

SAMSUNG

GSM TELEPHONE

SGH-U800

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 General Specification

	EGSM 900 Phase 2	DCS1800	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	80MHz	190MHz
Mod. Bit rate/ Bit Period	270.833 Kbps 3.692 us	270.833 Kbps 3.692 us	270.833 Kbps 3.692 us	3.84Mcps/s
Time Slot Period/ Frame Period	576.9 us 4.615 ms	576.9 us 4.615 ms	576.9 us 4.615 ms	10ms
Modulation	0.3 GMSK	0.3 GMSK	0.3 GMSK	Up Link:2BPSK Down Link:QPSK
MS Power	33 dBm~5 dBm	30 dBm~0 dBm	30 dBm~0 dBm	MAX:24(+1.-3) dBm MIN:<-50dBm
Power Class	5 pcl ~ 19 pcl	0 pcl ~ 15 pcl	0 pcl ~ 15 pcl	CLASS 3
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
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. Product Function

Main Function

- HSDPA 3.6Mbps
- 3M FF CMOS Camera
- CIF CMOS Camera
- FM RADIO
- Music Player
- Image editor
- Bluetooth
- USB 2.0 Highspeed

4. Array course control



TEST JIG BOX (GH80-03308A)



TEST CABLE
(0.4M:GH39-00990A/1.5M:GH39-00890A)



RF CABLE (GH39-00985A)

Software Downloading

4-1. Downloading Binary Files

- A boot file folder and five binary files for downloading SGH-U800

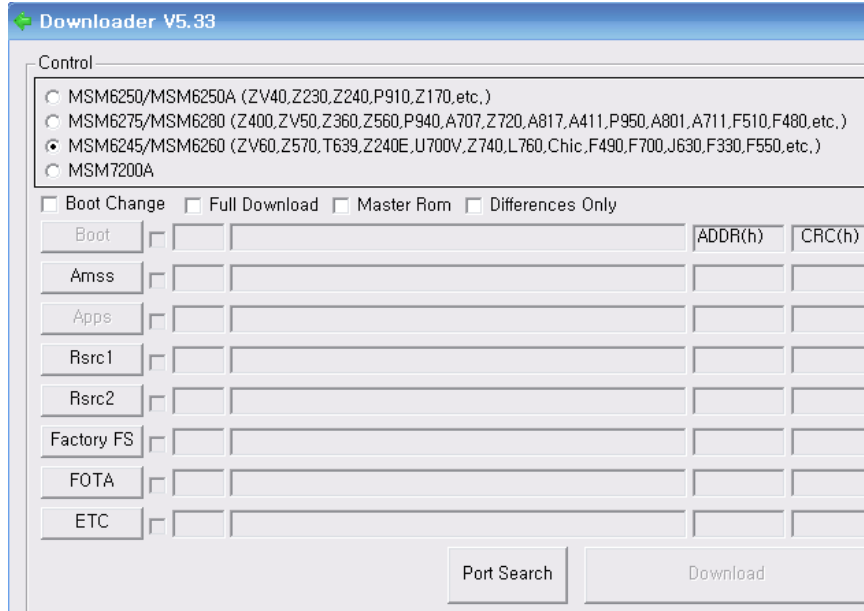
File	Comments
Boot folder	Initial booting files
amss_compressed.bin	Modem binary for common function
Rsrc_U800_Open_Europe_Common.rc1	Application files
Rsrc2_U800(Low/Mid).rc2	Power on/off animation files
FactoryFs_U800_Open_Europe_Common.ffs	Default file system for initial production

4-2. Pre-requisite for Downloading

- Downloader Program([Multiloader V5.33.exe](#))
- SGH-U800 Mobile Phone
- Data Cable
- Binary files

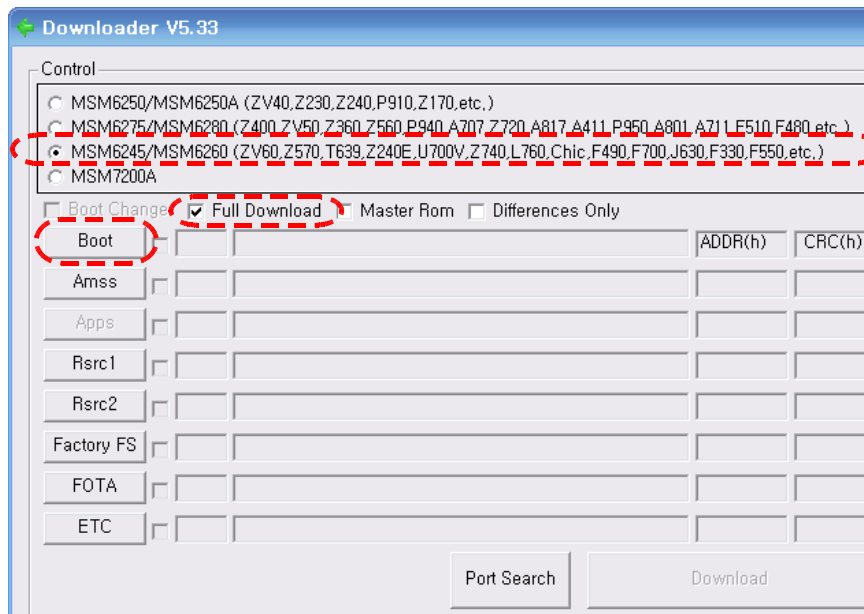
4-3. S/W Downloader Program

1. Load the binary download program by executing the "**Multiloader V5.33.exe**".

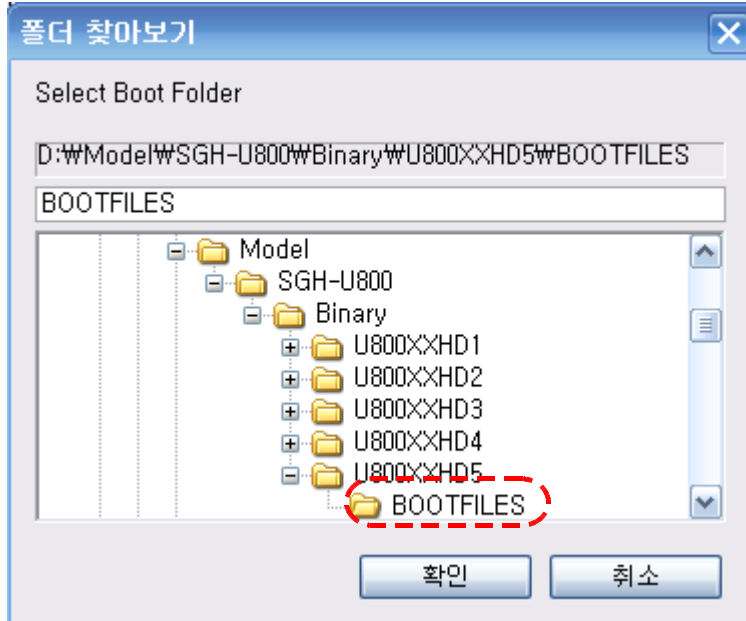


[Program main window]

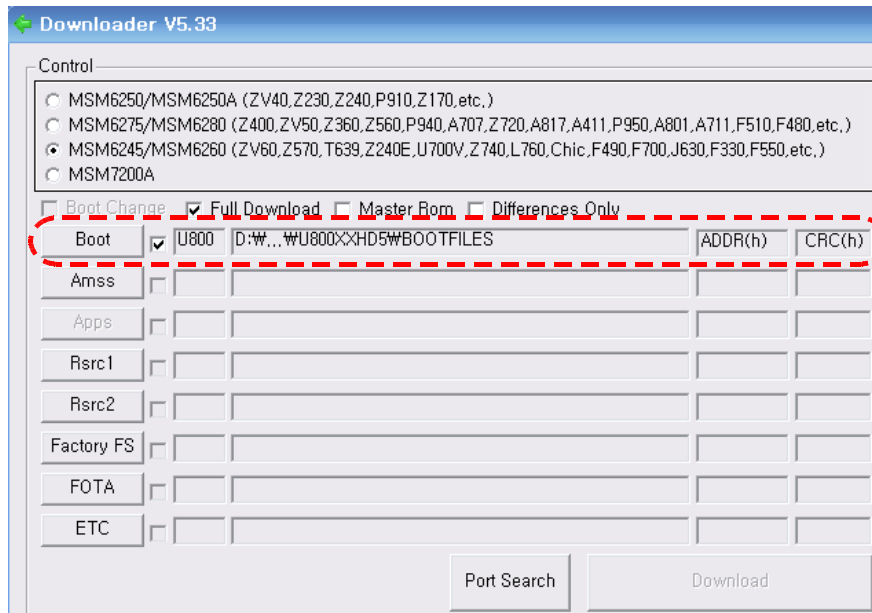
2. Click "**MSM6245/MSM6260**" to select baseband chip version of SGH-U800. Click "**Full Download**" to download binary files.



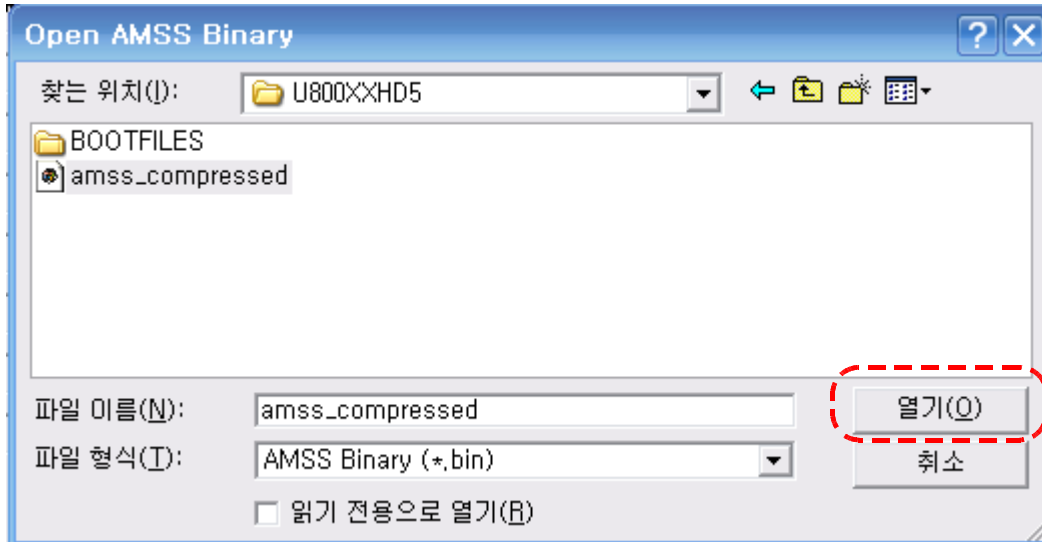
- 3. Click Boot button to load boot folder.
Select binary folder and boot folder(**BOOT_FILES**).
Click "**확인(OK)**".



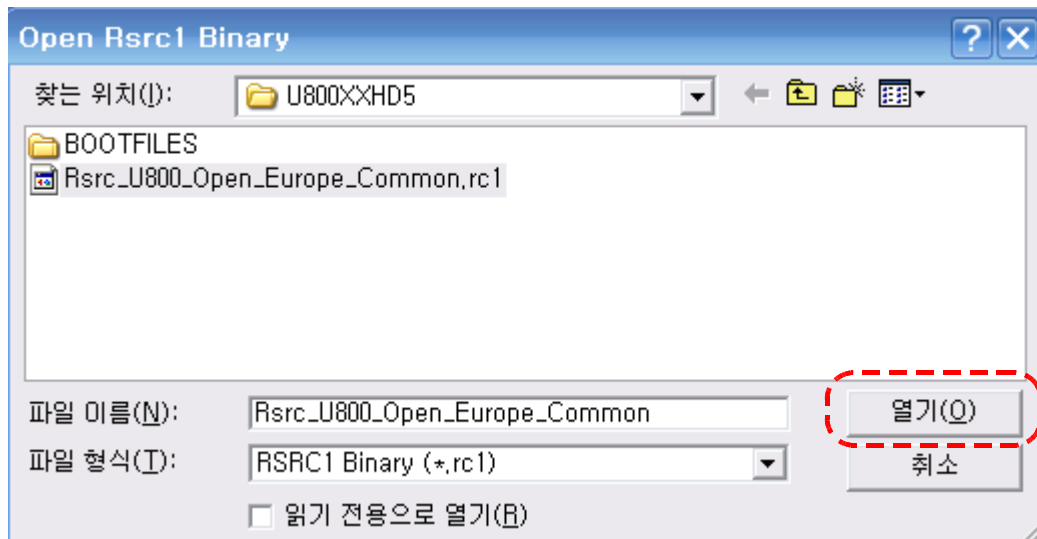
If the previous processes were successful, you can find **the condition** as below.



4. Click **AMSS** button to load "**amss_compressed.bin**" file.
Select "**amss_compressed.bin**" file and click "**열기(OPEN)**"



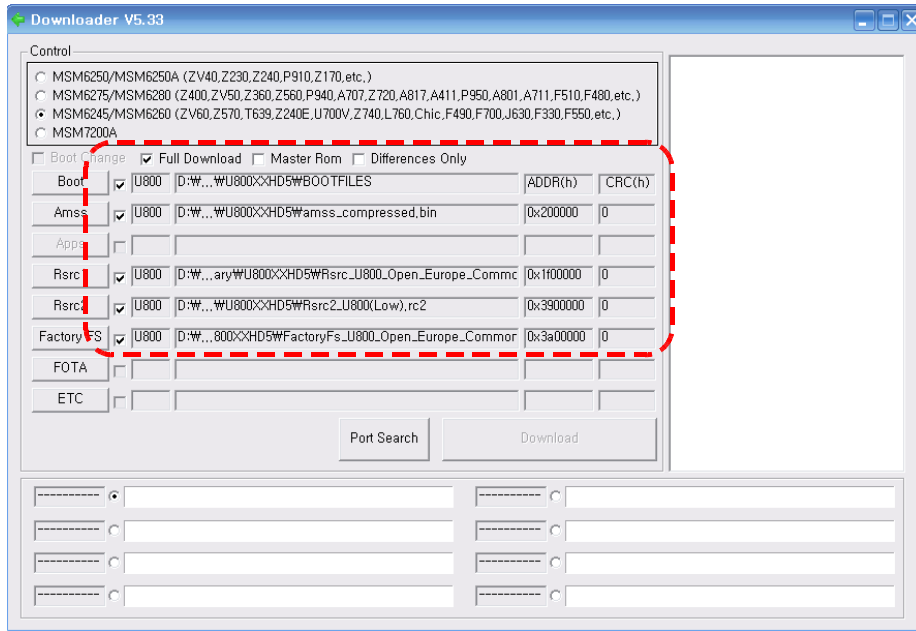
- Click **Rsrc1** button to load "**Rsrc_U800_Open_Europe_Common.rc1**" file.
Select "**Rsrc_U800_Open_Europe_Common.rc1**" file and click "**열기(OPEN)**"



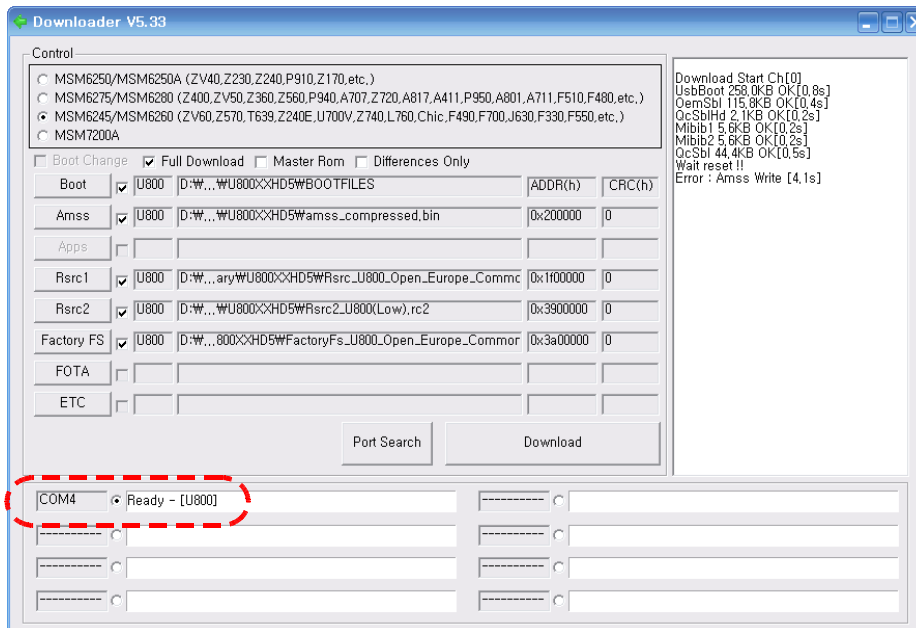
- Click **Rsrc2** button to load "**Rsrc2_U800(Low).rc2**" file.
Select "**Rsrc2_U800(Low).rc2**" file and click "**열기(OPEN)**"

- Click **Factory FS** button to load "**FactoryFs_U800_Open_Europe_Common.ffs**" file.
Select "**FactoryFs_U800_Open_Europe_Common.ffs**" file and click "**열기(OPEN)**"

5. If 3 and 4 processes were successful, you can find **the condition** as below.
 All files which compose the binary file are loaded.
 Don't need to click **FOTA** and **ETC**. Two buttons are not necessary.



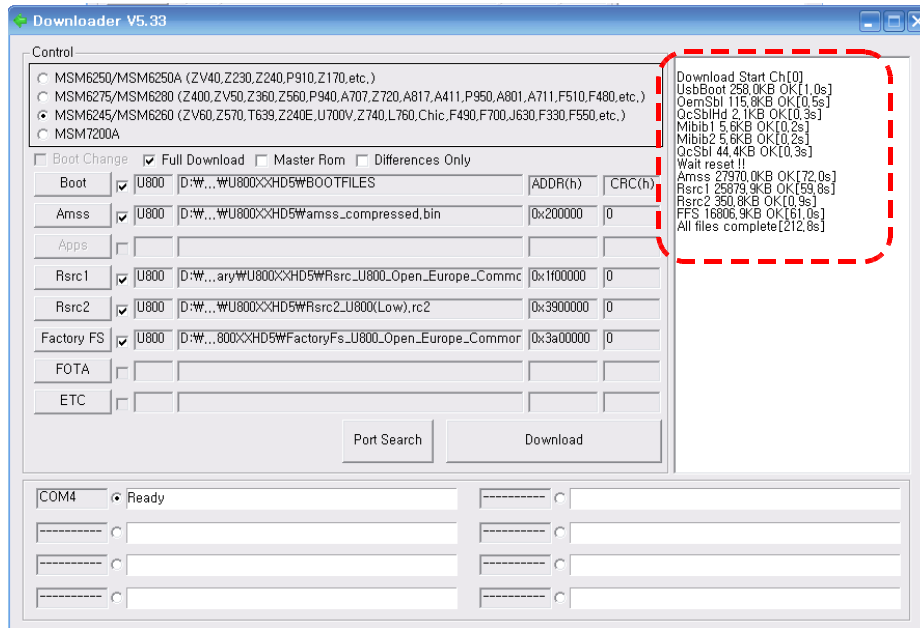
6. Connect **SGH-U800** mobile phone to computer via data cable.
 And click "**Port Search**" button to examine the connection condition.
 If the connection condition were successful, you can find the message below.
Eight connections are possible at the same time.



7. If all connections are ready, click "Download" to start downloading.



Process success message is "All is complete[XXX.Xs]".



8. Recommendations

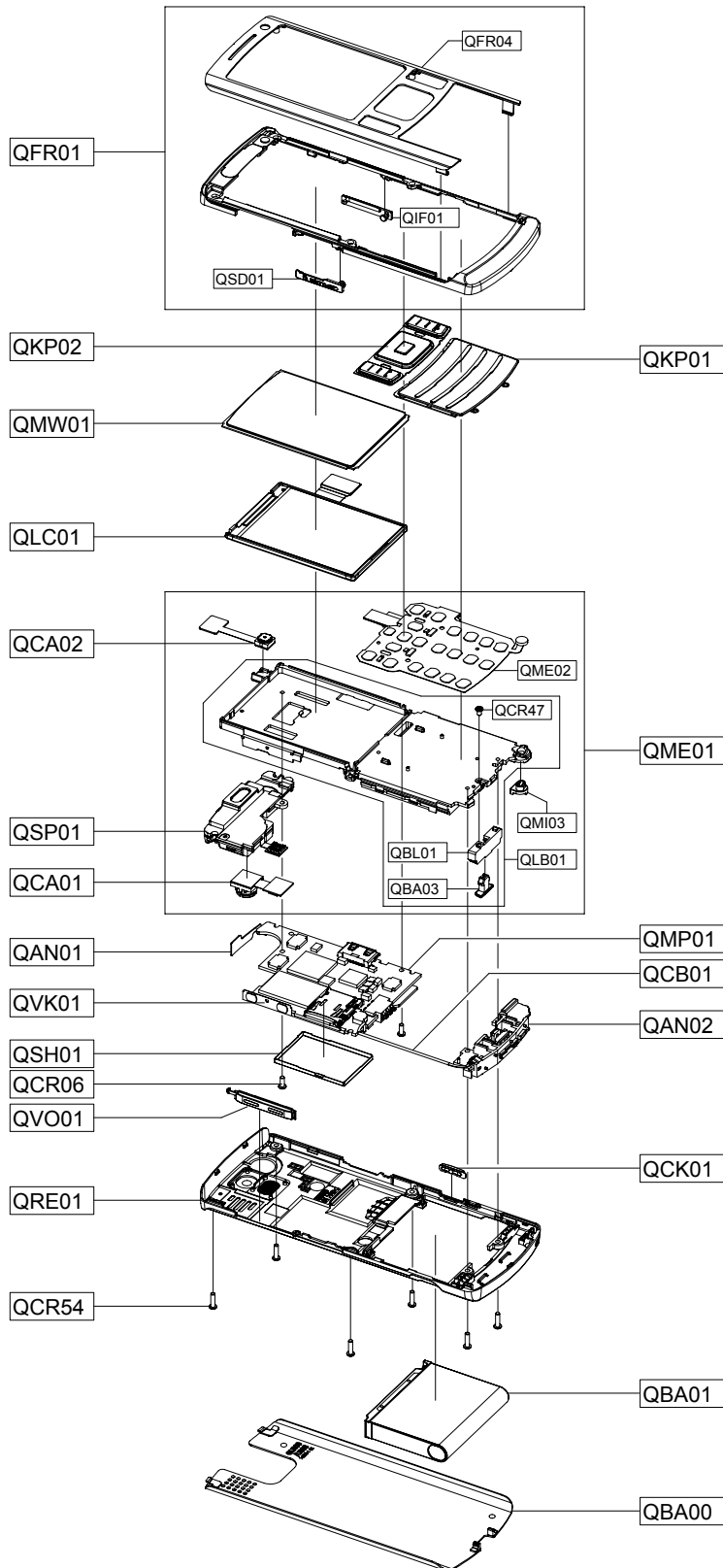
Don't touch the mobile phone while downloading to prevent disconnecting. Disconnection while downloading is critical to phone condition. Main PBA would be damaged by disconnection while downloading.

