

SAMSUNG

GSM TELEPHONE

SGH-G800

SERVICE *Manual*

GSM 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 specipcty of 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 manetic 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 error of measurement is 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/DCS1800/PCS1900/WCDMA2100 General Specification

	EGSM 900 Phase 2	DCS1800 Phase 1	PCS1900	WCDMA
Freq. Band[MHz] Uplink/Downlink	880~915 925~960	1710~1785 1805~1880	1850~1910 1930~1990	1920~1980 2110~2170
ARFCN range	0~124 & 975~1023	512~885	512~810	10562~10838
Tx/Rx spacing	45 MHz	95 MHz	80 MHz	190 MHz
Mod. Bit rate/ Bit Period	270.833 kbps 3.692 us	270.833 kbps 3.692 us	270.833 kbps 3.692 us	3.84 Mcps/s
Time Slot Period/Frame Period	576.9 us 4.615 ms	576.9 us 4.615 ms	576.9 us 4.615 ms	10 ms
Modulation	0.3 GMSK	0.3 GMSK	0.3 GMSK	UL:2BPSk DL:QPSK
MS Power	33 dBm~5 dBm	30 dBm~0 dBm	30 dBm~0 dBm	MAX:24(+1,-3) dBm MIN:<-50 dBm
Power Class	5 pcl ~ 19 pcl	0 pcl ~ 15 pcl	0 pcl ~ 15 pcl	CLASS3
Sensitivity	-102 dBm	-100 dBm	-100 dBm	-106.7 dBm
TDMA Mux	8	8	8	-
Cell Radius	35 Km	2 Km	-	-

2-2. GSM TX power class

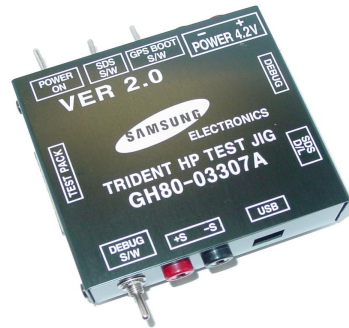
TX Power control level	EGSM900	TX Power control level	DCS1800	TX Power control level	PCS1900
5	33±2 dBm	0	30±3 dBm	0	30±3 dBm
6	31±2 dBm	1	28±3 dBm	1	28±3 dBm
7	29±2 dBm	2	26±3 dBm	2	26±3 dBm
8	27±2 dBm	3	24±3 dBm	3	24±3 dBm
9	25±2 dBm	4	22±3 dBm	4	22±3 dBm
10	23±2 dBm	5	20±3 dBm	5	20±3 dBm
11	21±2 dBm	6	18±3 dBm	6	18±3 dBm
12	19±2 dBm	7	16±3 dBm	7	16±3 dBm
13	17±2 dBm	8	14±3 dBm	8	14±3 dBm
14	15±2 dBm	9	12±4 dBm	9	12±4 dBm
15	13±2 dBm	10	10±4 dBm	10	10±4 dBm
16	11±3 dBm	11	8±4 dBm	11	8±4 dBm
17	9±3 dBm	12	6±4 dBm	12	6±4 dBm
18	7±3 dBm	13	4±4 dBm	13	4±4 dBm
19	5±3 dBm	14	2±5 dBm	14	2±5 dBm
		15	0±5 dBm	15	0±5 dBm

3. Product Function

Main Function

- 3G
- RSS reader
- Camera and camcorder
- Synchronisation with Windows Media Player
- Music player
- FM radio
- Image editor
- Digital data printing
- Bluetooth
- File viewer
- Web browser

4. Array course control



Test Jig (GH80-03308A)



Test Cable (GH39-00890A)



RF Test Cable (GH39-00397A)

Software Downloading

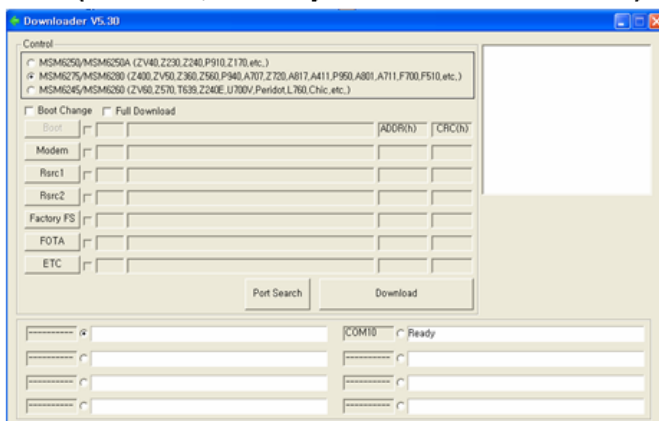
Download Firmware Files

- SGH-G800 firmware is composed of 4 files

File	Contents
amss_compressed.bin	Modem binary for communication function & Mocha binary for user interface and various application
Rsrc_G800_XXX*.rc1	Files need for each application
Rsrc2_G800(Mid/Low).rc2	Power on/off animation
FactoryFs_G800_XXX.bin	Default file system to be put into the initial production

*XXX means operator name usually.

- Download program (MultiLoader V5.xx.exe)
 - S/W for downloading firmware to the SGH-G800
 - No need to install the S/W. Just unzip the compressed file or copy it.
 - After copying one file, possible to download firmware to the mobile
 - Maximum 8 mobiles can be downloaded at the same time
(For this, usually USB hub is needed)



- **Prerequisite**

1. Get the **download program** and **Samsung USB modem driver**.
 - <http://www.anysvcmobile.com>
2. Install the Samsung USB modem driver
 - The previous section may be helpful for you.
3. Unzip MultiLoader.zip to the folder which you would like to locate the executable file.
 - No need to install it.
 - Get the **firmware** to download from service web site.
 - <http://www.anysvcmobile.com>
4. Unzip the firmware file to some specific folder which you want.
5. Prepare one **USB data cable** for SGH-G800

- **HowToDo**

1. Prepare 4 files which are explained before this procedure.
2. Execute the download SW, MultiLoader.exe.
3. Boot the SGH-G800 by pressing '**Power ON key**' + '**Number 9 key**' at the same time - If you do properly, you can see the **Red Screen** on the LCD
4. Connect the data cable to the SGH-G800
 - Check whether one of Entry is highlighted in MultiLoader.
 - If you want to download more UEs, you only have to connect them.
5. Choose each firmware file matched to each item of MultiLoader.
 - ★ **Be sure to choose the correct MSM chip(SGH-G800 : MSM6280)**
6. Now **press the button 'Download'**.
7. When downloading is complete, UE reboot automatically.
 - If there is different in FactoryFS.bin, UE will format file system automatically.

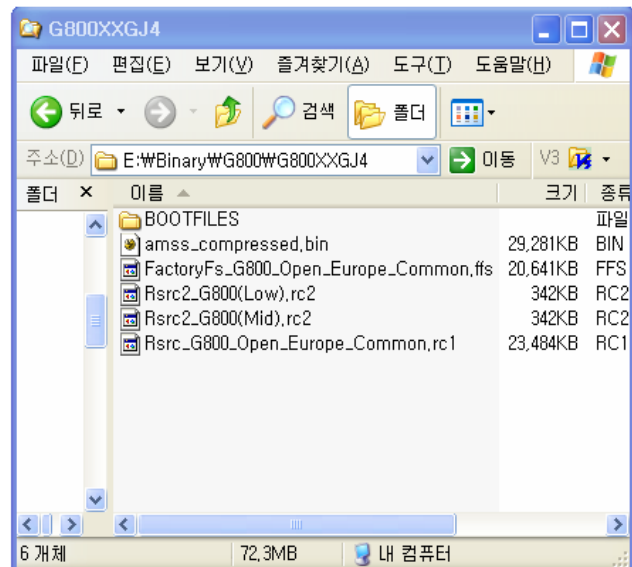
- **Things to remember**

- Only when it is informed that boot code change is necessary, use the check box “Boot Change” in Multiloader program.
 - > In most of cases, it is recommended not to use them.
 - > **If downloading fails during changing boot area, you can not reboot the mobile any more !**
- When you select the binary files for each item, don't forget to check that the files have the same version.
- File system will be formatted only when FactoryFS.bin file changed. At this time, all data which is made or stored by user will be removed.
- The Multiloader version should be matched to the firmware version. Please check whether the versions are matched.

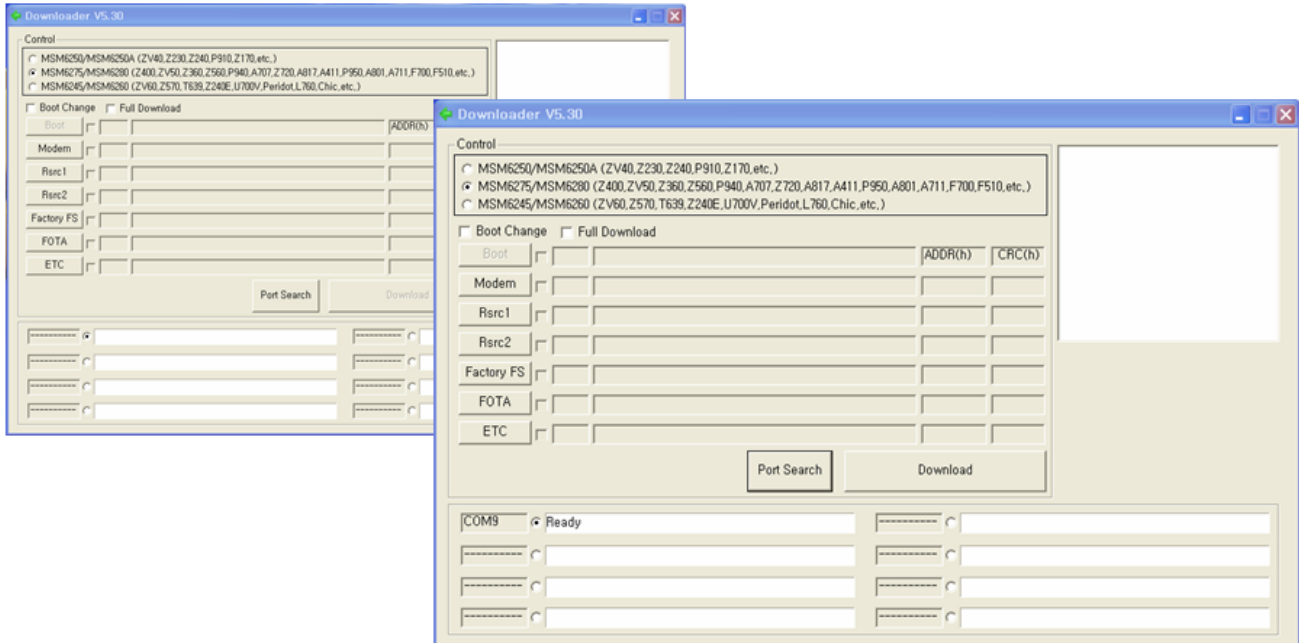
Download Firmware Files practice

- Prerequisite

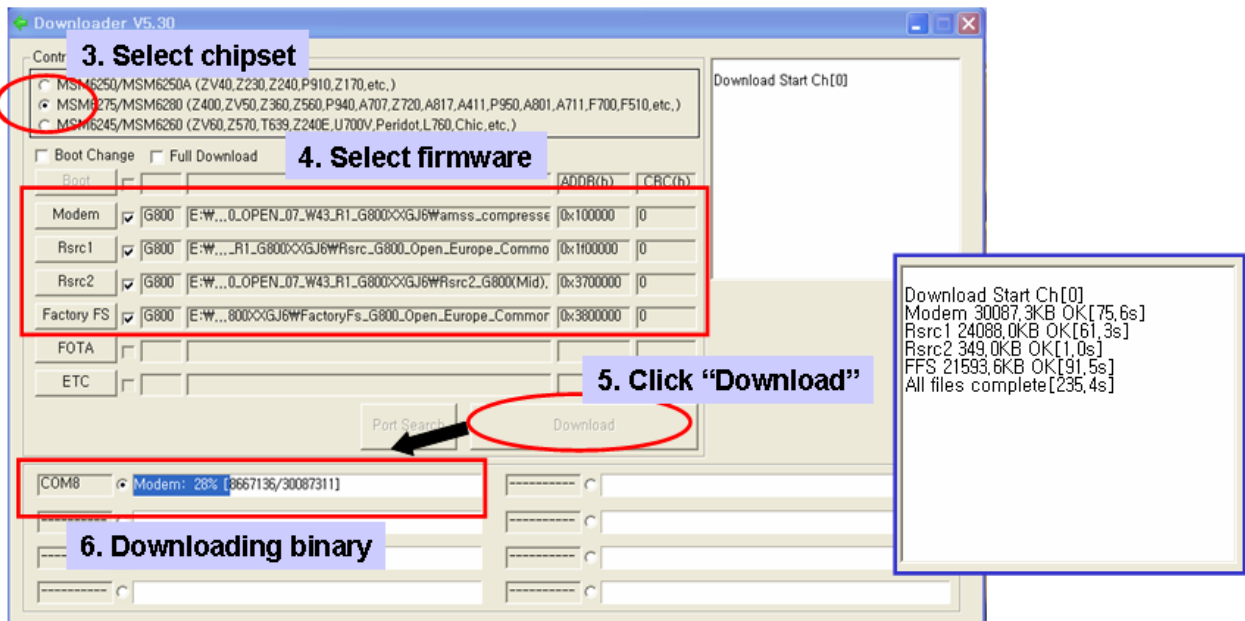
1. Get **download program** and **firmware** from service web site.
2. Prepare one **USB data cable** for SGH-G800.
3. Making connection between PC(it has already been installed USB driver) and SGH-G800.



- Execute "MultiLoader.exe".



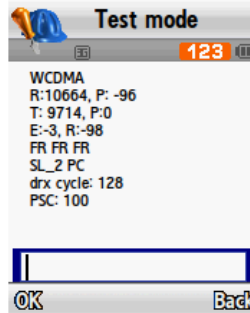
- Execute "MultiLoader.exe" and choose like the following.



Key Strings to remember

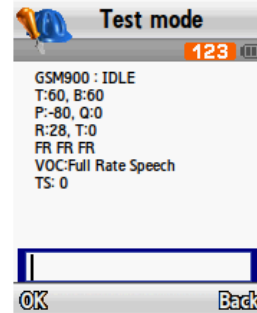
- Debug Screen :

- ***#0011#** →



- IMEI number check :

- ***#06#**



- Vibrator :

- ***#0842#**

- SW version check :

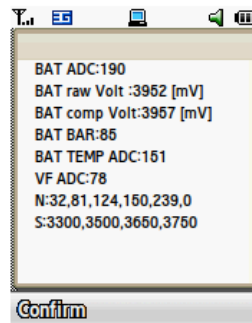
- ***#1234#**

- Admin :

- ***#6984125*#**

- Battery Information :

- ***#0228#** →



- **Reset(Initialize) Mobile's Settings.**

- Functions

- Initialize EEPROM section in phone.

delete SMS, MMS, multimedia files, remove phone lock...etc..

- Press **"*2767*3855#" (full)**

- After press those key stings, **wait** for the Mobile to power off and power on automatically. ([Never power off for 1 minute by force after power on.](#))

- The downloaded files (sounds, Image, video, etc..) are not deleted by this reset.

Key Strings to remember

- Debug Screen :

- ***#0011#** 

- IMEI number check :

- ***#06#**

- Vibrator :

- ***#0842#**


- SW version check :

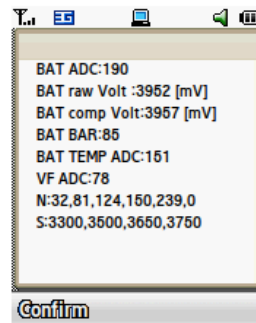
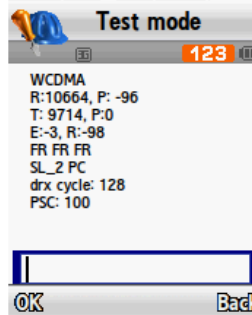
- ***#1234#**

- Admin :

- ***#6984125*#**

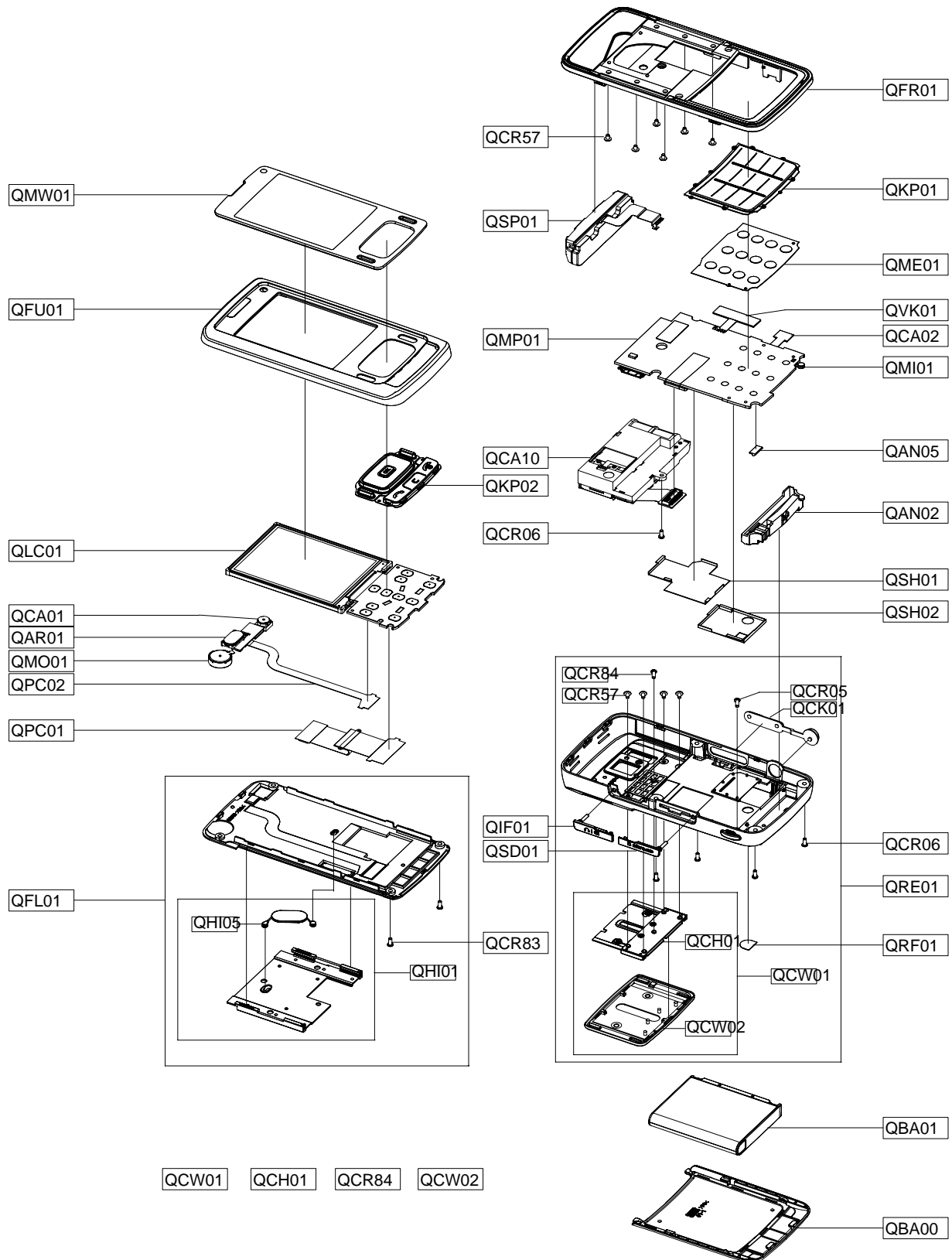
- Battery Information :

- ***#0228#** 



5. Exploded View and Parts List

5-1. Cellular phone Exploded View



5-2. Cellular phone Parts list

Design LOC	Description	SEC CODE
QAN02	INTENNA-SGHG800	GH42-01422A
QAN05	ASSY MEC-INTENNA CONTACT	GH75-08168A
QAR01	AUDIO-RECEIVER	3009-001292
QBA00	ASSY COVER-BATT	GH98-06263A
QBA01	INNER BATTERY PACK-1000MAH,BLK	GH43-02971A
QCA01	UNIT-SGHG800 VGA CAMERA	GH59-04718A
QCA02	KEY FPCB-CAMERA KEY	GH59-04957A
QCA10	CAMERA MODULE-SGHG800 5M	GH59-04965A
QCH01	ASSY HINGE-CAMERA MODULE	GH98-06574A
QCK01	PMO KEY-(VOL+CAM)	GH72-44288A
QCR05	SCREW-MACHINE	6001-001478
QCR06	SCREW-MACHINE	6001-001155
QCR06	SCREW-MACHINE	6001-001155
QCR57	SCREW-MACHINE	6001-002001
QCR57	SCREW-MACHINE	6001-002001
QCR83	SCREW-MACHINE	6001-002121
QCR84	SCREW-SPECIAL	6009-001540
QCW01	ASSY COVER-CAMERA DOOR	GH98-06439A
QCW02	ASSY COVER-CAMERA DOOR	GH98-06758A
QFL01	ASSY CASE-LOWER	GH98-06258A
QFR01	ASSY CASE-FRONT	GH98-06259A
QFU01	ASSY CASE-UPPER	GH98-06257A
QHI01	ASSY HINGE	GH98-06262A
QHI05	ASSY COVER-LINK UNIT	GH98-06573A
QIF01	PMO COVER-IF	GH72-44289A
QKP01	ASSY KEYPAD-MAIN(OPEN/SIL)	GH98-06264A
QKP02	ASSY KEYPAD-SUB(OPEN/SIL)	GH98-06265A
QLC01	LCD-MODULE SGHG800	GH07-01200A
QME01	UNIT-SGHG800 3X4 DOME SHEET 12	GH59-04676A
QMI01	MICROPHONE-ASSY-SGHG800	GH30-00423A
QMO01	MOTOR DC-SGHG800	GH31-00400A
QMP01	PBA MAIN-SGHG800	GH92-03759A
QMW01	PMO WINDOW-MAIN	GH72-44284A
QPC01	FPC-SGHG800 SLIDE FPCB	GH41-01789A
QPC02	FPC-SGHG800 VGA FPCB	GH41-01898A
QRE01	ASSY CASE-REAR	GH98-06261A
QRF01	TAPE-SHEET RF JACK	GH74-35277A
QSD01	PMO COVER-SD	GH72-44287A
QSH01	NPR SHIELD-CAN A	GH71-07770A
QSH02	NPR SHIELD-CAN B	GH71-07771A
QSP01	SPEAKER	3001-002246
QVK01	KEY FPCB-SIDE VOL 2 KEY FPCB	GH59-04678A

Description	SEC CODE
BAG PE	6902-000634
CBF INTERFACE-DLC APCBS10BSE (GH39-00922B
ADAPTOR-ATADS10ESE,SIL,EU	GH44-01702B
S/W CD-SGHG800 PC STUDIO 3.2	GH46-00555A
EARPHONE-B-TYPE	GH59-04557B
LABEL(P)-UNIT SEAL	GH68-00518B
LABEL(P)-IMEI	GH68-01335D
LABEL(R)-WATER SOAK	GH68-09361A
MANUAL USERS-EU ENGLISH	GH68-16188A
MANUAL USERS-EU DUTCH	GH68-16189A
LABEL(R)-MAIN(EU)	GH68-16381A
BOX(P)-UNIT MAIN(EU_NEW)	GH69-06157A
CUSHION-CASE_EU_SLIM	GH69-06194A
TAPE INSU	GH74-35281A
SPONGE-SIM PLATE	GH74-35290A
VINYL-UPPER PROTECTION	GH74-35331A
VINYL-BOHO LCD PROTECTION	GH74-35373A
TAPE-SUN BLOCK	GH74-35489A
TAPE GASK-LCD	GH74-35644A
TAPE GASK-LCD DOMESHEET	GH74-35645A
TAPE-ABSORBER MAIN BOT	GH74-36060A
TAPE INSU-BOT	GH74-36061A
TAPE INSU-ABSORBER	GH74-36062A
TAPE GASK-LOGIC	GH74-36483A
TAPE GASK-T-FLASH	GH74-36623A
VINYL-BOHO MAIN WINDOW	GH74-36624A
TAPE GASK-FRONT	GH74-36712A

6. MAIN Electrical Parts List

SEC CODE	Design LOC	Discription	STATUS
0403-001547	ZD603	DIODE-ZENER	SA
0403-001547	ZD604	DIODE-ZENER	SA
0404-001172	D300	DIODE-SCHOTTKY	SA
0404-001172	D301	DIODE-SCHOTTKY	SA
0404-001172	D302	DIODE-SCHOTTKY	SA
0406-001241	ZD600	DIODE-TVS	SA
0406-001241	ZD601	DIODE-TVS	SA
0406-001254	ZD501	DIODE-TVS	SA
0407-001002	D400	DIODE-ARRAY	SA
0504-001113	TR300	TR-DIGITAL	SA
0504-001113	TR400	TR-DIGITAL	SA
0601-002268	LED600	LED	SA
0601-002268	LED601	LED	SA
0904-002262	U301	IC-USC	SA
1001-001438	U300	IC-ANALOG SWITCH	SA
1001-001447	U605	IC-ANALOG MULTIPLEX	SA
1009-001032	U701	IC-HALL EFFECT S/W	SA
1108-000106	UME300	IC-MCP	SA
1201-002531	PAM200	IC-POWER AMP	SA
1201-002570	PAM100	IC-POWER AMP	SA
1201-002615	U501	IC-AUDIO AMP	SA
1203-003523	U700	IC-POSI.FIXED REG.	SA
1203-003688	U609	IC-POSI.FIXED REG.	SA
1203-003715	U601	IC-MULTI REG.	SA
1203-003737	U600	IC-POSI.FIXED REG.	SA
1203-003787	U607	IC-POSI.FIXED REG.	SA
1203-004338	U608	IC-POSI.FIXED REG.	SA
1203-004373	U503	IC-POSI.FIXED REG.	SA
1203-004428	U604	IC-MULTI REG.	SA
1203-004460	U603	IC-MULTI REG.	SA
1203-004518	U401	IC-BATTERY	SA
1203-004548	U602	IC-DC/DC CONVERTER	SA
1203-004926	U400	IC-POWER SUPERVISOR	SA
1204-002746	U502	IC-TUNER	SA
1205-002686	U606	IC-SWITCH	SA
1205-002942	U100	IC-TRANSCEIVER	SA

