	C506	T5E
399	3101051030020	Chip capacitor GRM155R71E103KA01D 0.01UF K 25V (RoHS)	1	C512	B4F
400	3101051030020	Chip capacitor GRM155R71E103KA01D 0.01UF K 25V (RoHS)	1	C604	B3G
401	3101051030020	Chip capacitor GRM155R71E103KA01D 0.01UF K 25V (RoHS)	1	C903	B5C
402	3101051030020	Chip capacitor GRM155R71E103KA01D 0.01UF K 25V (RoHS)	1	C905	B5C
403	3101051040010	Chip capacitor GRM36Y5V104Z25PT 0.1UF Z 25V (RoHS)	1	C154	B4B
404	3101051040010	Chip capacitor GRM36Y5V104Z25PT 0.1UF Z 25V (RoHS)	1	C165	T4A
405	3101051040010	Chip capacitor GRM36Y5V104Z25PT 0.1UF Z 25V (RoHS)	1	C167	T4A
406	3101051040010	Chip capacitor GRM36Y5V104Z25PT 0.1UF Z 25V (RoHS)	1	C168	T4A
407	3101051040010	Chip capacitor GRM36Y5V104Z25PT 0.1UF Z 25V (RoHS)	1	C169	T4B
408	3101051040010	Chip capacitor GRM36Y5V104Z25PT 0.1UF Z 25V (RoHS)	1	C174	T4A
409	3101051040010	Chip capacitor GRM36Y5V104Z25PT 0.1UF Z 25V (RoHS)	1	C175	T3A
410	3101051040010	Chip capacitor GRM36Y5V104Z25PT 0.1UF Z 25V (RoHS)	1	C176	T4A
411	3101051040010	Chip capacitor GRM36Y5V104Z25PT 0.1UF Z 25V (RoHS)	1	C179	T4B
412	3101051040010	Chip capacitor GRM36Y5V104Z25PT 0.1UF Z 25V (RoHS)	1	C202	B3C
413	3101051040010	Chip capacitor GRM36Y5V104Z25PT 0.1UF Z 25V (RoHS)	1	C403	B4E
414	3101051040010	Chip capacitor GRM36Y5V104Z25PT 0.1UF Z 25V (RoHS)	1	C405	B5E
415	3101051040010	Chip capacitor GRM36Y5V104Z25PT 0.1UF Z 25V (RoHS)	1	C406	B5E
416	3101051040010	Chip capacitor GRM36Y5V104Z25PT 0.1UF Z 25V (RoHS)	1	C407	B5E
417	3101051040010	Chip capacitor GRM36Y5V104Z25PT 0.1UF Z 25V (RoHS)	1	C430	B5D
418	3101051040010	Chip capacitor GRM36Y5V104Z25PT 0.1UF Z 25V (RoHS)	1	C431	B5B
419	3101051040010	Chip capacitor GRM36Y5V104Z25PT 0.1UF Z 25V (RoHS)	1	C440	B5E
420	3101051040010	Chip capacitor GRM36Y5V104Z25PT 0.1UF Z 25V (RoHS)	1	C453	B4C
421	3101051040010	Chip capacitor GRM36Y5V104Z25PT 0.1UF Z 25V (RoHS)	1	C463	B5B
422	3101051040010	Chip capacitor GRM36Y5V104Z25PT 0.1UF Z 25V (RoHS)	1	C466	B4D
423	3101051040010	Chip capacitor GRM36Y5V104Z25PT 0.1UF Z 25V (RoHS)	1	C504	T4E
424	3101051040010	Chip capacitor GRM36Y5V104Z25PT 0.1UF Z 25V (RoHS)	1	C505	T5D
425	3101051040010	Chip capacitor GRM36Y5V104Z25PT 0.1UF Z 25V (RoHS)	1	C511	B4F
426	3101051040010	Chip capacitor GRM36Y5V104Z25PT 0.1UF Z 25V (RoHS)	1	C525	T4G
427	3101051040010	Chip capacitor GRM36Y5V104Z25PT 0.1UF Z 25V (RoHS)	1	C537	B4F
428	3101051040010	Chip capacitor GRM36Y5V104Z25PT 0.1UF Z 25V (RoHS)	1	C801	T3C
429	3101051040010	Chip capacitor GRM36Y5V104Z25PT 0.1UF Z 25V (RoHS)	1	C803	T3D
430	3101051040010	Chip capacitor GRM36Y5V104Z25PT 0.1UF Z 25V (RoHS)	1	C911	B5C
431	3101051050000	Chip capacitor GRM155R60J105K6.3PT 1UF K 6.3V (RoHS)	1	C438	B5E
432	3101051050000	Chip capacitor GRM155R60J105K6.3PT 1UF K 6.3V (RoHS)	1	C444	B5E
433	3101051050000	Chip capacitor GRM155R60J105K6.3PT 1UF K 6.3V (RoHS)	1	C449	B4B
434	3101051050000	Chip capacitor GRM155R60J105K6.3PT 1UF K 6.3V (RoHS)	1	C450	B4B
435	3101051050000	Chip capacitor GRM155R60J105K6.3PT 1UF K 6.3V (RoHS)	1	C467	B4B
436	3101051050000	Chip capacitor GRM155R60J105K6.3PT 1UF K 6.3V (RoHS)	1	C468	T4F
437	3101051050000	Chip capacitor GRM155R60J105K6.3PT 1UF K 6.3V (RoHS)	1	C470	T5D
438	3101051050000	Chip capacitor GRM155R60J105K6.3PT 1UF K 6.3V (RoHS)	1	C609	T5F
439	3101051050000	Chip capacitor GRM155R60J105K6.3PT 1UF K 6.3V (RoHS)	1	C927	T4E

440	3101051050000	Chip capacitor GRM155R60J105K6.3PT 1UF K 6.3V (RoHS)	1	C928	T4E
441	3101051230000	Chip capacitor C1005X7R1E123K 0.012UF K 25V (RoHS)	1	C454	B5C
442	3101051500020	Chip capacitor GRM36COG150J50PT 15PF J 50V (RoHS)	1	C185	B3D
443	3101051500020	Chip capacitor GRM36COG150J50PT 15PF J 50V (RoHS)	1	C186	B4D
444	3101051500020	Chip capacitor GRM36COG150J50PT 15PF J 50V (RoHS)	1	C190	B4D
445	3101051500020	Chip capacitor GRM36COG150J50PT 15PF J 50V (RoHS)	1	C501	T3C
446	3101051510000	Chip capacitor GRM36COG151J50 150PF J 50V (RoHS)	1	C425	B5D
447	3101051520000	Chip capacitor GRM155R71H152K 1500PF K 50V (RoHS)	1	C413	B5E
448	3101051530010	Chip capacitor C1005X7R1E153K 0.015UF K 16V (RoHS)	1	C410	B5E
449	3101051530010	Chip capacitor C1005X7R1E153K 0.015UF K 16V (RoHS)	1	C824	T3D
450	3101051810010	Chip capacitor GRM1555C1H181JA1J 180p J 50V (RoHS)	1	C451	B5C
451	3101051820000	Chip capacitor GRM155R71H182KA01D 1800PF K 50V (RoHS)	1	C515	B4F
452	3101051820000	Chip capacitor GRM155R71H182KA01D 1800PF K 50V (RoHS)	1	C516	B4F
453	3101051830000	Chip capacitor C1005X7R1C183KT 0.018UF K 16V (RoHS)	1	C409	B5D
454	3101051830000	Chip capacitor C1005X7R1C183KT 0.018UF K 16V (RoHS)	1	C823	T3D
455	3101052200010	Chip capacitor GRM36C0G220J50PT 22PF J 50V (RoHS)	1	C427	B5D
456	3101052200010	Chip capacitor GRM36C0G220J50PT 22PF J 50V (RoHS)	1	C428	B5D
457	3101052210010	Chip capacitor GRM155R71H221KA01D 220PF K 50V (RoHS)	1	C170	T4A
458	3101052210010	Chip capacitor GRM155R71H221KA01D 220PF K 50V (RoHS)	1	C171	T4A
459	3101052220010	Chip capacitor GRM155R71H222KA01D 2200pF K 50V (RoHS)	1	C455	B5C
460	3101052700000	Chip capacitor GRM1555C1H270J 27PF J 50V (RoHS)	1	C189	B4D
461	3101052700000	Chip capacitor GRM1555C1H270J 27PF J 50V (RoHS)	1	C502	T4C
462	3101052700000	Chip capacitor GRM1555C1H270J 27PF J 50V (RoHS)	1	C503	T4C
463	3101052720000	Chip capacitor 0402 2700PF K 50V(RoHS)	1	C460	B5C
464	3101052730000	Chip capacitor GRM155R71C273KA01D 0.027UF K 16V (RoHS)	1	C426	B4D
465	3101053300000	Chip capacitor GRM1555C1H330JZ01D 33PF J 50V (RoHS)	1	C153	B3A
466	3101053300000	Chip capacitor GRM1555C1H330JZ01D 33PF J 50V (RoHS)	1	C415	B4E
467	3101053300000	Chip capacitor GRM1555C1H330JZ01D 33PF J 50V (RoHS)	1	C423	B4D
468	3101053300000	Chip capacitor GRM1555C1H330JZ01D 33PF J 50V (RoHS)	1	C908	B5C
469	3101053310030	Chip capacitor GRM1555C1H331JA01D 330PF (RoHS)	1	C439	B5E
470	3101053310030	Chip capacitor GRM1555C1H331JA01D 330PF (RoHS)	1	C471	T5D
471	3101054700010	Chip capacitor GRM36COG470J50PT 47PF J 50V (RoHS)	1	C433	B5F
472	3101054700010	Chip capacitor GRM36COG470J50PT 47PF J 50V (RoHS)	1	C435	B5F
473	3101054700010	Chip capacitor GRM36COG470J50PT 47PF J 50V (RoHS)	1	C447	B5B
474	3101054710010	Chip capacitor GRM155R71H471KA01D 470PF K 50V (RoHS)	1	C172	T4A
475	3101054710010	Chip capacitor GRM155R71H471KA01D 470PF K 50V (RoHS)	1	C432	B5F
476	3101054710010	Chip capacitor GRM155R71H471KA01D 470PF K 50V (RoHS)	1	C442	B4E
477	3101054710010	Chip capacitor GRM155R71H471KA01D 470PF K 50V (RoHS)	1	C443	B4E
478	3101054720000	Chip capacitor GRM36X7R472K50PT 4700PF K 50V (RoHS)	1	C402	B4E
479	3101054730030	Chip capacitor 0402 0.047UF Z 16V (RoHS)	1	C224	T3B
480	3101054740020	Chip capacitor GRM155R61A474KE15D 0.47uF K 10V (RoHS)	1	C420	B4E
481	3101054740020	Chip capacitor GRM155R61A474KE15D 0.47uF K 10V (RoHS)	1	C422	T4B
482	3101054740020	Chip capacitor GRM155R61A474KE15D 0.47uF K 10V (RoHS)	1	C909	B5C
483	3101054740020	Chip capacitor GRM155R61A474KE15D 0.47uF K 10V (RoHS)	1	C912	T4E
484	3101055610000	Chip capacitor C1005X7R1H561KT 560PF K 50V (RoHS)	1	C421	B4D
485	3101055610000	Chip capacitor C1005X7R1H561KT 560PF K 50V (RoHS)	1	C910	B5D
486	3101056830040	Chip capacitor GRM155R71C683KA88J 0.068uF K 16V (RoHS)	1	C452	B5C
487	3101056840010	Chip capacitor GRM36Y5V684Z10PN 0.68UF Z 10V (RoHS)	1	C419	B4E
488	3101058200000	Chip capacitor GRM1555C1H820J 82PF J 50V (RoHS)	1	C178	T3A

489	#####	Chip capacitor GRM1885C1H1R0BZ01D 1PF B 50V (RoHS	1	C133	B2A
490	#####	Chip capacitor GRM1885C1H1R0BZ01D 1PF B 50V (RoHS	1	C705	B3E
491	#####	Chip capacitor GRM1885C1H1R0BZ01D 1PF B 50V (RoHS	1	C709	B3D
492	#####	Chip capacitor GRM1885C1H1R0BZ01D 1PF B 50V (RoHS	1	C717	B3E
493	#####	Chip capacitor GRM1885C1H2R0BZ01D 2PF B 50V (RoHS	1	C121	B2B
494	#####	Chip capacitor GRM1885C1H2R0BZ01D 2PF B 50V (RoHS	1	C198	B3B
495	#####	Chip capacitor GRM1885C1H3R0BZ01D 3PF B 50V (RoHS	1	C128	B2B
496	#####	Chip capacitor GRM1885C1HR30BZ01D 0.3PF B 50V (RoH	1	C109	T2A
497	#####	Chip capacitor GRM1885C1HR30BZ01D 0.3PF B 50V (RoH	1	C110	T2A
498	#####	Chip capacitor GRM1885C1H5R0BZ01D 5PF B 50V (RoHS	1	C703	B2E
499	#####	Chip capacitor GRM1885C1H5R0BZ01D 5PF B 50V (RoHS	1	C813	T2E
500	#####	Chip capacitor GRM1885C1HR50BZ01D 0.5PF B 50V (RoH	1	C111	T2A
501	#####	Chip capacitor GRM1885C1HR50BZ01D 0.5PF B 50V (RoH	1	C112	T2A
502	#####	Chip capacitor GRM1885C1H6R0B201D 6PF B 50V (RoHS	1	C213	T1E
503	#####	Chip capacitor GRM1885C1H9R0BZ01D 9PF B 50V (RoHS	1	C118	B2B
504	#####	Chip capacitor GRM1885C1H9R0BZ01D 9PF B 50V (RoHS	1	C706	B3E
505	#####	Chip capacitor GRM1885C1H9R0BZ01D 9PF B 50V (RoHS	1	C707	B3E
506	#####	Chip capacitor 0603 10PF J 50V (RoHS)	1	C146	B3B
507	#####	Chip capacitor GRM188R71H102KA01D 1000PF K 50V (R	1	C113	T2A
508	#####	Chip capacitor GRM188R71H102KA01D 1000PF K 50V (R	1	C114	T2A
509	#####	Chip capacitor GRM188R71H102KA01D 1000PF K 50V (R	1	C130	B2A
510	#####	Chip capacitor GRM188R71H102KA01D 1000PF K 50V (R	1	C131	B3A
511	#####	Chip capacitor GRM188R71H102KA01D 1000PF K 50V (R	1	C132	B2A
512	#####	Chip capacitor GRM188R71H102KA01D 1000PF K 50V (R	1	C136	B3A
513	#####	Chip capacitor GRM188R71H102KA01D 1000PF K 50V (R	1	C141	B3B
514	#####	Chip capacitor GRM188R71H102KA01D 1000PF K 50V (R	1	C144	B3B
515	#####	Chip capacitor GRM188R71H102KA01D 1000PF K 50V (R	1	C147	B4B
516	#####	Chip capacitor GRM188R71H102KA01D 1000PF K 50V (R	1	C158	T2C
517	#####	Chip capacitor GRM188R71H102KA01D 1000PF K 50V (R	1	C194	B3B
518	#####	Chip capacitor GRM188R71H102KA01D 1000PF K 50V (R	1	C196	B3C
519	#####	Chip capacitor GRM188R71H102KA01D 1000PF K 50V (R	1	C199	B3B
520	#####	Chip capacitor GRM188R71H102KA01D 1000PF K 50V (R	1	C205	B2D
521	#####	Chip capacitor GRM188R71H102KA01D 1000PF K 50V (R	1	C207	B2D
522	#####	Chip capacitor GRM188R71H102KA01D 1000PF K 50V (R	1	C208	T2E
523	#####	Chip capacitor GRM188R71H102KA01D 1000PF K 50V (R	1	C210	T1E
524	#####	Chip capacitor GRM188R71H102KA01D 1000PF K 50V (R	1	C215	T2E
525	#####	Chip capacitor GRM188R71H102KA01D 1000PF K 50V (R	1	C216	T2E
526	#####	Chip capacitor GRM188R71H102KA01D 1000PF K 50V (R	1	C217	T2E
527	#####	Chip capacitor GRM188R71H102KA01D 1000PF K 50V (R	1	C220	T1E
528	#####	Chip capacitor GRM188R71H102KA01D 1000PF K 50V (R	1	C223	T1E
529	#####	Chip capacitor GRM188R71H102KA01D 1000PF K 50V (R	1	C226	T2D
530	#####	Chip capacitor GRM188R71H102KA01D 1000PF K 50V (R	1	C232	T1C
531	#####	Chip capacitor GRM188R71H102KA01D 1000PF K 50V (R	1	C236	B2A
532	#####	Chip capacitor GRM188R71H102KA01D 1000PF K 50V (R	1	C244	B3B
533	#####	Chip capacitor GRM188R71H102KA01D 1000PF K 50V (R	1	C245	B3A
534	#####	Chip capacitor GRM188R71H102KA01D 1000PF K 50V (R	1	C526	T1F
535	#####	Chip capacitor GRM188R71H102KA01D 1000PF K 50V (R	1	C529	T3F
536	#####	Chip capacitor GRM188R71H102KA01D 1000PF K 50V (R	1	C532	T3F
537	#####	Chip capacitor GRM188R71H102KA01D 1000PF K 50V (R	1	C605	B3G

538	#####	Chip capacitor GRM188R71H102KA01D 1000PF K 50V (RoHS)	1	C701	B3E
539	#####	Chip capacitor GRM188R71H102KA01D 1000PF K 50V (RoHS)	1	C708	B3D
540	#####	Chip capacitor GRM188R71H102KA01D 1000PF K 50V (RoHS)	1	C710	B3E
541	#####	Chip capacitor GRM188R71H102KA01D 1000PF K 50V (RoHS)	1	C716	B3E
542	#####	Chip capacitor GRM188R71H102KA01D 1000PF K 50V (RoHS)	1	C718	B4E
543	#####	Chip capacitor GRM188R71H102KA01D 1000PF K 50V (RoHS)	1	C719	B4D
544	#####	Chip capacitor GRM188R71H102KA01D 1000PF K 50V (RoHS)	1	C720	B2D
545	#####	Chip capacitor GRM188R71H102KA01D 1000PF K 50V (RoHS)	1	C721	B2D
546	#####	Chip capacitor GRM188R71H102KA01D 1000PF K 50V (RoHS)	1	C723	B3D
547	#####	Chip capacitor GRM188R71H102KA01D 1000PF K 50V (RoHS)	1	C726	B3E
548	#####	Chip capacitor GRM188R71H102KA01D 1000PF K 50V (RoHS)	1	C812	T3E
549	#####	Chip capacitor GRM188R71H103KA01D 0.01UF K 25V (RoHS)	1	C143	B3B
550	#####	Chip capacitor GRM188R71H103KA01D 0.01UF K 25V (RoHS)	1	C227	T2D
551	#####	Chip capacitor GRM188R71H103KA01D 0.01UF K 25V (RoHS)	1	C228	T2D
552	#####	Chip capacitor GRM188R71H103KA01D 0.01UF K 25V (RoHS)	1	C242	T4A
553	#####	Chip capacitor GRM188R71H103KA01D 0.01UF K 25V (RoHS)	1	C606	B1F
554	#####	Chip capacitor 0603 0.1UF K 16V (RoHS)	1	C135	B3A
555	#####	Chip capacitor 0603 0.1UF K 16V (RoHS)	1	C145	B3B
556	#####	Chip capacitor 0603 0.1UF K 16V (RoHS)	1	C222	T1E
557	#####	Chip capacitor 0603 0.1UF K 16V (RoHS)	1	C235	T1C
558	#####	Chip capacitor 0603 0.1UF K 16V (RoHS)	1	C507	T5D
559	#####	Chip capacitor 0603 0.1UF K 16V (RoHS)	1	C518	B5G
560	#####	Chip capacitor 0603 0.1UF K 16V (RoHS)	1	C519	B5G
561	#####	Chip capacitor 0603 0.1UF K 16V (RoHS)	1	C520	B4G
562	#####	Chip capacitor 0603 0.1UF K 16V (RoHS)	1	C521	B5G
563	#####	Chip capacitor 0603 0.1UF K 16V (RoHS)	1	C528	T3G
564	#####	Chip capacitor 0603 0.1UF K 16V (RoHS)	1	C534	T3F
565	#####	Chip capacitor 0603 0.1UF K 16V (RoHS)	1	C536	B4F
566	#####	Chip capacitor 0603 0.1UF K 16V (RoHS)	1	C602	B3F
567	#####	Chip capacitor 0603 0.1UF K 16V (RoHS)	1	C711	B3E
568	#####	Chip capacitor GRM188F51E105ZA12D 1UF Z 25V (RoHS)	1	C408	B5D
569	#####	Chip capacitor GRM188F51E105ZA12D 1UF Z 25V (RoHS)	1	C414	B4D
570	#####	Chip capacitor GRM188F51E105ZA12D 1UF Z 25V (RoHS)	1	C434	B5F
571	#####	Chip capacitor GRM188F51E105ZA12D 1UF Z 25V (RoHS)	1	C437	T5F
572	#####	Chip capacitor GRM188F51E105ZA12D 1UF Z 25V (RoHS)	1	C513	B4F
573	#####	Chip capacitor GRM188F51E105ZA12D 1UF Z 25V (RoHS)	1	C514	B4F
574	#####	Chip capacitor GRM188R61E105KA12D 1UF K 25V (RoHS)	1	C412	B5E
575	#####	Chip capacitor GRM1885C1H130JA01D 13PF J 50V (RoHS)	1	C150	B3B
576	#####	Chip capacitor GRM1885C1H150JA01D 15PF J 50V (RoHS)	1	C204	B3D
577	#####	Chip capacitor GRM1885C1H150JA01D 15PF J 50V (RoHS)	1	C219	T1E
578	#####	Chip capacitor GRM1885C1H150JA01D 15PF J 50V (RoHS)	1	C713	B4E
579	#####	Chip capacitor GRM1885C1H150JA01D 15PF J 50V (RoHS)	1	C714	B3E
580	#####	Chip capacitor GRM1885C1H150JA01D 15PF J 50V (RoHS)	1	C715	B3E
581	#####	Chip capacitor GRM1885C1H150JA01D 15PF J 50V (RoHS)	1	C722	B3D
582	#####	Chip capacitor GRM1885C1H1R5BZ01D 1.5PF B 50V (RoHS)	1	C127	B2B
583	#####	Chip capacitor GRM1885C1H1R5BZ01D 1.5PF B 50V (RoHS)	1	C137	B3B
584	#####	Chip capacitor GRM1885C1H1R5BZ01D 1.5PF B 50V (RoHS)	1	C139	B3B
585	#####	Chip capacitor GRM1885C1H180JA01D 18PF J 50V (RoHS)	1	C193	B3B
586	#####	Chip capacitor GRM1885C1H180JA01D 18PF J 50V (RoHS)	1	C197	B3B

587	#####	Chip capacitor GRM1885C1H221JA01D 220PF J 50V (RoHS)	1	C702	B3E
588	#####	Chip capacitor GRM1885C1H221JA01D 220PF J 50V (RoHS)	1	C704	B3E
589	#####	Chip capacitor GRM39X7R222K50PFT 2200PF K 50V (RoHS)	1	C416	B4D
590	#####	Chip capacitor GRM188R71A224KA01D 0.22UF K 10V (RoHS)	1	C237	T2B
591	#####	Chip capacitor GRM188R71A224KA01D 0.22UF K 10V (RoHS)	1	C522	T4F
592	#####	Chip capacitor GRM1885C1H2R4BZ01D 2.4PF B 50V (RoHS)	1	C149	B3A
593	#####	Chip capacitor GRM1885C1H270JA01D 27PF J 50V (RoHS)	1	C120	B2B
594	#####	Chip capacitor GRM1885C1H270JA01D 27PF J 50V (RoHS)	1	C124	B2B
595	#####	Chip capacitor GRM1885C1H270JA01D 27PF J 50V (RoHS)	1	C206	B2D
596	#####	Chip capacitor GRM1885C1H270JA01D 27PF J 50V (RoHS)	1	C218	T1E
597	#####	Chip capacitor 0603 270PF J 50V(RoHS)	1	C159	T3C
598	#####	Chip capacitor 0603 30PF J 50V (RoHS)	1	C155	T4A
599	#####	Chip capacitor GRM1885C1H330JA01D 33PF J 50V (RoHS)	1	C134	B2A
600	#####	Chip capacitor C1608C0G1H390JT 39PF J 50V (RoHS)	1	C129	B2B
601	#####	Chip capacitor C1608C0G1H390JT 39PF J 50V (RoHS)	1	C138	B3B
602	#####	Chip capacitor C1608C0G1H390JT 39PF J 50V (RoHS)	1	C212	T2E
603	#####	Chip capacitor GRM1885C1H470JA01D 47PF J 50V (RoHS)	1	C712	B3E
604	#####	Chip capacitor GRM1885C1H470JA01D 47PF J 50V (RoHS)	1	C725	T3E
605	#####	Chip capacitor GRM188R71H471KA01D 470PF K 50V (RoHS)	1	C530	T3F
606	#####	Chip capacitor GRM188R71H471KA01D 470PF K 50V (RoHS)	1	C531	T2F
607	#####	Chip capacitor 0603 68PF J 50V(RoHS)	1	C156	T2C
608	#####	Chip capacitor 0603 68PF J 50V(RoHS)	1	C157	T3C
609	#####	Chip capacitor 501R18N2R0CV4E 2pF C 500V (RoHS)	1	C102	B1A
610	#####	Chip capacitor 501R18N4R0CV4E 4pF C 500V (RoHS)	1	C104	B2A
611	#####	Chip capacitor 501R18N8R0DV4E 8pF D 500V (RoHS)	1	C107	B2B
612	#####	Chip capacitor 631R18N102KV4E 1000pF K 630V (RoHS)	1	C108	T2B
613	#####	Chip capacitor 631R18N102KV4E 1000pF K 630V (RoHS)	1	C229	T2C
614	#####	Chip capacitor 501R18N150JV4E 15pF J 500V (RoHS)	1	C117	T2C
615	#####	Chip capacitor 501R18N180JV4E 18pF J 500V (RoHS)	1	C101	B1B
616	#####	Chip capacitor 501R18N180JV4E 18pF J 500V (RoHS)	1	C103	B1A
617	#####	Chip capacitor 501R18N180JV4E 18pF J 500V (RoHS)	1	C231	T1C
618	#####	Chip capacitor 501R18N220JV4E 22pF J 500V (RoHS)	1	C105	B1B
619	#####	Chip capacitor 501R18N220JV4E 22pF J 500V (RoHS)	1	C116	T2C
620	#####	Chip capacitor 501R18N270JV4E 27pF J 500V (RoHS)	1	C230	T1B
621	#####	Trimmer capacitor TZY2Z060A001 6pF ± 2.5 pF 55V (RoHS)	1	TC101	B2B
622	#####	Trimmer capacitor TZY2Z060A001 6pF ± 2.5 pF 55V (RoHS)	1	TC701	B2E
623	#####	Trimmer capacitor TZY2Z060A001 6pF ± 2.5 pF 55V (RoHS)	1	TC702	B4E
624	#####	Tantalum capacitor TMCP1D104MTRF 0.1UF M 20V (RoHS)	1	C814	T2E
625	#####	Tantalum capacitor TEESVP1C105M8R 1UF M 16V (RoHS)	1	C241	T3B
626	#####	Tantalum capacitor TEESVP1C105M8R 1UF M 16V (RoHS)	1	C417	B4D
627	#####	Tantalum capacitor TEESVP1C105M8R 1UF M 16V (RoHS)	1	C418	B4D
628	#####	Tantalum capacitor TEESVP1C105M8R 1UF M 16V (RoHS)	1	C517	B4F
629	#####	Tantalum capacitor TEESVP1C105M8R 1UF M 16V (RoHS)	1	C608	B2F
630	#####	Tantalum capacitor TEESVP0J106M8R 10UF M 6.3V (RoHS)	1	C164	T4A
631	#####	Tantalum capacitor F920J156MPA 15UF M 6.3V (RoHS)	1	C429	B5D
632	#####	Tantalum capacitor TEESVP1A475M8R 4.7UF M 10V (RoHS)	1	C142	B4B
633	#####	Tantalum capacitor TEESVP1A475M8R 4.7UF M 10V (RoHS)	1	C246	T3B
634	#####	Tantalum capacitor TEESVP1A475M8R 4.7UF M 10V (RoHS)	1	C411	B5E
635	#####	Tantalum capacitor TEESVP1A475M8R 4.7UF M 10V (RoHS)	1	C424	B4D

