

SAMSUNG

UMTS TELEPHONE

SGH-Z400

SERVICE *Manual*

UMTS TELEPHONE



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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 specificity 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

	EGSM900	DCS1800	PCS1900	W-CDMA
Freq. Band[MHz] Uplink/Downlink	890~915 935~960	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
Modulation	0.3GMSK	0.3GMSK	0.3GMSK	QPSK HQPSK
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/BW
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	PCS1800
5	33±2 dBm	0	30±3 dBm	0	30±3 dBm
6	31±2 dBm	1	28±3 dBm	1	28±3 dBm
7	29±2 dBm	2	26±3 dBm	2	26±3 dBm
8	27±2 dBm	3	24±3 dBm	3	24±3 dBm
9	25±2 dBm	4	22±3 dBm	4	22±3 dBm
10	23±2 dBm	5	20±3 dBm	5	20±3 dBm
11	21±2 dBm	6	18±3 dBm	6	18±3 dBm
12	19±2 dBm	7	16±3 dBm	7	16±3 dBm
13	17±2 dBm	8	14±3 dBm	8	14±3 dBm
14	15±2 dBm	9	12±4 dBm	9	12±4 dBm
15	13±2 dBm	10	10±4 dBm	10	10±4 dBm
16	11±3 dBm	11	8±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

- GPRS Class 10
- EGPRS Class E2
- GSM 900MHz & DCS1800MHz & 1900MHz & WCDMA FDD1
- Triple Vocoder (HR, FR, EFR)
- Slide type
- Built-in Digital Camera (2 Mega CMOS Sensor)
- AMLCD (262K TFT colors)
- Sending Photo & Video by MMS or E-Mail
- Downloadable Game via JAVA
- 64 Polyphonic Ring Tone
- WAP 2.0 Browser (Including xHTML/WCSS MP, w/HTTP)
- Video Telephony
- External Memory Card Socket(T-flash)

4. Array course control



1. JIG: Download, Trace, Calibration, etc
2. RF test cable: RF test
3. Test cable: JIG to phone
4. TA (Travel Adaptor)
5. Data Link Cable : USB cable
6. Serial cable: PC to JIG

Software Downloading

4-1. Downloading Binary Files

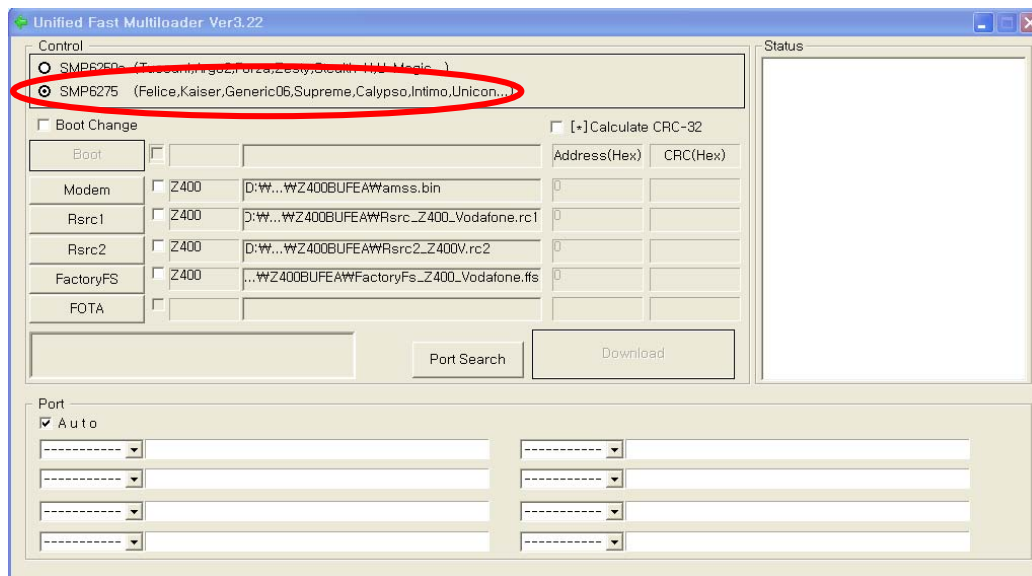
- Four binary files for downloading Z400.
 - amss.bin : Modem binary for communication function
& Mocha binary for user interface and various application
 - Rsrc_Z400_.rc1: Files need for each application
 - Rsrc2_Z400.rc2 : Power on/off animation
 - FactoryFs_Z400_.ffs : Default file system to be put into in initial production

4-2. Pre-requisite for Downloading

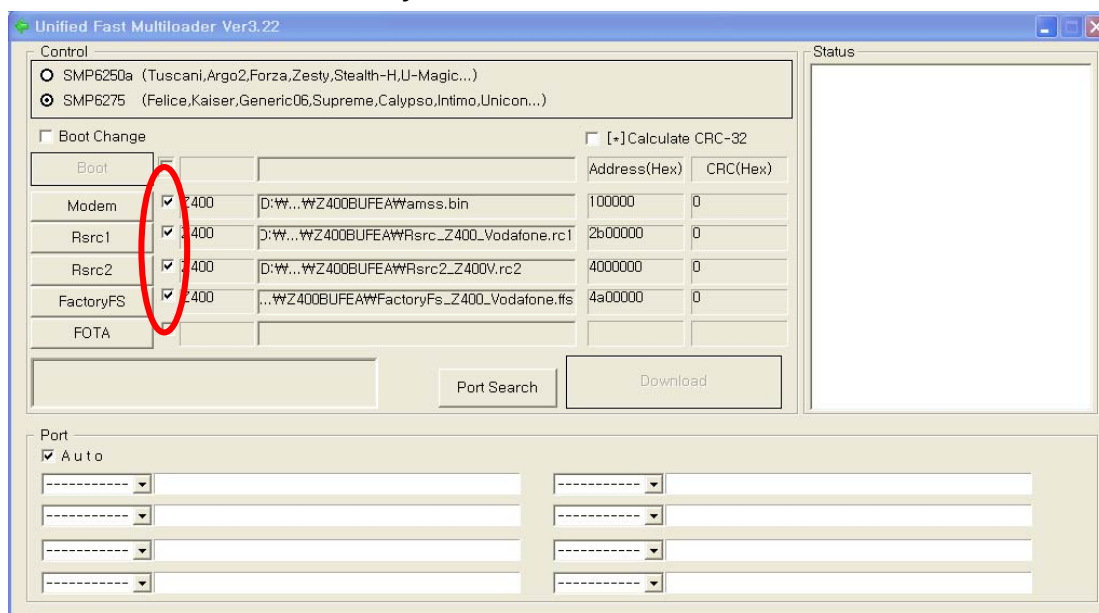
- Downloader Program([FastMultiLoader V3.22.exe](#))
- SGH-Z400 Mobile Phone
- USB Data Link Cable
- Binary files

4-3. S/W Downloader Program

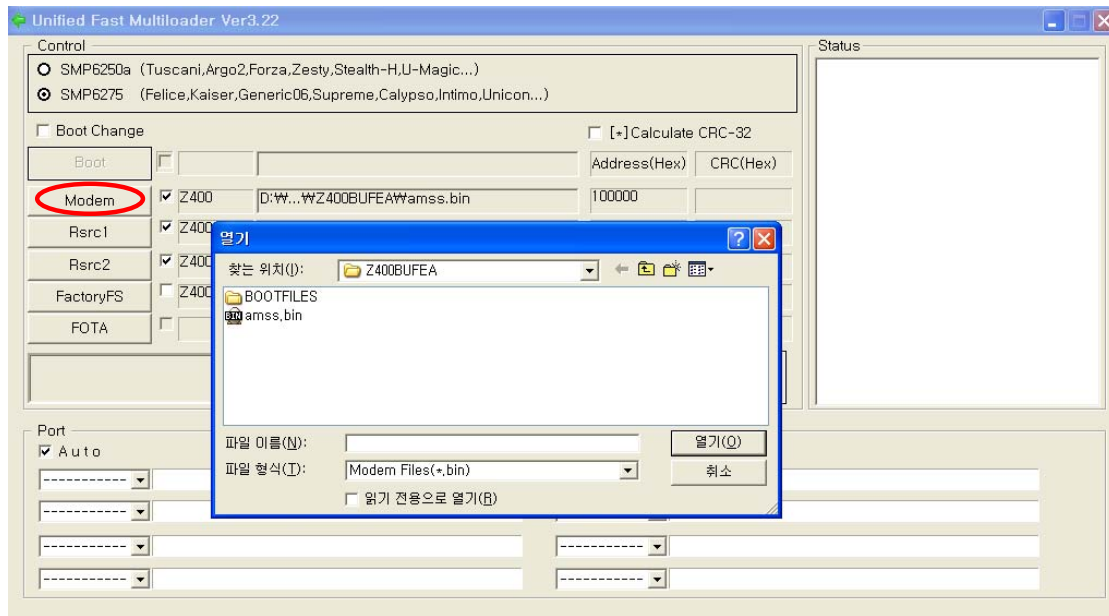
1. Boot the Z400 by pressing 'Power ON key' + 'Number 9 key' at the same time-
If you do properly, you can see the following message on sub LCD "SGH-Z400
DOWNLOAD"
2. Load the binary download program by executing the "**FastMultiLoader V3.22.exe**". And then Check the SMP6275.



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

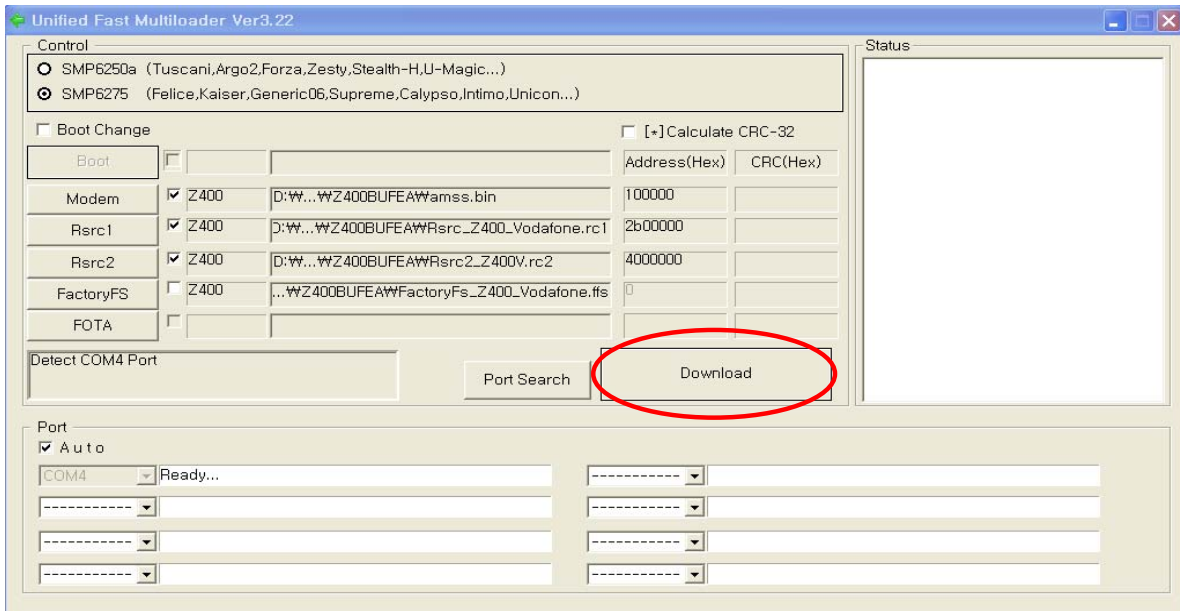


4. Select the binary file what you want to download



* Up to eight ports are supported.

5. Now press the button 'DownLoad'.

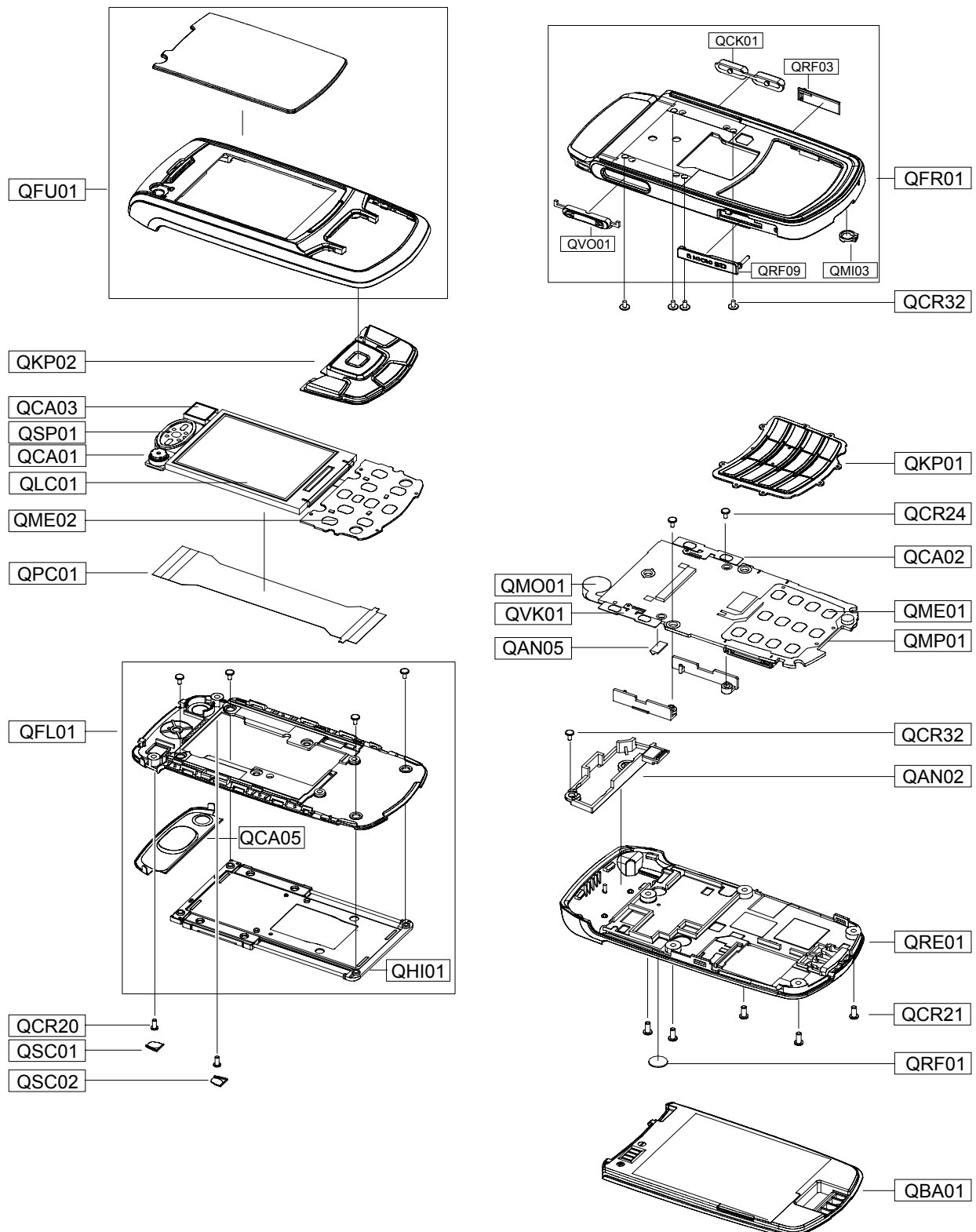


6. When downloading is complete, UE reboot automatically.

- 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		Description	SEC Code
QAN02		ANTENNA-SGHZ400	GH42-00870A
QAN05		ASSY MEC-ANTENNA CONTACT	GH75-08168A
QBA01		BATTERY-950MAH,MIRROR SILVER,E	GH43-02444B
QCA01		UNIT-CAMERA MODULE(VGA	GH59-03103A
QCA02		UNIT-CAMERA KEY	GH59-02990A
QCA03		UNIT-CAMERA	GH59-03132A
QCR20		SCREW-MACHINE	6001-001429
QCR21		SCREW-MACHINE	6001-001507
QCR24		SCREW-MACHINE	6001-001892
QCR32		SCREW-MACHINE	6001-001700
QCR32		SCREW-MACHINE	6001-001700
QKP01		MEC-KEYPAD MAIN(EU/SIL)	GH75-09305B
QKP02		MEC-KEYPAD SUB(EU/SIL)	GH75-09304B
QLC01		LCD-MODULE MAIN	GH07-00866A
QME01		UNIT-MAIN KEY FPCB	GH59-02976A
QME02		UNIT-EL KEY PBA	GH59-02997A
QMO01		MOTOR DC-SGHZ400	GH31-00252A
QMP01		PBA MAIN-SGH-Z400(V)	GH92-02727A
QPC01		MEA-SLIDE FPCB KIT	GH97-06071A
QRE01		ASSY ACCE-REAR(VODA)	GH98-00994B
QRF01		MPR-TAPE RF COVER	GH74-24453B
QSC01		ICT-COVER SCREW L	GH70-01106A
QSC02		ICT-COVER SCREW R	GH70-01107A
QSP01		MICRO SPEAKER	3001-001950
QVK01		UNIT-VOLUME KEY	GH59-02989A
QFL01		MEC-CASE SLIDE LOWER	GH75-09179B
	QHI01	ASSY MEC-HINGE MODULE	GH75-09303B
	QCA05	ASSY-DECO-CAMERA(VODA)	GH98-00995A
QFU01		ASSY ACCE-SLIDE UPPER(VODA)	GH98-00993B
QFR01		ASSY CASE-FRONT(VODA)	GH98-00992B
	QVO01	PMO-VOLUME KEY	GH72-28959A
	QRF09	PMO-COVER SD	GH72-28961B
	QCK01	PMO-CAMERA VT KEY	GH72-29360A
	QRF03	PMO-COVER EAR IF V2	GH72-30221B
	QMI03	RMO-RUBBER MIC HOLDER	GH73-06837A

Description	SEC Code
IC-MEMORY CARD	1109-001335
CONNECTOR-ADAPTOR	3719-001319
BAG PE	6902-000634
BAG ZIPPER	6902-000683
CBF INTERFACE-DATA LINK CABLE	GH39-00444B
ADAPTOR-SGHD800 TA(UK)	GH44-01131B
S/W CD-Z400V SAMSUNG PC STUDIO	GH46-00238A
UNIT-EARPHONE	GH59-02499B
LABEL(P)-WATER SOAK	GH68-02026A
LABEL(P)-WATER SOAK	GH68-02026A
MANUAL USERS-VODA ENGLISH	GH68-09727A
MANUAL USERS-VD QSG ENGLISH	GH68-09741A
LABEL(R)-MAIN(EU)	GH68-09930B
CUSHION-CASE(EU)	GH69-03844A
BOX-UNIT(VODA)	GH69-03886B
NDC-BRACKET CAMERA	GH71-06382A
NDC-BRACKET VOLUME	GH71-06383A
MPR-MAIN SHIELD TAPE	GH74-10829A
MPR-LCD PCB GASKET	GH74-15077A
MPR-BOHO VINYL LCD CONN	GH74-15350A
MPR-TAPE PBA A	GH74-16066A
MPR-BOHO VINYL KEY PAD	GH74-17373A
MPR-CUSHION LCD SCREW SHIELD L	GH74-23396A
MPR-CUSHION LCD SCREW SHIELD R	GH74-23397A
MPR-CUSHION PORON MAIN BOARD	GH74-23399A
MPR-VINYL BOHO CAMERA DUMMY	GH74-23408A
MPR-VINYL BOHO MAIN CAMERA	GH74-23409A
MPR-VINYL BOHO MAIN CAMERA LEN	GH74-23410A
MPR-VINYL BOHO SUB KEY	GH74-23413A
MPR-TAPE KEY INSULATION	GH74-23414A
MPR-TAPE CAMERA INSULATION	GH74-23417A
MPR-TAPE SUB CON INSULATION	GH74-23418A
MPR-TAPE FILTER INSULATION	GH74-23420A
MPR-TAPE B TO B BASE	GH74-23430A
MPR-TAPE B TO B BASE	GH74-23430A
MPR-TAPE LOWER SCREW CAP L	GH74-23433A
MPR-TAPE LOWER SCREW CAP R	GH74-23434A
MPR-TAPE LCD EMI	GH74-23526A
MPR-TAPE SUB CON BASE	GH74-23594A
MPR-TAPE CAMERA	GH74-23595A
MPR-VINYL BOHO MAIN WIN OUT	GH74-24255A
MPR-VINYL BOHO MAIN WIN OUT	GH74-24255A
MPR-TAPE EMI BD EL1	GH74-24615A
MPR-TAPE EMI BD EL2	GH74-24616A
MPR-TAPE INSULATION BD EL1	GH74-24617A
MPR-VINYL BOHO MAIN WINDOW	GH74-24962A
AS-IC-MCP UMTS	GH81-04519A