If all files are downloaded, it is recommended to do full reset.

Full reset : *2767*3855#

5. Exploded View and Parts List

5-1. Cellular phone Exploded View



5-2. Cellular phone Parts list

Design LOC			Discription	SEC CODE
QAN01			FPCB ANTENNA CHIP-SGHU800	GH42-01495A
QAN02			INTENNA-SGHU800	GH42-01497A
QBA00			ASSY COVER-BATT	GH98-08662A
QBA01			INNER BATTERY PACK-880MAH , BL	GH43-02666A
QCA01			ELA UNIT-CAMERA ASSY(SGH_U800	GH96-03230A
QCA02			CAMERA MODULE-SGHU800 CIF	GH59-05697A
QCB01			COAXIAL CABLE-SGHU800 MHF III	GH39-01050A
QCK01			ASSY KEY-CAMERA	GH98-09254A
QCR06			SCREW-MACHINE	6001-001155
QCR54			SCREW-MACHINE	6001-001645
QKP01			ASSY KEYPAD-MAIN(XEF/OAA)	GH98-08666A
QKP02			ASSY KEYPAD-SUB(XEF/OAA)	GH98-08667A
QLC01			LCD-MODULE SGHU800	GH07-01251A
QMP01			PBA MAIN-SGHU800	GH92-04412A
QMW01			ASSY COVER-MAIN WINDOW	GH98-08664A
QRE01			ASSY CASE-REAR	GH98-08659A
QSH01			IPR SHIELD-COVER BTM	GH70-03669A
QSP01			ASSY ETC-SGHU800 SPK/MOT MODUL	GH59-05442A
QVK01			KEY FPCB-SGHU800 VOLUME KEY	GH59-05405A
QVO01			ASSY KEY-VOLUME	GH98-08673A
QFR01			ASSY CASE-FRONT	GH98-08658A
	QFR04		ASSY DECO-FRONT	GH98-08660A
	QIF01		PMO COVER-IF V2	GH72-48517A
	QSD01		PMO COVER-SD	GH72-48103A
QME01			KEY FPCB-SGHU800 KEYPAD FPCB	GH59-06022A
	QME02		KEY FPCB-SGHU800 KEY PBA	GH59-05446A
	QMI03		RMO RUBBER-MIC HOLDER	GH73-11849A
	QLB01		ASSY BRACKET-LCD	GH98-08663A
		QBA03	ASSY LOCKER-BUTTON	GH98-08661A
		QBL01	ASSY LOCKER-BATT	GH98-08669A
		QCR47	SCREW-MACHINE	6001-001695

6. MAIN Electrical Parts List

SEC CODE	Design LOC	Description
0403-001547	ZD602	DIODE-ZENER
0403-001547	ZD603	DIODE-ZENER
0404-001153	D700	DIODE-SCHOTTKY
0404-001172	D300	DIODE-SCHOTTKY
0404-001172	D301	DIODE-SCHOTTKY
0406-001190	ZD601	DIODE-TVS
0406-001237	ZD600	DIODE-TVS
0406-001254	ZD604	DIODE-TVS
0406-001254	ZD605	DIODE-TVS
0406-001254	ZD606	DIODE-TVS
0406-001254	ZD607	DIODE-TVS
0407-001002	D400	DIODE-ARRAY
0407-001002	D701	DIODE-ARRAY
0504-001113	Q400	TR-DIGITAL
0505-001518	TR700	FET-SILICON
0601-002557	LED600	LED
1001-001336	U700	IC-ANALOG SWITCH
1001-001410	U501	IC-ANALOG SWITCH
1001-001543	U300	IC-ANALOG MULTIPLEX
1108-000183	UME300	IC-MCP
1201-002470	U500	IC-AUDIO AMP
1201-002570	PAM100	IC-POWER AMP
1201-002703	PAM200	IC-POWER AMP
1203-003688	U604	IC-POSI, FIXED REG
1203-004518	U401	IC-BATTERY
1203-004595	U602	IC-MULTI REG
1203-004604	U600	IC-DC/DC CONVERTER
1203-004778	U400	IC-POWER SUPERVISOR
1203-004857	U601	IC-DC/DC CONVERTER
1203-005118	U603	IC-MULTI REG
1203-005118	U605	IC-MULTI REG
1204-002924	UFM100	IC-TUNER
1205-003281	UCP300	IC-MODEM
1205-003341	U200	IC-TRANSCIEVER
1205-003419	UBT100	IC-TRANSCIEVER
1404-001224	TH300	THERMISTOR-NTC
1405-001082	VR701	VARISTOR

MAIN Electrical Parts List

SEC CODE	Design LOC	Discription
1405-001082	VR716	VARISTOR
1405-001082	VR701	VARISTOR
1405-001082	VR712	VARISTOR
1405-001082	VR716	VARISTOR
1405-001110	VR600	VARISTOR
1405-001110	VR715	VARISTOR
1405-001110	VR721	VARISTOR
1405-001110	VR722	VARISTOR
1405-001133	VR400	VARISTOR
1405-001133	VR401	VARISTOR
1405-001133	VR402	VARISTOR
1405-001133	VR702	VARISTOR
1405-001133	VR714	VARISTOR
1405-001133	VR717	VARISTOR
1405-001133	VR718	VARISTOR
1405-001133	VR719	VARISTOR
1405-001133	VR720	VARISTOR
1405-001177	VR703	VARISTOR
1405-001177	VR704	VARISTOR
1405-001177	VR705	VARISTOR
1405-001177	VR706	VARISTOR
1405-001177	VR707	VARISTOR
1405-001177	VR708	VARISTOR
1405-001200	VR709	VARISTOR
1405-001200	VR710	VARISTOR
1405-001200	VR711	VARISTOR
2007-000138	R518	R-CHIP
2007-000138	R710	R-CHIP
2007-000138	R712	R-CHIP
2007-000138	R726	R-CHIP
2007-000138	R729	R-CHIP
2007-000138	R730	R-CHIP
2007-000138	R731	R-CHIP
2007-000140	R204	R-CHIP
2007-000141	R513	R-CHIP
2007-000141	R517	R-CHIP
2007-000141	R713	R-CHIP

SEC CODE	Design LOC	Discription
2007-000141	R714	R-CHIP
2007-000144	R617	R-CHIP
2007-000145	R505	R-CHIP
2007-000148	R326	R-CHIP
2007-000148	R422	R-CHIP
2007-000148	R500	R-CHIP
2007-000148	R519	R-CHIP
2007-000148	R618	R-CHIP
2007-000148	R619	R-CHIP
2007-000151	R428	R-CHIP
2007-000154	R429	R-CHIP
2007-000154	R626	R-CHIP
2007-000154	R627	R-CHIP
2007-000157	R620	R-CHIP
2007-000157	R621	R-CHIP
2007-000157	R623	R-CHIP
2007-000162	R424	R-CHIP
2007-000162	R715	R-CHIP
2007-000164	R624	R-CHIP
2007-000164	R625	R-CHIP
2007-000165	R413	R-CHIP
2007-000165	R423	R-CHIP
2007-000165	R716	R-CHIP
2007-000167	R616	R-CHIP
2007-000169	R426	R-CHIP
2007-000170	R607	R-CHIP
2007-000170	R613	R-CHIP
2007-000170	R614	R-CHIP
2007-000170	R719	R-CHIP
2007-000171	R101	R-CHIP
2007-000171	R110	R-CHIP
2007-000171	R425	R-CHIP
2007-000171	R501	R-CHIP
2007-000171	R504	R-CHIP
2007-000171	R615	R-CHIP
2007-000171	R622	R-CHIP
2007-000171	R701	R-CHIP

MAIN Electrical Parts List

SEC CODE	Design LOC	Discription
2007-000171	R717	R-CHIP
2007-000171	R721	R-CHIP
2007-000171	R722	R-CHIP
2007-000171	R732	R-CHIP
2007-000171	R733	R-CHIP
2007-000172	R115	R-CHIP
2007-001217	R206	R-CHIP
2007-001217	R207	R-CHIP
2007-001285	R203	R-CHIP
2007-001290	R318	R-CHIP
2007-001298	R202	R-CHIP
2007-001298	R324	R-CHIP
2007-001305	R507	R-CHIP
2007-001305	R508	R-CHIP
2007-001339	R718	R-CHIP
2007-003001	R723	R-CHIP
2007-003001	R724	R-CHIP
2007-007014	R407	R-CHIP
2007-007014	R409	R-CHIP
2007-007092	R506	R-CHIP
2007-007107	R611	R-CHIP
2007-007142	R319	R-CHIP
2007-007142	R601	R-CHIP
2007-007155	R119	R-CHIP
2007-007306	R205	R-CHIP
2007-007309	R200	R-CHIP
2007-007314	R427	R-CHIP
2007-007318	R605	R-CHIP
2007-007468	R405	R-CHIP
2007-007489	R120	R-CHIP
2007-007528	R322	R-CHIP
2007-007698	R412	R-CHIP
2007-007766	R327	R-CHIP
2007-007875	R720	R-CHIP
2007-008040	R102	R-CHIP
2007-008044	R106	R-CHIP
2007-008045	R201	R-CHIP

SEC CODE	Design LOC	Discription
2007-008045	R702	R-CHIP
2007-008045	R703	R-CHIP
2007-008045	R704	R-CHIP
2007-008045	R705	R-CHIP
2007-008045	R706	R-CHIP
2007-008045	R707	R-CHIP
2007-008045	R708	R-CHIP
2007-008045	R709	R-CHIP
2007-008045	R711	R-CHIP
2007-008046	R103	R-CHIP
2007-008046	R104	R-CHIP
2007-008049	R113	R-CHIP
2007-008049	R118	R-CHIP
2007-008052	R121	R-CHIP
2007-008052	R122	R-CHIP
2007-008055	R112	R-CHIP
2007-008055	R404	R-CHIP
2007-008055	R416	R-CHIP
2007-008055	R600	R-CHIP
2007-008419	R602	R-CHIP
2007-008419	R603	R-CHIP
2007-008419	R606	R-CHIP
2007-008419	R608	R-CHIP
2007-008419	R610	R-CHIP
2007-008483	R410	R-CHIP
2007-008483	R411	R-CHIP
2007-008516	R105	R-CHIP
2007-008516	R320	R-CHIP
2007-008516	R321	R-CHIP
2007-008516	R323	R-CHIP
2007-008516	R609	R-CHIP
2007-008516	R612	R-CHIP
2007-008542	R116	R-CHIP
2007-008542	R117	R-CHIP
2007-008542	R123	R-CHIP
2007-008542	R300	R-CHIP
2007-008542	R400	R-CHIP

SEC CODE	Design LOC	Discription
2007-008542	R401	R-CHIP
2007-008542	R432	R-CHIP
2007-008542	R734	R-CHIP
2007-008544	R509	R-CHIP
2007-008548	R604	R-CHIP
2007-008588	R514	R-CHIP
2007-008806	R408	R-CHIP
2007-009084	R305	R-CHIP
2007-009171	R306	R-CHIP
2007-009171	R307	R-CHIP
2007-009171	R308	R-CHIP
2007-009171	R316	R-CHIP
2007-009171	R317	R-CHIP
2007-009402	R510	R-CHIP
2007-009408	R107	R-CHIP
2007-009801	R108	R-CHIP
2007-009801	R109	R-CHIP
2203-000233	C129	C-CER,CHIP
2203-000233	C137	C-CER,CHIP
2203-000233	C234	C-CER,CHIP
2203-000233	C249	C-CER,CHIP
2203-000233	C262	C-CER,CHIP
2203-000233	C277	C-CER,CHIP
2203-000233	C425	C-CER,CHIP
2203-000233	C429	C-CER,CHIP
2203-000233	C431	C-CER,CHIP
2203-000233	C439	C-CER,CHIP
2203-000254	C212	C-CER,CHIP
2203-000254	C215	C-CER,CHIP
2203-000254	C303	C-CER,CHIP
2203-000254	C308	C-CER,CHIP
2203-000254	C310	C-CER,CHIP
2203-000254	C318	C-CER,CHIP
2203-000254	C328	C-CER,CHIP
2203-000254	C337	C-CER,CHIP
2203-000254	C339	C-CER,CHIP
2203-000254	C509	C-CER,CHIP

SEC CODE	Design LOC	Discription
2203-000254	C602	C-CER,CHIP
2203-000278	C134	C-CER,CHIP
2203-000278	C135	C-CER,CHIP
2203-000278	C522	C-CER,CHIP
2203-000278	C532	C-CER,CHIP
2203-000386	C450	C-CER,CHIP
2203-000386	C453	C-CER,CHIP
2203-000438	C123	C-CER,CHIP
2203-000438	C125	C-CER,CHIP
2203-000438	C210	C-CER,CHIP
2203-000438	C233	C-CER,CHIP
2203-000438	C266	C-CER,CHIP
2203-000438	C278	C-CER,CHIP
2203-000438	C300	C-CER,CHIP
2203-000438	C301	C-CER,CHIP
2203-000438	C302	C-CER,CHIP
2203-000438	C326	C-CER,CHIP
2203-000438	C510	C-CER,CHIP
2203-000438	C511	C-CER,CHIP
2203-000438	C621	C-CER,CHIP
2203-000627	C223	C-CER,CHIP
2203-000627	C235	C-CER,CHIP
2203-000627	C237	C-CER,CHIP
2203-000627	C239	C-CER,CHIP
2203-000627	C261	C-CER,CHIP
2203-000812	C100	C-CER,CHIP
2203-000812	C217	C-CER,CHIP
2203-000812	C270	C-CER,CHIP
2203-000812	C426	C-CER,CHIP
2203-000812	C442	C-CER,CHIP
2203-000812	C443	C-CER,CHIP
2203-000812	C444	C-CER,CHIP
2203-000812	C445	C-CER,CHIP
2203-000812	C446	C-CER,CHIP
2203-000812	C449	C-CER,CHIP
2203-000812	C452	C-CER,CHIP
2203-000812	C523	C-CER,CHIP

MAIN Electrical Parts List

SEC CODE	Design LOC	Discription
2203-000812	C533	C-CER,CHIP
2203-000812	C606	C-CER,CHIP
2203-000812	C609	C-CER,CHIP
2203-000812	C610	C-CER,CHIP
2203-000812	C611	C-CER,CHIP
2203-000812	C700	C-CER,CHIP
2203-000812	C701	C-CER,CHIP
2203-000812	C719	C-CER,CHIP
2203-000812	C720	C-CER,CHIP
2203-000812	C721	C-CER,CHIP
2203-000812	C722	C-CER,CHIP
2203-000854	C501	C-CER,CHIP
2203-000854	C504	C-CER,CHIP
2203-000854	C519	C-CER,CHIP
2203-000854	C526	C-CER,CHIP
2203-000854	C528	C-CER,CHIP
2203-000854	C535	C-CER,CHIP
2203-000995	C345	C-CER,CHIP
2203-000995	C605	C-CER,CHIP
2203-001210	C505	C-CER,CHIP
2203-002443	C265	C-CER,CHIP
2203-002709	C304	C-CER,CHIP
2203-002709	C311	C-CER,CHIP
2203-002709	C314	C-CER,CHIP
2203-002709	C319	C-CER,CHIP
2203-002709	C325	C-CER,CHIP
2203-002709	C327	C-CER,CHIP
2203-002709	C336	C-CER,CHIP
2203-002709	C338	C-CER,CHIP
2203-002709	C340	C-CER,CHIP
2203-002709	C343	C-CER,CHIP
2203-002709	C704	C-CER,CHIP
2203-002709	C723	C-CER,CHIP
2203-002709	C725	C-CER,CHIP
2203-002709	C728	C-CER,CHIP
2203-003054	C515	C-CER,CHIP
2203-003054	C516	C-CER,CHIP

SEC CODE	Design LOC	Discription
2203-005050	C271	C-CER,CHIP
2203-005234	C133	C-CER,CHIP
2203-005234	C272	C-CER,CHIP
2203-005234	C273	C-CER,CHIP
2203-005288	C132	C-CER,CHIP
2203-005383	C708	C-CER,CHIP
2203-005383	C717	C-CER,CHIP
2203-005482	C205	C-CER,CHIP
2203-005482	C211	C-CER,CHIP
2203-005482	C218	C-CER,CHIP
2203-005482	C219	C-CER,CHIP
2203-005482	C225	C-CER,CHIP
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2203-005482	C250	C-CER,CHIP
2203-005482	C260	C-CER,CHIP
2203-005482	C410	C-CER,CHIP
2203-005482	C411	C-CER,CHIP
2203-005482	C451	C-CER,CHIP
2203-005482	C718	C-CER,CHIP
2203-005682	C106	C-CER,CHIP
2203-005682	C111	C-CER,CHIP
2203-005682	C114	C-CER,CHIP
2203-005682	C115	C-CER,CHIP
2203-005682	C116	C-CER,CHIP
2203-005682	C120	C-CER,CHIP
2203-005682	C121	C-CER,CHIP
2203-005682	C214	C-CER,CHIP
2203-005682	C226	C-CER,CHIP
2203-005682	C254	C-CER,CHIP
2203-005682	C268	C-CER,CHIP
2203-005682	C353	C-CER,CHIP
2203-005682	C413	C-CER,CHIP
2203-005682	C518	C-CER,CHIP
2203-005682	C525	C-CER,CHIP
2203-005682	C529	C-CER,CHIP
2203-005682	C536	C-CER,CHIP
2203-005683	C105	C-CER,CHIP

MAIN Electrical Parts List

SEC CODE	Design LOC	Discription
2203-005683	C107	C-CER,CHIP
2203-005683	C113	C-CER,CHIP
2203-005683	C117	C-CER,CHIP
2203-005719	C118	C-CER,CHIP
2203-005725	C216	C-CER,CHIP
2203-005725	C227	C-CER,CHIP
2203-005725	C236	C-CER,CHIP
2203-005725	C240	C-CER,CHIP
2203-005725	C247	C-CER,CHIP
2203-005725	C248	C-CER,CHIP
2203-005725	C252	C-CER,CHIP
2203-005725	C259	C-CER,CHIP
2203-005725	C275	C-CER,CHIP
2203-005725	C276	C-CER,CHIP
2203-005725	C607	C-CER,CHIP
2203-005725	C608	C-CER,CHIP
2203-005731	C415	C-CER,CHIP
2203-005731	C435	C-CER,CHIP
2203-005732	C200	C-CER,CHIP
2203-005732	C201	C-CER,CHIP
2203-005736	C207	C-CER,CHIP
2203-005736	C208	C-CER,CHIP
2203-005736	C209	C-CER,CHIP
2203-005736	C221	C-CER,CHIP
2203-005736	C224	C-CER,CHIP
2203-005736	C251	C-CER,CHIP
2203-005736	C253	C-CER,CHIP
2203-005736	C274	C-CER,CHIP
2203-005736	C434	C-CER,CHIP
2203-005789	C206	C-CER,CHIP
2203-005792	C246	C-CER,CHIP
2203-005792	C256	C-CER,CHIP
2203-005806	C305	C-CER,CHIP
2203-006048	C128	C-CER,CHIP
2203-006048	C138	C-CER,CHIP
2203-006137	C139	C-CER,CHIP
2203-006187	C119	C-CER,CHIP

SEC CODE	Design LOC	Discription
2203-006187	C122	C-CER,CHIP
2203-006194	C306	C-CER,CHIP
2203-006194	C322	C-CER,CHIP
2203-006194	C330	C-CER,CHIP
2203-006194	C333	C-CER,CHIP
2203-006194	C517	C-CER,CHIP
2203-006194	C527	C-CER,CHIP
2203-006257	C538	C-CER,CHIP
2203-006305	C521	C-CER,CHIP
2203-006305	C531	C-CER,CHIP
2203-006324	C407	C-CER,CHIP
2203-006324	C437	C-CER,CHIP
2203-006324	C613	C-CER,CHIP
2203-006361	C428	C-CER,CHIP
2203-006361	C430	C-CER,CHIP
2203-006399	C312	C-CER,CHIP
2203-006399	C313	C-CER,CHIP
2203-006399	C315	C-CER,CHIP
2203-006399	C331	C-CER,CHIP
2203-006399	C335	C-CER,CHIP
2203-006399	C438	C-CER,CHIP
2203-006410	C110	C-CER,CHIP
2203-006410	C112	C-CER,CHIP
2203-006423	C202	C-CER,CHIP
2203-006423	C203	C-CER,CHIP
2203-006423	C204	C-CER,CHIP
2203-006423	C220	C-CER,CHIP
2203-006423	C231	C-CER,CHIP
2203-006423	C232	C-CER,CHIP
2203-006423	C238	C-CER,CHIP
2203-006423	C242	C-CER,CHIP
2203-006423	C244	C-CER,CHIP
2203-006423	C245	C-CER,CHIP
2203-006423	C258	C-CER,CHIP
2203-006423	C309	C-CER,CHIP
2203-006423	C323	C-CER,CHIP
2203-006423	C329	C-CER,CHIP

MAIN Electrical Parts List

SEC CODE	Design LOC	Discription
2203-006423	C332	C-CER,CHIP
2203-006423	C334	C-CER,CHIP
2203-006423	C342	C-CER,CHIP
2203-006423	C347	C-CER,CHIP
2203-006423	C349	C-CER,CHIP
2203-006423	C414	C-CER,CHIP
2203-006423	C520	C-CER,CHIP
2203-006423	C524	C-CER,CHIP
2203-006423	C530	C-CER,CHIP
2203-006423	C534	C-CER,CHIP
2203-006462	C352	C-CER,CHIP
2203-006466	C618	C-CER,CHIP
2203-006556	C109	C-CER,CHIP
2203-006562	C124	C-CER,CHIP
2203-006562	C140	C-CER,CHIP
2203-006562	C341	C-CER,CHIP
2203-006562	C703	C-CER,CHIP
2203-006665	C263	C-CER,CHIP
2203-006668	C346	C-CER,CHIP
2203-006681	C441	C-CER,CHIP
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2203-006681	C502	C-CER,CHIP
2203-006681	C503	C-CER,CHIP
2203-006681	C506	C-CER,CHIP
2203-006681	C512	C-CER,CHIP
2203-006681	C513	C-CER,CHIP
2203-006681	C514	C-CER,CHIP
2203-006681	C612	C-CER,CHIP
2203-006681	C713	C-CER,CHIP
2203-006824	C241	C-CER,CHIP
2203-006824	C243	C-CER,CHIP
2203-006824	C402	C-CER,CHIP
2203-006824	C403	C-CER,CHIP
2203-006824	C404	C-CER,CHIP
2203-006824	C405	C-CER,CHIP
2203-006824	C417	C-CER,CHIP
2203-006824	C419	C-CER,CHIP