636	3104074750070	Tantalum capacitor TEESVP1A475M8R 4.7UF M 10V (RoHS)	1	C448	B4C
637	3104074750070	Tantalum capacitor TEESVP1A475M8R 4.7UF M 10V (RoHS)	1	C457	B5C
638	3104074750070	Tantalum capacitor TEESVP1A475M8R 4.7UF M 10V (RoHS)	1	C464	B5B
639	3104074750070	Tantalum capacitor TEESVP1A475M8R 4.7UF M 10V (RoHS)	1	C469	T5E
640	3104074750070	Tantalum capacitor TEESVP1A475M8R 4.7UF M 10V (RoHS)	1	C603	B4G
641	3104074750070	Tantalum capacitor TEESVP1A475M8R 4.7UF M 10V (RoHS)	1	C804	T3D
642	3104074750070	Tantalum capacitor TEESVP1A475M8R 4.7UF M 10V (RoHS)	1	C811	T3C
643	3104074750070	Tantalum capacitor TEESVP1A475M8R 4.7UF M 10V (RoHS)	1	C825	T3C
644	3104074750070	Tantalum capacitor TEESVP1A475M8R 4.7UF M 10V (RoHS)	1	C830	T5C
645	3104081040020	Tantalum capacitor TEESVA1V104M8R 0.1UF M 35V (RoHS)	1	C816	T3E
646	3104081060120	Tantalum capacitor TEESVA1C106M8R 10UF M 16V (RoHS)	1	C523	T3G
647	3104081060120	Tantalum capacitor TEESVA1C106M8R 10UF M 16V (RoHS)	1	C724	B3E
648	3104081060120	Tantalum capacitor TEESVA1C106M8R 10UF M 16V (RoHS)	1	C819	T3E
649	3104083350050	Tantalum capacitor F931C335MAA 3.3UF M 16V (RoHS)	1	C607	B1F
650	3104083350050	Tantalum capacitor F931C335MAA 3.3UF M 16V (RoHS)	1	C815	T3E
651	3104086850040	Tantalum capacitor F931A685MAA 6.8UF M 10V (RoHS)	1	C181	T4B
652	3210107560000	Chip inductor LQW2BHN56NJ03L 56nH J (RoHS)	1	L106	B2C
653	3210107560000	Chip inductor LQW2BHN56NJ03L 56nH J (RoHS)	1	L107	B2B
654	3210107560000	Chip inductor LQW2BHN56NJ03L 56nH J (RoHS)	1	L108	B2A
655	3210107560000	Chip inductor LQW2BHN56NJ03L 56nH J (RoHS)	1	L109	B3A
656	3210107560000	Chip inductor LQW2BHN56NJ03L 56nH J (RoHS)	1	L111	B3B
657	3210306101000	Chip inductor LQG18HNR10J00 100nH (RoHS)	1	L119	B3D
658	3210306181000	Chip inductor LQM18NNR18K00D 180nH (RoHS)	1	L112	B3B
659	3210306390000	Chip inductor LQG18HN39NJ00 39nH (RoHS)	1	L120	B3D
660	3210306390000	Chip inductor LQG18HN39NJ00 39nH (RoHS)	1	L121	B3D
661	3210306390000	Chip inductor LQG18HN39NJ00 39nH (RoHS)	1	L124	B3B
662	3210306560000	Chip inductor LQG18HN56NJ00 56nH (RoHS)	1	L125	B2D
663	3210306560000	Chip inductor LQG18HN56NJ00 56nH (RoHS)	1	L126	B2D
664	3210306561010	Chip inductor LQM18NNR56K00 560nH (RoHS)	1	L113	B3B
665	3210306561010	Chip inductor LQM18NNR56K00 560nH (RoHS)	1	L114	B4B
666	3210306820000	Chip inductor LQG18HN82NJ00 82nH (RoHS)	1	L110	B3A
667	3210306820000	Chip inductor LQG18HN82NJ00 82nH (RoHS)	1	L122	B3D
668	3213212103000	Chip inductor NLV25T-100J-PF 10uH (RoHS)	1	L134	B4B
669	3213212272000	Chip inductor NLV25T-2R7J-PF 2.7uH (RoHS)	1	L705	B3E
670	3213212272000	Chip inductor NLV25T-2R7J-PF 2.7uH (RoHS)	1	L706	B4E
671	3213212272000	Chip inductor NLV25T-2R7J-PF 2.7uH (RoHS)	1	L708	B3E
672	3213212272000	Chip inductor NLV25T-2R7J-PF 2.7uH (RoHS)	1	L709	B3D
673	3213212330000	Chip inductor NLV25T-033J-PF 33nH (RoHS)	1	L127	T2D
674	3213212331000	Chip inductor NLV25T-R33J-PF 330nH (RoHS)	1	L116	T2C
675	3213212331000	Chip inductor NLV25T-R33J-PF 330nH (RoHS)	1	L117	T3C
676	3213212331000	Chip inductor NLV25T-R33J-PF 330nH (RoHS)	1	L118	T2C
677	3213212332000	Chip inductor NLV25T-3R3J-PF 3.3uH (RoHS)	1	L701	B3E
678	3213212332000	Chip inductor NLV25T-3R3J-PF 3.3uH (RoHS)	1	L702	B3E
679	3213212332000	Chip inductor NLV25T-3R3J-PF 3.3uH (RoHS)	1	L704	B3D
680	3213212561000	Chip inductor NLV25T-R56J-PF 0.56uH (RoHS)	1	L802	T3D
681	3213212680000	Chip inductor NLV25T-068J-PF 68nH (RoHS)	1	L128	T1E
682	3221506601000	Bead BLM18AG601SN1 600Ω 100MHz ±25% (RoHS)	1	L129	T1E
683	3221506601000	Bead BLM18AG601SN1 600Ω 100MHz ±25% (RoHS)	1	L135	B4B
684	3221506601000	Bead BLM18AG601SN1 600Ω 100MHz ±25% (RoHS)	1	L136	B3A

685	#####	Bead BLM18AG601SN1 600Ω 100MHz ±25% (RoHS)	1	L501	T4E
686	#####	Bead BLM18AG601SN1 600Ω 100MHz ±25% (RoHS)	1	L502	T4C
687	#####	Bead BLM18AG601SN1 600Ω 100MHz ±25% (RoHS)	1	L503	T4D
688	#####	Bead BLM18AG601SN1 600Ω 100MHz ±25% (RoHS)	1	L504	T4D
689	#####	Bead BLM18AG601SN1 600Ω 100MHz ±25% (RoHS)	1	L505	T4D
690	#####	Bead BLM18AG601SN1 600Ω 100MHz ±25% (RoHS)	1	L801	T3D
691	#####	Bead BLM18AG601SN1 600Ω 100MHz ±25% (RoHS)	1	L803	T2D
692	#####	Bead BLM18AG601SN1 600Ω 100MHz ±25% (RoHS)	1	R157	T3A
693	#####	Bead BLM18AG601SN1 600Ω 100MHz ±25% (RoHS)	1	R831	T3E
694	#####	Bead BLM41PG600SN1 60Ω 100MHz ±25% (RoHS)	1	L131	T1D
695	#####	Bead BLM41PG600SN1 60Ω 100MHz ±25% (RoHS)	1	L132	T1D
696	#####	Air-core inductor 0.8*3.0*11TR (RoHS)	1	L101	B1B
697	#####	Air-core inductor 0.8*3.0*5TR (RoHS)	1	L102	B1A
698	#####	Air-core inductor 0.8*3.0*5TR (RoHS)	1	L103	B1A
699	#####	Air-core inductor 0.8*3.0*5TR (RoHS)	1	L104	B2B
700	#####	Air-core inductor 0.8*3.0*5TR (RoHS)	1	L105	T2C
701	#####	Air-core inductor 0.8*3.0*5TR (RoHS)	1	L130	T1C
702	#####	Air-core inductor 0.8*3.0*6TR (RoHS)	1	L133	T2D
703	#####	Chip air-core coil C6328 35nH (RoHS)	1	L703	B2E
704	#####	Chip air-core coil C6328 35nH (RoHS)	1	L707	B3E
705	#####	Rectifier diode DSM3MA1TRF-E 100V 3A 1V/3A (RoHS)	1	D515	T1G
706	#####	Zener diode UDZSTE(1710B) 10V 150℃ (RoHS)	1	D514	T4F
707	#####	Zener diode UDZSTE(1715B) 15V 150℃ (RoHS)	1	D518	T3F
708	#####	Zener diode UDZSTE(1718B) 18V 150℃ (RoHS)	1	D512	T4G
709	#####	Zener diode UDZSTE(175.1B) 5.1V 150℃ (RoHS)	1	D112	B4B
710	#####	Zener diode UDZSTE(175.1B) 5.1V 150℃ (RoHS)	1	D118	T1E
711	#####	Zener diode HZU5ALL-E 5V -55~150℃ (RoHS)	1	D802	T3D
712	#####	Switching diode 1SS355(TE17) 80V 100mA 1.2V/100mA (R	1	D103	T3A
713	#####	Switching diode 1SS355(TE17) 80V 100mA 1.2V/100mA (R	1	D116	T2D
714	#####	Switching diode 1SS355(TE17) 80V 100mA 1.2V/100mA (R	1	D511	T4F
715	#####	Switching diode 1SS355(TE17) 80V 100mA 1.2V/100mA (R	1	D513	T4F
716	#####	Switching diode 1SS355(TE17) 80V 100mA 1.2V/100mA (R	1	D517	T3F
717	#####	Switching diode MA2S11100L 80V 100mA 0.95V/100mA (R	1	D501	T4E
718	#####	Switching diode MA2S11100L 80V 100mA 0.95V/100mA (R	1	D801	T3D
719	#####	Switching diode MA2S11100L 80V 100mA 0.95V/100mA (R	1	D803	T3E
720	#####	Switching diode MA3J74200L 30V 30mA 0.8V/30mA (RoHS	1	D101	T2A
721	#####	Switching diode MA3J74200L 30V 30mA 0.8V/30mA (RoHS	1	D102	T2A
722	#####	Switching diode MA3J74200L 30V 30mA 0.8V/30mA (RoHS	1	D117	T2E
723	#####	Switching diode MA3J74200L 30V 30mA 0.8V/30mA (RoHS	1	D401	B4C
724	#####	Switching diode DAN222(TL) 80V 100mA 1V/100mA (RoHS	1	D113	T4A
725	#####	Switching diode DAN222(TL) 80V 100mA 1V/100mA (RoHS	1	D114	T4B
726	#####	Switching diode DAN235E 35V 0.8V/10mA (RoHS)	1	D115	B2D
727	#####	Switching diode MA4P1250 50V 1V/50mA (RoHS)	1	D104	T1B
728	#####	Switching diode MA4P1250 50V 1V/50mA (RoHS)	1	D105	T2C
729	#####	Varactor 1SV278(TH2,F,T) VR:30V 15pF/2VR 2.3pF/10VR (	1	D705	B3E
730	#####	Varactor 1SV279(TPH3.F) VR:15V 15pF/2VR 6pF/10VR (R	1	D107	B3B
731	#####	Varactor 1SV279(TPH3.F) VR:15V 15pF/2VR 6pF/10VR (R	1	D108	B3B
732	#####	Varactor 1SV279(TPH3.F) VR:15V 15pF/2VR 6pF/10VR (R	1	D109	B3B
733	#####	Varactor 1SV279(TPH3.F) VR:15V 15pF/2VR 6pF/10VR (R	1	D110	B2A

734	#####	Varactor 1SV279(TPH3.F) VR:15V 15pF/2VR 6pF/10VR (RoH	1	D111	B3B
735	#####	Varactor 1SV282(TH3.F.T) VR:34V 35pF/2VR 2.8pF/25VR (R	1	D701	B3F
736	#####	Varactor 1SV282(TH3.F.T) VR:34V 35pF/2VR 2.8pF/25VR (R	1	D703	B3E
737	#####	Varactor 1SV282(TH3.F.T) VR:34V 35pF/2VR 2.8pF/25VR (R	1	D706	B3F
738	#####	Varactor 1SV282(TH3.F.T) VR:34V 35pF/2VR 2.8pF/25VR (R	1	D707	B3F
739	#####	Varactor 1SV282(TH3.F.T) VR:34V 35pF/2VR 2.8pF/25VR (R	1	D708	B3E
740	#####	Varactor 1SV282(TH3.F.T) VR:34V 35pF/2VR 2.8pF/25VR (R	1	D709	B3E
741	#####	Zener diode UDZSTE(174.7B) 4.7V -55~150°C (RoHS)	1	D119	T3A
742	#####	Transistor 2SA1832-GR(TE85L.F) 50V 150mA (RoHS)	1	Q802	T3E
743	#####	Transistor 2SC4215-Y(TE85L.F) 30V 20mA (RoHS)	1	Q113	B4A
744	#####	Transistor 2SC4738F-GR(T5L.F) 50V 150mA (RoHS)	1	Q803	T2E
745	#####	Transistor 2SC4116-GR(T5L.F.H) 50V 150mA (RoHS)	1	Q404	B5F
746	#####	Transistor 2SC4116-GR(T5L.F.H) 50V 150mA (RoHS)	1	Q704	B3D
747	#####	Transistor 2SC4116-GR(T5L.F.H) 50V 150mA (RoHS)	1	Q705	B4D
748	#####	Transistor 2SC4116-GR(T5L.F.H) 50V 150mA (RoHS)	1	Q801	T3E
749	#####	Transistor 2SC5108-Y(TE85L.F) 10V 30mA (RoHS)	1	Q101	B3D
750	#####	Transistor 2SC5108-Y(TE85L.F) 10V 30mA (RoHS)	1	Q102	B3D
751	#####	Transistor 2SC5108-Y(TE85L.F) 10V 30mA (RoHS)	1	Q107	T3C
752	#####	Transistor 2SC5108-Y(TE85L.F) 10V 30mA (RoHS)	1	Q703	B3D
753	#####	Transistor 2SB1132FD5T100R 32V 1A (RoHS)	1	Q601	B3G
754	#####	Transistor 2SB1132FD5T100R 32V 1A (RoHS)	1	Q603	B2F
755	#####	Transistor 2SC2412K 50V 150mA (RoHS)	1	Q114	T3A
756	#####	Transistor 2SC4617TLS 50V 150mA (RoHS)	1	Q401	B5E
757	#####	BRT DTA114EE(TL) Vce:50V Vloff:0.5V Vlon:3V 70mA (RoH	1	Q105	T4B
758	#####	BRT DTA114EE(TL) Vce:50V Vloff:0.5V Vlon:3V 70mA (RoH	1	Q106	T3A
759	#####	BRT DTA114EE(TL) Vce:50V Vloff:0.5V Vlon:3V 70mA (RoH	1	Q514	T4F
760	#####	BRT DTA114EE(TL) Vce:50V Vloff:0.5V Vlon:3V 70mA (RoH	1	Q516	T4F
761	#####	BRT DTA114EE(TL) Vce:50V Vloff:0.5V Vlon:3V 70mA (RoH	1	Q519	T3G
762	#####	BRT DTA114EE(TL) Vce:50V Vloff:0.5V Vlon:3V 70mA (RoH	1	Q520	T3G
763	#####	BRT DTC114EE(TL) Vce:50V Vloff:0.5V Vlon:3V 100mA (Ro	1	Q402	B4E
764	#####	BRT DTC114EE(TL) Vce:50V Vloff:0.5V Vlon:3V 100mA (Ro	1	Q501	T3C
765	#####	BRT DTC114EE(TL) Vce:50V Vloff:0.5V Vlon:3V 100mA (Ro	1	Q503	T5E
766	#####	BRT DTC114EE(TL) Vce:50V Vloff:0.5V Vlon:3V 100mA (Ro	1	Q513	T4F
767	#####	BRT DTC114EE(TL) Vce:50V Vloff:0.5V Vlon:3V 100mA (Ro	1	Q515	T4F
768	#####	BRT DTC114EE(TL) Vce:50V Vloff:0.5V Vlon:3V 100mA (Ro	1	Q517	T4F
769	#####	BRT DTC114EE(TL) Vce:50V Vloff:0.5V Vlon:3V 100mA (Ro	1	Q518	T3G
770	#####	BRT DTC114EE(TL) Vce:50V Vloff:0.5V Vlon:3V 100mA (Ro	1	Q602	B4G
771	#####	BRT DTC114EE(TL) Vce:50V Vloff:0.5V Vlon:3V 100mA (Ro	1	Q604	B2F
772	#####	BRT DTC114EE(TL) Vce:50V Vloff:0.5V Vlon:3V 100mA (Ro	1	Q706	B3D
773	#####	Transistor 2SC3357-T1-A-RF 12V 100mA (RoHS)	1	Q109	T1E
774	#####	Transistor 2SC3357-T1-A-RF 12V 100mA (RoHS)	1	Q110	T2E
775	#####	N-JFET 2SK508-K52-T1B-A VGS:15V VGSoff:-1.4V (RoHS)	1	Q701	B3E
776	#####	N-JFET 2SK508-K52-T1B-A VGS:15V VGSoff:-1.4V (RoHS)	1	Q702	B3E
777	#####	N-MOSFET 3SK318YB-TL-E-Q VDS:6V ID:20mA VGS(th):0.7	1	Q111	B2A
778	#####	N-MOSFET 3SK318YB-TL-E-Q VDS:6V ID:20mA VGS(th):0.7	1	Q112	B3B
779	#####	P-MOSFET 2SJ506STR-E VDS:-30V ID:-10A VGS(th):-1.5V (	1	Q512	T3F
780	#####	N-MOSFET 2SK1824-T1-A VDS:30V ID:100mA VGS(th):3.0V	1	Q403	B5E
781	#####	N-MOSFET 2SK1824-T1-A VDS:30V ID:100mA VGS(th):3.0V	1	Q405	B4E
782	#####	N-MOSFET 2SK1824-T1-A VDS:30V ID:100mA VGS(th):3.0V	1	Q406	B4E

783	3503020000030	N-MOSFET 2SK1824-T1-A VDS:30V ID:100mA VGS(th):3.0V (RoHS)	1	Q502	T4E
784	3503020000030	N-MOSFET 2SK1824-T1-A VDS:30V ID:100mA VGS(th):3.0V (RoHS)	1	Q511	B4F
785	3503020000030	N-MOSFET 2SK1824-T1-A VDS:30V ID:100mA VGS(th):3.0V (RoHS)	1	Q521	B4F
786	3602017006350	Audio processor TDA7297D 10W+10W 6.5~18V 32dB (RoHS)	1	IC511	B4G
787	3603002005440	IF processor TA31136FNG(EL.HZ) 455MHz (RoHS)	1	IC102	T3A
788	3605002054590	Operational amplifier TA75W01FU(TE12L.F) 6~12V 250mW 100dB 2-operational (RoHS)	1	IC104	T3B
789	3605002054790	Operational amplifier TA75W558FU(TE12L.F) 4~18V 250mW 100dB 2-operational (RoHS)	1	IC404	B4C
790	3605002057090	Operational amplifier TA75S01F(TE85L.F) 6~12V 200mW 100dB 1-operational (RoHS)	1	IC103	T3B
791	3605002057090	Operational amplifier TA75S01F(TE85L.F) 6~12V 200mW 100dB 1-operational (RoHS)	1	IC407	T5D
792	3605002057290	Operational amplifier TC75W51FU(TE12.F) 1.5~7V 200mW 70dB 2-operational (RoHS)	1	IC402	B4B
793	3605002057290	Operational amplifier TC75W51FU(TE12.F) 1.5~7V 200mW 70dB 2-operational (RoHS)	1	IC403	B5B
794	3605002057290	Operational amplifier TC75W51FU(TE12.F) 1.5~7V 200mW 70dB 2-operational (RoHS)	1	IC405	B5E
795	3607002000180	Logic IC TC4013BF(EL,N,F) D-trigger 3~18V (RoHS)	1	IC512	T4G
796	3608002020890	Power management IC TA7805F(TE16L.F) 5V 1.0A (RoHS)	1	IC602	B3F
797	3608015005600	Power management IC XC62FP3502PR 3V 250mA (RoHS)	1	IC803	T2D
798	3609007001590	IF processor MB15A02PFV1-E1 1.1GHz -40~+85℃ (RoHS)	1	IC801	T3D
799	3612022000000	Memory CAT24C256WI-G EEPROM 256K 1.8~5.5V (RoHS)	1	IC501	T5E
800	3613034001060	Baseband processor AK2346-E2 2.7~3.3V (RoHS)	1	IC401	B4D
801	3701016850020	TCXO ENE3148A 16.8MHz 3.0V ±2.0ppm -30℃~+75℃ (RoHS)	1	IC802	T3C
802	3701098340010	Crystal DSX530GA-9.8304M 9.8304MHz (RoHS)	1	X501	T4C
803	3701368630000	Crystal NX1255GB 3.6864MHz (RoHS)	1	X402	B5D
804	3802499540070	Crystal filter DSF753SDF 49.95MHz ±7.5kHz (RoHS)	1	XF200	B3A
805	5205015000000	15PIN socket1251S-15-SM1 1.25PITCH (RoHS)	1	J503	T5D
806	5207032000000	FFC/FPC connector 52559-3272 32PIN (RoHS)	1	J501	T5D
807	3610045000200	MCU M3062LFGPGP 16-pin (RoHS)	1	IC502	T4D
808	3001072020000	Chip resistor 0805 2KΩ J 1/8W (RoHS)	1	R190	T2E
809	3104081050090	Tantalum capacitor TEESVA1C105M8R 1UF M 16V (RoHS)	1	C221	T1D
810	3101071030010	Chip capacitor GRM216R71H103KA01D 0.01UF K 25V (RoHS)	1	C148	B4B
811	410M6001007H0	PCB FR4 1.6T/4L/2P H (RoHS)	1		
812	3001066830000	Chip resistor 0603 68KΩ J 1/10W (RoHS)	1	R133	B3B
813	3001066830000	Chip resistor 0603 68KΩ J 1/10W (RoHS)	1	R134	B3B
814	4002000000300	Chip fuse 0603-FF 0.25A-32V (RoHS)	1	FP101	T5D
815	4002000000300	Chip fuse 0603-FF 0.25A-32V (RoHS)	1	FP102	T5D
816	3001062710000	Chip resistor 0603 270Ω J 1/10W (RoHS)	1	R125	B2A
817	3101053330000	Chip capacitor GRM155R71C333KA01D 0.033UF K 16V (RoHS)	1	C436	B5F
818	3001051520010	Chip resistor 0402 1.5KΩ F 1/16W (RoHS)	1	R151	T4B
819	3001051820010	Chip resistor 0402 1.8KΩ F 1/16W (RoHS)	1	R150	T4B
820	3101053920000	Chip capacitor GRM155R71H392KA01D 3900PF K 50V (RoHS)	1	C542	T5D
821	3101061040020	Chip capacitor GRM188F11E104ZA01B 0.1UF Z 25V (RoHS)	1	C540	T4F
822	3101061040020	Chip capacitor GRM188F11E104ZA01B 0.1UF Z 25V (RoHS)	1	C541	T4F
823	3411002000020	Transistor 2SC5343EG 50V 150mA (RoHS)	1	Q901	T4E
824	9900000001340	Lead-free solder paste (conventional) FLY905-T1(RoHS)	0		
825	3609999000330	Reset IC CN813LESA 4.65V -40~+85℃ (RoHS)	1	IC901	T4E
826	3104084750040	Tantalum capacitor1206 4.7uF K 16V (RoHS)	1	C524	T4G

827	3104084750040	Tantalum capacitor1206 4.7uF K 16V (RoHS)	1	C601	B3F
828	3104084750040	Tantalum capacitor1206 4.7uF K 16V (RoHS)	1	C828	T3E
829	3101081060010	Chip capacitor GRM31CR61E106KA12L 10UF K 25V (RoHS)	1	C535	B4G
830	3002996830060	Trimmer resistor EVM2NSX80BS4 68K $\pm 25\%$ 0.15W temperature coefficient: $\pm 250 \times 10^{-6}/^{\circ}\text{C}$ (RoHS)	1	VR101	T3A
831	3002996830060	Trimmer resistor EVM2NSX80BS4 68K $\pm 25\%$ 0.15W temperature coefficient: $\pm 250 \times 10^{-6}/^{\circ}\text{C}$ (RoHS)	1	VR801	T2D
832	3002996830060	Trimmer resistor EVM2NSX80BS4 68K $\pm 25\%$ 0.15W temperature coefficient: $\pm 250 \times 10^{-6}/^{\circ}\text{C}$ (RoHS)	1	VR802	T5E
833	3103994760080	Electrolytic capacitor VH1E470MF3R 47U M 25V (RoHS)	1	C234	T1D
834	3103994760080	Electrolytic capacitor VH1E470MF3R 47U M 25V (RoHS)	1	C533	T1F

TM-610 UHF Parts List 1 (VCO Unit)

No.	Material No.	Description	Qty.	Ref. No.	Print No.	Remarks
1	3001051010000	Chip resistor 0402 100Ω J 1/16W (RoHS)	1	R174	T2C	
2	3001051030000	Chip resistor 0402 10KΩ J 1/16W (RoHS)	1	R170	T2C	
3	3001051030000	Chip resistor 0402 10KΩ J 1/16W (RoHS)	1	R176	T1C	
4	3001051510000	Chip resistor 0402150Ω J 1/16W (RoHS)	1	R173	T2C	
5	3001051800000	Chip resistor 0402 18Ω J 1/16W(RoHS)	1	R168	T1C	
6	3001051800000	Chip resistor 0402 18Ω J 1/16W(RoHS)	1	R183	T1C	
7	3001052210000	Chip resistor 0402 220Ω J 1/16W(RoHS)	1	R172	T2C	
8	3001052210000	Chip resistor 0402 220Ω J 1/16W(RoHS)	1	R178	T1C	
9	3001053300010	Chip resistor 0402 33Ω J 1/16W(RoHS)	1	R167	T2C	
10	3001053310010	Chip resistor 0402 330Ω J 1/16W(RoHS)	1	R177	T1C	
11	3001054700000	Chip resistor 0402 47Ω J 1/16W(RoHS)	1	R169	T1C	
12	3001054720000	Chip resistor 0402 4.7KΩ J 1/16W(RoHS)	1	R171	T2C	
13	3001054730000	Chip resistor 0402 47KΩ J 1/16W(RoHS)	1	R179	T1C	
14	3001055600000	Chip resistor 0402 56Ω J 1/16W(RoHS)	1	R203	T2C	
15	3001060000000	Chip resistor 0603 0Ω J 1/10W(RoHS)	1	R706	T2B	
16	3001061030010	Chip resistor 0603 10KΩ J 1/10W(RoHS)	1	R709	T2C	
17	3001061040010	Chip resistor 0603 100KΩ J 1/10W(RoHS)	1	R718	T2A	U1:400-470MHz
18	3001063330010	Chip resistor 0603 33KΩ J 1/10W (RoHS)	1	R718	T2A	U2:450-500MHz
19	3001061040010	Chip resistor 0603 100KΩ J 1/10W(RoHS)	1	R718	T2A	U3:470-520MHz
20	3001061040010	Chip resistor 0603 100KΩ J 1/10W(RoHS)	1	R718	T2A	U4:350-400MHz
21	3001063330010	Chip resistor 0603 33KΩ J 1/10W (RoHS)	1	R718	T2A	U5:440-470MHz
22	3001061040010	Chip resistor 0603 100KΩ J 1/10W(RoHS)	1	R716	T2A	U1:400-470MHz
23	3001064730000	Chip resistor 0603 47KΩ J 1/10W(RoHS)	1	R716	T2A	U2:450-500MHz
24	3001064730000	Chip resistor 0603 47KΩ J 1/10W(RoHS)	1	R716	T2A	U3:470-520MHz
25	3001064730000	Chip resistor 0603 47KΩ J 1/10W(RoHS)	1	R716	T2A	U4:350-400MHz
26	3001061040010	Chip resistor 0603 100KΩ J 1/10W(RoHS)	1	R716	T2A	U5:440-470MHz
27	3001062210000	Chip resistor 0603 220Ω J 1/10W(RoHS)	1	R705	T2A	
28	3001062210000	Chip resistor 0603 220Ω J 1/10W(RoHS)	1	R715	T2B	
29	3001062240010	Chip resistor 0603 220KΩ J 1/10W(RoHS)	1	R713	T2B	
30	3001062710000	Chip resistor 0603 270Ω J 1/10W(RoHS)	1	R707	T2B	
31	3001063300000	Chip resistor 0603 33Ω J 1/10W(RoHS)	1	R704	T1B	
32	3001063300000	Chip resistor 0603 33Ω J 1/10W(RoHS)	1	R712	T1B	
33	3001063310000	Chip resistor 0603 330Ω F 1/10W(RoHS)	1	R702	T2B	
34	3001064700000	Chip resistor 0603 47Ω J 1/10W(RoHS)	1	R703	T2B	
35	3001064720000	Chip resistor 0603 4.7KΩ J 1/10W(RoHS)	1	R708	T2C	
36	3001064720000	Chip resistor 0603 4.7KΩ J 1/10W(RoHS)	1	R710	T2B	
37	3001064720000	Chip resistor 0603 4.7KΩ J 1/10W(RoHS)	1	R711	T2B	
38	3001064720000	Chip resistor 0603 4.7KΩ J 1/10W(RoHS)	1	R720	T2B	
39	3101050200010	Chip capacitor GRM1555C1H2R0BZ01D (RoHS)	1	C187	T2C	
40	3101050200010	Chip capacitor GRM1555C1H2R0BZ01D (RoHS)	1	C188	T2C	
41	3101050600010	Chip capacitor GRM1555C1H6R0BZ01D (RoHS)	1	C186	T2C	
42	3101050600010	Chip capacitor GRM1555C1H6R0BZ01D (RoHS)	1	C190	T2C	
43	3101050800000	Chip capacitor GRM1555C1H8R0BZ01D (RoHS)	1	C185	T2C	
44	3101051000020	Chip capacitor GRM1555C1H100JZ01D (RoHS)	1	C189	T2C	