6. MAIN Electrical Parts List

Design LOC	Description	SEC Code	STATUS
AN300	ANTENNA-CHIP	4202-001132	SA
ANT100	NPR-ANTENNA CONTACT	GH71-04302A	SA
ANT102	NPR-ANTENNA CONTACT	GH71-04302A	SA
BAT50	BATTERY-LI(2ND)	4302-001130	SA
BTC401	HEADER-BATTERY	3711-005880	SA
C100	C-CER,CHIP	2203-002982	SNA
C101	C-CER,CHIP	2203-001124	SA
C102	C-CER,CHIP	2203-005808	SA
C103	C-CER,CHIP	2203-005806	SA
C104	C-CER,CHIP	2203-005682	SA
C105	C-CER,CHIP	2203-002668	SA
C107	C-CER,CHIP	2203-005808	SA
C108	C-CER,CHIP	2203-005719	SA
C109	C-CER,CHIP	2203-006423	SA
C110	C-CER,CHIP	2203-005682	SA
C111	C-CER,CHIP	2203-005682	SA
C112	C-CER,CHIP	2203-006423	SA
C113	C-CER,CHIP	2203-006423	SA
C114	C-CER,CHIP	2203-005682	SA
C115	C-CER,CHIP	2203-005682	SA
C116	C-CER,CHIP	2203-006423	SA
C117	C-CER,CHIP	2203-006379	SA
C118	C-CER,CHIP	2203-005682	SA
C119	C-CER,CHIP	2203-006423	SA
C120	C-CER,CHIP	2203-005806	SA
C121	C-CER,CHIP	2203-005682	SA
C122	C-CER,CHIP	2203-005808	SA
C123	C-CER,CHIP	2203-006556	SA
C124	C-CER,CHIP	2203-005682	SA
C125	C-CER,CHIP	2203-006556	SA
C126	C-CER,CHIP	2203-005808	SA
C127	C-CER,CHIP	2203-006423	SA
C130	C-CER,CHIP	2203-000725	SA
C133	C-CER,CHIP	2203-000836	SA
C135	C-CER,CHIP	2203-006423	SA
C137	C-CER,CHIP	2203-006423	SA
C138	C-CER,CHIP	2203-005682	SA
C139	C-CER,CHIP	2203-000438	SA
C140	C-CER,CHIP	2203-005719	SA
C141	C-CER,CHIP	2203-006838	SA
C142	C-CER,CHIP	2203-005682	SA
C143	C-CER,CHIP	2203-006208	SA
C144	C-CER,CHIP	2203-006423	SA
C145	C-CER,CHIP	2203-006379	SA
C146	C-CER,CHIP	2203-006379	SA
C147	C-CER,CHIP	2203-005729	SA
C149	C-CER,CHIP	2203-006048	SA
C150	C-CER,CHIP	2203-006305	SA
C151	C-CER,CHIP	2203-005729	SA
C152	C-CER,CHIP	2203-005732	SA
C153	C-CER,CHIP	2203-000311	SA
C154	C-CER,CHIP	2203-002443	SA
C155	C-CER,CHIP	2203-001153	SA

Design LOC	Description	SEC Code	STATUS
C156	C-CER,CHIP	2203-005344	SA
C157	C-CER,CHIP	2203-001033	SA
C158	C-CER,CHIP	2203-005719	SA
C159	C-CER,CHIP	2203-006123	SA
C160	C-CER,CHIP	2203-005736	SA
C162	C-CER,CHIP	2203-005682	SA
C163	C-CER,CHIP	2203-005719	SA
C164	C-CER,CHIP	2203-005682	SA
C165	C-CER,CHIP	2203-005683	SA
C166	C-CER,CHIP	2203-005719	SA
C168	INDUCTOR-SMD	2703-001722	SA
C170	C-CER,CHIP	2203-006375	SNA
C200	C-CER,CHIP	2203-005736	SA
C201	C-CER,CHIP	2203-006194	SA
C202	C-CER,CHIP	2203-005736	SA
C203	C-CER,CHIP	2203-006194	SA
C204	C-CER,CHIP	2203-006838	SA
C206	C-CER,CHIP	2203-005729	SA
C207	C-CER,CHIP	2203-005729	SA
C210	C-CER,CHIP	2203-005288	SA
C212	C-CER,CHIP	2203-006305	SA
C213	C-CER,CHIP	2203-006423	SA
C214	C-CER,CHIP	2203-006305	SA
C217	C-CER,CHIP	2203-006194	SA
C219	C-CER,CHIP	2203-005808	SA
C220	C-CER,CHIP	2203-006423	SA
C221	C-CER,CHIP	2203-005806	SA
C222	C-CER,CHIP	2203-006194	SA
C223	C-CER,CHIP	2203-005736	SA
C224	C-CER,CHIP	2203-006423	SA
C225	C-CER,CHIP	2203-005806	SA
C231	C-CER,CHIP	2203-005806	SA
C232	C-CER,CHIP	2203-005682	SA
C233	C-CER,CHIP	2203-006556	SA
C234	C-CER,CHIP	2203-005736	SA
C235	C-CER,CHIP	2203-006423	SA
C236	C-CER,CHIP	2203-006423	SA
C237	C-CER,CHIP	2203-006305	SA
C239	C-CER,CHIP	2203-006846	SNA
C240	C-CER,CHIP	2203-006846	SNA
C242	C-CER,CHIP	2203-005736	SA
C244	C-CER,CHIP	2203-006120	SA
C245	C-CER,CHIP	2203-005736	SA
C246	C-CER,CHIP	2203-005806	SA
C247	C-CER,CHIP	2203-000330	SA
C248	C-CER,CHIP	2203-000386	SA
C250	C-CER,CHIP	2203-006423	SA
C251	C-CER,CHIP	2203-000330	SA
C252	C-CER,CHIP	2203-000330	SA
C253	C-CER,CHIP	2203-005719	SA
C300	C-CER,CHIP	2203-005725	SA
C301	C-CER,CHIP	2203-005725	SA
C302	C-CER,CHIP	2203-006668	SA

Design LOC	Description	SEC Code	STATUS
C303	C-CER,CHIP	2203-005725	SA
C304	C-CER,CHIP	2203-006194	SA
C305	C-CER,CHIP	2203-006047	SA
C306	C-CER,CHIP	2203-006423	SA
C307	C-CER,CHIP	2203-006423	SA
C308	C-CER,CHIP	2203-006838	SA
C309	C-CER,CHIP	2203-006838	SA
C310	C-CER,CHIP	2203-006838	SA
C311	C-CER,CHIP	2203-006423	SA
C312	C-CER,CHIP	2203-005717	SA
C314	C-CER,CHIP	2203-005482	SA
C315	C-CER,CHIP	2203-006562	SA
C316	C-CER,CHIP	2203-006257	SA
C317	C-CER,CHIP	2203-005682	SA
C318	C-CER,CHIP	2203-000233	SA
C319	C-CER,CHIP	2203-006194	SA
C320	C-CER,CHIP	2203-006194	SA
C321	C-CER,CHIP	2203-006825	SA
C322	C-CER,CHIP	2203-005806	SA
C323	C-CER,CHIP	2203-005806	SA
C324	C-CER,CHIP	2203-005806	SA
C325	C-CER,CHIP	2203-005806	SA
C326	C-CER,CHIP	2203-005806	SA
C327	C-CER,CHIP	2203-006194	SA
C328	C-CER,CHIP	2203-006194	SA
C329	C-CER,CHIP	2203-006194	SA
C330	C-CER,CHIP	2203-006194	SA
C331	C-CER,CHIP	2203-006194	SA
C332	C-CER,CHIP	2203-006194	SA
C333	C-CER,CHIP	2203-006194	SA
C334	C-CER,CHIP	2203-006423	SA
C335	C-CER,CHIP	2203-006091	SA
C336	C-CER,CHIP	2203-006423	SA
C337	C-CER,CHIP	2203-006423	SA
C338	C-CER,CHIP	2203-006423	SA
C339	C-CER,CHIP	2203-006091	SA
C340	C-CER,CHIP	2203-005806	SA
C341	C-CER,CHIP	2203-005806	SA
C342	C-CER,CHIP	2203-005806	SA
C343	C-CER,CHIP	2203-005806	SA
C344	C-CER,CHIP	2203-005806	SA
C345	C-CER,CHIP	2203-005806	SA
C346	C-CER,CHIP	2203-005806	SA
C347	C-CER,CHIP	2203-005806	SA
C348	C-CER,CHIP	2203-006194	SA
C349	C-CER,CHIP	2203-006194	SA
C350	C-CER,CHIP	2203-006194	SA
C351	C-CER,CHIP	2203-006194	SA
C354	C-CER,CHIP	2203-006423	SA
C355	C-CER,CHIP	2203-006194	SA
C356	C-CER,CHIP	2203-005806	SA
C357	C-CER,CHIP	2203-005806	SA
C358	C-CER,CHIP	2203-006194	SA

Design LOC	Description	SEC Code	STATUS
C359	C-CER,CHIP	2203-006423	SA
C360	C-CER,CHIP	2203-006194	SA
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C362	C-CER,CHIP	2203-006194	SA
C363	C-CER,CHIP	2203-006194	SA
C364	C-CER,CHIP	2203-006423	SA
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C372	C-CER,CHIP	2203-006194	SA
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C384	C-CER,CHIP	2203-006423	SA
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C414	C-CER,CHIP	2203-000254	SA
C415	C-CER,CHIP	2203-006423	SA
C417	C-CER,CHIP	2203-005682	SA
C418	C-CER,CHIP	2203-006562	SA
C420	C-CER,CHIP	2203-006423	SA
C422	C-CER,CHIP	2203-006423	SA
C423	C-CER,CHIP	2203-005719	SA
C424	C-CER,CHIP	2203-005719	SA
C425	C-CER,CHIP	2203-006423	SA

Design LOC	Description	SEC Code	STATUS
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C427	C-CER,CHIP	2203-005682	SA
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C501	C-CER,CHIP	2203-006324	SA
C502	C-CER,CHIP	2203-006208	SA
C503	C-CER,CHIP	2203-006423	SA
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C505	C-CER,CHIP	2203-005731	SA
C507	C-CER,CHIP	2203-005736	SA
C508	C-CER,CHIP	2203-005731	SA
C509	C-CER,CHIP	2203-006423	SA
C510	C-CER,CHIP	2203-006423	SA
C511	C-CER,CHIP	2203-006423	SA
C512	C-CER,CHIP	2203-006562	SA
C513	C-CER,CHIP	2203-006208	SA
C514	C-CER,CHIP	2203-006208	SA
C515	C-CER,CHIP	2203-006838	SA
C516	C-CER,CHIP	2203-006305	SA
C517	C-CER,CHIP	2203-006562	SA
C518	C-CER,CHIP	2203-006208	SA
C519	C-CER,CHIP	2203-006838	SA
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C524	C-CER,CHIP	2203-006562	SA
C525	C-CER,CHIP	2203-006305	SA
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C528	C-CER,CHIP	2203-005806	SA
C529	C-CER,CHIP	2203-005806	SA
C530	C-CER,CHIP	2203-006423	SA
C531	C-CER,CHIP	2203-006208	SA
C532	C-CER,CHIP	2203-006838	SA
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C538	C-CER,CHIP	2203-006838	SA
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C540	C-CER,CHIP	2203-006208	SA
C541	C-CER,CHIP	2203-005806	SA
C542	C-CER,CHIP	2203-005806	SA
C543	C-CER,CHIP	2203-005806	SA
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C554	C-CER,CHIP	2203-006562	SA
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C556	C-CER,CHIP	2203-005682	SA
C557	C-CER,CHIP	2203-005682	SA
C558	C-CER,CHIP	2203-005682	SA

Design LOC	Description	SEC Code	STATUS
C559	C-CER,CHIP	2203-005682	SA
C560	C-CER,CHIP	2203-005682	SA
C563	C-CER,CHIP	2203-005736	SA
C564	C-CER,CHIP	2203-006562	SA
C565	C-CER,CHIP	2203-006562	SA
C566	C-CER,CHIP	2203-005719	SA
C567	C-CER,CHIP	2203-006257	SA
C600	C-CER,CHIP	2203-005779	SA
C601	C-CER,CHIP	2203-005682	SA
C602	C-CER,CHIP	2203-006423	SA
C603	C-CER,CHIP	2203-006423	SA
C604	C-CER,CHIP	2203-005779	SA
C605	C-CER,CHIP	2203-005682	SA
C606	C-CER,CHIP	2203-005719	SA
C607	C-CER,CHIP	2203-005719	SA
C608	C-CER,CHIP	2203-005682	SA
C609	C-CER,CHIP	2203-005779	SA
C610	C-CER,CHIP	2203-005719	SA
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C615	C-CER,CHIP	2203-006648	SA
C616	C-CER,CHIP	2203-006648	SA
C619	C-CER,CHIP	2203-005779	SA
C620	C-CER,CHIP	2203-005729	SA
C621	C-CER,CHIP	2203-006305	SA
C622	C-CER,CHIP	2203-006305	SA
C623	C-CER,CHIP	2203-005729	SA
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C628	C-CER,CHIP	2203-005719	SA
C629	C-CER,CHIP	2203-005719	SA
C630	C-CER,CHIP	2203-005719	SA
C631	C-CER,CHIP	2203-005779	SA
C632	C-CER,CHIP	2203-005682	SA
C633	C-CER,CHIP	2203-006348	SA
C634	C-CER,CHIP	2203-005682	SA
C635	C-CER,CHIP	2203-005779	SA
C636	C-CER,CHIP	2203-006423	SA
C637	C-CER,CHIP	2203-006423	SA
C638	C-CER,CHIP	2203-006423	SA
C639	C-CER,CHIP	2203-006208	SA
C640	C-CER,CHIP	2203-006208	SA
C642	C-CER,CHIP	2203-006423	SA
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C645	C-CER,CHIP	2203-006562	SA
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C647	C-CER,CHIP	2203-005344	SA
C649	C-CER,CHIP	2203-006423	SA
C650	C-CER,CHIP	2203-006423	SA
C651	C-CER,CHIP	2203-005344	SA
C653	C-CER,CHIP	2203-006423	SA

Design LOC	Description	SEC Code	STATUS
C654	C-CER,CHIP	2203-006668	SA
C655	C-CER,CHIP	2203-005736	SA
C656	C-CER,CHIP	2203-000654	SA
C657	C-CER,CHIP	2203-005344	SA
C658	C-CER,CHIP	2203-006562	SA
C659	C-CER,CHIP	2203-005731	SA
C660	C-CER,CHIP	2203-005731	SA
C661	C-CER,CHIP	2203-005719	SA
C700	C-CER,CHIP	2203-006257	SA
C701	C-CER,CHIP	2203-006562	SA
C703	C-CER,CHIP	2203-005682	SA
C704	C-CER,CHIP	2203-006423	SA
C705	C-CER,CHIP	2203-005682	SA
C706	C-CER,CHIP	2203-006838	SA
C707	C-CER,CHIP	2203-006423	SA
C708	C-CER,CHIP	2203-005682	SA
C709	C-CER,CHIP	2203-006423	SA
C710	C-CER,CHIP	2203-002982	SNA
C711	C-CER,CHIP	2203-001153	SA
C712	C-CER,CHIP	2203-006562	SA
C713	C-CER,CHIP	2203-005719	SA
C714	C-CER,CHIP	2203-005719	SA
C715	C-CER,CHIP	2203-005719	SA
C716	C-CER,CHIP	2203-005742	SA
C717	C-CER,CHIP	2203-005742	SA
D500	DIODE-ZENER	0403-001547	SA
D501	DIODE-ARRAY	0407-001002	SA
D502	DIODE-ARRAY	0407-001002	SA
DUF201	DUPLEXER-SAW	2910-000018	SA
F100	FILTER-SAW	2904-001628	SA
F101	FILTER-SAW	2904-001634	SA
F102	FILTER-SAW	2904-001635	SA
F200	FILTER-SAW	2904-001658	SA
F202	FILTER-SAW	2904-001623	SA
F400	FILTER-EMI SMD	2901-001254	SA
F700	FILTER-EMI/ESD	2901-001326	SA
F701	FILTER-EMI/ESD	2901-001353	SA
F702	FILTER-EMI/ESD	2901-001326	SA
F703	FILTER-EMI/ESD	2901-001353	SA
F704	FILTER-EMI/ESD	2901-001326	SA
F705	FILTER-EMI/ESD	2901-001326	SA
F706	FILTER-EMI/ESD	2901-001326	SA
F707	FILTER-EMI/ESD	2901-001326	SA
F708	FILTER-EMI/ESD	2901-001326	SA
F709	FILTER-EMI/ESD	2901-001353	SA
F710	FILTER-EMI/ESD	2901-001353	SA
F711	FILTER-EMI/ESD	2901-001353	SA
IFC400	SOCKET-INTERFACE	3710-002306	SA
L102	INDUCTOR-SMD	2703-003004	SA
L103	BEAD-SMD	3301-001756	SA
L104	INDUCTOR-SMD	2703-002903	SA
L105	BEAD-SMD	3301-001756	SA
L106	INDUCTOR-SMD	2703-002900	SA

Design LOC	Description	SEC Code	STATUS
L107	INDUCTOR-SMD	2703-002903	SA
L108	INDUCTOR-SMD	2703-002906	SA
L109	INDUCTOR-SMD	2703-002907	SNA
L110	INDUCTOR-SMD	2703-002906	SA
L111	INDUCTOR-SMD	2703-002794	SNA
L112	INDUCTOR-SMD	2703-002903	SA
L113	INDUCTOR-SMD	2703-002794	SNA
L114	BEAD-SMD	3301-001756	SA
L115	INDUCTOR-SMD	2703-002819	SA
L116	INDUCTOR-SMD	2703-002819	SA
L117	INDUCTOR-SMD	2703-002819	SA
L118	INDUCTOR-SMD	2703-002819	SA
L119	BEAD-SMD	3301-001756	SA
L120	BEAD-SMD	3301-001756	SA
L121	INDUCTOR-SMD	2703-002207	SA
L123	BEAD-SMD	3301-001756	SA
L124	INDUCTOR-SMD	2703-001747	SA
L125	INDUCTOR-SMD	2703-001728	SA
L128	INDUCTOR-SMD	2703-002901	SNA
L129	INDUCTOR-SMD	2703-002901	SNA
L130	INDUCTOR-SMD	2703-002901	SNA
L131	INDUCTOR-SMD	2703-001726	SA
L200	INDUCTOR-SMD	2703-002369	SA
L206	INDUCTOR-SMD	2703-002313	SA
L207	INDUCTOR-SMD	2703-003004	SA
L208	INDUCTOR-SMD	2703-002906	SA
L210	INDUCTOR-SMD	2703-003004	SA
L211	INDUCTOR-SMD	2703-003004	SA
L212	INDUCTOR-SMD	2703-002267	SA
L214	INDUCTOR-SMD	2703-002612	SA
L215	INDUCTOR-SMD	2703-003004	SA
L218	INDUCTOR-SMD	2703-002906	SA
L219	INDUCTOR-SMD	2703-002198	SA
L300	BEAD-SMD	3301-001534	SA
L400	BEAD-SMD	3301-001534	SA
L500	BEAD-SMD	3301-001534	SA
L501	BEAD-SMD	3301-001534	SA
L502	INDUCTOR-SMD	2703-002872	SA
L503	INDUCTOR-SMD	2703-002872	SA
L506	INDUCTOR-SMD	2703-002989	SA
L507	INDUCTOR-SMD	2703-002989	SA
L600	BEAD-SMD	3301-001756	SA
L601	BEAD-SMD	3301-001756	SA
L700	BEAD-SMD	3301-001534	SA
L701	BEAD-SMD	3301-001534	SA
L702	BEAD-SMD	3301-001534	SA
L703	INDUCTOR-SMD	2703-002850	SA
MIC60	MICROPHONE-ASSY-SMD MIC	GH30-00265A	SA
MIS200	FREQ-ISOLATOR	4709-001408	SNA
OSC300	RESONATOR-CERAMIC	2802-001182	SA
OSC500	CRYSTAL-SMD	2801-004339	SA
PAM100	IC-POWER AMP	1201-002288	SA
PAM201	IC-POWER AMP	1201-002325	SA

Design LOC	Description	SEC Code	STATUS
Q501	TR-DIGITAL	0504-000168	SA
R100	R-CHIP	2007-007491	SA
R102	R-CHIP	2007-007136	SA
R103	R-CHIP	2007-008045	SA
R104	R-CHIP	2007-007136	SA
R105	R-CHIP	2007-008419	SA
R106	R-CHIP	2007-008531	SA
R107	R-CHIP	2007-008531	SA
R108	R-CHIP	2007-007798	SA
R109	R-CHIP	2007-007316	SA
R110	R-CHIP	2007-000145	SA
R111	R-CHIP	2007-007798	SA
R112	R-CHIP	2007-008045	SA
R113	R-CHIP	2007-008785	SNA
R114	R-CHIP	2007-009201	SA
R115	R-CHIP	2007-008579	SA
R116	R-CHIP	2007-008579	SA
R117	R-CHIP	2007-008045	SA
R118	R-CHIP	2007-008581	SNA
R119	R-CHIP	2007-008581	SNA
R120	R-CHIP	2007-000138	SA
R121	R-CHIP	2007-008806	SA
R122	R-CHIP	2007-008588	SA
R123	R-CHIP	2007-001292	SA
R128	R-CHIP	2007-008531	SA
R200	R-CHIP	2007-008542	SA
R201	R-CHIP	2007-007318	SA
R202	R-CHIP	2007-001217	SA
R203	R-CHIP	2007-008045	SA
R205	R-CHIP	2007-008045	SA
R206	R-CHIP	2007-007491	SA
R301	R-CHIP	2007-008516	SA
R302	R-CHIP	2007-008049	SA
R303	R-CHIP	2007-008419	SA
R306	R-CHIP	2007-008516	SA
R308	R-CHIP	2007-008516	SA
R309	R-CHIP	2007-008055	SA
R310	R-CHIP	2007-009171	SA
R314	R-CHIP	2007-007318	SA
R315	R-CHIP	2007-007314	SA
R316	R-CHIP	2007-007135	SA
R317	R-CHIP	2007-000148	SA
R318	R-CHIP	2007-001339	SA
R320	R-CHIP	2007-001339	SA
R321	R-CHIP	2007-000148	SA
R322	R-CHIP	2007-009171	SA
R323	R-CHIP	2007-009171	SA
R324	R-CHIP	2007-009171	SA
R325	R-CHIP	2007-009171	SA
R326	R-CHIP	2007-008516	SA
R327	R-CHIP	2007-008516	SA
R328	R-CHIP	2007-008055	SA
R329	R-CHIP	2007-008516	SA

