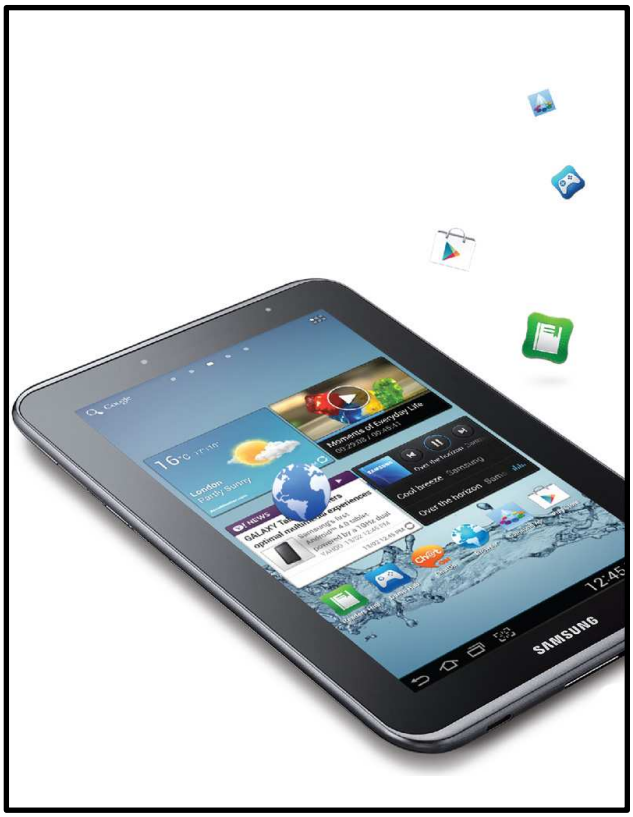
# GSM TELEPHONE

## GT-P3110

# SERVICE Manual

### GSM TELEPHONE



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SAMSUNG
ELECTRONICS




2012. 03. Rev.1.0

# 3. Operation Instruction and Installation

## Main Function

- Android OS: Ice Cream Sandwich(ICS)
- Main 3M FF, VGA
- 7.0" WSGA 16M TFT LCD (PLS_type)
- GPS / BT v3.0 USB v2.0 / WiFi (802.11 b/g/n) / OTG
- Recording definition: 720p / Playback at 1080p resolution
- Sensors: Accelerometer, Electromagnetic, Light
- Additional :
  - 1GHz Dual Core CPU
  - Application store / Precise Motion UI
  - Seamless Sharing Experience.

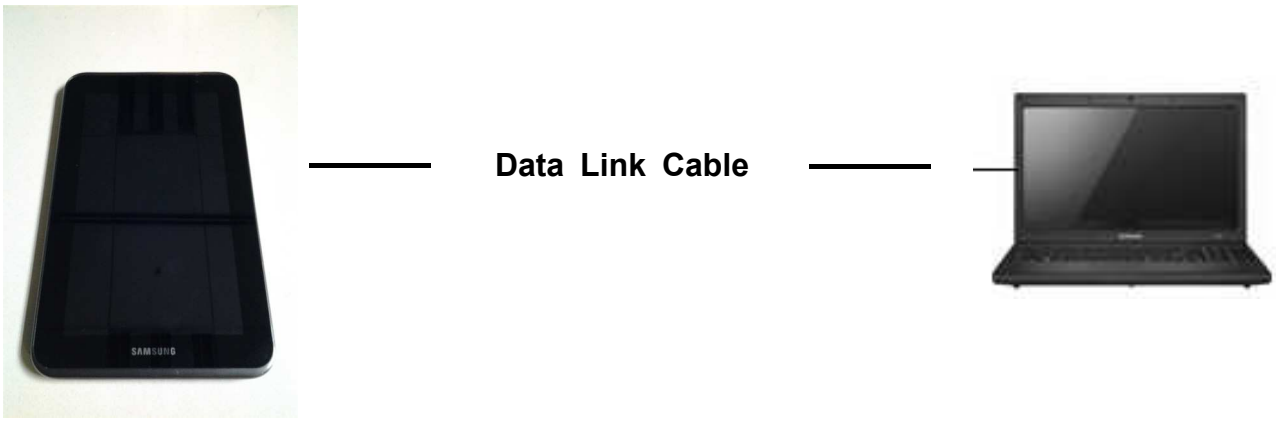
# 6. Level 1 Repair

6-1. S/W Download

6-1-1. Pre-requisite for S/W Downloading

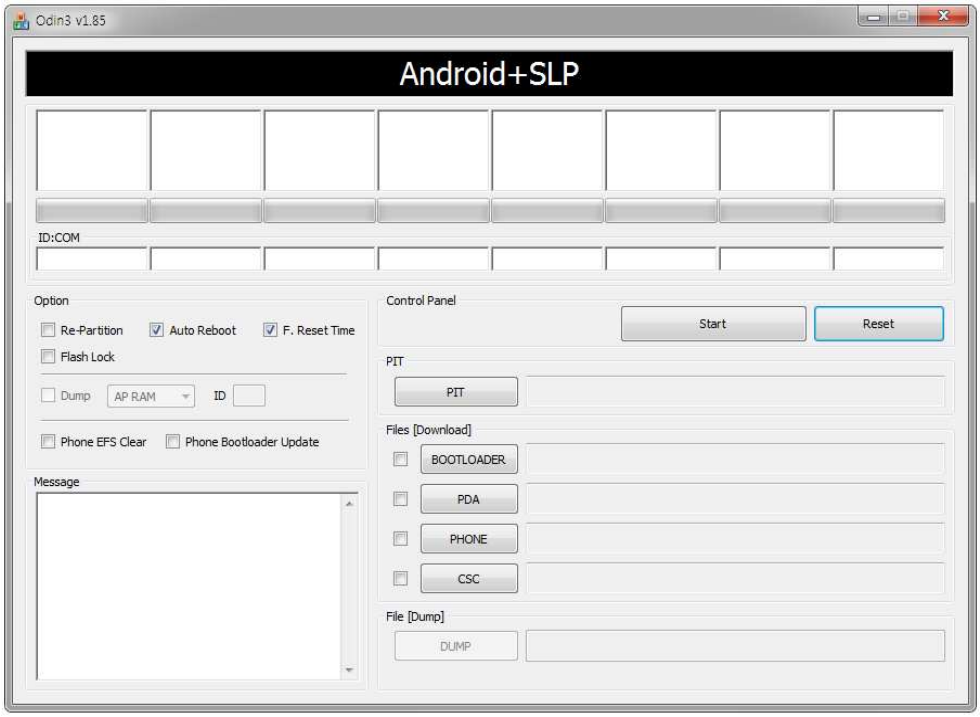
- Downloader Program (**Odin3 v1.85.exe**)
- GT-P3110 Mobile Phone
- Data Link Cable (GH39-01440H)
- Binary files

❖ **Settings**



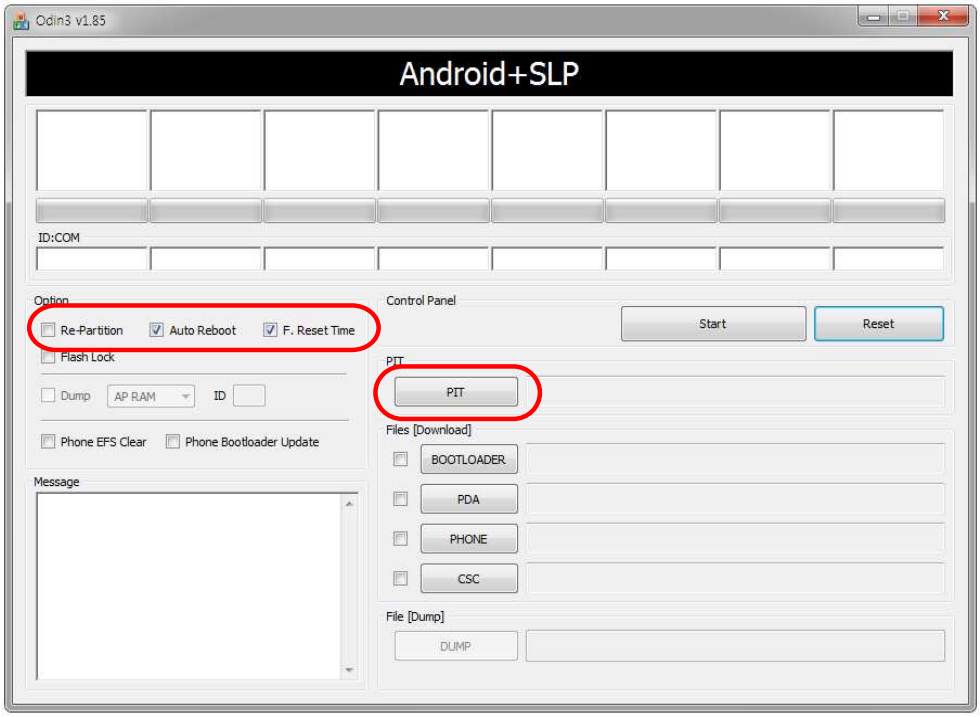
6-1-2. S/W Downloader Program

■ Load the binary download program by executing the **"Odin3 v1.85.exe"** ← **Run this file.**



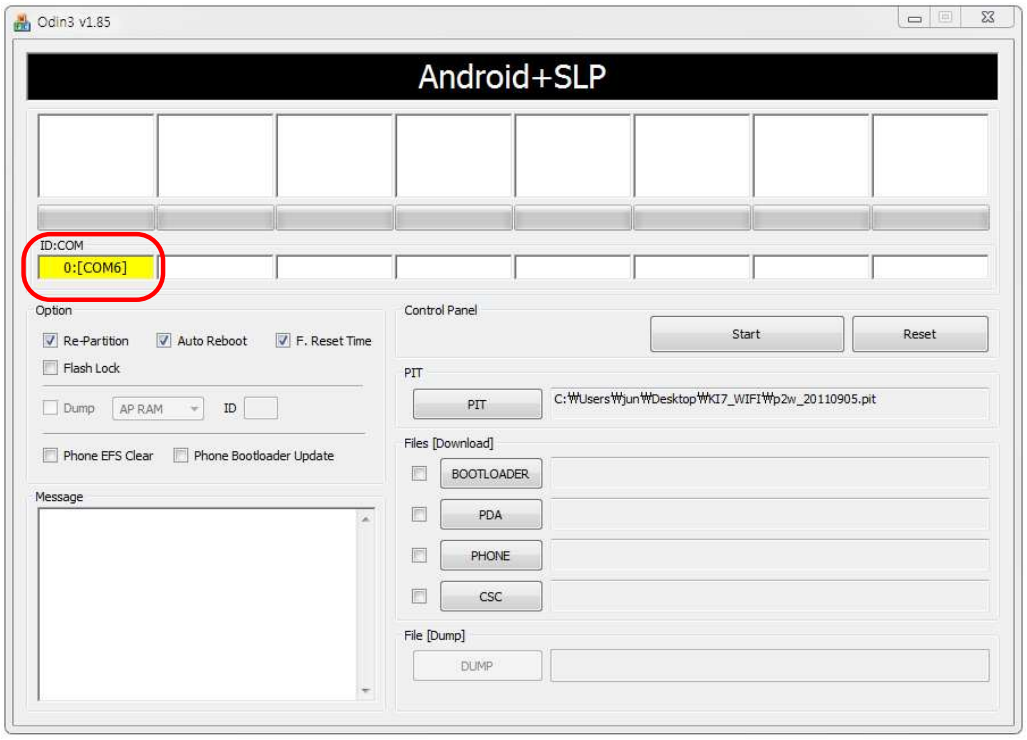

**1**. Option Selection

- Check Auto Reboot and F. Reset Time, then select PIT File



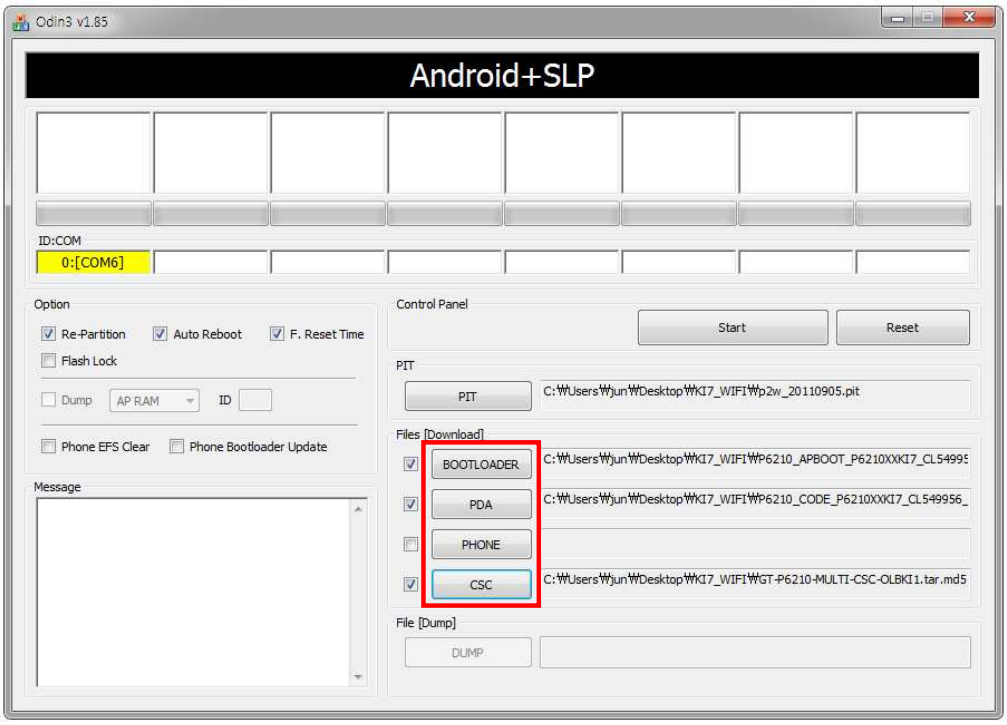
**2**. Enter Device into Download Mode
- Press down on Volume Down button and power key at same time for 10 seconds
- Press down on Volume Up button to enter device into download mode

**3**. Connect the Device to PC via Data Cable.
Make sure ID:COM box highlighted yellow that the device is connected to the PC.

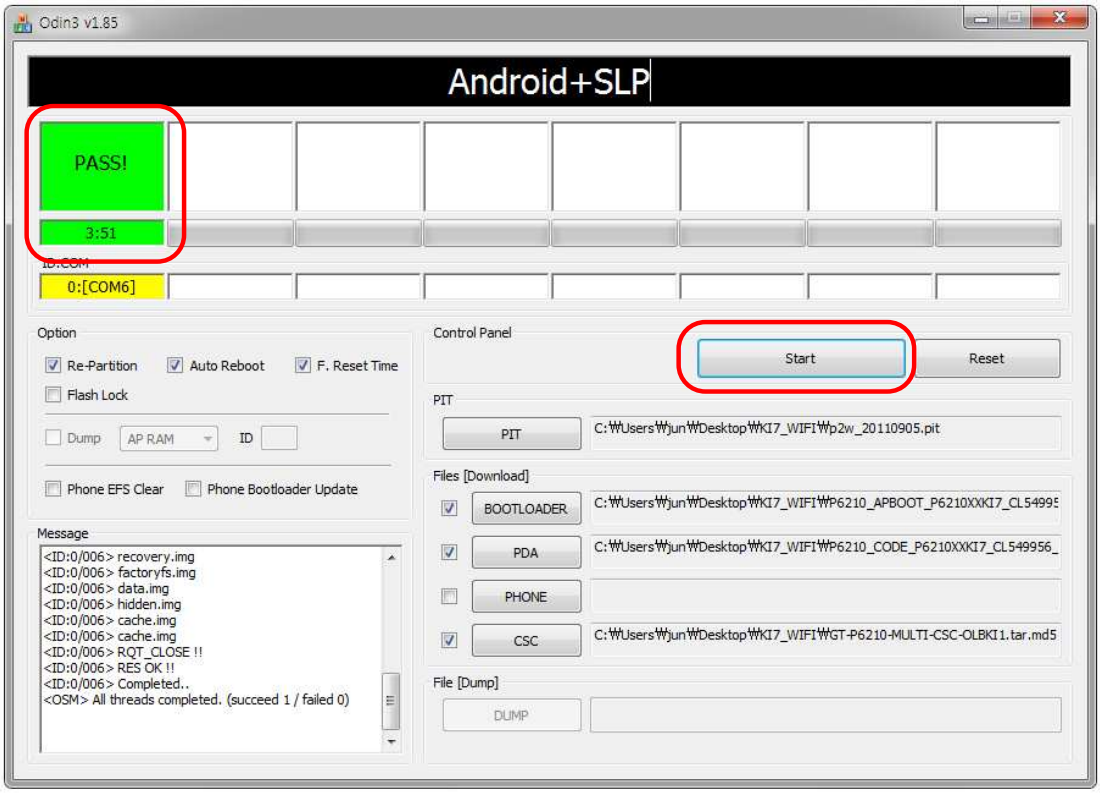



**4**. Enable the check mark by click on the following options,

- Check BOOTLOADER, PDA and CSC Files



**5**. Start downloading binary file into the device by clicking Start Button on the screen. the green colored "PASS!" sign will appear on the upper-left box if the binary file has been successfully downloaded into the device.




**6.** Disconnect the device from the Data cable.

**7**. Once the device boots up, confirm the downloaded version name and etc. : ***#1234#**

Full Reset :
***2767*3855#**

# 9. Reference Abbreviate

## Reference Abbreviate

—AAC: AdvancedAudioCoding.
—AVC: AdvancedVideoCoding.
—BER: BitErrorRate
—BPSK: BinaryPhaseShiftKeying
—CA: ConditionalAccess
—CDM: CodeDivisionMultiplexing
—C/I: CarriertoInterference
—DMB: DigitalMultimediaBroadcasting
—두: EuropeanStandard
—ES: ElementaryStream
—ETSI: EuropeanTelecommunicationsStandardsInstitute
—MPEG: MovingPictureExpertsGroup
—PN: Pseudo-randomNoise
—PS: PilotSymbol
—QPSK: QuadraturePhaseShiftKeying
—RS: Reed-Solomon
—SI: ServiceInformation
—TDM: TimeDivisionMultiplexing
—TS: TransportStream

# 1. Safety Precautions

## 1-1. Repair Precaution

Before attempting any repair or detailed tuning, shield the device from RF noise or static electricity discharges.

Use only demagnetized tools that are specifically designed for small electronic repairs, as most electronic parts are sensitive to electromagnetic forces.

Use only high quality screwdrivers when servicing products. Low quality screwdrivers can easily damage the heads of screws.

Use only conductor wire of the properly gauge and insulation for low resistance, because of the low margin of error of most testing equipment.
We recommend 22-gauge twisted copper wire.

Hand-soldering is not recommended, because printed circuit boards (PCBs) can be easily damaged, even with relatively low heat. Never use a soldering iron with a power rating of more than 100 watts and use only lead-free solder with a melting point below 250°C (482°F).

Prior to disassembling the battery charger for repair, ensure that the AC power is disconnected. Always use the replacement parts that are registered in the SEC system. Third-party replac ement parts may not function properly.

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

Many semiconductors and ESDs in electronic devices are particularly sensitive to static discha rge and can be easily damaged by it. We recommend protecting these components with cond uctive anti-static bags when you store or transport them.

Always use an anti-static strap or wristband and remove electrostatic buildup or dissipate static electricity from your body before repairing ESDs.

Ensure that soldering irons have AC adapter with ground wires and that the ground wires are properly connected.

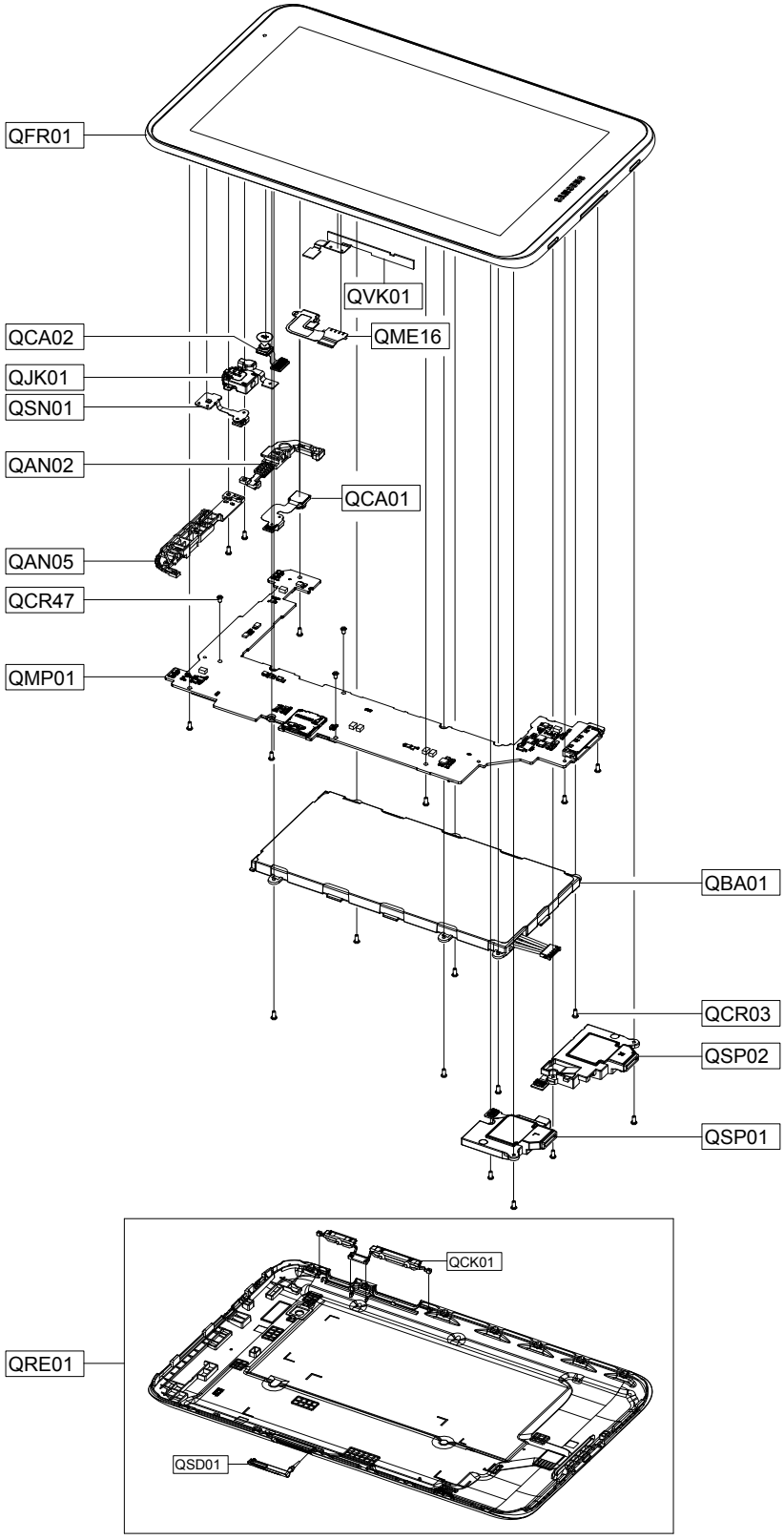
Use only desoldering tools with plastic tips to prevent static discharge.

