

**SAMSUNG**

# GSM TELEPHONE

## SGH-J700

# **SERVICE** *Manual*

### GSM TELEPHONE



### CONTENTS

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

**SAMSUNG  
ELECTRONICS**



GSPN (Global Service Partner Network)

| Country          | Web Site                  |
|------------------|---------------------------|
| North America    | service.samsungportal.com |
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| China            | china.samsungportal.com   |
| Asia             | asia.samsungportal.com    |
| Mideast & Africa | mea.samsungportal.com     |

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## 2. Specification

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### 2-1. GSM General Specification

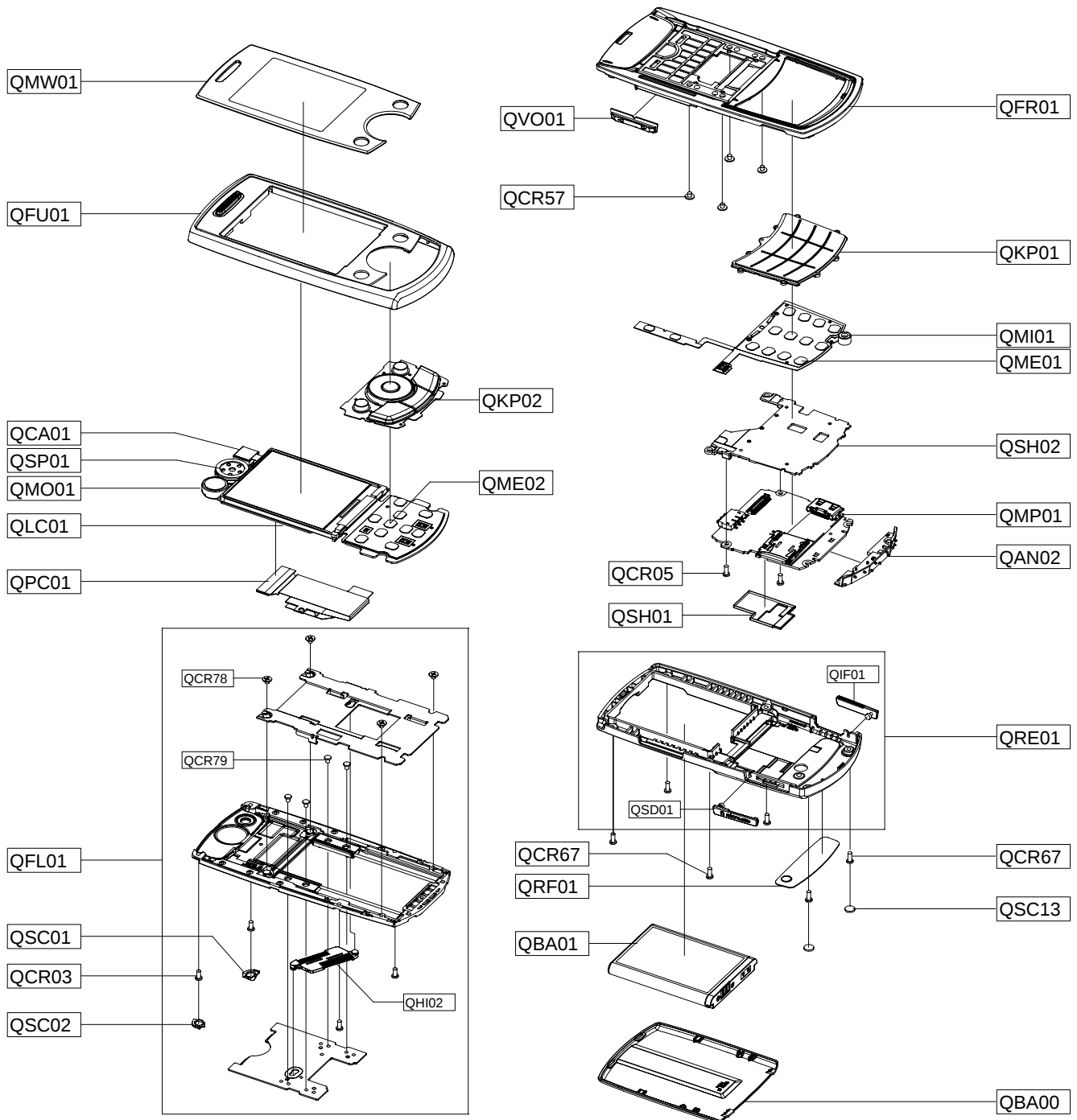
|                                       | <b>GSM900<br/>Phase 1</b> | <b>DCS1800<br/>Phase 1</b> | <b>PCS1900</b>         |
|---------------------------------------|---------------------------|----------------------------|------------------------|
| Freq.<br>Band[MHz]<br>Uplink/Downlink | 880~915<br>925~960        | 1710~1785<br>1805~1880     | 1850~1910<br>1930~1990 |
| ARFCN range                           | 0~124 & 975~1023          | 512~885                    | 512~810                |
| Tx/Rx spacing                         | 45MHz                     | 95MHz                      | 80MHz                  |
| Mod. Bit rate/<br>Bit Period          | 270.833kbps<br>3.692us    | 270.833kbps<br>3.692us     | 270.833kbps<br>3.692us |
| Time Slot<br>Period/Frame Period      | 576.9us<br>4.615ms        | 576.9us<br>4.615ms         | 576.9us<br>4.615ms     |
| Modulation                            | 0.3GMSK                   | 0.3GMSK                    | 0.3GMSK                |
| MS Power                              | 33dBm~5dBm                | 30dBm~0dBm                 | 30dBm~0dBm             |
| Power Class                           | 5pcl ~ 19pcl              | 0pcl ~ 15pcl               | 0pcl ~ 15pcl           |
| Sensitivity                           | -102dBm                   | -100dBm                    | -100dBm                |
| TDMA Mux                              | 8                         | 8                          | 8                      |
| Cell Radius                           | 35Km                      | 2Km                        | -                      |

## 2-2. GSM Tx Power Class

| TX Power control level | GSM850   | TX Power control level | DCS1800  | TX Power control level | PCS1800  |
|------------------------|----------|------------------------|----------|------------------------|----------|
| 5                      | 33±2 dBm | 0                      | 30±3 dBm | 0                      | 30±3 dBm |
| 6                      | 31±3 dBm | 1                      | 28±3 dBm | 1                      | 28±3 dBm |
| 7                      | 29±3 dBm | 2                      | 26±3 dBm | 2                      | 26±3 dBm |
| 8                      | 27±3 dBm | 3                      | 24±3 dBm | 3                      | 24±3 dBm |
| 9                      | 25±3 dBm | 4                      | 22±3 dBm | 4                      | 22±3 dBm |
| 10                     | 23±3 dBm | 5                      | 20±3 dBm | 5                      | 20±3 dBm |
| 11                     | 21±3 dBm | 6                      | 18±3 dBm | 6                      | 18±3 dBm |
| 12                     | 19±3 dBm | 7                      | 16±3 dBm | 7                      | 16±3 dBm |
| 13                     | 17±3 dBm | 8                      | 14±3 dBm | 8                      | 14±3 dBm |
| 14                     | 15±3 dBm | 9                      | 12±4 dBm | 9                      | 12±4 dBm |
| 15                     | 13±3 dBm | 10                     | 10±4 dBm | 10                     | 10±4 dBm |
| 16                     | 11±5 dBm | 11                     | 8±4dBm   | 11                     | 8±4dBm   |
| 17                     | 9±5 dBm  | 12                     | 6±4 dBm  | 12                     | 6±4 dBm  |
| 18                     | 7±5 dBm  | 13                     | 4±4 dBm  | 13                     | 4±4 dBm  |
| 19                     | 5±5 dBm  | 14                     | 2±5 dBm  | 14                     | 2±5 dBm  |
|                        |          | 15                     | 0±5 dBm  | 15                     | 0±5 dBm  |

## 5. Exploded View and Parts List

### 5-1. Cellular phone Exploded View



## 5-2. Cellular phone Parts List

| Design LOC |  | Description                    | SEC CODE    |
|------------|--|--------------------------------|-------------|
| QAN02      |  | INTENNA-SGHE260                | GH42-01416A |
| QBA00      |  | PMO COVER-BATTERY              | GH72-44851B |
| QBA01      |  | INNER BATTERY PACK-800MAH,BLK, | GH43-02692A |
| QCA01      |  | CAMERA MODULE-SGHJ700          | GH59-05149A |
| QCR03      |  | SCREW-MACHINE                  | 6001-001811 |
| QCR05      |  | SCREW-MACHINE                  | 6001-001478 |
| QCR57      |  | SCREW-MACHINE                  | 6001-002001 |
| QCR67      |  | SCREW-MACHINE                  | 6001-002083 |
| QCR67      |  | SCREW-MACHINE                  | 6001-002083 |
| QFR01      |  | ASSY CASE-FRONT                | GH98-06615B |
| QFU01      |  | ASSY CASE-SLIDE UPPER          | GH98-06614B |
| QKP01      |  | ASSY KEYPAD-MAIN(EU/GLD)       | GH98-06617A |
| QKP02      |  | ASSY KEYPAD-SUB(EU/SIL)        | GH98-06618B |
| QLC01      |  | ELA ETC-SUB PBA+LCD MODULE SVC | GH96-02998A |
| QME01      |  | KEY FPCB-MAIN KEY PBA          | GH59-05147A |
| QME02      |  | KEY FPCB-S/DOME SHEET 10KEY    | GH59-05160A |
| QMI01      |  | MICROPHONE-ASSY-SGHJ700        | GH30-00464A |
| QMO01      |  | MOTOR DC-SGHE260               | GH31-00388A |
| QMP01      |  | PBA MAIN-SGHJ700               | GH92-04396A |
| QMW01      |  | ASSY COVER-WINDOW MAIN         | GH98-06619A |
| QPC01      |  | MEA-SLIDER FPCB KIT(J700)      | GH97-08598A |
| QRF01      |  | ASSY COVER-RF                  | GH98-06891B |
| QSC01      |  | PMO COVER-SCREW LOWER L        | GH72-44845B |
| QSC02      |  | PMO COVER-SCREW LOWER R        | GH72-44846B |
| QSC13      |  | RMO COVER-SCREW REAR           | GH73-11103B |
| QSH01      |  | ICT SHIELD-PBA                 | GH70-03164A |
| QSH02      |  | ASSY BRACKET-SHIELD CAN        | GH98-06620A |
| QSP01      |  | SPEAKER                        | 3001-002273 |
| QVO01      |  | ASSY KEY-VOLUME                | GH98-07865A |
| QFL01      |  | ASSY CASE-SLIDE LOWER          | GH98-06616B |

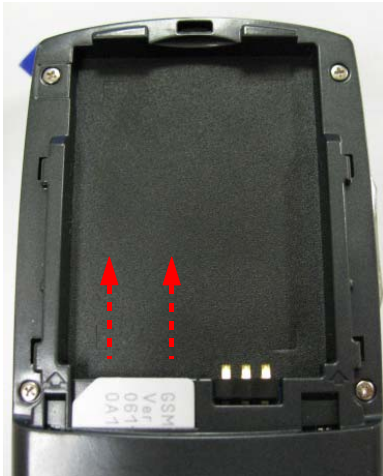
| Design LOC |       | Description              | SEC CODE    |
|------------|-------|--------------------------|-------------|
|            | QCR78 | SCREW-MACHINE            | 6001-002116 |
|            | QCR79 | SCREW-SPECIAL            | 6009-001534 |
|            | QHI02 | ASSY HINGE-ACTUATOR BODY | GH98-05288A |
| QRE01      |       | ASSY CASE-REAR           | GH98-06736B |
|            | QIF01 | PMO COVER-IF             | GH72-44814B |
|            | QSD01 | PMO COVER-SD             | GH72-44815B |

| <b>Description</b>             | <b>SEC CODE</b> |
|--------------------------------|-----------------|
| BAG PE                         | 6902-000634     |
| CBF INTERFACE-DATA LINK CABLE( | GH39-00859B     |
| ADAPTOR-ATADS10EBE,BLK,EU      | GH44-01702A     |
| S/W CD-SGHJ700 PC LINK CD      | GH46-00583A     |
| EARPHONE-AAEP407DBE,EU,M, B-TY | GH59-05476A     |
| LABEL(P)-UNIT SEAL             | GH68-00518B     |
| LABEL(R)-WATER SOAK            | GH68-09361A     |
| LABEL(R)-MASTER_FANCE_BOG      | GH68-13691B     |
| MANUAL USERS-XEF FRENCH        | GH68-17047A     |
| LABEL(R)-MAIN(FRAN)            | GH68-17060D     |
| CUSHION-CASE(EU)               | GH69-06299A     |
| BOX-UNIT(EU)                   | GH69-06300A     |
| RMO RUBBER-SD SUPPORT          | GH73-11524A     |
| RMO RUBBER-BGA2                | GH73-11541A     |
| TAPE-REMOVE                    | GH74-35112A     |
| TAPE INSU                      | GH74-35281A     |
| TAPE-BATT BTM                  | GH74-36011A     |
| TAPE-LCD CON                   | GH74-36017A     |
| TAPE GASK-CON TO CON           | GH74-36018A     |
| TAPE ELEC                      | GH74-36019A     |
| TAPE ELEC-LCD PCB              | GH74-36020A     |
| TAPE INSU-LCD CONN COVER       | GH74-36055A     |
| VINYL-BOHO WINDOW MAIN         | GH74-37566A     |
| SPONGE                         | GH74-37569A     |
| SPONGE                         | GH74-37605A     |
| TAPE INSU                      | GH74-37614A     |
| TAPE-MIC RUBBER                | GH74-37672A     |
| VINYL-BOHO NAVI KEY            | GH74-37674A     |

## 11. Disassembly and Assembly Instructions

### 11-1. Disassembly Instructions

1



1) Remove the SIM card.

1) Be careful not to make a superficial scratch.

2



1) Unscrew.(6 points)

1) Be careful not to make a superficial scratch.

3



1) Separate the rear from the front.

1) Don't devote heavily the bottom of the Rear .

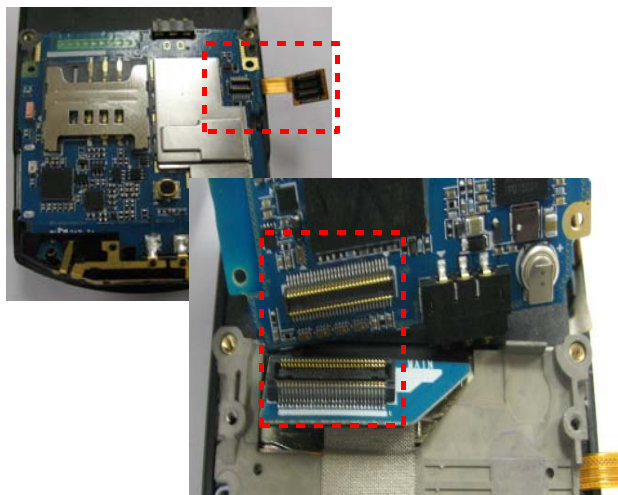
4



1) Separate the rear from the front with care of the upper hook(one point).

1) Be careful not to damage the hook.

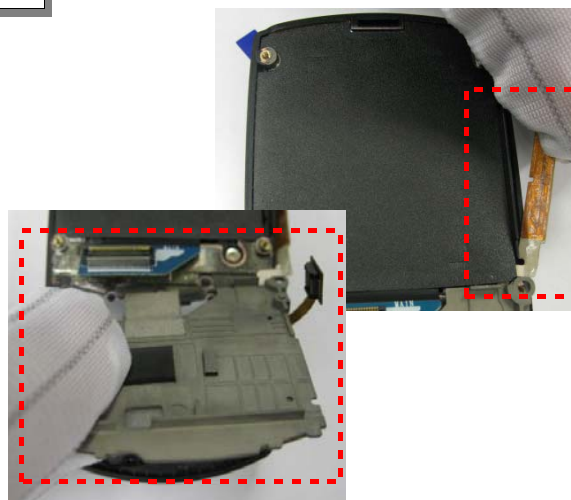
5



1) Remove the Key FPCB connector & the LCD FPCB one from the main board.

1) Be careful not to damage to FPCB.

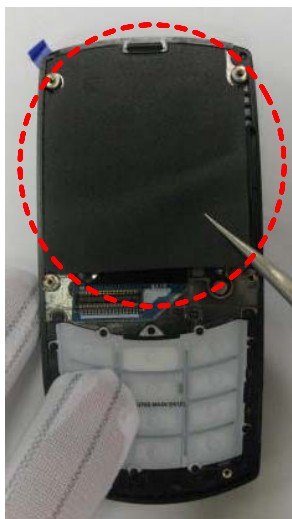
6



1) Take off the volume key tape, and then remove the bracket.

1) Be careful not to damage to FPCB.

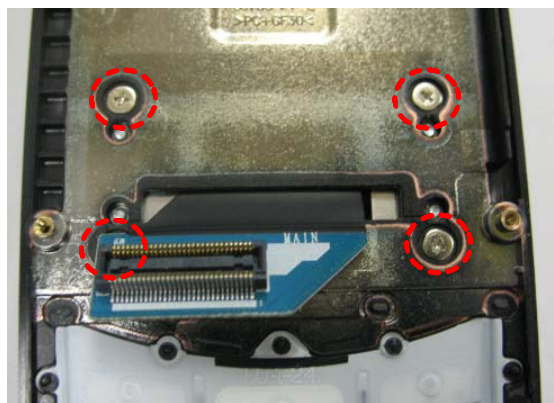
7



1) Remove the black tape.

1) Be careful not to damage to FPCB.

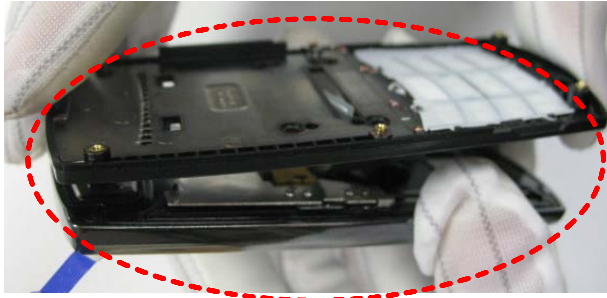
8



1) Unscrew.(4 points)

1) Be careful not to damage to FPCB.

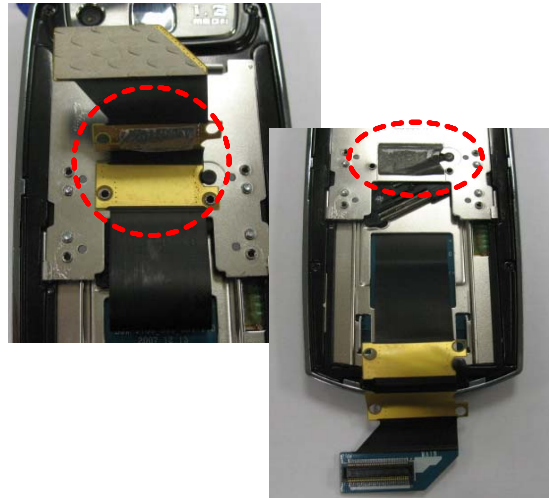
9



1) Separate the front from the lower.

1) Be careful not to damage to FPCB.

10



1) Take off the LCD FPCB & the two kinds of the tapes.

1) Be careful not to damage to FPCB.

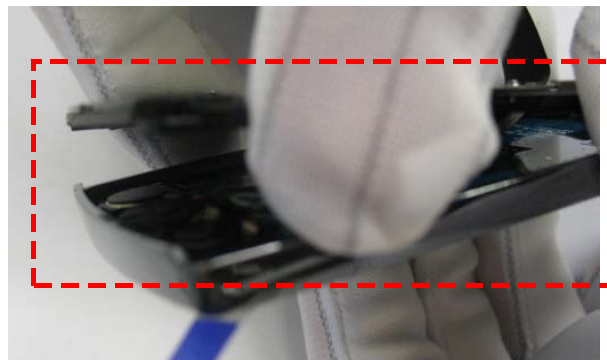
11



1) Unscrew.(4 points)

1) Be careful not to damage to FPCB.

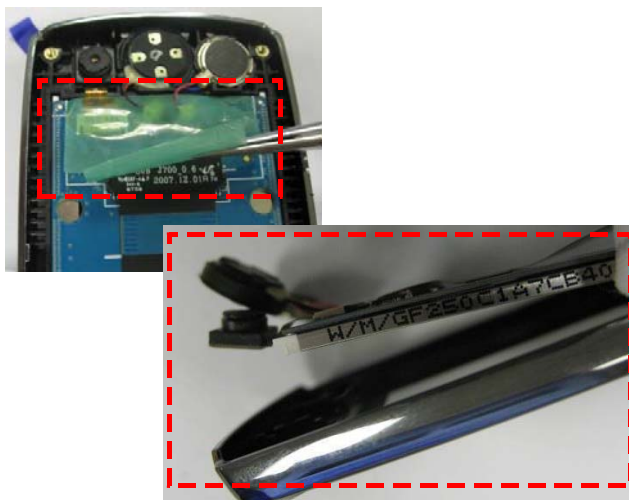
12



1) Separate the lower from the upper.

1) Be careful not to stain the LCD & not to do damage to the camera module & the speaker.

13



1) After removing the insulated tape, take off the LCD module.

1) Be careful not to stain the LCD & not to do damage to the camera module & the speaker.

14



## 11-2. Assembly Instructions

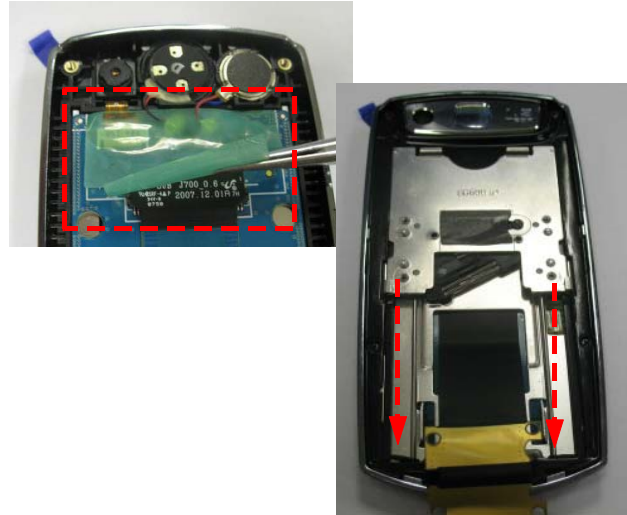
1



1) Put the keypad on the upper, and then assembly the LCD module.

1) Be careful not to stain the LCD & not to do damage to the camera module & the speaker.

2



1) Attach the insulated tape, and then assembly the lower from the bottom.

1) Be careful not to damage to FPCB.

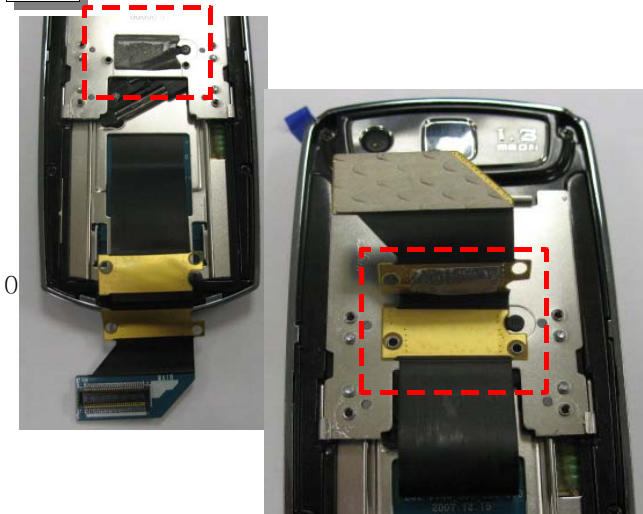
3



1) Screw up the four points.

1) Be careful not to damage to FPCB.

4



1) Fold the LCD FPCB up & Attach it on the tape with care of the two holes.

1) Be careful not to damage to FPCB.

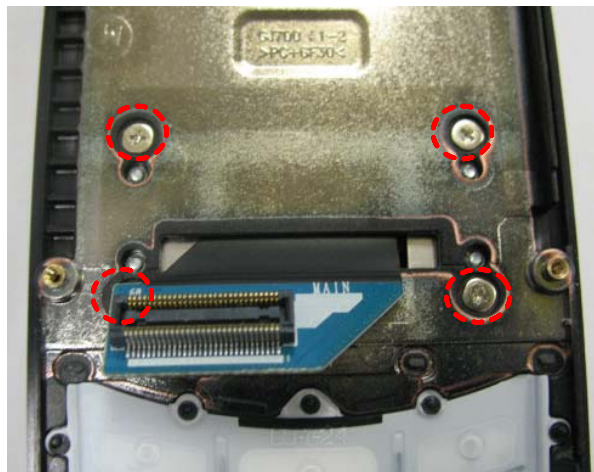
5



1) Assembly the lower with the front.

1) Be careful not to damage to FPCB.

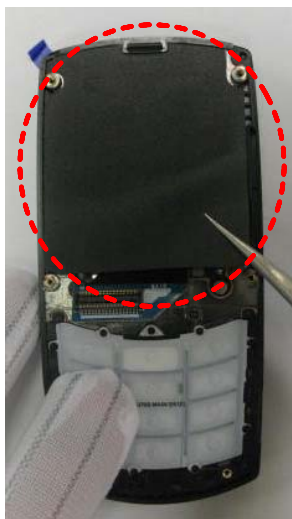
6



1) Screw up the four points.

1) Be careful not to damage to FPCB.

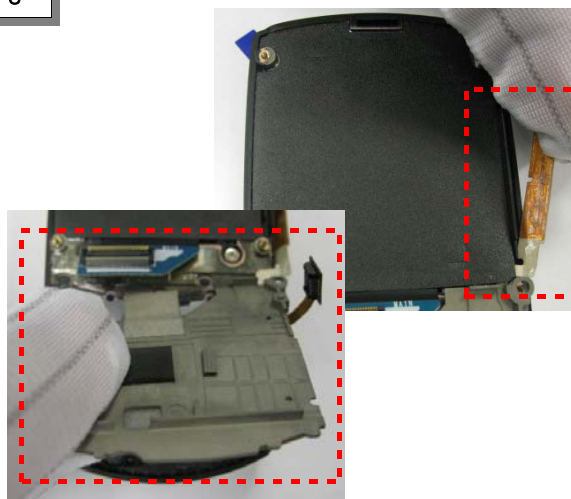
7



1) Attach the black tape.

1) Be careful not to tear the tape with the tweezers.

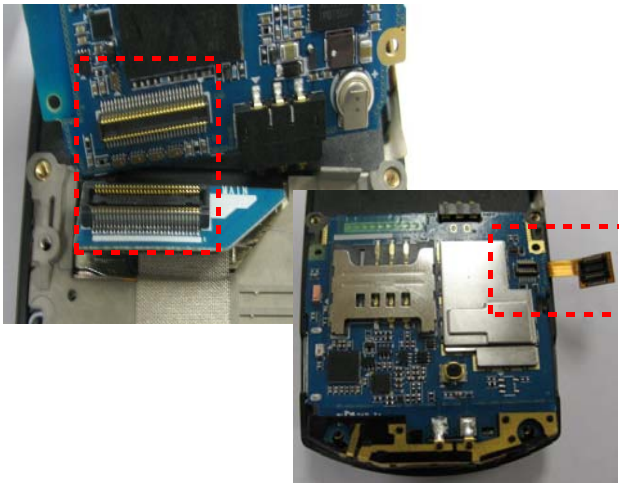
8



1) After attaching the volume key next to the side, put the bracket onto the front.

1) Be careful not to damage to FPCB.

9



1) Join the LCD connector with the main board, and then do the key FPCB connector with the main board.

1) Be careful not to damage to FPCB.

10



1) Assembly the rear join the front from the bottom.

1) Be careful not to make a superficial scratch.

11



1) Screw up the 6 points.

