

**SAMSUNG**

# GSM TELEPHONE

## SGH-F500

# **SERVICE** *Manual*

### GSM TELEPHONE



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# 1. Specification

## 1-1. GSM/WCDMA General Specification

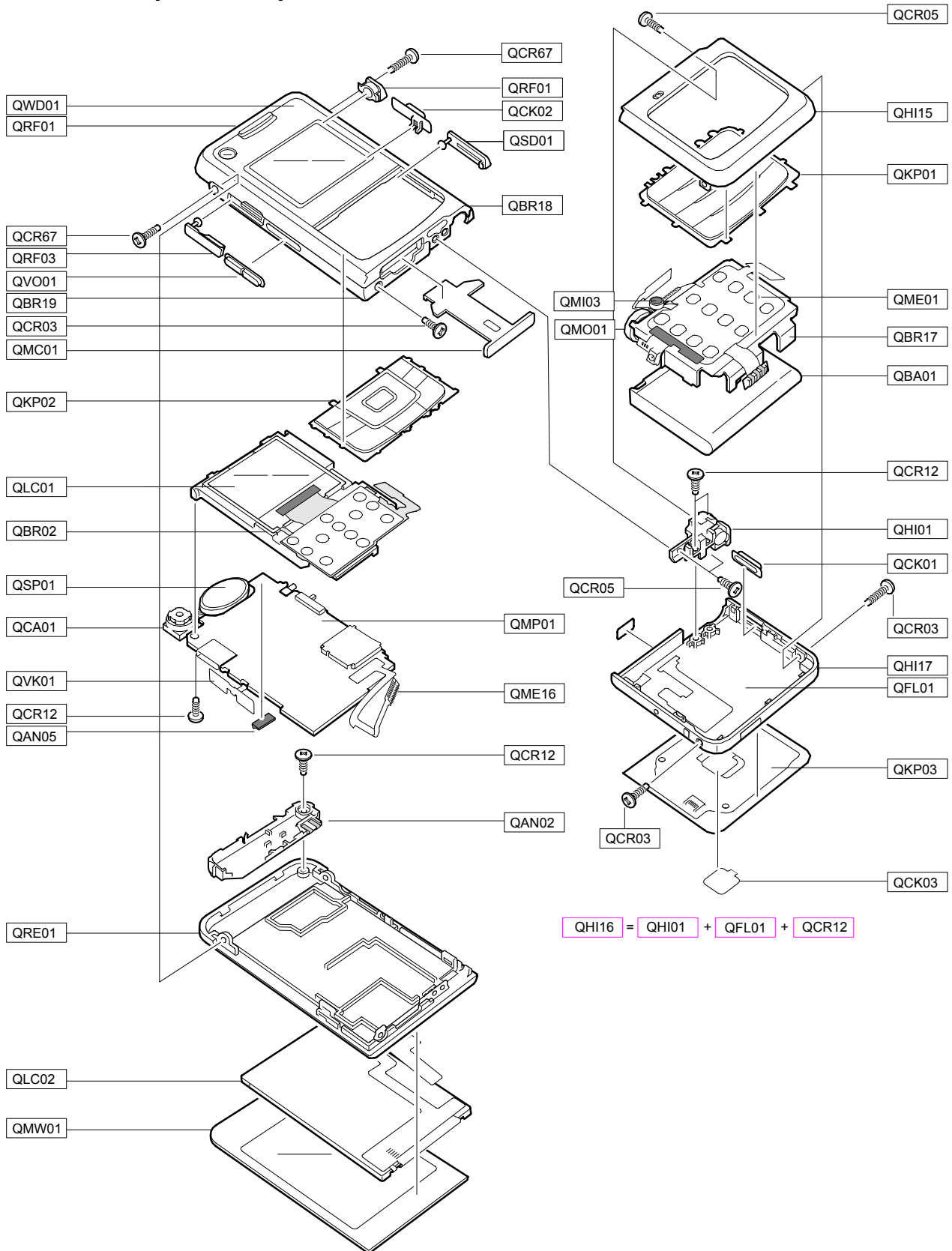
	<b>EGSM 900 Phase 2</b>	<b>DCS1800 Phase 1</b>	<b>PCS1900</b>	<b>WCDMA</b>
Freq. Band[MHz] Uplink/Downlink	880~915 925~960	1710~1785 1805~1880	1850~1910 1930~1990	1920~1980 2110~2170
ARFCN range	0~124 & 975~1023	512~885	512~810	10562~10838
Tx/Rx spacing	45 MHz	95 MHz	80 MHz	190 MHz
Mod. Bit rate/ Bit Period	270.833 kbps 3.692 us	270.833 kbps 3.692 us	270.833 kbps 3.692 us	3.84 Mcps/s
Time Slot Period/Frame Period	576.9 us 4.615 ms	576.9 us 4.615 ms	576.9 us 4.615 ms	10 ms
Modulation	0.3 GMSK	0.3 GMSK	0.3 GMSK	UL:2BPSK DL:QPSK
MS Power	33 dBm~5 dBm	30 dBm~0 dBm	30 dBm~0 dBm	MAX:24(+1,-3) dBm MIN:<-50 dBm
Power Class	5 pcl ~ 19 pcl	0 pcl ~ 15 pcl	0 pcl ~ 15 pcl	CLASS3
Sensitivity	-102 dBm	-100 dBm	-100 dBm	-106.7 dBm
TDMA Mux	8	8	8	-
Cell Radius	35 Km	2 Km	-	-

## 1-2. GSM TX power class

TX Power control level	EGSM900	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± 3dBm	12	6±4 dBm	12	6±4 dBm
18	7±3 dBm	13	4±4 dBm	13	4±4 dBm
19	5±3 dBm	14	2±5 dBm	14	2±5 dBm
		15	0±5 dBm	15	0±5 dBm

## 2. Exploded View and Parts List

### 2-1. Cellular phone Exploded View




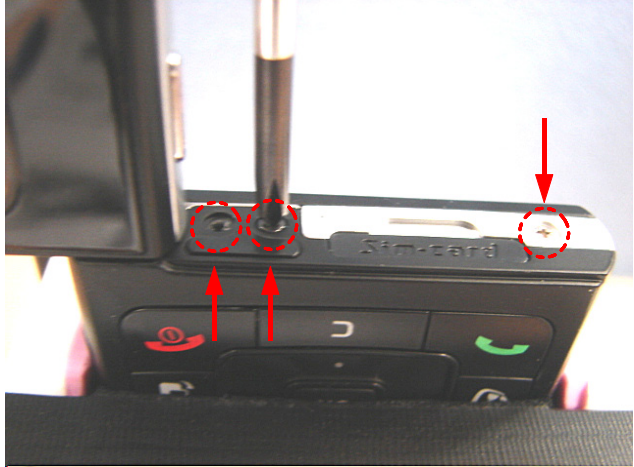
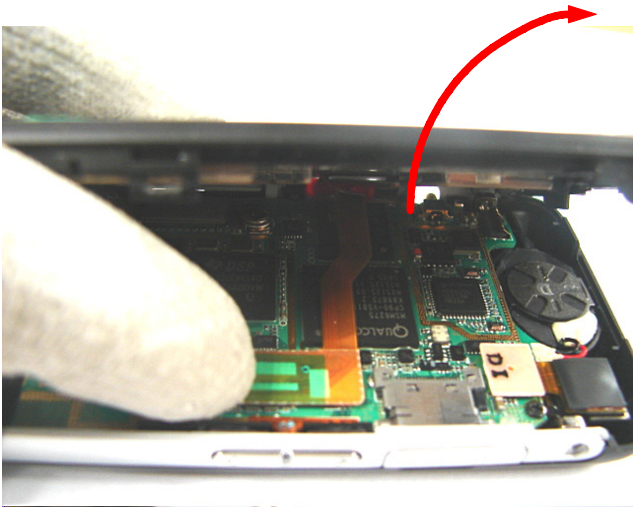
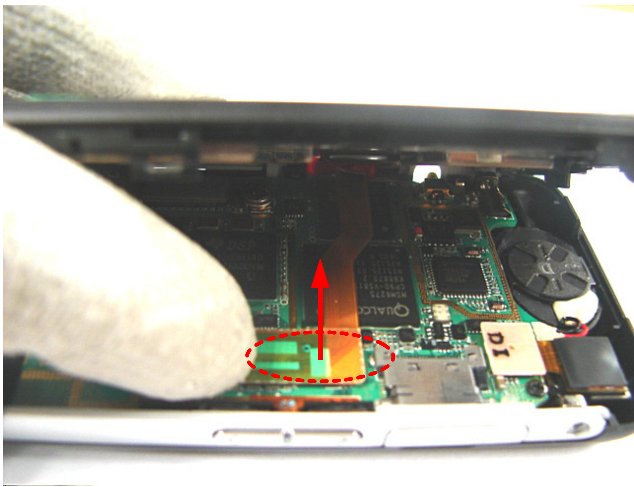
## 2-2. Cellular phone Parts list

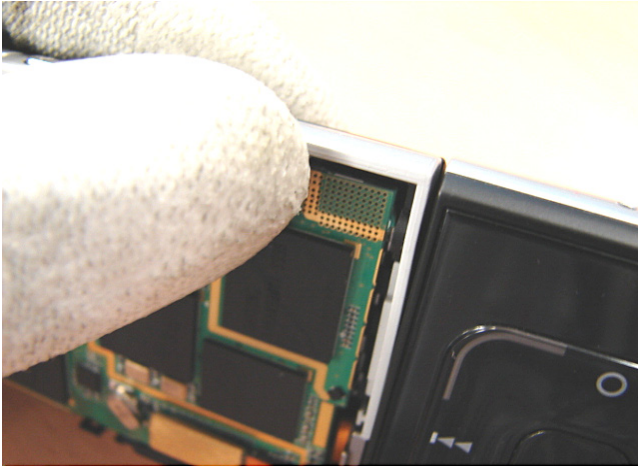

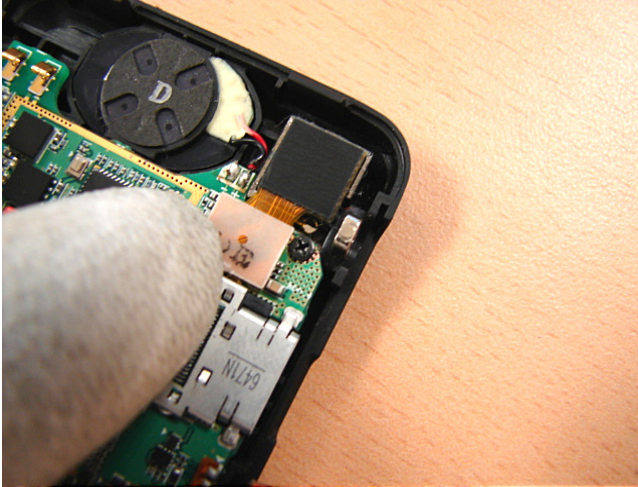
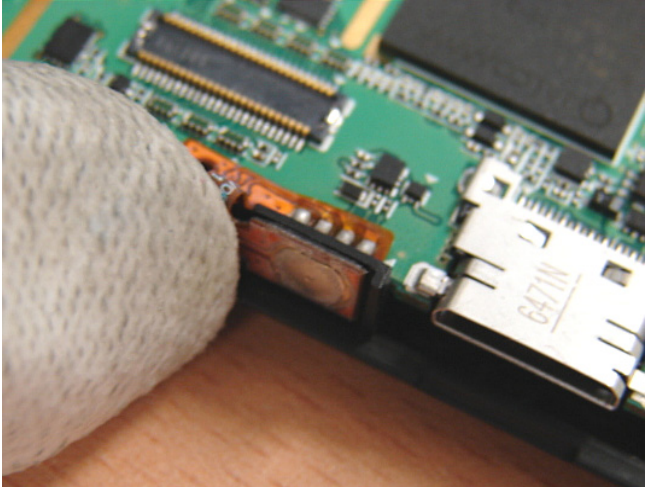
Design LOC	Discription	SEC CODE	
QAN02	ANTENNA-SGHF500	GH42-01094A	
QAN05	ASSY MEC-RUBBER ANT CON	GH75-09161A	
QBA00	COVER BATTERY PACK-950MAH,BLK,	GH43-02844A	
QBA01	INNER BATTERY PACK-880MAH,BLK,	GH43-02588A	
QBR02	ASSY BRACKET-SUB	GH98-03560A	
QBR17	ASSY BRACKET-BATT	GH98-02339A	
QCA01	UNIT-PHONE CAMERA	GH59-03593A	
QCK03	PMO-KEY TOUCH OK	GH72-35526A	
QCR03	SCREW-MACHINE	6001-001811	
QCR03	SCREW-MACHINE	6001-001811	
QCR05	SCREW-MACHINE	6001-001478	
QCR05	SCREW-MACHINE	6001-001478	
QCR12	SCREW-MACHINE	6001-001530	
QCR67	SCREW-MACHINE	6001-002083	
QHI15	NDC-CASE SWING UPPER V2	GH71-07017A	
QKP01	ASSY KEYPAD-MAIN(OPEN/BLK)	GH98-02861A	
QKP02	ASSY KEYPAD-SUB(OPEN/BLK)	GH98-02860A	
QKP03	MEA-TOUCH KEYPAD KIT	GH97-07638A	
QLC01	LCD-SGHF500	GH07-01032A	
QLC02	LCD-MODULE SGHF500	GH07-00992A	
QMC01	PMO-SIM COVER	GH72-35542A	
QME01	UNIT-TF KEY PBA	GH59-03767A	
QME16	UNIT-CON TO CON FPCB	GH59-03792A	
QMI03	ASSY RUBBER-MIC HOLDER	GH98-03682A	
QMO01	MOTOR DC-SPHB6400	GH31-00271A	
QMP01	PBA MAIN-SGHF500	GH92-03070A	
QMW01	ASSY COVER-WINDOW MAIN	GH98-02870A	
QRE01	ASSY COVER-REAR	GH98-02868A	
QRF01	PMO-COVER RF V2	GH72-35129A	
QSP01	SPEAKER	3001-002109	
QVK01	UNIT-SIDE KEY	GH59-03762A	
QWD01	ASSY COVER-WINDOW SUB	GH98-02869A	
QFR01	ASSY COVER-FRONT	GH98-02863A	
	QSD01	PMO-COVER MICRO SD	GH72-35529A
QHI16	ASSY COVER-SWING LOWER	GH98-05068A	
	QCR12	SCREW-MACHINE	6001-001530
	QFL01	ASSY CASE-SWING LOWER	GH98-02337A
	QHI01	ASSY HINGE	GH98-03747A
QHI17	ASSY COVER-SWING BELT	GH98-05119A	
	QCK01	PMO-CAMERA KEY	GH72-33543A
QBR18	ASSY COVER-MAIN BELT R	GH98-02864A	
	QCK02	PMO-HOLD KEY	GH72-35531A
QBR19	ASSY COVER-MAIN BELT L	GH98-02865A	
	QRF03	PMO-EAR JACK COVER	GH72-35534A
	QVO01	PMO-VOLUME KEY	GH72-33544A

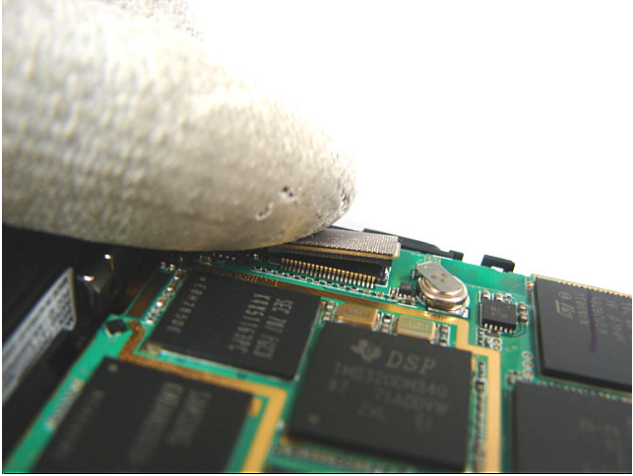
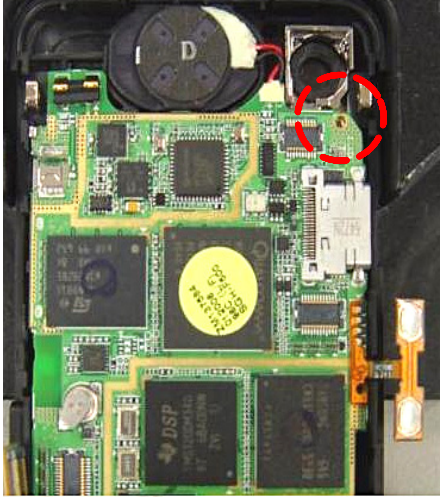
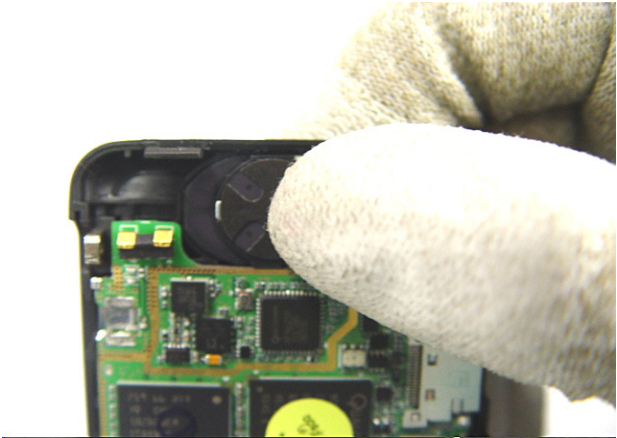
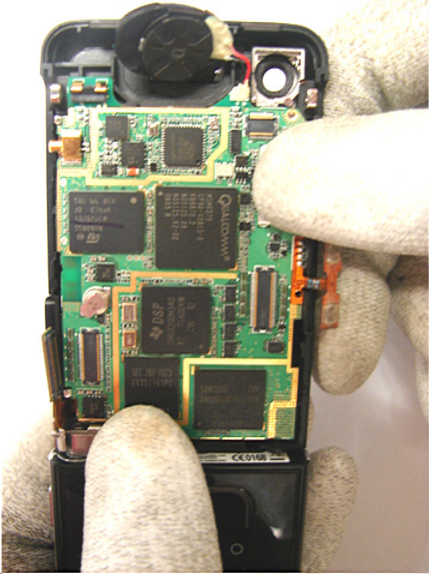
Discription	SEC CODE
IC-MEMORY CARD	1109-001363
CONNECTOR-ADAPTOR	3719-001319
BAG PE	6902-000634
BAG ZIPPER	6902-000683
CBF INTERFACE-AV CABLE	GH39-00442A
CBF INTERFACE-DLC,X830,BLK,PCB	GH39-00720A
ADAPTOR-SGHE690,BLK,EU,A_TYPE	GH44-01361A
S/W CD-SAMSUNG PC STUDIO 3.1,F	GH46-00392A
UNIT-EARPHONE,SGHE790,MAIN,A-T	GH59-03884A
LABEL(P)-IMEI	GH68-01335D
LABEL(R)-WATER SOAK	GH68-09361A
MANUAL USERS-EU DUTCH	GH68-13752A
MANUAL USERS-EU ENGLISH	GH68-13753A
LABEL(R)-MAIN EU	GH68-13981A
BOX(P)-UNIT MAIN EU	GH69-05089A
CUSHION-CASE TA2 MA1~2	GH69-05090A
MPR-VINYL BOHO SIM CARD	GH74-30419A
TAPE GASK	GH74-31723A
MPR-GASK TAPE	GH74-31724A
MPR-INSU TAPE	GH74-31725A
TAPE-RF CONNECTOR	GH74-31726A
TAPE-IF CONNECTOR	GH74-31727A
VINYL-BOHO MAIN KEY	GH74-32568A
VINYL-BOHO SUB KEY	GH74-32569A
TAPE INSU-BOARD	GH74-32936A



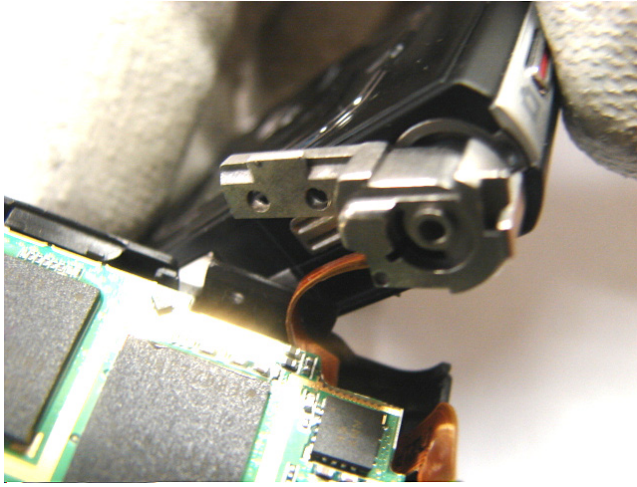
## 2-3. Disassembly

<p><b>1</b></p> 	<p><b>2</b></p> 
<p>1) SCREW REMOVE 1 Remove the 2POINT SCREWS on the both sides of SET (SILVER 2 POINT)</p>	<p>1) SCREW REMOVE 2 Remove the 3POINT SCREWS on the upper of SWING part. (BLACK 2 POINT, SILVER 1 POINT)</p>
<p><b>3</b></p> 	<p><b>4</b></p> 
<p>1) DISASSEMBLE REAR ASS'Y Disassemble REAR ASS'Y from the SET by using tools.</p>	<p>1) 2.4" LCD CONNECTOR REMOVE Disassemble 2.4" LCD CONNECTOR from PBA. <b>* caution</b> 1) NO DAMAGE to F-PCB</p>

<p><b>5</b></p> 	<p><b>6</b></p> 
<p>1) REMOVE THE RIGHT SIDE BELT Remove the SIDE BELT on the right of SET.</p>	<p>1) REMOVE THE LEFT SIDE BELT Remove the SIDE BELT on the left of SET.</p>
<p><b>7</b></p> 	<p><b>8</b></p> 
<p>1) DISASSEMBLE 2MEGA CAMERA Disassemble the 2MEGA CAMERA combined with PBA</p>	<p>1) DISASSEMBLE VOLUME KEY Disassemble the VOLUME KEY F-PCB from the BODY.</p>

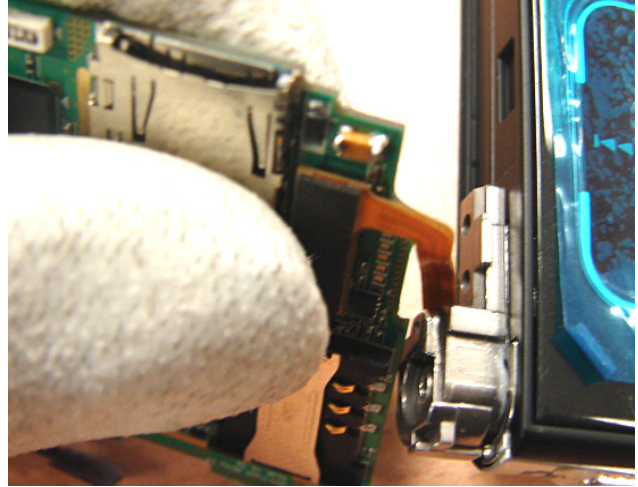
<p><b>9</b></p> 	<p><b>10</b></p> 
<p>1) DISASSEMBLE SUB LCD CONNECTOR Disassemble the SUB LCD CONNECTOR from the PBA.</p>	<p>1) REMOVE SCREW Remove the SCREW on the PBA.</p>
<p><b>11</b></p> 	<p><b>12</b></p> 
<p>1) DISASSEMBLE SPEAKER Disassemble the SPEAKER from the FRONT COVER.</p>	<p>1) DISASSEMBLE PBA ASS'Y Disassemble the PBA ASS'Y from the FRONT COVER.</p>

13



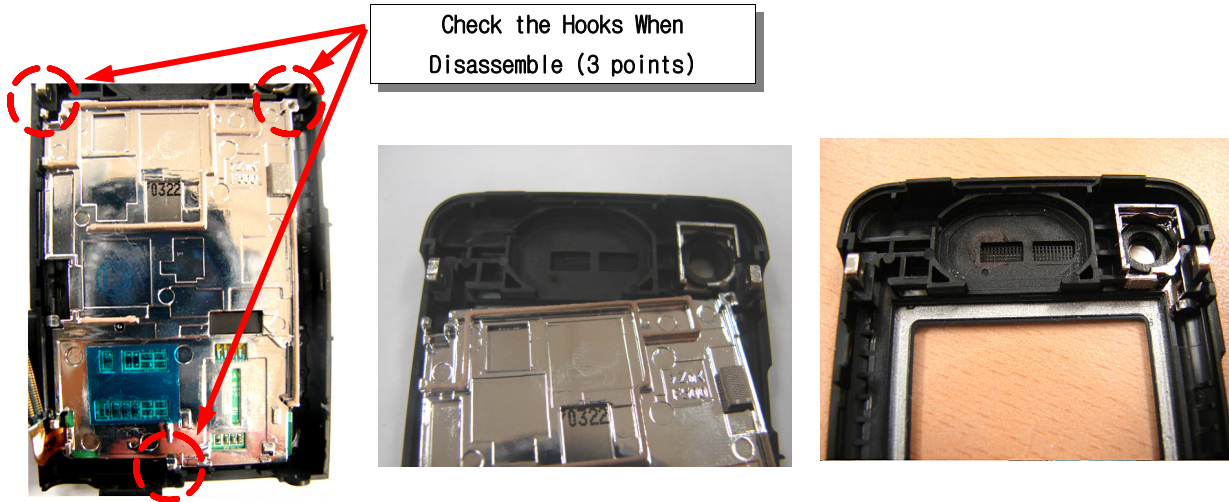
1) DISASSEMBLE SWING ASS'Y  
Disassemble the HINGE of the SWING ASS'Y from the REAR part.

14

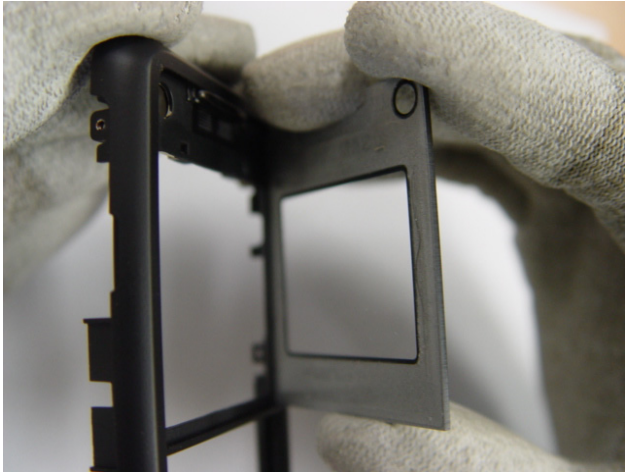
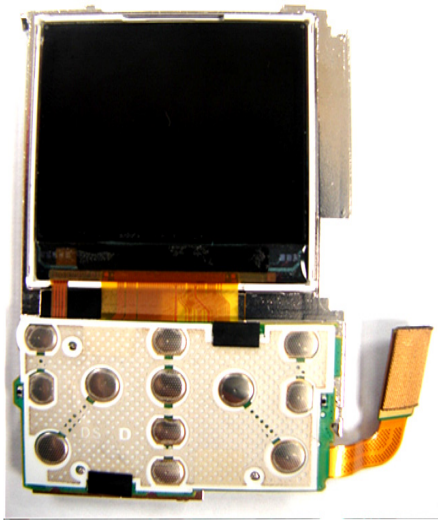
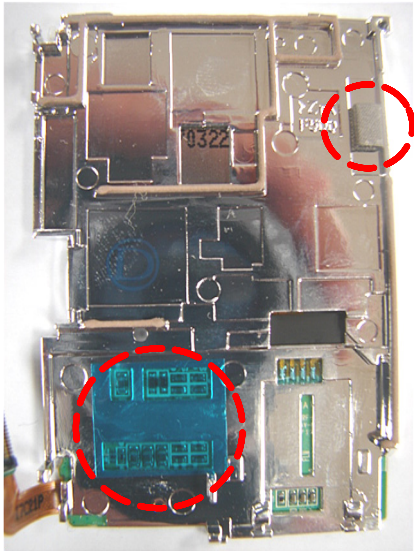
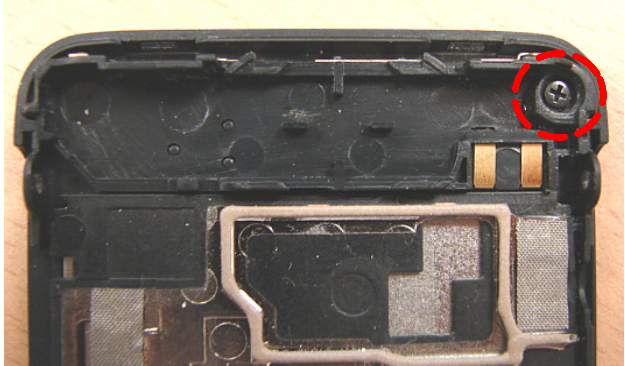


1) DISASSEMBLE CON TO CON F-PCB  
Disassemble the CON TO CON F-PCB combined with PBA.

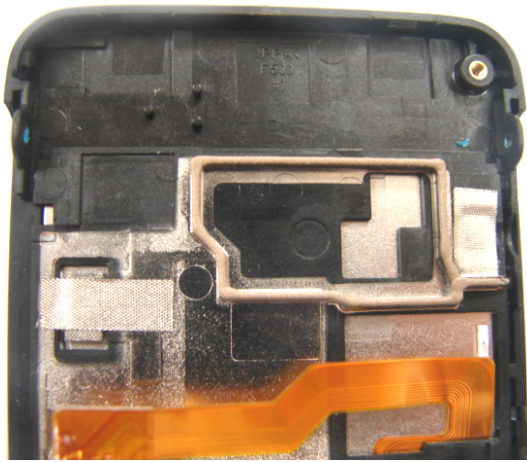
15



1) DISASSEMBLE SHIELD COVER  
Disassemble the SHEILD COVER ASS'Y from the FRONT COVER.  
**※ caution**  
Remove the SHELID COVER after check the position of the HOOK.

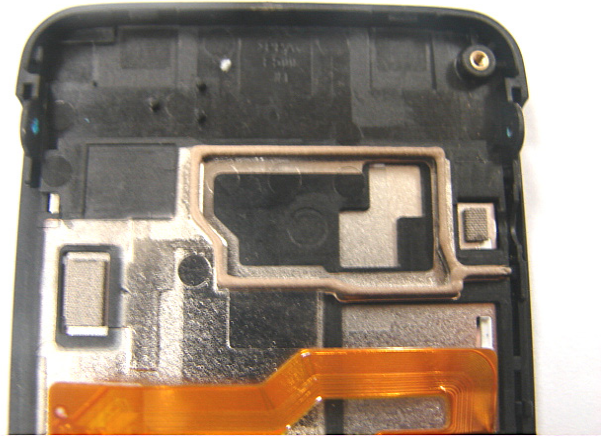
<p><b>16</b></p> 	<p><b>17</b></p> 
<p>1) REMOVE SUB WINDOW REMOVE the SUB WINDOW from FRONT COVER</p>	<p>1) REMOVE 1.5" LCD MODULE Remove the 1.5" LCD MODULE from SHIELD COVER.</p>
<p><b>18</b></p> 	<p><b>19</b></p> 
<p>1) REMOVE SHIELD COVER Remove subsidiary material 2point combined with SHIELD COVER</p>	<p>1) DISASSEMBLE ANTENNA Disassemble ANTENNA after remove SCREW combined with right side of ANTENNA</p>

**20**



1) REMOVE ELECTRIC CONDUCTION TAPE  
Remove TAPE 2 POINT sticked with 2.4" LCD

**21**



1) REMOVE ELECTRIC CONDUCTION SPONGE  
Remove sponge 2 POINT sticked with 2.4" LCD

**22**



1) DISASSEMBLE MAIN WINDOW  
Disassemble MAIN WINDOW from REAR ASS'Y

**23**



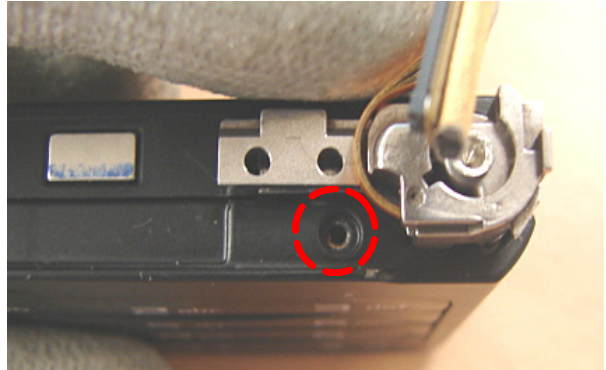
1) DISASSEMBLE 2.4" LCD  
Disassemble 2.4" LCD MODULE from rear part

**24**



1) REMOVE LABEL  
Remove label sticked with upper of SWING ASS'Y

**25**



1) REMOVE SCREW 1  
Remove SCREW 1 POINT of SWING ASS'Y

**26**



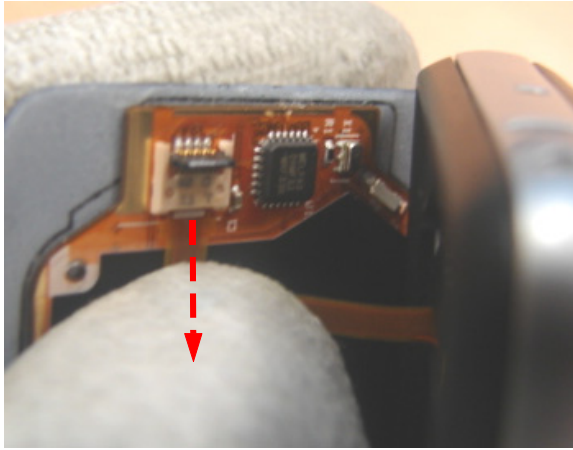
1) REMOVE SCREW 2  
Remove SCREW 2 POINT on both side of SWING ASS'Y

**27**



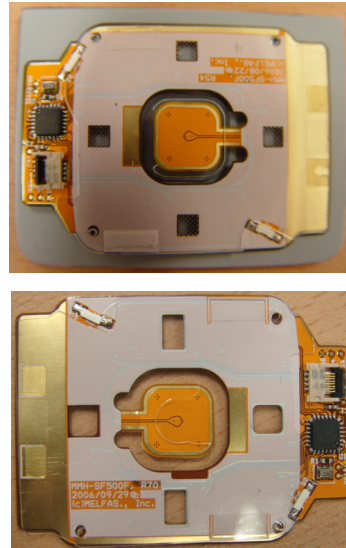
1) UNCOVER TOUCH KEY CONNECTOR  
UNCOVER ACTUATOR OF TOUCH KEY CONNECTOR

**28**



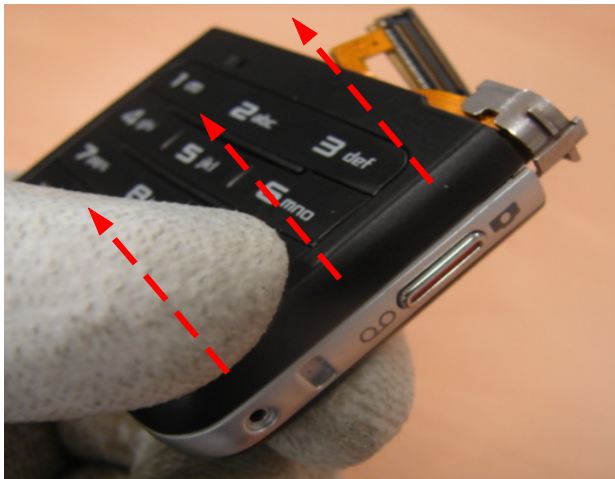
1) DISASSEMBLE TOUCH KEY F-PCB  
Disassemble F-PCB combined with TOUCH KEY CONNECTOR

**29**



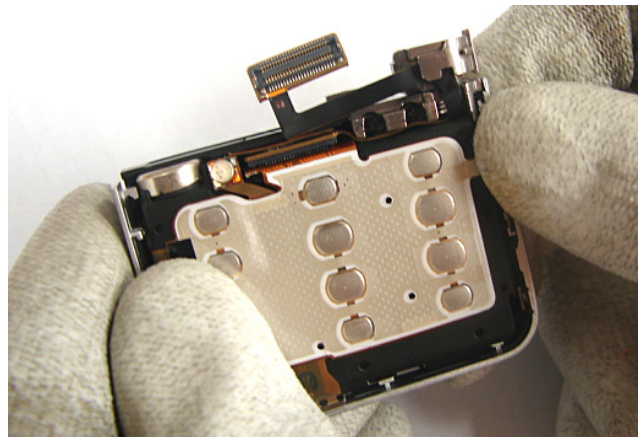
1) REMOVE TOUCH KEY PCB  
Remove TOUCH KEY PCB stuck with TOUCH KEY PAD

**30**



1) DISASSEMBLE SWING UPPER  
Disassemble SWING UPPER from SWING ASS'Y

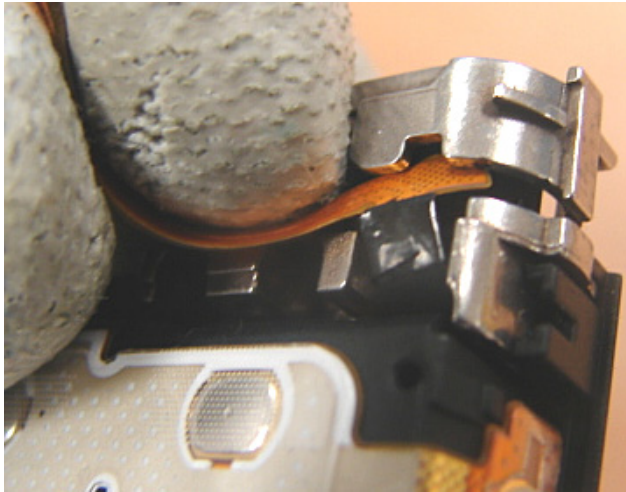
**31**



1) DISASSEMBLE SWING SIDE BELT  
Disassemble SWING SIDE BELT from SWING ASS'Y

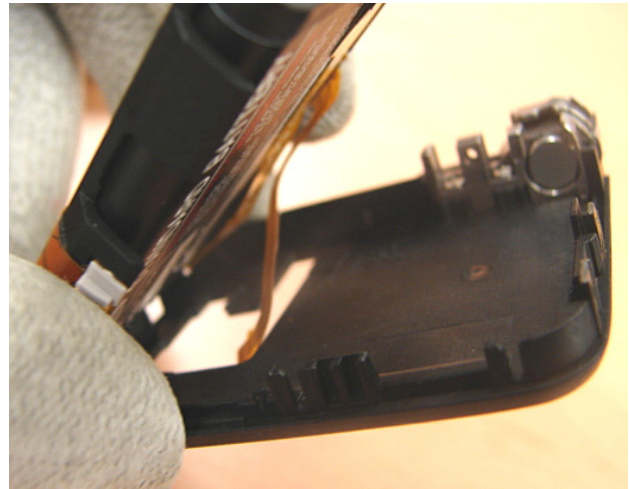


**32**



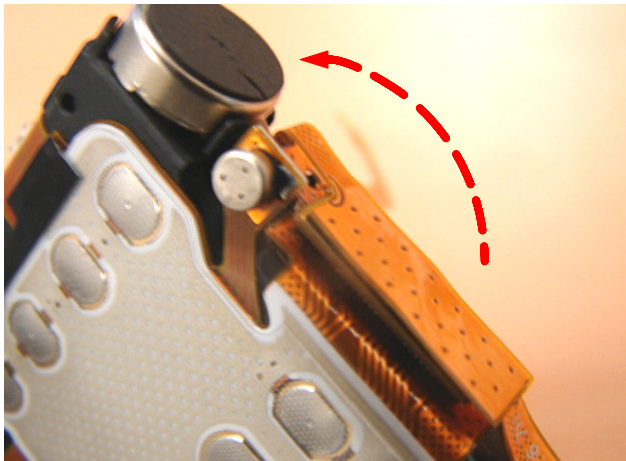
1) DISASSEMBLE CON TO CON F-PCB  
 Disassemble CON TO CON F-PCB between hinge  
 ※ **caution**  
 NO DAMAGE to F-PCB

**33**



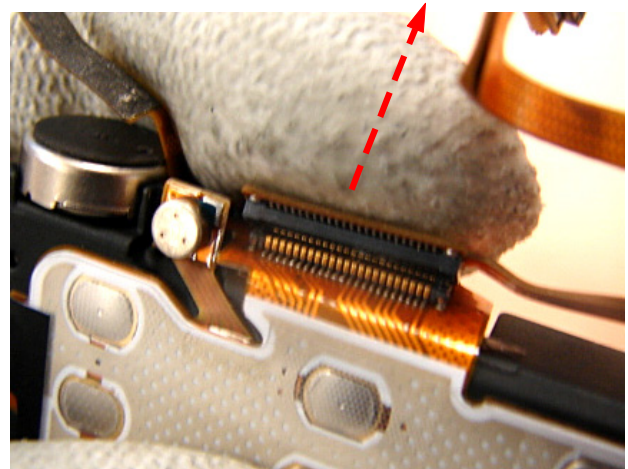
1) DISASSEMBLE BATTERY BRACKET  
 Disassemble BATTERY BRACKET from SWING LOWER

**34**



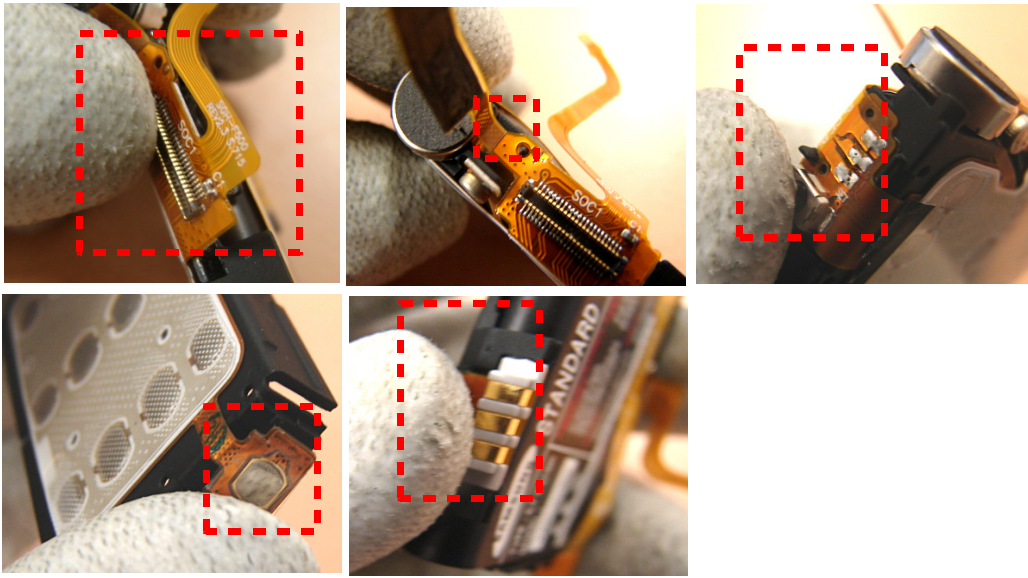
1) DISASSEMBLE ESD F-PCB  
 Disassemble ESD F-PCB combined with CON TO CON F-PCB

**35**



1) DISASSEMBLE CON TO CON F-PCB  
 Disassemble CON TO CON F-PCB from 3\*4 KEY F-PCB.  
 ※ **caution**  
 NO DAMAGE to F-PCB

36



REMOVE 3\*4 KEY F-PCB

Remove 3\*4 KEY F-PCB

(MAIN CONNECTOR,BATTERY SOLDERING, CAMERA KEY DOME SHEET, EXT BATTERY CONTACT)

37



DISASSEMBLE BATTERY

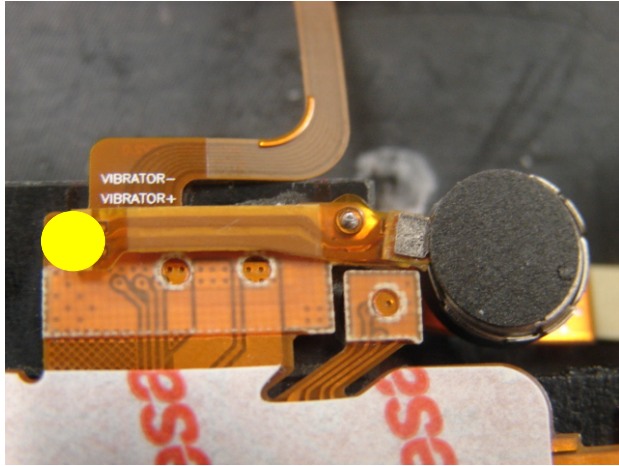
1.Remove the BATTERY SOLDERING

2.Disassemble the BATTERY from the BATTERY BRACKET.