Properly shield the work environment from accidental electrostatic discharge before opening packages containing ESDs.

The potential for static electricity discharge may be increased in low humidity environments, such as air-conditioned rooms. Increase the airflow to the working area to decrease the chance of accidental static electricity discharges.

# 4. Exploded View and Parts List

## 4-1. Cellular phone Exploded View



## 4-2. Cellular phone Parts list

| Design LOC | | Description | SEC CODE |
|---|---|---|---|
| QCR47 | | SCREW-MACHINE | 6001-001695 |
| QCR03 | | SCREW-MACHINE | 6001-001811 |
| QAN02 | | INTENNA-GPS_(GT-P3100) | GH42-03569A |
| QBA01 | | BATTERY-4000MAH | GH43-03615A |
| QME16 | | UNIT-CON TO CON FPCB | GH59-11578A |
| QVK01 | | KEY FPCB-SIDE_(GT-P3100) | GH59-12113A |
| QCA02 | | CAMERA MODULE-VGA VT_1/10_SF MIPI(GT-P31 | GH59-12126A |
| QJK01 | | MODULE-GT_P3100 EARJACK+MIC FPCB | GH59-12128A |
| QSN01 | | ASSY ETC-SENSOR FPCB(GT_P3110) | GH59-12129A |
| QSP01 | | UNIT-GT-P3110_SPK(L) | GH59-12139A |
| QSP02 | | UNIT-GT-P3110_SPK(R) | GH59-12140A |
| QCA01 | | CAMERA MODULE-3M_FF_1/5 LSI(GT-P3110) | GH59-12197A |
| QAN05 | | DUMMY-MAIN_ANTTENA | GH61-00752A |
| QMP01 | | A/S ASSY-PBA MAIN GT-P3110 | GH82-06426A |
| QFR01 | | ETC ASSY-LCD ASSY(SVC) | GH97-13516A |
| QRE01 | | ASSY CASE-REAR_WIFI_AS | GH98-23237A |
| | QSD01 | COVER-SD_V4 | GH63-00655A |
| | QCK01 | KEY-SIDE_V2_1 | GH64-00352A |

# 5. MAIN Electrical Parts List

| SEC CODE | Design LOC | Description |
|---|---|---|
| 0403-001688 | D504,ZD501,ZD701 | DIODE-ZENER |
| 0406-001239 | D500,D501,D502,D503 | DIODE-TVS |
| 0406-001267 | ZD500,ZD700 | DIODE-TVS |
| 0406-001375 | ZD502,ZD503,ZD504 | DIODE-TVS |
| 0406-001375 | ZD505,ZD506,ZD800 | DIODE-TVS |
| 0406-001413 | ZD900,ZD901 | DIODE-TVS |
| 0406-001506 | ZD402,ZD403,ZD404 | DIODE-TVS |
| 0406-001506 | ZD405 | DIODE-TVS |
| 0407-001002 | D700 | DIODE-ARRAY |
| 0504-001113 | TR700,TR702,TR703 | TR-DIGITAL |
| 0504-001171 | TR500 | TR-DIGITAL |
| 0505-001518 | Q800 | FET-SILICON |
| 0505-002720 | TR701 | FET-SILICON |
| 0505-002748 | TR704,TR705 | FET-SILICON |
| 0505-003052 | U703 | FET-SILICON |
| 0801-003031 | U609 | IC-ANALOG SWITCH |
| 0801-003079 | U606,U608 | IC-ANALOG SWITCH |
| 0902-002849 | UCP600 | IC-MICROPROCESSOR |
| 0903-001762 | U900 | IC-TOUCH IC |
| 1001-001410 | U405 | IC-ANALOG SWITCH |
| 1001-001481 | U504,U505 | IC-USB SWITCH IC |
| 1003-002132 | U503 | IC-LEVEL DRIVER |
| 1003-002216 | U601,U602,U603 | IC-LEVEL DRIVER |
| 1107-002134 | U607 | IC-FLASH |
| 1201-003378 | U200 | IC-GPS LNA |
| 1202-001121 | U500 | IC-ANALOG SWITCH |
| 1202-001123 | U401 | IC-COMPARATOR |
| 1203-004776 | U803 | IC-DC/DC CONVERTER |
| 1203-004818 | U605 | IC-DC/DC CONVERTER |
| 1203-004819 | U403,U700,U901 | IC-DC/DC CONVERTER |
| 1203-005069 | U707 | IC-DC/DC CONVERTER |
| 1203-005396 | U404 | IC-DC/DC CONVERTER |
| 1203-005521 | U705 | IC-DC/DC CONVERTER |
| 1203-006115 | U913 | IC-POWER SUPERVISOR |
| 1203-006346 | U704 | IC-RESET IC |
| 1203-006392 | U702 | IC-FUELGAUGE |

| SEC CODE | Design LOC | Description |
|---|---|---|
| 1203-006493 | U706 | IC-POWER SUPERVISOR |
| 1203-006766 | U502 | IC-SWITCH |
| 1203-006794 | U501 | IC-POWER SUPERVISOR |
| 1203-006817 | U904 | IC-DC/DC CONVERTER |
| 1203-006986 | U800 | IC-DC/DC CONVERTER |
| 1203-007142 | U604 | IC-DC/DC CONVERTER |
| 1203-007210 | U701 | IC-POWER SUPERVISOR |
| 1205-003692 | U400 | IC-ADC IC |
| 1205-004004 | U805 | IC-DC/DC CONVERTER |
| 1205-004313 | U801 | IC-TRANSMITTER |
| 1205-004396 | U201 | IC-GPS |
| 1205-004402 | U203 | IC-Wifi |
| 1205-004509 | U406 | IC-CODEC |
| 1209-002085 | U902 | IC-SENSOR |
| 1209-002106 | U903 | IC-SENSOR |
| 1404-001728 | TH700 | THERMISTOR |
| 1405-001091 | VAR402,VAR403 | VARISTOR |
| 1405-001346 | VAR700 | VARISTOR |
| 2007-000138 | R421,R628,R629 | R-CHIP |
| 2007-000140 | R532,R533 | R-CHIP |
| 2007-000141 | R419,R635,R636,R670 | R-CHIP |
| 2007-000141 | R671 | R-CHIP |
| 2007-000143 | R720,R729,R901,R912 | R-CHIP |
| 2007-000143 | R913 | R-CHIP |
| 2007-000147 | R907 | R-CHIP |
| 2007-000148 | R322,R608,R609,R614 | R-CHIP |
| 2007-000148 | R615,R672,R691,R693 | R-CHIP |
| 2007-000148 | R717,R726,R728 | R-CHIP |
| 2007-000155 | R721 | R-CHIP |
| 2007-000157 | R209,R210,R211,R212 | R-CHIP |
| 2007-000157 | R213,R500,R503,R504 | R-CHIP |
| 2007-000157 | R505,R506,R507 | R-CHIP |
| 2007-000162 | R402,R524,R534,R657 | R-CHIP |
| 2007-000162 | R658,R664,R690,R704 | R-CHIP |
| 2007-000162 | R708,R711,R722,R727 | R-CHIP |
| 2007-000162 | R810 | R-CHIP |

| SEC CODE | Design LOC | Description |
|---|---|---|
| 2007-000163 | R512,R513 | R-CHIP |
| 2007-000164 | R516,R517 | R-CHIP |
| 2007-000167 | R508 | R-CHIP |
| 2007-000170 | R420,R515 | R-CHIP |
| 2007-000172 | R825 | R-CHIP |
| 2007-000173 | R684,R900 | R-CHIP |
| 2007-001217 | R502 | R-CHIP |
| 2007-001292 | R630,R689,R694,R695 | R-CHIP |
| 2007-001295 | R801,R802,R803,R804 | R-CHIP |
| 2007-001295 | R805,R806,R807,R808 | R-CHIP |
| 2007-001295 | R809 | R-CHIP |
| 2007-001298 | R404,R520,R521 | R-CHIP |
| 2007-001306 | R731 | R-CHIP |
| 2007-003015 | R529,R530 | R-CHIP |
| 2007-007014 | R673,R674,R675,R676 | R-CHIP |
| 2007-007014 | R677,R678,R679,R680 | R-CHIP |
| 2007-007014 | R681 | R-CHIP |
| 2007-007092 | R531 | R-CHIP |
| 2007-007099 | R525 | R-CHIP |
| 2007-007131 | R824 | R-CHIP |
| 2007-007132 | R208 | R-CHIP |
| 2007-007137 | R410,R414,R416 | R-CHIP |
| 2007-007142 | R526,R527,R528 | R-CHIP |
| 2007-007156 | R422,R423 | R-CHIP |
| 2007-007195 | R909,R911 | R-CHIP |
| 2007-007312 | R424,R823 | R-CHIP |
| 2007-007318 | R409,R412,R418 | R-CHIP |
| 2007-007517 | R687,R688 | R-CHIP |
| 2007-007529 | R509 | R-CHIP |
| 2007-007538 | R661 | R-CHIP |
| 2007-007573 | R510 | R-CHIP |
| 2007-007700 | R407 | R-CHIP |
| 2007-007875 | R405 | R-CHIP |
| 2007-007942 | R403 | R-CHIP |
| 2007-008045 | R626,R627,R638,R639 | R-CHIP |
| 2007-008045 | R735 | R-CHIP |

| SEC CODE | Design LOC | Description |
|---|---|---|
| 2007-008055 | R430,R709,R902 | R-CHIP |
| 2007-008211 | R518,R519,R903,R919 | R-CHIP |
| 2007-008275 | R511 | R-CHIP |
| 2007-008354 | R656 | R-CHIP |
| 2007-008403 | R501 | R-CHIP |
| 2007-008483 | R522,R523,R712 | R-CHIP |
| 2007-008502 | R406 | R-CHIP |
| 2007-008516 | R643,R644,R813,R817 | R-CHIP |
| 2007-008516 | R904 | R-CHIP |
| 2007-008579 | R207 | R-CHIP |
| 2007-008588 | R400,R625,R637,R669 | R-CHIP |
| 2007-008588 | R685,R686 | R-CHIP |
| 2007-008774 | R634,R908 | R-CHIP |
| 2007-009108 | R668 | R-CHIP |
| 2007-009155 | R667 | R-CHIP |
| 2007-009233 | R701 | R-CHIP |
| 2007-009314 | R733,R734 | R-CHIP |
| 2007-009354 | R600,R617 | R-CHIP |
| 2007-010509 | R713 | R-CHIP |
| 2007-010856 | R736 | R-CHIP |
| 2203-000233 | C206,C235,C236 | C-CERAMIC,CHIP |
| 2203-000254 | C747,C802 | C-CERAMIC,CHIP |
| 2203-000278 | C231,C232,C234,C239 | C-CERAMIC,CHIP |
| 2203-000278 | C240,C241,C242,C244 | C-CERAMIC,CHIP |
| 2203-000278 | C247,C825 | C-CERAMIC,CHIP |
| 2203-000386 | C436,C437 | C-CERAMIC,CHIP |
| 2203-000425 | C439,C443,C444 | C-CERAMIC,CHIP |
| 2203-000438 | C233 | C-CERAMIC,CHIP |
| 2203-000585 | C228,C695 | C-CERAMIC,CHIP |
| 2203-000696 | C210 | C-CERAMIC,CHIP |
| 2203-001153 | C431,C438 | C-CERAMIC,CHIP |
| 2203-001239 | C440,C441,C442,C924 | C-CERAMIC,CHIP |
| 2203-001239 | C925 | C-CERAMIC,CHIP |
| 2203-001437 | C238 | C-CERAMIC,CHIP |
| 2203-002687 | C746 | C-CERAMIC,CHIP |
| 2203-002709 | C211 | C-CERAMIC,CHIP |

| SEC CODE | Design LOC | Description |
|---|---|---|
| 2203-005395 | C248 | C-CERAMIC,CHIP |
| 2203-005725 | C214 | C-CERAMIC,CHIP |
| 2203-005727 | C224,C715,C716,C912 | C-CERAMIC,CHIP |
| 2203-005729 | C222,C429 | C-CERAMIC,CHIP |
| 2203-005732 | C432 | C-CERAMIC,CHIP |
| 2203-005736 | C200,C250 | C-CERAMIC,CHIP |
| 2203-005806 | C203 | C-CERAMIC,CHIP |
| 2203-006048 | C220,C221,C223,C243 | C-CERAMIC,CHIP |
| 2203-006048 | C507,C508,C607,C612 | C-CERAMIC,CHIP |
| 2203-006048 | C651,C654,C668,C684 | C-CERAMIC,CHIP |
| 2203-006048 | C685,C748,C932 | C-CERAMIC,CHIP |
| 2203-006190 | C655,C691,C693,C694 | C-CERAMIC,CHIP |
| 2203-006190 | C731 | C-CERAMIC,CHIP |
| 2203-006194 | C216 | C-CERAMIC,CHIP |
| 2203-006348 | C513 | C-CERAMIC,CHIP |
| 2203-006399 | C411,C416,C619,C620 | C-CERAMIC,CHIP |
| 2203-006399 | C666,C675,C689,C724 | C-CERAMIC,CHIP |
| 2203-006423 | C204,C402,C407,C601 | C-CERAMIC,CHIP |
| 2203-006423 | C602,C603,C604,C606 | C-CERAMIC,CHIP |
| 2203-006423 | C608,C609,C611,C613 | C-CERAMIC,CHIP |
| 2203-006423 | C614,C621,C622,C625 | C-CERAMIC,CHIP |
| 2203-006423 | C626,C627,C630,C631 | C-CERAMIC,CHIP |
| 2203-006423 | C632,C634,C635,C636 | C-CERAMIC,CHIP |
| 2203-006423 | C637,C638,C640,C641 | C-CERAMIC,CHIP |
| 2203-006423 | C642,C649,C652,C653 | C-CERAMIC,CHIP |
| 2203-006423 | C661,C662,C663,C664 | C-CERAMIC,CHIP |
| 2203-006423 | C667,C669,C670,C671 | C-CERAMIC,CHIP |
| 2203-006423 | C678,C682,C909,C910 | C-CERAMIC,CHIP |
| 2203-006423 | C915 | C-CERAMIC,CHIP |
| 2203-006562 | C226,C400,C401,C413 | C-CERAMIC,CHIP |
| 2203-006562 | C415,C505,C506,C510 | C-CERAMIC,CHIP |
| 2203-006562 | C600,C688,C723,C743 | C-CERAMIC,CHIP |
| 2203-006562 | C749,C803,C804,C805 | C-CERAMIC,CHIP |
| 2203-006562 | C900,C901,C902,C903 | C-CERAMIC,CHIP |
| 2203-006562 | C905,C907,C919,C920 | C-CERAMIC,CHIP |
| 2203-006681 | C753,C823 | C-CERAMIC,CHIP |

| SEC CODE | Design LOC | Description |
|---|---|---|
| 2203-006824 | C729,C732 | C-CERAMIC,CHIP |
| 2203-006839 | C215,C679,C683,C714 | C-CERAMIC,CHIP |
| 2203-006839 | C921 | C-CERAMIC,CHIP |
| 2203-006841 | C701 | C-CERAMIC,CHIP |
| 2203-006844 | C623 | C-CERAMIC,CHIP |
| 2203-006872 | C201,C202,C212,C213 | C-CERAMIC,CHIP |
| 2203-006872 | C403,C425,C427,C428 | C-CERAMIC,CHIP |
| 2203-006872 | C690,C703,C704,C708 | C-CERAMIC,CHIP |
| 2203-006872 | C709,C713,C754 | C-CERAMIC,CHIP |
| 2203-006979 | C207,C751 | C-CERAMIC,CHIP |
| 2203-007133 | C511,C733 | C-CERAMIC,CHIP |
| 2203-007210 | C628,C629,C633,C656 | C-CERAMIC,CHIP |
| 2203-007210 | C657,C658,C659,C660 | C-CERAMIC,CHIP |
| 2203-007210 | C665,C673,C674 | C-CERAMIC,CHIP |
| 2203-007240 | C686,C734 | C-CERAMIC,CHIP |
| 2203-007269 | C744 | C-CERAMIC,CHIP |
| 2203-007270 | C741,C742,C817 | C-CERAMIC,CHIP |
| 2203-007271 | C205,C230,C702,C705 | C-CERAMIC,CHIP |
| 2203-007271 | C707,C710,C756,C800 | C-CERAMIC,CHIP |
| 2203-007271 | C815,C816,C906,C908 | C-CERAMIC,CHIP |
| 2203-007271 | C911,C913,C929,C930 | C-CERAMIC,CHIP |
| 2203-007271 | C931,C933,C934,C936 | C-CERAMIC,CHIP |
| 2203-007279 | C725,C726,C735,C736 | C-CERAMIC,CHIP |
| 2203-007279 | C737,C738,C739,C740 | C-CERAMIC,CHIP |
| 2203-007317 | C218,C219,C229,C504 | C-CERAMIC,CHIP |
| 2203-007342 | C706,C824 | C-CERAMIC,CHIP |
| 2203-007391 | C605,C610,C624,C650 | C-CERAMIC,CHIP |
| 2203-007392 | C717 | C-CERAMIC,CHIP |
| 2203-007393 | C217,C227,C617,C618 | C-CERAMIC,CHIP |
| 2203-007393 | C639,C647,C648,C687 | C-CERAMIC,CHIP |
| 2203-007393 | C700,C718,C719,C720 | C-CERAMIC,CHIP |
| 2203-007393 | C721,C722,C752 | C-CERAMIC,CHIP |
| 2203-007449 | C643,C644,C672,C676 | C-CERAMIC,CHIP |
| 2203-007449 | C696,C697,C730,C914 | C-CERAMIC,CHIP |
| 2203-007449 | C916,C917,C918,C926 | C-CERAMIC,CHIP |
| 2203-007449 | C927,C928,C935 | C-CERAMIC,CHIP |

| SEC CODE | Design LOC | Description |
|---|---|---|
| 2203-007474 | C246,C512 | C-CERAMIC,CHIP |
| 2203-007634 | C509 | C-CERAMIC,CHIP |
| 2203-007693 | C727,C728 | C-CERAMIC,CHIP |
| 2203-007755 | C245 | C-CERAMIC,CHIP |
| 2203-007775 | C404,C405,C406,C410 | C-CERAMIC,CHIP |
| 2203-007775 | C419,C692,C711,C712 | C-CERAMIC,CHIP |
| 2203-007775 | C755 | C-CERAMIC,CHIP |
| 2203-007781 | C500,C501,C502,C503 | C-CERAMIC,CHIP |
| 2203-007795 | C615,C616,C645,C646 | C-CERAMIC,CHIP |
| 2203-007796 | C408,C409,C417,C418 | C-CERAMIC,CHIP |
| 2203-007796 | C422,C423,C424,C426 | C-CERAMIC,CHIP |
| 2203-007840 | C801 | C-CERAMIC,CHIP |
| 2404-001561 | TA400,TA402 | C-TA,CHIP |
| 2703-001737 | L211 | INDUCTOR-SMD |
| 2703-002649 | L214 | INDUCTOR-SMD |
| 2703-003533 | L600 | INDUCTOR-SMD |
| 2703-003545 | L212 | INDUCTOR-SMD |
| 2703-003687 | L500 | INDUCTOR-SMD |
| 2703-003754 | L901 | INDUCTOR-SMD |
| 2703-003911 | L700,L701,L702,L703 | INDUCTOR-SMD |
| 2703-003911 | L704 | INDUCTOR-SMD |
| 2703-004088 | L207 | INDUCTOR-SMD |
| 2703-004225 | L705 | INDUCTOR-SMD |
| 2801-004551 | OSC700 | CRYSTAL-UNIT |
| 2801-005107 | OSC201 | CRYSTAL-UNIT |
| 2804-001884 | OSC600 | OSCILLATOR-CLOCK |
| 2804-001935 | OSC400 | OSCILLATOR-CLOCK |
| 2809-001374 | OSC200 | OSCILLATOR-VCTCXO |
| 2901-001674 | F800,F801,F802,F900 | FILTER-EMI |
| 2901-001674 | F901 | FILTER-EMI |
| 2904-001988 | F200 | FILTER-SAW |
| 2909-001307 | F201 | FILTER-DUPLEXER |
| 2911-000168 | U202 | FILTER |
| 3301-001659 | L201 | CORE-FERRITE |
| 3301-001885 | L403,L404,L406,L407 | CORE-FERRITE |
| 3301-001885 | L408,L409,L410 | CORE-FERRITE |

| SEC CODE | Design LOC | Description |
|---|---|---|
| 3301-001895 | L200,L205,L206 | CORE-FERRITE |
| 3301-001901 | L900 | CORE-FERRITE |
| 3301-001929 | L400,L401 | CORE-FERRITE |
| 3301-001956 | L804 | CORE-FERRITE |
| 3301-002066 | L902 | CORE-FERRITE |
| 3301-002085 | L203,L204 | CORE-FERRITE |
| 3709-001575 | CD500 | CONNECTOR-CARD |
| 3710-003319 | IFC500 | CONNECTOR-SOCKET |
| 3711-005618 | HDC902 | CONNECTOR-HEADER |
| 3711-006615 | HDC400,HDC401,HDC800 | CONNECTOR-HEADER |
| 3711-006615 | HDC901,HEA400 | CONNECTOR-HEADER |
| 3711-006852 | HDC900,HDC903 | CONNECTOR-HEADER |
| 3711-006882 | HDC801 | CONNECTOR-HEADER |
| 3711-007173 | HDC600 | CONNECTOR-HEADER |
| 3711-007494 | CON700 | CONNECTOR-HEADER |
| 3712-001348 | ANT202 | CONNECTOR |
| 3712-001375 | ANT200,ANT201 | CONNECTOR |
| GH62-00019A | CON100,CON101,CON102 | SMR-TS-3-1.5-2 |
| GH62-00019A | CON103,CON104,CON105 | SMR-TS-3-1.5-2 |
| GH62-00019A | CON106 | SMR-TS-3-1.5-2 |
| GH70-07744A | SC200 | SHIELDCAN-P2-GPS-1 |
| GH98-21816A | SC201 | SHIELDCAN-P2-WIFI |

