

SAMSUNG

GSM TELEPHONE

GT-C3330

SERVICE *Manual*

GSM TELEPHONE



CONTENTS

1. Safety Precautions
2. Specification
3. Product Function
4. Exploded View and Parts list
5. MAIN Electrical Parts List
6. Level 1 Repair
7. Level 2 Repair
8. Level 3 Repair
9. Reference data

Notice: All functionality, features, specifications, and other product information provided in this document, including but not limited to, benefits, design, pricing, components, performance, availability, and capabilities of the product are subject to change without notice. Samsung reserves the right to alter this document or the product described herein at anytime, without obligation to provide notification of such changes.

**SAMSUNG
ELECTRONICS**



2. Specification

2-1. GSM General Specification

	GSM 850	EGSM 900	DCS1800	PCS1900
Freq. Band[MHz] Uplink/Downlink	824~849 869~894	880~915 925~960	1710~1785 1805~1880	1850~1910 1930~1990
ARFCN range	128~251	0~124 & 975~1023	512~885	512~810
Tx/Rx spacing	45MHz	45MHz	95MHz	80MHz
Mod. Bit rate/ Bit Period	270.833kbps 3.692us	270.833kbps 3.692us	270.833kbps 3.692us	270.833kbps 3.692us
Time Slot Period/Frame Period	576.9us 4.615ms	576.9us 4.615ms	576.9us 4.615ms	576.9us 4.615ms
Modulation	0.3GMSK	0.3GMSK	0.3GMSK	0.3GMSK
MS Power	33dBm ~5dBm	33dBm ~5dBm	30dBm ~0dBm	30dBm ~0dBm
Power Class	5pcl ~ 19pcl	5pcl ~ 19pcl	0pcl ~ 15pcl	0pcl ~ 15pcl
Sensitivity	-102dBm	-102dBm	-100dBm	-100dBm
TDMA Mux	8	8	8	8
Cell Radius	35Km	35Km	2Km	2Km

2-2. GSM Tx Power Class

TX Power control level	GSM850	TX Power control level	EGSM900	TX Power control level	DCS1800	TX Power control level	PCS1900
5	33±2 dBm	5	33±2 dBm	0	30±3 dBm	0	30±3 dBm
6	31±2 dBm	6	31±2 dBm	1	28±3 dBm	1	28±3 dBm
7	29±2 dBm	7	29±2 dBm	2	26±3 dBm	2	26±3 dBm
8	27±2 dBm	8	27±2 dBm	3	24±3 dBm	3	24±3 dBm
9	25±2 dBm	9	25±2 dBm	4	22±3 dBm	4	22±3 dBm
10	23±2 dBm	10	23±2 dBm	5	20±3 dBm	5	20±3 dBm
11	21±2 dBm	11	21±2 dBm	6	18±3 dBm	6	18±3 dBm
12	19±2 dBm	12	19±2 dBm	7	16±3 dBm	7	16±3 dBm
13	17±2 dBm	13	17±2 dBm	8	14±3 dBm	8	14±3 dBm
14	15±2 dBm	14	15±2 dBm	9	12±4 dBm	9	12±4 dBm
15	13±2 dBm	15	13±2 dBm	10	10±4 dBm	10	10±4 dBm
16	11±3 dBm	16	11±3 dBm	11	8±4 dBm	11	8±4 dBm
17	9±3dBm	17	9±3dBm	12	6±4 dBm	12	6±4 dBm
18	7±3 dBm	18	7±3 dBm	13	4±4 dBm	13	4±4 dBm
19	5±3 dBm	19	5±3 dBm	14	2±5 dBm	14	2±5 dBm
				15	0±5 dBm	15	0±5 dBm

3. Operation Instruction and Installation

Main Function

- EDGE, GPRS
- 64 Poly Melody
- BT 2.1
- USB 2.0
- WAP2.0, JAVA
- MMS / SMS
- Camera: 2.0 Mega Pixel, CMOS
- LCD : 2.4" TFT (LCD)
- Size: 96x52.6x12.15mm
- Battery: 1,000 mAh
- Memory: 1G OneNand + 512M DDR SDRAM
- Band: GSM 850/900/1800/1900
- BB: Infineon CatFish X-Gold215
- RF: Skyworks SKY77548
- 1-Speaker

6. Level 6 Repair

6-1. Software Download

6-1-1. Required items in order to install S/W

- Installation program: Downloader Program ([FlashTool_E2.exe](#))
 - GT-C3330 Mobile Phone
 - Data Cable
 - Mobile device specific S/W: Binary files
-
- Download Program
 - [FlashTool_E2_XMM2150.ZIP : Version v.4.68.3.44](#)
 - USB Driver
 - [Samsung_USB_Driver_for_Mobile_Phones_1.3.1650.0.exe](#)
 - GT-C3330 Mobile Device
 - Data Cable
 - Binary files
 - ActiveSync Setting
 - Driver Installation.

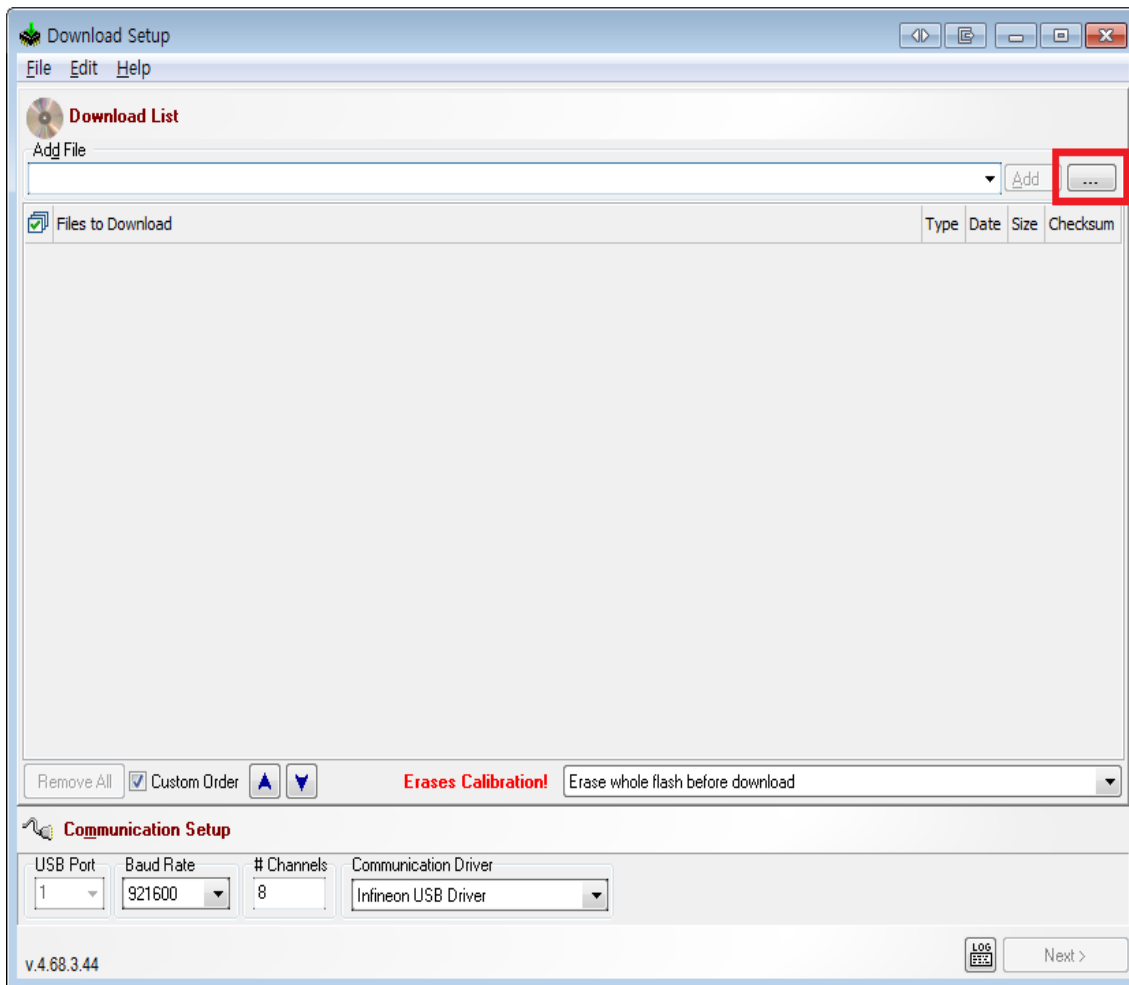
6-1-2. Driver Installation

- Make sure that you install the driver for a phone.
- You have to install the driver of Samsung USB Modem of downloading a phone image
- [Restart your host PC after you install the phone driver.](#)

6-1-3. S/W Download Process

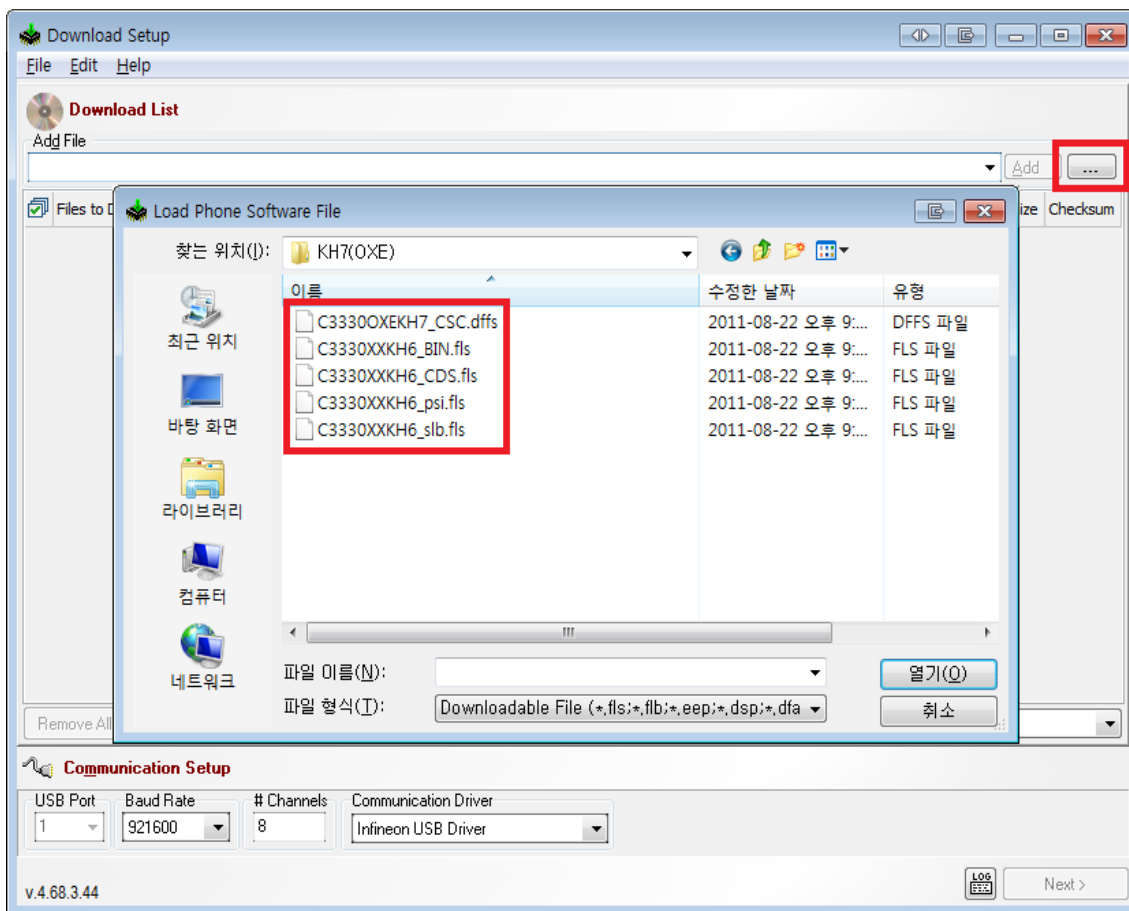
1) Execute the downloader

- Execute the 'FlashTool_E2_XMM2150.zip\FlashTool_E2.exe' program.



2) Add binary file

- Click "...", and you can select appropriate binary files.
These can be added via "Drag & Drop"

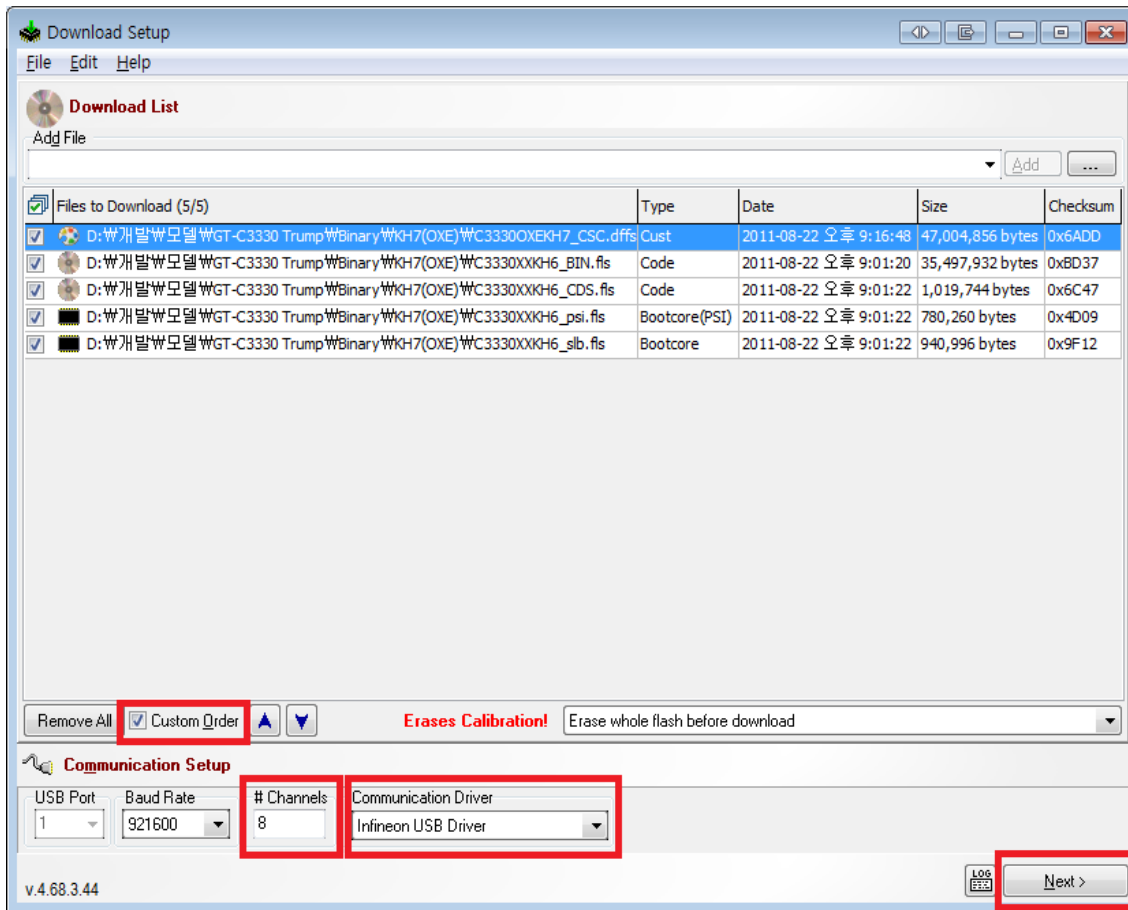


[Target Software]

- C3330XXKXX_psi.fls (Type : Bootcore (PSI))
- C3330XXKXX_slb.fls (Type : Bootcore)
- C3330XXKXX_BIN.fls (Type : Code)
- C3330XXKXX_CDS.fls (Type : Code)

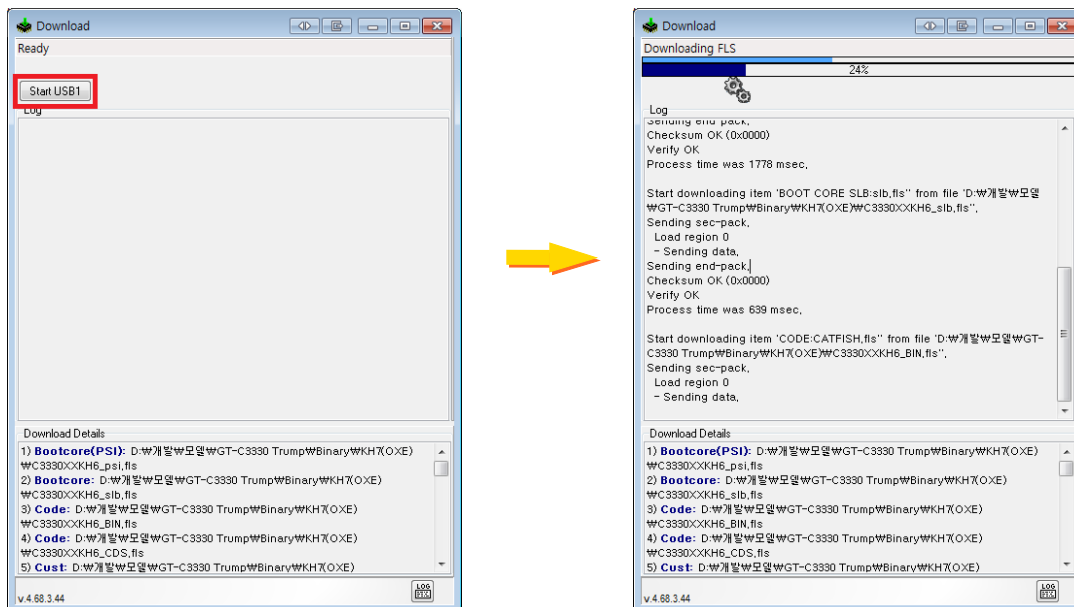
[Resource File]

- C3330XXKXX_CSC.dffs (Type : Cust)



- Binary sequence should be set as
C3330OXXKXX_psi.fl → C3330OXXKXX_slb.fl → C3330OXXKXX_BIN.fl →
C3330OXXKXX_CDS.fl → C3330OXXKXX_CSC.dffs
- This can be done automatically if 'Customer Order' not checked and check
- Communication Driver should be set as Infineon USB Driver
- Choose the 'Erase whole flash before download [default]'
- You can change quantity as "#Channels" (Max 8)
- Click "NEXT" button

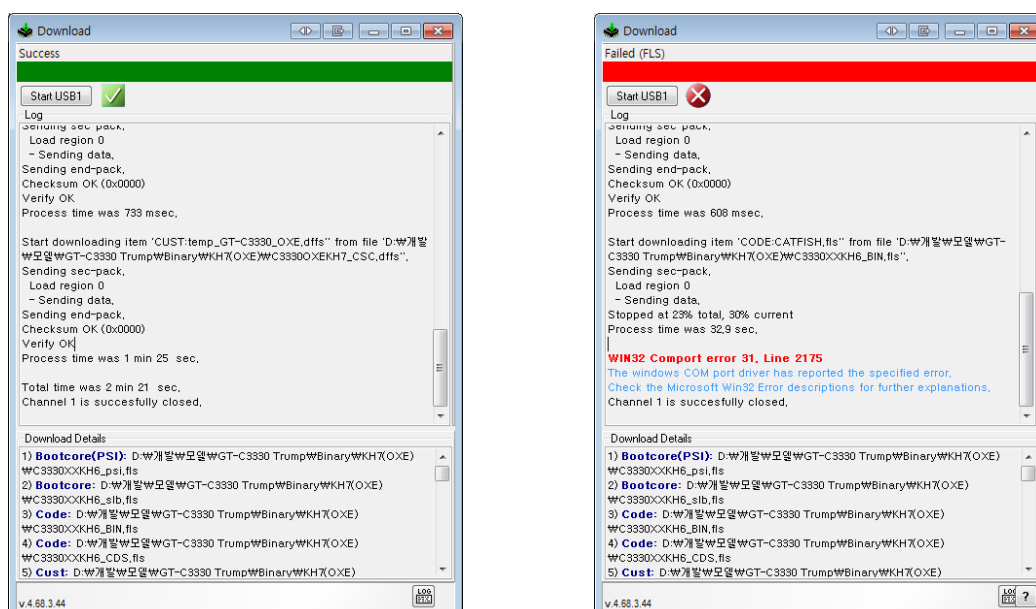
3) Connect the device



- Click "Start USB1" button.
- Connect the target without battery via USB cable.
- The download will start automatically.

