

SAMSUNG

UMTS TELEPHONE

SGH-i617

SERVICE *Manual*

UMTS TELEPHONE



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**SAMSUNG
ELECTRONICS**



GSPN (Global Service Partner Network)

Country	Web Site
North America	service.samsungportal.com
Latin America	latin.samsungportal.com
CIS	cis.samsungportal.com
Europe	europe.samsungportal.com
China	china.samsungportal.com
Asia	asia.samsungportal.com
Mideast & Africa	mea.samsungportal.com

1. Safety Precautions

1-1. Repair Precaution

- Repair in Shield Box, during detailed tuning.

Take specially care of tuning or test, because cellular phone is sensitive for surrounding interference(RF noise).

- Be careful to use a kind of magnetic object or tool, because performance of parts is damaged by the influence of magnetic force.

- Surely use a standard screwdriver when you disassemble this product, otherwise screw will be worn away.

- Use a thicken twisted wire when you measure level.

A thicken twisted wire has low resistance, therefore errors of measurement are few.

- Repair after separate Test Pack and Set because for short danger (for example an overcurrent and furious flames of parts etc) when you repair board in condition of connecting Test Pack and tuning on.

- Take specially care of soldering, because Land of PCB is small and weak in heat.

- Surely tune on/off while using AC power plug, because a repair of battery charger is dangerous when tuning ON/OFF PBA and Connector after disassembling charger.

- Don't use as you pleases after change other material than replacement registered on SEC System. Otherwise engineer in charge isn't charged with problem that you don't keep this rules.

1-2. ESD(Electrostatically Sensitive Devices) Precaution

Several semiconductor may be damaged easily by static electricity. Such parts are called by ESD (Electrostatically Sensitive Devices), for example IC, BGA chip etc. Read Precaution below.

You can prevent from ESD damage by static electricity.

- Remove static electricity remained your body before you touch semiconductor or parts with semiconductor. There are ways that you touch an earthed place or wear static electricity prevention string on wrist.
- Use earthed soldering steel when you connect or disconnect ESD.
- Use soldering removing tool to break static electricity, otherwise ESD will be damaged by static electricity.
- Don't unpack until you set up ESD on product. Because most of ESD are packed by box and aluminum plate to have conductive power, they are prevented from static electricity.
- You must maintain electric contact between ESD and place due to be set up until ESD is connected completely to the proper place or a circuit board.

2. Specification

2-1. GSM General Specification

	GSM 850	EGSM 900	DCS1800	PCS1900	W-CDMA 850	W-CDMA 1900	W-CDMA 2100
Freq. Band[MHz] Uplink/Downlink	824~849 869~894	880~915 925~960	1710~1785 1805~1880	1850~1910 1930~1990	824~849 869~894	1850~1910 1930~1990	1920~1980 2110~2170
ARFCN range	128~25	0~124 & 975~1023	512~885	512~810	UL:4132~4233 DL:4357~4458	UL:9262~9538 DL:9662~9938	UL:9612~9888 DL:10562~10838
Tx/Rx spacing	45MHz	45MHz	95MHz	80MHz	45MHz	80MHz	130MHz
Mod. Bit rate/ Bit Period	270.833kbps 3.692us	270.833kbps 3.692us	270.833kbps 3.692us	270.833kbps 3.692us	3.84Mcps	3.84Mcps	3.84Mcps
Time Slot Period/Frame Period	576.9us 4.615ms	576.9us 4.615ms	576.9us 4.615ms	576.9us 4.615ms	Frame length : 10ms Slot length : 0.667ms	Frame length : 10ms Slot length : 0.667ms	Frame length : 10ms Slot length : 0.667ms
Modulation	0.3GMSK	0.3GMSK	0.3GMSK	0.3GMSK	QPSK HQPSK	QPSK HQPSK	QPSK HQPSK
MS Power	33dBm~5dBm	33dBm~5dBm	30dBm~0dBm	30dBm~0dBm	24dBm~-50dBm	24dBm ~ -50dBm	24dBm ~ -50dBm
Power Class	4 (max +33dBm)	4 (max +33dBm)	1 (max +30dBm)	1 (max +30dBm)	3 (max +24dBm)	3 (max +24dBm)	3 (max +24dBm)
Sensitivity	-102dBm	-102dBm	-100dBm	-100dBm	-106.7dBm	-106.7dBm	-106.7dBm
TDMA Mux	8	8	8	8			
Cell Radius	35Km	35Km	2Km	2Km	2Km	2Km	2Km

2-2. GSM TX power class

TX Power control level	GSM850 GSM900
5	33±2 dBm
6	31±2 dBm
7	29±2 dBm
8	27±2 dBm
9	25±2 dBm
10	23±2 dBm
11	21±2 dBm
12	19±2 dBm
13	17±2 dBm
14	15±2 dBm
15	13±2 dBm
16	11±3 dBm
17	9±3 dBm
18	7±3 dBm
19	5±3 dBm

TX Power control level	DCS1800
0	30±3 dBm
1	28±3 dBm
2	26±3 dBm
3	24±3 dBm
4	22±3 dBm
5	20±3 dBm
6	18±3 dBm
7	16±3 dBm
8	14±3 dBm
9	12±4 dBm
10	10±4 dBm
11	8±4 dBm
12	6±4 dBm
13	4±4 dBm
14	2±5 dBm
15	0±5 dBm

TX Power control level	PCS1900
0	30±3 dBm
1	28±3 dBm
2	26±3 dBm
3	24±3 dBm
4	22±3 dBm
5	20±3 dBm
6	18±3 dBm
7	16±3 dBm
8	14±3 dBm
9	12±4 dBm
10	10±4 dBm
11	8±4 dBm
12	6±4 dBm
13	4±4 dBm
14	2±5 dBm
15	0±5 dBm

3. Operation Instruction and Installation

Main Function

- MP3 / 48 Poly Melody
- BT 2.0
- Video Sharing / Streaming
- USB 1.1
- WAP2.0, JAVA, MPEG4
- MIDP 2.0 / CLDC 1.1
- Auto Time Setting,
- MMS / SMS
- Weight: 115.3g
- Camera: - 2.0M (LSI)
- LCD : 2.4" QVGA TFT (AMLCD)
- Size: 114x60x12.8mm
- GPRS/EDGE : class 10
- Battery: 1700mAH
- Memory: 2Gb MuxOneNAND Flash +512Mb (x8)*2 Mobile DDR
- Band: GSM850/900/1800/1900, W850/1900/2100
- BB: Qualcomm MSM6260, PM6650
- RF: Qualcomm RTR6275, RFR6275

4. Array course control

4-1. Equipment for Software Download

- There is 3 set to download the binary image into your device.

[First set]



1. JIG (UMTS TEST JIG) : (GH80-03308A)
2. USB Cable
3. Test Cable(SGH-I617 cable): JIG to phone(GH39-00890A)
4. Power Cable: JIG to power supply
5. Serial Cable: PC to JIG

4-1

6. Power Supply : (E3610A)
7. Test Cable(SGH-I617 cable) : JIG to phone(GH39-00886A)
8. RF Cable : (GH39-00397A)

[Second Set]



1. JIG (S20P SGH-i617 DLC JIG)
2. Portable Power Supply

[Third Set]



1. USB DATA Link Cable
2. Battery

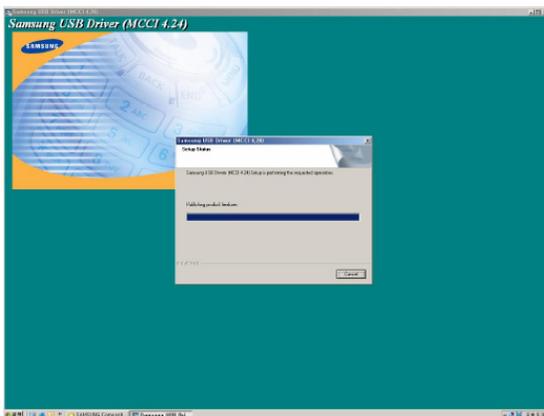
4-2. Software Download

4-2-1. Pre-requisite for Download

- Download Program (there is 3 ways to download.)
 - [Image Version].exe
 - [BADA] Download V0.9.3_Single.exe
 - [BADA] Download V0.9.3_Multi(LINE).exe (Mult-idownloader)
- USB Driver
 - [PDA]: Samsung MITs USB Sync <Samsung MITs USB Sync.zip> (If you installed the latest ActiveSync program, you don't need to install the PDA driver.)
 - [Phone]: Samsung CDMA Modem [Samsung CDMA Modem.zip]
- SGH_I617 Mobile Device
- Binary files
- ActiveSync Setting
- Driver Installation.

4-2-2. Driver Installation

- [PDA]
 - Make Sure that you install the latest ActiveSync program.
- [Phone]



- Make sure that you install the driver for a phone.
- You have to install the driver of Samsung CDMA Modem of downloading a phone image
- Restart your host PC after you install the phone driver.

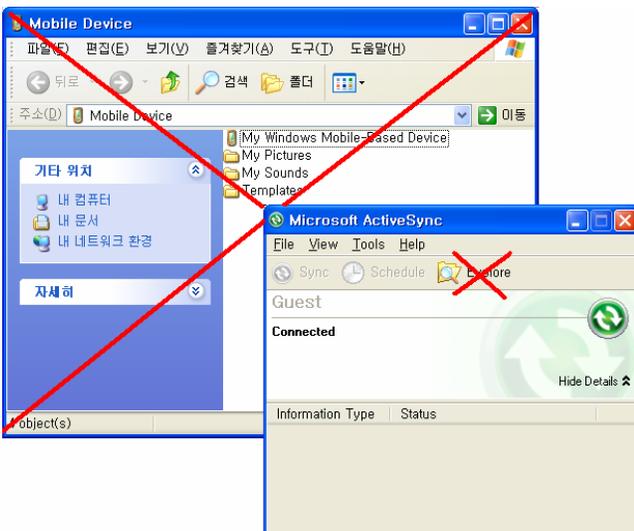
4-2-3. S/W Download Process

4-2-3-1. Exe Download ([Image Version].exe)

■ ActiveSync Setting.

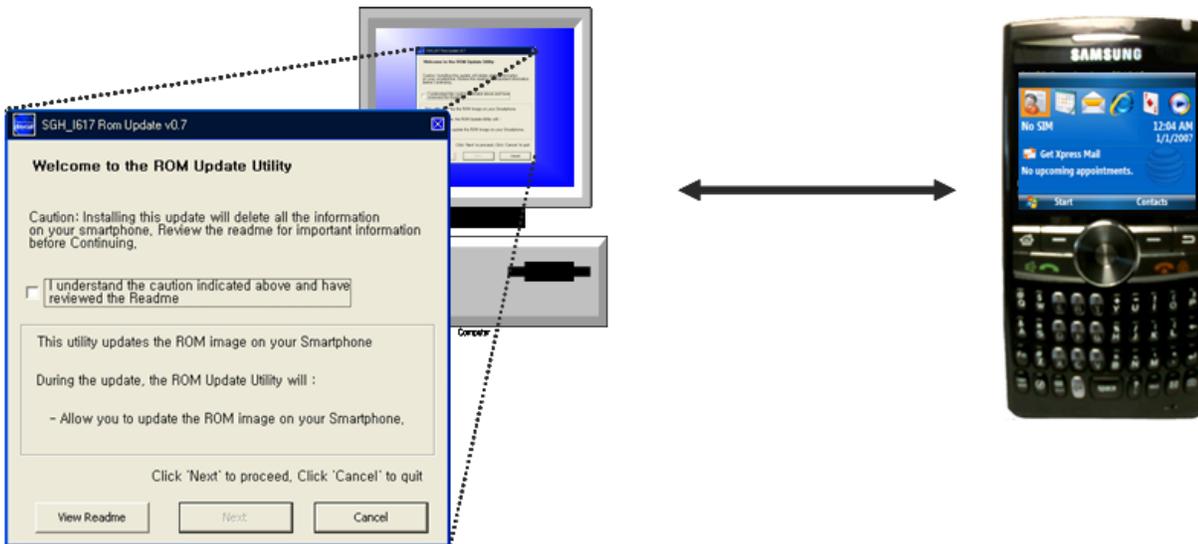


- Make sure that ActiveSync program is checked before connecting your device to the host computer.
- If the ActiveSync is not working on your computer, Make sure that check box, [Allow USB connection at the connection settings](#), is checked.
- Press 'OK' button to save a configuration.



- If the device is connected with the host pc through the ActiveSync, Do NOT open the explorer of the ActiveSync.

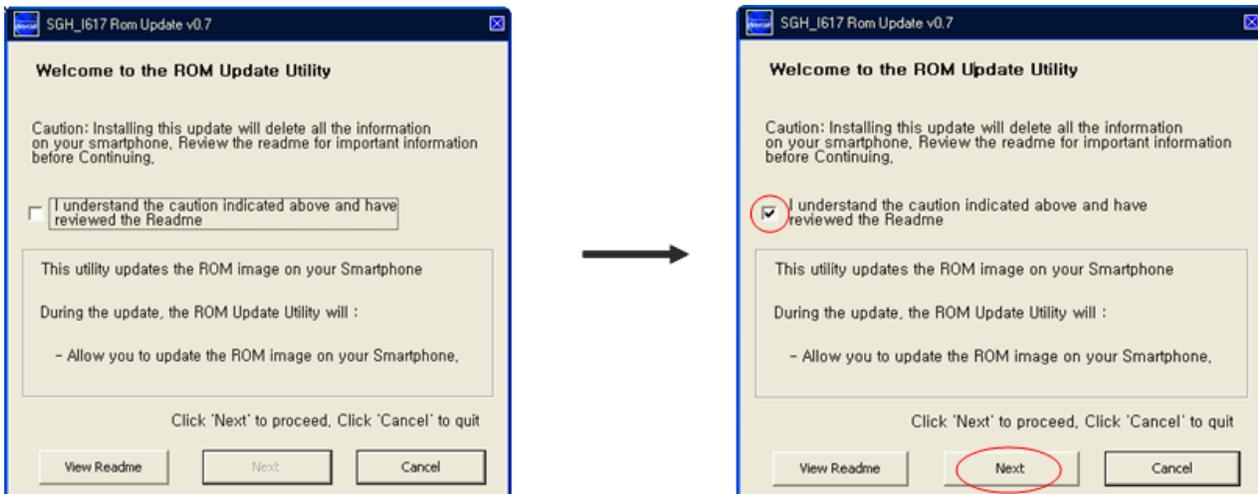
■ How to connect the device to your host computer.



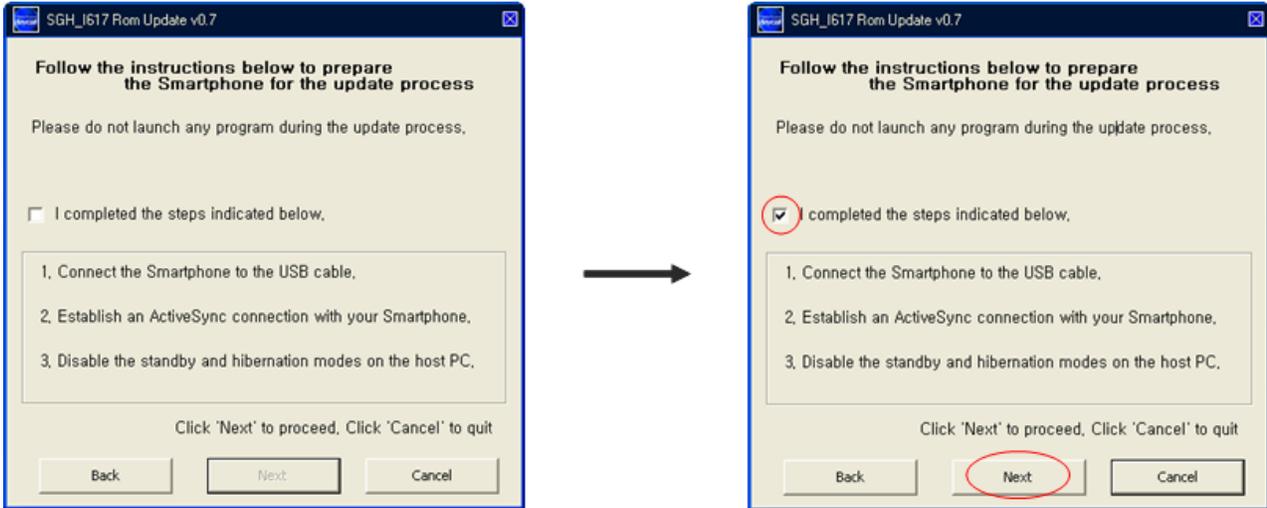
- Execute the download program (**[Image Version].exe**)
- Make sure that you have to connect the device with the PC through the ActiveSync.

■ Download Procedure

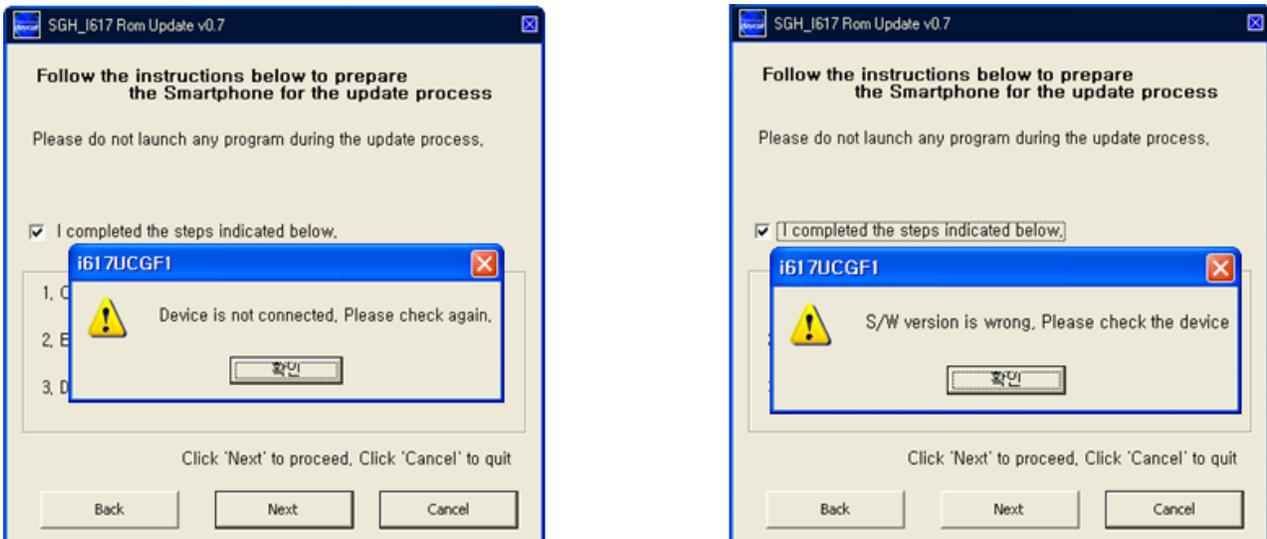
1. If you check the check box, "Next" button will be activated. Then you can go on next step.



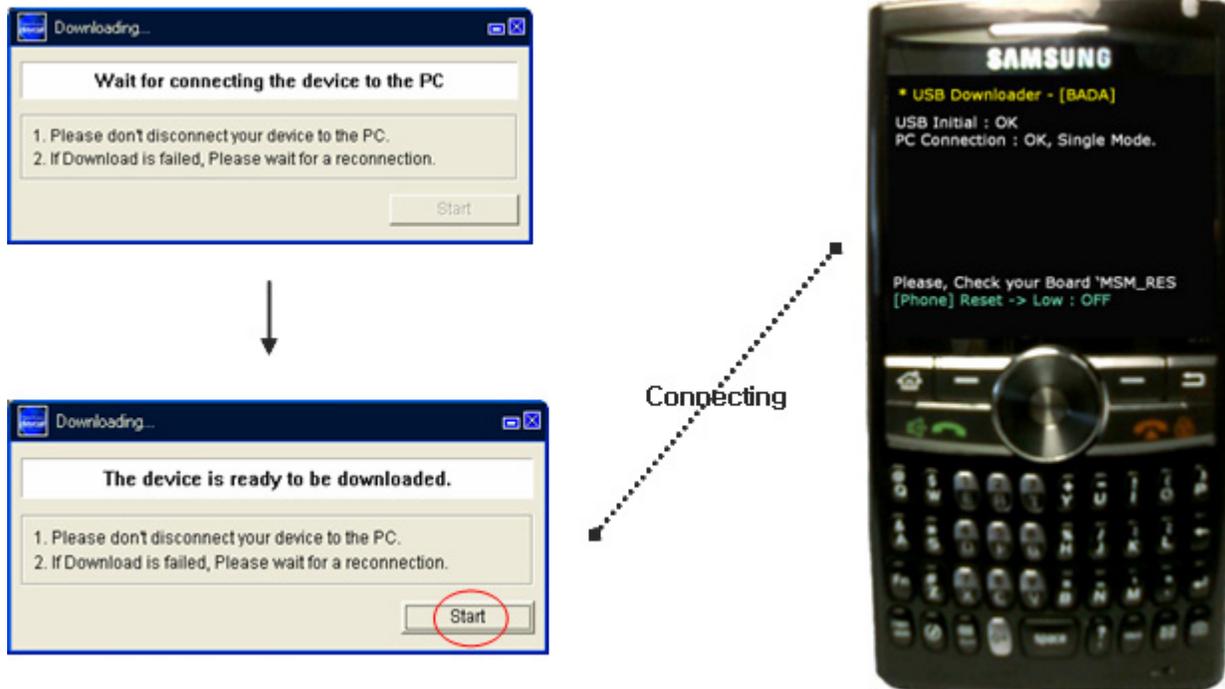
2. Disable the standby and hibernation modes on the host PC. And the capacity of a battery should be enough. Do NOT launch any program during the update process.



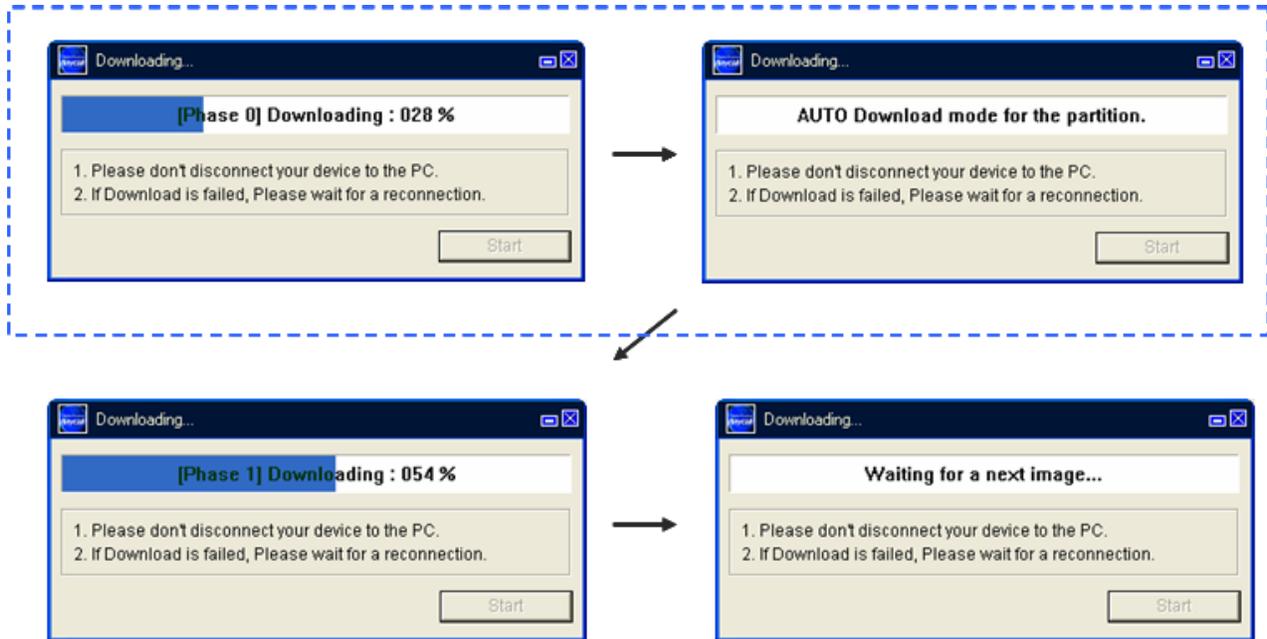
3. If you try to go on next step without connection between the device and the PC, it will be occurred that error message is indicated below. And the device version is not correct, you can NOT go on next step.



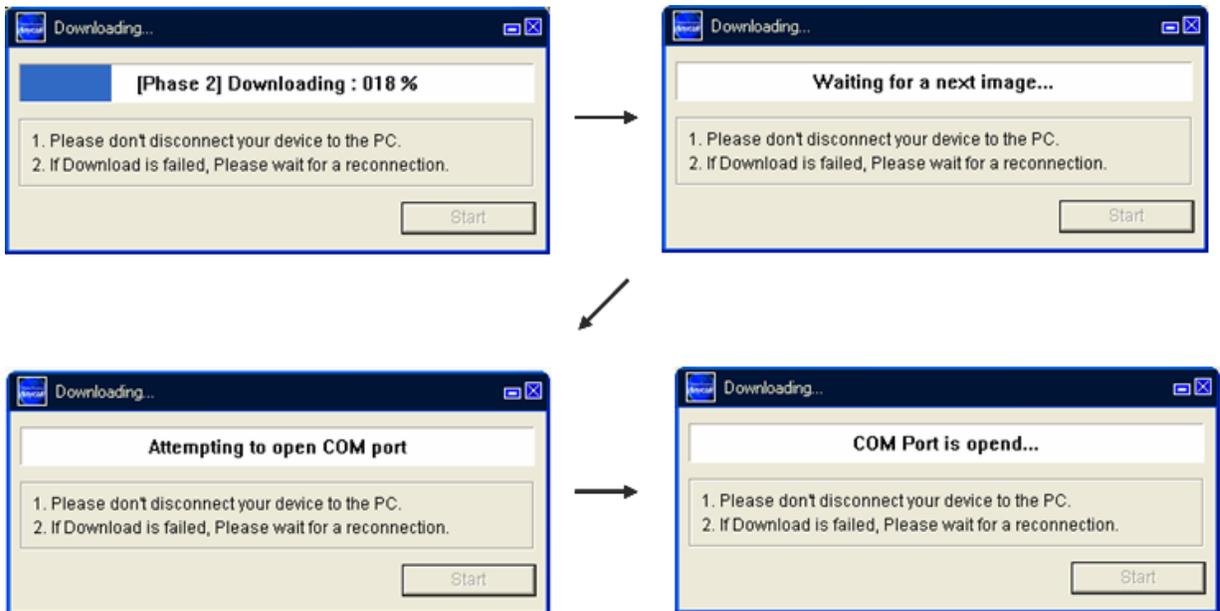
4. ActiveSync will be terminated on your computer at this step. (The icon for the ActiveSync may be on your tray of the PC. It is not updated merely.) And wait for the reboot of the device. The device will be connected the download program.
- If you succeed in connecting, you can see the 'Start' button which is activated.



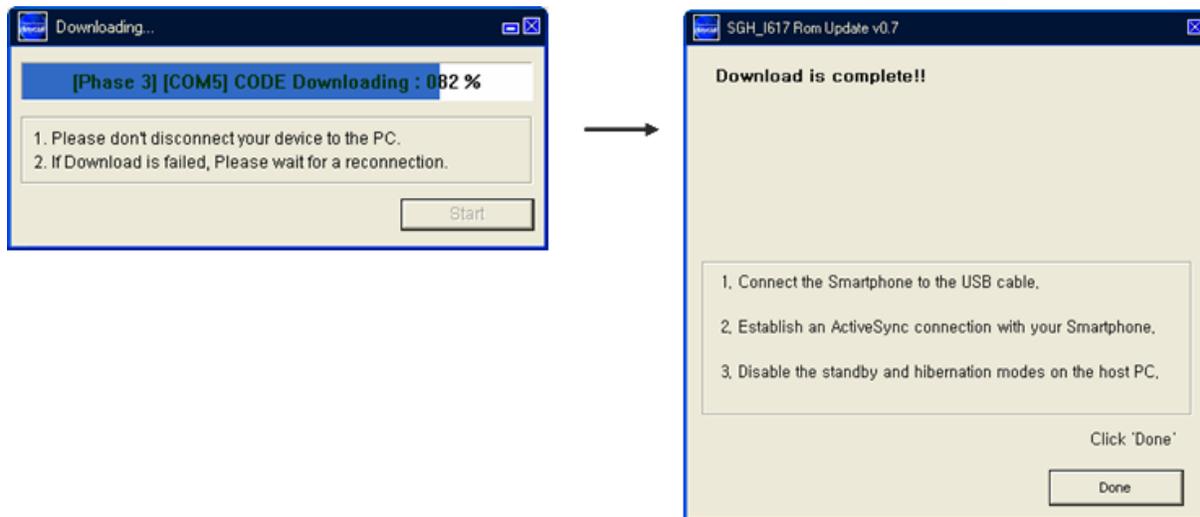
5. You can push the start button to download the binary image. (Phase 0 is for the partition process. So, it may be omitted. In normal case, download is started from phase 1.)



6. Phase 2 is for the PDA binary. And the PC try to open the COM port after finishing Phase 2.



7. You can see the message for the completion after finishing Phase 3.



■ Trouble Shooting.

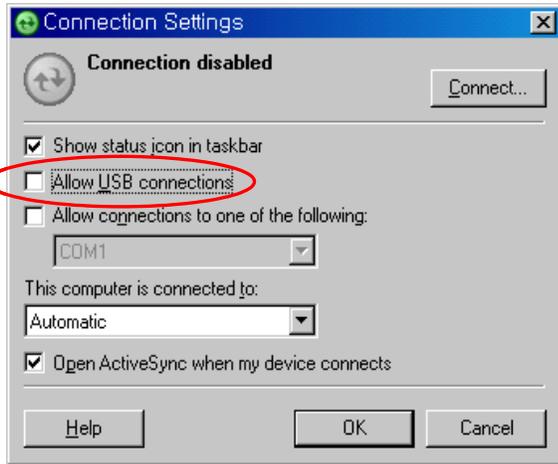
- If you face with the problem during Download, disconnect your device from the PC. Then turn off the device and turn on it by pressing power key, back key, and volume up key simultaneously. The device will be reconnected with the PC. So you can go on next step.

(If the download is failed in Phase 2, Do NOT terminate the download program. Just reconnect your device in download mode.)



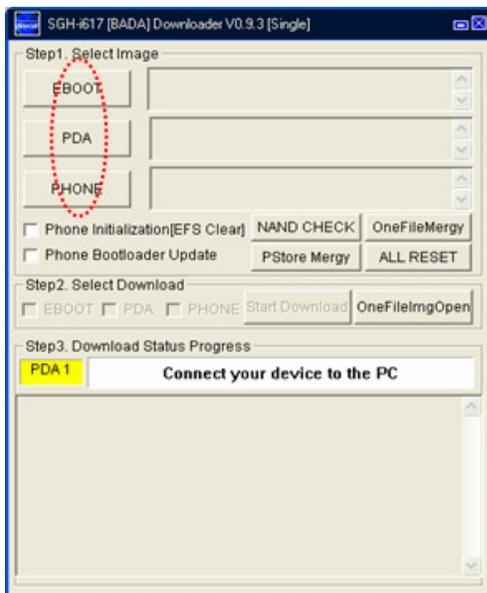
4-2-3-2. Single Download ([BADA] Download V0.9.3_Single.exe)

■ ActiveSync Setting.

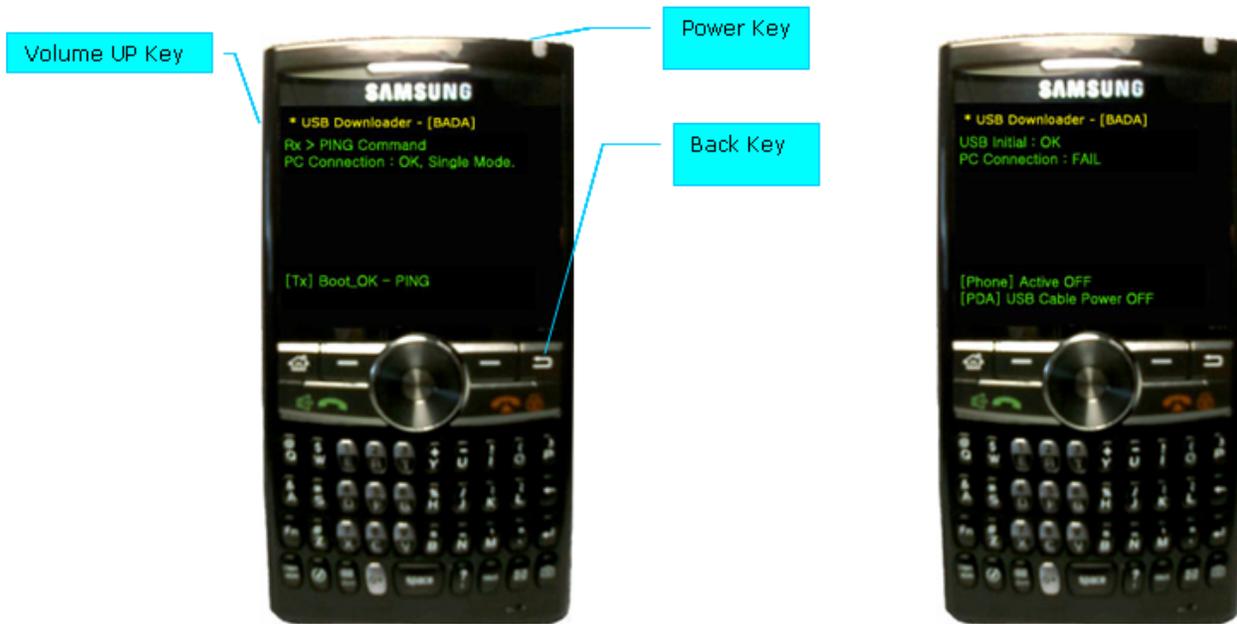


- Make sure that the active sync program is checked before connecting your device to the host computer.
- If the ActiveSync is not working on your computer, Make sure that check box, [Allow USB connection at the connection settings, is released.](#)
- Press 'OK' button to save a configuration.

■ How to connect the device to your host computer.



- Select the binary files by using Eboot, PDA and PHONE buttons.



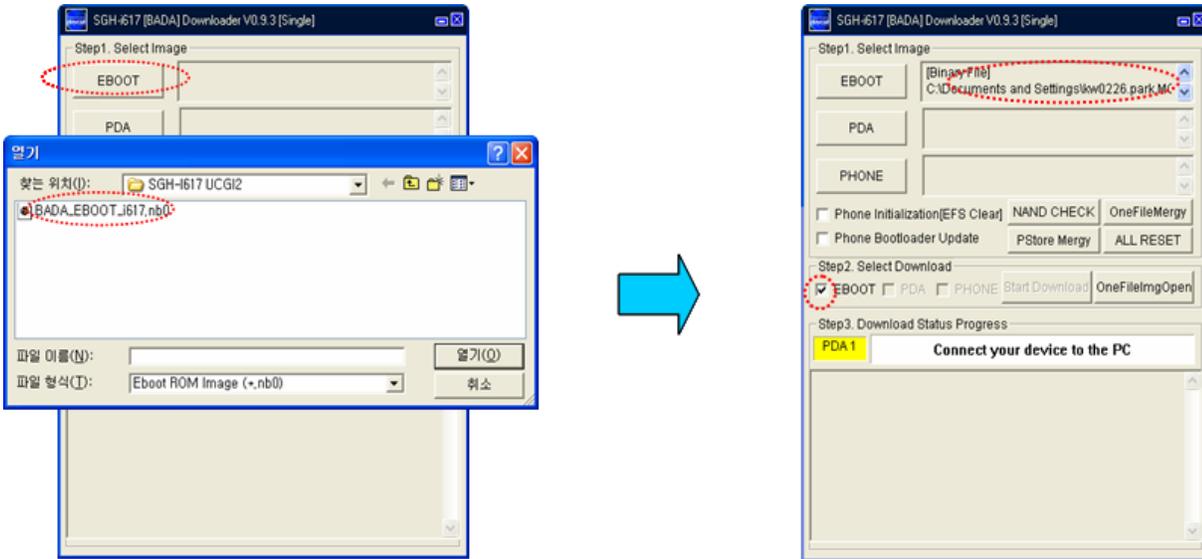
- Turn on your device to enter download Mode when you press on volume up key and back key simultaneously

- You can see the upper picture When the connection is failed.

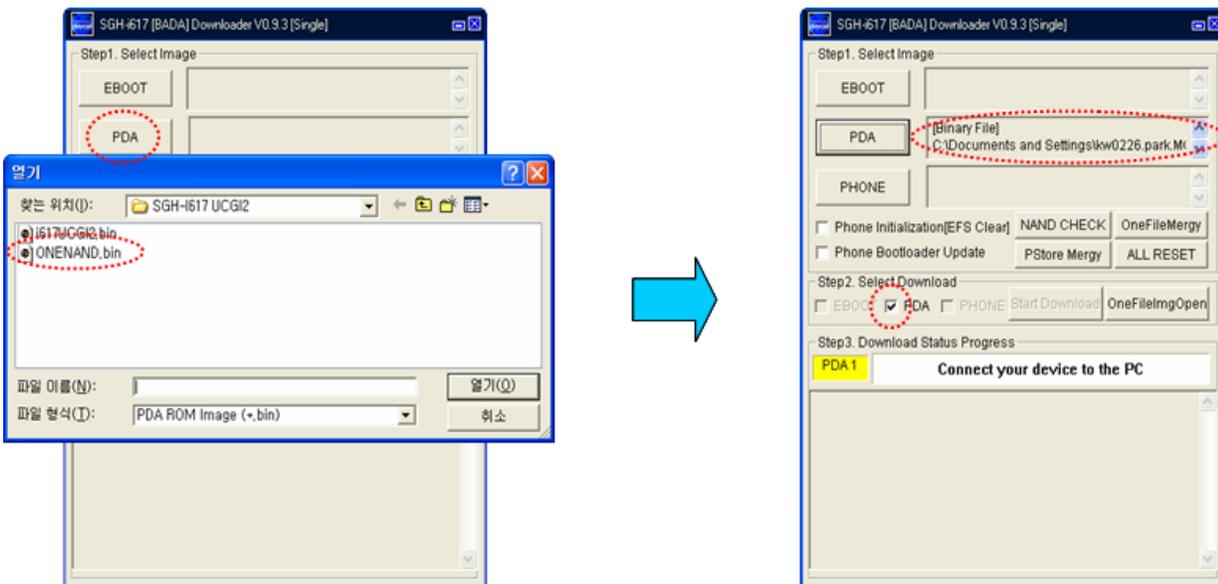
- Retry to connect the device with your host computer

■ Load the binary download program by executing the "[BADA] Download V0.9.3_Single.exe"

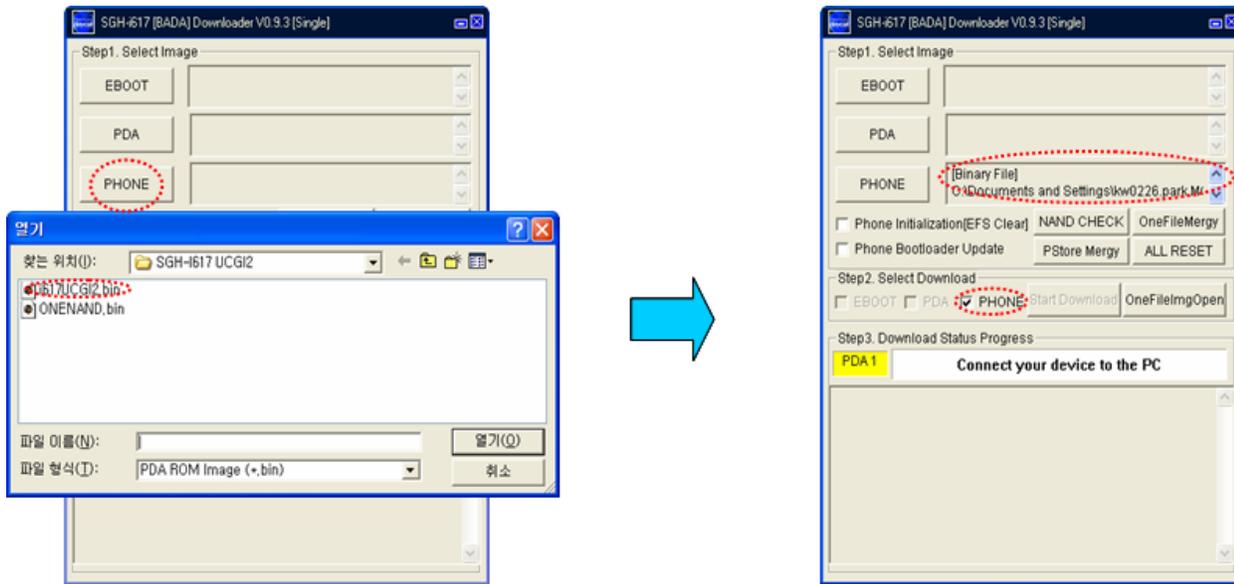
1. First select the bootloader image by clicking the EBOOT button. The Eboot Checkbox will be activated.



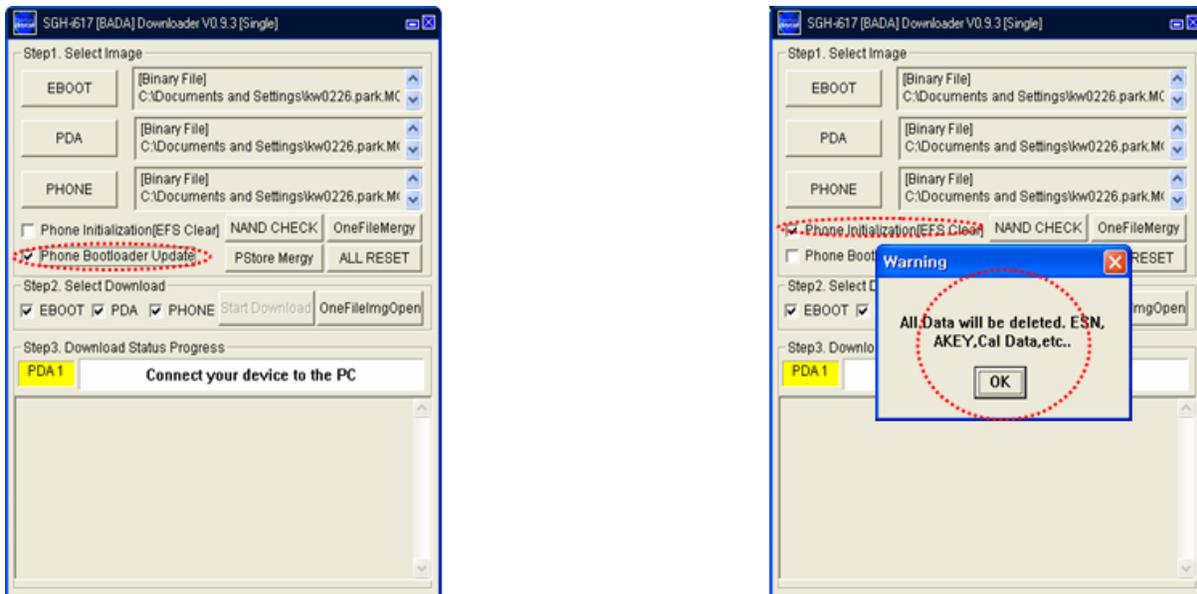
2. Click the PDA Button to select the PDA image, then the PDA checkbox will be activated.



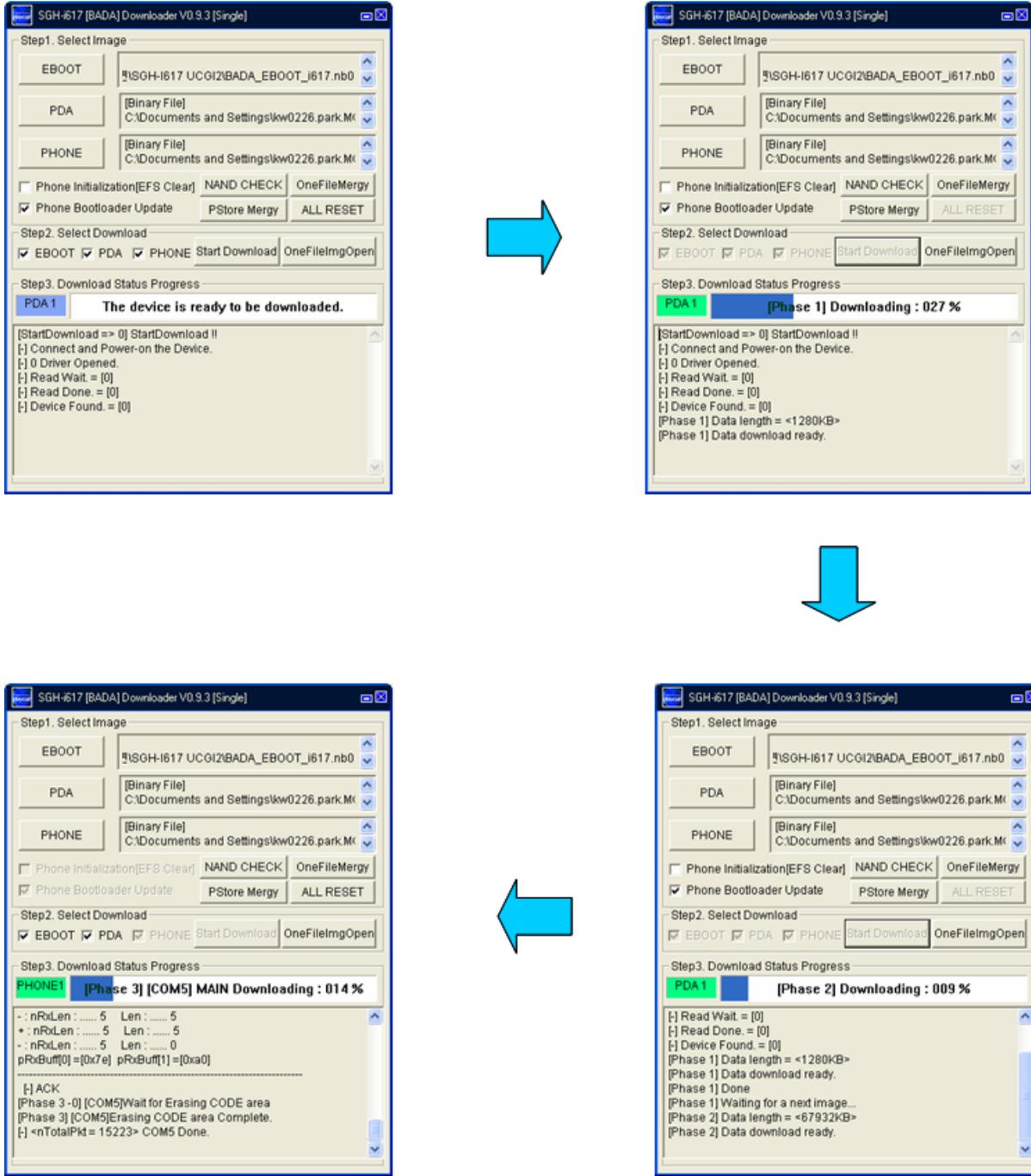
3. Click the PHONE Button to select the PHONE image, then the PHONE checkbox will be activated.



