

SAMSUNG

GSM TELEPHONE

SGH-P940

SERVICE *Manual*

GSM TELEPHONE



CONTENTS

1. Safety Precautions
2. Specification
3. Product Function
4. Array course control
5. Exploded View/Disassembly and Assembly Instructions
6. MAIN Electrical Parts List
7. Block Diagrams
8. PCB Diagrams
9. Flow Chart of Troubleshooting
10. Reference data

CONTENTS

1. Safety Precautions

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

2. Specification

- 2-1. GSM General Specification.....2-1
- 2-2. GSM Tx Power Class.....2-2

3. Product Function

4. Array course control

- 4-1. Software Adjustments.....4-1
- 4-2. Software Downloading.....4-2

5. Exploded View/Disassembly & Assembly Instructions

- 5-1. Cellular phone Exploded View5-1
- 5-2. Cellular phone Parts list.....5-2
- 5-3. Disassembly & Assembly Instructions.....5-4

6. MAIN Electrical Parts List

7. Block Diagrams

8. PCB Diagrams

CONTENTS

9. Flow Chart of Troubleshooting

9-1. Power ON.....	9-1
9-2. Initial.....	9-4
9-3. Sim Part.....	9-8
9-4. Speaker Part(Melody).....	9-11
9-5. Microphone Part.....	9-14
9-6. Key Data Input.....	9-16
9-7. Receiver Part.....	9-17
9-8. Back Light (for Color Main LCD).....	9-19
9-9. Key Back Light.....	9-22
9-10. Camera Part.....	9-24
9-11. GSM Receiver.....	9-27
9-12. GSM Transmitter.....	9-29
9-13. DCS Receiver.....	9-32
9-14. DCS Transmitter.....	9-34
9-15. PCS Receiver.....	9-37
9-16. PCS Transmitter.....	9-39
9-17. WCDMA Receiver.....	9-42
9-18. WCDMA Transmitter.....	9-44
9-19. DVB-H.....	9-46

10. Reference data

1. Safety Precautions

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

1-2. ESD(Electrostatically Sensitive Devices) Precaution

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

You can prevent from ESD damage by static electricity.

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

2. Specification

2-1. GSM General Specification

	EGSM900	DCS1800	PCS1900	W-CDMA
Freq. Band[MHz] Uplink/Downlink	890~915 935~960	1710~1785 1805~1880	1850~1910 1930~1990	1920~1980 2110~2170
ARFCN range	0~124 & 975~1023	512~885	512~810	UL:9612~9888 DL:10562~10838
Tx/Rx spacing	45MHz	95MHz	80MHz	190MHz
Mod. Bit rate/ Bit Period	270.833kbps 3.692us	270.833kbps 3.692us	270.833kbps 3.692us	3.84Mcps
Time Slot Period/Frame Period	576.9us 4.615ms	576.9us 4.615ms	576.9us 4.615ms	Frame length : 10ms
Modulation	0.3GMSK	0.3GMSK	0.3GMSK	QPSK HQPSK
MS Power	33dBm~5dBm	30dBm~0dBm	30dBm~0dBm	24dBm ~ - 50dBm
Power Class	4 (max +33dBm)	1 (max +30dBm)	1 (max +30dBm)	3 (max +24dBm)
Sensitivity	-102dBm	-100dBm	-100dBm	-106.7dBm
TDMA Mux	8	8	8	
Cell Radius	35Km	2Km	2Km	2Km

2-2. GSM TX power class

TX Power control level	GSM900	TX Power control level	DCS1800	TX Power control level	PCS1800
5	33±2 dBm	0	30±3 dBm	0	30±3 dBm
6	31±2 dBm	1	28±3 dBm	1	28±3 dBm
7	29±2 dBm	2	26±3 dBm	2	26±3 dBm
8	27±2 dBm	3	24±3 dBm	3	24±3 dBm
9	25±2 dBm	4	22±3 dBm	4	22±3 dBm
10	23±2 dBm	5	20±3 dBm	5	20±3 dBm
11	21±2 dBm	6	18±3 dBm	6	18±3 dBm
12	19±2 dBm	7	16±3 dBm	7	16±3 dBm
13	17±2 dBm	8	14±3 dBm	8	14±3 dBm
14	15±2 dBm	9	12±4 dBm	9	12±4 dBm
15	13±2 dBm	10	10±4 dBm	10	10±4 dBm
16	11±3 dBm	11	8±4dBm	11	8±4dBm
17	9±3dBm	12	6±4 dBm	12	6±4 dBm
18	7±3 dBm	13	4±4 dBm	13	4±4 dBm
19	5±3 dBm	14	2±5 dBm	14	2±5 dBm
		15	0±5 dBm	15	0±5 dBm

3. Product Function

Main Function

- 260K Color QVGA Screen (176×320 / 2.15"")
- 6.5K OLED sub Screen (80*64/1.09")
- YAMAHA 64 poly
- Multimedia Message Service (MMS)
- E-mail
- Voice recorder
- Java / WAP2.0
- Quad-band(900/1800/1900/2100MHz)
- Bluetooth (Ver1.2)
- DVB-H
- 2MEGA CAMERA

4. Array course control

4-1. Software Adjustments



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

4-2. Software Downloading

4-2-1. Downloading Binary Files

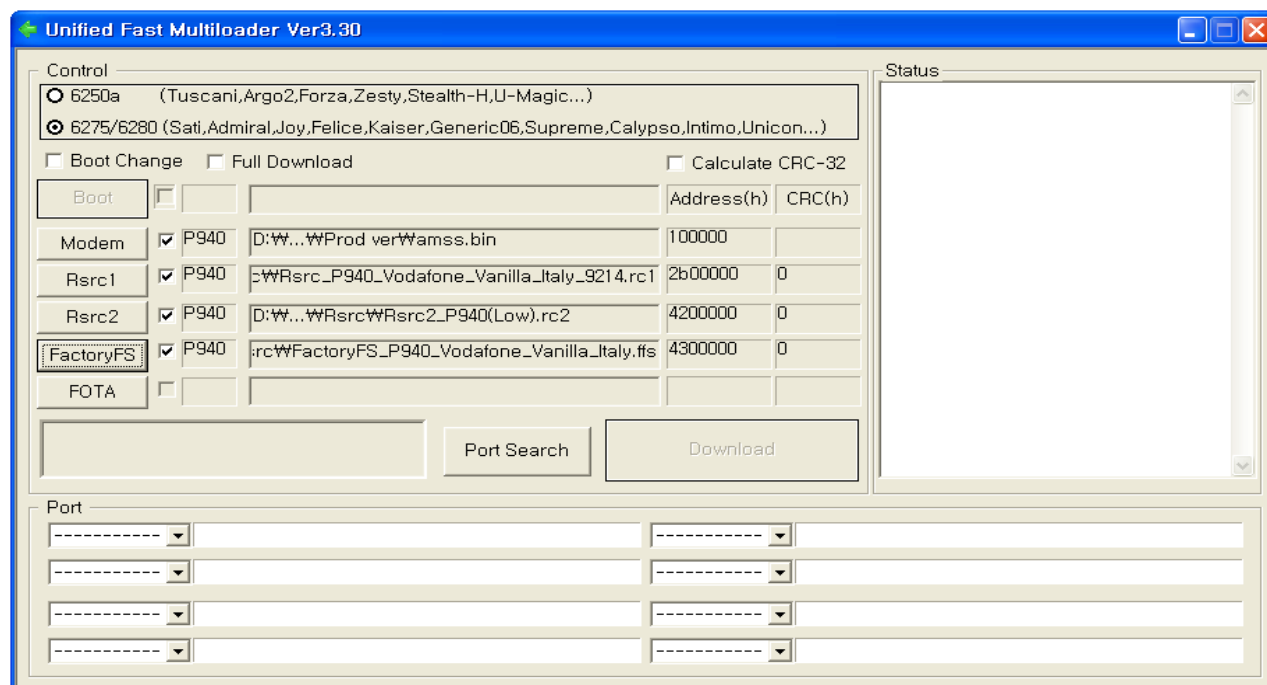
- Four binary files for downloading SGH-P940.
 - amss.bin : Modem binary for communication function
& Mocha binary for user interface and various application
 - Rsrc_P940_Vodafone_Vanilla_Italy: Files need for each application
 - Rsrc2_P940(Low).rc2 : Power on/off animation
 - FactoryFS_P940_Vodafone_Vanilla_Italy.ffs : Default file system to be put into in initial production

4-2-2. Pre-requisite for Downloading

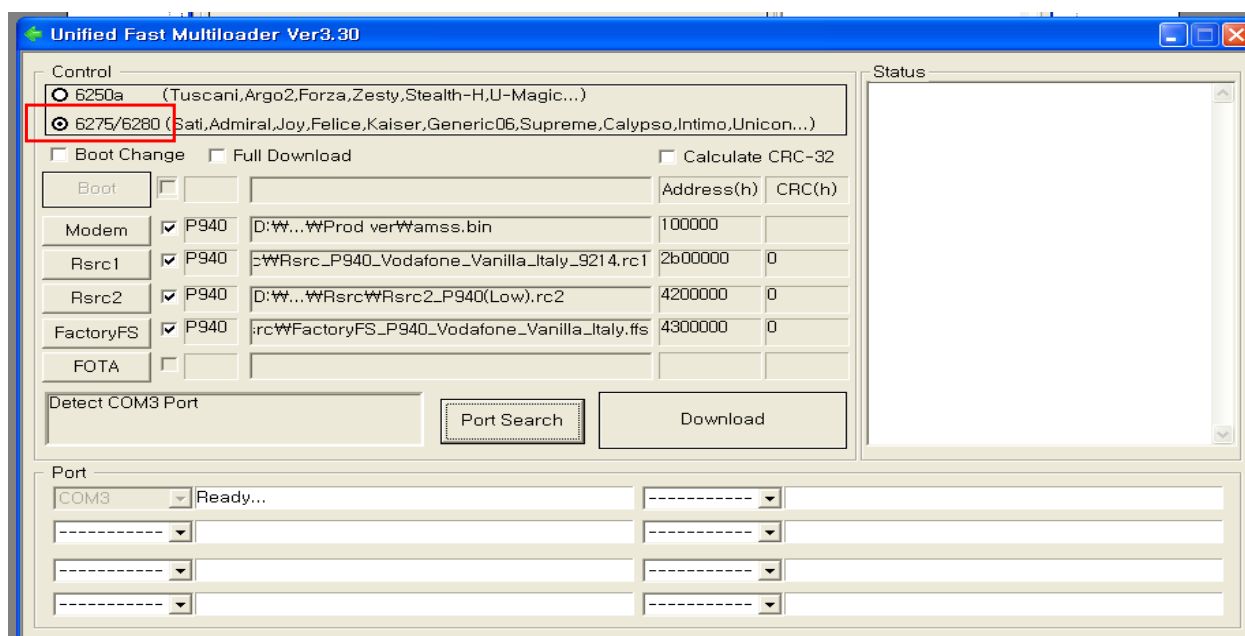
- Downloader Program([FastMultiLoader V3.3.exe](#))
- SGH-P940 Mobile Phone
- USB Data Link Cable
- Binary files

4-2-3. S/W Downloader Program

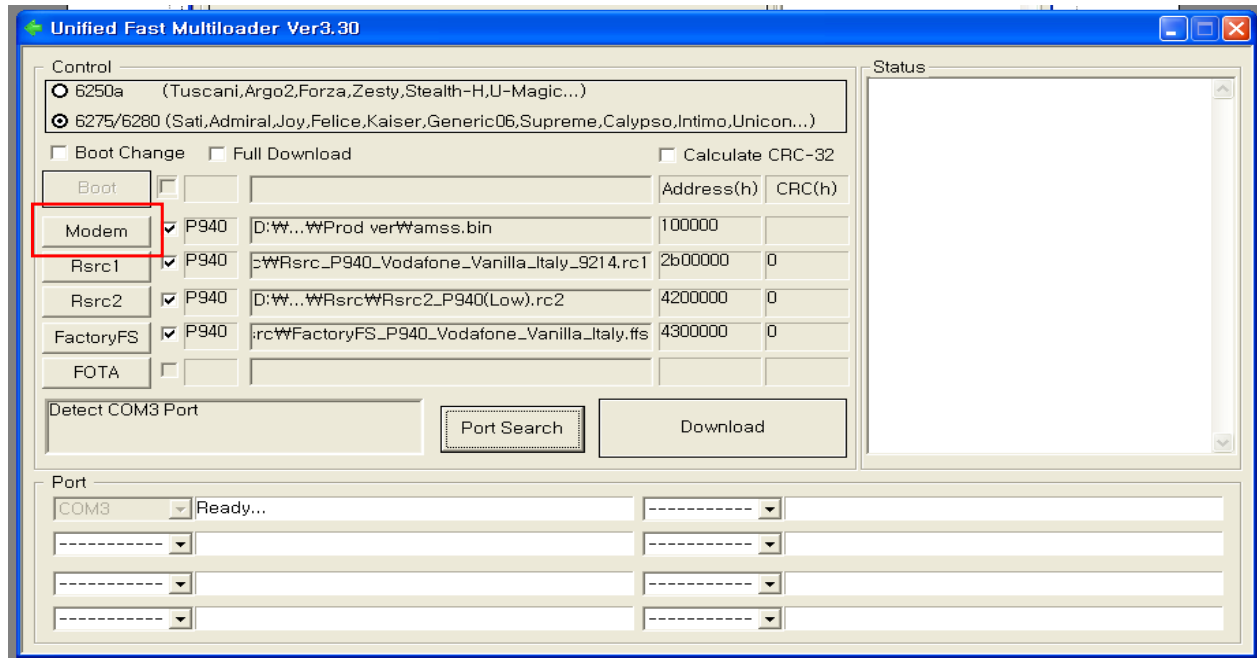
1. Boot the P940 by pressing 'Power ON key' + 'Number 9 key' at the same time-
If you do properly, you can see the following message on sub LCD "SGH-P940
DOWNLOAD"



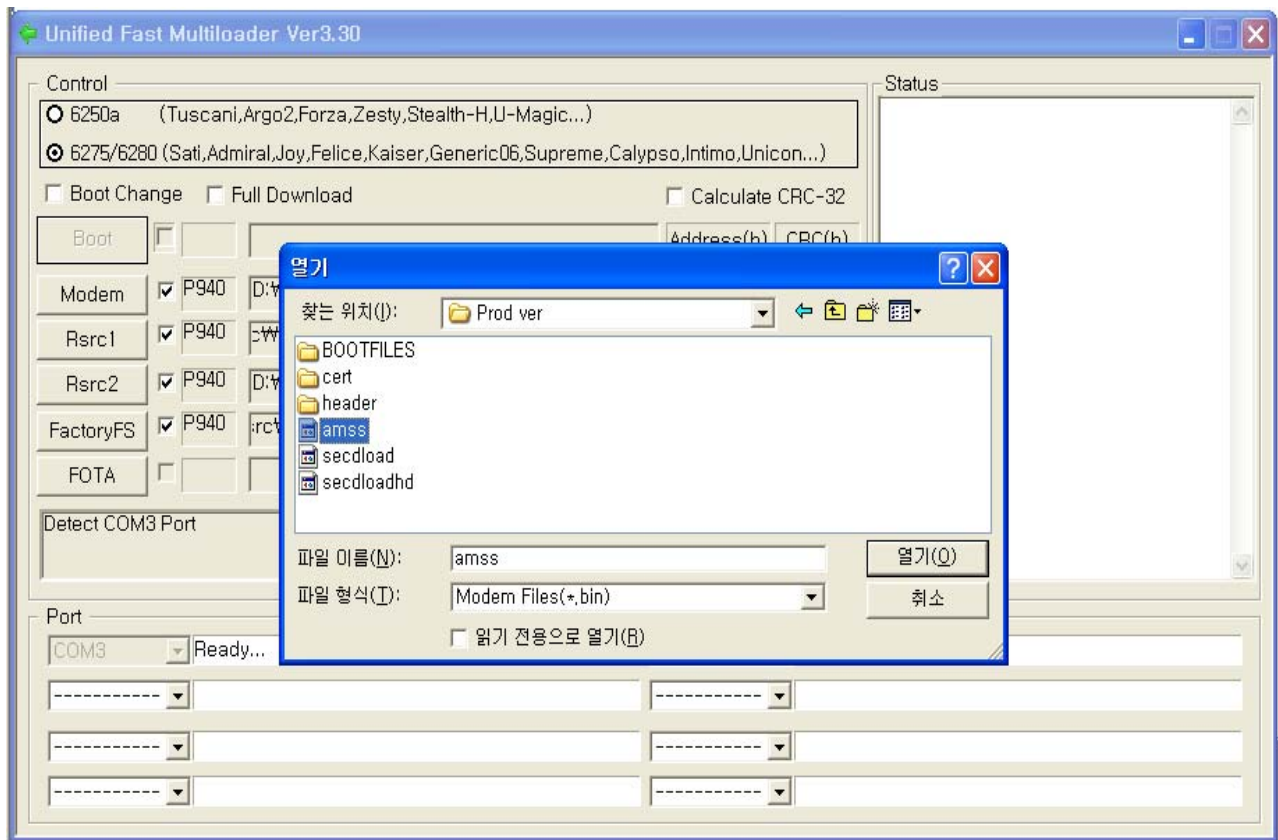
2. Load the binary download program by executing the "FastMultiLoader V3.3.exe". And then Check the 6275/6280



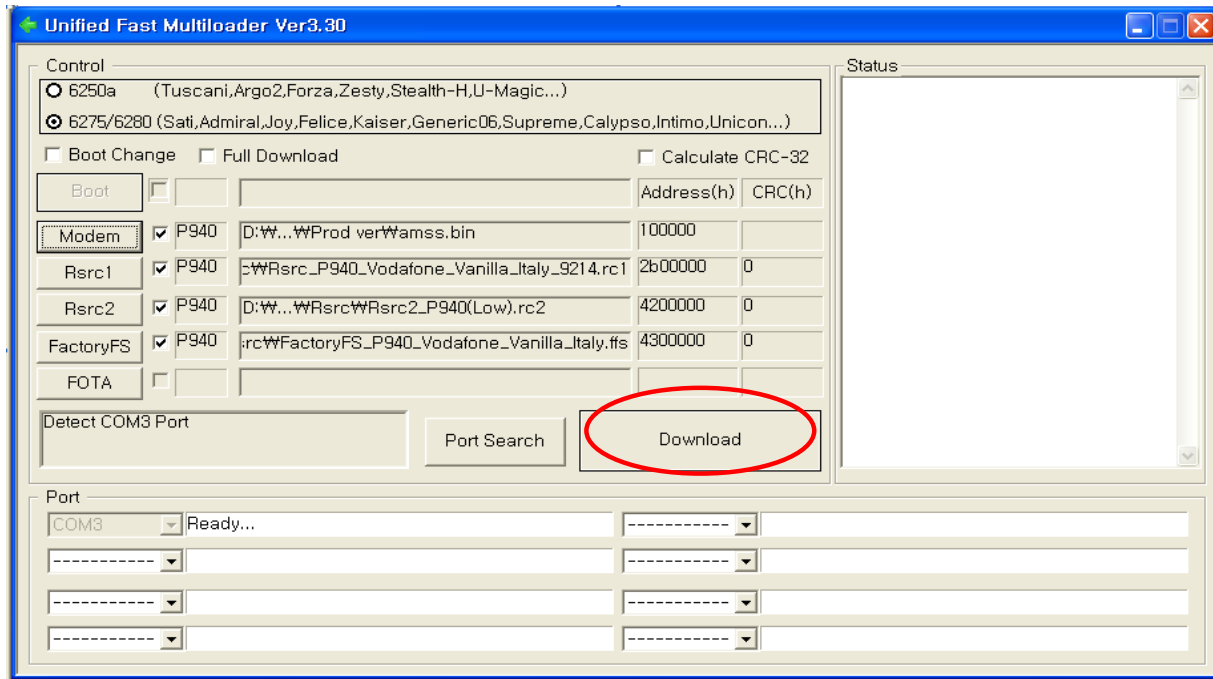
3. Select the check box what you want to download.



4. Select the binary file what you want to download



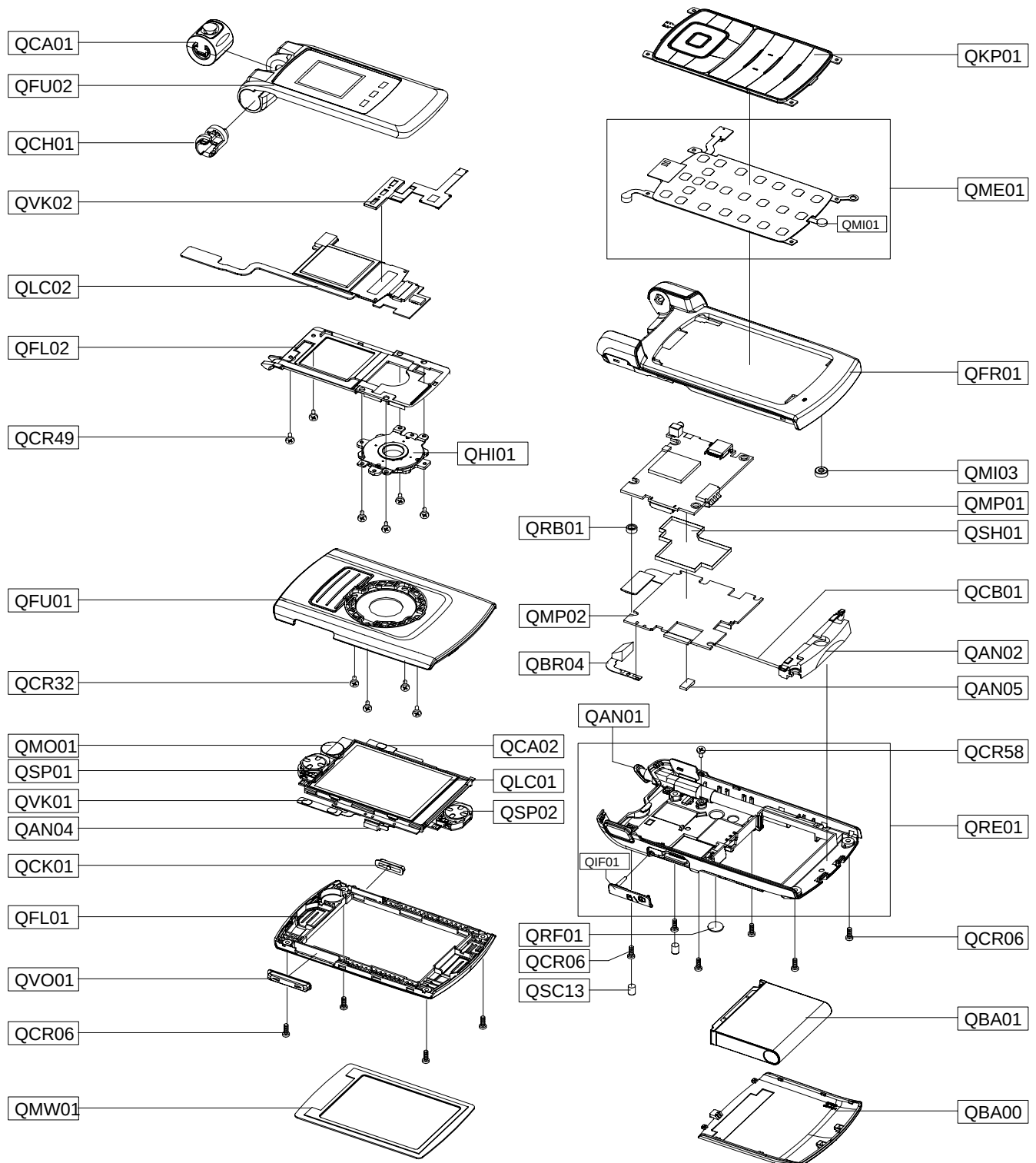
5. Now press the button 'DownLoad'.



6. When downloading is complete, UE reboot automatically.
- If there is difference in FactoryFs.bin, UE will format file system automatically.

5. Exploded View / Disassembly&Assembly Instructions

5-1. Cellular phone Exploded View



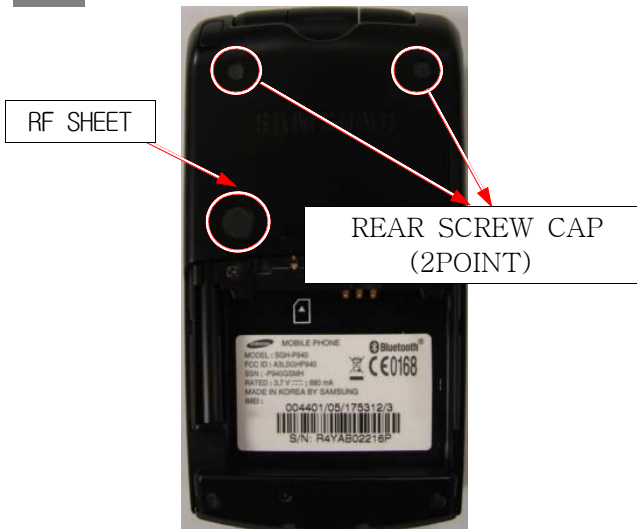
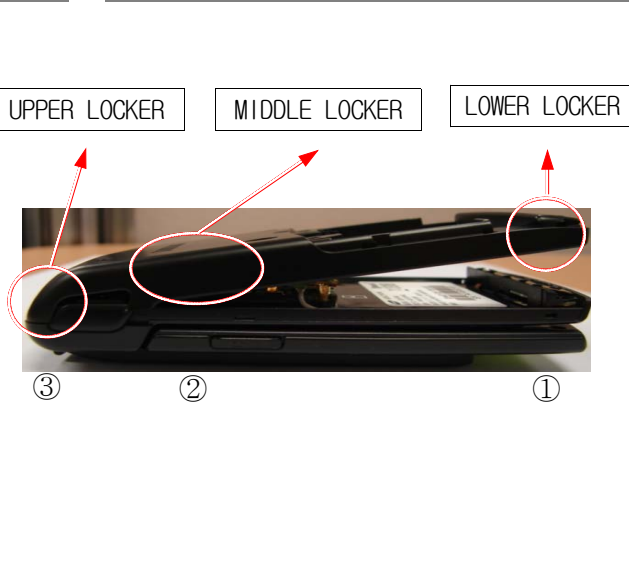
5-2. Cellular phone Parts list

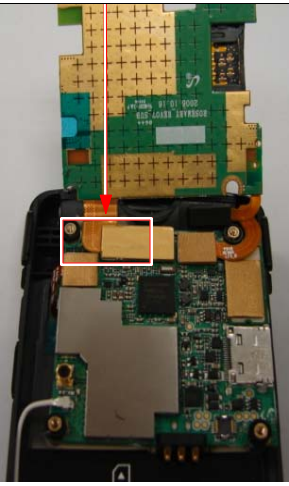
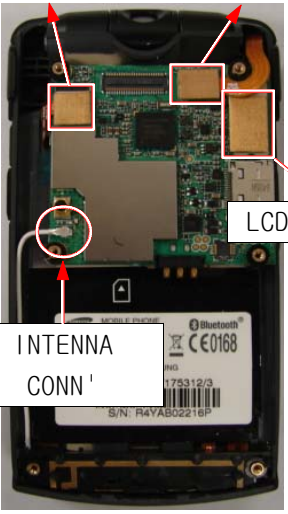
Design LOC		Description	SEC Code
QAN01		ANTENNA	GH42-01008A
QAN02		INTENNA-SGH P940	GH42-01009A
QAN04		FPCB ANTENNA CHIP-SGH P940	GH42-01074A
QAN05		ASSY RUBBER-ANT CONTACT	GH98-02820A
QBA00		ASSY CASE-BATT	GH98-03001A
QBA01		INNER BATTERY PACK-880MAH , BL	GH43-02666A
QBR04		ASSY RUBBER-BT	GH98-03568A
QCA01		UNIT-CAMERA	GH59-03742A
QCA02		UNIT-CAM KEY	GH59-03077A
QCB01		COAXIAL CABLE-SGHP940	GH39-00687A
QCH01		ASSY HINGE-CAMERA	GH98-01541A
QCK01		PMO-CAM KEY	GH72-36399A
QCR06		SCREW-MACHINE	6001-001155
QCR06		SCREW-MACHINE	6001-001155
QCR06		SCREW-MACHINE	6001-001155
QCR32		SCREW-MACHINE	6001-001700
QCR49		SCREW-MACHINE	6001-001823
QCR58		SCREW-MACHINE	6001-001870
QFL01		ASSY CASE-FOLDER LOWER	GH98-02815A
QFL02		NDC-CASE ARM LOWER V2	GH71-06136A
QFR01		ASSY CASE-FRONT	GH98-02814A
QFU01		ASSY CASE-FOLDER UPPER	GH98-02817A
QFU02		ASSY CASE-ARM UPPER	GH98-02816A
QHI01		ASSY-HINGE-SWING HINGE	GH98-01141A
QKP01		ASSY KEYPAD-(EU/BLK)	GH98-02819A
QLC01		LCD-SGH P940 MODULE	GH07-01029A
QLC02		LCD-SUB+FPCB	GH07-01005A
QMI03		RMO-RUBBER MIC HOLDER V2	GH73-08833A
QMO01		MOTOR DC-SGHT209	GH31-00225A
QMP01		PBA MAIN-SGH-P940	GH92-03106A
QMP02		PBA-SUB SGH P940	GH92-03118A
QMW01		ASSY COVER-WINDOW MAIN	GH98-02818A
QRB01		PMO-RING BOARD	GH72-35386A
QRF01		MPR-TAPE CAP RF	GH74-27676A
QSC13		RMO-RUBBER SCREW CAP REAR	GH73-08458A
QSH01		ICT-SHIELD COVER	GH70-01894A
QSP01		SPEAKER	3001-001968
QSP02		SPEAKER	3001-001976
QVK01		UNIT-VOLUME KEY	GH59-03076A
QVK02		UNIT-TOUCH KEY	GH59-03093A
QVO01		PMO-VOL KEY	GH72-28866A
QME01		UNIT-KEY FPCB	GH59-03704A
	QMI01	AS-MIC SVC	GH81-05445A
QRE01		ASSY CASE-REAR	GH98-02999A
	QIF01	PMO-COVER TF	GH72-34693A

Description	SEC Code
BAG PE	6902-000634
CBF INTERFACE-DATA LINK CABLE	GH39-00444A
ADAPTOR-SGHE690,BLK,EU,A TYPE	GH44-01361A
S/W CD-SGHP940 PC LINK CD	GH46-00347A
UNIT-EARPHONE,20P,B-TYPE	GH59-03883A
LABEL(P)-IMEI	GH68-01335D
LABEL(P)-WATER SOAK	GH68-02026A
LABEL(R)-MAIN(EU)	GH68-13074A
MANUAL USERS-OMN ITALIAN	GH68-13082A
BOX-UNIT(EU)	GH69-04705A
CUSHION-CASE(EU)	GH69-04706A
NDC-ANT BUSHING	GH71-07141A
NDC-ANT E RING	GH71-07142A
NPR-ANT NUT	GH71-07144A
PMO-DUMMY CARD	GH72-36453A
PMO-ANT TUBE	GH72-36454A
MPR-SPK LEADING TAPE	GH74-12322A
MPR-BOHO VINYL FOLDER	GH74-18217A
MPR-TAPE MAIN WINDOW	GH74-24330A
MPR-TAPE FRONT HINGE	GH74-24337A
MPR-TAPE SCREW CAP FOLDER	GH74-24355A
MPR-VINYL BOHO ARM	GH74-26177B
MPR-INSU TAPE FRONT	GH74-27674B
MPR-GASK TAPE	GH74-28820A
MPR-GASK TAPE	GH74-29119A
MPR-GASK TAPE	GH74-29120A
MPR-GASK TAPE	GH74-29121A
MPR-TAPE	GH74-29123A
MPR-TAPE SCREW CAP ARM	GH74-29416A
MPR-VINYL BOHO TF COVER	GH74-29559A
MPR-TAPE	GH74-29560A
MPR-INSU TAPE	GH74-29717A
MPR-SPONGE	GH74-29719A
MPR-INSU TAPE	GH74-29733A
MPR-INSU TAPE	GH74-29734A
MPR-INSU TAPE	GH74-29762A
MPR-INSU TAPE	GH74-29763A
MPR-INSU TAPE	GH74-29764A
MPR-INSU TAPE	GH74-29765A
MPR-INSU TAPE	GH74-29766A
MPR-INSU TAPE	GH74-29767A
AS-LCD FPCB	GH81-05945A
AS-SUB LCD SVC	GH81-06086A

5-3. Disassembly&Assembly Instructions

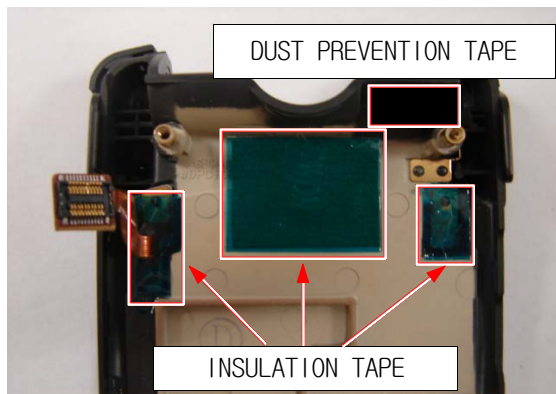
1-1. FRONT ASS'Y & REAR DISASSEMBLY

1 Remove SCREW CAP 4 POINT  RF SHEET REAR SCREW CAP (2POINT)	2 Remove SCREW 6 POINT  REAR SCREW CONNECTION POINT (6POINT)
1) When remove REAR SCREW CAP and R/F SHEET, When disjoint SCREW, take care lest scratch should occur on ejection.	1) When use electric motion driver, take care do not give damage to REAR.
3 Disassemble the Folder Ass'y and Rear from the bottom of side  ③ ② ①	4 Disassemble giving flow to right and left.  UPPER LOCKER MIDDLE LOCKER LOWER LOCKER ③ ② ①
1) After Disassemble priority REAR lower column (①), side (②) and REAR Disjoint top portion (③) sequentially.	1) When disjoint, Take care LOCKING wealth damage and scratch attention. 2) When disjoint REAR top portion (③), do not inflict force and disassemble giving flow to right and left..

