

**SAMSUNG**

# GSM TELEPHONE

## SGH-i900

# **SERVICE** *Manual*

**GSM TELEPHONE**



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**SAMSUNG  
ELECTRONICS**



GSPN (Global Service Partner Network)

<b>Country</b>	<b>Web Site</b>
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

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# 1. Safety Precautions

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## 1-1. Repair Precaution

- Repair in Shield Box, during detailed tuning.  
Take specially care of tuning or test,  
because specipcty of cellular phone is sensitive for surrounding interference(RF noise).
- Be careful to use a kind of magnetic object or tool,  
because performance of parts is damaged by the influence of manetic force.
- Surely use a standard screwdriver when you disassemble this product,  
otherwise screw will be worn away.
- Use a thicken twisted wire when you measure level.  
A thicken twisted wire has low resistance, therefore error of measurement is few.
- Repair after separate Test Pack and Set because for short danger (for example an  
overcurrent and furious flames of parts etc) when you repair board in condition of  
connecting Test Pack and tuning on.
- Take specially care of soldering, because Land of PCB is small and weak in heat.
- Surely tune on/off while using AC power plug, because a repair of battery charger is  
dangerous when tuning ON/OFF PBA and Connector after disassembling charger.
- Don't use as you pleases after change other material than replacement registered on SEC  
System.  
Otherwise engineer in charge isn't charged with problem that you don't keep this rules.

## 1-2. ESD(Electrostatically Sensitive Devices) Precaution

Several semiconductor may be damaged easily by static electricity. Such parts are called by ESD(Electrostatically Sensitive Devices), for example IC,BGA chip etc. Read Precaution below. You can prevent from ESD damage by static electricity.

- Remove static electricity remained your body before you touch semiconductor or parts with semiconductor. There are ways that you touch an earthed place or wear static electricity prevention string on wrist.
- Use earthed soldering steel when you connect or disconnect ESD.
- Use soldering removing tool to break static electricity. , otherwise ESD will be damaged by static electricity.
- Don't unpack until you set up ESD on product. Because most of ESD are packed by box and aluminum plate to have conductive power,they are prevented from static electricity.
- You must maintain electric contact between ESD and place due to be set up until ESD is connected completely to the proper place or a circuit board.



## 2. Specification

### 2-1. GSM General Specification

	<b>GSM850 Phase 1</b>	<b>EGSM 900 Phase 2</b>	<b>DCS1800 Phase 1</b>	<b>PCS1900</b>	<b>WCDMA2100</b>
Freq. Band[MHz] Uplink/Downlink	824~849 869~894	880~915 925~960	1710~1785 1805~1880	1850~1910 1930~1990	1922~1977 2112~2167
ARFCN range	128~251	0~124 & 975~1023	512~885	512~810	UL:9612~9888 DL:10562~10838
Tx/Rx spacing	45MHz	45MHz	95MHz	80MHz	190MHz
Mod. Bit rate/ Bit Period	270.833kbps 3.692us	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	576.9us 4.615ms	FrameLength: 10ms Slotlength: 0.667ms
Modulation	0.3GMSK	0.3GMSK	0.3GMSK	0.3GMSK	QPSKHQPSK
MS Power	33dBm~5dBm	33dBm~5dBm	30dBm~0dBm	30dBm~0dBm	24dBm~-50dBm
Power Class	5pcl ~ 19pcl	5pcl ~ 19pcl	0pcl ~ 15pcl	0pcl ~ 15pcl	3(max+24dBm)
Sensitivity	-102dBm	-102dBm	-100dBm	-100dBm	-106.7dBm
TDMA Mux	8	8	8	8	
Cell Radius	35Km	35Km	2Km	2Km	2Km

## 2-2. GSM Tx Power Class

<b>TX Power control level</b>	<b>GSM850</b>	<b>TX Power control level</b>	<b>EGSM900</b>	<b>TX Power control level</b>	<b>DCS1800</b>	<b>TX Power control level</b>	<b>PCS1900</b>
5	33±2 dBm	5	33±2 dBm	0	30±3 dBm	0	30±3 dBm
6	31±2 dBm	6	31±2 dBm	1	28±3 dBm	1	28±3 dBm
7	29±2 dBm	7	29±2 dBm	2	26±3 dBm	2	26±3 dBm
8	27±2 dBm	8	27±2 dBm	3	24±3 dBm	3	24±3 dBm
9	25±2 dBm	9	25±2 dBm	4	22±3 dBm	4	22±3 dBm
10	23±2 dBm	10	23±2 dBm	5	20±3 dBm	5	20±3 dBm
11	21±2 dBm	11	21±2 dBm	6	18±3 dBm	6	18±3 dBm
12	19±2 dBm	12	19±2 dBm	7	16±3 dBm	7	16±3 dBm
13	17±2 dBm	13	17±2 dBm	8	14±3 dBm	8	14±3 dBm
14	15±2 dBm	14	15±2 dBm	9	12±4 dBm	9	12±4 dBm
15	13±2 dBm	15	13±2 dBm	10	10±4 dBm	10	10±4 dBm
16	11±3 dBm	16	11±3 dBm	11	8±4 dBm	11	8±4 dBm
17	9±3dBm	17	9±3dBm	12	6±4 dBm	12	6±4 dBm
18	7±3 dBm	18	7±3 dBm	13	4±4 dBm	13	4±4 dBm
19	5±3 dBm	19	5±3 dBm	14	2±5 dBm	14	2±5 dBm
				15	0±5 dBm	15	0±5 dBm

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## 3. Product Function

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### Main Function

- Homescreen
- PIM - Contacts, Calendar, Tasks, Voice Note
- Messaging - SMS, MMS, Email, VoiceRecorder within MMS
- Windows Live! Portal
- Windows Update
- Email Setup Wizard
- Internet Explorer
- Multimedia capability - 5 Mega Pixel, Camcorder, Windows Media Player
- Zoomer
- Dialer
- Video Telephony
- Accessary Applications - Alarms, Calculator, NotePad, Task Manager, Smart Converter, World Clock, Stopwatch, Smart Search
- Active Sync
- Bluetooth
- Document Viewer
- File Manager, My Item
- Java
- Pod Casting, RSS Reader
- Games
- MTV
- Postcard
- Google Map
- TV OUT
- Auto Brightness Control
- Acceleration Sensor

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## 4. Array course control

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### 4-1. Software Adjustments

There is 2 set to download the binary image into your device.

[First set]



1. JIG BOX (UMTS TEST JIG: GH80-03308A)
2. USB Cable : JIG to PC
3. Test Cable : JIG to SGH-i780 (GH39-00993A)
4. Power Cable : JIG to power supply
5. Serial Cable : SGH-i900 to PC
6. Power Supply
7. RF Cable (GH39-00599A): to Agilent 8960 or CMU200
8. Test Cable : JIG to SGH-i900 (GH39-00990A)

[Second set]



1. USB DATA Link Cable : GH39-00922A
2. Battery : GH43-03110A

## 4-2. Software Download

### 1-1. Equipment for Software Download



### 1-2. Pre-requisite for Download

- ▶ Downloader Program
  - [\[Image Version\].exe](#)
- ▶ USB Driver
  - **PDA : Samsung MITs USB Sync [Samsung MITs USB Sync.zip]**
  - **Phone : Samsung CDMA Modem [Samsung CDMA Modem.zip]**
- ▶ SGH-i900 Mobile Device
- ▶ Driver Installation

## 2-1. Driver Installation (PDA)

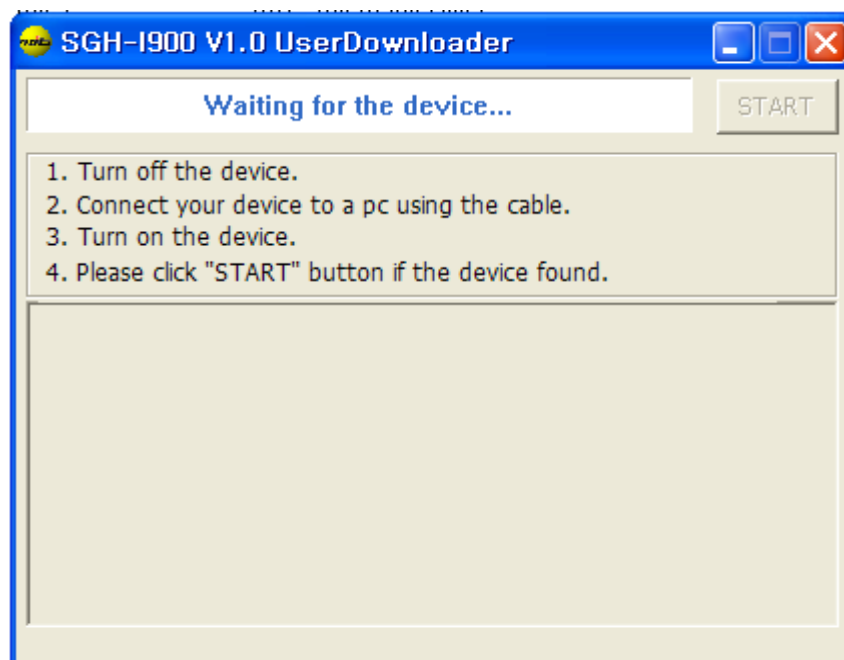
- ▶ Make sure that you install drivers.
- ▶ **If you installed the latest ActiveSync program, you don't need to install the pda driver. Please install the latest ActiveSync program.**

## 2-2. Driver Installation (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.**

## 3. Execute the Downloader Program. [Image Version.exe]



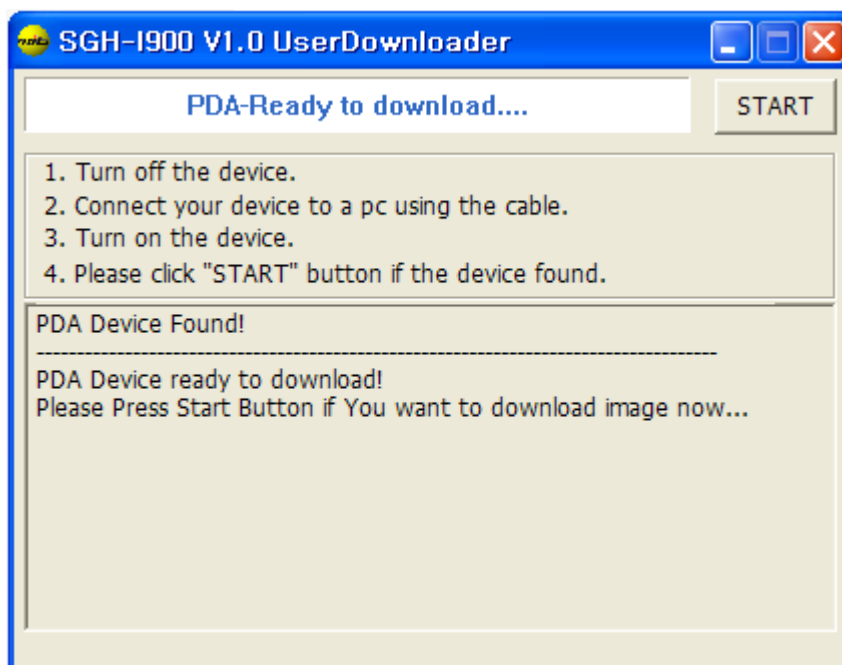
**4. Turn off your device.**

**5. Connect your device to a host computer by using USB DATA Link Ca**



ble.

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



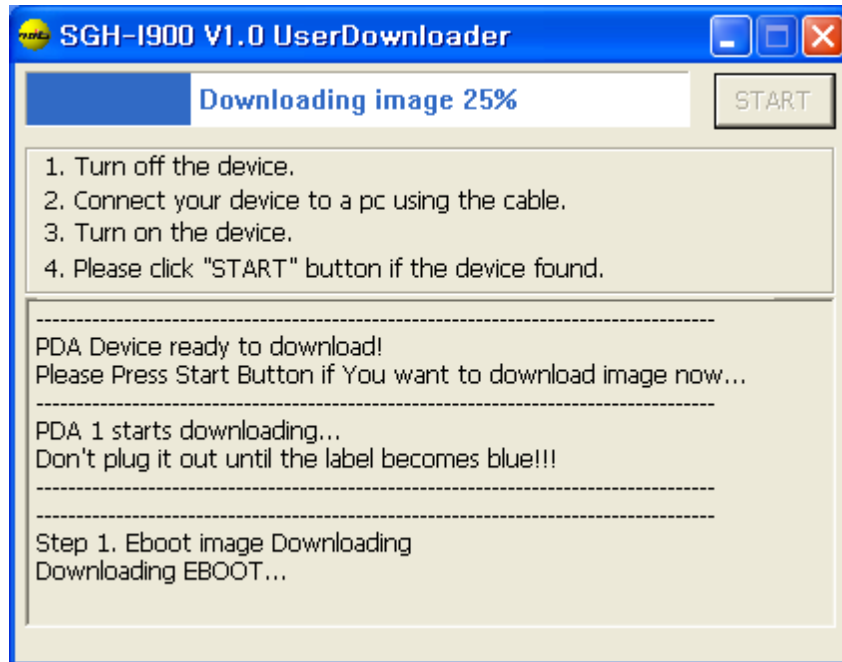


☞ If 'START' button is not activated, terminate the application and reconnect USB data link cable and retry.

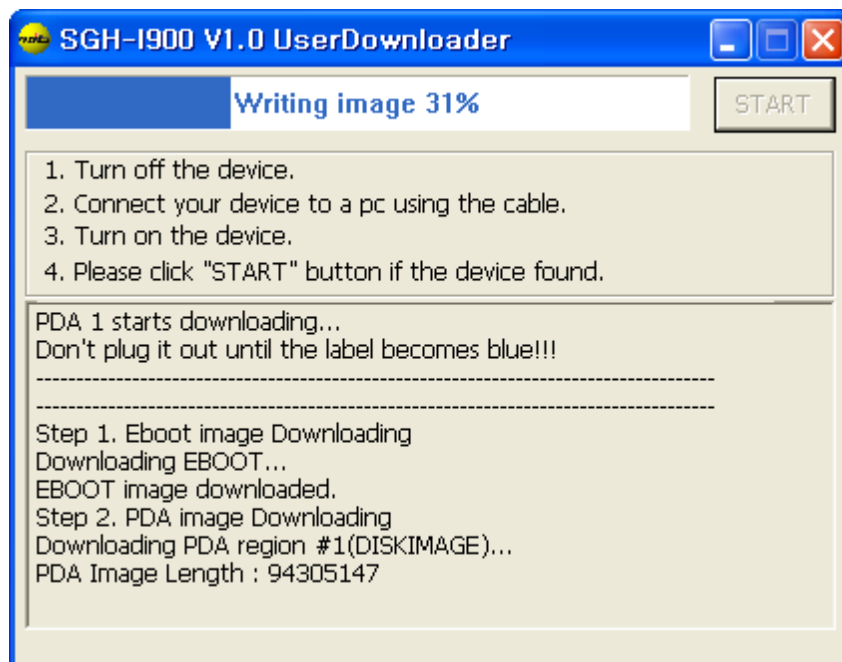
**7. Please click "START" button.**

**8. When the download is finished, the phone is rebooted automatically.**

☞ **Download Procedure**

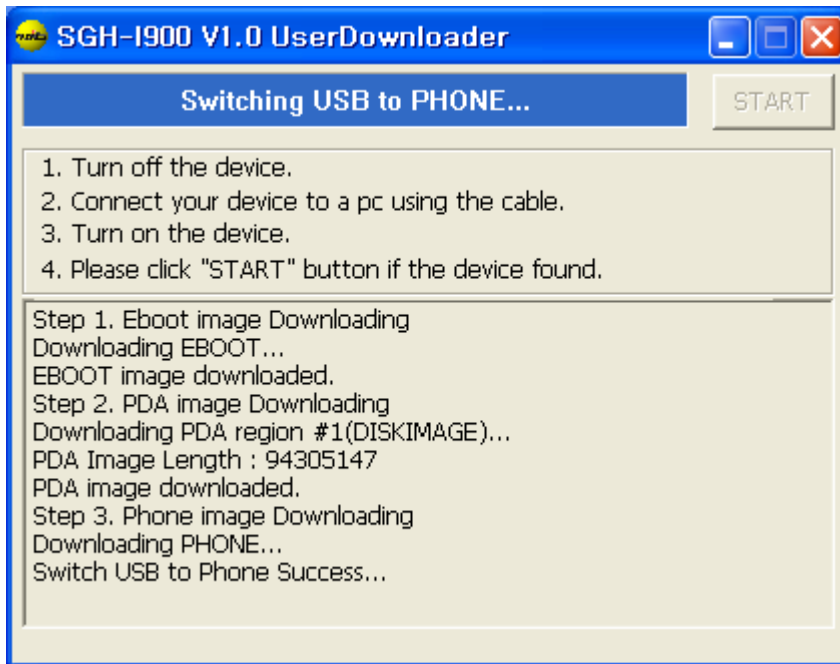


[ Downloading EBOOT ]

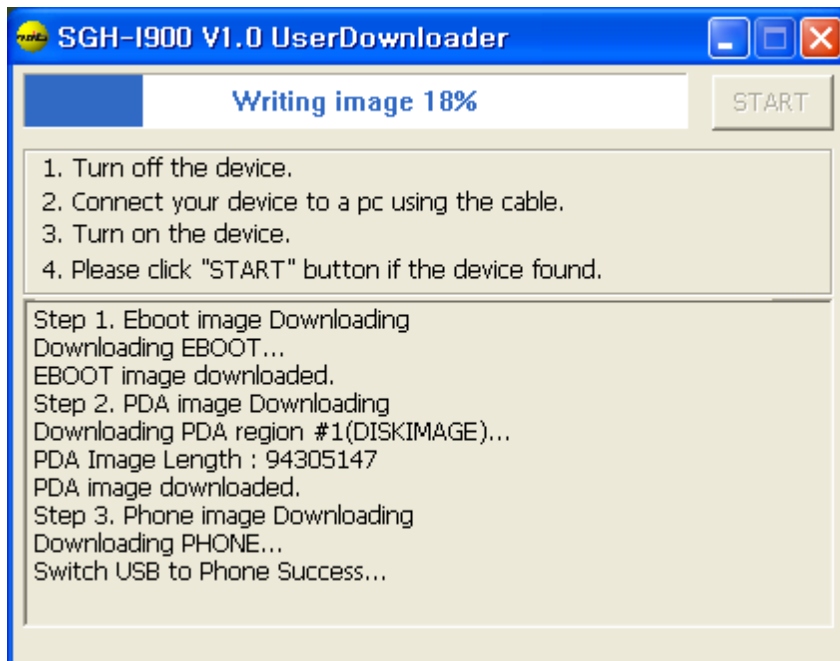


[ Downloading PDA ]

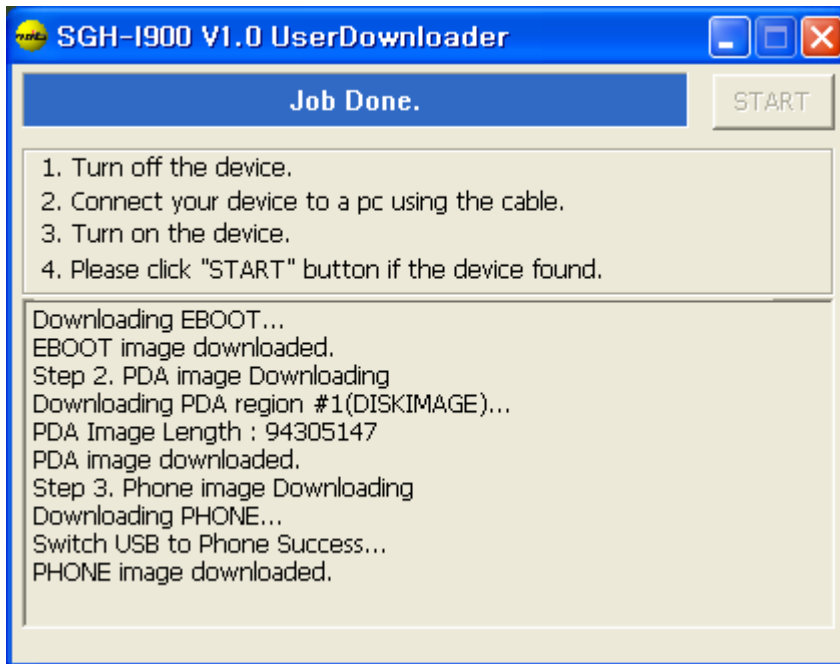




[ Changing USB PATH ]



[ Downloading PHONE ]



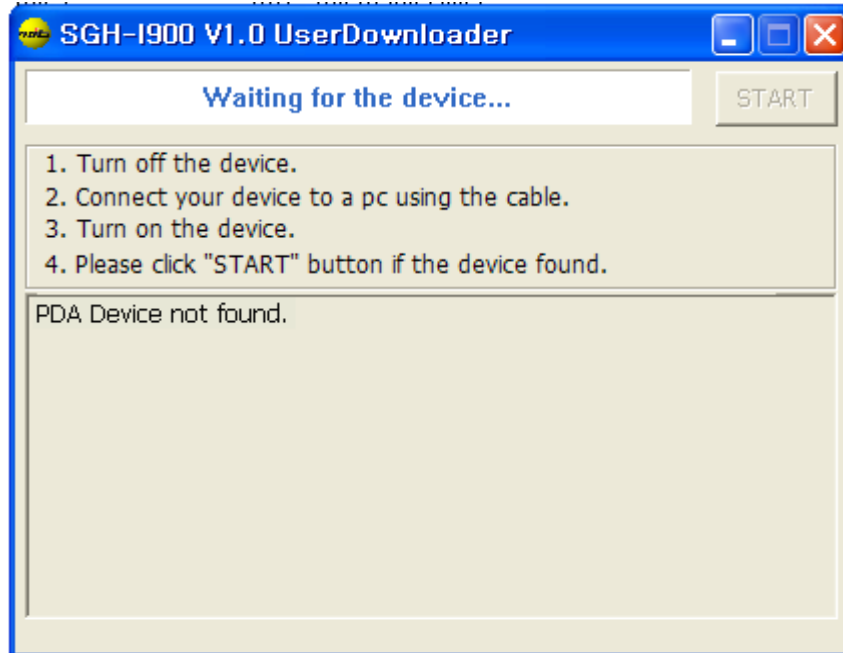
[ Job Done ]

## ☛ The Display of your Device



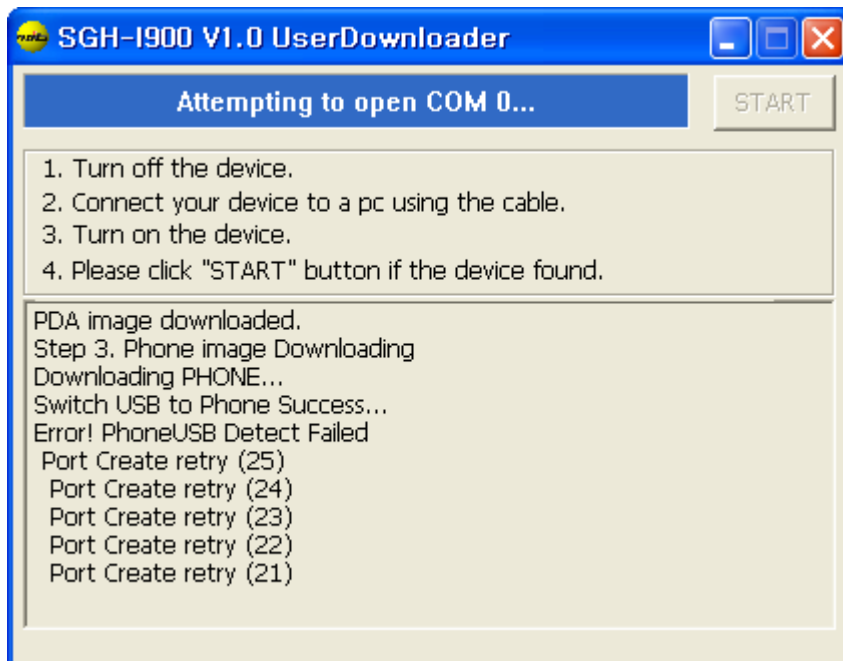
## ☞ **Trouble Shooting**

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.

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

1. When failed 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.

## - Reference -

**How to deal with the an error in the computer USB port of the computer.**

Symptom: Device is not identified after connecting it.

Cause: The device is connected before the previous connection is complete. All devices should be connected one by one. Otherwise, an error may occur in the computer USB port of the computer.

**Solution:**

**Proceed with the following action in order only when the previous action does not work.**

- 1) Unplug the USB port from the computer and plug it again.
- 2) Open the Device Manager and remove the USB hub and install it again.



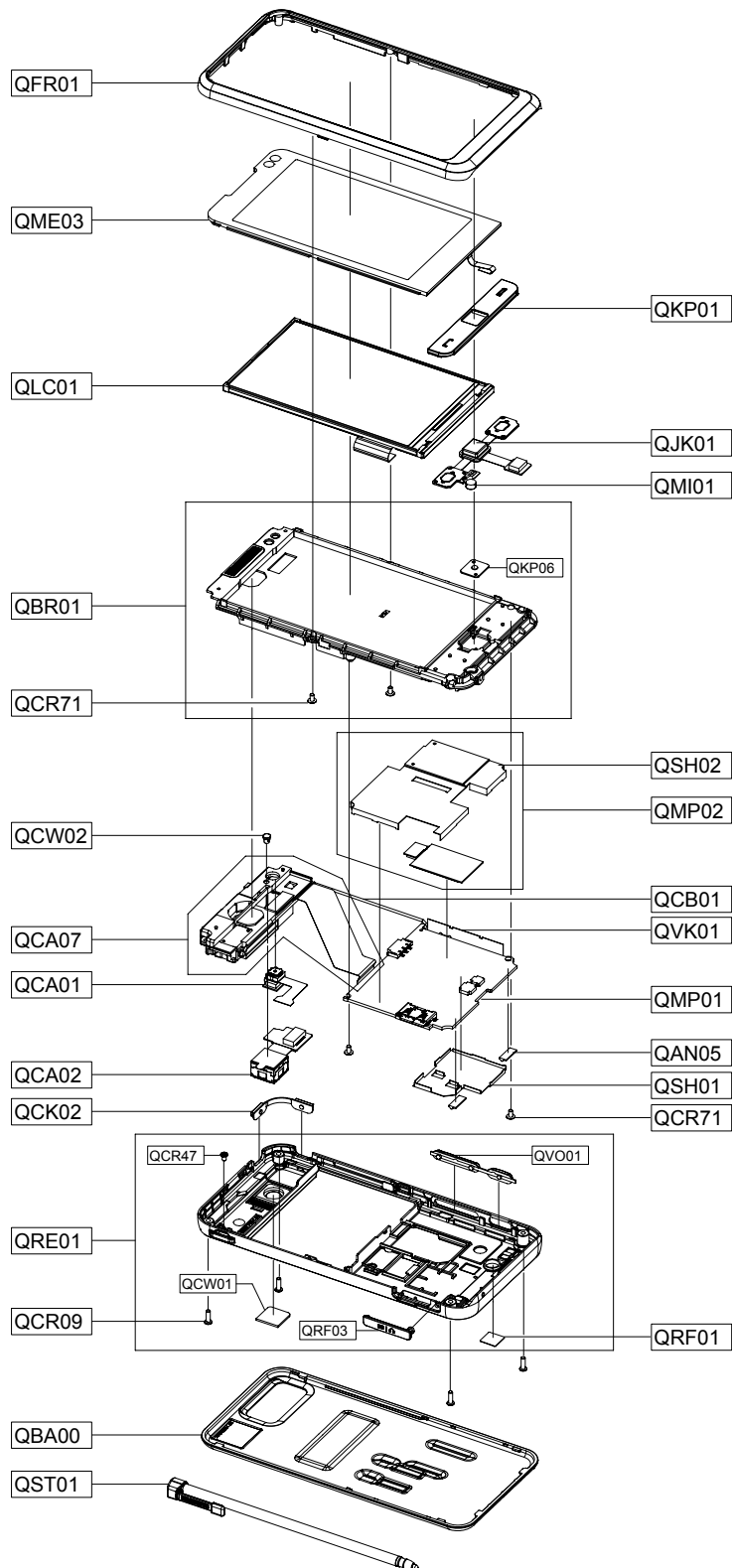
- 3) Reboot the computer.

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## 5. Exploded View and Parts List

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### 5-1. Cellular phone Exploded View



**5-2. Cellular phone Parts list**

Design LOC		Discription	SEC CODE
QAN05		ASSY RUBBER-INTENNA CONTACT	GH98-08737A
QBA00		ASSY COVER-BATT	GH98-09310A
QCA01		CAMERA MODULE-SGHI900 CIF	GH59-05582A
QCA02		CAMERA MODULE-SGHI900 5M	GH59-05583A
QCA07		KEY FPCB-SGHI900 CAMERA FPCB_C	GH59-06056A
QCB01		CBF COAXIAL CABLE-SGHI900 MHF	GH39-01069A
QCK02		PMO KEY-POWER FUNCTION	GH72-47423A
QCR09		SCREW-MACHINE	6001-001670
QCR71		SCREW-MACHINE	6001-002095
QCR71		SCREW-MACHINE	6001-002095
QCW02		PMO DECO-WINDOW	GH72-46895A
QFR01		NDC CASE-FRONT V2	GH71-08256A
QJK01		UNIT-SGHI900 OPTICAL JOYSTICK	GH59-05596A
QKP01		ASSY KEYPAD-(XEF/XKA)	GH98-07557A
QLC01		ELA UNIT-LCD UNIT ASSY(SGH_I90	GH96-03195A
QME03		UNIT-SGHI900 TOUCH WINDOW	GH59-05586A
QMI01		MICROPHONE-ASSY-SGHI900	GH30-00473A
QMP01		PBA MAIN-SGHI900	GH92-04463A
QMP02		ASSY PBA MAIN-SGH_I900 16G	GH92-04807A
QRF01		TAPE-RF SHEET	GH74-37306A
QSH01		IPR SHIELD-CAN A	GH70-03218A
QSH02		ASSY COVER-SHIELD CAN B	GH98-09048A
QST01		ASSY ACCE-STYLUS PEN	GH98-09044A
QVK01		KEY FPCB-SGHI900 VOLUME KEY	GH59-05578A
QBR01		ASSY BRACKET	GH98-07554A
	QKP06	ASSY RUBBER-KEY DOM	GH98-07631A
QRE01		ASSY CASE-REAR	GH98-07553A
	QCR47	SCREW-MACHINE	6001-001695
	QCW01	ASSY COVER-CAMERA WINDOW	GH98-07556A
	QRF03	PMO COVER-EAR JACK V2	GH72-48359A
	QVO01	ASSY KEY-CAM VOL	GH98-08142A

## 6. MAIN Electrical Parts List

SEC CODE	Design LOC	Discription
0403-001547	D301	DIODE-ZENER
0403-001547	D600	DIODE-ZENER
0406-001167	ZD403	DIODE-TVS
0406-001167	ZD404	DIODE-TVS
0406-001208	ZD402	DIODE-TVS
0406-001215	U502	DIODE-TVS
0406-001215	ZD400	DIODE-TVS
0406-001215	ZD401	DIODE-TVS
0406-001215	ZD405	DIODE-TVS
0406-001231	ZD500	DIODE-TVS
0406-001231	ZD501	DIODE-TVS
0406-001237	U208	DIODE-TVS
0406-001237	U308	DIODE-TVS
0406-001237	U312	DIODE-TVS
0406-001237	ZD406	DIODE-TVS
0406-001254	ZD300	DIODE-TVS
0406-001267	ZD201	DIODE-TVS
0407-001002	D300	DIODE-ARRAY
0407-001007	D302	DIODE-ARRAY
0501-002440	TR500	TR-SMALL SIGNAL
0501-002440	TR501	TR-SMALL SIGNAL
0501-002440	TR502	TR-SMALL SIGNAL
0504-000168	TR600	TR-DIGITAL
0801-002237	U205	IC-CMOS LOGIC
0801-002529	U206	IC-CMOS LOGIC
0801-002882	U311	IC-CMOS LOGIC
0801-003013	U207	IC-CMOS LOGIC
0801-003013	U503	IC-CMOS LOGIC
0801-003013	U504	IC-CMOS LOGIC
0801-003013	U515	IC-CMOS LOGIC
0801-003016	U201	IC-CMOS LOGIC
0801-003016	U516	IC-CMOS LOGIC
0801-003016	U602	IC-CMOS LOGIC
0801-003031	U204	IC-CMOS LOGIC
0801-003031	U600	IC-CMOS LOGIC
0801-003052	U203	IC-CMOS LOGIC
0801-003052	U307	IC-CMOS LOGIC
0801-003052	U608	IC-CMOS LOGIC
0801-003052	U609	IC-CMOS LOGIC
0801-003052	U610	IC-CMOS LOGIC
0902-002319	UCP600	IC-MICROPROCESSOR
1001-001231	U400	IC-ANALOG SWITCH



