



SAMSUNG

# GSM TELEPHONE

## GT-S5570

# 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, the benefits, design, pricing, components, performance, availability, and capabilities of the product are subject to change without notice or obligation. Samsung reserves the right to make changes to this document and the product described herein, at anytime, without obligation on Samsung to provide notification of such change.

**SAMSUNG  
ELECTRONICS**



## 2. Specification

### 2-1. GSM General Specification

	<b>GSM850 Phase 1</b>	<b>EGSM 900 Phase 2</b>	<b>DCS1800 Phase 1</b>	<b>PCS1900</b>	<b>WCDMA2100</b>	<b>WCDMA900</b>
Freq. Band[MHz] Uplink/Downlink	824~849 869~894	880~915 925~960	1710~1785 1805~1880	1850~1910 1930~1990	1922~1977 2112~2167	880~915 925~960
ARFCN range	128~251	0~124 & 975~1023	512~885	512~810	UL:9612~9888 DL:10562~10838	UL:2712~2863, DL:2937~3088
Tx/Rx spacing	45MHz	45MHz	95MHz	80MHz	190MHz	45MHz
Mod. Bit rate/ Bit Period	270.833kbp s 3.692us	270.833kbp s 3.692us	270.833kbp s 3.692us	270.833kbp s 3.692us	3.84Mcps	3.84Mcps
Time Slot Period/Frame Period	576.9us 4.615ms	576.9us 4.615ms	576.9us 4.615ms	576.9us 4.615ms	FrameLength: h: 10ms Slotlength: 0.667ms	FrameLength: h: 10ms Slotlength: 0.667ms
Modulation	0.3GMSK	0.3GMSK	0.3GMSK	0.3GMSK	QPSKHQPSK	QPSKHQPSK
MS Power	33dBm~5dBm	33dBm~5dBm	30dBm~0dBm	30dBm~0dBm	24dBm~-50dBm	24dBm~-50dBm
Power Class	5pcl ~ 19pcl	5pcl ~ 19pcl	0pcl ~ 15pcl	0pcl ~ 15pcl	3(max+24dB m)	3(max+24dB m)
Sensitivity	-102dBm	-102dBm	-100dBm	-100dBm	-106.7dBm	-106.7dBm
TDMA Mux	8	8	8	8	8	8
Cell Radius	35Km	35Km	2Km	2Km	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

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### **3. Operation Instruction and Installation**

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#### Main Function

- GSM(2G EDGE/GPRS) 850/900/1800/1900
- HSDPA 7.2 Mbps
- 3.14" QVGA TFT Full Touch (c-type )
- Music player, Voice Recorder
- A-GPS / BT v3.0 / USB v2.0 / WiFi (802.11 b/n/g)
- 3M Camera
- FM Radio Receiver
- Bluetooth v3.0
- USB 2.0 FS / Wi-Fi 802.11n / GPS
- Sensors: Accelerometer, Compass
- TouchWiz 3.0 Light for Android(Multiple SNS(Facebook, Myspace, Twitter)

#### Multiple IM(Parling: AOL, G-talk))

- Touch WIZ 3.0 UI , Application store
- SMS/MMS/Email

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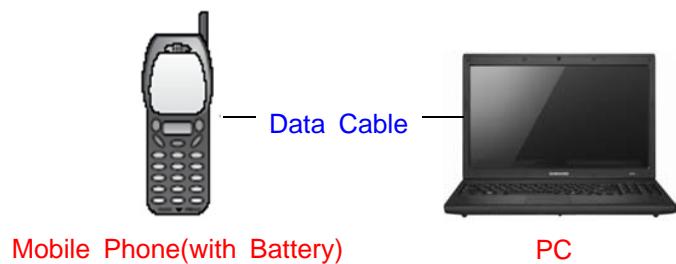
## 6. Level 1 Repair

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### 6-1. Software Download

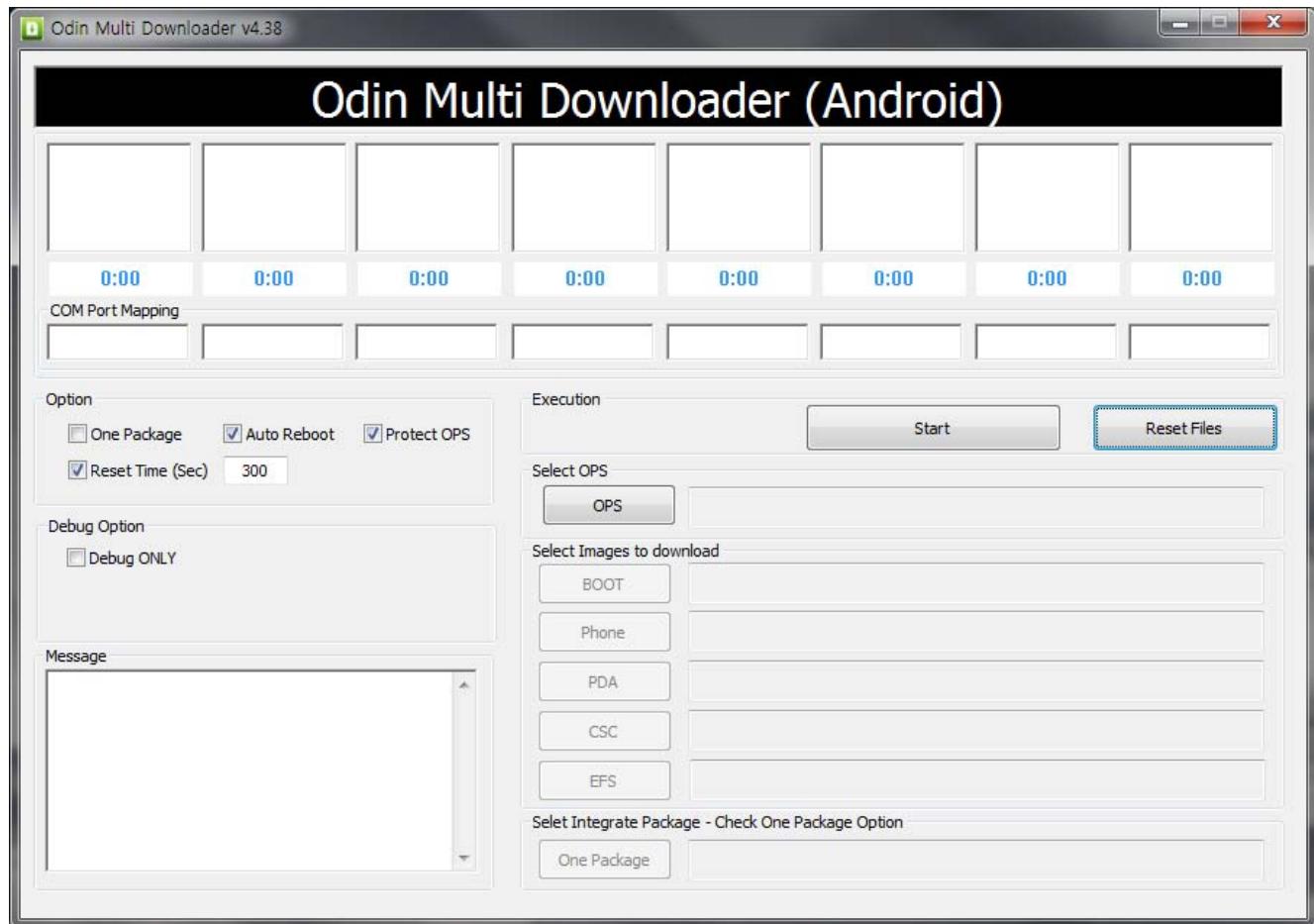
#### 6-1-1. Pre-requisite for Download

- Downloader Program ([Odin Multi Downloader v4.38](#))
  - GT-S5570 Mobile Phone
  - Data Cable
  - JIG BOX (GH99-36900A)
  - RF Test Cable (GH39-00985A)
  - JIG Cable (GH39-01160A)
  - Adapter (GH99-38251A)
  - Binary files
- Diagram of Connection:

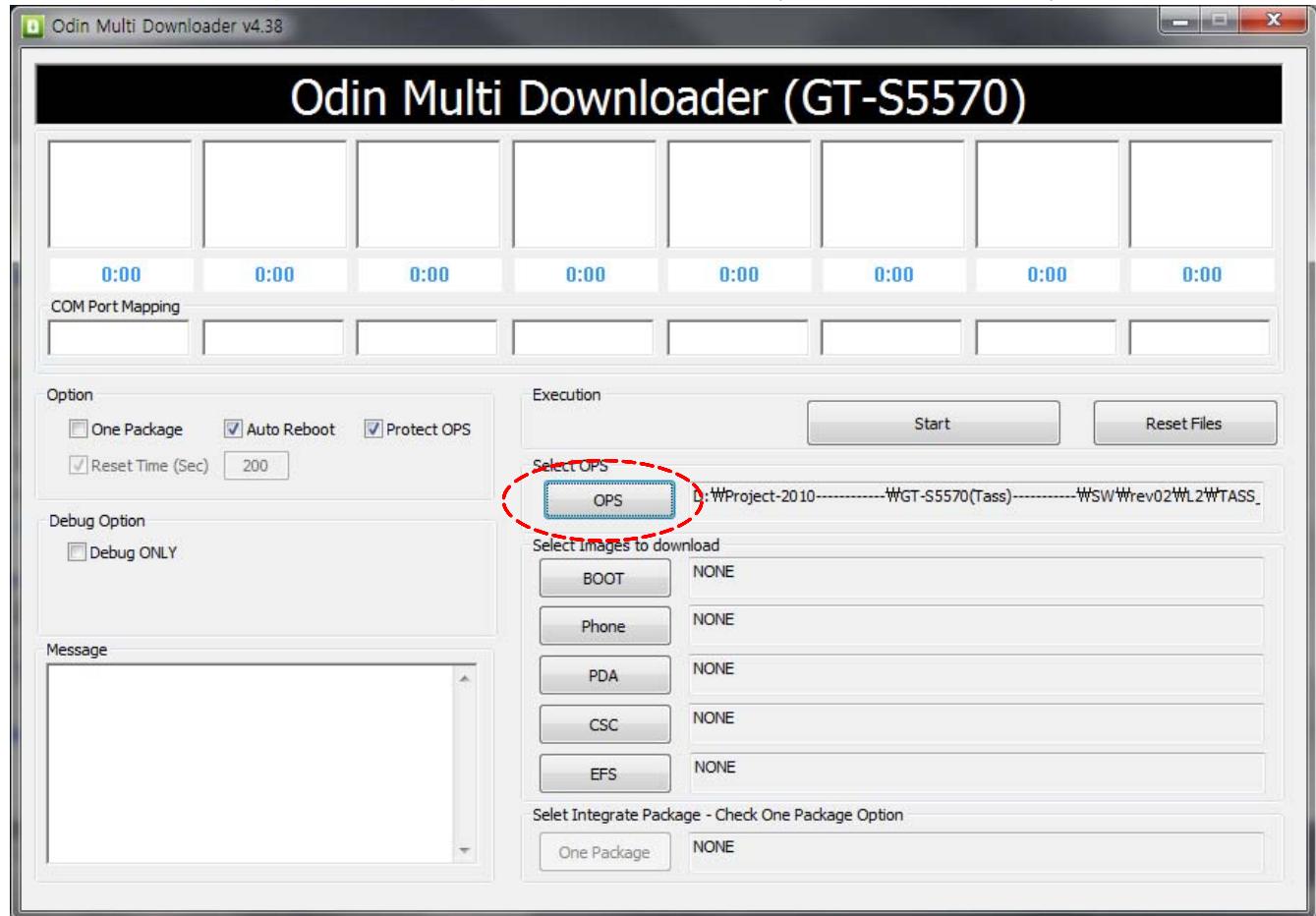


### 6-1-2. S/W Download Process

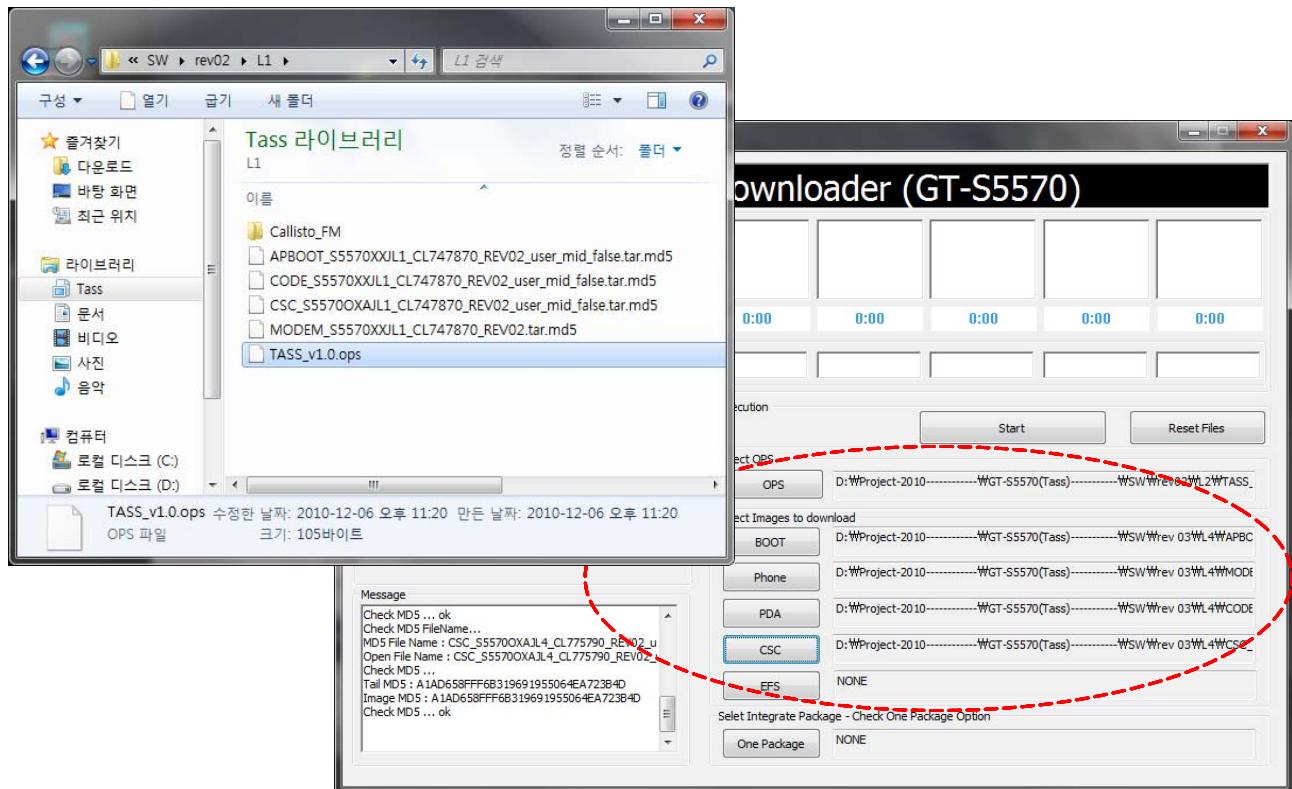
1. Load the binary download program by executing the "[Odin Multi Downloader v4.38](#)"