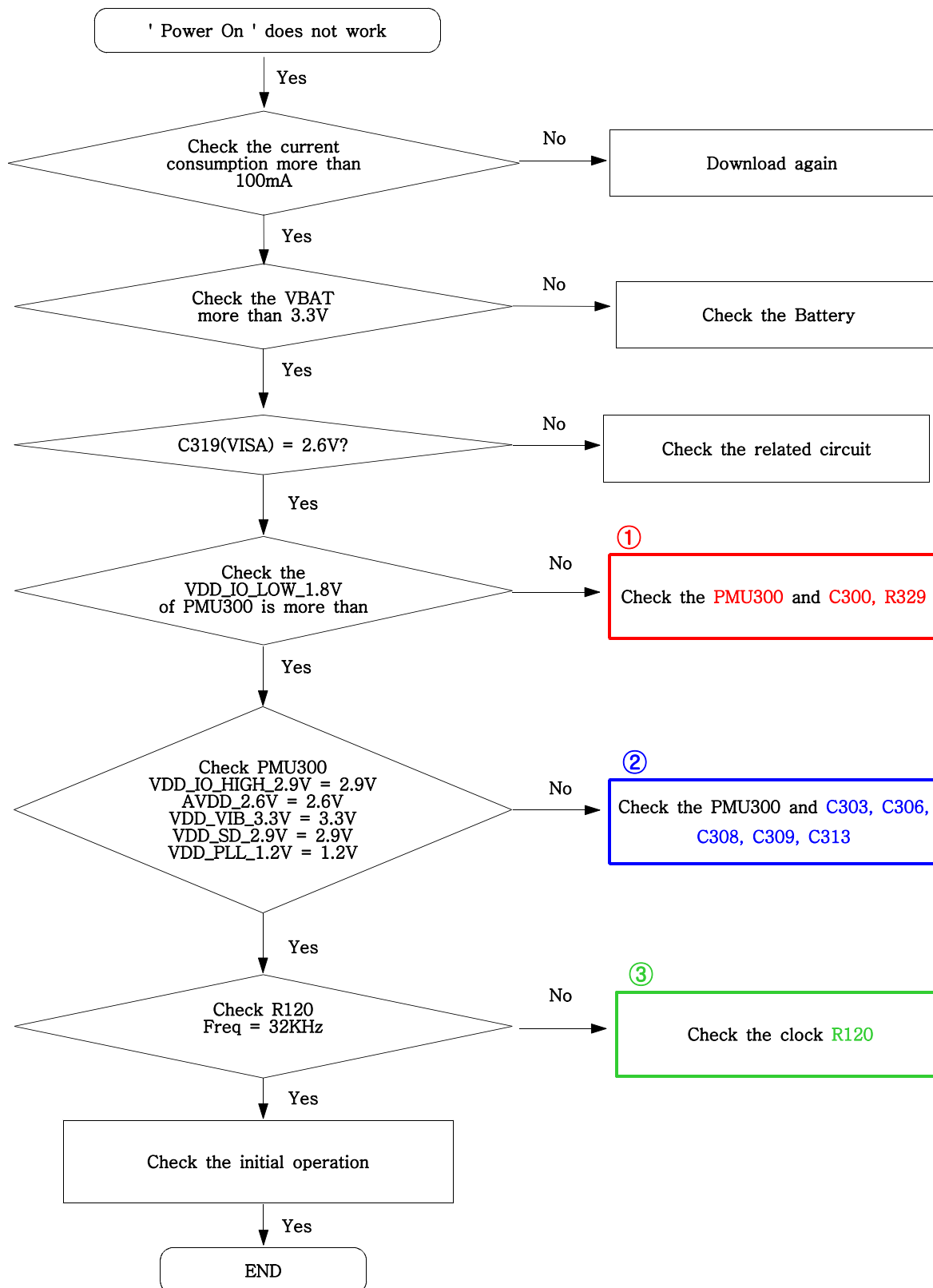
1) Be careful not to make a superficial scratch.

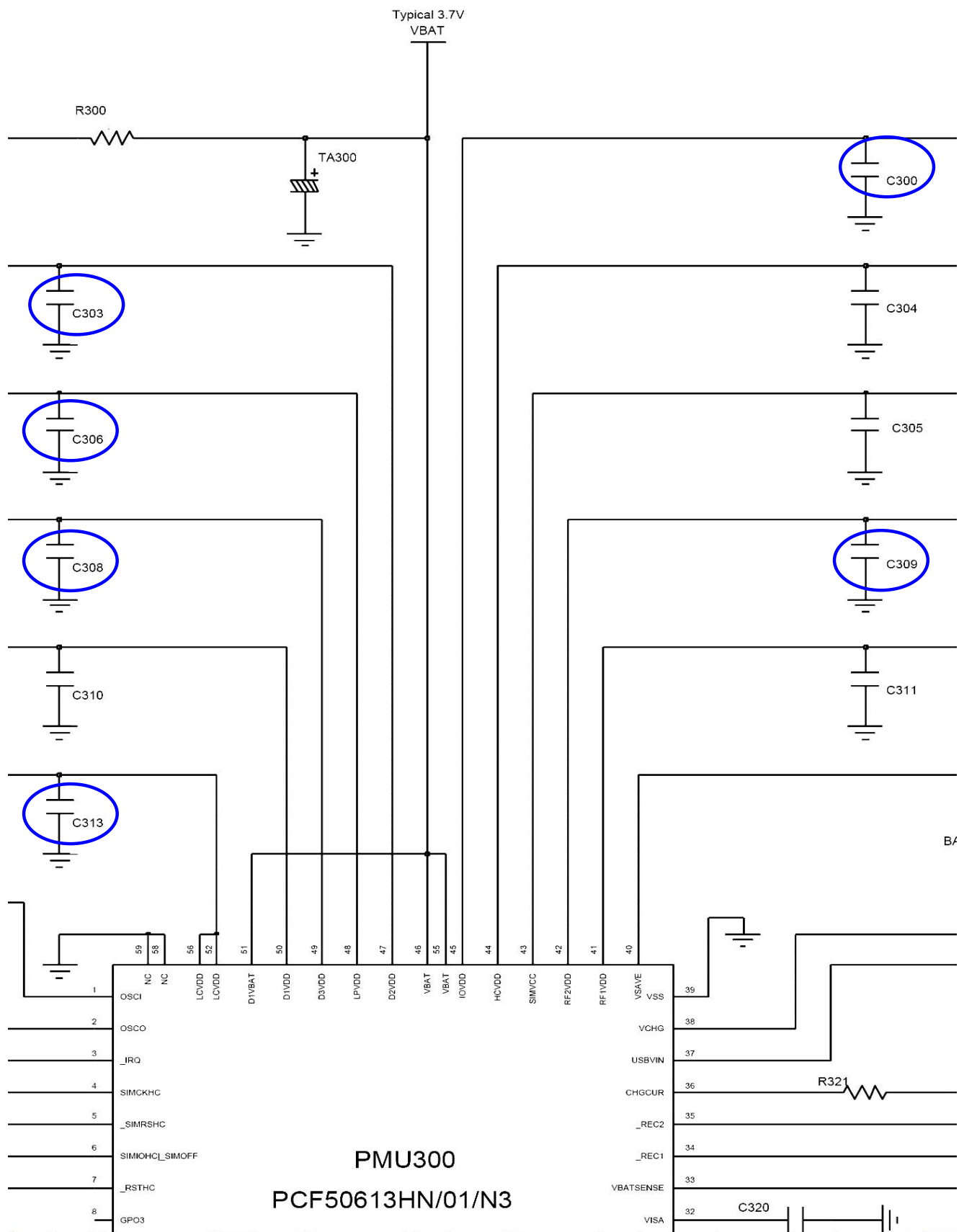
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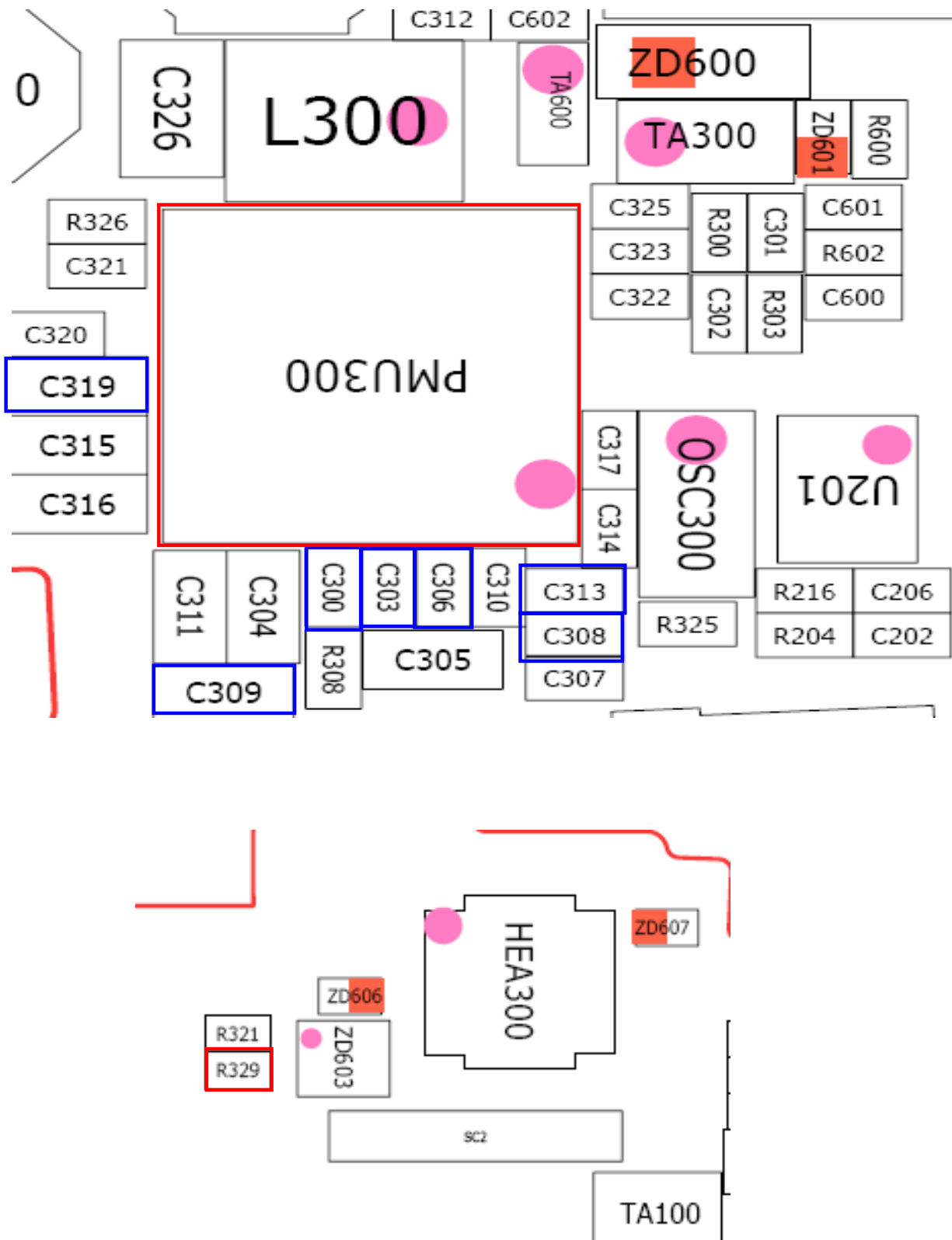
## 9. Flow Chart of Troubleshooting