4) Complete download

- The download process is automatically executed.



- a. If succeeds, you can see the previous page's image (Left side)
- b. If "Failed" message was shown the right side image, you should check and rearrange the order of binary files after click "x" box on top right. (refer to 2-a)

5) Confirm Download

- When completing download, downloader is automatically ready mode for next.
Click "Start USB1" button, and repeat above process.
- You can check the version as pushing [***#1234#**] after booting.

9. Reference Abbreviate

Reference Abbreviate

- AAC: AdvancedAudioCoding.
- AVC: AdvancedVideoCoding.
- BER: BitErrorRate
- BPSK: BinaryPhaseShiftKeying
- CA: ConditionalAccess
- CDM: CodeDivisionMultiplexing
- C/I: Carrier to Interference
- DMB: DigitalMultimediaBroadcasting
- E: 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 replacement parts may not function properly.

1-2. ESD(Electrostatically Sensitive Devices) Precaution

Many semiconductors and ESDs in electronic devices are particularly sensitive to static discharge and can be easily damaged by it. We recommend protecting these components with conductive 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.

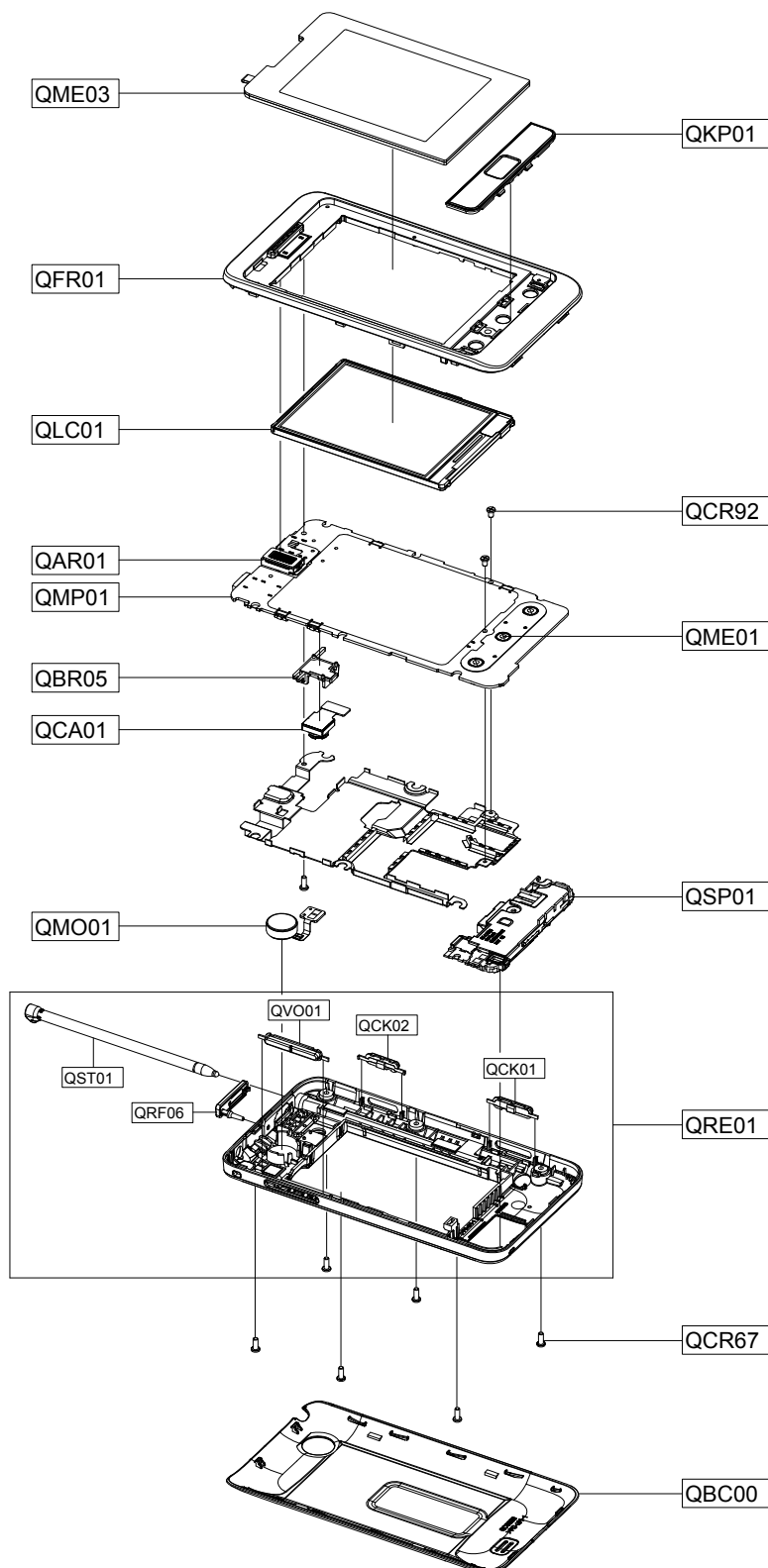
Use only desoldering tools with plastic tips to prevent static discharge.

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
QAR01		AUDIO-RECEIVER	3009-001564
QCR67		SCREW-MACHINE	6001-002083
QCR92		SCREW-MACHINE	6001-002261
QMO01		MOTOR DC-GT_C3330	GH31-00548A
QME01		DOME SHEET-GT_C3330	GH59-11366A
QME03		TOUCH/PANEL-GT_C3330	GH59-11367A
QSP01		MODULE-GT_C3330 SPK+INT	GH59-11369A
QBC00		PMO COVER-BATT_V2	GH72-65578A
QMP01		A/S ASSY-PBA MAIN(COMM)GT_C3330	GH82-06051A
QLC01		ELA MODULE-GT_C3330 LCD	GH96-05290A
QCA01		ASSY CAMERA-2M 1/5" GT_C3330	GH96-05307A
QKP01		ASSY KEYPAD-HOME	GH98-21050A
QFR01		ASSY CASE-FRONT	GH98-21051A
QBR05		ASSY BRACKET-CAMERA	GH98-21186A
QRE01		ASSY CASE-REAR	GH98-21052A
	QVO01	PMO KEY-VOLUME_V2	GH72-65579A
	QCK01	PMO KEY-CAMERA_V2	GH72-65580A
	QCK02	PMO KEY-HOLD_V2	GH72-65581A
	QRF06	PMO COVER-USB_V2	GH72-65582A
	QST01	PMO ACCE-STYLUS PEN_V2	GH72-65583A

5. MAIN Electrical Parts List

SEC CODE	Design LOC	Description
0403-001688	ZD300	DIODE-ZENER
0404-001172	D300	DIODE-SCHOTTKY
0406-001286	D501	DIODE-TVS
0406-001361	ZD407	DIODE-TVS
0406-001369	D301	DIODE-TVS
0406-001413	ZD404,ZD405,ZD406	DIODE-TVS
0406-001446	ZD601	DIODE-TVS
0406-001459	ZD301,ZD400,ZD406	DIODE-TVS
0406-001459	ZD402,XF403	DIODE-TVS
0406-001465	D400	DIODE-TVS
0407-001002	D600	DIODE-ARRAY
0501-002680	Q100	TR-SMALL SIGNAL
1001-001635	U402	IC
1001-001706	U300	IC
1108-000406	UME201	IC
1201-002985	PAM100	IC
1201-003208	U403	IC
1202-001088	U401	IC
1203-005580	U601	IC
1203-005848	U600	IC
1203-006604	U301	IC
1205-003288	U502	IC
1205-004116	U101	IC
1205-004215	UCP201	IC
1404-001224	TH200	THERMISTOR
1405-001317	V301,V600,V601,V602	VARISTOR
1405-001317	V603	VARISTOR
2007-000138	R210,R313,R408,R416	R-CHIP
2007-000138	R601	R-CHIP
2007-000140	R507	R-CHIP
2007-000141	R513,R517	R-CHIP
2007-000143	R206,R207,R315,R508	R-CHIP
2007-000143	R606	R-CHIP
2007-000146	R200	R-CHIP
2007-000148	R201,R205,R303,R304	R-CHIP
2007-000148	R500,R503,R504,R505	R-CHIP

2007-000154	R414,R417	R-CHIP
2007-000155	R114	R-CHIP
2007-000157	R407	R-CHIP
2007-000162	R111	R-CHIP
2007-000166	R420	R-CHIP
2007-000168	R501	R-CHIP
2007-000169	R406	R-CHIP
2007-000170	R424	R-CHIP
2007-000242	R305,R306,R401	R-CHIP
2007-001288	R404,R405	R-CHIP
2007-002970	R109	R-CHIP
2007-007008	R115	R-CHIP
2007-007142	R202	R-CHIP
2007-007197	R412,R413	R-CHIP
2007-007528	R409	R-CHIP
2007-007798	R311,R312,R317	R-CHIP
2007-007942	R415	R-CHIP
2007-008045	R102,R103,R106	R-CHIP
2007-008055	R204,R310,R314	R-CHIP
2007-008403	R419	R-CHIP
2007-008419	R104	R-CHIP
2007-008516	R203,R301,R302	R-CHIP
2007-008648	R307	R-CHIP
2007-009804	R400	R-CHIP
2203-000233	C106,C118,C316,C411	C-CERAMIC,CHIP
2203-000233	C610	C-CERAMIC,CHIP
2203-000278	C107	C-CERAMIC,CHIP
2203-000330	C403,C415	C-CERAMIC,CHIP
2203-000425	C228,C229	C-CERAMIC,CHIP
2203-000438	C124,C131,C222,C225	C-CERAMIC,CHIP
2203-000489	C125,C130	C-CERAMIC,CHIP
2203-000679	C423	C-CERAMIC,CHIP
2203-000812	C129,C314,C404,C406	C-CERAMIC,CHIP
2203-000812	C416,C418,C419,C420	C-CERAMIC,CHIP
2203-000812	C422,C426,C501,C502	C-CERAMIC,CHIP
2203-000812	C503,C508	C-CERAMIC,CHIP

2203-001153	C414	C-CERAMIC,CHIP
2203-001385	C115	C-CERAMIC,CHIP
2203-001412	C109	C-CERAMIC,CHIP
2203-002443	C230	C-CERAMIC,CHIP
2203-002668	C108,C231	C-CERAMIC,CHIP
2203-005057	C102	C-CERAMIC,CHIP
2203-005288	C101,C128	C-CERAMIC,CHIP
2203-005382	R112	C-CERAMIC,CHIP
2203-005481	C202,C210	C-CERAMIC,CHIP
2203-005682	C110	C-CERAMIC,CHIP
2203-006048	C104,C113,C204,C207	C-CERAMIC,CHIP
2203-006048	C307,C401,C402,C421	C-CERAMIC,CHIP
2203-006048	C509,C608	C-CERAMIC,CHIP
2203-006190	C201,C215	C-CERAMIC,CHIP
2203-006257	C211	C-CERAMIC,CHIP
2203-006324	C213,C214	C-CERAMIC,CHIP
2203-006379	C218,C219	C-CERAMIC,CHIP
2203-006399	C203,C206,C208,C407	C-CERAMIC,CHIP
2203-006399	C410,C424,C425,C511	C-CERAMIC,CHIP
2203-006399	C605,C611	C-CERAMIC,CHIP
2203-006423	C200,C216,C233,C234	C-CERAMIC,CHIP
2203-006423	C237,C315	C-CERAMIC,CHIP
2203-006462	C227	C-CERAMIC,CHIP
2203-006562	C212,C308,C311,C405	C-CERAMIC,CHIP
2203-006841	C303	C-CERAMIC,CHIP
2203-006844	C114,C223	C-CERAMIC,CHIP
2203-006872	C111,C112,C117,C317	C-CERAMIC,CHIP
2203-006872	C601,C602,C609	C-CERAMIC,CHIP
2203-006890	C400	C-CERAMIC,CHIP
2203-007210	C235,C236	C-CERAMIC,CHIP
2203-007269	C232	C-CERAMIC,CHIP
2203-007271	C116,C306,C603	C-CERAMIC,CHIP
2203-007279	C105,C221,C305,C313	C-CERAMIC,CHIP
2203-007371	C604	C-CERAMIC,CHIP
2203-007342	C408,C409	C-CERAMIC,CHIP
2203-007449	C209,C238,C302,C304	C-CERAMIC,CHIP

2203-007449	C309	C-CERAMIC,CHIP
2203-007456	C300	C-CERAMIC,CHIP
2203-007687	C310	C-CERAMIC,CHIP
2203-007693	C312	C-CERAMIC,CHIP
2203-007754	C121,C122	C-CERAMIC,CHIP
2203-007786	C103,C123	C-CERAMIC,CHIP
2203-008097	C205,C217,C220,C224	C-CERAMIC,CHIP
2703-001729	R113	INDUCTOR-SMD
2703-001734	L110,L114	INDUCTOR-SMD
2703-001749	L115,L116	INDUCTOR-SMD
2703-001752	L101	INDUCTOR-SMD
2703-002200	L100,L104	INDUCTOR-SMD
2703-002204	L102	INDUCTOR-SMD
2703-002207	L106,L112	INDUCTOR-SMD
2703-002208	L109	INDUCTOR-SMD
2703-002309	L119	INDUCTOR-SMD
2703-002314	L111	INDUCTOR-SMD
2703-002367	L107,L120	INDUCTOR-SMD
2703-002369	L117	INDUCTOR-SMD
2703-003476	L118,L121	INDUCTOR-SMD
2703-003479	L113	INDUCTOR-SMD
2703-003485	L300	INDUCTOR-SMD
2703-003781	L411	INDUCTOR-SMD
2703-003869	L202	INDUCTOR-SMD
2801-004902	OSC200	CRYSTAL-SMD
2801-004931	OSC201	CRYSTAL-SMD
2901-001422	F603,F604	FILTER-EMI SMD
2901-001435	F600,F601	FILTER-EMI SMD
2901-001454	F602	FILTER-EMI SMD
2904-001987	F100	FILTER-SAW
2909-001337	F101	FILTER-LC
3003-001136	MIC400	MIC MEMS
3003-001138	MIC401	MIC MEMS
3301-002000	L201	BEAD-SMD
3301-002065	L402,L403,L404,L405	BEAD-SMD
3301-002065	L406,L407,L408,L409	BEAD-SMD

3301-002065	L410	BEAD-SMD
3301-002066	L400,L401	BEAD-SMD
3301-002070	L412	BEAD-SMD
3404-001410	TAC600,TAC601,TAC602	SWITCH-TACT
3404-001410	TAC603	SWITCH-TACT
3705-001731	RFS100	CONNECTOR-COXIAL
3709-001630	CN501	CONNECTOR-CARD EDGE
3709-001699	SIM500	CONNECTOR-CARD EDGE
3711-006925	CN602	HEADER-BOARD TO BOARD
3711-007071	CN601	HEADER-BOARD TO BOARD
3711-007437	BTC300	HEADER-BATTERY
3711-007478	HEA500	HEADER-BOARD TO BOARD
3712-001348	ANT100,ANT101,MOT600	CONNECTOR-TERMINAL
3712-001348	MOT601	CONNECTOR-TERMINAL
3712-001378	ANT102,ANT103	CONNECTOR-TERMINAL
3722-003115	IFC300	JACK-MINI USB
3722-003382	EAR400	JACK-EAR PHONE
GH80-03320A	R101,R208,R506,R511	Solder Bridge PAD
GH80-03320A	R512,R515	Solder Bridge PAD

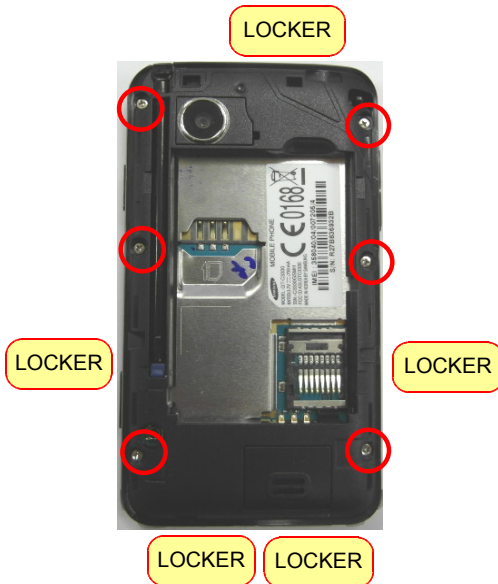
Please consult the GSPN website (Samsung Portal) for the most recent version of the product's part list.

7. Level 2 Repair

7-1. Disassembly

1

- 1) Unscrew the 6 points.
- 2) Separate the REAR CASE.

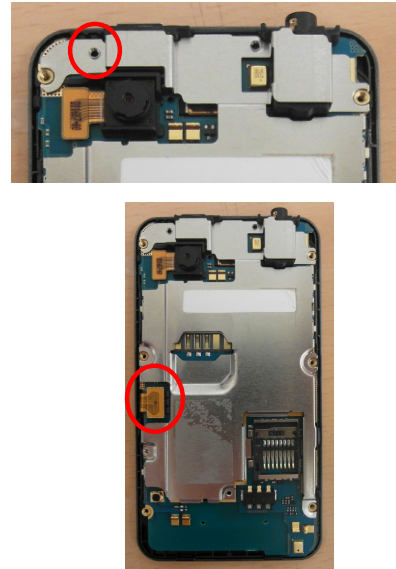


※ **Caution**

- 1) Be care of scratch and molding damage.

2

- 1) Unscrew the 1 points.
- 2) Separate the LCD connector

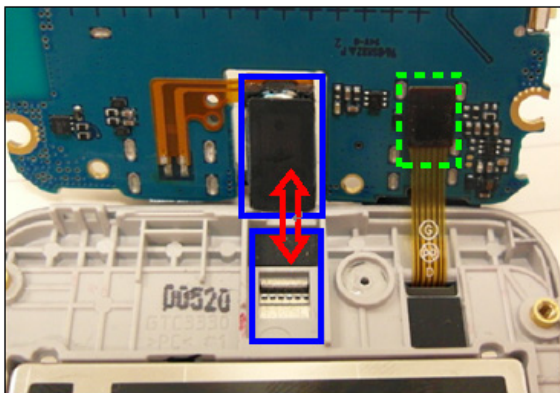


※ **Caution**

- 1) Be care of scratch and molding damage.

3

- 1) Separate the TSP connector.

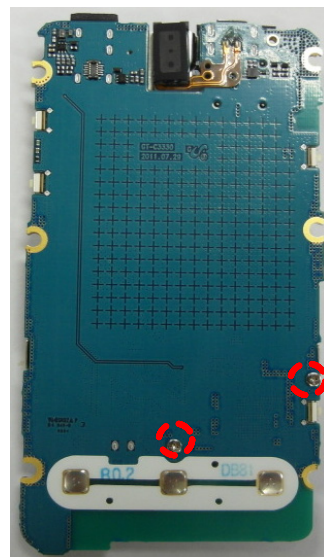


※ **Caution**

- 1) Be care of damage to TSP FPCB and receiver.

4

- Unscrew 2 Points of Shield can.



※ **Caution**

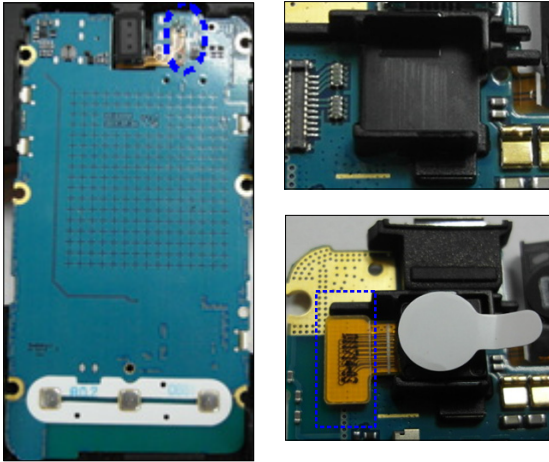
- 1) Be care of damage to PBA.

5 1) Separate the CAMERA connector.	6 1) Separate receiver from PBA.
※ Caution 1) Be care of the Camera module.	※ Caution 1) Be care of damage to receiver FPCB.
7 1) Separate the KEY PAD and LCD from FRONT.	8 Separate the MOTOR and Intenna from REAR.
※ Caution 1) Be care of damage to the LCD. 2) Be care of damage to TSP FPCB.	※ Caution 1) Be care of damage to Intenna Pattern. 2) Be care of damage to MOTOR FPCB.

