

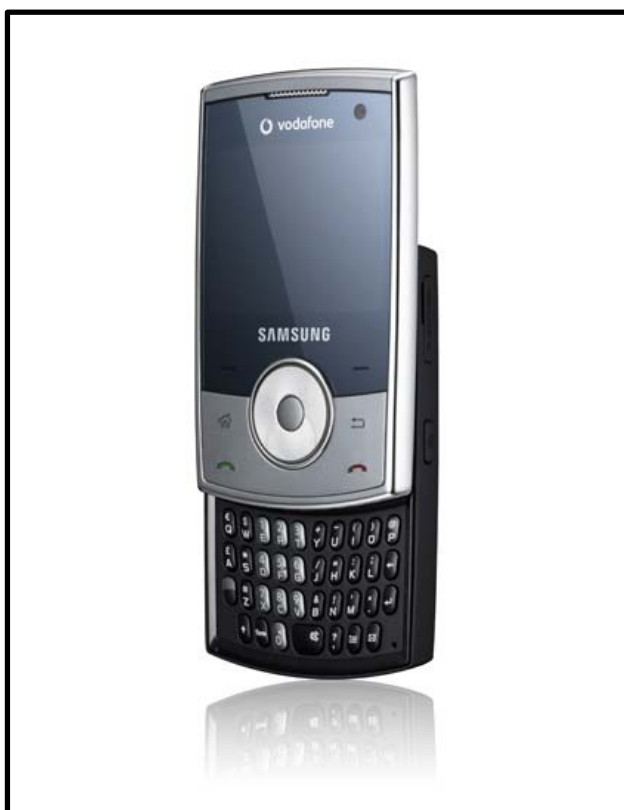
SAMSUNG

UMTS TELEPHONE

SGH-i640V

SERVICE *Manual*

UMTS TELEPHONE



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**SAMSUNG
ELECTRONICS**



GSPN (Global Service Partner Network)

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

1. Safety Precautions

1-1. Repair Precaution

- Repair in Shield Box, during detailed tuning.
Take specially care of tuning or test, because the specification 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	DCS 1800	PCS 1900	W-CDMA 2100
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 (chip rate)
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	0.3GMSK	0.3GMSK	0.3GMSK	QPSK (DL) HPSK (UL)
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±3 dBm	0	30±3 dBm
6	31±2 dBm	1	28±3 dBm	1	28±3 dBm
7	29±2 dBm	2	26±3 dBm	2	26±3 dBm
8	27±2 dBm	3	24±3 dBm	3	24±3 dBm
9	25±2 dBm	4	22±3 dBm	4	22±3 dBm
10	23±2 dBm	5	20±3 dBm	5	20±3 dBm
11	21±2 dBm	6	18±3 dBm	6	18±3 dBm
12	19±2 dBm	7	16±3 dBm	7	16±3 dBm
13	17±2 dBm	8	14±3 dBm	8	14±3 dBm
14	15±2 dBm	9	12±4 dBm	9	12±4 dBm
15	13±2 dBm	10	10±4 dBm	10	10±4 dBm
16	11±3 dBm	11	8±4 dBm	11	8±4 dBm
17	9±3 dBm	12	6±4 dBm	12	6±4 dBm
18	7±3 dBm	13	4±4 dBm	13	4±4 dBm
19	5±3 dBm	14	2±5 dBm	14	2±5 dBm
		15	0±5 dBm	15	0±5 dBm

3. Product Function

Main Function

- Homescreen
- PIM - Contacts,Calendar,Tasks, Voice Notes
- Messaging - SMS, MMS, Email, VoiceRecorder within MMS, Postcard
- Internet -Internet Explorer, Windows Live! Portal, Windows Update, Email Setup Wizard, Podcast,RSS Reader, Google Map, Mobile TV
- Multimedia capability - 2 Mega Pixel /VGA Camera, Camcorder, Widnows Media Player
- Call - Dialer, Video Call
- Accessary Applications - Calculator, Notepad, Task Manager, Smart converter,World Clock, Stopwatch, Smart Search
- Games - Solitarie, Bubble Breaker, Java
- File Manager, My Files, ActiveSync, Document Viewer, Zoomer
- Bluetooth
- T9
- Java

4. Array course control

4-1. Software Adjustments



1. USB DATA Link Cable
2. Battery

4-2. Software Download

4-2-1. Pre-requisite for Download

- Downloader Program (there are 2 ways to download.)
 - [\[Image version\].exe](#) (Single downloader)
 - [SGH_i640V_version.exe](#) (Multi downloader)
- SGH_i640V Mobile Device
- USB Driver
 - **PDA : Samsung MITs USB Sync** [[Samsung MITs USB Sync.zip](#)]
 - **Phone : Samsung CDMA Modem** [[Samsung CDMA Modem.zip](#)]
- Driver Installation.
 - **PDA**

Make sure that you install drivers.

If you installed the latest ActiveSync program, you don't need to install the pda driver. Please install the latest ActiveSync program.

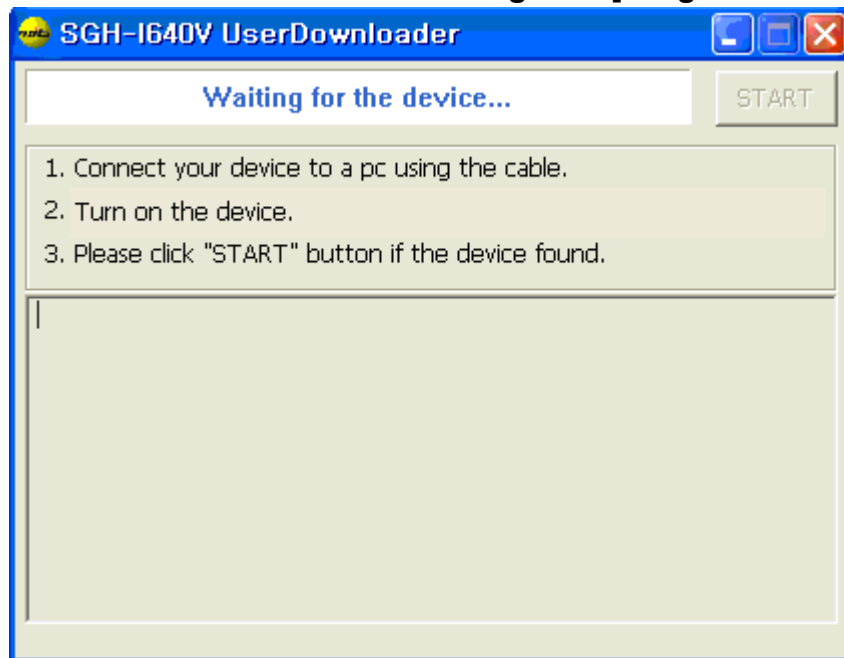
- Phone

When you download the phone image, you need the driver of Samsung CDMA Modem. If you want to download the phone image, install the Samsung CDMA Modem driver.

After you install the driver of Samsung CDMA Modem, please restart a host computer.

4-2-2. Single download ([Image version].exe)

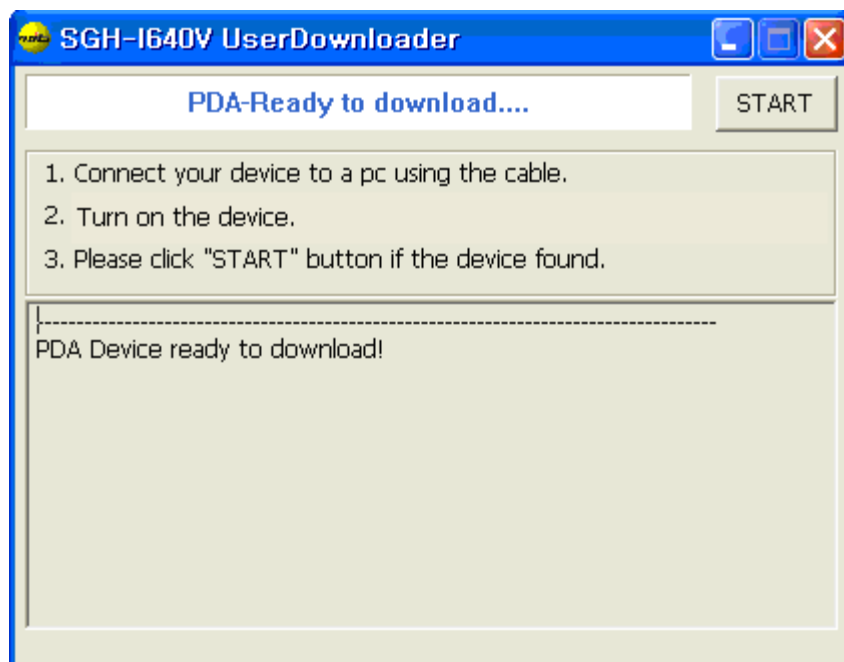
1. Execute the Downloader Program. [Image Version.exe]



2. Turn off your device.

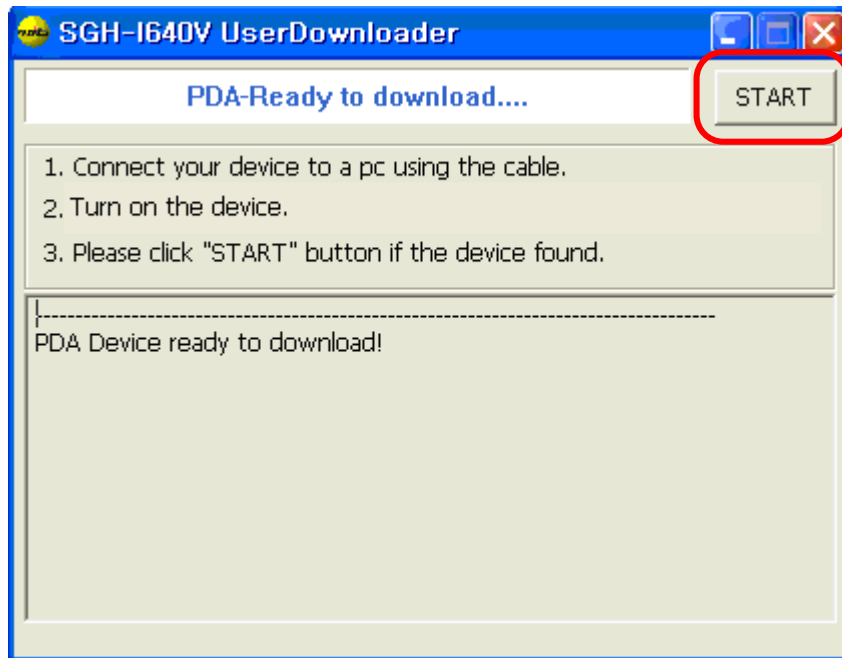
3. Connect your device to a host computer by using USB DATA Link Cable.

4. Turn on your device and wait until 'START' button is activated.



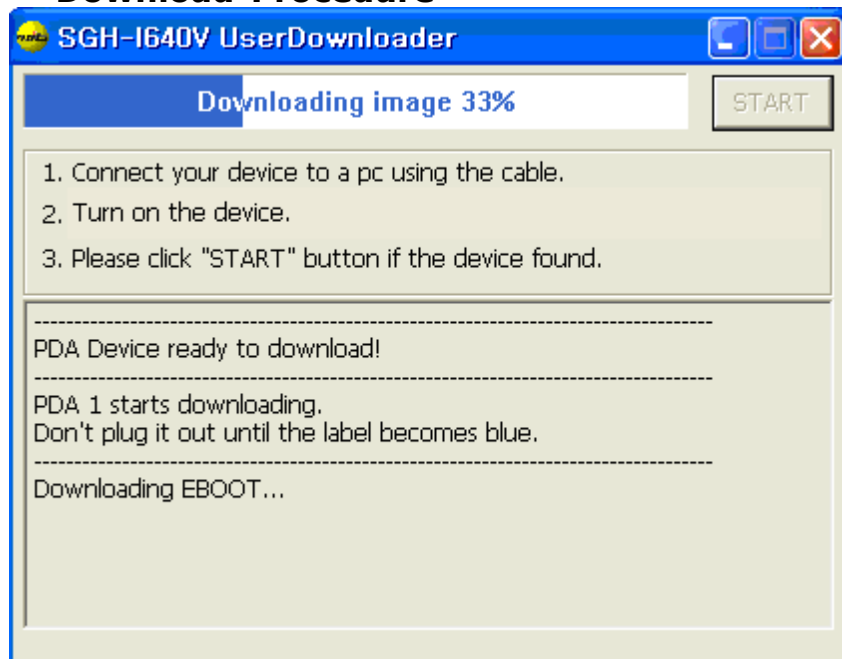
If 'START' button is not activated, terminate the application and reconnect USB data link cable and retry.

5. Please click "START" button.

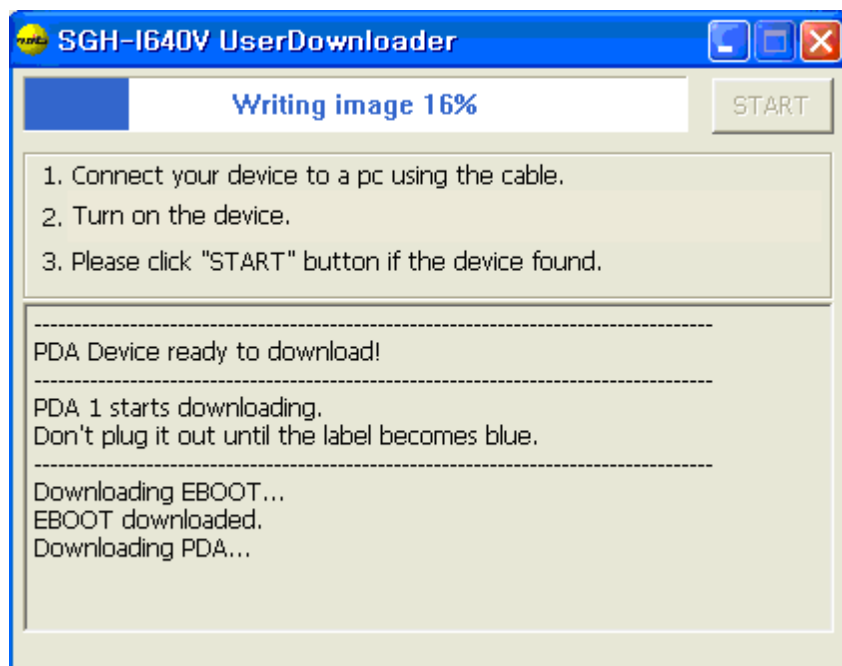


6. When the download is finished, the phone is rebooted automatically.

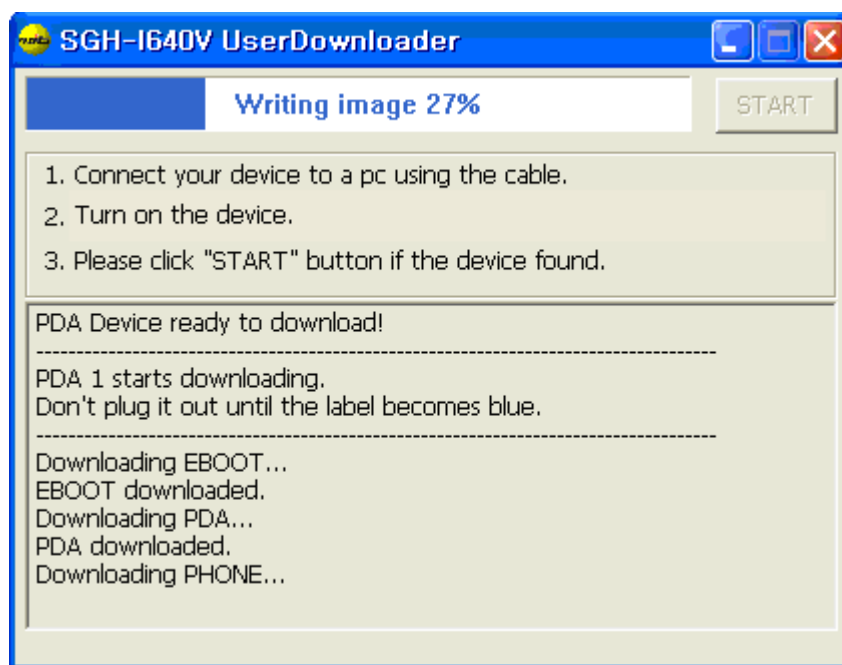
Download Procedure



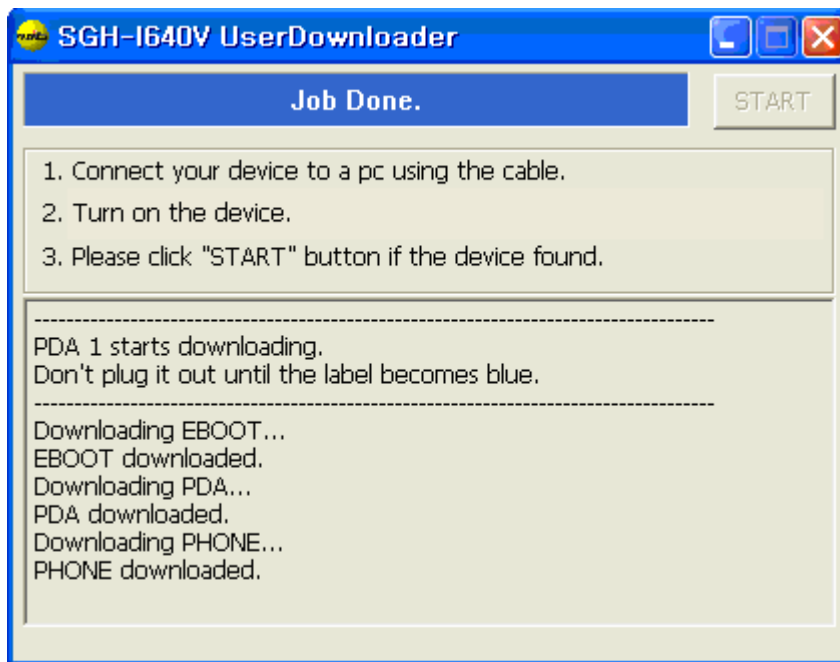
[Downloading EBOOT]



[Downloading PDA]

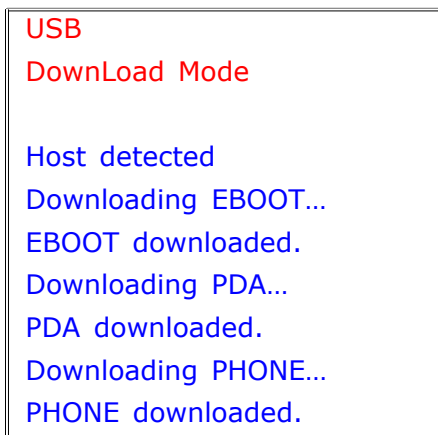


[Downloading Phone]



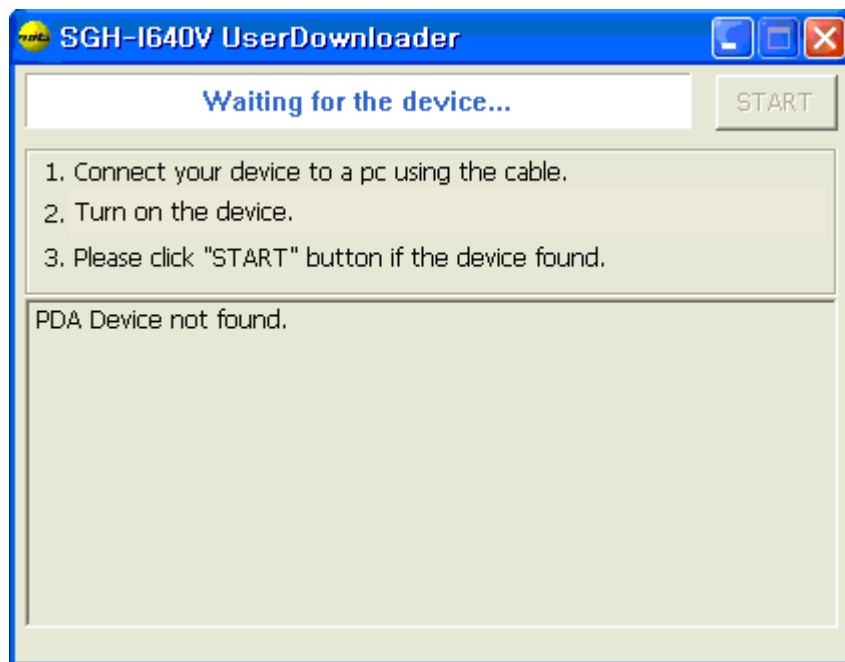
[Job Done]

The Display of your Device



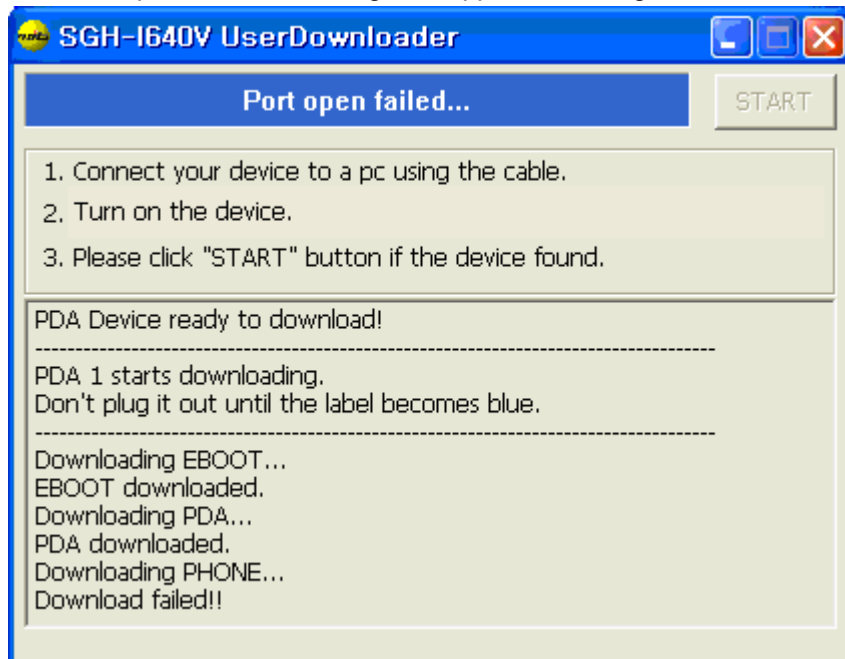
Trouble Shooting

1. "PDA Device not found" message



 **Make sure that your device is connected a host computer by USB DATA Link cable.**

2. "Port Open Failed" message or application hang



☞ After you install “phone USB driver (Samsung CDMA Modem)” at first time, you may see “Port open failed...” message or application hang while downloading a phone image. If so, terminate the application and then try the download again.

☞ If USB port is changed, at first time you may see “Port open failed...” message or application hang. If so, terminate the application and then try the download again.

☞ If USB cable to the mobile device is not connected tightly, you may see “Port open failed...” message or application hang. If so, terminate the application and then try the download again.

☞ If you **always** see “port open failed” message or application hang,

1. When application is activated, go to the device manager, remove the SAMSUNG CDMA Modem and SAMSUNG USB Composite Device.
2. Rename C:\WINDOWS\system32\drivers\Modem.sys to other name. (ex. Modem -.sys)
3. Go to control panel->program add/remove, and then remove Samsung CDMA Modem driver or Samsung USB driver(MCCI)
4. Restart your PC.
5. Install attached SAMSUNG CDMA Modem_4.34
6. Try the download again.

3. “Write Failed” message

☞ If **battery level is low**, use charged battery and try again.

4-2-3. Multi download (SGH_i640V_version.exe)

1. ActiveSync Setting

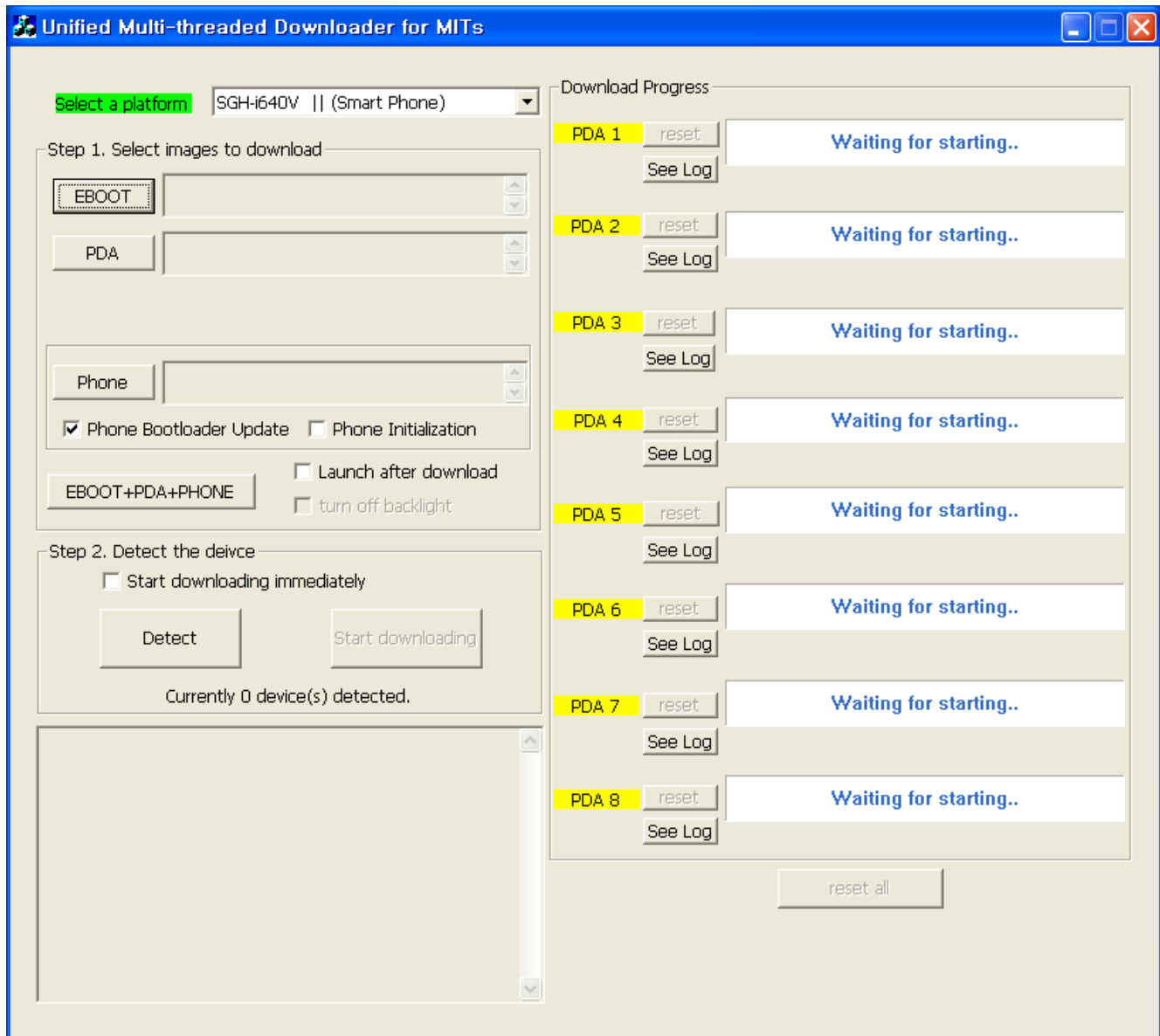


► Make sure that the ActiveSync program is unchecked before connecting your device to the host computer.

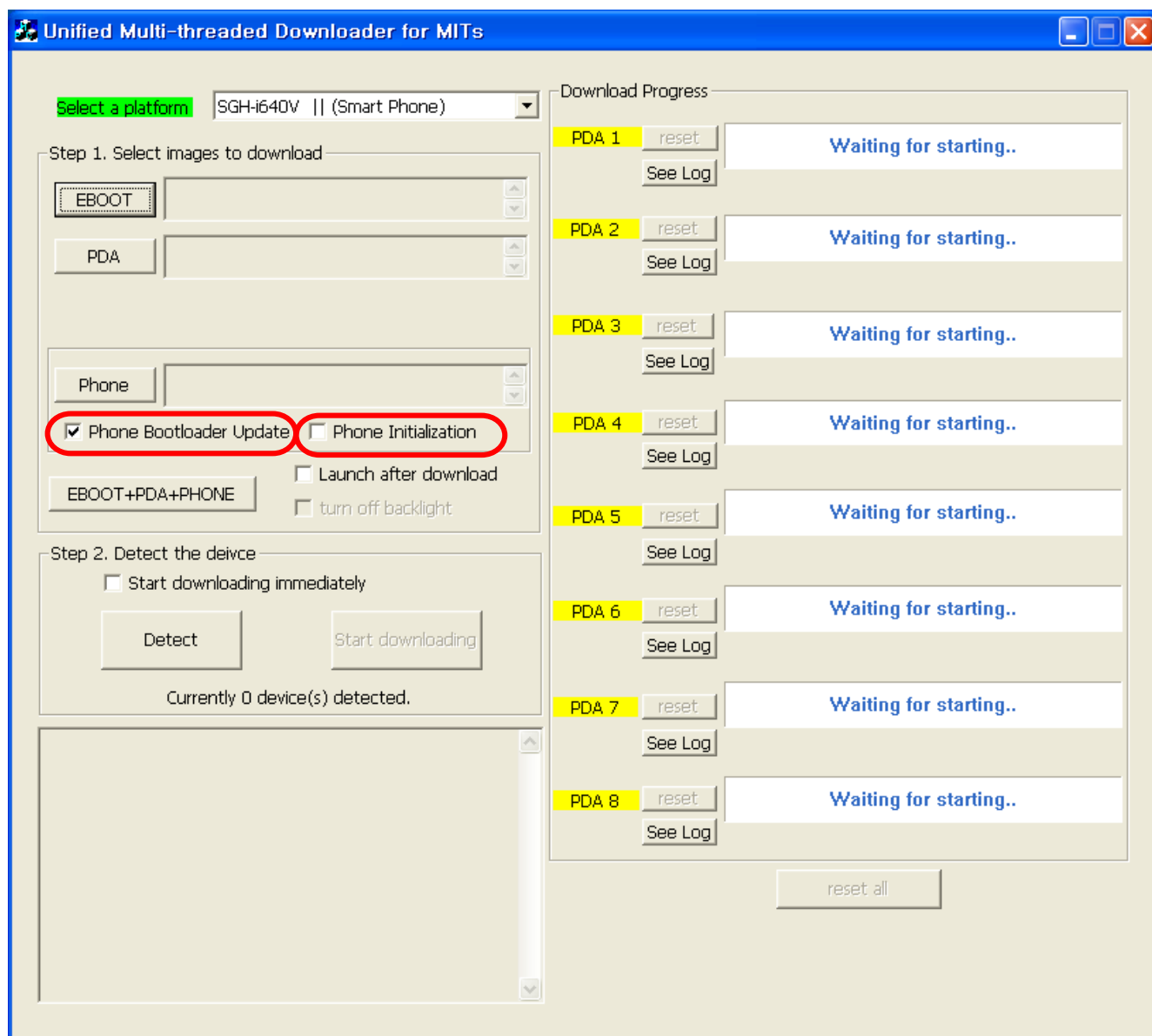
► If the ActiveSync is working in your Computer, Make sure that check box, Allow USB connection at the Connection Settings, is released. (Select [File – Connection Settings])

► Press 'OK' button to save a configuration

2. Execute the Downloader Program. [UMDL_i640V_version.exe]

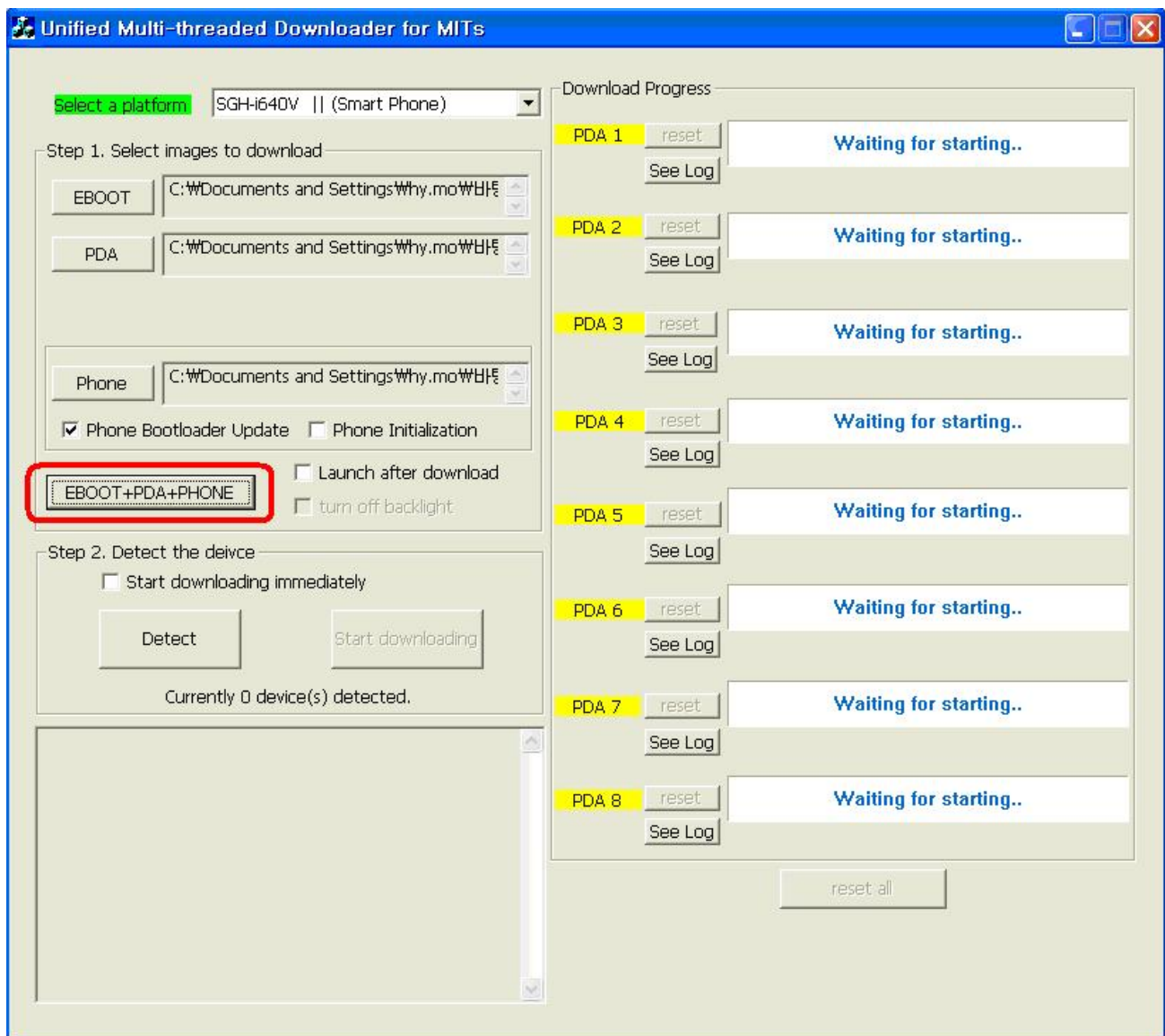


3. If you need to update phone bootloader, you should check the 'Phone Bootloader Update' checkbox. So does 'EFS Clear'.



%% If you check **Phone Initialization[EFS Clear]** , all data will be erased in NV region. So If you just want to download the image, you must not check EFS Clear box without direction.