\* **caution**

NO DAMAGE to F-PCB

38



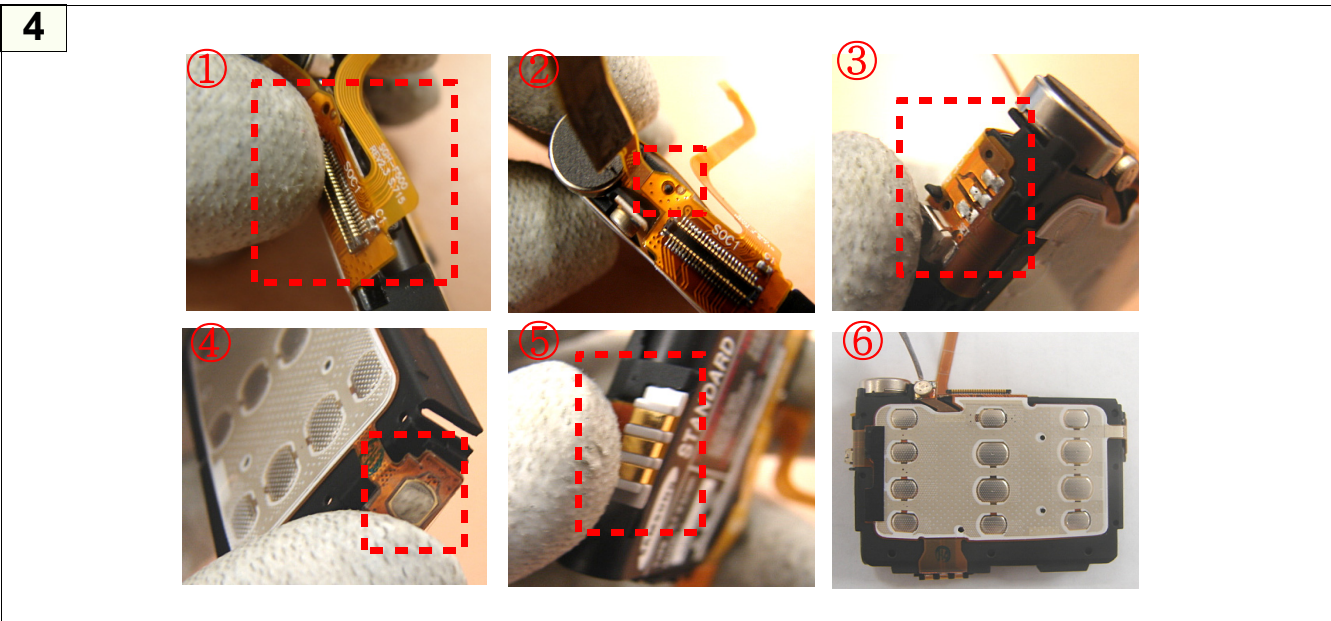
1) REMOVE MOTOR

Disassemble the MOTOR from the 3\*4 KEY PCB after removing SOLDERING.

2) Be careful not to damage the CON TO CON .

## 2-4. Assembly

<p><b>1</b></p> 	<p><b>2</b></p> 
<p>1) MOTOR SOLDERING</p> <p>Solder the MOTOR to the 3*4 KEY PCB.</p> <p><b>* caution</b></p> <p>When soldering the MOTOR, 3*4 KEY's holes must be overlapped with MOTOR PIN's holes.</p>	<p>1) BATTERY SOLDERING</p> <p>3*4 KEY ASS'Y와 BATTERY를 SOLDERING한다.</p> <p>Solder the 3*4 KEY ASS'Y to the BATTERY.</p> <p><b>* caution</b></p> <p>In the unlikely event of SHORT, It may be difficult to supply the right power.</p>
<p><b>3</b></p> 	
<p><b>ATTACH 3*4 KEY 1</b></p> <p>1. Prepare BATTERY BRACKET</p> <p>2. Remove the 3*4 KEY's exfoliative sheet</p> <p>3. Attach the 3*4 KEY and Overlap holes</p> <p>4. Remove BATTERY' exfoliative sheet</p> <p>5. Combine the BATTERY to theBRACKET</p> <p>6. BATTERY F-PCB arrangement</p>	



ATTACH 3\*4 KEY 2

1.Attach MAIN CONNECTOR on BRACKET CONNECTOR

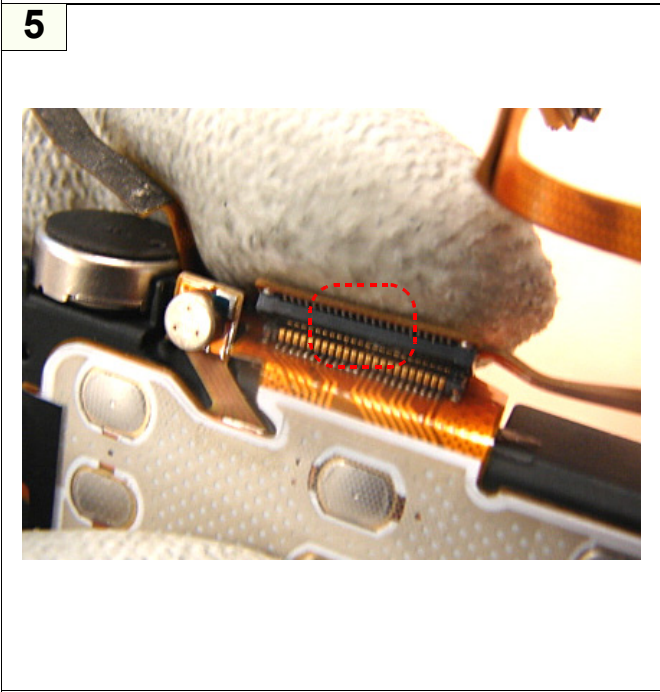
2.Be careful of PIN Hole when attaching MAIN

3.attach BATTERY CONTACT

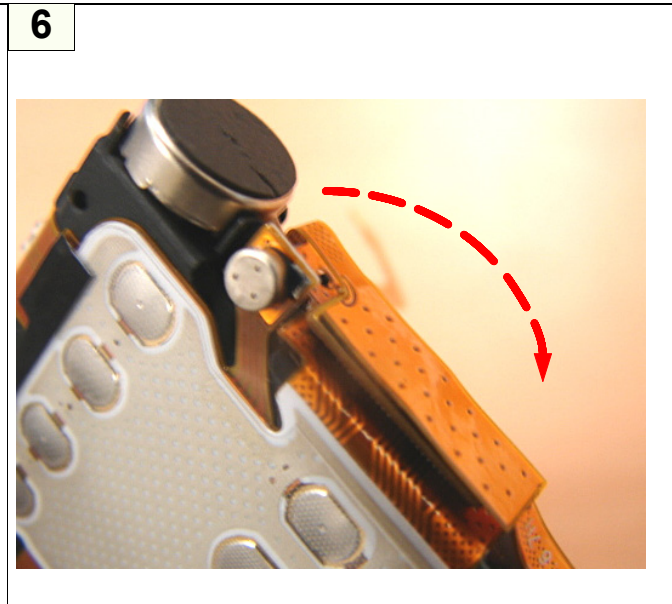
4.attach CAMERA KEY PART

5.attach External BATTERY CONTACT

6.confirm final state



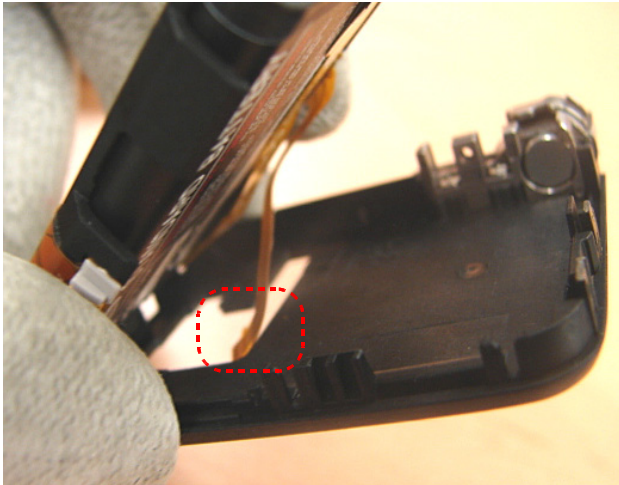
1) Join CON TO CON F-PCB  
Join CON TO CON F-PCB and MAIN CONNECTOR as picture



1) Attach ESD reinforcement F-PCB attach F-PCB on CONNECTOR

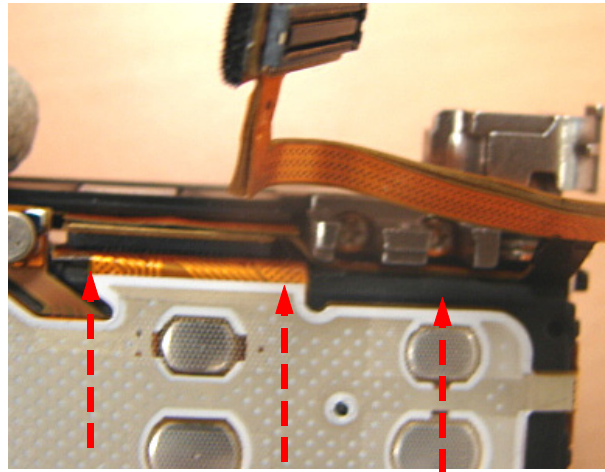
※ **caution**  
Be careful of interference MIC when attaching F-PCB

7



1) Location of BATTERY BRACKT (Step 1)  
Put Battery Bracket on the Swing Lower.  
**\* caution**  
When putting, inset Touch Key F-PCB through the hole first.

8



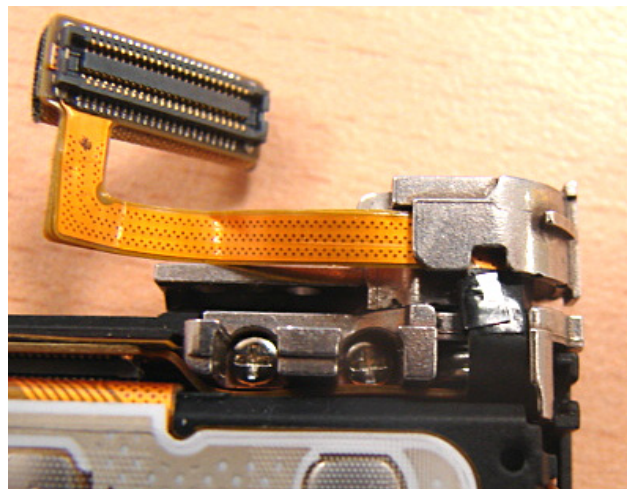
1) Location of BATTERY BRACKT (Step 2)  
Push Battery Bracket to the upper direction like the direction in the picture.  
**\* caution**  
1) Be careful not to make scratch and molding damage!  
2) Be careful not to damage the locker.

9

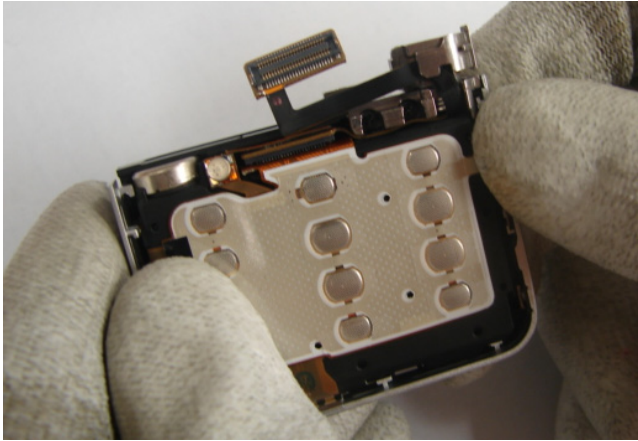
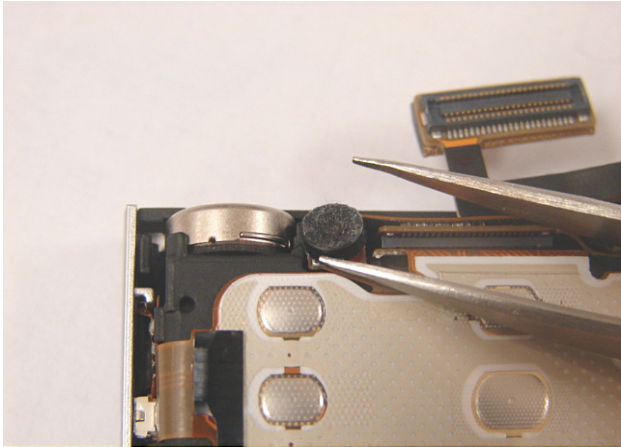

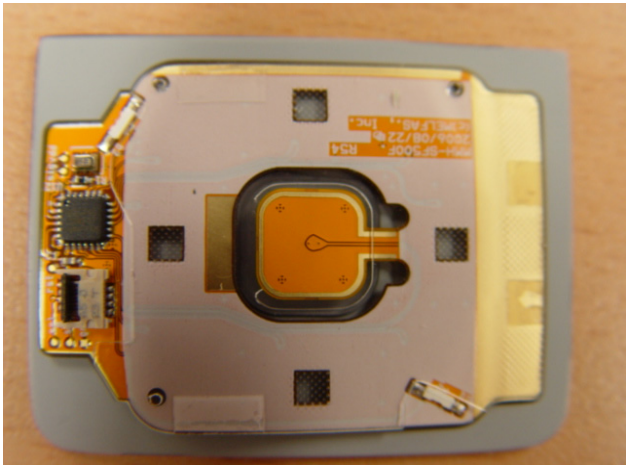


1) Assembly of CON TO CON F-PCB (Step 1)  
Push CON TO CON F-PCB in the inside of HINGE  
**\* caution**  
Be careful of FPCB cutting.

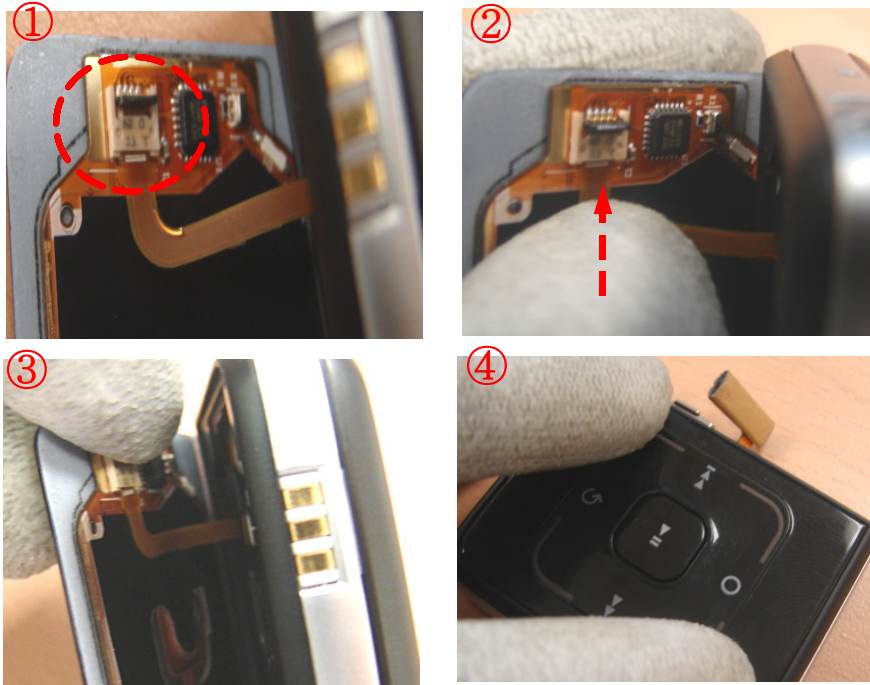
10



1) Assembly of CON TO CON F-PCB (Step 2)  
Look at the CON TO CON F-PCB after pushing  
**\* caution**  
Not allowed to be positioned on the downside of HINGE

<p><b>11</b></p> 	<p><b>12</b></p> 
<p>1) Assembly of SWING SIDE BELT Insert SWING SIDE BELT into LOWER.</p>	<p>1) Assembly of MIC HOLDER Put MIC HOLDER on the MIC.</p>
<p><b>13</b></p> 	<p><b>14</b></p> 
<p>1) Assembly of SWING UPPER Put SWING UPPER on the LOWER.</p>	<p>1) Attachment of TOUCH KEY F-PCB Attach TOUCH KEY F-PCB following silk line on the TOUCH KEY PAD.</p>

15



Assembly of TOUCH KEY

- 1 ~ 2. Opening TOUCH KEY CONNECTOR, insert F-PCB to the SILK LINE.
3. Shut the CONNECTOR after inserting F-PCB.
4. Attach TOUCH KEY PAD on the SWING LOWER at last.

16



- 1) Assembly of SWING SCREW.  
Assemble the three point of screw following the direction.

17

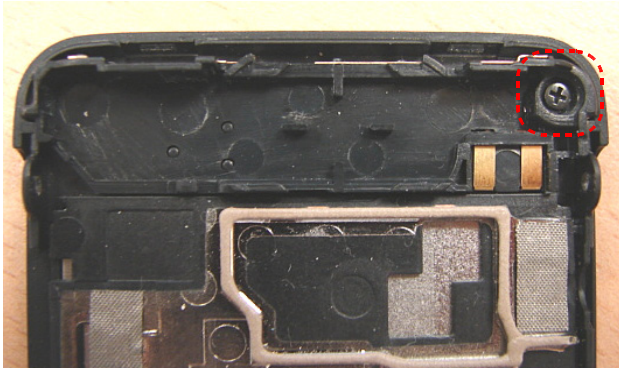


- 1) Attaching the LABEL  
Attach the LABEL on the top of SWING assembly.



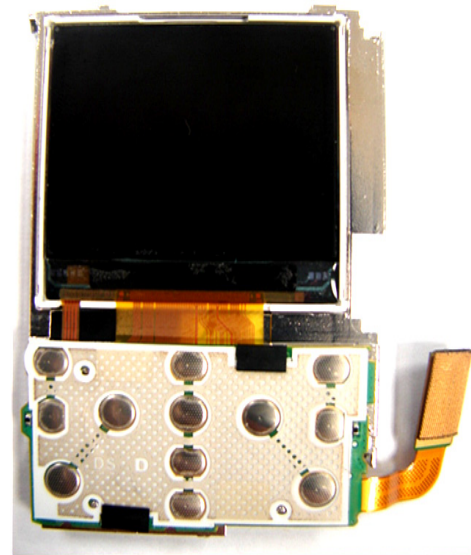
<p>18</p> 	<p>19</p> 
<p>1) Location of 2.4" LCD Put 2.4" LCD MODULE on the REAR COVER. ※ <b>caution</b> Insert F-PCB into the hall of REAR COVER.</p>	<p>1) Attachment of MAIN WINDOW Attach MAIN WINDOW following the picture.</p>
<p>20</p> 	<p>21</p> 
<p>1) Attachment of Gasket Attach two gasket following the picture.</p>	<p>1) Attachment of Tape Attach two tape following the picture.</p>

**22**



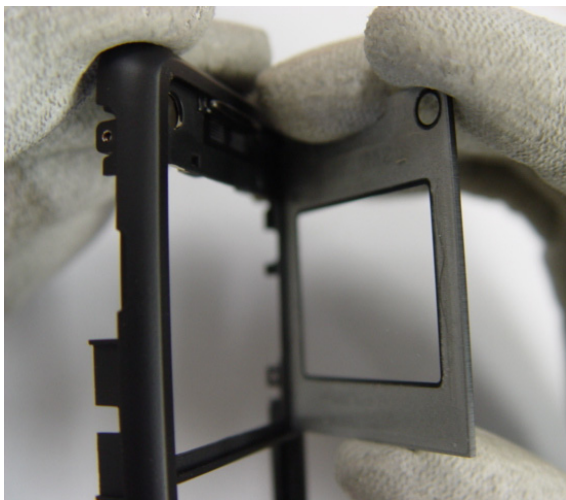
1) Assembly of INTENNA  
Positioning the Intenna on the REAR COVER, tighten the SCREW.

**23**



1) Attachment of 1.5" LCD  
Removing the vinyl on the back of 1.5" LCD MODULE, attach the module on the SHIELD COVER.

**24**

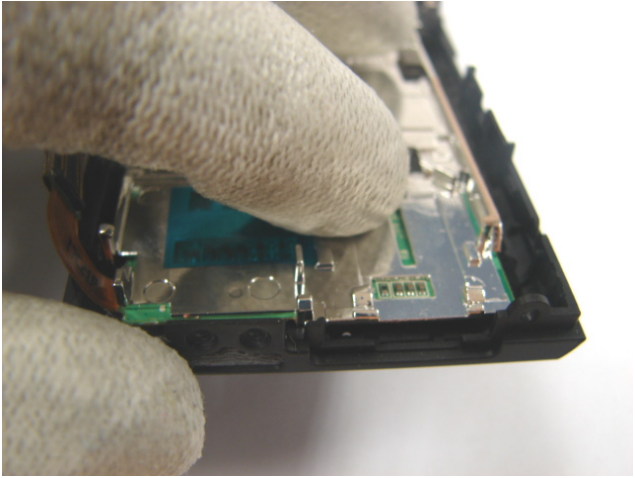
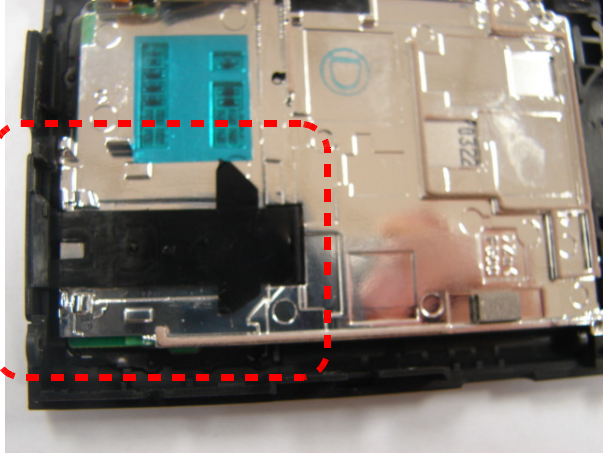

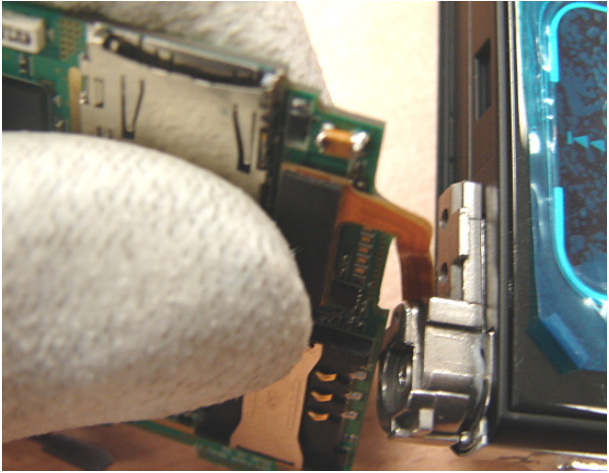


1) Attachment of SUB WINDOW  
Attach the SUB WINDOW on the front cover.

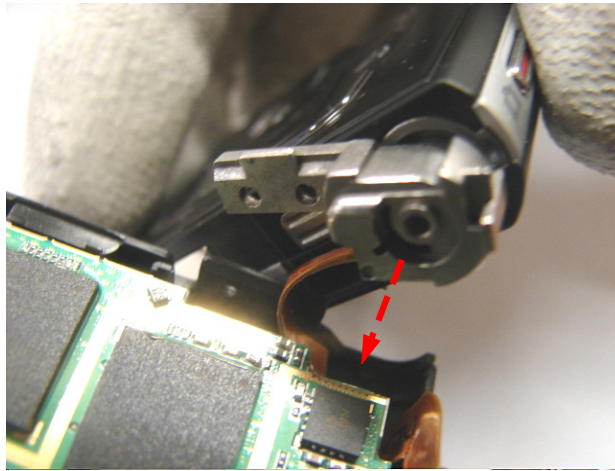
**25**



1) Location of NAVI KEY  
Locate NAVI KEY on the FRONT COVER.  
**\* caution**  
Locating the NAVI KEY, watch the twelve of RIB.

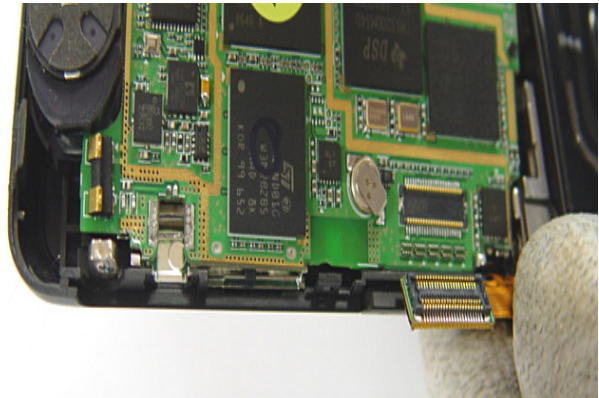
<p><b>26</b></p> 	<p><b>27</b></p> 
<p>1) Location of SHIELD COVER. Locate shield cover on the front cover from the top to the lower.</p>	<p>1) Location of SIM COVER Locate the SIM COVER on the SHIELD COVER following the picture.</p>
<p><b>28</b></p> 	<p><b>29</b></p> 
<p>1) Rotating the HINGE Rotate the HINGE before positioning the SWING assembly.</p>	<p>1) Assembly of CON TO CON CONNECTOR Insert CON TO CON CONNECTOR to PBA following the picture.</p>

**30**



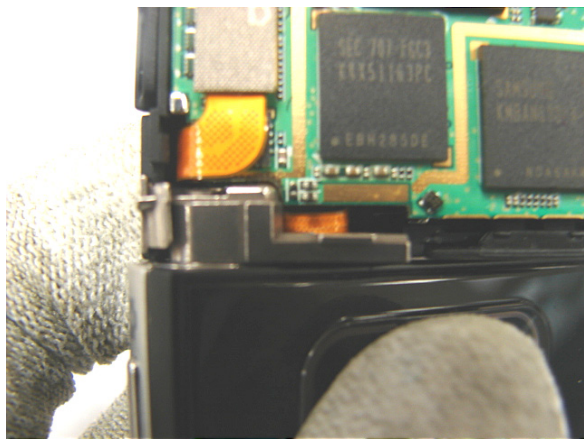
1) Assembly of HINGE  
After locating the PBA, locate the SWING HINGE on the FRONT COVER.

**31**



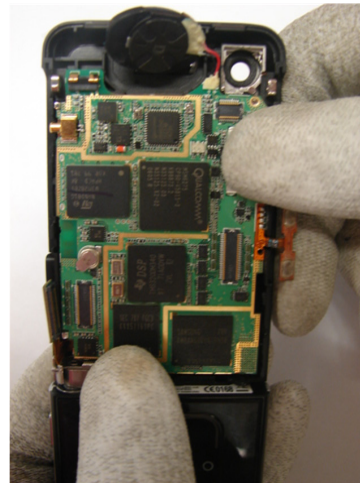
1) Location of PBA  
Locate the PBA by the hook of FRONT COVER.

**32**



1) Arrangement of SWING on the FRONT COVER  
Arrange the SWING PART on the FRONT COVER.

**33**



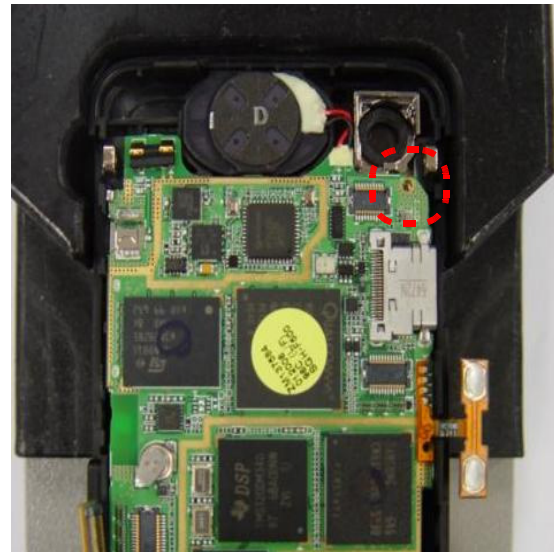
1) Arrangement of SWING on the FRONT COVER  
Arrange PBA on the FRONT COVER.

34



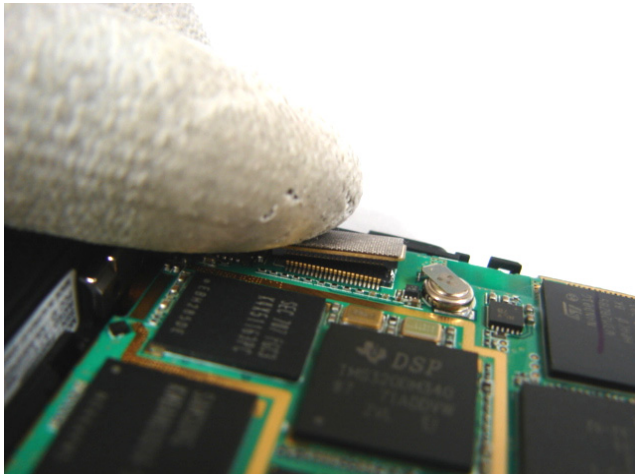
1) Location of SPEAKER  
Locate SPEAKER on the FRONT COVER HOLE.

35



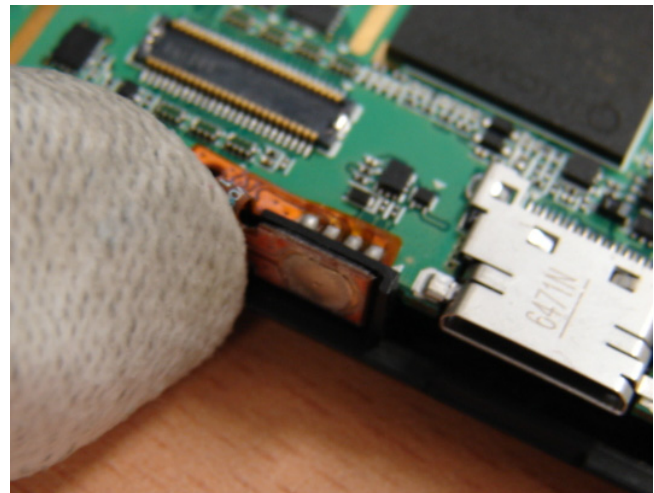
1) Assembly of SCREW  
Tighten a screw on the right upper side of PBA.  
**\* caution**  
When tightening, Be careful of harm of surrounding chips.

36



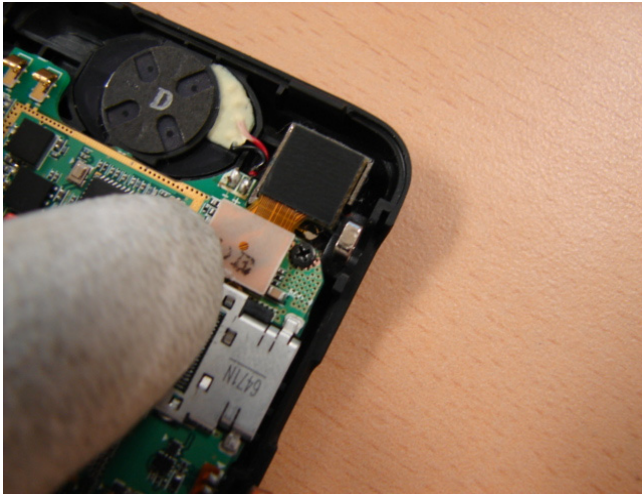
1) Assembly of SUB LCD CONNECTOR.  
Insert the SUB LCD CONNECTOR into the socket on the left side of PBA.

37



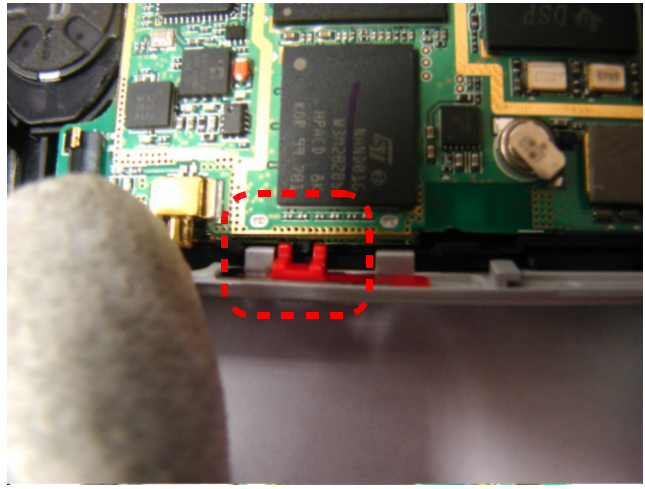
1) Attachment of VOLUME KEY  
Attach the VOLUME KEY F-PCB on the front cover.

38



1) Assembly of 2MEGA CAMERA  
Inset 2MEGA CAMERA on the socket of the right and upper side fo PBA.

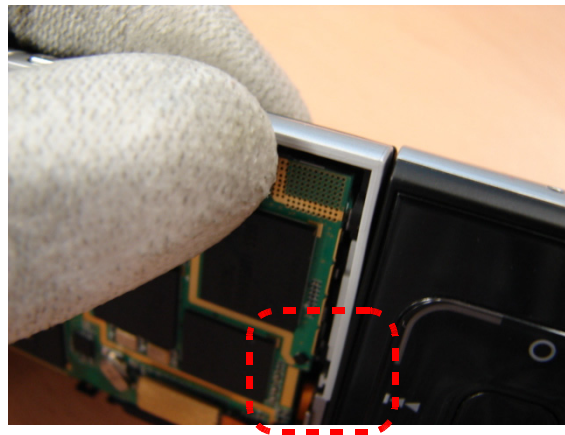
39



1) Assembly of Left SIDE BELT  
Insert Left SIDE BELT.

**\* caution**  
When inserting, locate HOLD KEY on the HOLD SWITCH exactly.

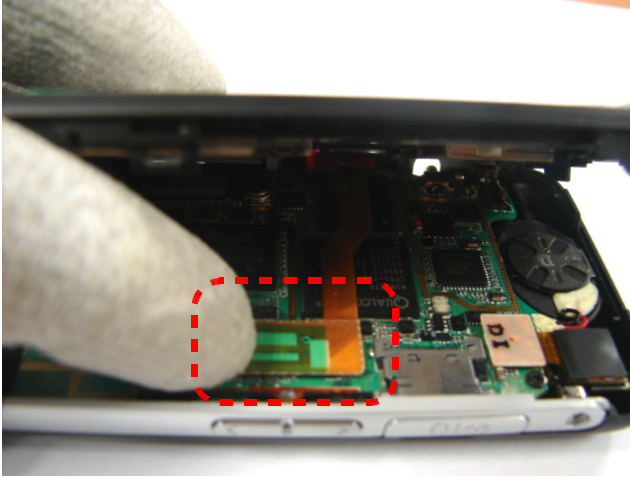
40



1) Assembly of right SIDE BELT  
Insert right SIDE BELT from the top to the lower.

**\* caution**  
When inserting, locate exactly on each hook, eespecially the lower hook.

41



1) Insertion of 2.4" LCD CONNECTOR  
Insert 2.4" CONNECTOR following the picture.

43



1) Tightening the SCREW (Step 1)  
Tighten the two screws following the picture.  
(Notice the color of SCREW: SILVER 2EA)

42



1) Assembly of REAR part  
Assemble the rear part following the picture.  
**\* caution**  
Assemble the locker from the upper to the lower, one by one.