45	3101051020010	Chip capacitor GRM36X7R102K50PT (RoHS)	1	C201	T1C	
46	3101051020010	Chip capacitor GRM36X7R102K50PT (RoHS)	1	C203	T1C	
47	3101051040010	Chip capacitor GRM36Y5V104Z25PT (RoHS)	1	C202	T2C	
48	3101054710010	Chip capacitor GRM155R71H471KA01D (RoHS)	1	C182	T2C	
49	3101054710010	Chip capacitor GRM155R71H471KA01D (RoHS)	1	C183	T1C	
50	3101054710010	Chip capacitor GRM155R71H471KA01D (RoHS)	1	C184	T2B	
51	3101054710010	Chip capacitor GRM155R71H471KA01D (RoHS)	1	C191	T2C	
52	3101054710010	Chip capacitor GRM155R71H471KA01D (RoHS)	1	C200	T1C	
53	3101060590010	Chip capacitor GRM1885C1HR50BZ01D (RoHS)	1	C705	T1A	U1:400-470MHz
54	3101060590010	Chip capacitor GRM1885C1HR50BZ01D (RoHS)	1	C705	T1A	U2:450-500MHz
55	3101060590010	Chip capacitor GRM1885C1HR50BZ01D (RoHS)	1	C705	T1A	U3:470-520MHz
56	3199060758000	Chip capacitor 0603 0.75PF B 50V(RoHS)	1	C705	T1A	U4:350-400MHz
57	3101060390000	Chip capacitor GRM1885C1HR30BZ01D (RoHS)	1	C705	T1A	U5:440-470MHz
58	3101060590010	Chip capacitor GRM1885C1HR50BZ01D (RoHS)	1	C709	T2B	
59	3101060590010	Chip capacitor GRM1885C1HR50BZ01D (RoHS)	1	C717	T2B	
60	3101060600010	Chip capacitor GRM1885C1H6R0BZ01D (RoHS)	1	C713	T2B	U1:400-470MHz
61	3101062490000	Chip capacitor GRM1885C1H2R4BZ01D (RoHS)	1	C713	T2B	U2:450-500MHz
62	3101060300010	Chip capacitor GRM1885C1H3R0BZ01D (RoHS)	1	C713	T2B	U3:470-520MHz
63	3101060900010	Chip capacitor GRM1885C1H9R0BZ01D (RoHS)	1	C713	T2B	U4:350-400MHz
64	3101062490000	Chip capacitor GRM1885C1H2R4BZ01D (RoHS)	1	C713	T2B	U5:440-470MHz
65	3101060600010	Chip capacitor GRM1885C1H6R0BZ01D (RoHS)	1	C722	T2B	U1:400-470MHz
66	3101060600010	Chip capacitor GRM1885C1H6R0BZ01D (RoHS)	1	C722	T2B	U2:450-500MHz
67	3101060600010	Chip capacitor GRM1885C1H6R0BZ01D (RoHS)	1	C722	T2B	U3:470-520MHz
68	3101060600010	Chip capacitor GRM1885C1H6R0BZ01D (RoHS)	1	C722	T2B	U4:350-400MHz
69	3101060600010	Chip capacitor GRM1885C1H6R0BZ01D (RoHS)	1	C722	T2B	U5:440-470MHz
70	3101061000000	Chip capacitor 0603 10PF J 50V (RoHS)	1	C206	T1C	
71	3101061000000	Chip capacitor 0603 10PF J 50V (RoHS)	1	C703	T1A	
72	3101061000000	Chip capacitor 0603 10PF J 50V (RoHS)	1	C712	T2A	U1:400-470MHz
73	3101061000000	Chip capacitor 0603 10PF J 50V (RoHS)	1	C712	T2A	U2:450-500MHz
74	3101061000000	Chip capacitor 0603 10PF J 50V (RoHS)	1	C712	T2A	U3:470-520MHz
75	3101066800000	Chip capacitor 0603 68PF J 50V(RoHS)	1	C712	T2A	U4:350-400MHz
76	3101061000000	Chip capacitor 0603 10PF J 50V (RoHS)	1	C712	T2A	U5:440-470MHz
77	3101061500010	Chip capacitor GRM1885C1H150JA01D (RoHS)	1	C204	T1C	
78	3101064710000	Chip capacitor GRM188R71H471KA01D (RoHS)	1	C205	T1C	
79	3101064710000	Chip capacitor GRM188R71H471KA01D (RoHS)	1	C207	T2B	
80	3101064710000	Chip capacitor GRM188R71H471KA01D (RoHS)	1	C708	T2B	
81	3101064710000	Chip capacitor GRM188R71H471KA01D (RoHS)	1	C710	T2A	
82	3101064710000	Chip capacitor GRM188R71H471KA01D (RoHS)	1	C716	T2A	
83	3101064710000	Chip capacitor GRM188R71H471KA01D (RoHS)	1	C718	T2B	
84	3101064710000	Chip capacitor GRM188R71H471KA01D (RoHS)	1	C719	T2C	
85	3101064710000	Chip capacitor GRM188R71H471KA01D (RoHS)	1	C720	T2B	
86	3101064710000	Chip capacitor GRM188R71H471KA01D (RoHS)	1	C721	T2B	
87	3101064710000	Chip capacitor GRM188R71H471KA01D (RoHS)	1	C723	T1C	
88	3101064710000	Chip capacitor GRM188R71H471KA01D (RoHS)	1	C726	T2B	
89	3101064710000	Chip capacitor GRM188R71H471KA01D (RoHS)	1	C755	T2A	
90	3101066800000	Chip capacitor 0603 68PF J 50V(RoHS)	1	C711	T2A	U1:400-470MHz

91	3101061810010	Chip capacitor C1608COG1H181J (RoHS)	1	C711	T2A	U2:450-500MHz
92	3101064700000	Chip capacitor GRM1885C1H470JA01D (RoHS)	1	C711	T2A	U3:470-520MHz
93	3101061210000	Chip capacitor C1608C0G1H121JT (RoHS)	1	C711	T2A	U4:350-400MHz
94	3101061810010	Chip capacitor C1608COG1H181J (RoHS)	1	C711	T2A	U5:440-470MHz
95	3102992000000	Trimmer capacitor TZY2Z060A001 (RoHS)	1	TC701	T1A	
96	3102992000000	Trimmer capacitor TZY2Z060A001 (RoHS)	1	TC702	T2A	
97	3210306150000	Chip inductor LQG18HN15NJ00D 15nH J (RoHS)	1	L119	T2C	
98	3210306150000	Chip inductor LQG18HN15NJ00D 15nH J (RoHS)	1	L120	T2C	
99	3210306150000	Chip inductor LQG18HN15NJ00D 15nH J (RoHS)	1	L121	T2C	
100	3210306150000	Chip inductor LQG18HN15NJ00D 15nH J (RoHS)	1	L125	T1C	
101	3210306180000	Chip inductor LQG18HN18NJ00 18nH J (RoHS)	1	L710	T2B	
102	3210306820000	Chip inductor LQG18HN82NJ00 82nH J (RoHS)	1	L122	T1C	
103	3234599180000	Chip air-core coil C3328 18nH C3328A-18NG (RoHS)	1	L703	T1A	
104	3234599180000	Chip air-core coil C3328 18nH C3328A-18NG (RoHS)	1	L707	T2A	
105	3303030100020	Switching diode DAN235E 35V 0.8V/10mA (RoHS)	1	D115	T1C	
106	3304010100160	Varactor 1SV278(TH2.F.T) (RoHS)	1	D705	T1A	
107	3304010100990	Varactor 1SV282(TH3.F.T) (RoHS)	1	D702	T1A	
108	3304010100990	Varactor 1SV282(TH3.F.T) (RoHS)	1	D704	T1A	
109	3304010100990	Varactor 1SV282(TH3.F.T) (RoHS)	1	D706	T2A	
110	3304010100990	Varactor 1SV282(TH3.F.T) (RoHS)	1	D709	T2A	
111	3401002000290	Transistor 2SC4116-GR(T5L.F.H) 50V 150mA (RoHS)	1	Q704	T2B	
112	3401002000290	Transistor 2SC4116-GR(T5L.F.H) 50V 150mA (RoHS)	1	Q705	T2B	
113	3401002000990	Transistor 2SC5108-Y(TE85L.F) 10V 30mA (RoHS)	1	Q101	T1C	
114	3401002000990	Transistor 2SC5108-Y(TE85L.F) 10V 30mA (RoHS)	1	Q102	T2C	
115	3401002000990	Transistor 2SC5108-Y(TE85L.F) 10V 30mA (RoHS)	1	Q703	T2B	
116	3403008000010	BRT DTC114EE(TL) Vce:50V Vloff:0.5V Vlon:3V (RoHS)	1	Q706	T2B	
117	3499000000140	N-JFET 2SK508-K52-T1B-A (RoHS)	1	Q701	T2B	
118	3499000000140	N-JFET 2SK508-K52-T1B-A (RoHS)	1	Q702	T2B	
119	3213212102000	Chip inductor NLV25T-1R0J-PF 1uH J (RoHS)	1	L701	T1A	
120	3213212102000	Chip inductor NLV25T-1R0J-PF 1uH J (RoHS)	1	L702	T1A	
121	3213212102000	Chip inductor NLV25T-1R0J-PF 1uH J (RoHS)	1	L704	T2B	
122	3213212102000	Chip inductor NLV25T-1R0J-PF 1uH J (RoHS)	1	L705	T2A	
123	3213212102000	Chip inductor NLV25T-1R0J-PF 1uH J (RoHS)	1	L706	T2A	
124	3213212102000	Chip inductor NLV25T-1R0J-PF 1uH J (RoHS)	1	L708	T2B	
125	3213212102000	Chip inductor NLV25T-1R0J-PF 1uH J (RoHS)	1	L709	T2B	
126	3213212102000	Chip inductor NLV25T-1R0J-PF 1uH J (RoHS)	1	L711	T2B	
127	3101061210000	Chip capacitor C1608C0G1H121JT (RoHS)	1	C702	T1A	
128	3001052710000	Chip resistor 0402 270Ω F 1/16W(RoHS)	1	R182	T1C	
129	3001052710000	Chip resistor 0402 270Ω F 1/16W(RoHS)	1	R184	T1C	
130	3101060300010	Chip capacitor GRM1885C1H3R0BZ01D (RoHS)	1	C707	T2B	U1:400-470MHz
131	3101061590010	Chip capacitor GRM1885C1H1R5BZ01D (RoHS)	1	C707	T2B	U2:450-500MHz
132	3101060100010	Chip capacitor GRM1885C1H1R0BZ01D (RoHS)	1	C707	T2B	U3:470-520MHz
133	3101060500010	Chip capacitor GRM1885C1H5R0BZ01D (RoHS)	1	C707	T2B	U4:350-400MHz
134	3101061590010	Chip capacitor GRM1885C1H1R5BZ01D (RoHS)	1	C707	T2B	U5:440-470MHz
135	3101065690000	Chip capacitor 0603 5.6PF C 50V(RoHS)	1	C715	T2B	U1:400-470MHz
136	3101060500010	Chip capacitor GRM1885C1H5R0BZ01D (RoHS)	1	C715	T2B	U2:450-500MHz

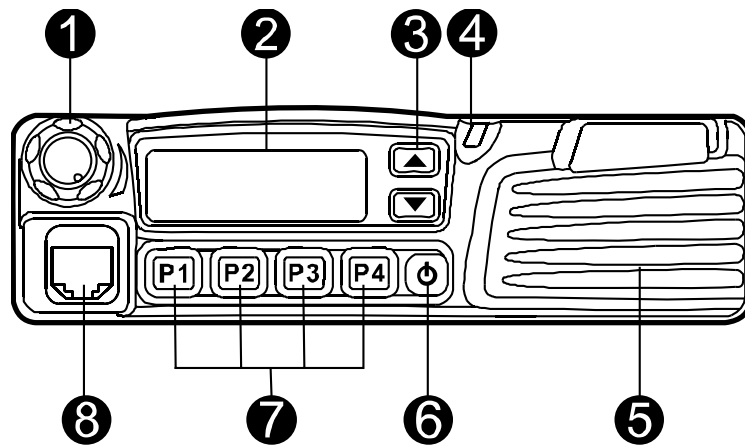
137	3101060300010	Chip capacitor GRM1885C1H3R0BZ01D (RoHS)	1	C715	T2B	U3:470-520MHz
138	3101061200000	Chip capacitor GRM1885C1H120JA01D (RoHS)	1	C715	T2B	U4:350-400MHz
139	3101060500010	Chip capacitor GRM1885C1H5R0BZ01D (RoHS)	1	C715	T2B	U5:440-470MHz
140	3101060500010	Chip capacitor GRM1885C1H5R0BZ01D (RoHS)	1	C714	T2B	U1:400-470MHz
141	3101060500010	Chip capacitor GRM1885C1H5R0BZ01D (RoHS)	1	C714	T2B	U2:450-500MHz
142	3101060300010	Chip capacitor GRM1885C1H3R0BZ01D (RoHS)	1	C714	T2B	U3:470-520MHz
143	3101061000000	Chip capacitor 0603 10PF J 50V (RoHS)	1	C714	T2B	U4:350-400MHz
144	3101060500010	Chip capacitor GRM1885C1H5R0BZ01D RoHS)	1	C714	T2B	U5:440-470MHz
145	3001053330010	Chip resistor 0402 33KΩ J 1/16W(RoHS)	1	R175	T1C	
146	410M600100920	VCO board FR4 1.6T/4L/10P 02(RoHS)	1			
147	3101062490000	Chip capacitor GRM1885C1H2R4BZ01D (RoHS)	1	C706	T2B	U1:400-470MHz
148	3101060100010	Chip capacitor GRM1885C1H1R0BZ01D (RoHS)	1	C706	T2B	U2:450-500MHz
149	3101060100010	Chip capacitor GRM1885C1H1R0BZ01D (RoHS)	1	C706	T2B	U3:470-520MHz
150	3101060600010	Chip capacitor GRM1885C1H6R0BZ01D (RoHS)	1	C706	T2B	U4:350-400MHz
151	3101061590010	Chip capacitor GRM1885C1H1R5BZ01D (RoHS)	1	C706	T2B	U5:440-470MHz
152	3001065630000	Chip resistor 0603 56KΩ J 1/10W(RoHS)	1	R717	T1A	U1:400-470MHz
153	3001063330010	Chip resistor 0603 33KΩ J 1/10W(RoHS)	1	R717	T1A	U2:450-500MHz
154	3001064730000	Chip resistor 0603 47KΩ J 1/10W(RoHS)	1	R717	T1A	U3:470-520MHz
155	3001062230000	Chip resistor 0603 22KΩ J 1/10W(RoHS)	1	R717	T1A	U4:350-400MHz
156	3001062230000	Chip resistor 0603 22KΩ J 1/10W(RoHS)	1	R717	T1A	U5:440-470MHz
157	3101063690000	Chip capacitor GRM1885C1H3R6BZ01D (RoHS)	1	C704	T2B	U1:400-470MHz
158	3101060200010	Chip capacitor GRM1885C1H2R0BZ01D (RoHS)	1	C704	T2B	U2:450-500MHz
159	3101060100010	Chip capacitor GRM1885C1H1R0BZ01D (RoHS)	1	C704	T2B	U3:470-520MHz
160	3101060500010	Chip capacitor GRM1885C1H5R0BZ01D (RoHS)	1	C704	T2B	U4:350-400MHz
161	3101060200010	Chip capacitor GRM1885C1H2R0BZ01D (RoHS)	1	C704	T2B	U5:440-470MHz
162	3104081060120	Tantalum capacitor TEESVA1C106M8R (RoHS)	1	C724	T2A	

TM-610 VHF/UHF Parts List 1 (Display Unit)

No.	Material No.	Description	Qty.	Ref. No.	Print No.
1	3001061010000	Chip Resistor 100Ω J 1/10W 0603 (RoHS)	1	R341	T3B
2	3001061010000	Chip Resistor 100Ω J 1/10W 0603 (RoHS)	1	R344	B4H
3	3001061030000	Chip Resistor 10KΩ D 1/10W 0603 (RoHS)	1	R304	B1C
4	3001061040000	Chip Resistor 100KΩ D 1/10W 0603 (RoHS)	1	R319	B4D
5	3001061210000	Chip Resistor 120Ω J 1/10W 0603 (RoHS)	1	R311	T2J
6	3001061830000	Chip Resistor 18KΩ D 1/10W 0603 (RoHS)	1	R308	T2G
7	3001061830000	Chip Resistor 18KΩ D 1/10W 0603 (RoHS)	1	R313	T2I
8	3001062700000	Chip Resistor 27Ω J 1/10W 0603 (RoHS)	1	R306	T2G
9	3001063310010	Chip Resistor 330Ω J 1/10W 0603 (RoHS)	1	R301	B4H
10	3001063920000	Chip Resistor 3.9KΩ J 1/10W 0603 (RoHS)	1	R307	T2G
11	3101064710000	Chip Capacitor 470PF K 50V X7R 0603 (RoHS)	1	C301	T2D
12	3101064710000	Chip Capacitor 470PF K 50V X7R 0603 (RoHS)	1	C302	T2D
13	3399010600000	Diode HSB123TR-E (RoHS)	1	D303	T2C
14	3399010600000	Diode HSB123TR-E (RoHS)	1	Q305	B4B
15	3399010600000	Diode HSB123TR-E (RoHS)	1	Q306	B3H
16	3403002000000	PNP Transistor 32V 1A 82~390 SC-62 (RoHS)	1	Q302	T2D
17	3403008000010	Transistor DTC114EE(TL) (RoHS)	1	Q301	B2B
18	3403008000010	Transistor DTC114EE(TL) (RoHS)	1	Q303	T1H
19	3403008000010	Transistor DTC114EE(TL) (RoHS)	1	Q304	T2I
20	3609023000020	Driver IC 1.8~5.5V 16-Bit TQFP64 (RoHS)	1	IC301	T2E
21	5207032000000	FPC Connector 32PIN 0.50mm SMD (RoHS)	1	J302	B2D
22	3213306221010	Chip Inductor 0.22uH K 50mA 0.8Ω 0603 (RoHS)	1	L301	B3I
23	3213306221010	Chip Inductor 0.22uH K 50mA 0.8Ω 0603 (RoHS)	1	L302	T5C
24	3001050000000	Chip Resistor 0Ω J 1/16W 0402 (RoHS)	1	R320	B3H
25	3001051010000	Chip Resistor 100Ω J 1/16W 0402 (RoHS)	1	R321	T5C
26	3001051010000	Chip Resistor 100Ω J 1/16W 0402 (RoHS)	1	R342	B2E
27	3001051520000	Chip Resistor 1.5KΩ J 1/16W 0402 (RoHS)	1	R315	T1D
28	3001051520000	Chip Resistor 1.5KΩ J 1/16W 0402 (RoHS)	1	R316	T1E
29	3221506601000	Bead 600Ω 100MHz ±25% 500mA 0603 (RoHS)	1	L303	B2F
30	3001051210000	Chip Resistor 120Ω J 1/16W 0402 (RoHS)	1	R310	T1I
31	3307110200000	LED KP-3025SURKCGKC Red&Green 30mA (RoHS)	1	LED	T1J
32	3101051030020	Chip Capacitor 0.01UF K 25V 0402 (RoHS)	1	C304	T1G
33	410M6101000H0	PCB Contol Panel FR4 1.2T/2L/4P H (RoHS)	1		
34	4002000000180	Fuse 0467.250NR 32VAC 0.25A 0603-FF (RoHS)	1	FP101	B4I
35	3307110000000	LED KP-1608SECK Super orange 30mA (RoHS)	1	LED302	T1D
36	3307110000000	LED KP-1608SECK Super orange 30mA (RoHS)	1	LED303	T1F
37	3307110000000	LED KP-1608SECK Super orange 30mA (RoHS)	1	LED304	T1G
38	3307110000000	LED KP-1608SECK Super orange 30mA (RoHS)	1	LED306	T4H
39	3307110000000	LED KP-1608SECK Super orange 30mA (RoHS)	1	LED307	T3I
40	3307110000000	LED KP-1608SECK Super orange 30mA (RoHS)	1	LED308	T2I
41	3307110000000	LED KP-1608SECK Super orange 30mA (RoHS)	1	LED309	T4D
42	3307110000000	LED KP-1608SECK Super orange 30mA (RoHS)	1	LED310	T4E
43	3307110000000	LED KP-1608SECK Super orange 30mA (RoHS)	1	LED311	T4G
44	3001051020010	Chip Resistor 1KΩ J 1/16W 0402 (RoHS)	1	R340	B5G

Tuning Description

1. Key Functions



- ① Volume Control Knob
- ② LCD Display
- ③ Programmable Function Keys ▲/▼
- ④ LED Indicator
- ⑤ Speaker
- ⑥ Power Switch
- ⑦ Programmable function keys **P1/P2/P3/P4**
- ⑧ Microphone Jack

2. Panel Tuning Mode

2-1 Basic Operations in Panel Tuning Mode

The transceiver is tuned in this mode. For details on mode selection, see “Software Specifications -> Keypad Entry for Mode Startup -> Panel Tuning Mode”.

2-2 Enter Panel Tuning Mode

Power on the radio while holding down **P1** to enter the tuning mode, and the LED would flash red twice. As for the tuning items, all the frequencies and signaling, other than the maximum frequency deviation and sensitivity, return to the values valid for the test frequency channels and test signaling channels before entering the panel tuning mode.

No.	Tuning Item
1	TX High Power
2	TX Low Power
3	Maximum Frequency Deviation
4	CDCSS Balance
5	CTCSS Deviation (67.0Hz)
6	CTCSS Deviation (151.4Hz)
7	CTCSS Deviation (254.1Hz)
8	CDCSS Deviation
9	DTMF Deviation
10	MSK Deviation
11	Single Tone Deviation
12	RX Sensitivity
13	Squelch ON Level (9)
14	Squelch ON Level (3)
15	Squelch OFF Level (9)
16	Squelch OFF Level (3)

Note: The tuning items are displayed on the LCD as described in Section “2-3”.

2-3 Tuning Items and Display

Tuning Items and Display (* * *: 1-256)

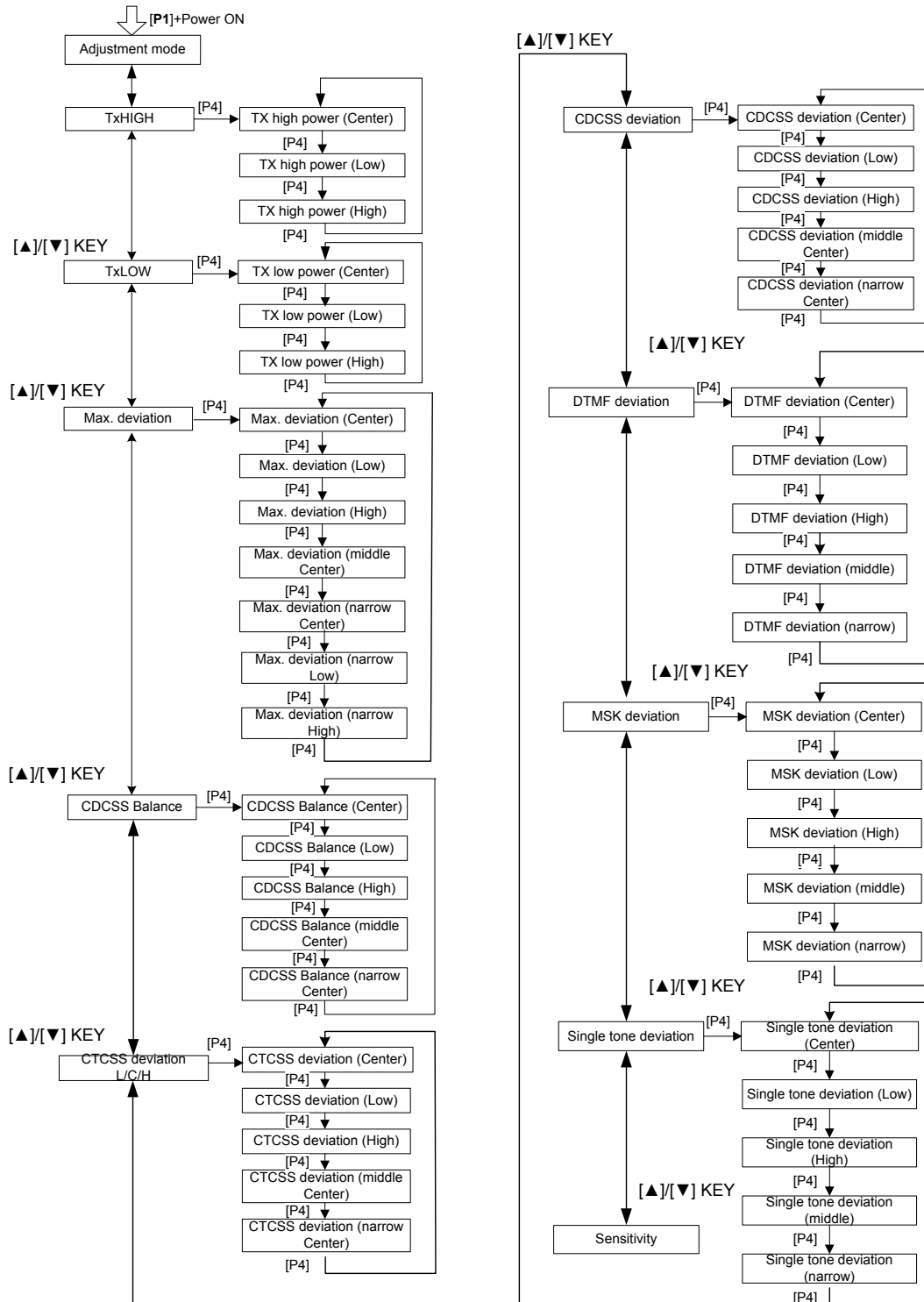
Tuning Item	Tuning Item Display	Wideband/ Narrowband	Frequency	Sub-item Display	Description
Tx Power	TXHIGH	High Power W	Center	_C ***	No signaling
			Low	_L ***	No signaling
			High	_H ***	No signaling
	TXLOW	Low Power W	Center	_C ***	No signaling
			Low	_L ***	No signaling
			High	_H ***	No signaling
Maximum Frequency Deviation	MAXDEV	W	Center	_C ***	No signaling
			Low	_L ***	No signaling
			High	_H ***	No signaling
		M	Center	M_C ***	No signaling
		N	Center	N_C ***	No signaling
			Low	N_L ***	No signaling
			High	N_H ***	No signaling
CDCSS Balance	CDCSSBAL	W	Center	_C ***	100Hz square wave
			Low	_L ***	100Hz square wave
			High	_H ***	100Hz square wave
		M	Center	M_C ***	100Hz square wave
		N	Center	N_C ***	100Hz square wave

