

SAMSUNG

UMTS TELEPHONE SGH-Z310

SERVICE *Manual*

UMTS TELEPHONE



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**SAMSUNG
ELECTRONICS**



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1. Safety Precautions

1-1. Repair Precaution

- Repair in Shield Box, during detailed tuning.
Take specially care of tuning or test,
because specipicty 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 magnetic force.
- Surely use a standard screwdriver when you disassemble this product,
otherwise screw will be worn away.
- Use a thicken twisted wire when you measure level.
A thicken twisted wire has low resistance, therefore 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	DCS1800	PCS1900	W-CDMA
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	UL:9612~9888 DL:10562~10838
Tx/Rx spacing		45MHz	95MHz	80MHz	190MHz
Mod. Bit rate/ Bit Period		270.833kbps 3.692us	270.833kbps 3.692us	270.833kbps 3.692us	3.84Mcps
Time Slot Period/Frame Period		576.9us 4.615ms	576.9us 4.615ms	576.9us 4.615ms	Frame length : 10ms Slot length : 0.667ms
Modulation	GSM/ GPRS	0.3GMSK	0.3GMSK	0.3GMSK	QPSK HQPSK
	EDGE	8PSK	8PSK	8PSK	
MS Power		33dBm~5dBm	30dBm~0dBm	30dBm~0dBm	24dBm ~ - 50dBm
Power Class		4 (max +33dBm)	1 (max +30dBm)	1 (max +30dBm)	3 (max +24dBm)
Sensitivity		-102dBm	-100dBm	-100dBm	-106.7dBm
TDMA Mux		8	8	8	
Cell Radius		35Km	2Km	2Km	2Km

2-2. GSM TX power class

TX Power control level	GSM900	TX Power control level	DCS1800	TX Power control level	PCS1900
5	33±2 dBm	0	30±2 dBm	0	30±2 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±4dBm	11	8±4dBm
17	9±3dBm	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

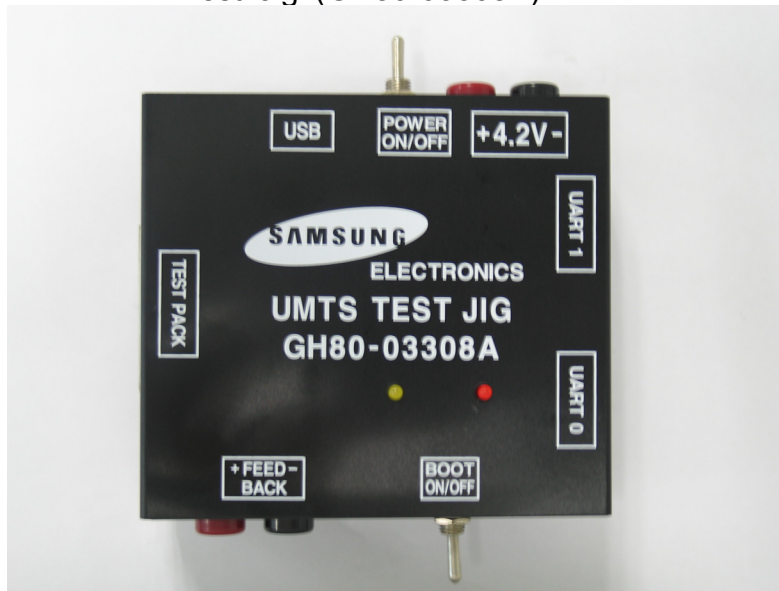
3. Product Function

Main Function

- Camera and camcorder
- Image editor
- MP3 player
- Phonebook
- Name card
- Multimedia Message Service (MMS)
- E-mail
- Voice recorder
- Bluetooth
- Get personal with photo caller ID
- Web browser
- Java
- Calendar
- GPRS
- Video call
- External flashmemory
- EDGE

4. Array course control

Test Jig (GH80-03308A)



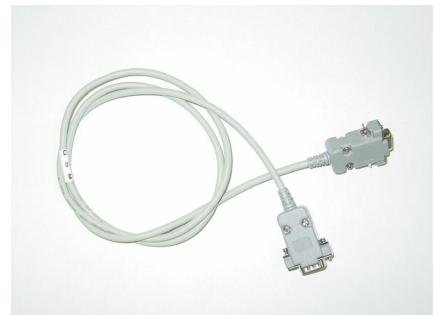
RF Test Cable
(GH39-00468A)



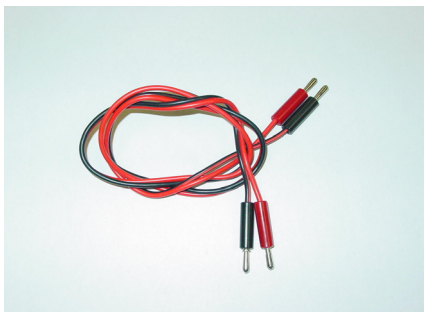
Test Cable
(GH39-00446A)



Serial Cable



Power Supply Cable



DATA CABLE
(GH39-00437B)



TA
(GH44-01079A)



Software Downloading

4-1. Downloading Binary Files

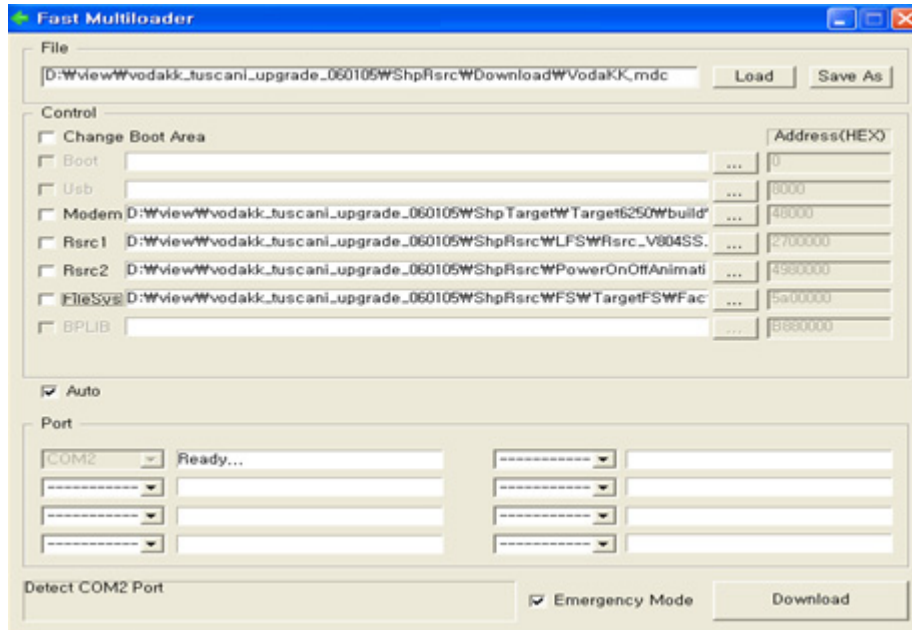
- Three binary files for downloading SGH-Z310.
 - VMSZT.bin : Modem binary for communication function♪
 & Mocha binary for user interface and various application♪
 - Rsrc_Z310_TIM.cnt: Files need for each application
 - Rsrc2.cnt : Power on/off animation
 - FactoryFs_Z310_TIM.bin : Default file system to be put into in
 initial production

4-2. Pre-requisite for Downloading

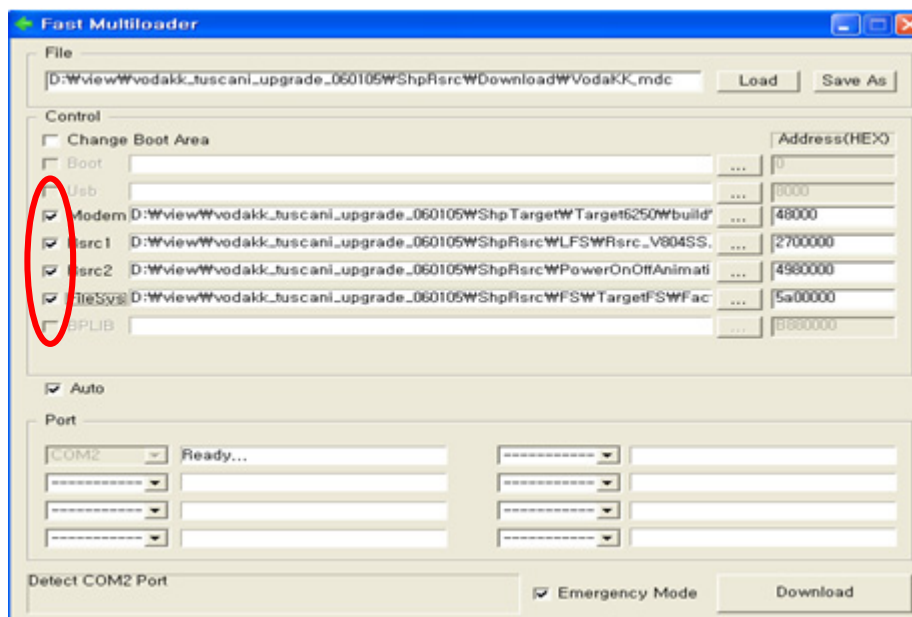
- Downloader Program([FastMultiloader3.0.exe](#))
- Mobile Phone
- Data Cable
- Binary files

4-3. S/W Downloader Program

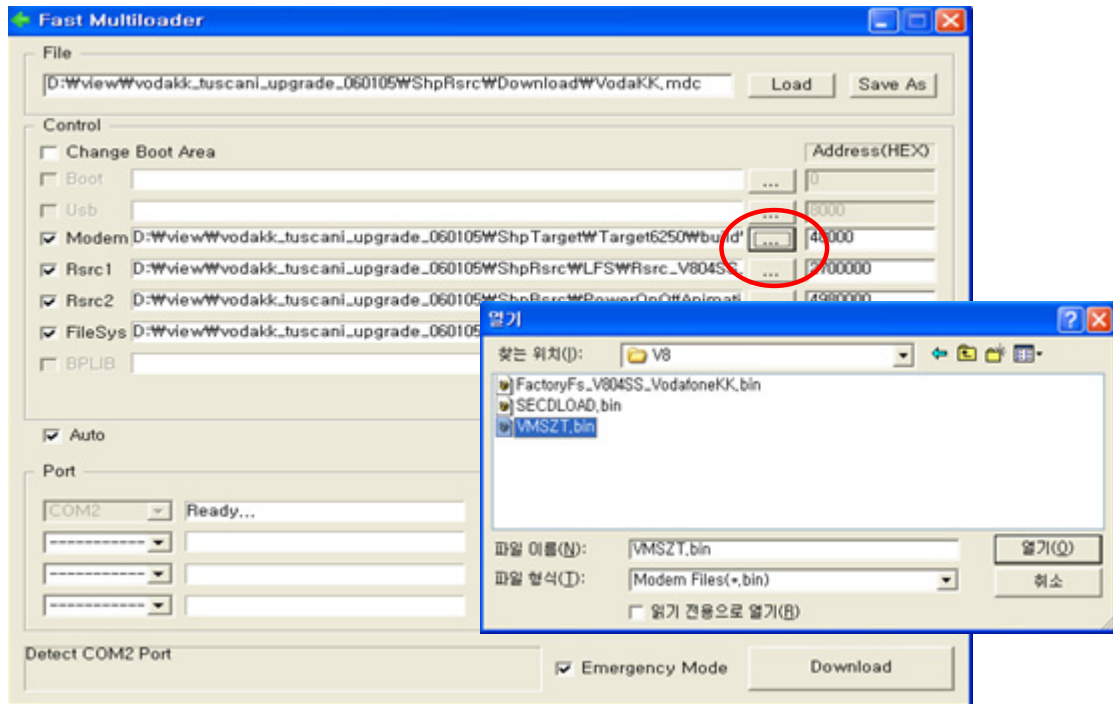
1. Boot the SGH-Z310 by pressing 'Power ON key' + 'Number 9 key' at the same time
- If you do properly, you can see the following message on sub LCD "DOWNLOAD"
and red screen on main LCD also.
2. Load the binary download program by executing the "**FastMultiloader3.0.exe**"



3. Select the check box what you want to download.

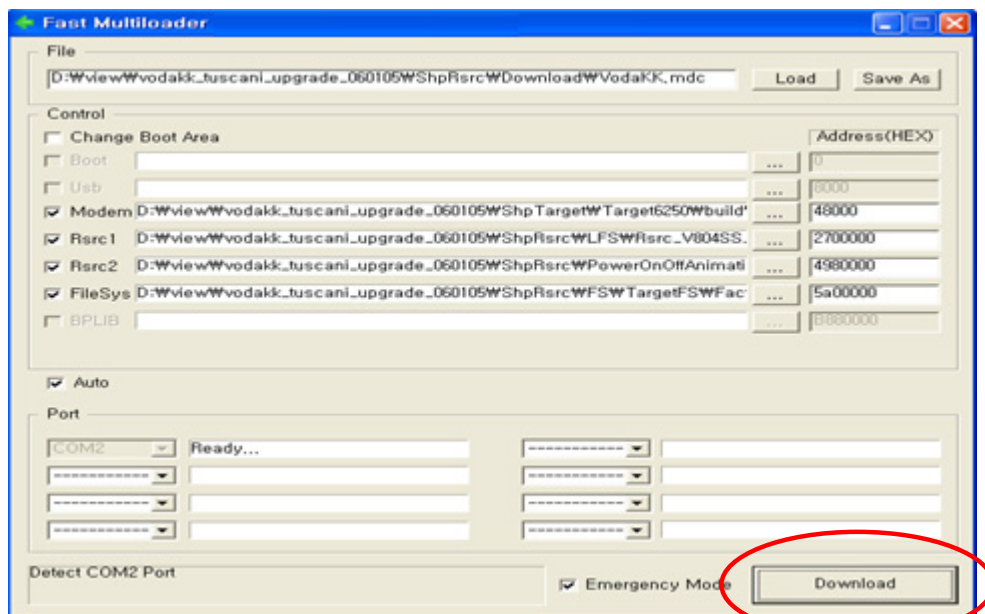


4. Select the binary file what you want to download



* Up to eight ports are supported.

5. Now press the button 'DownLoad'.♪

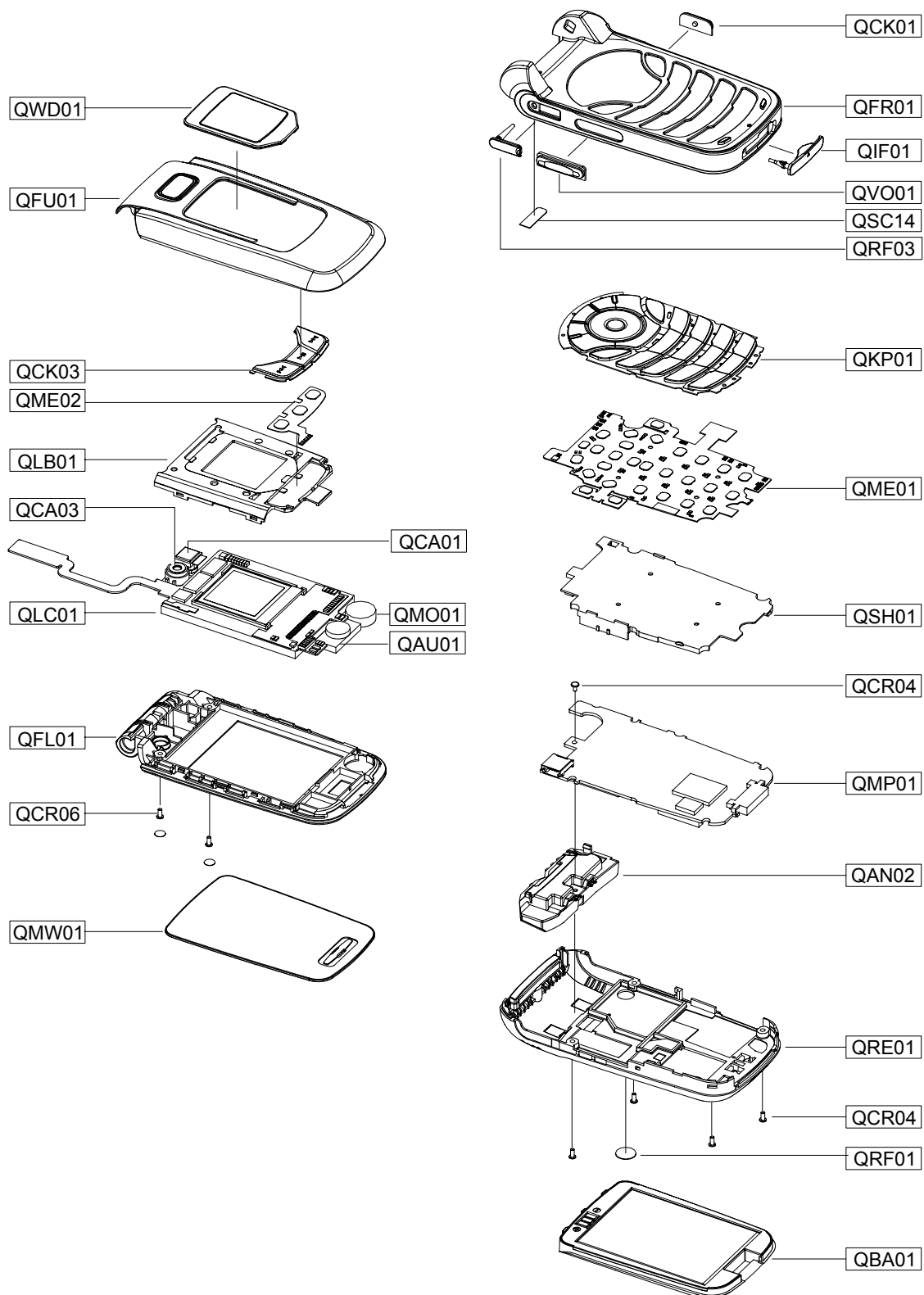


6. When downloading is complete, UE reboot automatically.♪

- If there is difference in FactoryFs.bin, UE will format file system automatically.

5. Exploded View and Parts List

5-1. Cellular phone Exploded View



5-2. Cellular phone Parts list

Design LOC		Discription	SEC Code
QAN02		INTENNA-SGHZ310	GH42-00722A
QAU01		AUDIO-RECEIVER	3009-001111
QBA01		BATTERY-950MAH,DA/BLUE,MAIN	GH43-02223A
QCA01		UNIT-VGA CAMERA SGH-Z308	GH59-02027A
QCA03		UNIT-MEGA CAMERA SGH-Z308	GH59-02028A
QCK03		MEC-KEY FOLD(MP3)	GH75-09029A
QCR04		SCREW-MACHINE	6001-001479
QCR06		SCREW-MACHINE	6001-001155
QFL01		MEC-FOLDER LOWER	GH75-08494A
QFU01		MEC-FOLDER UPPER	GH75-08493A
QKP01		MEC-KEYPAD(TIM/ABA)	GH75-09030A
QLB01		MEC-LCD BRACKET	GH75-08495A
QLC01		MEA-LCD MODULE KIT	GH97-05607A
QME01		UNIT-KEY PAD	GH59-02506A
QME02		UNIT-KEY PAD	GH59-02505A
QMO01		MOTOR DC-SGHZ130	GH31-00153K
QMP01		PBA MAIN-SGHZ310	GH92-02595A
QMW01		MEC-WINDOW MAIN	GH75-09027A
QRE01		MEC-REAR COVER	GH75-08499A
QRF01		MPR-RF CAP	GH74-14085B
QSC14		MPR-TAPE FRONT HOLE	GH74-15598A
QSH01		MEC-SHIELD CAN	GH75-09028A
QWD01		MEC-SUB WINDOW DUMMY	GH75-08497A
QFR01		MEC-FRONT COVER	GH75-08498A
	QIF01	PMO-IF COVER	GH72-26594A
	QVO01	PMO-VOL KEY	GH72-26597A
	QCK01	PMO-CAMERA KEY	GH72-26598A
	QRF03	PMO-EAR COVER	GH72-26599A

Discription	SEC Code
BAG PE	6902-000634
CBF INTERFACE-DATA LINK CABLE	GH39-00431A
ADAPTOR-SGHZ310 TA	GH44-01079A
S/W CD-SGH-Z310 PC STUDIO C	GH46-00200A
UNIT-EARPHONE	GH59-02395A
LABEL(P)-WATER SOAK	GH68-02026A
LABEL(P)-MASTER(TIM BLUE)	GH68-06569Y
LABEL(R)-MAIN(TIM BLUE)	GH68-09011D
MANUAL USERS-ITAY ITALIAN	GH68-09025A
BOX(P)-SGHZ310(TIM)	GH69-03569B
CUSHION-CASE(NEW)	GH69-03752A
MPR-TAPE MAIN WINDOW	GH74-14073A
MPR-BOHO VINYL LCD CONN	GH74-15350A
MPR-SPONGE MIC	GH74-15543A
MPR-BOHO VINYL DUAL WIN	GH74-15717A
MPR-TAPE WINDOW MAIN	GH74-20449A
MPR-VINYL BOHO F/LOWER	GH74-20455A
MPR-VINYL BOHO LCD BRK	GH74-20457A
MEC-HANGER	GH75-03673H

6. MAIN Electrical Parts List

Ddsign LOC	Discription	SEC Code	STATUS
ANT501	ANTENNA-CHIP	4202-001088	SA
BAT601	BATTERY-LI(2ND)	4302-001130	SA
BTC501	HEADER-BATTERY	3711-006026	SA
C100	C-CER,CHIP	2203-000812	SA
C101	C-CER,CHIP	2203-000254	SA
C102	C-CER,CHIP	2203-005682	SA
C103	C-CER,CHIP	2203-005806	SA
C104	C-CER,CHIP	2203-006194	SA
C106	C-CER,CHIP	2203-006423	SA
C107	C-CER,CHIP	2203-005682	SA
C108	C-CER,CHIP	2203-005682	SA
C109	C-CER,CHIP	2203-006423	SA
C110	C-CER,CHIP	2203-000233	SA
C111	C-CER,CHIP	2203-000854	SA
C112	C-CER,CHIP	2203-000812	SA
C113	C-CER,CHIP	2203-006423	SA
C114	C-CER,CHIP	2203-000885	SA
C115	C-CER,CHIP	2203-006423	SA
C116	C-CER,CHIP	2203-005682	SA
C117	C-CER,CHIP	2203-000854	SA
C118	C-CER,CHIP	2203-000995	SA
C119	C-CER,CHIP	2203-006423	SA
C120	C-CER,CHIP	2203-000438	SA
C121	C-CER,CHIP	2203-005682	SA
C122	C-CER,CHIP	2203-000254	SA
C123	C-CER,CHIP	2203-000233	SA
C124	C-CER,CHIP	2203-000995	SA
C125	C-CER,CHIP	2203-005682	SA
C126	C-CER,CHIP	2203-000254	SA
C127	C-CER,CHIP	2203-000854	SA
C129	C-CER,CHIP	2203-005446	SA
C130	C-CER,CHIP	2203-000725	SA
C131	C-CER,CHIP	2203-005682	SA
C132	C-CER,CHIP	2203-006423	SA
C133	C-CER,CHIP	2203-000836	SA
C135	C-CER,CHIP	2203-000854	SA
C138	C-CER,CHIP	2203-005682	SA
C139	C-CER,CHIP	2203-006423	SA
C140	C-CER,CHIP	2203-005682	SA
C141	C-CER,CHIP	2203-006423	SA
C142	C-CER,CHIP	2203-000438	SA
C143	C-CER,CHIP	2203-000995	SA
C144	C-CER,CHIP	2203-006348	SA
C145	C-CER,CHIP	2203-006423	SA
C146	C-CER,CHIP	2203-005682	SA
C147	C-CER,CHIP	2203-006208	SA
C148	C-CER,CHIP	2203-005808	SA
C149	C-CER,CHIP	2203-005808	SA
C150	C-CER,CHIP	2203-002443	SA

Ddsign LOC	Discription	SEC Code	STATUS
C151	C-CER,CHIP	2203-000233	SA
C152	C-CER,CHIP	2203-001033	SA
C154	C-CER,CHIP	2203-000995	SA
C155	C-CER,CHIP	2203-006423	SA
C156	C-CER,CHIP	2203-001239	SA
C157	C-CER,CHIP	2203-001153	SA
C159	C-CER,CHIP	2203-000386	SA
C160	C-CER,CHIP	2203-000386	SA
C161	C-CER,CHIP	2203-005382	SA
C162	C-CER,CHIP	2203-000254	SA
C163	C-CER,CHIP	2203-005552	SA
C200	C-CER,CHIP	2203-000233	SA
C201	C-CER,CHIP	2203-006194	SA
C202	C-CER,CHIP	2203-000233	SA
C203	C-CER,CHIP	2203-006423	SA
C204	C-CER,CHIP	2203-000233	SA
C205	C-CER,CHIP	2203-005061	SA
C206	C-CER,CHIP	2203-000330	SA
C208	C-CER,CHIP	2203-000330	SA
C209	C-CER,CHIP	2203-000233	SA
C210	C-CER,CHIP	2203-006423	SA
C211	C-CER,CHIP	2203-002668	SA
C212	C-CER,CHIP	2203-000438	SA
C214	C-CER,CHIP	2203-000330	SA
C215	C-CER,CHIP	2203-006423	SA
C216	C-CER,CHIP	2203-000233	SA
C219	C-CER,CHIP	2203-002668	SA
C220	C-CER,CHIP	2203-000330	SA
C222	C-CER,CHIP	2203-000696	SA
C223	C-CER,CHIP	2203-000438	SA
C224	C-CER,CHIP	2203-000386	SA
C225	C-CER,CHIP	2203-000386	SA
C226	C-CER,CHIP	2203-005061	SA
C227	C-CER,CHIP	2203-000696	SA
C228	C-CER,CHIP	2203-006423	SA
C229	C-CER,CHIP	2203-000233	SA
C230	C-CER,CHIP	2203-000233	SA
C231	C-CER,CHIP	2203-000679	SA
C232	C-CER,CHIP	2203-006208	SA
C233	C-CER,CHIP	2203-006423	SA
C234	C-CER,CHIP	2203-000233	SA
C235	C-CER,CHIP	2203-000330	SA
C236	C-CER,CHIP	2203-006423	SA
C237	C-CER,CHIP	2203-000233	SA
C238	C-CER,CHIP	2203-006194	SA
C239	C-CER,CHIP	2203-006194	SA
C240	C-CER,CHIP	2203-000679	SA
C241	C-CER,CHIP	2203-006194	SA
C242	C-CER,CHIP	2203-006423	SA