4. Click the **EBOOT+PDA+PHONE** and then choose the .img file.

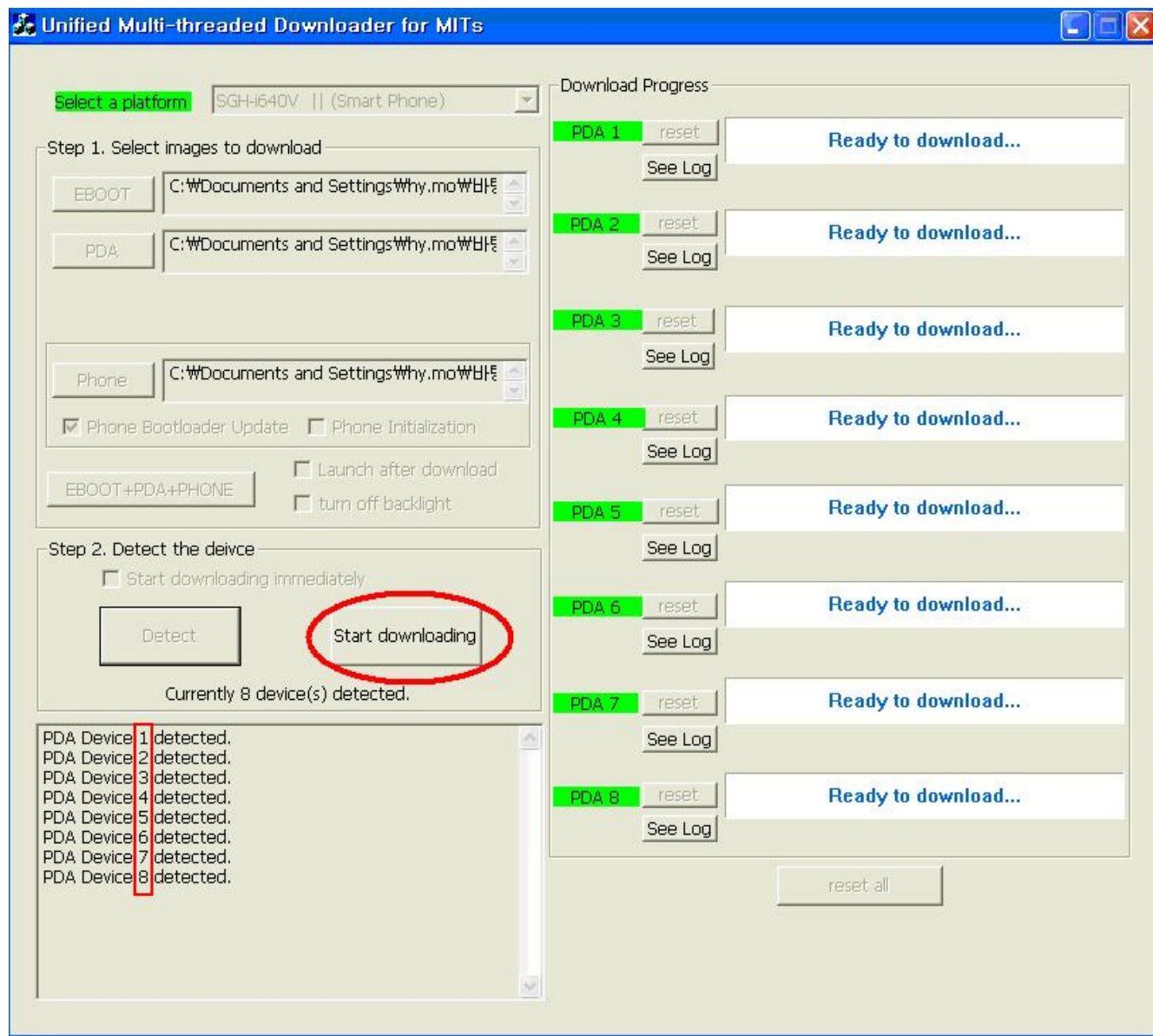


5. Turn off your devices.

6. Click “Detect” button

7. Connect your devices to a host computer by using USB Cable.

8. Turn on your device and wait until 'START downloading' button is activated.

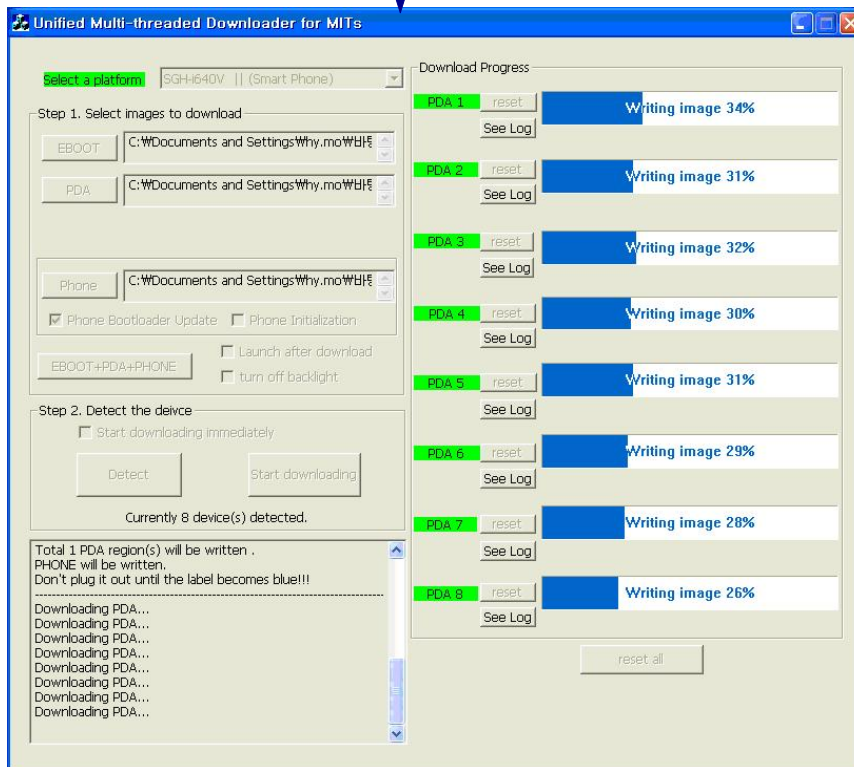
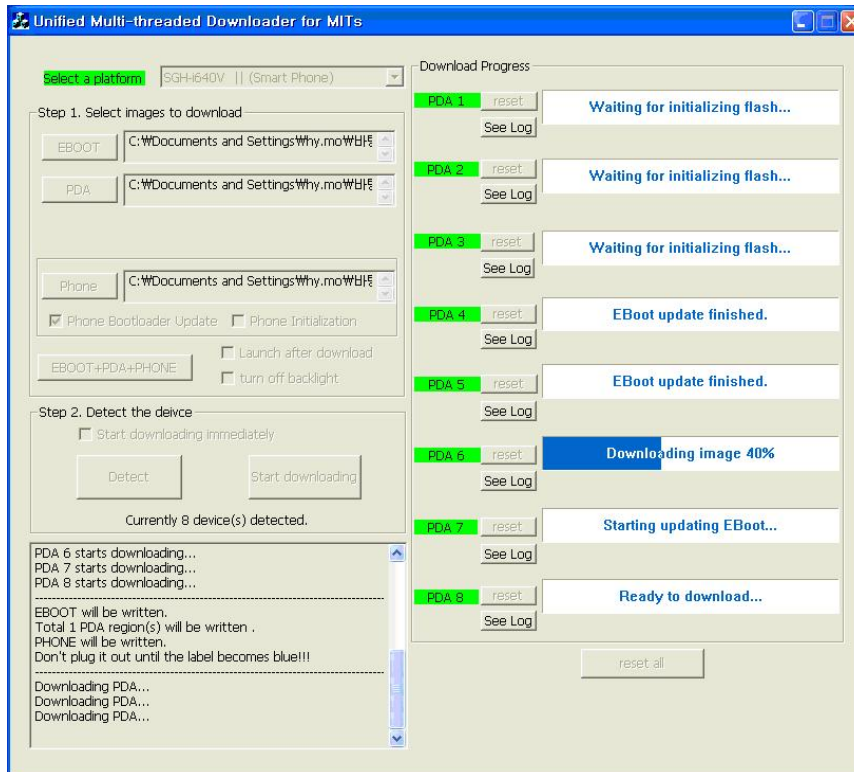


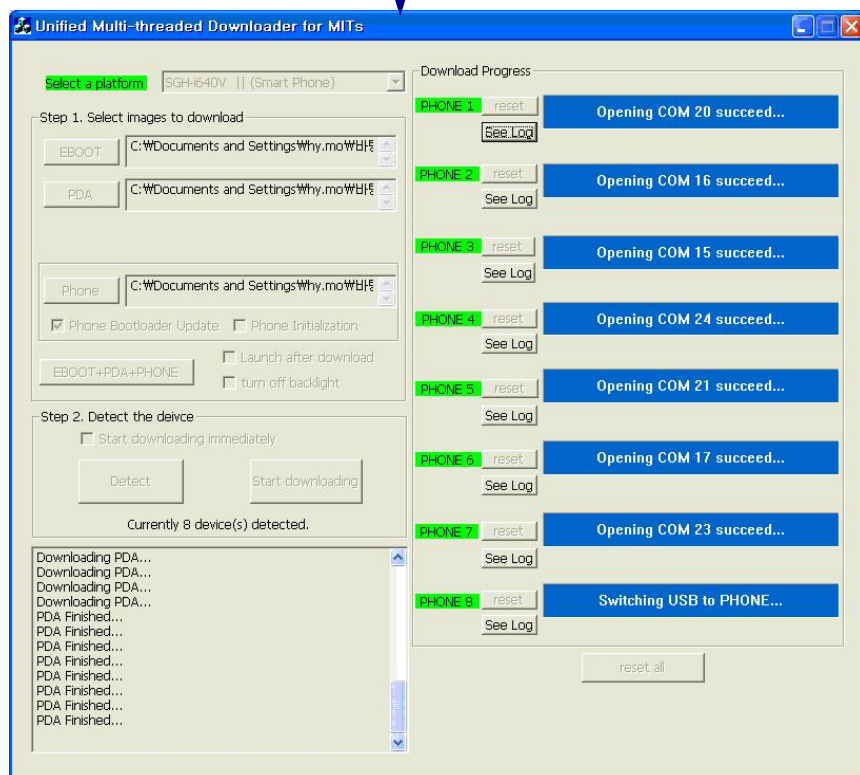
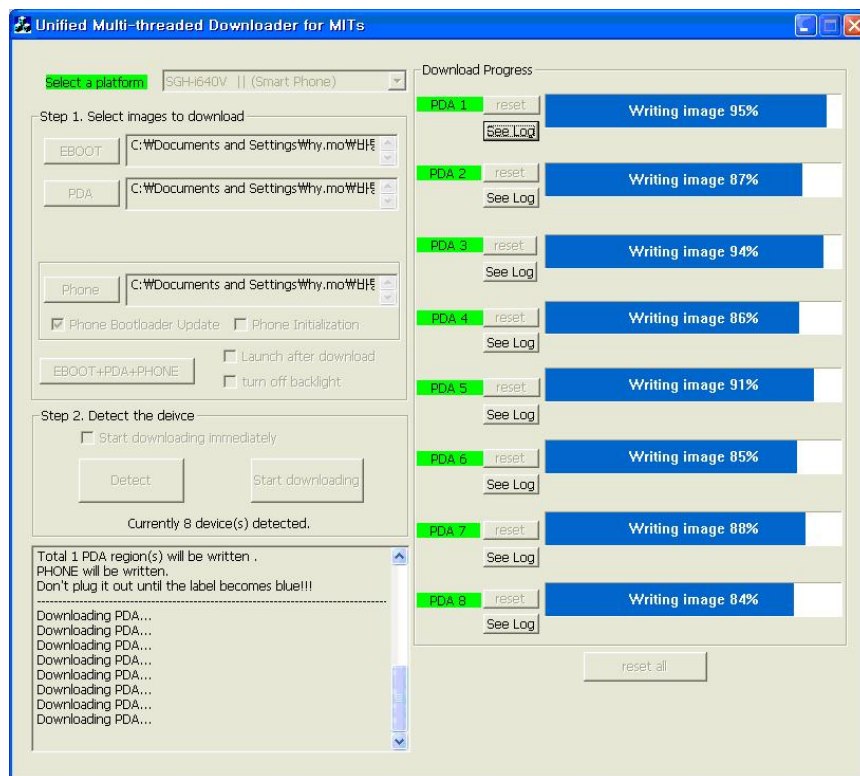
☞ If 'Start downloading' button is not activated, terminate the application and reconnect USB data link cable and retry.

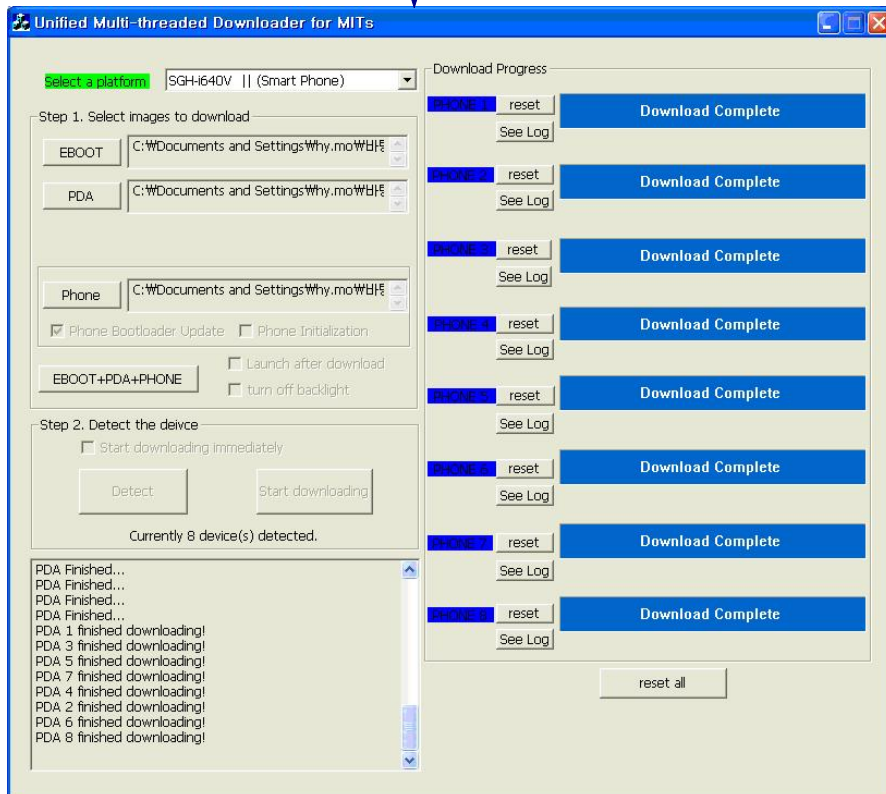
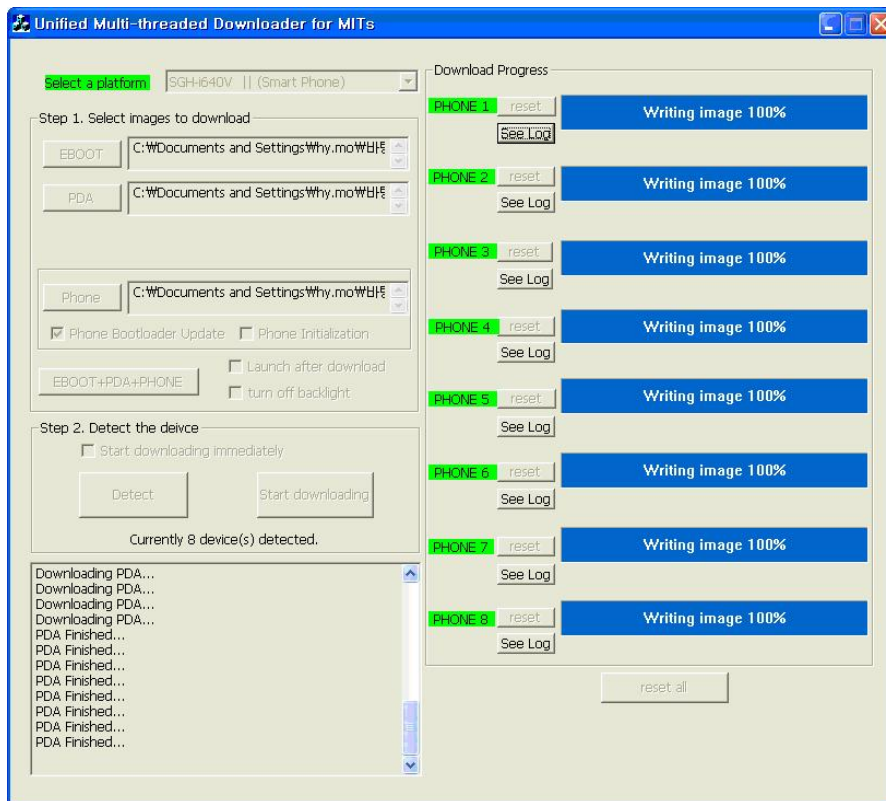
9. Please click "Start downloading" button.

10. When the download is finished, the phone is rebooted automatically.

Download Procedure







Trouble Shooting

1. "PDA Device not found" message

 **Make sure that check box, Allow USB connection at the Connection Settings, is released. (ActiveSync)**

2. "Port Open Failed" message or application hang

 **After you install "phone USB driver (Samsung CDMA Modem)" at first time, you may see "Port open failed..." message or application hang(Opening COM XX succeed. ..) while downloading a phone image. If so, terminate the application and then try the download again.**

 **If USB port is changed, at first time you may see "Port open failed..." message or application hang(Opening COM XX succeed...). If so, terminate the application and then try the download again.**

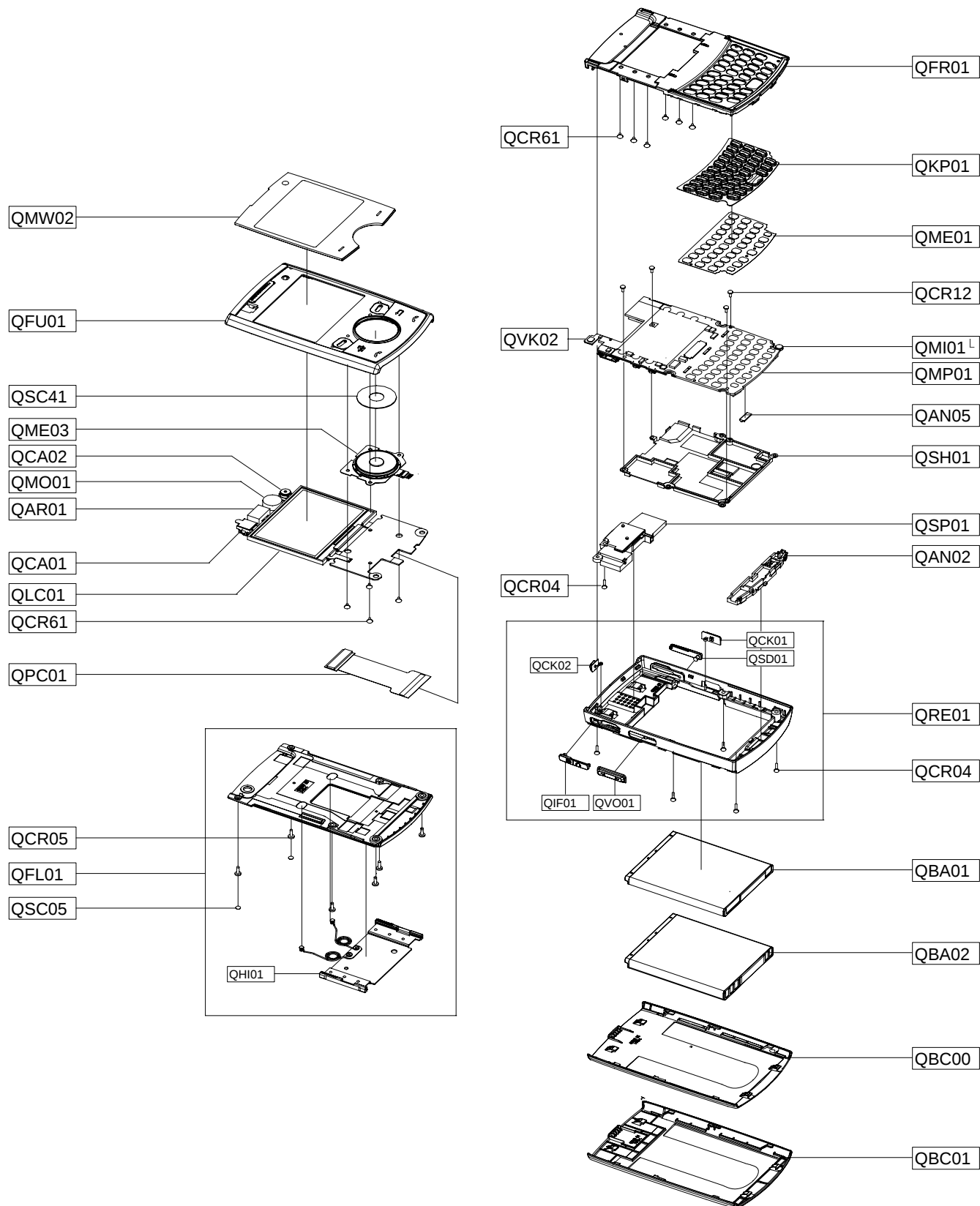
 **If USB cable to the mobile device is not connected tightly, you may see "Port open failed..." message or application hang(Opening COM XX succeed...). If so, terminate the application and then try the download again.**

3. "Write Failed" message

 **If battery level is low, use charged battery and try again.**

5. Exploded View and Parts List

5-1. Cellular phone Exploded View



5-2. Cellular phone Parts List

Design LOC	Description	SEC CODE
QAN02	INTENNA-SGH-I640	GH42-01316A
QAN05	ASSY RUBBER-INTENNA CONTACT 1	GH98-04736A
QAR01	AUDIO-RECEIVER	3009-001278
QBA01	INNER BATTERY PACK-1200MAH,BLK	GH43-02821A
QBA02	INNER BATTERY PACK-1500MAH,BLK	GH43-02888A
QBC00	ASSY COVER-BATTERY(STD/BLK)	GH98-06859B
QBC01	ASSY COVER-BATTERY(EXT/BLK)	GH98-06861B
QCA01	CAMERA MODULE-SGHI640,2M	GH59-05118A
QCA02	CAMERA MODULE-SGHI640,VGA	GH59-05119A
QCK01	PMO KEY-CAM	GH72-42666B
QCK02	PMO KEY-PWR	GH72-42668B
QCR04	SCREW-MACHINE	6001-001479
QCR04	SCREW-MACHINE	6001-001479
QCR05	SCREW-MACHINE	6001-001478
QCR12	SCREW-MACHINE	6001-001530
QCR61	SCREW-MACHINE	6001-002008
QFL01	ASSY CASE-LOWER	GH98-05437B
QFR01	ASSY CASE-FRONT	GH98-05435B
QFU01	ASSY CASE-UPPER	GH98-05436A
QHI01	ASSY HINGE-SLIDE	GH98-05439A
QIF01	PMO COVER-IF	GH72-42665B
QKP01	ASSY KEYPAD-(VD2/BLK)	GH98-06864B
QLC01	LCD-MODULE, SGHI640	GH07-01159A
QME01	DOME SHEET-METAL DOME ASSY	GH59-04717A
QME03	UNIT-WHEEL KEY,I640(GRY)	GH59-04715B
QMI01	MICROPHONE-ASSY-SGH I640	GH30-00401A
QMO01	MOTOR DC-SGH I640	GH31-00352A
QMP01	PBA MAIN-SGH I640	GH92-04011A
QMW02	PMO WINDOW-MAIN(VODA)	GH72-44429A
QPC01	MEA-SLIDE FPCB KIT	GH97-08264A
QRE01	ASSY CASE-REAR(VODA/BLK)	GH98-07042B
QSC05	TAPE-PC SHEET SCREW	GH74-35316B
QSC41	ASSY DECO-WHEEL	GH98-06397A
QSD01	PMO COVER-SD	GH72-42664B
QSH01	ASSY BRACKET-SHIELD CAN	GH98-06336A
QSP01	SPEAKER	3001-002216
QVK02	KEY FPCB-POWER KEY FPCB	GH59-04716A
QVO01	PMO KEY-VOL	GH72-42667B

Description	SEC CODE
CBF INTERFACE-DLC APCBS10BBE(S	GH39-00922A
ADAPTOR-ATADS10EBE,BLK,EU	GH44-01702A
CHARGER-ABCC768BBE,BTC,BLK,M	GH44-01796A
EARPHONE	GH59-04556A
RMO RUBBER-PCB1	GH73-11231A
RMO RUBBER-PCB2	GH73-11232A
RMO RUBBER-PCB3	GH73-11233A
RMO RUBBER-PCB4	GH73-11234A
RMO RUBBER-PCB5	GH73-11235A
TAPE-PCB GASKET	GH74-34971A
TAPE-KJ LED	GH74-34973A
TAPE INSU	GH74-35715A
ICT BRACKET-SUS GUIDE	GH70-02822A
TAPE-DECO WHEEL BOT	GH74-34972A
TAPE INSU-MAIN	GH74-34977A
TAPE-UPPER REFLECT3	GH74-35788A
TAPE INSU-CAMERA	GH74-36123A
TAPE-THERMAL PAD 2M CAM	GH74-36124A
TAPE INSU-SUB FPCB	GH74-34636A
TAPE INSU	GH74-35715A
TAPE-UPPER REFLECT2	GH74-36408A
TAPE INSU	GH74-36436A
TAPE-ESD CIR	GH74-36437A
VINYL-BOHO MAIN	GH74-36291A
SCREW-MACHINE	6001-002097
LABEL(R)-WATER SOAK	GH68-09361A
BAG PE	6902-000634
LABEL(R)-MAIN(VODA)	GH68-16362A
CUSHION-CASE(VODA)	GH69-06038A
BOX-UNIT(VODA BLK)	GH69-06037B
S/W CD-SGHI640V USER GUIDE CD	GH46-00541A
MANUAL USERS-VD2 GERMAN QSG	GH68-16349A
S/W CD-SGHI640V COMPANION CD	GH46-00506A
LABEL(R)-WATER SOAK	GH68-09361A

6. MAIN Electrical Parts List

SEC Code	Design LOC	Description	STATUS
0401-001144	D301	DIODE-SWITCHING	SA
0403-001547	D302	DIODE-ZENER	SA
0404-001089	ZD512	DIODE-SCHOTTKY	SA
0406-001197	ZD500	DIODE-TVS	SA
0406-001197	ZD501	DIODE-TVS	SA
0406-001197	ZD502	DIODE-TVS	SA
0406-001197	ZD503	DIODE-TVS	SA
0406-001197	ZD513	DIODE-TVS	SA
0406-001197	ZD514	DIODE-TVS	SA
0406-001197	ZD515	DIODE-TVS	SA
0406-001201	ZD401	DIODE-TVS	SA
0406-001201	ZD402	DIODE-TVS	SA
0406-001201	ZD507	DIODE-TVS	SA
0406-001201	ZD511	DIODE-TVS	SA
0406-001231	D506	DIODE-TVS	SA
0406-001231	D600	DIODE-TVS	SA
0406-001231	D601	DIODE-TVS	SA
0406-001231	D602	DIODE-TVS	SA
0406-001231	D603	DIODE-TVS	SA
0406-001231	D604	DIODE-TVS	SA
0406-001231	D605	DIODE-TVS	SA
0406-001231	D606	DIODE-TVS	SA
0406-001231	ZD406	DIODE-TVS	SA
0406-001231	ZD407	DIODE-TVS	SA
0406-001231	ZD504	DIODE-TVS	SA
0406-001231	ZD505	DIODE-TVS	SA
0406-001231	ZD506	DIODE-TVS	SA
0407-001002	D400	DIODE-ARRAY	SA
0504-001088	TR304	TR-DIGITAL	SA
0504-001171	TR300	TR-DIGITAL	SA
0504-001171	TR303	TR-DIGITAL	SA
0505-001165	TR302	FET-SILICON	SA
0601-002268	LED1	LED	SA
0601-002268	LED2	LED	SA
0601-002268	LED3	LED	SA
0801-002237	U803	IC-CMOS LOGIC	SA
0801-002294	U304	IC-CMOS LOGIC	SA
0801-002529	U805	IC-CMOS LOGIC	SA
0801-002970	U702	IC-CMOS LOGIC	SA
0801-003016	U202	IC-CMOS LOGIC	SA
0801-003031	U801	IC-CMOS LOGIC	SA
0801-003052	U804	IC-CMOS LOGIC	SA
0801-003065	U307	IC-CMOS LOGIC	SA
0801-003136	U501	IC-CMOS LOGIC	SA
0902-002262	UCP700	IC-MICROPROCESSOR	SA
1001-001351	CN1	IC-ANALOG MULTIPLEX	SA
1001-001358	U400	IC-ANALOG MULTIPLEX	SA
1001-001358	U402	IC-ANALOG MULTIPLEX	SA
1001-001358	U603	IC-ANALOG MULTIPLEX	SA
1002-001410	U600	IC-D/A CONVERTER	SA
1009-001023	U601	IC-HALL EFFECT S/W	SA
1106-001511	UME800	IC-SRAM	SA
1108-000127	UME200	IC-MCP	SA

SEC Code	Design LOC	Description	STATUS
1108-000143	UME801	IC-MCP	SA
1201-002195	U401	IC-AUDIO AMP	SA
1201-002446	PAM100	IC-POWER AMP	SA
1201-002531	PAM101	IC-POWER AMP	SA
1201-002587	U403	IC-AUDIO AMP	SA
1203-002716	U305	IC-VOL. DETECTOR	SA
1203-002789	U700	IC-VOL. DETECTOR	SA
1203-003500	U303	IC-DC/DC CONVERTER	SA
1203-003664	U404	IC-MULTI REG.	SA
1203-004448	U809	IC-MULTI REG.	SA
1203-004835	U102	IC-POS.FIXED REG.	SA
1203-004835	U306	IC-POS.FIXED REG.	SA
1203-004835	U502	IC-POS.FIXED REG.	SA
1203-004838	U302	IC-BATTERY	SA
1203-004926	U301	IC-POWER SUPERVISOR	SA
1205-002720	UCD401	IC-CODEC	SA
1205-002767	U300	IC-SWITCH	SA
1205-002920	U103	IC-DATA COMM./GEN.	SA
1205-003215	UCP200	IC-MODEM	SA
1205-003285	U101	IC-TRANSCIEVER	SA
1404-001221	TH402	THERMISTOR-NTC	SA
1405-001082	V1	VARISTOR	SA
2007-000137	R205	R-CHIP	SA
2007-000138	R139	R-CHIP	SA
2007-000138	R140	R-CHIP	SA
2007-000138	R233	R-CHIP	SA
2007-000140	R506	R-CHIP	SA
2007-000140	R507	R-CHIP	SA
2007-000140	R508	R-CHIP	SA
2007-000141	R119	R-CHIP	SA
2007-000148	R200	R-CHIP	SA
2007-000148	R201	R-CHIP	SA
2007-000148	R210	R-CHIP	SA
2007-000148	R212	R-CHIP	SA
2007-000148	R235	R-CHIP	SA
2007-000148	R352	R-CHIP	SA
2007-000148	R525	R-CHIP	SA
2007-000148	R706	R-CHIP	SA
2007-000151	R527	R-CHIP	SA
2007-000153	R526	R-CHIP	SA
2007-000157	R306	R-CHIP	SA
2007-000162	R228	R-CHIP	SA
2007-000162	R229	R-CHIP	SA
2007-000162	R308	R-CHIP	SA
2007-000162	R309	R-CHIP	SA
2007-000162	R344	R-CHIP	SA
2007-000162	R347	R-CHIP	SA
2007-000162	R406	R-CHIP	SA
2007-000162	R407	R-CHIP	SA
2007-000162	R500	R-CHIP	SA
2007-000162	R502	R-CHIP	SA
2007-000162	R512	R-CHIP	SA
2007-000162	R513	R-CHIP	SA

SEC Code	Design LOC	Description	STATUS
2007-000162	R514	R-CHIP	SA
2007-000162	R516	R-CHIP	SA
2007-000162	R517	R-CHIP	SA
2007-000162	R518	R-CHIP	SA
2007-000162	R519	R-CHIP	SA
2007-000162	R523	R-CHIP	SA
2007-000162	R531	R-CHIP	SA
2007-000162	R603	R-CHIP	SA
2007-000162	R705	R-CHIP	SA
2007-000162	R801	R-CHIP	SA
2007-000162	R802	R-CHIP	SA
2007-000162	R803	R-CHIP	SA
2007-000162	R804	R-CHIP	SA
2007-000162	R805	R-CHIP	SA
2007-000162	R806	R-CHIP	SA
2007-000164	R501	R-CHIP	SA
2007-000165	R323	R-CHIP	SA
2007-000165	R809	R-CHIP	SA
2007-000168	R808	R-CHIP	SA
2007-000170	R325	R-CHIP	SA
2007-000170	R346	R-CHIP	SA
2007-000170	R353	R-CHIP	SA
2007-000170	R700	R-CHIP	SA
2007-000170	R704	R-CHIP	SA
2007-000171	R101	R-CHIP	SA
2007-000171	R102	R-CHIP	SA
2007-000171	R103	R-CHIP	SA
2007-000171	R104	R-CHIP	SA
2007-000171	R106	R-CHIP	SA
2007-000171	R109	R-CHIP	SA
2007-000171	R115	R-CHIP	SA
2007-000171	R116	R-CHIP	SA
2007-000171	R118	R-CHIP	SA
2007-000171	R206	R-CHIP	SA
2007-000171	R218	R-CHIP	SA
2007-000171	R231	R-CHIP	SA
2007-000171	R343	R-CHIP	SA
2007-000171	R354	R-CHIP	SA
2007-000171	R401	R-CHIP	SA
2007-000171	R402	R-CHIP	SA
2007-000171	R415	R-CHIP	SA
2007-000171	R416	R-CHIP	SA
2007-000171	R418	R-CHIP	SA
2007-000171	R504	R-CHIP	SA
2007-000171	R505	R-CHIP	SA
2007-000171	R509	R-CHIP	SA
2007-000171	R510	R-CHIP	SA
2007-000171	R511	R-CHIP	SA
2007-000171	R609	R-CHIP	SA
2007-000242	R608	R-CHIP	SA
2007-001119	R128	R-CHIP	SA
2007-001119	R318	R-CHIP	SA
2007-001290	R219	R-CHIP	SA