5 Separate MAIN PBA & SUB PBA CONN'. MAIN / SUB PBA CONN' 	6 Disjoint FPCBs KEYPAD FPCB CAMERA FPCB LCD FPCB ANTENNA CONN' 
1) When disjoint CONN', pays attention to PIN damage, and avoids for PBA piece part that effect goes.	1) Disjoint KEYPAD FPCB, CAMERA FPCB, LCD FPCB, ANTENNA CONN'.
7 When is detached, emancipate PBA. 	8 Remove Antenna. GUIDE GROOVE 
1) When disjoint CONN', pays attention to PIN damage, and avoids for PBA piece part that effect goes.	1) Disjoint Coaxial CABLE at left side guide groove. 2) Disjoint Antenna from right side on FRONT lower column. 3) Disjoint COAXIAL CABLE at Antenna

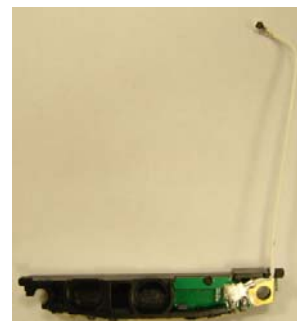
9

Remove TAPE.



- 1) Remove dust prevention TAPE and insulation TAPE.

10

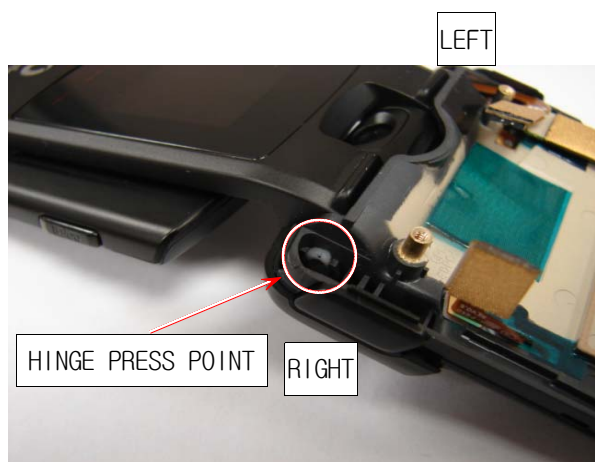


ANTENNA

- 1) When Antenna disjoints, Do not inflict force to do damage does not go to LOCKER.
- 2) When disjoint COAXIAL CABLE, Avoid expiring or deform CABLE and CABLE CONN'.

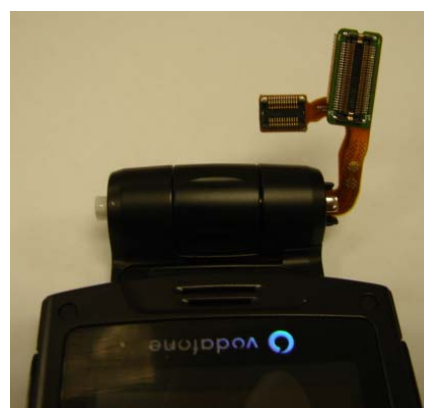
11

Disjoint FOLDER ASSY'.



- 1) Disjoint right side and after extract left FPCB, Separate FOLDER ASS' Y and FRONT

12

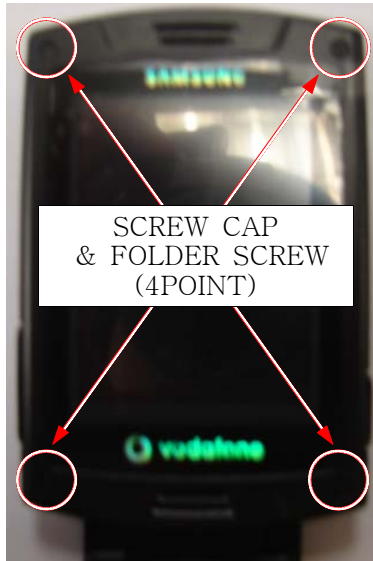


- 1) Take care so that do not inflict force perform.
- 2) When disjoint FPCB, take care so that FPCB may not tear.

1-2. FOLDER DISASSEMBLY

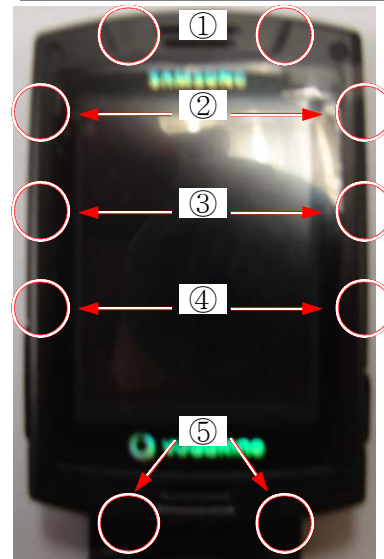
1

Remove SCREW CAP & SCREW 4 POINT.



2

Disjoint LOCKER.



1) When disjoint SCREW, SCREW CAP, scratch attention

1) After disjoint first side LOCKER (②, ③, ④), Disjoint LOCKER (①, ⑤).
2) When disjoint, take care so that damage may not go to LOCKER.

3

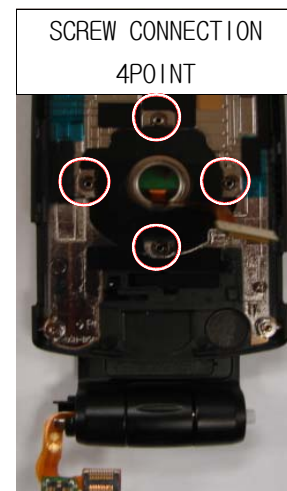
Separate FOLDER LOWER / UPPER.



1) When disjoint FPCB, take care lest FPCB should tear.

4

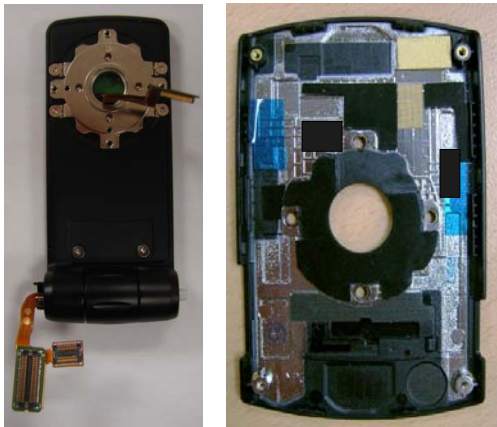
Remove FOLDER UPPER SCREW 4 POINT.



1) After FOLDER UPPER SCREW 4 point, Extracting SUB LCD ASS' Y FPCB through Hole.
2) Separate UPPER and ARM.

5

Separate UPPER and ARM.



1) Take care so that FPCB may not tear or fold.

6

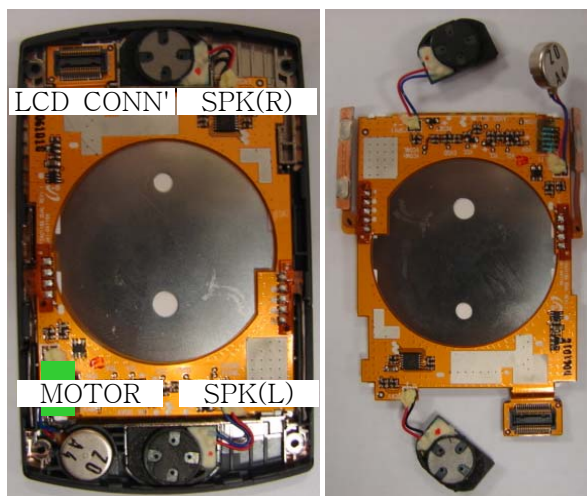
Remove INSULATION TAPE.



1) When remove insulation TAPE, avoid influencing for piece part..

7

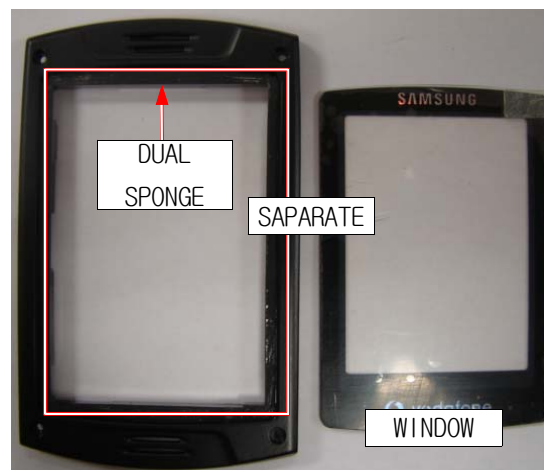
Separate each parts.



1) Separate CAMERA KEY, VOLUME KEY, SPK, MOTOR, LCD CONN in FOLDER LOWER.
2) When separate each parts, Avoid parts interference and FPCB/WIRE tearing or get taken.

8

Remove WINDOW in LOWER.



1) When remove, Scratch Attention.
- When remove dust, use alcohol and swab.

1-3. ARM DISASSEMBLY

1

Remove ARM SCREW SHEET.



ARM SCREW SHEET

1) REMOVE ARM SCREW SHEET.

2

Disjoint SCREW.

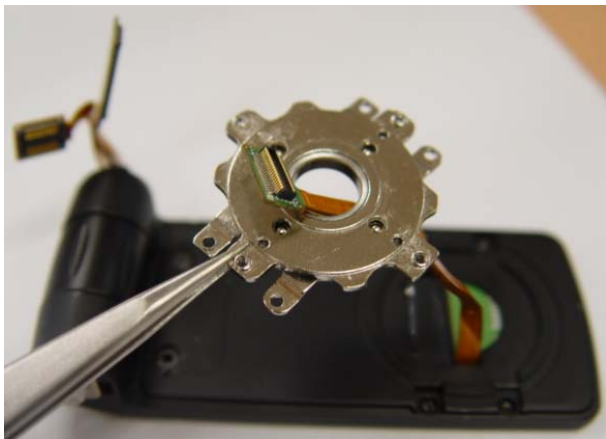


DISJOINT SCREW (6 POINT)

1) When disjoint SCREW, Scratch Attention.

3

Extract SUB LCD FPCB.



1) When extract SUB LCD FPCB, Take care so that FPCB may not tear.

4

Remove TAPE and Separate ARM UPPER / LOWER.



1) Remove INSULATION TAPE of detached ARM UPPER's lower column.
 2) After disjoint TOUCH KEY FPCB ARM, Separate perfectly UPPER / LOWER.
 3) Take care so that TOUCH KEY FPCB may not tear.

5

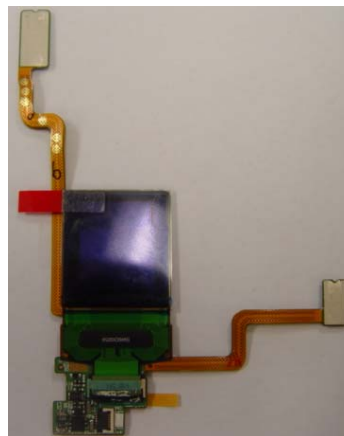
Separate ARM UPPER's TOUCH KEY FPCB



1) Take care so that TOUCH KEY FPCB may not tear.

6

Disassembly SUB LCD MODULE.



1) Take care so that FPCB may not tear.

7

Disjoint HINGE DUMMY.



1) When disjoint HINGE DUMMY, take care so that CAMERA FPCB may not tear.

8

Extract HINGE.



1) Extract HINGE and Cancel CAMERA fixing state.

9

Separate CAMERA.

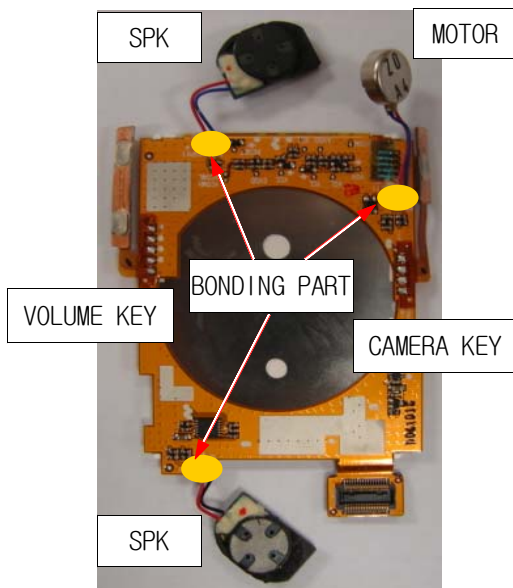


- 1) When separate CAMERA, Take care so that CAMERA FPCB may not tear.

1-4. LCD DISASSEMBLY

1

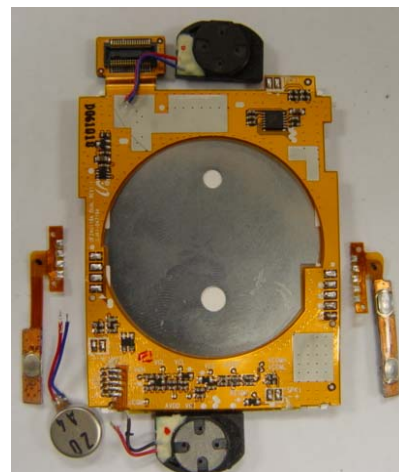
Separate ARM UPPER's TOUCH KEY FPCB.



- 1) Remove SPK & MOTOR's bonding and disjoint SOLDERING segment.
 2) When remove SOLDERING, Do not to effect goes for neighborhood piece part.

2

Disjoint SUB LCD MODULE.

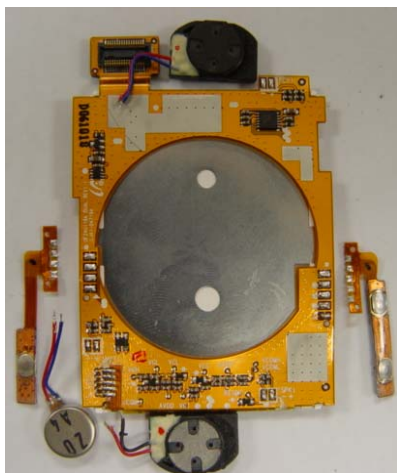


- 1) Remove and Disjoint SOLDERING part of VOLUME KEY, CAM KEY.
 2) Take care lest FPCB should tear.

2-1. LCD ASSEMBLY

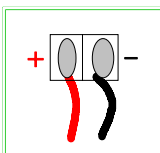
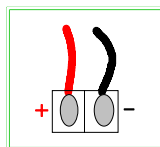
1

KEY FPCB does SOLDERING.



2

Parts do SOLDERING.

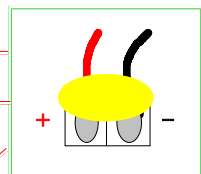
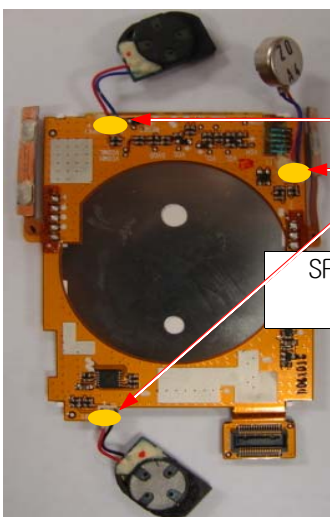
SPEAKER(L) MANUAL
SOLDERING partMOTOR MANUAL
SOLDERING part

- 1) When SOLDERING, avoid influencing for neighborhood piece part.
- 2) First, Do MANUAL SOLDERING to LAND to do MANUAL SOLDERING.

- 1) Do MANUAL SOLDERING Where red WIRE is FPCB's (+) la and is registered.
(Observe in polarity)
- 2) When SOLDERING, avoid influencing for neighborhood piece part.

3

Do bonding.

SPEAKER, MOTOR
BONDING

- 1) Work bonding in SPEAKER WIRE's neck region.
- 2) Work as do not become excess bonding.
- 3) Glue works as do not escape GUIDE LINE.

2-2. ARM ASSEMBLY

1

Insert CAMERA.



HINGE

FPCB CRACK
OCCURENCE

- 1) Make CAMERA insertion space after press hinge to outer block.
- 2) When insert CAMERA, Pull FPCB downward so that FPCB may not get torn.
- 3) Take care lest should tear to FPCB and contracts.

2

Remove SCREW 6 POINTs.

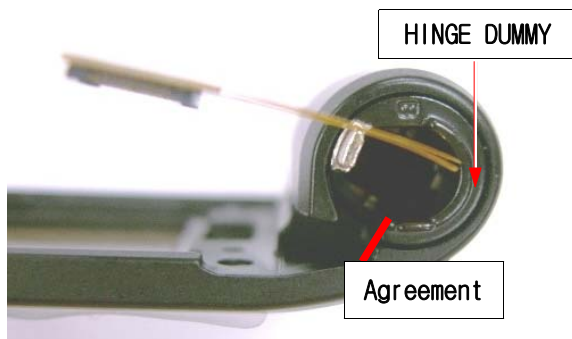


Press hinge

- 1) Does CAMERA insertion and uses hinge, Fix CAMERA.

3

Confirm HINGE DUMMY.



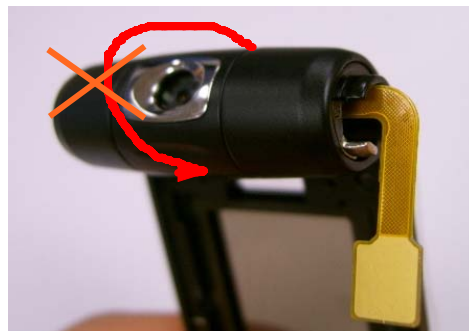
HINGE DUMMY

Agreement

- 1) Contracts HINGE DUMMY and Insert perfectly CAMERA.
- 2) Observe in FPCB and hinge direction after CAMERA insertion.

4

Confirm CAMERA insertion.



- 1) When was inserted, fix HINGE DUMMY and CAMERA When turn downward, do not return downward at relevant position.
- 2) When connect hinge DUMMY, Take care lest should tear to FPCB.

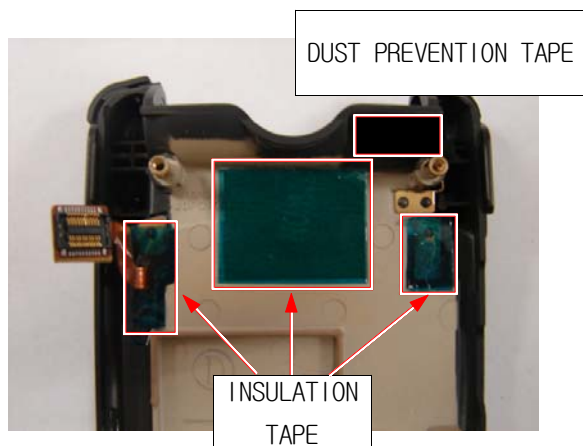
5 SUB LCD to ARM LOWER safe arrival.	6 Connect TOUCH KEY FPCB.
1) Attach TOUCH KEY FPCB to ARM UPPER. 2) When Attach TOUCH KEY FPCB, Attach by projection standard for fixing.	1) Attach TOUCH KEY FPCB to ARM UPPER CONN' 2) Remove SUB WINDOW protection vinyl & SUB WINDOW attach tape. 3) Do to insert perfectly guide line. 4) Take care so that insulation TAPE may not get loose.
7 When is detached, separate PBA.	8 Remove Intena.
1) After insert SUB LCD FPCB to HINGE DUMMY (1), Connect ARM UPPER and ARM LOWER (FPCB direction attention)	1) Take care so that FPCB may not tear. 2) SUB LCD FPCB is front, CAMERA FPCB is backward.

9 Insert SUB LCD FPCB in ROTATE HINGE 	10 Connect SCREW 6 POINTs.  DISJOINT SCREW (6 POINT)
1) ROTATE HINGE's triangle symbol is combined to CAMERA. (When direction is not right, do not become safe arrival perfectly) 2) Take care lest FPCB should tear.	1) When contract SCREW, Take care so that scratch does not occur.
11 Attach ARM SCREW SHEET.  ARM SCREW SHEET	
1) Attach ARM SCREW SHEET.	

2-3. FRONT ASSEMBLY

1

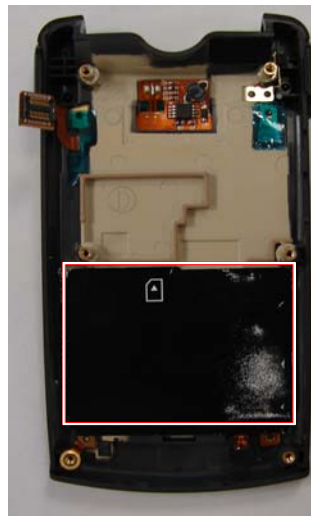
Attach TAPES.



1) Central TAPE (INSULATION TAPE →
CHALLENGE TAPE → INSULATION TAPE)

2

Attach black insulation TAPE.



1) Sets well in holdfast directrix and attaches
INSULATION TAPE.

2-4. FOLDER ASSEMBLY

1

Attach WINDOW.



2

Inserts parts to case and attaches TAPE.

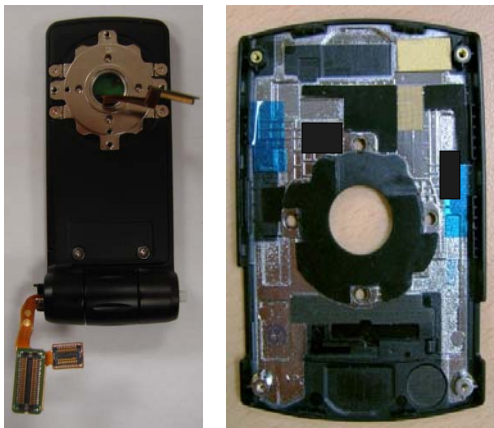


- 1) Attach WINDOW.
- 2) When handle to WINDOW, observe in dust management. (When remove dust, use alcohol and swab.)

- 1) Insert SPK(L), SPK(R), MOTOR and LCD CONN'.
- 2) Attach INSULATION TAPE.
- 3) Take care so that WIRE may gets snarl and does not drop.

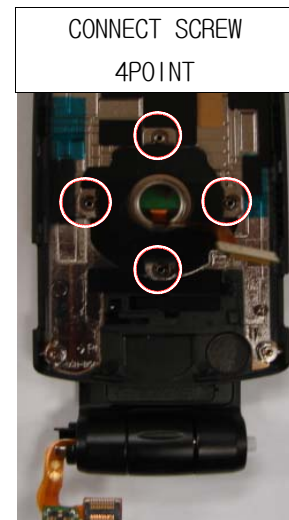
3

Assemble UPPER and ARM.



4

CONNECT FOLDER UPPER SCREW
4 POINT



- 1) Insert SUB LCD ASS' Y's FPCB through FOLDER UPPER HOLE.
- 2) Do ROTATE HINGE so that arrive safe to FOLDER UPPER.
- 3) When insert FPCB, take care so that FPCB may not tear.

- 1) When contract SCREW, Take care so that scratch does not occur.

5 Assemble UPPER and ARM.	6 Remove insulation TAPE.
1) Assemble LCD FPCB to FOLDER UPPER. 2) Take care so that FPCB may not tear or fold.	1) Assemble in LOCKER's order. (① → ②) 2) Assemble VOLUME KEY & CAMERA KEY. 3) Assemble in LOCKER's order. (③ → ④ → ⑤) 4) Observe in VOLUME KEY & CAMERA KEY's inclination.
7 CONNECT FOLDER SCREW	
1) Attach FOLDER SCREW CAP (4POINT). 2) When contract SCREW, observe shooting out scratch. 3) SCREW CAP fix as once more as possible press.	

2-5. FRONT ASS'Y & REAR ASSEMBLY

1



1) Make CAMERA lens turn front side.

2

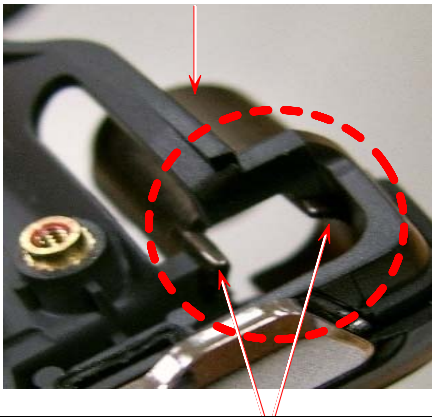
Assemble folder.



- 1) Rush LCD FPCB & CAMERA FPCB to FRONT's groove.
- 2) Insert to FRONT from HINGE DUMMY (①).
- 3) Presses and assembles projected part (②).
- 4) Opens FOLDER and repeats close of 2 times.

3

Extract SUB LCD FPCB.

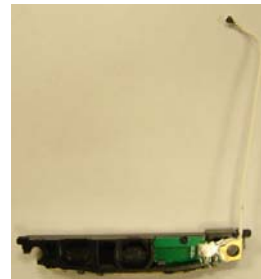


OBSERVE on HINGE DUMMY direction

1) Take care so that FPCB may not be chewed.

4

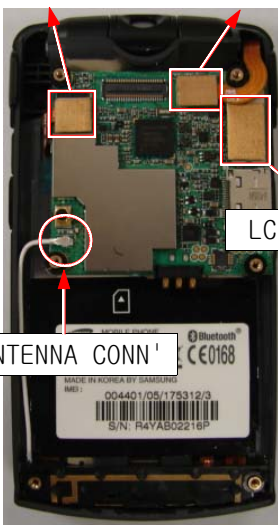
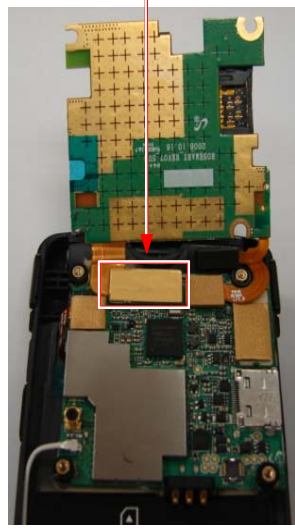
Assemble INTENNA to REAR.



INTENNA

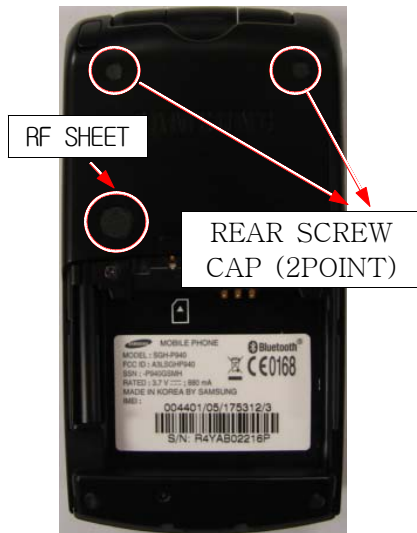


- 1) Assembles Intena from left side and right side.
- 2) At left side assembly Confirm whether was arrived safe to KEY PCB GND.
- 3) Take care so that COAXIAL CABLE may not be chewed.

5 ASSEMBLE FPCB & ANTENNA CONN' KEYPAD FPCB CAMERA FPCB  LCD FPCB ANTENNA CONN'	6 ASSEMBLE MAIN / SUB PBA MAIN / SUB PBA CONN' 
1) Insert MAIN PBA to SCREW BOSS's(4ea) HOLE. 2) Assemble ANTENNA WIRE, LCD FPCB. 3) Assemble CAMERA FPCB, KEYPAD FPCB.	1) When insert PBA, insert vertically.
7 ASSEMBLE REAR. UPPER LOCKER MIDDLE LOCKER LOWER LOCKER 	8 CONNECT REAR SCREW 6 POINT  CONNECT REAR SCREW POINT
1) Assemble Left LOCKER, Right LOCKER and Lower LOCKER. 2) Observe for LOCKING wealth damage. 3) Take care so that RF WIRE may not be chewed at LOCKER assembly.	1) When contract SCREW, Take care so that scratch does not occur.

9

ASSEMBLE FPCB & ANTENNA CONN' .



- 1) Insert REAR SCREW CAP to 4 POINTs of picture.
- 2) Attach R/F SHEET.

