GSM TELEPHONE

GT-P6210

SERVICE Manual

GSM TELEPHONE

CONTENTS

SAMSUNG
ELECTRONICS

2011. 10. Rev.1.0

3. Operation Instruction and Installation

Main Function

- Android OS: Gingerbread
- 3MP AF with LED Flash, 2M FF
- 7.0" WSGA 16M TFT LCD (PLS_type)
- A-GPS / BT v3.0 USB v2.0 / WiFi (802.11 a/b/g/n) / OTG
- Recording definition: 720p / Playback at 720p resolution
- Sensors: Accelerometer, Electromagnetic, Gyro, Light, Proximity
- Additional :
  - 1.2GHz Dual Core CPU
  - Application store / Precise Motion UI
  - Seamless Sharing Experience.

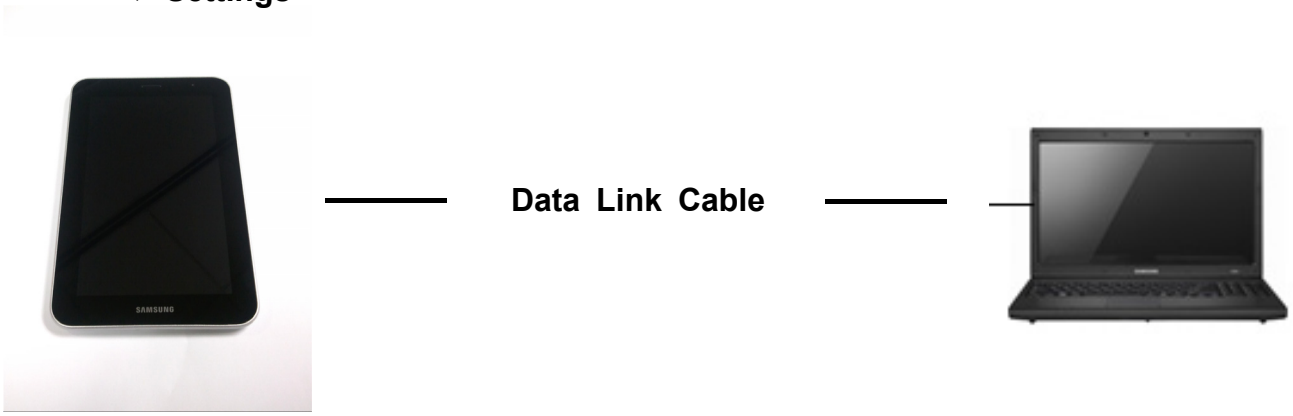
6. Level 1 Repair

6-1. S/W Download

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

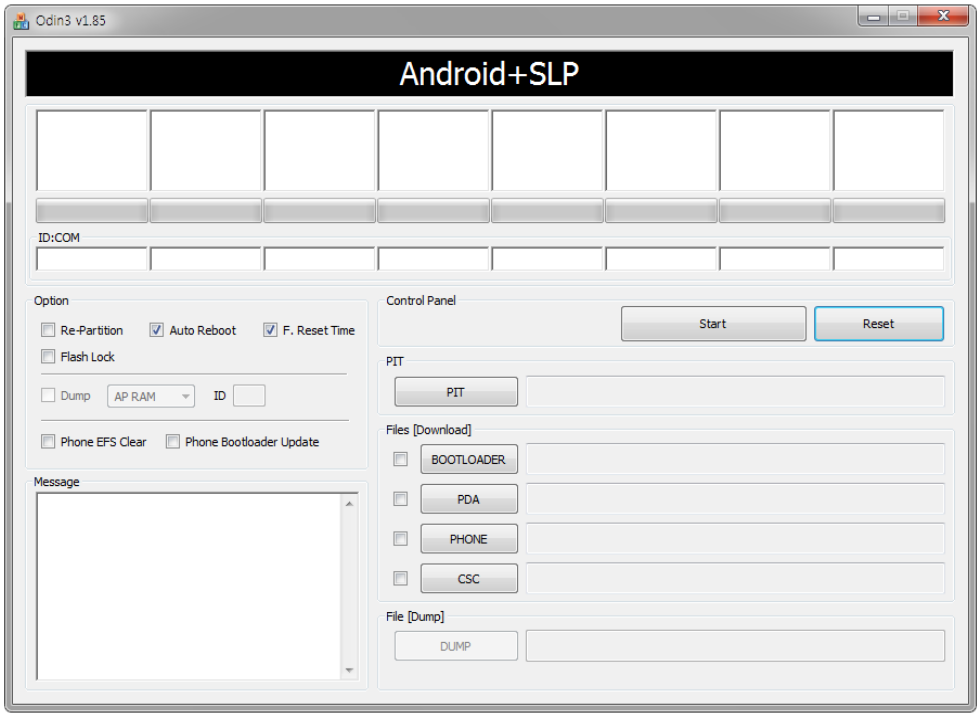
- Downloader Program (**Odin3 v1.85.exe**)
- GT-P6210 Mobile Phone
- Data Link Cable (GH39-014408)
- Binary files

❖ **Settings**



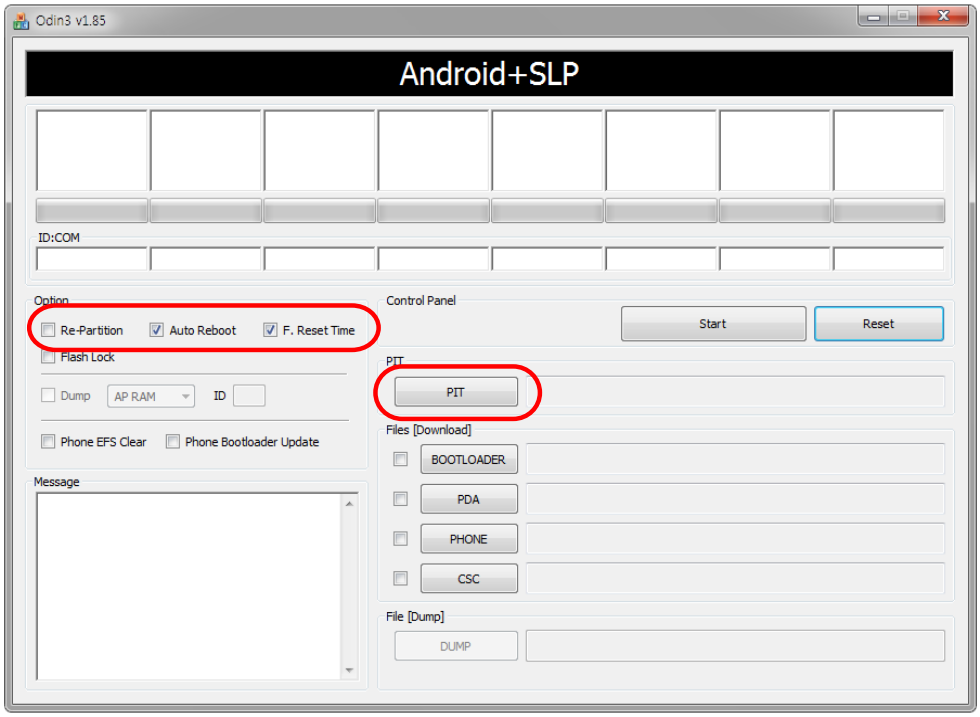
6-1-2. S/W Downloader Program

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

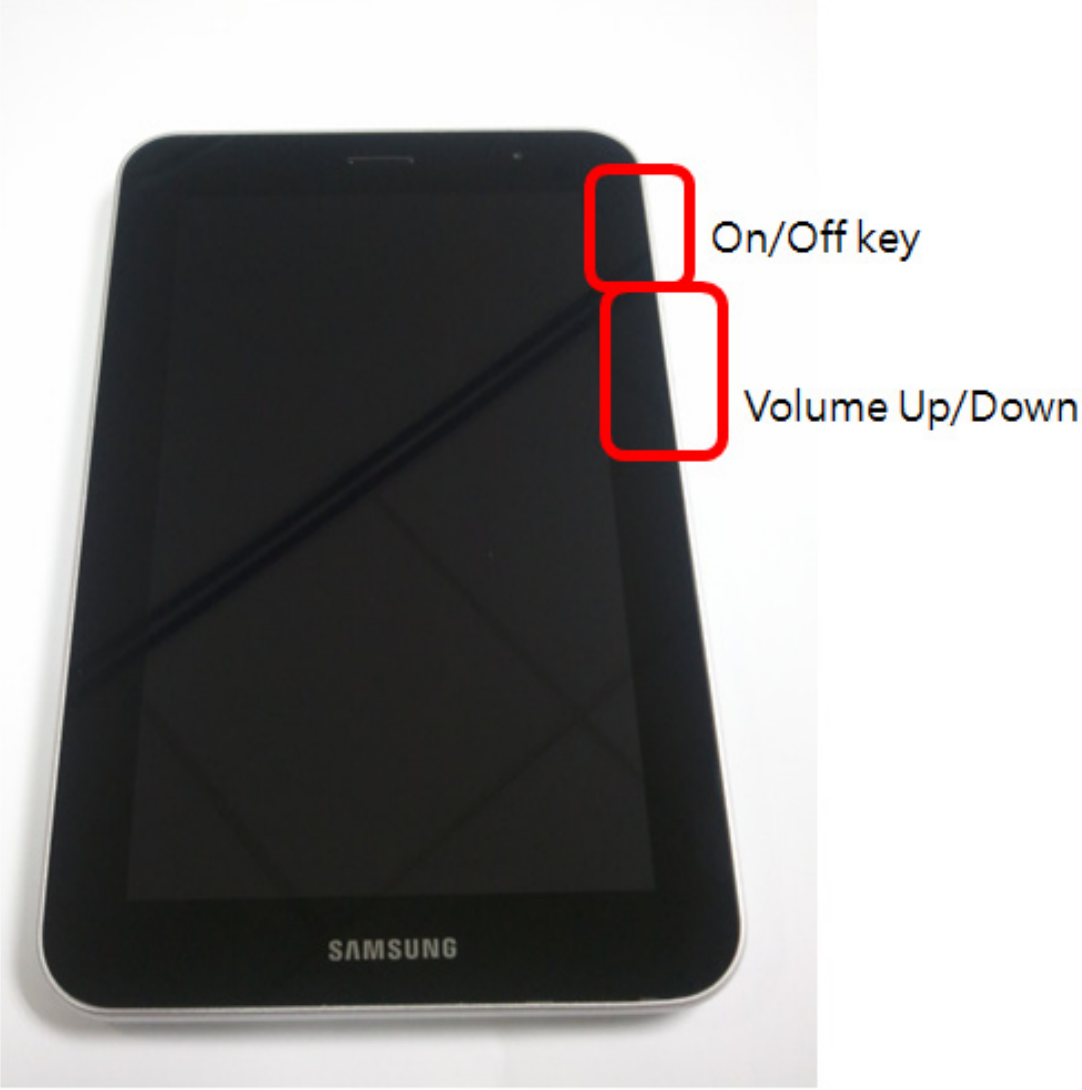


1. Option Selection

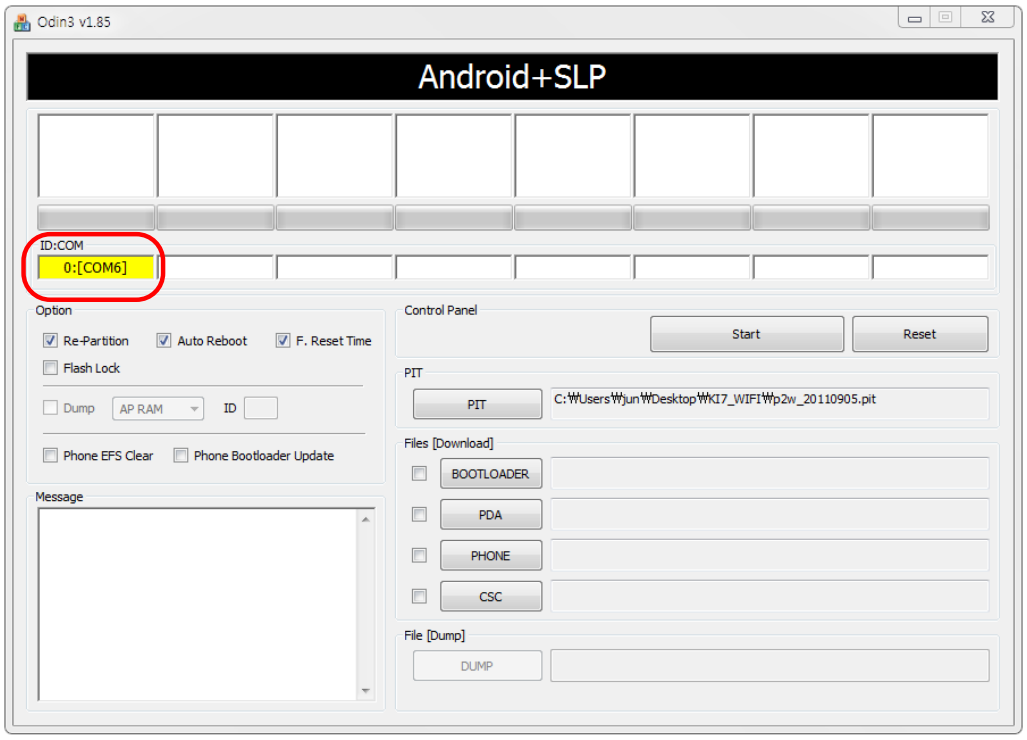
- Check Auto Reboot and F. Reset Time, then select PIT File



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

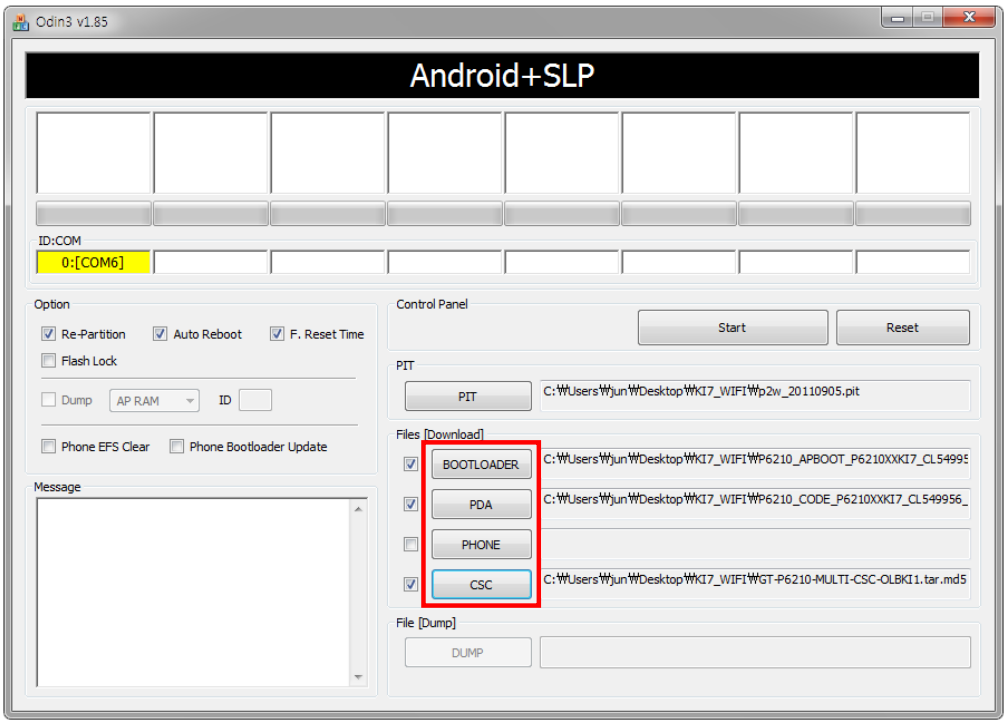


3. Connect the Device to PC via Data Cable.
Make sure ID:COM box highlighted yellow that the device is connected to the PC.

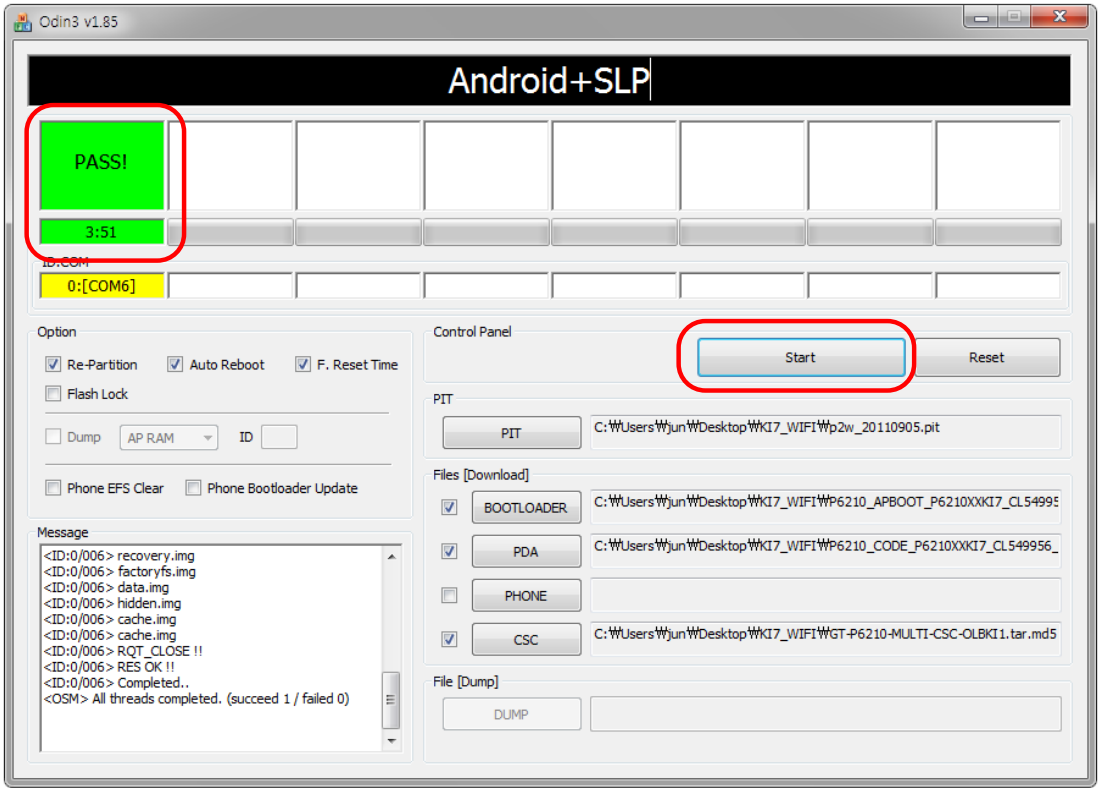


4. Enable the check mark by click on the following options,

- 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.

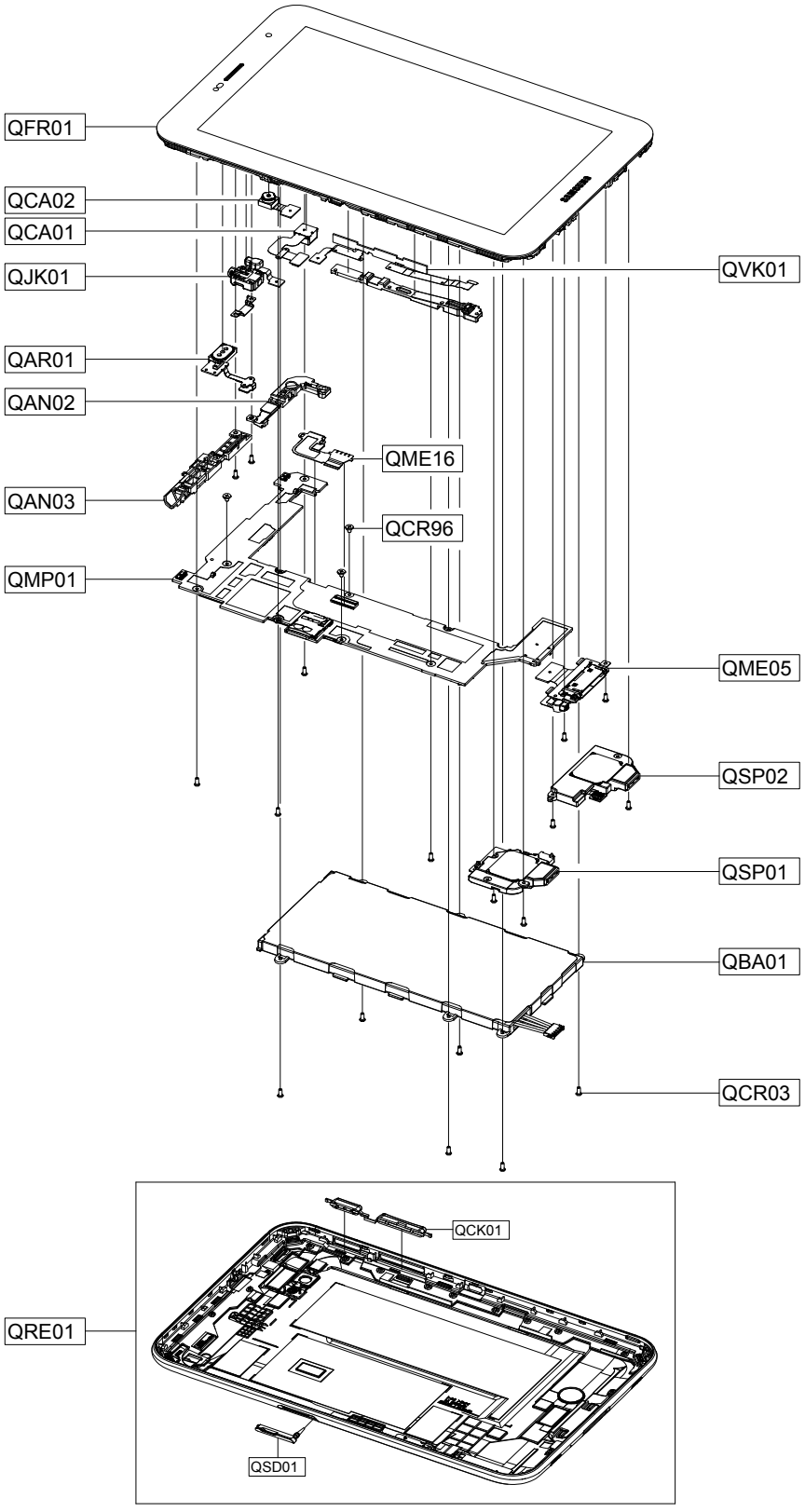
Use only desoldering tools with plastic tips to prevent static discharge.