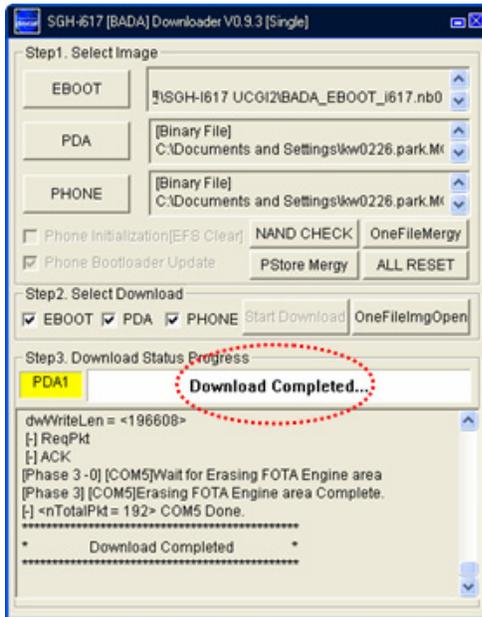
4. If you need to update phone bootloader, you should check the 'Phone Bootloader Update' checkbox. So does 'EFS Clear'.



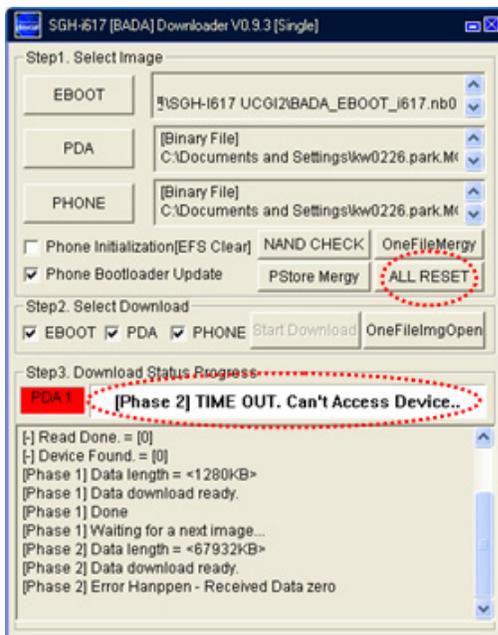
5. If the device connected with the host PC, the color of progress bar will be changed with blue. In that time, You can push the start button to download the binary image.



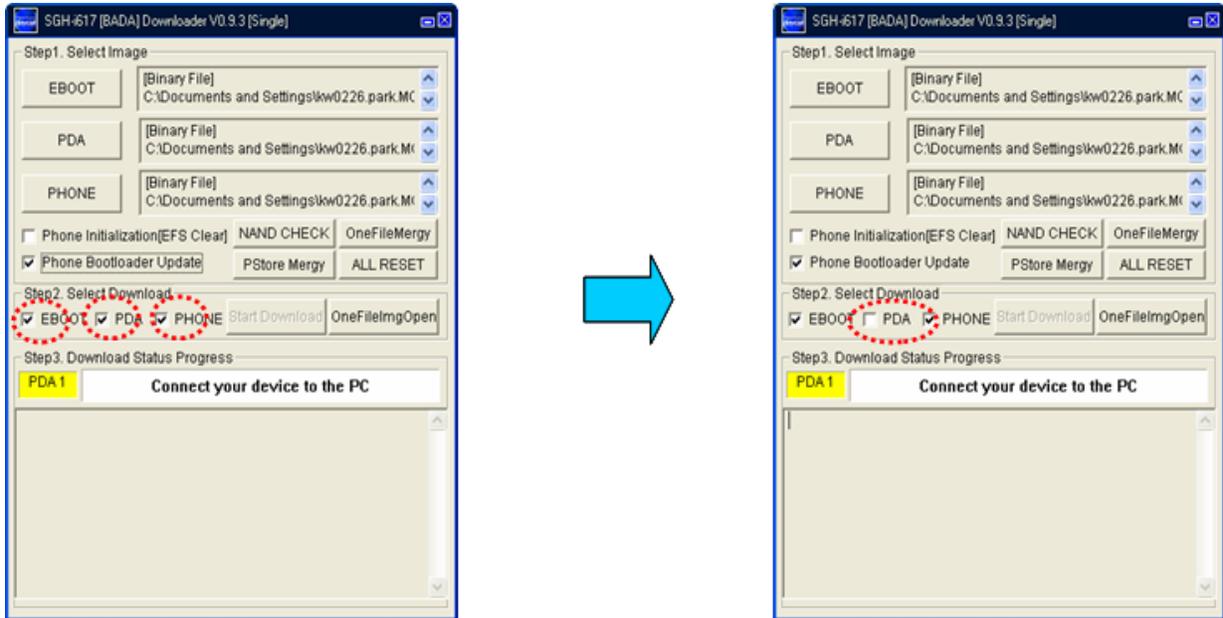
6. You can see the below picture, when it is done. And the device will be rebooted. If your device is turned on successfully, every downloading procedure is finished.



7. If some error occurs, You have to restart download program or push the all reset button.

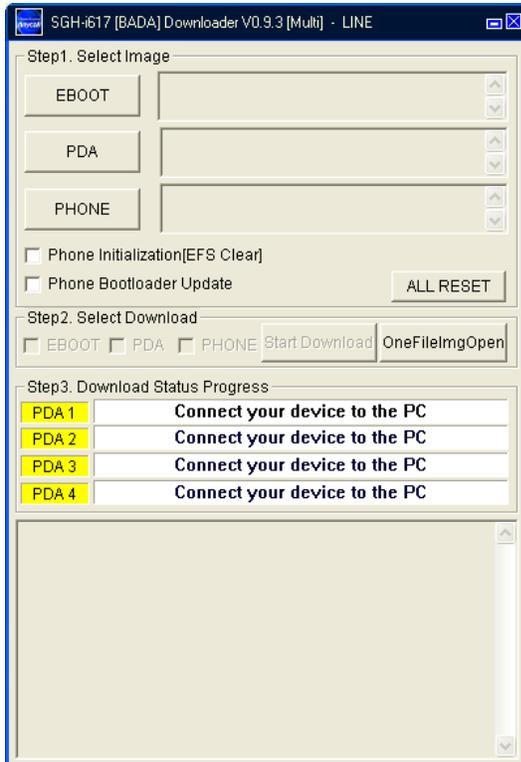


8. If you want to omit to download PDA image, you can release the PDA check box. And Eboot, Phone download are the same as this.



4-2-3-3. Multi Download ([BADA] Download V0.9.3_Multi(LINE).exe)

- Multi-download is almost same as single download.



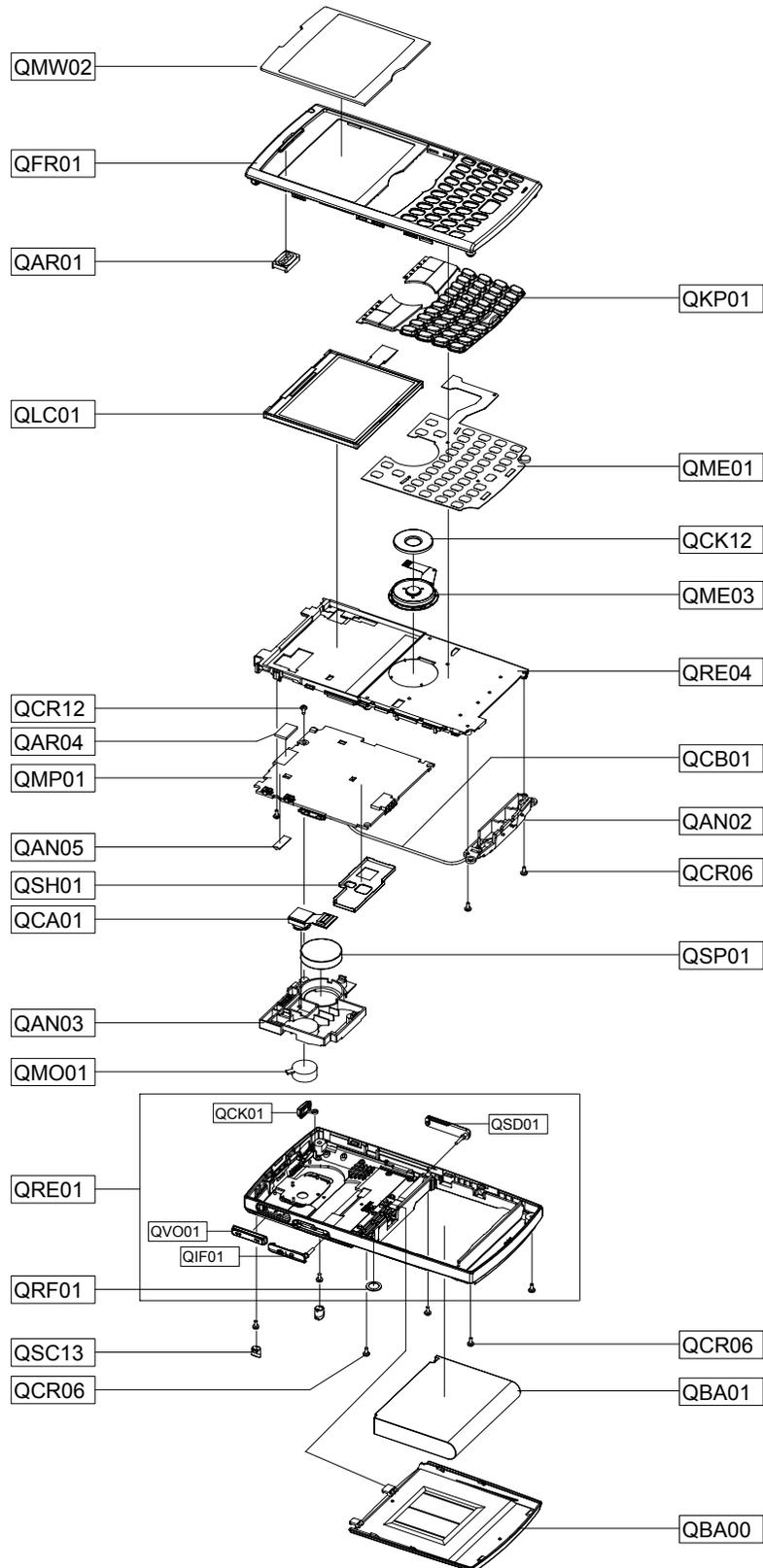
- The difference is below.

1. There is four progress bars. It means you can download four devices at once.

2. The device will be rebooted automatically after download. In that time, 'MITs USB RNDIS Driver' is not detected in the host PC. It means you can't use the active sync program. So Make sure that you have to restart the device after first booting. (Just pull out the battery. And wait for a minute.)

5. Exploded View and Parts List

5-1. Cellular phone Exploded View



5-2. Cellular phone Parts List

Design LOC		Description	SEC CODE
QAN02		ANTENNA-SGH I617	GH42-01272A
QAN03		ANTENNA-SGH-I617_GPS	GH42-01263A
QAN05		ASSY RUBBER-ANTENNA CONTACT 1	GH98-04736A
QAR01		AUDIO-RECEIVER	3009-001310
QAR04		RMO RUBBER-RECEIVER BACKUP	GH73-11065A
QBA00		PMO COVER-BATTERY	GH72-42962A
QBA01		INNER BATTERY PACK-1700MAH,BLK	GH43-02910A
QCA01		CAMERA MODULE-SGHI617	GH59-04619A
QCB01		CBF COAXIAL CABLE	GH39-00469A
QCK12		ASSY KEY-WHEEL DECO	GH98-06966A
QCR06		SCREW-MACHINE	6001-001155
QCR06		SCREW-MACHINE	6001-001155
QCR06		SCREW-MACHINE	6001-001155
QCR12		SCREW-MACHINE	6001-001530
QFR01		ASSY CASE-FRONT	GH98-05655A
QKP01		ASSY KEYPAD-(CIN/BLK)	GH98-05657A
QLC01		LCD-MODULE, SGHI617	GH07-01145A
QME01		KEY FPCB-SGHI617 KEY PAD FPCB	GH59-04743A
QME03		KEY FPCB-WHEEL KEY,SGHI617	GH59-04754A
QMO01		MOTOR DC-SGH I617	GH31-00350A
QMP01		PBA MAIN-SGH I617	GH92-03886A
QMW02		PCT WINDOW-COVER MAIN	GH72-44239A
QRE04		ASSY BRACKET-REAR SHIELD	GH98-05658A
QRF01		TAPE-RF COVER	GH74-34460A
QSC13		PMO COVER-REAR SCREW	GH72-42961A
QSH01		ICT SHIELD-COVER	GH70-02950A
QSP01		SPEAKER	3001-002203
QRE01		ASSY COVER-REAR	GH98-05656A
	QCK01	PMO KEY-POWER	GH72-42960A
	QIF01	PMO COVER-IF	GH72-42957A
	QSD01	PMO COVER-SD	GH72-42956A
	QVO01	PMO KEY-VOLUME	GH72-42959A

Description	SEC Code
BAG PE	6902-000634
CBF INTERFACE-DLC APCBS10BBE(S)	GH39-00922A
ADAPTOR-ATADS10JBE,BLK,USA	GH44-01700A
LABEL(R)-WATERSOAK(NEW)	GH68-14285A
LABEL(R)-MAIN(AT&T)	GH68-16523A
BOX-SPACE AT&T	GH69-05279A
CUSHION-CASE(AT&T)	GH69-05862A
BOX-UNIT(AT&T)	GH69-05930A
MPR-VOL KEY BOHO VINYL	GH74-07312A
TAPE-BATTERY	GH74-34463A
TAPE INSU	GH74-34466A
PAA ETC-SGHI617(ATT)	GH99-25251A

6. MAIN Electrical Parts List

SEC Code	Design LOC	Description	STATUS
0401-001144	D402	DIODE-SWITCHING	SA
0403-001339	ZD600	DIODE-ZENER	SA
0403-001463	ZD300	DIODE-ZENER	SA
0403-001467	ZD701	DIODE-ZENER	SA
0403-001547	D401	DIODE-ZENER	SA
0403-001547	D607	DIODE-ZENER	SA
0406-001167	ZD602	DIODE-TVS	SA
0406-001167	ZD700	DIODE-TVS	SA
0406-001167	ZD702	DIODE-TVS	SA
0406-001167	ZD703	DIODE-TVS	SA
0406-001167	ZD704	DIODE-TVS	SA
0406-001167	ZD705	DIODE-TVS	SA
0406-001167	ZD706	DIODE-TVS	SA
0406-001210	ZD604	DIODE-TVS	SA
0406-001210	ZD605	DIODE-TVS	SA
0406-001210	ZD607	DIODE-TVS	SA
0406-001223	D704	DIODE-TVS	SA
0406-001231	D600	DIODE-TVS	SA
0406-001231	D601	DIODE-TVS	SA
0406-001231	D602	DIODE-TVS	SA
0406-001231	D603	DIODE-TVS	SA
0406-001231	D604	DIODE-TVS	SA
0406-001231	D605	DIODE-TVS	SA
0406-001231	D606	DIODE-TVS	SA
0406-001231	D701	DIODE-TVS	SA
0406-001231	D702	DIODE-TVS	SA
0406-001231	D705	DIODE-TVS	SA
0406-001231	D706	DIODE-TVS	SA
0406-001231	D707	DIODE-TVS	SA
0406-001231	D708	DIODE-TVS	SA

Main Electrical Parts List

SEC Code	Design LOC	Description	STATUS
0406-001231	D709	DIODE-TVS	SA
0406-001231	D710	DIODE-TVS	SA
0406-001231	D711	DIODE-TVS	SA
0406-001231	D712	DIODE-TVS	SA
0406-001231	D713	DIODE-TVS	SA
0406-001231	D714	DIODE-TVS	SA
0406-001231	D715	DIODE-TVS	SA
0406-001231	D716	DIODE-TVS	SA
0406-001231	ZD606	DIODE-TVS	SA
0406-001231	ZD608	DIODE-TVS	SA
0407-000115	D400	DIODE-ARRAY	SA
0407-000115	D700	DIODE-ARRAY	SA
0504-000168	TR400	TR-DIGITAL	SA
0504-000168	TR401	TR-DIGITAL	SA
0504-000168	TR403	TR-DIGITAL	SA
0504-000168	TR700	TR-DIGITAL	SA
0505-001165	TR402	FET-SILICON	SA
0601-001905	LED700	LED	SA
0801-002321	U801	IC-CMOS LOGIC	SA
0801-002882	U901	IC-CMOS LOGIC	SA
0801-003013	U300	IC-CMOS LOGIC	SA
0801-003016	U902	IC-CMOS LOGIC	SA
0801-003052	U900	IC-CMOS LOGIC	SA
0801-003140	U407	IC-CMOS LOGIC	SA
0904-002074	UCP800	IC-DSP	SA
1001-001408	U501	IC-ANALOG SWITCH	SA
1001-001408	U502	IC-ANALOG SWITCH	SA
1001-001410	U904	IC-ANALOG SWITCH	SA
1001-001471	U905	IC-ANALOG SWITCH	SA
1003-001984	U404	IC-LEVEL DRIVER	SA

SEC Code	Design LOC	Description	STATUS
1106-001511	UME901	IC-SRAM	SA
1108-000127	UME300	IC-MCP	SA
1108-000134	UME900	IC-MCP	SA
1201-002240	U503	IC-AUDIO AMP	SA
1201-002426	PAM100	IC-POWER AMP	SA
1201-002550	PAM201	IC-POWER AMP	SA
1201-002577	PAM200	IC-POWER AMP	SA
1201-002610	U504	IC-AUDIO AMP	SA
1203-002716	U403	IC-VOL. DETECTOR	SA
1203-003924	U800	IC-VOL. DETECTOR	SA
1203-004018	U604	IC-DC/DC CONVERTER	SA
1203-004107	U406	IC-VOL. DETECTOR	SA
1203-004120	U605	IC-MULTI REG.	SA
1203-004172	U700	IC-DC/DC CONVERTER	SA
1203-004340	U609	IC-MULTI REG.	SA
1203-004447	U601	IC-MULTI REG.	SA
1203-004449	U608	IC-MULTI REG.	SA
1203-004469	U610	IC-VOL. DETECTOR	SA
1203-004518	U401	IC-BATTERY	SA
1203-004606	U607	IC-MULTI REG.	SA
1203-004607	U606	IC-MULTI REG.	SA
1203-004798	U702	IC-SWITCH VOL. REG.	SA
1203-004926	U402	IC-POWER SUPERVISOR	SA
1205-002784	U906	IC-SWITCH	SA
1205-003095	RFS101	IC-SWITCH	SA
1205-003114	UCD500	IC-CODEC	SA
1205-003115	U903	IC-TRANSCEIVER	SA
1205-003215	UCP300	IC-MODEM	SA
1205-003235	U505	IC-DATA COMM./GEN.	SA
1205-003285	U100	IC-TRANSCEIVER	SA

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SEC Code	Design LOC	Description	STATUS
1205-003286	U200	IC-RECEIVER	SA
1404-001221	TH300	THERMISTOR-NTC	SA
1404-001221	TH301	THERMISTOR-NTC	SA
2007-000070	R412	R-CHIP	SA
2007-000137	R308	R-CHIP	SA
2007-000138	R220	R-CHIP	SA
2007-000138	R221	R-CHIP	SA
2007-000140	R119	R-CHIP	SA
2007-000140	R122	R-CHIP	SA
2007-000148	R628	R-CHIP	SA
2007-000148	R629	R-CHIP	SA
2007-000149	R401	R-CHIP	SA
2007-000162	R707	R-CHIP	SA
2007-000167	R805	R-CHIP	SA
2007-000168	R620	R-CHIP	SA
2007-000170	R329	R-CHIP	SA
2007-000170	R418	R-CHIP	SA
2007-000171	L508	R-CHIP	SA
2007-000171	R111	R-CHIP	SA
2007-000171	R201	R-CHIP	SA
2007-000171	R206	R-CHIP	SA
2007-000171	R215	R-CHIP	SA
2007-000171	R217	R-CHIP	SA
2007-000171	R331	R-CHIP	SA
2007-000171	R524	R-CHIP	SA
2007-000171	R638	R-CHIP	SA
2007-000171	R642	R-CHIP	SA
2007-000171	R822	R-CHIP	SA
2007-000172	R202	R-CHIP	SA
2007-000249	R330	R-CHIP	SA

SEC Code	Design LOC	Description	STATUS
2007-001284	R207	R-CHIP	SA
2007-001290	R311	R-CHIP	SA
2007-001291	R118	R-CHIP	SA
2007-001298	R211	R-CHIP	SA
2007-001301	R640	R-CHIP	SA
2007-001301	R641	R-CHIP	SA
2007-001308	R123	R-CHIP	SA
2007-001308	R209	R-CHIP	SA
2007-001323	R404	R-CHIP	SA
2007-001335	R513	R-CHIP	SA
2007-001335	R514	R-CHIP	SA
2007-007009	R219	R-CHIP	SA
2007-007014	R403	R-CHIP	SA
2007-007014	R413	R-CHIP	SA
2007-007014	R417	R-CHIP	SA
2007-007107	R320	R-CHIP	SA
2007-007107	R321	R-CHIP	SA
2007-007107	R323	R-CHIP	SA
2007-007107	R324	R-CHIP	SA
2007-007107	R333	R-CHIP	SA
2007-007107	R334	R-CHIP	SA
2007-007132	R421	R-CHIP	SA
2007-007139	R519	R-CHIP	SA
2007-007142	R402	R-CHIP	SA
2007-007193	R103	R-CHIP	SA
2007-007193	R109	R-CHIP	SA
2007-007308	R422	R-CHIP	SA
2007-007308	R423	R-CHIP	SA
2007-007309	R105	R-CHIP	SA
2007-007312	R424	R-CHIP	SA

SEC Code	Design LOC	Description	STATUS
2007-007316	R309	R-CHIP	SA
2007-007468	R406	R-CHIP	SA
2007-007491	R208	R-CHIP	SA
2007-007741	R205	R-CHIP	SA
2007-007741	R630	R-CHIP	SA
2007-007766	R203	R-CHIP	SA
2007-008040	R705	R-CHIP	SA
2007-008043	R704	R-CHIP	SA
2007-008045	R112	R-CHIP	SA
2007-008045	R216	R-CHIP	SA
2007-008052	R806	R-CHIP	SA
2007-008052	R807	R-CHIP	SA
2007-008052	R808	R-CHIP	SA
2007-008052	R809	R-CHIP	SA
2007-008055	R407	R-CHIP	SA
2007-008055	R408	R-CHIP	SA
2007-008055	R419	R-CHIP	SA
2007-008055	R420	R-CHIP	SA
2007-008055	R429	R-CHIP	SA
2007-008055	R601	R-CHIP	SA
2007-008055	R610	R-CHIP	SA
2007-008055	R611	R-CHIP	SA
2007-008055	R616	R-CHIP	SA
2007-008055	R622	R-CHIP	SA
2007-008055	R702	R-CHIP	SA
2007-008055	R800	R-CHIP	SA
2007-008055	R811	R-CHIP	SA
2007-008055	R812	R-CHIP	SA
2007-008055	R816	R-CHIP	SA
2007-008055	R817	R-CHIP	SA

SEC Code	Design LOC	Description	STATUS
2007-008055	R900	R-CHIP	SA
2007-008055	R901	R-CHIP	SA
2007-008055	R902	R-CHIP	SA
2007-008055	R903	R-CHIP	SA
2007-008055	R905	R-CHIP	SA
2007-008055	R915	R-CHIP	SA
2007-008263	R400	R-CHIP	SA
2007-008403	R626	R-CHIP	SA
2007-008419	R606	R-CHIP	SA
2007-008419	R607	R-CHIP	SA
2007-008419	R609	R-CHIP	SA
2007-008419	R815	R-CHIP	SA
2007-008478	R214	R-CHIP	SA
2007-008478	R501	R-CHIP	SA
2007-008478	R504	R-CHIP	SA
2007-008478	R510	R-CHIP	SA
2007-008478	R511	R-CHIP	SA
2007-008478	R912	R-CHIP	SA
2007-008483	R506	R-CHIP	SA
2007-008483	R614	R-CHIP	SA
2007-008483	R621	R-CHIP	SA
2007-008483	R910	R-CHIP	SA
2007-008486	R411	R-CHIP	SA
2007-008486	R515	R-CHIP	SA
2007-008516	R300	R-CHIP	SA
2007-008516	R312	R-CHIP	SA
2007-008516	R314	R-CHIP	SA
2007-008516	R316	R-CHIP	SA
2007-008516	R700	R-CHIP	SA
2007-008516	R804	R-CHIP	SA

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SEC Code	Design LOC	Description	STATUS
2007-008516	R814	R-CHIP	SA
2007-008516	R818	R-CHIP	SA
2007-008516	R819	R-CHIP	SA
2007-008516	R904	R-CHIP	SA
2007-008531	R113	R-CHIP	SA
2007-008531	R701	R-CHIP	SA
2007-008531	R803	R-CHIP	SA
2007-008542	R100	R-CHIP	SA
2007-008542	R101	R-CHIP	SA
2007-008542	R106	R-CHIP	SA
2007-008542	R107	R-CHIP	SA
2007-008542	R108	R-CHIP	SA
2007-008542	R129	R-CHIP	SA
2007-008542	R130	R-CHIP	SA
2007-008542	R135	R-CHIP	SA
2007-008542	R222	R-CHIP	SA
2007-008542	R223	R-CHIP	SA
2007-008542	R224	R-CHIP	SA
2007-008542	R318	R-CHIP	SA
2007-008542	R322	R-CHIP	SA
2007-008542	R332	R-CHIP	SA
2007-008542	R507	R-CHIP	SA
2007-008542	R508	R-CHIP	SA
2007-008542	R520	R-CHIP	SA
2007-008542	R521	R-CHIP	SA
2007-008544	R500	R-CHIP	SA
2007-008544	R505	R-CHIP	SA
2007-008544	R509	R-CHIP	SA
2007-008544	R512	R-CHIP	SA
2007-008547	R212	R-CHIP	SNA

SEC Code	Design LOC	Description	STATUS
2007-008582	R703	R-CHIP	SA
2007-008588	R131	R-CHIP	SA
2007-008588	R132	R-CHIP	SA
2007-008588	R133	R-CHIP	SA
2007-008588	R134	R-CHIP	SA
2007-008588	R801	R-CHIP	SA
2007-008588	R802	R-CHIP	SA
2007-008686	R116	R-CHIP	SA
2007-008765	R210	R-CHIP	SNA
2007-008765	R213	R-CHIP	SNA
2007-008774	R518	R-CHIP	SA
2007-008806	R124	R-CHIP	SA
2007-008806	R327	R-CHIP	SA
2007-008806	R405	R-CHIP	SA
2007-009115	R913	R-CHIP	SA
2007-009115	R914	R-CHIP	SA
2007-009116	R114	R-CHIP	SA
2007-009116	R115	R-CHIP	SA
2007-009160	R627	R-CHIP	SA
2007-009169	R909	R-CHIP	SA
2007-009170	R319	R-CHIP	SA
2007-009170	R602	R-CHIP	SA
2007-009170	R906	R-CHIP	SA
2007-009170	R907	R-CHIP	SA
2007-009170	R908	R-CHIP	SA
2007-009194	R911	R-CHIP	SNA
2007-009257	R619	R-CHIP	SA
2007-009374	R502	R-CHIP	SA
2007-009374	R503	R-CHIP	SA
2007-009804	R110	R-CHIP	SA

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SEC Code	Design LOC	Description	STATUS
2007-009879	R117	R-CHIP	SA
2007-009880	R120	R-CHIP	SA
2007-009880	R121	R-CHIP	SA
2203-000233	C207	C-CER,CHIP	SA
2203-000233	C208	C-CER,CHIP	SA
2203-000233	C212	C-CER,CHIP	SA
2203-000233	C221	C-CER,CHIP	SA
2203-000233	C225	C-CER,CHIP	SA
2203-000233	C241	C-CER,CHIP	SA
2203-000233	C245	C-CER,CHIP	SA
2203-000233	C250	C-CER,CHIP	SA
2203-000233	C406	C-CER,CHIP	SA
2203-000254	C407	C-CER,CHIP	SA
2203-000278	C553	C-CER,CHIP	SA
2203-000278	C830	C-CER,CHIP	SA
2203-000330	C117	C-CER,CHIP	SA
2203-000330	C122	C-CER,CHIP	SA
2203-000330	C151	C-CER,CHIP	SA
2203-000330	C167	C-CER,CHIP	SA
2203-000425	C408	C-CER,CHIP	SA
2203-000425	C409	C-CER,CHIP	SA
2203-000425	C822	C-CER,CHIP	SA
2203-000425	C823	C-CER,CHIP	SA
2203-000438	C147	C-CER,CHIP	SA
2203-000438	C231	C-CER,CHIP	SA
2203-000438	C243	C-CER,CHIP	SA
2203-000466	C253	C-CER,CHIP	SA
2203-000489	C302	C-CER,CHIP	SA
2203-000550	C802	C-CER,CHIP	SA
2203-000550	C803	C-CER,CHIP	SA

SEC Code	Design LOC	Description	STATUS
2203-000550	C828	C-CER,CHIP	SA
2203-000627	C616	C-CER,CHIP	SNA
2203-000627	C617	C-CER,CHIP	SNA
2203-000714	C127	C-CER,CHIP	SA
2203-000812	C104	C-CER,CHIP	SA
2203-000812	C157	C-CER,CHIP	SA
2203-000812	C213	C-CER,CHIP	SA
2203-000812	C249	C-CER,CHIP	SA
2203-001101	C536	C-CER,CHIP	SA
2203-001101	C537	C-CER,CHIP	SA
2203-001153	C434	C-CER,CHIP	SA
2203-001259	C234	C-CER,CHIP	SA
2203-001385	C254	C-CER,CHIP	SA
2203-002668	C123	C-CER,CHIP	SA
2203-002668	C139	C-CER,CHIP	SA
2203-002687	C535	C-CER,CHIP	SA
2203-002687	C541	C-CER,CHIP	SA
2203-002709	C404	C-CER,CHIP	SA
2203-002709	C418	C-CER,CHIP	SA
2203-002709	C420	C-CER,CHIP	SA
2203-002709	C421	C-CER,CHIP	SA
2203-002709	C425	C-CER,CHIP	SA
2203-002709	C427	C-CER,CHIP	SA
2203-002709	C430	C-CER,CHIP	SA
2203-002709	C552	C-CER,CHIP	SA
2203-002709	C908	C-CER,CHIP	SA
2203-003054	C264	C-CER,CHIP	SA
2203-005050	C239	C-CER,CHIP	SA
2203-005052	C554	C-CER,CHIP	SA
2203-005053	C251	C-CER,CHIP	SA

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SEC Code	Design LOC	Description	STATUS
2203-005281	C106	C-CER,CHIP	SA
2203-005281	C235	C-CER,CHIP	SA
2203-005480	C311	C-CER,CHIP	SA
2203-005482	C341	C-CER,CHIP	SA
2203-005483	C203	C-CER,CHIP	SA
2203-005503	C100	C-CER,CHIP	SA
2203-005503	C101	C-CER,CHIP	SA
2203-005503	C102	C-CER,CHIP	SA
2203-005503	C103	C-CER,CHIP	SA
2203-005682	C112	C-CER,CHIP	SA
2203-005682	C131	C-CER,CHIP	SA
2203-005682	C132	C-CER,CHIP	SA
2203-005682	C159	C-CER,CHIP	SA
2203-005682	C171	C-CER,CHIP	SA
2203-005682	C201	C-CER,CHIP	SA
2203-005682	C224	C-CER,CHIP	SA
2203-005682	C228	C-CER,CHIP	SA
2203-005682	C230	C-CER,CHIP	SA
2203-005682	C246	C-CER,CHIP	SA
2203-005682	C262	C-CER,CHIP	SA
2203-005682	C342	C-CER,CHIP	SA
2203-005682	C343	C-CER,CHIP	SA
2203-005682	C435	C-CER,CHIP	SA
2203-005682	C437	C-CER,CHIP	SA
2203-005682	C444	C-CER,CHIP	SA
2203-005682	C600	C-CER,CHIP	SA
2203-005682	C601	C-CER,CHIP	SA
2203-005682	C602	C-CER,CHIP	SA
2203-005682	C603	C-CER,CHIP	SA
2203-005682	C604	C-CER,CHIP	SA

SEC Code	Design LOC	Description	STATUS
2203-005682	C636	C-CER,CHIP	SA
2203-005682	C638	C-CER,CHIP	SA
2203-005682	C639	C-CER,CHIP	SA
2203-005682	C709	C-CER,CHIP	SA
2203-005682	C714	C-CER,CHIP	SA
2203-005682	C716	C-CER,CHIP	SA
2203-005682	C722	C-CER,CHIP	SA
2203-005682	C725	C-CER,CHIP	SA
2203-005682	C727	C-CER,CHIP	SA
2203-005682	C728	C-CER,CHIP	SA
2203-005682	C729	C-CER,CHIP	SA
2203-005682	C730	C-CER,CHIP	SA
2203-005682	C731	C-CER,CHIP	SA
2203-005682	C732	C-CER,CHIP	SA
2203-005682	C733	C-CER,CHIP	SA
2203-005682	C734	C-CER,CHIP	SA
2203-005682	C831	C-CER,CHIP	SA
2203-005682	C832	C-CER,CHIP	SA
2203-005683	C169	C-CER,CHIP	SA
2203-005683	C508	C-CER,CHIP	SA
2203-005683	C516	C-CER,CHIP	SA
2203-005683	C532	C-CER,CHIP	SA
2203-005683	C640	C-CER,CHIP	SA
2203-005683	C641	C-CER,CHIP	SA
2203-005683	C710	C-CER,CHIP	SA
2203-005683	C715	C-CER,CHIP	SA
2203-005683	C718	C-CER,CHIP	SA
2203-005725	C107	C-CER,CHIP	SA
2203-005725	C109	C-CER,CHIP	SA
2203-005725	C113	C-CER,CHIP	SA

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SEC Code	Design LOC	Description	STATUS
2203-005725	C135	C-CER,CHIP	SA
2203-005725	C154	C-CER,CHIP	SA
2203-005725	C155	C-CER,CHIP	SA
2203-005725	C177	C-CER,CHIP	SA
2203-005725	C240	C-CER,CHIP	SA
2203-005725	C259	C-CER,CHIP	SA
2203-005725	C544	C-CER,CHIP	SA
2203-005727	C505	C-CER,CHIP	SA
2203-005727	C506	C-CER,CHIP	SA
2203-005727	C522	C-CER,CHIP	SA
2203-005727	C523	C-CER,CHIP	SA
2203-005727	C530	C-CER,CHIP	SA
2203-005727	C539	C-CER,CHIP	SA
2203-005729	C550	C-CER,CHIP	SA
2203-005734	C223	C-CER,CHIP	SA
2203-005734	C227	C-CER,CHIP	SA
2203-005734	C244	C-CER,CHIP	SA
2203-005736	C148	C-CER,CHIP	SA
2203-005736	C162	C-CER,CHIP	SA
2203-005736	C166	C-CER,CHIP	SA
2203-005736	C178	C-CER,CHIP	SA
2203-005736	C179	C-CER,CHIP	SA
2203-005736	C232	C-CER,CHIP	SA
2203-005739	C181	C-CER,CHIP	SA
2203-005740	C118	C-CER,CHIP	SA
2203-005742	C120	C-CER,CHIP	SA
2203-005742	C121	C-CER,CHIP	SA
2203-005789	L122	C-CER,CHIP	SA
2203-005792	C558	C-CER,CHIP	SA
2203-005806	C115	C-CER,CHIP	SNA

SEC Code	Design LOC	Description	STATUS
2203-005806	C128	C-CER,CHIP	SNA
2203-005806	C152	C-CER,CHIP	SNA
2203-005806	C158	C-CER,CHIP	SNA
2203-005806	C206	C-CER,CHIP	SNA
2203-005806	C247	C-CER,CHIP	SNA
2203-005806	C305	C-CER,CHIP	SNA
2203-005806	C818	C-CER,CHIP	SNA
2203-006048	C909	C-CER,CHIP	SA
2203-006120	C500	C-CER,CHIP	SA
2203-006121	C202	C-CER,CHIP	SA
2203-006121	C442	C-CER,CHIP	SA
2203-006194	C153	C-CER,CHIP	SA
2203-006194	C242	C-CER,CHIP	SA
2203-006194	C548	C-CER,CHIP	SA
2203-006194	C549	C-CER,CHIP	SA
2203-006194	C555	C-CER,CHIP	SA
2203-006194	C711	C-CER,CHIP	SA
2203-006194	C719	C-CER,CHIP	SA
2203-006194	C720	C-CER,CHIP	SA
2203-006194	C721	C-CER,CHIP	SA
2203-006194	C801	C-CER,CHIP	SA
2203-006194	C804	C-CER,CHIP	SA
2203-006194	C805	C-CER,CHIP	SA
2203-006194	C907	C-CER,CHIP	SA
2203-006257	C533	C-CER,CHIP	SA
2203-006257	C538	C-CER,CHIP	SA
2203-006260	C436	C-CER,CHIP	SA
2203-006305	C216	C-CER,CHIP	SA
2203-006305	C222	C-CER,CHIP	SA
2203-006324	C400	C-CER,CHIP	SA

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SEC Code	Design LOC	Description	STATUS
2203-006324	C401	C-CER,CHIP	SA
2203-006324	C410	C-CER,CHIP	SA
2203-006324	C424	C-CER,CHIP	SA
2203-006348	C443	C-CER,CHIP	SA
2203-006361	C619	C-CER,CHIP	SA
2203-006361	C620	C-CER,CHIP	SA
2203-006361	C911	C-CER,CHIP	SA
2203-006399	C217	C-CER,CHIP	SA
2203-006399	C902	C-CER,CHIP	SA
2203-006410	C170	C-CER,CHIP	SA
2203-006423	C111	C-CER,CHIP	SA
2203-006423	C116	C-CER,CHIP	SA
2203-006423	C125	C-CER,CHIP	SA
2203-006423	C126	C-CER,CHIP	SA
2203-006423	C133	C-CER,CHIP	SA
2203-006423	C134	C-CER,CHIP	SA
2203-006423	C143	C-CER,CHIP	SA
2203-006423	C144	C-CER,CHIP	SA
2203-006423	C145	C-CER,CHIP	SA
2203-006423	C146	C-CER,CHIP	SA
2203-006423	C200	C-CER,CHIP	SA
2203-006423	C215	C-CER,CHIP	SA
2203-006423	C218	C-CER,CHIP	SA
2203-006423	C226	C-CER,CHIP	SA
2203-006423	C229	C-CER,CHIP	SA
2203-006423	C248	C-CER,CHIP	SA
2203-006423	C261	C-CER,CHIP	SA
2203-006423	C309	C-CER,CHIP	SA
2203-006423	C414	C-CER,CHIP	SA
2203-006423	C431	C-CER,CHIP	SA

SEC Code	Design LOC	Description	STATUS
2203-006423	C432	C-CER,CHIP	SA
2203-006423	C501	C-CER,CHIP	SA
2203-006423	C507	C-CER,CHIP	SA
2203-006423	C509	C-CER,CHIP	SA
2203-006423	C513	C-CER,CHIP	SA
2203-006423	C517	C-CER,CHIP	SA
2203-006423	C518	C-CER,CHIP	SA
2203-006423	C521	C-CER,CHIP	SA
2203-006423	C525	C-CER,CHIP	SA
2203-006423	C527	C-CER,CHIP	SA
2203-006423	C534	C-CER,CHIP	SA
2203-006423	C540	C-CER,CHIP	SA
2203-006423	C546	C-CER,CHIP	SA
2203-006423	C547	C-CER,CHIP	SA
2203-006423	C551	C-CER,CHIP	SA
2203-006423	C631	C-CER,CHIP	SA
2203-006423	C634	C-CER,CHIP	SA
2203-006423	C800	C-CER,CHIP	SA
2203-006423	C806	C-CER,CHIP	SA
2203-006423	C807	C-CER,CHIP	SA
2203-006423	C808	C-CER,CHIP	SA
2203-006423	C809	C-CER,CHIP	SA
2203-006423	C810	C-CER,CHIP	SA
2203-006423	C811	C-CER,CHIP	SA
2203-006423	C812	C-CER,CHIP	SA
2203-006423	C813	C-CER,CHIP	SA
2203-006423	C814	C-CER,CHIP	SA
2203-006423	C816	C-CER,CHIP	SA
2203-006423	C817	C-CER,CHIP	SA
2203-006423	C819	C-CER,CHIP	SA

Main Electrical Parts List

SEC Code	Design LOC	Description	STATUS
2203-006423	C820	C-CER,CHIP	SA
2203-006423	C826	C-CER,CHIP	SA
2203-006423	C827	C-CER,CHIP	SA
2203-006423	C829	C-CER,CHIP	SA
2203-006423	C900	C-CER,CHIP	SA
2203-006423	C903	C-CER,CHIP	SA
2203-006423	C906	C-CER,CHIP	SA
2203-006423	C910	C-CER,CHIP	SA
2203-006423	C915	C-CER,CHIP	SA
2203-006474	C438	C-CER,CHIP	SA
2203-006556	C119	C-CER,CHIP	SA
2203-006556	C124	C-CER,CHIP	SA
2203-006556	C130	C-CER,CHIP	SA
2203-006556	C141	C-CER,CHIP	SA
2203-006556	C165	C-CER,CHIP	SA
2203-006556	C325	C-CER,CHIP	SA
2203-006620	C210	C-CER,CHIP	SNA
2203-006648	C163	C-CER,CHIP	SA
2203-006665	C219	C-CER,CHIP	SA
2203-006665	C220	C-CER,CHIP	SA
2203-006665	C266	C-CER,CHIP	SA
2203-006668	C204	C-CER,CHIP	SA
2203-006681	C440	C-CER,CHIP	SA
2203-006681	C612	C-CER,CHIP	SA
2203-006681	C707	C-CER,CHIP	SA
2203-006707	C209	C-CER,CHIP	SA
2203-006707	C211	C-CER,CHIP	SA
2203-006824	C320	C-CER,CHIP	SA
2203-006824	C413	C-CER,CHIP	SA
2203-006824	C415	C-CER,CHIP	SA

SEC Code	Design LOC	Description	STATUS
2203-006824	C417	C-CER,CHIP	SA
2203-006824	C419	C-CER,CHIP	SA
2203-006824	C422	C-CER,CHIP	SA
2203-006824	C423	C-CER,CHIP	SA
2203-006824	C426	C-CER,CHIP	SA
2203-006824	C503	C-CER,CHIP	SA
2203-006824	C504	C-CER,CHIP	SA
2203-006824	C605	C-CER,CHIP	SA
2203-006824	C613	C-CER,CHIP	SA
2203-006824	C614	C-CER,CHIP	SA
2203-006824	C622	C-CER,CHIP	SA
2203-006824	C624	C-CER,CHIP	SA
2203-006824	C628	C-CER,CHIP	SA
2203-006824	C629	C-CER,CHIP	SA
2203-006838	C411	C-CER,CHIP	SA
2203-006838	C412	C-CER,CHIP	SA
2203-006838	C416	C-CER,CHIP	SA
2203-006838	C502	C-CER,CHIP	SA
2203-006838	C510	C-CER,CHIP	SA
2203-006838	C512	C-CER,CHIP	SA
2203-006838	C623	C-CER,CHIP	SA
2203-006838	C700	C-CER,CHIP	SA
2203-006838	C701	C-CER,CHIP	SA
2203-006838	C702	C-CER,CHIP	SA
2203-006838	C703	C-CER,CHIP	SA
2203-006838	C704	C-CER,CHIP	SA
2203-006838	C712	C-CER,CHIP	SA
2203-006838	C713	C-CER,CHIP	SA
2203-006838	C723	C-CER,CHIP	SA
2203-006838	C724	C-CER,CHIP	SA

Main Electrical Parts List

SEC Code	Design LOC	Description	STATUS
2203-006838	C904	C-CER,CHIP	SA
2203-006839	C164	C-CER,CHIP	SA
2203-006839	C303	C-CER,CHIP	SA
2203-006839	C312	C-CER,CHIP	SA
2203-006839	C316	C-CER,CHIP	SA
2203-006839	C317	C-CER,CHIP	SA
2203-006839	C322	C-CER,CHIP	SA
2203-006839	C327	C-CER,CHIP	SA
2203-006839	C328	C-CER,CHIP	SA
2203-006839	C330	C-CER,CHIP	SA
2203-006839	C331	C-CER,CHIP	SA
2203-006839	C334	C-CER,CHIP	SA
2203-006839	C335	C-CER,CHIP	SA
2203-006839	C338	C-CER,CHIP	SA
2203-006839	C433	C-CER,CHIP	SA
2203-006839	C625	C-CER,CHIP	SA
2203-006839	C627	C-CER,CHIP	SA
2203-006840	C205	C-CER,CHIP	SA
2203-006841	C306	C-CER,CHIP	SA
2203-006841	C308	C-CER,CHIP	SA
2203-006841	C310	C-CER,CHIP	SA
2203-006841	C318	C-CER,CHIP	SA
2203-006841	C323	C-CER,CHIP	SA
2203-006841	C324	C-CER,CHIP	SA
2203-006841	C332	C-CER,CHIP	SA
2203-006841	C339	C-CER,CHIP	SA
2203-006841	C340	C-CER,CHIP	SA
2203-006841	C441	C-CER,CHIP	SA
2203-006841	C524	C-CER,CHIP	SA
2203-006841	C630	C-CER,CHIP	SA