SEC CODE	Design LOC	Discription	STATUS
1205-003285	U200	IC-TRANSCIEVER	SA
1205-003342	UCP300	IC-MODEM	SA
1404-001224	VR300	THERMISTOR-NTC	SA
1405-001110	VR704	VARISTOR	SA
1405-001133	VR400	VARISTOR	SA
1405-001133	VR700	VARISTOR	SA
1405-001133	VR701	VARISTOR	SA
1405-001133	VR702	VARISTOR	SA
1405-001133	VR703	VARISTOR	SA
1405-001133	VR705	VARISTOR	SA
1405-001133	VR706	VARISTOR	SA
1405-001133	VR708	VARISTOR	SA
1405-001133	VR709	VARISTOR	SA
1405-001133	VR710	VARISTOR	SA
1405-001133	VR711	VARISTOR	SA
1405-001177	VR401	VARISTOR	SA
1405-001177	VR402	VARISTOR	SA
2007-000138	R703	R-CHIP	SA
2007-000138	R704	R-CHIP	SA
2007-000138	R705	R-CHIP	SA
2007-000138	R706	R-CHIP	SA
2007-000138	R717	R-CHIP	SA
2007-000143	R330	R-CHIP	SA
2007-000143	R331	R-CHIP	SA
2007-000144	R404	R-CHIP	SA
2007-000145	R333	R-CHIP	SA
2007-000148	R309	R-CHIP	SA
2007-000148	R311	R-CHIP	SA
2007-000148	R340	R-CHIP	SA
2007-000148	R341	R-CHIP	SA
2007-000148	R402	R-CHIP	SA
2007-000148	R510	R-CHIP	SA
2007-000148	R713	R-CHIP	SA
2007-000151	R427	R-CHIP	SA
2007-000157	R403	R-CHIP	SA
2007-000157	R606	R-CHIP	SA

SEC CODE	Design LOC	Discription	STATUS
2007-000157	R615	R-CHIP	SA
2007-000162	R411	R-CHIP	SA
2007-000162	R423	R-CHIP	SA
2007-000162	R425	R-CHIP	SA
2007-000162	R508	R-CHIP	SA
2007-000162	R509	R-CHIP	SA
2007-000164	R112	R-CHIP	SA
2007-000165	R413	R-CHIP	SA
2007-000169	R424	R-CHIP	SA
2007-000170	R113	R-CHIP	SA
2007-000171	R101	R-CHIP	SA
2007-000171	R110	R-CHIP	SA
2007-000171	R114	R-CHIP	SA
2007-000171	R303	R-CHIP	SA
2007-000171	R342	R-CHIP	SA
2007-000171	R343	R-CHIP	SA
2007-000171	R347	R-CHIP	SA
2007-000171	R348	R-CHIP	SA
2007-000171	R400	R-CHIP	SA
2007-000171	R401	R-CHIP	SA
2007-000171	R408	R-CHIP	SA
2007-000171	R428	R-CHIP	SA
2007-000171	R504	R-CHIP	SA
2007-000171	R701	R-CHIP	SA
2007-000171	R702	R-CHIP	SA
2007-000171	R715	R-CHIP	SA
2007-000171	R718	R-CHIP	SA
2007-000171	R719	R-CHIP	SA
2007-000171	R720	R-CHIP	SA
2007-000172	R332	R-CHIP	SA
2007-000242	R500	R-CHIP	SA
2007-000242	R501	R-CHIP	SA
2007-000982	R426	R-CHIP	SA
2007-001119	R514	R-CHIP	SA
2007-001119	R515	R-CHIP	SA
2007-001285	R200	R-CHIP	SA

SEC CODE	Design LOC	Discription	STATUS
2007-001285	R204	R-CHIP	SA
2007-001292	R607	R-CHIP	SA
2007-001292	R608	R-CHIP	SA
2007-001298	R105	R-CHIP	SA
2007-001298	R407	R-CHIP	SA
2007-001305	R107	R-CHIP	SA
2007-001305	R108	R-CHIP	SA
2007-003006	R506	R-CHIP	SA
2007-003006	R507	R-CHIP	SA
2007-007009	R208	R-CHIP	SA
2007-007014	R412	R-CHIP	SA
2007-007014	R414	R-CHIP	SA
2007-007135	R336	R-CHIP	SA
2007-007306	R103	R-CHIP	SA
2007-007306	R104	R-CHIP	SA
2007-007317	R502	R-CHIP	SA
2007-007317	R511	R-CHIP	SA
2007-007317	R512	R-CHIP	SA
2007-007321	R102	R-CHIP	SA
2007-007468	R410	R-CHIP	SA
2007-007741	R611	R-CHIP	SA
2007-007766	R323	R-CHIP	SA
2007-008045	R207	R-CHIP	SA
2007-008045	R210	R-CHIP	SA
2007-008045	R211	R-CHIP	SA
2007-008045	R212	R-CHIP	SA
2007-008045	R716	R-CHIP	SA
2007-008045	R722	R-CHIP	SA
2007-008045	R723	R-CHIP	SA
2007-008055	R416	R-CHIP	SA
2007-008419	R601	R-CHIP	SA
2007-008419	R602	R-CHIP	SA
2007-008419	R604	R-CHIP	SA
2007-008419	R605	R-CHIP	SA
2007-008483	R417	R-CHIP	SA
2007-008483	R418	R-CHIP	SA

SEC CODE	Design LOC	Discription	STATUS
2007-008483	R419	R-CHIP	SA
2007-008483	R420	R-CHIP	SA
2007-008483	R421	R-CHIP	SA
2007-008516	R106	R-CHIP	SA
2007-008516	R304	R-CHIP	SA
2007-008516	R305	R-CHIP	SA
2007-008516	R312	R-CHIP	SA
2007-008516	R313	R-CHIP	SA
2007-008516	R337	R-CHIP	SA
2007-008516	R609	R-CHIP	SA
2007-008531	R205	R-CHIP	SA
2007-008542	R209	R-CHIP	SA
2007-008542	R338	R-CHIP	SA
2007-008542	R616	R-CHIP	SA
2007-008542	R617	R-CHIP	SA
2007-008542	R708	R-CHIP	SA
2007-008542	R721	R-CHIP	SA
2007-008544	R206	R-CHIP	SA
2007-008548	R603	R-CHIP	SA
2007-008588	R307	R-CHIP	SA
2007-008588	R308	R-CHIP	SA
2007-008647	R202	R-CHIP	SA
2007-008774	R201	R-CHIP	SA
2007-008774	R203	R-CHIP	SA
2007-008806	R213	R-CHIP	SA
2007-008806	R321	R-CHIP	SA
2007-009084	R300	R-CHIP	SA
2007-009115	R306	R-CHIP	SA
2007-009167	R334	R-CHIP	SA
2007-009212	R335	R-CHIP	SA
2007-009408	R109	R-CHIP	SA
2203-000233	C412	C-CER,CHIP	SA
2203-000233	C526	C-CER,CHIP	SA
2203-000278	C120	C-CER,CHIP	SA
2203-000278	C123	C-CER,CHIP	SA
2203-000278	C346	C-CER,CHIP	SA

SEC CODE	Design LOC	Discription	STATUS
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2203-000278	C508	C-CER,CHIP	SA
2203-000386	C124	C-CER,CHIP	SA
2203-000386	C406	C-CER,CHIP	SA
2203-000386	C407	C-CER,CHIP	SA
2203-000438	C531	C-CER,CHIP	SA
2203-000812	C439	C-CER,CHIP	SA
2203-000812	C440	C-CER,CHIP	SA
2203-000812	C442	C-CER,CHIP	SA
2203-000812	C504	C-CER,CHIP	SA
2203-000812	C507	C-CER,CHIP	SA
2203-000812	C515	C-CER,CHIP	SA
2203-000812	C537	C-CER,CHIP	SA
2203-000812	C538	C-CER,CHIP	SA
2203-000812	C539	C-CER,CHIP	SA
2203-000812	C540	C-CER,CHIP	SA
2203-000854	C400	C-CER,CHIP	SA
2203-000854	C501	C-CER,CHIP	SA
2203-000854	C503	C-CER,CHIP	SA
2203-000854	C511	C-CER,CHIP	SA
2203-000854	C516	C-CER,CHIP	SA
2203-000940	C122	C-CER,CHIP	SA
2203-000995	C709	C-CER,CHIP	SA
2203-000995	C723	C-CER,CHIP	SA
2203-002709	C332	C-CER,CHIP	SA
2203-002709	C409	C-CER,CHIP	SA
2203-002709	C410	C-CER,CHIP	SA
2203-002709	C434	C-CER,CHIP	SA
2203-002709	C435	C-CER,CHIP	SA
2203-002709	C436	C-CER,CHIP	SA
2203-002709	C437	C-CER,CHIP	SA
2203-002709	C534	C-CER,CHIP	SA
2203-002709	C535	C-CER,CHIP	SA
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2203-002709	C708	C-CER,CHIP	SA

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2203-005288	C101	C-CER,CHIP	SA
2203-005383	C718	C-CER,CHIP	SA
2203-005383	C719	C-CER,CHIP	SA
2203-005481	C514	C-CER,CHIP	SA
2203-005481	C518	C-CER,CHIP	SA
2203-005482	C339	C-CER,CHIP	SA
2203-005482	C340	C-CER,CHIP	SA
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2203-005482	C615	C-CER,CHIP	SA
2203-005482	C618	C-CER,CHIP	SA
2203-005482	C620	C-CER,CHIP	SA
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2203-005682	C107	C-CER,CHIP	SA
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2203-005682	C126	C-CER,CHIP	SA
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2203-005682	C448	C-CER,CHIP	SA
2203-005682	C449	C-CER,CHIP	SA
2203-005682	C450	C-CER,CHIP	SA
2203-005682	C602	C-CER,CHIP	SA
2203-005682	C603	C-CER,CHIP	SA
2203-005682	C703	C-CER,CHIP	SA

SEC CODE	Design LOC	Discription	STATUS
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2203-005719	C333	C-CER,CHIP	SA
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2203-005725	C219	C-CER,CHIP	SA
2203-005725	C224	C-CER,CHIP	SA
2203-005725	C234	C-CER,CHIP	SA
2203-005725	C251	C-CER,CHIP	SA
2203-005725	C252	C-CER,CHIP	SA
2203-005725	C604	C-CER,CHIP	SA
2203-005725	C605	C-CER,CHIP	SA
2203-005725	C606	C-CER,CHIP	SA
2203-005726	C214	C-CER,CHIP	SA
2203-005726	C245	C-CER,CHIP	SA
2203-005727	C204	C-CER,CHIP	SA
2203-005727	C243	C-CER,CHIP	SA
2203-005729	C231	C-CER,CHIP	SA
2203-005736	C111	C-CER,CHIP	SA
2203-005736	C218	C-CER,CHIP	SA
2203-005736	C225	C-CER,CHIP	SA
2203-005736	C250	C-CER,CHIP	SA
2203-005736	C348	C-CER,CHIP	SA
2203-005736	C405	C-CER,CHIP	SA
2203-005736	C408	C-CER,CHIP	SA
2203-005739	C352	C-CER,CHIP	SA
2203-005739	C353	C-CER,CHIP	SA
2203-005740	C208	C-CER,CHIP	SA
2203-005740	C232	C-CER,CHIP	SA
2203-005742	C206	C-CER,CHIP	SA
2203-005742	C207	C-CER,CHIP	SA
2203-005806	C211	C-CER,CHIP	SNA
2203-005806	C230	C-CER,CHIP	SNA
2203-005806	C240	C-CER,CHIP	SNA
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2203-005806	C302	C-CER,CHIP	SNA
2203-005806	C306	C-CER,CHIP	SNA

SEC CODE	Design LOC	Discription	STATUS
2203-005806	C309	C-CER,CHIP	SNA
2203-005806	C310	C-CER,CHIP	SNA
2203-005806	C311	C-CER,CHIP	SNA
2203-005806	C312	C-CER,CHIP	SNA
2203-005806	C313	C-CER,CHIP	SNA
2203-005806	C318	C-CER,CHIP	SNA
2203-005806	C319	C-CER,CHIP	SNA
2203-005806	C324	C-CER,CHIP	SNA
2203-005806	C328	C-CER,CHIP	SNA
2203-005806	C329	C-CER,CHIP	SNA
2203-005808	C233	C-CER,CHIP	SA
2203-006048	C113	C-CER,CHIP	SA
2203-006048	C116	C-CER,CHIP	SA
2203-006048	C118	C-CER,CHIP	SA
2203-006048	C524	C-CER,CHIP	SA
2203-006048	C525	C-CER,CHIP	SA
2203-006048	C527	C-CER,CHIP	SA
2203-006048	C528	C-CER,CHIP	SA
2203-006194	C239	C-CER,CHIP	SA
2203-006194	C241	C-CER,CHIP	SA
2203-006194	C246	C-CER,CHIP	SA
2203-006194	C307	C-CER,CHIP	SA
2203-006194	C308	C-CER,CHIP	SA
2203-006194	C316	C-CER,CHIP	SA
2203-006194	C350	C-CER,CHIP	SA
2203-006318	C127	C-CER,CHIP	SA
2203-006318	C128	C-CER,CHIP	SA
2203-006324	C238	C-CER,CHIP	SA
2203-006348	C403	C-CER,CHIP	SA
2203-006348	C438	C-CER,CHIP	SA
2203-006399	C114	C-CER,CHIP	SA
2203-006399	C323	C-CER,CHIP	SA
2203-006399	C327	C-CER,CHIP	SA
2203-006399	C426	C-CER,CHIP	SA
2203-006399	C427	C-CER,CHIP	SA
2203-006423	C217	C-CER,CHIP	SA

SEC CODE	Design LOC	Discription	STATUS
2203-006423	C220	C-CER,CHIP	SA
2203-006423	C221	C-CER,CHIP	SA
2203-006423	C222	C-CER,CHIP	SA
2203-006423	C226	C-CER,CHIP	SA
2203-006423	C227	C-CER,CHIP	SA
2203-006423	C228	C-CER,CHIP	SA
2203-006423	C229	C-CER,CHIP	SA
2203-006423	C303	C-CER,CHIP	SA
2203-006423	C304	C-CER,CHIP	SA
2203-006423	C305	C-CER,CHIP	SA
2203-006423	C314	C-CER,CHIP	SA
2203-006423	C315	C-CER,CHIP	SA
2203-006423	C317	C-CER,CHIP	SA
2203-006423	C320	C-CER,CHIP	SA
2203-006423	C321	C-CER,CHIP	SA
2203-006423	C322	C-CER,CHIP	SA
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2203-006423	C326	C-CER,CHIP	SA
2203-006423	C330	C-CER,CHIP	SA
2203-006423	C344	C-CER,CHIP	SA
2203-006423	C414	C-CER,CHIP	SA
2203-006423	C416	C-CER,CHIP	SA
2203-006439	C212	C-CER,CHIP	SNA
2203-006439	C213	C-CER,CHIP	SNA
2203-006462	C334	C-CER,CHIP	SA
2203-006466	C608	C-CER,CHIP	SA
2203-006556	C106	C-CER,CHIP	SA
2203-006562	C216	C-CER,CHIP	SA
2203-006562	C338	C-CER,CHIP	SA
2203-006562	C341	C-CER,CHIP	SA
2203-006562	C342	C-CER,CHIP	SA
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2203-006562	C351	C-CER,CHIP	SA
2203-006562	C417	C-CER,CHIP	SA
2203-006562	C443	C-CER,CHIP	SA
2203-006562	C521	C-CER,CHIP	SA

SEC CODE	Design LOC	Discription	STATUS
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2203-006562	C533	C-CER,CHIP	SA
2203-006562	C600	C-CER,CHIP	SA
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2203-006562	C612	C-CER,CHIP	SA
2203-006562	C613	C-CER,CHIP	SA
2203-006562	C614	C-CER,CHIP	SA
2203-006562	C617	C-CER,CHIP	SA
2203-006562	C623	C-CER,CHIP	SA
2203-006562	C625	C-CER,CHIP	SA
2203-006562	C627	C-CER,CHIP	SA
2203-006562	C628	C-CER,CHIP	SA
2203-006562	C701	C-CER,CHIP	SA
2203-006562	C706	C-CER,CHIP	SA
2203-006562	C707	C-CER,CHIP	SA
2203-006562	C724	C-CER,CHIP	SA
2203-006620	C200	C-CER,CHIP	SNA
2203-006620	C201	C-CER,CHIP	SNA
2203-006620	C202	C-CER,CHIP	SNA
2203-006620	C203	C-CER,CHIP	SNA
2203-006668	C335	C-CER,CHIP	SA
2203-006681	C401	C-CER,CHIP	SA
2203-006681	C444	C-CER,CHIP	SA
2203-006681	C522	C-CER,CHIP	SA
2203-006681	C607	C-CER,CHIP	SA
2203-006824	C402	C-CER,CHIP	SA
2203-006824	C404	C-CER,CHIP	SA
2203-006824	C431	C-CER,CHIP	SA
2203-006824	C432	C-CER,CHIP	SA
2203-006824	C433	C-CER,CHIP	SA
2203-006839	C105	C-CER,CHIP	SA
2203-006839	C428	C-CER,CHIP	SA
2203-006839	C429	C-CER,CHIP	SA
2203-006839	C430	C-CER,CHIP	SA
2203-006839	C523	C-CER,CHIP	SA
2203-006839	C609	C-CER,CHIP	SA

SEC CODE	Design LOC	Discription	STATUS
2203-006839	C702	C-CER,CHIP	SA
2203-006872	C115	C-CER,CHIP	SA
2203-006872	C117	C-CER,CHIP	SA
2203-006872	C119	C-CER,CHIP	SA
2203-006872	C209	C-CER,CHIP	SA
2203-006872	C300	C-CER,CHIP	SA
2203-006872	C418	C-CER,CHIP	SA
2203-006872	C419	C-CER,CHIP	SA
2203-006872	C422	C-CER,CHIP	SA
2203-006872	C423	C-CER,CHIP	SA
2203-006872	C424	C-CER,CHIP	SA
2203-006872	C502	C-CER,CHIP	SA
2203-006872	C509	C-CER,CHIP	SA
2203-006872	C529	C-CER,CHIP	SA
2203-006872	C624	C-CER,CHIP	SA
2203-006872	C700	C-CER,CHIP	SA
2203-006872	C711	C-CER,CHIP	SA
2203-006872	C712	C-CER,CHIP	SA
2203-006872	C714	C-CER,CHIP	SA
2203-006872	C715	C-CER,CHIP	SA
2203-006872	C716	C-CER,CHIP	SA
2203-006979	C237	C-CER,CHIP	SA
2203-006979	C705	C-CER,CHIP	SA
2203-006994	C215	C-CER,CHIP	SA
2203-007147	C411	C-CER,CHIP	SA
2203-007165	C205	C-CER,CHIP	SA
2203-007165	C413	C-CER,CHIP	SA
2203-007165	C415	C-CER,CHIP	SA
2203-007165	C420	C-CER,CHIP	SA
2203-007165	C421	C-CER,CHIP	SA
2203-007165	C425	C-CER,CHIP	SA
2203-007165	C610	C-CER,CHIP	SA
2203-007165	C611	C-CER,CHIP	SA
2203-007165	C616	C-CER,CHIP	SA
2203-007165	C619	C-CER,CHIP	SA
2203-007165	C622	C-CER,CHIP	SA

SEC CODE	Design LOC	Discription	STATUS
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2404-001381	TA200	C-TA,CHIP	SA
2404-001381	TA600	C-TA,CHIP	SA
2404-001381	TA602	C-TA,CHIP	SA
2404-001381	TA603	C-TA,CHIP	SA
2404-001411	TA601	C-TA,CHIP	SA
2703-001749	L206	INDUCTOR-SMD	SA
2703-002495	L604	INDUCTOR-SMD	SA
2703-002506	L114	INDUCTOR-SMD	SA
2703-002506	L205	INDUCTOR-SMD	SA
2703-002649	L104	INDUCTOR-SMD	SNA
2703-002649	L105	INDUCTOR-SMD	SNA
2703-002795	L103	INDUCTOR-SMD	SNA
2703-002795	L106	INDUCTOR-SMD	SNA
2703-002798	L200	INDUCTOR-SMD	SNA
2703-002798	L201	INDUCTOR-SMD	SNA
2703-002870	L100	INDUCTOR-SMD	SA
2703-002900	L109	INDUCTOR-SMD	SA
2703-002907	L101	INDUCTOR-SMD	SNA
2703-002907	L102	INDUCTOR-SMD	SNA
2703-002917	L202	INDUCTOR-SMD	SA
2703-002917	L204	INDUCTOR-SMD	SA
2703-002919	L203	INDUCTOR-SMD	SA
2703-003273	L606	INDUCTOR-SMD	SA
2703-003292	L400	INDUCTOR-SMD	SA
2703-003292	L401	INDUCTOR-SMD	SA
2703-003292	L402	INDUCTOR-SMD	SA
2801-004455	OSC100	CRYSTAL-SMD	SA
2801-004458	OSC301	CRYSTAL-SMD	SA
2801-004466	OSC400	CRYSTAL-SMD	SA
2809-001280	TCX200	OSCILLATOR-VCTCXO	SA
2901-001448	F700	FILTER-EMI/ESD	SA
2901-001448	F701	FILTER-EMI/ESD	SA
2904-001600	F101	FILTER-SAW	SA
2904-001604	F100	FILTER-SAW	SNA

SEC CODE	Design LOC	Discription	STATUS
2904-001628	F103	FILTER-SAW	SA
2904-001658	F201	FILTER-SAW	SA
2904-001703	F102	FILTER-SAW	SA
2904-001769	F200	FILTER-SAW	SA
2909-001279	F104	FILTER-LC	SA
2910-000028	DUP200	DUPLEXER-SAW	SA
3301-001342	L707	BEAD-SMD	SA
3301-001534	L504	BEAD-SMD	SA
3301-001534	L703	BEAD-SMD	SA
3301-001659	L110	BEAD-SMD	SA
3301-001659	L601	BEAD-SMD	SA
3301-001659	L602	BEAD-SMD	SA
3301-001659	L603	BEAD-SMD	SA
3301-001729	L704	BEAD-SMD	SA
3301-001729	L705	BEAD-SMD	SA
3301-001729	L706	BEAD-SMD	SA
3301-001812	L500	BEAD-SMD	SA
3301-001812	L501	BEAD-SMD	SA
3301-001812	L502	BEAD-SMD	SA
3301-001812	L503	BEAD-SMD	SA
3301-001879	L600	BEAD-SMD	SA
3705-001358	RFS100	CONNECTOR-COAXIAL	SA
3708-001872	CN500	CONNECTOR-FPC/FFC/PIC	SA
3709-001384	SIM400	CONNECTOR-CARD EDGE	SA
3709-001392	CD400	CONNECTOR-CARD EDGE	SA
3710-002499	IFC600	SOCKET-INTERFACE	SA
3711-005933	HDC700	HEADER-BOARD TO BOARD	SA
3711-006084	BTC700	HEADER-BATTERY	SA
3711-006141	HDC701	HEADER-BOARD TO BOARD	SA
4202-001388	ANT102	ANTENNA-CHIP	SA
4302-001130	BAT400	BATTERY-LI(2ND)	SA
4709-001399	CPL200	COUPLER-DIRECTION	SA
GH70-02367A	SC100	ICT-ON-BOARD CLIP	SA
GH70-02367A	SC101	ICT-ON-BOARD CLIP	SA
GH70-02367A	SC102	ICT-ON-BOARD CLIP	SA
GH70-02367A	SC103	ICT-ON-BOARD CLIP	SA

SEC CODE	Design LOC	Discription	STATUS
GH70-02996A	SC104	IPR SHIELD-FRAME B	SA
GH71-07129A	ANT100	NDC-DMB ANT CONTACT	SA
GH71-07129A	ANT101	NDC-DMB ANT CONTACT	SA

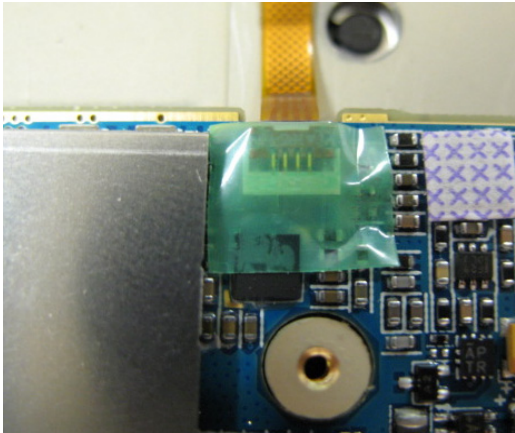
Please consult the GSPN website (Samsung Portal) for the most recent version of the product's part list.