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
QCR03		SCREW-MACHINE	6001-001811
QCR96		SCREW-MACHINE	6001-002259
QAN02		INTENNA-GT_P6200 BT+GPS	GH42-03310A
QAN03		INTENNA-GT_P6210 MAIN CARRIER	GH42-03405A
QBA01		BATTERY-4000MAH	GH43-03615A
QVK01		KEY FPCB-SIDE (GT_P6200)	GH59-11548A
QME05		ASSY ETC-30PIN CON (GT_P6200)	GH59-11549A
QJK01		ASSY ETC-EARJACK FPCB(GT_P6200)	GH59-11576A
QME16		UNIT-CON TO CON FPCB	GH59-11578A
QAR01		ASSY ETC-SENSOR+RCV FPCB(GT_P6200)	GH59-11590A
QSP01		MODULE-SPEAKER_R+MOTOR	GH59-11602A
QSP02		MODULE-SPEAKER_L	GH59-11603A
QMP01		A/S ASSY-PBA MAIN (COMM)	GH82-06117A
QCA01		ASSY CAMERA-3M MODULE(GT-P6200)	GH96-05368A
QCA02		ASSY CAMERA-2M 1/5" MODULE(GT-P6200)	GH96-05435A
QFR01		MEA FRONT-OCTA LCD ASSY (SVC)	GH97-13025A
QRE01		ASSY CASE-REAR_SVC_16GB(MA/USA)	GH98-22113A
	QSD01	PMO COVER-SD	GH72-65200A
	QCK01	PMO KEY-SIDE	GH72-65204A

5. MAIN Electrical Parts List

SEC CODE	Design LOC	Description
0401-001110	D701,D702	DIODE-SWITCHING
0403-001688	D505,ZD512,ZD701	DIODE-ZENER
0406-001239	D301,D302,D503,D504	DIODE-TVS
0406-001239	D506	DIODE-TVS
0406-001267	ZD300	DIODE-TVS
0406-001293	ZD402,ZD403	DIODE-TVS
0406-001375	ZD507,ZD508,ZD509	DIODE-TVS
0406-001375	ZD510,ZD511,ZD801	DIODE-TVS
0406-001413	ZD401,ZD404,ZD505	DIODE-TVS
0406-001413	ZD506	DIODE-TVS
0504-001113	Q601,TR501,TR703	TR-DIGITAL
0505-001518	Q801	FET-SILICON
0505-002353	U703	FET-SILICON
0505-002720	TR702	FET-SILICON
0505-002748	Q701,TR701	FET-SILICON
0601-002779	LED901	LED
0801-003031	U604	IC-CMOS LOGIC
0902-002766	UCP601	IC-MICROPROCESSOR
1001-001481	U502,U503,U507	IC-ANALOG SWITCH
1003-002216	U903	IC-LEVEL DRIVER
1107-002068	UME601	IC-FLASH MEMORY
1201-003308	U200	IC-GPS AMP
1202-001118	U409	IC-VOLTAGE COMP.
1202-001121	U501	IC-VOLTAGE COMP.
1203-004776	U605,U802	IC-POSI.FIXED REG.
1203-004819	U1002,U401,U402,U408	IC-POSI.FIXED REG.
1203-005244	U1109	IC-MULTI REG.
1203-005574	U1106	IC-POSI.FIXED REG.
1203-006159	U601	IC-DC/DC CONVERTER
1203-006392	U702	IC-POWER SUPERVISOR
1203-006493	U704	IC-BATTERY
1203-006766	U505	IC-VOL. DETECTOR
1203-006794	U504	IC-DC/DC CONVERTER
1203-006817	R6002,U508	IC-POSI.FIXED REG.
1203-006851	U701	IC-POWER SUPERVISOR
1203-006862	U904	IC-BACKLIGHT DRIVER

SEC CODE	Design LOC	Description
1203-006874	U205	IC-MULTI REG.
1205-004004	U804	IC-SWITCH
1205-004055	U1104	IC-TRANSMITTER
1205-004174	U407	IC-CODEC
1205-004313	U801	IC-INTERFACE
1205-004391	U203	IC-BLUETOOTH
1205-004395	U204	IC-WIFI
1205-004396	U201	IC-GPS RECEIVER
1205-004429	U1001	IC-CONTROLLER
1209-002038	U1105	IC-SENSOR
1209-002041	U1101	IC-SENSOR
1209-002052	U1107	IC-SENSOR
1404-001221	TH601,TH602	THERMISTOR-NTC
1405-001091	VAR401,VAR402,VAR403	VARISTOR
1405-001091	VAR404	VARISTOR
1405-001200	VAR801,VAR802	VARISTOR
1405-001317	VAR701	VARISTOR
2007-000140	R529,R530,R629,R630	R-CHIP
2007-000143	R1004,R698,R699,R719	R-CHIP
2007-000143	R728	R-CHIP
2007-000147	R516	R-CHIP
2007-000148	R691,R717	R-CHIP
2007-000157	R317,R318,R319,R331	R-CHIP
2007-000157	R332,R333	R-CHIP
2007-000162	R532,R689,R718,R729	R-CHIP
2007-000162	R823	R-CHIP
2007-000165	R6004	R-CHIP
2007-000166	R514,R515	R-CHIP
2007-000167	R503	R-CHIP
2007-000170	R513	R-CHIP
2007-000172	R517,R518	R-CHIP
2007-000173	R1002	R-CHIP
2007-000758	R1001	R-CHIP
2007-001295	R809,R812,R813,R814	R-CHIP
2007-001295	R815,R816,R817,R818	R-CHIP
2007-001295	R819	R-CHIP

SEC CODE	Design LOC	Description
2007-001306	R724	R-CHIP
2007-003010	R537,R538	R-CHIP
2007-003015	R523,R524	R-CHIP
2007-003029	R6005	R-CHIP
2007-007014	R511,R512	R-CHIP
2007-007092	R200,R201,R525	R-CHIP
2007-007131	R807	R-CHIP
2007-007135	R906	R-CHIP
2007-007137	R404,R405,R412,R413	R-CHIP
2007-007137	R658	R-CHIP
2007-007139	R693	R-CHIP
2007-007142	R520,R521,R522	R-CHIP
2007-007156	R417,R418,R735,R738	R-CHIP
2007-007156	R739	R-CHIP
2007-007310	R214	R-CHIP
2007-007312	R683,R686,R806	R-CHIP
2007-007318	R403,R406,R409,R415	R-CHIP
2007-007517	R634,R637,R681,R682	R-CHIP
2007-007529	R504	R-CHIP
2007-007573	R509,R638	R-CHIP
2007-007942	R407,R536	R-CHIP
2007-007981	R639	R-CHIP
2007-008043	R502	R-CHIP
2007-008052	R1102,R1103,R1105	R-CHIP
2007-008052	R619,R620,R621,R622	R-CHIP
2007-008052	R635,R636,R665,R677	R-CHIP
2007-008052	R678	R-CHIP
2007-008055	R1005,R1101,R1106	R-CHIP
2007-008055	R207,R625,R645,R646	R-CHIP
2007-008055	R653,R654,R657,R671	R-CHIP
2007-008055	R672,R674,R675,R676	R-CHIP
2007-008055	R692,R694,R907,R908	R-CHIP
2007-008055	U602	R-CHIP
2007-008167	R909	R-CHIP
2007-008211	R505,R506,R535,R910	R-CHIP
2007-008211	R911	R-CHIP

SEC CODE	Design LOC	Description
2007-008263	R216	R-CHIP
2007-008275	R510	R-CHIP
2007-008312	R414	R-CHIP
2007-008401	R424,R425	R-CHIP
2007-008403	R501,R707	R-CHIP
2007-008419	R631,R632,R669,R670	R-CHIP
2007-008420	R684,R685,R912,R913	R-CHIP
2007-008483	R507,R508,R534,R734	R-CHIP
2007-008516	R600,R602,R617,R618	R-CHIP
2007-008516	R659,R663,R664,R666	R-CHIP
2007-008516	R668,R702,R703,R705	R-CHIP
2007-008516	R706,R802,R803	R-CHIP
2007-008531	R628	R-CHIP
2007-008588	R660,R661,R679,R680	R-CHIP
2007-008774	R539,R540,R903	R-CHIP
2007-008800	R427,R641,U603	R-CHIP
2007-009084	R416	R-CHIP
2007-009111	R428,R429,R611	R-CHIP
2007-009157	R612,R613,R615,R616	R-CHIP
2007-009157	R647	R-CHIP
2007-009171	R603,R604,R605,R606	R-CHIP
2007-009171	R607,R608,R609,R610	R-CHIP
2007-009212	R401	R-CHIP
2007-009314	R726,R727	R-CHIP
2007-009354	R204	R-CHIP
2007-009408	R430,R623,R624,R626	R-CHIP
2007-009408	R627	R-CHIP
2007-009793	R704	R-CHIP
2007-009794	R208	R-CHIP
2007-009805	R212,R213,R410	R-CHIP
2007-009964	R648,R656	R-CHIP
2007-009969	R402	R-CHIP
2007-010029	R633	R-CHIP
2007-010509	R722	R-CHIP
2007-010856	R742	R-CHIP
2203-000233	C209,C255,C258,C278	C-CER,CHIP

SEC CODE	Design LOC	Description
2203-000233	C279	C-CER,CHIP
2203-000254	C770	C-CER,CHIP
2203-000386	C412,C413,C419,C420	C-CER,CHIP
2203-000425	C434,C438,C439	C-CER,CHIP
2203-000438	C246	C-CER,CHIP
2203-000489	C1114	C-CER,CHIP
2203-000725	C750	C-CER,CHIP
2203-001153	C409,C414,C415,C421	C-CER,CHIP
2203-001153	C435,C436,C437	C-CER,CHIP
2203-001239	C508,C509	C-CER,CHIP
2203-001437	C219	C-CER,CHIP
2203-002687	C766	C-CER,CHIP
2203-002709	C216	C-CER,CHIP
2203-005138	C647,C655	C-CER,CHIP
2203-005288	C218	C-CER,CHIP
2203-005682	C910	C-CER,CHIP
2203-005725	C229,C649,C650	C-CER,CHIP
2203-005727	C906	C-CER,CHIP
2203-005729	C247,C269,C408,C716	C-CER,CHIP
2203-005729	C724	C-CER,CHIP
2203-005732	C410	C-CER,CHIP
2203-005736	C201,C213	C-CER,CHIP
2203-005806	C205	C-CER,CHIP
2203-006048	C656,C771	C-CER,CHIP
2203-006121	C268	C-CER,CHIP
2203-006123	C270	C-CER,CHIP
2203-006190	C641,C763	C-CER,CHIP
2203-006194	C801	C-CER,CHIP
2203-006208	C726,C728,C729,C730	C-CER,CHIP
2203-006305	C239,C253,C256,C257	C-CER,CHIP
2203-006305	C273,C277,C282,C286	C-CER,CHIP
2203-006305	C287,C288,C289,C290	C-CER,CHIP
2203-006305	C291,C292,C298,C648	C-CER,CHIP
2203-006324	C904	C-CER,CHIP
2203-006348	C512,C704	C-CER,CHIP
2203-006399	C1107,C1108,C405	C-CER,CHIP

SEC CODE	Design LOC	Description
2203-006399	C407,C440,C441,C442	C-CER,CHIP
2203-006399	C443	C-CER,CHIP
2203-006423	C1103,C1106,C1110	C-CER,CHIP
2203-006423	C1111,C206,C240,C243	C-CER,CHIP
2203-006423	C245,C249,C250,C261	C-CER,CHIP
2203-006423	C264,C272,C418,C601	C-CER,CHIP
2203-006423	C602,C606,C608,C611	C-CER,CHIP
2203-006423	C616,C635,C639,C640	C-CER,CHIP
2203-006423	C651,C653,C654,C659	C-CER,CHIP
2203-006423	C752	C-CER,CHIP
2203-006462	C285,C293	C-CER,CHIP
2203-006474	C623,C657	C-CER,CHIP
2203-006562	C1001,C1002,C1007	C-CER,CHIP
2203-006562	C1009,C1012,C1013	C-CER,CHIP
2203-006562	C510,C518,C519,C662	C-CER,CHIP
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2203-006562	C761,C772,C776,C802	C-CER,CHIP
2203-006562	C803,C804	C-CER,CHIP
2203-006642	C634,C637	C-CER,CHIP
2203-006647	C426,C428	C-CER,CHIP
2203-006648	C431,C433,U405,U406	C-CER,CHIP
2203-006665	C297	C-CER,CHIP
2203-006668	C444,C445,C642,C643	C-CER,CHIP
2203-006681	C812	C-CER,CHIP
2203-006824	C762,C764	C-CER,CHIP
2203-006839	C1105,C1112,C1115	C-CER,CHIP
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2203-006839	C507,C713,C715	C-CER,CHIP
2203-006872	C203,C204,C217,C228	C-CER,CHIP
2203-006872	C425,C603,C604,C739	C-CER,CHIP
2203-006872	C740,C743,C744,C745	C-CER,CHIP
2203-006872	C907,C909	C-CER,CHIP
2203-006890	C725	C-CER,CHIP
2203-006979	C211,C774	C-CER,CHIP
2203-007133	C511,C765	C-CER,CHIP
2203-007194	C254,C266	C-CER,CHIP

SEC CODE	Design LOC	Description
2203-007230	C711,C760	C-CER,CHIP
2203-007240	C665	C-CER,CHIP
2203-007270	C758,C759,C811	C-CER,CHIP
2203-007271	C1006,C1008,C1101	C-CER,CHIP
2203-007271	C1102,C1104,C1109	C-CER,CHIP
2203-007271	C207,C208,C238,C241	C-CER,CHIP
2203-007271	C244,C248,C252,C260	C-CER,CHIP
2203-007271	C267,C271,C283,C294	C-CER,CHIP
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2203-007271	C622,C629,C638,C658	C-CER,CHIP
2203-007271	C735,C805,C806	C-CER,CHIP
2203-007279	C705,C707,C712,C727	C-CER,CHIP
2203-007279	C754,C756,C768,C769	C-CER,CHIP
2203-007279	C905	C-CER,CHIP
2203-007317	C344,C609,C612,C617	C-CER,CHIP
2203-007317	C619,C624,C626,C664	C-CER,CHIP
2203-007342	C813	C-CER,CHIP
2203-007391	C242	C-CER,CHIP
2203-007393	C520,C706,C708,C709	C-CER,CHIP
2203-007393	C710,C717,C718,C719	C-CER,CHIP
2203-007393	C720,C721,C722,C723	C-CER,CHIP
2203-007393	C732,C734,C738,C775	C-CER,CHIP
2203-007449	C1113,C1116,C1117	C-CER,CHIP
2203-007449	C1118,C1119,C1120	C-CER,CHIP
2203-007449	C1122,C417,C422,C423	C-CER,CHIP
2203-007449	C424,C427,C429,C430	C-CER,CHIP
2203-007449	C432,C503,C504,C513	C-CER,CHIP
2203-007449	C613,C614,C615,C618	C-CER,CHIP
2203-007449	C620,C621,C625,C627	C-CER,CHIP
2203-007449	C628,C630,C631,C632	C-CER,CHIP
2203-007449	C633,C636,C666,C667	C-CER,CHIP
2203-007449	C701,C733,C736,C737	C-CER,CHIP
2203-007449	C741,C742,C746,C747	C-CER,CHIP
2203-007449	C748,C749,C777,C901	C-CER,CHIP
2203-007449	C903,C908	C-CER,CHIP
2203-007634	C514,C515	C-CER,CHIP

SEC CODE	Design LOC	Description
2203-007693	C755,C757	C-CER,CHIP
2203-007761	C274	C-CER,CHIP
2203-007781	C501,C502,C505,C506	C-CER,CHIP
2404-001561	TA401,TA402,TA403	C-TA,CHIP
2703-002649	C212	INDUCTOR-SMD
2703-003546	L601	INDUCTOR-SMD
2703-003686	L704	INDUCTOR-SMD
2703-003687	L501	INDUCTOR-SMD
2703-003892	L705	INDUCTOR-SMD
2703-003908	L205,L207	INDUCTOR-SMD
2703-003909	L702,L706	INDUCTOR-SMD
2703-003911	L701,L703,L902	INDUCTOR-SMD
2703-003917	L206,L208	INDUCTOR-SMD
2703-004088	L209	INDUCTOR-SMD
2703-004225	L707	INDUCTOR-SMD
2801-004339	OSC701	CRYSTAL-SMD
2801-004458	OSC601	CRYSTAL-SMD
2801-004931	OSC203	CRYSTAL-SMD
2801-005069	OSC202	CRYSTAL-SMD
2809-001374	OSC200	OSCILLATOR-VCTCXO
2901-001525	F902,F903,F904	FILTER-EMI/ESD
2901-001647	F801,F802,F803,F901	FILTER-EMI SMD
2904-001944	F201,F204	FILTER-SAW
2904-001988	F200	FILTER-GPS SAW
2911-000188	F203	DUPLEXER-FEM
3301-001534	L1101,L1102,L1103	BEAD-SMD
3301-001534	L1104	BEAD-SMD
3301-001659	L201	BEAD-SMD
3301-001885	L401,L402,L403,L405	BEAD-SMD
3301-001885	L406,L407,L408,L409	BEAD-SMD
3301-001885	L410	BEAD-SMD
3301-001895	L200	BEAD-SMD
3301-001901	L1001	BEAD-SMD
3301-001929	L404	BEAD-SMD
3301-001956	L801	BEAD-SMD
3301-002066	L901	BEAD-SMD

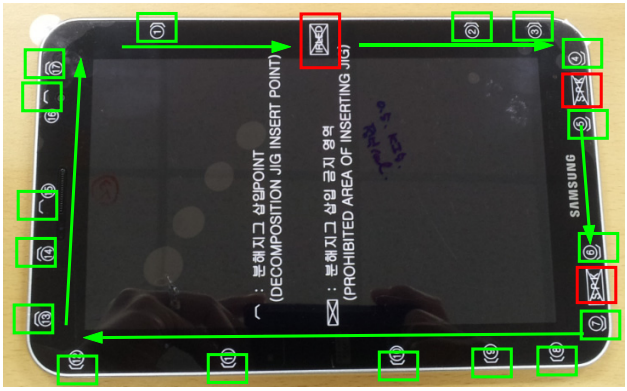
SEC CODE	Design LOC	Description
3709-001575	CD300	CONNECTOR-CARD EDGE
3711-006015	HDC505	HEADER-BOARD TO BOARD
3711-006615	HDC401,HDC502,HDC503	HEADER-BOARD TO BOARD
3711-006615	HDC803,HEA504	HEADER-BOARD TO BOARD
3711-006619	HEA1001	HEADER-BOARD TO BOARD
3711-006852	HDC901,HDC902	HEADER-BOARD TO BOARD
3711-006882	HDC802	HEADER-BOARD TO BOARD
3711-007173	HDC601	HEADER-BOARD TO BOARD
3711-007494	CON701	CONNECTOR-HEADER
3712-001375	ANT200,ANT201,ANT204	CONNECTOR-TERMINAL
4709-001672	U202	FREQ-DISTRIBUTER
4709-002018	F206	BALUN
4709-002019	F202	BALUN
4709-002021	F205	FREQ-DISTRIBUTER
GH62-00015A	U206,U207,U410	PAD GAP-PCB GASKET
GH70-07744A	SC204	ICT SHIELD-CAN GPS
GH80-03320A	R217,R614	SOLDER-CREAM/SMT KOREA(FREE)
GH80-03321A	R219,R431	SOLDER-CREAM/DHDMR(FREE)
GH98-21815A	SC206	ASSY COVER-SHIELD CAN GPS2
GH98-21816A	SC205	ASSY COVER-SHIELD CAN WI-FI

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



: Insert Point (17 Point)

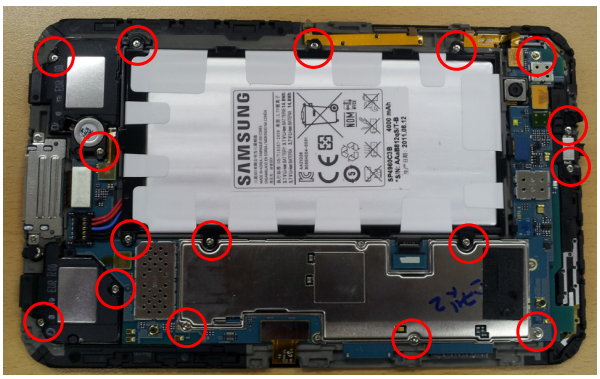
: Do not Insert

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

2 (Caution) Be careful Earjack damage

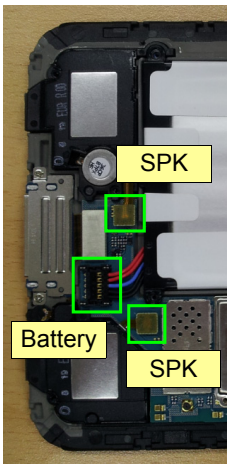
-

3 Carefully release the screws at 16 different locations from the Front.
(L1.4*2.5, Torque 1.1 ± 0.1 kgf.cm)



Be careful not to scratch cover

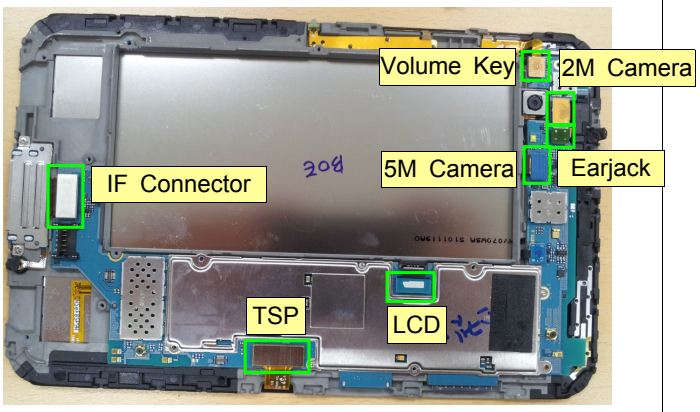
4 Separate the Speaker, Battery from the PBA.



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

LCD

5 Separate IF Connector, TSP, LCD, 5M Camera, 2M Camera, Volume Key, Earjack FPCBs from the PBA

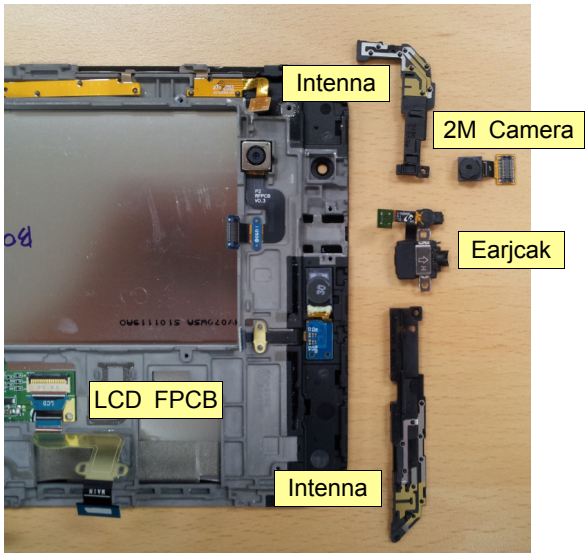


Be careful not to damage the FPCBs

6 Separate PBA from the Front.

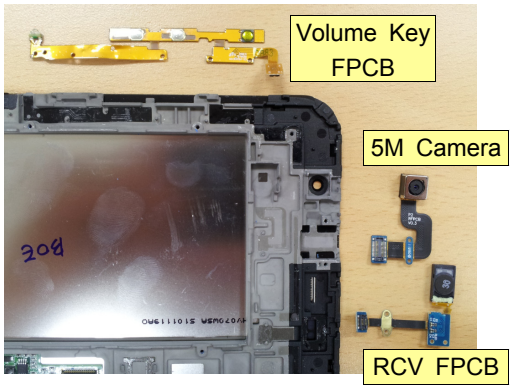
Be careful not to scratch cover

7 Separate the Intenna, 2M Camera, Earjack, LCD FPCB from the Front.

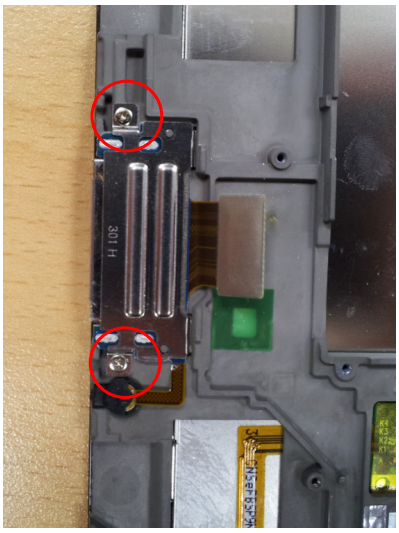
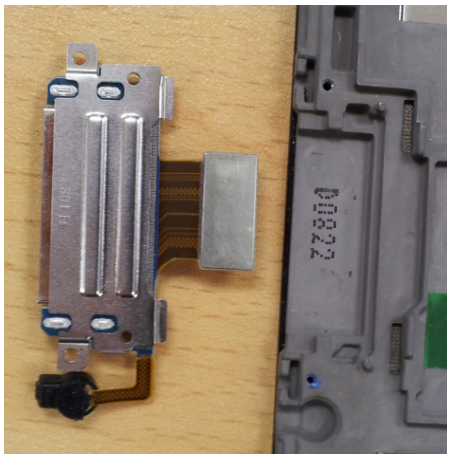


Be careful not to damage the FPCBs

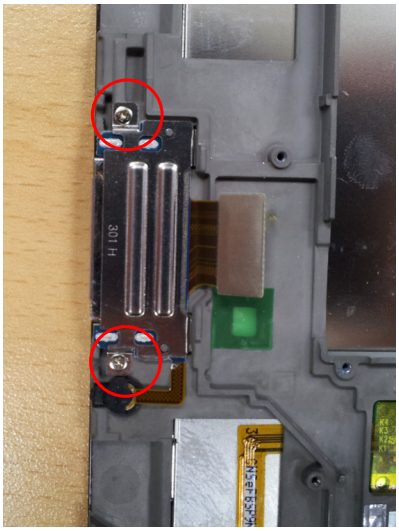
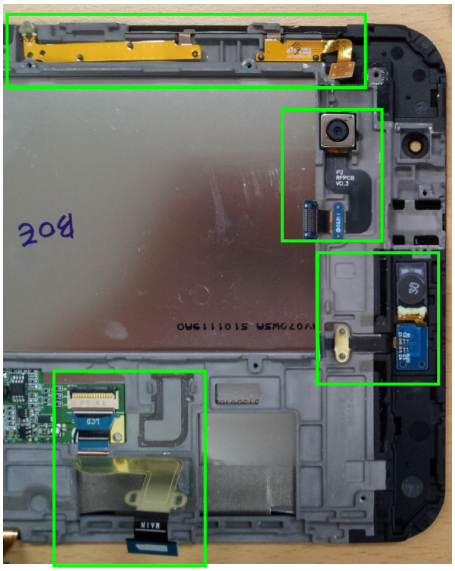
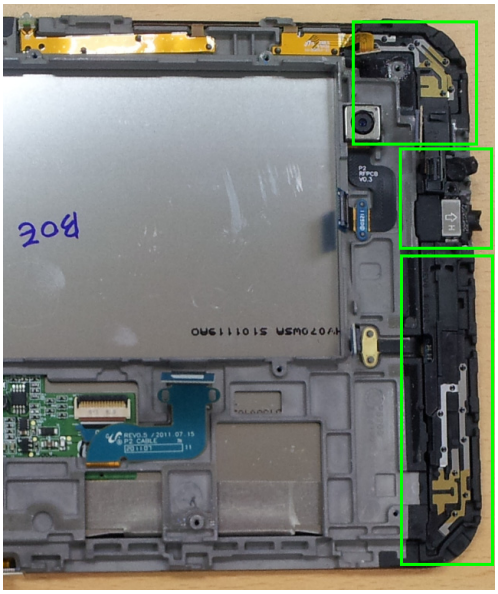
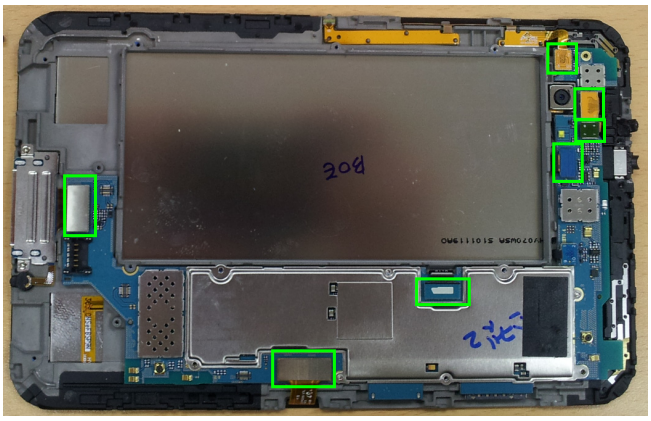
8 Separate the Volume FPCB, 5M Camera, RCV FPCB from the Front.