SEC Code	Design LOC	Description	STATUS
2007-001291	R532	R-CHIP	SA
2007-001291	R533	R-CHIP	SA
2007-001298	R124	R-CHIP	SA
2007-001298	R136	R-CHIP	SA
2007-001298	R314	R-CHIP	SA
2007-001301	R600	R-CHIP	SA
2007-001305	R111	R-CHIP	SA
2007-001305	R112	R-CHIP	SA
2007-001305	R125	R-CHIP	SA
2007-001305	R126	R-CHIP	SA
2007-001305	R409	R-CHIP	SA
2007-001325	R317	R-CHIP	SA
2007-001339	R607	R-CHIP	SA
2007-002970	R408	R-CHIP	SA
2007-003010	R807	R-CHIP	SA
2007-003014	R329	R-CHIP	SA
2007-003014	R340	R-CHIP	SA
2007-003014	R345	R-CHIP	SA
2007-003015	R141	R-CHIP	SA
2007-007009	R138	R-CHIP	SA
2007-007014	R321	R-CHIP	SA
2007-007014	R322	R-CHIP	SA
2007-007014	R520	R-CHIP	SA
2007-007014	R521	R-CHIP	SA
2007-007014	R522	R-CHIP	SA
2007-007014	R524	R-CHIP	SA
2007-007092	R702	R-CHIP	SA
2007-007092	R703	R-CHIP	SA
2007-007107	R337	R-CHIP	SA
2007-007107	R602	R-CHIP	SA
2007-007107	R605	R-CHIP	SA
2007-007107	R606	R-CHIP	SA
2007-007132	R411	R-CHIP	SA
2007-007132	R414	R-CHIP	SA
2007-007137	R403	R-CHIP	SA
2007-007137	R410	R-CHIP	SA
2007-007139	R143	R-CHIP	SA
2007-007142	R300	R-CHIP	SA
2007-007193	R114	R-CHIP	SA
2007-007193	R127	R-CHIP	SA
2007-007306	R131	R-CHIP	SA
2007-007306	R145	R-CHIP	SA
2007-007309	R117	R-CHIP	SA
2007-007312	R412	R-CHIP	SA
2007-007312	R413	R-CHIP	SA
2007-007315	R307	R-CHIP	SA
2007-007316	R222	R-CHIP	SA
2007-007318	R400	R-CHIP	SA
2007-007318	R405	R-CHIP	SA
2007-007468	R316	R-CHIP	SA
2007-007468	R601	R-CHIP	SA
2007-007480	R327	R-CHIP	SA
2007-007588	R319	R-CHIP	SA

SEC Code	Design LOC	Description	STATUS
2007-007798	R129	R-CHIP	SA
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2007-007798	R529	R-CHIP	SA
2007-007798	R530	R-CHIP	SA
2007-007981	R503	R-CHIP	SA
2007-008300	R330	R-CHIP	SA
2007-008300	R339	R-CHIP	SA
2007-008542	R120	R-CHIP	SA
2007-008542	R121	R-CHIP	SA
2007-008542	R122	R-CHIP	SA
2007-008542	R123	R-CHIP	SA
2007-008672	R107	R-CHIP	SA
2203-000138	C337	C-CER,CHIP	SA
2203-000138	C447	C-CER,CHIP	SA
2203-000138	C448	C-CER,CHIP	SA
2203-000233	C119	C-CER,CHIP	SA
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2203-000233	C154	C-CER,CHIP	SA
2203-000233	C160	C-CER,CHIP	SA
2203-000233	C166	C-CER,CHIP	SA
2203-000233	C179	C-CER,CHIP	SA
2203-000233	C195	C-CER,CHIP	SA
2203-000233	C303	C-CER,CHIP	SA
2203-000233	C314	C-CER,CHIP	SA
2203-000233	C349	C-CER,CHIP	SA
2203-000254	C163	C-CER,CHIP	SA
2203-000254	C183	C-CER,CHIP	SA
2203-000254	C184	C-CER,CHIP	SA
2203-000254	C188	C-CER,CHIP	SA
2203-000254	C192	C-CER,CHIP	SA
2203-000254	C207	C-CER,CHIP	SA
2203-000254	C210	C-CER,CHIP	SA
2203-000254	C220	C-CER,CHIP	SA
2203-000254	C221	C-CER,CHIP	SA
2203-000254	C232	C-CER,CHIP	SA
2203-000254	C233	C-CER,CHIP	SA
2203-000254	C238	C-CER,CHIP	SA
2203-000254	C243	C-CER,CHIP	SA
2203-000254	C339	C-CER,CHIP	SA
2203-000254	C403	C-CER,CHIP	SA
2203-000254	C408	C-CER,CHIP	SA
2203-000254	C424	C-CER,CHIP	SA
2203-000278	C189	C-CER,CHIP	SA
2203-000278	C401	C-CER,CHIP	SA
2203-000278	C407	C-CER,CHIP	SA
2203-000330	C116	C-CER,CHIP	SA
2203-000330	C304	C-CER,CHIP	SA
2203-000386	C171	C-CER,CHIP	SA
2203-000386	C185	C-CER,CHIP	SA
2203-000386	C305	C-CER,CHIP	SA
2203-000438	C115	C-CER,CHIP	SA
2203-000438	C118	C-CER,CHIP	SA

SEC Code	Design LOC	Description	STATUS
2203-000438	C158	C-CER,CHIP	SA
2203-000438	C162	C-CER,CHIP	SA
2203-000438	C175	C-CER,CHIP	SA
2203-000438	C193	C-CER,CHIP	SA
2203-000438	C198	C-CER,CHIP	SA
2203-000438	C209	C-CER,CHIP	SA
2203-000438	U807	C-CER,CHIP	SA
2203-000489	C202	C-CER,CHIP	SA
2203-000627	C111	C-CER,CHIP	SNA
2203-000627	C114	C-CER,CHIP	SNA
2203-000627	C141	C-CER,CHIP	SNA
2203-000627	C147	C-CER,CHIP	SNA
2203-000627	C157	C-CER,CHIP	SNA
2203-000627	C159	C-CER,CHIP	SNA
2203-000627	C164	C-CER,CHIP	SNA
2203-000627	C180	C-CER,CHIP	SNA
2203-000627	C181	C-CER,CHIP	SNA
2203-000654	C329	C-CER,CHIP	SA
2203-000714	C133	C-CER,CHIP	SA
2203-000812	C104	C-CER,CHIP	SA
2203-000812	C109	C-CER,CHIP	SA
2203-000812	C127	C-CER,CHIP	SA
2203-000812	C131	C-CER,CHIP	SA
2203-000812	C132	C-CER,CHIP	SA
2203-000812	C197	C-CER,CHIP	SA
2203-000812	C199	C-CER,CHIP	SA
2203-000812	C450	C-CER,CHIP	SA
2203-000812	C452	C-CER,CHIP	SA
2203-000812	C461	C-CER,CHIP	SA
2203-000812	C502	C-CER,CHIP	SA
2203-000812	C506	C-CER,CHIP	SA
2203-000812	C519	C-CER,CHIP	SA
2203-000812	U808	C-CER,CHIP	SA
2203-000854	C139	C-CER,CHIP	SA
2203-000854	C212	C-CER,CHIP	SA
2203-000854	C413	C-CER,CHIP	SA
2203-000854	C417	C-CER,CHIP	SA
2203-000854	C418	C-CER,CHIP	SA
2203-000854	C423	C-CER,CHIP	SA
2203-000854	C436	C-CER,CHIP	SA
2203-000854	C508	C-CER,CHIP	SA
2203-000870	C148	C-CER,CHIP	SA
2203-000870	C153	C-CER,CHIP	SA
2203-000995	C117	C-CER,CHIP	SA
2203-000995	C125	C-CER,CHIP	SA
2203-000995	C135	C-CER,CHIP	SA
2203-000995	C149	C-CER,CHIP	SA
2203-000995	C150	C-CER,CHIP	SA
2203-000995	C246	C-CER,CHIP	SA
2203-000995	C439	C-CER,CHIP	SA
2203-000995	C441	C-CER,CHIP	SA
2203-001072	C138	C-CER,CHIP	SA
2203-001072	C152	C-CER,CHIP	SA

SEC Code	Design LOC	Description	STATUS
2203-001259	C449	C-CER,CHIP	SA
2203-001259	C451	C-CER,CHIP	SA
2203-001259	C460	C-CER,CHIP	SA
2203-001437	C124	C-CER,CHIP	SA
2203-002443	C332	C-CER,CHIP	SA
2203-002443	C334	C-CER,CHIP	SA
2203-002668	C126	C-CER,CHIP	SA
2203-002668	C134	C-CER,CHIP	SA
2203-002677	C176	C-CER,CHIP	SA
2203-003054	C191	C-CER,CHIP	SA
2203-005052	C186	C-CER,CHIP	SA
2203-005052	C194	C-CER,CHIP	SA
2203-005382	C122	C-CER,CHIP	SA
2203-005382	C123	C-CER,CHIP	SA
2203-005383	C174	C-CER,CHIP	SA
2203-005383	L128	C-CER,CHIP	SA
2203-005383	R417	C-CER,CHIP	SA
2203-005390	C728	C-CER,CHIP	SA
2203-005393	C727	C-CER,CHIP	SA
2203-005480	C203	C-CER,CHIP	SA
2203-005482	C216	C-CER,CHIP	SA
2203-005482	C218	C-CER,CHIP	SA
2203-005482	C245	C-CER,CHIP	SA
2203-005482	C247	C-CER,CHIP	SA
2203-005482	C302	C-CER,CHIP	SA
2203-005482	C338	C-CER,CHIP	SA
2203-005482	C410	C-CER,CHIP	SA
2203-005482	C412	C-CER,CHIP	SA
2203-005482	C426	C-CER,CHIP	SA
2203-005482	C431	C-CER,CHIP	SA
2203-005482	C434	C-CER,CHIP	SA
2203-005482	C607	C-CER,CHIP	SA
2203-005482	C609	C-CER,CHIP	SA
2203-005482	C610	C-CER,CHIP	SA
2203-005482	C615	C-CER,CHIP	SA
2203-005482	C617	C-CER,CHIP	SA
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2203-005482	C702	C-CER,CHIP	SA
2203-005482	C703	C-CER,CHIP	SA
2203-005482	C704	C-CER,CHIP	SA
2203-005482	C708	C-CER,CHIP	SA
2203-005482	C709	C-CER,CHIP	SA
2203-005482	C710	C-CER,CHIP	SA
2203-005482	C712	C-CER,CHIP	SA
2203-005482	C717	C-CER,CHIP	SA
2203-005482	C719	C-CER,CHIP	SA
2203-005482	C722	C-CER,CHIP	SA
2203-005482	C802	C-CER,CHIP	SA
2203-005482	C803	C-CER,CHIP	SA
2203-005482	C806	C-CER,CHIP	SA
2203-005482	C810	C-CER,CHIP	SA
2203-005482	C812	C-CER,CHIP	SA
2203-005659	C100	C-CER,CHIP	SA

SEC Code	Design LOC	Description	STATUS
2203-005659	C101	C-CER,CHIP	SA
2203-005659	C102	C-CER,CHIP	SA
2203-005659	C103	C-CER,CHIP	SA
2203-006048	C107	C-CER,CHIP	SA
2203-006048	C110	C-CER,CHIP	SA
2203-006048	C129	C-CER,CHIP	SA
2203-006048	C130	C-CER,CHIP	SA
2203-006048	C155	C-CER,CHIP	SA
2203-006048	C156	C-CER,CHIP	SA
2203-006048	C165	C-CER,CHIP	SA
2203-006048	C182	C-CER,CHIP	SA
2203-006048	C187	C-CER,CHIP	SA
2203-006048	C196	C-CER,CHIP	SA
2203-006048	C211	C-CER,CHIP	SA
2203-006048	C213	C-CER,CHIP	SA
2203-006048	C215	C-CER,CHIP	SA
2203-006048	C222	C-CER,CHIP	SA
2203-006048	C223	C-CER,CHIP	SA
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2203-006048	C231	C-CER,CHIP	SA
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2203-006048	C421	C-CER,CHIP	SA
2203-006048	C500	C-CER,CHIP	SA
2203-006048	C600	C-CER,CHIP	SA
2203-006048	C724	C-CER,CHIP	SA
2203-006048	C725	C-CER,CHIP	SA
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2203-006048	C731	C-CER,CHIP	SA
2203-006048	C800	C-CER,CHIP	SA
2203-006048	C801	C-CER,CHIP	SA
2203-006048	C814	C-CER,CHIP	SA
2203-006048	C815	C-CER,CHIP	SA
2203-006048	C816	C-CER,CHIP	SA
2203-006260	C503	C-CER,CHIP	SA
2203-006324	C316	C-CER,CHIP	SA
2203-006324	C325	C-CER,CHIP	SA
2203-006324	C326	C-CER,CHIP	SA
2203-006348	C320	C-CER,CHIP	SA
2203-006361	C336	C-CER,CHIP	SA
2203-006377	C501	C-CER,CHIP	SA

SEC Code	Design LOC	Description	STATUS
2203-006474	C317	C-CER,CHIP	SA
2203-006474	C333	C-CER,CHIP	SA
2203-006474	C335	C-CER,CHIP	SA
2203-006474	C340	C-CER,CHIP	SA
2203-006562	C161	C-CER,CHIP	SA
2203-006562	C168	C-CER,CHIP	SA
2203-006562	C206	C-CER,CHIP	SA
2203-006562	C208	C-CER,CHIP	SA
2203-006562	C217	C-CER,CHIP	SA
2203-006562	C224	C-CER,CHIP	SA
2203-006562	C228	C-CER,CHIP	SA
2203-006562	C236	C-CER,CHIP	SA
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2203-006562	C530	C-CER,CHIP	SA
2203-006562	C531	C-CER,CHIP	SA
2203-006562	C601	C-CER,CHIP	SA
2203-006562	C611	C-CER,CHIP	SA
2203-006562	C705	C-CER,CHIP	SA
2203-006562	C706	C-CER,CHIP	SA
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2203-006562	C715	C-CER,CHIP	SA
2203-006562	C716	C-CER,CHIP	SA
2203-006562	C720	C-CER,CHIP	SA
2203-006562	C723	C-CER,CHIP	SA
2203-006562	C804	C-CER,CHIP	SA
2203-006562	C805	C-CER,CHIP	SA
2203-006562	C809	C-CER,CHIP	SA
2203-006562	C811	C-CER,CHIP	SA
2203-006562	C813	C-CER,CHIP	SA
2203-006562	C817	C-CER,CHIP	SA
2203-006562	C818	C-CER,CHIP	SA
2203-006626	C429	C-CER,CHIP	SA

SEC Code	Design LOC	Description	STATUS
2203-006626	C520	C-CER,CHIP	SA
2203-006824	C128	C-CER,CHIP	SA
2203-006824	C219	C-CER,CHIP	SA
2203-006824	C301	C-CER,CHIP	SA
2203-006824	C309	C-CER,CHIP	SA
2203-006824	C310	C-CER,CHIP	SA
2203-006824	C313	C-CER,CHIP	SA
2203-006824	C315	C-CER,CHIP	SA
2203-006824	C323	C-CER,CHIP	SA
2203-006824	C324	C-CER,CHIP	SA
2203-006824	C341	C-CER,CHIP	SA
2203-006824	C347	C-CER,CHIP	SA
2203-006824	C357	C-CER,CHIP	SA
2203-006824	C402	C-CER,CHIP	SA
2203-006824	C425	C-CER,CHIP	SA
2203-006824	C430	C-CER,CHIP	SA
2203-006824	C445	C-CER,CHIP	SA
2203-006824	C446	C-CER,CHIP	SA
2203-006825	C237	C-CER,CHIP	SA
2203-006838	C113	C-CER,CHIP	SA
2203-006838	C145	C-CER,CHIP	SA
2203-006838	C172	C-CER,CHIP	SA
2203-006838	C300	C-CER,CHIP	SA
2203-006838	C311	C-CER,CHIP	SA
2203-006838	C454	C-CER,CHIP	SA
2203-006838	C455	C-CER,CHIP	SA
2203-006872	C225	C-CER,CHIP	SA
2203-006890	C443	C-CER,CHIP	SA
2203-006890	C444	C-CER,CHIP	SA
2404-001268	C167	C-TA,CHIP	SA
2404-001268	C331	C-TA,CHIP	SA
2404-001268	TA400	C-TA,CHIP	SA
2404-001268	TA401	C-TA,CHIP	SA
2404-001268	TA404	C-TA,CHIP	SA
2404-001268	TA409	C-TA,CHIP	SA
2404-001281	TA407	C-TA,CHIP	SA
2404-001281	TA408	C-TA,CHIP	SA
2404-001352	TA300	C-TA,CHIP	SA
2404-001381	TA304	C-TA,CHIP	SA
2404-001381	TA502	C-TA,CHIP	SA
2404-001406	C121	C-TA,CHIP	SA
2404-001406	TA303	C-TA,CHIP	SA
2404-001406	TA600	C-TA,CHIP	SA
2404-001411	TA406	C-TA,CHIP	SA
2404-001474	TA402	C-TA,CHIP	SA
2404-001474	TA405	C-TA,CHIP	SA
2404-001474	TA505	C-TA,CHIP	SA
2703-000345	L304	INDUCTOR-SMD	SA
2703-001723	L402	INDUCTOR-SMD	SA
2703-001723	L403	INDUCTOR-SMD	SA
2703-002199	L115	INDUCTOR-SMD	SA
2703-002200	C105	INDUCTOR-SMD	SA
2703-002201	L100	INDUCTOR-SMD	SA

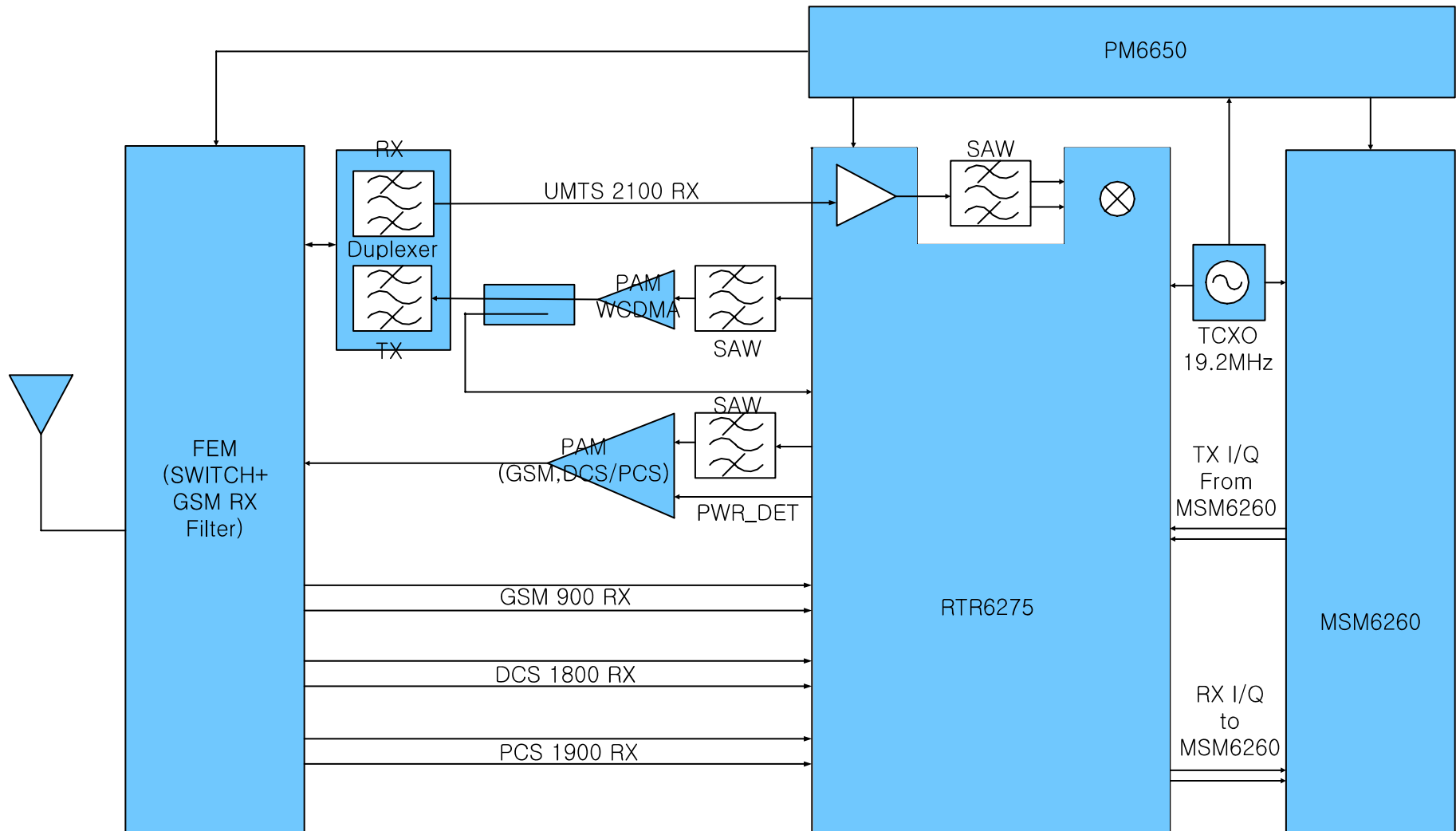
SEC Code	Design LOC	Description	STATUS
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2703-002202	L108	INDUCTOR-SMD	SA
2703-002202	L112	INDUCTOR-SMD	SA
2703-002203	L101	INDUCTOR-SMD	SA
2703-002204	L124	INDUCTOR-SMD	SA
2703-002206	L103	INDUCTOR-SMD	SA
2703-002206	L111	INDUCTOR-SMD	SA
2703-002208	R100	INDUCTOR-SMD	SA
2703-002281	L102	INDUCTOR-SMD	SA
2703-002281	L104	INDUCTOR-SMD	SA
2703-002281	L105	INDUCTOR-SMD	SA
2703-002281	L107	INDUCTOR-SMD	SA
2703-002367	L113	INDUCTOR-SMD	SA
2703-002367	L114	INDUCTOR-SMD	SA
2703-002367	L116	INDUCTOR-SMD	SA
2703-002367	L122	INDUCTOR-SMD	SA
2703-002368	L117	INDUCTOR-SMD	SA
2703-002369	C173	INDUCTOR-SMD	SA
2703-002369	L126	INDUCTOR-SMD	SA
2703-002608	L121	INDUCTOR-SMD	SA
2703-002608	L123	INDUCTOR-SMD	SA
2703-002768	L306	INDUCTOR-SMD	SNA
2703-002774	L305	INDUCTOR-SMD	SA
2703-002782	L300	INDUCTOR-SMD	SA
2703-002782	L301	INDUCTOR-SMD	SA
2703-002782	L302	INDUCTOR-SMD	SA
2801-004189	OSC701	CRYSTAL-SMD	SA
2801-004466	OSC300	CRYSTAL-SMD	SA
2801-004466	OSC700	CRYSTAL-SMD	SA
2801-004560	OSC100	CRYSTAL-SMD	SA
2804-001725	OSC400	OSCILLATOR-CLOCK	SA
2809-001280	OSC101	OSCILLATOR-VCTCXO	SA
2901-001320	F600	FILTER-EMI/ESD	SA
2901-001320	F601	FILTER-EMI/ESD	SA
2901-001320	F602	FILTER-EMI/ESD	SA
2901-001320	F603	FILTER-EMI/ESD	SA
2901-001320	F606	FILTER-EMI/ESD	SA
2901-001461	F604	FILTER-EMI/ESD	SA
2901-001461	F605	FILTER-EMI/ESD	SA
2904-001629	F103	FILTER-SAW	SA
2904-001702	F102	FILTER-SAW	SA
2904-001703	F101	FILTER-SAW	SA
2909-001283	F104	FILTER-LC	SA
2910-000004	DUF100	DUPLEXER-FBAR	SA
2911-000091	U100	DUPLEXER-FEM	SA
3301-001208	L303	BEAD-SMD	SA
3301-001342	L600	BEAD-SMD	SA
3301-001729	L400	BEAD-SMD	SA
3301-001729	L401	BEAD-SMD	SA
3301-001756	L125	BEAD-SMD	SA
3404-001303	TAC501	SWITCH-TACT	SA
3404-001303	TAC502	SWITCH-TACT	SA
3404-001303	TAC503	SWITCH-TACT	SA

SEC Code	Design LOC	Description	STATUS
3705-001358	RFS100	CONNECTOR-COAXIAL	SA
3709-001465	CD501	CONNECTOR-CARD EDGE	SA
3710-002081	SOC400	SOCKET-BOARD TO BOARD	SA
3710-002499	IFC500	SOCKET-INTERFACE	SA
3711-005945	HDC601	HEADER-BOARD TO BOARD	SA
3711-006137	BTC501	HEADER-BATTERY	SA
4202-001031	ANT102	ANTENNA-CHIP	SA
4302-001180	BAT301	BATTERY-LI(2ND)	SA
4709-001399	F105	COUPLER-DIRECTION	SA
GH71-06262A	ANT100	NPR-ANTENNA CONTACT V2	SA
GH71-06262A	ANT101	NPR-ANTENNA CONTACT V2	SA

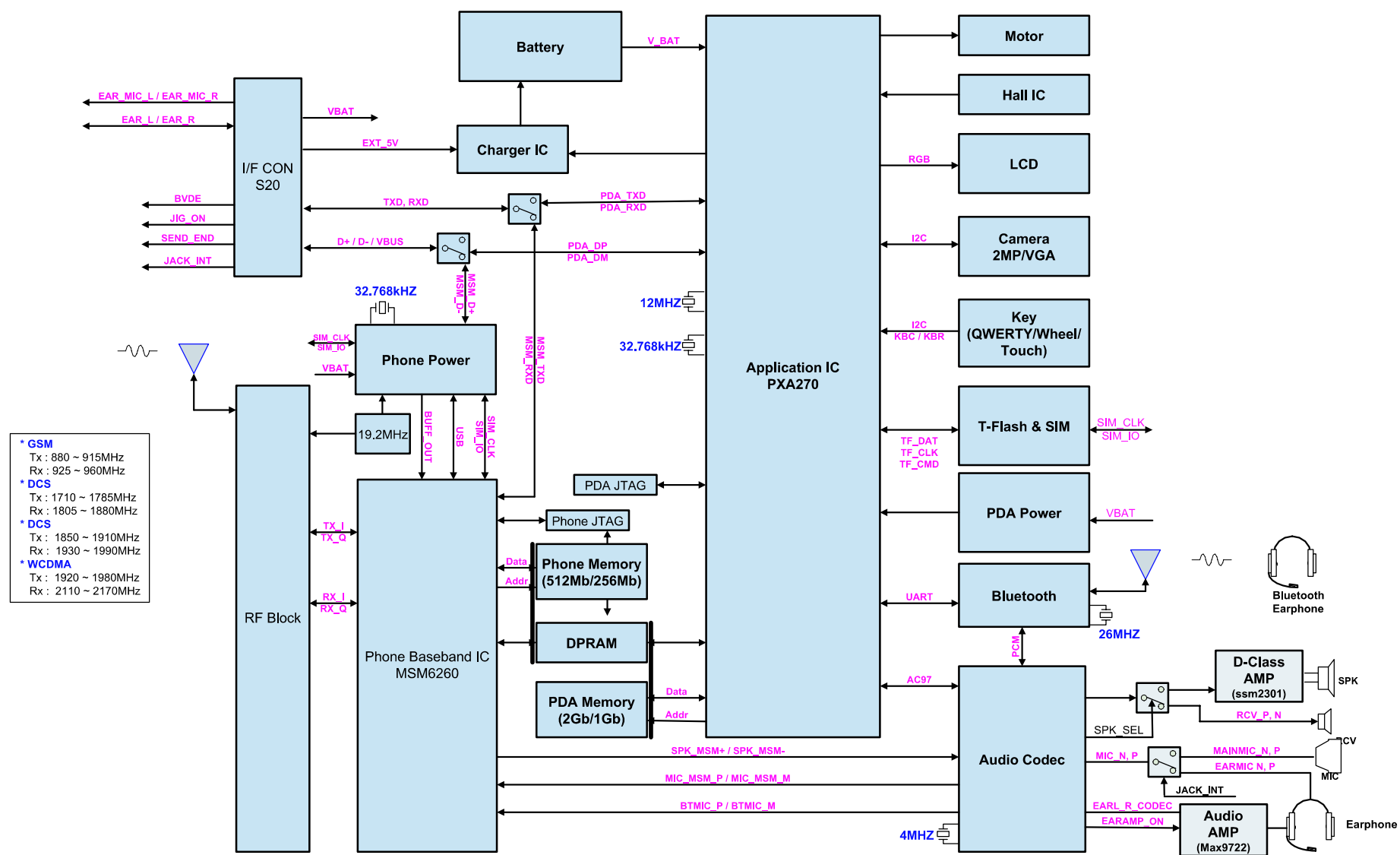
Please consult the GSPN website (Samsung Portal) for the most recent version of the product's part list.