Ddsign LOC	Discription	SEC Code	STATUS
C243	C-CER,CHIP	2203-005806	SA
C244	C-CER,CHIP	2203-005682	SA
C245	C-CER,CHIP	2203-000940	SA
C246	C-CER,CHIP	2203-000885	SA
C247	C-CER,CHIP	2203-006208	SA
C248	C-CER,CHIP	2203-006423	SA
C249	C-CER,CHIP	2203-000386	SA
C300	C-CER,CHIP	2203-006423	SA
C301	C-CER,CHIP	2203-005808	SA
C302	C-CER,CHIP	2203-005682	SA
C303	C-CER,CHIP	2203-005806	SA
C304	C-CER,CHIP	2203-000386	SA
C305	C-CER,CHIP	2203-000278	SA
C306	C-CER,CHIP	2203-006423	SA
C307	C-CER,CHIP	2203-005682	SA
C308	C-CER,CHIP	2203-005682	SA
C309	C-CER,CHIP	2203-006423	SA
C310	C-CER,CHIP	2203-005806	SA
C311	C-CER,CHIP	2203-005682	SA
C312	C-CER,CHIP	2203-006423	SA
C313	C-CER,CHIP	2203-000278	SA
C314	C-CER,CHIP	2203-005682	SA
C315	C-CER,CHIP	2203-005806	SA
C316	C-CER,CHIP	2203-000438	SA
C317	C-CER,CHIP	2203-000278	SA
C318	C-CER,CHIP	2203-000812	SA
C319	C-CER,CHIP	2203-000438	SA
C320	C-CER,CHIP	2203-000812	SA
C321	C-CER,CHIP	2203-005736	SA
C322	C-CER,CHIP	2203-000679	SA
C323	C-CER,CHIP	2203-005808	SA
C324	C-CER,CHIP	2203-006208	SA
C325	C-CER,CHIP	2203-005806	SA
C326	C-CER,CHIP	2203-005806	SA
C327	C-CER,CHIP	2203-005682	SA
C328	C-CER,CHIP	2203-005806	SA
C400	C-CER,CHIP	2203-000628	SA
C401	C-CER,CHIP	2203-000628	SA
C402	C-CER,CHIP	2203-000489	SA
C403	C-CER,CHIP	2203-006562	SA
C404	C-CER,CHIP	2203-005480	SA
C405	C-CER,CHIP	2203-006194	SA
C406	C-CER,CHIP	2203-005482	SA
C407	C-CER,CHIP	2203-006091	SA
C408	C-CER,CHIP	2203-005482	SA
C409	C-CER,CHIP	2203-005482	SA
C410	C-CER,CHIP	2203-006091	SA
C411	C-CER,CHIP	2203-006423	SA
C412	C-CER,CHIP	2203-005395	SA

Ddsign LOC	Discription	SEC Code	STATUS
C413	C-CER,CHIP	2203-005482	SA
C414	C-CER,CHIP	2203-005482	SA
C415	C-CER,CHIP	2203-005682	SA
C416	C-CER,CHIP	2203-000233	SA
C417	C-CER,CHIP	2203-006194	SA
C418	C-CER,CHIP	2203-006194	SA
C419	C-CER,CHIP	2203-006208	SA
C420	C-CER,CHIP	2203-006562	SA
C421	C-CER,CHIP	2203-006423	SA
C422	C-CER,CHIP	2203-006423	SA
C423	C-CER,CHIP	2203-006423	SA
C424	C-CER,CHIP	2203-006423	SA
C425	C-CER,CHIP	2203-006562	SA
C426	C-CER,CHIP	2203-006423	SA
C427	C-CER,CHIP	2203-006423	SA
C428	C-CER,CHIP	2203-006423	SA
C429	C-CER,CHIP	2203-006423	SA
C430	C-CER,CHIP	2203-005806	SA
C431	C-CER,CHIP	2203-006562	SA
C432	C-CER,CHIP	2203-006423	SA
C433	C-CER,CHIP	2203-006423	SA
C434	C-CER,CHIP	2203-006423	SA
C435	C-CER,CHIP	2203-006423	SA
C436	C-CER,CHIP	2203-005806	SA
C437	C-CER,CHIP	2203-005806	SA
C438	C-CER,CHIP	2203-006562	SA
C439	C-CER,CHIP	2203-006423	SA
C440	C-CER,CHIP	2203-006423	SA
C441	C-CER,CHIP	2203-006423	SA
C442	C-CER,CHIP	2203-006562	SA
C443	C-CER,CHIP	2203-006423	SA
C444	C-CER,CHIP	2203-006423	SA
C445	C-CER,CHIP	2203-006423	SA
C446	C-CER,CHIP	2203-006423	SA
C447	C-CER,CHIP	2203-006194	SA
C448	C-CER,CHIP	2203-006194	SA
C449	C-CER,CHIP	2203-006423	SA
C450	C-CER,CHIP	2203-006423	SA
C451	C-CER,CHIP	2203-006423	SA
C452	C-CER,CHIP	2203-006562	SA
C453	C-CER,CHIP	2203-006562	SA
C454	C-CER,CHIP	2203-006423	SA
C455	C-CER,CHIP	2203-006423	SA
C456	C-CER,CHIP	2203-006423	SA
C457	C-CER,CHIP	2203-006423	SA
C458	C-CER,CHIP	2203-006423	SA
C459	C-CER,CHIP	2203-006423	SA
C460	C-CER,CHIP	2203-000995	SA
C461	C-CER,CHIP	2203-005482	SA

Ddsign LOC	Discription	SEC Code	STATUS
C462	C-CER,CHIP	2203-000854	SA
C463	C-CER,CHIP	2203-000854	SA
C500	C-CER,CHIP	2203-006208	SA
C501	C-CER,CHIP	2203-006423	SA
C502	C-CER,CHIP	2203-006423	SA
C503	C-CER,CHIP	2203-006423	SA
C504	C-CER,CHIP	2203-000233	SA
C505	C-CER,CHIP	2203-000233	SA
C506	C-CER,CHIP	2203-006423	SA
C507	C-CER,CHIP	2203-006423	SA
C508	C-CER,CHIP	2203-006423	SA
C509	C-CER,CHIP	2203-006423	SA
C510	C-CER,CHIP	2203-006141	SA
C511	C-CER,CHIP	2203-006423	SA
C514	C-CER,CHIP	2203-000812	SA
C515	C-CER,CHIP	2203-005061	SA
C516	C-CER,CHIP	2203-006201	SA
C517	C-CER,CHIP	2203-000233	SA
C518	C-CER,CHIP	2203-006201	SA
C521	C-CER,CHIP	2203-006201	SA
C601	C-CER,CHIP	2203-006208	SA
C602	C-CER,CHIP	2203-005138	SA
C603	C-CER,CHIP	2203-005138	SA
C604	C-CER,CHIP	2203-006562	SA
C605	C-CER,CHIP	2203-005482	SA
C606	C-CER,CHIP	2203-000278	SA
C607	C-CER,CHIP	2203-006208	SA
C608	C-CER,CHIP	2203-000233	SA
C609	C-CER,CHIP	2203-005061	SA
C610	C-CER,CHIP	2203-006562	SA
C611	C-CER,CHIP	2203-000278	SA
C612	C-CER,CHIP	2203-005065	SA
C613	C-CER,CHIP	2203-000278	SA
C614	C-CER,CHIP	2203-000278	SA
C615	C-CER,CHIP	2203-006201	SA
C616	C-CER,CHIP	2203-000278	SA
C617	C-CER,CHIP	2203-006201	SA
C618	C-CER,CHIP	2203-006201	SA
C619	C-CER,CHIP	2203-006201	SA
C620	C-CER,CHIP	2203-006208	SA
C621	C-CER,CHIP	2203-000278	SA
C622	C-CER,CHIP	2203-006208	SA
C623	C-CER,CHIP	2203-006201	SA
C624	C-CER,CHIP	2203-006201	SA
C625	C-CER,CHIP	2203-006562	SA
C626	C-CER,CHIP	2203-006208	SA
C627	C-CER,CHIP	2203-000438	SA
C628	C-CER,CHIP	2203-006208	SA
C629	C-CER,CHIP	2203-000438	SA

Ddsign LOC	Discription	SEC Code	STATUS
C630	C-CER,CHIP	2203-000679	SA
C631	C-CER,CHIP	2203-000679	SA
C633	C-CER,CHIP	2203-000812	SA
C634	C-CER,CHIP	2203-000812	SA
C635	C-CER,CHIP	2203-006208	SA
C636	C-CER,CHIP	2203-006208	SA
C637	C-CER,CHIP	2203-006208	SA
C638	C-CER,CHIP	2203-005482	SA
C639	C-CER,CHIP	2203-005482	SA
C640	C-CER,CHIP	2203-005482	SA
C641	C-CER,CHIP	2203-005482	SA
C642	C-CER,CHIP	2203-005482	SA
C643	C-CER,CHIP	2203-005482	SA
C644	C-CER,CHIP	2203-005061	SA
C646	C-CER,CHIP	2203-006208	SA
C650	C-CER,CHIP	2203-006348	SA
C651	C-CER,CHIP	2203-006208	SA
C652	C-CER,CHIP	2203-006208	SA
C654	C-CER,CHIP	2203-000254	SA
C655	C-CER,CHIP	2203-006208	SA
C700	C-CER,CHIP	2203-000854	SA
C701	C-CER,CHIP	2203-000854	SA
C702	C-CER,CHIP	2203-000278	SA
C703	C-CER,CHIP	2203-000812	SA
C704	C-CER,CHIP	2203-000278	SA
C705	C-CER,CHIP	2203-000278	SA
C706	C-CER,CHIP	2203-000812	SA
C707	C-CER,CHIP	2203-000278	SA
C708	C-CER,CHIP	2203-000854	SA
C709	C-CER,CHIP	2203-000854	SA
C710	C-CER,CHIP	2203-006562	SA
C711	C-CER,CHIP	2203-006562	SA
C712	C-CER,CHIP	2203-005061	SA
C713	C-CER,CHIP	2203-005061	SA
C716	C-CER,CHIP	2203-003054	SA
C717	C-CER,CHIP	2203-000386	SA
C718	C-CER,CHIP	2203-005061	SA
C719	C-CER,CHIP	2203-003054	SA
C720	C-CER,CHIP	2203-003054	SA
C721	C-CER,CHIP	2203-005061	SA
C722	C-CER,CHIP	2203-003054	SA
C723	C-CER,CHIP	2203-003054	SA
C724	C-CER,CHIP	2203-003054	SA
C725	C-CER,CHIP	2203-003054	SA
C726	C-CER,CHIP	2203-005061	SA
C727	C-CER,CHIP	2203-005061	SA
C728	C-CER,CHIP	2203-005057	SA
C729	C-CER,CHIP	2203-005057	SA
C730	C-CER,CHIP	2203-006562	SA

Ddsign LOC	Discription	SEC Code	STATUS
C731	C-CER,CHIP	2203-006562	SA
C732	C-CER,CHIP	2203-000386	SA
C733	C-CER,CHIP	2203-003054	SA
C734	C-CER,CHIP	2203-003054	SA
C735	C-CER,CHIP	2203-003054	SA
C736	C-CER,CHIP	2203-000812	SA
C737	C-CER,CHIP	2203-000812	SA
C738	C-CER,CHIP	2203-000995	SA
C739	C-CER,CHIP	2203-000995	SA
C740	C-CER,CHIP	2203-000995	SA
C741	C-CER,CHIP	2203-000995	SA
C742	C-CER,CHIP	2203-006562	SA
C743	C-CER,CHIP	2203-006562	SA
C744	C-CER,CHIP	2203-005061	SA
C745	C-TA,CHIP	2404-001312	SA
C746	C-CER,CHIP	2203-005061	SA
C747	C-CER,CHIP	2203-006208	SA
C748	C-CER,CHIP	2203-006423	SA
C749	C-CER,CHIP	2203-006562	SA
C750	C-CER,CHIP	2203-006562	SA
C751	C-CER,CHIP	2203-005061	SA
C752	C-CER,CHIP	2203-005061	SA
C753	C-CER,CHIP	2203-005061	SA
C754	C-CER,CHIP	2203-006562	SA
C755	C-TA,CHIP	2404-001312	SA
C756	C-CER,CHIP	2203-005061	SA
C757	C-CER,CHIP	2203-006562	SA
C758	C-CER,CHIP	2203-005061	SA
C759	C-CER,CHIP	2203-005061	SA
C760	C-CER,CHIP	2203-005806	SA
C761	C-CER,CHIP	2203-006208	SA
C762	C-CER,CHIP	2203-006423	SA
C763	C-CER,CHIP	2203-006423	SA
C766	C-CER,CHIP	2203-000812	SA
C767	C-CER,CHIP	2203-000812	SA
C768	C-CER,CHIP	2203-000812	SA
C769	C-CER,CHIP	2203-000278	SA
C770	C-CER,CHIP	2203-000812	SA
C800	C-CER,CHIP	2203-006423	SA
C801	C-CER,CHIP	2203-006562	SA
C802	C-CER,CHIP	2203-006562	SA
C803	C-CER,CHIP	2203-006208	SA
C804	C-CER,CHIP	2203-006208	SA
C805	C-CER,CHIP	2203-000812	SA
C806	C-CER,CHIP	2203-000812	SA
C807	C-CER,CHIP	2203-000812	SA
C808	C-CER,CHIP	2203-006208	SA
C809	C-CER,CHIP	2203-006208	SA
C810	C-CER,CHIP	2203-003054	SA

Ddsign LOC	Discription	SEC Code	STATUS
C811	C-CER,CHIP	2203-000386	SA
C812	C-CER,CHIP	2203-006208	SA
C813	C-CER,CHIP	2203-006324	SA
C814	C-CER,CHIP	2203-005482	SA
C815	C-CER,CHIP	2203-005482	SA
C816	C-CER,CHIP	2203-006562	SA
CD400	CONNECTOR-CARD EDGE	3709-001392	SA
D500	DIODE-TVS	0406-001197	SA
D502	DIODE-TVS	0406-001197	SA
D601	DIODE-ARRAY	0407-001002	SA
EAR700	JACK-PHONE	3722-002082	SA
F100	FILTER-SAW	2904-001550	SA
F101	FILTER-SAW	2904-001549	SA
F102	FILTER-SAW	2904-001571	SA
F200	FILTER-SAW	2904-001623	SA
F201	DUPLEXER-SAW	2910-000010	SA
F202	FILTER-SAW	2904-001438	SA
F800	FILTER-EMI SMD	2901-001286	SA
F801	FILTER-EMI SMD	2901-001286	SA
F802	FILTER-EMI SMD	2901-001286	SA
F803	FILTER-EMI SMD	2901-001286	SA
F804	FILTER-EMI SMD	2901-001286	SA
F805	FILTER-EMI SMD	2901-001286	SA
HDC800	HEADER-BOARD TO BOARD	3711-005777	SA
HDC801	HEADER-BOARD TO BOARD	3711-005605	SA
IFC500	CONNECTOR-INTERFACE	3710-002283	SA
L100	INDUCTOR-SMD	2703-002201	SA
L101	INDUCTOR-SMD	2703-001748	SA
L102	INDUCTOR-SMD	2703-002314	SA
L103	INDUCTOR-SMD	2703-002208	SA
L104	INDUCTOR-SMD	2703-002203	SA
L105	INDUCTOR-SMD	2703-002208	SA
L106	INDUCTOR-SMD	2703-002203	SA
L107	INDUCTOR-SMD	2703-002203	SA
L108	INDUCTOR-SMD	2703-002819	SA
L109	INDUCTOR-SMD	2703-002176	SA
L110	INDUCTOR-SMD	2703-002268	SA
L111	INDUCTOR-SMD	2703-002176	SA
L112	BEAD-SMD	3301-001534	SA
L113	INDUCTOR-SMD	2703-002199	SA
L114	INDUCTOR-SMD	2703-002819	SA
L115	INDUCTOR-SMD	2703-002819	SA
L116	INDUCTOR-SMD	2703-002176	SA
L117	INDUCTOR-SMD	2703-002819	SA
L118	INDUCTOR-SMD	2703-002207	SA
L119	INDUCTOR-SMD	2703-002176	SA
L120	INDUCTOR-SMD	2703-002203	SA
L121	INDUCTOR-SMD	2703-002314	SA
L122	INDUCTOR-SMD	2703-002314	SA

Ddsign LOC	Discription	SEC Code	STATUS
L137	INDUCTOR-SMD	2703-002205	SA
L138	INDUCTOR-SMD	2703-002268	SA
L200	INDUCTOR-SMD	2703-002314	SA
L201	INDUCTOR-SMD	2703-002198	SA
L202	INDUCTOR-SMD	2703-002267	SA
L203	INDUCTOR-SMD	2703-002267	SA
L204	INDUCTOR-SMD	2703-001722	SA
L205	INDUCTOR-SMD	2703-001750	SA
L206	BEAD-SMD	3301-001729	SA
L207	INDUCTOR-SMD	2703-002205	SA
L208	INDUCTOR-SMD	2703-002205	SA
L209	BEAD-SMD	3301-001729	SA
L210	BEAD-SMD	3301-001729	SA
L211	BEAD-SMD	3301-001729	SA
L212	INDUCTOR-SMD	2703-002506	SA
L213	INDUCTOR-SMD	2703-002608	SA
L214	INDUCTOR-SMD	2703-001748	SA
L300	BEAD-SMD	3301-001756	SA
L301	INDUCTOR-SMD	2703-002202	SA
L302	INDUCTOR-SMD	2703-002202	SA
L303	INDUCTOR-SMD	2703-002202	SA
L304	INDUCTOR-SMD	2703-002202	SA
L305	BEAD-SMD	3301-001756	SA
L600	INDUCTOR-SMD	2703-002840	SA
L601	INDUCTOR-SMD	2703-002840	SA
L602	BEAD-SMD	3301-001534	SA
L603	BEAD-SMD	3301-001534	SA
L700	INDUCTOR-SMD	2703-001938	SA
L701	INDUCTOR-SMD	2703-001938	SA
L702	INDUCTOR-SMD	2703-001938	SA
L703	INDUCTOR-SMD	2703-001938	SA
L800	BEAD-SMD	3301-001534	SA
L801	BEAD-SMD	3301-001534	SA
MOD502	BLUETOOTH MODULE	4709-001382	SA
OSC201	OSCILLATOR-VCO	2806-001372	SA
OSC400	RESONATOR-CERAMIC	2802-001182	SA
OSC600	CRYSTAL-SMD	2801-004373	SA
Q200	TR-DIGITAL	0504-001151	SA
Q202	FET-SILICON	0505-001464	SA
Q600	FET-SILICON	0505-001889	SA
R100	R-CHIP	2007-007491	SA
R102	R-CHIP	2007-008045	SA
R103	R-CHIP	2007-007318	SA
R104	R-CHIP	2007-007306	SA
R105	R-CHIP	2007-001217	SA
R106	R-CHIP	2007-001217	SA
R107	R-CHIP	2007-001298	SA
R108	R-CHIP	2007-008419	SA
R109	R-CHIP	2007-008419	SA

Ddsign LOC	Discription	SEC Code	STATUS
R110	R-CHIP	2007-007316	SA
R111	R-CHIP	2007-008419	SA
R112	R-CHIP	2007-000172	SA
R113	R-CHIP	2007-008419	SA
R114	R-CHIP	2007-000145	SA
R115	R-CHIP	2007-000172	SA
R116	R-CHIP	2007-008542	SA
R117	R-CHIP	2007-008542	SA
R118	R-CHIP	2007-008542	SA
R119	R-CHIP	2007-002965	SA
R120	R-CHIP	2007-007306	SA
R121	R-CHIP	2007-002965	SA
R122	R-CHIP	2007-001292	SA
R123	R-CHIP	2007-001311	SA
R124	R-CHIP	2007-001311	SA
R127	R-CHIP	2007-000139	SA
R128	R-CHIP	2007-000139	SA
R129	R-CHIP	2007-000141	SA
R130	R-CHIP	2007-008542	SA
R131	R-CHIP	2007-000138	SA
R133	R-CHIP	2007-001298	SA
R134	R-CHIP	2007-000138	SA
R200	R-CHIP	2007-008542	SA
R201	R-CHIP	2007-007314	SA
R202	R-CHIP	2007-000173	SA
R203	R-CHIP	2007-007318	SA
R204	R-CHIP	2007-001217	SA
R205	R-CHIP	2007-000138	SA
R206	R-CHIP	2007-007314	SA
R207	R-CHIP	2007-007491	SA
R208	R-CHIP	2007-007314	SA
R209	R-CHIP	2007-008542	SA
R210	R-CHIP	2007-001298	SA
R211	R-CHIP	2007-008045	SA
R212	R-CHIP	2007-001284	SA
R213	R-CHIP	2007-008045	SA
R214	R-CHIP	2007-000157	SA
R215	R-CHIP	2007-008419	SA
R216	R-CHIP	2007-003006	SA
R217	R-CHIP	2007-003006	SA
R218	R-CHIP	2007-008672	SA
R219	R-CHIP	2007-007001	SA
R220	R-CHIP	2007-000146	SA
R300	R-CHIP	2007-008542	SA
R301	R-CHIP	2007-008542	SA
R302	R-CHIP	2007-003006	SA
R303	R-CHIP	2007-008542	SA
R304	R-CHIP	2007-003006	SA
R305	R-CHIP	2007-008542	SA

Ddsign LOC	Discription	SEC Code	STATUS
R306	R-CHIP	2007-001298	SA
R307	R-CHIP	2007-008542	SA
R308	R-CHIP	2007-000139	SA
R309	R-CHIP	2007-008542	SA
R310	R-CHIP	2007-001298	SA
R311	R-CHIP	2007-008542	SA
R312	R-CHIP	2007-008045	SA
R313	R-CHIP	2007-007491	SA
R400	R-CHIP	2007-000148	SA
R401	R-CHIP	2007-000162	SA
R404	R-CHIP	2007-008516	SA
R405	R-CHIP	2007-000148	SA
R406	R-CHIP	2007-000148	SA
R407	R-CHIP	2007-000148	SA
R408	R-CHIP	2007-000148	SA
R409	R-CHIP	2007-000148	SA
R410	R-CHIP	2007-008542	SA
R411	R-CHIP	2007-000172	SA
R412	R-CHIP	2007-000172	SA
R413	R-CHIP	2007-000172	SA
R414	R-CHIP	2007-000172	SA
R415	R-CHIP	2007-000172	SA
R416	R-CHIP	2007-000137	SA
R417	R-CHIP	2007-000140	SA
R418	R-CHIP	2007-008542	SA
R423	R-CHIP	2007-008542	SA
R424	R-CHIP	2007-000171	SA
R425	R-CHIP	2007-000171	SA
R426	R-CHIP	2007-000162	SA
R427	R-CHIP	2007-000162	SA
R428	R-CHIP	2007-000162	SA
R429	R-CHIP	2007-000171	SA
R430	R-CHIP	2007-000171	SA
R431	R-CHIP	2007-000148	SA
R432	R-CHIP	2007-001339	SA
R433	R-CHIP	2007-001339	SA
R434	R-CHIP	2007-000148	SA
R436	R-CHIP	2007-008542	SA
R437	R-CHIP	2007-007318	SA
R438	R-CHIP	2007-007314	SA
R439	R-CHIP	2007-007135	SA
R440	R-CHIP	2007-000171	SA
R441	R-CHIP	2007-000171	SA
R442	R-CHIP	2007-000171	SA
R443	R-CHIP	2007-000171	SA
R444	R-CHIP	2007-009168	SA
R445	R-CHIP	2007-009168	SA
R446	R-CHIP	2007-009168	SA
R447	R-CHIP	2007-009168	SA

Ddsign LOC	Discription	SEC Code	STATUS
R448	R-CHIP	2007-009168	SA
R449	R-CHIP	2007-000171	SA
R450	R-CHIP	2007-000171	SA
R451	R-CHIP	2007-001298	SA
R453	R-CHIP	2007-000143	SA
R454	R-CHIP	2007-000143	SA
R455	R-CHIP	2007-008542	SA
R460	R-CHIP	2007-000171	SA
R461	R-CHIP	2007-008542	SA
R462	R-CHIP	2007-008516	SA
R463	R-CHIP	2007-008542	SA
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R502	R-CHIP	2007-000173	SA
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R506	R-CHIP	2007-000173	SA
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R516	R-CHIP	2007-008542	SA
R518	R-CHIP	2007-007132	SA
R519	R-CHIP	2007-008542	SA
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R521	R-CHIP	2007-000143	SA
R522	R-CHIP	2007-000171	SA
R523	R-CHIP	2007-000171	SA
R524	R-CHIP	2007-000171	SA
R525	R-CHIP	2007-000171	SA
R528	R-CHIP	2007-000148	SA
R600	R-CHIP	2007-000157	SA
R601	R-CHIP	2007-003015	SA
R602	R-CHIP	2007-003015	SA
R603	R-CHIP	2007-008516	SA
R604	R-CHIP	2007-000171	SA
R605	R-CHIP	2007-001298	SA
R607	R-CHIP	2007-007468	SA
R608	R-CHIP	2007-008542	SA
R609	R-CHIP	2007-008542	SA
R610	R-CHIP	2007-008542	SA
R611	R-CHIP	2007-000153	SA
R612	R-CHIP	2007-007314	SA

Ddsign LOC	Discription	SEC Code	STATUS
R613	R-CHIP	2007-007014	SA
R615	R-CHIP	2007-008542	SA
R617	R-CHIP	2007-008542	SA
R618	R-CHIP	2007-000171	SA
R619	R-CHIP	2007-000171	SA
R620	R-CHIP	2007-000162	SA
R621	R-CHIP	2007-000162	SA
R622	R-CHIP	2007-000171	SA
R623	R-CHIP	2007-000171	SA
R700	R-CHIP	2007-008542	SA
R701	R-CHIP	2007-000171	SA
R702	R-CHIP	2007-000171	SA
R703	R-CHIP	2007-000168	SA
R704	R-CHIP	2007-003010	SA
R705	R-CHIP	2007-008542	SA
R706	R-CHIP	2007-000162	SA
R707	R-CHIP	2007-000165	SA
R708	R-CHIP	2007-008542	SA
R709	R-CHIP	2007-000159	SA
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R713	R-CHIP	2007-000171	SA
R714	R-CHIP	2007-007142	SA
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R716	R-CHIP	2007-007142	SA
R717	R-CHIP	2007-007142	SA
R718	R-CHIP	2007-000148	SA
R719	R-CHIP	2007-000148	SA
R720	R-CHIP	2007-000171	SA
R721	R-CHIP	2007-000141	SA
R722	R-CHIP	2007-000141	SA
R723	R-CHIP	2007-008300	SA
R724	R-CHIP	2007-000171	SA
R725	R-CHIP	2007-008542	SA
R726	R-CHIP	2007-008542	SA
R727	R-CHIP	2007-000171	SA
R728	R-CHIP	2007-008300	SA
R729	R-CHIP	2007-008300	SA
R730	R-CHIP	2007-008542	SA
R731	R-CHIP	2007-000171	SA
R732	R-CHIP	2007-008542	SA
R733	R-CHIP	2007-000171	SA
R734	R-CHIP	2007-008542	SA
R735	R-CHIP	2007-007316	SA
R736	R-CHIP	2007-008300	SA
R800	R-CHIP	2007-008542	SA
R801	R-CHIP	2007-008542	SA
R803	R-CHIP	2007-000162	SA