7. Disassembly and Assembly Instructions

7-1. Disassembly

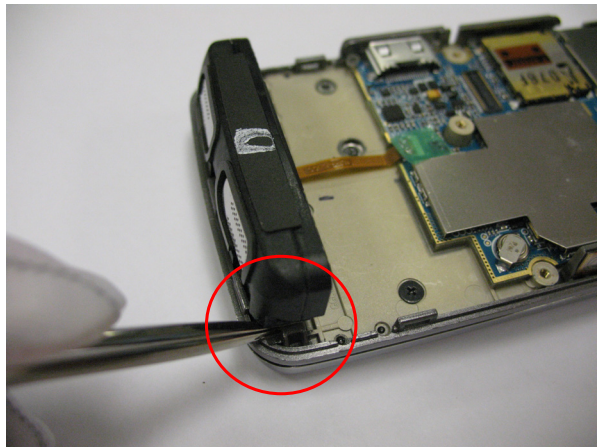
<p>1</p> 	<p>2</p> 
<p>1) Unscrew 4 points from the rear case. ※ caution 1) Be careful not to make scratch and molding damage!</p>	<p>1) Lift up sides of Rear using Assembly stick and disjoint it. ※ caution 1) Be careful not to make scratch and molding damage!</p>
<p>3</p> 	<p>4</p> 
<p>1) Unscrew 1 point from the camera module. ※ caution 1) Be careful not to make scratch and molding damage!</p>	<p>1) Disconnect Camera module FPCB connector. 2) Disjoint Camera module from the front case. ※ caution 1) Be careful not to make scratch and molding damage!</p>

5



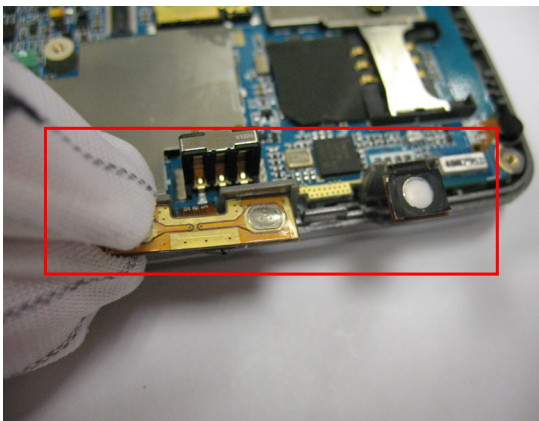
- 1) Remove the anelectric tape at the speaker module connector.
- 2) Disconnect speaker module FPCB connector.
※ caution
- 1) Be careful not to make scratch and molding damage!
- 2) Be careful of damage to the FPCB.

6



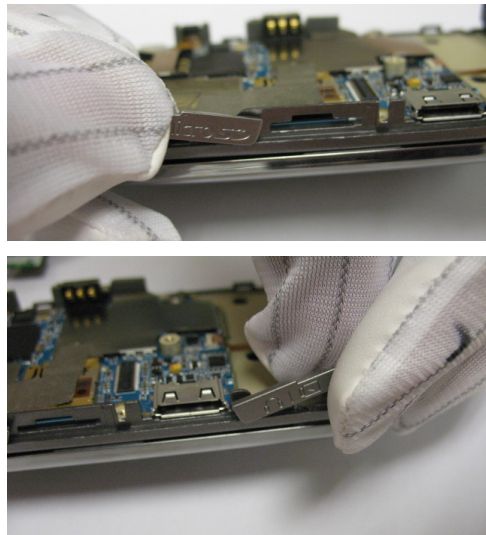
- 1) Unhook speaker module from the fFront case.
※ caution
- 1) Be careful not to make scratch and molding damage!

7



- 1) Remove volume key FPCB from Front Rib.
- 2) Remove camera key FPCB from Front Rib.
※ caution
- 1) Be careful not to make scratch and molding damage!

8



- 1) Disjoint MICRO SD cover.
- 2) Disjoint I/F cover.
※ caution
- 1) Be careful not to make scratch and molding damage!

9

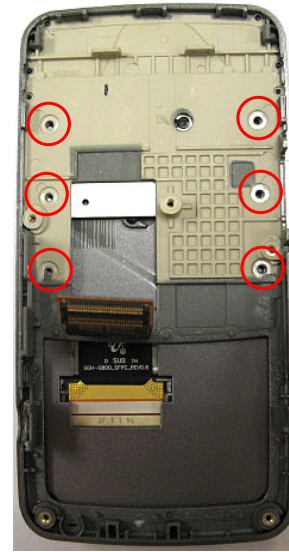


1) Disconnect slide FPCB connector from PBA.

※ caution

- 1) Be careful not to make scratch and molding damage!
- 2) Be careful of damage to the FPCB.

10

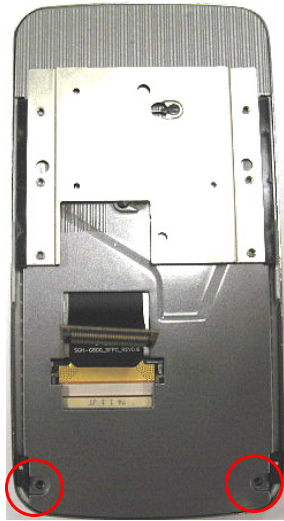


1) Unscrew 6 points from Front case and then disjoint the Front case.

※ caution

- 1) Be careful not to make scratch and molding damage!

11

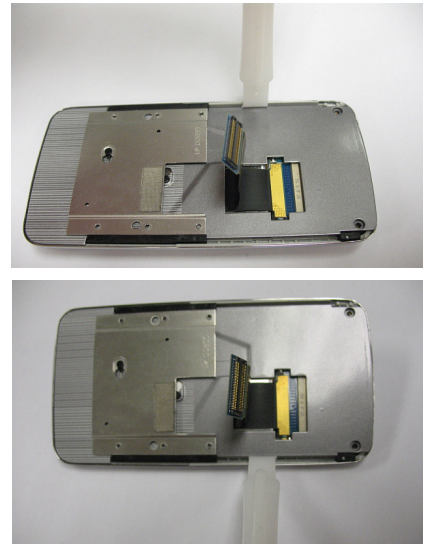


1) Unscrew 2 points from the Lower.

※ caution

- 1) Be careful not to make scratch and molding damage!

12

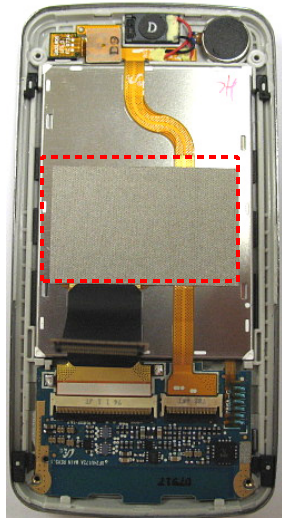


1) Lift up sides of Lower and disjoint it.

※ caution

- 1) Be careful not to make scratch and molding damage!

13



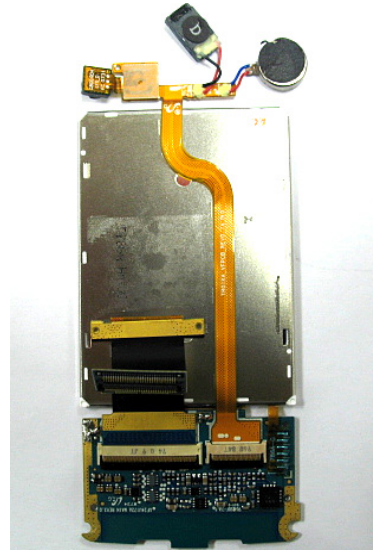
1) 1)Remove an electric tape on the back of LCD.

※ caution

1) Be careful not to make scratch and molding damage!

2) Be careful of damage to the FPCB.

14



1)Remove LCD ASS'Y from the upper.

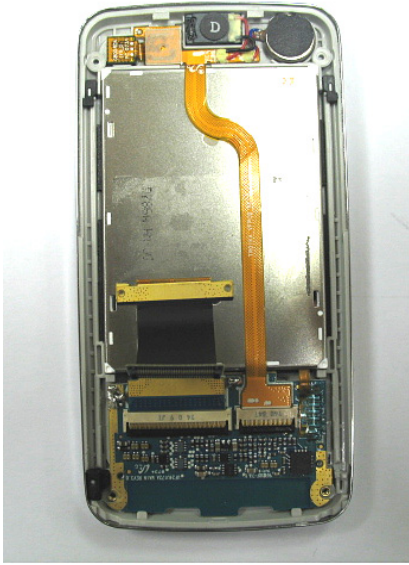
※ caution

1) Be careful not to make scratch and molding damage!

7-2. Assembly

<p>1</p> 	<p>2</p> 
<p>1) Insert Slide FPCB into connector. 2) Solder the side pads of Slide FPCB. ※ caution</p> <p>1) Be careful not to make scratch and molding the! 2) Be careful of damage to the FPCB.</p>	<p>1) Attach Slide FPCB on the back of LCD.. ※ caution</p> <p>1) Be careful not to make scratch and molding damage! 2) When attaching check the guideline.</p>
<p>3</p> 	<p>4</p> 
<p>1) Insert VGA FPCB into connector. 2) Attach VGA FPCB on the back of LCD. ※ caution</p> <p>1) Be careful not to make scratch and molding damage! 2) Be careful of damage to the FPCB.</p>	<p>1) Let the Sub keypad be on the UPPER ※ caution</p> <p>1) Be careful not to make scratch and molding damage!</p>

5



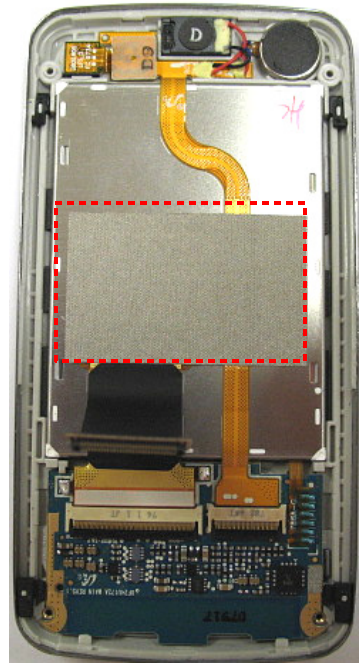
1) Let the LCD ASS'Y be on the Upper.

※ caution

1) Be careful not to make scratch and molding damage!

2) Be careful of damage to the FPCB.

6

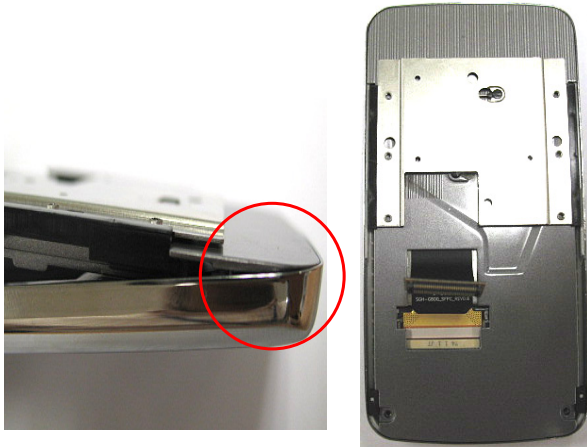


1) Attach an electric tape on the back of LCD.

※ caution

1) When attaching, check the guideline.

7



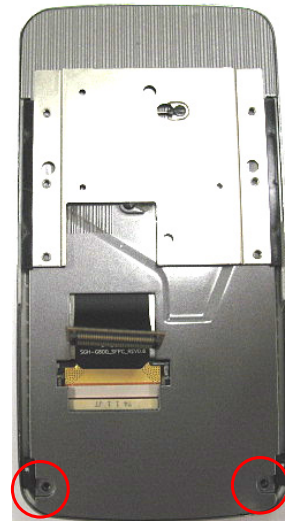
1) Assemble from the upper to the lower side of Lower.

※ caution

1) Be careful not to make scratch and molding damage!

2) Lock the hooker of upper side Lower perfectly.

8



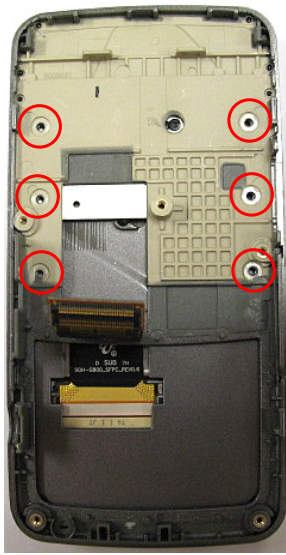
1) Screw 2 points on the Lower

※ caution

1) Be careful not to make scratch and molding damage!

2) Check the TORQUE(1.0~ 1.2 Kgf.Cm)

9

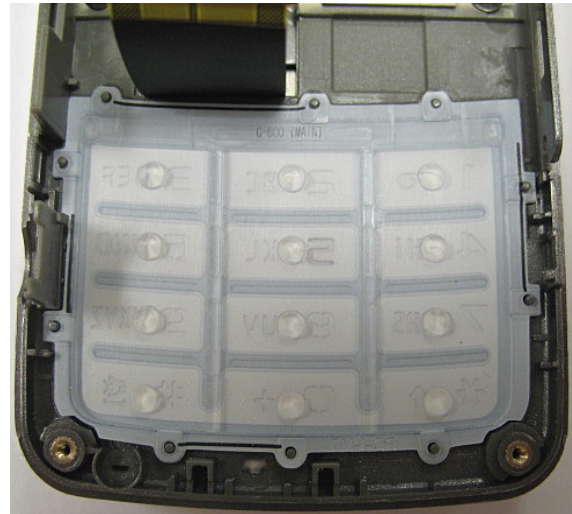


1)After assemble the Front, screw 6 points on the Front.

※ **caution**

- 1) Be careful not to make scratch and molding damage!
- 2) Check the TORQE(1.0~ 1.2 Kgf.Cm)

10

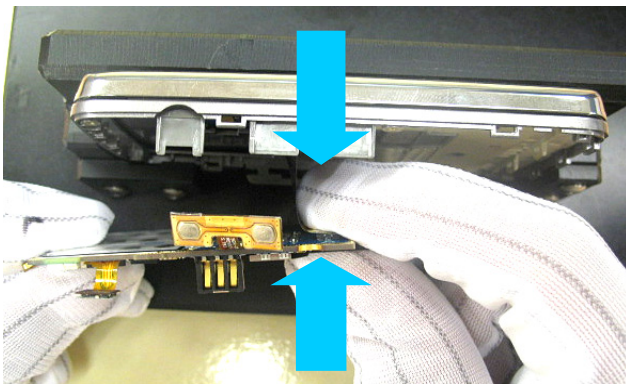


1)Let main keypad be on the Front.

※ **caution**

- 1) Be careful not to make scratch and molding damage!

11

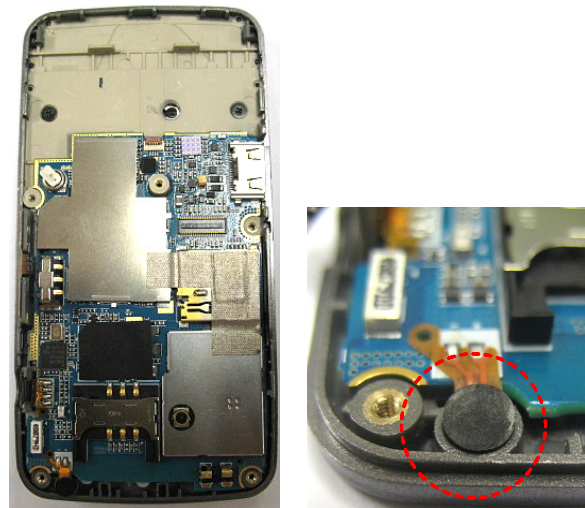


1)Connect Slide FPCB to PBA.

※ **caution**

- 1) Be careful not to make scratch and molding damage!
- 2) Be carefue! to connect Slide FPCB perfectly.

12



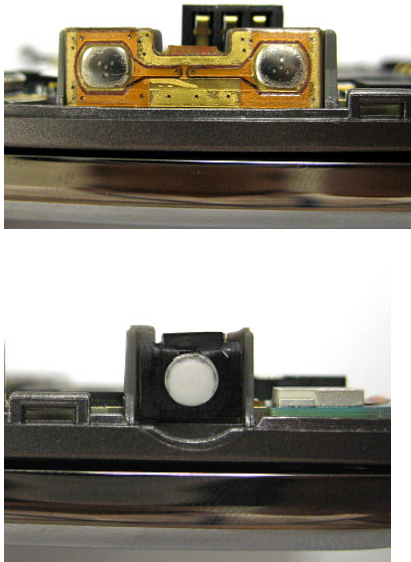
1)Let the PBA be on the Front.

2)Insert mic into Front hole.

※ **caution**

- 1) Be careful not to make scratch and molding damage!

13



- 1) Attach volume key FPCB on the Front rib.
- 2) Attach camera key FPCB on the Front rib.

※ **caution**

- 1) Be careful not to make scratch and molding damage!

14



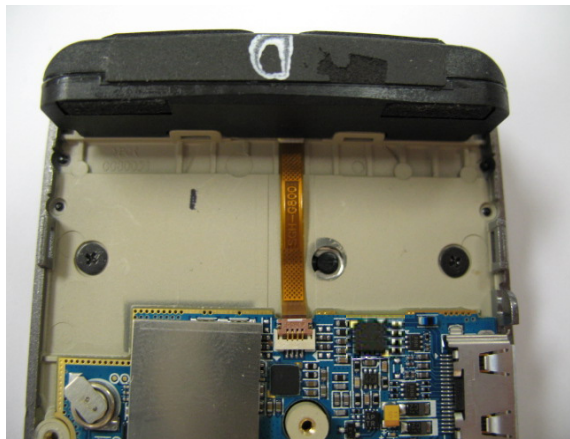
- 1) Insert MICRO SD COVER into Front rib hole.

- 2) Insert I/F COVER into Front rib hole.

※ **caution**

- 1) Be careful not to make scratch and molding damage!

15

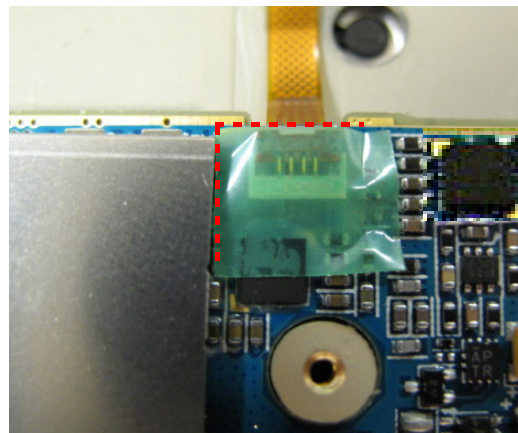


- 1) Join Speaker module to the Front.

※ **caution**

- 1) Be careful not to make scratch and molding damage!

16



- 1) Insert speaker module FPCB into connector.

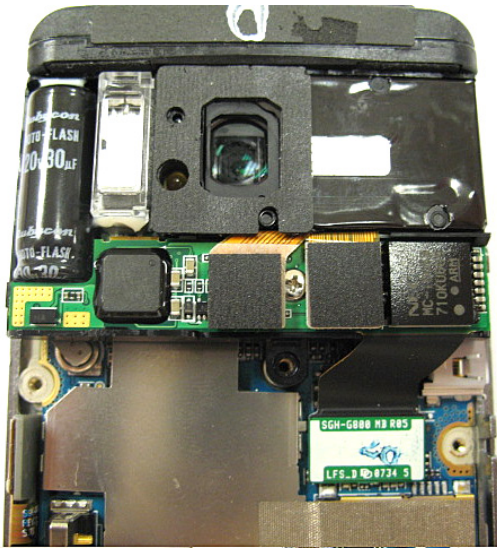
- 2) Attach the anelectric tape for loose-pervention.

※ **caution**

- 1) Be careful not to make scratch and molding damage!

- 2) When attaching, check the red line at the picture.

17



- 1) Assemble camera module to into the Front.
 - 2) Connect Camera FPCB on the PBA.
- ※ **caution**
- 1) Be careful not to make scratch and molding damage!.

18



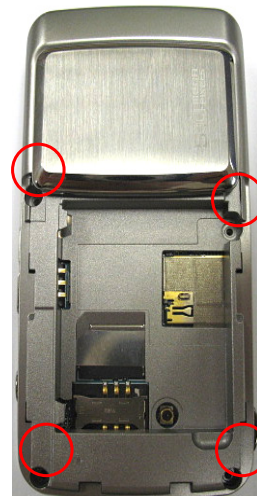
- 1) Screw 1 point of camera module.
- ※ **caution**
- 1) Be careful not to make scratch and molding damage!
 - 2) Check the TORQE(1.0~ 1.2 Kgf.Cm)

19



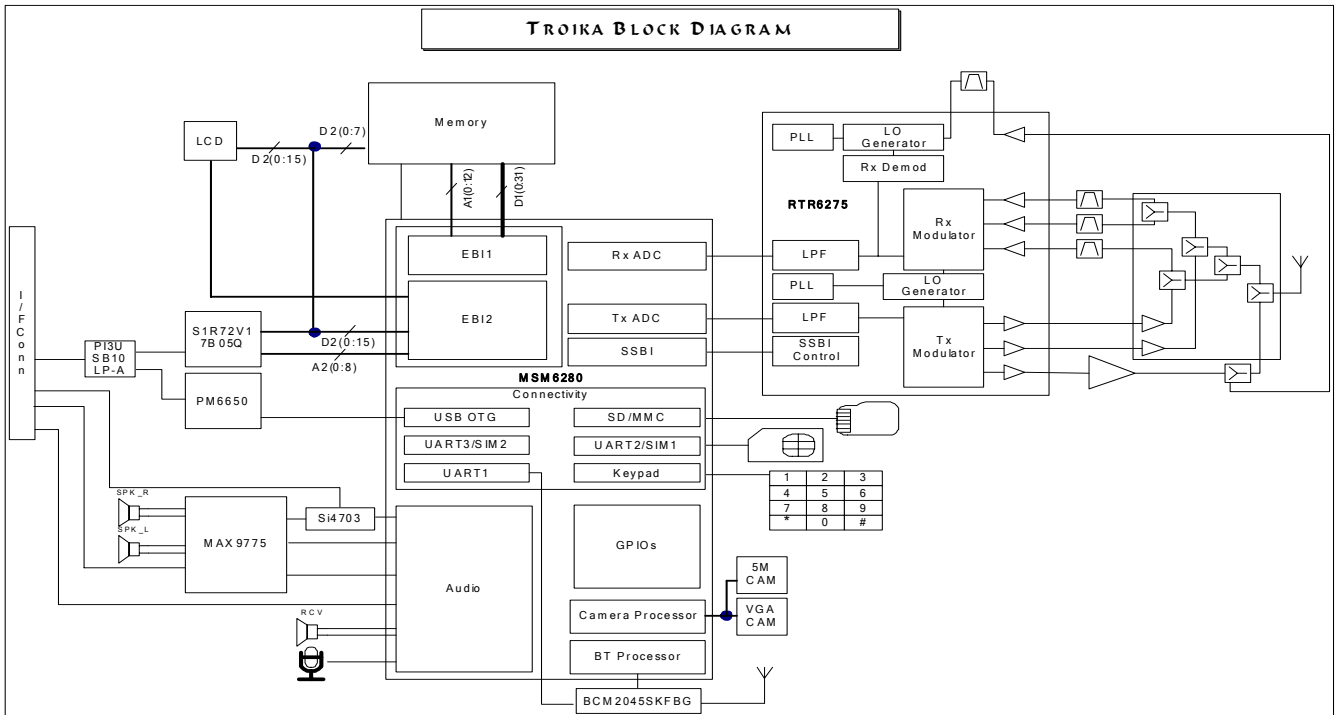
- 1) Assemble the Rear case.
- ※ **caution**
- 1) Be careful not to make scratch and molding damage!