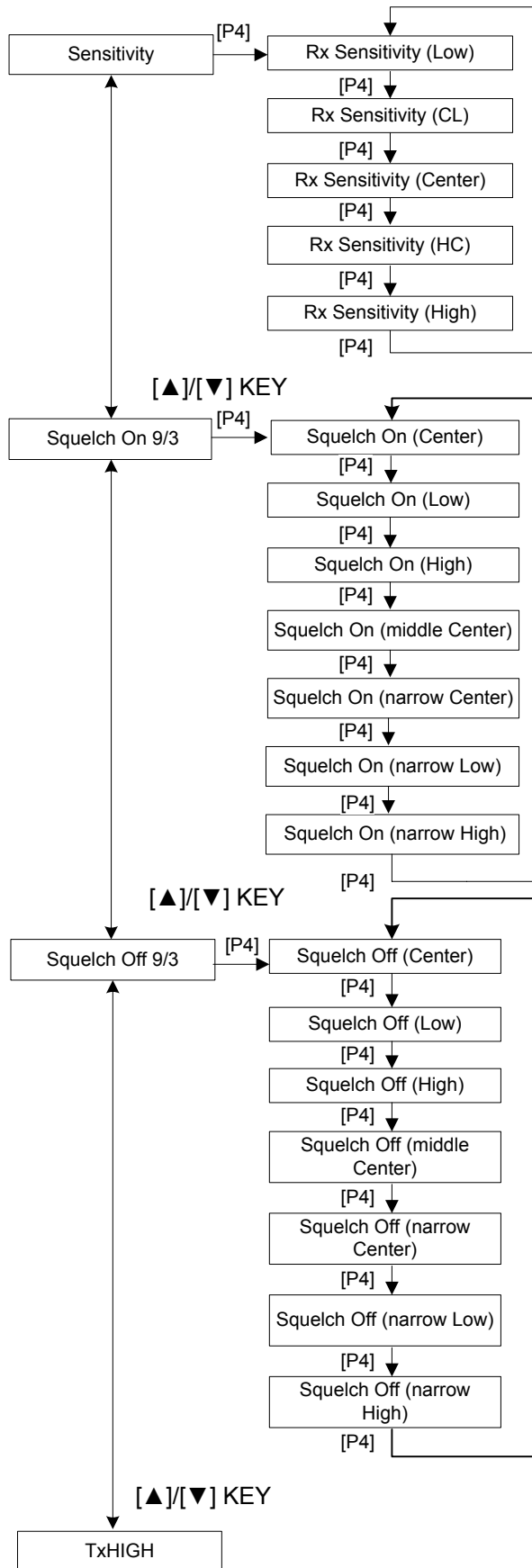
CTCSS Deviation	CTCL_DEV	W	Center	_C ***	CTCSS: 67.0Hz
			Low	_L ***	CTCSS: 67.0Hz
			High	_H ***	CTCSS: 67.0Hz
		M	Center	M_C ***	CTCSS: 67.0Hz
		N	Center	N_C ***	CTCSS: 67.0Hz
	CTCC_DEV	W	Center	_C ***	CTCSS: 151.4Hz
			Low	_L ***	CTCSS: 151.4Hz
			High	_H ***	CTCSS: 151.4Hz
		M	Center	M_C ***	CTCSS: 151.4Hz
		N	Center	N_C ***	CTCSS: 151.4Hz
	CTCH_DEV	W	Center	_C ***	CTCSS: 254.1Hz
			Low	_L ***	CTCSS: 254.1Hz
			High	_H ***	CTCSS: 254.1Hz
		M	Center	M_C ***	CTCSS: 254.1Hz
		N	Center	N_C ***	CTCSS: 254.1Hz
CDCSS Deviation	CDCSS_DEV	W	Center	_C ***	CDCSS: 023N
			Low	_L ***	CDCSS: 023N
			High	_H ***	CDCSS: 023N
		M	Center	M_C ***	CDCSS: 023N
DTMF Deviation	DTMFDEV	W	Center	_C ***	DTMF: 9
			Low	_L ***	DTMF: 9
			High	_H ***	DTMF: 9
		M	Center	M_C ***	DTMF: 9
MSK Deviation	MSKDEV	W	Center	_C ***	0XAAA...
			Low	_L ***	0XAAA...
			High	_H ***	0XAAA...
		M	Center	M_C ***	0XAAA...
Single Tone Deviation	TONEDEV	W	Center	_C ***	1KHz
			Low	_L ***	1KHz
			High	_H ***	1KHz
		M	Center	M_C ***	1KHz
RX Sensitivity	SENSITVI	N	Center	N_C ***	1KHz
		-	Low	_L ***	No signaling, SQL off
		-	Low-center	_LC ***	No signaling, SQL off
		-	Center	_C ***	No signaling, SQL off
		-	Center-high	_CH ***	No signaling, SQL off
		-	High	_H ***	No signaling, SQL off

Squelch On Level	OPENSQL9	SQL 9 W	Center	_C ***	No signaling
			Low	_L ***	No signaling
			High	_H ***	No signaling
		SQL 9 M	Center	M_C ***	No signaling
		SQL 9 N	Center	N_C ***	No signaling
			Low	N_L ***	No signaling
			High	N_H ***	No signaling
	OPENSQL3	SQL 3 W	Center	_C ***	No signaling
			Low	_L ***	No signaling
			High	_H ***	No signaling
		SQL 3 M	Center	M_C ***	No signaling
		SQL 3 N	Center	N_C ***	No signaling
			Low	N_L ***	No signaling
			High	N_H ***	No signaling
Squelch Off Level	CLOSSQL9	SQL 9 W	Center	_C ***	No signaling
			Low	_L ***	No signaling
			High	_H ***	No signaling
		SQL 9 M	Center	M_C ***	No signaling
		SQL 9 N	Center	N_C ***	No signaling
			Low	N_L ***	No signaling
			High	N_H ***	No signaling
	CLOSSQL3	SQL 3 W	Center	_C ***	No signaling
			Low	_L ***	No signaling
			High	_H ***	No signaling
		SQL 3 M	Center	M_C ***	No signaling
		SQL 3 N	Center	N_C ***	No signaling
			Low	N_L ***	No signaling
			High	N_H ***	No signaling

2-4 Flow Chart

You can perform tuning in the following steps:

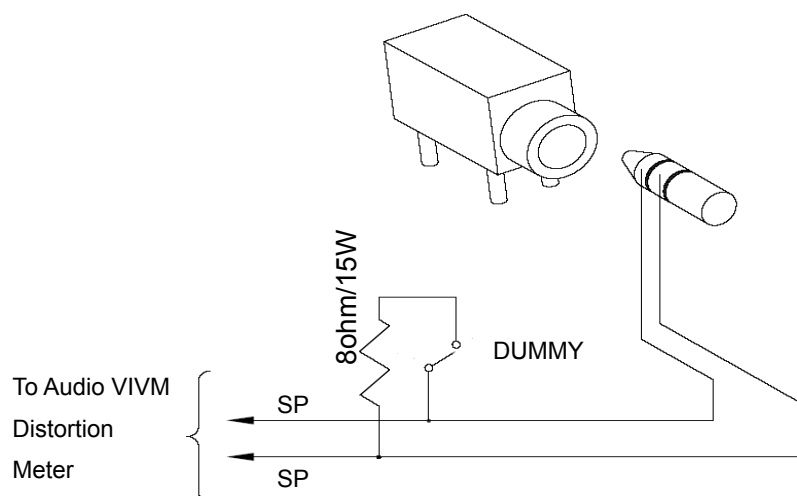




3. Instruments for Tuning

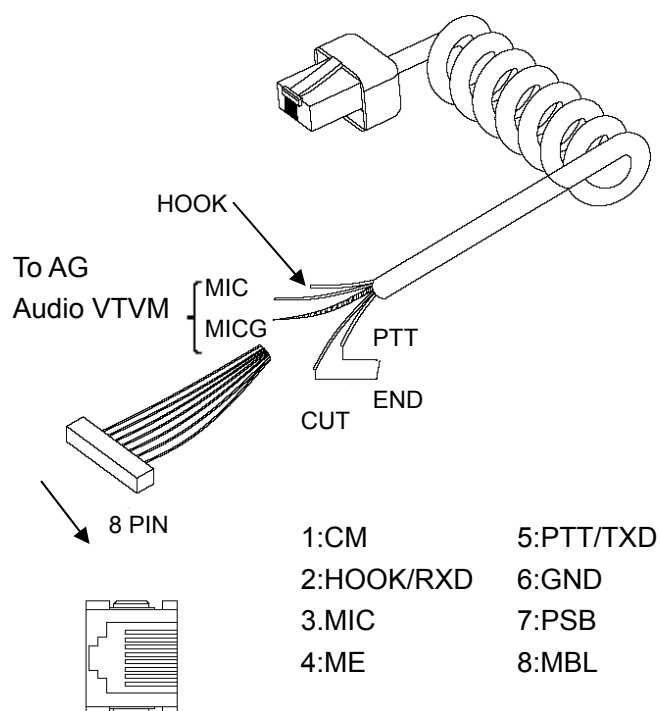
Instrument	Method	Specifications
Standard Signal Generator (SSG)	Frequency Range	VHF: 136-174 MHz; UHF: 400-470 MHz 450-500 MHz 470-520 MHz 350-400 MHz 440-470 MHz
	Modulation Method	Frequency modulation and external modulation
	Power Output	0.1uV and above
Power Meter	Input Impedance	50Ω
	Frequency Range	VHF: 136-174 MHz; UHF: 400-470 MHz 450-500 MHz 470-520 MHz 350-400 MHz 440-470 MHz
	Measurement Capability	About 25W (high power)/5W (low power)
Tuning Meter	Frequency Range	VHF: 136-174 MHz; UHF: 400-470 MHz 450-500 MHz 470-520 MHz 350-400 MHz 440-470 MHz
Digital Voltmeter (DVM)	Measuring Range	1 to 20V DC
	Accuracy	High input impedance for minimum circuit load
Oscilloscope		DC to 30MHz AC
High Sensitivity Frequency Counter	Frequency Range	10Hz to 600MHz
	Frequency Stability	0.2ppm or less
Ammeter		13A or more
AF Vacuum Tube Voltmeter (AF VTVM)	Frequency Range	50Hz to 10kHz
	Voltage Range	3mV to 3V
Audio Generator (AG)	Frequency Range	50Hz to 5kHz
	Power Output	0 to 1V
Distortion Meter	Measurement Capability	3% or less (1KHz)
	Input Level	50mV to 10Vrms
4Ω Dummy Load		About 4Ω, 20W
Regulated Power Supply		13.6V, about 20A (adjustable within 9~20V)
		Applicable when an antenna is used.

3-1 Test Cable for Speaker Output



3-2 Test Cable for Microphone Input

The following test cable is recommended:



4. Tuning Instructions

The mobile radio can be tuned manually or through PC programming software. For information on manual tuning, see “Software Specifications -> Panel Tuning Mode”.

Instruments:

Communication Test Set	1 set
Spectrum Analyzer	1 set
20A/30V Power Supply	1 set
Digital Voltmeter	1 set
Power Meter	1 set
Signal Cable (with dummy load)	1 set

Method and Procedure:

1) Downloading

- Connect the mobile radio with PC via programming cable; and turn the radio on.
- Click “Download” on software interface.
- Click “Exit” when download is completed.
- Turn the radio off and remove the programming cable.

2) Initialization

It's necessary to set the frequency and initialize the mobile radio before tuning, because there is no required information in EEPROM when the radio is delivered from the factory.

- Turn on the power while holding down P2, and press P4 after the LCD displays “DESTINA + initialized value” (Refer to “Model No.” in the Frequency Table).
- Initialization is done when the red LED on the front panel goes out.

3) Tuning

Some items can be tuned in conventional mode and the others in manual tuning mode.

- Turn on the power to enter conventional mode by default.
- Turn the radio off and restart it by holding down P1; then the radio will enter manual tuning mode.

The tuning items are displayed on the LCD.

- Frequency Table

Model No.	RX/TX	1 (C)	2 (L)	3 (H)	4	5	6	7	8
0 (V)	RX(MHz)	155.15	136.15	173.85	145.55	164.50	155.00	155.20	155.40
	TX(MHz)	155.00	136.00	174.00	145.50	164.50	155.00	155.20	155.40
1 (U1)	RX(MHz)	435.15	400.15	469.85	417.55	452.50	435.00	435.20	435.40
	TX(MHz)	435.00	400.00	470.00	417.50	452.50	435.00	435.20	435.40
2 (U2)	RX(MHz)	475.15	450.15	499.85	462.55	487.50	475.00	475.20	475.40
	TX(MHz)	475.00	450.00	500.00	462.50	487.50	475.00	475.20	475.40
3 (U3)	RX(MHz)	495.15	470.15	519.85	482.55	507.50	495.00	495.20	495.40
	TX(MHz)	495.00	470.00	520.00	482.50	507.50	495.00	495.20	495.40
4 (U4)	RX(MHz)	375.15	350.15	399.85	362.55	387.50	375.00	375.20	375.40
	TX(MHz)	375.00	350.00	400.00	362.50	387.50	375.00	375.20	375.40
5 (U5)	RX(MHz)	455.15	440.15	469.85	447.55	462.50	455.00	455.20	455.40
	TX(MHz)	455.00	440.00	470.00	447.50	462.50	455.00	455.20	455.40

TM-610 V: 136-174;

TM-610 U1: 400-470;

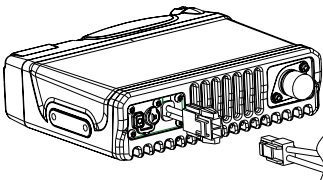
TM-610 U2: 450-500;

TM-610 U3: 470-520;

TM-610 U4: 350-400;

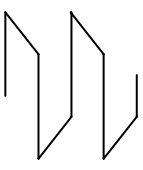
TM-610 U5: 440-470;

VCO Tuning

Item	Condition	Measurement		Tuning		Specification/ Remarks
		Test Instrument	Terminal	Part	Method	
1. Power Supply	13.6V DC	 Note: 1. This radio can be installed in negative ground electrical systems only. Reverse polarity will cause the cable fuse to blow. Check the vehicle ground polarity before installation. 2. If DC power is to be controlled by the vehicle ignition switch, a switch relay should be used to switch the positive power lead. The vehicle ignition switch then controls DC to the relay coil.				
2. VCO Lock Voltage (TX)	1. CH: TX HI	Digital Voltmeter	CV	TC701	6.1V±0.1V	TM-610 U1
					5.0V±0.1V	TM-610 U2
					5.1V±0.1V	TM-610 U3
					5.1V±0.1V	TM-610 U4
					4.0V±0.1V	TM-610 U5
	2. CH: TX LO				6.0V±0.1V	TM-610 V
					Check	> 1.0V
3. VCO Lock Voltage (RX)	1. CH: RX HI	Digital Voltmeter	CV	TC702	6.0V±0.1V	TM-610 U1
						TM-610 V
						TM-610 U3
						TM-610 U4
					2. CH: RX LO	6.5V±0.1V
	4.0V±0.1V					TM-610 U5
					Check	> 1.0V

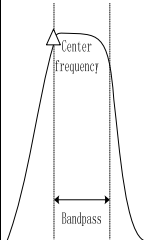
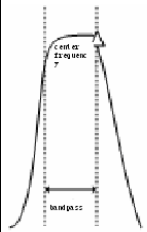
Transmitter Tuning

Item	Condition	Measurement		Tuning		Specification/ Remarks
		Test Instrument	Terminal	Part	Method	
4. TX Frequency	Switch to CH_4 (Do not enter any tuning item).	Communication Test Set	ANT	Adjust VR801.	Adjust Channel frequency.	Error <50Hz
5. TX Power	Each channel corresponds to a specific TX frequency. Enter the item "TXHIGH" and "TXLOW" in turn, and press P4 to enter "_C", "_L" or "_H" to tune the high or low power.	Communication Test Set Ammeter	ANT	Adjust software settings; press P4 to save and enter the next item. Note: VR101 is required to be tuned for VHF high power (not required for UHF).	High Power: PO=23~25WW I≤8.0A	Check high power
					Low Power: PO=5±0.5W I≤5.0A	Check low power
6. Maximum Frequency Deviation	Each channel corresponds to a specific TX frequency. Enter the tuning item "MAXDEV" to adjust among "_C", "_L", "_H", "M_C", "N_C", "N_L" and "N_H".	Communication Test Set FILTER: 0.05-15KHz AF:1KHz 75mV	ANT MIC Jack	Adjust software settings; press P4 to save and enter the next item.	Check deviation at CH L/C/H: 4.0±0.2KHz (W)	"_C", "_L" and "_H" for wideband
					Check deviation at CH L/C/H: 3.2±0.2KHz (M)	"M_C" for mediumband
					Check deviation at CH L/C/H: 2.0.0±0.2KHz (N)	"N_C", "N_L" and "N_H" for narrowband
7. Modulation Sensitivity	Each channel corresponds to a specific TX frequency.	Communication Test Set Filter: 0.05-15KHz AF: 1KHz 7.5mV	ANT MIC Jack		Check deviation: 2.7KHz-3.4KHz (W) 2.2KHz-2.7KHz (M) 1.3KHz-1.7KHz (N)	Check
8. Modulation Distortion					≤5%	

9. CDCSS Balance	Each channel corresponds to a specific TX frequency. Enter the tuning item "CDCSSBAL", and press P4 to adjust among "_C", "_L", "_H", "M_C" and "N_C".	Communication Test Set Filter <20Hz-300Hz AF: OFF	ANT	Use ▲/▼ to adjust software settings; press P4 to save and enter the next item.		"_C", "_L" and "_H" indicate the widebands respectively of center, low and high frequencies ; "M_C" indicates the mediumband of center frequency (20K); "N_C" indicates the narrowband of center frequency (12.5K).
10. CTCSS Deviation	Each channel corresponds to a specific TX frequency. Enter tuning items "CTCL_DEV", "CTCC_DEV" and "CTCH_DEV" (to tune the CTCSS at 67Hz/151.4Hz/254.1Hz). Press P4 to adjust among "_C", "_L", "_H", "M_C" and "N_C".	Communication Test Set Filter <20Hz-300Hz AF: OFF	ANT	Use ▲/▼ to adjust software settings; press P4 to save and enter the next item.	Adjust the deviation to 0.75KHz±0.15KHz (W) 0.60KHz±0.15KHz (M) 0.37KHz±0.15KHz (N)	"_C", "_L" and "_H" indicate the widebands of each frequency; "M_C" indicates the medium band; "N_C" indicates the narrowband of center frequency.
11. CDCSS Deviation	Each channel corresponds to a specific TX frequency. Enter tuning item "CDCSS_DEV", and press P4 to adjust among "_C", "_L", "_H", "M_C" and "N_C".	Communication Test Set Filter <20Hz-300Hz AF: OFF	ANT	Use ▲/▼ to adjust software settings; press P4 to save and enter the next item.	Adjust the deviation to 0.75KHz±0.15KHz (W) 0.60KHz±0.15KHz (M) 0.37KHz±0.15KHz (N)	"_C", "_L" and "_H" indicate the widebands of each frequency; "M_C" indicates mediumband; "N_C" indicates the narrowband of center frequency.

12. DTMF Deviation	Each channel corresponds to a specific TX frequency. Enter tuning item "DTMFDEV", and press P4 to adjust among "_C", "_L", "_H", "M_C" and "N_C".	Communication Test Set Filter 300Hz--3KHz AF: OFF	ANT	Use ▲/▼ to adjust software settings; press P4 to save and enter the next item.	3.0KHz±0.2KHz (W) 2.4KHz±0.2KHz (M) 1.5KHz±0.2KHz (N)	"_C", "_L" and "_H" indicate the widebands of each frequency; "M_C" indicates the medium band; "N_C" indicates the narrowband of center frequency.
13. MSK Deviation	Each channel corresponds to a specific TX frequency. Enter tuning item "MSKDEV", and press P4 to adjust among "_C", "_L", "_H", "M_C" and "N_C".	Communication Test Set Filter 300Hz--3KHz AF: OFF	ANT	Use ▲/▼ to adjust software settings; press P4 to save and enter the next item.	3.0KHz±0.2KHz (W) 2.4KHz±0.2KHz (M) 1.5KHz±0.2KHz (N)	"_C", "_L" and "_H" indicate the widebands of each frequency; "M_C" indicates the medium band; "N_C" indicates the narrowband of center frequency.
14. Single Tone Deviation	Each channel corresponds to a specific TX frequency. Enter tuning item "TONEDEV", and press P4 to adjust among "_C", "_L", "_H", "M_C" and "N_C".	Communication Test Set Filter 300Hz--3KHz AF: OFF	ANT	Use ▲/▼ to adjust software settings; press P4 to save and enter the next item.	Adjust the deviation to 3.0KHz±0.2KHz (W) 2.4KHz±0.2KHz (M) 1.5KHz±0.2KHz (N)	"_C", "_L" and "_H" indicate the widebands of each frequency; "M_C" indicates the medium band; "N_C" indicates the narrowband of center frequency.
15. TX S/N	Each channel corresponds to a specific TX frequency.	Communication Test Set Filter 0.3-3KHz AF: 1KHz 7.5Mv DEV: 3KHz	ANT	Check	S/N≥45 (W) S/N≥40 (N)	

Receiver Tuning

Item	Condition	Measurement		Tuning		Specification / Remarks
		Test Instrument	Terminal	Part	Method	
16. RF Bandpass Filter	Each channel corresponds to a specific RX frequency. Enter tuning item "SENSITVI", and press P4 to adjust among "_L", "_LC", "_C", "_CH" and "_H".	Scanner	ANT TC101 TC102	Use ▲/▼ to adjust TC101 and TC102 manually, and then press P4 to save and enter the next item. For VHF, only TC101 needs to be adjusted.	Adjust the gain to the maximum value; the corresponding frequencies of VHF and UHF are respectively at the rightmost and leftmost of the bandpass waveform. Press P4 to save.	UHF waveform  VHF waveform 
17. Maximum Volume:	Freq: RX Center; go to CH_1 (C), which corresponds to a specific frequency.	Communication Test Set SSG output: -47dBm MOD: 1KHz DEV: ±3KHz (W) ±1.5KHz (N) Filter: 0.3-3.0KHz	ANT SP Jack	K301		Check the maximum volume: 4.4V-5.2V
18. Sensitivity	1. Test mode CH: RX Center; manually switch to CH_1 (C).	Communication Test Set SSG output: -118dBm MOD: 1KHz DEV: ±3KHz (W) ±2.4KHz (M) ±1.5KHz (N) FILTER: 0.3-3.0KHz	ANT SP Jack	Switch between wideband and narrowband (turn power on while holding down P1 to enter Channel Set Mode).	Adjust K301 to provide rated volume output.	SINAD: 12dB or above
	2. Test mode CH: RX LO; manually switch to CH_2 (L).					
	3. Test mode CH: RX HI; manually switch to CH_3 (H).					

19. Squelch On	Enter tuning items “OPENSQ9” and “OPENSQ3” in turn, and then press P4 to adjust among “_C”, “_L”, “_H”, “M_C”, “N_C”, “N_L” and “N_H”.	Communication Test Set SSG output: -120dBm (Level 3)	ANT SP Jack	Adjust software settings	Press P3 and P4 in turn for the CPU to read and write squelch level. (Note: Do not press P4 until the LED glows green after P3 is pressed.)
20. Squelch Off	Enter tuning items “CLOSESQ9” and “CLOSESQ3” in turn, and then press P4 to adjust among “_C”, “_L”, “_H”, “M_C”, “N_C”, “N_L” and “N_H”.	Communication Test Set SSG output: -122dBm (Level 3)			Press P3 and P4 in turn for the CPU to read and write squelch level. (Note: Do not press P4 until the LED glows green after P3 is pressed.)
21. Distortion		Communication Test			DIS≤5%
22. S/N	Test mode CH: RX Center	Set SSG output: -60dBm		Filter: 0.3-3.0KHz	Check S/N≥47 (W) S/N≥42 (N)

Note: The radio must be covered with aluminum chassis during adjustment of sensitivity, TX power, signaling waveform, frequency deviation and RX squelch; the RF power meter must be connected to the antenna connector during transmission; and the SINAD meter with a 16ohm load must be connected to the external speaker jack.

Terminal Function

1. Display Unit

Pin No.	Name	Description
J301 (To MIC Jack)		
1	CM	Serial data input for keypad MIC
2	HOOK/RXD	Hook signal/serial data input
3	MIC	MIC signal input
4	ME	MIC ground
5	PTT/TXD	PTT signal input/ Serial data output
6	GND	Ground
7	PSB	Power output upon power switch (13.6V $\pm$ 15%).
8	MBL	MIC backlight control signal output H: On, L: Off.
J303 (To Display Unit)		
1	VCC	+5V
2	BS	Power output upon power switch (13.6V $\pm$ 15%)
3	VCC	+5V
4	BS	Power output upon power switch (13.6V $\pm$ 15%)
5	NC	
6	MICDAT	Serial data input for keypad MIC
7	NC	
8	ME	MIC ground
9	MIC	MIC signal output
10	GND	Ground
11	VO	Audio input after tuned by K301
12	PSW	Power switch control signal output
13	RXD2	Serial data output
14	TXD2	Serial data output
15	VI	Audio output after tuned by K301
16	TYPE	Model select (H: TM-600; L: TM-610)
17	P4	P4 signal output
18	P3	P3 signal output
19	P2	P2 signal output
20	P1	P1 signal output
21	SLED	Scan indicator
22	PLED	Low power indicator
23	RLED	TX indicator control
24	GLED	RX indicator control
25	LED1	Channel display control
26	LED7	Channel display control
27	LED0	Channel display control
28	LED2	Channel display control

29	LED5	Channel display control
30	LED3	Channel display control
31	LED6	Channel display control
32	LED4	Channel display control

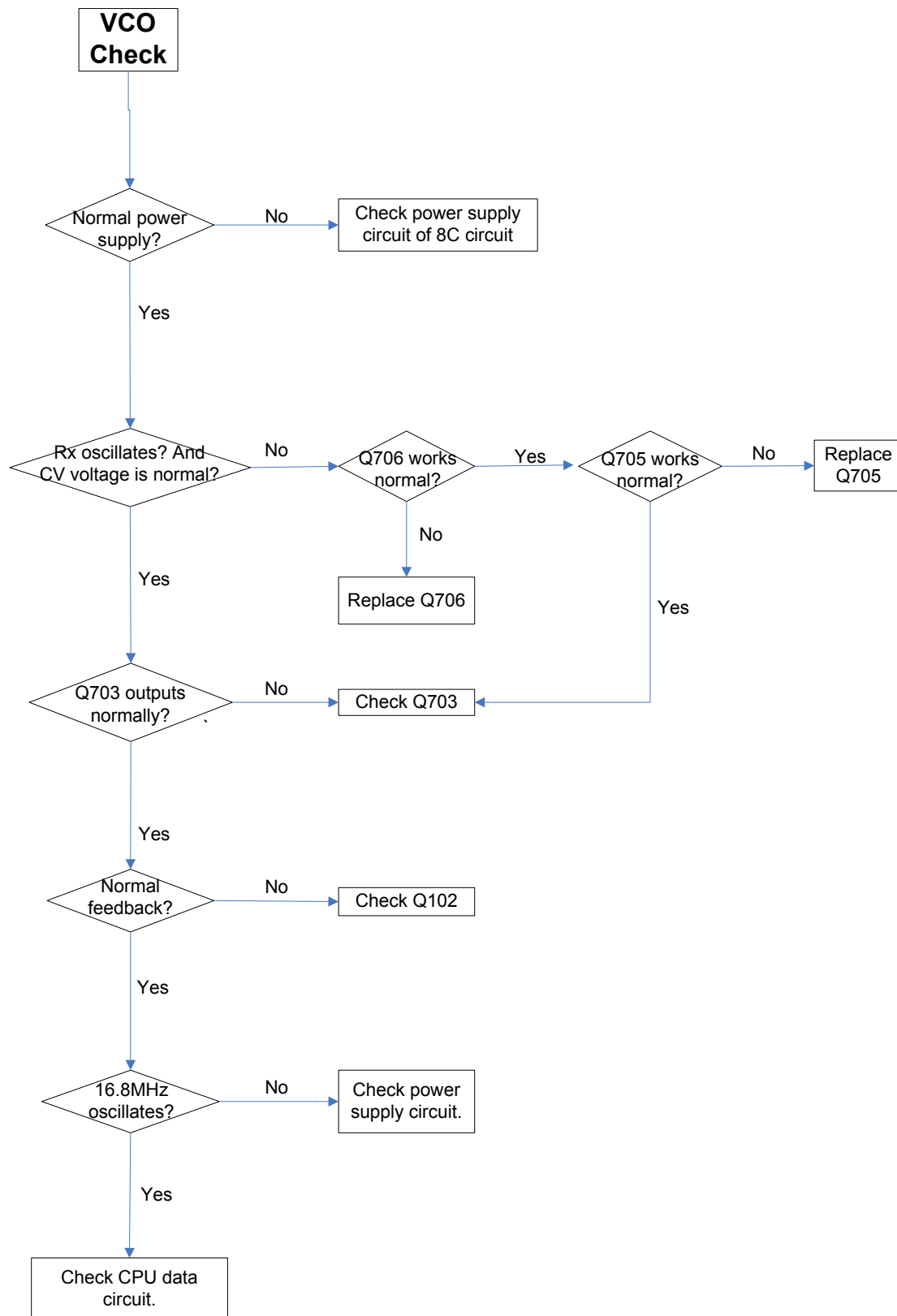
2. Tx-Rx Unit

Pin No.	Name	Description
J501 (To Display Unit)		
1	VCC	+5V
2	BS	Power output upon power switch (13.6V $\pm$ 15%)
3	VCC	+5V
4	BS	Power output upon power switch (13.6V $\pm$ 15%)
5	NC	NC
6	MICDAT	Serial data input for keypad MIC
7	NC	NC
8	ME	MIC ground
9	MIC	MIC signal input
10	GND	Ground
11	VO	Audio output after tuned by K301
12	PSW	Power switch control signal output
13	RXD2	Serial data output
14	TXD2	Serial data input
15	VI	Audio input after tuned by K301
16	TYPE	Model select (H: TM-600; L: TM-610)
17	P4	P4 signal output
18	P3	P3 signal output
19	P2	P2 signal output
20	P1	P1 signal output
21	SLED	Scan indicator
22	PLED	Low power indicator
23	RLED	TX indicator control
24	GLED	RX indicator control
25	LED1	Channel display control
26	LED7	Channel display control
27	LED0	Channel display control
28	LED2	Channel display control
29	LED5	Channel display control
30	LED3	Channel display control
31	LED6	Channel display control
32	LED4	Channel display control
J504 (To Speaker)		
1	SP1	BTL Input for external speaker