7. Block Diagrams

7-1. RF Solution Block Diagram



7-2. Logic Solution Block Diagram



— **Main Top**

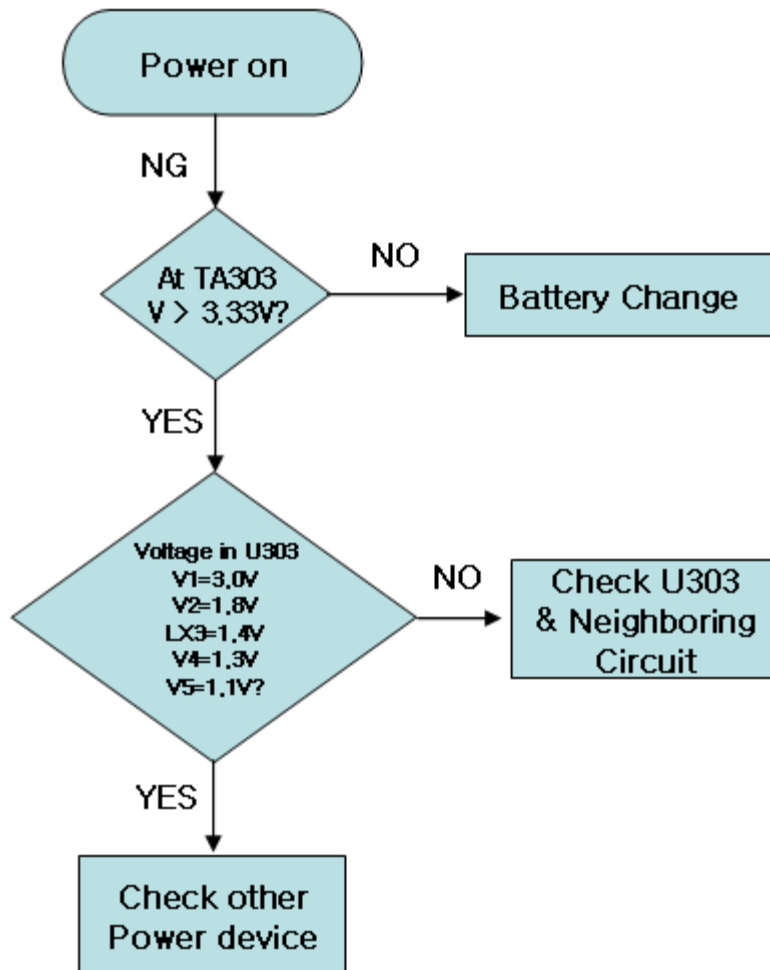


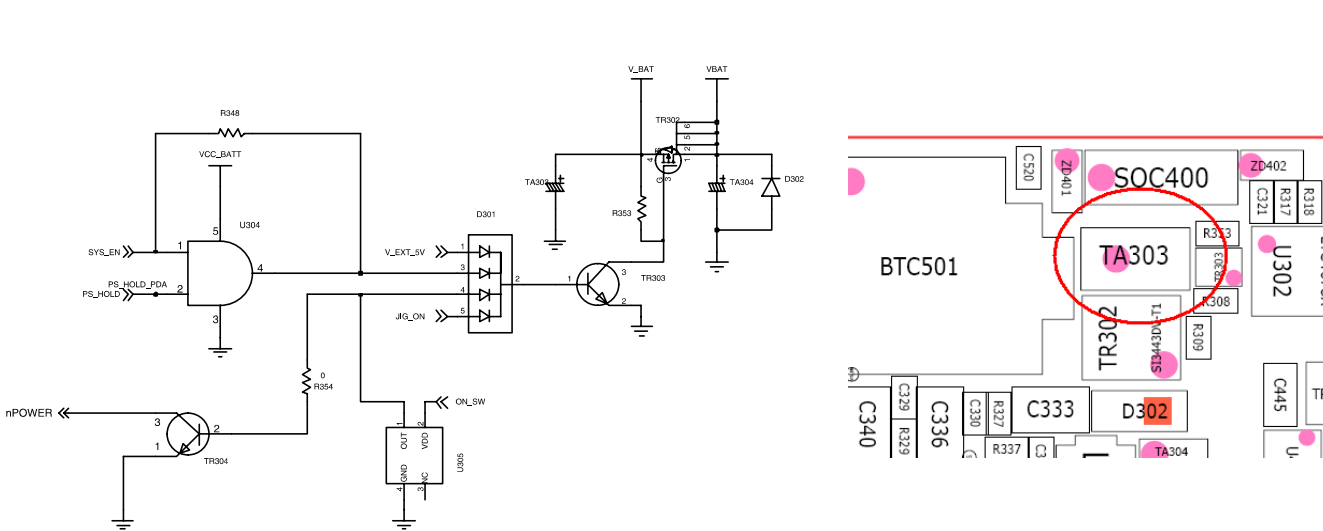


9. Flow Chart of TroubleShooting

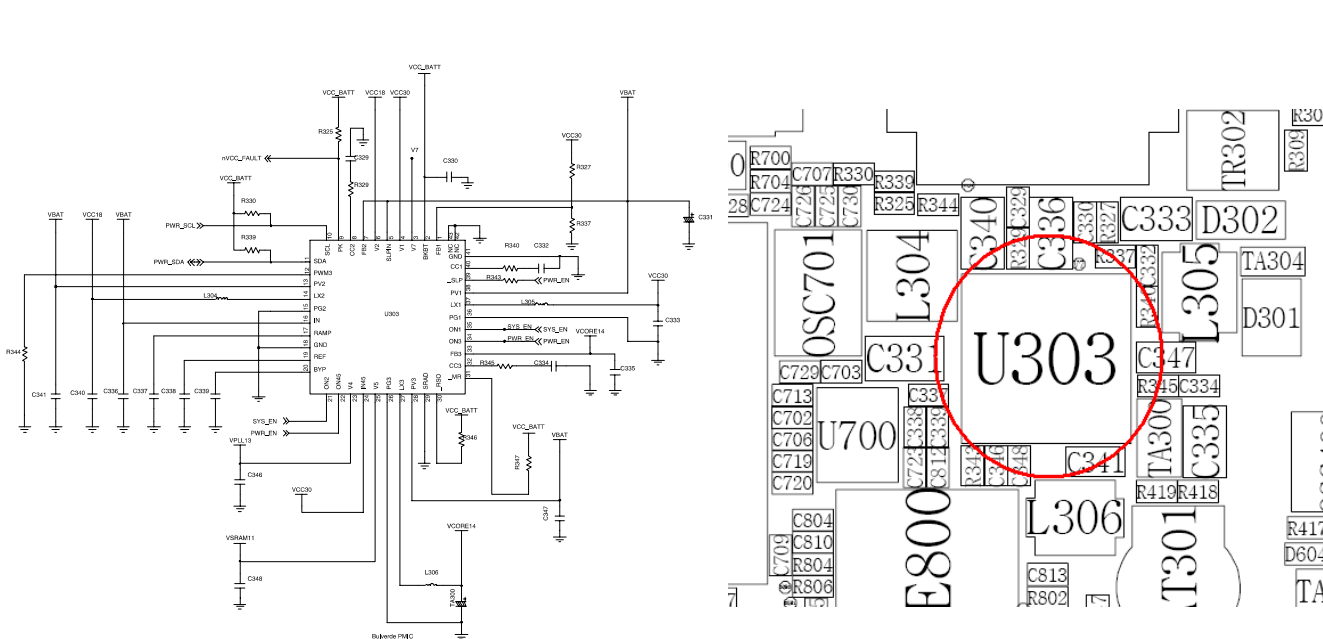
9-1. Power On

- PDA Part

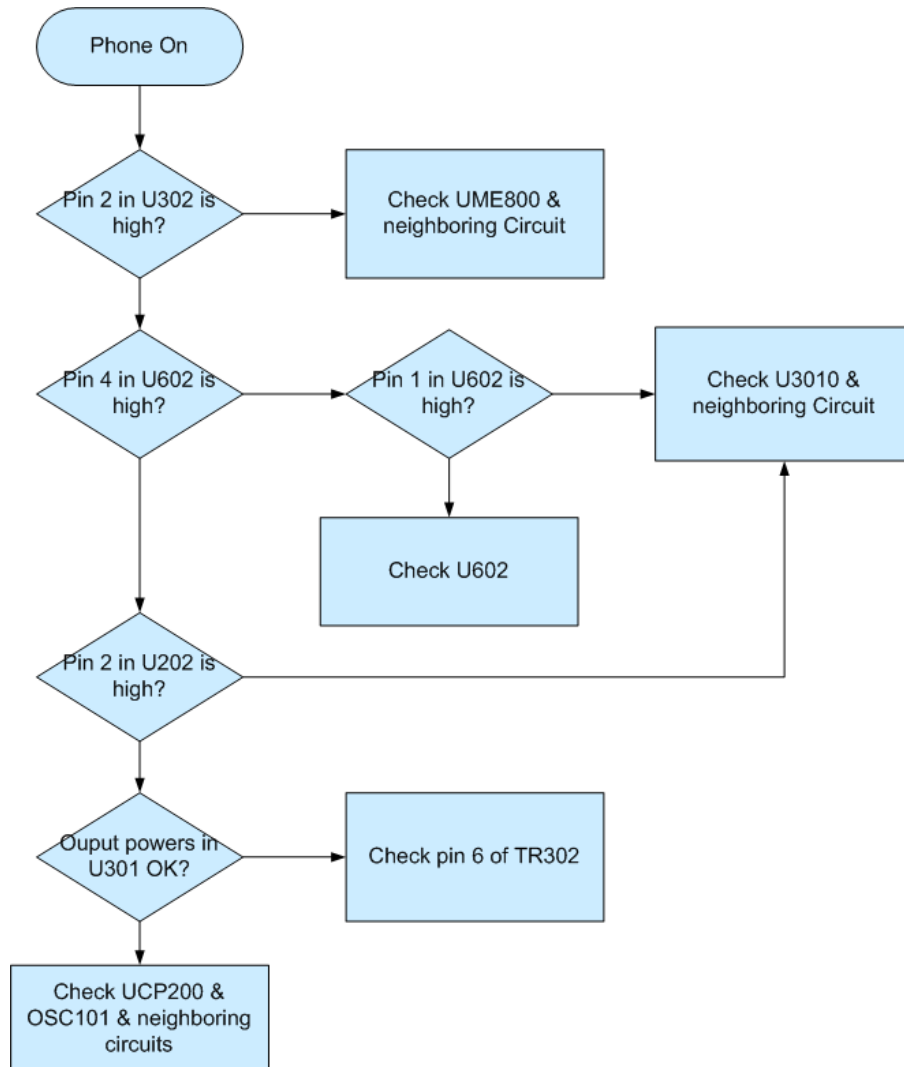


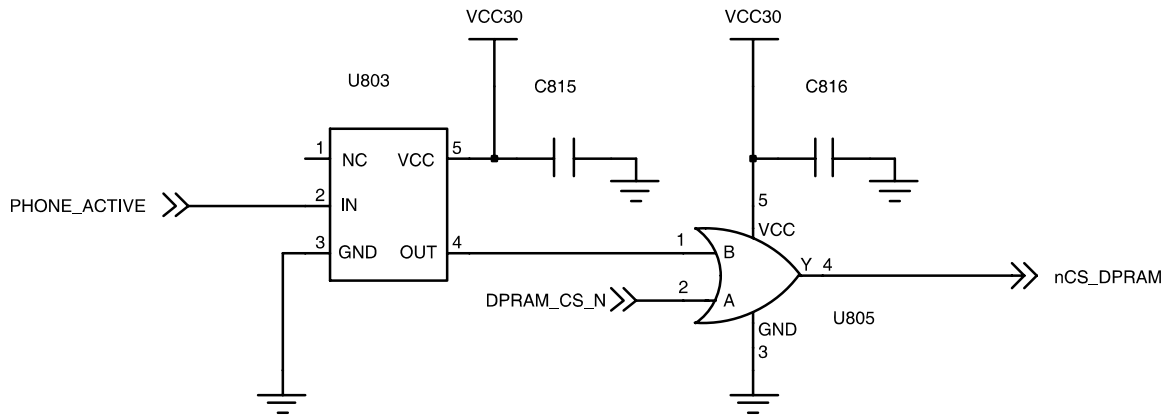


TA303 & neighboring circuits

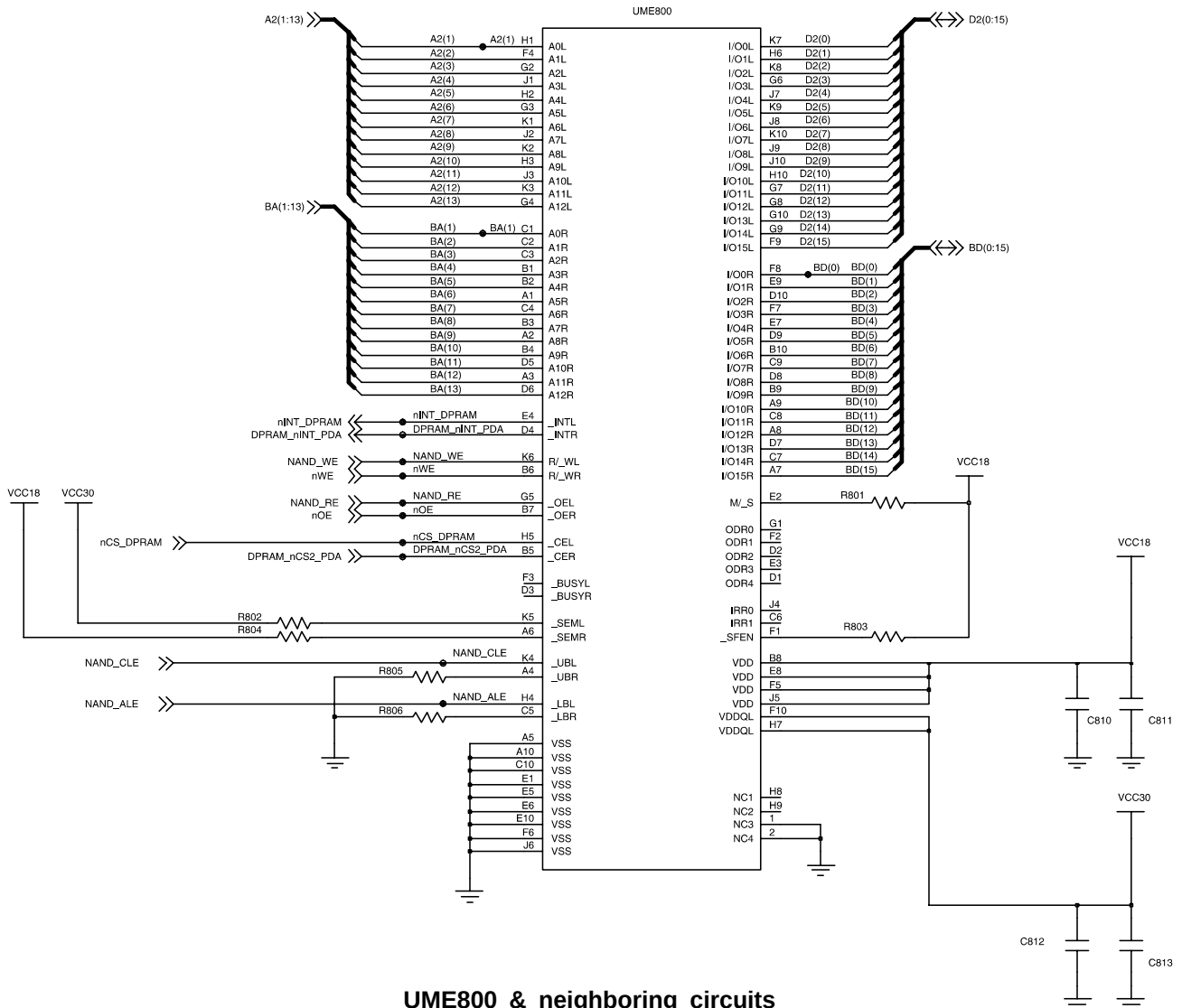


U303 & neighboring circuits

● PHONE Part



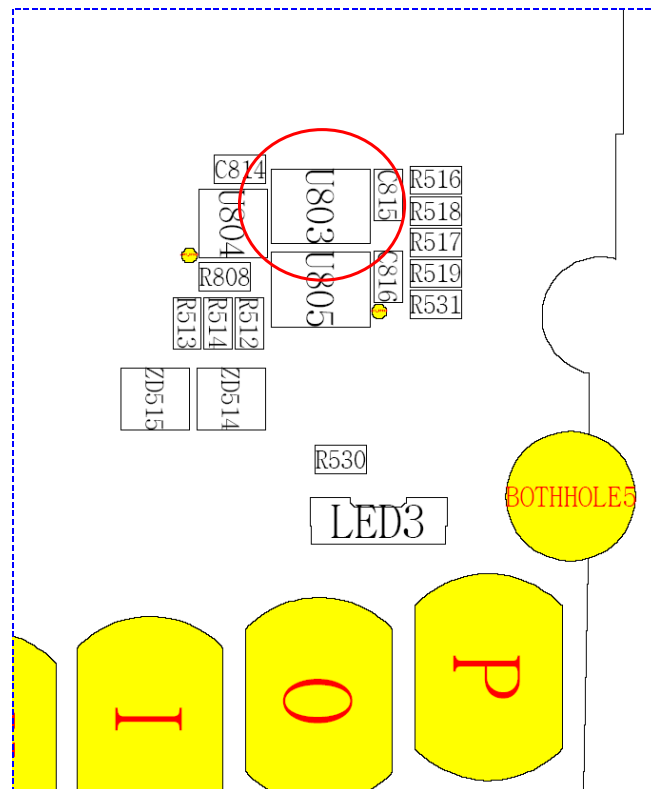
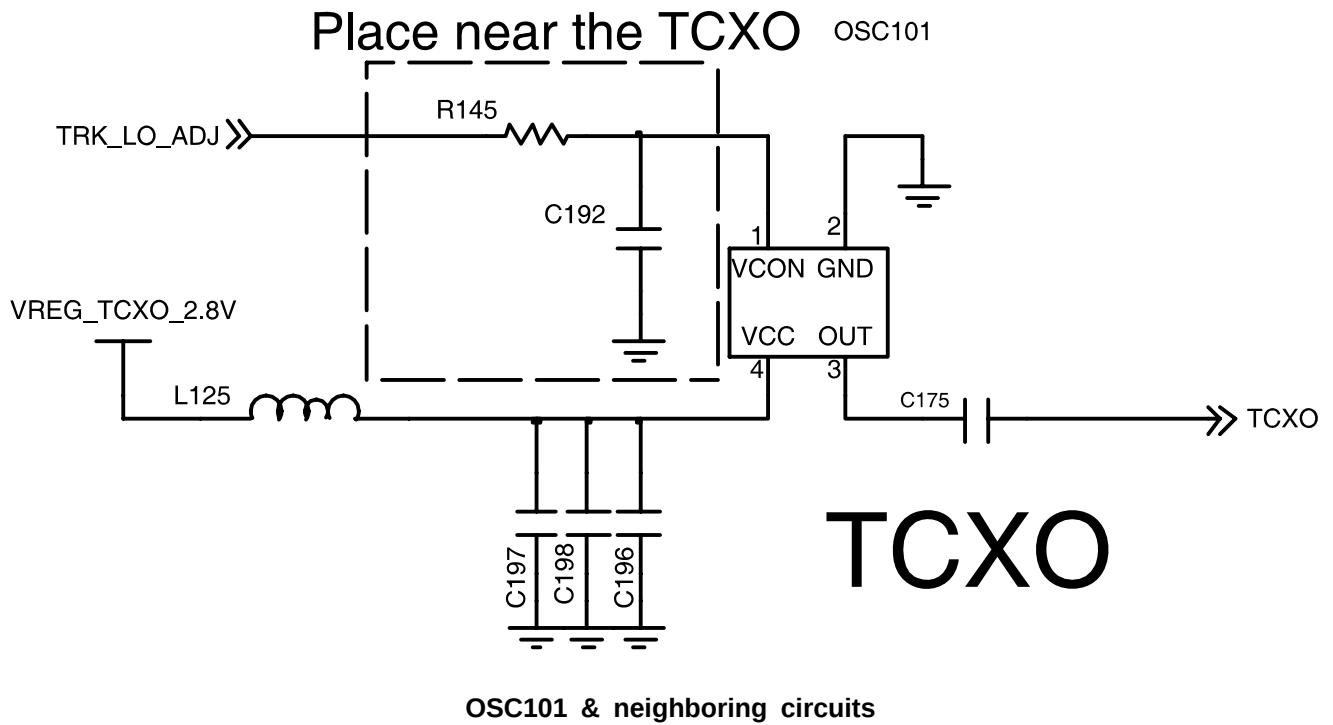
U803 & neighboring circuits

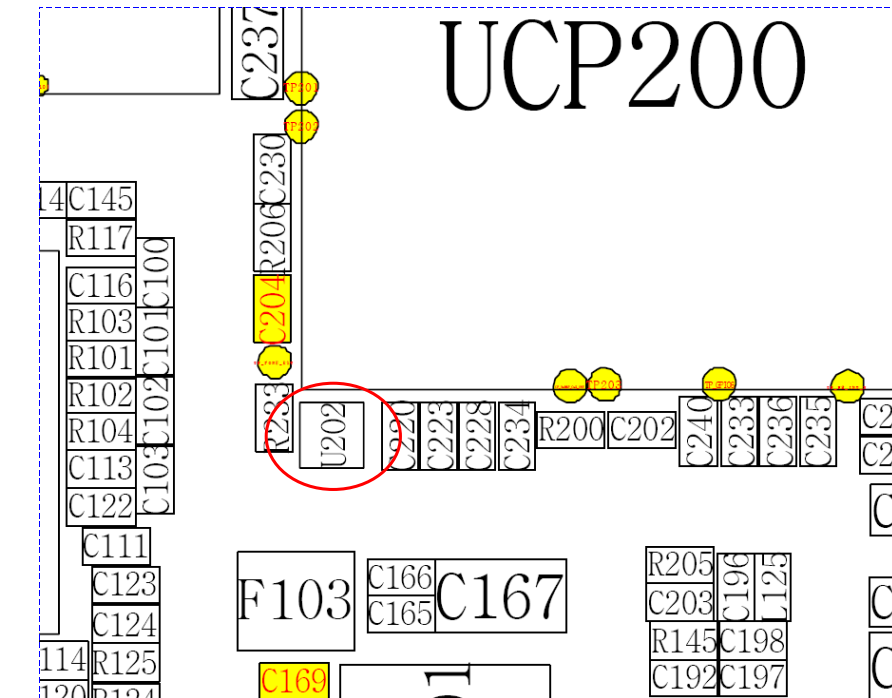


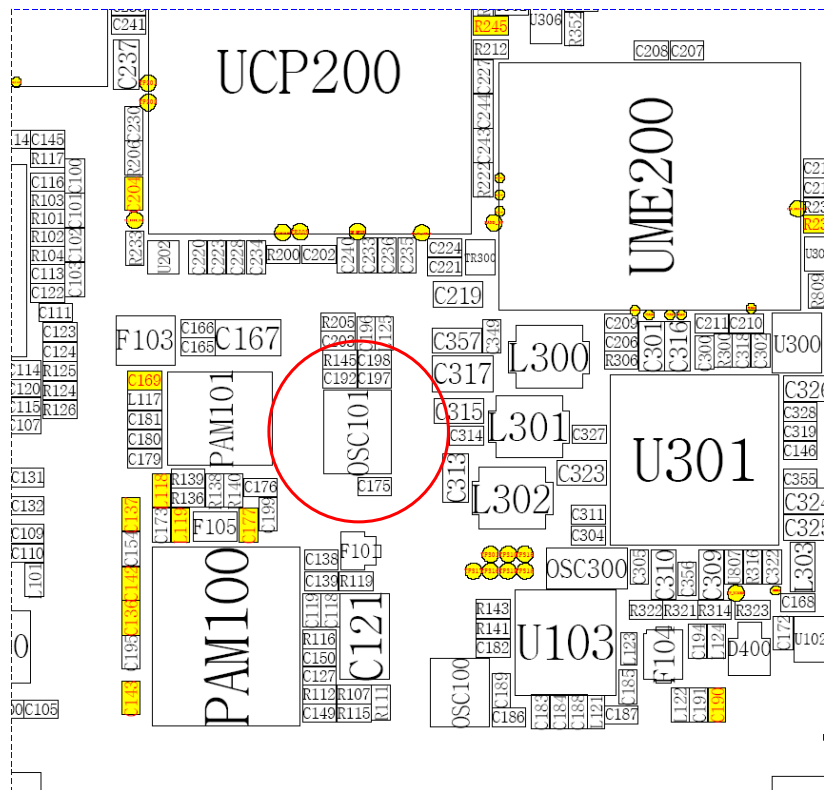
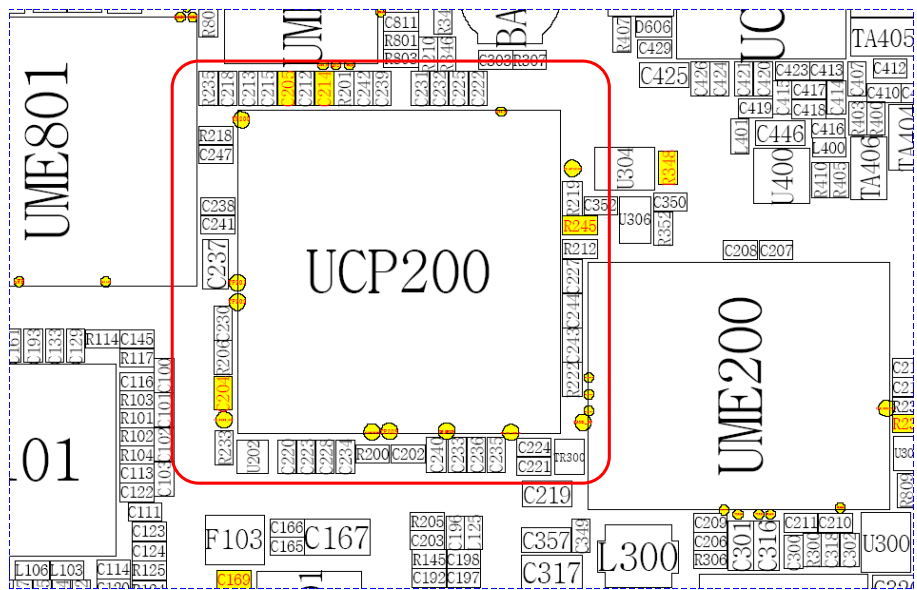
UME800 & neighboring circuits



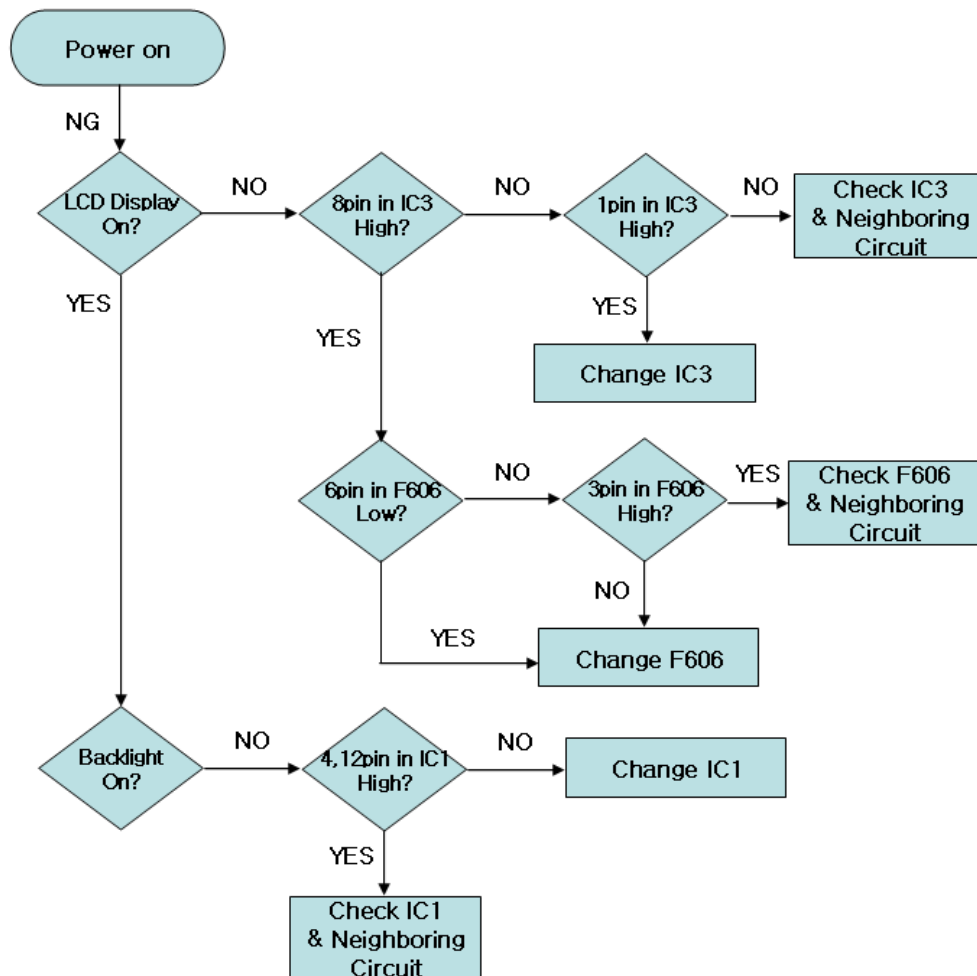


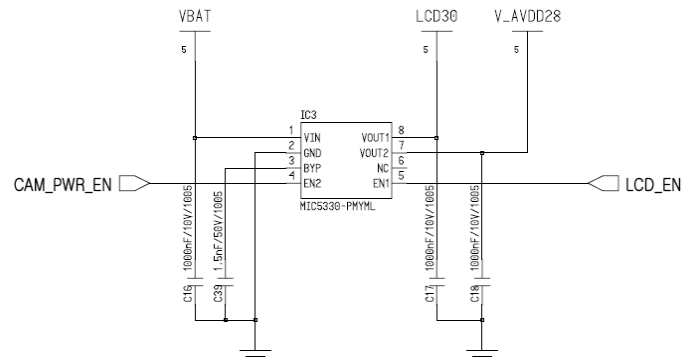






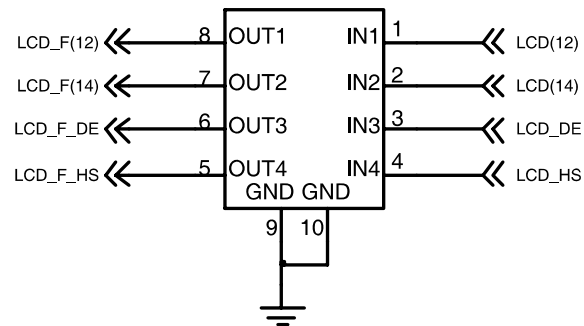
9-2. LCD Working



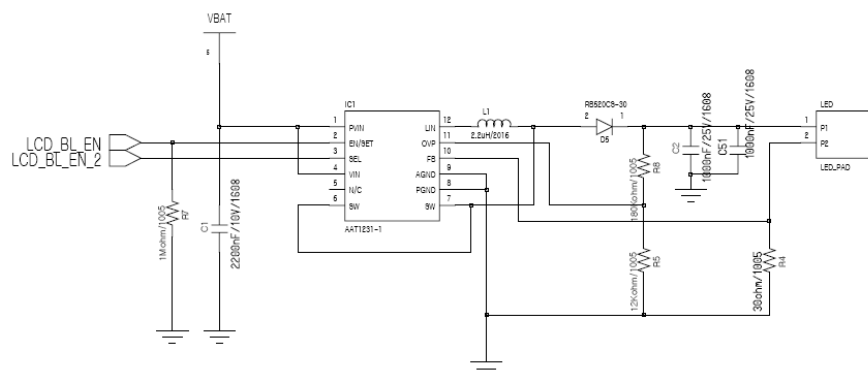


IC3 & neighboring circuits

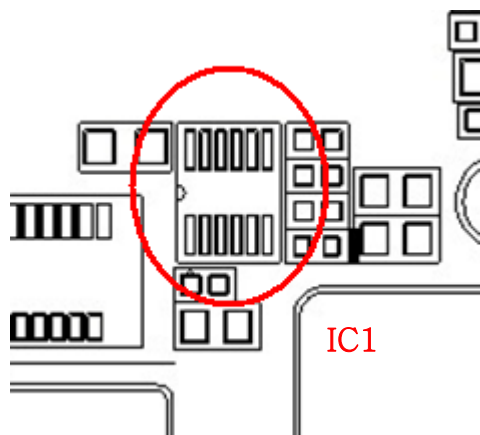
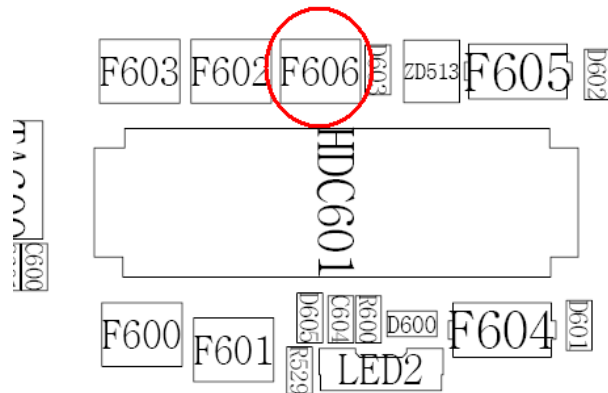
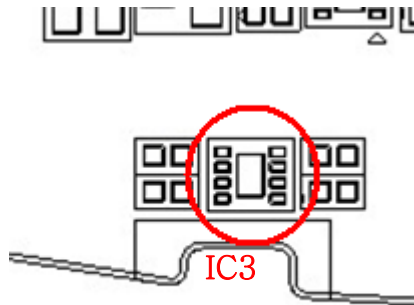
F606