# 7. Level 2 Repair

## 7-1. Disassembly and assembly Instructions

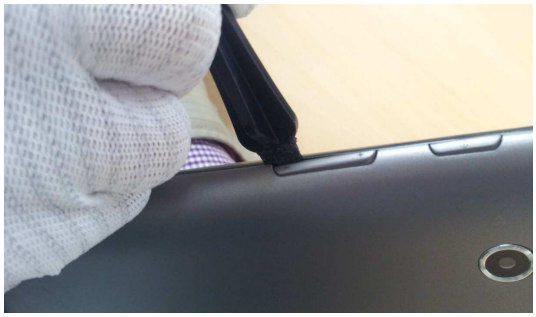
### 7-1-1. Disassembly

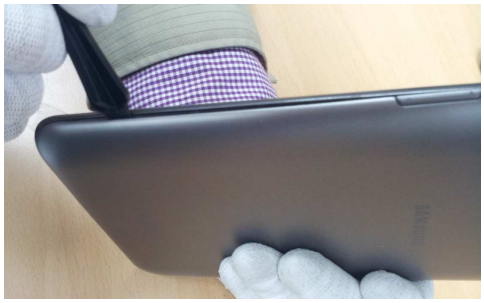
**1** Disassemble the rear cover with the front cover by using the hook


: Hook (24 Point)

Be careful not to scratch cover.
Follow the numbered sequence when you disjoint

**2** Put the disassemble jig as shown in the picture below. And disassemble hooks in regular sequence.



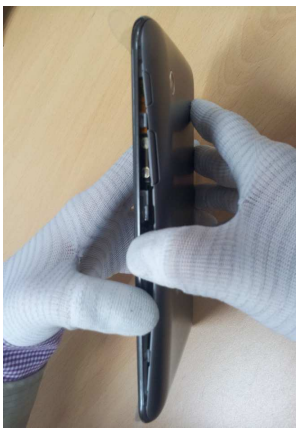


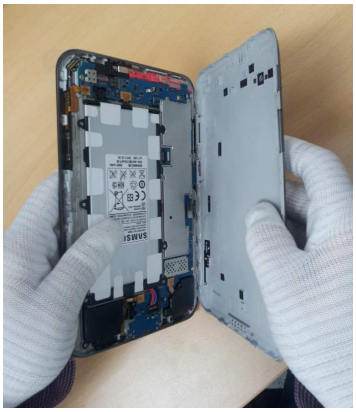
Be careful not to scratch cover.
Follow the numbered sequence when you disjoint

**3** Disassemble the rest of the hooks.

Be careful not to scratch cover.
Follow the numbered sequence when you disjoint

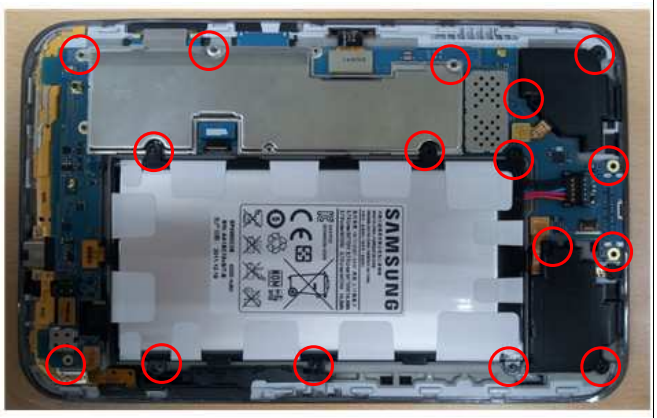
**4** Put your hand has opened between the front assy and the rear cover. First, disassemble the hooks in the direction of IF connector. And then disassemble all the remain hooks.





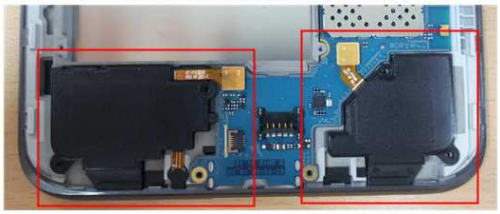
Be careful not to scratch cover.
Follow the numbered sequence when you disjoint

**5** Carefully release the screws at 16 different locations from the Front.
(L1.4*3.0, Torque 0.9 ~ 1.0 kgf.cm)




Be careful not to scratch cover

**6** Separate the Speaker, Battery from the PBA.

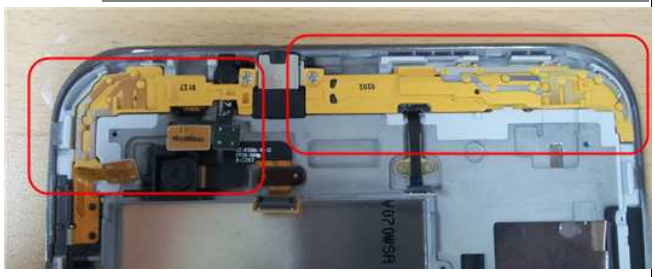
Be careful not to damage the FPCBs
Be careful not to damage the wires

**7** Separate IF Connector, TSP, LCD, 3M Camera, VGA Camera, Volume Key, Earjack FPCBs from the PBA

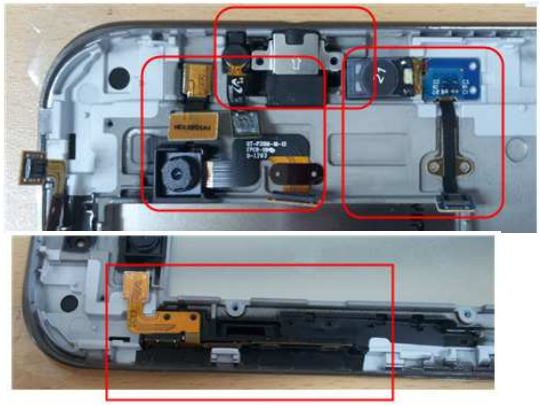
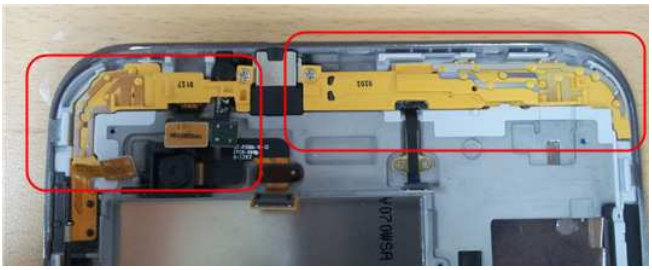
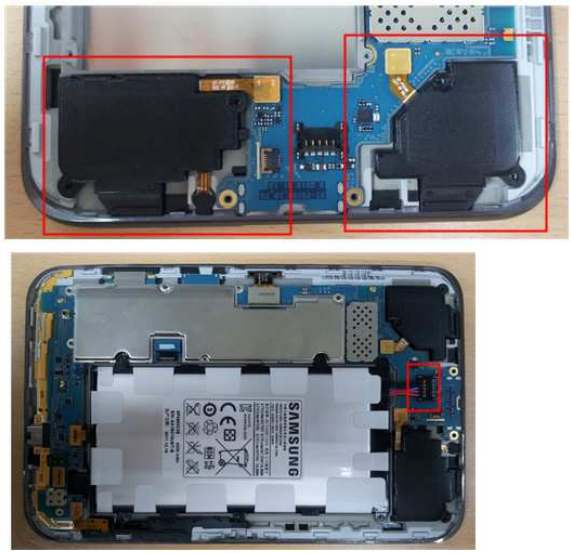
Be careful not to damage the FPCBs

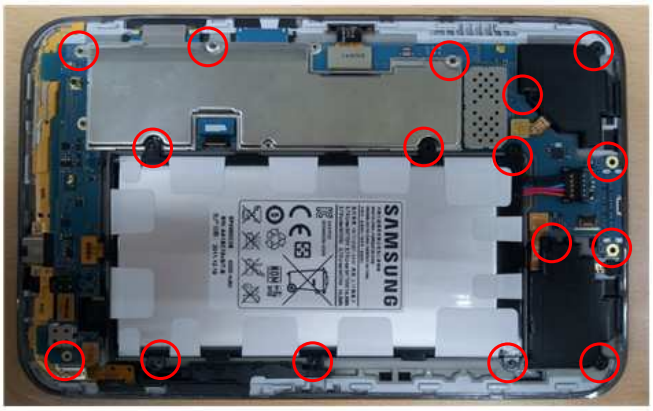
**8** Separate PBA from the Front.

Be careful not to scratch cover

| | |
|---|---|
| **9** Separate the Intenna, 3M Camera, Earjack, Volume FPCB, VGA Camera, Sensor FPCB from the Front.<br>  <br>  <br>  | |
| Be careful not to damage the FPCBs | |
| | |
| | |

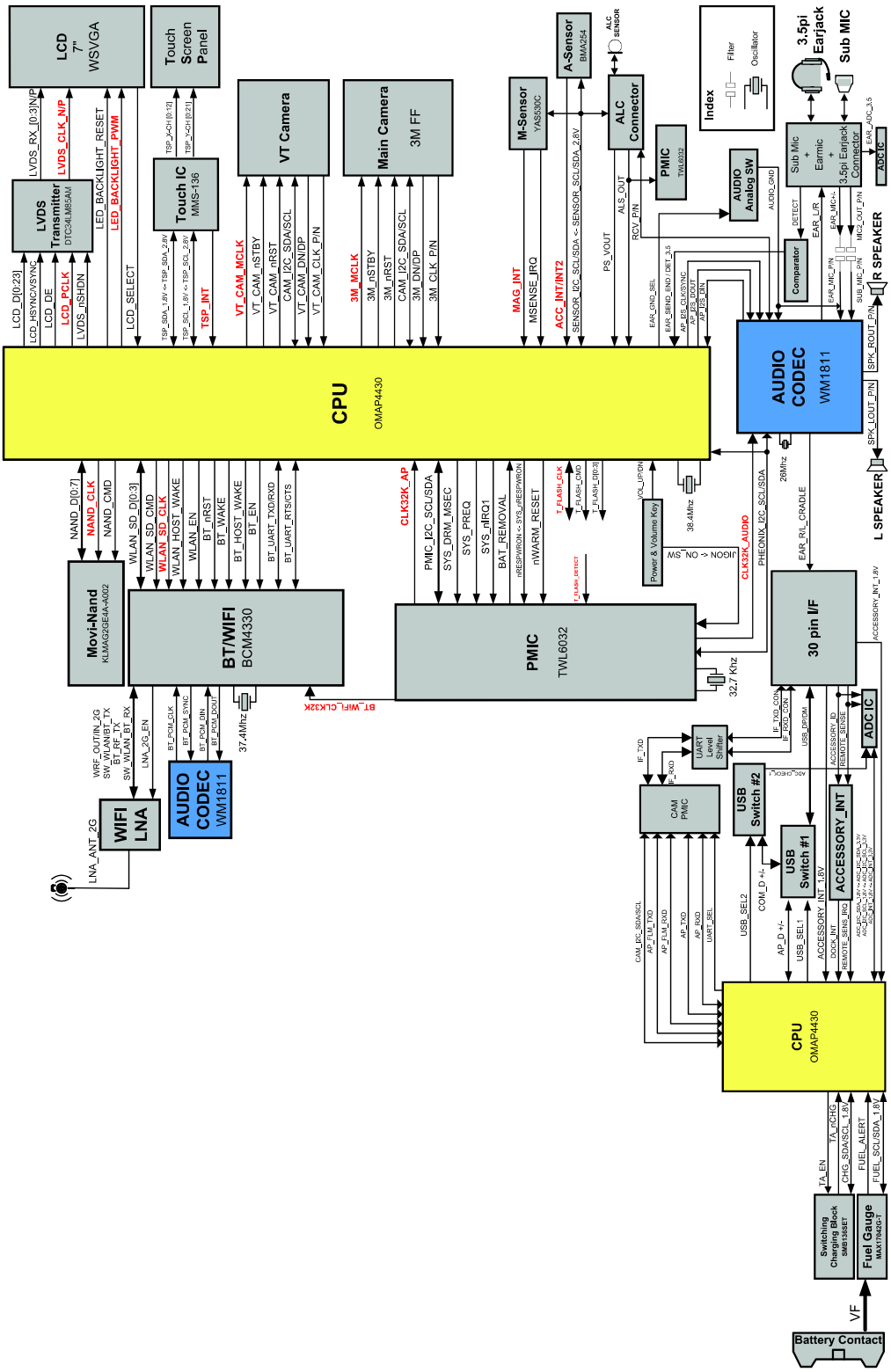
## 7-1-2. assemble

| | |
|---|---|
| 1 Assemble the 3M Camera, Earjack, Volume FPCB, VGA Camera, Sensor FPCB<br>  | 2 Assemble the Intenna<br>  |
| Be careful not to damage the FPCBs | Be careful not to damage the FPCBs |
| 3 Assemble PBA and all Connectors<br>  | 4 Assemble the Speakers Battery<br>  |
| Be careful not to damage the FPCBs | Be careful not to damage the FPCBs |

| | |
|---|---|
| **5** Screw at 16 point (L1.4*3.0, Torque 0.9 ~ 1.0 kgf.cm)<br>  | **6** Assemble the Rear.<br>  <br>  |
| Be careful not to damage the FPCBs | Be careful not to damage the FPCBs, not to scratch cover. |