2. Select OPS file (TASS\_v1.0.ops) from the folder that you saved the binary files.



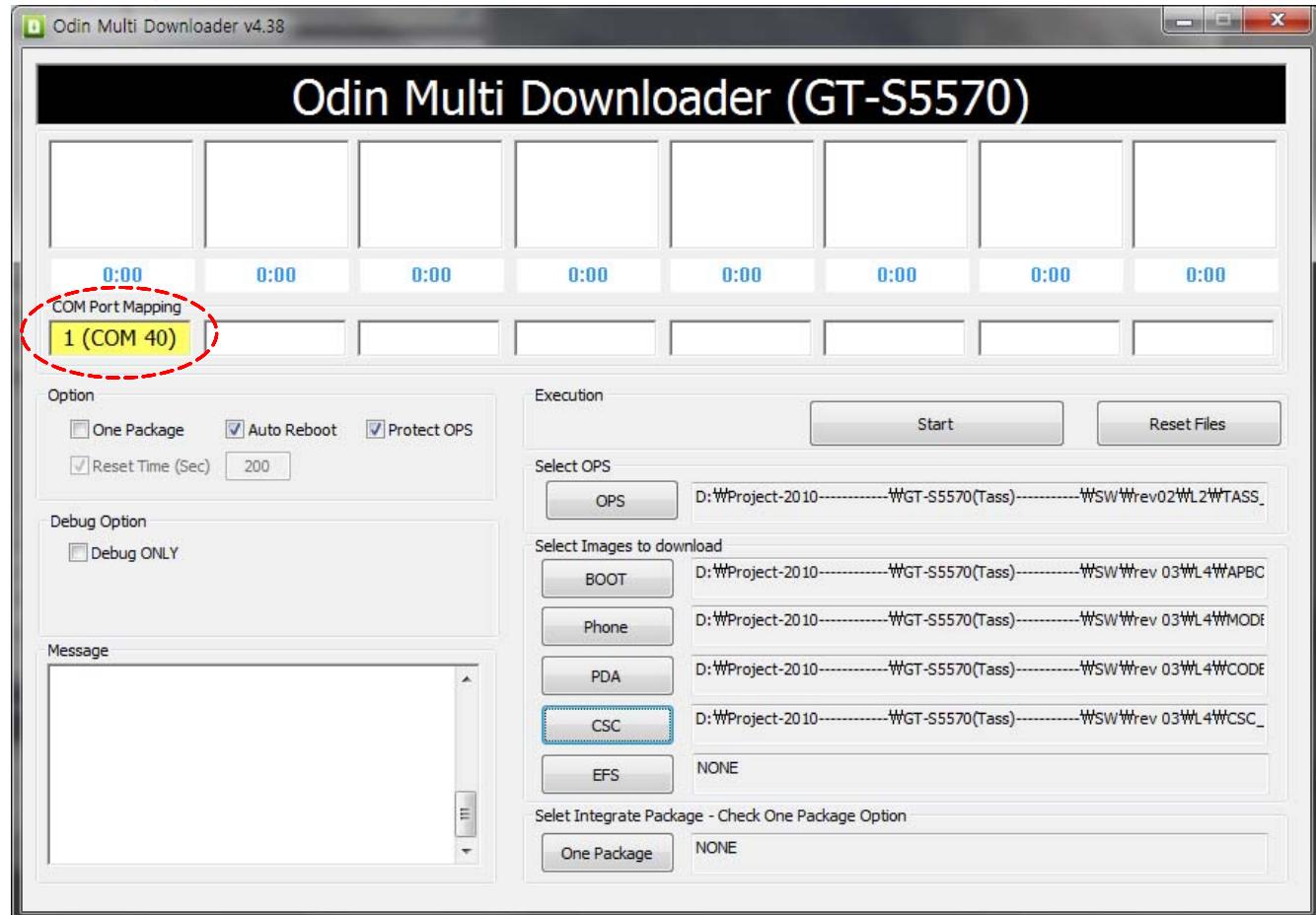
4. Load the file of Bootloader, Amss, PDA, CSC files from the folder that you saved the binary files.



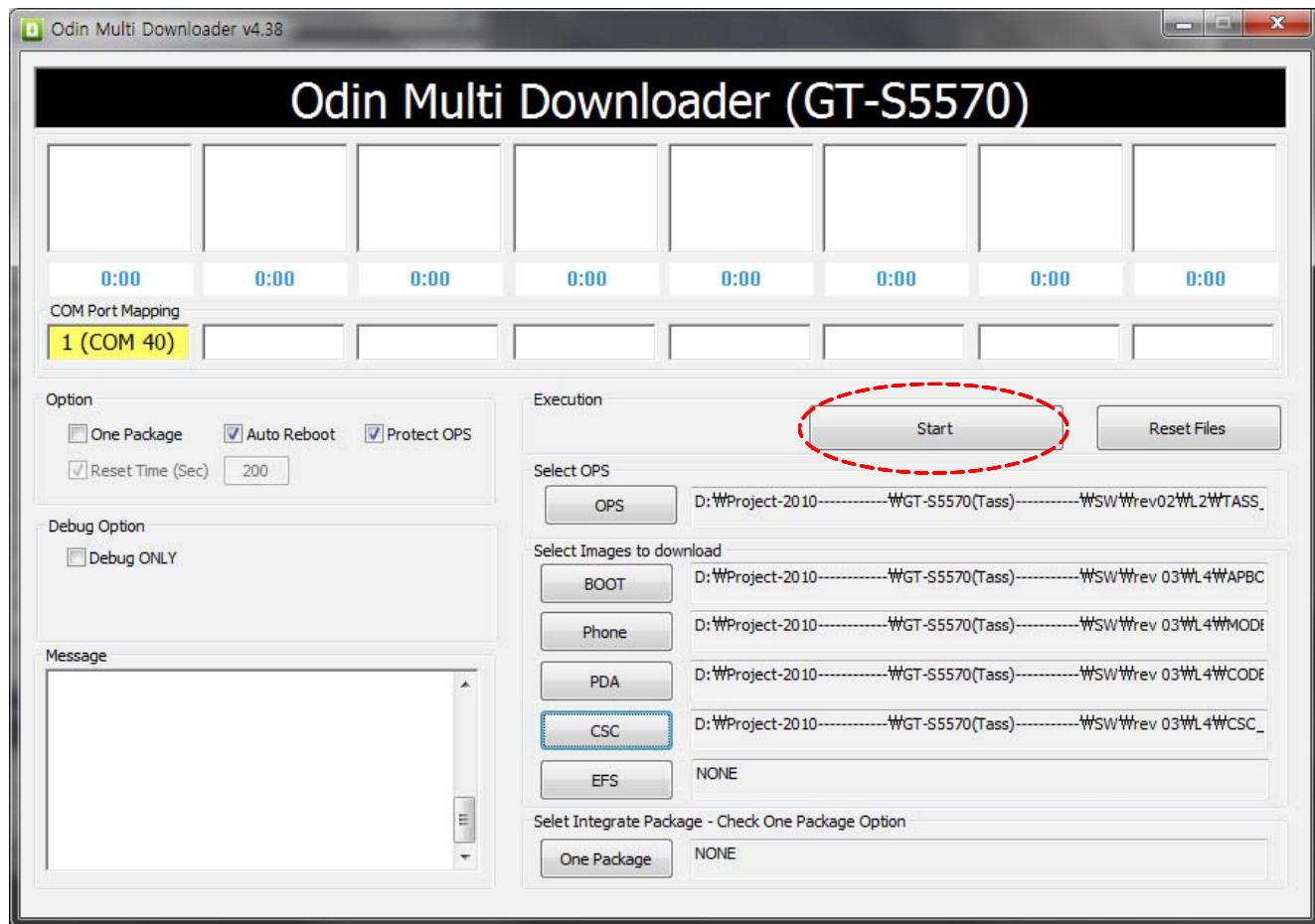
5. COM Port Mapping change to **yellow** colour when the phone with download mode is connected to PC by data cable.

cf. You have to set the phone as a download mode by pressing Volume down + Middle Key(Home Key) + Power key simultaneously before connecting to PC .

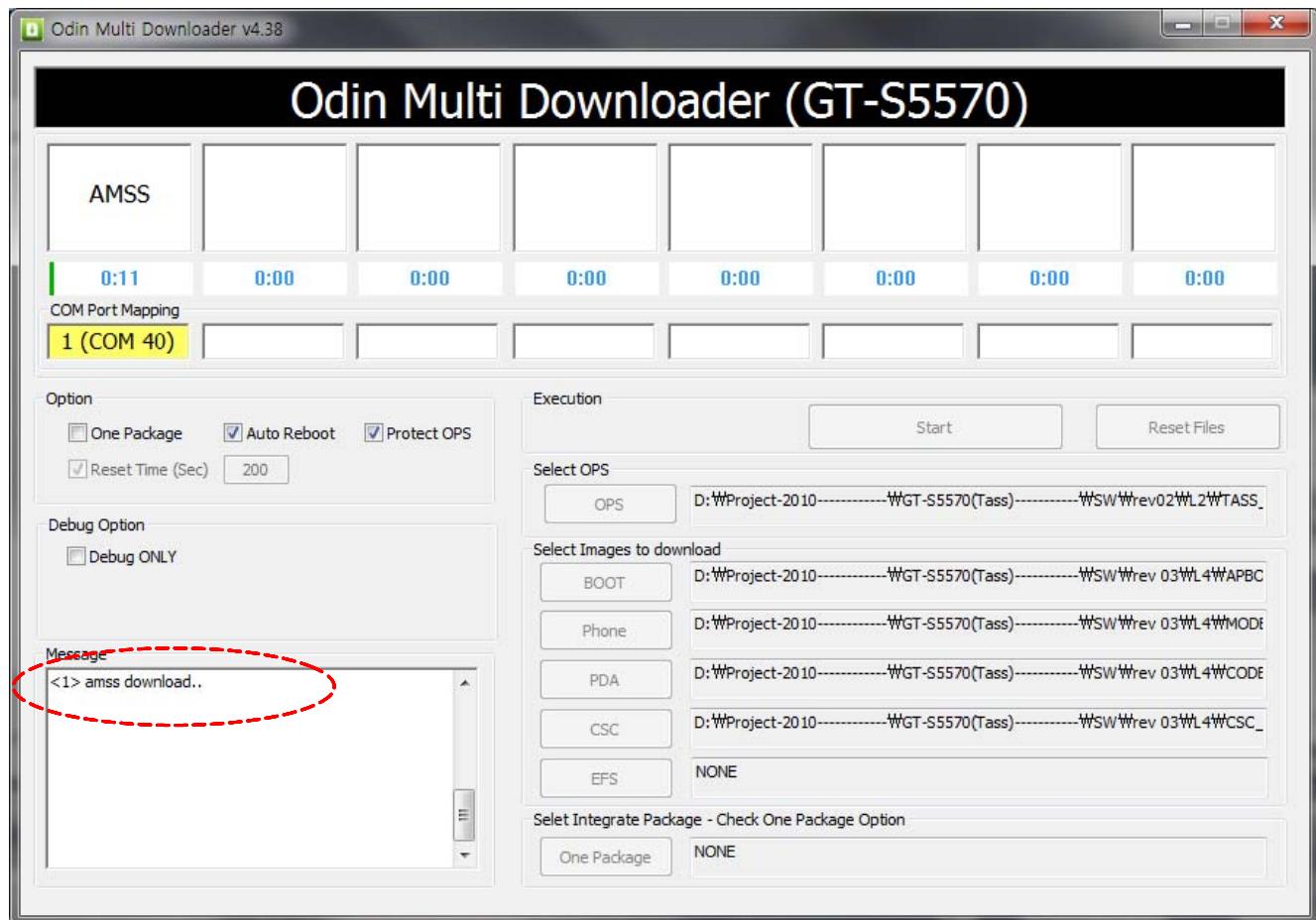
Then, the port would be searched.