### 9-1. Power On

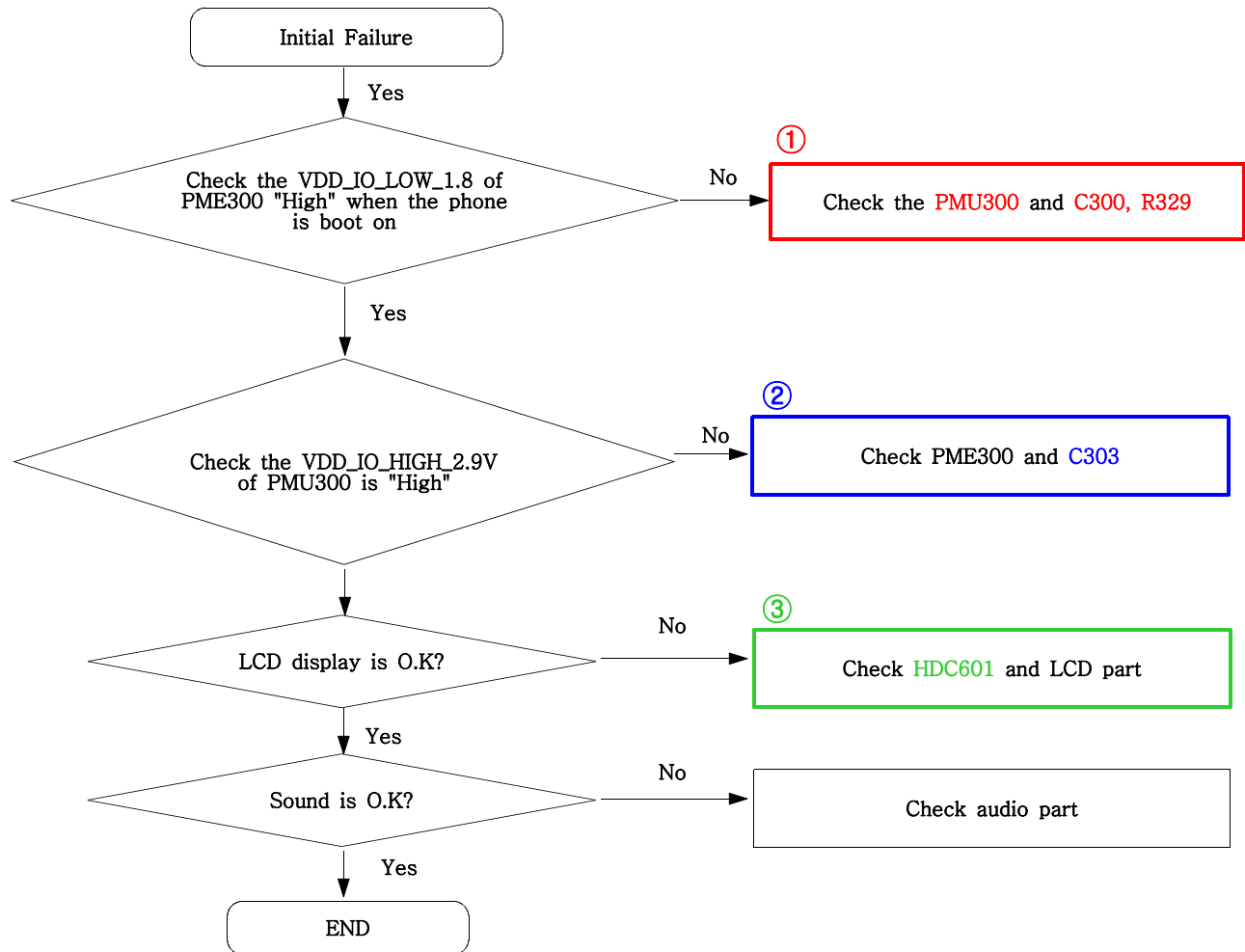


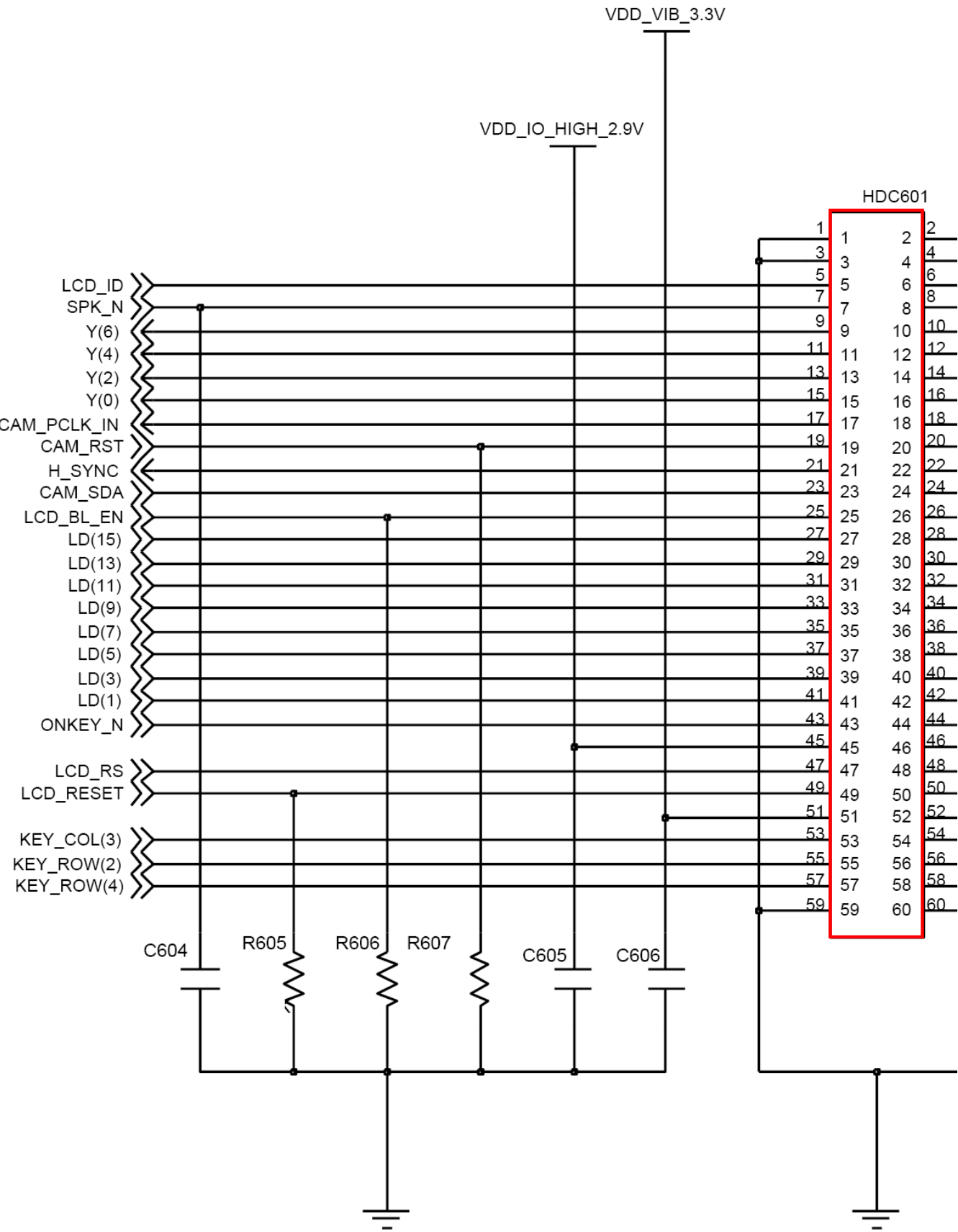


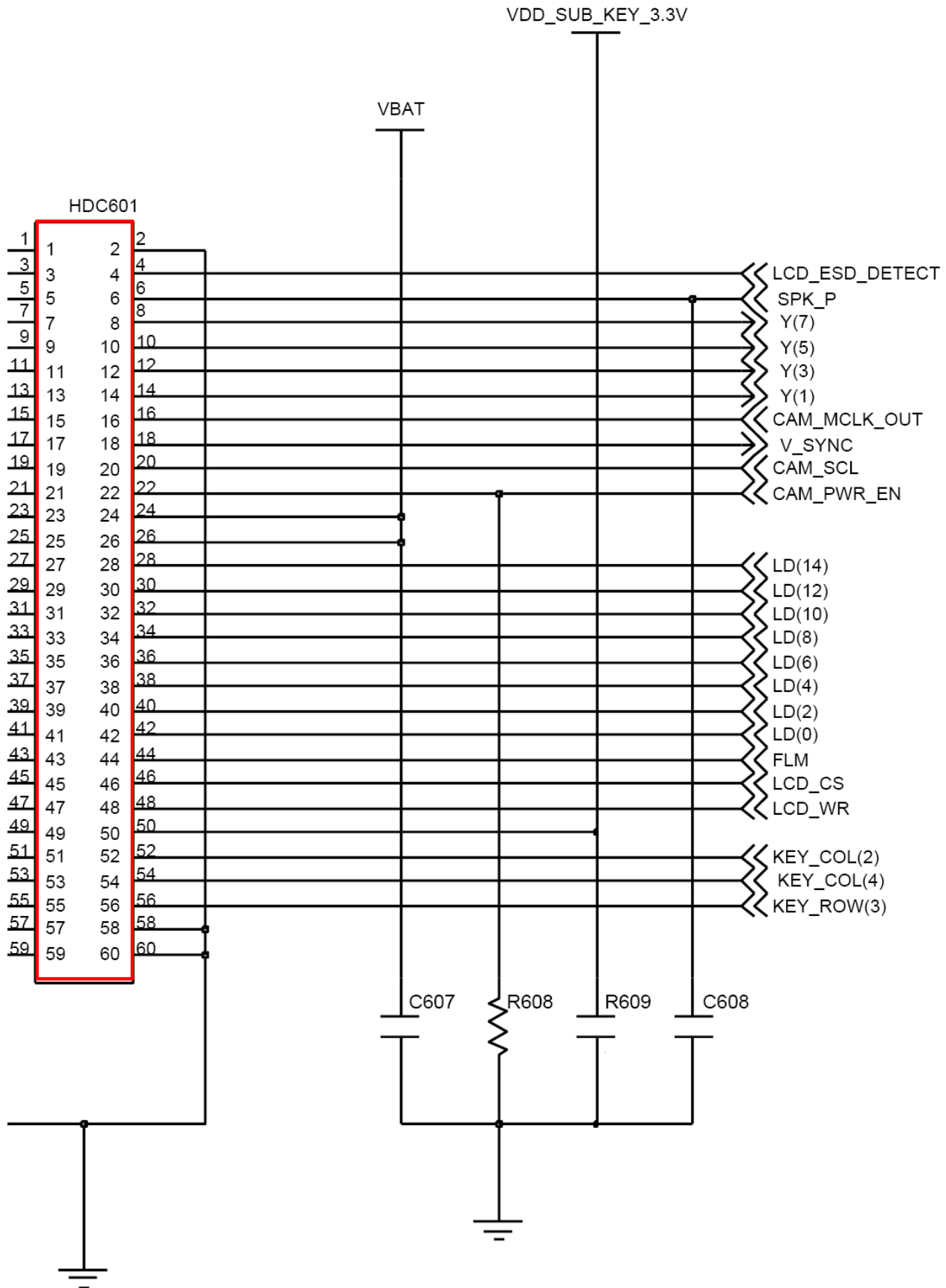


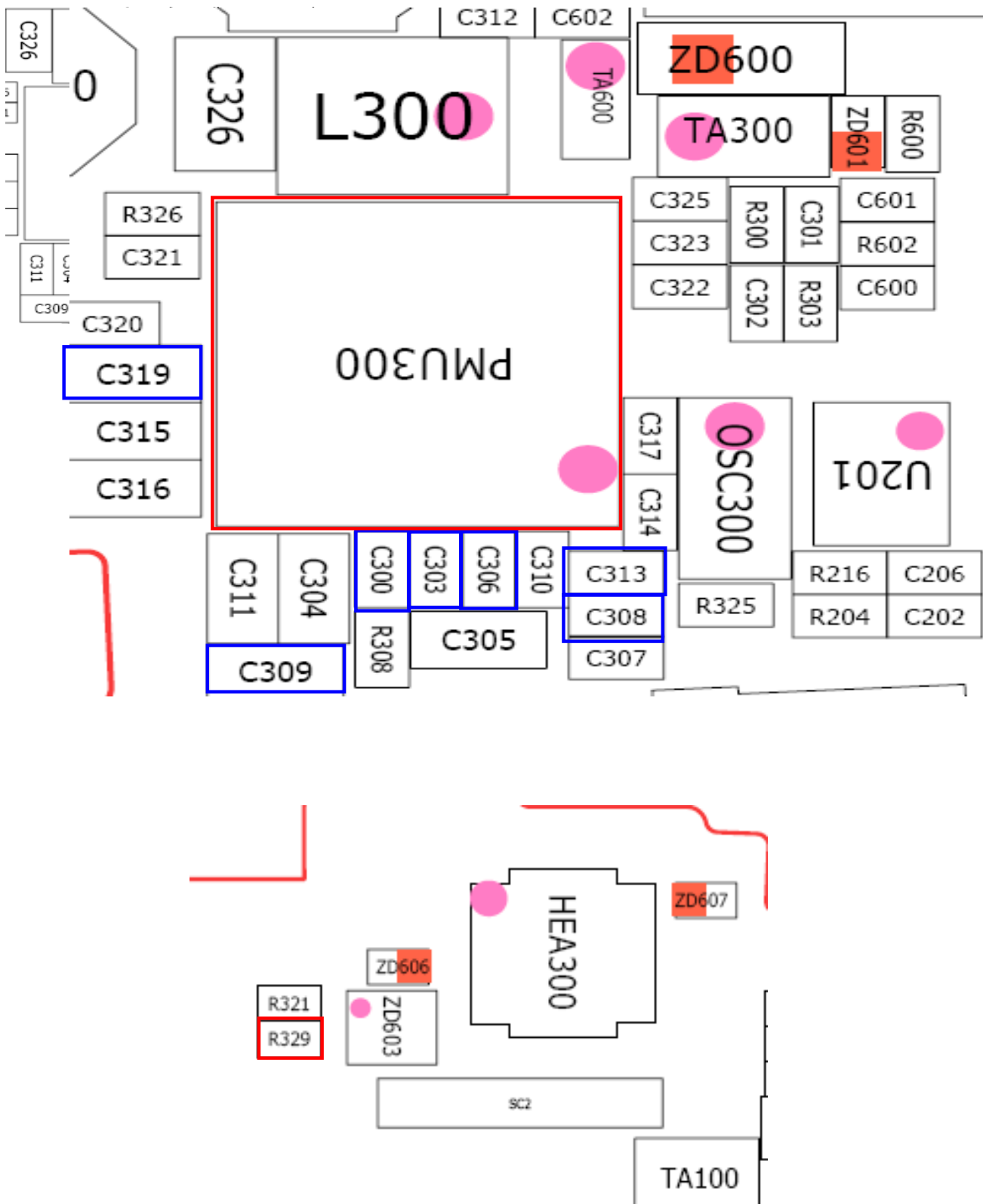


## 9-2. Initial

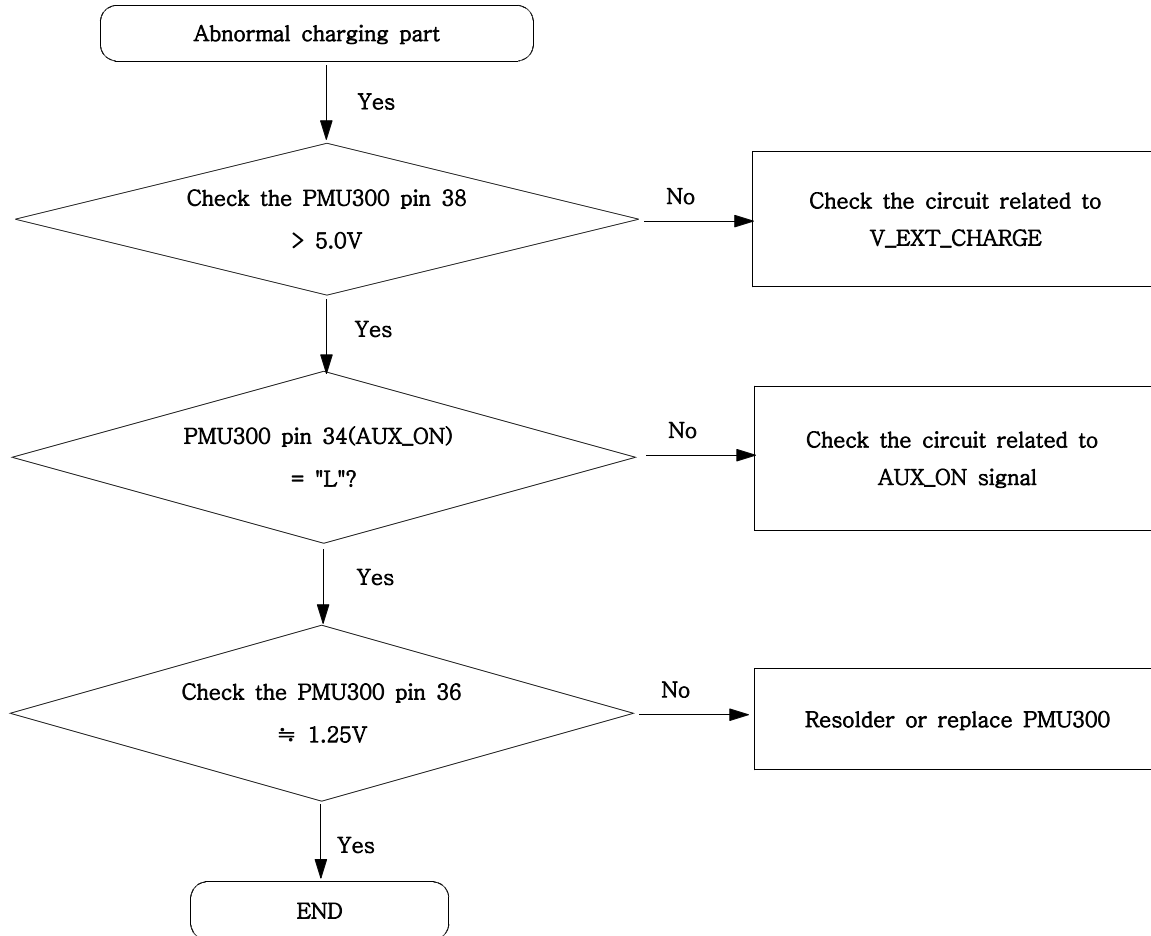


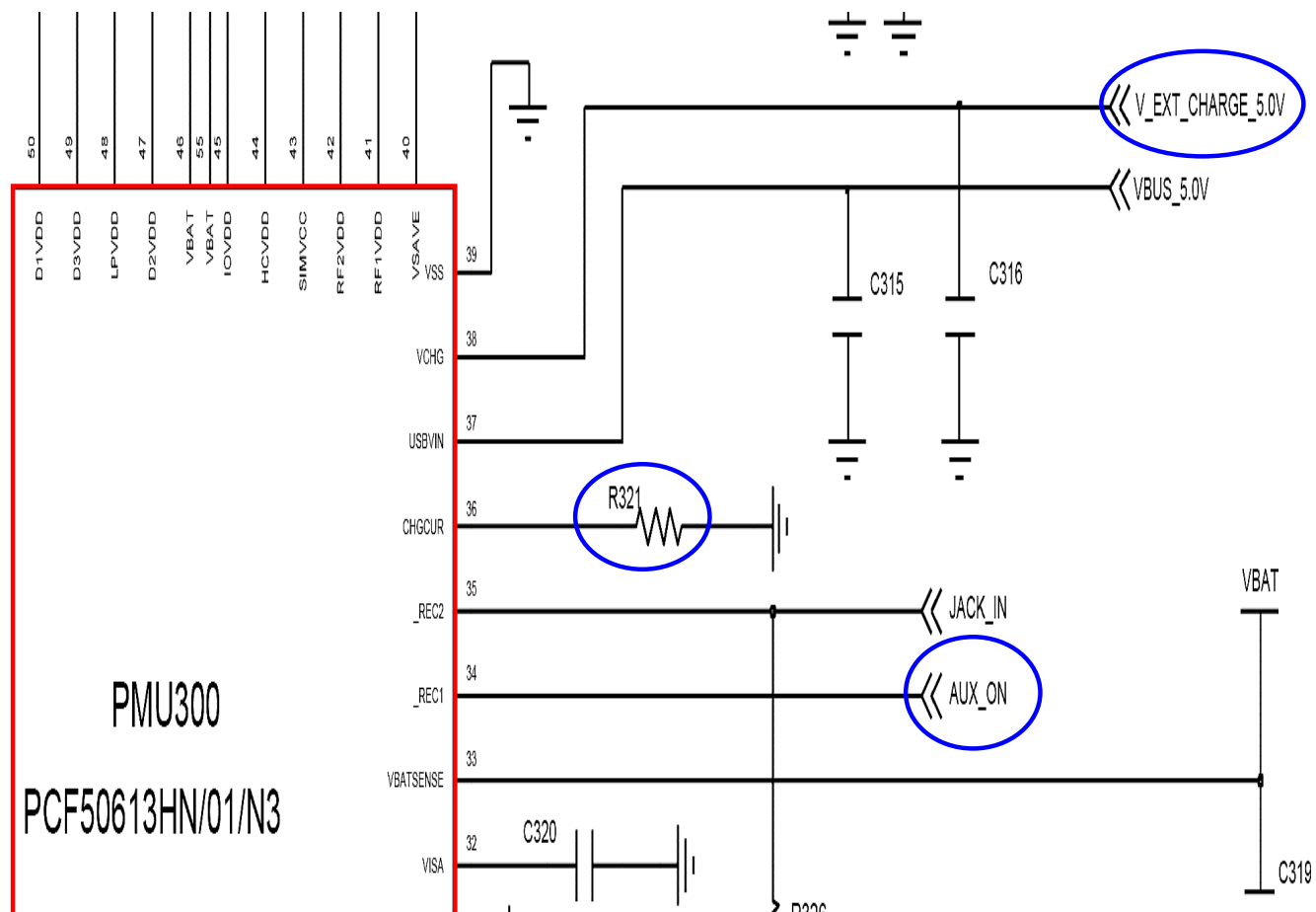




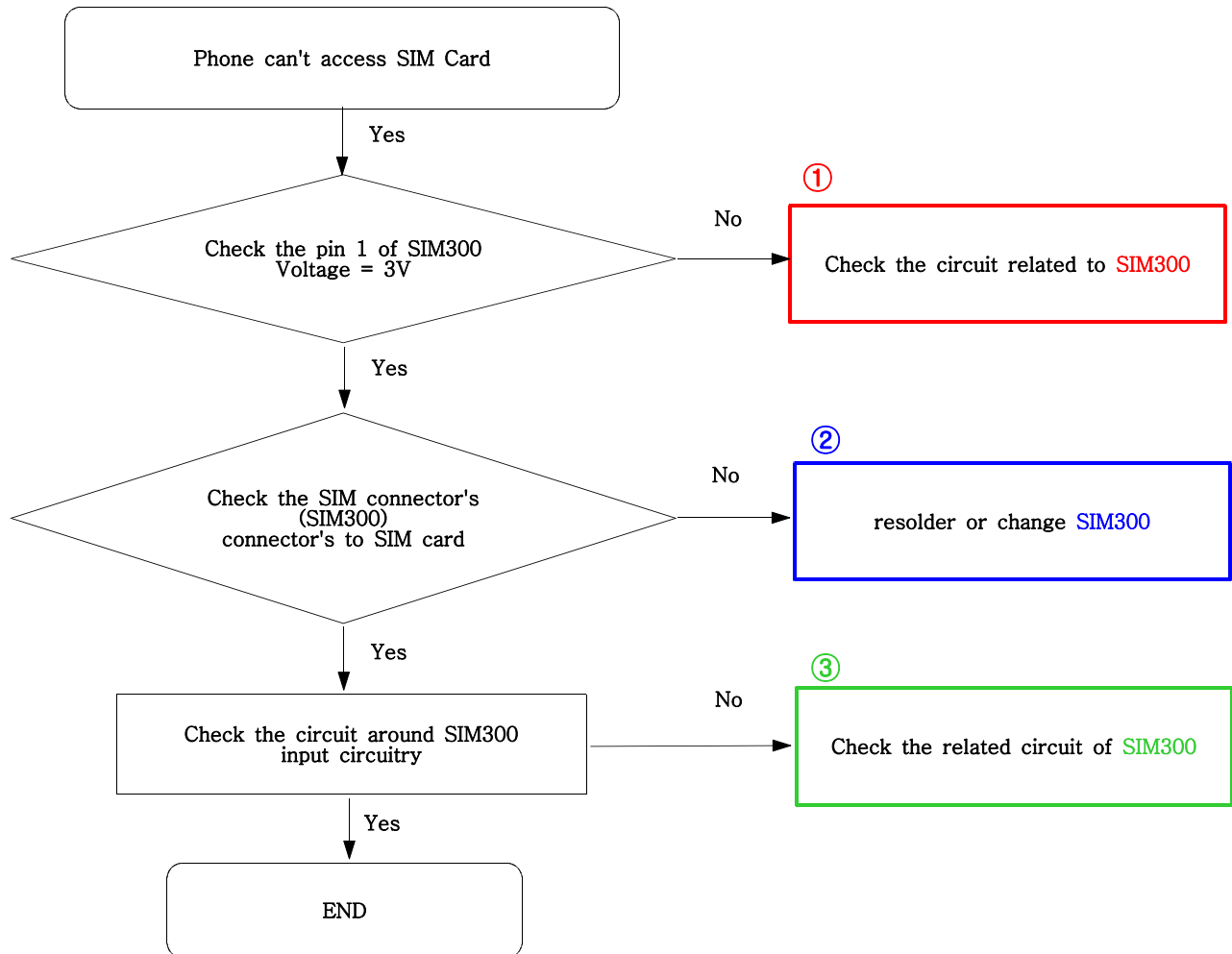


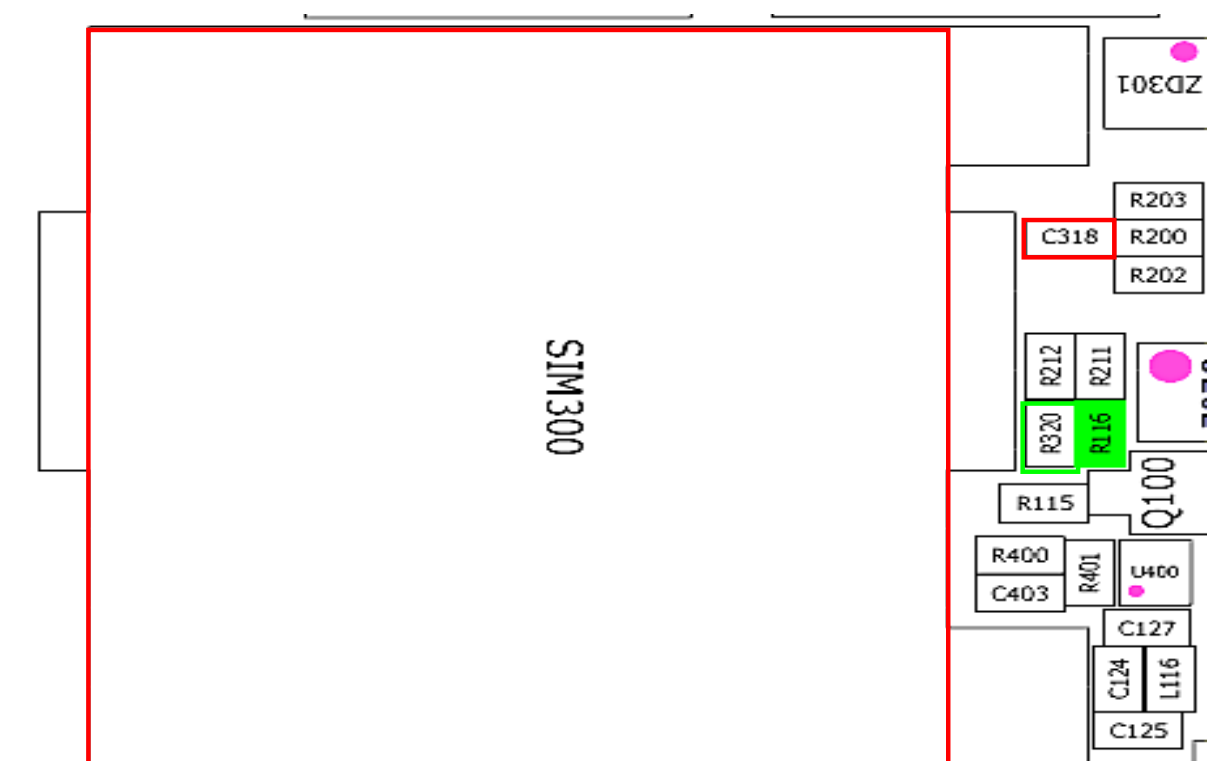
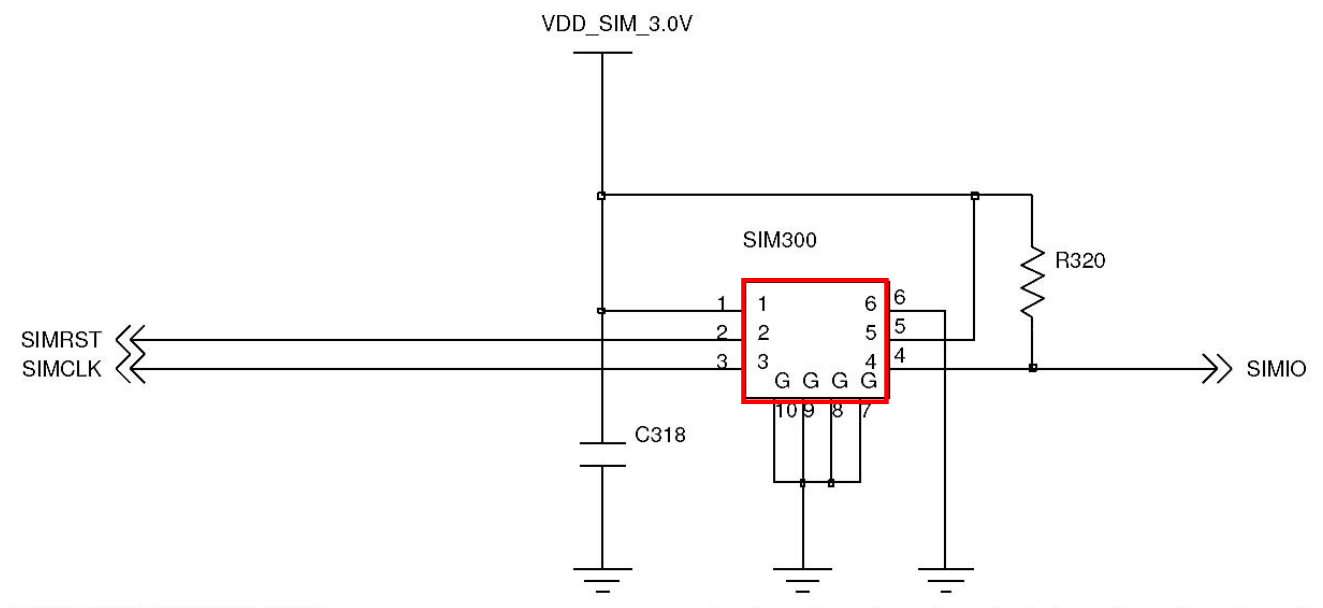
## 9-3. Charging Part



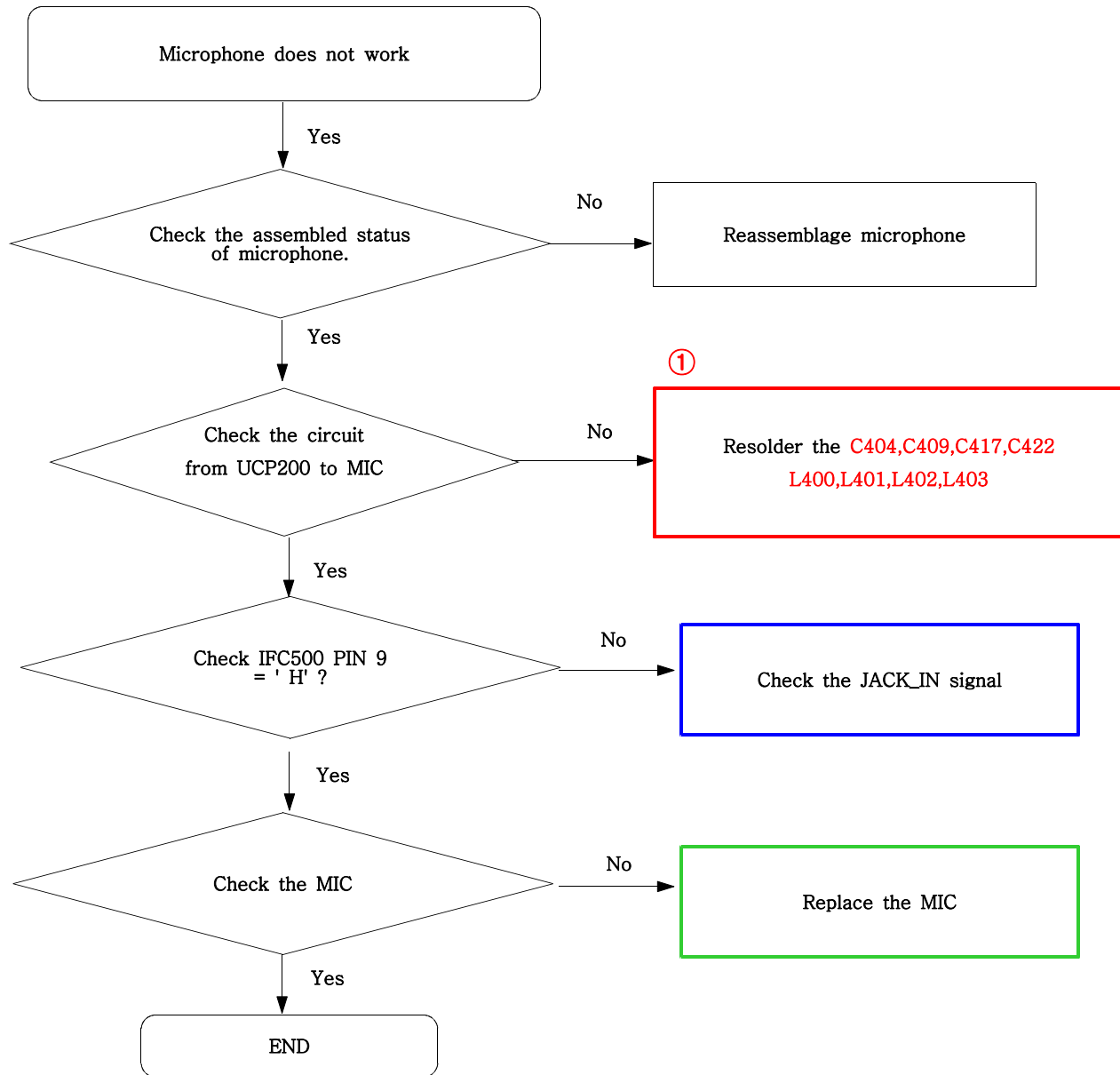


## 9-4. Sim Part

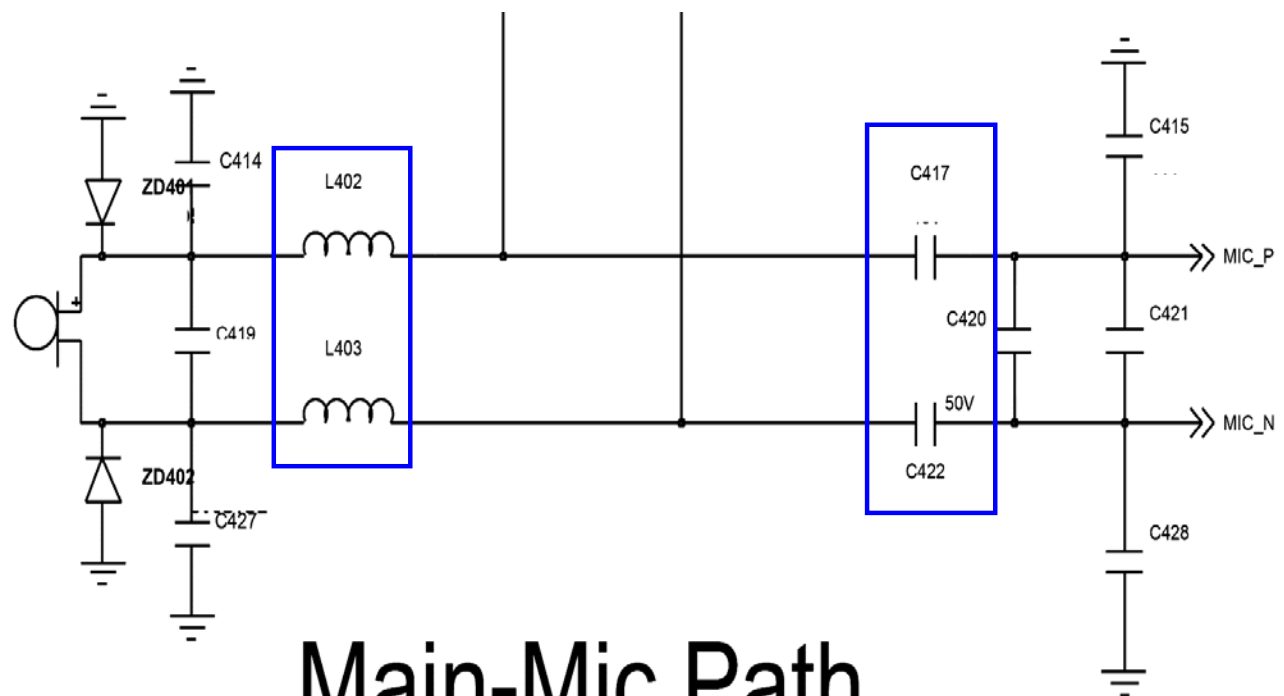
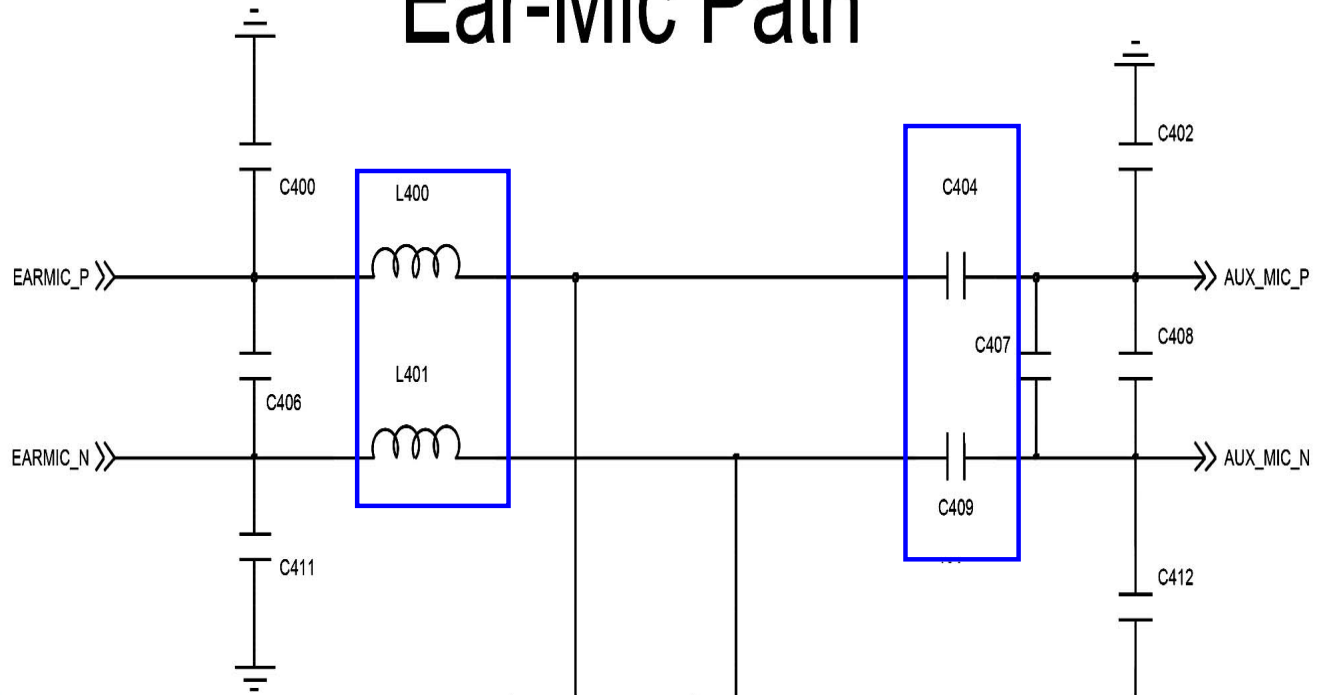