SEC CODE	Design LOC	Discription
1001-001410	U300	IC-ANALOG SWITCH
1001-001436	U407	IC-ANALOG SWITCH
1001-001436	U408	IC-ANALOG SWITCH
1002-001410	U507	IC-D/A CONVERTER
1003-002047	U510	IC-MOTOR DRIVER
1006-001322	U505	IC-LINE TRANSCEIVER
1106-001564	UME201	IC-SRAM
1108-000127	UME200	IC-MCP
1108-000174	UCP600	IC-MCP
1201-002570	PAM100	IC-POWER AMP
1201-002581	F108	IC-RF AMP
1201-002597	U402	IC-AUDIO AMP
1201-002703	PAM101	IC-POWER AMP
1203-002832	U310	IC-VOL. DETECTOR
1203-003926	U305	IC-VOL. DETECTOR
1203-004291	U202	IC-MULTI REG.
1203-004319	U401	IC-MULTI REG.
1203-004435	U601	IC-MULTI REG.
1203-004548	U511	IC-DC/DC CONVERTER
1203-004571	U508	IC-MULTI REG.
1203-004763	U409	IC-VOL. DETECTOR
1203-004778	U301	IC-POWER SUPERVISOR
1203-004838	U303	IC-BATTERY
1203-004841	U605	IC-POWER SUPERVISOR
1203-004857	U506	IC-DC/DC CONVERTER
1203-005118	U514	IC-MULTI REG.
1203-005244	U101	IC-MULTI REG.
1203-005246	U500	IC-DC/DC CONVERTER
1203-005250	U512	IC-MULTI REG.
1203-005263	U509	IC-MULTI REG.
1204-002746	U405	IC-TUNER
1204-002749	UCD604	IC-PAL/NTSC ENCODER
1205-002686	U304	IC-SWITCH
1205-002720	UCD402	IC-CODEC
1205-002767	U302	IC-SWITCH
1205-003297	U100	IC-TRANSCEIVER
1205-003375	U603	IC-INTERFACE
1205-003498	UCP200	IC-MODEM
1209-001817	U607	IC-SENSOR
1404-001221	VR500	THERMISTOR-NTC
1405-001133	VR300	VARISTOR
2007-000070	L600	R-CHIP

SEC CODE	Design LOC	Discription
2007-000148	R119	R-CHIP
2007-000162	R137	R-CHIP
2007-000164	R139	R-CHIP
2007-000170	R120	R-CHIP
2007-000171	R100	R-CHIP
2007-000171	R141	R-CHIP
2007-000171	R427	R-CHIP
2007-000171	R431	R-CHIP
2007-000171	R432	R-CHIP
2007-001285	R111	R-CHIP
2007-001285	R112	R-CHIP
2007-001290	R207	R-CHIP
2007-002965	R425	R-CHIP
2007-002965	R426	R-CHIP
2007-002965	R430	R-CHIP
2007-002965	R433	R-CHIP
2007-007468	R302	R-CHIP
2007-007468	R509	R-CHIP
2007-007517	R606	R-CHIP
2007-007741	R105	R-CHIP
2007-007741	R401	R-CHIP
2007-007741	R428	R-CHIP
2007-007741	R601	R-CHIP
2007-007741	R602	R-CHIP
2007-007766	R315	R-CHIP
2007-008015	R604	R-CHIP
2007-008040	R102	R-CHIP
2007-008044	R106	R-CHIP
2007-008045	R135	R-CHIP
2007-008046	R103	R-CHIP
2007-008046	R104	R-CHIP
2007-008049	R221	R-CHIP
2007-008052	R607	R-CHIP
2007-008052	R608	R-CHIP
2007-008055	R123	R-CHIP
2007-008055	R124	R-CHIP
2007-008055	R127	R-CHIP
2007-008055	R129	R-CHIP
2007-008055	R310	R-CHIP
2007-008055	R311	R-CHIP
2007-008055	R404	R-CHIP
2007-008055	R420	R-CHIP

SEC CODE	Design LOC	Discription
2007-008055	R421	R-CHIP
2007-008055	R600	R-CHIP
2007-008263	R306	R-CHIP
2007-008263	R313	R-CHIP
2007-008419	R110	R-CHIP
2007-008419	R405	R-CHIP
2007-008419	R510	R-CHIP
2007-008419	R514	R-CHIP
2007-008419	R515	R-CHIP
2007-008438	R314	R-CHIP
2007-008456	R605	R-CHIP
2007-008483	R423	R-CHIP
2007-008486	R312	R-CHIP
2007-008516	R209	R-CHIP
2007-008516	R212	R-CHIP
2007-008516	R213	R-CHIP
2007-008516	R218	R-CHIP
2007-008516	R323	R-CHIP
2007-008516	R500	R-CHIP
2007-008516	R614	R-CHIP
2007-008542	R138	R-CHIP
2007-008542	R222	R-CHIP
2007-008542	R414	R-CHIP
2007-008542	R501	R-CHIP
2007-008542	R502	R-CHIP
2007-008542	R519	R-CHIP
2007-008542	R610	R-CHIP
2007-008542	R612	R-CHIP
2007-008542	R613	R-CHIP
2007-008542	R631	R-CHIP
2007-008548	R407	R-CHIP
2007-008548	R408	R-CHIP
2007-008548	R619	R-CHIP
2007-008548	R620	R-CHIP
2007-008588	R507	R-CHIP
2007-008588	R508	R-CHIP
2007-008588	R520	R-CHIP
2007-008588	R621	R-CHIP
2007-008588	R622	R-CHIP
2007-008686	R116	R-CHIP
2007-008708	R615	R-CHIP
2007-008739	R307	R-CHIP

SEC CODE	Design LOC	Discription
2007-008798	R402	R-CHIP
2007-008798	U306	R-CHIP
2007-008806	R304	R-CHIP
2007-008806	R415	R-CHIP
2007-009084	R206	R-CHIP
2007-009084	R603	R-CHIP
2007-009108	R627	R-CHIP
2007-009155	R202	R-CHIP
2007-009155	R517	R-CHIP
2007-009157	R219	R-CHIP
2007-009157	R220	R-CHIP
2007-009157	R316	R-CHIP
2007-009157	R506	R-CHIP
2007-009157	R511	R-CHIP
2007-009157	R512	R-CHIP
2007-009170	R403	R-CHIP
2007-009170	R518	R-CHIP
2007-009170	R630	R-CHIP
2007-009171	R303	R-CHIP
2007-009171	R309	R-CHIP
2007-009171	R319	R-CHIP
2007-009171	R320	R-CHIP
2007-009171	R321	R-CHIP
2007-009171	R322	R-CHIP
2007-009212	R318	R-CHIP
2007-009212	R417	R-CHIP
2007-009212	R424	R-CHIP
2007-009323	R513	R-CHIP
2007-009354	R208	R-CHIP
2007-009361	R624	R-CHIP
2007-009361	R626	R-CHIP
2007-009402	R611	R-CHIP
2007-009408	R107	R-CHIP
2007-009408	R400	R-CHIP
2007-009408	R406	R-CHIP
2007-009420	R101	R-CHIP
2007-009801	R108	R-CHIP
2007-009801	R109	R-CHIP
2007-009801	R117	R-CHIP
2007-009801	R118	R-CHIP
2007-009801	R200	R-CHIP
2007-009801	R300	R-CHIP

SEC CODE	Design LOC	Discription
2007-009801	R434	R-CHIP
2007-009801	R435	R-CHIP
2007-009801	R436	R-CHIP
2007-009954	R623	R-CHIP
2007-009969	R418	R-CHIP
2007-009969	R419	R-CHIP
2203-000233	C315	C-CER,CHIP
2203-000233	C319	C-CER,CHIP
2203-000233	C444	C-CER,CHIP
2203-000438	C170	C-CER,CHIP
2203-000438	C176	C-CER,CHIP
2203-000438	C219	C-CER,CHIP
2203-000438	C225	C-CER,CHIP
2203-000438	C611	C-CER,CHIP
2203-000438	C631	C-CER,CHIP
2203-000466	C1111	C-CER,CHIP
2203-000489	C237	C-CER,CHIP
2203-000725	C532	C-CER,CHIP
2203-000812	C103	C-CER,CHIP
2203-000812	C188	C-CER,CHIP
2203-002668	C174	C-CER,CHIP
2203-002668	C179	C-CER,CHIP
2203-002668	R122	C-CER,CHIP
2203-005234	C111	C-CER,CHIP
2203-005249	C416	C-CER,CHIP
2203-005249	C417	C-CER,CHIP
2203-005514	C435	C-CER,CHIP
2203-005514	C439	C-CER,CHIP
2203-005682	C1106	C-CER,CHIP
2203-005682	C117	C-CER,CHIP
2203-005682	C137	C-CER,CHIP
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2203-005682	C144	C-CER,CHIP
2203-005682	C156	C-CER,CHIP
2203-005682	C181	C-CER,CHIP
2203-005682	C244	C-CER,CHIP
2203-005682	C328	C-CER,CHIP
2203-005682	C329	C-CER,CHIP
2203-005682	C330	C-CER,CHIP
2203-005682	C409	C-CER,CHIP
2203-005682	C414	C-CER,CHIP
2203-005682	C418	C-CER,CHIP

SEC CODE	Design LOC	Discription
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2203-005682	C432	C-CER,CHIP
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2203-005682	C458	C-CER,CHIP
2203-005682	C462	C-CER,CHIP
2203-005719	C150	C-CER,CHIP
2203-005719	C442	C-CER,CHIP
2203-005719	C443	C-CER,CHIP
2203-005725	C1112	C-CER,CHIP
2203-005725	C1113	C-CER,CHIP
2203-005725	C1114	C-CER,CHIP
2203-005725	C115	C-CER,CHIP
2203-005725	C125	C-CER,CHIP
2203-005725	C132	C-CER,CHIP
2203-005725	C141	C-CER,CHIP
2203-005725	C146	C-CER,CHIP
2203-005725	C147	C-CER,CHIP
2203-005725	C160	C-CER,CHIP
2203-005725	C161	C-CER,CHIP
2203-005725	C164	C-CER,CHIP
2203-005725	C171	C-CER,CHIP
2203-005725	C177	C-CER,CHIP
2203-005727	C310	C-CER,CHIP
2203-005727	C317	C-CER,CHIP
2203-005727	C438	C-CER,CHIP
2203-005729	C434	C-CER,CHIP
2203-005729	C440	C-CER,CHIP
2203-005729	C642	C-CER,CHIP
2203-005729	C646	C-CER,CHIP
2203-005731	C175	C-CER,CHIP
2203-005732	C100	C-CER,CHIP
2203-005732	C101	C-CER,CHIP
2203-005736	C105	C-CER,CHIP
2203-005736	C107	C-CER,CHIP
2203-005736	C116	C-CER,CHIP
2203-005736	C118	C-CER,CHIP
2203-005736	C119	C-CER,CHIP
2203-005736	C120	C-CER,CHIP
2203-005736	C127	C-CER,CHIP
2203-005736	C128	C-CER,CHIP
2203-005736	C131	C-CER,CHIP

SEC CODE	Design LOC	Discription
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2203-005736	C153	C-CER,CHIP
2203-005736	C166	C-CER,CHIP
2203-005736	C172	C-CER,CHIP
2203-005736	C189	C-CER,CHIP
2203-005736	C323	C-CER,CHIP
2203-005740	C186	C-CER,CHIP
2203-005740	C187	C-CER,CHIP
2203-005740	C192	C-CER,CHIP
2203-005740	C193	C-CER,CHIP
2203-005740	C451	C-CER,CHIP
2203-005779	C413	C-CER,CHIP
2203-005779	C415	C-CER,CHIP
2203-005779	C419	C-CER,CHIP
2203-005779	C421	C-CER,CHIP
2203-005779	C426	C-CER,CHIP
2203-005779	C461	C-CER,CHIP
2203-005792	C152	C-CER,CHIP
2203-005792	C159	C-CER,CHIP
2203-005792	C180	C-CER,CHIP
2203-005806	C1104	C-CER,CHIP
2203-005806	C1105	C-CER,CHIP
2203-005806	C1107	C-CER,CHIP
2203-005806	C139	C-CER,CHIP
2203-005806	C452	C-CER,CHIP
2203-005806	C454	C-CER,CHIP
2203-006048	C245	C-CER,CHIP
2203-006053	C663	C-CER,CHIP
2203-006120	C182	C-CER,CHIP
2203-006120	C183	C-CER,CHIP
2203-006120	C184	C-CER,CHIP
2203-006123	L102	C-CER,CHIP
2203-006123	L103	C-CER,CHIP
2203-006123	L104	C-CER,CHIP
2203-006123	L105	C-CER,CHIP
2203-006194	C1109	C-CER,CHIP
2203-006194	C204	C-CER,CHIP
2203-006194	C206	C-CER,CHIP
2203-006194	C209	C-CER,CHIP
2203-006194	C220	C-CER,CHIP
2203-006194	C222	C-CER,CHIP

SEC CODE	Design LOC	Discription
2203-006194	C224	C-CER,CHIP
2203-006194	C227	C-CER,CHIP
2203-006194	C402	C-CER,CHIP
2203-006194	C425	C-CER,CHIP
2203-006194	C428	C-CER,CHIP
2203-006194	C612	C-CER,CHIP
2203-006194	C615	C-CER,CHIP
2203-006194	C624	C-CER,CHIP
2203-006194	C630	C-CER,CHIP
2203-006208	C320	C-CER,CHIP
2203-006208	C408	C-CER,CHIP
2203-006208	C427	C-CER,CHIP
2203-006208	C535	C-CER,CHIP
2203-006305	C400	C-CER,CHIP
2203-006305	C407	C-CER,CHIP
2203-006307	C325	C-CER,CHIP
2203-006307	C326	C-CER,CHIP
2203-006324	C216	C-CER,CHIP
2203-006324	C324	C-CER,CHIP
2203-006348	C404	C-CER,CHIP
2203-006348	C453	C-CER,CHIP
2203-006379	C465	C-CER,CHIP
2203-006379	C466	C-CER,CHIP
2203-006379	C467	C-CER,CHIP
2203-006379	C468	C-CER,CHIP
2203-006399	C200	C-CER,CHIP
2203-006399	C205	C-CER,CHIP
2203-006399	C208	C-CER,CHIP
2203-006399	C211	C-CER,CHIP
2203-006399	C212	C-CER,CHIP
2203-006399	C213	C-CER,CHIP
2203-006399	C214	C-CER,CHIP
2203-006399	C239	C-CER,CHIP
2203-006399	C240	C-CER,CHIP
2203-006399	C311	C-CER,CHIP
2203-006399	C600	C-CER,CHIP
2203-006399	C601	C-CER,CHIP
2203-006423	C123	C-CER,CHIP
2203-006423	C124	C-CER,CHIP
2203-006423	C126	C-CER,CHIP
2203-006423	C129	C-CER,CHIP
2203-006423	C165	C-CER,CHIP



SEC CODE	Design LOC	Discription
2203-006423	C201	C-CER,CHIP
2203-006423	C202	C-CER,CHIP
2203-006423	C207	C-CER,CHIP
2203-006423	C210	C-CER,CHIP
2203-006423	C215	C-CER,CHIP
2203-006423	C217	C-CER,CHIP
2203-006423	C218	C-CER,CHIP
2203-006423	C223	C-CER,CHIP
2203-006423	C228	C-CER,CHIP
2203-006423	C231	C-CER,CHIP
2203-006423	C234	C-CER,CHIP
2203-006423	C235	C-CER,CHIP
2203-006423	C238	C-CER,CHIP
2203-006423	C241	C-CER,CHIP
2203-006423	C242	C-CER,CHIP
2203-006423	C243	C-CER,CHIP
2203-006423	C305	C-CER,CHIP
2203-006423	C306	C-CER,CHIP
2203-006423	C308	C-CER,CHIP
2203-006423	C327	C-CER,CHIP
2203-006423	C331	C-CER,CHIP
2203-006423	C401	C-CER,CHIP
2203-006423	C403	C-CER,CHIP
2203-006423	C405	C-CER,CHIP
2203-006423	C406	C-CER,CHIP
2203-006423	C424	C-CER,CHIP
2203-006423	C433	C-CER,CHIP
2203-006423	C469	C-CER,CHIP
2203-006423	C524	C-CER,CHIP
2203-006423	C634	C-CER,CHIP
2203-006423	C641	C-CER,CHIP
2203-006423	C647	C-CER,CHIP
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2203-006423	C650	C-CER,CHIP
2203-006423	C658	C-CER,CHIP
2203-006423	C659	C-CER,CHIP
2203-006423	C660	C-CER,CHIP
2203-006423	C661	C-CER,CHIP
2203-006423	C662	C-CER,CHIP
2203-006423	C670	C-CER,CHIP
2203-006423	C672	C-CER,CHIP

SEC CODE	Design LOC	Discription
2203-006423	U200	C-CER,CHIP
2203-006423	U309	C-CER,CHIP
2203-006462	C246	C-CER,CHIP
2203-006466	C671	C-CER,CHIP
2203-006474	C314	C-CER,CHIP
2203-006474	C667	C-CER,CHIP
2203-006474	C668	C-CER,CHIP
2203-006474	C674	C-CER,CHIP
2203-006474	C677	C-CER,CHIP
2203-006556	C114	C-CER,CHIP
2203-006556	C203	C-CER,CHIP
2203-006562	C195	C-CER,CHIP
2203-006562	C198	C-CER,CHIP
2203-006562	C226	C-CER,CHIP
2203-006562	C229	C-CER,CHIP
2203-006562	C232	C-CER,CHIP
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2203-006562	C236	C-CER,CHIP
2203-006562	C307	C-CER,CHIP
2203-006562	C445	C-CER,CHIP
2203-006562	C446	C-CER,CHIP
2203-006562	C450	C-CER,CHIP
2203-006562	C455	C-CER,CHIP
2203-006562	C457	C-CER,CHIP
2203-006562	C459	C-CER,CHIP
2203-006562	C503	C-CER,CHIP
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2203-006562	C505	C-CER,CHIP
2203-006562	C513	C-CER,CHIP
2203-006562	C519	C-CER,CHIP
2203-006562	C541	C-CER,CHIP
2203-006562	C542	C-CER,CHIP
2203-006562	C602	C-CER,CHIP
2203-006562	C603	C-CER,CHIP
2203-006562	C604	C-CER,CHIP
2203-006562	C605	C-CER,CHIP
2203-006562	C606	C-CER,CHIP
2203-006562	C608	C-CER,CHIP
2203-006562	C610	C-CER,CHIP
2203-006562	C614	C-CER,CHIP
2203-006562	C617	C-CER,CHIP
2203-006562	C619	C-CER,CHIP

SEC CODE	Design LOC	Discription
2203-006562	C620	C-CER,CHIP
2203-006562	C622	C-CER,CHIP
2203-006562	C625	C-CER,CHIP
2203-006562	C627	C-CER,CHIP
2203-006562	C628	C-CER,CHIP
2203-006562	C638	C-CER,CHIP
2203-006562	C643	C-CER,CHIP
2203-006562	C654	C-CER,CHIP
2203-006585	C447	C-CER,CHIP
2203-006585	C448	C-CER,CHIP
2203-006642	C169	C-CER,CHIP
2203-006648	C678	C-CER,CHIP
2203-006707	C157	C-CER,CHIP
2203-006824	C162	C-CER,CHIP
2203-006824	C163	C-CER,CHIP
2203-006824	C221	C-CER,CHIP
2203-006824	C301	C-CER,CHIP
2203-006824	C302	C-CER,CHIP
2203-006824	C422	C-CER,CHIP
2203-006824	C500	C-CER,CHIP
2203-006824	C655	C-CER,CHIP
2203-006824	C666	C-CER,CHIP
2203-006824	C669	C-CER,CHIP
2203-006824	C673	C-CER,CHIP
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2203-006838	C1101	C-CER,CHIP
2203-006838	C1102	C-CER,CHIP
2203-006838	C199	C-CER,CHIP
2203-006838	C300	C-CER,CHIP
2203-006838	C303	C-CER,CHIP
2203-006838	C304	C-CER,CHIP
2203-006838	C316	C-CER,CHIP
2203-006838	C322	C-CER,CHIP
2203-006838	C410	C-CER,CHIP
2203-006838	C411	C-CER,CHIP
2203-006838	C412	C-CER,CHIP
2203-006838	C523	C-CER,CHIP
2203-006838	C525	C-CER,CHIP
2203-006838	C530	C-CER,CHIP
2203-006838	C533	C-CER,CHIP
2203-006838	C534	C-CER,CHIP
2203-006838	C537	C-CER,CHIP

SEC CODE	Design LOC	Discription
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2203-006838	C543	C-CER,CHIP
2203-006838	C544	C-CER,CHIP
2203-006838	C546	C-CER,CHIP
2203-006838	C547	C-CER,CHIP
2203-006838	C549	C-CER,CHIP
2203-006838	C635	C-CER,CHIP
2203-006838	C636	C-CER,CHIP
2203-006838	C637	C-CER,CHIP
2203-006839	C102	C-CER,CHIP
2203-006839	C106	C-CER,CHIP
2203-006839	C108	C-CER,CHIP
2203-006839	C1108	C-CER,CHIP
2203-006839	C113	C-CER,CHIP
2203-006839	C133	C-CER,CHIP
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2203-006839	C609	C-CER,CHIP
2203-006839	C613	C-CER,CHIP
2203-006839	C616	C-CER,CHIP
2203-006839	C618	C-CER,CHIP
2203-006839	C621	C-CER,CHIP
2203-006839	C623	C-CER,CHIP
2203-006839	C626	C-CER,CHIP
2203-006839	C629	C-CER,CHIP
2203-006839	C632	C-CER,CHIP
2203-006839	C639	C-CER,CHIP
2203-006839	C653	C-CER,CHIP
2203-006839	C657	C-CER,CHIP

SEC CODE	Design LOC	Discription
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2203-006839	C681	C-CER,CHIP
2203-006839	C682	C-CER,CHIP
2203-006841	C309	C-CER,CHIP
2203-006872	C194	C-CER,CHIP
2203-006872	C196	C-CER,CHIP
2203-006872	C197	C-CER,CHIP
2203-006872	C318	C-CER,CHIP
2203-006872	C321	C-CER,CHIP
2203-006872	C508	C-CER,CHIP
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2203-006872	C664	C-CER,CHIP
2203-006872	C665	C-CER,CHIP
2203-006890	C109	C-CER,CHIP
2203-006890	C168	C-CER,CHIP
2203-006890	C312	C-CER,CHIP
2203-006890	C676	C-CER,CHIP
2203-006896	C313	C-CER,CHIP
2203-006896	C520	C-CER,CHIP
2203-006896	C526	C-CER,CHIP
2203-006896	C531	C-CER,CHIP
2203-006979	C134	C-CER,CHIP
2203-006979	C167	C-CER,CHIP
2203-007170	C190	C-CER,CHIP
2404-001381	TA100	C-TA,CHIP
2404-001381	TA400	C-TA,CHIP
2404-001381	TA401	C-TA,CHIP
2404-001381	TA403	C-TA,CHIP
2404-001381	TA404	C-TA,CHIP
2404-001381	TA405	C-TA,CHIP
2404-001381	TA407	C-TA,CHIP
2404-001381	TA600	C-TA,CHIP
2404-001411	TA300	C-TA,CHIP
2404-001411	TA402	C-TA,CHIP
2404-001557	TA406	C-TA,CHIP
2703-001231	L601	INDUCTOR-SMD
2703-001737	L115	INDUCTOR-SMD

SEC CODE	Design LOC	Discription
2703-001750	L116	INDUCTOR-SMD
2703-001868	L502	INDUCTOR-SMD
2703-001868	L503	INDUCTOR-SMD
2703-002155	L100	INDUCTOR-SMD
2703-002205	L101	INDUCTOR-SMD
2703-002206	L125	INDUCTOR-SMD
2703-002267	L119	INDUCTOR-SMD
2703-002281	L121	INDUCTOR-SMD
2703-002649	L108	INDUCTOR-SMD
2703-002649	L112	INDUCTOR-SMD
2703-002649	L117	INDUCTOR-SMD
2703-002701	L404	INDUCTOR-SMD
2703-002701	L405	INDUCTOR-SMD
2703-002793	L114	INDUCTOR-SMD
2703-002795	C122	INDUCTOR-SMD
2703-002795	C136	INDUCTOR-SMD
2703-002858	L126	INDUCTOR-SMD
2703-002917	L110	INDUCTOR-SMD
2703-002955	R409	INDUCTOR-SMD
2703-002955	R410	INDUCTOR-SMD
2703-002955	R411	INDUCTOR-SMD
2703-002955	R412	INDUCTOR-SMD
2703-003003	L106	INDUCTOR-SMD
2703-003003	L107	INDUCTOR-SMD
2703-003009	L109	INDUCTOR-SMD
2703-003009	L111	INDUCTOR-SMD
2703-003182	L603	INDUCTOR-SMD
2703-003240	L604	INDUCTOR-SMD
2703-003240	L605	INDUCTOR-SMD
2703-003258	L300	INDUCTOR-SMD
2703-003258	L301	INDUCTOR-SMD
2703-003258	L302	INDUCTOR-SMD
2703-003258	L602	INDUCTOR-SMD
2703-003273	L504	INDUCTOR-SMD
2703-003347	L501	INDUCTOR-SMD
2703-003419	L402	INDUCTOR-SMD
2801-004189	OSC600	CRYSTAL-SMD
2801-004466	OSC300	CRYSTAL-SMD
2801-004466	OSC601	CRYSTAL-SMD
2801-004506	OSC101	CRYSTAL-SMD
2801-004749	OSC100	CRYSTAL-SMD
2804-001725	OSC400	OSCILLATOR-CLOCK

SEC CODE	Design LOC	Discription
2809-001324	OSC102	OSCILLATOR-VCTCXO
2901-001409	F500	FILTER-EMI SMD
2901-001409	F501	FILTER-EMI SMD
2901-001409	F502	FILTER-EMI SMD
2901-001409	F503	FILTER-EMI SMD
2901-001470	F504	FILTER-EMI SMD
2901-001470	F505	FILTER-EMI SMD
2904-001600	F103	FILTER-SAW
2904-001604	F102	FILTER-SAW
2904-001628	F101	FILTER-SAW
2904-001658	F105	FILTER-SAW
2904-001759	F107	FILTER-SAW
2904-001769	F104	FILTER-SAW
2904-001773	F100	FILTER-SAW
2910-000028	DUP100	DUPLEXER-SAW
3301-001158	L409	BEAD-SMD
3301-001158	L410	BEAD-SMD
3301-001729	L406	BEAD-SMD
3301-001729	L407	BEAD-SMD
3301-001729	L500	BEAD-SMD
3301-001756	L118	BEAD-SMD
3301-001901	L124	BEAD-SMD
3705-001358	RFS100	CONNECTOR-COAXIAL
3705-001448	RFS101	CONNECTOR-COAXIAL
3708-001872	SLC501	CONNECTOR-FPC/FFC/PIC
3708-002183	HDC501	CONNECTOR-FPC/FFC/PIC
3709-001381	CN301	CONNECTOR-CARD EDGE
3709-001456	SIM300	CONNECTOR-CARD EDGE
3710-002523	IFC400	SOCKET-INTERFACE
3710-002632	HDC201	HEADER-BOARD TO BOARD
3711-005789	HDC400	HEADER-BOARD TO BOARD
3711-006483	HDC500	HEADER-BOARD TO BOARD
3711-006710	BTC300	HEADER-BATTERY
4302-001181	BAT300	BATTERY-LI(2ND)
4709-001529	MOD100	W-LAN MODULE
GH70-03349A	SC100	IPR SHIELD-CAN CLIP
GH70-03349A	SC101	IPR SHIELD-CAN CLIP
GH70-03349A	SC102	IPR SHIELD-CAN CLIP
GH70-03349A	SC103	IPR SHIELD-CAN CLIP
GH70-03349A	SC104	IPR SHIELD-CAN CLIP
GH70-03349A	SC106	IPR SHIELD-CAN CLIP
GH70-03349A	SC107	IPR SHIELD-CAN CLIP

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SEC CODE	Design LOC	Discription
GH70-03349A	SC109	IPR SHIELD-CAN CLIP
GH70-03349A	SC110	IPR SHIELD-CAN CLIP
GH70-03349A	SC113	IPR SHIELD-CAN CLIP
GH70-03349A	SC114	IPR SHIELD-CAN CLIP
GH70-03349A	SC116	IPR SHIELD-CAN CLIP
GH70-03349A	SC117	IPR SHIELD-CAN CLIP
GH70-03349A	SC118	IPR SHIELD-CAN CLIP
GH71-06721A	ANT100	NPR-ANT CONTACT
GH71-06721A	ANT101	NPR-ANT CONTACT
GH71-06721A	ANT102	NPR-ANT CONTACT
GH71-06721A	ANT103	NPR-ANT CONTACT

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



## 7. Disassembly and Assembly Instructions

### 7-1. Disassembly

1



1) UNSCREW 4 REAR Points.

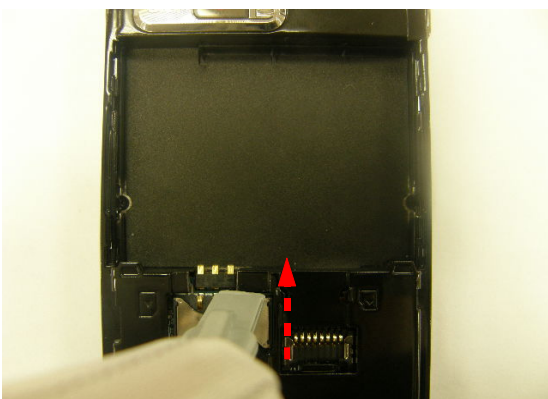
2



Separate the REAR cover - 1

- Separate the rear case using a disassembly tool following indicated direction.

3



Separate the REAR cover - 2

- Separate the REAR using a disassembly tool following indicated direction.

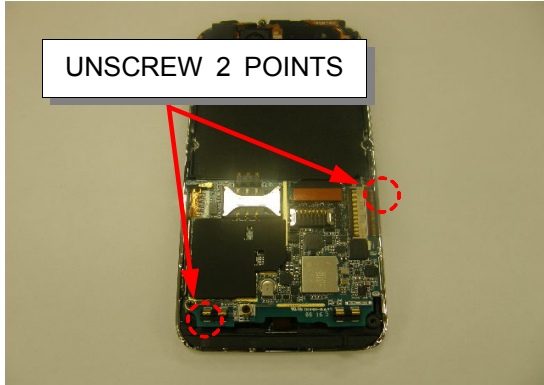
4



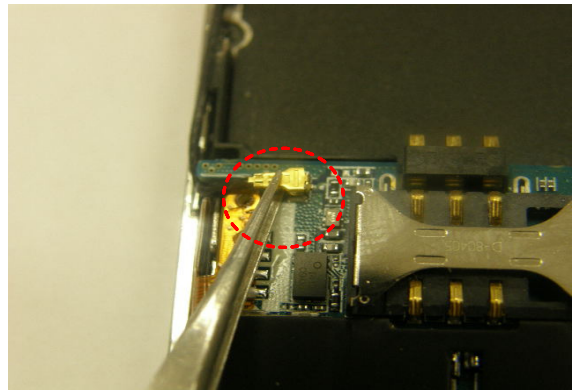
Lift the REAR from the FRONT Ass'y.

- Separate the REAR from the FRONT Ass'y with care.

5



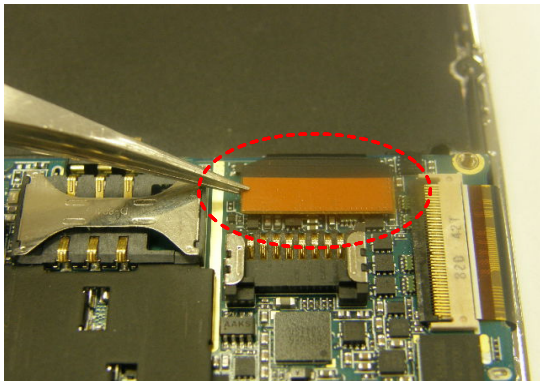
6



**Separate GPS CONNECTOR.**  
- Separate GPS Connector from the PBA Connector with great care. (Be careful not to damage FPCB & nearby chipsets.)

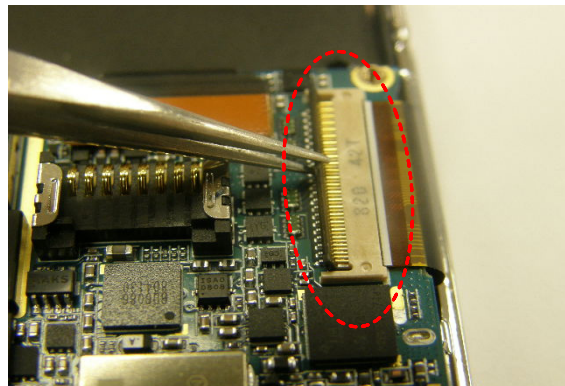
UNSCREW PBA 2 Points.

7



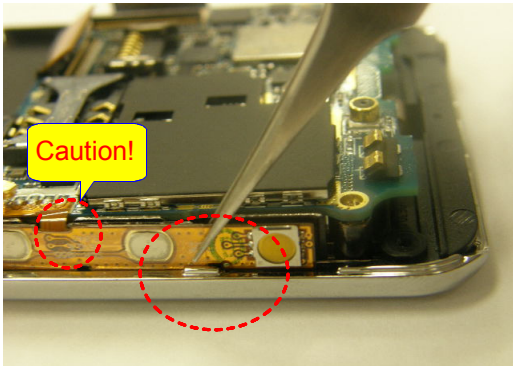
**Separate Main FPCB CONNECTOR.**  
- Separate Main FPCB Connector from the PBA Connector with great care. (Be careful not to damage FPCB & nearby chipsets.)

8



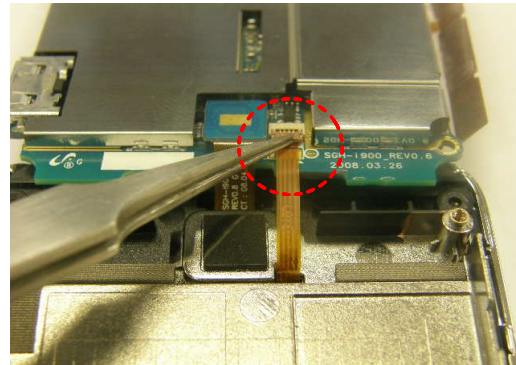
**Separate LCD FPCB CONNECTOR.**  
- Separate LCD FPCB Connector from the PBA Connector with great care. (Be careful not to damage FPCB & nearby chipsets.)