20

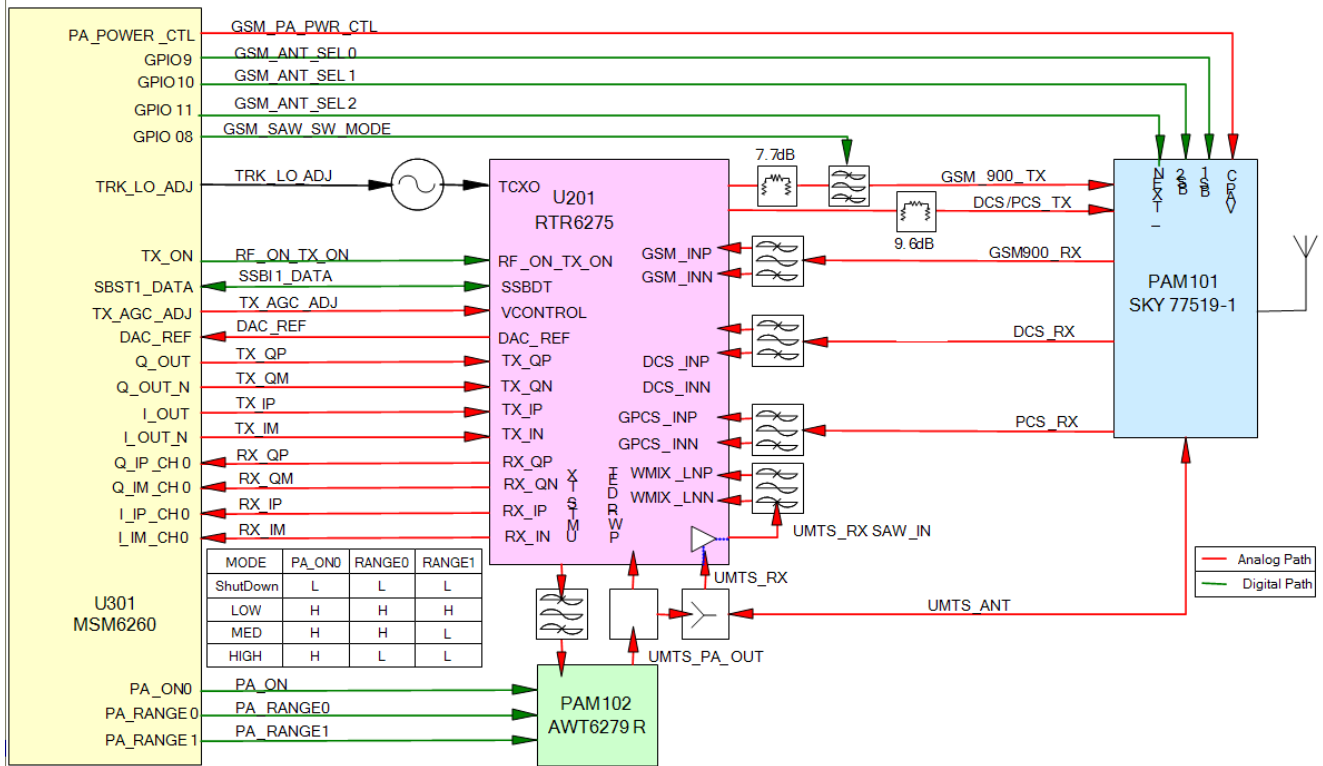


- 1) Screw 4 points of Rear.
- ※ **caution**
- 1) Be careful not to make scratch and molding damage!
 - 2) Check the TORQE(1.0~ 1.2 Kgf.Cm)

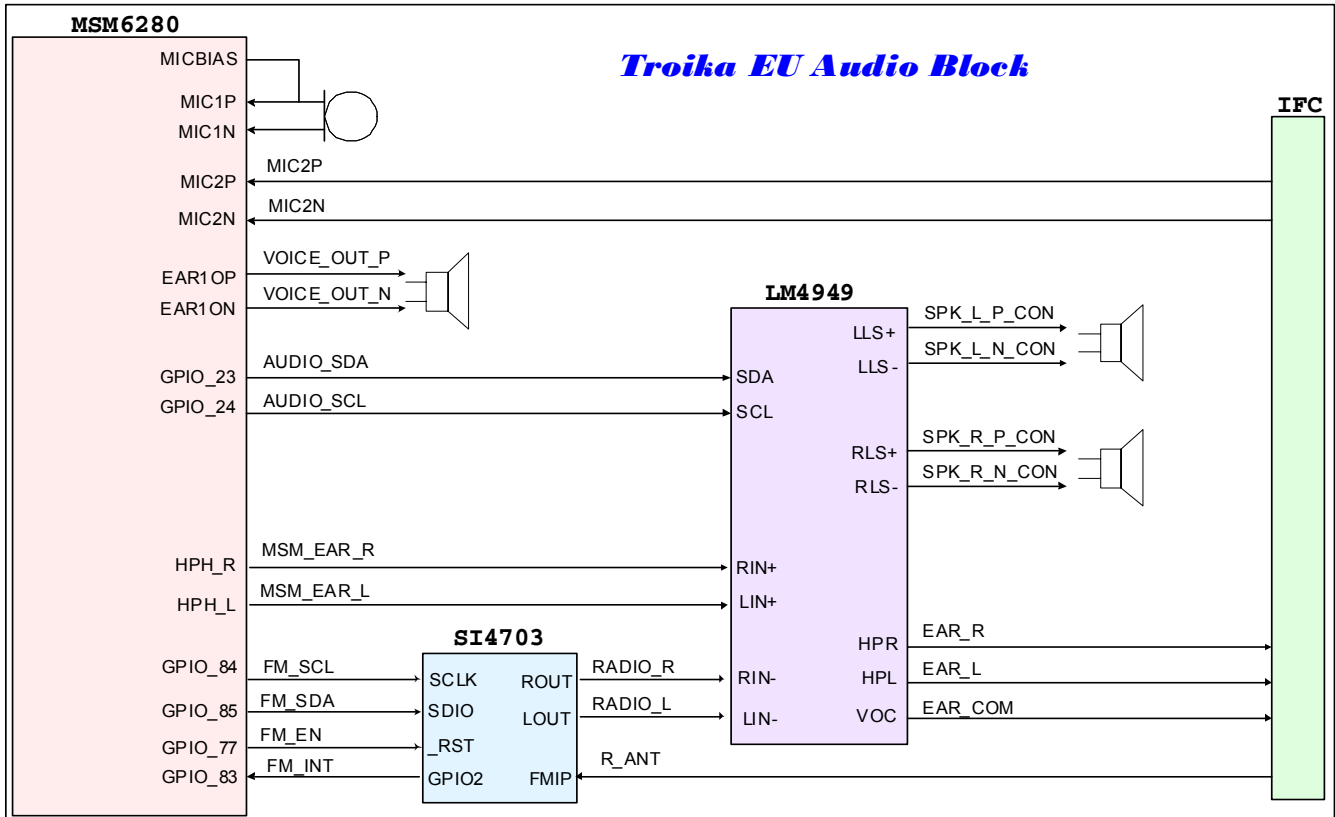
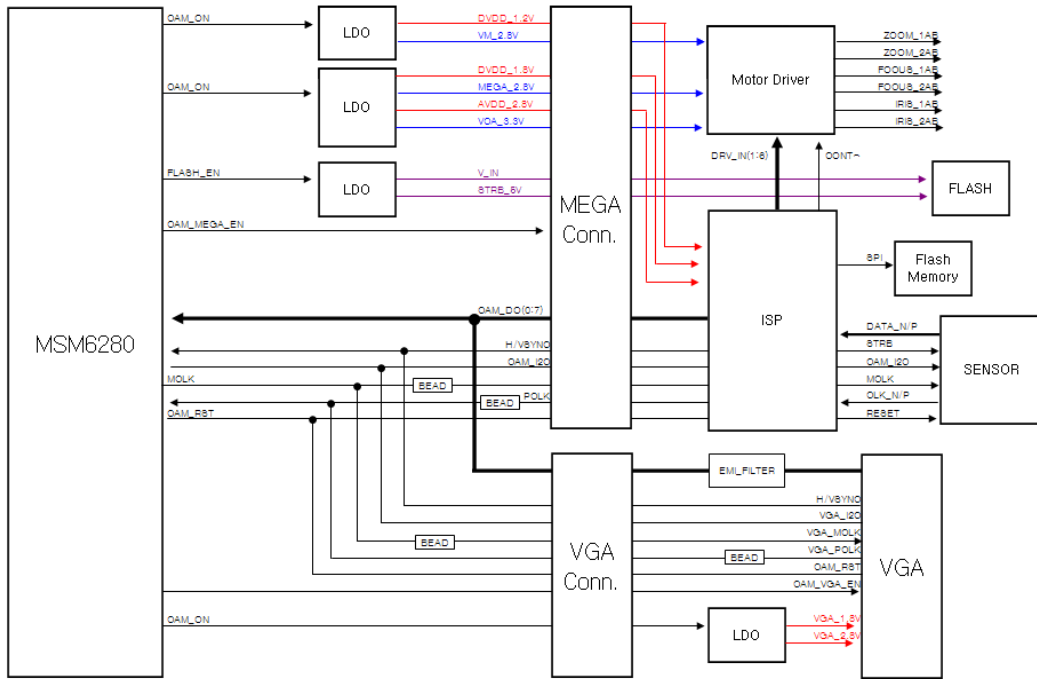
8. Block Diagrams



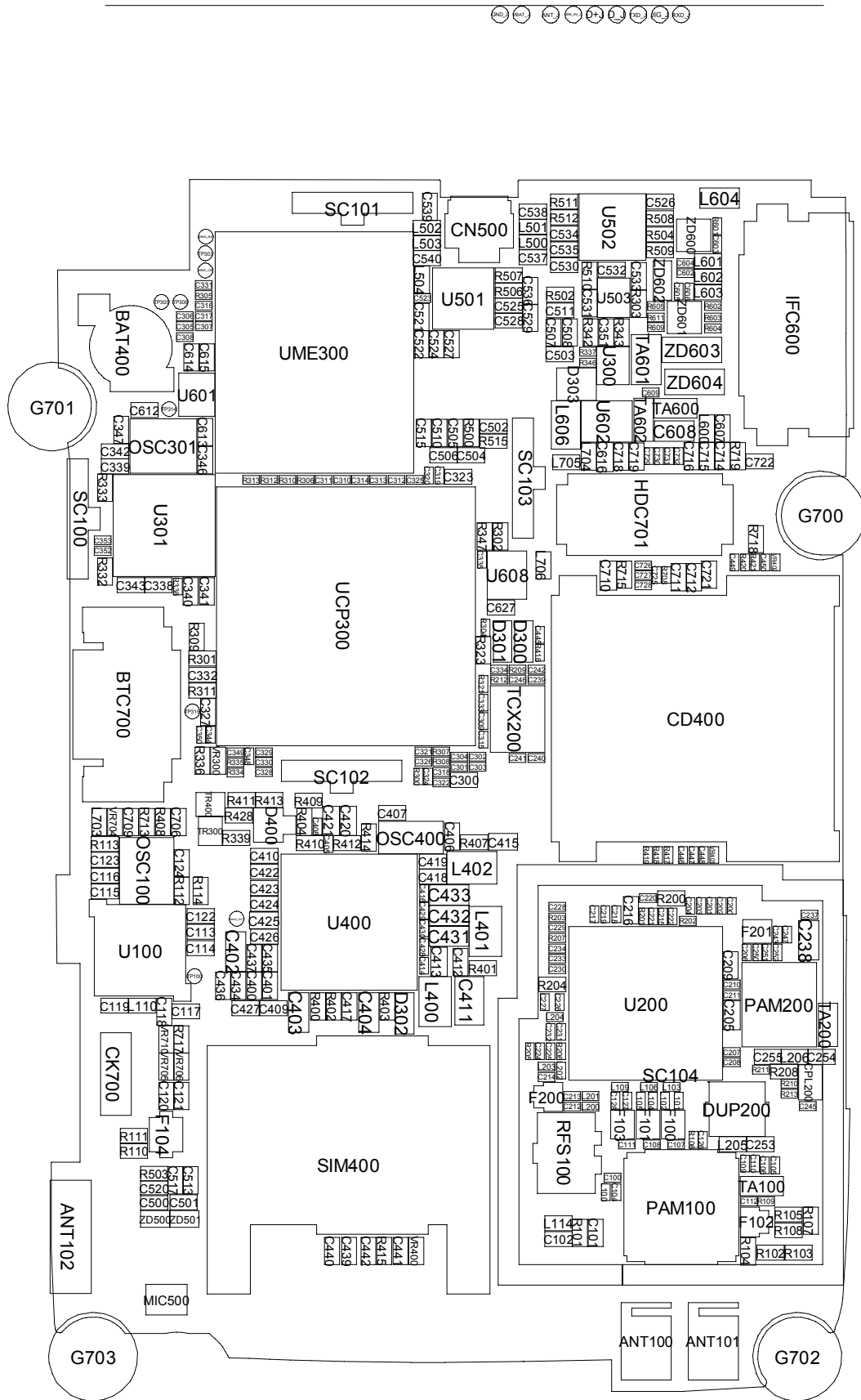
TROIKA RF BLOCK DIAGRAM

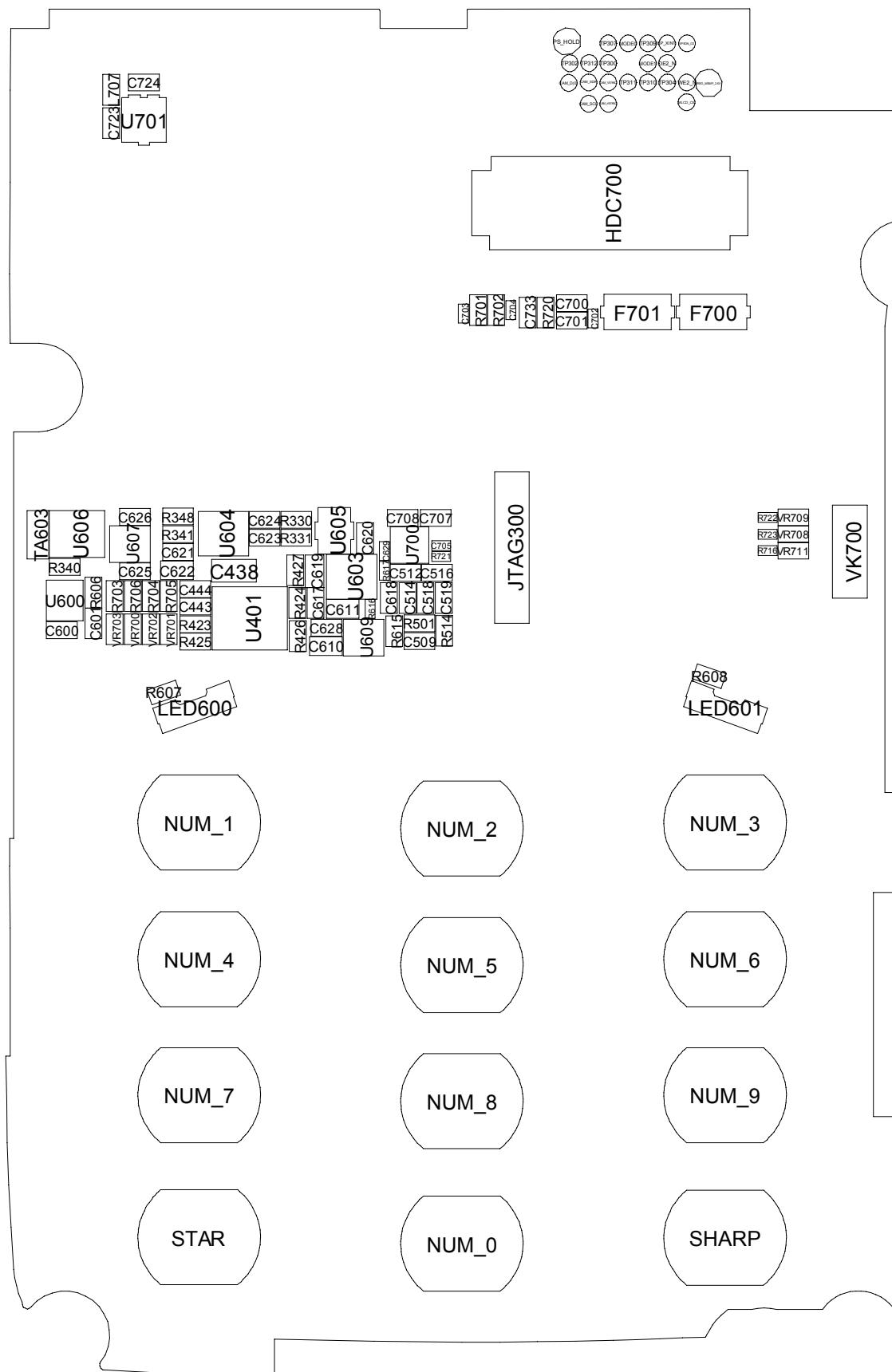


5M Camera Block Diagram



9. PCB Diagrams

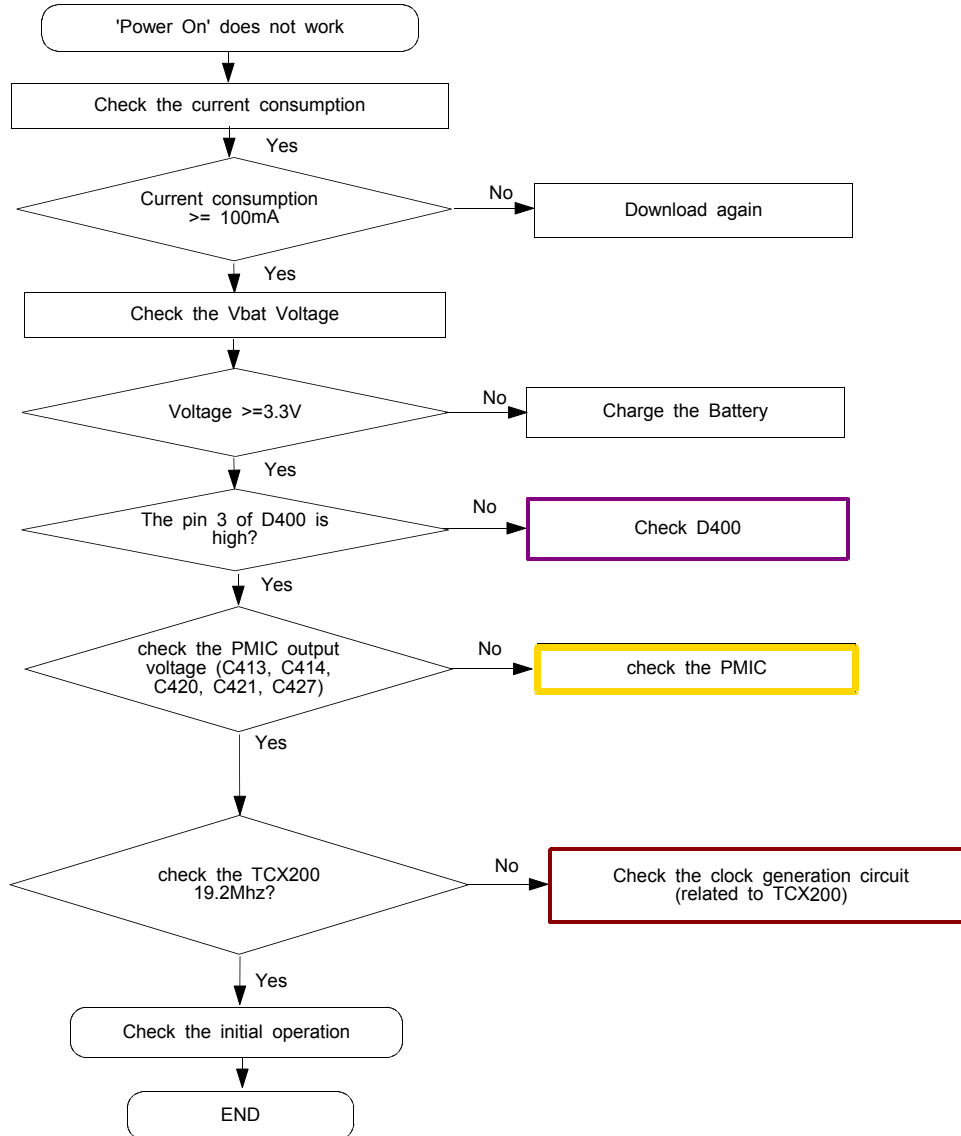


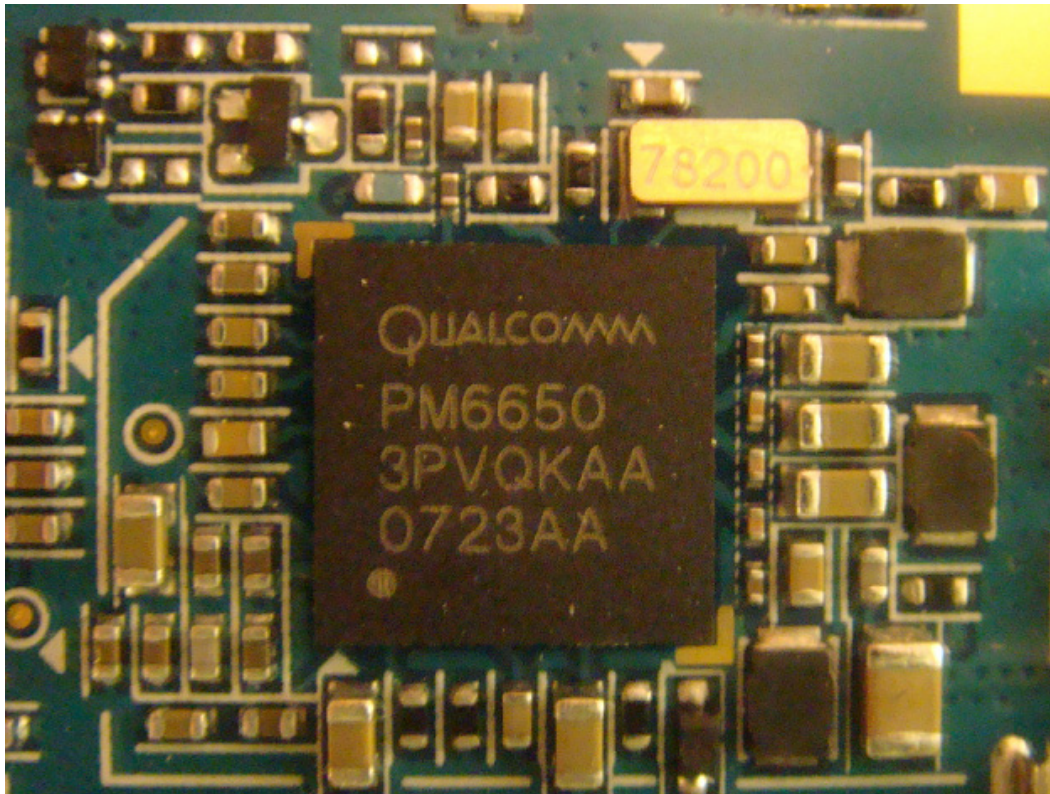
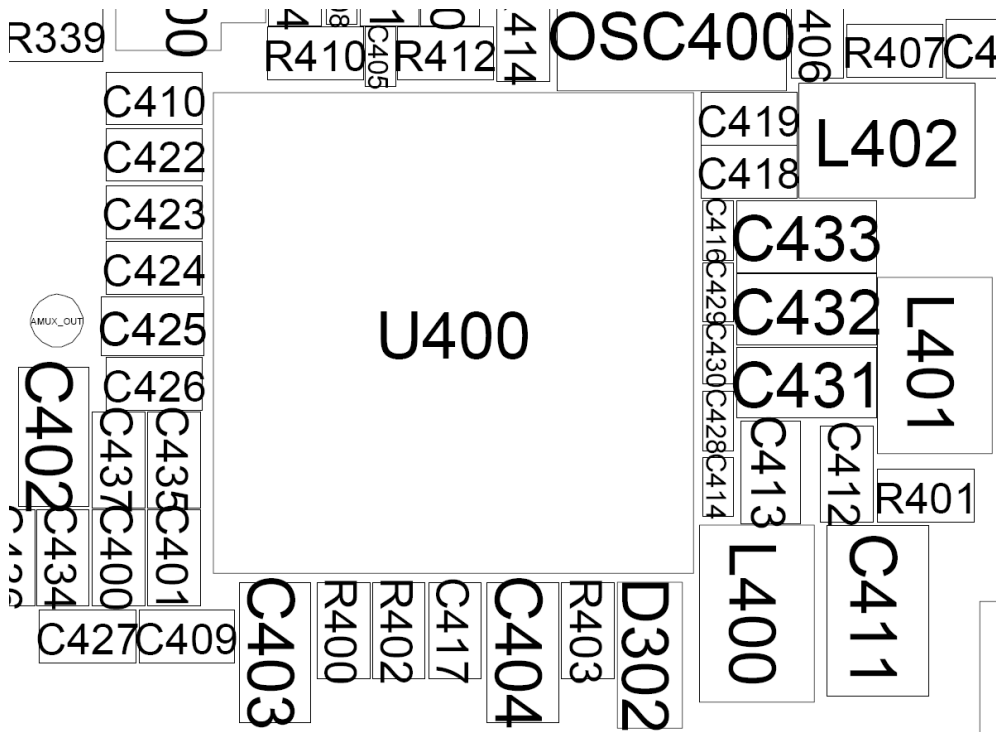