6. MAIN Electrical Parts List

Design LOC	Description	SEC Code	STATUS
ANT1	NPR-ANTENNA CONTACT	GH71-06984A	SA
BAT900	BATTERY-LI(2ND)	4302-001130	SA
BTC700	CONNECTOR-BATTERY	3711-006003	SA
C100	C-CER,CHIP	2203-002982	SA
C1000	C-CER,CHIP	2203-005725	SA
C1001	C-CER,CHIP	2203-006423	SA
C1002	C-CER,CHIP	2203-005725	SA
C1003	C-CER,CHIP	2203-005725	SA
C1004	C-CER,CHIP	2203-005725	SA
C1005	C-CER,CHIP	2203-006708	SA
C1006	C-CER,CHIP	2203-006423	SA
C1007	C-CER,CHIP	2203-006708	SA
C1008	C-CER,CHIP	2203-006708	SA
C1009	C-CER,CHIP	2203-006423	SA
C101	C-CER,CHIP	2203-006123	SA
C1010	C-CER,CHIP	2203-006423	SA
C1011	C-CER,CHIP	2203-006708	SA
C1012	C-CER,CHIP	2203-006423	SA
C1013	C-CER,CHIP	2203-006562	SA
C1014	C-CER,CHIP	2203-006423	SA
C1017	C-CER,CHIP	2203-006423	SA
C1018	C-CER,CHIP	2203-006423	SA
C1019	C-CER,CHIP	2203-006423	SA
C102	C-CER,CHIP	2203-001124	DNA
C1020	C-CER,CHIP	2203-000854	SA
C1021	C-CER,CHIP	2203-006423	SA
C1022	C-CER,CHIP	2203-006423	SA
C1023	C-CER,CHIP	2203-006423	SA
C1024	C-CER,CHIP	2203-006824	SA
C1025	C-CER,CHIP	2203-006423	SA
C1026	C-CER,CHIP	2203-000330	SA
C1027	C-CER,CHIP	2203-006423	SA
C1028	C-CER,CHIP	2203-006423	SA
C1029	C-CER,CHIP	2203-006423	SA
C103	C-CER,CHIP	2203-005808	SA
C1030	C-CER,CHIP	2203-006423	SA
C1031	C-CER,CHIP	2203-000330	SA
C1032	C-CER,CHIP	2203-006423	SA
C1033	C-CER,CHIP	2203-006824	SA
C1034	C-CER,CHIP	2203-006423	SA
C1035	C-CER,CHIP	2203-006562	SA
C1036	C-CER,CHIP	2203-006562	SA
C1037	C-CER,CHIP	2203-006562	SA
C1038	C-CER,CHIP	2203-006562	SA
C1039	C-CER,CHIP	2203-006423	SA
C104	C-CER,CHIP	2203-005808	SA
C1040	C-CER,CHIP	2203-006423	SA
C1041	C-CER,CHIP	2203-006562	SA
C1042	C-CER,CHIP	2203-006423	SA
C1043	C-CER,CHIP	2203-006423	SA
C1044	C-CER,CHIP	2203-006423	SA
C1045	C-CER,CHIP	2203-006824	SA
C1046	C-CER,CHIP	2203-006562	SA

Design LOC	Description	SEC Code	STATUS
C1047	C-CER,CHIP	2203-006562	SA
C1048	C-CER,CHIP	2203-006824	SA
C1049	C-CER,CHIP	2203-006708	SA
C105	C-CER,CHIP	2203-005806	SNA
C1050	C-CER,CHIP	2203-001432	SA
C1051	C-CER,CHIP	2203-006708	SA
C1052	C-CER,CHIP	2203-006824	SA
C1053	C-CER,CHIP	2203-000854	SA
C106	C-CER,CHIP	2203-005682	SA
C108	C-CER,CHIP	2203-006423	SA
C109	C-CER,CHIP	2203-005682	SA
C110	C-CER,CHIP	2203-005682	SA
C111	C-CER,CHIP	2203-006423	SA
C112	C-CER,CHIP	2203-005719	SA
C113	C-CER,CHIP	2203-005682	SA
C114	C-CER,CHIP	2203-006423	SA
C115	C-CER,CHIP	2203-006379	SA
C116	C-CER,CHIP	2203-005736	SA
C117	C-CER,CHIP	2203-005682	SA
C119	C-CER,CHIP	2203-006423	SA
C120	C-CER,CHIP	2203-005806	SNA
C121	C-CER,CHIP	2203-005682	SA
C122	C-CER,CHIP	2203-005808	SA
C123	C-CER,CHIP	2203-005682	SA
C124	C-CER,CHIP	2203-006556	SA
C125	C-CER,CHIP	2203-005682	SA
C126	C-CER,CHIP	2203-005682	SA
C127	C-CER,CHIP	2203-006556	SA
C128	C-CER,CHIP	2203-005682	SA
C129	C-CER,CHIP	2203-005808	SA
C130	C-CER,CHIP	2203-005717	SA
C131	C-CER,CHIP	2203-006423	SA
C132	C-CER,CHIP	2203-005682	SA
C133	C-CER,CHIP	2203-005717	SA
C134	C-CER,CHIP	2203-000725	SA
C135	C-CER,CHIP	2203-000836	SA
C136	C-CER,CHIP	2203-005682	SA
C137	C-CER,CHIP	2203-006423	SA
C138	C-CER,CHIP	2203-006423	SA
C139	C-CER,CHIP	2203-005682	SA
C140	C-CER,CHIP	2203-000438	SA
C141	C-CER,CHIP	2203-005682	SA
C142	C-CER,CHIP	2203-005719	SA
C143	C-CER,CHIP	2203-000812	SA
C144	C-CER,CHIP	2203-006838	SA
C145	C-CER,CHIP	2203-000812	SA
C146	C-CER,CHIP	2203-005682	SA
C147	C-CER,CHIP	2203-006208	SA
C148	C-CER,CHIP	2203-006423	SA
C149	C-CER,CHIP	2203-005729	SA
C150	C-CER,CHIP	2203-000254	SA
C151	C-CER,CHIP	2203-005729	SA
C152	C-CER,CHIP	2203-005732	SA

Design LOC	Description	SEC Code	STATUS
C153	C-CER,CHIP	2203-000254	SA
C154	C-CER,CHIP	2203-002443	SA
C155	C-CER,CHIP	2203-000311	SA
C156	C-CER,CHIP	2203-001033	SA
C157	C-CER,CHIP	2203-000995	SA
C158	C-CER,CHIP	2203-006423	SA
C160	C-CER,CHIP	2203-001153	SA
C200	C-CER,CHIP	2203-005736	SA
C201	C-CER,CHIP	2203-006194	SA
C202	C-CER,CHIP	2203-005736	SA
C203	C-CER,CHIP	2203-005968	SA
C204	C-CER,CHIP	2203-006324	SA
C205	C-CER,CHIP	2203-006194	SA
C206	C-CER,CHIP	2203-000233	SA
C207	C-CER,CHIP	2203-000386	SA
C208	C-CER,CHIP	2203-000854	SA
C209	R-CHIP	2007-000171	SA
C210	C-CER,CHIP	2203-005382	SA
C211	C-CER,CHIP	2203-000330	SA
C212	C-CER,CHIP	2203-002668	SA
C214	R-CHIP	2007-000171	SA
C216	C-CER,CHIP	2203-000386	SA
C217	C-CER,CHIP	2203-006194	SA
C218	C-CER,CHIP	2203-005736	SA
C219	C-CER,CHIP	2203-005808	SA
C220	C-CER,CHIP	2203-006423	SA
C221	C-CER,CHIP	2203-005806	SNA
C222	C-CER,CHIP	2203-006194	SA
C223	C-CER,CHIP	2203-005736	SA
C224	C-CER,CHIP	2203-005719	SA
C225	C-CER,CHIP	2203-006423	SA
C226	C-CER,CHIP	2203-006305	SA
C227	C-CER,CHIP	2203-006846	SA
C228	C-CER,CHIP	2203-005806	SNA
C229	C-CER,CHIP	2203-000330	SA
C230	C-CER,CHIP	2203-006423	SA
C231	C-CER,CHIP	2203-006846	SA
C232	C-CER,CHIP	2203-005806	SNA
C233	C-CER,CHIP	2203-005682	SA
C234	C-CER,CHIP	2203-006556	SA
C235	C-CER,CHIP	2203-005736	SA
C236	C-CER,CHIP	2203-006423	SA
C237	C-CER,CHIP	2203-006423	SA
C238	C-CER,CHIP	2203-006305	SA
C239	C-CER,CHIP	2203-006305	SA
C300	C-CER,CHIP	2203-006423	SA
C301	C-CER,CHIP	2203-006617	SA
C302	C-CER,CHIP	2203-006423	SA
C303	C-CER,CHIP	2203-005725	SA
C304	C-CER,CHIP	2203-005725	SA
C305	C-CER,CHIP	2203-006668	SA
C306	C-CER,CHIP	2203-006423	SA
C307	C-CER,CHIP	2203-006617	SA

Design LOC	Description	SEC Code	STATUS
C308	C-CER,CHIP	2203-006423	SA
C309	C-CER,CHIP	2203-006194	SA
C310	C-CER,CHIP	2203-006462	SA
C311	C-CER,CHIP	2203-006423	SA
C312	C-CER,CHIP	2203-006423	SA
C313	C-CER,CHIP	2203-006423	SA
C314	C-CER,CHIP	2203-006562	SA
C315	C-CER,CHIP	2203-006562	SA
C316	C-CER,CHIP	2203-006708	SA
C317	C-CER,CHIP	2203-006423	SA
C318	C-CER,CHIP	2203-006423	SA
C319	C-CER,CHIP	2203-006708	SA
C320	C-CER,CHIP	2203-005482	SA
C321	C-CER,CHIP	2203-006194	SA
C322	C-CER,CHIP	2203-006194	SA
C323	C-CER,CHIP	2203-000233	SA
C324	C-CER,CHIP	2203-005682	SA
C325	C-CER,CHIP	2203-006825	SA
C326	C-CER,CHIP	2203-005719	SA
C327	C-CER,CHIP	2203-005806	SNA
C328	C-CER,CHIP	2203-005806	SNA
C329	C-CER,CHIP	2203-006194	SA
C330	C-CER,CHIP	2203-006194	SA
C331	C-CER,CHIP	2203-006194	SA
C332	C-CER,CHIP	2203-006194	SA
C333	C-CER,CHIP	2203-006194	SA
C334	C-CER,CHIP	2203-006194	SA
C335	C-CER,CHIP	2203-006423	SA
C336	C-CER,CHIP	2203-005719	SA
C337	C-CER,CHIP	2203-005806	SNA
C338	C-CER,CHIP	2203-005806	SNA
C339	C-CER,CHIP	2203-006194	SA
C340	C-CER,CHIP	2203-006194	SA
C341	C-CER,CHIP	2203-005806	SNA
C342	C-CER,CHIP	2203-005806	SNA
C343	C-CER,CHIP	2203-006194	SA
C344	C-CER,CHIP	2203-006423	SA
C345	C-CER,CHIP	2203-005719	SA
C346	C-CER,CHIP	2203-006194	SA
C347	C-CER,CHIP	2203-006194	SA
C348	C-CER,CHIP	2203-006423	SA
C349	C-CER,CHIP	2203-006423	SA
C350	C-CER,CHIP	2203-006423	SA
C351	C-CER,CHIP	2203-006423	SA
C352	C-CER,CHIP	2203-006194	SA
C353	C-CER,CHIP	2203-006194	SA
C354	C-CER,CHIP	2203-006194	SA
C355	C-CER,CHIP	2203-006825	SA
C356	C-CER,CHIP	2203-006423	SA
C357	C-CER,CHIP	2203-006423	SA
C358	C-CER,CHIP	2203-006423	SA
C359	C-CER,CHIP	2203-006423	SA
C360	C-CER,CHIP	2203-006423	SA

Design LOC	Description	SEC Code	STATUS
C361	C-CER,CHIP	2203-006423	SA
C400	C-CER,CHIP	2203-005719	SA
C401	C-CER,CHIP	2203-006423	SA
C402	C-CER,CHIP	2203-006324	SA
C403	C-CER,CHIP	2203-006348	SA
C404	C-CER,CHIP	2203-006208	SA
C405	C-CER,CHIP	2203-006562	SA
C406	C-CER,CHIP	2203-005682	SA
C407	C-CER,CHIP	2203-006423	SA
C408	C-CER,CHIP	2203-005731	SA
C409	C-CER,CHIP	2203-005736	SA
C410	C-CER,CHIP	2203-005731	SA
C411	C-CER,CHIP	2203-006423	SA
C412	C-CER,CHIP	2203-006562	SA
C413	C-CER,CHIP	2203-006838	SA
C414	C-CER,CHIP	2203-006208	SA
C415	C-CER,CHIP	2203-006208	SA
C416	C-CER,CHIP	2203-006208	SA
C417	C-CER,CHIP	2203-006838	SA
C418	C-CER,CHIP	2203-006305	SA
C419	C-CER,CHIP	2203-006562	SA
C420	C-CER,CHIP	2203-006208	SA
C421	C-CER,CHIP	2203-006838	SA
C422	C-CER,CHIP	2203-006305	SA
C423	C-CER,CHIP	2203-006838	SA
C424	C-CER,CHIP	2203-006838	SA
C425	C-CER,CHIP	2203-006305	SA
C426	C-CER,CHIP	2203-006562	SA
C427	C-CER,CHIP	2203-006305	SA
C428	C-CER,CHIP	2203-006562	SA
C429	C-CER,CHIP	2203-006305	SA
C430	C-CER,CHIP	2203-005806	SNA
C431	C-CER,CHIP	2203-005806	SNA
C432	C-CER,CHIP	2203-005682	SA
C433	C-CER,CHIP	2203-006423	SA
C434	C-CER,CHIP	2203-006423	SA
C435	C-CER,CHIP	2203-006423	SA
C436	C-CER,CHIP	2203-006423	SA
C437	C-CER,CHIP	2203-006838	SA
C438	C-CER,CHIP	2203-006838	SA
C439	C-CER,CHIP	2203-006208	SA
C440	C-CER,CHIP	2203-005806	SNA
C441	C-CER,CHIP	2203-005806	SNA
C442	C-CER,CHIP	2203-005806	SNA
C443	C-CER,CHIP	2203-006423	SA
C444	C-CER,CHIP	2203-006423	SA
C445	C-CER,CHIP	2203-006048	SA
C446	C-CER,CHIP	2203-006048	SA
C447	C-CER,CHIP	2203-006562	SA
C448	C-CER,CHIP	2203-006562	SA
C449	C-CER,CHIP	2203-006562	SA
C450	C-CER,CHIP	2203-006681	SA
C451	C-CER,CHIP	2203-006562	SA

Design LOC	Description	SEC Code	STATUS
C452	C-CER,CHIP	2203-006562	SA
C453	C-CER,CHIP	2203-006562	SA
C455	C-TA,CHIP	2404-001225	SA
C502	C-CER,CHIP	2203-000812	SA
C504	C-CER,CHIP	2203-006562	SA
C506	C-CER,CHIP	2203-006423	SA
C507	C-CER,CHIP	2203-006423	SA
C508	C-CER,CHIP	2203-006708	SA
C509	C-CER,CHIP	2203-006423	SA
C510	C-CER,CHIP	2203-006423	SA
C513	C-CER,CHIP	2203-000386	SA
C515	C-CER,CHIP	2203-006562	SA
C517	C-CER,CHIP	2203-006648	SA
C518	C-CER,CHIP	2203-006562	SA
C519	C-CER,CHIP	2203-006562	SA
C520	C-CER,CHIP	2203-006562	SA
C522	C-CER,CHIP	2203-006648	SA
C524	C-CER,CHIP	2203-006423	SA
C525	C-CER,CHIP	2203-006556	SA
C526	C-CER,CHIP	2203-005057	SA
C528	C-CER,CHIP	2203-006423	SA
C530	C-CER,CHIP	2203-006423	SA
C531	C-CER,CHIP	2203-006556	SA
C532	C-CER,CHIP	2203-005057	SA
C533	C-CER,CHIP	2203-006648	SA
C534	C-CER,CHIP	2203-006648	SA
C535	C-CER,CHIP	2203-000654	SA
C536	C-CER,CHIP	2203-000654	SA
C538	C-CER,CHIP	2203-005344	SA
C539	C-CER,CHIP	2203-006668	SA
C540	C-CER,CHIP	2203-005736	SA
C541	C-CER,CHIP	2203-006562	SA
C542	C-CER,CHIP	2203-005344	SA
C544	C-CER,CHIP	2203-005383	SA
C545	C-CER,CHIP	2203-000812	SA
C547	C-CER,CHIP	2203-000386	SA
C551	C-CER,CHIP	2203-006648	SA
C556	C-CER,CHIP	2203-006648	SA
C559	C-CER,CHIP	2203-005682	SA
C560	C-CER,CHIP	2203-001259	SA
C561	C-CER,CHIP	2203-001259	SA
C562	C-CER,CHIP	2203-005682	SA
C563	C-CER,CHIP	2203-005682	SA
C564	C-CER,CHIP	2203-001259	SA
C565	C-CER,CHIP	2203-005383	SA
C567	C-CER,CHIP	2203-005383	SA
C568	C-CER,CHIP	2203-005683	SA
C569	C-CER,CHIP	2203-005683	SA
C570	C-CER,CHIP	2203-005683	SA
C571	C-CER,CHIP	2203-005682	SA
C572	C-CER,CHIP	2203-001259	SA
C573	C-CER,CHIP	2203-001259	SA
C574	C-CER,CHIP	2203-005682	SA

Design LOC	Description	SEC Code	STATUS
C575	C-CER,CHIP	2203-005682	SA
C576	C-CER,CHIP	2203-001259	SA
C577	C-CER,CHIP	2203-006681	SA
C601	C-CER,CHIP	2203-006423	SA
C602	C-CER,CHIP	2203-006423	SA
C603	C-CER,CHIP	2203-006423	SA
C604	C-CER,CHIP	2203-006423	SA
C605	C-CER,CHIP	2203-006423	SA
C606	C-CER,CHIP	2203-006423	SA
C607	C-CER,CHIP	2203-006423	SA
C608	C-CER,CHIP	2203-006708	SA
C609	C-CER,CHIP	2203-006708	SA
C610	C-CER,CHIP	2203-006708	SA
C611	C-CER,CHIP	2203-005725	SA
C612	C-CER,CHIP	2203-000278	SA
C613	C-CER,CHIP	2203-006838	SA
C614	C-CER,CHIP	2203-006838	SA
C615	C-CER,CHIP	2203-006423	SA
C616	C-CER,CHIP	2203-006562	SA
C617	C-CER,CHIP	2203-006562	SA
C618	C-CER,CHIP	2203-006562	SA
C619	C-CER,CHIP	2203-006562	SA
C620	C-CER,CHIP	2203-000278	SA
C621	C-CER,CHIP	2203-000278	SA
C622	C-CER,CHIP	2203-006423	SA
C623	C-CER,CHIP	2203-006423	SA
C625	C-CER,CHIP	2203-006423	SA
C626	C-CER,CHIP	2203-006423	SA
C627	C-CER,CHIP	2203-006423	SA
C628	C-CER,CHIP	2203-006423	SA
C629	C-CER,CHIP	2203-006423	SA
C630	C-CER,CHIP	2203-006423	SA
C631	C-CER,CHIP	2203-006708	SA
C632	C-CER,CHIP	2203-006423	SA
C633	C-CER,CHIP	2203-006838	SA
C634	C-CER,CHIP	2203-006423	SA
C635	C-CER,CHIP	2203-000438	SA
C703	C-CER,CHIP	2203-005736	SA
C704	C-CER,CHIP	2203-005682	SA
C705	C-CER,CHIP	2203-006423	SA
C707	C-CER,CHIP	2203-002709	SA
C708	C-CER,CHIP	2203-006562	SA
C709	C-CER,CHIP	2203-006562	SA
C710	C-CER,CHIP	2203-006562	SA
C711	C-CER,CHIP	2203-000438	SA
C712	C-CER,CHIP	2203-006423	SA
C800	C-CER,CHIP	2203-006562	SA
C801	C-CER,CHIP	2203-006562	SA
C802	C-CER,CHIP	2203-006562	SA
C803	C-CER,CHIP	2203-005682	SA
C804	C-CER,CHIP	2203-005682	SA
C805	C-CER,CHIP	2203-006562	SA
C806	C-CER,CHIP	2203-005682	SA

Design LOC	Description	SEC Code	STATUS
C807	C-CER,CHIP	2203-005682	SA
C808	C-CER,CHIP	2203-006423	SA
C809	C-CER,CHIP	2203-006423	SA
C810	C-CER,CHIP	2203-006423	SA
C811	C-CER,CHIP	2203-005682	SA
C812	C-CER,CHIP	2203-005682	SA
C813	C-CER,CHIP	2203-005682	SA
C814	C-CER,CHIP	2203-005682	SA
C815	C-CER,CHIP	2203-006423	SA
C816	C-CER,CHIP	2203-006423	SA
C901	C-CER,CHIP	2203-002709	SA
C902	C-CER,CHIP	2203-002709	SA
C903	C-CER,CHIP	2203-002709	SA
C905	C-CER,CHIP	2203-006208	SA
C906	C-CER,CHIP	2203-000233	SA
C908	C-CER,CHIP	2203-000812	SA
C909	C-CER,CHIP	2203-000812	SA
C910	C-CER,CHIP	2203-002709	SA
C911	C-CER,CHIP	2203-005725	SA
C912	C-CER,CHIP	2203-006423	SA
C913	C-CER,CHIP	2203-006423	SA
C914	C-CER,CHIP	2203-006872	SA
C915	C-CER,CHIP	2203-006872	SA
C916	C-CER,CHIP	2203-006872	SA
CD900	CONNECTOR-CARD EDGE	3709-001392	SA
D1000	DIODE-TVS	0406-001239	SA
D401	DIODE-SCHOTTKY	0404-001245	SA
D402	DIODE-SCHOTTKY	0404-001245	SA
D403	DIODE-ARRAY	0407-001002	SA
DUF200	DUPLEXER-SAW	2910-000010	SA
F101	DUPLEXER-FEM	2911-000070	SA
F201	FILTER-SAW	2904-001658	SA
F202	FILTER-SAW	2904-001623	SA
F800	FILTER-EMI SMD	2901-001409	SA
F801	FILTER-EMI SMD	2901-001409	SA
F802	FILTER-EMI SMD	2901-001409	SA
F803	FILTER-EMI SMD	2901-001409	SA
F804	FILTER-EMI SMD	2901-001409	SA
F805	FILTER-EMI SMD	2901-001409	SA
F806	FILTER-EMI SMD	2901-001409	SA
HDC300	HEADER-BOARD TO BOARD	3711-005550	SA
HDC700	HEADER-BOARD TO BOARD	3711-006016	SA
HDC800	HEADER-BOARD TO BOARD	3711-006016	SA
HDC801	HEADER-BOARD TO BOARD	3711-005643	SA
HDC802	HEADER-BOARD TO BOARD	3711-005659	SA
IFC700	SOCKET-INTERFACE	3710-002442	SA
L100	INDUCTOR-SMD	2703-002207	SA
L1000	INDUCTOR-SMD	2703-002774	SA
L1001	INDUCTOR-SMD	2703-002774	SA
L1002	INDUCTOR-SMD	2703-001235	SA
L1003	INDUCTOR-SMD	2703-001180	SA
L1004	INDUCTOR-SMD	2703-001235	SA
L1005	INDUCTOR-SMD	2703-001235	SA

Design LOC	Description	SEC Code	STATUS
L1006	INDUCTOR-SMD	2703-001235	SA
L101	ICT-SHIELD FRAME	GH70-01895A	SA
L102	INDUCTOR-SMD	2703-002958	SA
L103	BEAD-SMD	3301-001756	SA
L104	C-CER,CHIP	2203-005288	SA
L105	BEAD-SMD	3301-001756	SA
L106	INDUCTOR-SMD	2703-002819	SA
L107	INDUCTOR-SMD	2703-002205	SA
L108	BEAD-SMD	3301-001756	SA
L109	INDUCTOR-SMD	2703-002819	SA
L110	INDUCTOR-SMD	2703-002819	SA
L111	INDUCTOR-SMD	2703-002819	SA
L112	INDUCTOR-SMD	2703-002207	SA
L113	INDUCTOR-SMD	2703-002199	SA
L114	BEAD-SMD	3301-001756	SA
L115	BEAD-SMD	3301-001756	SA
L118	BEAD-SMD	3301-001756	SA
L201	INDUCTOR-SMD	2703-003004	SA
L202	INDUCTOR-SMD	2703-003004	SA
L203	INDUCTOR-SMD	2703-002906	SA
L204	INDUCTOR-SMD	2703-002267	SA
L205	INDUCTOR-SMD	2703-002198	SA
L206	INDUCTOR-SMD	2703-002906	SA
L207	INDUCTOR-SMD	2703-002313	SA
L208	INDUCTOR-SMD	2703-003004	SA
L209	INDUCTOR-SMD	2703-003004	SA
L210	INDUCTOR-SMD	2703-002205	SA
L400	BEAD-SMD	3301-001534	SA
L401	BEAD-SMD	3301-001534	SA
L402	INDUCTOR-SMD	2703-002840	SA
L403	INDUCTOR-SMD	2703-002840	SA
L600	INDUCTOR-SMD	2703-002782	SA
L700	BEAD-SMD	3301-001729	SA
L800	BEAD-SMD	3301-001534	SA
L801	BEAD-SMD	3301-001534	SA
L802	BEAD-SMD	3301-001534	SA
L803	BEAD-SMD	3301-001534	SA
L804	BEAD-SMD	3301-001534	SA
OSC1000	CRYSTAL-SMD	2801-004037	SA
OSC1001	CRYSTAL-SMD	2801-004555	SA
OSC300	RESONATOR-CERAMIC	2802-001182	SA
OSC400	CRYSTAL-SMD	2801-004339	SA
OSC600	CRYSTAL-SMD	2801-003603	SA
PAM100	IC-POWER AMP	1201-002446	SA
PAM200	IC-POWER AMP	1201-002305	SA
Q200	TR-DIGITAL	0504-001151	SA
R100	R-CHIP	2007-007491	SA
R1000	R-CHIP	2007-007943	SA
R1001	R-CHIP	2007-007483	SA
R1002	R-CHIP	2007-000170	SA
R1003	R-CHIP	2007-009212	SA
R1004	R-CHIP	2007-009212	SA
R1005	R-CHIP	2007-007943	SA

Design LOC	Description	SEC Code	STATUS
R1006	R-CHIP	2007-007943	SA
R1008	R-CHIP	2007-008056	SA
R1009	R-CHIP	2007-000171	SA
R101	R-CHIP	2007-007136	SA
R1010	R-CHIP	2007-008055	SA
R1013	R-CHIP	2007-000148	SA
R1014	R-CHIP	2007-000148	SA
R1015	R-CHIP	2007-008055	SA
R1016	R-CHIP	2007-001292	SA
R1017	R-CHIP	2007-007627	SA
R1018	R-CHIP	2007-008055	SA
R1019	R-CHIP	2007-000163	SA
R102	R-CHIP	2007-008045	SA
R1020	R-CHIP	2007-008055	SA
R1022	R-CHIP	2007-000171	SA
R1023	R-CHIP	2007-008542	SA
R103	R-CHIP	2007-007136	SA
R104	R-CHIP	2007-008419	SA
R105	R-CHIP	2007-007798	SA
R107	R-CHIP	2007-007316	SA
R109	R-CHIP	2007-000145	SA
R111	R-CHIP	2007-007798	SA
R112	R-CHIP	2007-008045	SA
R113	R-CHIP	2007-008785	SNA
R114	R-CHIP	2007-009201	SA
R115	R-CHIP	2007-008579	SA
R116	R-CHIP	2007-008579	SA
R117	R-CHIP	2007-008045	SA
R118	R-CHIP	2007-008581	SNA
R119	R-CHIP	2007-008581	SNA
R120	R-CHIP	2007-000138	SA
R121	R-CHIP	2007-008806	SA
R122	R-CHIP	2007-001292	SA
R123	R-CHIP	2007-000141	SA
R200	R-CHIP	2007-008542	SA
R201	R-CHIP	2007-008263	SA
R202	R-CHIP	2007-001217	SA
R203	R-CHIP	2007-007741	SA
R204	R-CHIP	2007-008045	SA
R205	R-CHIP	2007-008045	SA
R206	R-CHIP	2007-007491	SA
R300	R-CHIP	2007-008516	SA
R301	R-CHIP	2007-009170	SA
R302	R-CHIP	2007-008516	SA
R303	R-CHIP	2007-009170	SA
R304	R-CHIP	2007-008516	SA
R305	R-CHIP	2007-008055	SA
R306	R-CHIP	2007-008049	SA
R307	R-CHIP	2007-008419	SA
R308	R-CHIP	2007-008516	SA
R310	R-CHIP	2007-008516	SA
R311	R-CHIP	2007-000171	SA
R312	R-CHIP	2007-000171	SA

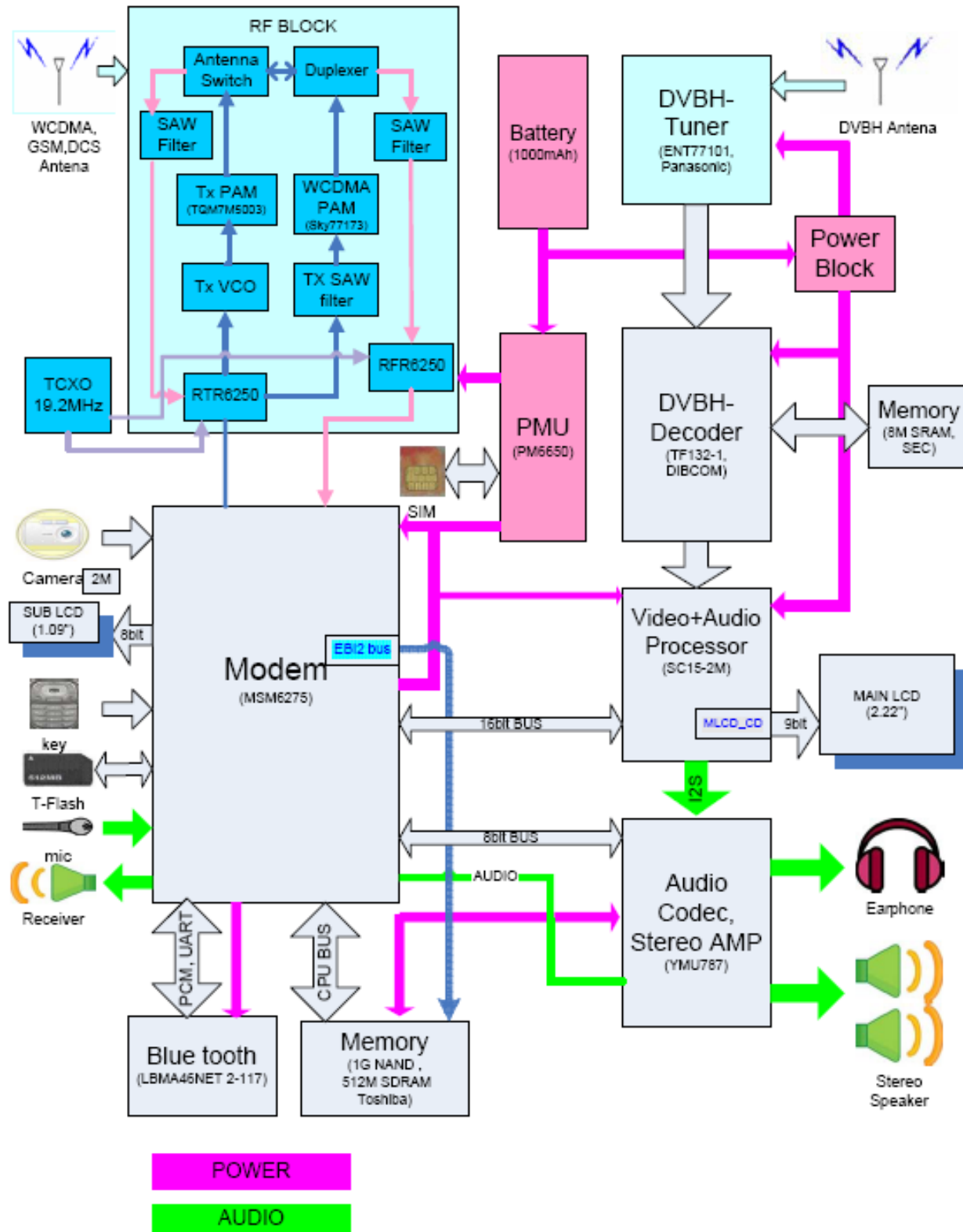
Design LOC	Description	SEC Code	STATUS
R313	R-CHIP	2007-008516	SA
R314	R-CHIP	2007-007318	SA
R315	R-CHIP	2007-007135	SA
R316	R-CHIP	2007-007314	SA
R317	R-CHIP	2007-008542	SA
R318	R-CHIP	2007-008542	SA
R319	R-CHIP	2007-008542	SA
R320	R-CHIP	2007-008542	SA
R321	R-CHIP	2007-009171	SA
R322	R-CHIP	2007-009171	SA
R323	R-CHIP	2007-009171	SA
R324	R-CHIP	2007-009171	SA
R325	R-CHIP	2007-009171	SA
R326	R-CHIP	2007-008542	SA
R327	R-CHIP	2007-008516	SA
R328	R-CHIP	2007-008542	SA
R329	R-CHIP	2007-008055	SA
R330	R-CHIP	2007-009170	SA
R331	R-CHIP	2007-009171	SA
R334	R-CHIP	2007-008052	SA
R335	R-CHIP	2007-008055	SA
R336	R-CHIP	2007-008052	SA
R400	R-CHIP	2007-000148	SA
R401	R-CHIP	2007-008483	SA
R402	R-CHIP	2007-008806	SA
R403	R-CHIP	2007-007468	SA
R404	R-CHIP	2007-000165	SA
R405	R-CHIP	2007-008055	SA
R406	R-CHIP	2007-008055	SA
R407	R-CHIP	2007-008055	SA
R408	R-CHIP	2007-007316	SA
R409	R-CHIP	2007-007468	SA
R410	R-CHIP	2007-009409	SA
R411	R-CHIP	2007-008055	SA
R412	R-CHIP	2007-000932	SA
R413	R-CHIP	2007-008483	SA
R414	R-CHIP	2007-008055	SA
R500	R-CHIP	2007-008542	SA
R501	R-CHIP	2007-008542	SA
R502	R-CHIP	2007-008516	SA
R505	R-CHIP	2007-008419	SA
R506	R-CHIP	2007-008548	SA
R507	R-CHIP	2007-003006	SA
R508	R-CHIP	2007-003006	SA
R512	R-CHIP	2007-008588	SA
R513	R-CHIP	2007-008786	SA
R514	R-CHIP	2007-008786	SA
R515	R-CHIP	2007-008786	SA
R516	R-CHIP	2007-008808	SA
R517	R-CHIP	2007-008786	SA
R518	R-CHIP	2007-008808	SA
R519	R-CHIP	2007-007313	SA
R520	R-CHIP	2007-008798	SNA

Design LOC	Description	SEC Code	STATUS
R521	R-CHIP	2007-008798	SNA
R522	R-CHIP	2007-008516	SA
R523	R-CHIP	2007-008516	SA
R524	R-CHIP	2007-003001	SA
R525	R-CHIP	2007-008419	SA
R526	R-CHIP	2007-003001	SA
R527	R-CHIP	2007-008548	SA
R528	R-CHIP	2007-008588	SA
R600	R-CHIP	2007-008055	SA
R601	R-CHIP	2007-008055	SA
R603	R-CHIP	2007-008055	SA
R604	R-CHIP	2007-008055	SA
R605	R-CHIP	2007-008055	SA
R606	R-CHIP	2007-008055	SA
R607	R-CHIP	2007-007981	SA
R608	R-CHIP	2007-008403	SA
R609	R-CHIP	2007-008055	SA
R612	R-CHIP	2007-008055	SA
R613	R-CHIP	2007-009170	SA
R614	R-CHIP	2007-000170	SA
R615	R-CHIP	2007-008055	SA
R618	R-CHIP	2007-008055	SA
R619	R-CHIP	2007-008542	SA
R620	R-CHIP	2007-008542	SA
R621	R-CHIP	2007-000171	SA
R700	R-CHIP	2007-008055	SA
R701	R-CHIP	2007-008516	SA
R702	R-CHIP	2007-008419	SA
R703	R-CHIP	2007-008419	SA
R704	R-CHIP	2007-008548	SA
R705	R-CHIP	2007-008419	SA
R706	R-CHIP	2007-008419	SA
R707	R-CHIP	2007-009111	SA
R708	R-CHIP	2007-009084	SA
R800	R-CHIP	2007-008516	SA
R801	R-CHIP	2007-008516	SA
R900	R-CHIP	2007-000148	SA
R901	R-CHIP	2007-000148	SA
R902	R-CHIP	2007-000148	SA
R903	R-CHIP	2007-008055	SA
R904	R-CHIP	2007-000162	SA
R905	R-CHIP	2007-000148	SA
R906	R-CHIP	2007-000172	SA
R907	R-CHIP	2007-000172	SA
R908	R-CHIP	2007-000172	SA
R909	R-CHIP	2007-000162	SA
R910	R-CHIP	2007-000172	SA
R911	R-CHIP	2007-000172	SA
R912	R-CHIP	2007-000153	SA
R913	R-CHIP	2007-007148	SA
R914	R-CHIP	2007-000151	SA
R916	R-CHIP	2007-008055	SA
R917	R-CHIP	2007-009171	SA