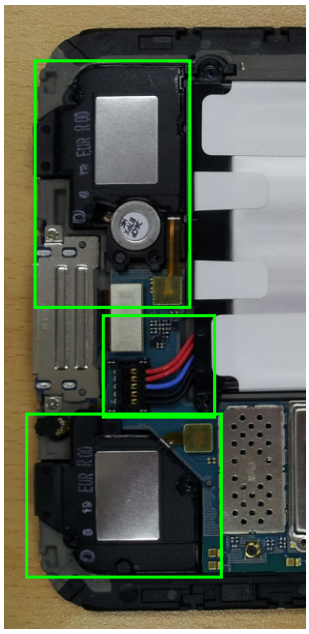
Be careful not to damage the FPCBs

9 Carefully release the screws at 2 different locations from the Front. (L1.4*3.0, Torque 1.1 ± 0.1 kgf.cm) 	**10** Separate the IF Connector from the Front. 
Be careful not to damage the FPCBs	Be careful not to damage the FPCBs

7-1-2. assemble

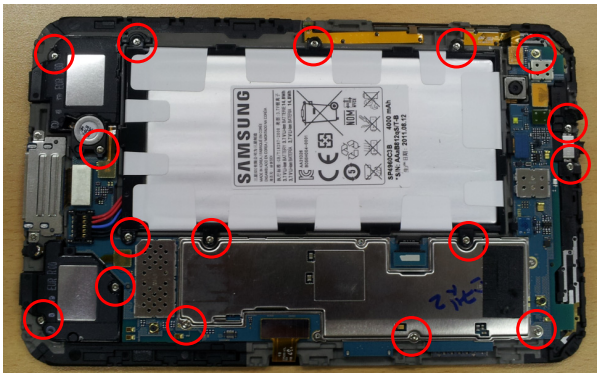
1 Screw at 2 point (L1.4*3.0, Torque 1.1 ± 0.1 kgf.cm) Assemble the IF Connector. 	**2** Assemble the Volume FPCB, 5M Camera, RCV FPCB, LCD FPCB. 
Be careful not to damage the FPCBs	Be careful not to damage the FPCBs
3 Assemble the Intenna, 2M Camera. 	**4** Assemble PBA and all Connectors (IF Connector, TSP, LCD, 5M Camera, 2M Camera, Volume Key, Earjack FPCBs) 
Be careful not to damage the FPCBs	Be careful not to damage the FPCBs

6 Assemble the Speakers Battery



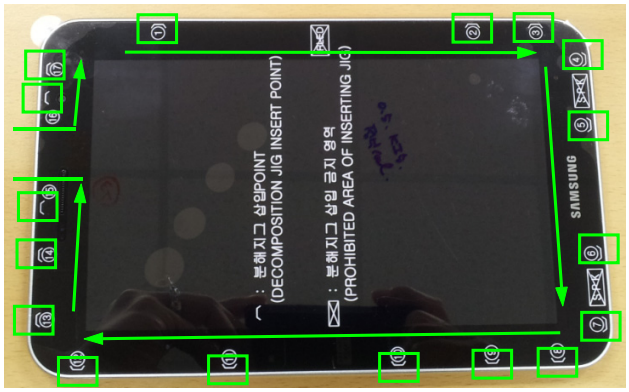
Be careful not to damage the FPCBs

5 Screw at 16 point
(L1.4*2.5, Torque 1.1 ± 0.1 kgf.cm)



Be careful not to damage the FPCBs

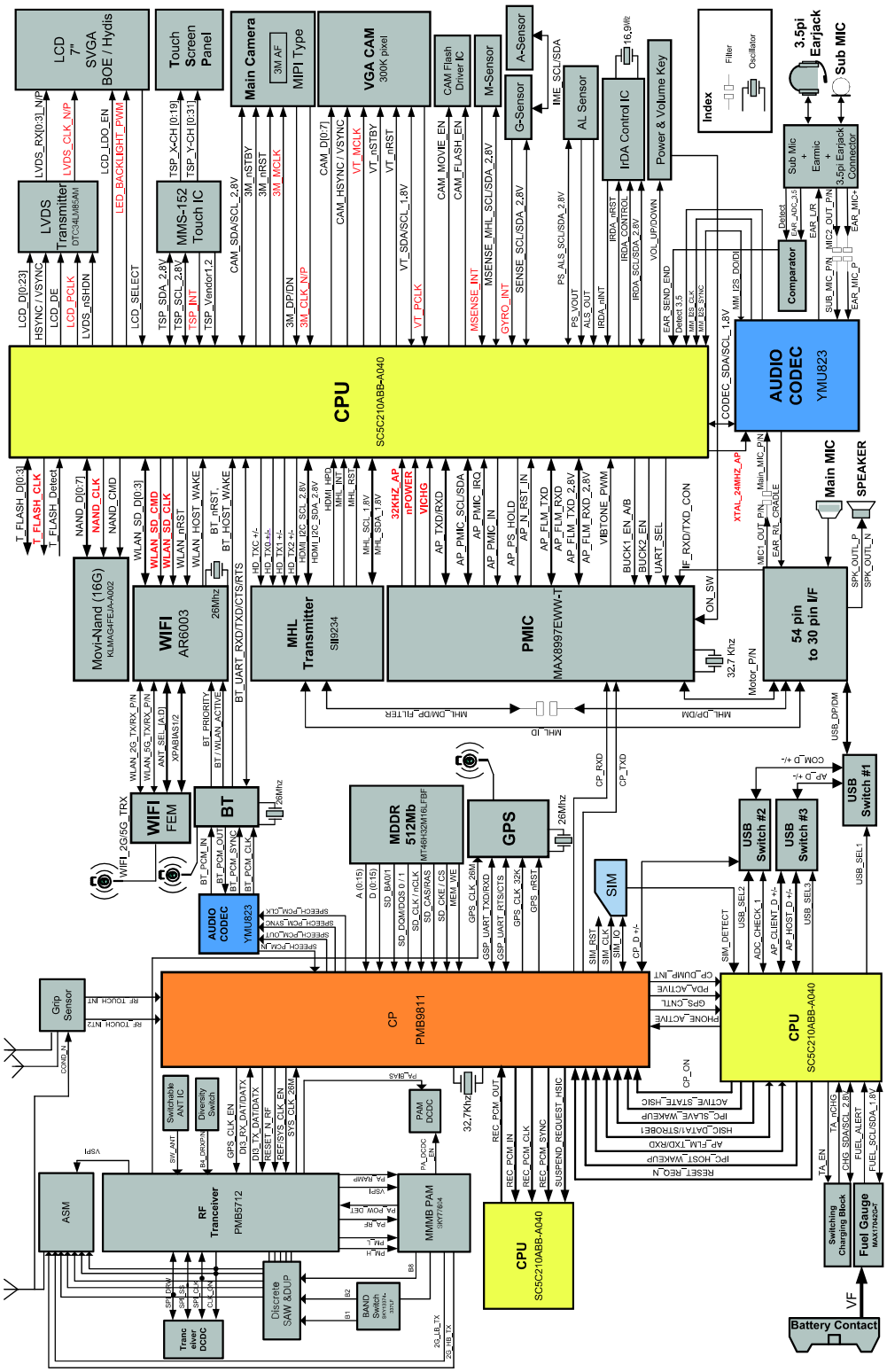
7 Assemble the Rear.



Be careful not to damage the FPCBs, not to scratch cover.