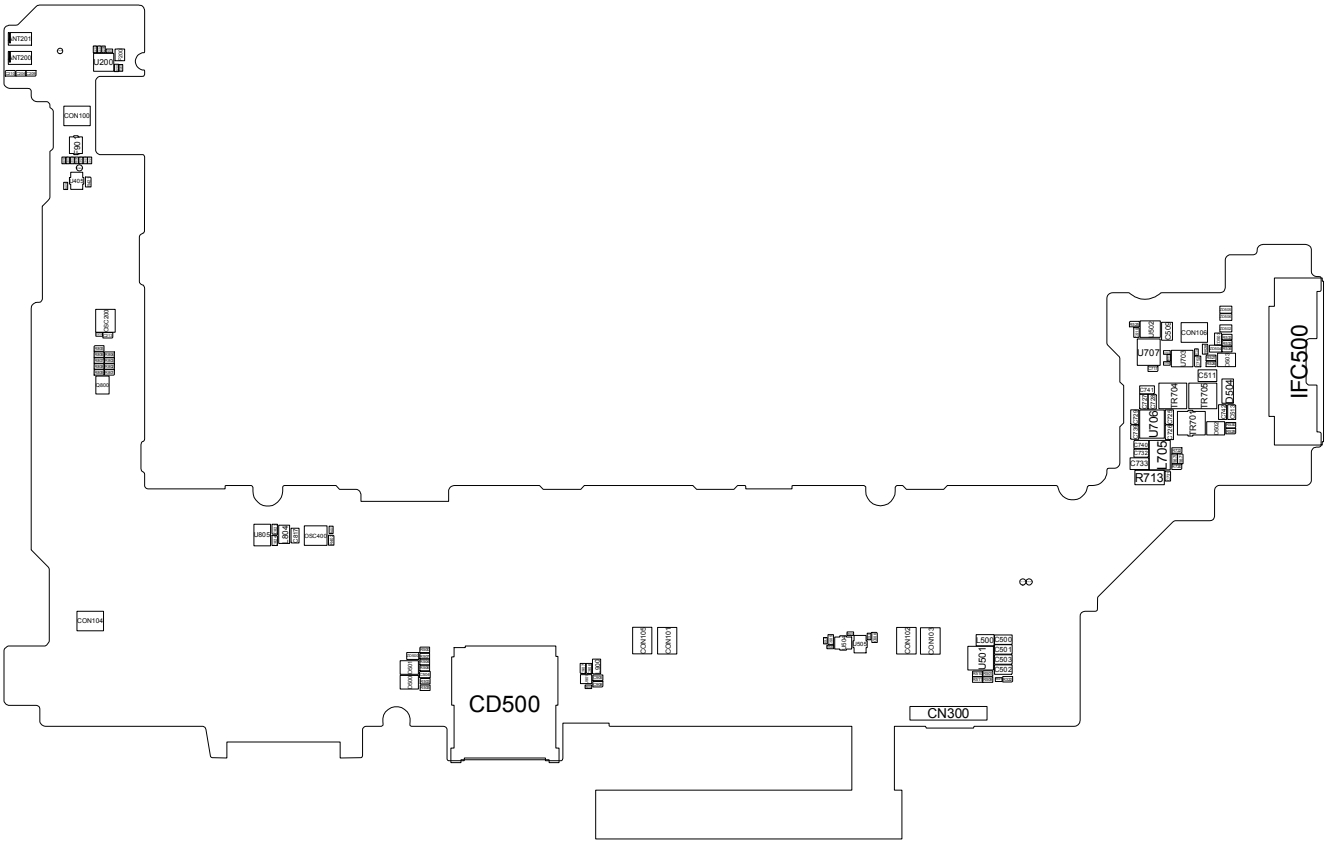
# 8. Level 3 Repair

## 8-1. Block Diagram

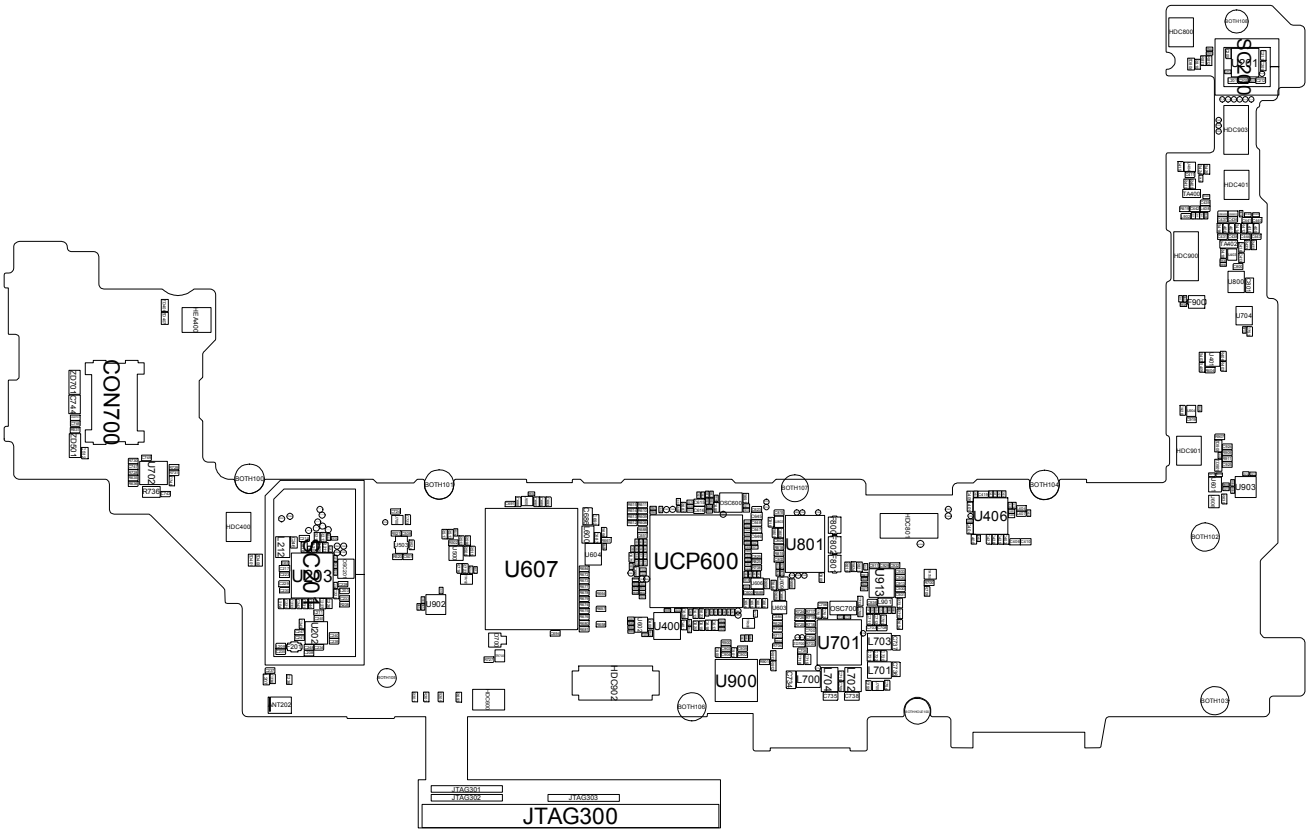


## 8-2. PCB Diagrams

### 8-2-1. Top

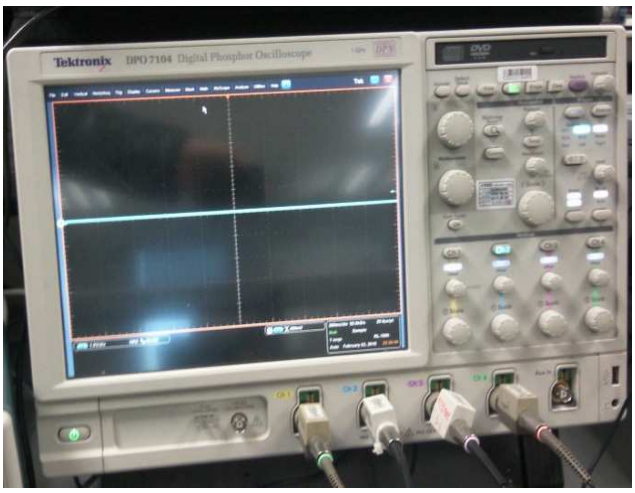


## 8-2-2. Bottom



## 8-3. Flow Chart of Troubleshooting

### Equipments

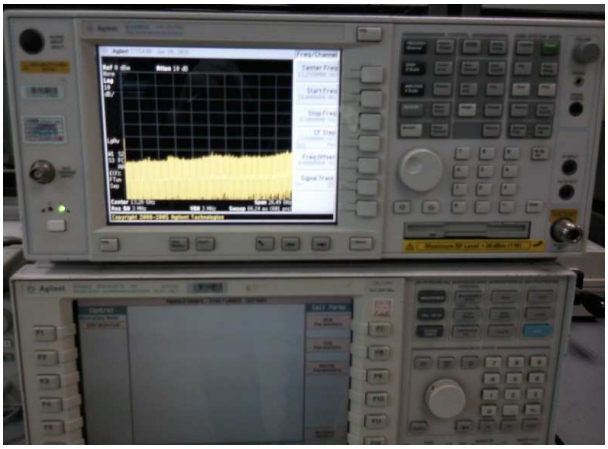



↑ Oscilloscope


↑ Digital Multimeter


↑ Power Supply

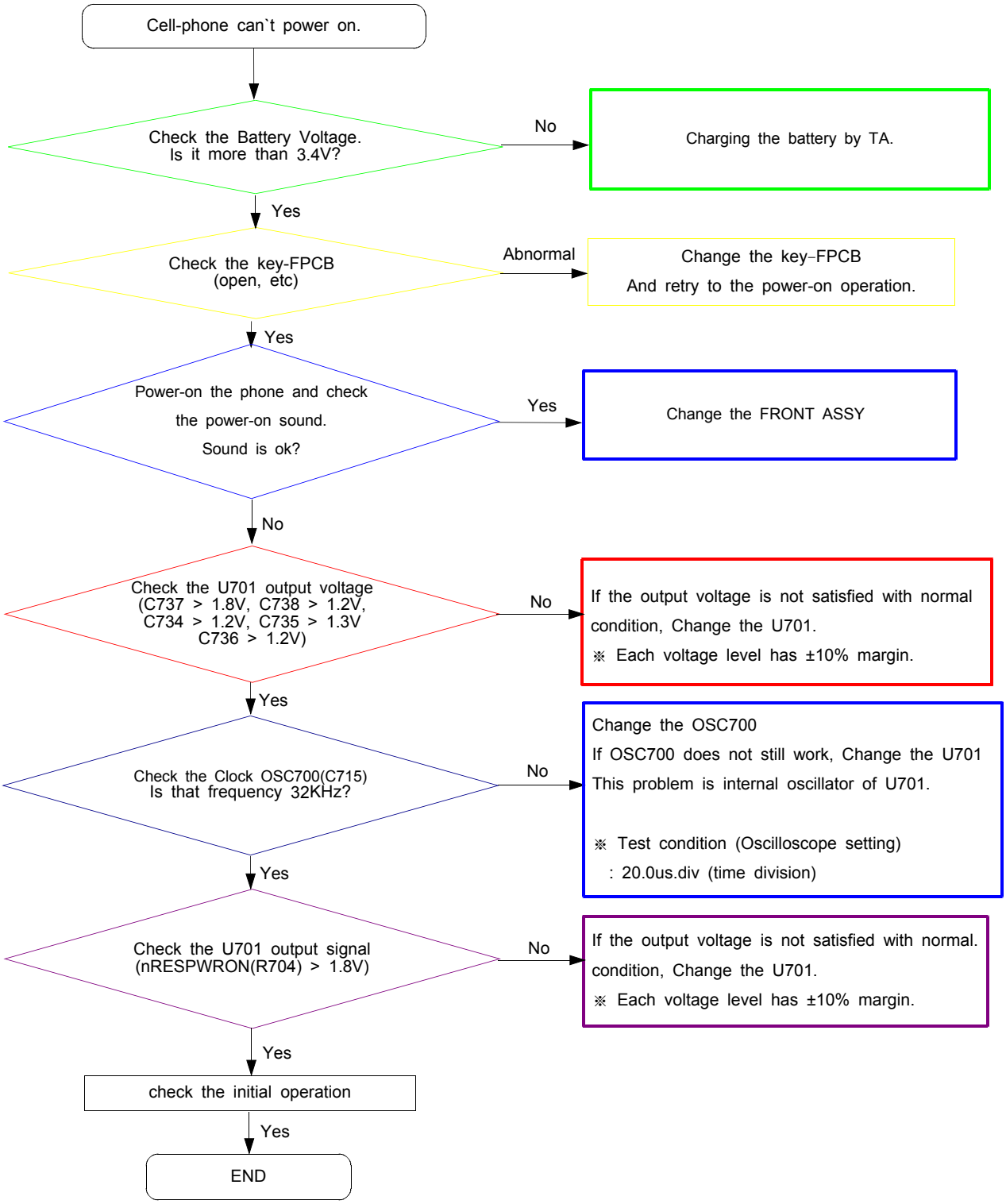
↑ + driver, ESD Safe Tweezer

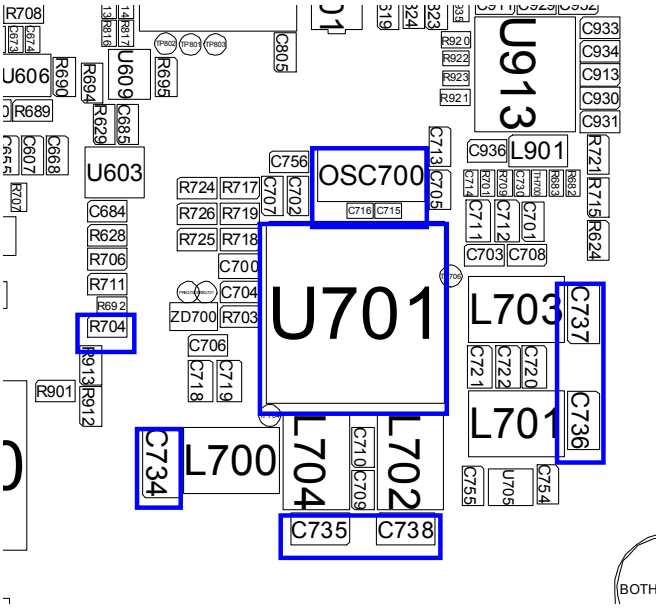


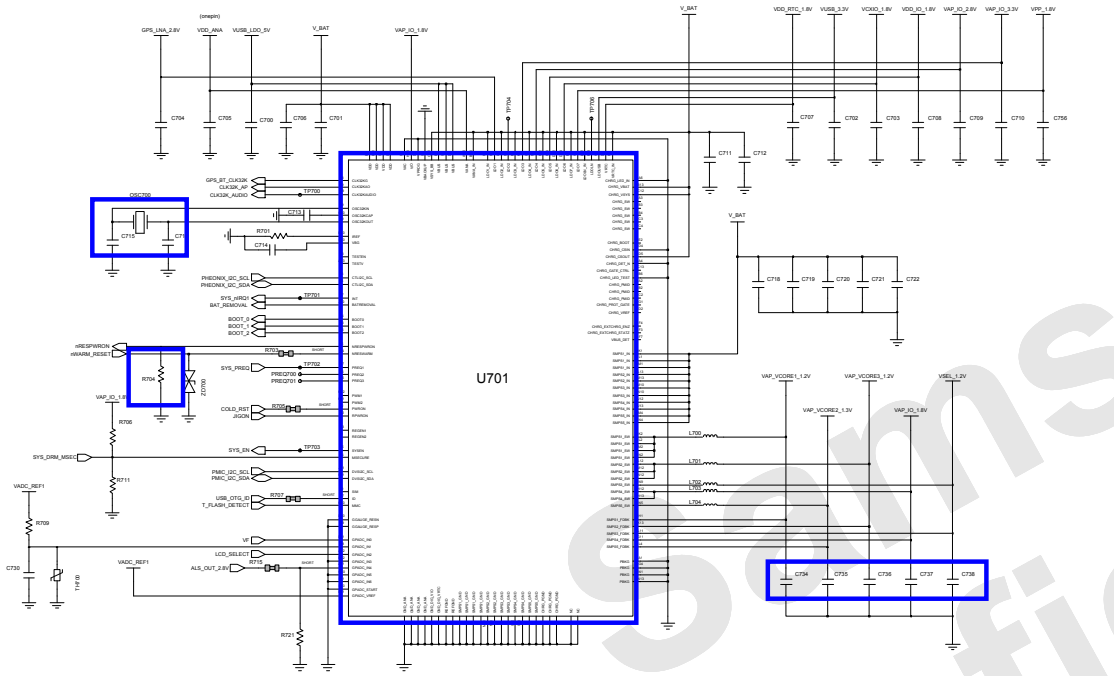
↑ 8960 & Spectrum Analyzer


↑ Soldering iron