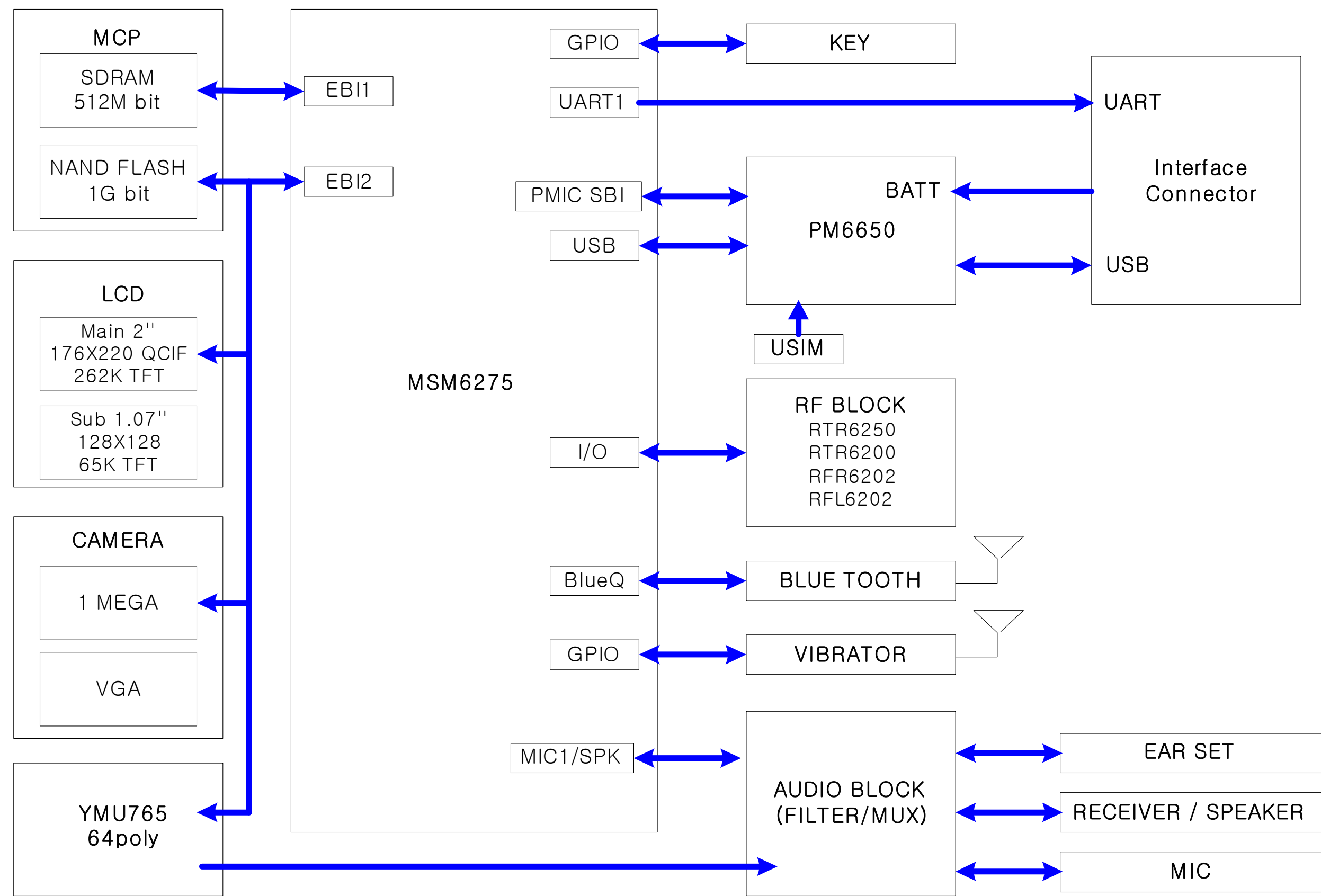
Ddsign LOC	Discription	SEC Code	STATUS
R804	R-CHIP	2007-008542	SA
R806	R-CHIP	2007-008542	SA
R807	R-CHIP	2007-008542	SA
R809	R-CHIP	2007-000171	SA
R811	R-CHIP	2007-007766	SA
R812	R-CHIP	2007-007318	SA
R813	R-CHIP	2007-007588	SA
R817	R-CHIP	2007-000162	SA
R819	R-CHIP	2007-000171	SA
R820	R-CHIP	2007-000171	SA
R822	R-CHIP	2007-000171	SA
R824	R-CHIP	2007-000171	SA
R828	R-CHIP	2007-008542	SA
R829	R-CHIP	2007-007107	SA
R830	R-CHIP	2007-007107	SA
RFS100	CONNECTOR-COAXIAL	3705-001358	SA
SIM600	CONNECTOR-CARD EDGE	3709-001355	SA
TA153	C-TA,CHIP	2404-001274	SA
TA213	C-TA,CHIP	2404-001394	SA
TA512	C-TA,CHIP	2404-001274	SA
TA513	C-TA,CHIP	2404-001274	SA
TA514	C-TA,CHIP	2404-001274	SA
TA647	C-TA,CHIP	2404-001339	SA
TA648	C-TA,CHIP	2404-001339	SA
TA649	C-TA,CHIP	2404-001394	SA
TA653	C-TA,CHIP	2404-001339	SA
TA714	C-TA,CHIP	2404-001394	SA
TA715	C-TA,CHIP	2404-001394	SA
TA816	C-TA,CHIP	2404-001394	SA
TCXO200	OSCILLATOR-VCTCXO	2809-001280	SA
TH401	THERMISTOR-NTC	1404-001224	SA
TR201	TR-DIGITAL	0504-001113	SA
TR500	TR-DIGITAL	0504-000168	SA
U100	IC-TRANSCEIVER	1205-002645	SA
U101	IC-SWITCH	1205-002724	SA
U102	IC-POWER AMP	1201-002288	SA
U200	IC-DETECTOR	1209-001577	SA
U201	IC-RF AMP	1201-002297	SA
U202	IC-POWER AMP	1201-002293	SA
U203	IC-RECEIVER	1205-002798	SA
U300	IC-TRANSCEIVER	1205-002300	SA
U400	IC-SWITCH	1205-002568	SA
U401	IC-MODEM	1205-002790	SA
U402	IC-CMOS LOGIC	0801-002975	SA
U403	IC-CMOS LOGIC	0801-002975	SA
U501	IC-ANALOG MULTIPLEX	1001-001306	SA
U600	IC-POWER SUPERVISOR	1203-003335	SA
U601	IC-VOL. DETECTOR	1203-003728	SA
U602	IC-MULTI REG.	1203-002969	SA

Ddsign LOC	Discription	SEC Code	STATUS
U603	IC-SWITCH	1205-002568	SA
U604	IC-POSI.FIXED REG.	1203-002626	SA
U605	DIODE-TVS	0406-001237	SNA
U700	IC-VOLTAGE COMP.	1202-001068	SA
U701	IC-AUDIO AMP	1201-002241	SA
U702	DIODE-TVS	0406-001237	SNA
U705	IC-AUDIO AMP	1201-002195	SA
U706	IC-ANALOG SWITCH	1001-001354	SA
U707	IC-ANALOG SWITCH	1001-001354	SA
U708	IC-MELODY	1204-002138	SA
U800	IC-BATTERY	1203-003823	SA
U802	IC-POSI.FIXED REG.	1203-003208	SA
U805	IC-POSI.FIXED REG.	1203-002565	SA
U809	DIODE-ARRAY	0407-001038	SA
U811	DIODE-TVS	0406-001237	SNA
U813	IC-VOL. DETECTOR	1203-004045	SNA
U814	IC-CMOS LOGIC	0801-002970	SA
U815	IC-POSI.FIXED REG.	1203-003105	SA
U816	C-CER,CHIP	2203-006562	SA
U817	DIODE-TVS	0406-001237	SNA
UEM500	IC-MCP	1108-000041	SA
VCO100	OSCILLATOR-VCO	2806-001377	SA
ZD501	DIODE-ZENER	0403-001427	SA
ZD503	DIODE-ZENER	0403-001547	SA
ZD504	DIODE-ZENER	0403-001427	SA
ZD801	DIODE-TVS	0406-001237	SNA
ZD802	DIODE-TVS	0406-001237	SNA

7-1. RF Solution Block Diagram



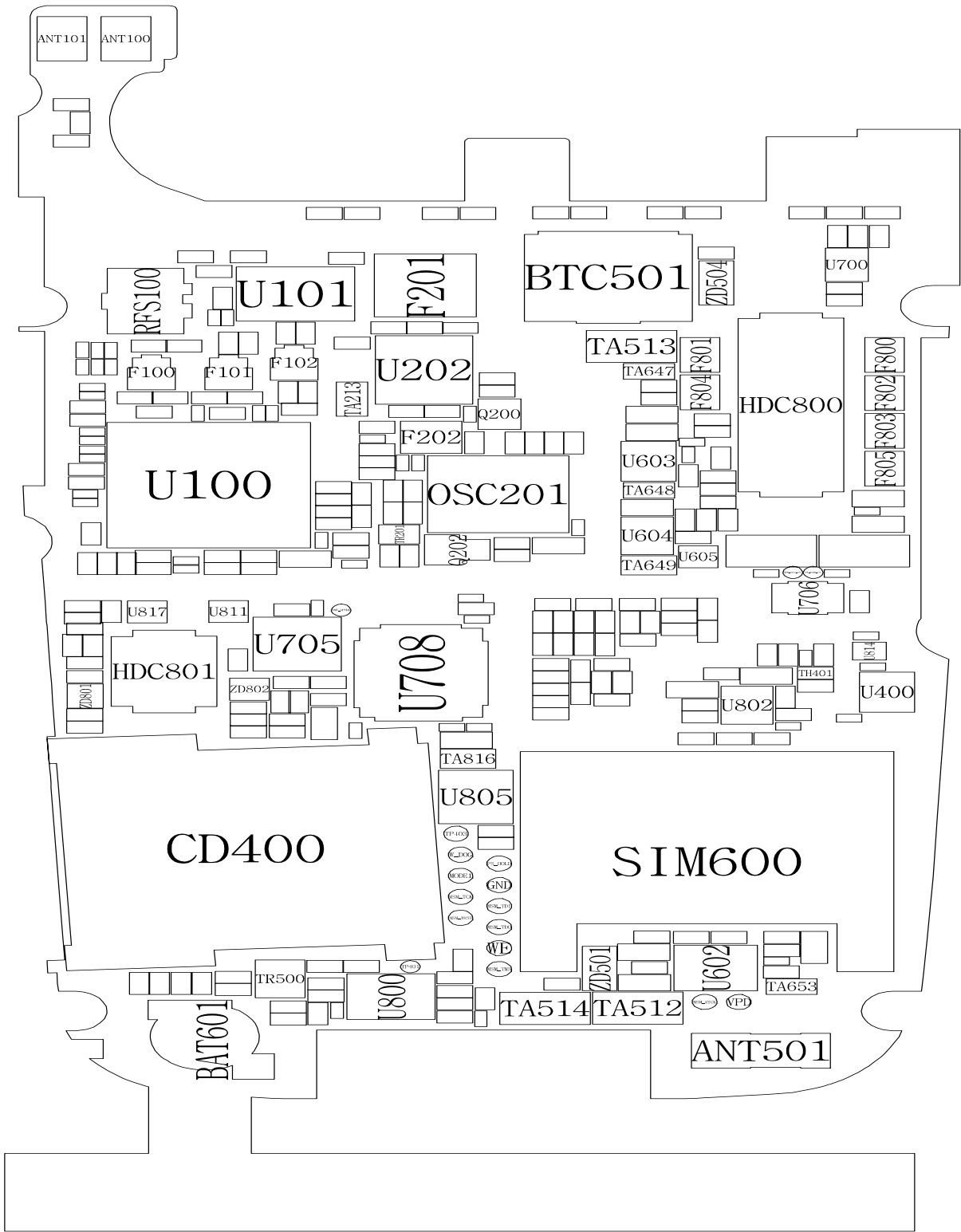
7-2. Base Band Solution Block Diagram



8-1. PCB Top Diagram

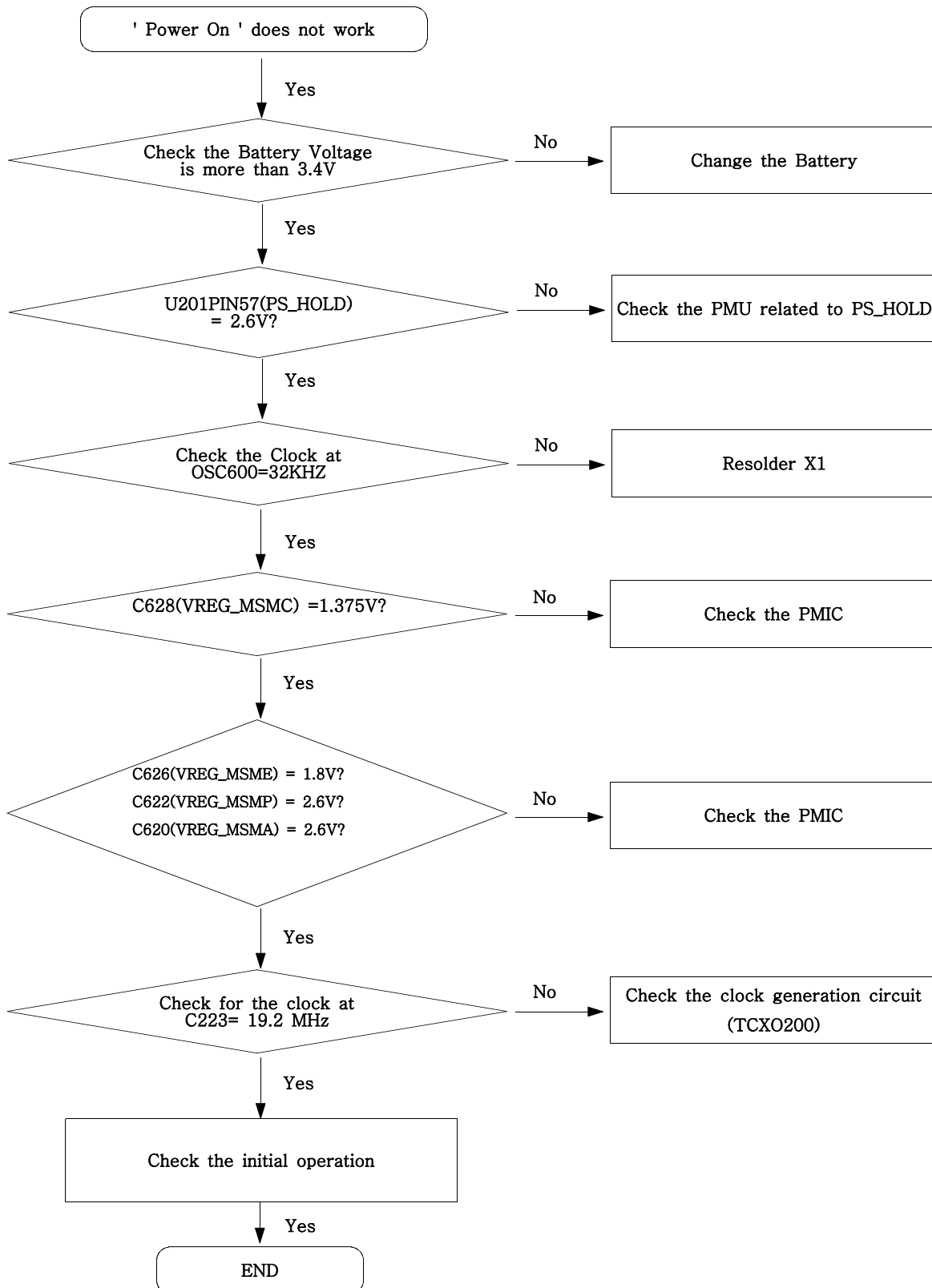


8-2. PCB Bottom Diagram

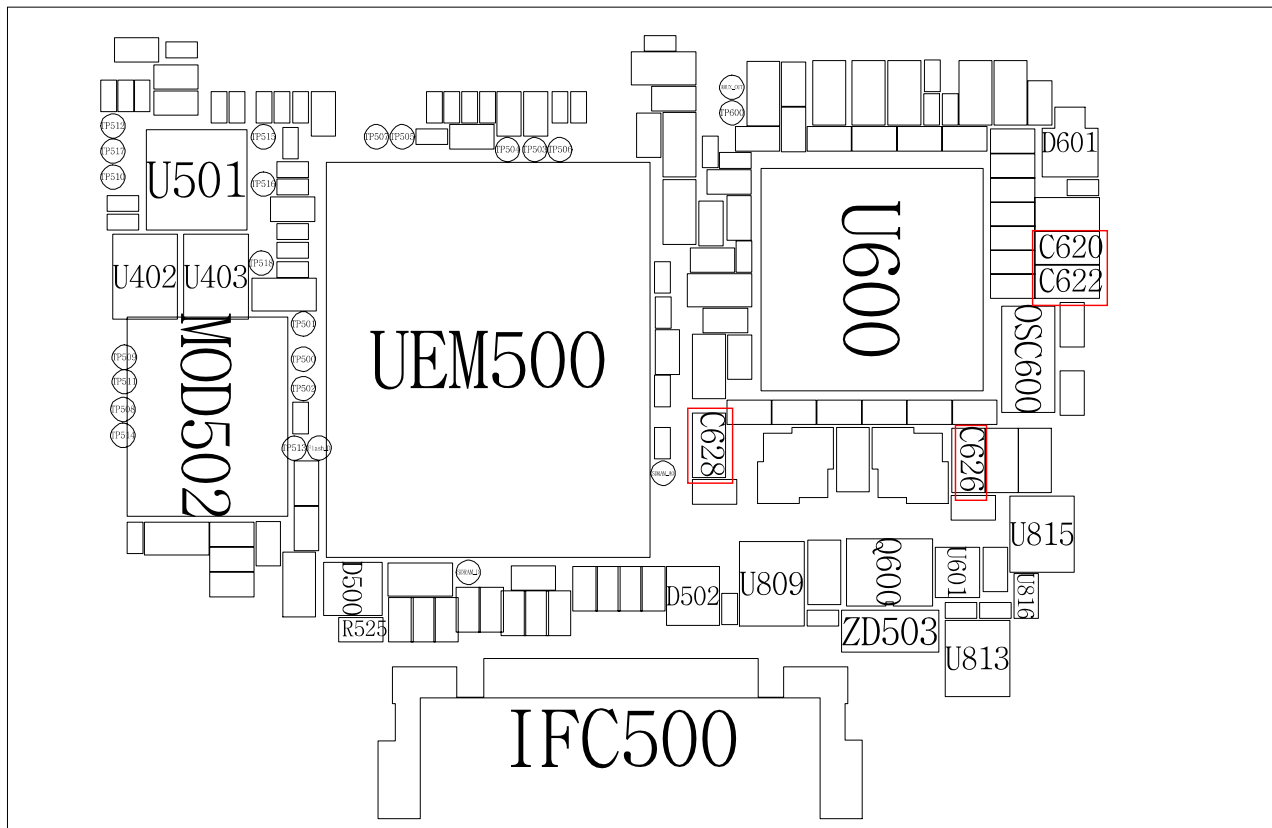
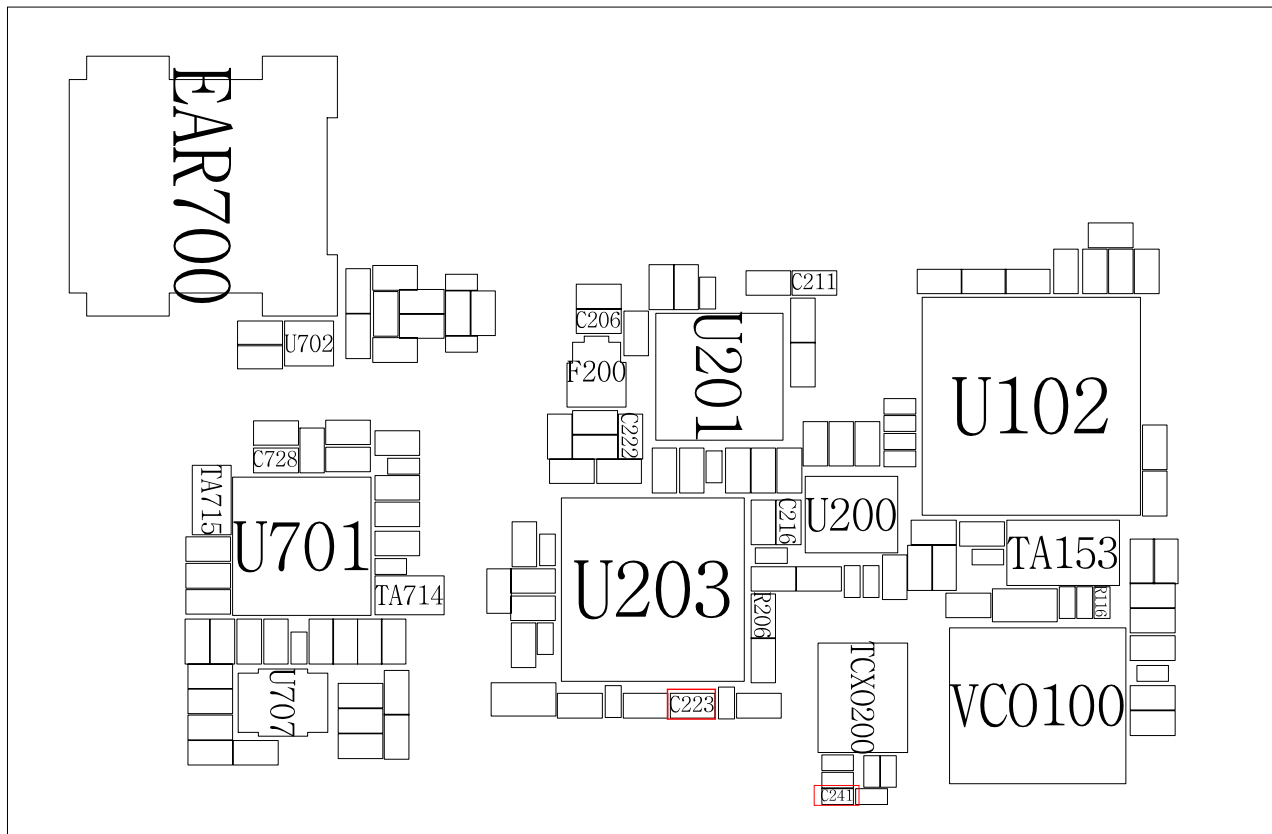


9. Flow Chart of Troubleshooting

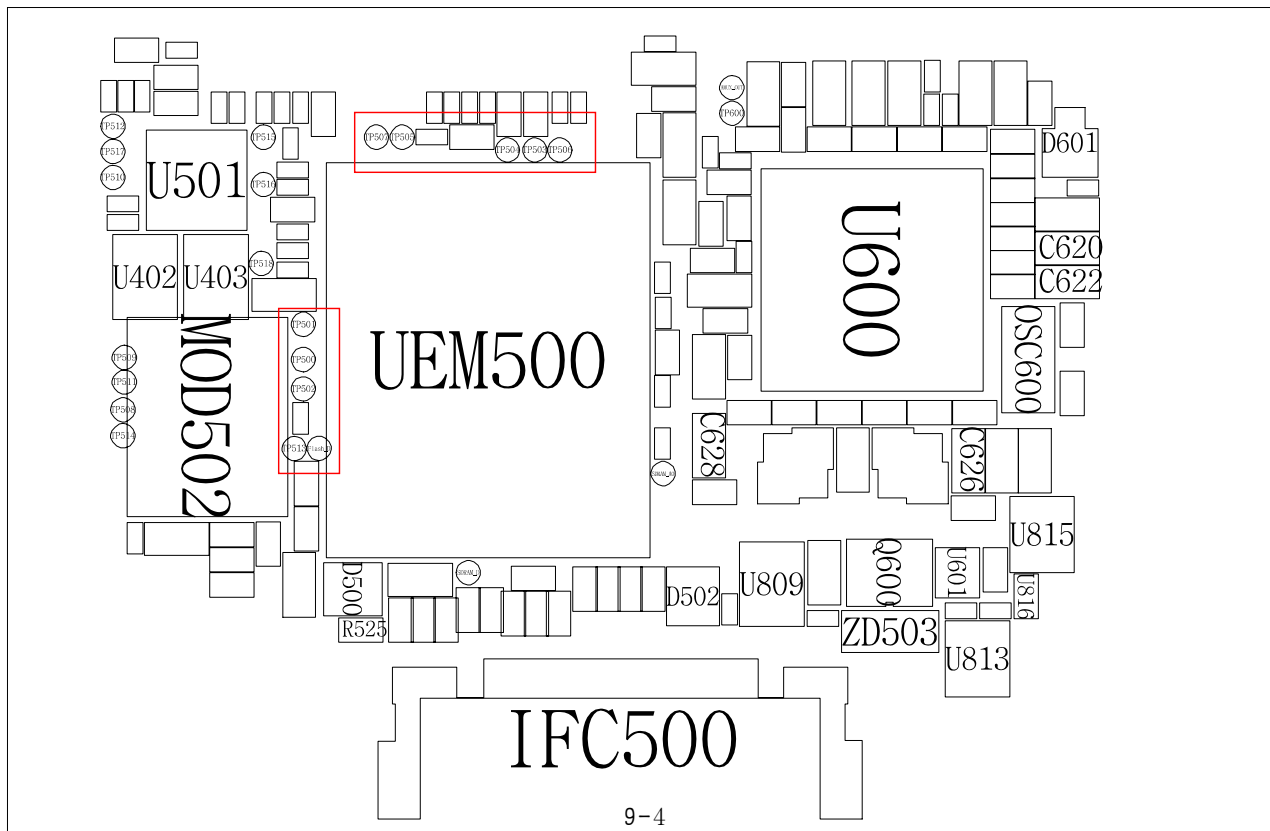
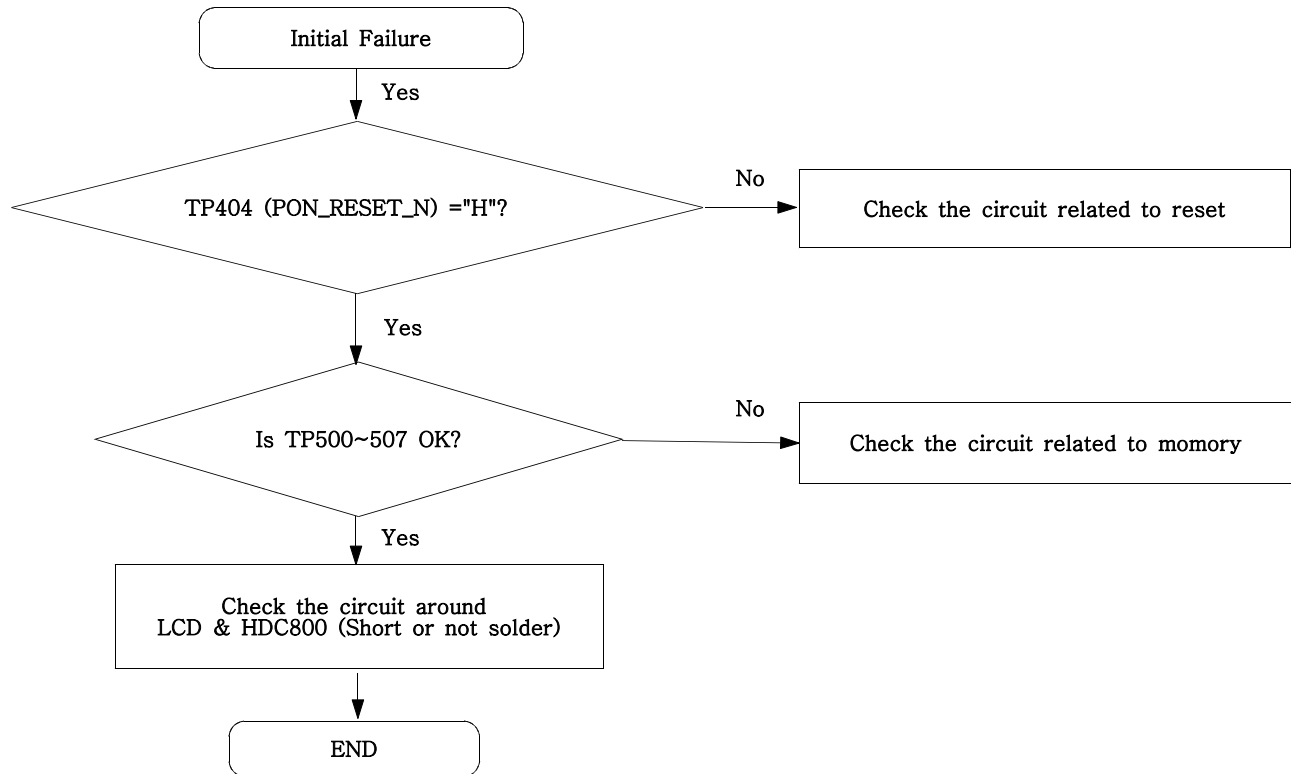
9-1. Power On