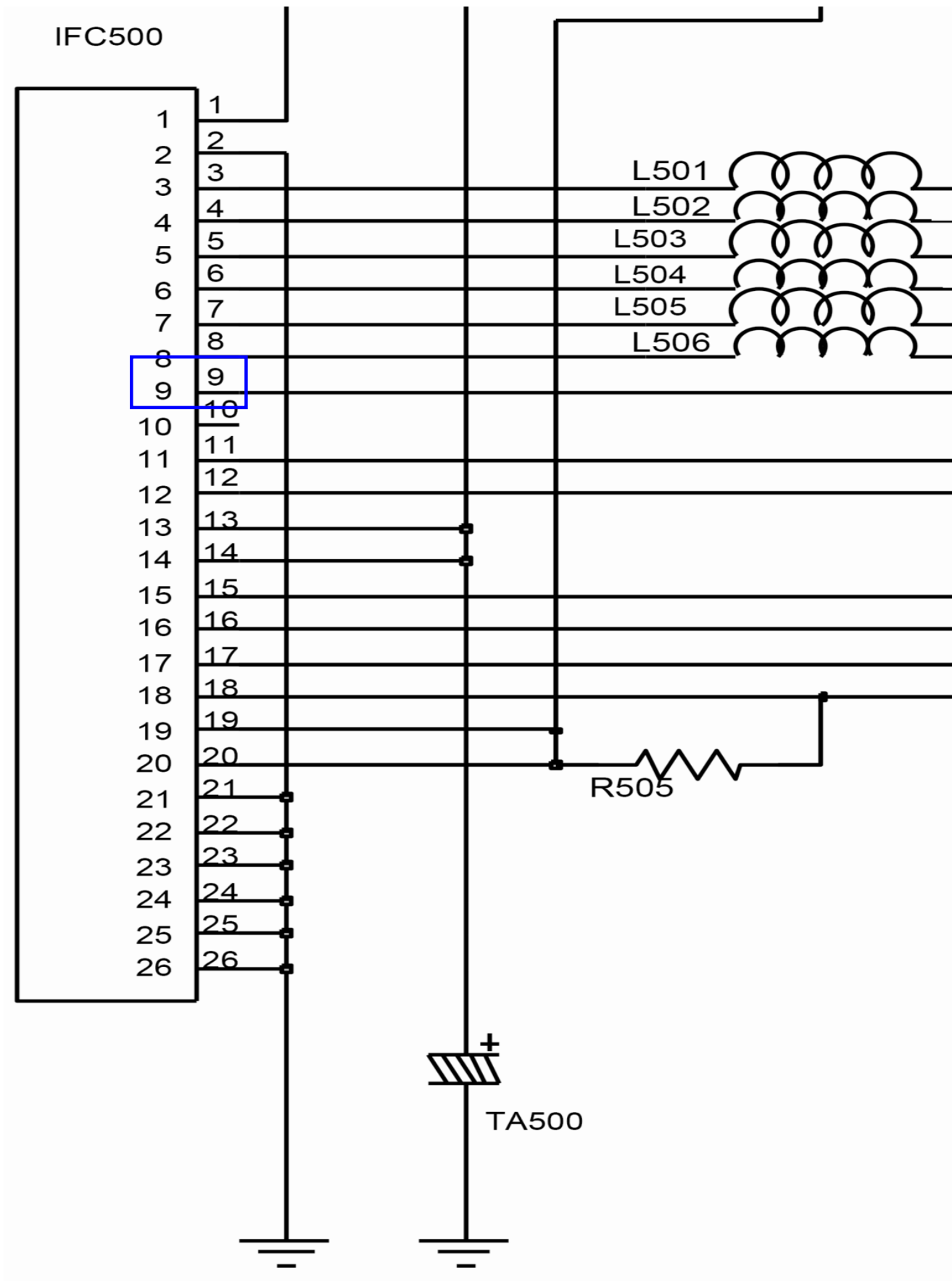
## 9-5. Microphone Part

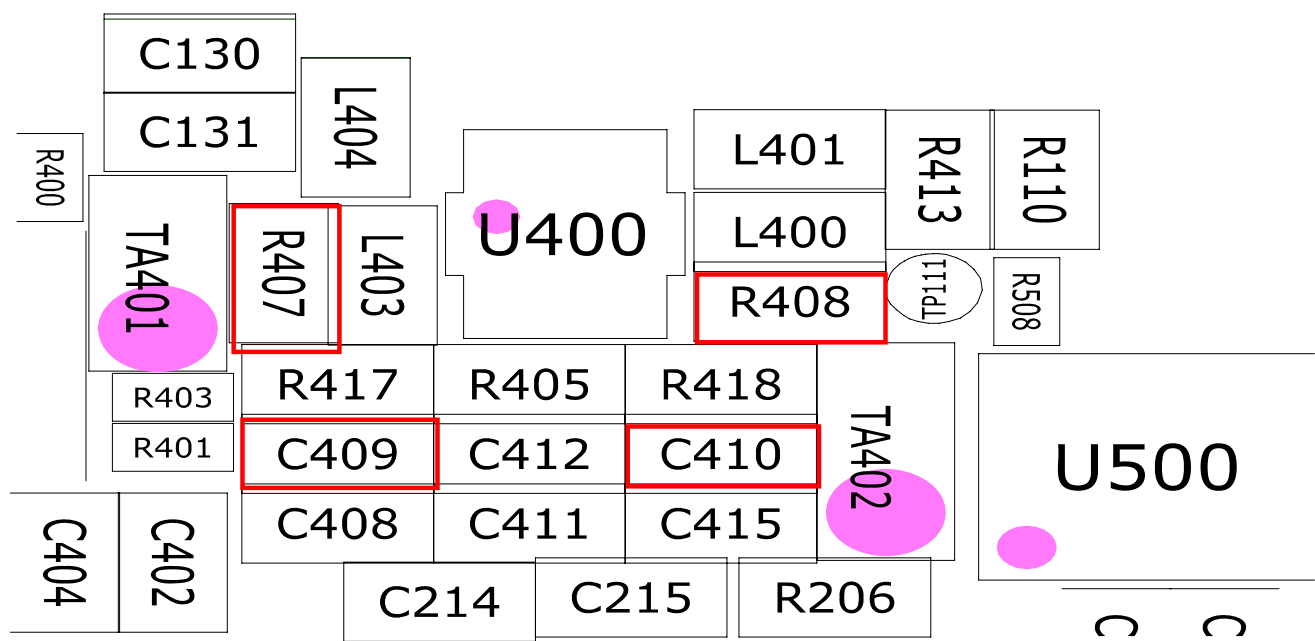


# Ear-Mic Path

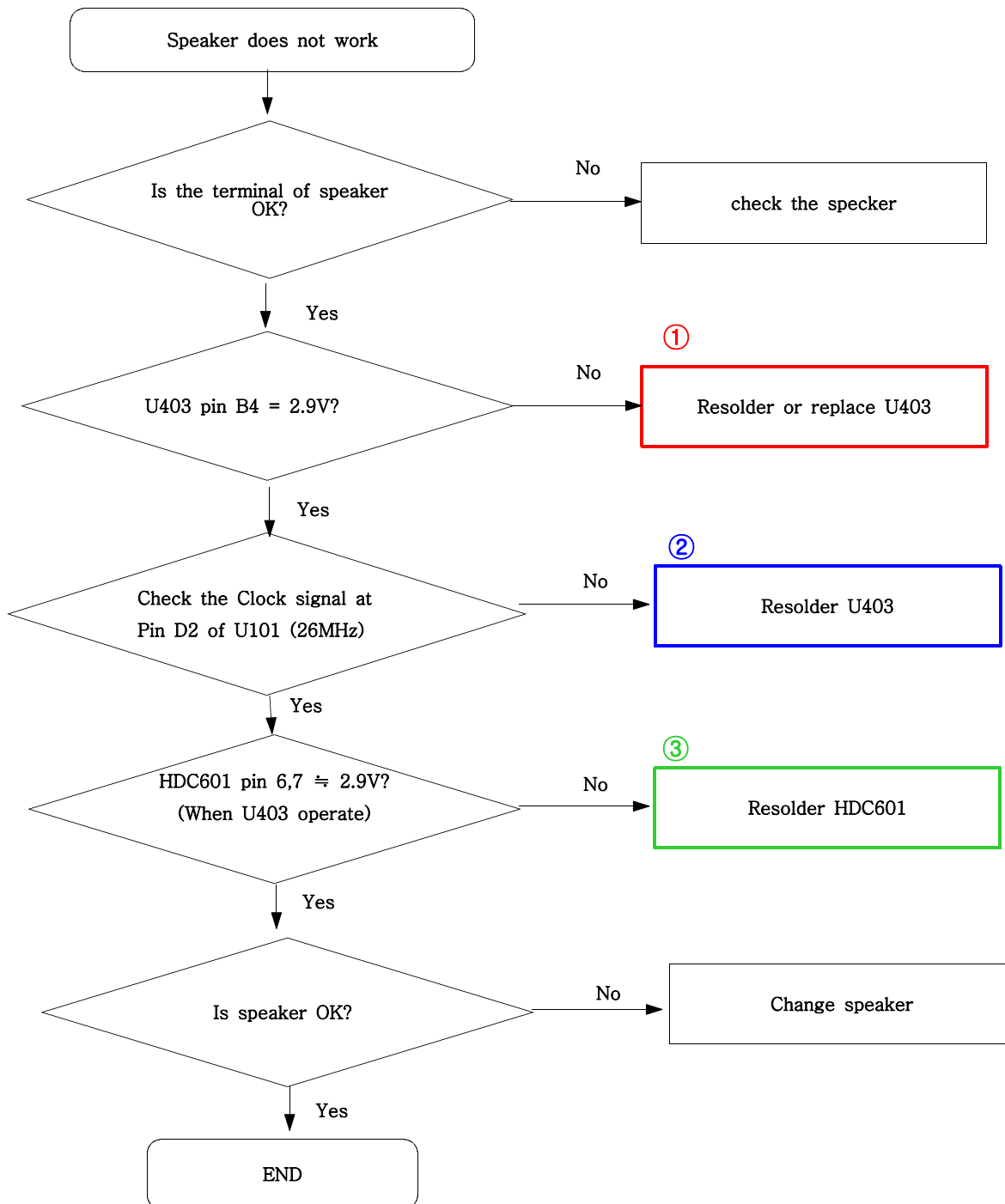


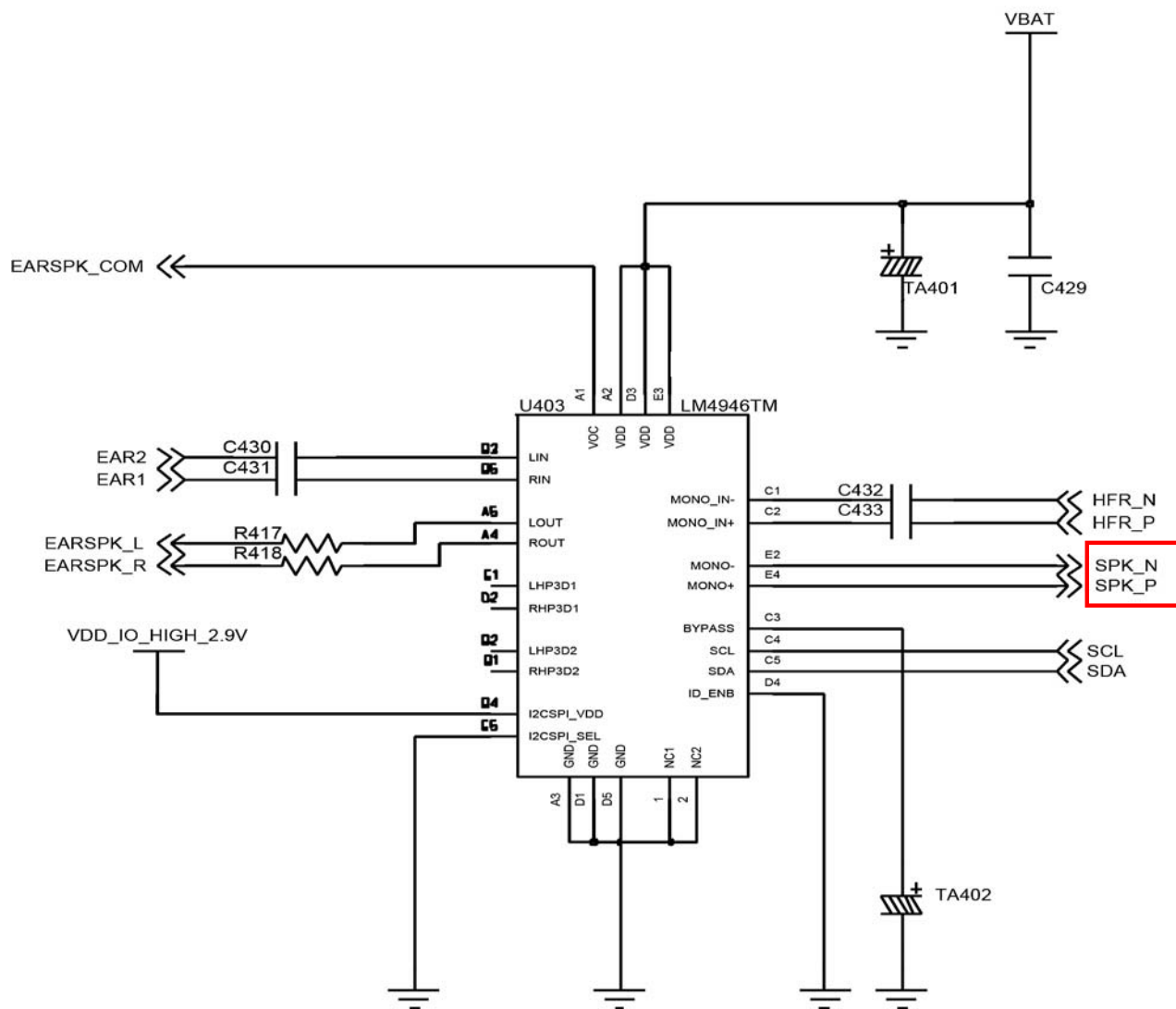
# Main-Mic Path

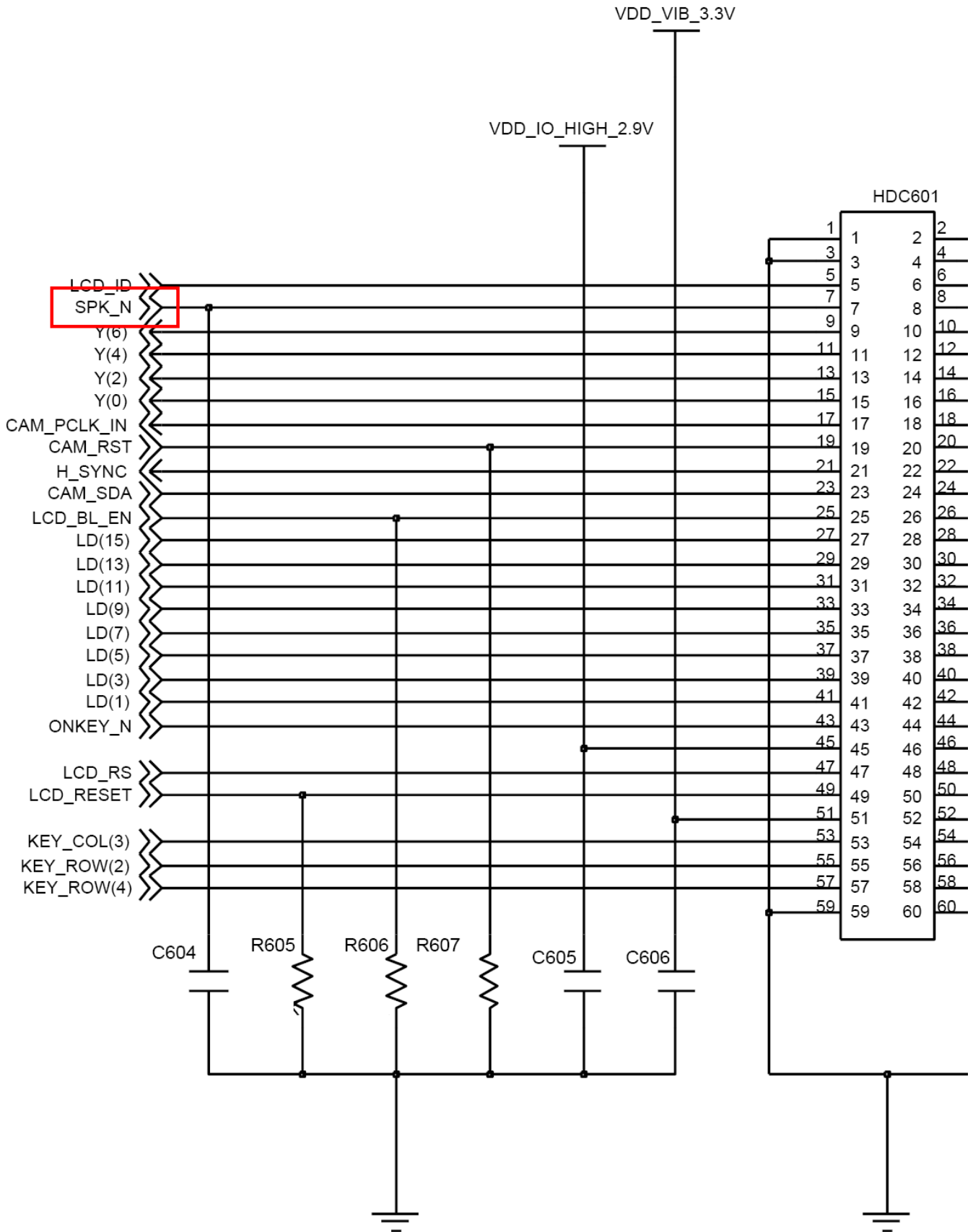




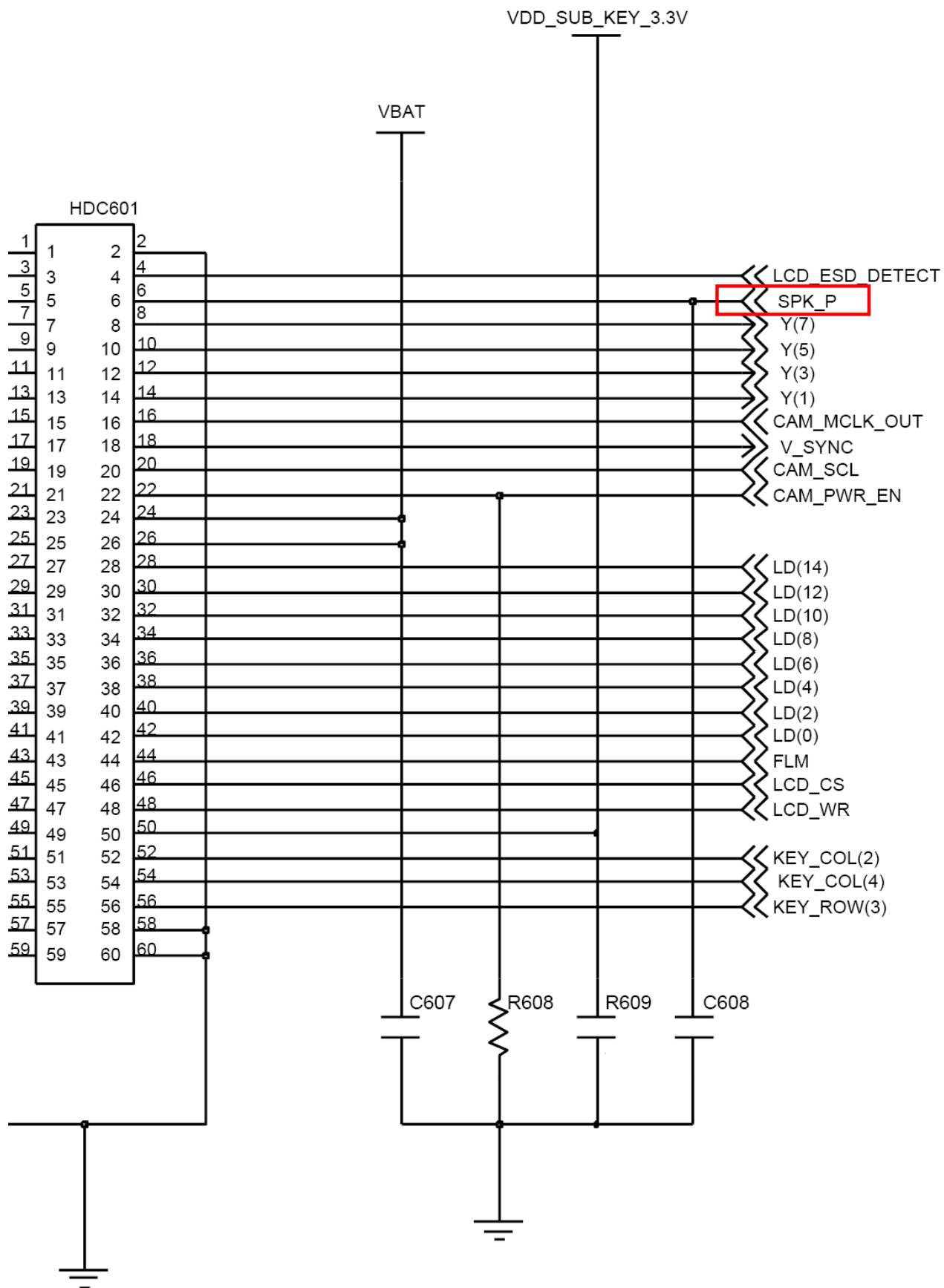
## 9-6. Speaker Part(Melody)



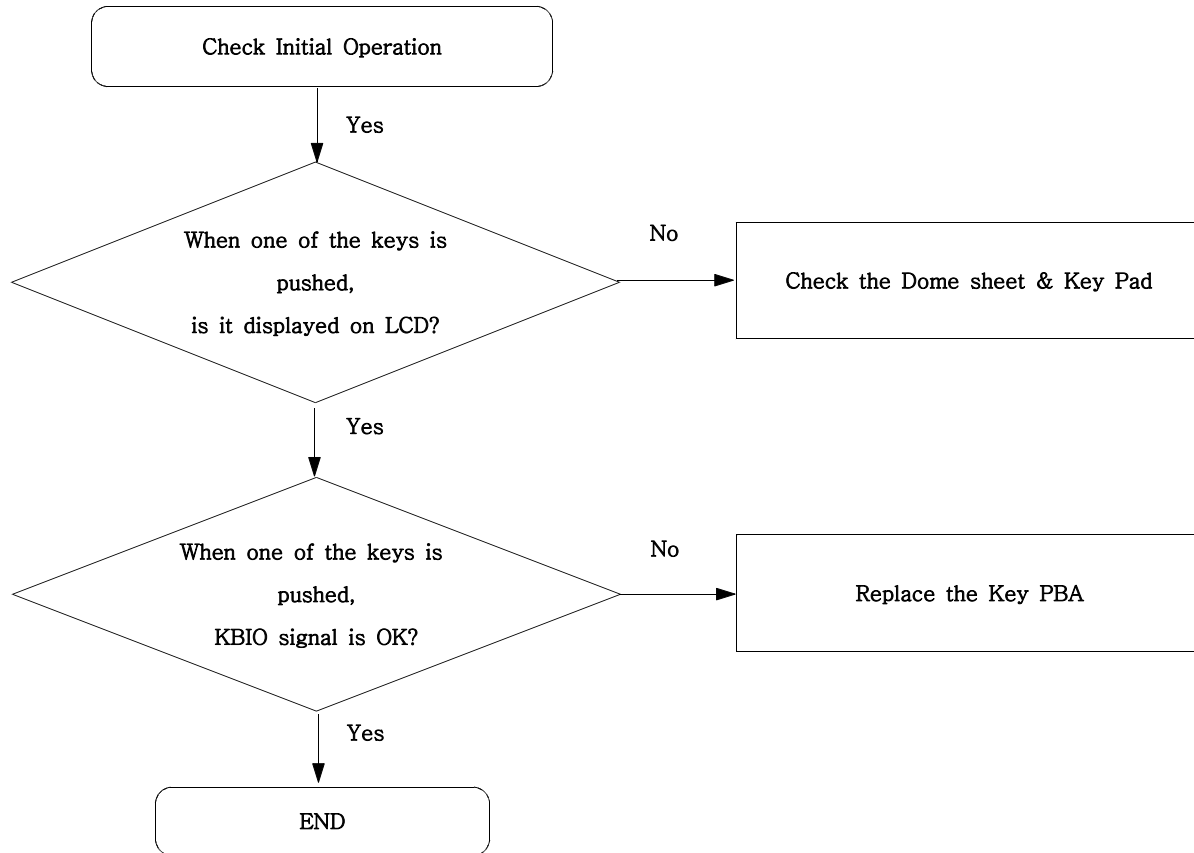


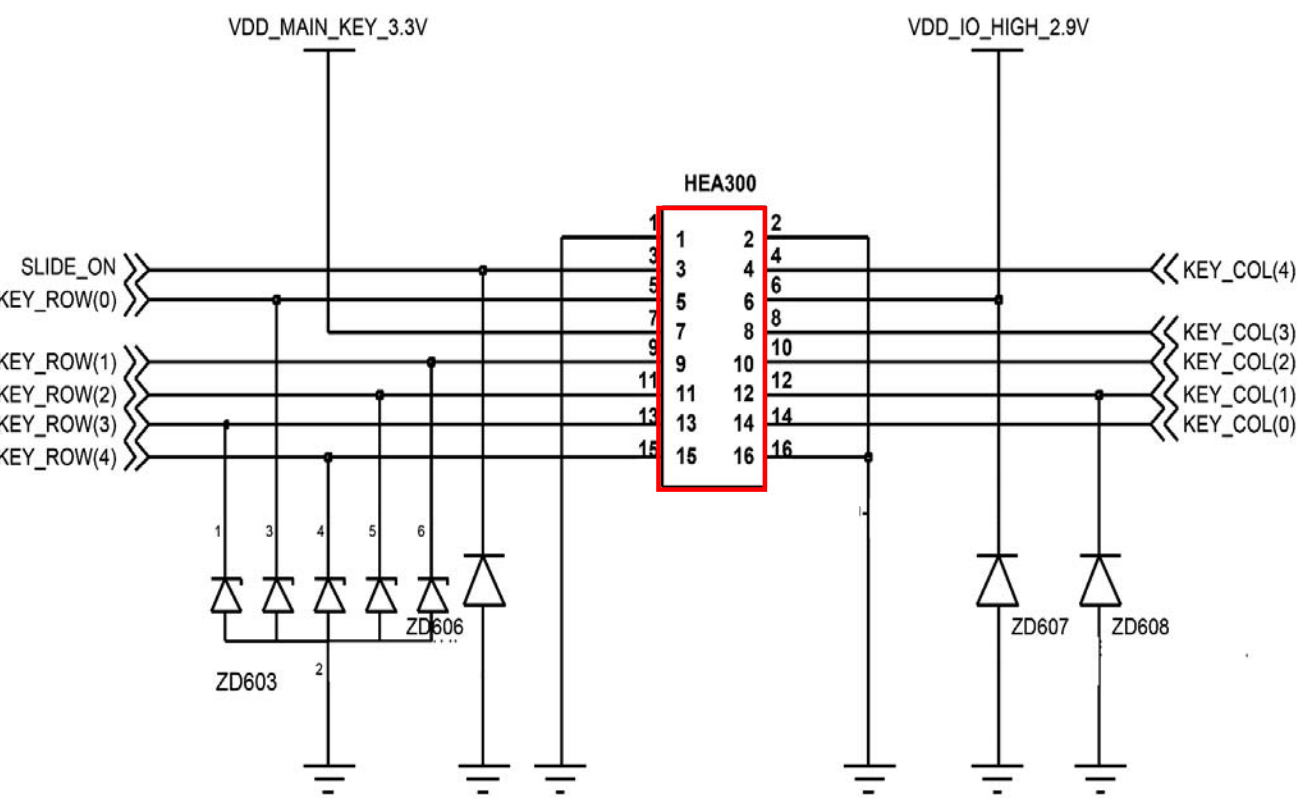


## Flow Chart of Troubleshooting

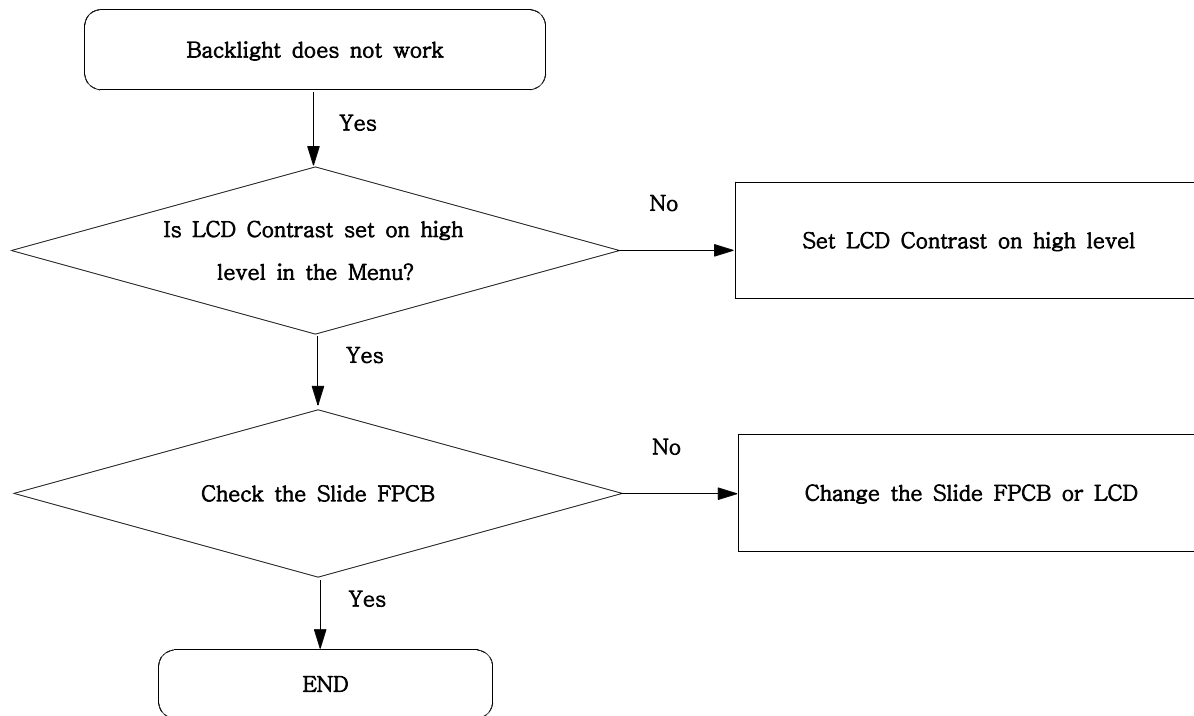


## 9-7. Key Data Input

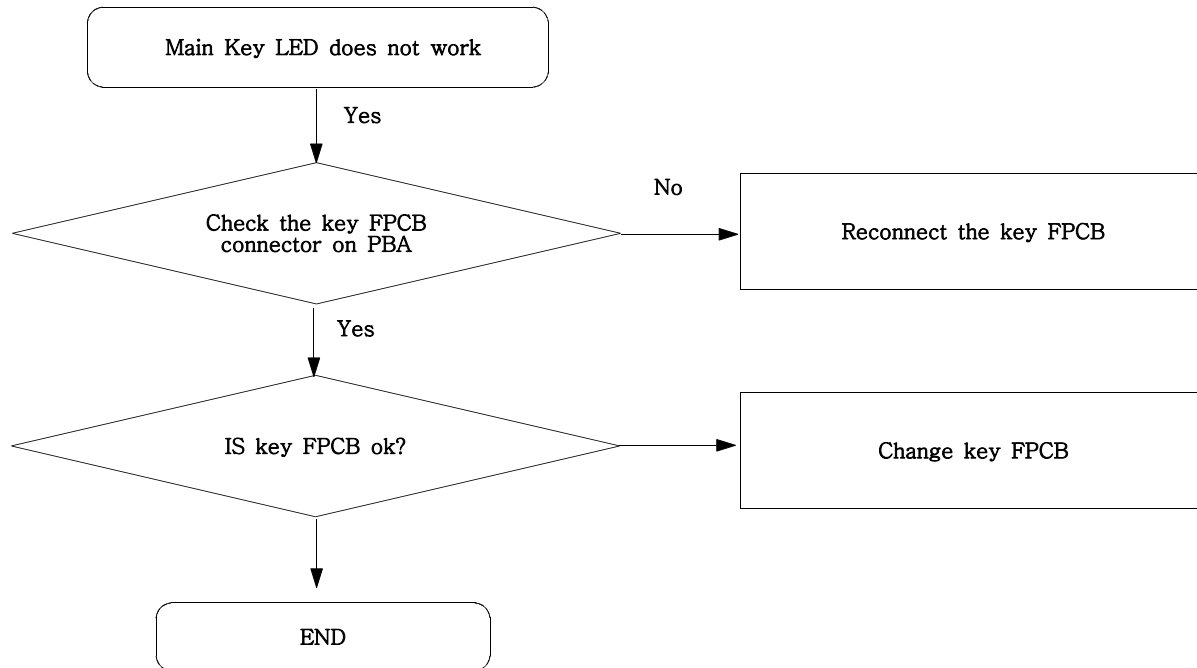




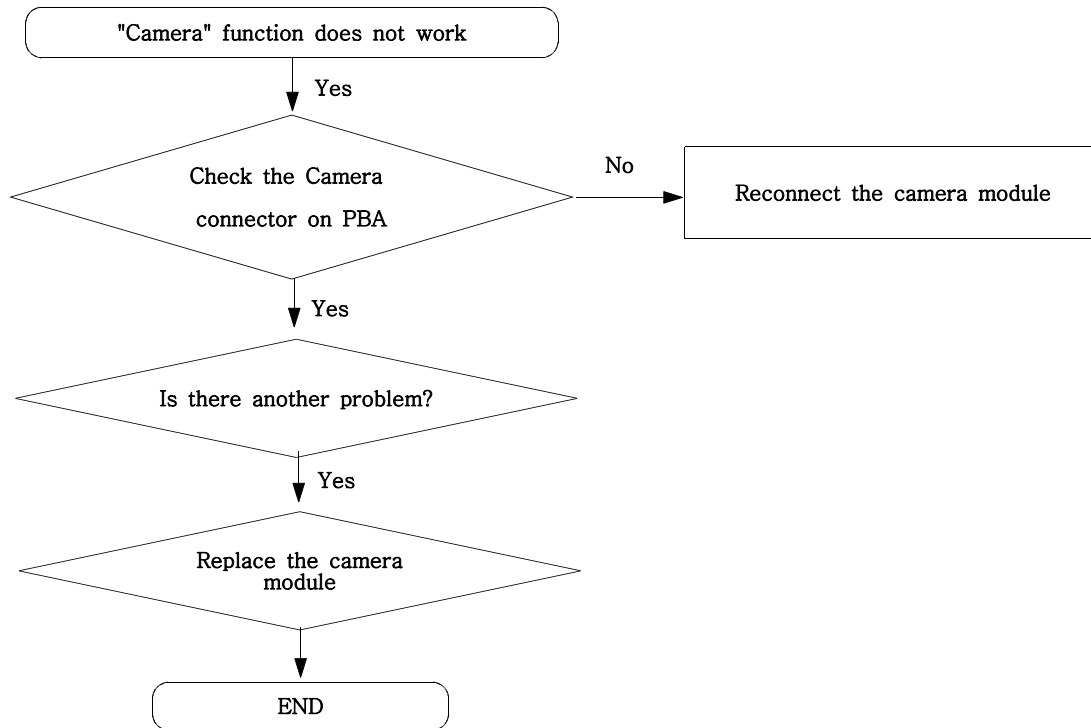
## 9-8. Back Light (for Color Main LCD)