7-2. Assembly

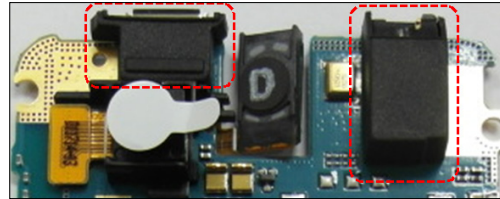
1

- 1) Solder the receiver.
- 2) Attach the Camera Bracket.
- 3) Assembly the Camera.



2

- 1) Assemble the EAR Jack and IF Connector rubber.



※ Caution

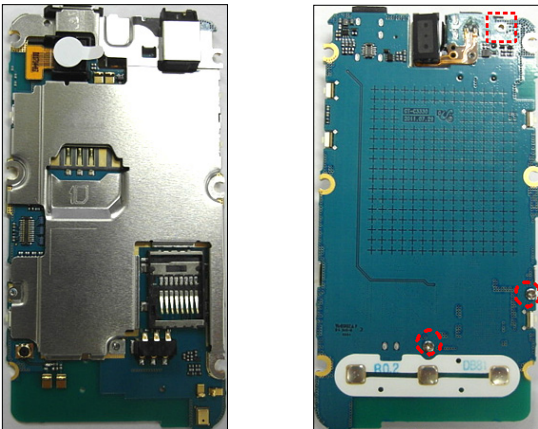
- 1) Be care of damage to receiver FPCB and Camera module.

※ Caution

- 1) Be care of the PBA.

3

- 1) Assemble the Shield CAN.
- 2) Screw 2 Points.



4

- 1) Assemble keypad,TSP and LCD to FRONT ASS'Y.



※ Caution

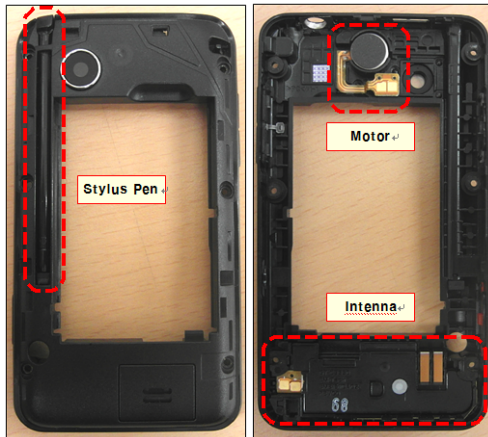
- 1) Be care of damage to PBA.

※ Caution

- 1) 1) Be care of damage the LCD,TSP connector.

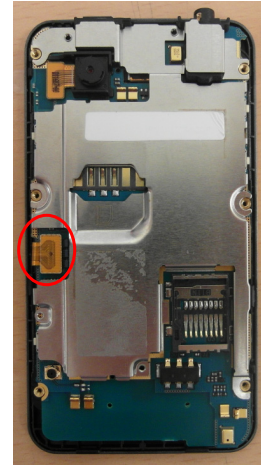
5

- 1) Assemble stylus pen, motor and antenna to REAR.



6

- 1) Assemble the PBA to Front ass'y.
- 2) Assemble the LCD Connector.



※ Caution

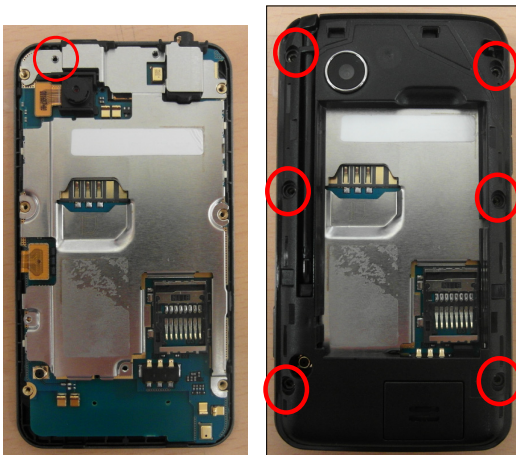
- 1) Be care of damage to Mold.

※ Caution

- 1) Be care of damage to LCD connector.

7

- 1) Screw 1 point.
- 2) Assemble REAR and screw 6 points

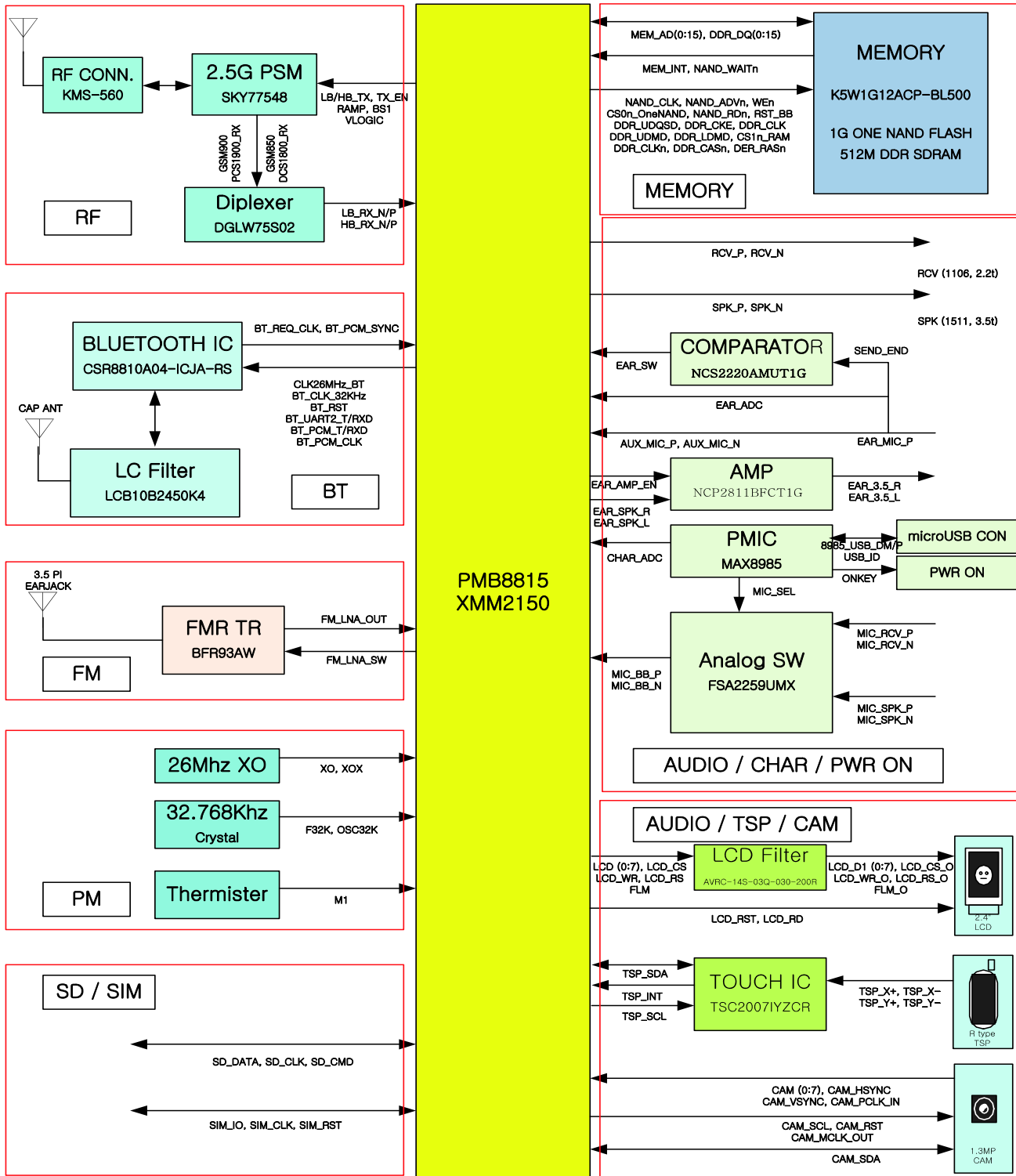


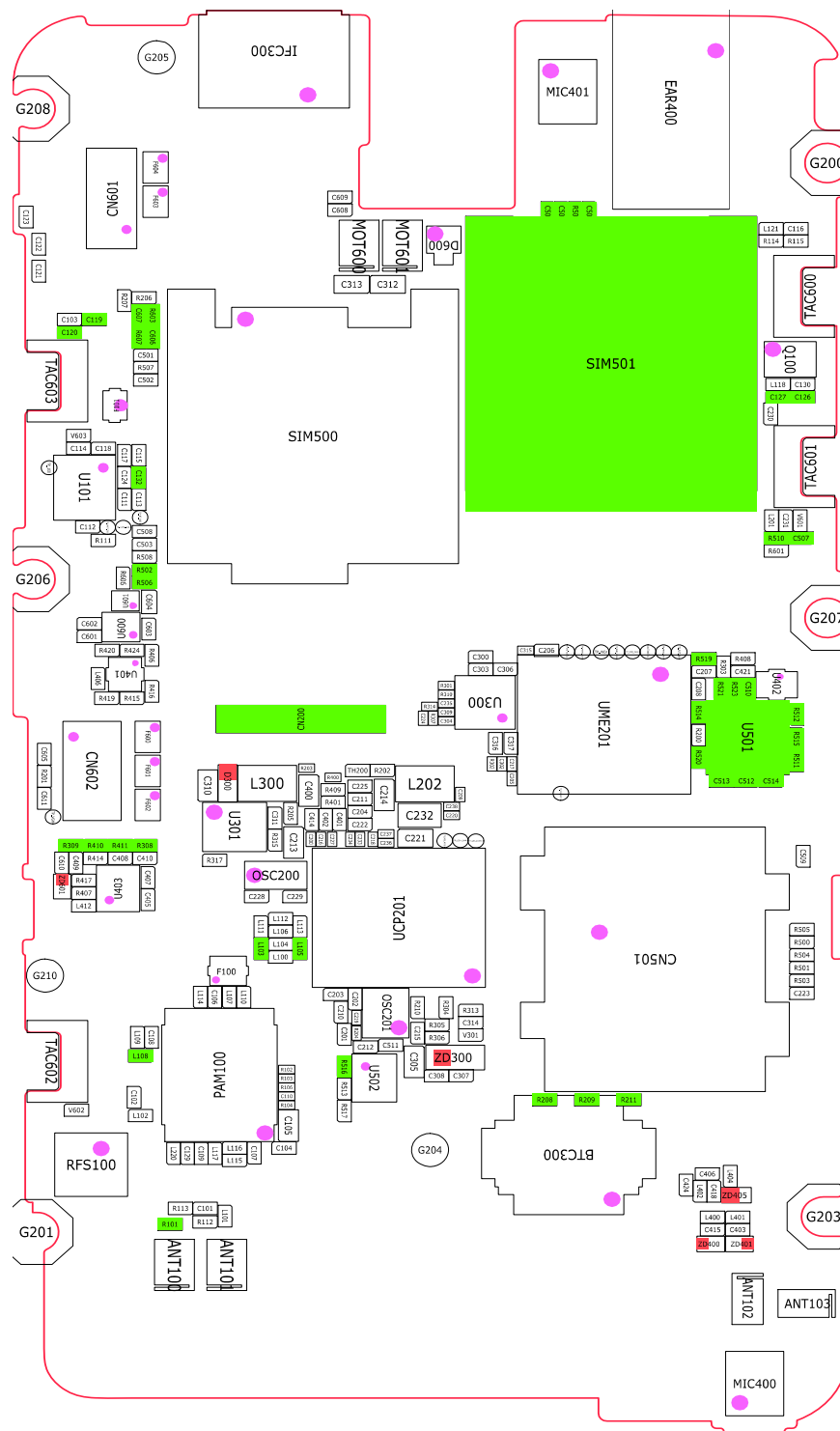
※ Caution

- 1) Be care of damage to Intenna Pattern.