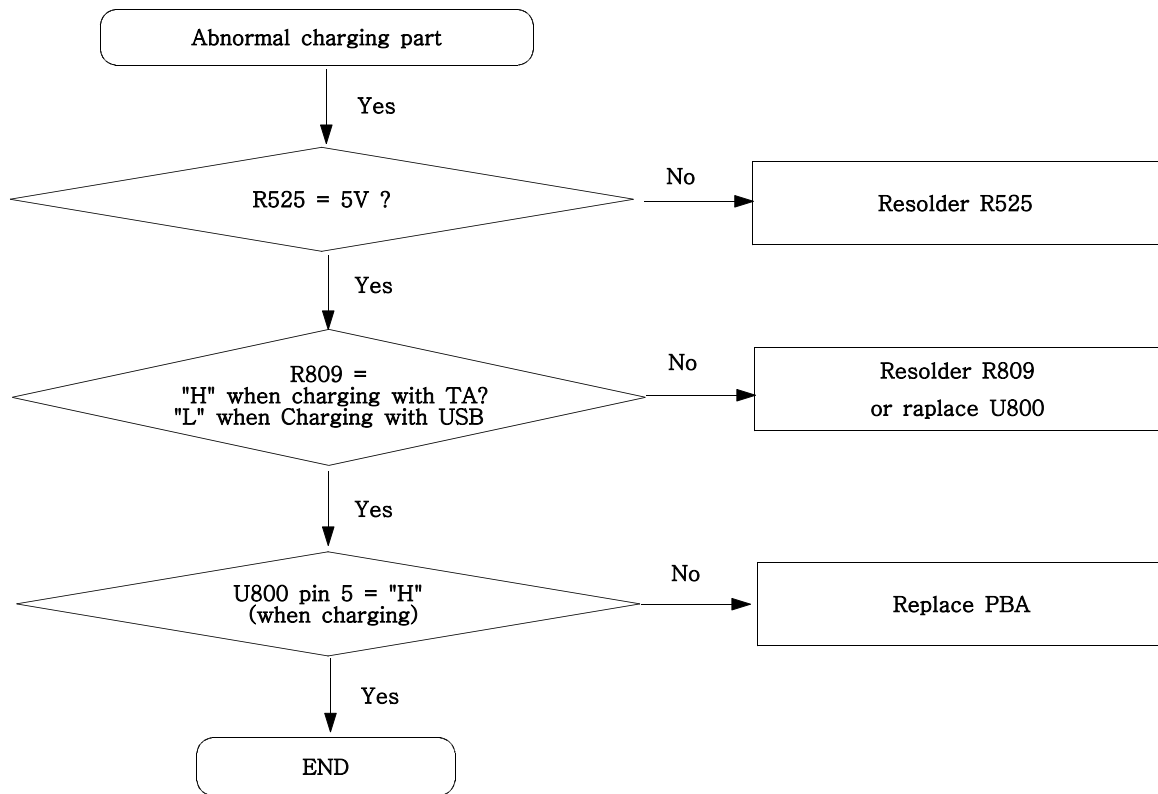




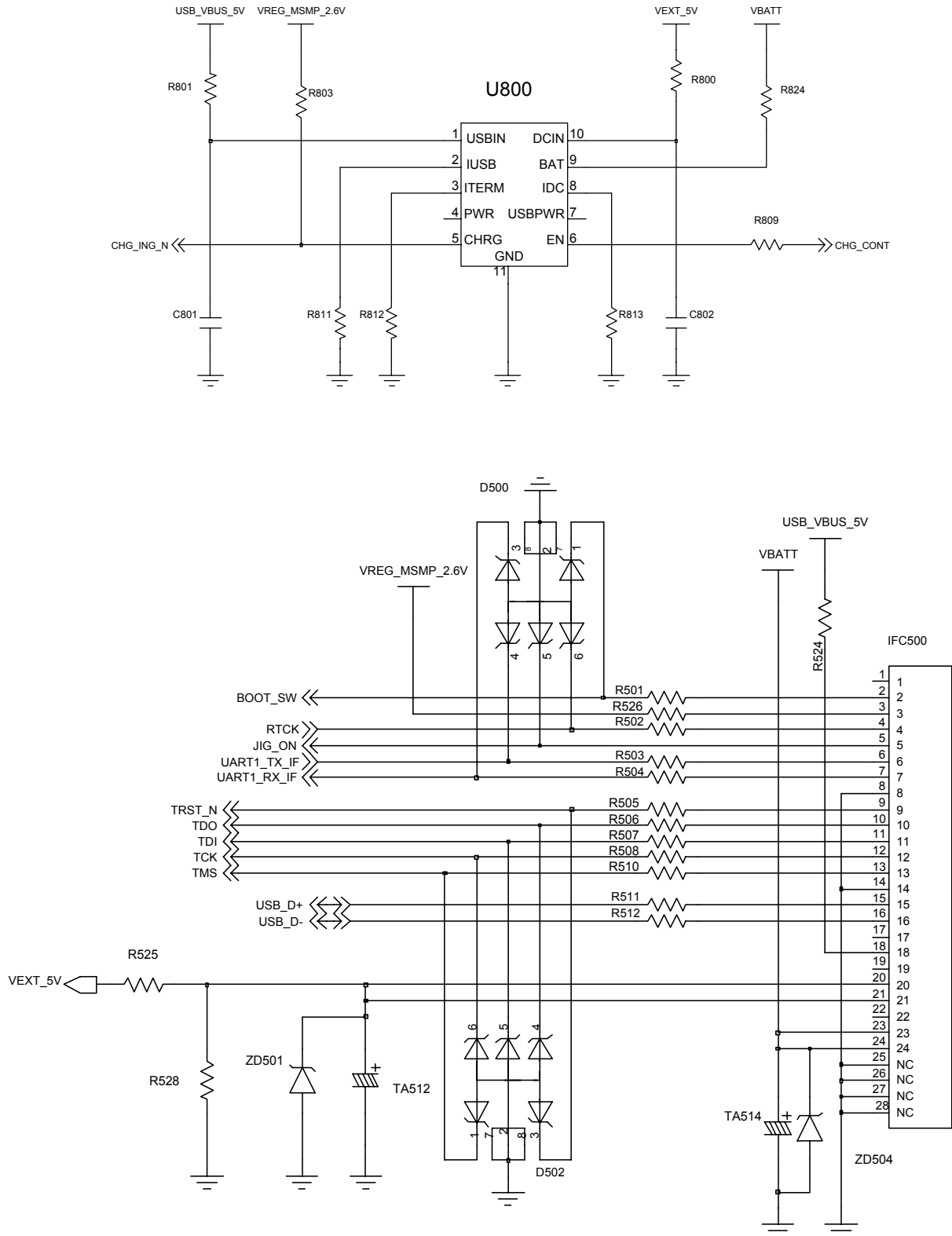
9-2. Initial

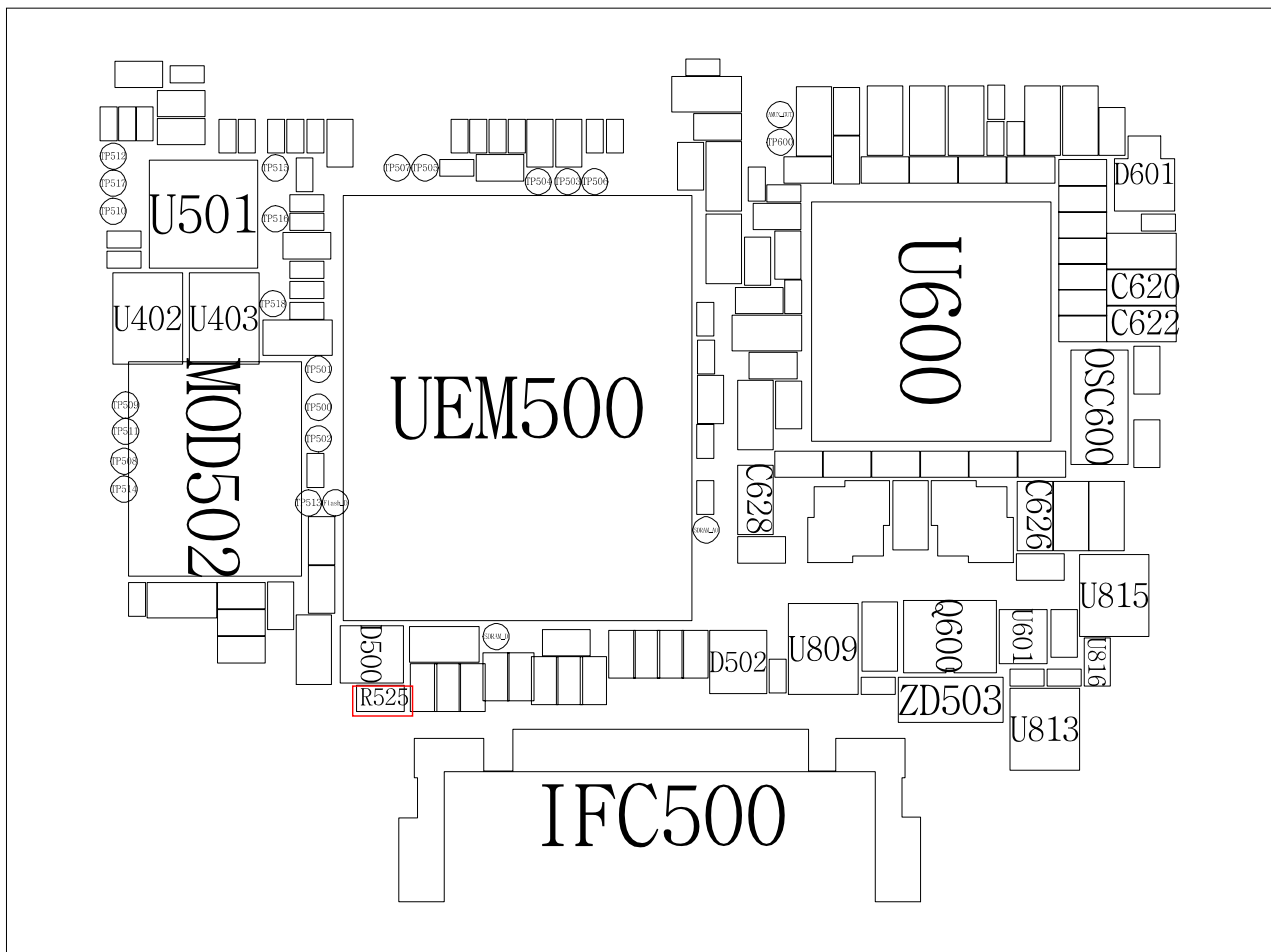
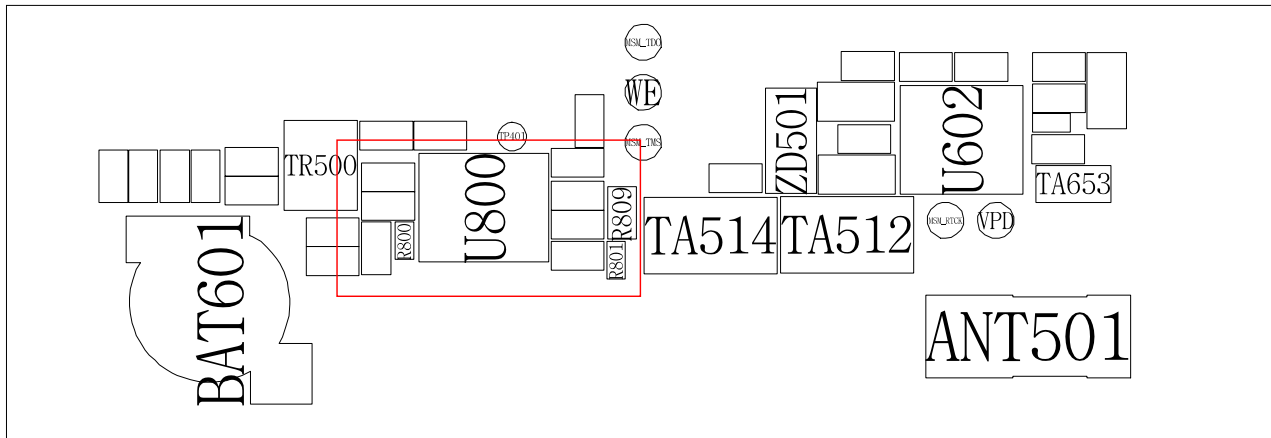


9-3. Charging Part

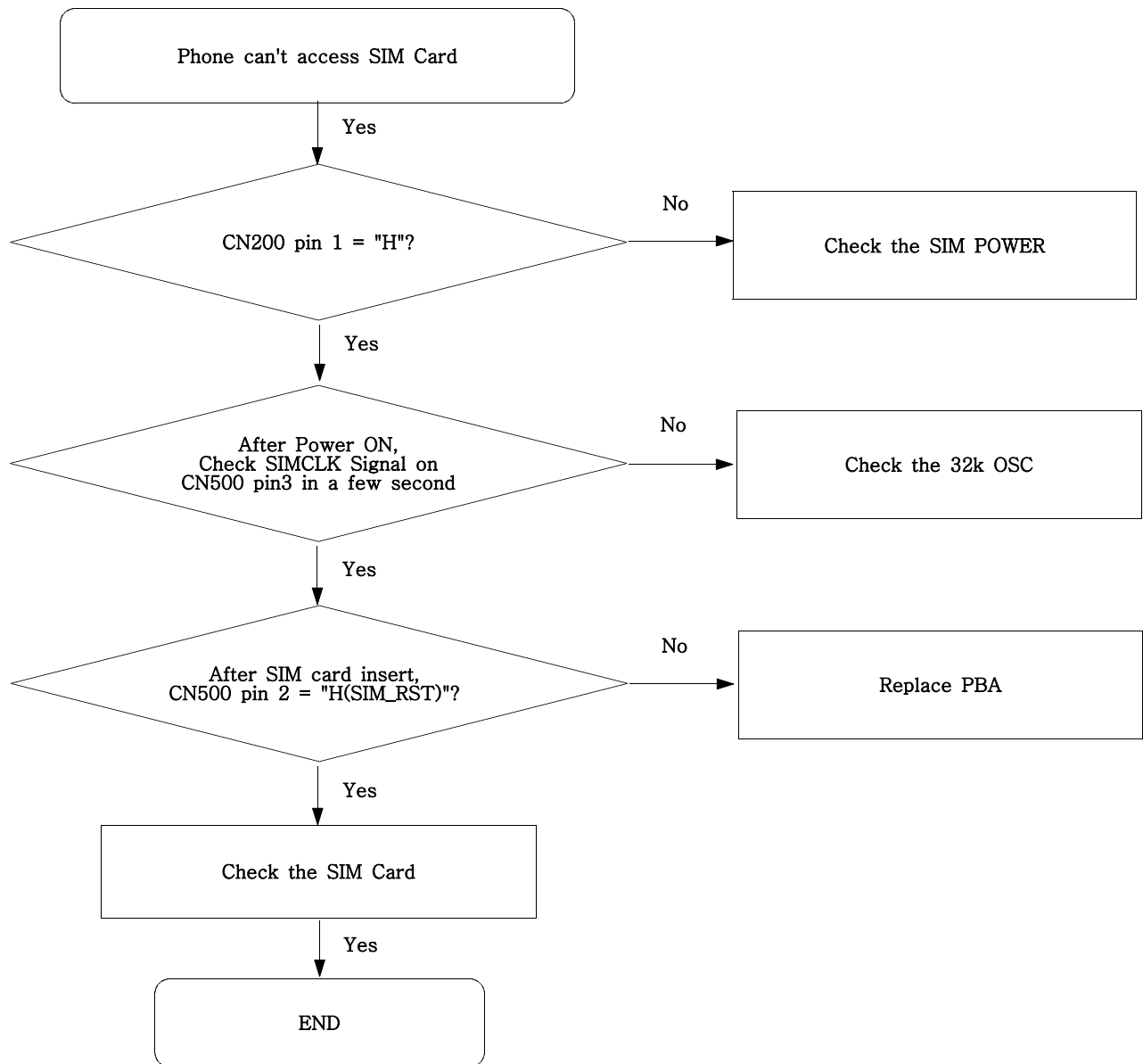


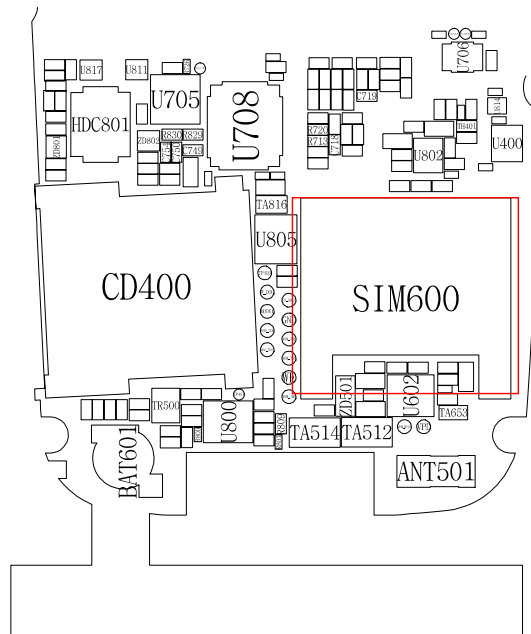
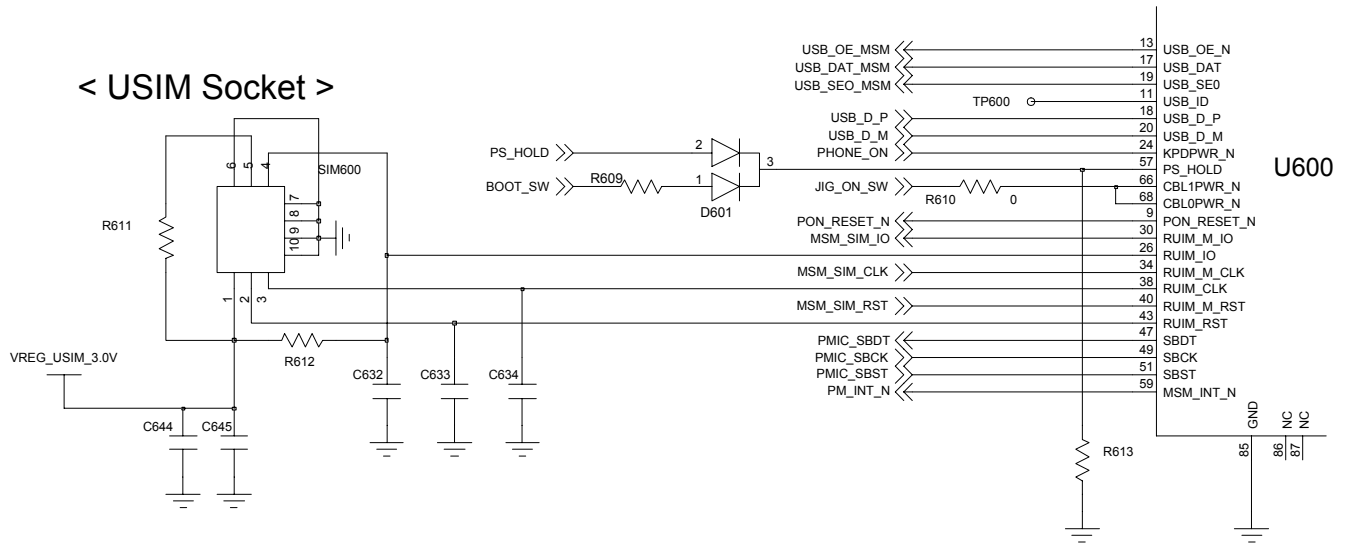
Charging



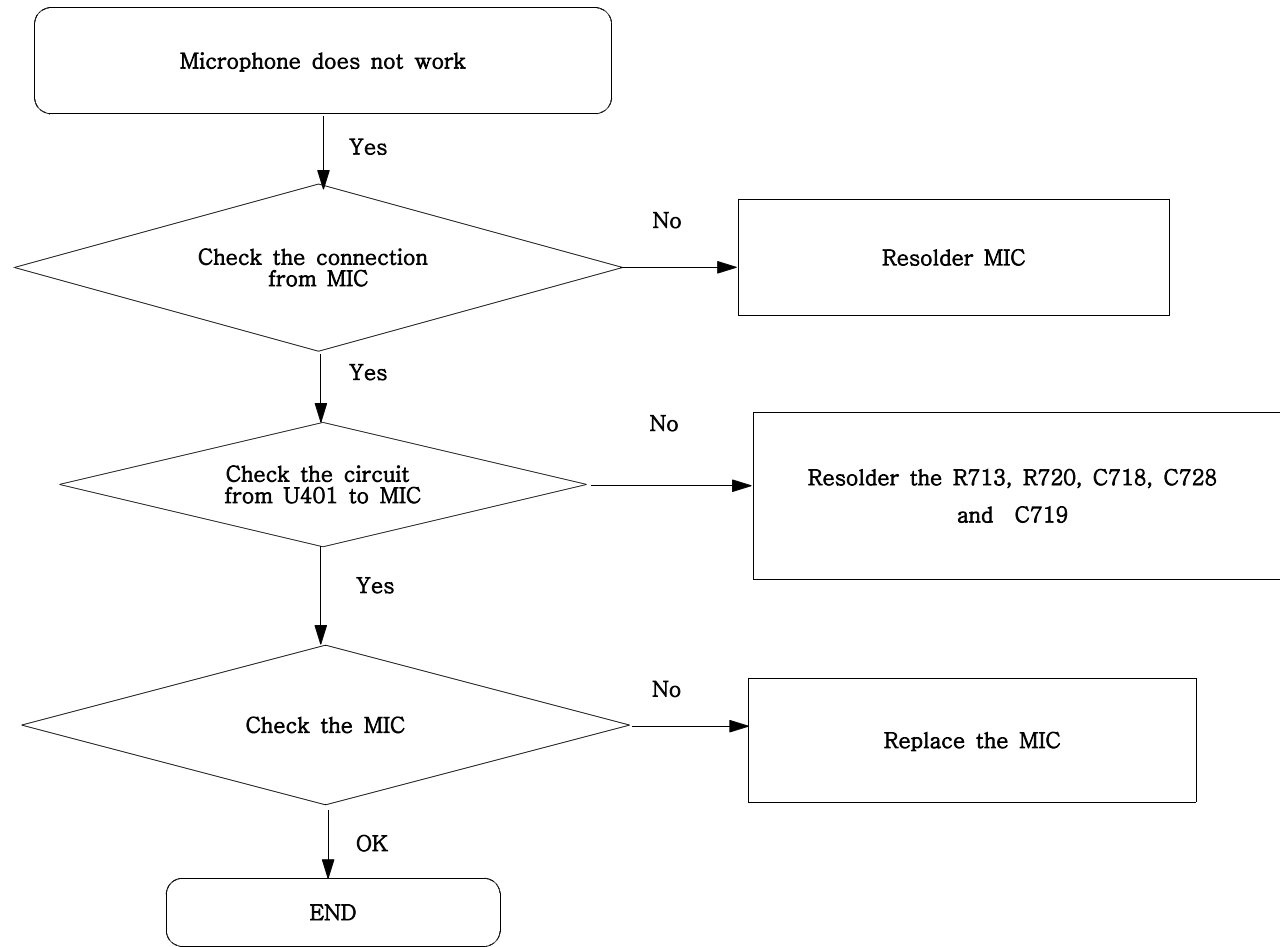


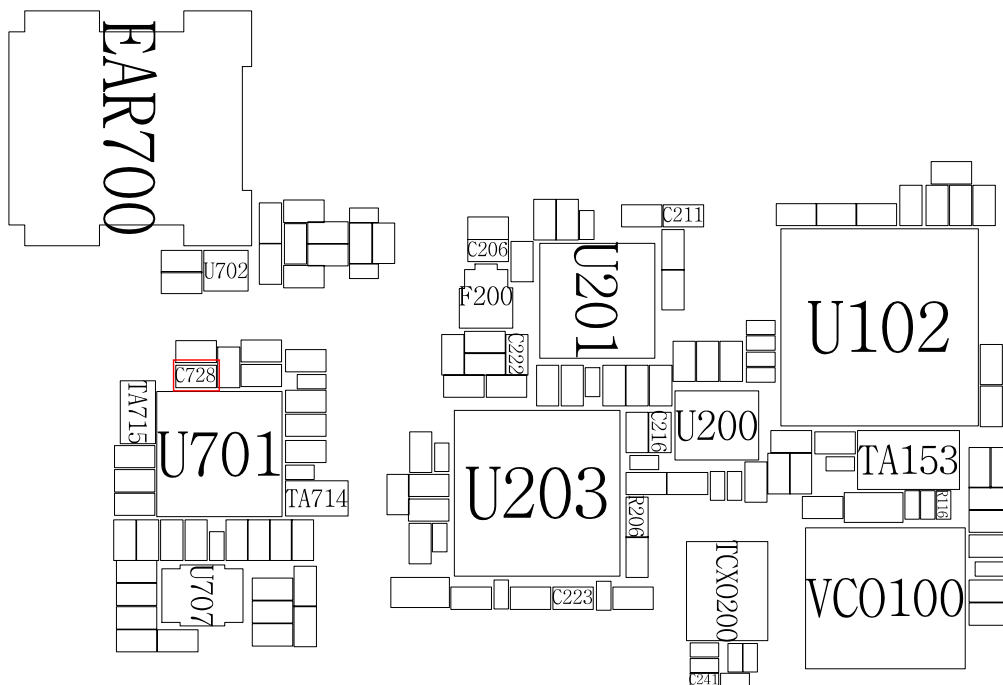
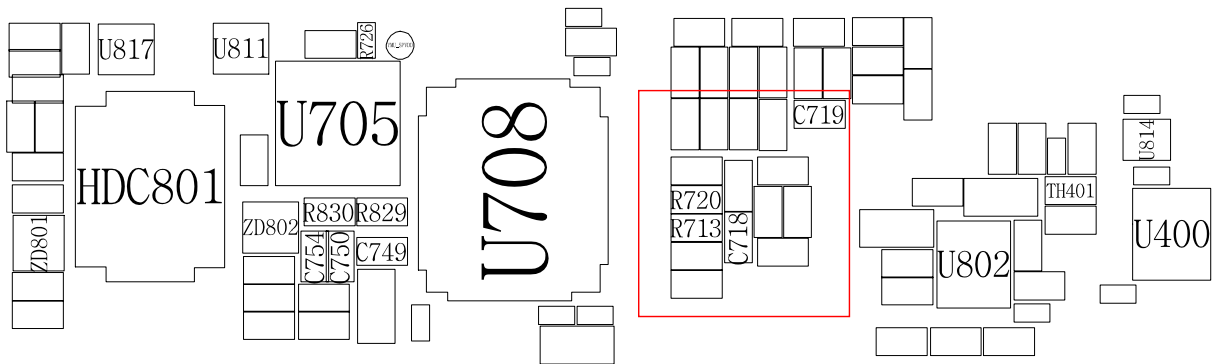
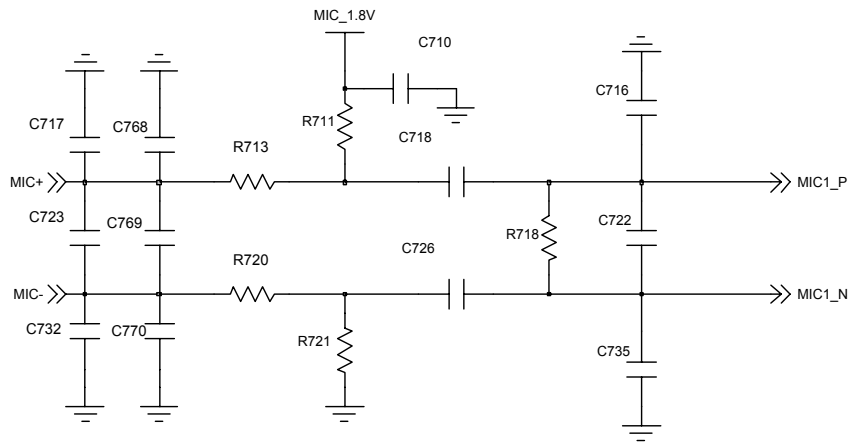
9-4. Sim Part