SEC Code	Design LOC	Description	STATUS
2203-006841	C632	C-CER,CHIP	SA
2203-006841	C633	C-CER,CHIP	SA
2203-006841	C705	C-CER,CHIP	SA
2203-006841	C815	C-CER,CHIP	SA
2203-006841	C821	C-CER,CHIP	SA
2203-006841	C901	C-CER,CHIP	SA
2203-006841	C905	C-CER,CHIP	SA
2203-006841	C912	C-CER,CHIP	SA
2203-006841	C913	C-CER,CHIP	SA
2203-006841	C914	C-CER,CHIP	SA
2203-006841	C916	C-CER,CHIP	SA
2203-006841	C917	C-CER,CHIP	SA
2203-006872	C319	C-CER,CHIP	SA
2203-006872	C542	C-CER,CHIP	SA
2203-006872	C543	C-CER,CHIP	SA
2203-006872	C545	C-CER,CHIP	SA
2203-006885	C637	C-CER,CHIP	SA
2203-006890	C336	C-CER,CHIP	SA
2203-006890	C439	C-CER,CHIP	SA
2203-006896	C114	C-CER,CHIP	SA
2203-006896	C136	C-CER,CHIP	SA
2203-006896	C156	C-CER,CHIP	SA
2203-006978	C706	C-CER,CHIP	SA
2203-006979	C304	C-CER,CHIP	SA
2203-006979	C307	C-CER,CHIP	SA
2203-006979	C314	C-CER,CHIP	SA
2203-006979	C315	C-CER,CHIP	SA
2203-006979	C321	C-CER,CHIP	SA
2203-006979	C326	C-CER,CHIP	SA
2203-006979	C329	C-CER,CHIP	SA

Main Electrical Parts List

SEC Code	Design LOC	Description	STATUS
2203-006979	C333	C-CER,CHIP	SA
2203-006979	C337	C-CER,CHIP	SA
2203-007210	C635	C-CER,CHIP	SA
2404-001268	TA605	C-TA,CHIP	SA
2404-001274	TA101	C-TA,CHIP	SA
2404-001350	TA200	C-TA,CHIP	SA
2404-001350	TA201	C-TA,CHIP	SA
2404-001377	TA500	C-TA,CHIP	SA
2404-001377	TA501	C-TA,CHIP	SA
2404-001377	TA502	C-TA,CHIP	SA
2404-001377	TA503	C-TA,CHIP	SA
2404-001381	TA504	C-TA,CHIP	SA
2404-001381	TA600	C-TA,CHIP	SA
2404-001381	TA603	C-TA,CHIP	SA
2404-001396	TA100	C-TA,CHIP	SA
2404-001474	TA401	C-TA,CHIP	SA
2404-001474	TA402	C-TA,CHIP	SA
2404-001484	TA602	C-TA,CHIP	SA
2404-001484	TA604	C-TA,CHIP	SA
2703-001722	L125	INDUCTOR-SMD	SA
2703-001723	L117	INDUCTOR-SMD	SA
2703-001733	L233	INDUCTOR-SMD	SA
2703-001737	L231	INDUCTOR-SMD	SA
2703-001938	L230	INDUCTOR-SMD	SA
2703-002155	L215	INDUCTOR-SMD	SA
2703-002198	L228	INDUCTOR-SMD	SA
2703-002199	L205	INDUCTOR-SMD	SA
2703-002199	L212	INDUCTOR-SMD	SA
2703-002201	L100	INDUCTOR-SMD	SA
2703-002205	L124	INDUCTOR-SMD	SA

SEC Code	Design LOC	Description	STATUS
2703-002207	L222	INDUCTOR-SMD	SA
2703-002269	L112	INDUCTOR-SMD	SA
2703-002367	L223	INDUCTOR-SMD	SA
2703-002484	L208	INDUCTOR-SMD	SA
2703-002544	L202	INDUCTOR-SMD	SA
2703-002544	L206	INDUCTOR-SMD	SA
2703-002544	L216	INDUCTOR-SMD	SA
2703-002596	L217	INDUCTOR-SMD	SA
2703-002608	L126	INDUCTOR-SMD	SA
2703-002608	L506	INDUCTOR-SMD	SA
2703-002768	L605	INDUCTOR-SMD	SNA
2703-002768	L606	INDUCTOR-SMD	SNA
2703-002793	C180	INDUCTOR-SMD	SA
2703-002793	L102	INDUCTOR-SMD	SA
2703-002793	L104	INDUCTOR-SMD	SA
2703-002793	L105	INDUCTOR-SMD	SA
2703-002793	L107	INDUCTOR-SMD	SA
2703-002795	L507	INDUCTOR-SMD	SNA
2703-002798	L224	INDUCTOR-SMD	SNA
2703-002824	L700	INDUCTOR-SMD	SA
2703-002840	L401	INDUCTOR-SMD	SA
2703-002840	L402	INDUCTOR-SMD	SA
2703-002840	L404	INDUCTOR-SMD	SA
2703-002842	L121	INDUCTOR-SMD	SA
2703-002900	L103	INDUCTOR-SMD	SA
2703-002900	L108	INDUCTOR-SMD	SA
2703-002900	L110	INDUCTOR-SMD	SA
2703-002900	L111	INDUCTOR-SMD	SA
2703-002900	L113	INDUCTOR-SMD	SA
2703-002901	L127	INDUCTOR-SMD	SNA

Main Electrical Parts List

SEC Code	Design LOC	Description	STATUS
2703-002901	L203	INDUCTOR-SMD	SNA
2703-002901	L204	INDUCTOR-SMD	SNA
2703-002901	L227	INDUCTOR-SMD	SNA
2703-002903	L221	INDUCTOR-SMD	SA
2703-002906	L119	INDUCTOR-SMD	SA
2703-002907	L218	INDUCTOR-SMD	SNA
2703-002910	L213	INDUCTOR-SMD	SA
2703-002910	L214	INDUCTOR-SMD	SA
2703-002917	L234	INDUCTOR-SMD	SA
2703-002918	L219	INDUCTOR-SMD	SA
2703-002919	L116	INDUCTOR-SMD	SA
2703-002919	L123	INDUCTOR-SMD	SA
2703-002919	L232	INDUCTOR-SMD	SA
2703-002953	L106	INDUCTOR-SMD	SA
2703-002955	L220	INDUCTOR-SMD	SA
2703-002958	L109	INDUCTOR-SMD	SA
2703-003125	C168	INDUCTOR-SMD	SA
2703-003125	L115	INDUCTOR-SMD	SA
2703-003125	L201	INDUCTOR-SMD	SA
2703-003125	L207	INDUCTOR-SMD	SA
2703-003127	L226	INDUCTOR-SMD	SA
2801-004318	OSC800	CRYSTAL-SMD	SA
2801-004466	OSC400	CRYSTAL-SMD	SA
2801-004466	OSC801	CRYSTAL-SMD	SA
2801-004560	OSC500	CRYSTAL-SMD	SA
2809-001280	OSC200	OSCILLATOR-VCTCXO	SA
2901-001283	F900	FILTER-EMI SMD	SA
2901-001326	F700	FILTER-EMI/ESD	SA
2901-001326	F703	FILTER-EMI/ESD	SA
2901-001326	F705	FILTER-EMI/ESD	SA

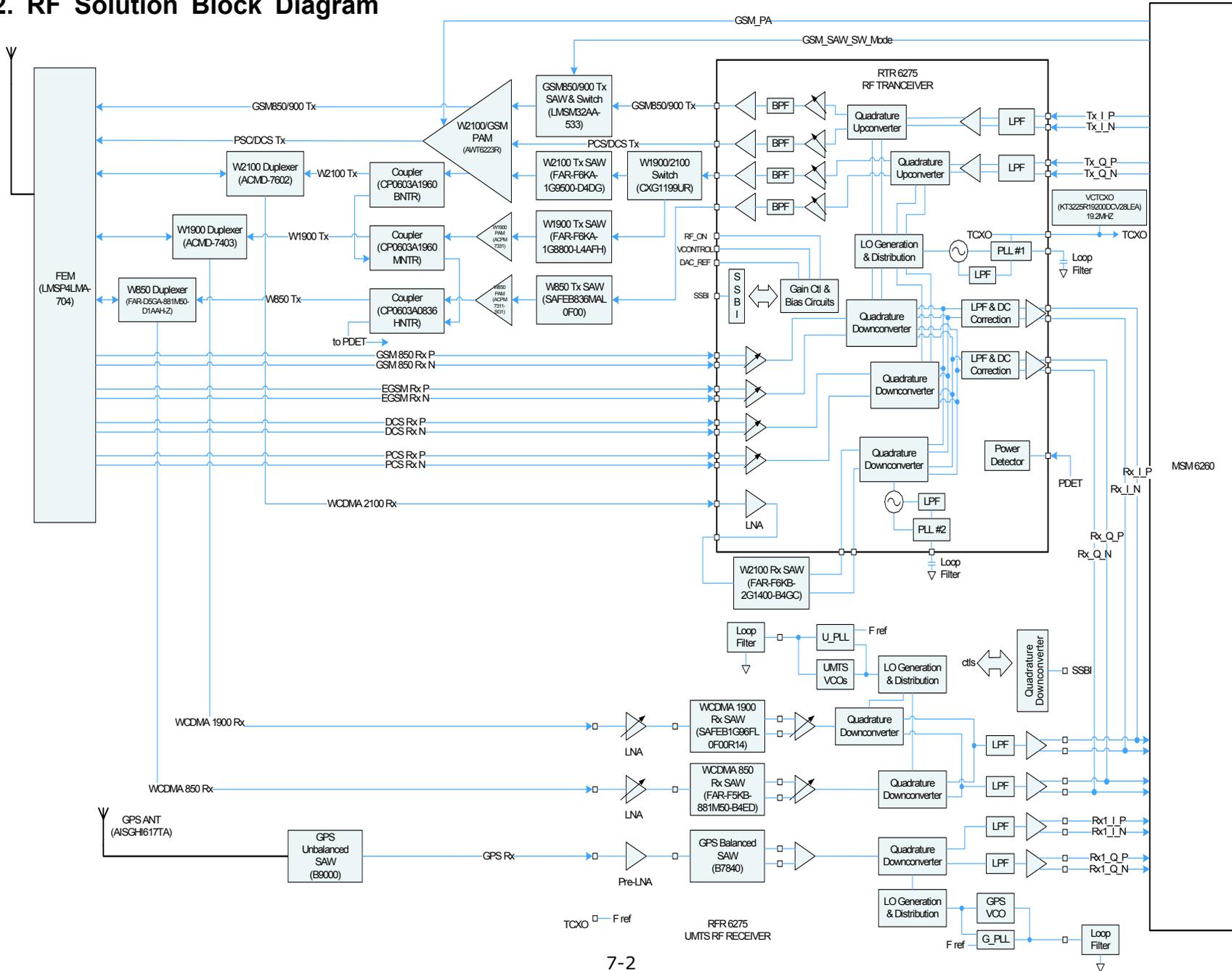
SEC Code	Design LOC	Description	STATUS
2901-001453	F701	FILTER-EMI SMD	SA
2901-001453	F702	FILTER-EMI SMD	SA
2901-001460	F704	FILTER-EMI/ESD	SA
2904-001414	F206	FILTER-SAW	SA
2904-001668	F205	FILTER-SAW	SA
2904-001738	F200	FILTER-SAW	SA
2904-001739	F204	FILTER-SAW	SA
2904-001751	F203	FILTER-SAW	SA
2904-001769	F100	FILTER-SAW	SA
2904-001789	F101	FILTER-SAW	SA
2904-001790	F201	FILTER-SAW	SA
2909-001283	F501	FILTER-LC	SA
2910-000022	DUF201	DUPLEXER-SAW	SA
2910-000032	DUF200	DUPLEXER-FBAR	SA
2910-000039	DUF100	DUPLEXER-FBAR	SA
2911-000079	RFS100	DUPLEXER-FEM	SA
2911-000085	F102	DUPLEXER-FEM	SA
3301-001438	L500	BEAD-SMD	SA
3301-001438	L501	BEAD-SMD	SA
3301-001438	L502	BEAD-SMD	SA
3301-001438	L503	BEAD-SMD	SA
3301-001756	L225	BEAD-SMD	SA
3301-001756	L300	BEAD-SMD	SA
3301-001851	L504	BEAD-SMD	SA
3301-001851	L505	BEAD-SMD	SA
3404-001303	TAC701	SWITCH-TACT	SA
3404-001303	TAC702	SWITCH-TACT	SA
3404-001317	TAC700	SWITCH-TACT	SA
3705-001225	ANT100	CONNECTOR-COAXIAL	SA
3705-001358	RFS102	CONNECTOR-COAXIAL	SA

Main Electrical Parts List

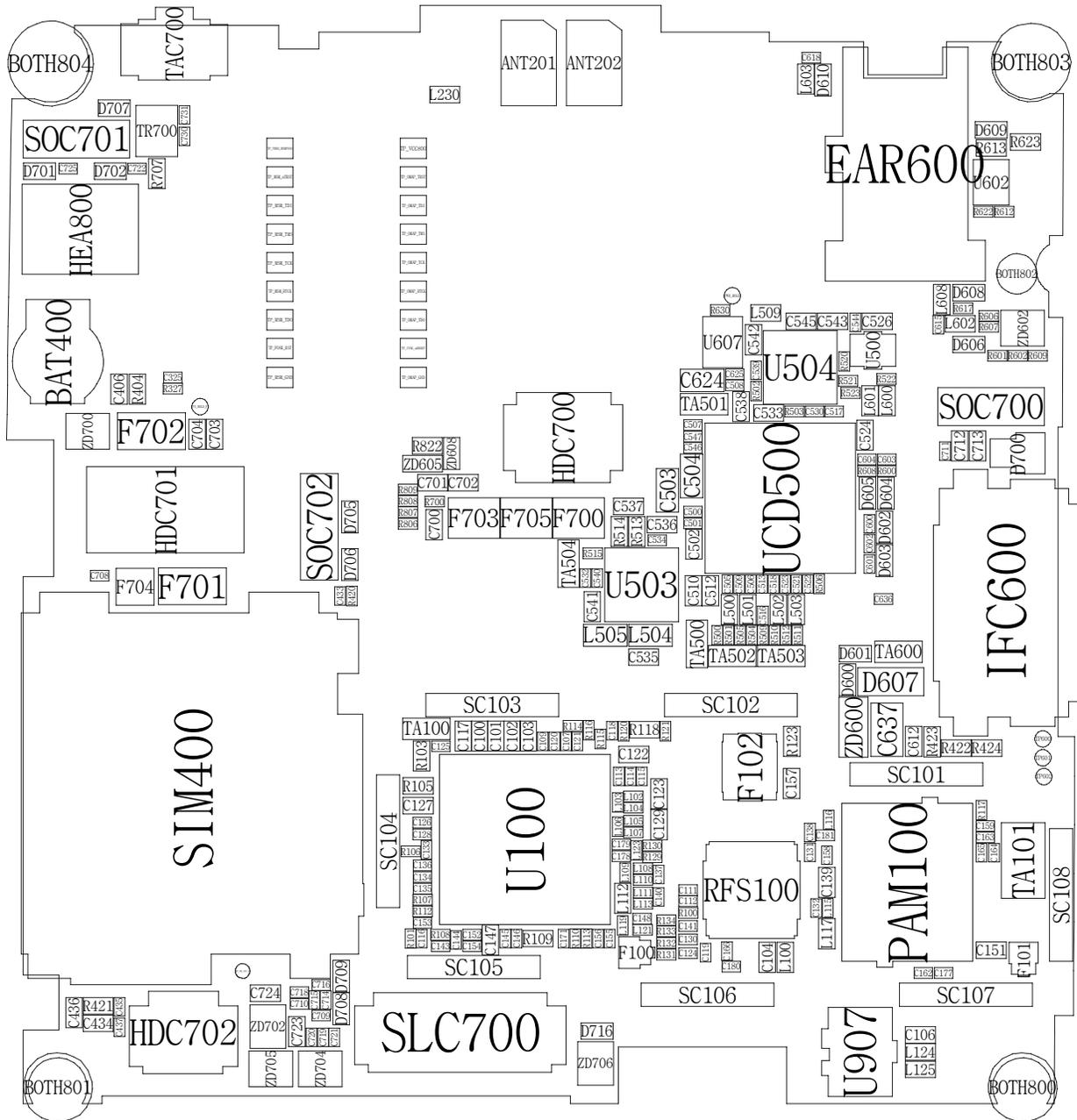
SEC Code	Design LOC	Description	STATUS
3708-002162	SLC700	CONNECTOR-FPC/FFC/PIC	SA
3708-002283	HDC702	CONNECTOR-FPC/FFC/PIC	SA
3709-001453	SIM400	CONNECTOR-CARD EDGE	SA
3710-002081	SOC700	SOCKET-BOARD TO BOARD	SA
3710-002081	SOC701	SOCKET-BOARD TO BOARD	SA
3710-002081	SOC702	SOCKET-BOARD TO BOARD	SA
3710-002499	IFC600	SOCKET-INTERFACE	SA
3711-005522	CN203	HEADER-BOARD TO BOARD	SA
3711-005954	HDC700	HEADER-BOARD TO BOARD	SA
3711-006217	BTC400	HEADER-BATTERY	SA
4202-001337	ANT500	ANTENNA-CHIP	SA
4302-001181	BAT400	BATTERY-LI(2ND)	SA
4709-001399	CPL100	COUPLER-DIRECTION	SA
4709-001405	CPL201	COUPLER-DIRECTION	SA
4709-001406	CPL200	COUPLER-DIRECTION	SNA
GH70-02640A	SC101	ICT SHIELD-CAN CLIP	SA
GH70-02640A	SC102	ICT SHIELD-CAN CLIP	SA
GH70-02640A	SC103	ICT SHIELD-CAN CLIP	SA
GH70-02640A	SC104	ICT SHIELD-CAN CLIP	SA
GH70-02640A	SC105	ICT SHIELD-CAN CLIP	SA
GH70-02640A	SC106	ICT SHIELD-CAN CLIP	SA
GH70-02640A	SC107	ICT SHIELD-CAN CLIP	SA
GH70-02640A	SC108	ICT SHIELD-CAN CLIP	SA
GH71-06262A	ANT201	NPR-ANTENNA CONTACT V2	SA
GH71-06262A	ANT202	NPR-ANTENNA CONTACT V2	SA

Please consult the GSPN website (Samsung Portal) for the most recent version of the product's part list.

7-2. RF Solution Block Diagram



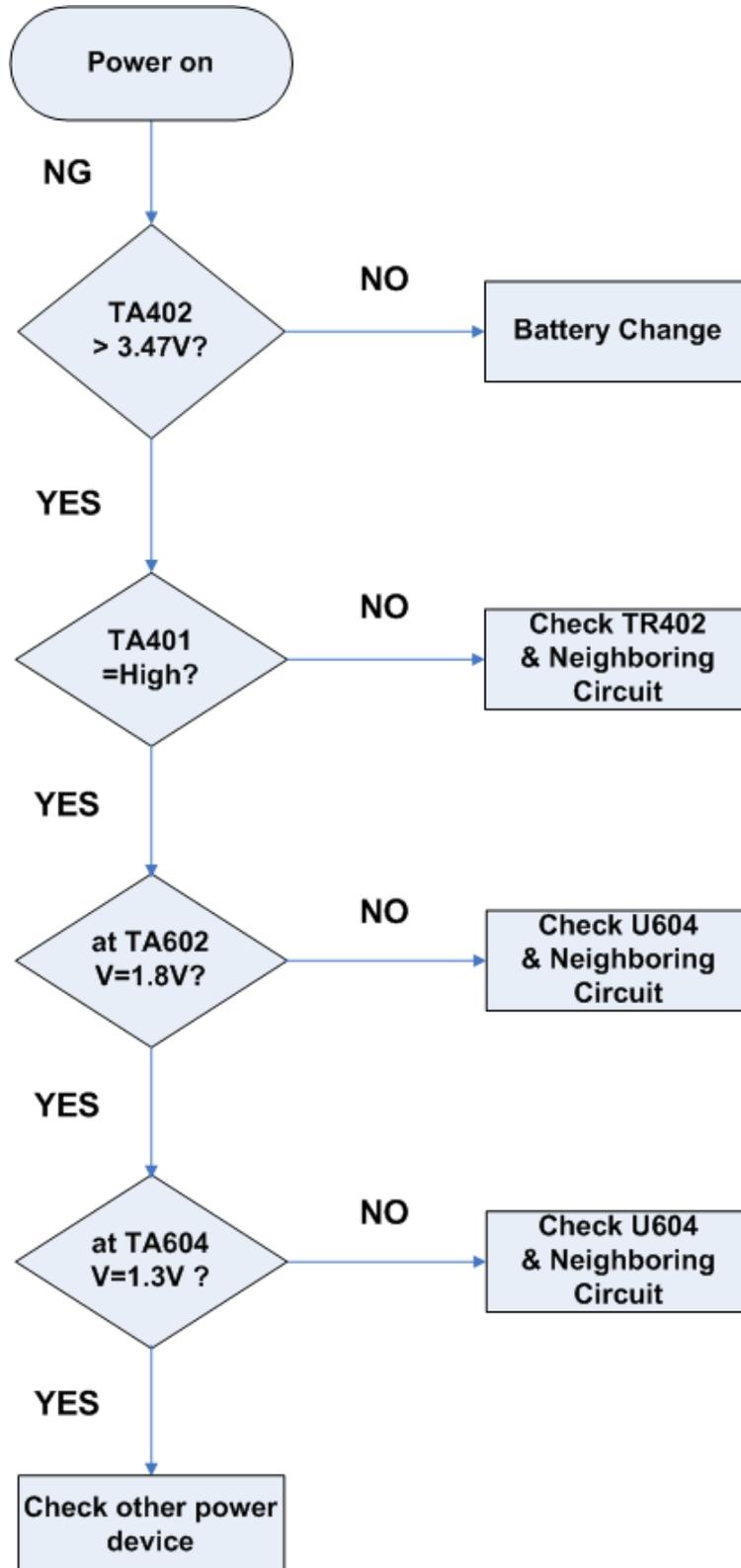
Bottom

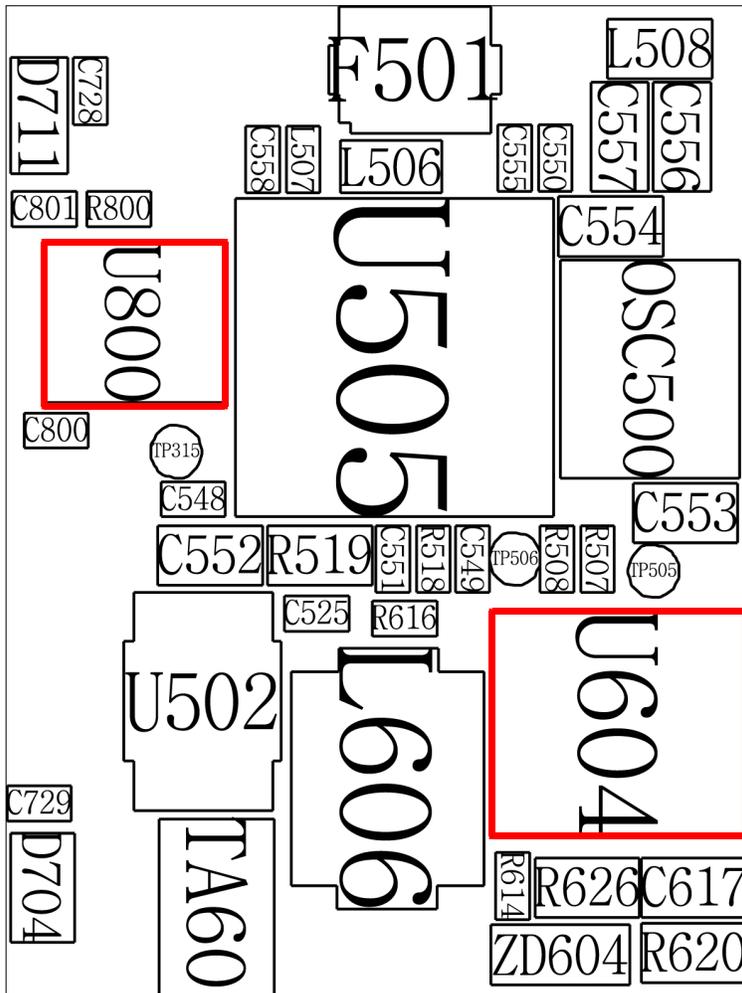
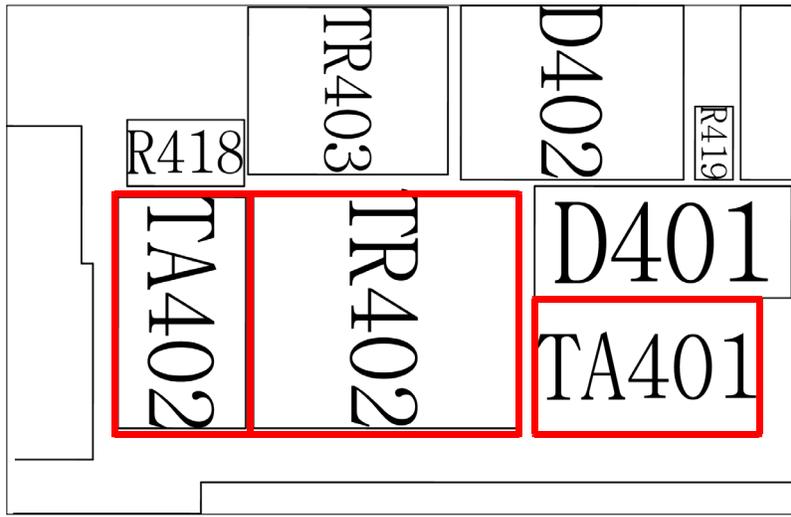