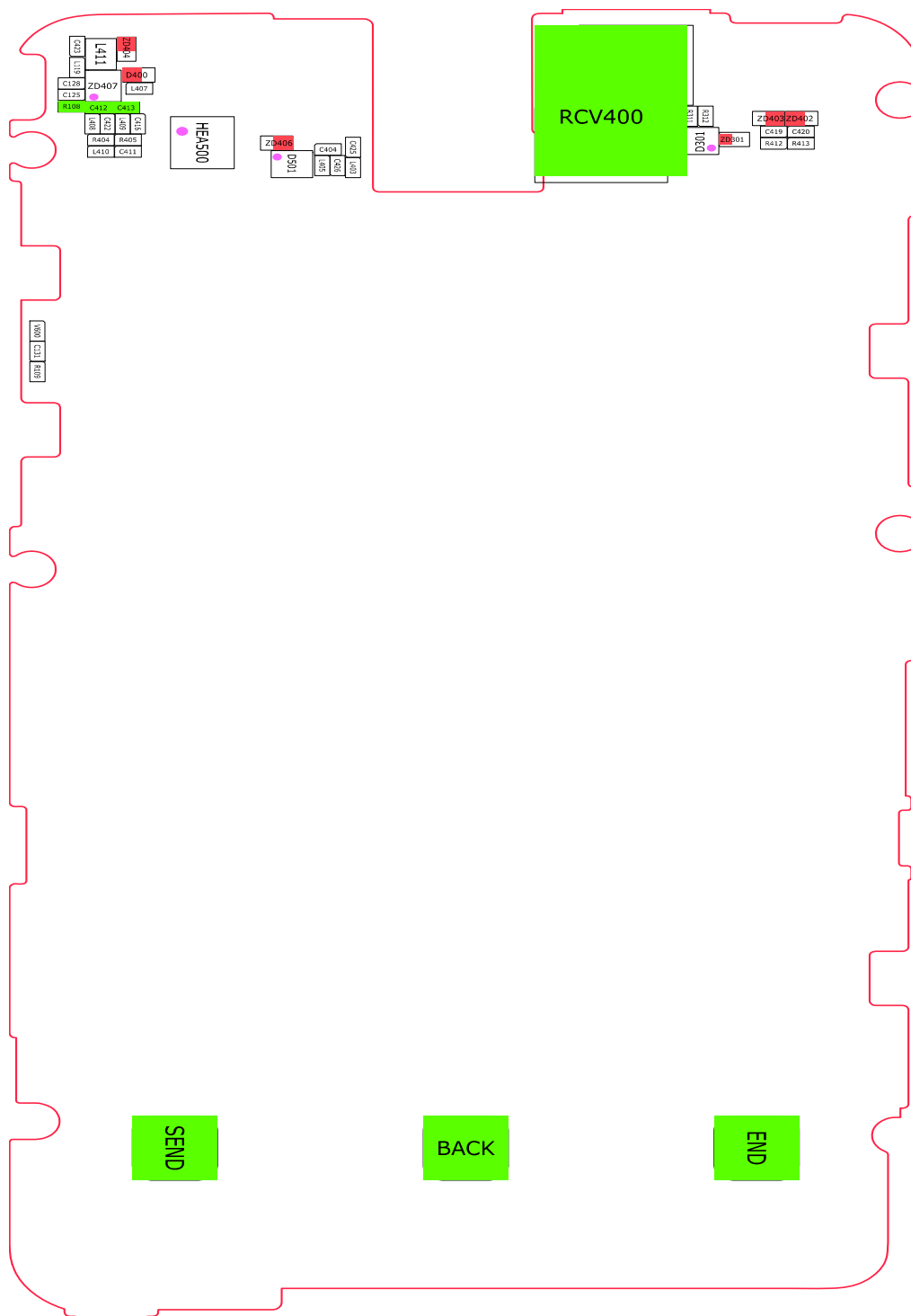
8. Level 3 Repair

8-1. Block Diagram

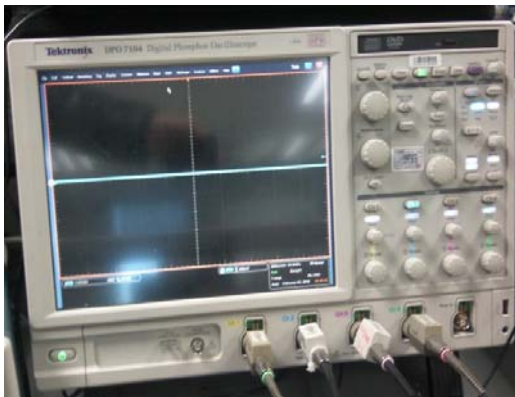




8-2-2. Bottom



8-3. Flow Chart of Troubleshooting Equipments



↑ Oscilloscope



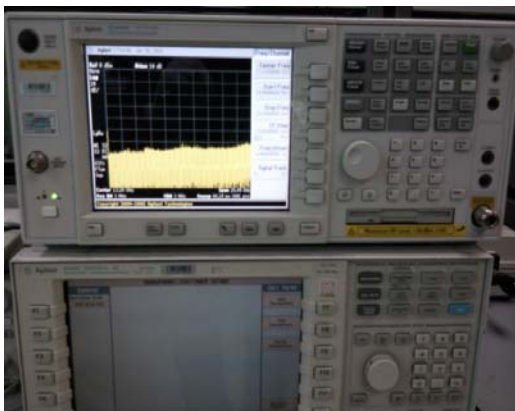
á Digital Multimeter



á Power Supply



á + driver, ESD Safe Tweezer



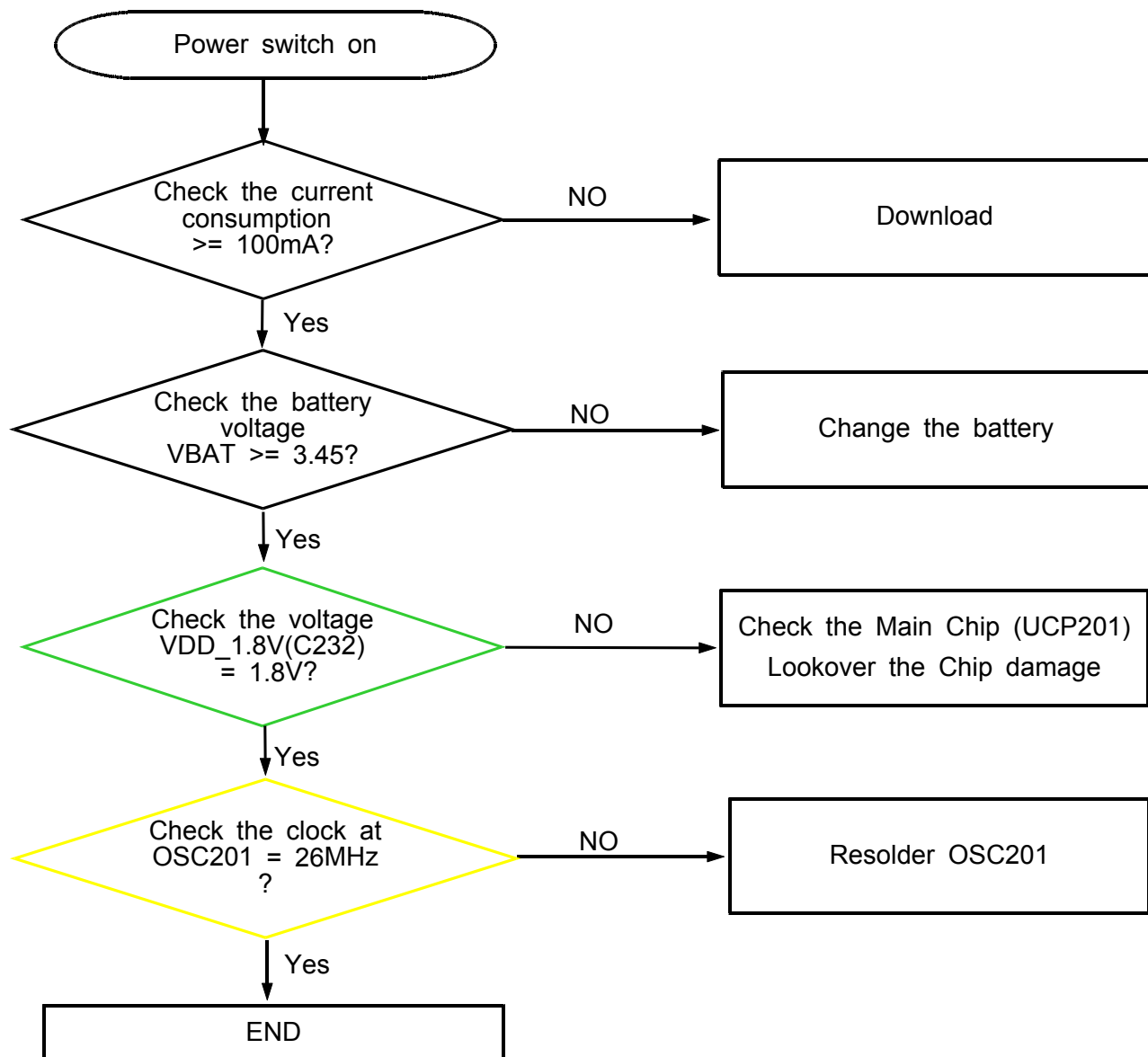
↑ 8960 & Spectrum Analyzer

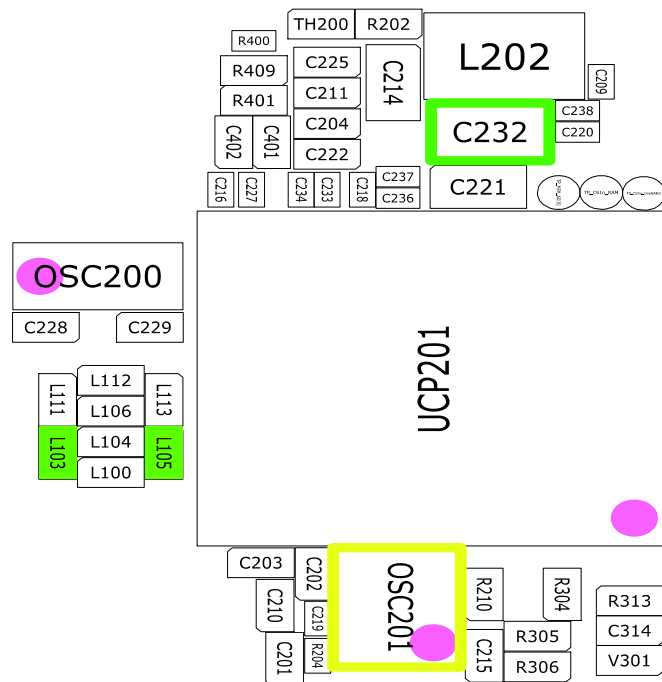
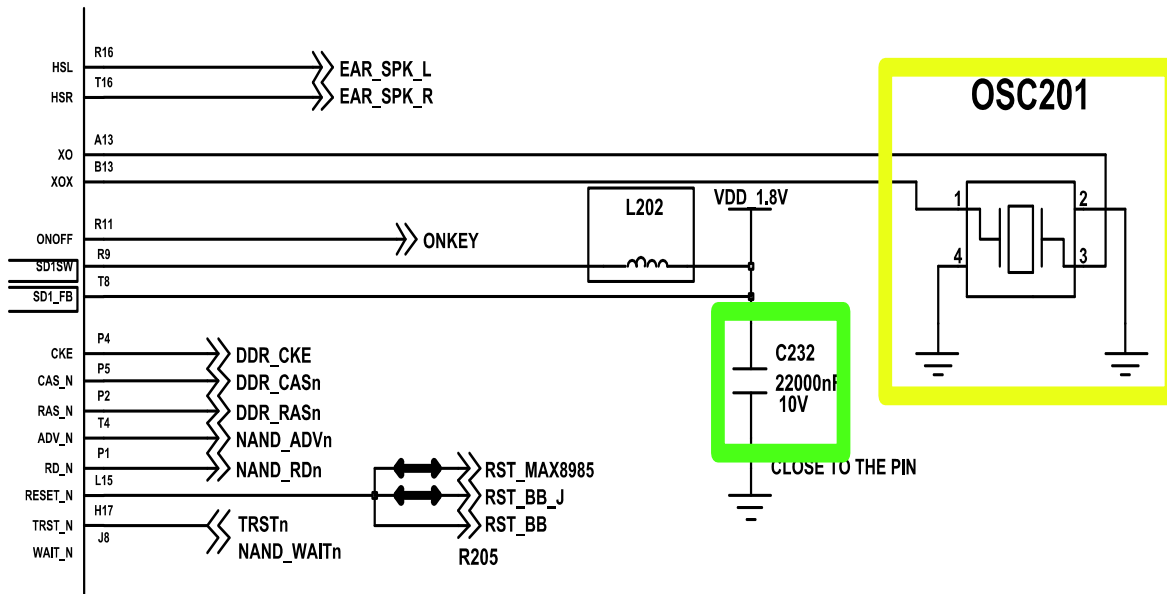


á Soldering iron

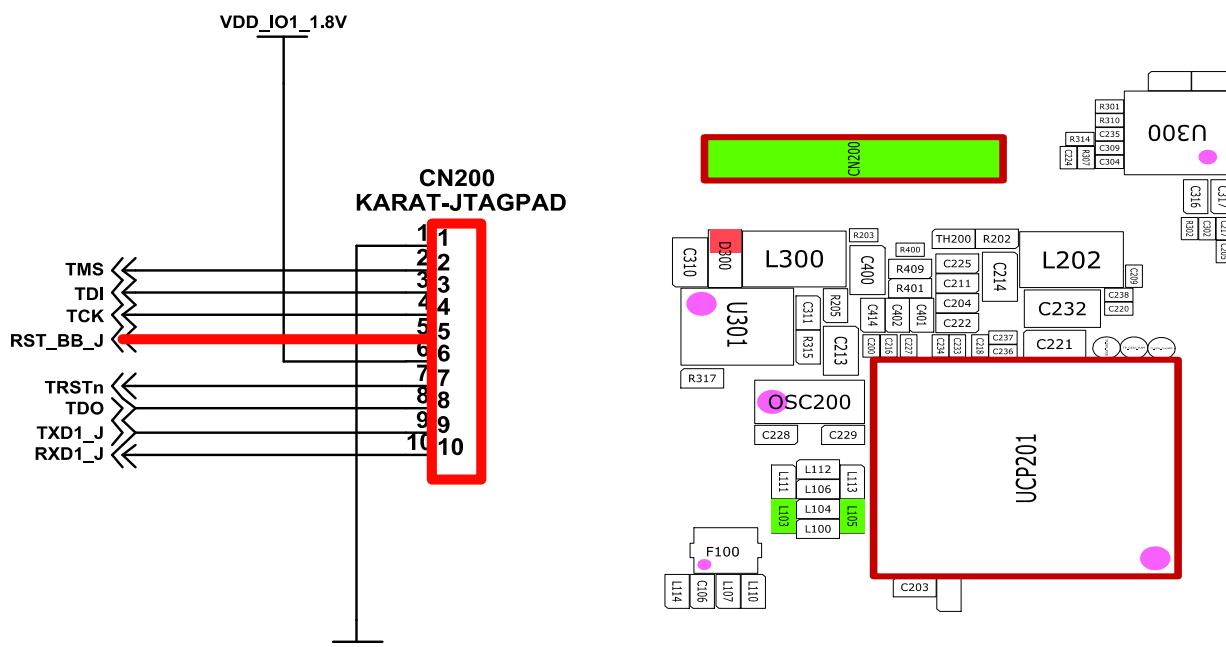
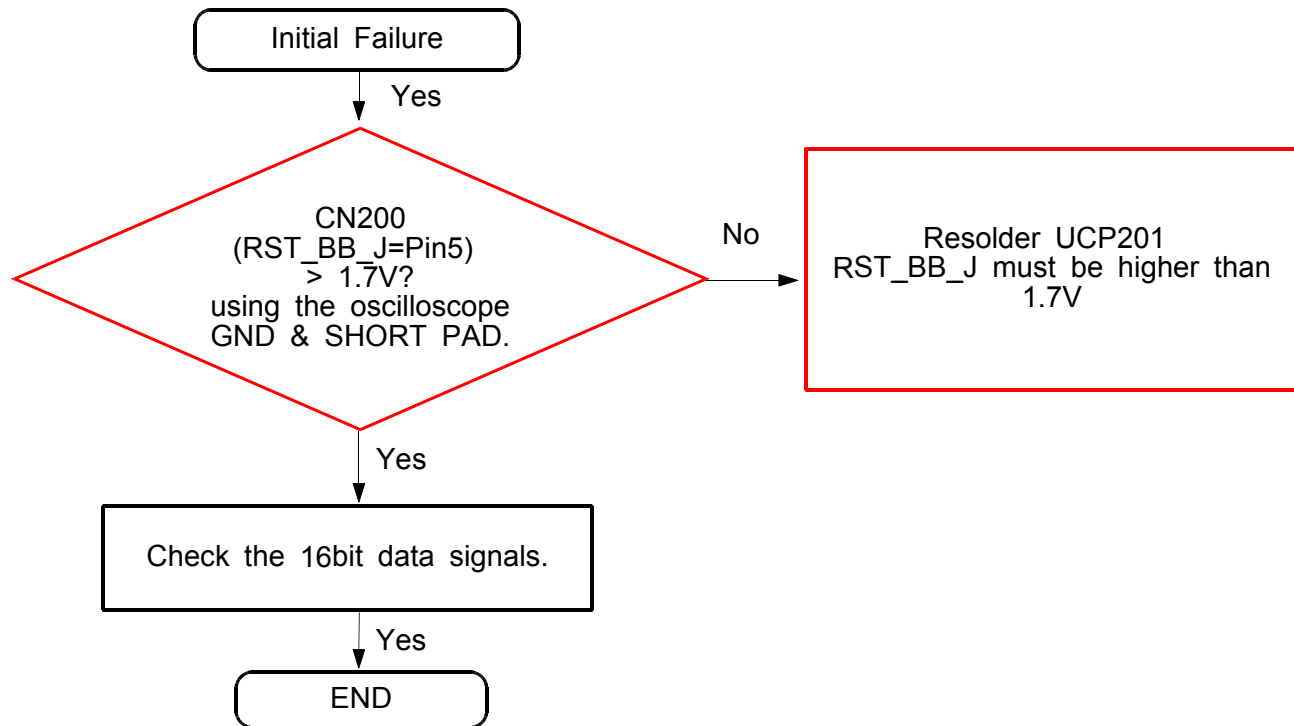
8-3. Flow Chart of Troubleshooting

8-3-1. Power On

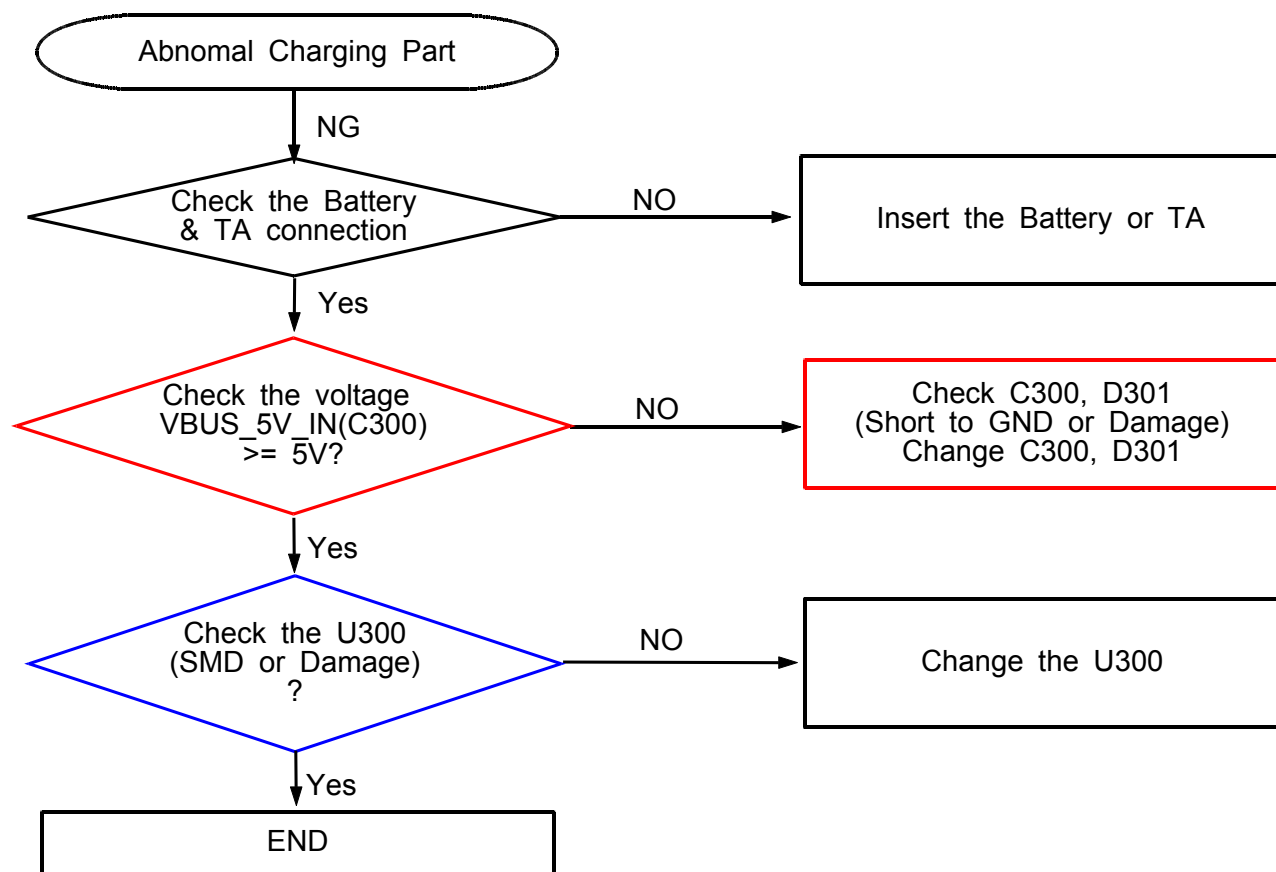


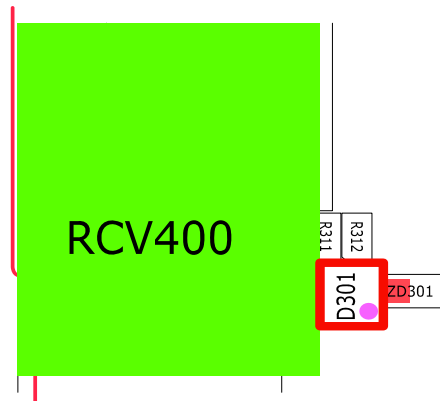
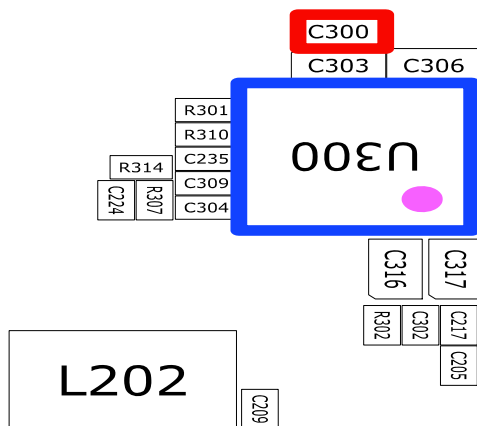
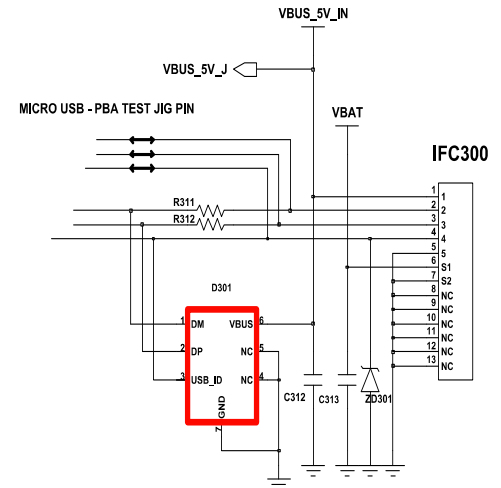
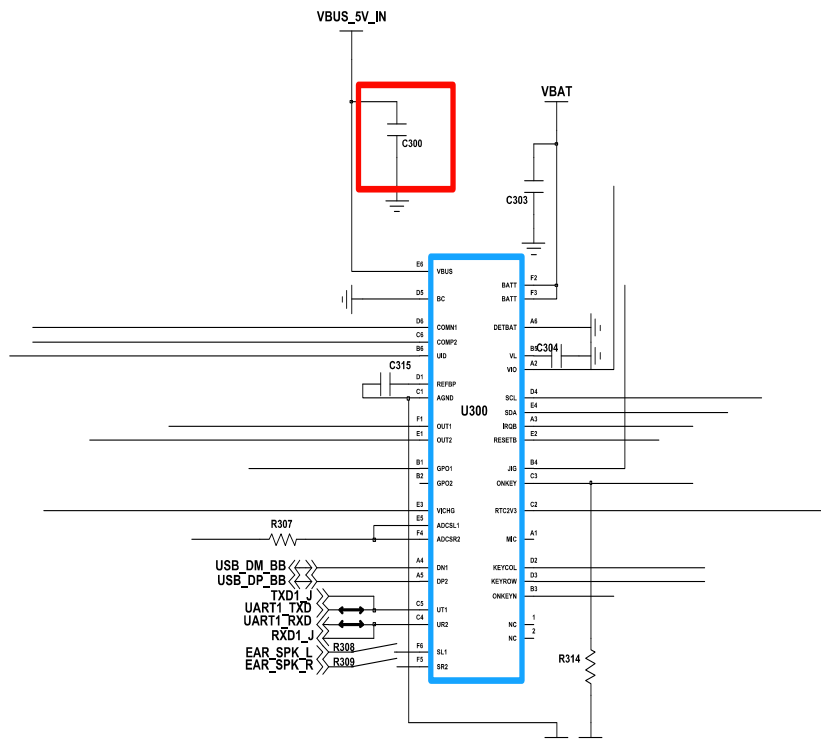