SEC CODE	Design LOC	Discription
2203-006824	C422	C-CER,CHIP
2203-006824	C424	C-CER,CHIP
2203-006839	C108	C-CER,CHIP
2203-006839	C400	C-CER,CHIP
2203-006839	C401	C-CER,CHIP
2203-006839	C408	C-CER,CHIP
2203-006839	C409	C-CER,CHIP
2203-006839	C412	C-CER,CHIP
2203-006839	C711	C-CER,CHIP
2203-006839	C715	C-CER,CHIP
2203-006841	C418	C-CER,CHIP
2203-006841	C432	C-CER,CHIP
2203-006841	C440	C-CER,CHIP
2203-006841	C537	C-CER,CHIP
2203-006841	C600	C-CER,CHIP
2203-006841	C601	C-CER,CHIP
2203-006841	C603	C-CER,CHIP
2203-006841	C604	C-CER,CHIP
2203-006841	C614	C-CER,CHIP
2203-006841	C615	C-CER,CHIP
2203-006841	C616	C-CER,CHIP
2203-006841	C617	C-CER,CHIP
2203-006841	C619	C-CER,CHIP
2203-006841	C620	C-CER,CHIP
2203-006841	C622	C-CER,CHIP
2203-006841	C623	C-CER,CHIP
2203-006841	C624	C-CER,CHIP
2203-006841	C626	C-CER,CHIP
2203-006841	C712	C-CER,CHIP
2203-006841	C714	C-CER,CHIP
2203-006841	C716	C-CER,CHIP
2203-006841	C724	C-CER,CHIP
2203-006841	C726	C-CER,CHIP
2203-006841	C727	C-CER,CHIP
2203-006842	C141	C-CER,CHIP
2203-006872	C126	C-CER,CHIP
2203-006872	C127	C-CER,CHIP

MAIN Electrical Parts List

SEC CODE	Design LOC	Discription
2203-006872	C307	C-CER,CHIP
2203-006872	C316	C-CER,CHIP
2203-006872	C317	C-CER,CHIP
2203-006872	C320	C-CER,CHIP
2203-006872	C321	C-CER,CHIP
2203-006872	C324	C-CER,CHIP
2203-006872	C420	C-CER,CHIP
2203-006872	C421	C-CER,CHIP
2203-006872	C423	C-CER,CHIP
2203-006872	C427	C-CER,CHIP
2203-006872	C433	C-CER,CHIP
2203-006872	C448	C-CER,CHIP
2203-006872	C508	C-CER,CHIP
2203-006872	C625	C-CER,CHIP
2203-006872	C705	C-CER,CHIP
2203-006978	C436	C-CER,CHIP
2203-006978	C454	C-CER,CHIP
2203-006979	C228	C-CER,CHIP
2203-006979	C229	C-CER,CHIP
2203-006979	C257	C-CER,CHIP
2203-007195	C222	C-CER,CHIP
2203-007195	C264	C-CER,CHIP
2203-007270	C507	C-CER,CHIP
2404-001377	TA503	C-TA,CHIP
2404-001377	TA504	C-TA,CHIP
2404-001381	TA100	C-TA,CHIP
2404-001381	TA500	C-TA,CHIP
2404-001381	TA603	C-TA,CHIP
2404-001381	TA700	C-TA,CHIP
2404-001411	TA600	C-TA,CHIP
2404-001411	TA601	C-TA,CHIP
2404-001414	TA501	C-TA,CHIP
2404-001414	TA502	C-TA,CHIP
2404-001496	TA602	C-TA,CHIP
2703-001750	L200	INDUCTOR-SMD
2703-002155	L100	INDUCTOR-SMD
2703-002176	L204	INDUCTOR-SMD

SEC CODE	Design LOC	Discription
2703-002204	L101	INDUCTOR-SMD
2703-002207	L205	INDUCTOR-SMD
2703-002308	L110	INDUCTOR-SMD
2703-002557	L604	INDUCTOR-SMD
2703-002714	L502	INDUCTOR-SMD
2703-002714	L503	INDUCTOR-SMD
2703-002794	L202	INDUCTOR-SMD
2703-002794	L203	INDUCTOR-SMD
2703-002795	L102	INDUCTOR-SMD
2703-002795	L103	INDUCTOR-SMD
2703-002795	L104	INDUCTOR-SMD
2703-002858	L201	INDUCTOR-SMD
2703-002858	L207	INDUCTOR-SMD
2703-002901	L206	INDUCTOR-SMD
2703-003127	L105	INDUCTOR-SMD
2703-003127	L106	INDUCTOR-SMD
2703-003127	L108	INDUCTOR-SMD
2703-003258	L400	INDUCTOR-SMD
2703-003258	L401	INDUCTOR-SMD
2703-003258	L402	INDUCTOR-SMD
2703-003347	L605	INDUCTOR-SMD
2801-004339	OSC400	CRYSTAL-SMD
2809-001280	TCX200	OSCILLATOR-VCTCXO
2901-001469	F704	FILTER-EMI/ESD
2901-001469	F705	FILTER-EMI/ESD
2901-001499	F700	FILTER-EMI/ESD
2901-001499	F701	FILTER-EMI/ESD
2904-001600	F103	FILTER-SAW
2904-001604	F102	FILTER-SAW
2904-001628	F101	FILTER-SAW
2904-001658	F201	FILTER-SAW
2904-001769	F200	FILTER-SAW
2904-001773	F100	FILTER-SAW
2909-001285	F104	FILTER-LC
2910-000024	DUP200	DUPLEXER-SAW
3301-001158	L500	BEAD-SMD
3301-001158	L501	BEAD-SMD

SEC CODE	Design LOC	Discription
3301-001534	L603	BEAD-SMD
3301-001659	L109	BEAD-SMD
3301-001786	L601	BEAD-SMD
3301-001786	L602	BEAD-SMD
3301-001786	L607	BEAD-SMD
3301-001786	L608	BEAD-SMD
3301-001786	R511	BEAD-SMD
3301-001786	R512	BEAD-SMD
3301-001809	L700	BEAD-SMD
3301-001809	L701	BEAD-SMD
3301-001879	L606	BEAD-SMD
3705-001448	RFC100	CONNECTOR-COAXIAL
3705-001503	RFS100	CONNECTOR-COAXIAL
3709-001447	SIM400	CONNECTOR-CARD EDGE
3709-001464	CD400	CONNECTOR-CARD EDGE
3710-002523	IFC600	SOCKET-INTERFACE
3711-005550	HDC703	HEADER-BOARD TO BOARD
3711-005581	HDC701	HEADER-BOARD TO BOARD
3711-005643	HDC702	HEADER-BOARD TO BOARD
3711-005643	HDC704	HEADER-BOARD TO BOARD
3711-005659	HDC700	HEADER-BOARD TO BOARD
3711-006217	BTC600	HEADER-BATTERY
4302-001130	BAT400	BATTERY-LI(2ND)
GH70-03349A	SC100	IPR SHIELD-CAN CLIP
GH70-03349A	SC101	IPR SHIELD-CAN CLIP
GH70-03349A	SC102	IPR SHIELD-CAN CLIP
GH70-03349A	SC103	IPR SHIELD-CAN CLIP
GH70-03349A	SC104	IPR SHIELD-CAN CLIP
GH70-03349A	SC105	IPR SHIELD-CAN CLIP

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

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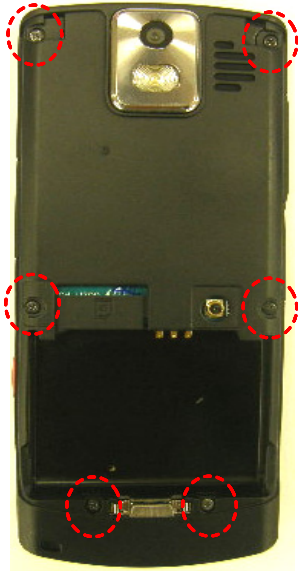
Country	Web Site
North America	service.samsungportal.com
Latin America	latin.samsungportal.com
CIS	cis.samsungportal.com
Europe	europe.samsungportal.com
China	china.samsungportal.com
Asia	asia.samsungportal.com
Mideast & Africa	mea.samsungportal.com

7. Disassembly and Assembly Instructions

7-1. Disassembly

1

1) Unscrew 6 bolts.



1) Be careful not to make any scratch or damage on the exterior.

2

1) Unlock the lockers forcibly following the directions below.



1) Be careful not to make any scratch or damage on the exterior.

3

1) Unscrew 2 bolts.

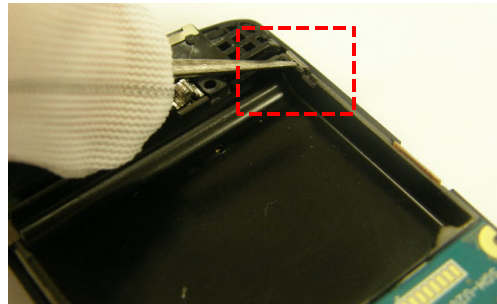


1) Be careful not to make any damage to the pba

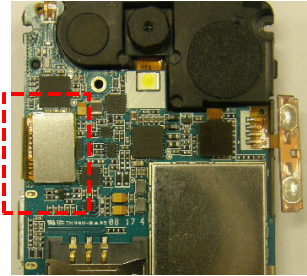
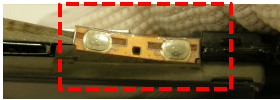
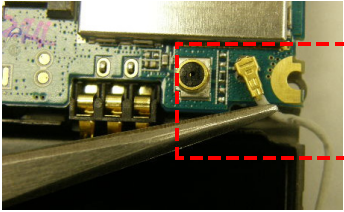
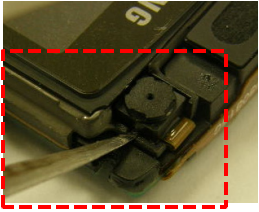
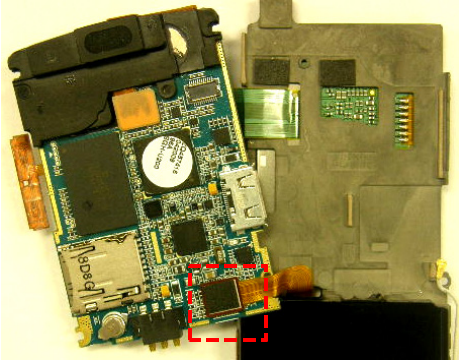
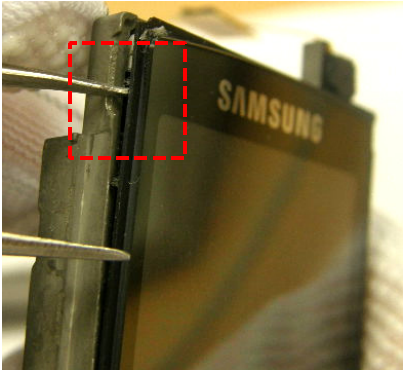
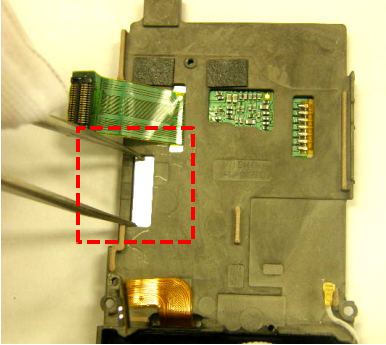
4

1) Disassemble the pba assembly.

push down this point using tool.



1) Be careful not to make any damage to the pba

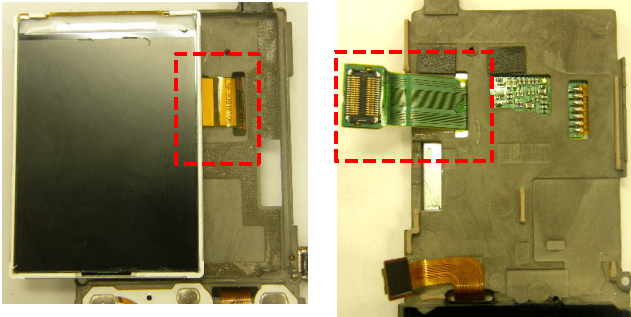
<p>5</p> <ol style="list-style-type: none"> 1) Separate LCD connector from the pba 2) Separate volume key pcb from the pba 3) Separate inntena connector from the pba <p>1</p>  <p>2</p>  <p>3</p> 	<p>6</p> <ol style="list-style-type: none"> 1) Separate camera from the braket 2) turn over the pba 3) Separate key connector from the pba <p>pull up this point using tool.</p>  
<p>1) Be careful not to make any damage to the pba</p>	<p>1) Be careful not to make any damage to the pba 2) Be careful not to make any damage to the camera</p>
<p>7</p> <ol style="list-style-type: none"> 1) Detach window from the pba <p>pull up this point using tool.</p> 	<p>8</p> <ol style="list-style-type: none"> 1) Detach LCD from the braket. <p>push down this point using tool.</p> 
<p>1) Separate slowly with no damage to the window and LCD.</p>	<p>1) Separate slowly with no damage to the LCD.</p>

7-2. Assembly

1

1) Assemble LCD to the bracket

insert LCD connector into the bracket hole



- 1) Check dust and dirt on the LCD.
- 2) Be careful not to make any damage to the LCD.

2

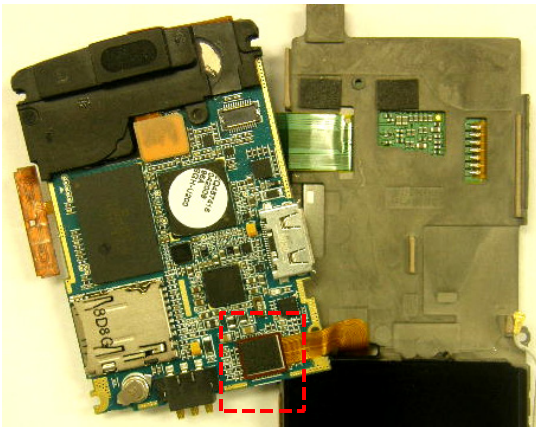
1) Attach the window to the LCD.



- 1) Check dust and dirt on the LCD and window.

3

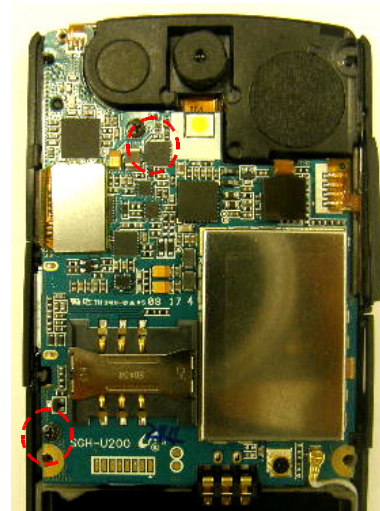
- 1) Connect the key connector.
- 2) Turn over the pba.



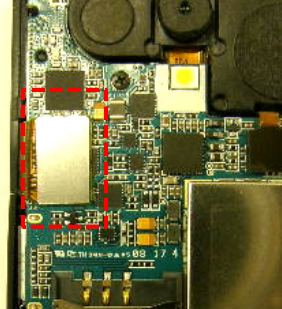
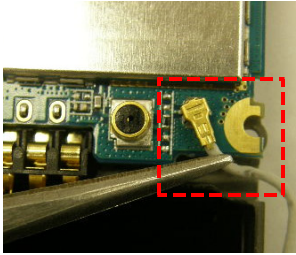
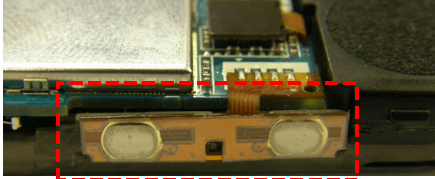
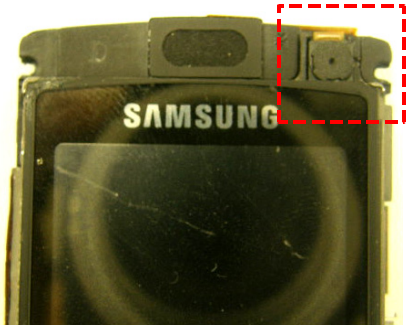
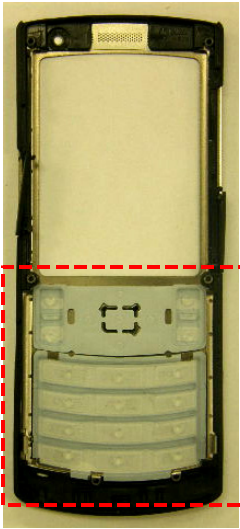
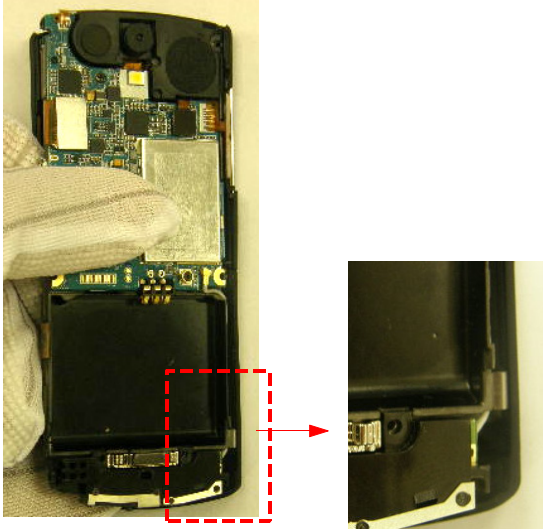
- 1) Check completely connected.

4

1) Screw 2 bolts.



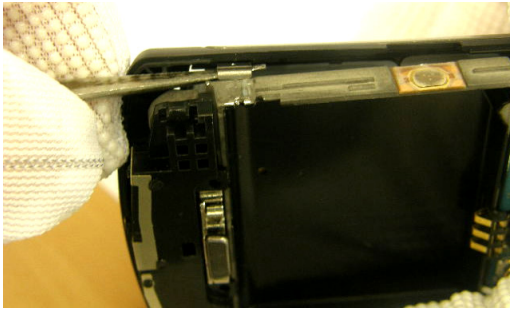
- 1) Be careful not to make any damage to the pba

<div data-bbox="168 243 805 373" style="border: 1px solid black; padding: 5px;"> <p>5</p> <ol style="list-style-type: none"> 1) Connect LCD connector to the pba 2) Connect inntena wire to the pba 3) Attach volume key pcb to the braket </div> <div style="display: flex; justify-content: space-around; margin-top: 10px;"> <div data-bbox="185 390 464 751"> <div data-bbox="198 394 243 432" style="border: 1px solid black; padding: 2px; width: 20px; height: 20px; display: flex; align-items: center; justify-content: center; margin-bottom: 5px;">1</div>  </div> <div data-bbox="496 432 789 751"> <div data-bbox="532 436 578 474" style="border: 1px solid black; padding: 2px; width: 20px; height: 20px; display: flex; align-items: center; justify-content: center; margin-bottom: 5px;">2</div>  </div> </div> <div data-bbox="243 768 675 1008"> <div data-bbox="256 772 302 810" style="border: 1px solid black; padding: 2px; width: 20px; height: 20px; display: flex; align-items: center; justify-content: center; margin-bottom: 5px;">3</div>  </div>	<div data-bbox="831 243 1458 298" style="border: 1px solid black; padding: 5px;"> <p>6</p> <ol style="list-style-type: none"> 1) Attach camera to the braket </div> <div data-bbox="961 508 1367 831" style="text-align: center; margin-top: 20px;">  </div>
<ol style="list-style-type: none"> 1) Check completely connected. 2) Be careful not to make any damage to the pba 	<ol style="list-style-type: none"> 2) Be careful not to make any damage to the camera.
<div data-bbox="168 1125 805 1180" style="border: 1px solid black; padding: 5px;"> <p>7</p> <ol style="list-style-type: none"> 1) Assemble the key pad with front. </div> <div data-bbox="376 1251 613 1776" style="text-align: center; margin-top: 20px;">  </div>	<div data-bbox="831 1125 1458 1180" style="border: 1px solid black; padding: 5px;"> <p>8</p> <ol style="list-style-type: none"> 1) Assemble the pba with front. </div> <div data-bbox="857 1209 1455 1264" style="border: 1px solid black; padding: 5px; margin-top: 10px;"> <p>insert pba into the right's hook</p> </div> <div data-bbox="886 1285 1425 1810" style="text-align: center; margin-top: 20px;">  </div>
<ol style="list-style-type: none"> 1) Be careful not to make any scratch or damage on the exterior. 	<ol style="list-style-type: none"> 1) Be careful not to move the key pad

9

1) Assemble the pba with front.

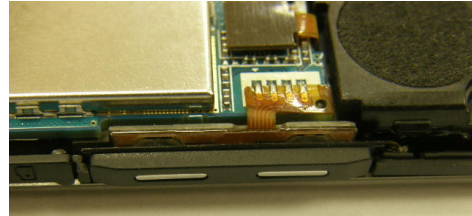
insert pba into the left's hook using tool.



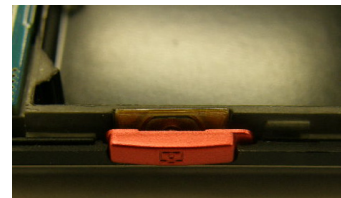
10

1) Assemble the volume key pad with front.
2) Assemble the camera key pad with front.

1



2



1) Be careful not to move the key pad

1) Be careful not to move the key pad

11

1) Assemble the rear with front.



12

1) Screw 6 bolts.

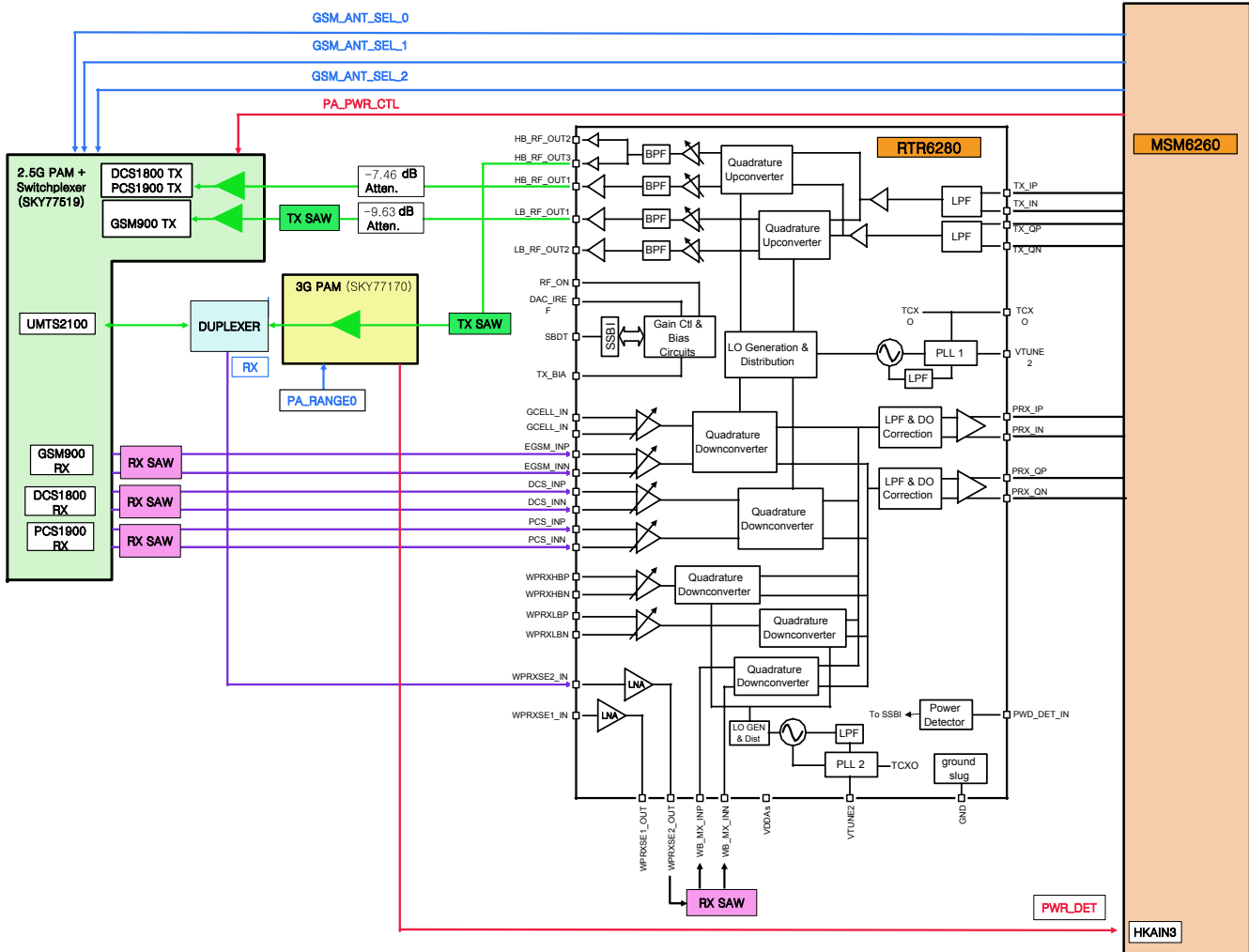


1) Be careful not to make any scratch or damage on the exterior.