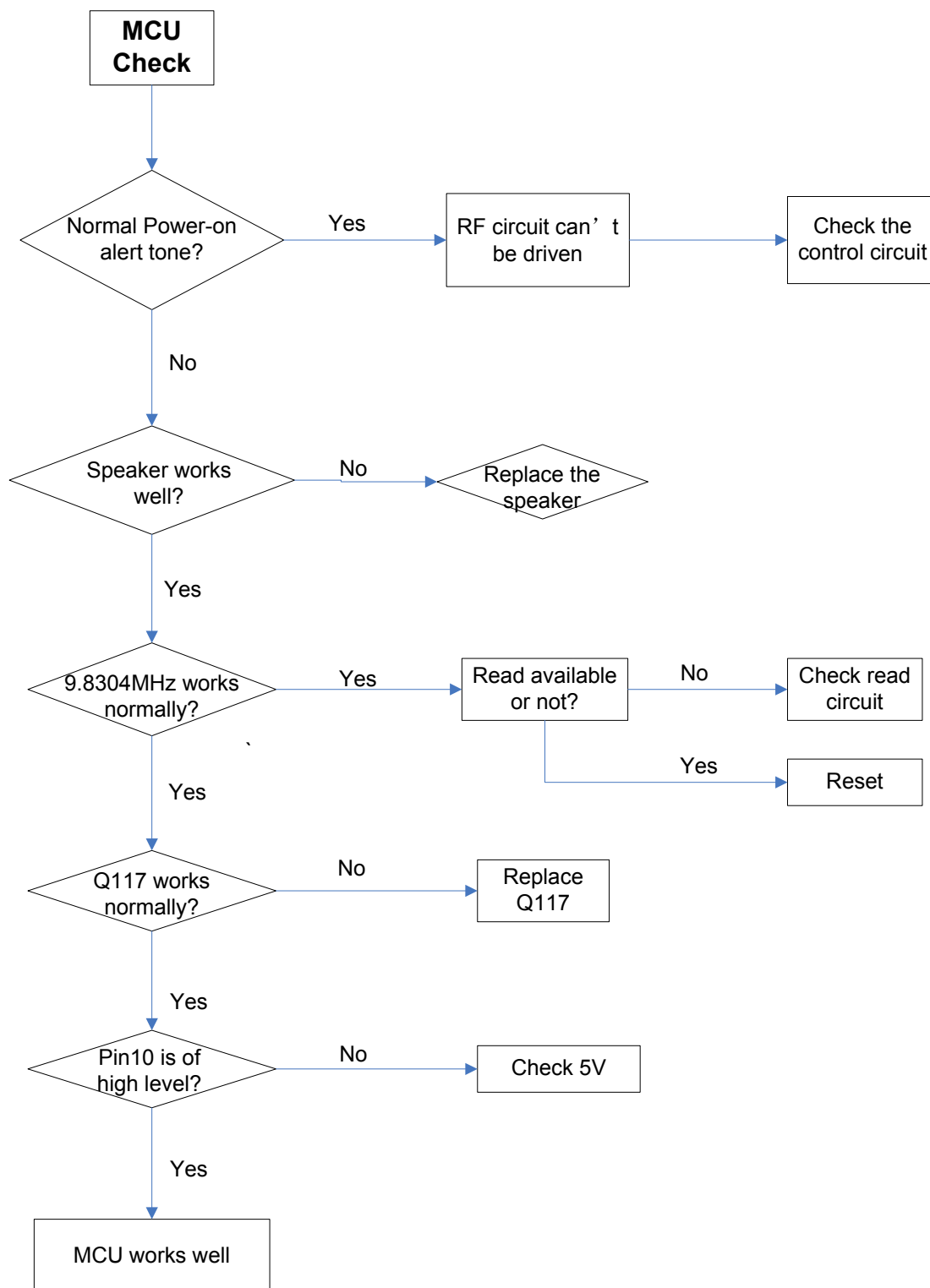
2	SP2	BTL Input for external speaker
J503 of old version mobile radio (to Repeater)		
1	TXD1	Serial data input
2	RXD1	Serial data output
3	MIC2	External MIC signal output
4	ME	MIC ground
5	AF-OUT	Filtered audio output
6	TI	Filtered CTCSS/CDCSS output
7	PA1	MIC signal output
8	PA2	MIC signal output
9	E	Ground
10	IGN	Ignition sensor input
11	SB	Power output upon power switch (13.6V $\pm$ 15%)
12	AUX1	Programmable auxiliary port
13	AUX2	Programmable auxiliary port
14	AUX4	Programmable auxiliary port
15	AUX5	Programmable auxiliary port
J503 of new version mobile radio (to Repeater)		
1	TXD2	Transmit and read
2	RXD2	Write
3	MIC2	External MIC input
4	ME	External MIC ground
5	AF_O	RX audio output (300-3KHz, de-emphasized) (default)
	DI	Digital signal modulation input (optional)
6	PA1	SPEAKER1 signal output (optional)
	RSSI	RSSI detect (default)
7	PA2	SPEAKER2 signal output (optional)
	PCO	RF power control (default)
8	AUX1	Functions to be expanded (for AUX1 to AUX4): 1. External PTT; 2. Data Transmission PTT; 3. Speaker Mute; 4. External Monitor; 5. ▲ Key; 6. ▼ Key; 7. External Hook; 8. Emergency Call; 9. MIC Mute; 10. RX Carrier; 11. RX Audio; 12. Digital Modulation Input
9	AUX2	
10	AUX3	
11	AUX4	
12	DET	RX audio output, AK2346 (default)
	TI	Filtered CTCSS/CDCSS output (optional)
13	E	Ground
14	SB	13.6V power (default)
	5C	5V power, maximum current is 1A (optional)
15	IGN	Ignition sensor input

Troubleshooting Flow Chart

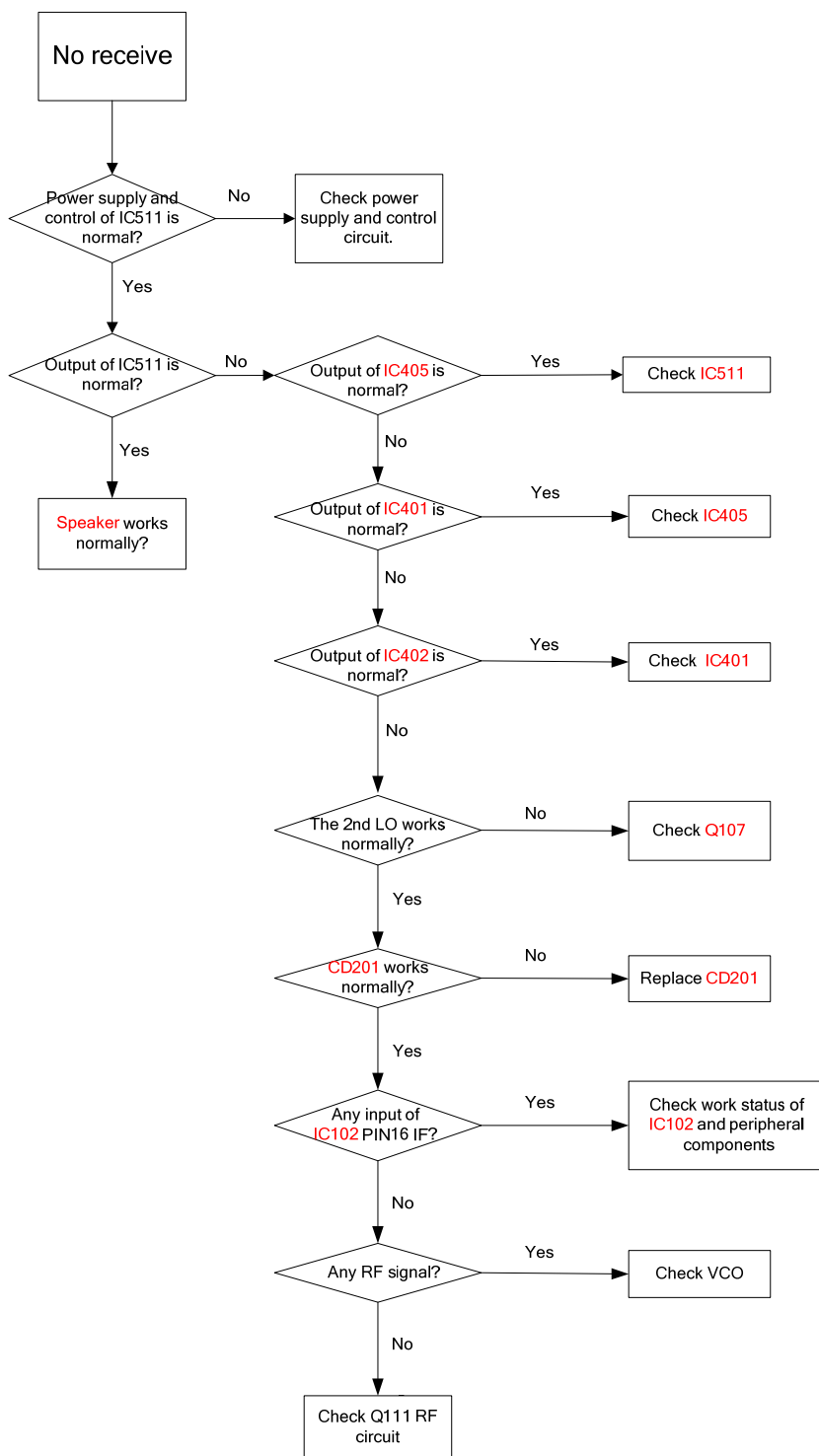
VCO



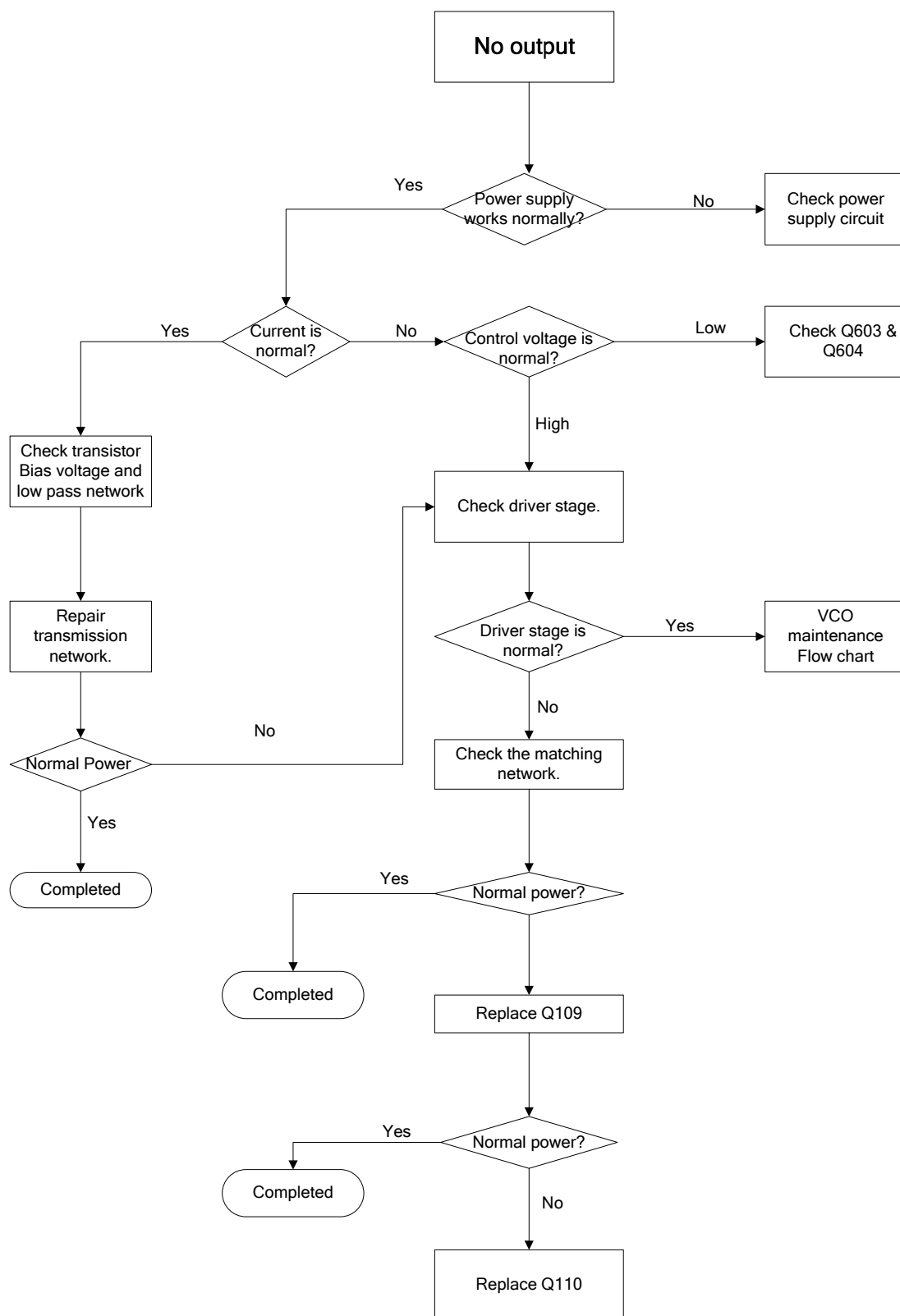
MCU



Receive Circuit



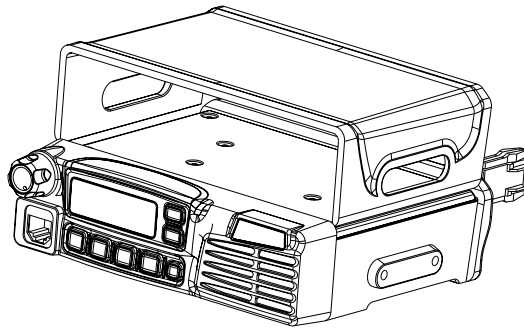
Transmit Circuit



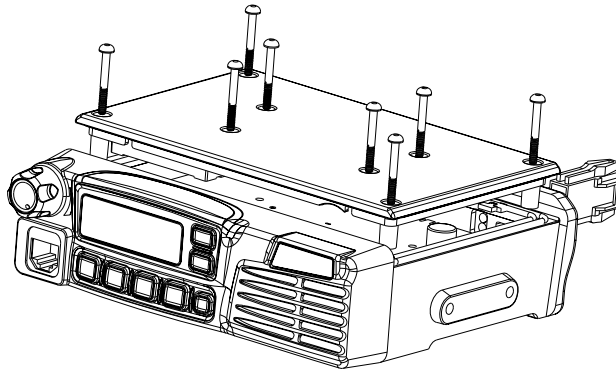
Disassembly and Assembly for Repair

Disassembly

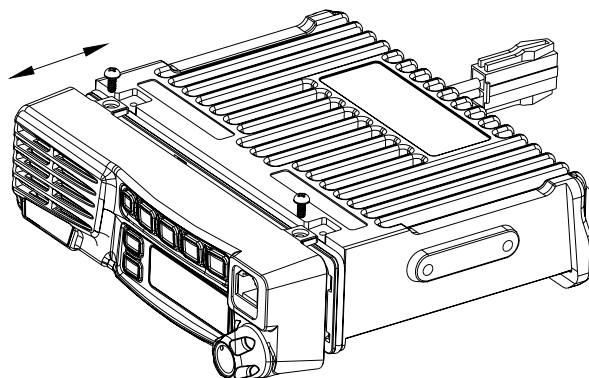
1. Power off the radio, disconnect the power cable and screw out the antenna.
2. Remove the upper cover.



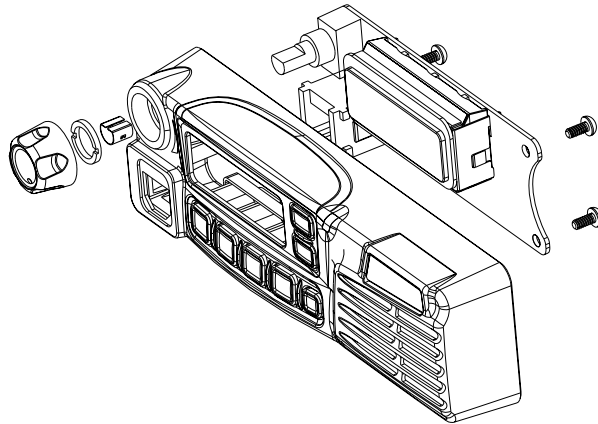
3. Loosen the eight locking screws; then remove the shield cover, and disconnect FFC and speaker cable which bind the front panel PCB and the main board PCB.



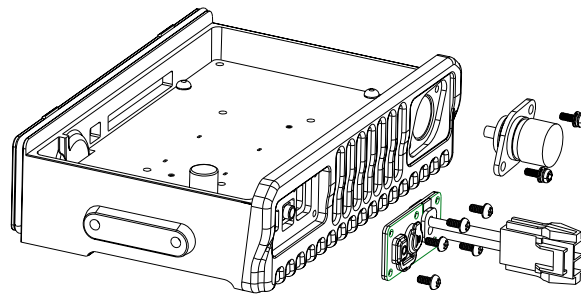
4. Loosen the two screws, and detach the front panel from the main unit.



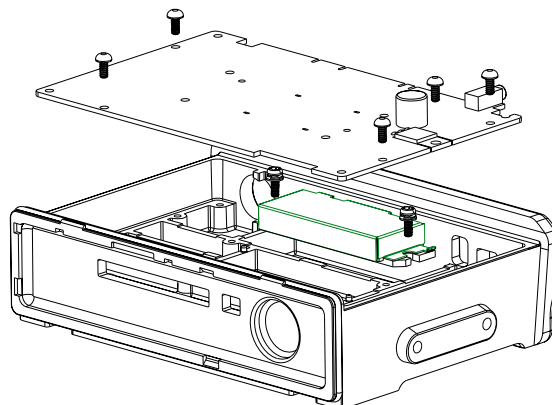
5. Pull out the Volume Control Knob, and screw out the copper nut from the potentiometer. Then loosen the four screws locking the front case, and take out the front panel PCB.



6. Use an electric iron and a screwdriver to disassemble the antenna connector, power cable, external board and water-proof ring on this board.



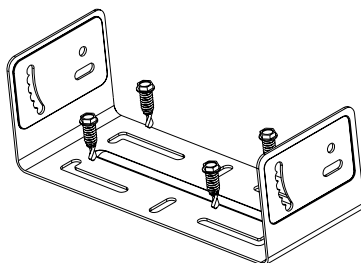
7. Loosen the screws locking the main board PCB and the PA module.



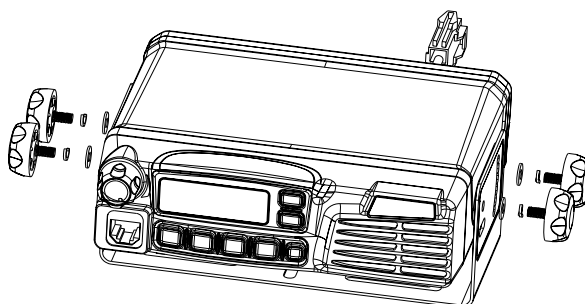
Assembly

For the reassembly of the mobile radio, please do the contrary to disassembly procedures. Other procedures are as follows:

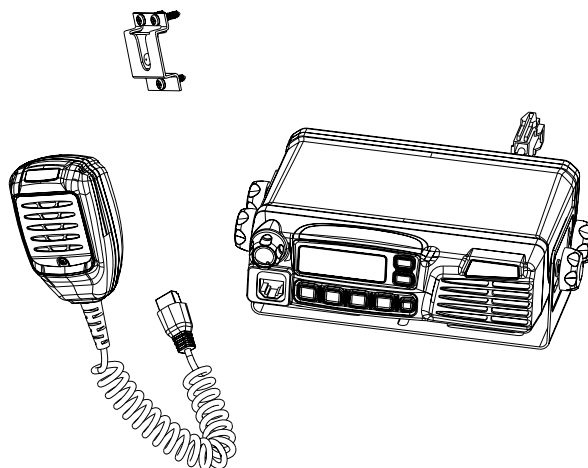
1. Fix the bracket (for main unit) by using four self-tapping screws.



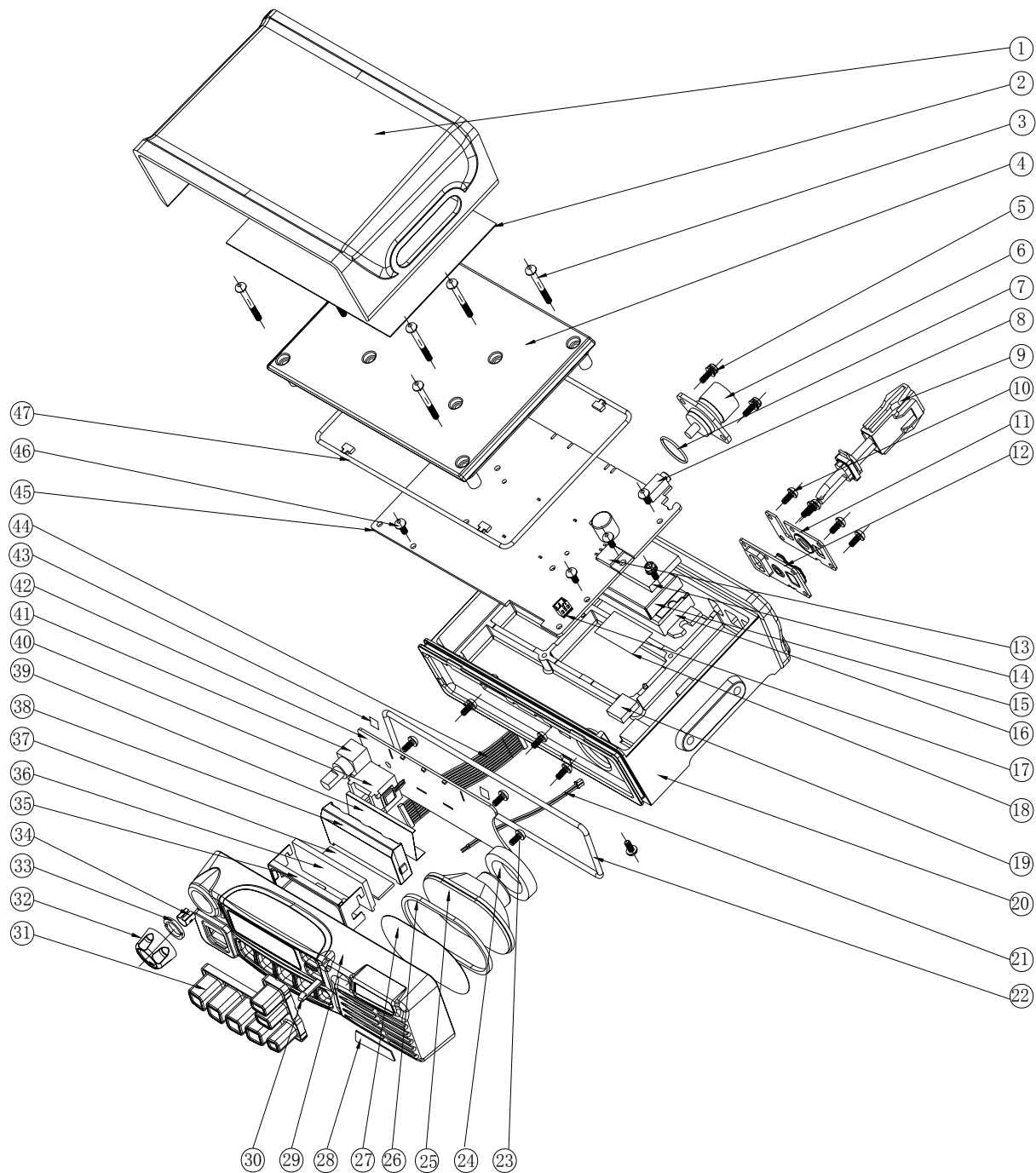
2. Fasten the four adjustment screws (each with one spring plate and one cushion).