9



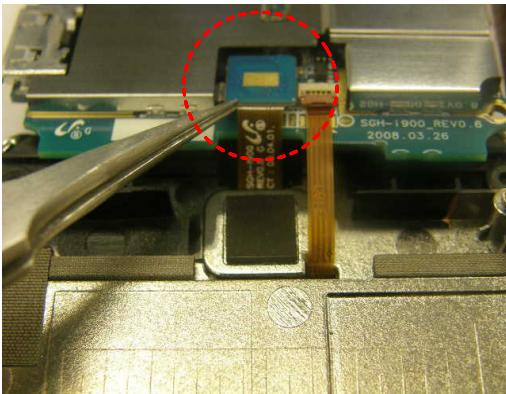
Separate VOLUME KEY FPCB.  
 - Separate Volume Key from PBA.  
 (Be careful not to damage VOLUME KEY FPCB)

10



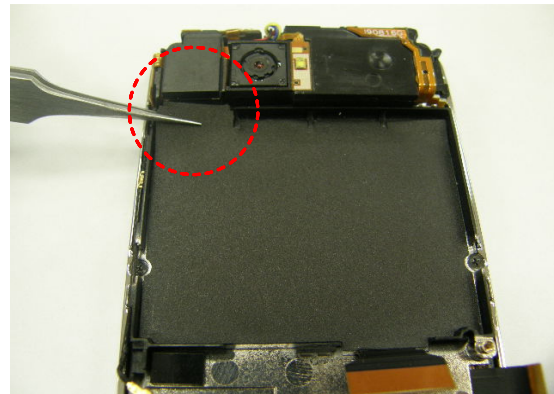
Separate TSP FPCB.  
 - Separate TSP FPCB from PBA not to tear FPCB with great care.

11



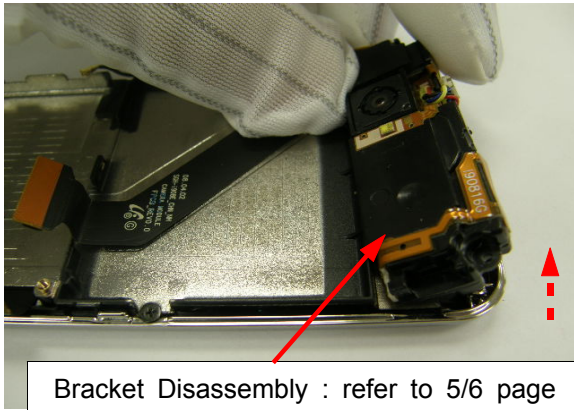
Separate OJ(Optical Joystic) KEY FPCB.  
 - Separate OJ KEY with great care not to tear OJ KEY FPCB.

12



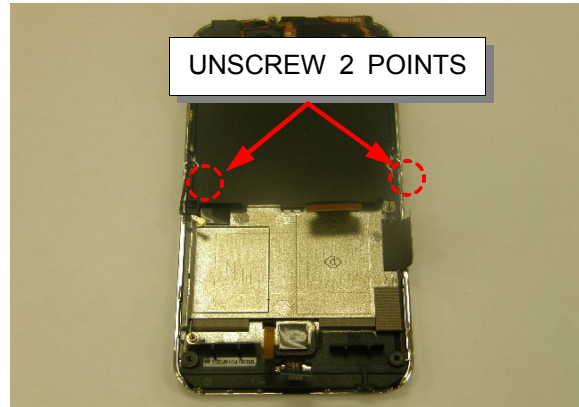
Remove Bracket Sheet.  
 - Remove Bracket sheet with great care not to damage GPS wire & MAIN FPCB.

13



Separate SPK Bracket.  
-Lift SPK Bracket from FRONT Ass'y.

14



UNSCREW FRONT 2 Points.

15



Separate FRONT.  
- Separate FRONT from FRONT Ass'y following indicated direction.

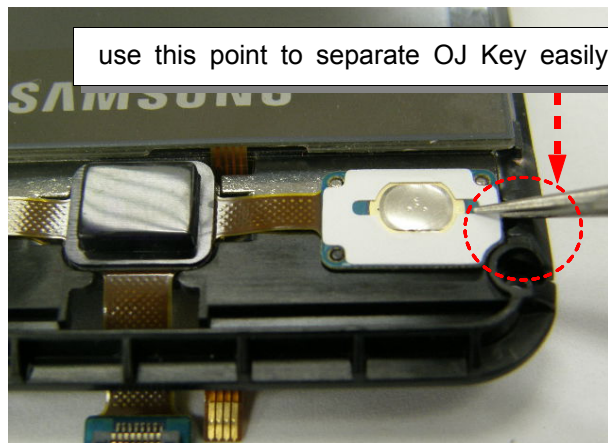
16



Separate Key Pad.  
- Separate Key Pad from FRONT Ass'y.

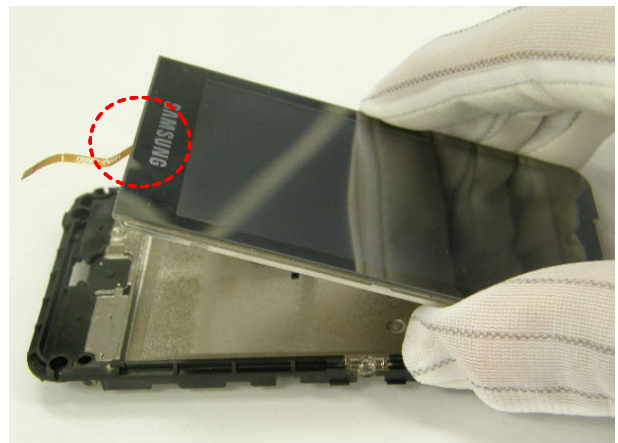


**17**



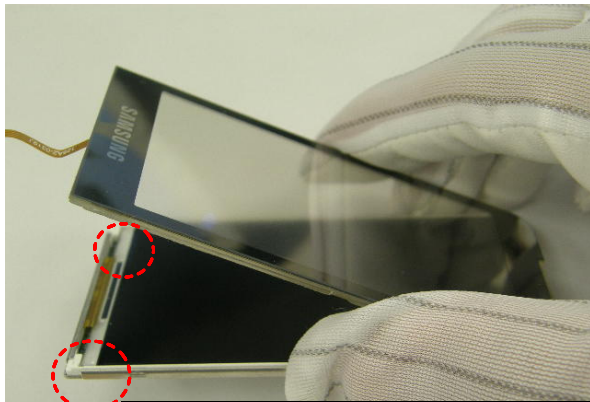
Separate OJ(Optical Joystic) KEY FPCB..  
 - Separate FPCB from FRONT Ass'y using guide hole.

**18**



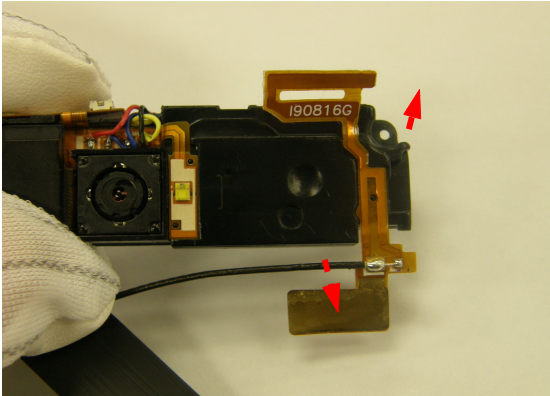
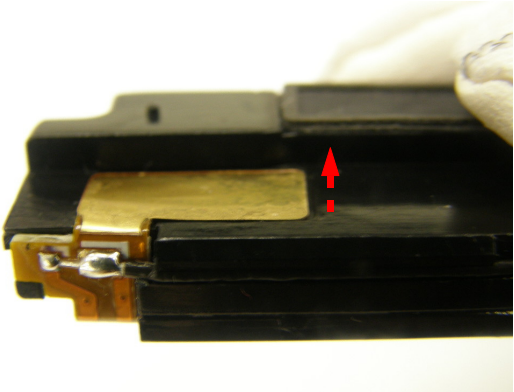
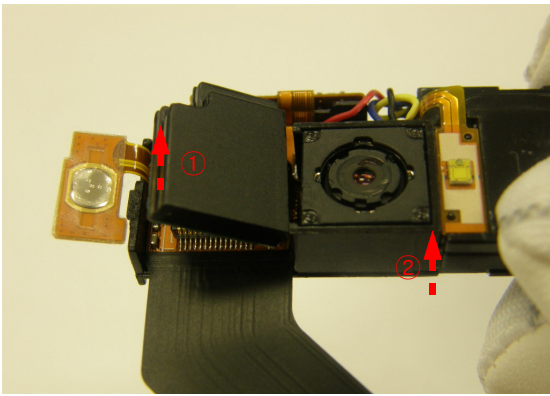
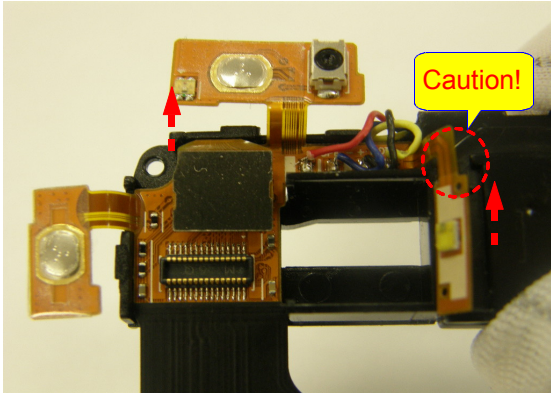
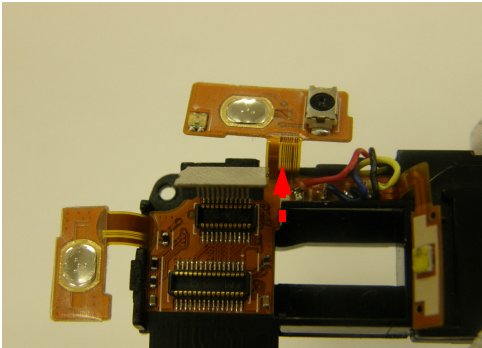
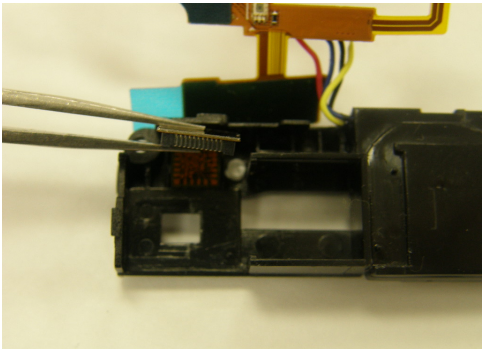
Separate TSP Module.  
 - Separate TSP Module from PBA with care.

**19**

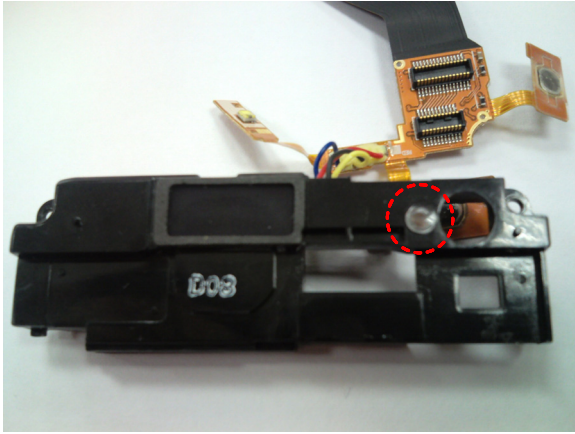


Separate LCD from TSP.  
 - Separate LCD from TSP with great care not to damage TSP.

## 7-2. SPK Disassembling

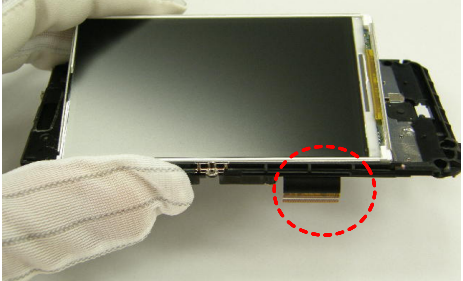
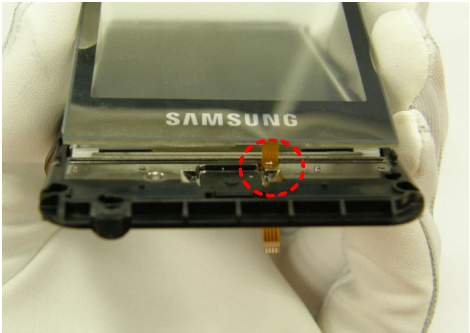
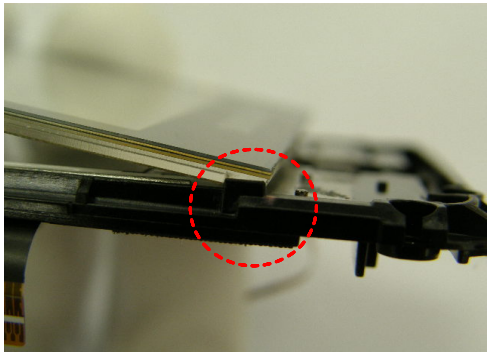
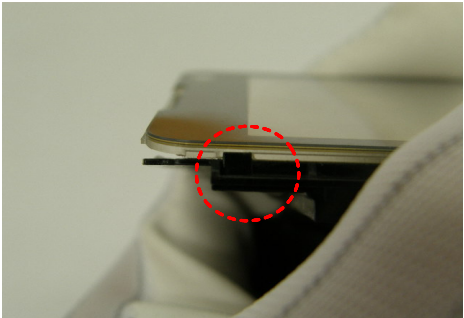
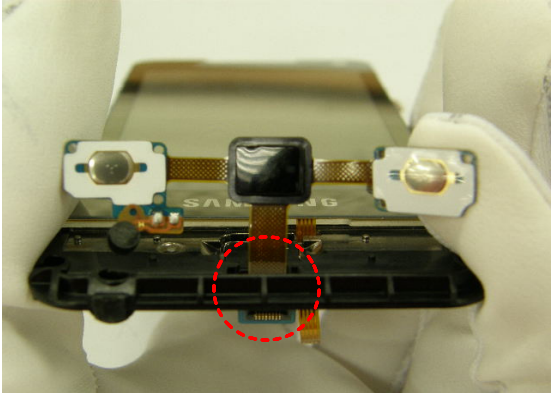
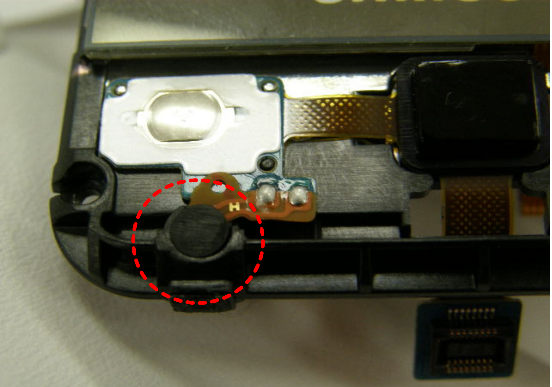
<p><b>1</b></p> 	<p><b>2</b></p> 
<p>Detach GPS FPCB - 1.</p>	<p>Detach GPS FPCB &amp; GPS wire - 2. - Detach metal part of FPCB &amp; GPS wire from SPK Bracket.</p>
<p><b>3</b></p> 	<p><b>4</b></p> 
<p>Disassemble 5M CAM CONNECTOR. - Separate 5M CAM Connector First. Then Pull 5M CAM out of Bracket.</p>	<p>Detach Flash FPCB &amp; Power Key. - <b>Caution</b> : Detach Flash FPCB from Bracket with great care not to tear FPCB.</p>
<p><b>5</b></p> 	<p><b>6</b></p> 
<p>Disassemble CIF CAM CONNECTOR.</p>	<p>Separate Main FPCB from SPK Bracket &amp; Remove CIF CAM.</p>

7



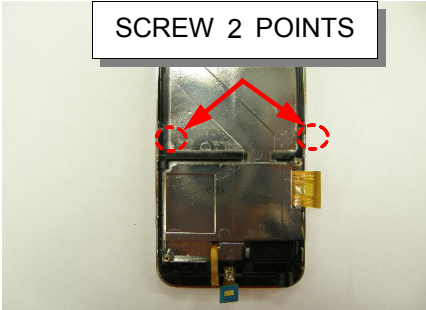
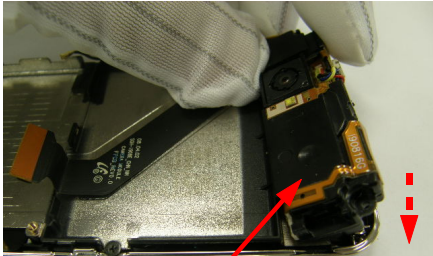
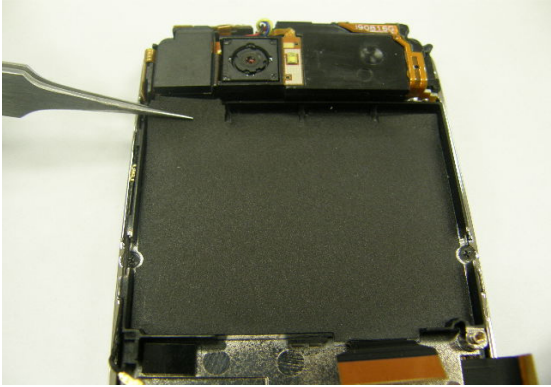



Disassemble Window Deco.

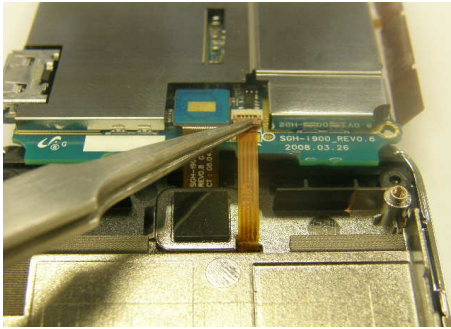
### 7-3. Assembling

<p><b>1</b></p> <p>Attach the left side of LCD first.</p> 	<p><b>2</b></p> 
<p>Attach LCD to the Main Shield Can. - Insert LCD connector into the hole and then attach LCD to the main shield can.</p>	<p>Insert TSP FPCB into the hole. - Insert TSP FPCB into the smaller hole of the Two.</p>
<p><b>3</b></p> 	<p><b>4</b></p> 
<p>Attach TSP on the LCP - 1. - Attach TSP referring to the Guide.</p>	<p>Attach TSP on the LCP - 2. - Attach TSP referring to the Guide.</p>
<p><b>5</b></p> 	<p><b>6</b></p> 
<p>Insert OJ Key FPCB into the hole. - Insert OJ(Optical Joystic) Key FPCB into the larger hole of the Two.</p>	<p>Attach OJ Key on the Main Shield Can. - Attach OJ Key referring to the Guide. - MIC should fit in the hole.</p>



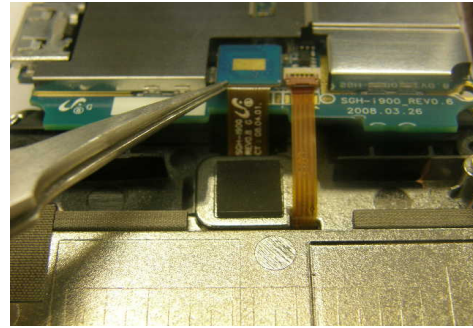
<p><b>7</b></p> 	<p><b>8</b></p> 
<p>Assemble Key Pad with OJ Key. - Optical Joystick should fit in the hole of Key Pad.</p>	<p>Assemble FRONT with FRONT Ass'y. - Assemble FRONT with FRONT Ass'y following indicated direction.</p>
<p><b>9</b></p> 	<p><b>10</b></p>  <p>Bracket Assembly : refer to 5/6 page</p> <p>Attach SPK Bracket. -Attach SPK Bracket on the FRONT Ass'y referring to the Guide.</p>
<p>Screw 2 FRONT Points.</p>	
<p><b>11</b></p> 	<p><b>12</b></p> 
<p>Attach Bracket Sheet. - Attach Bracket sheet considering guide line.</p>	<p>Put the GPS wire into FRONT Ass'y Guide.</p>

**13**



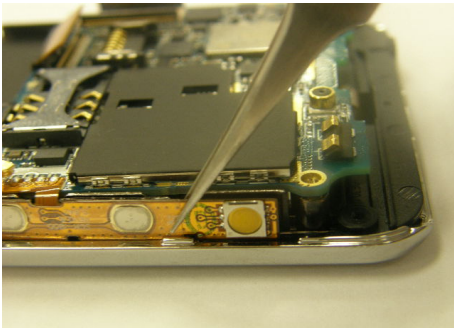
Assemble TSP FPCB CONNECTOR.  
- Assemble TSP FPCB Connector with PBA Connector.

**14**



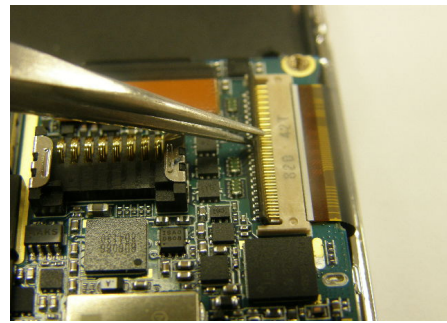
Assemble OJ Key FPCB CONNECTOR.  
- Assemble OJ Key FPCB Connector with PBA Connector.

**15**



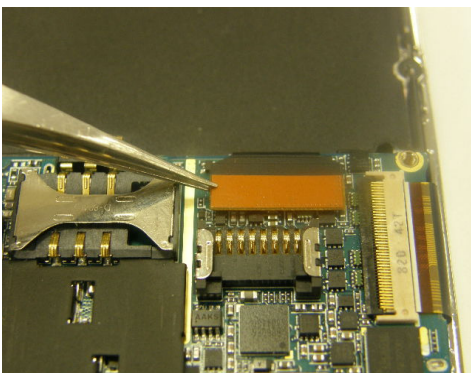
Attach Volume Key FPCB to FRONT Ass'y.

**16**



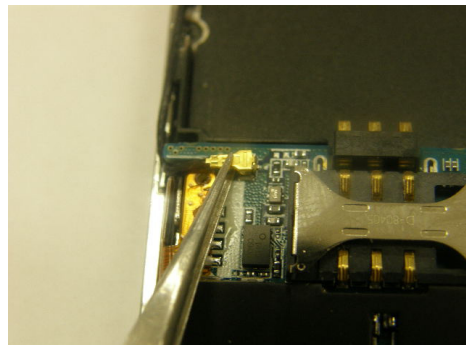
Assemble LCD FPCB CONNECTOR.  
- Assemble LCD FPCB Connector with PBA Connector.

**17**

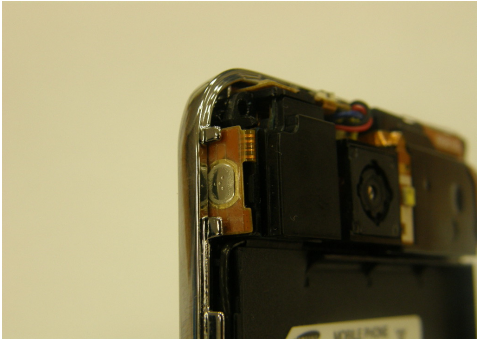
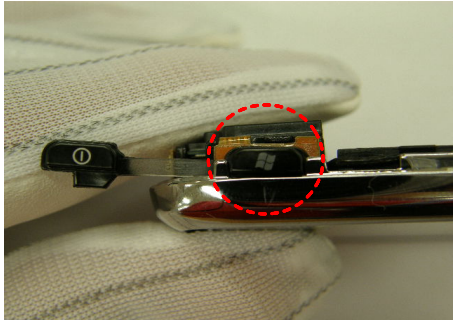
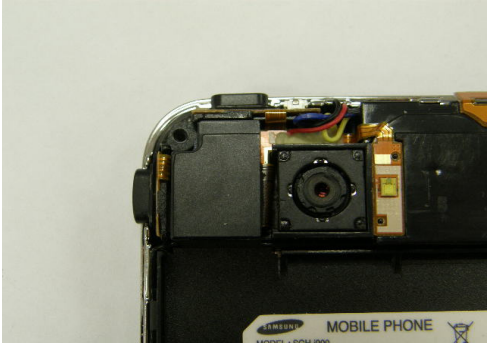
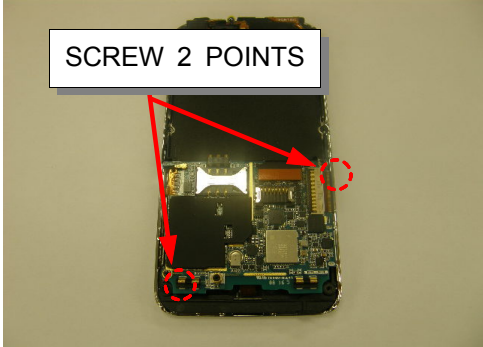

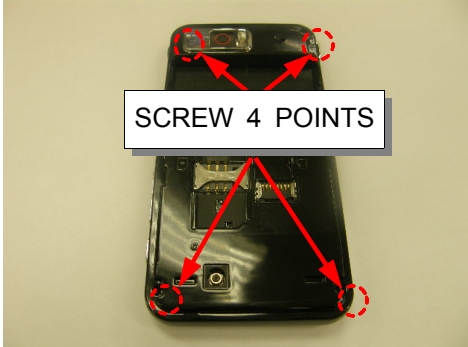


Assemble Main FPCB CONNECTOR.  
- Assemble Main FPCB Connector with PBA Connector.

**18**

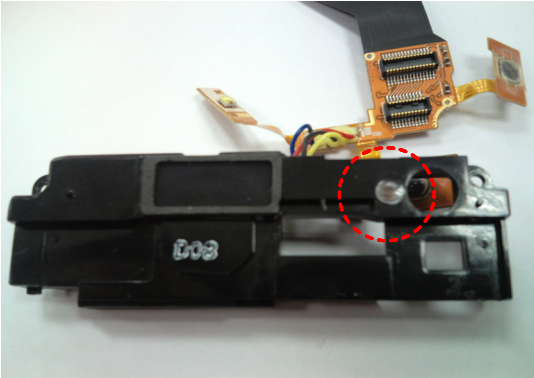
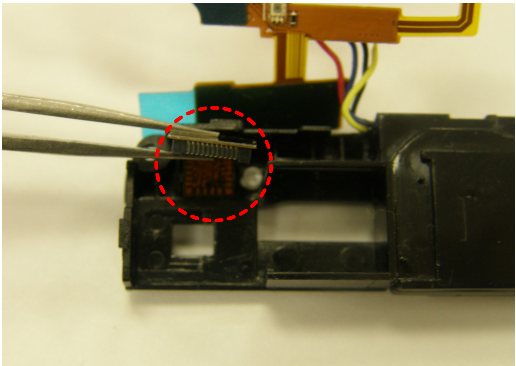
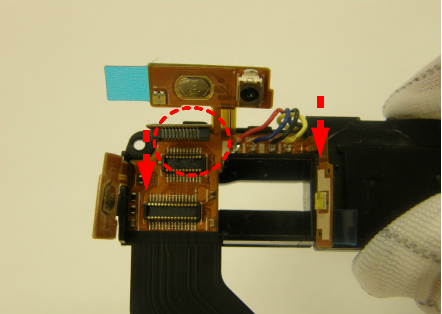
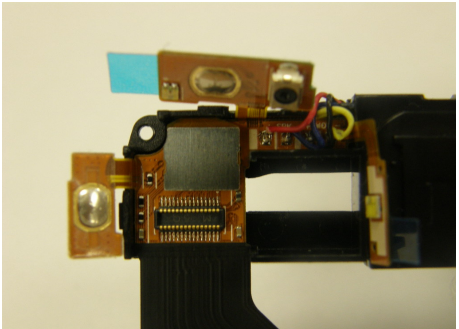
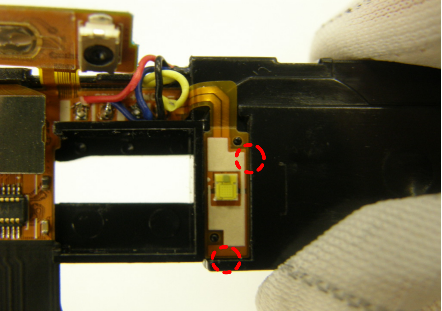
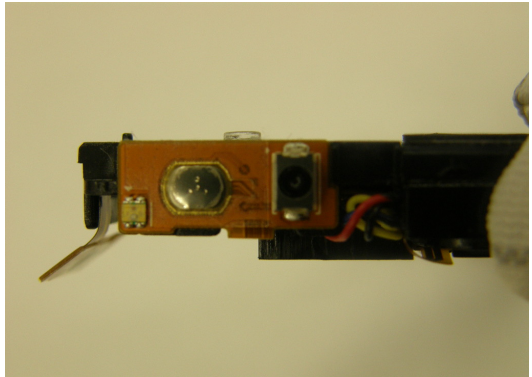


Assemble GPS CONNECTOR.  
- Assemble GPS Connector with PBA Connector.

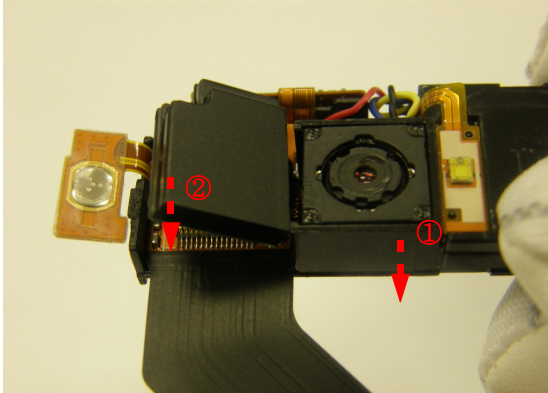
<p><b>19</b></p> 	<p><b>20</b></p> 
<p>Put the Fuction Key FPCB into FRONT Ass`y Guide.</p>	<p>Assemble Window Function key - 1. - The Rounded part is headed to the TOP.</p>
<p><b>21</b></p> 	<p><b>22</b></p> 
<p>Assemble Window Function key - 2.</p>	<p>Screw 2 PBA Points.</p>
<p><b>23</b></p> 	<p><b>24</b></p> 
<p>Assemble the REAR with FRONT Ass`y. - Assemble REAR with FRONT Ass`y considering GPS wire, Window Fuction key and IF cover.</p>	<p>Screw 4 REAR Points.</p>



### 7-4. SPK Assembling

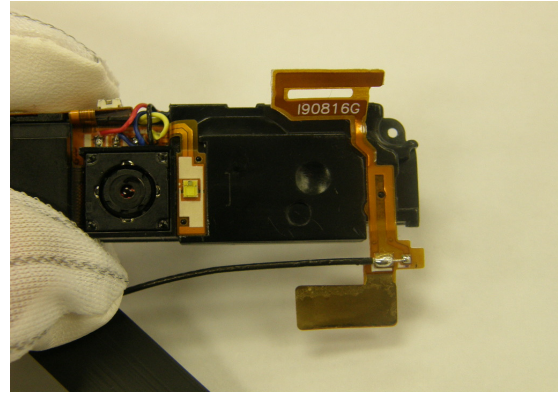
<p><b>1</b></p> 	<p><b>2</b></p> 
<p>Assemble Window Deco.</p>	<p>Assemble CIF CAM.</p>
<p><b>3</b></p> 	<p><b>4</b></p> 
<p>Make Main FPCB fit in SPK Bracket.          - Attach Main FPCB between CIF CAM and its Connector. Main FPCB should be stuck on SPK Bracaket inside.</p>	<p>Assemble CIF CAM CONNECTOR.          - Assemble CIF CAM Connector with PBA Connector.</p>
<p><b>5</b></p> 	<p><b>6</b></p> 
<p>Attach Flash FPCB.          - Attach Flash FPCB to SPK Bracket referring to the Guide.</p>	<p>Attach Power Key.</p>

7



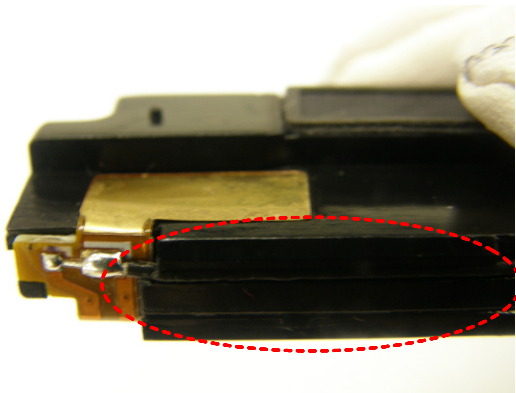
Assemble 5M CAM CONNECTOR.  
 - Assemble 5M CAM Connector with FPCB Connector following indicated direction.

8



Attach GPS FPCB - 1.  
 - Attach GPS FPCB to SPK Bracket referring to the Guide.