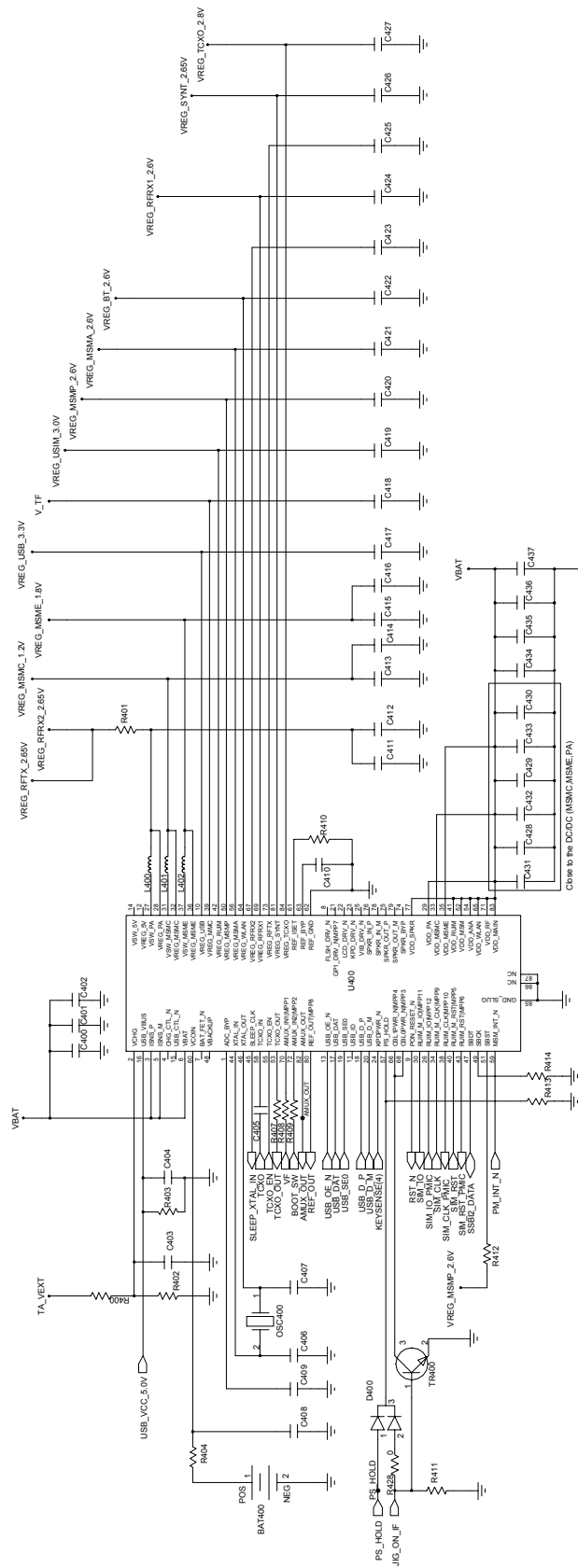
10. Flow Chart of Troubleshooting

10-1 BASEBAND

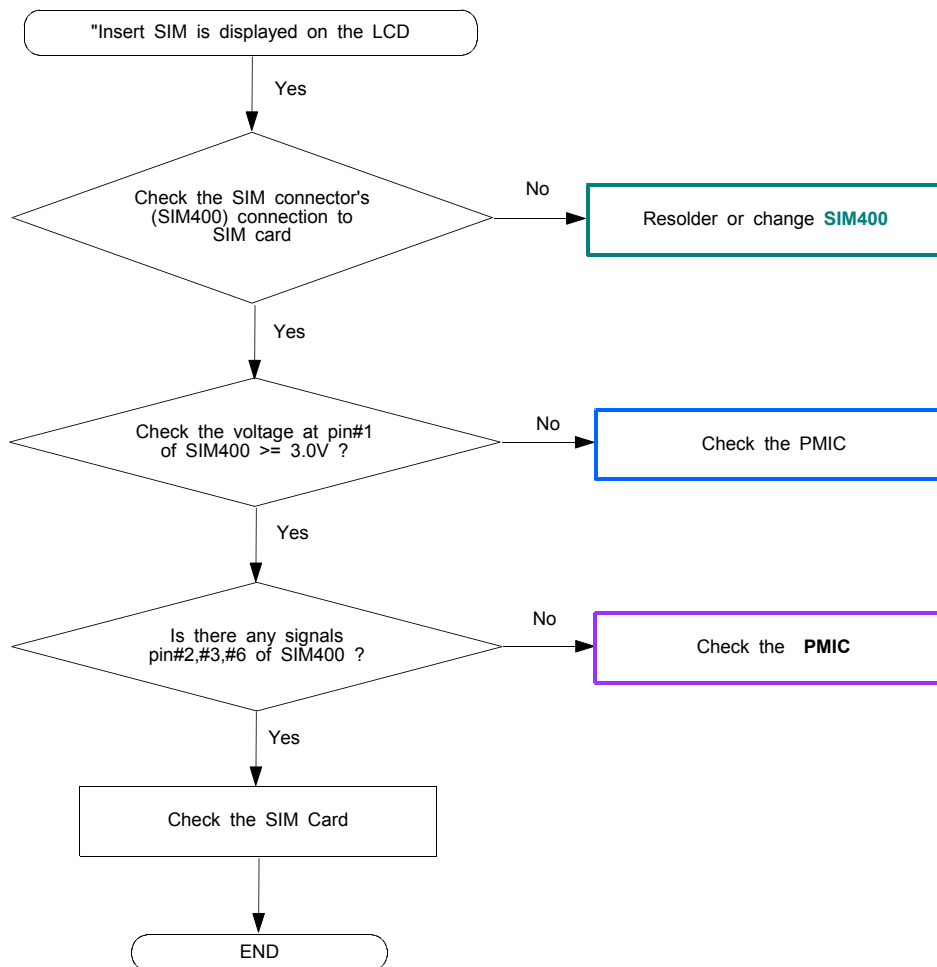
10-1-1. Power ON

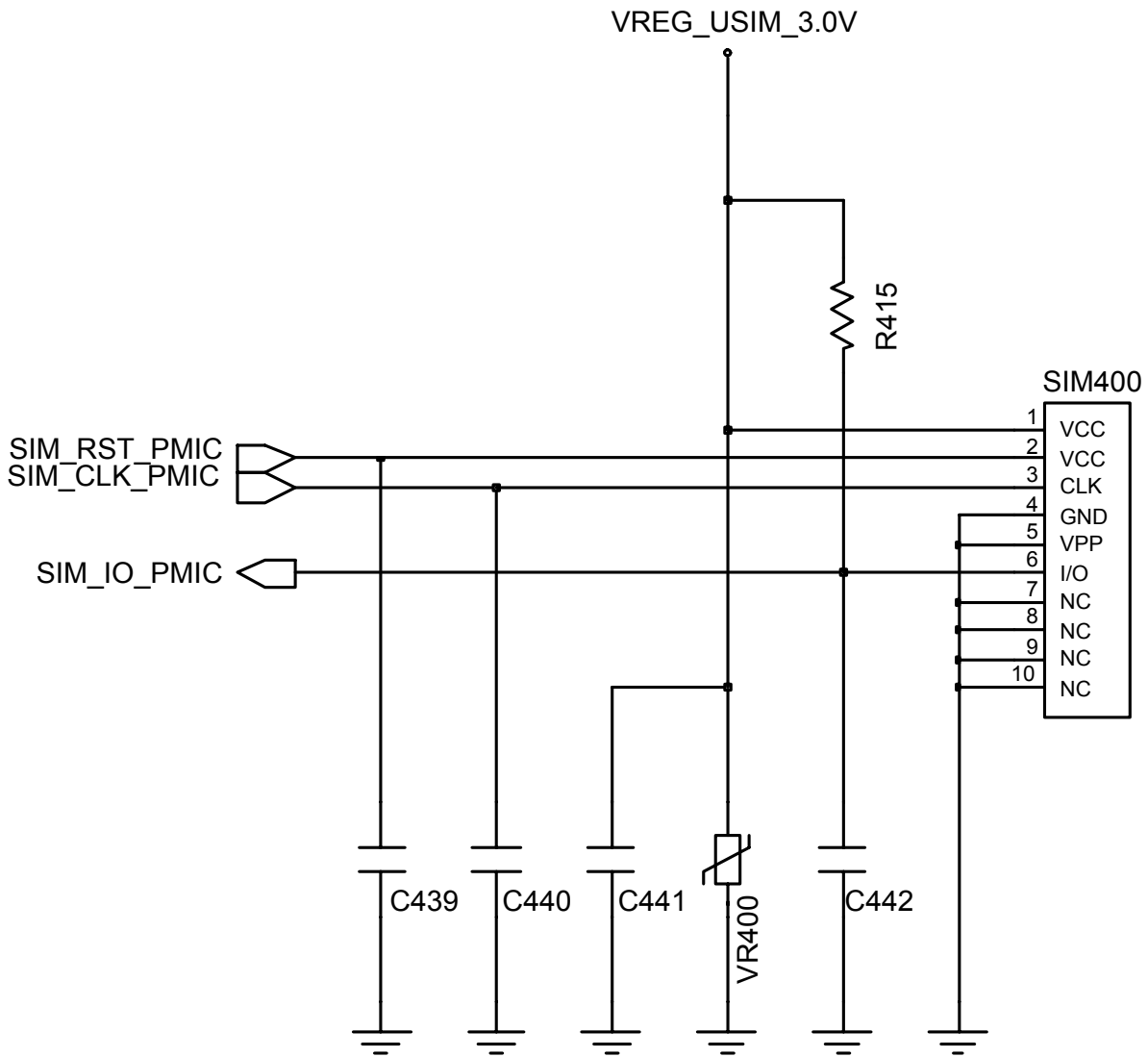




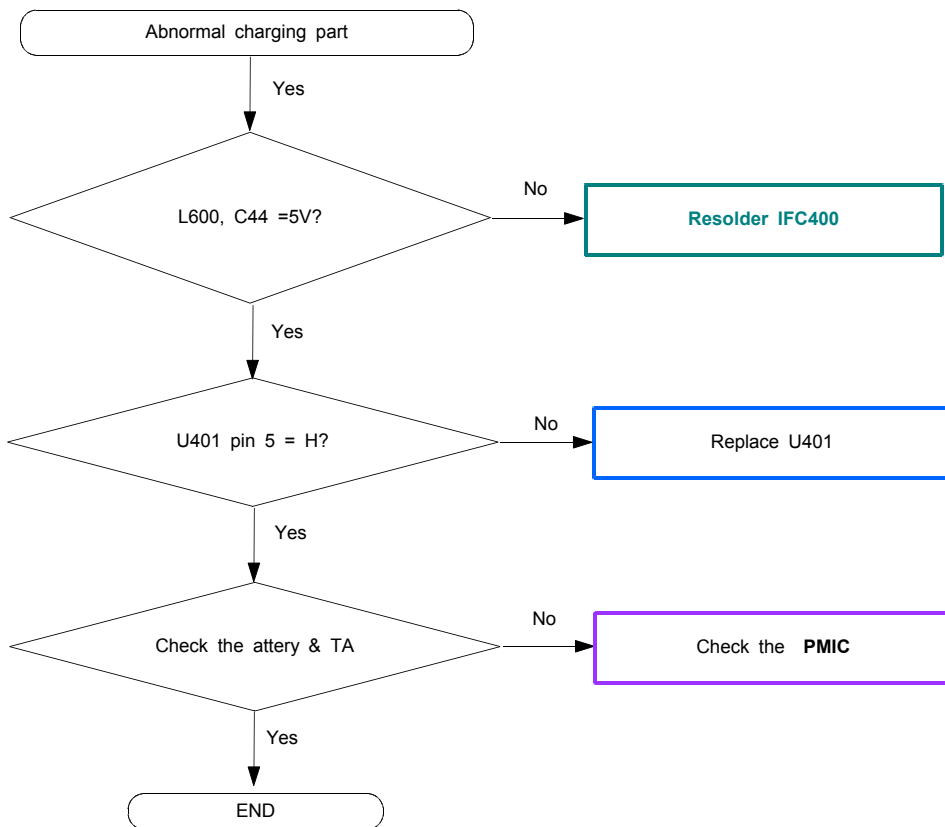


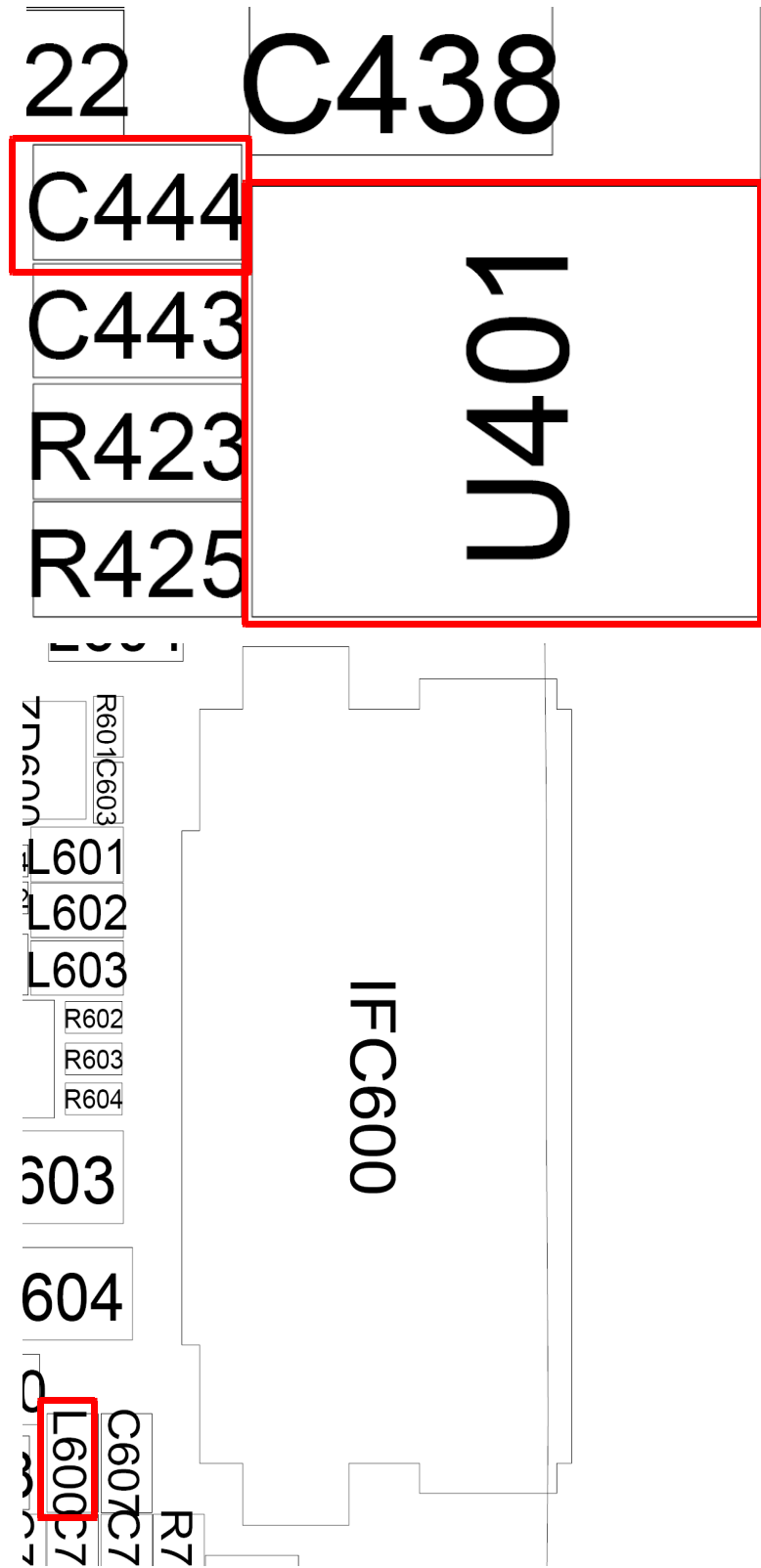
10-1-2. Sim Part



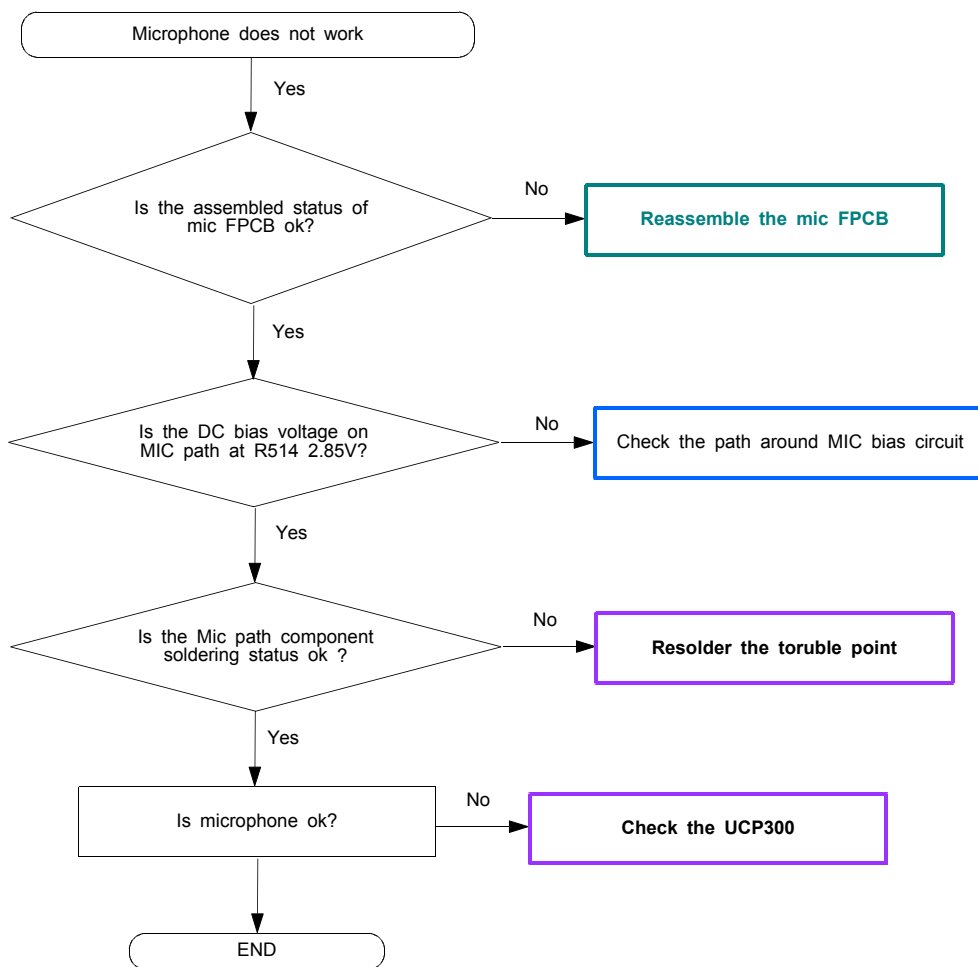


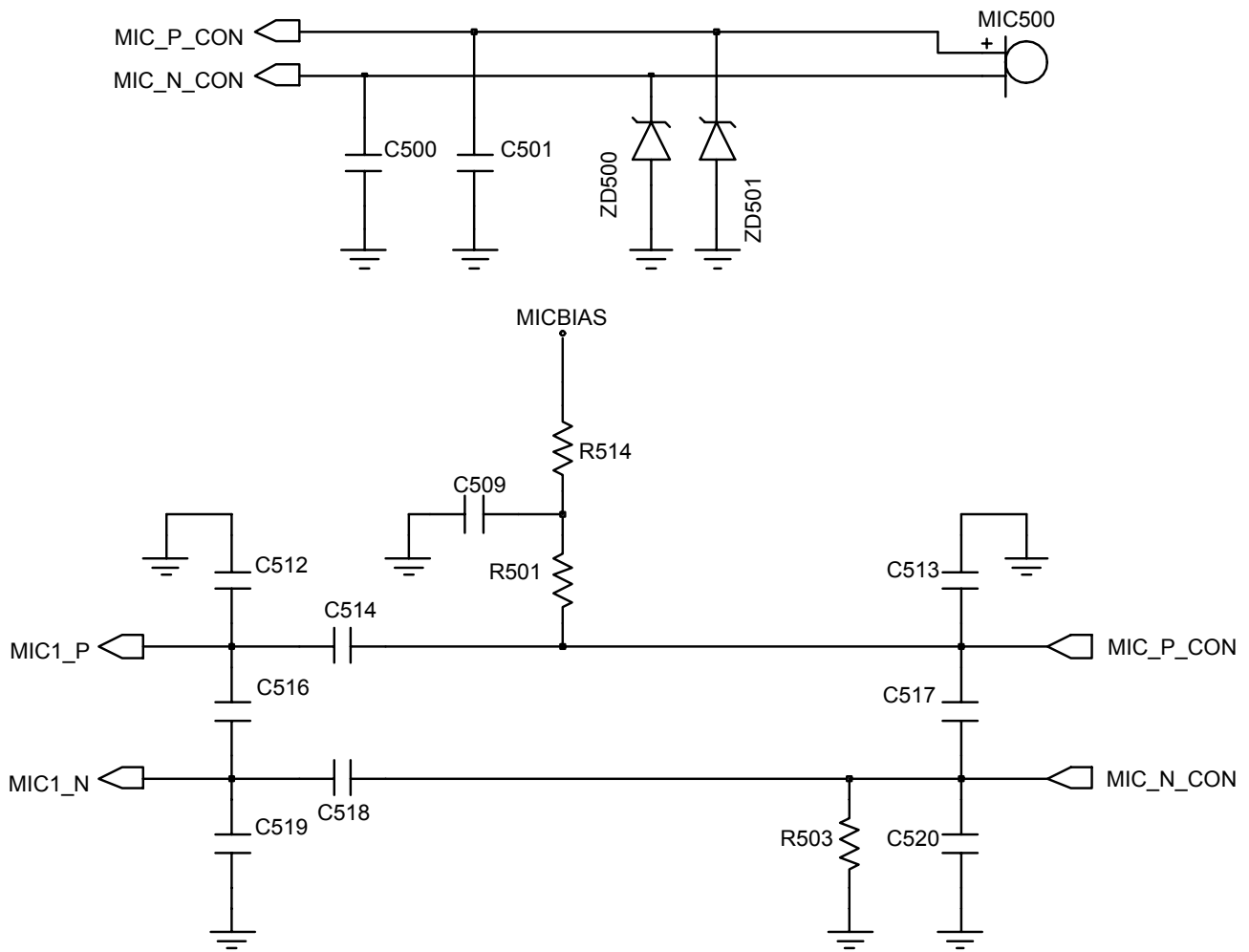
10-1-3. Charging Part





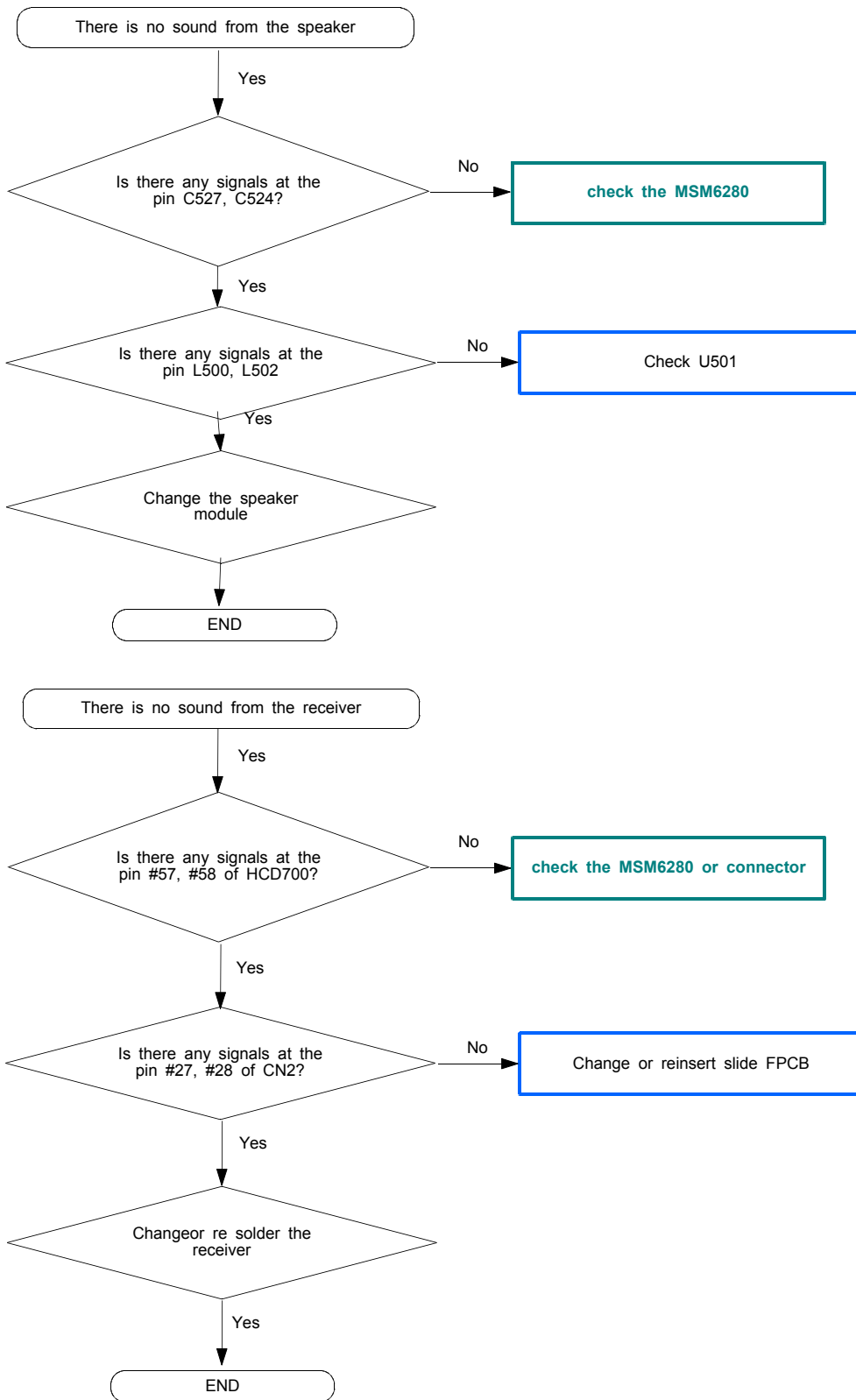
10-1-4. Microphone Part

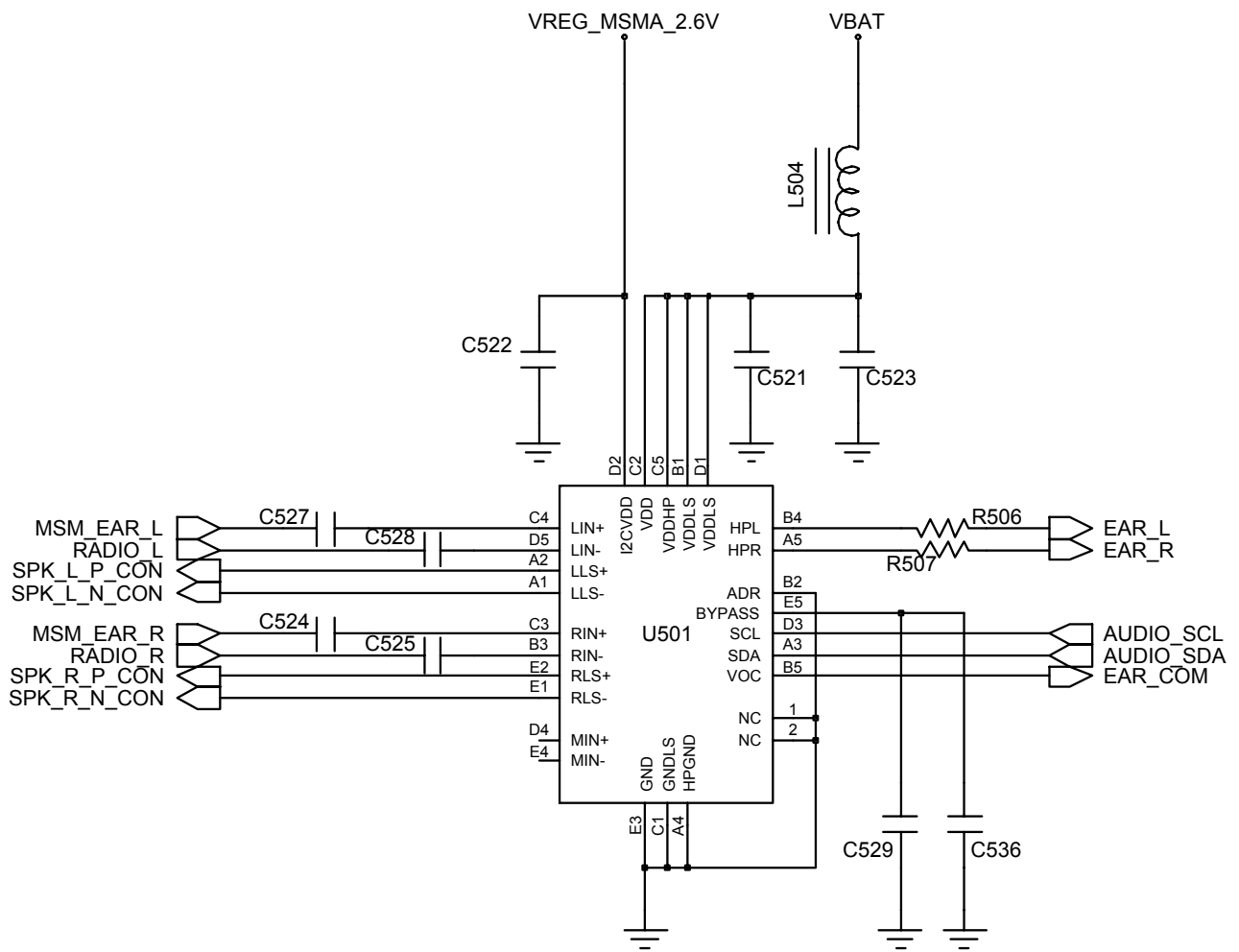
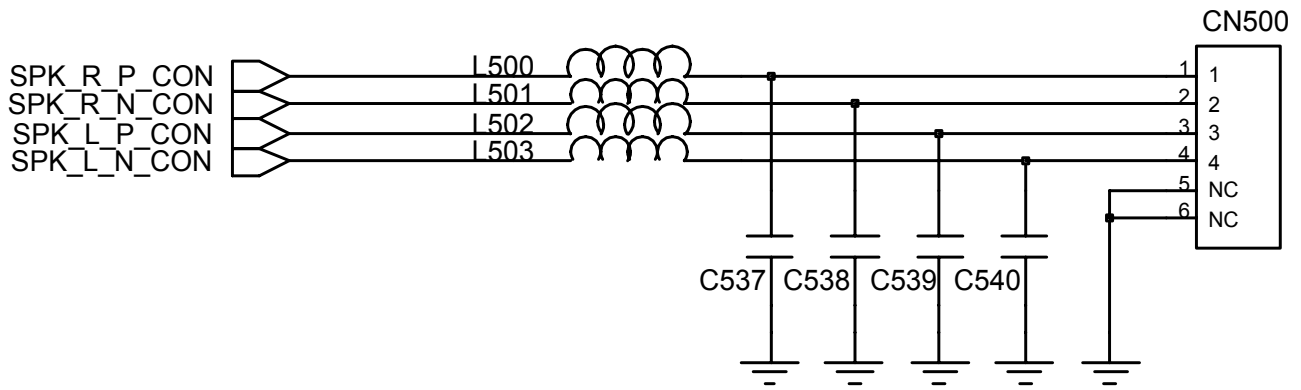