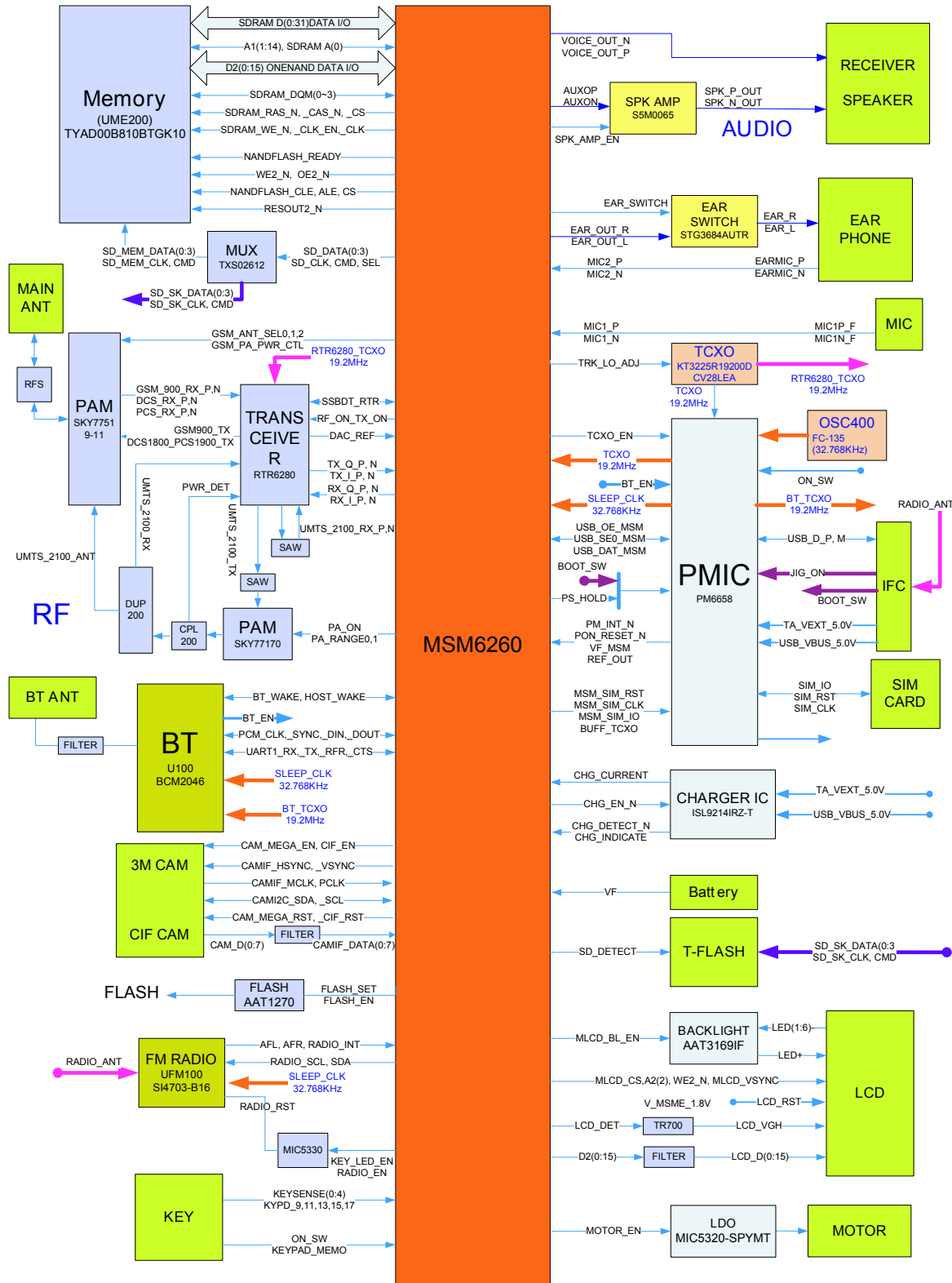
1) Be careful not to make any scratch or damage on the exterior.

8. Block Diagrams

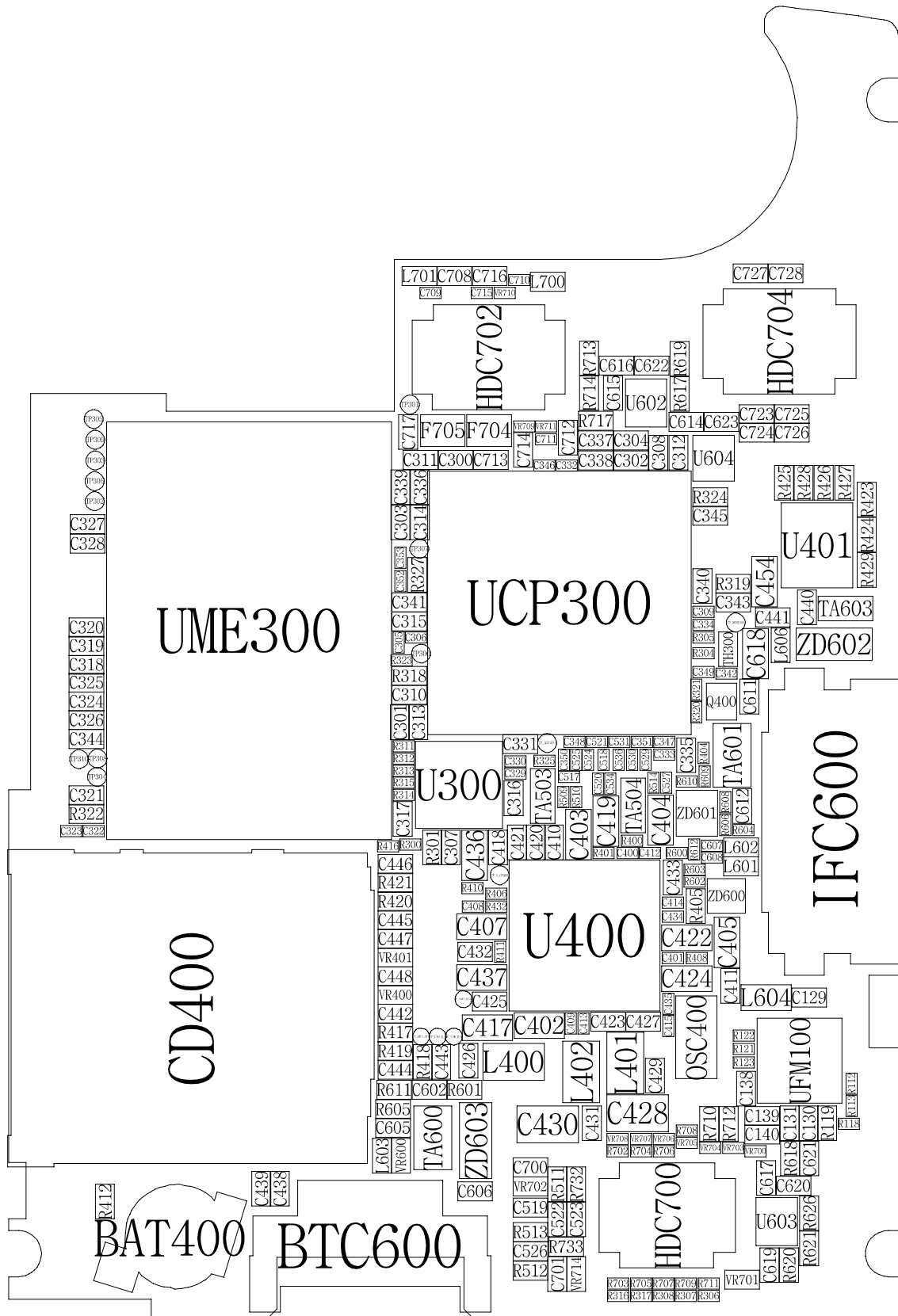
SGH-U800 RF Block Diagram

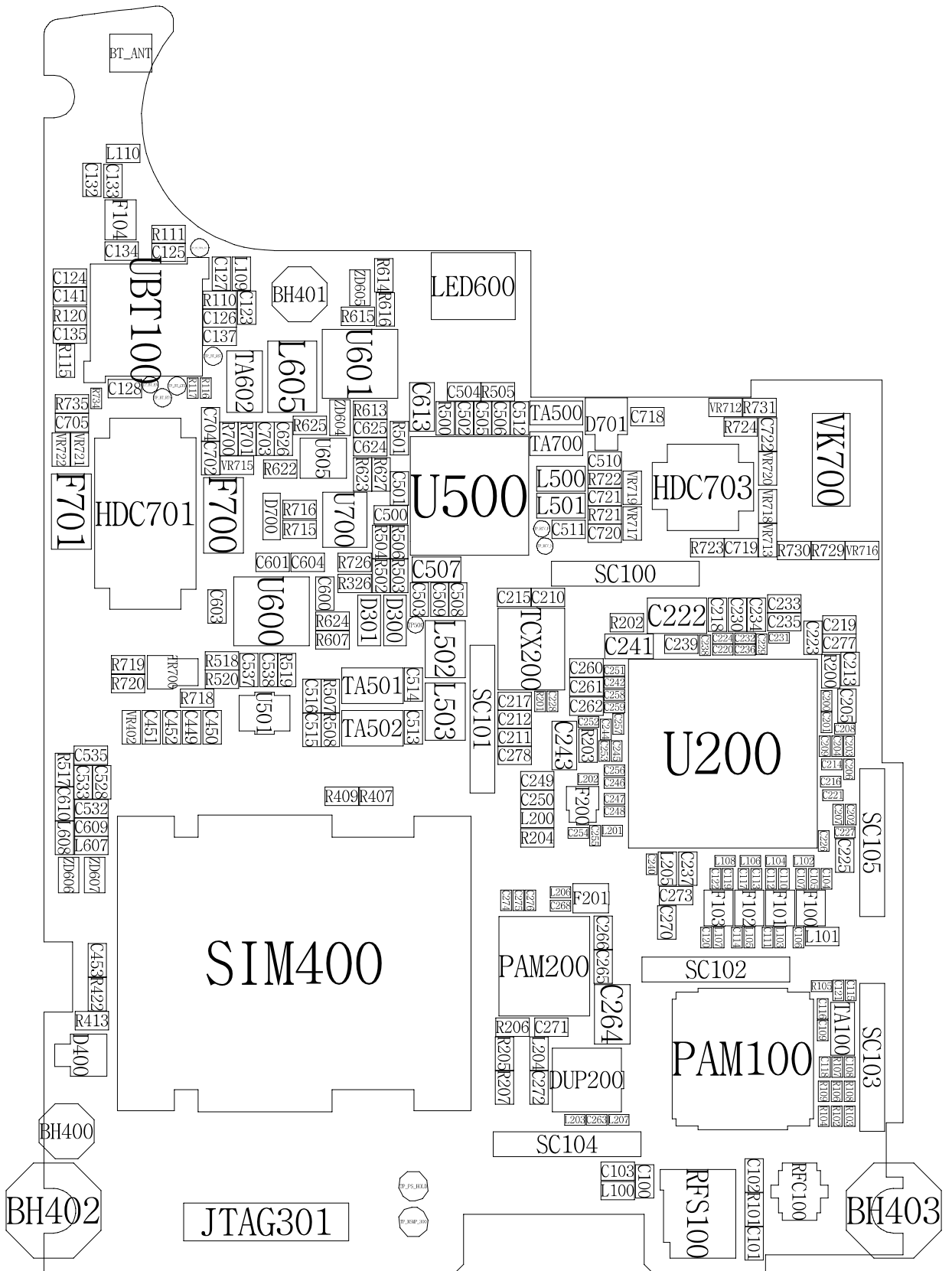


SGH-U800 Block Diagram



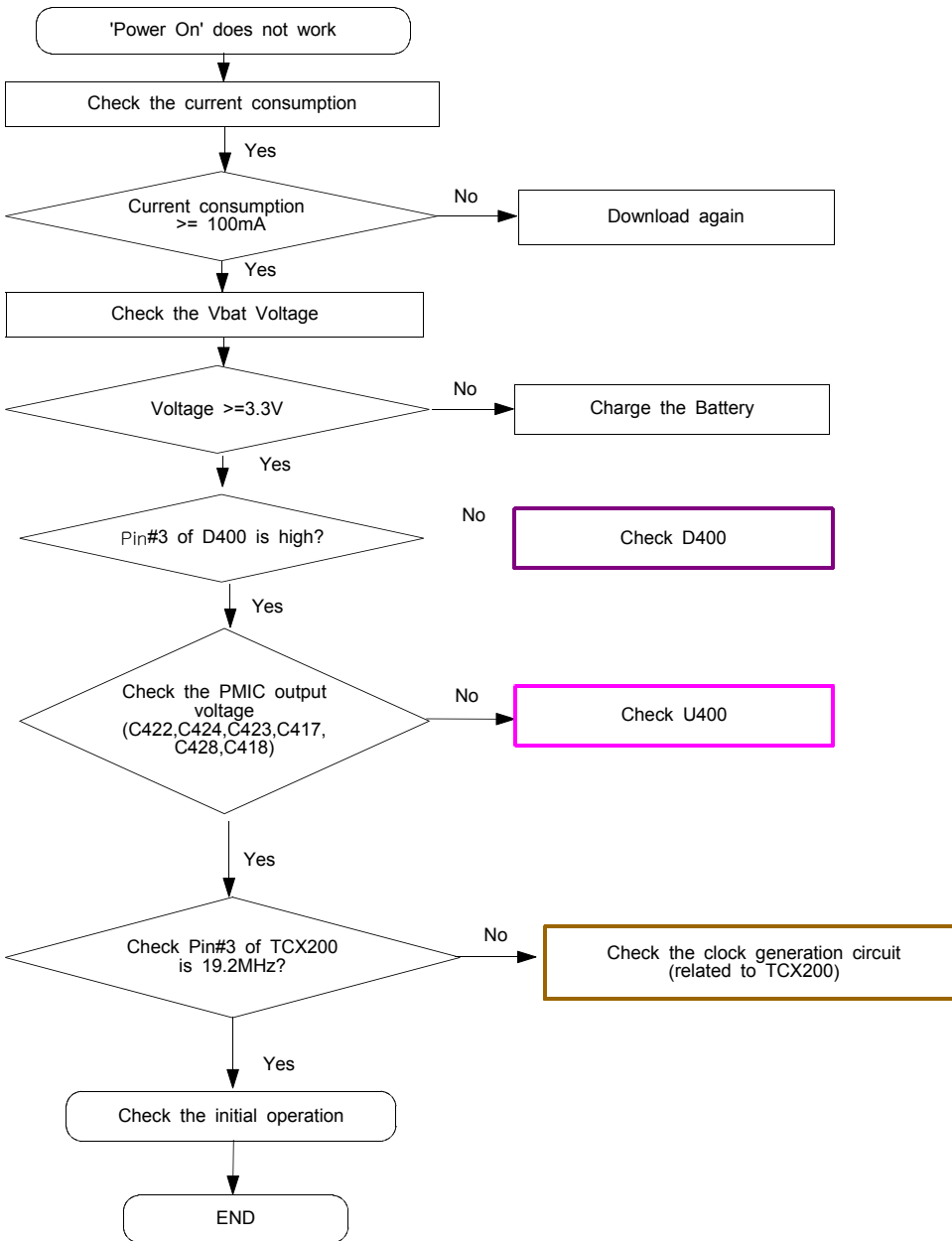
9. PCB Diagrams

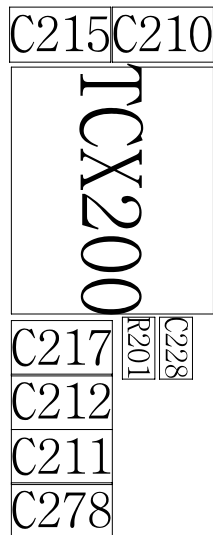
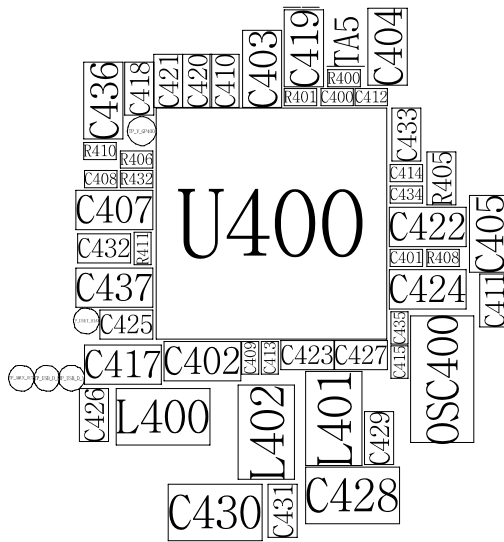
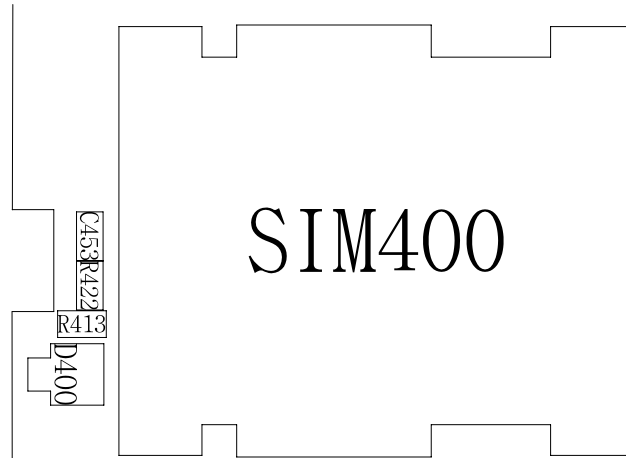




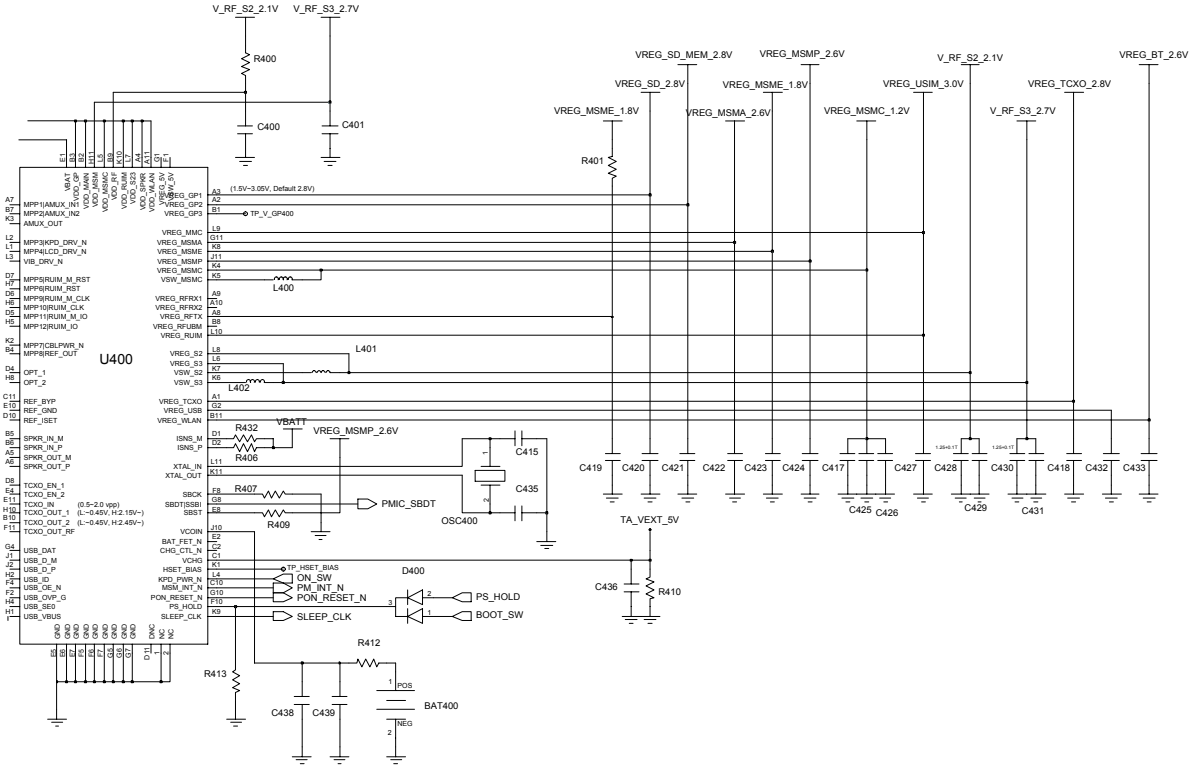
10. Flow Chart of Troubleshooting

10-1-1. Power ON

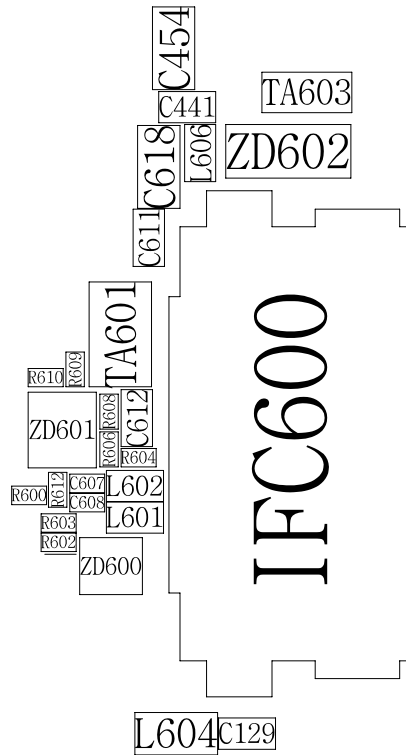
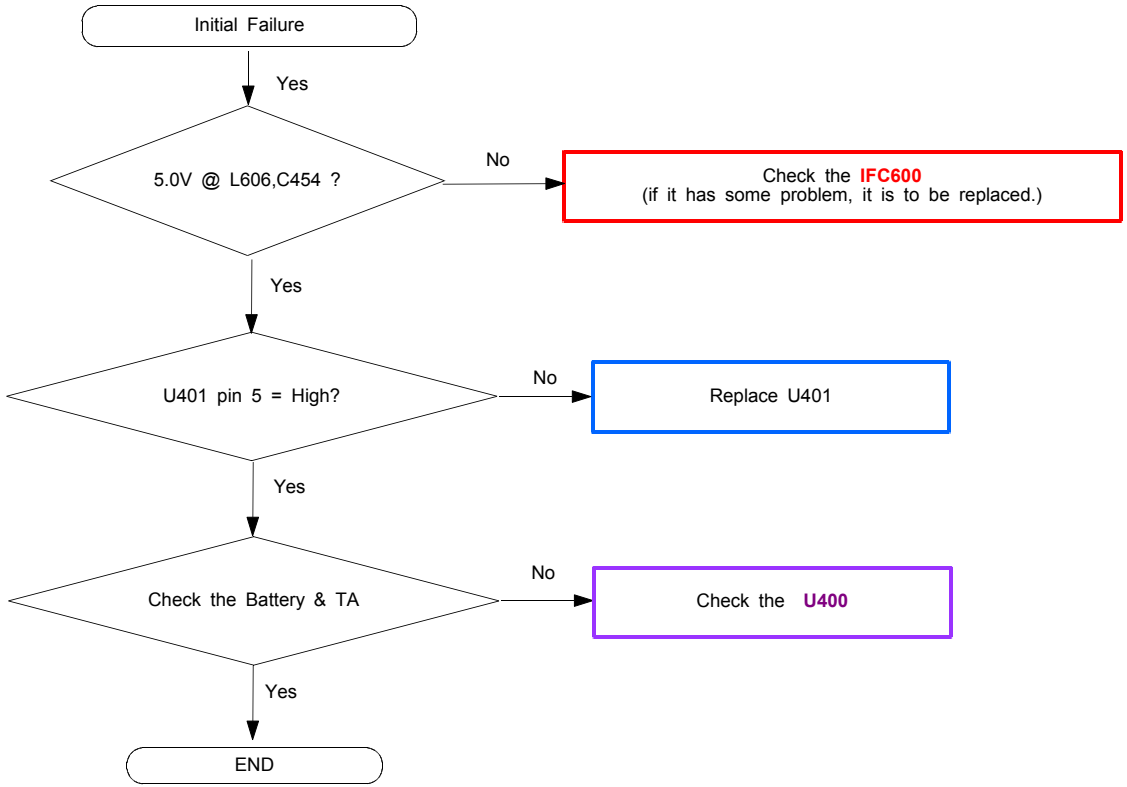