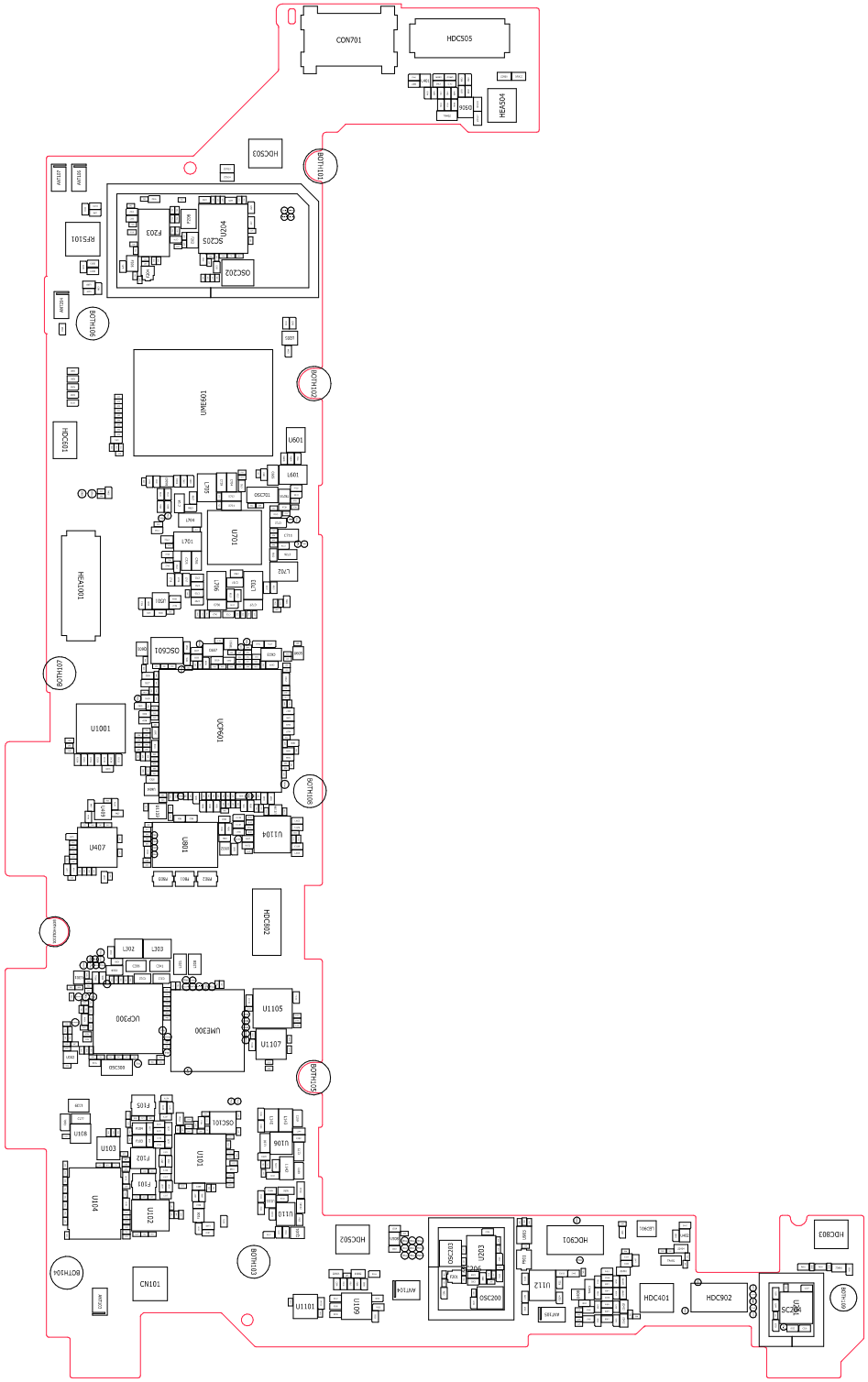
8. Level 3 Repair

8-1. Block Diagram

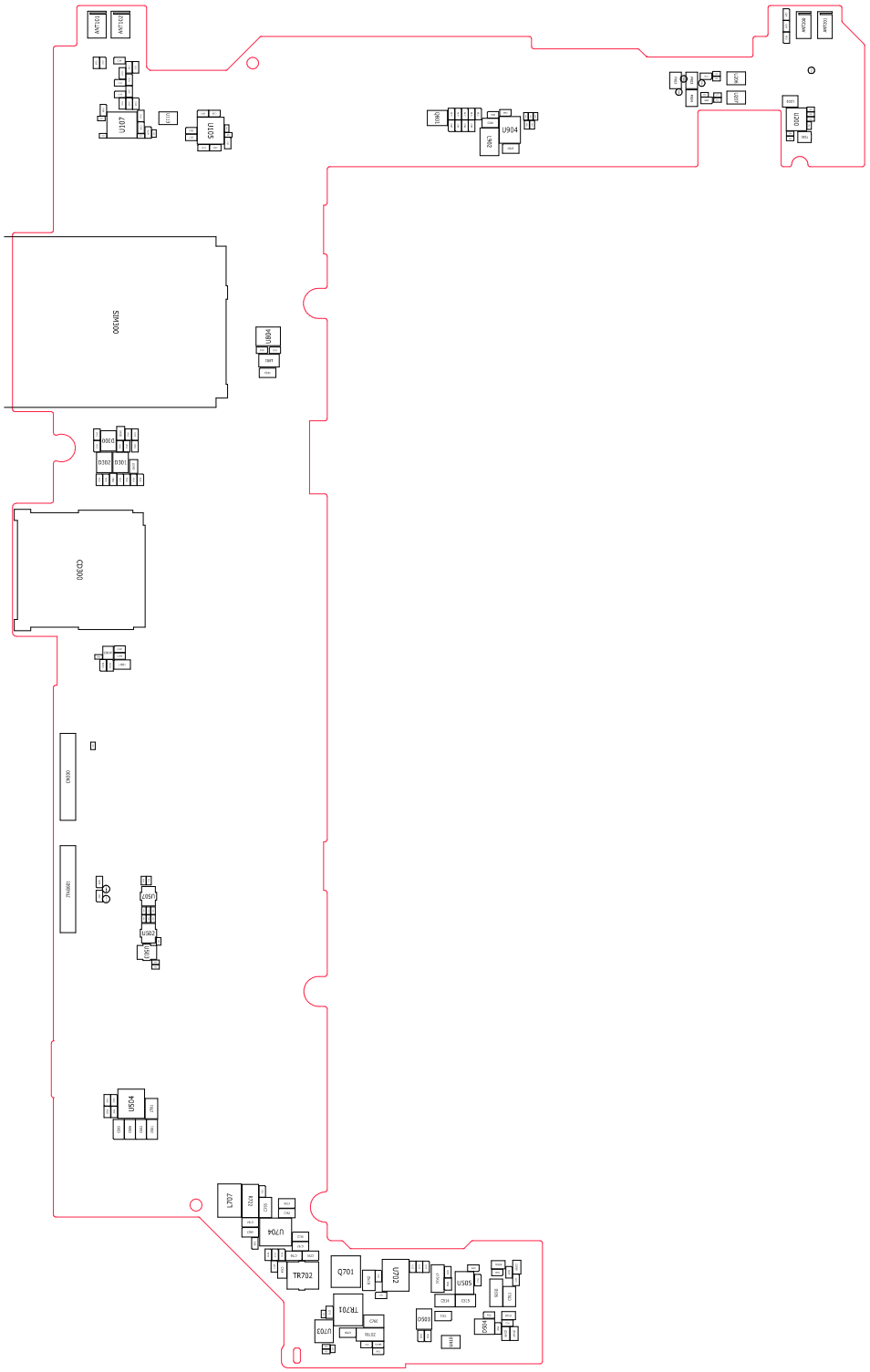


8-2. PCB Diagrams

8-2-1. Top

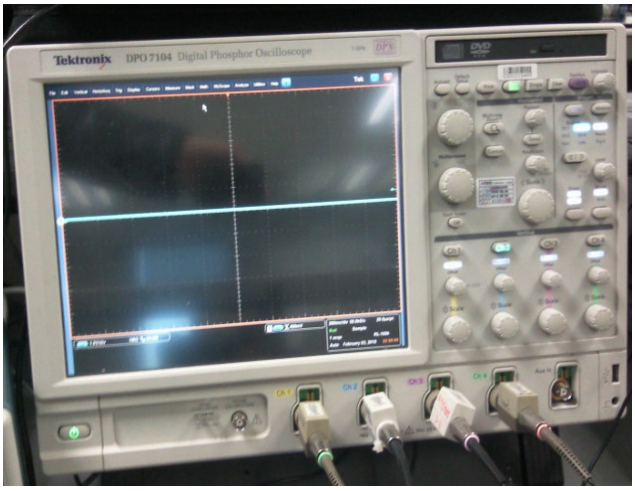


8-2-2. Bottom



8-3. Flow Chart of Troubleshooting

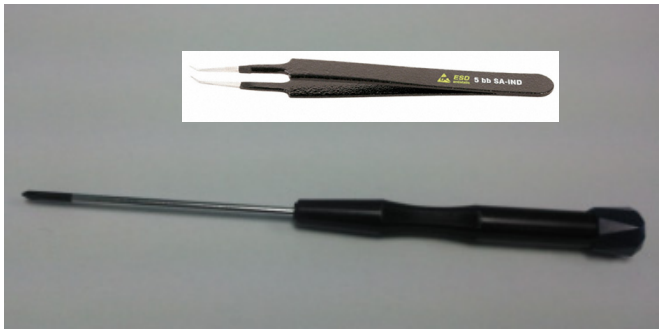
Equipments



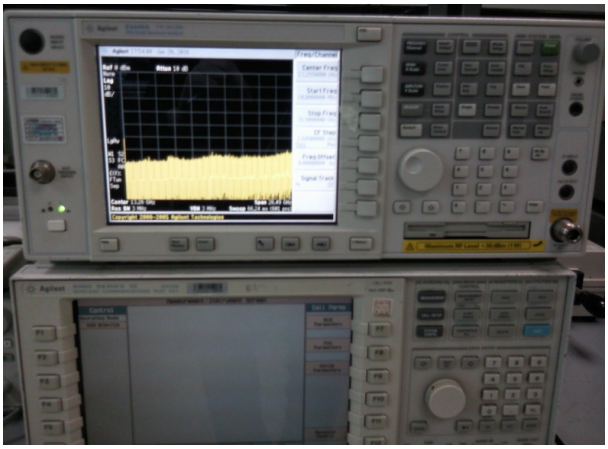
↑ Oscilloscope

↑ Digital Multimeter

↑ Power Supply



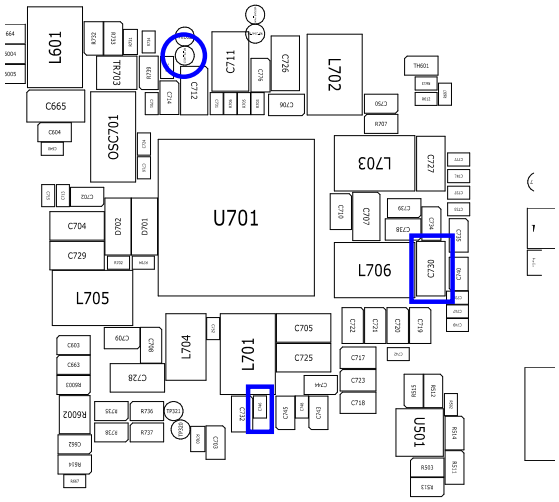
↑ + driver, ESD Safe Tweezer

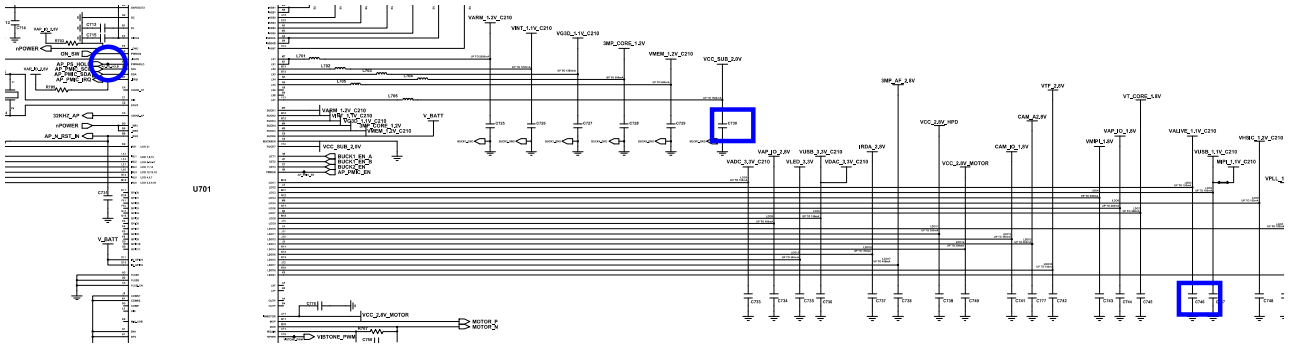


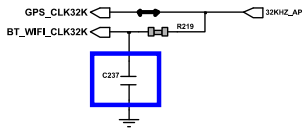
↑ 8960 & Spectrum Analyzer

↑ Soldering iron

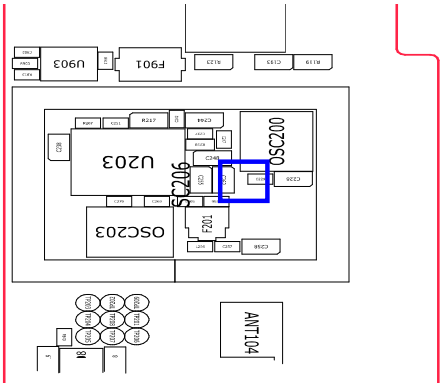
8-3-1. Power On



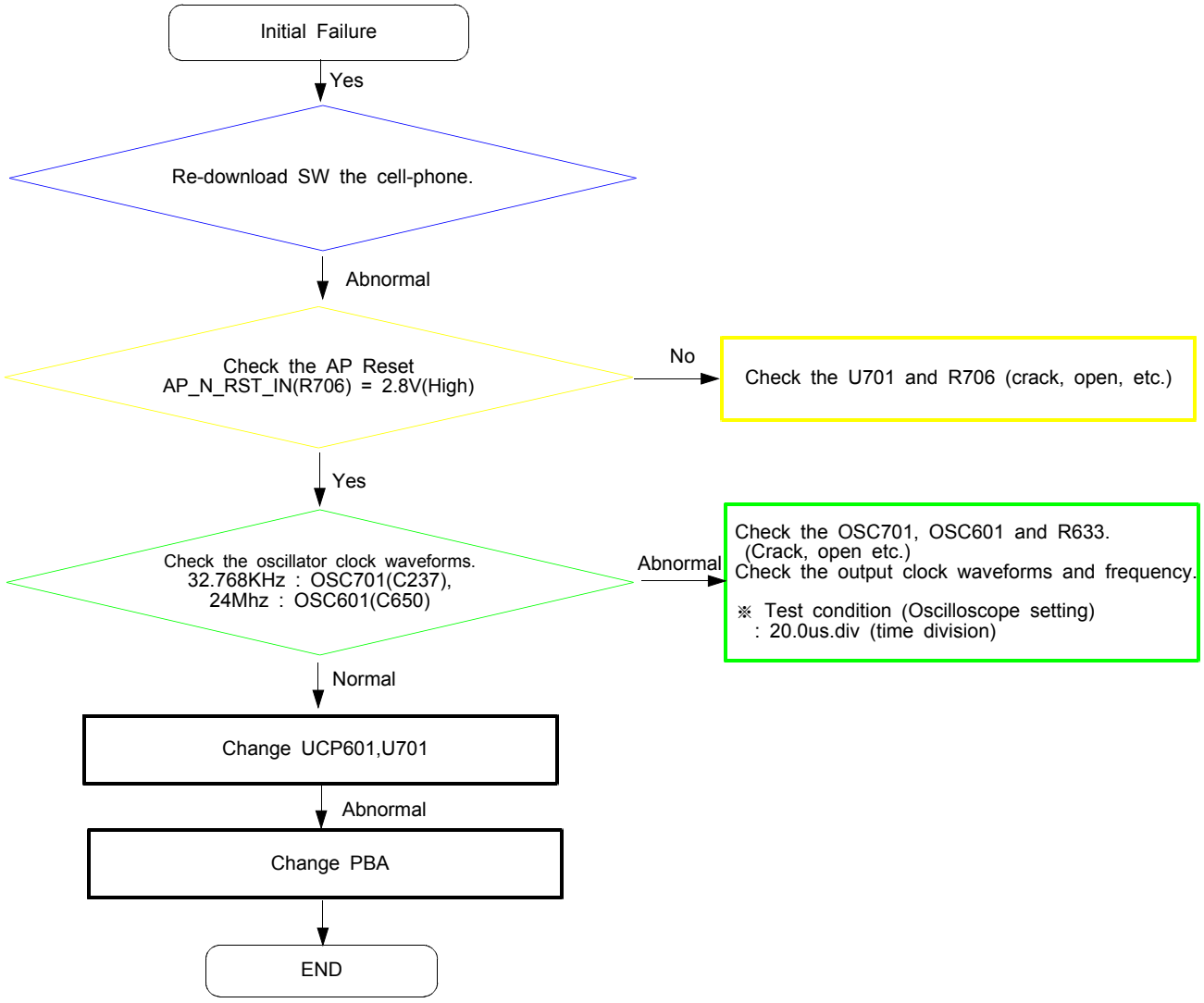


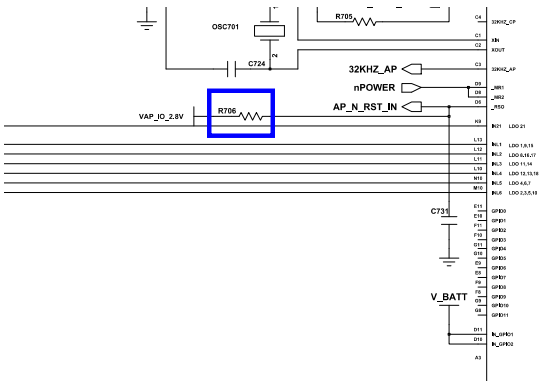


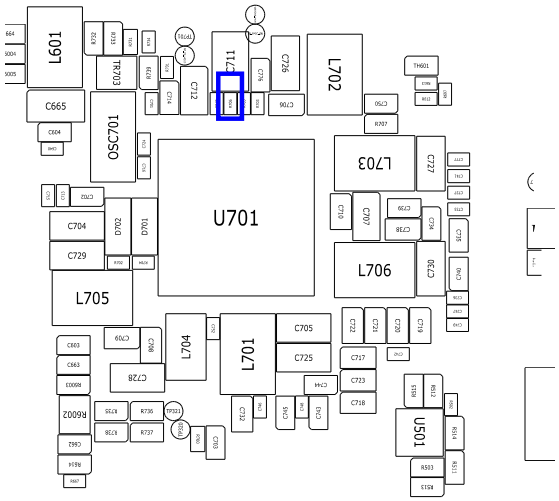
32KHZ CLOCK