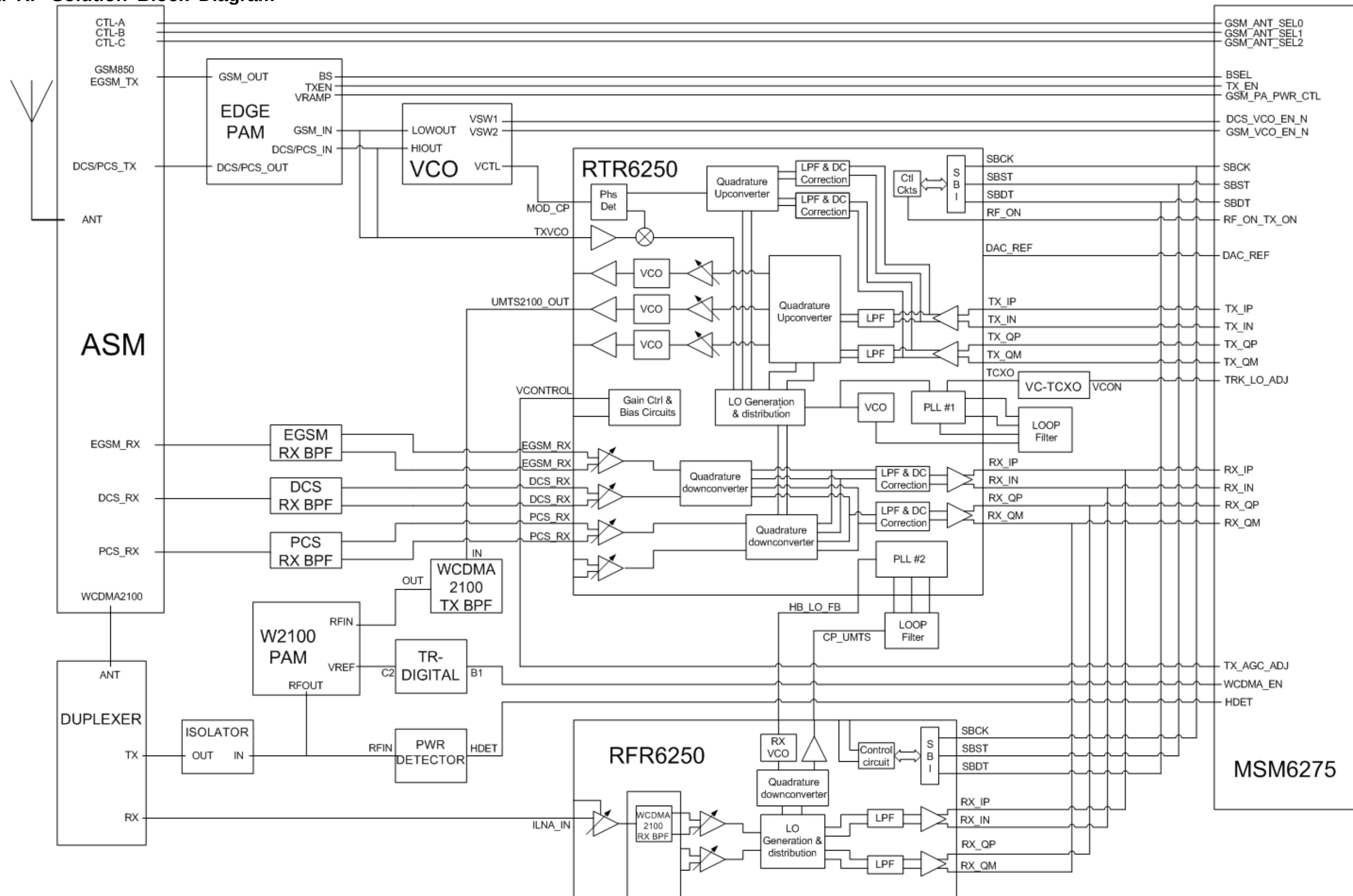
Design LOC	Description	SEC Code	STATUS
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R331	R-CHIP	2007-008516	SA
R332	R-CHIP	2007-009171	SA
R335	R-CHIP	2007-008542	SA
R336	R-CHIP	2007-008798	SNA
R337	R-CHIP	2007-008055	SA
R401	R-CHIP	2007-008516	SA
R403	R-CHIP	2007-008542	SA
R404	R-CHIP	2007-008542	SA
R405	R-CHIP	2007-009170	SA
R406	R-CHIP	2007-008542	SA
R407	R-CHIP	2007-008542	SA
R408	R-CHIP	2007-008542	SA
R409	R-CHIP	2007-008542	SA
R410	R-CHIP	2007-008548	SA
R412	R-CHIP	2007-009170	SA
R413	R-CHIP	2007-009111	SA
R414	R-CHIP	2007-009111	SA
R415	R-CHIP	2007-008542	SA
R416	R-CHIP	2007-000171	SA
R418	R-CHIP	2007-008419	SA
R419	R-CHIP	2007-008542	SA
R420	R-CHIP	2007-008419	SA
R421	R-CHIP	2007-008516	SA
R501	R-CHIP	2007-000148	SA
R502	R-CHIP	2007-008483	SA
R503	R-CHIP	2007-000171	SA
R504	R-CHIP	2007-008806	SA
R505	R-CHIP	2007-007468	SA
R506	R-CHIP	2007-008055	SA
R507	R-CHIP	2007-000165	SA
R510	R-CHIP	2007-008486	SA
R511	R-CHIP	2007-007589	SA
R512	R-CHIP	2007-007528	SA
R513	R-CHIP	2007-009212	SA
R514	R-CHIP	2007-000171	SA
R517	R-CHIP	2007-007132	SA
R518	R-CHIP	2007-000147	SA
R519	R-CHIP	2007-008486	SA
R600	R-CHIP	2007-009212	SA
R601	R-CHIP	2007-009212	SA
R602	R-CHIP	2007-008548	SA
R603	R-CHIP	2007-008548	SA
R604	R-CHIP	2007-008548	SA
R605	R-CHIP	2007-008548	SA
R606	R-CHIP	2007-009212	SA
R607	R-CHIP	2007-009212	SA
R608	R-CHIP	2007-003001	SA
R609	R-CHIP	2007-003001	SA
R612	R-CHIP	2007-007132	SA
R613	R-CHIP	2007-007308	SA
R614	R-CHIP	2007-007313	SA
R615	R-CHIP	2007-007308	SA

Design LOC	Description	SEC Code	STATUS
R616	R-CHIP	2007-000159	SA
R617	R-CHIP	2007-007132	SA
R618	R-CHIP	2007-008786	SA
R619	R-CHIP	2007-008786	SA
R700	R-CHIP	2007-008055	SA
R701	R-CHIP	2007-008542	SA
R702	R-CHIP	2007-000159	SA
R703	R-CHIP	2007-000690	SA
RFS10	CONNECTOR-COAXIAL	3705-001358	SA
SIM300	CONNECTOR-CARD EDGE	3709-001453	SA
SLC700	CONNECTOR-FPC/FFC/PIC	3708-002194	SA
TA148	C-TA,CHIP	2404-001411	SA
TA300	C-TA,CHIP	2404-001402	SA
TA301	C-TA,CHIP	2404-001339	SA
TA302	C-TA,CHIP	2404-001339	SA
TA400	C-TA,CHIP	2404-001268	SA
TA401	C-TA,CHIP	2404-001268	SA
TA402	C-TA,CHIP	2404-001411	SA
TA500	C-TA,CHIP	2404-001381	SA
TA501	C-TA,CHIP	2404-001381	SA
TA600	C-TA,CHIP	2404-001402	SA
TA601	C-TA,CHIP	2404-001402	SA
TA602	C-TA,CHIP	2404-001422	SA
TA603	C-TA,CHIP	2404-001422	SA
TA604	C-TA,CHIP	2404-001381	SA
TCX201	OSCILLATOR-VCTCXO	2809-001280	SA
TH300	THERMISTOR-NTC	1404-001224	SA
TR200	TR-DIGITAL	0504-001151	SA
U100	IC-SWITCH	1205-002724	SA
U102	IC-TRANSCEIVER	1205-002645	SA
U200	IC-DETECTOR	1209-001577	SA
U202	IC-RECEIVER	1205-002781	SA
U300	IC-CMOS LOGIC	0801-003076	SA
U301	IC-POSI.FIXED REG.	1203-003737	SA
U303	IC-SWITCH	1205-002784	SA
U304	IC-SWITCH	1205-002784	SA
U305	BLUETOOTH MODULE	4709-001398	SA
U306	DIODE-ARRAY	0407-001038	SA
U401	IC-ANALOG MULTIPLEX	1001-001349	SA
U402	IC-ANALOG MULTIPLEX	1001-001349	SA
U403	IC-ANALOG SWITCH	1001-001265	SA
U404	IC-HALL EFFECT S/W	1009-001020	SA
U500	IC-POWER SUPERVISOR	1203-004102	SA
U501	IC-VOL. DETECTOR	1203-004045	SA
U502	IC-ANALOG SWITCH	1001-001231	SA
U503	IC-POSI.FIXED REG.	1203-003737	SA
U504	IC-BATTERY	1203-003823	SA
U600	IC-ANALOG SWITCH	1001-001261	SA
U601	IC-MELODY	1204-002587	SA
U602	IC-CMOS LOGIC	0801-003076	SA
U700	IC-POSI.FIXED REG.	1203-003787	SA
U701	IC-EL DRIVER	1003-001716	SA
UCP300	IC-MODEM	1205-002790	SA

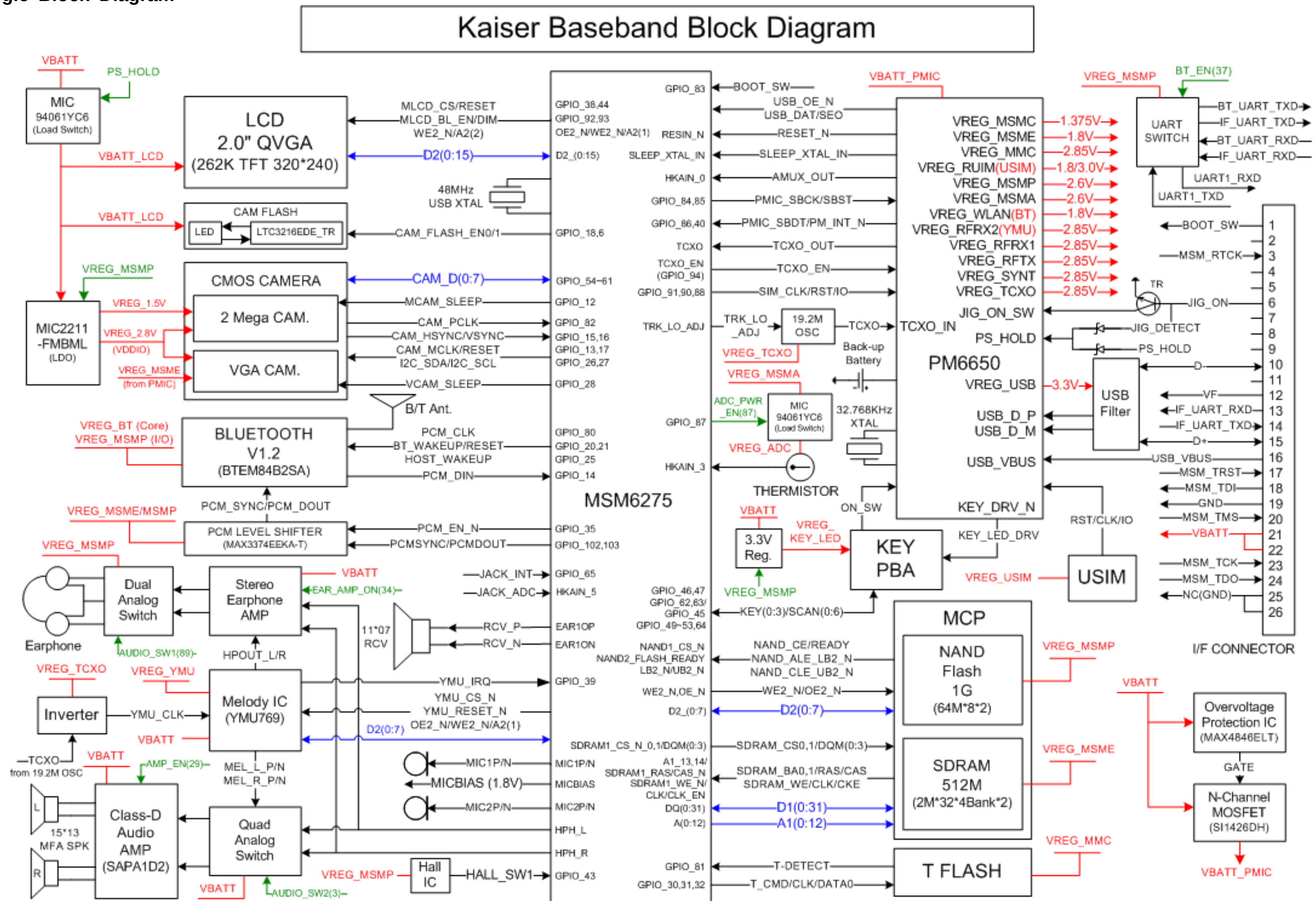
Design LOC	Description	SEC Code	STATUS
UME400	IC-MCP	1108-000041	SA
VCO100	OSCILLATOR-VCO	2806-001380	SA
ZD300	DIODE-TVS	0406-001215	SA
ZD301	DIODE-TVS	0406-001215	SA
ZD400	DIODE-ZENER	0403-001547	SA
ZD401	DIODE-TVS	0406-001215	SA
ZD402	DIODE-TVS	0406-001215	SA
ZD403	VARISTOR	1405-001082	SA
ZD404	DIODE-ZENER	0403-001427	SA
ZD600	DIODE-TVS	0406-001215	SA
ZD700	DIODE-ZENER	0403-001511	SA
ZD701	DIODE-TVS	0406-001215	SA
ZD702	DIODE-TVS	0406-001215	SA
ZD703	DIODE-TVS	0406-001215	SA
ZD704	DIODE-TVS	0406-001215	SA