3. Plug the microphone connector into MIC jack. When the microphone is not in use, hang it on the microphone bracket.



Exploded View



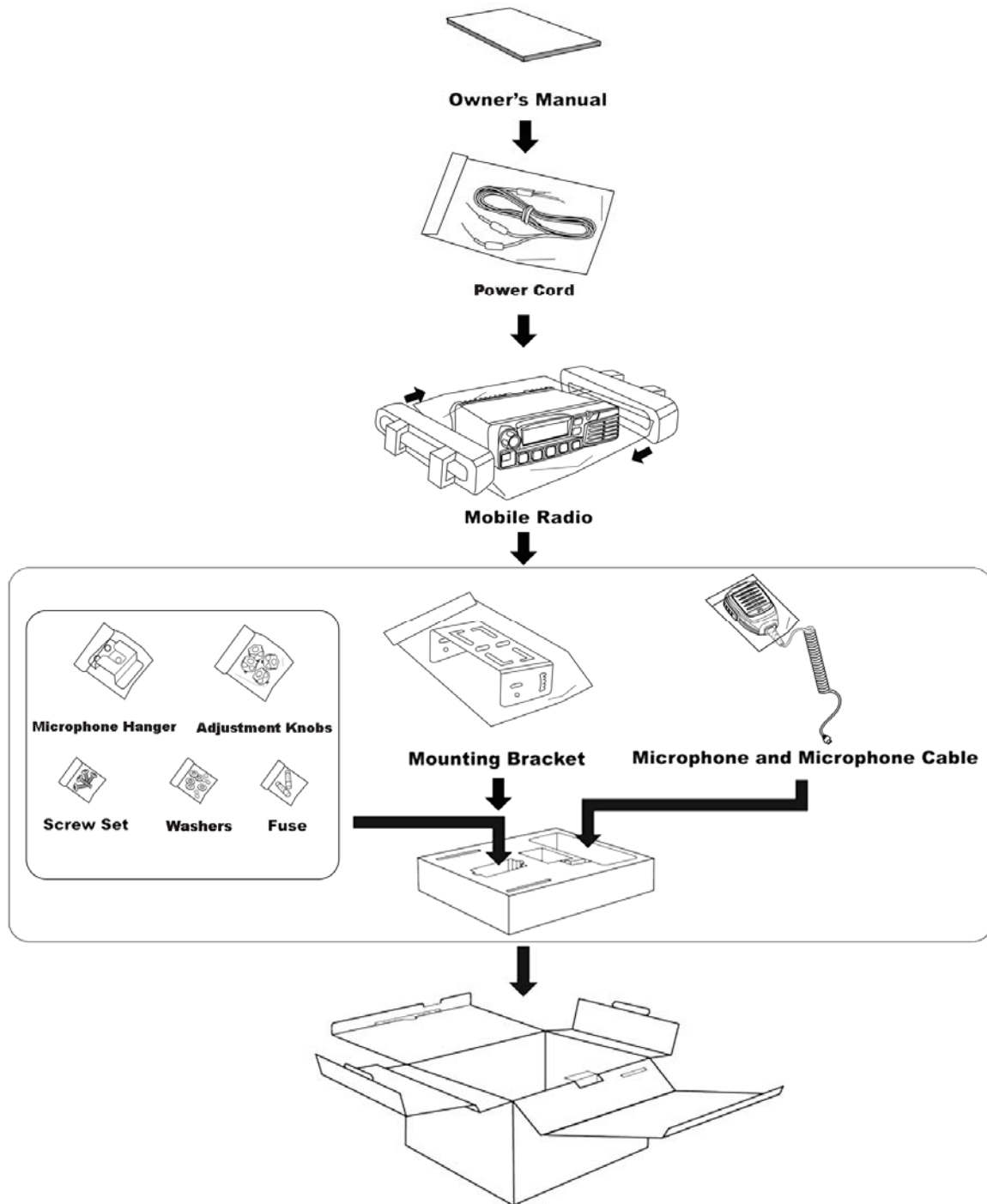
TM-610 Parts List 2

No.	Part Number	Description	Qty.
1	6000234100000	Upper cover (RoHS)	1
2	7500171000000	Vibration-suction sponge (RoHS)	1
3	7102623020000	Self-tapping screw (RoHS)	8
4	6300037000010	Shield cover for main unit (RoHS)	1
5	7102508000100	Machine screw (RoHS)	4
6	4405100001000	Antenna Connector (RoHS)	1
7	6100393000000	Waterproof ring of antenna connector (RoHS)	1
8	5205000000280	Speaker jack (RoHS)	1
9	4200215000100	Power cable kit (RoHS)	1
10	7102606021000	Self-tapping screw (RoHS)	7
11	6201186001010	External connection board (RoHS)	1
12	6100480100000	Waterproof ring of external connection board (RoHS)	1
13	3608002002090	Power management IC (RoHS)	1
14	7600028000000	Conductive fabric for shielding mask of PA module (RoHS)	1.5
15	6201190000010	Shielding mask of PA module (RoHS)	1
16	3601004000530	RF PA module (RoHS)	1
17	5202002100270	Board-to-cable connector (RoHS)	1
18	7600022000000	Copper foil (RoHS)	1
19	7500159000100	Heat sink silicone rubber (RoHS)	1
20	6300026000020	Aluminum chassis (RoHS)	1
21	4210150000100	Speaker cable (with plug) (RoHS)	1
22	6100478000000	Waterproof ring for front panel (RoHS)	1
23	7102310020010	Self-tapping screw (RoHS)	3
24	7500259000000	Sponge cushion for speaker (RoHS)	1
25	5001210000260	Speaker (RoHS)	1
26	6100199000000	Cushion front cavity of speaker (RoHS)	1
27	7400189000000	Speaker felt (RoHS)	1
28	860M800500100	HYT-LOGO label	1
29	6000505000010	Front panel kit (RoHS)	1
30	6000231000000	Light guide (RoHS)	1
31	6100484000000	Numeric keys (RoHS)	1
32	6000235100000	Volume control knob (RoHS)	1
33	7209002000000	Nut (RoHS)	1
34	6201066000000	Inner lining for knob (RoHS)	1
35	6201374000000	LCD bracket (RoHS)	1
36	5110000000320	LCD (RoHS)	1
37	7600026000000	Conductive rubber connector (RoHS)	1
38	6000473000000	Light guide panel (RoHS)	1
39	7400144000000	Light reflector (RoHS)	1
40	5205000000260	Microphone Jack (RoHS)	1
41	4310020000000	Volume switch (RoHS)	1

42		PCB of front panel (RoHS)	1
43	7400201000000	Light barrier (RoHS)	2
44	4210070000500	32-pin signal cable (RoHS)	1
45		PCB of main unit (RoHS)	1
46	7102606020000	Self-tapping screw (RoHS)	5
47	6100479000000	Waterproof ring for radio unit (RoHS)	1

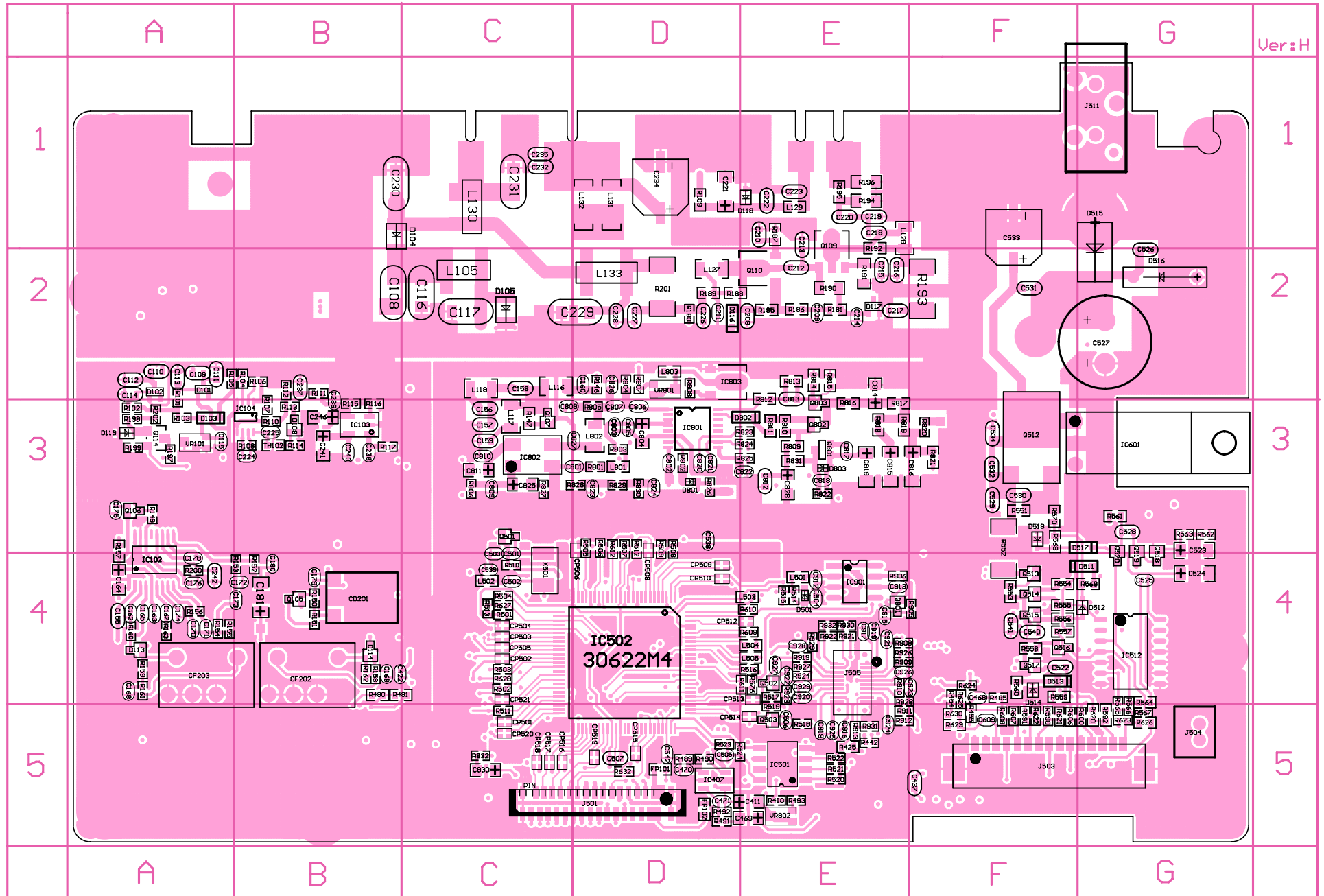
Note: Parts that are not marked with material number may vary with radio frequency band.

Packing

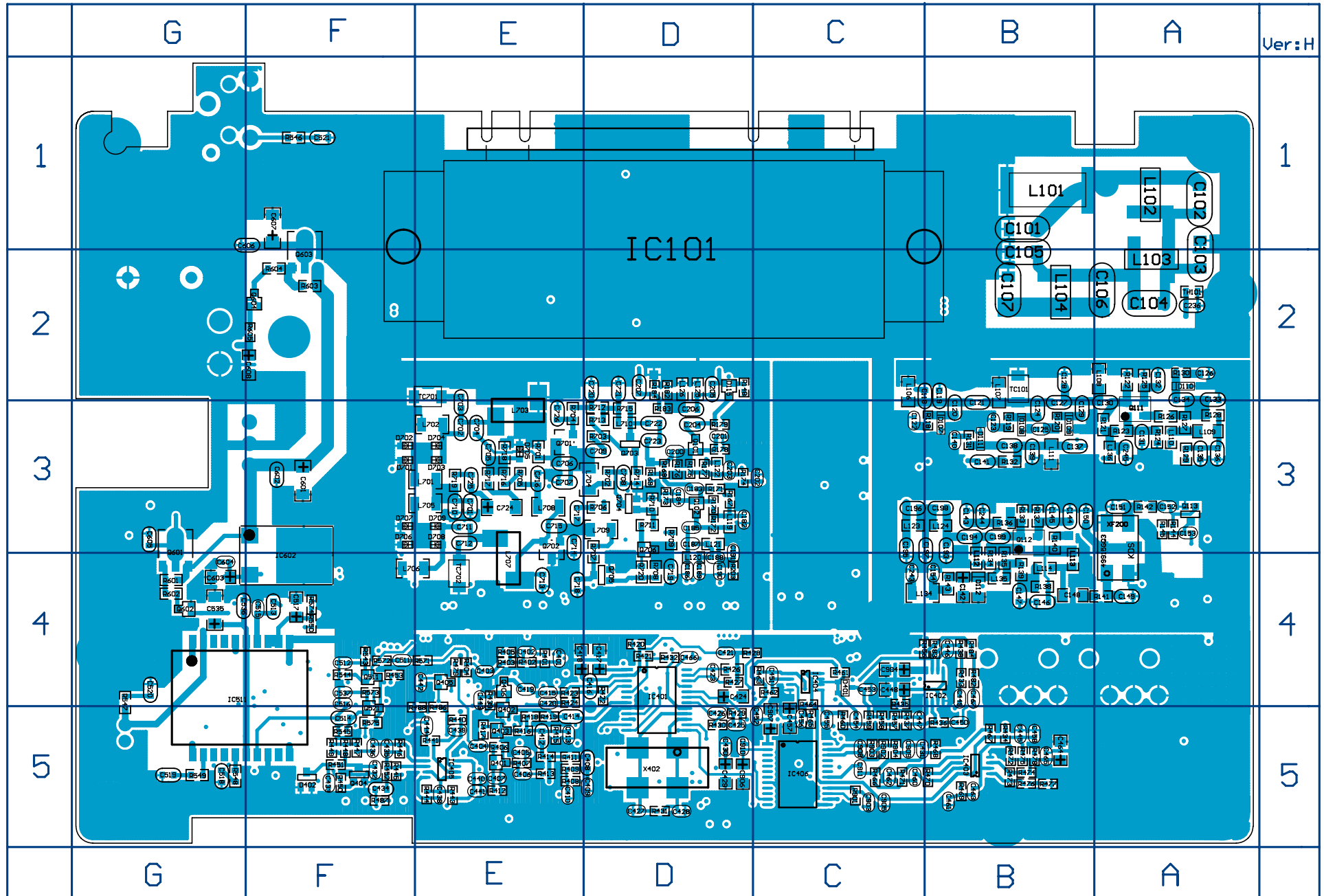


TM-610 VHF PCB View (Main Board Unit)

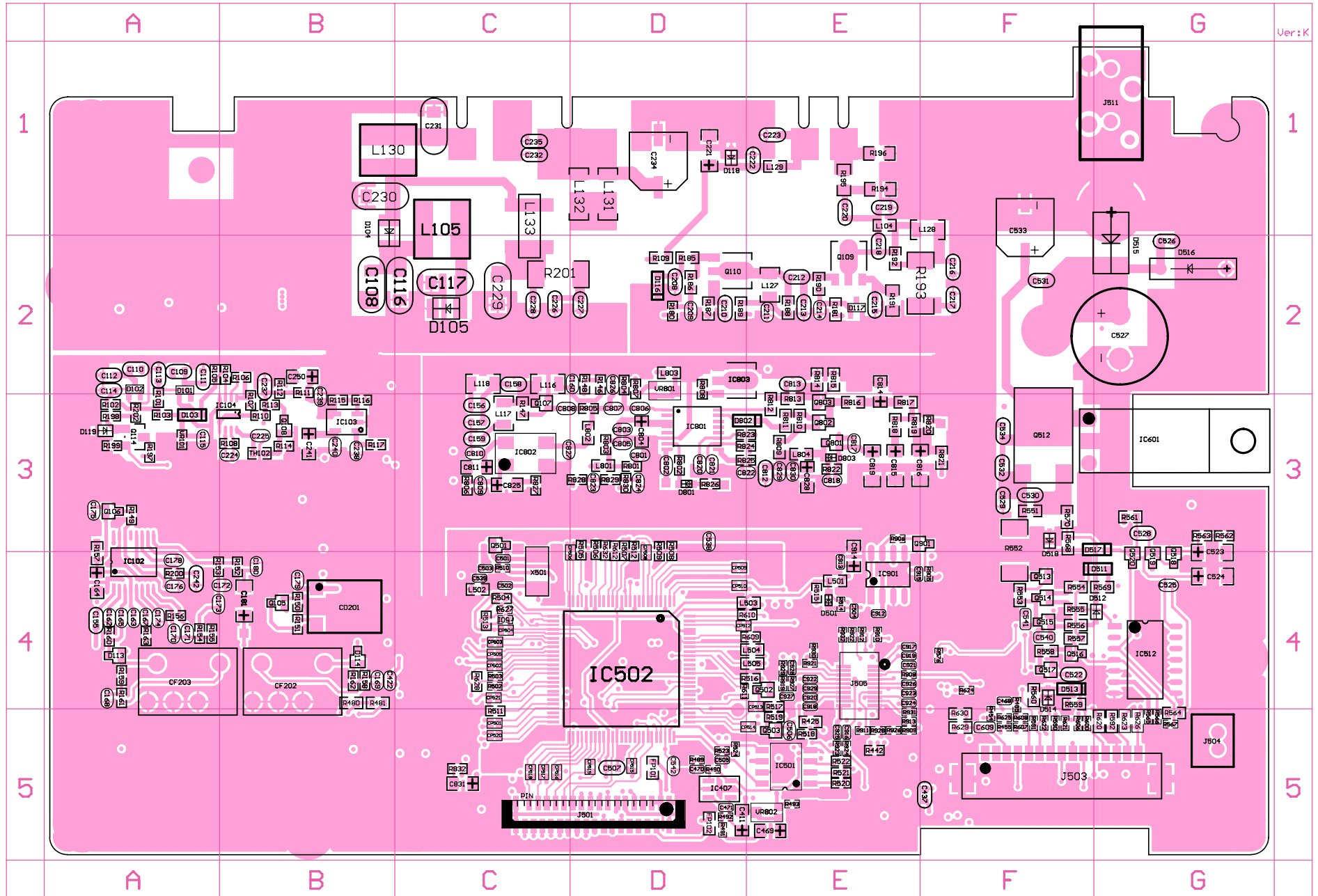
Top Layer



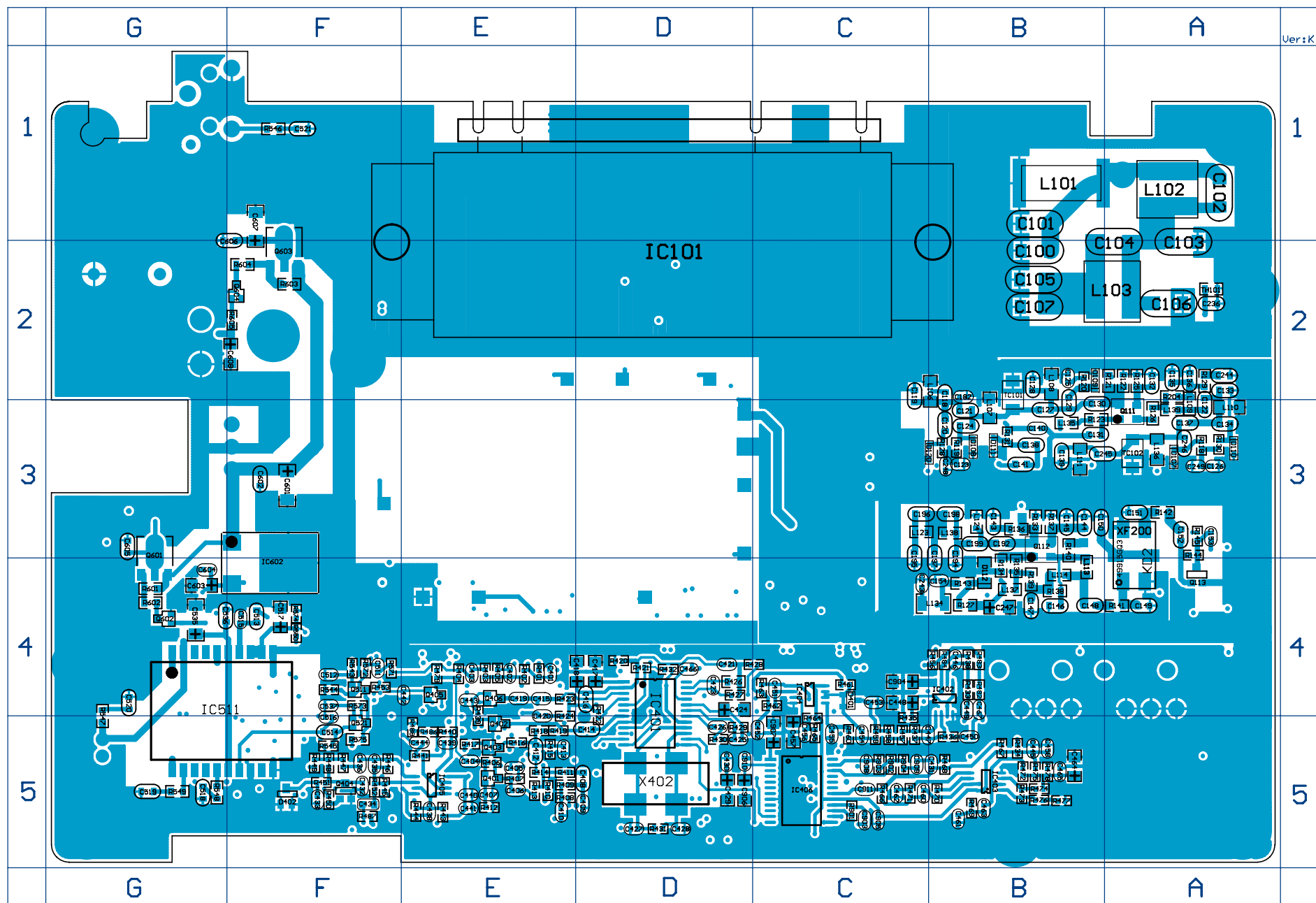
TM-610 VHF PCB View (Main Board Unit) Bottom Layer



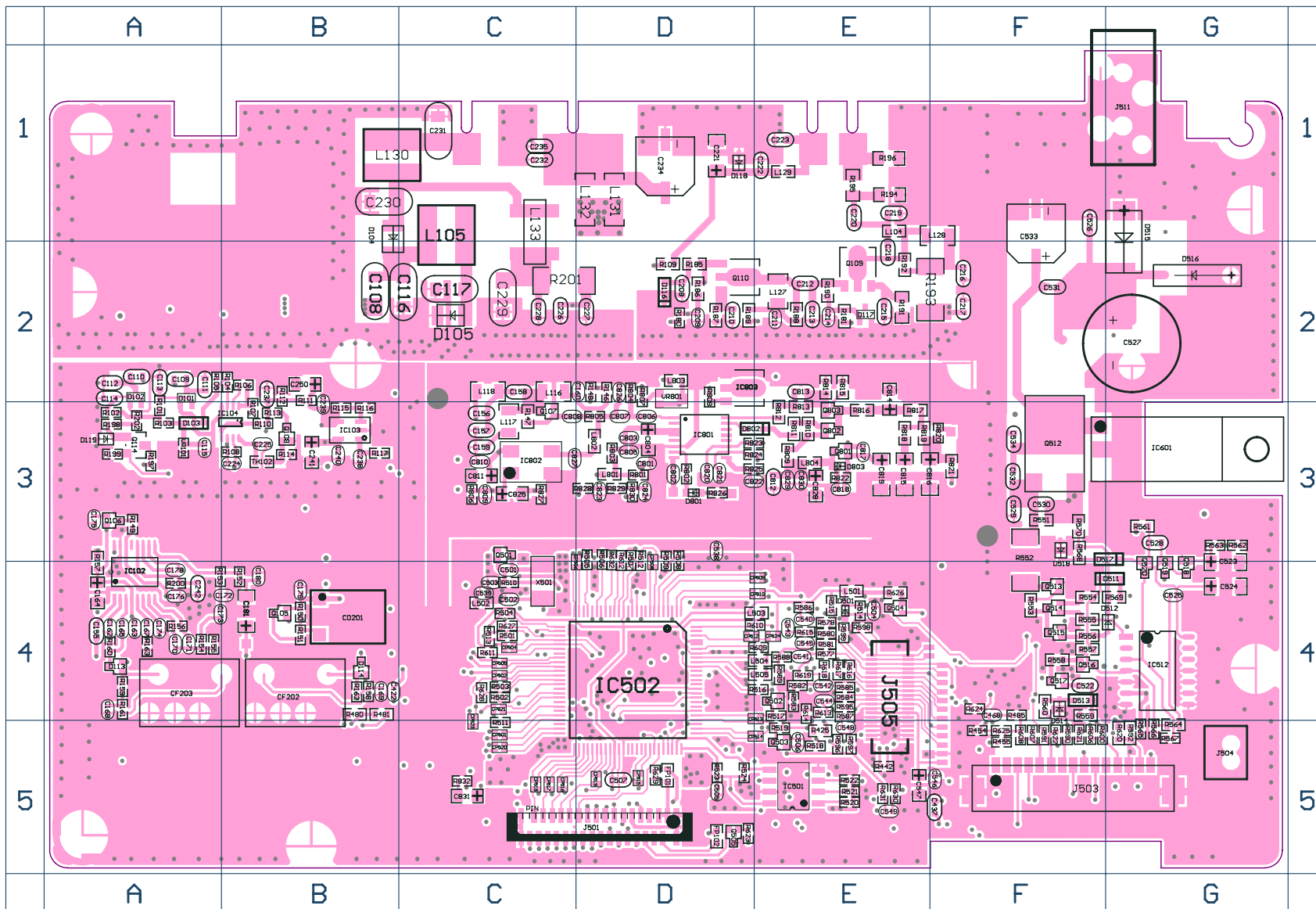
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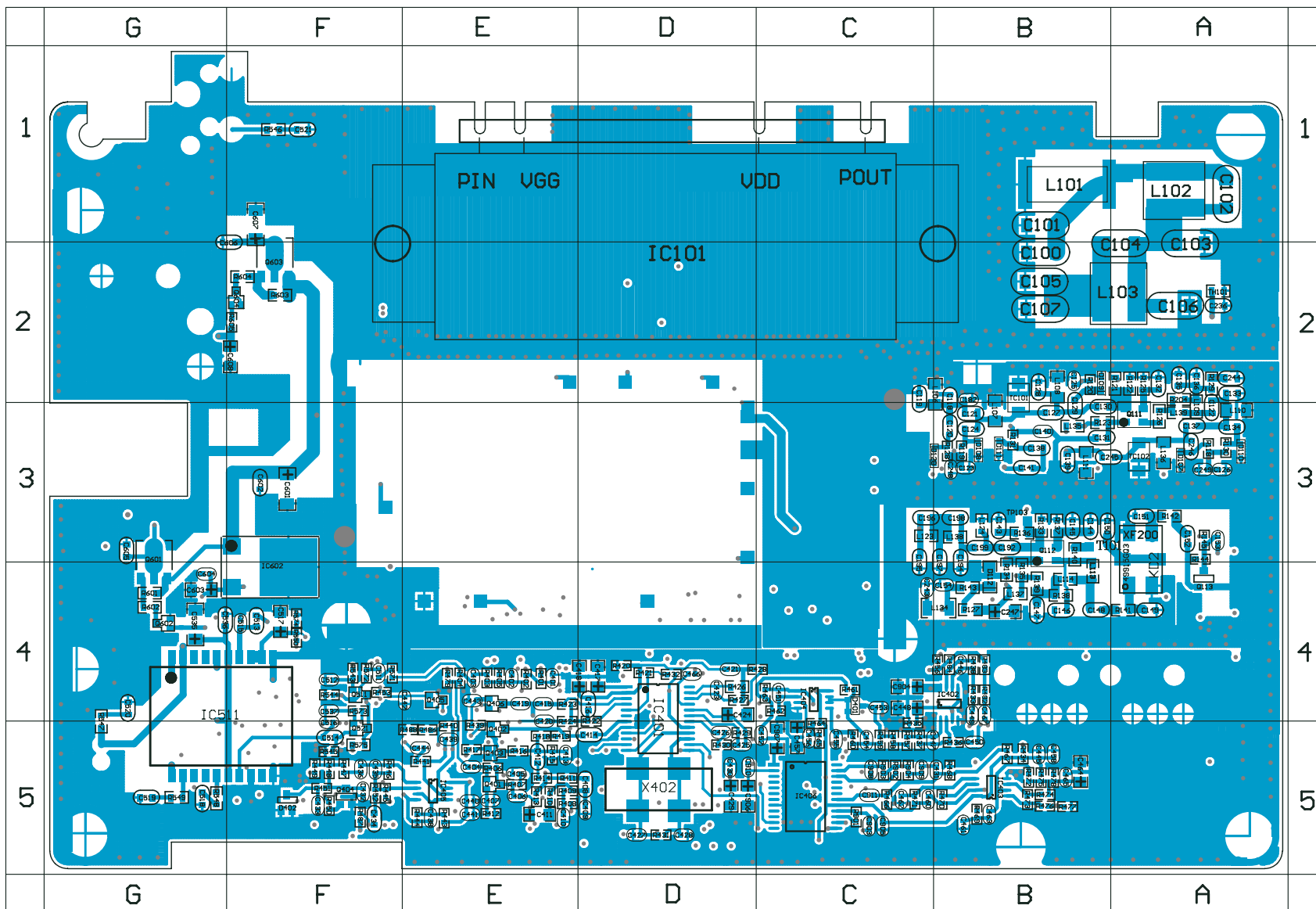
TM-610 U1-U4 PCB View (Main Board Unit) Bottom Layer