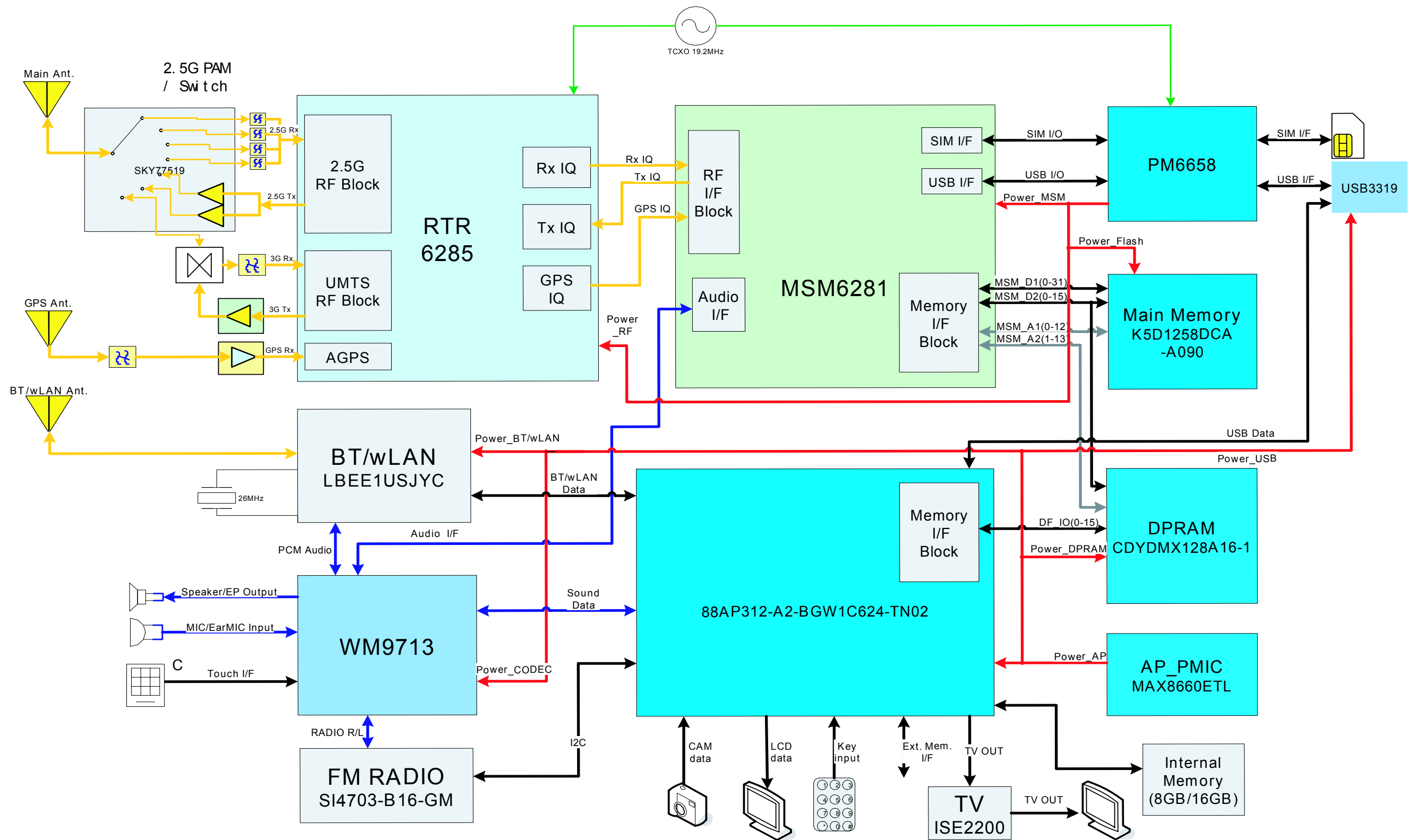
9



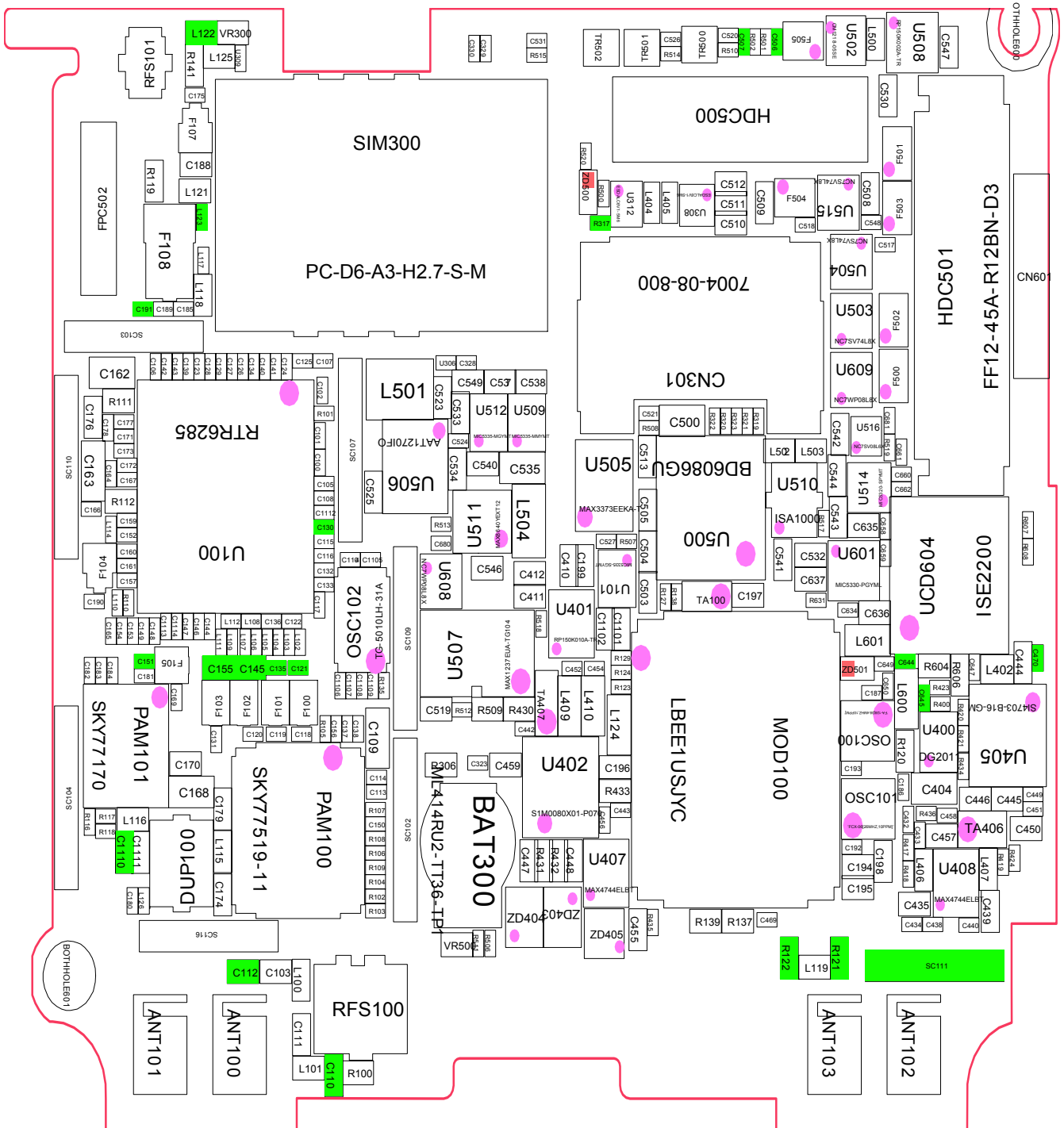
Attach GPS FPCB & wire - 2.  
 - Attach metal part of FPCB to SPK Bracket behind. Then Put GPS Wire into SPK Bracket Guide.

## 8. Block Diagrams

### SGH-i900 Block Diagram



# 9. PCB Diagrams







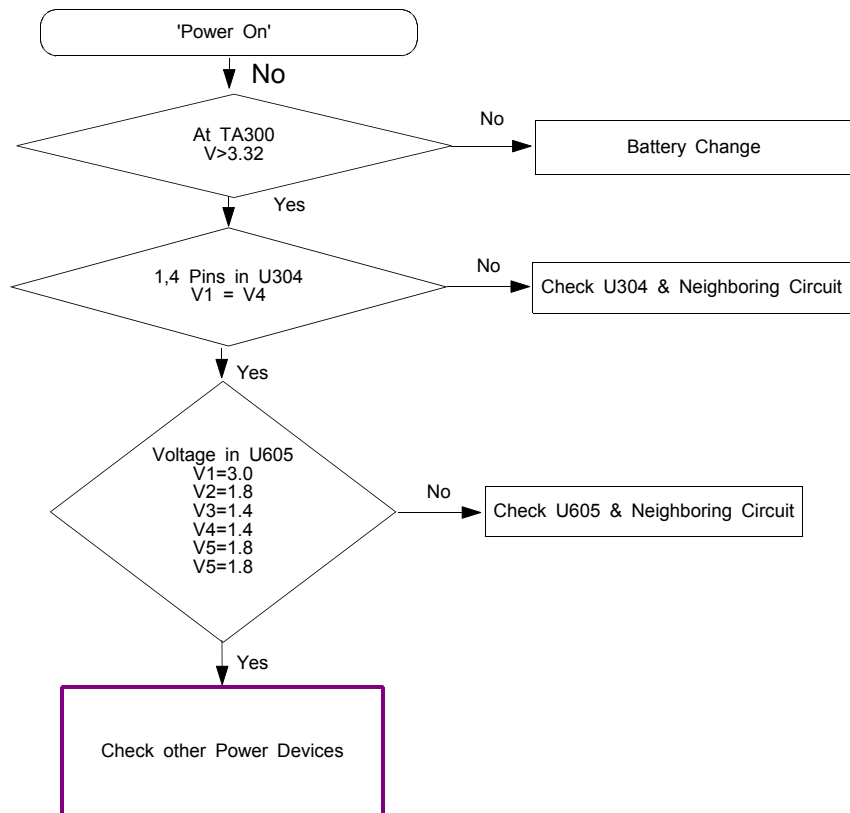
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# 10. Flow Chart of TroubleShooting

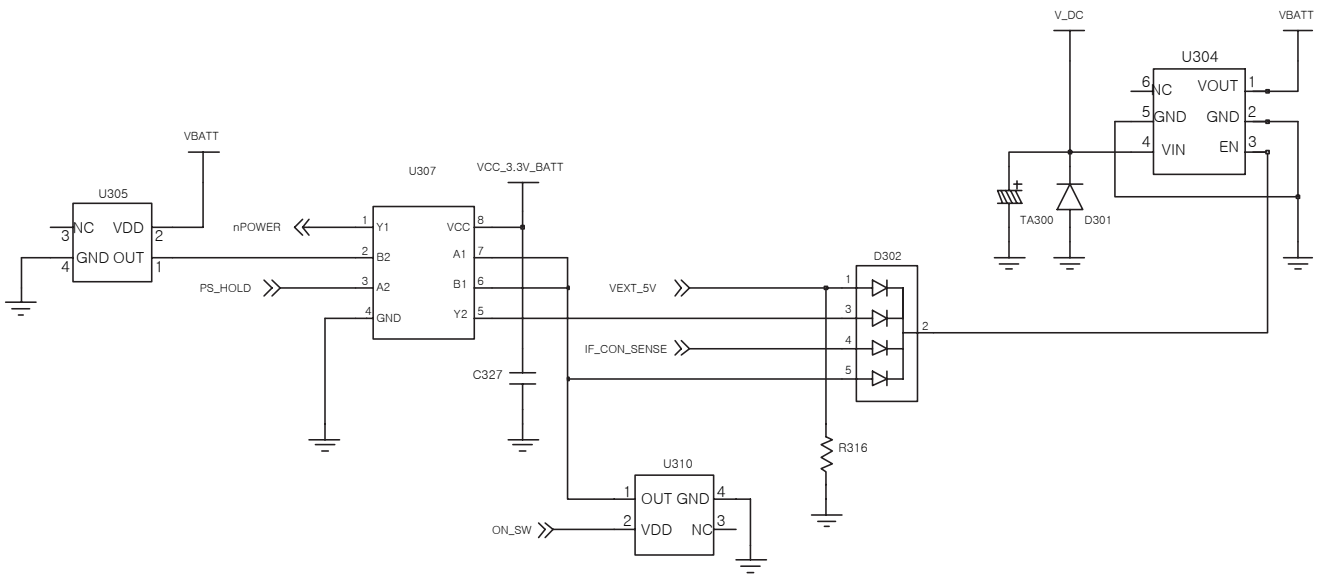
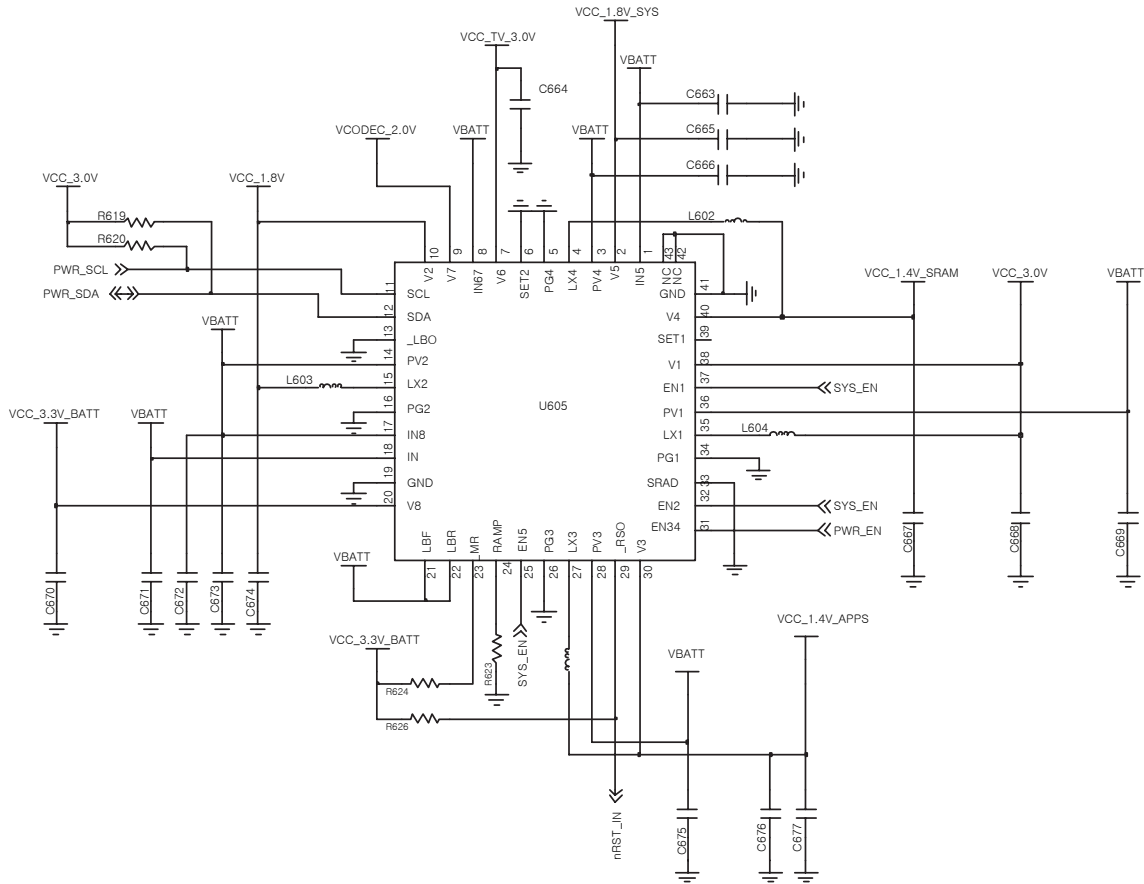
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## 10-1. Power On

- PDA Part

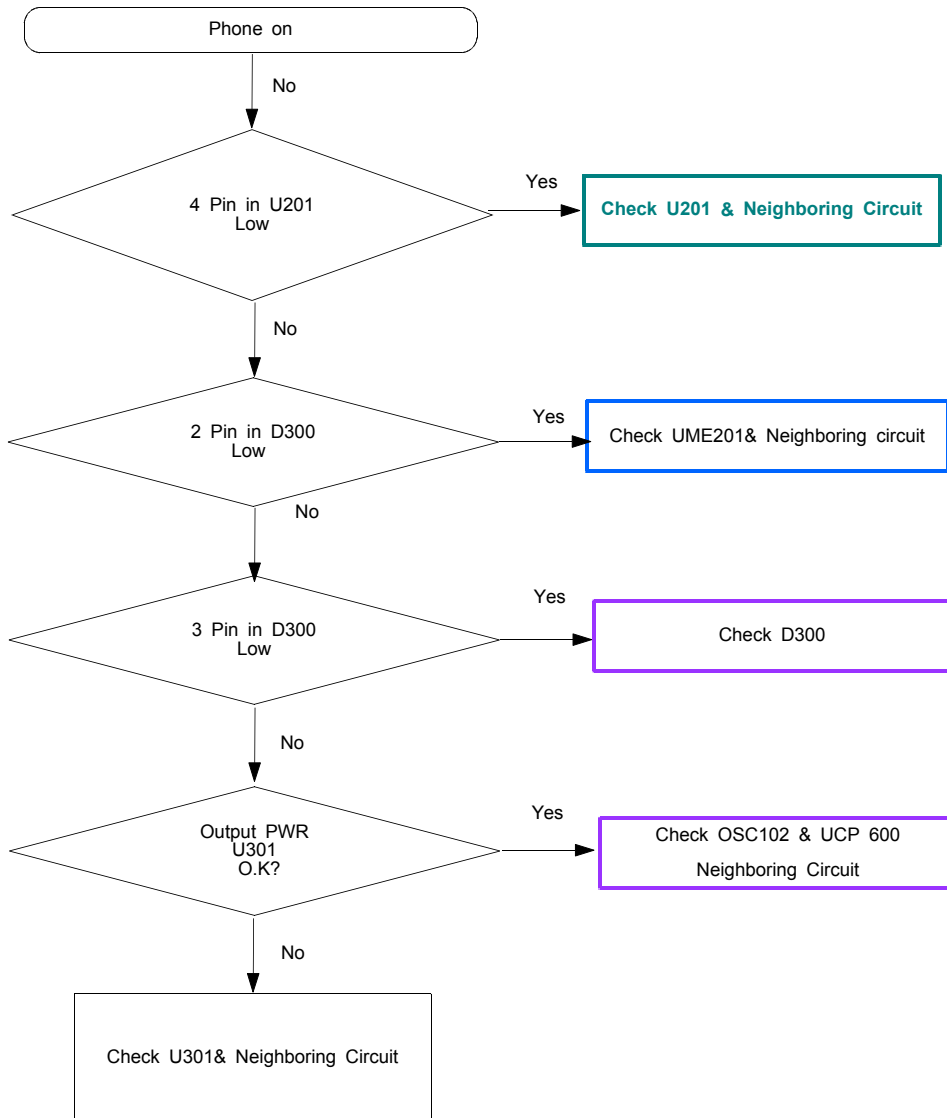


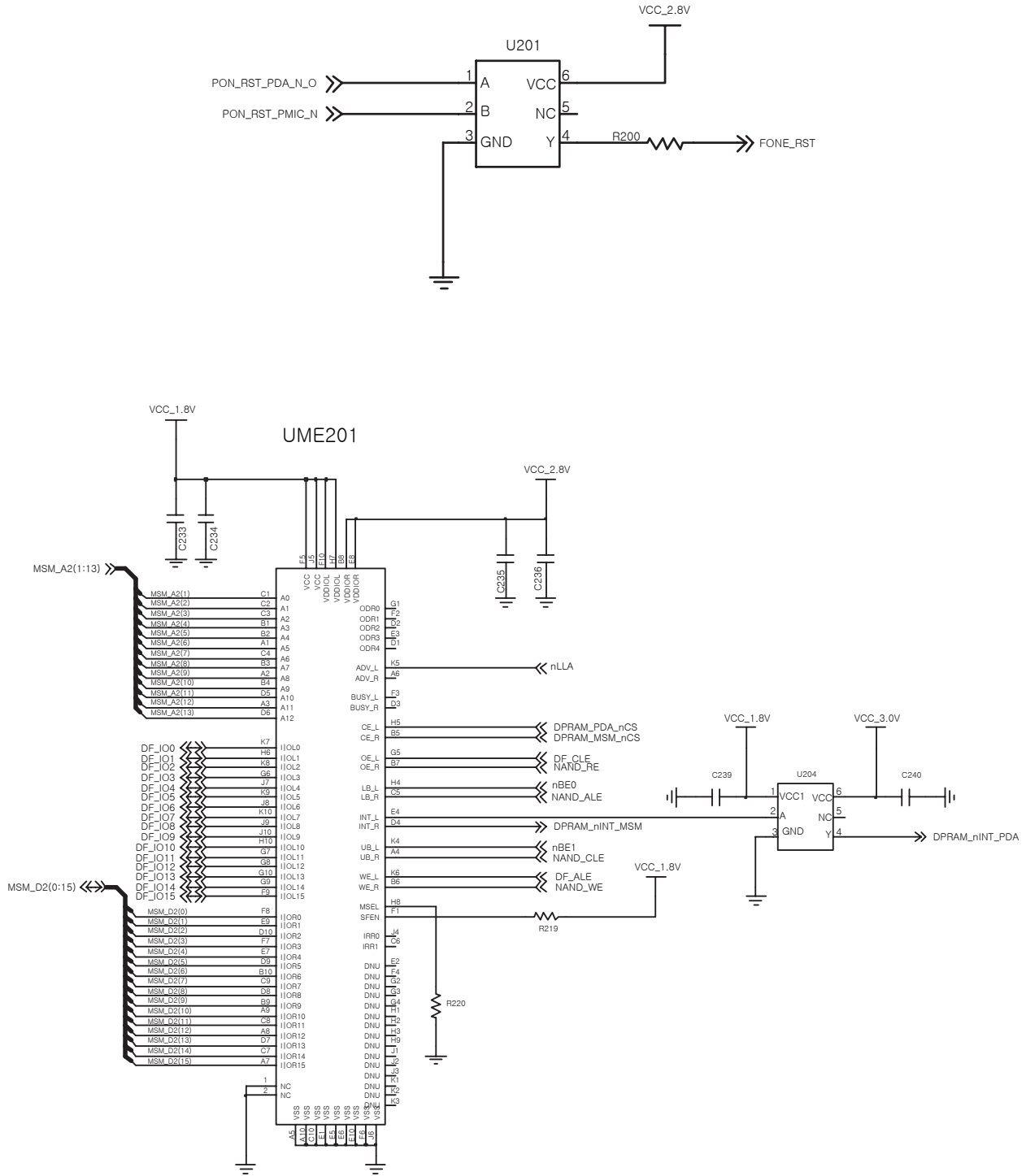
# Flow Chart of Troubleshooting



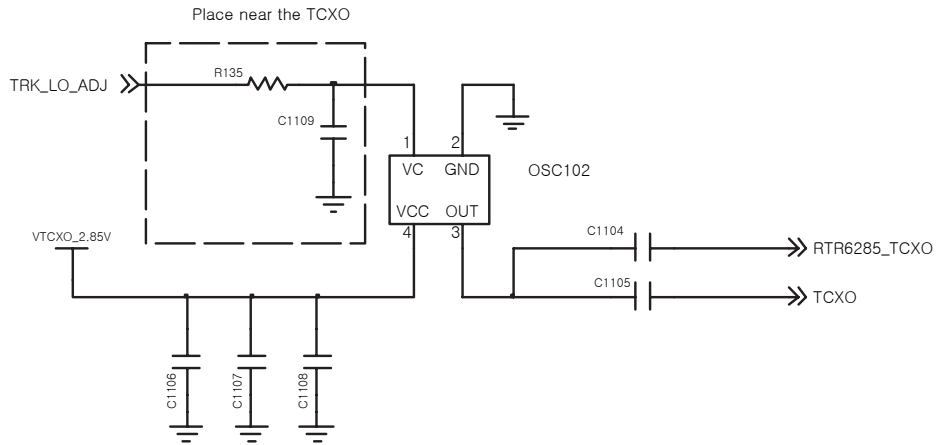
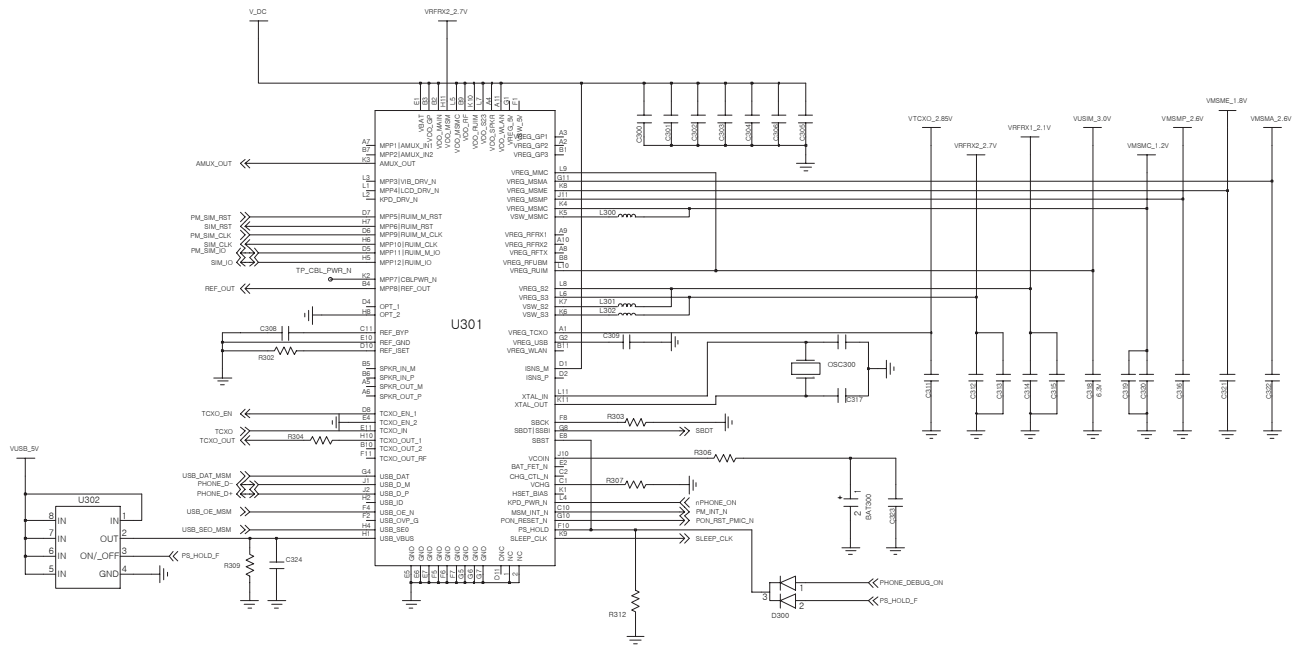


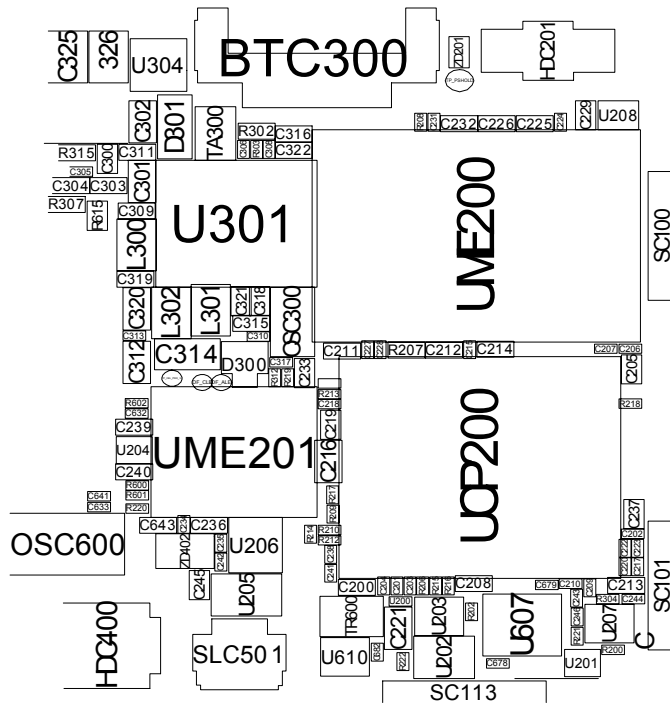
● PHONE Part



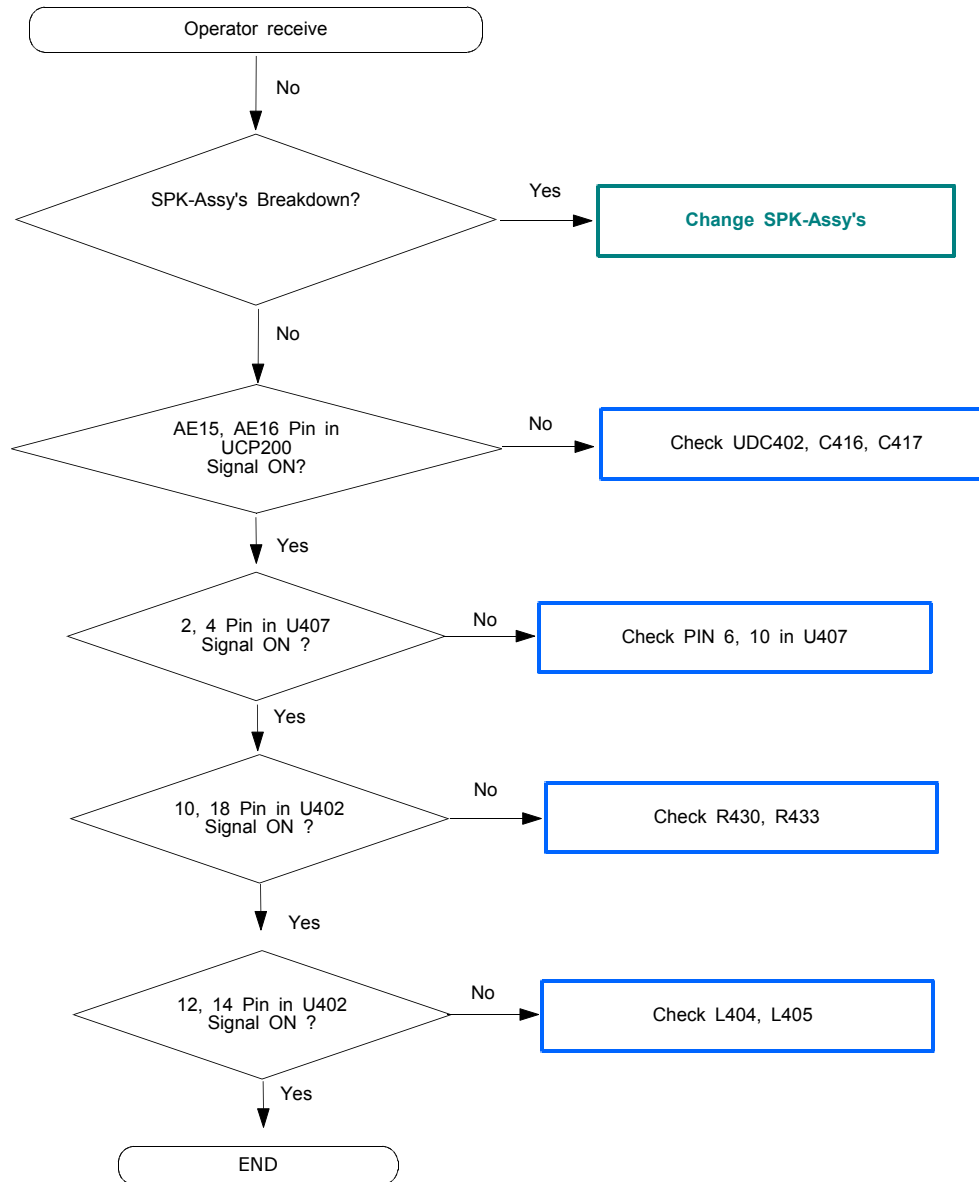


# Flow Chart of Troubleshooting

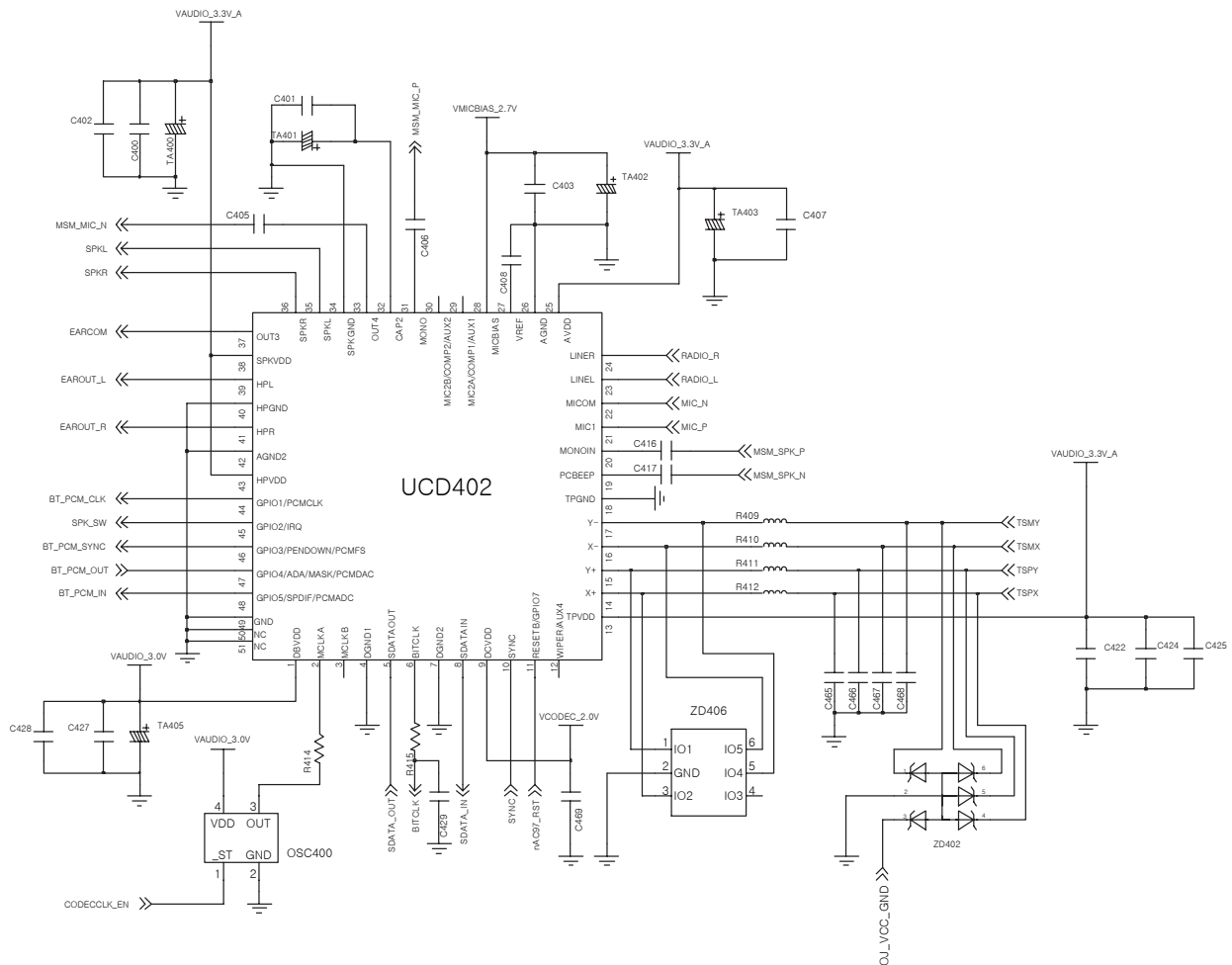
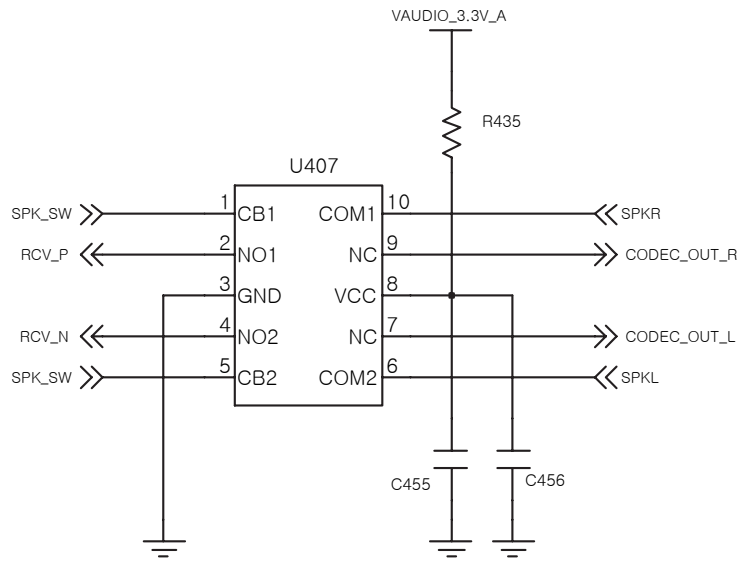