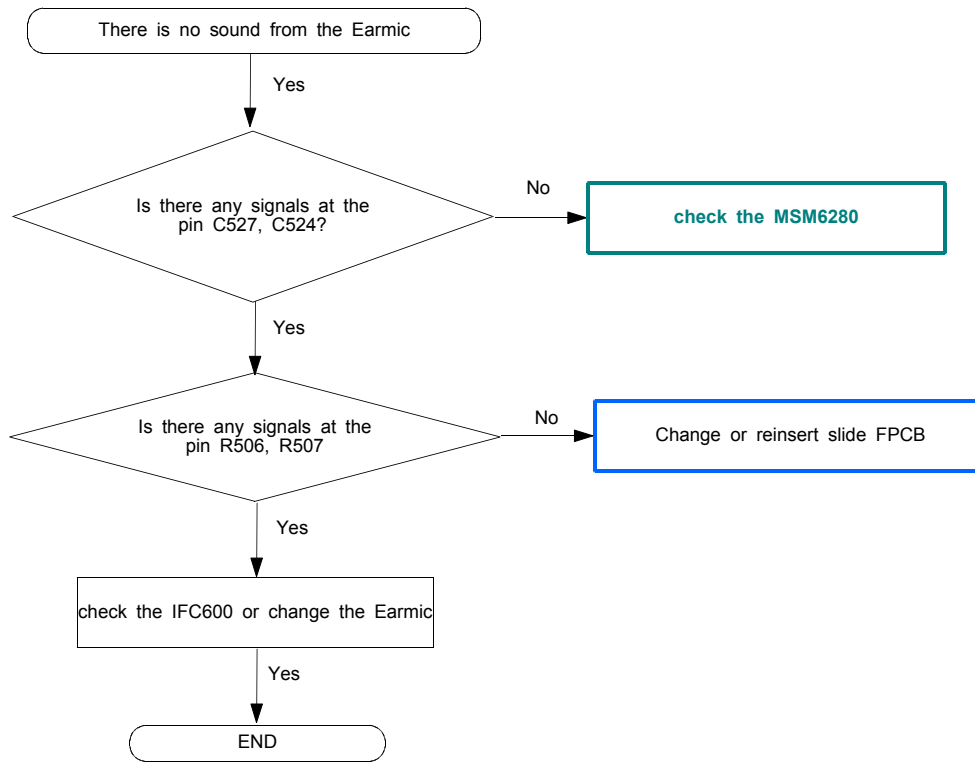


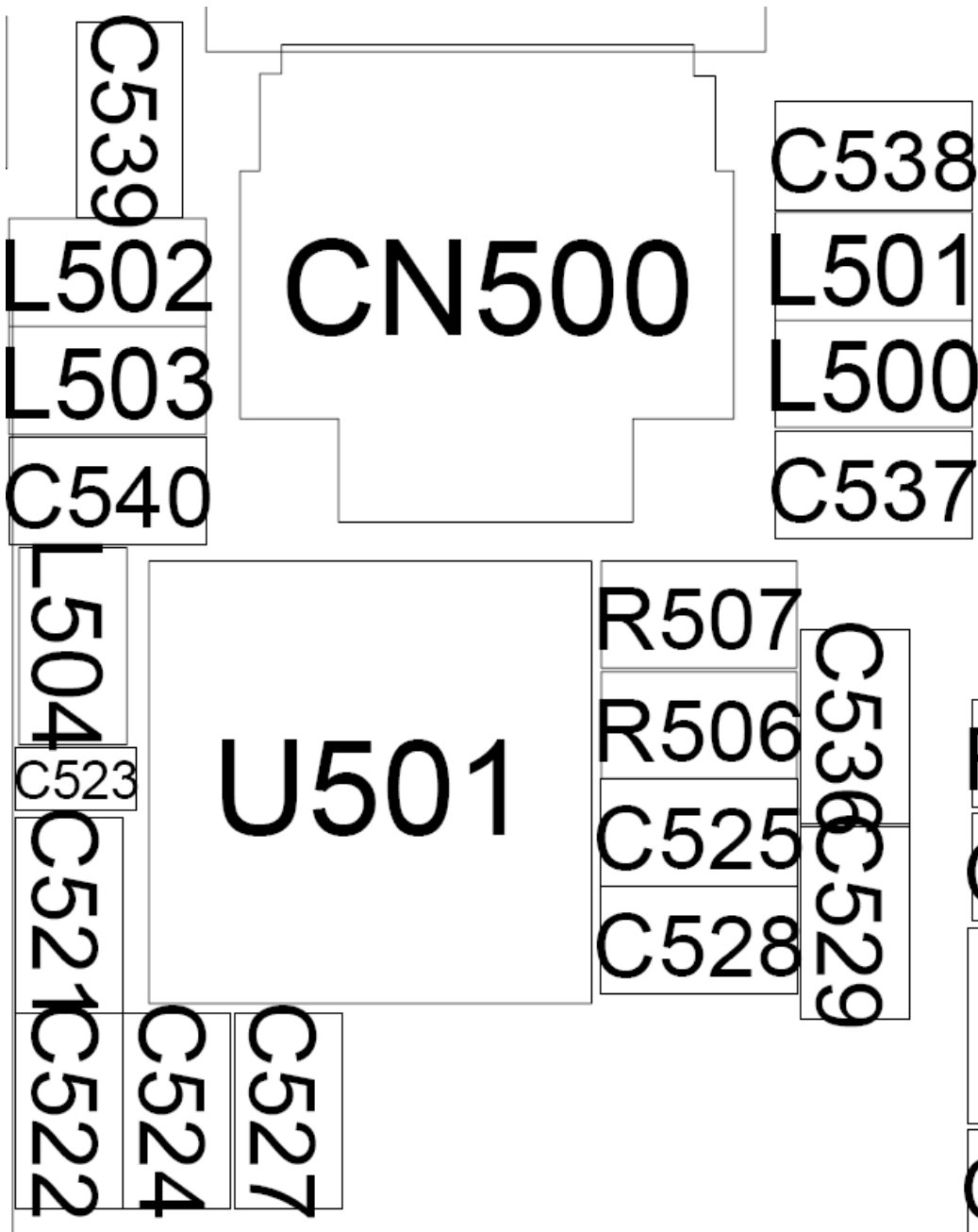
10-1-5. Speaker & Receiver part



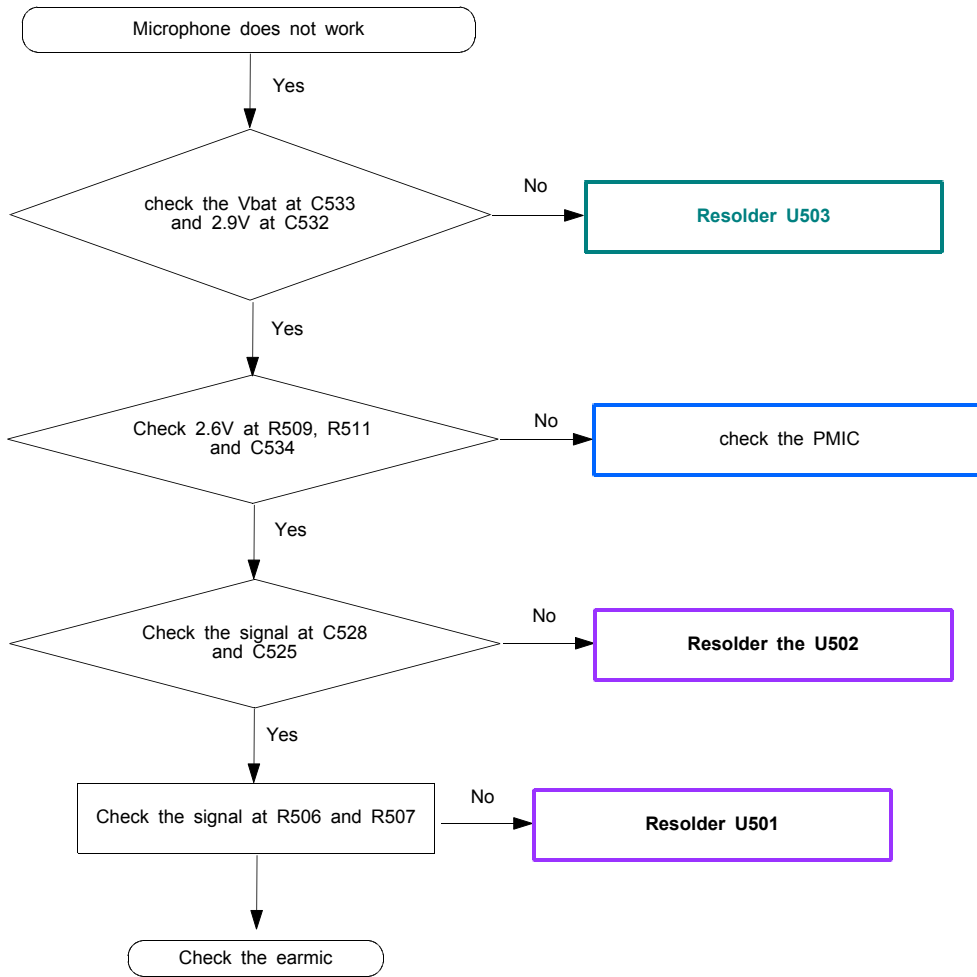


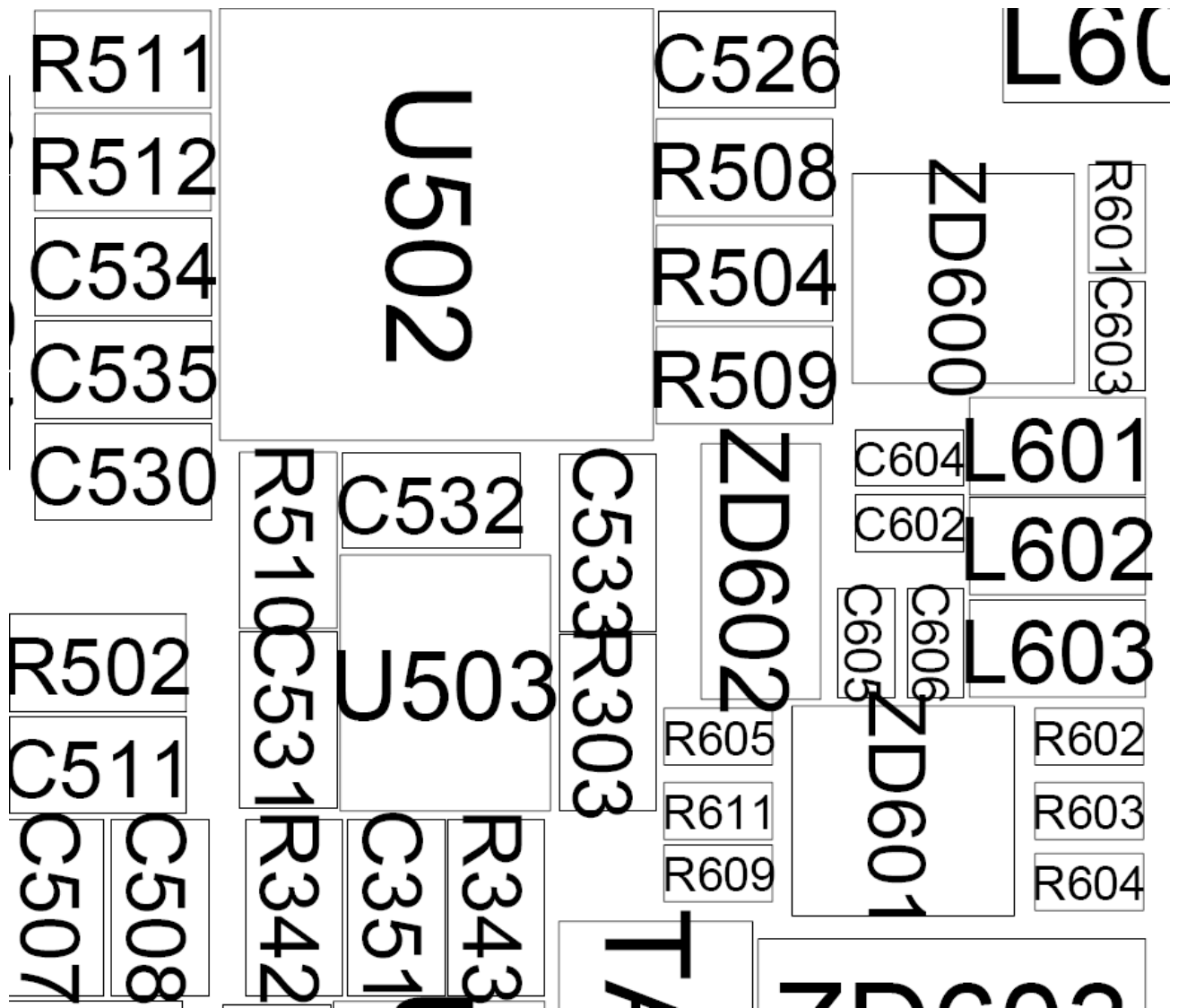
10-1-5. Ear mic Part



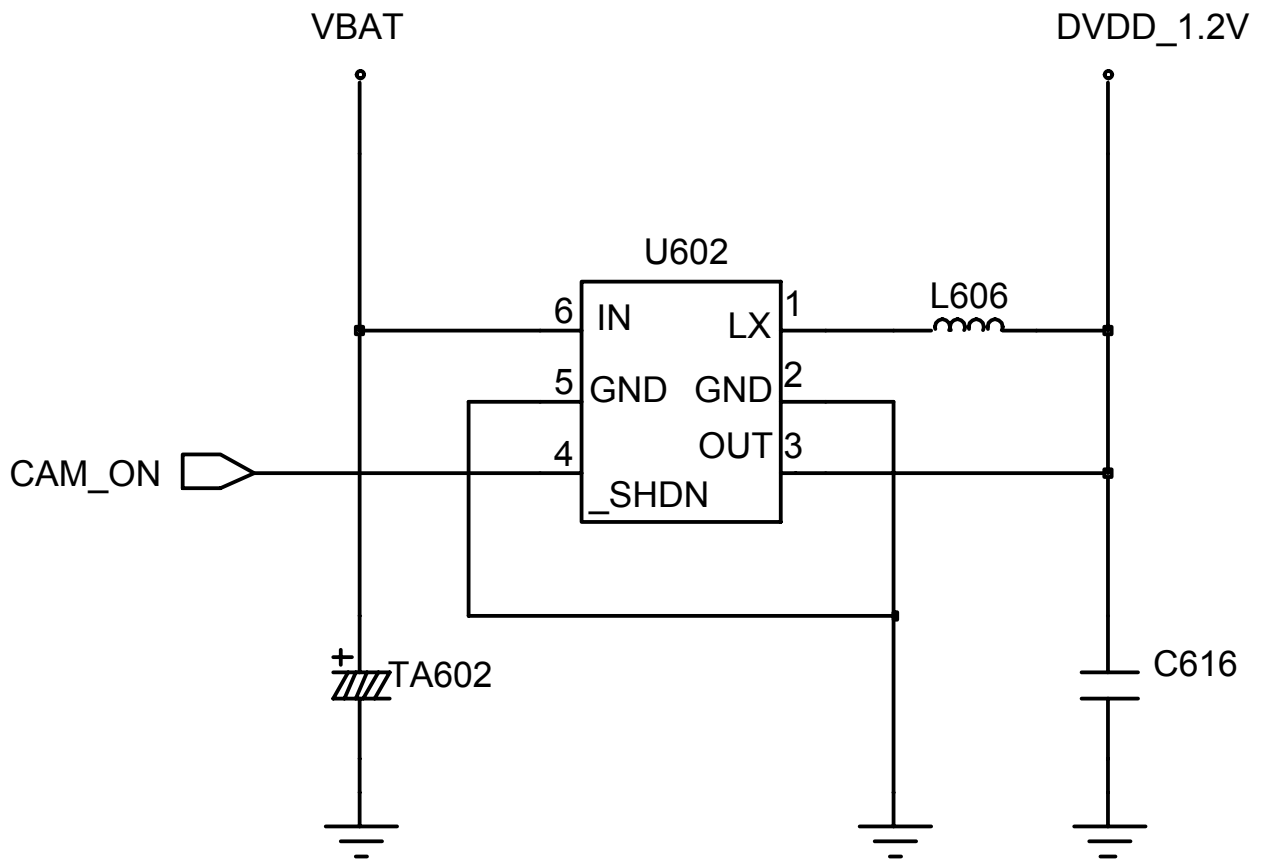
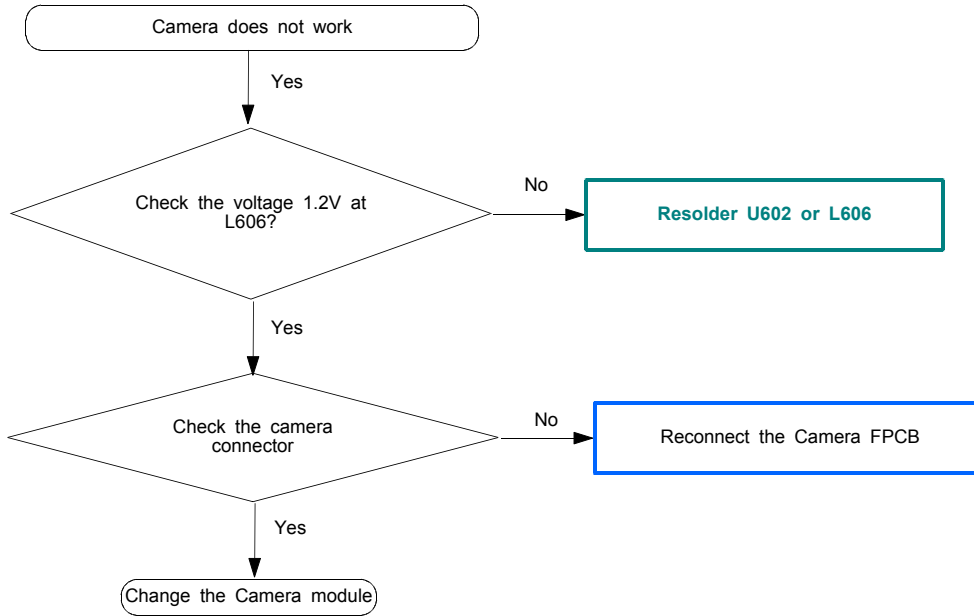


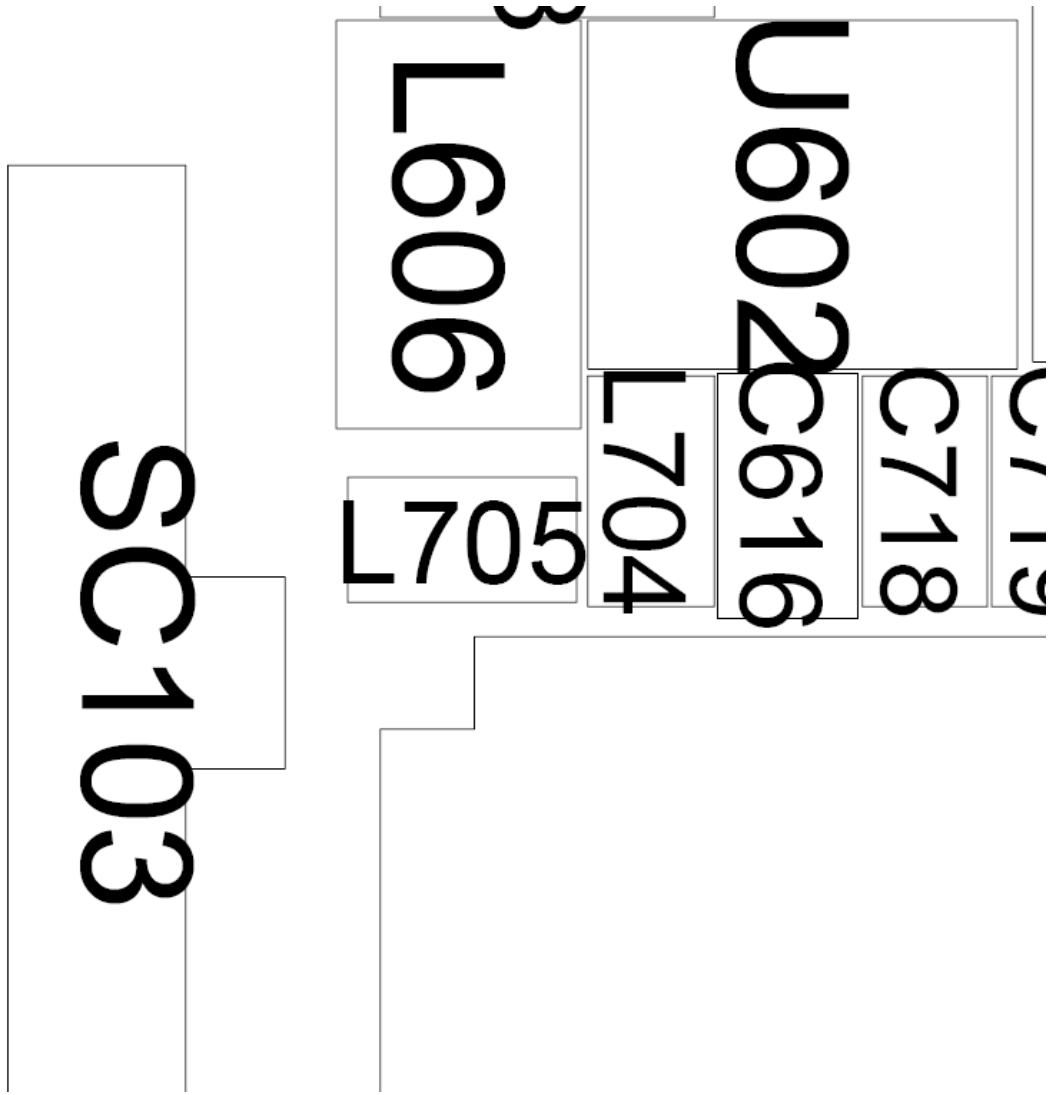
10-1-7. FM Radio Part



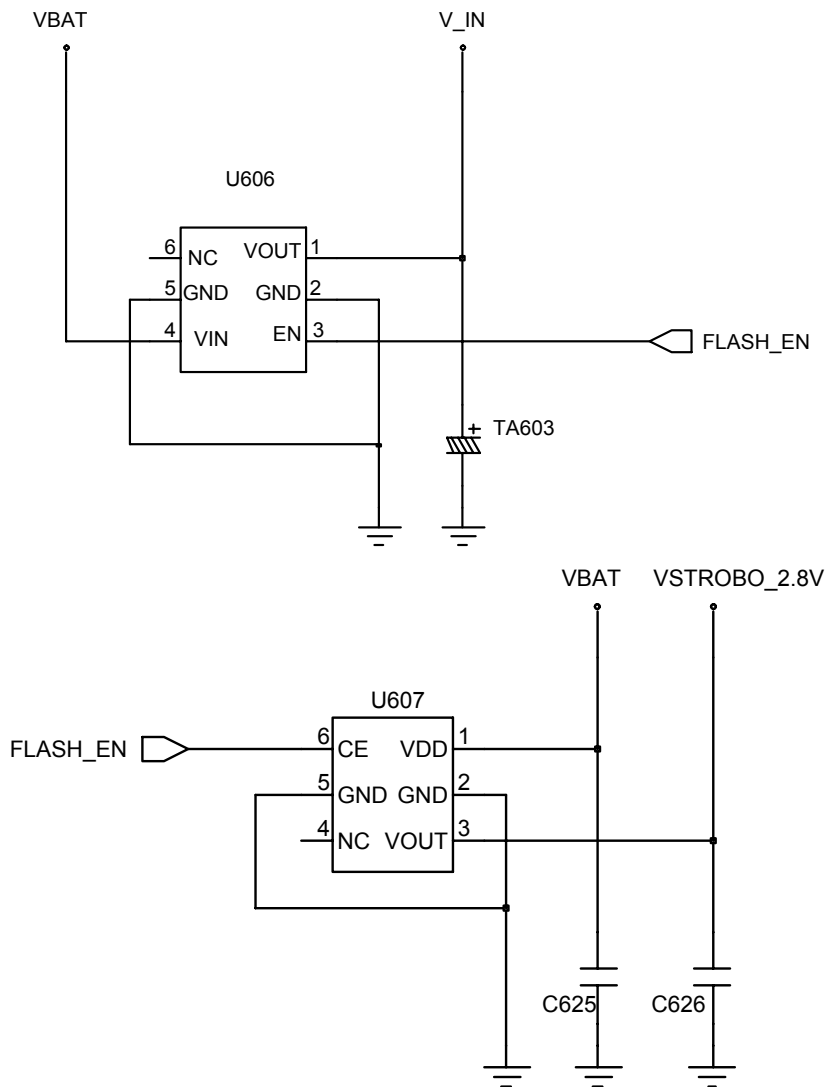
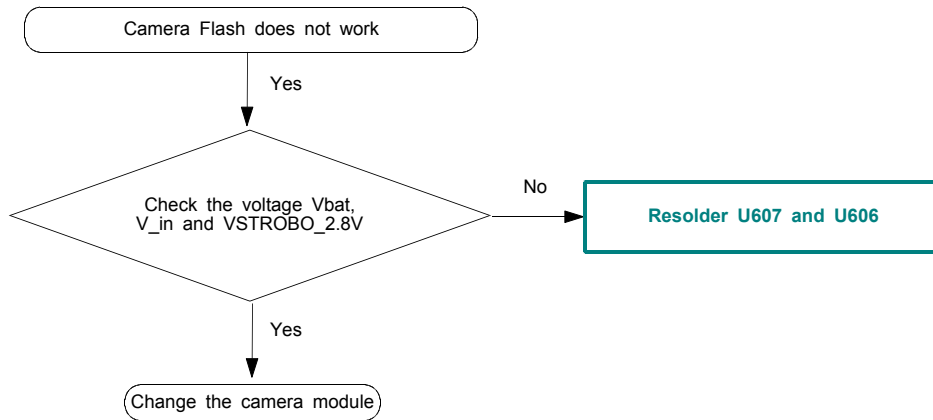