Design LOC	Description	SEC Code	STATUS
RFS101	CONNECTOR-COAXIAL	3705-001339	SNA
RFS102	CONNECTOR-COAXIAL	3705-001358	SA
SIM900	CONNECTOR-CARD EDGE	3709-001447	SA
SOC900	SOCKET-BOARD TO BOARD	3710-002446	SA
TA100	C-TA,CHIP	2404-001474	SA
TA511	C-TA,CHIP	2404-001422	SA
TA512	C-TA,CHIP	2404-001225	SA
TA514	C-TA,CHIP	2404-001422	SA
TA537	C-TA,CHIP	2404-001406	SA
TA548	C-TA,CHIP	2404-001225	SA
TA600	C-TA,CHIP	2404-001377	SA
TA601	C-TA,CHIP	2404-001377	SA
TA700	C-TA,CHIP	2404-001381	SA
TA701	C-TA,CHIP	2404-001450	SA
TA702	C-TA,CHIP	2404-001474	SA
TA703	C-TA,CHIP	2404-001381	SA
TA900	C-TA,CHIP	2404-001474	SA
TCX200	OSCILLATOR-VCTCXO	2809-001280	SA
TH300	THERMISTOR-NTC	1404-001224	SA
TR400	TR-DIGITAL	0504-000168	SA
TR401	TR-DIGITAL	0504-000168	SA
U100	IC-TRANSCEIVER	1205-002645	SA
U1000	IC-DECODER	1204-002625	SA
U1001	IC-DC/DC CONVERTER	1203-004018	SA
U1002	RF-MODULE	4709-001459	SA
U1003	IC-POSI.FIXED REG.	1203-003812	SA
U200	IC-RECEIVER	1205-002781	SA
U201	IC-DETECTOR	1209-001577	SA
U300	DIODE-ARRAY	0407-001038	SA
U301	IC-SWITCH	1205-002784	SA
U401	IC-SWITCH	1205-002568	SA
U402	IC-POSI.FIXED REG.	1203-003815	SA
U403	IC-POSI.FIXED REG.	1203-003523	SA
U404	IC-MULTI REG.	1203-003748	SA
U405	IC-BATTERY	1203-004024	SA
U500	IC-POSI.FIXED REG.	1203-003815	SA
U501	IC-MELODY	1204-002587	SA
U502	IC-CMOS LOGIC	0801-003031	SA
U600	IC-DC/DC CONVERTER	1203-004161	SA
U601	IC-GRAPHIC CONT.	0904-002159	SA
U602	IC-MULTI REG.	1203-003778	SA
U603	IC-CMOS LOGIC	0801-002970	SA
U700	IC-ANALOG SWITCH	1001-001336	SA
U701	IC-HALL EFFECT S/W	1009-001027	SA
U702	IC-ANALOG SWITCH	1001-001359	SA
U704	C-CER,CHIP	2203-006562	SA
U705	R-CHIP	2007-008052	SA
U707	C-CER,CHIP	2203-006423	SA
U708	IC-POWER SUPERVISOR	1203-004102	SA
U709	C-TA,CHIP	2404-001339	SA
U710	C-CER,CHIP	2203-001259	SA
U711	IC-ANALOG MULTIPLEX	1001-001405	SA
U900	BLUETOOTH MODULE	4709-001398	SA

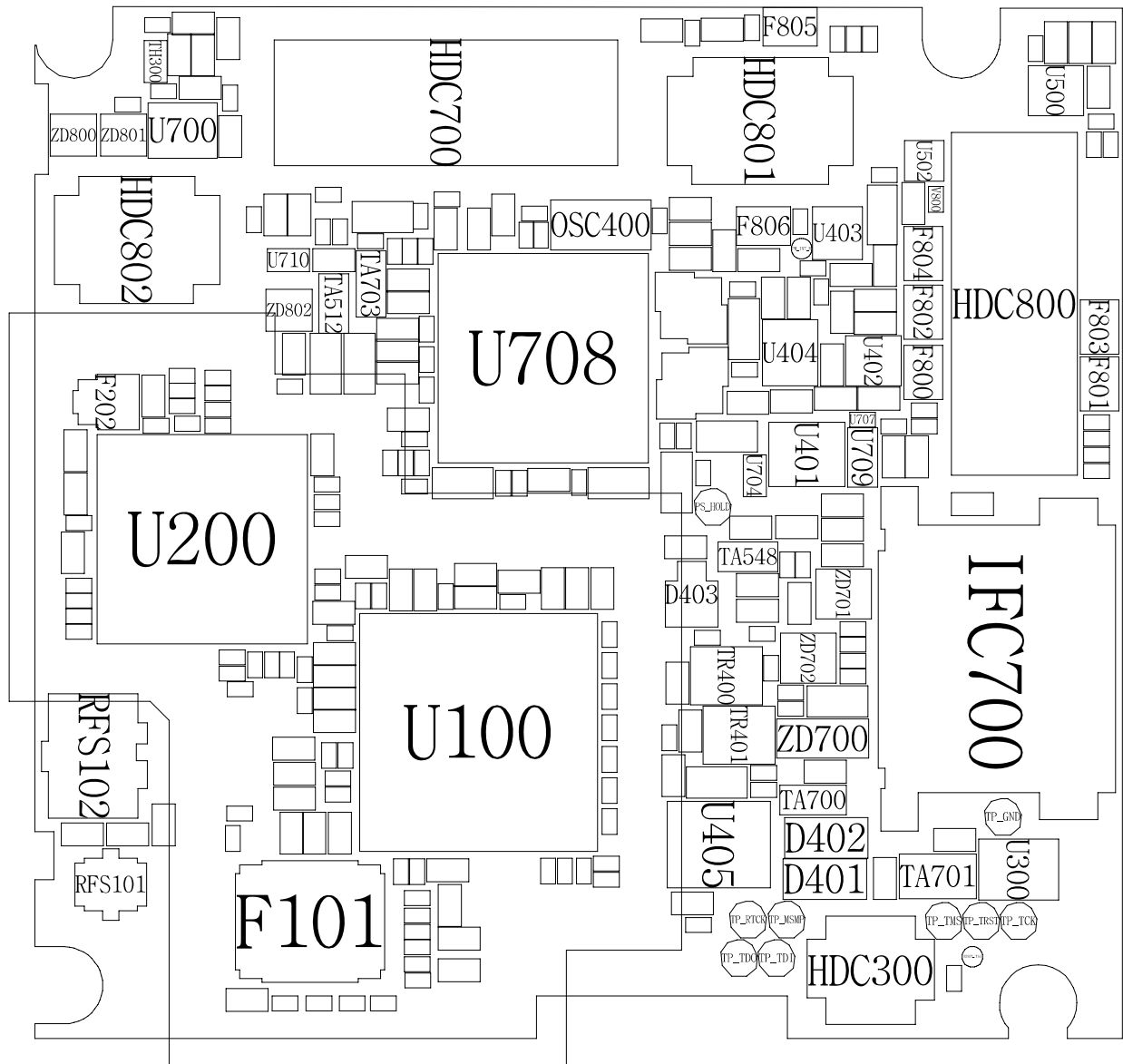
Design LOC	Description	SEC Code	STATUS
U901	IC-CMOS LOGIC	0801-003076	SA
UCP300	IC-MODEM	1205-002790	SA
UME1000	IC-SRAM	1106-001538	SA
UME300	IC-MCP	1108-000072	SA
V800	VARISTOR	1405-001177	SA
VCO100	OSCILLATOR-VCO	2806-001380	SA
ZD701	DIODE-TVS	0406-001197	SA
ZD702	DIODE-TVS	0406-001197	SA
ZD703	DIODE-ZENER	0403-001547	SA
ZD800	DIODE-TVS	0406-001237	SNA
ZD801	DIODE-TVS	0406-001237	SNA
ZD802	DIODE-TVS	0406-001237	SNA