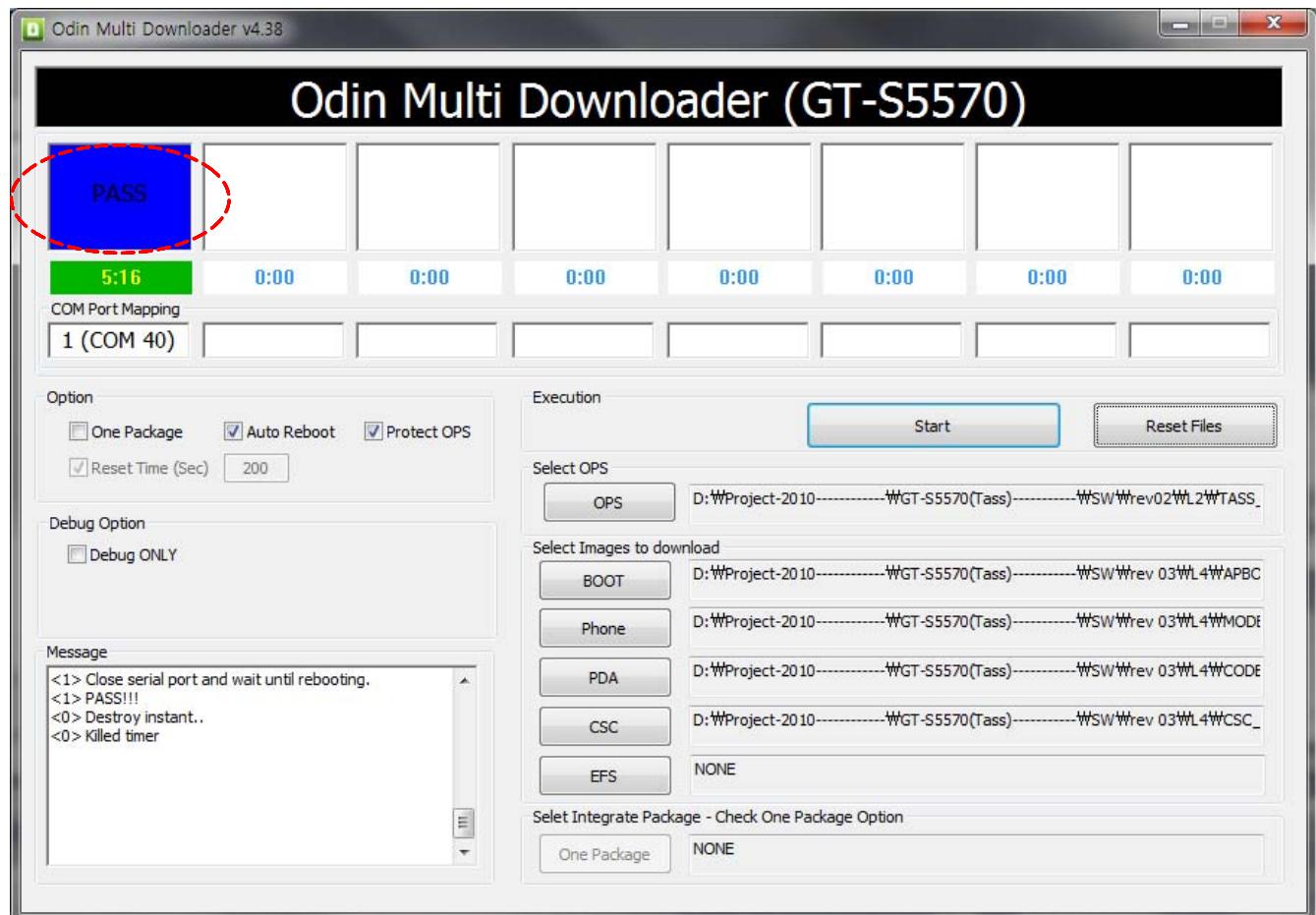
5. Click the **Start** button when the Port searched.



It will start to download.



6. When downloading is finished successfully, there is a "**PASS**" message.



7. Confirm the downloaded version name and etc. :

\*#1234#

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## 9. Reference Abbreviate

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### Reference Abbreviate

- **AAC**: Advanced Audio Coding.
- **AVC** : Advanced Video Coding.
- **BER** : Bit Error Rate
- **BPSK**: Binary Phase Shift Keying
- **CA** : Conditional Access
- **CDM** : Code Division Multiplexing
- **C/I** : Carrier to Interference
- **DMB** : Digital Multimedia Broadcasting
- **EN** : European Standard
- **ES** : Elementary Stream
- **ETSI**: European Telecommunications Standards Institute
- **MPEG**: Moving Picture Experts Group
- **PN** : Pseudo-random Noise
- **PS** : Pilot Symbol
- **QPSK**: Quadrature Phase Shift Keying
- **RS** : Reed-Solomon
- **SI** : Service Information
- **TDM** : Time Division Multiplexing
- **TS** : Transport Stream

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# 1. Safety Precautions

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## 1-1. Repair Precaution

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

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

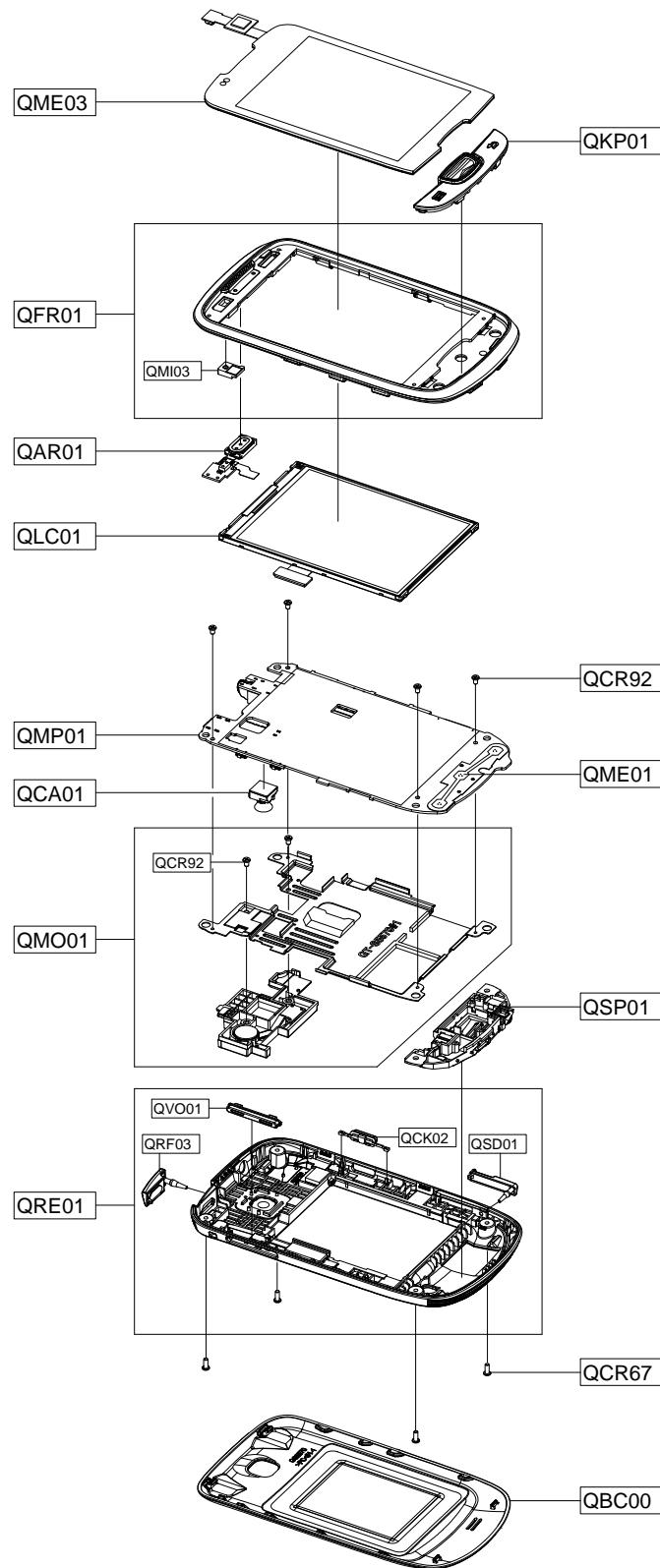
Several semiconductor may be damaged easily by static electricity. Such parts are called by ESD (Electrostatically Sensitive Devices), for example IC,BGA chip etc. Read Precaution below.

You can prevent from ESD damage by static electricity.

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

## 4. Exploded View and Parts List

### 4-1. Cellular phone Exploded View



**4-2. Cellular phone Parts list**

Design LOC	Description	SEC CODE
QCR67	SCREW-MACHINE	6001-002083
QCR92	SCREW-MACHINE	6001-002261
QCA01	CAMERA MODULE-GT-S5330 3M	GH59-09906A
QAR01	ASSY ETC-RCV+SENSOR FPCB(GT_S5570)	GH59-10625A
QME01	DOME SHEET-GT_S5570	GH59-10628A
QME03	TOUCH/PANEL-GT_S5570(EU/BLACK)	GH59-10651A
QSP01	MODULE-SPK+INT	GH59-10663A
QMP01	A/S ASSY-PBA MAIN (COMM)	GH82-05484A
QLC01	ELA MODULE-LCD (GT_S5570)	GH96-05032A
QKP01	ASSY KEYPAD-GT-S5570	GH98-19187A
QBC00	ASSY COVER-BATT	GH98-19190A
QMO01	MODULE-MOT+BRACKET+SHIELD CAN(GT_S557	GH59-10768A
	QCR92 SCREW-MACHINE	6001-002261
QFR01	ASSY CASE-FRONT	GH98-19183A
	QMI03 ASSY RUBBER-MIC UP	GH98-19272A
QRE01	ASSY CASE-REAR	GH98-19189A
	QVO01 PMO COVER-VOL_KEY	GH72-62658A
	QCK02 PMO COVER-POWER_KEY	GH72-62659A
	QSD01 PMO COVER-SD	GH72-62660A
	QRF03 PMO COVER-USB	GH72-62661A

## 5. MAIN Electrical Parts List (2010.12.22)

Design LOC	SEC CODE	Description
D600	0403-001870	DIODE-ZENER
U637	0404-001646	DIODE-SCHOTTKY
ZD501	0406-001286	DIODE-TVS
ZD502	0406-001329	DIODE-TVS
D400,D500	0407-001002	DIODE-ARRAY
Q601	0504-001138	TR-DIGITAL
Q600	0505-001325	FET-SILICON
U619	0505-002341	FET-SILICON
U301	0801-003265	IC
U303	0801-003383	IC
U609	1001-001645	IC
U500,U635	1001-001655	IC
UME300	1108-000411	MEMORY
PAM102	1201-002967	IC
PAM101	1201-003088	IC
U200	1201-003168	IC
PAM100	1201-003210	IC
U508	1202-001068	IC
U503	1203-006331	IC
U501	1203-006346	IC
U615	1203-006732	IC
U101	1205-003297	IC
UCP300	1205-004035	IC
U202	1205-004076	IC
U201	1205-004113	IC
C522	1209-002023	IC
U509	1209-002030	IC
TH300	1404-001221	THERMISTOR
U614,V500,V503,V504	1405-001298	VARISTOR
V505,V600,V601,V602	1405-001298	VARISTOR
VR500,VR501,VR502	1405-001298	VARISTOR
R116,R325,R509	2007-000137	R-CHIP
R100,R322,R326,R500	2007-000138	R-CHIP
R506,R527,R606	2007-000138	R-CHIP
R4112,U628	2007-000140	R-CHIP
R119	2007-000141	R-CHIP

Design LOC	SEC CODE	Description
R400	2007-000144	R-CHIP
R501,R526,R600,R607	2007-000148	R-CHIP
R615	2007-000148	R-CHIP
R605	2007-000149	R-CHIP
R616,R617	2007-000151	R-CHIP
U617	2007-000153	R-CHIP
R608,R609,R610,R611	2007-000157	R-CHIP
R612	2007-000157	R-CHIP
R300,R318,R324,R327	2007-000162	R-CHIP
R409,R505,U638	2007-000162	R-CHIP
R516,U616	2007-000165	R-CHIP
R614,U618	2007-000168	R-CHIP
R502	2007-000170	R-CHIP
U639	2007-000172	R-CHIP
R329,R404,R405	2007-001292	R-CHIP
R109,R401	2007-001298	R-CHIP
R521	2007-001333	R-CHIP
R613	2007-001339	R-CHIP
R507	2007-002796	R-CHIP
U630	2007-003004	R-CHIP
R603,R604	2007-003015	R-CHIP
U629	2007-003030	R-CHIP
R406	2007-007107	R-CHIP
R204	2007-007132	R-CHIP
R309,R313	2007-007139	R-CHIP
R110	2007-007309	R-CHIP
R402	2007-007334	R-CHIP
R408	2007-007468	R-CHIP
R407	2007-007480	R-CHIP
R410	2007-007573	R-CHIP
R105	2007-008044	R-CHIP
R106,R107	2007-008045	R-CHIP
R302,R319,R321,R335	2007-008055	R-CHIP
R301	2007-008298	R-CHIP
R111,R303	2007-008419	R-CHIP
R308	2007-008516	R-CHIP

Design LOC	SEC CODE	Description
R121	2007-008531	R-CHIP
R332	2007-008564	R-CHIP
R304,R305,R306,R307	2007-008588	R-CHIP
R314,R315,R316,R317	2007-008588	R-CHIP
R323	2007-008766	R-CHIP
R120	2007-008774	R-CHIP
R330	2007-008806	R-CHIP
R403	2007-008812	R-CHIP
R205	2007-009794	R-CHIP
C109,C127,C154,C215	2203-000233	C-CERAMIC,CHIP
C434,L111	2203-000233	C-CERAMIC,CHIP
C103,C110,C205	2203-000254	C-CERAMIC,CHIP
C200,C204,C214,C230	2203-000278	C-CERAMIC,CHIP
C511	2203-000278	C-CERAMIC,CHIP
R200	2203-000311	C-CERAMIC,CHIP
C237	2203-000330	C-CERAMIC,CHIP
L116	2203-000386	C-CERAMIC,CHIP
C530	2203-000425	C-CERAMIC,CHIP
C101,C104,C114,C218	2203-000438	C-CERAMIC,CHIP
C519,C520	2203-000438	C-CERAMIC,CHIP
C328	2203-000489	C-CERAMIC,CHIP
C432,C433	2203-000550	C-CERAMIC,CHIP
C427	2203-000585	C-CERAMIC,CHIP
C322,L119	2203-000696	C-CERAMIC,CHIP
C102,C105,C203,C206	2203-000812	C-CERAMIC,CHIP
C210,C220,C221,C324	2203-000812	C-CERAMIC,CHIP
C506,C516,C517,C606	2203-000812	C-CERAMIC,CHIP
R104	2203-000812	C-CERAMIC,CHIP
C235	2203-000940	C-CERAMIC,CHIP
C329,C428	2203-000995	C-CERAMIC,CHIP
C406,C407	2203-001405	C-CERAMIC,CHIP
C108	2203-002668	C-CERAMIC,CHIP
C224,C226,C227,C229	2203-002709	C-CERAMIC,CHIP
C232,C233,C243,C305	2203-002709	C-CERAMIC,CHIP
C318,C524,C527,C603	2203-002709	C-CERAMIC,CHIP
U302	2203-002709	C-CERAMIC,CHIP