8-3-2. Initial

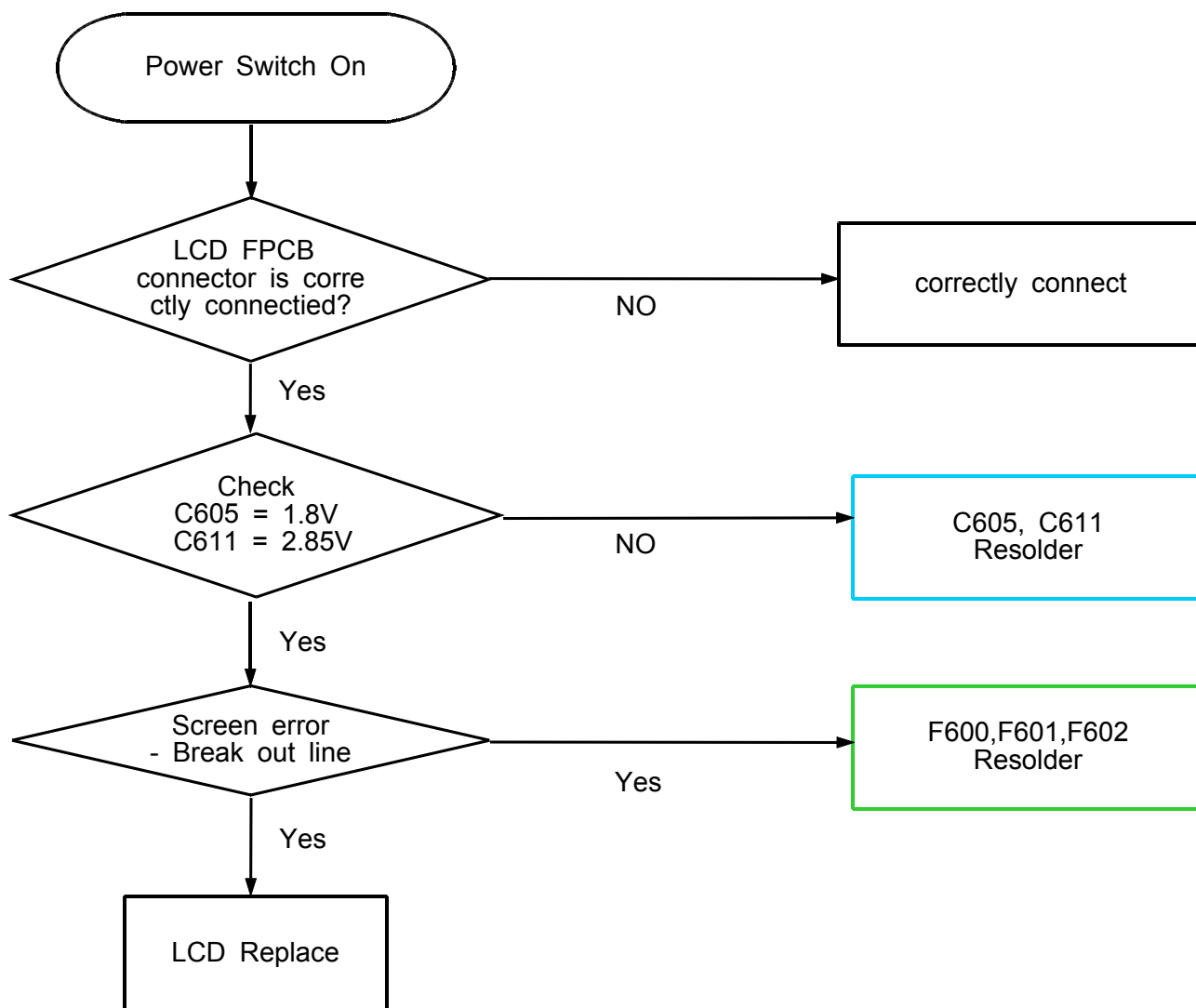


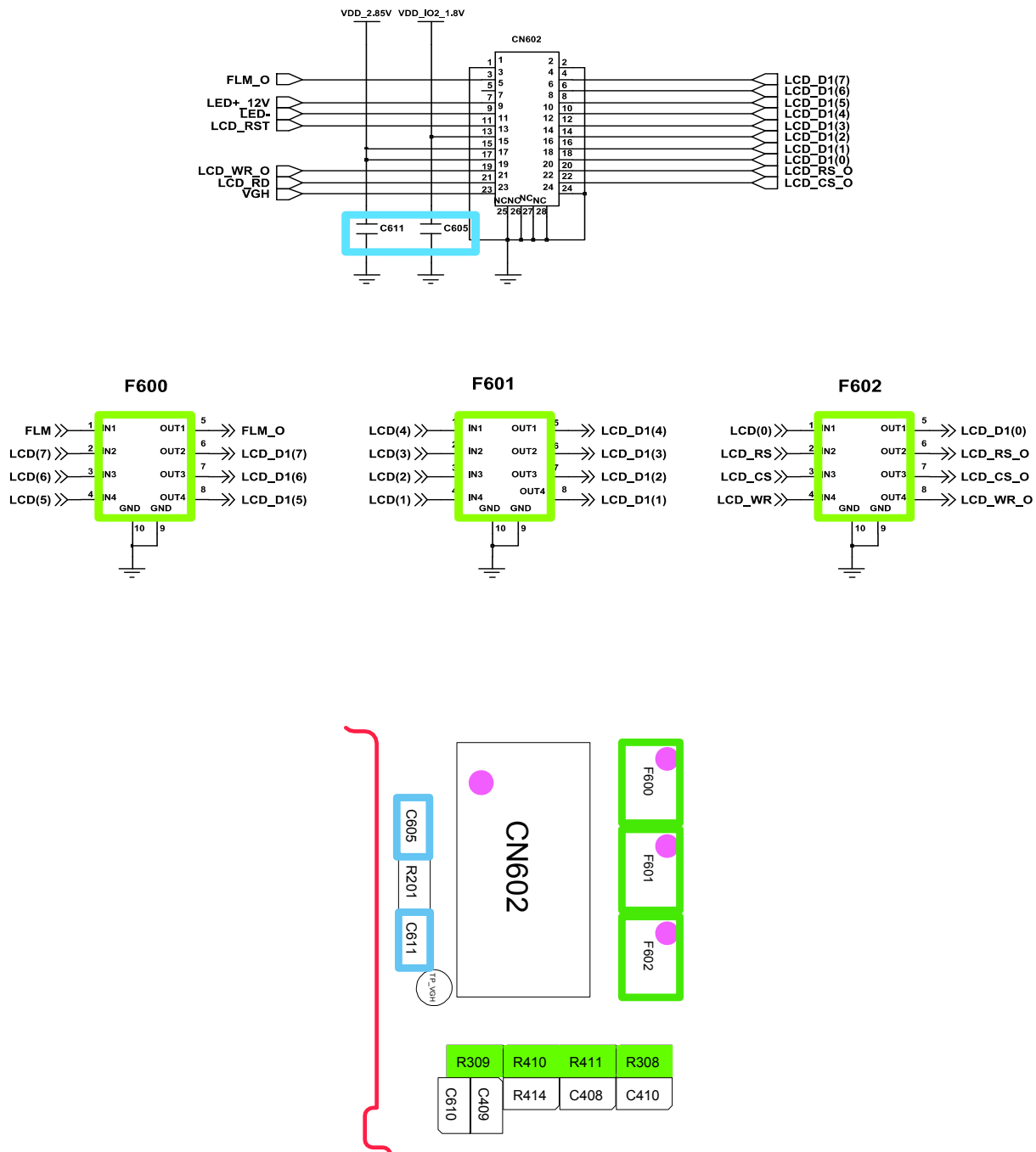
8-3-3. Charging Part



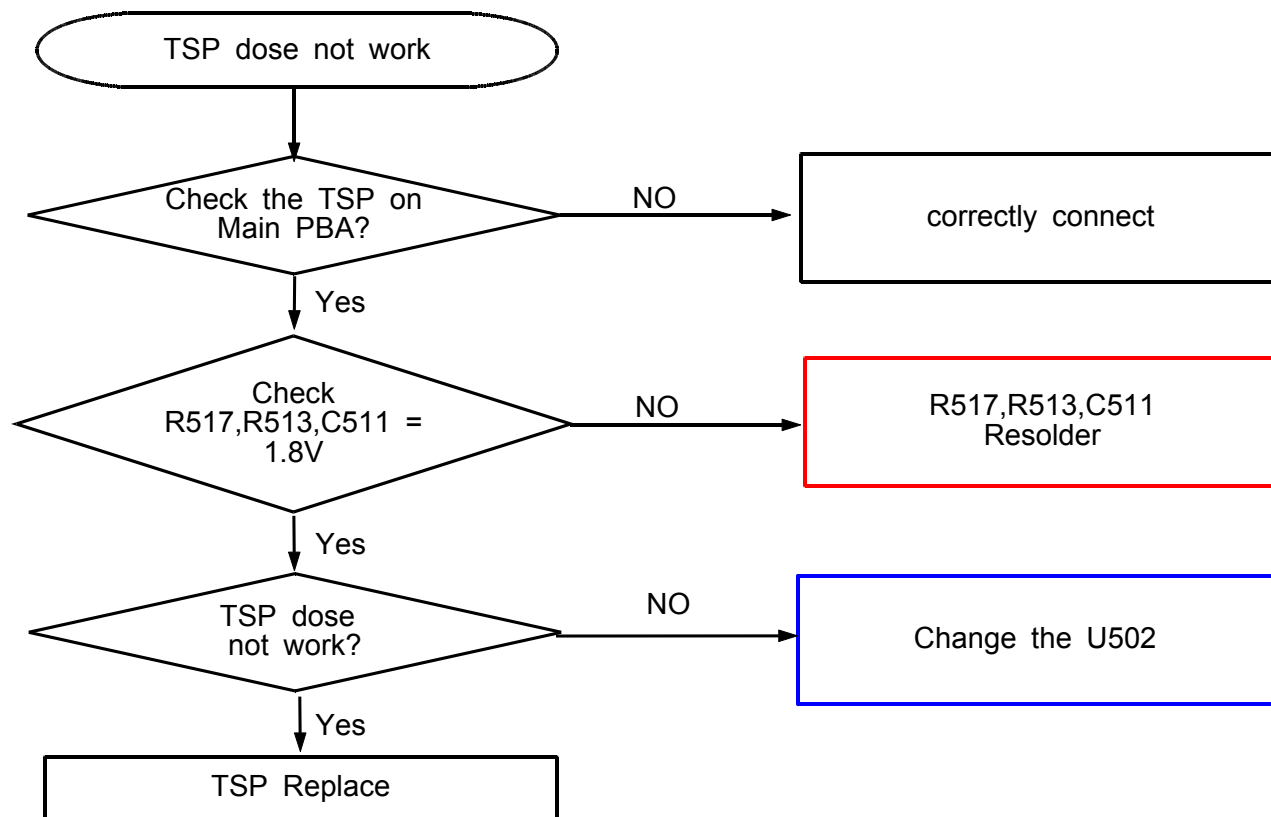


8-3-4. LCD Working

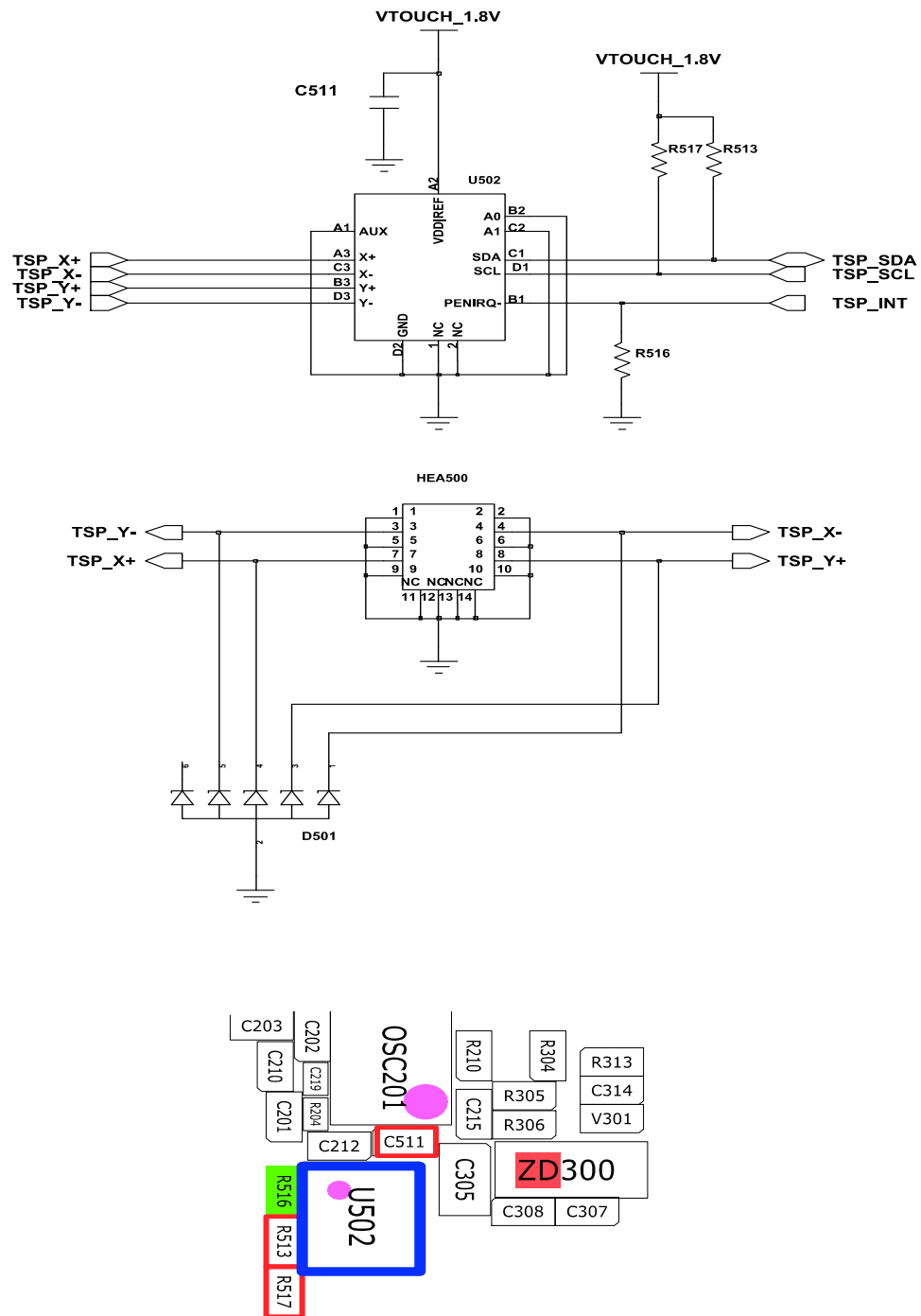




8-3-11. TSP

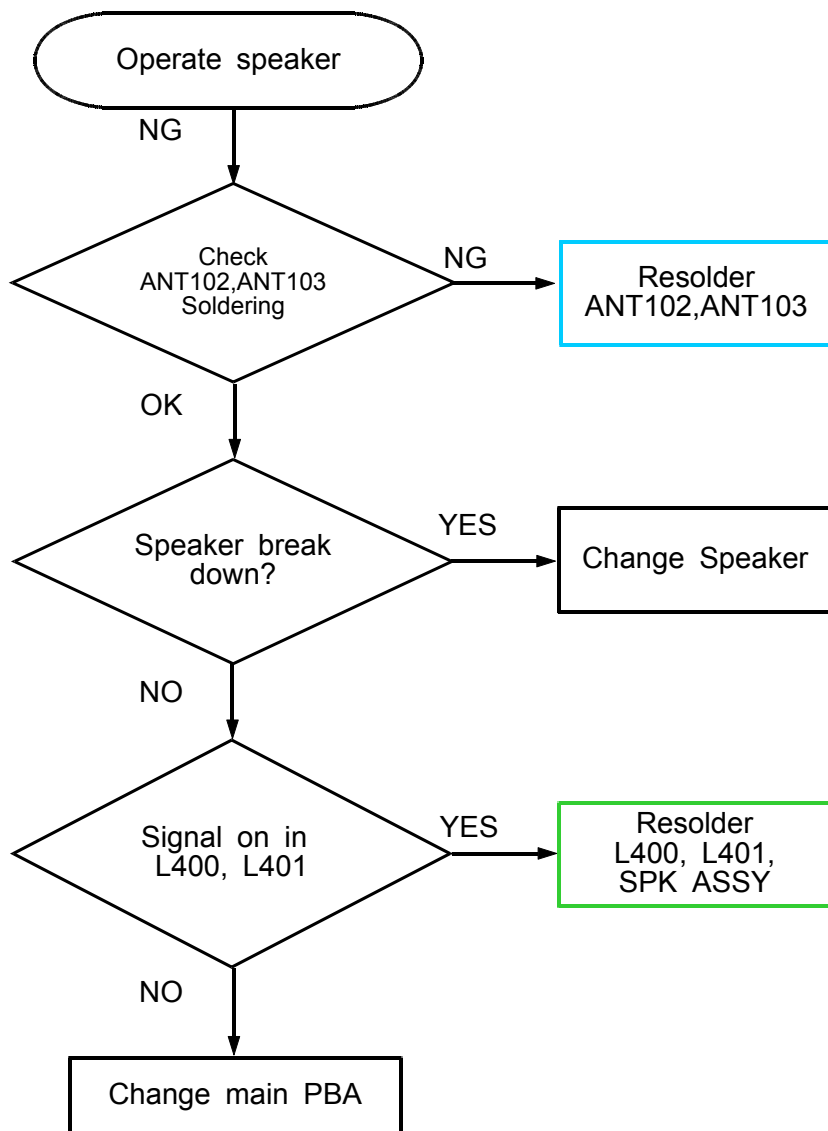


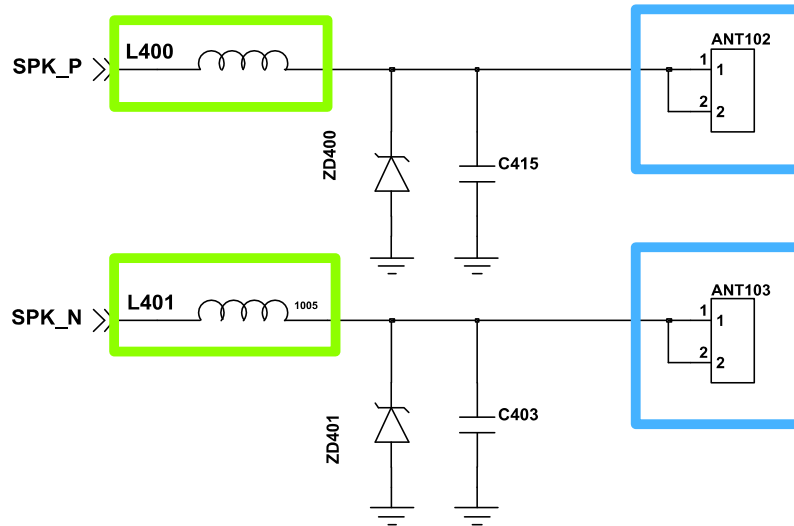
..



8-3-5. Audio Working

- Speaker Working

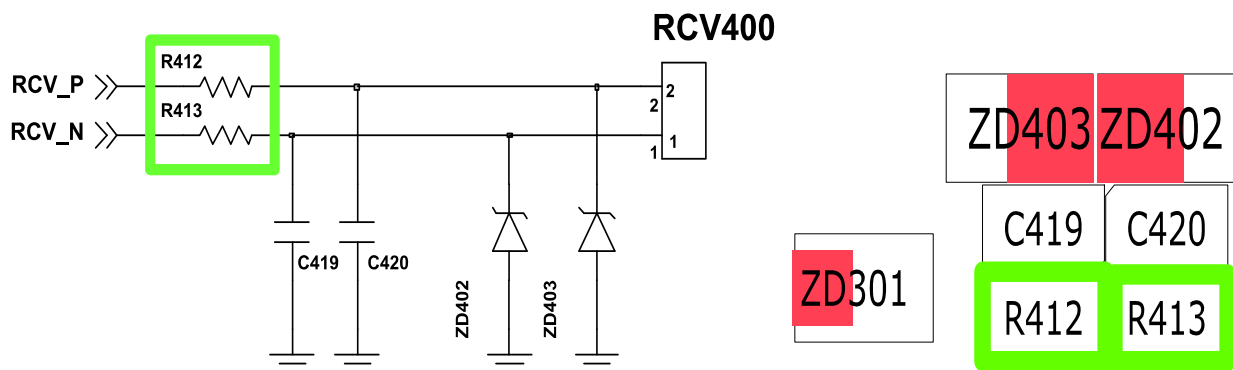
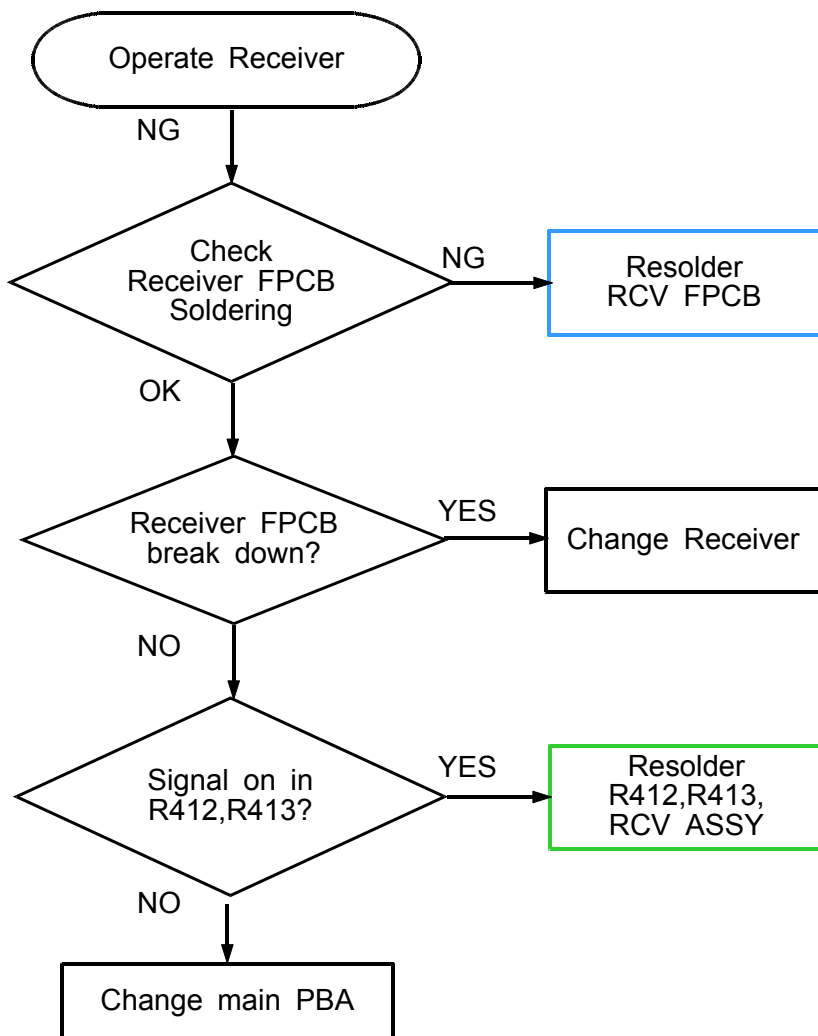