9. Flow Chart of Troubleshooting

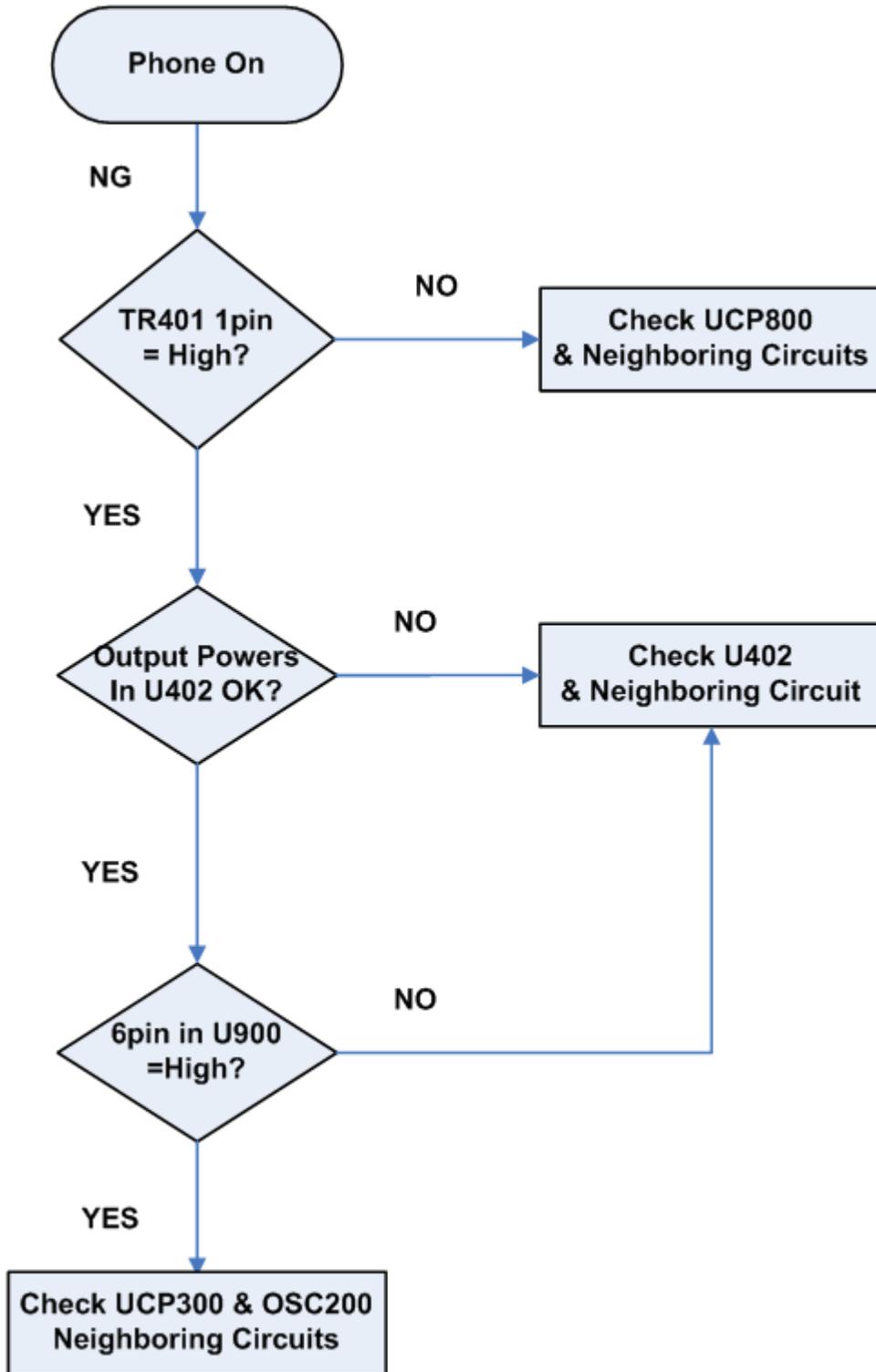
9-1. Power On

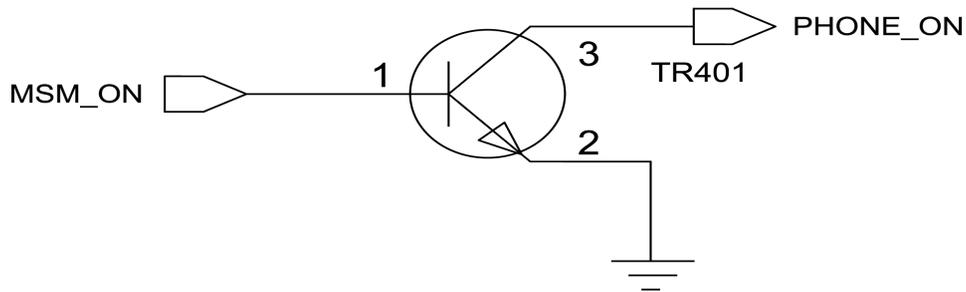
- PDA Part



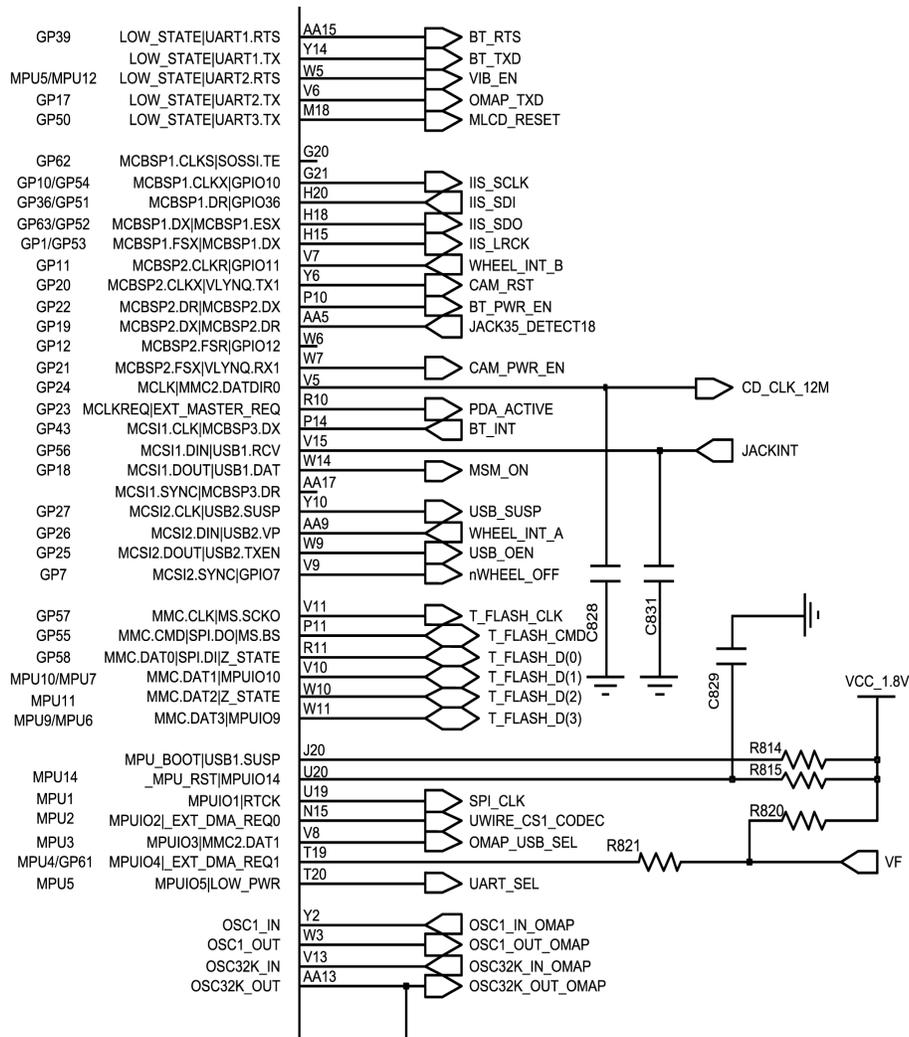


● PHONE Part

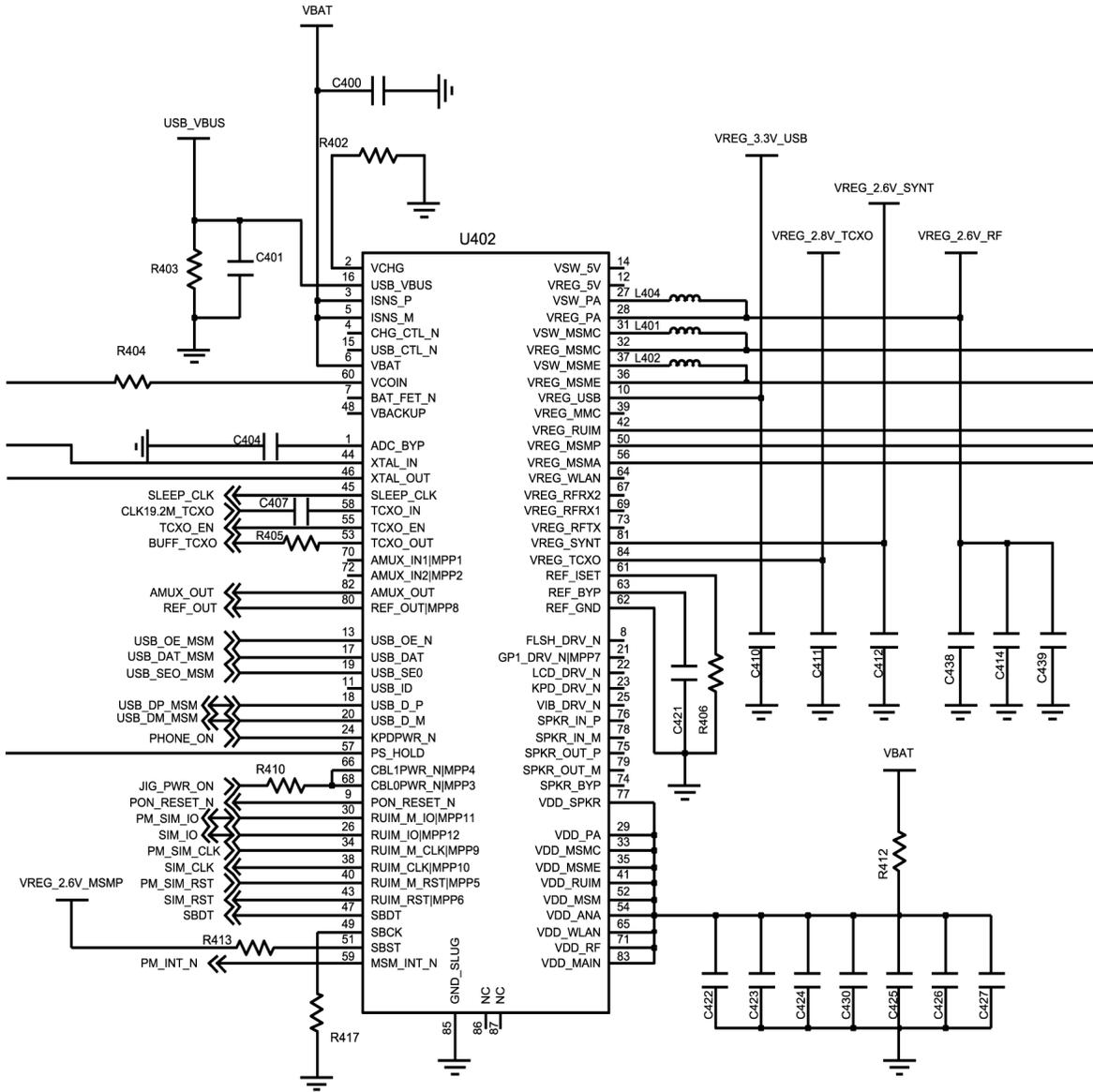




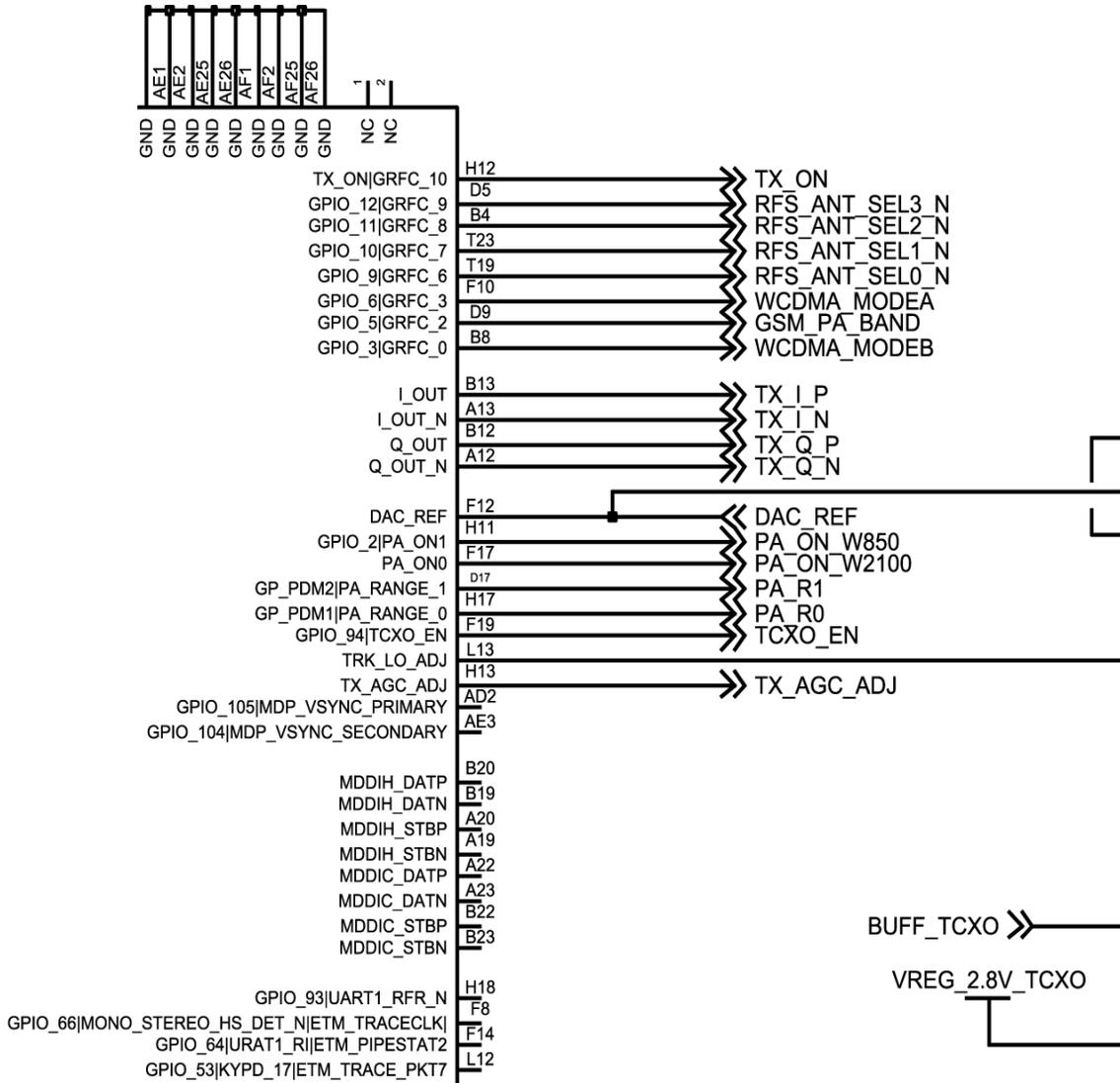
TR401



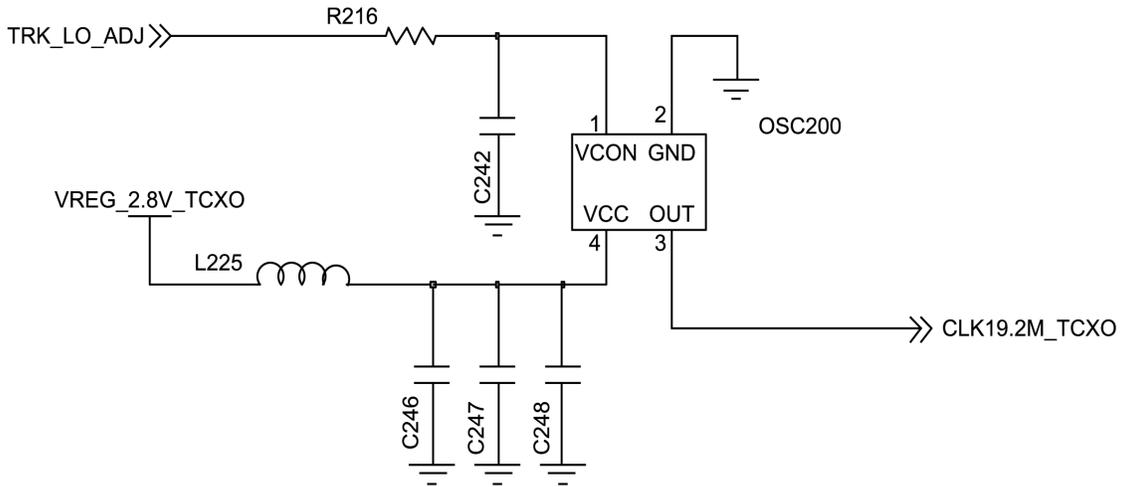
UCP800 & neighboring circuits



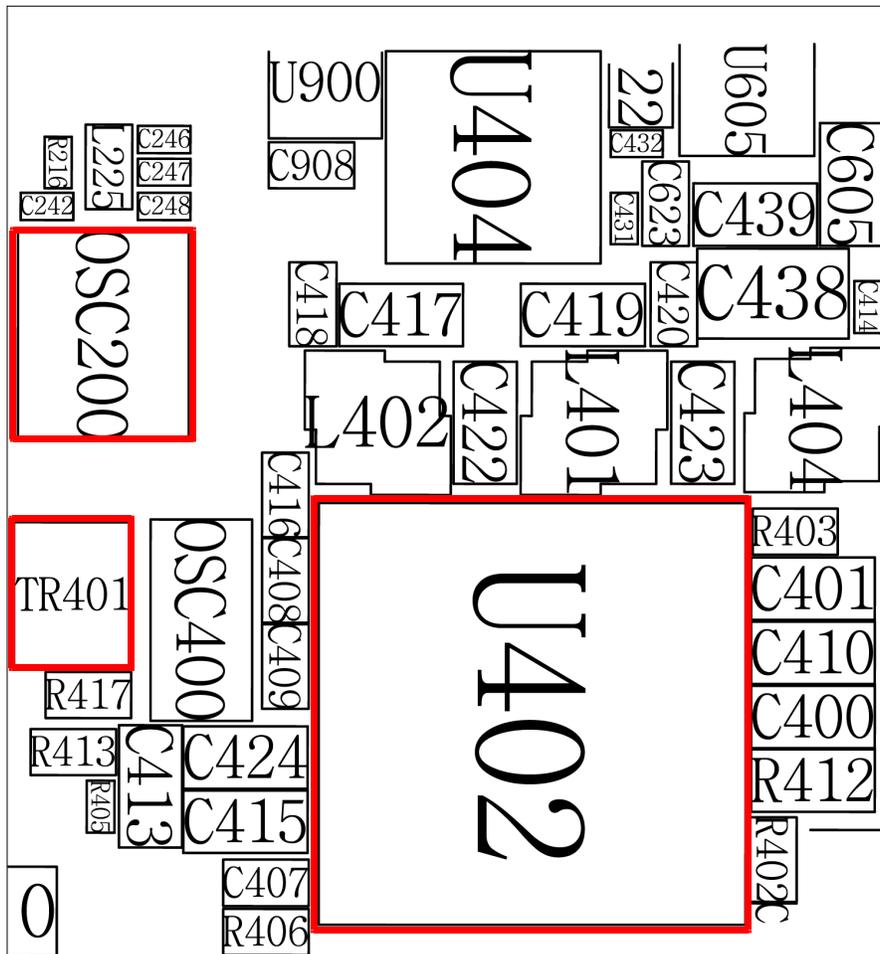
U402 & neighboring circuits



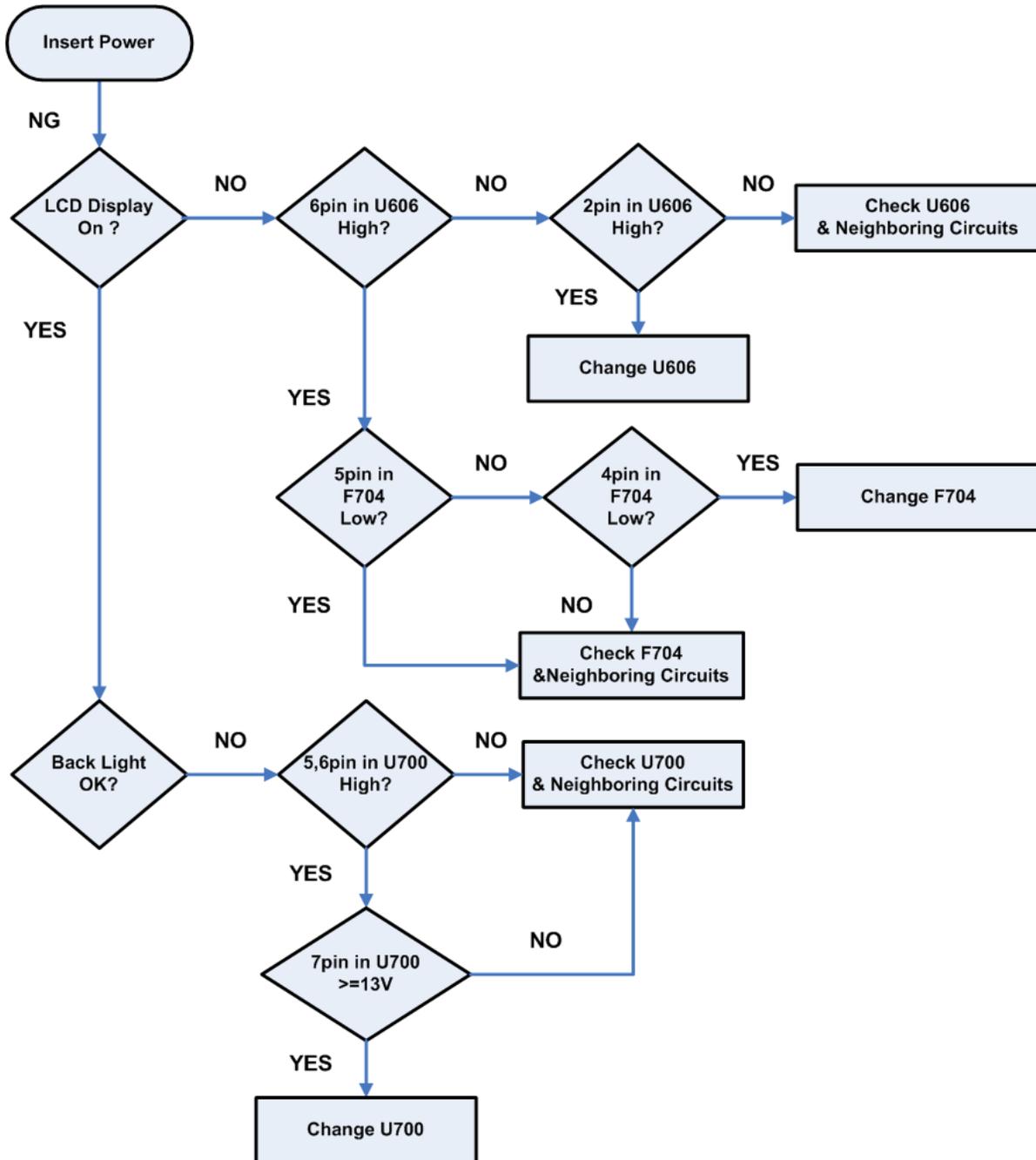
UCP300 & neighboring circuits

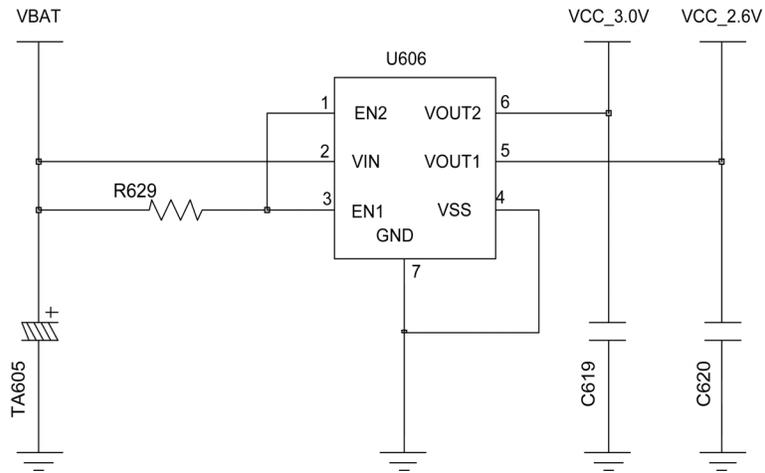


OSC200 & neighboring circuits

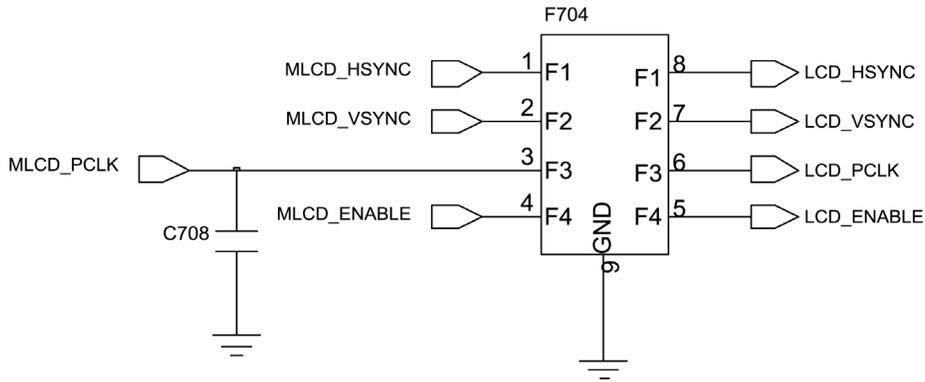


9-2. LCD Working

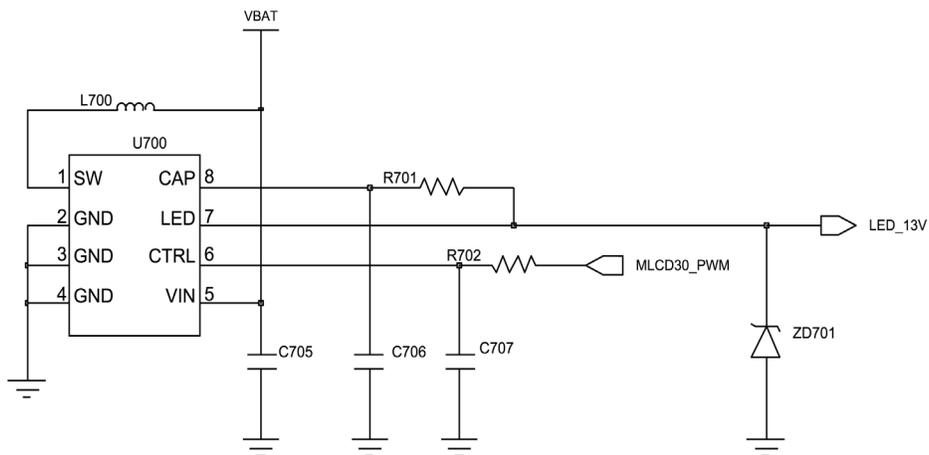




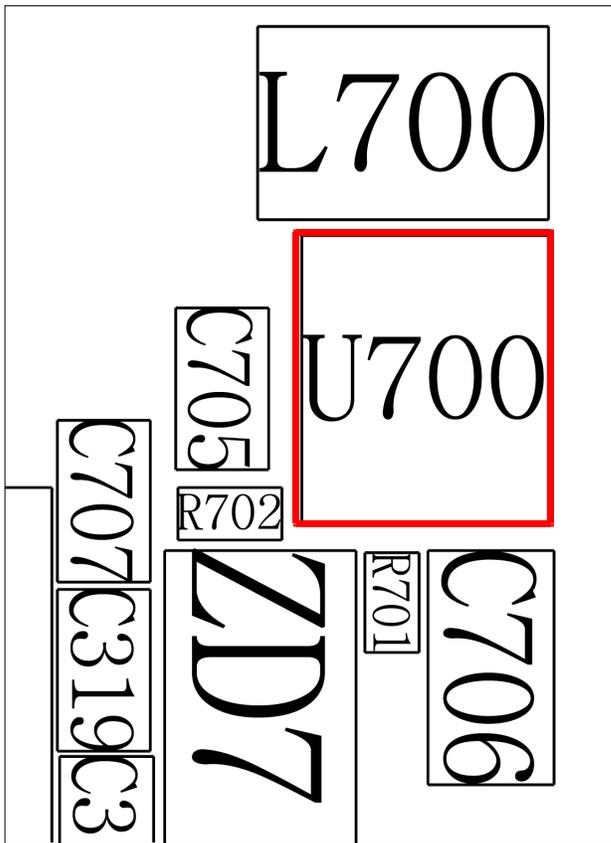
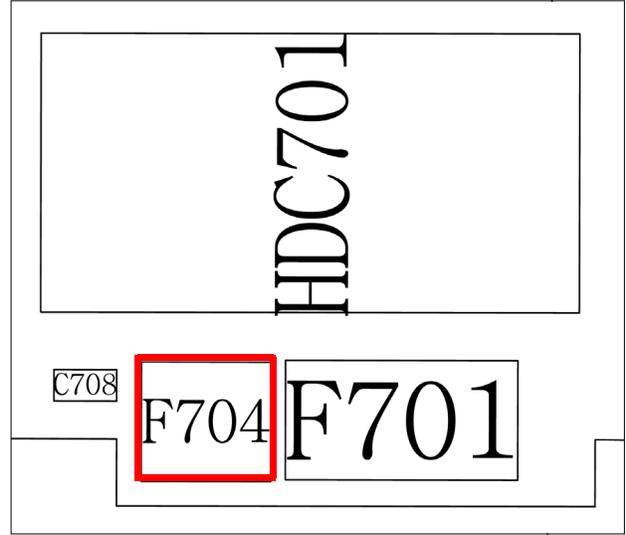
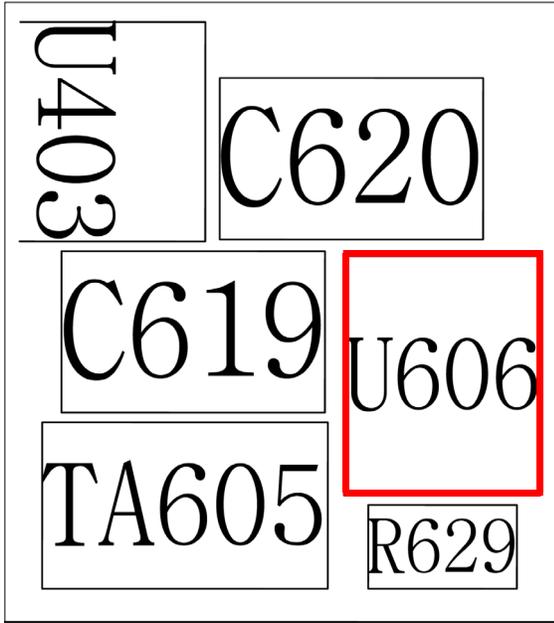
U606 & neighboring circuits



F704 & neighboring circuits

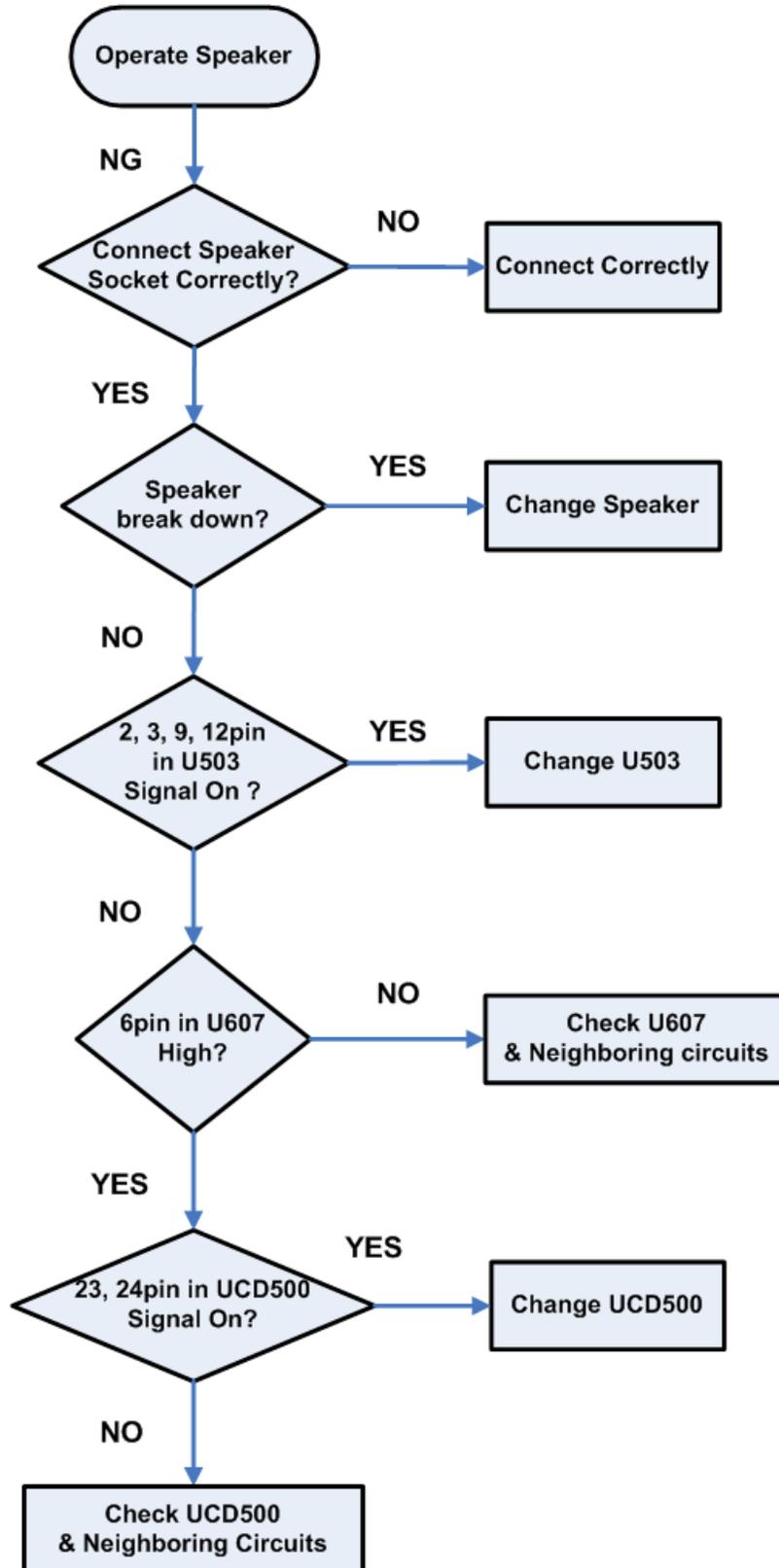


U700 & neighboring circuits

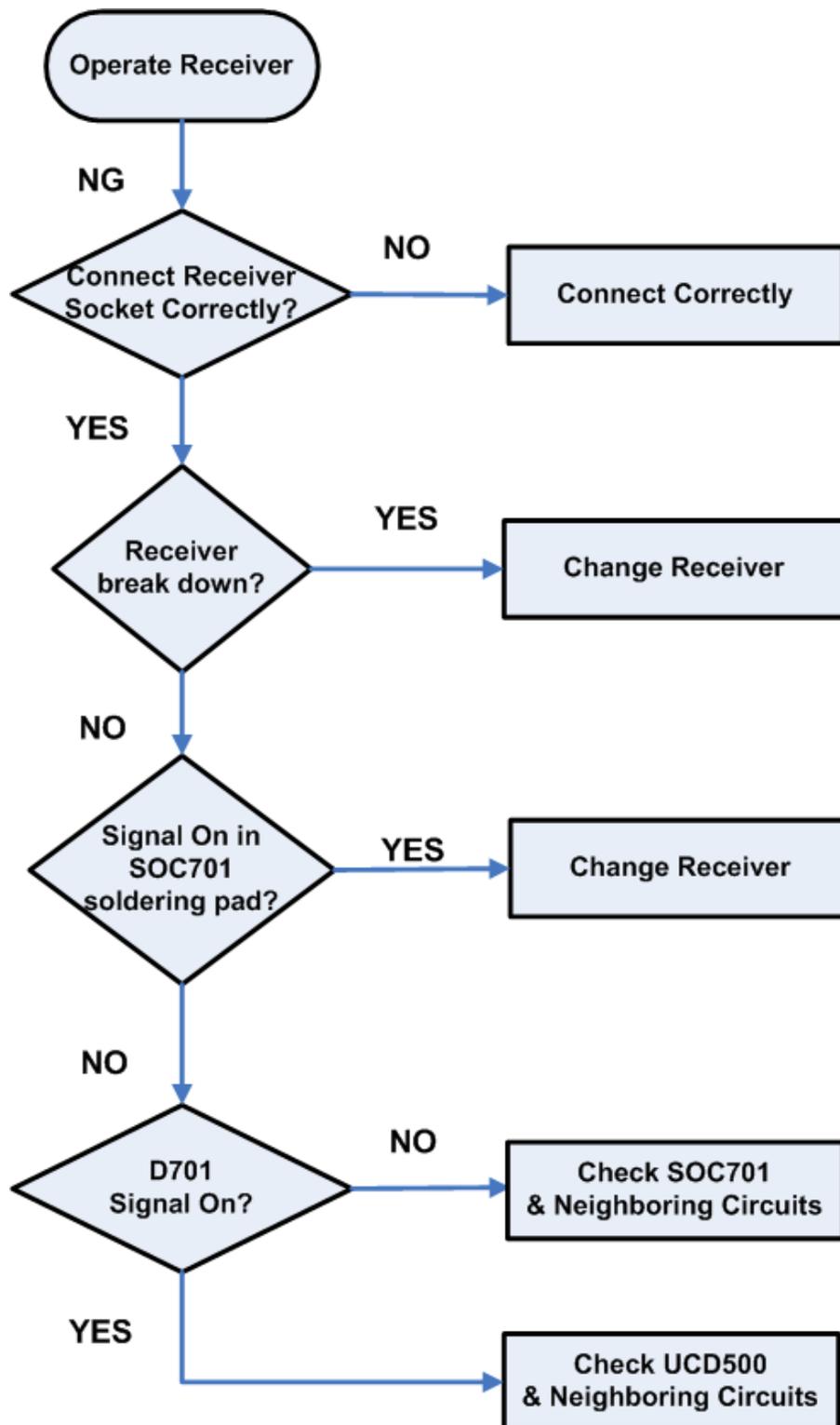


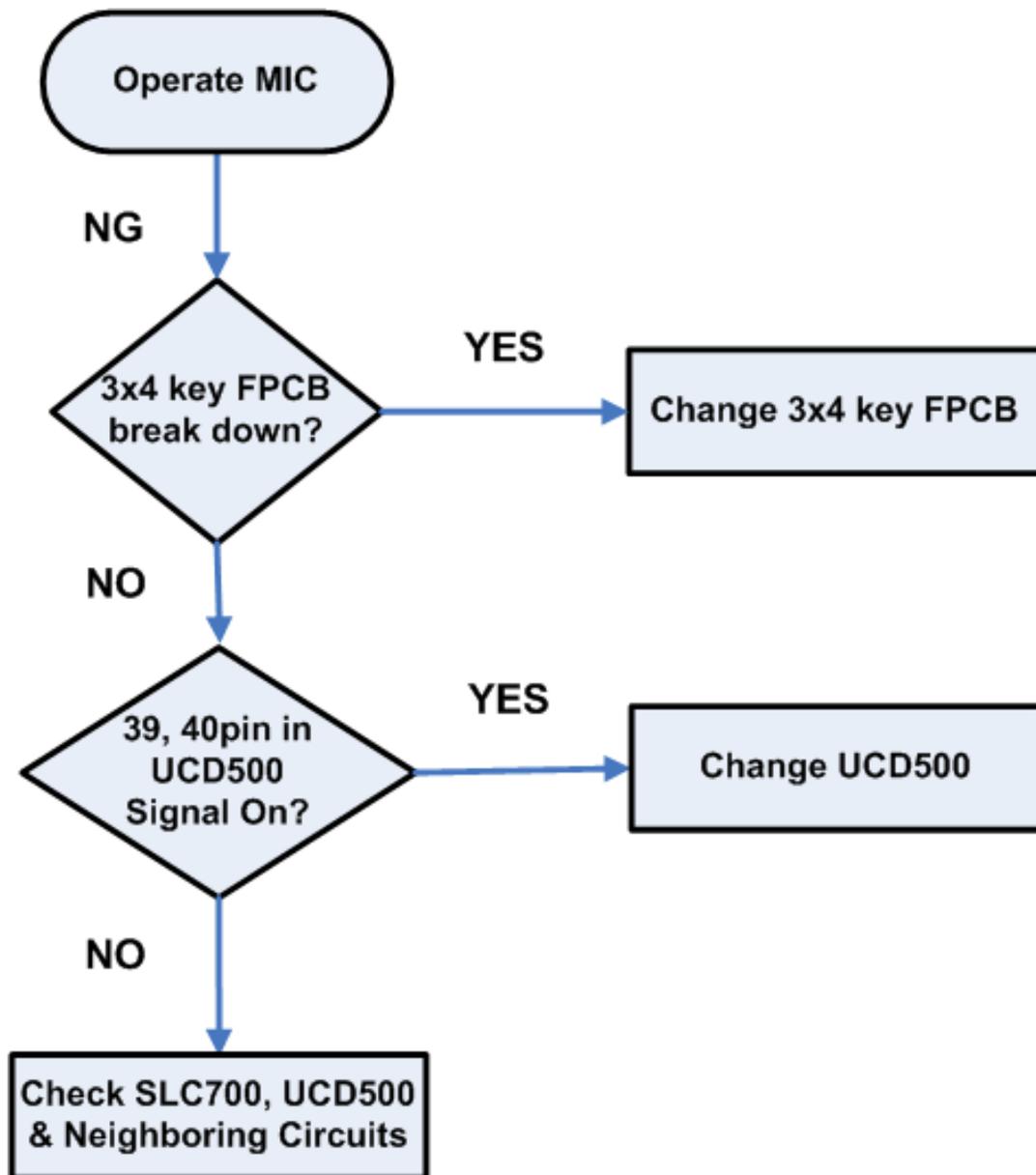
9-3. Audio Working

- Speaker Working

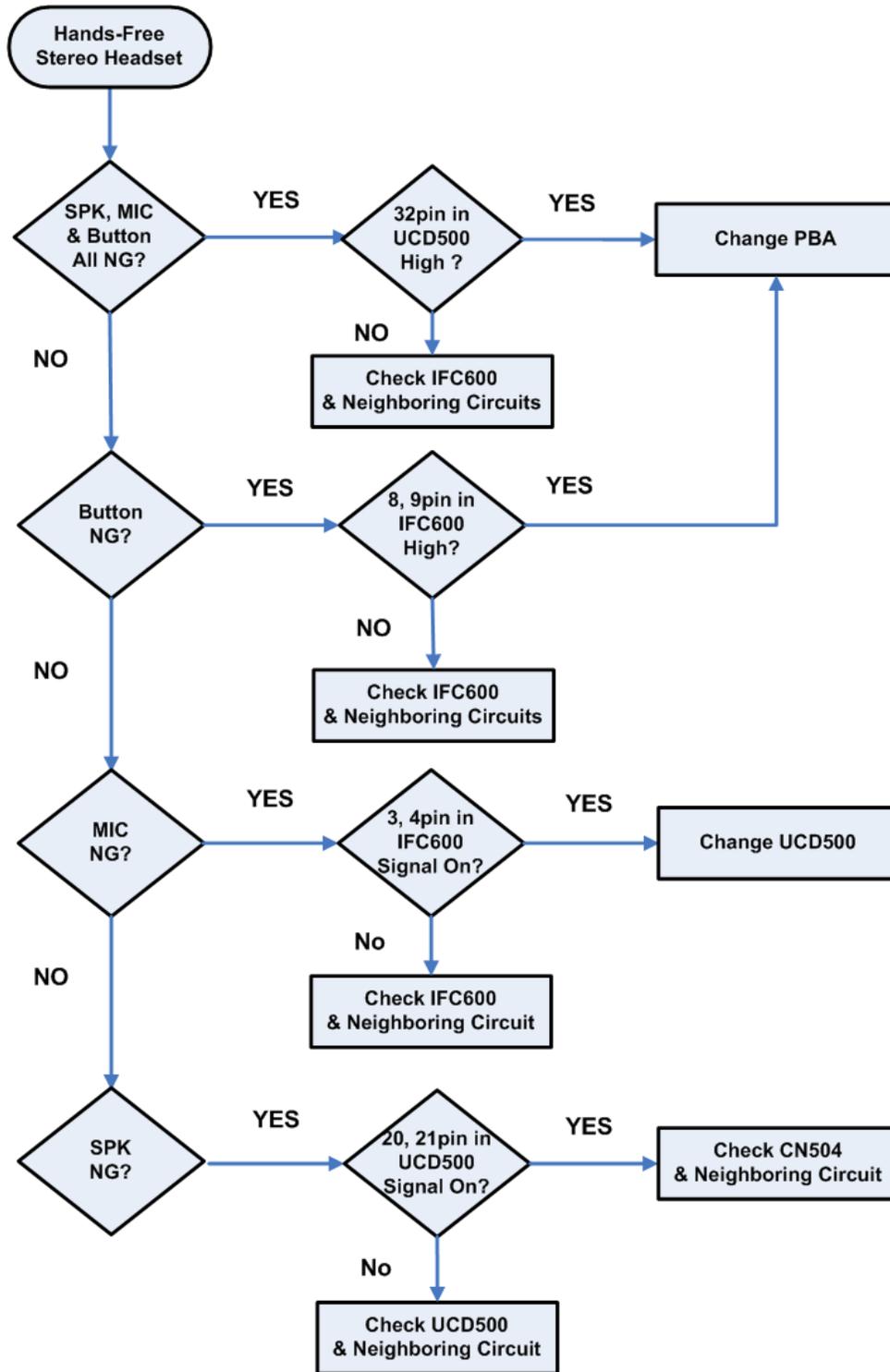


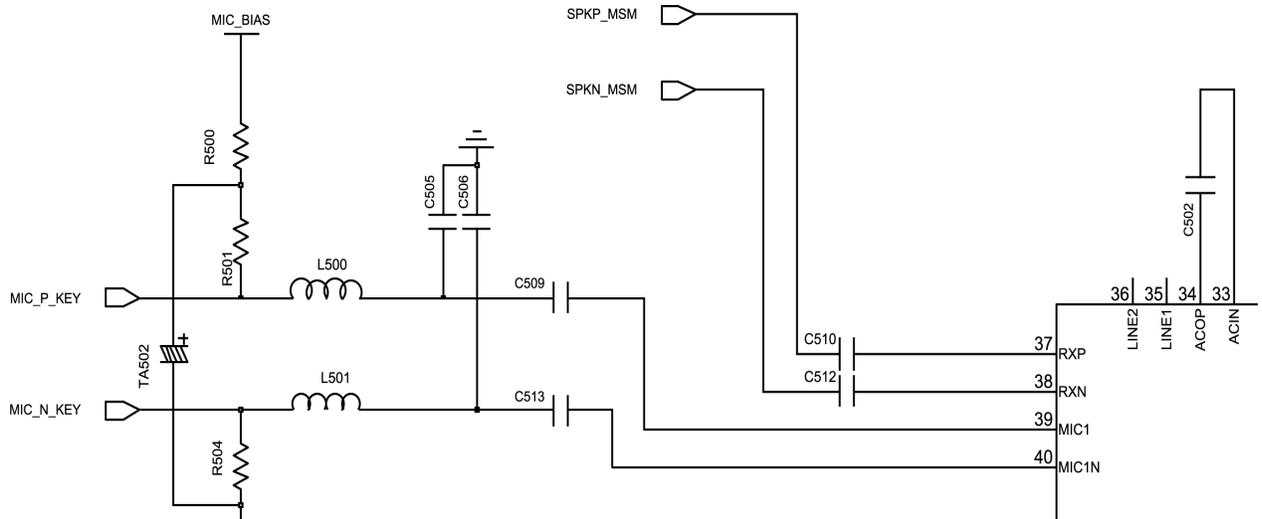
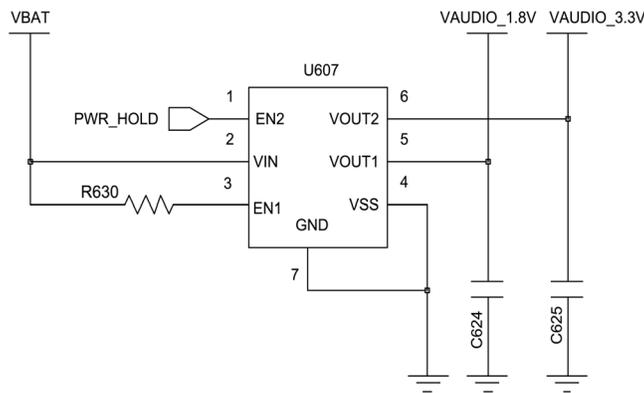
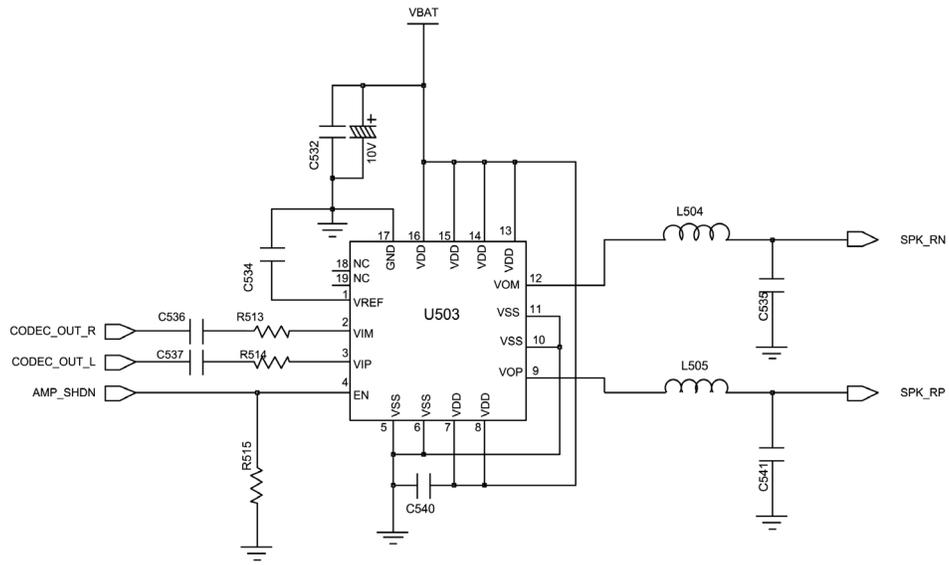
● Receiver Working

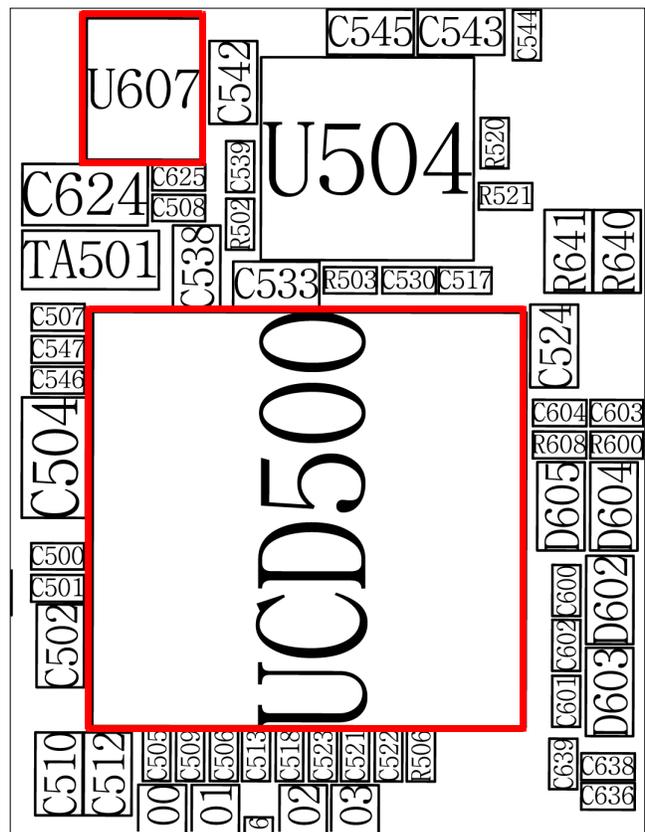
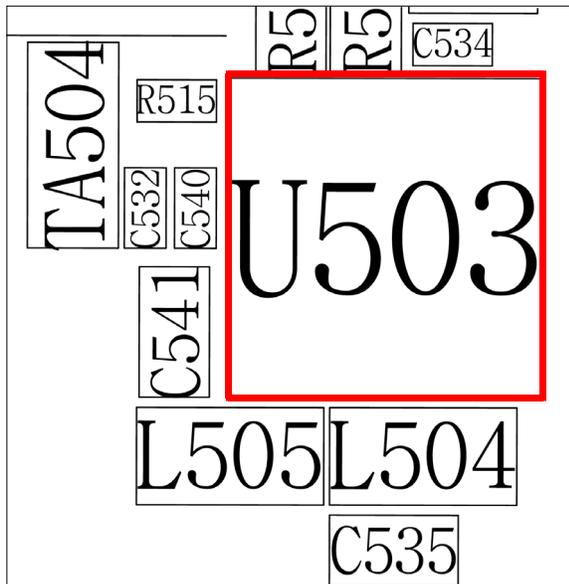
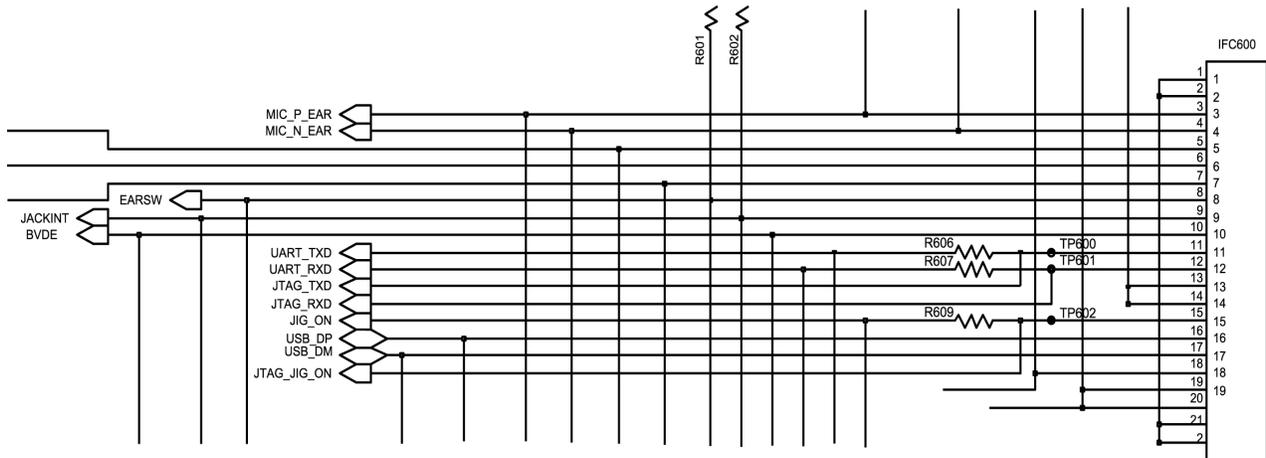


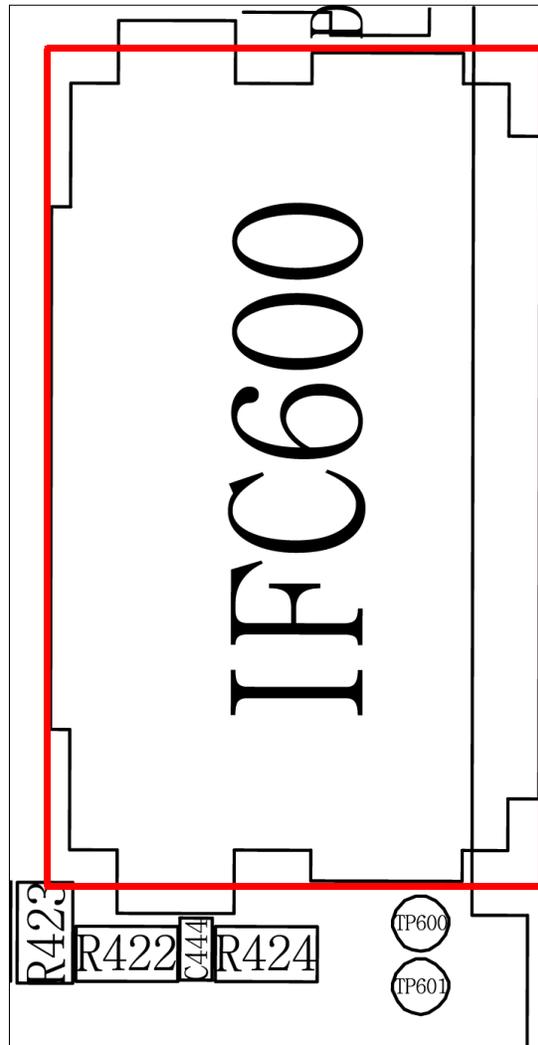
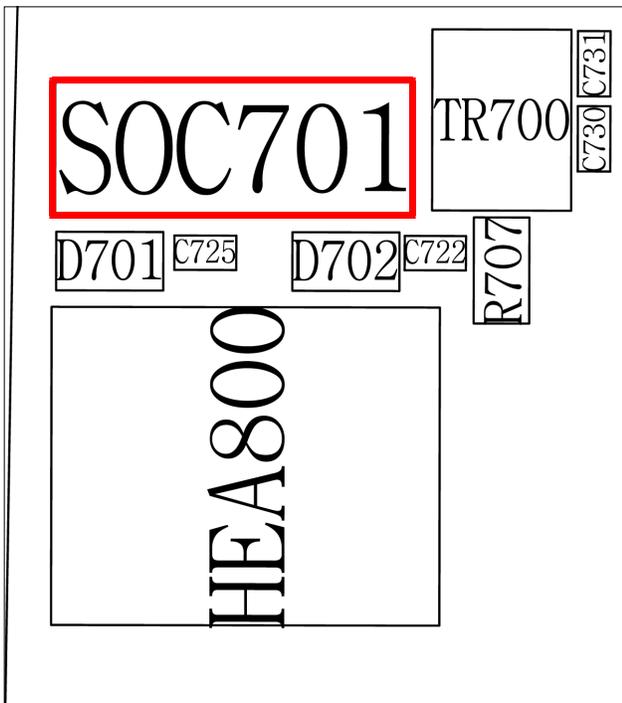
● MIC Working

● Hands-Free Stereo Headset Working

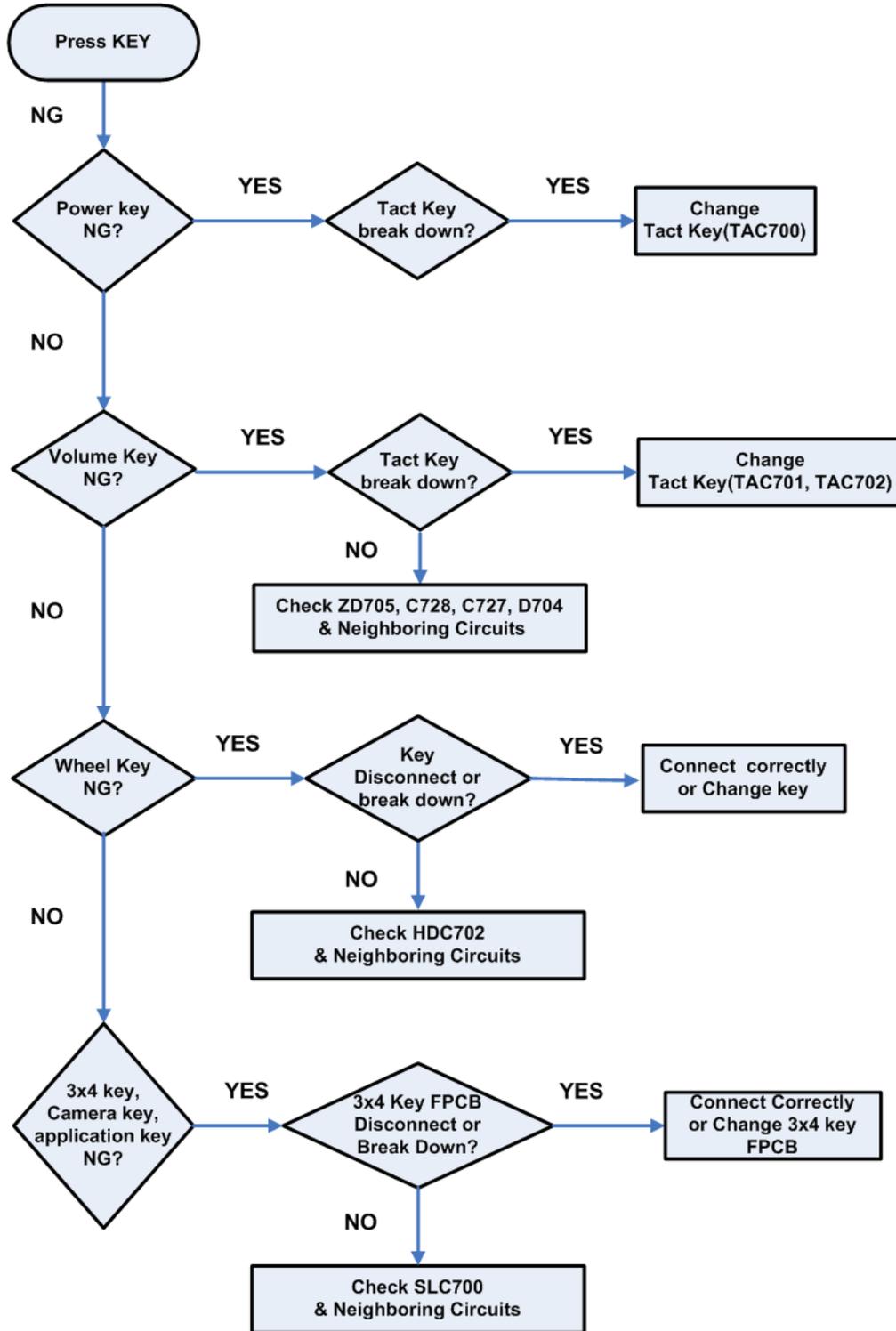


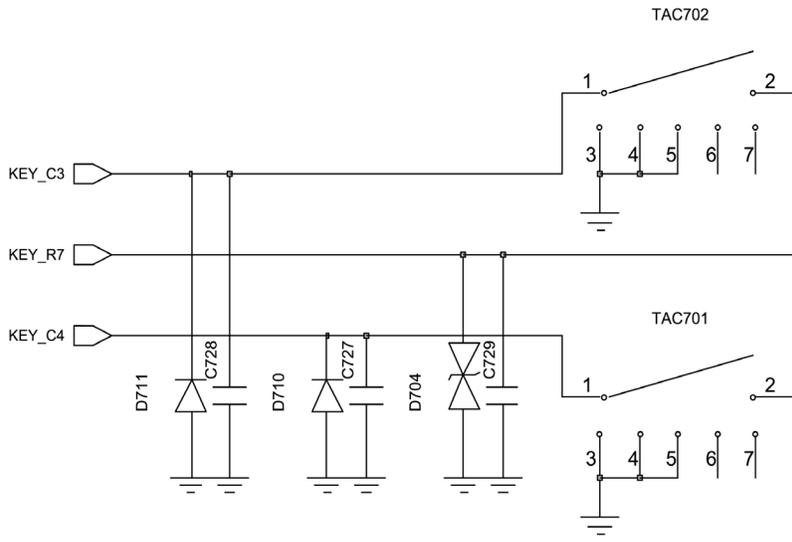




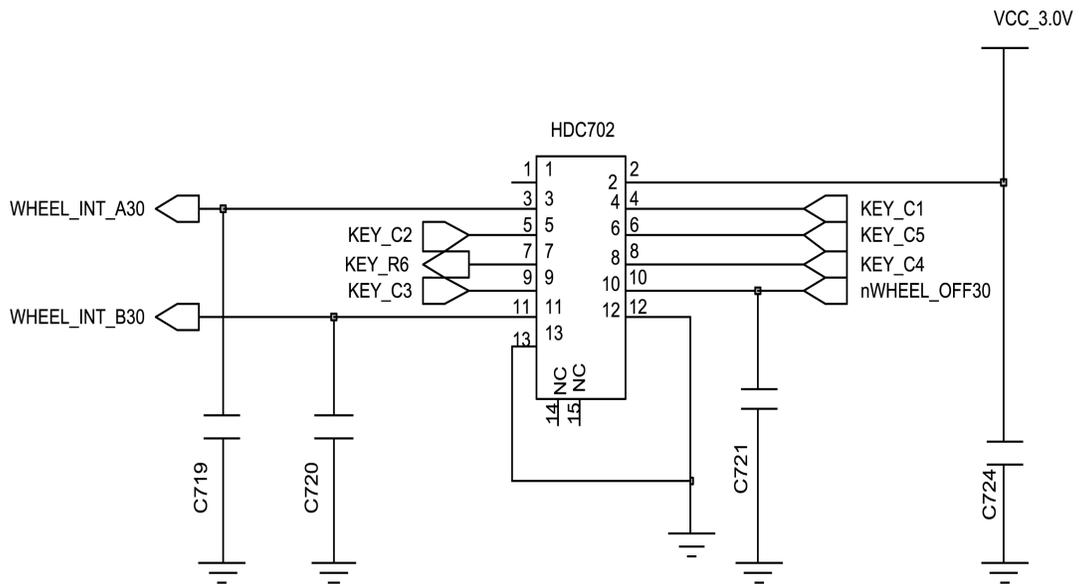
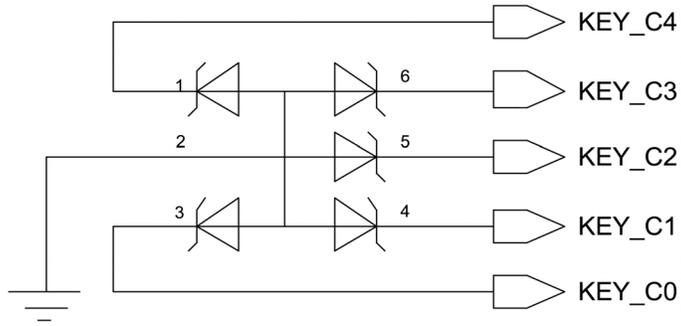