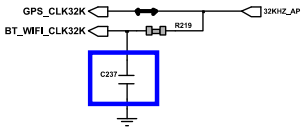
8-3-2. Initial



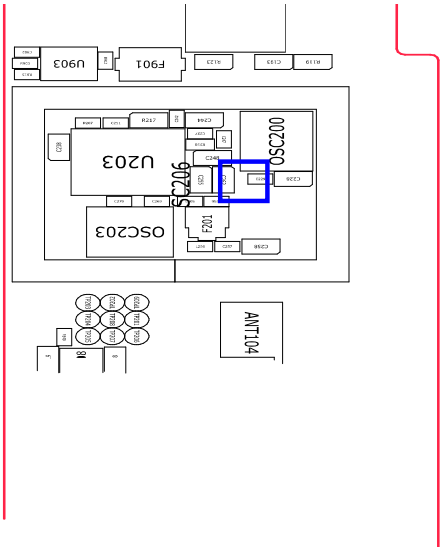


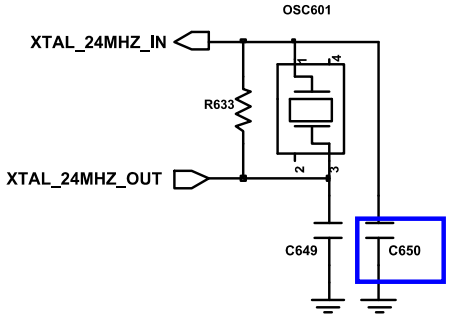


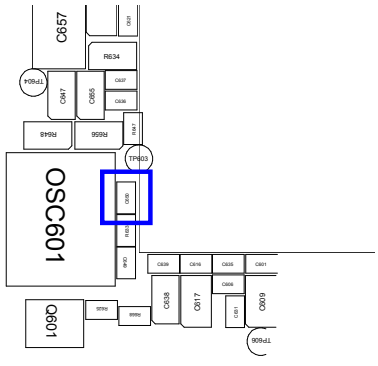
U701



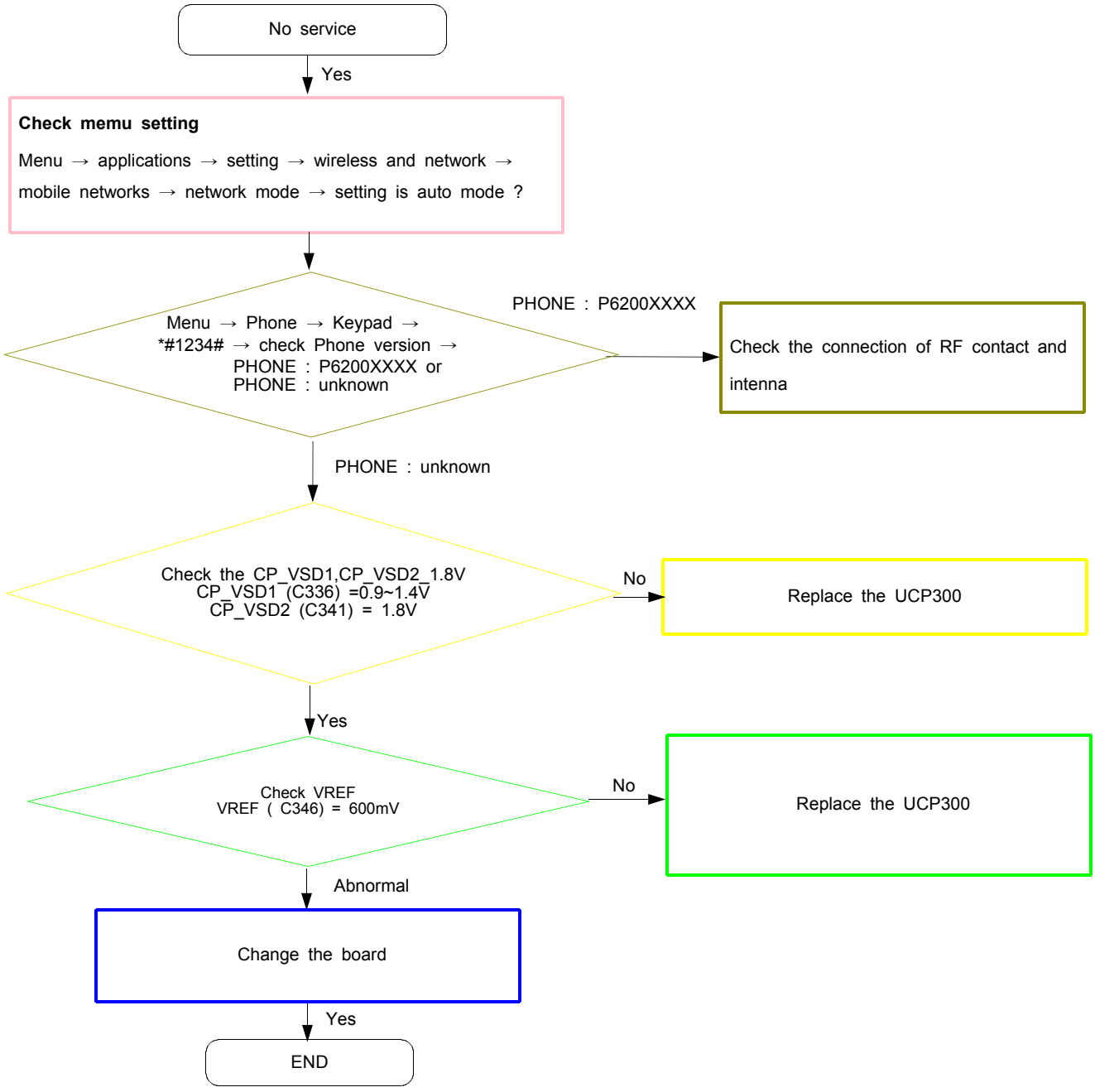
32KHZ CLOCK

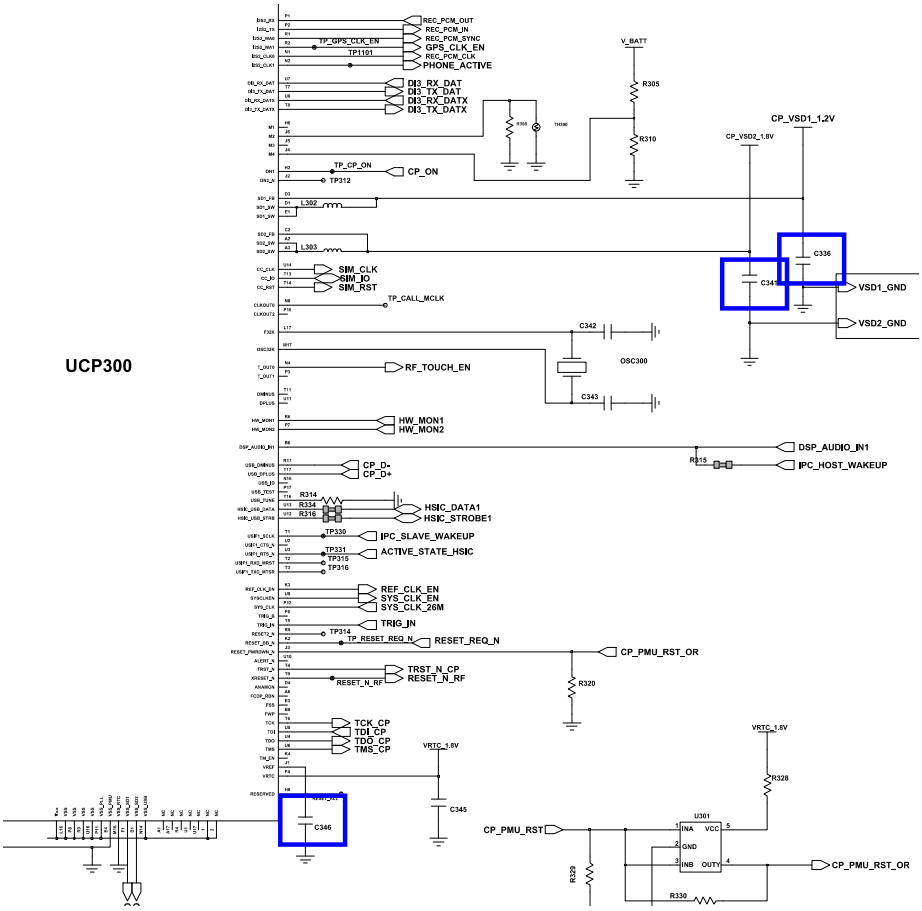


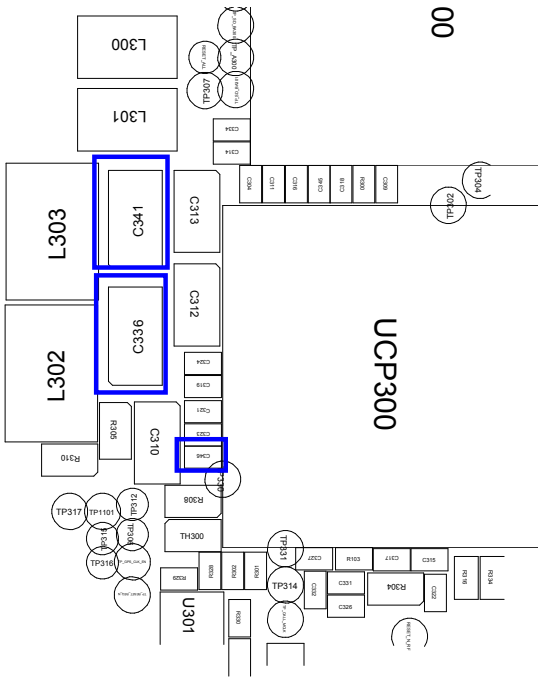




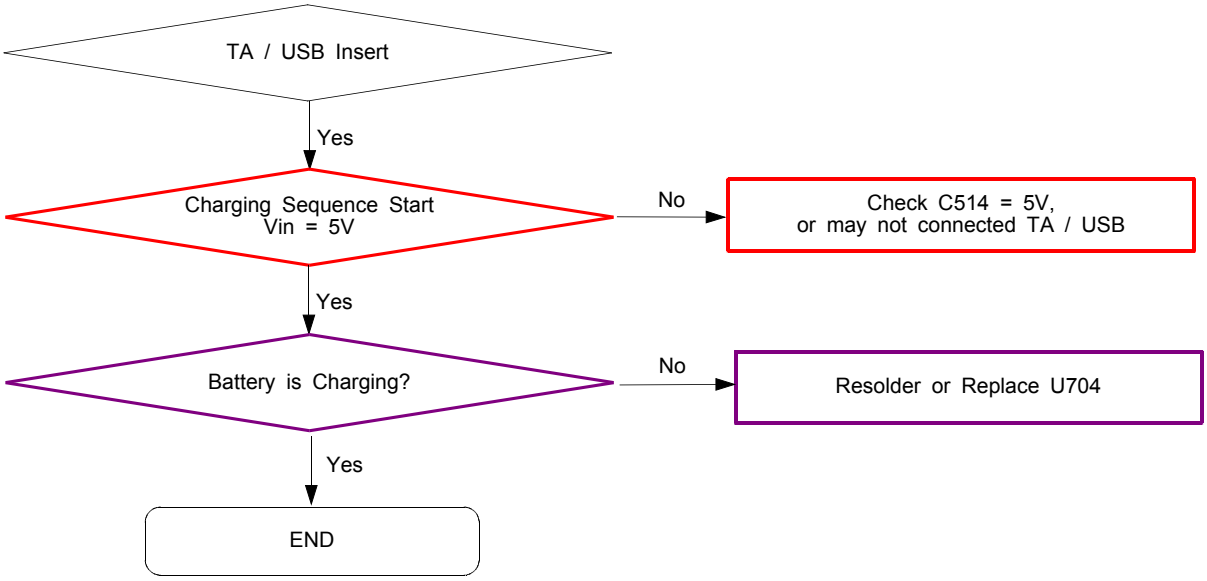
8-3-3. No Service

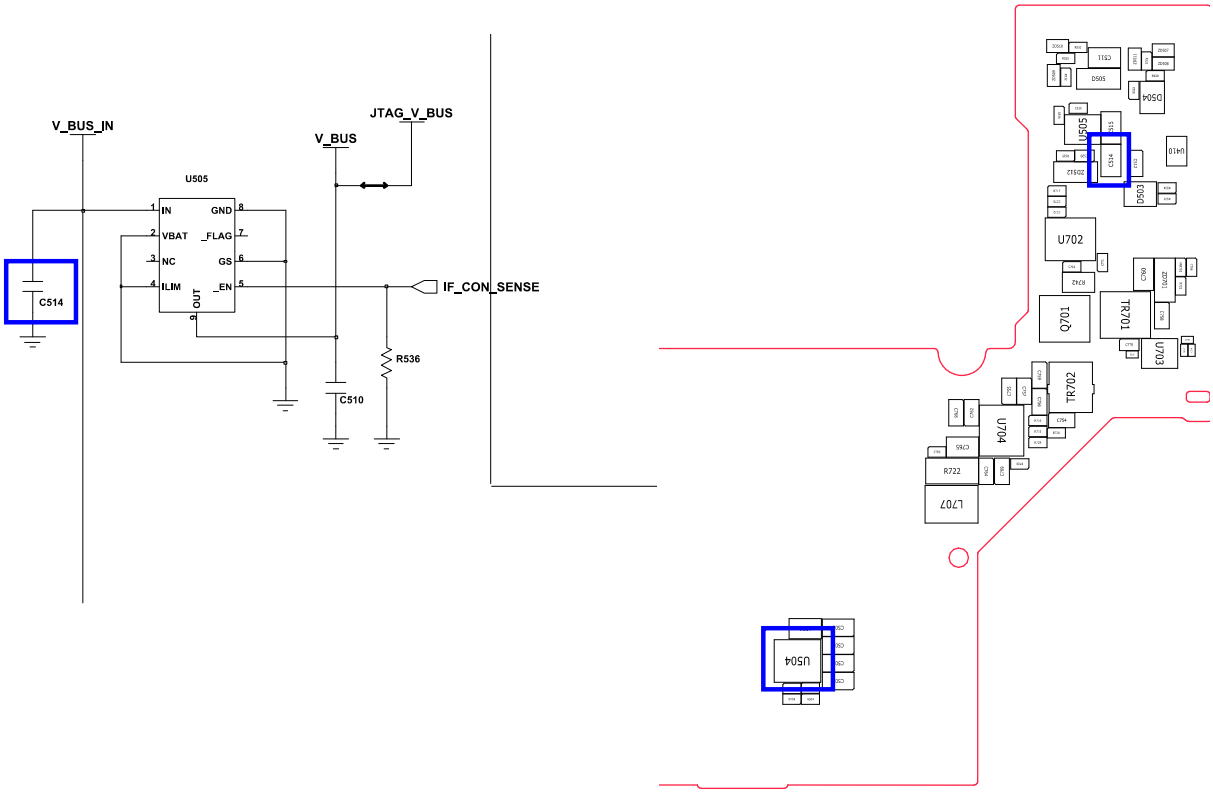




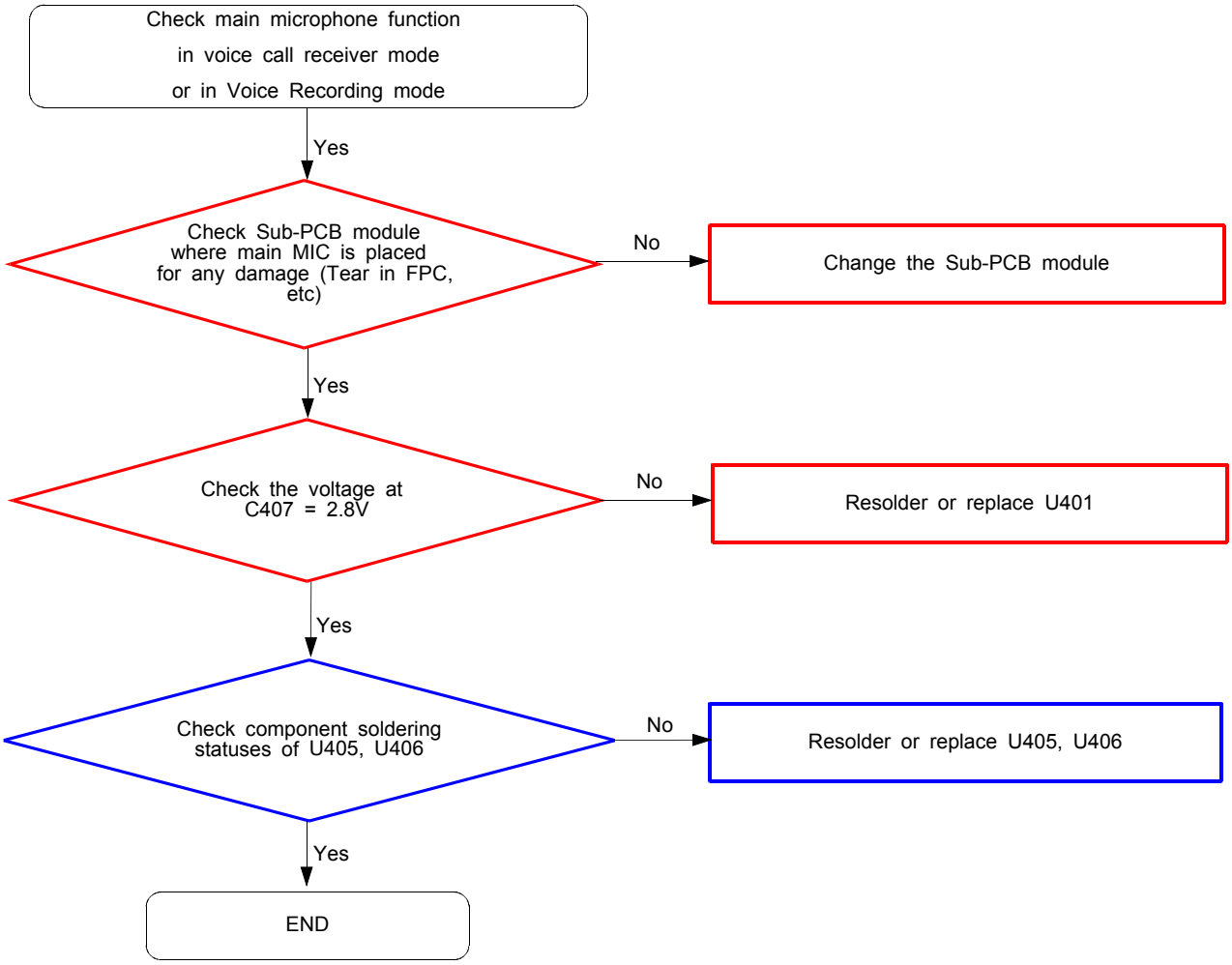


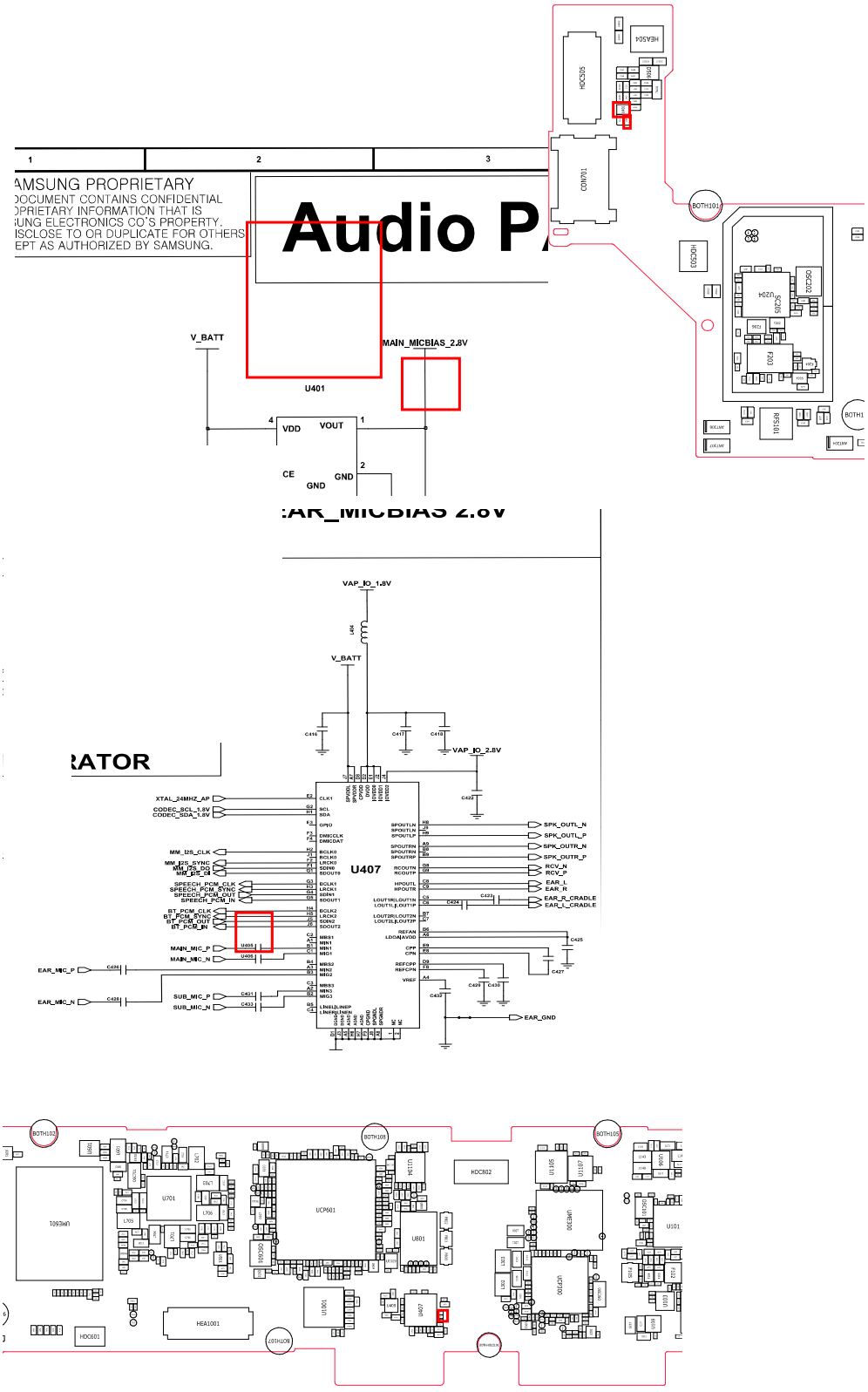
8-3-4. Charging Part



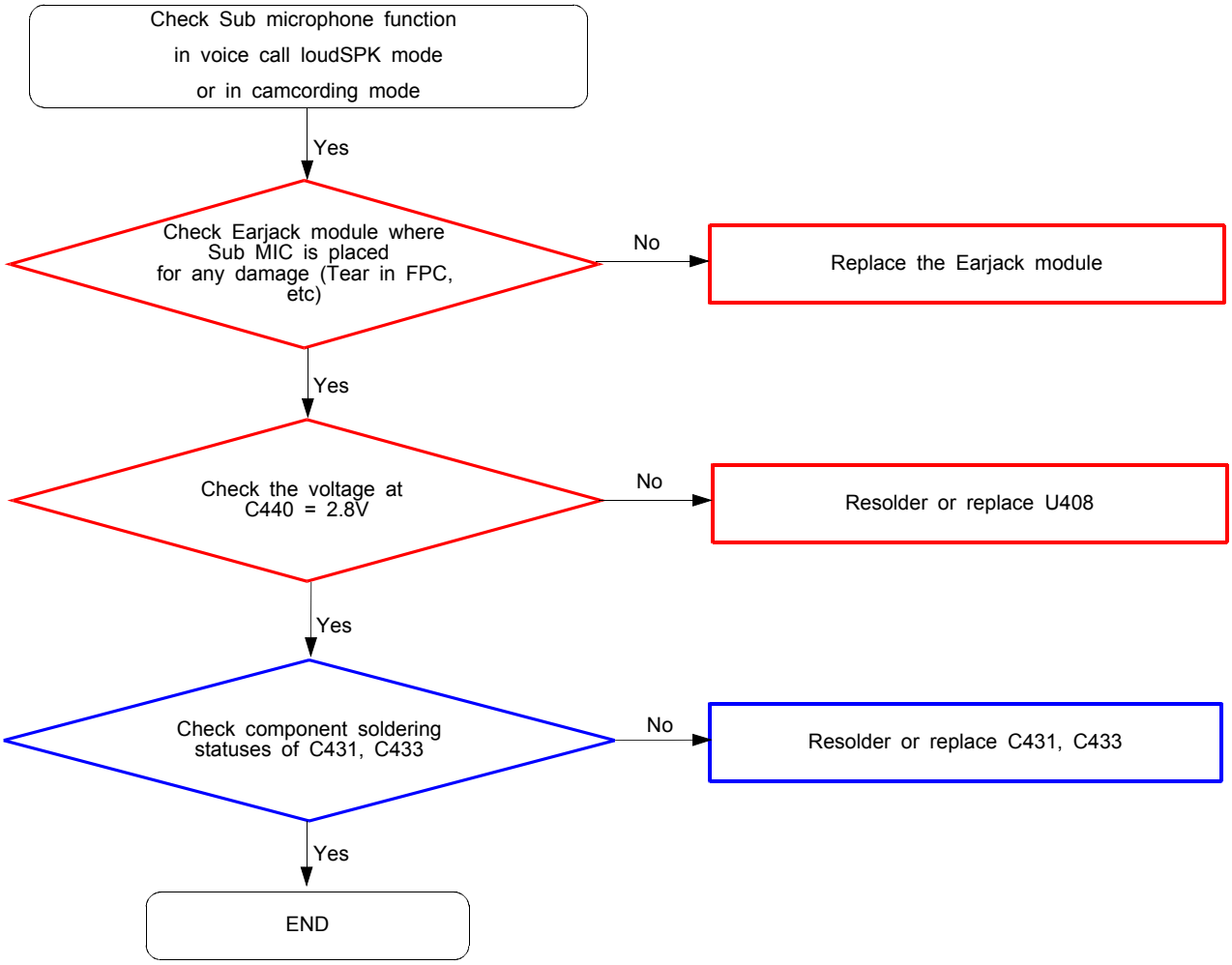


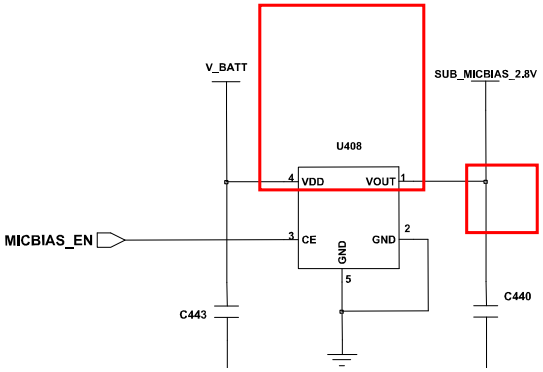
8-3-5. Microphone Part (Main MIC)

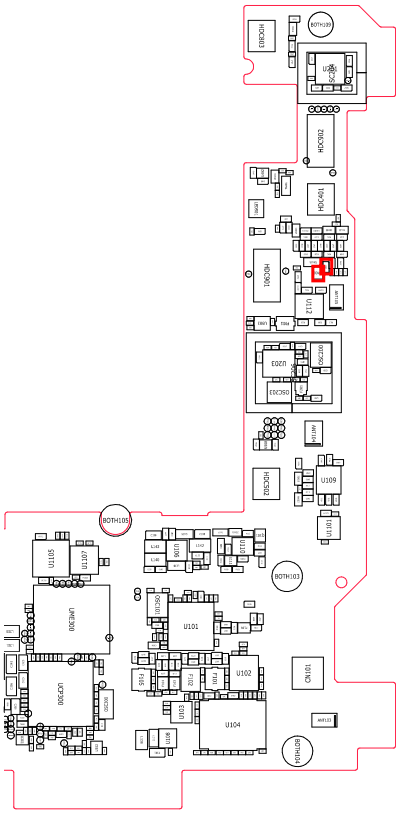


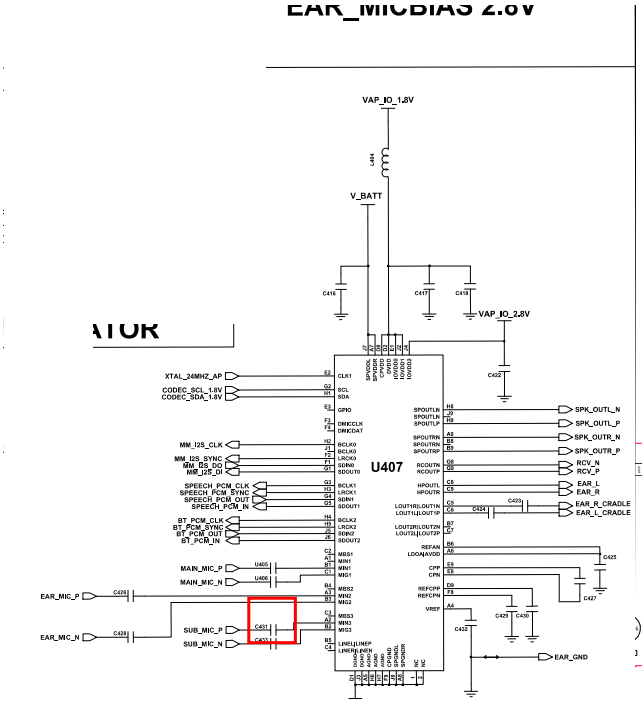


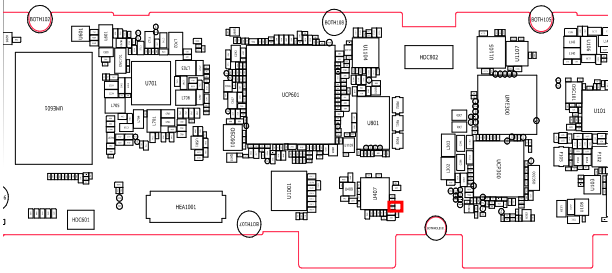
8-3-6. Microphone Part (Sub MIC)