7. Block Diagrams

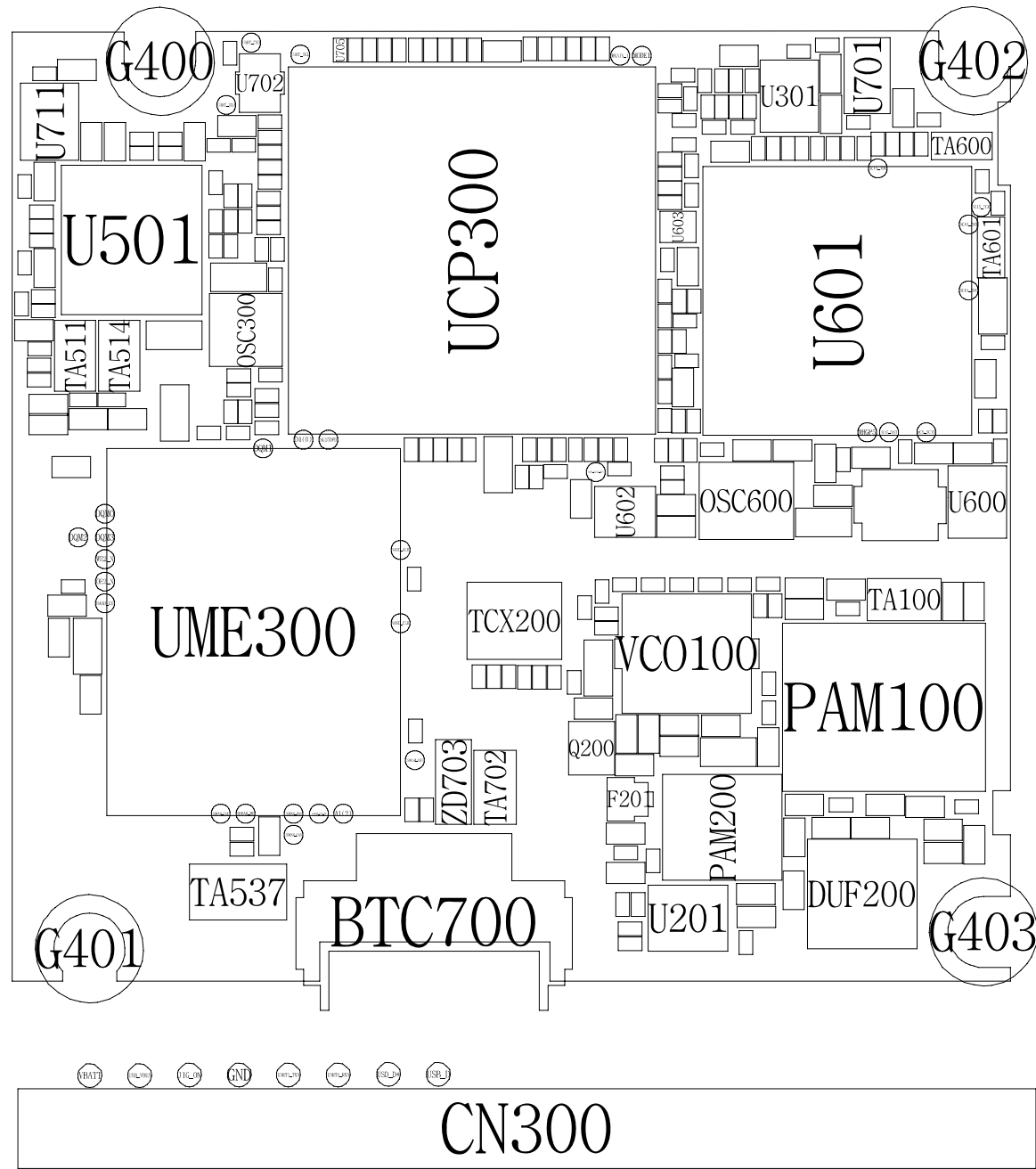


8. PCB Diagrams

Top

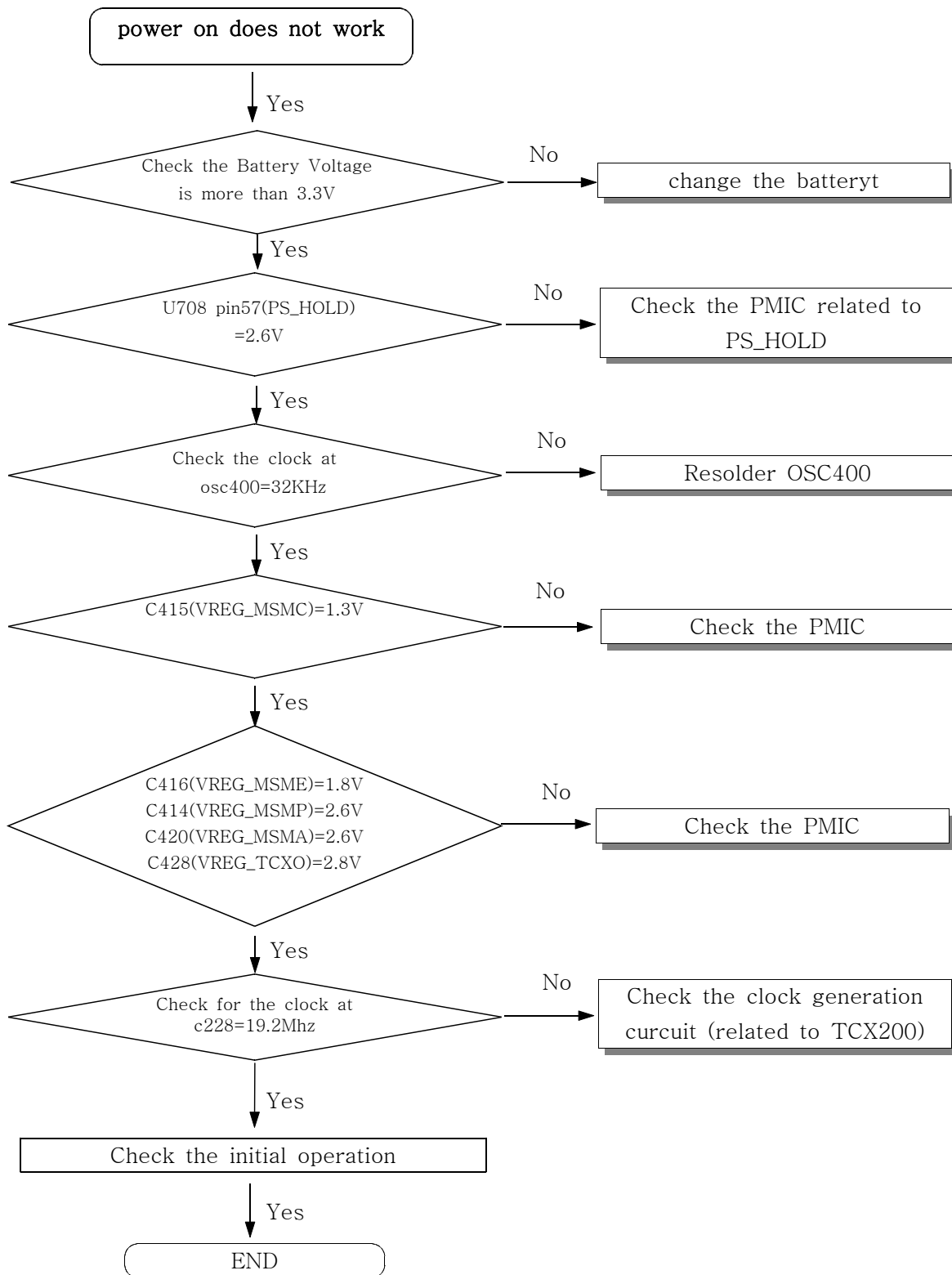


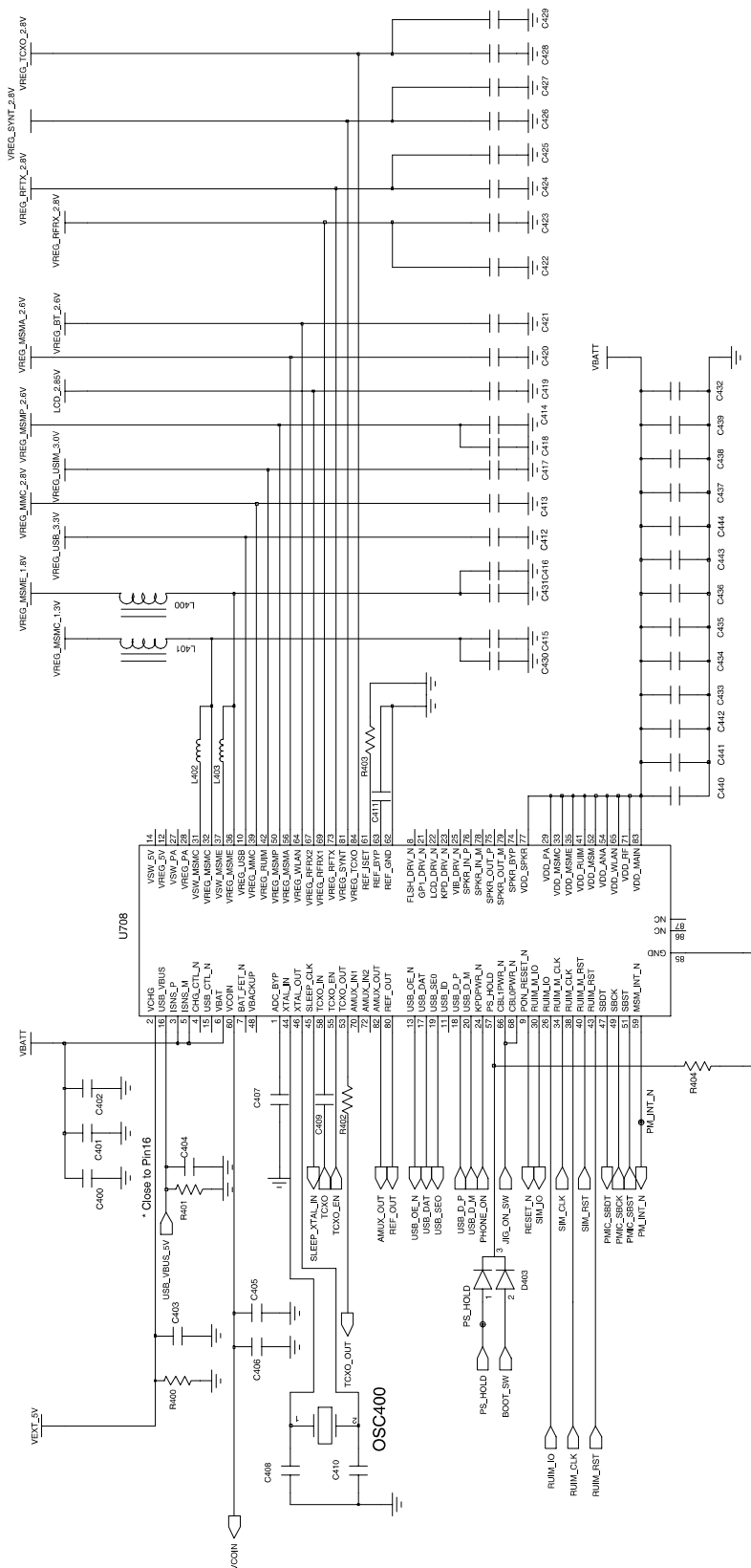
Bottom



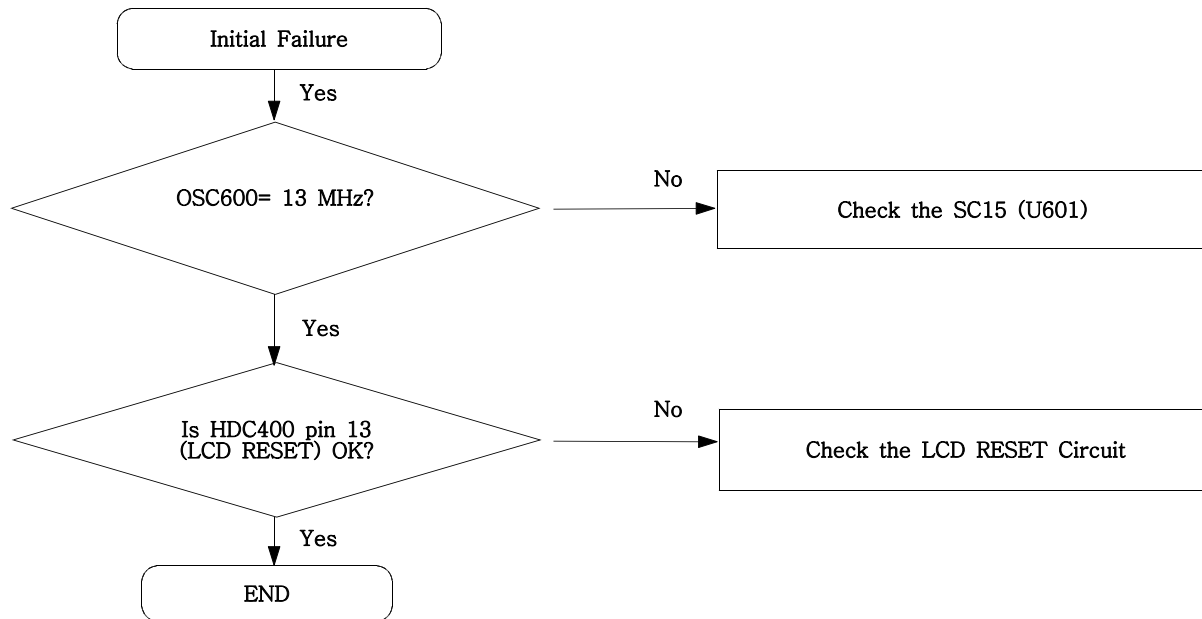
9. Flow Chart of Troubleshooting

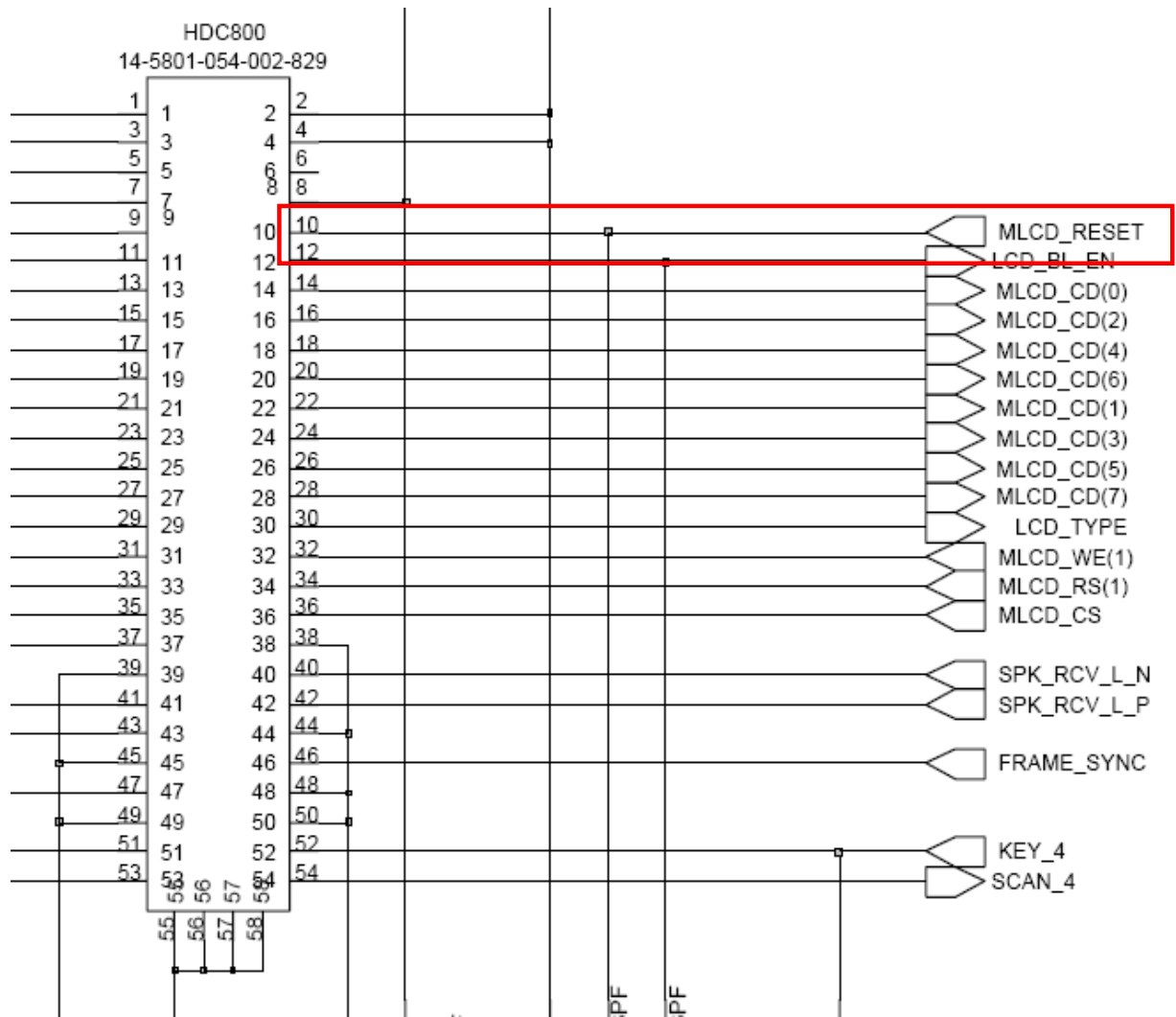
9-1. Power On



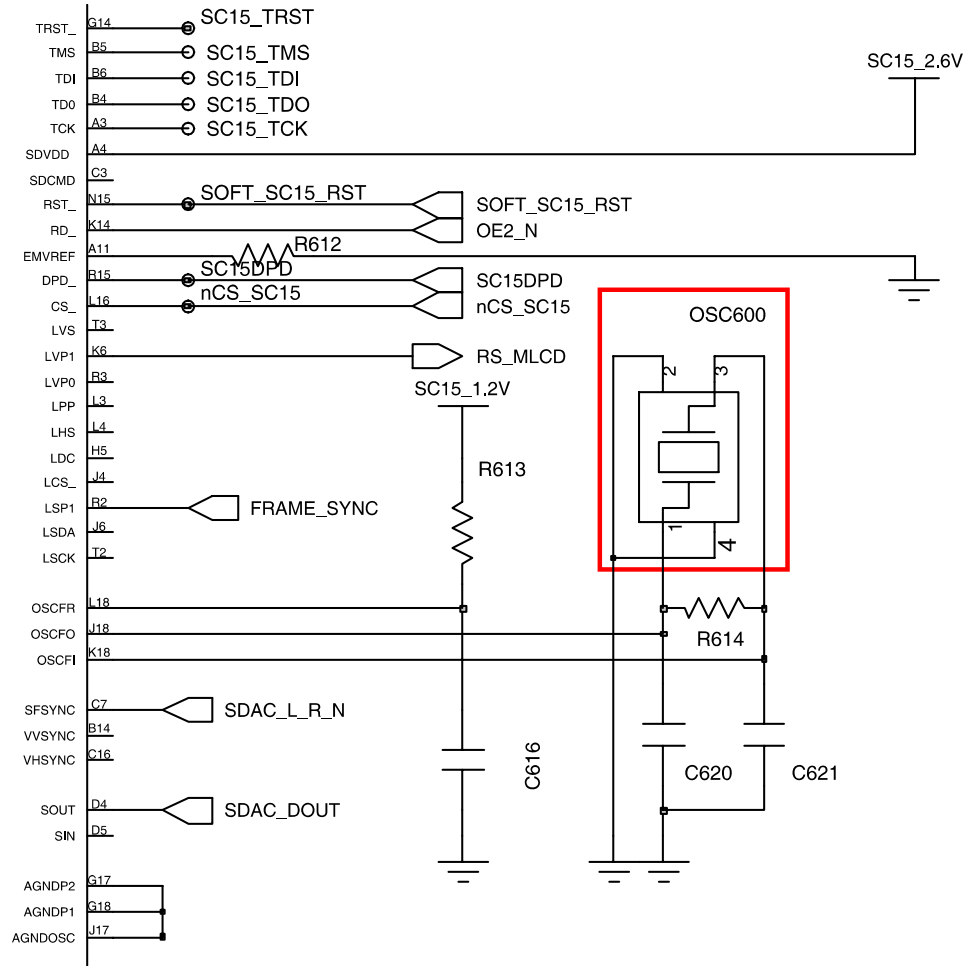


9-2. Initial

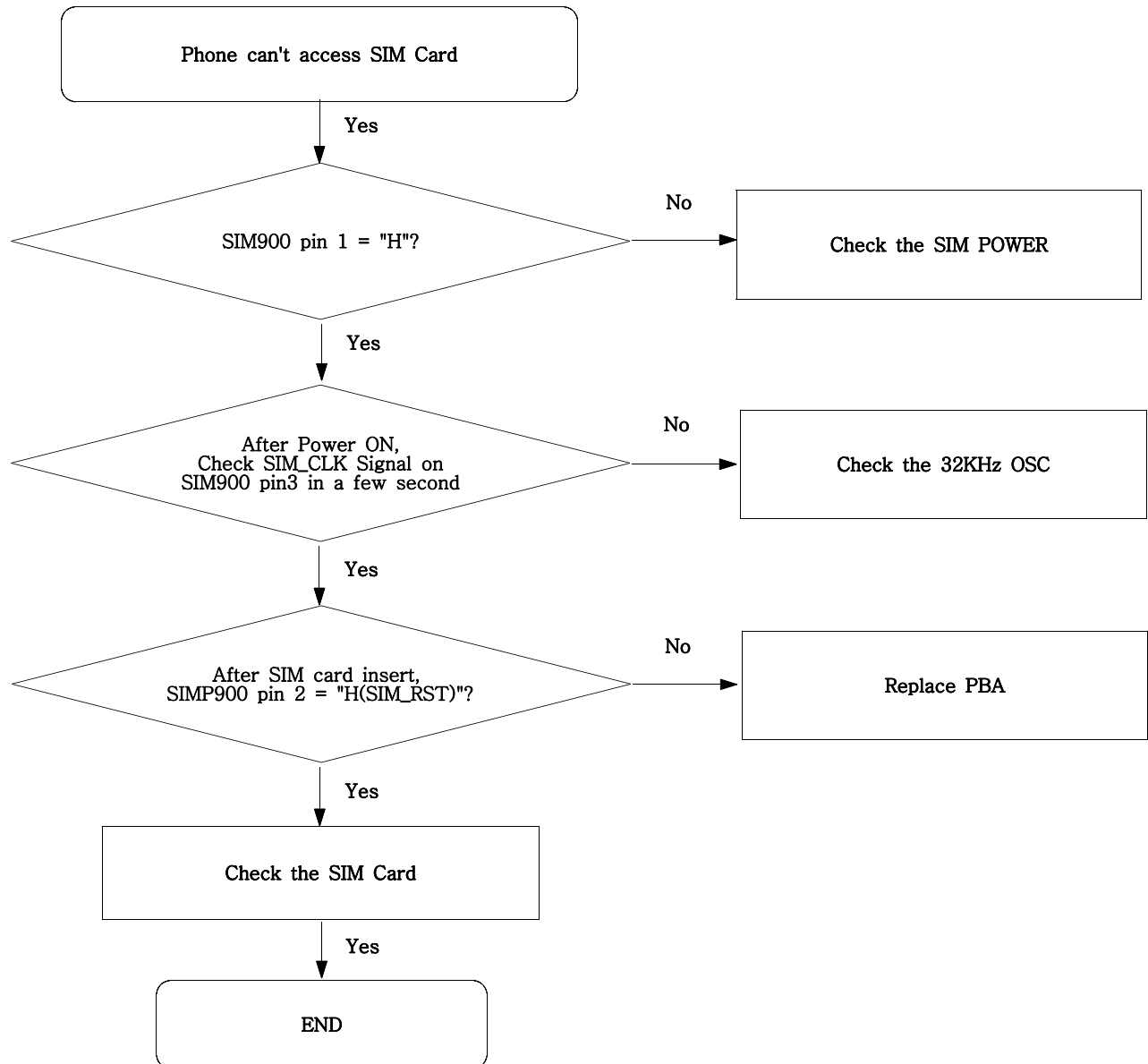


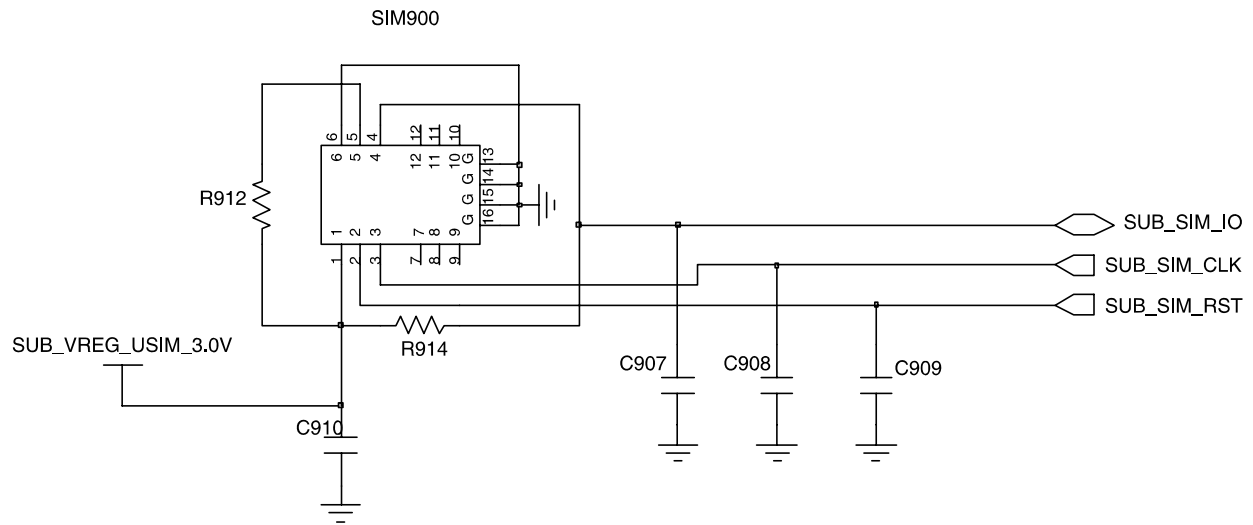


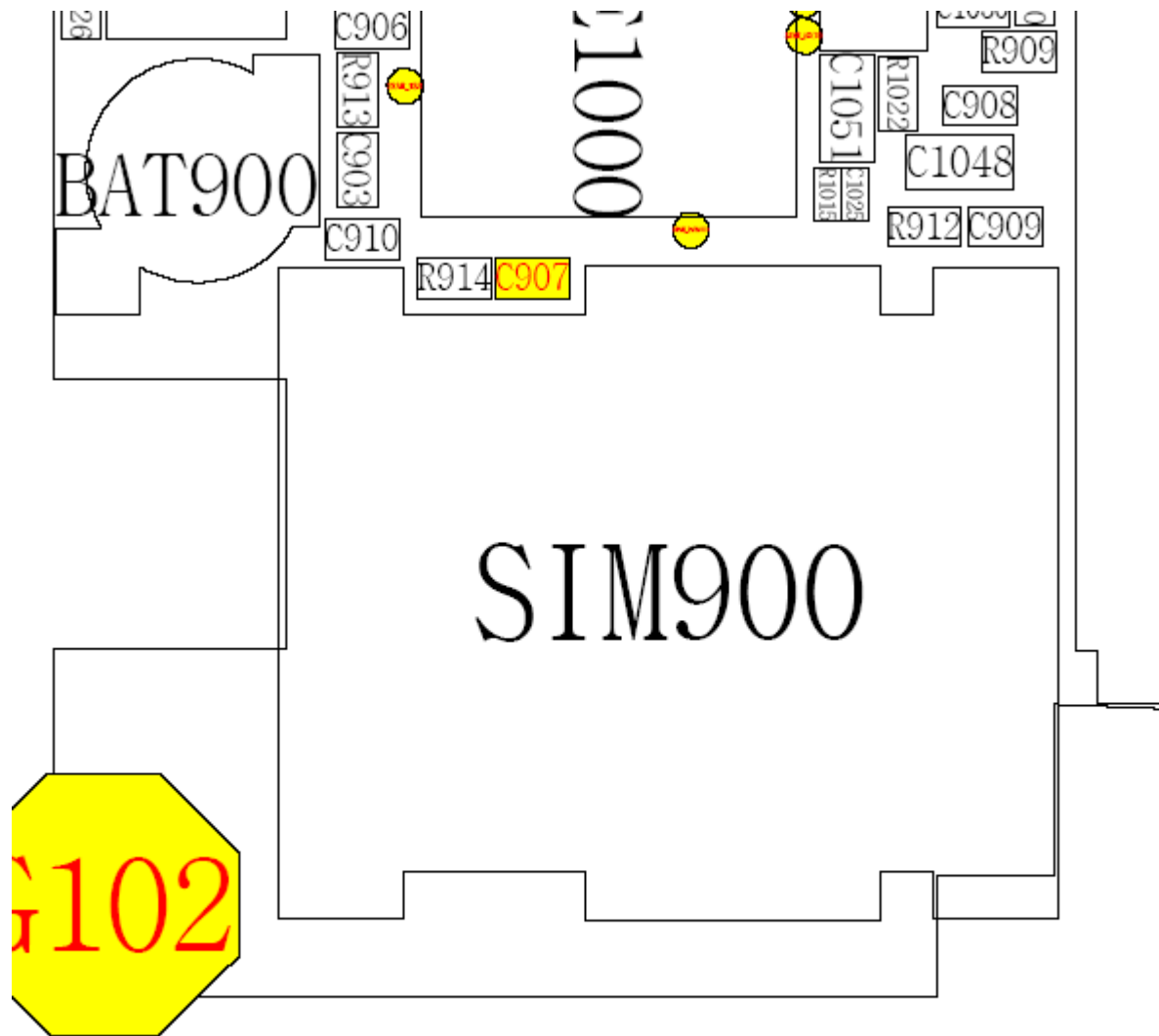
U601



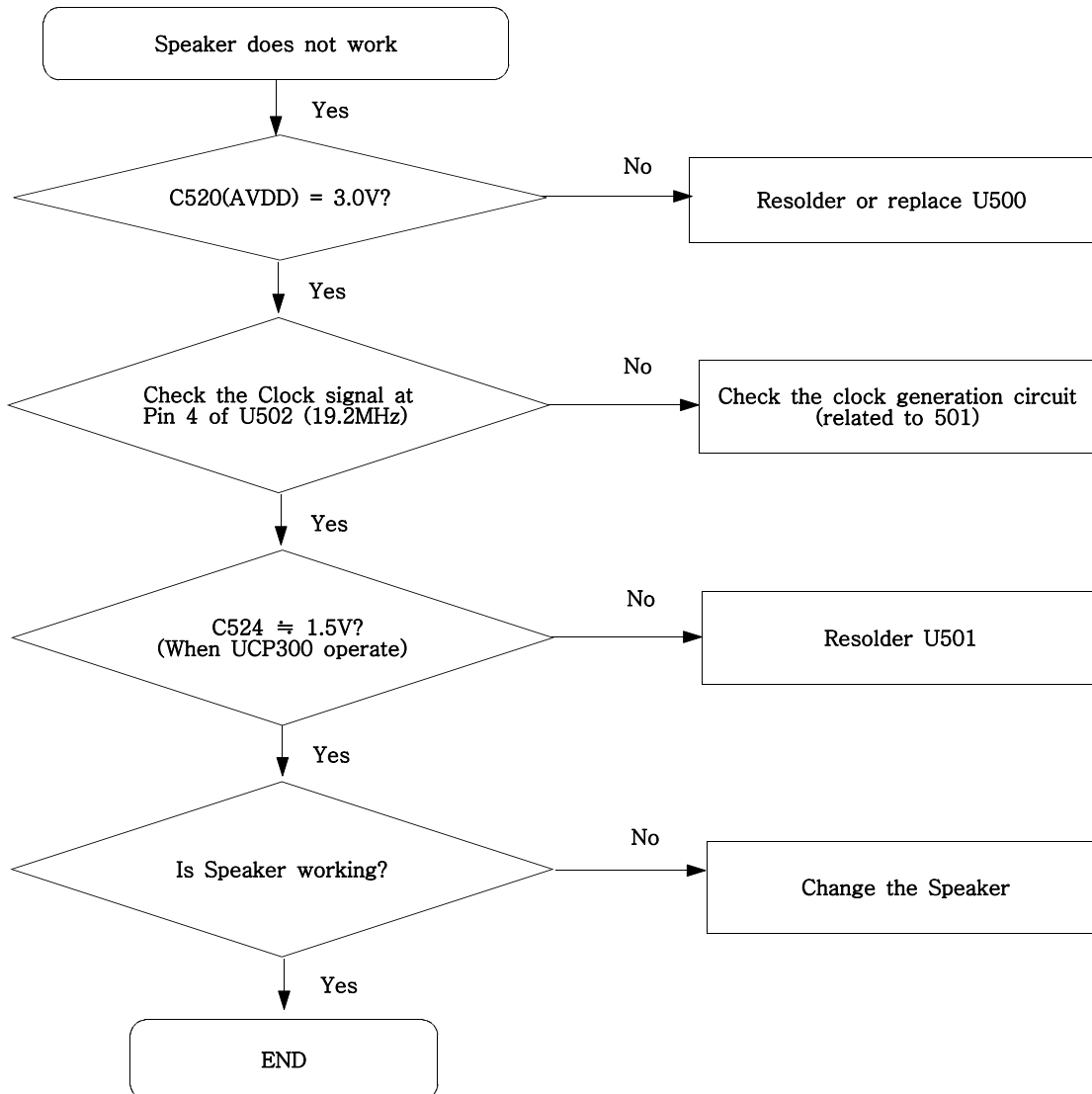
9-3. Sim Part



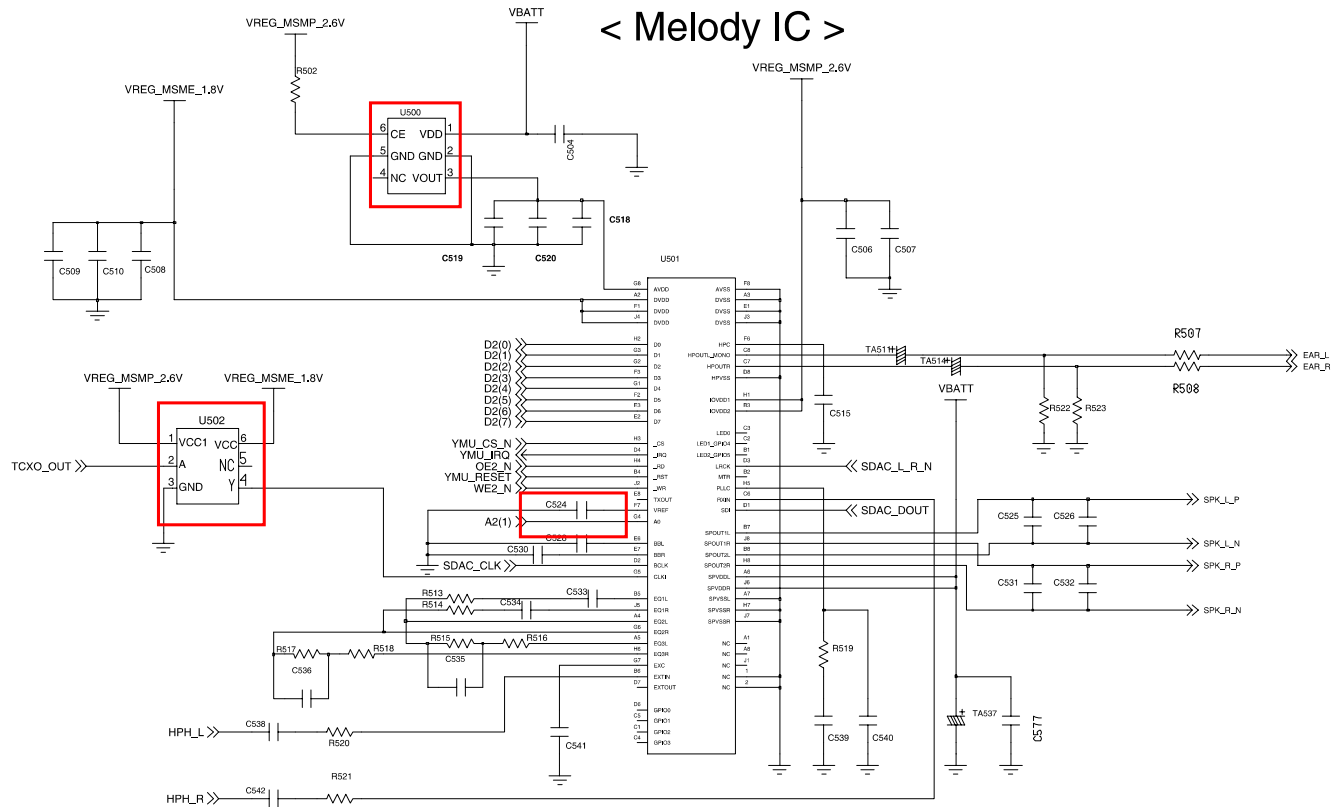


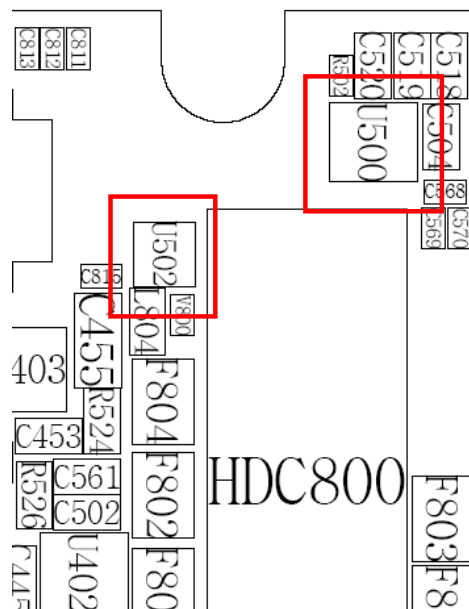
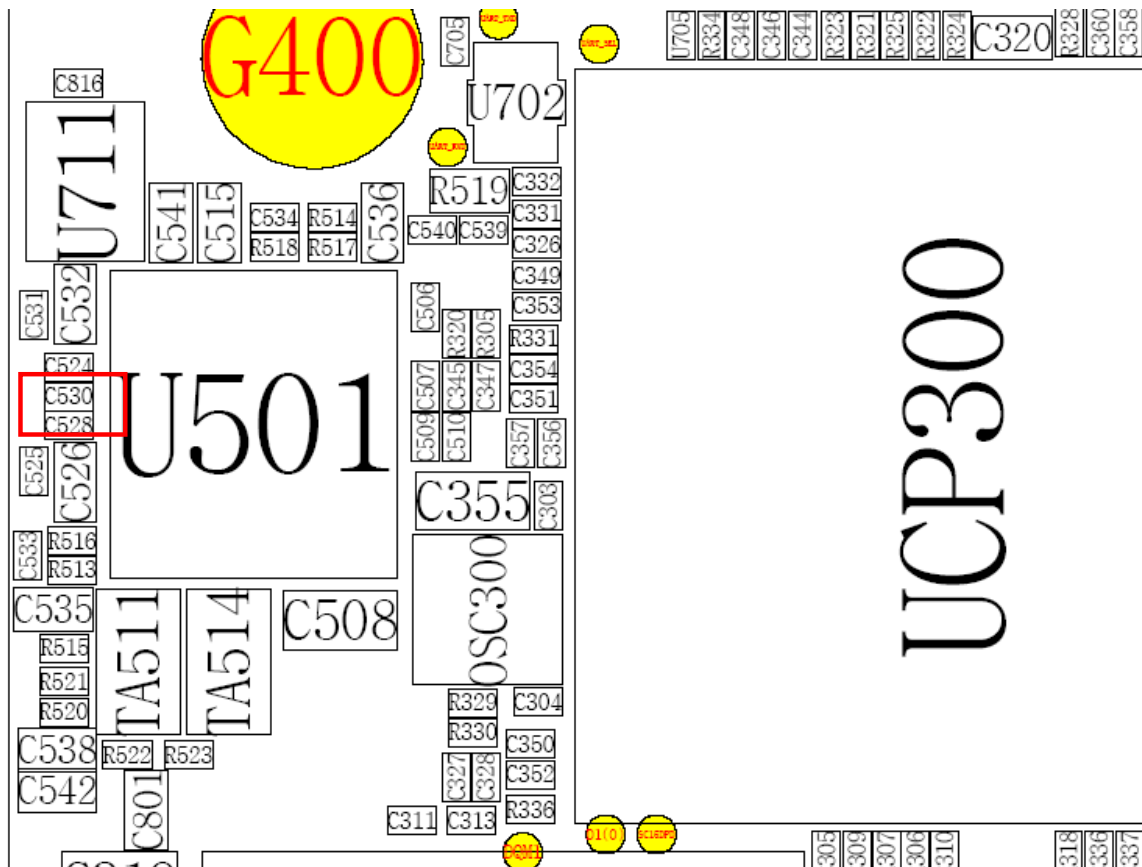


9-4. Speaker Part(Melody)

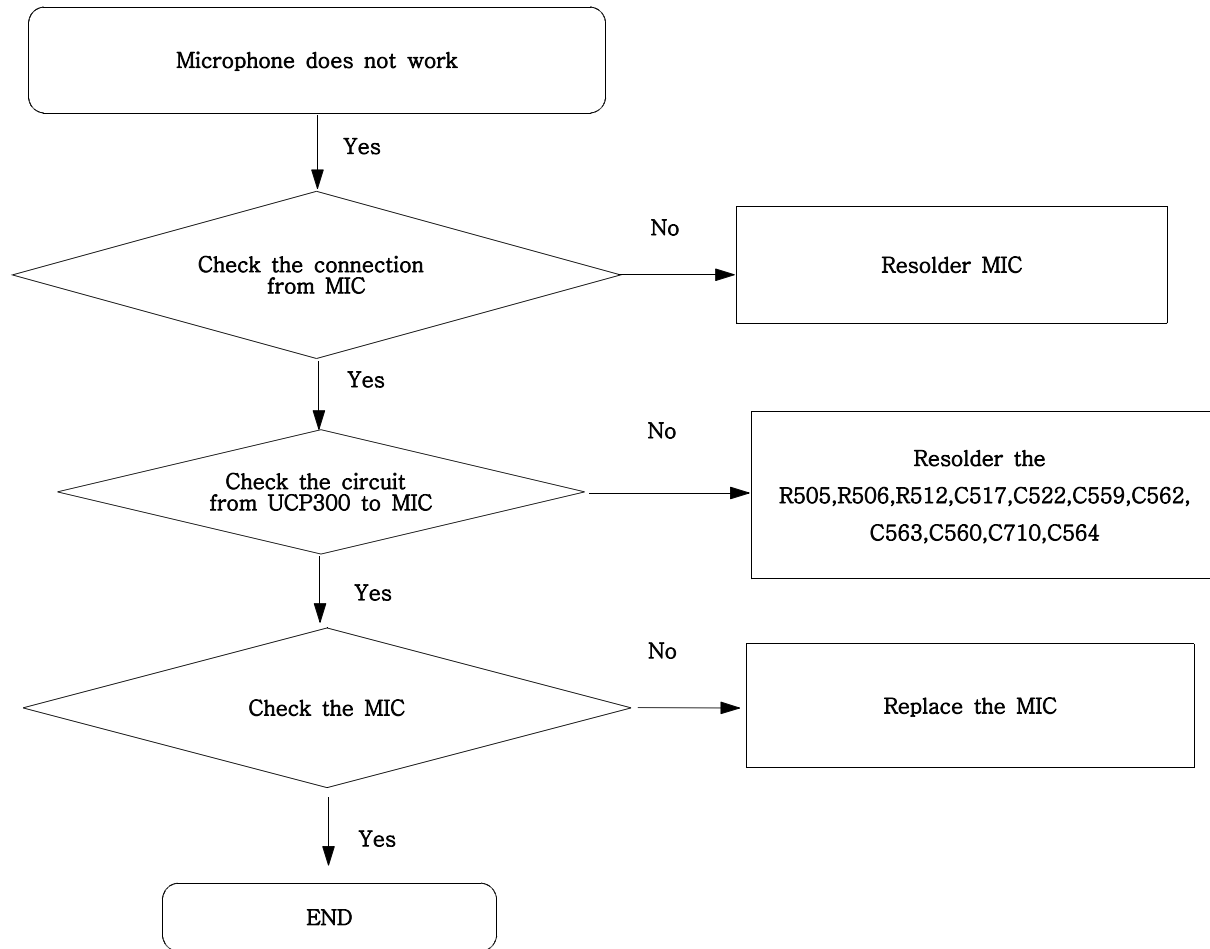


Speaker

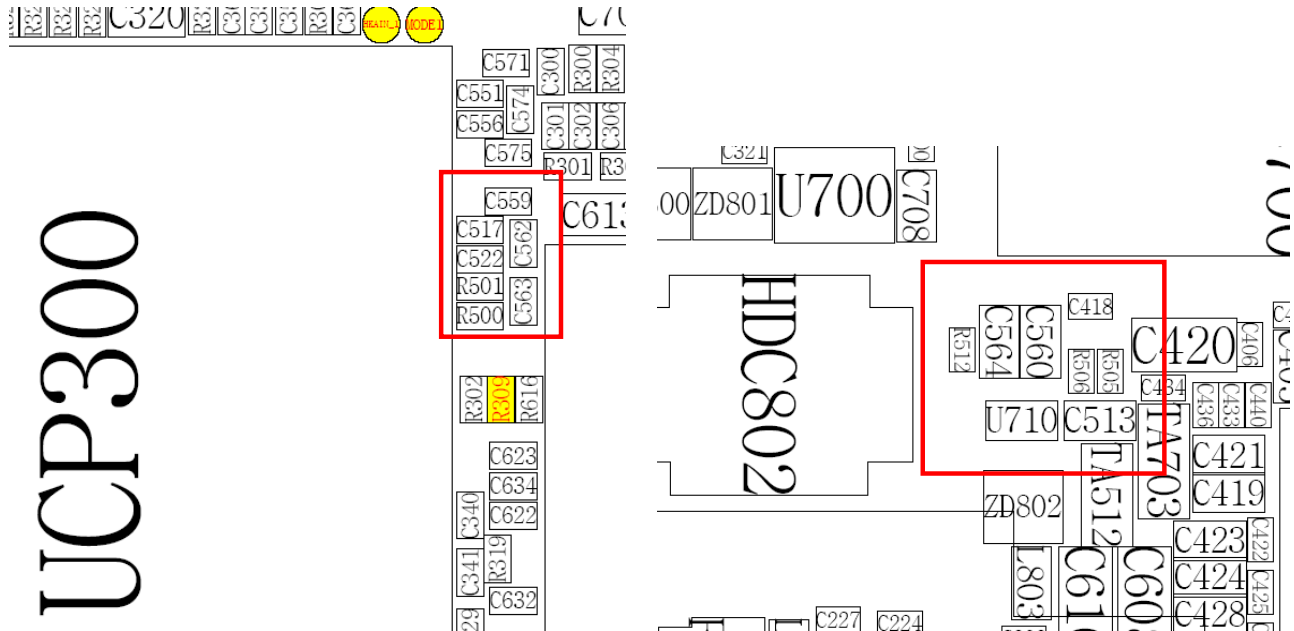
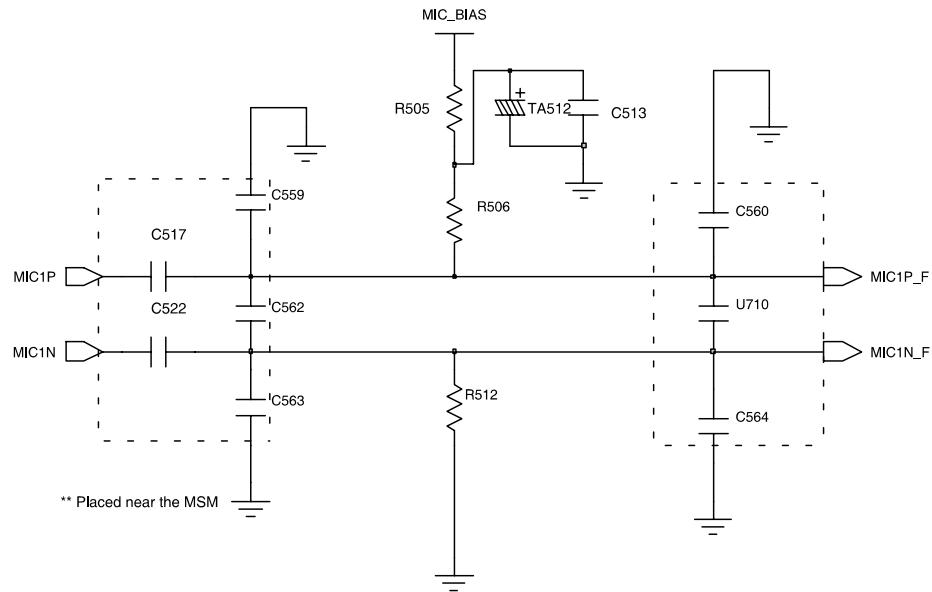




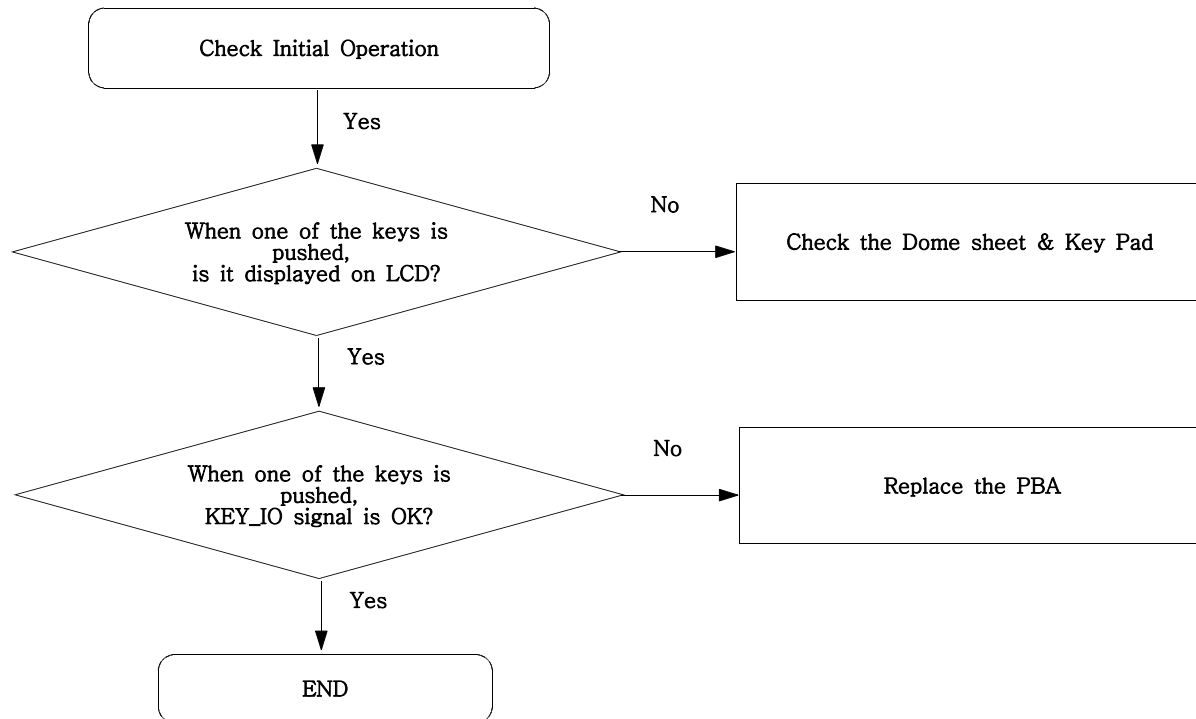
9-5. Microphone Part



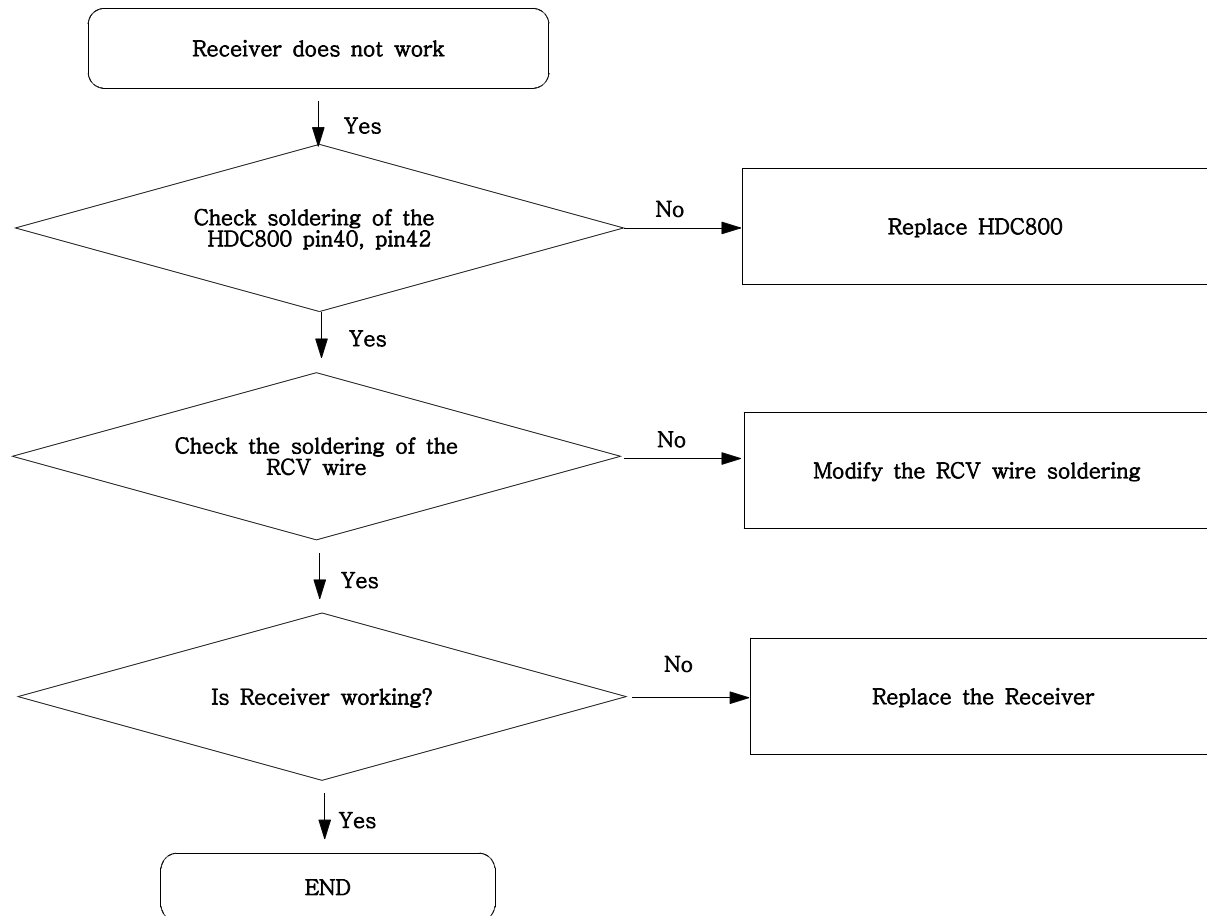
Microphone

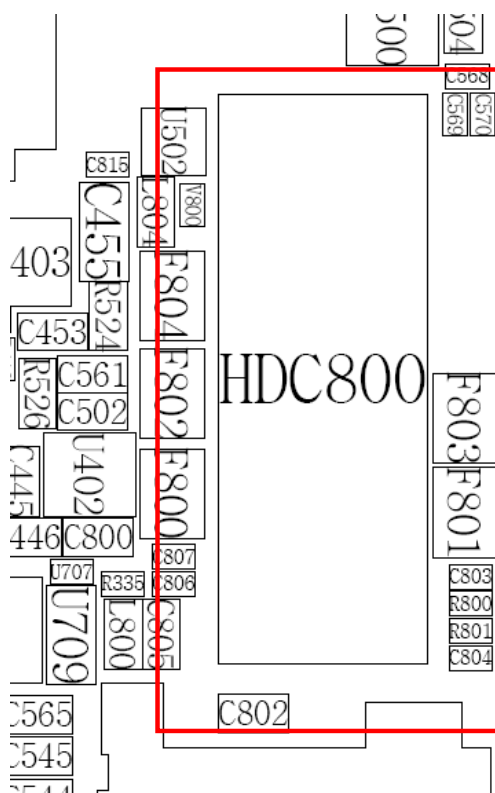
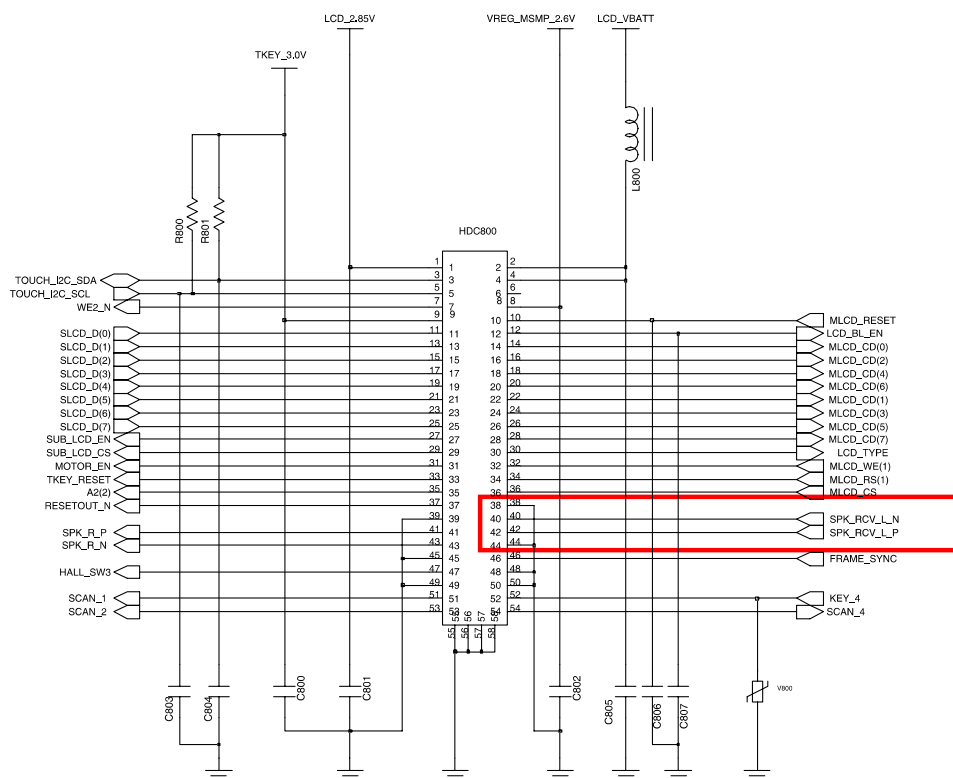