Design LOC	SEC CODE	Description
C167,C211	2203-005052	C-CERAMIC,CHIP
C234,C236	2203-005056	C-CERAMIC,CHIP
C512	2203-005057	C-CERAMIC,CHIP
C238	2203-005444	C-CERAMIC,CHIP
C219	2203-005450	C-CERAMIC,CHIP
C325	2203-005480	C-CERAMIC,CHIP
C131,C144,C145,C148	2203-005682	C-CERAMIC,CHIP
C158	2203-005682	C-CERAMIC,CHIP
C149,C151,C164	2203-005725	C-CERAMIC,CHIP
C132,C133	2203-005732	C-CERAMIC,CHIP
C165	2203-005736	C-CERAMIC,CHIP
C153	2203-005806	C-CERAMIC,CHIP
C100,C244,C300,C301	2203-006048	C-CERAMIC,CHIP
C303,C326,C435,C436	2203-006048	C-CERAMIC,CHIP
C441,C442,C501,C502	2203-006048	C-CERAMIC,CHIP
C507,C508,C514,C515	2203-006048	C-CERAMIC,CHIP
C518,C528,C532,C604	2203-006048	C-CERAMIC,CHIP
U632	2203-006048	C-CERAMIC,CHIP
C121,C122	2203-006187	C-CERAMIC,CHIP
C400	2203-006260	C-CERAMIC,CHIP
C608	2203-006348	C-CERAMIC,CHIP
C201,C202,C216,C217	2203-006399	C-CERAMIC,CHIP
C223,C302,C304,C306	2203-006399	C-CERAMIC,CHIP
C307,C317,C319,C320	2203-006399	C-CERAMIC,CHIP
C321,C408,C409,C415	2203-006399	C-CERAMIC,CHIP
C416,C417,C418,C422	2203-006399	C-CERAMIC,CHIP
C423,C425,C426,C429	2203-006399	C-CERAMIC,CHIP
C431,C444,C503,C601	2203-006399	C-CERAMIC,CHIP
C602,U602,U603,U608	2203-006399	C-CERAMIC,CHIP
U610	2203-006399	C-CERAMIC,CHIP
C147,C150,C160,C163	2203-006423	C-CERAMIC,CHIP
C207,C208,C308,C309	2203-006423	C-CERAMIC,CHIP
C311,C312,C313,C314	2203-006423	C-CERAMIC,CHIP
C315,C323,C327	2203-006423	C-CERAMIC,CHIP
C330	2203-006556	C-CERAMIC,CHIP
C424,C430,C443,C500	2203-006562	C-CERAMIC,CHIP

Design LOC	SEC CODE	Description
L101,L103	2203-006604	C-CERAMIC,CHIP
C135,C138,C155,C159	2203-006665	C-CERAMIC,CHIP
C119,C120	2203-006707	C-CERAMIC,CHIP
C401,C402,C403,C404	2203-006824	C-CERAMIC,CHIP
C405,C437,C438,C439	2203-006824	C-CERAMIC,CHIP
C440,U612	2203-006824	C-CERAMIC,CHIP
C209,C222,C225,C228	2203-006872	C-CERAMIC,CHIP
C231,C241	2203-006872	C-CERAMIC,CHIP
C152,C162	2203-006979	C-CERAMIC,CHIP
C504,U502	2203-007133	C-CERAMIC,CHIP
C505	2203-007240	C-CERAMIC,CHIP
C242,C410,C411,C412	2203-007271	C-CERAMIC,CHIP
C413,C414,C420,C421	2203-007271	C-CERAMIC,CHIP
C609,C610	2203-007271	C-CERAMIC,CHIP
C111,C310,C316,C523	2203-007279	C-CERAMIC,CHIP
C161	2203-007317	C-CERAMIC,CHIP
C124,C134	2203-007393	C-CERAMIC,CHIP
U620	2203-007687	C-CERAMIC,CHIP
C525,C605	2203-007701	C-CERAMIC,CHIP
BAT400	2404-001506	C-TA,CHIP
L104	2703-001729	INDUCTOR-SMD
L105	2703-001733	INDUCTOR-SMD
C137,L107	2703-001737	INDUCTOR-SMD
L118	2703-002170	INDUCTOR-SMD
C107,C128	2703-002199	INDUCTOR-SMD
C106,C130	2703-002205	INDUCTOR-SMD
L112	2703-002207	INDUCTOR-SMD
L109,L110	2703-002208	INDUCTOR-SMD
C129,C213	2703-002267	INDUCTOR-SMD
C113	2703-002314	INDUCTOR-SMD
C126	2703-002365	INDUCTOR-SMD
C125	2703-002369	INDUCTOR-SMD
L122	2703-002842	INDUCTOR-SMD
L124	2703-002858	INDUCTOR-SMD
L120	2703-002901	INDUCTOR-SMD
L123	2703-002907	INDUCTOR-SMD

Design LOC	SEC CODE	Description
R510	2703-003064	INDUCTOR-SMD
L502	2703-003121	INDUCTOR-SMD
L508	2703-003485	INDUCTOR-SMD
L400,L401,L402,L403	2703-003686	INDUCTOR-SMD
L106,L108,L115	2703-003915	INDUCTOR-SMD
C115,C118,L102	2703-004024	INDUCTOR-SMD
OSC400	2801-004551	CRYSTAL-UNIT
OSC200	2801-005045	CRYSTAL-UNIT
OSC100	2809-001277	OSCILLATOR-VCTCXO
F600,F601,F602,F603	2901-001424	FILTER-EMI SMD
F604,F605	2901-001424	FILTER-EMI SMD
F607,F608	2901-001469	FILTER-EMI SMD
F102	2904-001847	FILTER-SAW
F104	2904-001864	FILTER-SAW
F100	2904-001889	FILTER-SAW
F101	2904-001920	FILTER-SAW
DUF100	2910-000099	FILTER
DUF101	2910-000117	FILTER
F200	2911-000158	FILTER
MIC500	3003-001136	MIC-CONDENSOR
L203	3301-001438	CORE-FERRITE BEAD
L200,L201	3301-001659	CORE-FERRITE BEAD
L100,L601,L602	3301-001756	CORE-FERRITE BEAD
L512	3301-001762	CORE-FERRITE BEAD
L600	3301-001789	CORE-FERRITE BEAD
L500,L501,L503,L504	3301-001885	CORE-FERRITE BEAD
L505,L507,L513,L514	3301-001885	CORE-FERRITE BEAD
L515	3301-001885	CORE-FERRITE BEAD
L516	3301-002062	CORE-FERRITE BEAD
R202,R203	3301-002065	CORE-FERRITE BEAD
L510,L511	3301-002078	CORE-FERRITE BEAD
TACT500,TAC_DN	3404-001303	SWITCH-TACT
TAC_UP	3404-001303	SWITCH-TACT
RFS100	3705-001731	CONNECTOR-COAXIAL
CD600	3709-001575	CONNECTOR-CARD EDGE
SIM600	3709-001645	CONNECTOR-CARD EDGE

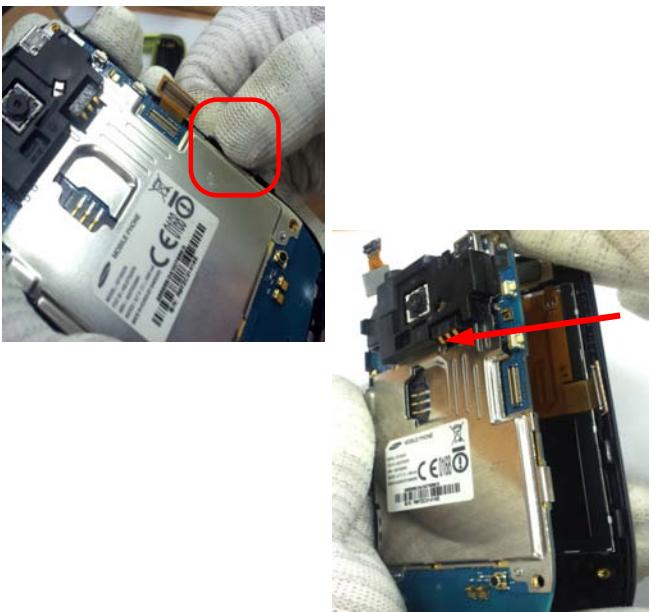
Design LOC	SEC CODE	Description
HDC600	3710-002632	CONNECTOR-SOCKET
SOC600	3710-003306	CONNECTOR-SOCKET
HDC601	3711-006843	CONNECTOR-HEADER
BTC600	3711-007393	CONNECTOR-HEADER
ANT100,ANT101,ANT200	3712-001332	CONNECTOR
ANT201,MOT500,MOT501	3712-001332	CONNECTOR
SPK500,SPK501	3712-001332	CONNECTOR
IFC600	3722-003115	JACK-PHONE
EAR1	3722-003221	JACK-PHONE

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 and Assembly Instructions

#### 7-1-1. Disassembly

<p>1      Unscrew Rear Case</p> 	<p>2      Separate the Rear Case</p> 
Unscrew 4 points on Rear Case.	Separate Rear part corner using a decomposition tool.
<p>3      Separate 2 connectors.</p>  	<p>4      Separate the PBA from Front Ass'y.</p> 
Separate 2 connectors from the PBA with care.	Lift the Hook & Separate the PBA from Front Ass'y.

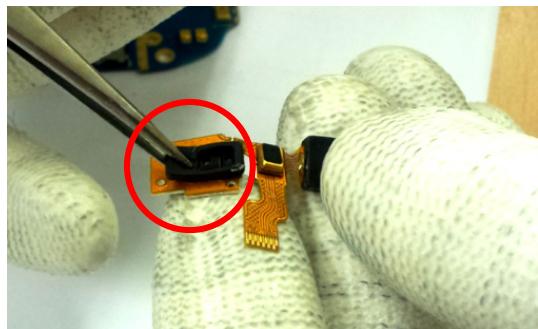
## 7. Level 2 Repair

<p>5      Unscrew PBA</p>	<p>6      Separate Shield Can</p>
<p>Unscrew 4 points on the PBA.</p>	<p>Separate the Shield Can.</p>
<p>7      Separate the Receiver-FPCB from LCD.</p> 	
<p>Separate Receiver-FPCB to Open lever of ZIP-TYPE connector.</p>	

## 7-1-2. Assembly

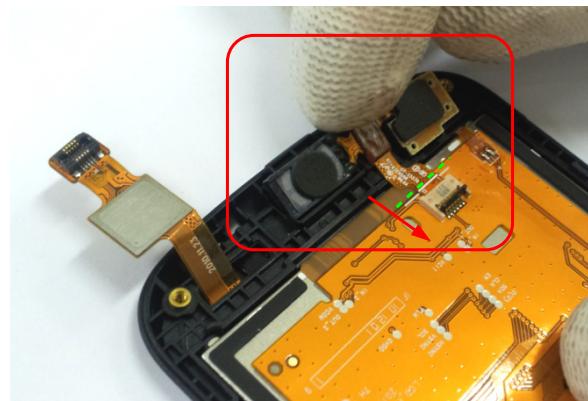
1

Insert the Rubber on the Sensor.



2

Assemble the Receiver Module.



Insert the Rubber on the Sensor.

3

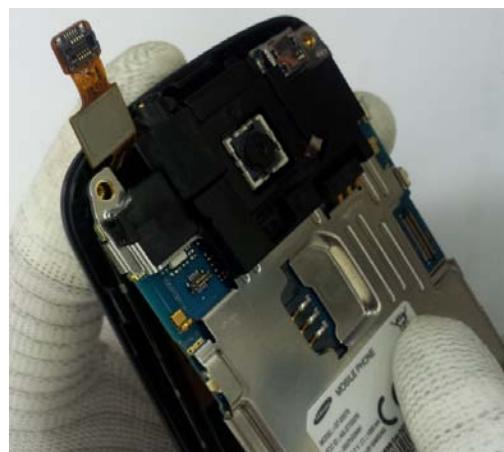
Assemble the Shield-Can



Assemble the Receiver-Module to LCD.

4

Assemble the PBA to FRONT Ass'y.

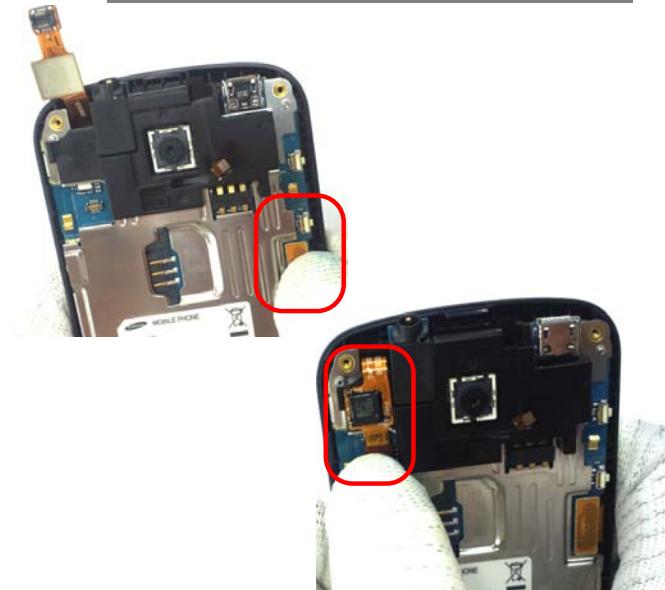


Attach the Shield-Can and screw 4 points on the PBA.

Place PBA carefully on hook.

7. Level 2 Repair

5 Assemble the PBA to FRONT Ass'y.



6 Assemble the Rear Case



Assemble the LCD Connector & TSP Connector.

Assemble the Rear Case to FRONT Ass'y.