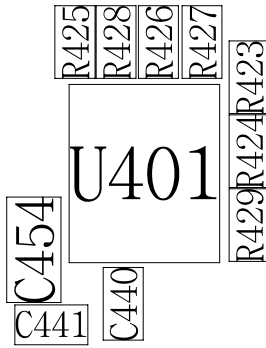


< Power Management IC >

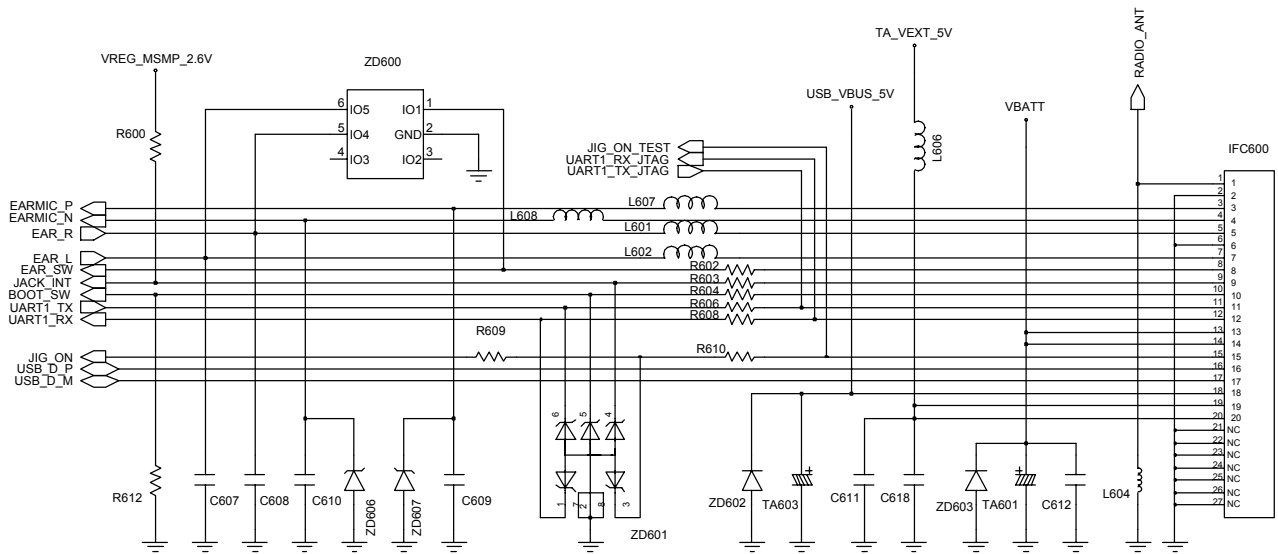


10-1-2. Charging Part

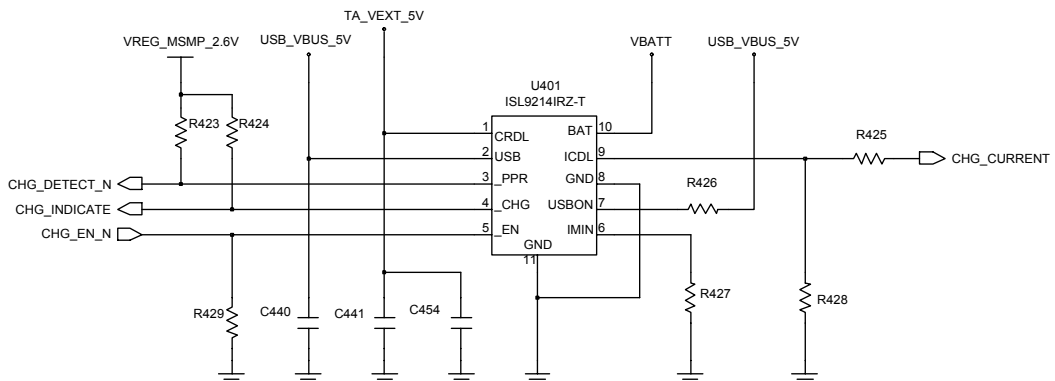




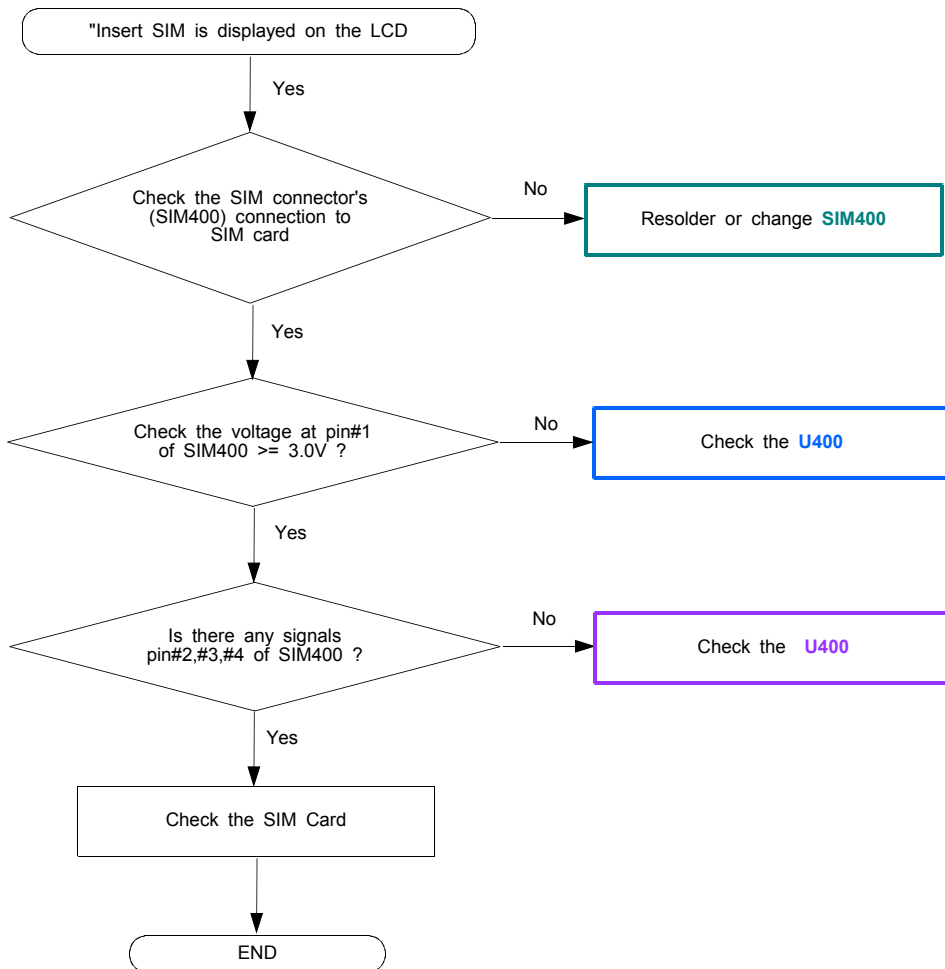
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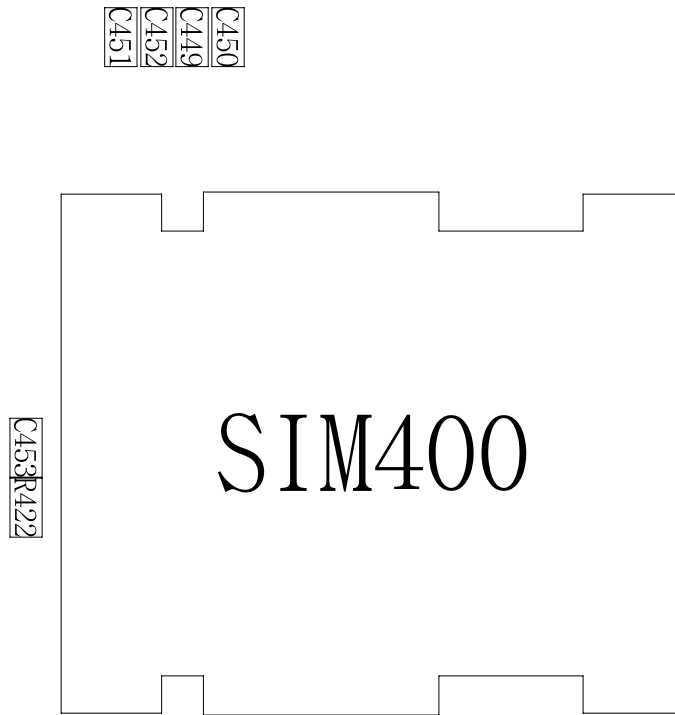


< CHARGER >

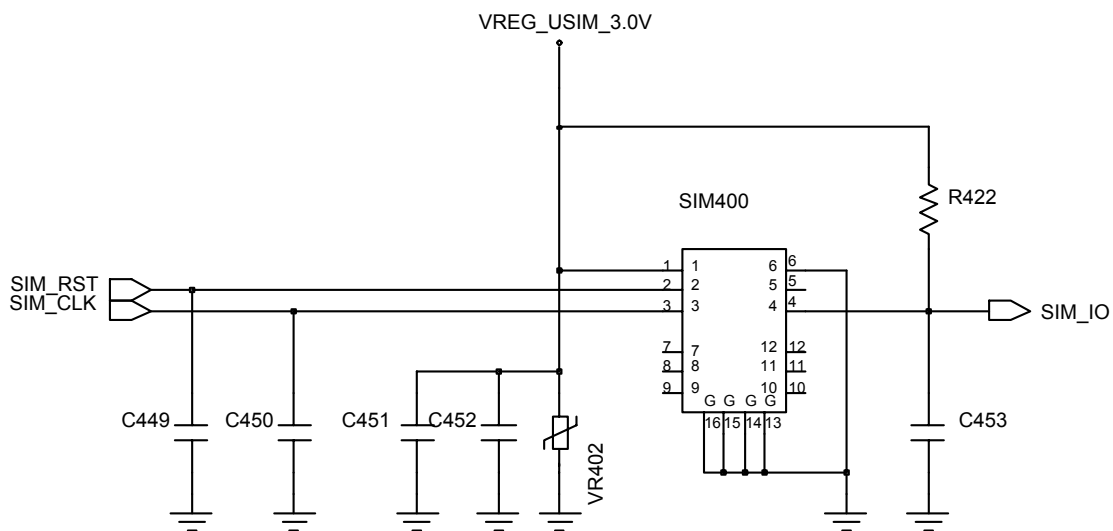


10-1-3. Sim Part

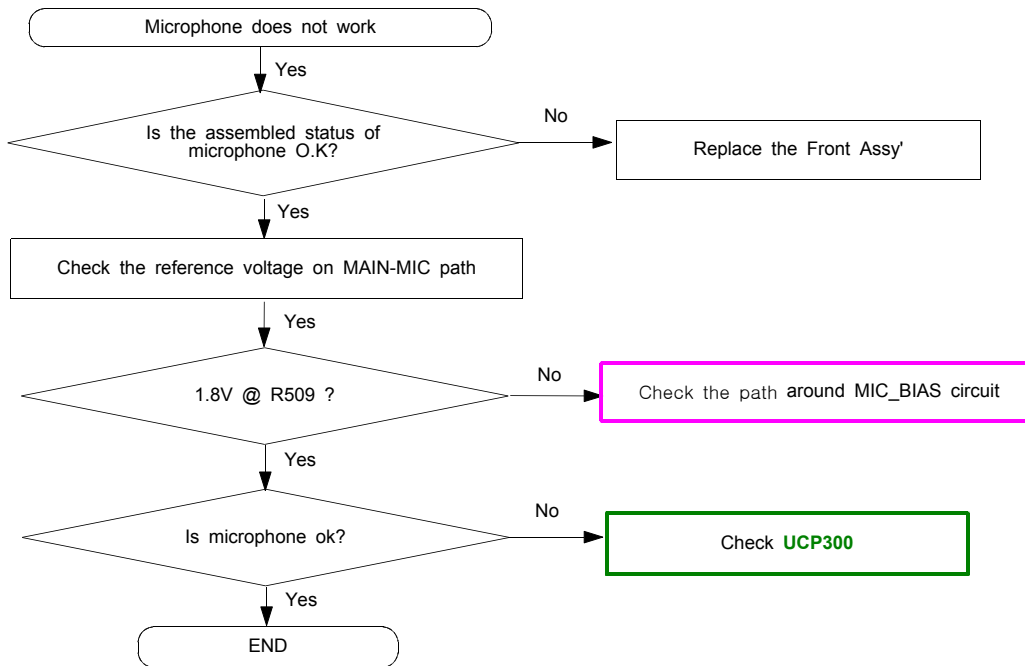




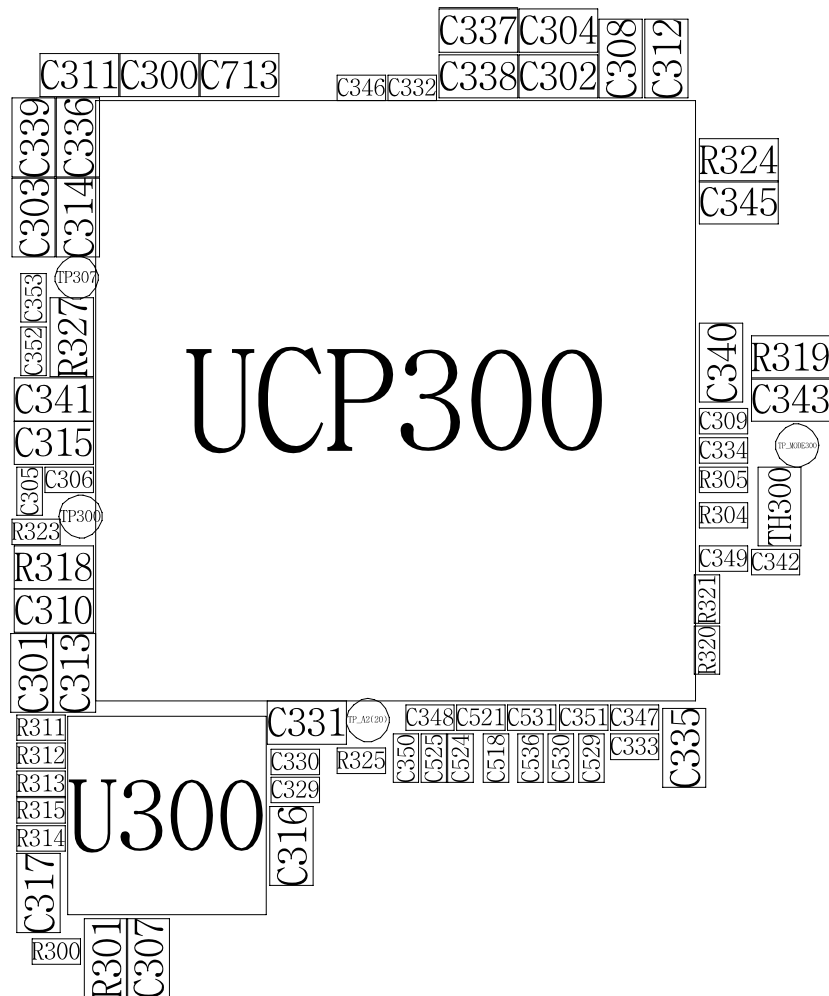
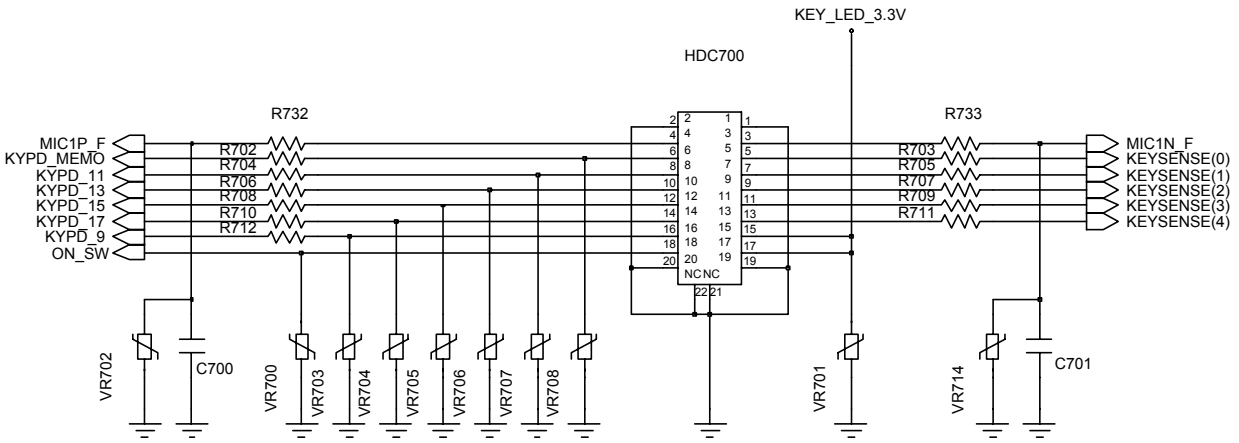
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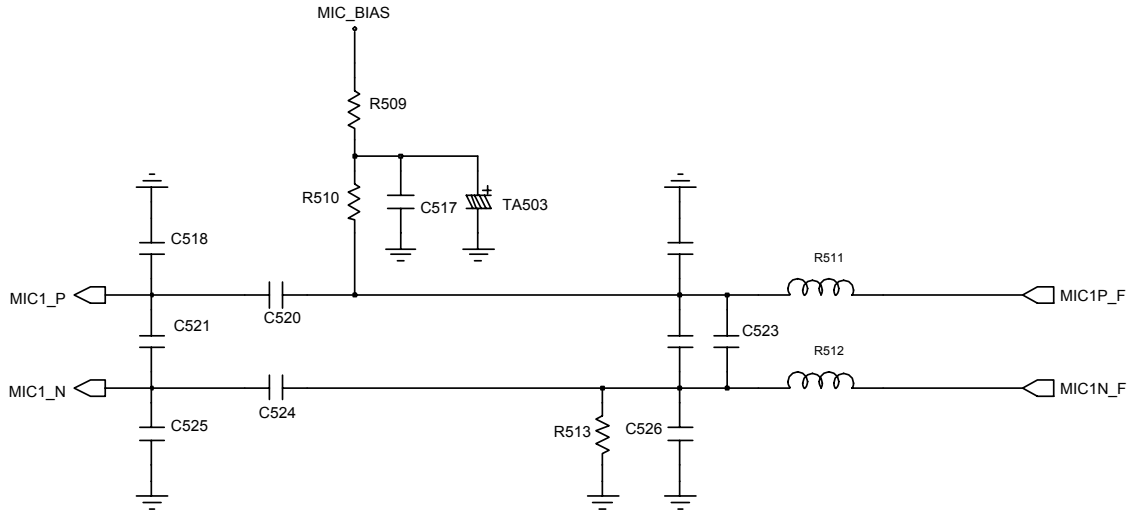
10-1-4. Microphone Part