F606 & neighboring circuits

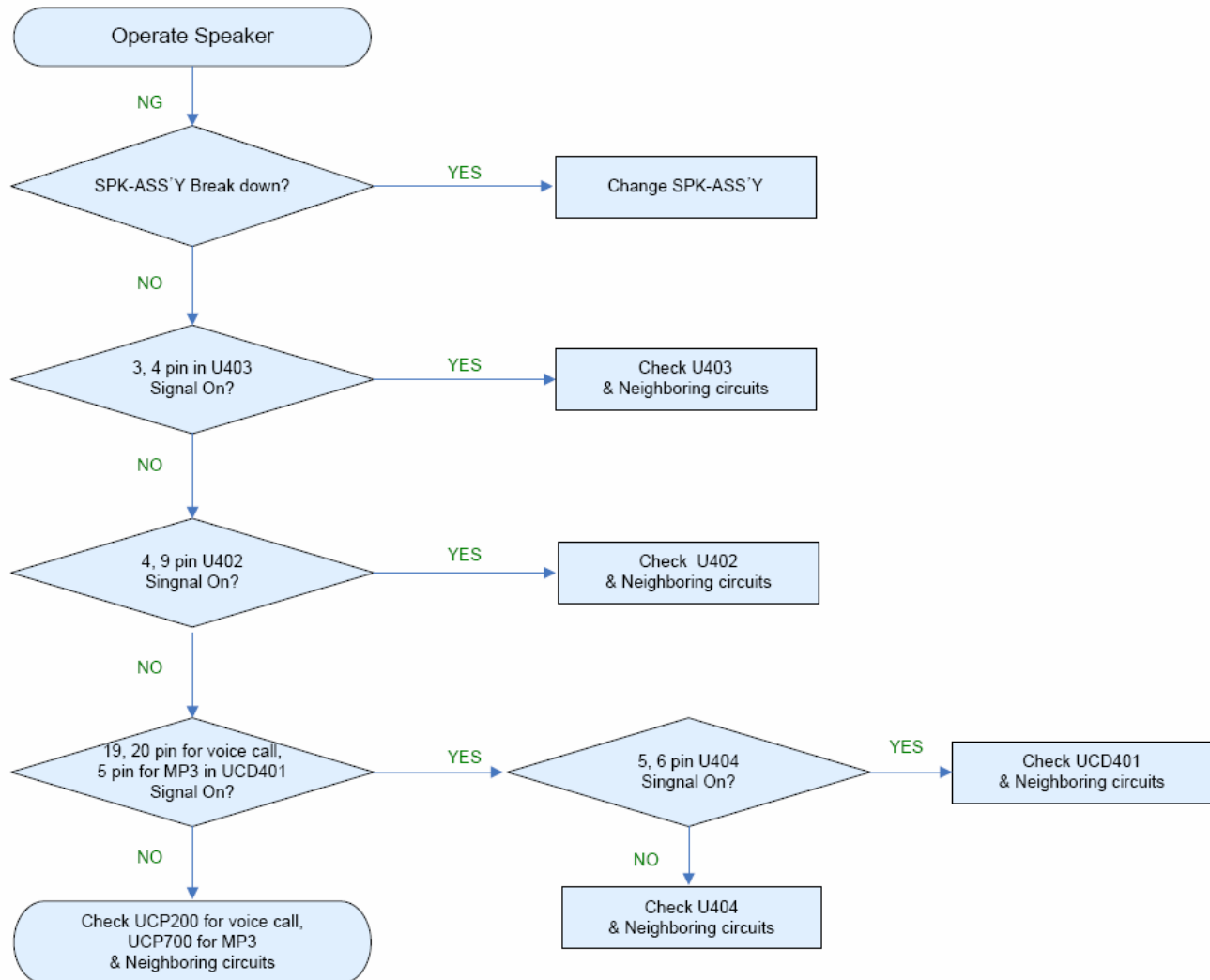


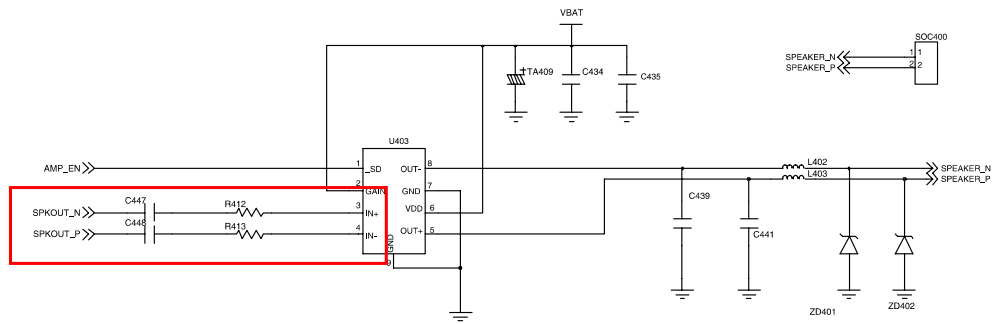
IC1 & neighboring circuits



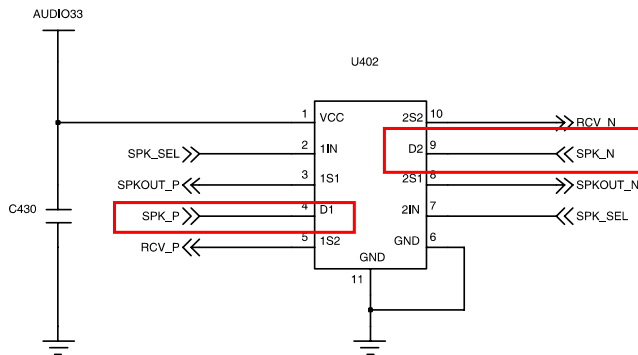
9-3. Audio Working

- Speaker Working

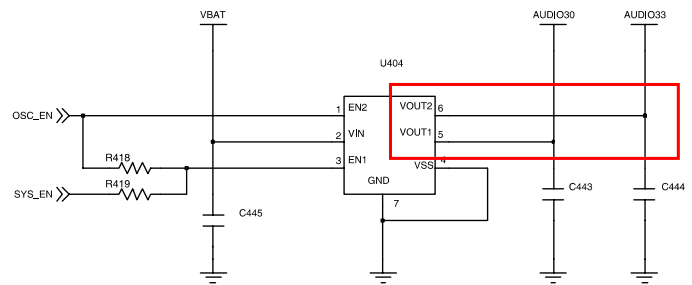




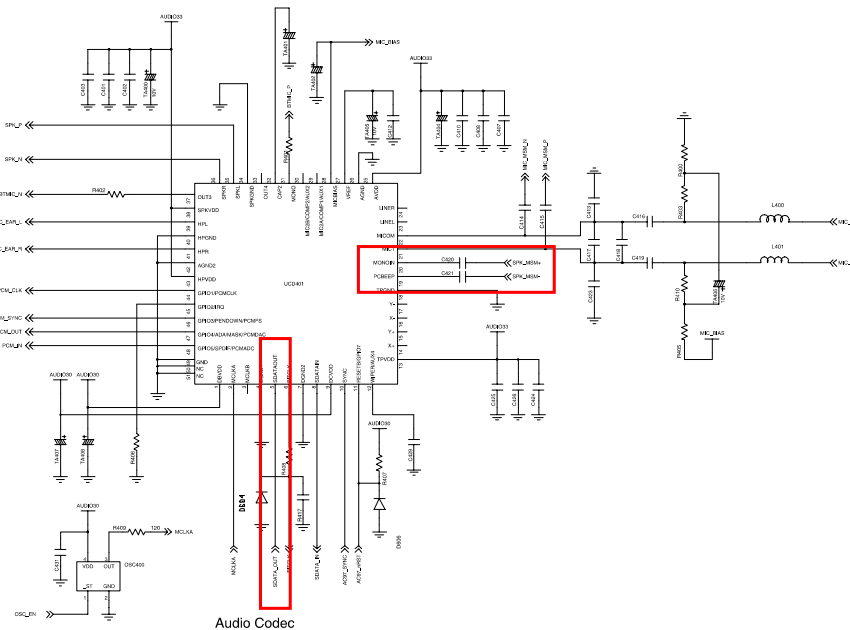
D-CLASS AUDIO AMP



SPK / Receiver Switch



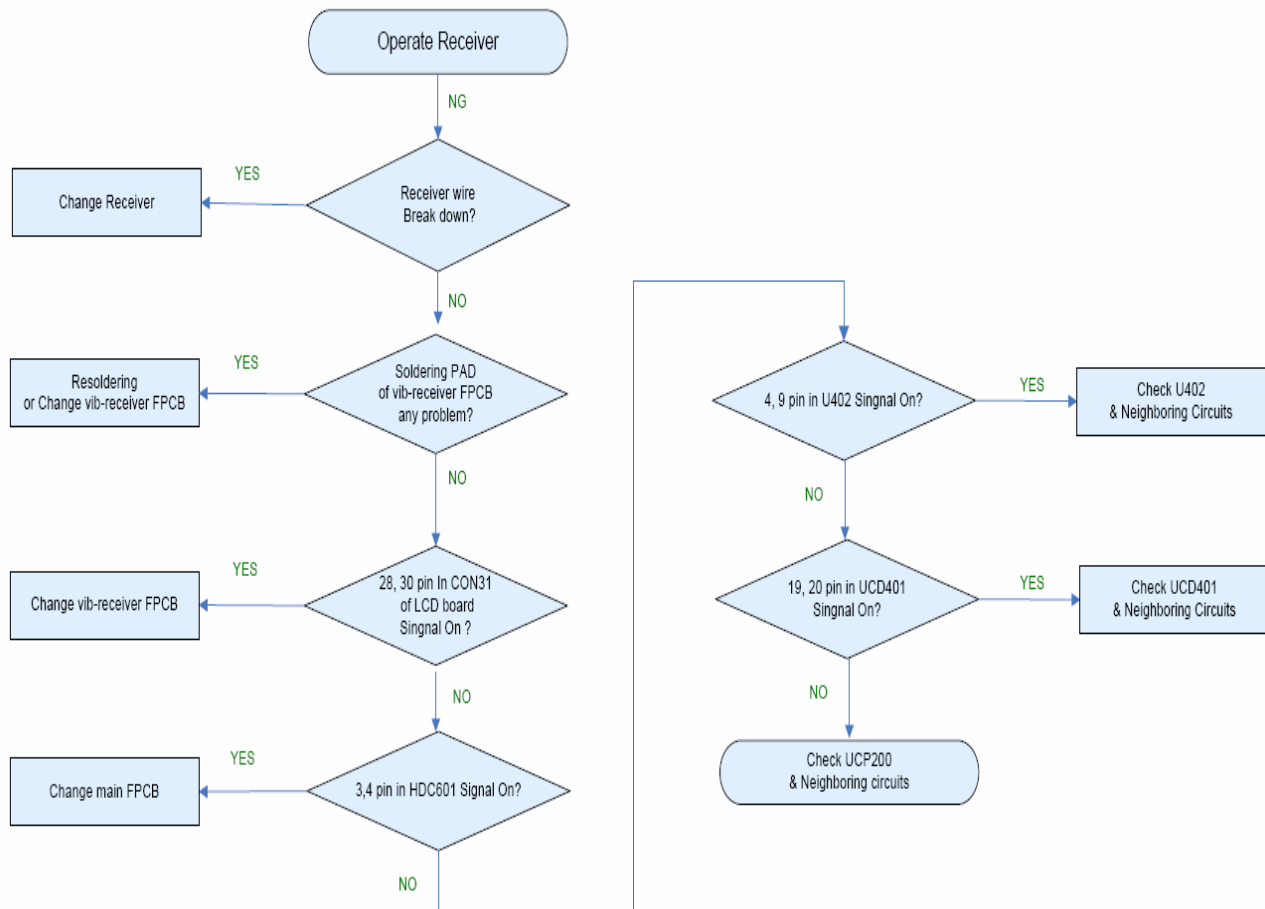
Audio 3.0V / 3.3V Dual LDO

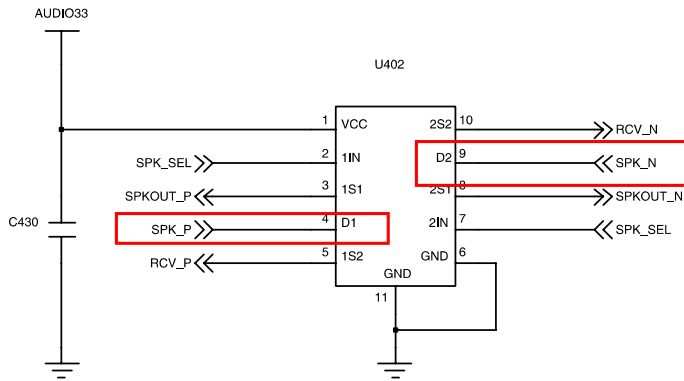


Audio Codec

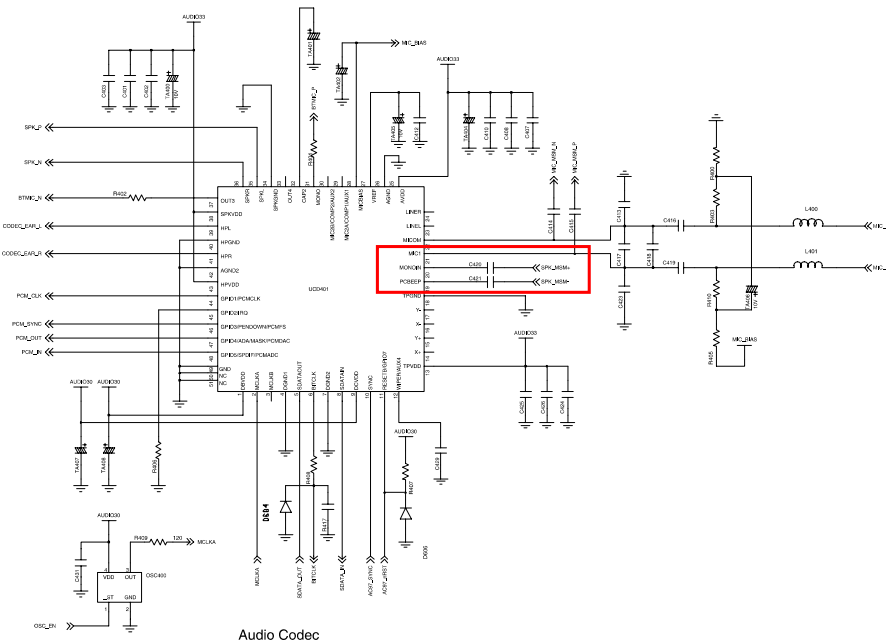
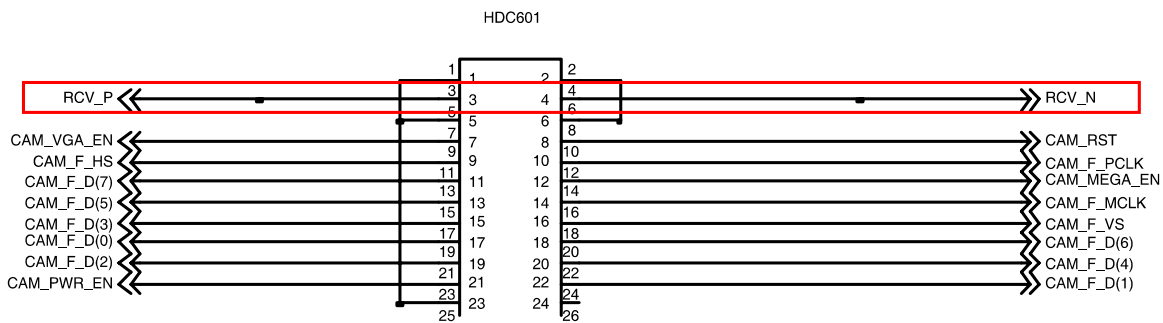


● Reciever Working

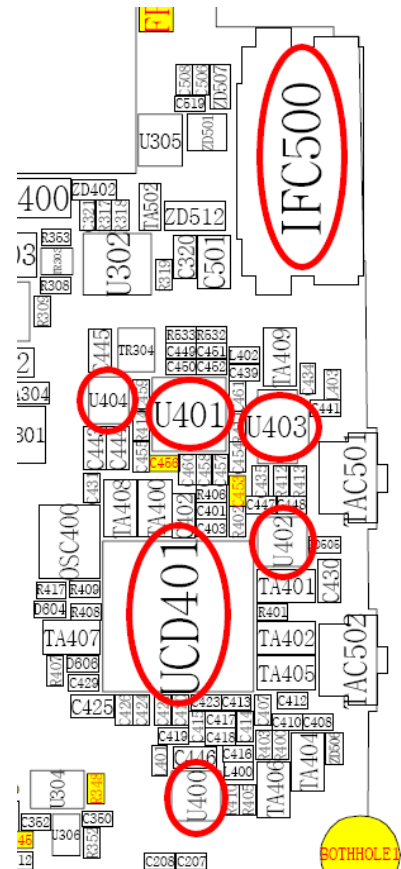




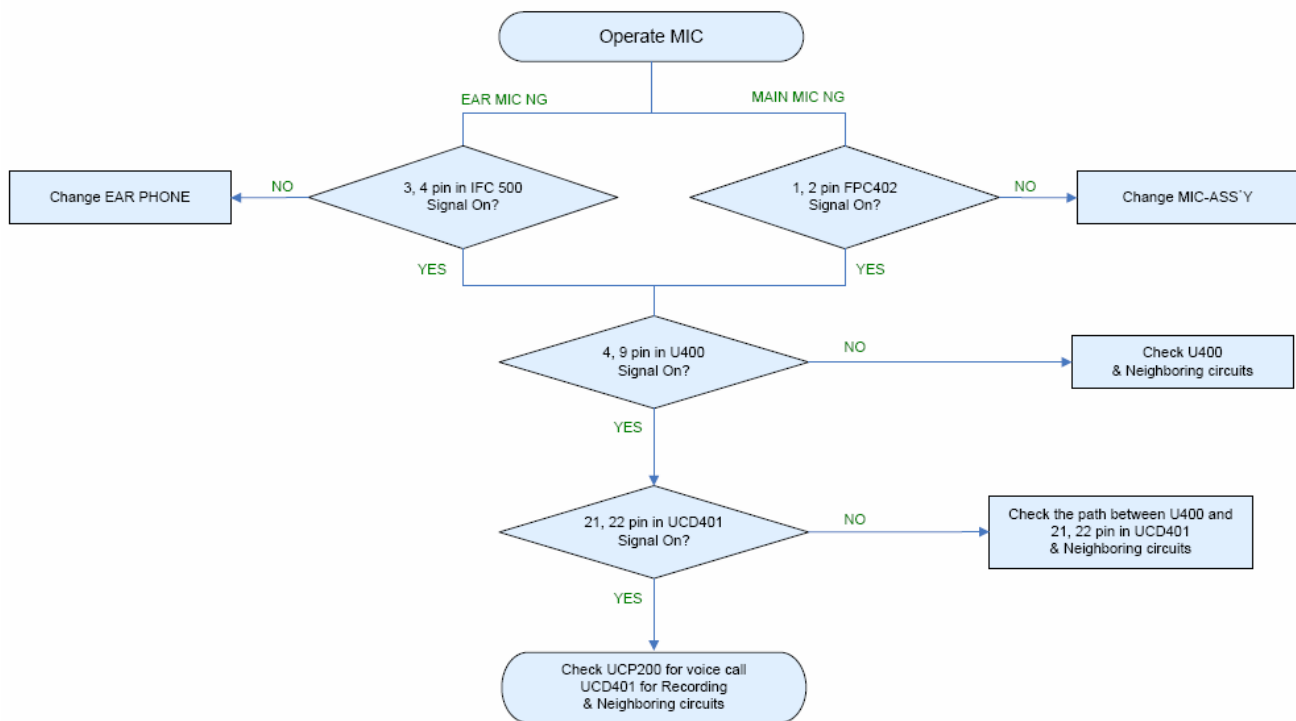
SPK / Receiver Switch

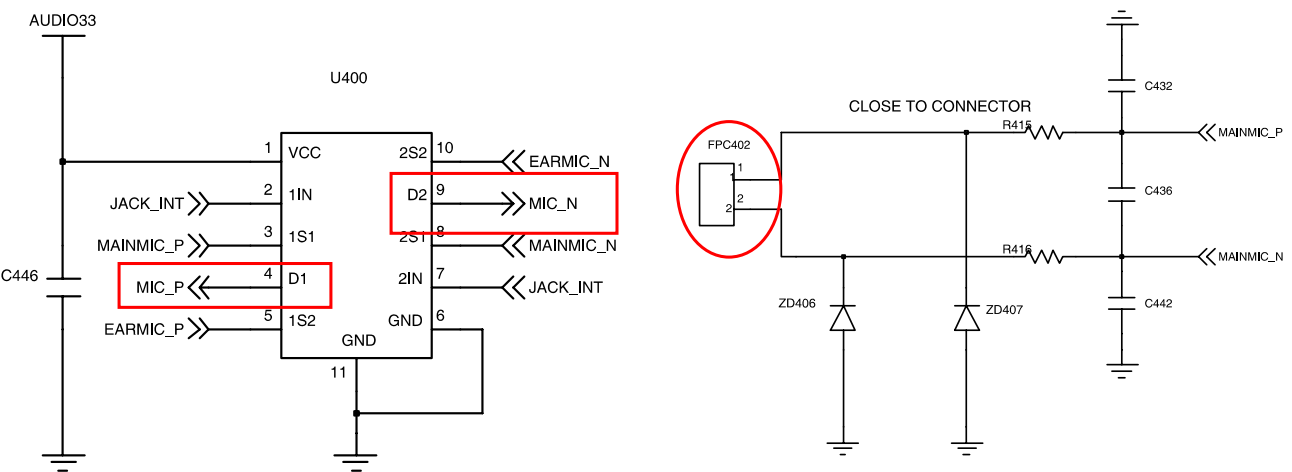
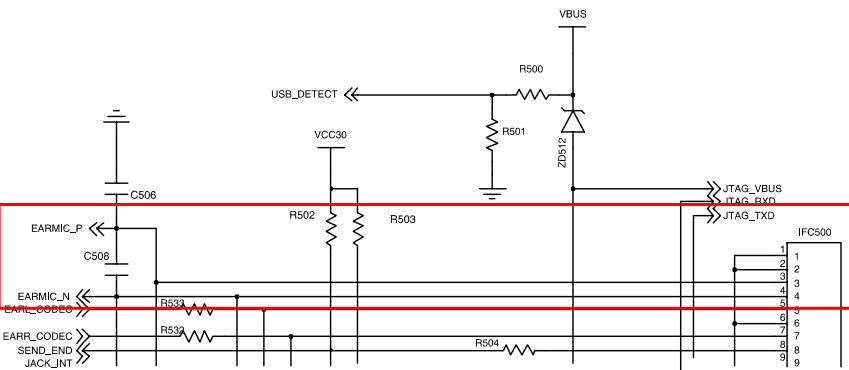


Audio Codec

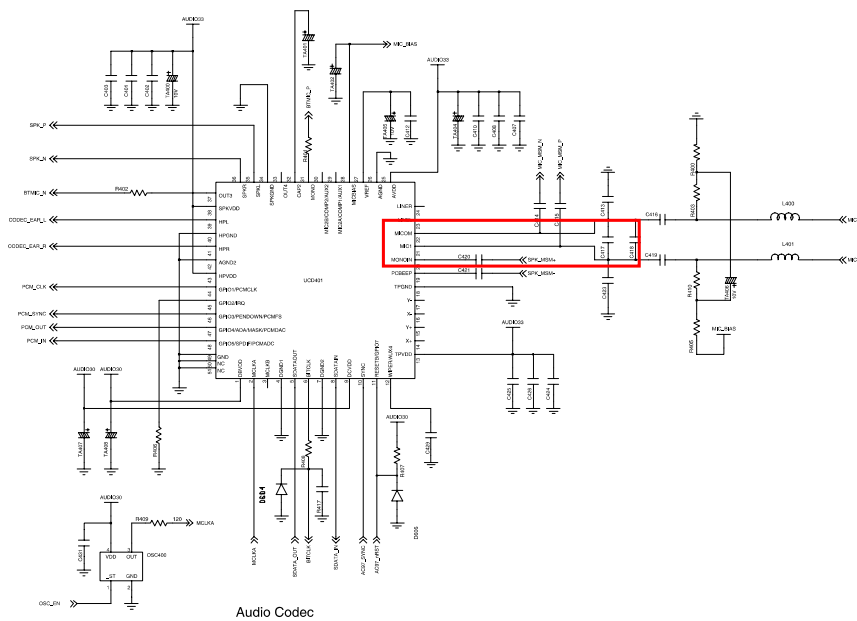


- MIC Working

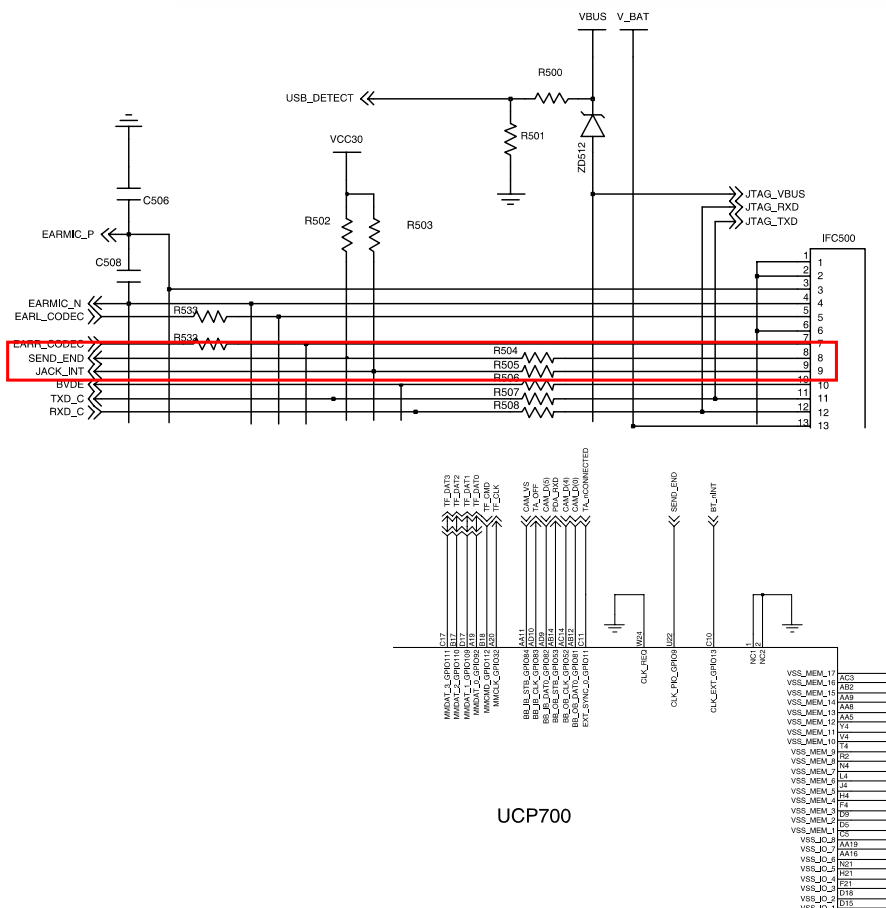
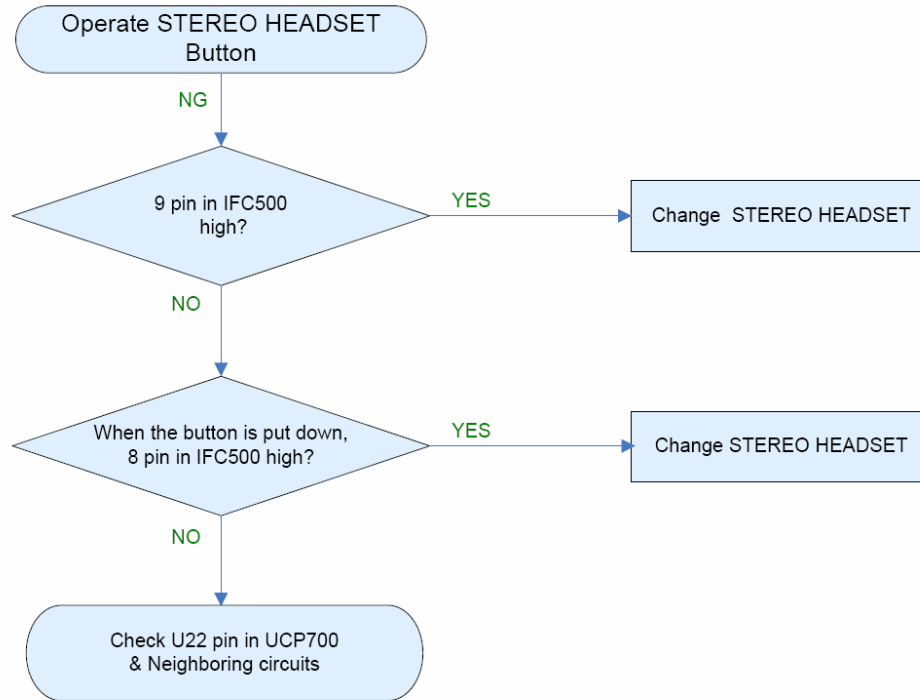




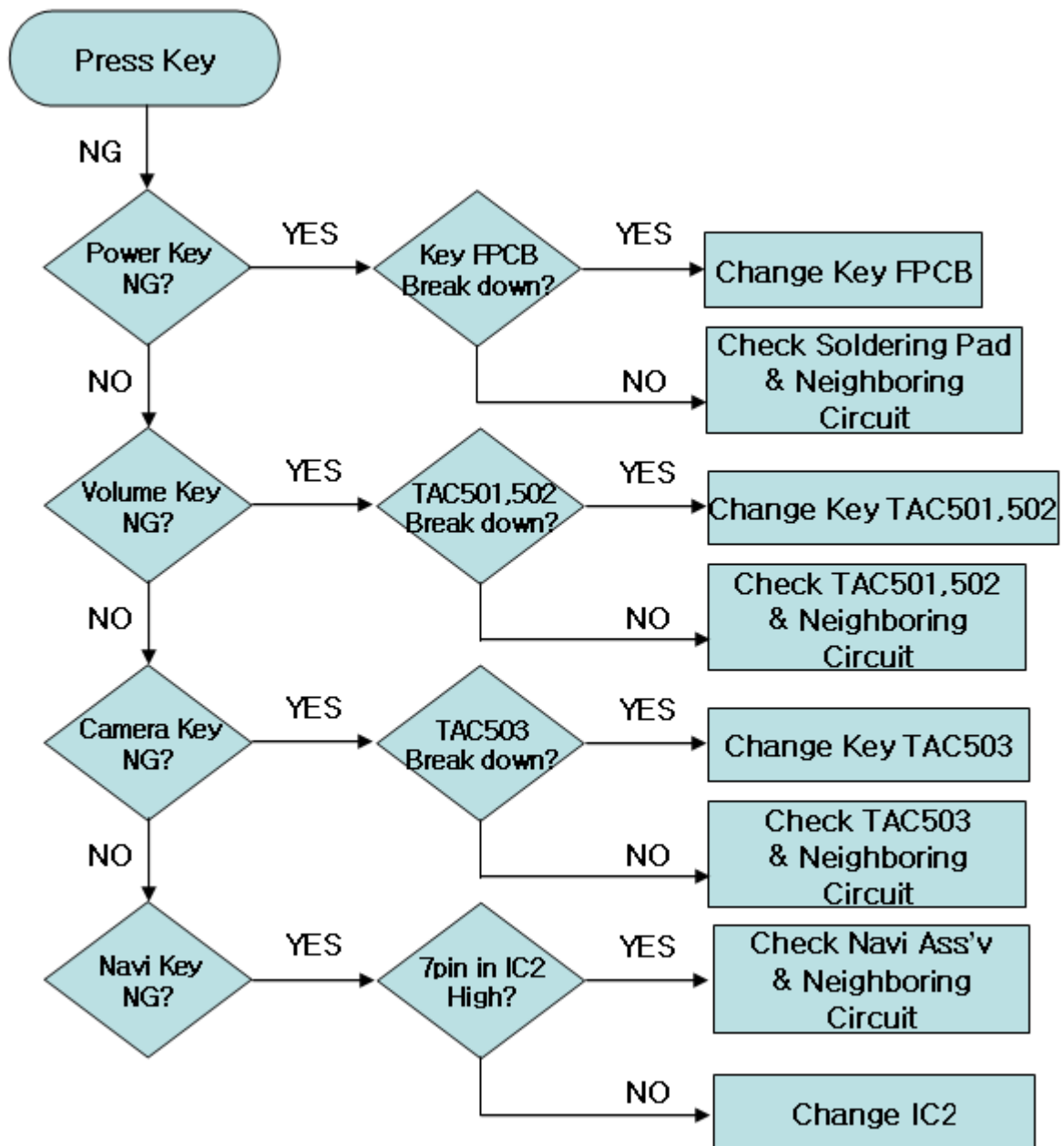
Main Mic Tunning Value

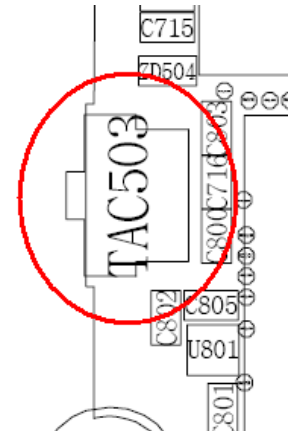
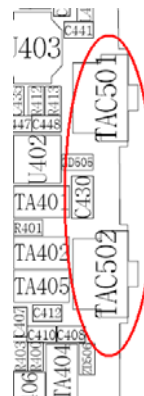
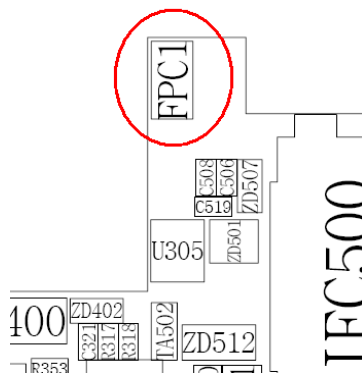
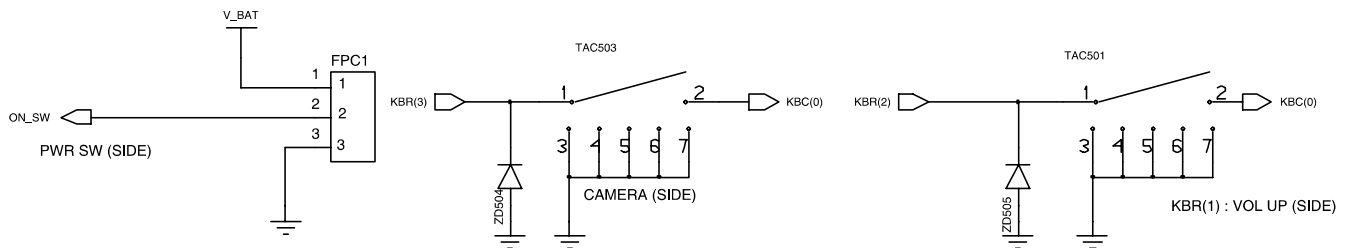
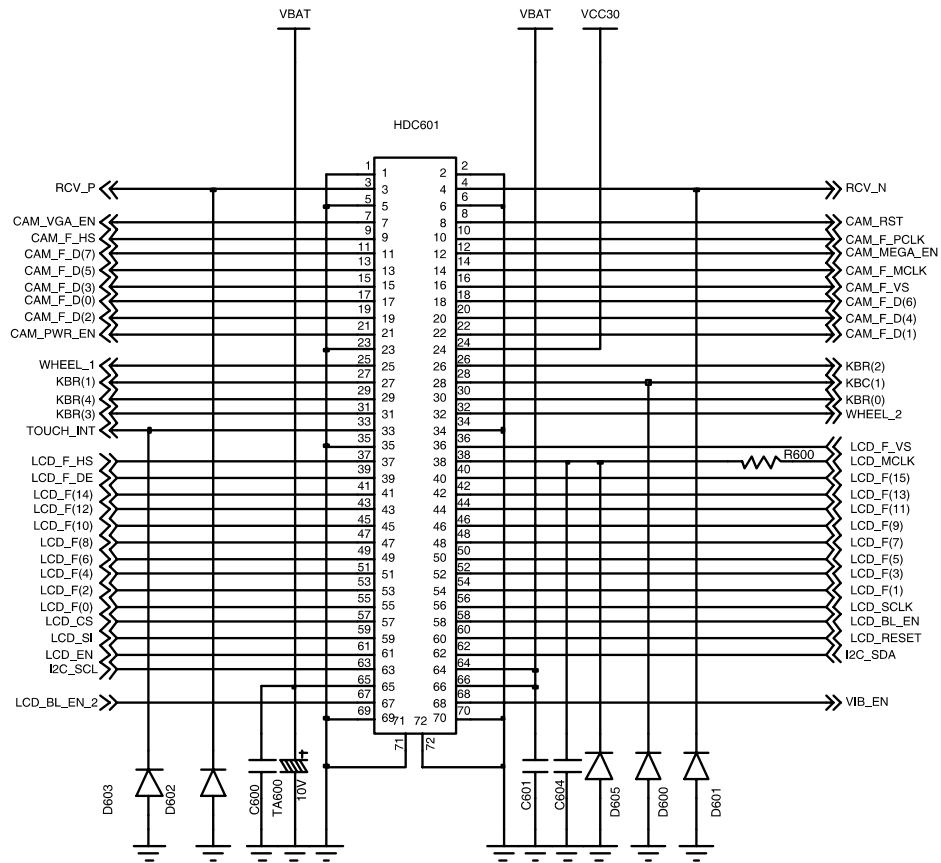


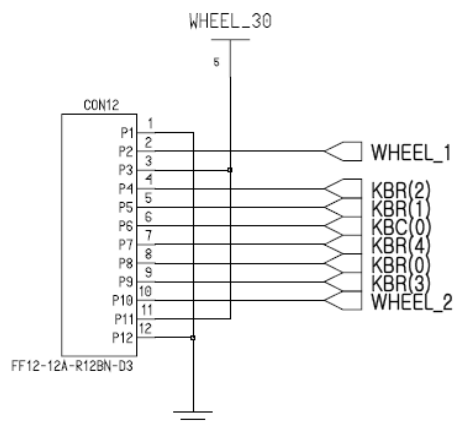
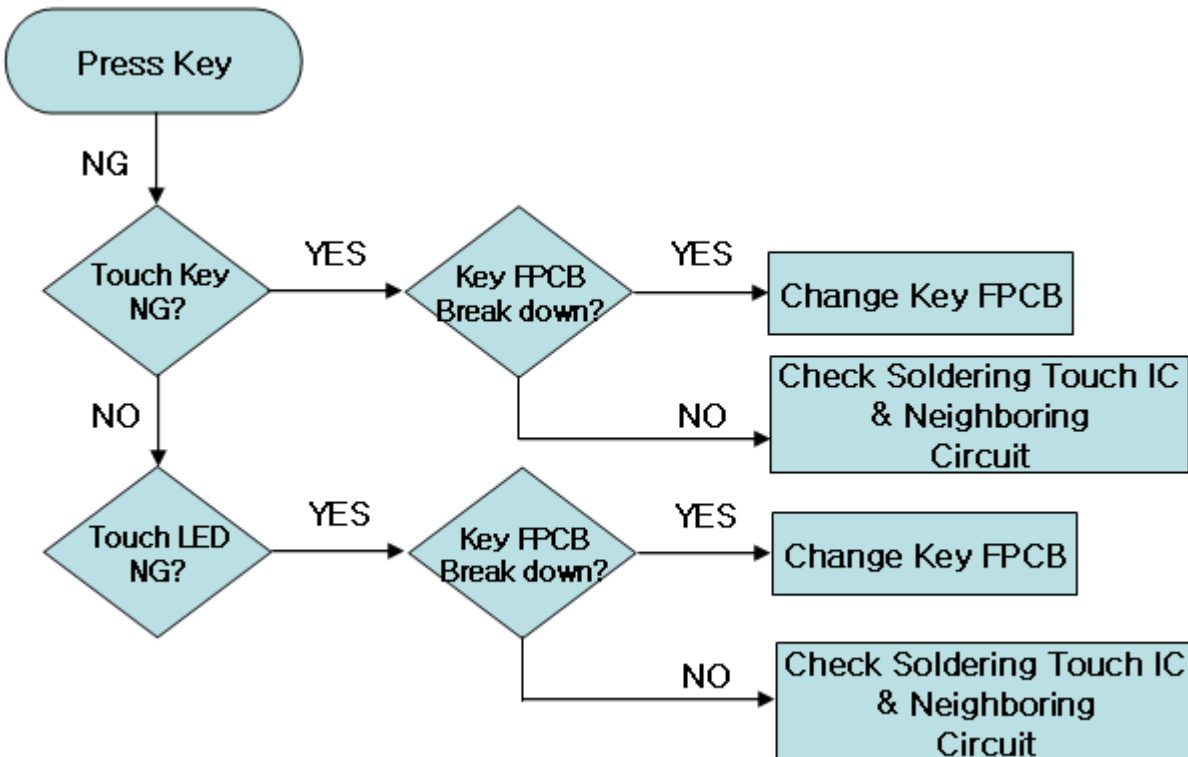
● Hands-Free Stereo Headset Button Working