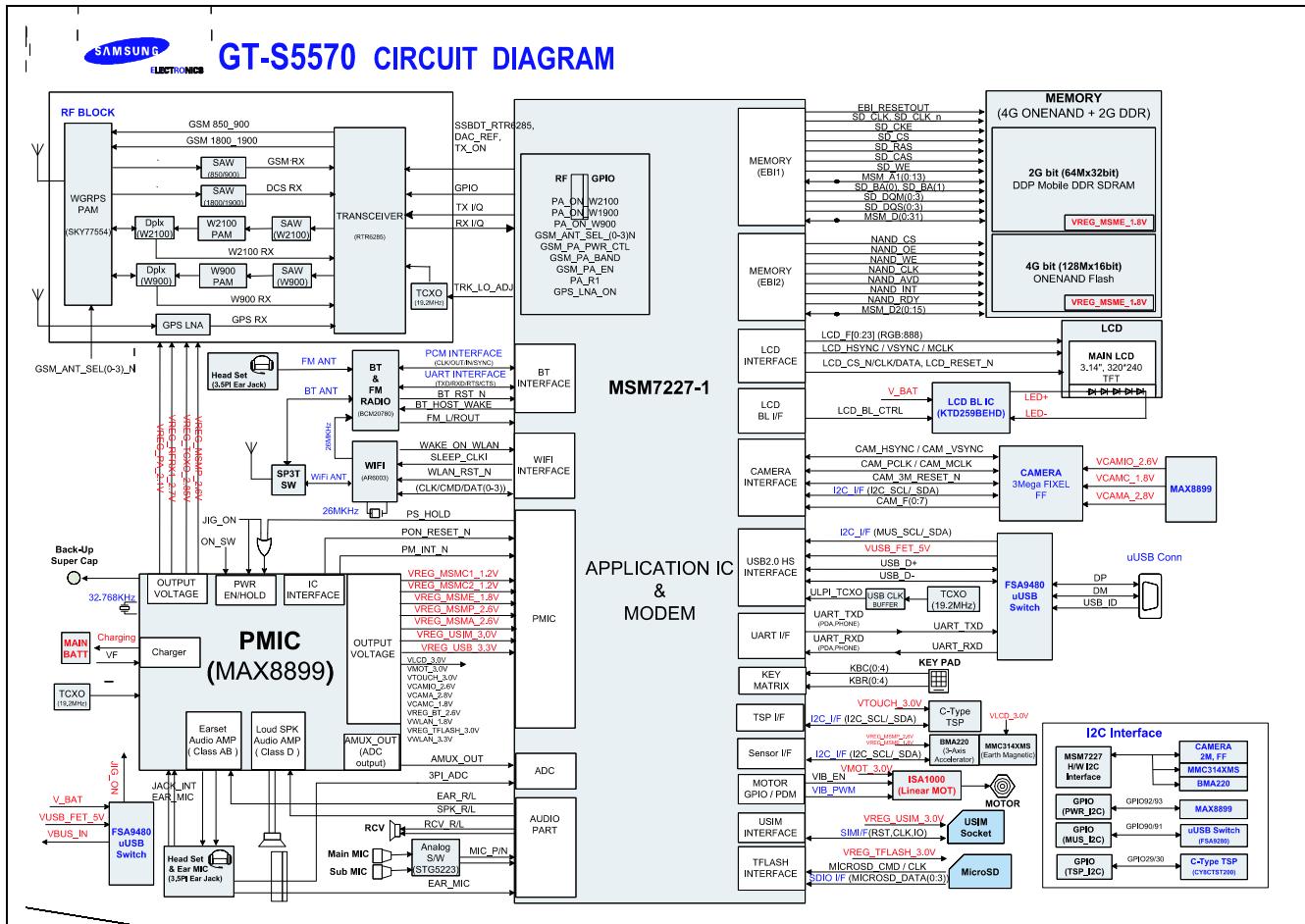
7 Screw REAR 4-point



Land REAR on PBA and screw REAR 4-point.  
(Torque 1.1)