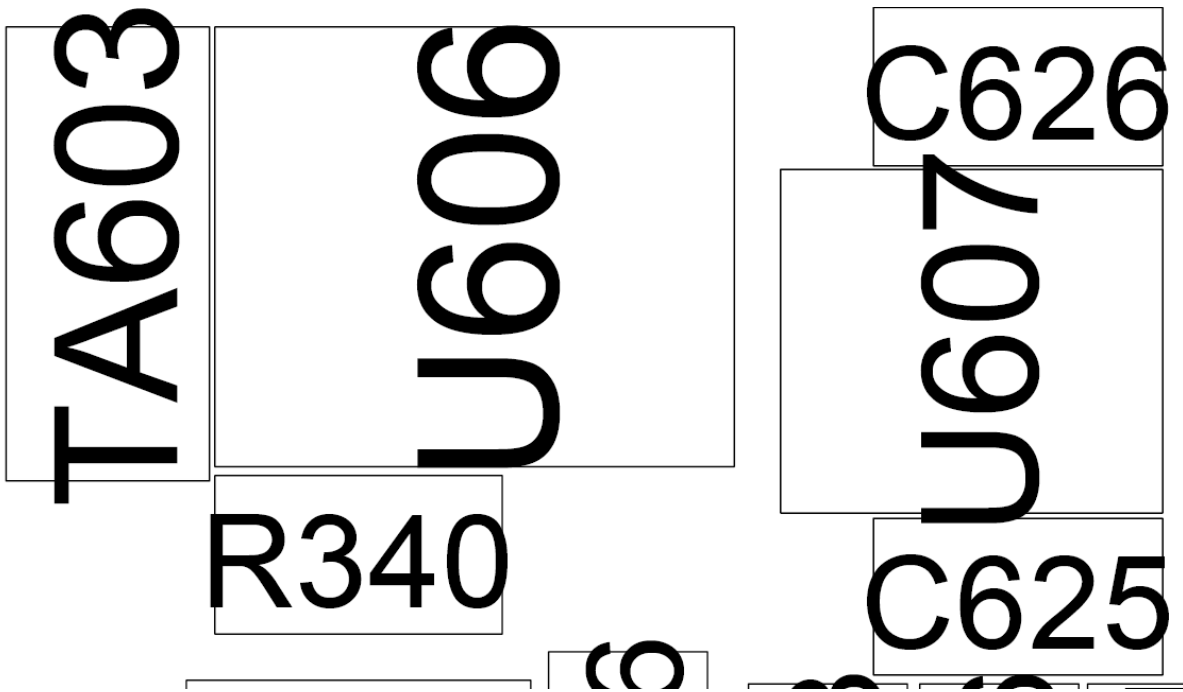
10-1-8-1. Camera



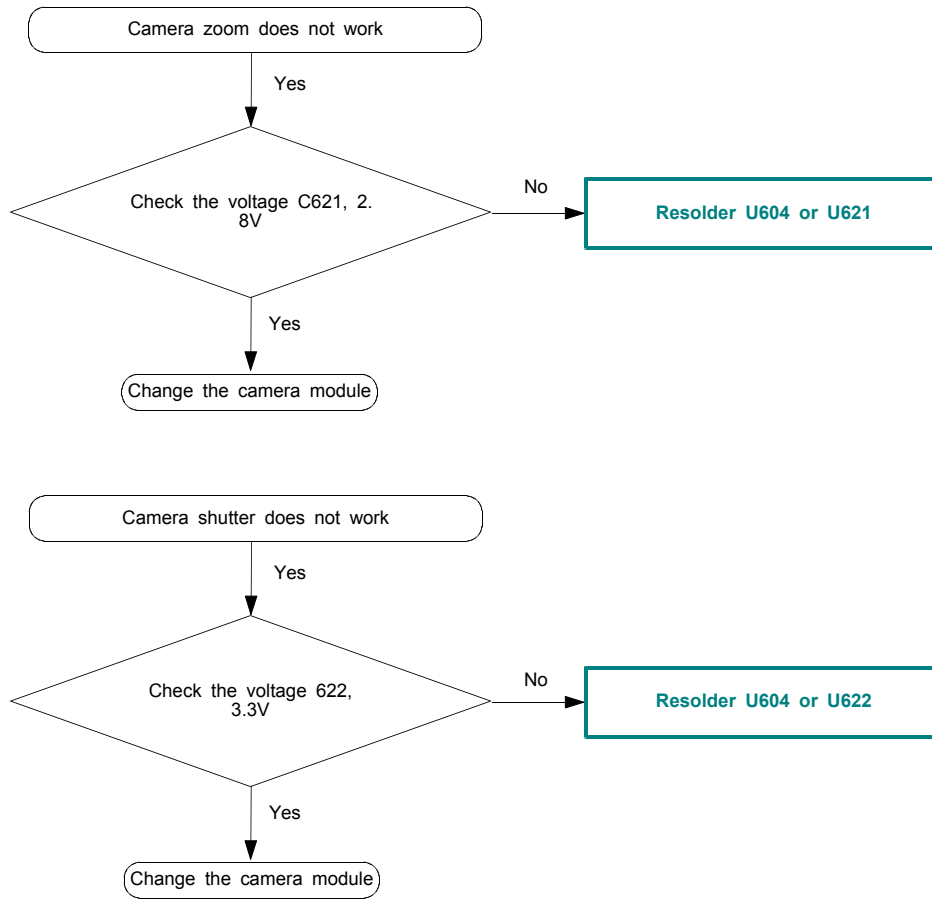


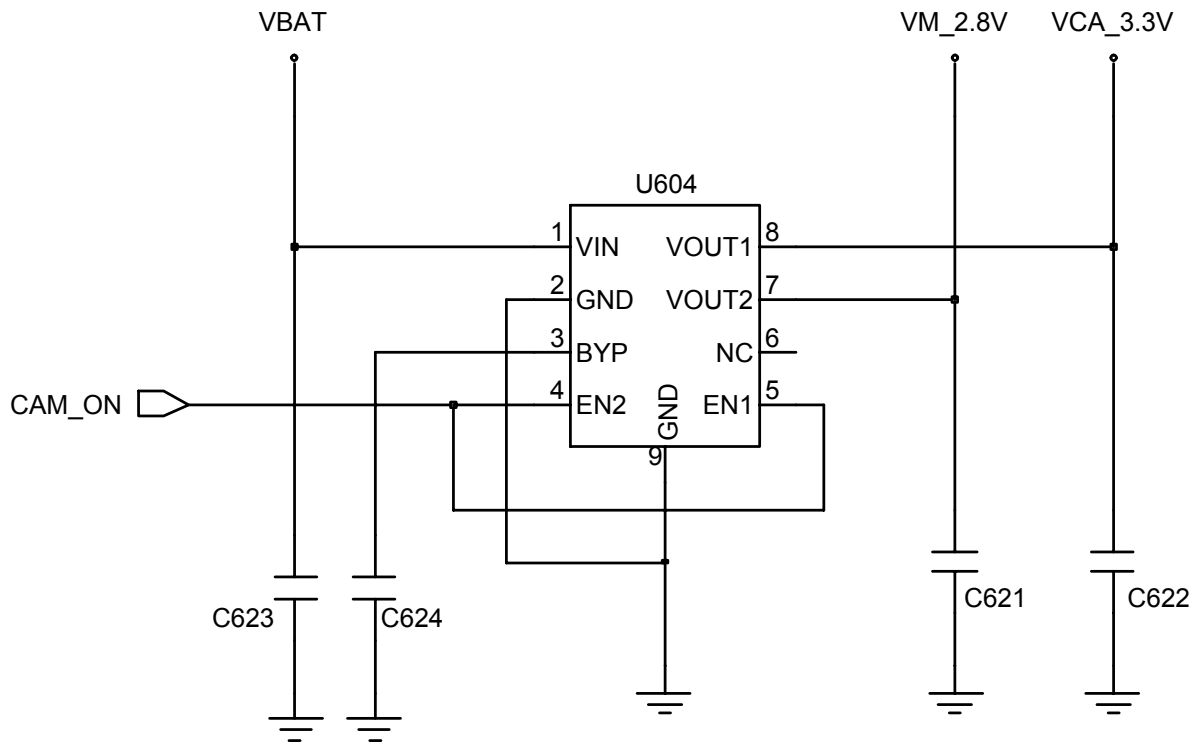
10-1-8-2. Camera Flash





10-1-8-2. Camoom & Shutter





R348

R341

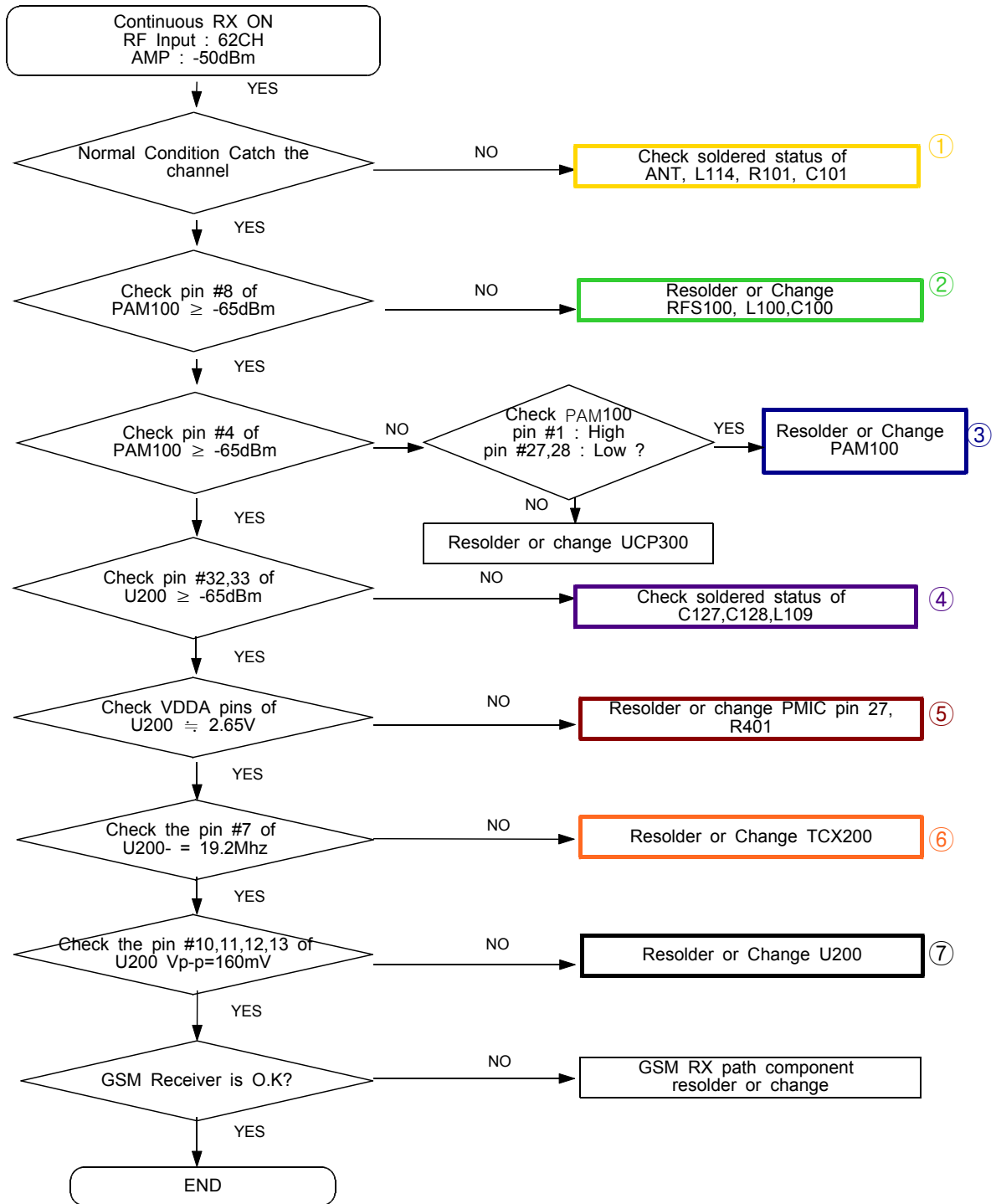
C621

C622

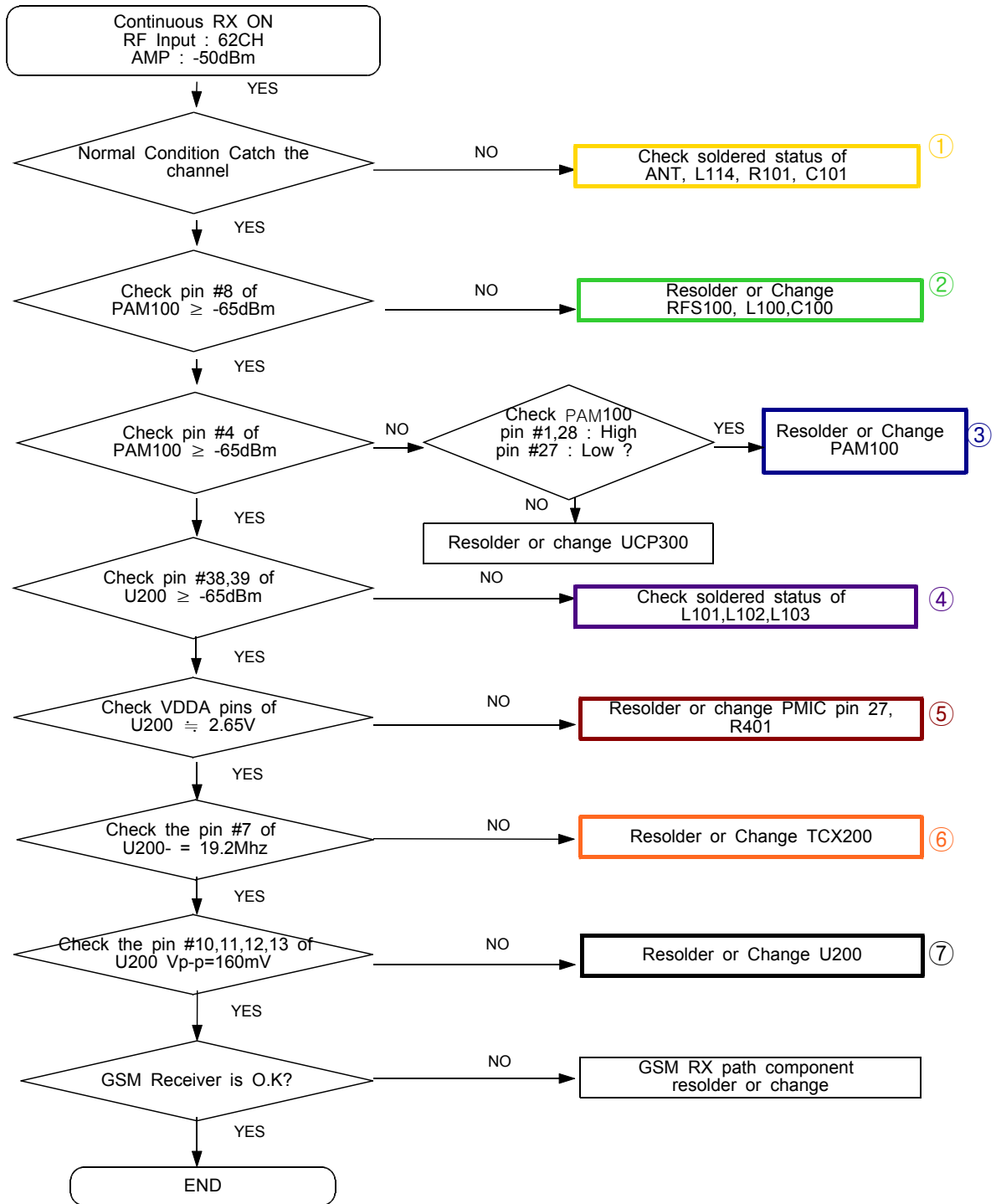
U604

C438

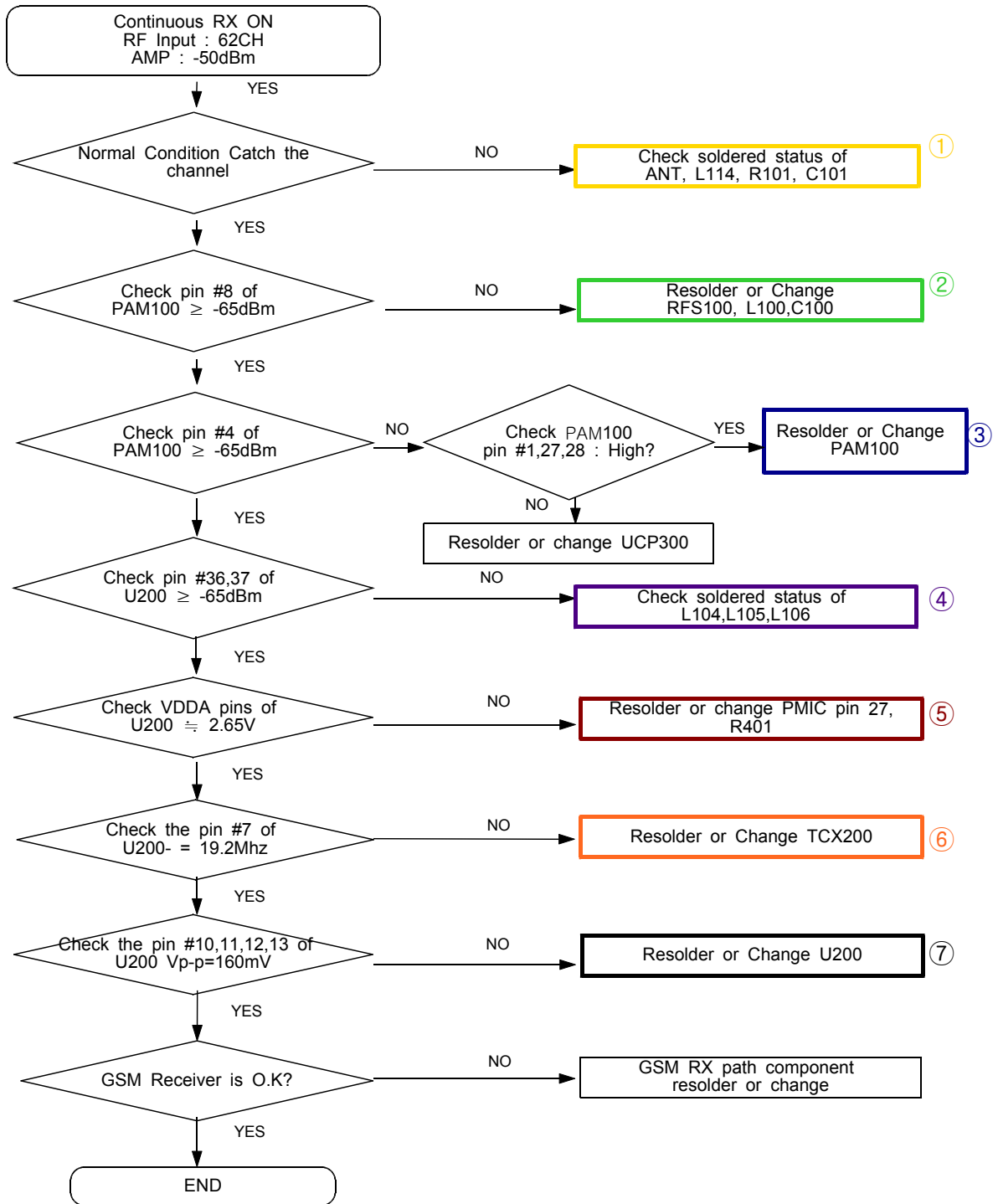
10-2-1. DCS Rx



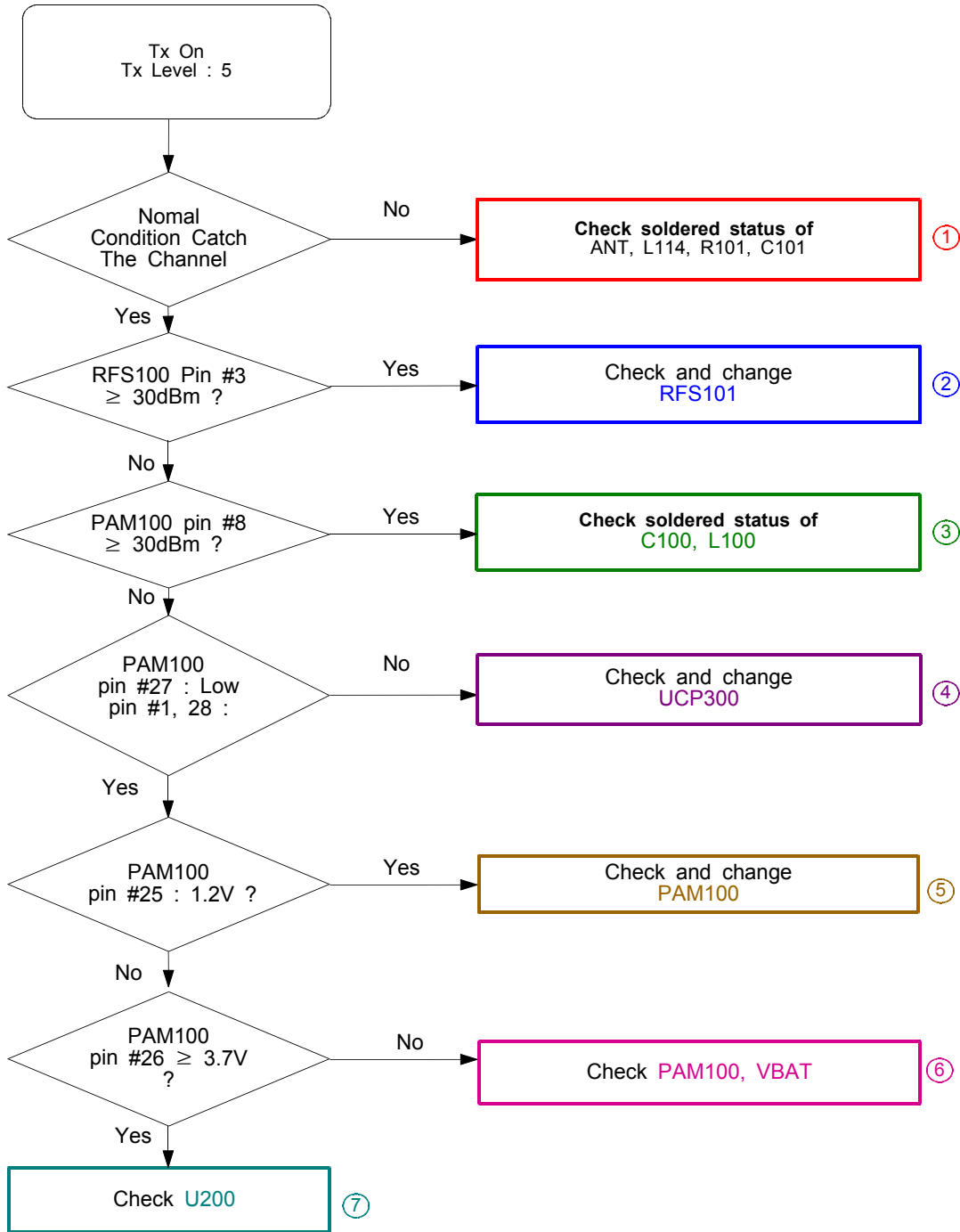
10-2-2. DCS Rx



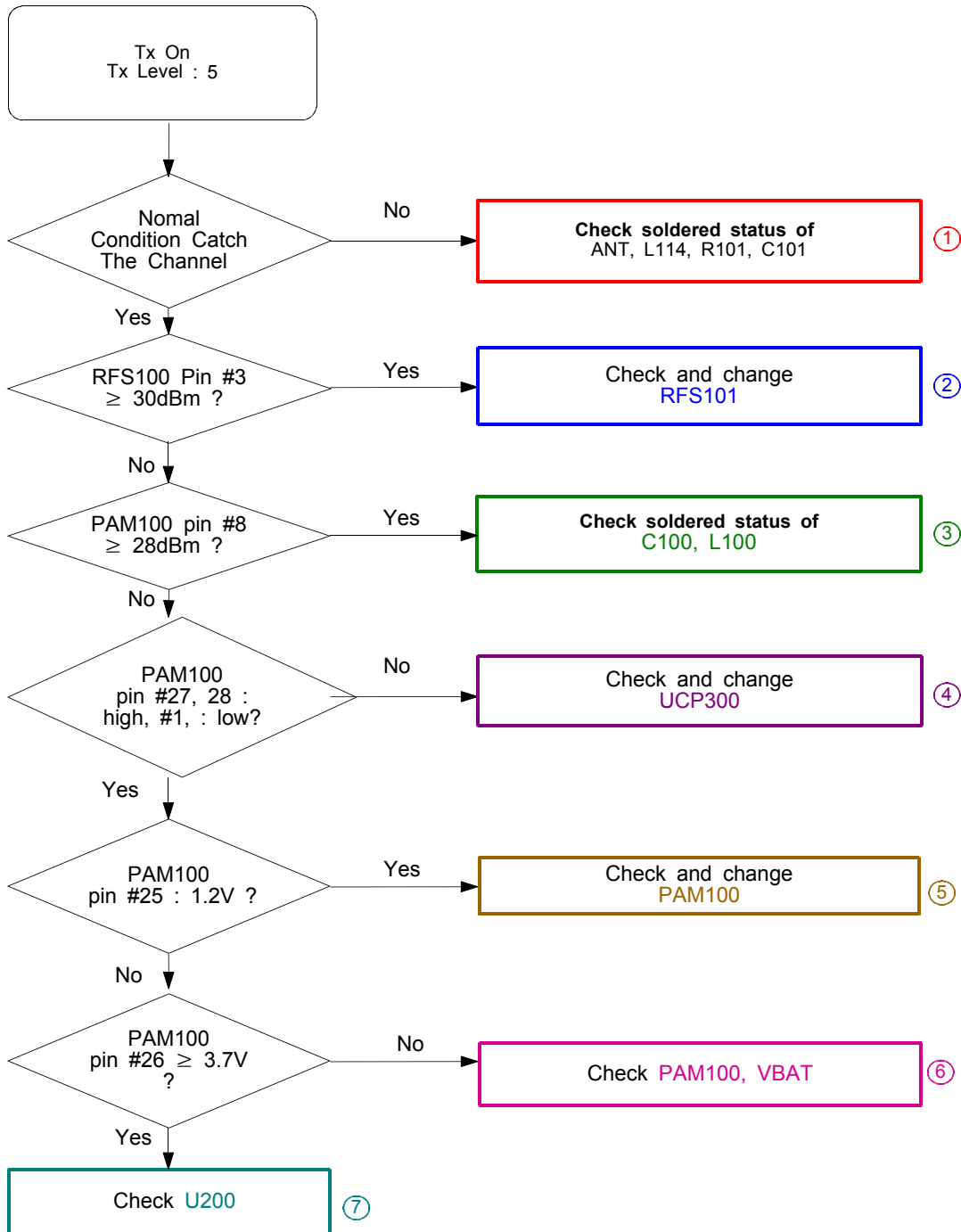
10-2-3. PCS Rx