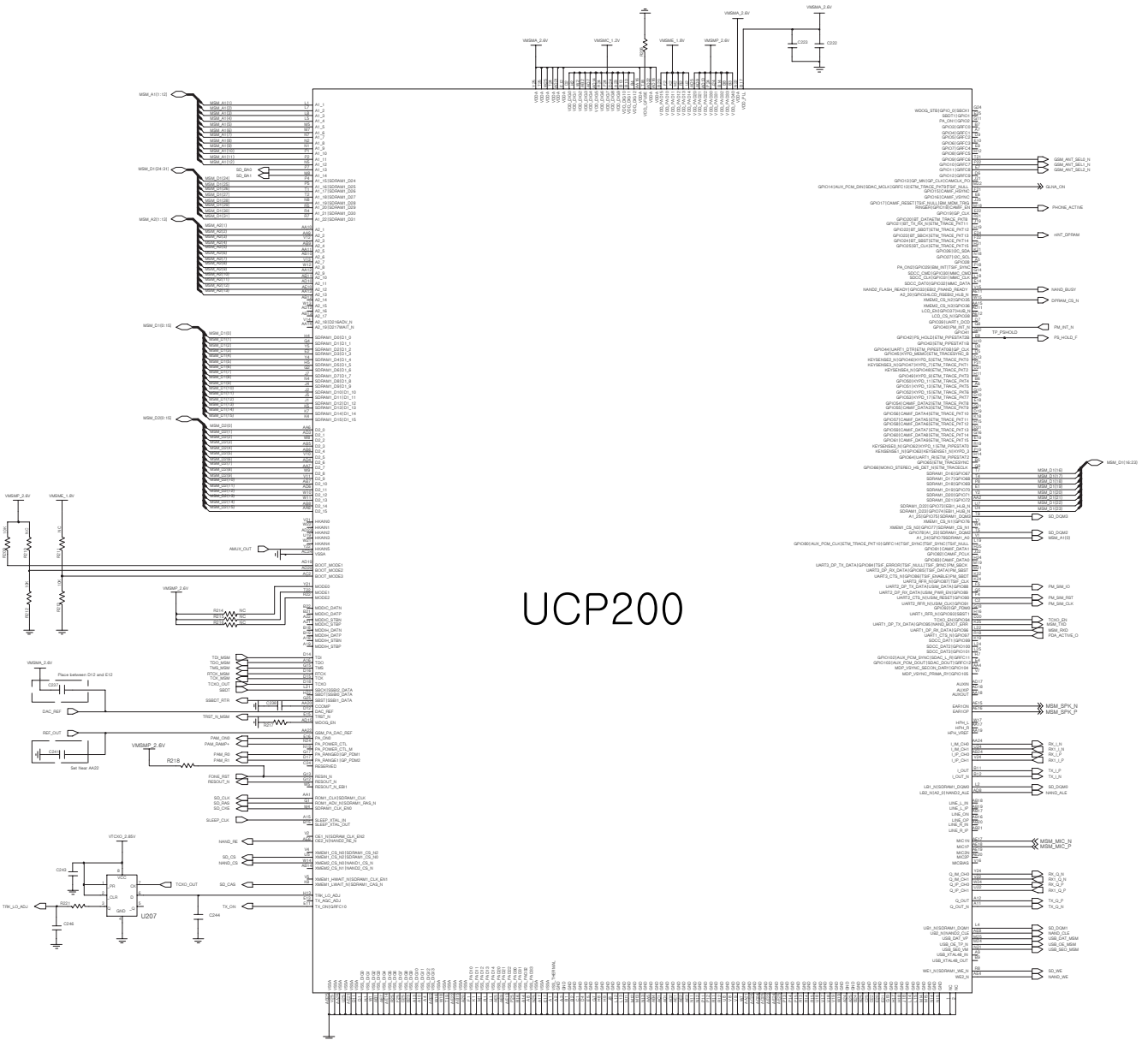
## 10-2. RECEIVER Working

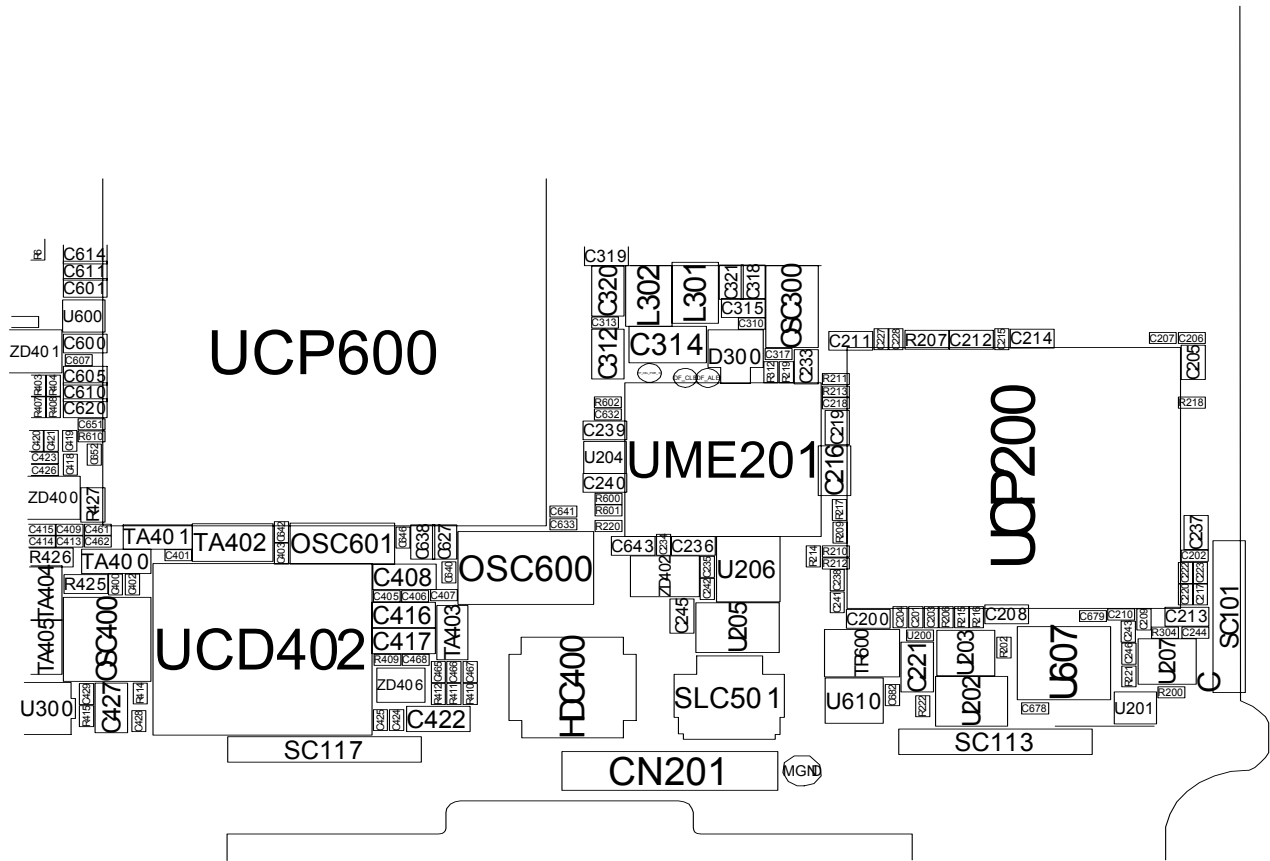




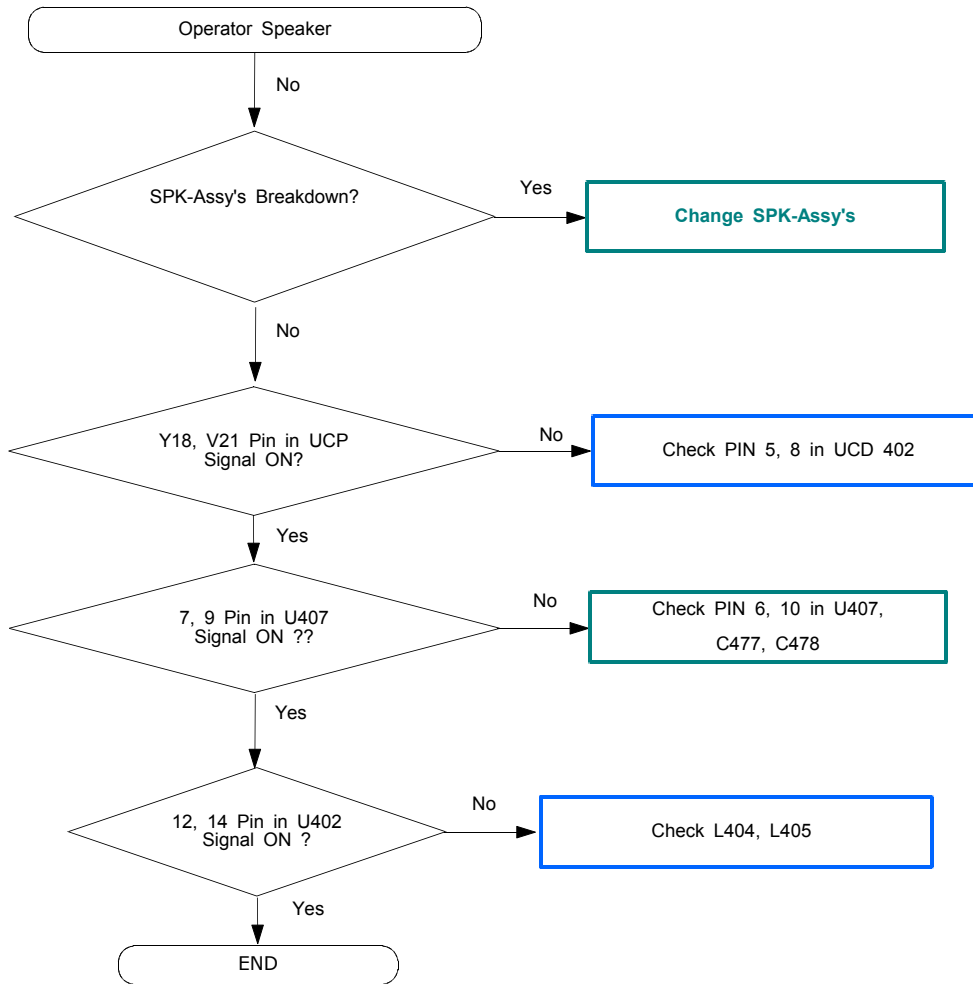


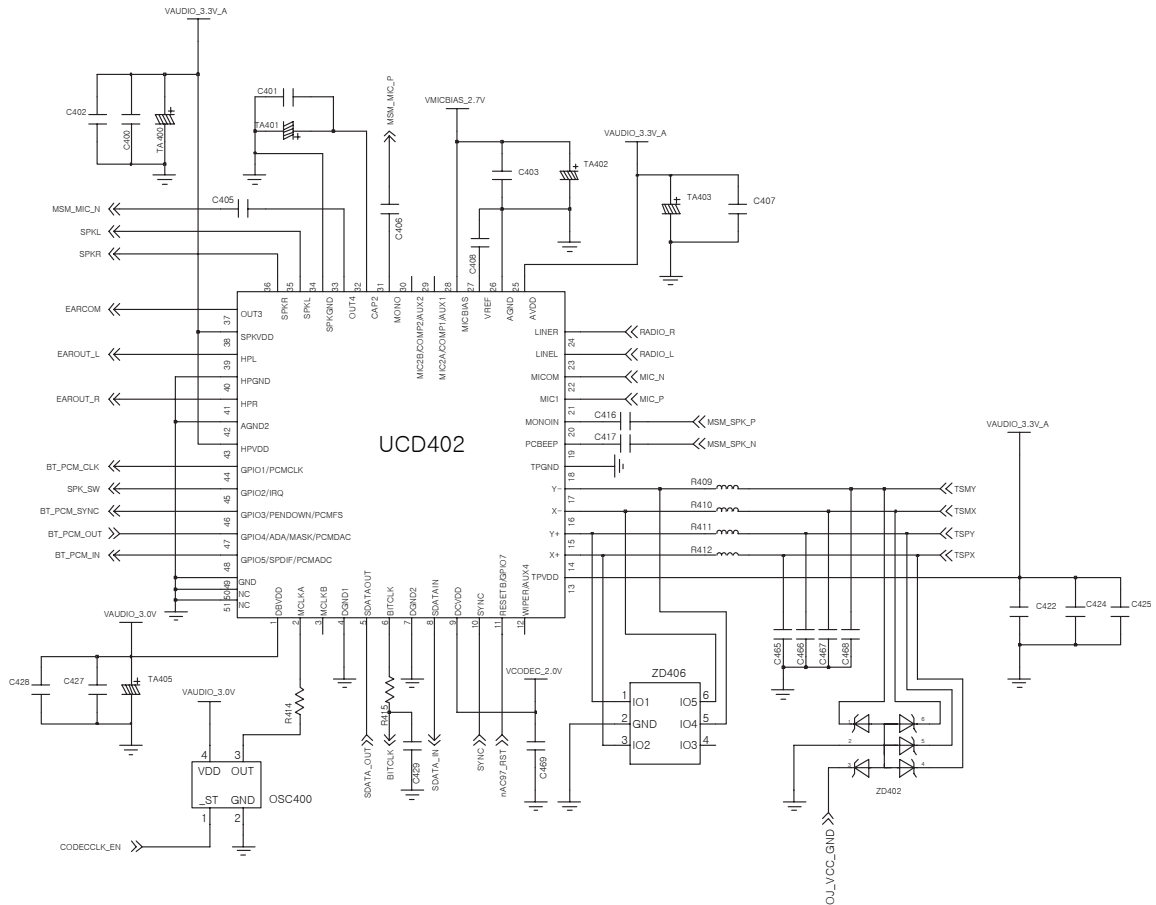
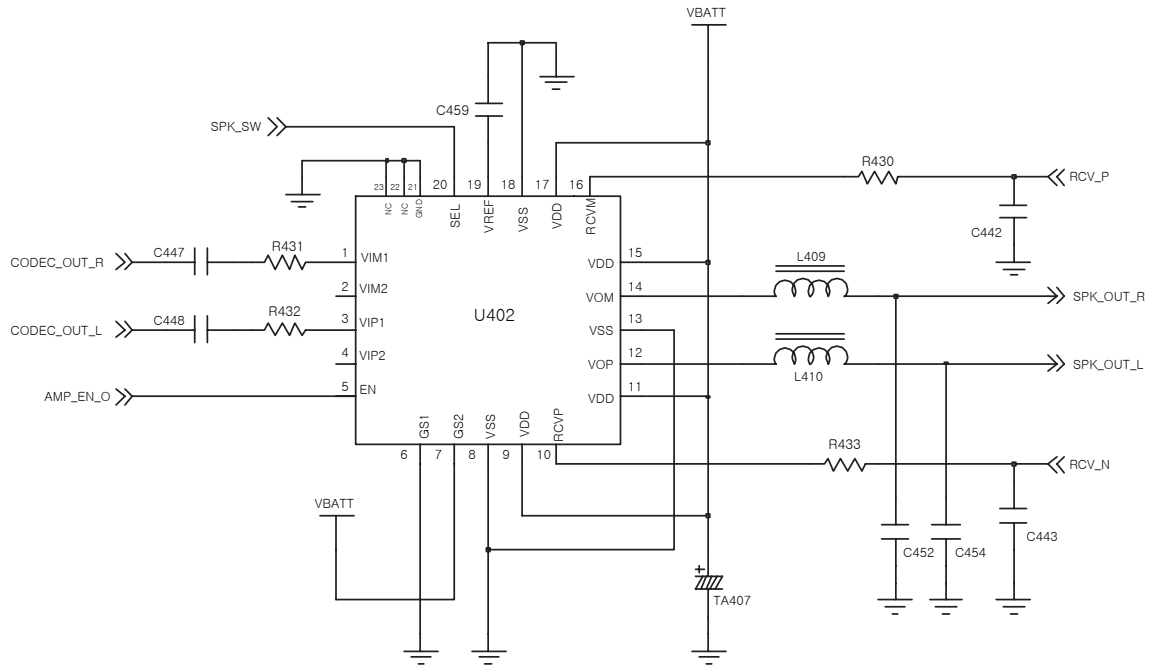
# Flow Chart of Troubleshooting

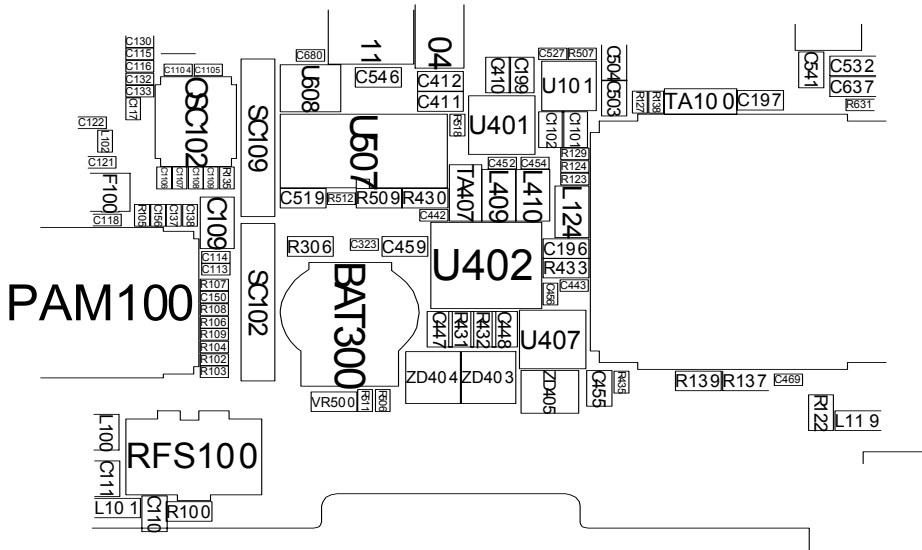
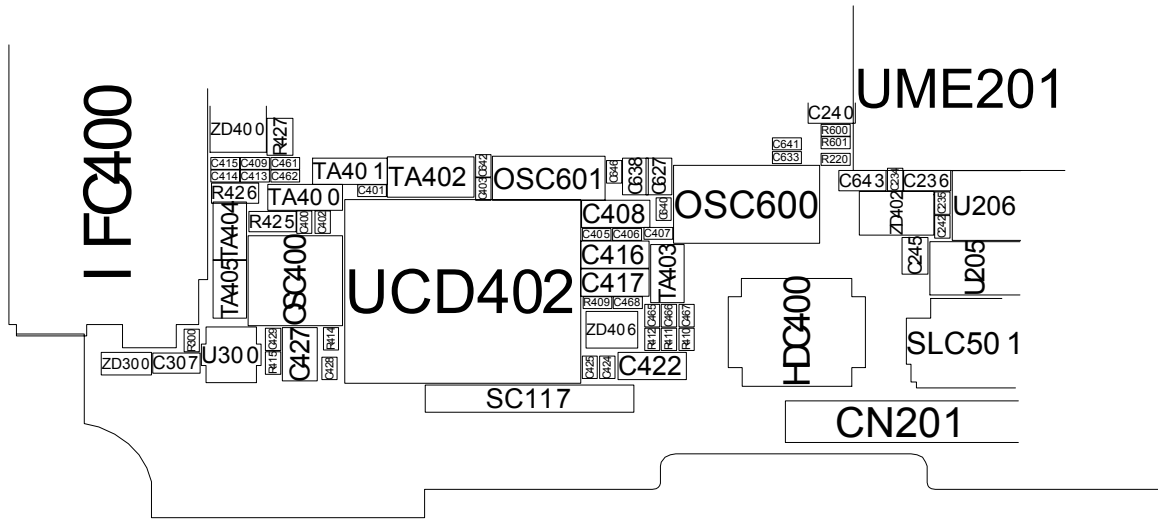




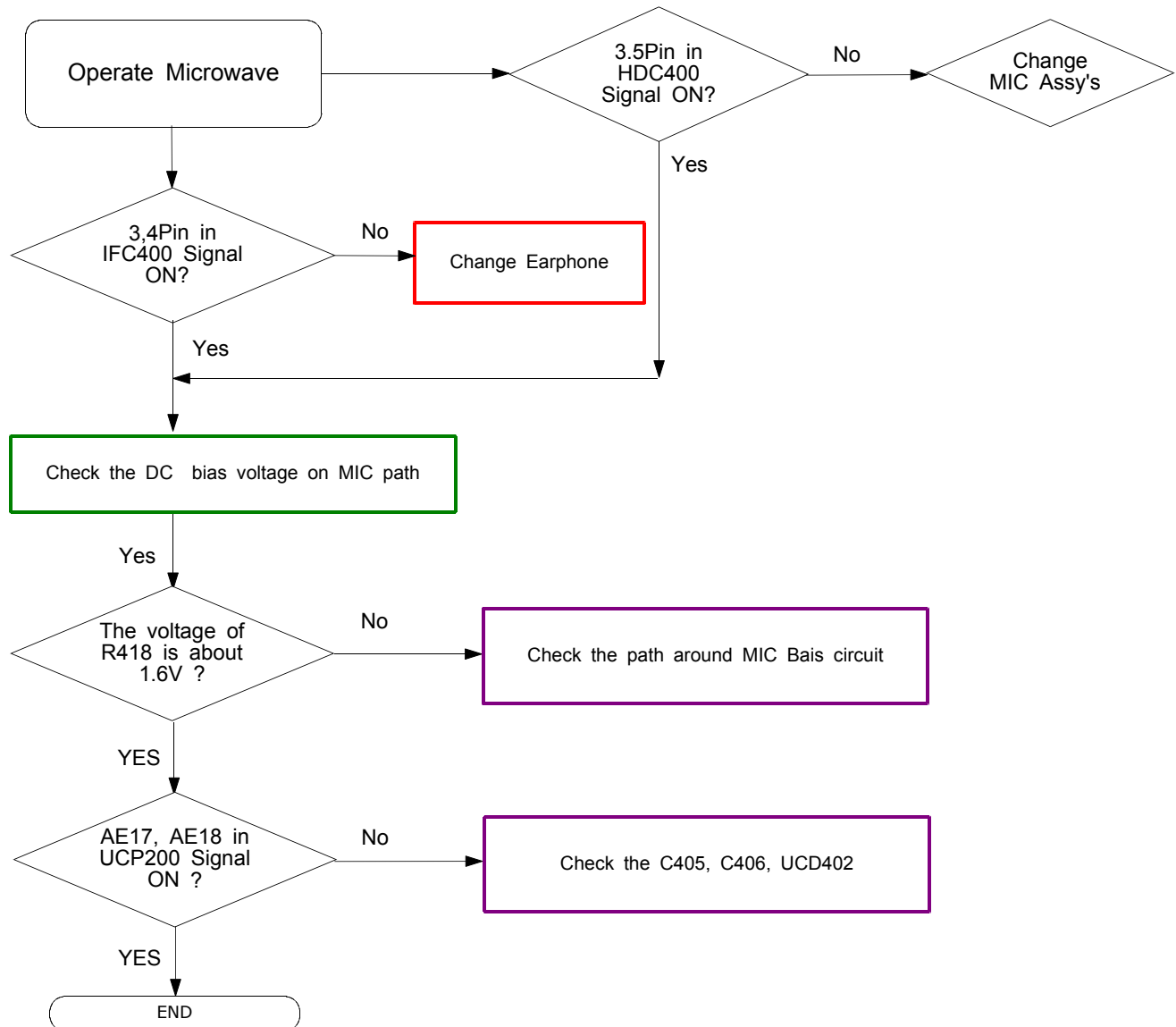
### 10-3. SPEAKER Working



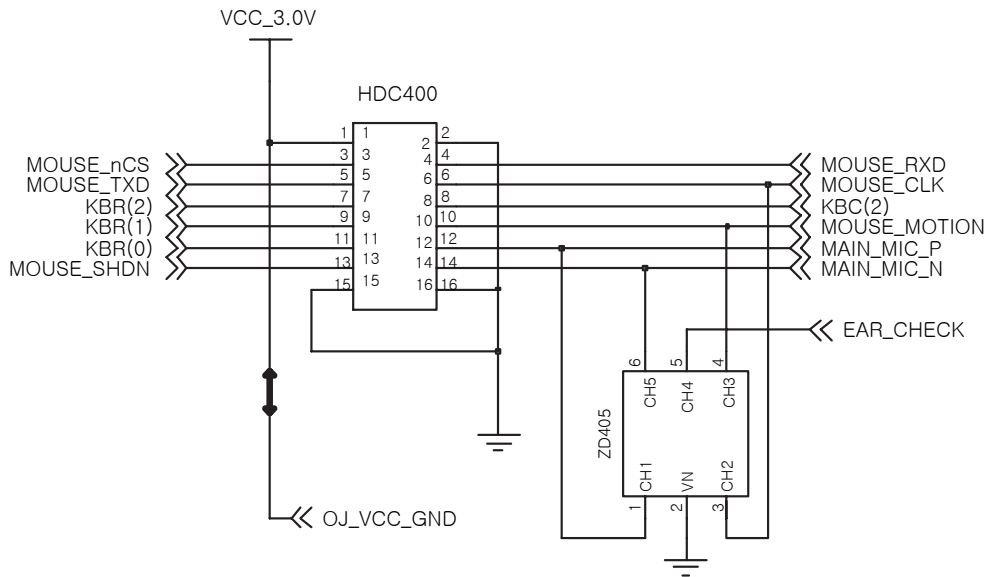
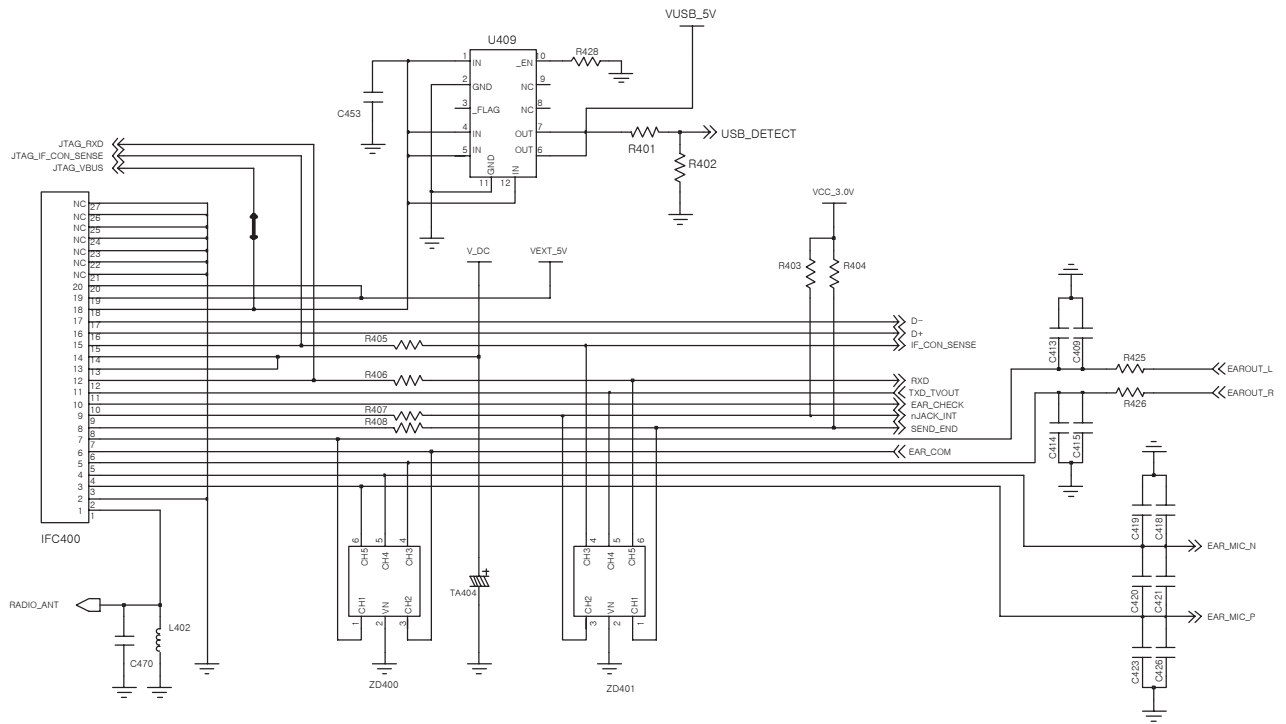




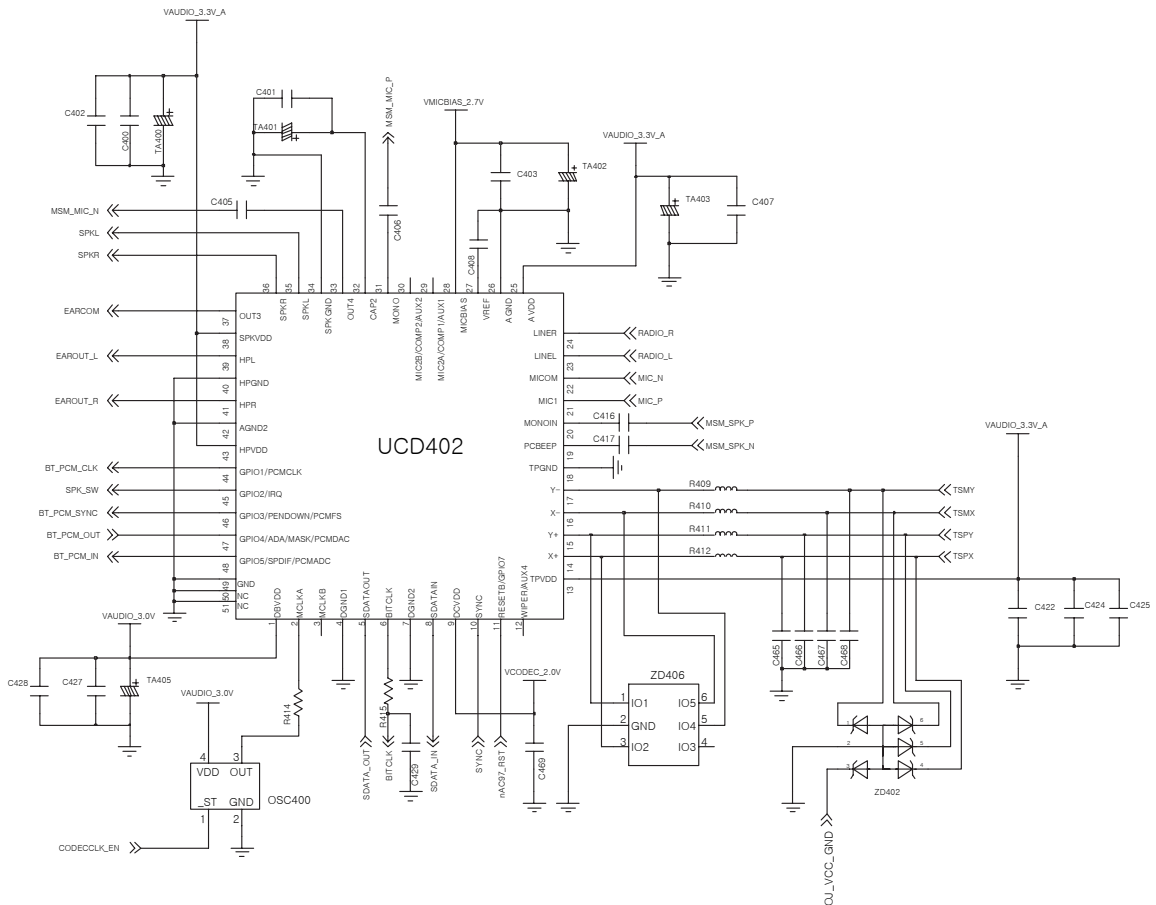
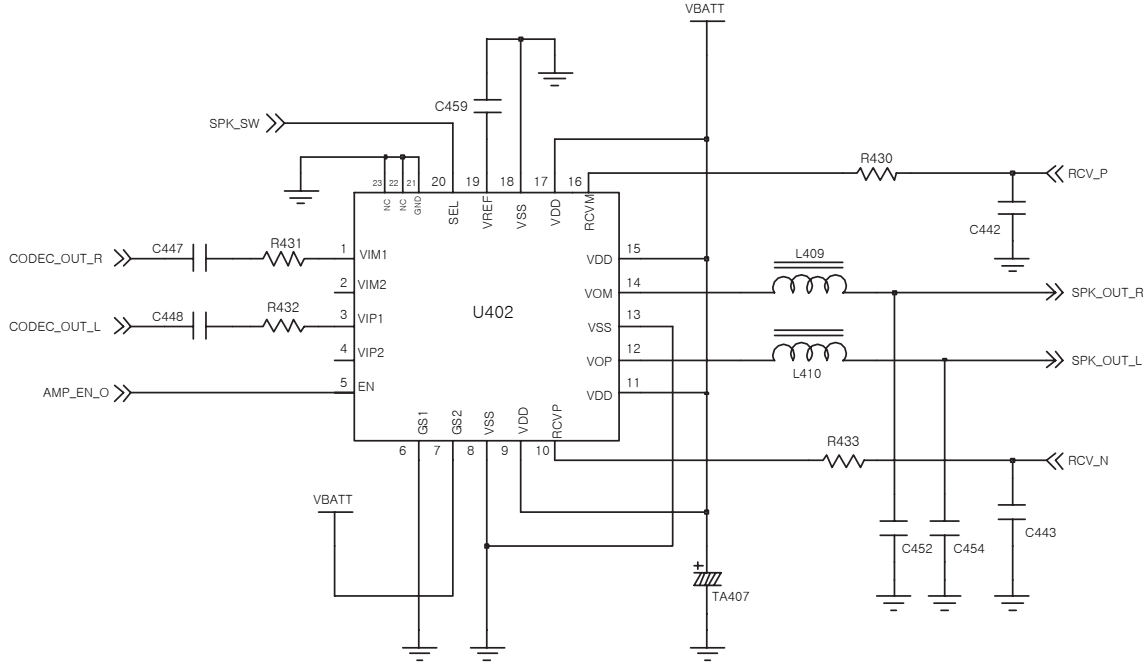
### 10-4. MIC Working