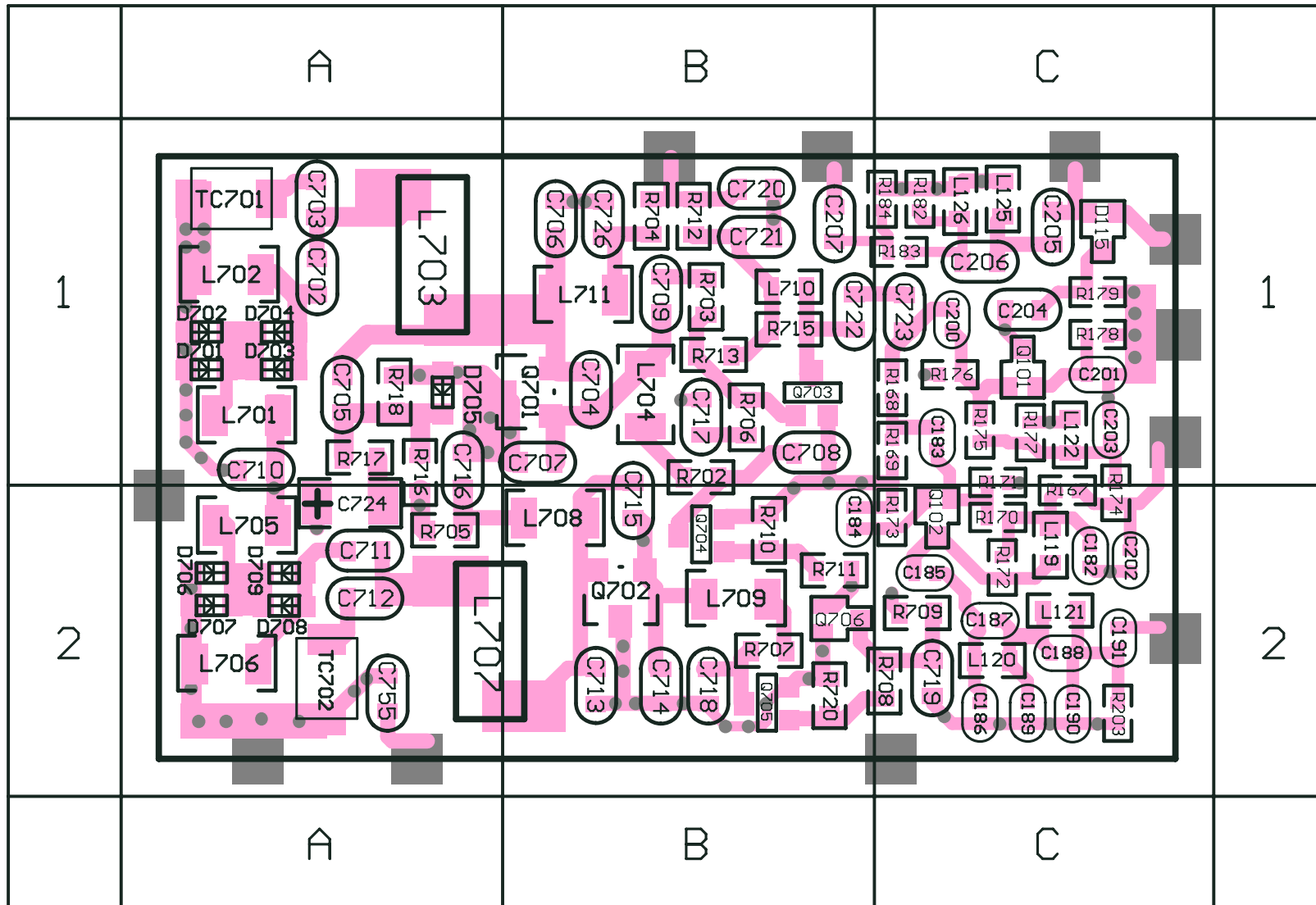
Top Layer



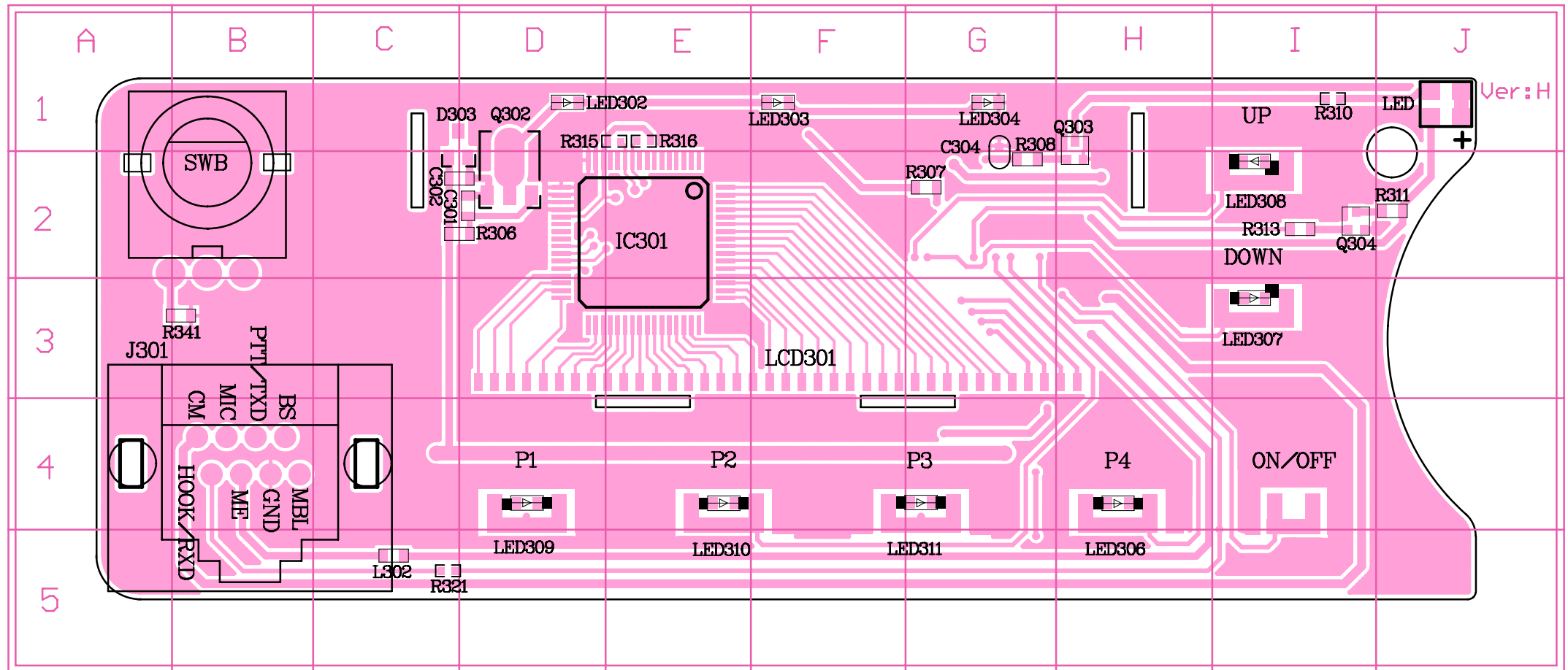
TM-610 U5 PCB View (Main Board Unit)



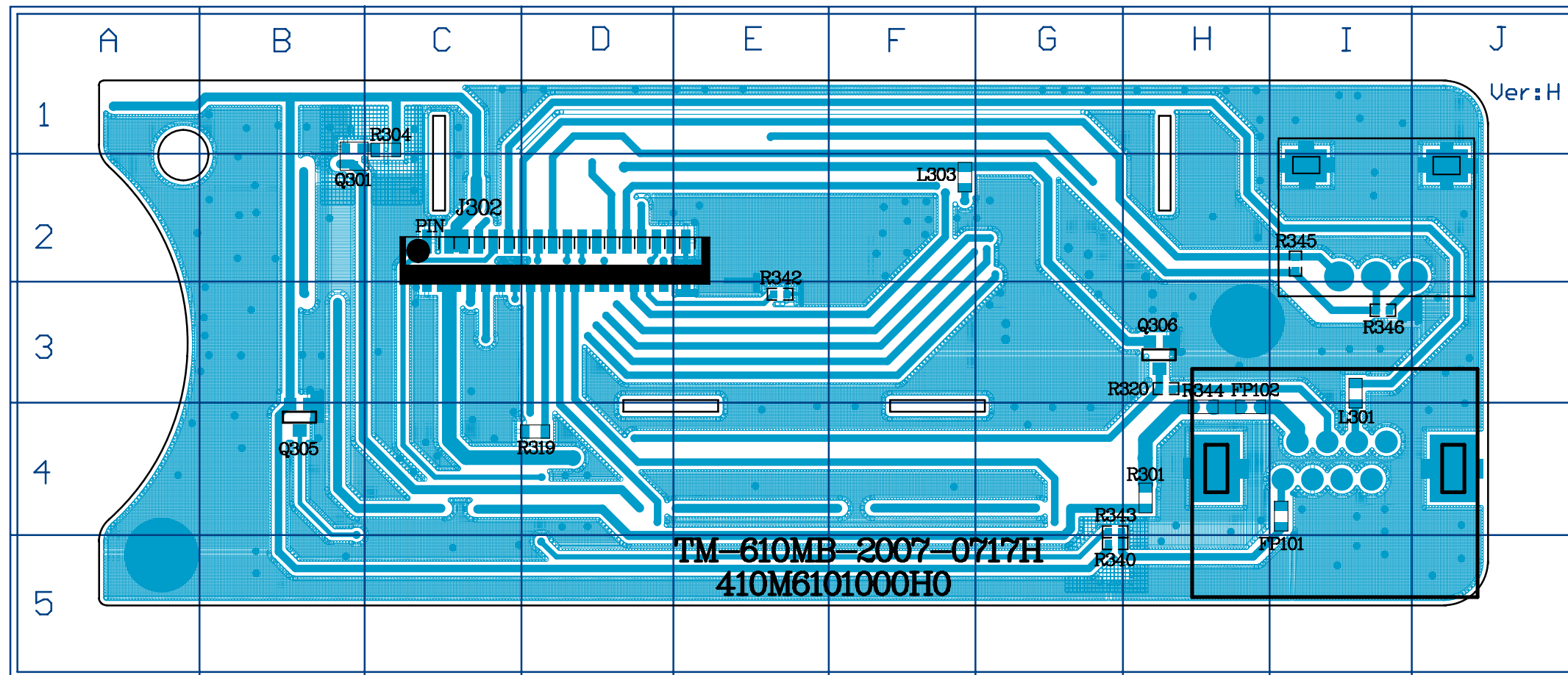
TM-610 UHF PCB View (VCO Unit)



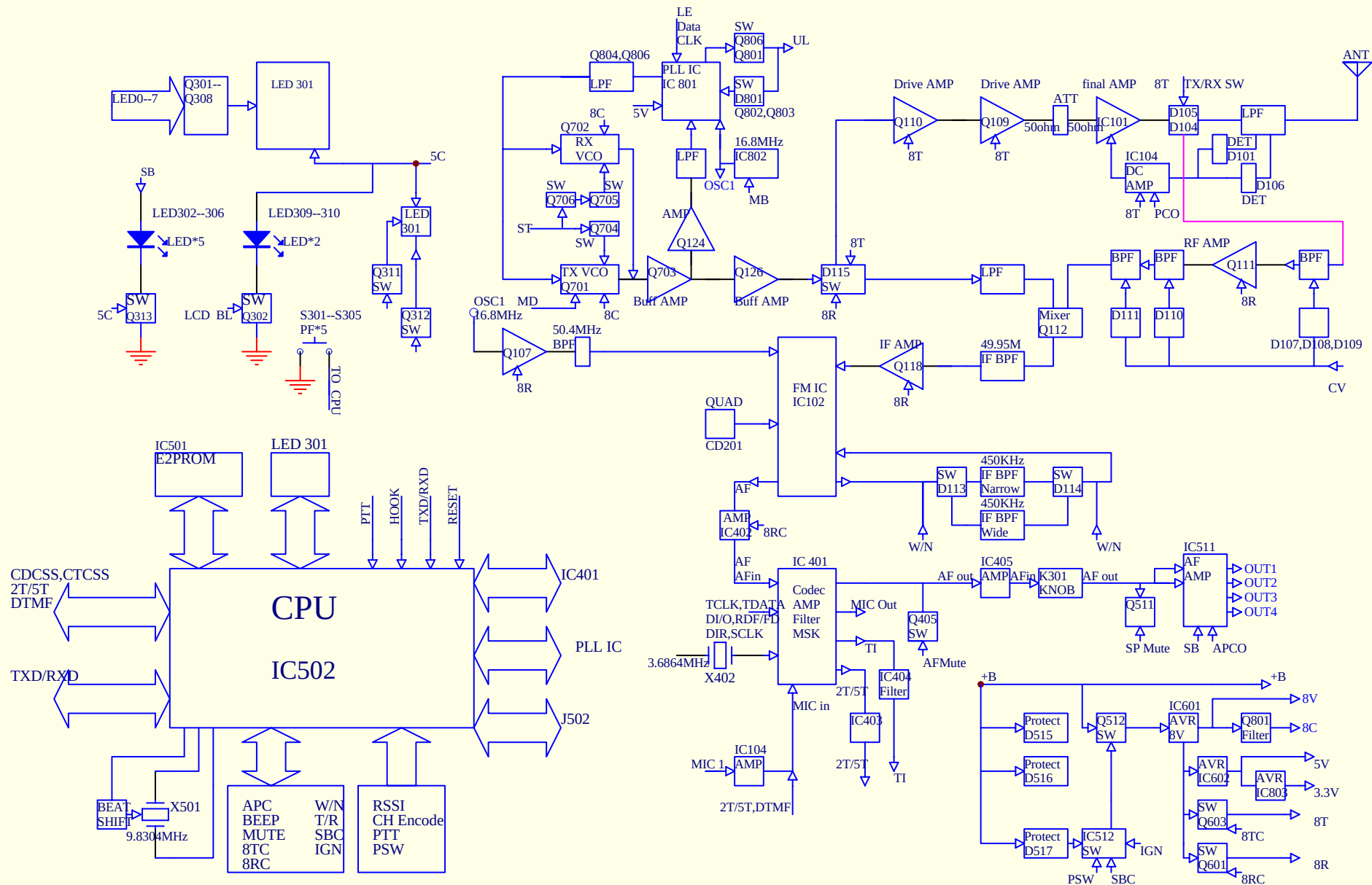
TM-610 VHF/UHF PCB View (Display Unit) Top Layer



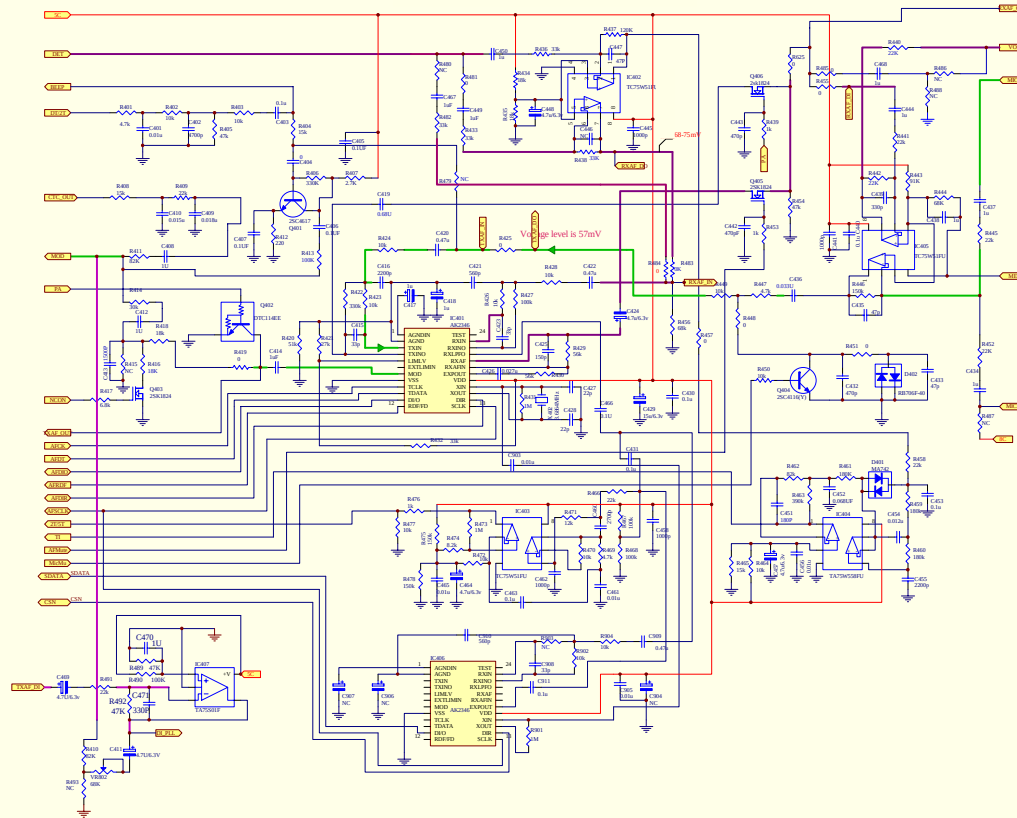
TM-610 VHF/UHF PCB View (Display Unit) Bottom Layer



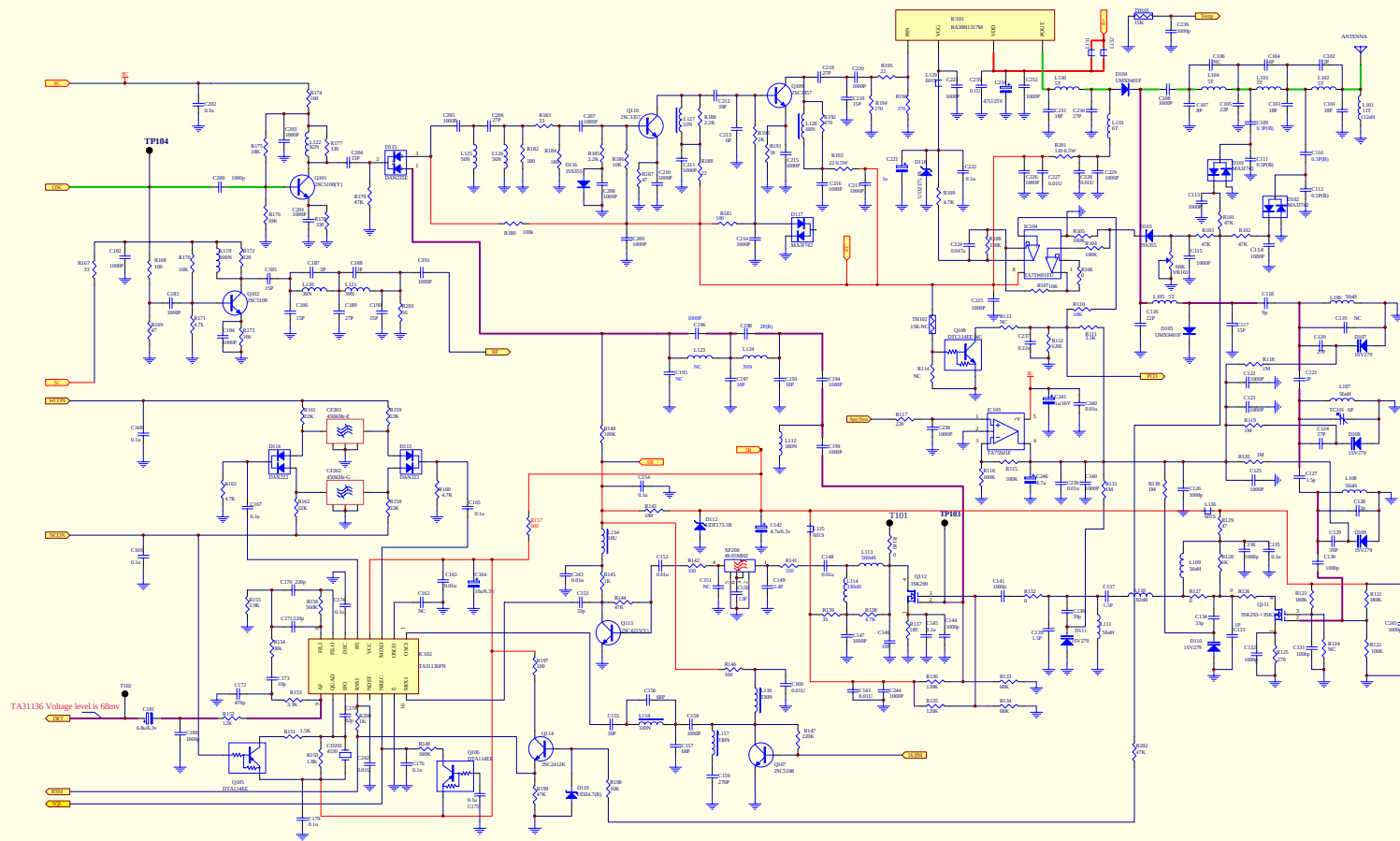
TM-610 Block Diagram



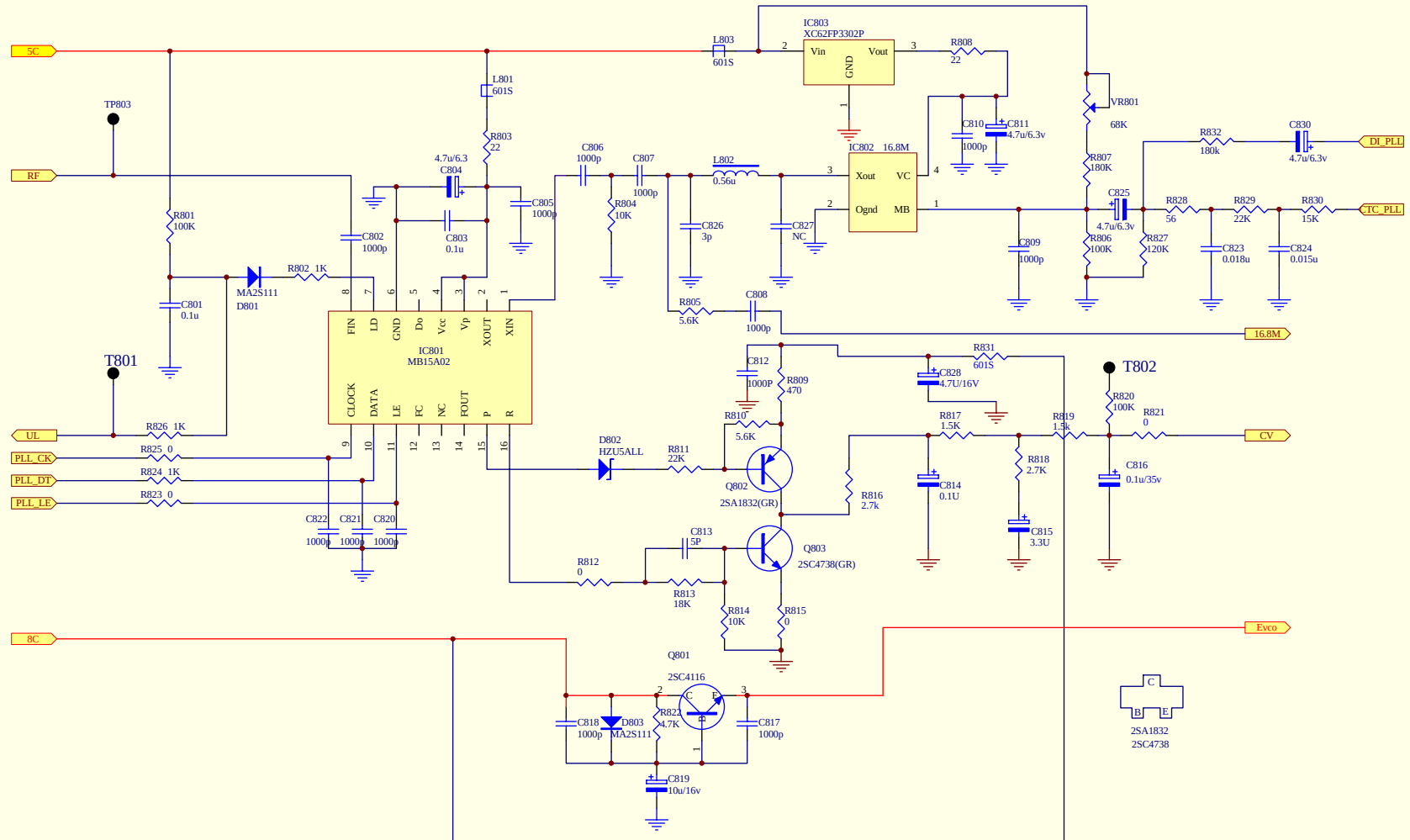
TM-610 VHF Schematic Diagram (AFPr Unit)



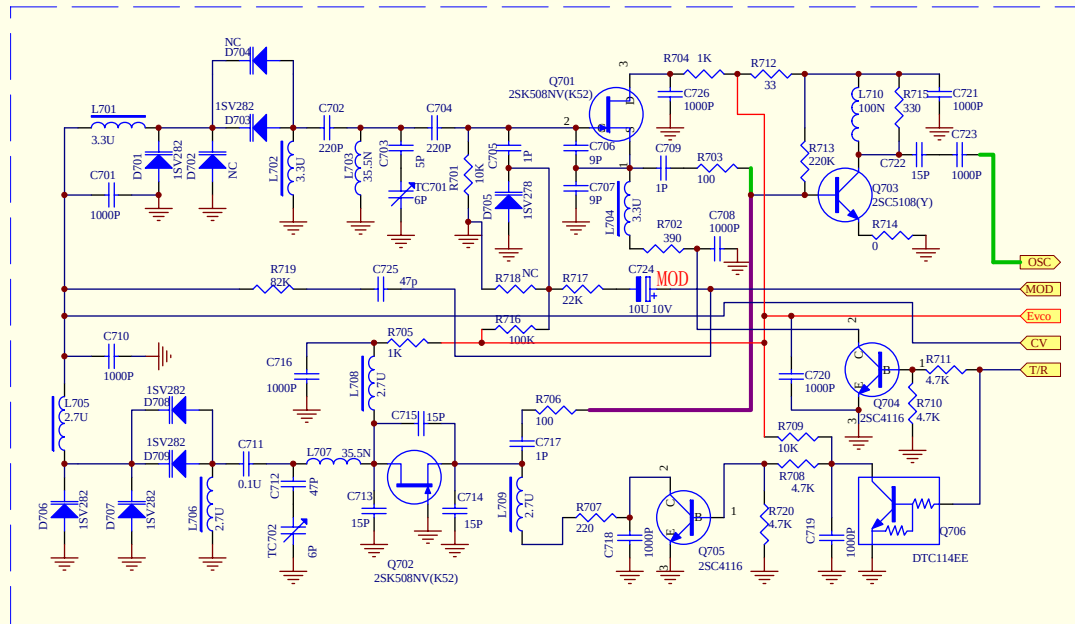
TM-610 VHF Schematic Diagram (RF Unit)



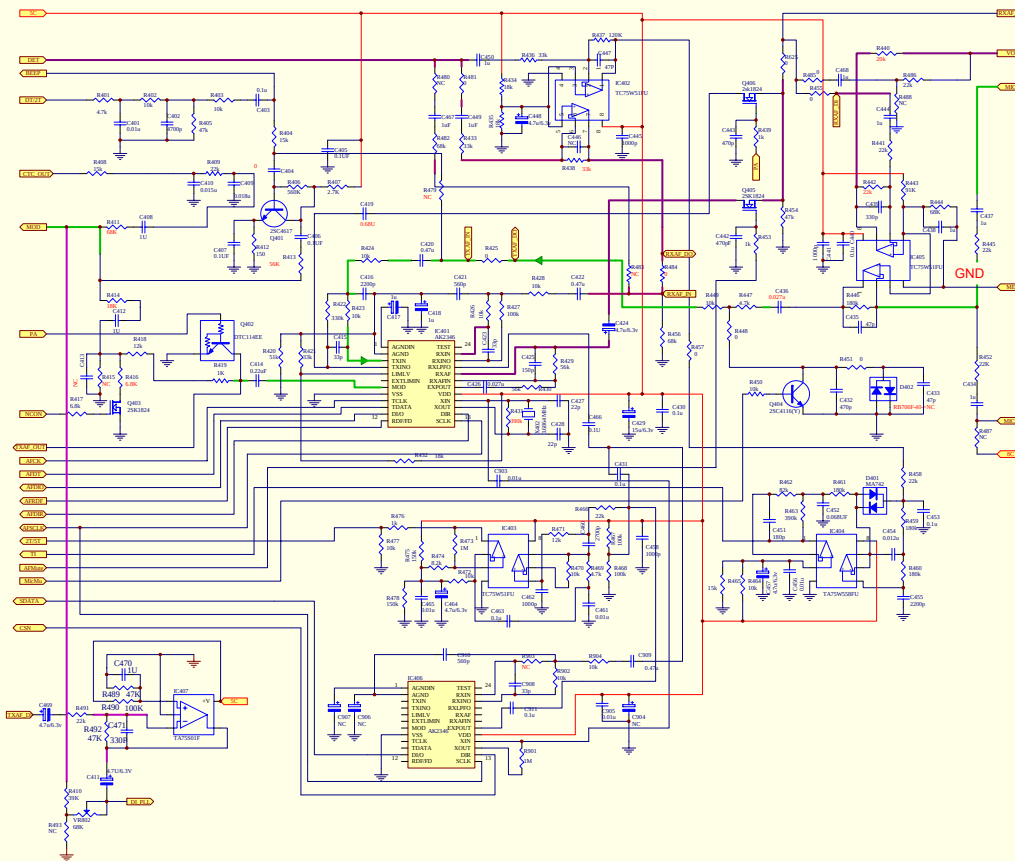
TM-610 VHF Schematic Diagram (PLL Unit)