9-6. Key Data Input

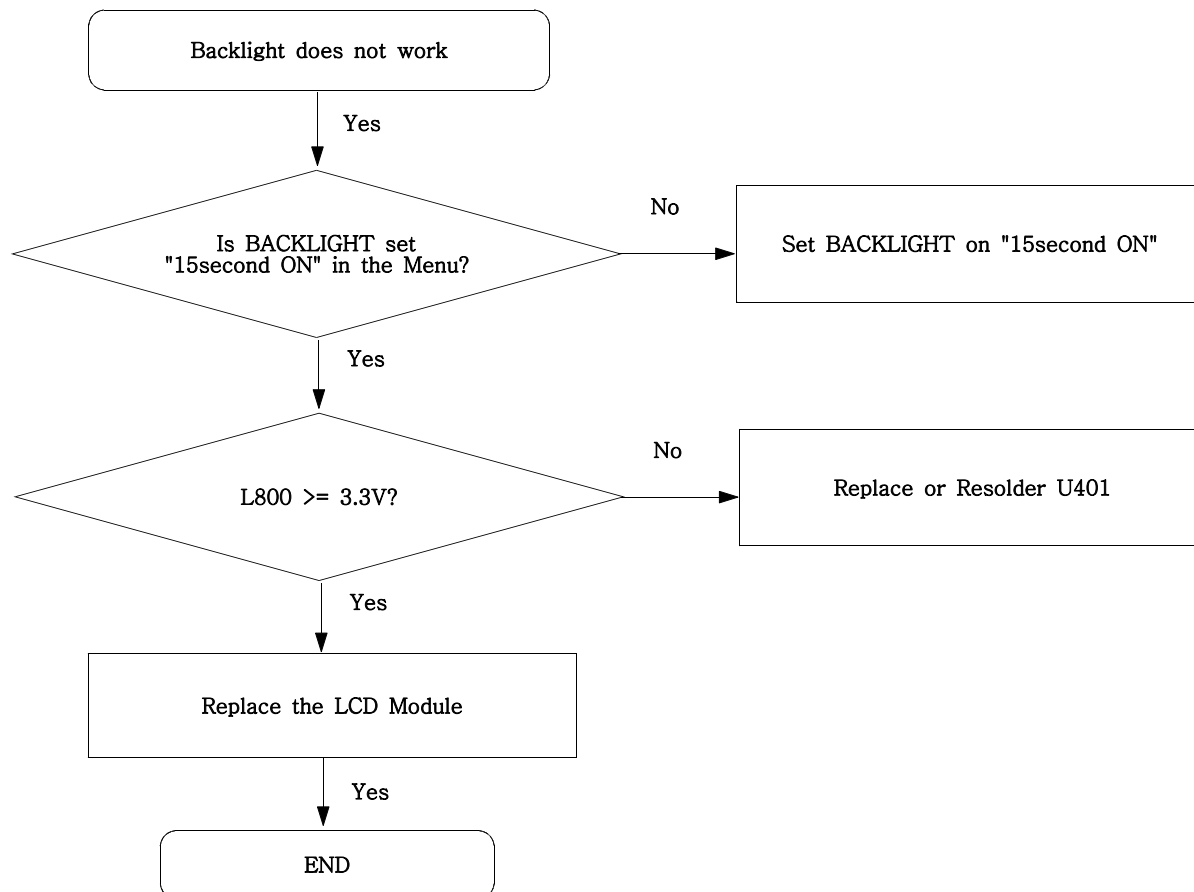


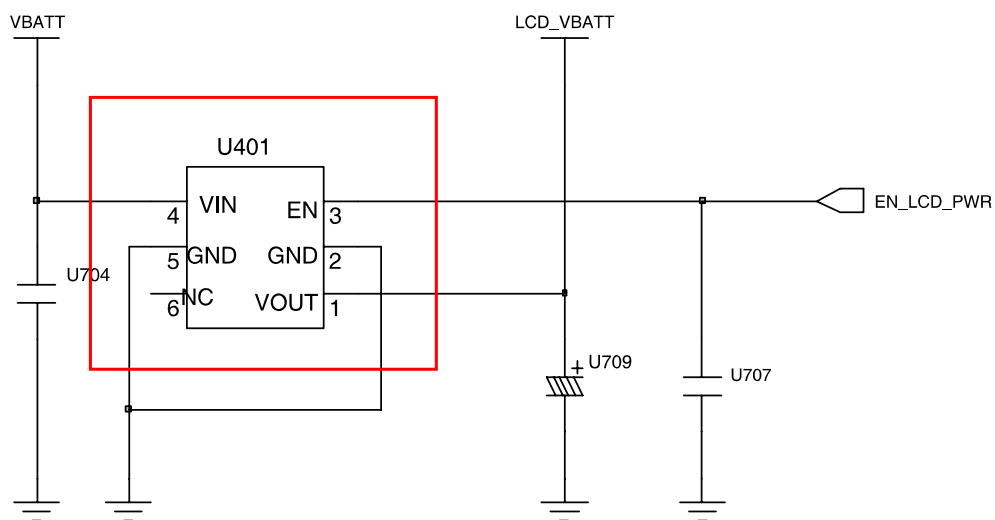
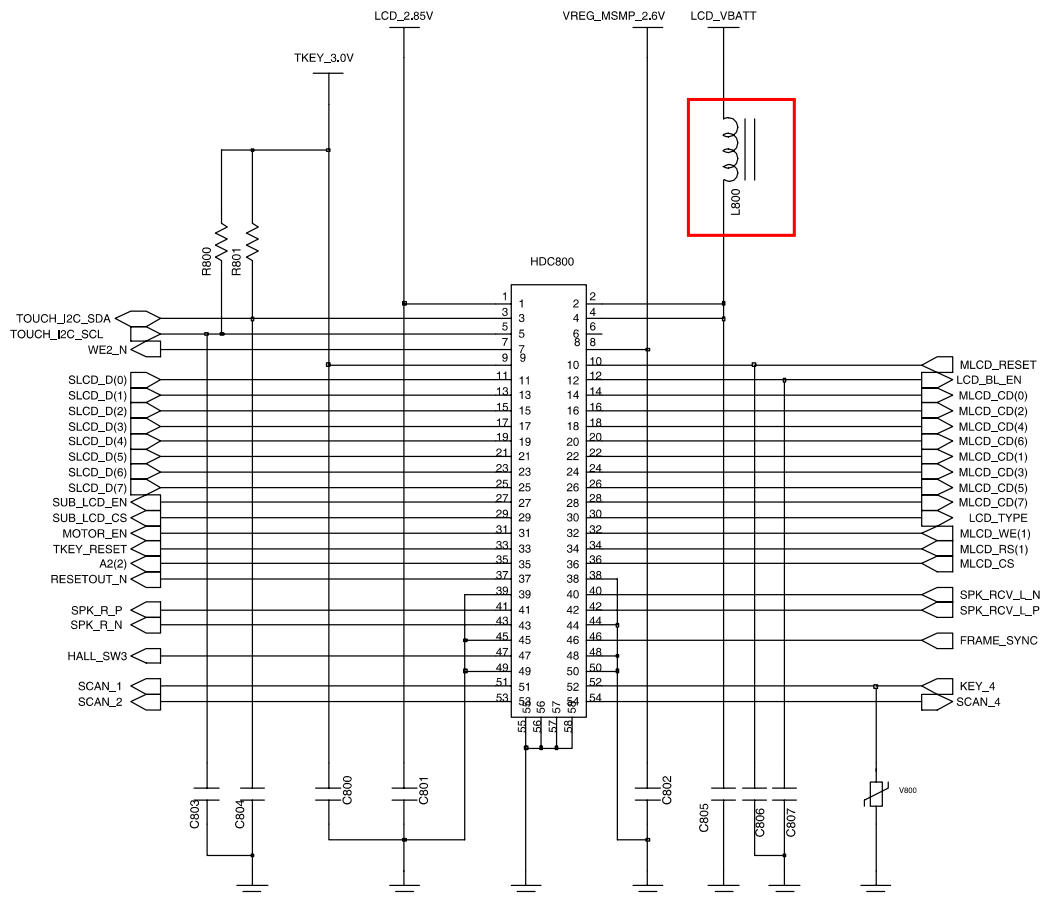
9-7. Receiver Part

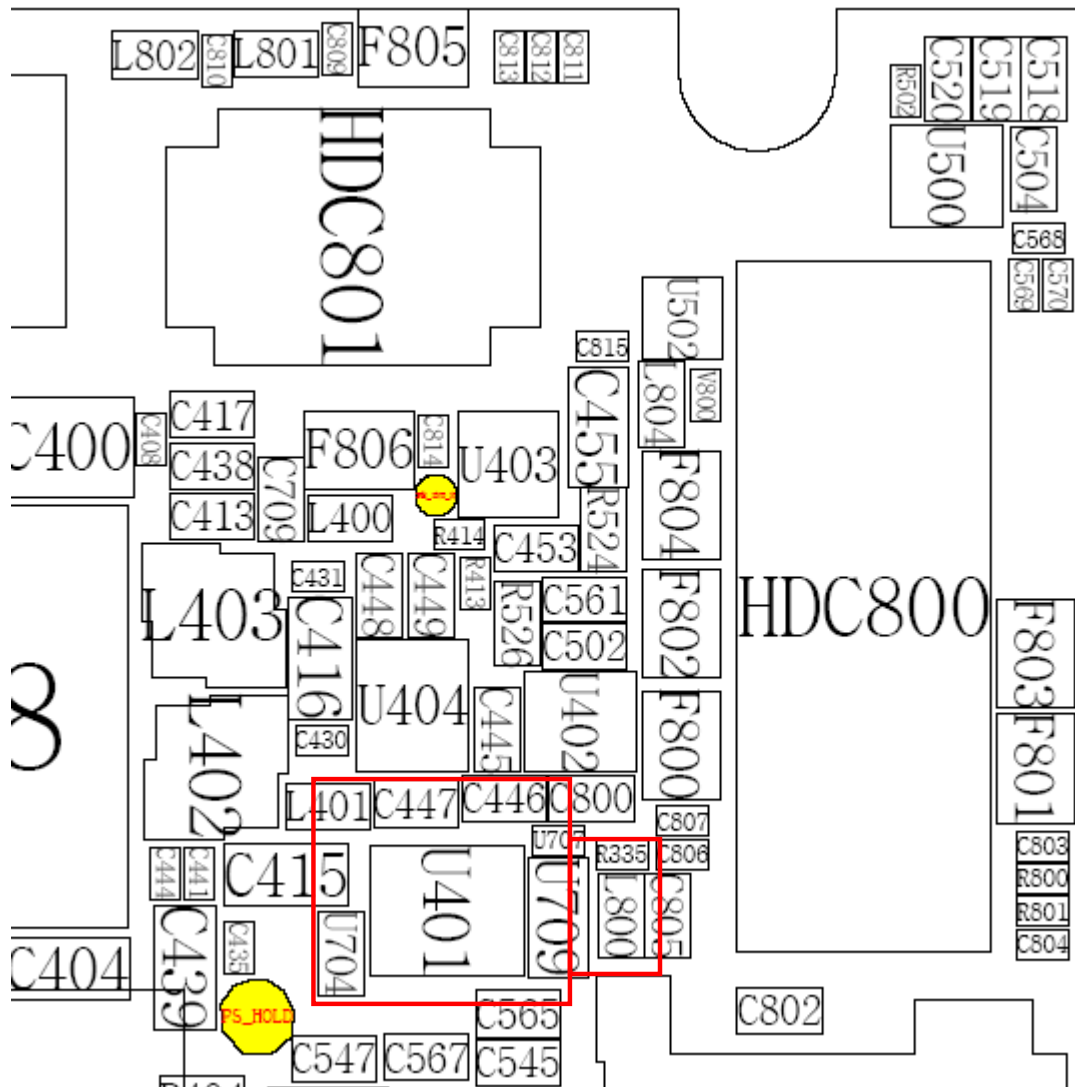




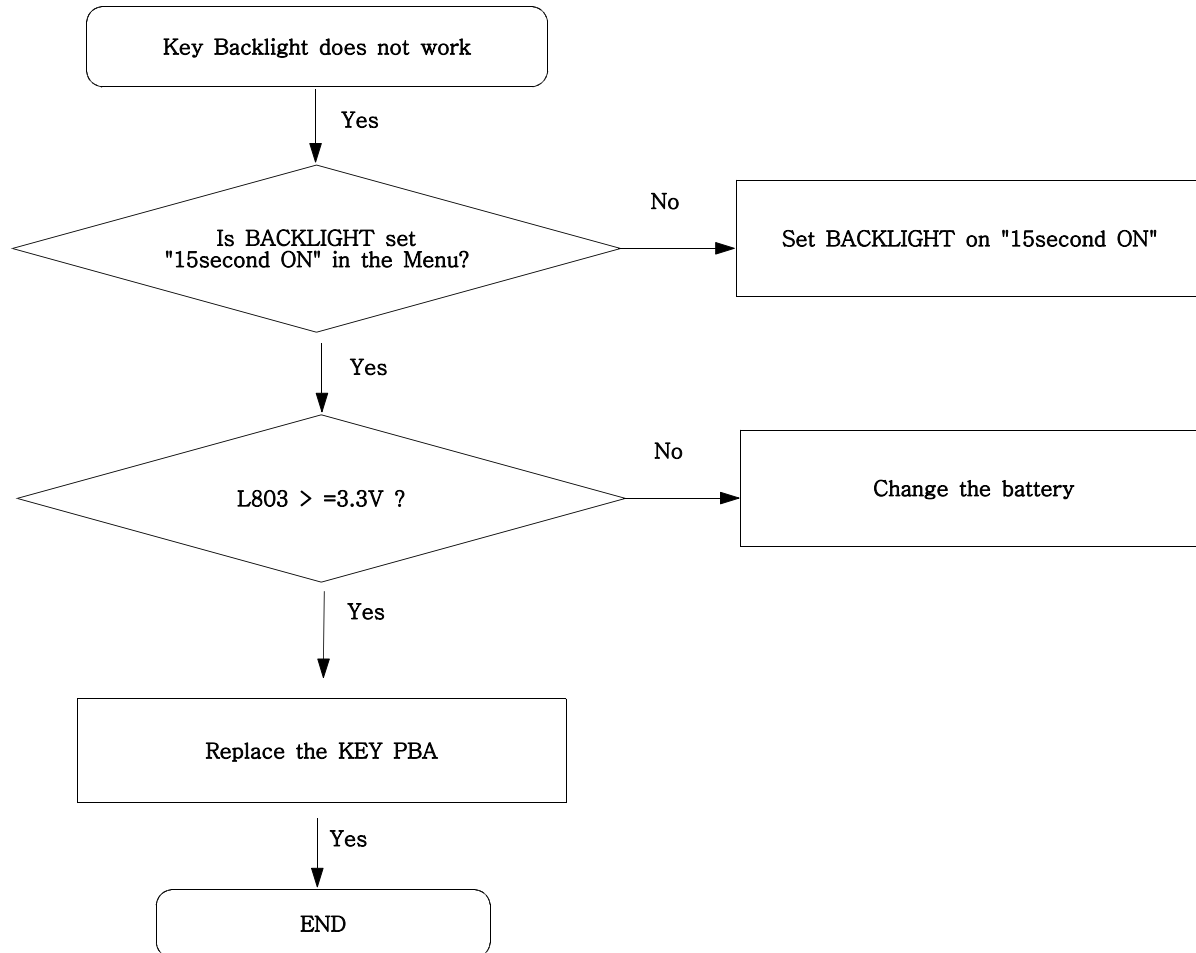
9-8. Back Light (for Color Main LCD)

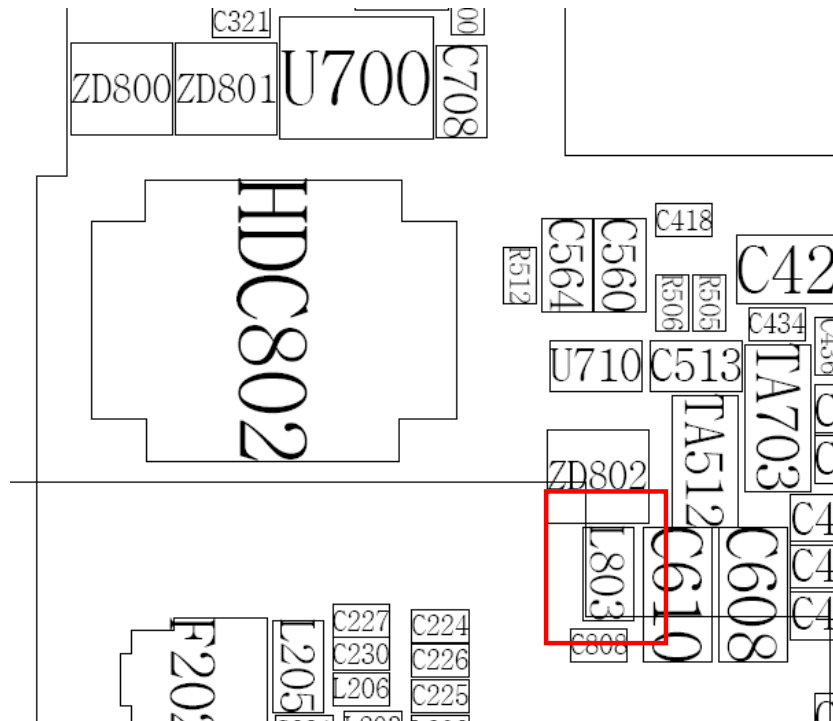
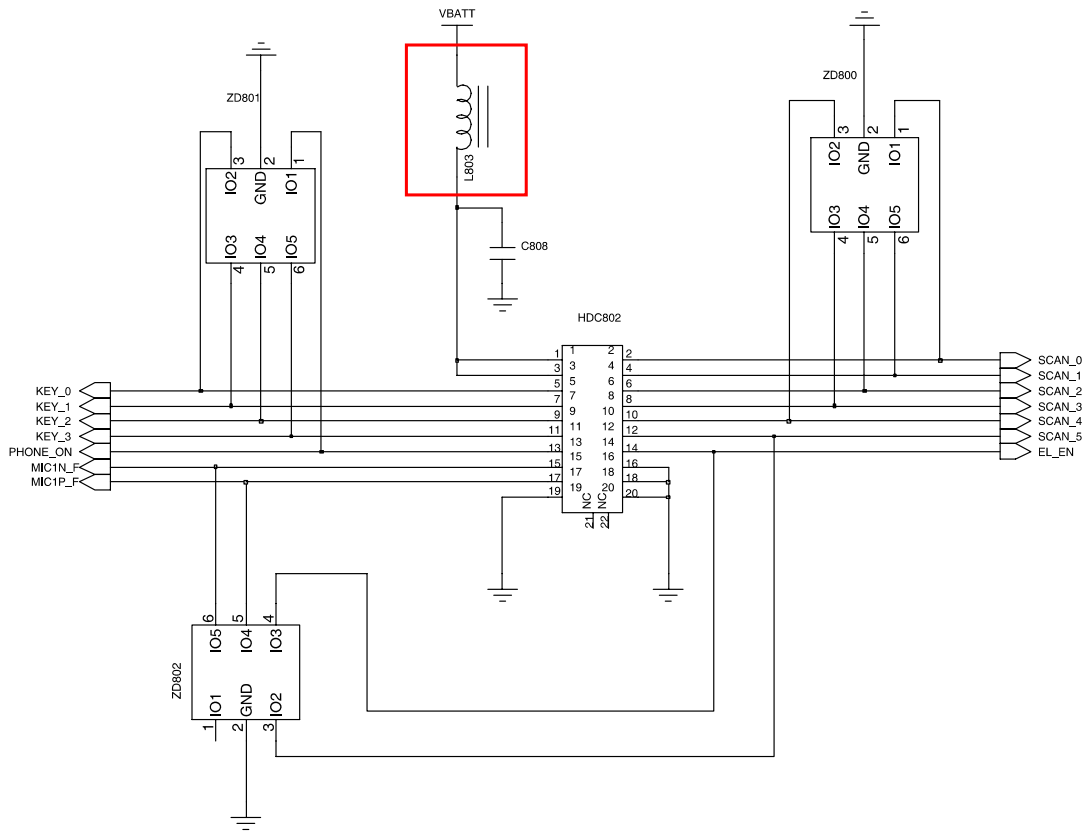




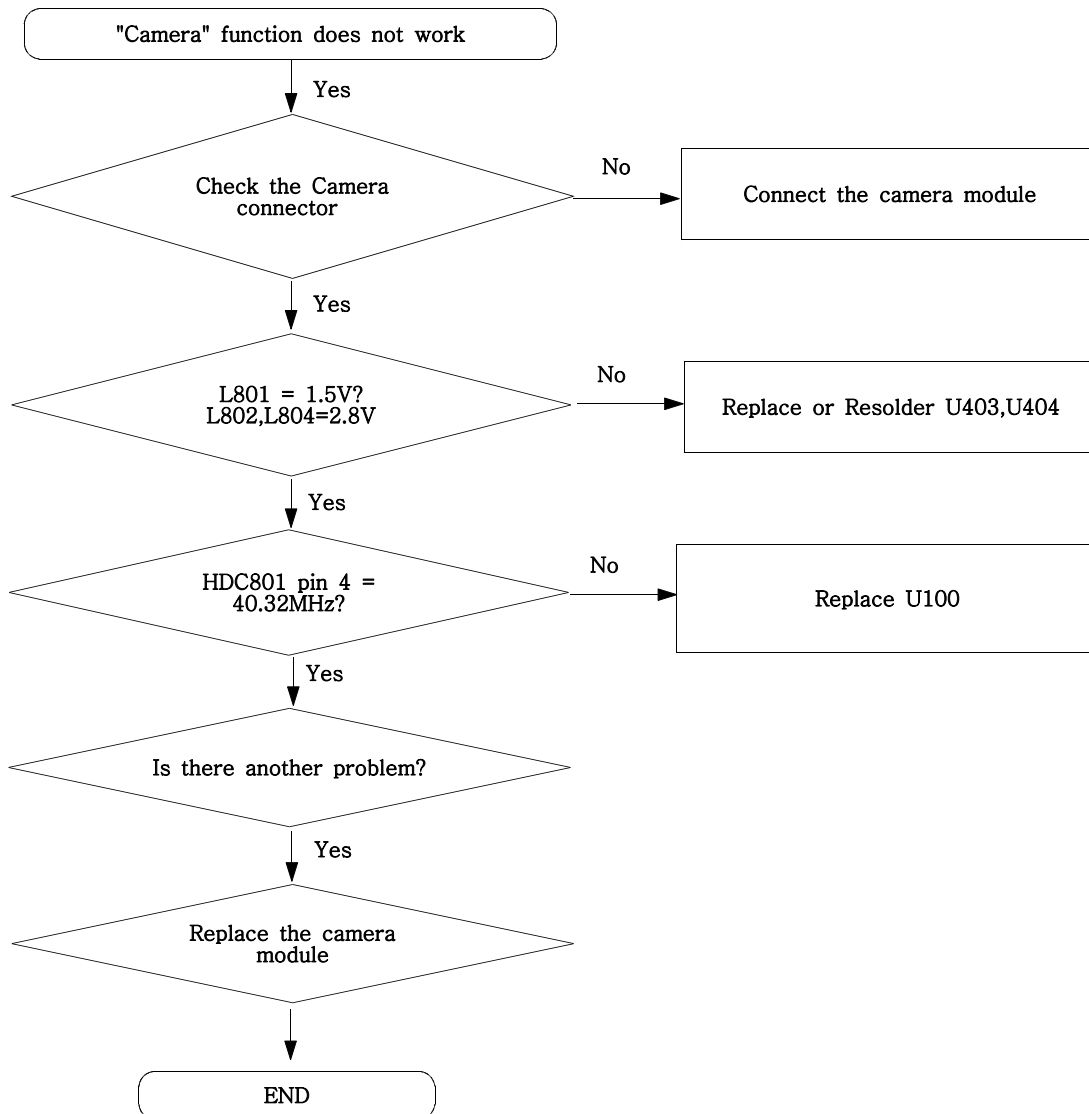


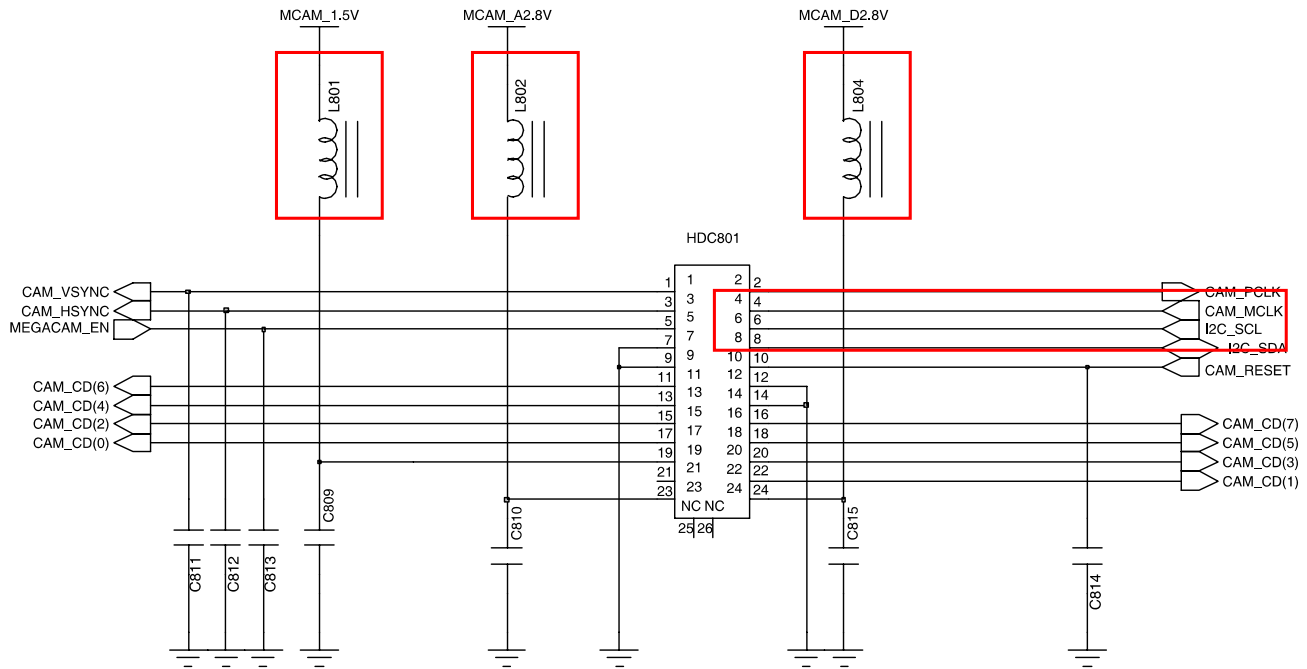
9-9. Key Back Light



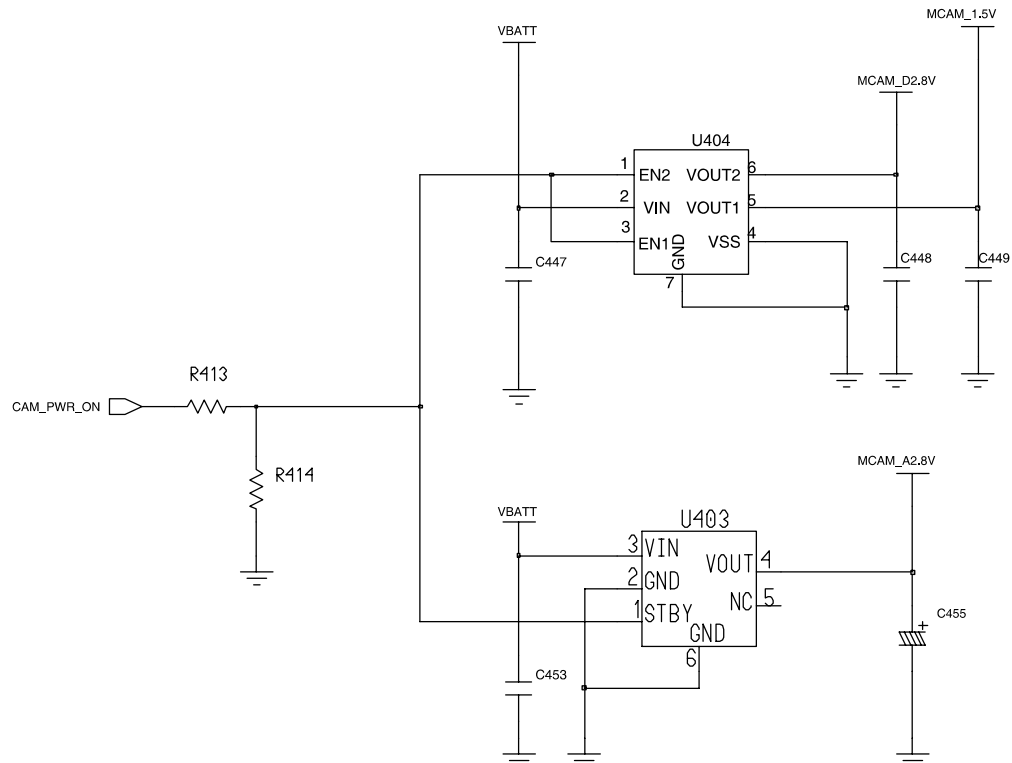


9-10. Camera part



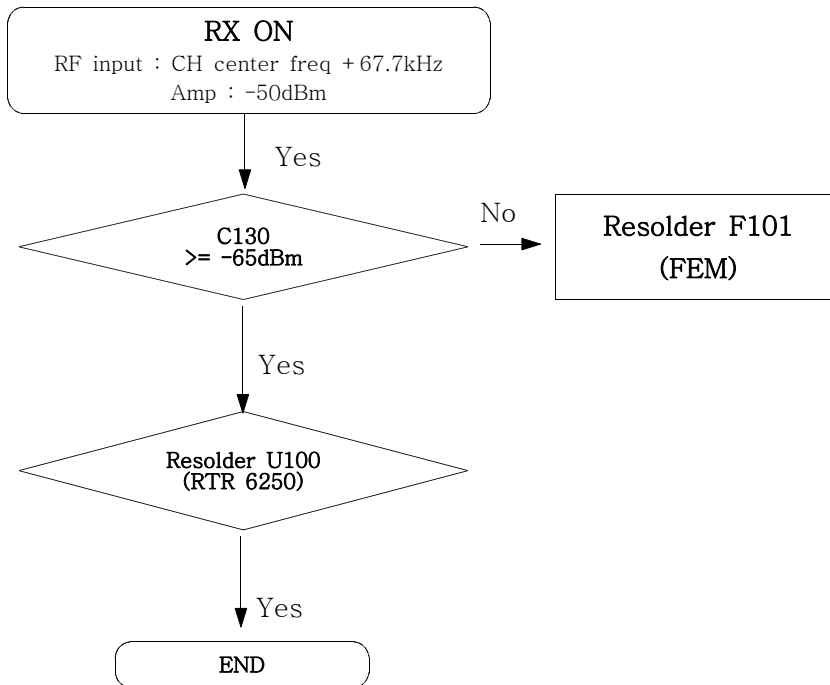


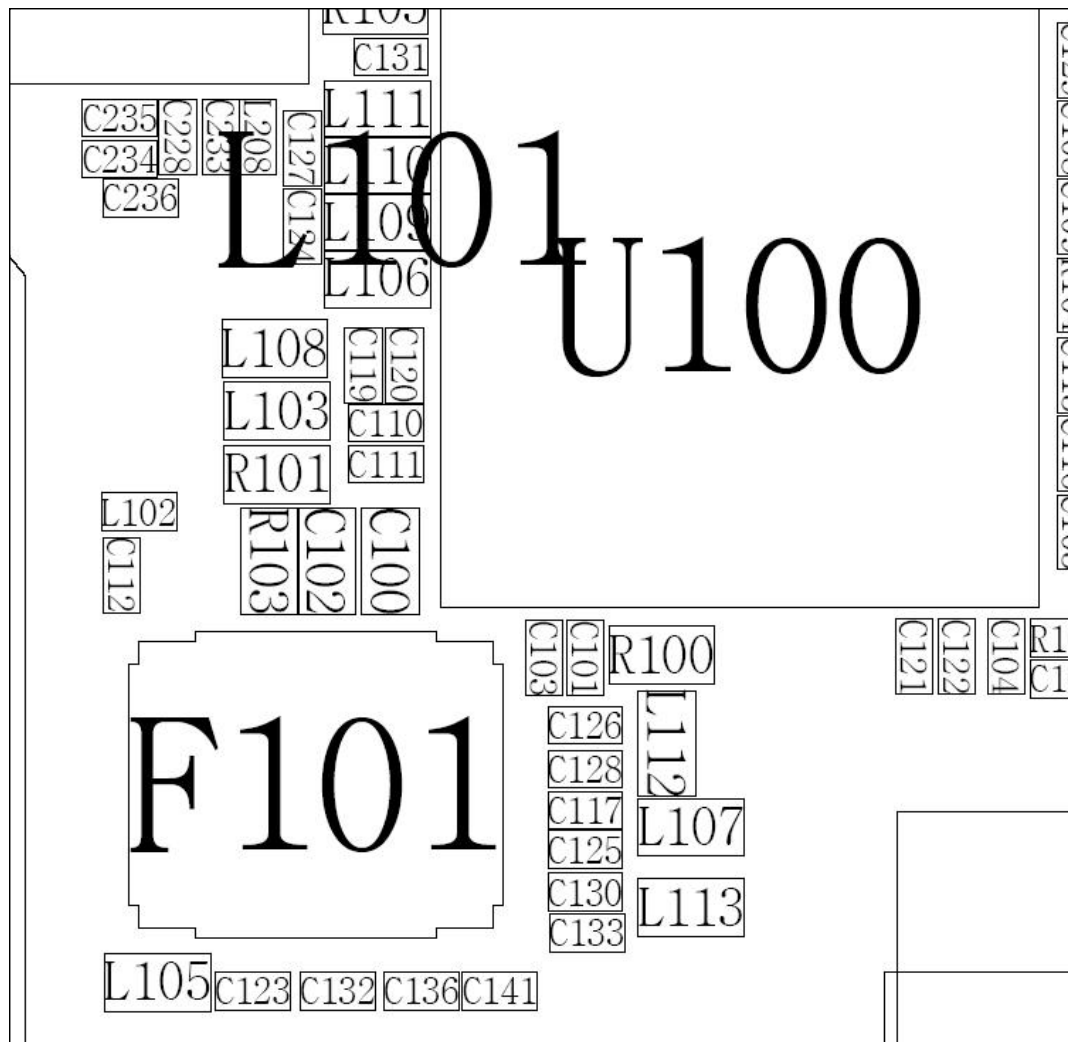
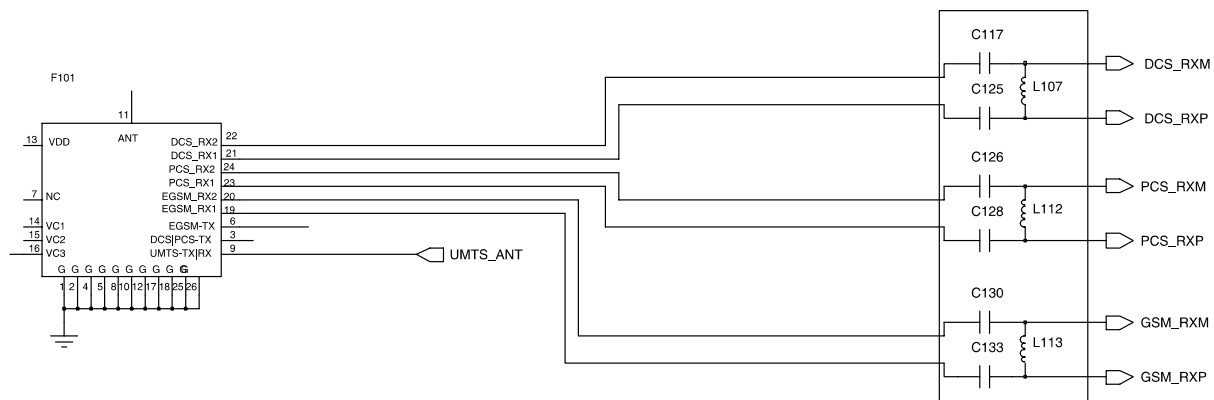
< 2M Camera Power >