7. Block Diagrams

7-1. RF Solution Block Diagram

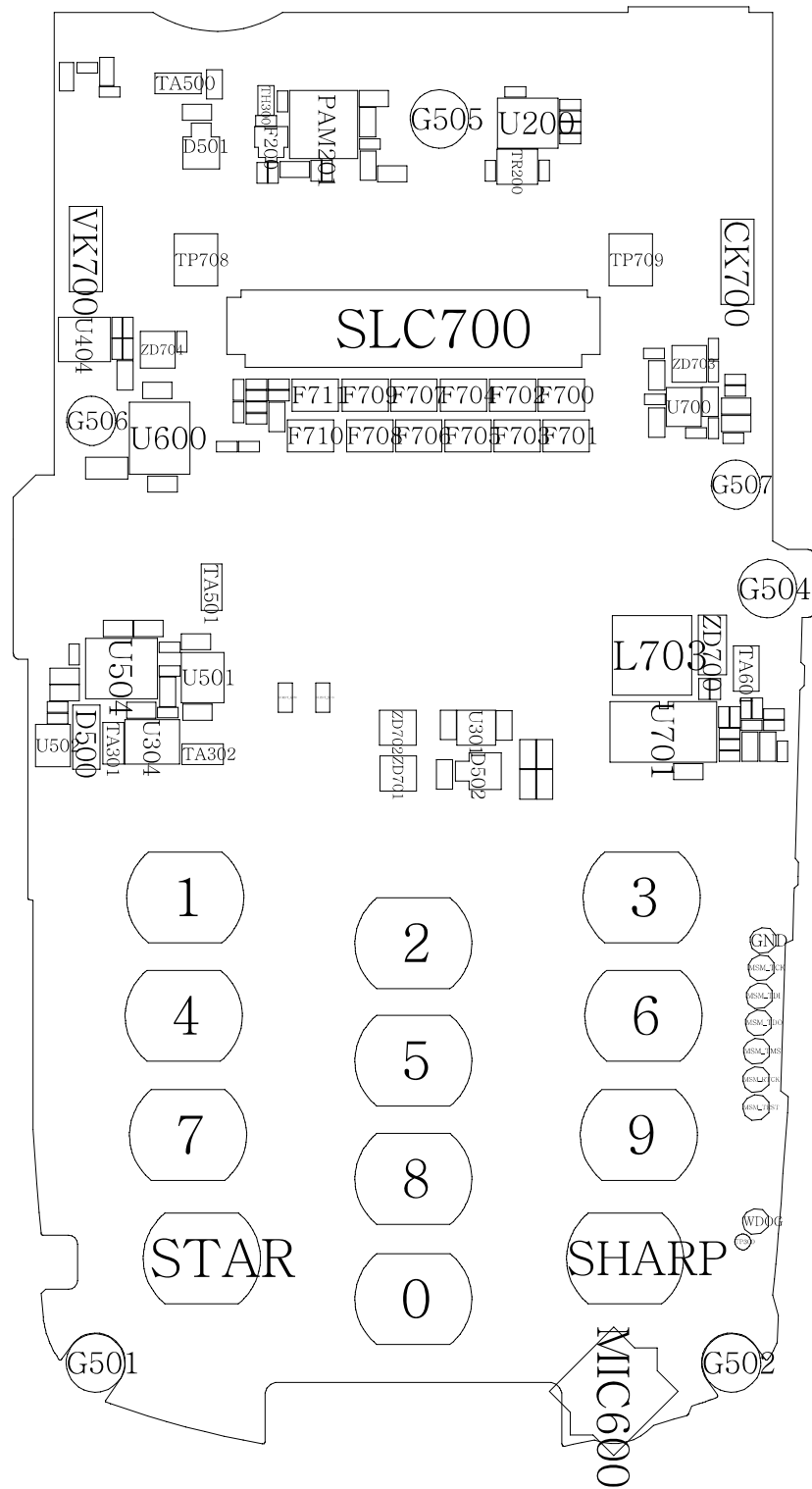


7-2. Logic Block Diagram

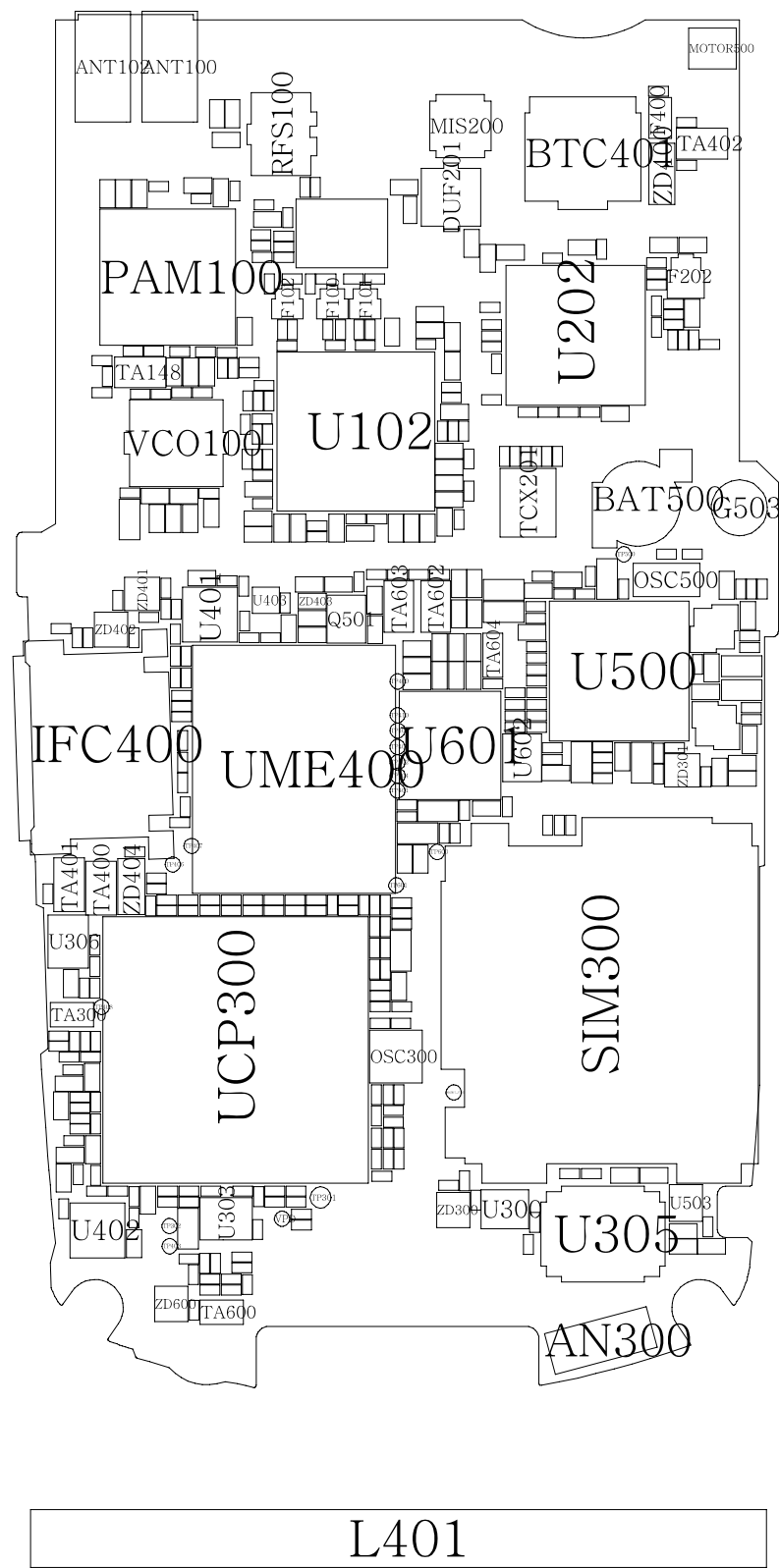


8. PCB Diagrams

Top

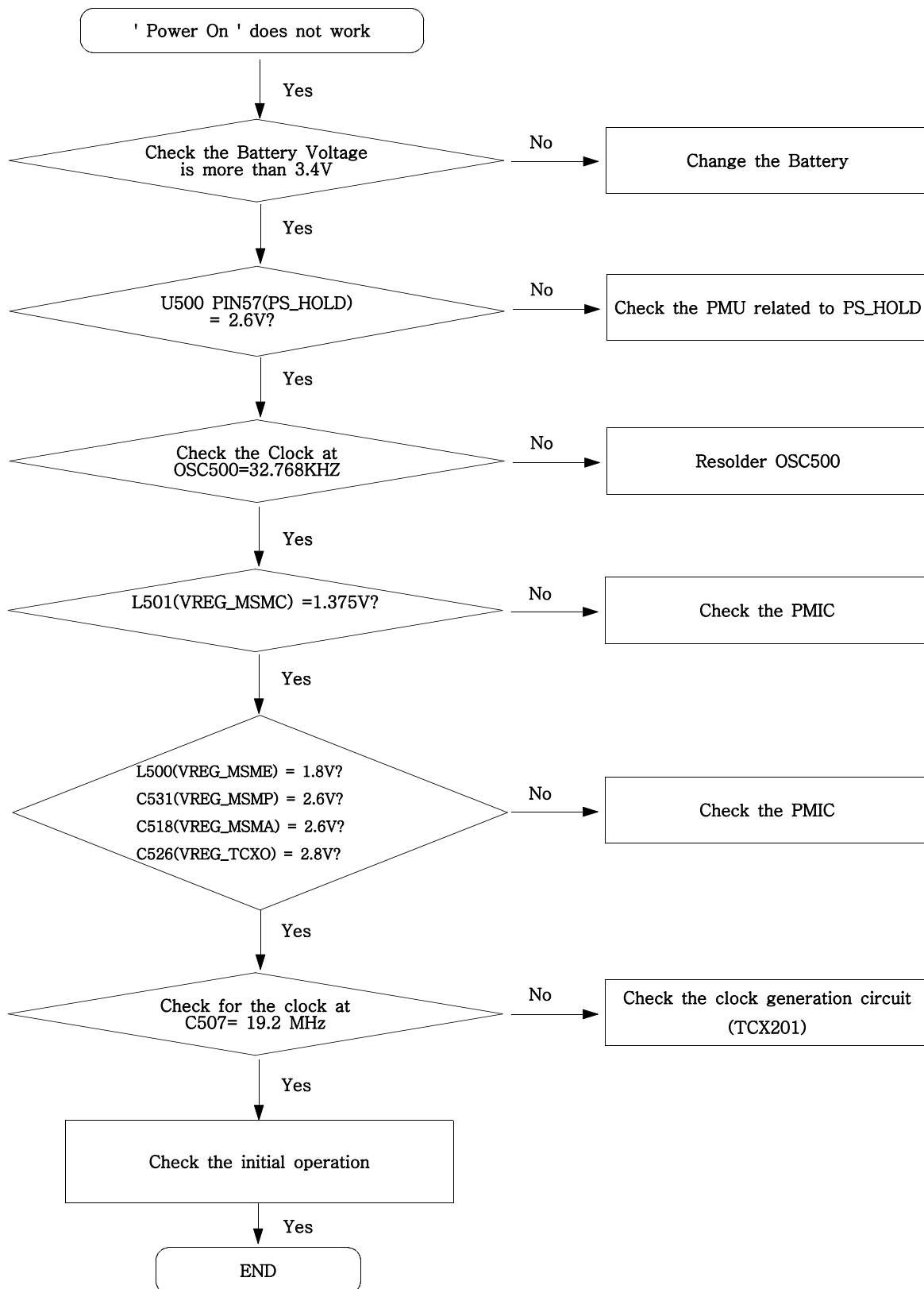


Bottom

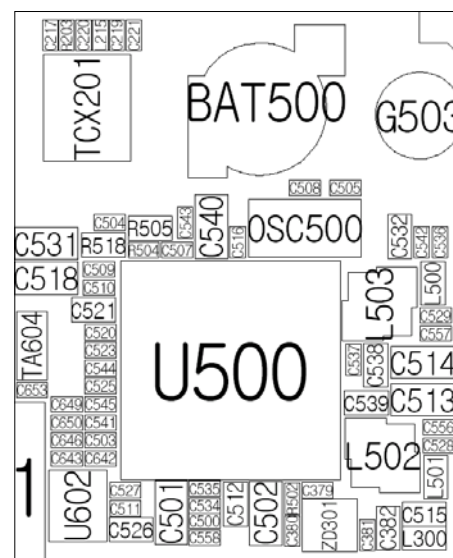
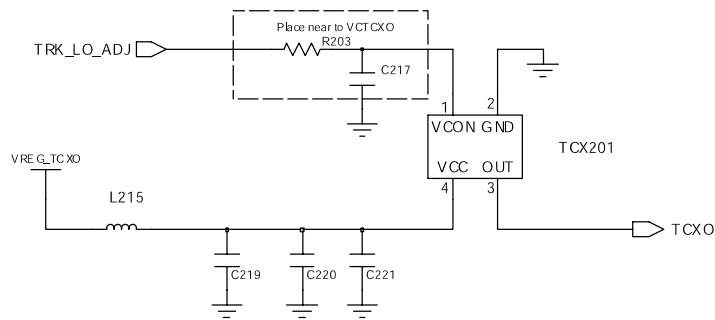


9. Flow Chart of Troubleshooting

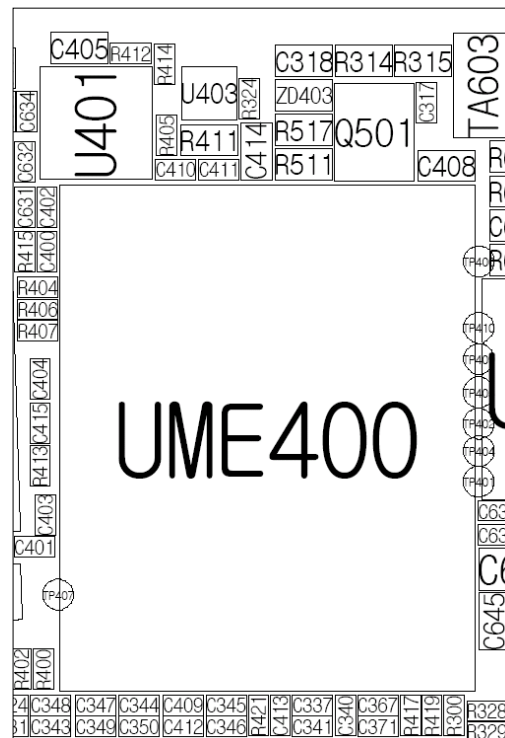
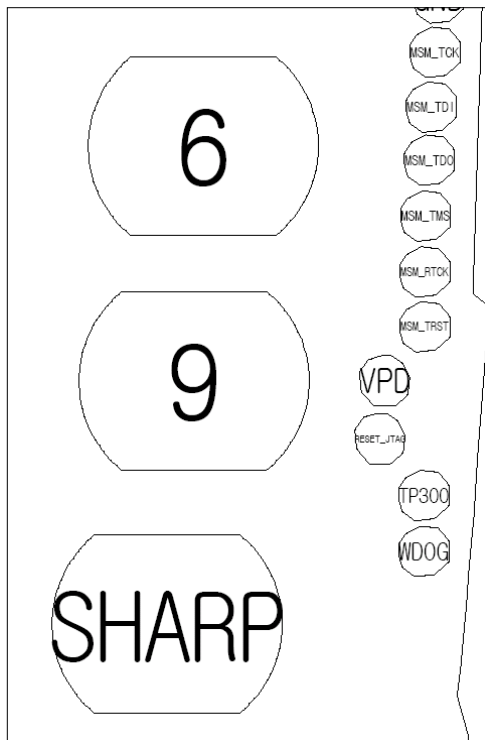
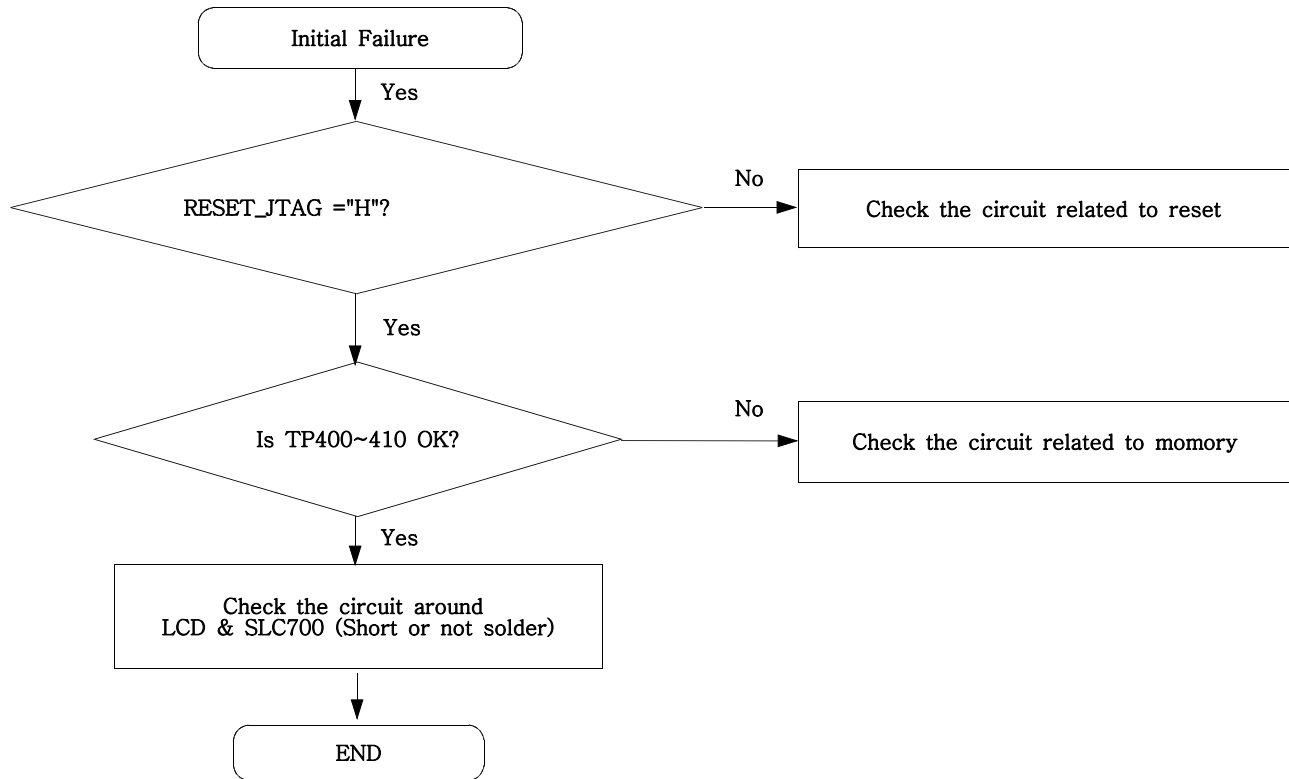
9-1. Power On



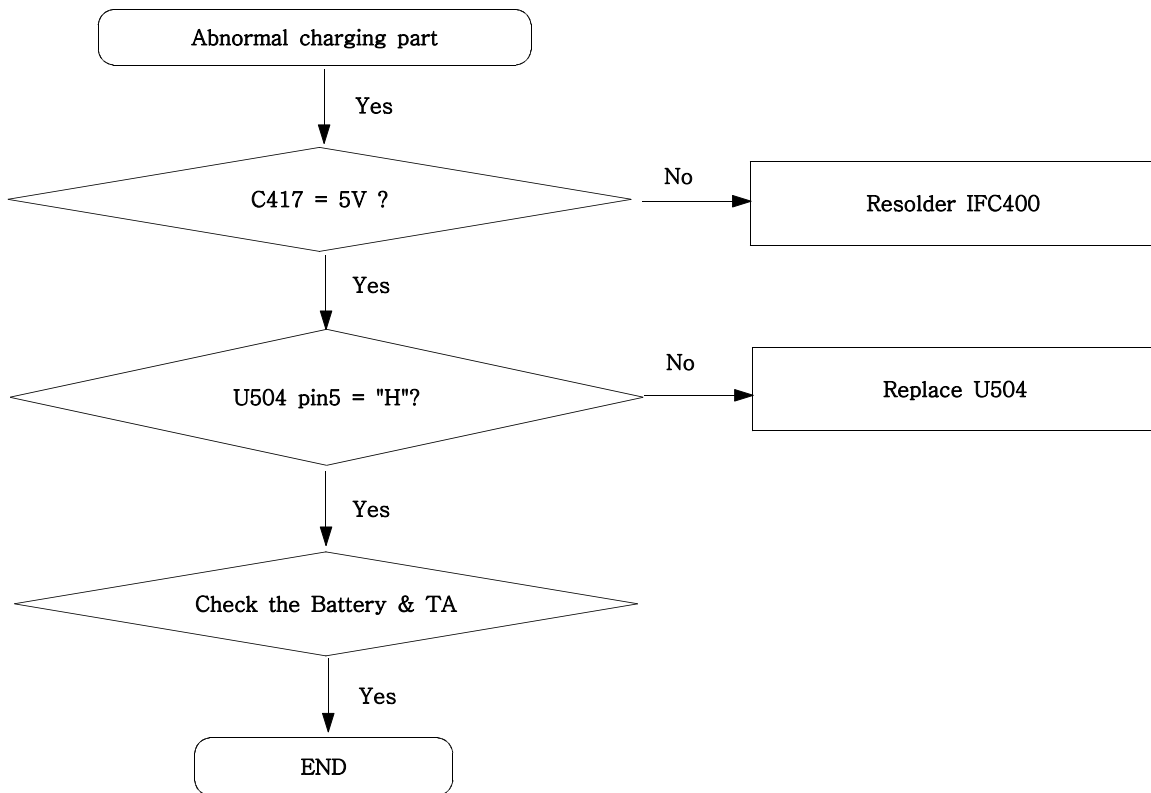
Power On



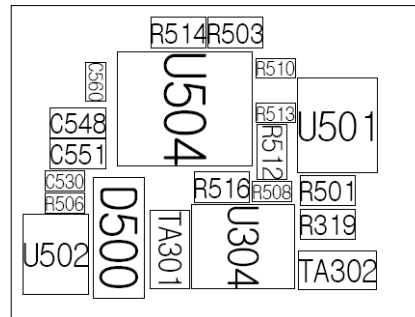
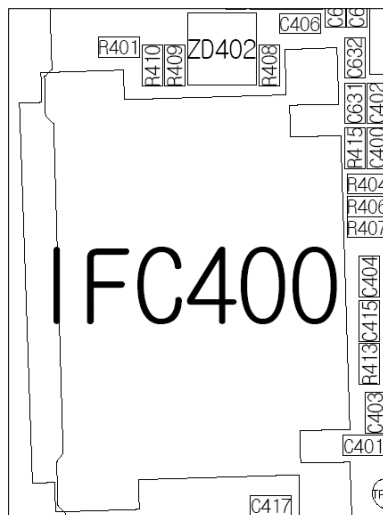
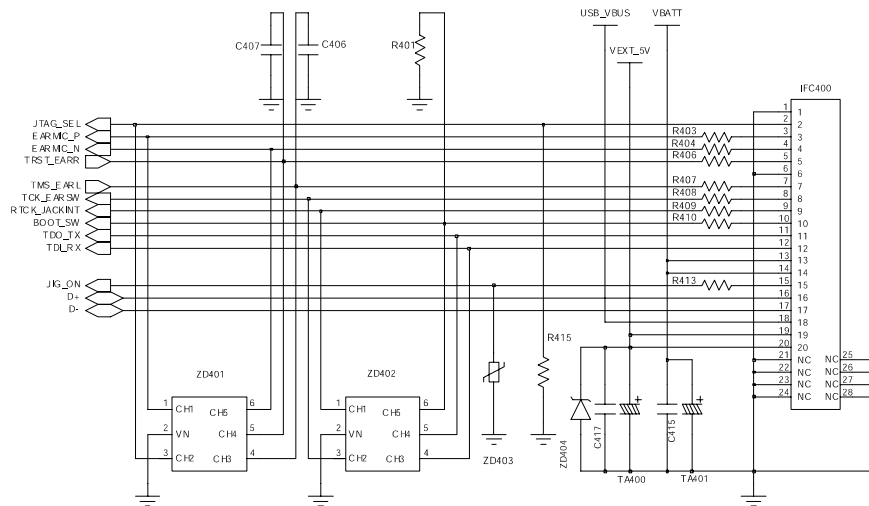
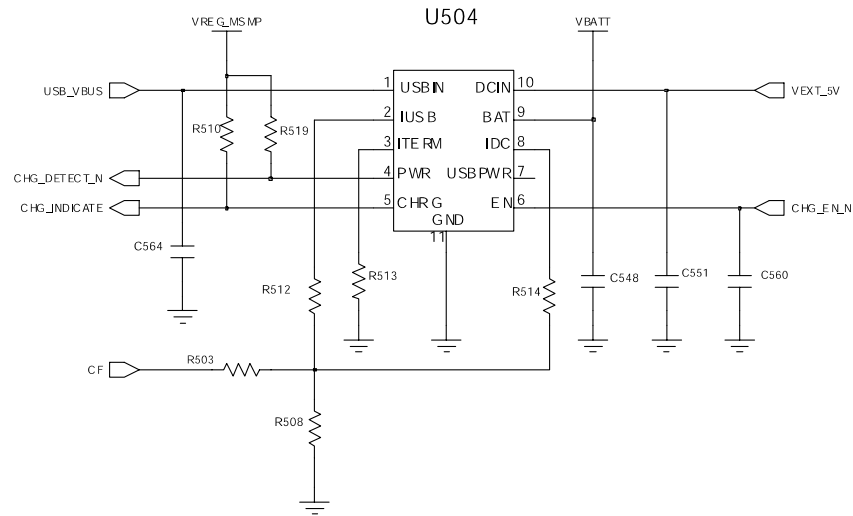
9-2. Initial