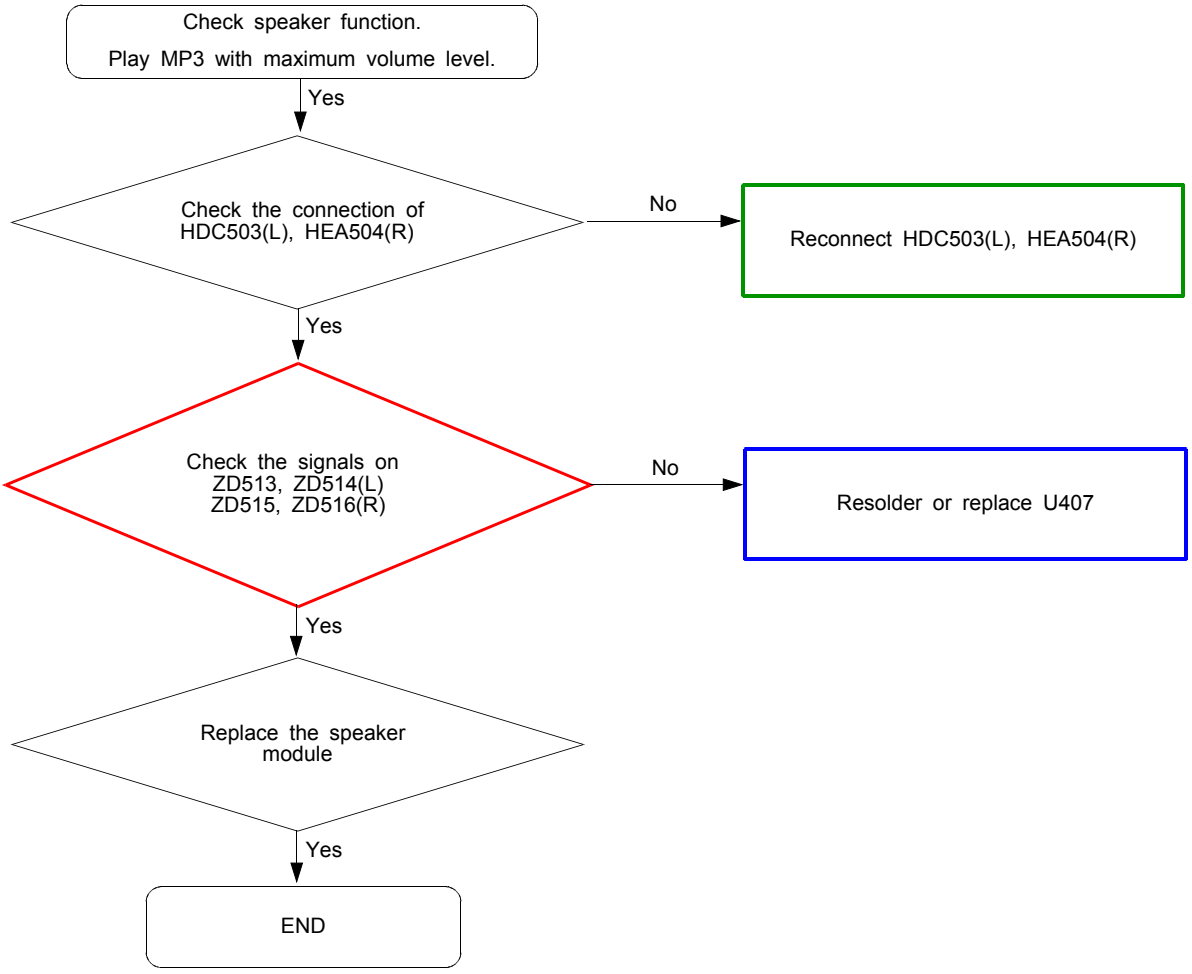


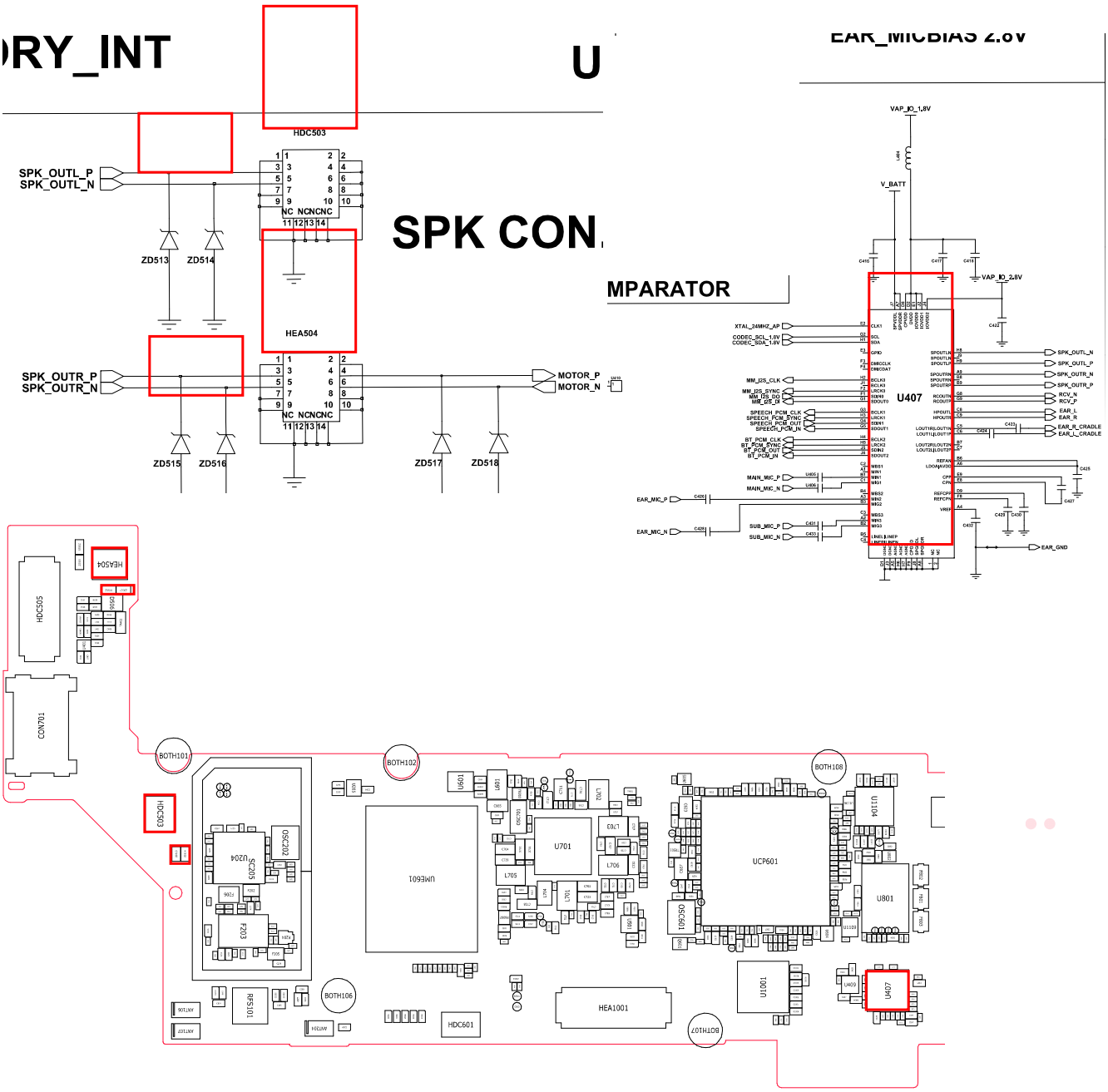




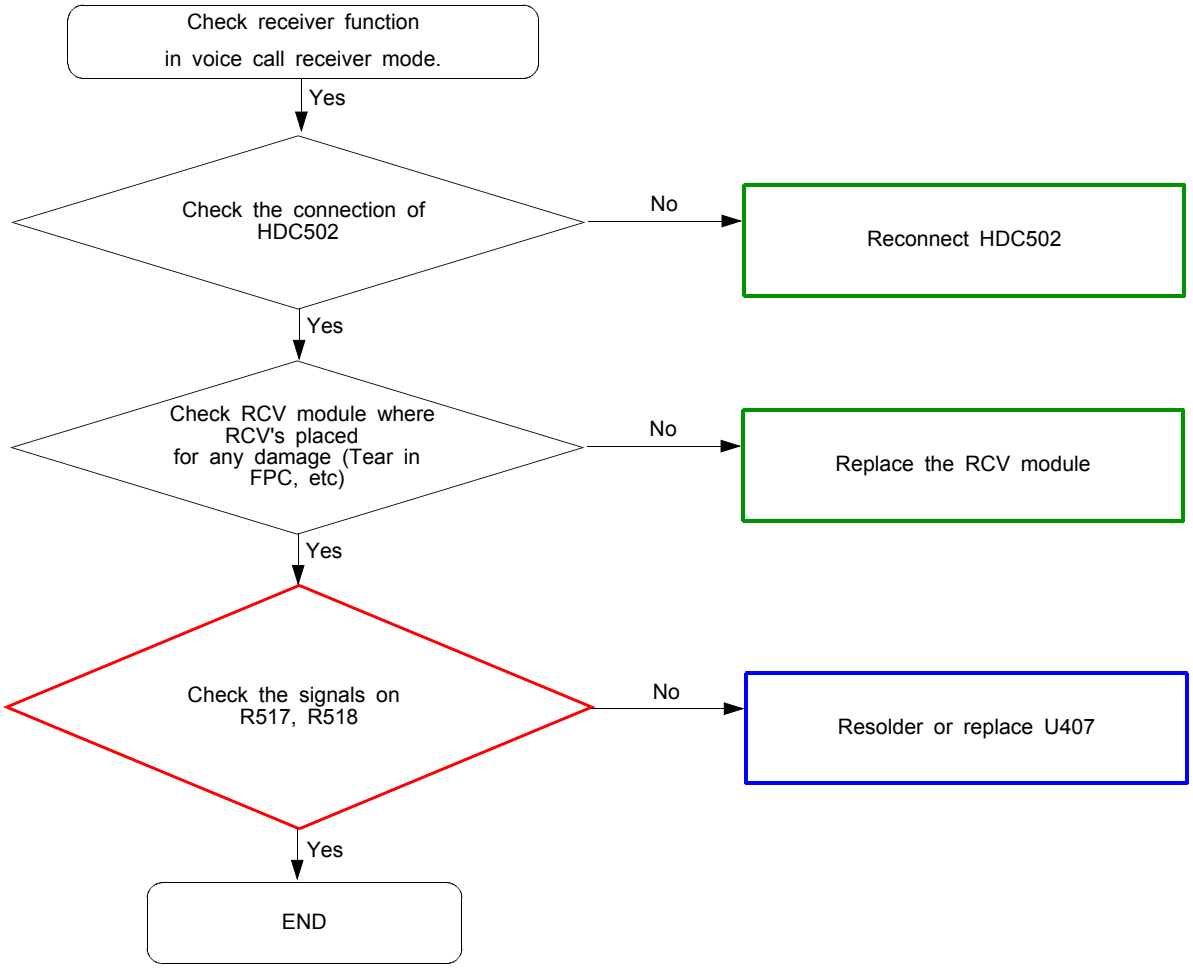


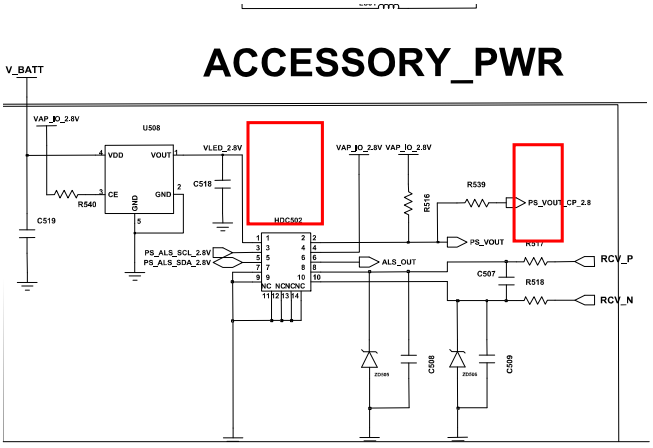
8-3-7. Speaker Part

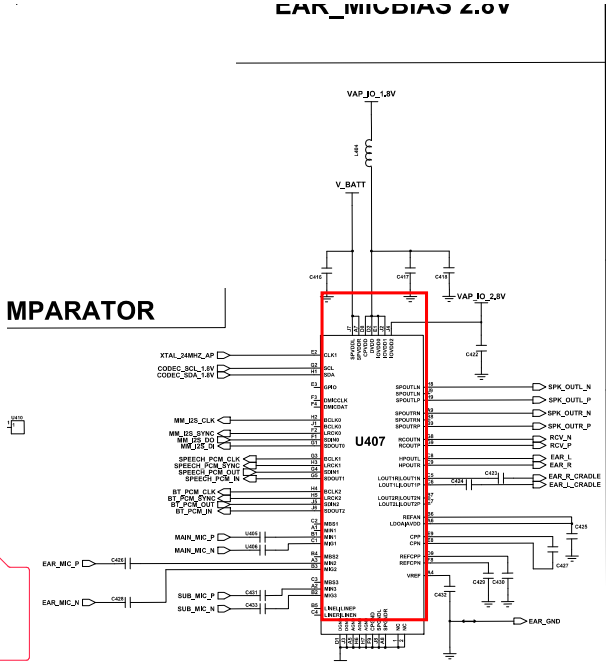


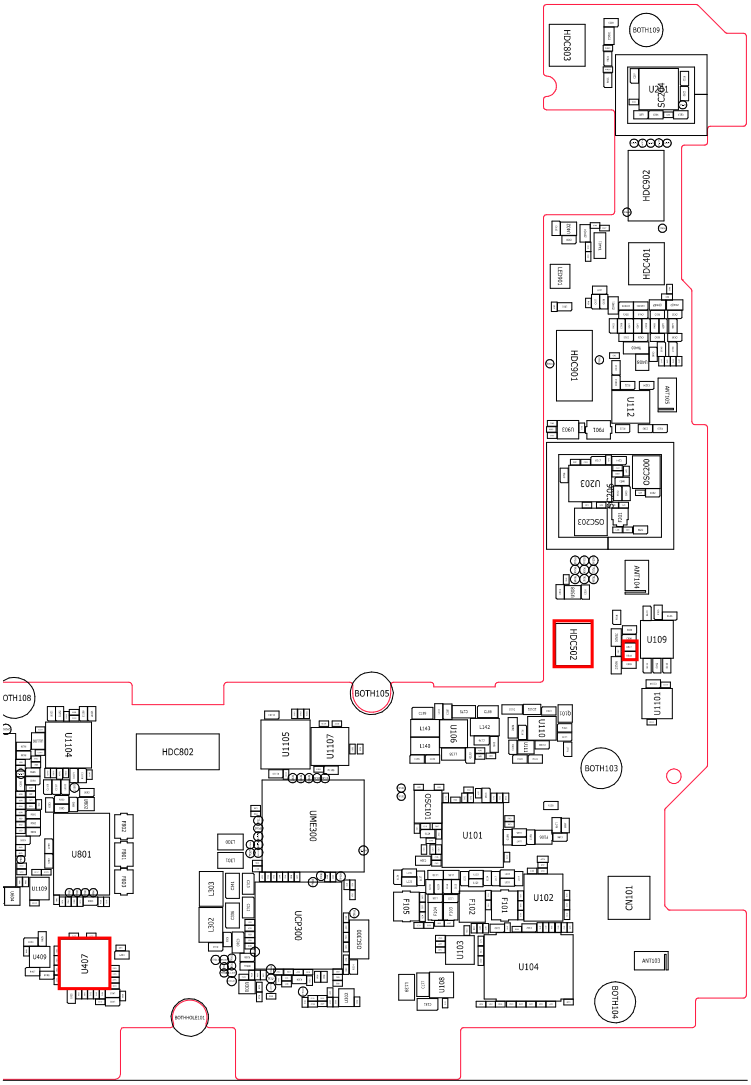


8-3-8. Receiver Part

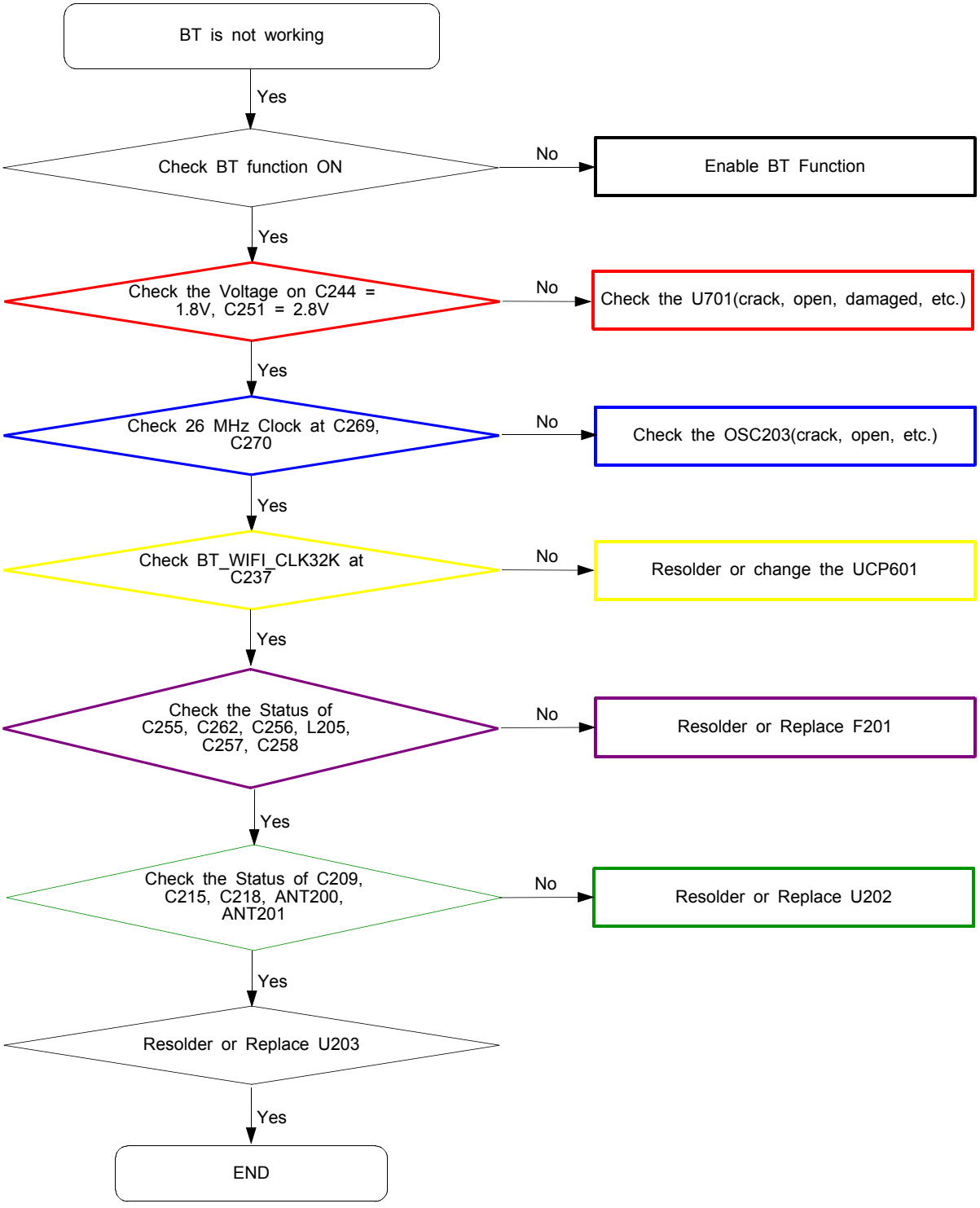


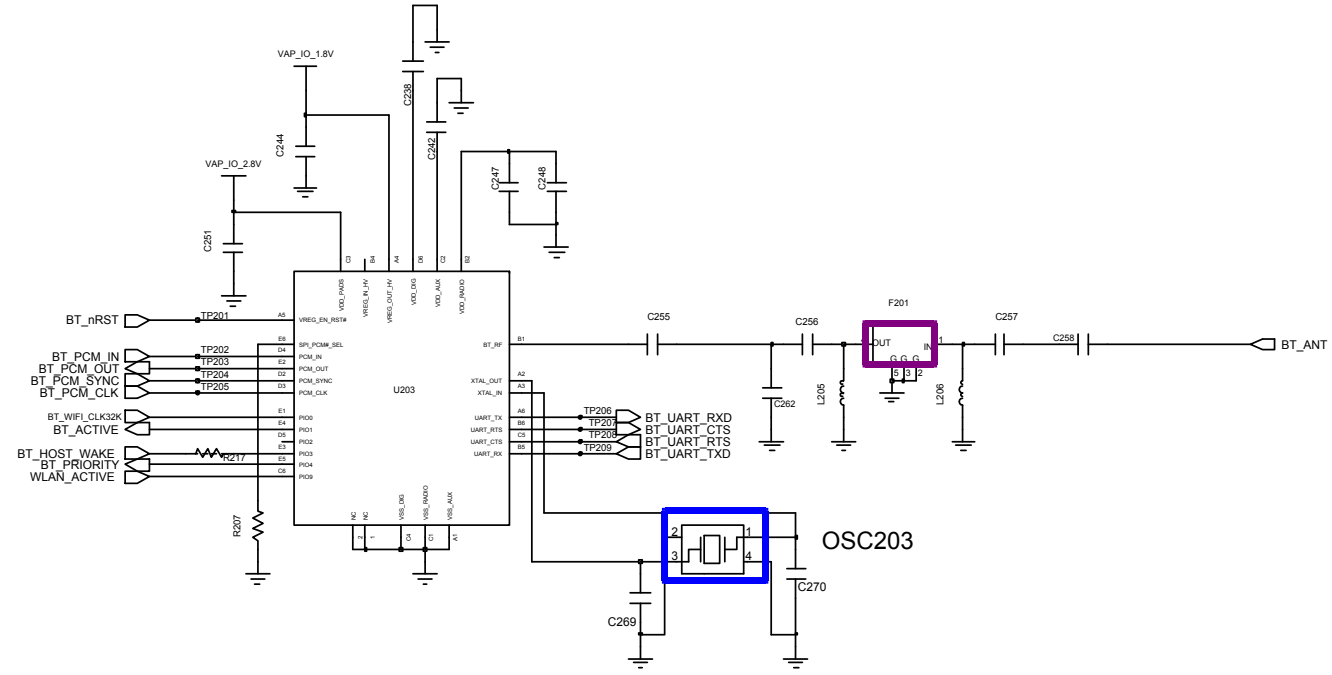


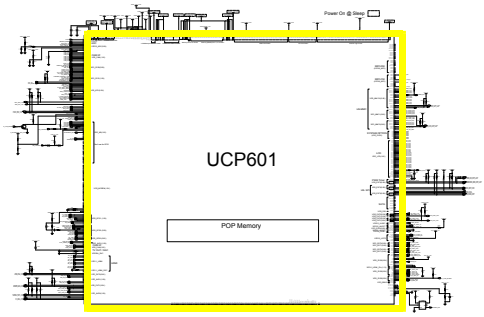


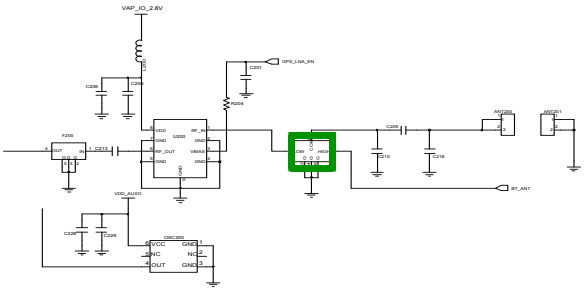


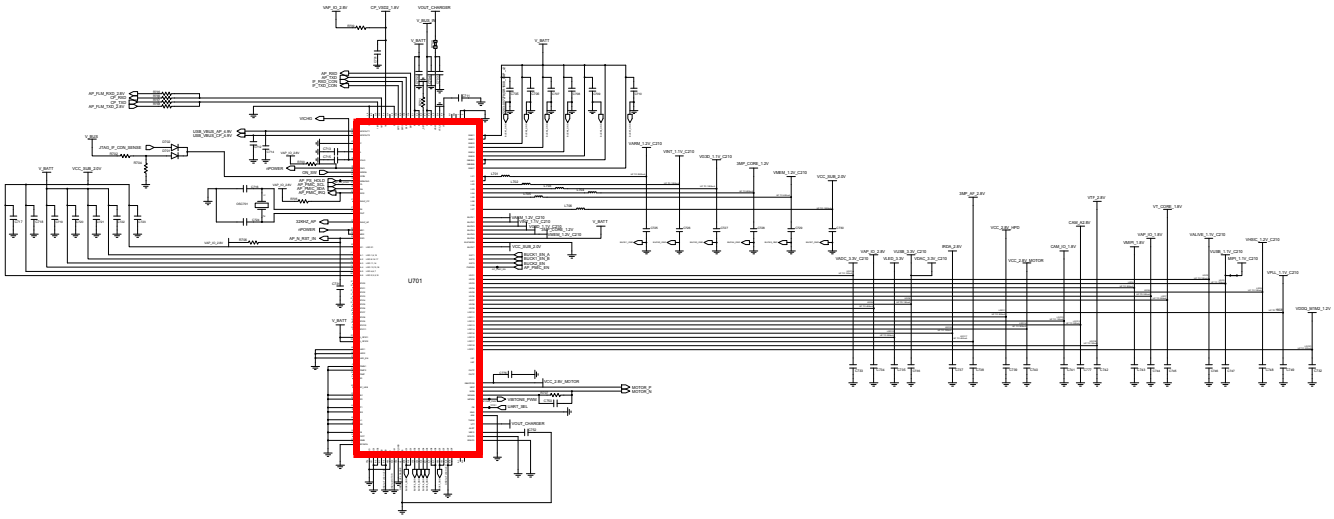
8-3-9. BT

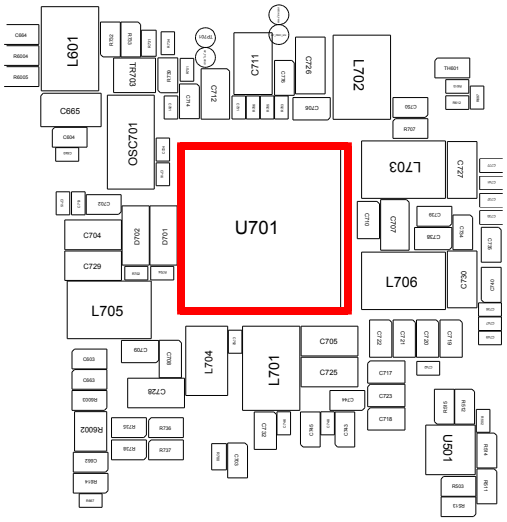


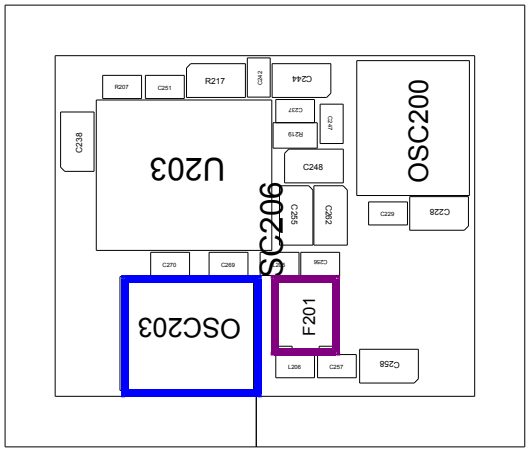


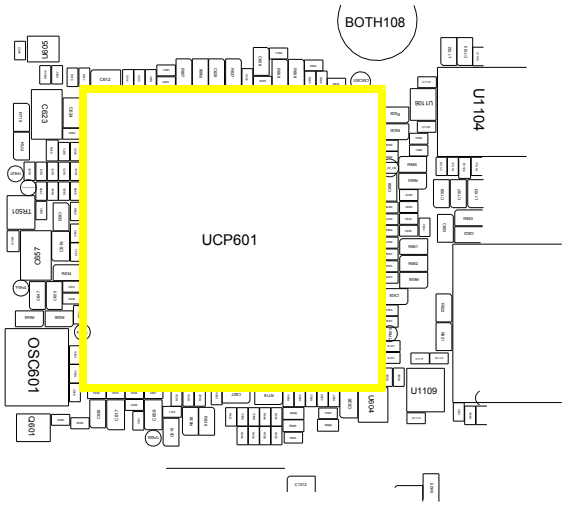


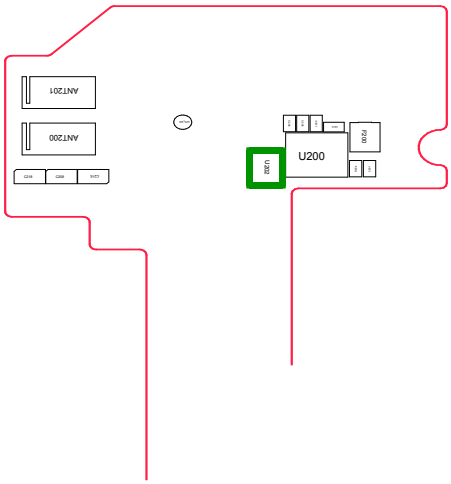