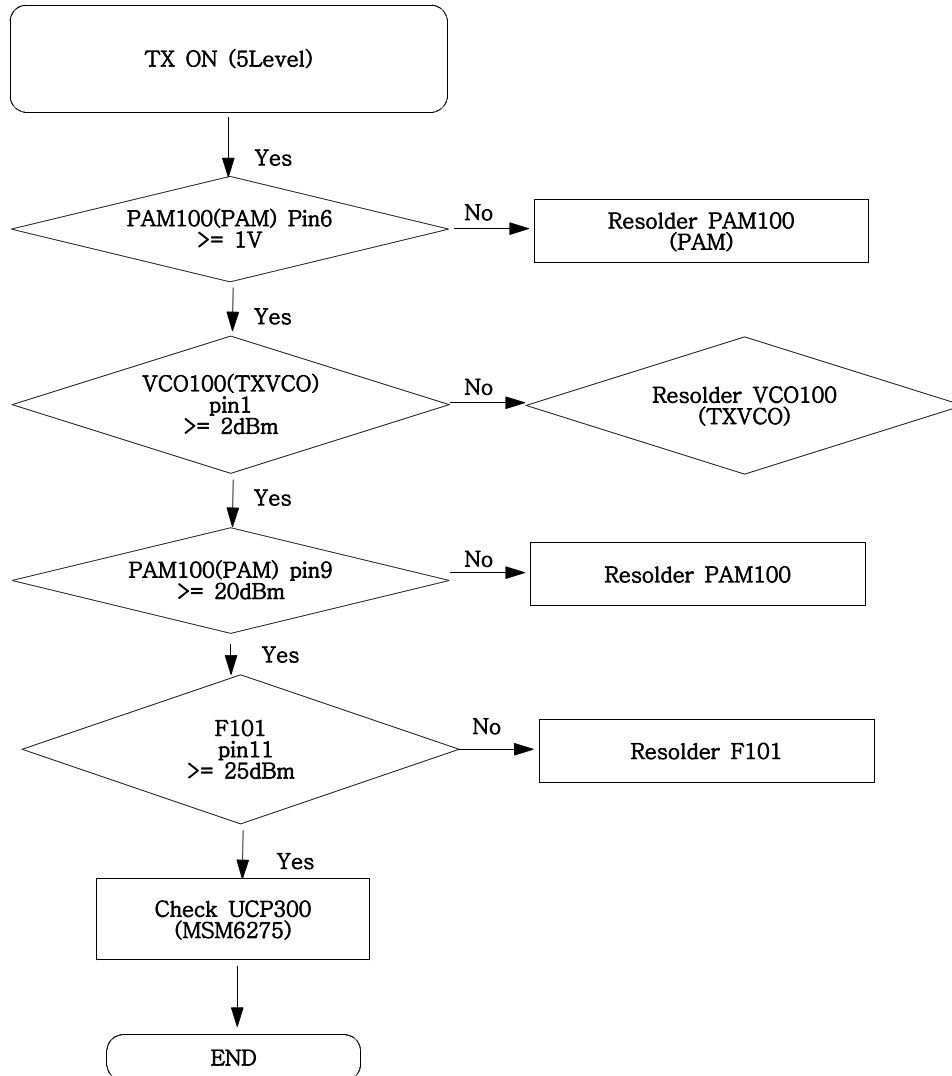


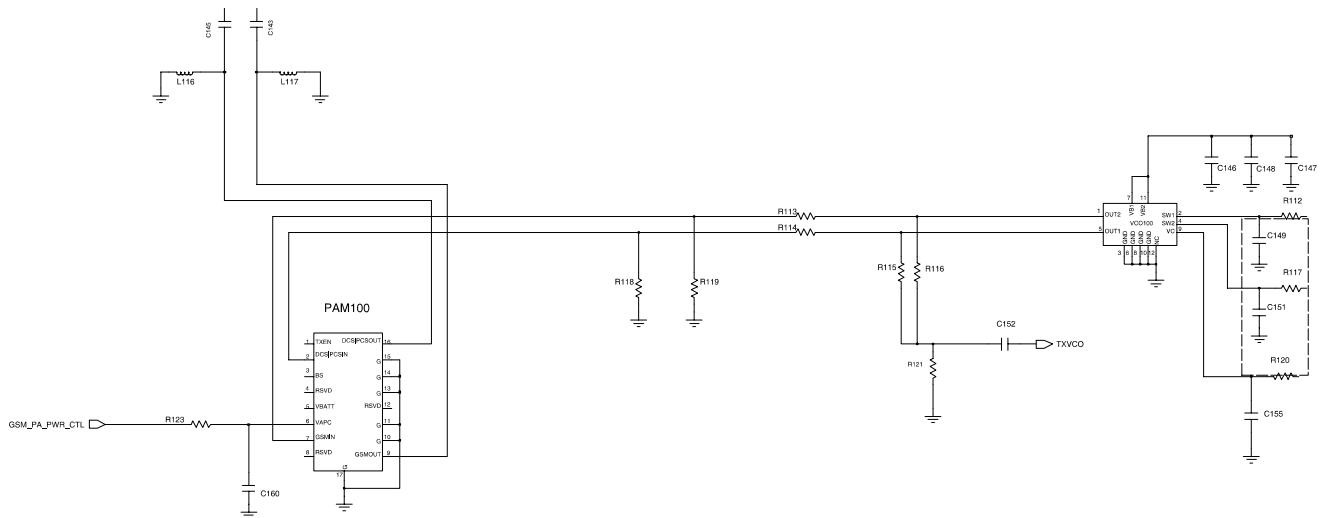
9-11. GSM Receiver



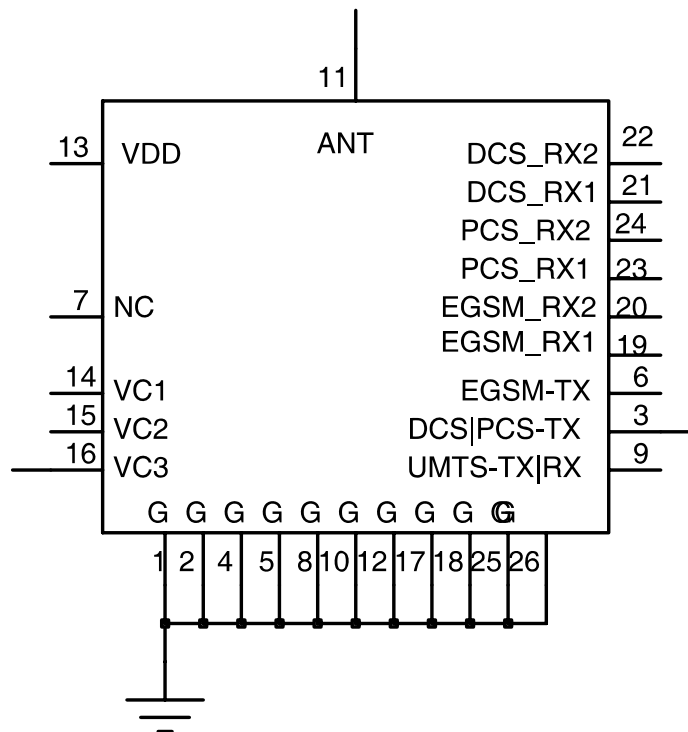


9-12. GSM Transmitter

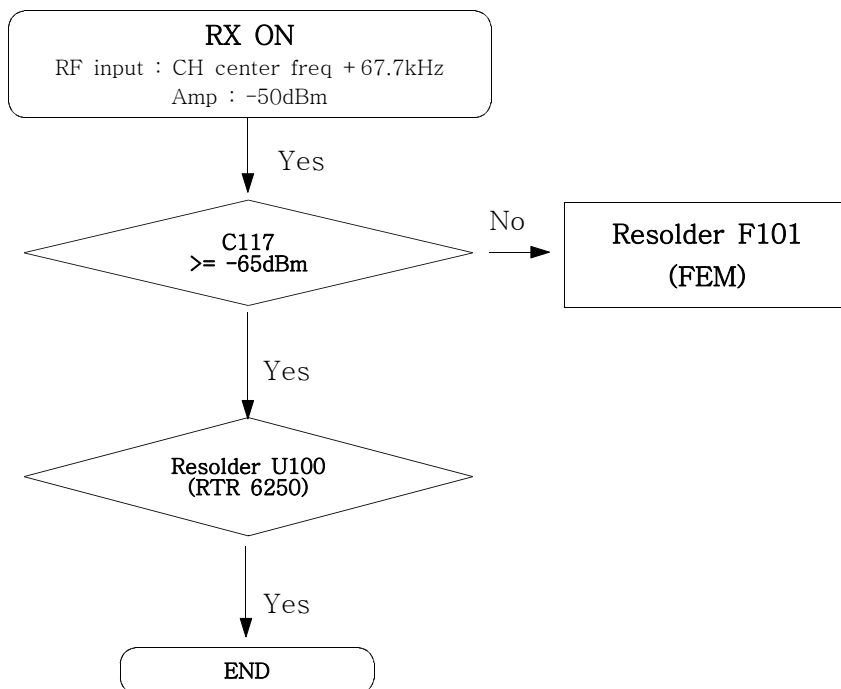


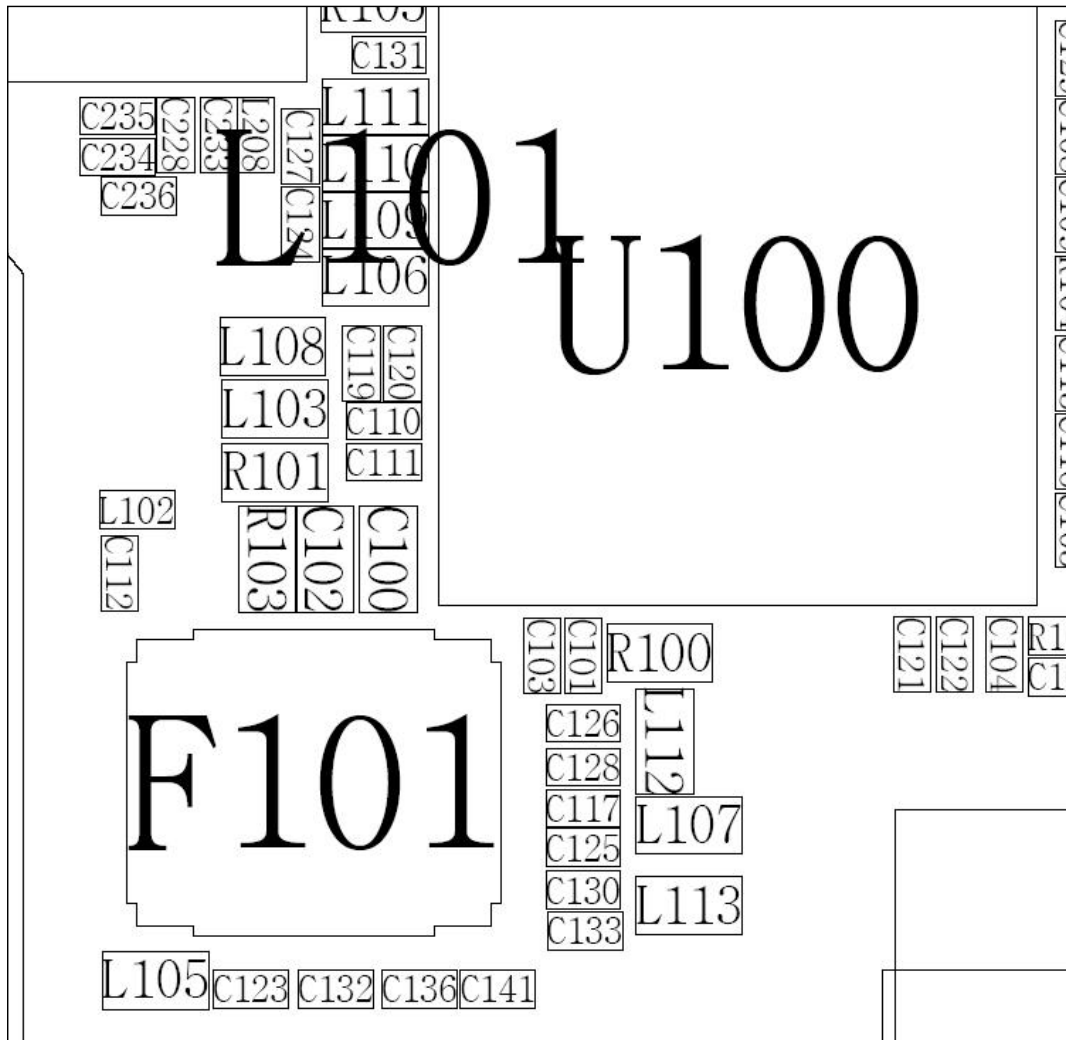
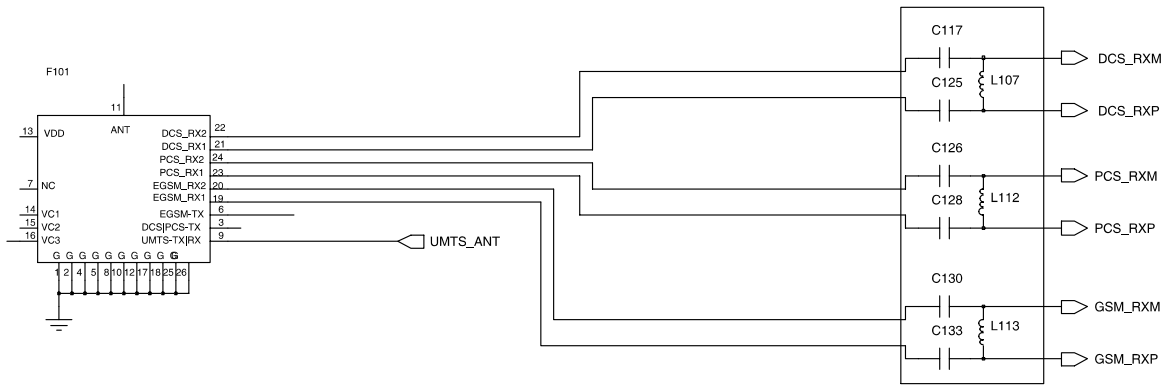


F101

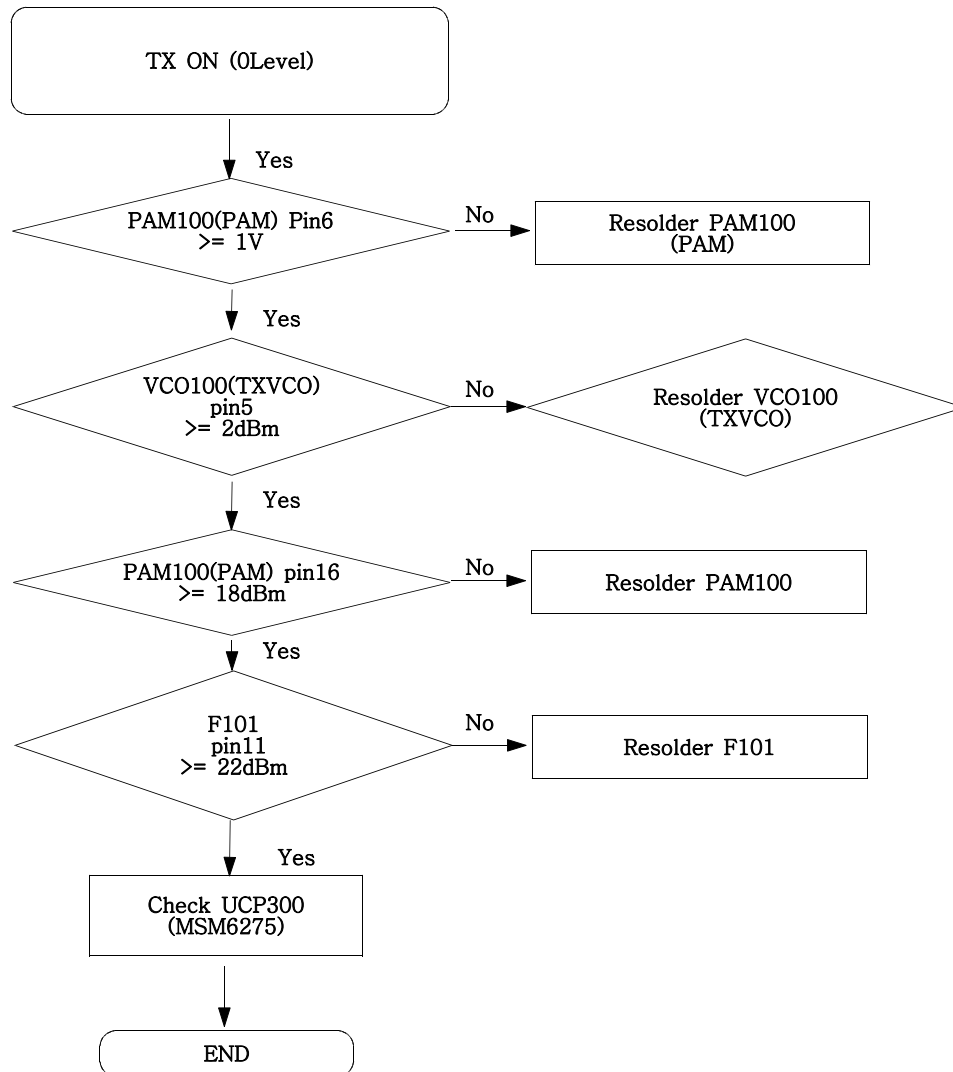


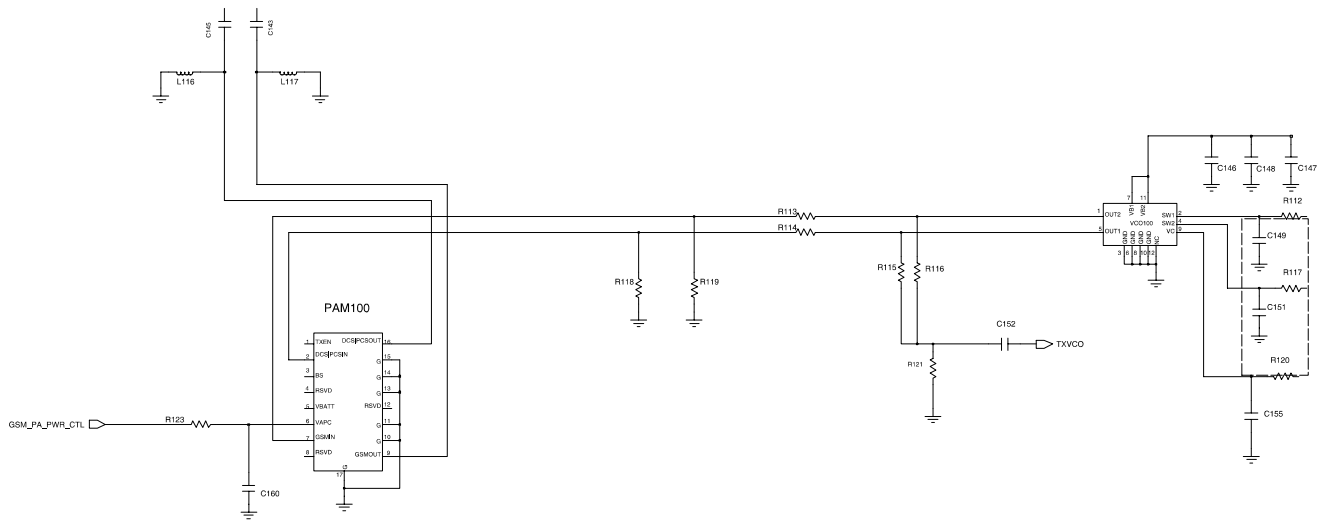
9-13. DCS Receiver



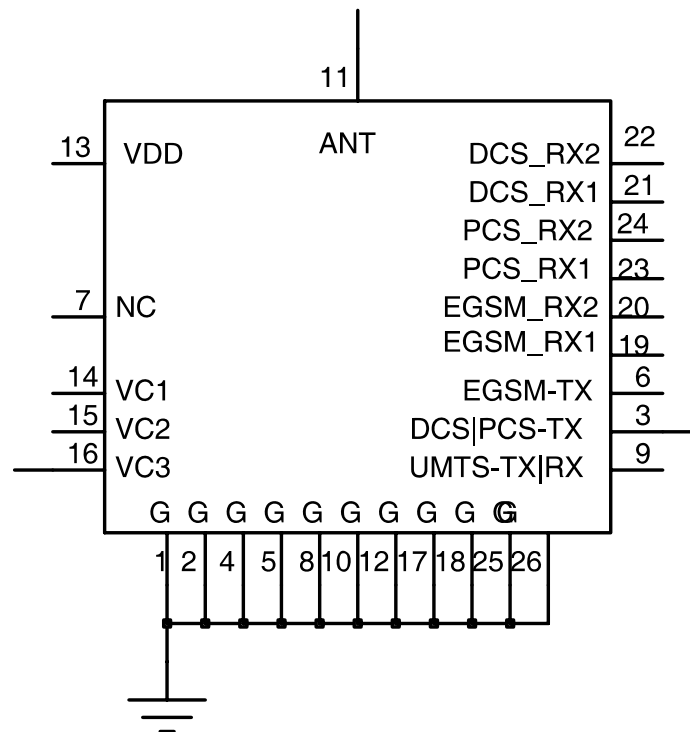


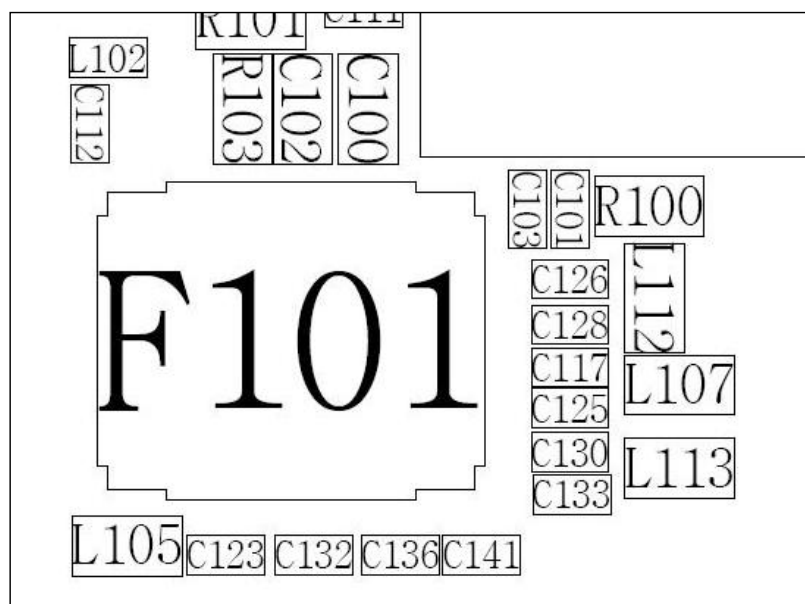
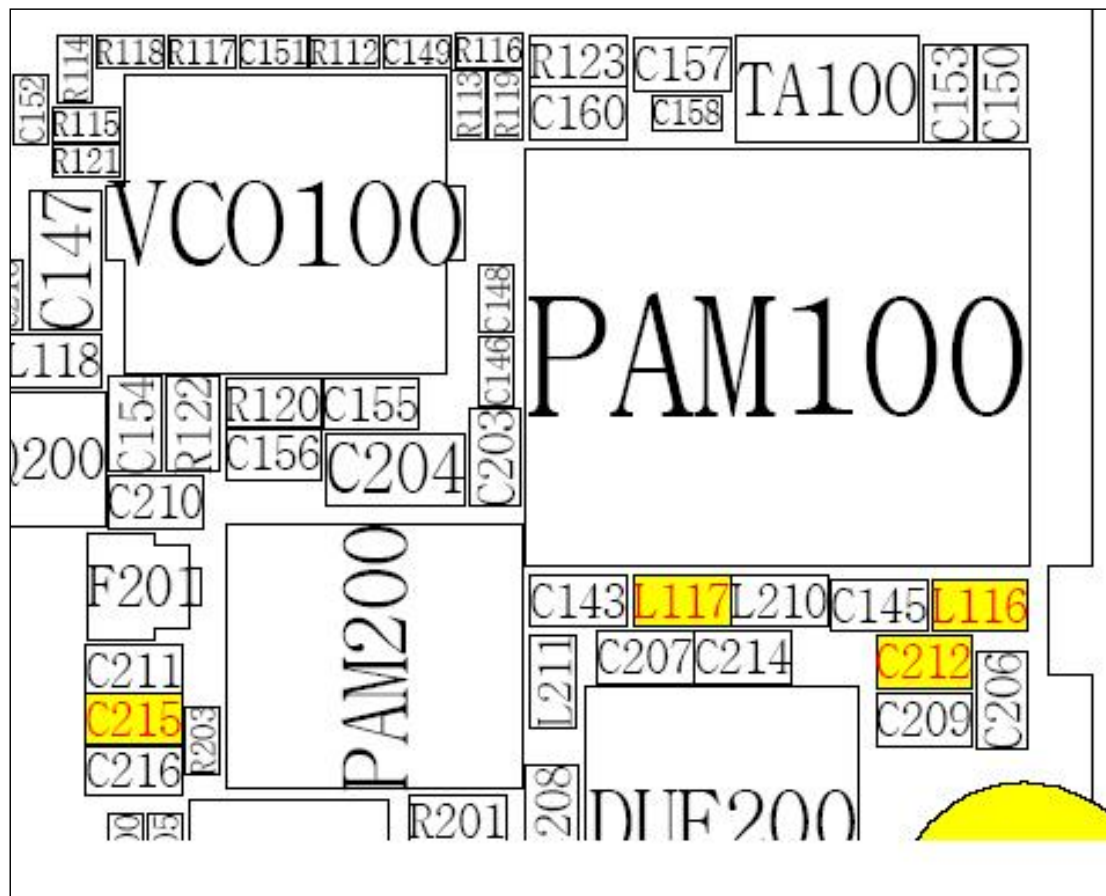
9-14. DCS Transmitter



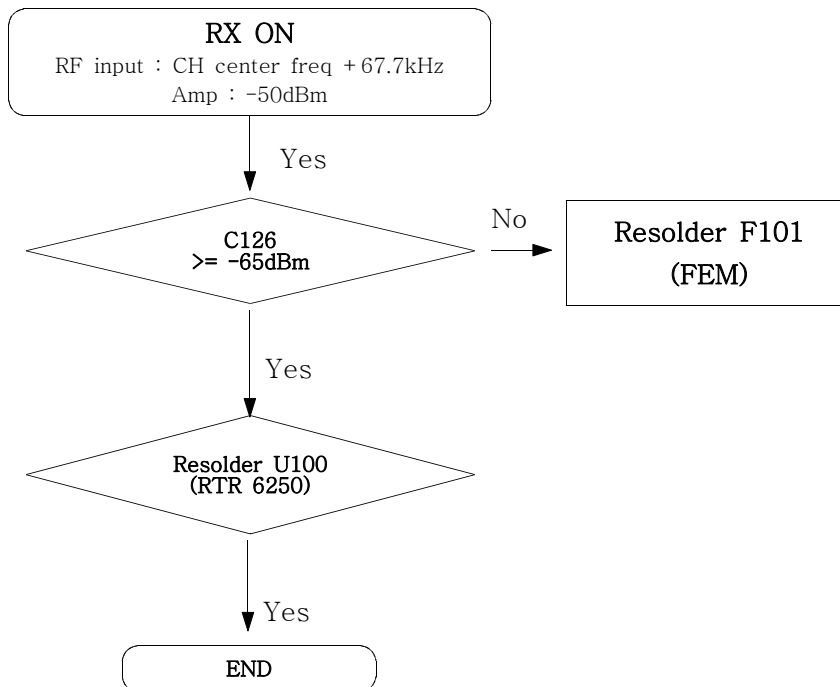


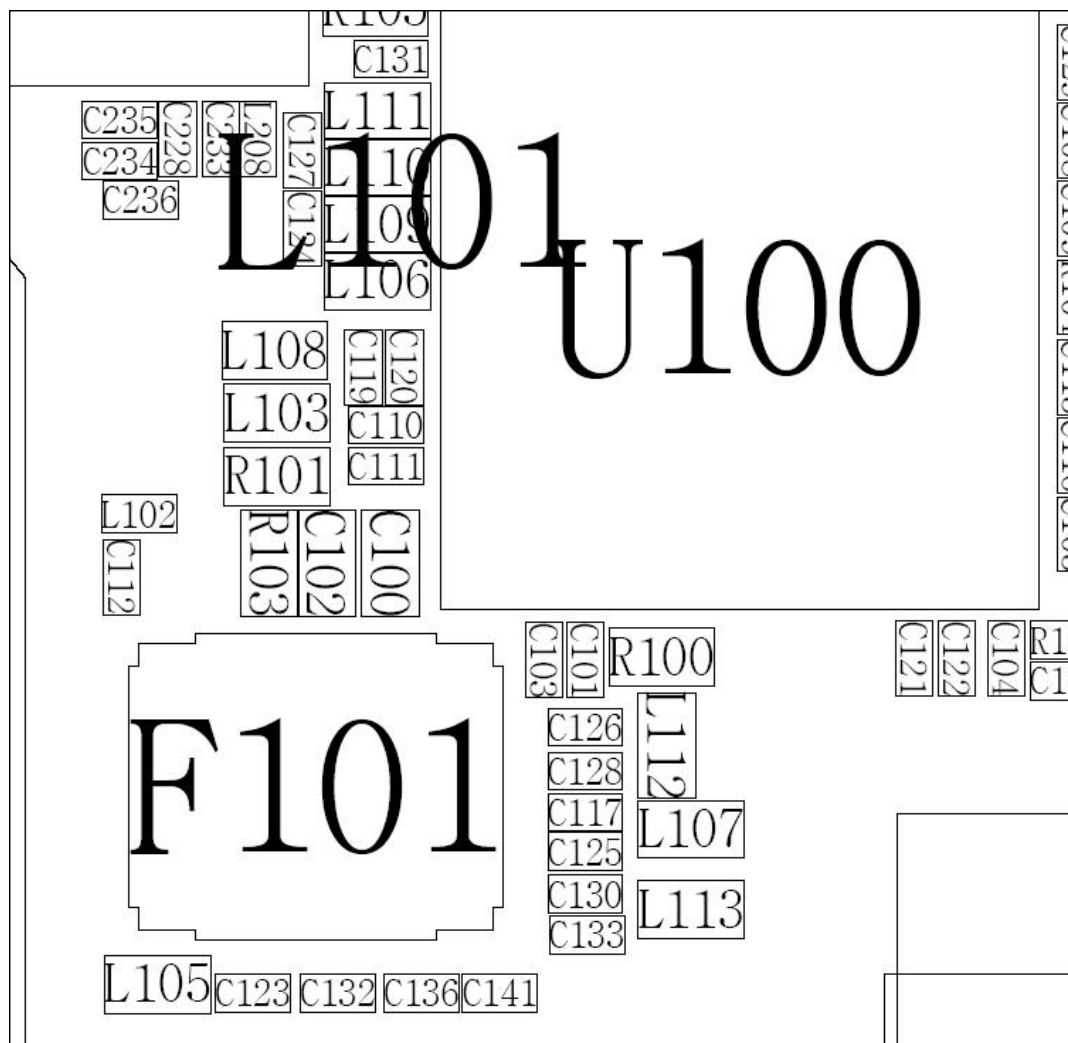
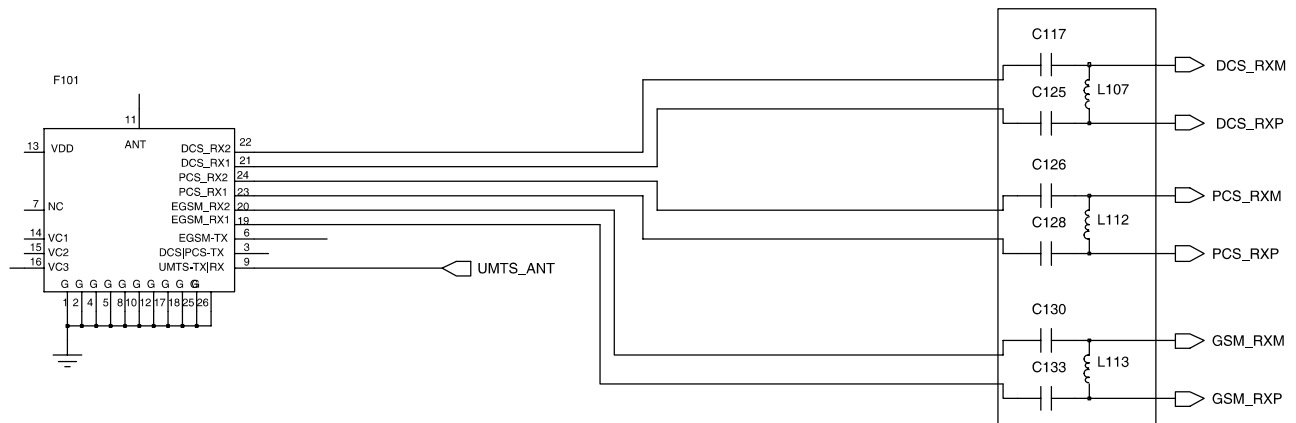
F101