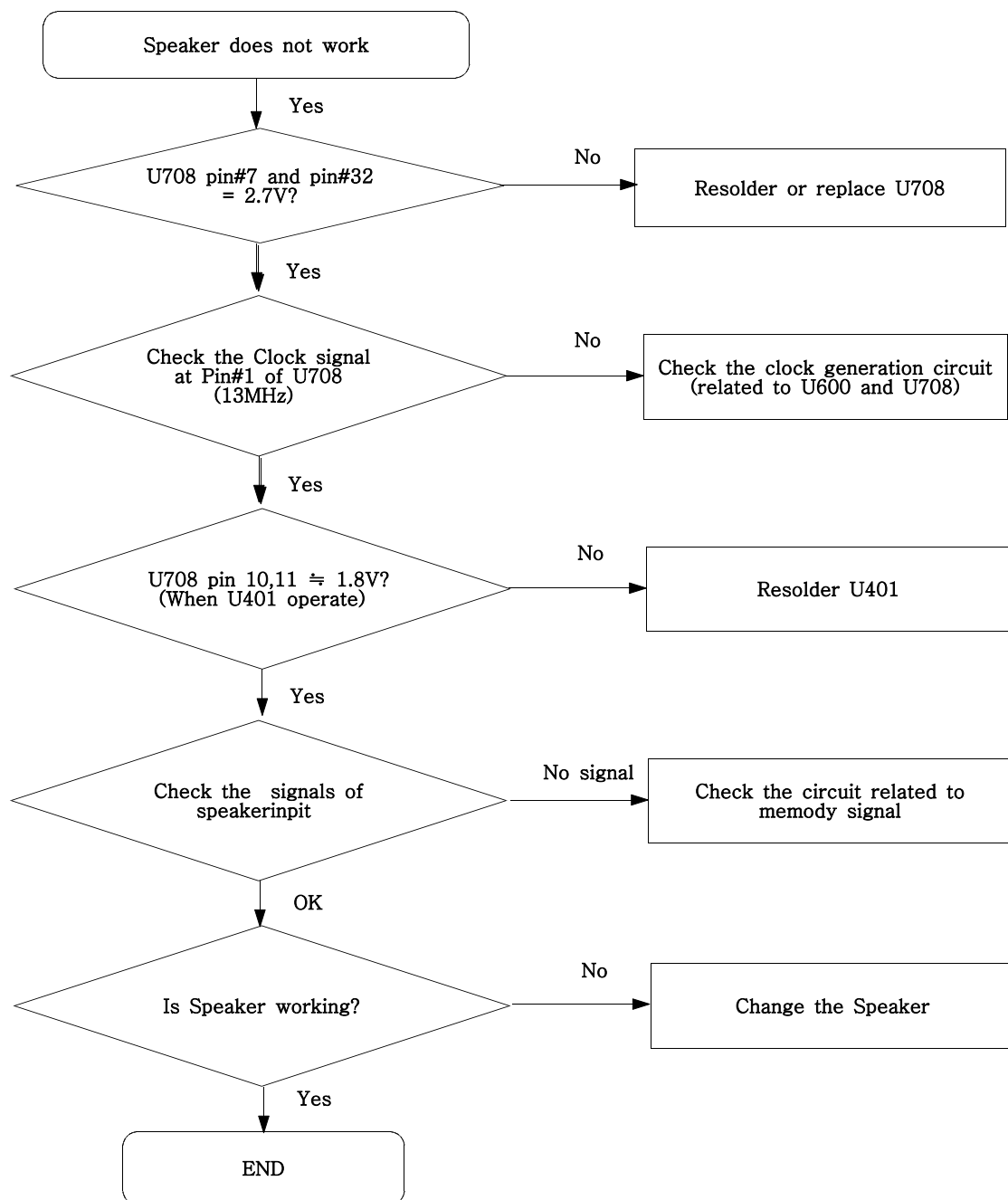


9-5. Microphone Part

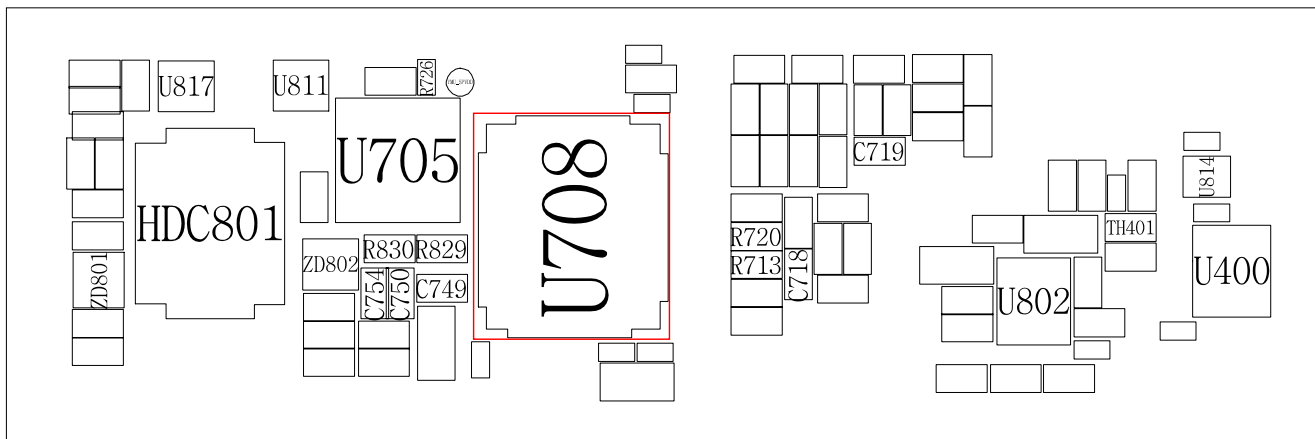
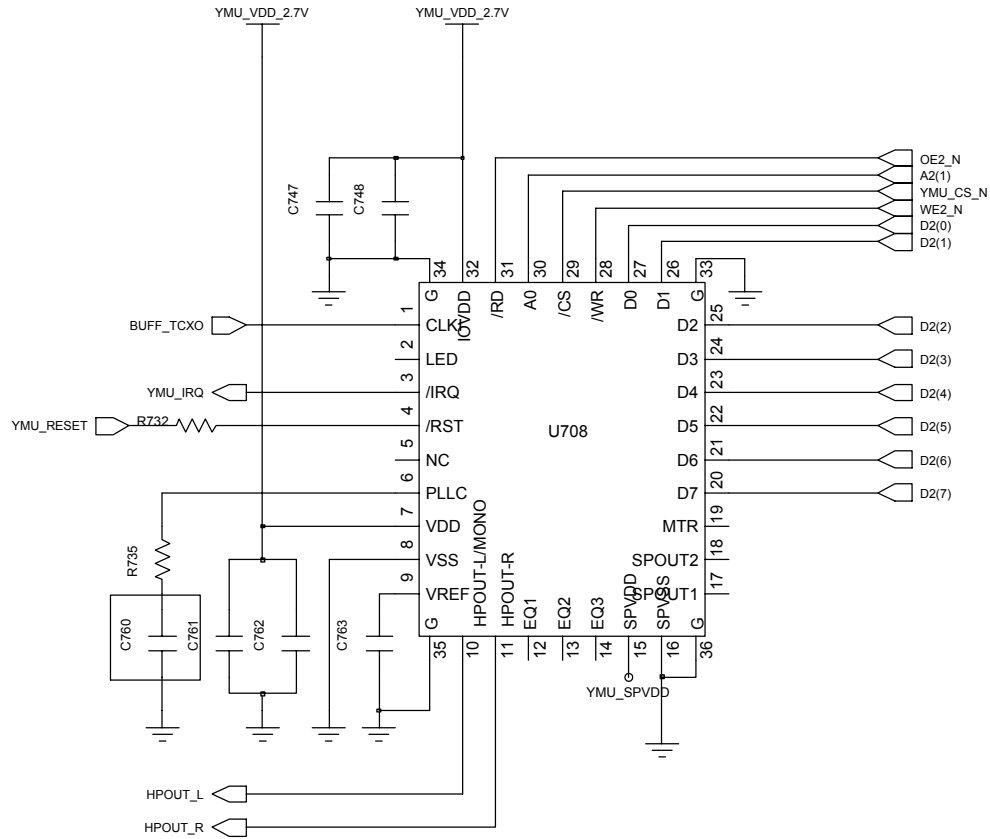




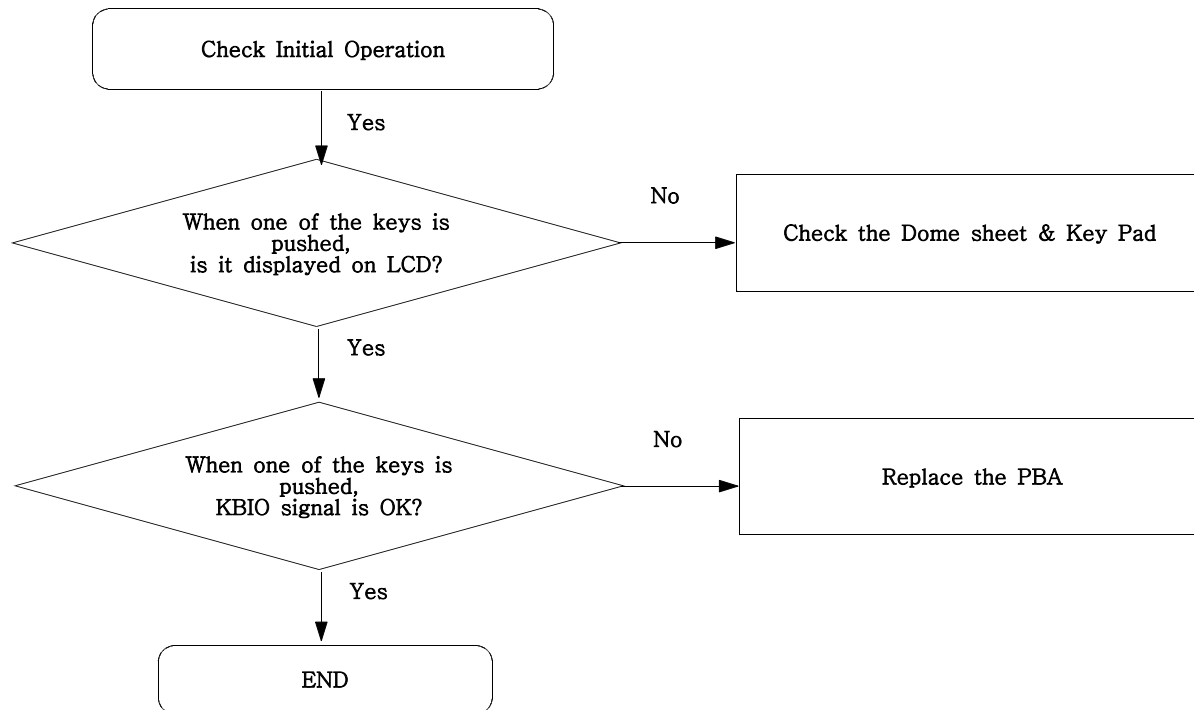
9-6. Speaker Part(Melody)



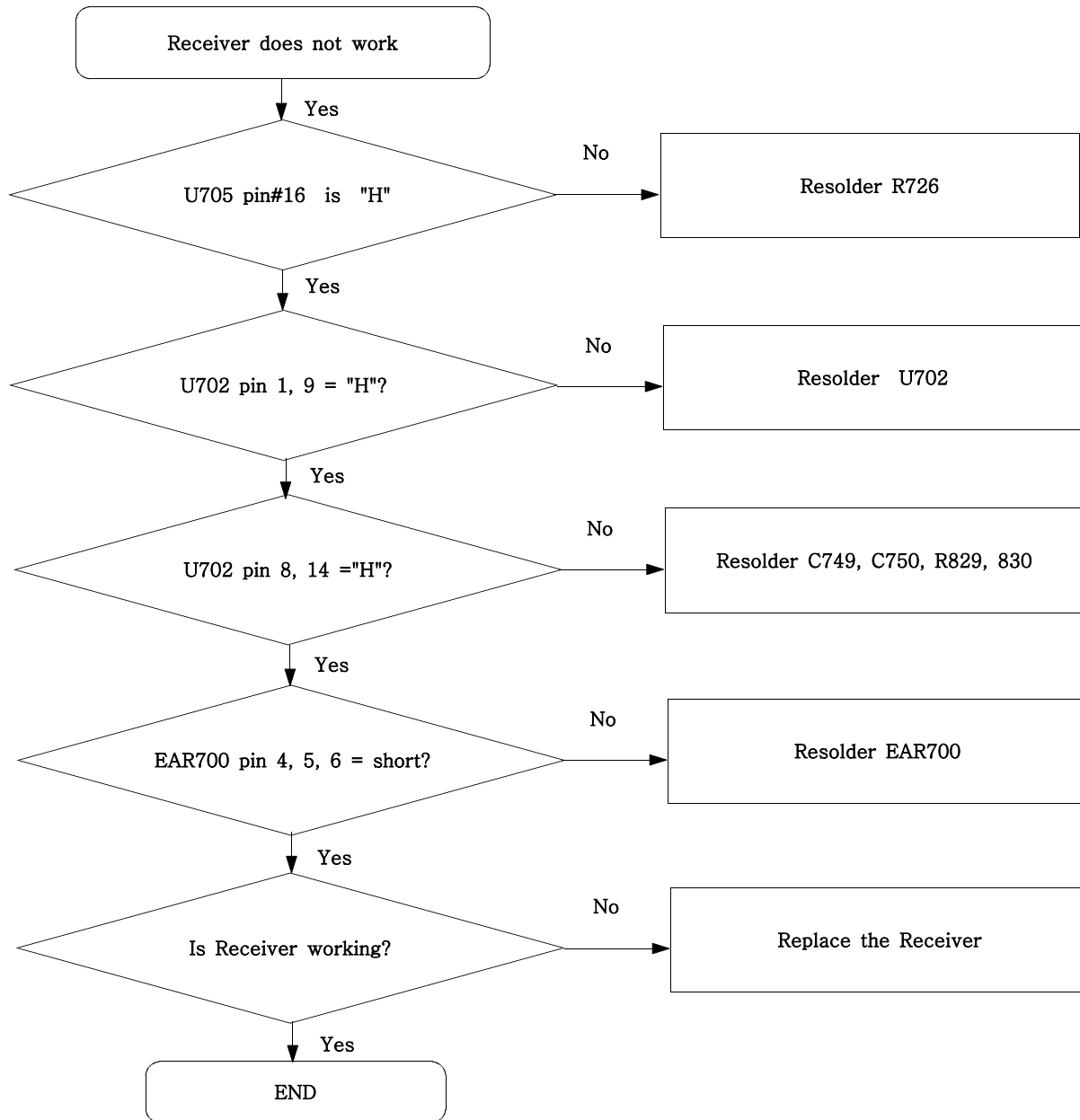
Speaker

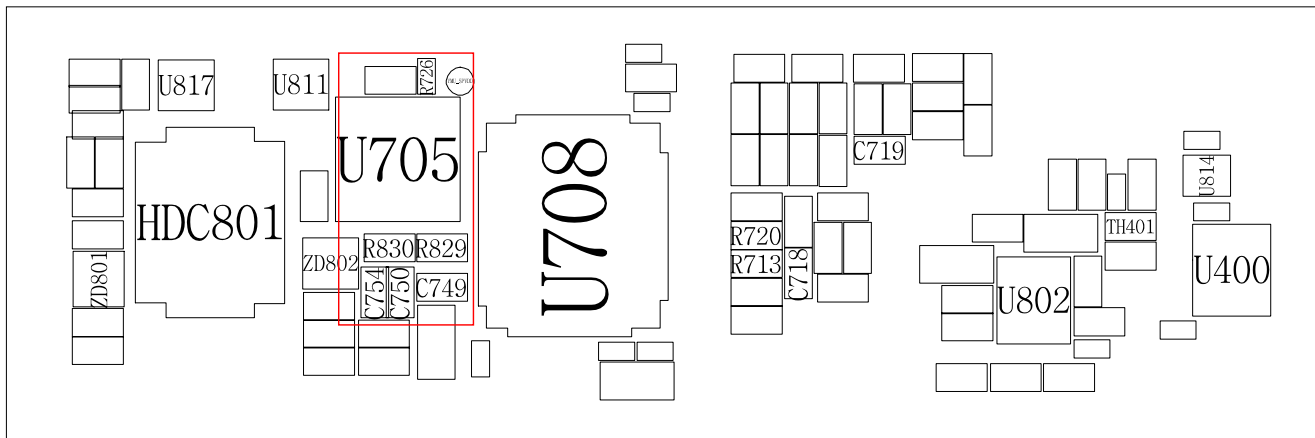
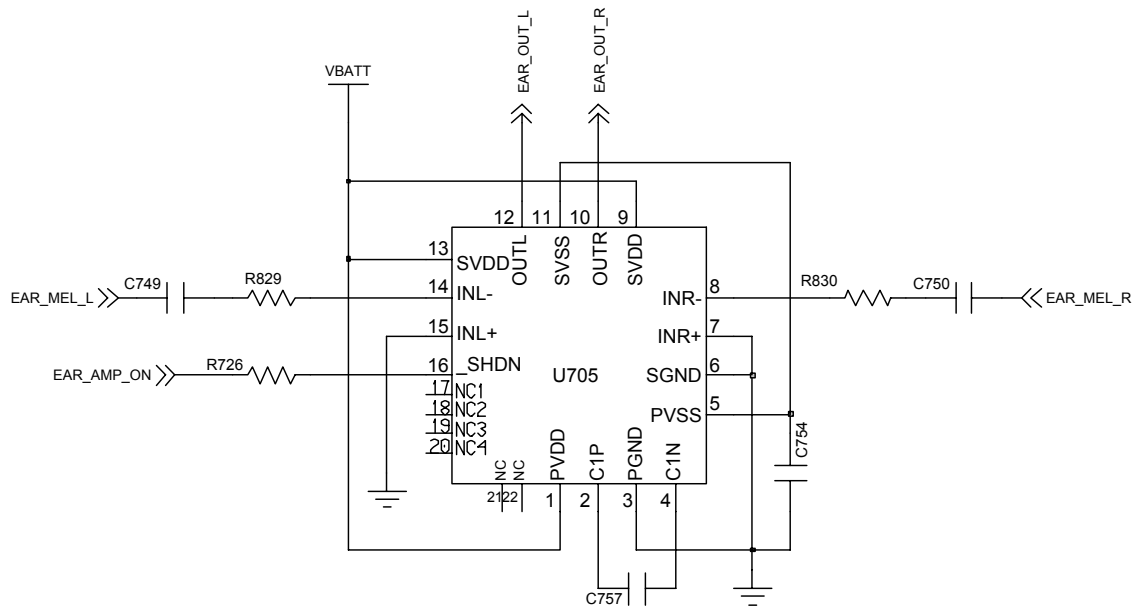


9-7. Key Data Input

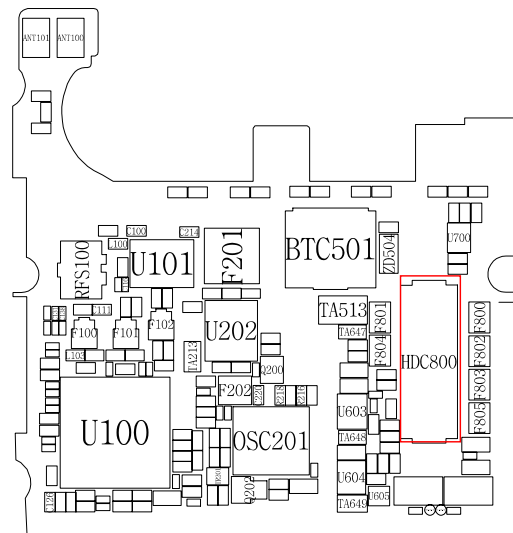
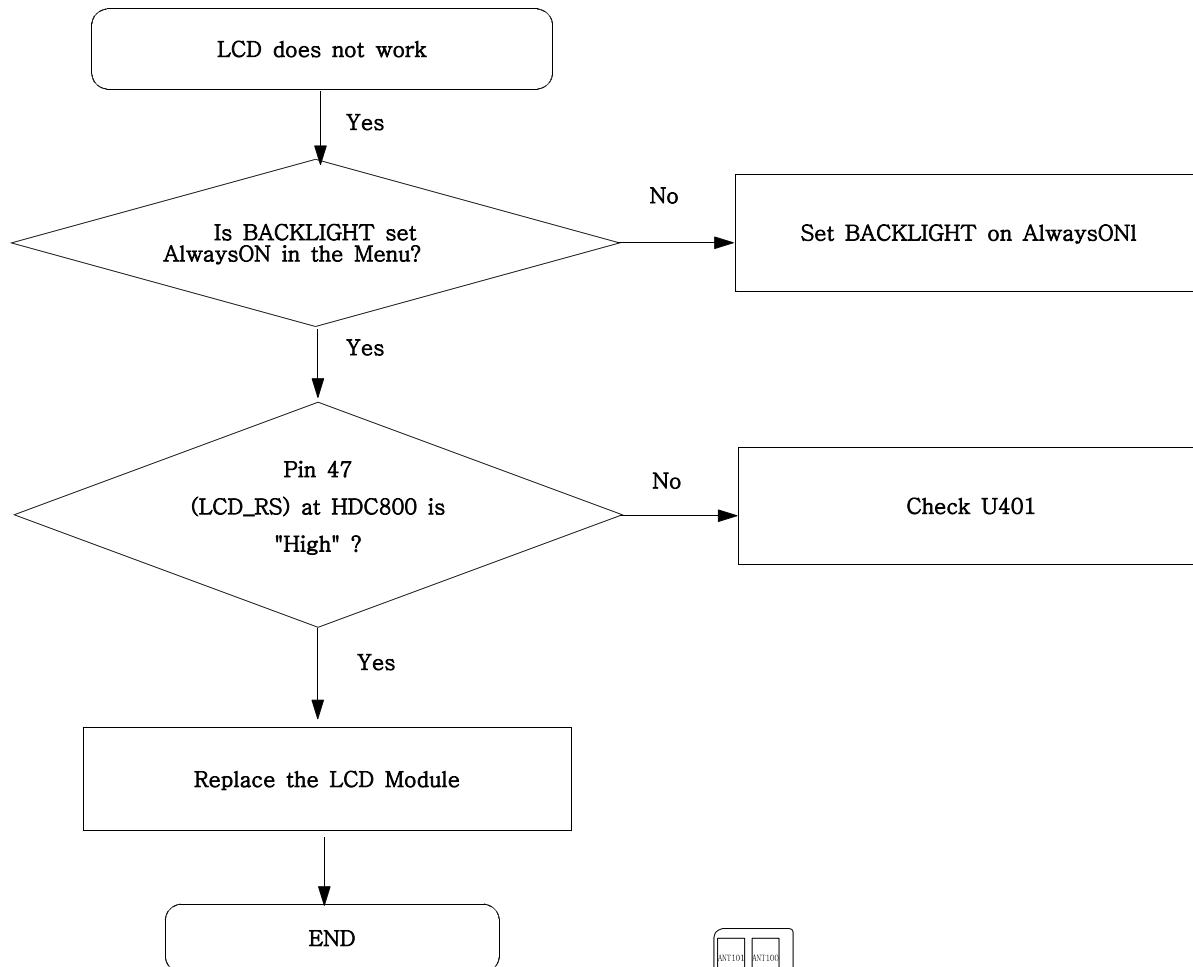