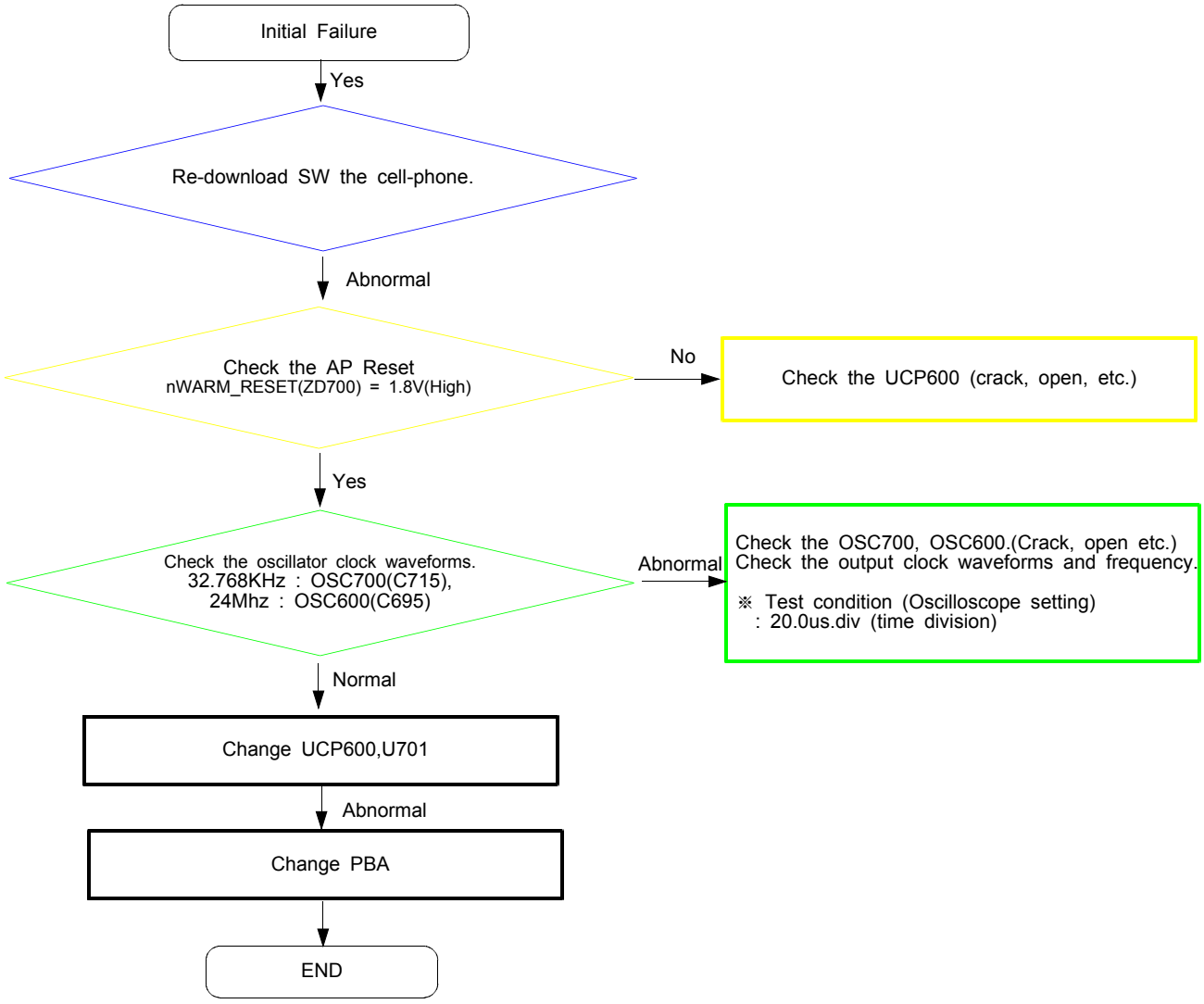
## 8-3-1. Power On

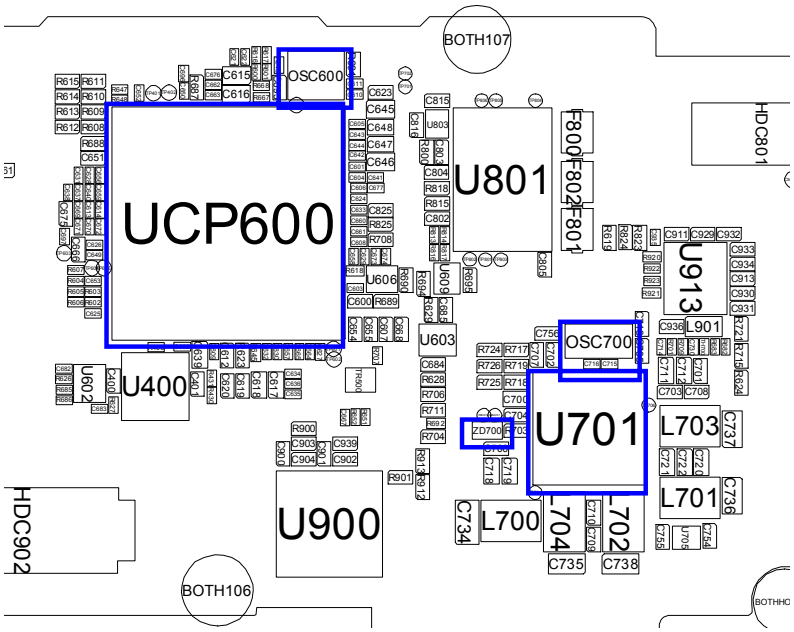


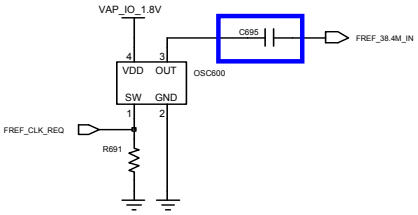


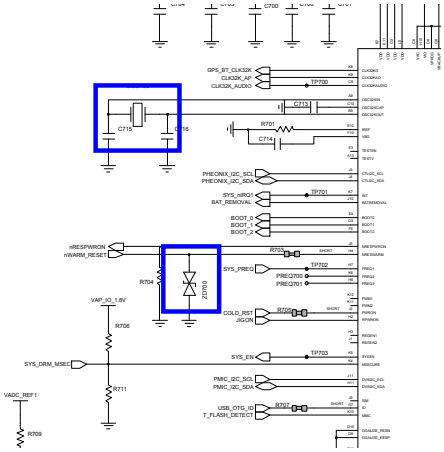



## 8-3-2. Initial

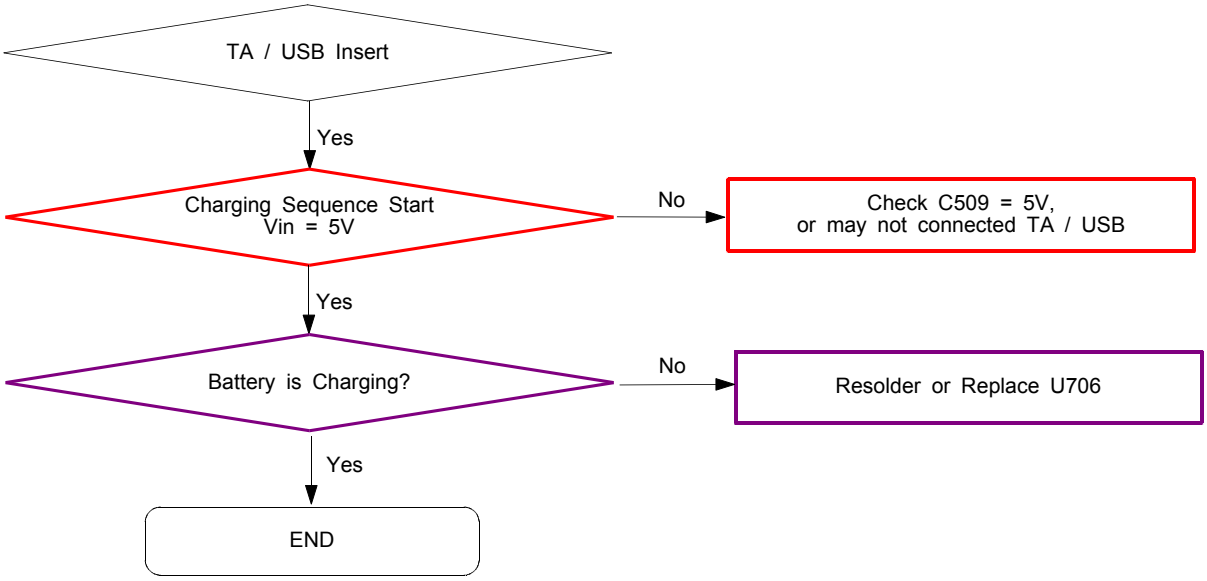


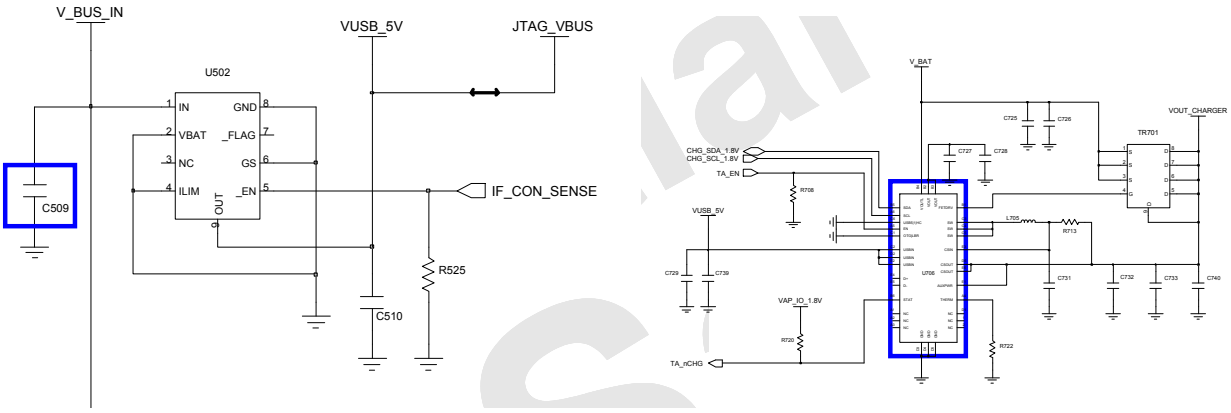


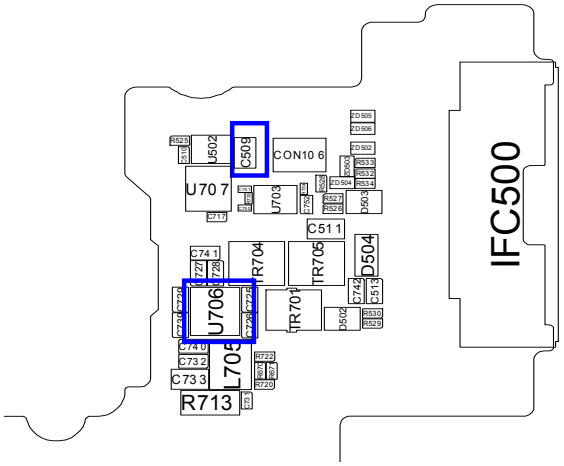



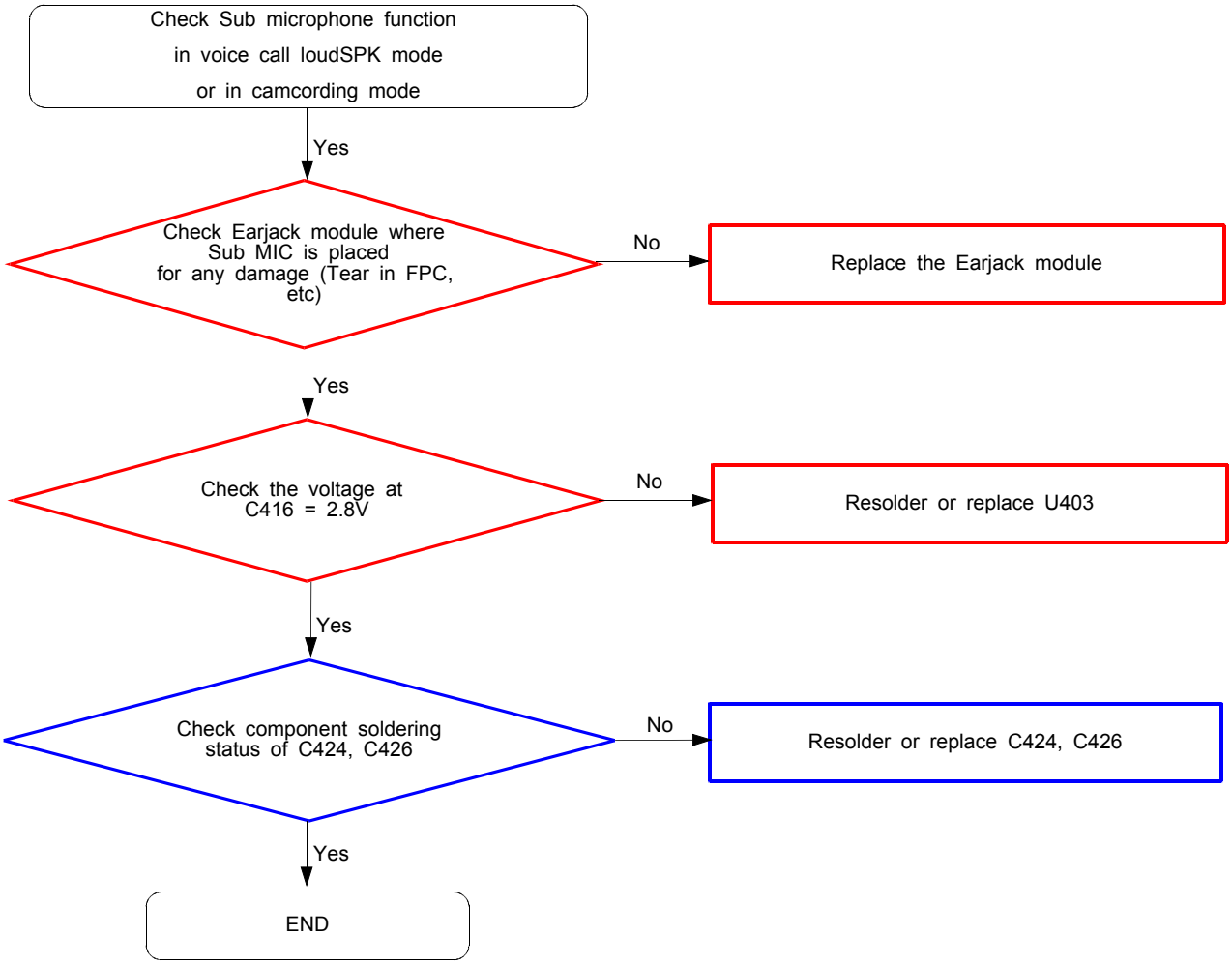
## 8-3-3. Charging Part

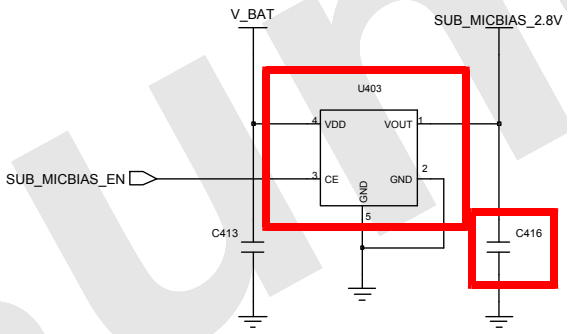


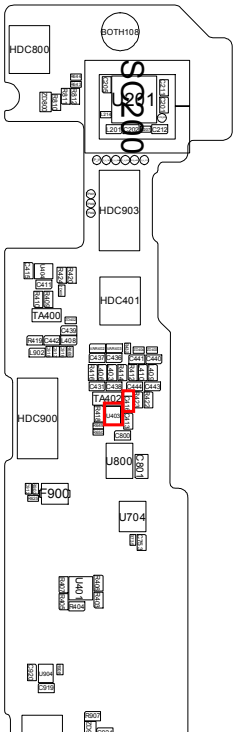



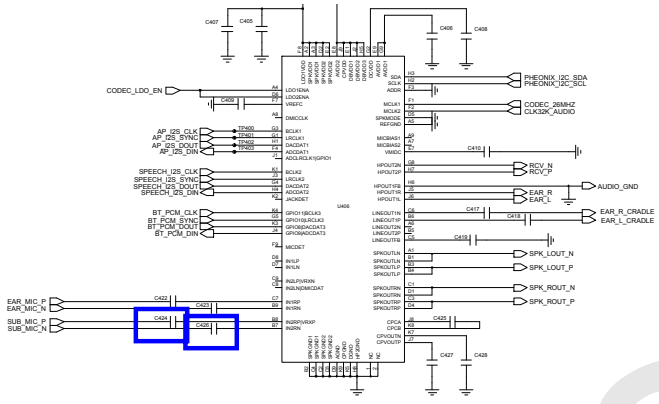



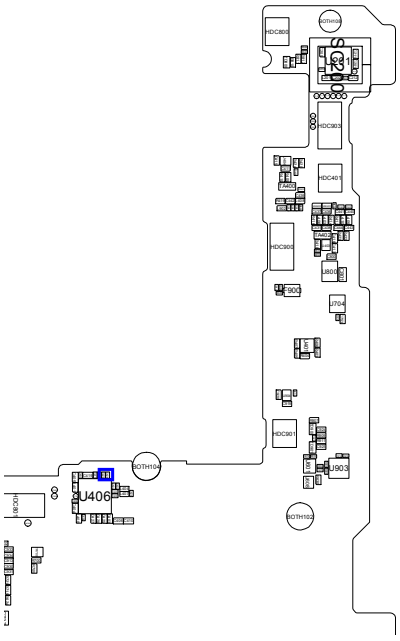
## 8-3-4. Microphone Part (Sub MIC)