44

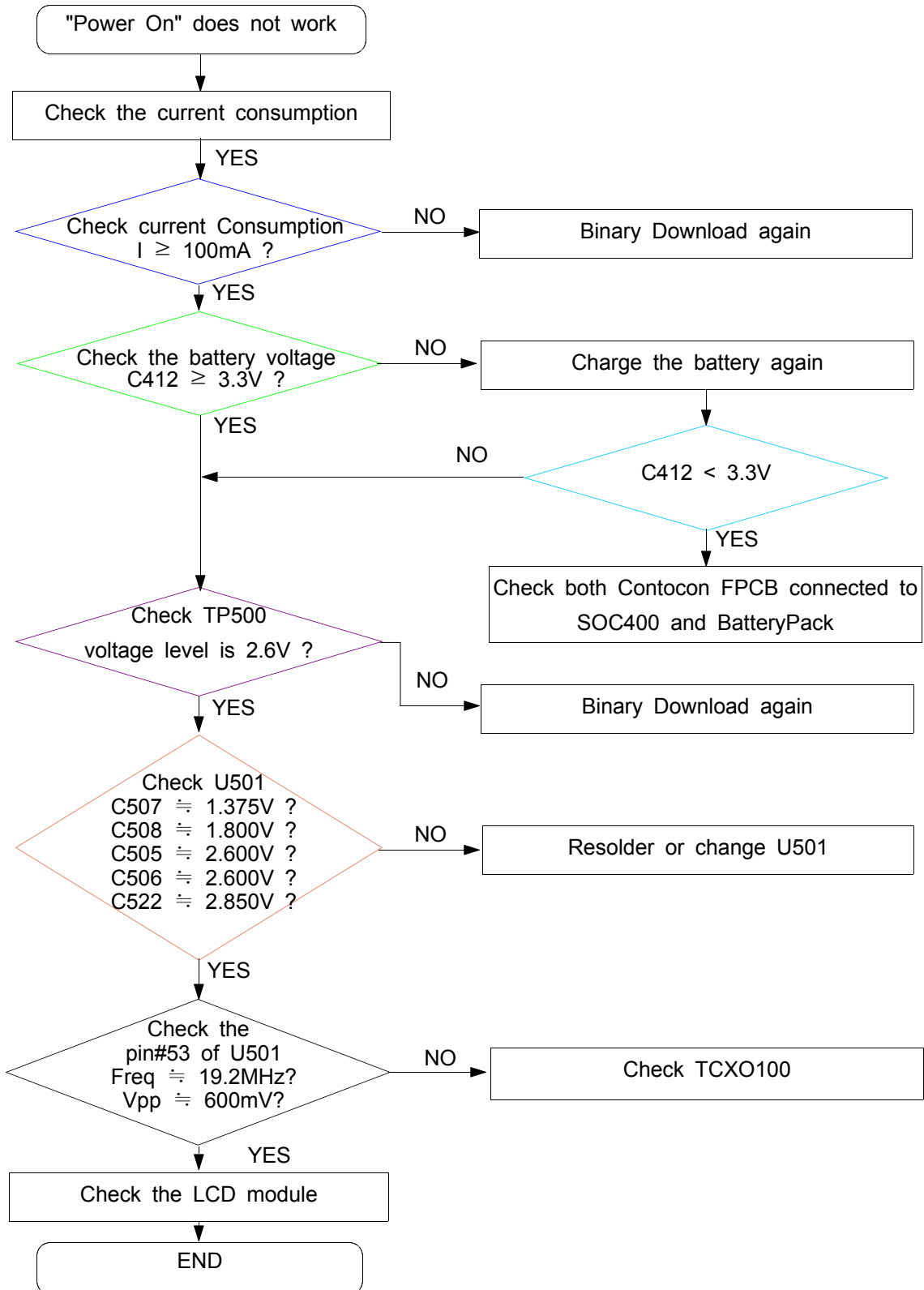


1) Tightening the SCREW (Step 2)  
Tighten the three screws following the picture.  
(Notice the color of SCREW: SILVER 1, BLACK 2)

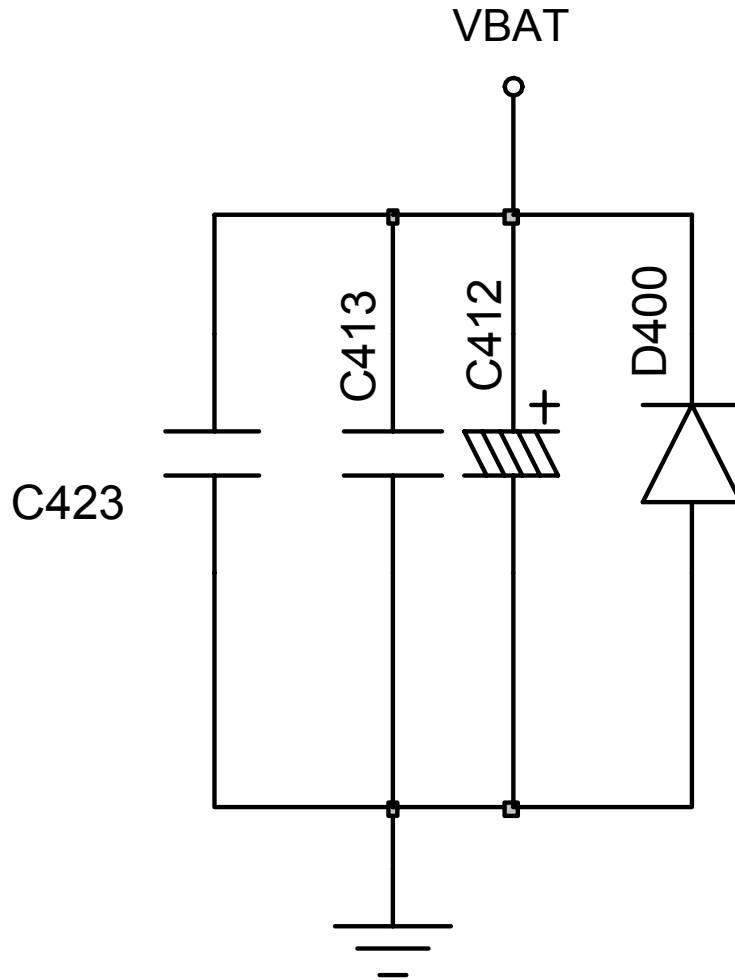
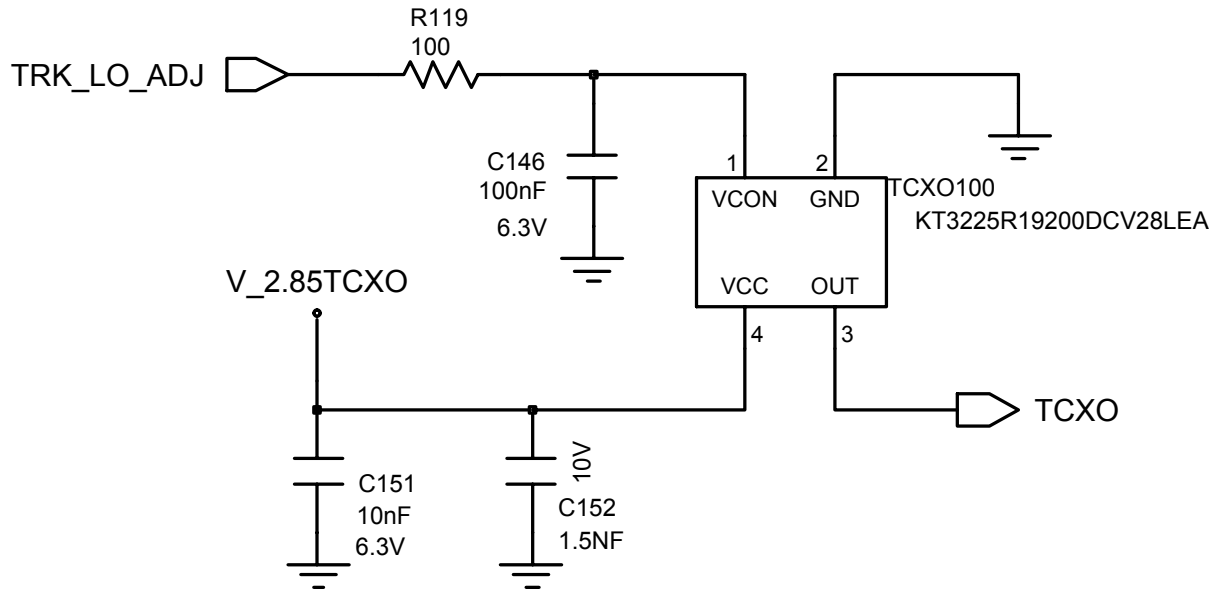
### 3. Chart of Troubleshooting

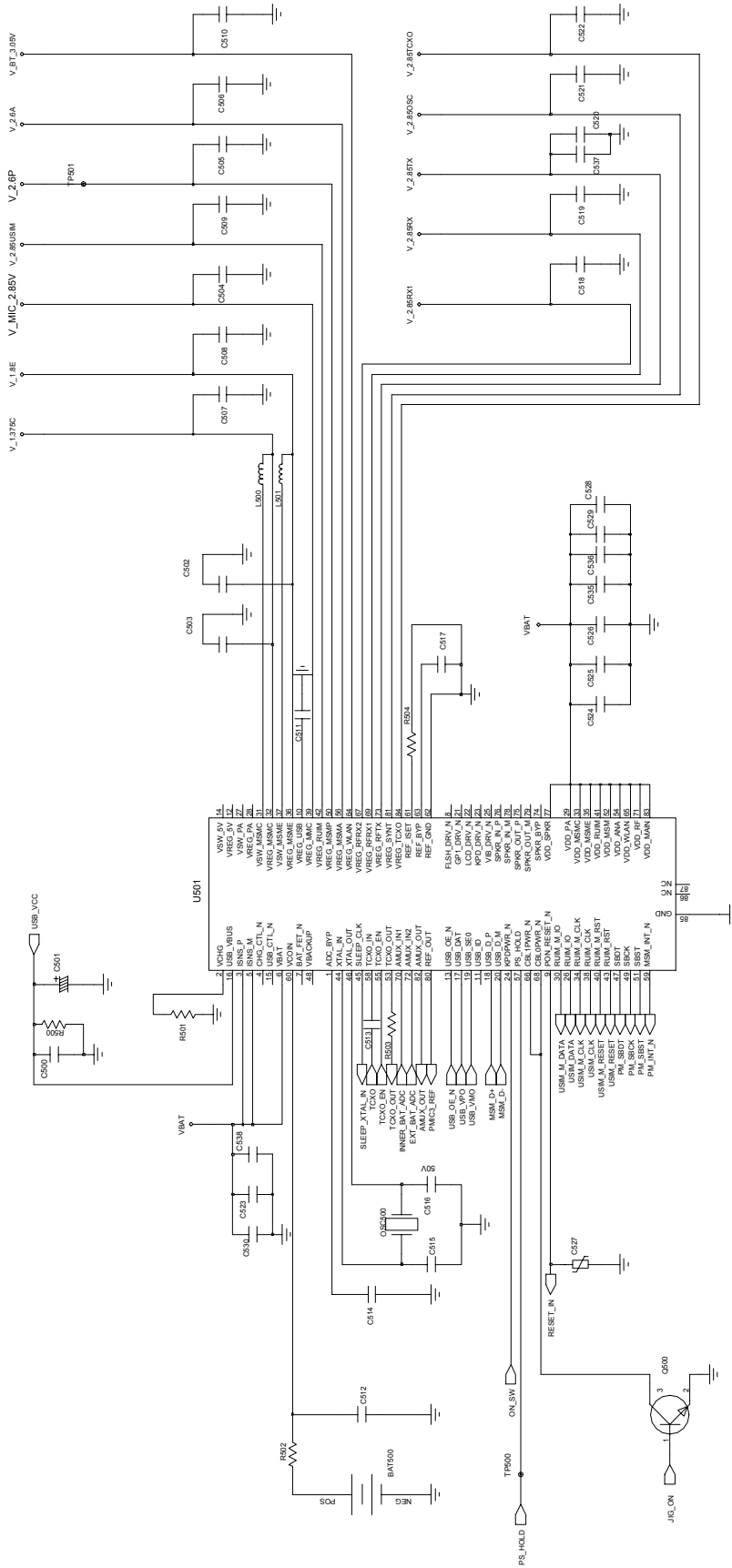
#### 3-1.Baseband

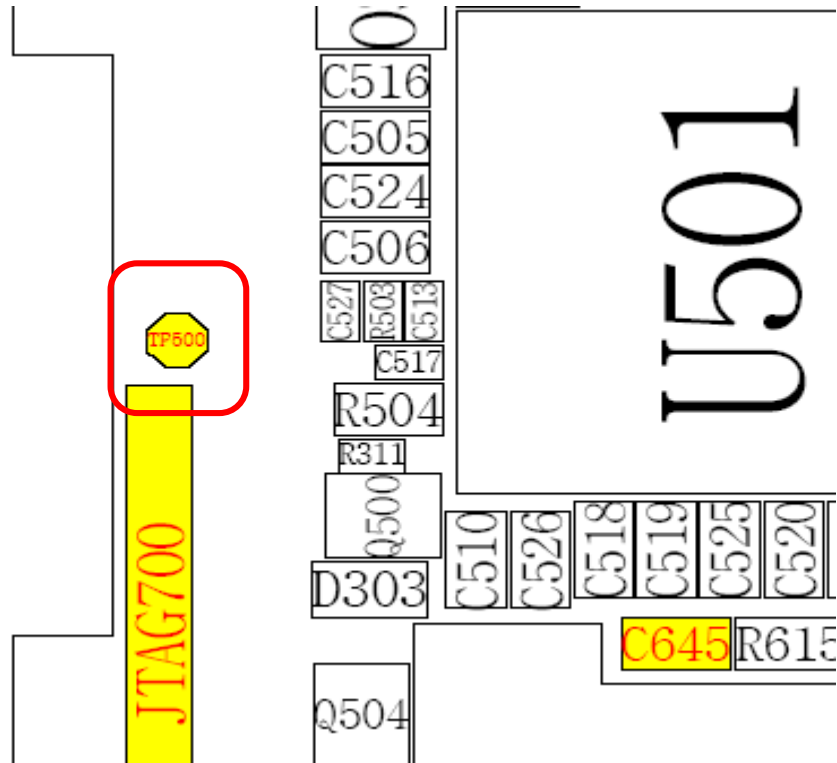
##### 3-1-1. Power ON

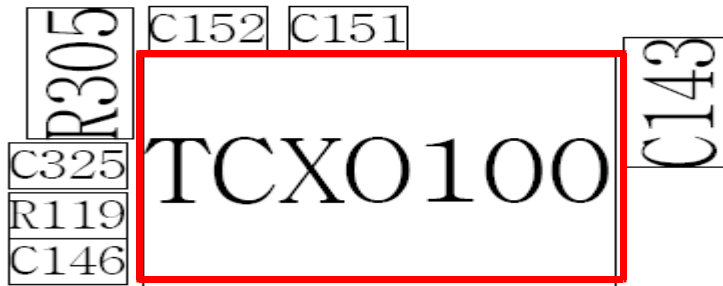
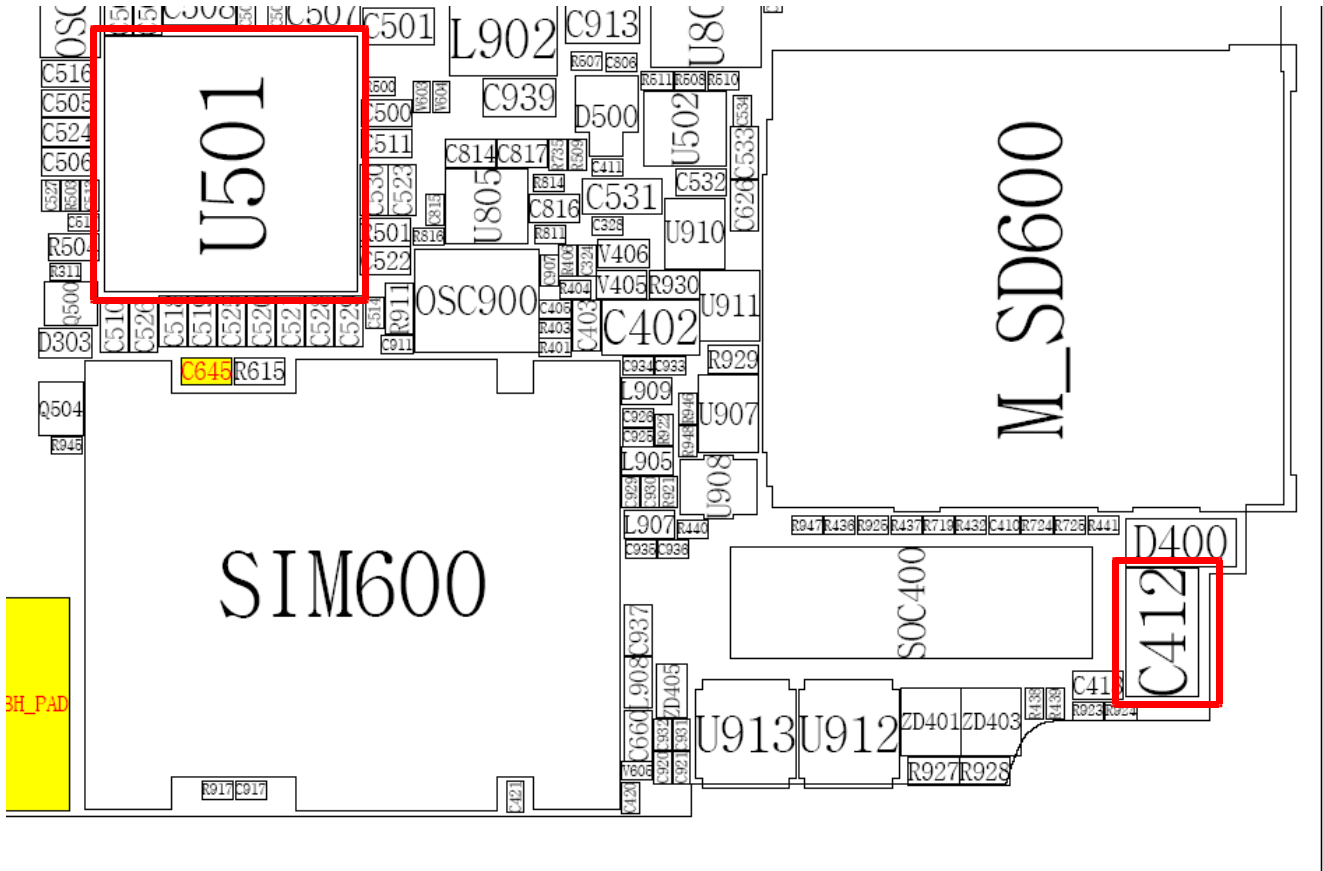




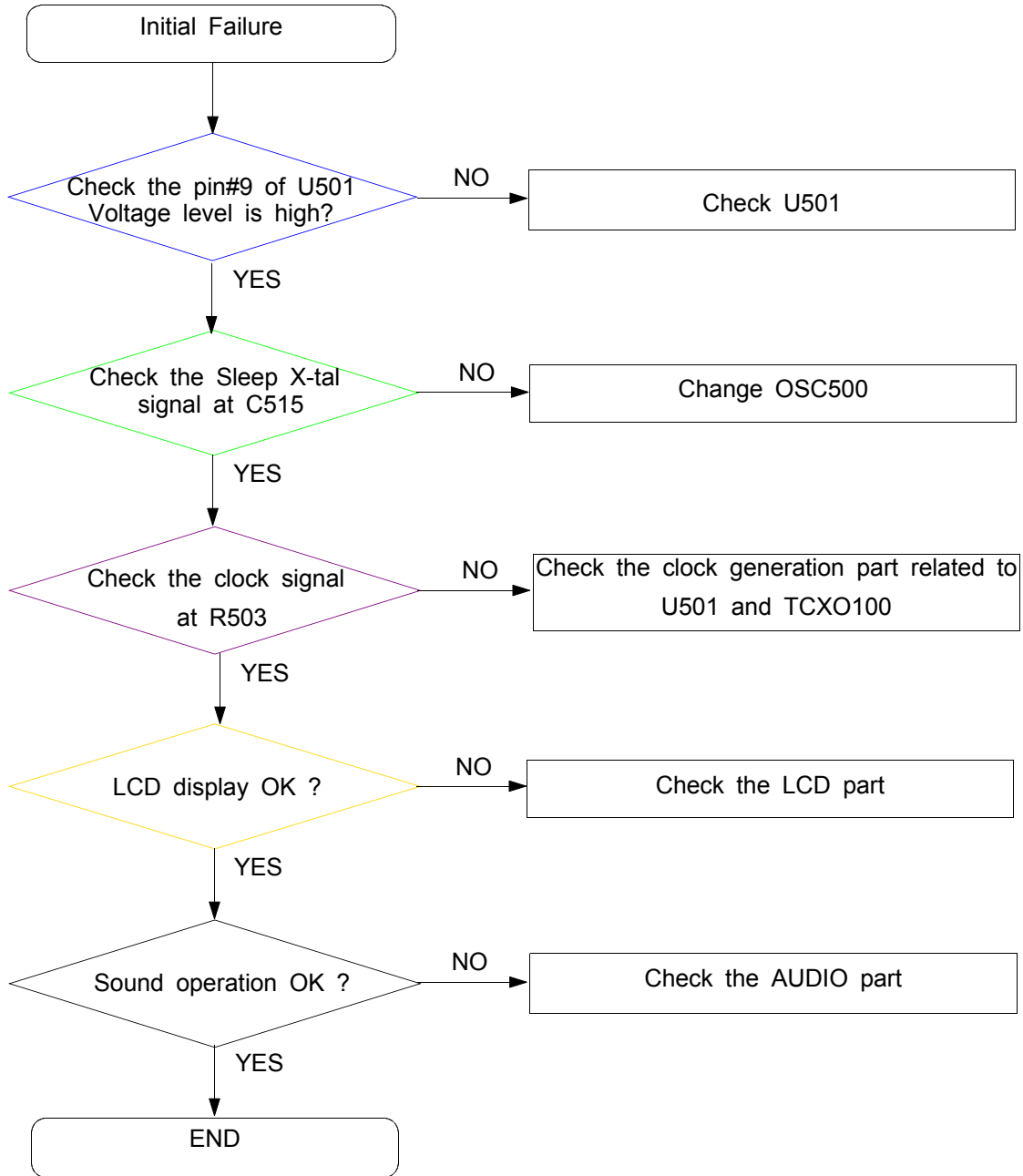


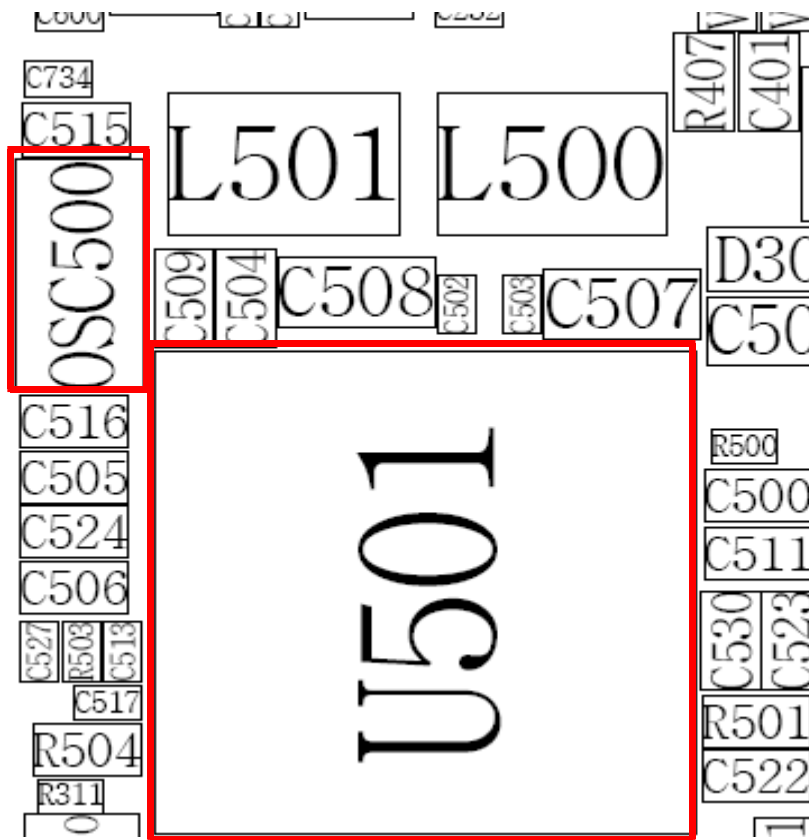




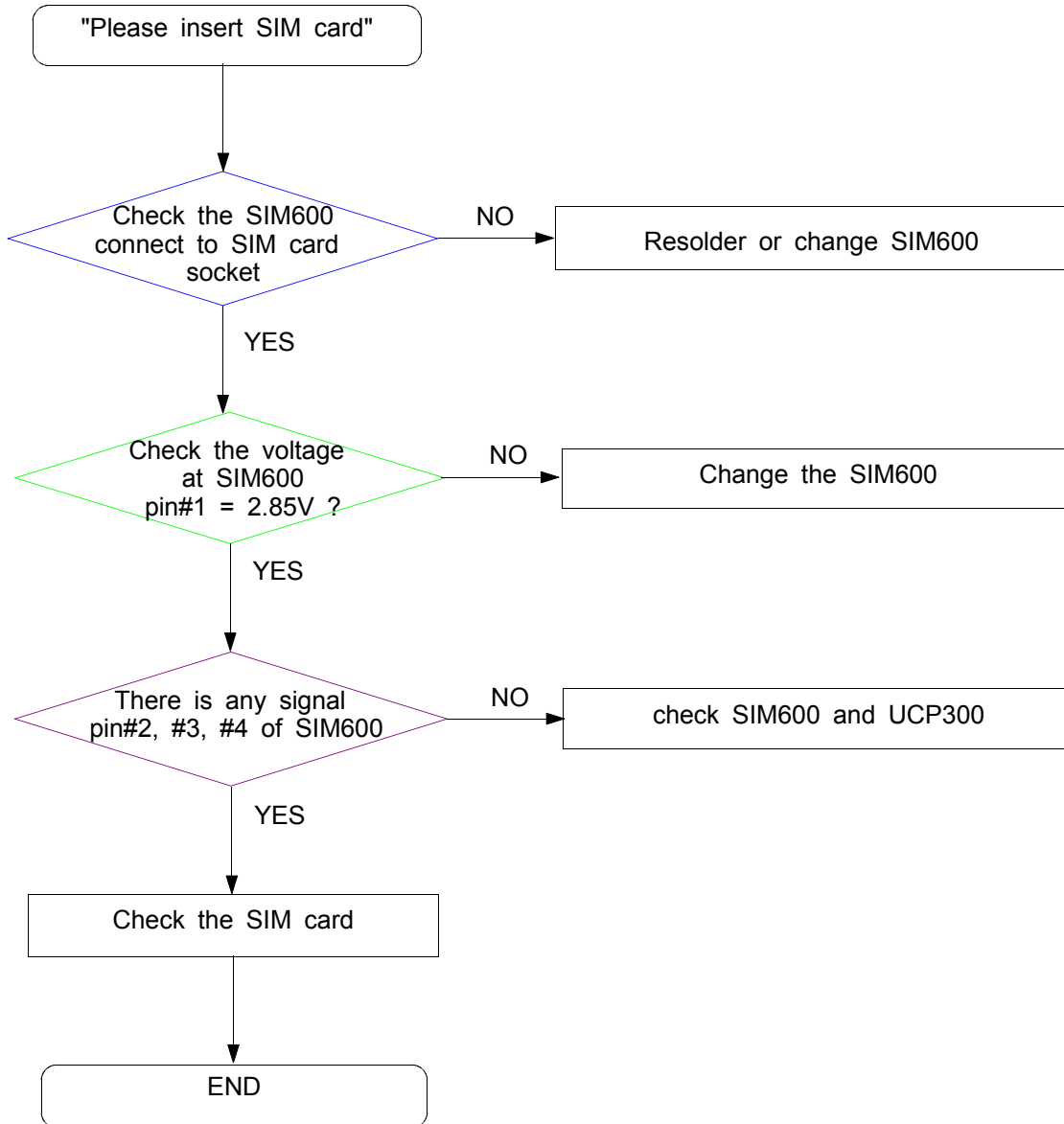


### 3-1-2. System Initial





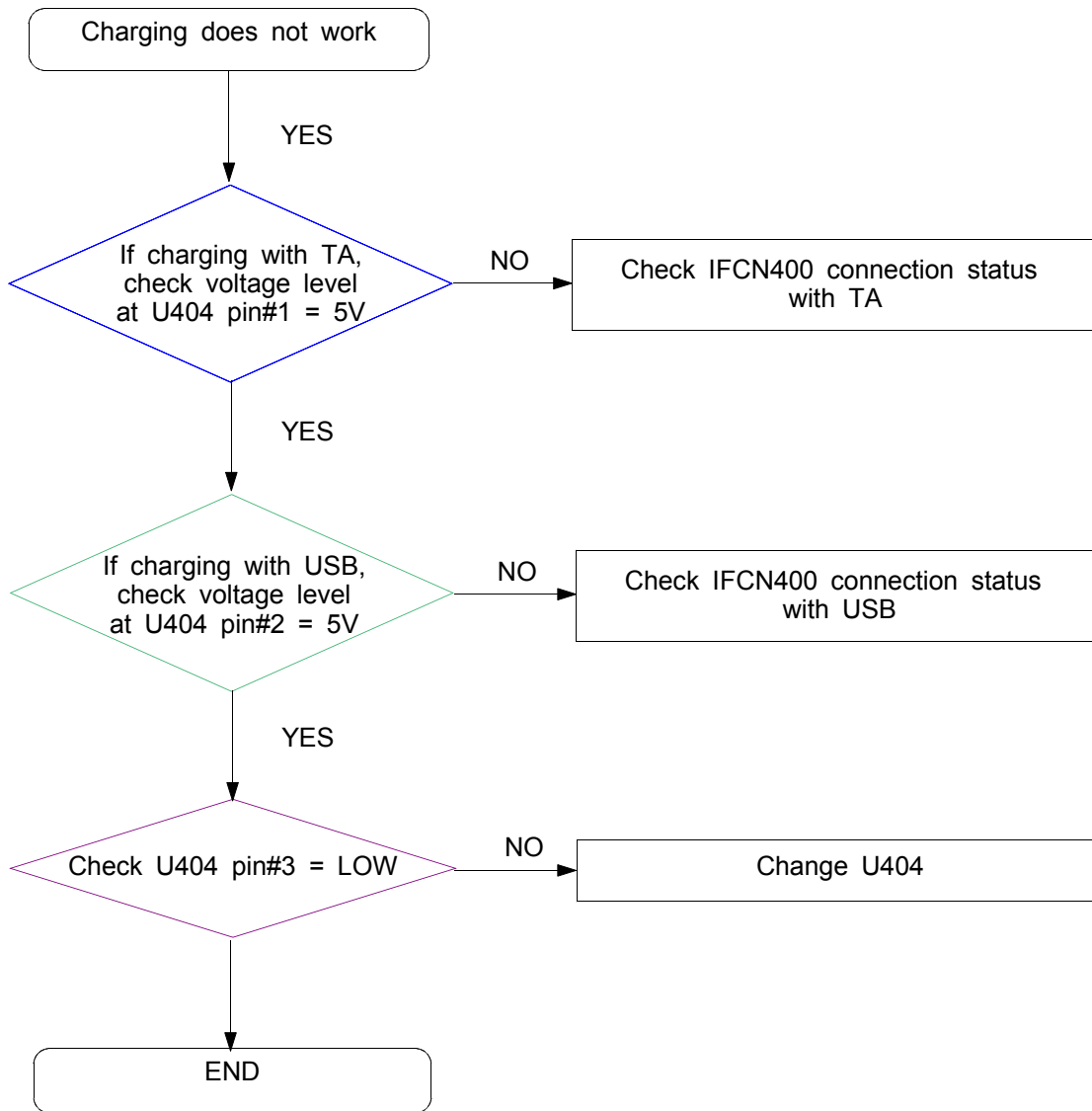
### 3-1-3. SIM Part

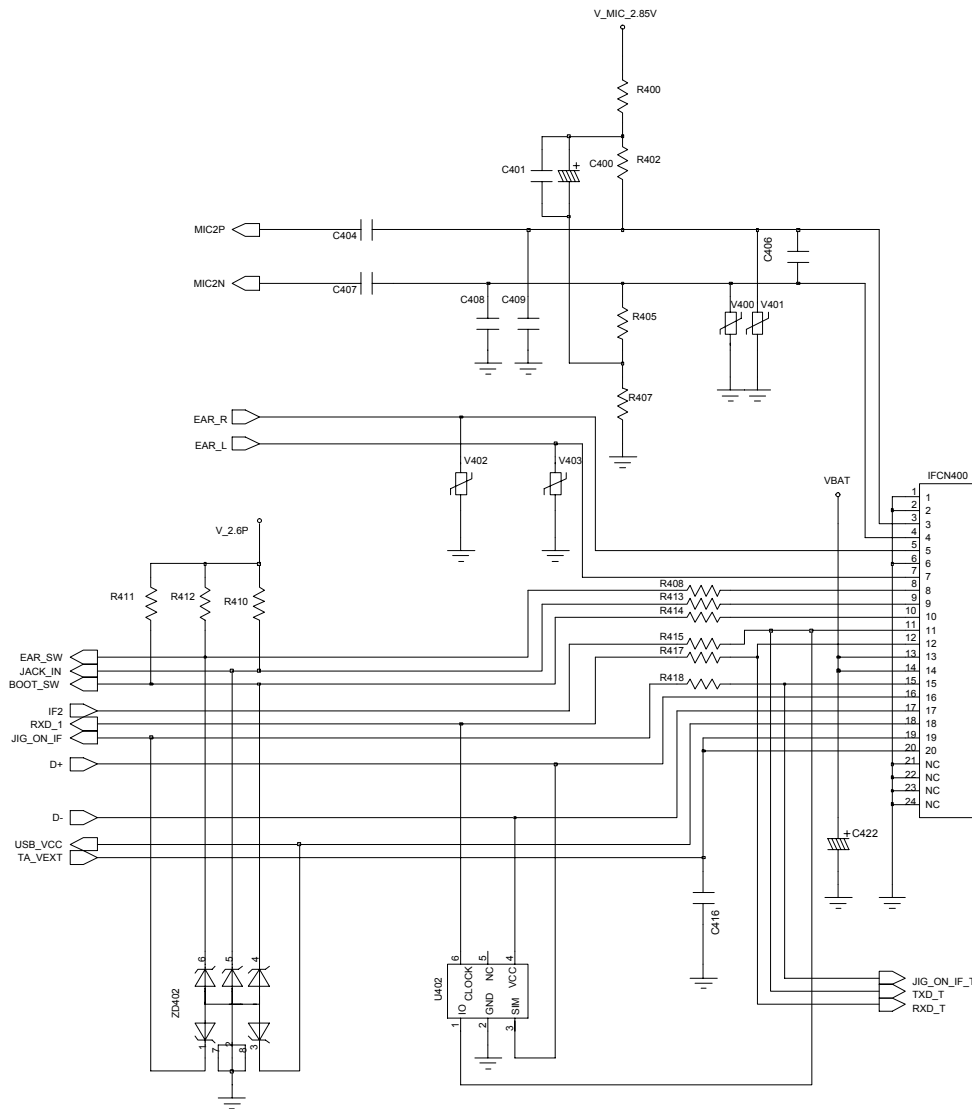
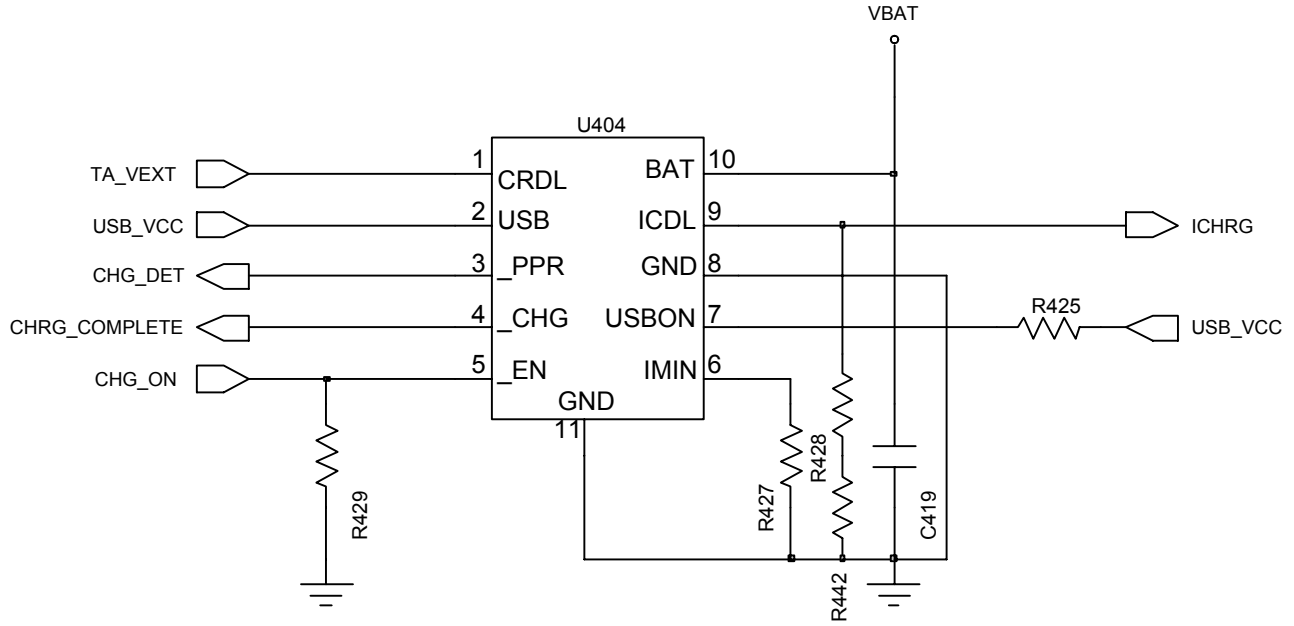