9-8. Earphone Part

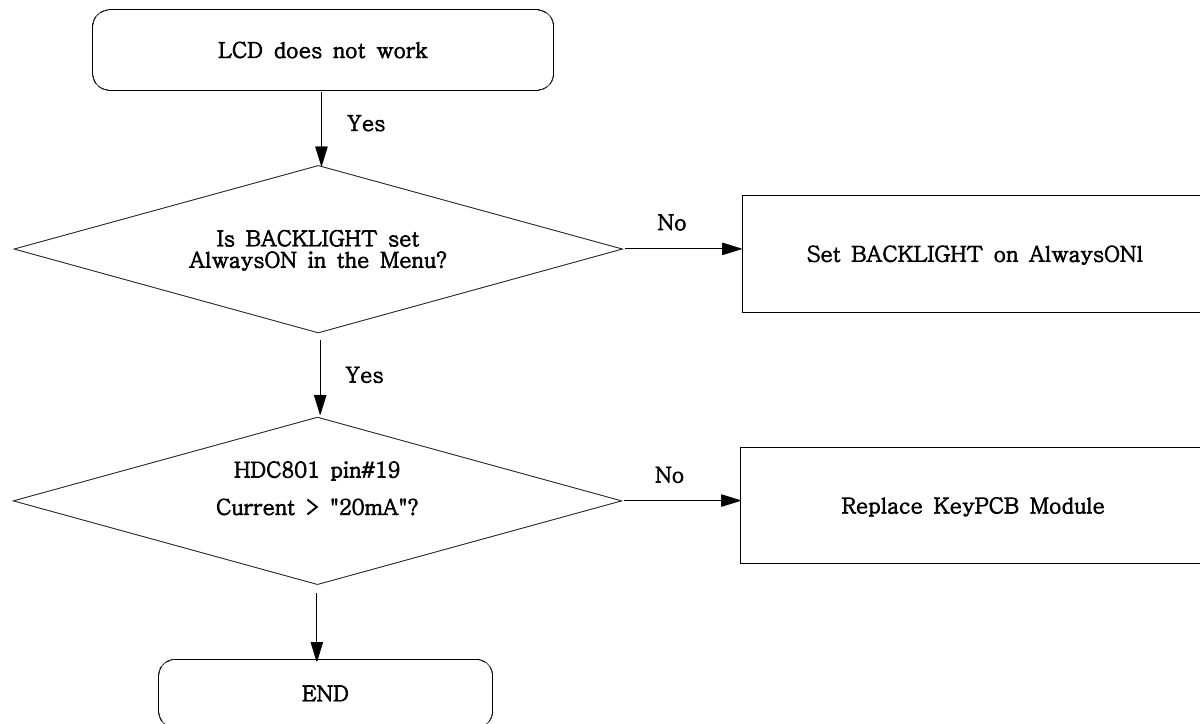


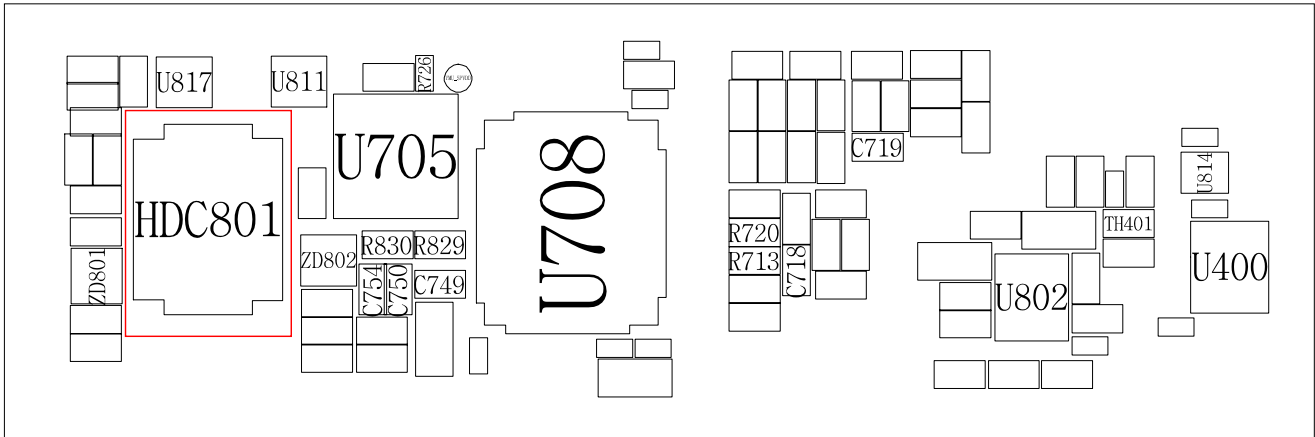
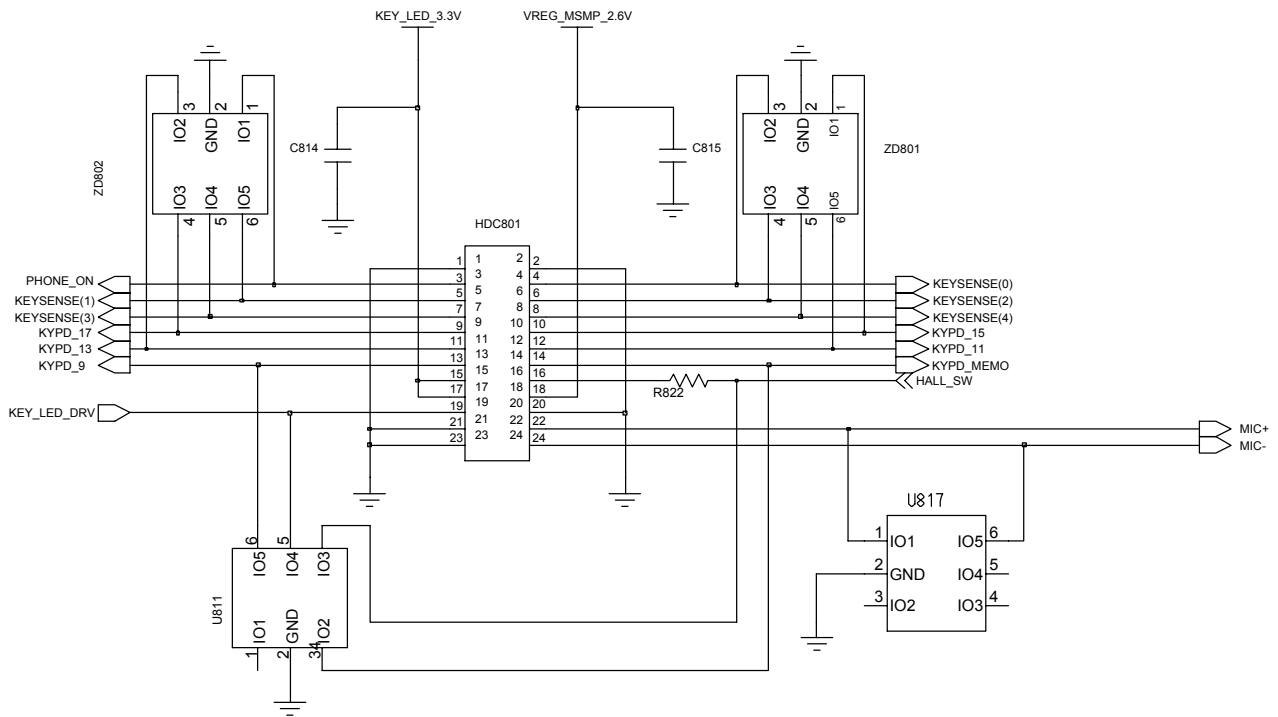


9-9. LCD Part

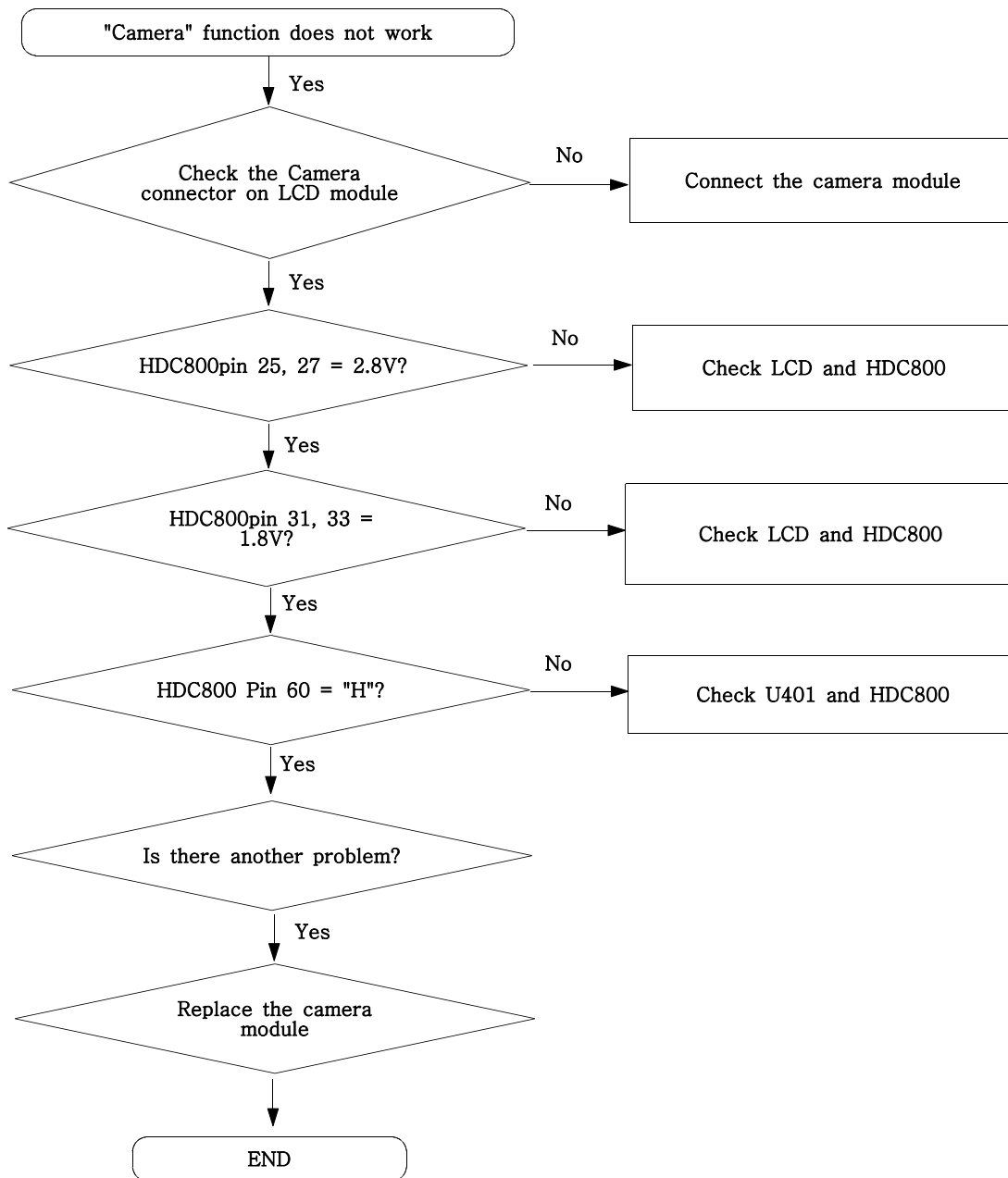


9-10. Key Back Light (Main)

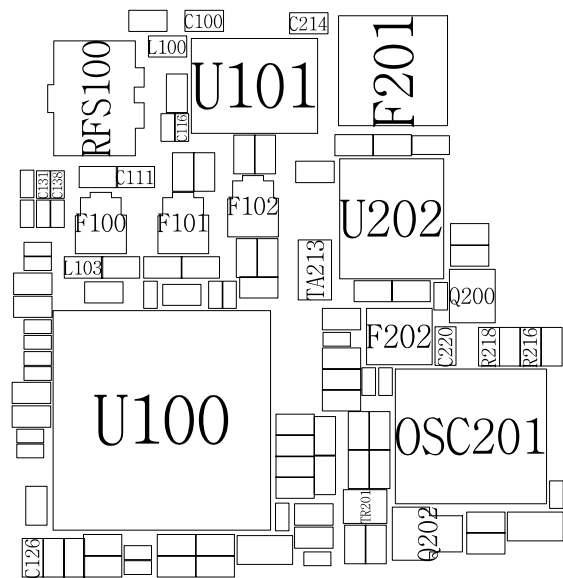
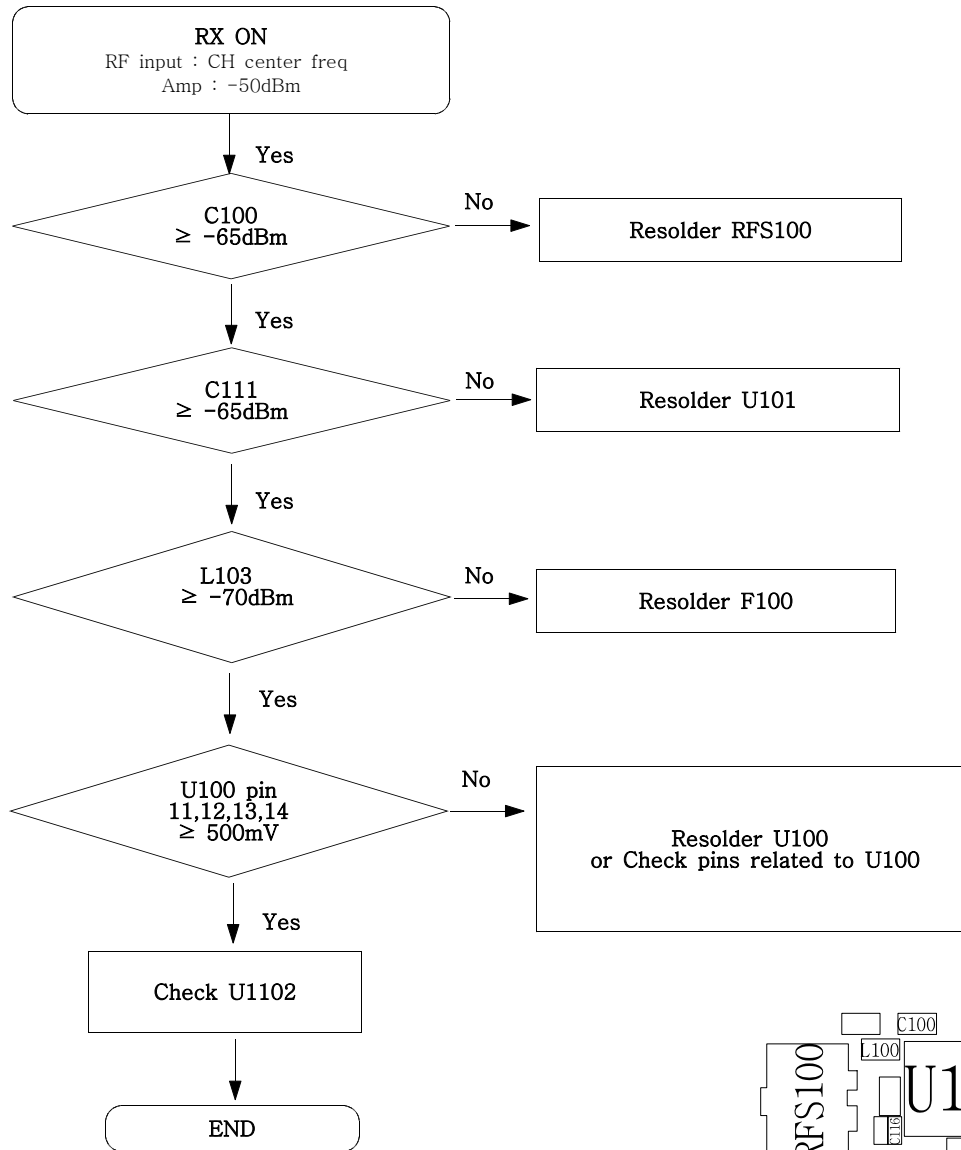




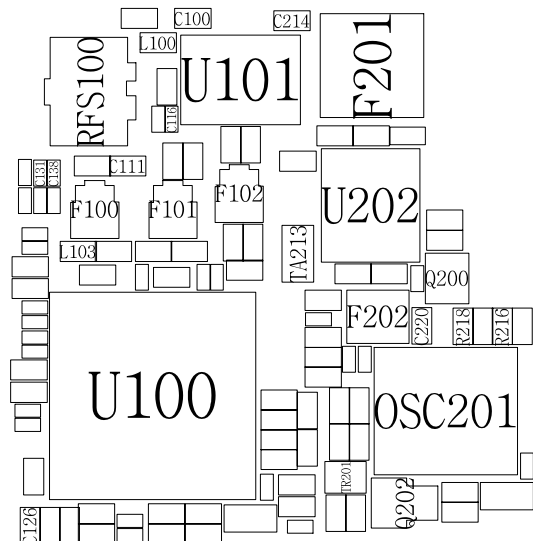
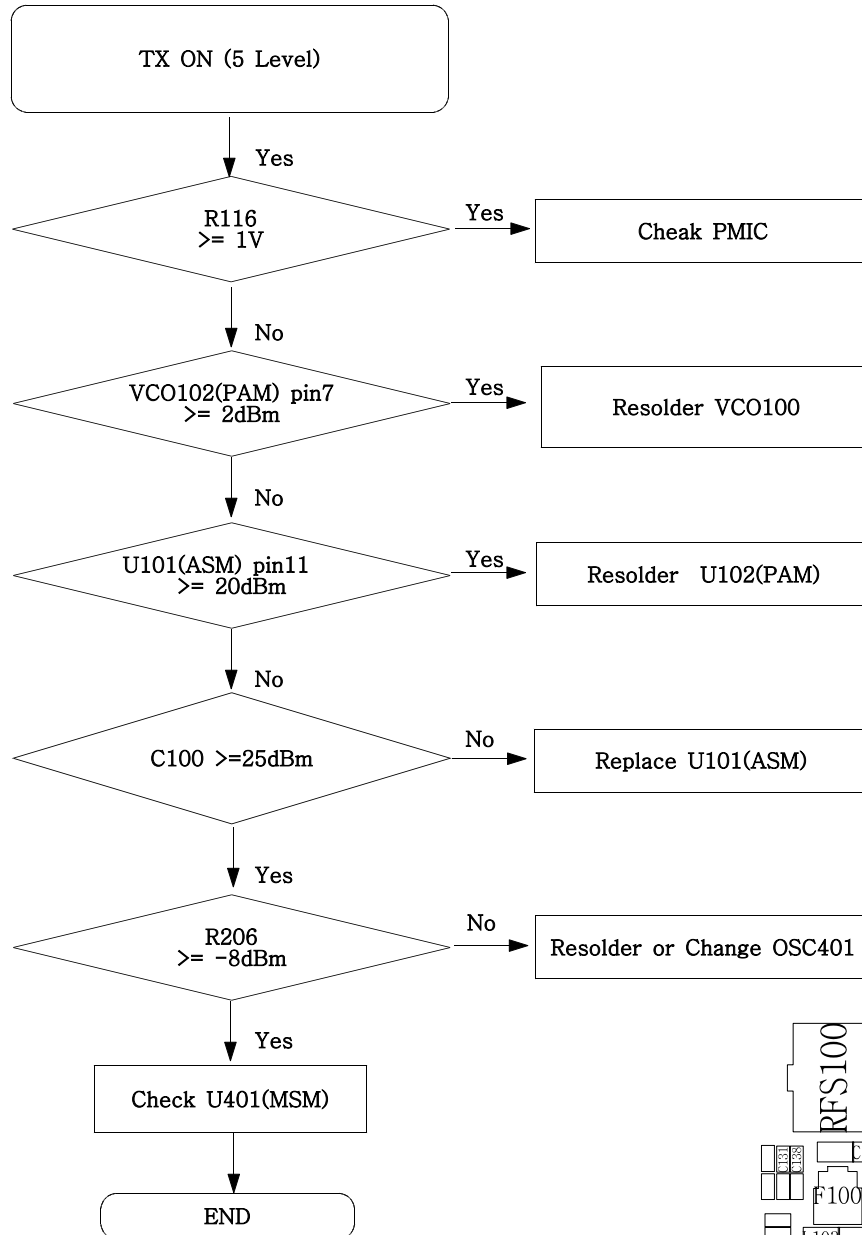
9-11. Camera part



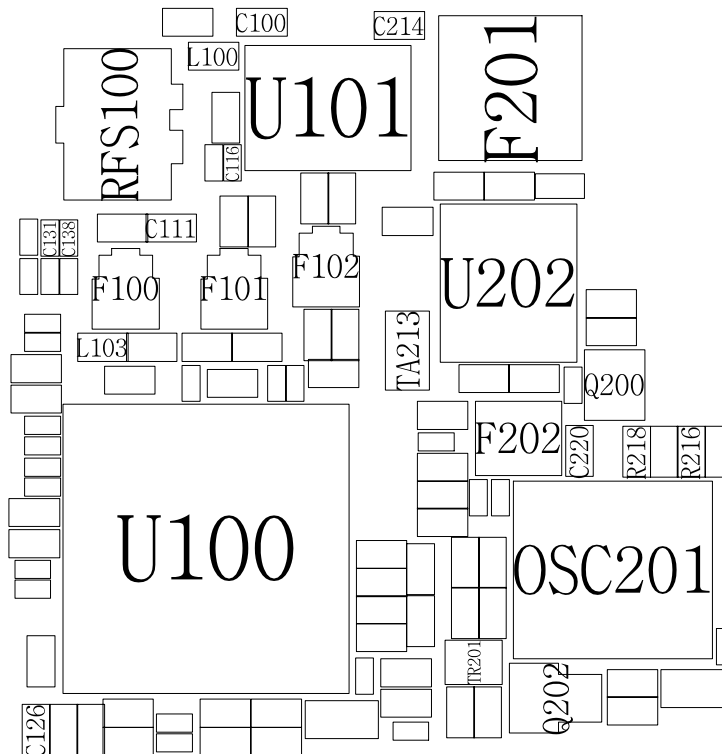
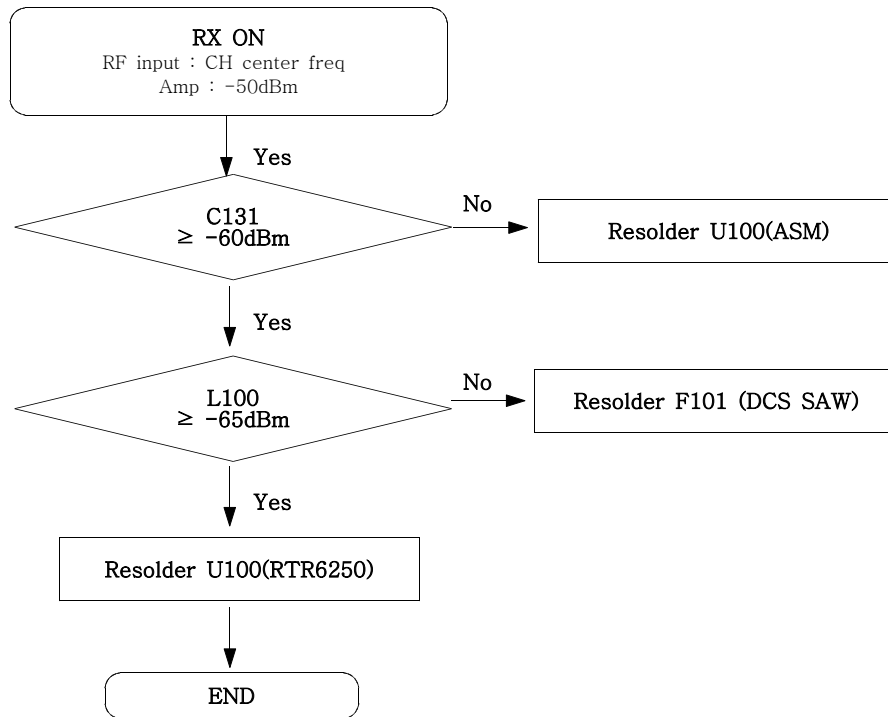
9-12. GSM900 Receiver



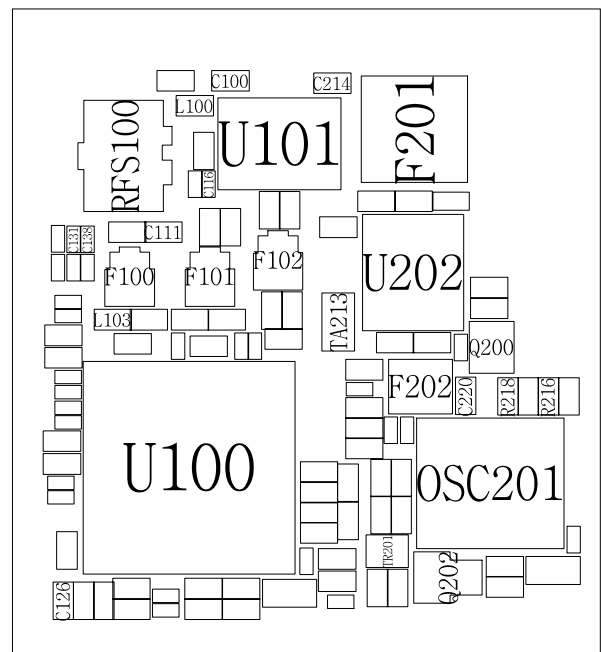
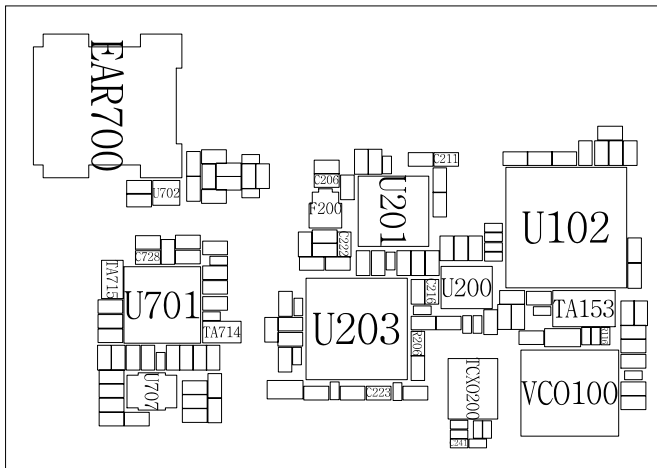
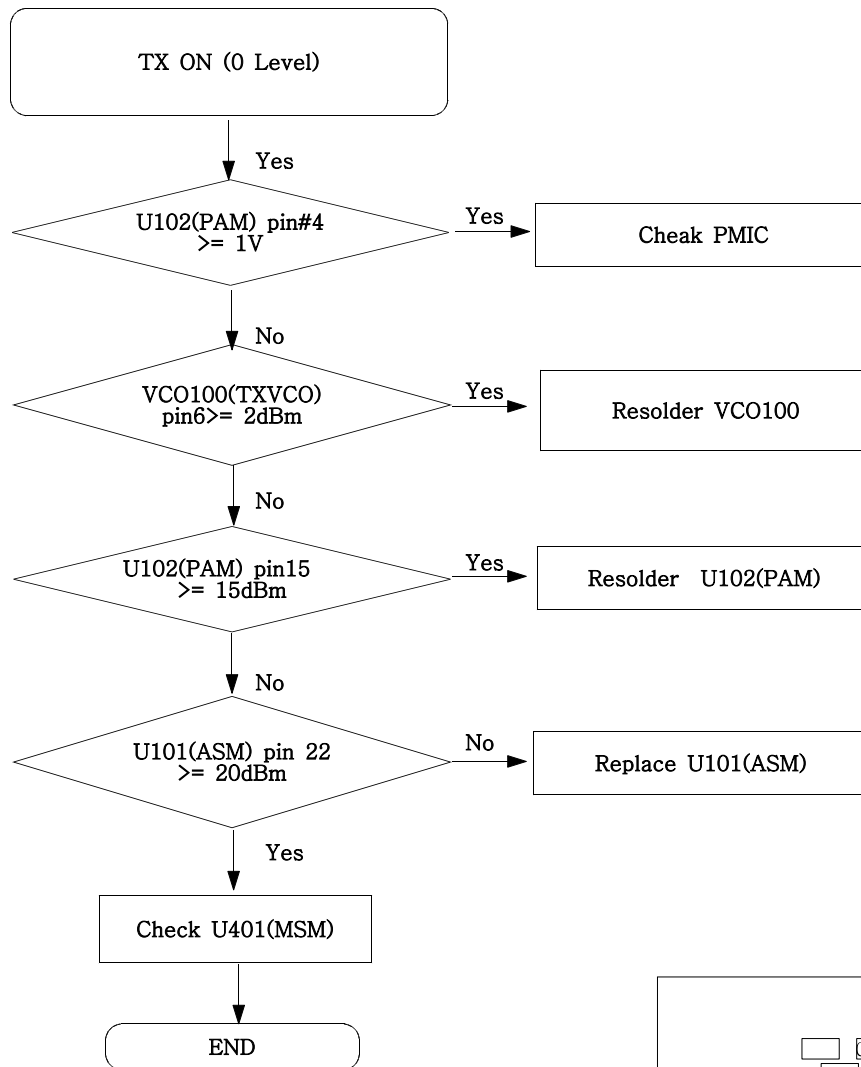
9-13. GSM900 Transmitter