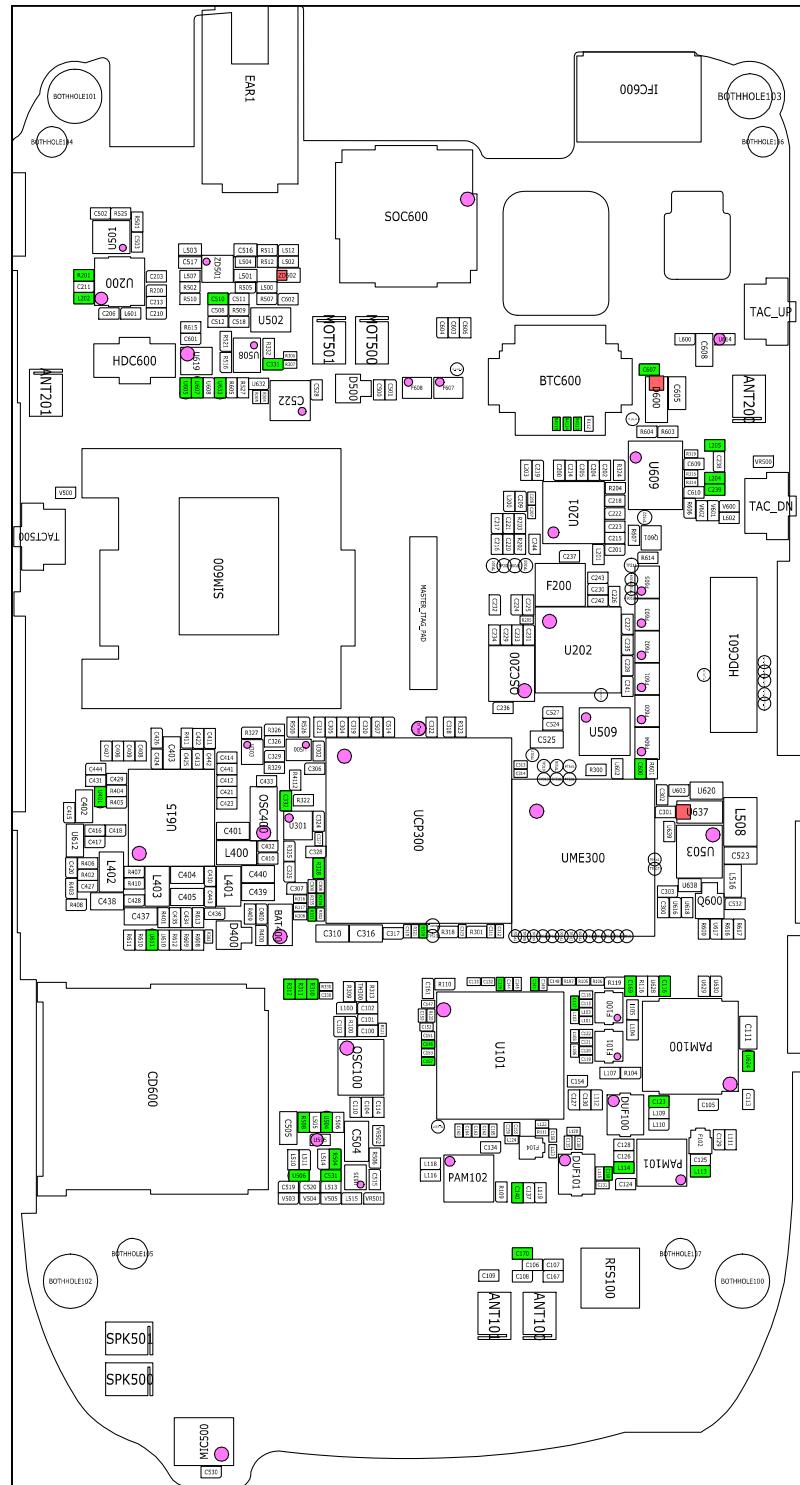
## 8. Level 3 Repair

### 8-1. Block Diagram



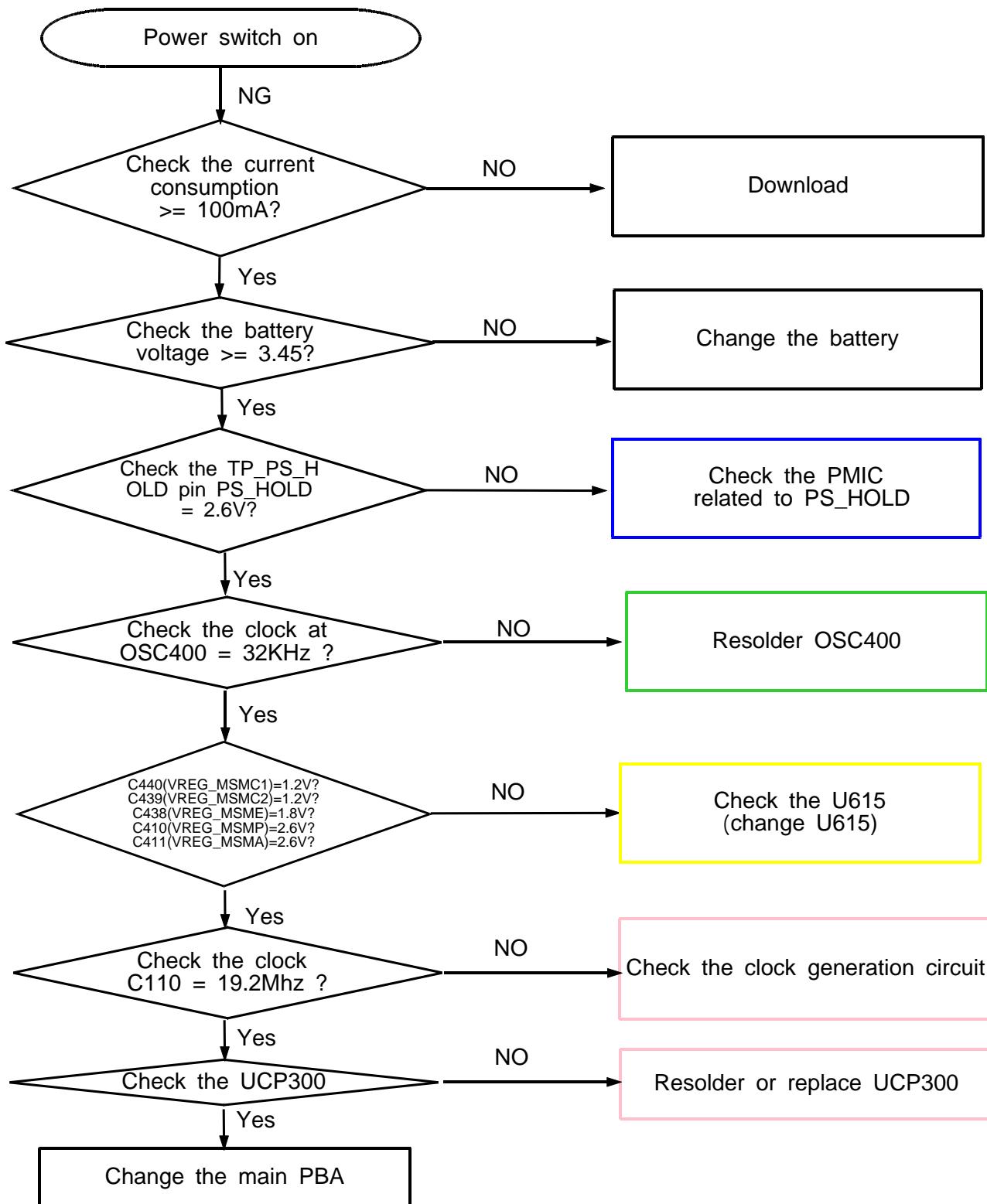
## 8-2. PCB Diagrams

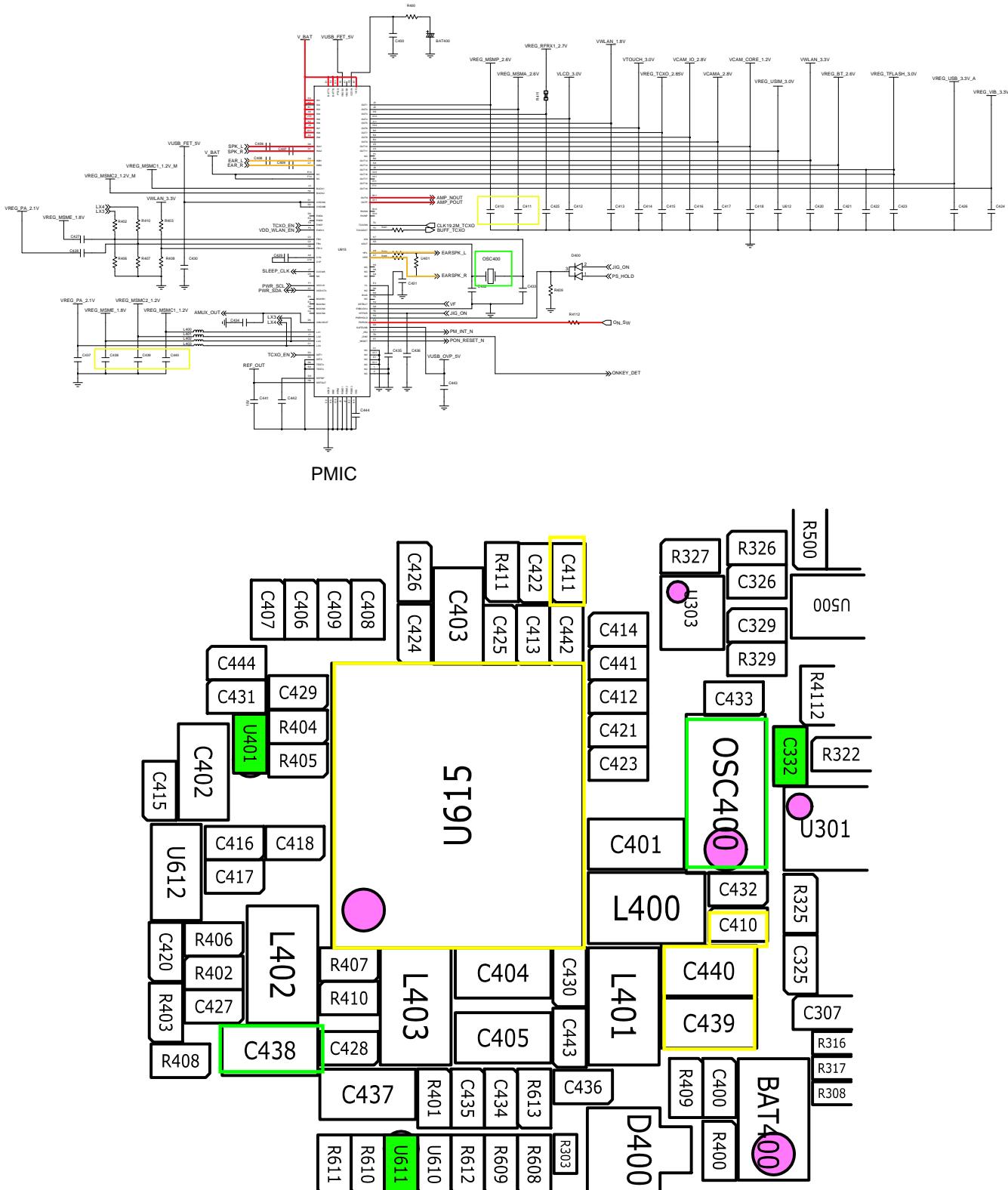
### 8-2-1. Top

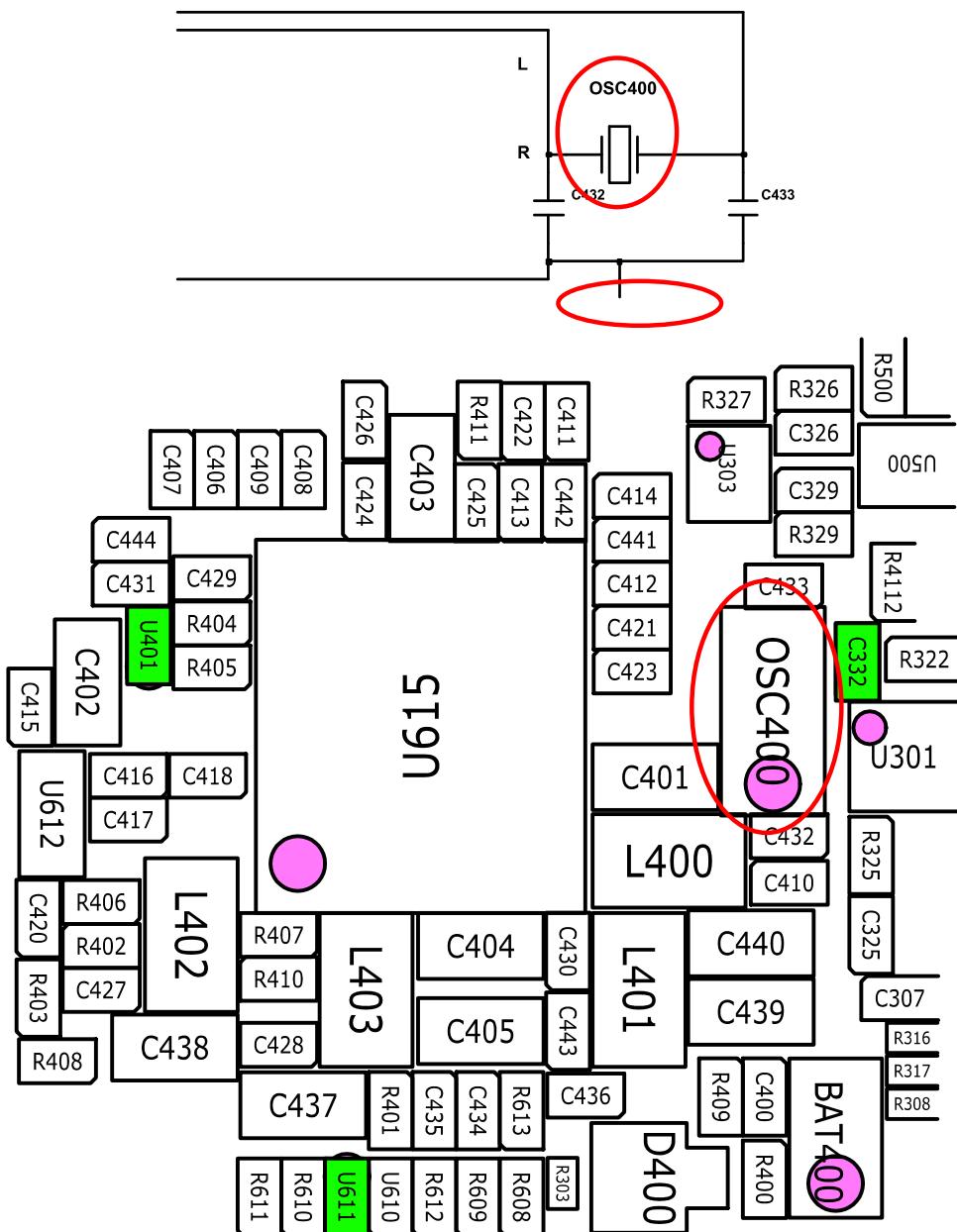


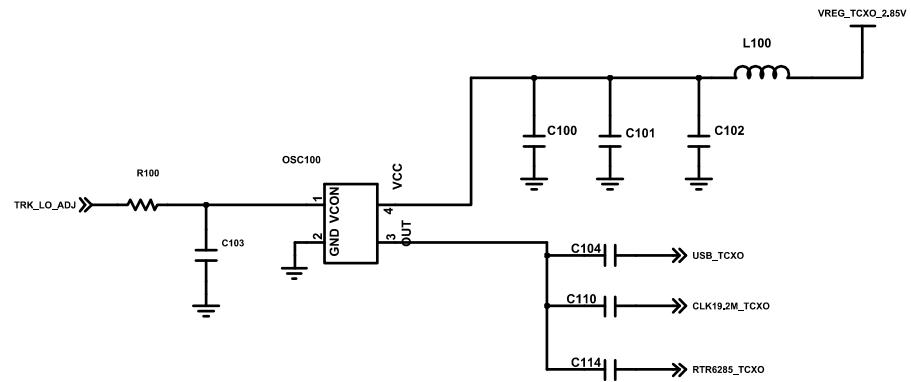