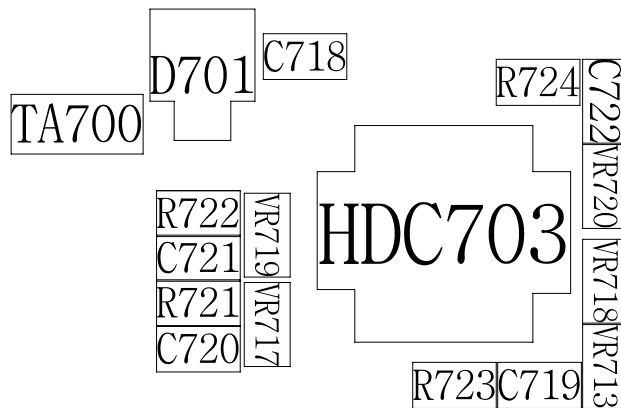
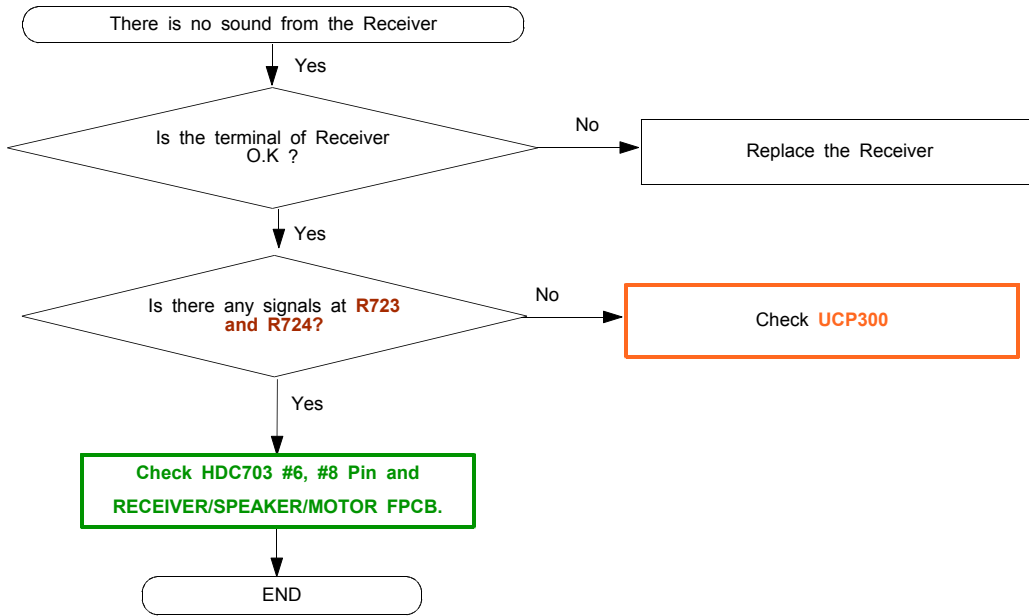
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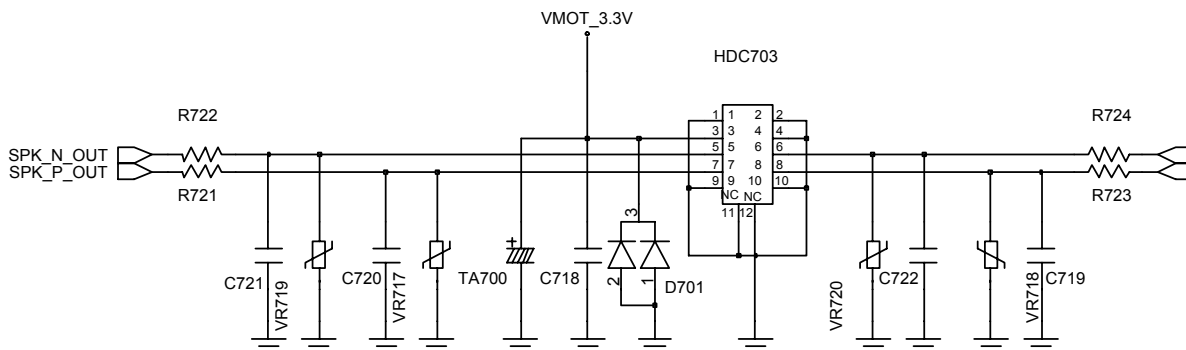
<MAIN-MIC PATH>



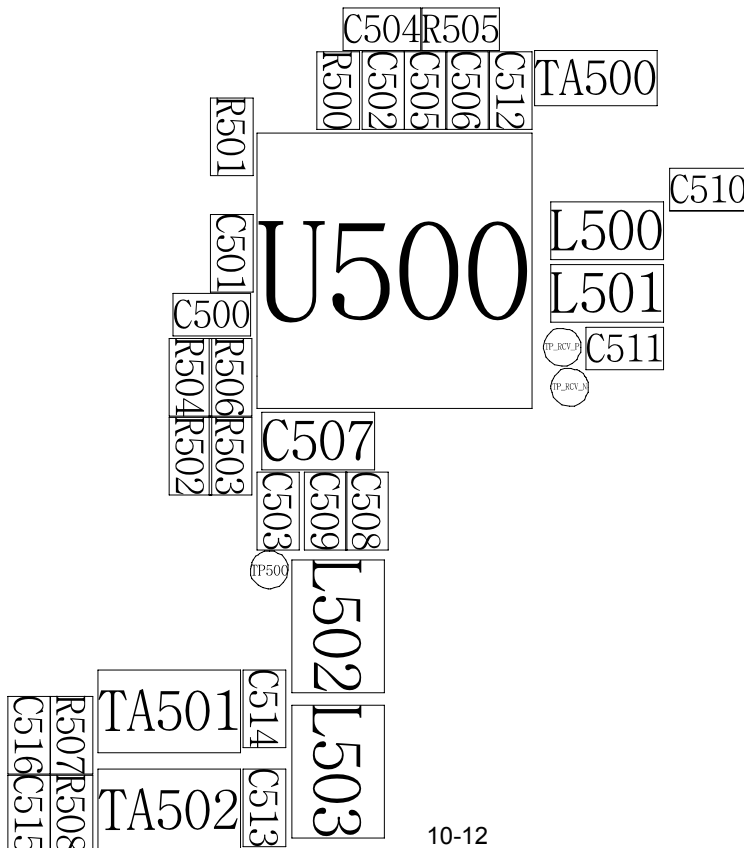
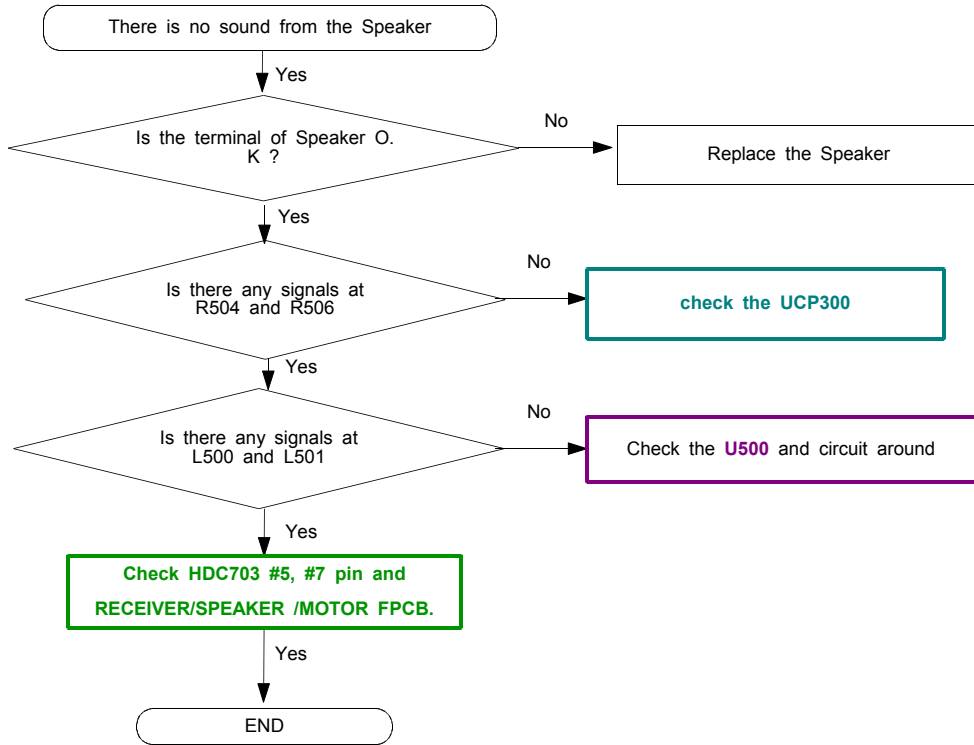
10-1-5. Receiver Part



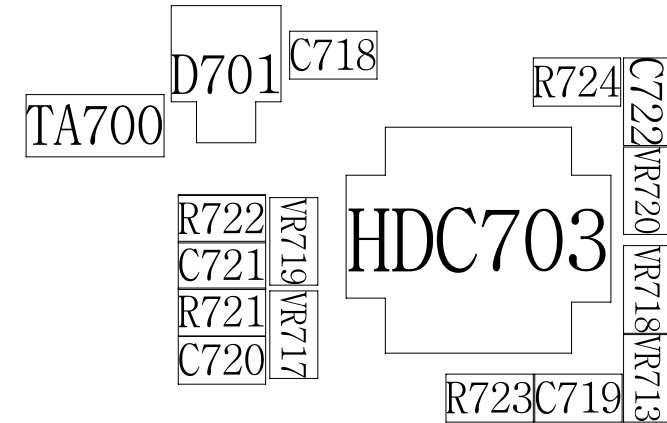
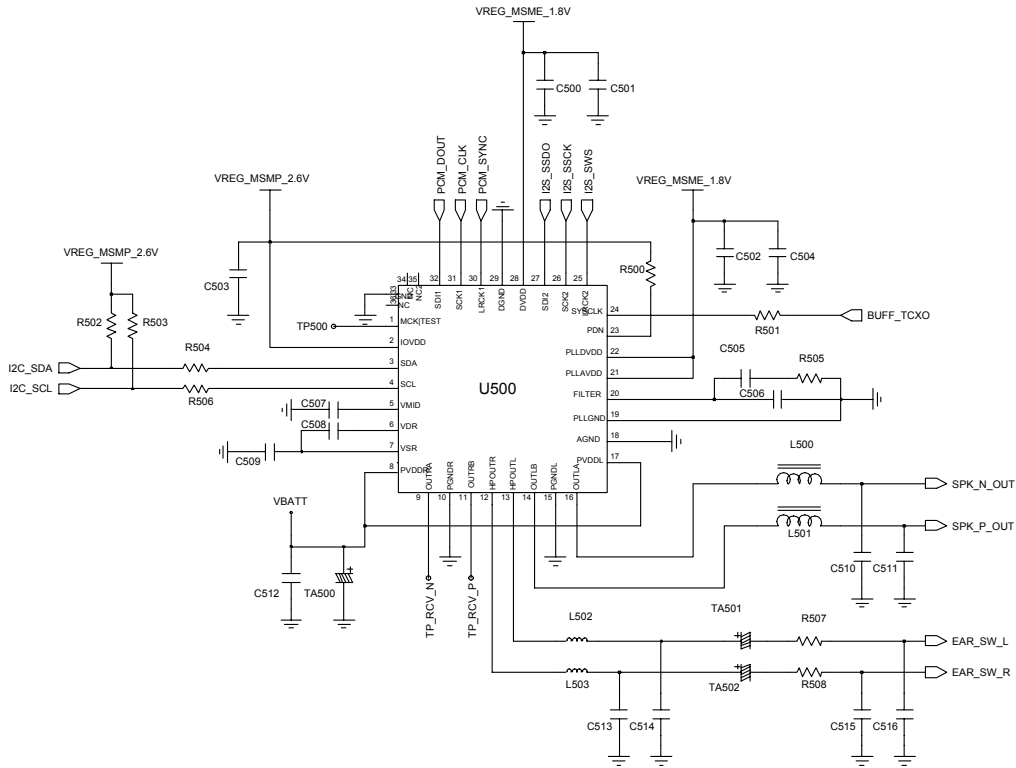
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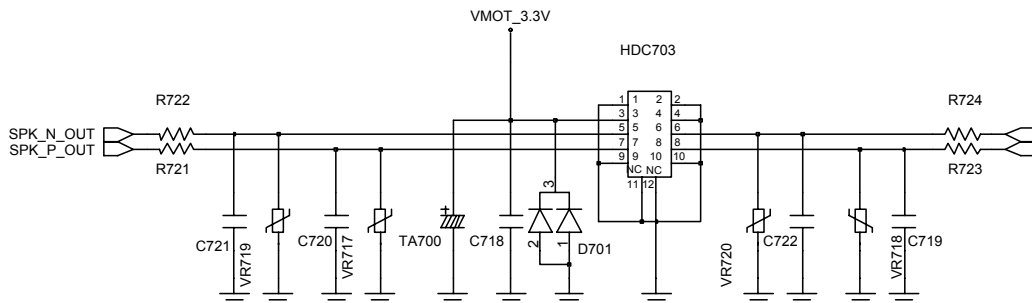
10-1-6. Speaker Part



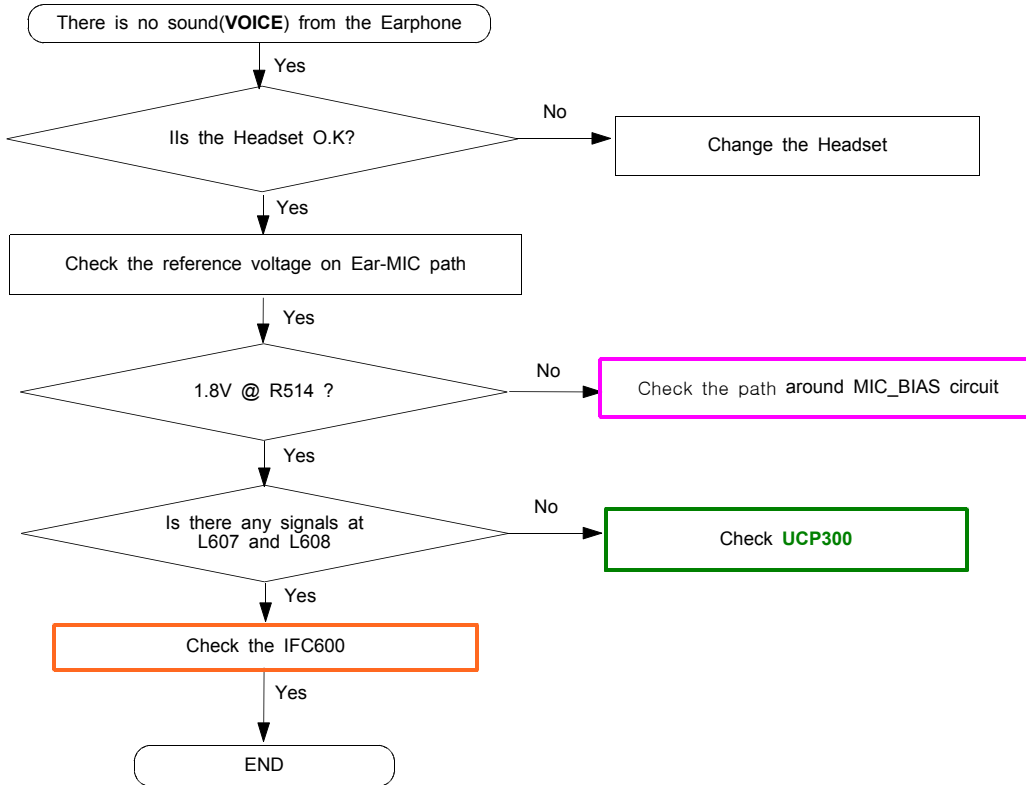
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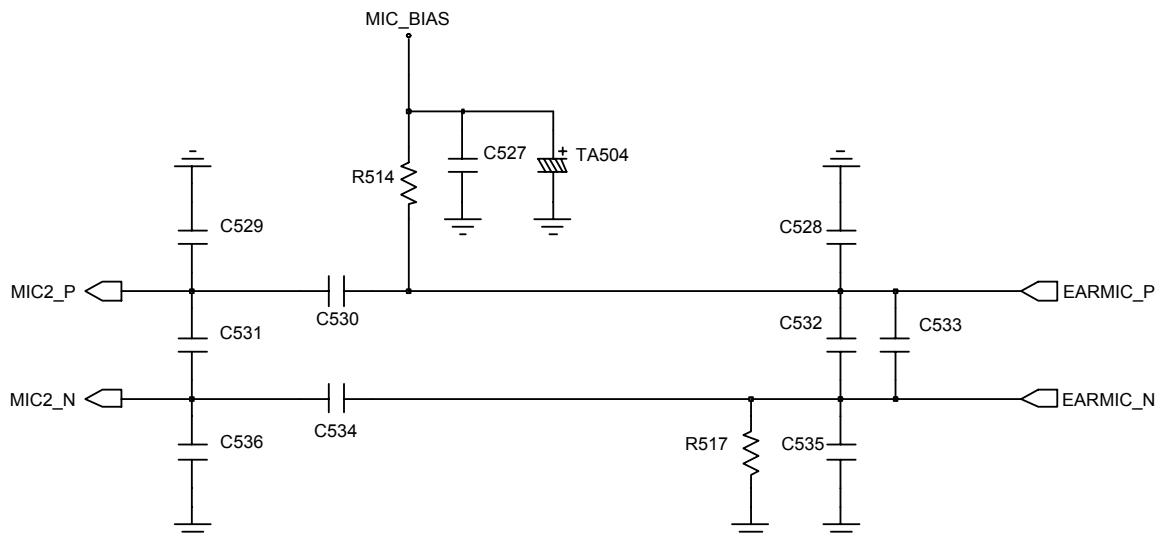
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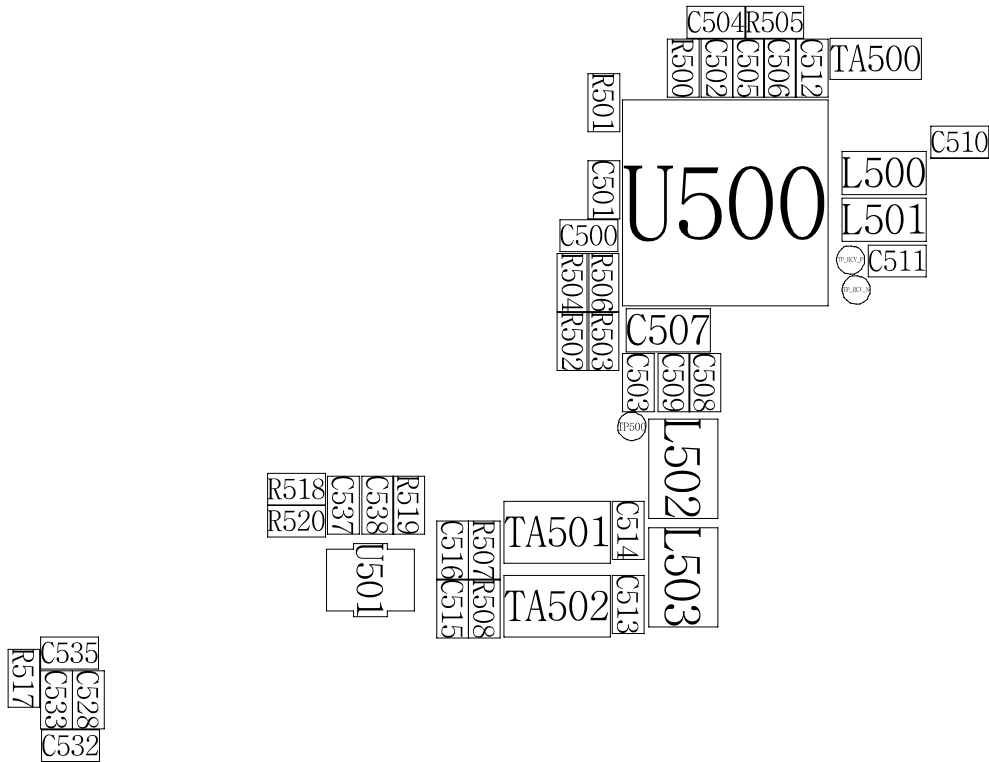
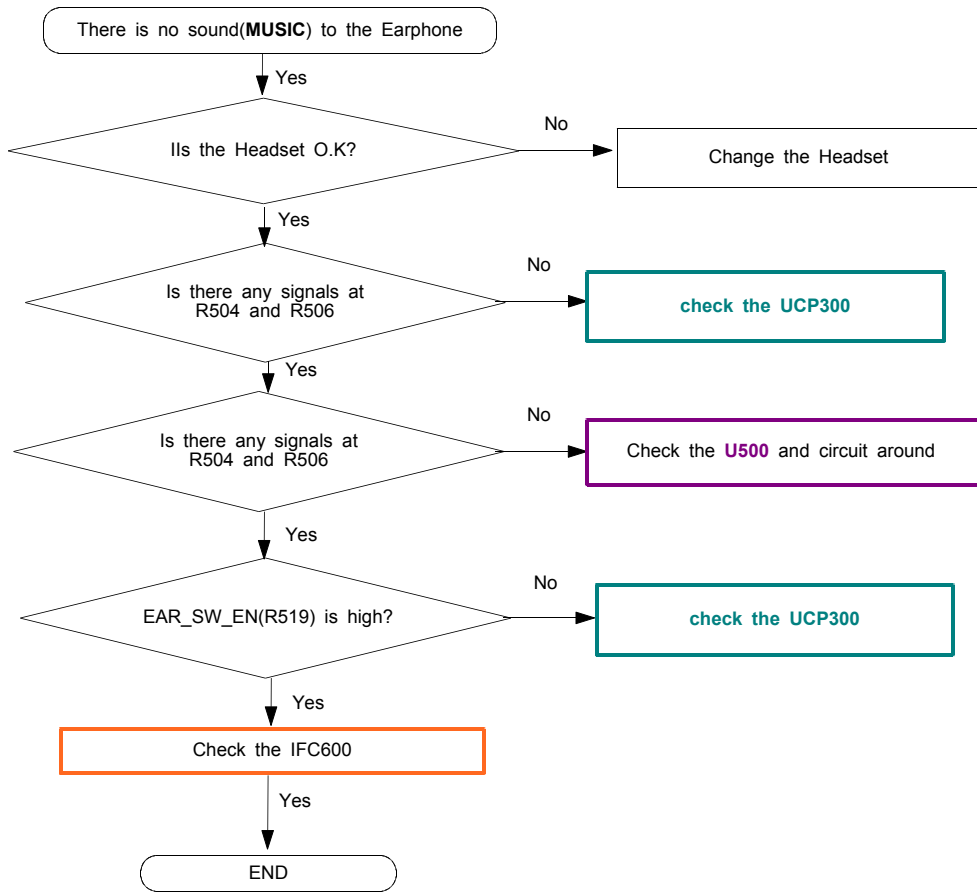