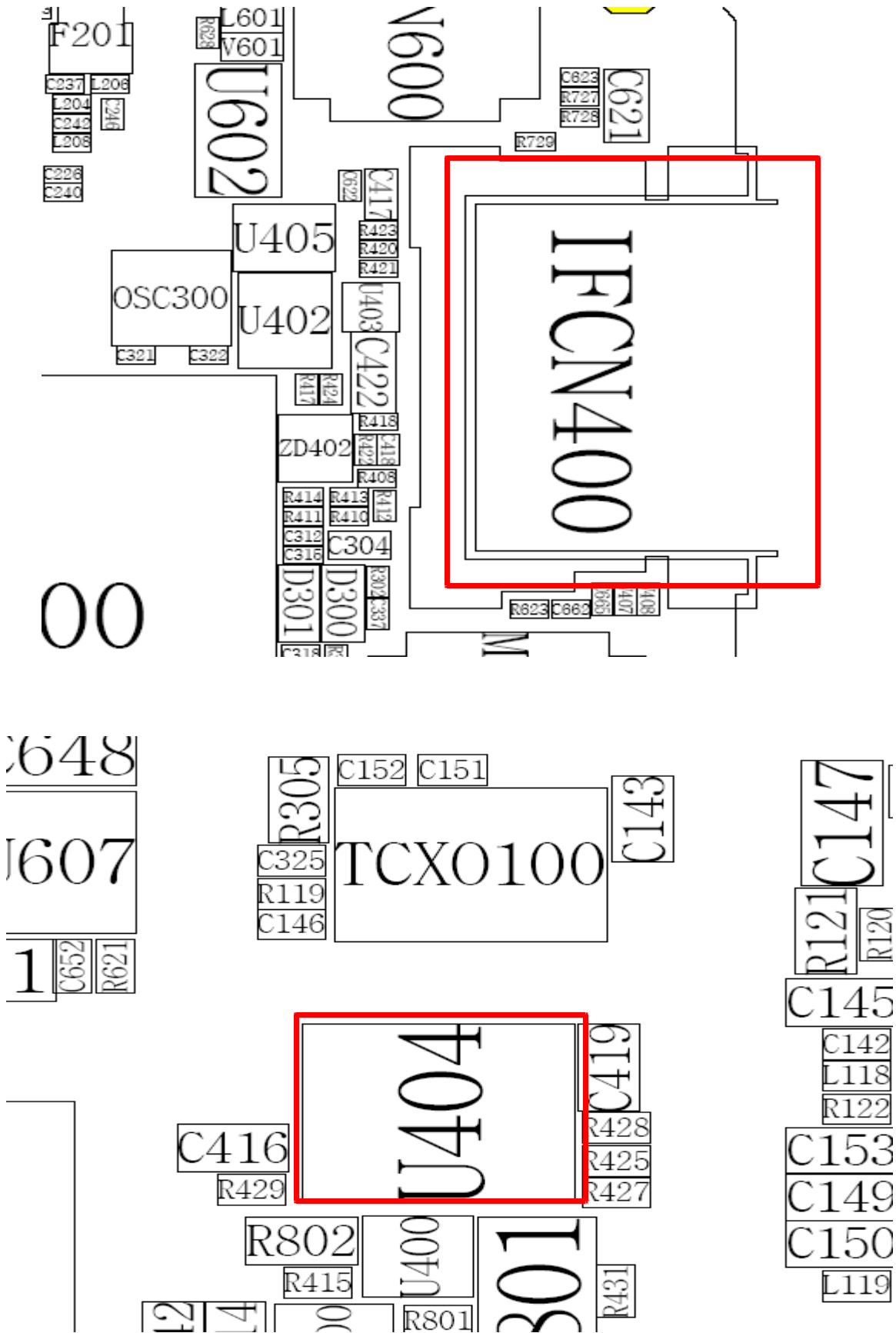


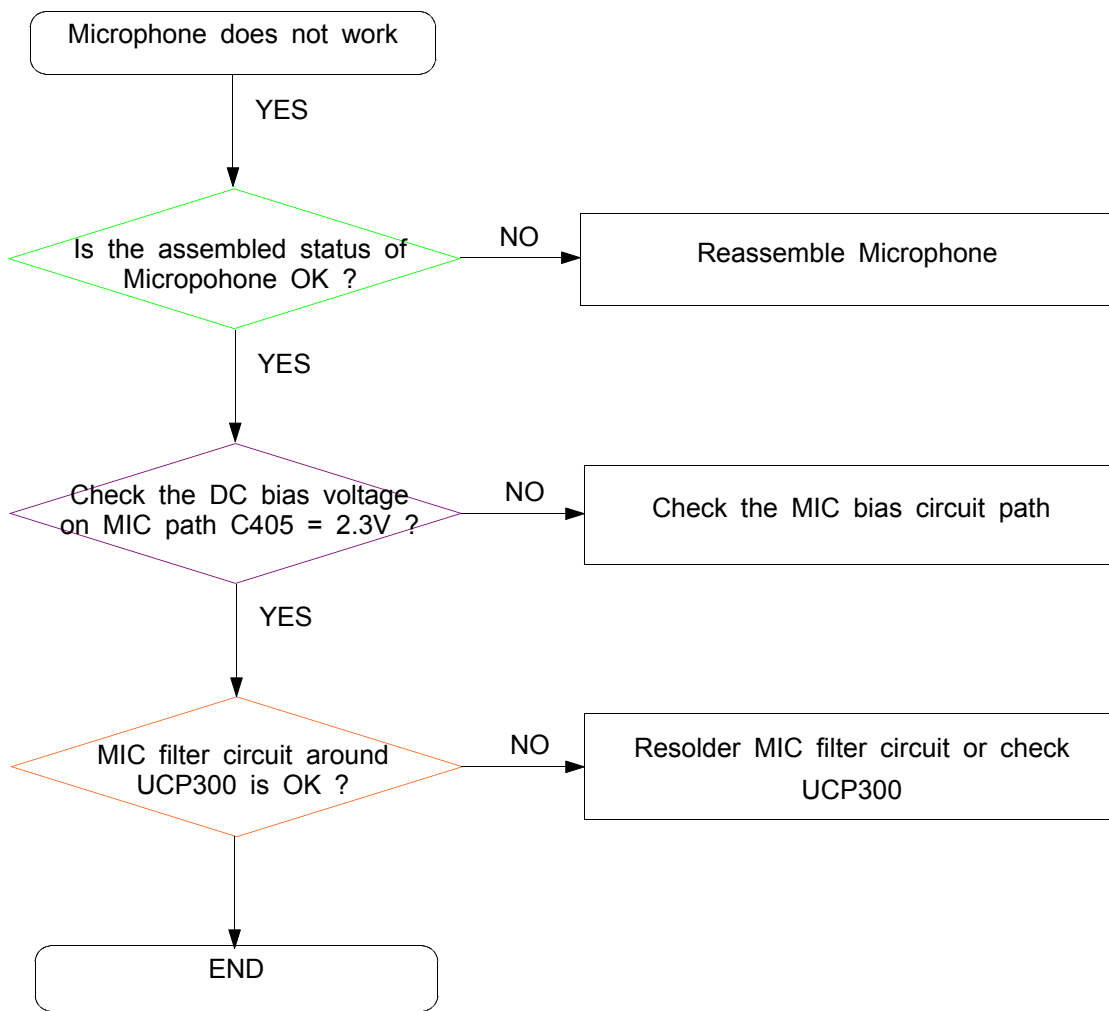


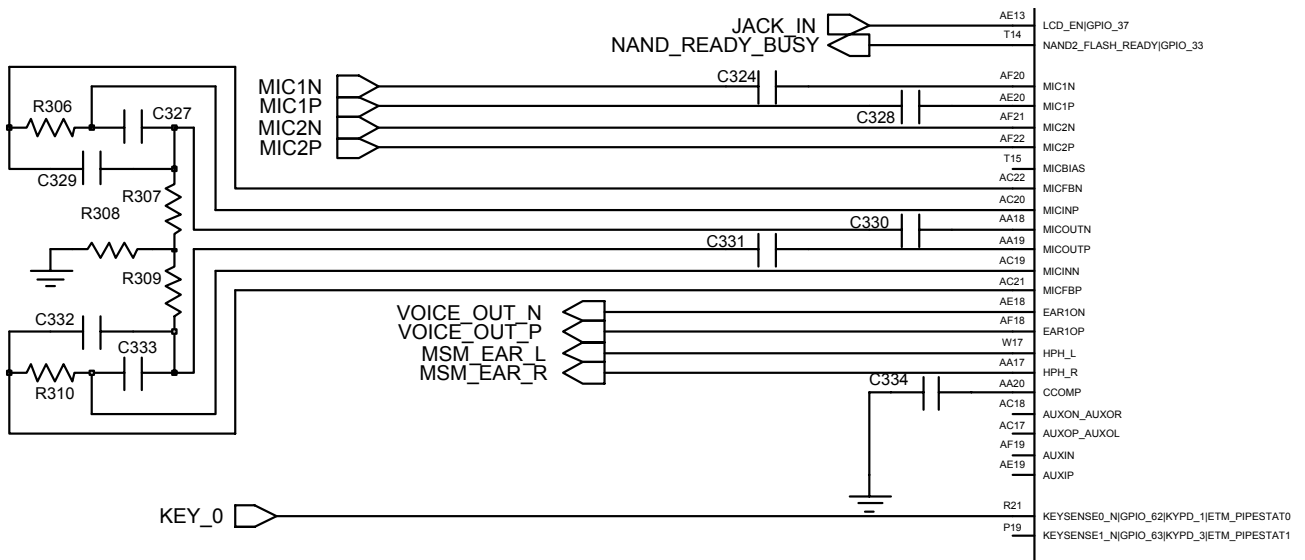
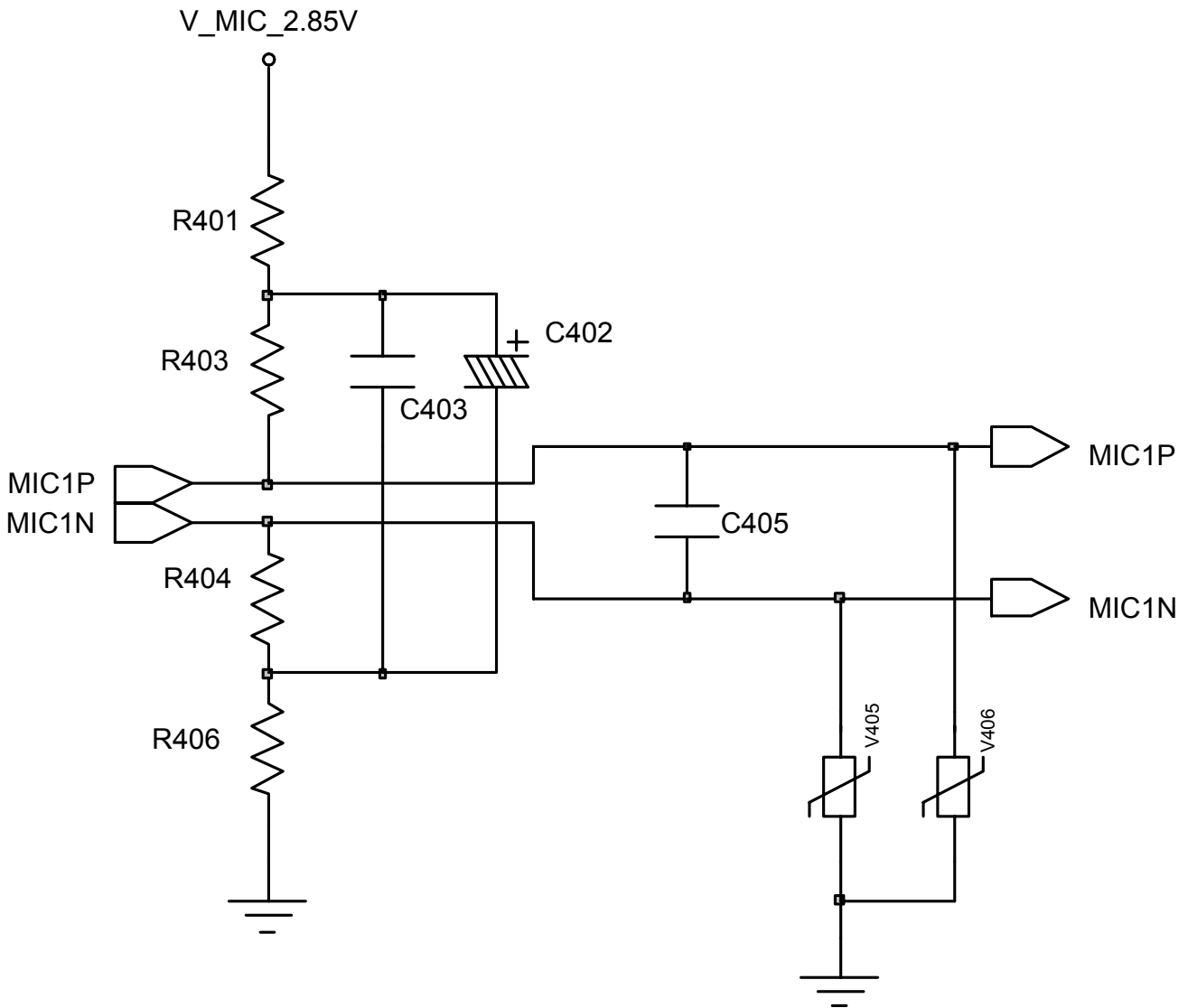
### 3-1-4. Charging Part

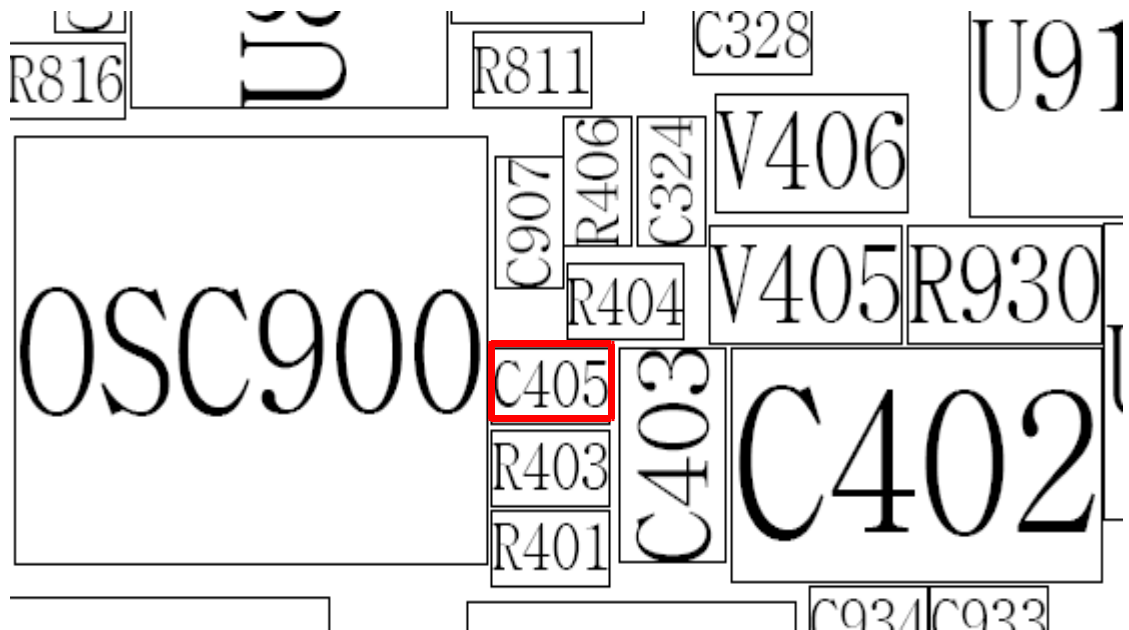




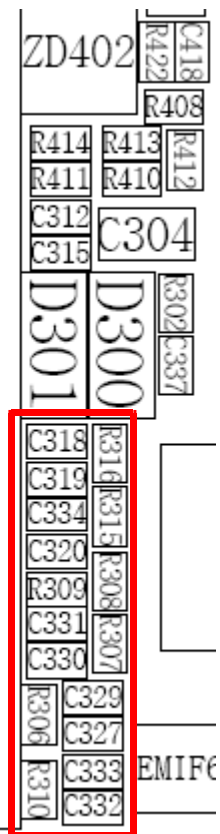


**3-1-5. Microphone Part**

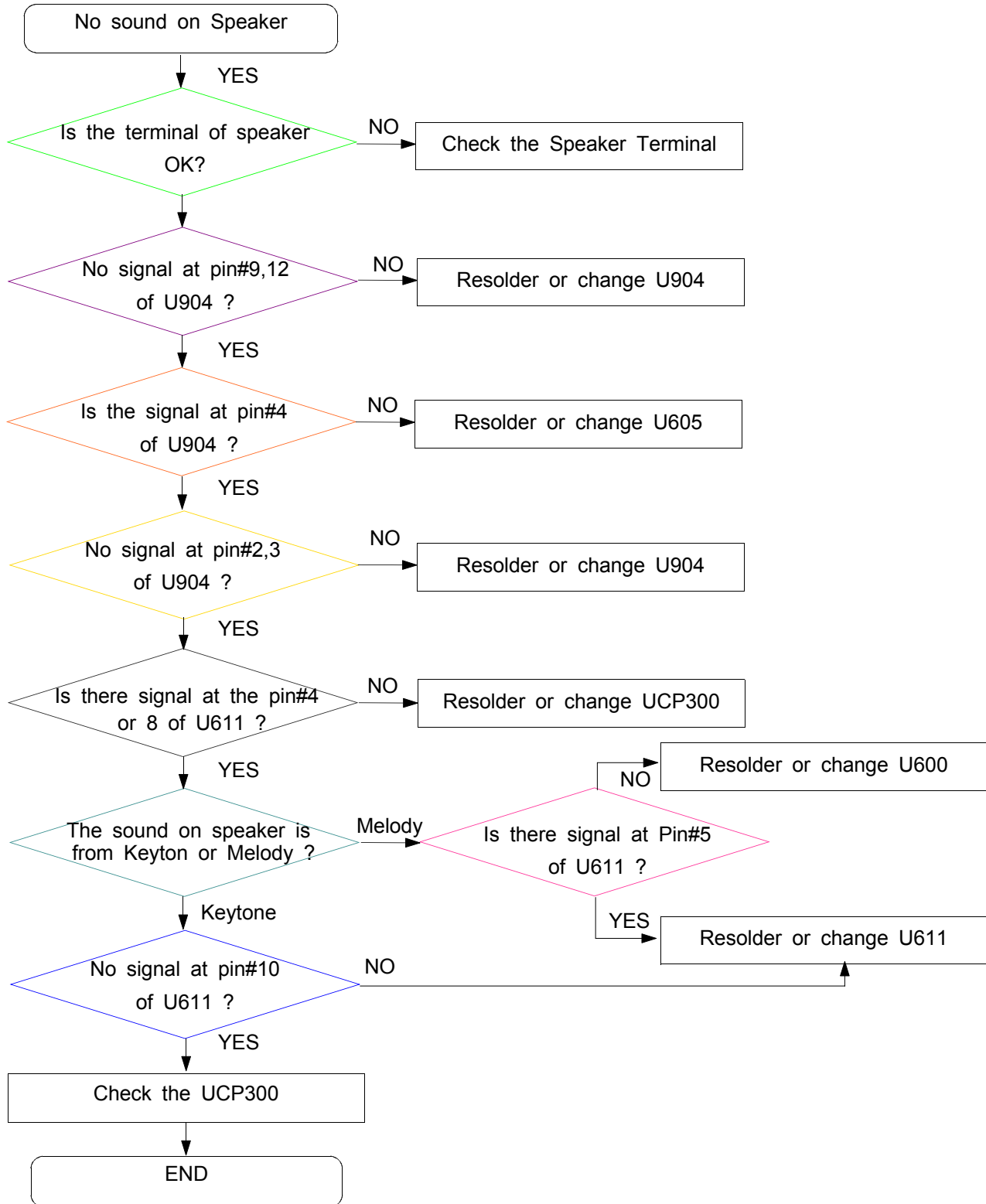


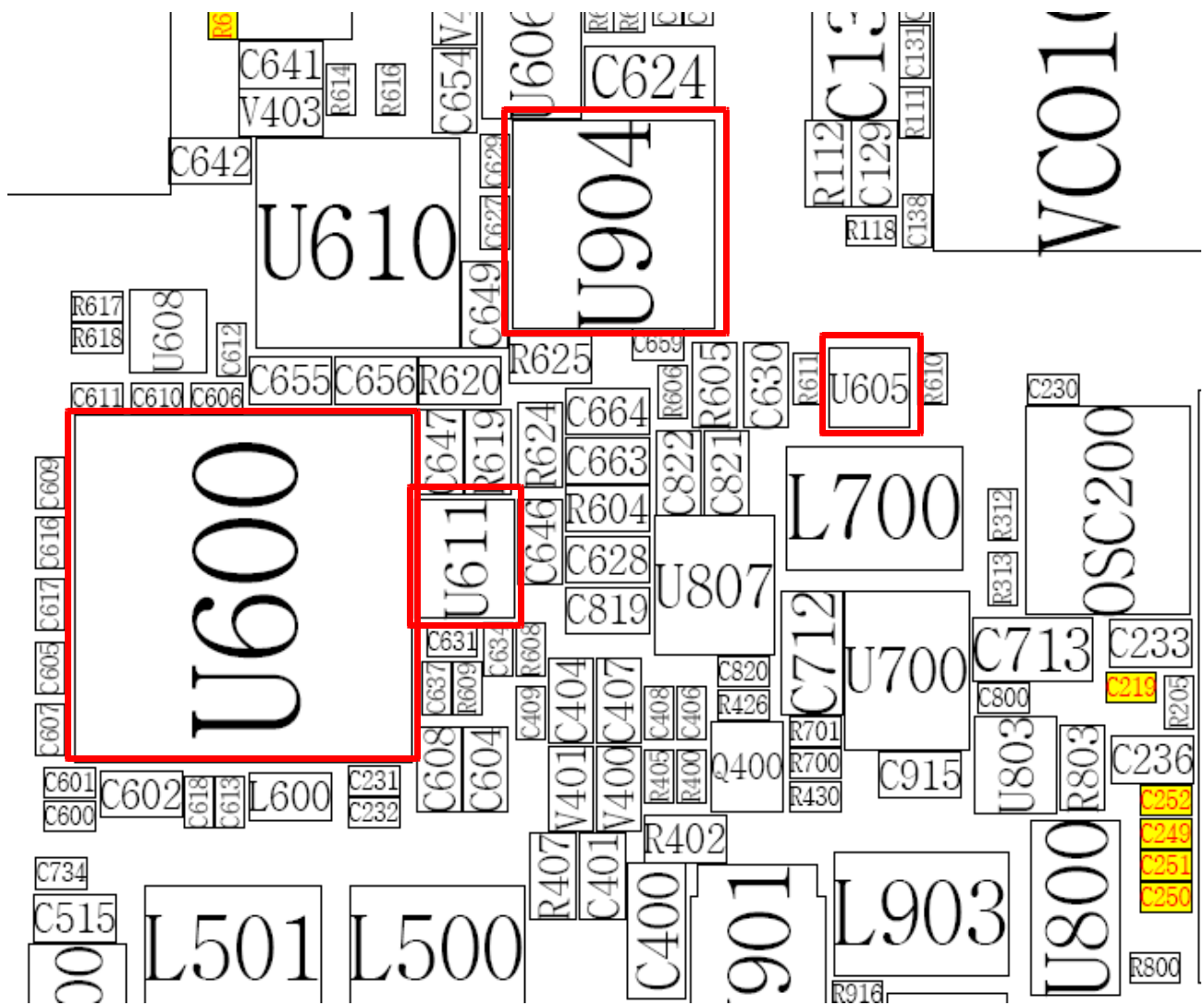


UCP300

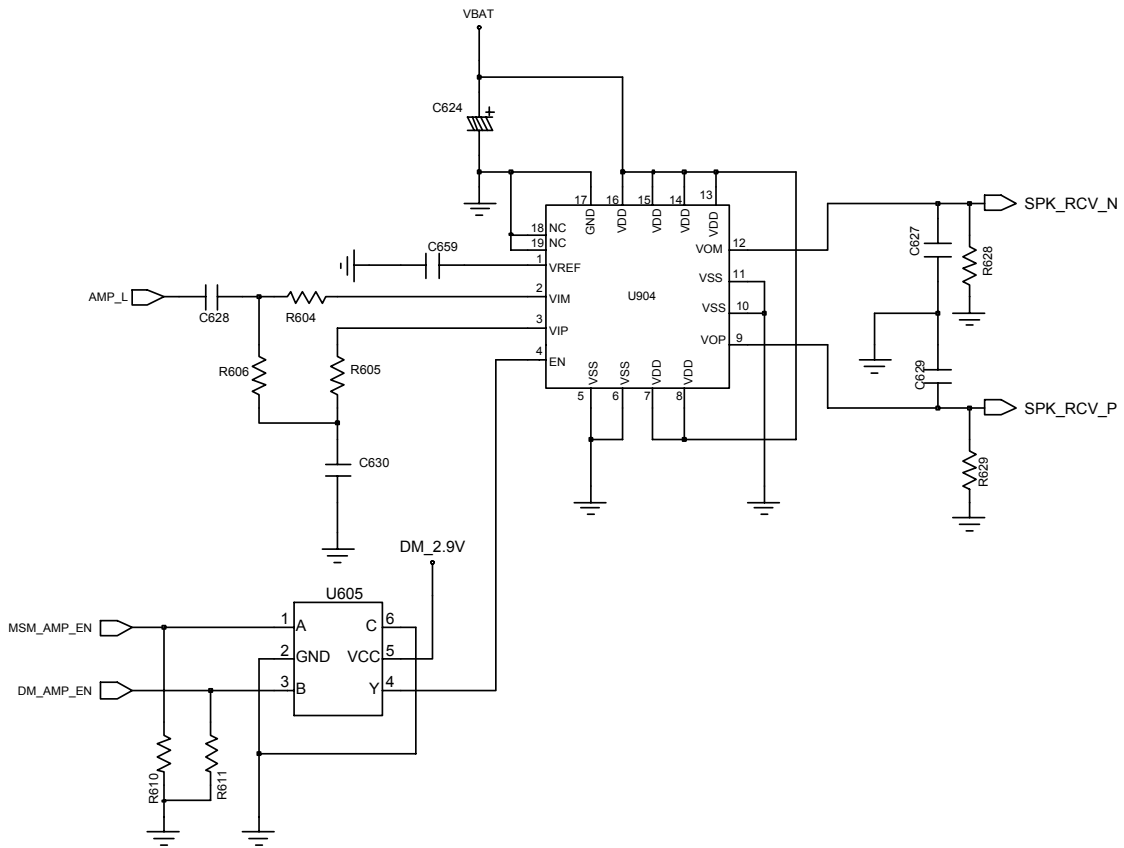
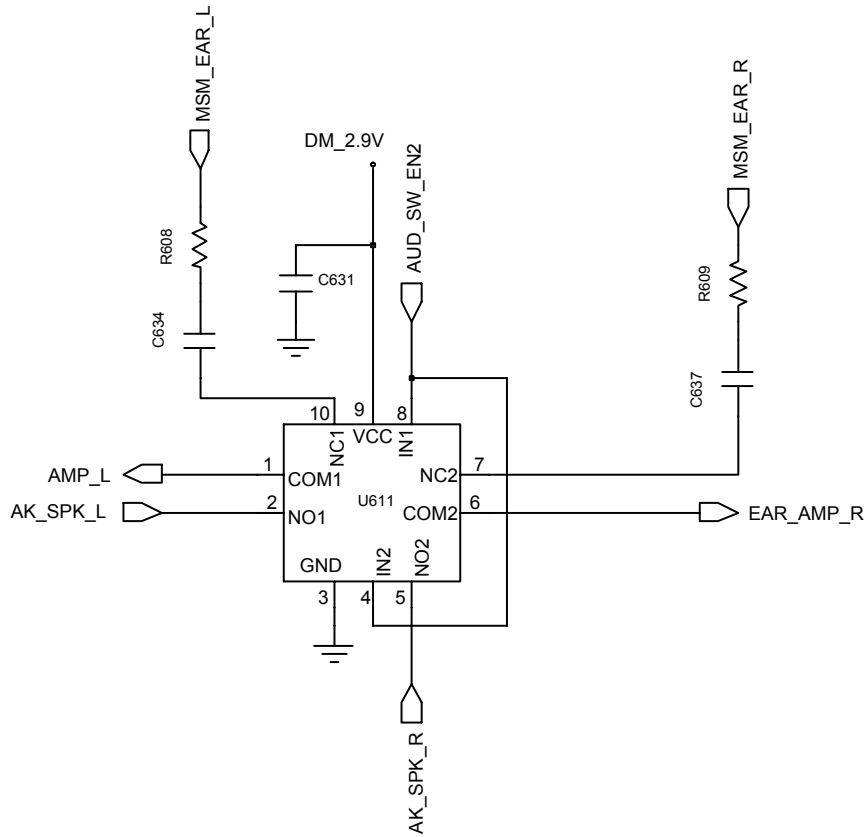