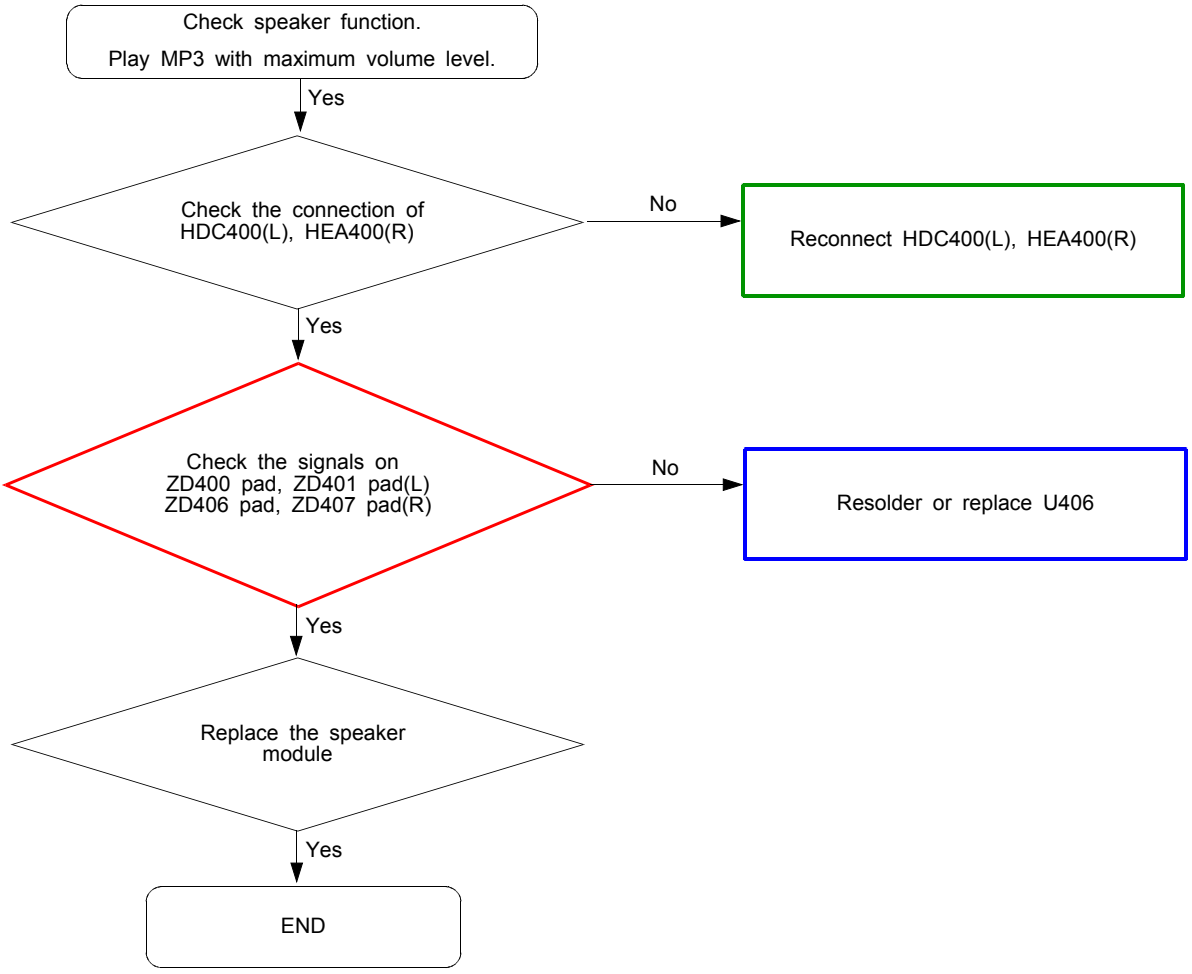


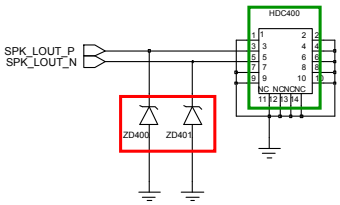



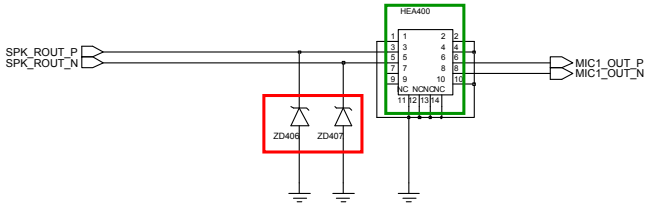



## 8-3-5. Speaker Part

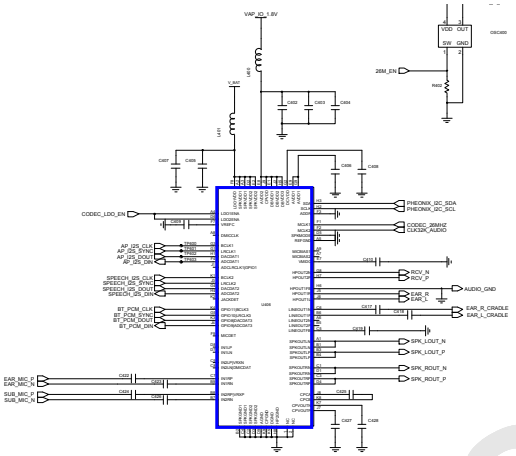


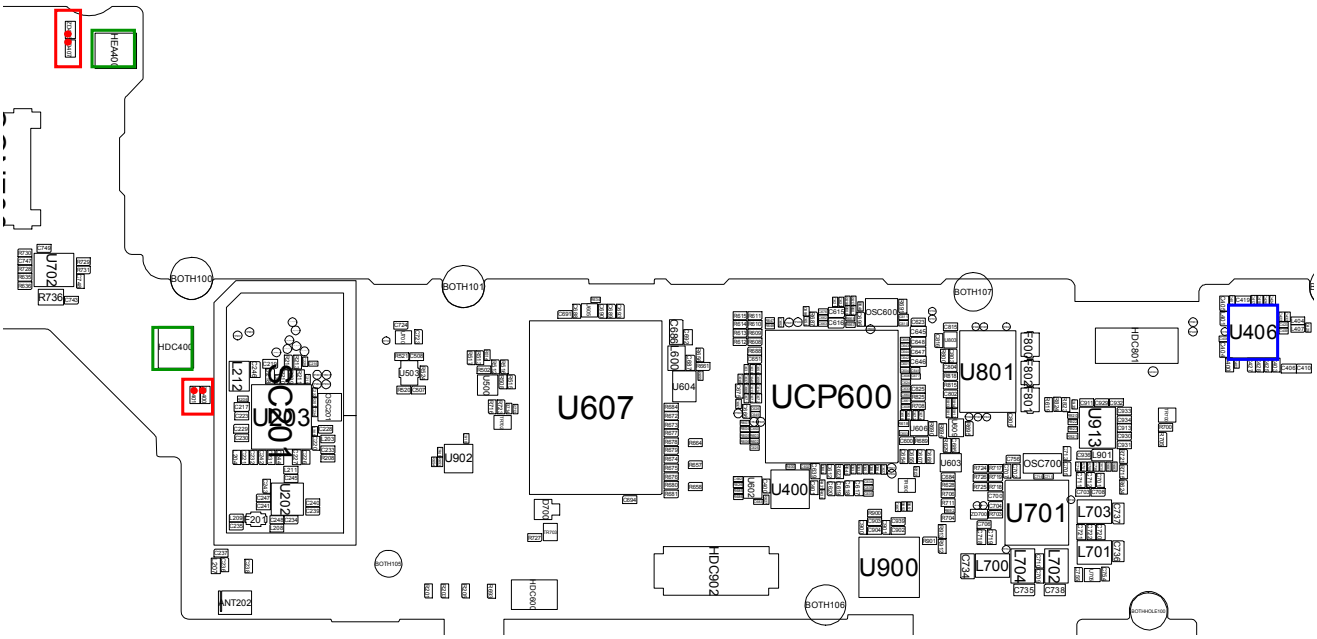



Left SPK conn

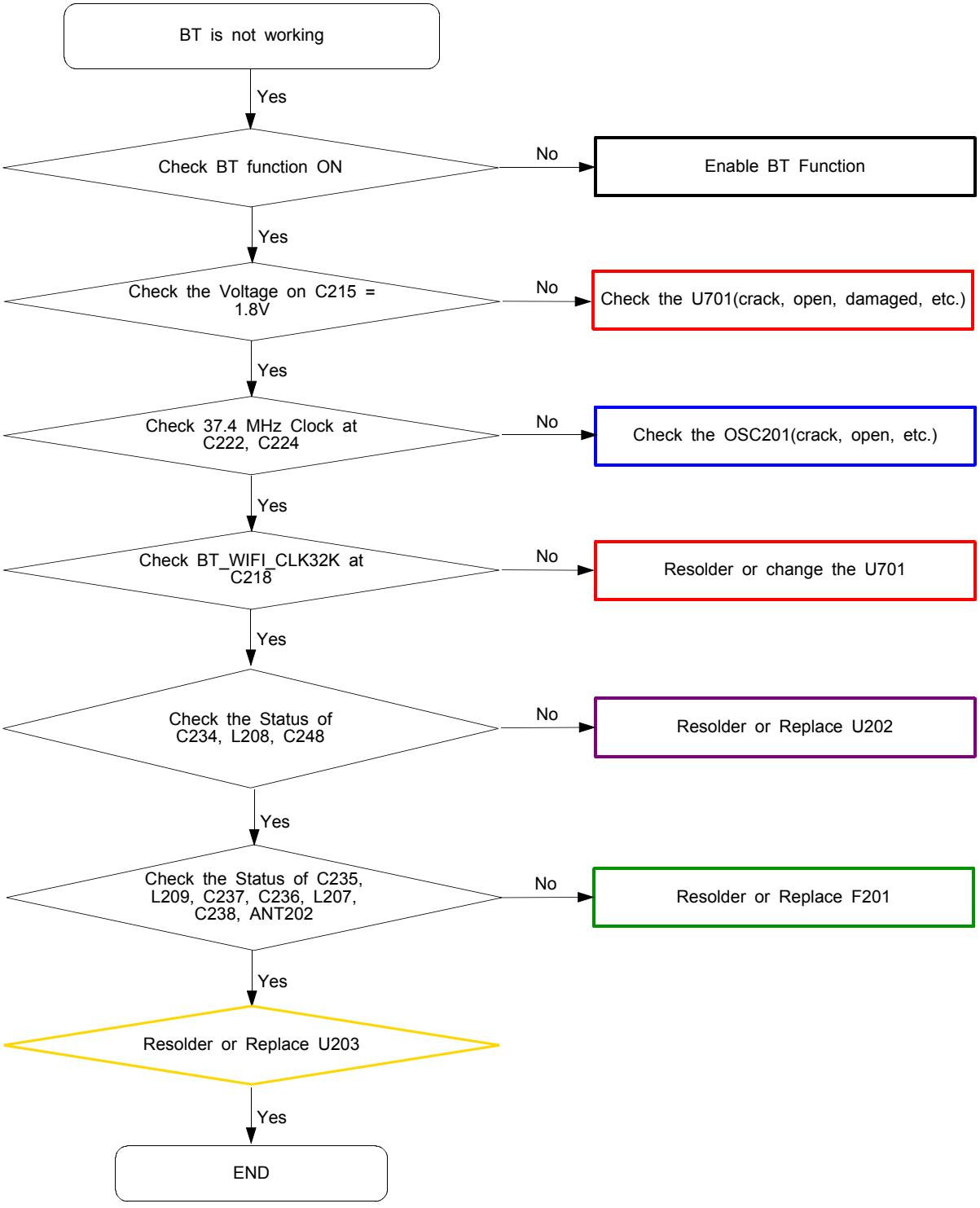


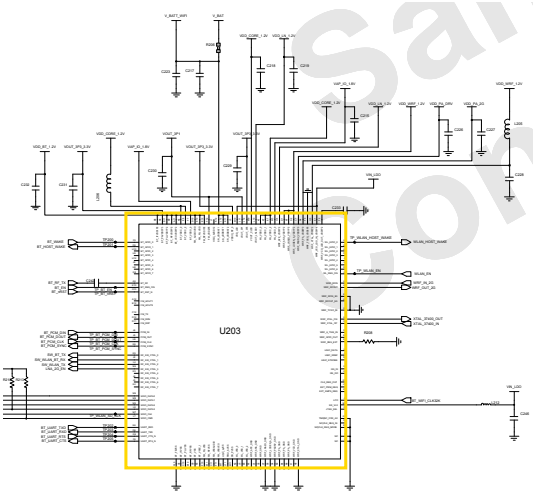

Right SPK / MOT conn

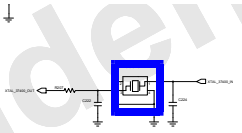




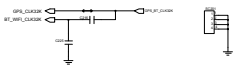
## 8-3-6. BT

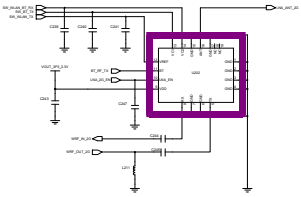




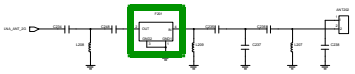



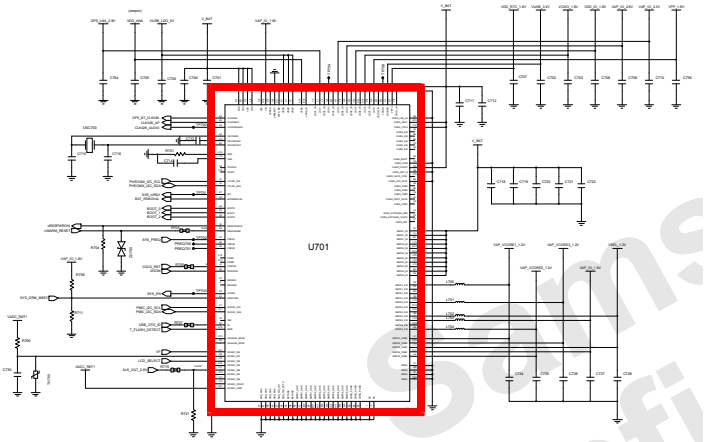
BT/WIFI OSC

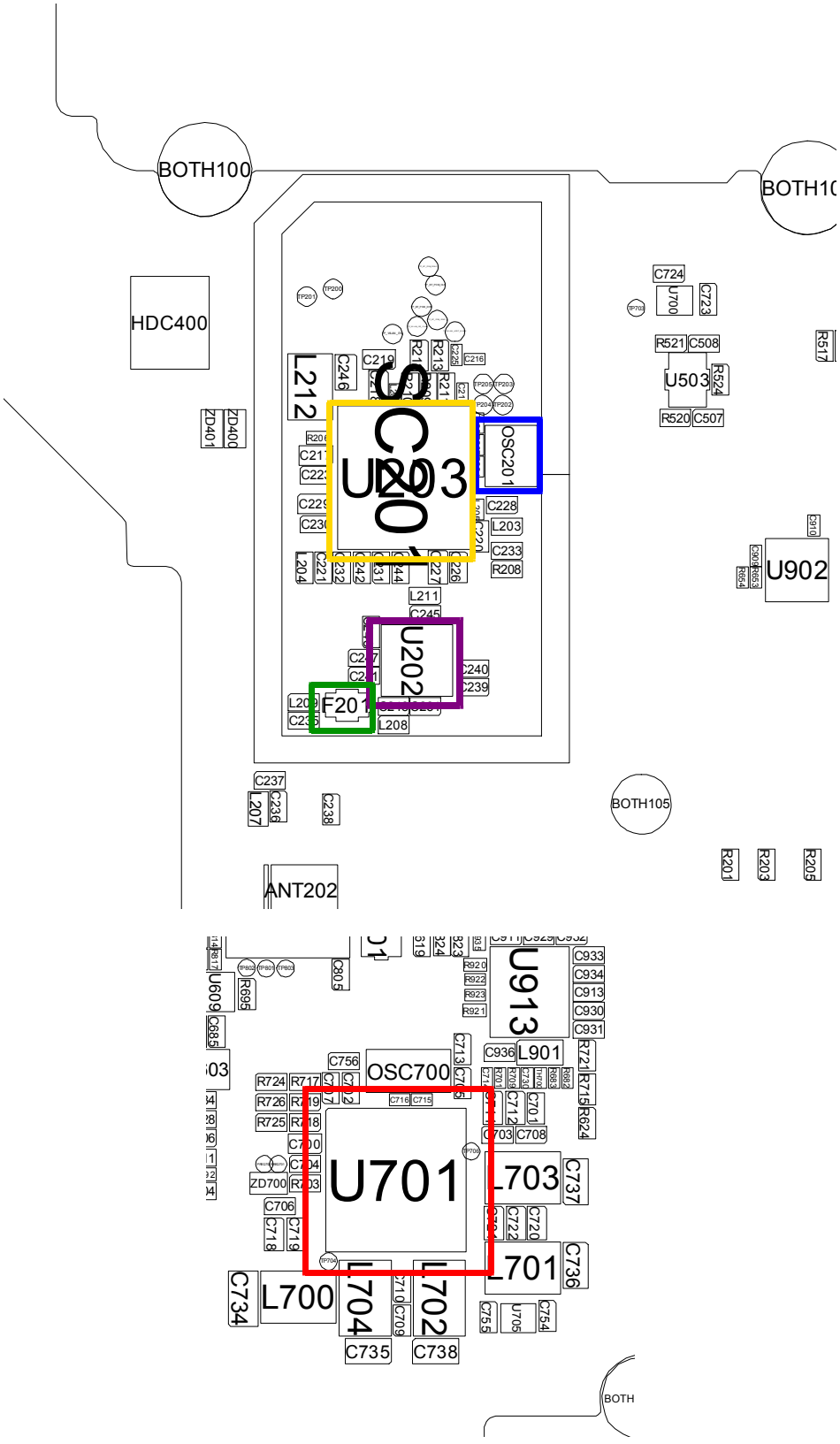




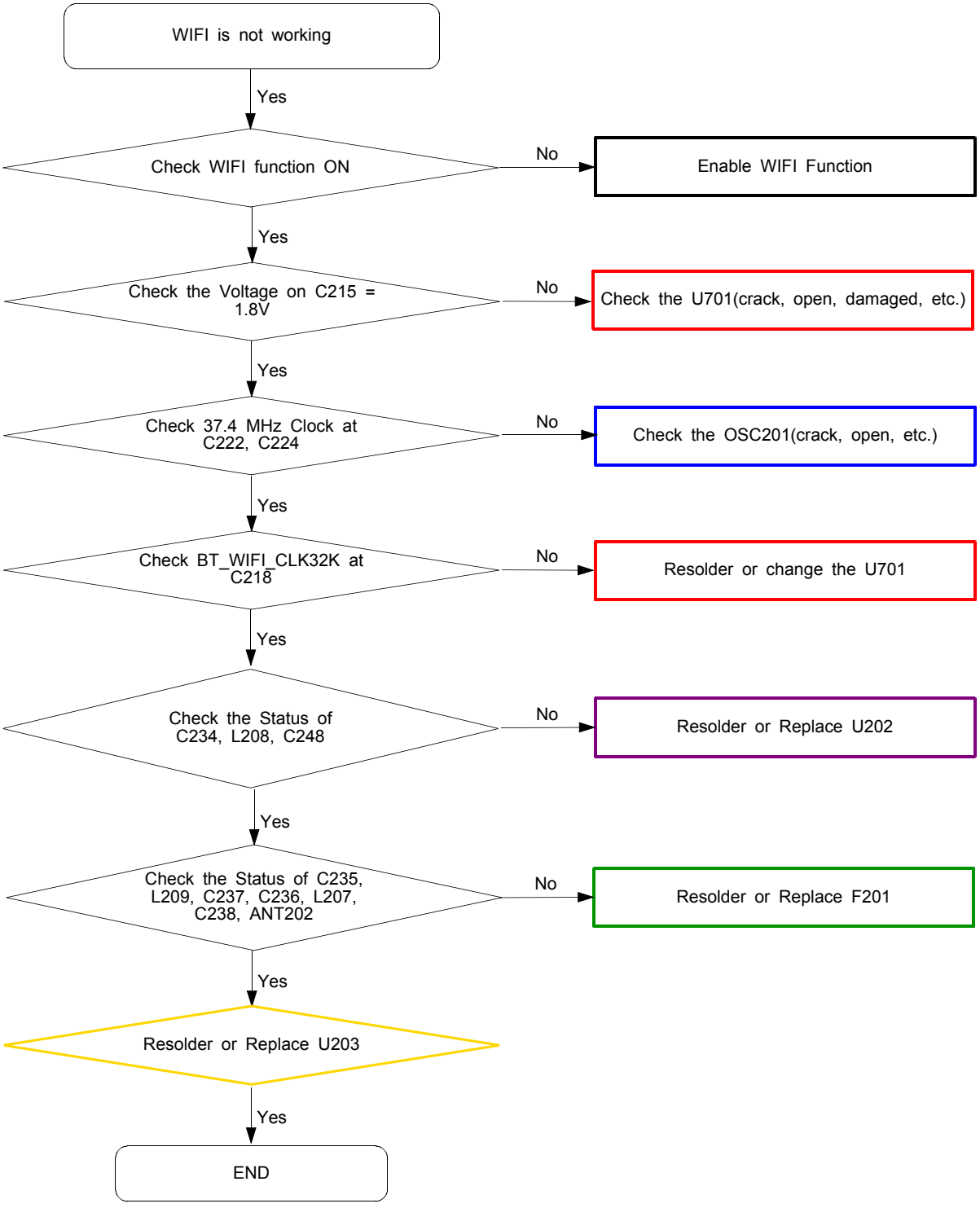
WIFI LNA(2G)

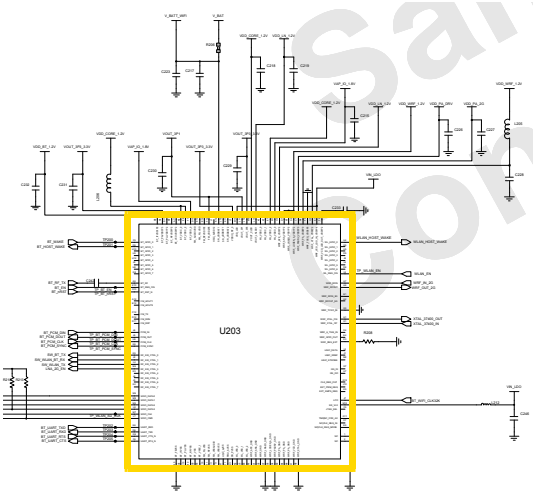


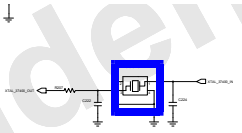




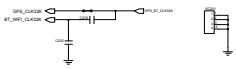
## 8-3-7. WIFI

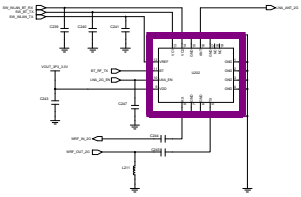




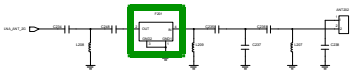



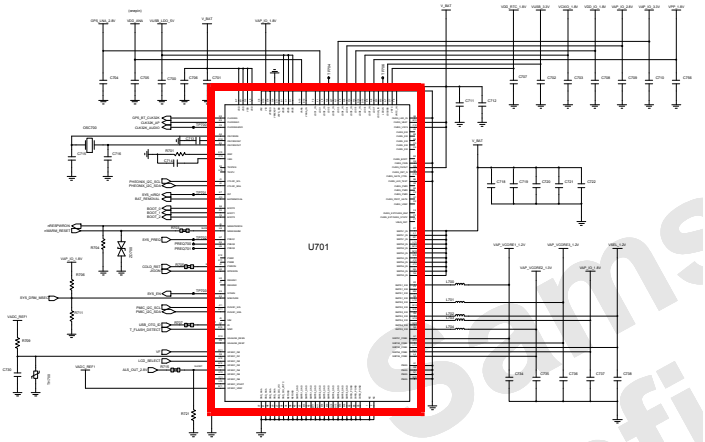
BT/WIFI OSC

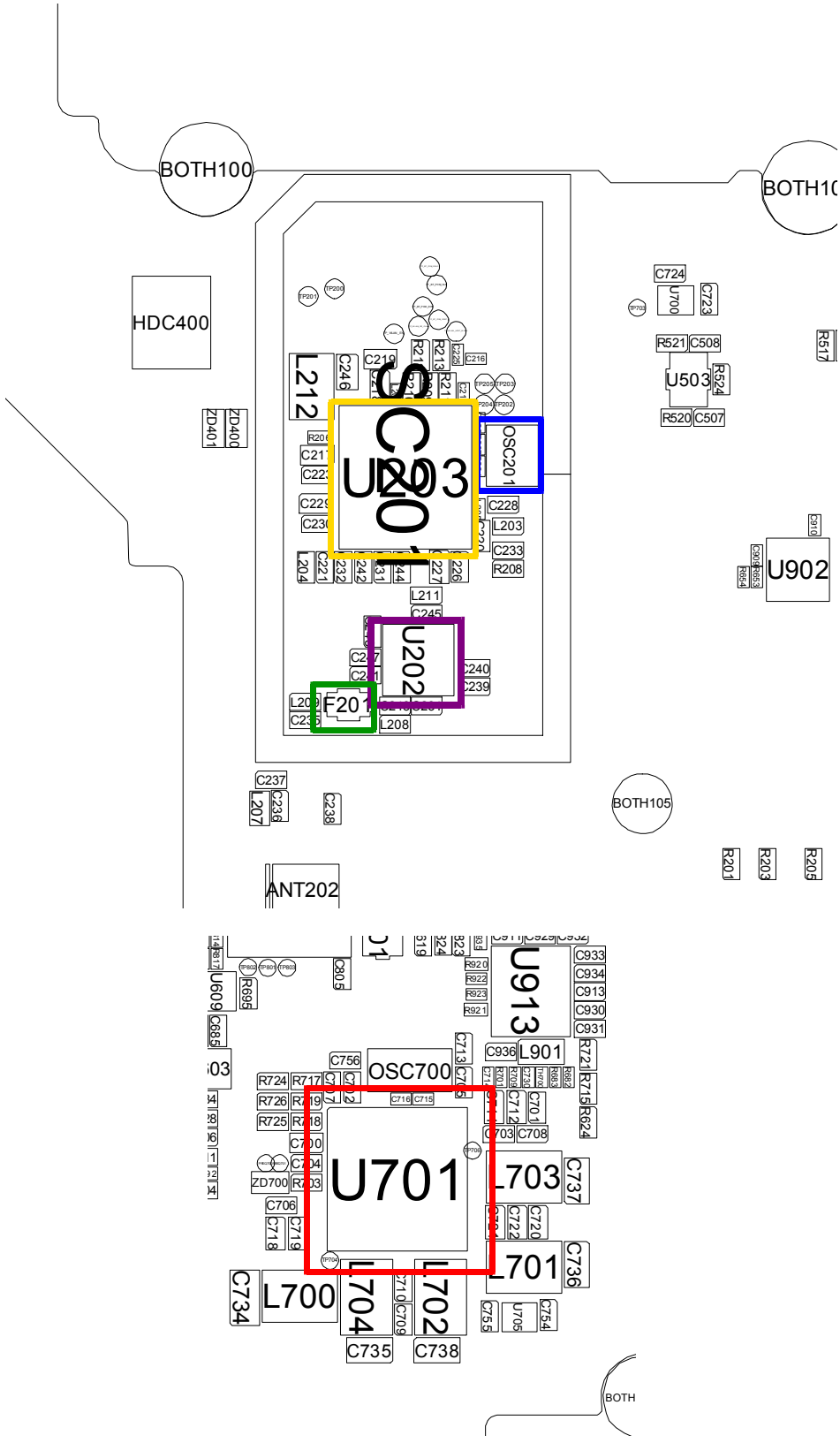




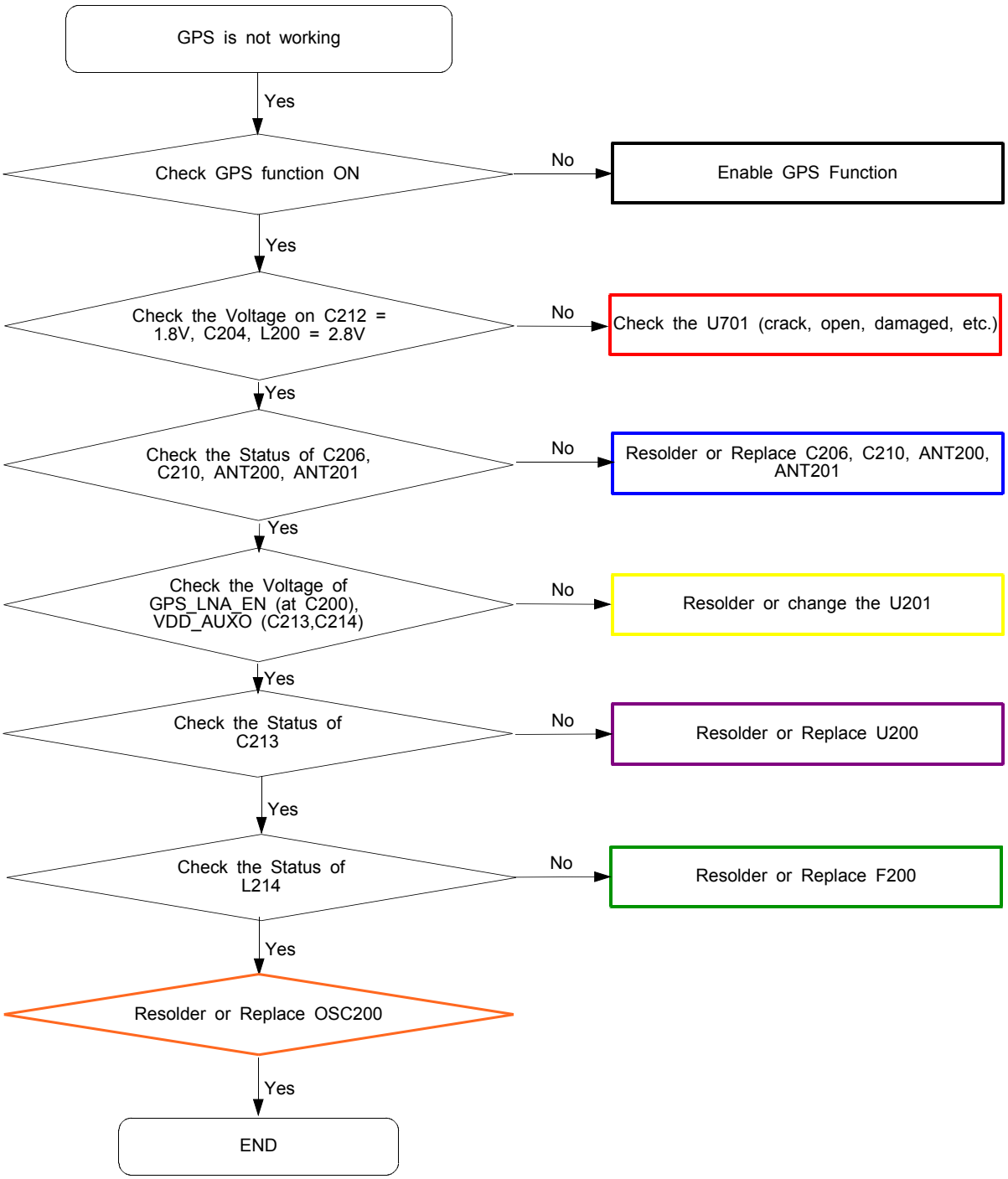
WIFI LNA(2G)