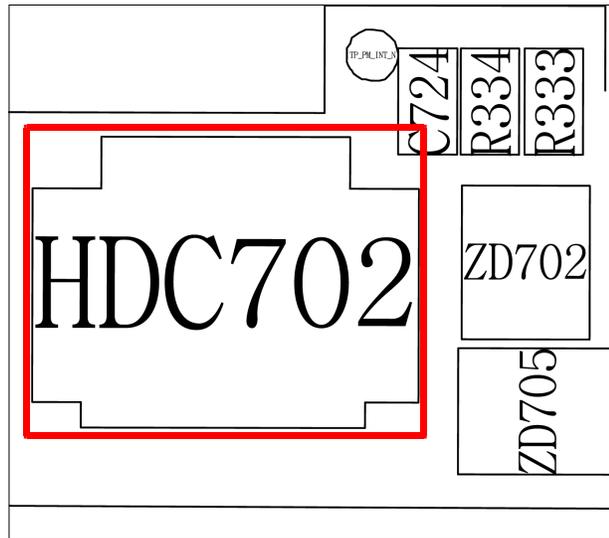
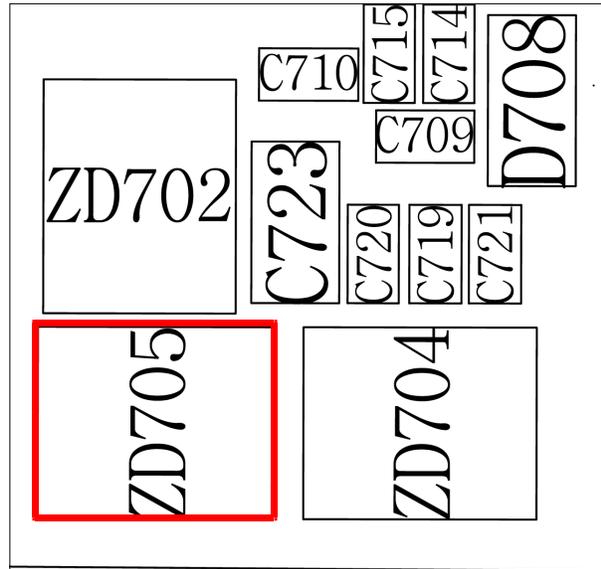
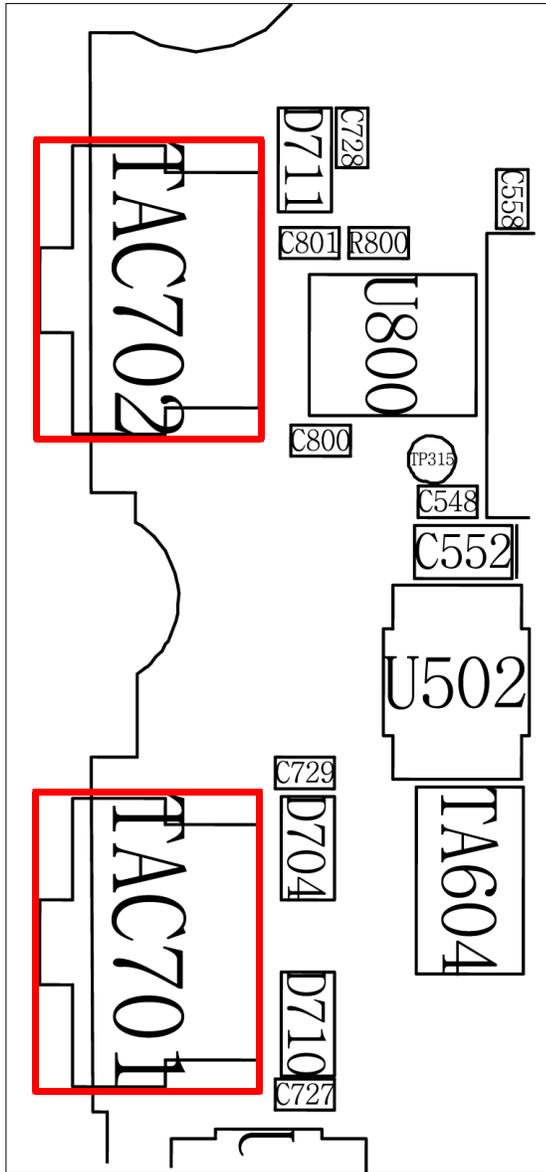
9-4. KEY Working



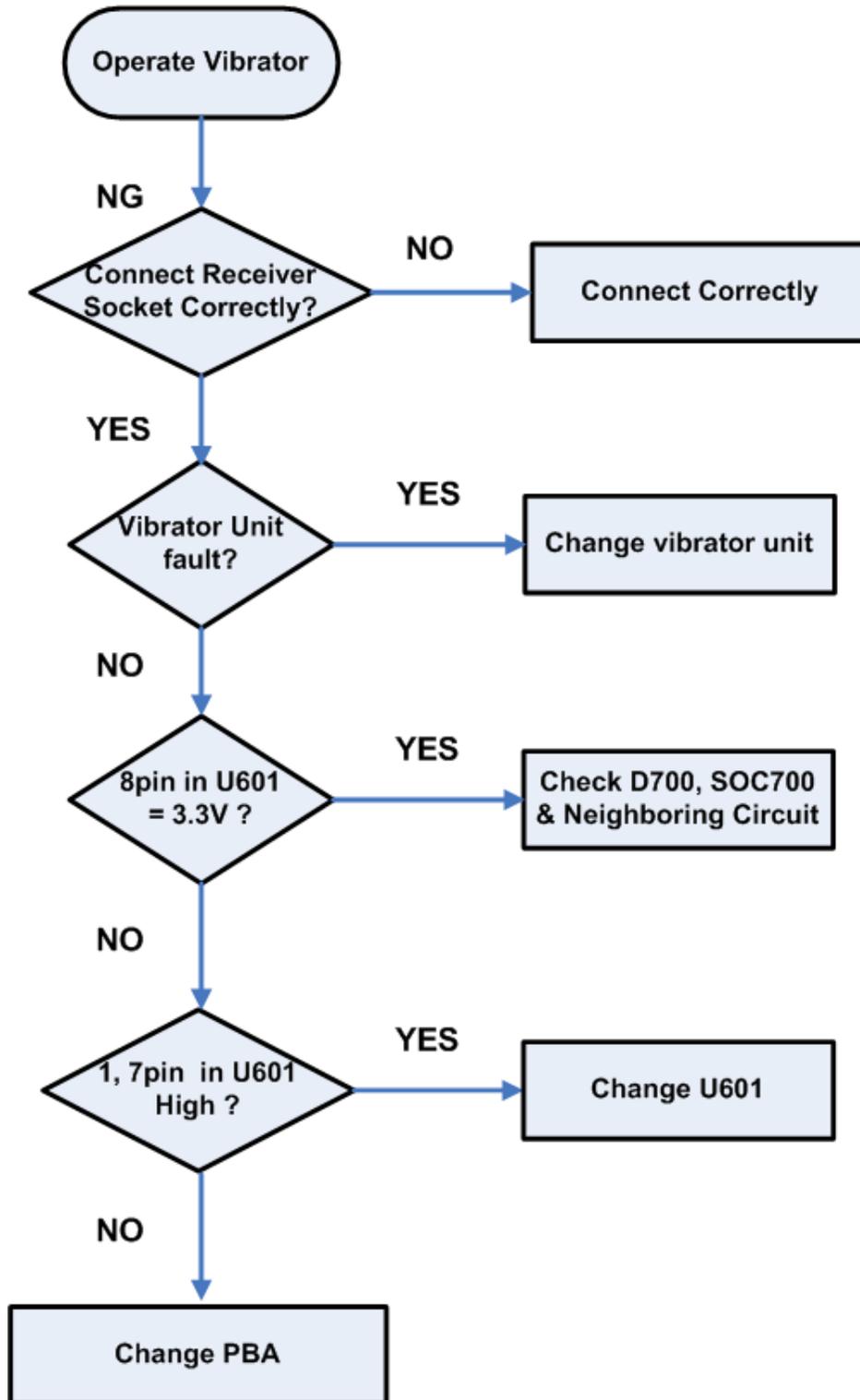


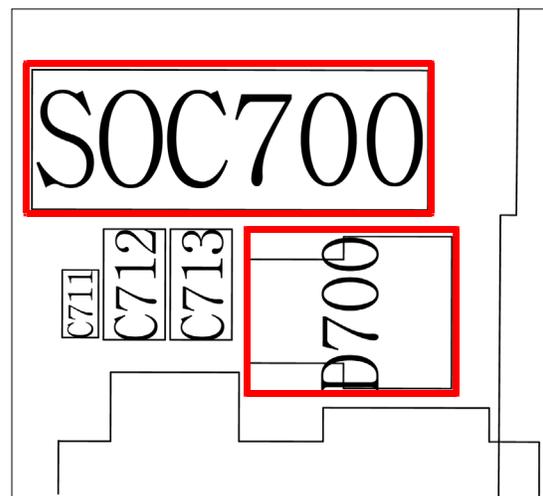
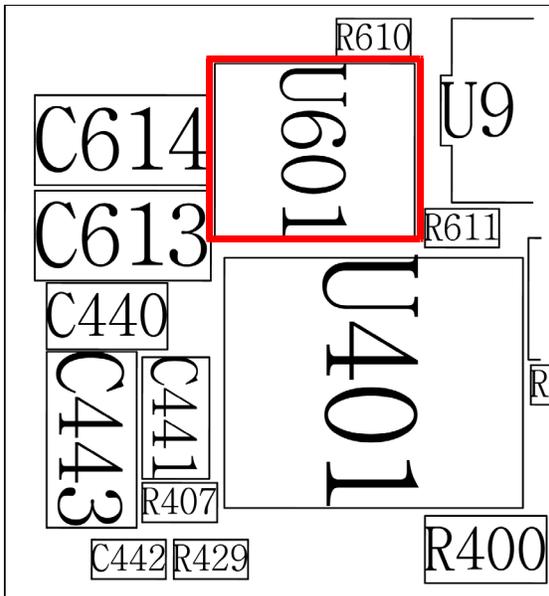
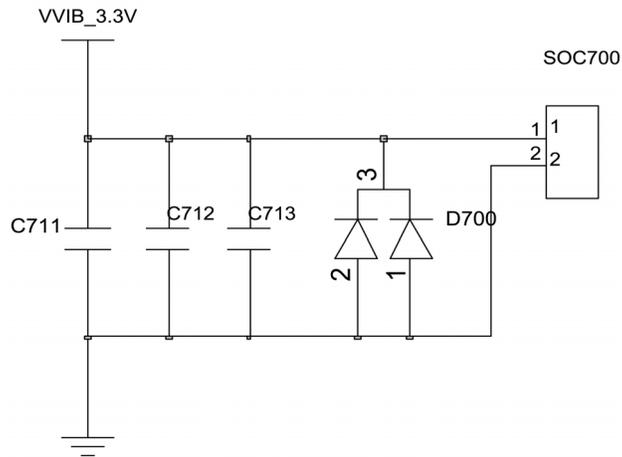
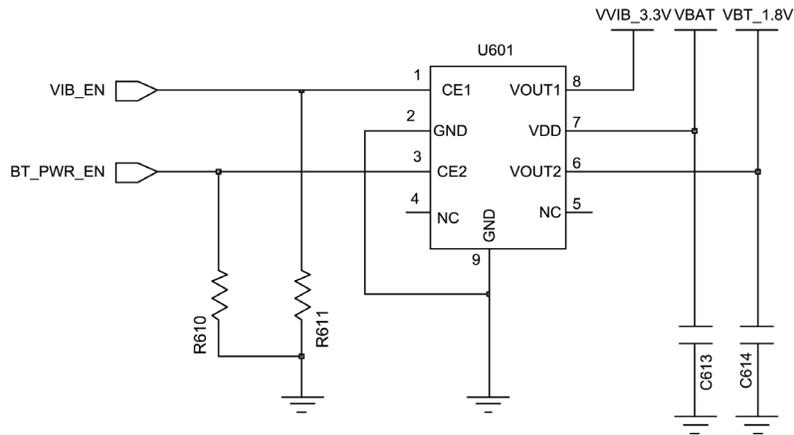
ZD705



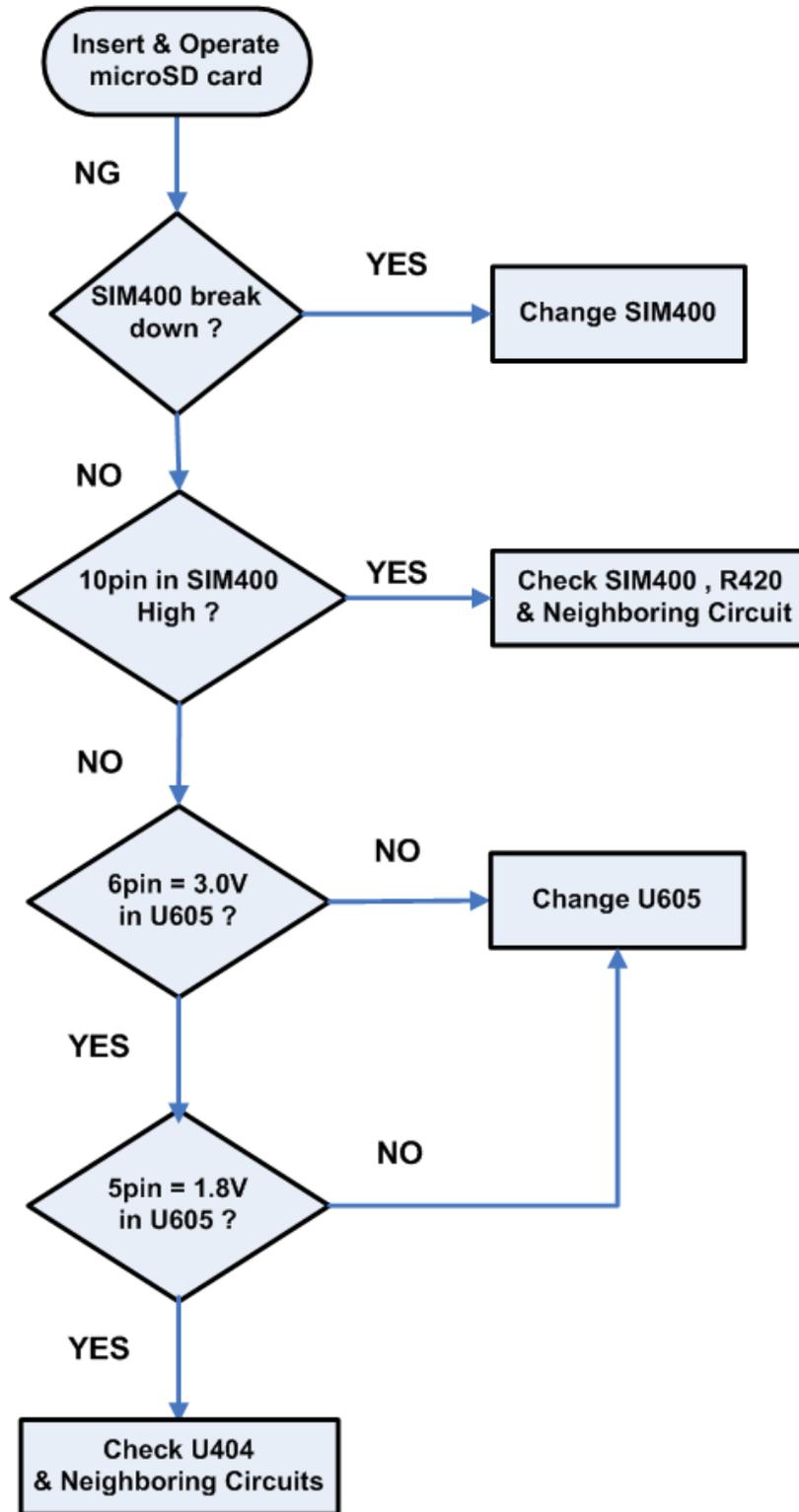


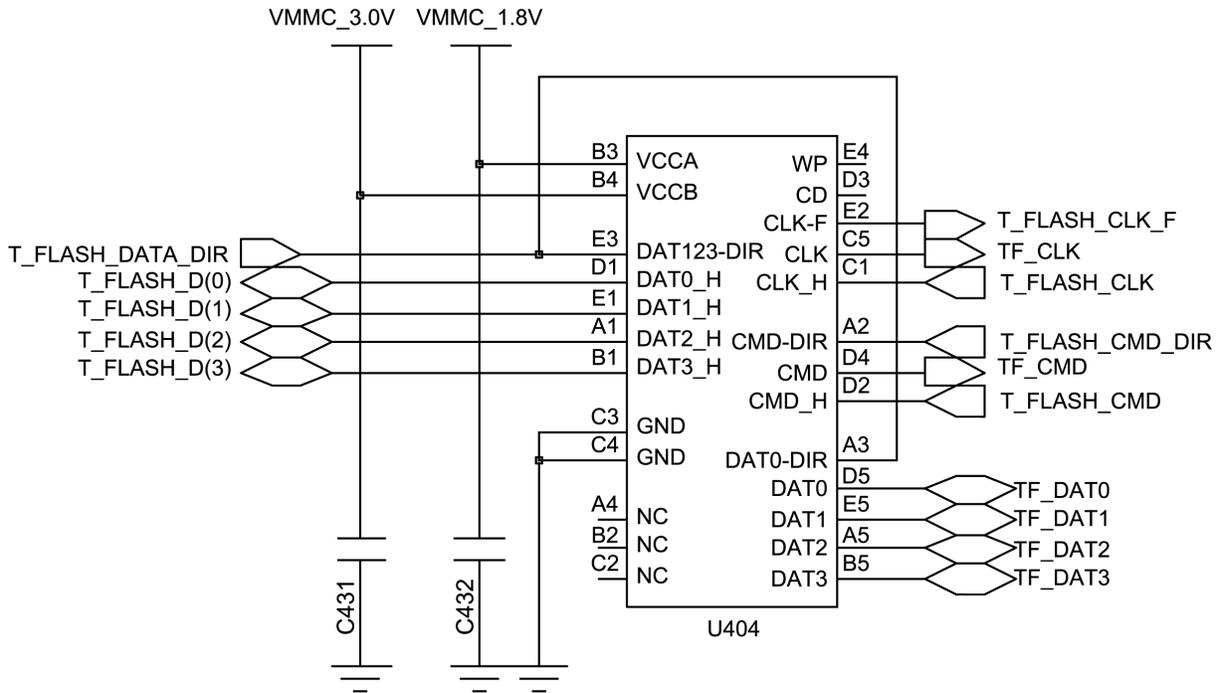
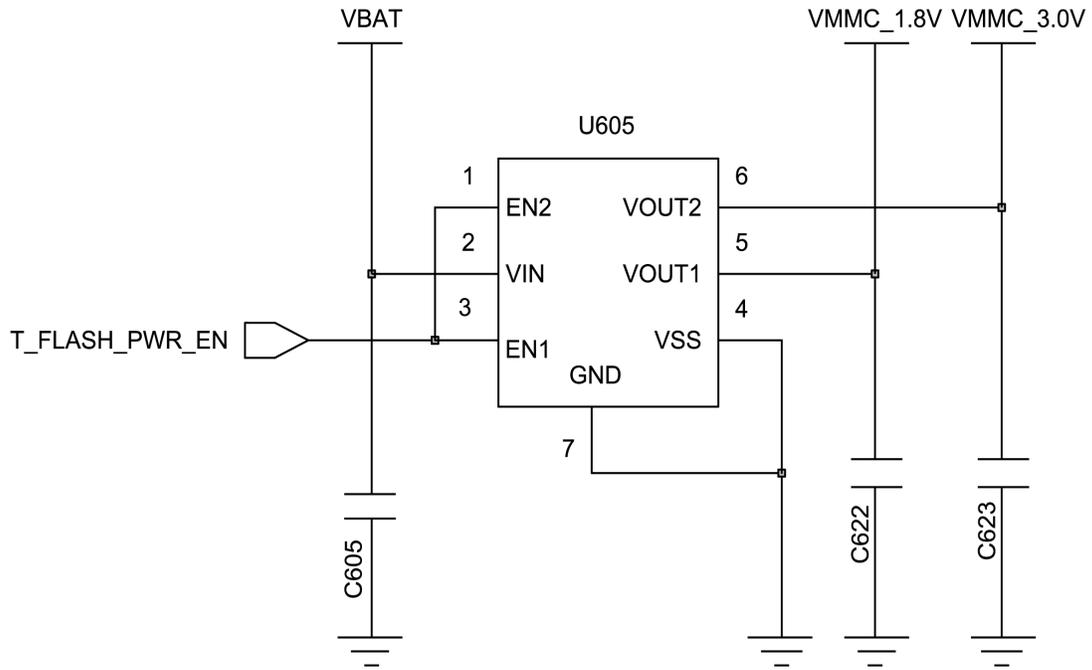
9-5. Vibrator Working

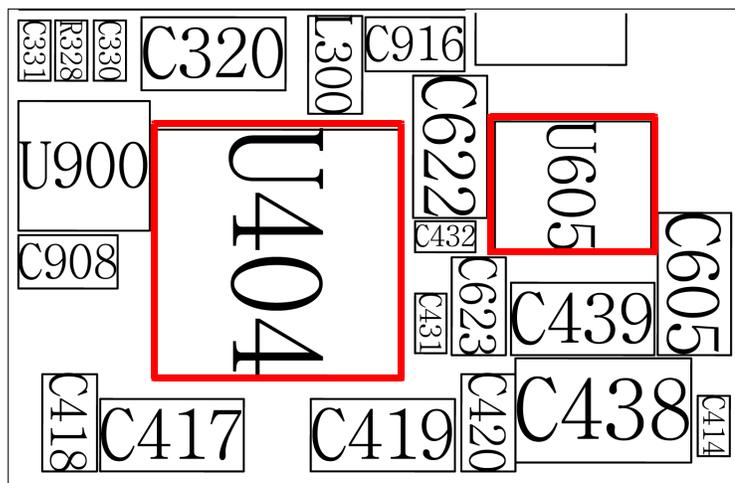
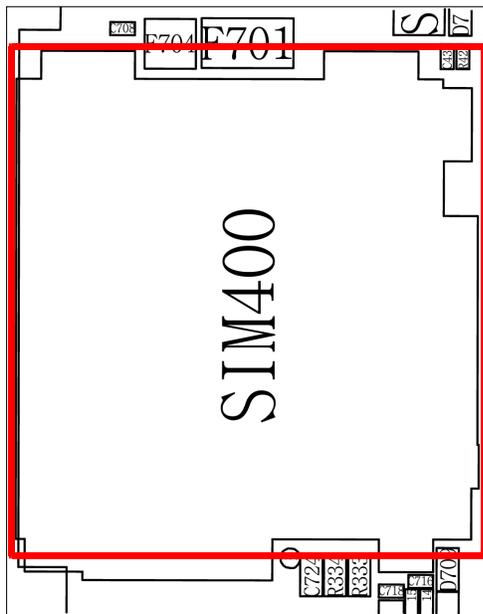
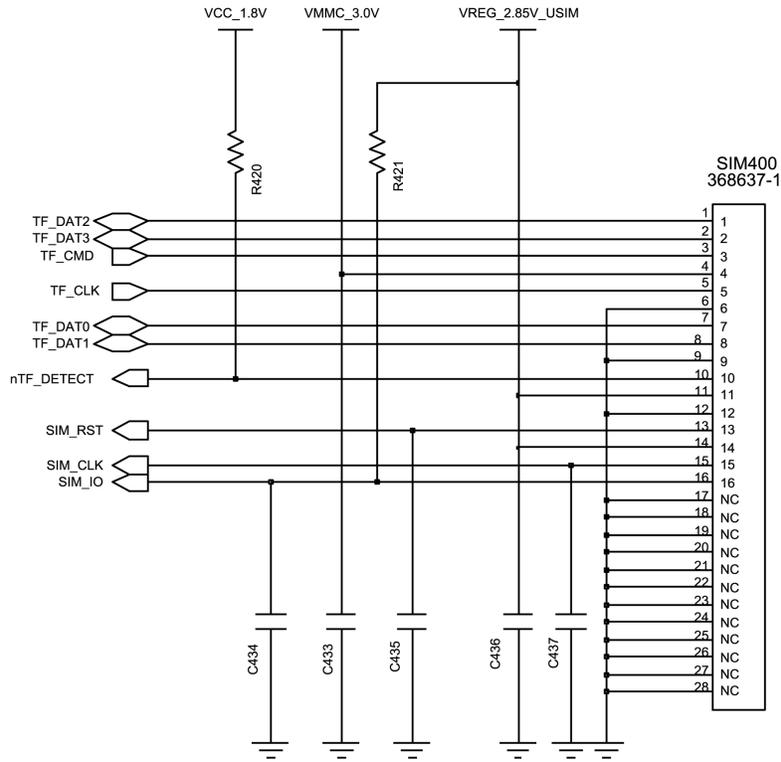




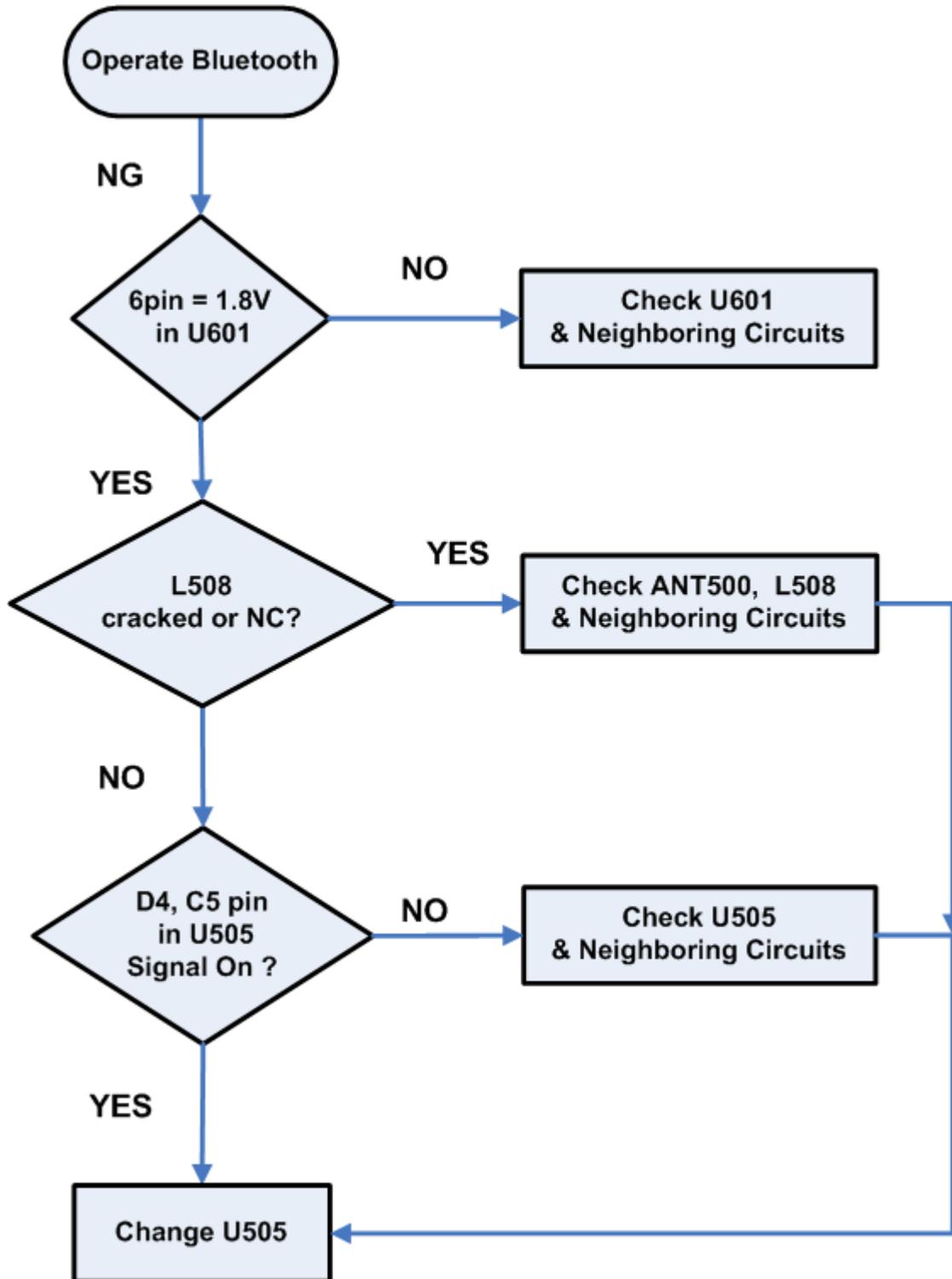
9-6. T-Flash Card Working

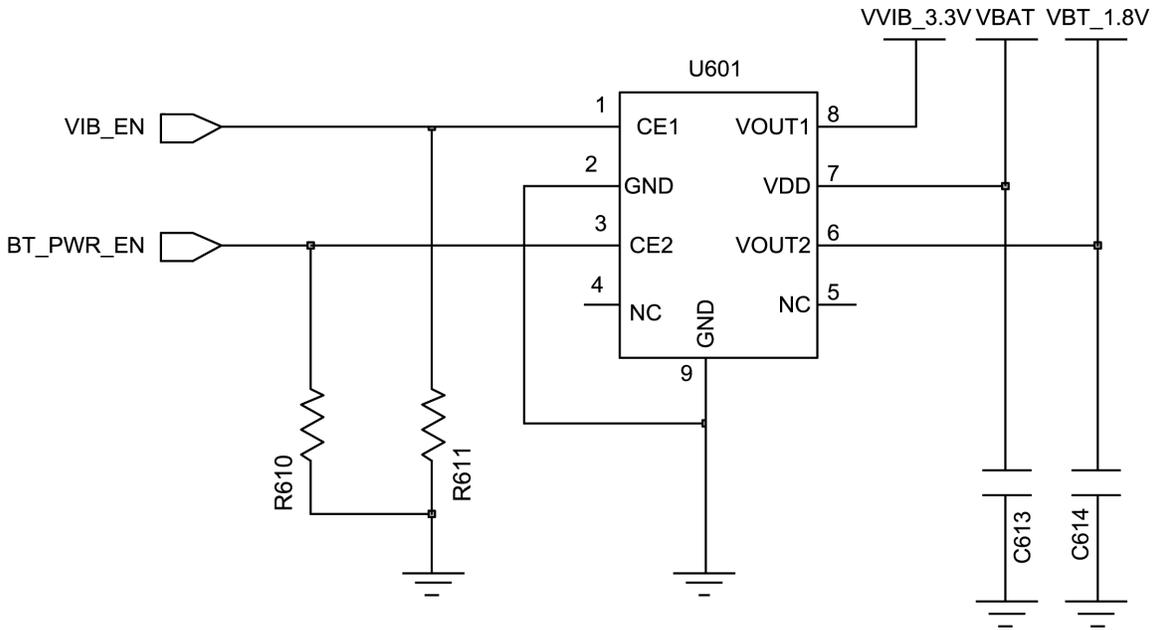
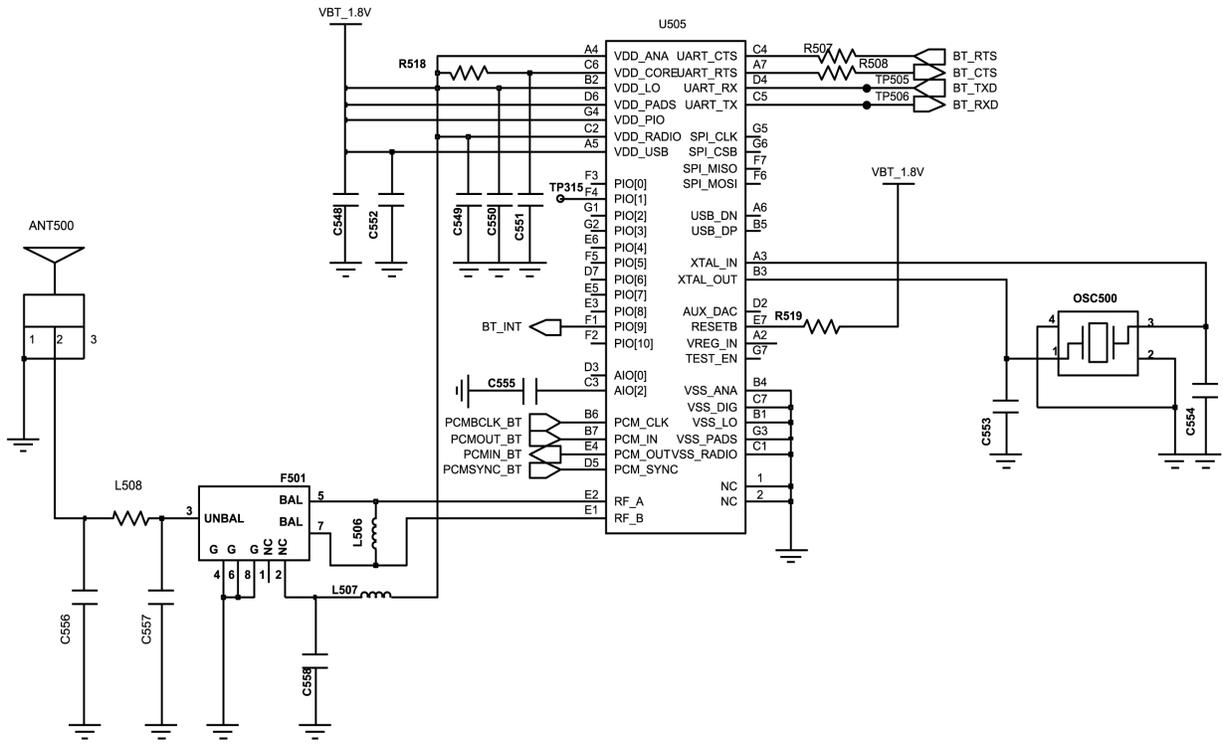






9-7. Bluetooth Working



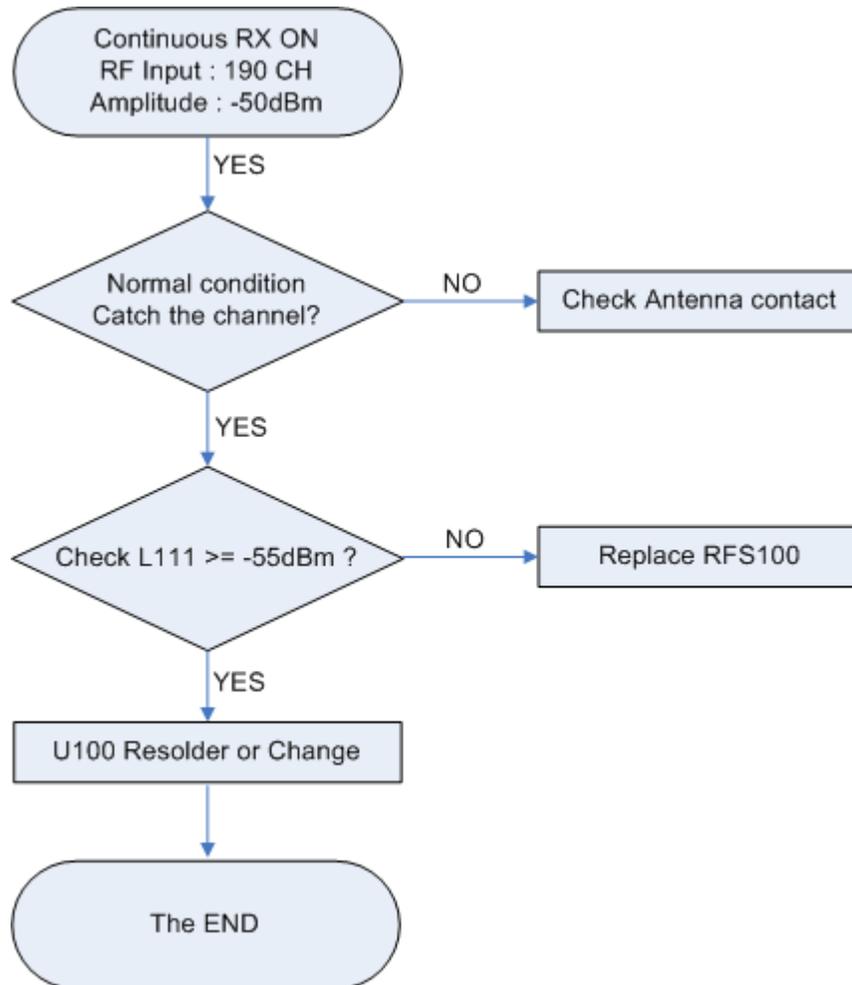


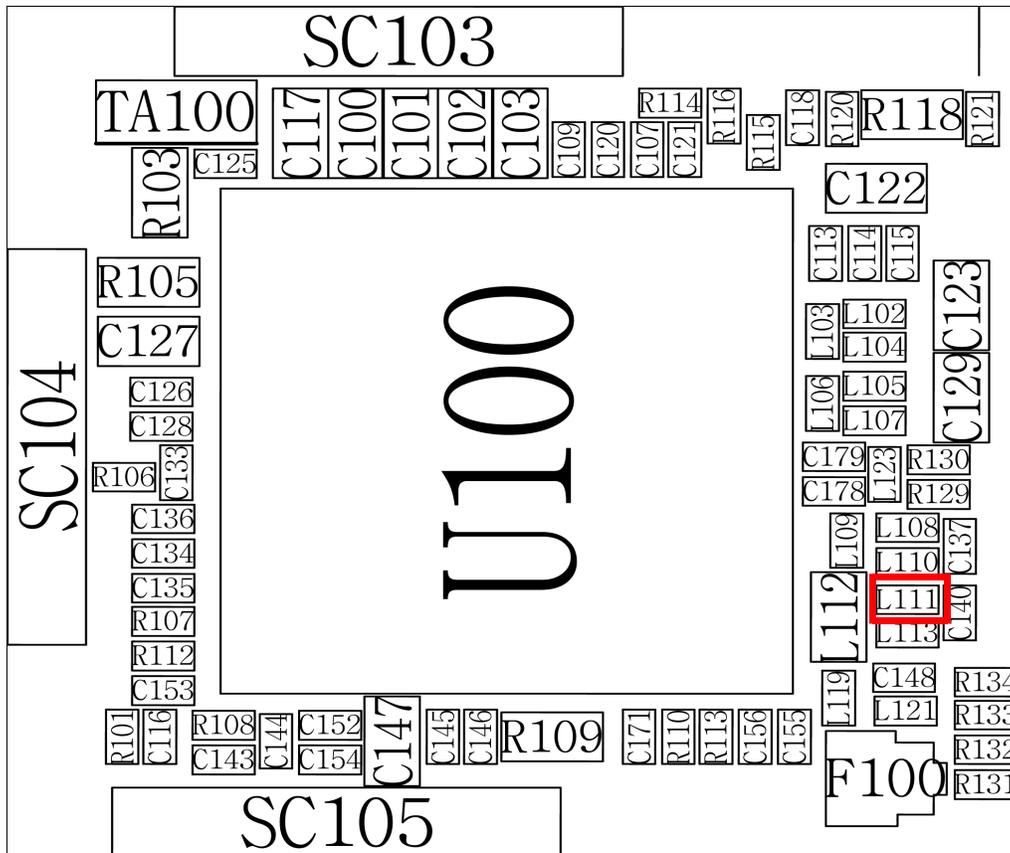
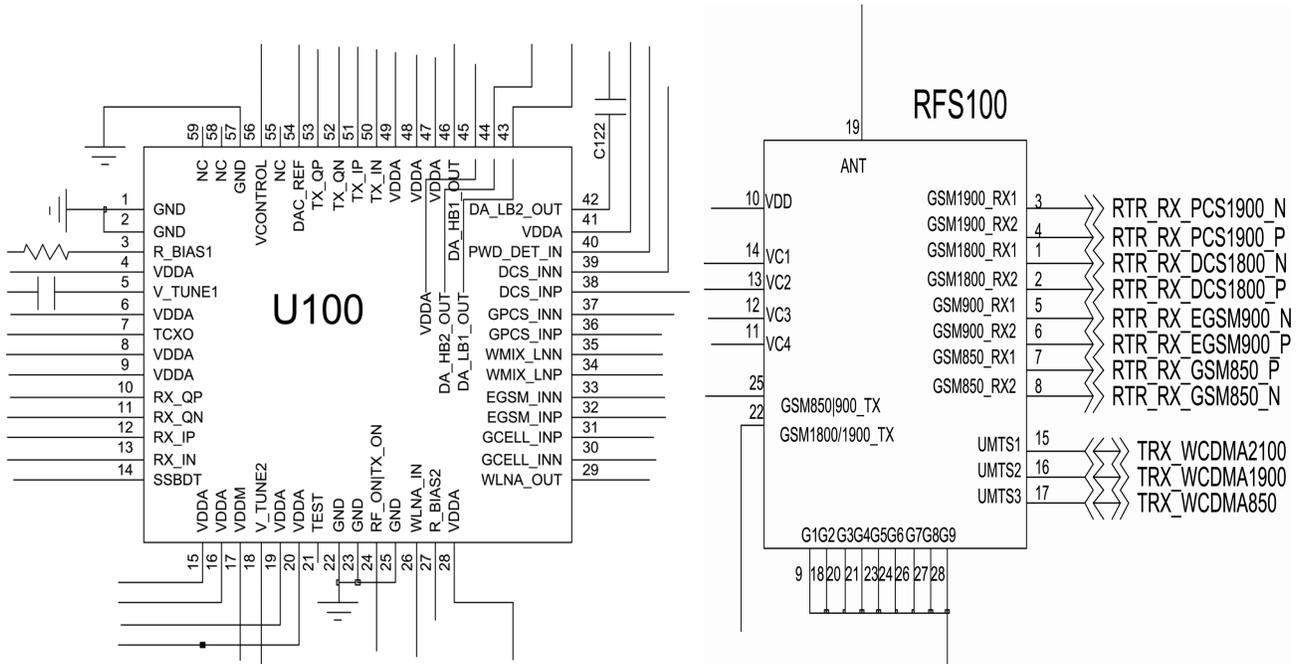
9-2.RF

9-2-1. GSM850 Receiver

**If you check the tx chain,

Check the not only RF Device but also resistor, inductor and capacitor.

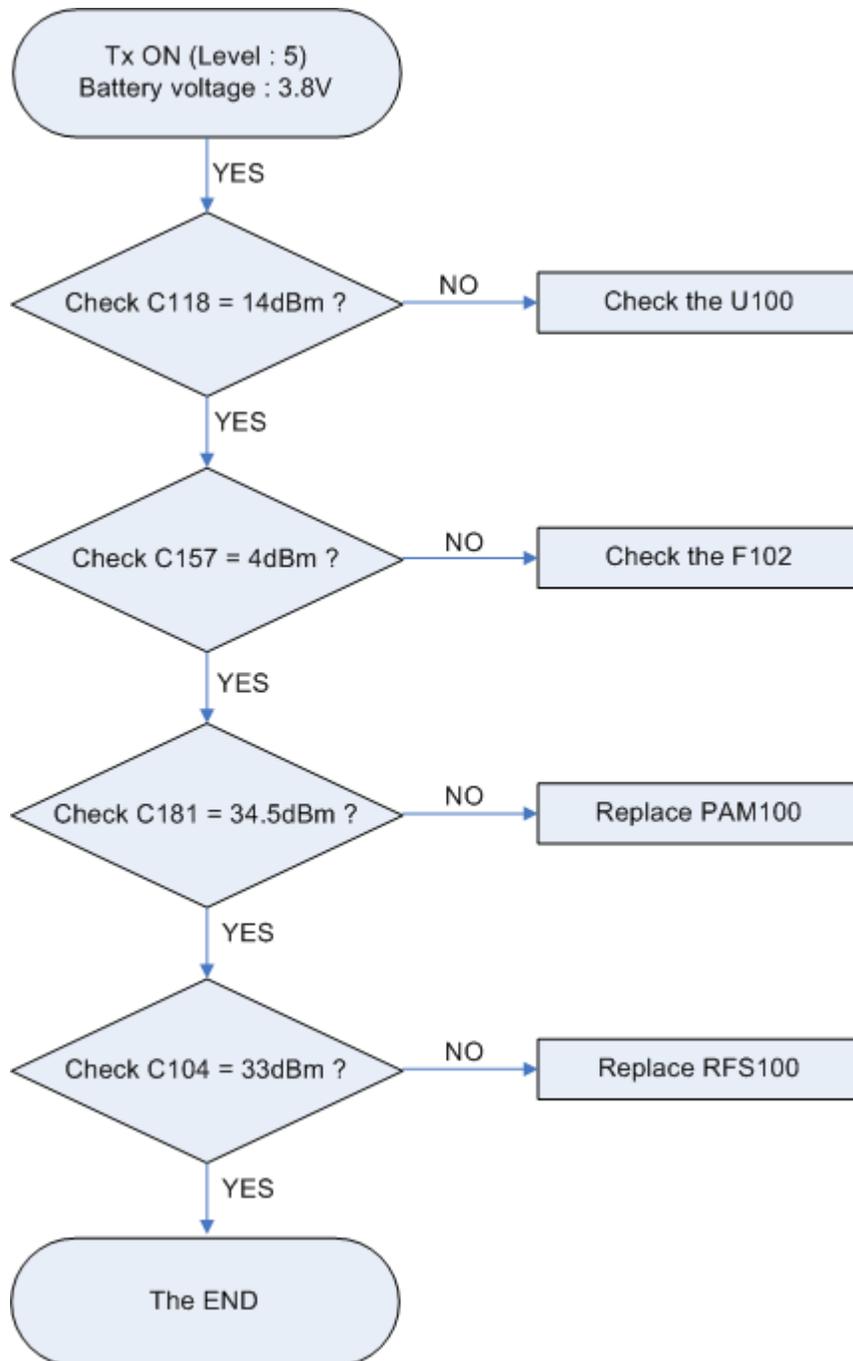




9-2-2. GSM850 Transmitter

**If you check the tx chain,

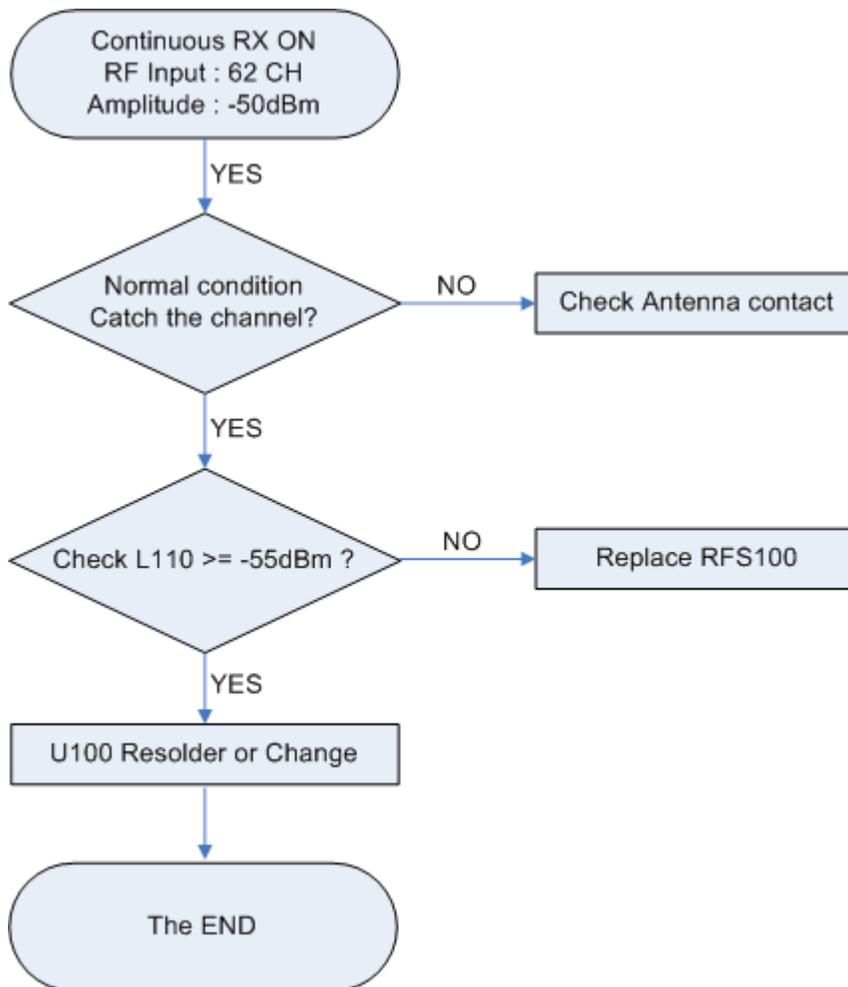
Check the not only RF Device but also resistor, inductor and capacitor.