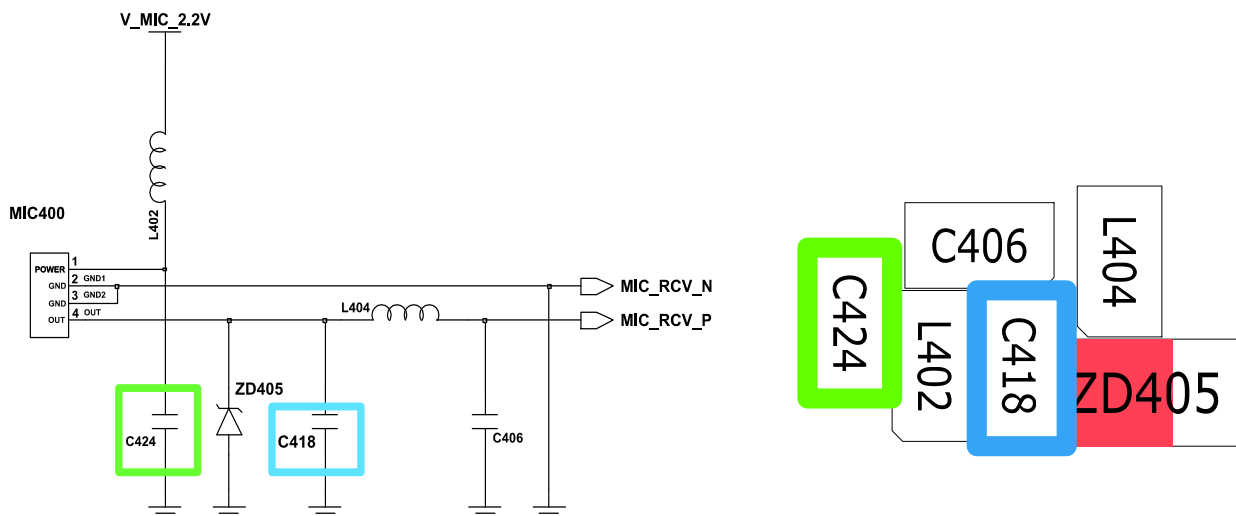
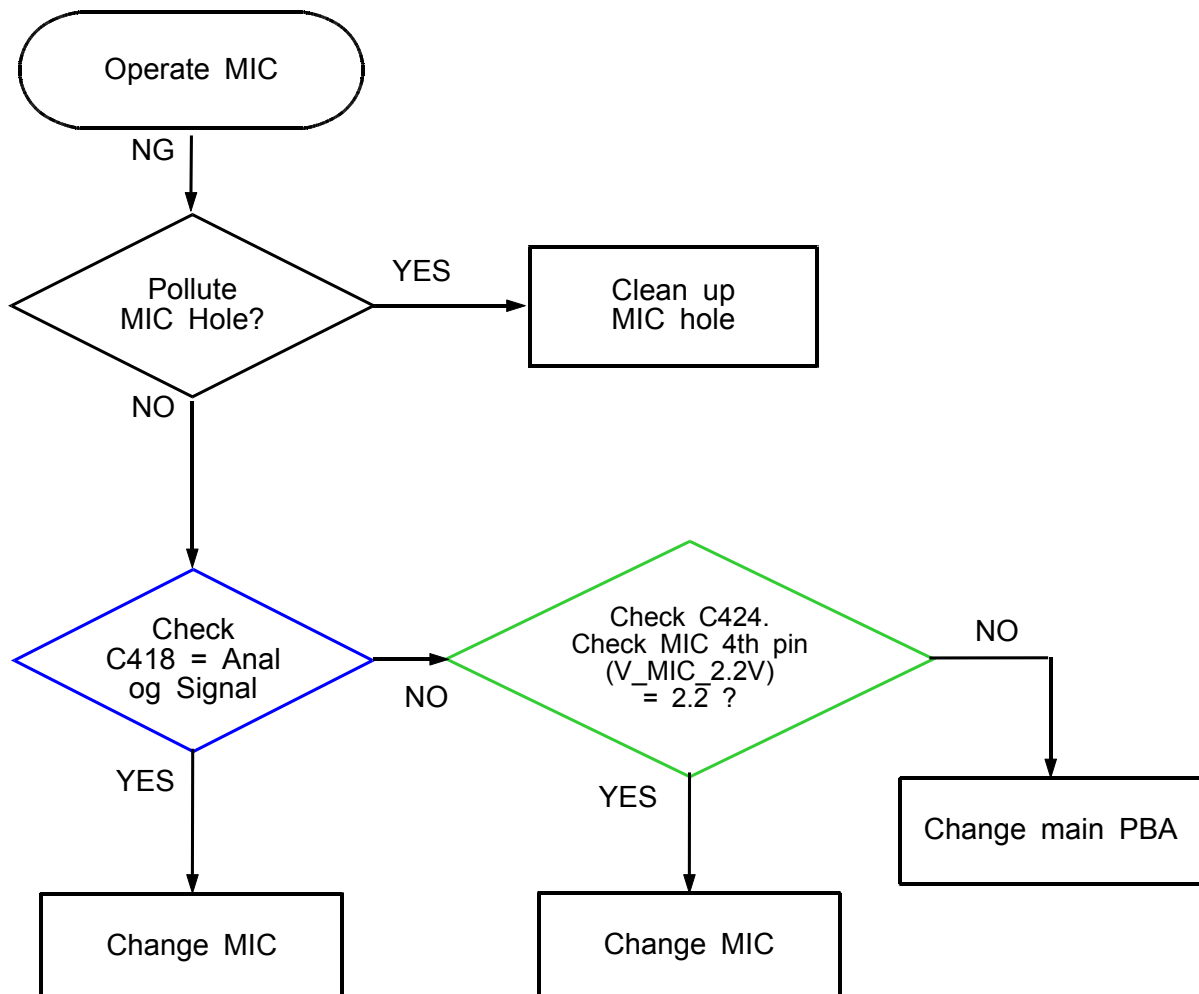
L400	L401
C415	C403
ZD400	ZD401



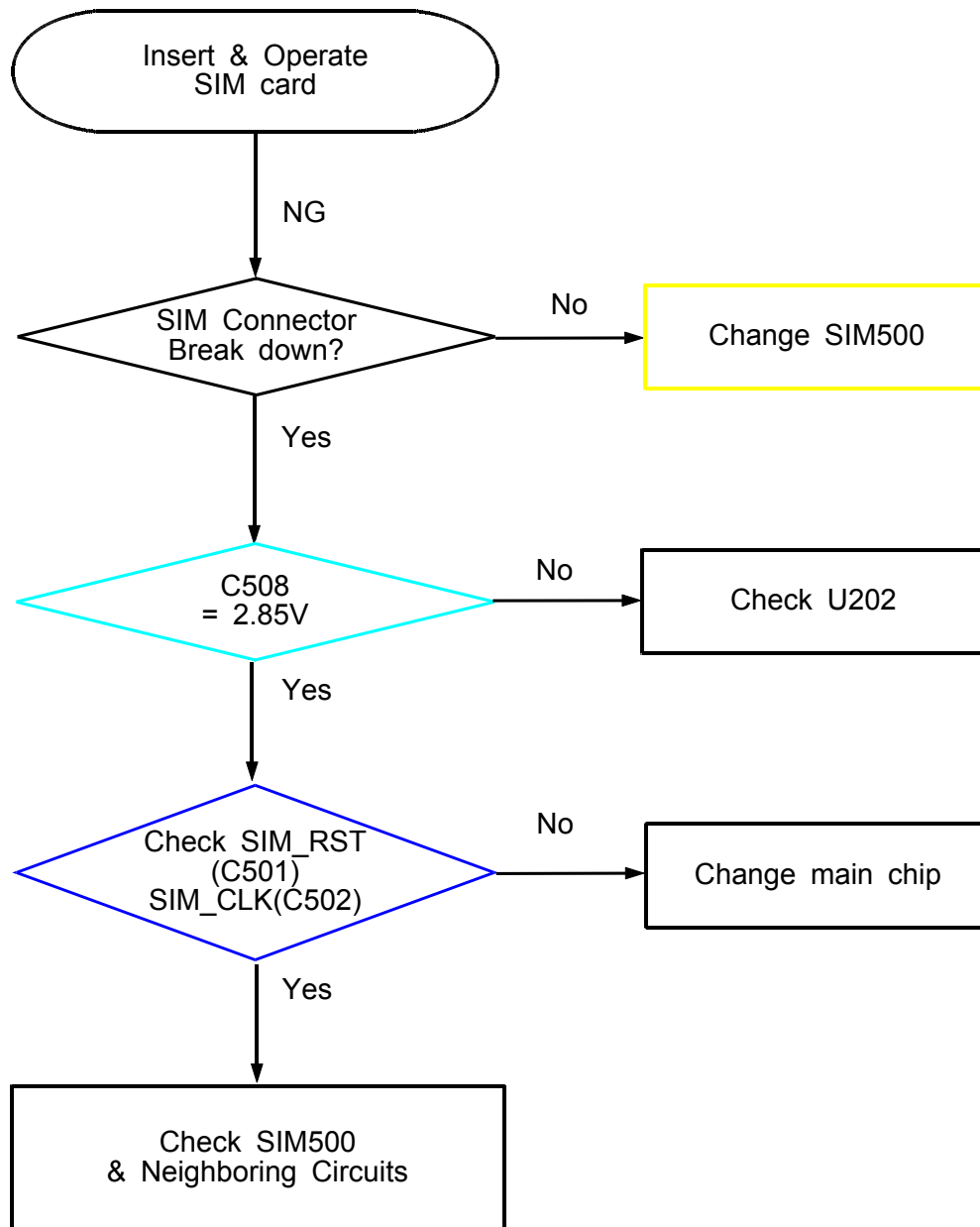
● Receiver Working

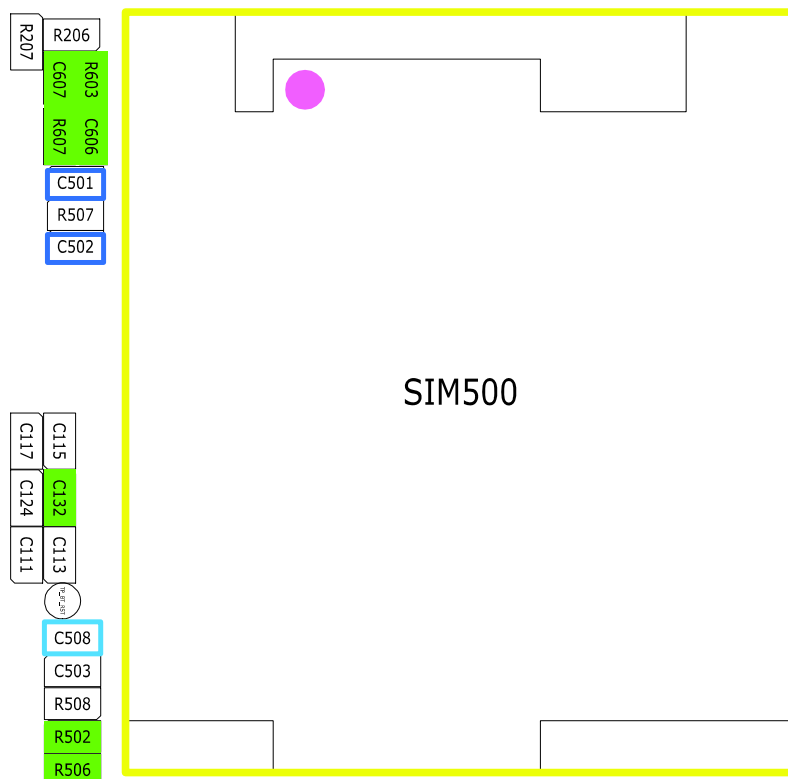
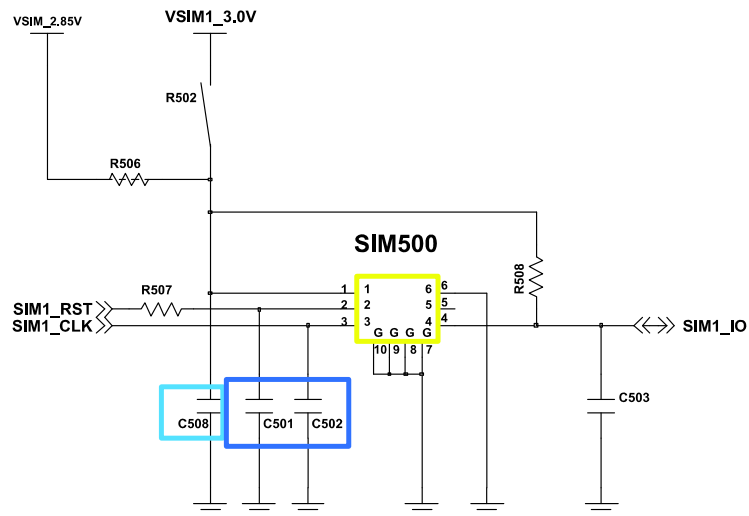


● MIC Working

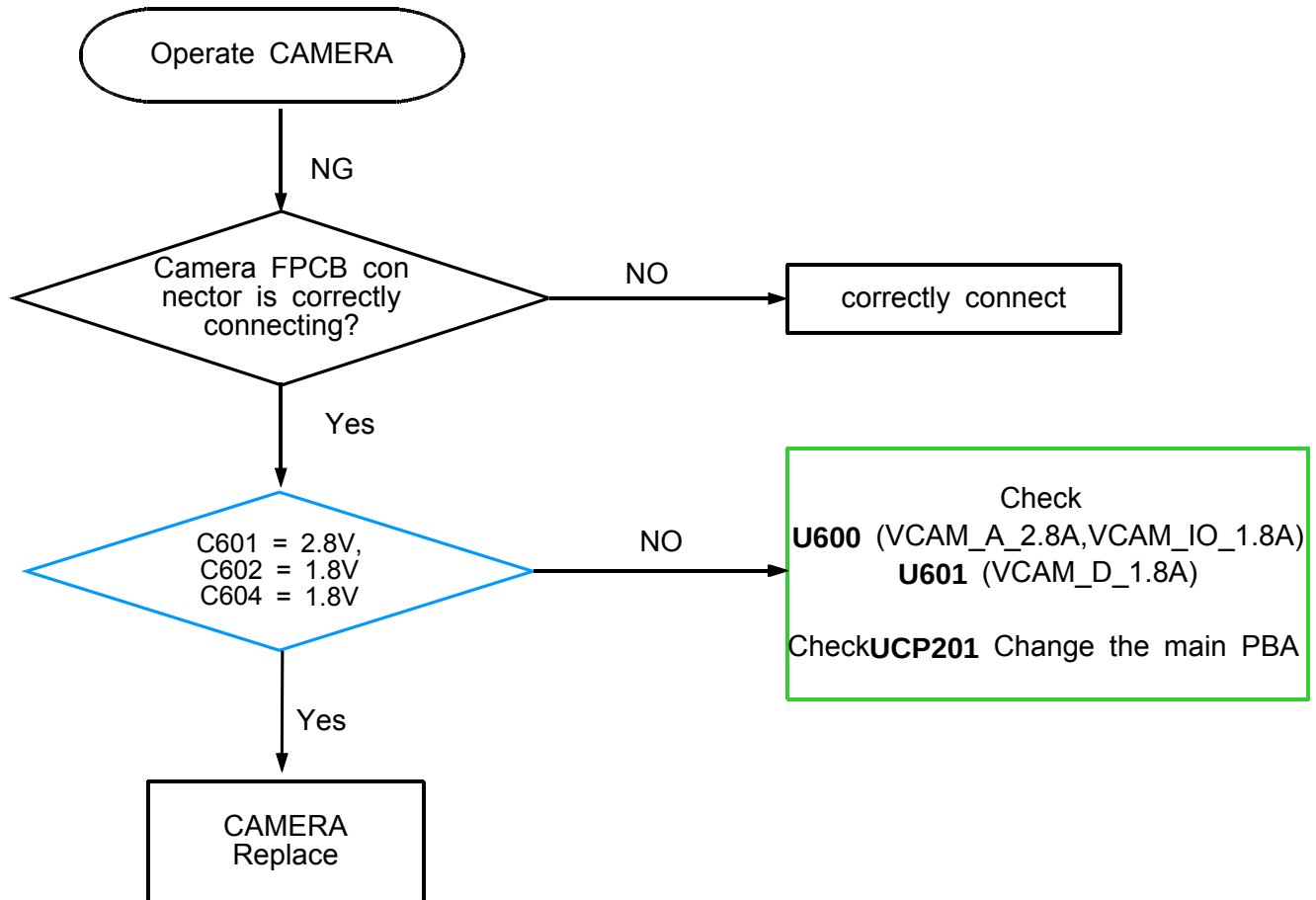


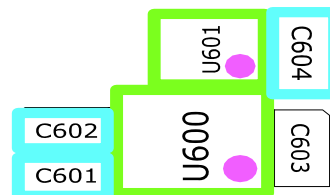
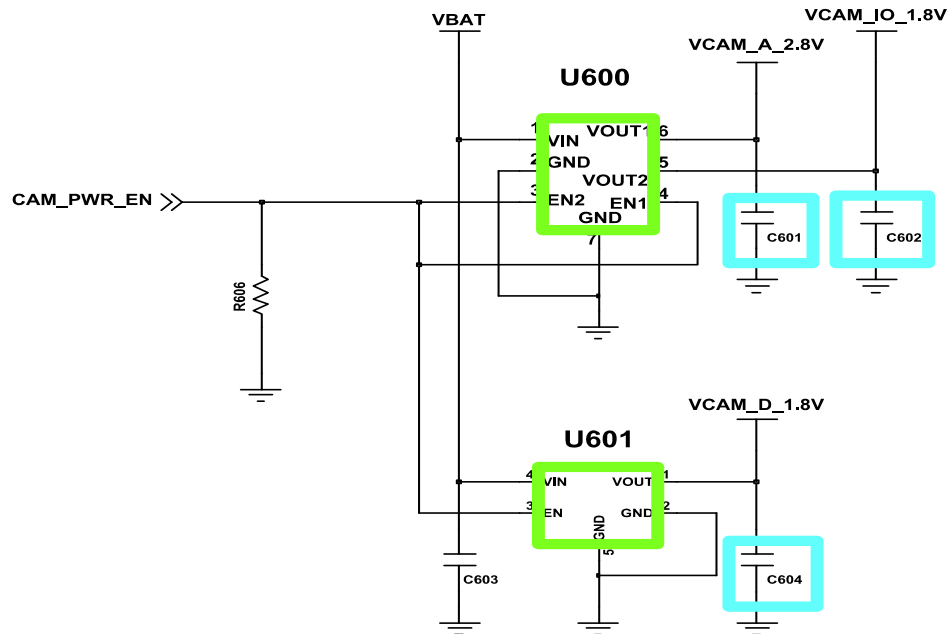
8-3-6. SIM Card Working