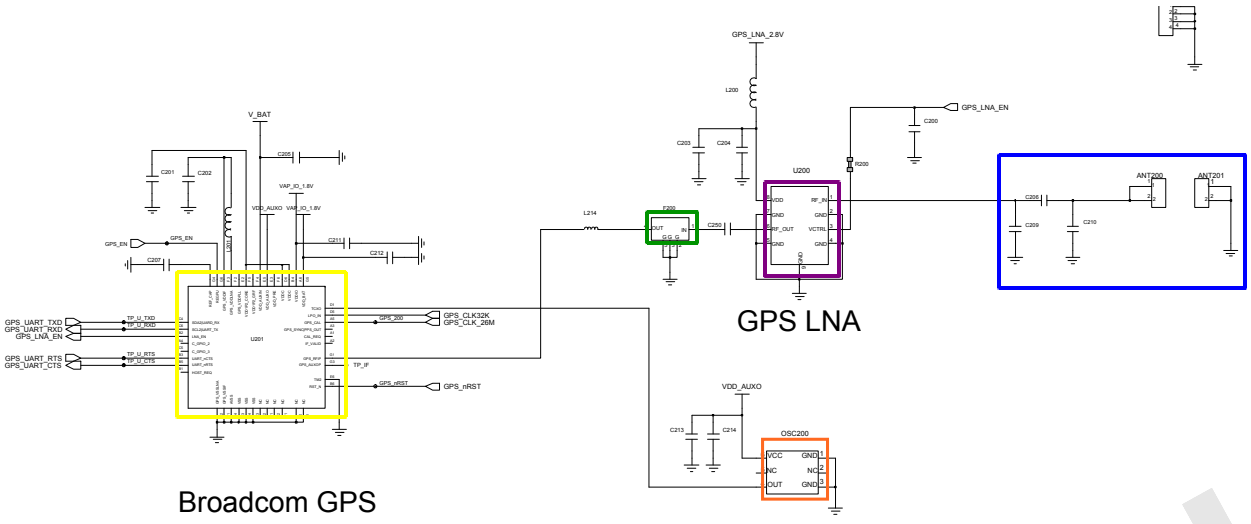


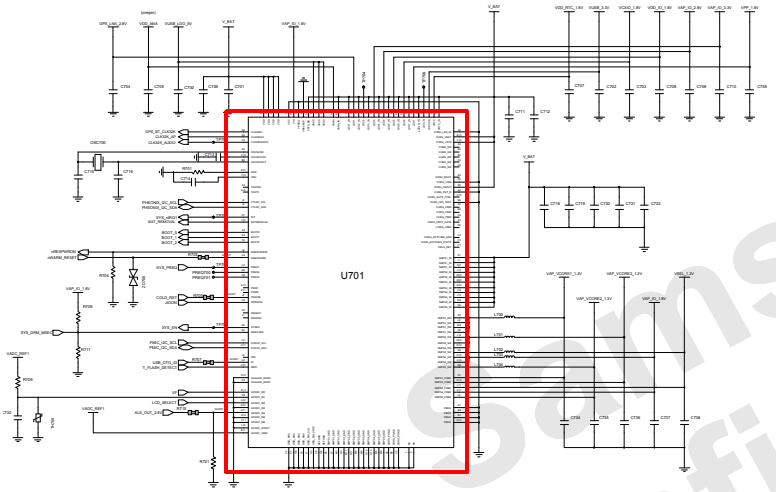


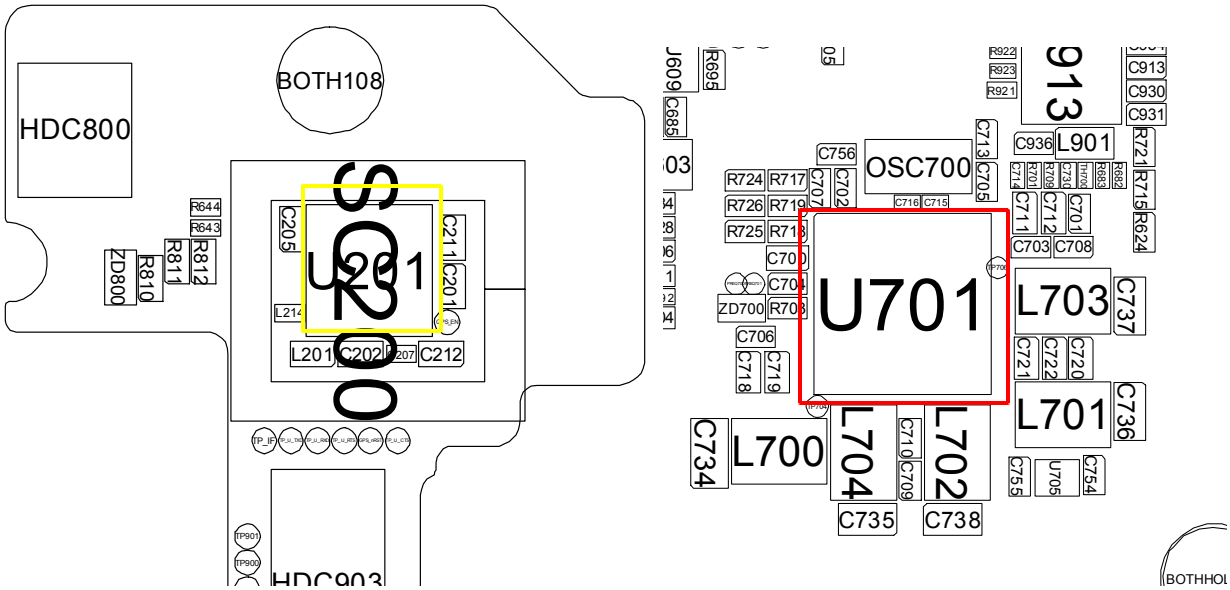


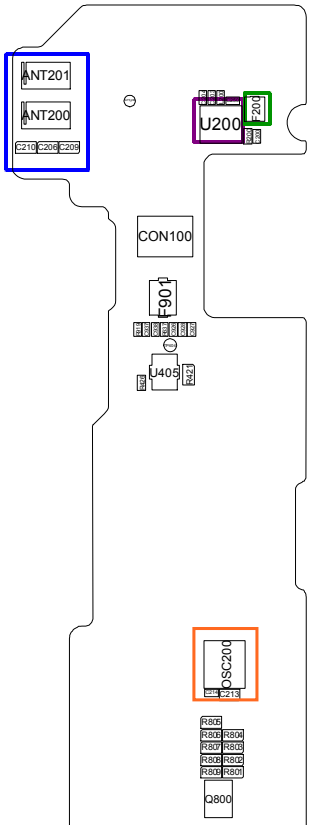
## 8-3-8. GPS



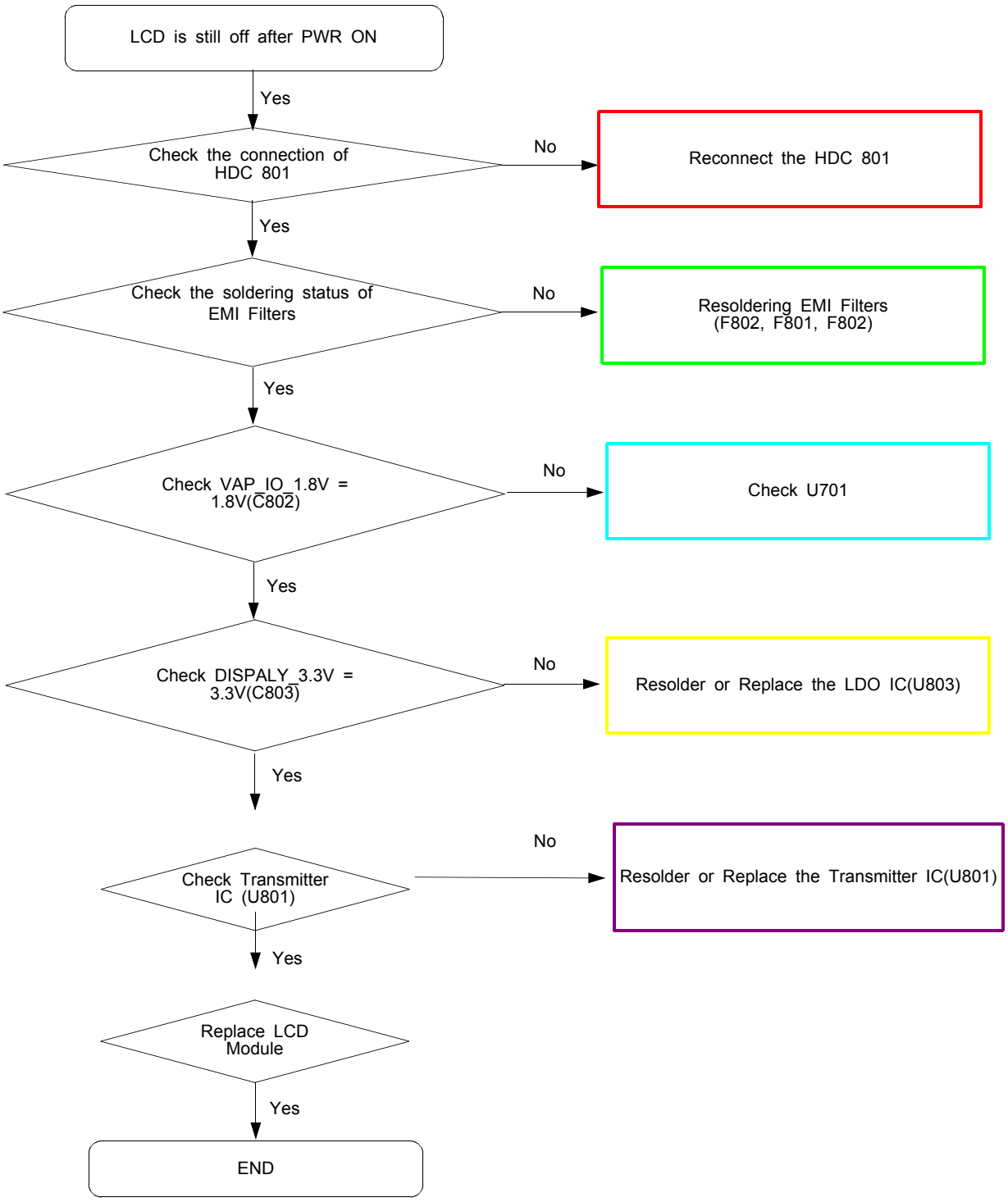


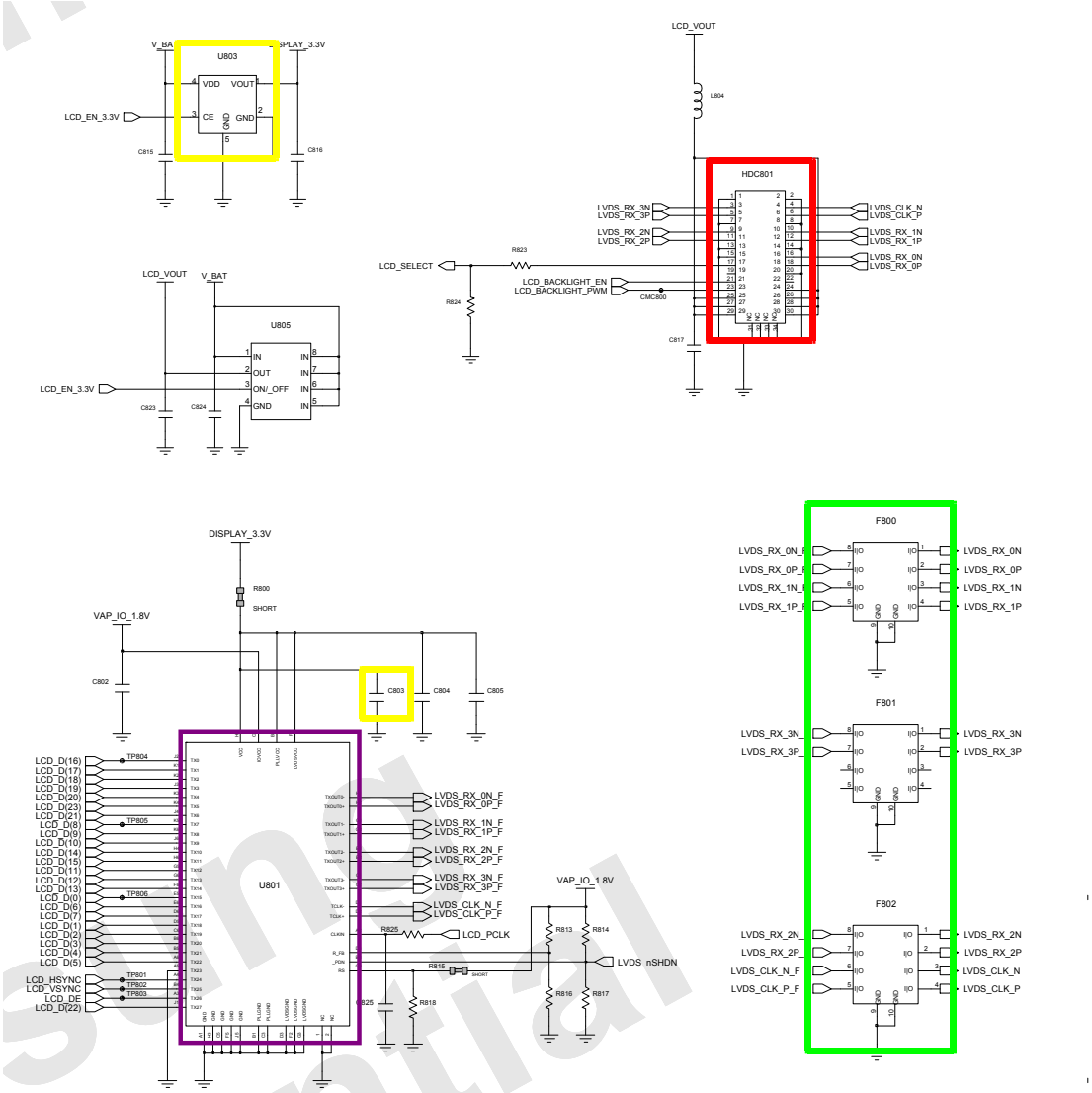





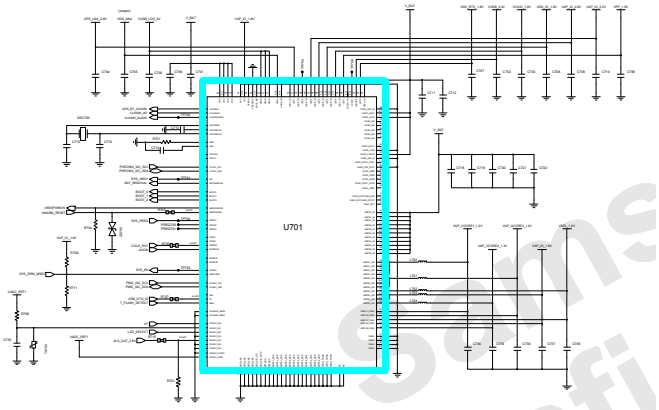



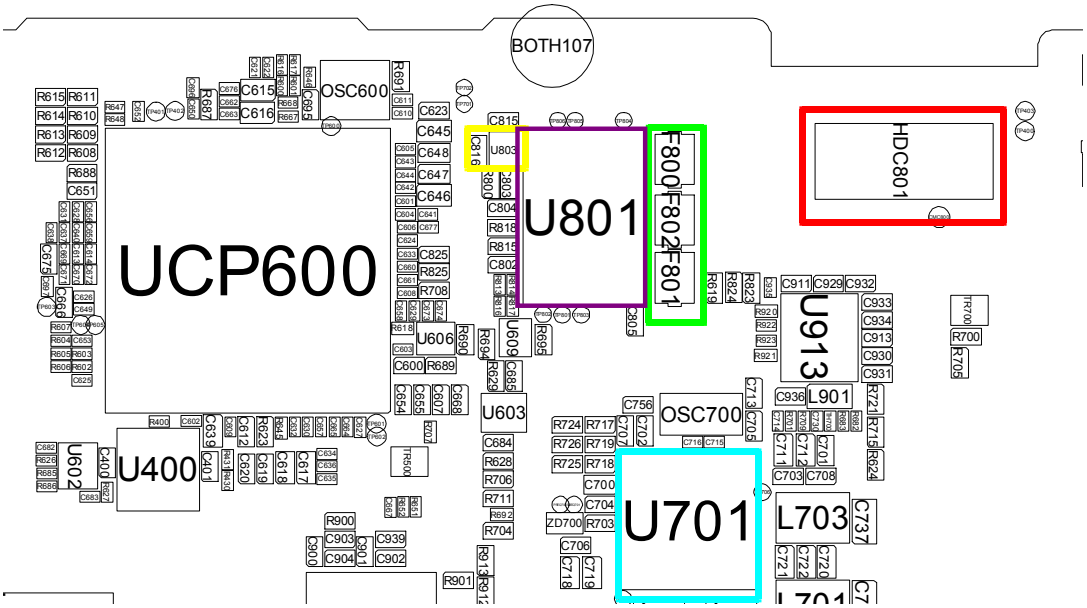
## 8-3-9. LCD



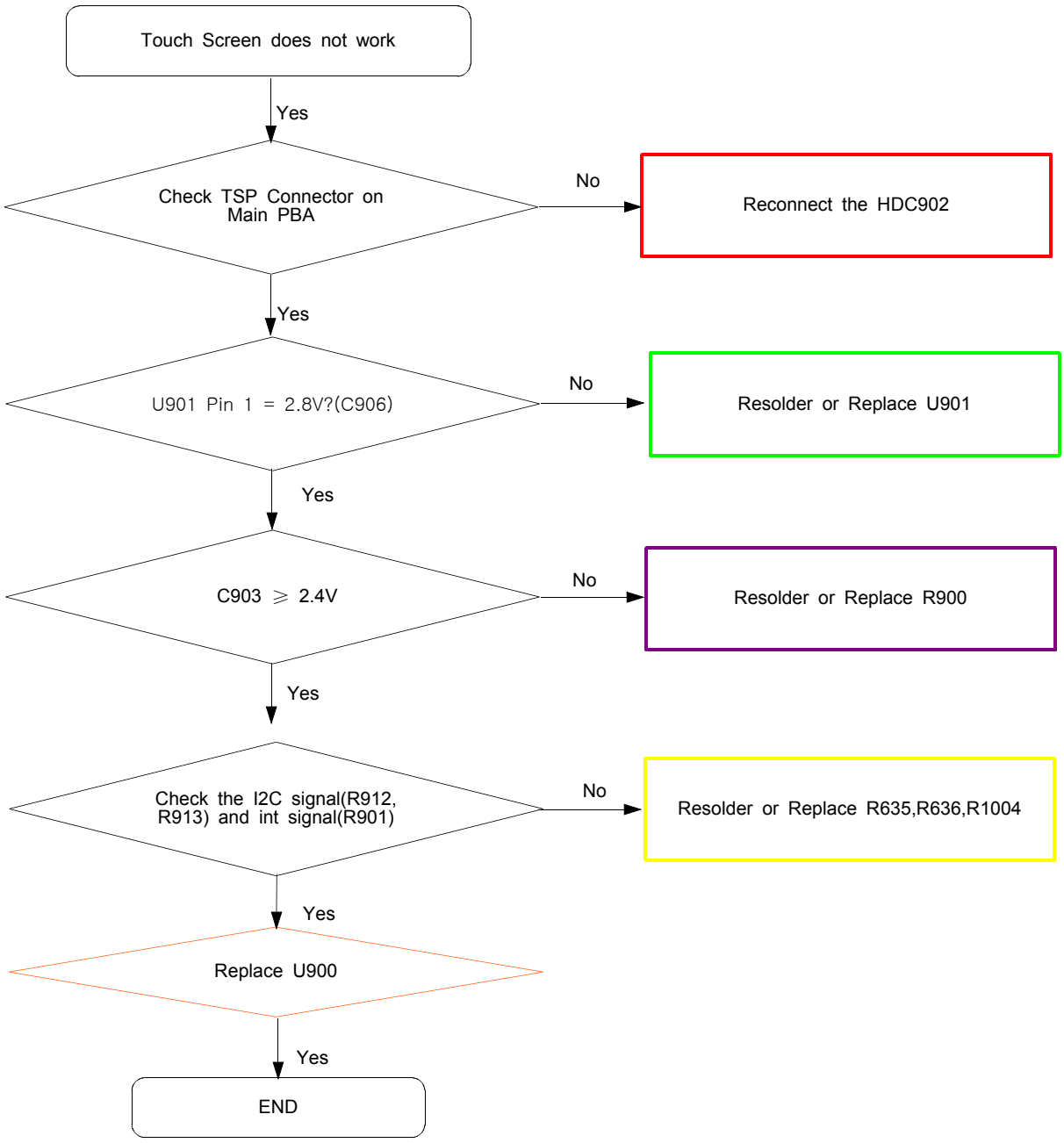


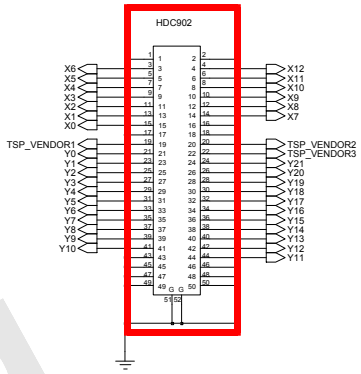

# LVDS Transmitter



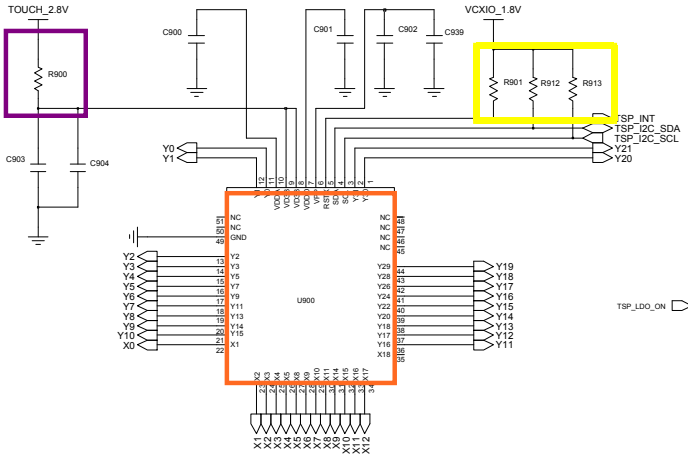


## 8-3-10. TSP

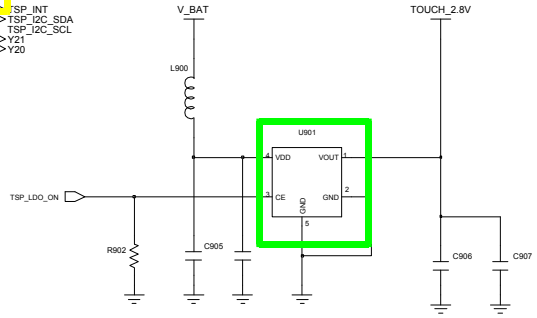




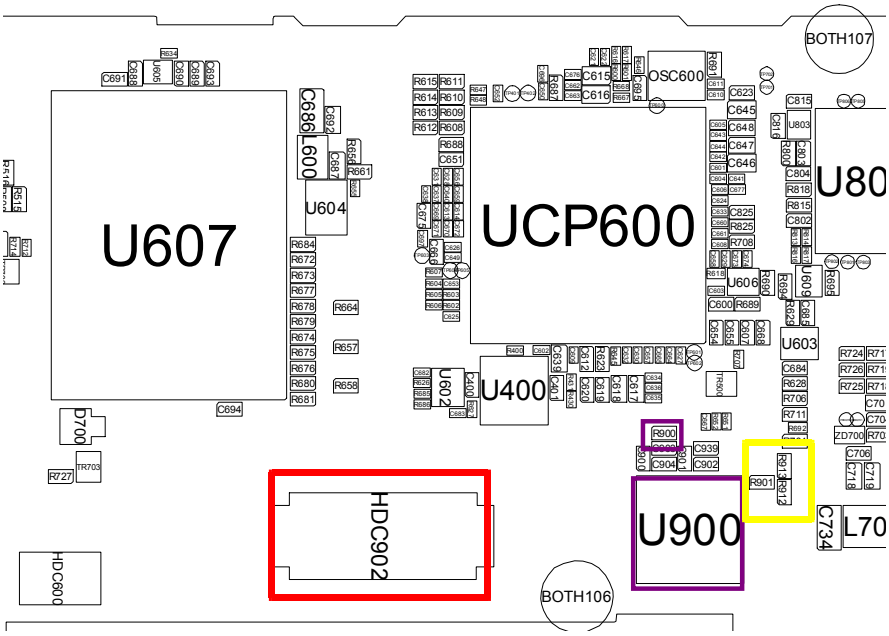

50Pin TOUCH Con.