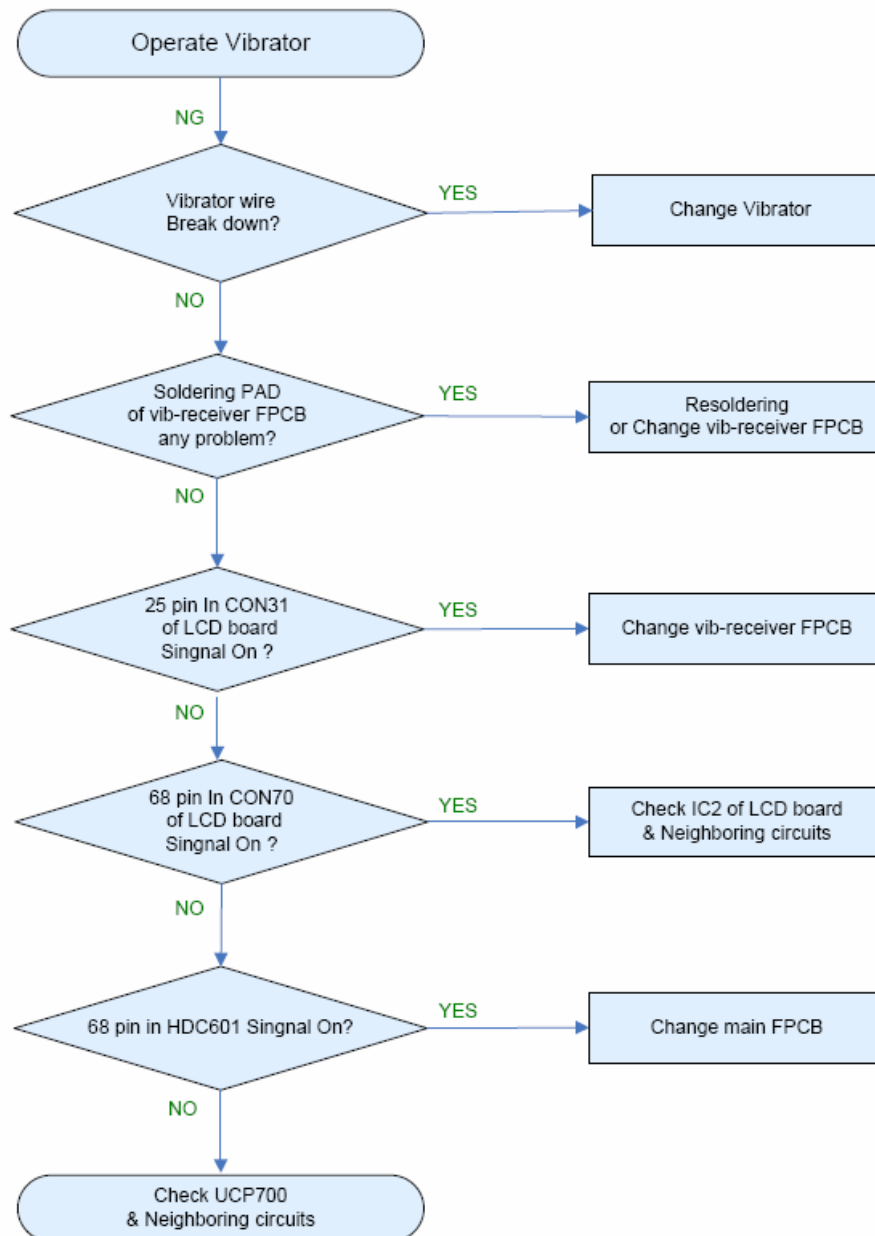
9-4. KEY Working



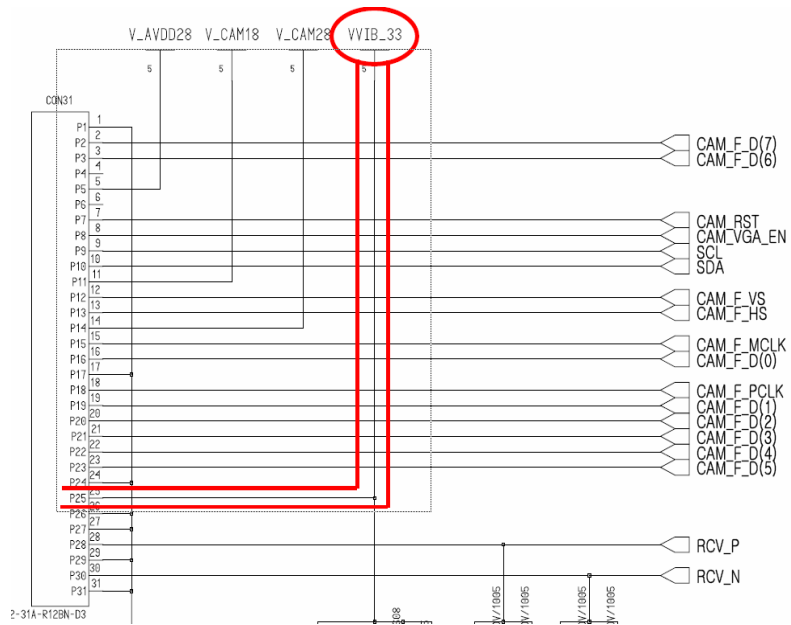


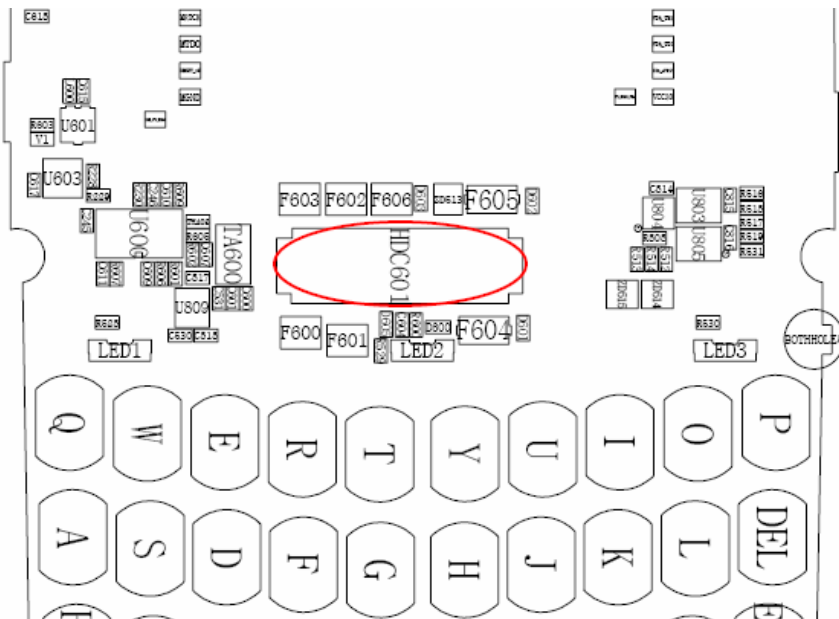
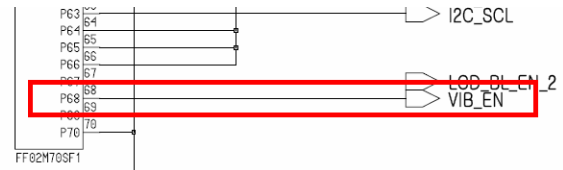
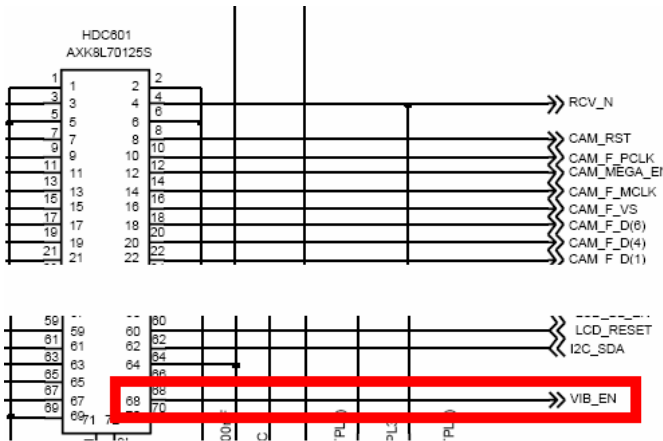
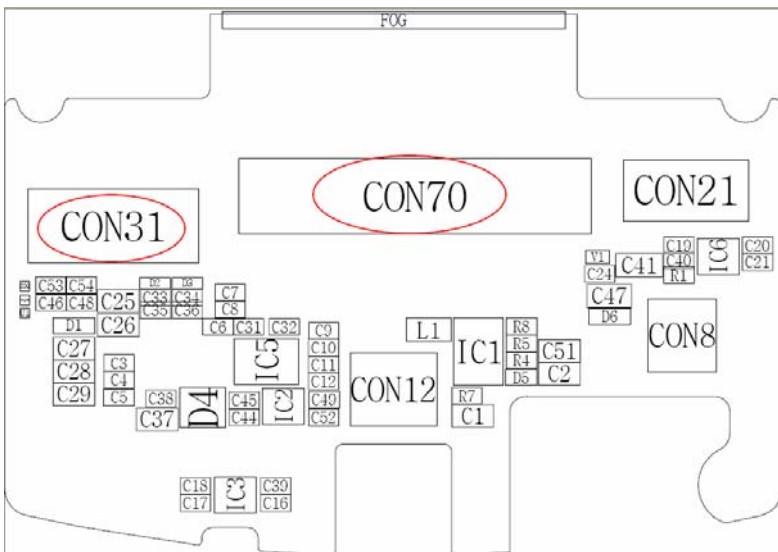


9-5. Vibrator Working

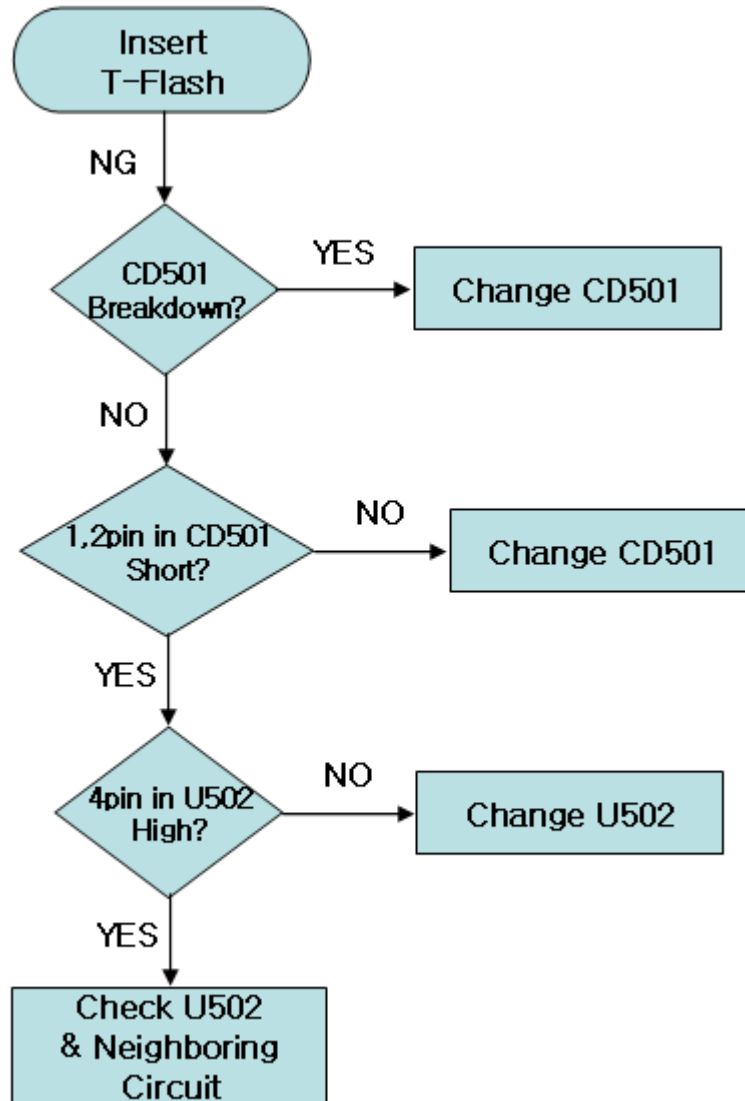


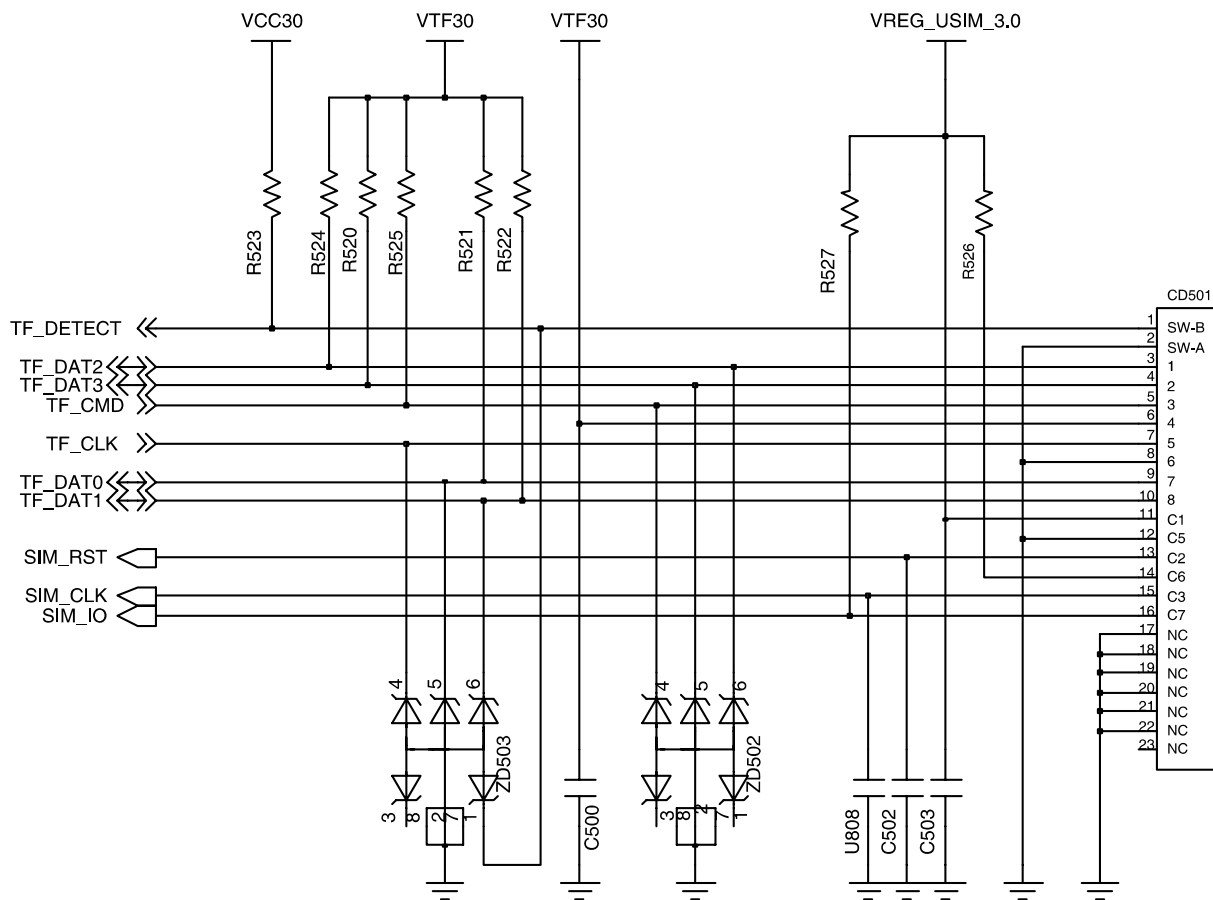
Flow Chart of Troubleshooting



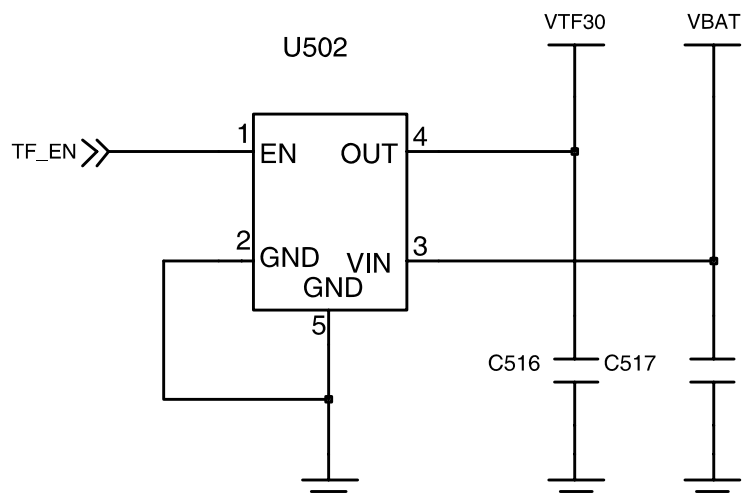


9-6. T-Flash Card Working



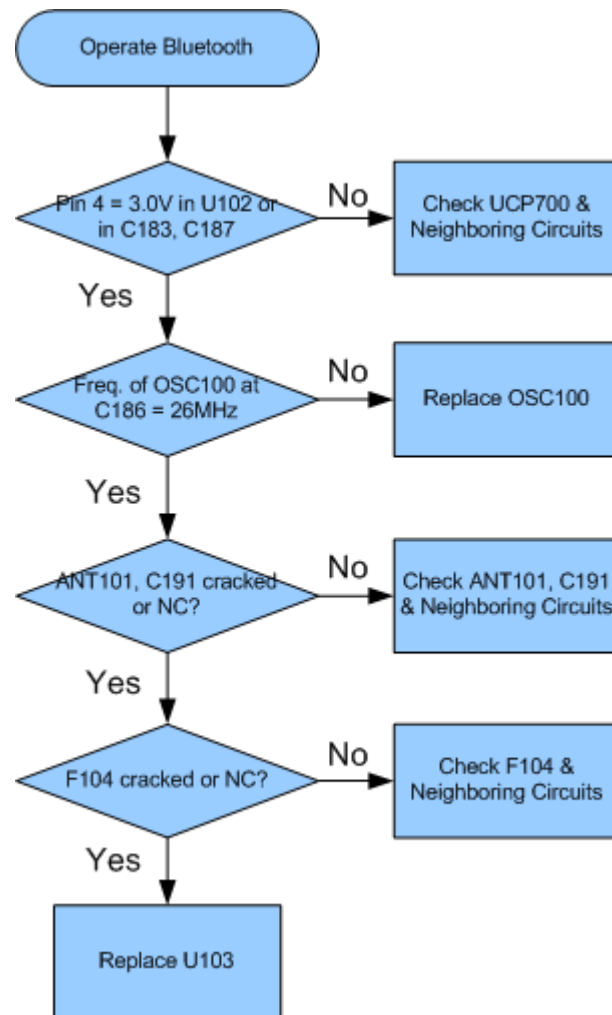


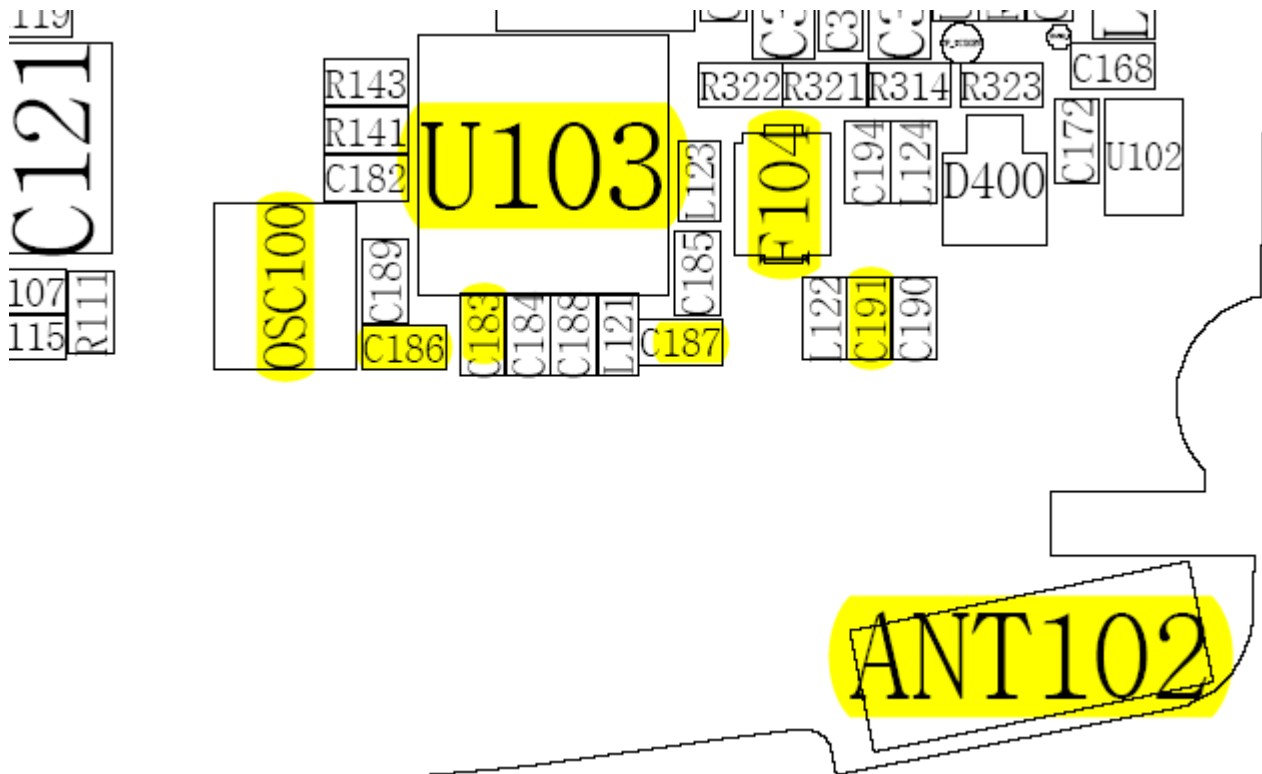
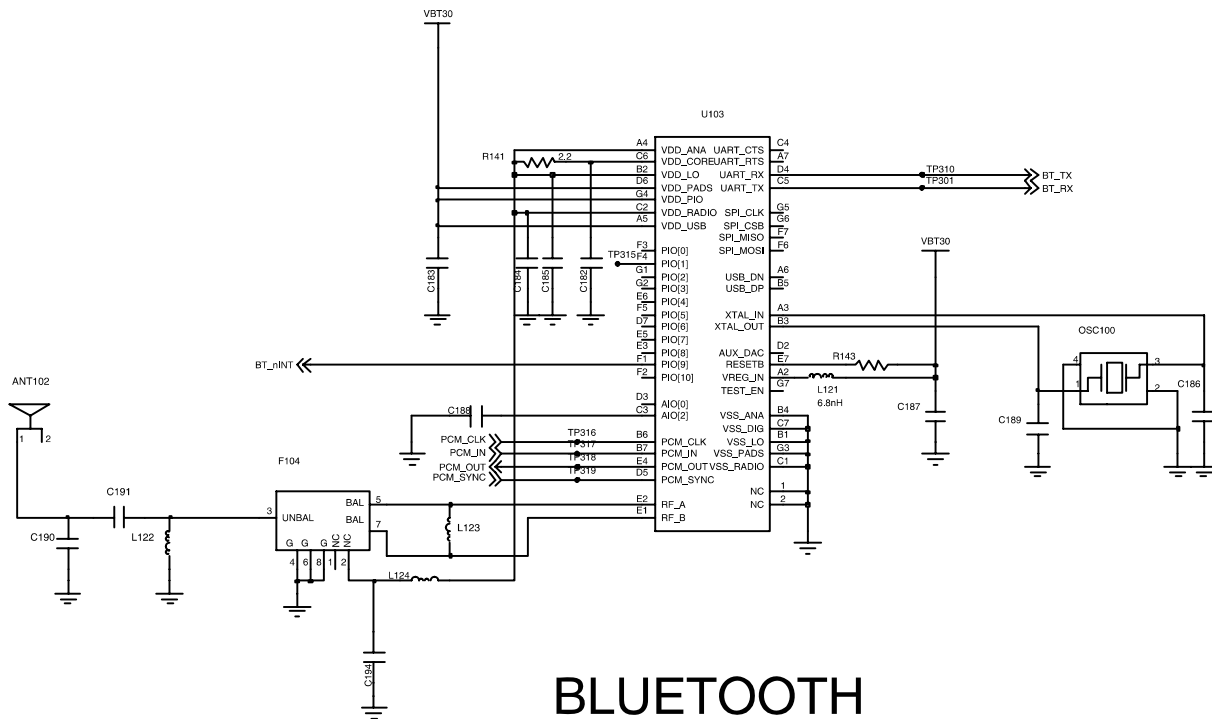
< T-Flash +SIM >



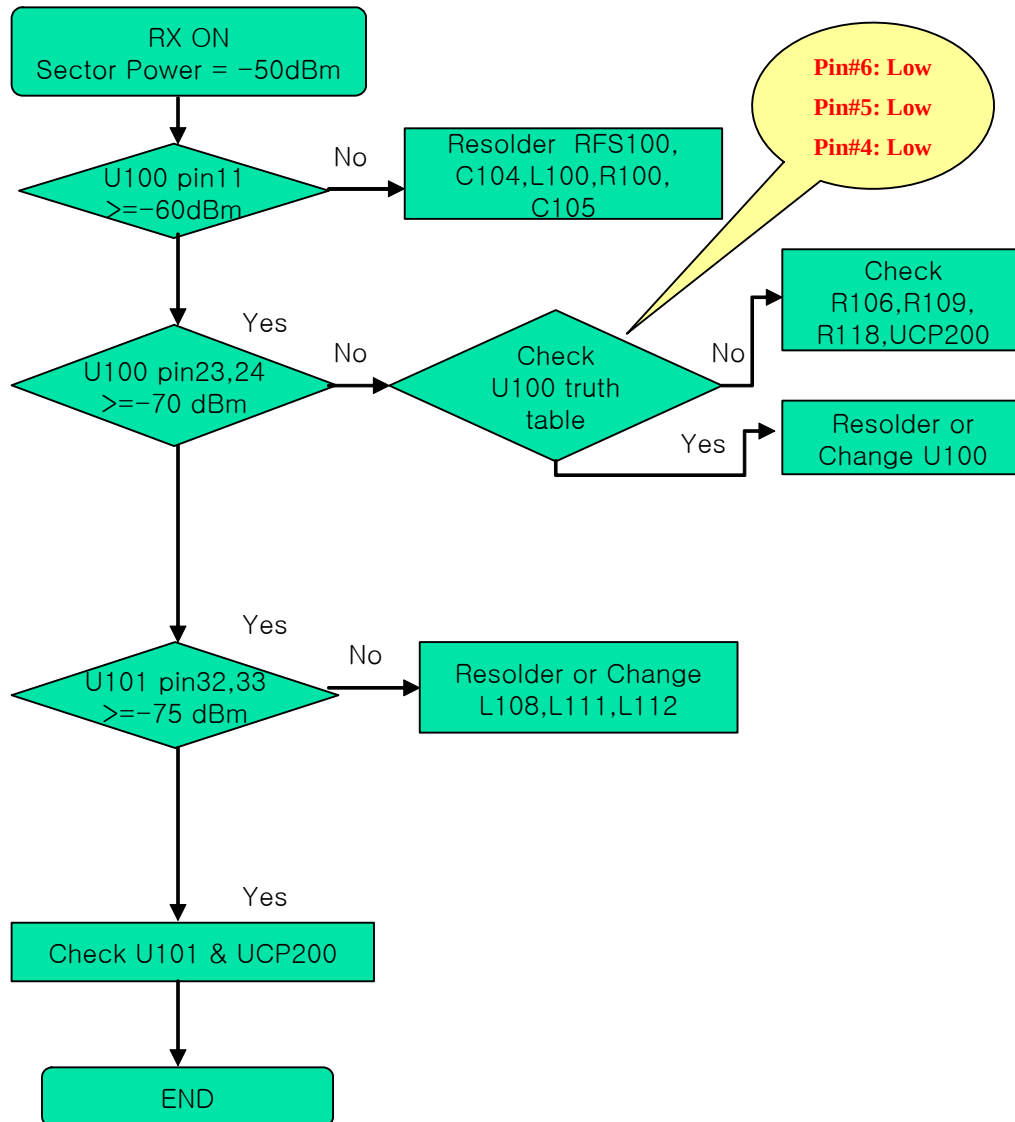
T-Flash 3.0V LDO

9-7. Bluetooth Working



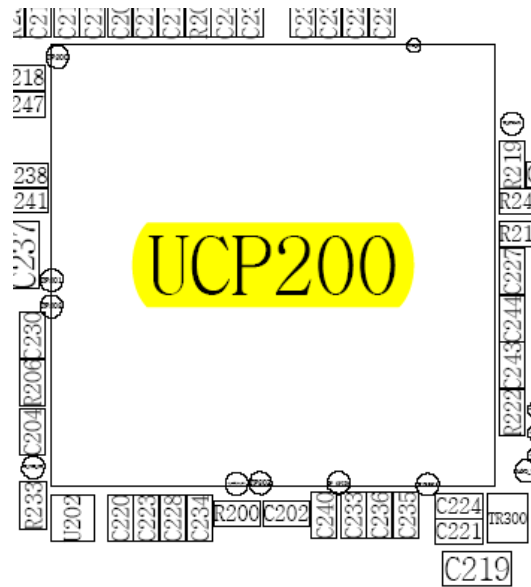
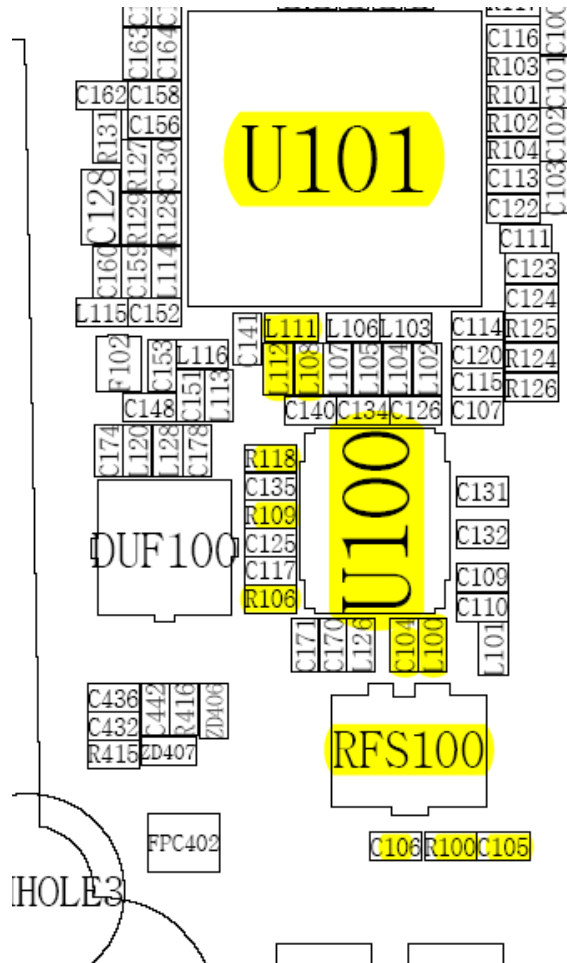
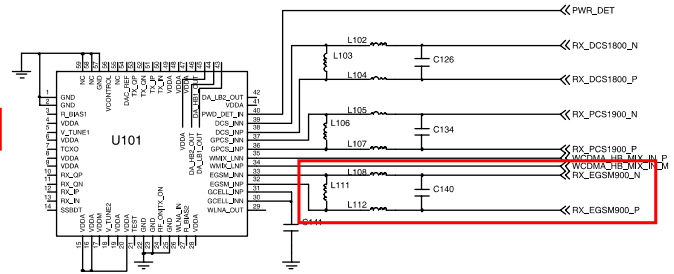
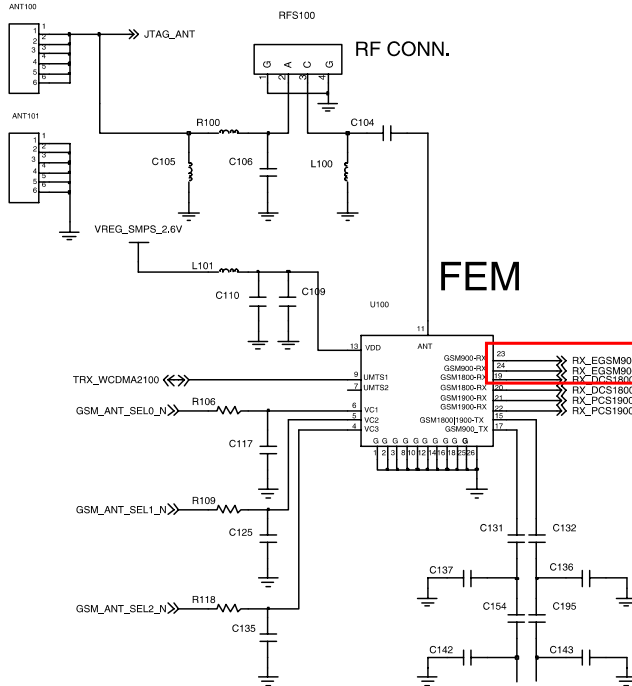