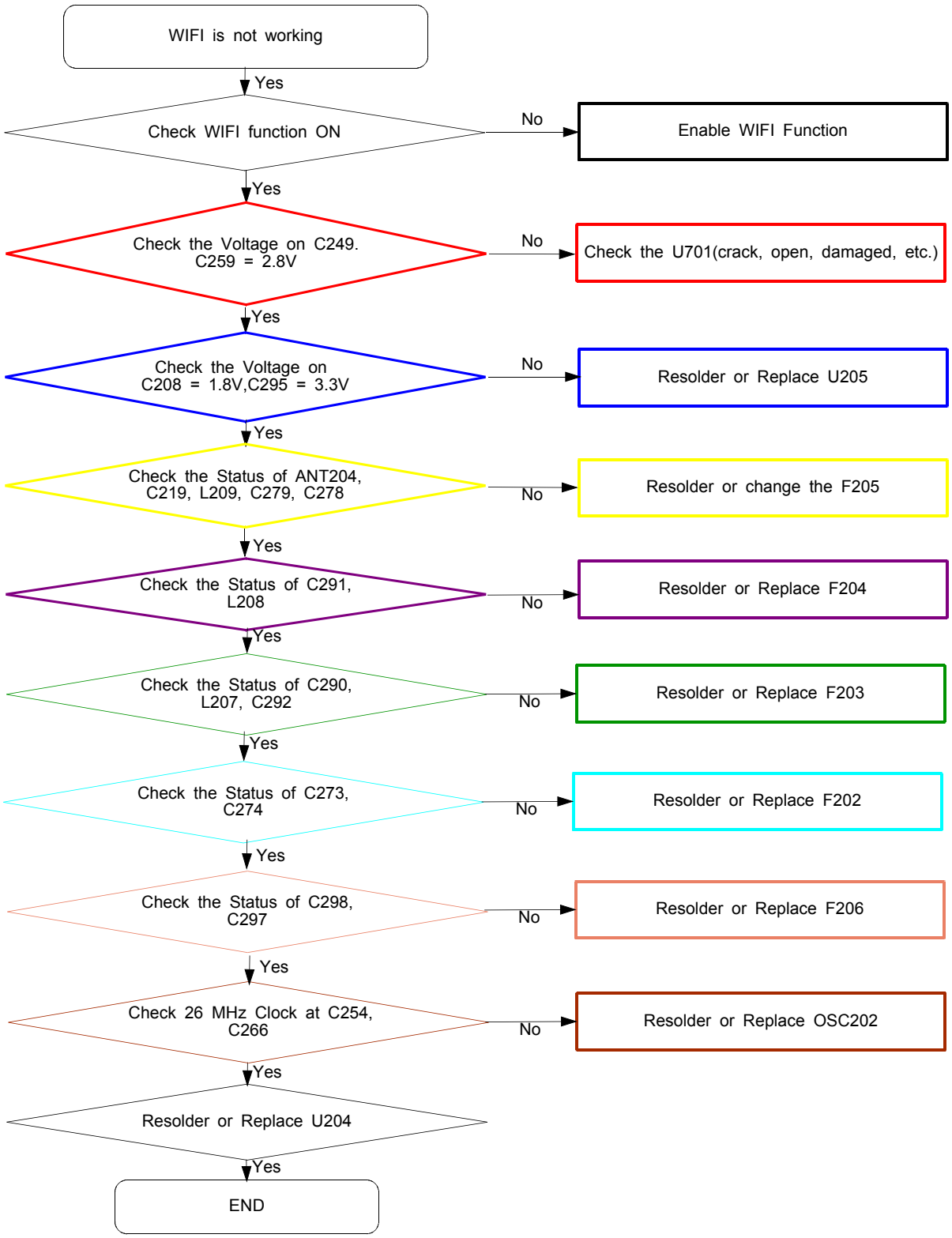


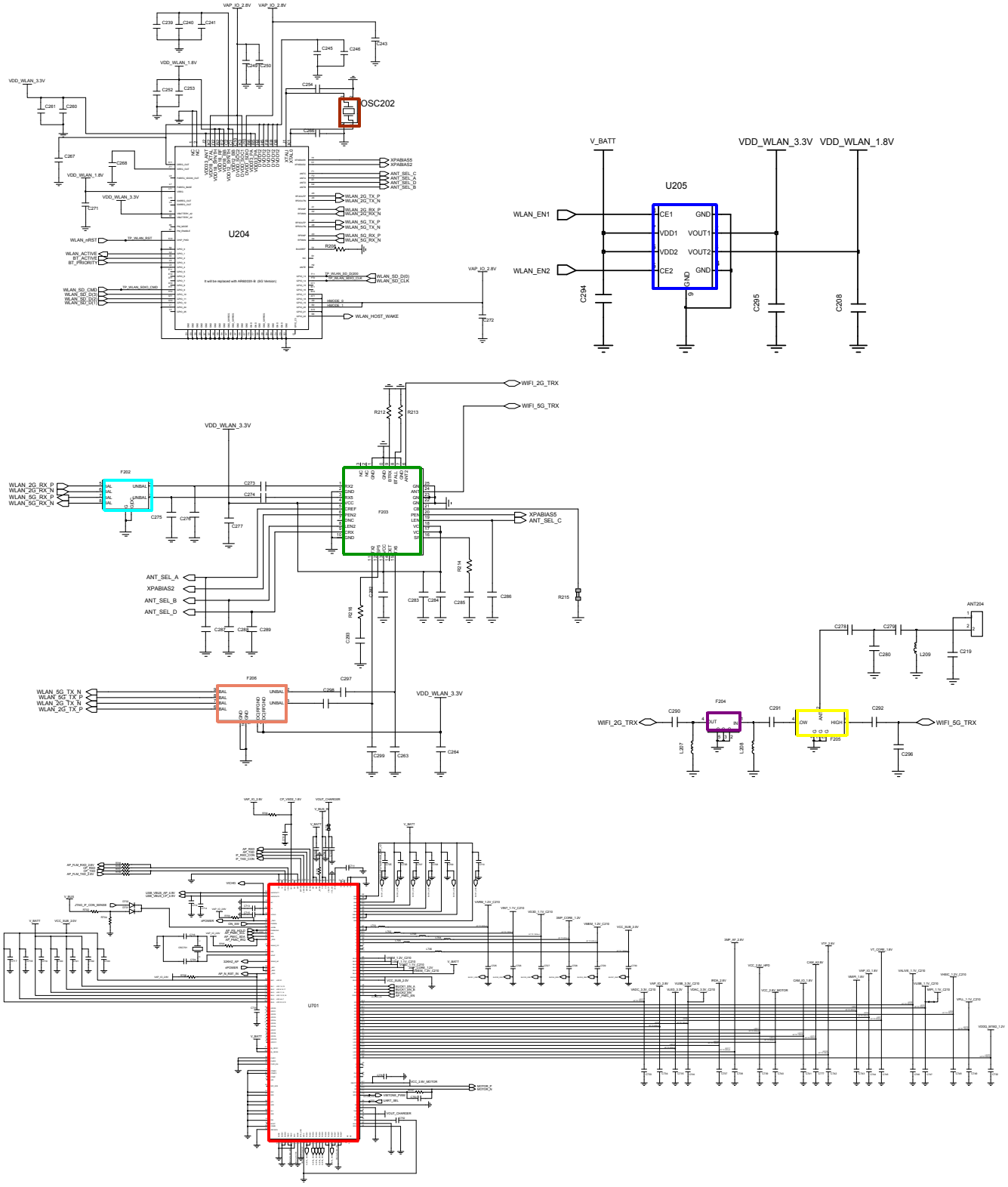


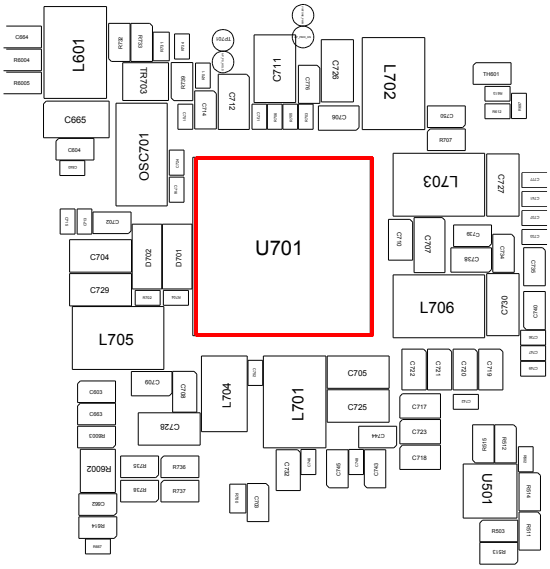




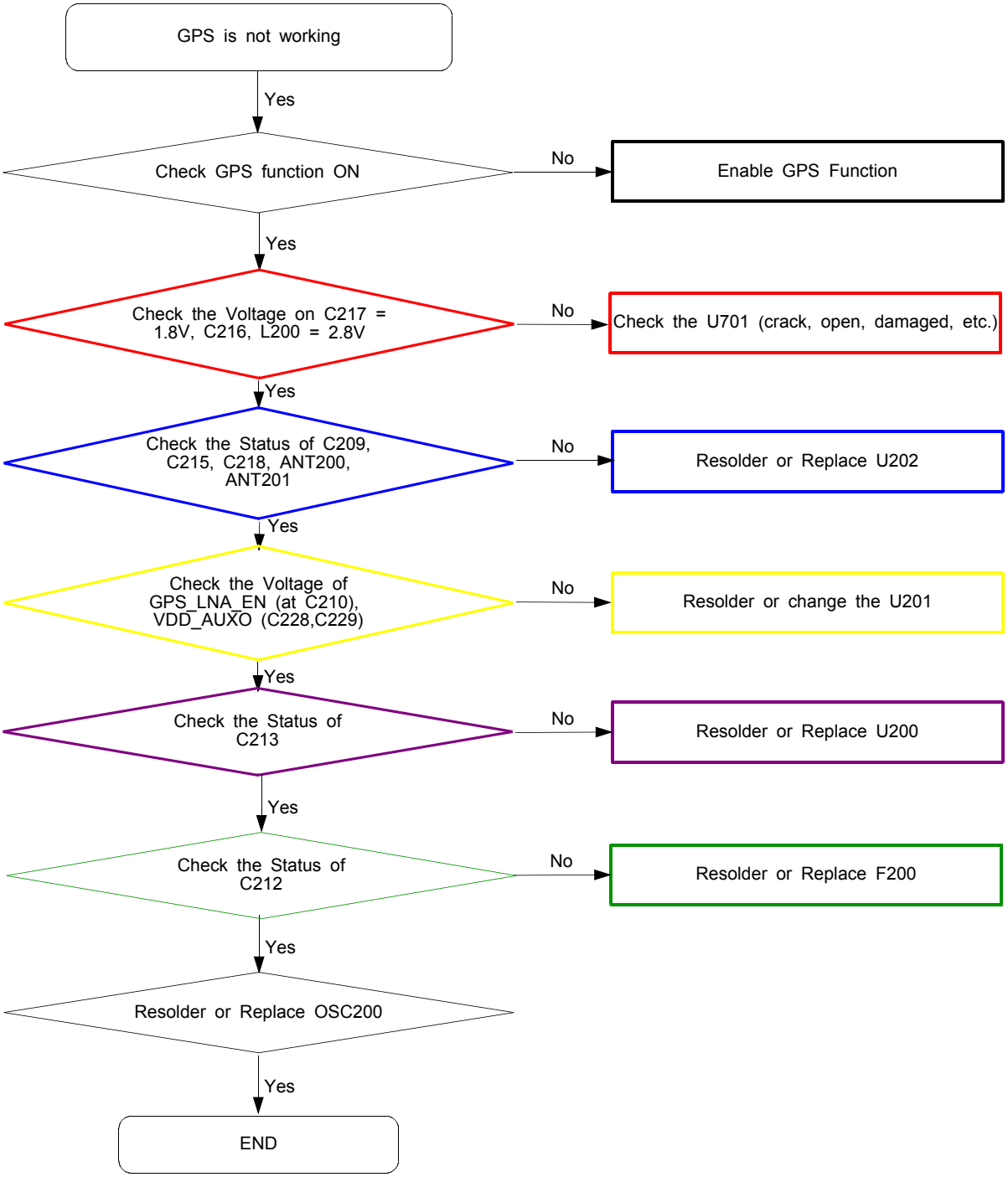
8-3-10. WIFI

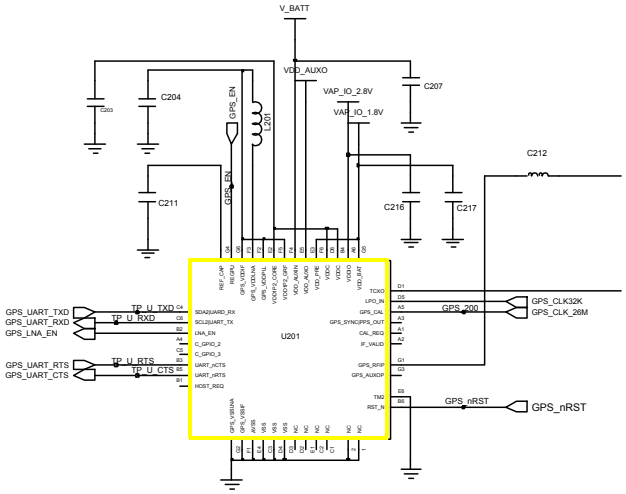


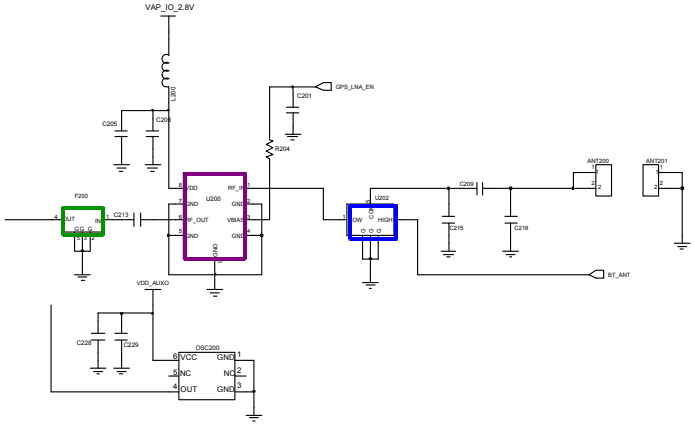


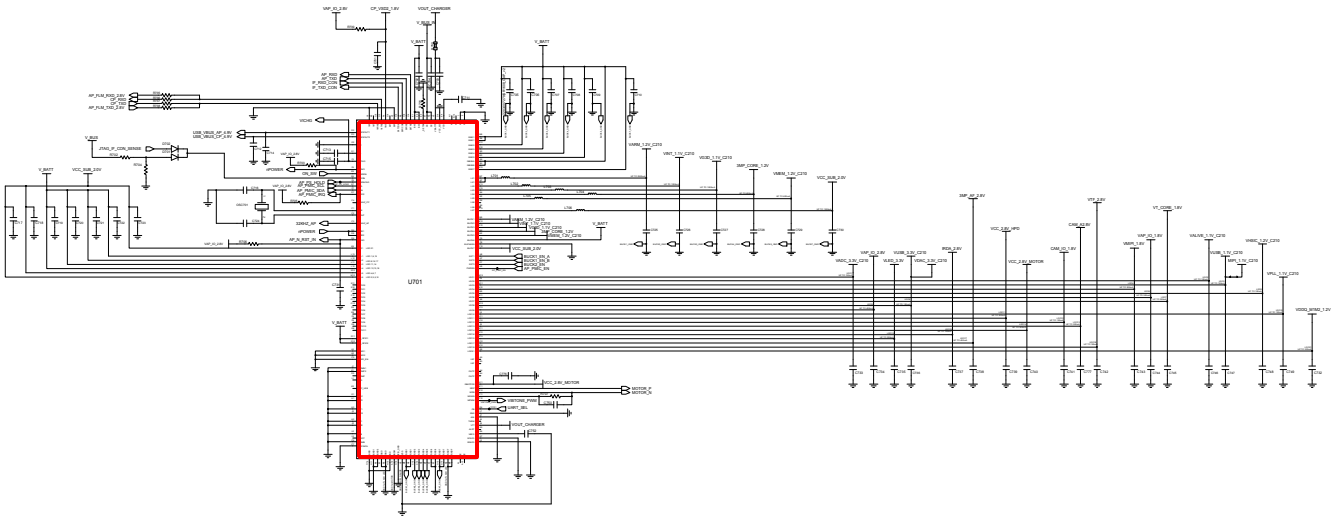


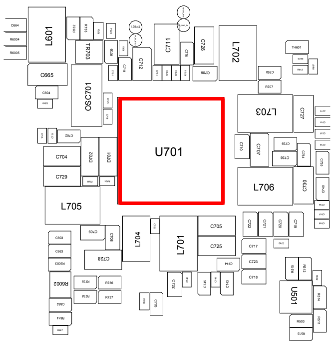
8-3-11. GPS

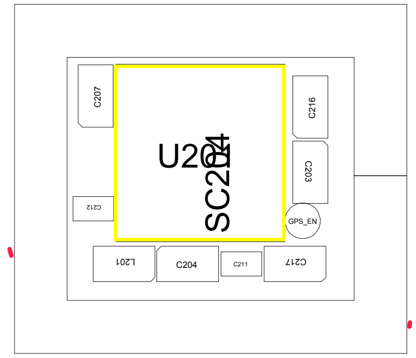


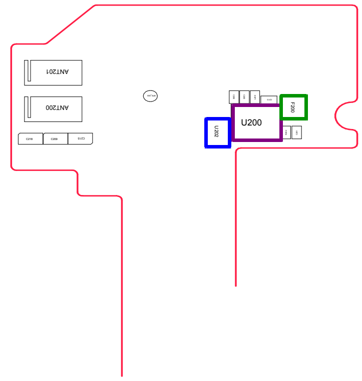




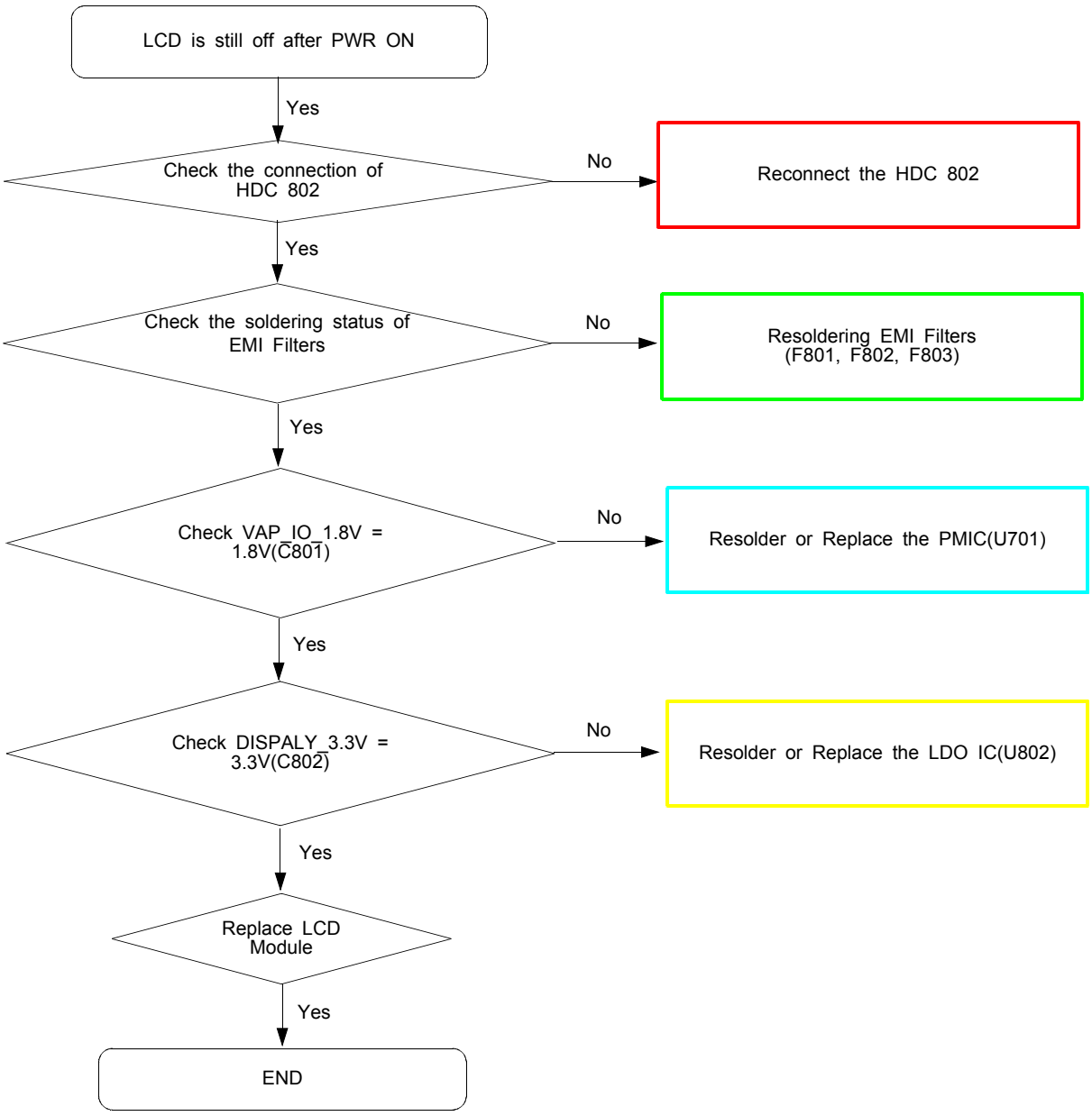


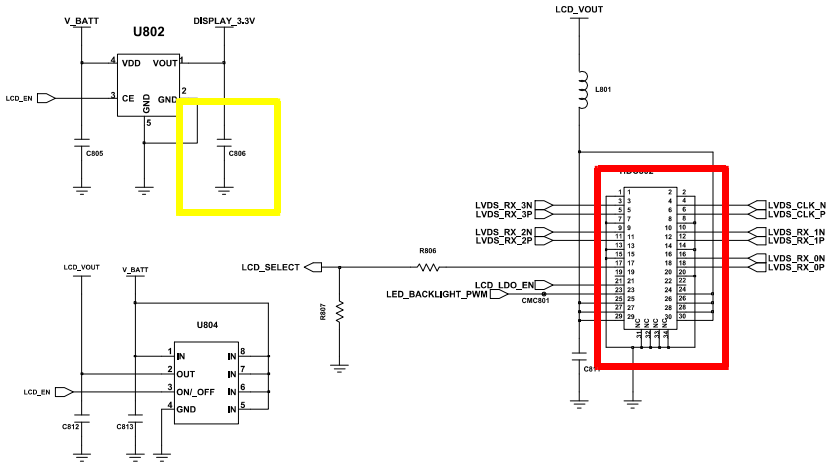




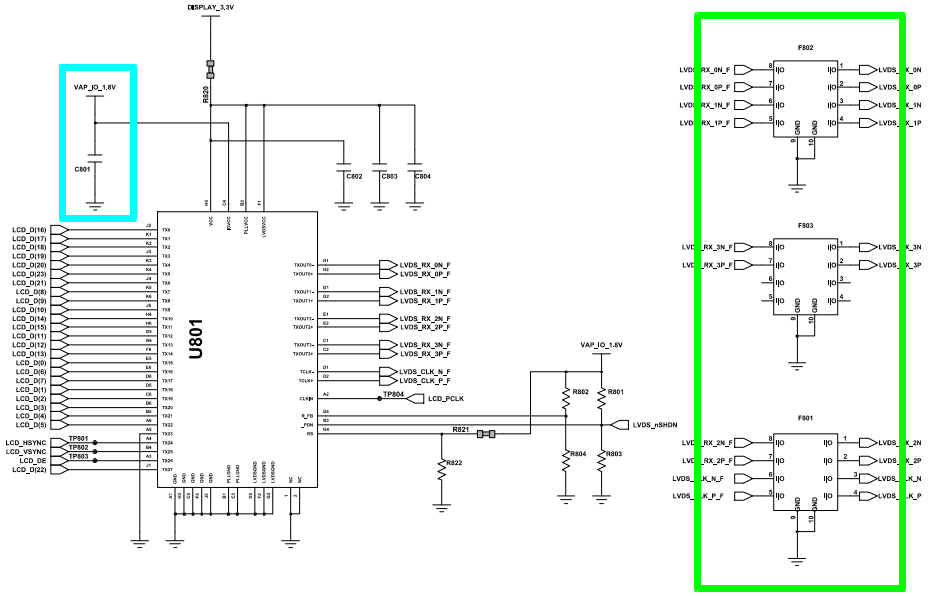


8-3-12. LCD

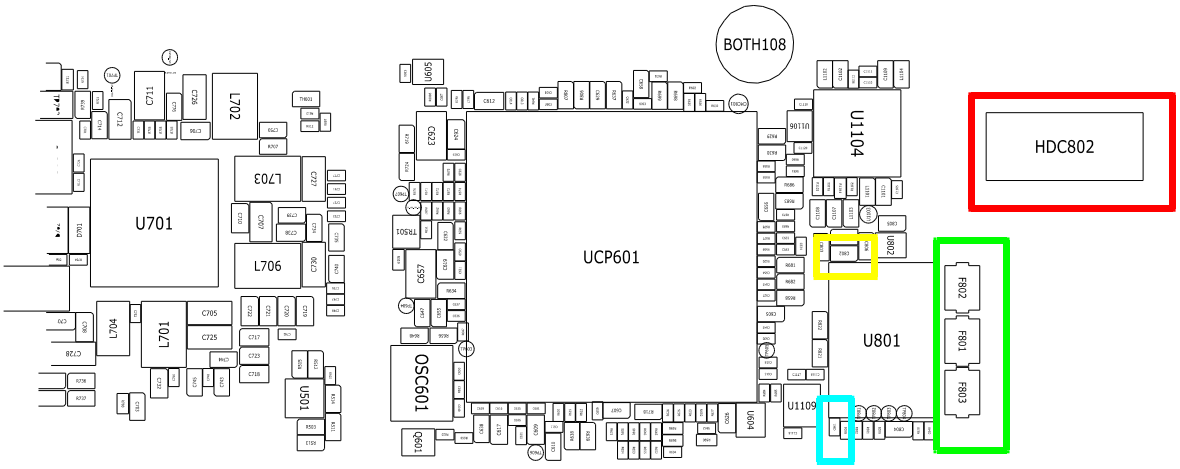




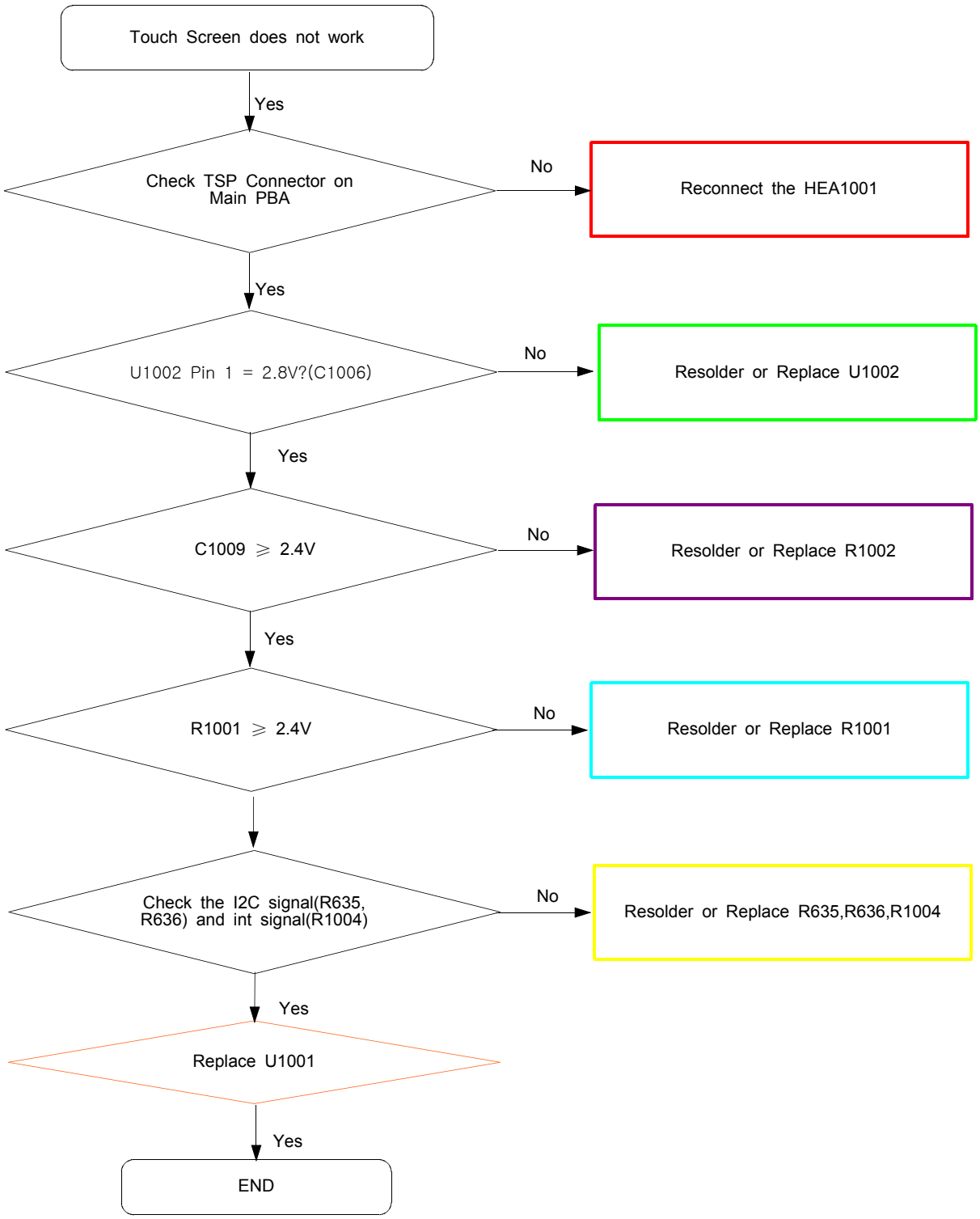