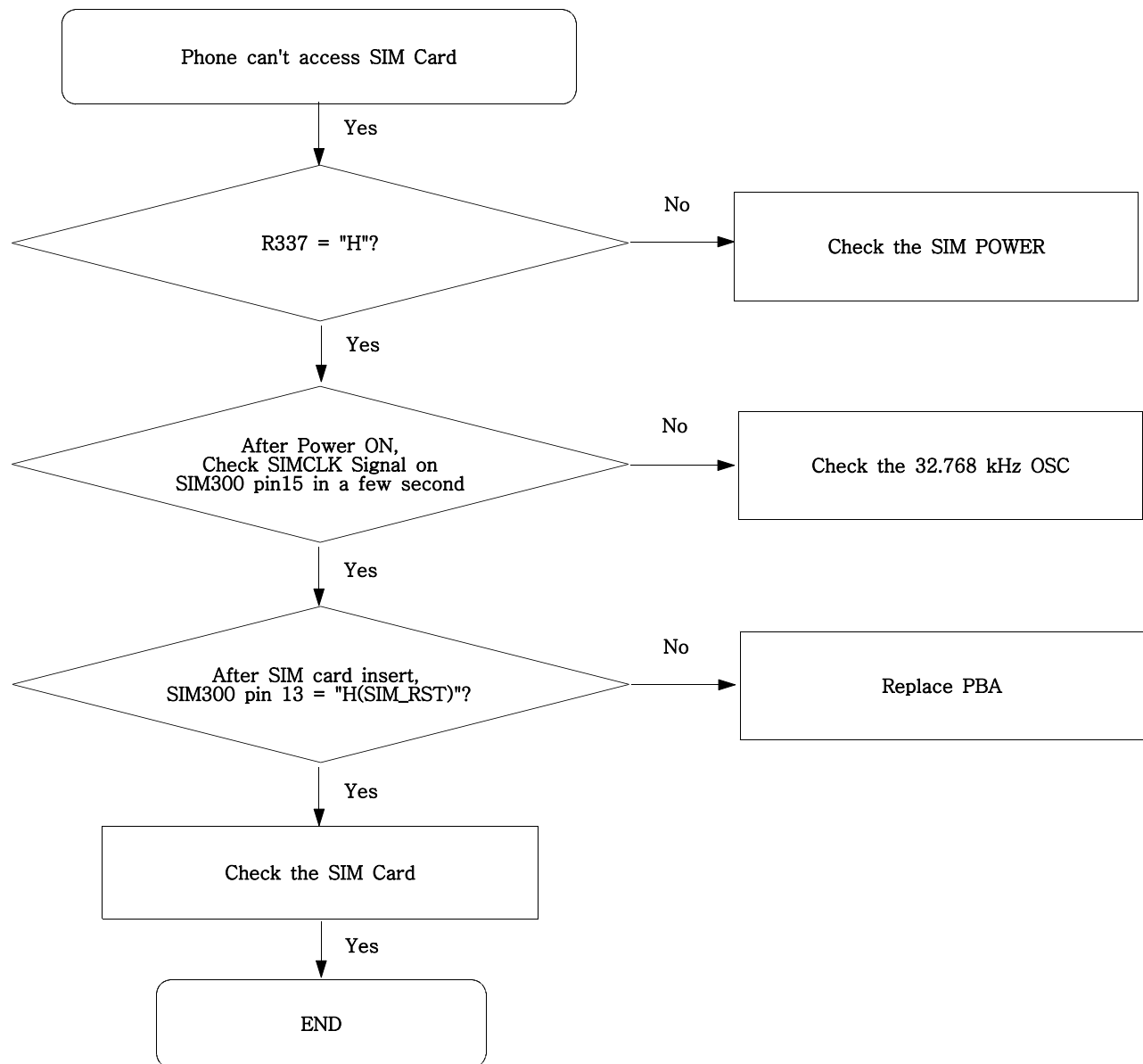
9-3. Charging Part



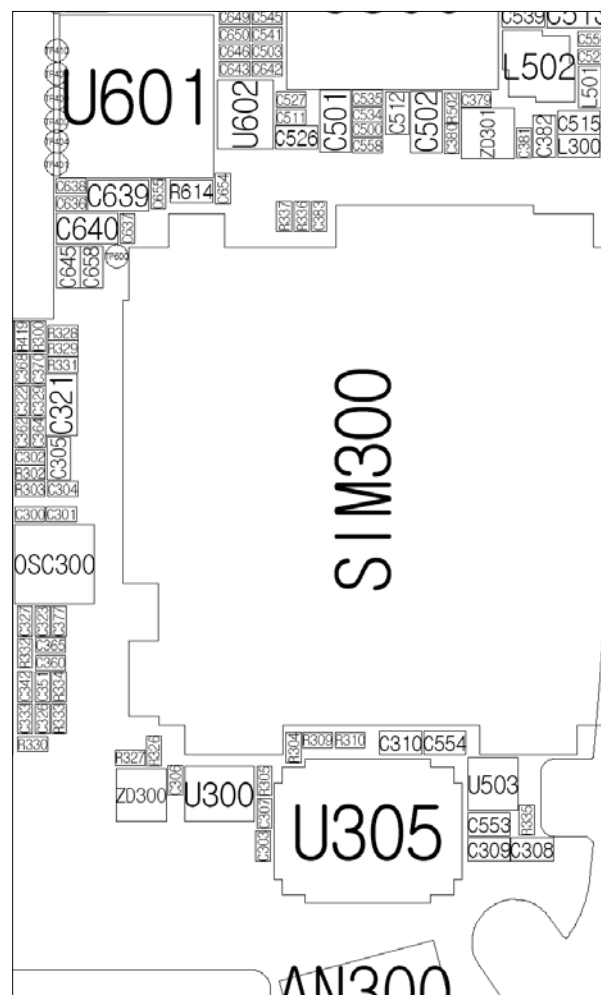
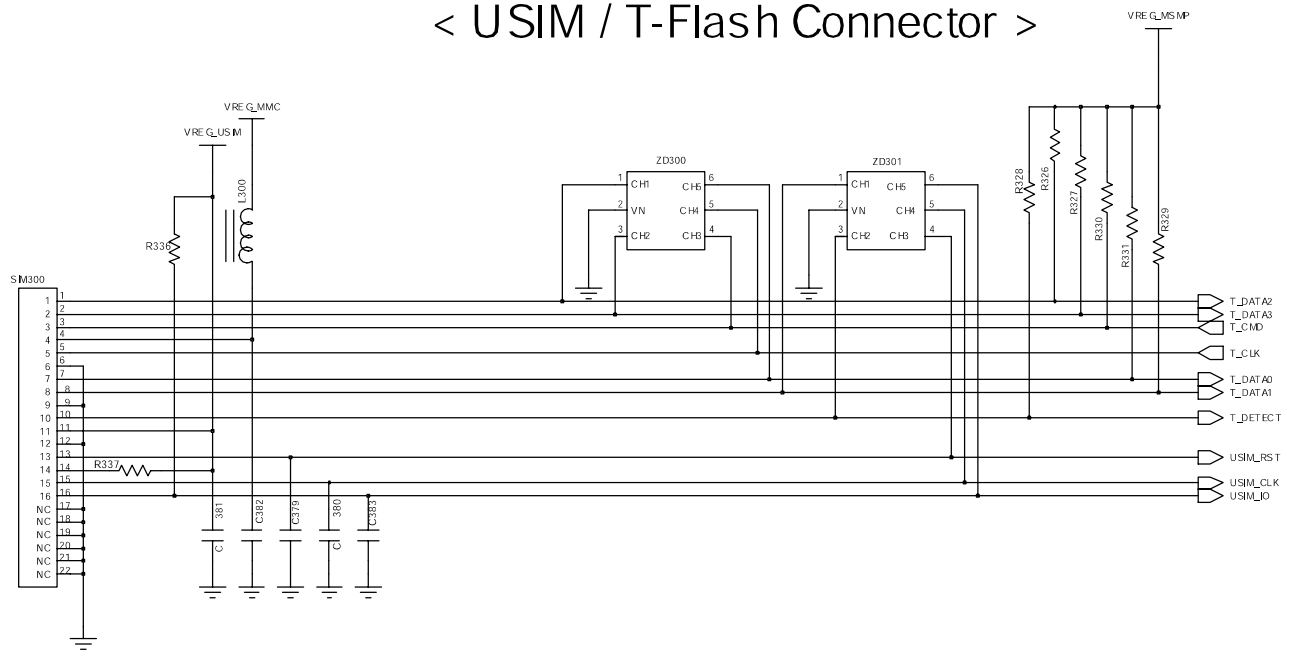
Charging



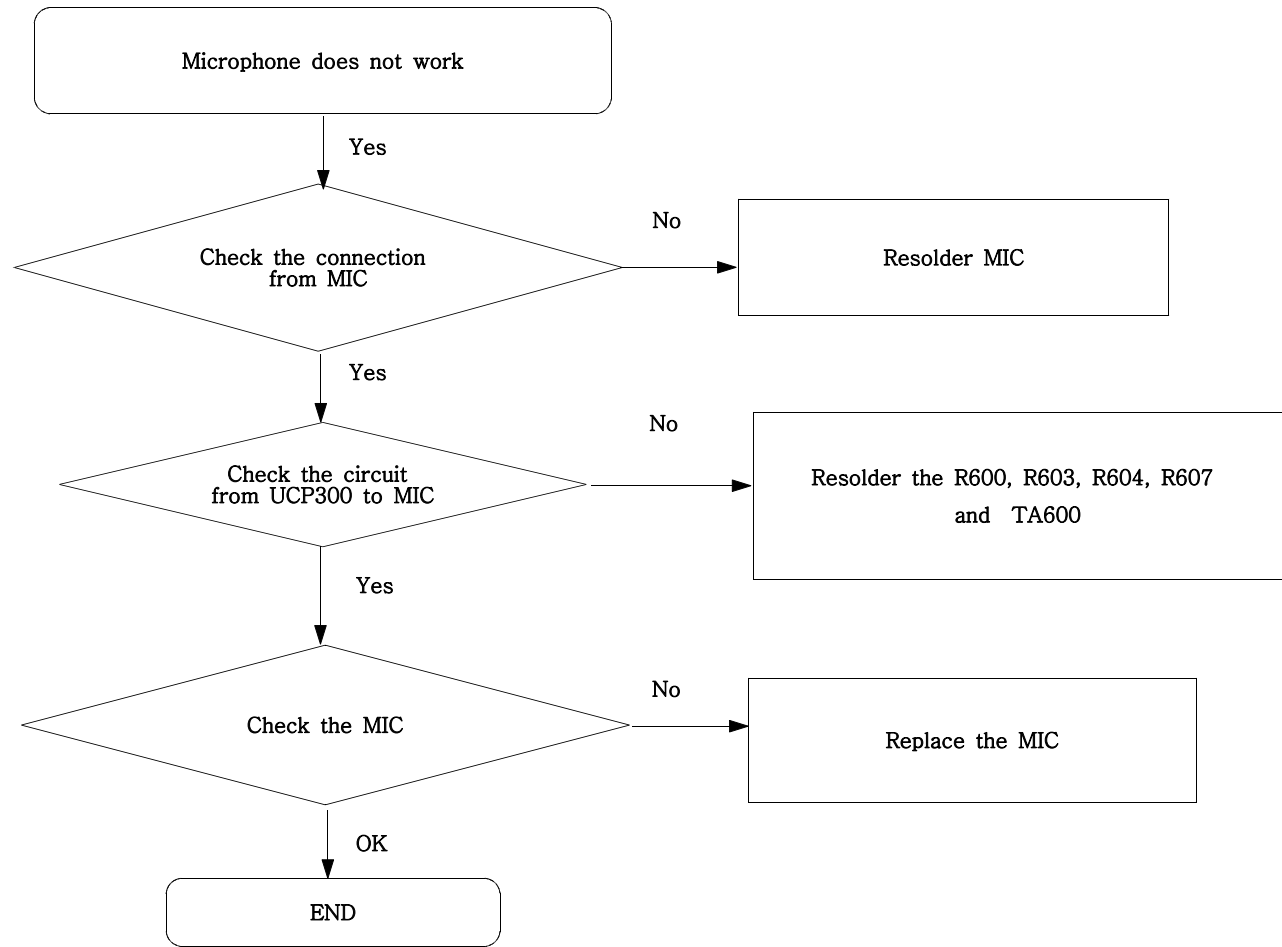
9-4. SIM Part



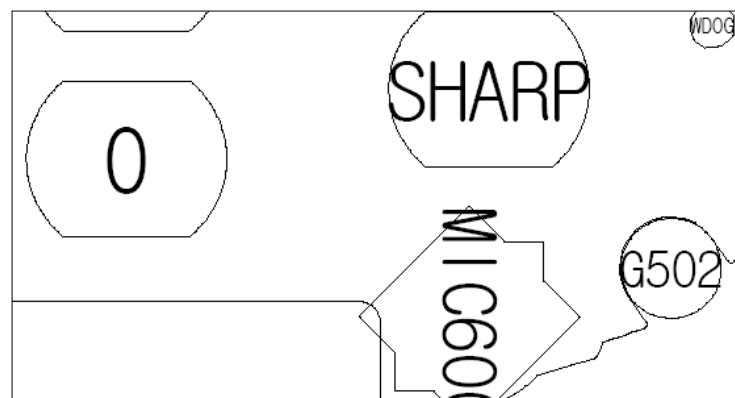
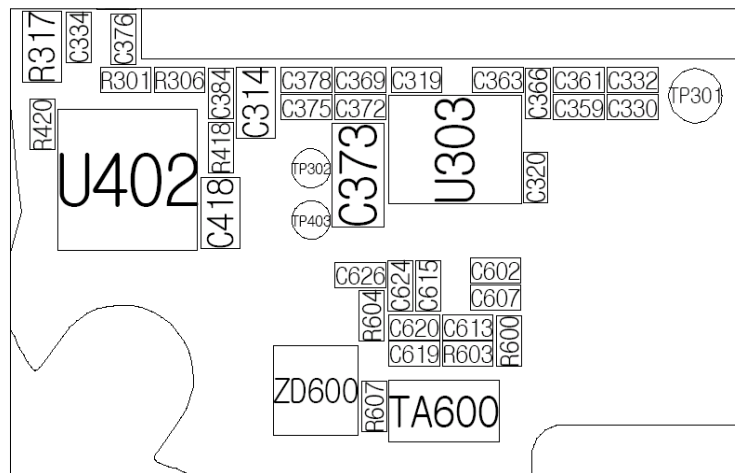
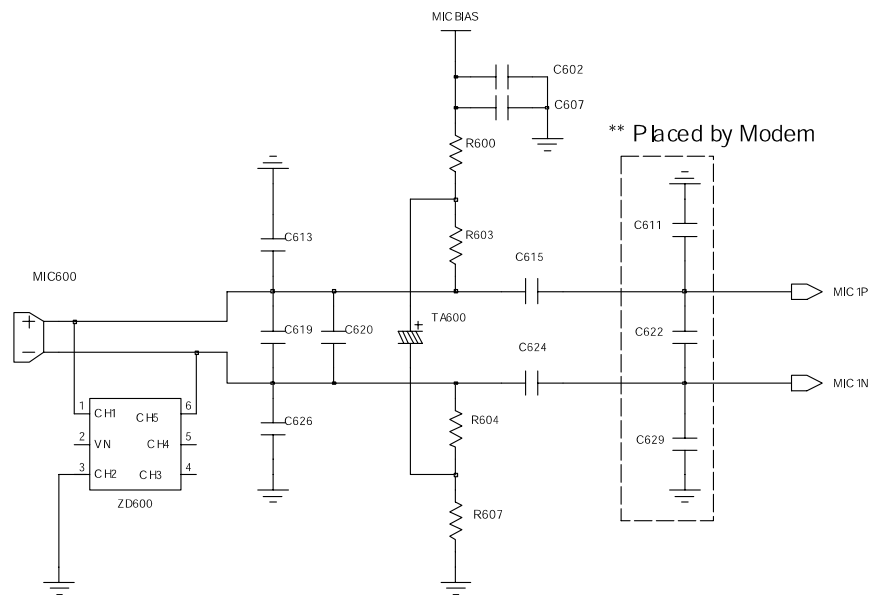
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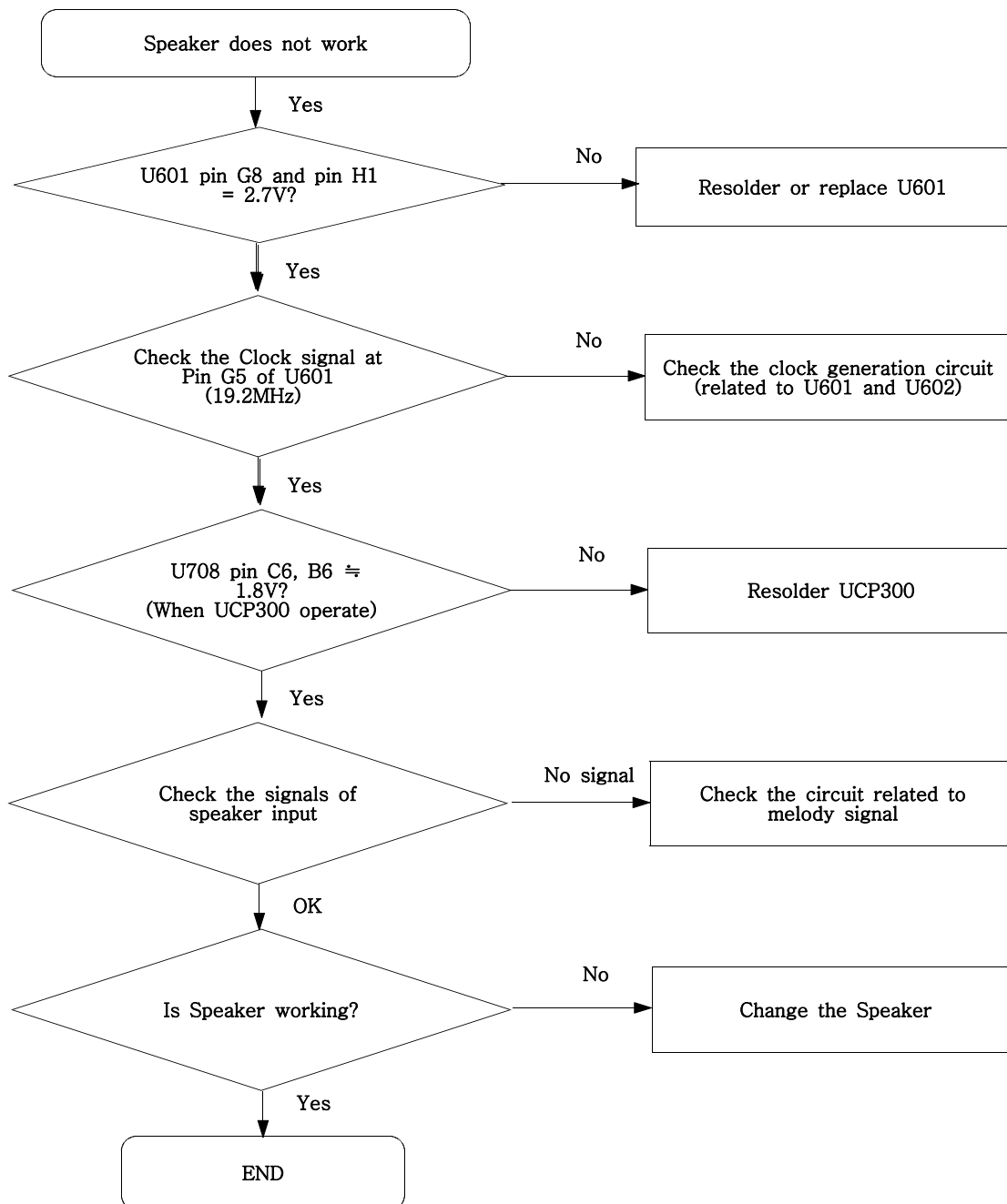
9-5. Microphone Part

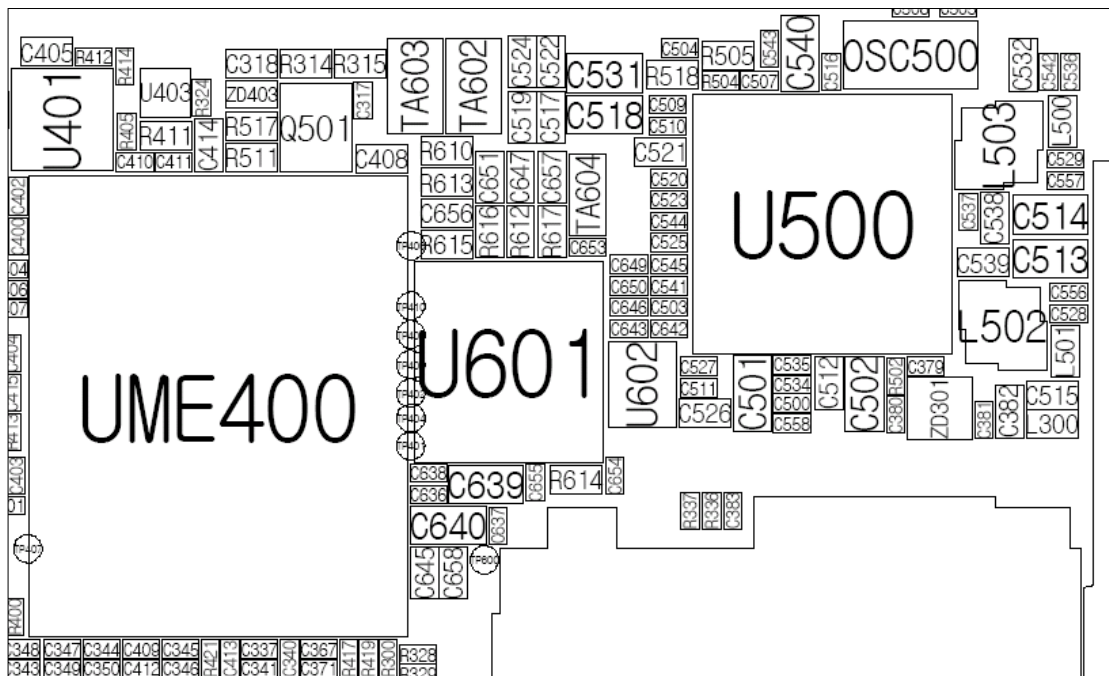


Microphone

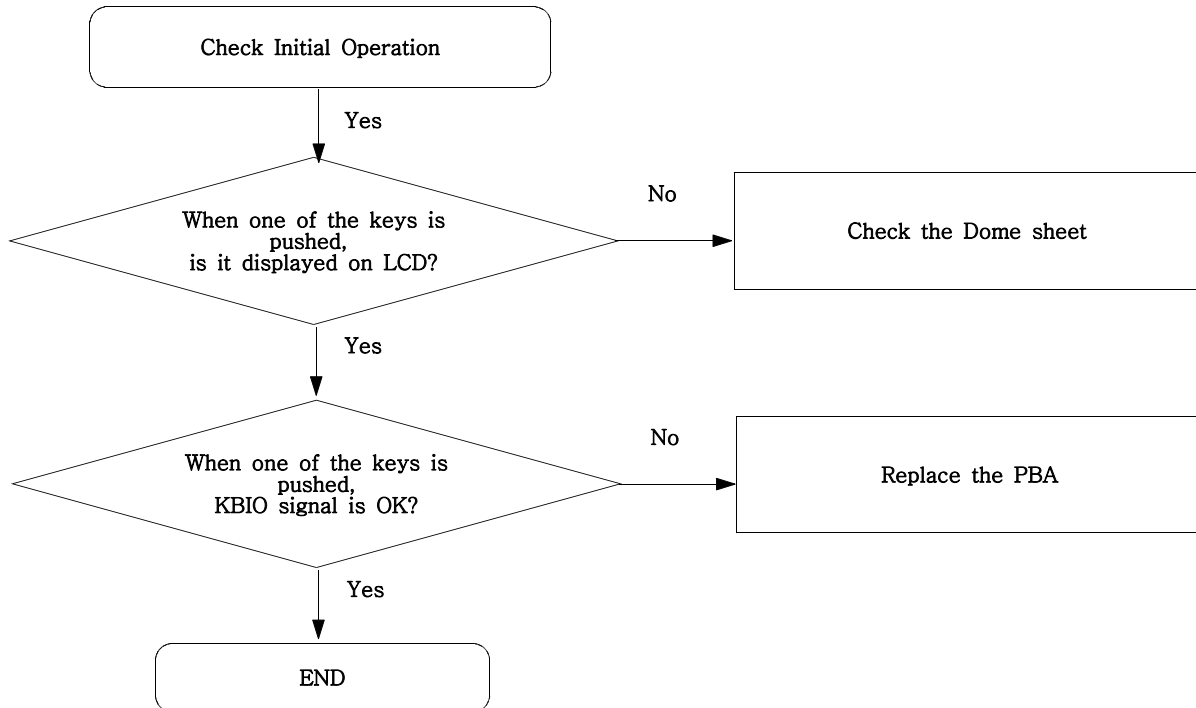


9-6. Speaker Part(Melody))