9-8. GSM Receiver

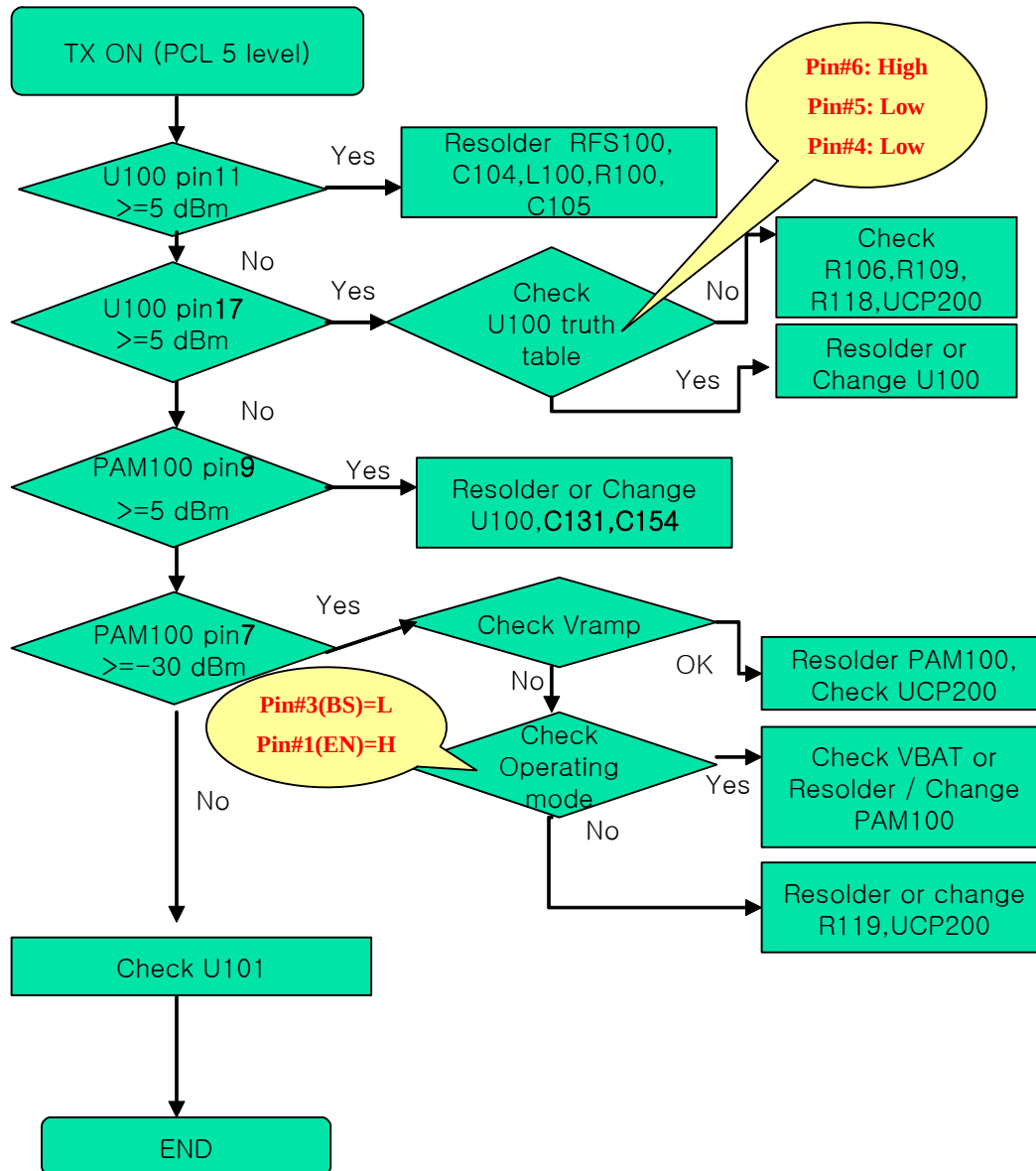


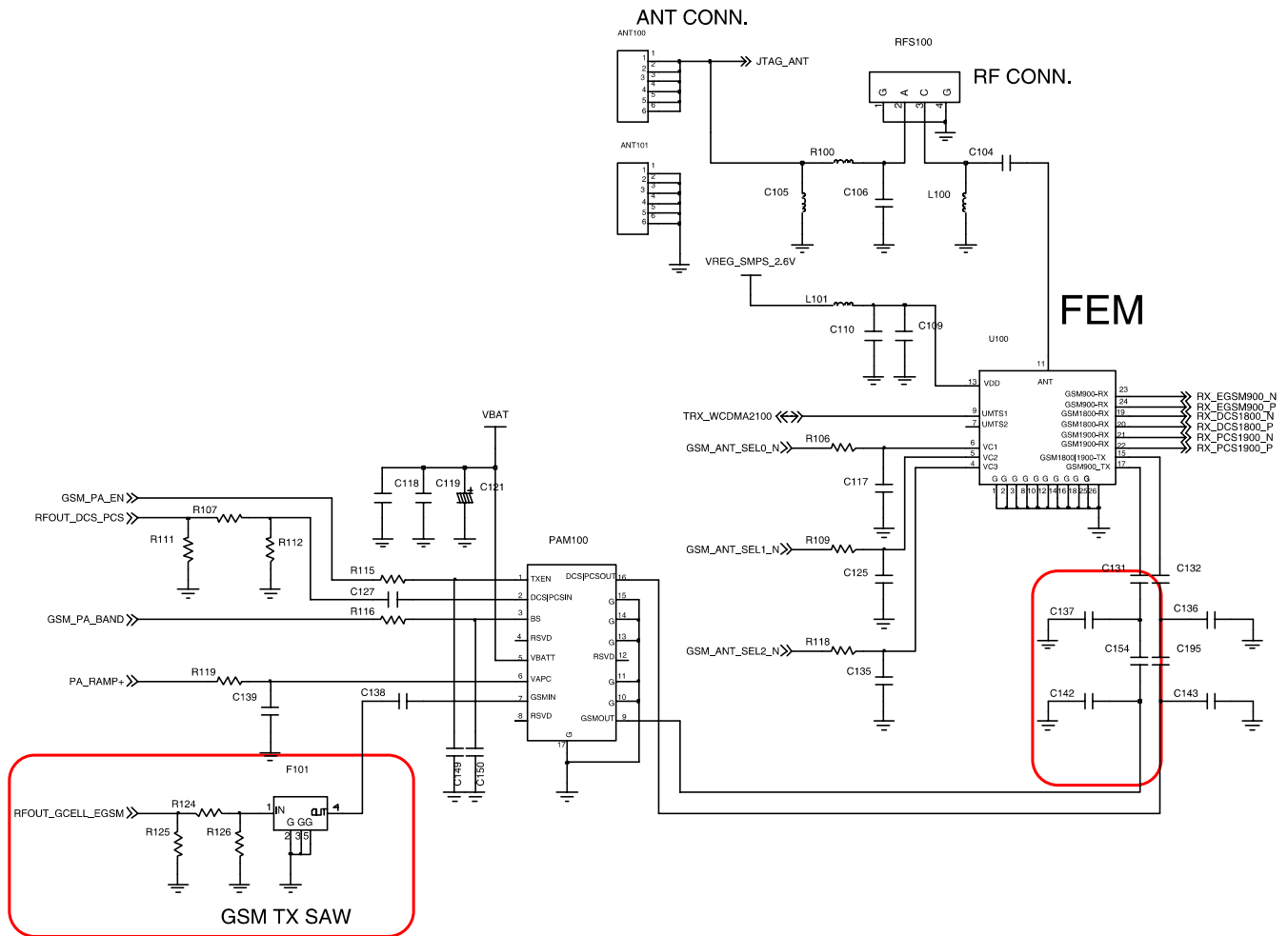
Flow Chart of Troubleshooting

ANT CONN.

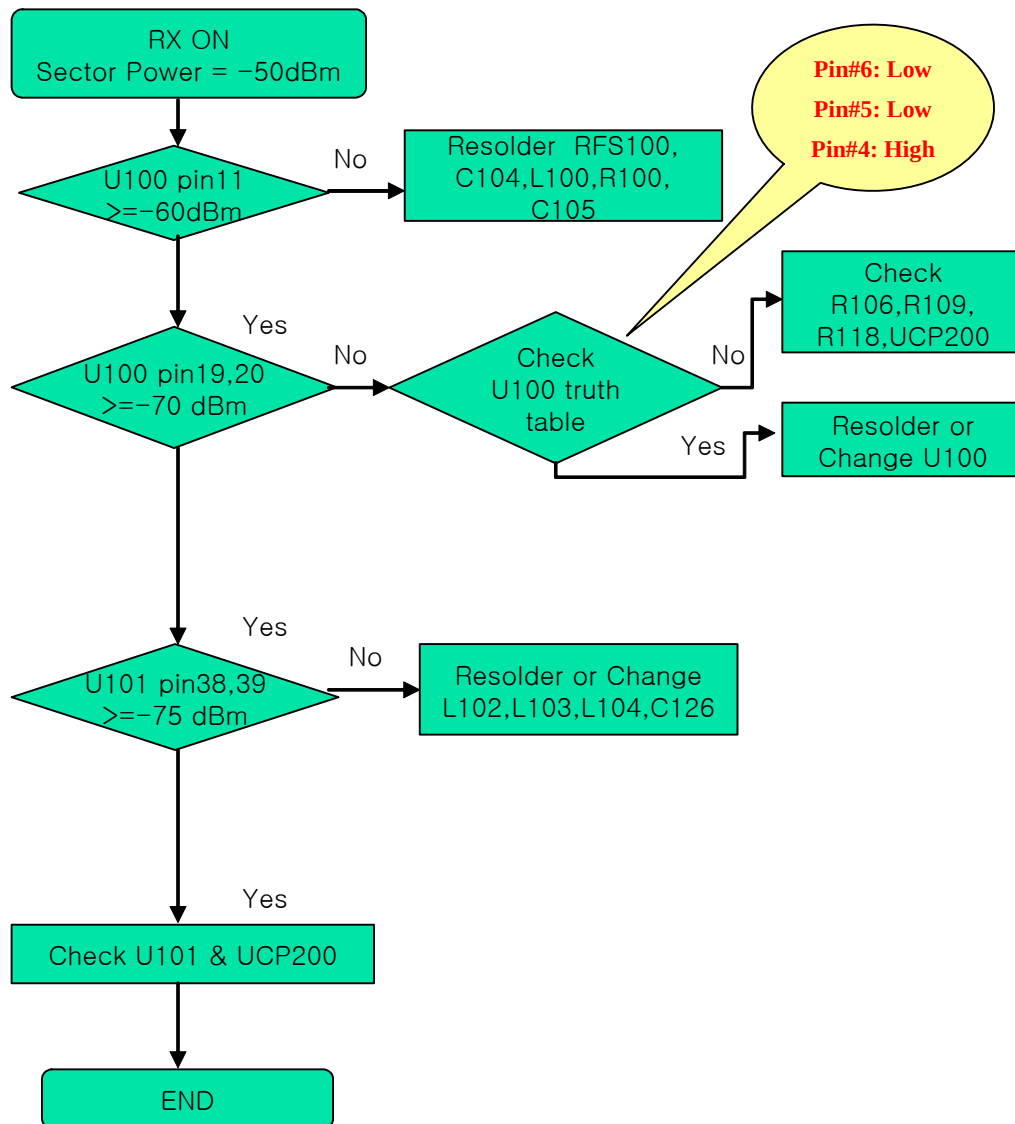


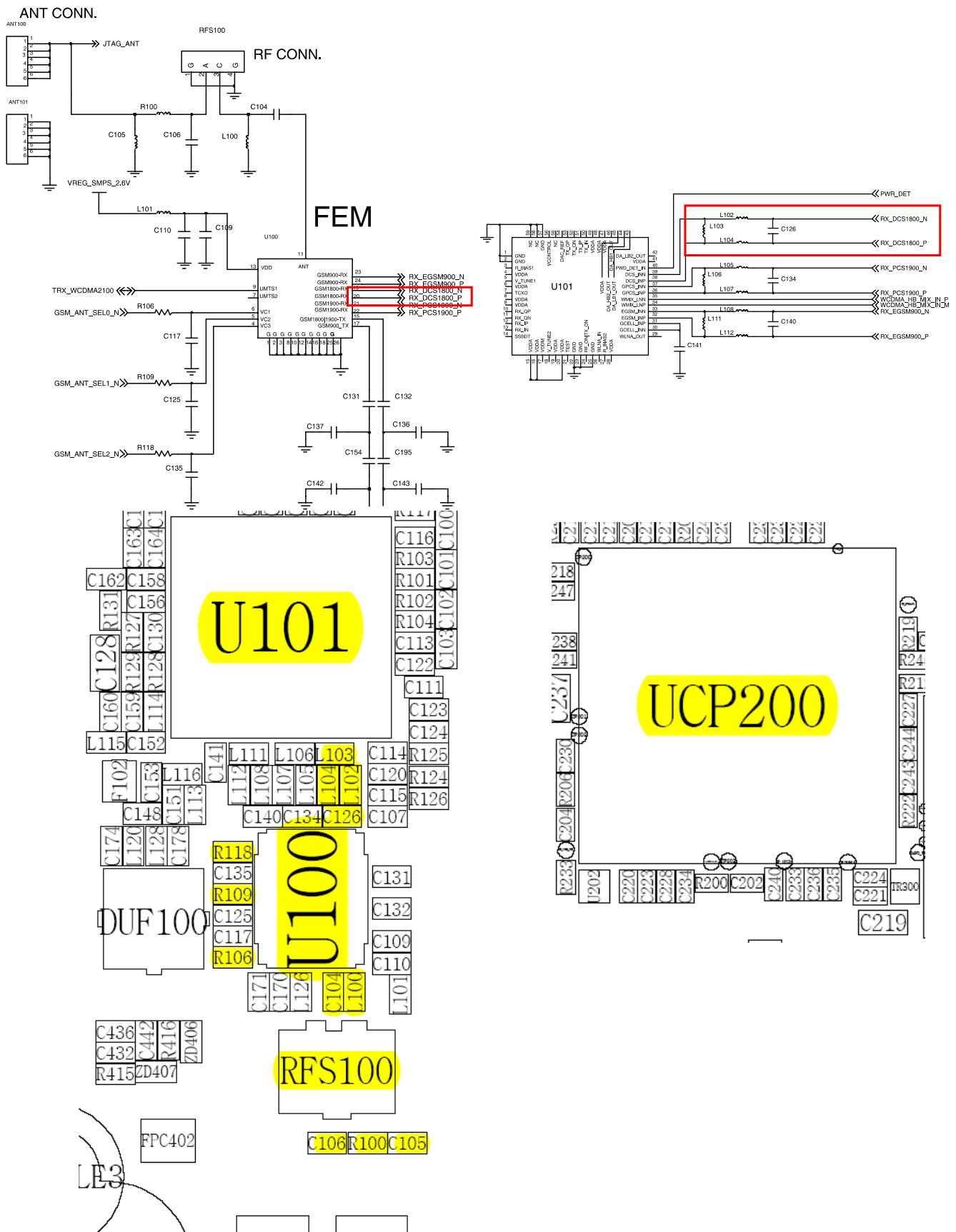
9-9. GSM Transmitter



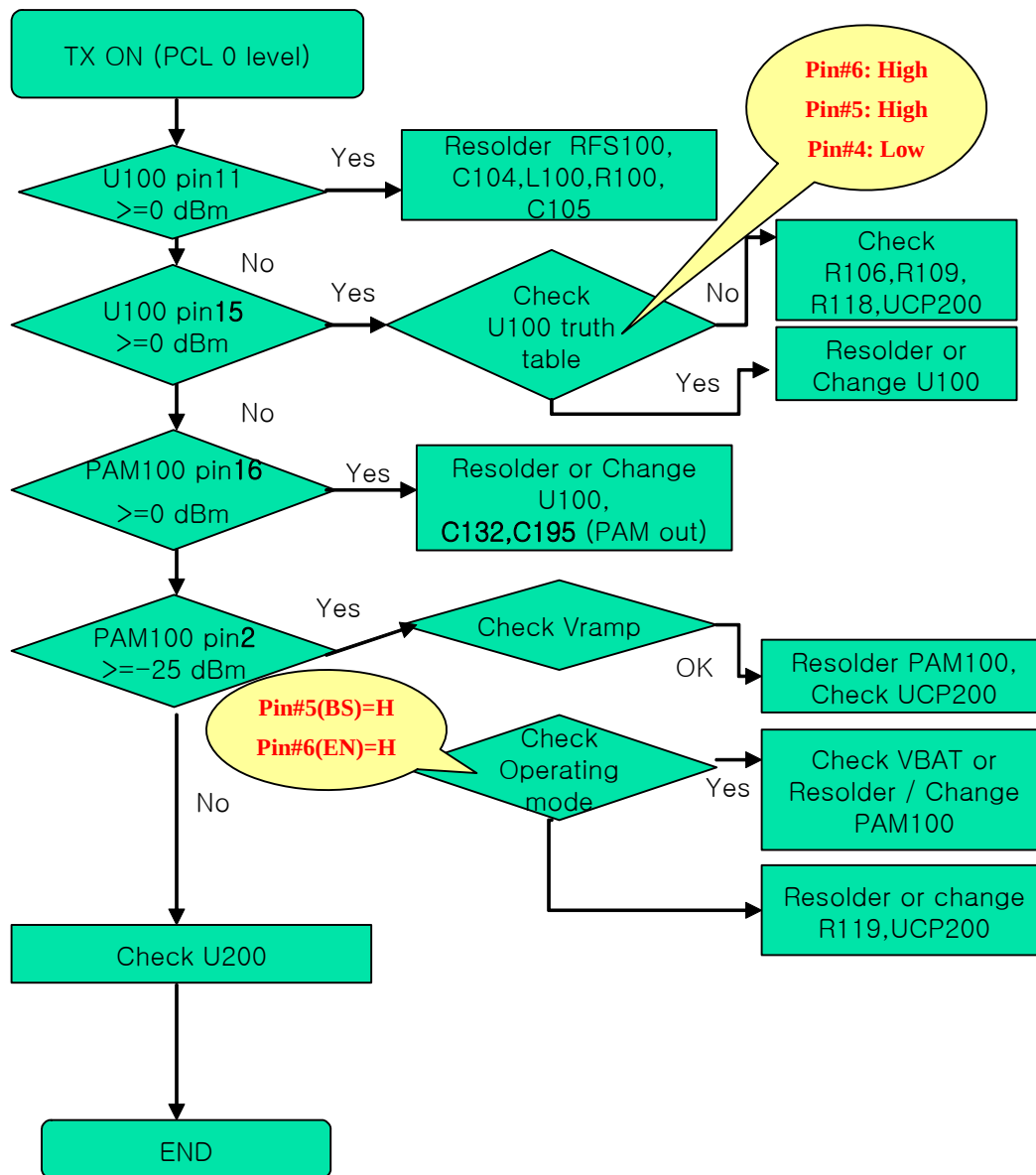


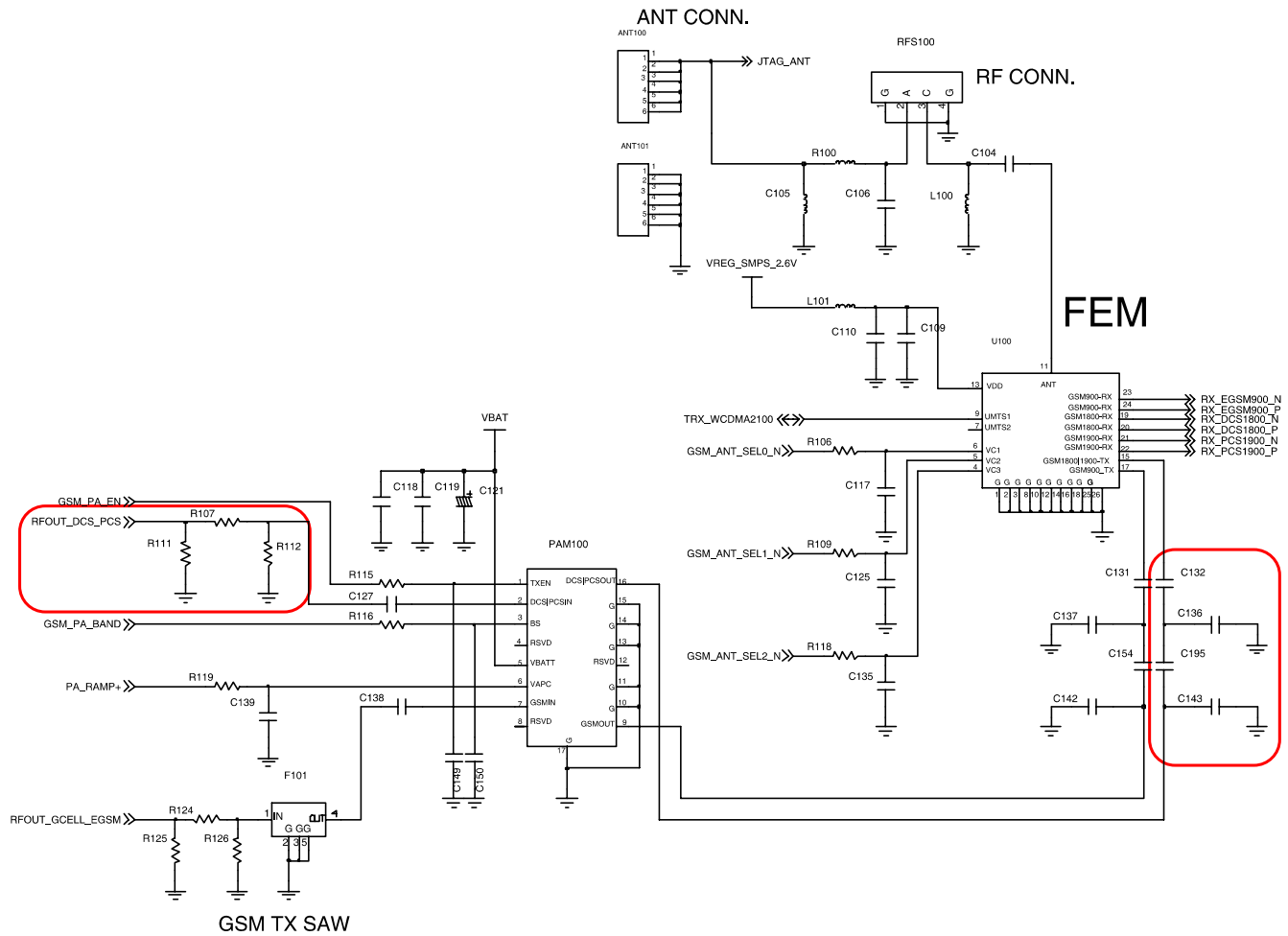
9-10. DCS Receiver

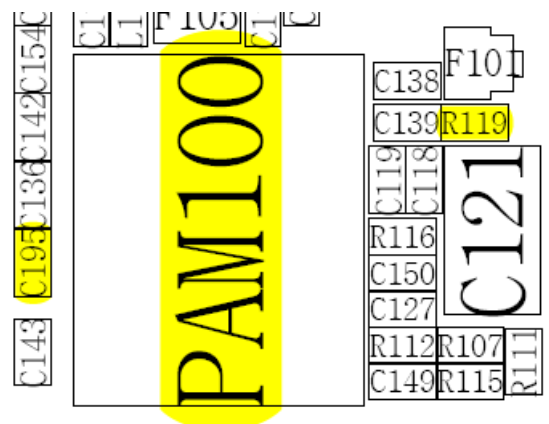
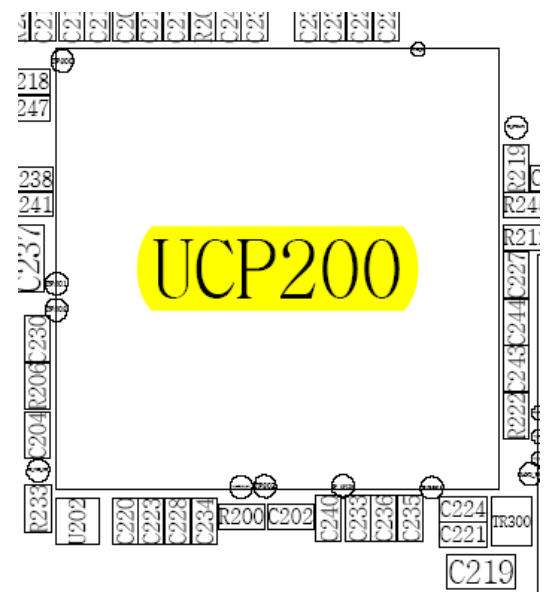
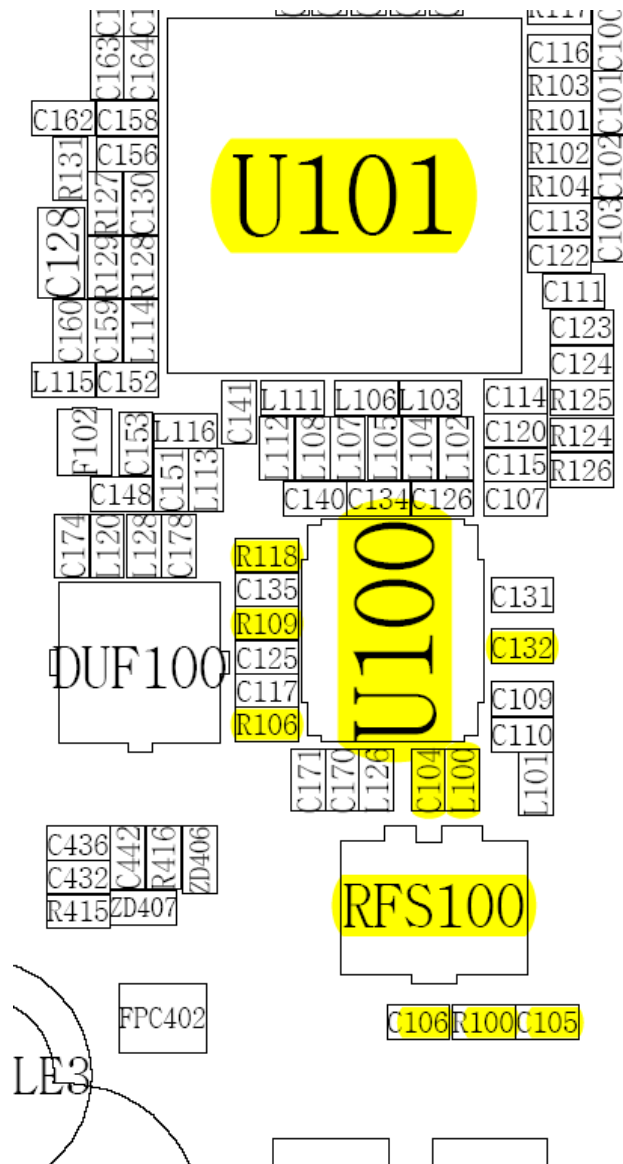