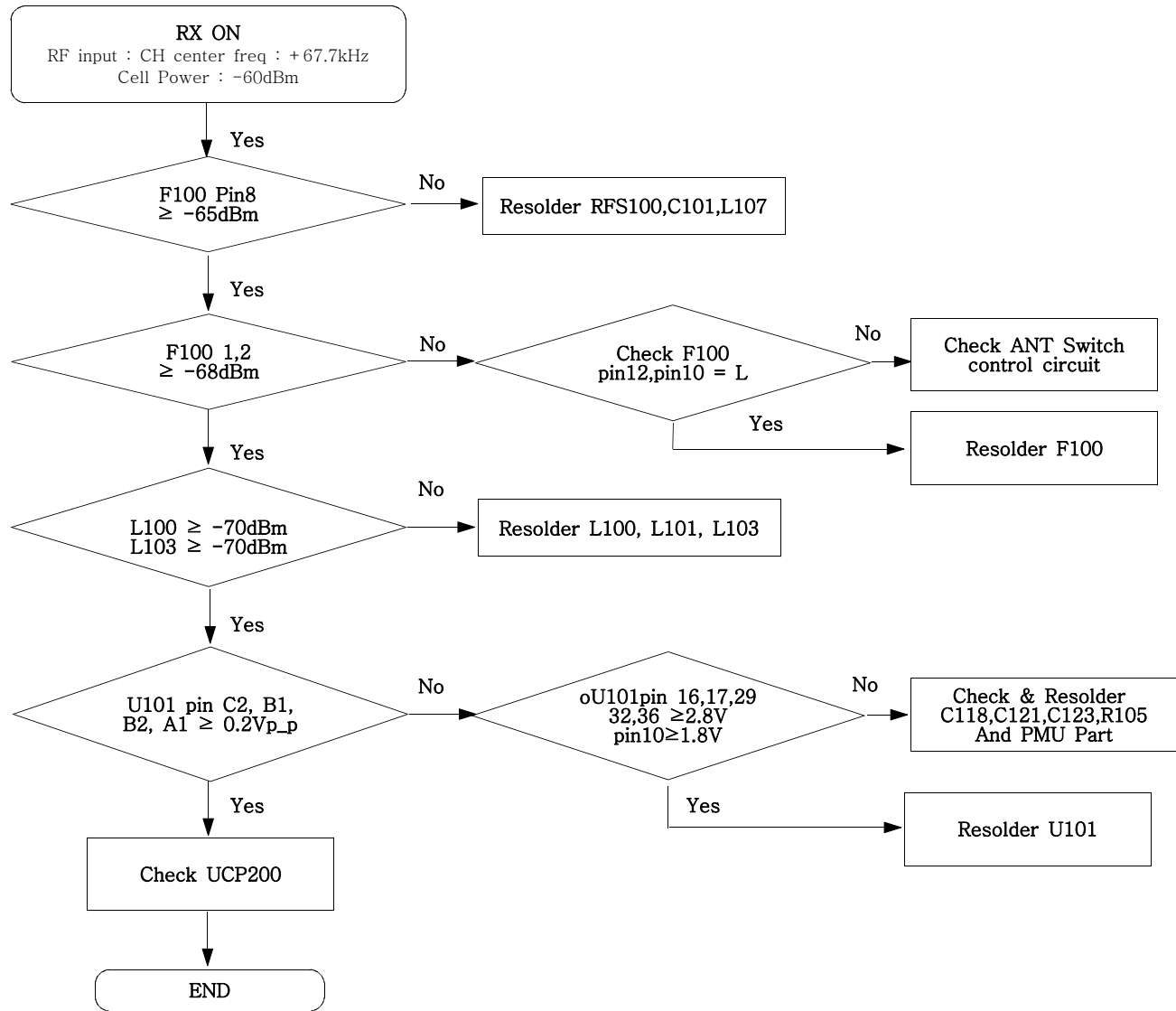
## 9-9. Key Back Light



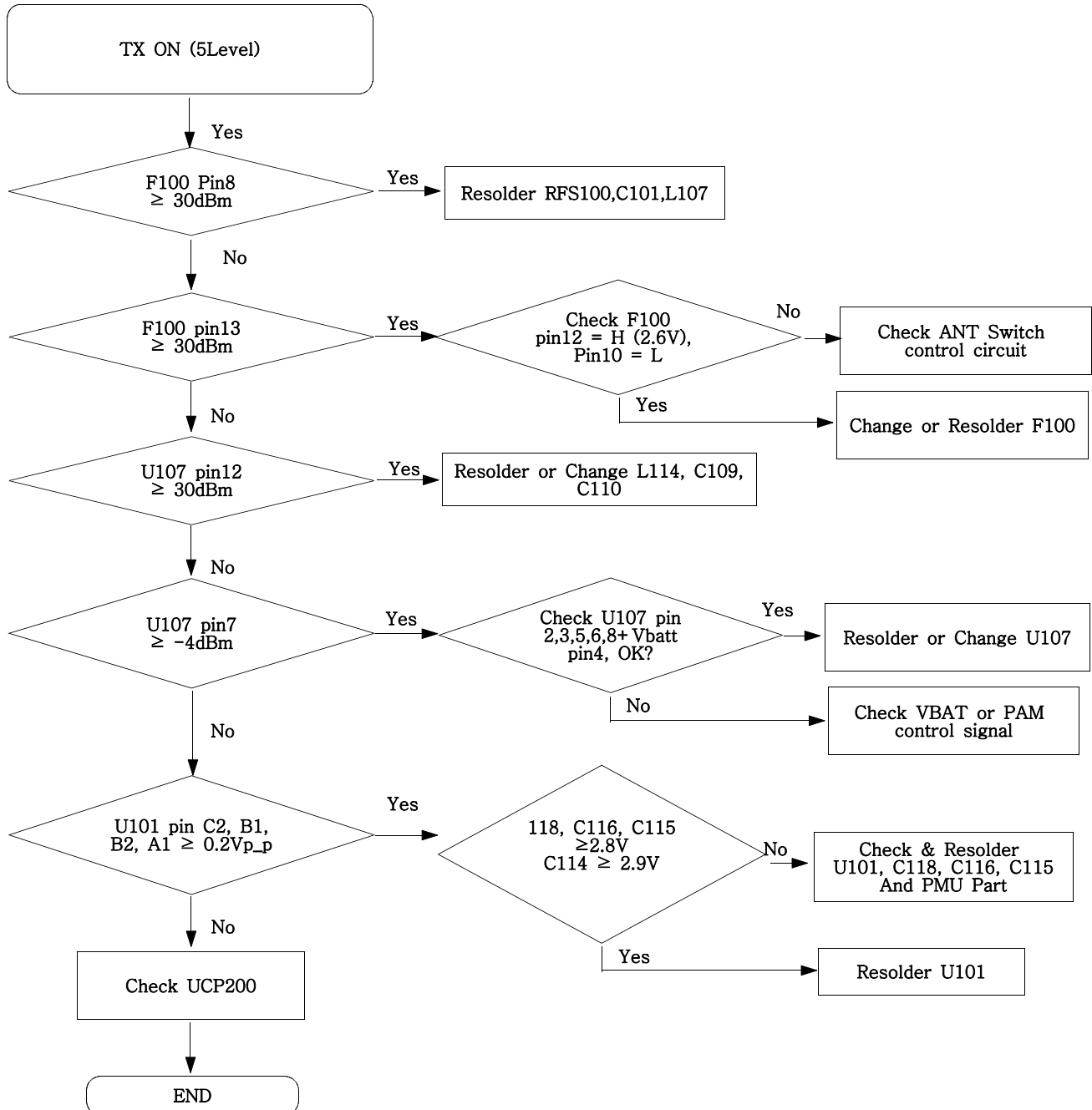
## 9-10. Camera part



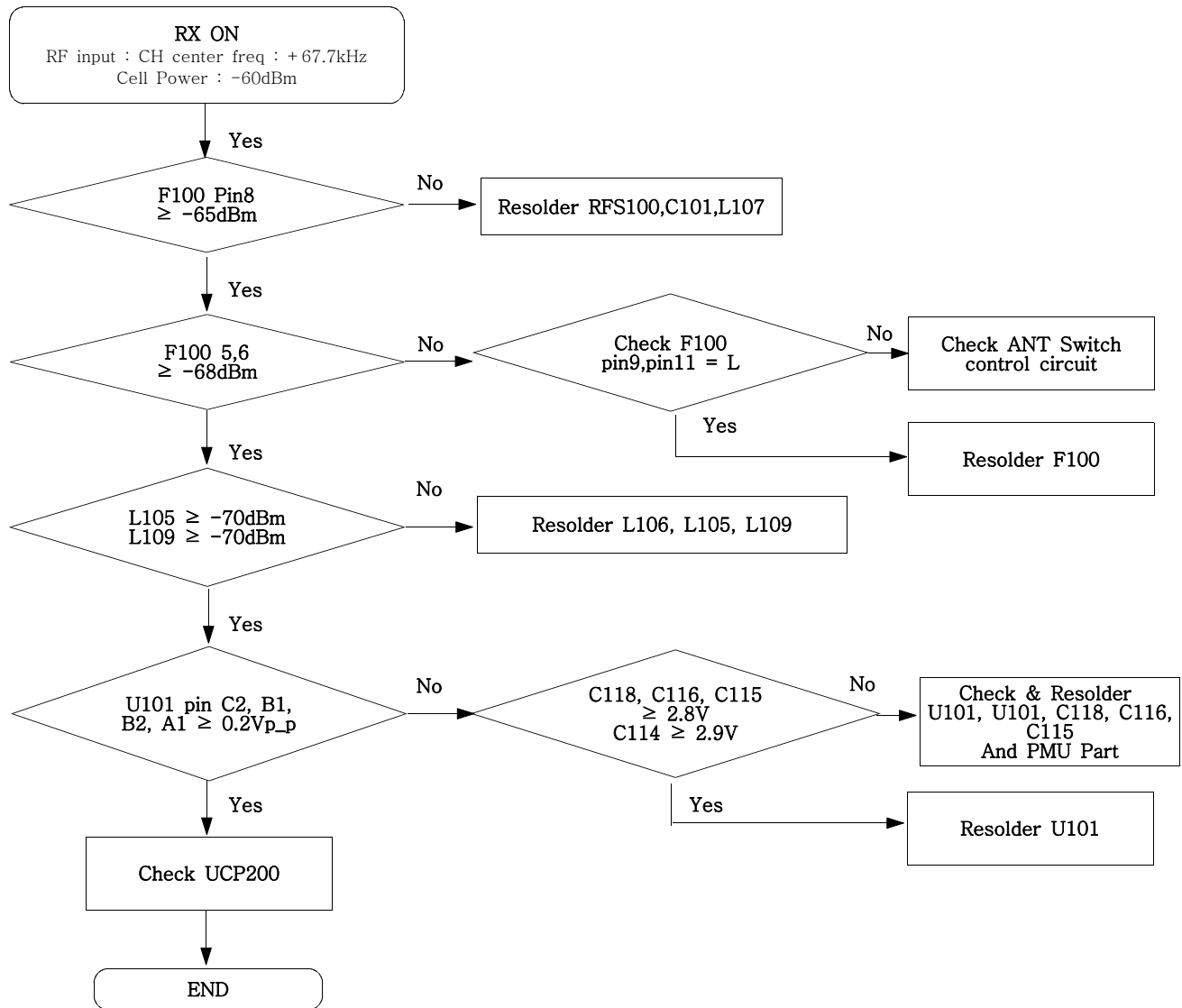
## 9-11. GSM Receiver



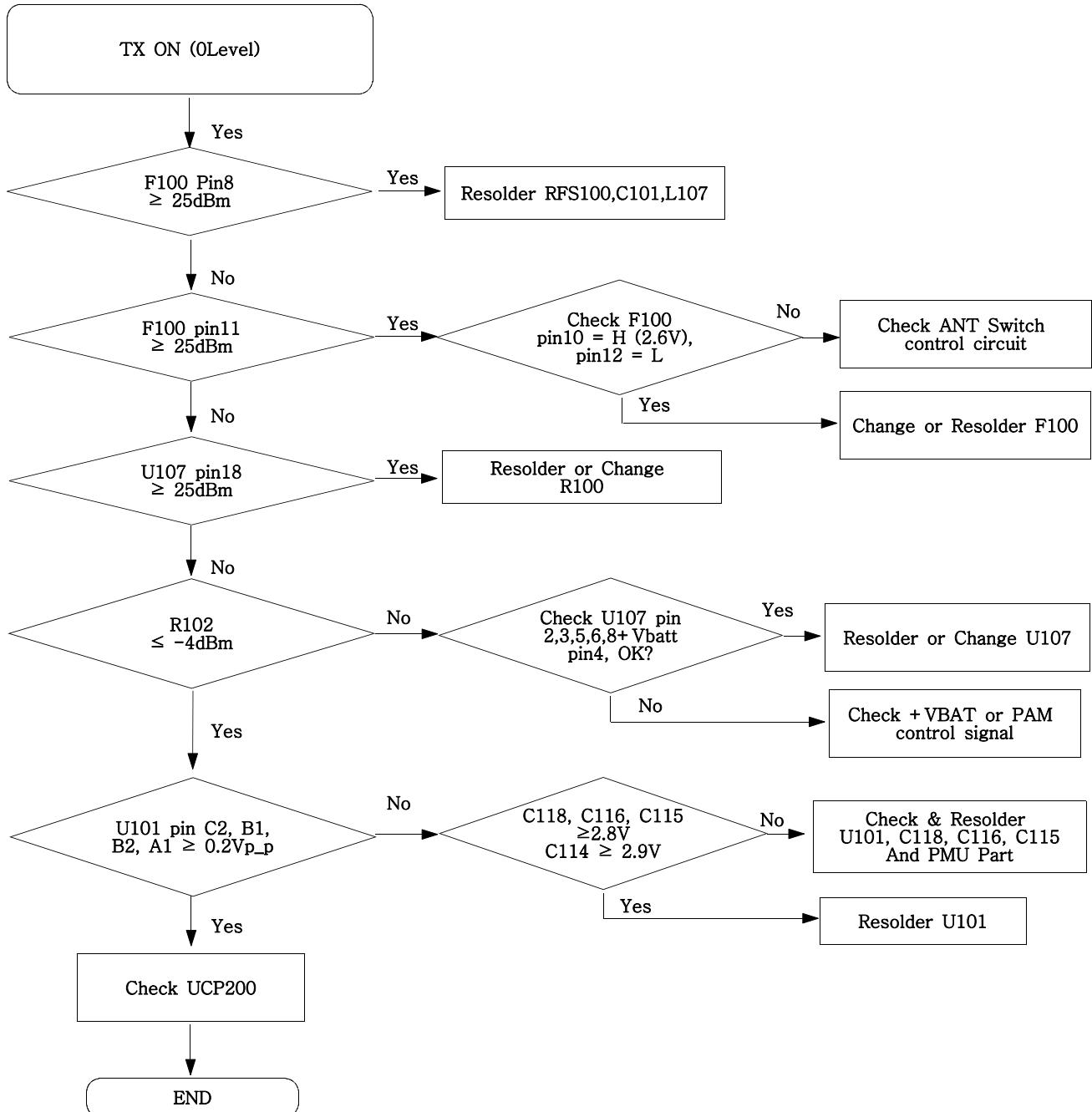
## 9-12. GSM Transmitter



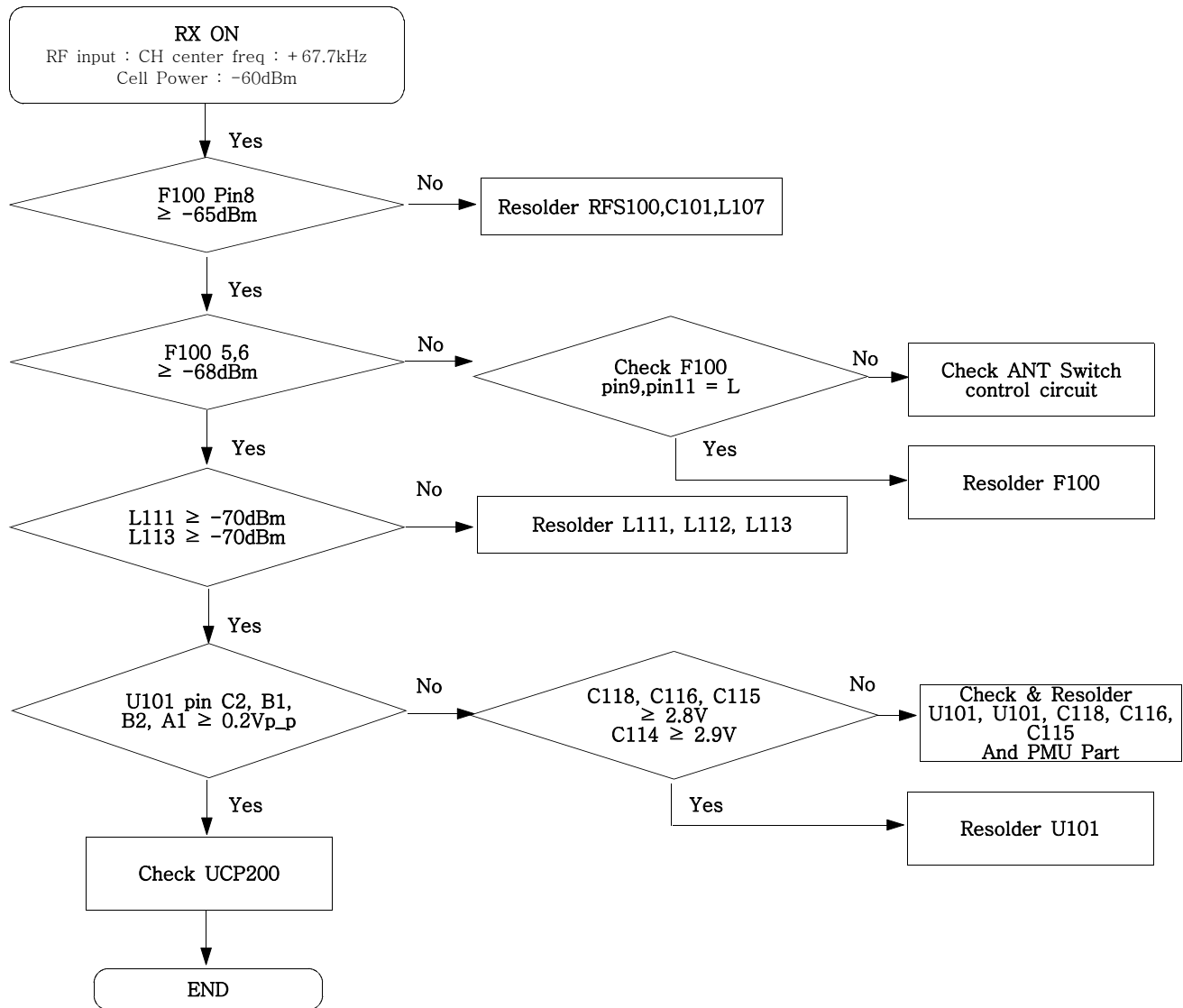
### 9-13. DCS Receiver



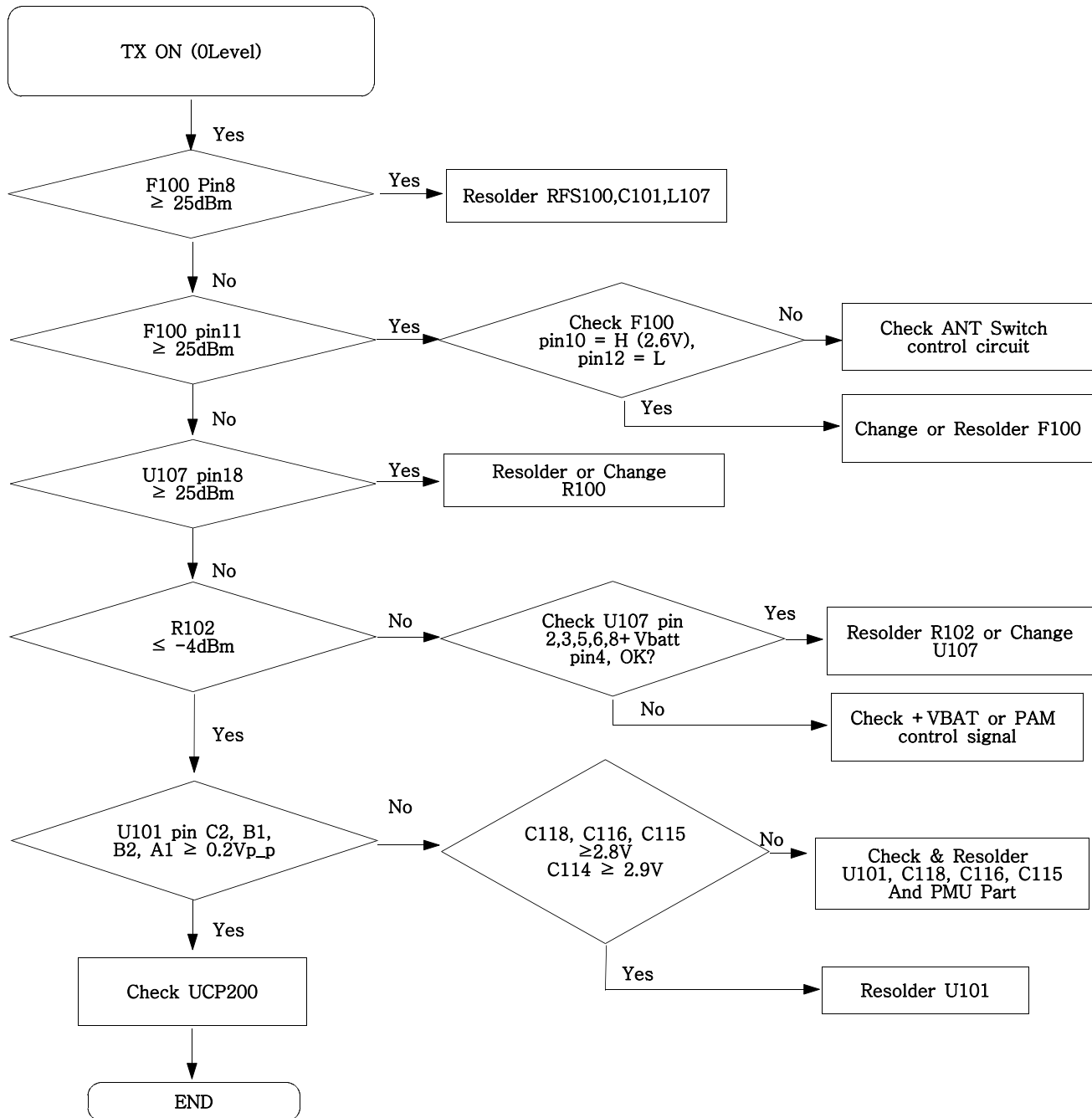
## 9-14. DCS Transmitter



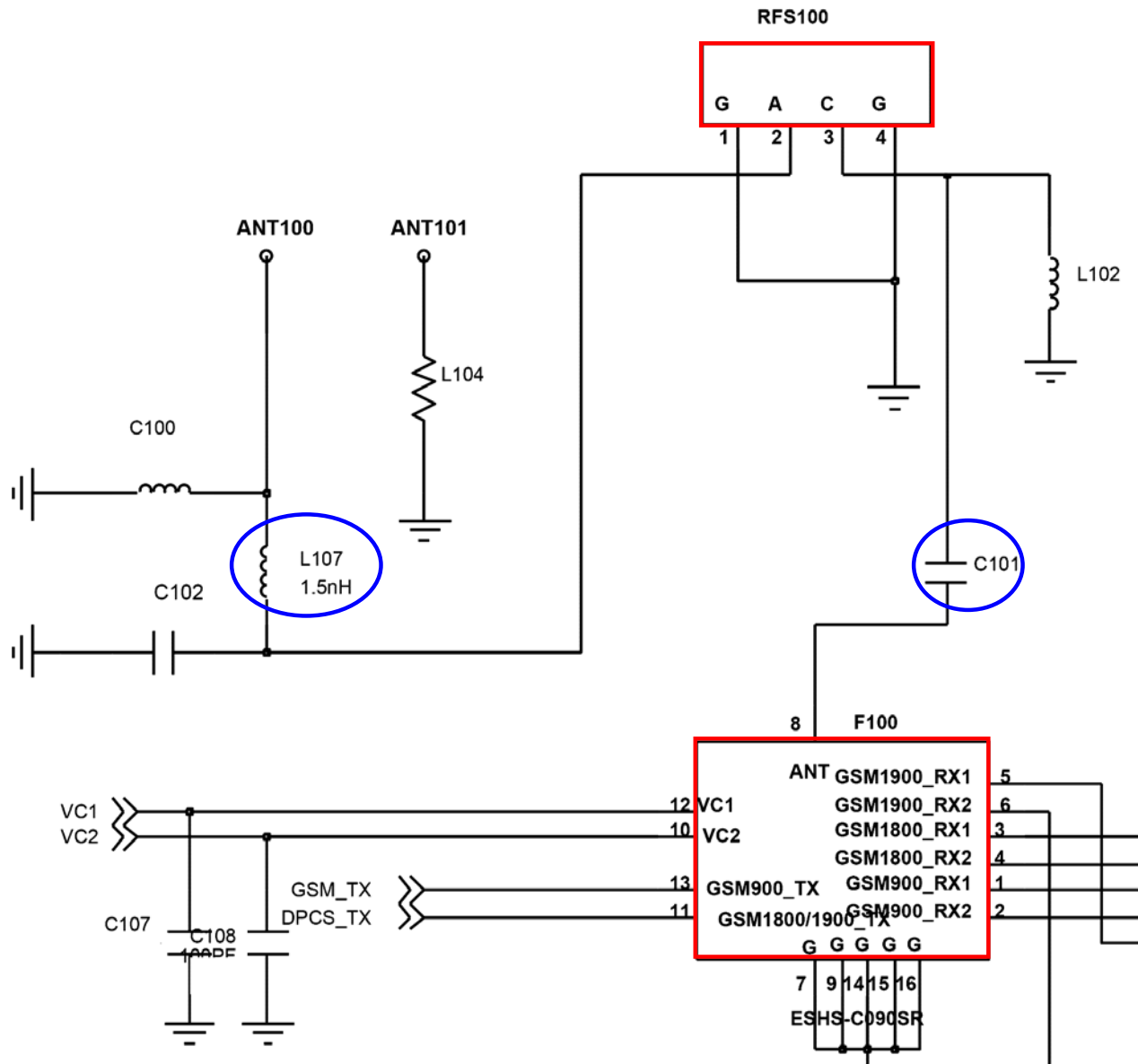