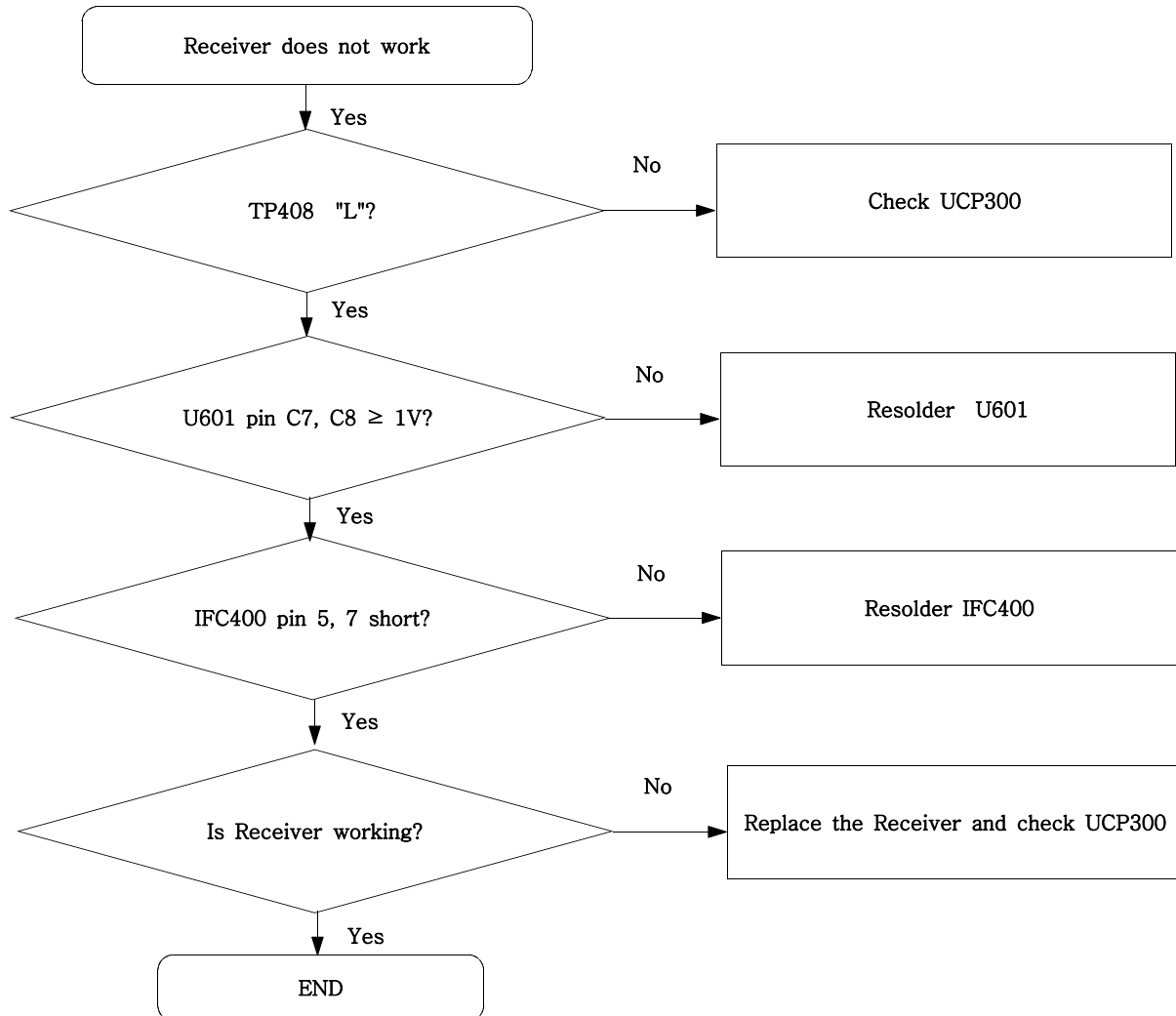


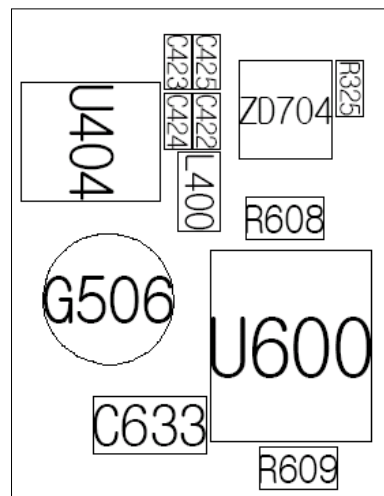
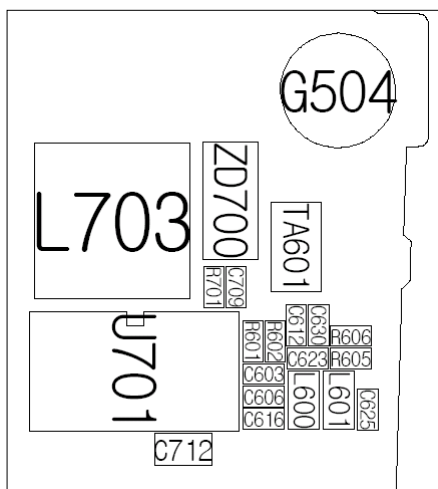
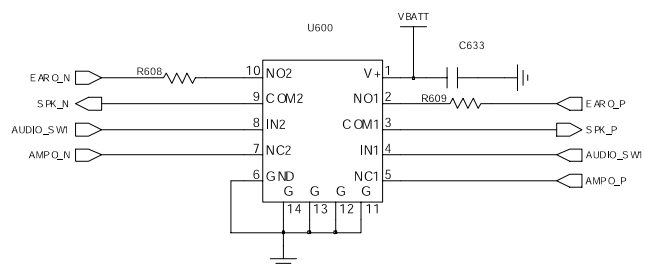
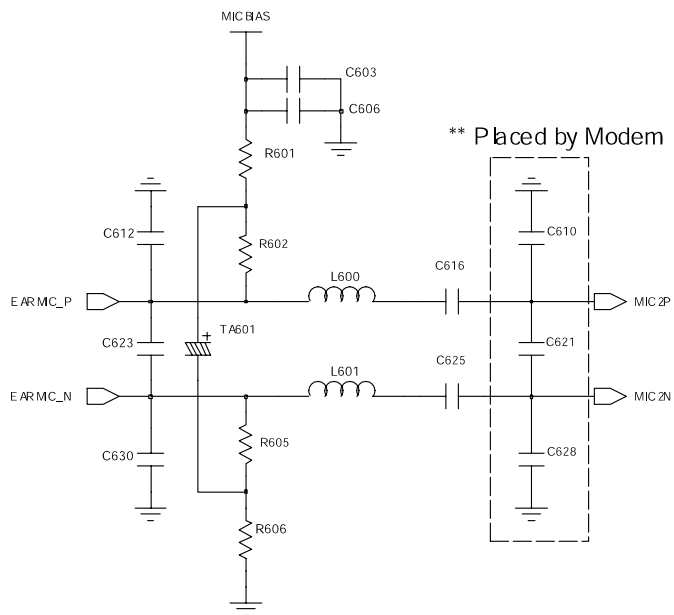


9-7. Key Data Input

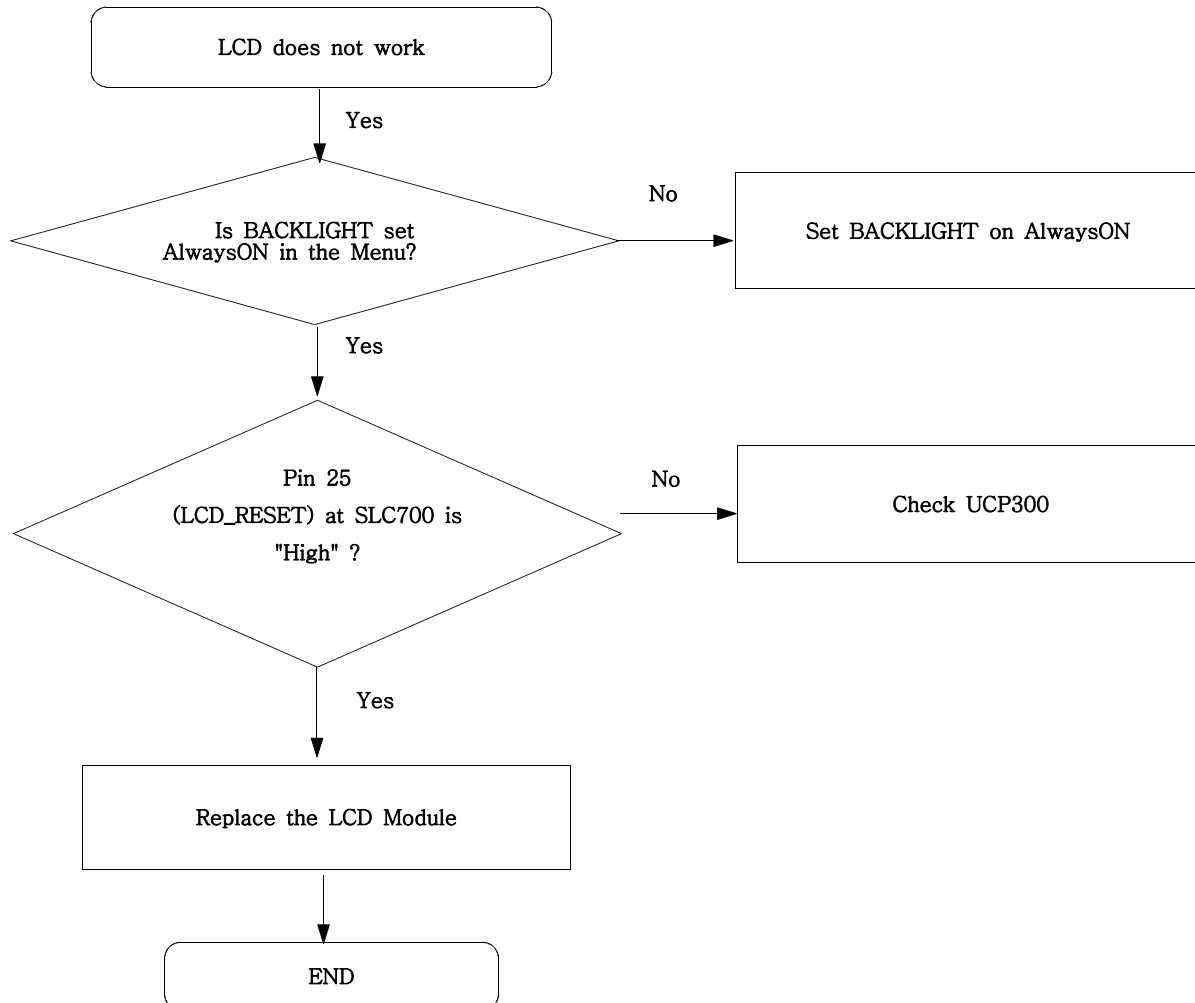


9-8. Earphone Part

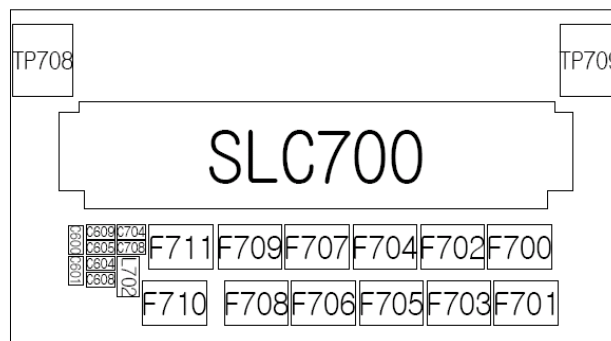
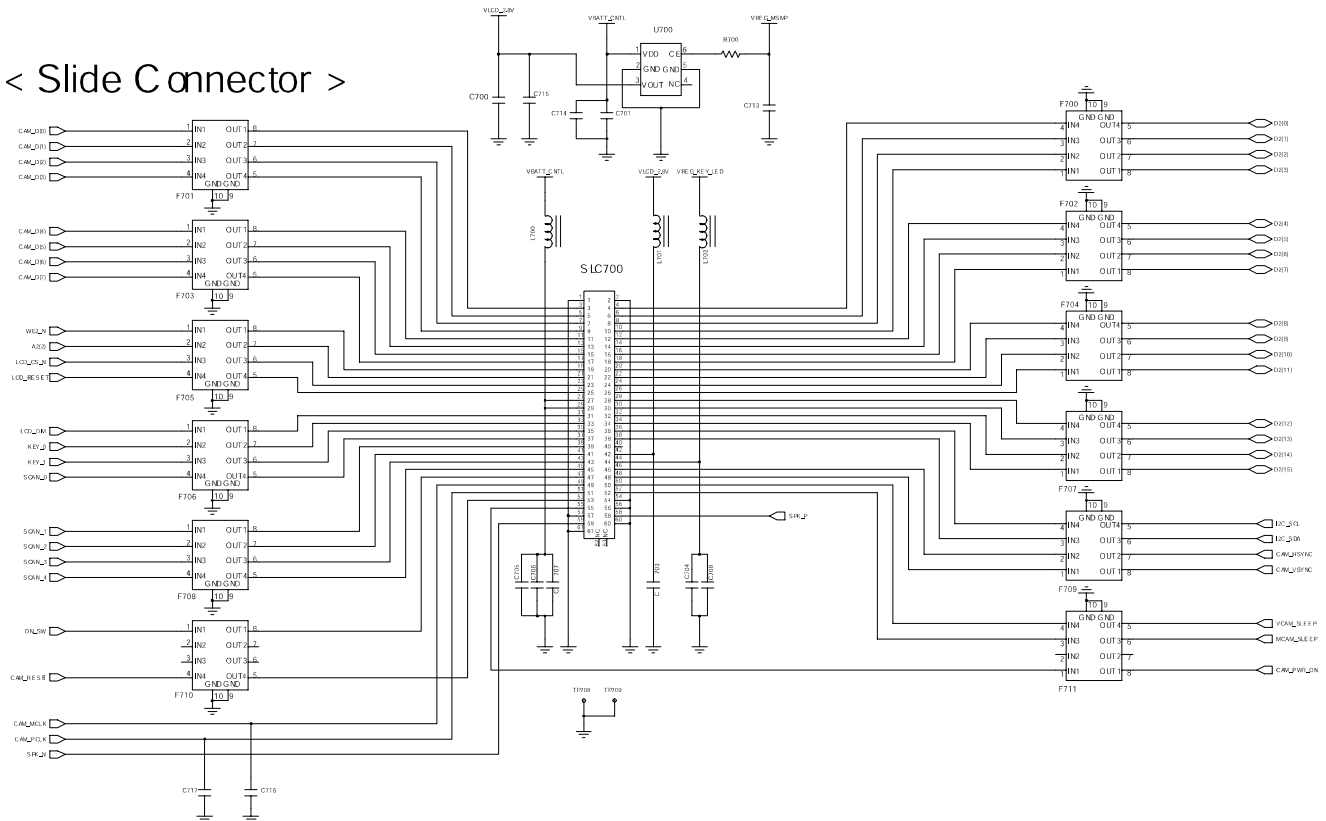