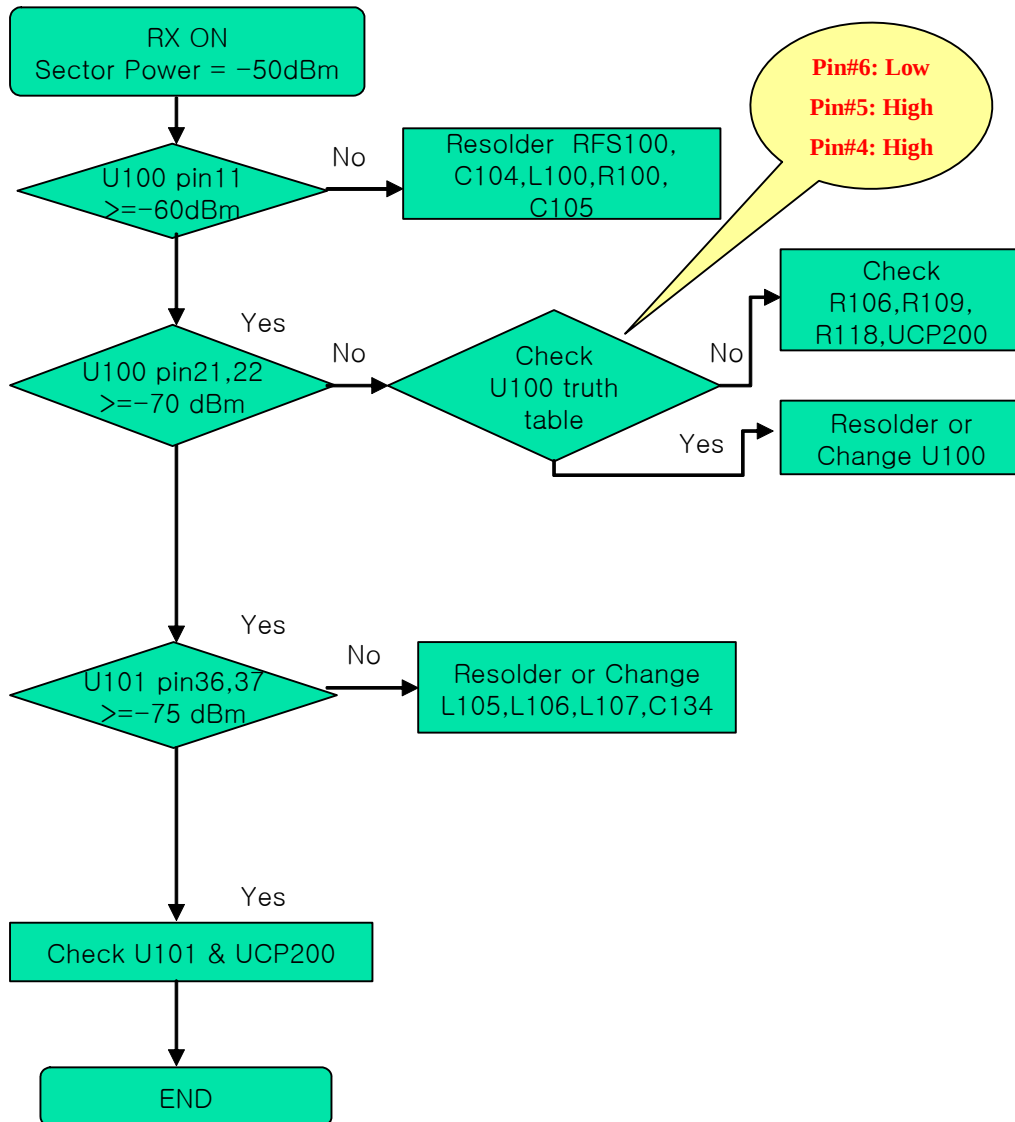
9-11. DCS Transmitter



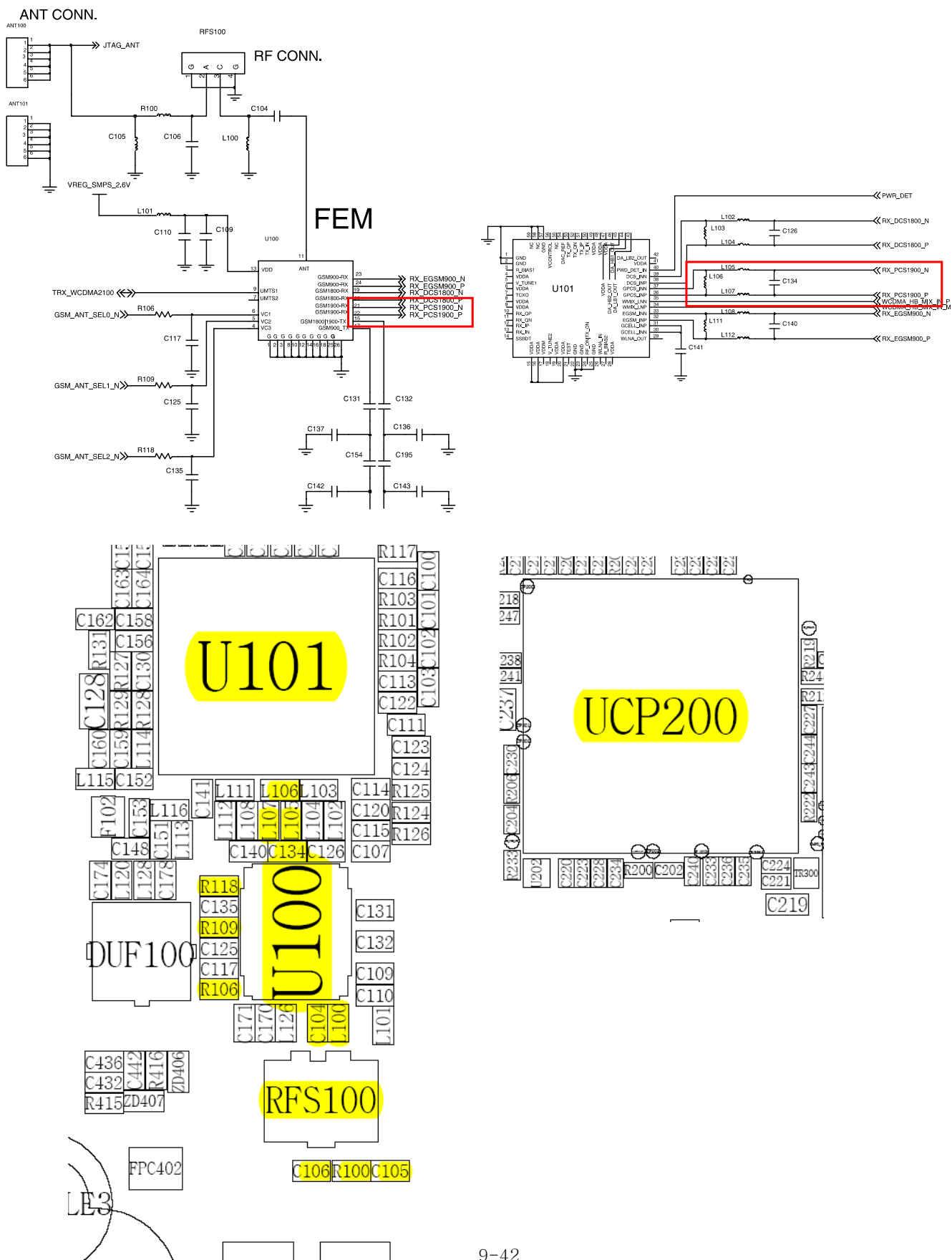




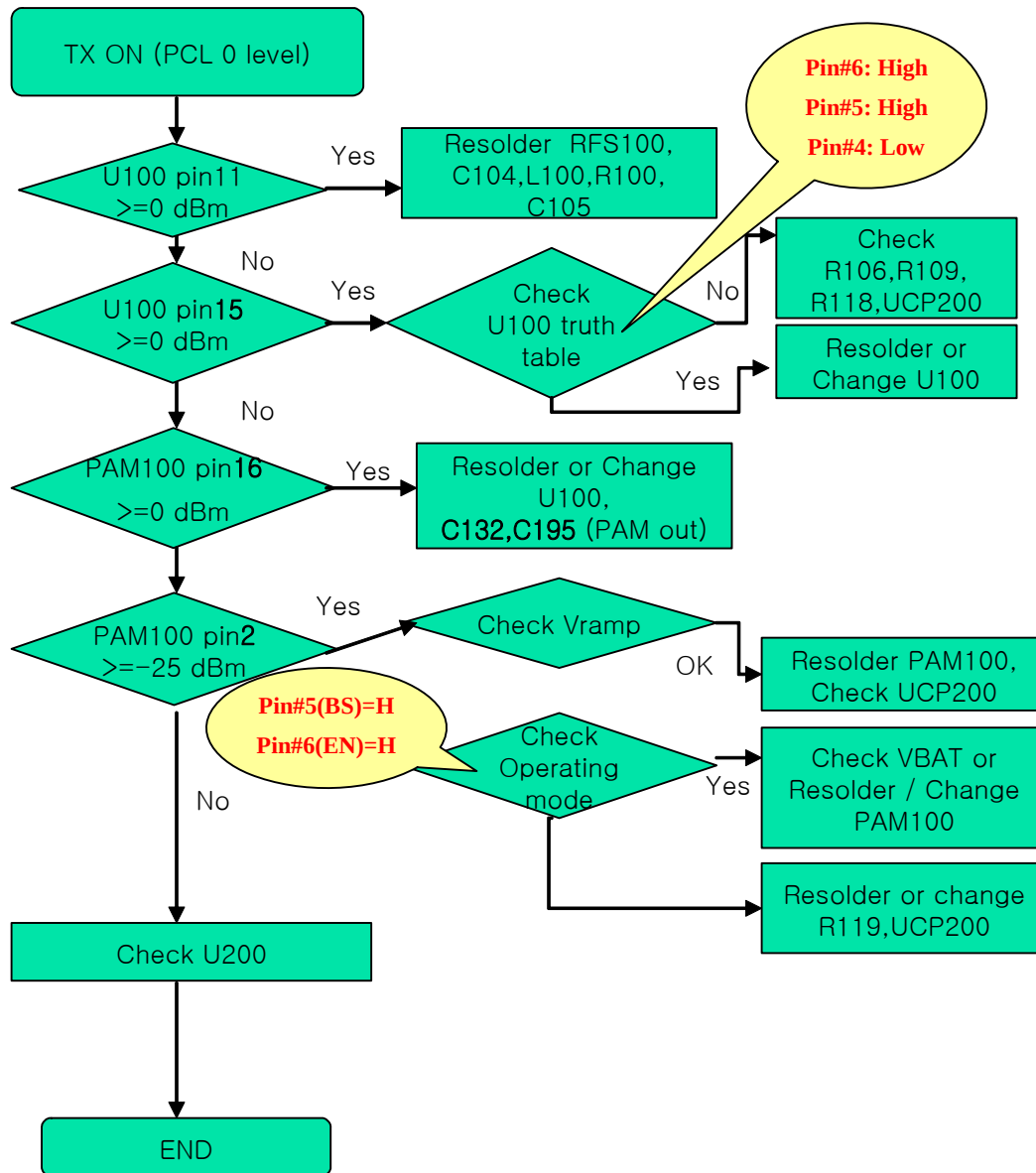
9-12. PCS Receiver

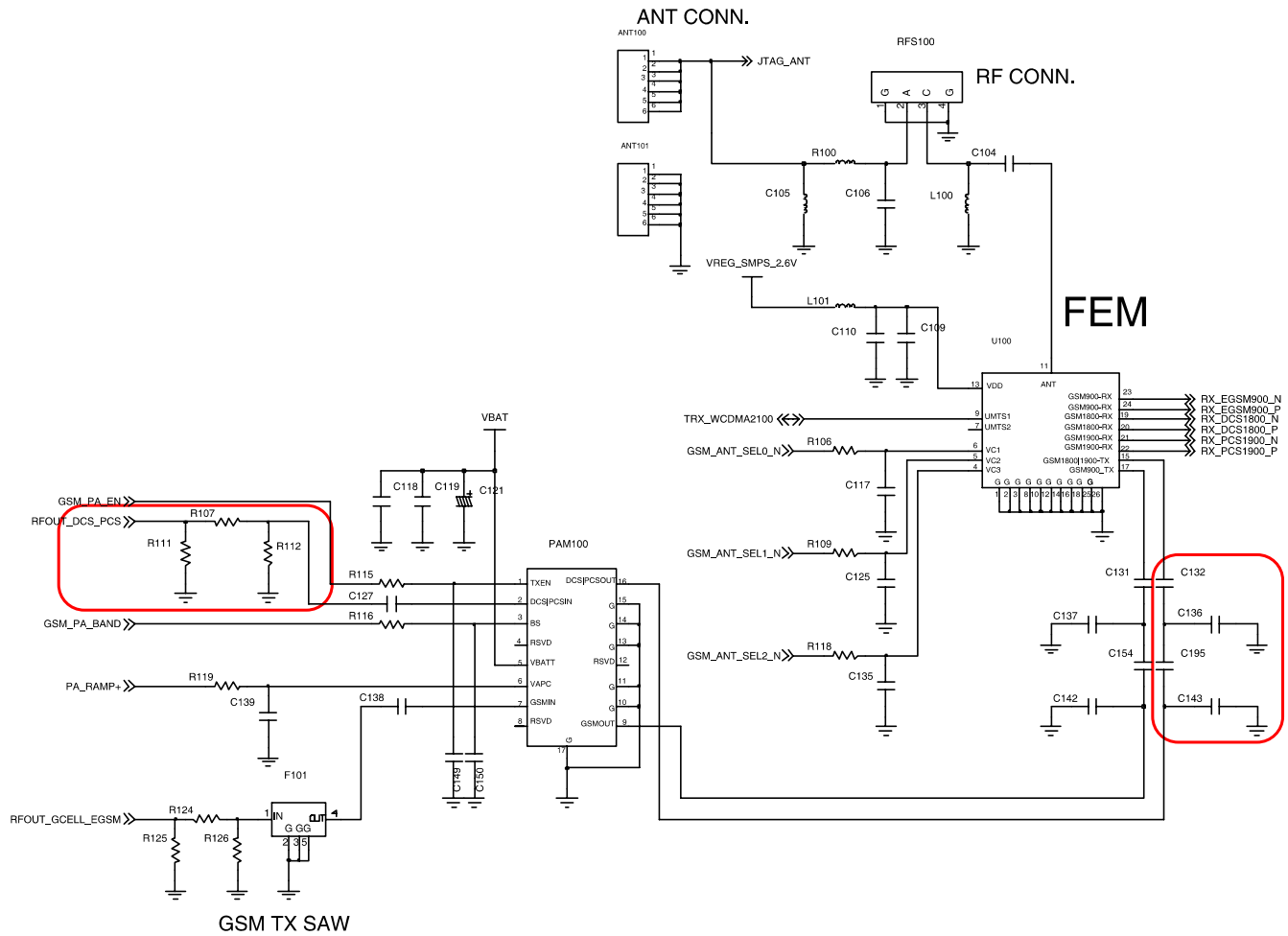


Flow Chart of Troubleshooting

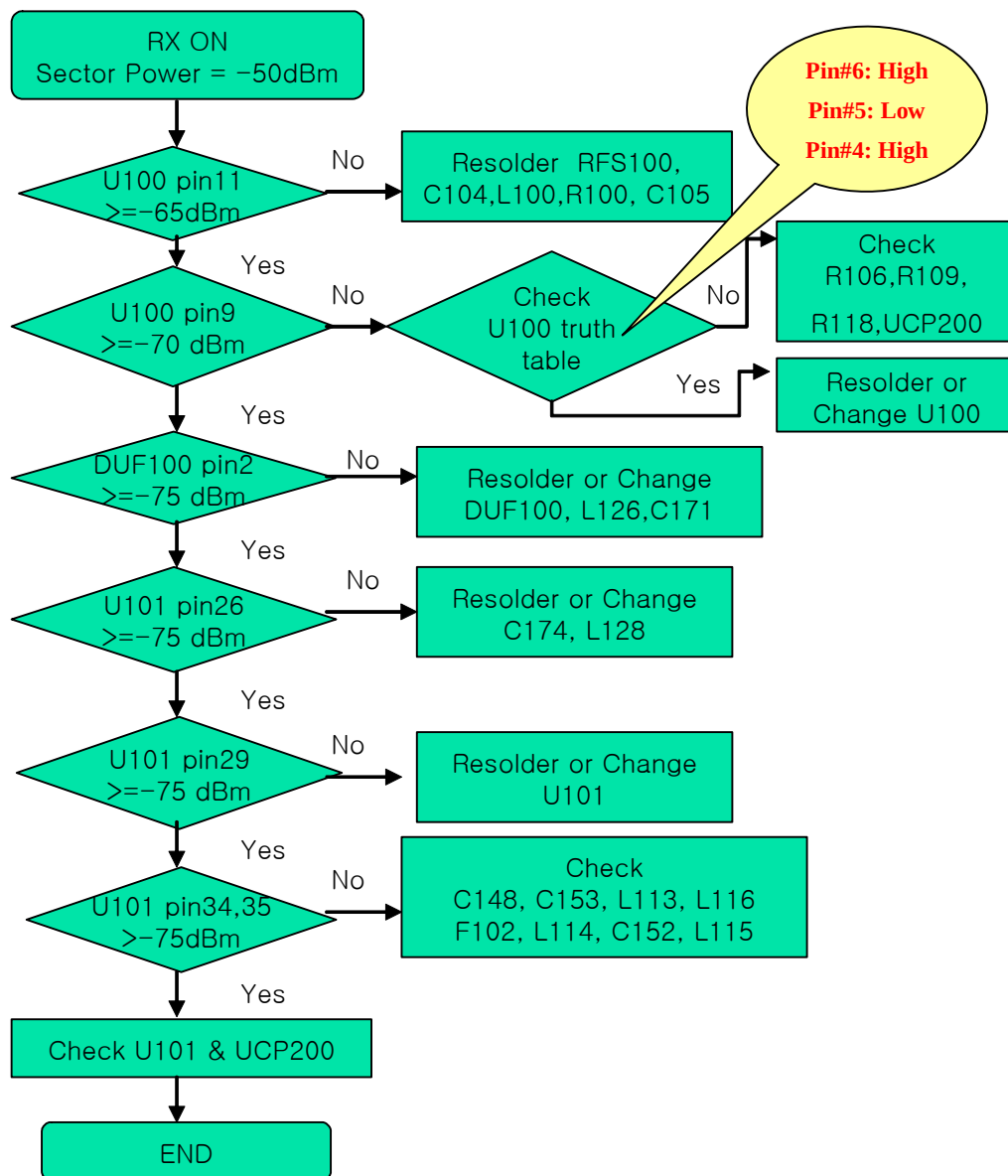


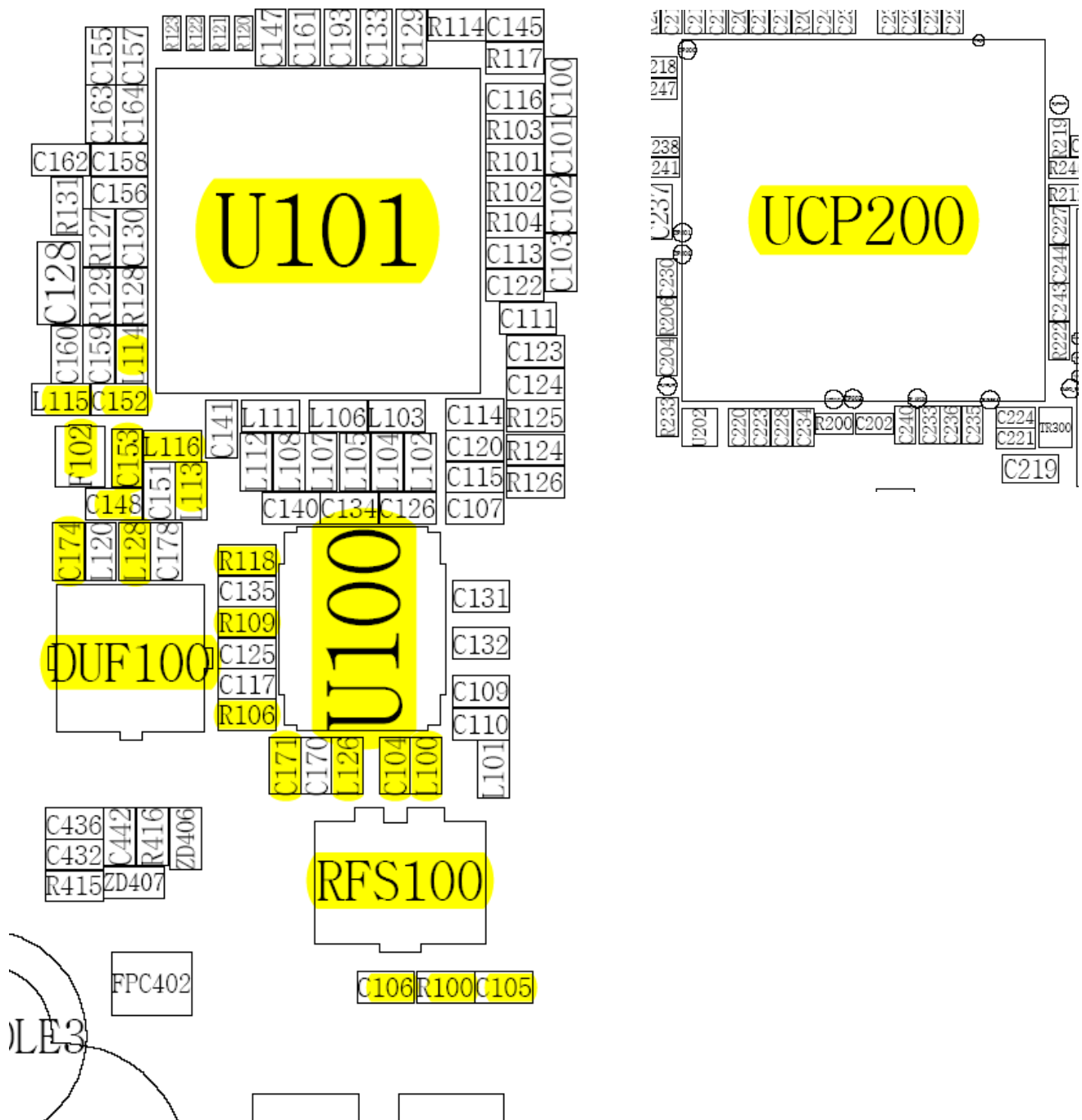
9-13. PCS Transmitter (same as DCS)



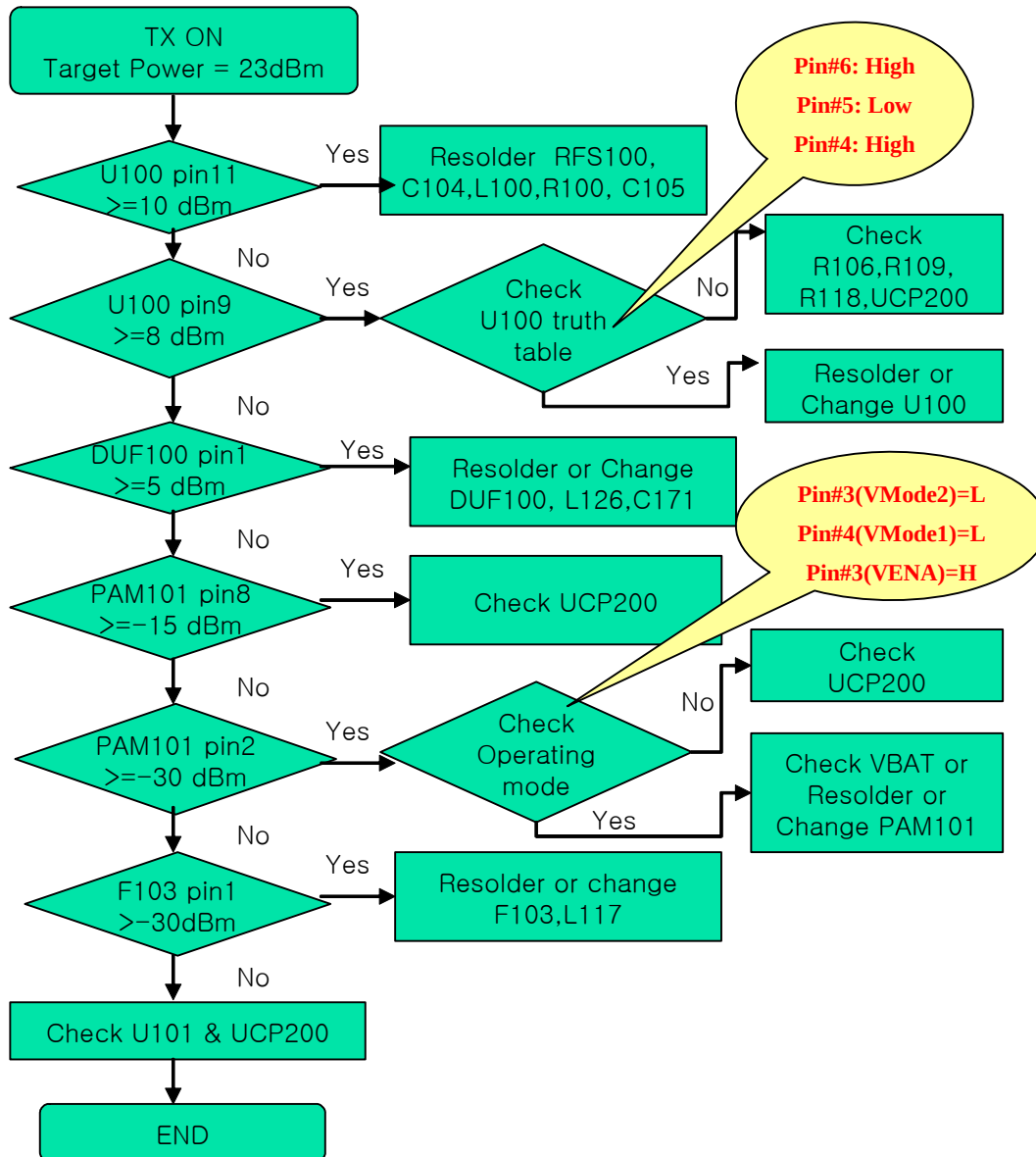


9-14. WCDMA 2100 Receiver





9-15. WCDMA 2100 Transmitter



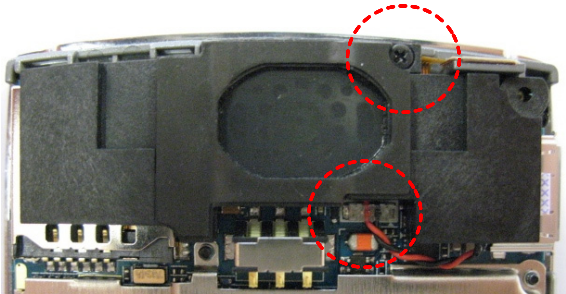
10. Reference data

Reference Abbreviate

- **ARFCN** : Absolute Radio Frequency Channel Number
- **BGA** : Ball Grid Array
- **DCS** : Digital Communications System
- **DL** : Downlink
- **EDR** : Enhanced Data Rate
- **EFS** : Embaded File System
- **EGSM** : Enhanced Global System for Mobile Communications
- **FTP** : File Transfer Protocol
- **HPSK** : Hybrid Phase Shift Keying
- **HSDPA** : High Speed Downlink Packet Access
- **Mcps** : Mega-chips per second
- **MMS** : Multimedia Messaging Service
- **MSK** : Minimum Shift Keying
- **OBEX** : OBject EXchange
- **PBA** : Panel Board Assembly
- **PCS** : Personal Communication System
- **PIM(S)** : Personal Information Management (System)
- **QPSK** : Quadrature Phase Shift Keying
- **RNDIS** : Remote Network Driver Interface Specification
- **RSS** : Received Signal Strength
- **SAW** : Surface Acoustic Wave
- **SMS** : Short Message Service
- **UL** : Uplink
- **USB** : Universal Serial Bus
- **WCDMA** : Wideband Code Division Multiple Access

11. Disassembly and Assembly Instructions

11-1. Disassembly Instructions

1) Unscrew 5 points in the rear case. 	1) Separate the locker by inserting the disassembly apparatus into the gap between the front and the rear. -Must use the disassembly apparatus -Notice the fragile rear not be broken 
1) Notice the rear case should not be damaged or scratched.	1) Notice the rear case should not be damaged and deformed
1) Separate the locker on the other side 2) Separate the rear case 	1) Unscrew the speaker carrier. 2) Separate the speaker carrier connector. 
1) Notice the rear case not be damaged or scratched. 2) Notice the rear case not be deformed	1) Notice the speaker carrier not be damaged. 2) Notice the speaker wire not be cut.

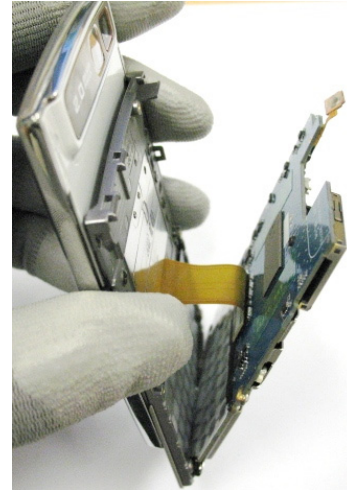
5

1) Detach the power key FPC



6

1) Slide up by half to make it easy to separate the main FPC from the PBA.
2) Separate the PBA



1) Notice the power key FPC not be damaged

1) Notice the PBA not be damaged
2) Notice the main FPC not be damaged

7

1) Separate the keypad.



8

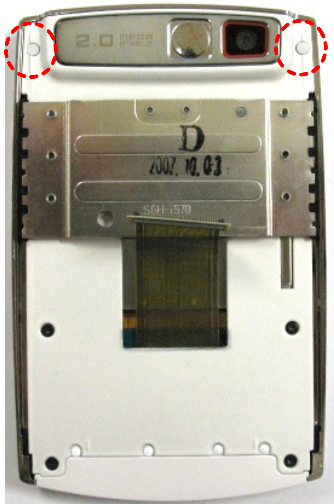
1) Unscrew 6 point below



1) Notice the plastics not be damaged or scratched.

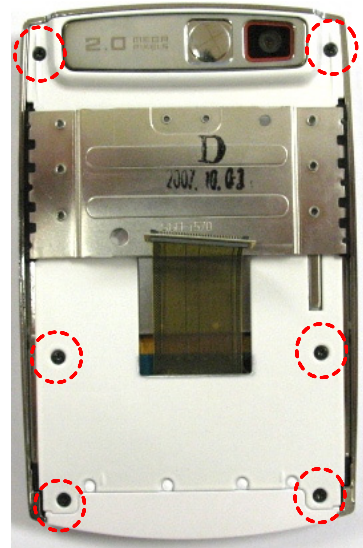
9

1) Disassemble the 2 screw cap using the tweezers.



10

1) Unscrew the 6 point and separate

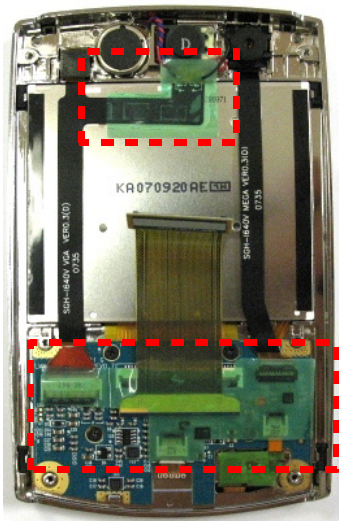


1) Notice the body not be scratched

1) Notice the body not be damaged.

11

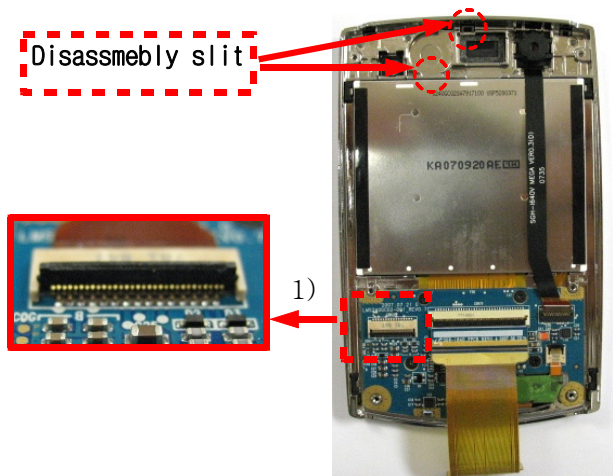
1) Detach two insulation tape



1) Notice the FPC not be damaged.

12

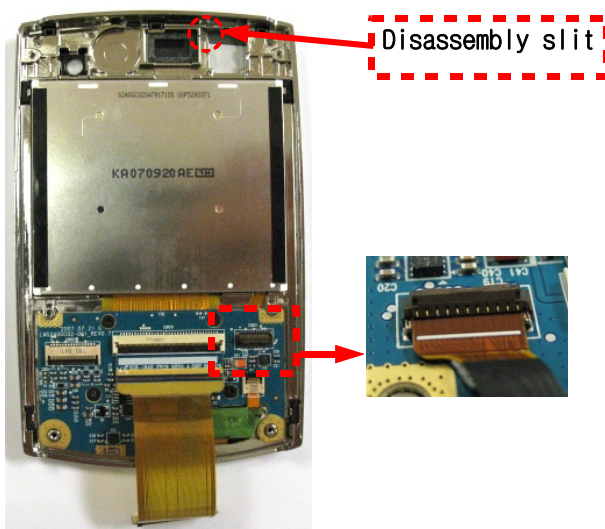
1) Separate the MOTOR/RECEIVER/VGA camera FPCB CONNECTOR
2) Separate the MOTOR/RECEIVER/VGA camera assay using disassembly slit.



1) Notice the MOTOR/RECEIVER not be damaged
2) Notice the FPC not be damaged

13

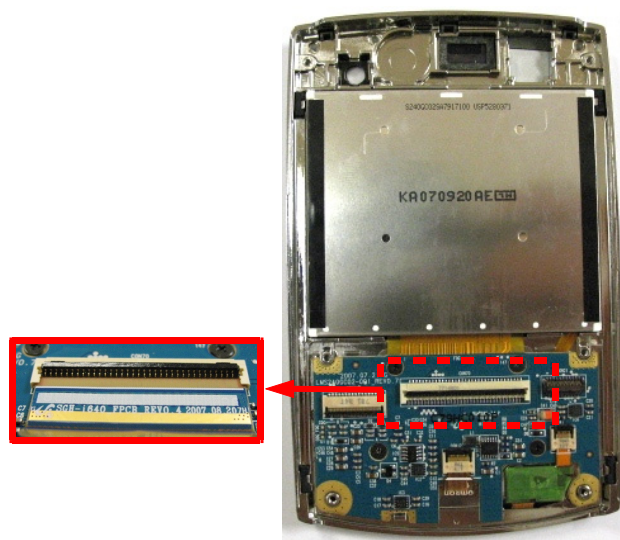
1) Separate the 2MP camera using the disassembly slit.



1) Notice the FPC not be damaged

14

1) Unlock the main FPC connector and separate the main FPC.



1) Notice the FPC not be damaged

15

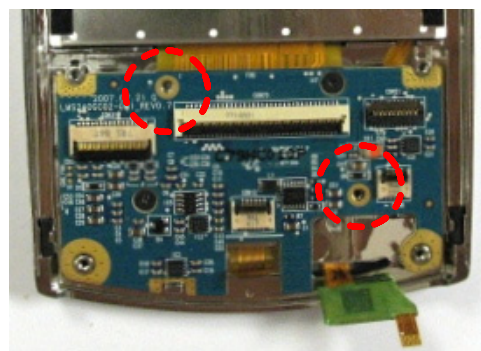
1) Separate WHEEL KEY FPCB/TOUCH KEY FPCB



1) Notice the FPC not be damaged

16

1) Unscrew 2 points and separate the sub-PBA



1) Notice the PBA not be damaged

17

1) Unscrew 2 point on the wheel key sus



1) Notice not be damaged

19

1) Separate the WHEEL KEY



11-2. Assembly Instructions

1

1) Screw 2 point on the wheel key sus



2

1) Put the LCD SUB PBA onto the UPPER slide
2) Screw 2 point of LCD sub PBA



1) Notice the plastics not be damaged or scratched.

1) Notice the PBA not be damaged

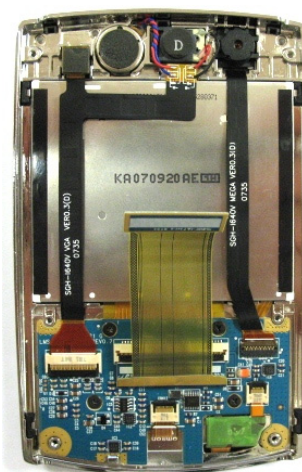
3

1) Slide in the WHEEL KEY FPCB / TOUCH KEY FPCB into the corresponding connector



4

1) Connect the main FPC.
2) Connect the MEGA CAMERA FPCB
3) Connect the MOTOR/VGA CAM/RECEIVER FPCB



1) Notice the FPC not be damaged

1) Notice the FPC not be damaged
2) Make sure all components are exactly in place

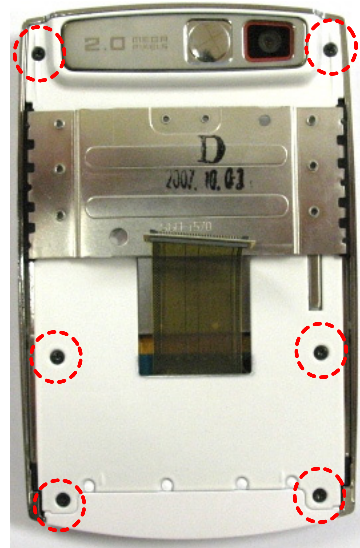
5

1) Attach two insulation tape



6

1) Put the lower part of slide
2) Screw 6 points

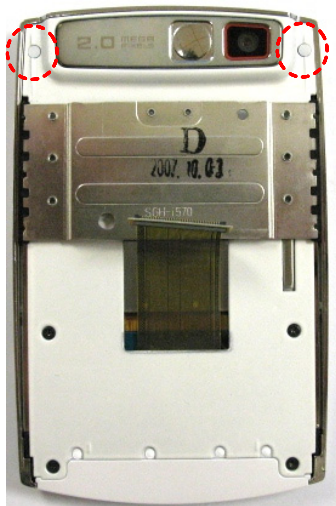


1) Be sure in the guideline

1) Make sure no gap between the upper and lower slide
2) Notice the plastics not be damaged or scratched.

7

1) Attach 2 screw cap.



8

1) Put the front into the right position
2) Screw 6 points.

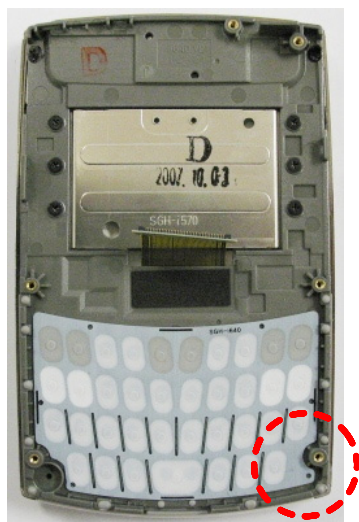


1) Make sure the screw caps are in position

1) Notice the plastics not be damaged or scratched

9

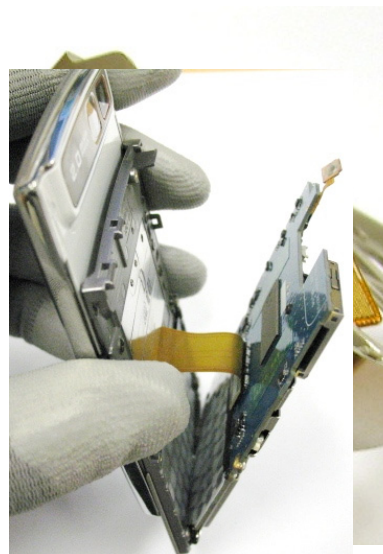
1) Put in the key pad



- 1) press the double sided tape in the lower right side of the key pad
- 2) Make sure the key pad attachment

10

1) Press the main FPC head onto the connector 2) Put down the PBA



- 1) Make sure the main FPC connection
- 2) Notice the PBA not be damaged
- 3) Notice the FPC not be damaged

11

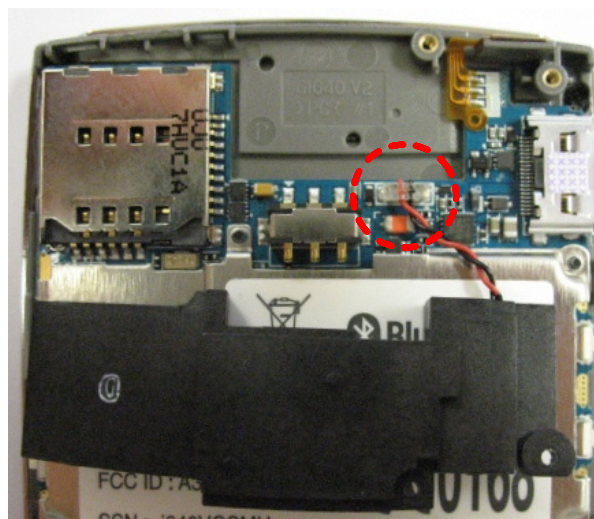
1) Attach the power key FPC



- 1) Keep the guide line
- 2) Notice the power key FPC not be damaged

12

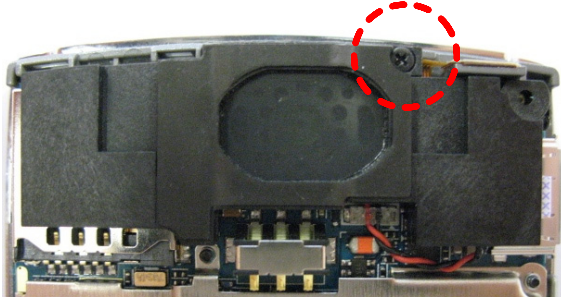
1) Join the speaker carrier



- 1) Make sure the polarity. Red wire is on the left and black wire is on the right
- 2) Make sure the connection

13

1) Screw the speaker carrier



14

1) Assemble the rear case from the upper part of it.



1) Make sure the speaker carrier is in position.
2) Notice the speaker carrier not be damaged

1) Make sure no gap between the front and rear case.

15

1) Screw 5 points in the rear case



16

1) Check the final assembly status