## 9-15. PCS Receiver

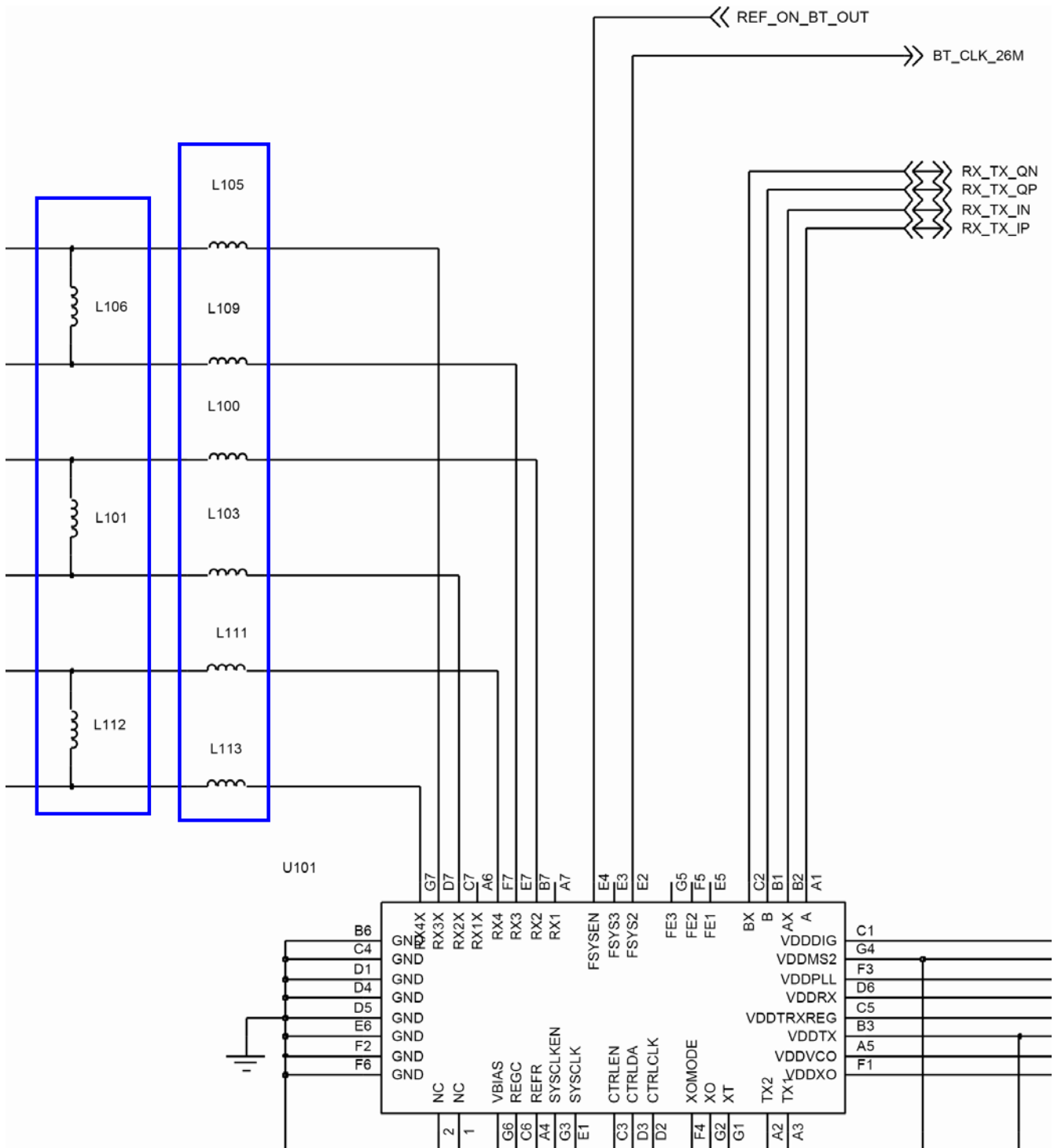


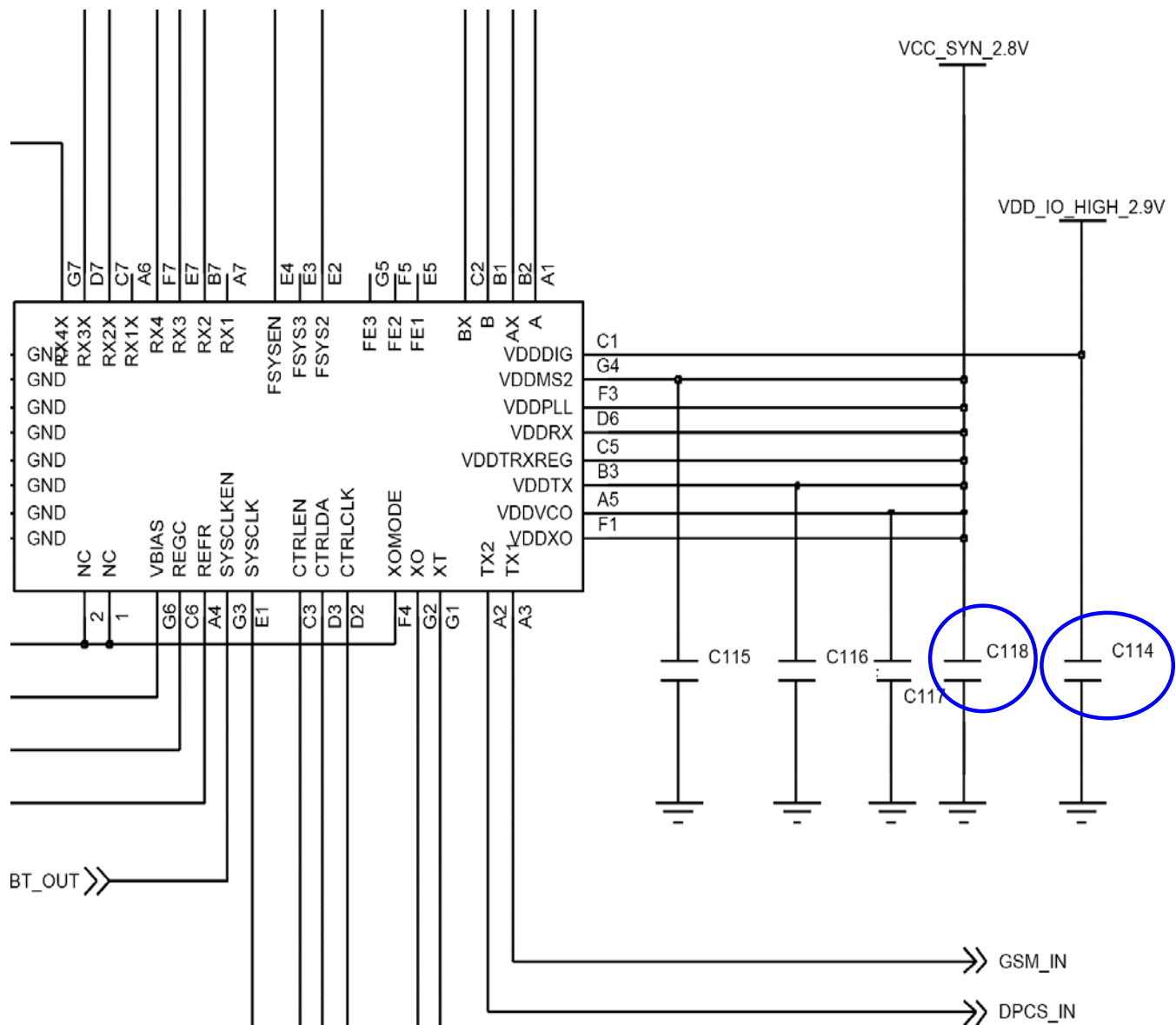
## 9-16. PCS Transmitter

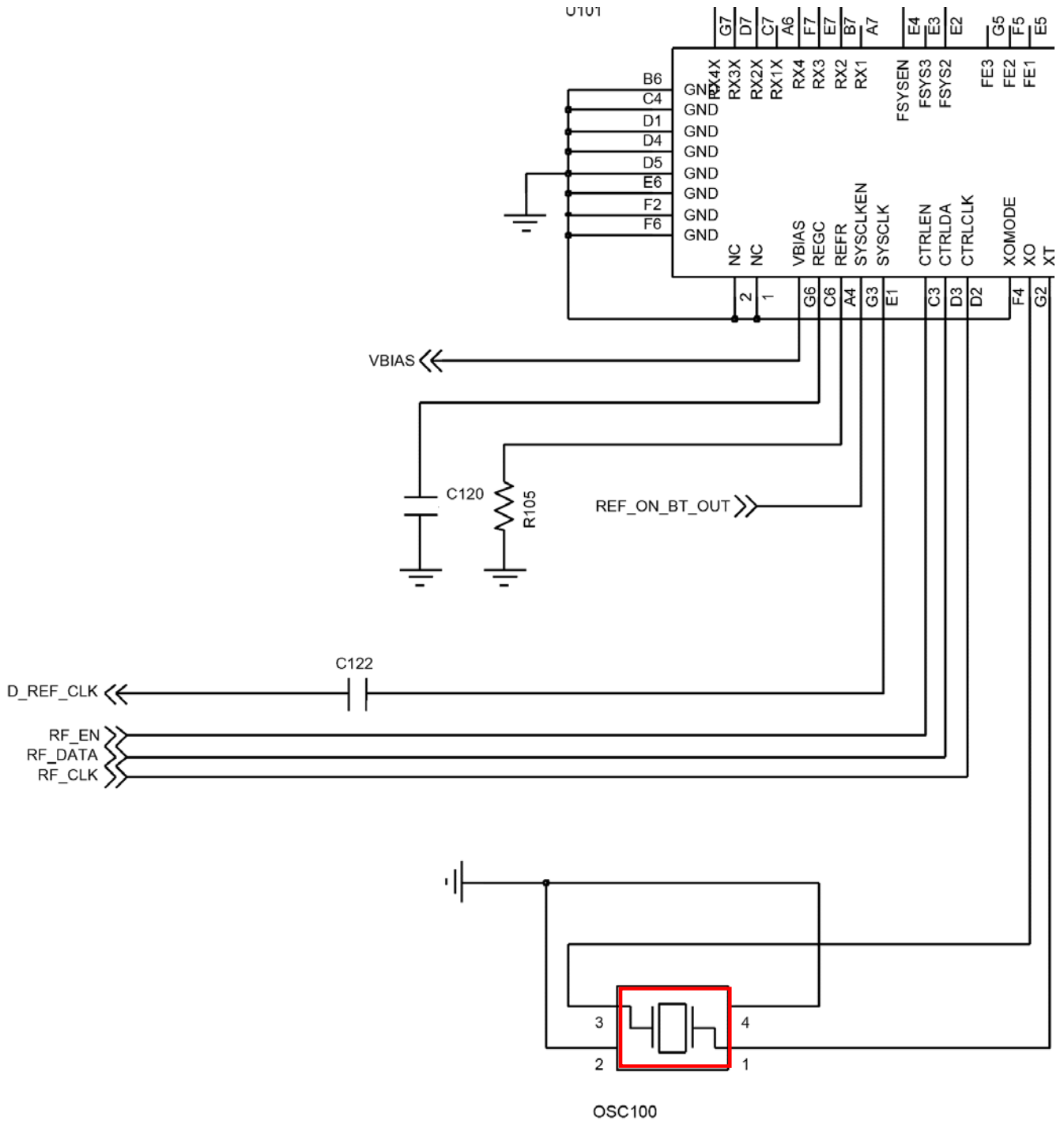


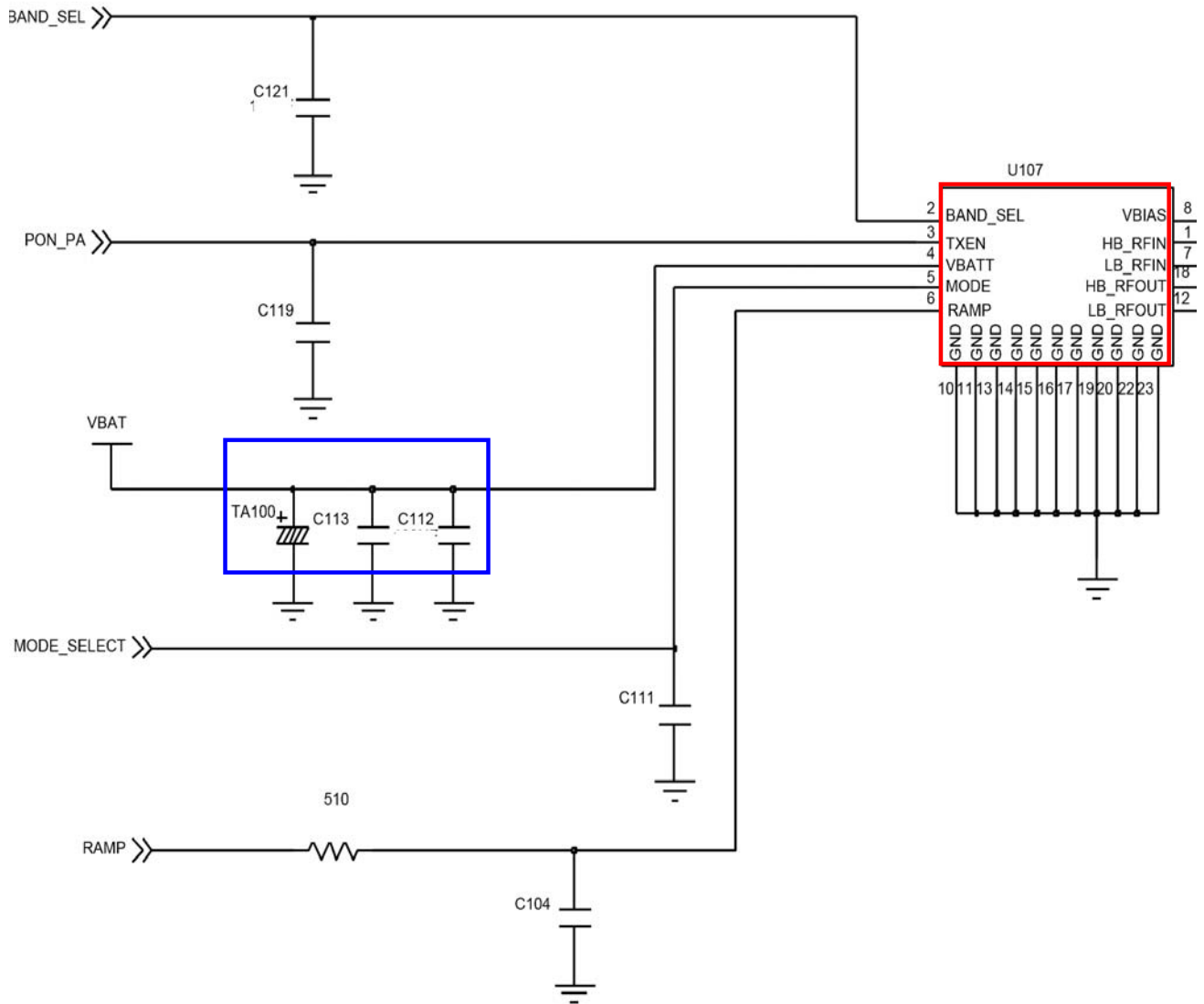
AUTHORIZED BY SAMSUNG.

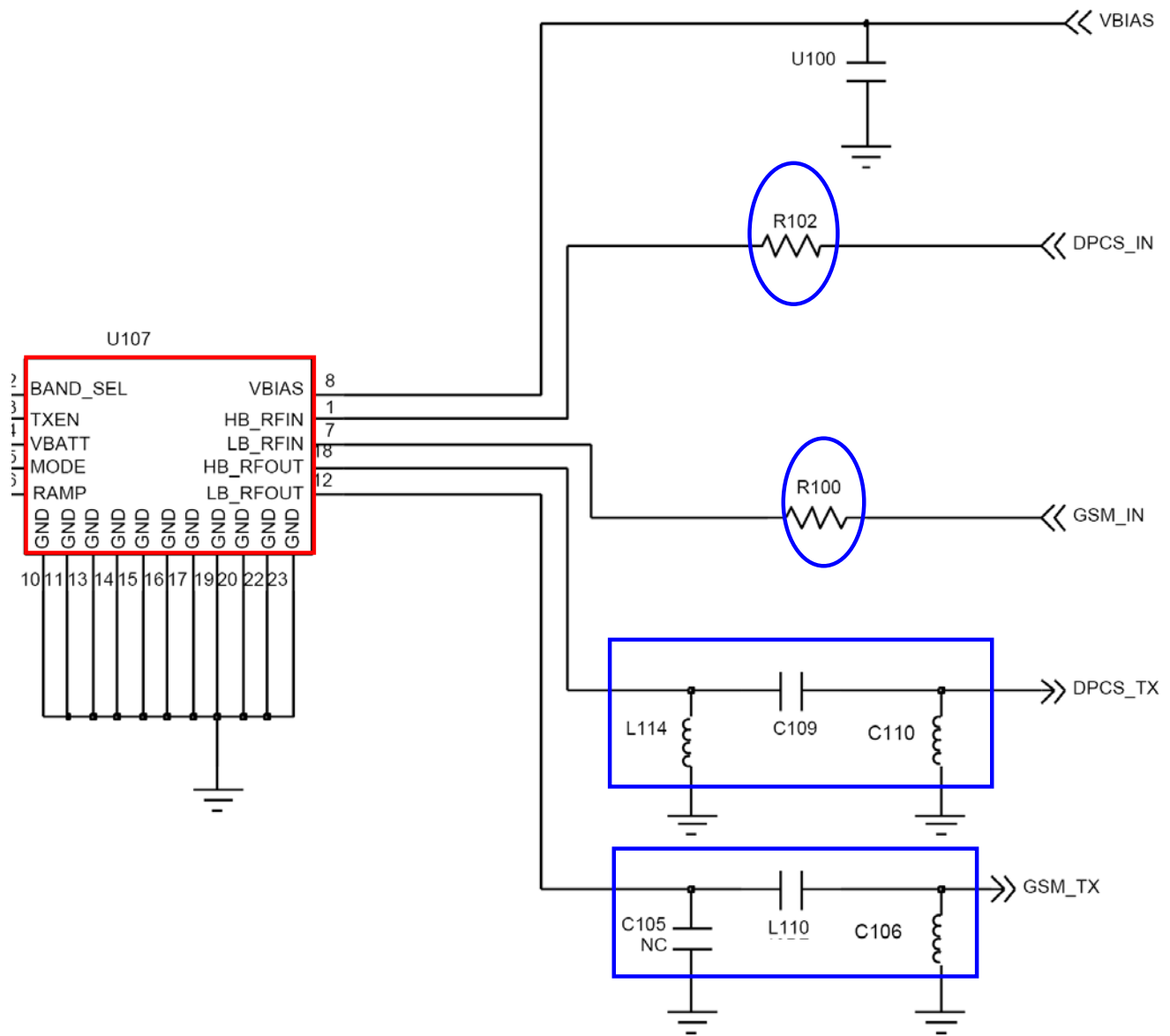




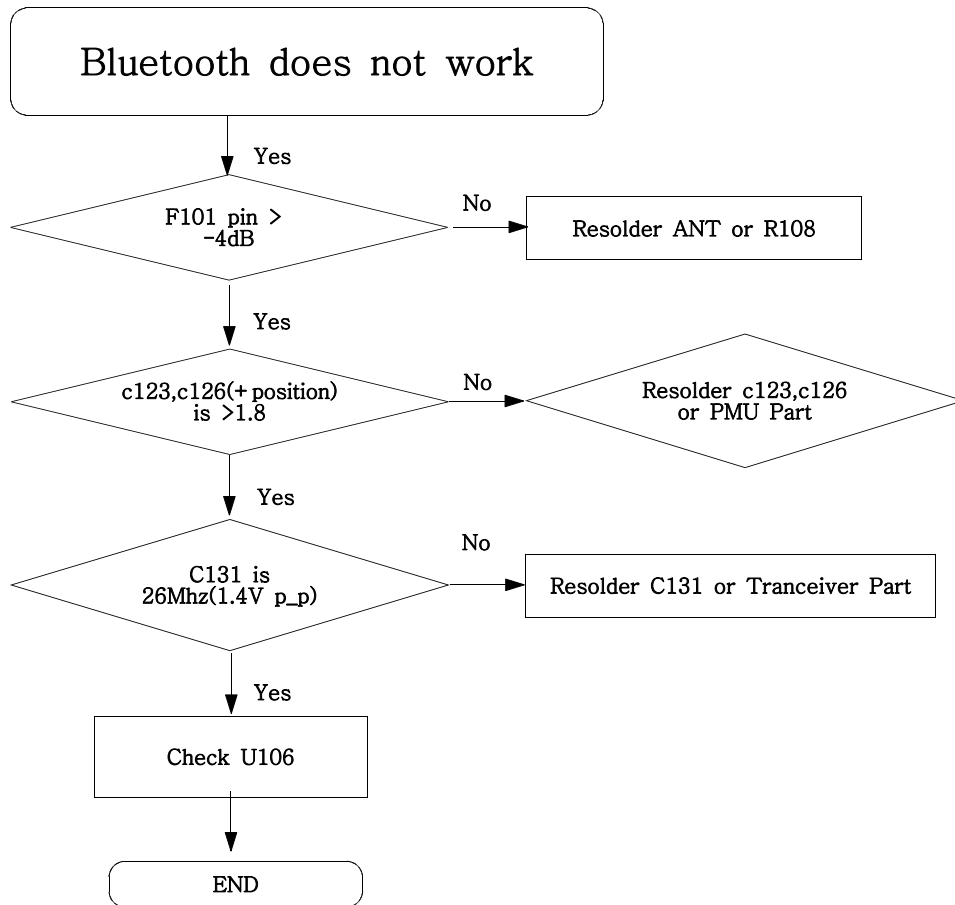


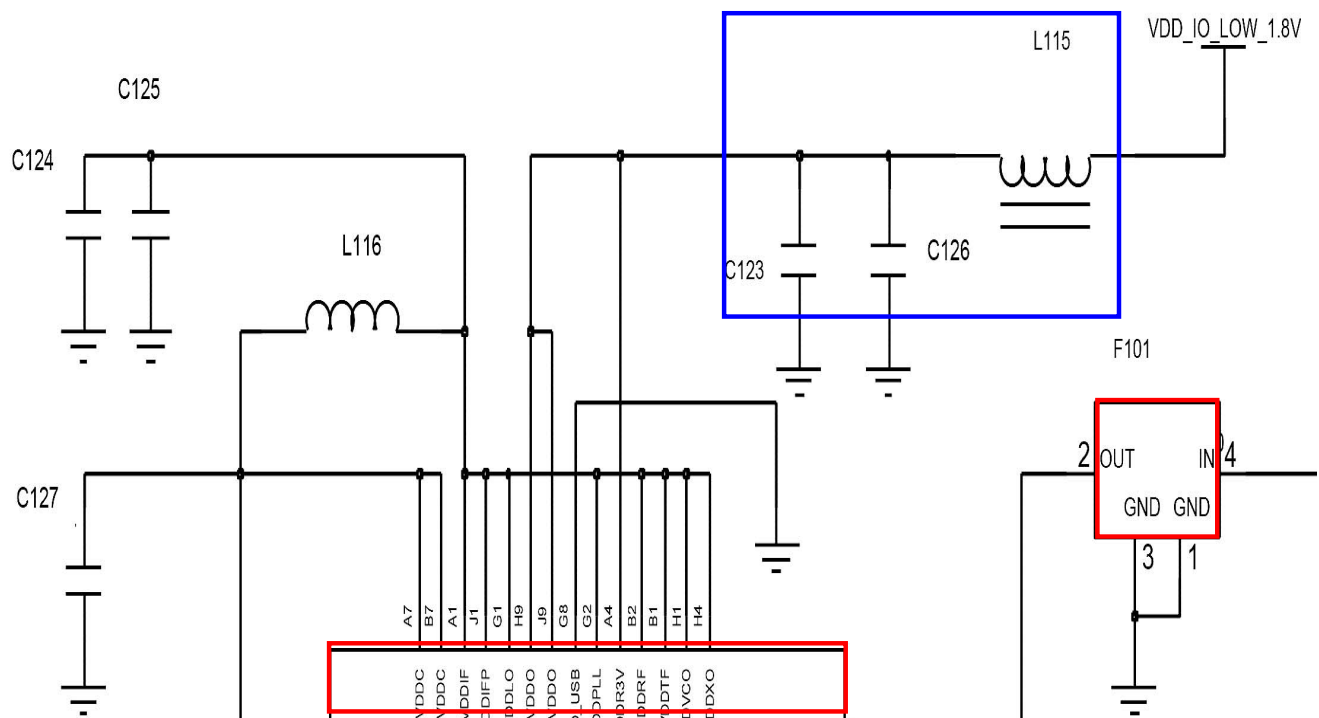
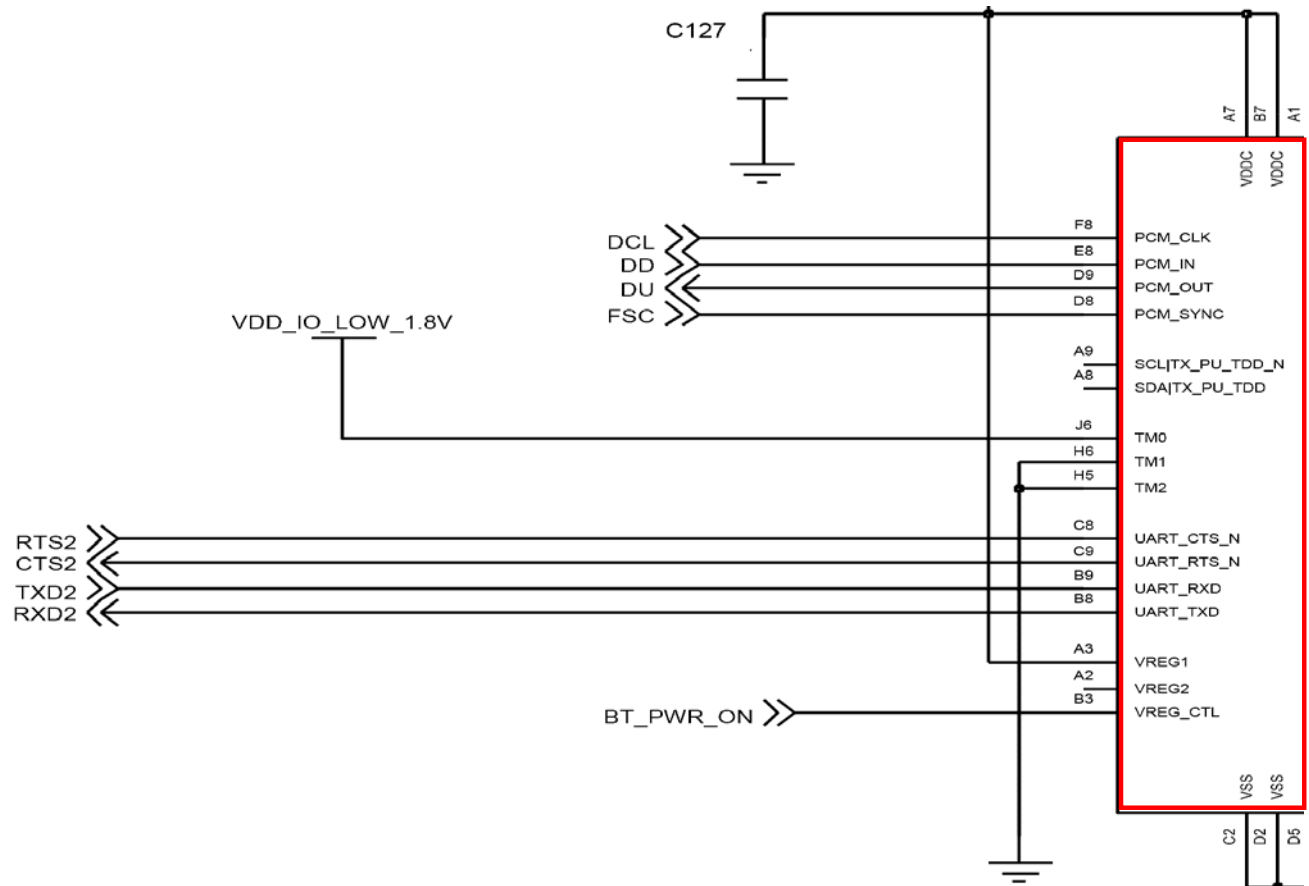