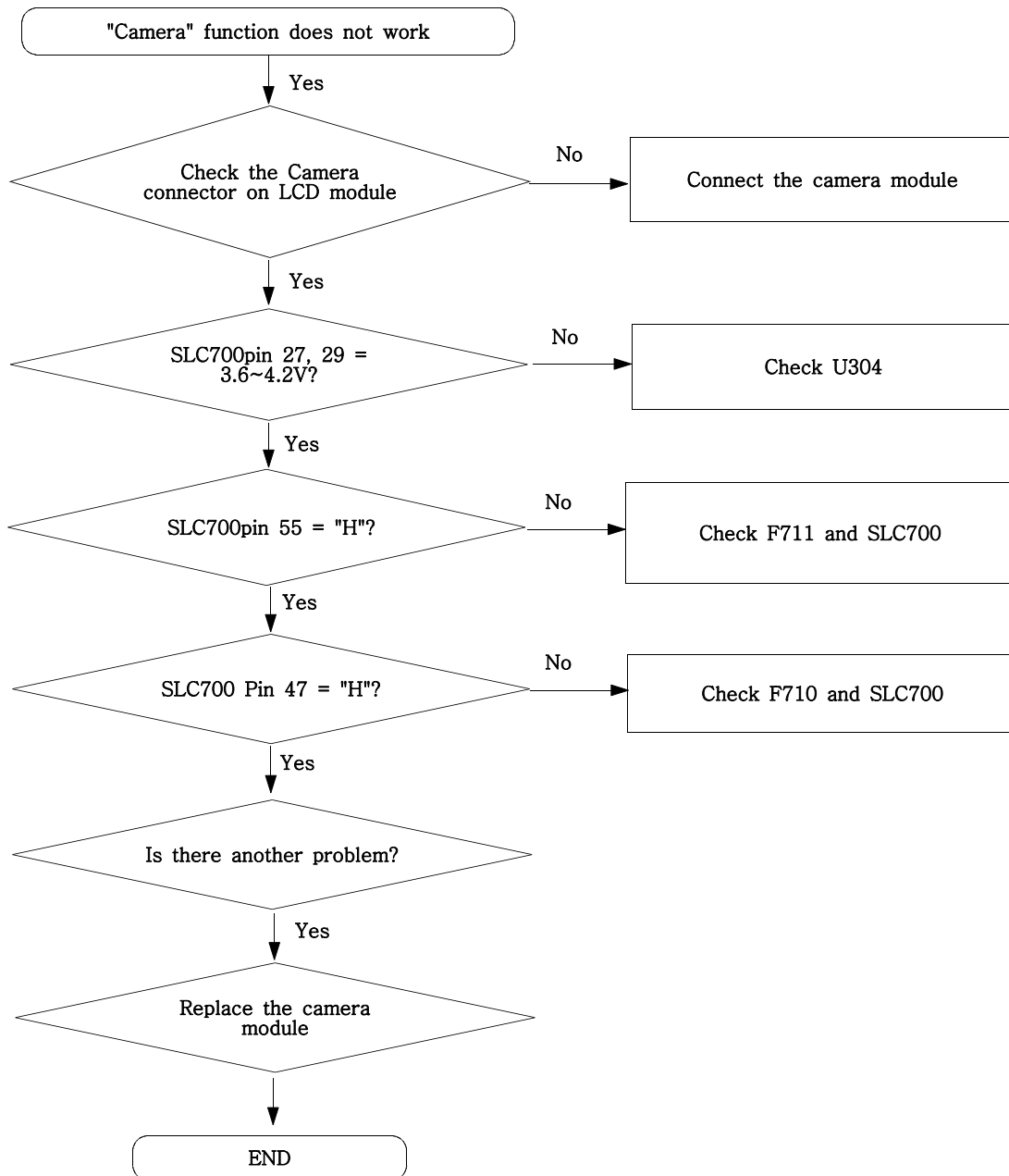
9-9. LCD Part



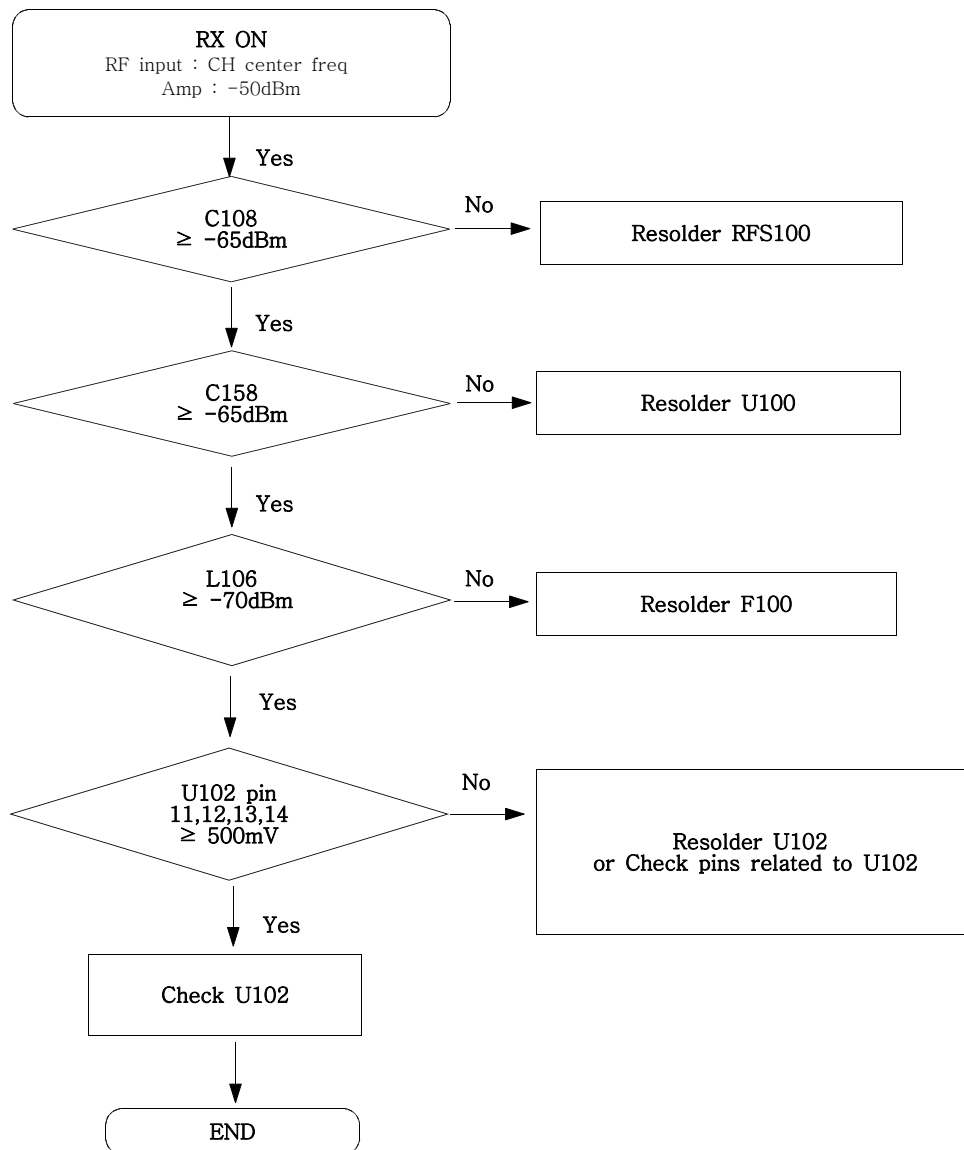
< Slide Connector >



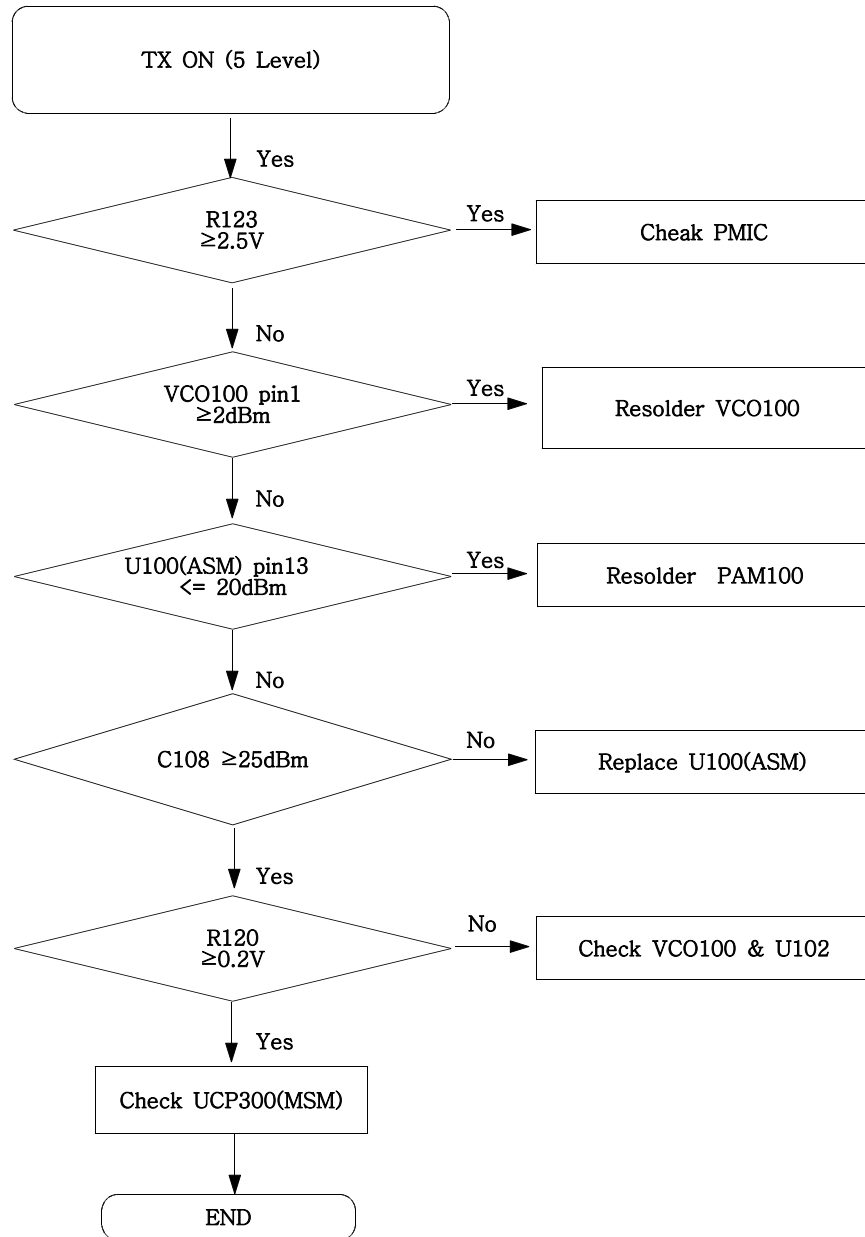
9-10. Camera part



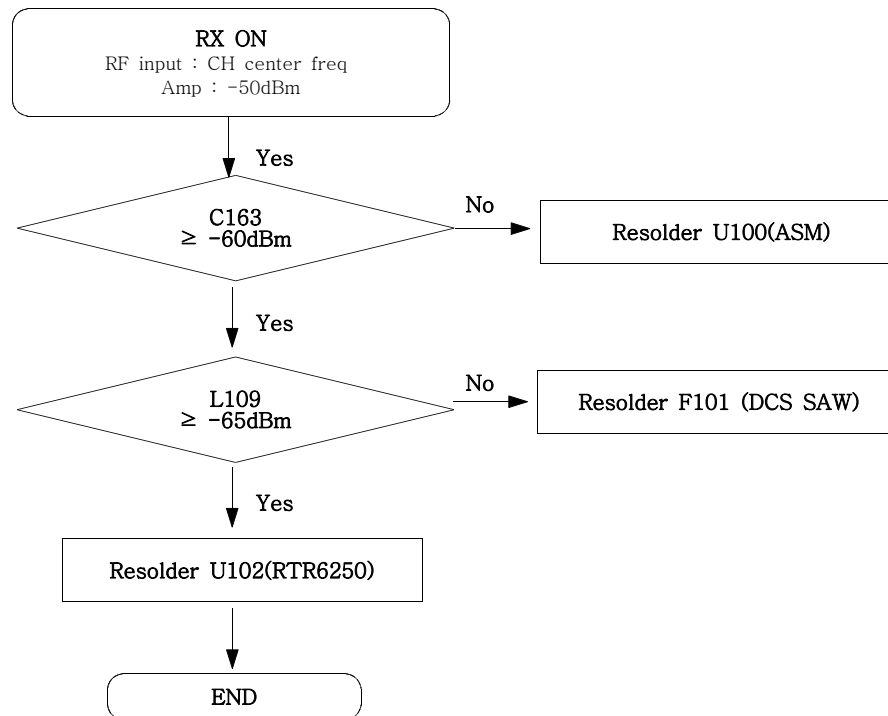
9-11. GSM900 Receiver



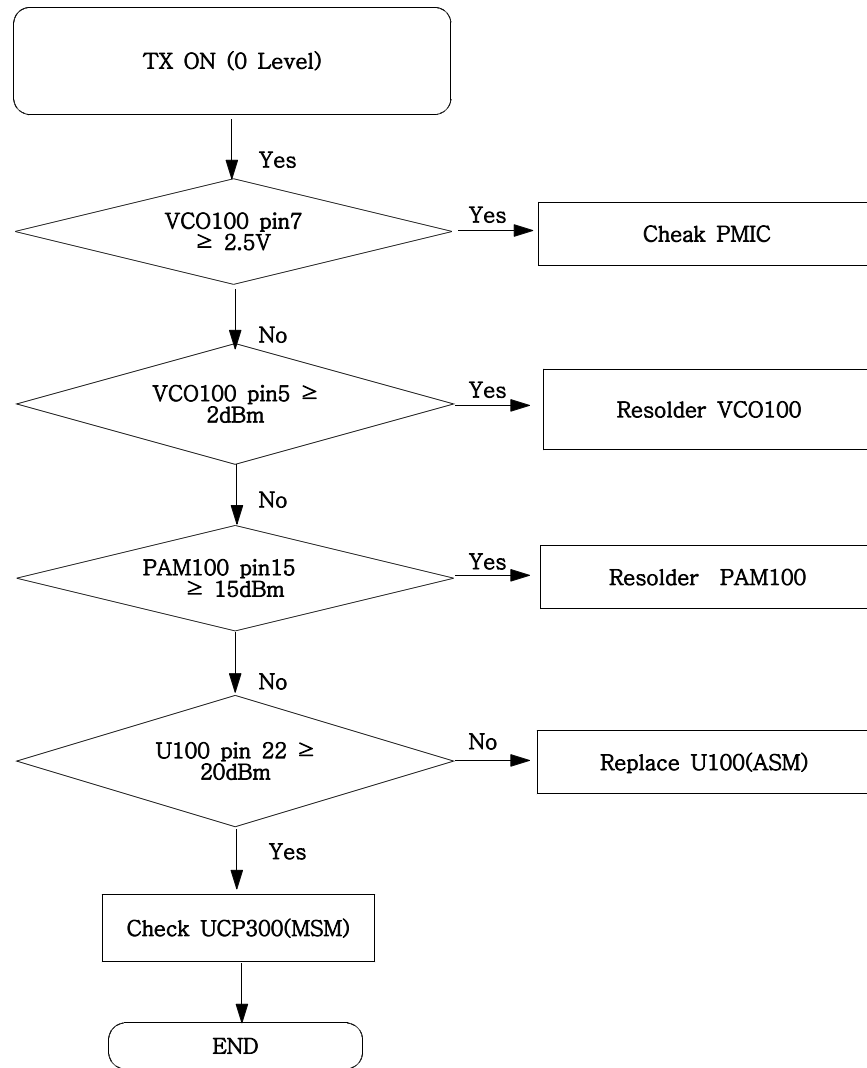
9-12. GSM900 Transmitter



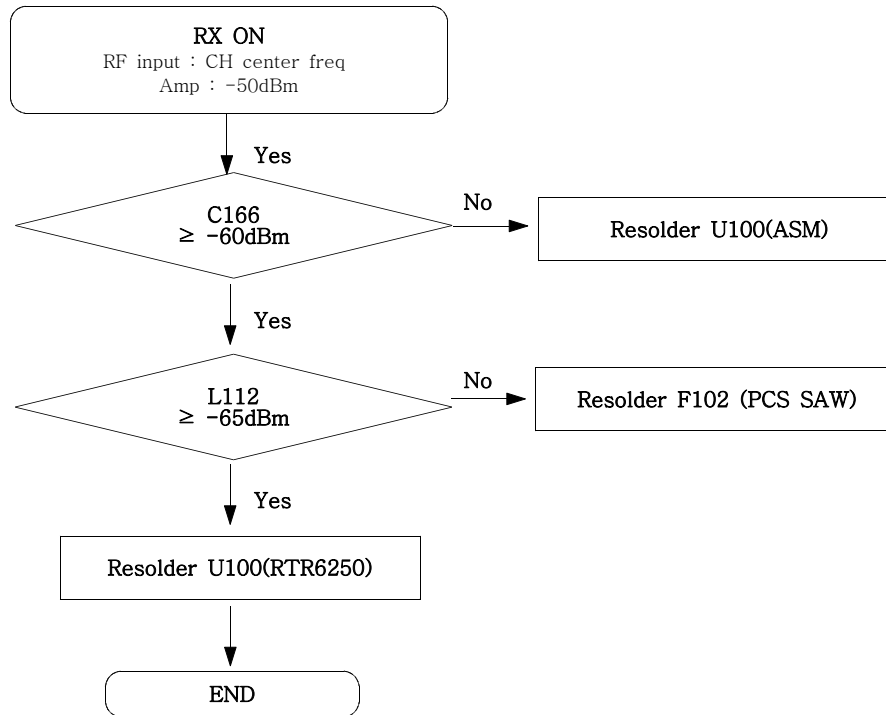
9-13. DCS Receiver



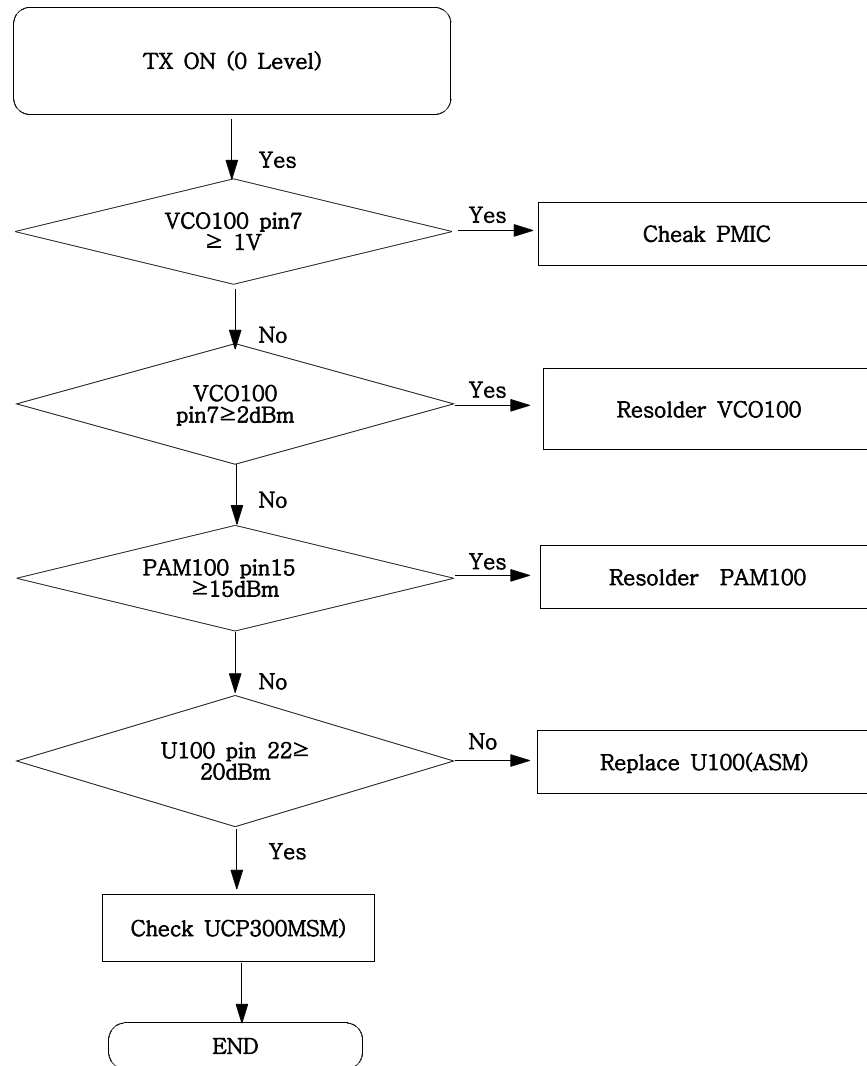
9-14. DCS Transmitter



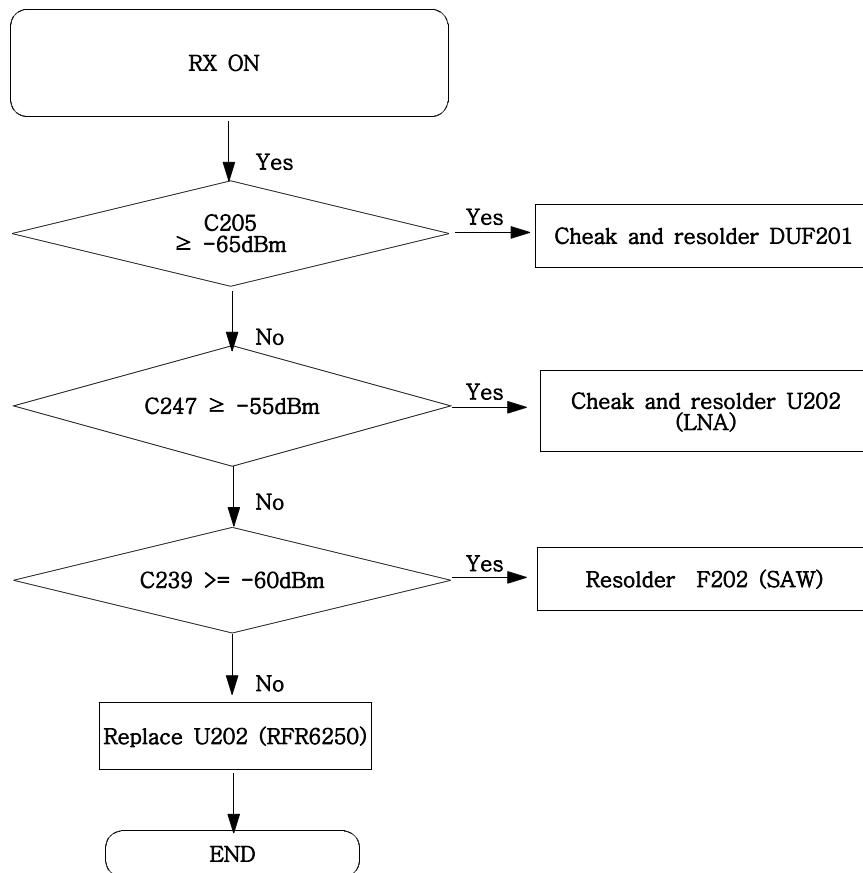
9-15. PCS Receiver



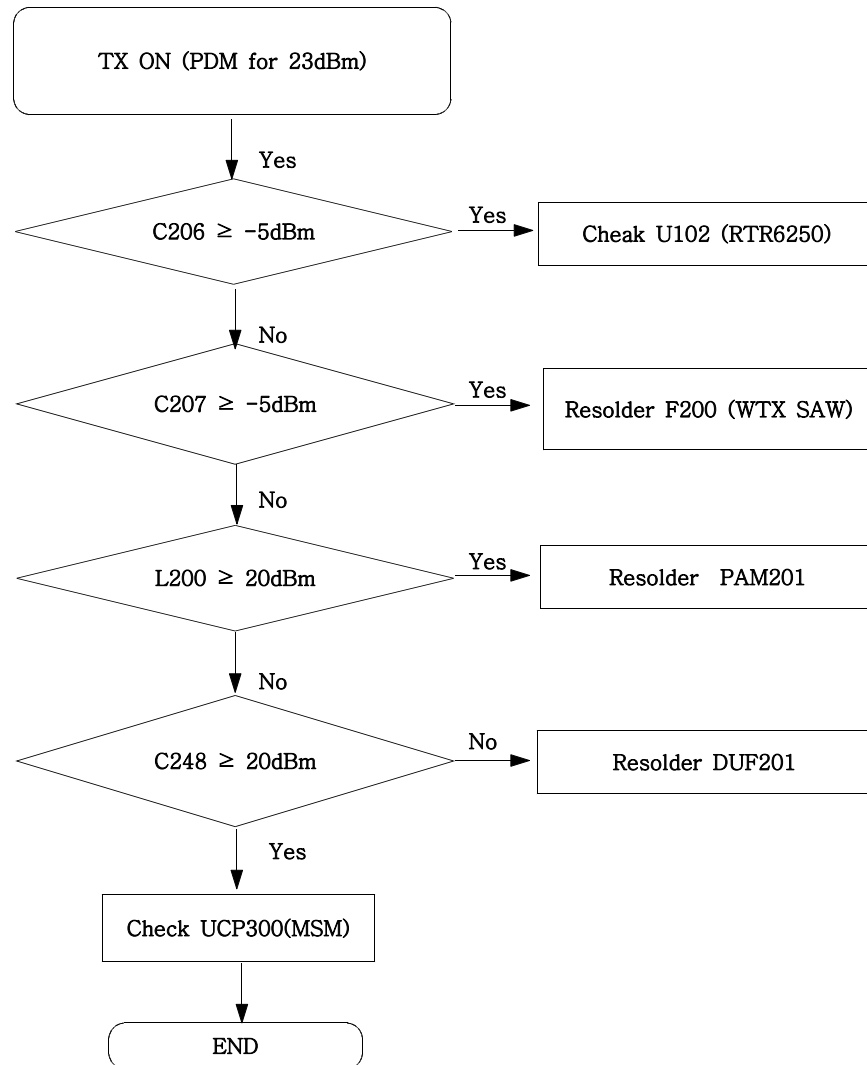
9-16. PCS Transmitter



9-17. WCDMA Receiver



9-18. WCDMA Transmitter



	MODE		
	AMT_510	AMT_511	AMT_512
G360505001TX	H	H	L
G361001001TX	H	L	L
G361001001RX	L	L	L
G361001001X	L	L	H
G361001001RX	L	H	H
UNIT11001001RX	H	L	L



[illegible]

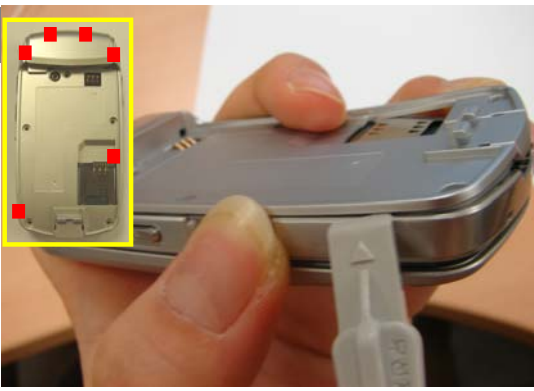
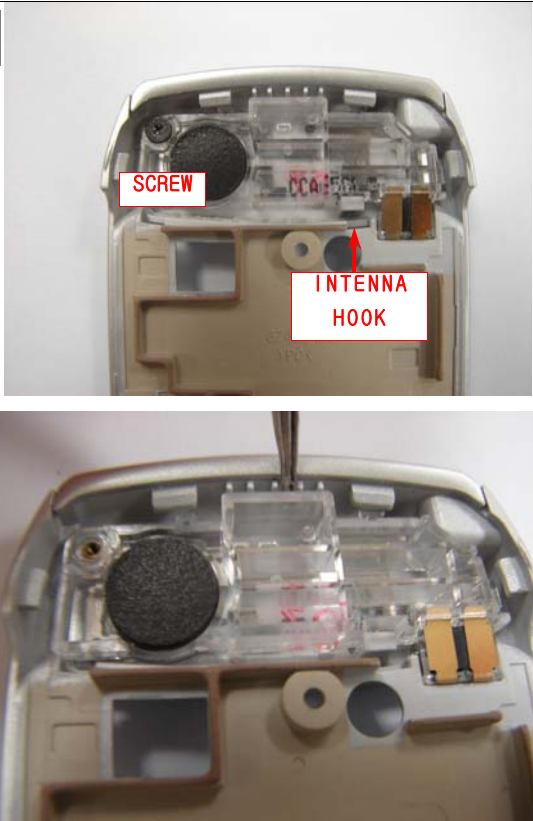
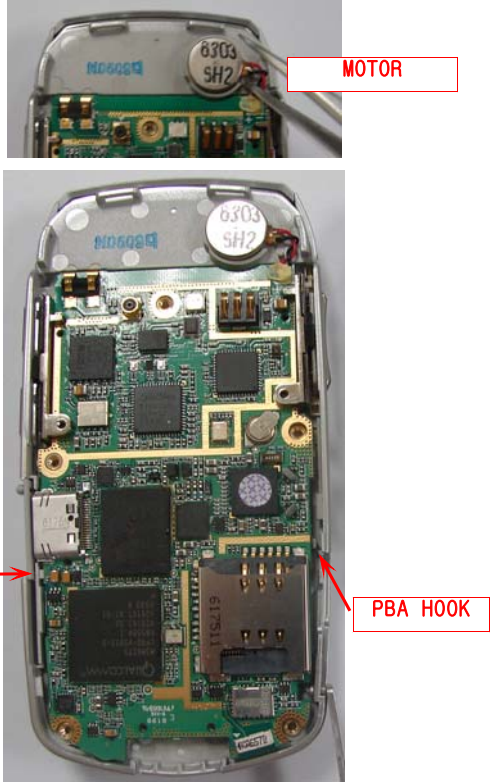
10. Reference data