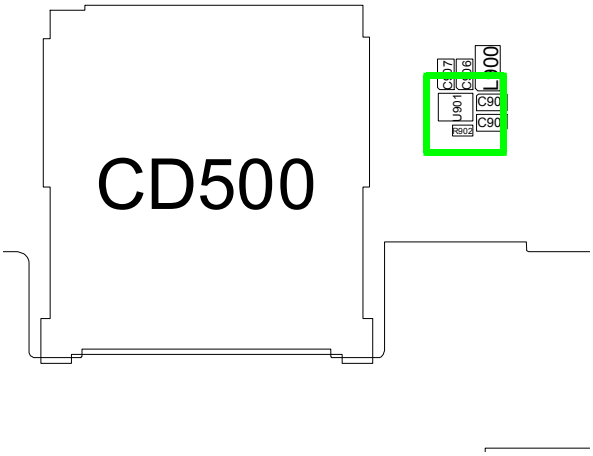



TOUCH SENSOR IC

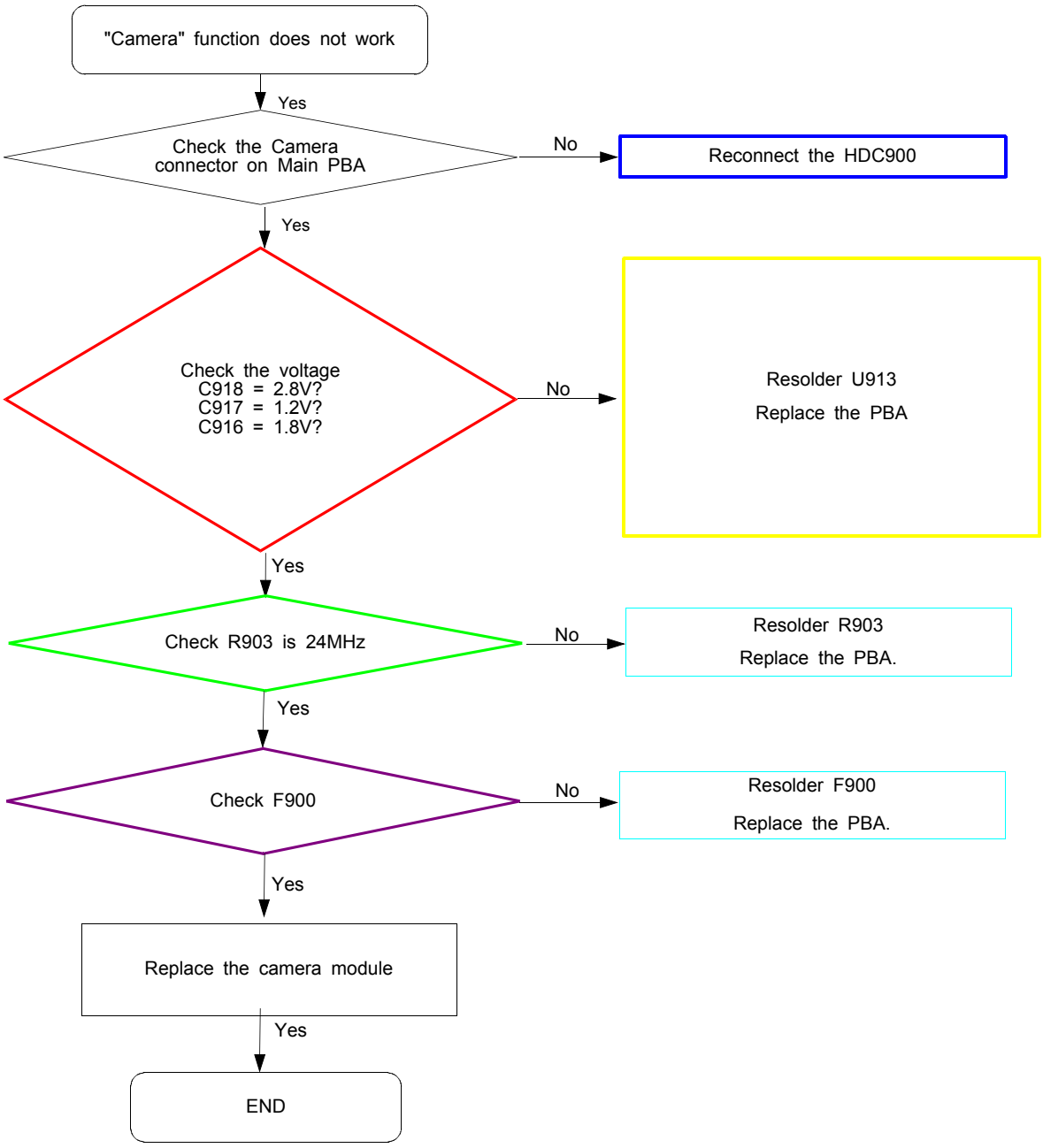


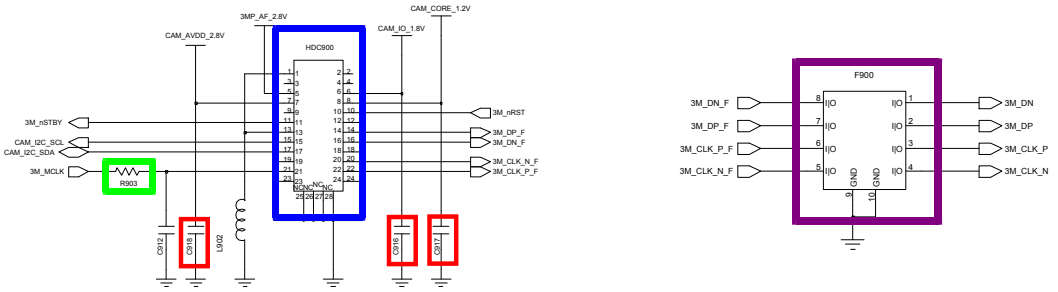

TOUCH LDO



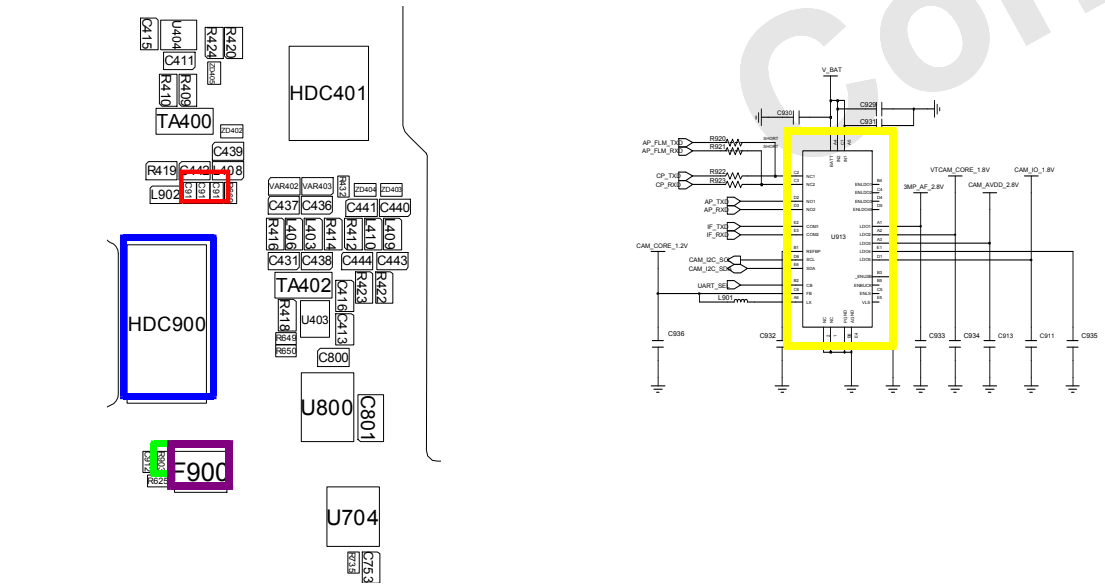



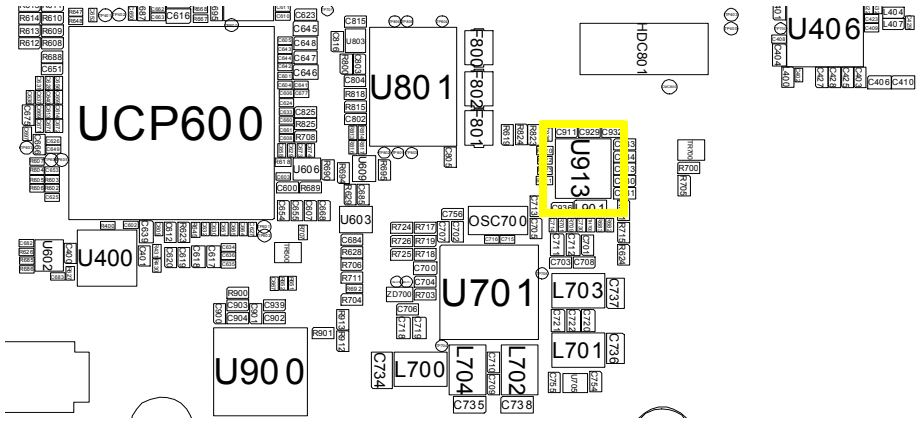
## 8-3-11. 3M CAM



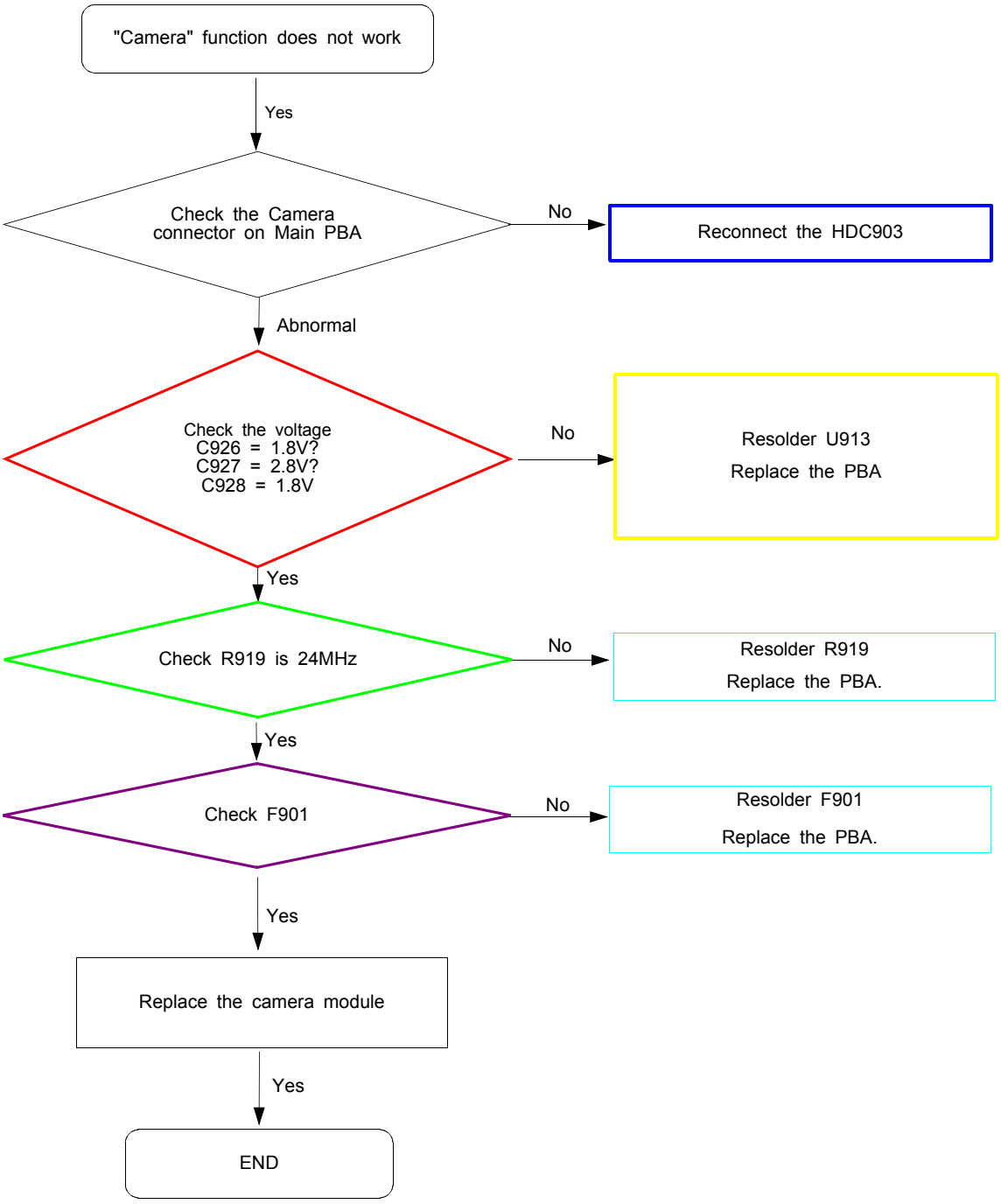


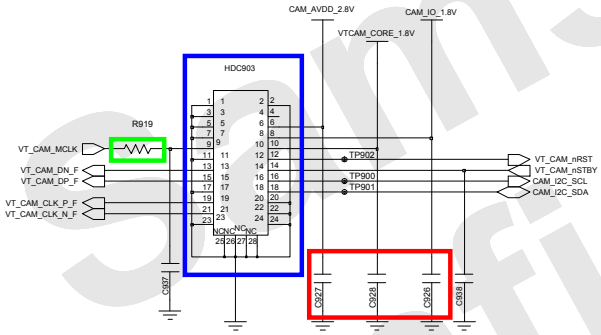

3M CAM

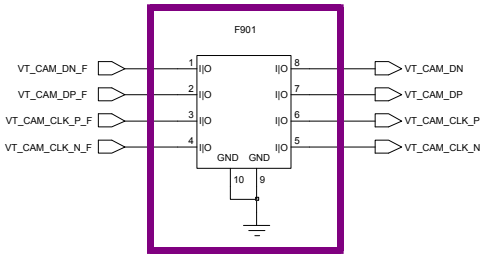


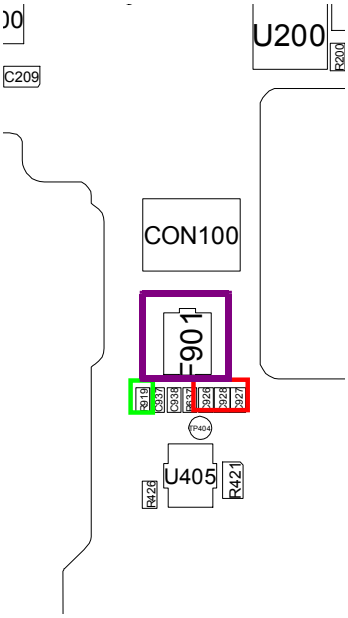
## 8-3-12. VGA CAM

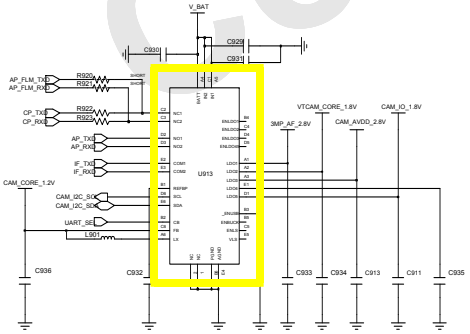


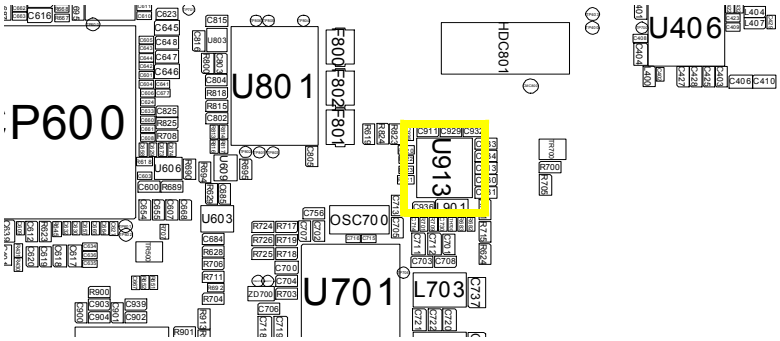


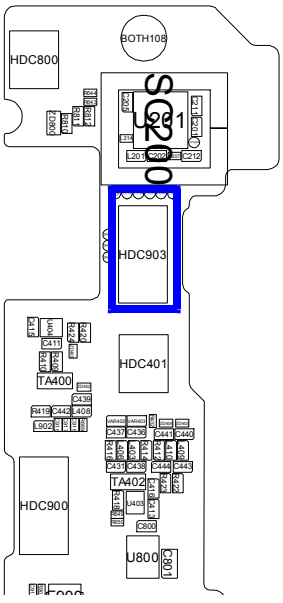




VT CAM

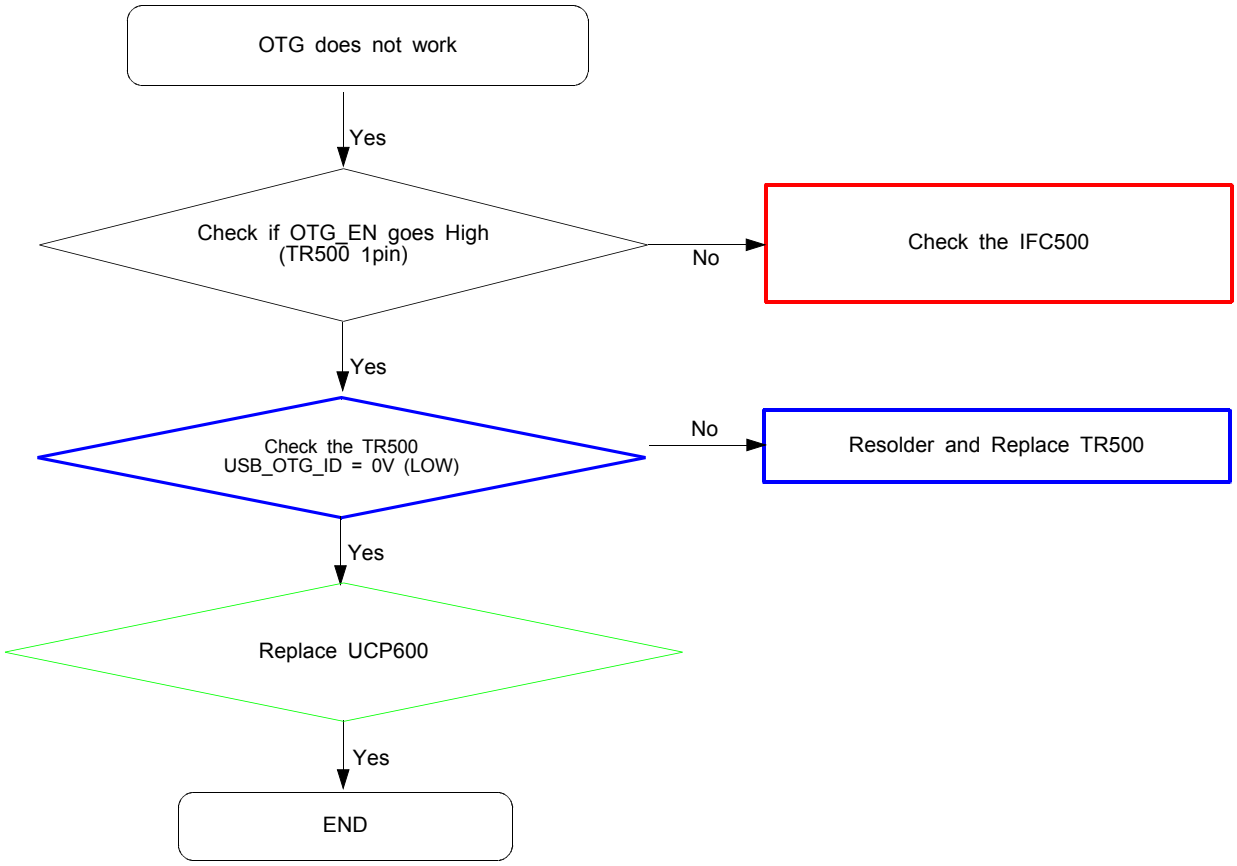


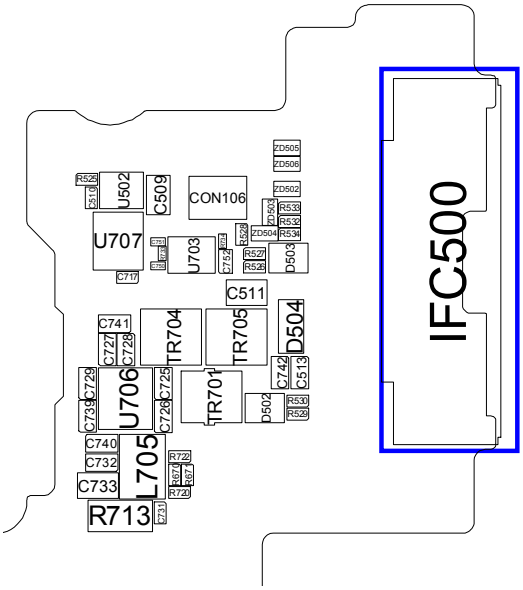



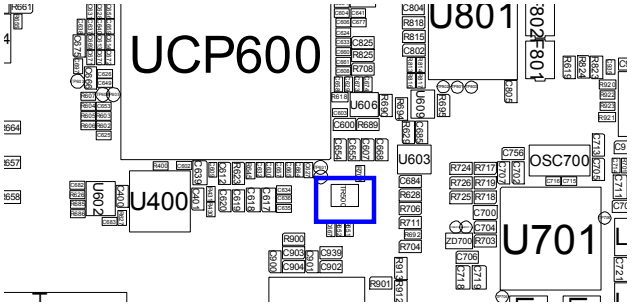



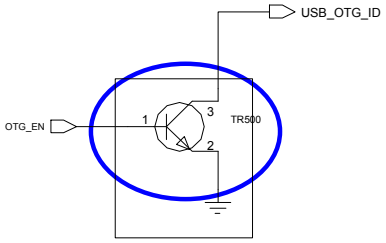



## 8-3-13. OTG



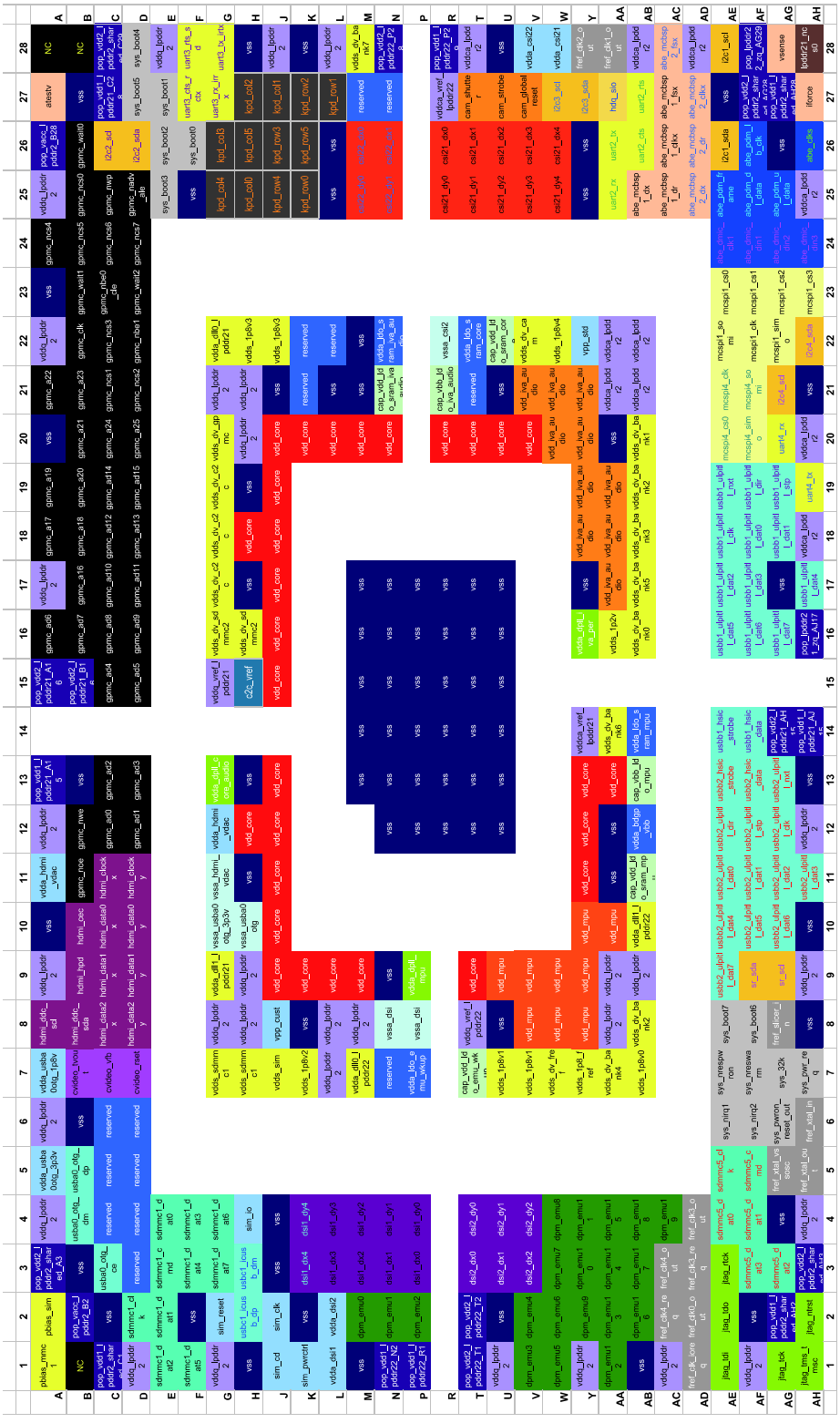


## 8-4. NC Point

## -UCP600



-U607