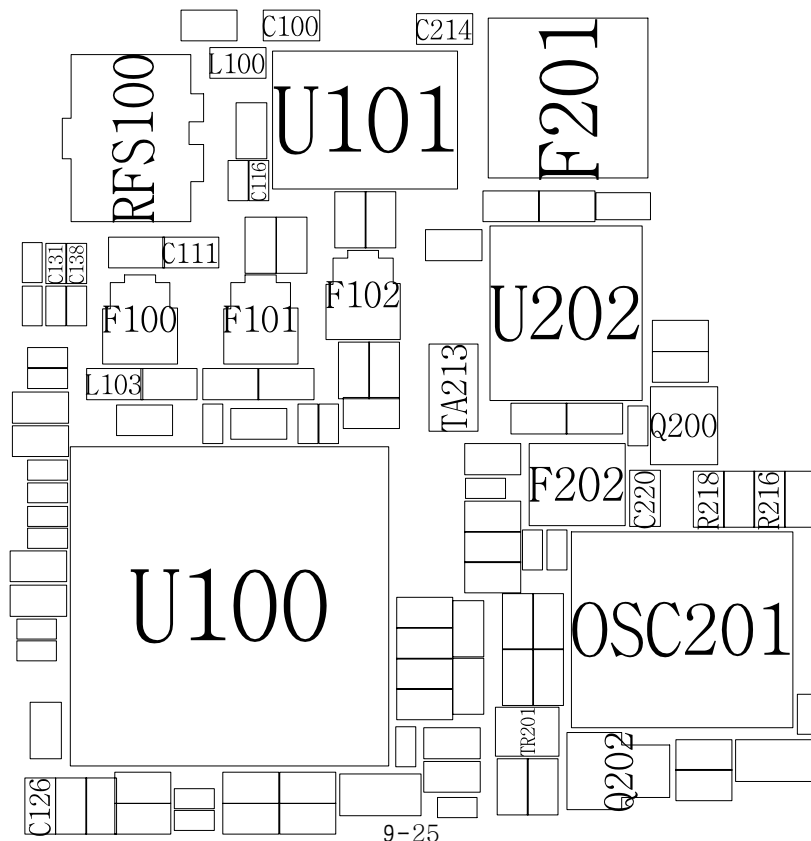
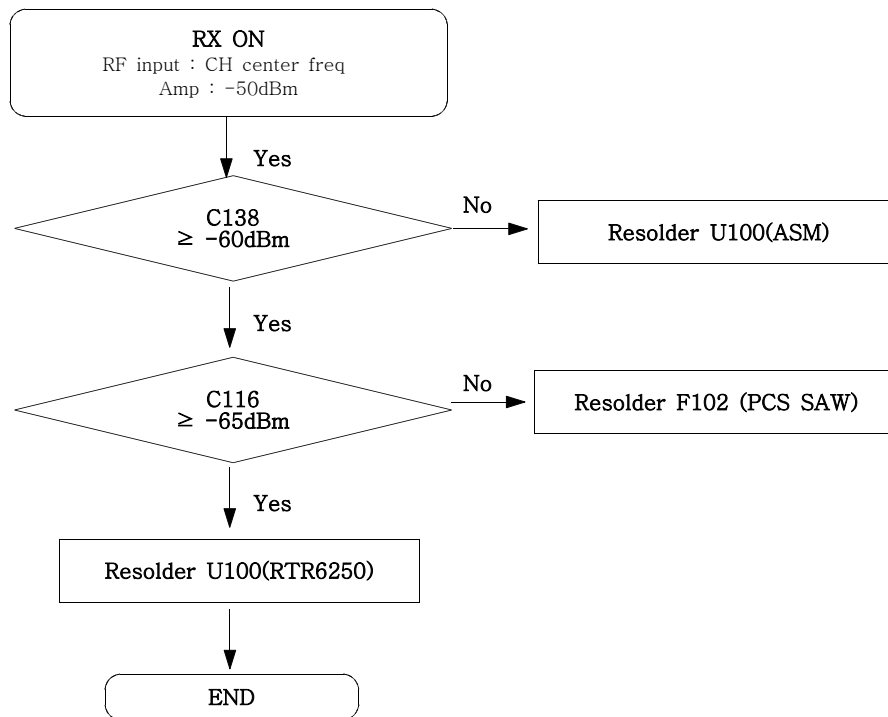
9-14. DCS Receiver



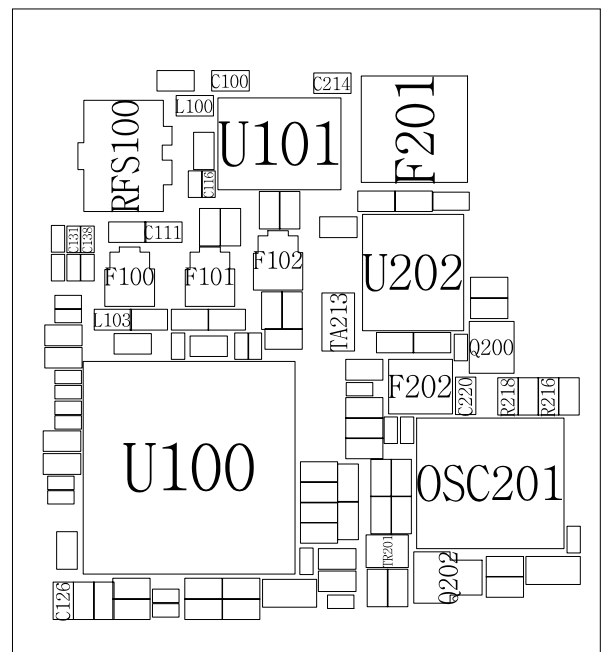
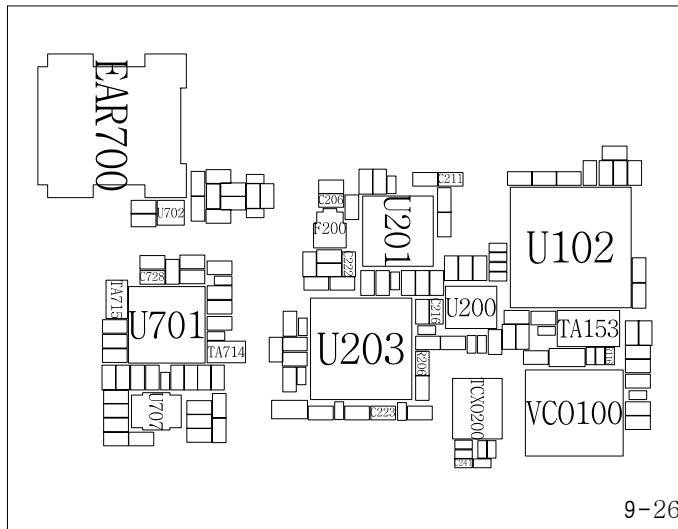
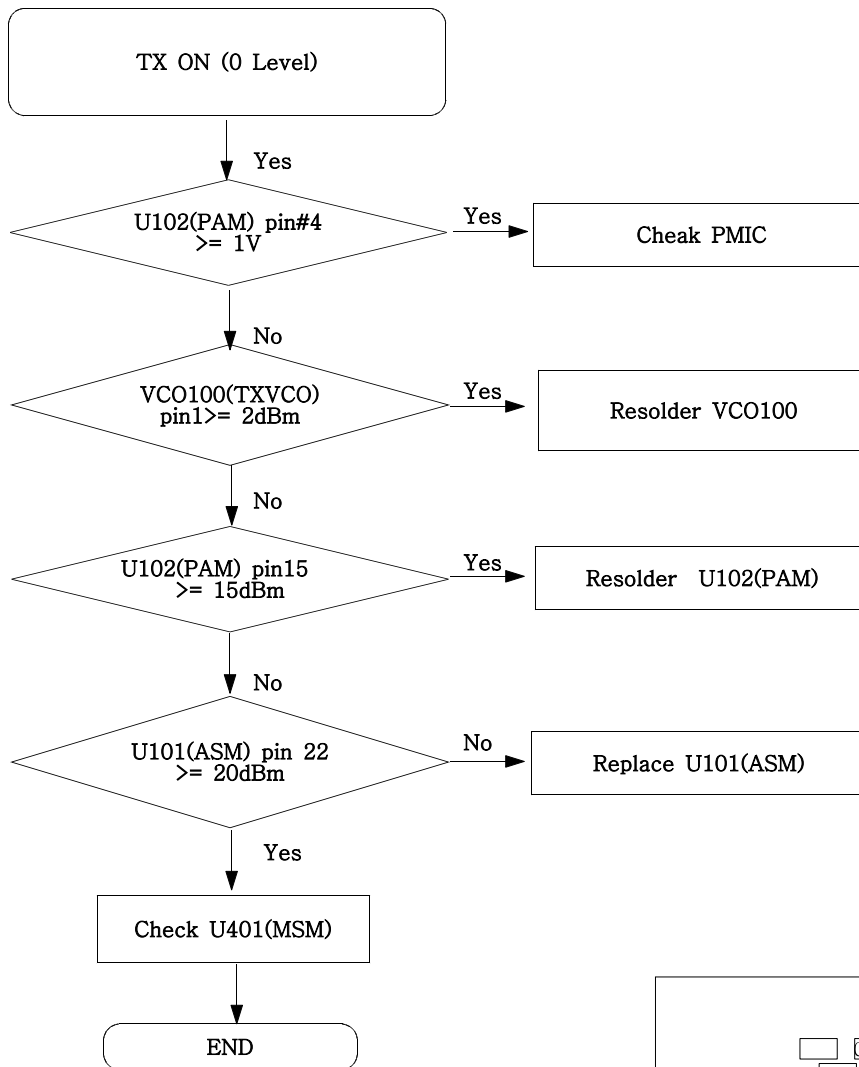
9-15. DCS Transmitter



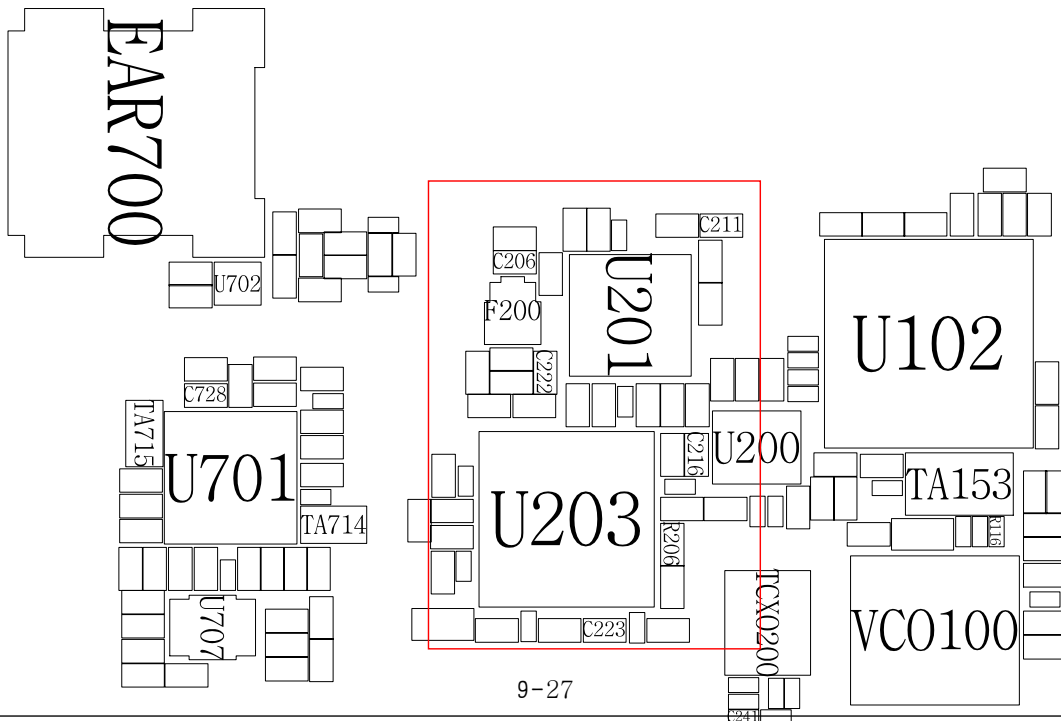
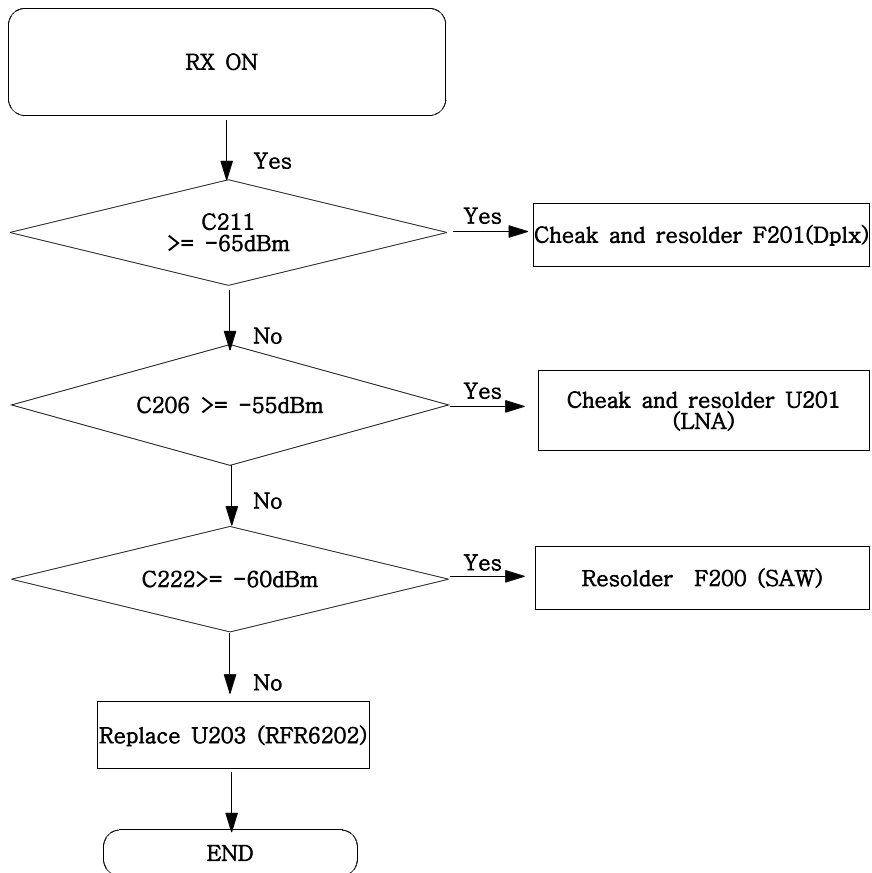
9-16. PCS Receiver



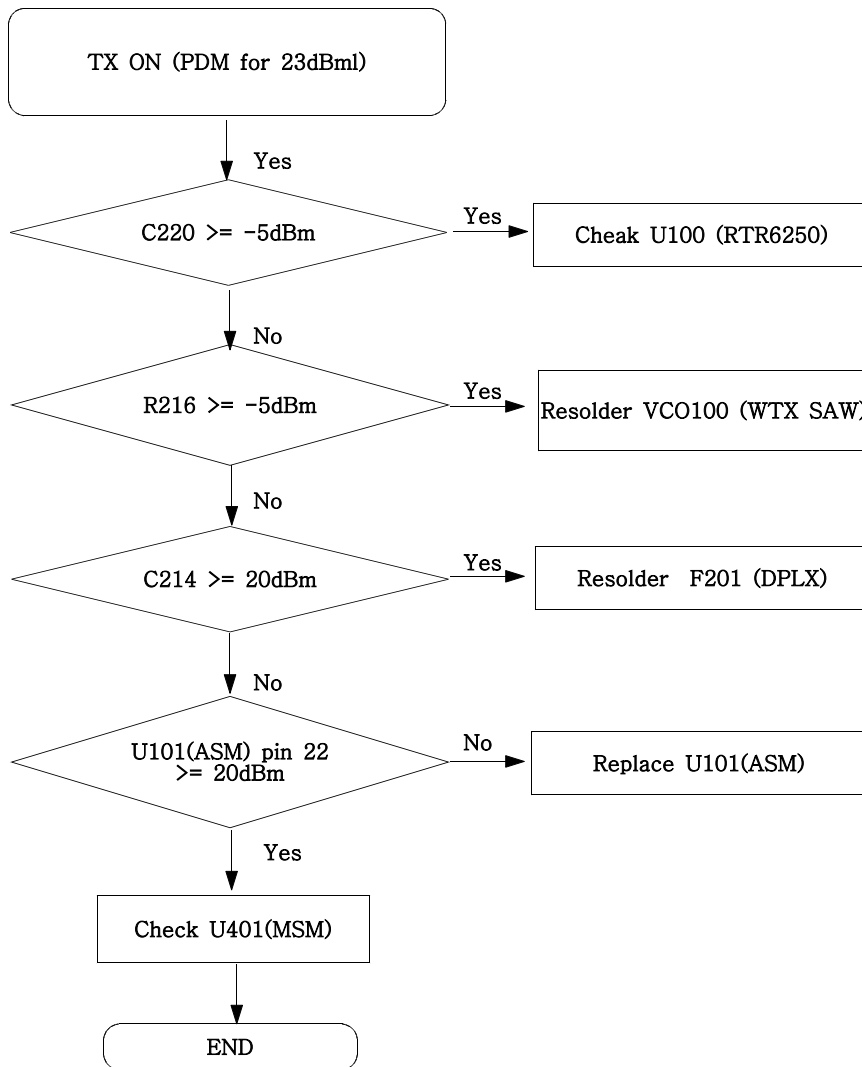
9-17. PCS Transmitter

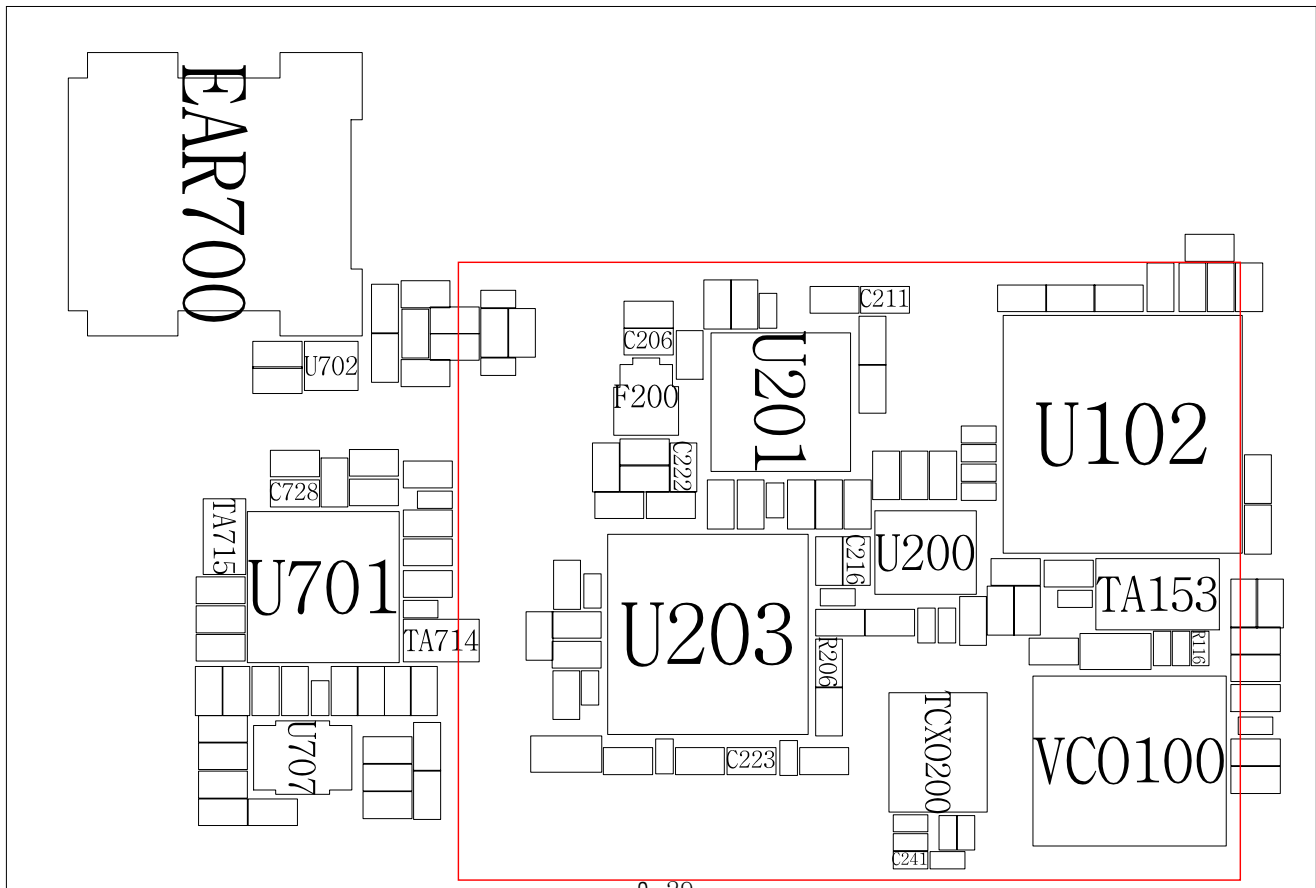
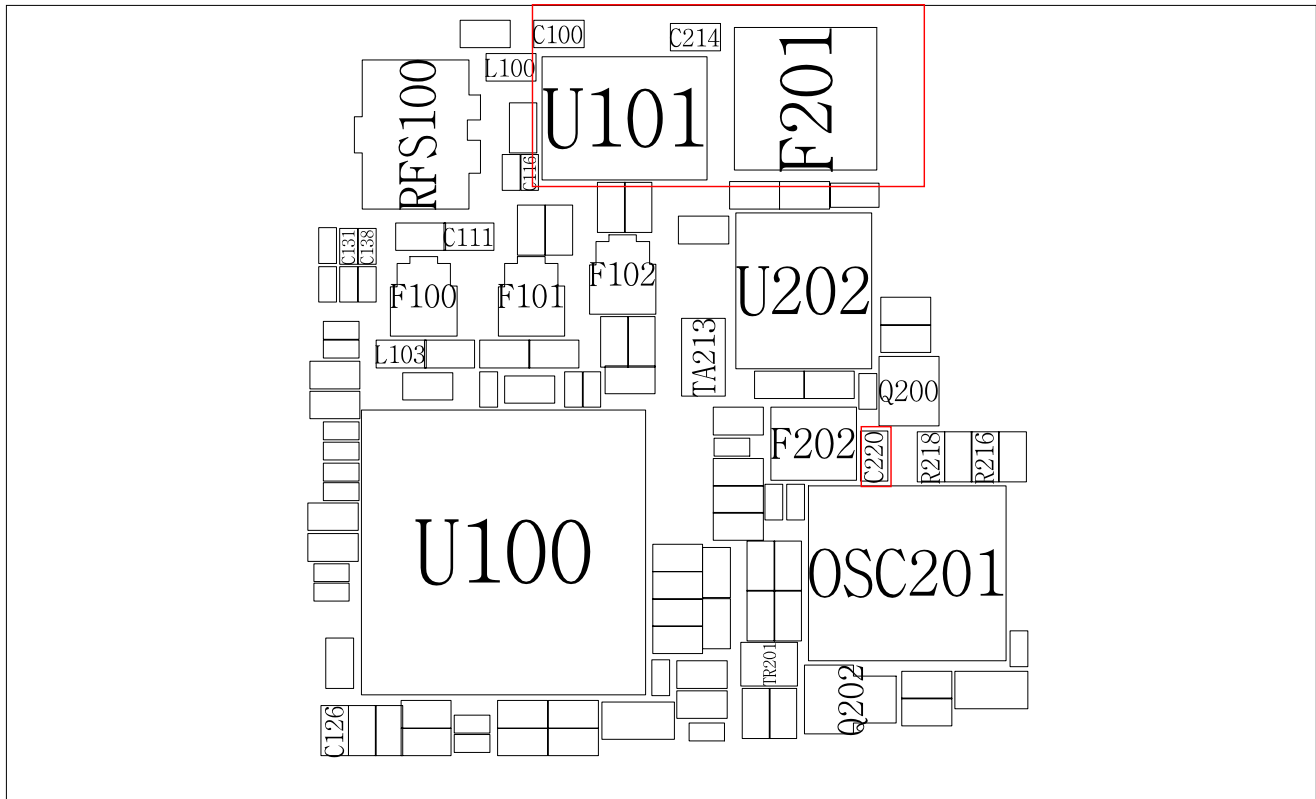


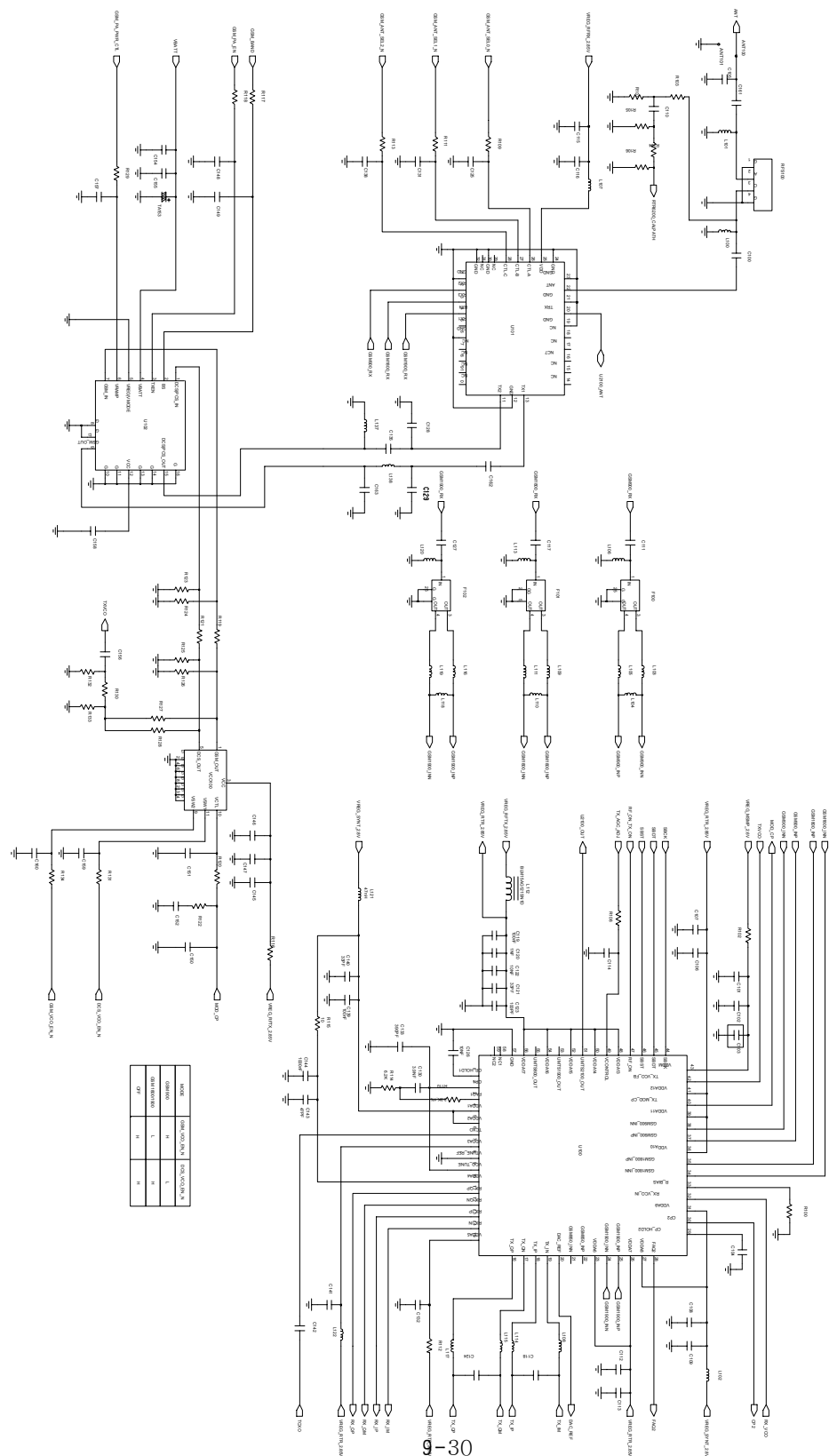
9-18. WCDMA Receiver



9-19. WCDMA Transmitter









10. Reference data

– Reference Abbreviate

AAC: Advanced Audio Coding.