TFT LCD LVDS CON

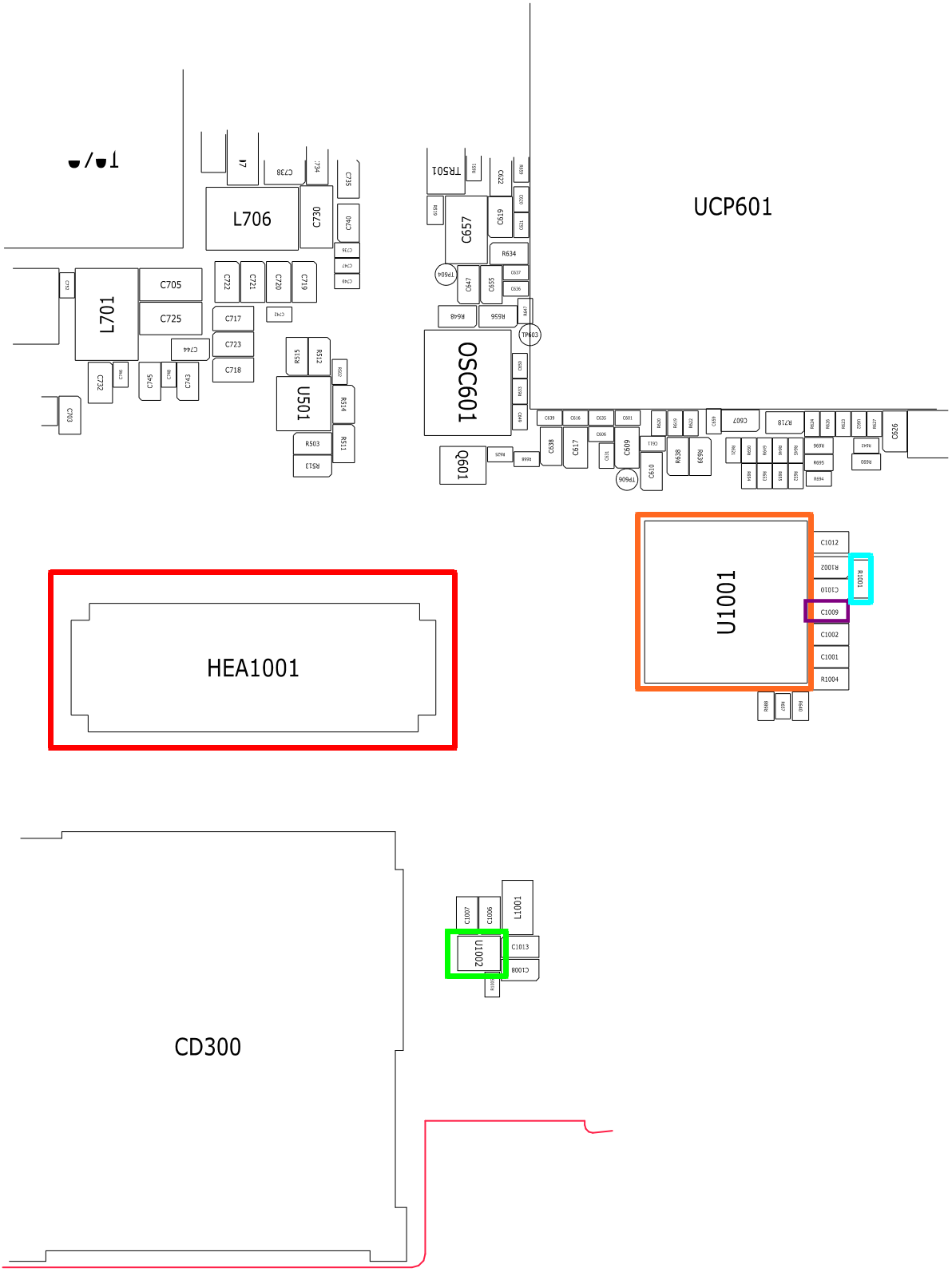


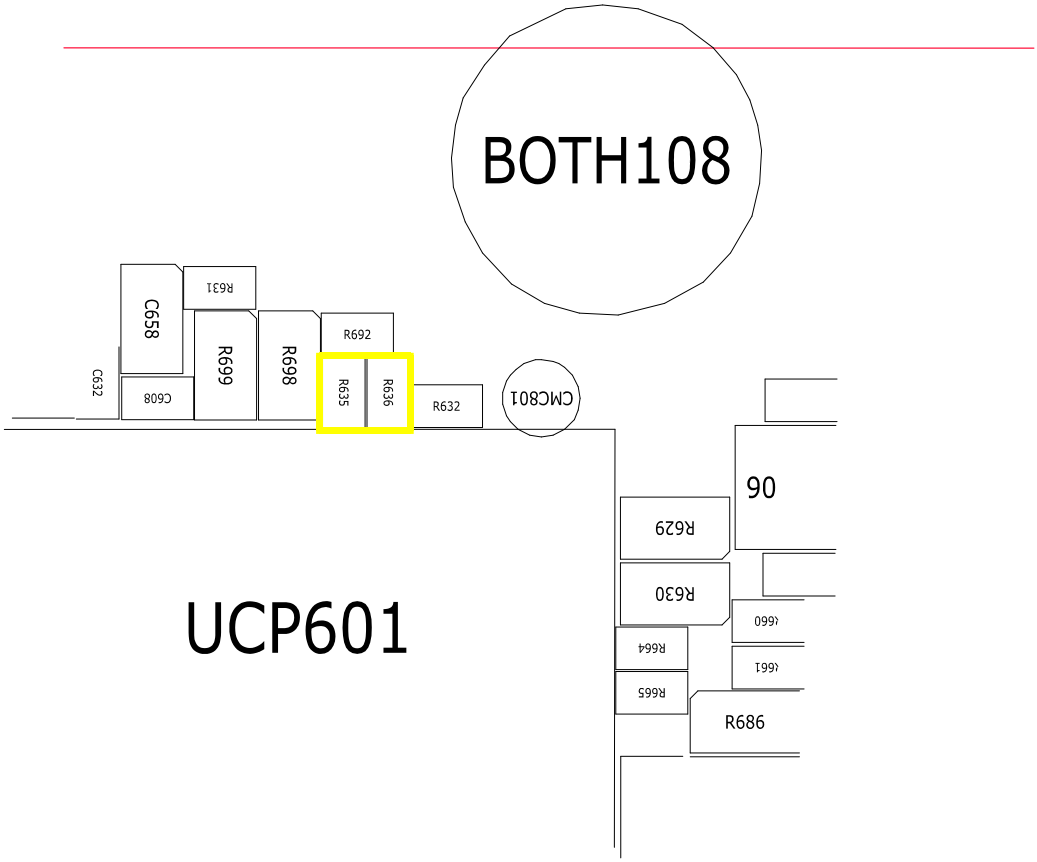
LVDS Transmitter



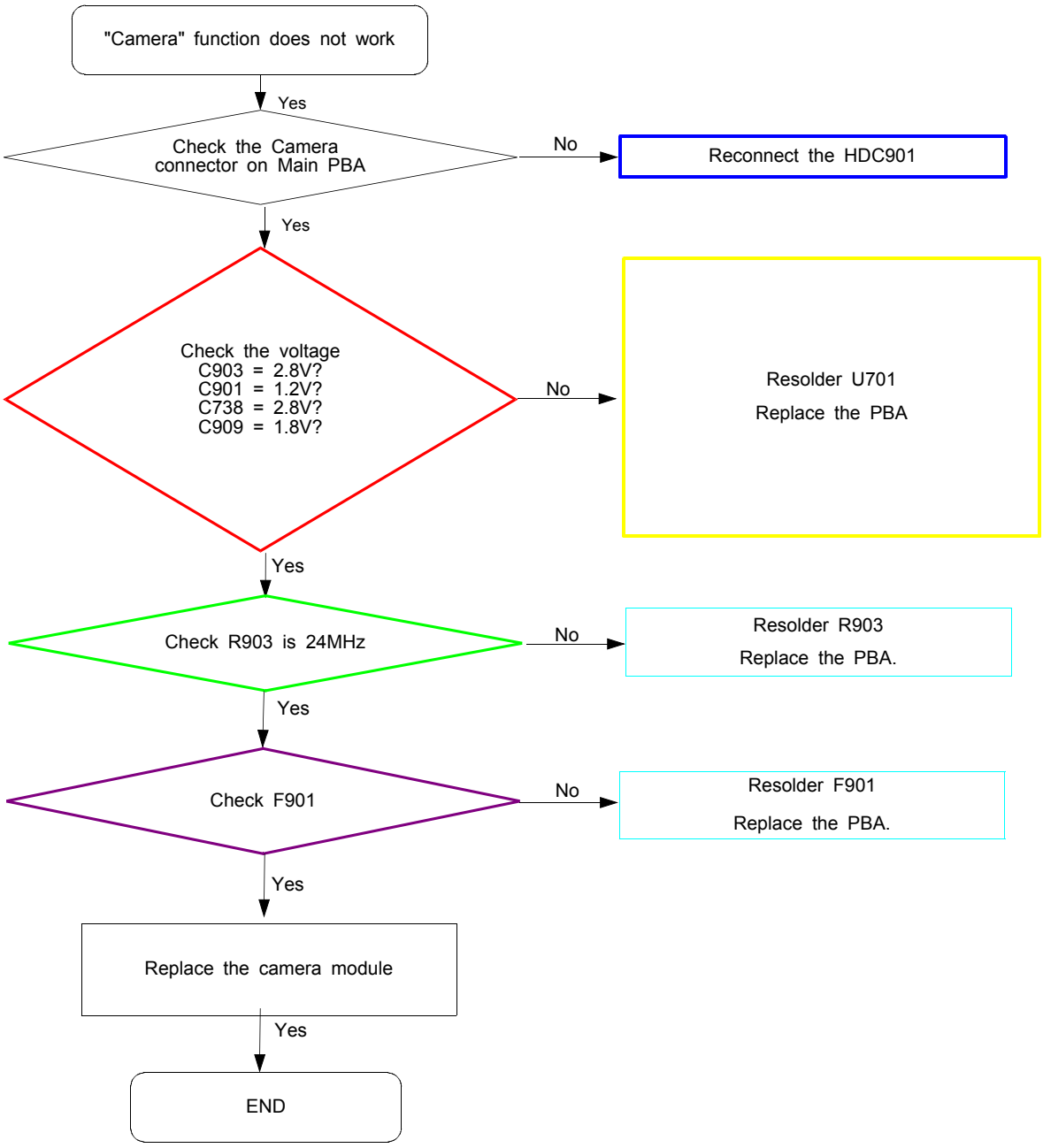
8-3-13. TSP

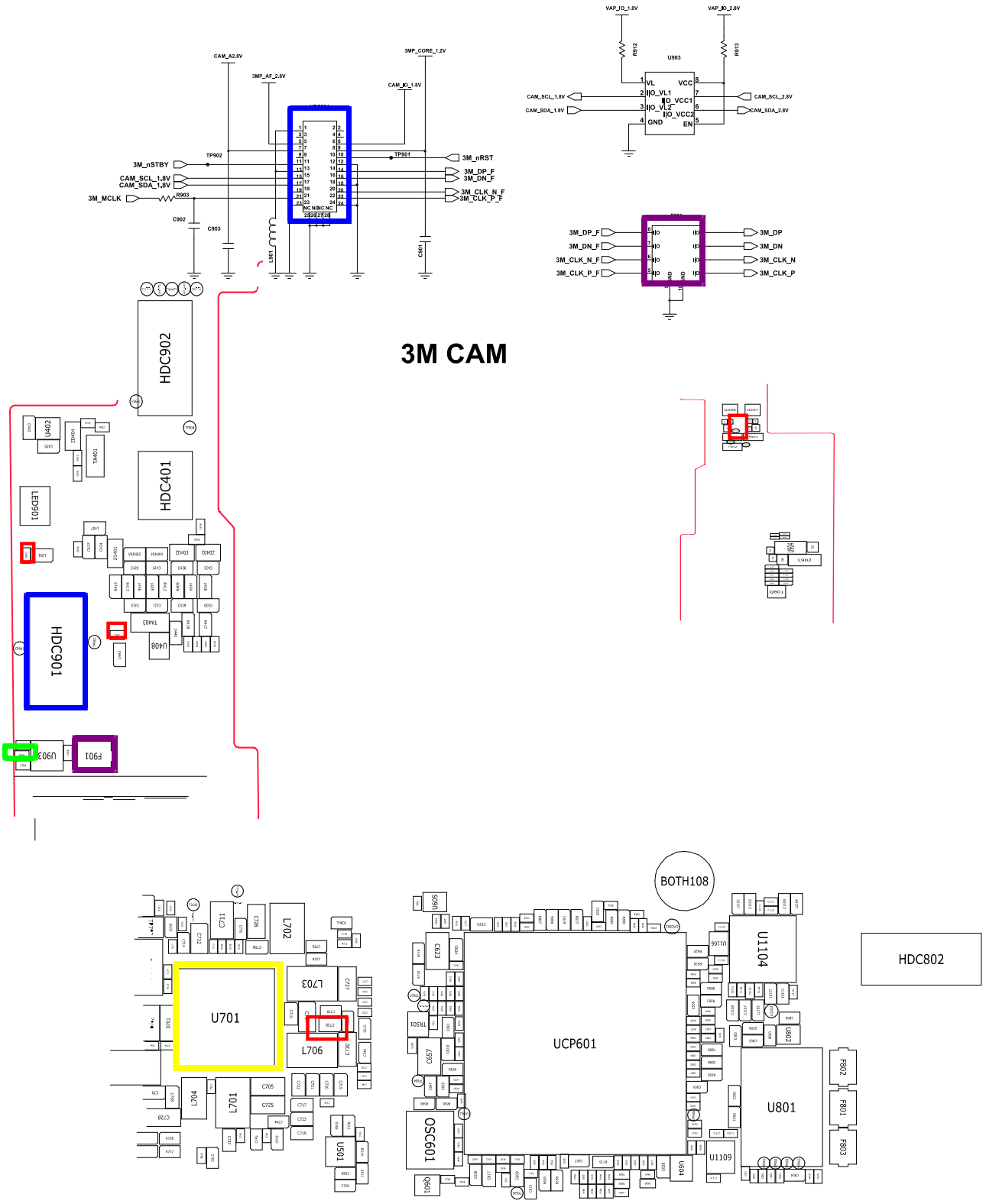




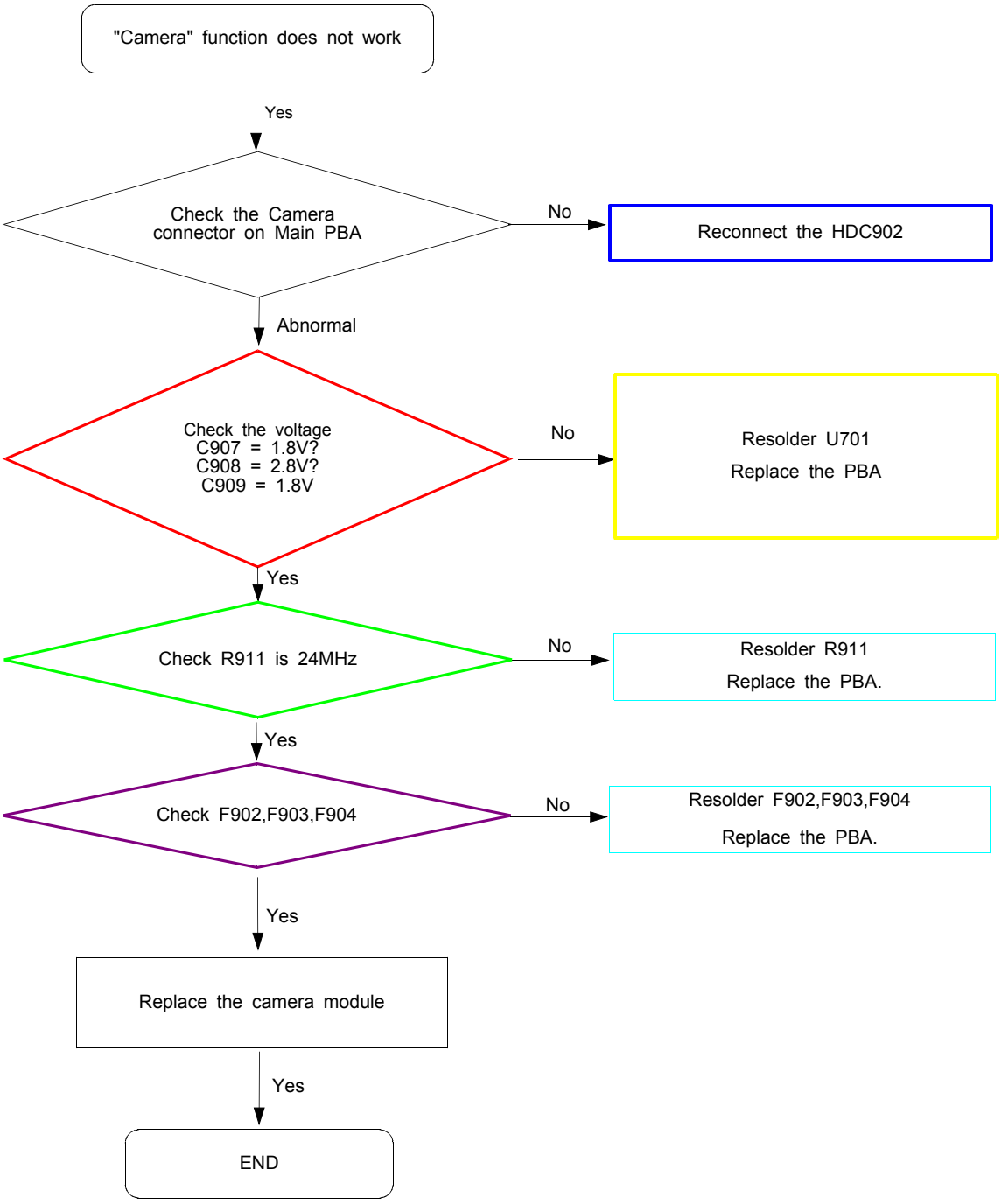


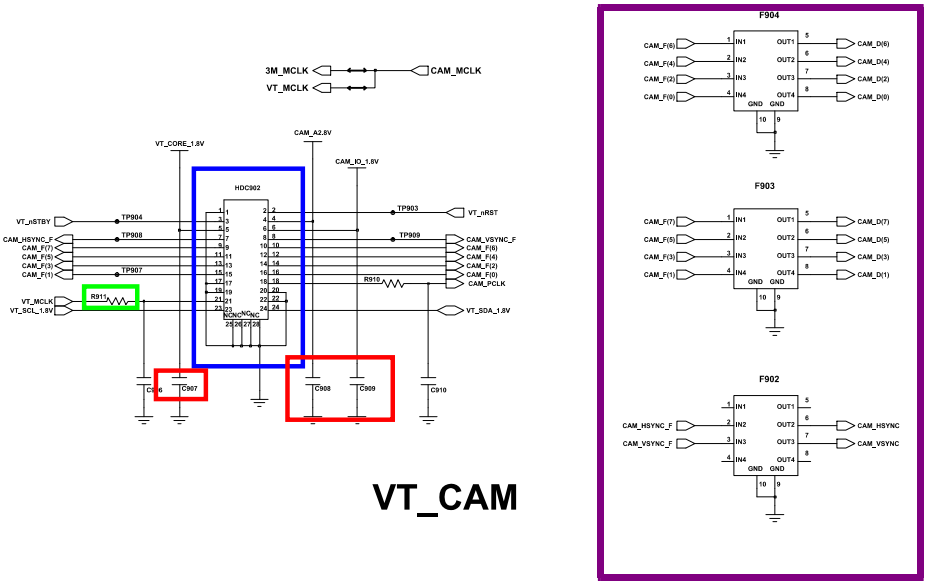
8-3-14. 3M CAM



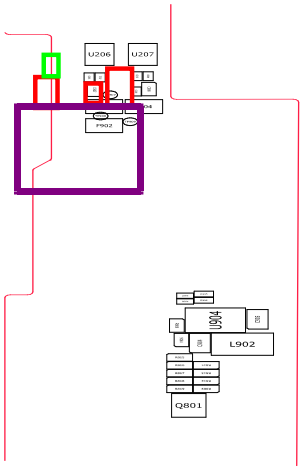


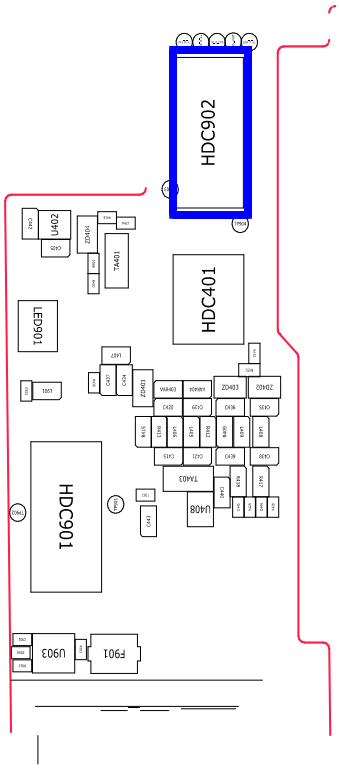
8-3-15. 2M CAM



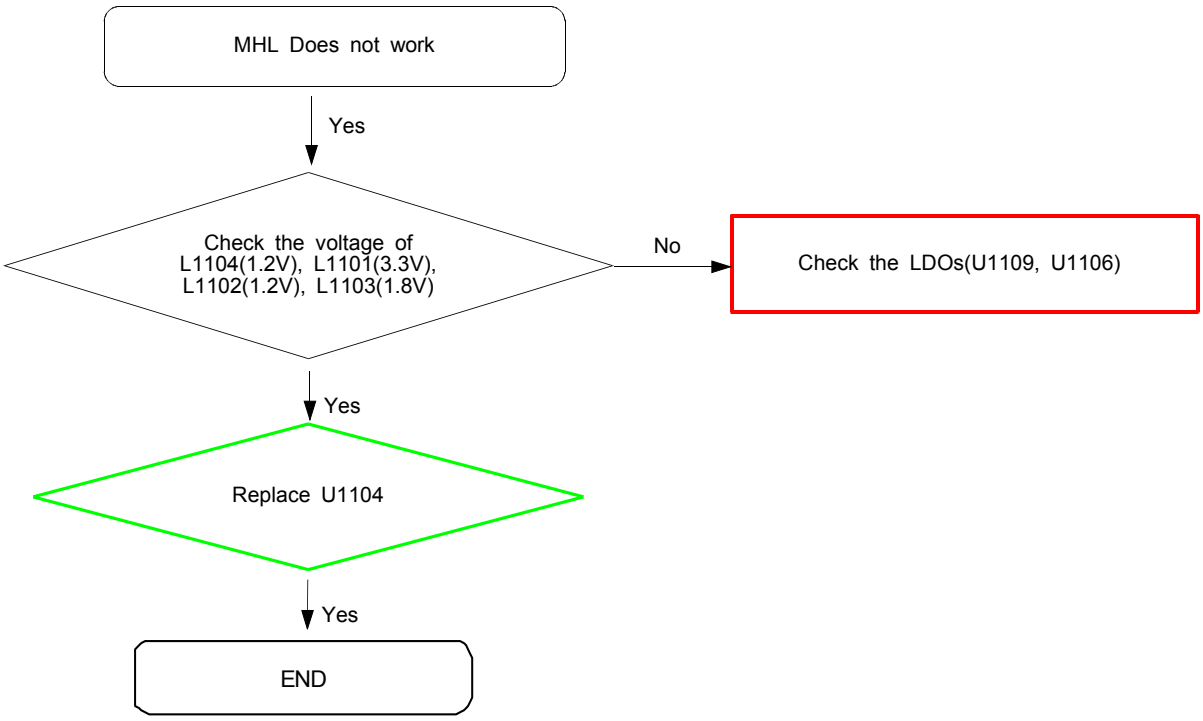


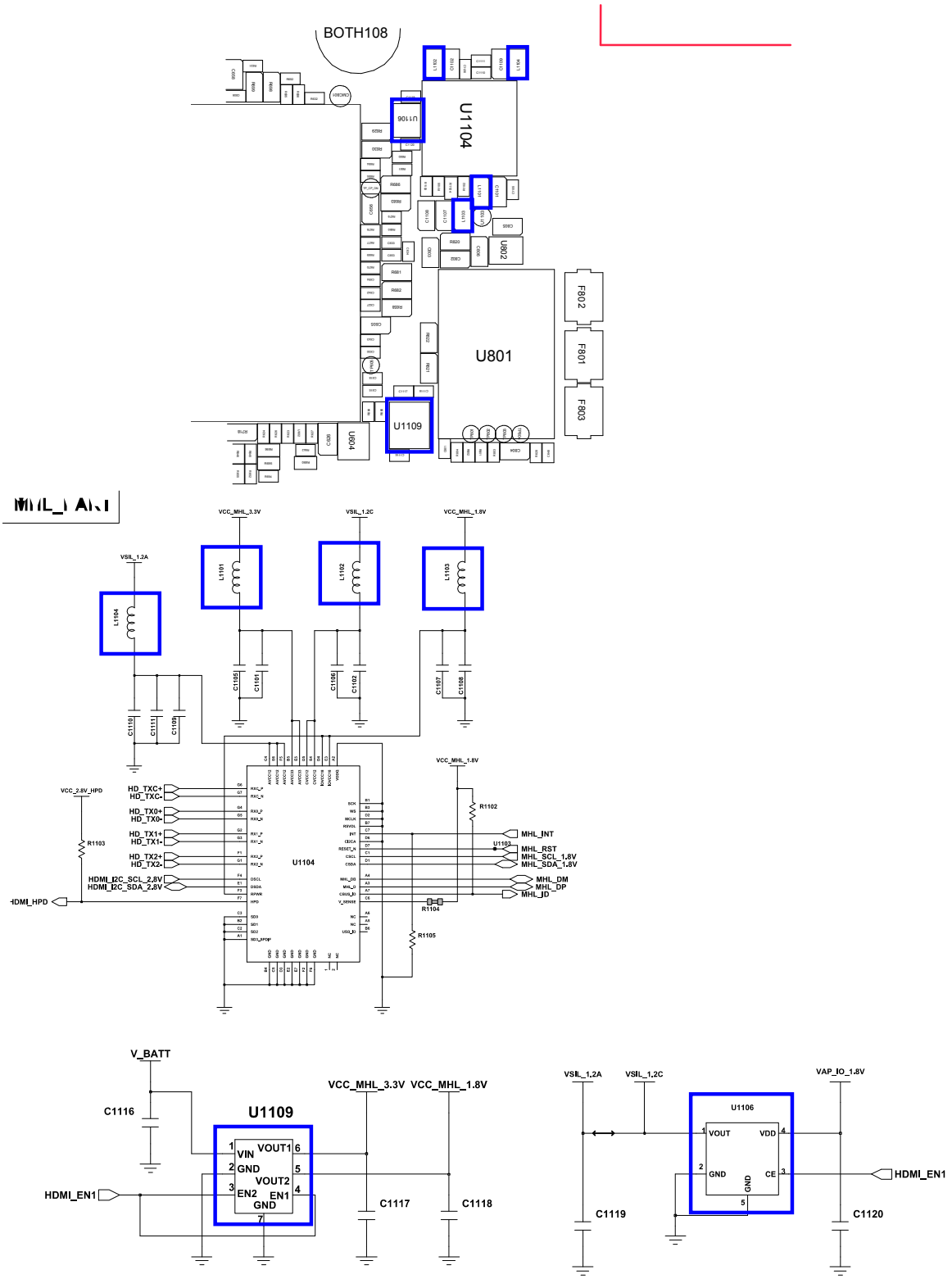
VT_CAM



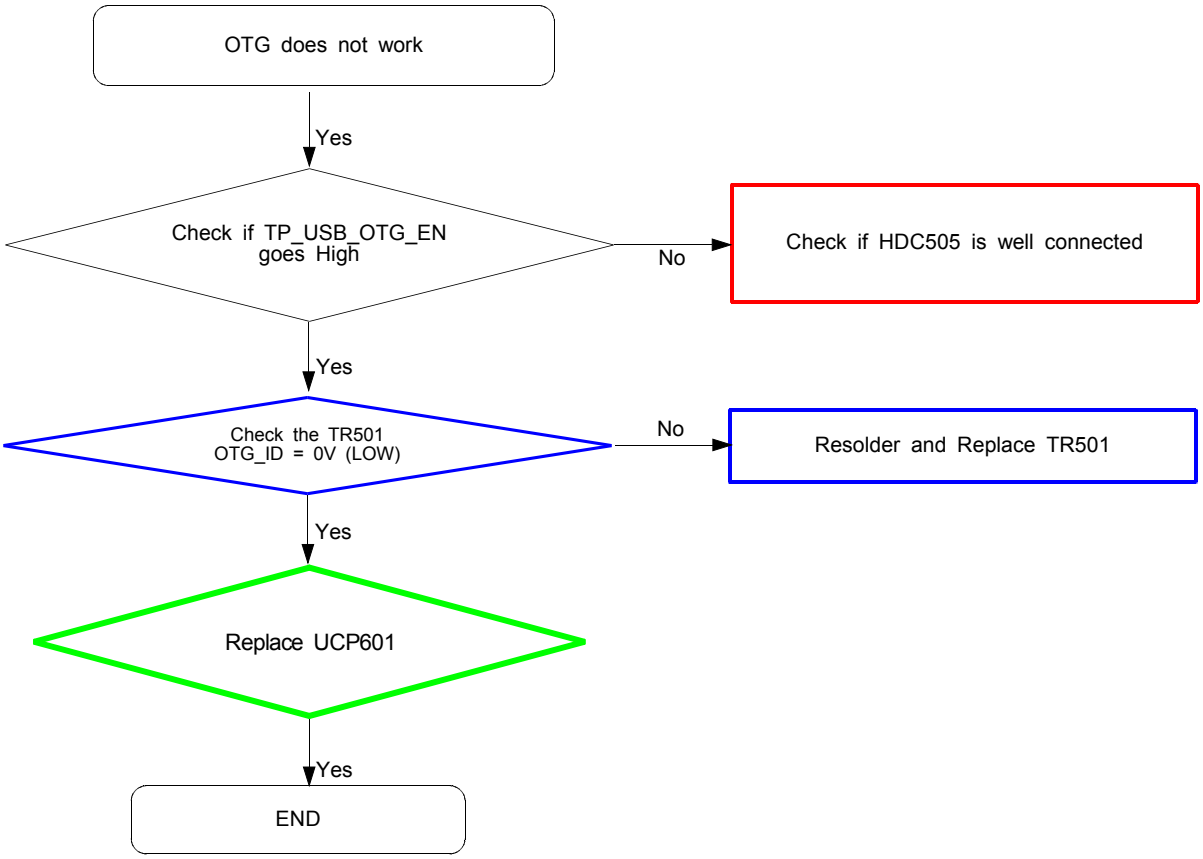


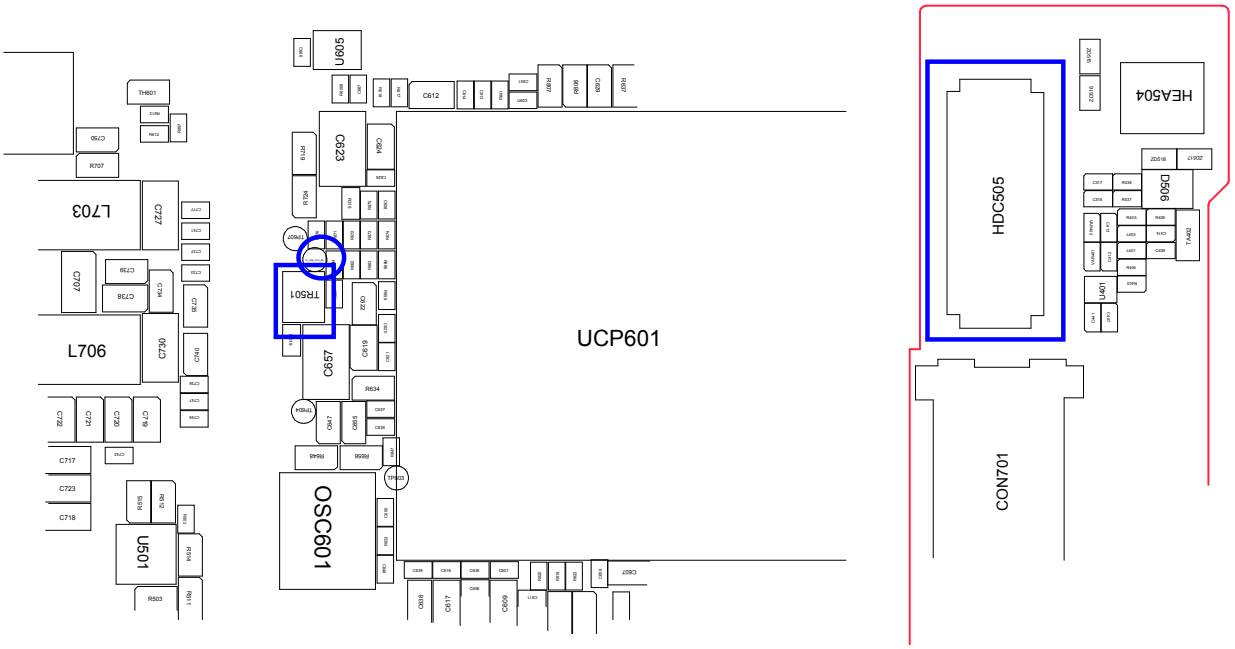
8-3-16. MHL

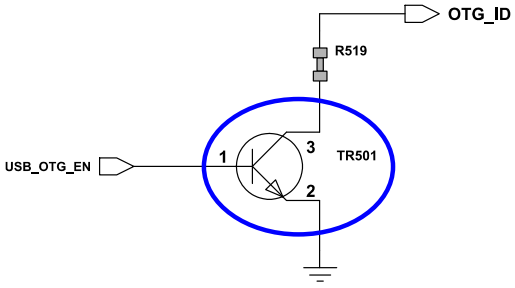




8-3-17. OTG







OTG Enable