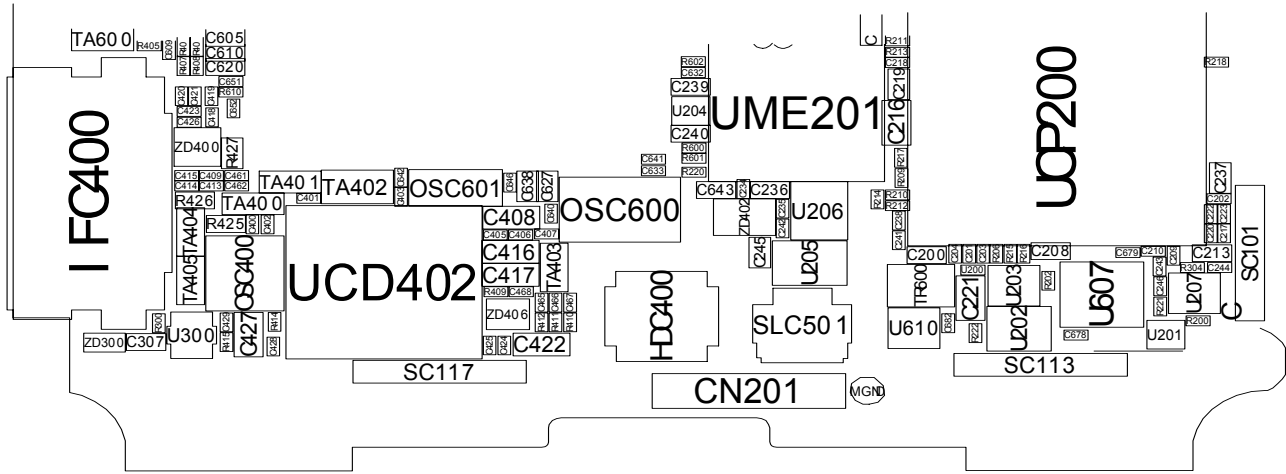


Flow Chart of Troubleshooting

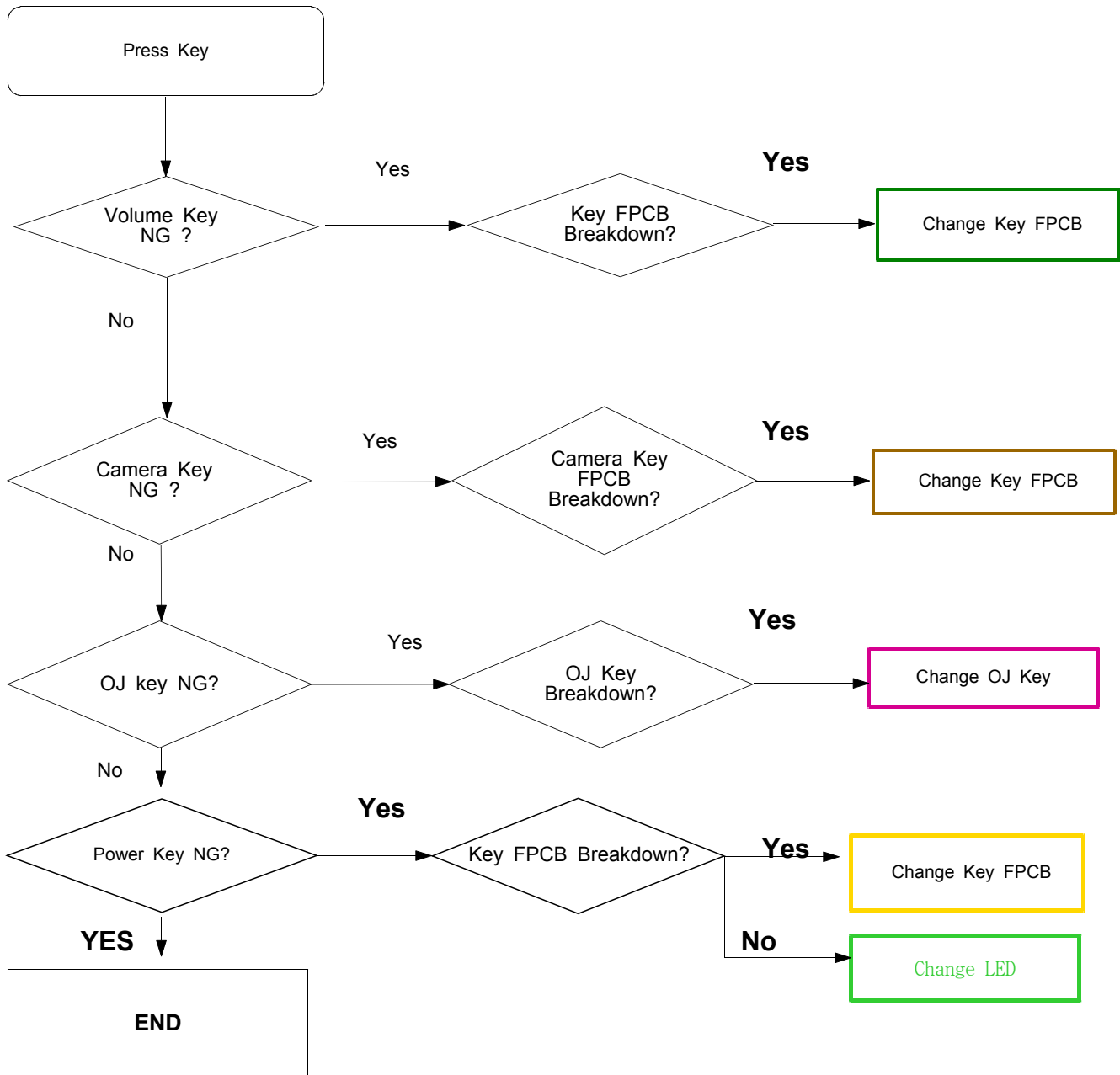




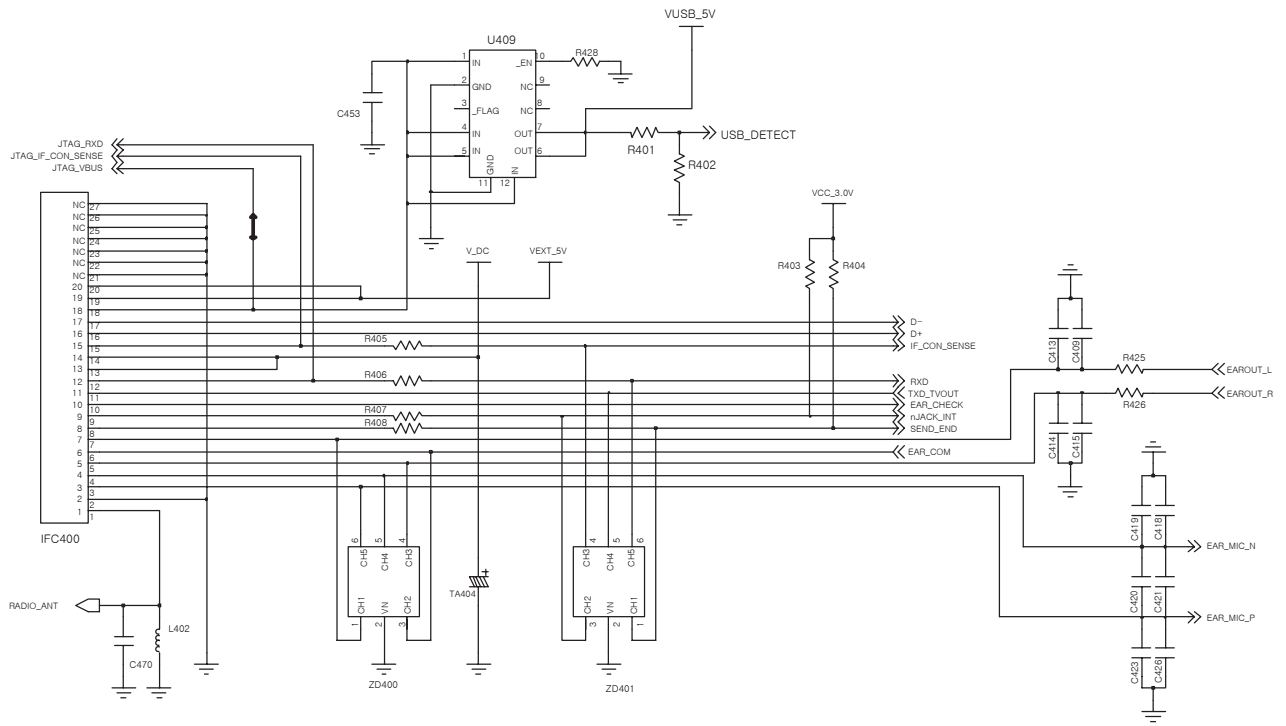




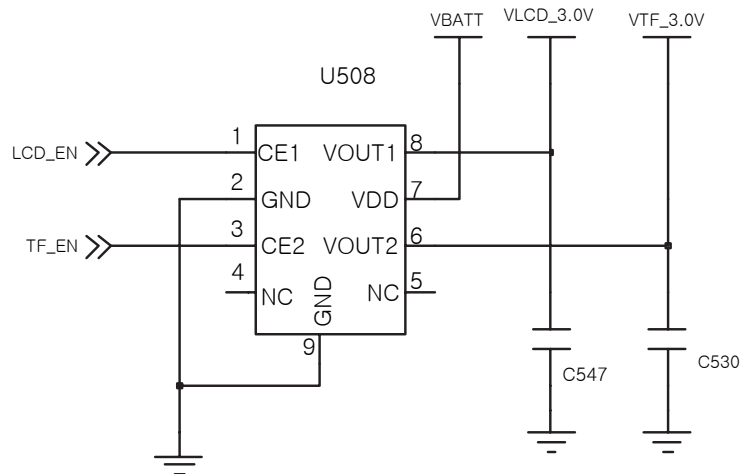
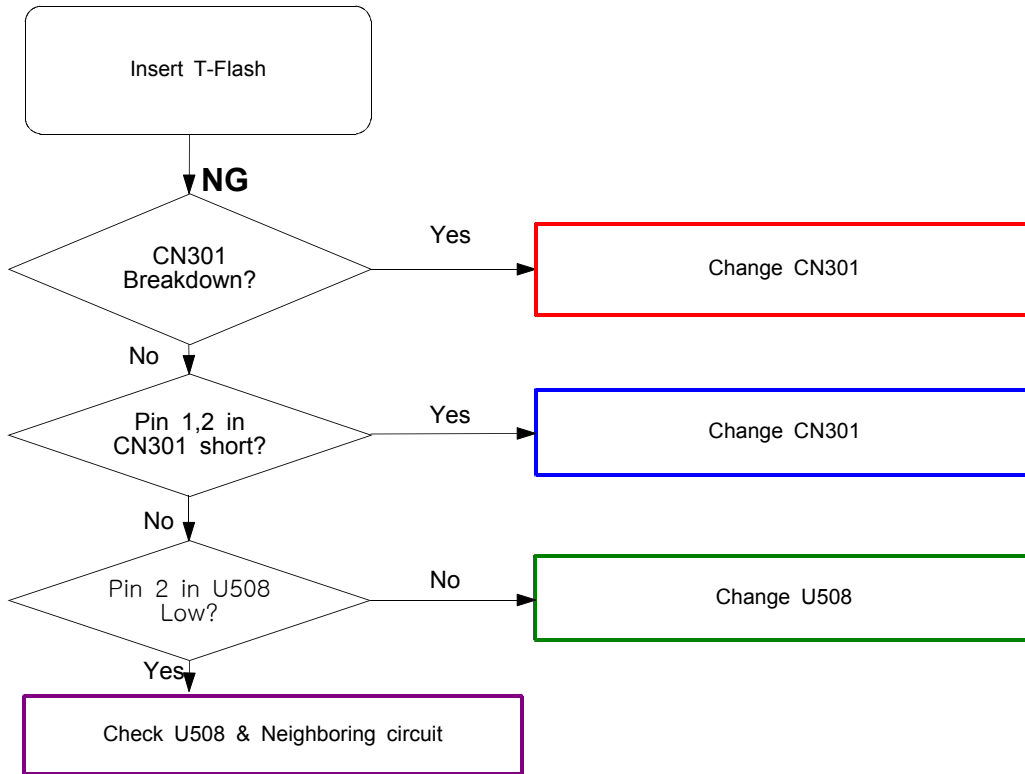
### 10-5. KEY Working



Flow Chart of Troubleshooting

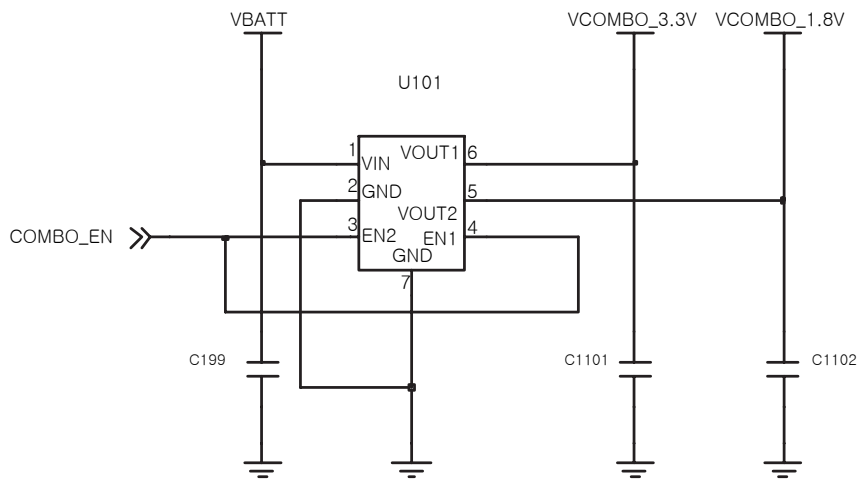
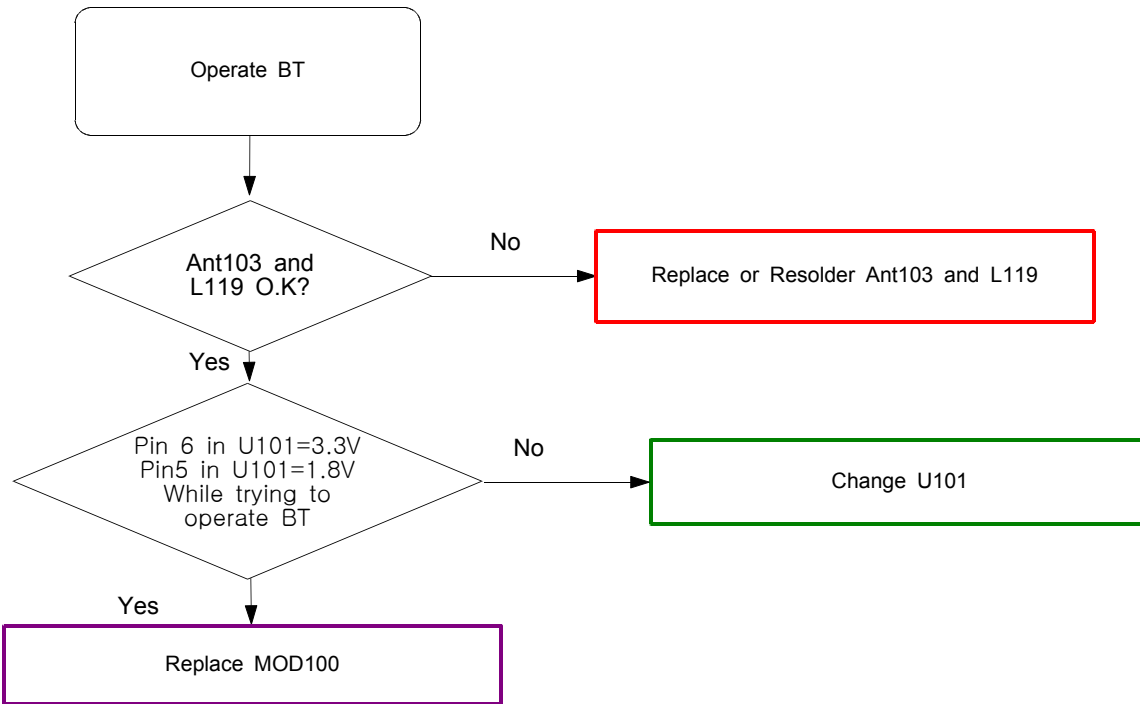


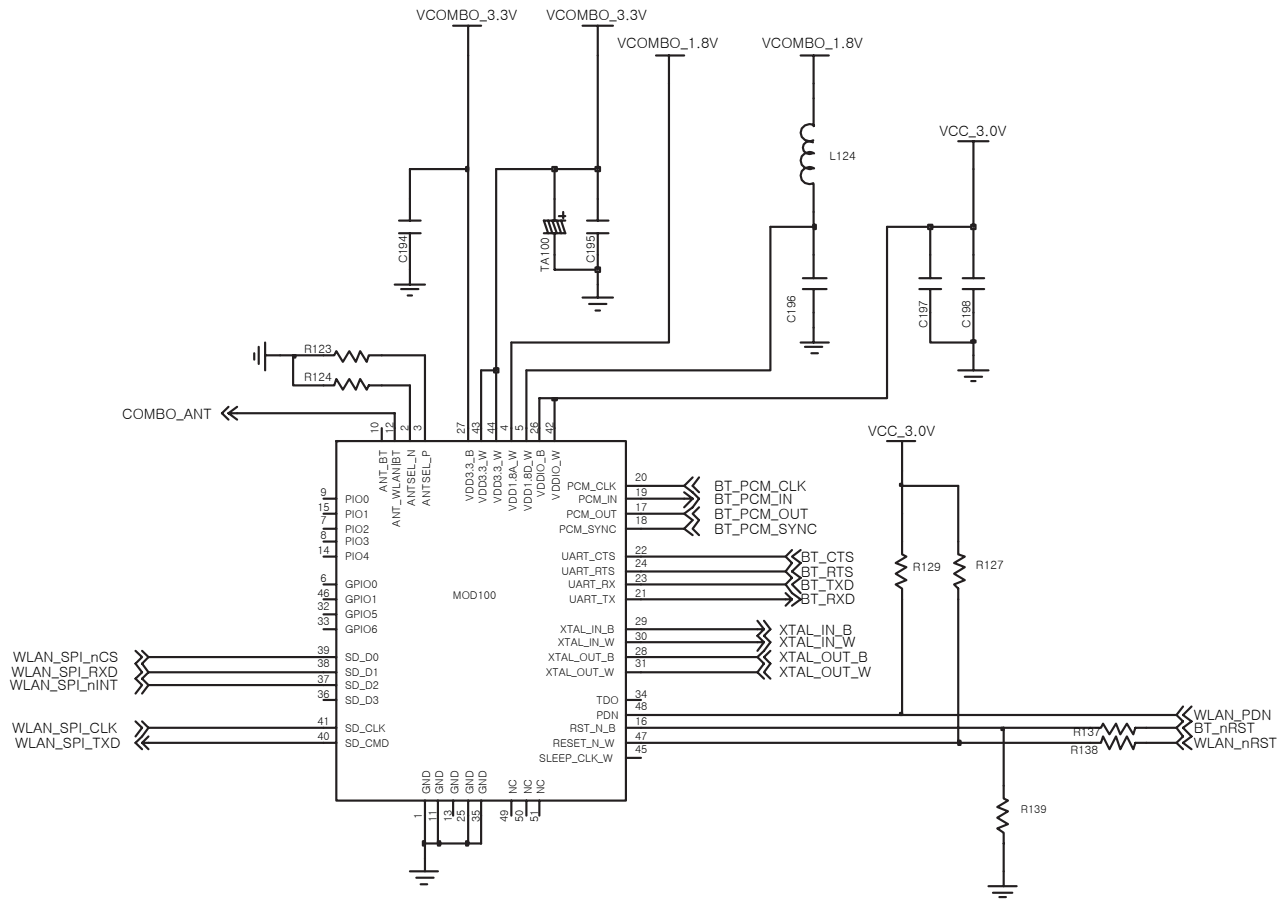
### 10-6. T-Flash Card Working





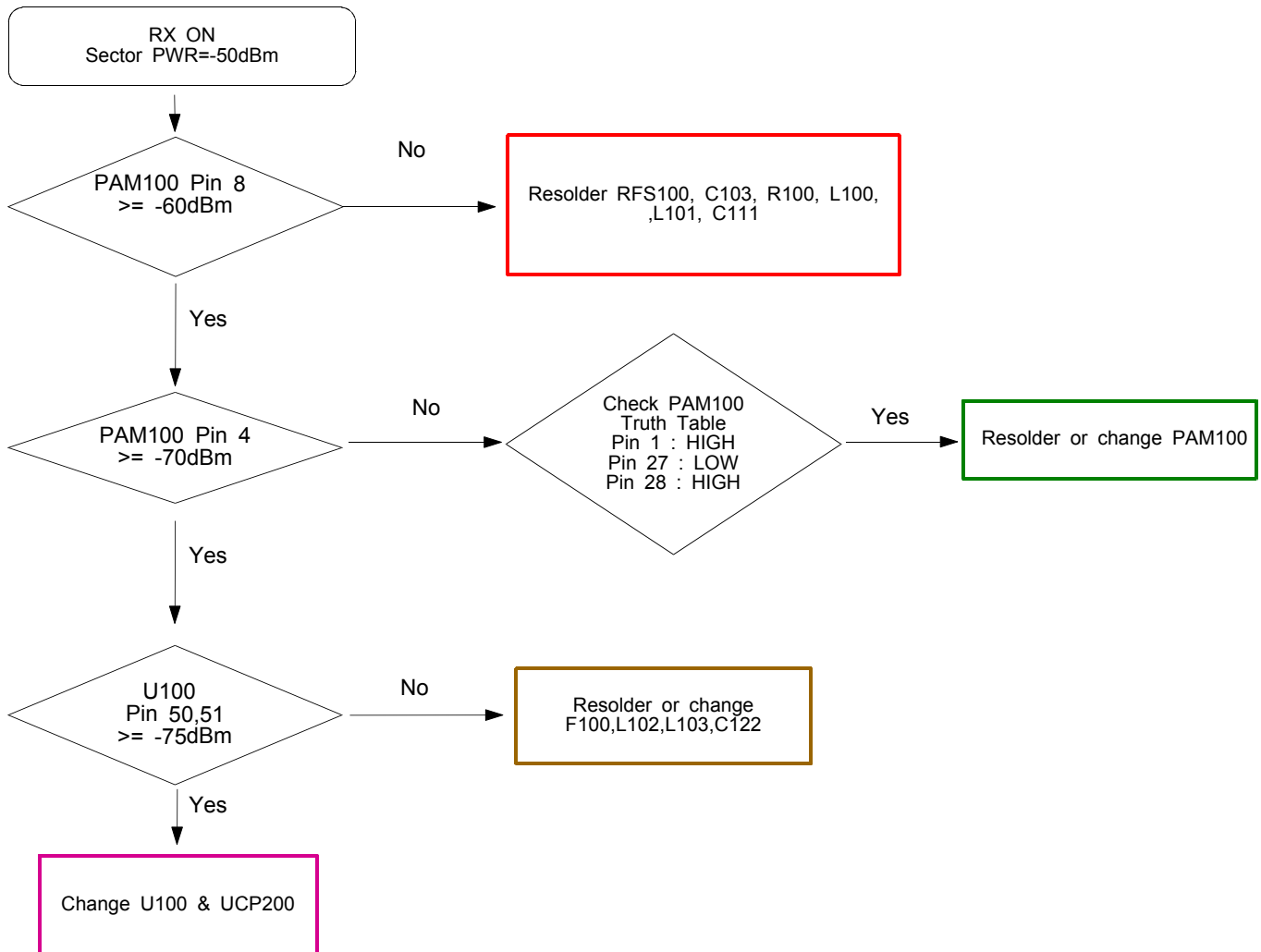
### 10-7. Bluetooth Working



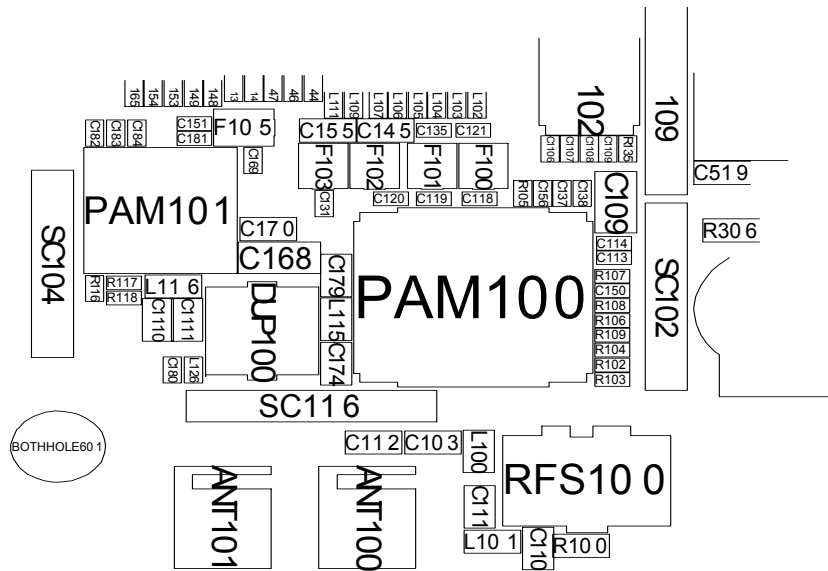
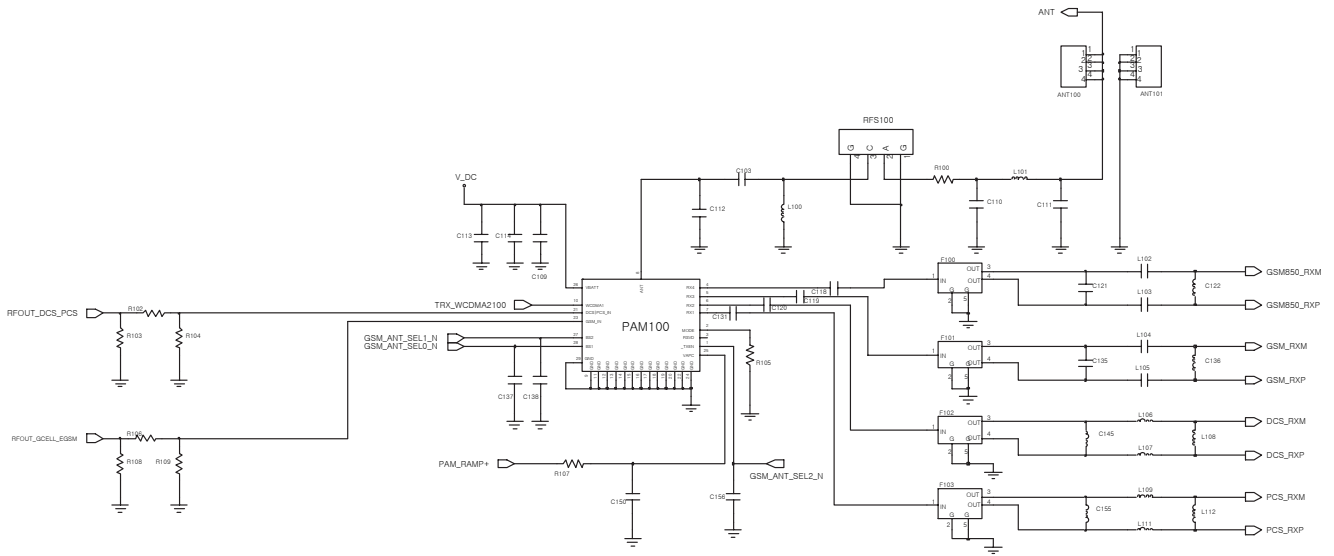


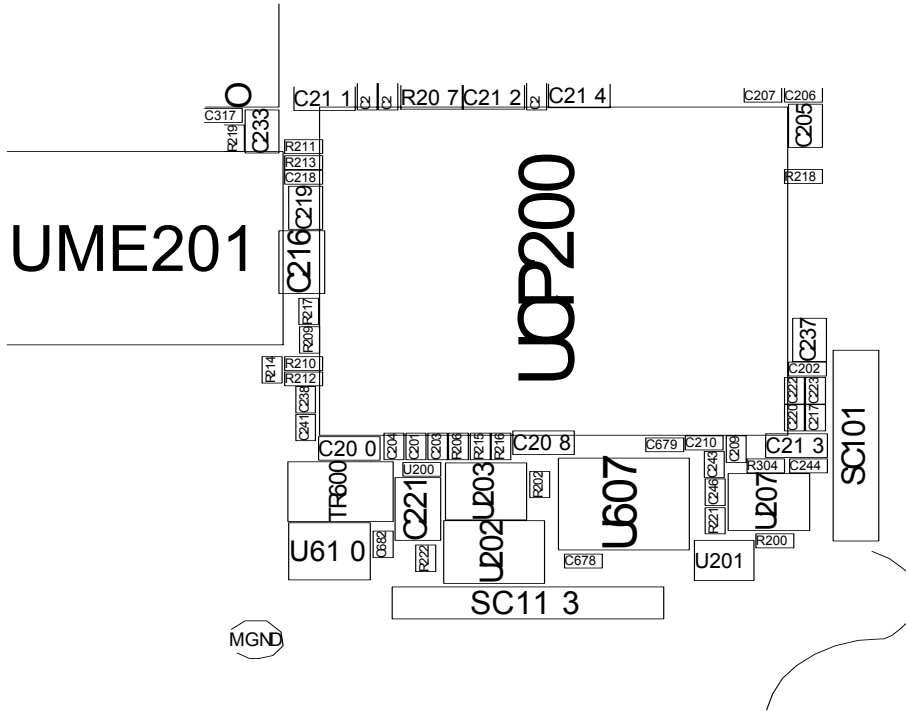


### 10-8. GSM850 Receiver

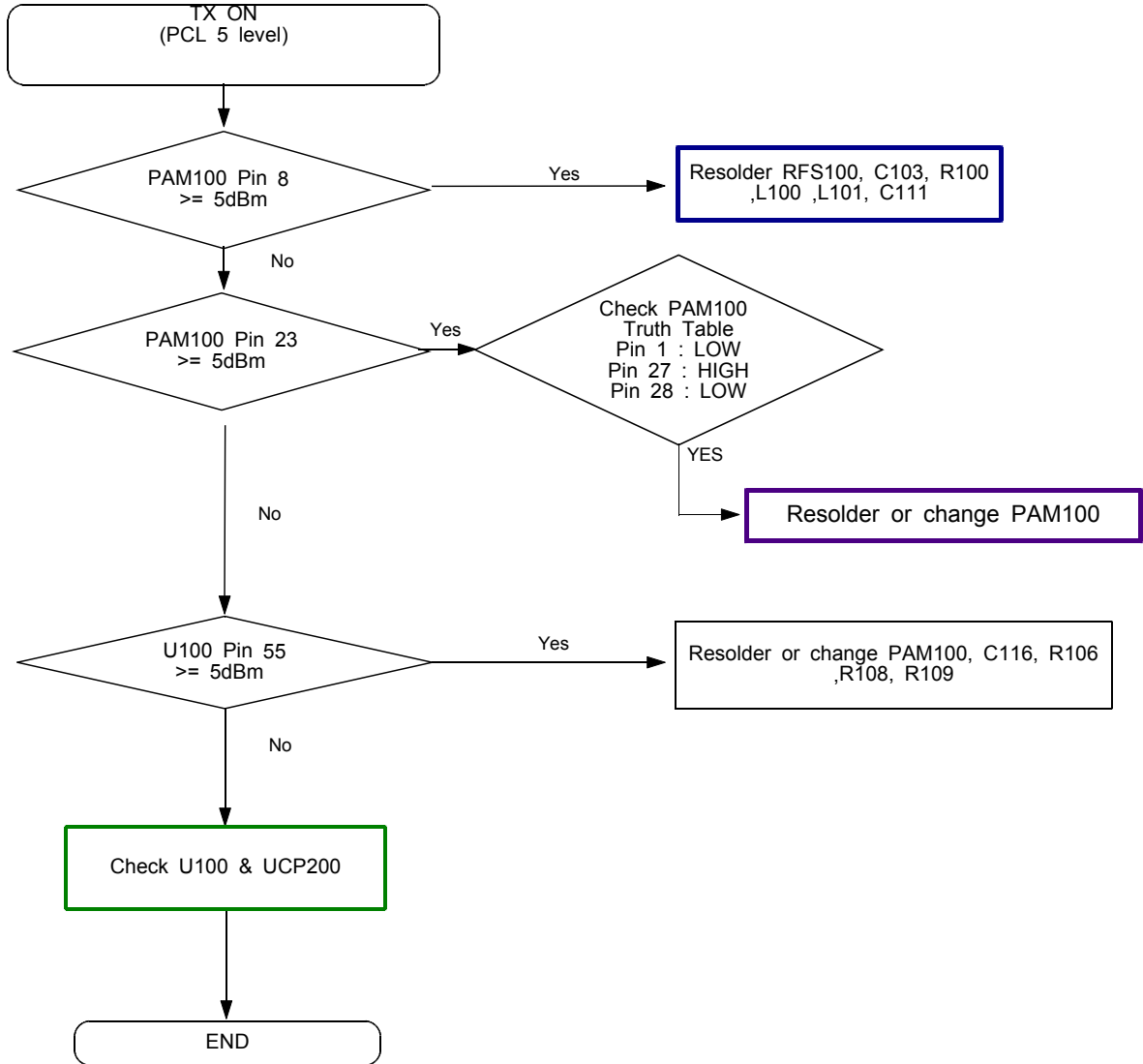


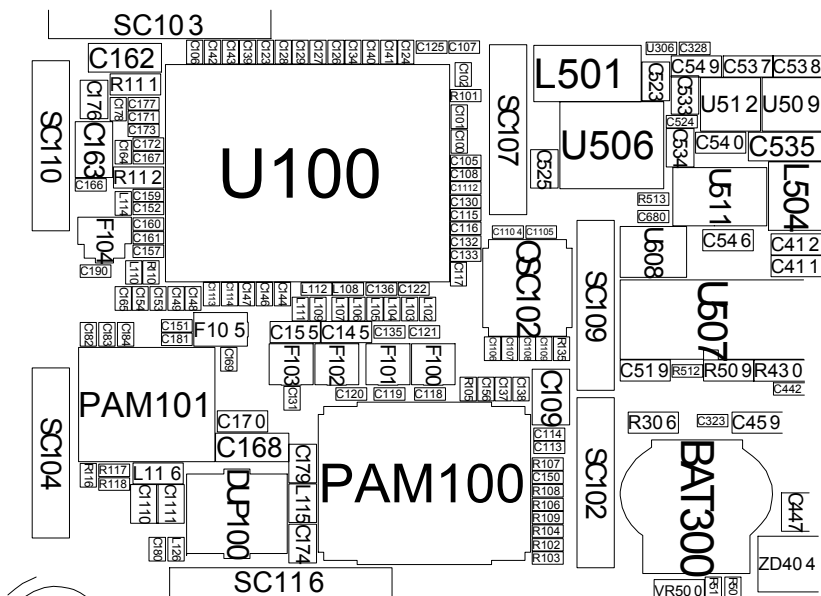
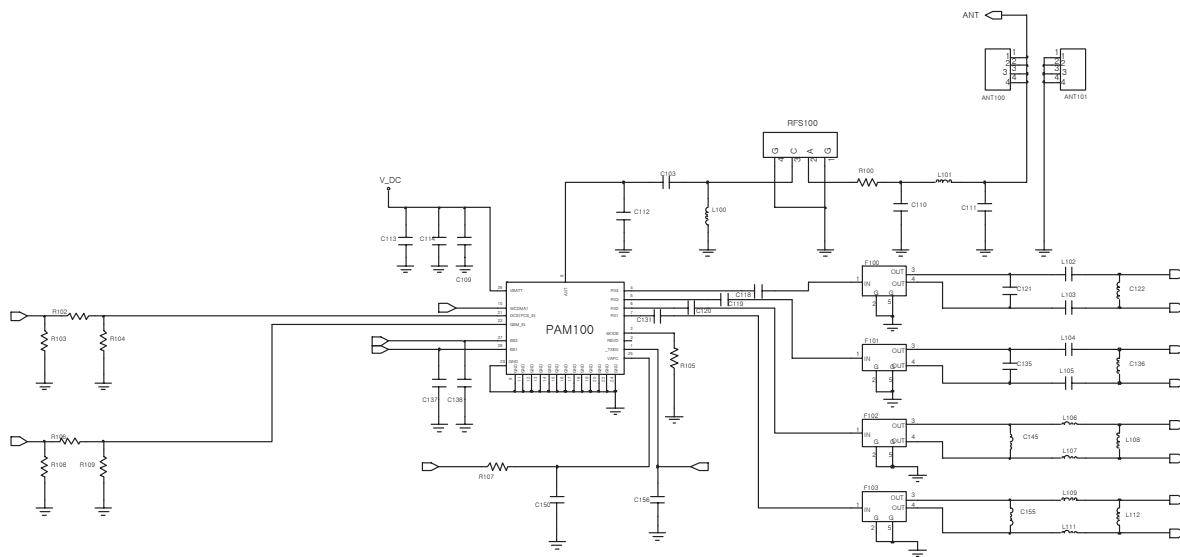
Flow Chart of Troubleshooting