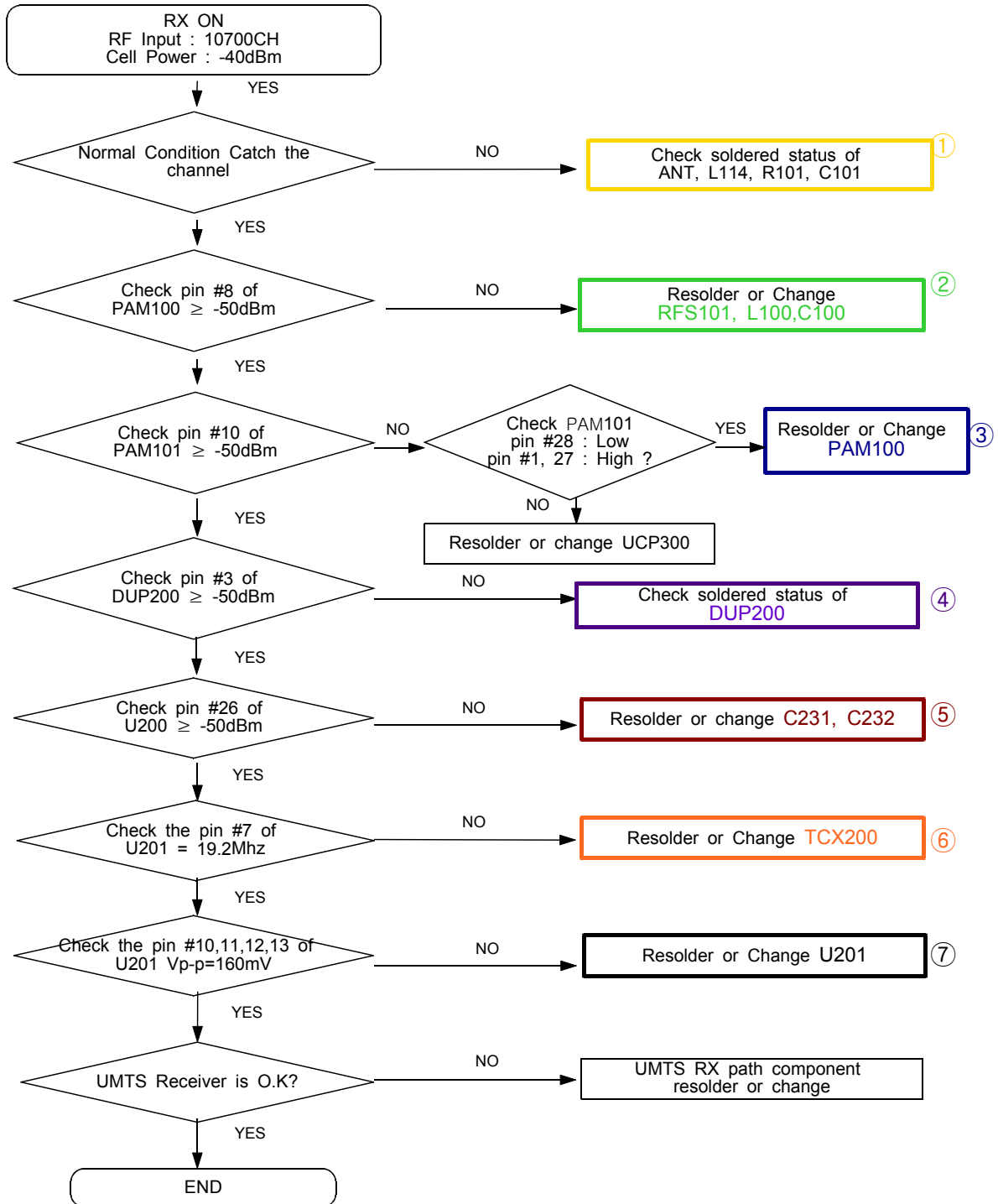
10-2-4. GSM Tx



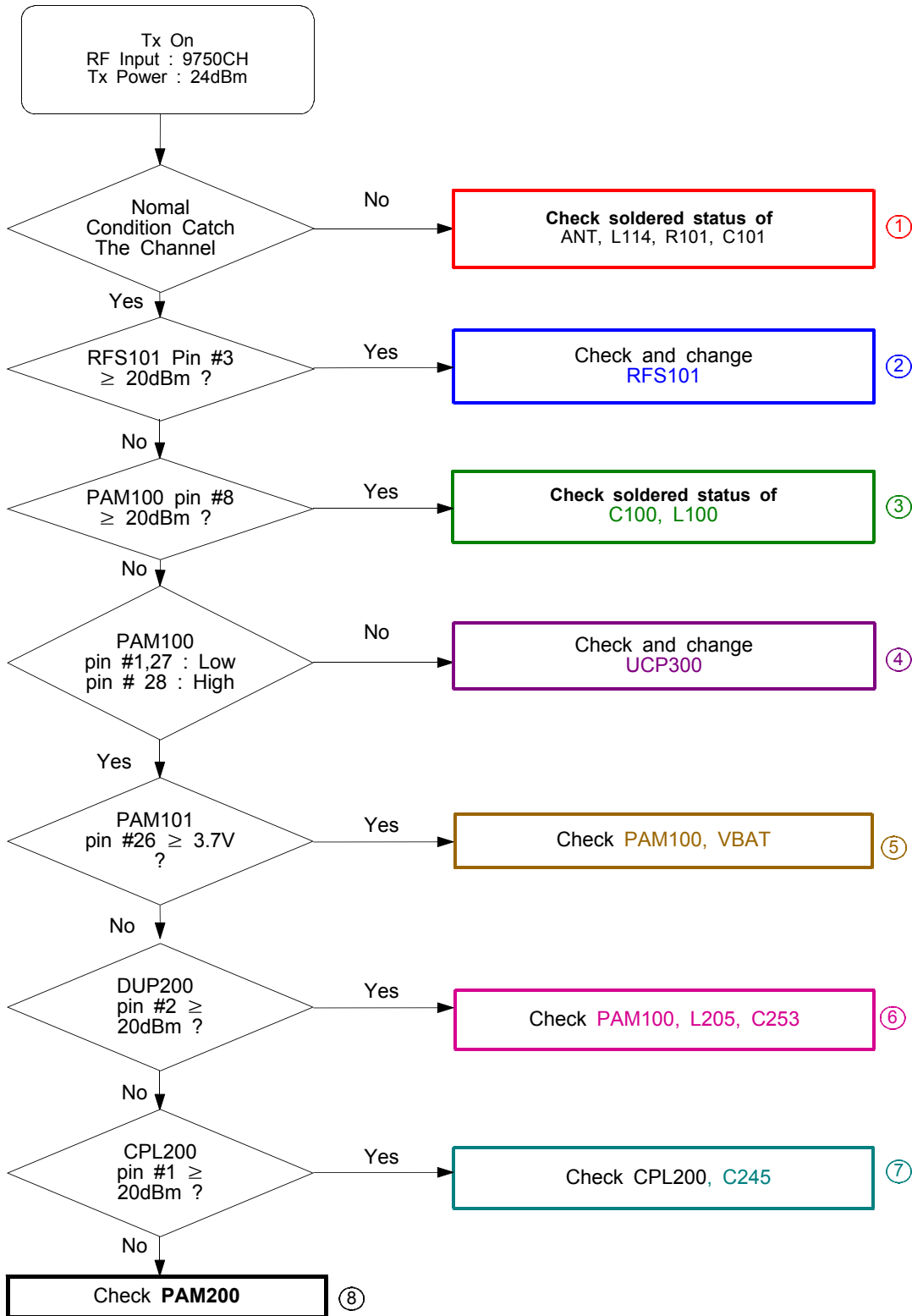
10-2-5. DCS, PCS Tx

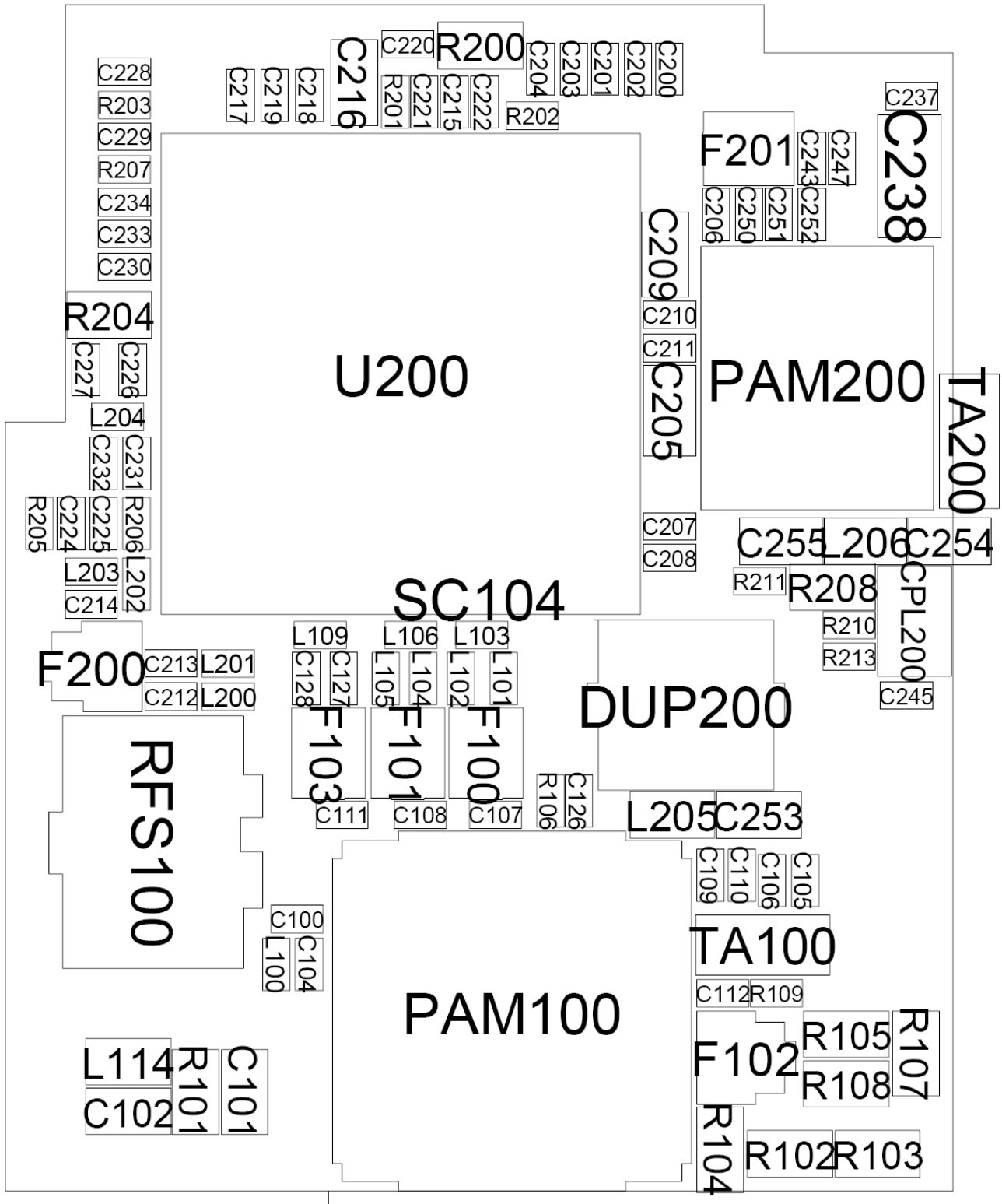


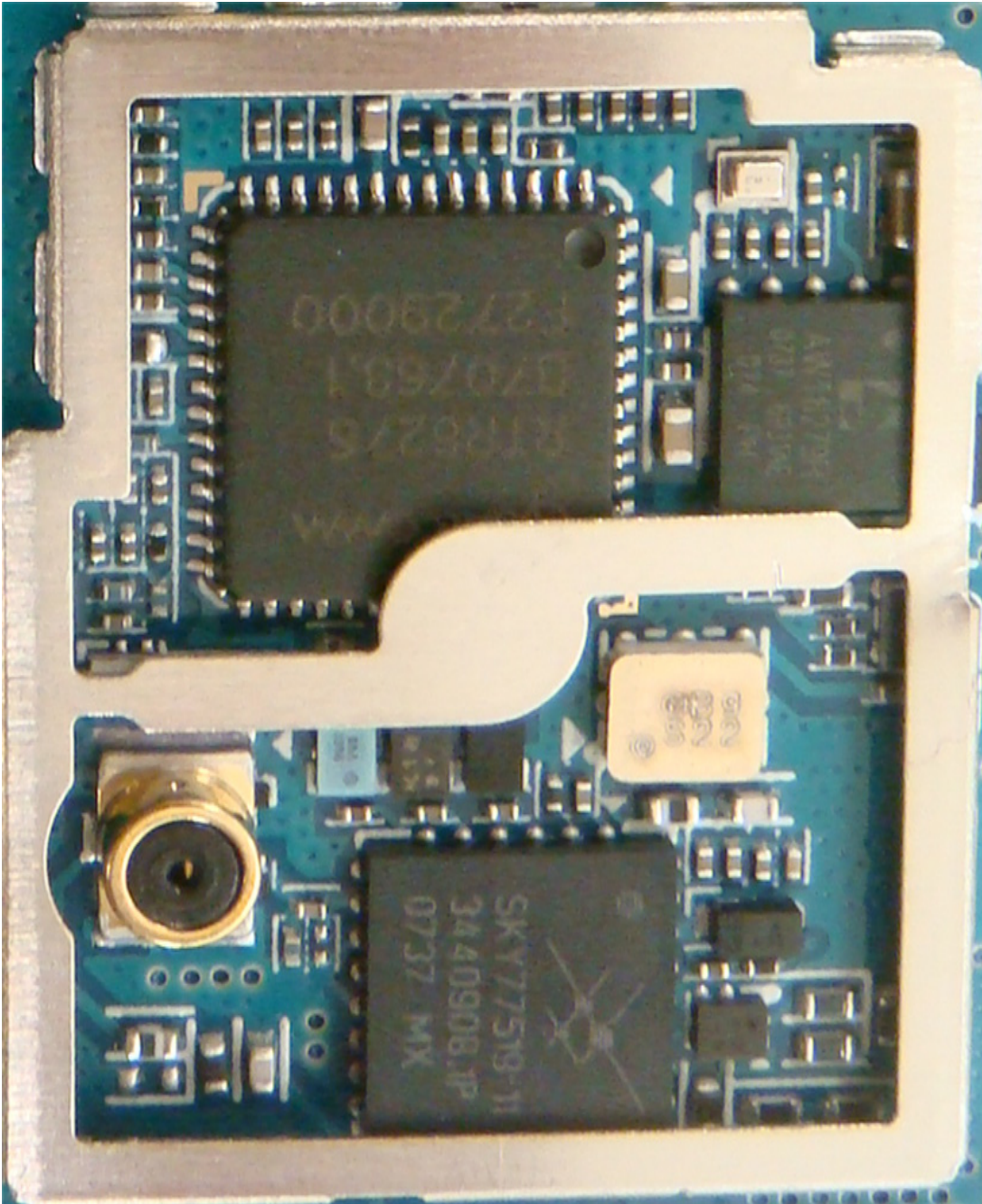
10-2-7. UMTS Rx

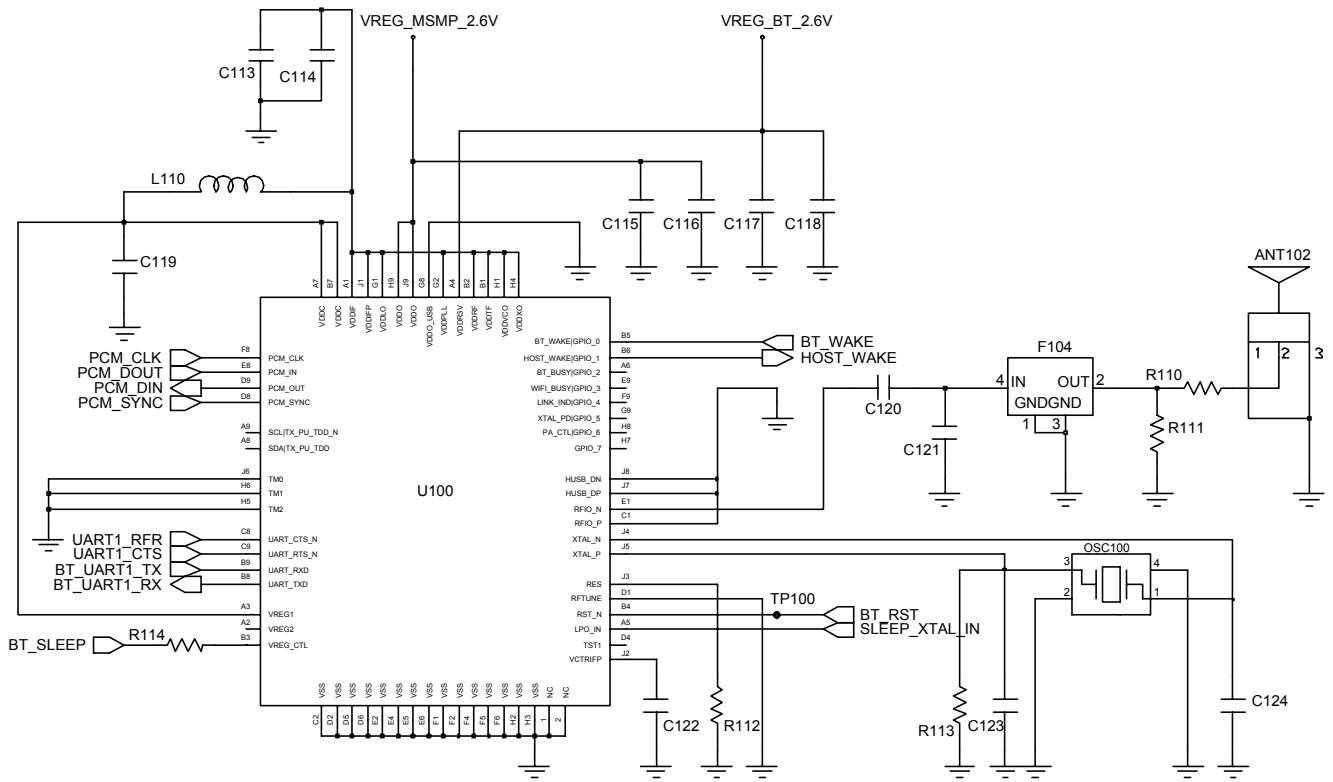


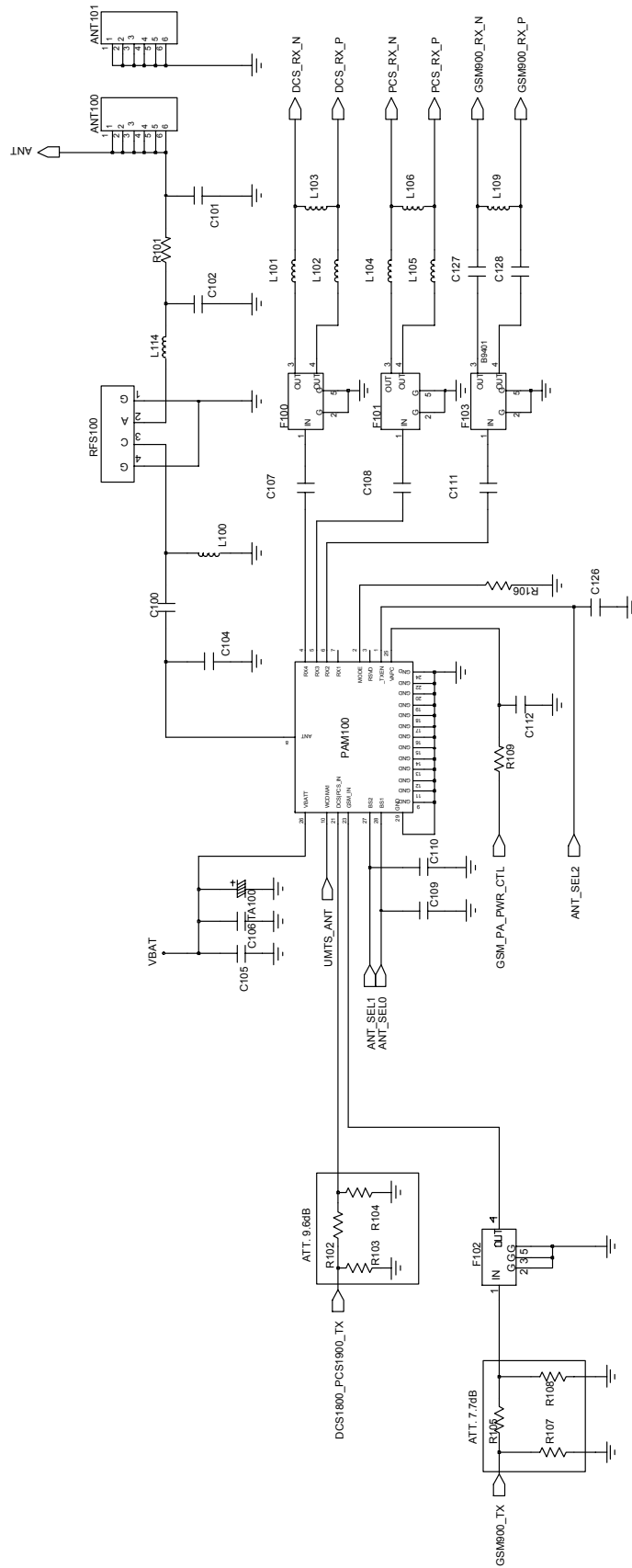
10-2-8. UMTS Tx











11. Reference data

11-1. 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
DMB : Digital Multimedia Broadcasting
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