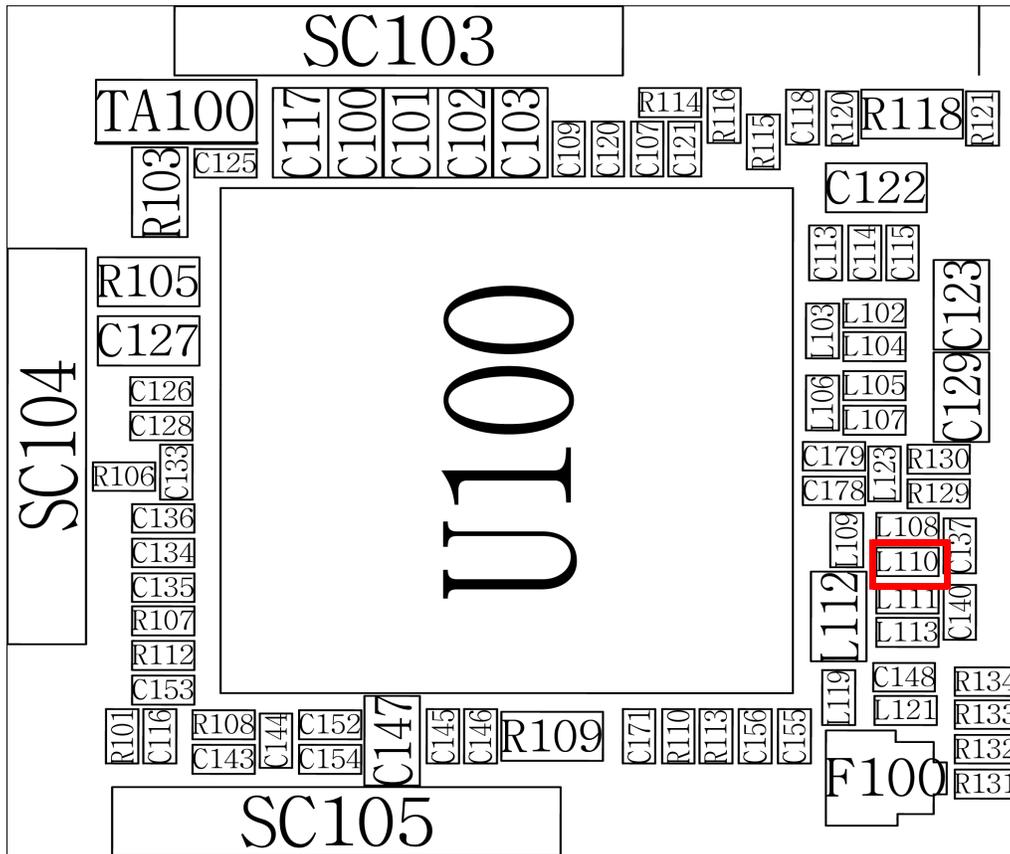
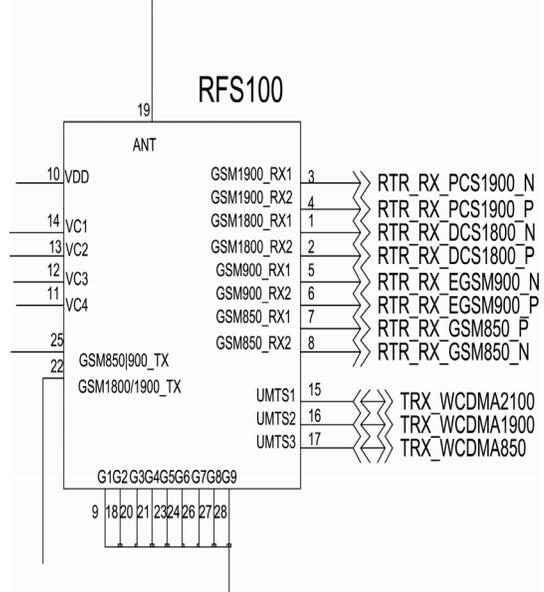
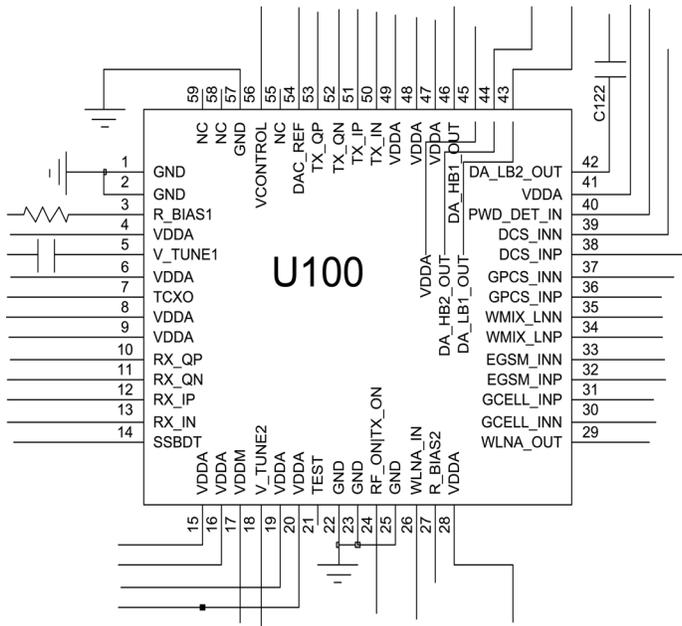


9-2-3. GSM900 Receiver

**If you check the tx chain,

Check the not only RF Device but also resistor, inductor and capacitor.

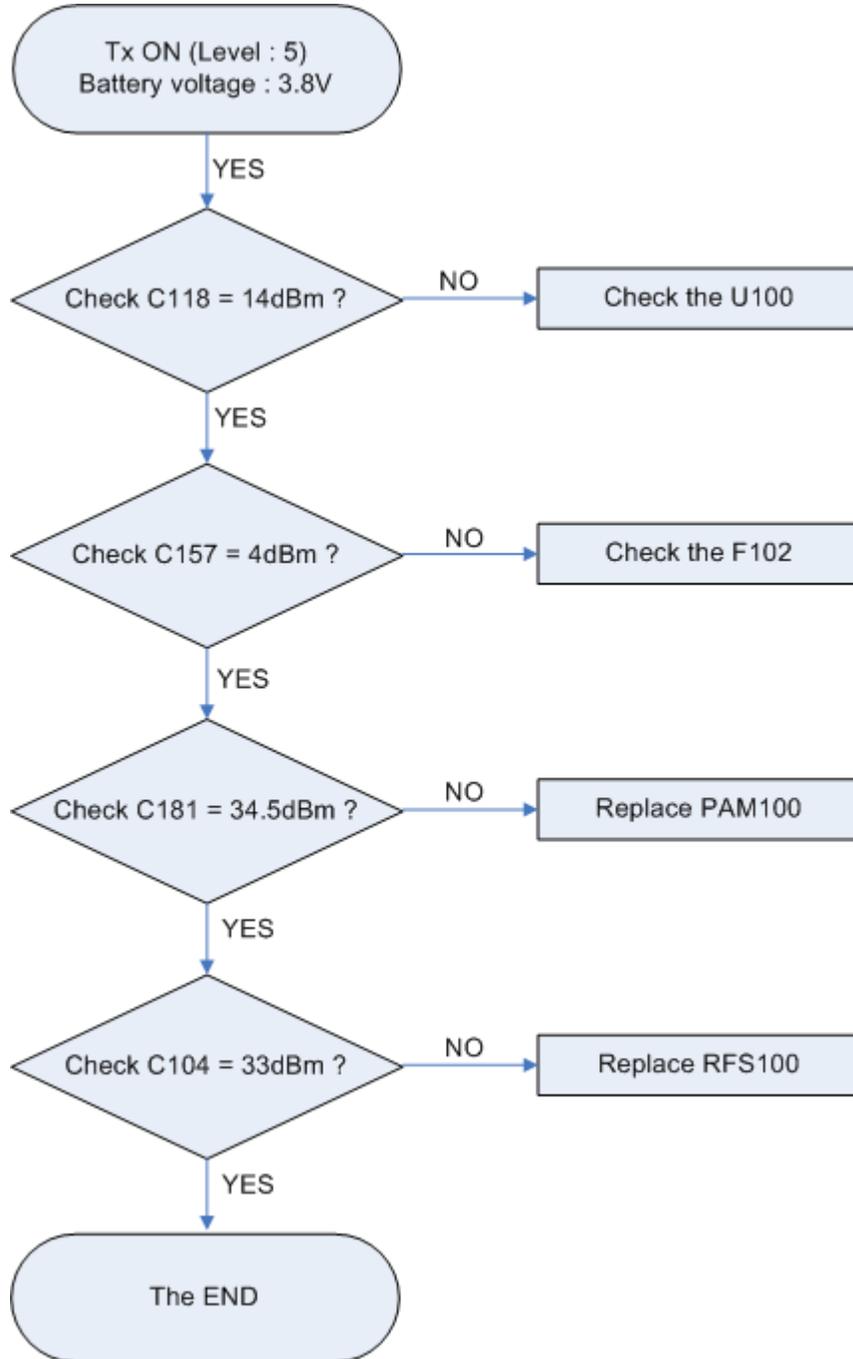


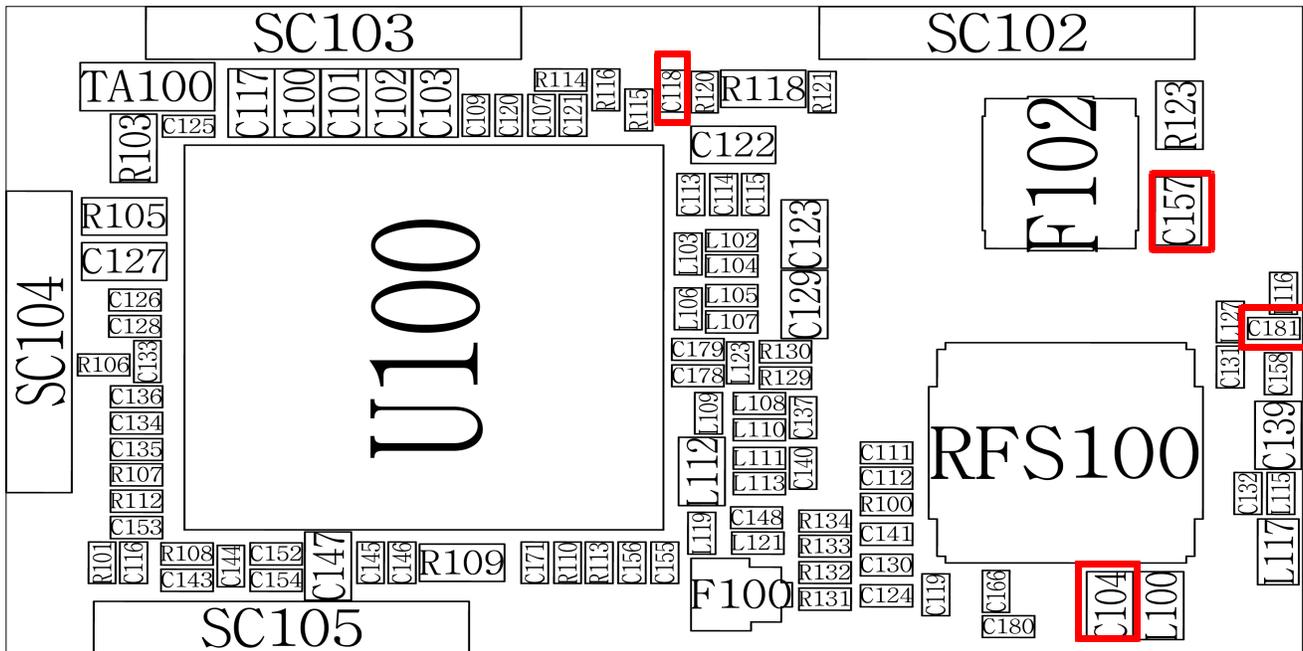
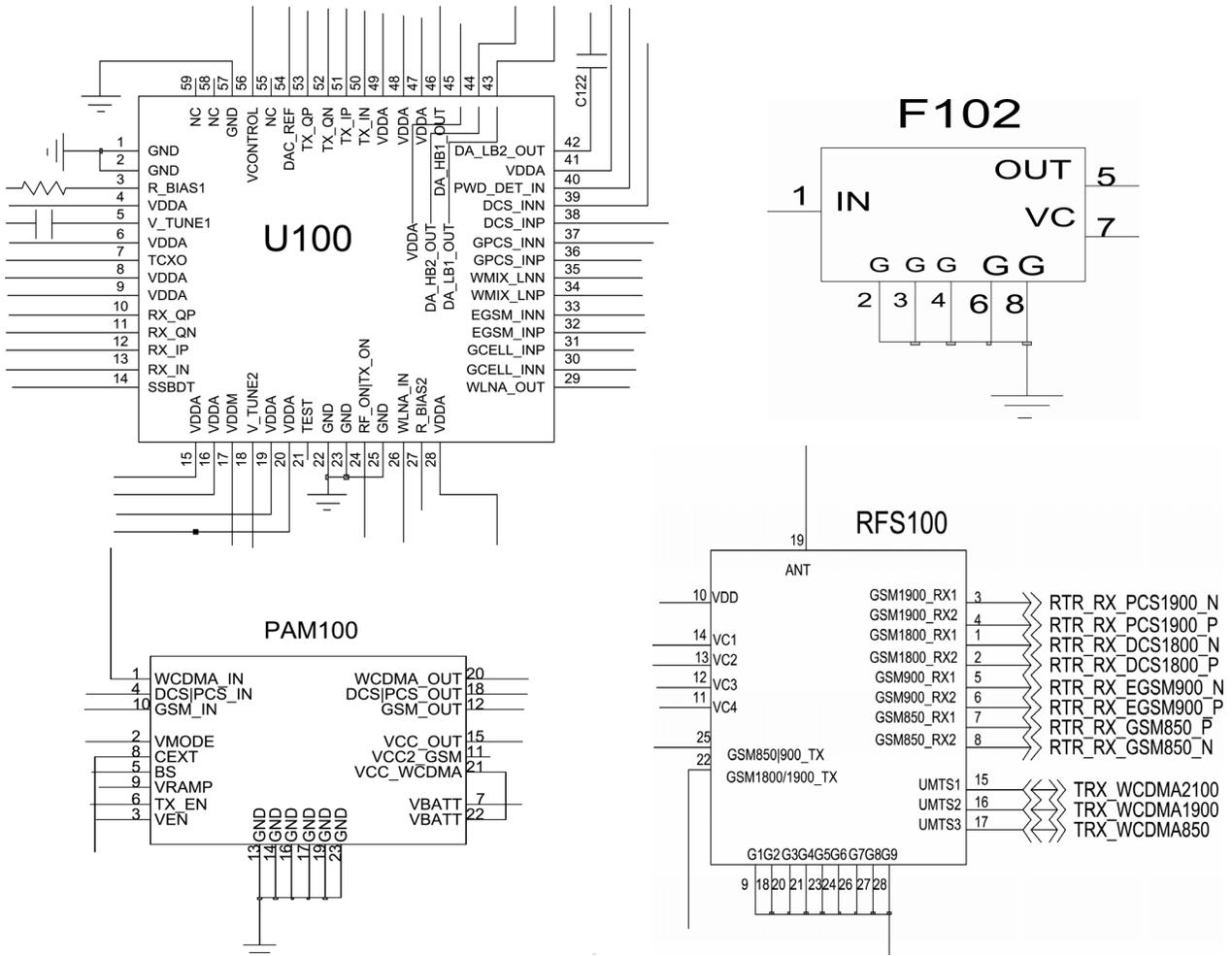


9-2-4. GSM900 Transmitter

**If you check the tx chain,

Check the not only RF Device but also resistor, inductor and capacitor.

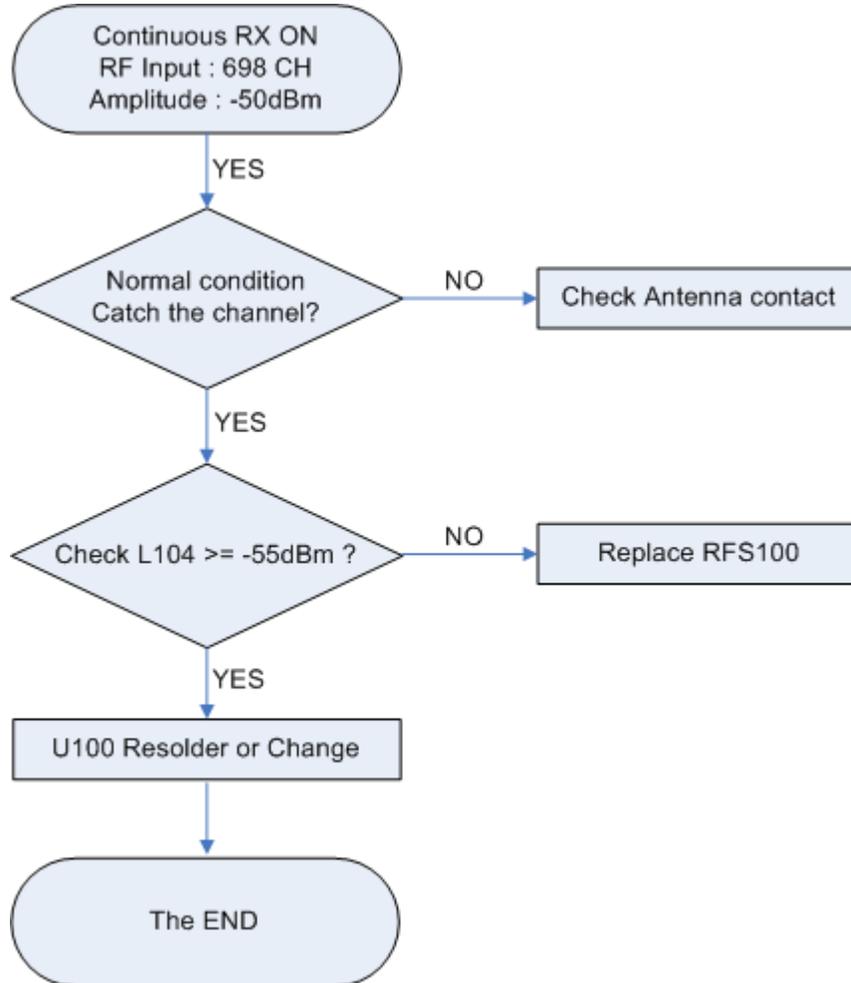


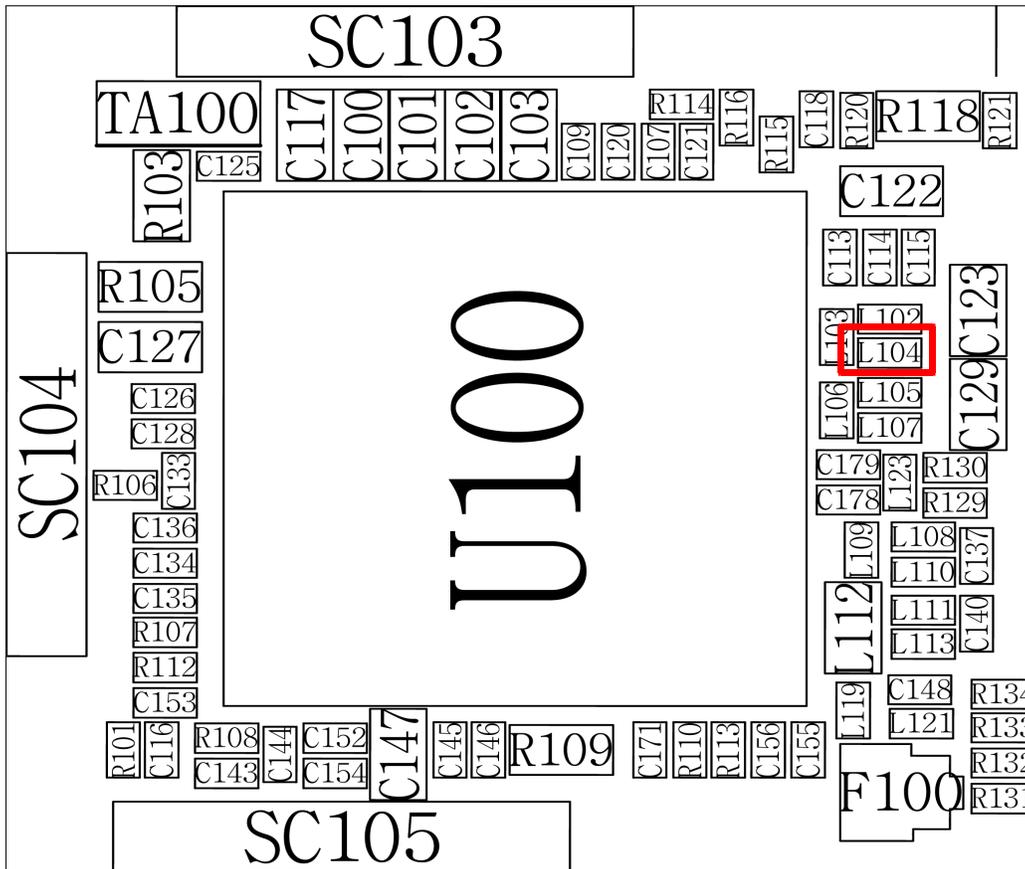
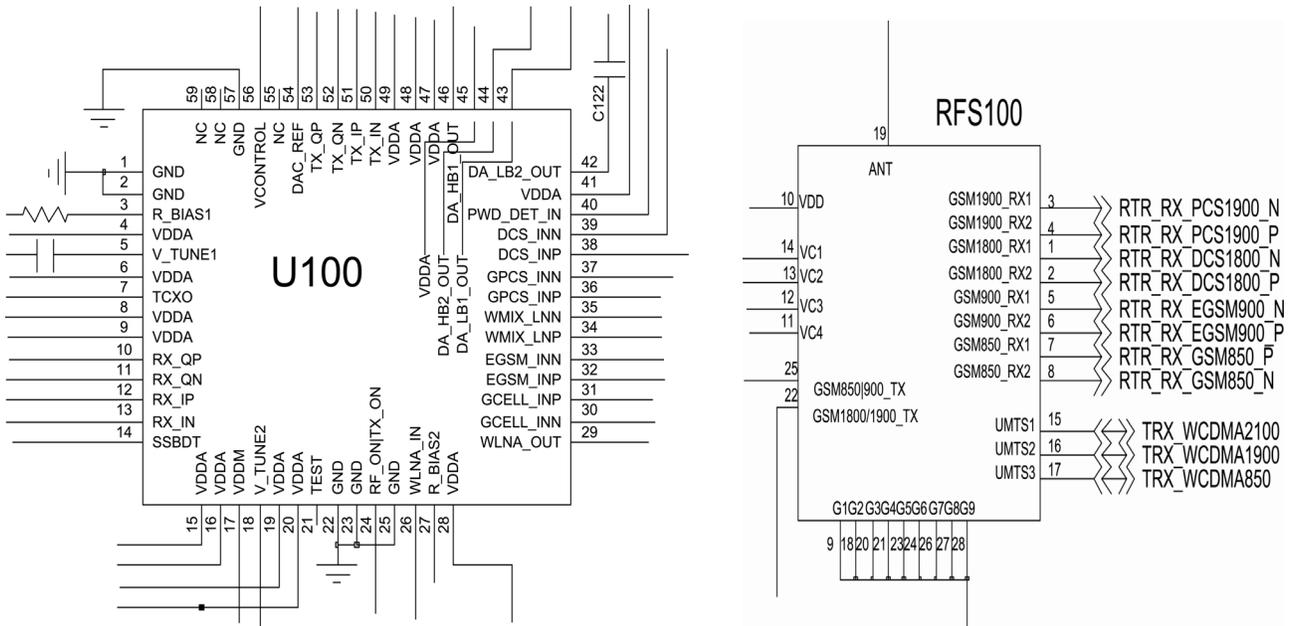


9-2-5. DCS1800 Receiver

**If you check the tx chain,

Check the not only RF Device but also resistor, inductor and capacitor.

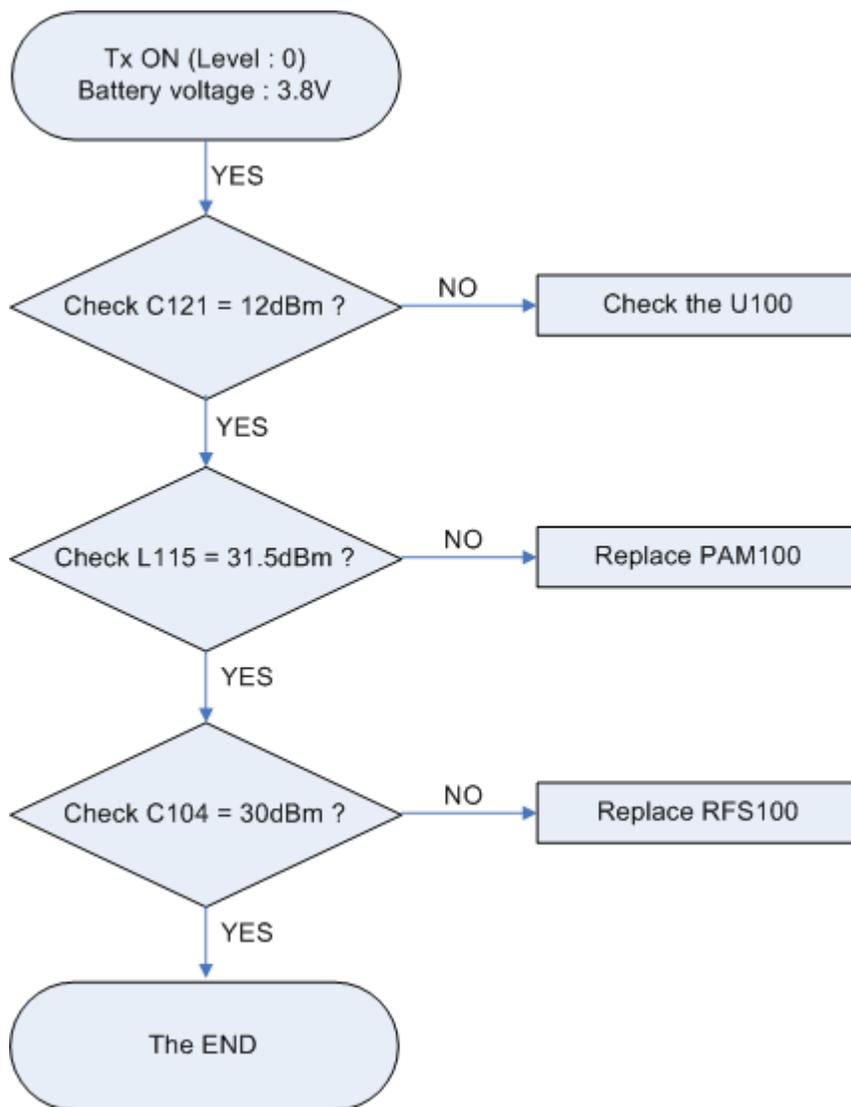


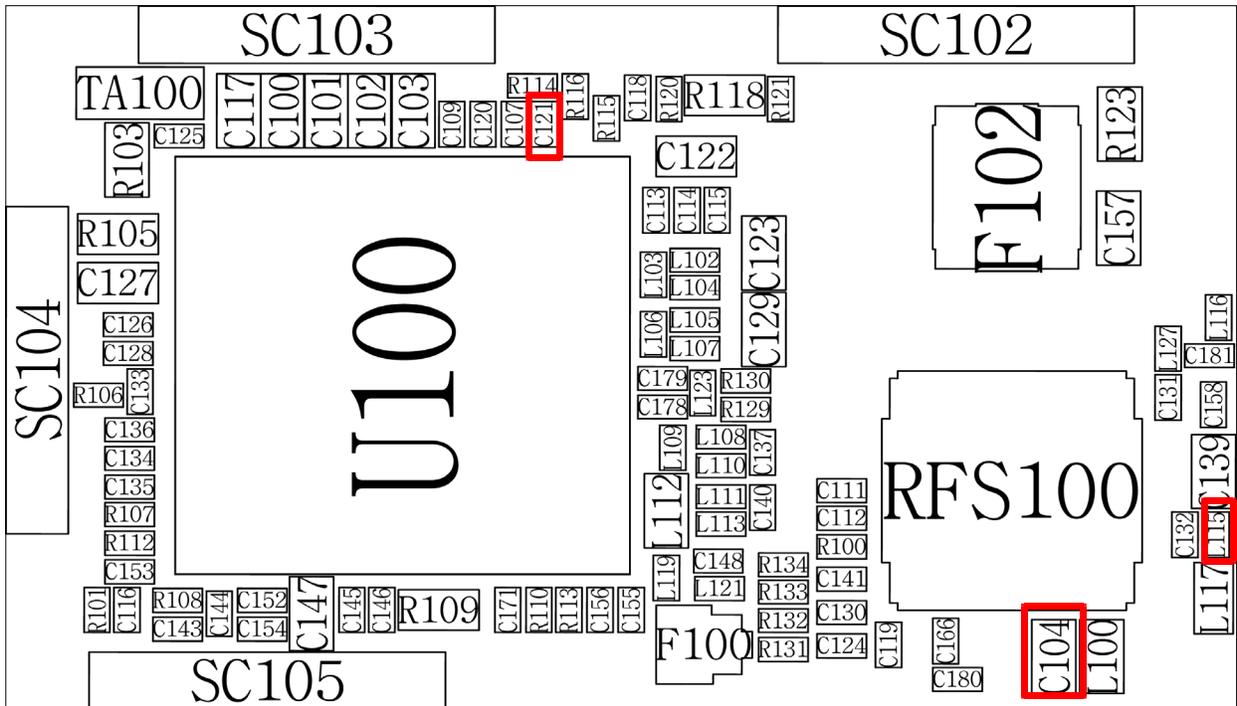
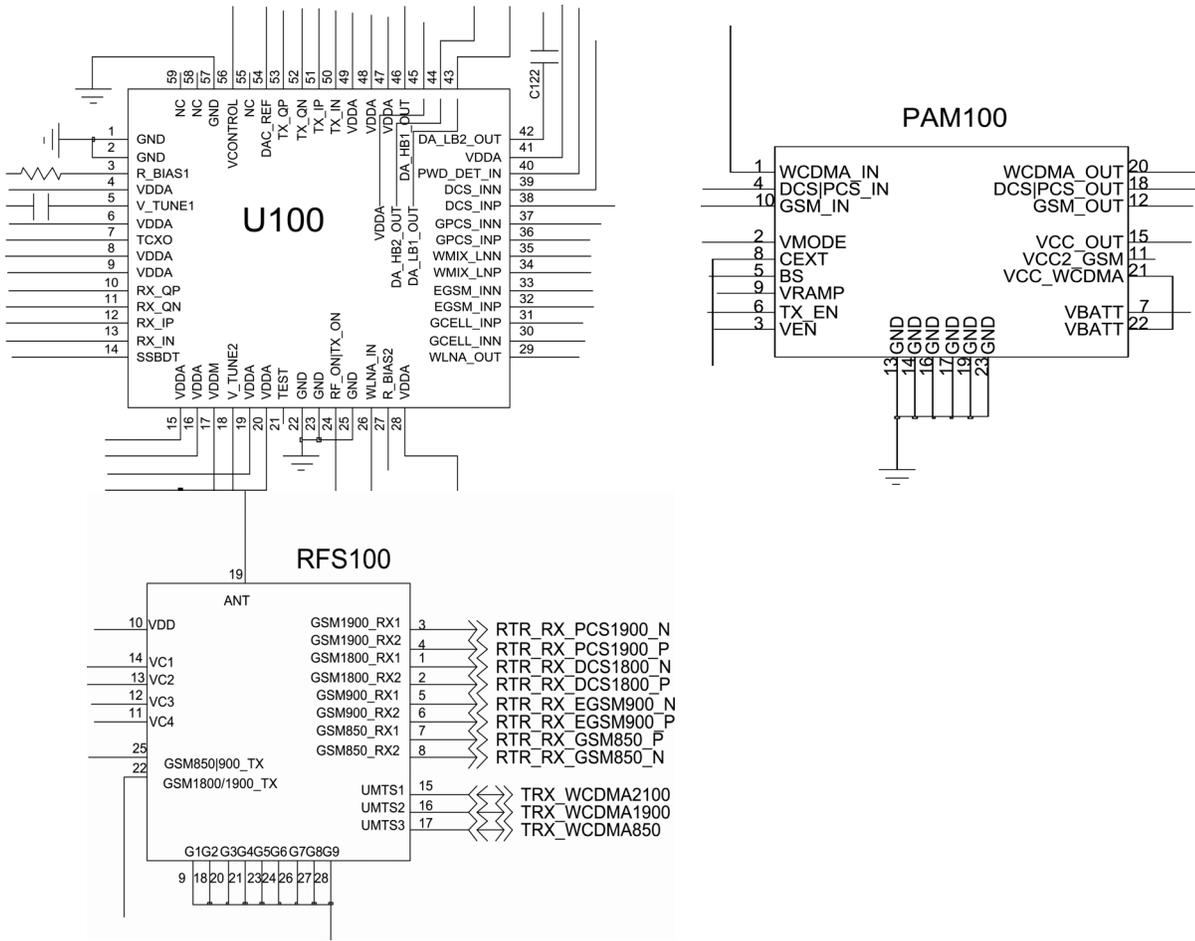


9-2-6. DCS1800 Transmitter

**If you check the tx chain,

Check the not only RF Device but also resistor, inductor and capacitor.

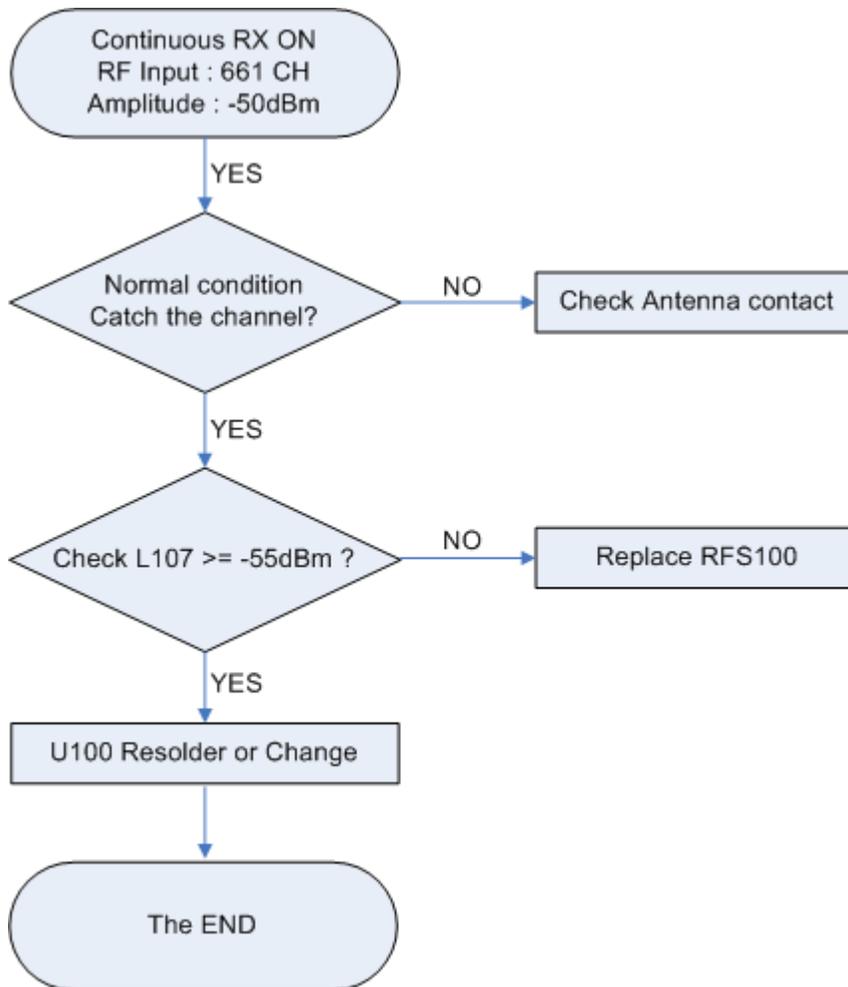


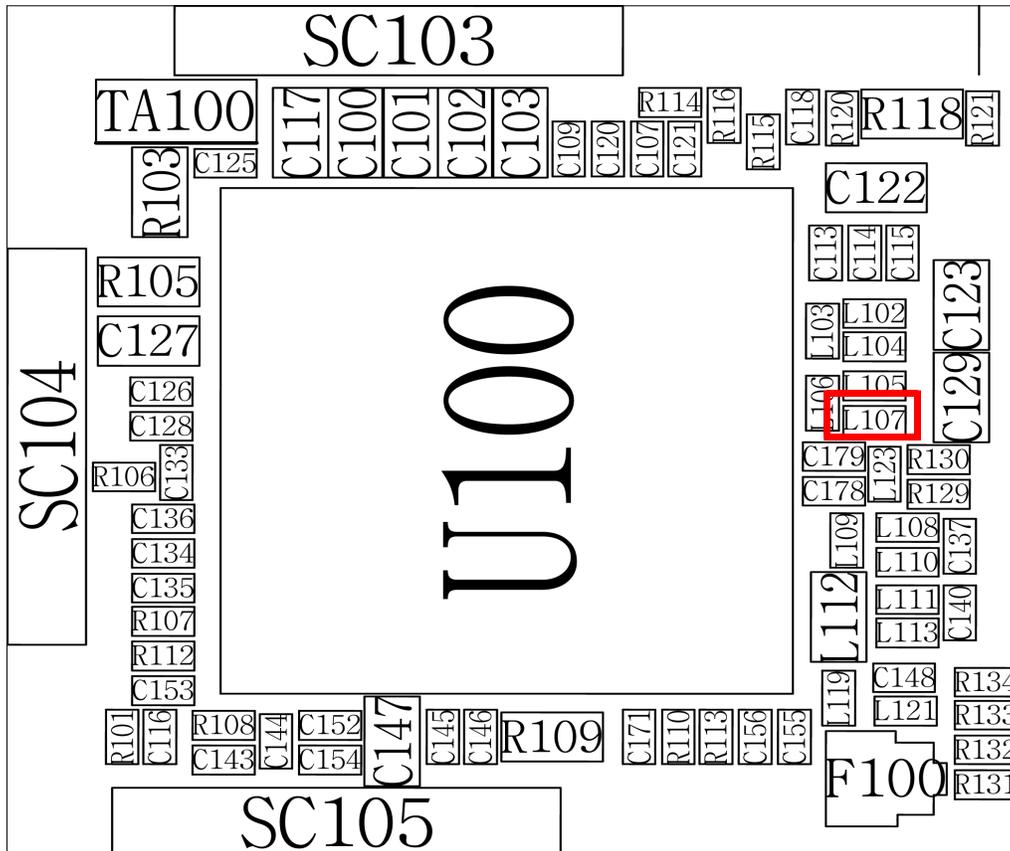
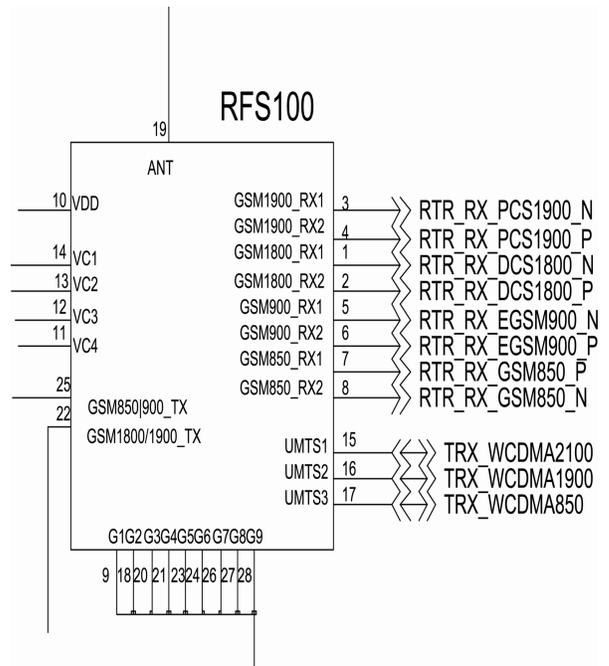
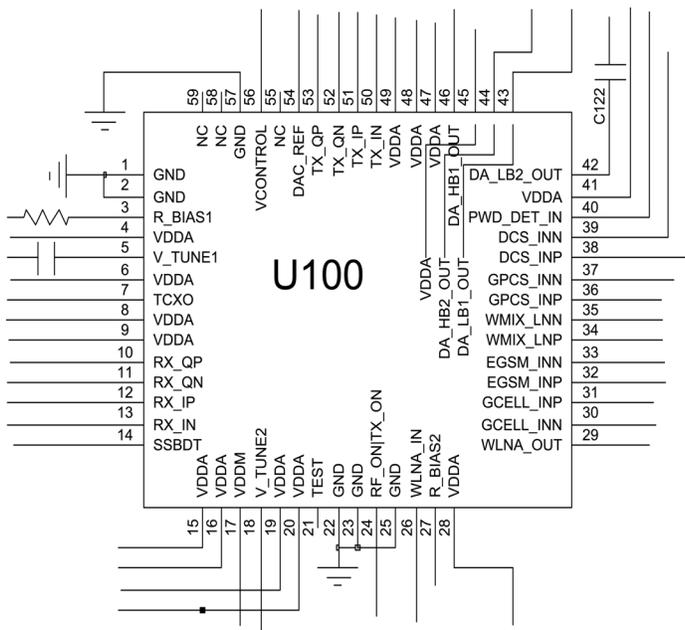


9-2-7. PCS1900 Receiver

**If you check the tx chain,

Check the not only RF Device but also resistor, inductor and capacitor.