## 8-3. LOGIC

## 8-3-1. Power On

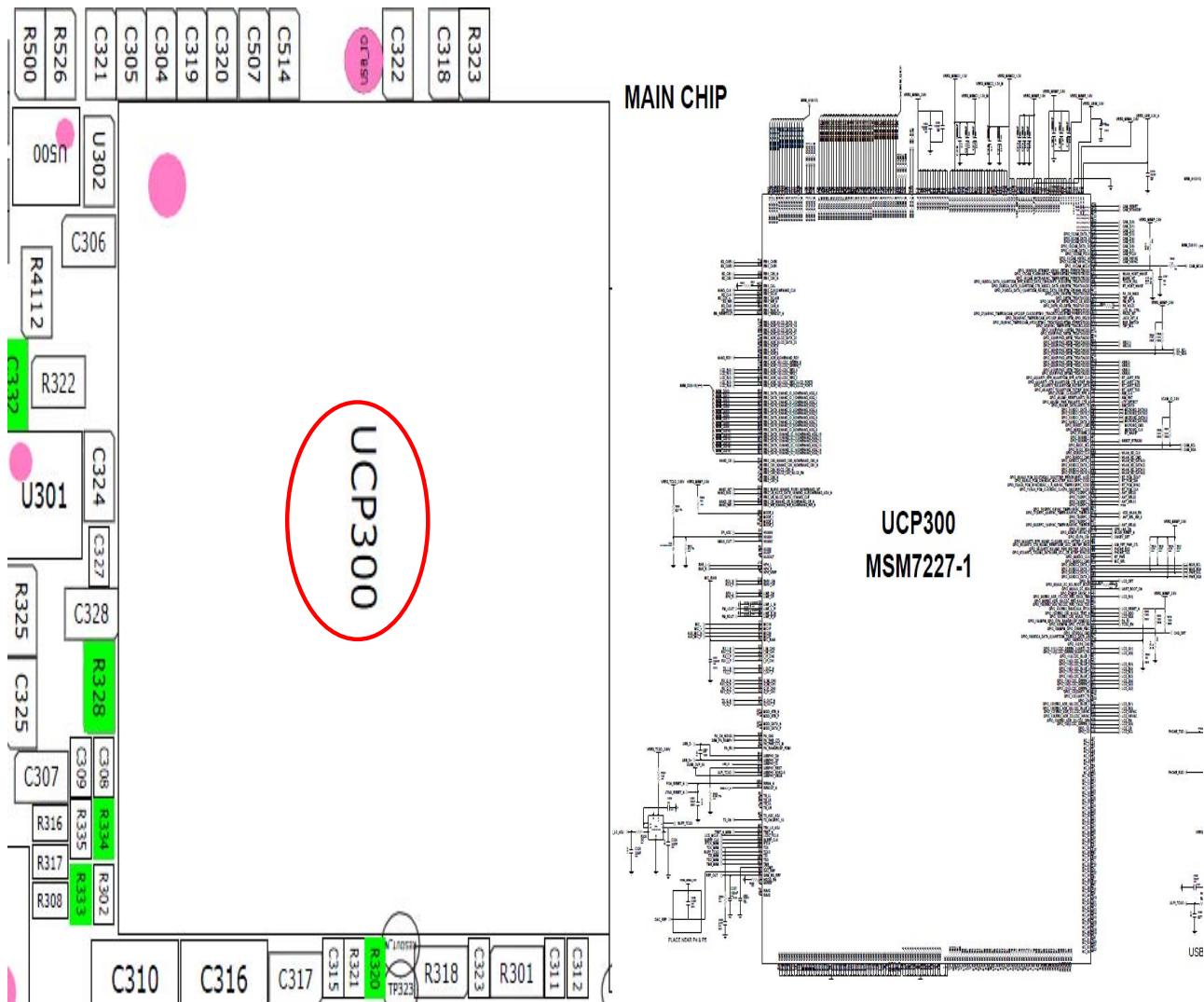




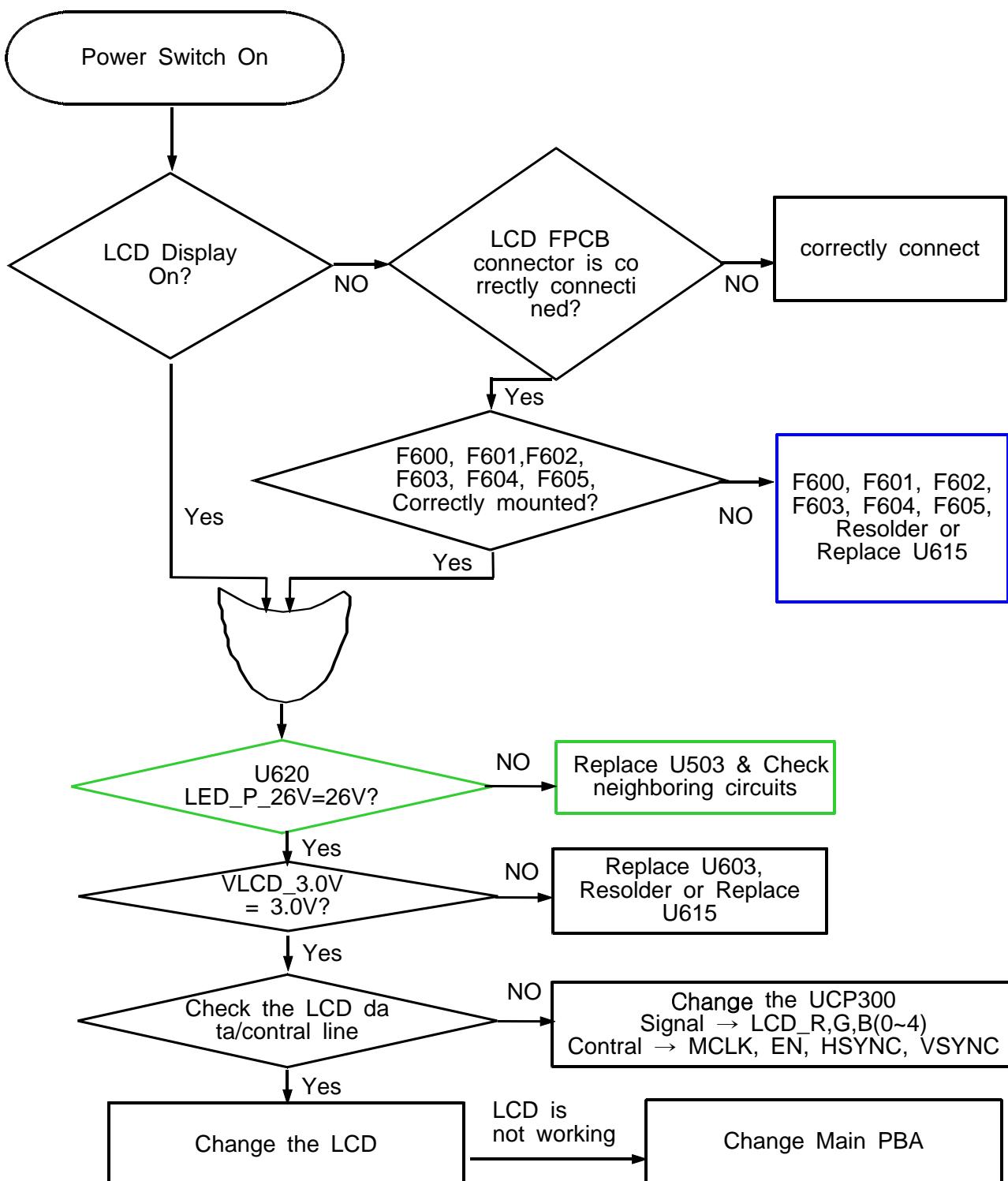


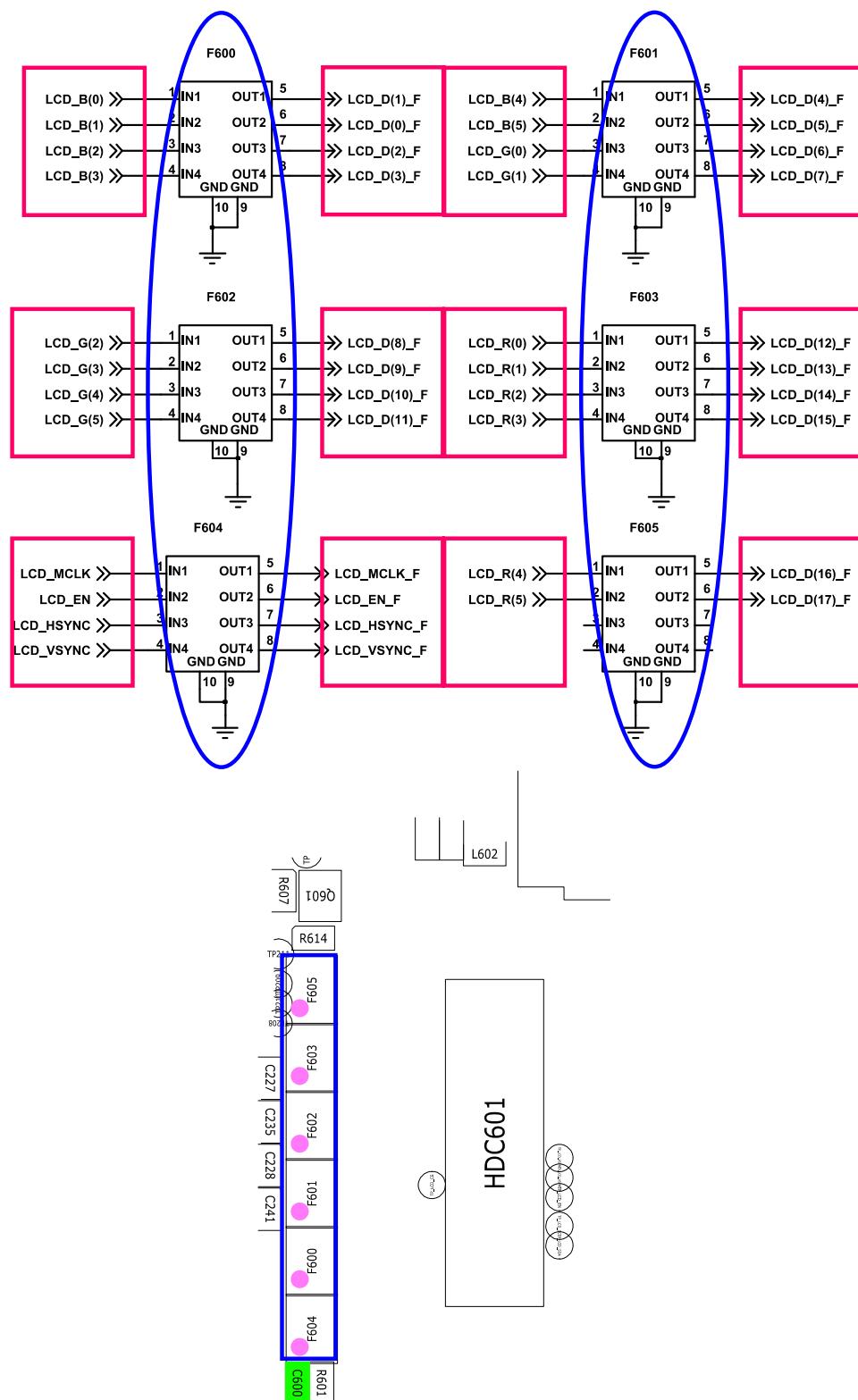


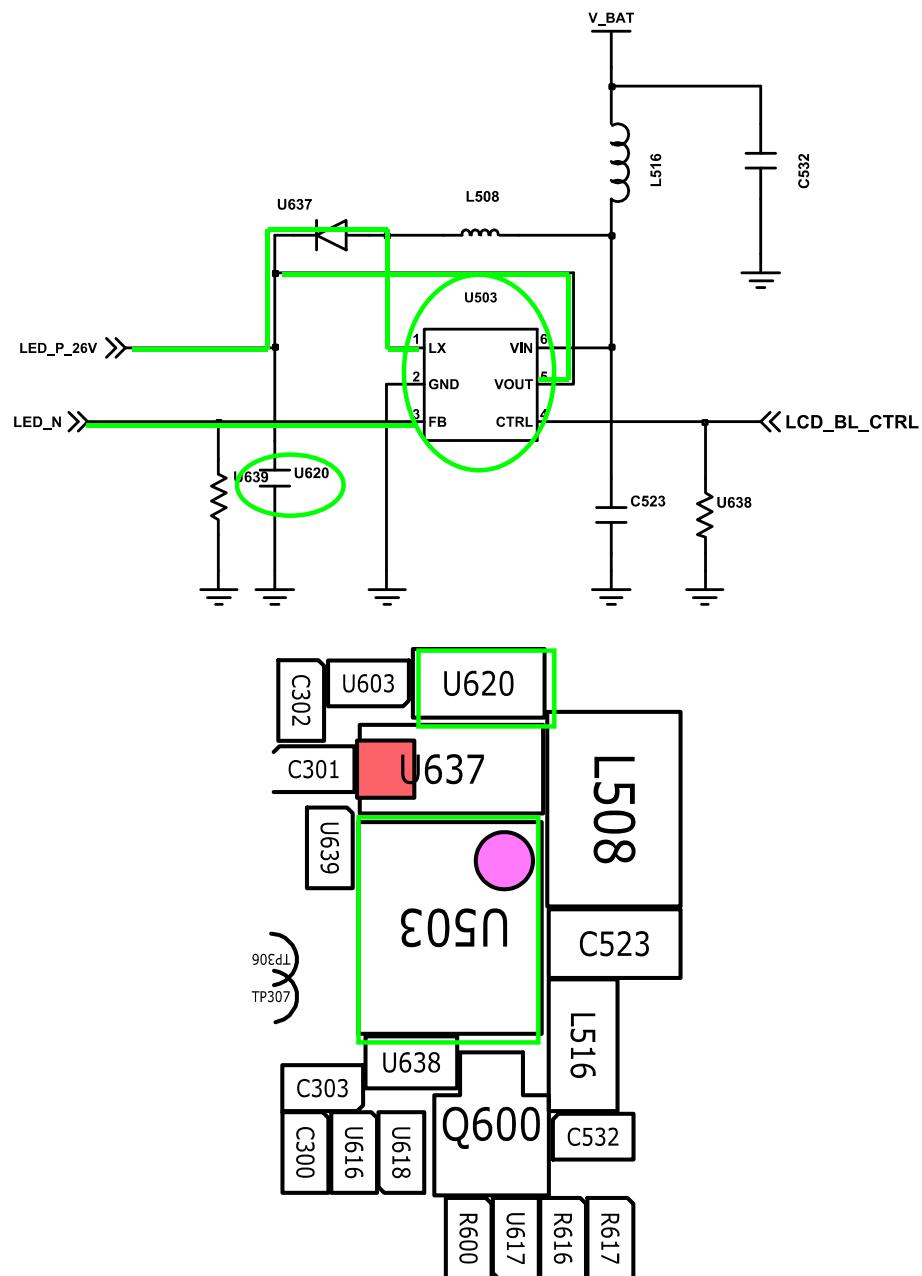
< TCXO >

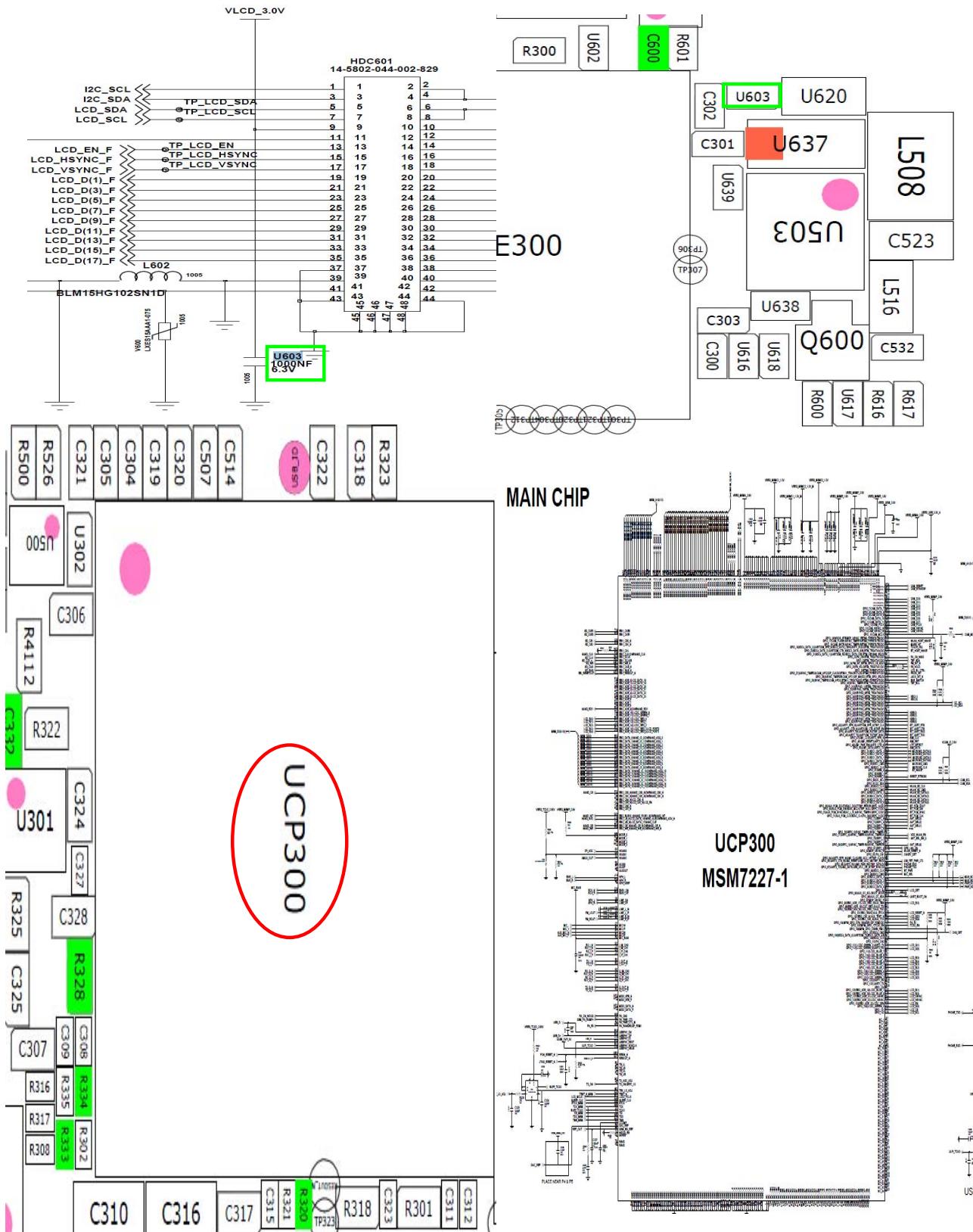


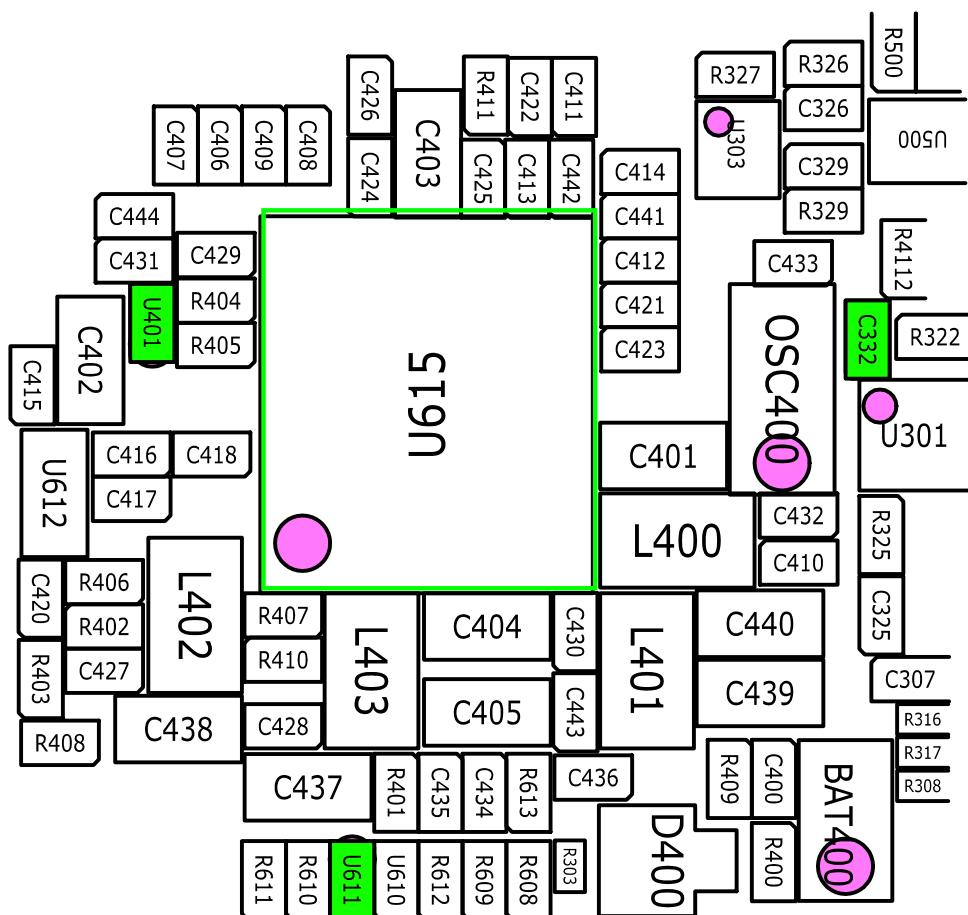
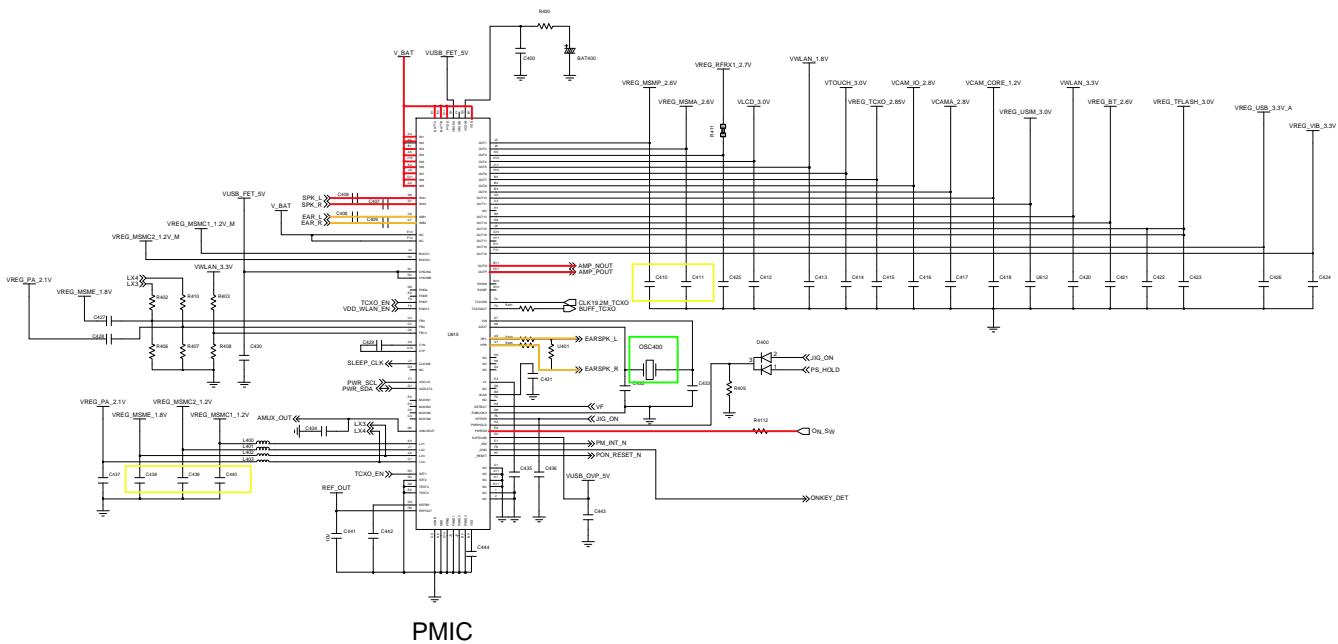
## 8-3-2. LCD Working