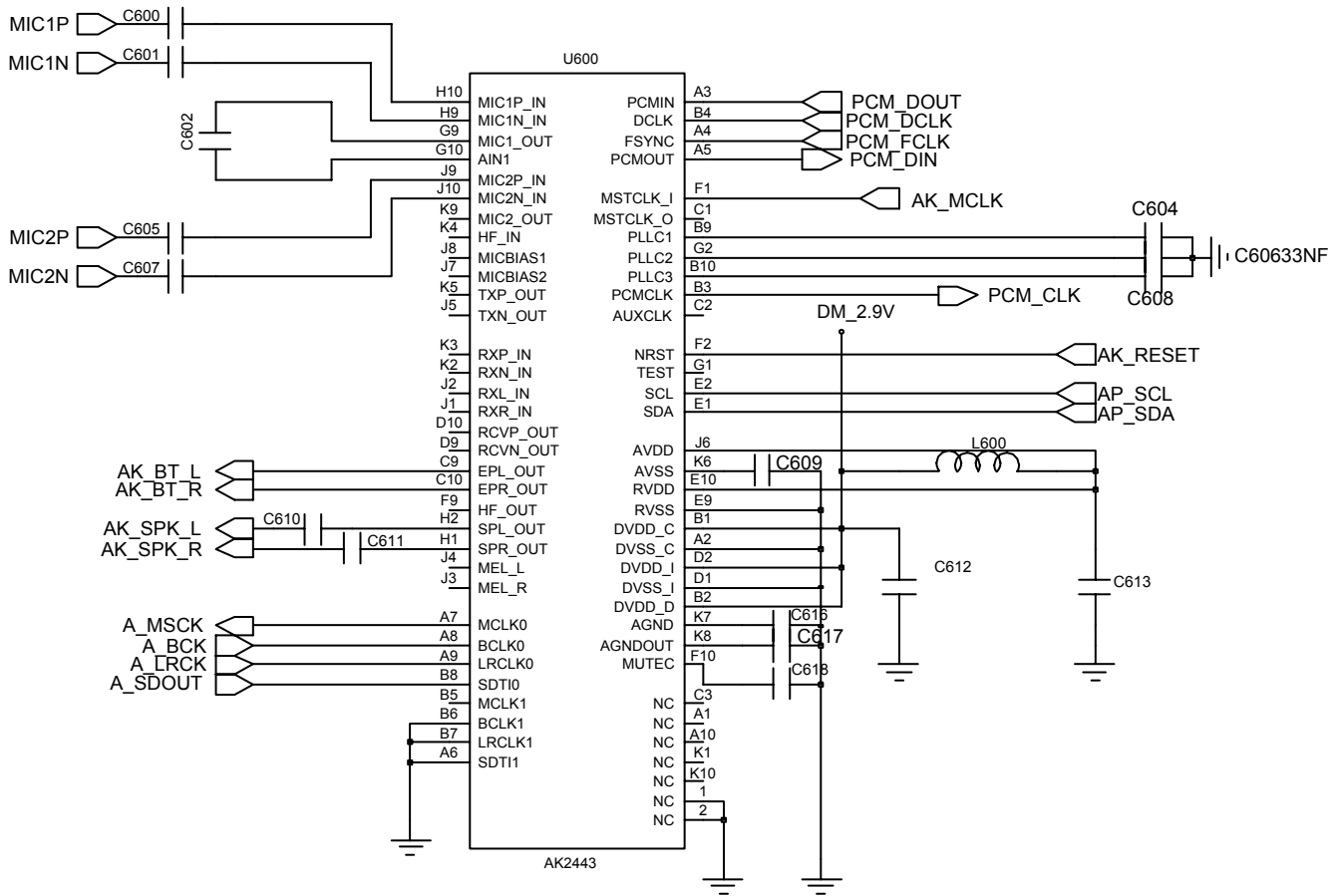
### 3-1-6. Speaker Part



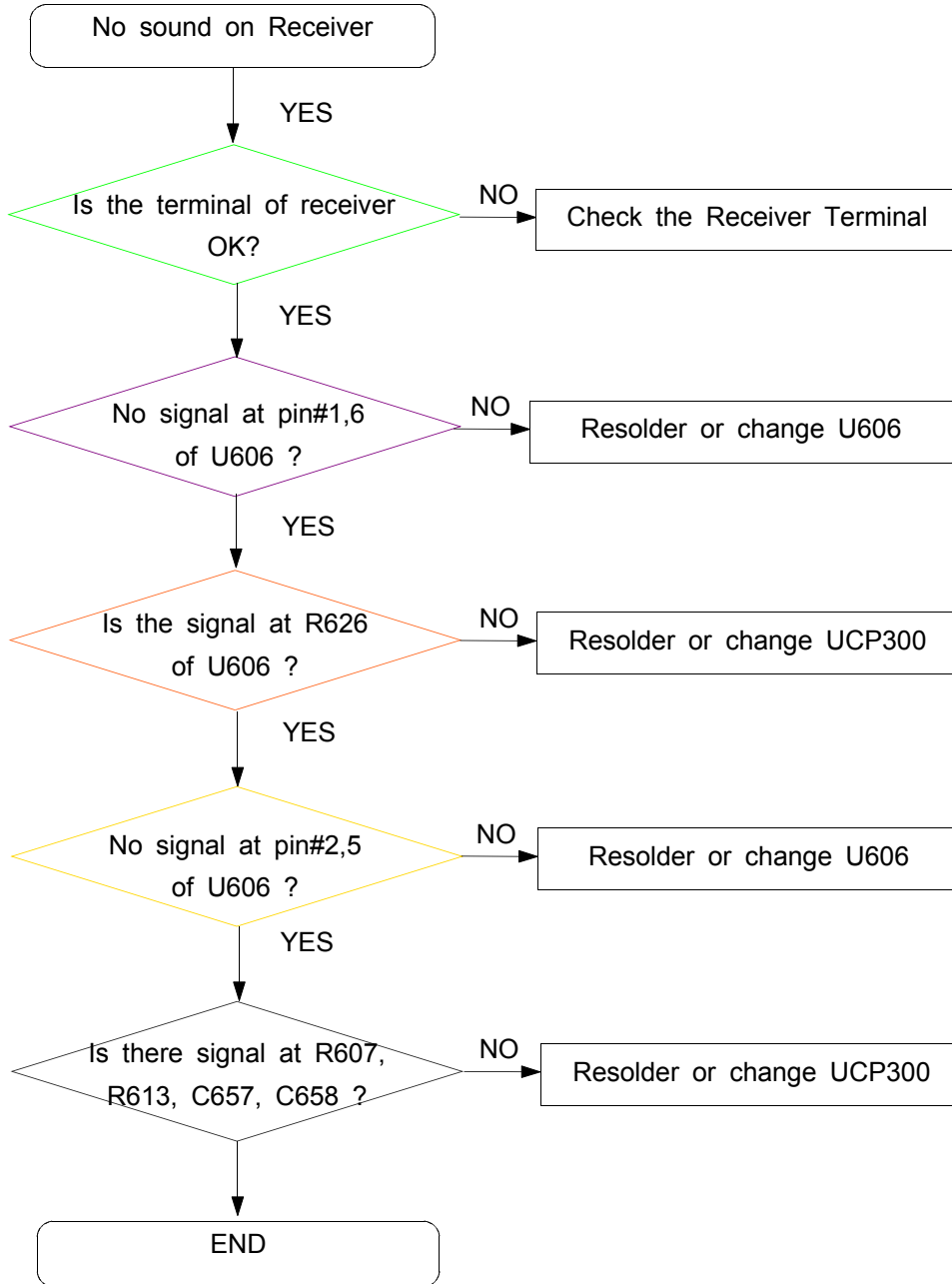


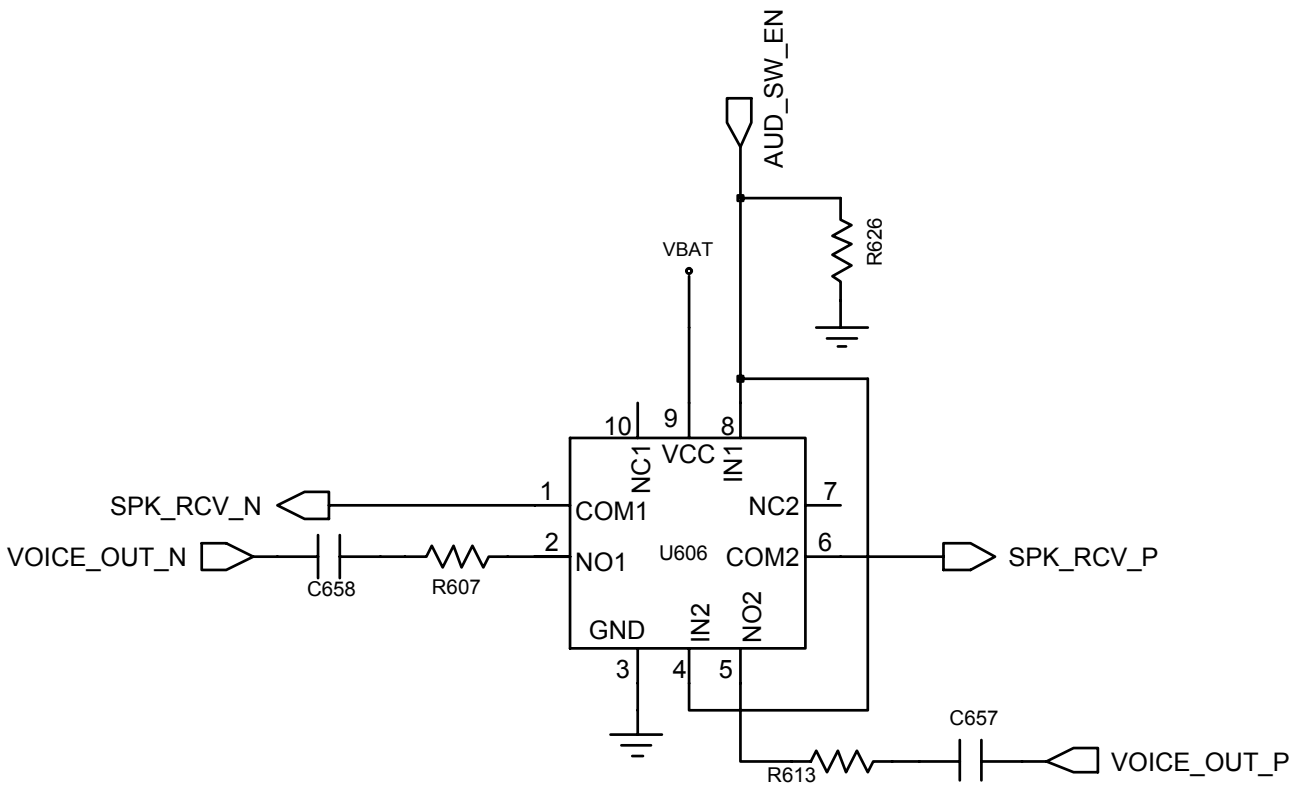


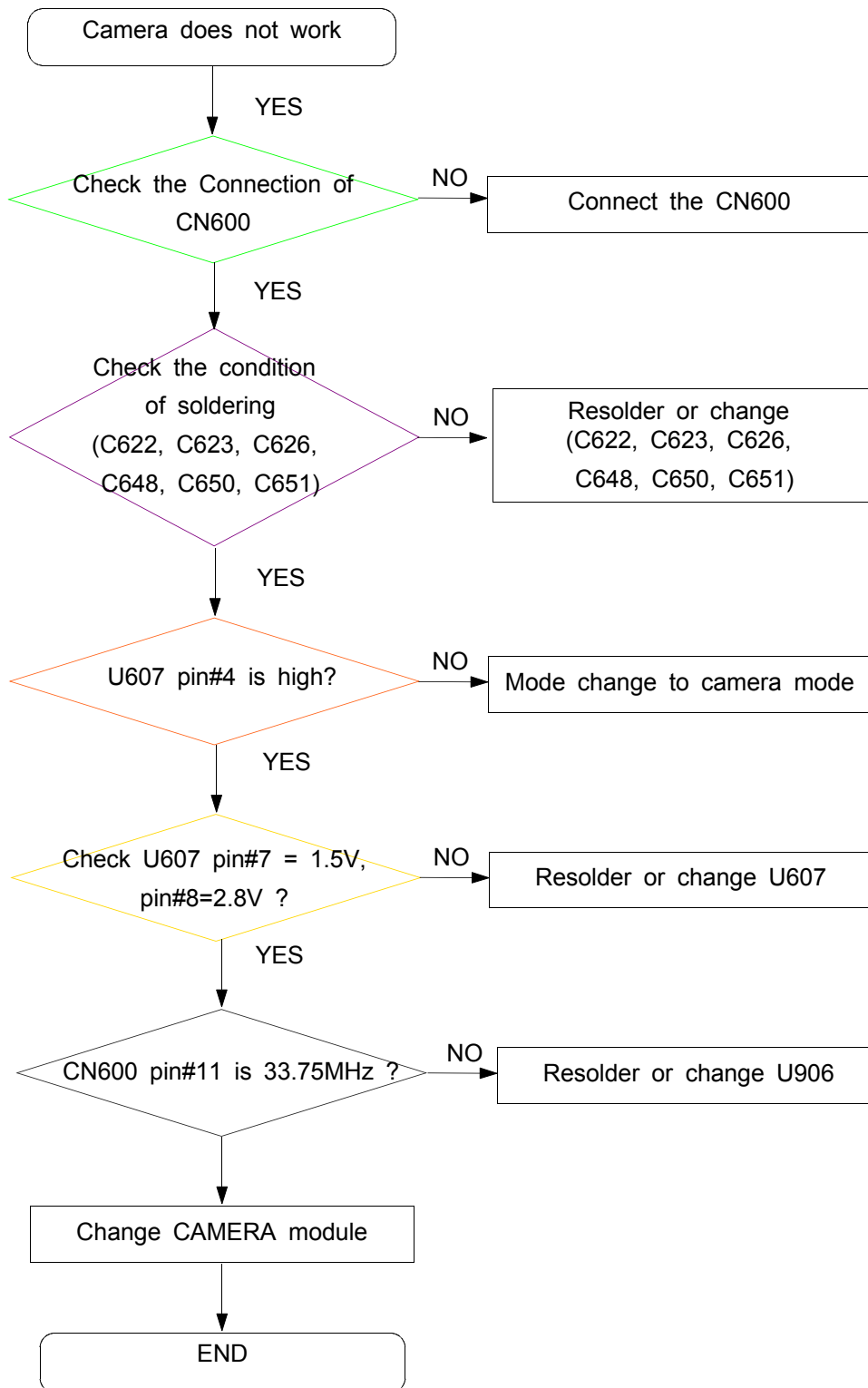


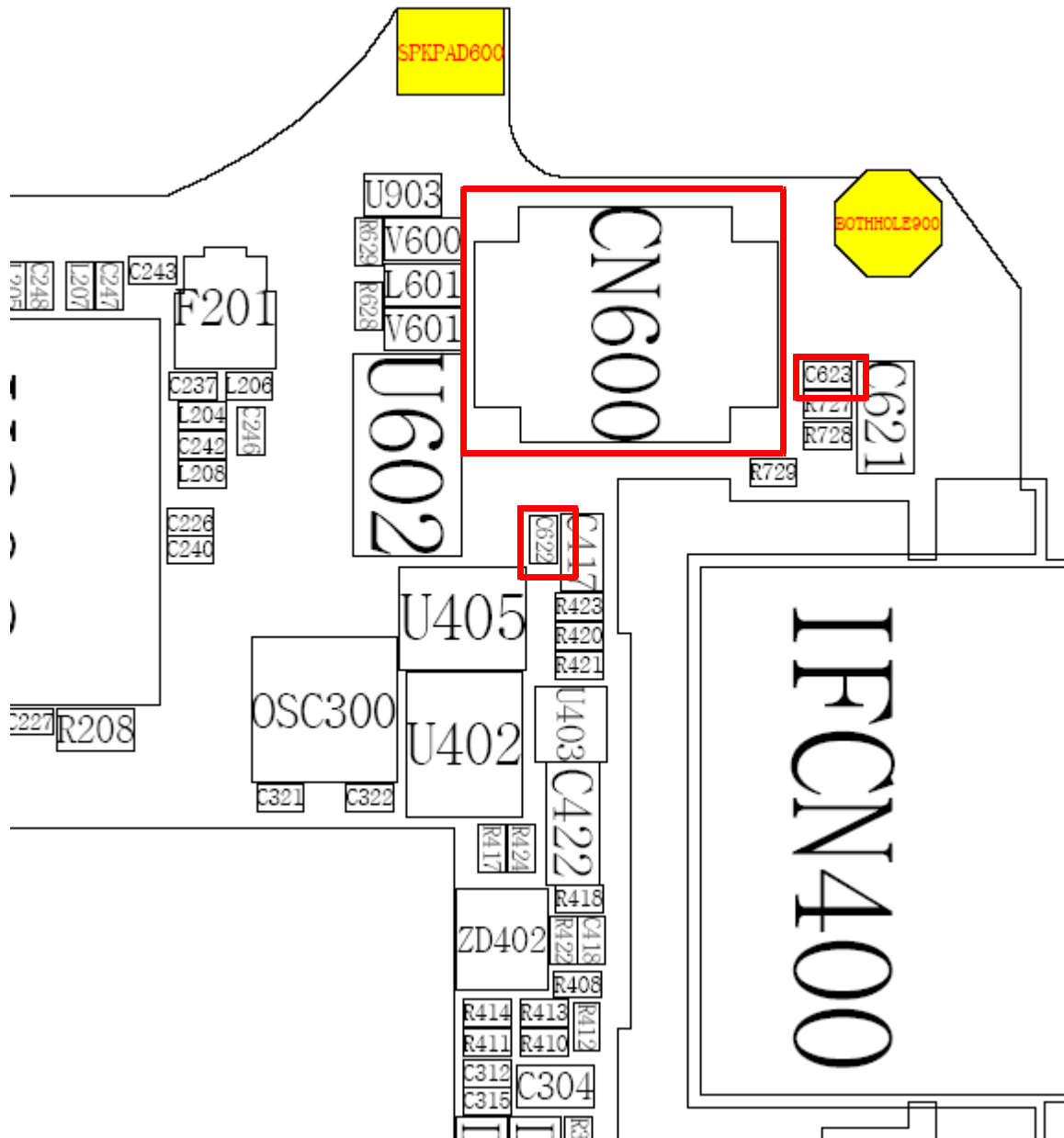


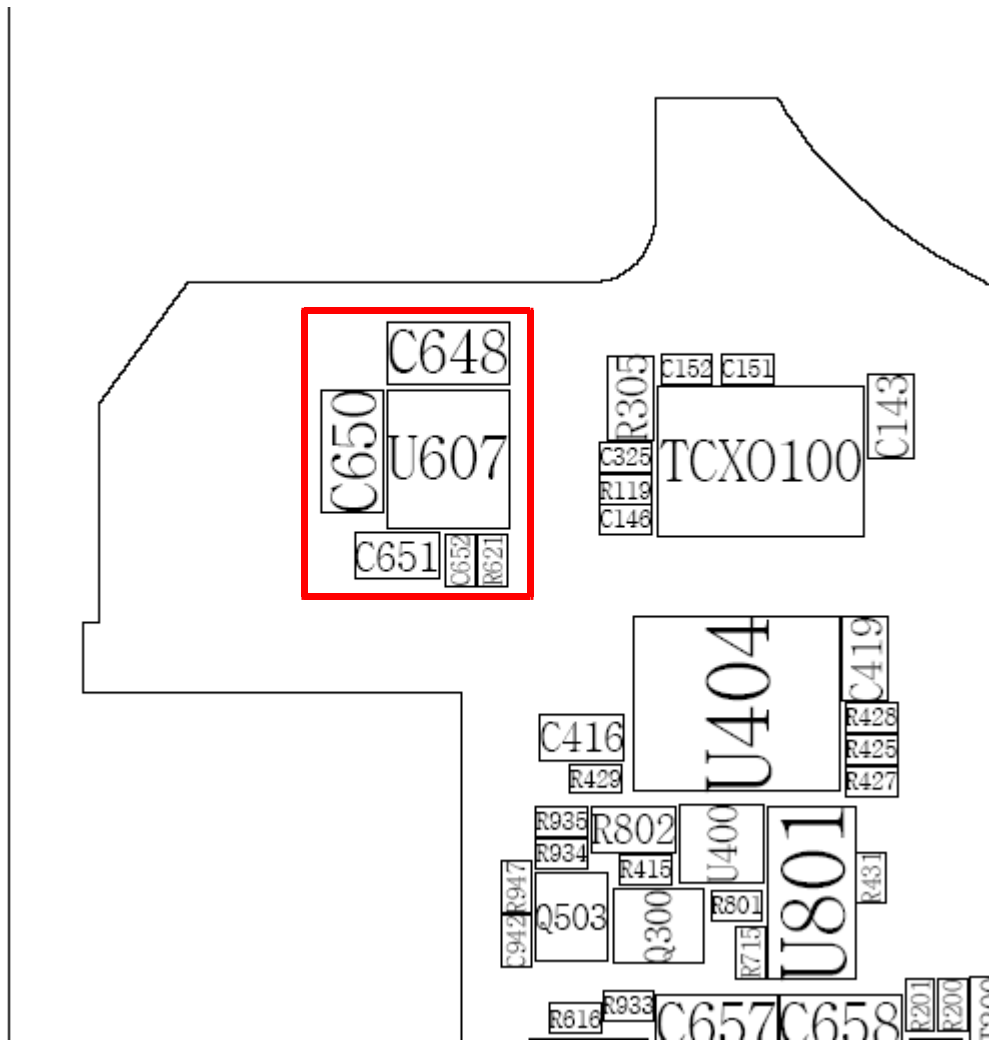
### 3-1-7. Receiver Part

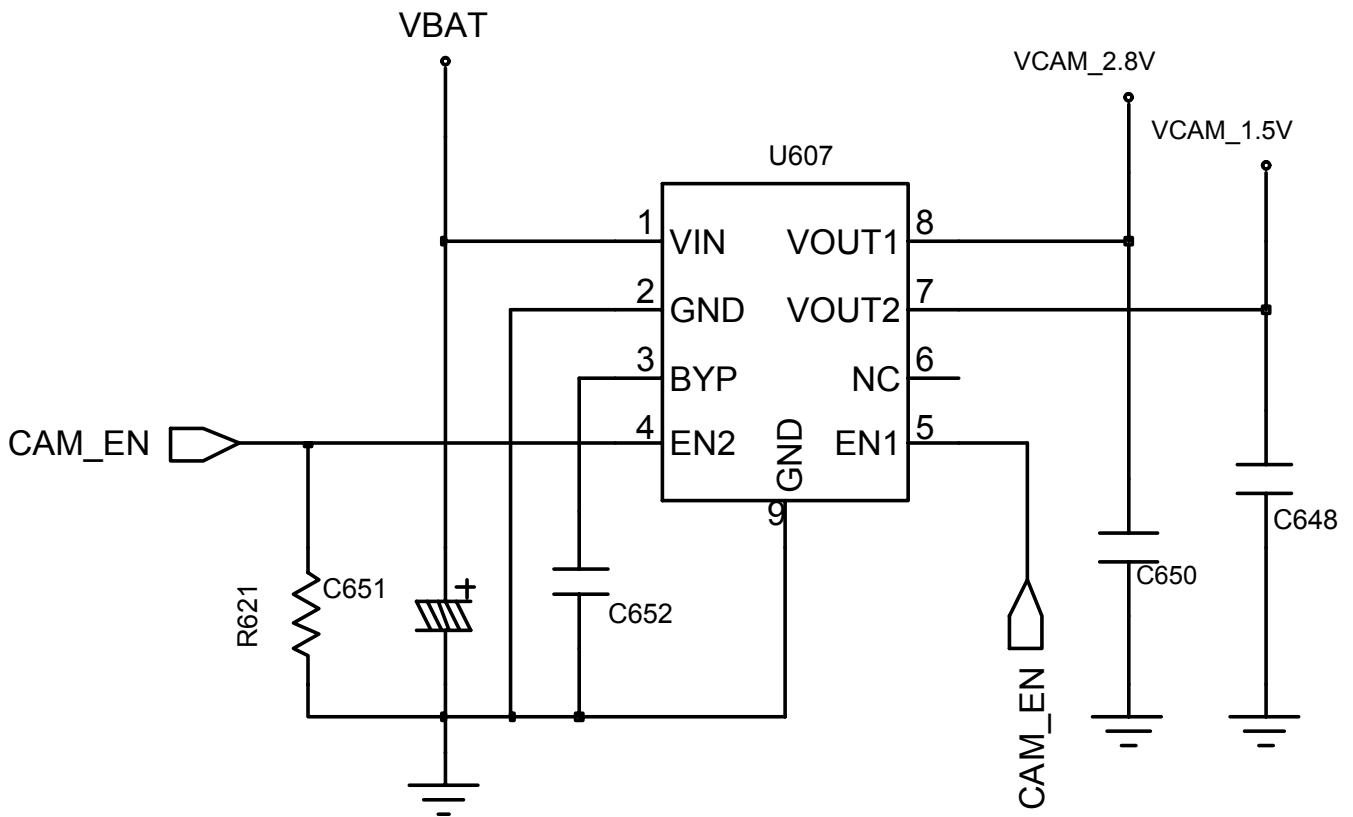
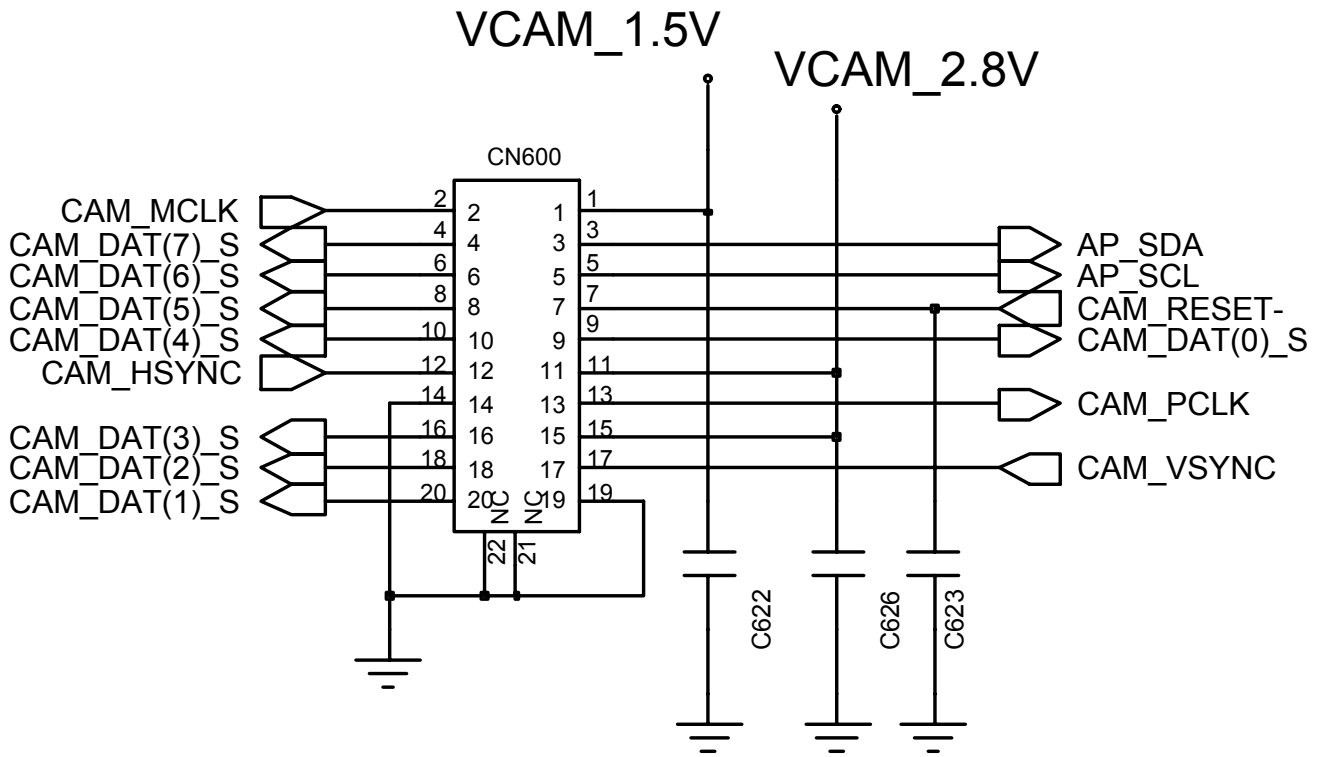




**3-1-8. Camera Part**



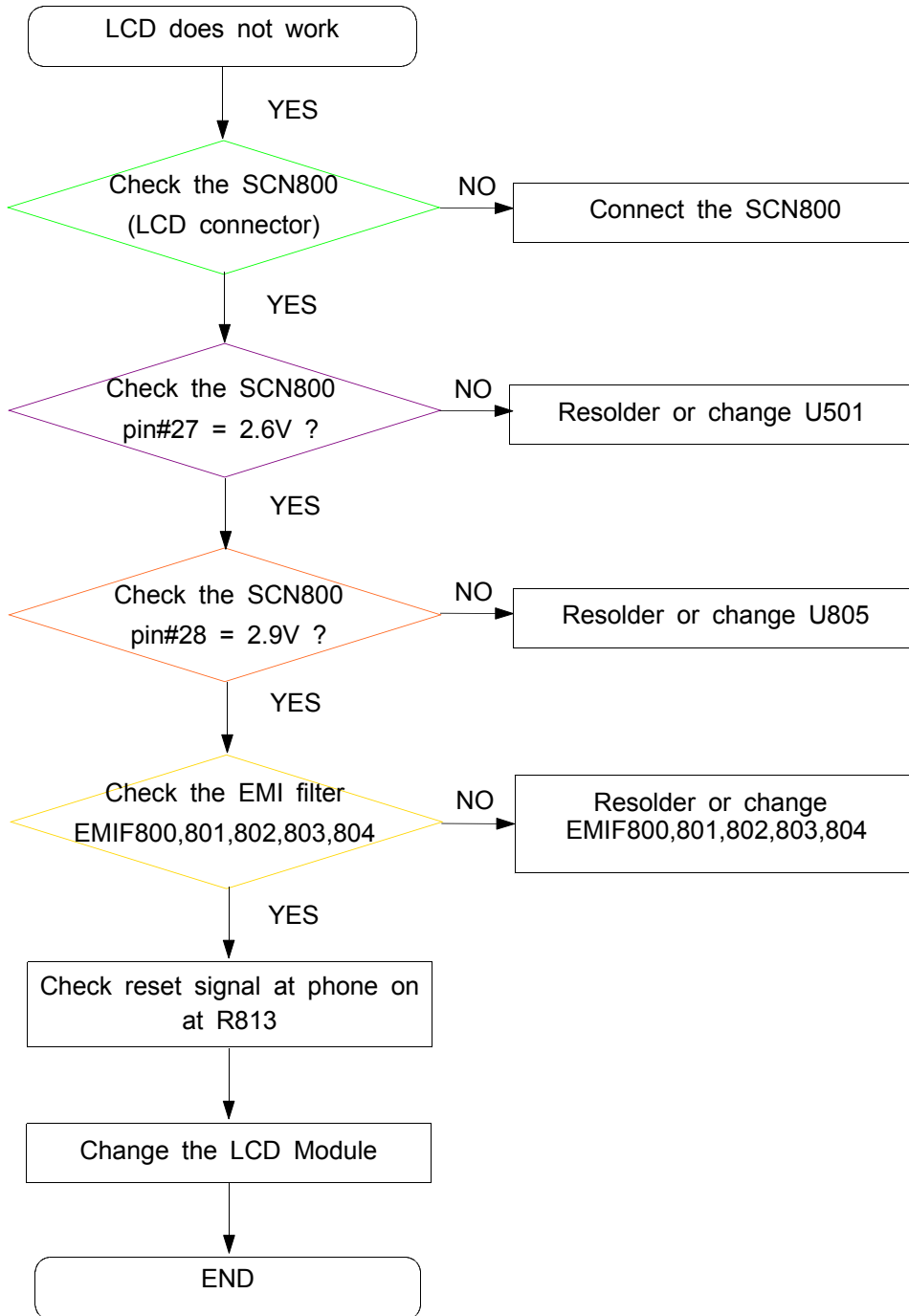




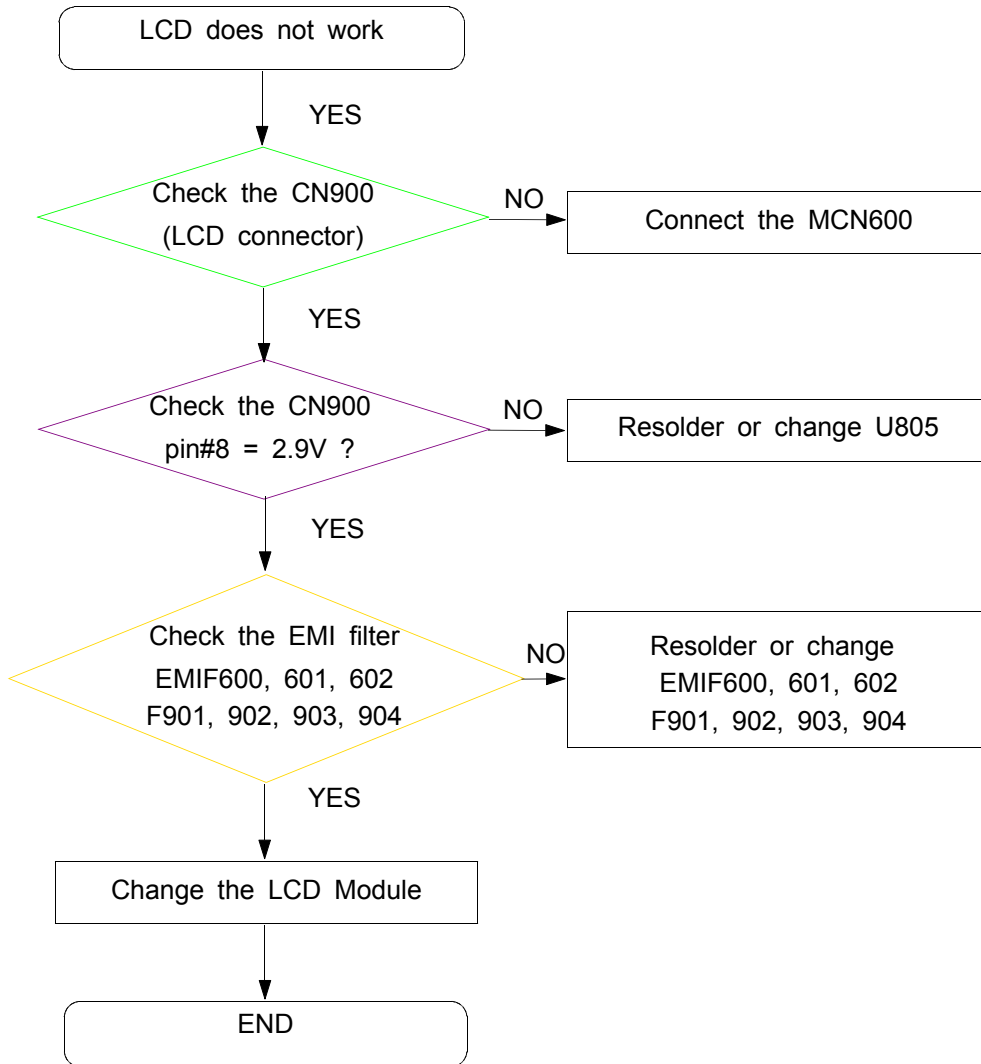


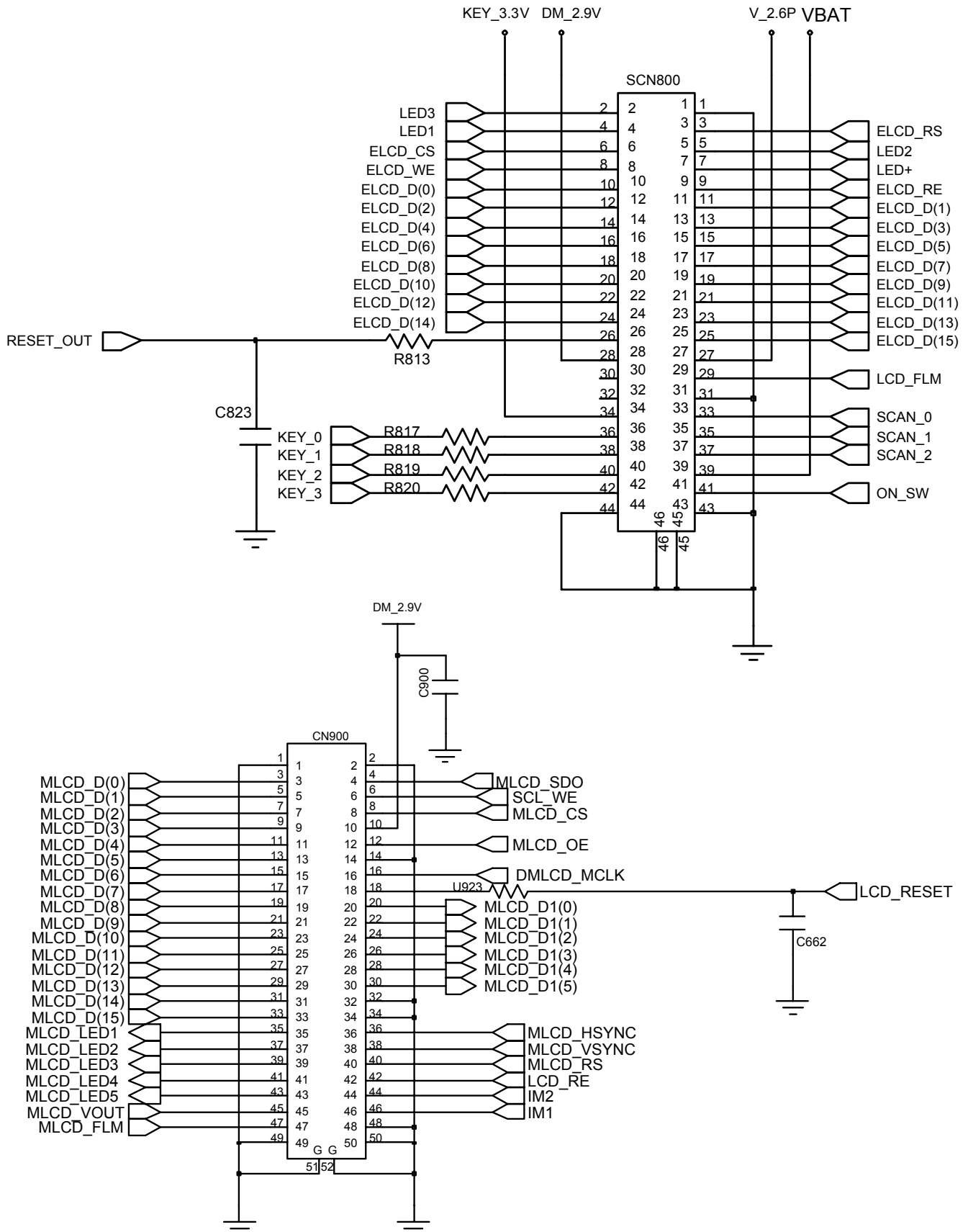
### 3-1-9. LCD

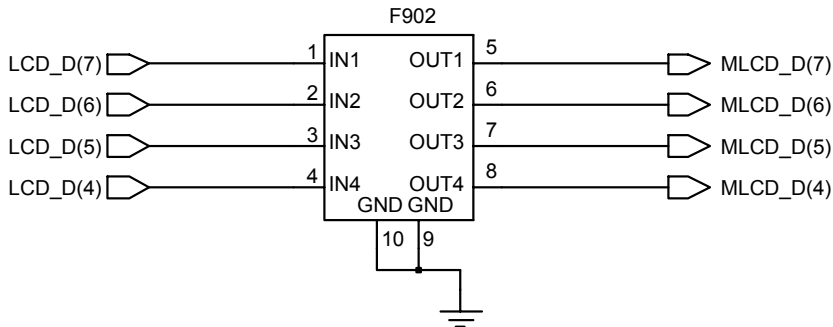
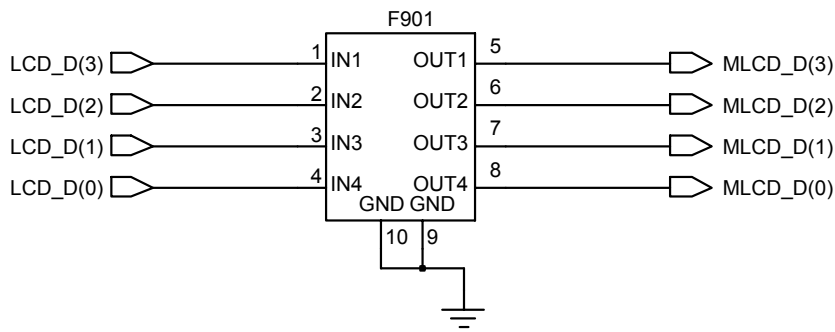
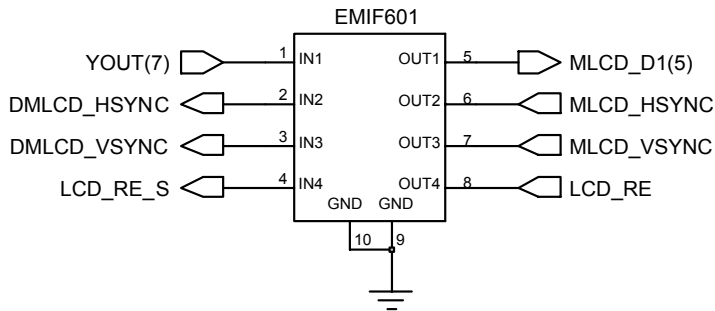
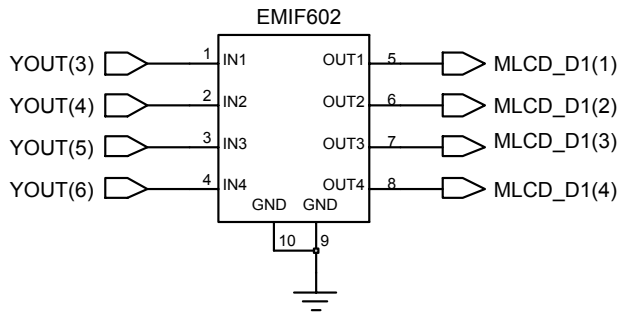
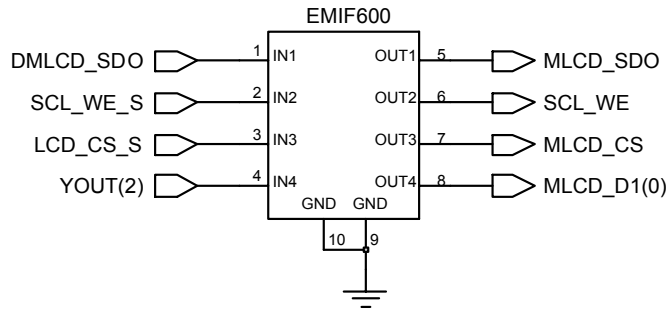
#### 3-1-9-1. 1.5 inch LCD

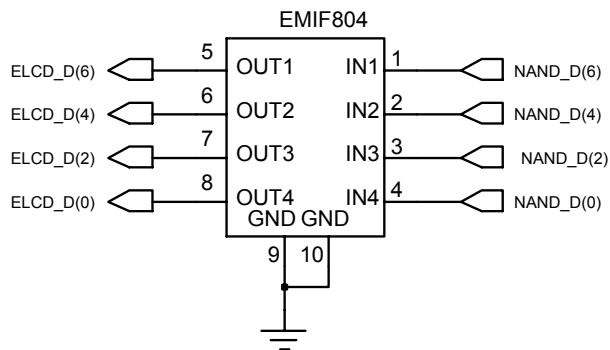
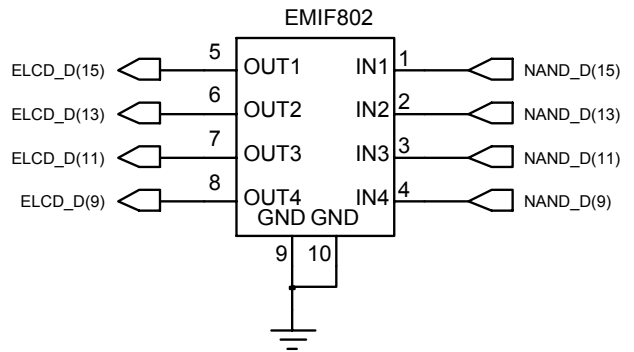
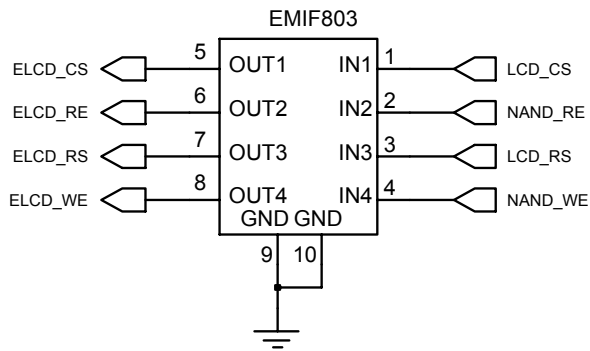
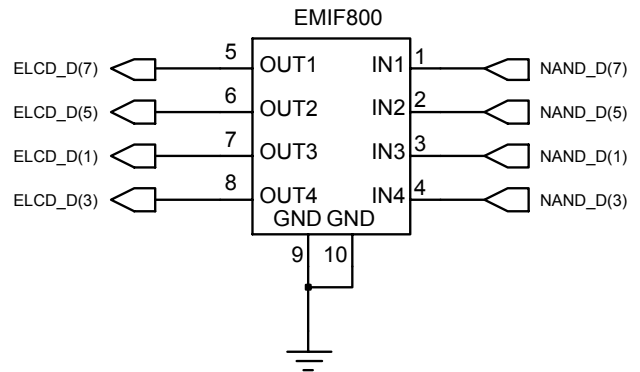
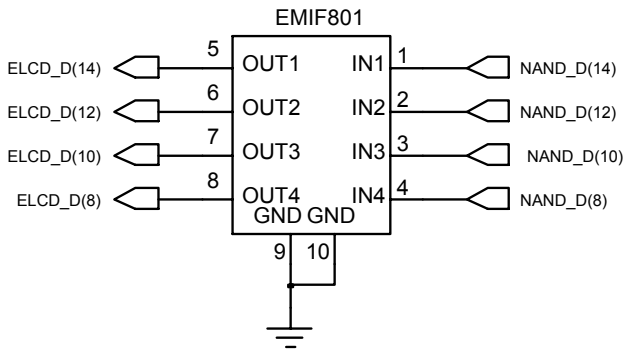


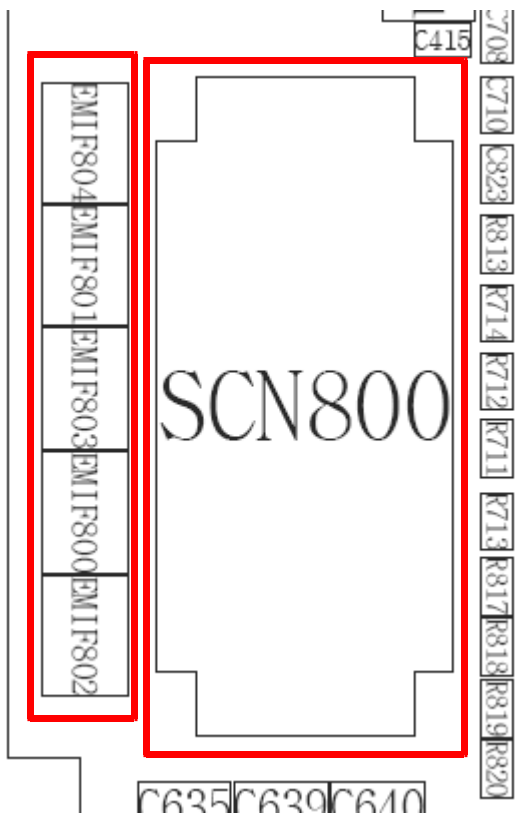
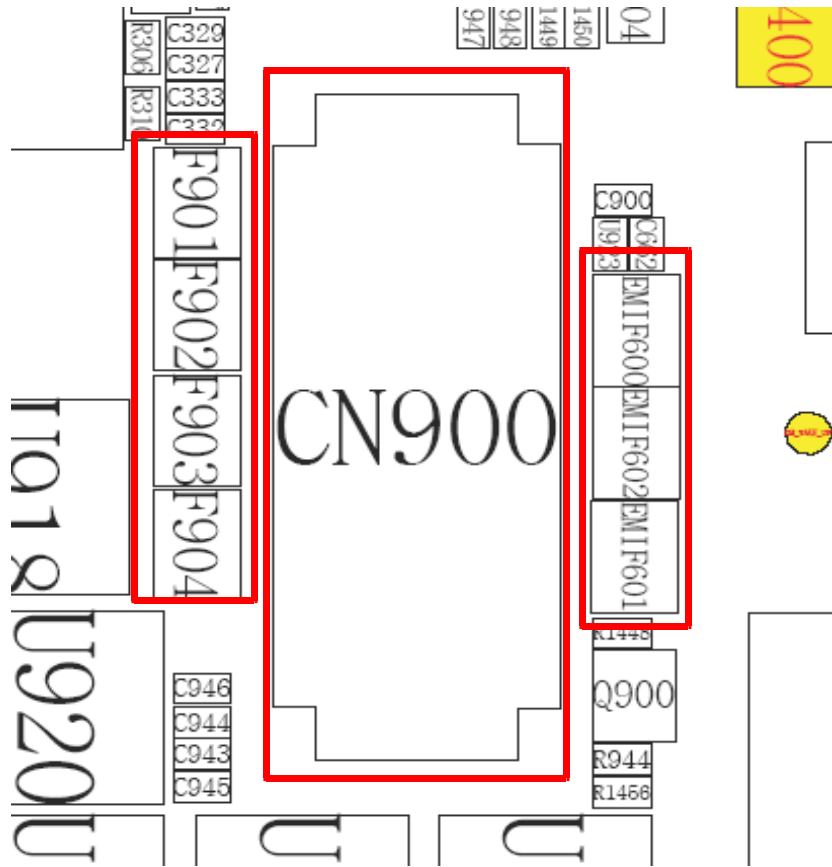
### 3-1-9-2. 2.4 inch LCD