10-1-7. EARPHONE Part

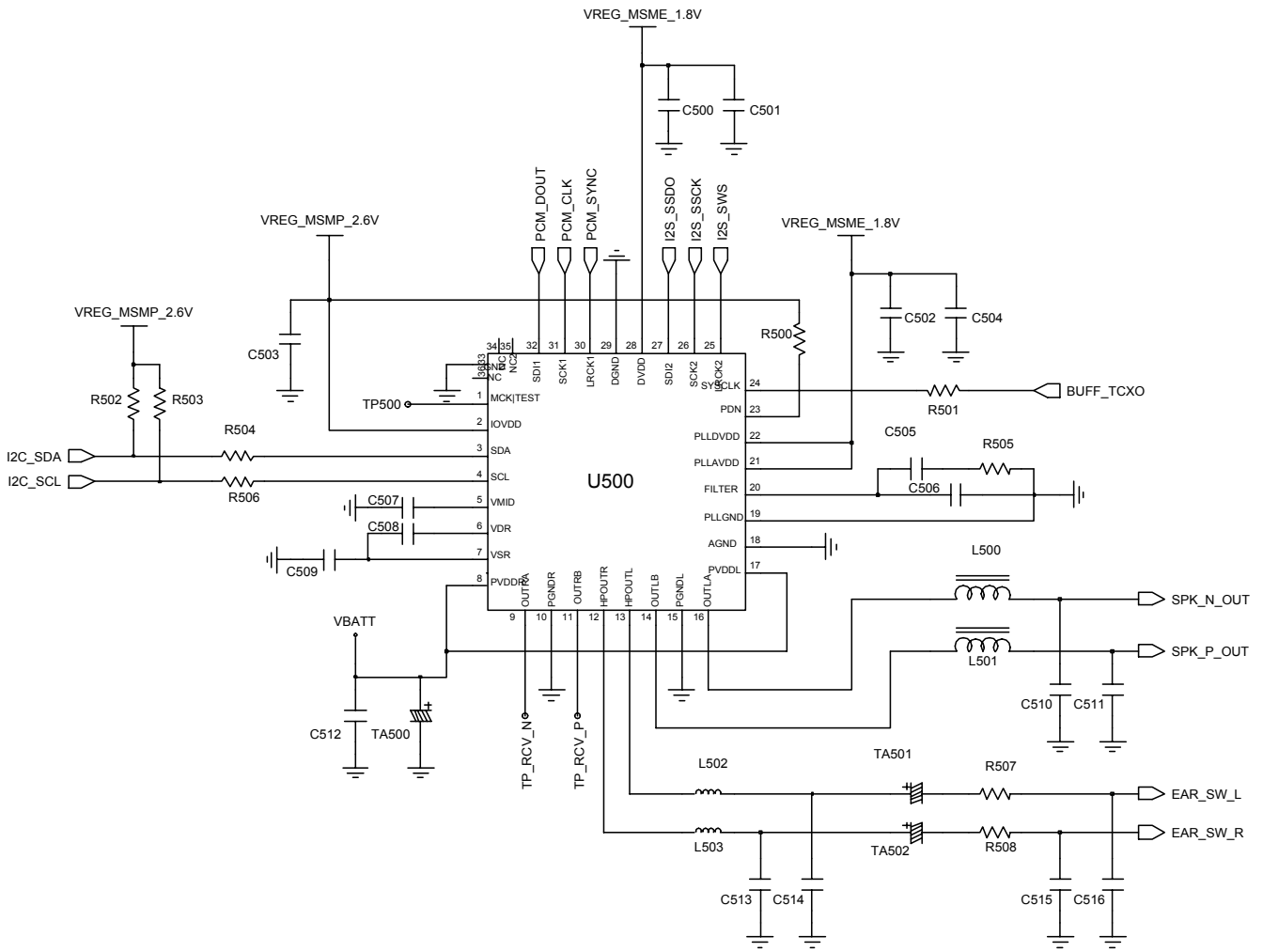


<EAR-MIC PATH>

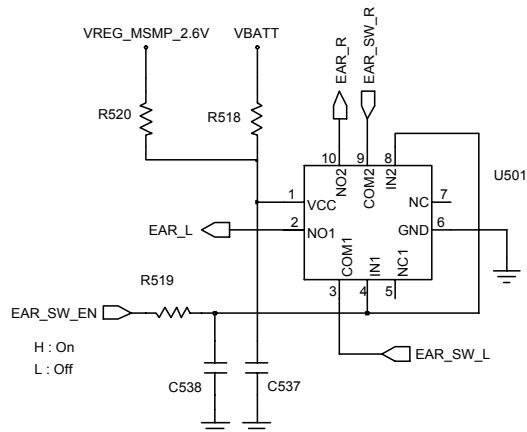




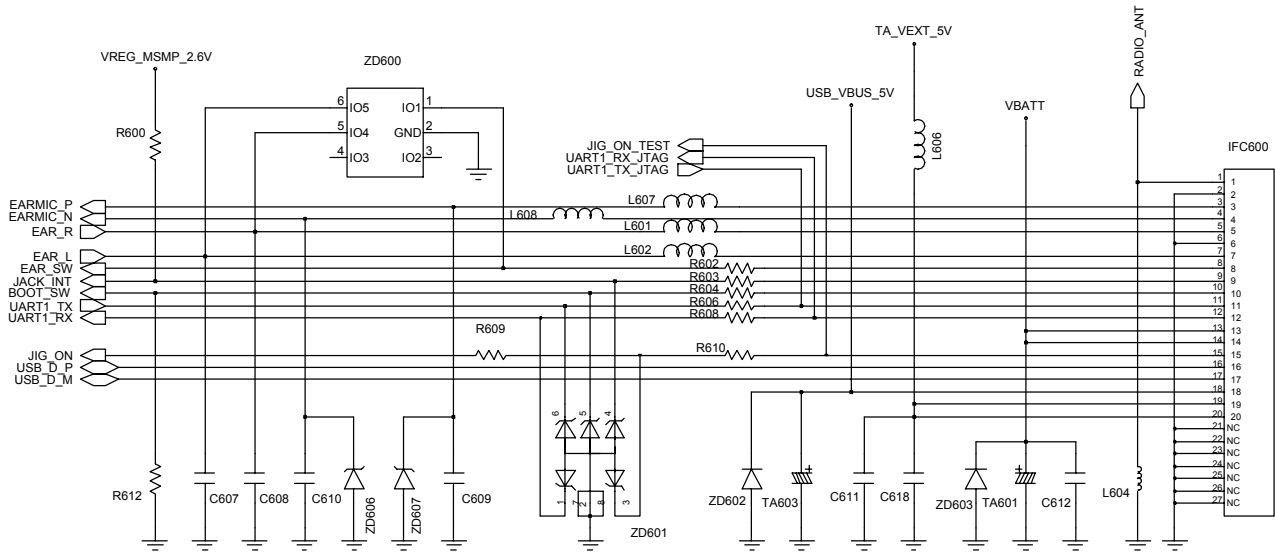
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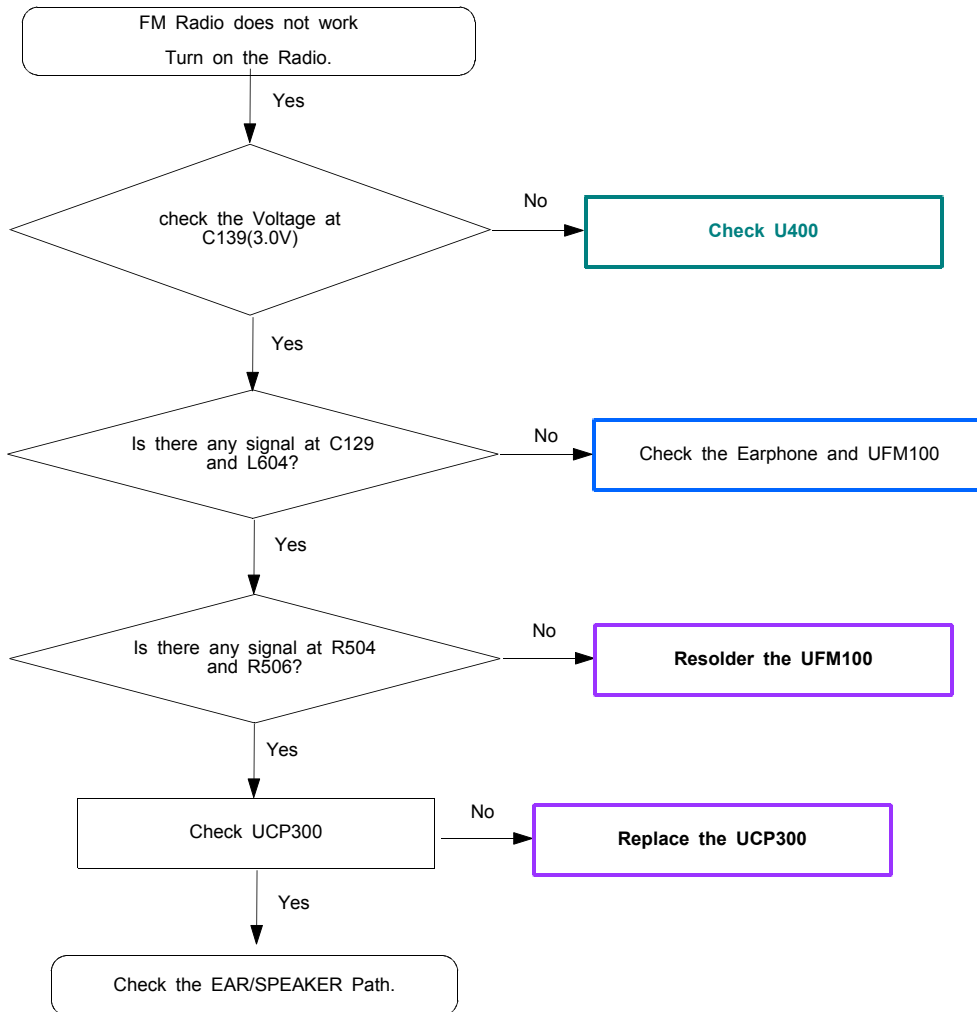
<EAR SWITCH>

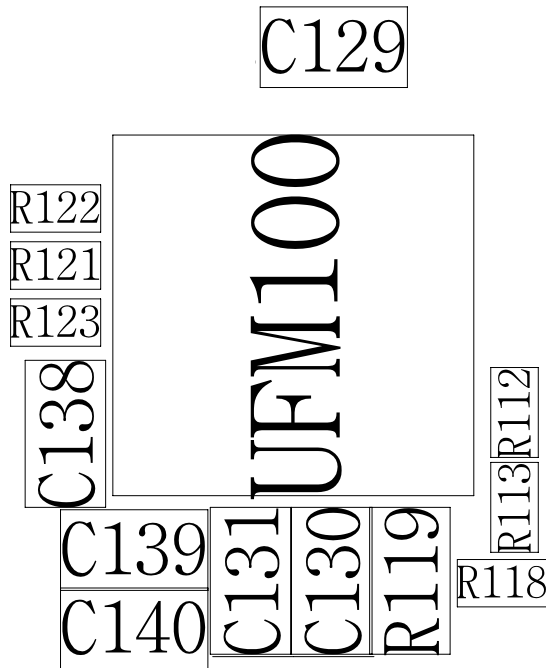


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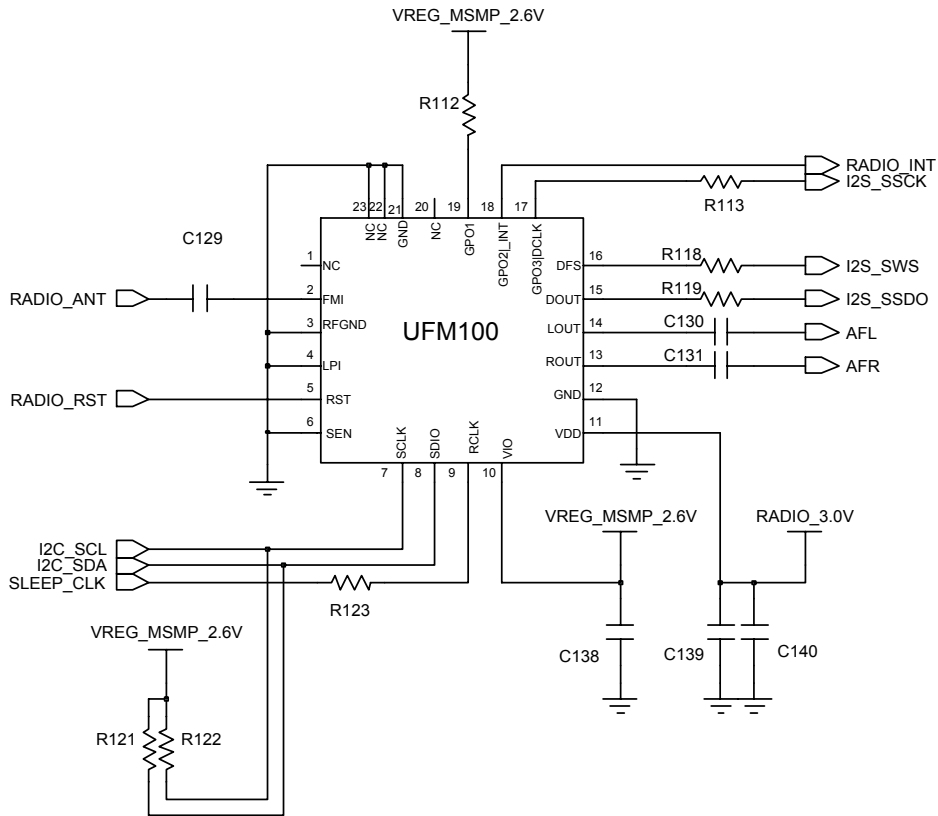