AVC : Advanced Video Coding.

BER : Bit Error Rate

BPSK: Binary Phase Shift Keying

C/I : Carrier to Interference

EN : European Standard

ES : Elementary Stream

ETSI: European Telecommunications Standards Institute

MPEG: Moving Picture Experts Group

PN : Pseudo-random Noise

PS : Pilot Symbol

QPSK: Quadrature Phase Shift Keying

RS : Reed-Solomon

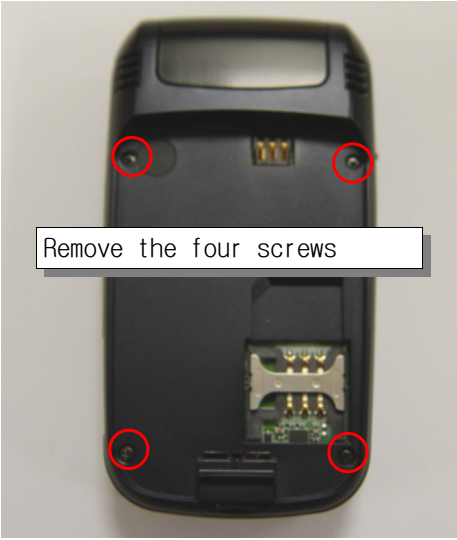
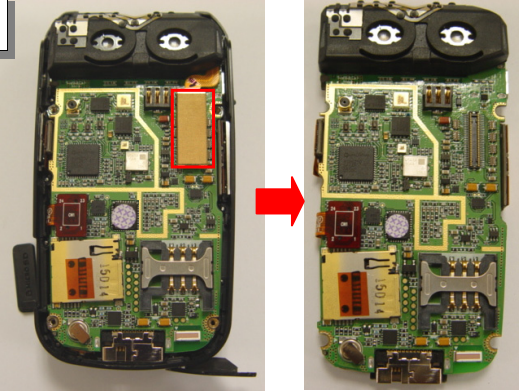
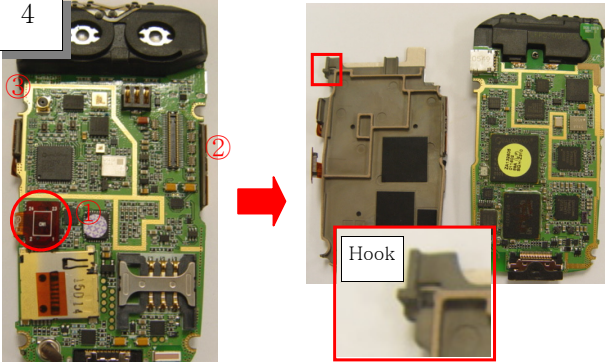
SI : Service Information

TDM : Time Division Multiplexing

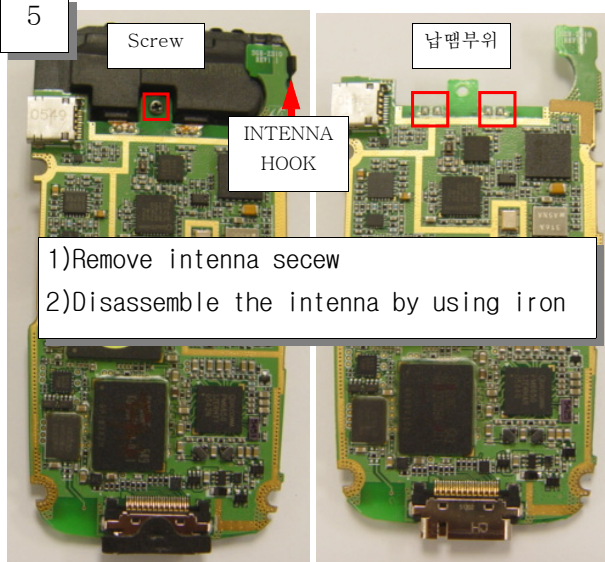
TS : Transport Stream

11. Exploded and assembling View

11-1. Disassembling

1  Remove the four screws	2  Disassemble the rear cover from lower side
※Pay attention not to scratch the rear cover	※Pay attention to the Micro SD CARD COVER The cover is easily dropped out
3  1)Remove the LCD CONNECTOR 2)and PCB also	4  1)Remove KEY connector. 2)Remove shield can from the right side
※Do not make any crack on LCD connertor	※ Because there is a hook which can be broken easily, shiled cover must be removed from the right hand side

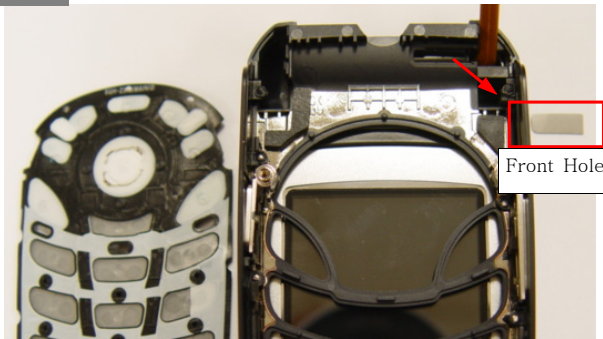
5



1)Remove intenna secew
2)Disassemble the intenna by using iron

※Pay attention to the intenna FPCB
※and intenna hook also

6



1)REMOVE THE KEY PAD
2)REMOVE FRONT HOLE TAPE

※Make sure the you remove the front hole tape,
you that you can easily take the LDC off

7



1)Take off the LCD assemble

※pay attention no to make any crack on a LCD
FPCB

8



1)remove the two scre caps
2)remove the screws

※ Screw caps can not be reused

9



Remove the folder upper cover

※Pay attention not to make a scratch

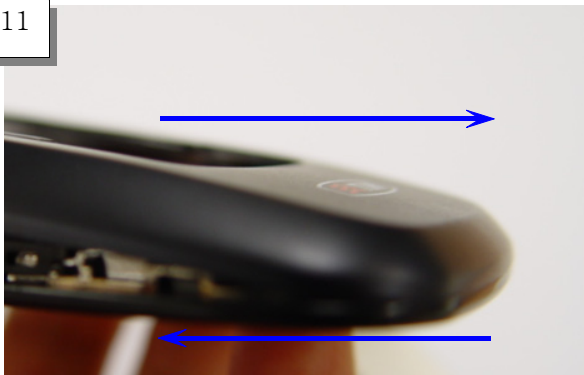
10



Remove the folder upper cover

※Pay attention not to make a scratch

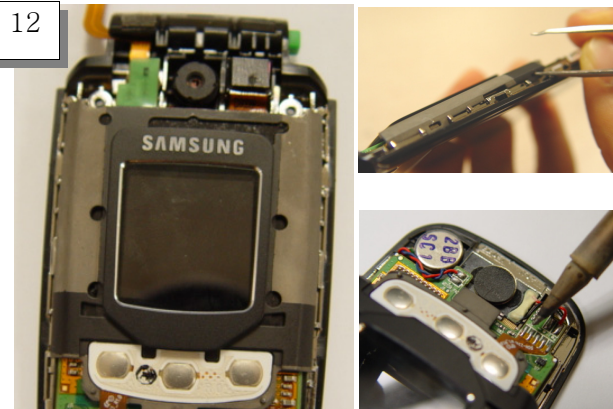
11



You can disassemble the upper cover as shown in above

※Pay attention not to make a scratch

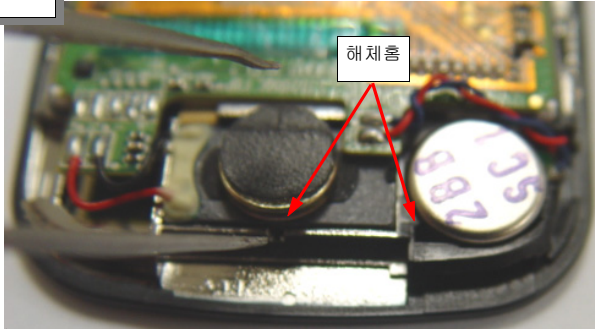
12



- 1)Get rid of LCD BRK
- 2)Use iron to take off the MP3 KEY PCB solder

※LCD BRK LOCKER is easily borken
 ※When removing MP3 KEY FPCB, pay attention not to short pads

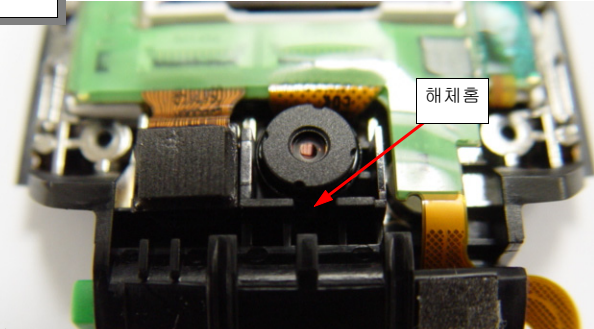
13



Take the MOTOR and RECEIVER out

※by using pincette you can make it easily

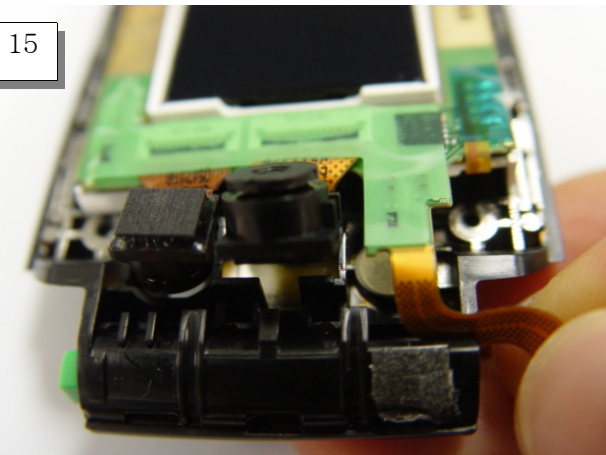
14



Take the MEGA CAMERA and VGA CAMERA out

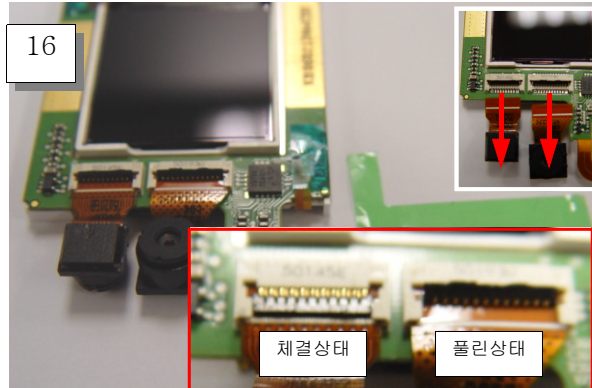
※ by using pincette you can make it easily
※ Pay attention not to make camera lens dirty

15



Remove the LCD module from the lower cover
Pay attention to the LCD FPCB tail

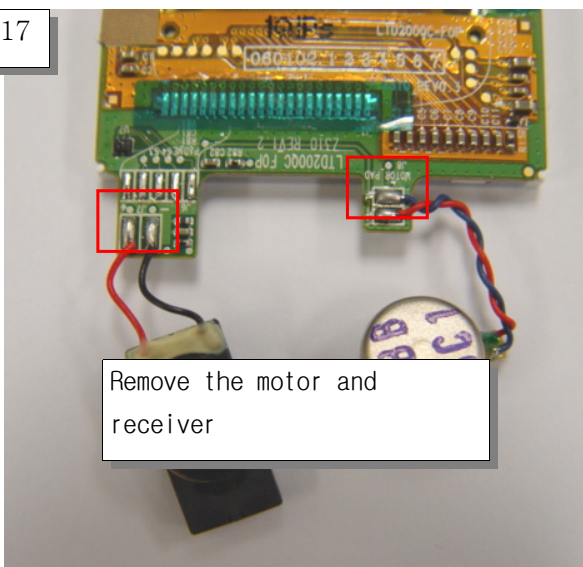
16



1)Remove LCD upper tape(green)
2)Remove the MEGA / VGA CAMERAas shown above

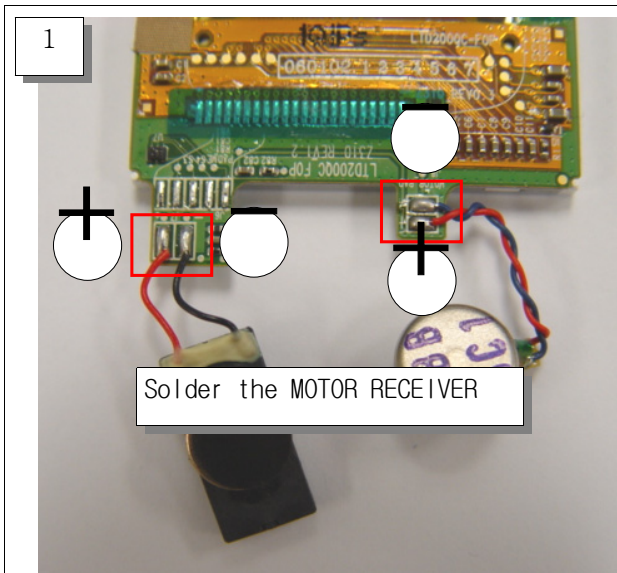
※ pay attention not to make a crack on the
both camera connector

17

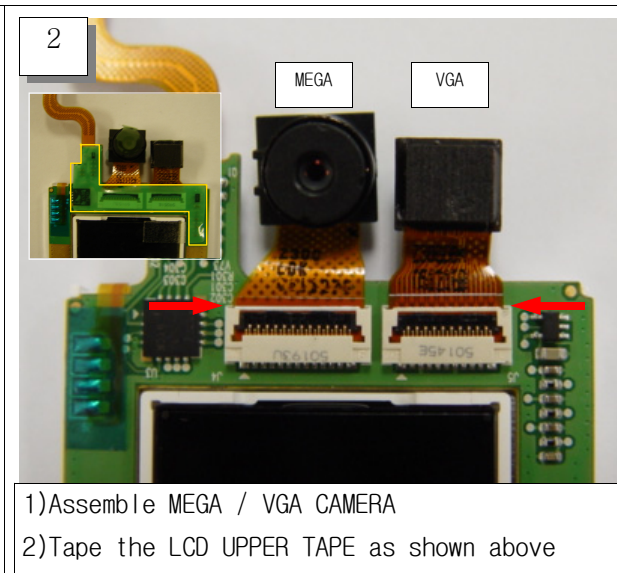


※Use soldering iron

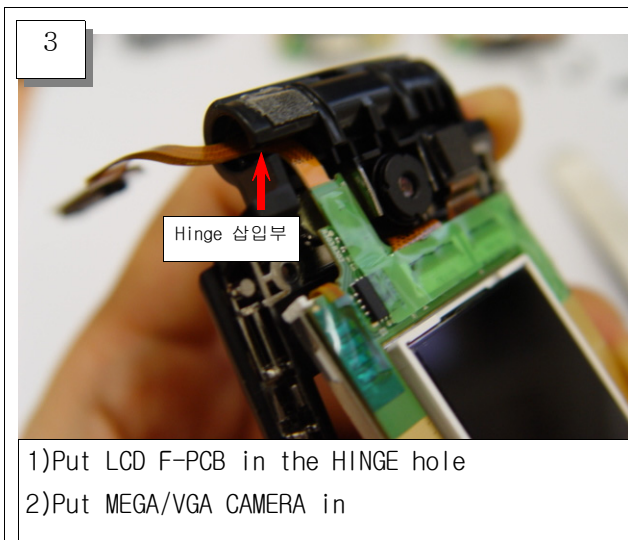
11-2. Assembling Manual



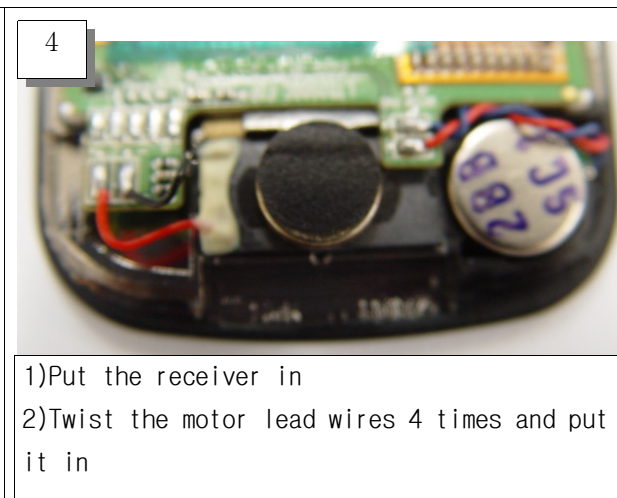
※Pay attention to the poles

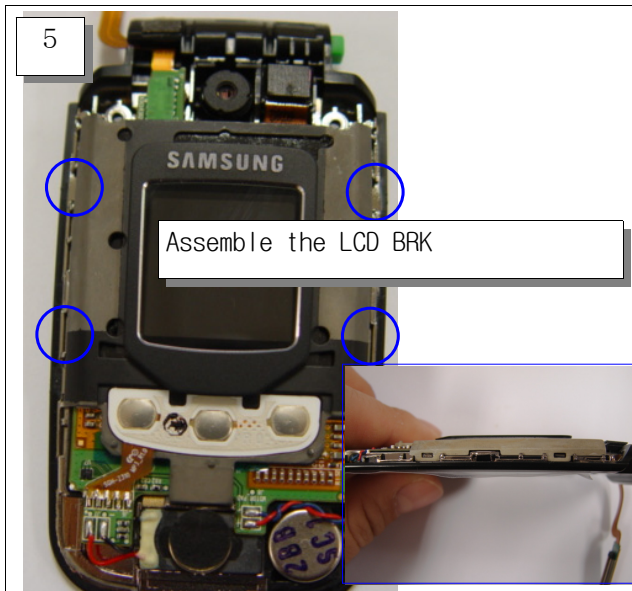


※Caution! put the cameras in until cameras guide lines fit in the connectors

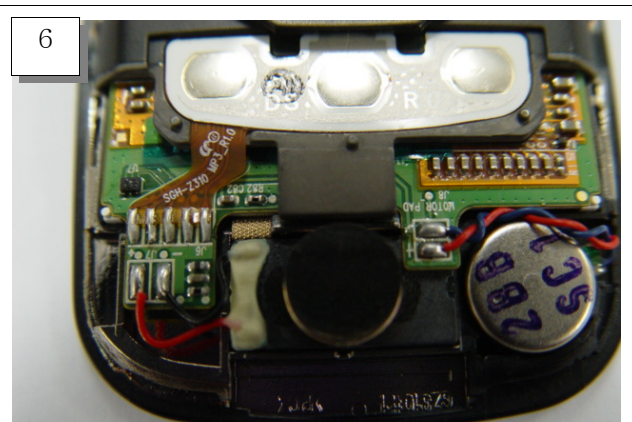


※CAMERA should be fit to the hole
※Pay attention to the LCD F-PCB

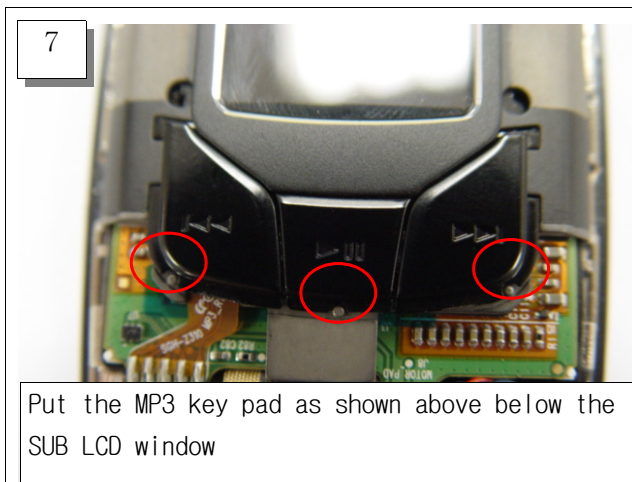




※ Get rid of dust on the LCD screen



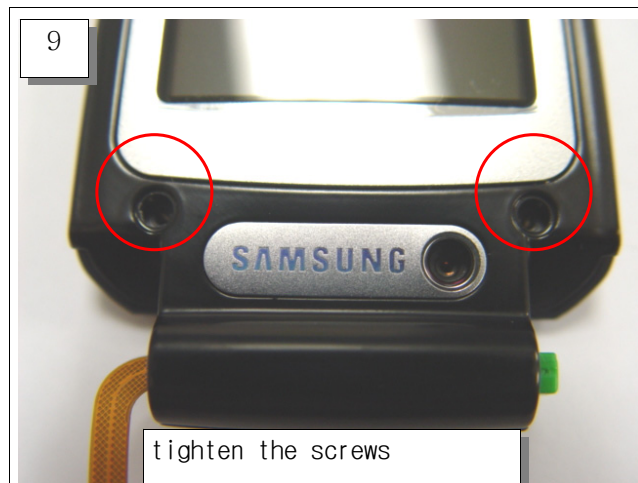
※The 5 points must not be shorted



※ be sure to fit in the guide hole



※pay attention to the MP3 KEY not to move along



※Pay attention not to make a scratch

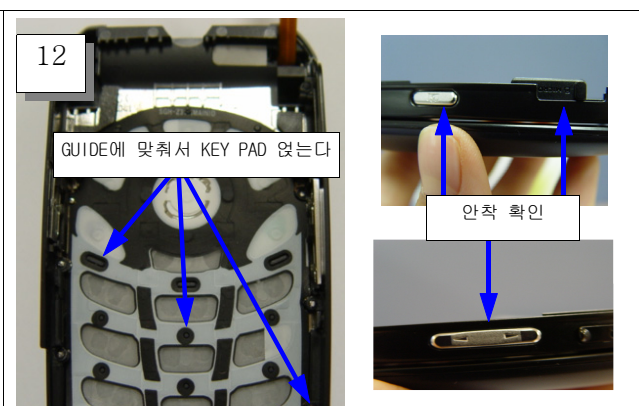


※Pay attention not to make a scratch



- 1)Put the LCD FPCB through the front cover hole o
- 2)Assemble the hinhg dummy

※Pay attention not to make a scratch
※F-PCB should be treated with caution



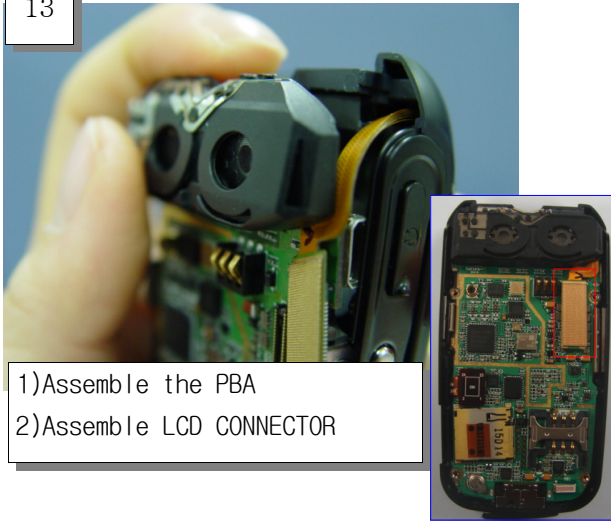
- 1)Put the KEY PAD on the front cover
- 2)Tape FRONT HOLE
- 2)cheMicrocock SD CARD COVER / CAMERA KEY / Volume KEY are in each position

※KEY PAD should be flattened out each other



KEY PAD 서로 올라 탐

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※Put LCD F-PCB beneath the ANTENNA

14



※Pay attention not to make a scratch

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