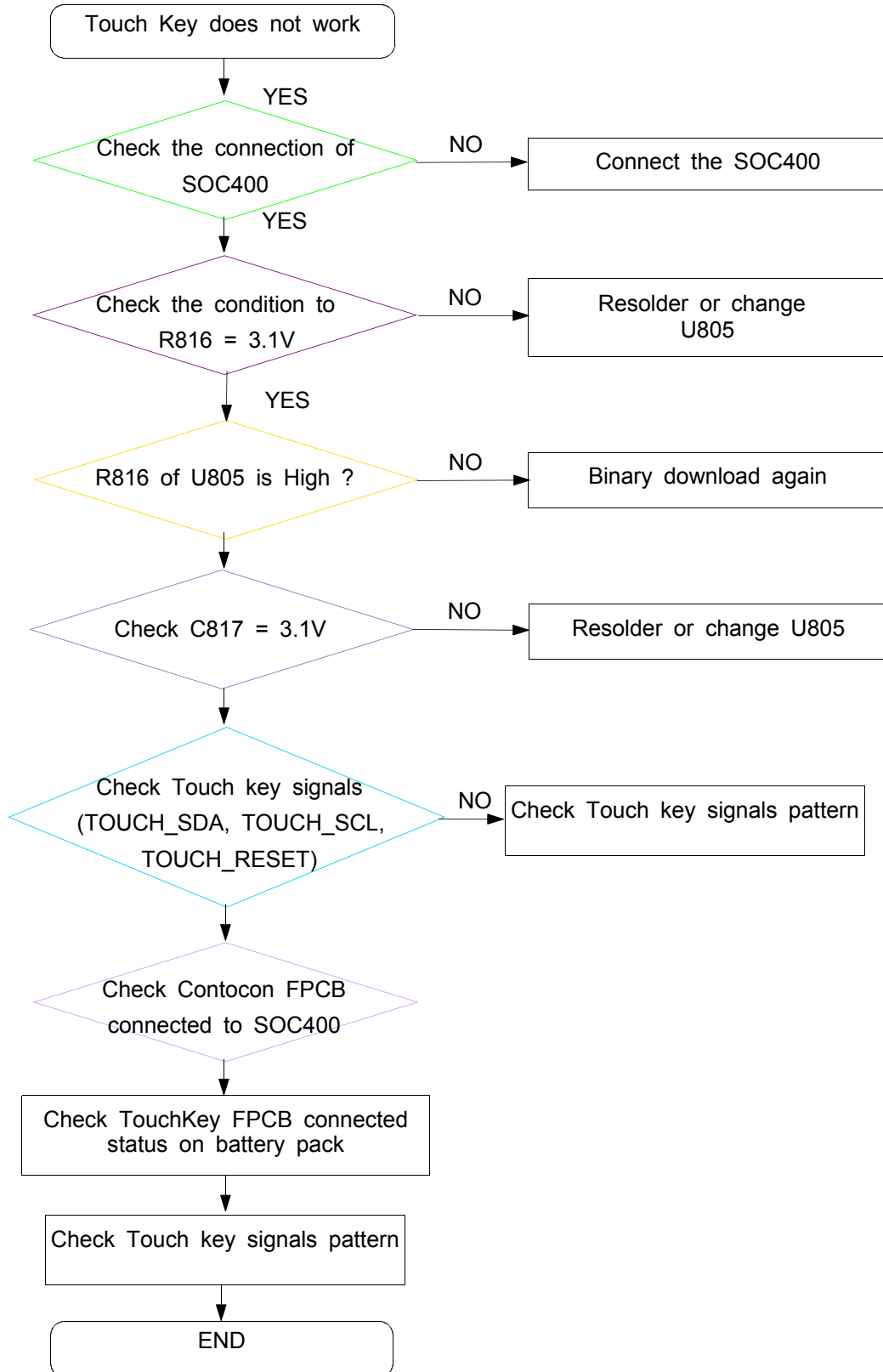


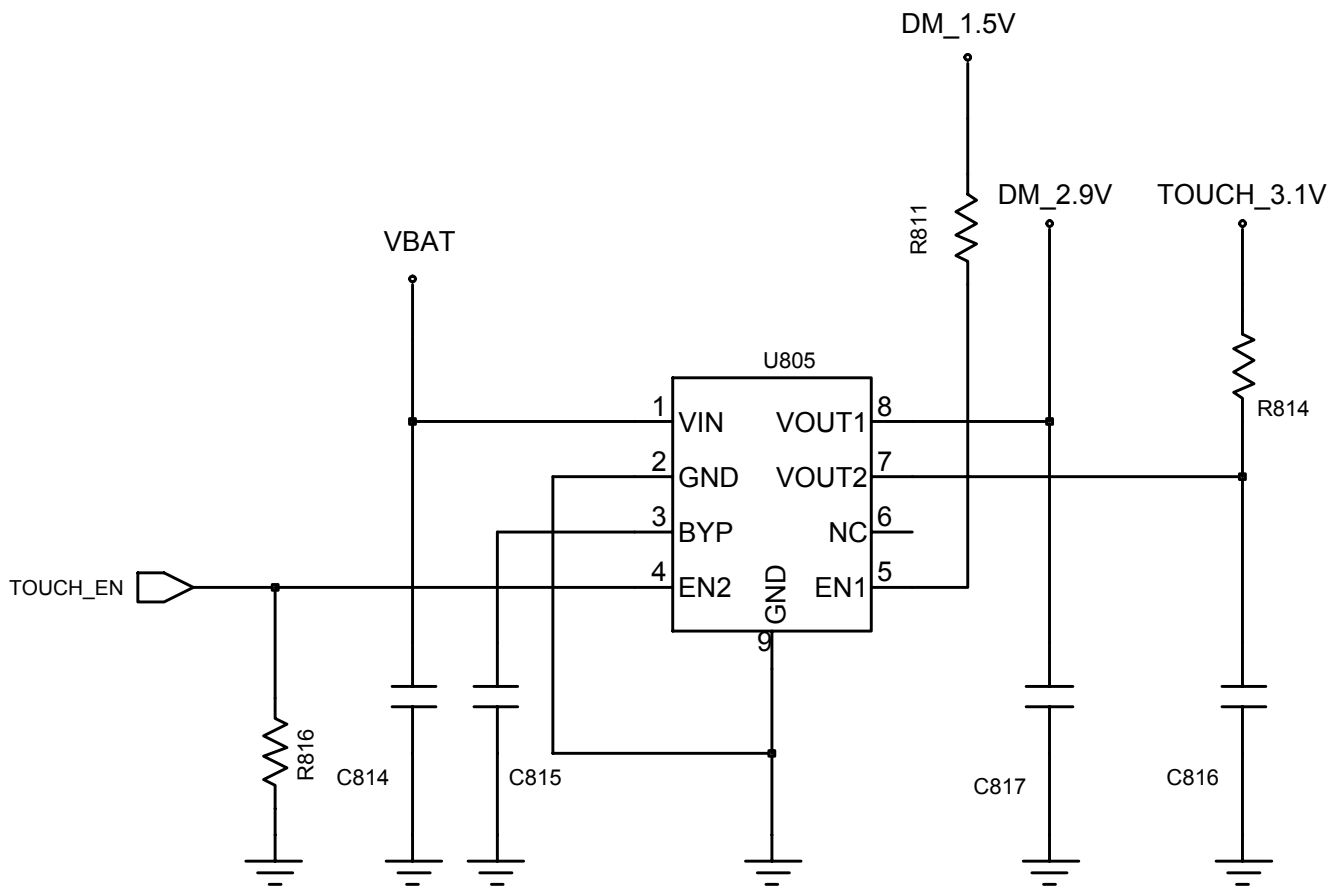




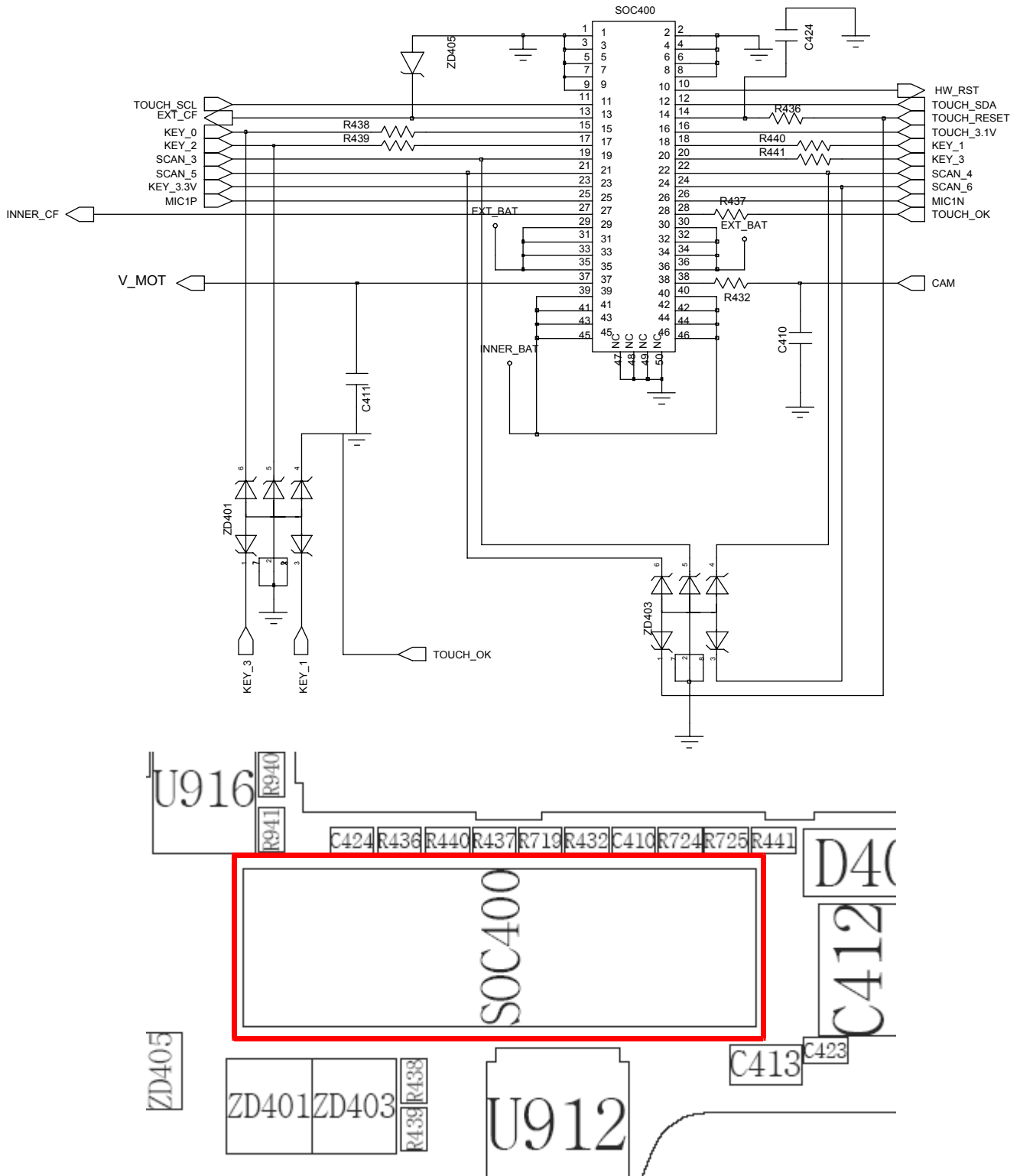


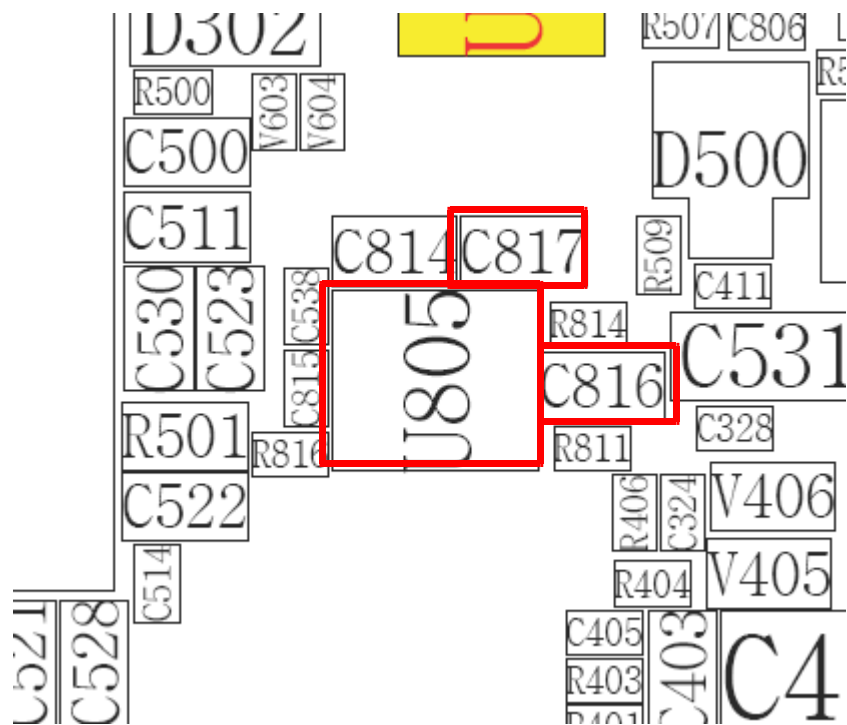
### 3-1-10. Touch Key





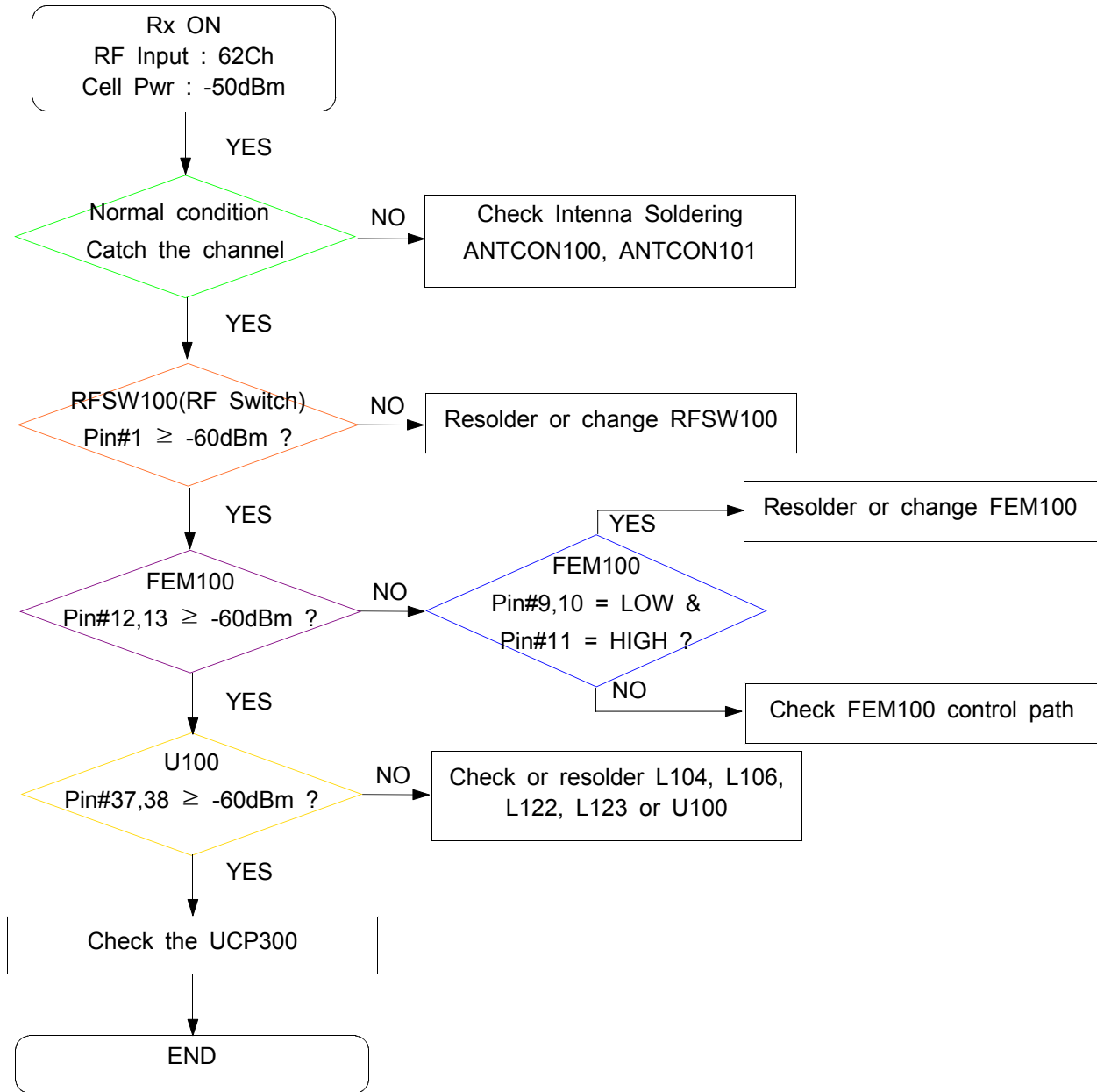




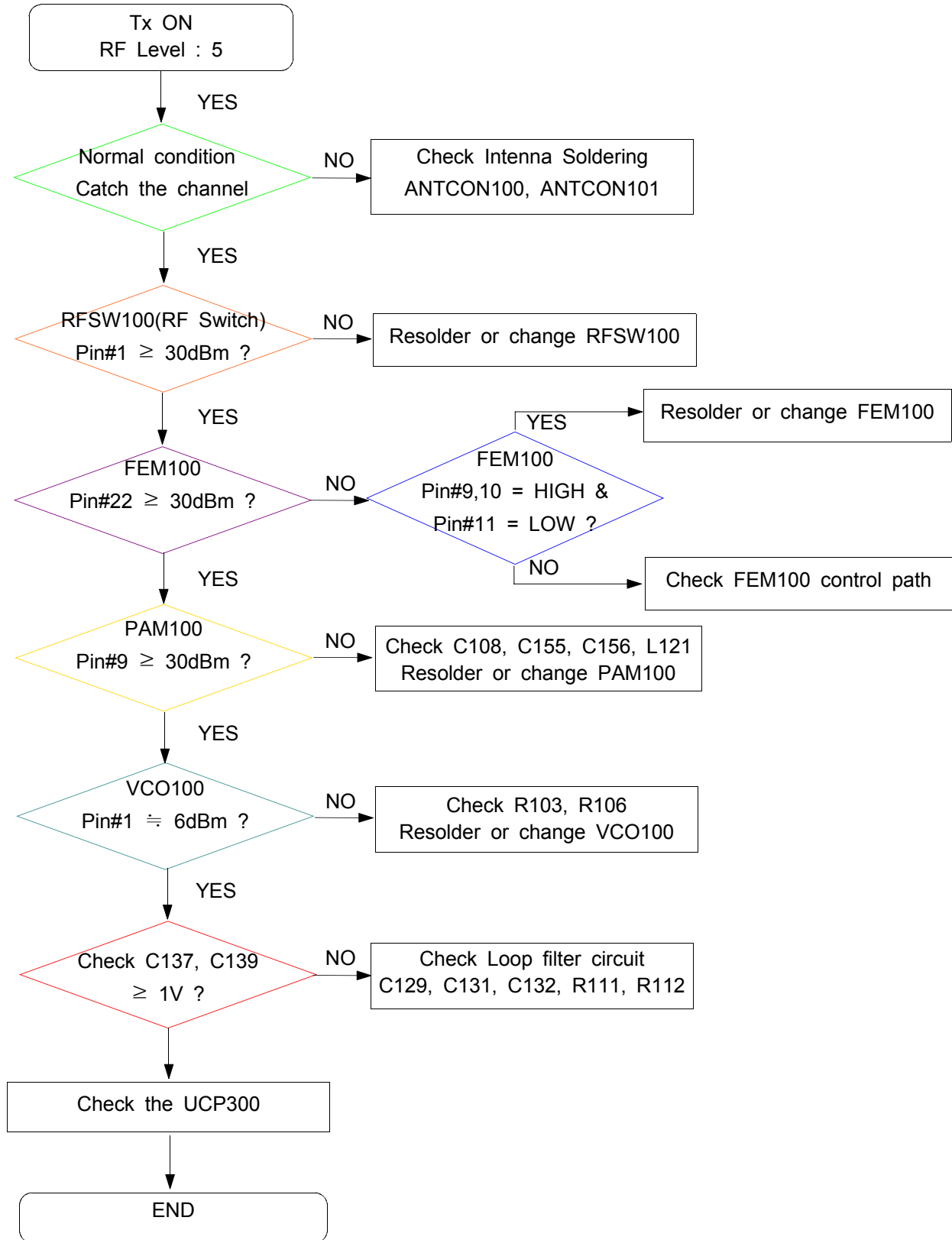


## 2.RF

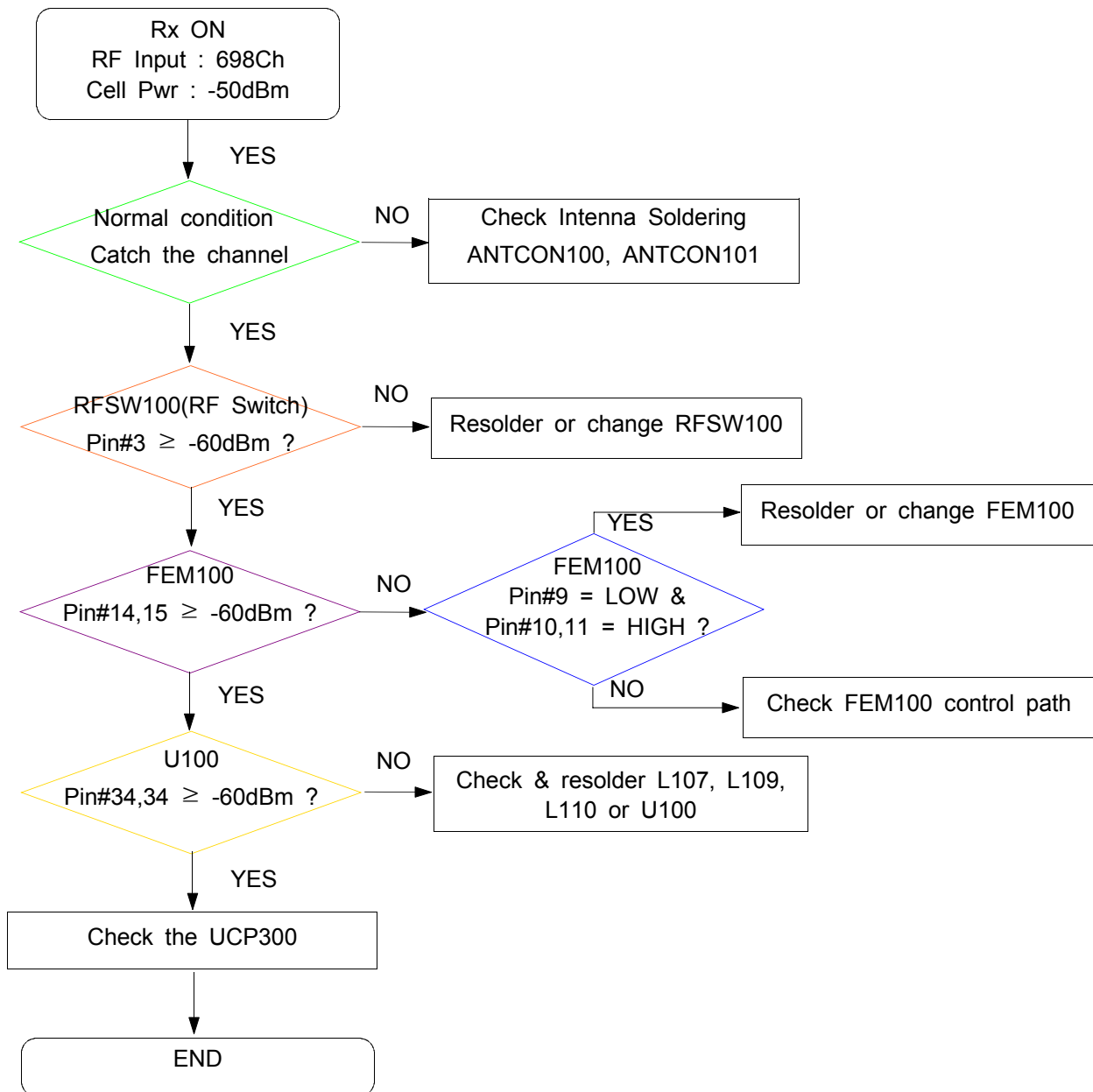
### 3-2-1. EGSM Receiver



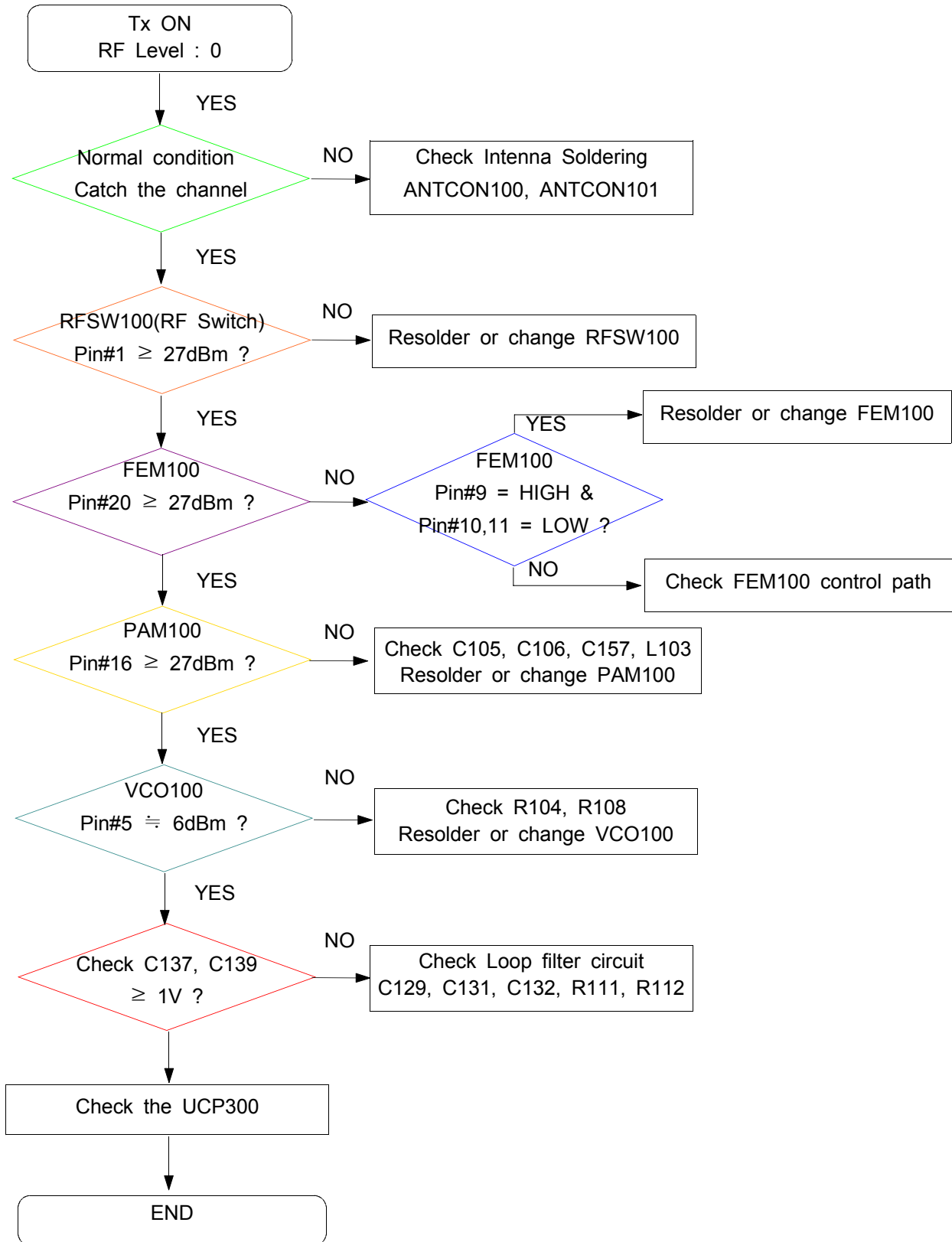
### 3-2-2. EGSM Transmitter



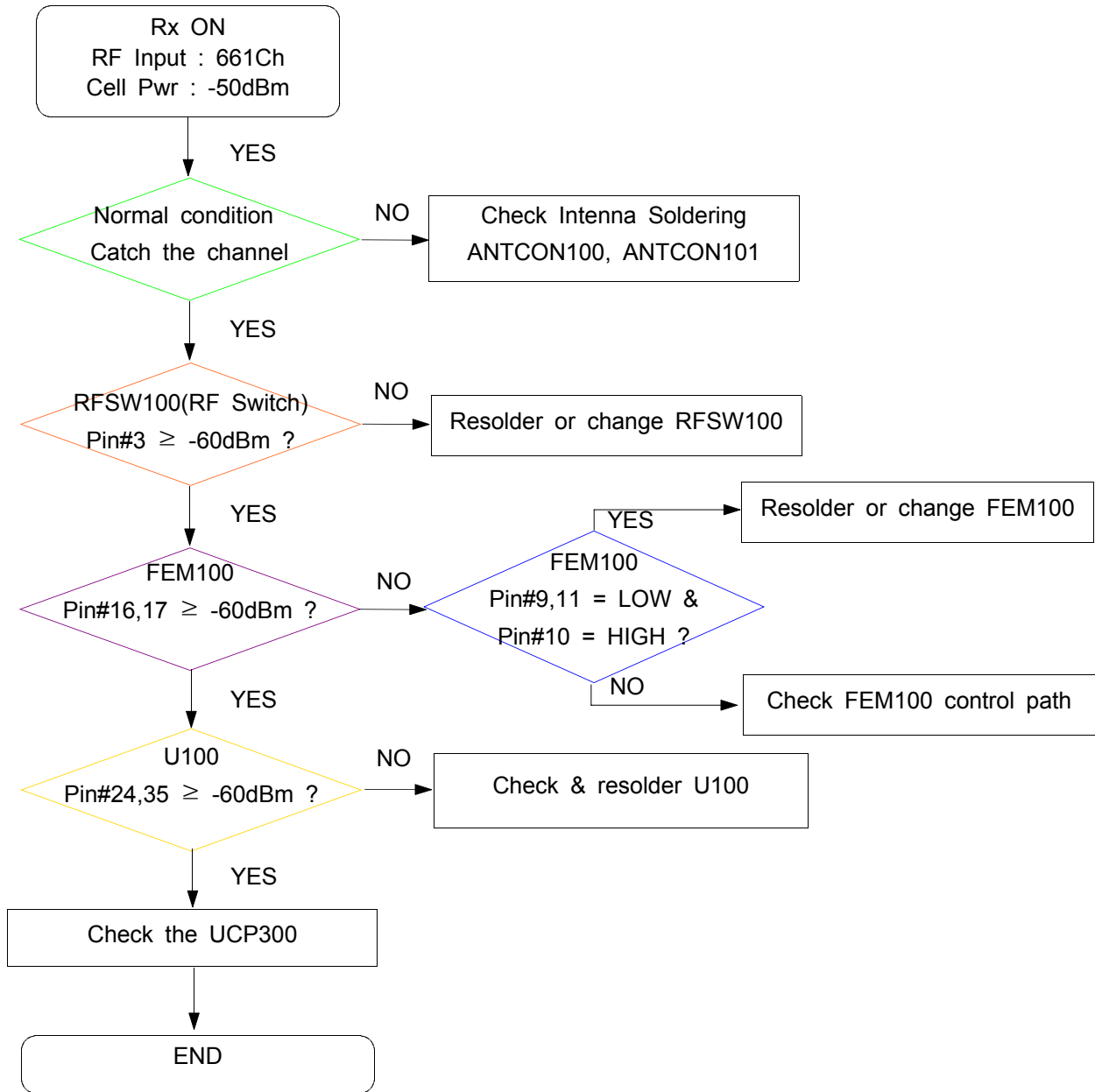
### 3-2-3. DCS Receiver



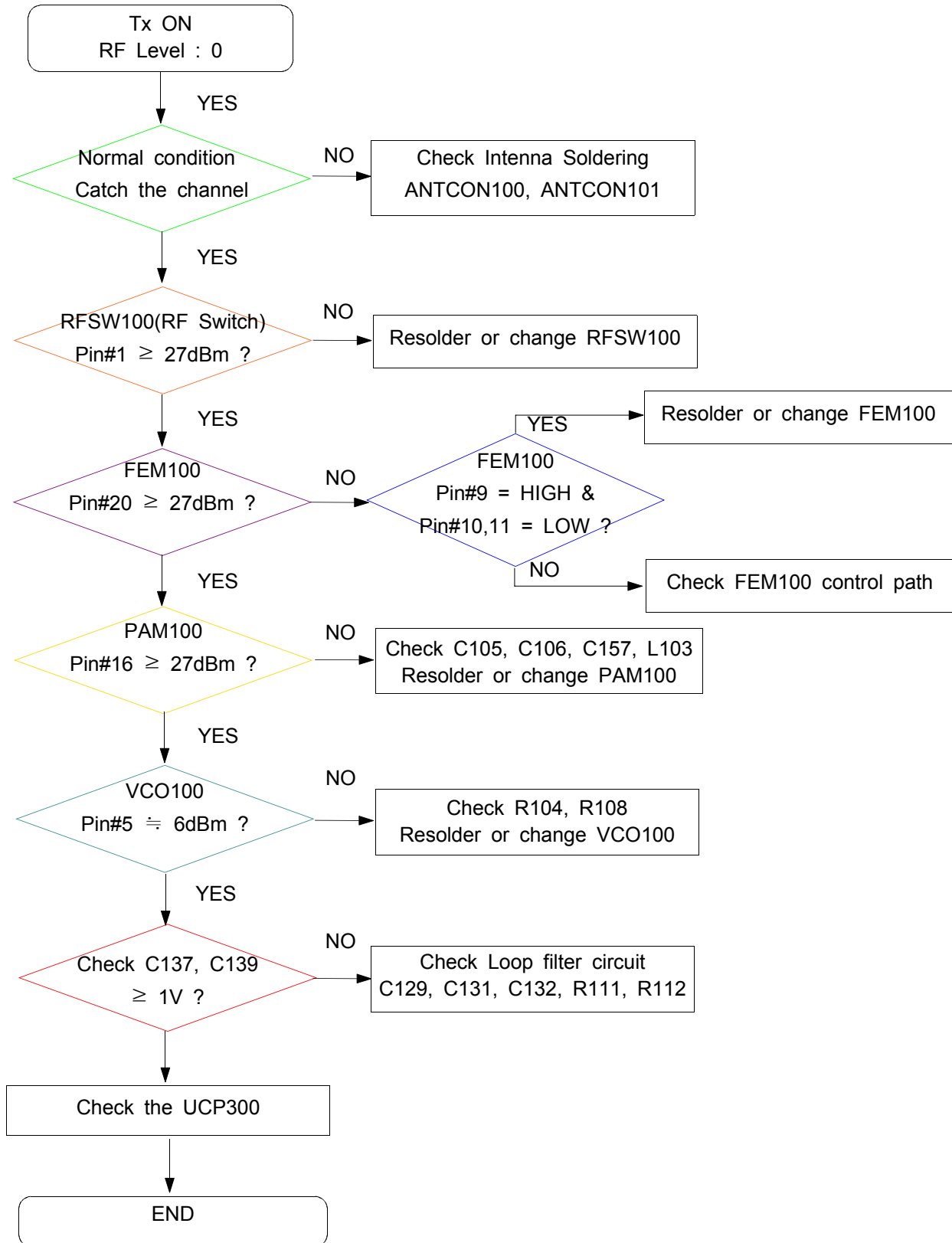
### 3-2-4. DCS Transmitter



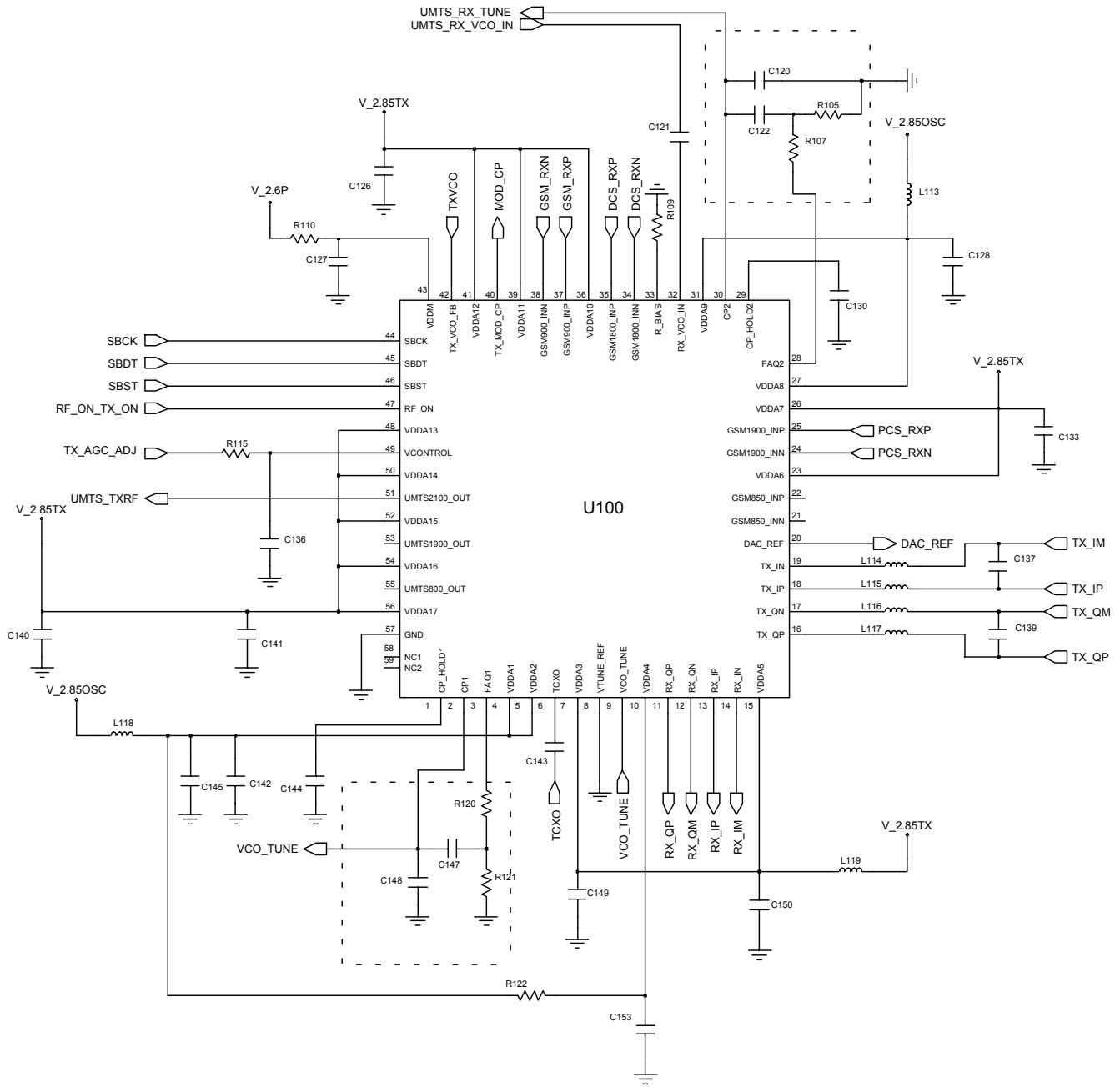
### 3-2-5. PCS Receiver

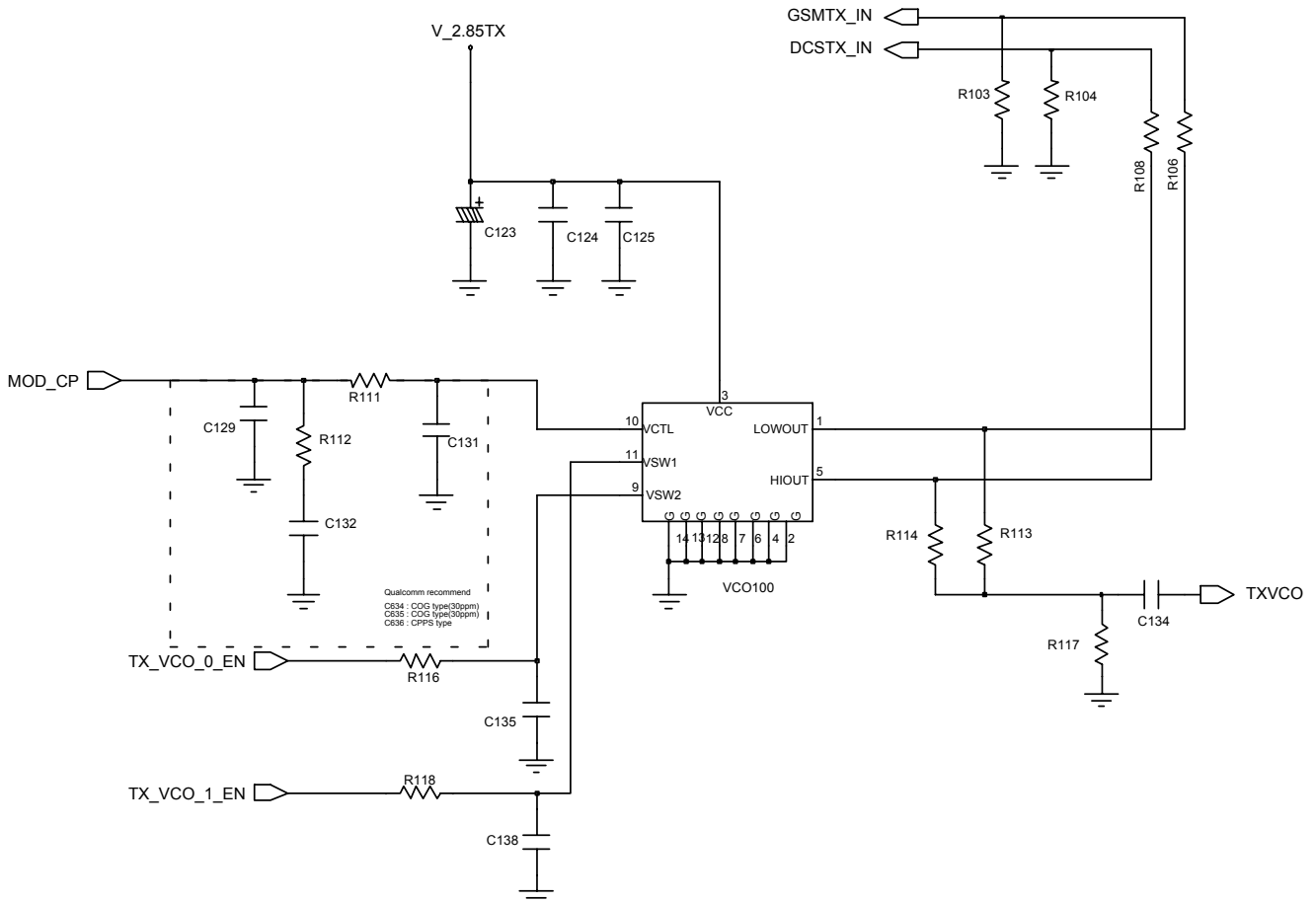
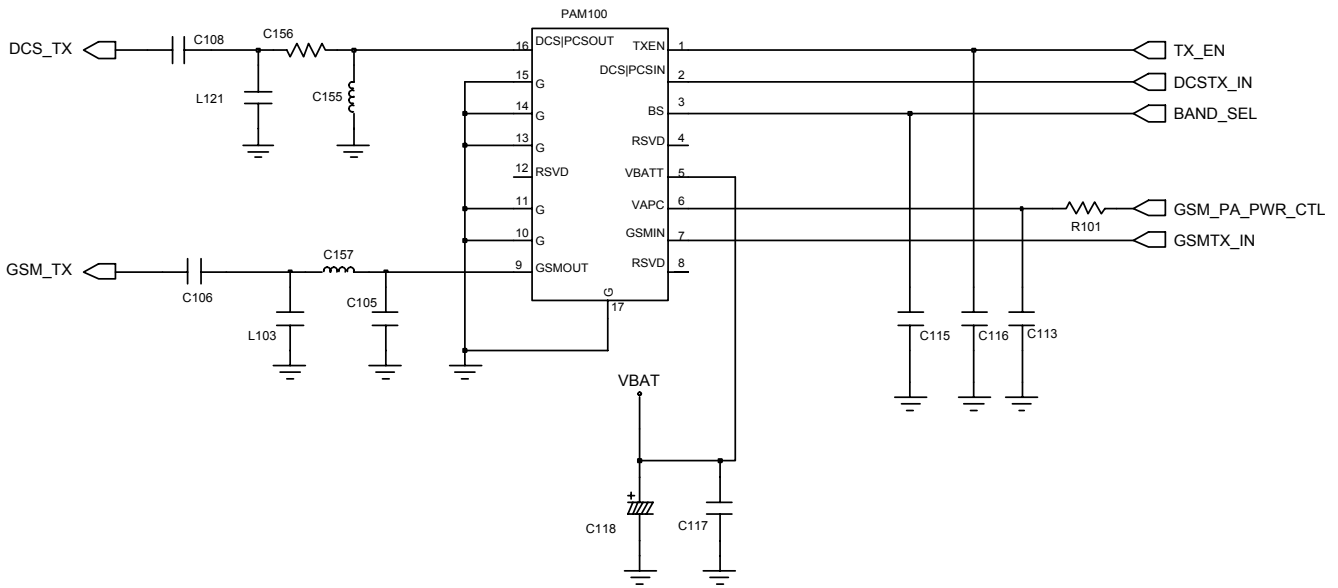