8-3-7. CAMERA Working

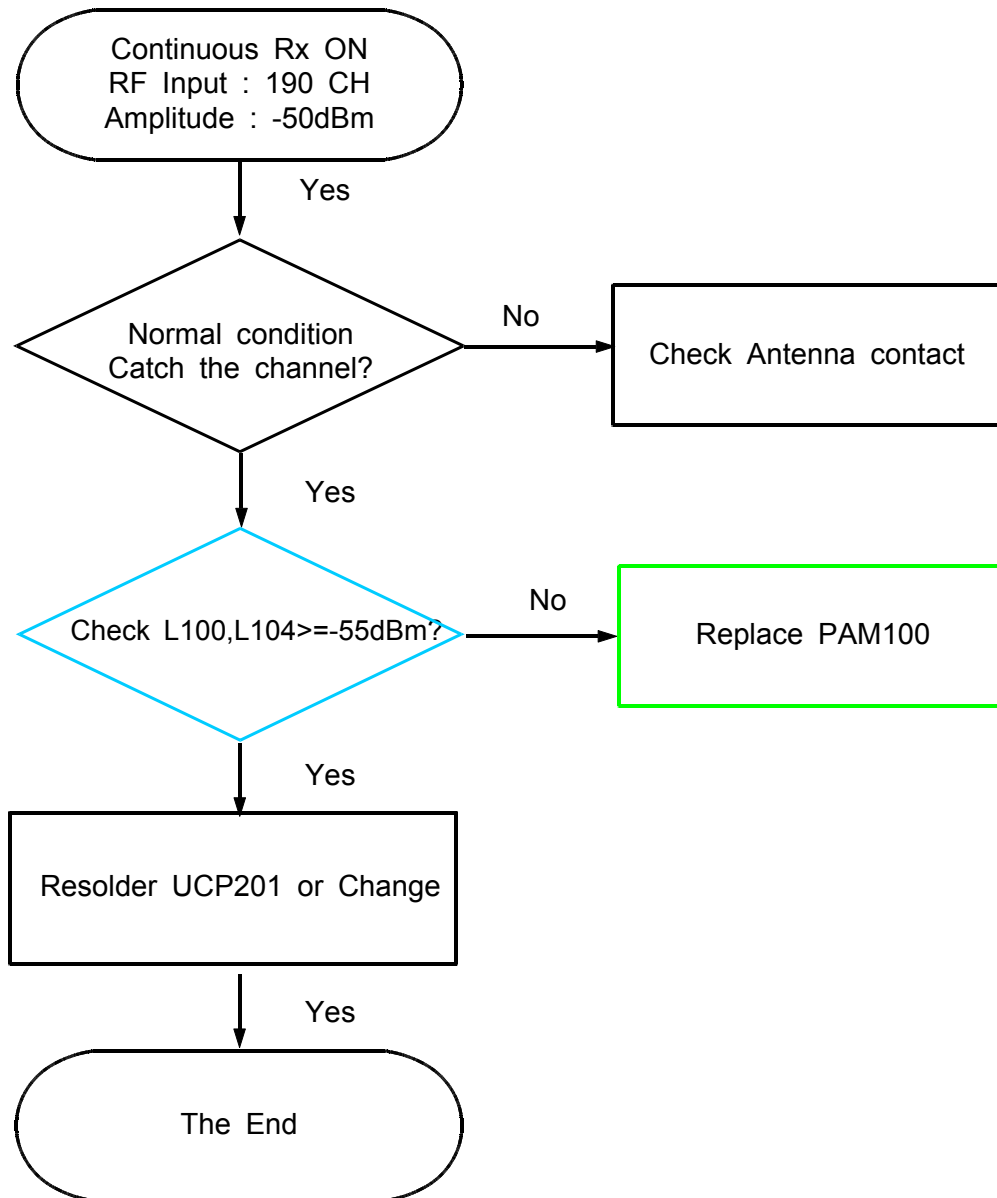




8-3-8. GSM850 RX

**If you check the tx chain,

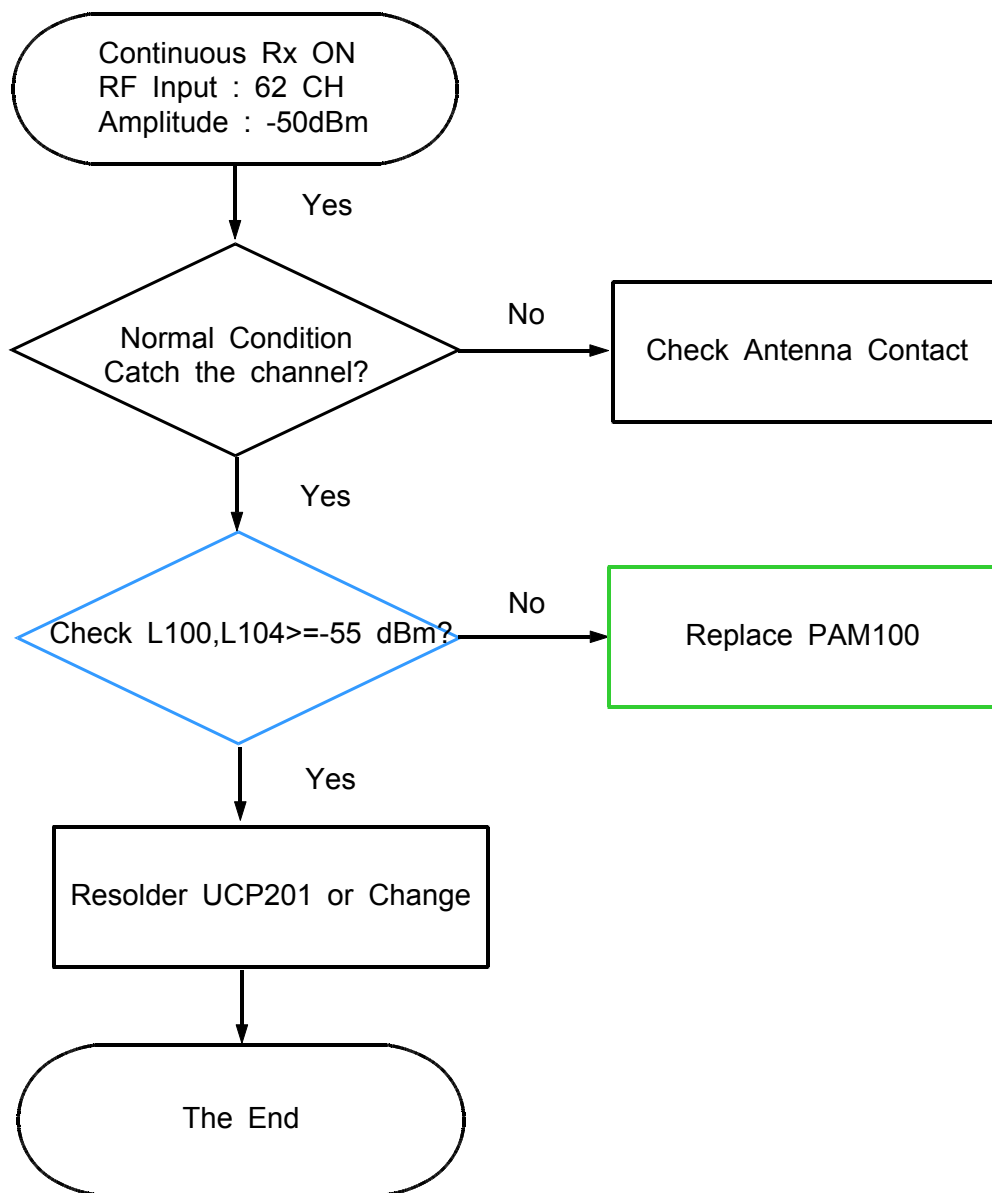
Check the not only RF Device but also resistor, inductor and capacitor.



8-3-9. GSM900 RX

**If you check the tx chain,

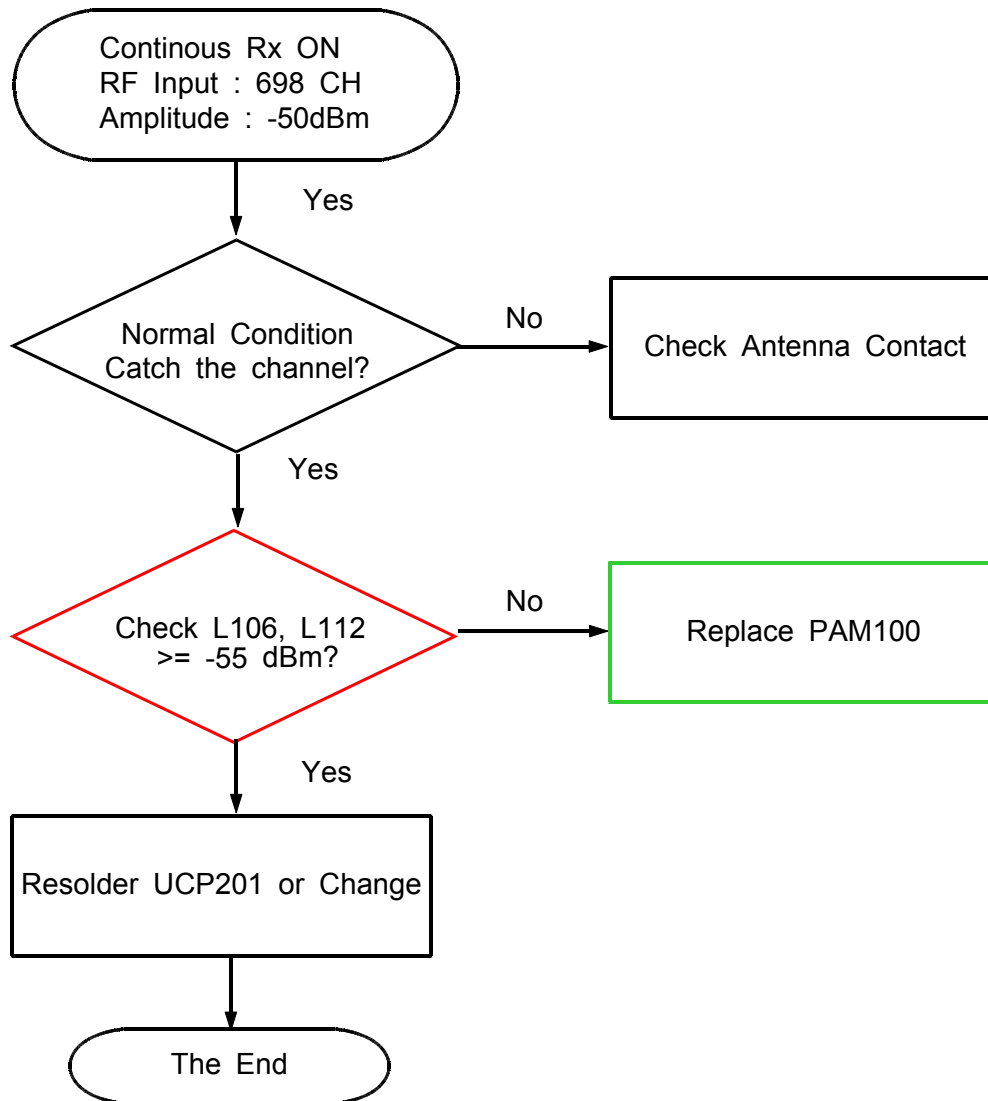
Check the not only RF Device but also resistor, inductor and capacitor.

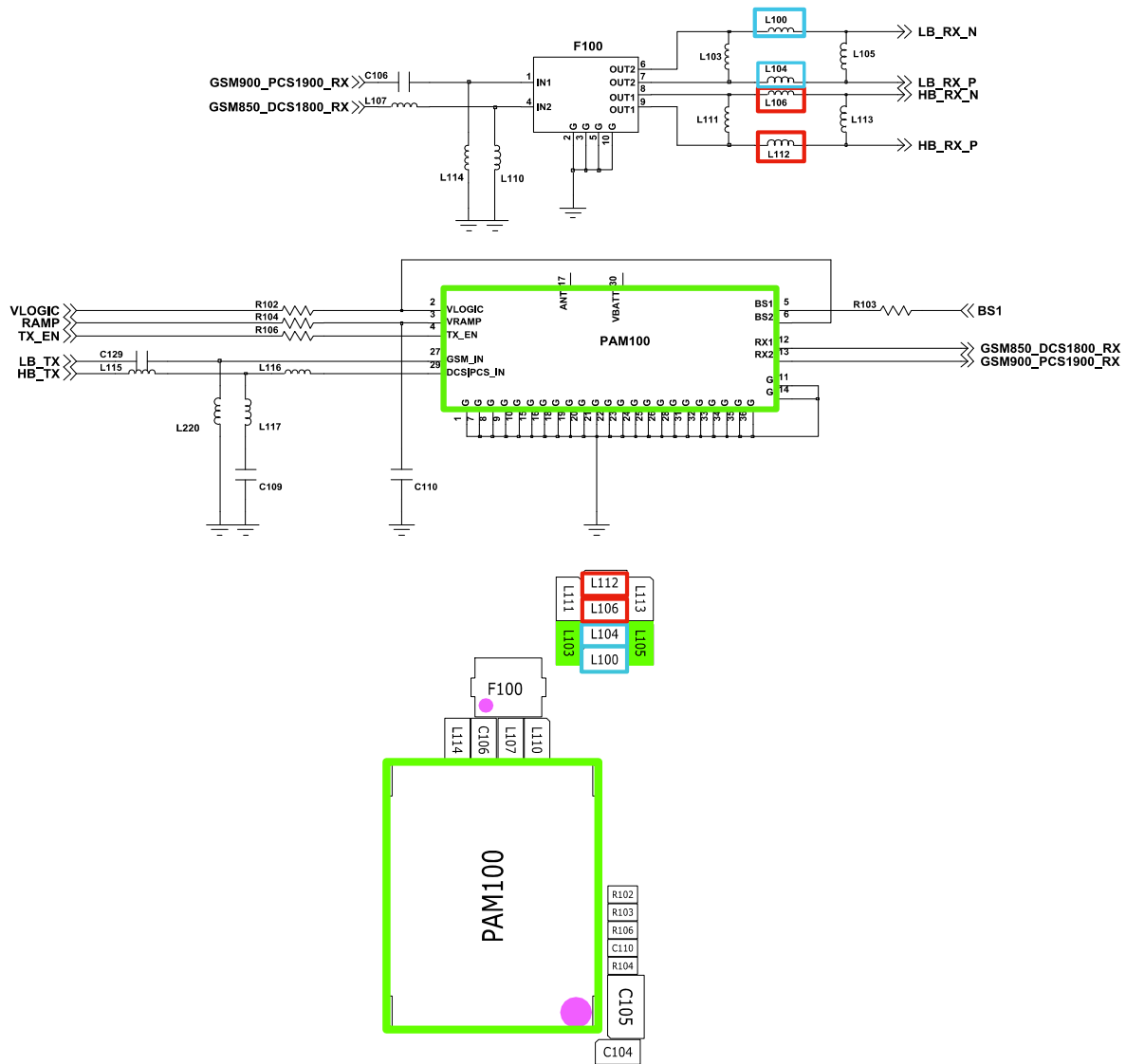


8-3-10. DCS/PCS RX

**If you check the tx chain,

Check the not only RF Device but also resistor, inductor and capacitor.

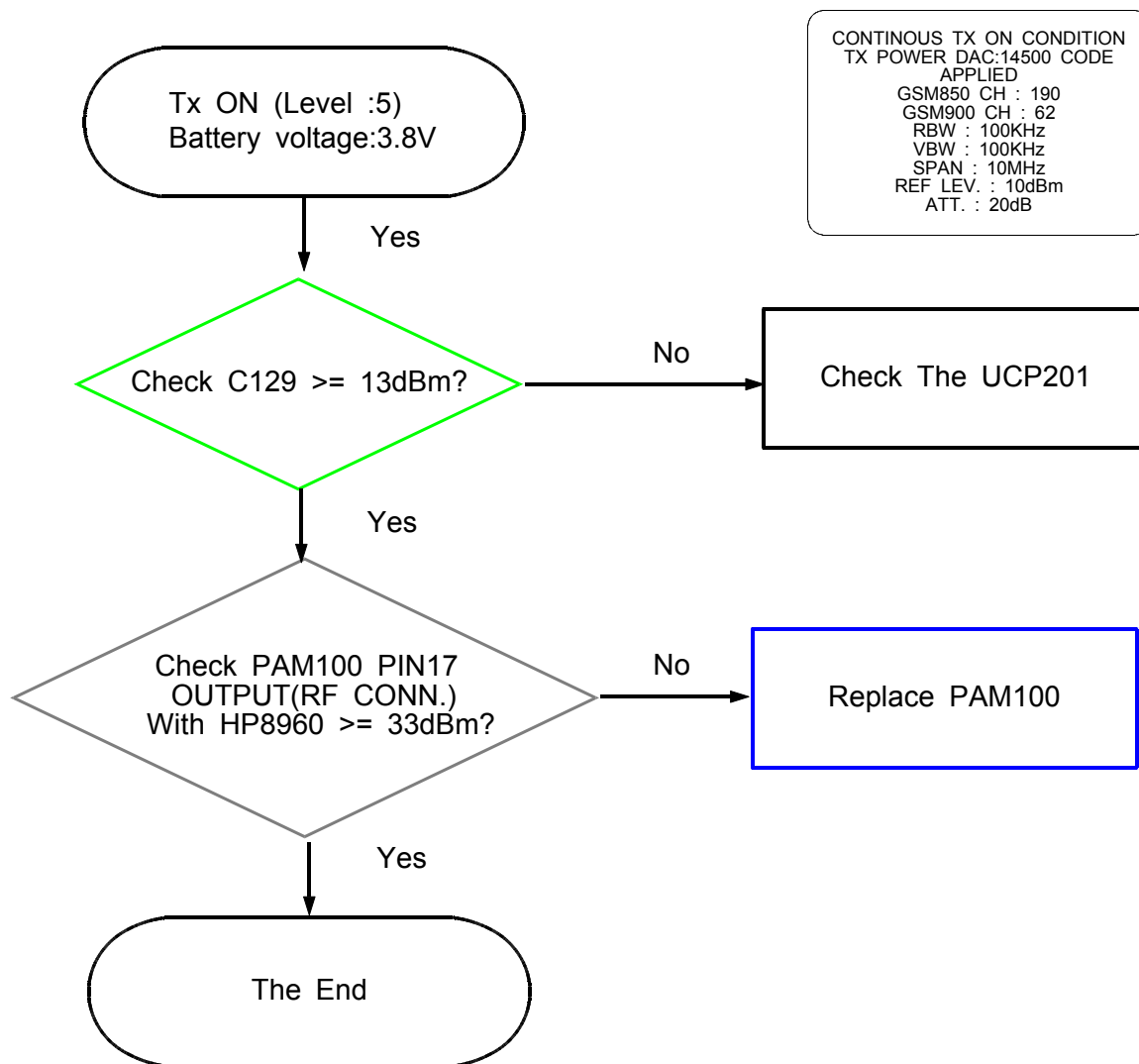




8-3-11. GSM850/900 TX

**If you check the tx chain,

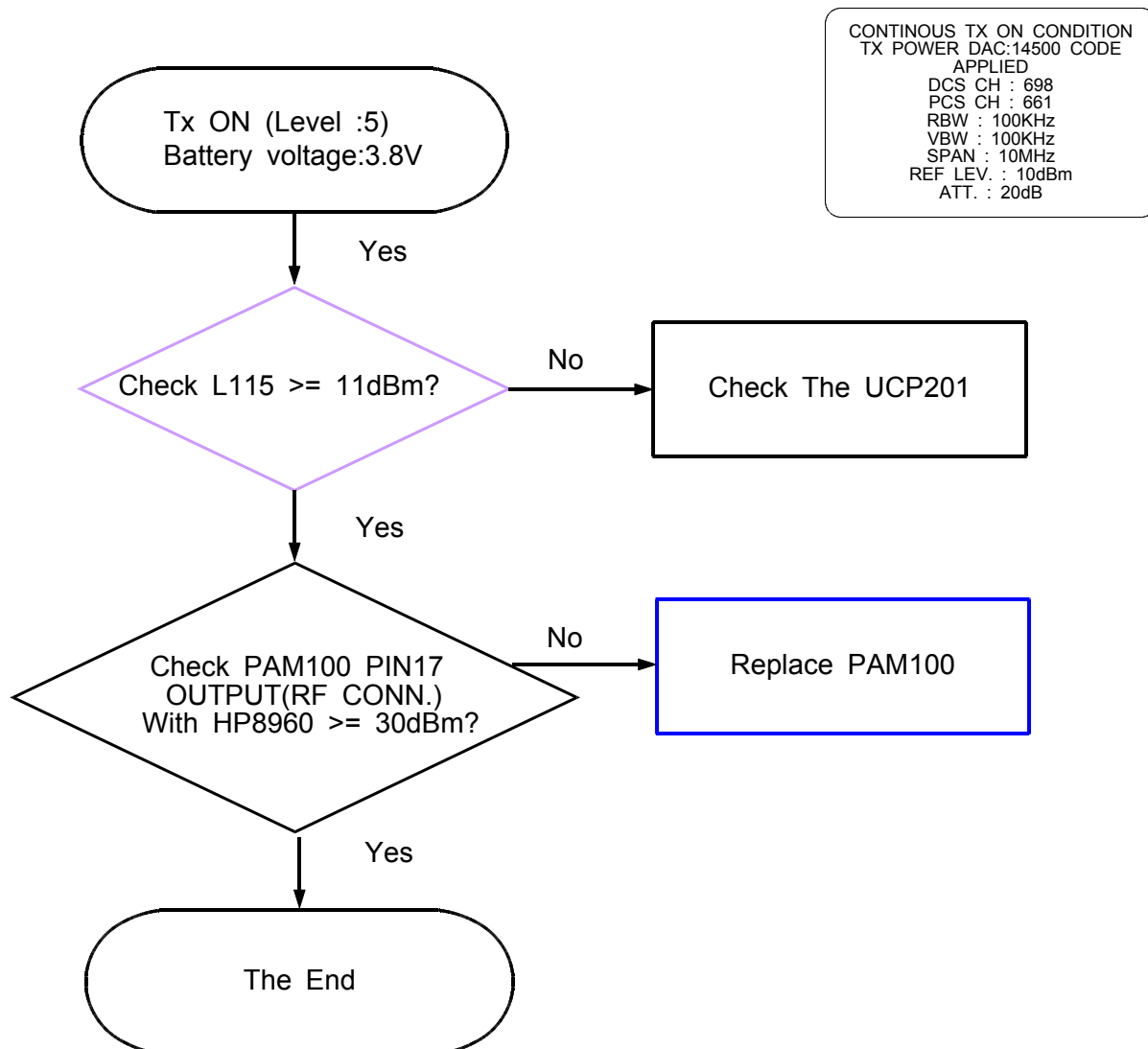
Check the not only RF Device but also resistor, inductor and capacitor.