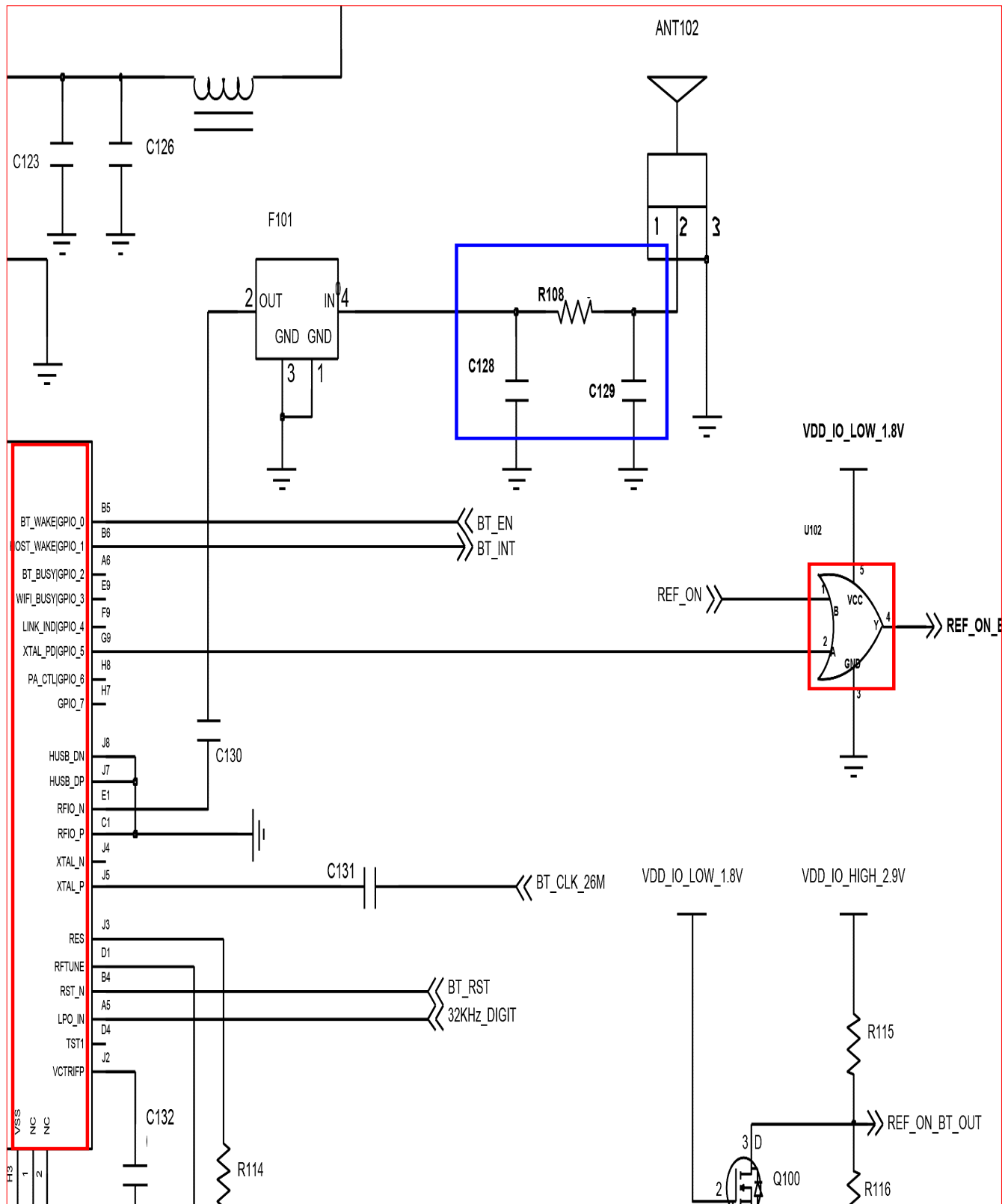


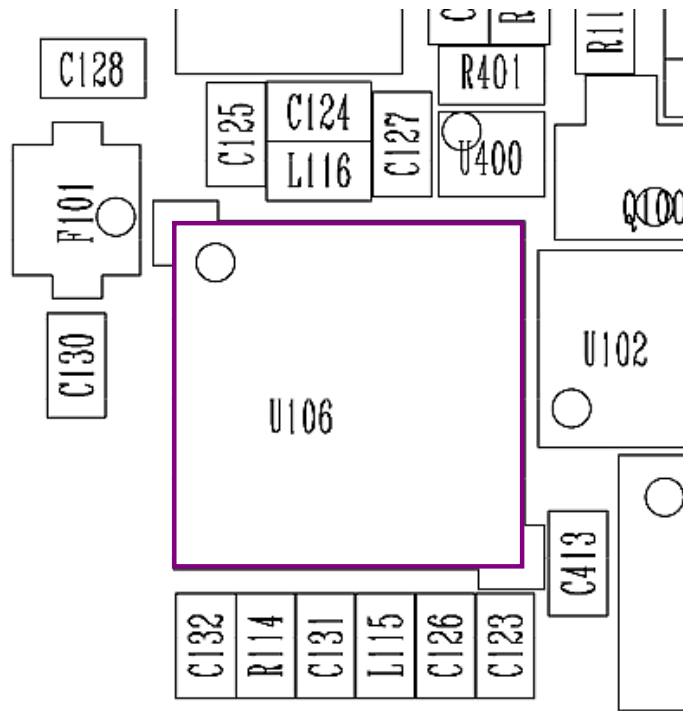
## 9-17. Bluetooth part



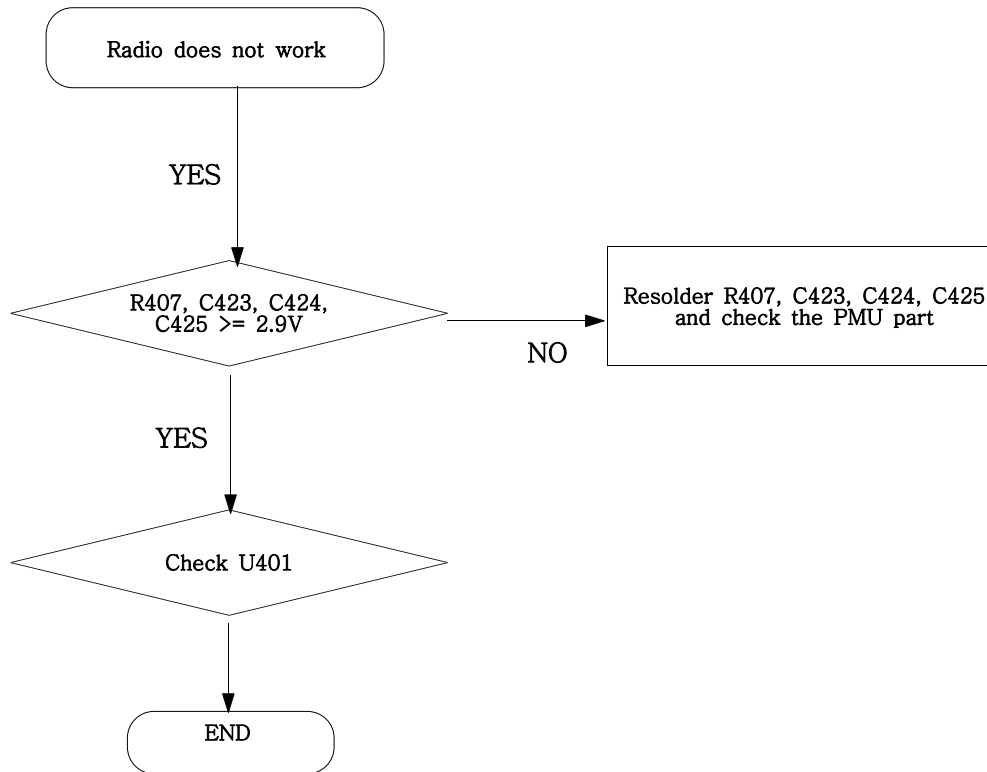


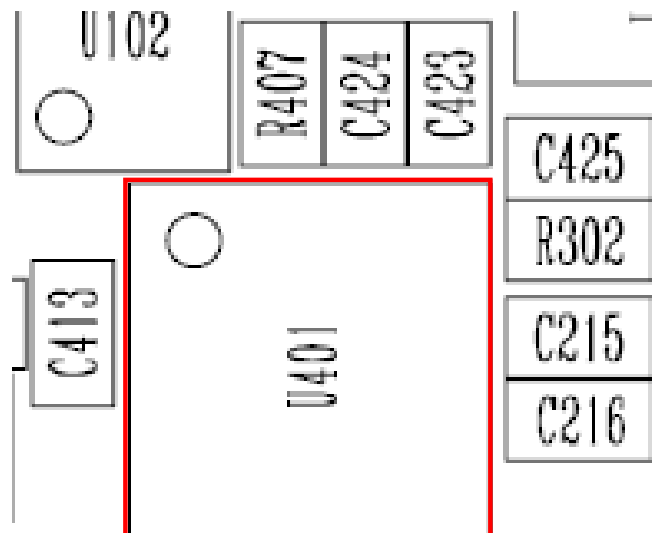
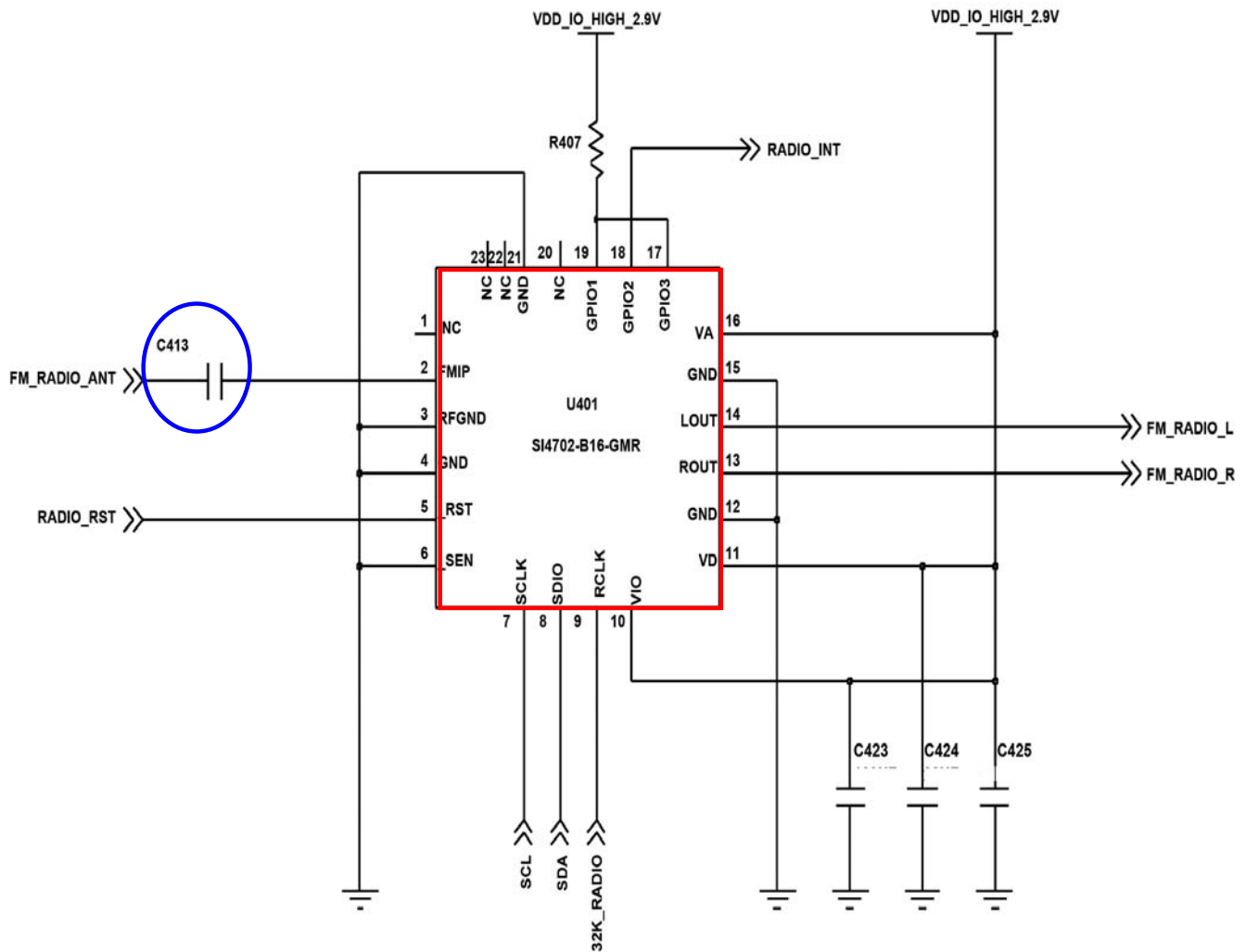
## Flow Chart of Troubleshooting





## 9-18. Radio part







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## 4. Array course control

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### 4-1. Software Adjustments

Test Jig (GH80-03306A)



RF Cable (GH39-00599A)

0.4M Test Cable  
(GH39-01020A)

1.5M Test Cable  
(GH39-01022A)

Serial Cable(CSA LL64151-A)



Power Supply Cable



## 4-2. Software Downloading

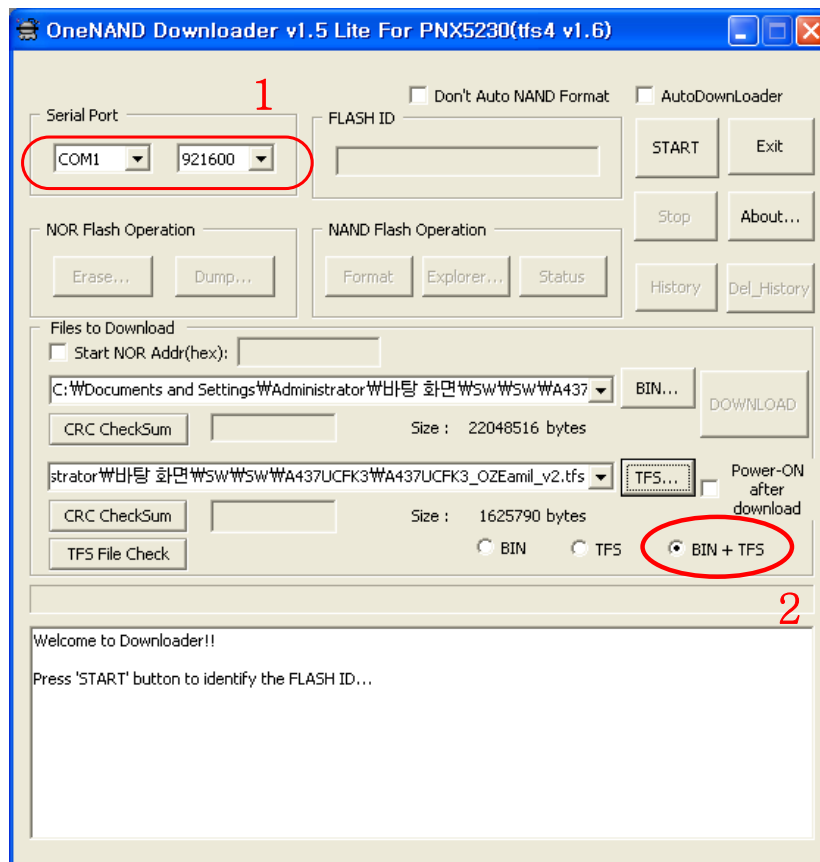
### 4-2-1. Pre-requisite for Downloading

- Downloader Program([OneNAND Downloader V1.5 Lite For PNX5230.exe](#))
- SGH-J700 Mobile Phone
- Data Cable
- Binary file, TFS file

### 4-2-2. S/W Downloader Program

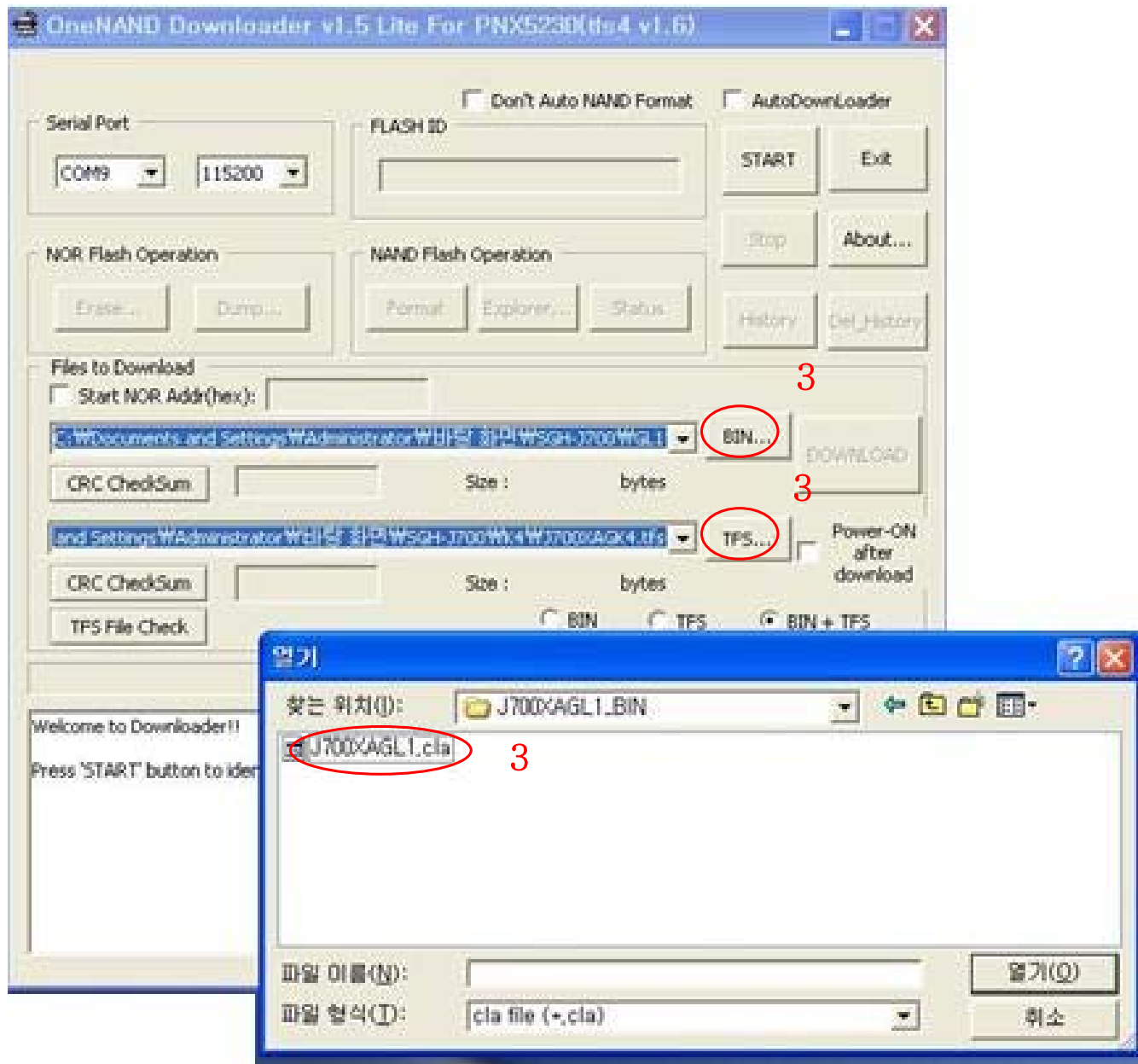
■ Load the binary download program by executing the  
[“J700 OneNAND Downloader V1.5 Lite For PNX5230.exe”](#)

1. Select the connected serial port and the rate of speed
2. Select the check box, the mode you want to download.
  - if the binary file wanted, check only 'BIN'
  - if the tfs file wanted, check only 'TFS'
  - if all the files wanted, check 'BIN+TFS'

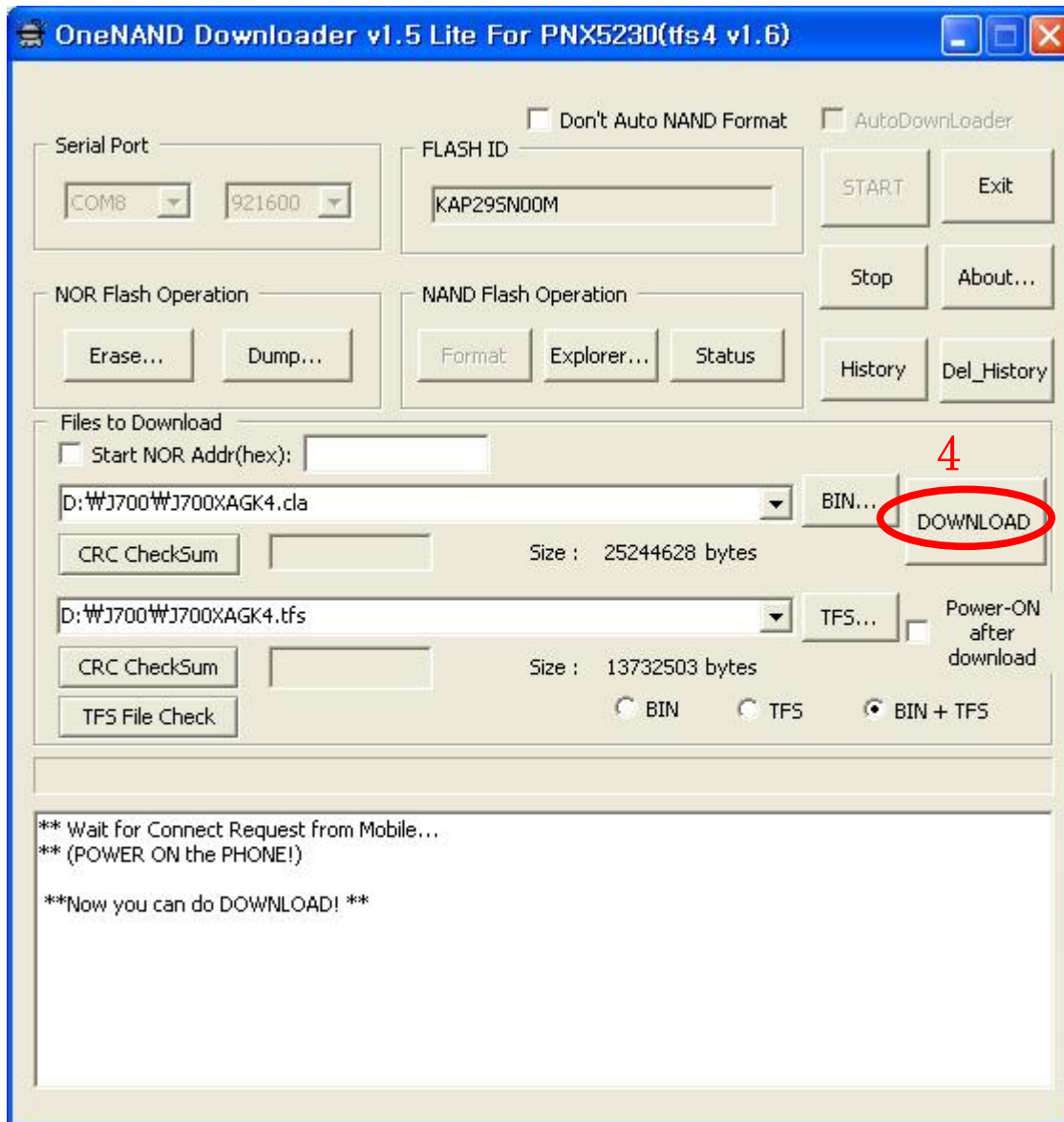


### 3. Select the file(s) what you want to download

- click 'BIN...' to select a binary file.
- click 'TFS...' to select a tfs file.