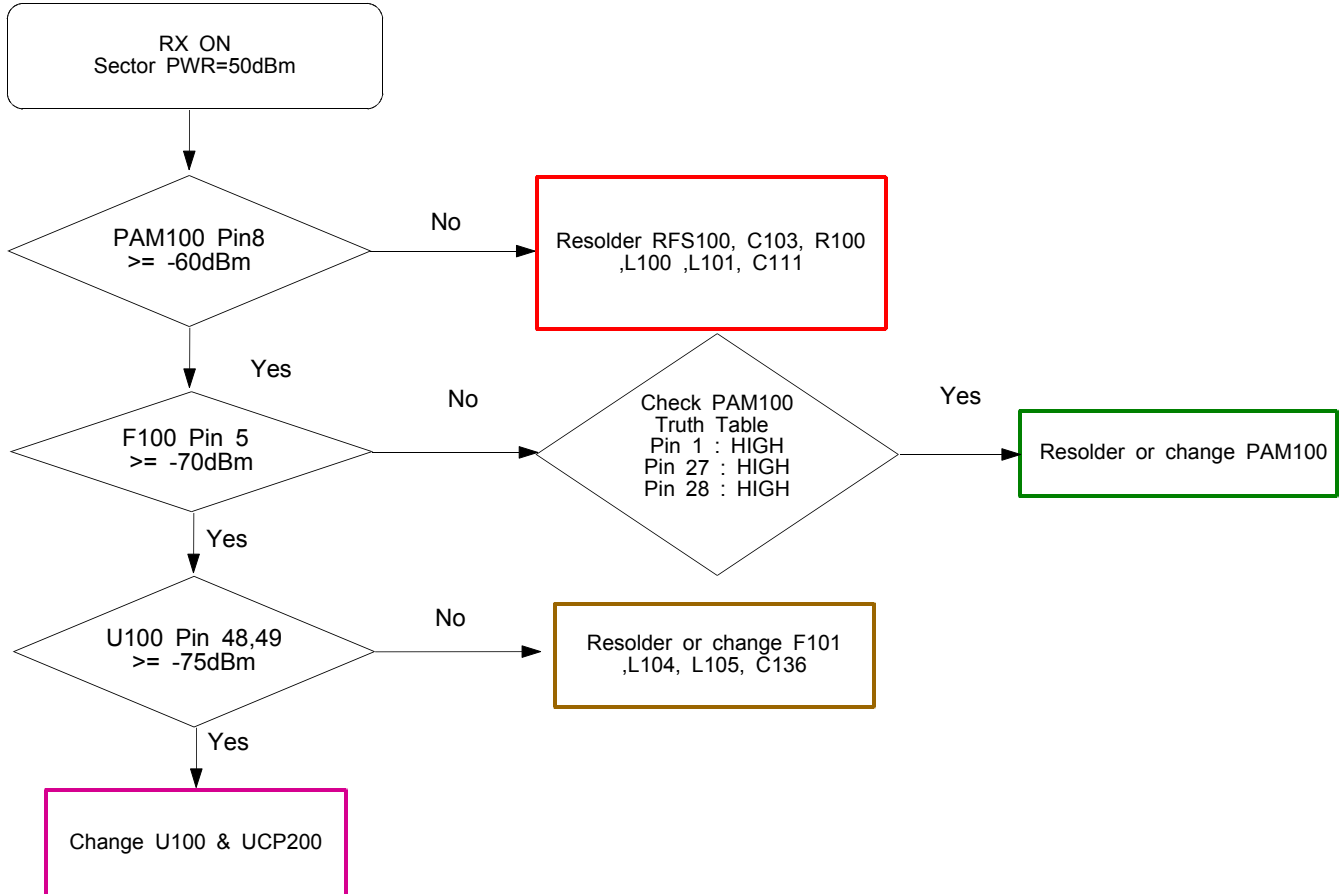


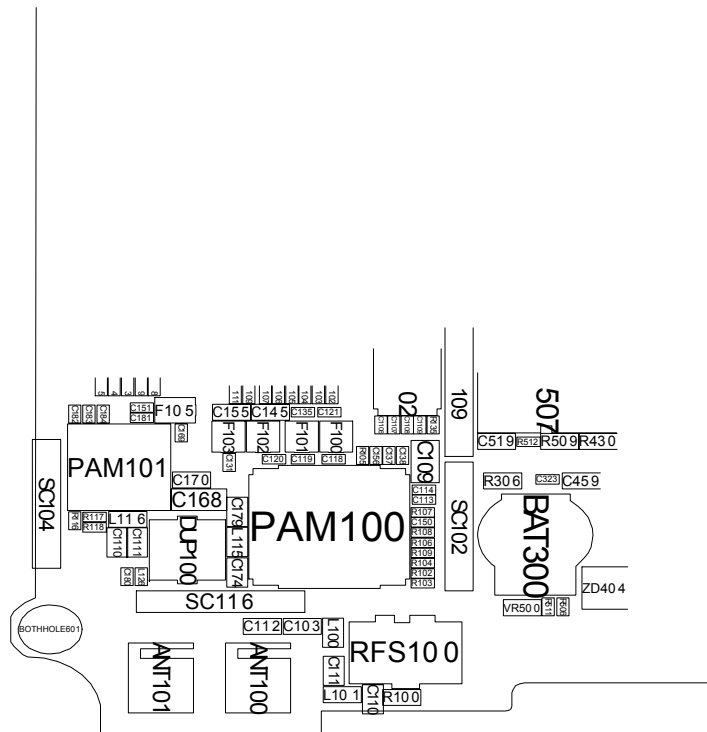
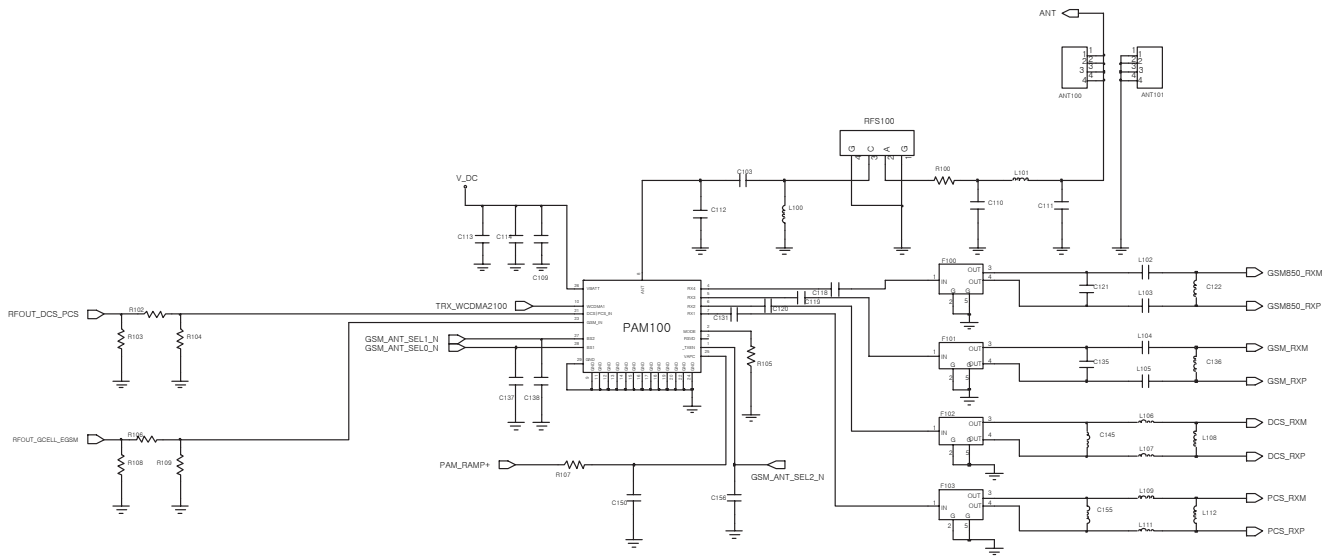
### 10-9. GSM850 Transmitter