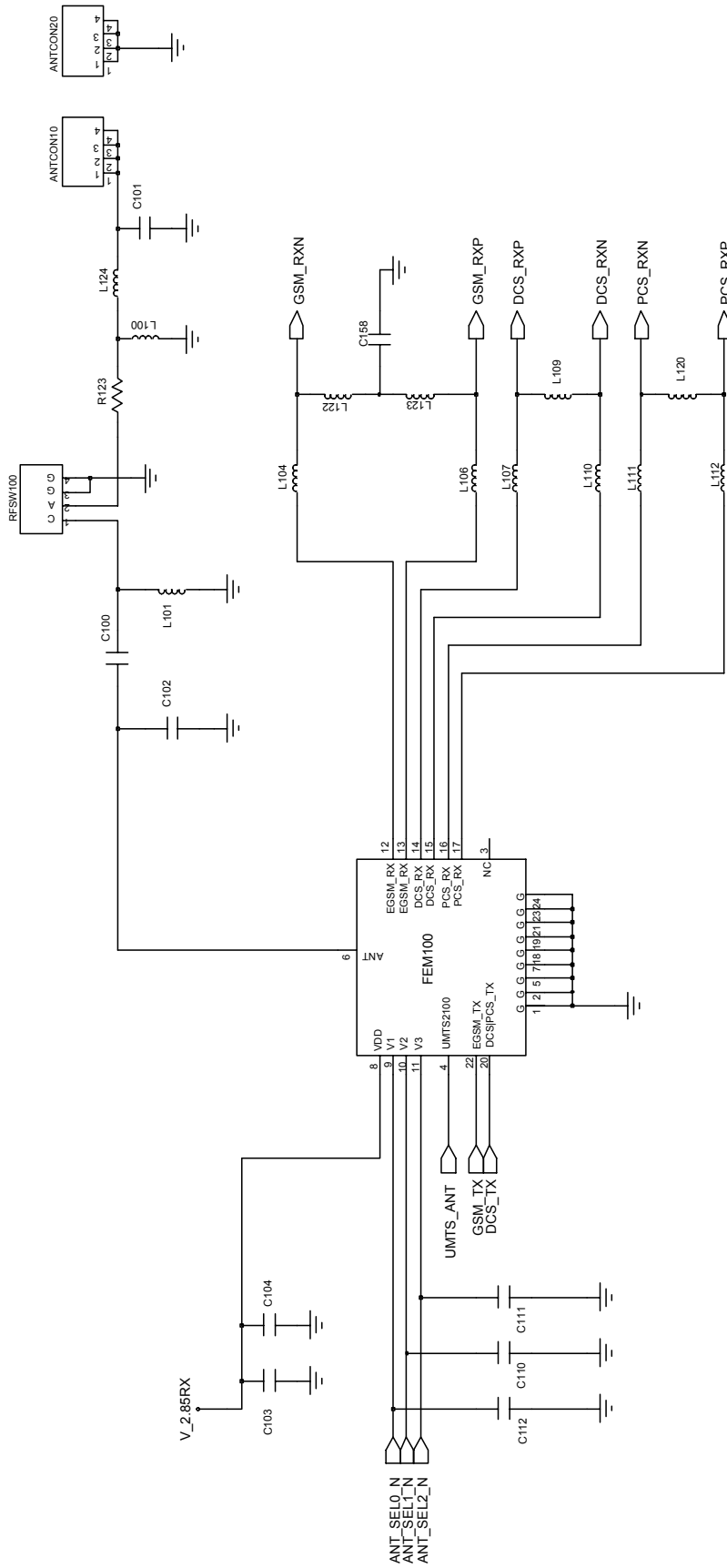
### 3-2-6. PCS Transmitter

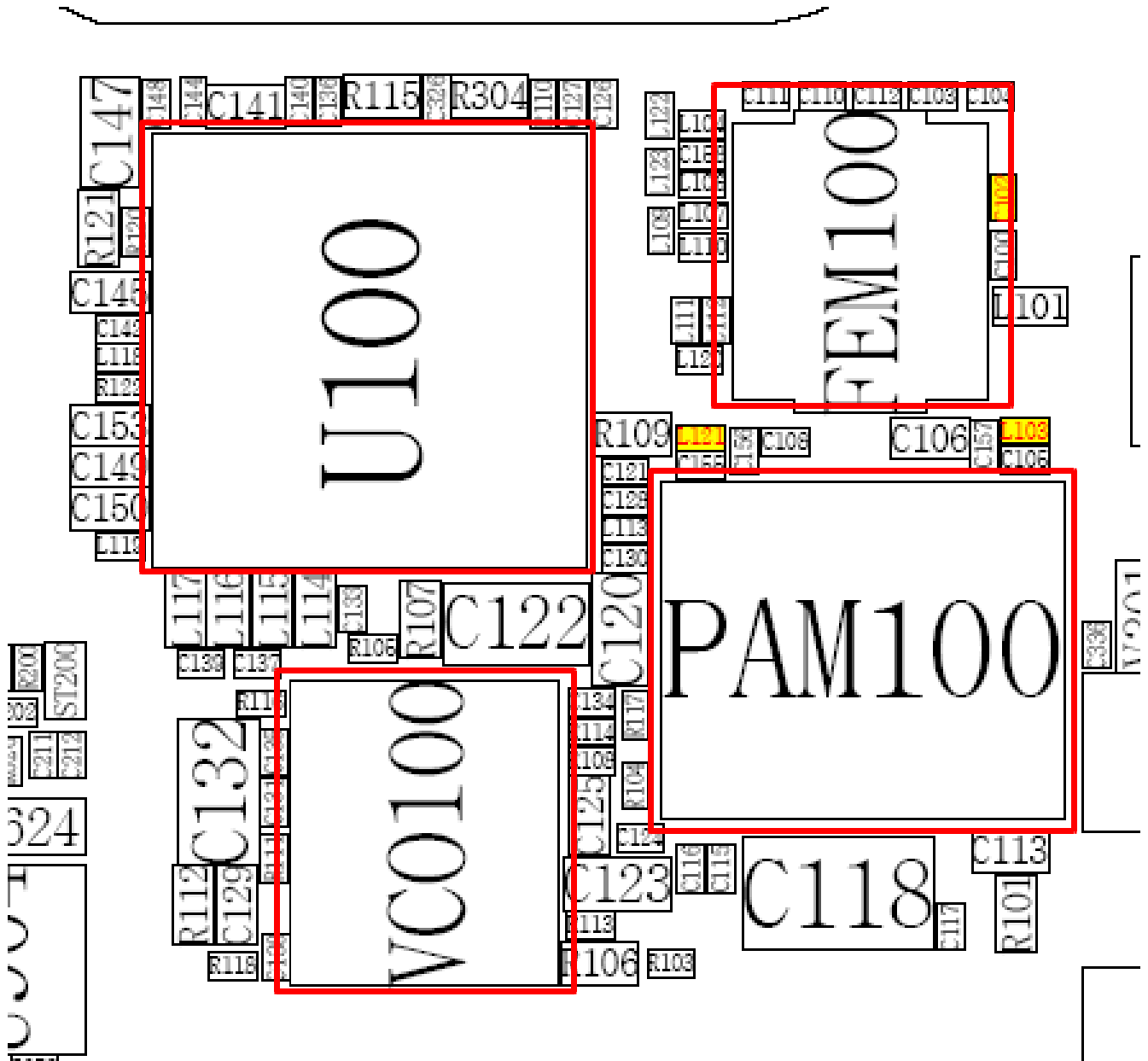




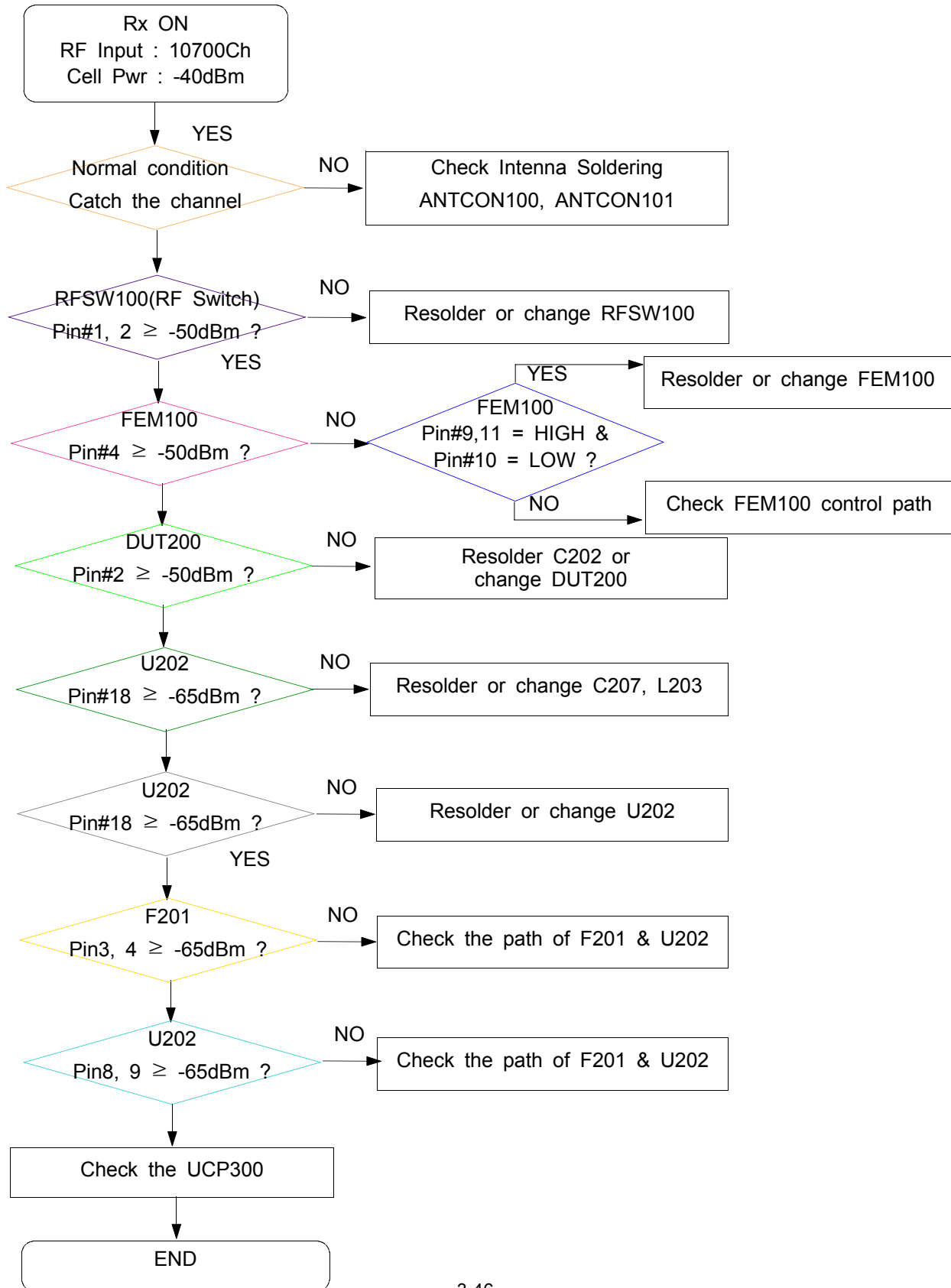




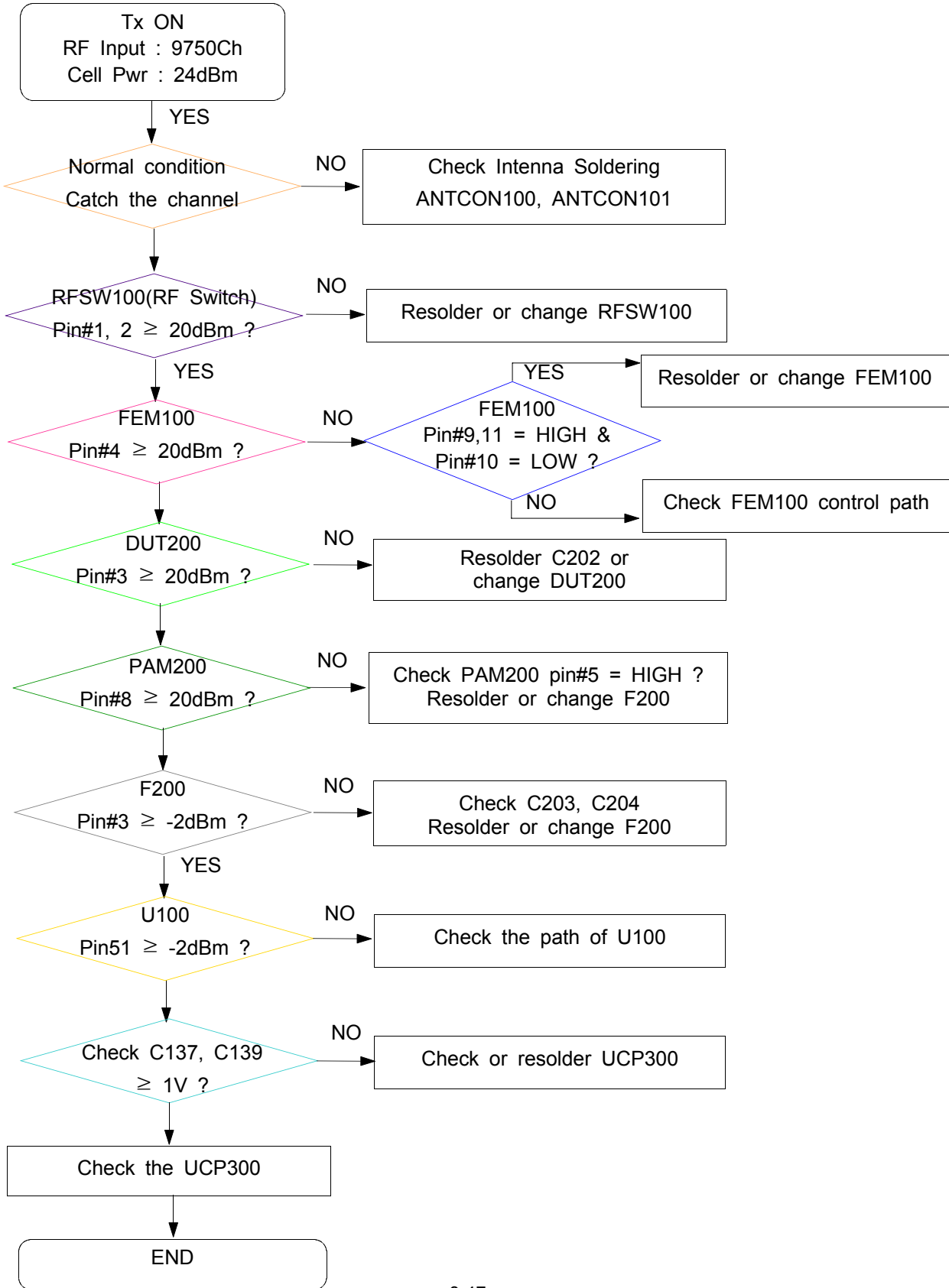


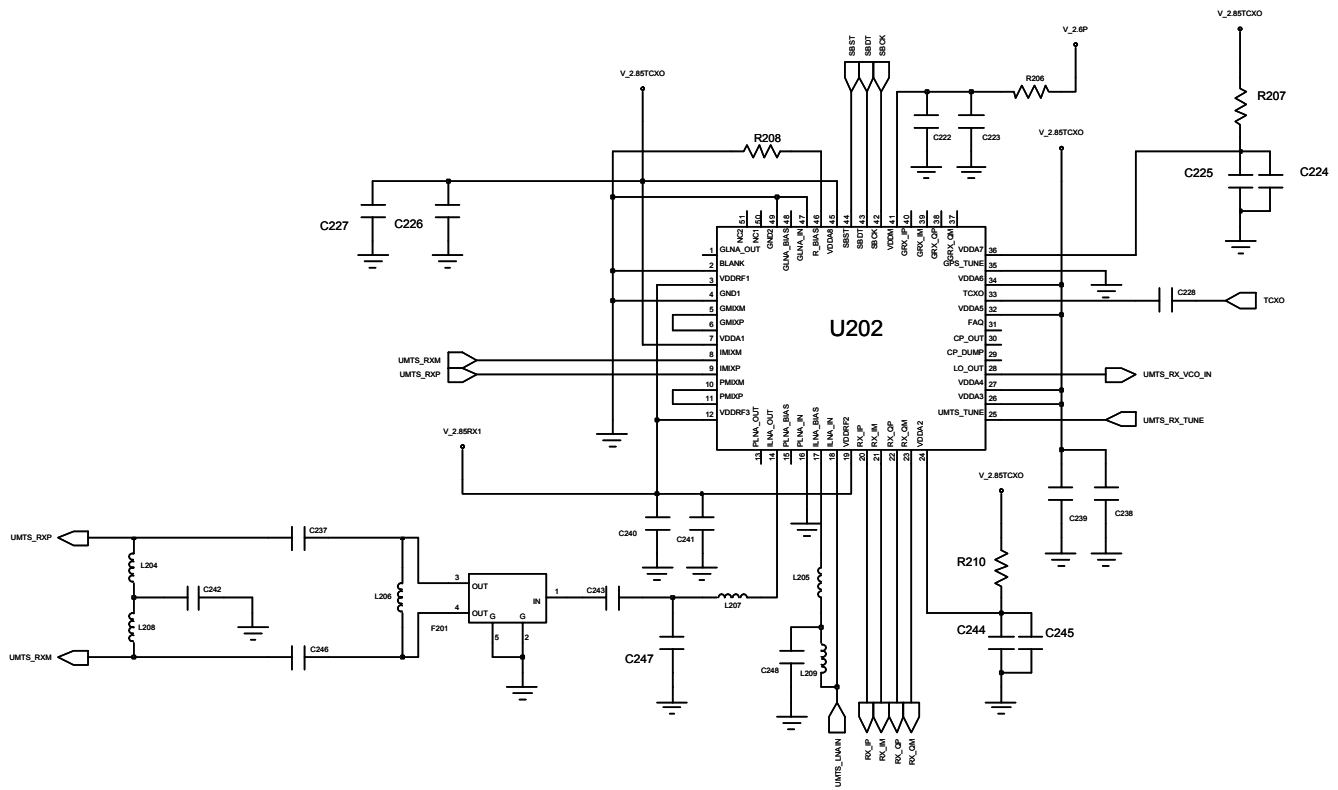


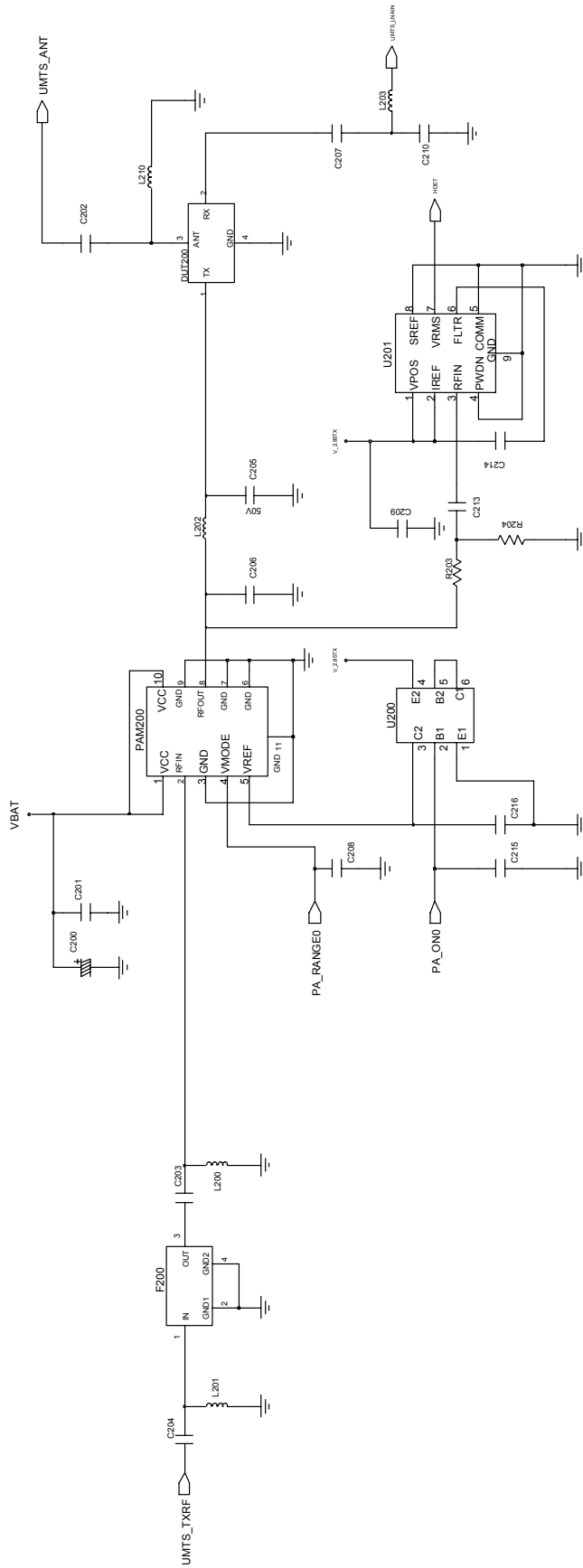
### 3-2-7. UMTS Receiver



### 3-2-8. UMTS Transmitter



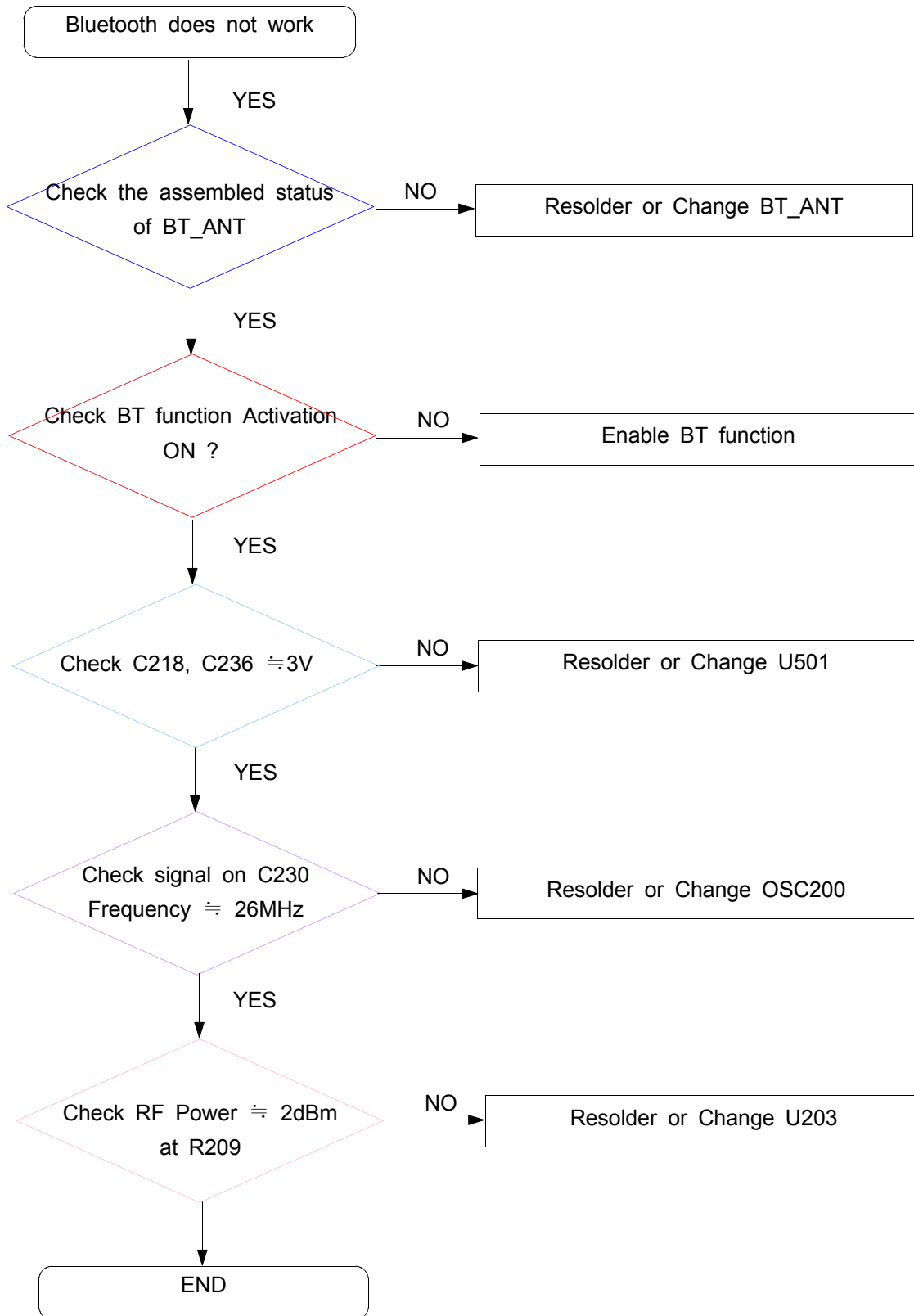








### 3-2-9. BLUETOOTH



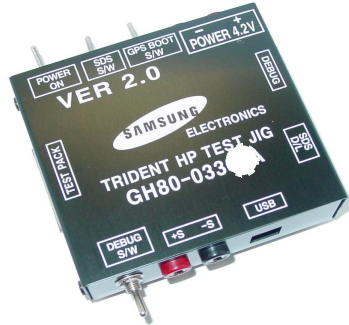




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## 4. Array course control

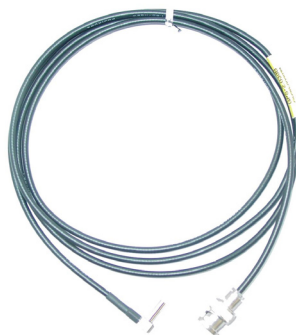
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**Test Jig (GH80-03308A)**



**Test Cable (GH39-00478A)**



**RF Test Cable (GH39-00737A)**

## Software Downloading

### 4-1. Downloading Binary Files

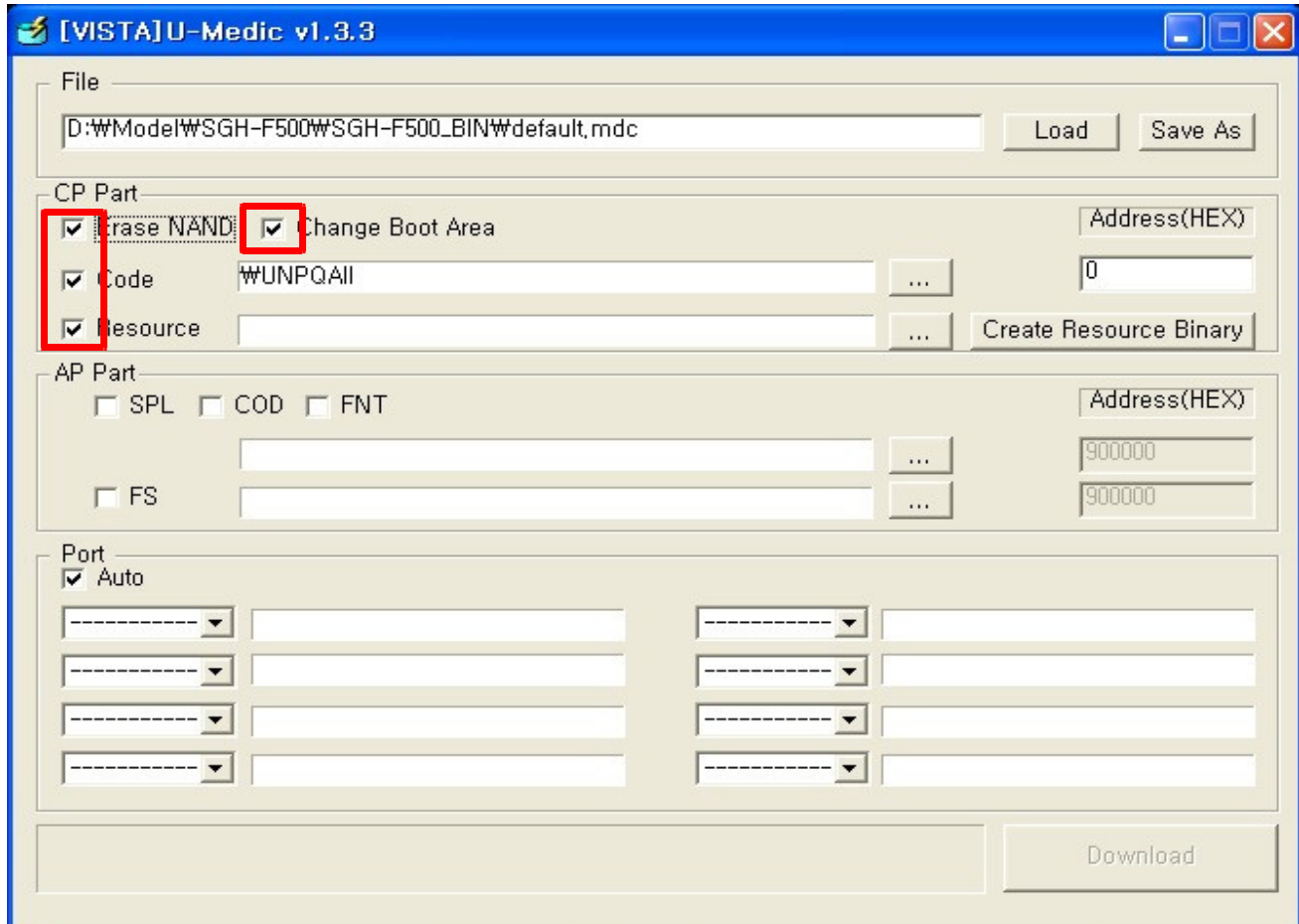
- Three binary files for downloading F500.
  - VIC\_SEC : Main source code binary folder.
  - SECUMTS\_rsc.bin : Resource file

### 4-2. Pre-requisite for Downloading

- Downloader Program([\[VISTA\]U-Medic\\_v1.3.3.exe](#))
- F500 Mobile Phone
- Data Cable
- Binary files

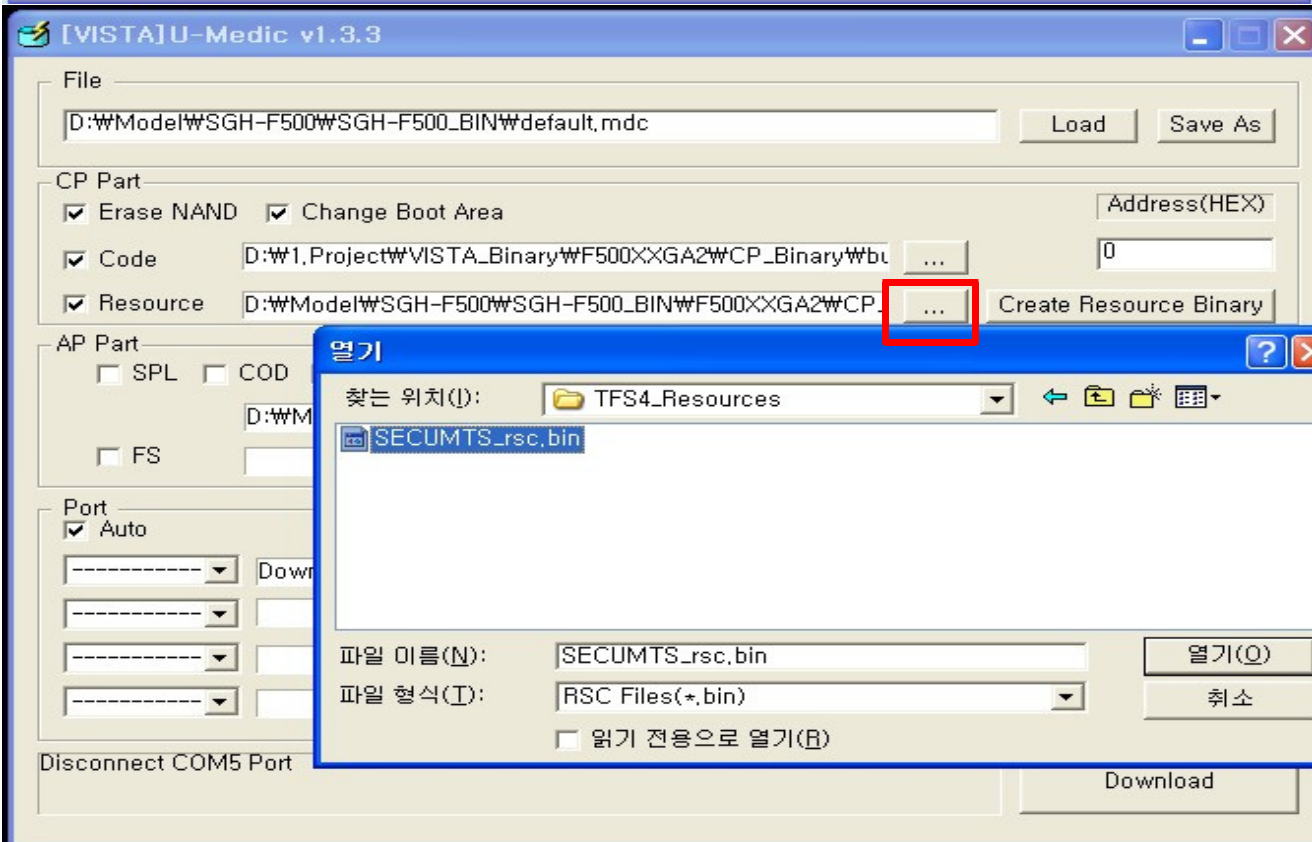
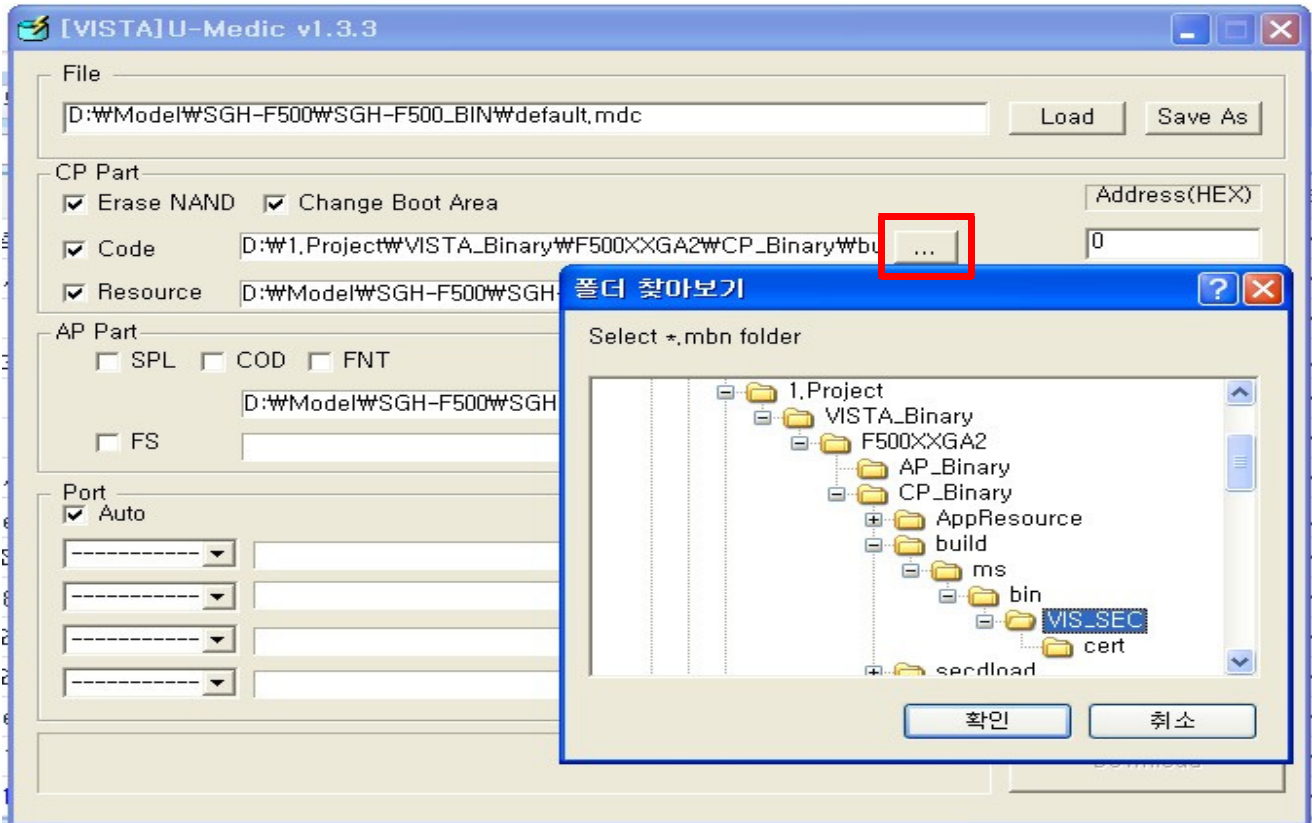
### 4-3. S/W Downloader Program

1. Load the binary download program by executing the "[VISTA]U-Medic\_v1.3.3.exe"



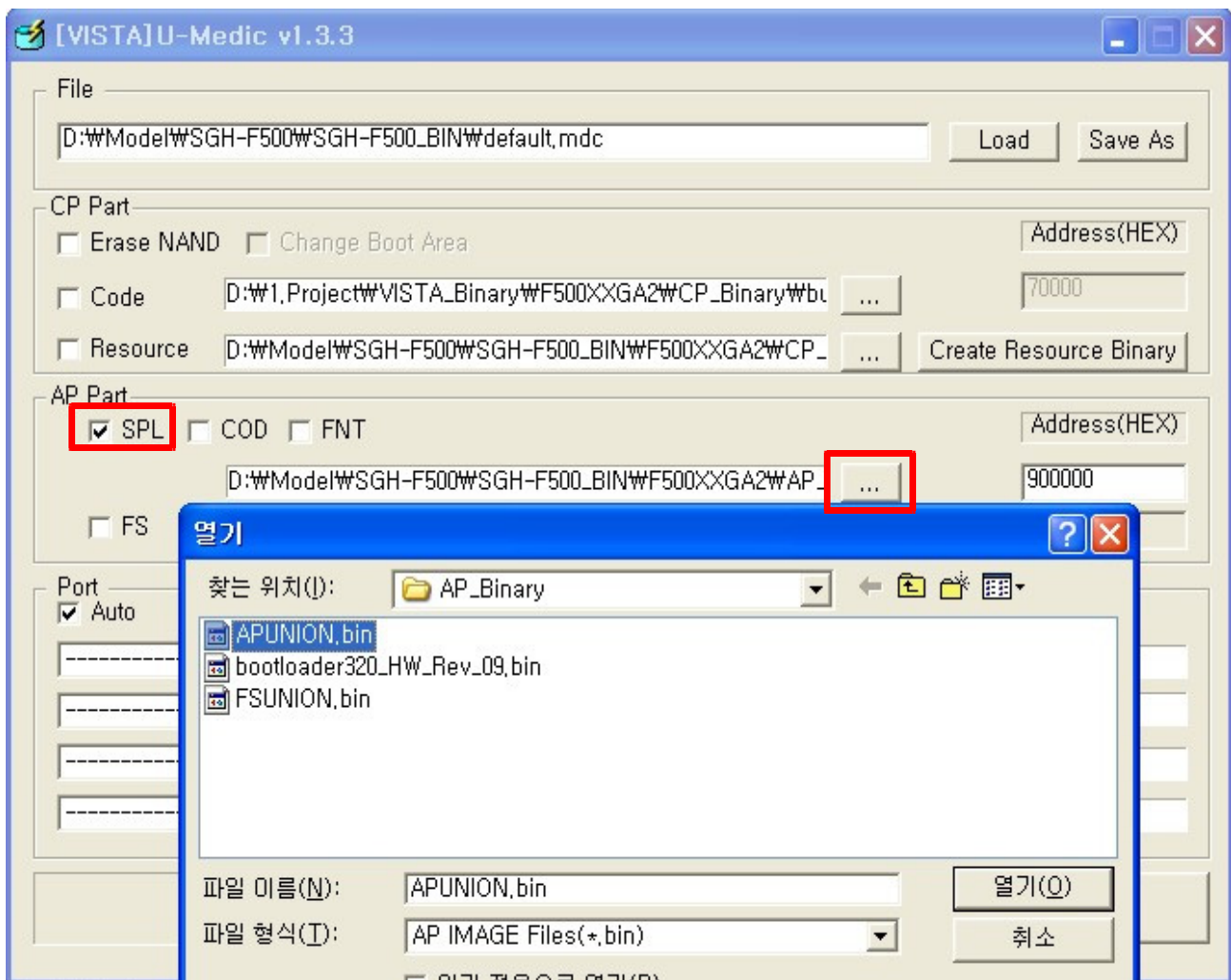
Then, check the every "check box" which is "Erase NAND", "Change Boot Area", "Code" and "Resource".