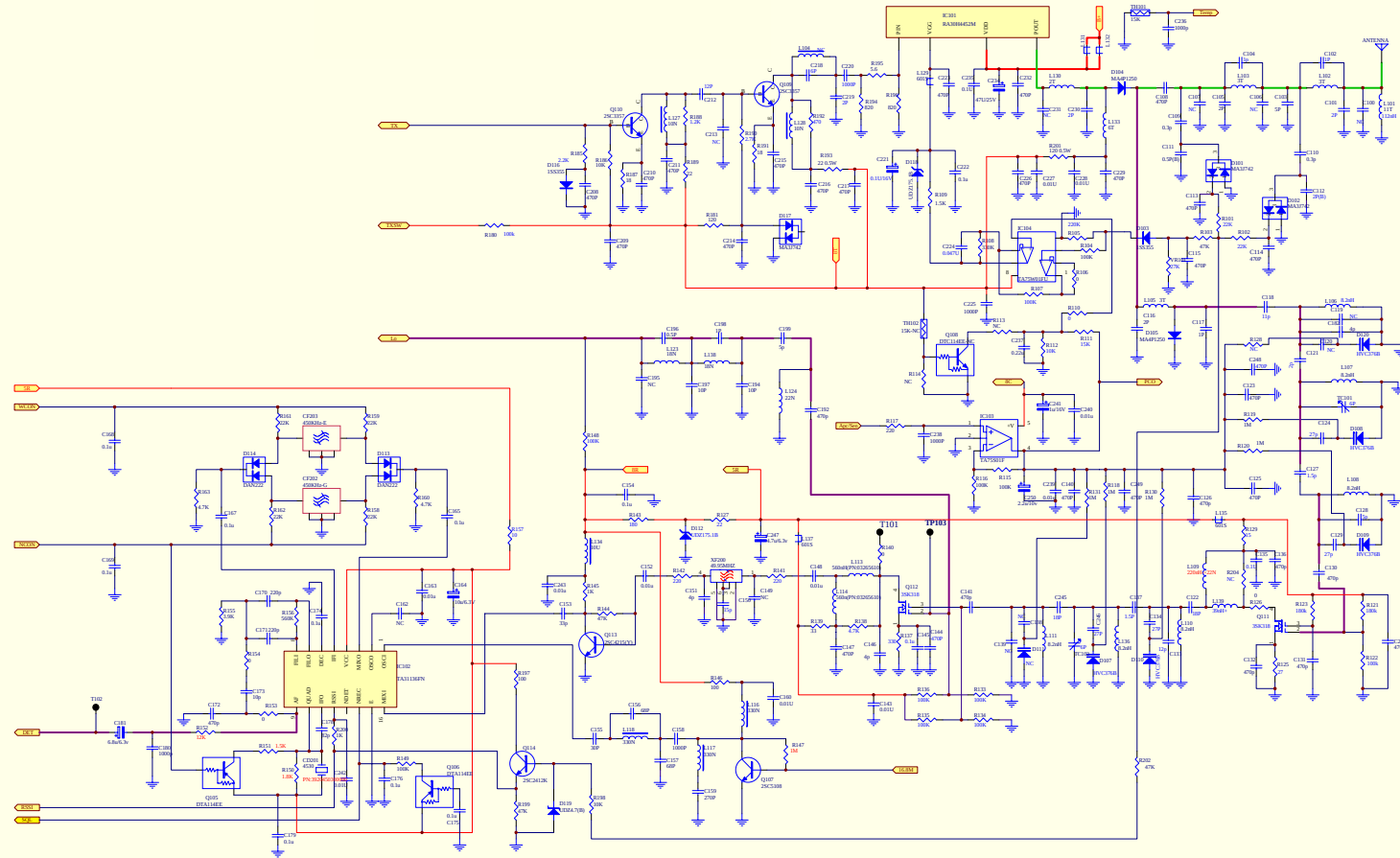
TM-610 VHF Schematic Diagram (VCO Unit)



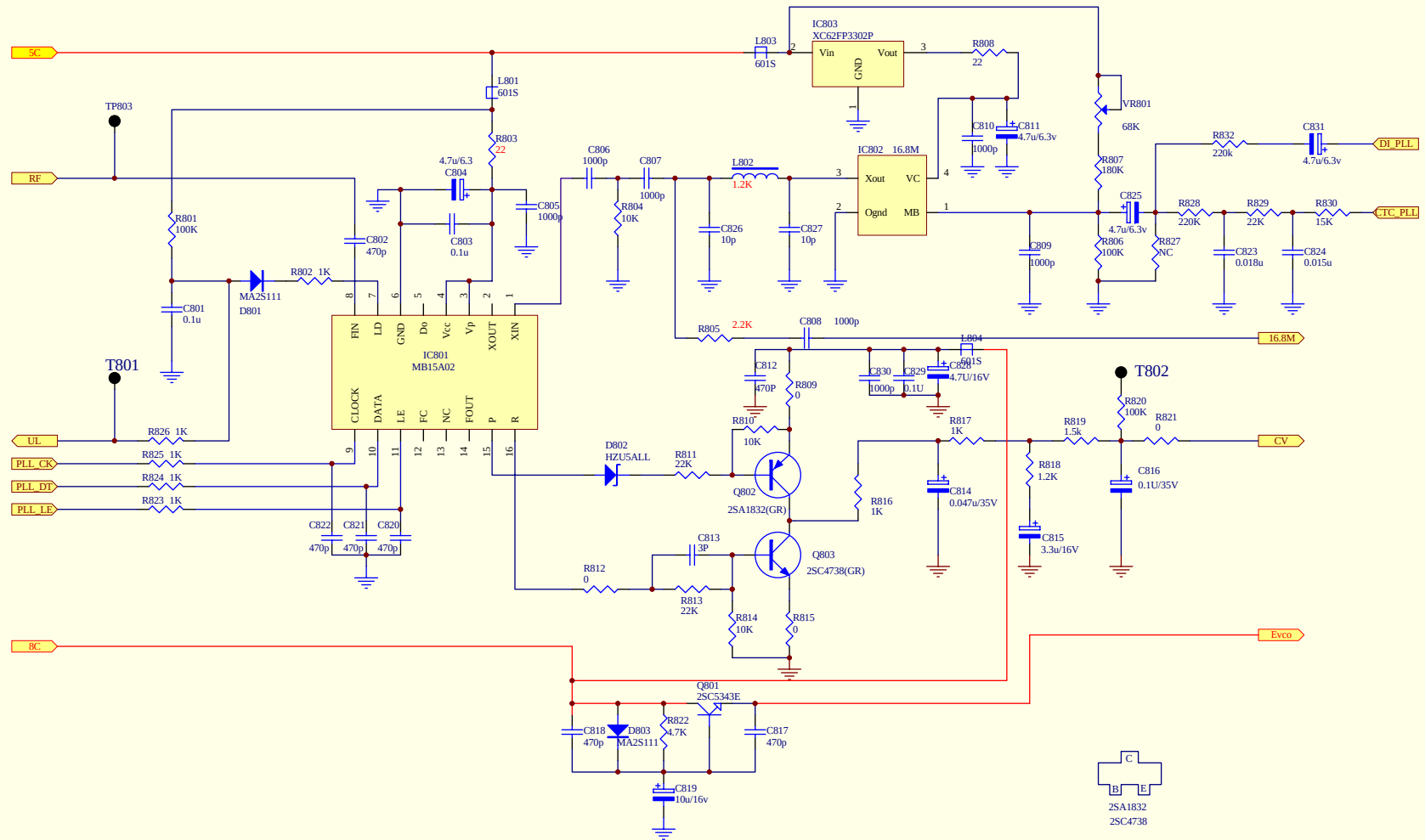
TM-610 UHF Schematic Diagram (AFPr Unit)



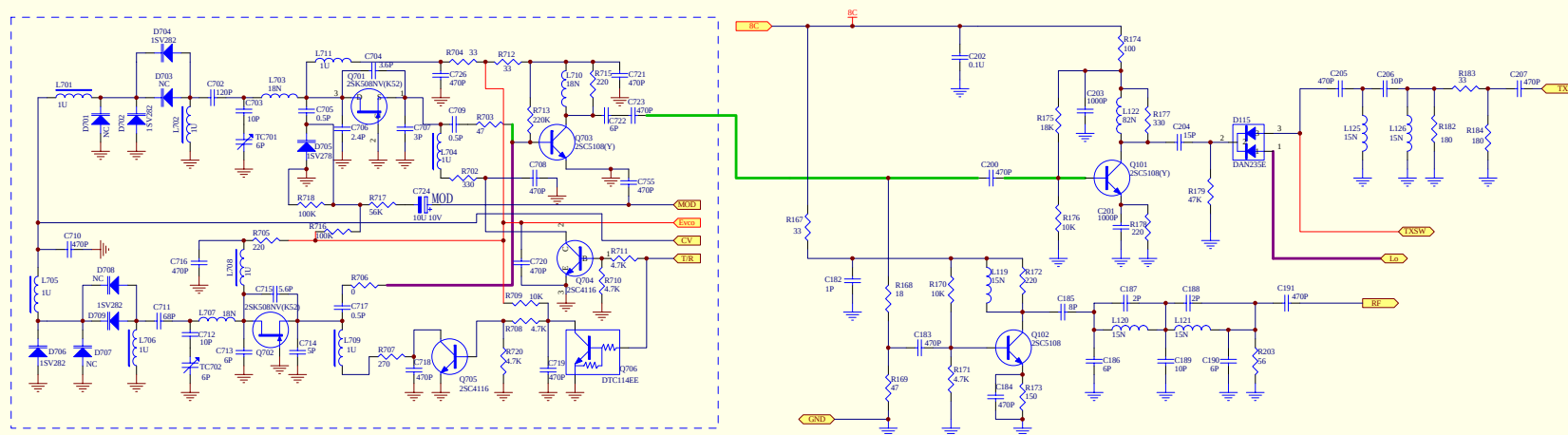
TM-610 UHF Schematic Diagram (RF Unit)



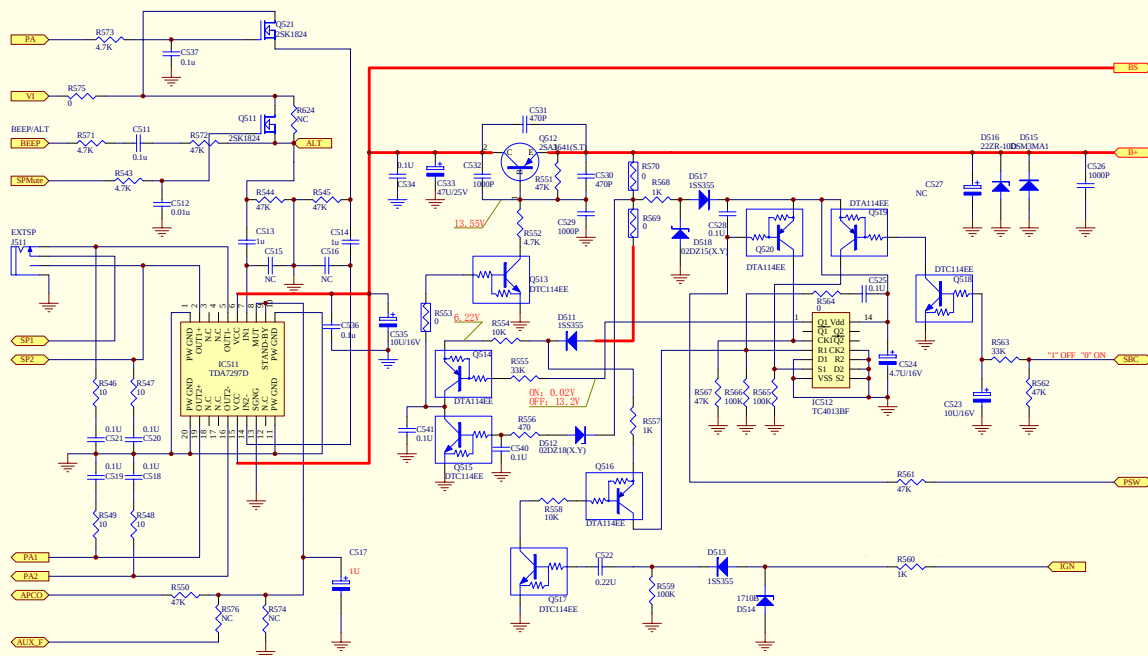
TM-610 UHF Schematic Diagram (PLL Unit)



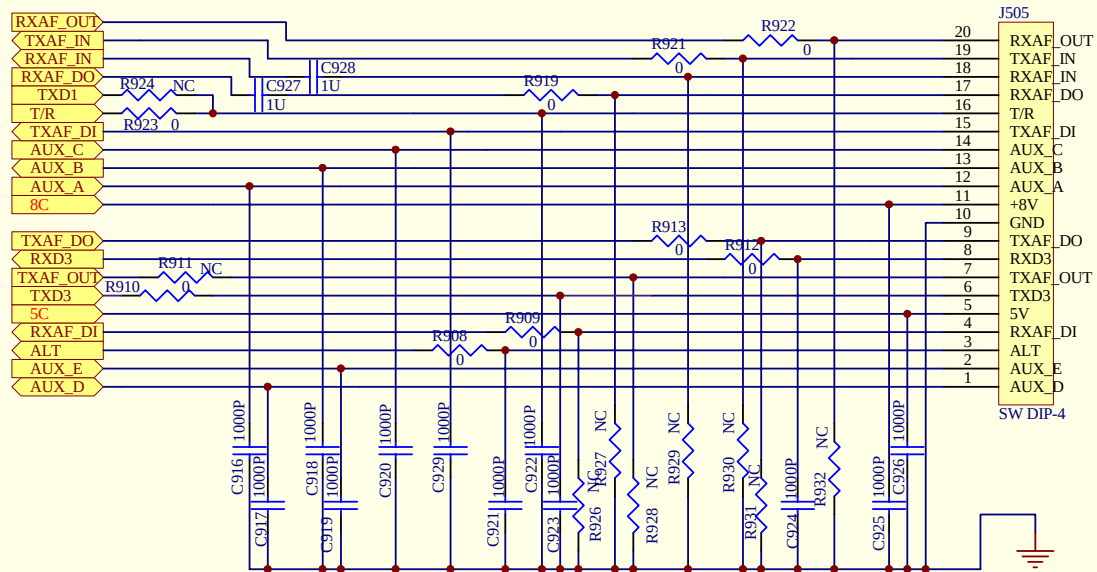
TM-610 UHF Schematic Diagram (VCO Unit)



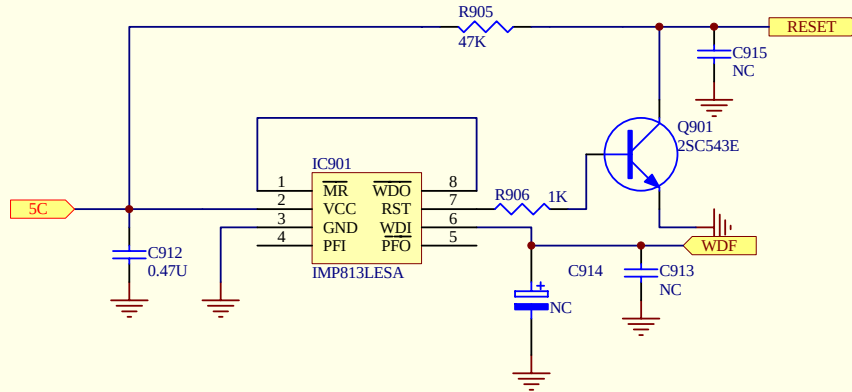
TM-610 VHF/UHF Schematic Diagram (AFPwr Unit)



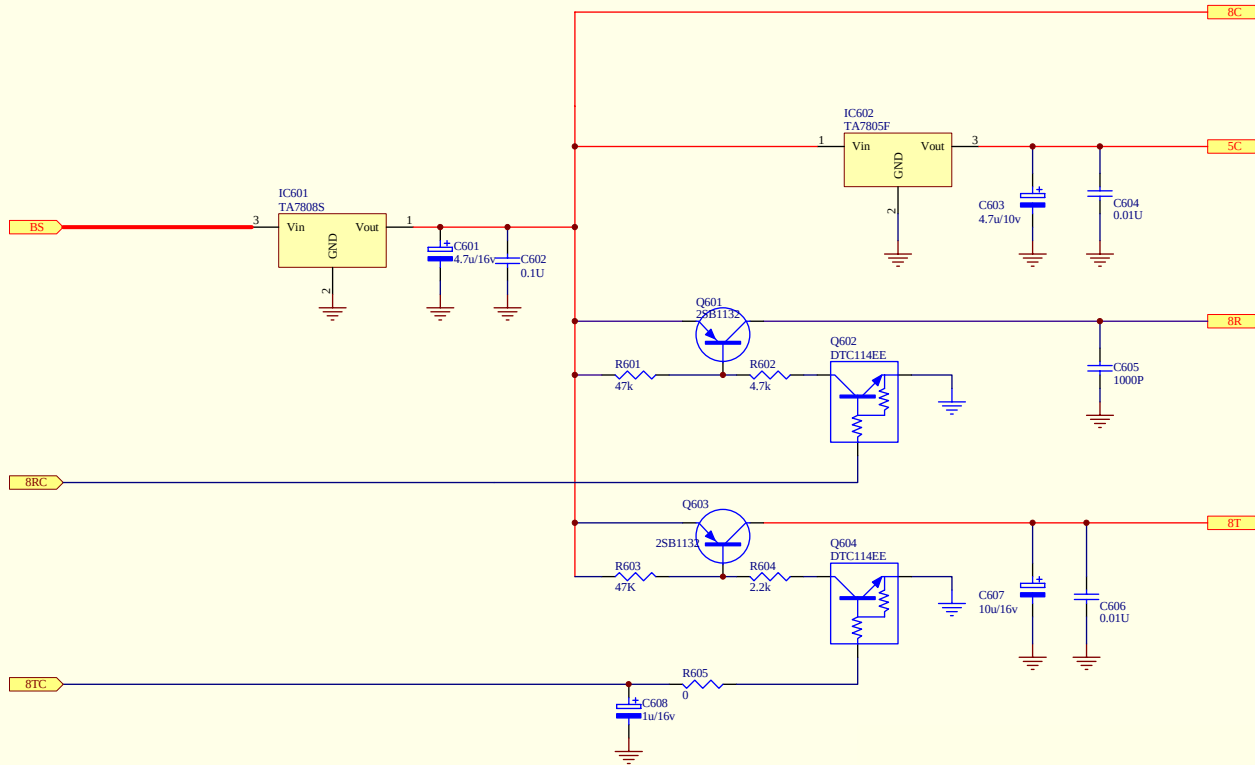
TM-610 VHF/UHF Schematic Diagram (Connector Unit)



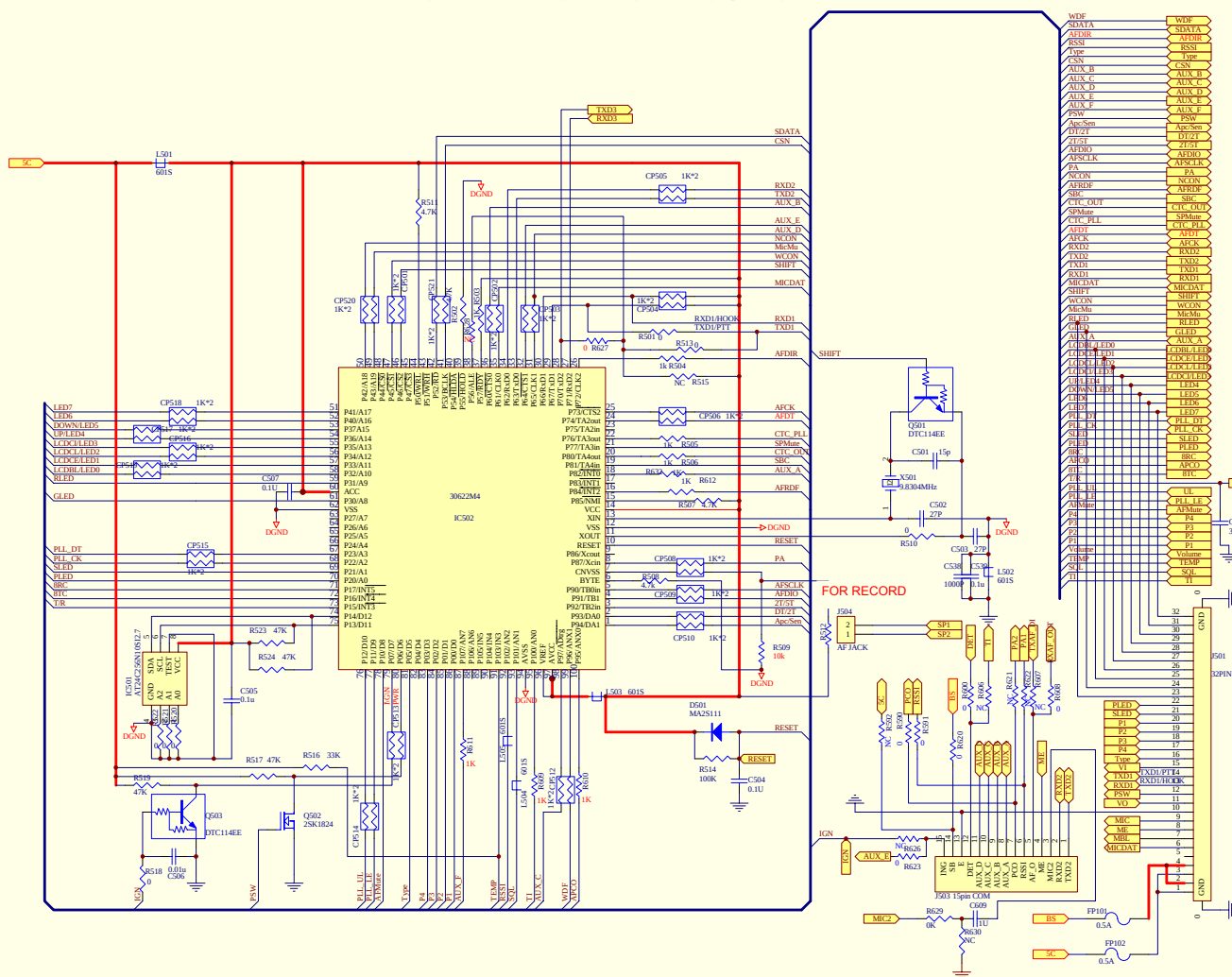
TM-610 VHF/UHF Schematic Diagram (Watchdog Unit)



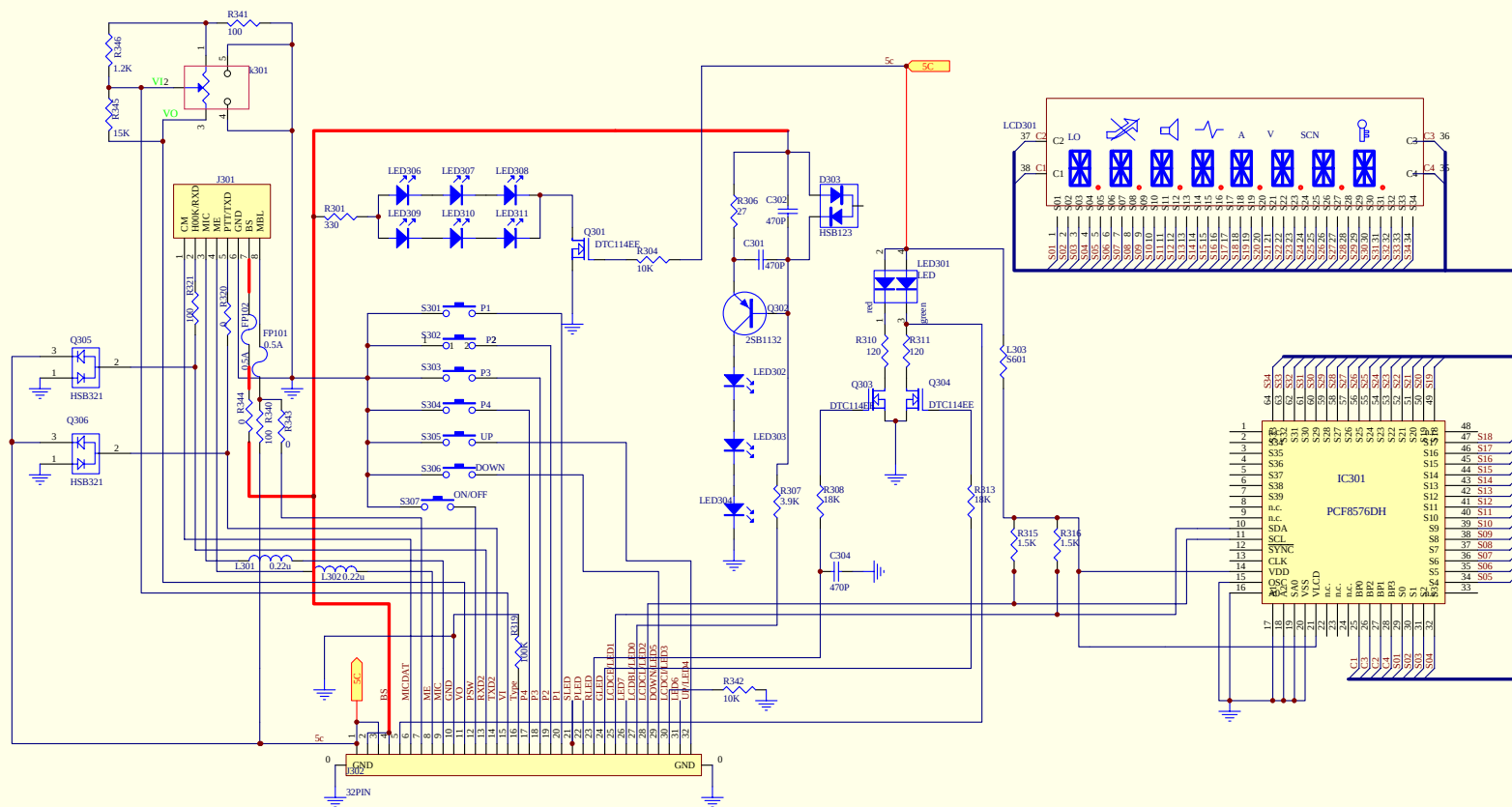
TM-610 VHF/UHF Schematic Diagram (Power Unit)



TM-610 VHF/UHF Schematic Diagram (CPU Unit)



TM-610 VHF/UHF Schematic Diagram (Display Unit)



Specifications

General		
Frequency Range		VHF: 136-174MHz UHF: 400-470MHz 450-500MHz 470-520MHz 350-400MHz 440-470MHz
Channel Capacity		128
Channel Spacing		25KHz/20KHz/12.5KHz
Operating Voltage		13.6V±15%
Current Drain	Standby	0.2A
	Receive	≤2A
	Transmit	≤8A (High power); ≤5A (Low power)
Operating Temperature		-30℃~+60℃
Dimensions (H×W×D)		125×152×43mm
Weight		1.0kg
Frequency Stability		±2.5ppm
Receiver		
Reference Sensitivity		0.28μV/0.33μv/0.35μV
Selectivity		75dB/70dB/65dB
Intermodulation		70dB/70dB/70dB
Spurious Response Rejection		70dB
Rated Audio Power Output (Internal)		Rated: 3W (@16Ω 3% distortion), Max.: 6W(@16Ω 5% distortion)
Rated Audio Power Output (External)		Rated: 10W (@8Ω 3% distortion), Max.: 12W(@8Ω 5% distortion)
Transmitter		
RF Power Output		25W/5W
Spurious and Harmonics		-36dBm<1GHz -30dBm>1GHz
Modulation Limiting		5KHz/4KHz/2.5KHz
FM Noise		≥45dB(25KHz/20KHz)/40dB(12.5KHz)
Audio Distortion		<3%

All Specifications are tested according to TIA/EIA-603, and subject to change without notice due to continuous development.

HYT endeavors to achieve the accuracy and completeness of this manual, but no warranty of accuracy or reliability is given. All the specifications and designs are subject to change without notice due to continuous technology development. Changes which may occur after publication are highlighted by Revision History contained in Service Manual.

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