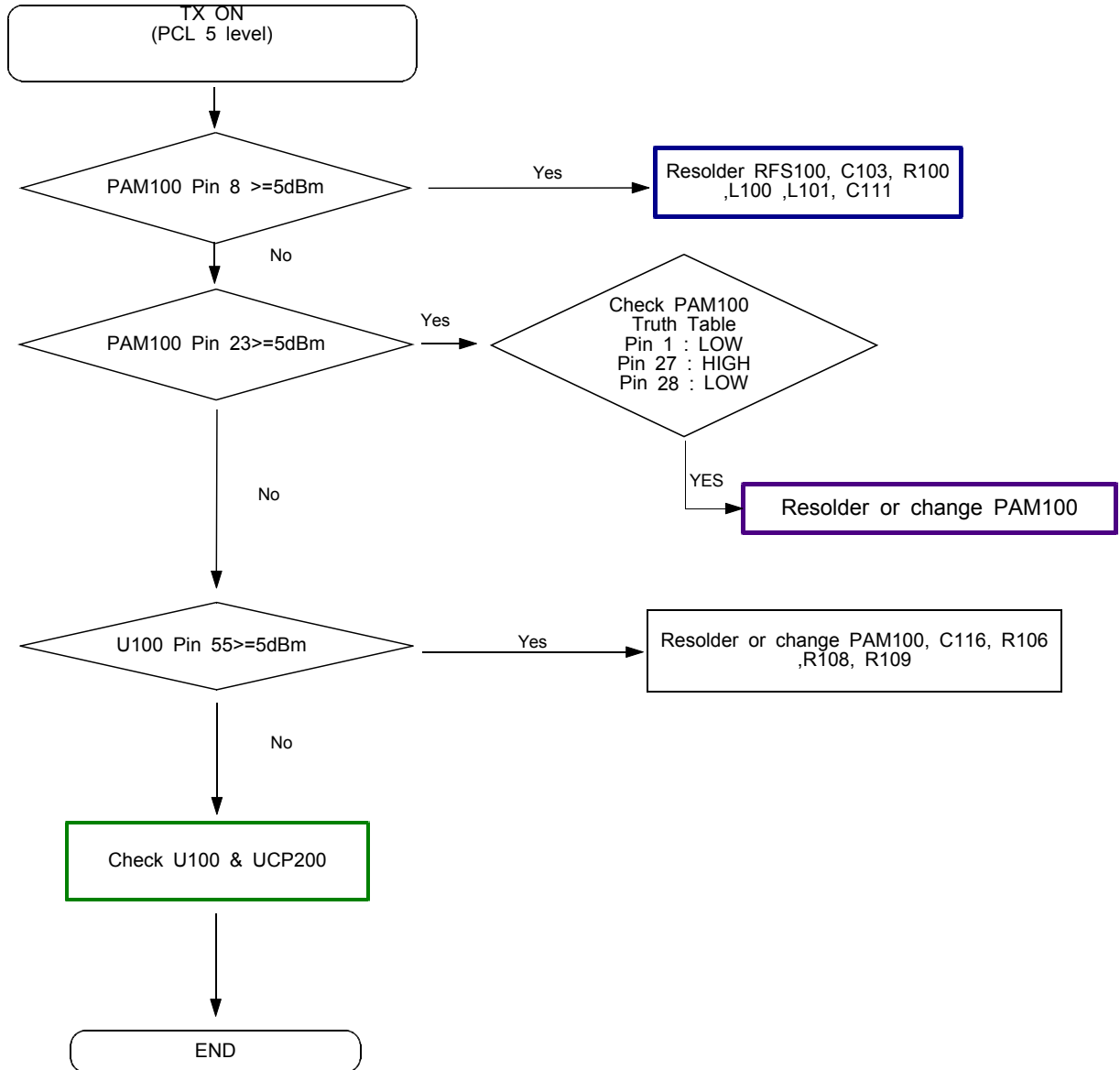


### 10-10. GSM900 Receiver

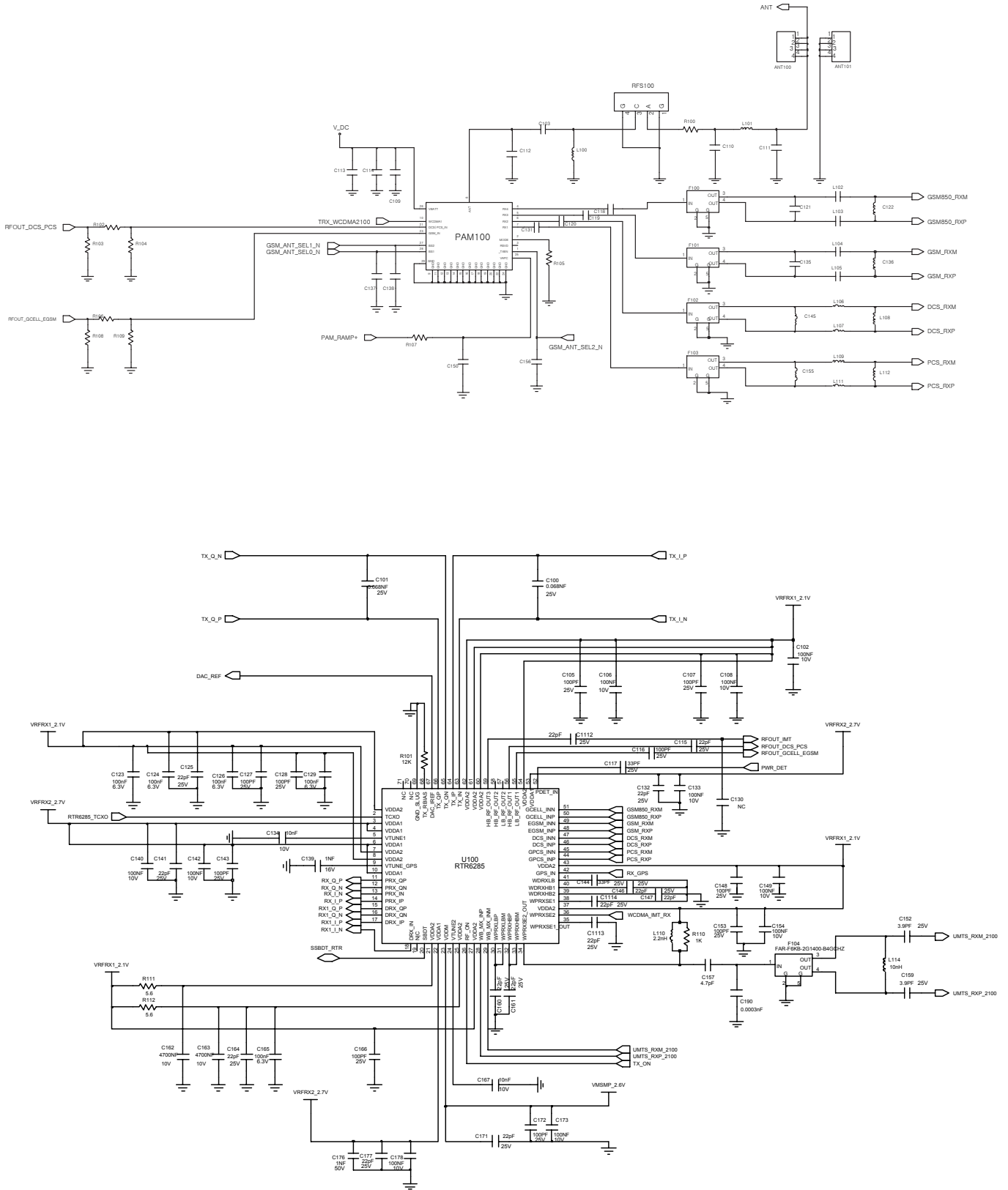


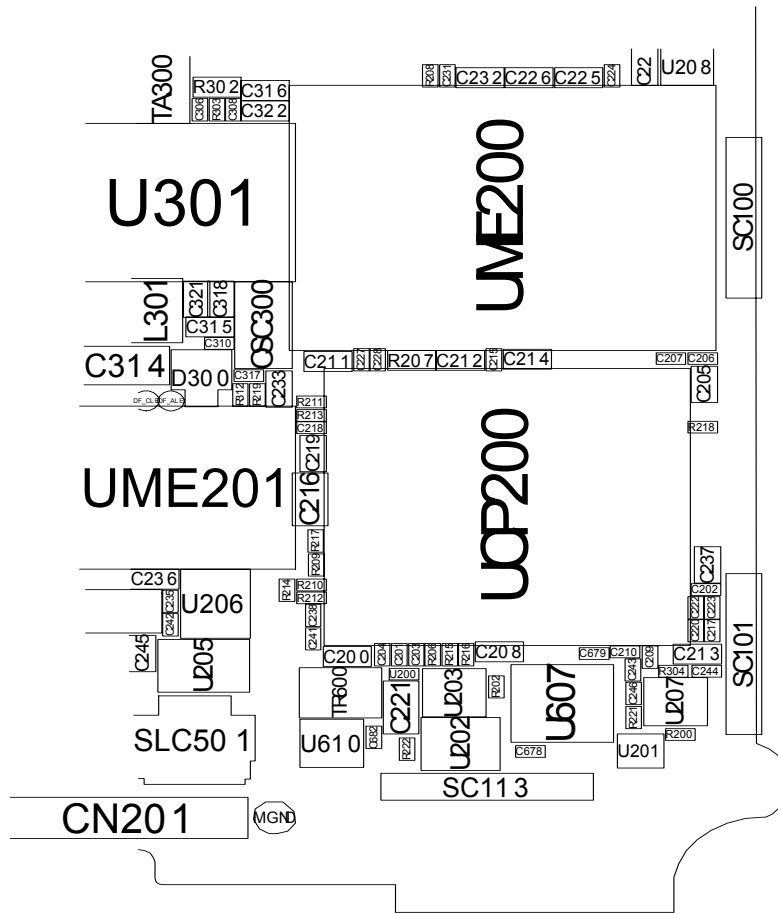


### 10-9. GSM900 Transmitter

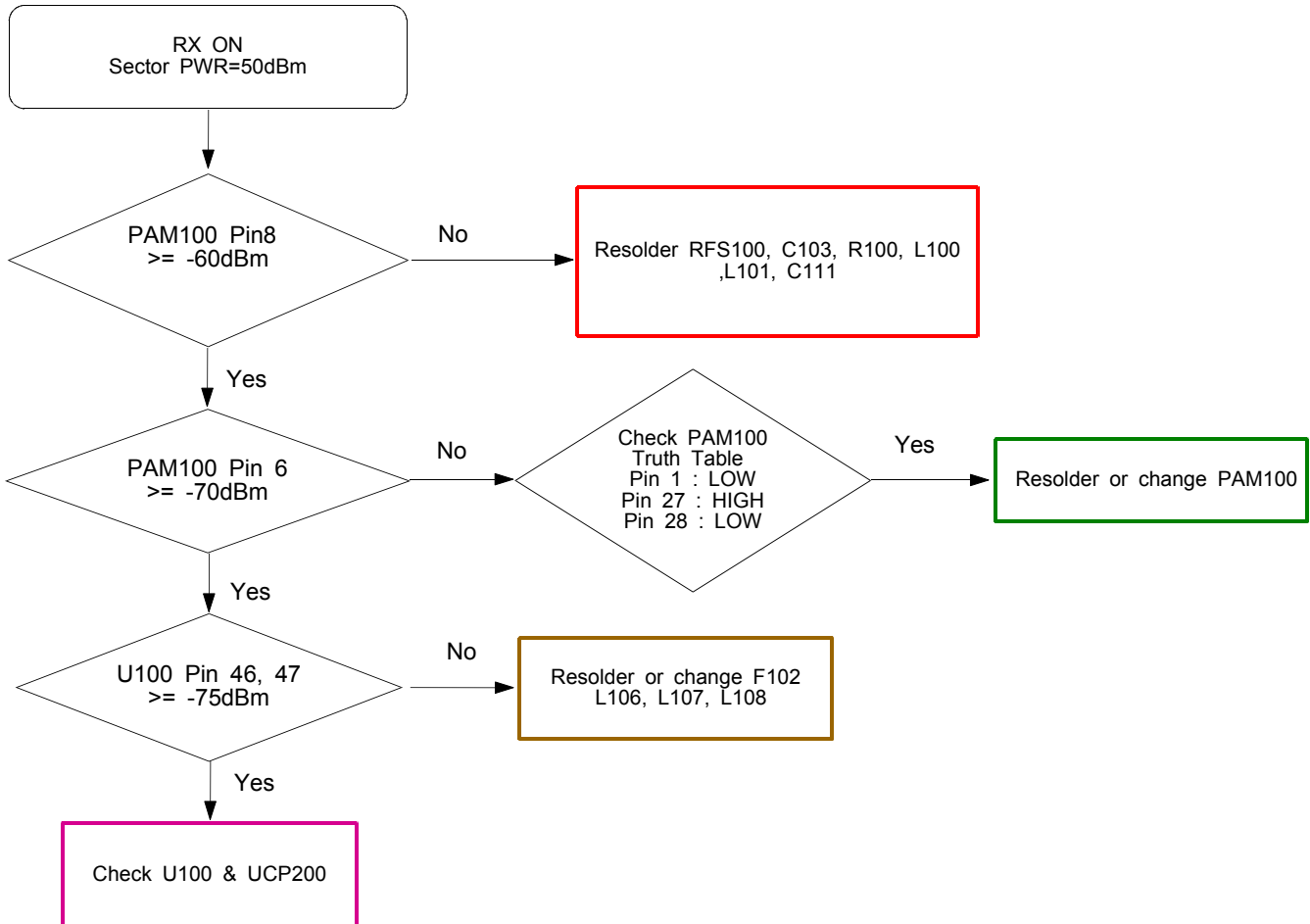


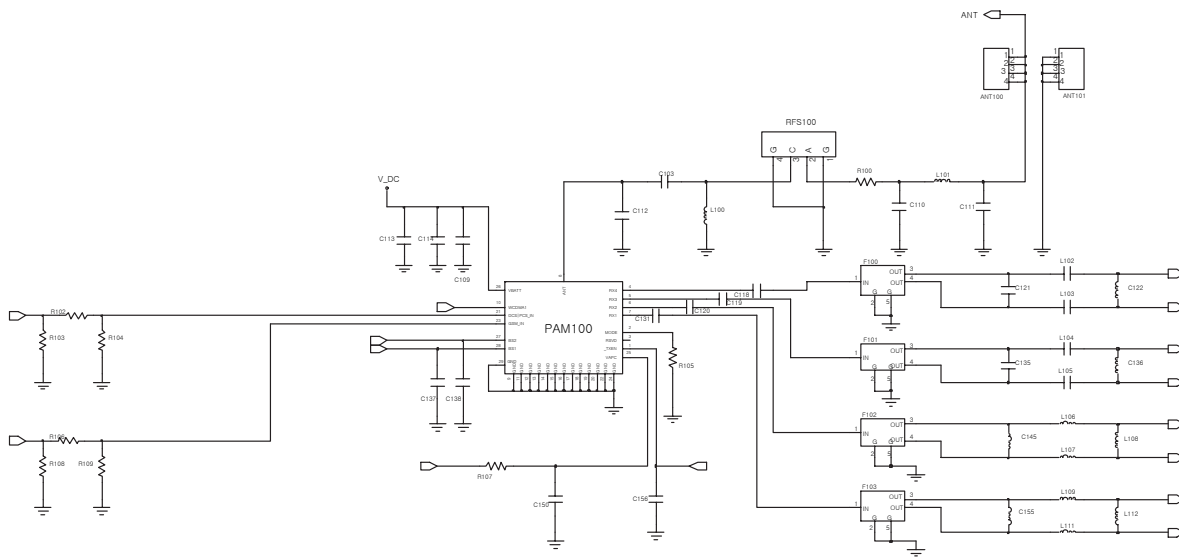




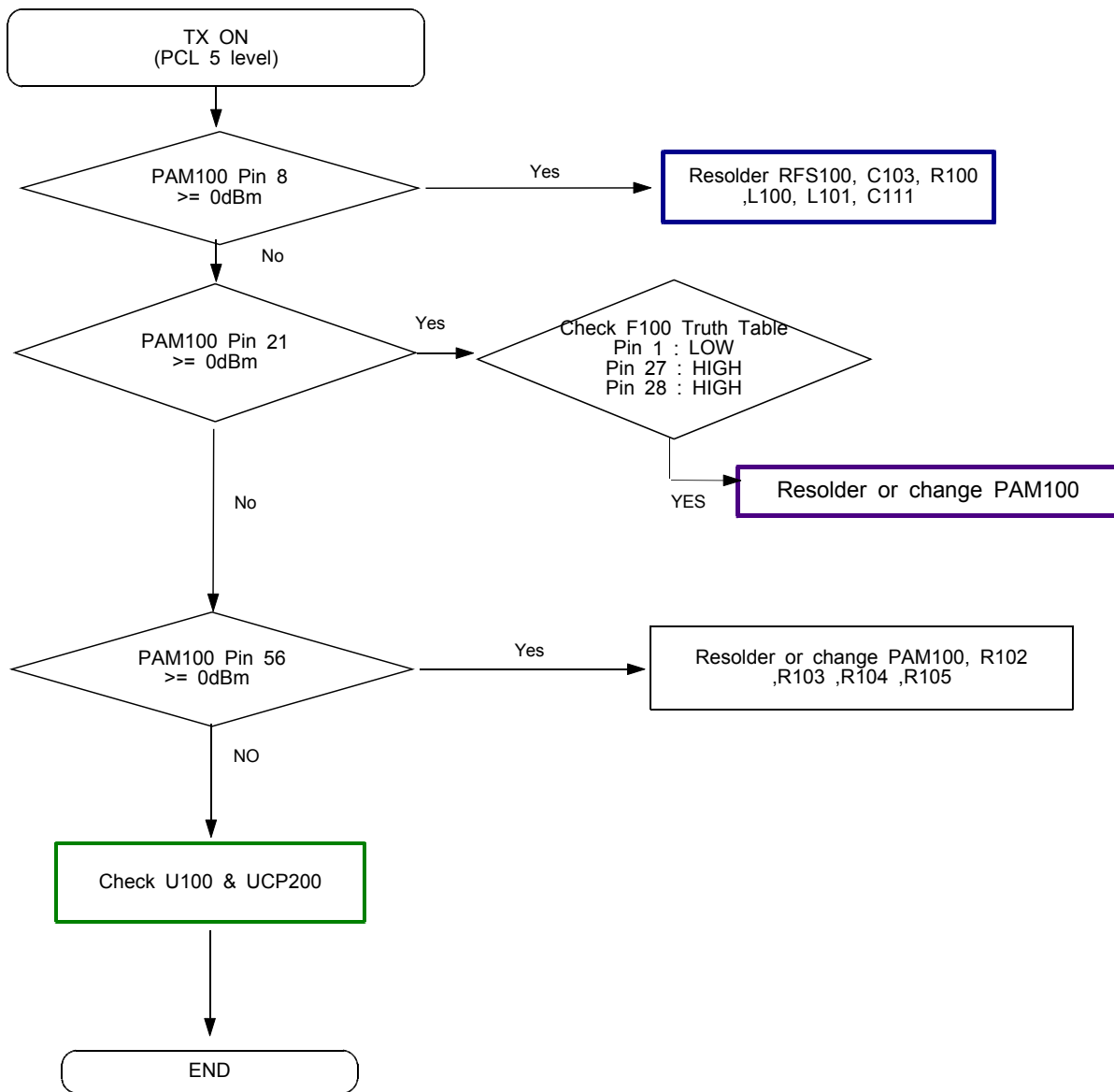


### 10-12. DCS Receiver

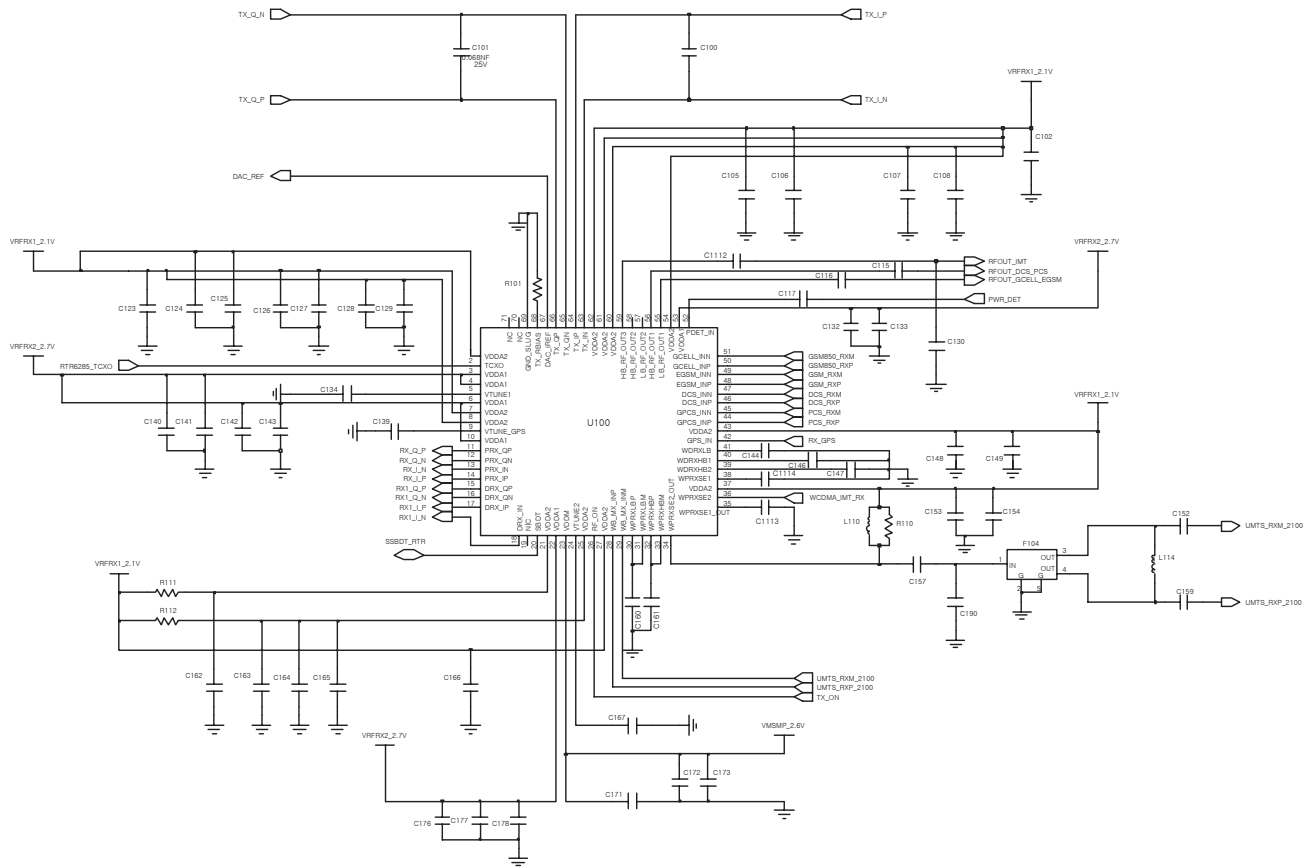




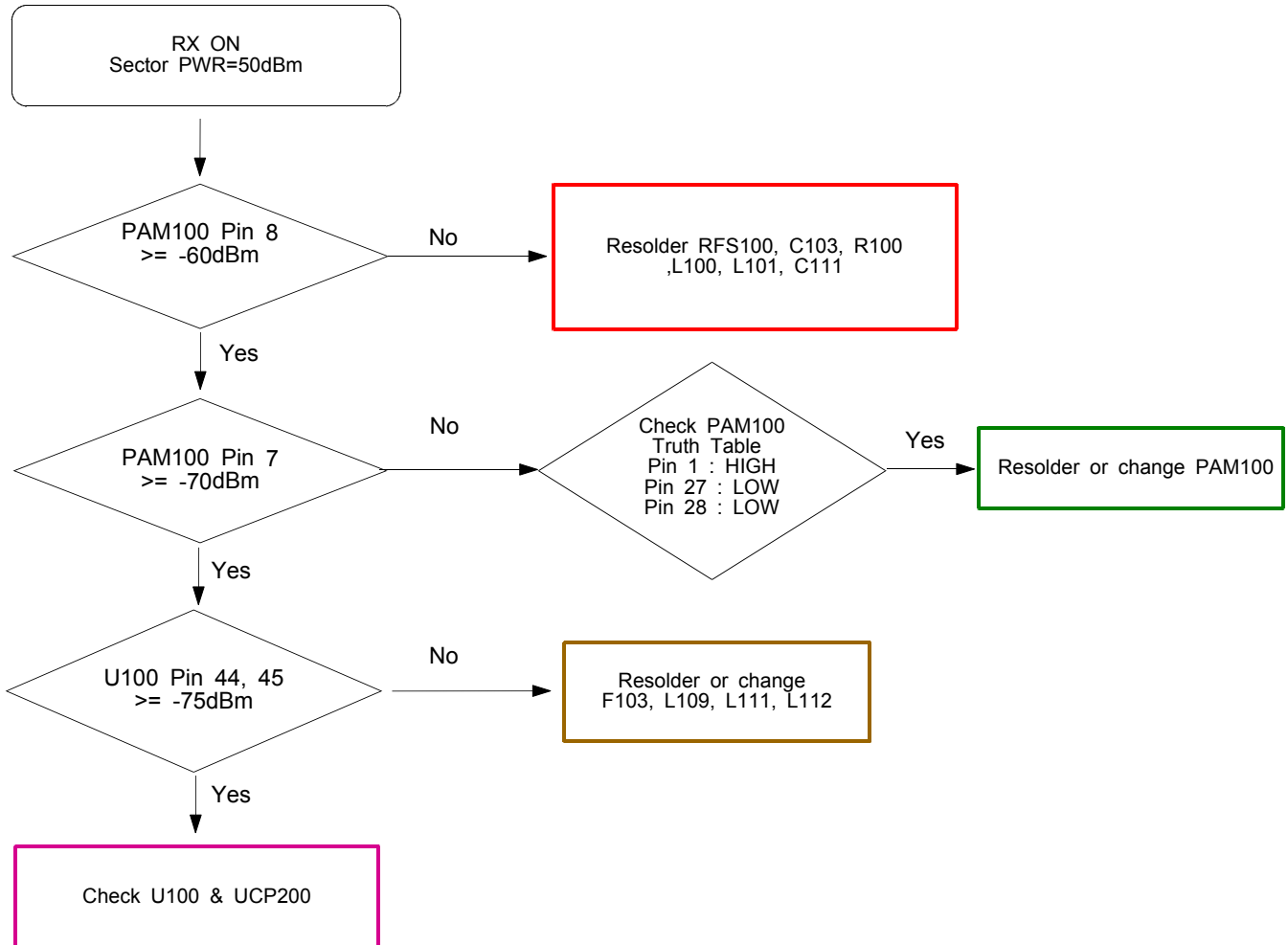
10-13. DCS Transmitter

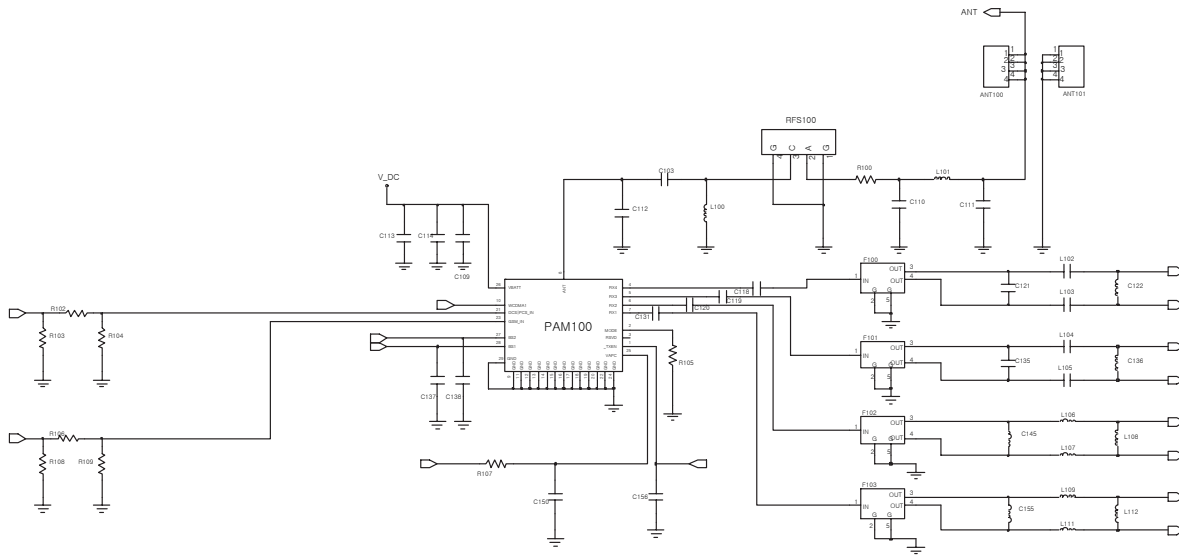


# Flow Chart of Troubleshooting



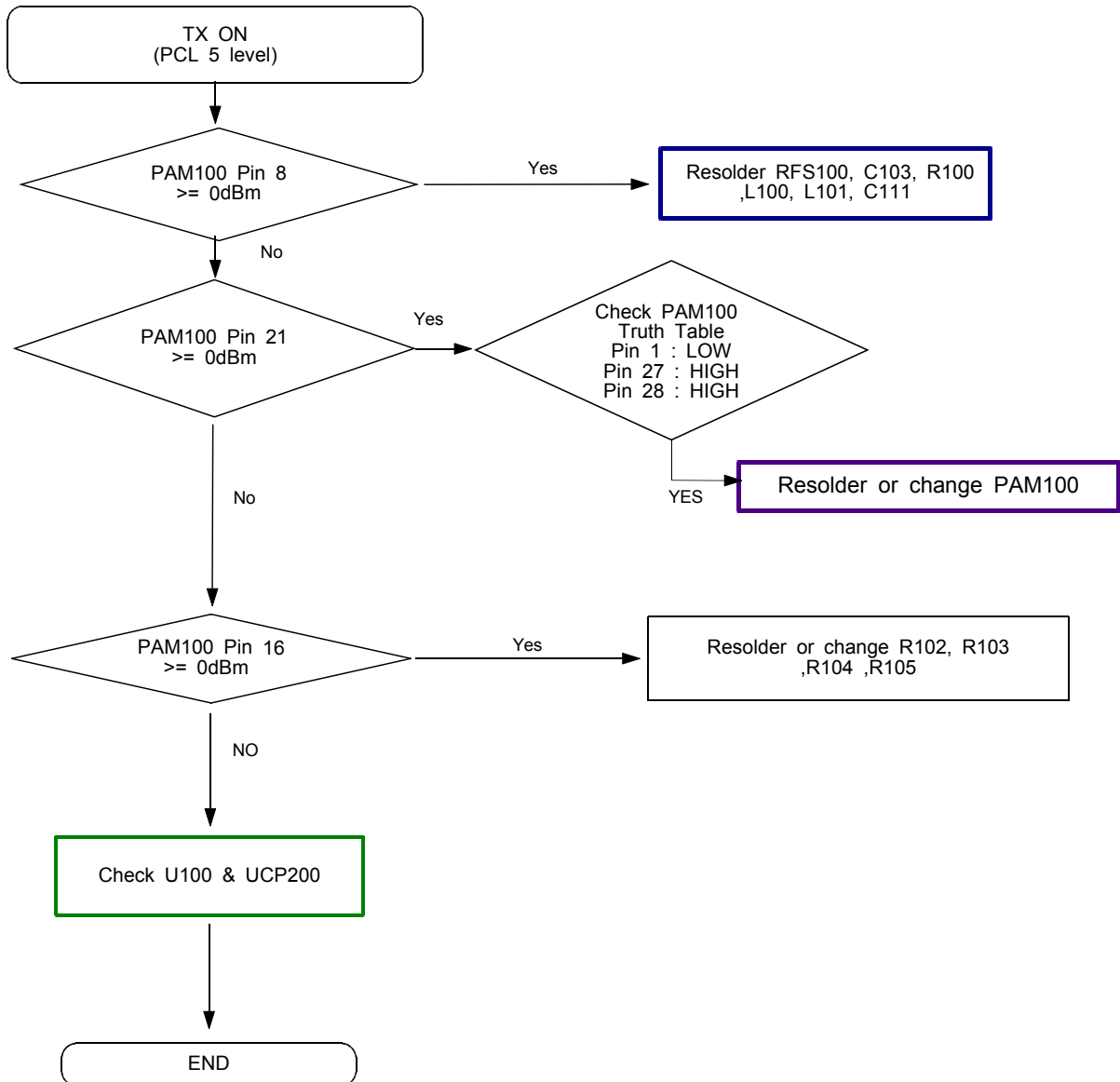
### 10-14. PCS Receiver



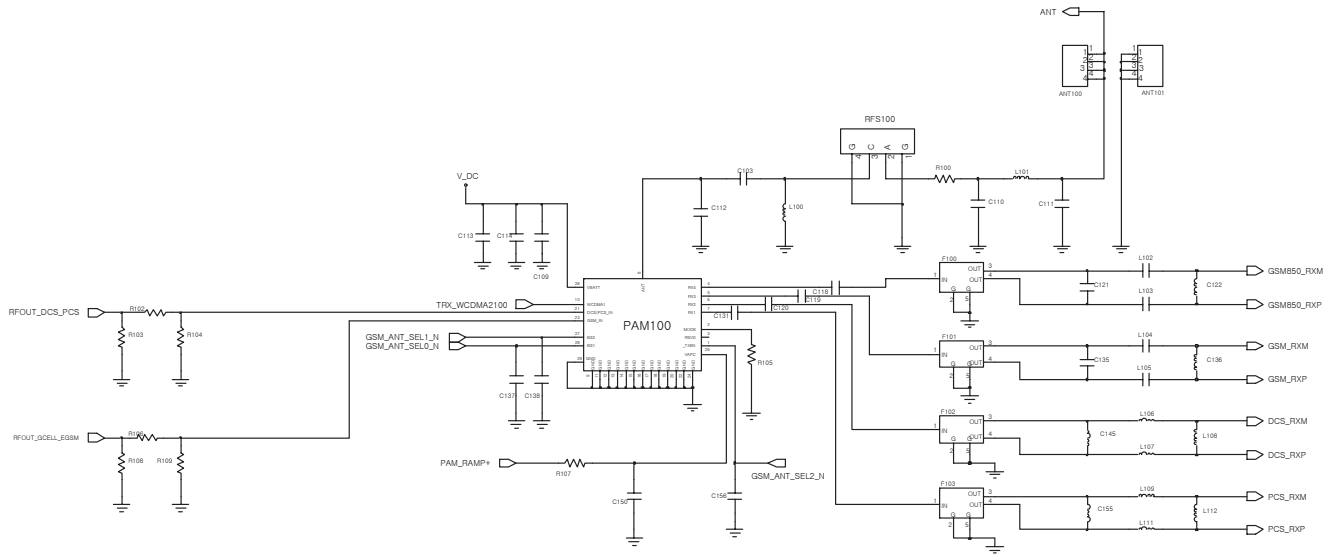


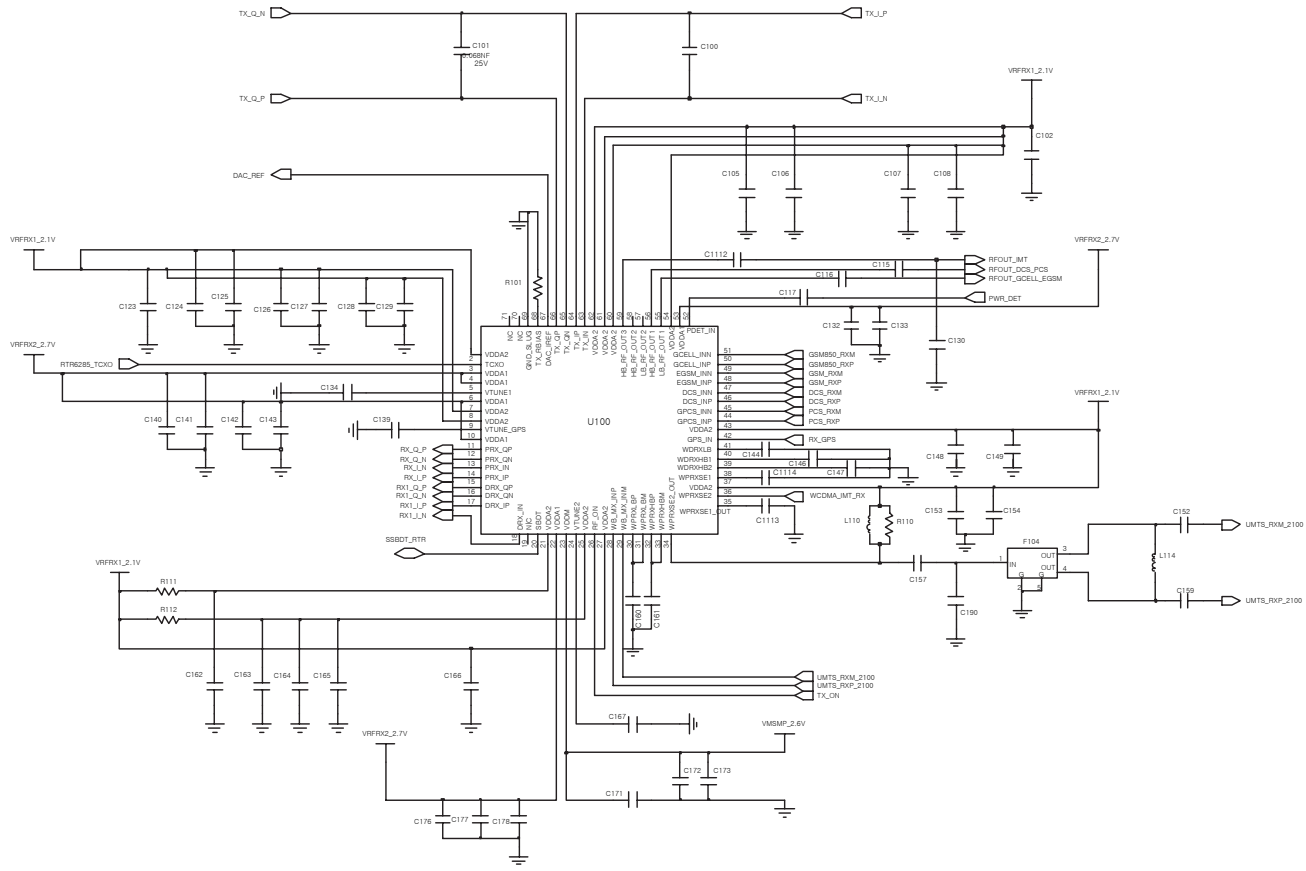


10-15. PCS Transmitter

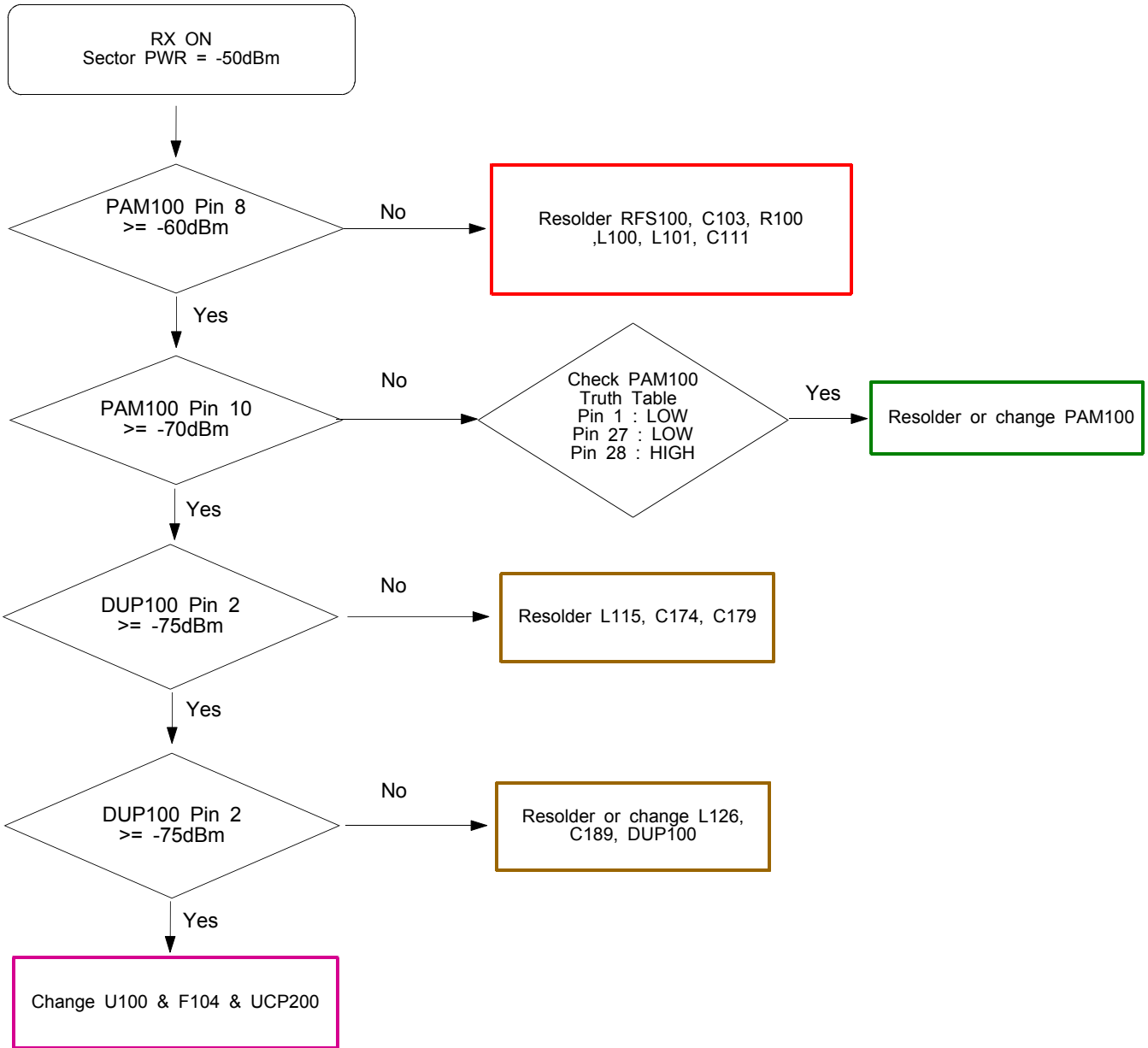


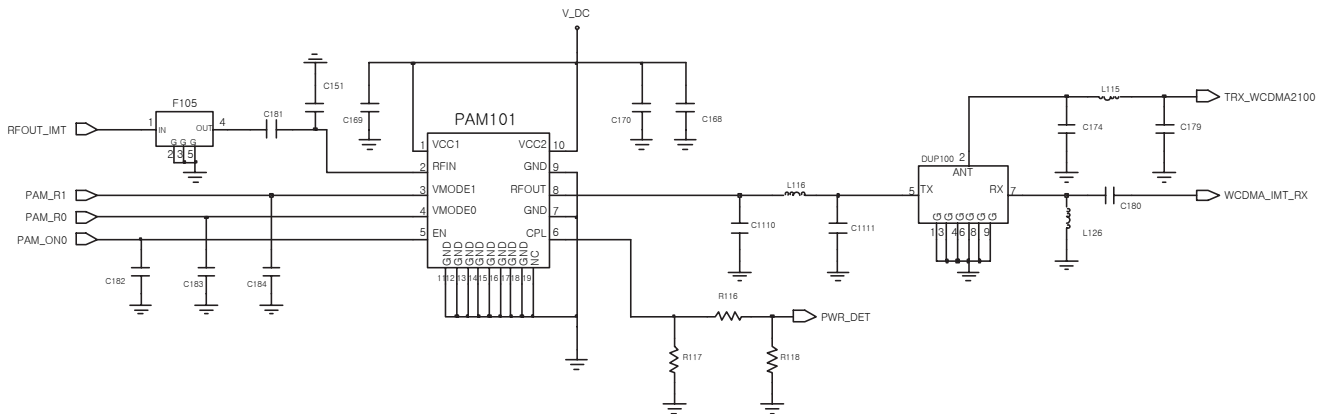
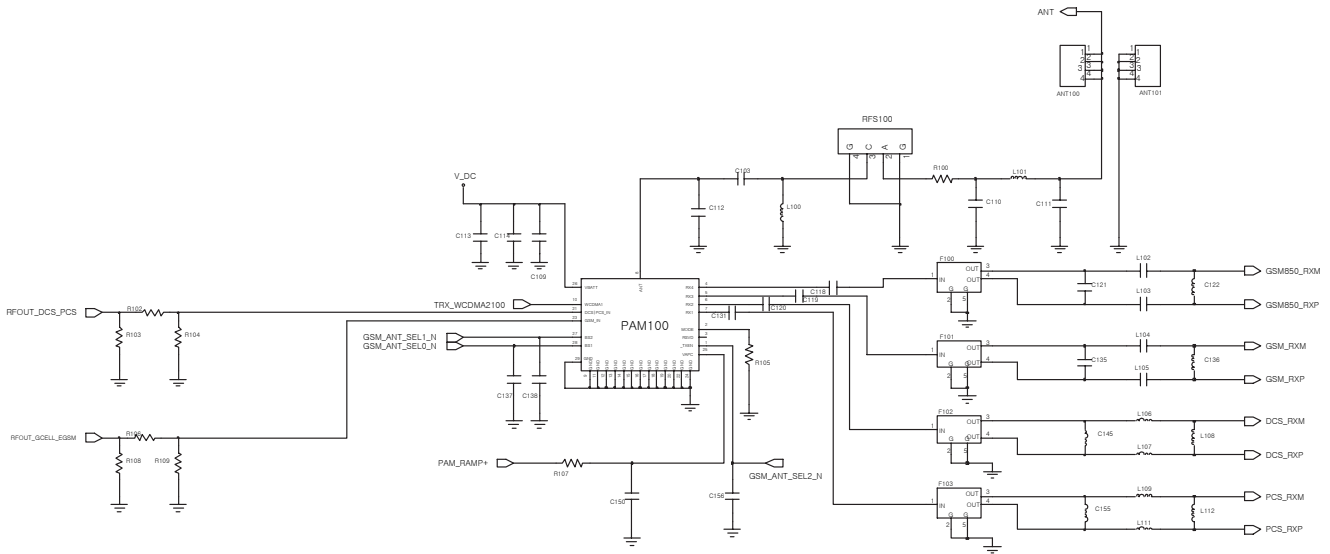
# Flow Chart of Troubleshooting



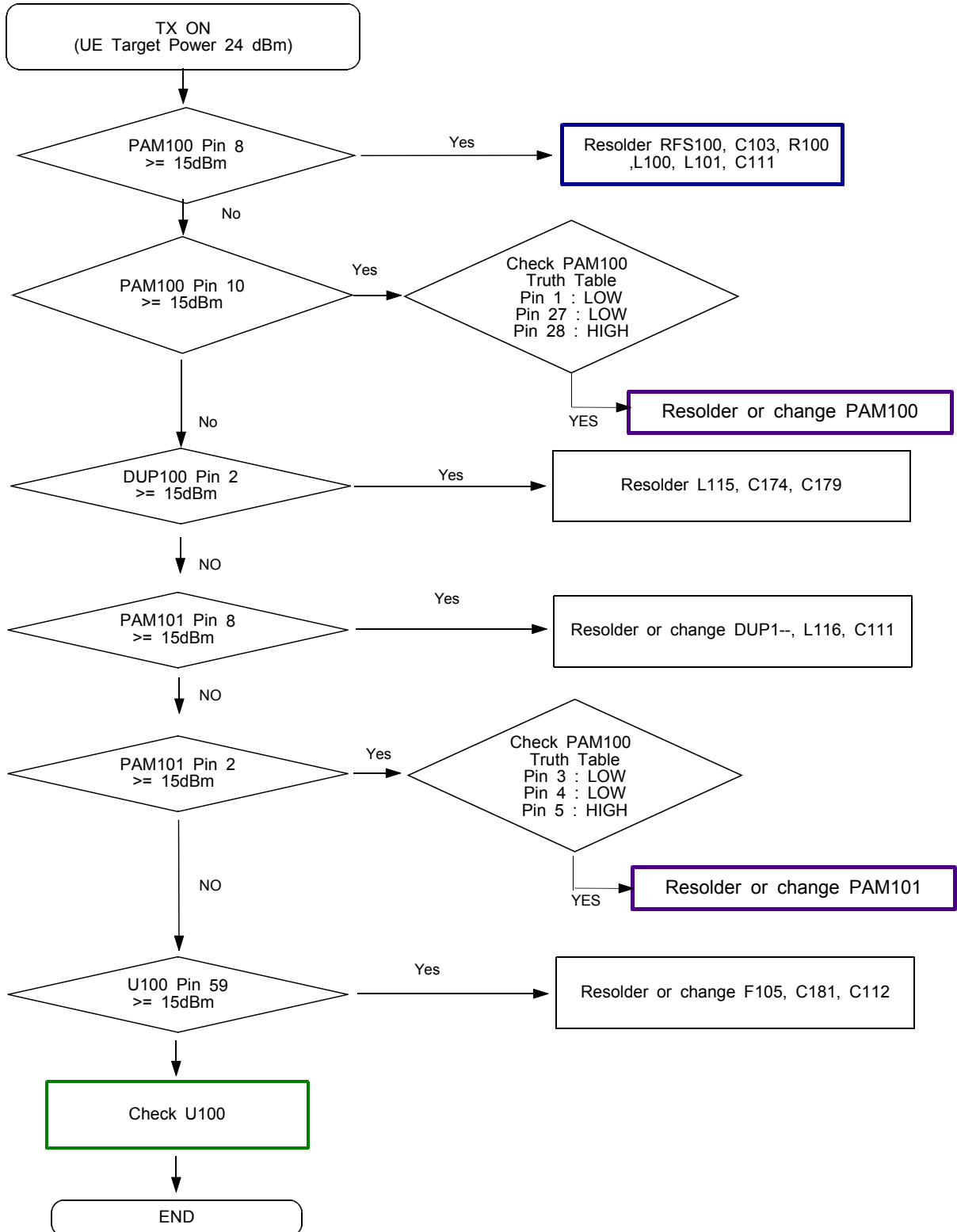


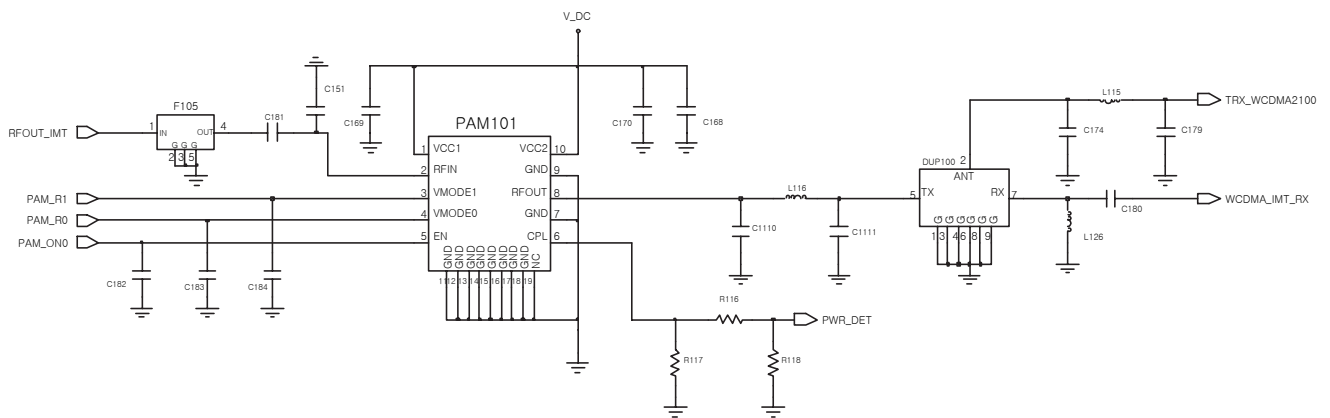
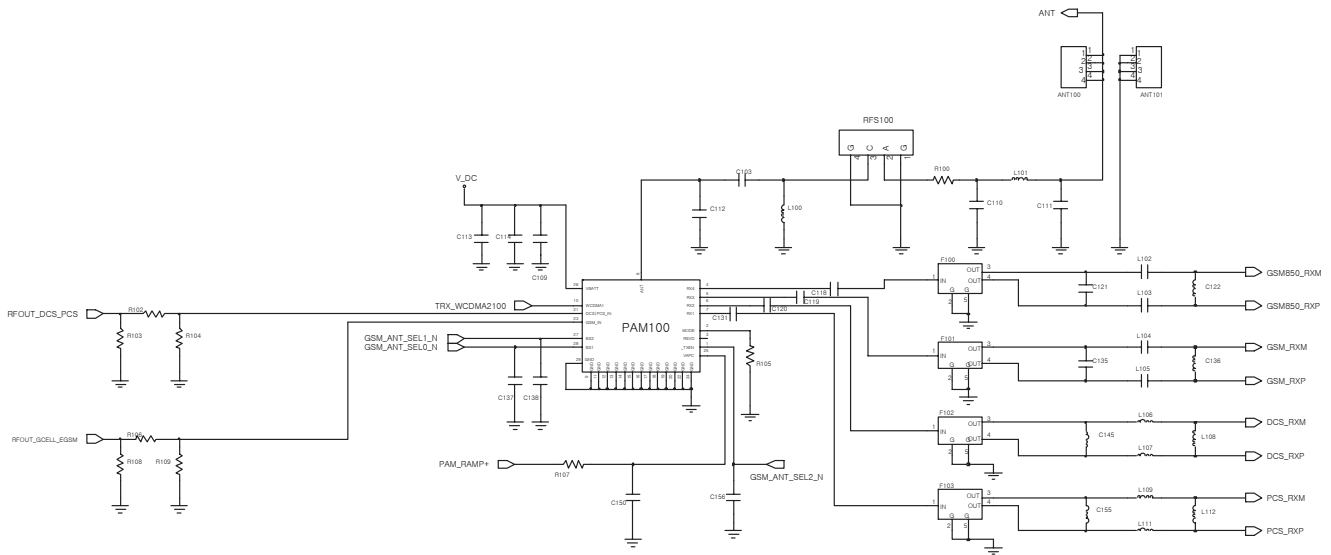
### 10-16. WCDMA Receiver





### 10-17. WCDMA Transmitter









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## 11. Reference data

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### 11-1. Reference Abbreviate

**AAC**: Advanced Audio Coding.  
**AVC** : Advanced Video Coding.  
**BER** : Bit Error Rate  
**BPSK**: Binary Phase Shift Keying  
**CA** : Conditional Access  
**CDM** : Code Division Multiplexing  
**C/I** : Carrier to Interference  
**DMB** : Digital Multimedia Broadcasting  
**EN** : European Standard  
**ES** : Elementary Stream  
**ETSI**: European Telecommunications Standards Institute  
**MPEG**: Moving Picture Experts Group  
**PN** : Pseudo-random Noise  
**PS** : Pilot Symbol  
**QPSK**: Quadrature Phase Shift Keying  
**RS** : Reed-Solomon  
**SI** : Service Information  
**TDM** : Time Division Multiplexing  
**TS** : Transport Stream