10-1-8. FM RADIO Part



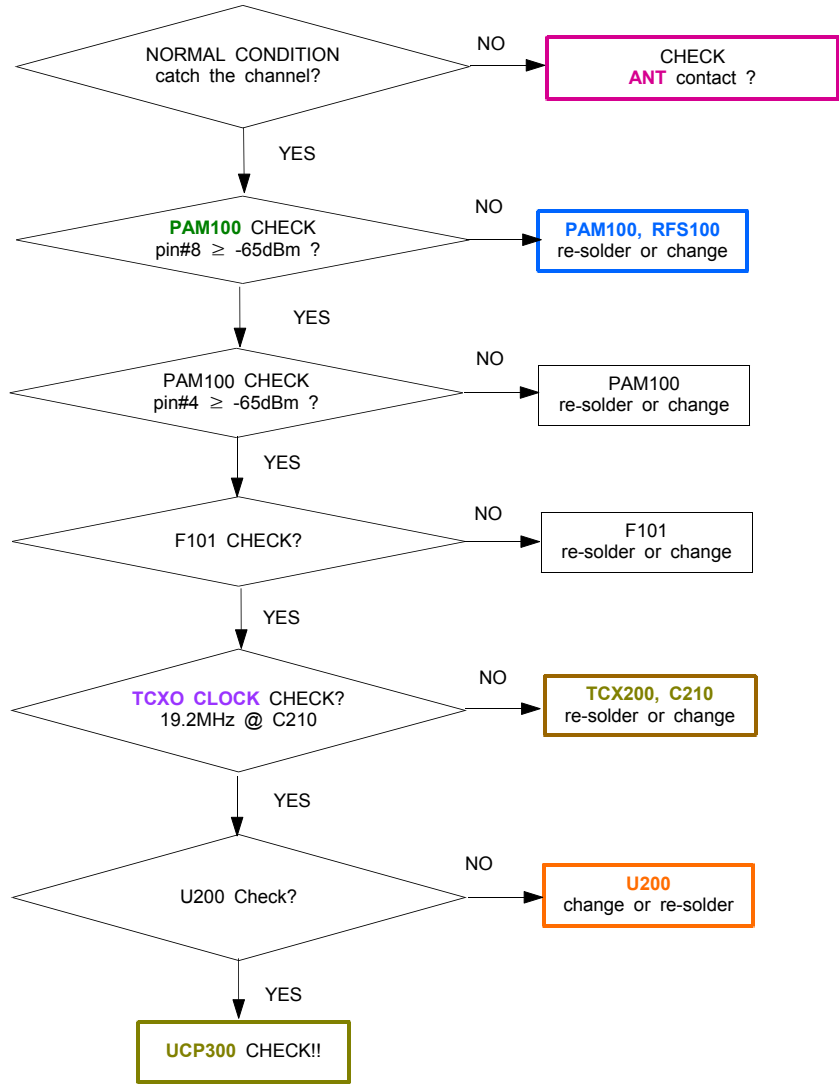


< FM RADIO >



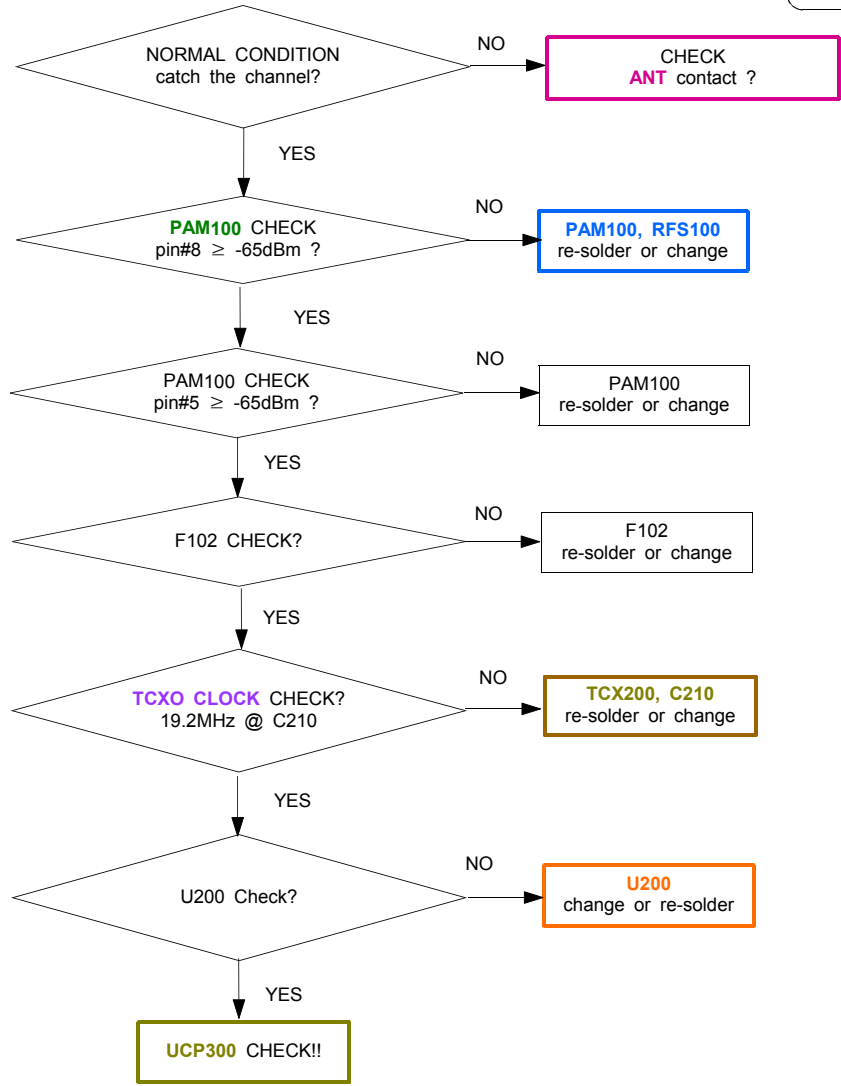
10-2-1. EGSM900 RX

Band : EGSM
CELL POWER : -50dBm
Channel : 62Ch



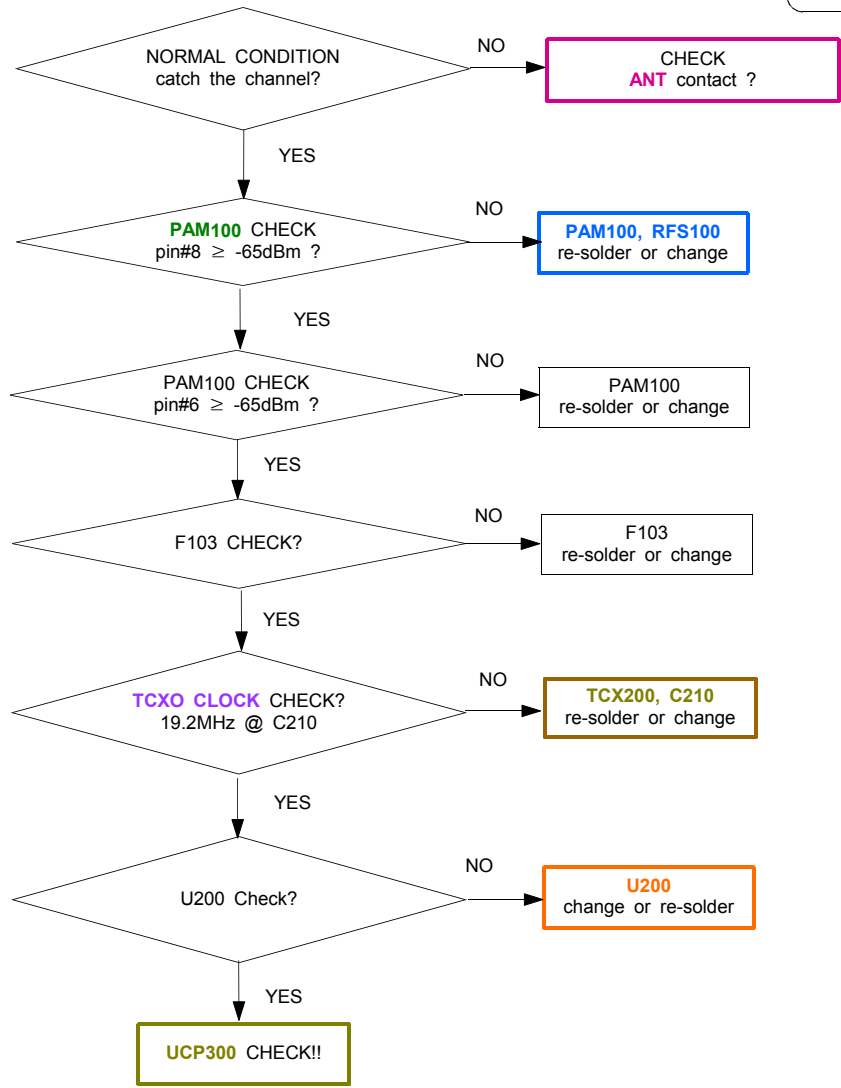
10-2-2. DCS1800 RX

Band : DCS
 CELL POWER : -50dBm
 Channel : 698Ch



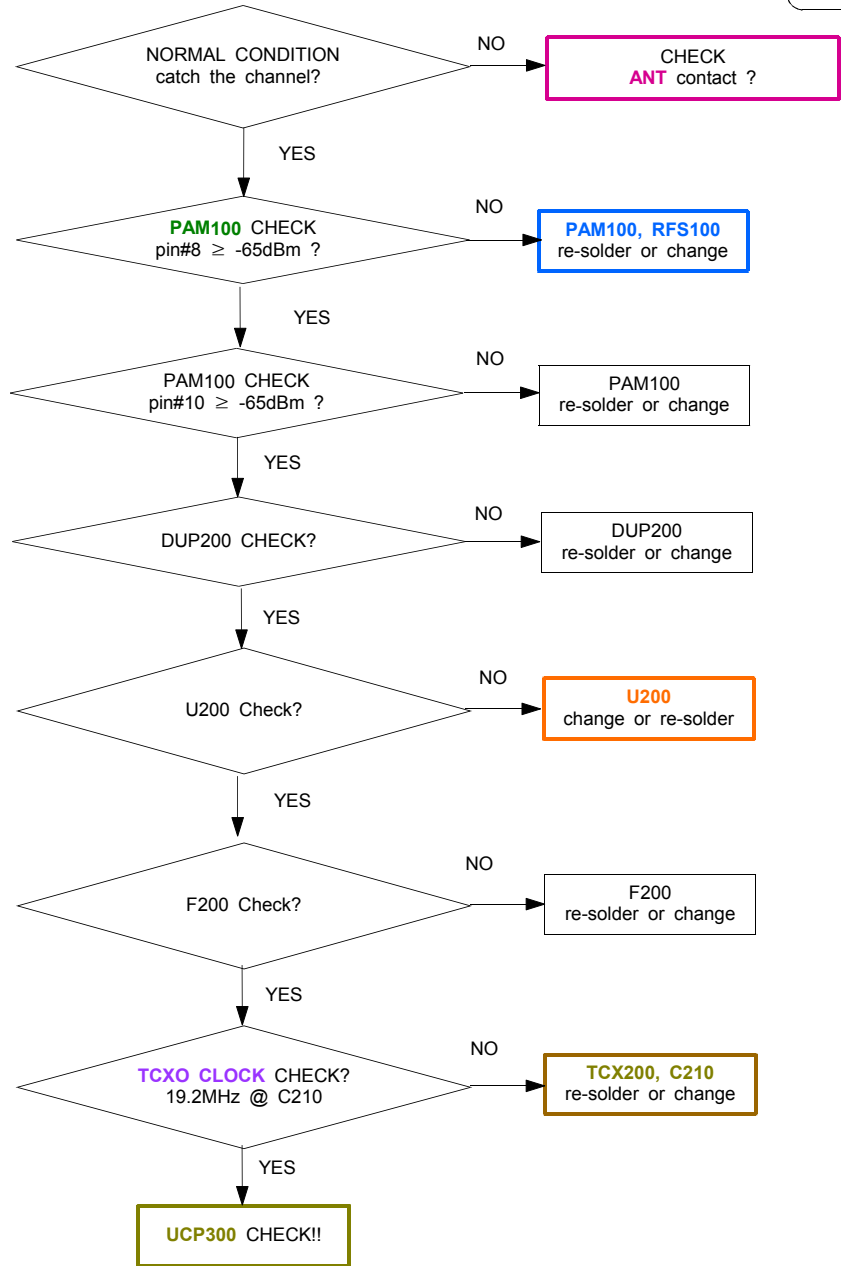
10-2-3. PCS1900 RX

Band : PCS
CELL POWER : -50dBm
Channel : 661Ch



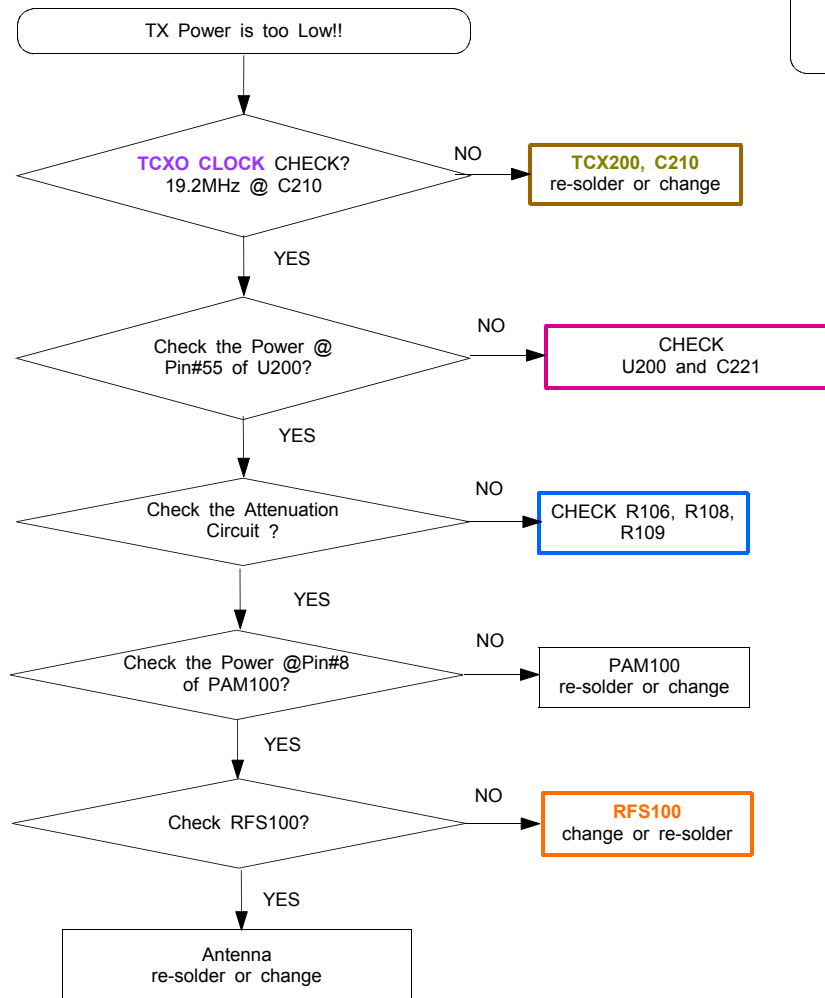
10-2-4. WCDMA2100 RX

Band : WCDMA
 CELL POWER : -50dBm
 DL Channel : 10700Ch
 UL Channel : 9750Ch



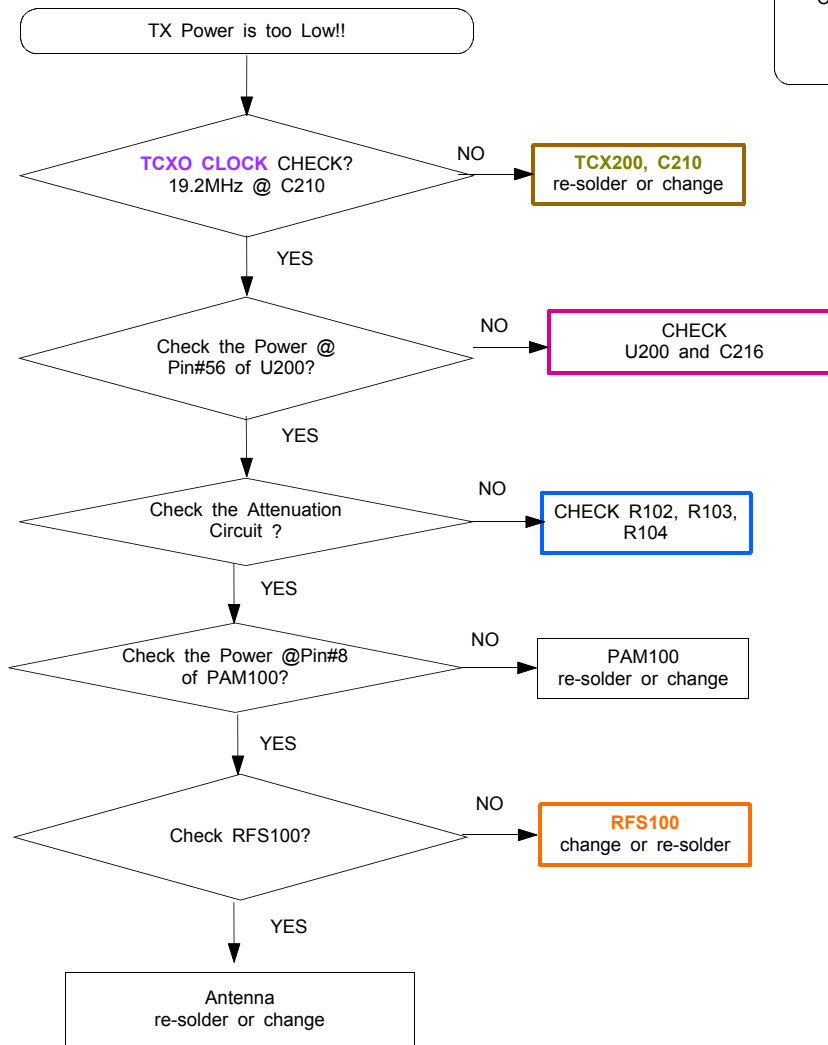
10-2-5. EGSM900 TX

Band :GSM
CELL POWER : -50dBm
Tx Power : 5Level
Channel : 62ch



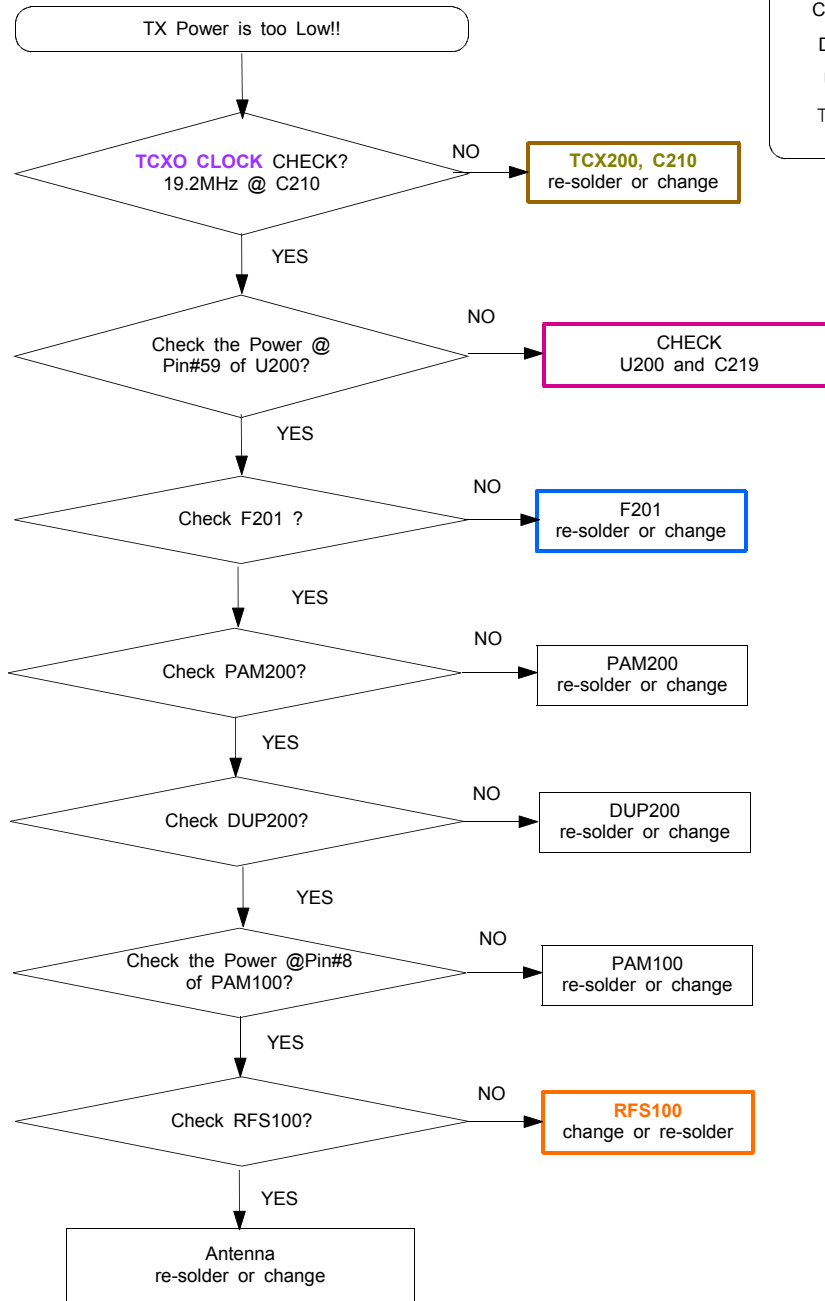
10-2-6. DCS1800/PCS1900 TX

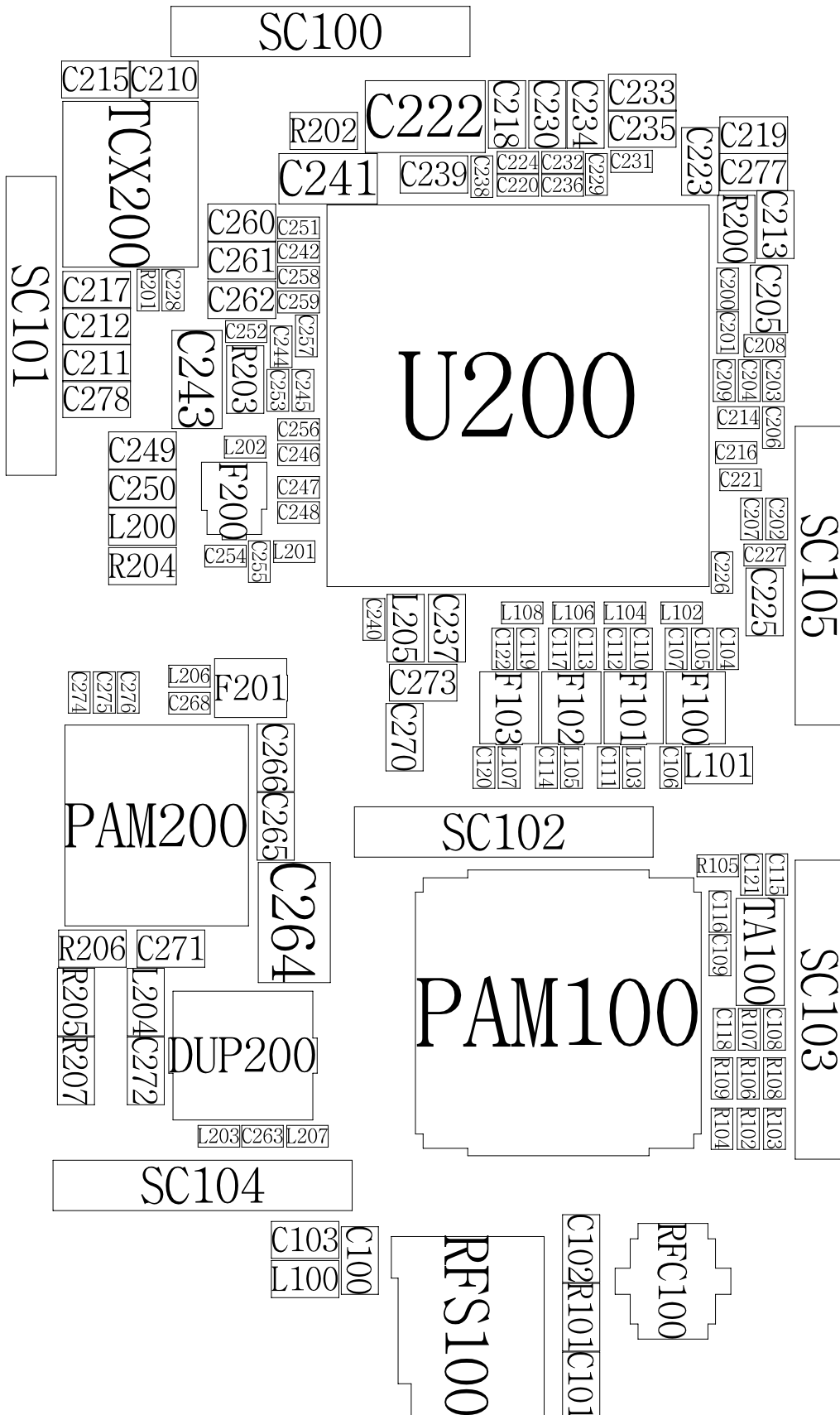
Band :DCS/PCS
 CELL POWER : -50dBm
 Tx Power : 0Level
 Channel : 660ch

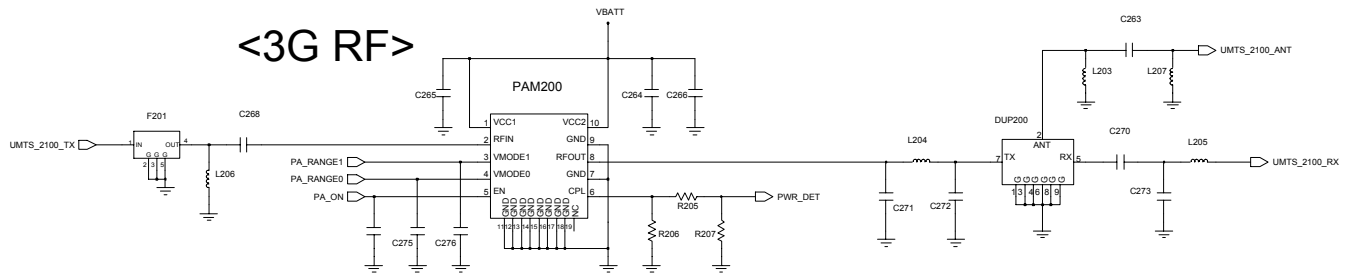


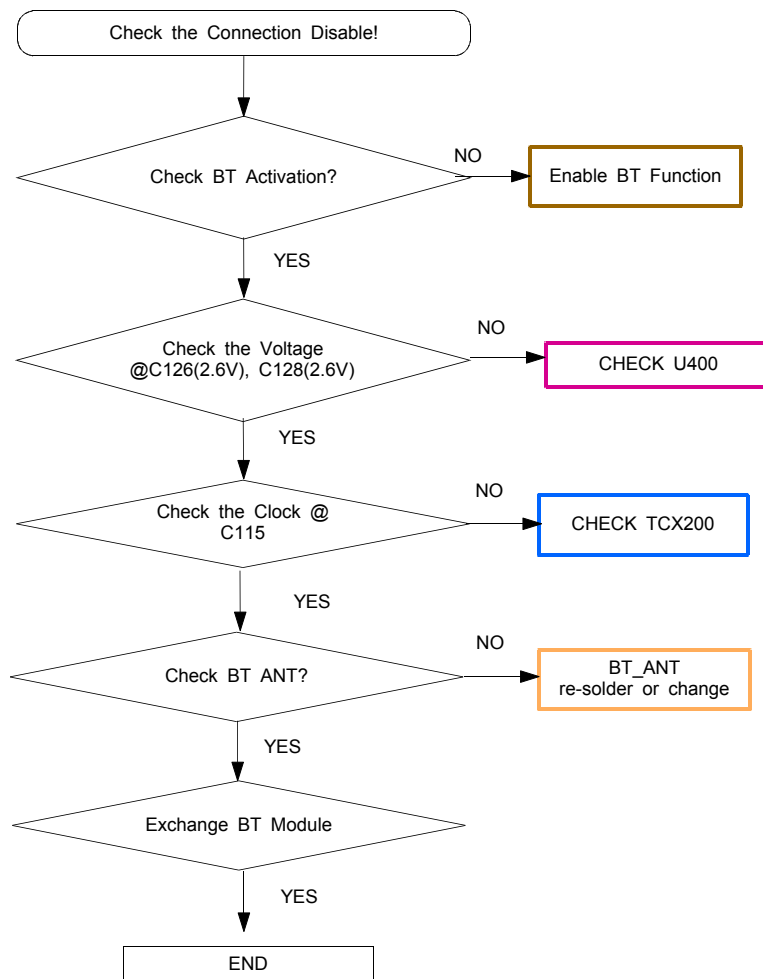
10-2-7. WCDMA2100 TX

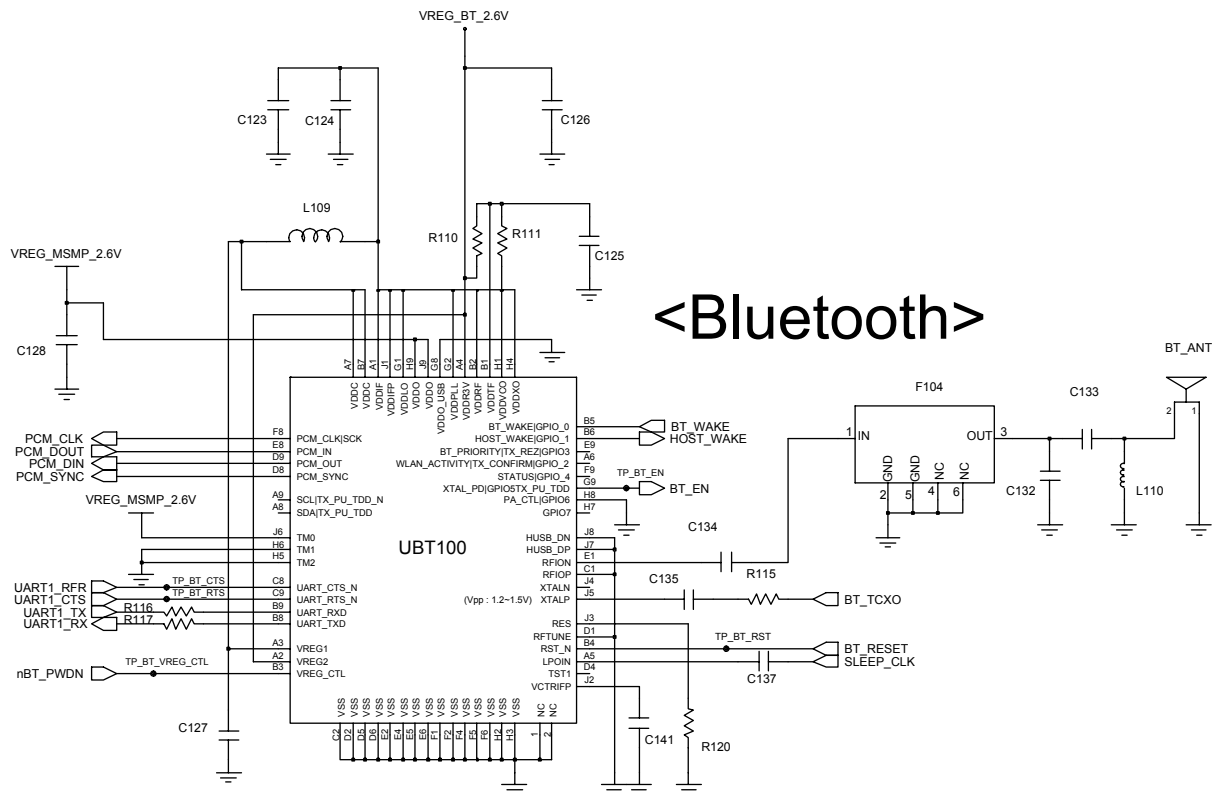
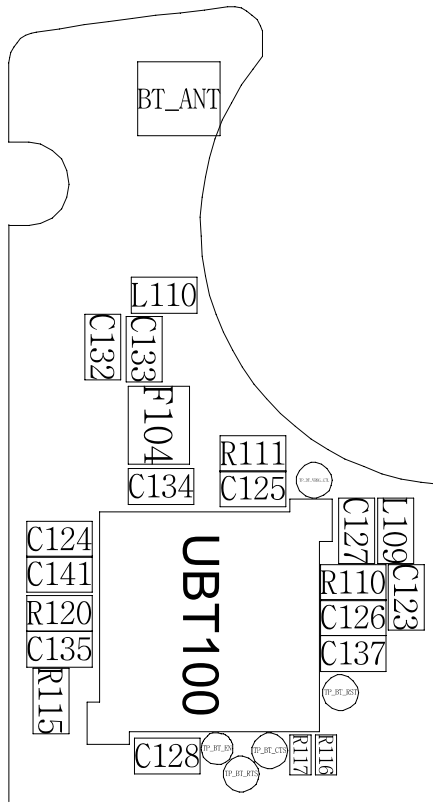
Band :WCDMA
 CELL POWER : -50dBm
 DL Channel : 10700Ch
 UL Channel : 9750Ch
 Target Power : 24dBm







10-2-8. Bluetooth Part



<Bluetooth>

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