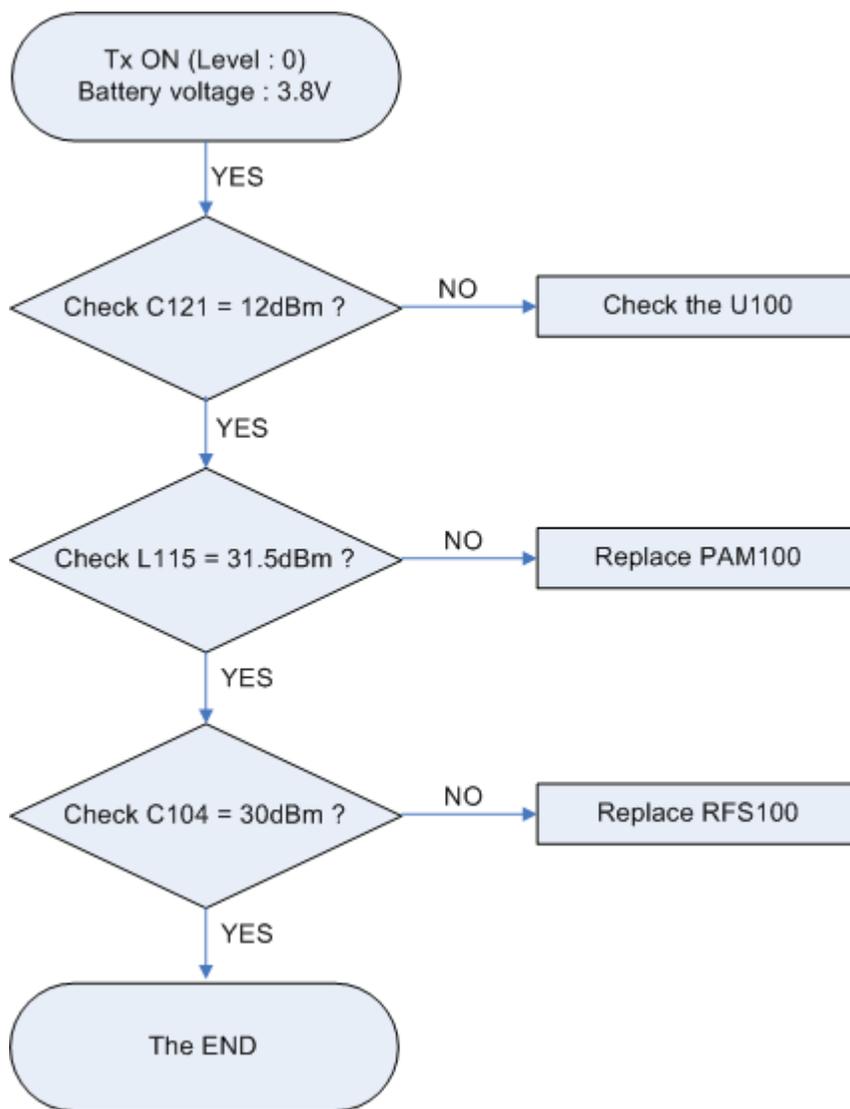


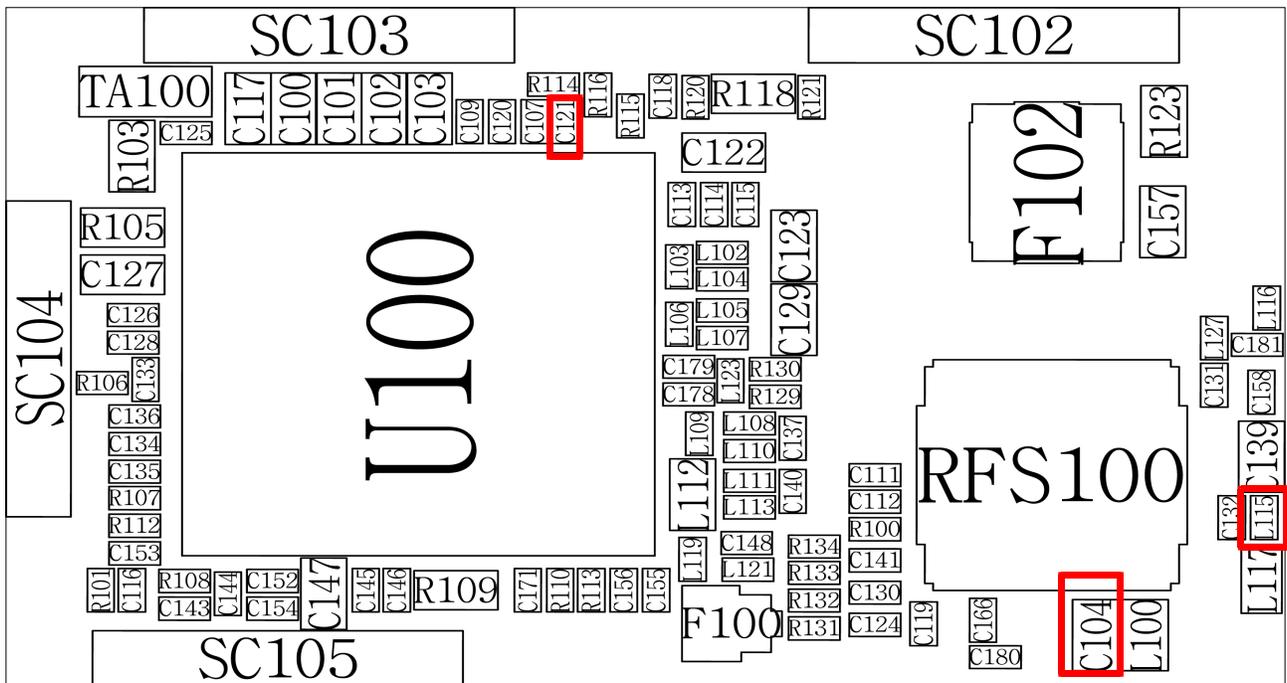
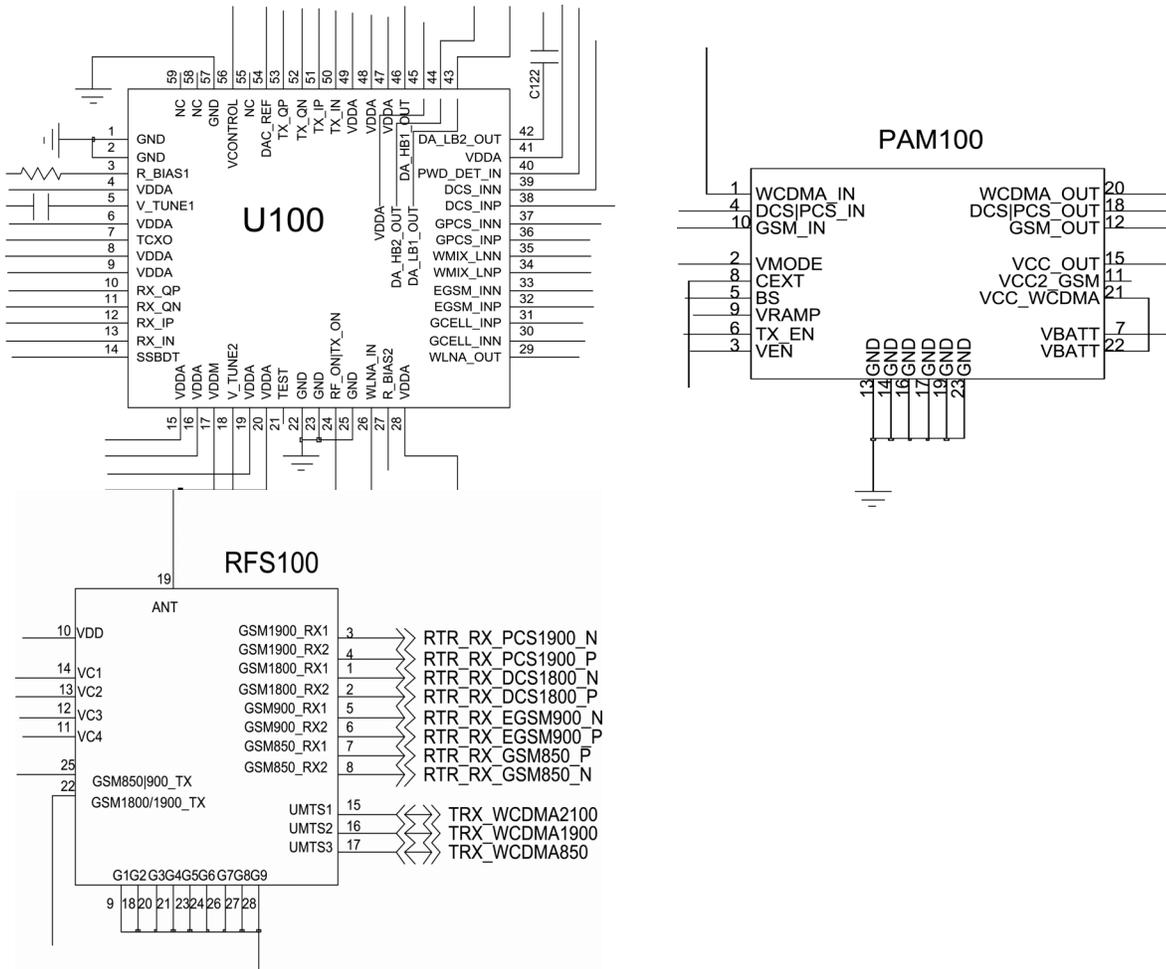


9-2-8. PCS1900 Transmitter

**If you check the tx chain,

Check the not only RF Device but also resistor, inductor and capacitor.

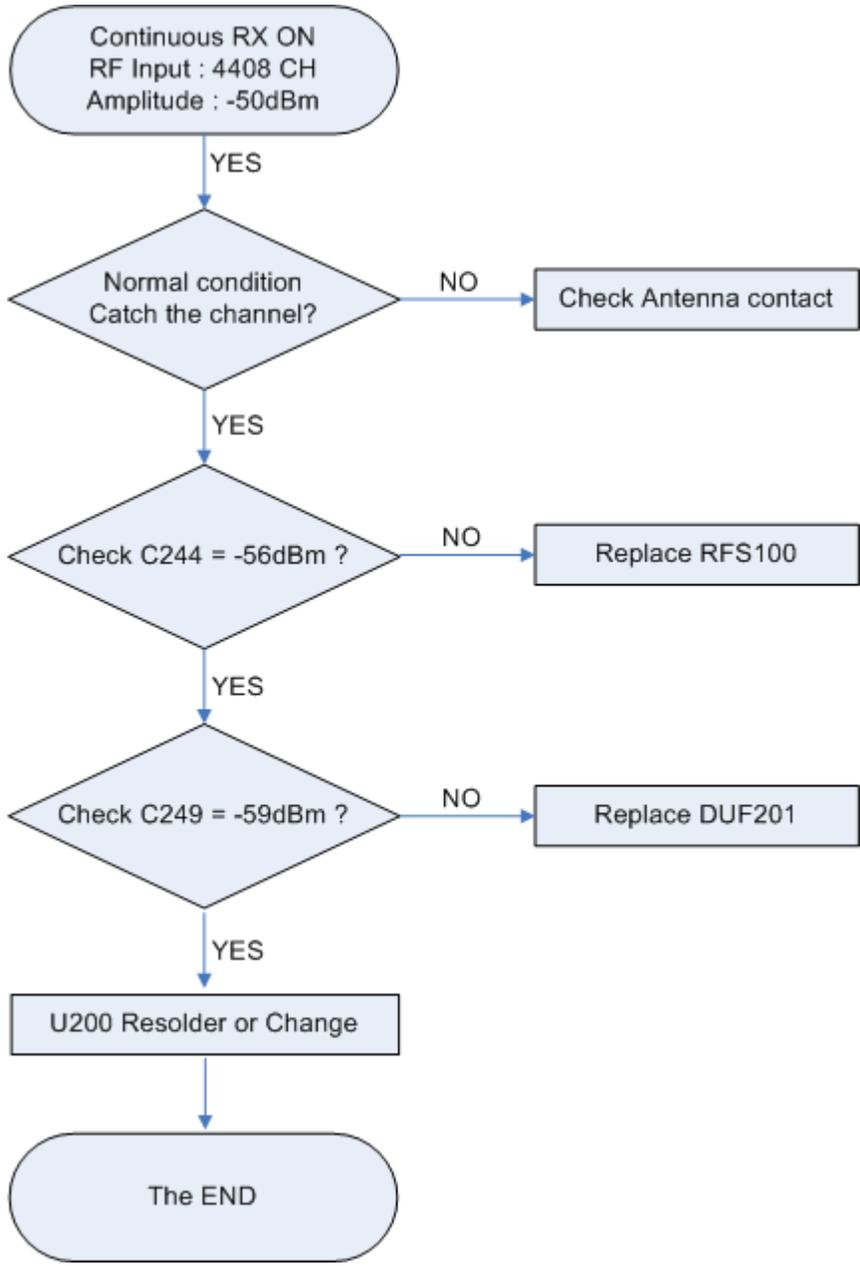


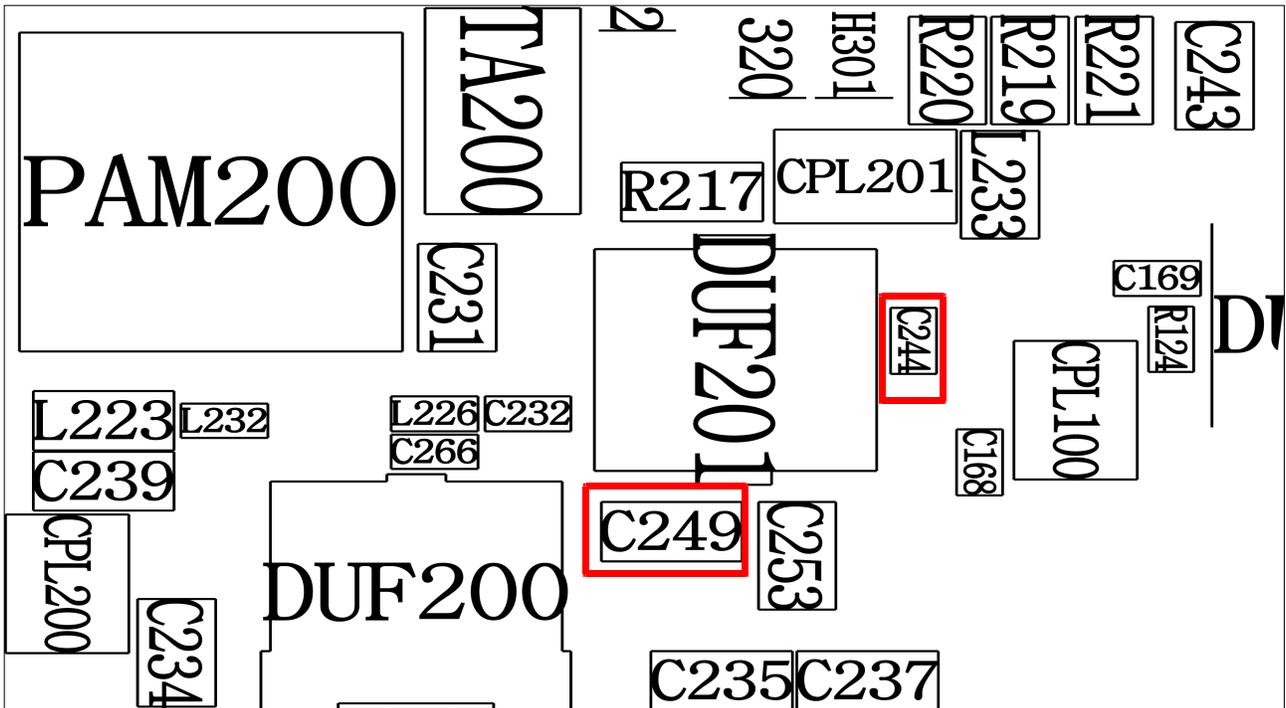
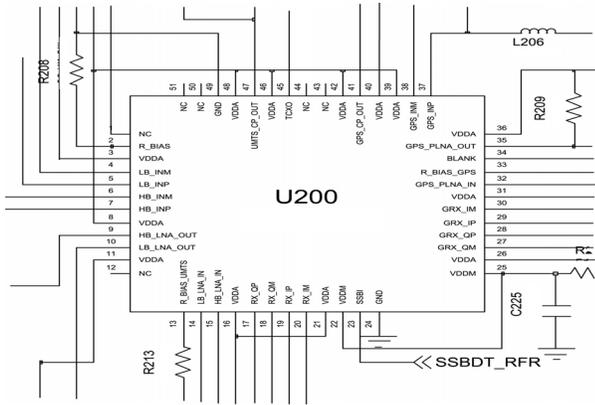
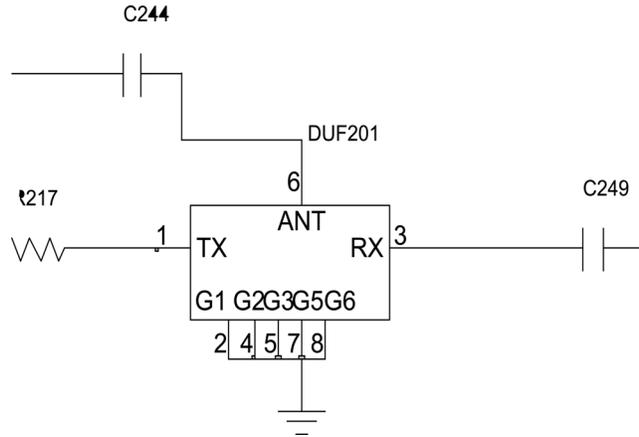
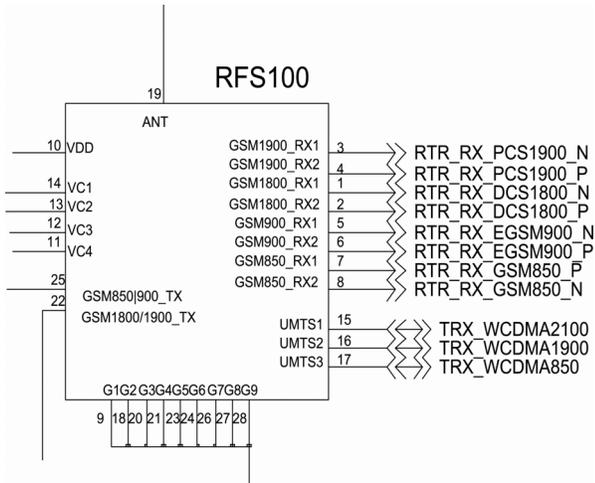


9-2-9. WCDMA850 Receiver

**If you check the tx chain,

Check the not only RF Device but also resistor, inductor and capacitor.

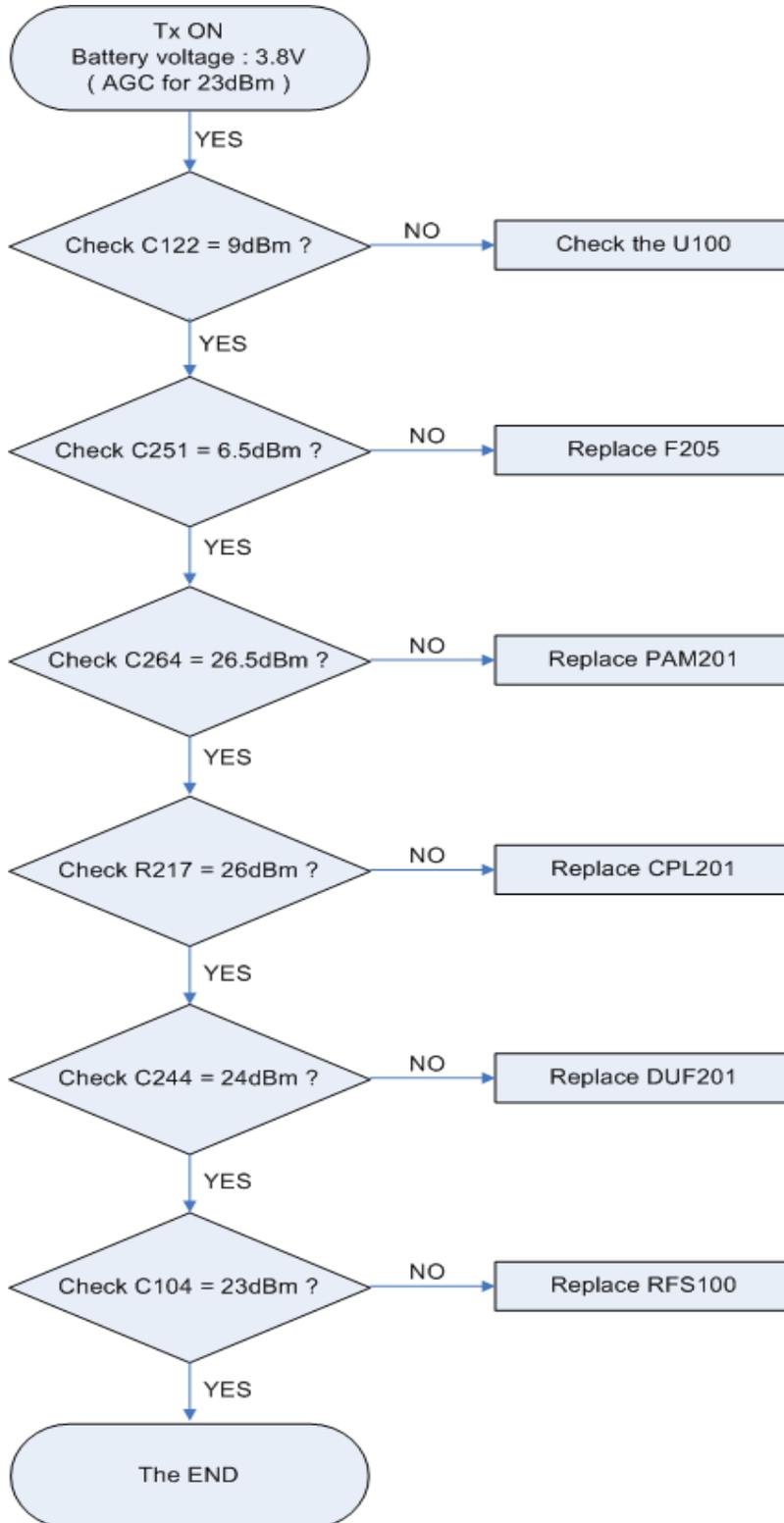


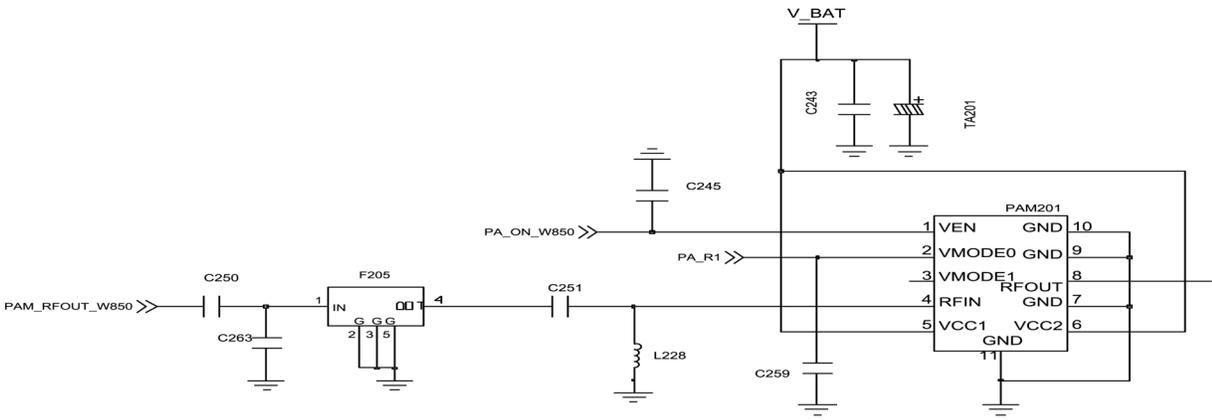
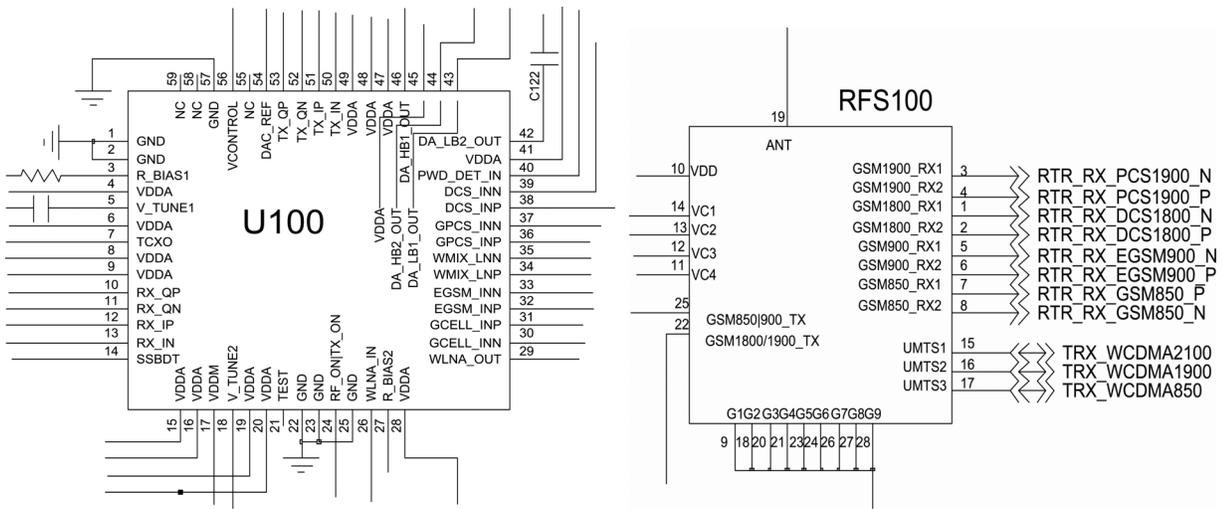


9-2-10. WCDMA850 Transmitter

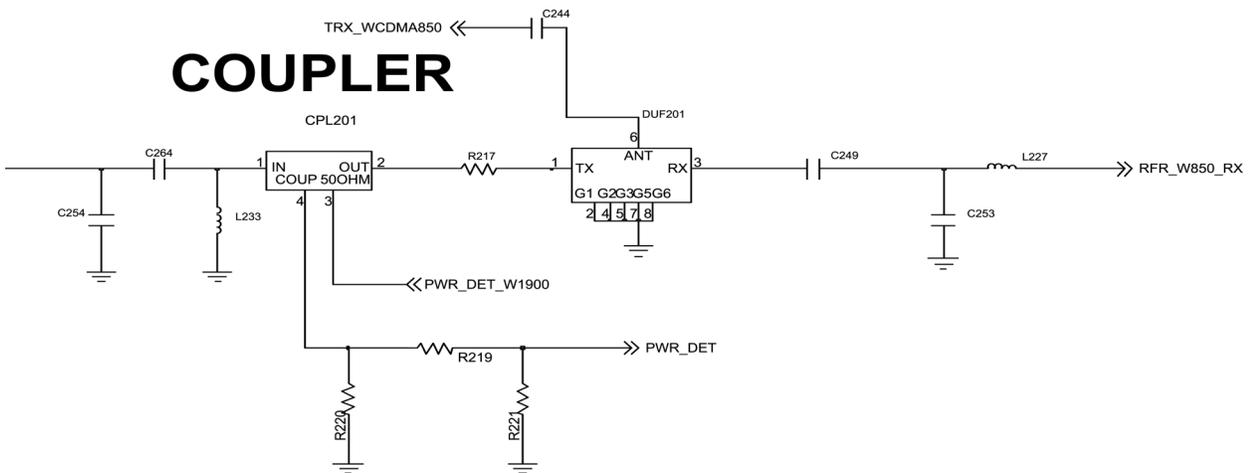
**If you check the tx chain,

Check the not only RF Device but also resistor, inductor and capacitor.

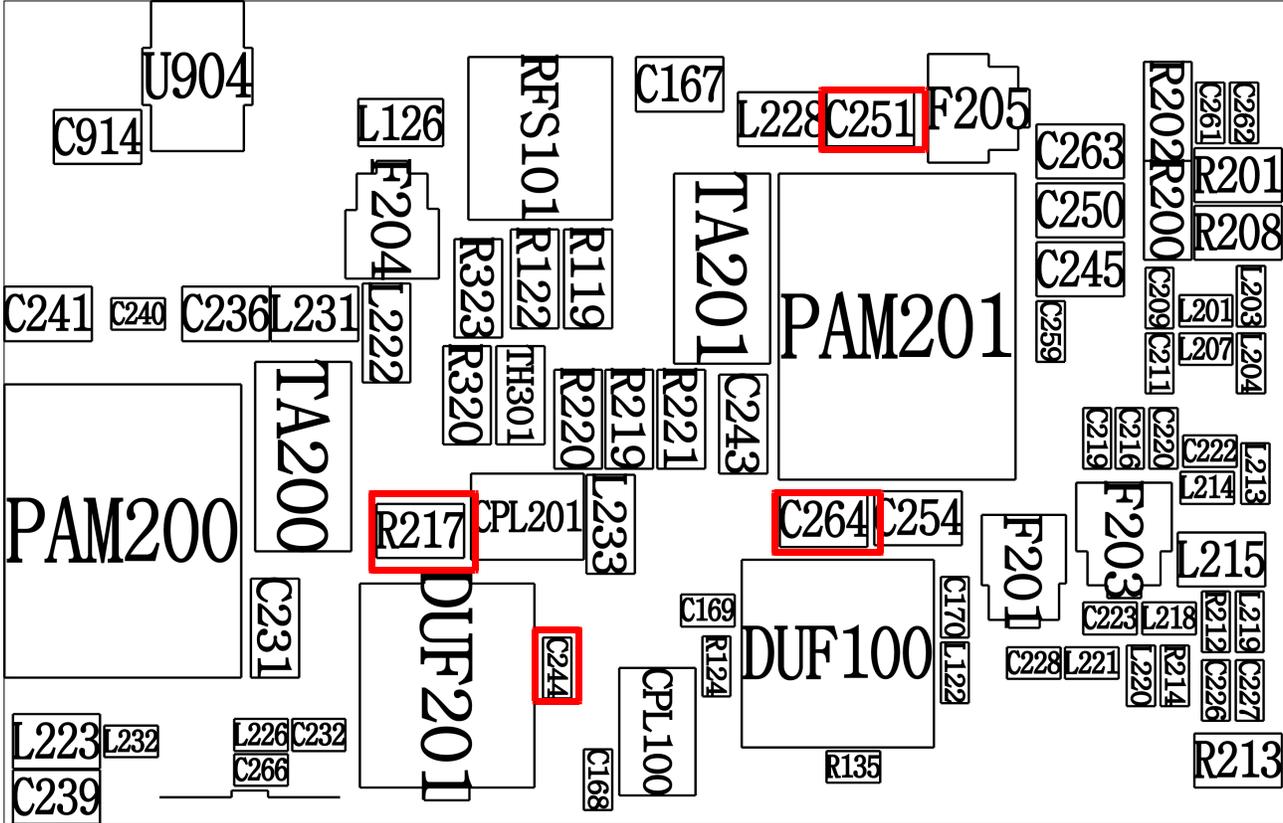
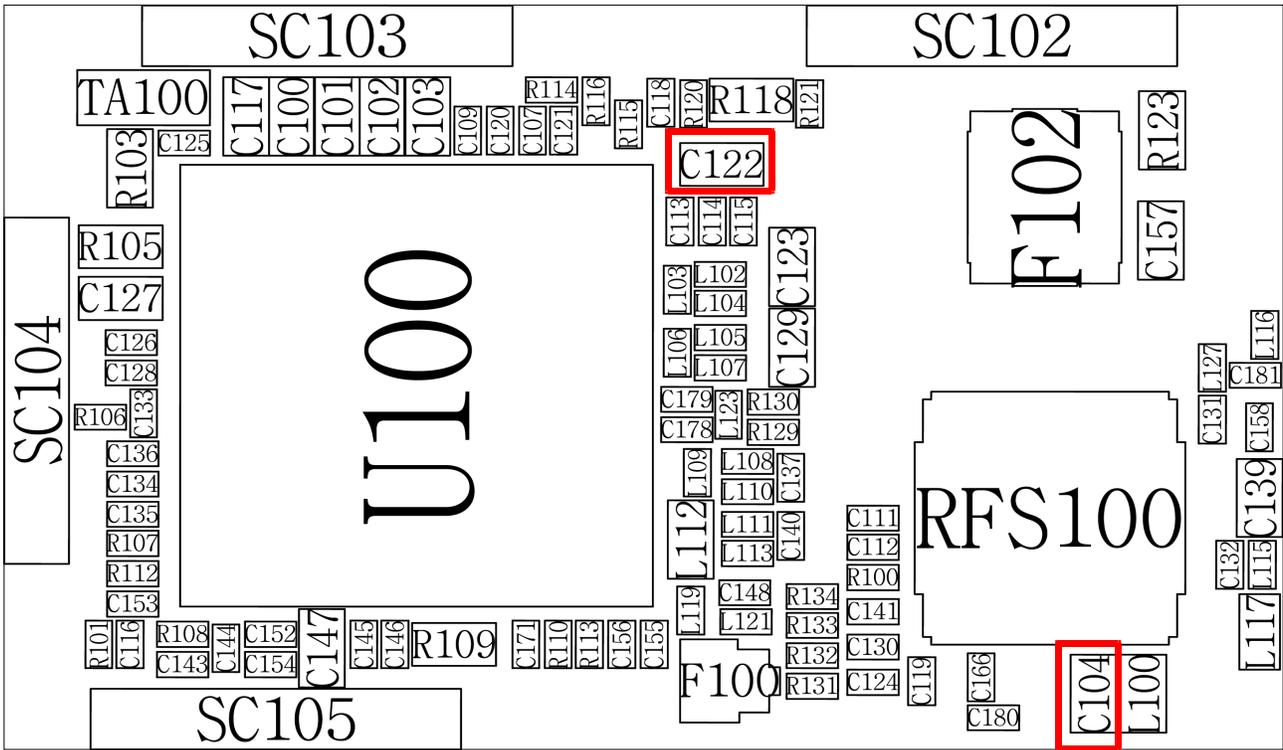




WCDMA850 PAM



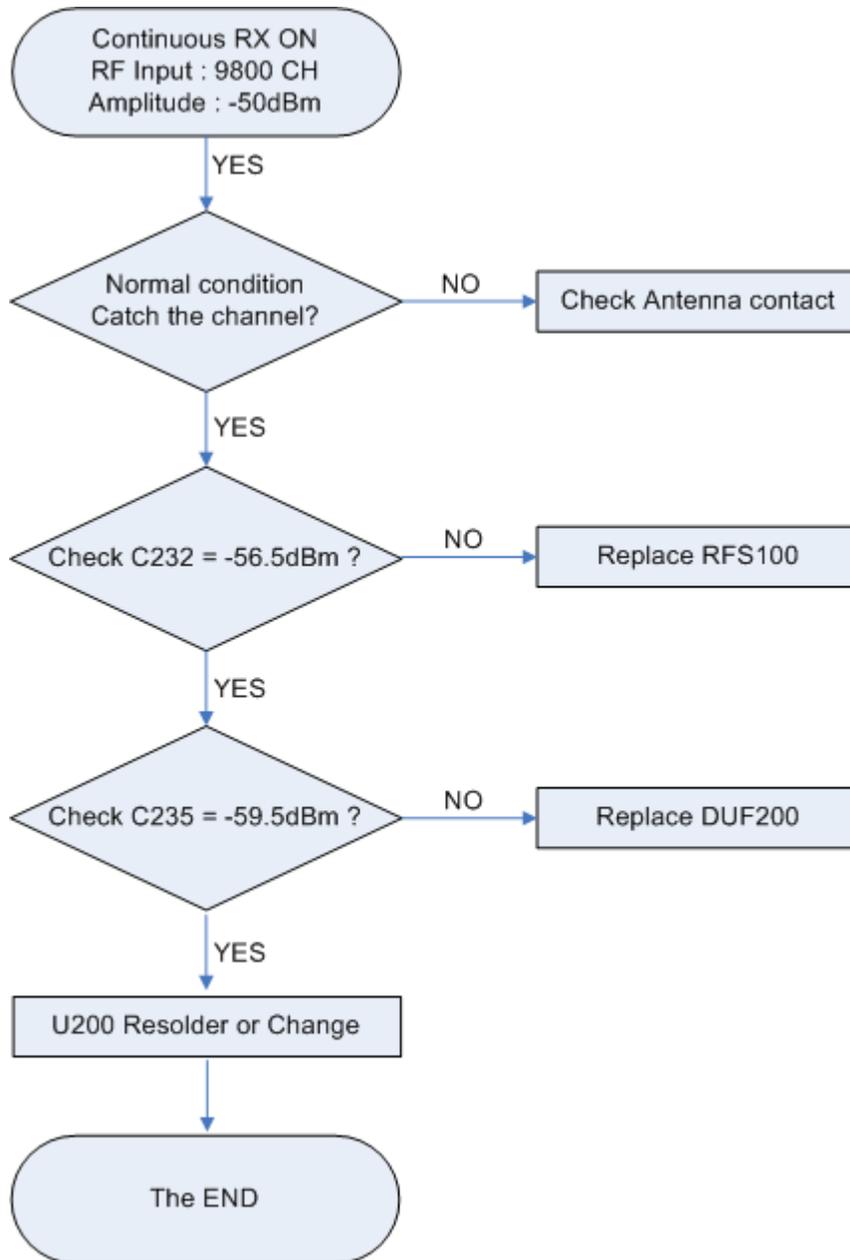
COUPLER

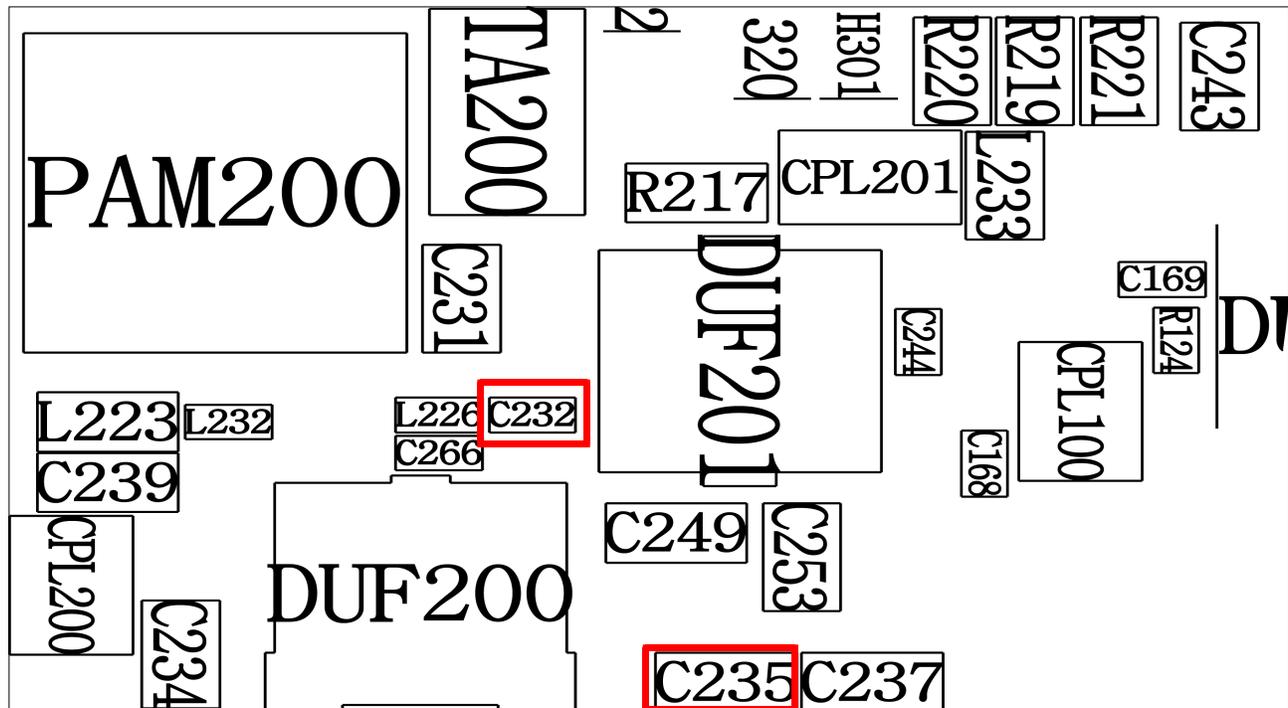
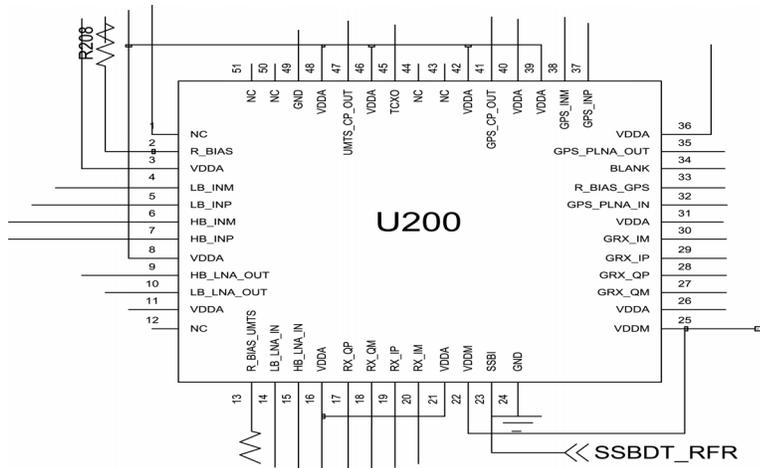
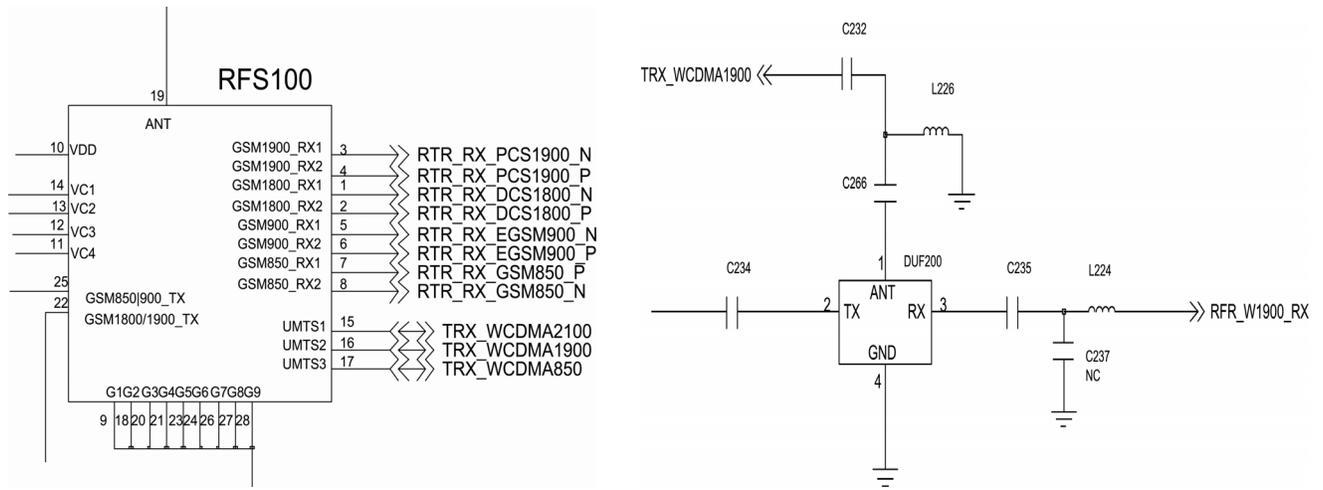


9-2-11. WCDMA1900 Receiver

**If you check the tx chain,

Check the not only RF Device but also resistor, inductor and capacitor.

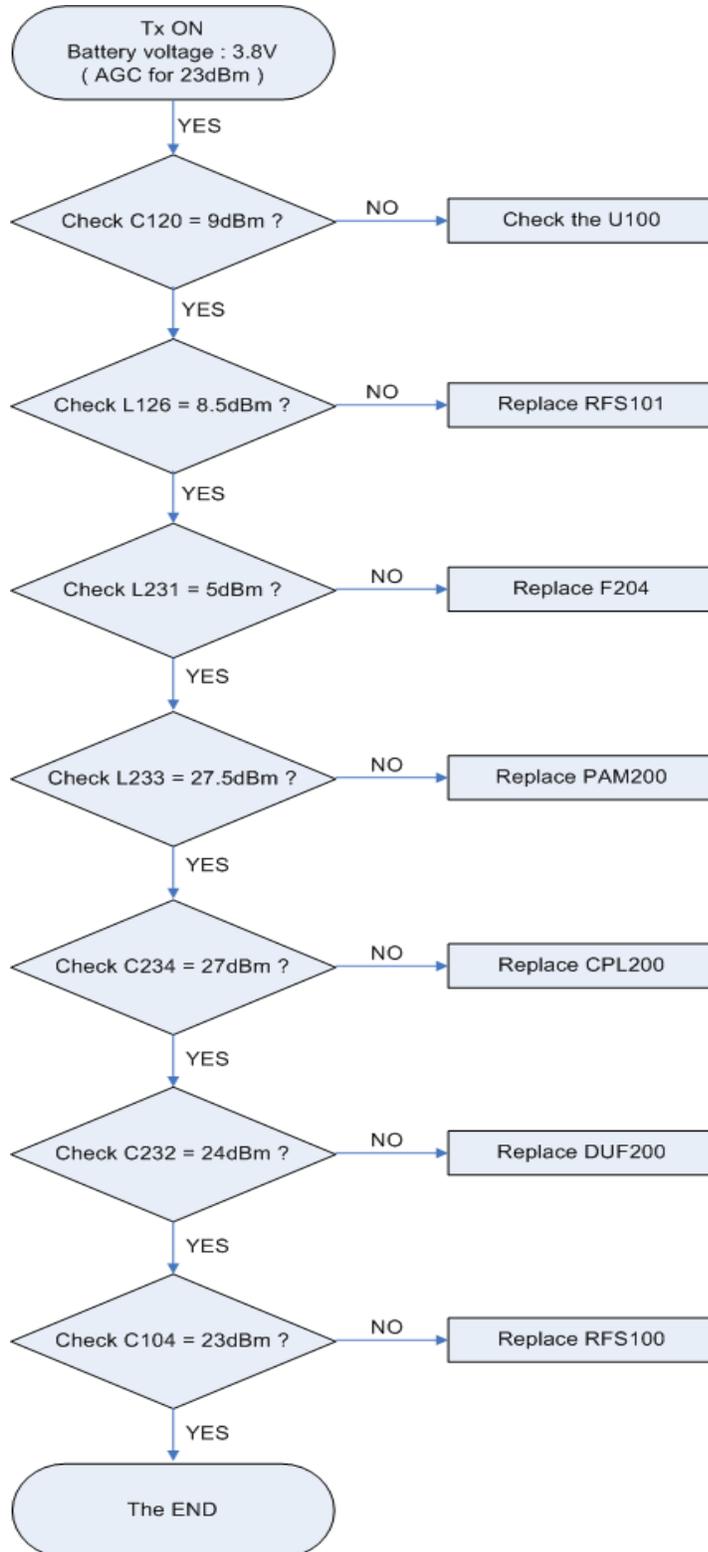


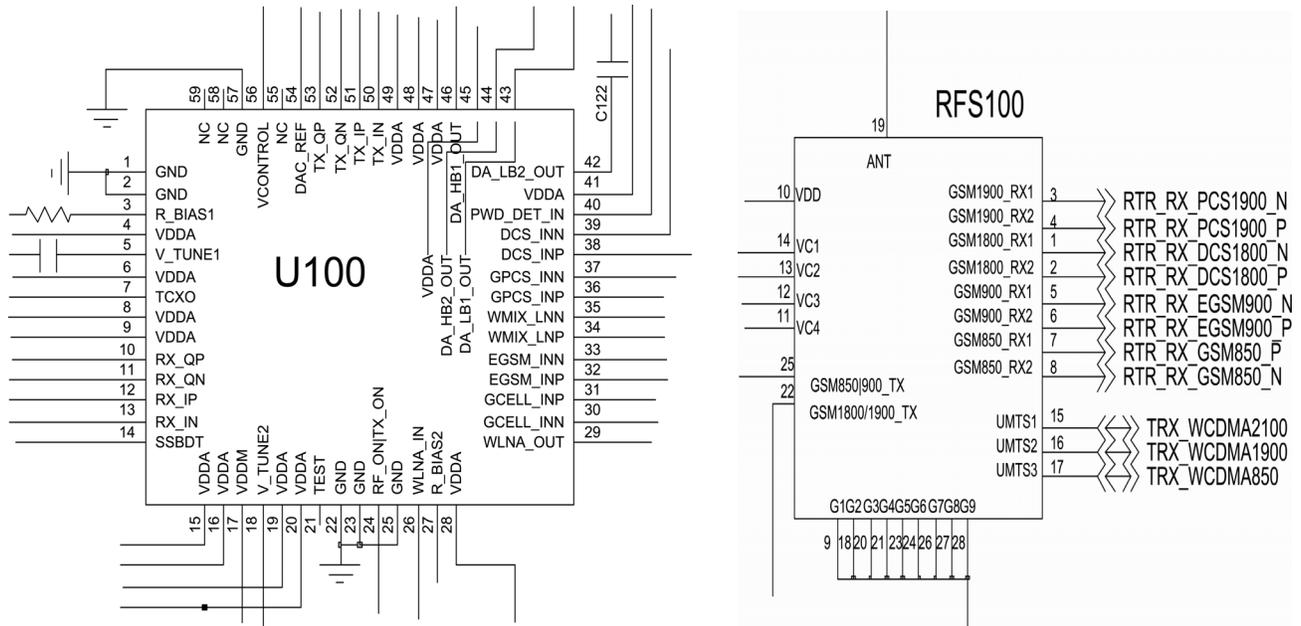


9-2-12. WCDMA1900 Transmitter

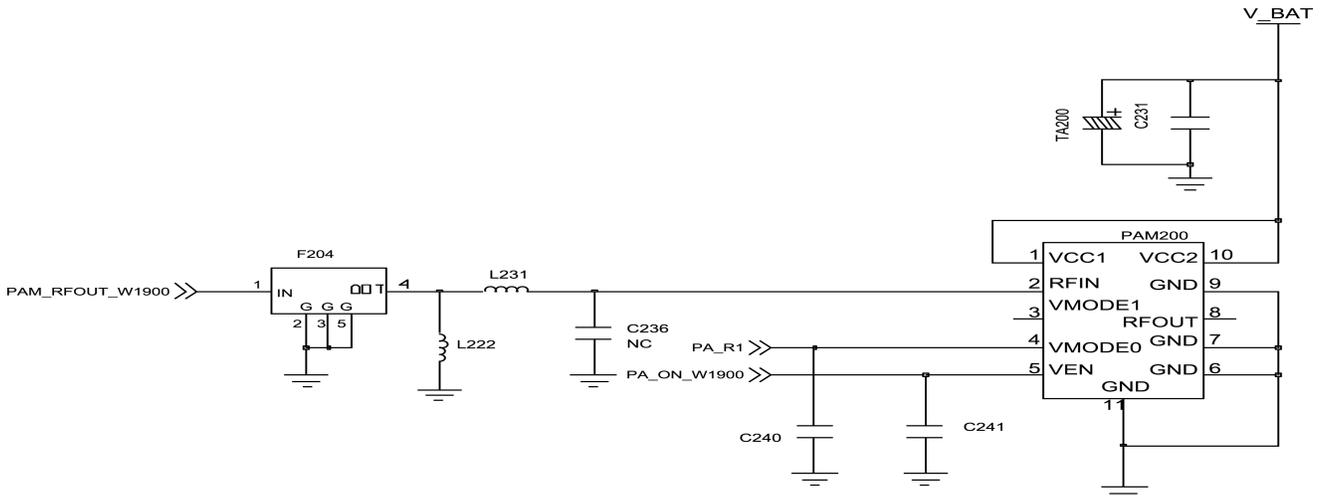
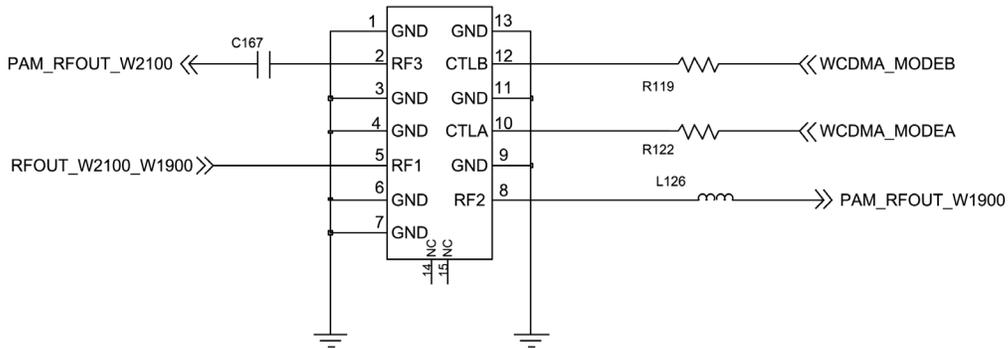
**If you check the tx chain,

Check the not only RF Device but also resistor, inductor and capacitor.