2. Click the Browser button and select the folder. (Select Code and Resource)

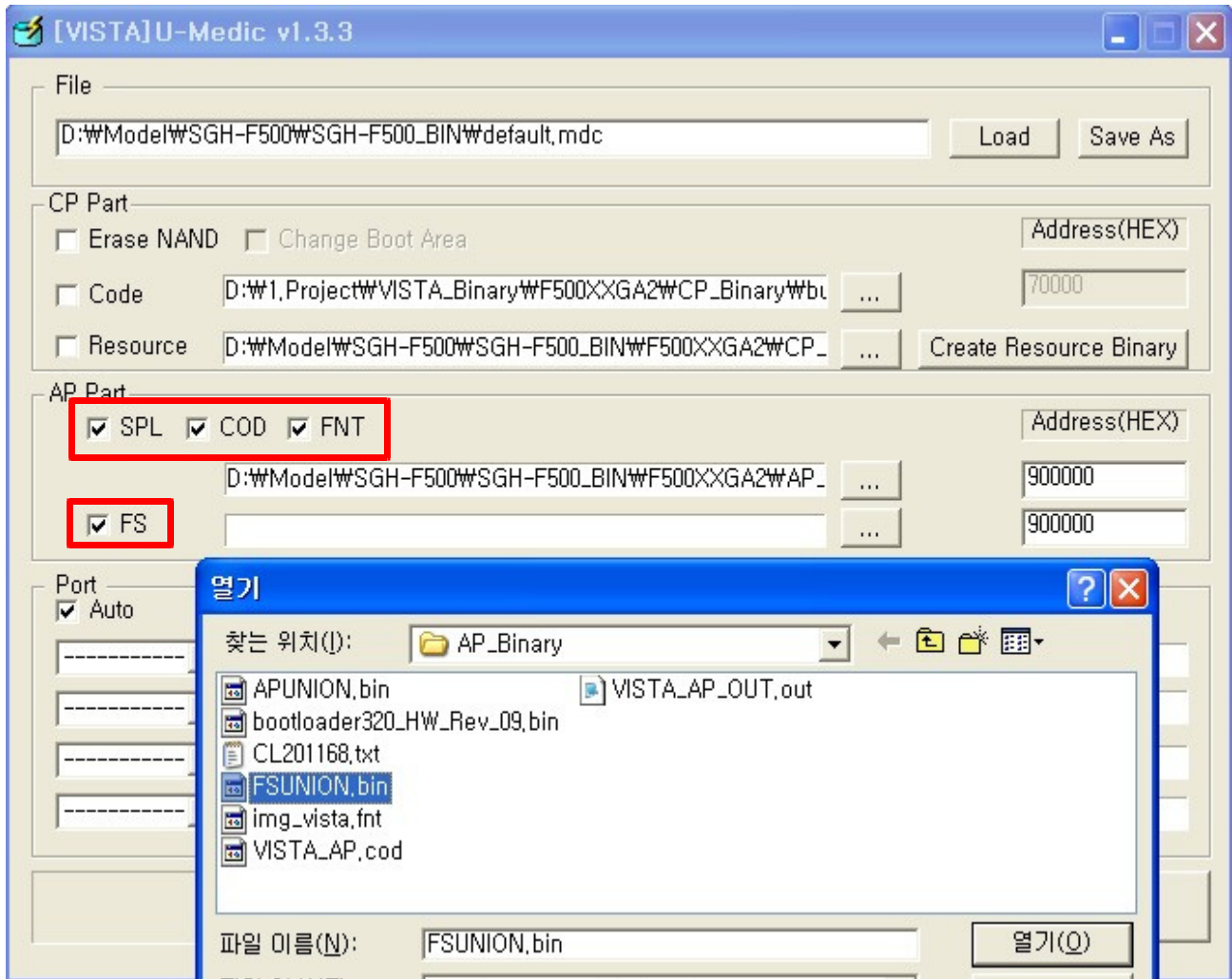




3. Connect the download cable to the mobile.  
Turn on the mobile phone pushing the "4" button at the same time.  
When the phone is ready to download, you will see the "Ready...", Click the "Download" button.  
If not, you have to install the samsung usb modem driver.
4. When downloading is finished successfully, there is a pop up message "DOWNLOAD COMPLETE"
5. With booting the phone, AP NAND format on the idle status.  
**\*#62367#**
6. AP download with only check the SPL and Click the Browser button and select the folder.



7. After completing download, click the every check box, "SPL", "COD", "FNT" and "FS"



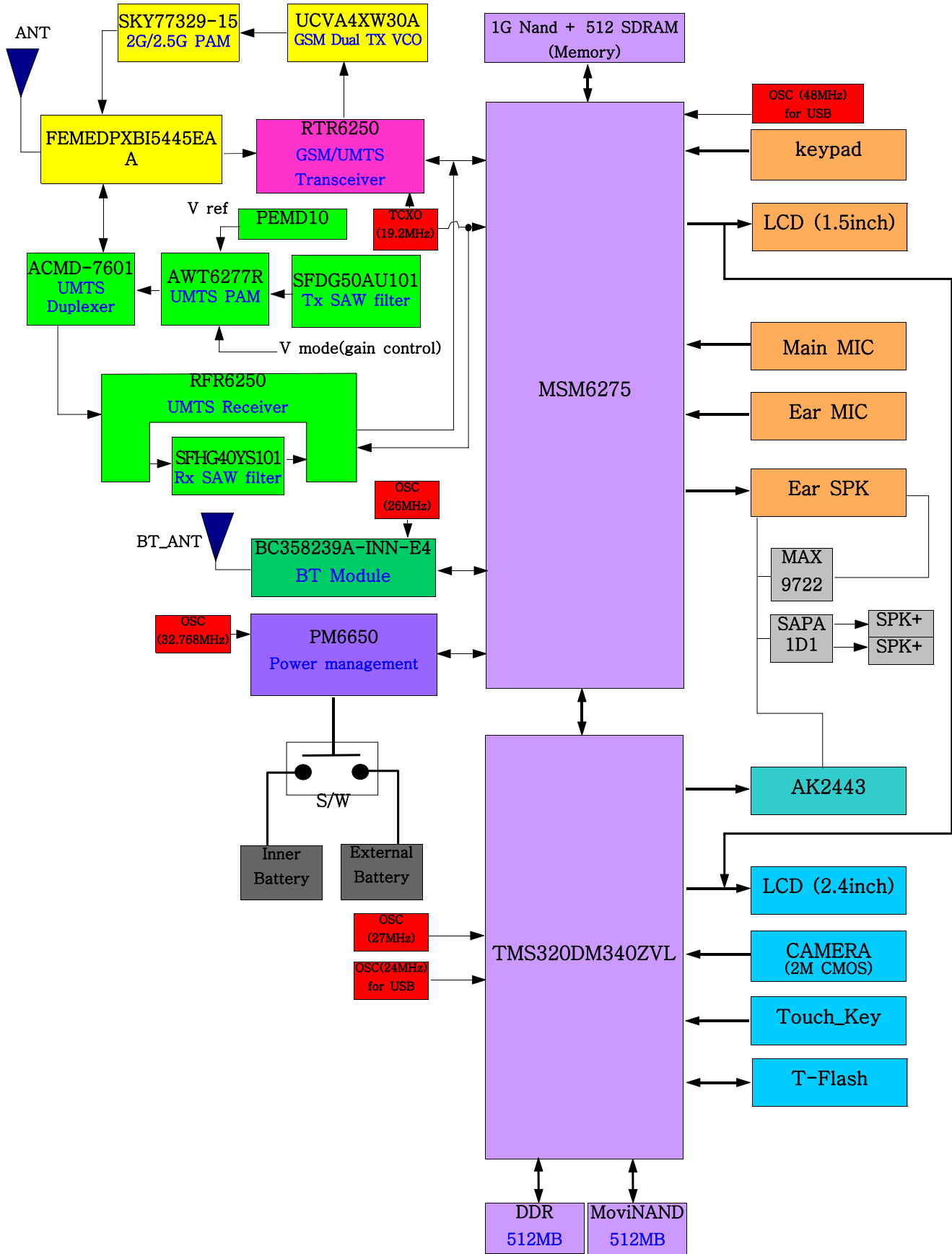
8. Confirm the downloaded version name and etc. :

**\*#1234#**

Full Reset :

**\*2767\*3855#**

# 5. Block Diagrams







## 7. MAIN Electrical Parts List

SEC CODE	Design LOC	Discription	STATUS
0403-001547	D400	DIODE-ZENER	SA
0404-001172	D300	DIODE-SCHOTTKY	SA
0404-001172	D301	DIODE-SCHOTTKY	SA
0404-001172	D302	DIODE-SCHOTTKY	SA
0406-001190	ZD401	DIODE-TVS	SA
0406-001190	ZD402	DIODE-TVS	SA
0406-001190	ZD403	DIODE-TVS	SA
0406-001200	U402	DIODE-TVS	SA
0406-001201	V300	DIODE-TVS	SA
0406-001201	V301	DIODE-TVS	SA
0406-001254	ZD404	DIODE-TVS	SA
0406-001254	ZD405	DIODE-TVS	SA
0407-001002	D500	DIODE-ARRAY	SA
0504-001113	Q300	TR-DIGITAL	SA
0504-001113	Q400	TR-DIGITAL	SA
0504-001113	Q500	TR-DIGITAL	SA
0504-001113	Q501	TR-DIGITAL	SA
0504-001113	Q502	TR-DIGITAL	SA
0504-001113	Q900	TR-DIGITAL	SA
0504-001151	U200	TR-DIGITAL	SA
0505-002111	U916	FET-SILICON	SA
0505-002210	U912	FET-SILICON	SA
0801-002507	U915	IC-CMOS LOGIC	SA
0801-002507	U927	IC-CMOS LOGIC	SA
0801-002995	U403	IC-CMOS LOGIC	SA
0801-002995	U605	IC-CMOS LOGIC	SA
0801-002995	U608	IC-CMOS LOGIC	SA
0904-002215	U906	IC-DSP	SA
1001-001351	U800	IC-ANALOG MULTIPLEX	SA
1001-001351	U801	IC-ANALOG MULTIPLEX	SA
1001-001373	U405	IC-ANALOG SWITCH	SA
1001-001394	U400	IC-ANALOG SWITCH	SA
1001-001394	U401	IC-ANALOG SWITCH	SA
1001-001414	U606	IC-ANALOG SWITCH	SA
1001-001414	U609	IC-ANALOG SWITCH	SA
1001-001414	U611	IC-ANALOG SWITCH	SA
1001-001414	U917	IC-ANALOG SWITCH	SA

SEC CODE	Design LOC	Discription	STATUS
1001-001429	U925	IC-ANALOG MULTIPLEX	SA
1001-001429	U926	IC-ANALOG MULTIPLEX	SA
1001-001429	U928	IC-ANALOG MULTIPLEX	SA
1001-001429	U929	IC-ANALOG MULTIPLEX	SA
1001-001429	U930	IC-ANALOG MULTIPLEX	SA
1001-001429	U931	IC-ANALOG MULTIPLEX	SA
1001-001429	U932	IC-ANALOG MULTIPLEX	SA
1006-001322	U802	IC-LINE TRANSCEIVER	SA
1105-001751	U704	IC-DRAM	SA
1107-001678	U808	IC-FLASH MEMORY	SA
1108-000071	U804	IC-MCP	SA
1201-002195	U610	IC-AUDIO AMP	SA
1201-002240	U904	IC-AUDIO AMP	SA
1201-002347	PAM200	IC-POWER AMP	SA
1201-002413	U803	IC-VIDEO AMP	SA
1201-002446	PAM100	IC-POWER AMP	SA
1202-001068	U907	IC-VOLTAGE COMP.	SA
1203-003708	U809	IC-DC/DC CONVERTER	SA
1203-003742	U404	IC-BATTERY	SA
1203-004102	U501	IC-POWER SUPERVISOR	SA
1203-004104	U604	IC-DC/DC CONVERTER	SA
1203-004362	U607	IC-MULTI REG.	SA
1203-004448	U502	IC-MULTI REG.	SA
1203-004449	U807	IC-MULTI REG.	SA
1203-004453	U700	IC-DC/DC CONVERTER	SA
1203-004655	U805	IC-MULTI REG.	SA
1205-002645	U100	IC-TRANSCEIVER	SA
1205-002727	U600	IC-CODEC	SA
1205-002781	U202	IC-RECEIVER	SA
1205-002790	UCP300	IC-MODEM	SA
1205-003038	U203	IC-DATA COMM./GEN.	SA
1209-001577	U201	IC-DETECTOR	SA
1209-001731	U406	IC-SENSOR	SA
1404-001224	ST200	THERMISTOR-NTC	SA
1405-001108	V400	VARISTOR	SA
1405-001108	V401	VARISTOR	SA
1405-001108	V402	VARISTOR	SA

SEC CODE	Design LOC	Discription	STATUS
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1405-001108	V405	VARISTOR	SA
1405-001108	V406	VARISTOR	SA
1405-001108	V600	VARISTOR	SA
1405-001108	V601	VARISTOR	SA
1405-001108	V608	VARISTOR	SA
1405-001138	V606	VARISTOR	SA
1405-001138	V607	VARISTOR	SA
1405-001177	C527	VARISTOR	SA
1405-001183	V407	VARISTOR	SA
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2007-000148	U914	R-CHIP	SA
2007-000149	R604	R-CHIP	SA
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2007-000151	R615	R-CHIP	SA
2007-000154	R619	R-CHIP	SA
2007-000154	R620	R-CHIP	SA
2007-000154	R624	R-CHIP	SA
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2007-000170	R703	R-CHIP	SA
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2007-000171	R209	R-CHIP	SA
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2007-001303	R803	R-CHIP	SA
2007-001329	R402	R-CHIP	SA
2007-003010	R106	R-CHIP	SA
2007-007009	R802	R-CHIP	SA
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2007-007142	R501	R-CHIP	SA
2007-007318	R115	R-CHIP	SA



SEC CODE	Design LOC	Discription	STATUS
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2007-007318	R304	R-CHIP	SA
2007-007468	R504	R-CHIP	SA
2007-007491	R109	R-CHIP	SA
2007-007491	R208	R-CHIP	SA
2007-007528	R708	R-CHIP	SA
2007-007528	R717	R-CHIP	SA
2007-007741	R428	R-CHIP	SA
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2007-008045	R110	R-CHIP	SA
2007-008045	R111	R-CHIP	SA
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2007-008045	R119	R-CHIP	SA
2007-008045	R206	R-CHIP	SA
2007-008045	R406	R-CHIP	SA
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2007-008051	R120	R-CHIP	SA
2007-008052	R105	R-CHIP	SA
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2007-008055	R411	R-CHIP	SA
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SEC CODE	Design LOC	Discription	STATUS
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2007-008055	R629	R-CHIP	SA
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2007-008419	R405	R-CHIP	SA
2007-008419	R408	R-CHIP	SA
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2007-008419	R437	R-CHIP	SA
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2007-008478	R725	R-CHIP	SA
2007-008483	R1449	R-CHIP	SA
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2007-008483	R807	R-CHIP	SA
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2007-008516	R311	R-CHIP	SA
2007-008516	R312	R-CHIP	SA
2007-008516	R313	R-CHIP	SA

SEC CODE	Design LOC	Discription	STATUS
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2007-008516	R700	R-CHIP	SA
2007-008516	R718	R-CHIP	SA
2007-008516	R808	R-CHIP	SA
2007-008516	R809	R-CHIP	SA
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2007-008531	R607	R-CHIP	SA
2007-008531	R613	R-CHIP	SA
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2007-008542	R308	R-CHIP	SA
2007-008542	R400	R-CHIP	SA
2007-008542	R415	R-CHIP	SA
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2007-008542	R714	R-CHIP	SA
2007-008542	R814	R-CHIP	SA
2007-008544	R401	R-CHIP	SA
2007-008547	R721	R-CHIP	SNA
2007-008579	R113	R-CHIP	SA
2007-008579	R114	R-CHIP	SA
2007-008581	R103	R-CHIP	SNA
2007-008581	R104	R-CHIP	SNA
2007-008587	R608	R-CHIP	SA
2007-008587	R609	R-CHIP	SA
2007-008647	R316	R-CHIP	SA
2007-008648	R1450	R-CHIP	SA
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2007-008786	R610	R-CHIP	SA
2007-008786	R617	R-CHIP	SA
2007-008806	R117	R-CHIP	SA
2007-008806	R303	R-CHIP	SA
2007-008806	R503	R-CHIP	SA
2007-008809	R502	R-CHIP	SNA
2007-009111	R108	R-CHIP	SA
2007-009111	R614	R-CHIP	SA

SEC CODE	Design LOC	Discription	STATUS
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2007-009111	R631	R-CHIP	SA
2007-009111	R632	R-CHIP	SA
2007-009112	R626	R-CHIP	SNA
2007-009157	R701	R-CHIP	SA
2007-009157	R716	R-CHIP	SA
2007-009157	R720	R-CHIP	SA
2007-009157	R811	R-CHIP	SA
2007-009158	R427	R-CHIP	SA
2007-009166	R202	R-CHIP	SA
2007-009168	R420	R-CHIP	SA
2007-009168	R421	R-CHIP	SA
2007-009168	R815	R-CHIP	SA
2007-009170	R306	R-CHIP	SA
2007-009170	R310	R-CHIP	SA
2007-009170	R410	R-CHIP	SA
2007-009212	R418	R-CHIP	SA
2007-009212	R813	R-CHIP	SA
2007-009233	R425	R-CHIP	SA
2007-009233	R940	R-CHIP	SA
2007-009244	R107	R-CHIP	SA
2203-000233	C213	C-CER,CHIP	SA
2203-000254	C201	C-CER,CHIP	SA
2203-000254	C209	C-CER,CHIP	SA
2203-000254	C218	C-CER,CHIP	SA
2203-000254	C608	C-CER,CHIP	SA
2203-000254	C942	C-CER,CHIP	SA
2203-000278	C207	C-CER,CHIP	SA
2203-000278	C233	C-CER,CHIP	SA
2203-000330	C720	C-CER,CHIP	SA
2203-000330	C721	C-CER,CHIP	SA
2203-000330	C722	C-CER,CHIP	SA
2203-000330	C723	C-CER,CHIP	SA
2203-000438	C141	C-CER,CHIP	SA
2203-000438	C143	C-CER,CHIP	SA
2203-000438	C149	C-CER,CHIP	SA
2203-000438	C416	C-CER,CHIP	SA

SEC CODE	Design LOC	Discription	STATUS
2203-000489	C323	C-CER,CHIP	SA
2203-000627	C515	C-CER,CHIP	SNA
2203-000627	C516	C-CER,CHIP	SNA
2203-000812	C401	C-CER,CHIP	SA
2203-001072	C106	C-CER,CHIP	SA
2203-001153	C113	C-CER,CHIP	SA
2203-001405	C404	C-CER,CHIP	SA
2203-001405	C407	C-CER,CHIP	SA
2203-001405	C604	C-CER,CHIP	SA
2203-002443	C129	C-CER,CHIP	SA
2203-002668	C205	C-CER,CHIP	SA
2203-005050	C206	C-CER,CHIP	SA
2203-005288	C101	C-CER,CHIP	SA
2203-005395	C203	C-CER,CHIP	SA
2203-005481	C628	C-CER,CHIP	SA
2203-005481	C630	C-CER,CHIP	SA
2203-005682	C100	C-CER,CHIP	SA
2203-005682	C104	C-CER,CHIP	SA
2203-005682	C108	C-CER,CHIP	SA
2203-005682	C110	C-CER,CHIP	SA
2203-005682	C111	C-CER,CHIP	SA
2203-005682	C112	C-CER,CHIP	SA
2203-005682	C128	C-CER,CHIP	SA
2203-005682	C142	C-CER,CHIP	SA
2203-005682	C202	C-CER,CHIP	SA
2203-005682	C208	C-CER,CHIP	SA
2203-005682	C215	C-CER,CHIP	SA
2203-005682	C216	C-CER,CHIP	SA
2203-005682	C405	C-CER,CHIP	SA
2203-005682	C406	C-CER,CHIP	SA
2203-005682	C408	C-CER,CHIP	SA
2203-005682	C409	C-CER,CHIP	SA
2203-005683	C243	C-CER,CHIP	SA
2203-005729	C135	C-CER,CHIP	SA
2203-005729	C138	C-CER,CHIP	SA
2203-005729	C220	C-CER,CHIP	SA
2203-005729	C321	C-CER,CHIP	SA

SEC CODE	Design LOC	Discription	STATUS
2203-005729	C322	C-CER,CHIP	SA
2203-005736	C134	C-CER,CHIP	SA
2203-005736	C223	C-CER,CHIP	SA
2203-005736	C225	C-CER,CHIP	SA
2203-005736	C238	C-CER,CHIP	SA
2203-005736	C240	C-CER,CHIP	SA
2203-005736	C245	C-CER,CHIP	SA
2203-005736	C618	C-CER,CHIP	SA
2203-005736	C644	C-CER,CHIP	SA
2203-005789	C105	C-CER,CHIP	SA
2203-005789	C210	C-CER,CHIP	SA
2203-005789	C247	C-CER,CHIP	SA
2203-005806	C158	C-CER,CHIP	SNA
2203-005806	C302	C-CER,CHIP	SNA
2203-005806	C303	C-CER,CHIP	SNA
2203-005806	C305	C-CER,CHIP	SNA
2203-005806	C308	C-CER,CHIP	SNA
2203-005806	C314	C-CER,CHIP	SNA
2203-005806	C315	C-CER,CHIP	SNA
2203-005806	C317	C-CER,CHIP	SNA
2203-005806	C318	C-CER,CHIP	SNA
2203-005806	C423	C-CER,CHIP	SNA
2203-005806	C502	C-CER,CHIP	SNA
2203-005806	C503	C-CER,CHIP	SNA
2203-005806	C513	C-CER,CHIP	SNA
2203-005806	C538	C-CER,CHIP	SNA
2203-005806	C803	C-CER,CHIP	SNA
2203-005808	C115	C-CER,CHIP	SA
2203-005808	C116	C-CER,CHIP	SA
2203-005808	C117	C-CER,CHIP	SA
2203-005808	C126	C-CER,CHIP	SA
2203-005808	C127	C-CER,CHIP	SA
2203-005808	C130	C-CER,CHIP	SA
2203-005808	C144	C-CER,CHIP	SA
2203-005808	C222	C-CER,CHIP	SA
2203-005808	C424	C-CER,CHIP	SA
2203-006048	C500	C-CER,CHIP	SA

SEC CODE	Design LOC	Discription	STATUS
2203-006048	C530	C-CER,CHIP	SA
2203-006048	C533	C-CER,CHIP	SA
2203-006048	C536	C-CER,CHIP	SA
2203-006048	C726	C-CER,CHIP	SA
2203-006120	C627	C-CER,CHIP	SA
2203-006120	C629	C-CER,CHIP	SA
2203-006120	C701	C-CER,CHIP	SA
2203-006120	C702	C-CER,CHIP	SA
2203-006120	C708	C-CER,CHIP	SA
2203-006187	C121	C-CER,CHIP	SA
2203-006187	C237	C-CER,CHIP	SA
2203-006187	C246	C-CER,CHIP	SA
2203-006194	C151	C-CER,CHIP	SA
2203-006194	C212	C-CER,CHIP	SA
2203-006194	C221	C-CER,CHIP	SA
2203-006194	C326	C-CER,CHIP	SA
2203-006194	C337	C-CER,CHIP	SA
2203-006194	C534	C-CER,CHIP	SA
2203-006194	C617	C-CER,CHIP	SA
2203-006194	C631	C-CER,CHIP	SA
2203-006194	C662	C-CER,CHIP	SA
2203-006194	C710	C-CER,CHIP	SA
2203-006194	C727	C-CER,CHIP	SA
2203-006194	C728	C-CER,CHIP	SA
2203-006194	C732	C-CER,CHIP	SA
2203-006194	C801	C-CER,CHIP	SA
2203-006194	C802	C-CER,CHIP	SA
2203-006194	C808	C-CER,CHIP	SA
2203-006194	C811	C-CER,CHIP	SA
2203-006194	C823	C-CER,CHIP	SA
2203-006194	C951	C-CER,CHIP	SA
2203-006260	C660	C-CER,CHIP	SA
2203-006260	C663	C-CER,CHIP	SA
2203-006260	C664	C-CER,CHIP	SA
2203-006379	C136	C-CER,CHIP	SA
2203-006379	C421	C-CER,CHIP	SA
2203-006423	C103	C-CER,CHIP	SA



SEC CODE	Design LOC	Discription	STATUS
2203-006423	C124	C-CER,CHIP	SA
2203-006423	C133	C-CER,CHIP	SA
2203-006423	C140	C-CER,CHIP	SA
2203-006423	C146	C-CER,CHIP	SA
2203-006423	C211	C-CER,CHIP	SA
2203-006423	C214	C-CER,CHIP	SA
2203-006423	C224	C-CER,CHIP	SA
2203-006423	C226	C-CER,CHIP	SA
2203-006423	C227	C-CER,CHIP	SA
2203-006423	C229	C-CER,CHIP	SA
2203-006423	C231	C-CER,CHIP	SA
2203-006423	C232	C-CER,CHIP	SA
2203-006423	C234	C-CER,CHIP	SA
2203-006423	C235	C-CER,CHIP	SA
2203-006423	C239	C-CER,CHIP	SA
2203-006423	C241	C-CER,CHIP	SA
2203-006423	C242	C-CER,CHIP	SA
2203-006423	C244	C-CER,CHIP	SA
2203-006423	C300	C-CER,CHIP	SA
2203-006423	C301	C-CER,CHIP	SA
2203-006423	C306	C-CER,CHIP	SA
2203-006423	C307	C-CER,CHIP	SA
2203-006423	C309	C-CER,CHIP	SA
2203-006423	C310	C-CER,CHIP	SA
2203-006423	C311	C-CER,CHIP	SA
2203-006423	C312	C-CER,CHIP	SA
2203-006423	C316	C-CER,CHIP	SA
2203-006423	C319	C-CER,CHIP	SA
2203-006423	C320	C-CER,CHIP	SA
2203-006423	C327	C-CER,CHIP	SA
2203-006423	C330	C-CER,CHIP	SA
2203-006423	C331	C-CER,CHIP	SA
2203-006423	C333	C-CER,CHIP	SA
2203-006423	C334	C-CER,CHIP	SA
2203-006423	C411	C-CER,CHIP	SA
2203-006423	C418	C-CER,CHIP	SA
2203-006423	C420	C-CER,CHIP	SA

SEC CODE	Design LOC	Discription	STATUS
2203-006423	C512	C-CER,CHIP	SA
2203-006423	C514	C-CER,CHIP	SA
2203-006423	C517	C-CER,CHIP	SA
2203-006423	C600	C-CER,CHIP	SA
2203-006423	C601	C-CER,CHIP	SA
2203-006423	C605	C-CER,CHIP	SA
2203-006423	C607	C-CER,CHIP	SA
2203-006423	C609	C-CER,CHIP	SA
2203-006423	C610	C-CER,CHIP	SA
2203-006423	C611	C-CER,CHIP	SA
2203-006423	C612	C-CER,CHIP	SA
2203-006423	C613	C-CER,CHIP	SA
2203-006423	C616	C-CER,CHIP	SA
2203-006423	C622	C-CER,CHIP	SA
2203-006423	C623	C-CER,CHIP	SA
2203-006423	C634	C-CER,CHIP	SA
2203-006423	C637	C-CER,CHIP	SA
2203-006423	C652	C-CER,CHIP	SA
2203-006423	C704	C-CER,CHIP	SA
2203-006423	C705	C-CER,CHIP	SA
2203-006423	C706	C-CER,CHIP	SA
2203-006423	C709	C-CER,CHIP	SA
2203-006423	C715	C-CER,CHIP	SA
2203-006423	C717	C-CER,CHIP	SA
2203-006423	C733	C-CER,CHIP	SA
2203-006423	C800	C-CER,CHIP	SA
2203-006423	C804	C-CER,CHIP	SA
2203-006423	C806	C-CER,CHIP	SA
2203-006423	C807	C-CER,CHIP	SA
2203-006423	C809	C-CER,CHIP	SA
2203-006423	C810	C-CER,CHIP	SA
2203-006423	C815	C-CER,CHIP	SA
2203-006423	C820	C-CER,CHIP	SA
2203-006423	C900	C-CER,CHIP	SA
2203-006423	C943	C-CER,CHIP	SA
2203-006423	C944	C-CER,CHIP	SA
2203-006423	C945	C-CER,CHIP	SA

SEC CODE	Design LOC	Discription	STATUS
2203-006423	C946	C-CER,CHIP	SA
2203-006423	C947	C-CER,CHIP	SA
2203-006423	C948	C-CER,CHIP	SA
2203-006426	C248	C-CER,CHIP	SNA
2203-006462	C325	C-CER,CHIP	SA
2203-006462	C606	C-CER,CHIP	SA
2203-006556	C137	C-CER,CHIP	SA
2203-006556	C139	C-CER,CHIP	SA
2203-006556	C204	C-CER,CHIP	SA
2203-006562	C125	C-CER,CHIP	SA
2203-006562	C145	C-CER,CHIP	SA
2203-006562	C150	C-CER,CHIP	SA
2203-006562	C153	C-CER,CHIP	SA
2203-006562	C304	C-CER,CHIP	SA
2203-006562	C313	C-CER,CHIP	SA
2203-006562	C403	C-CER,CHIP	SA
2203-006562	C417	C-CER,CHIP	SA
2203-006562	C419	C-CER,CHIP	SA
2203-006562	C511	C-CER,CHIP	SA
2203-006562	C521	C-CER,CHIP	SA
2203-006562	C522	C-CER,CHIP	SA
2203-006562	C523	C-CER,CHIP	SA
2203-006562	C524	C-CER,CHIP	SA
2203-006562	C525	C-CER,CHIP	SA
2203-006562	C526	C-CER,CHIP	SA
2203-006562	C528	C-CER,CHIP	SA
2203-006562	C532	C-CER,CHIP	SA
2203-006562	C535	C-CER,CHIP	SA
2203-006562	C602	C-CER,CHIP	SA
2203-006562	C635	C-CER,CHIP	SA
2203-006562	C638	C-CER,CHIP	SA
2203-006562	C639	C-CER,CHIP	SA
2203-006562	C640	C-CER,CHIP	SA
2203-006562	C642	C-CER,CHIP	SA
2203-006562	C646	C-CER,CHIP	SA
2203-006562	C647	C-CER,CHIP	SA
2203-006562	C649	C-CER,CHIP	SA

SEC CODE	Design LOC	Discription	STATUS
2203-006562	C654	C-CER,CHIP	SA
2203-006562	C655	C-CER,CHIP	SA
2203-006562	C656	C-CER,CHIP	SA
2203-006562	C659	C-CER,CHIP	SA
2203-006562	C814	C-CER,CHIP	SA
2203-006562	C819	C-CER,CHIP	SA
2203-006562	C824	C-CER,CHIP	SA
2203-006562	C825	C-CER,CHIP	SA
2203-006562	C826	C-CER,CHIP	SA
2203-006562	C827	C-CER,CHIP	SA
2203-006617	C329	C-CER,CHIP	SA
2203-006617	C332	C-CER,CHIP	SA
2203-006648	C324	C-CER,CHIP	SA
2203-006648	C328	C-CER,CHIP	SA
2203-006668	C805	C-CER,CHIP	SA
2203-006674	C230	C-CER,CHIP	SNA
2203-006681	C413	C-CER,CHIP	SA
2203-006712	C152	C-CER,CHIP	SA
2203-006712	C228	C-CER,CHIP	SA
2203-006824	C507	C-CER,CHIP	SA
2203-006824	C508	C-CER,CHIP	SA
2203-006824	C529	C-CER,CHIP	SA
2203-006824	C657	C-CER,CHIP	SA
2203-006824	C658	C-CER,CHIP	SA
2203-006824	C712	C-CER,CHIP	SA
2203-006824	C713	C-CER,CHIP	SA
2203-006838	C217	C-CER,CHIP	SA
2203-006838	C236	C-CER,CHIP	SA
2203-006838	C504	C-CER,CHIP	SA
2203-006838	C505	C-CER,CHIP	SA
2203-006838	C506	C-CER,CHIP	SA
2203-006838	C509	C-CER,CHIP	SA
2203-006838	C510	C-CER,CHIP	SA
2203-006838	C518	C-CER,CHIP	SA
2203-006838	C519	C-CER,CHIP	SA
2203-006838	C520	C-CER,CHIP	SA
2203-006838	C537	C-CER,CHIP	SA

SEC CODE	Design LOC	Discription	STATUS
2203-006838	C626	C-CER,CHIP	SA
2203-006838	C641	C-CER,CHIP	SA
2203-006838	C653	C-CER,CHIP	SA
2203-006838	C700	C-CER,CHIP	SA
2203-006838	C703	C-CER,CHIP	SA
2203-006838	C730	C-CER,CHIP	SA
2203-006838	C816	C-CER,CHIP	SA
2203-006838	C817	C-CER,CHIP	SA
2203-006838	C821	C-CER,CHIP	SA
2203-006838	C822	C-CER,CHIP	SA
2203-006840	C335	C-CER,CHIP	SA
2203-006840	C336	C-CER,CHIP	SA
2203-006840	C410	C-CER,CHIP	SA
2203-006840	C415	C-CER,CHIP	SA
2203-006847	C148	C-CER,CHIP	SA
2203-006872	C714	C-CER,CHIP	SA
2203-006872	C719	C-CER,CHIP	SA
2203-006890	C621	C-CER,CHIP	SA
2203-006890	C648	C-CER,CHIP	SA
2203-006890	C650	C-CER,CHIP	SA
2203-006896	C131	C-CER,CHIP	SA
2203-006896	C734	C-CER,CHIP	SA
2301-001200	C132	C-FILM,SMD-PPS	SA
2301-001213	C122	C-FILM,SMD-PPS	SA
2301-001735	C120	C-FILM,SMD	SA
2301-001807	C147	C-FILM,SMD	SA
2404-001225	C123	C-TA,CHIP	SA
2404-001268	C200	C-TA,CHIP	SA
2404-001339	C501	C-TA,CHIP	SA
2404-001352	C402	C-TA,CHIP	SA
2404-001377	C400	C-TA,CHIP	SA
2404-001381	C422	C-TA,CHIP	SA
2404-001381	C531	C-TA,CHIP	SA
2404-001381	C624	C-TA,CHIP	SA
2404-001381	C651	C-TA,CHIP	SA
2404-001406	C118	C-TA,CHIP	SA
2404-001411	C412	C-TA,CHIP	SA

SEC CODE	Design LOC	Discription	STATUS
2703-001178	L124	INDUCTOR-SMD	SA
2703-001752	L601	INDUCTOR-SMD	SA
2703-001752	U903	INDUCTOR-SMD	SA
2703-002170	L210	INDUCTOR-SMD	SA
2703-002203	L100	INDUCTOR-SMD	SA
2703-002205	L202	INDUCTOR-SMD	SA
2703-002551	L101	INDUCTOR-SMD	SNA
2703-002793	L104	INDUCTOR-SMD	SA
2703-002793	L106	INDUCTOR-SMD	SA
2703-002793	L120	INDUCTOR-SMD	SA
2703-002794	L107	INDUCTOR-SMD	SA
2703-002794	L110	INDUCTOR-SMD	SA
2703-002794	L206	INDUCTOR-SMD	SA
2703-002795	L205	INDUCTOR-SMD	SNA
2703-002819	L114	INDUCTOR-SMD	SA
2703-002819	L115	INDUCTOR-SMD	SA
2703-002819	L116	INDUCTOR-SMD	SA
2703-002819	L117	INDUCTOR-SMD	SA
2703-002858	L209	INDUCTOR-SMD	SA
2703-002870	L113	INDUCTOR-SMD	SA
2703-002870	L118	INDUCTOR-SMD	SA
2703-002870	L119	INDUCTOR-SMD	SA
2703-002900	L109	INDUCTOR-SMD	SA
2703-002906	L203	INDUCTOR-SMD	SA
2703-002906	L204	INDUCTOR-SMD	SA
2703-002906	L208	INDUCTOR-SMD	SA
2703-002917	L207	INDUCTOR-SMD	SA
2703-002918	L200	INDUCTOR-SMD	SA
2703-002919	L122	INDUCTOR-SMD	SA
2703-002919	L123	INDUCTOR-SMD	SA
2703-002947	L111	INDUCTOR-SMD	SA
2703-002947	L112	INDUCTOR-SMD	SA
2703-002953	C155	INDUCTOR-SMD	SA
2703-003109	C157	INDUCTOR-SMD	SA
2703-003127	L201	INDUCTOR-SMD	SA
2703-003182	L700	INDUCTOR-SMD	SA
2703-003184	L500	INDUCTOR-SMD	SA

SEC CODE	Design LOC	Discription	STATUS
2703-003184	L501	INDUCTOR-SMD	SA
2801-004340	OSC701	CRYSTAL-SMD	SA
2801-004373	OSC500	CRYSTAL-SMD	SA
2801-004455	OSC200	CRYSTAL-SMD	SA
2801-004458	OSC700	CRYSTAL-SMD	SA
2802-001182	OSC300	RESONATOR-CERAMIC	SA
2806-001377	VCO100	OSCILLATOR-VCO	SA
2809-001274	TCXO100	OSCILLATOR-VCTCXO	SA
2901-001348	U602	FILTER-EMI/ESD	SA
2901-001409	EMIF800	FILTER-EMI SMD	SA
2901-001409	EMIF801	FILTER-EMI SMD	SA
2901-001409	EMIF802	FILTER-EMI SMD	SA
2901-001409	EMIF803	FILTER-EMI SMD	SA
2901-001409	EMIF804	FILTER-EMI SMD	SA
2901-001422	EMIF600	FILTER-EMI SMD	SA
2901-001422	EMIF601	FILTER-EMI SMD	SA
2901-001422	EMIF602	FILTER-EMI SMD	SA
2901-001422	F901	FILTER-EMI SMD	SA
2901-001422	F902	FILTER-EMI SMD	SA
2901-001422	F903	FILTER-EMI SMD	SA
2901-001422	F904	FILTER-EMI SMD	SA
2904-001622	F201	FILTER-SAW	SA
2904-001629	F200	FILTER-SAW	SA
2910-000004	DUT200	DUPLEXER-FBAR	SA
2911-000048	FEM100	DUPLEXER-FEM	SA
3301-001659	L600	BEAD-SMD	SA
3408-001109	CN300	SWITCH-SLIDE	SA
3705-001461	RFSW100	CONNECTOR-COAXIAL	SA
3709-001447	SIM600	CONNECTOR-CARD EDGE	SA
3709-001464	M_SD600	CONNECTOR-CARD EDGE	SA
3710-002464	IFCN400	SOCKET-INTERFACE	SA
3711-005618	CN900	HEADER-BOARD TO BOARD	SA
3711-005659	CN600	HEADER-BOARD TO BOARD	SA
3711-006352	SCN800	HEADER-BOARD TO BOARD	SA
3711-006484	SOC400	HEADER-BOARD TO BOARD	SA
4202-001260	BT_ANT	ANTENNA-CHIP	SA
4302-001130	BAT500	BATTERY-LI(2ND)	SA

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SEC CODE	Design LOC	Discription	STATUS
GH71-06013A	ANTCON10	NPR-ANT CONTACT	SA
GH71-06013A	ANTCON20	NPR-ANT CONTACT	SA



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## 8. Reference data

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### 8-1. 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

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## 9. Safety Precautions

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### 9-1. Repair Precaution

- Repair in Shield Box, during detailed tuning.  
Take specially care of tuning or test,  
because specificity of cellular phone is sensitive for surrounding interference(RF noise).
- Be careful to use a kind of magnetic object or tool,  
because performance of parts is damaged by the influence of magnetic force.
- Surely use a standard screwdriver when you disassemble this product,  
otherwise screw will be worn away.
- Use a thick twisted wire when you measure level.  
A thick 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 please 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.

## 9-2. 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.

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## 10. Product Function

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### Main Function

- 3G
- Multimedia gate
- Synchronisation with Windows Media Player
- Media player
- Camera and camcorder
- Java
- Phone to TV
- Bluetooth
- File viewer
- Web browser
- Email

**SAMSUNG  
ELECTRONICS**



GSPN (Global Service Partner Network)

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North America	<a href="http://service.samsungportal.com">service.samsungportal.com</a>
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China	<a href="http://china.samsungportal.com">china.samsungportal.com</a>
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