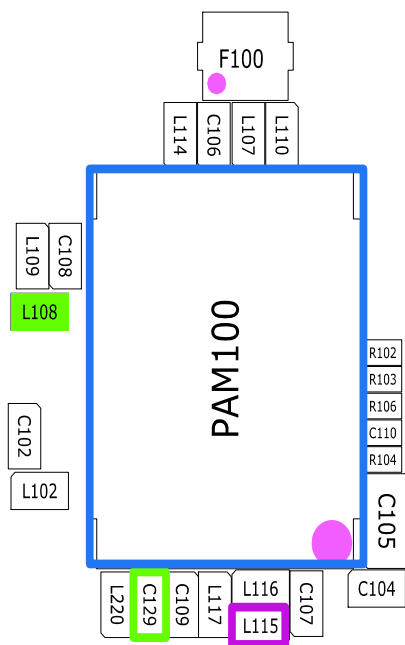
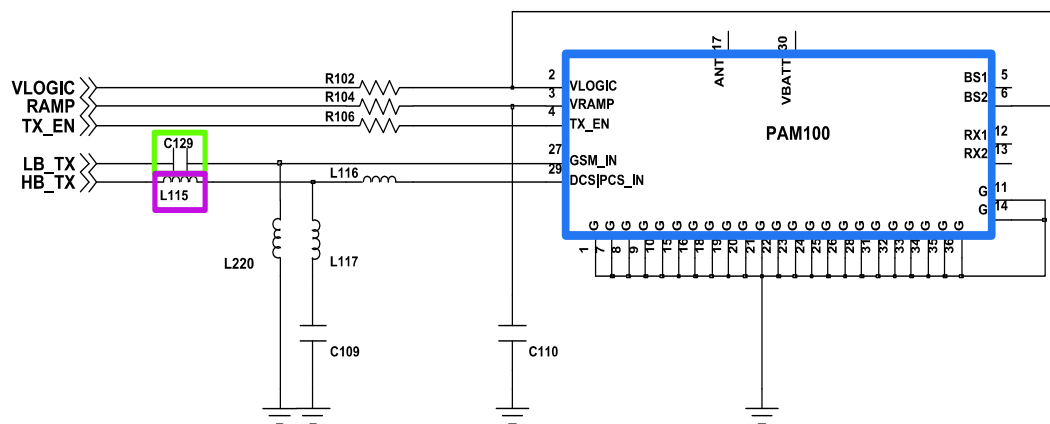


8-3-12. DCS/PCS TX

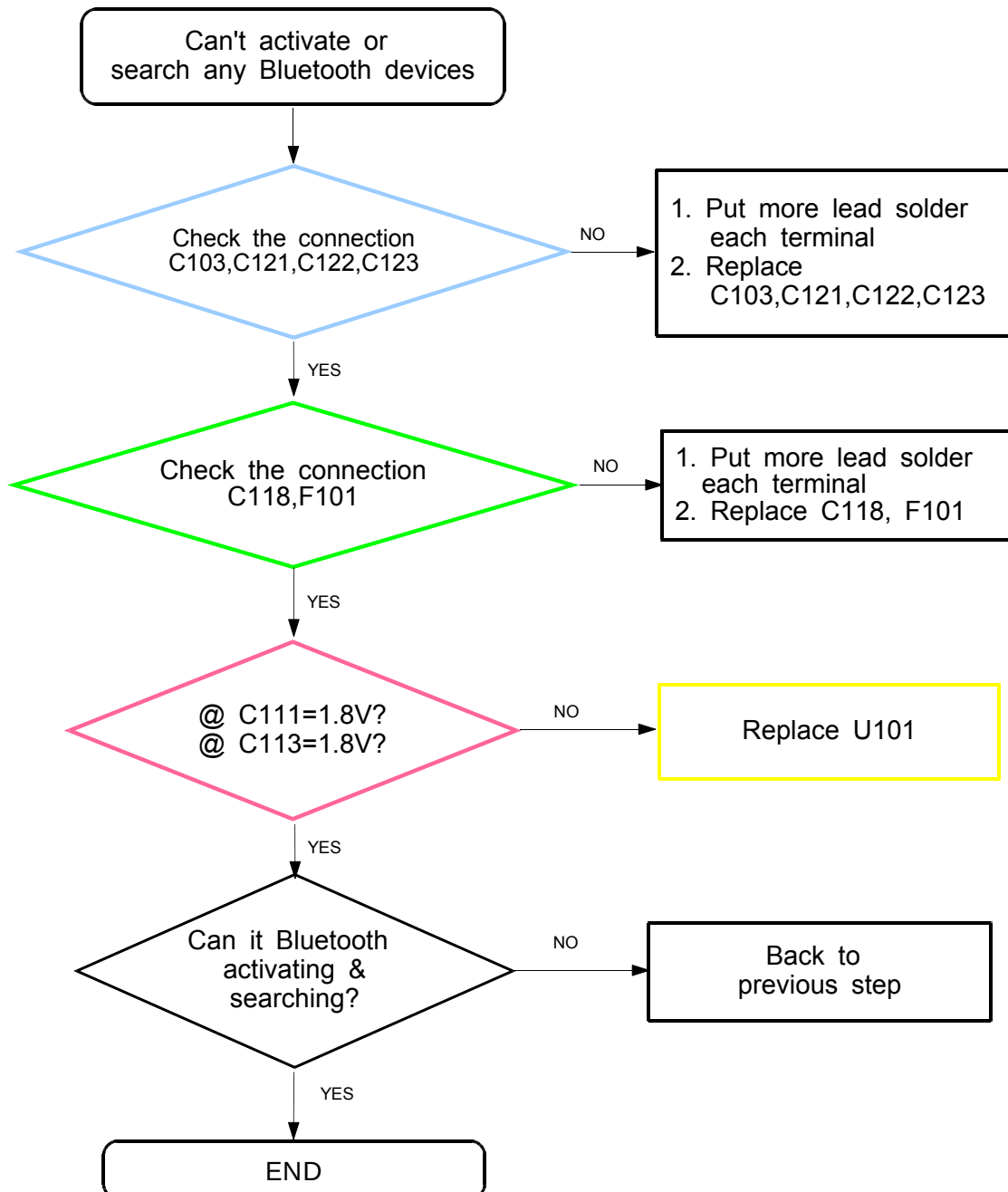
**If you check the tx chain,

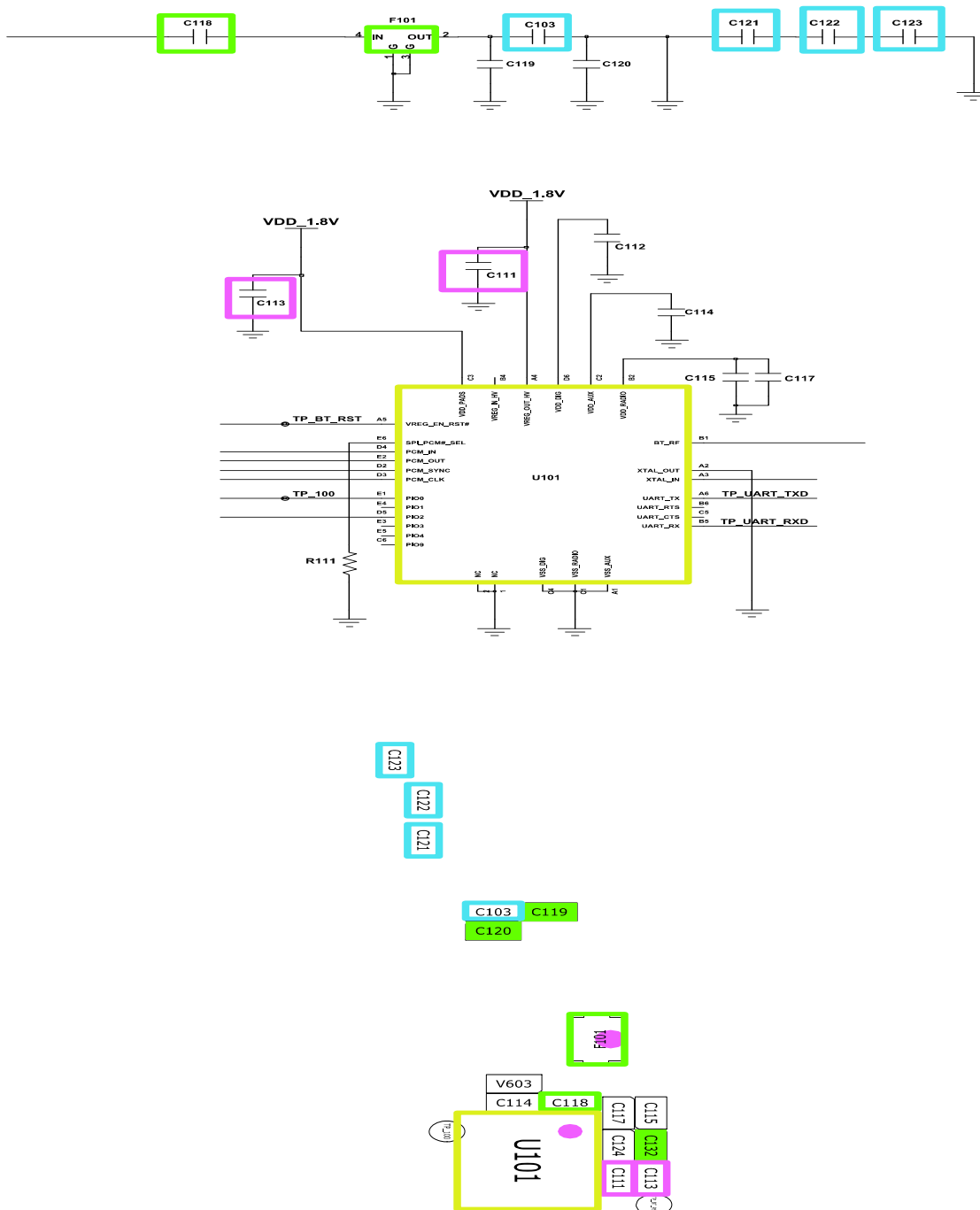
Check the not only RF Device but also resistor, inductor and capacitor.



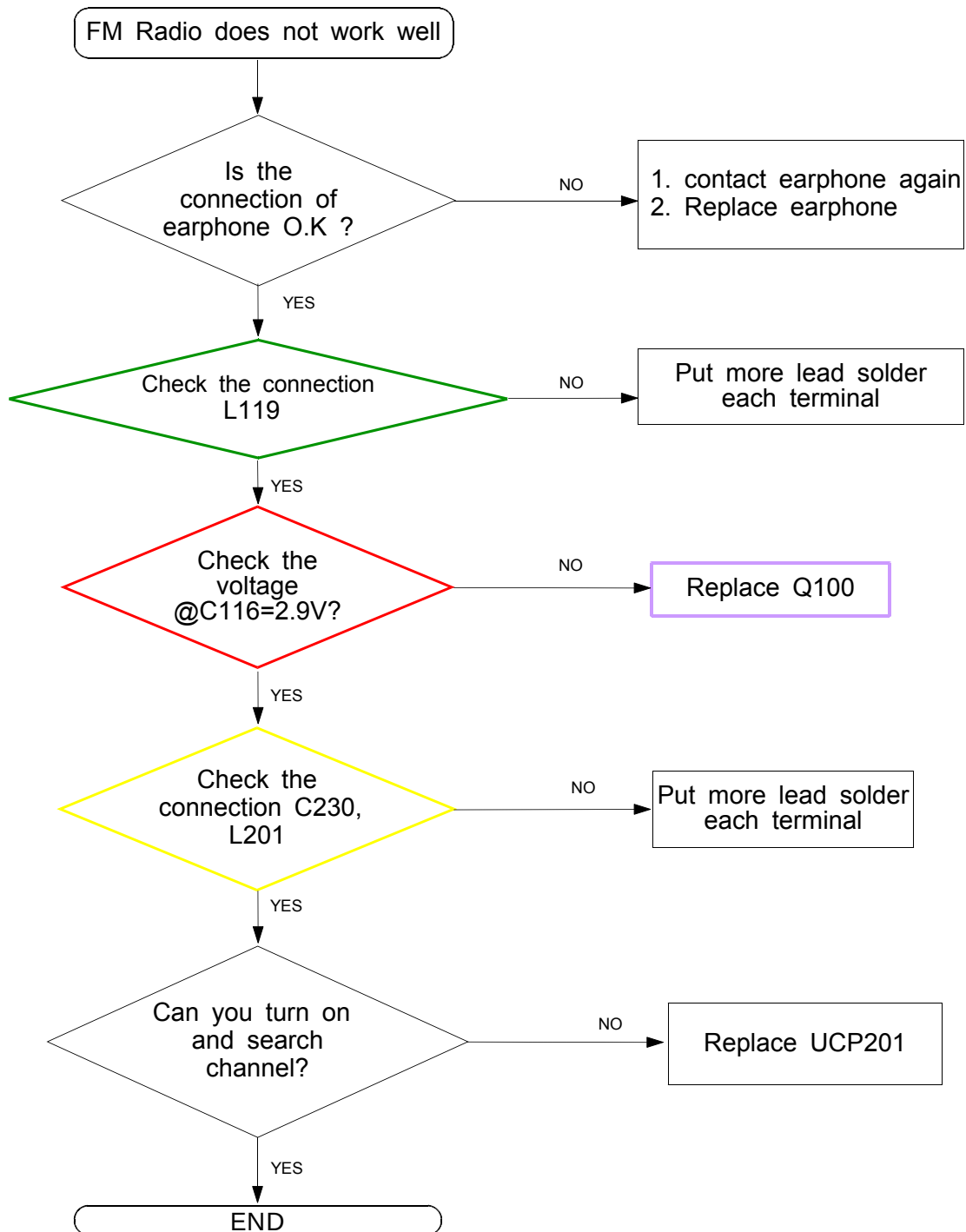


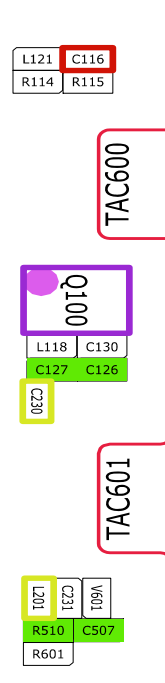
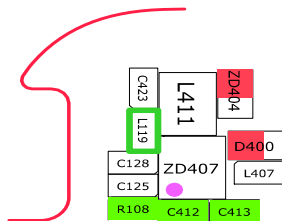
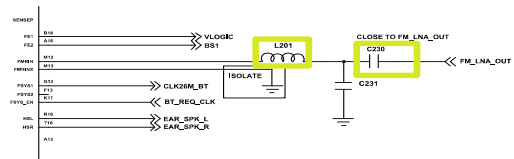
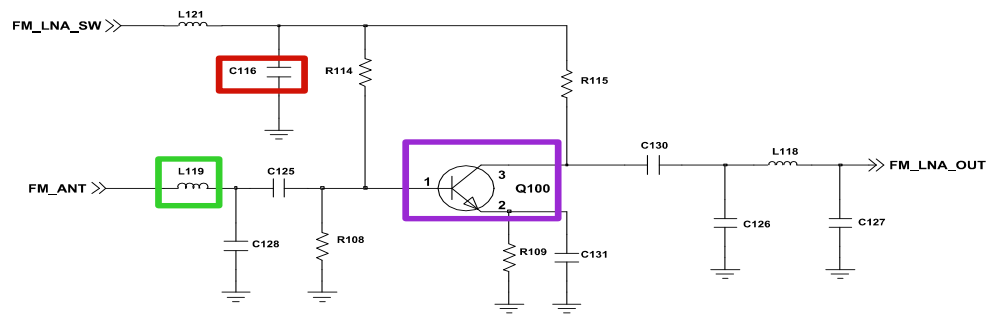
8-3-13. Bluetooth





8-3-14. FM radio





8-4. Service Schematics

- NC Point(Top View)

● : NC

U101

	1	2	3	4	5	6
A	O	O	O	O	O	O
B	O	O		●	O	●
C	O	O	O	O	●	●
D		O	O	O	O	O
E	O	O	●	O	●	O

UME201

	1	2	3	4	5	6	7	8	9	10	11	12	13	14
A	●	●	●	O	O	O	O	O	O	O	O	O	●	●
B	●	O	O	●	O	O	●	●	●	O	●	●	O	●
C	O	●	O	O	O	O	O	O	O	●	●	O	O	O
D	O	O	O	●								●	●	O
E	●	O	O		O	●	●	O	●	●		●	O	O
F	O	O	O		O					●		O	O	O
G	O	O	O		O					●		O	O	O
H	O	O	O		O					O		O	O	O
J	O	O	O		O					O		O	●	O
K	O	O	O		O	O	O	O	O	O		O	O	O
L	●	O	O									O	O	O
M	O	O	●	O	O	O	O	O	●	●	●	●	O	O
N	●	O	●	O	O	O	●	O	●	●	●	●	O	●
P	●	●	O	O	O	O	O	O	O	O	O	O	●	●

UCP201

	A	B	C	D	E	F	G	H	J	K	L	M	N	P	R	T
1	●	○	○	○	○	○	○	○	○	○	○	○	○	○	○	●
2	○	○	○	●	●	○	●	○	○	○	○	○	○	○	○	○
3	○	○	○	●	●	○	○	●	●	●	○	●	●	○	○	○
4	○	○	○	●	●	○	○	○	○	●	○	●	●	○	○	○
5	●	○	○	●	○	○	○	○	○	○	●	●	○	○	○	○
6	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○
7	○	○	○	○	○	○	○	○	○	○	○	○	●	○	○	○
8	○	○	○	○	○	○	○	○	○	●	○	○	●	○	○	○
9	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○
10	○	○	○	○	○	○	○	○	○	○	○	○	●	○	○	○
11	○	○	○	●	○	○	○	○	○	○	○	○	●	●	○	○
12	○	○	○	●	●	●	●	●	●	●	●	●	●	○	○	○
13	○	○	○	○	●	○	○	○	●	●	●	●	○	○	○	○
14	○	○	○	○	○	○	○	●	○	●	○	○	○	○	○	○
15	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○
16	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○
17	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○
18	●	○	○	○	○	○	○	○	○	●	○	○	●	○	○	●