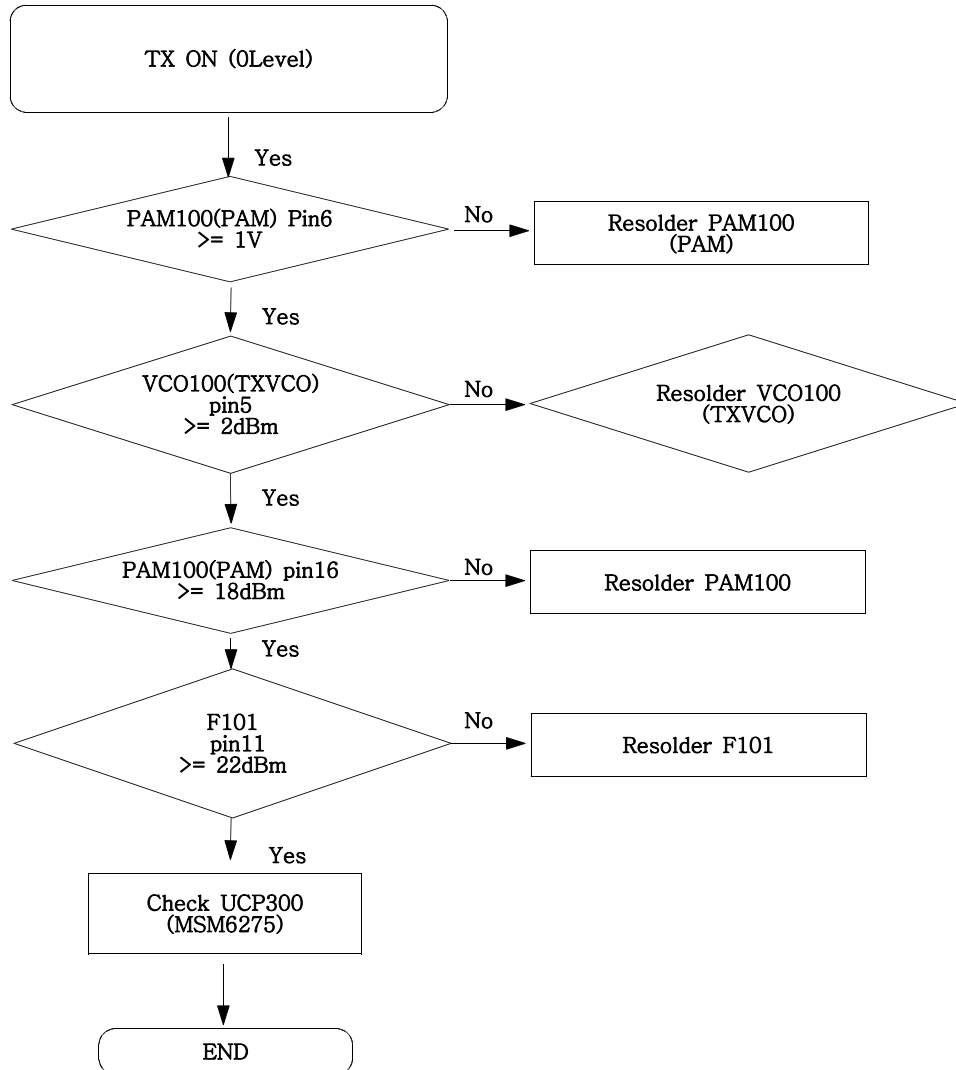


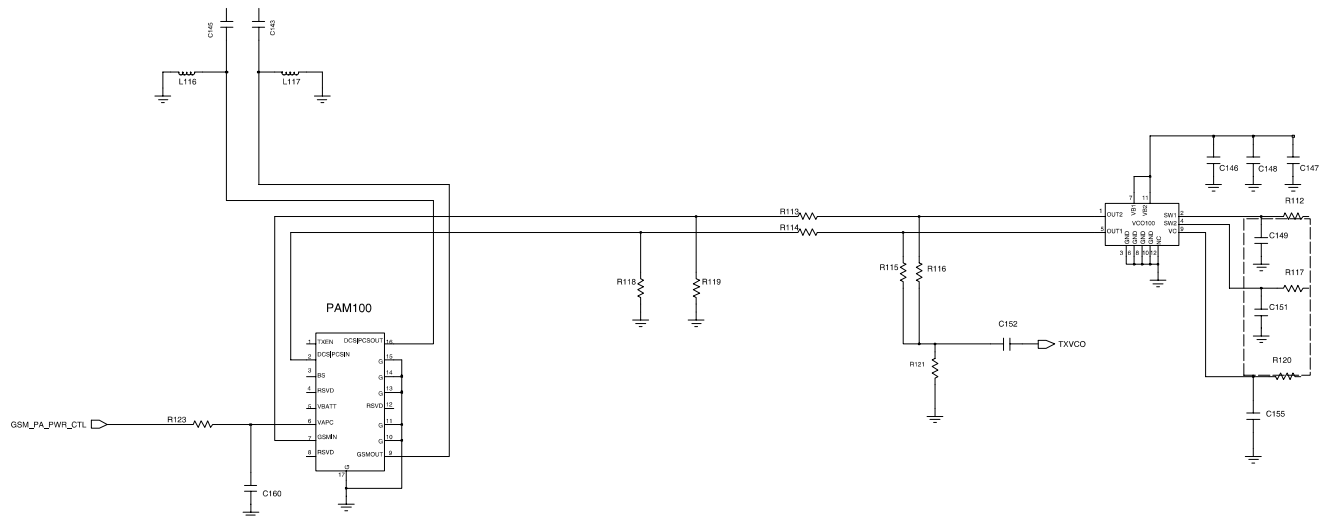
9-15. PCS Receiver



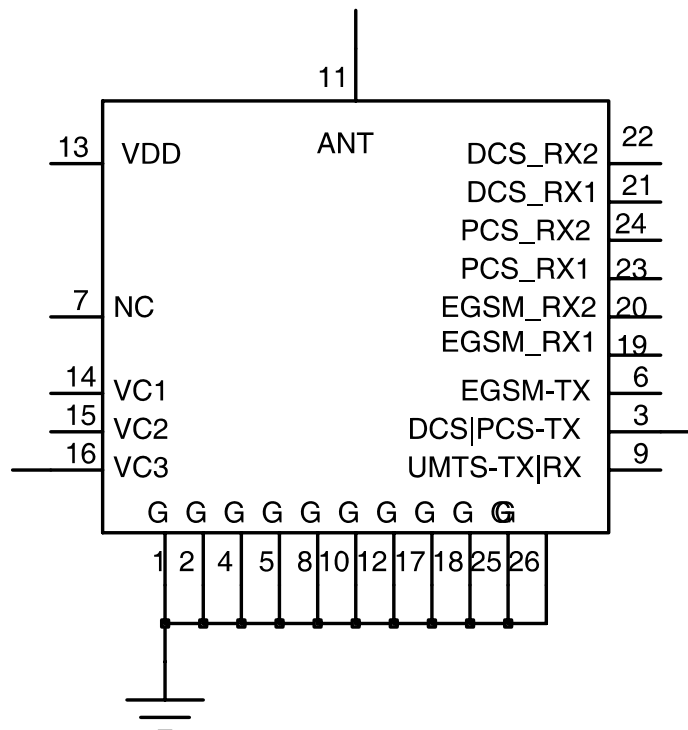


9-16. PCS Transmitter

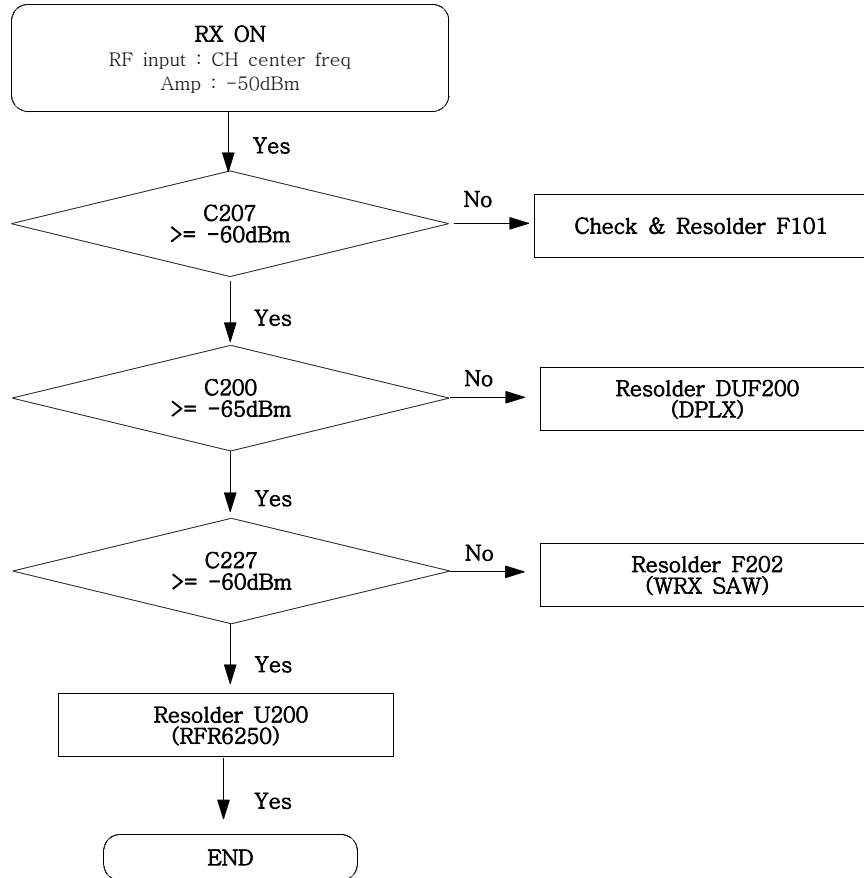


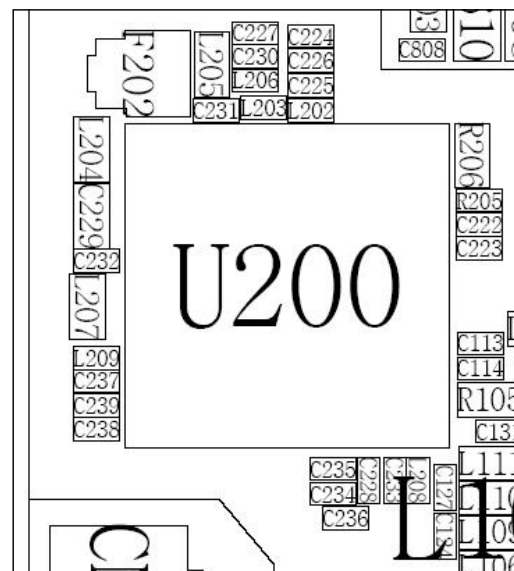
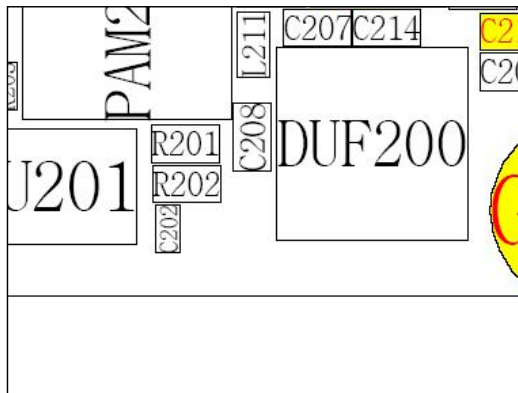


F101

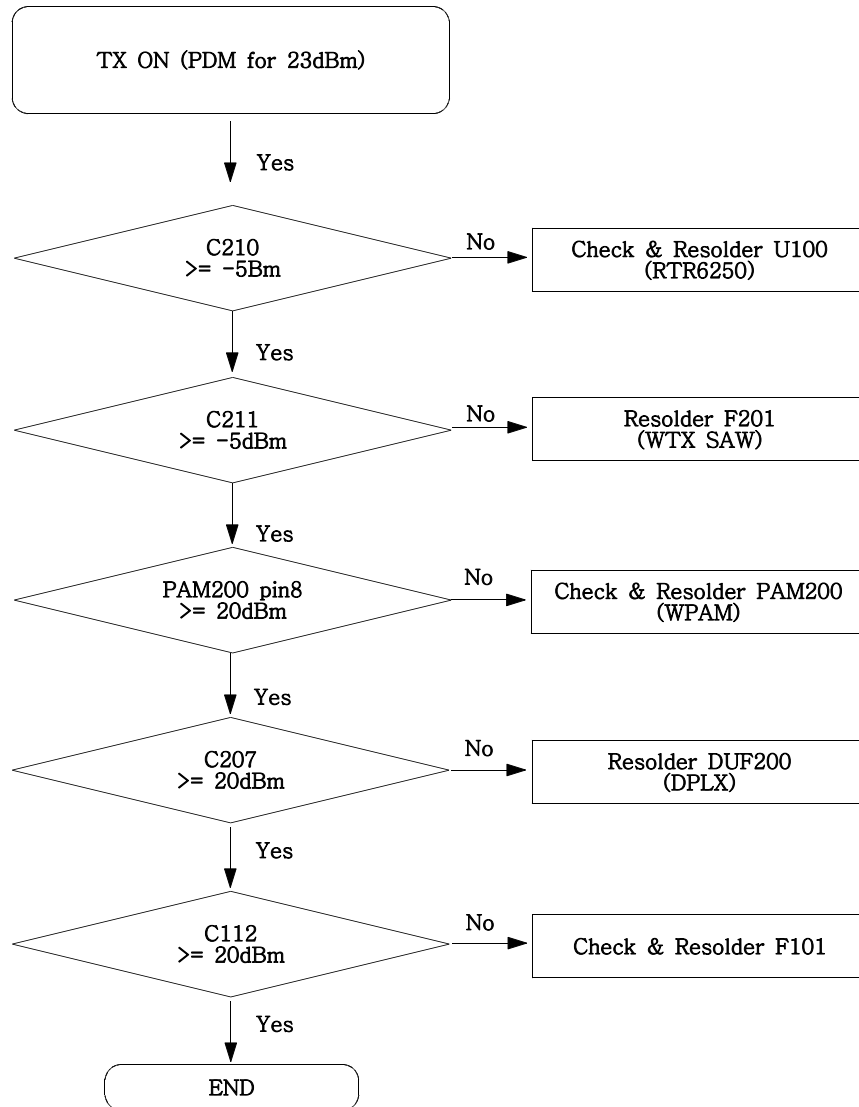


9-17. WCDMA Receiver

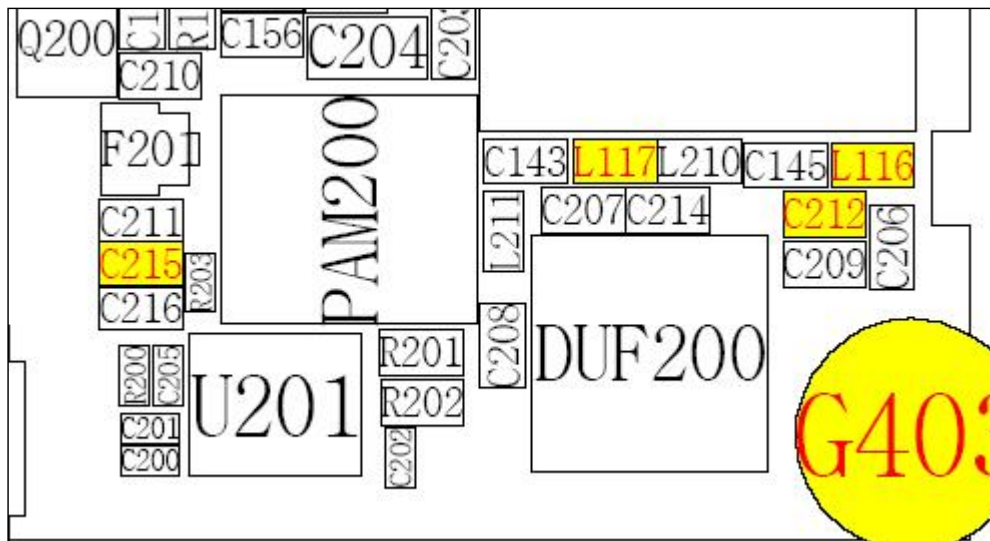
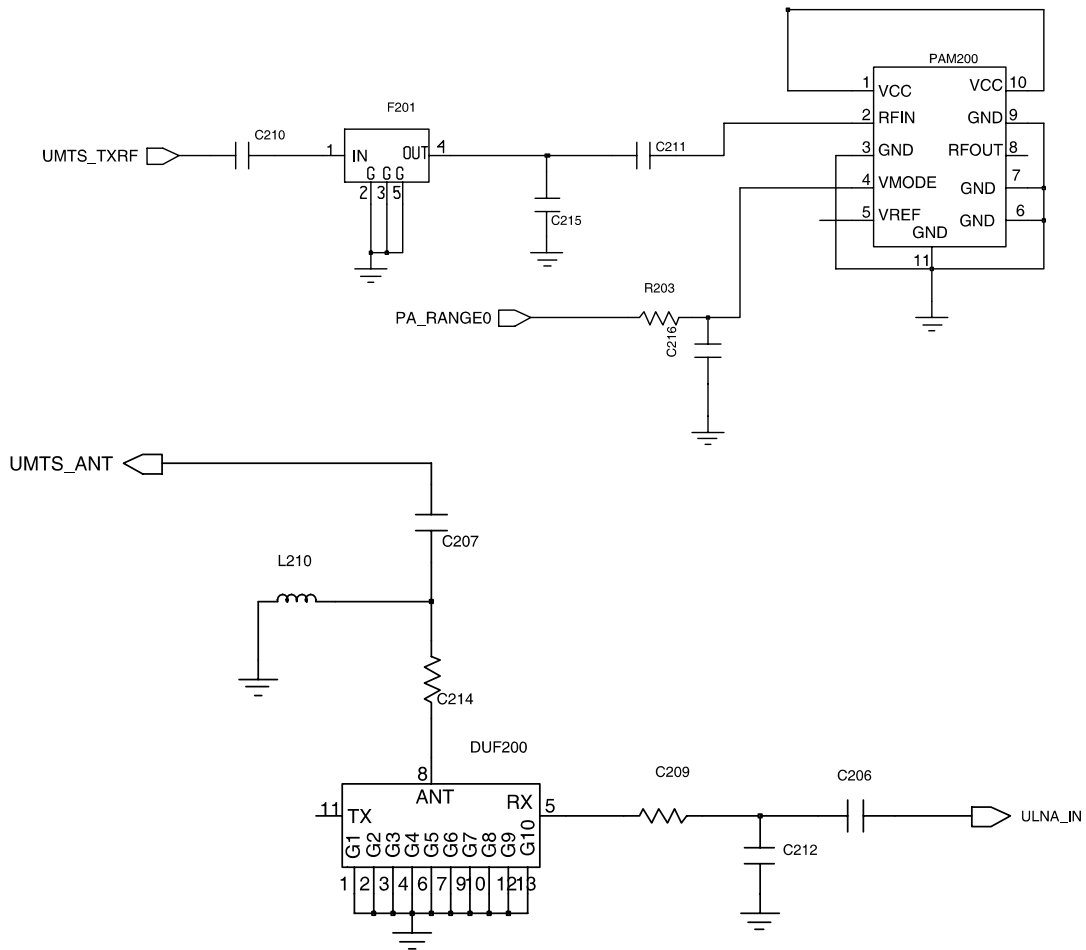




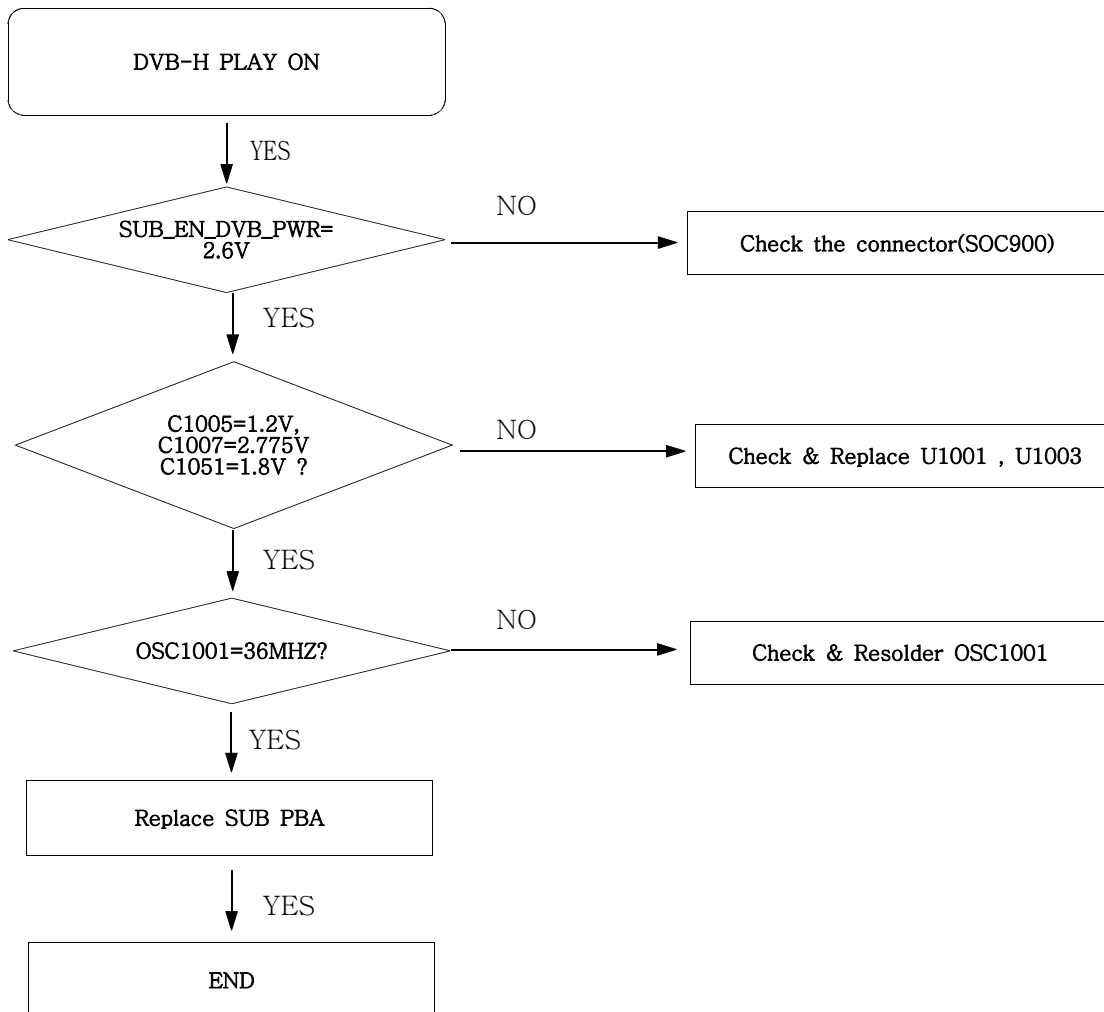
9-18. WCDMA Transmitter

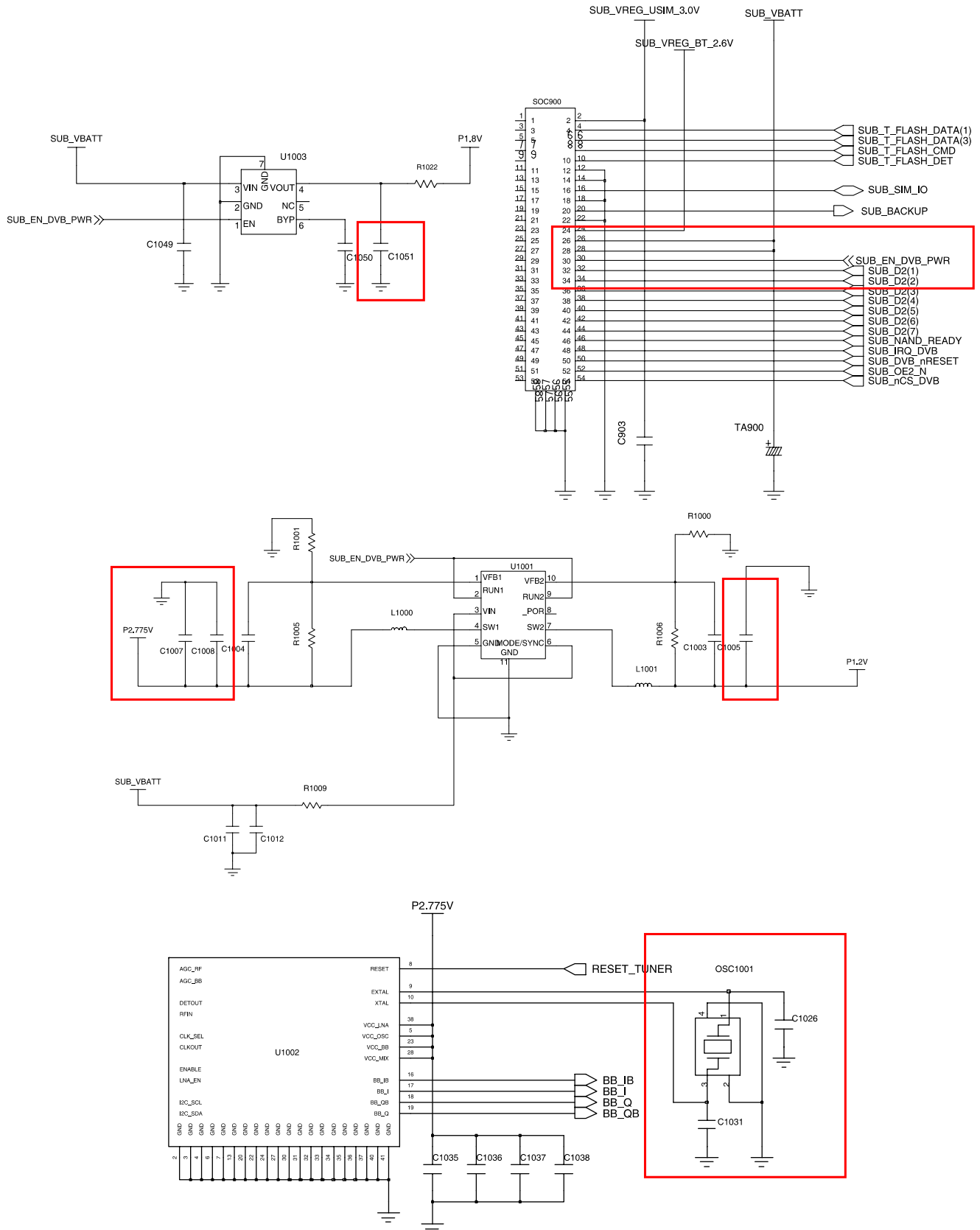


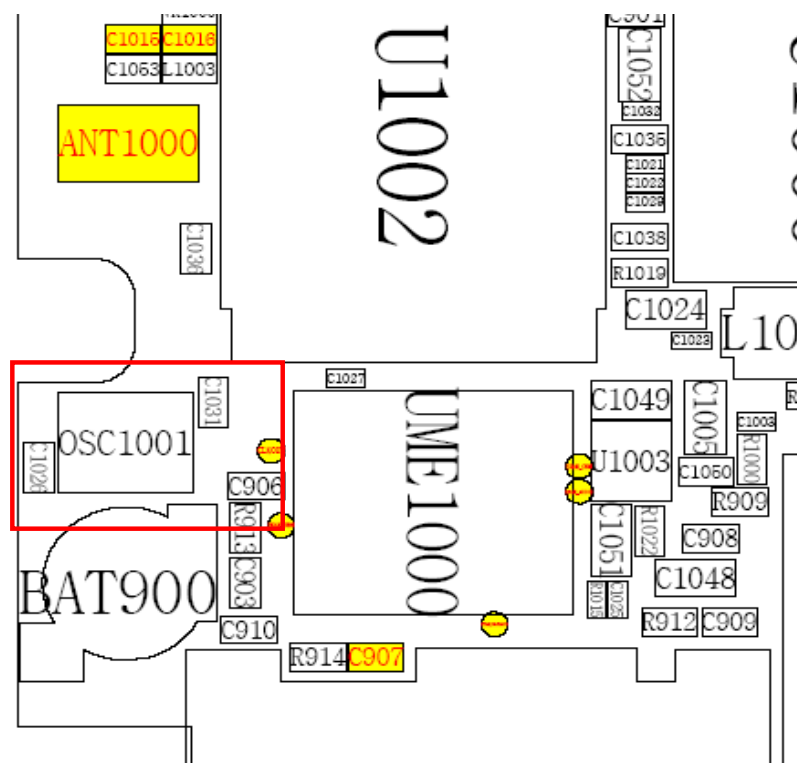
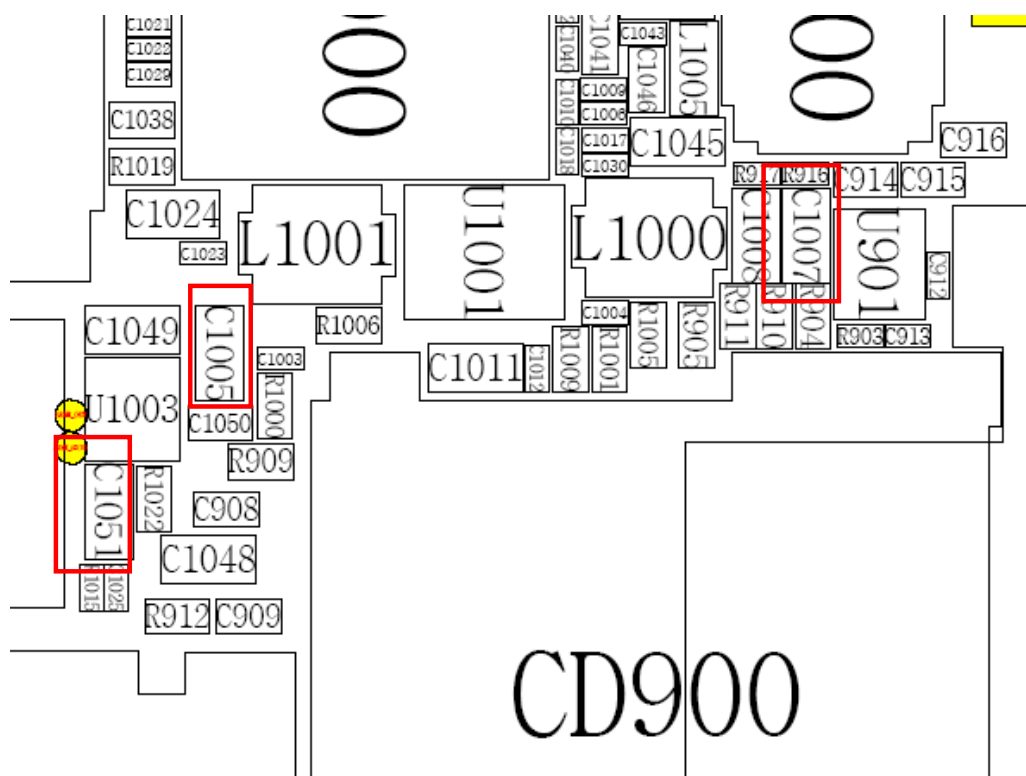
WCDMA TX Part



9-19. DVB-H







10. Reference data

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

**SAMSUNG
ELECTRONICS**