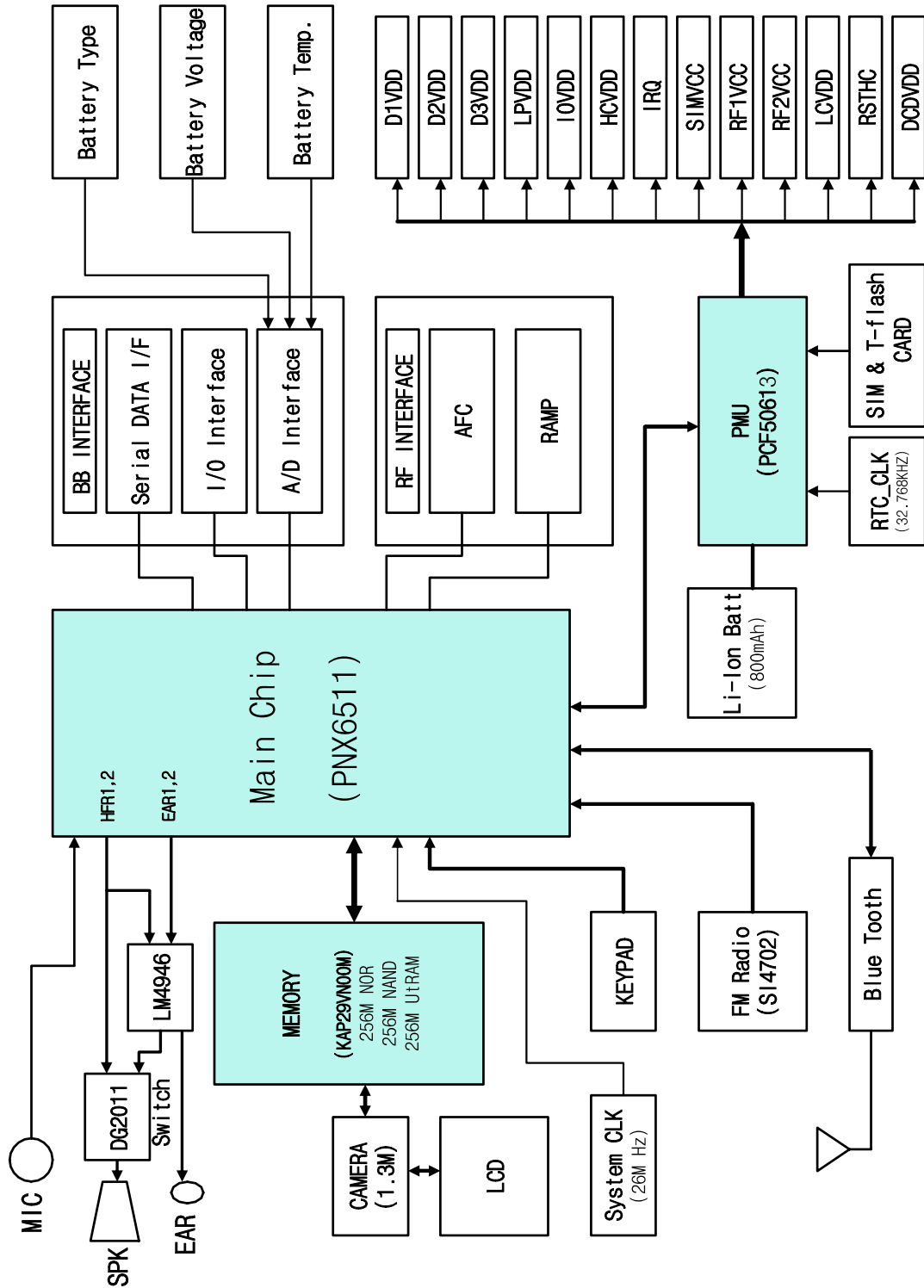


4. Click the 'DOWNLOAD' button to downloading

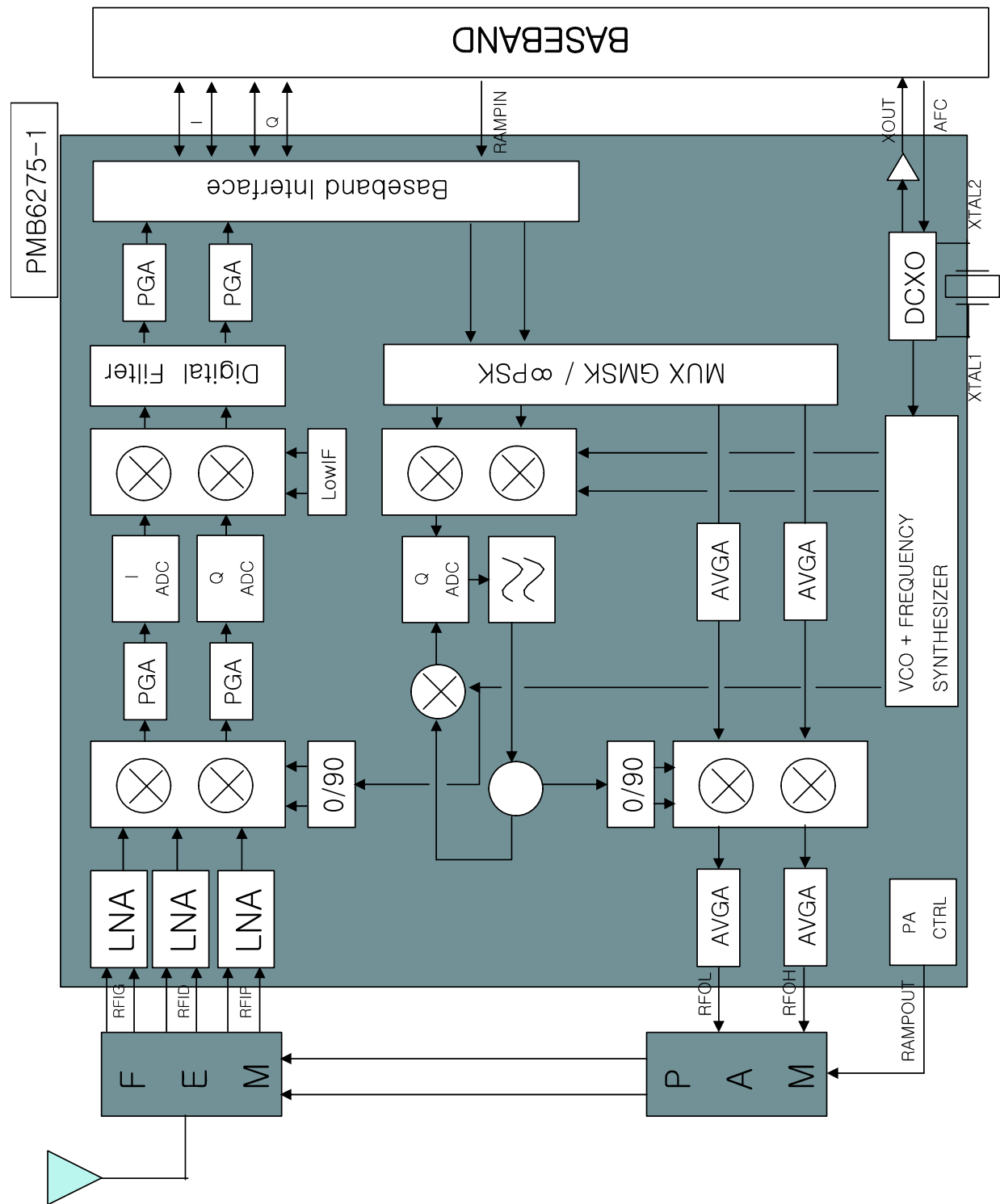


## 7. Block Diagrams

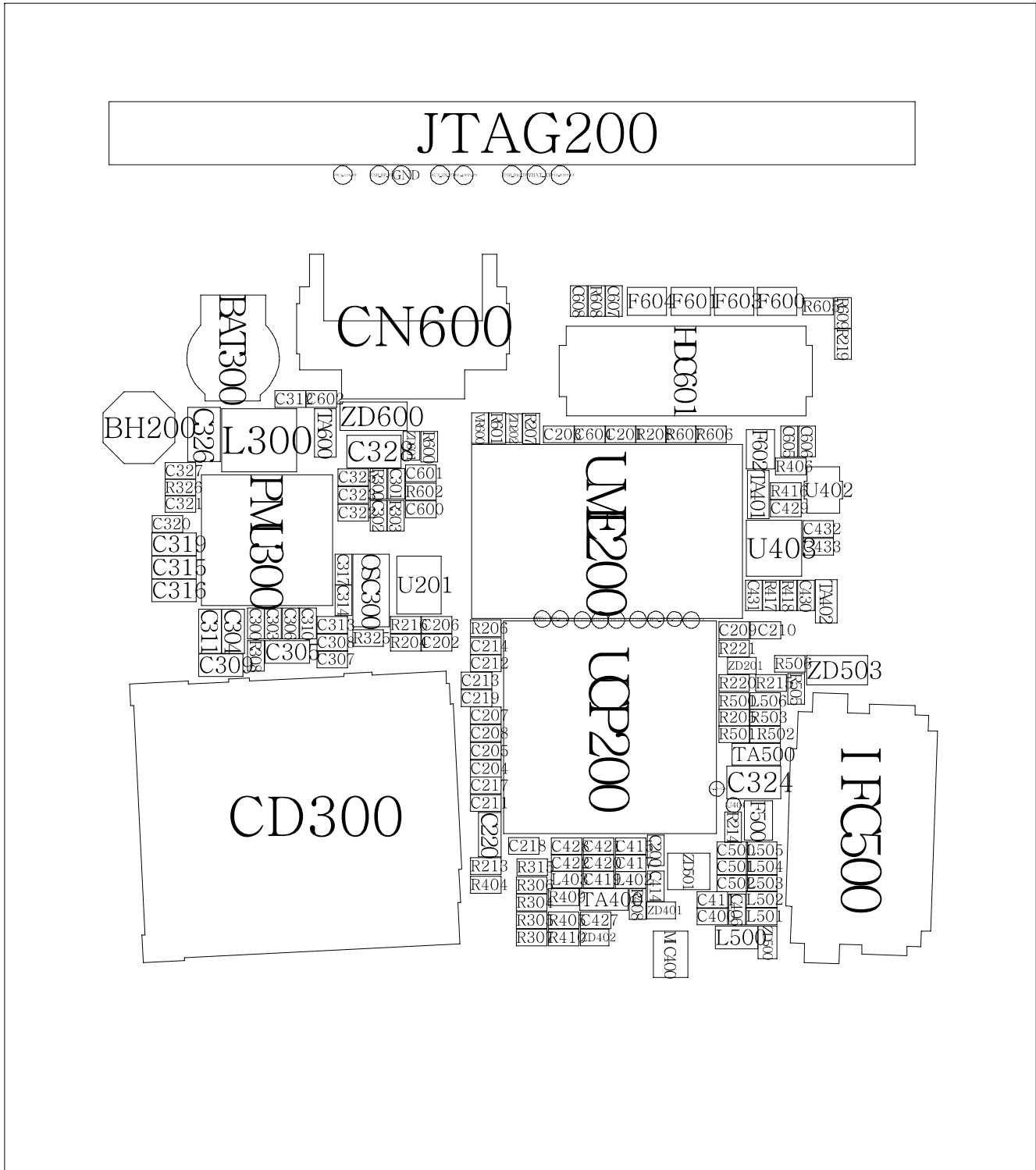
### 7-1. Main Block Diagram

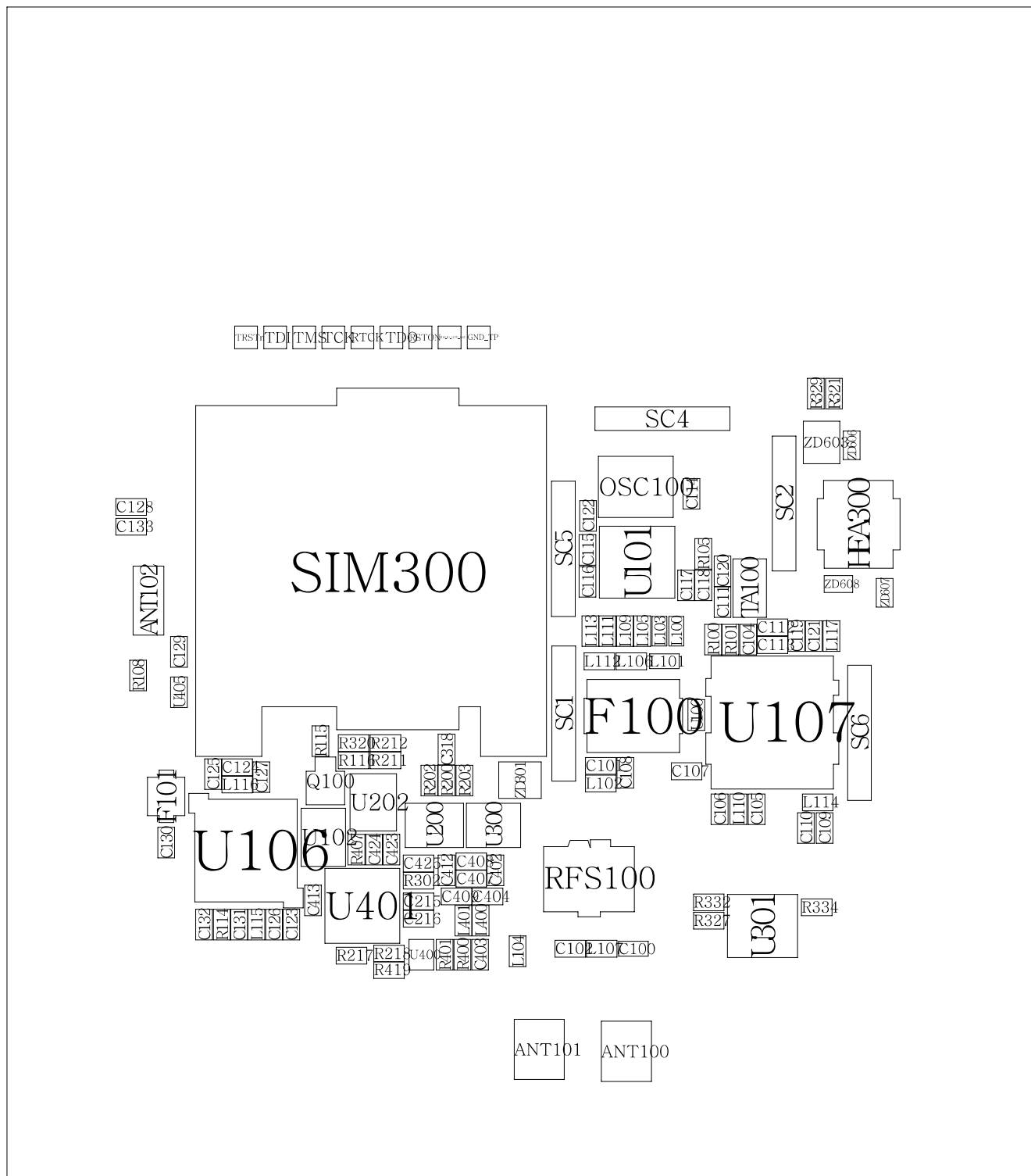


7-2. Baseband Solution Block Diagram



**- Main top view**



**- Main bottom view**

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## 3. Product Function

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### Main Function

- Enhanced Music Function supporting phone
- 1.3 Mega Pixel (CMOS) Camera
- Bluetooth V.2.0 (V-Note support)
- 65K 128x160 TFT 2.0"
- SMS/MMS/E-Mail/Video Recording and Messaging
- J2ME JAVA (MIDP 2.0/CLDC 1.1)
- EMS (Enhanced Message Service)
- WAP 2.0
- MP3/AAC/AAC+/e-AAC+ Ringtone
- GPRS/EDGE Class 10
- Triple Band(GSM900/1800/1900)
- 64 Poly Melody (MIDI)
- MicroSD Card Support
- External Memory
- USB v1.1 Full-speed, Bluetooth 2.0 EDR
- FM Radio Support



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## 10. Reference data

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### 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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# 1. Safety Precautions

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## 1-1. Repair Precaution

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

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

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

You can prevent from ESD damage by static electricity.

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

## 6. Main Electrical Parts List

| SEC Code    | Design LOC | Description         | STATUS |
|-------------|------------|---------------------|--------|
| 0403-001339 | ZD503      | DIODE-ZENER         | SA     |
| 0403-001547 | ZD600      | DIODE-ZENER         | SA     |
| 0406-001267 | ZD500      | DIODE-TVS           | SA     |
| 0406-001286 | ZD301      | DIODE-TVS           | SA     |
| 0406-001286 | ZD501      | DIODE-TVS           | SA     |
| 0406-001286 | ZD603      | DIODE-TVS           | SA     |
| 0406-001288 | ZD201      | DIODE-TVS           | SA     |
| 0406-001288 | ZD202      | DIODE-TVS           | SA     |
| 0406-001288 | ZD401      | DIODE-TVS           | SA     |
| 0406-001288 | ZD402      | DIODE-TVS           | SA     |
| 0406-001288 | ZD601      | DIODE-TVS           | SA     |
| 0406-001288 | ZD606      | DIODE-TVS           | SA     |
| 0406-001288 | ZD607      | DIODE-TVS           | SA     |
| 0406-001288 | ZD608      | DIODE-TVS           | SA     |
| 0505-001325 | Q100       | FET-SILICON         | SA     |
| 0505-002111 | U300       | FET-SILICON         | SA     |
| 0801-000796 | U200       | IC-CMOS LOGIC       | SA     |
| 0801-002237 | U201       | IC-CMOS LOGIC       | SA     |
| 0801-002529 | U102       | IC-CMOS LOGIC       | SA     |
| 0801-003065 | U400       | IC-CMOS LOGIC       | SA     |
| 1001-001428 | U402       | IC-ANALOG MULTIPLEX | SA     |
| 1108-000104 | UME200     | IC-MCP              | SA     |
| 1201-002423 | U107       | IC-POWER AMP        | SA     |
| 1201-002609 | U403       | IC-AUDIO AMP        | SA     |
| 1203-005072 | PMU300     | IC-POWER SUPERVISOR | SA     |
| 1204-002700 | U401       | IC-TUNER            | SA     |
| 1205-002942 | U106       | IC-TRANSCEIVER      | SA     |
| 1205-003335 | U101       | IC-TRANSCEIVER      | SA     |
| 1205-003336 | UCP200     | IC-COMM. CONTROLLER | SA     |
| 1404-001221 | VR600      | THERMISTOR-NTC      | SA     |
| 2007-000140 | R105       | R-CHIP              | SA     |
| 2007-000140 | R216       | R-CHIP              | SA     |
| 2007-000140 | R304       | R-CHIP              | SA     |
| 2007-000148 | R203       | R-CHIP              | SA     |
| 2007-000148 | R204       | R-CHIP              | SA     |
| 2007-000148 | R205       | R-CHIP              | SA     |
| 2007-000148 | R215       | R-CHIP              | SA     |
| 2007-000148 | R219       | R-CHIP              | SA     |
| 2007-000159 | R305       | R-CHIP              | SA     |
| 2007-000162 | R115       | R-CHIP              | SA     |
| 2007-000162 | R206       | R-CHIP              | SA     |
| 2007-000162 | R306       | R-CHIP              | SA     |
| 2007-000162 | R307       | R-CHIP              | SA     |
| 2007-000162 | R308       | R-CHIP              | SA     |
| 2007-000162 | R407       | R-CHIP              | SA     |
| 2007-000162 | R600       | R-CHIP              | SA     |
| 2007-000162 | R605       | R-CHIP              | SA     |
| 2007-000164 | R207       | R-CHIP              | SA     |
| 2007-000164 | R400       | R-CHIP              | SA     |
| 2007-000164 | R401       | R-CHIP              | SA     |
| 2007-000165 | R602       | R-CHIP              | SA     |
| 2007-000170 | R211       | R-CHIP              | SA     |
| 2007-000170 | R212       | R-CHIP              | SA     |

| SEC Code    | Design LOC | Description | STATUS |
|-------------|------------|-------------|--------|
| 2007-000171 | L104       | R-CHIP      | SA     |
| 2007-000171 | R100       | R-CHIP      | SA     |
| 2007-000171 | R102       | R-CHIP      | SA     |
| 2007-000171 | R220       | R-CHIP      | SA     |
| 2007-000171 | R221       | R-CHIP      | SA     |
| 2007-000171 | R327       | R-CHIP      | SA     |
| 2007-000171 | R419       | R-CHIP      | SA     |
| 2007-000171 | R506       | R-CHIP      | SA     |
| 2007-000172 | R502       | R-CHIP      | SA     |
| 2007-000172 | R503       | R-CHIP      | SA     |
| 2007-000758 | R315       | R-CHIP      | SA     |
| 2007-000758 | R329       | R-CHIP      | SA     |
| 2007-001298 | R417       | R-CHIP      | SA     |
| 2007-001298 | R418       | R-CHIP      | SA     |
| 2007-001319 | R217       | R-CHIP      | SA     |
| 2007-001319 | R218       | R-CHIP      | SA     |
| 2007-001333 | R302       | R-CHIP      | SA     |
| 2007-001333 | R320       | R-CHIP      | SA     |
| 2007-001333 | R406       | R-CHIP      | SA     |
| 2007-001333 | R500       | R-CHIP      | SA     |
| 2007-001333 | R501       | R-CHIP      | SA     |
| 2007-001333 | R606       | R-CHIP      | SA     |
| 2007-001333 | R607       | R-CHIP      | SA     |
| 2007-001333 | R608       | R-CHIP      | SA     |
| 2007-002796 | R101       | R-CHIP      | SA     |
| 2007-002796 | R213       | R-CHIP      | SA     |
| 2007-002796 | R410       | R-CHIP      | SA     |
| 2007-002965 | R416       | R-CHIP      | SA     |
| 2007-007107 | R208       | R-CHIP      | SA     |
| 2007-007107 | R326       | R-CHIP      | SA     |
| 2007-007107 | R601       | R-CHIP      | SA     |
| 2007-007138 | R321       | R-CHIP      | SA     |
| 2007-007309 | R214       | R-CHIP      | SA     |
| 2007-007317 | R325       | R-CHIP      | SA     |
| 2007-007489 | R114       | R-CHIP      | SA     |
| 2007-007528 | R404       | R-CHIP      | SA     |
| 2007-007528 | R405       | R-CHIP      | SA     |
| 2007-007528 | R408       | R-CHIP      | SA     |
| 2007-007528 | R409       | R-CHIP      | SA     |
| 2007-007573 | R202       | R-CHIP      | SA     |
| 2007-007573 | R300       | R-CHIP      | SA     |
| 2007-007875 | R200       | R-CHIP      | SA     |
| 2007-008354 | R303       | R-CHIP      | SA     |
| 2203-000233 | C101       | C-CER,CHIP  | SA     |
| 2203-000233 | C107       | C-CER,CHIP  | SA     |
| 2203-000233 | C108       | C-CER,CHIP  | SA     |
| 2203-000233 | C119       | C-CER,CHIP  | SA     |
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| 2203-000233 | C312       | C-CER,CHIP  | SA     |
| 2203-000233 | U100       | C-CER,CHIP  | SA     |
| 2203-000278 | C130       | C-CER,CHIP  | SA     |

| SEC Code    | Design LOC | Description | STATUS |
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| 2203-000311 | C601       | C-CER,CHIP  | SA     |
| 2203-000359 | C104       | C-CER,CHIP  | SA     |
| 2203-000425 | C301       | C-CER,CHIP  | SA     |
| 2203-000425 | C314       | C-CER,CHIP  | SA     |
| 2203-000425 | C317       | C-CER,CHIP  | SA     |
| 2203-000438 | C111       | C-CER,CHIP  | SA     |
| 2203-000438 | C124       | C-CER,CHIP  | SA     |
| 2203-000812 | C113       | C-CER,CHIP  | SA     |
| 2203-000812 | C604       | C-CER,CHIP  | SA     |
| 2203-000812 | C608       | C-CER,CHIP  | SA     |
| 2203-000854 | C400       | C-CER,CHIP  | SA     |
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| 2203-000854 | C414       | C-CER,CHIP  | SA     |
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| 2203-000854 | C427       | C-CER,CHIP  | SA     |
| 2203-002668 | C105       | C-CER,CHIP  | SA     |
| 2203-002709 | C115       | C-CER,CHIP  | SA     |
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| 2203-002709 | C120       | C-CER,CHIP  | SA     |
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| 2203-005057 | C407       | C-CER,CHIP  | SA     |
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| 2203-005395 | C109       | C-CER,CHIP  | SA     |
| 2203-005480 | C432       | C-CER,CHIP  | SA     |
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| 2203-005482 | C209       | C-CER,CHIP  | SA     |
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| 2203-005482 | C214       | C-CER,CHIP  | SA     |
| 2203-005482 | C217       | C-CER,CHIP  | SA     |
| 2203-005482 | C218       | C-CER,CHIP  | SA     |

| SEC Code    | Design LOC | Description | STATUS |
|-------------|------------|-------------|--------|
| 2203-005482 | C219       | C-CER,CHIP  | SA     |
| 2203-005482 | C318       | C-CER,CHIP  | SA     |
| 2203-005482 | C321       | C-CER,CHIP  | SA     |
| 2203-005482 | C403       | C-CER,CHIP  | SA     |
| 2203-005482 | C404       | C-CER,CHIP  | SA     |
| 2203-005482 | C409       | C-CER,CHIP  | SA     |
| 2203-005482 | C417       | C-CER,CHIP  | SA     |
| 2203-005482 | C422       | C-CER,CHIP  | SA     |
| 2203-005482 | C423       | C-CER,CHIP  | SA     |
| 2203-005482 | C425       | C-CER,CHIP  | SA     |
| 2203-005482 | C429       | C-CER,CHIP  | SA     |
| 2203-005496 | C215       | C-CER,CHIP  | SA     |
| 2203-005496 | C216       | C-CER,CHIP  | SA     |
| 2203-005496 | C302       | C-CER,CHIP  | SA     |
| 2203-006047 | C114       | C-CER,CHIP  | SA     |
| 2203-006048 | C126       | C-CER,CHIP  | SA     |
| 2203-006048 | C600       | C-CER,CHIP  | SA     |
| 2203-006137 | C424       | C-CER,CHIP  | SA     |
| 2203-006208 | C304       | C-CER,CHIP  | SA     |
| 2203-006208 | C311       | C-CER,CHIP  | SA     |
| 2203-006257 | C300       | C-CER,CHIP  | SA     |
| 2203-006257 | C303       | C-CER,CHIP  | SA     |
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| 2203-006257 | C323       | C-CER,CHIP  | SA     |
| 2203-006257 | C325       | C-CER,CHIP  | SA     |
| 2203-006324 | C319       | C-CER,CHIP  | SA     |
| 2203-006361 | C324       | C-CER,CHIP  | SA     |
| 2203-006399 | C118       | C-CER,CHIP  | SA     |
| 2203-006474 | C326       | C-CER,CHIP  | SA     |
| 2203-006562 | C125       | C-CER,CHIP  | SA     |
| 2203-006562 | C211       | C-CER,CHIP  | SA     |
| 2203-006562 | C307       | C-CER,CHIP  | SA     |
| 2203-006562 | C430       | C-CER,CHIP  | SA     |
| 2203-006562 | C431       | C-CER,CHIP  | SA     |
| 2203-006562 | C605       | C-CER,CHIP  | SA     |
| 2203-006562 | C606       | C-CER,CHIP  | SA     |
| 2203-006562 | C607       | C-CER,CHIP  | SA     |
| 2203-006562 | R609       | C-CER,CHIP  | SA     |
| 2203-006824 | C220       | C-CER,CHIP  | SA     |
| 2203-006824 | C309       | C-CER,CHIP  | SA     |
| 2203-006825 | C305       | C-CER,CHIP  | SA     |
| 2203-006838 | C123       | C-CER,CHIP  | SA     |
| 2203-006838 | C127       | C-CER,CHIP  | SA     |
| 2203-006838 | C327       | C-CER,CHIP  | SA     |
| 2203-006842 | C132       | C-CER,CHIP  | SA     |
| 2203-006901 | C315       | C-CER,CHIP  | SA     |
| 2203-006901 | C316       | C-CER,CHIP  | SA     |
| 2203-007195 | C328       | C-CER,CHIP  | SA     |

| SEC Code    | Design LOC | Description           | STATUS |
|-------------|------------|-----------------------|--------|
| 2404-001226 | TA402      | C-TA,CHIP             | SA     |
| 2404-001377 | TA400      | C-TA,CHIP             | SA     |
| 2404-001381 | TA401      | C-TA,CHIP             | SA     |
| 2404-001381 | TA500      | C-TA,CHIP             | SA     |
| 2404-001381 | TA600      | C-TA,CHIP             | SA     |
| 2404-001536 | TA100      | C-TA,CHIP             | SA     |
| 2703-001178 | C129       | INDUCTOR-SMD          | SA     |
| 2703-001724 | L111       | INDUCTOR-SMD          | SA     |
| 2703-001724 | L113       | INDUCTOR-SMD          | SA     |
| 2703-001734 | L110       | INDUCTOR-SMD          | SA     |
| 2703-001737 | L112       | INDUCTOR-SMD          | SA     |
| 2703-001749 | R108       | INDUCTOR-SMD          | SA     |
| 2703-002178 | L500       | INDUCTOR-SMD          | SA     |
| 2703-002314 | L102       | INDUCTOR-SMD          | SA     |
| 2703-002365 | C133       | INDUCTOR-SMD          | SA     |
| 2703-002368 | L117       | INDUCTOR-SMD          | SA     |
| 2703-002506 | L107       | INDUCTOR-SMD          | SA     |
| 2703-002586 | L105       | INDUCTOR-SMD          | SA     |
| 2703-002586 | L109       | INDUCTOR-SMD          | SA     |
| 2703-002596 | C100       | INDUCTOR-SMD          | SA     |
| 2703-002596 | L101       | INDUCTOR-SMD          | SA     |
| 2703-002597 | L100       | INDUCTOR-SMD          | SA     |
| 2703-002597 | L103       | INDUCTOR-SMD          | SA     |
| 2703-003331 | L300       | INDUCTOR-SMD          | SA     |
| 2801-004339 | OSC300     | CRYSTAL-SMD           | SA     |
| 2801-004683 | OSC100     | CRYSTAL-SMD           | SA     |
| 2901-001316 | U202       | FILTER-EMI SMD        | SA     |
| 2901-001450 | F500       | FILTER-EMI/ESD        | SA     |
| 2901-001498 | F600       | FILTER-EMI/ESD        | SA     |
| 2901-001498 | F601       | FILTER-EMI/ESD        | SA     |
| 2901-001498 | F602       | FILTER-EMI/ESD        | SA     |
| 2901-001498 | F603       | FILTER-EMI/ESD        | SA     |
| 2901-001498 | F604       | FILTER-EMI/ESD        | SA     |
| 2909-001279 | F101       | FILTER-LC             | SA     |
| 2911-000058 | F100       | DUPLEXER-FEM          | SA     |
| 3301-001534 | L115       | BEAD-SMD              | SA     |
| 3301-001659 | L116       | BEAD-SMD              | SA     |
| 3301-001729 | L400       | BEAD-SMD              | SA     |
| 3301-001729 | L401       | BEAD-SMD              | SA     |
| 3301-001729 | L402       | BEAD-SMD              | SA     |
| 3301-001729 | L403       | BEAD-SMD              | SA     |
| 3301-001812 | L503       | BEAD-SMD              | SA     |
| 3301-001812 | L504       | BEAD-SMD              | SA     |
| 3301-001812 | L505       | BEAD-SMD              | SA     |
| 3301-001917 | L501       | BEAD-SMD              | SA     |
| 3301-001917 | L502       | BEAD-SMD              | SA     |
| 3301-001917 | L506       | BEAD-SMD              | SA     |
| 3301-001970 | L404       | BEAD-SMD              | SA     |
| 3705-001421 | RFS100     | CONNECTOR-COAXIAL     | SA     |
| 3709-001464 | CD300      | CONNECTOR-CARD EDGE   | SA     |
| 3709-001488 | SIM300     | CONNECTOR-CARD EDGE   | SA     |
| 3710-002523 | IFC500     | SOCKET-INTERFACE      | SA     |
| 3711-005578 | HEA300     | HEADER-BOARD TO BOARD | SA     |

| <b>SEC Code</b> | <b>Design LOC</b> | <b>Description</b>    | <b>STATUS</b> |
|-----------------|-------------------|-----------------------|---------------|
| 3711-006010     | HDC601            | HEADER-BOARD TO BOARD | SA            |
| 3711-006348     | CN600             | HEADER-BATTERY        | SA            |
| 4202-001381     | ANT102            | ANTENNA-CHIP          | SA            |
| 4302-001181     | BAT300            | BATTERY-LI(2ND)       | SA            |
| GH70-02640A     | SC1               | ICT SHIELD-CAN CLIP   | SA            |
| GH70-02640A     | SC2               | ICT SHIELD-CAN CLIP   | SA            |
| GH70-02640A     | SC4               | ICT SHIELD-CAN CLIP   | SA            |
| GH70-02640A     | SC5               | ICT SHIELD-CAN CLIP   | SA            |
| GH70-02640A     | SC6               | ICT SHIELD-CAN CLIP   | SA            |

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