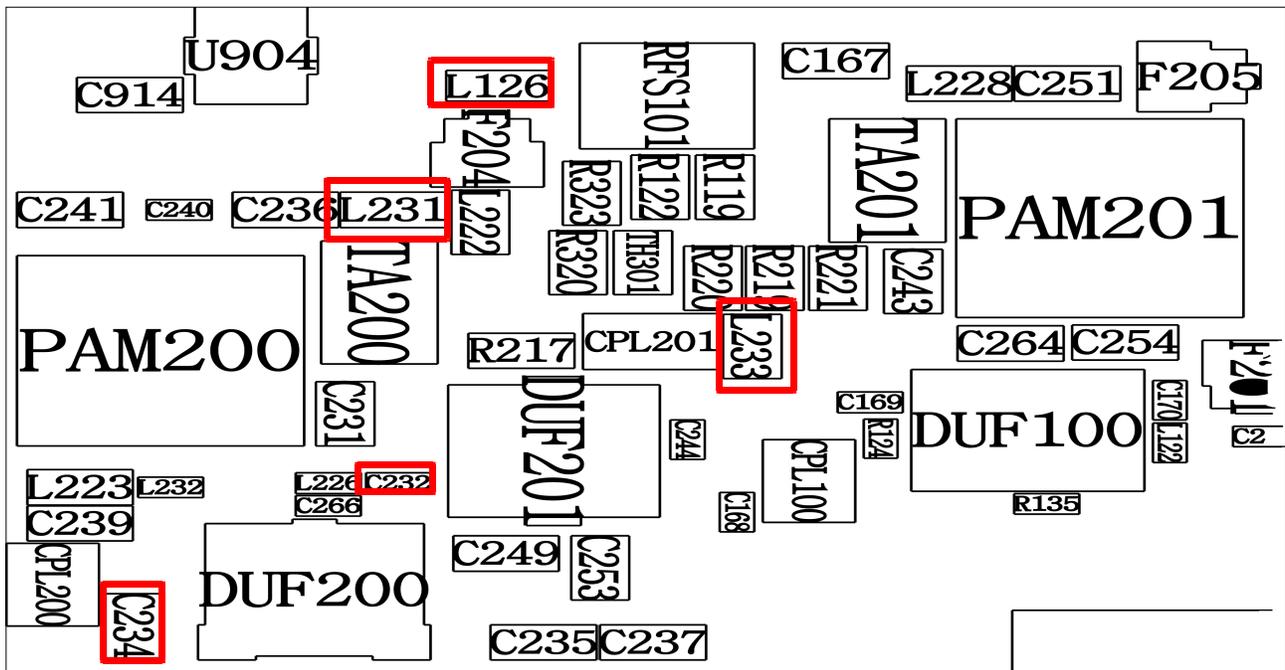
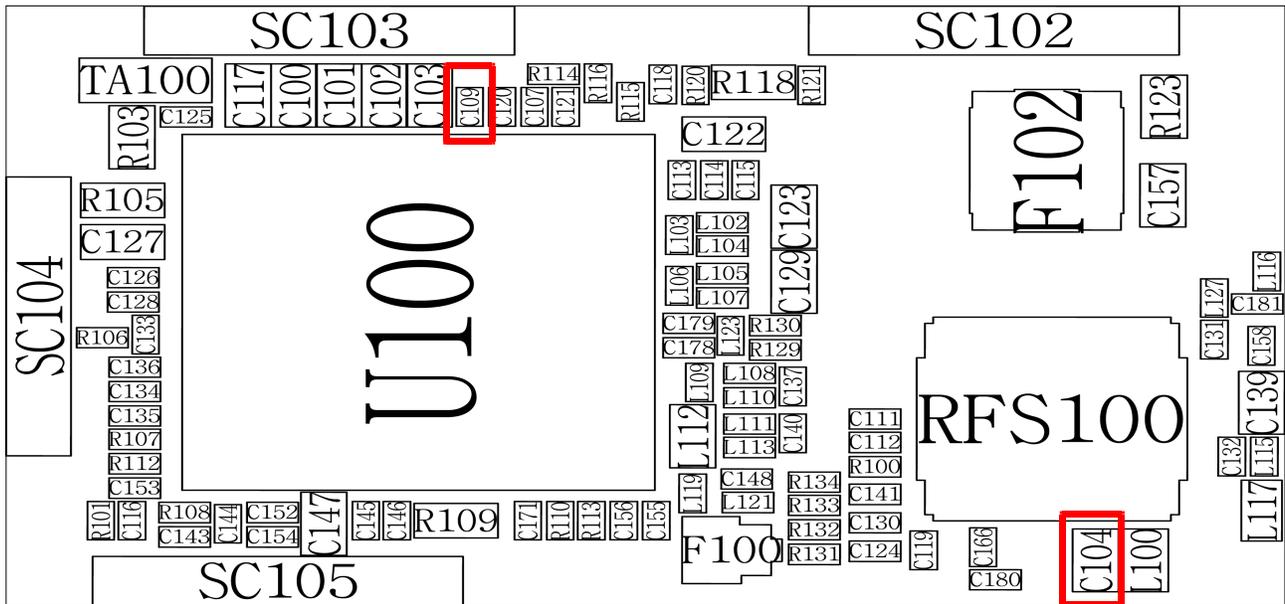
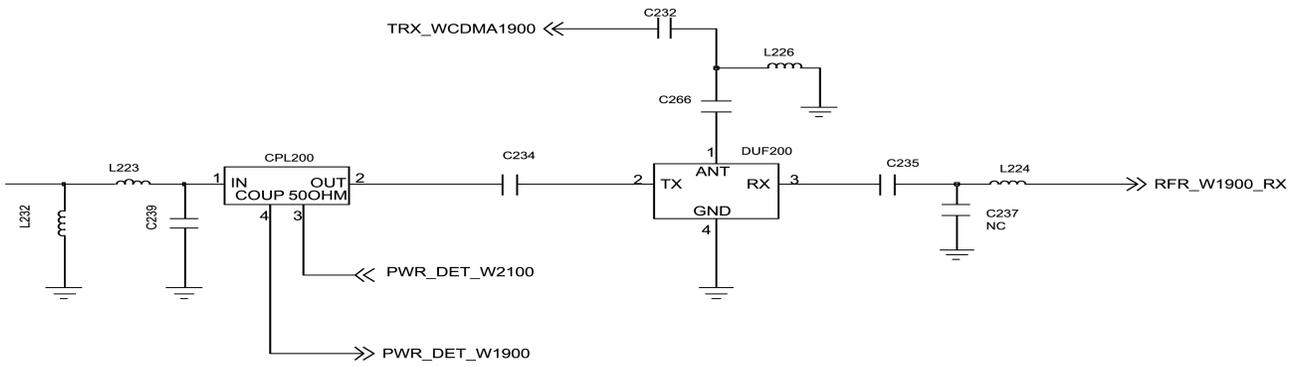




RFS101



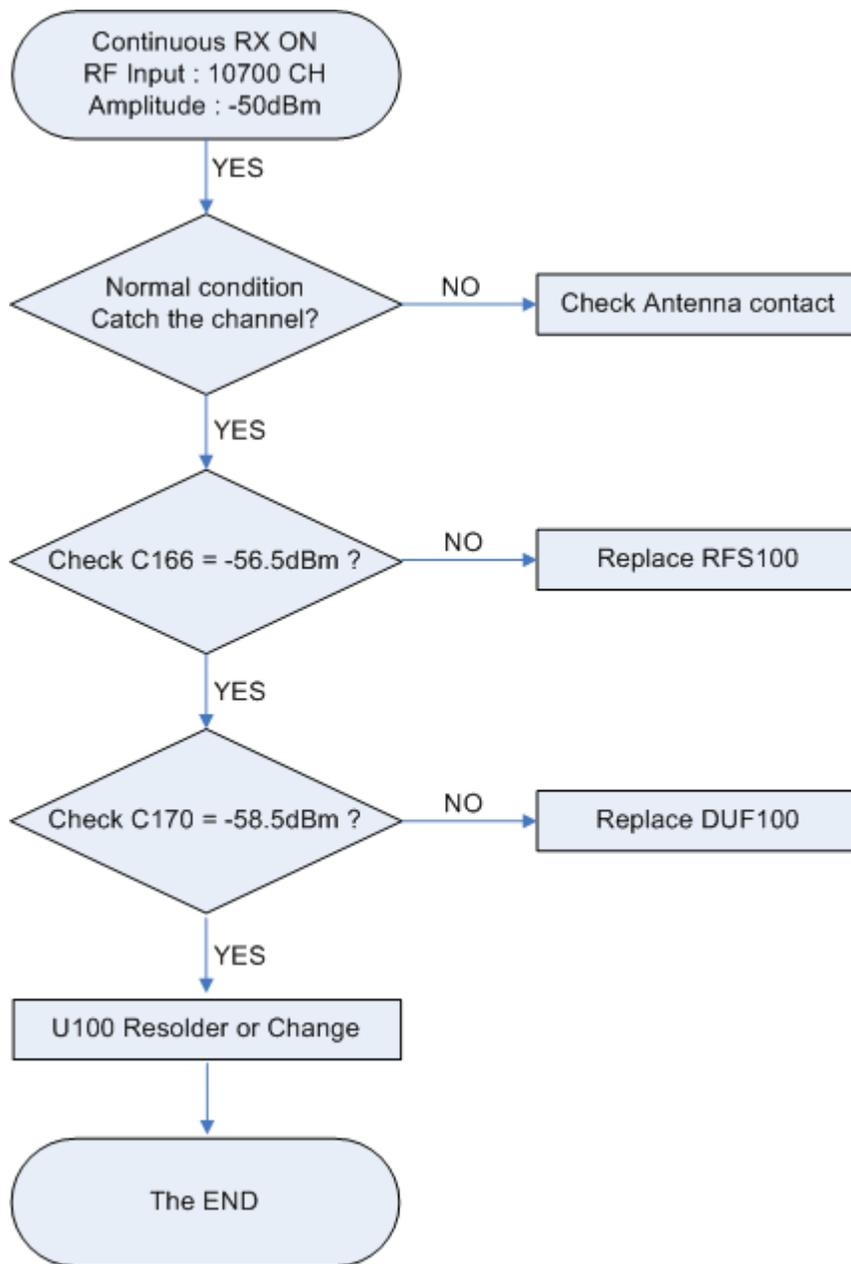
WCDMA1900 PAM



9-2-13. WCDMA2100 Receiver

**If you check the tx chain,

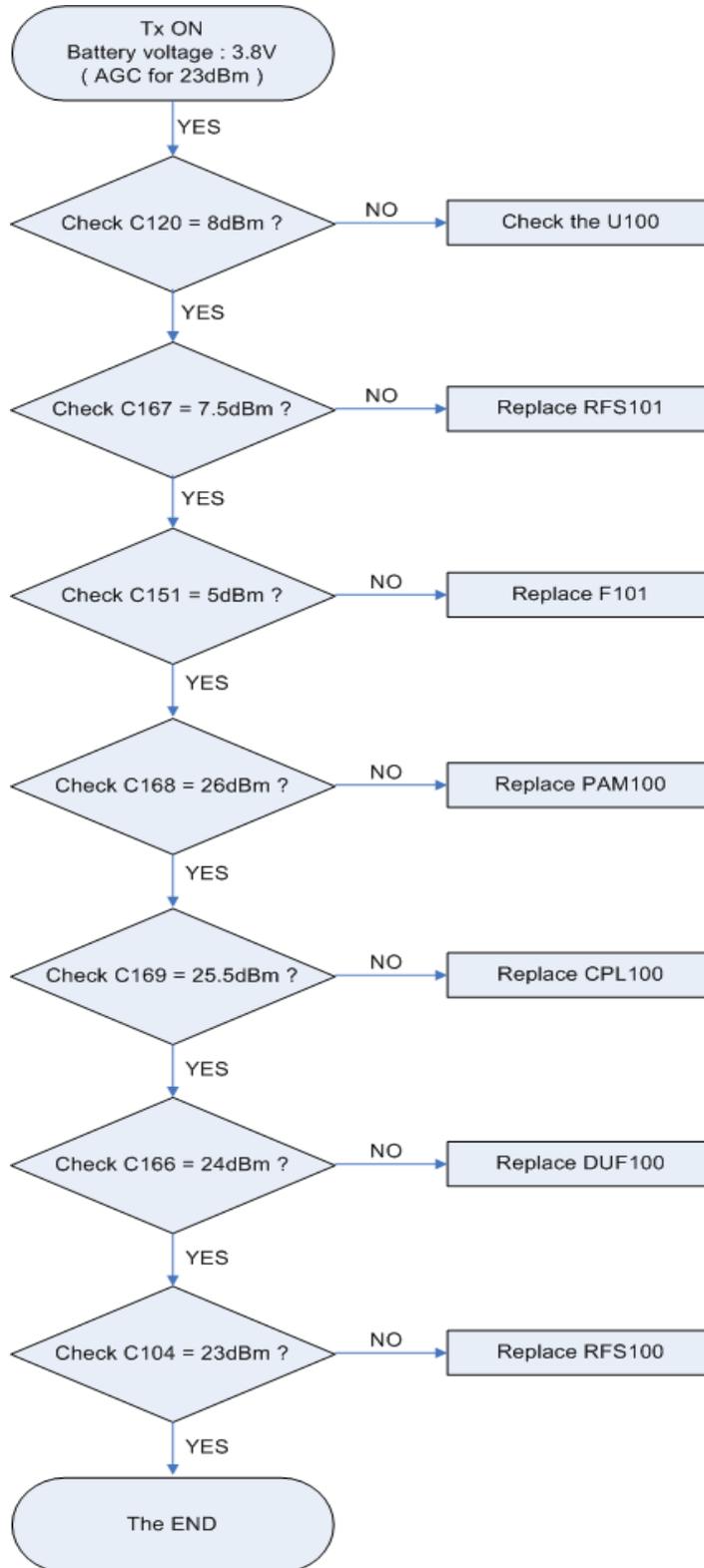
Check the not only RF Device but also resistor, inductor and capacitor.

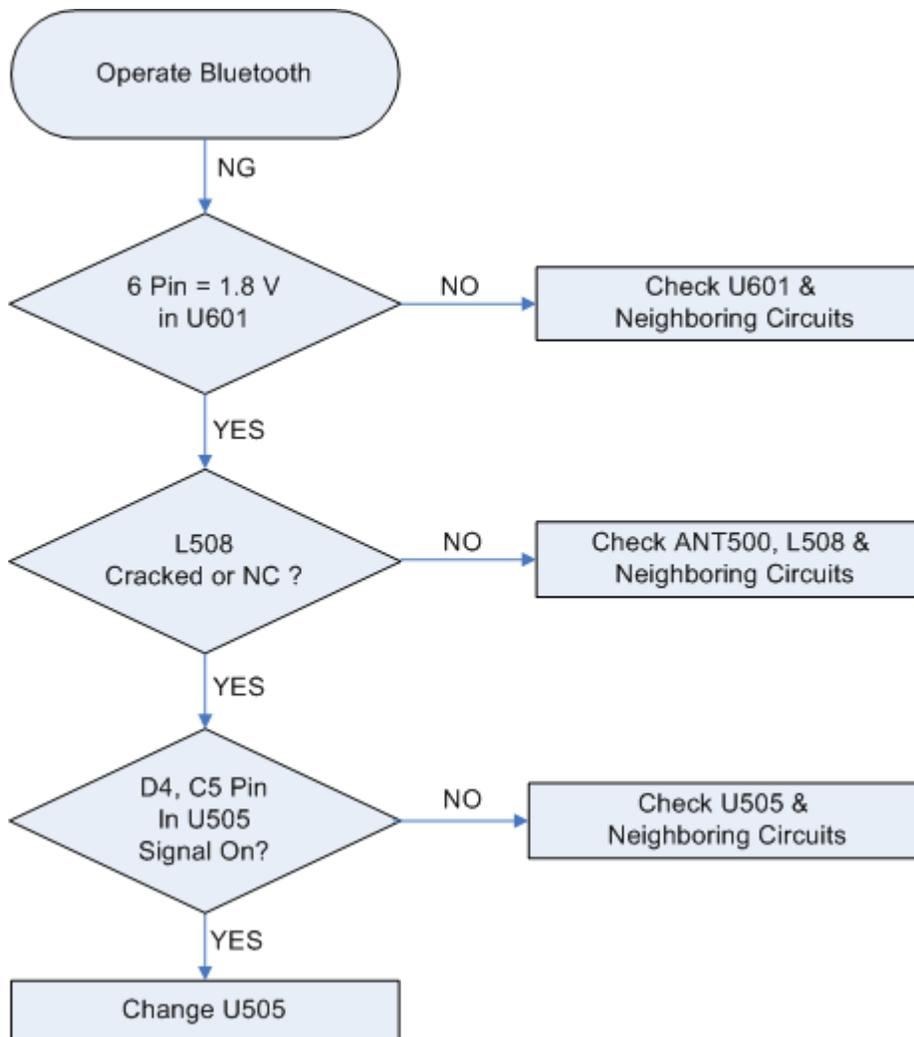


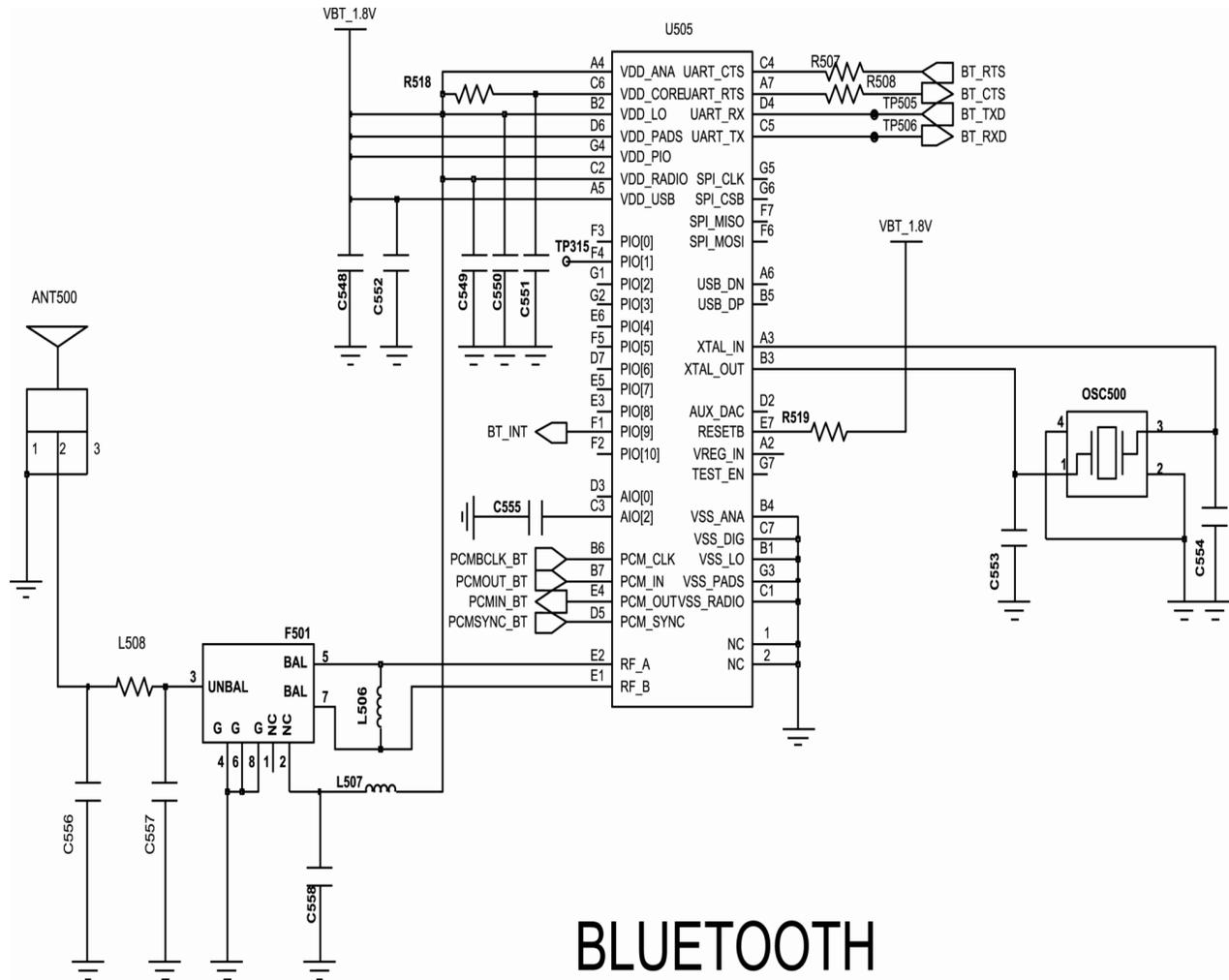
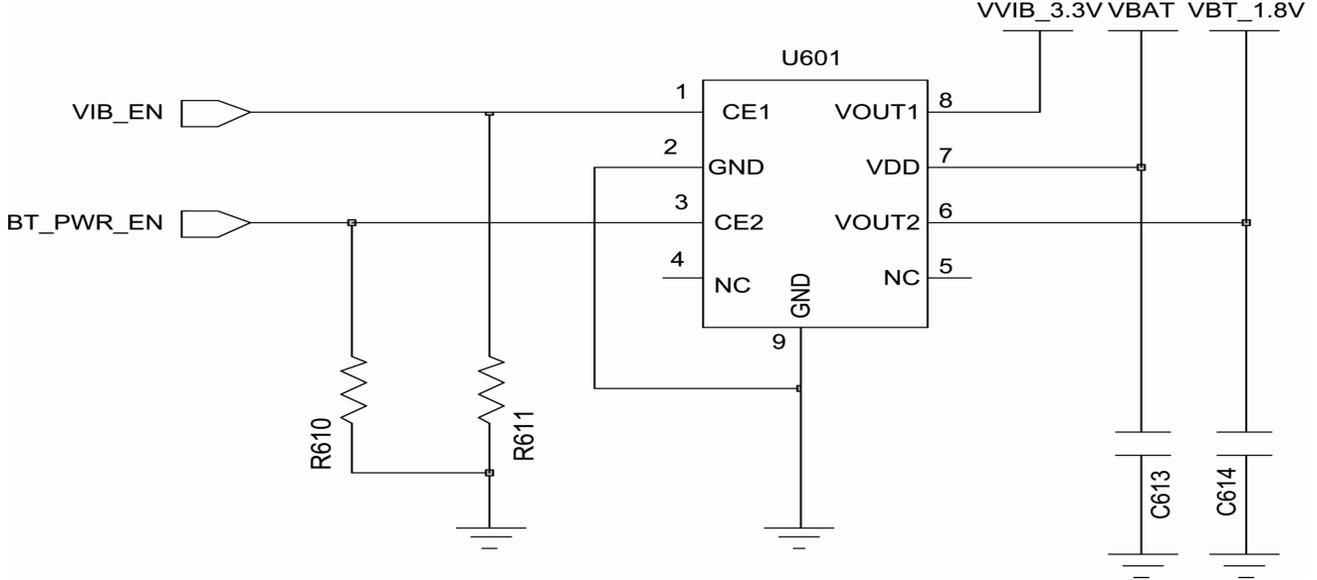
9-2-14. WCDMA2100 Transmitter

**If you check the tx chain,

Check the not only RF Device but also resistor, inductor and capacitor.



9-2-15. BLUETOOTH



BLUETOOTH

10. Reference data

Reference Abbreviate

- **AAC**: Advanced Audio Coding.
- **AVC** : Advanced Video Coding.
- **BER** : Bit Error Rate
- **BPSK**: Binary Phase Shift Keying
- **CA** : Conditional Access
- **CDM** : Code Division Multiplexing
- **C/I** : Carrier to Interference
- **EN** : European Standard
- **ES** : Elementary Stream
- **ETSI**: European Telecommunications Standards Institute
- **MPEG**: Moving Picture Experts Group
- **PN** : Pseudo-random Noise
- **PS** : Pilot Symbol
- **QPSK**: Quadrature Phase Shift Keying
- **RS** : Reed-Solomon
- **SI** : Service Information
- **TDM** : Time Division Multiplexing
- **TS** : Transport Stream

11. Disassembly and Assembly Instructions

11-1. Disassembly

The work guide to disjoint SET - Disjoint REAR

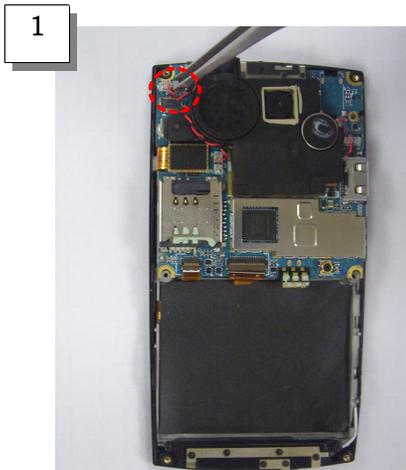


Remove the Rear Screws (6-points)

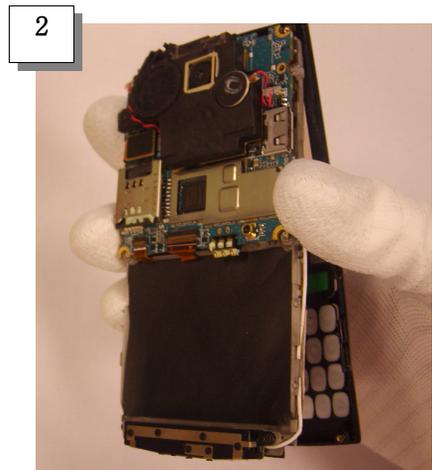


Disjoint the Rear

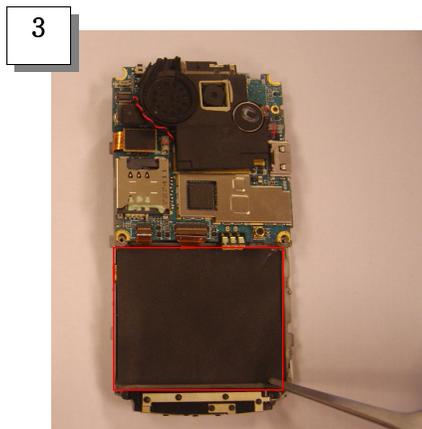
The work guide to disjoint SET - Disjoint Upper



Disjoint the Receiver connector



Disjoint the Upper

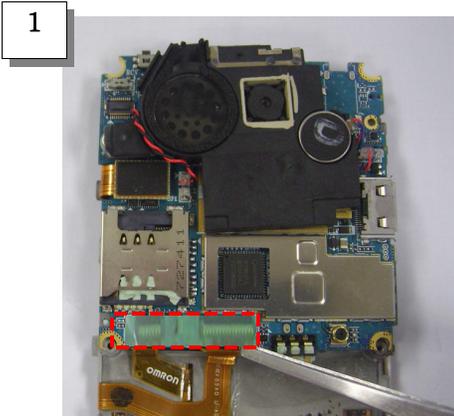


Remove the sheet label

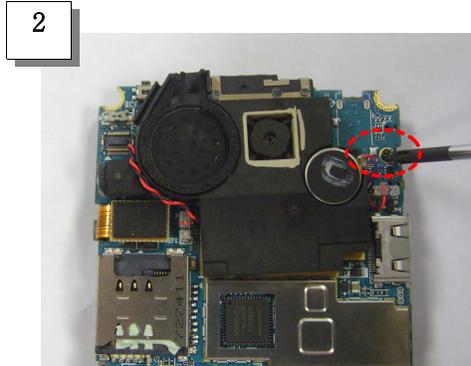


Disjoint the receiver

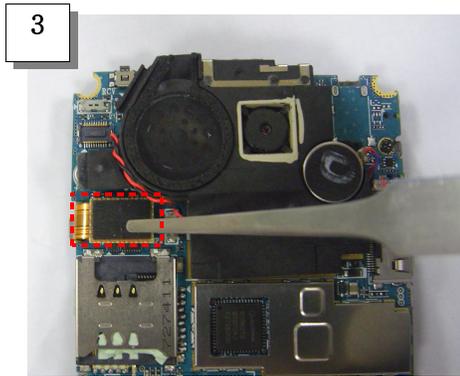
The work guide to disjoint SET - Disjoint PBA



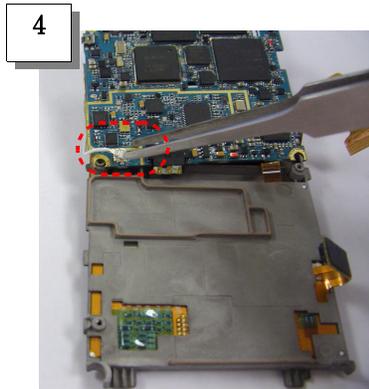
Disjoint the tape and f-pcb connectors



Remove the Screw (1-point)



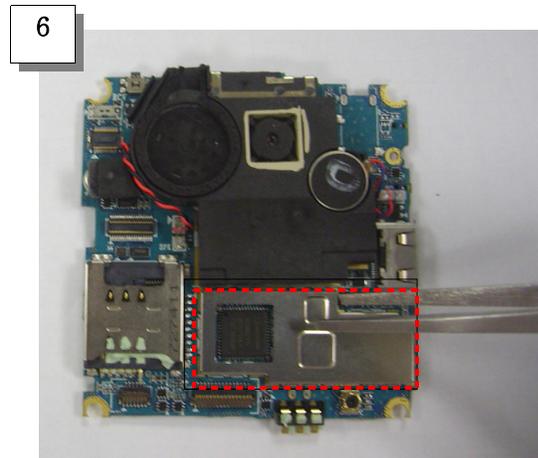
Disjoint the lcd connector



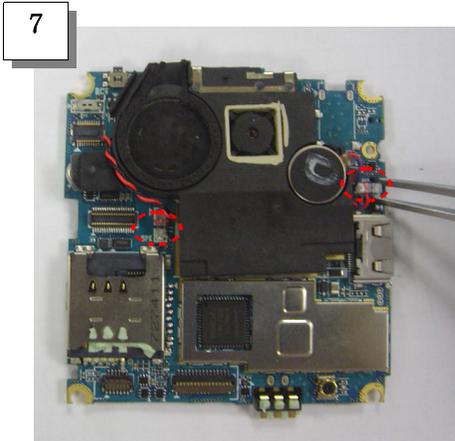
Disjoint the inntena wire connector



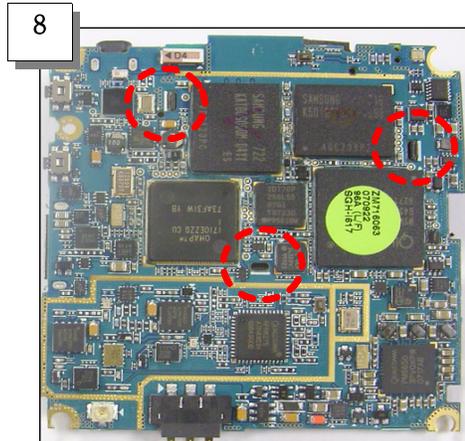
Disjoint the PBA



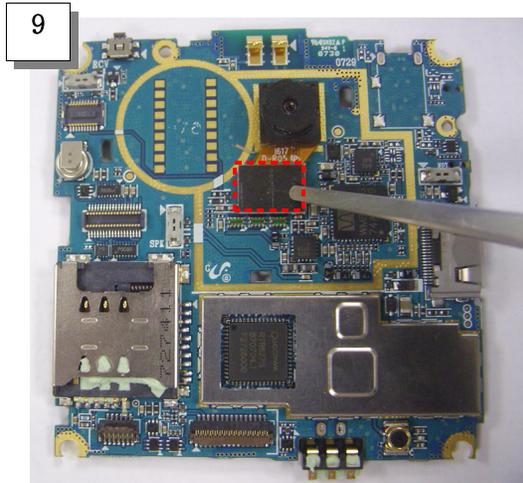
Remove the Shield can



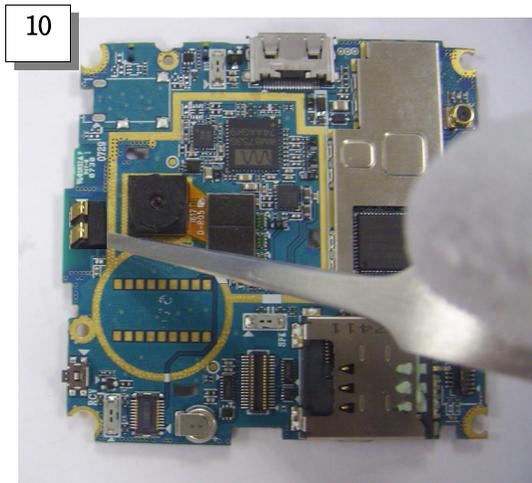
7
Disjoint the motor wire connector and speaker wire connector



8
Disjoint the hookers (3-point) and Disjoint the blocket

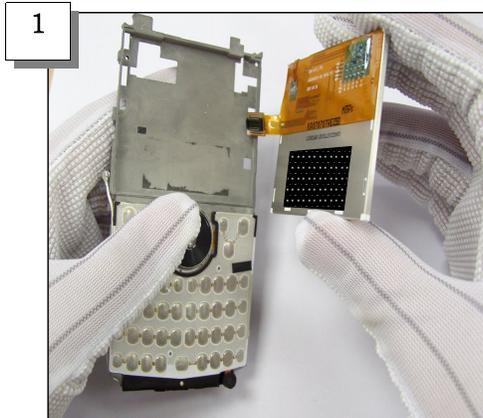


9
Disjoint the camera connetor



10
Remove the intena rubber

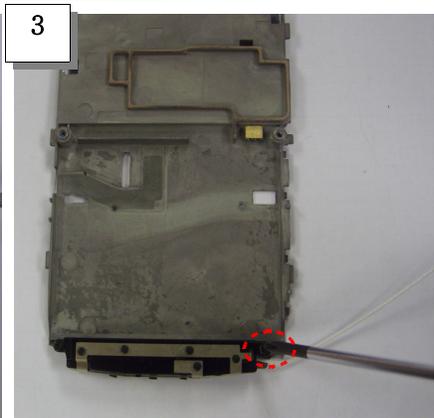
The work guide to disjoint SET – Disjoint Blocket



1
Disjoint the lcd



2
Remove the domsheet



3
Remove the Screw (1-point)

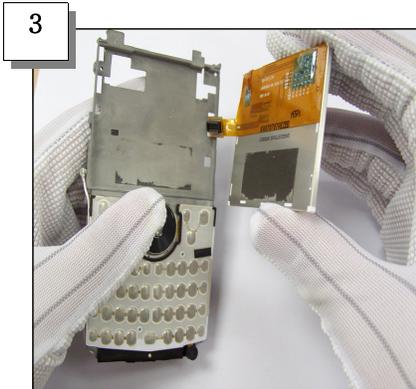
The work guide to assemble SET - BLOCKET



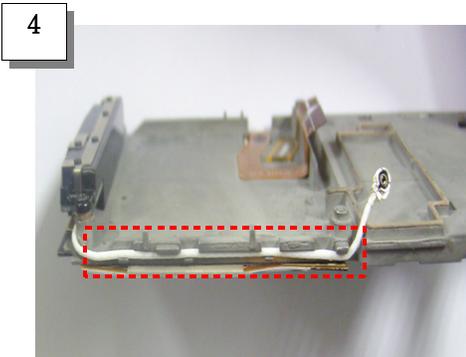
Insert the Screw



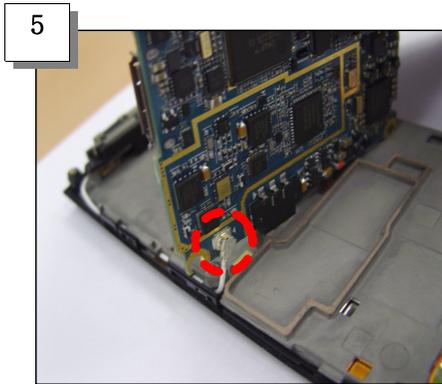
Attach the domsheet



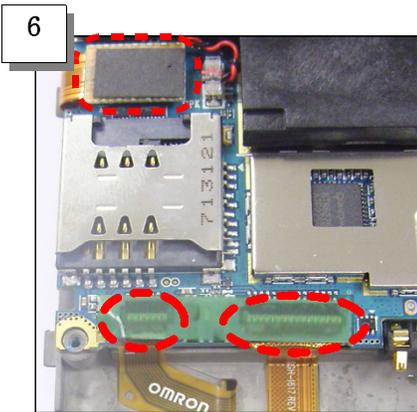
Join the lcd



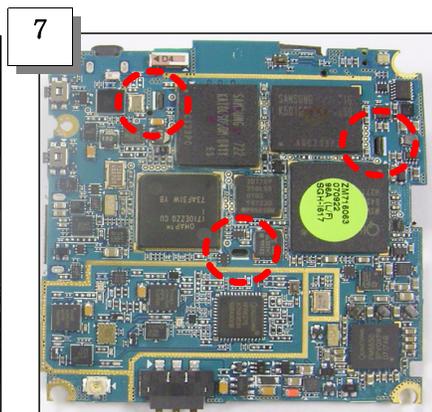
Array the inntena wire



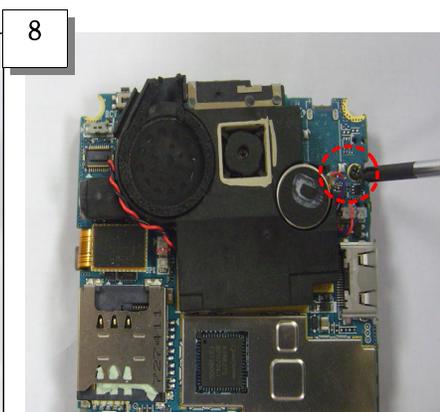
Join the inntena wire connector



Join the connectors and attach the tape



Join the hookers (3-point) and Join the blocket

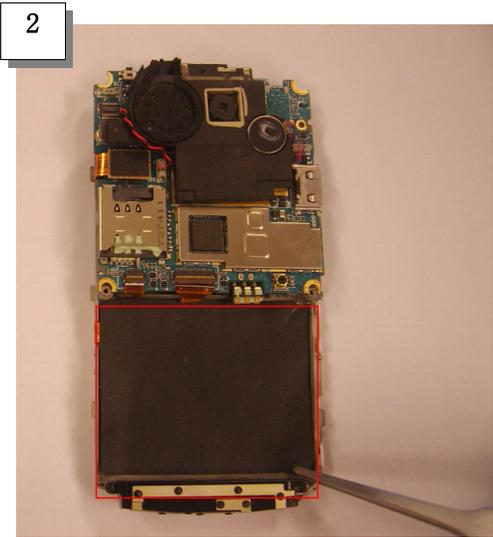


Insert the Screw

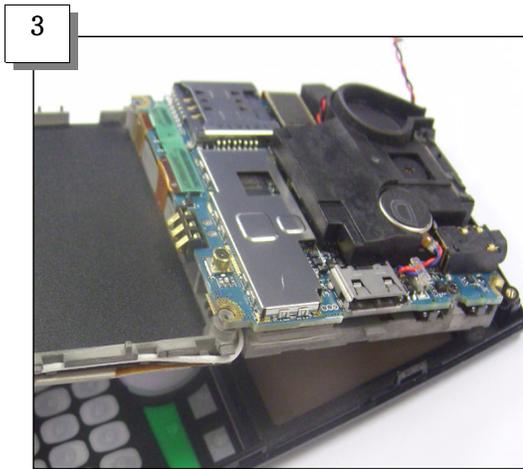
The work guide to assemble SET - UPPER



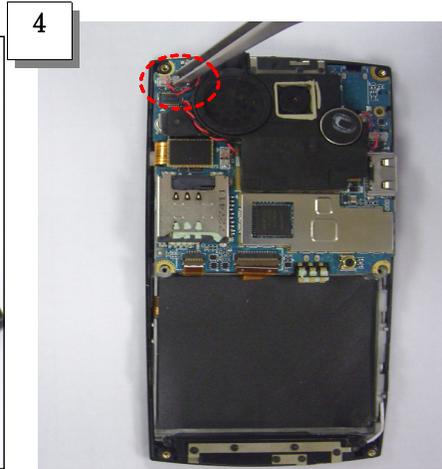
Join the receiver



Attach the sheet label

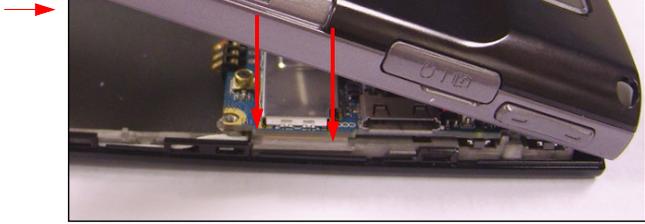
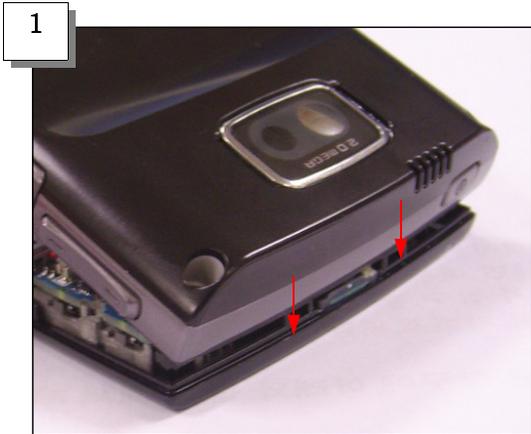


Join the upper

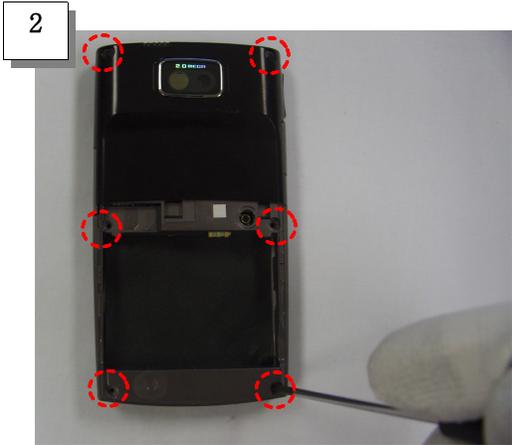


Join the receiver wire connector

The work guide to assemble SET - REAR



Join the Rear



Insert the Screws (6-points)