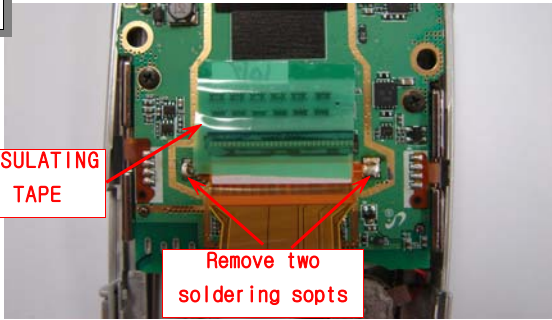
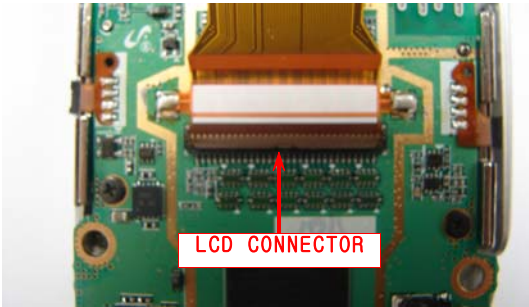
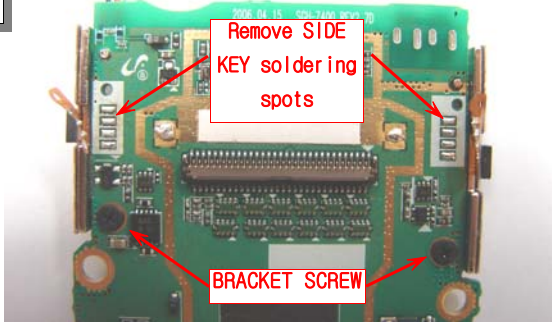
10-1. Reference Abbreviate

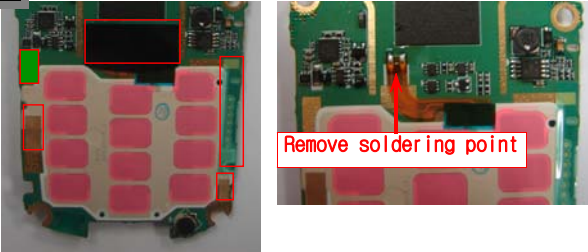
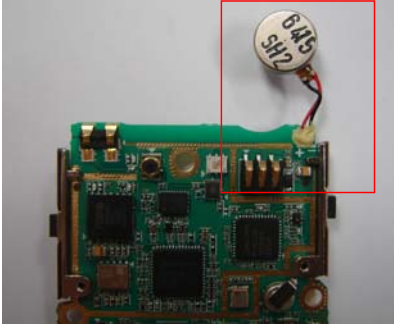
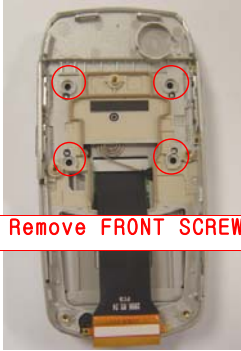
AAC: Advanced Audio Coding.
AVC : Advanced Video Coding.
BER : Bit Error Rate
BPSK: Binary Phase Shift Keying
CA : Conditional Access
CDM : Code Division Multiplexing
C/I : Carrier to Interference
DMB : Digital Multimedia Broadcasting
EN : European Standard
ES : Elementary Stream
ETSI: European Telecommunications 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

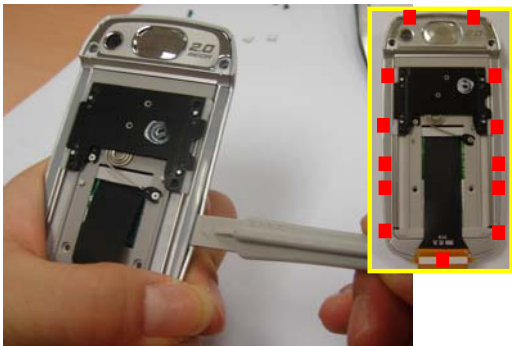
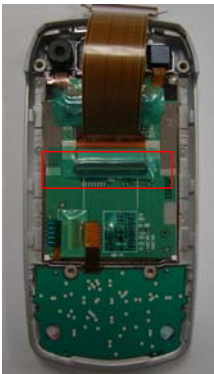
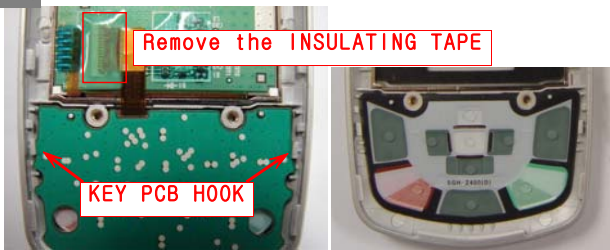
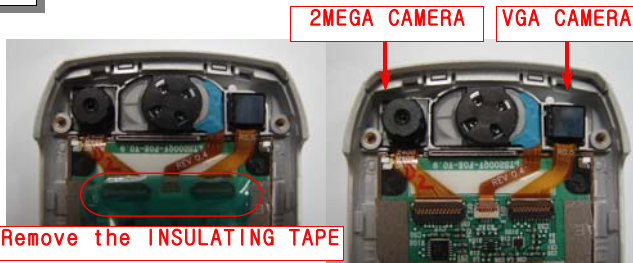
11. Disassembly and Assembly Instructions

11-1. Disassembly

1  Remove the five screws in red circles.	2  Open the rear case from the lower part with disassembling stick.
3  Remove INTENNA 1. Remove the scew. 2. Remove the N TENNA with tweezers. ※ Take note of the INTENNA PATTERN	4  Detach the PBA 1. Remove the MOTOR with tweezers. 2. Pull back the PBA HOOK and then detach the PBA.

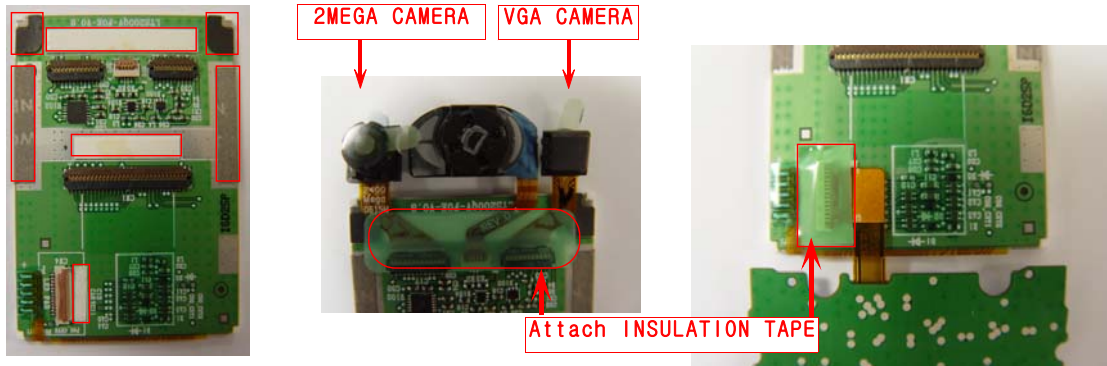
5 	6 
Remove the MAIN KEY PAD	Remove the LCD F-PCB soldering spots 1. Remove the insulating tapes. 2. Remove two soldering spots with soldering station.
7 	8 
Open the LCD Connector locker and then remove the F-PCB (Note that there is a BASE TAPE on the back of F-PCB)	Disassemble the SIDE KEY 1. Remove the SIDE KEY soldering spots with soldering station. 2. Remove the bracket screws and then remove the SIDE KEY.

9 	10 
Remove EL SHEET 1. Remove insulating and conductive tapes in red rectangles. 2. Remove soldering spots and then remove the EL SHEET.	Remove the MOTOR 1. Remove the yellow glue. 2. Remove the soldering spots and then remove the MOTOR.
11 	
Remove FRONT SCREW 1. Remove the 4 screws and then remove the FRONT case.	Remove LOWER SCREW 1. Remove the screw caps with tweezers(Take note of SCRATCH) 2. Remove the LOWER 4 screws.

12  Remove the LOWER part 1. Open the hook of lower cover with disassembling stick. ※ Take note of SCRATCH.	13  Remove the F-PCB 1. Remove the insulating tape 2. Pull back the connector locker and then remove F-PCB(Take notice that there is a BASE tape in the back of F-PCB)
14  Remove the SUB KEY 1. Remove the insulating tape and then remove KEY PCB. 2. Remove the SUB KEY PAD	15  Remove the CAMERA,SPEAKER 1. Remove the insulating tape. 2. Open the lockers of camera connectors and then remove the camera modules.

11-2. Assembly

1

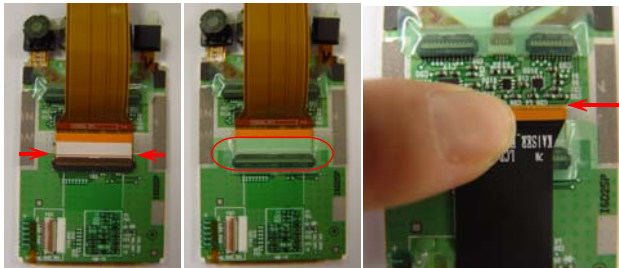


LCD MODULE Assembling

1. Attach the conductive, PORON, BASE TAPE on the each point.
2. Put the CAMERA, SPEAKER MODULE to each connector.(Close the locker after you confirm the GUIDE LINE)

3. Attach the insulating tape on the connector.
4. Put the SUB KEY PCB to the end of the GUIDE LINE and then close the locker.
5. Attach the insulating tape on the connector.

2



Assembling SLIDE F-PCB

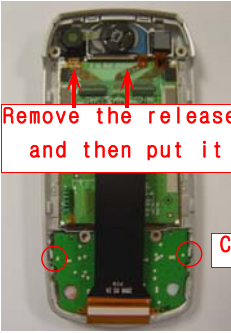
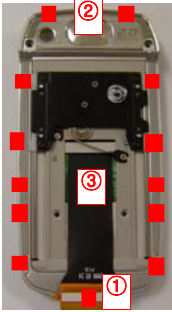
1. Put the F-PCB to the end of the GUIDE LINE
2. Close the locker and then attach the insulating tape on it.
3. Bend the F-PCB and then press it.

3

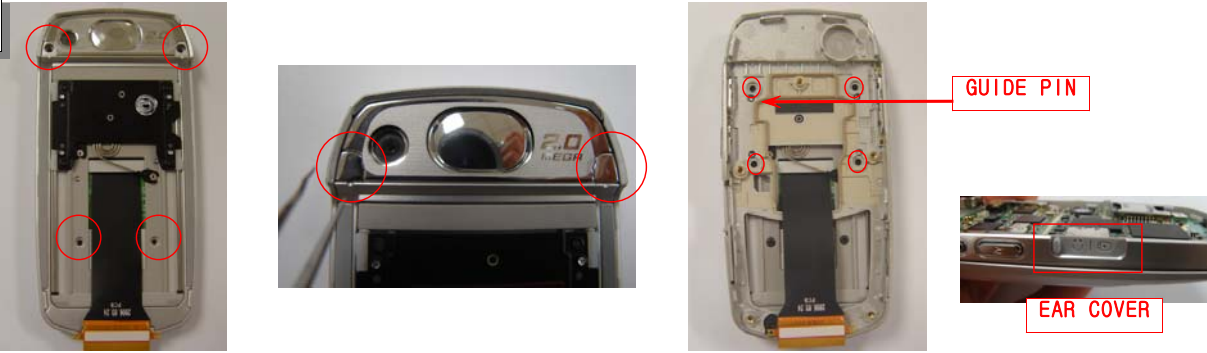


Put LCD MODULE to Front case

1. Remove the protective plastic cover on slide upper(CAMERA WINDOW, MAIN LCD WINDOW)
 2. Put the SUB KEY PAD along the GUIDE PIN
 3. Remove the protective plastic cover and then put the LCD module from the LCD part.
- ※ Brush away dust in MAIN WINDOW, CAMERA WINDOW with air spray.

4  Remove the release paper and then put it here Check SUB KEY HOOK	5  Remove release paper Remove protective plastic cover
Put CAMERA,SPEAKER,SUB KEY 1. Remove the release paper on MEGA CAMERA, SPEAKER and then put it. 2. Remove the protective plastic cover on VGA CAMERA and then put it(Take note of dust) 3. Connect SUB KEY PCB (Check the HOOK)	Remove the release paper on LOWER COVER and protective plastic cover on camera window. 1. Remove the release paper on the LOWER COVER. 2. Remove the protective plastic cover on the camera window.
6  PASS the F-PCB  Hook up the lower part	 Assembling LOWER slide 1. Pass the F-PCB to the hole. 2. Hook up the lower part. 3. Hook up the upper part. 4. Hook up the side part.

7



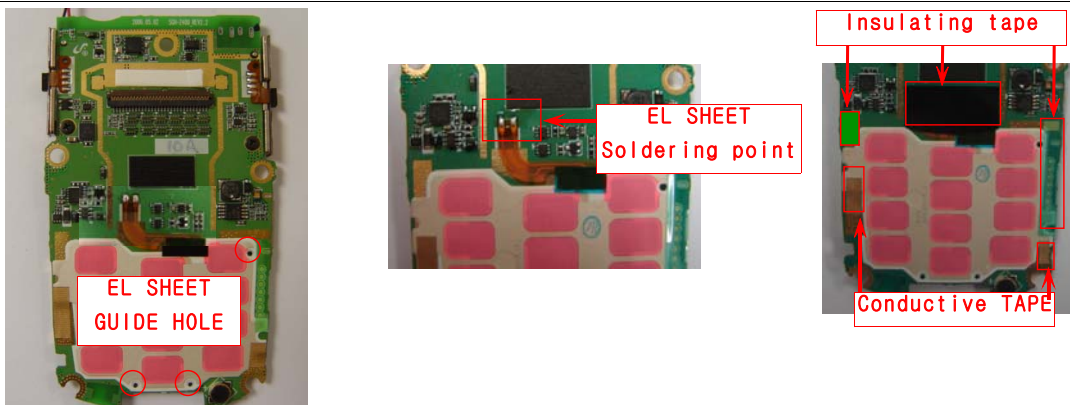
Screw up 4 point

1. Screw up the 4 point in LOWER (6001-001429)
2. Attach the SCREW CAPs with double stick tape.

Assembling FRONT

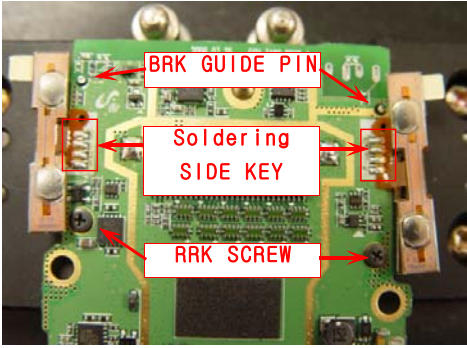
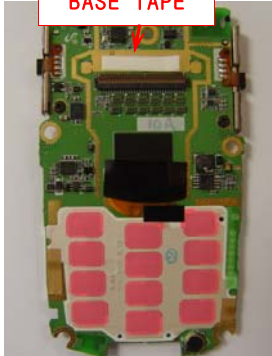
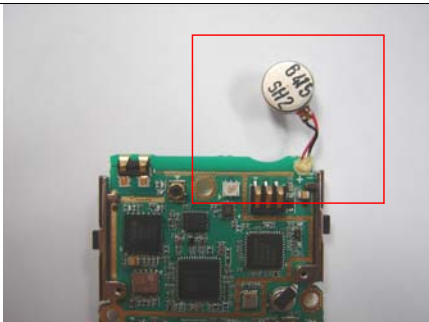
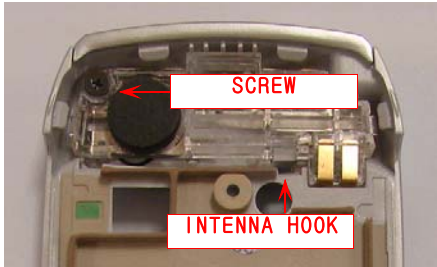
1. Put the FRONT COVER along GUIDE PIN
 2. Screw up the 4 point(6001-001700)
- ※ Take note of breakaway of the EARPHONE COVER.

8

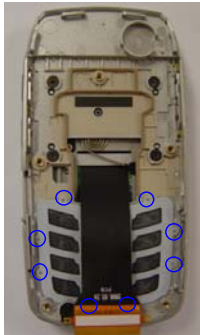


Attach the EL SHEET

1. Attach the EL SHEET along the GUIDE PIN HOLE
2. Solder the EL SHEET F-PCB
3. Attach the insulating tape and the conductive tape

9  BRK GUIDE PIN Soldering SIDE KEY RRK SCREW	10  BASE TAPE
Soldering SIDE KEY and attach BRK 1. Solder the SIDE KEYS along the each guide hole. 2. Put the BRKs to both sides along the guide pin hole and then screw up the BRK screws.	Attach the SIDE KEY and the BASE TAPE 1. Attach the SIDE KEY FPCBs on the BRK along the guide. 2. Attach the BASE TAPE for the SLIDE F-PCB.
11 	12  SCREW ANTENNA HOOK
Soldering MOTOR 1. Solder the MOTOR pad.(Check +,- mark) 2. Put some yellow glue on the soldering point.	Assemble REAR ANTENNA 1. Put the ANTENNA to rear case. (Check the HOOK for antenna) 2. Put the SCREW to screw hole for antenna.

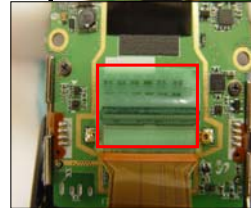
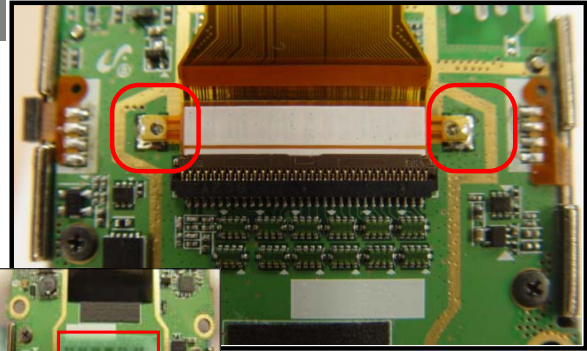
13



Assembling MAIN KEY PAD

※ Be careful that you don't bend the KEY PAD while putting the KEY PAD.

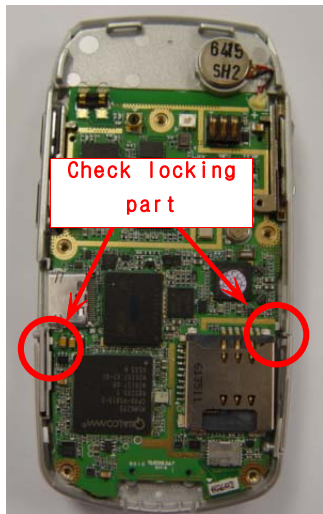
14



Soldering SLIDE F-PCB and attaching the insulating TAPE

1. Insert the SLIDE F-PCB and then close the locker.
2. Solder two wings on the Slide FPCB.
3. Attach the insulating tape on it.

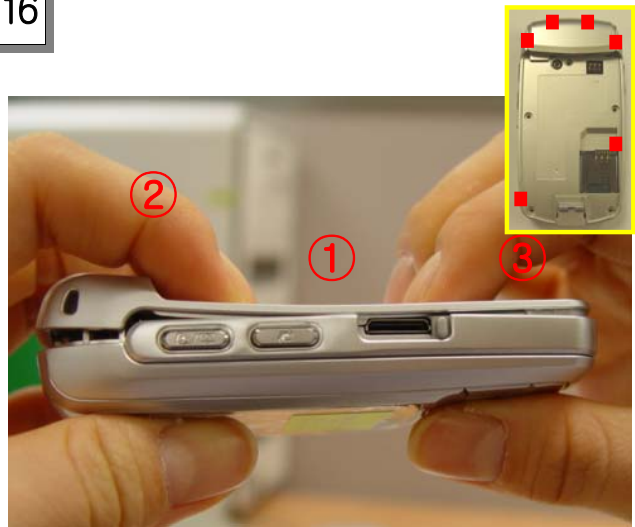
15



Put the PBA and MOTOR to the case.

1. Put PBA to FRONT ASS'Y (Check the locking part)
2. Put the motor to FRONT ASS'Y after turn it half round clockwise.

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Assembling REAR screwing up

1. Screw up 5 point after putting the rear case.
- ※ The EARPHONE COVER is seceded easily.

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