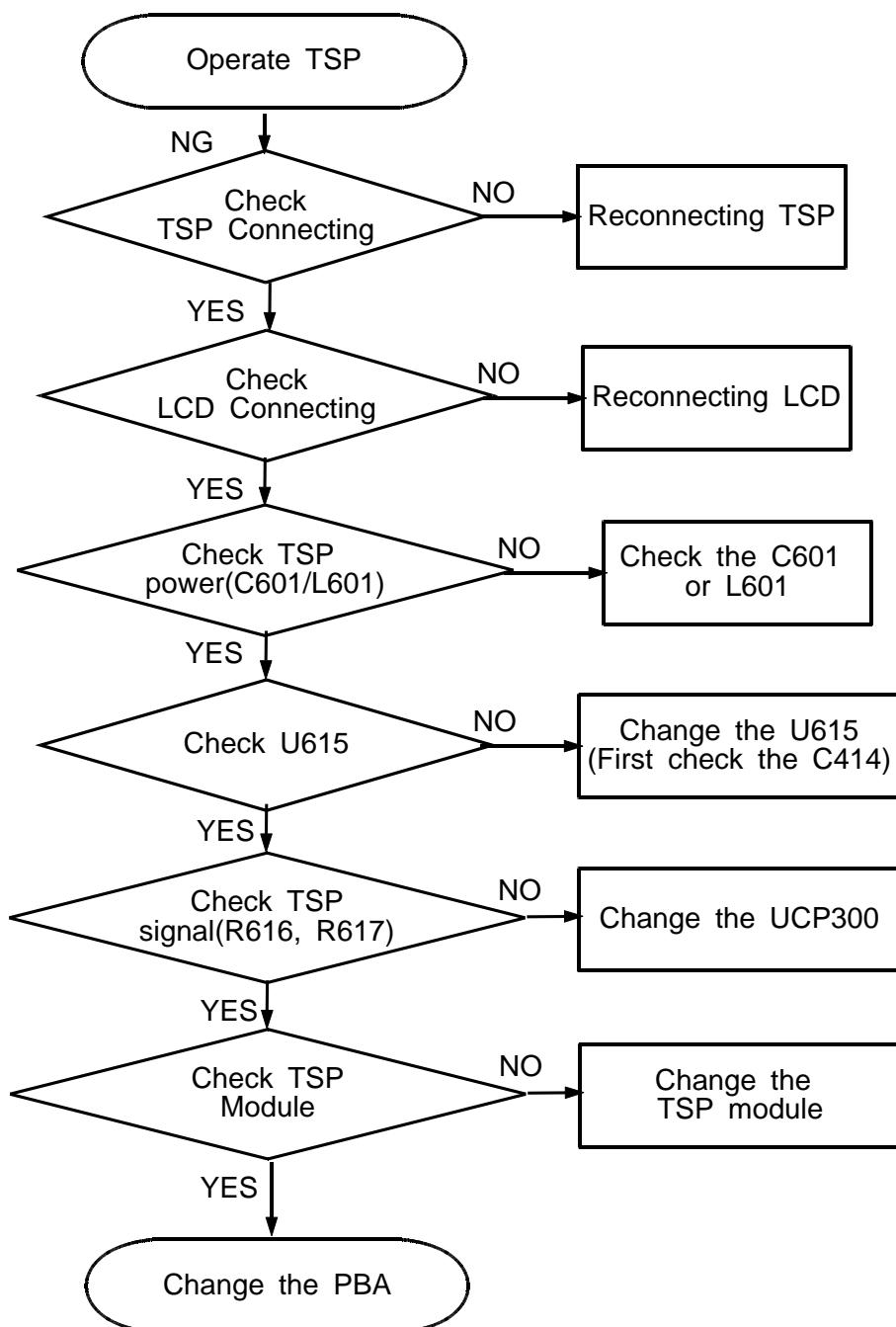


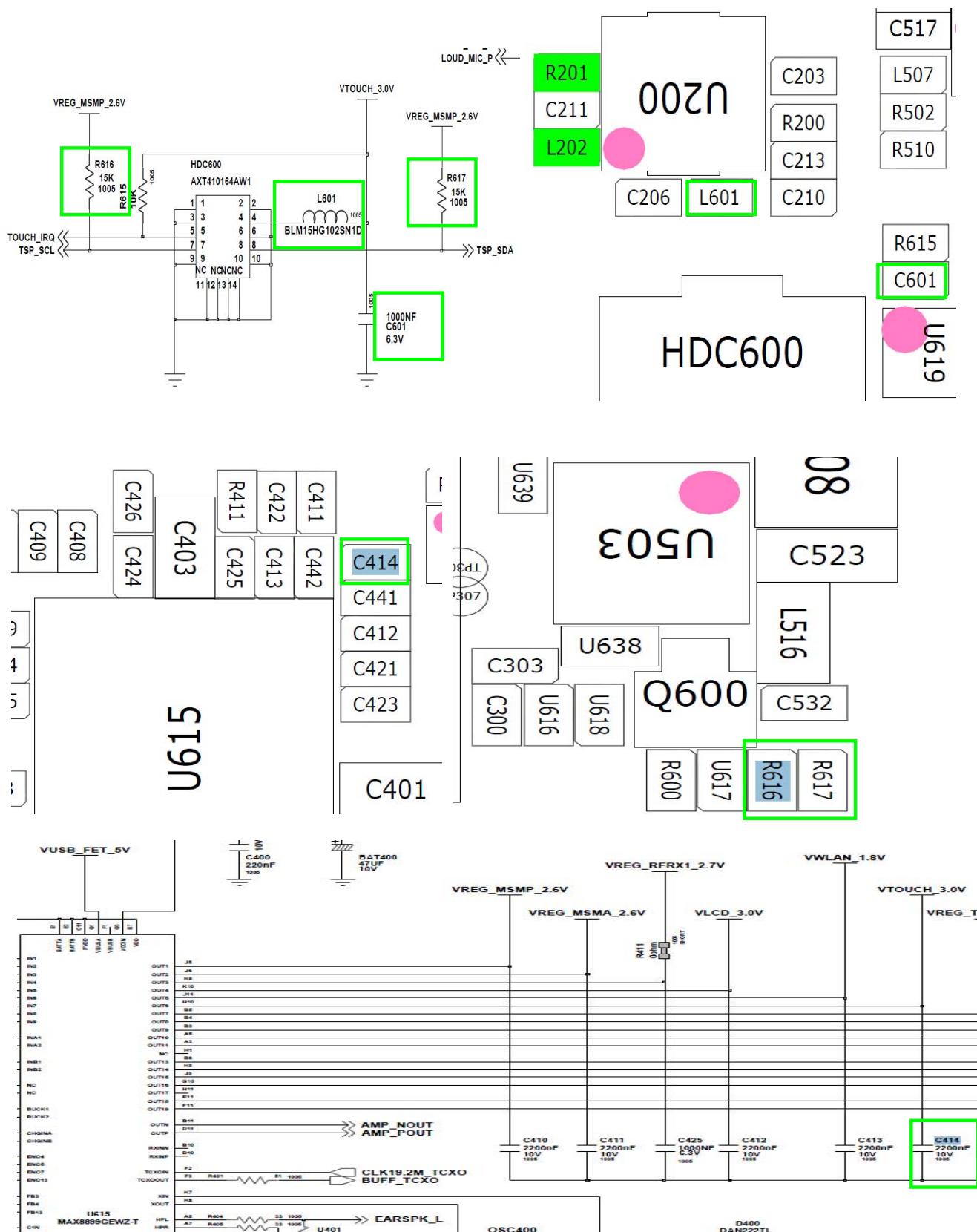


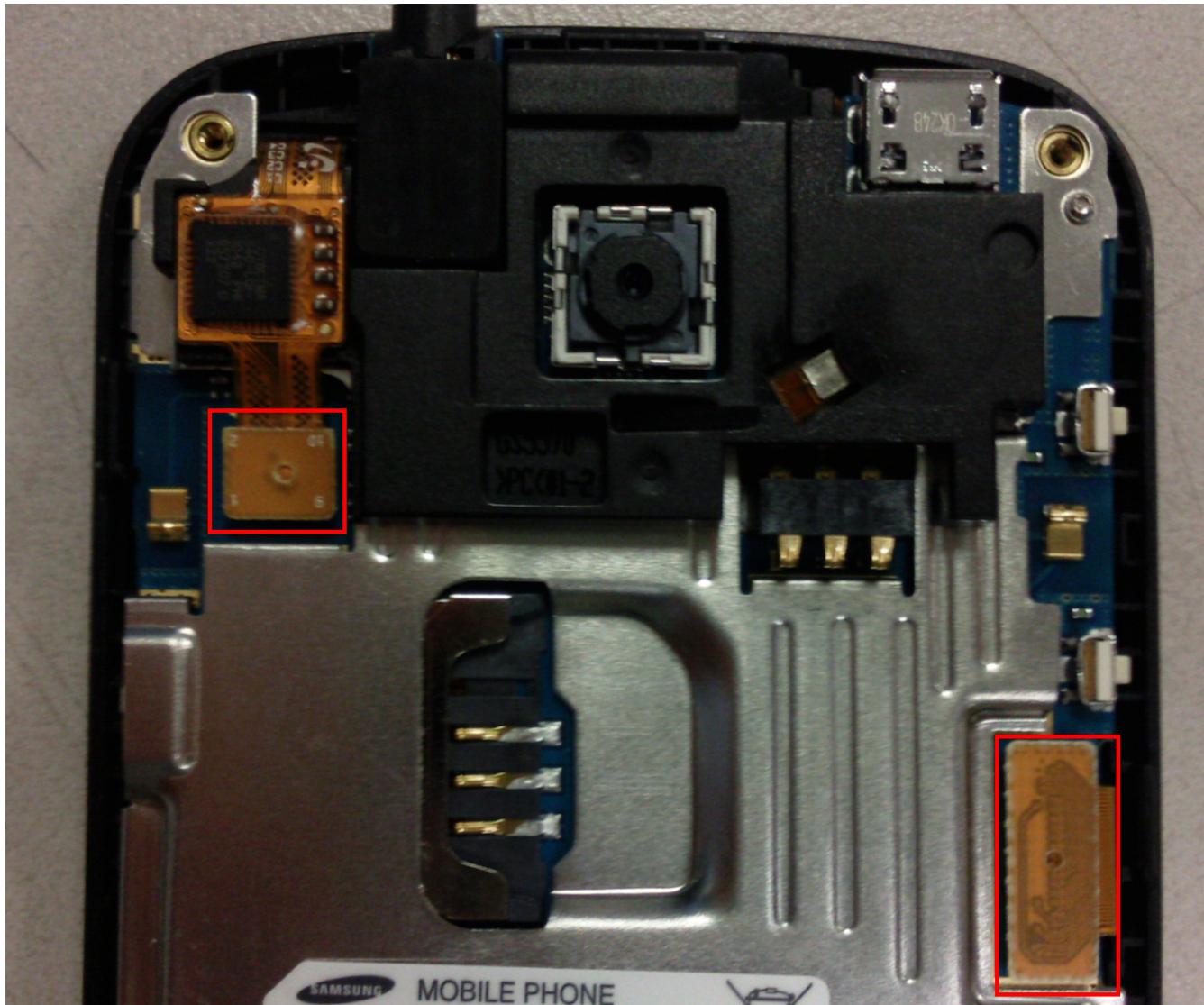




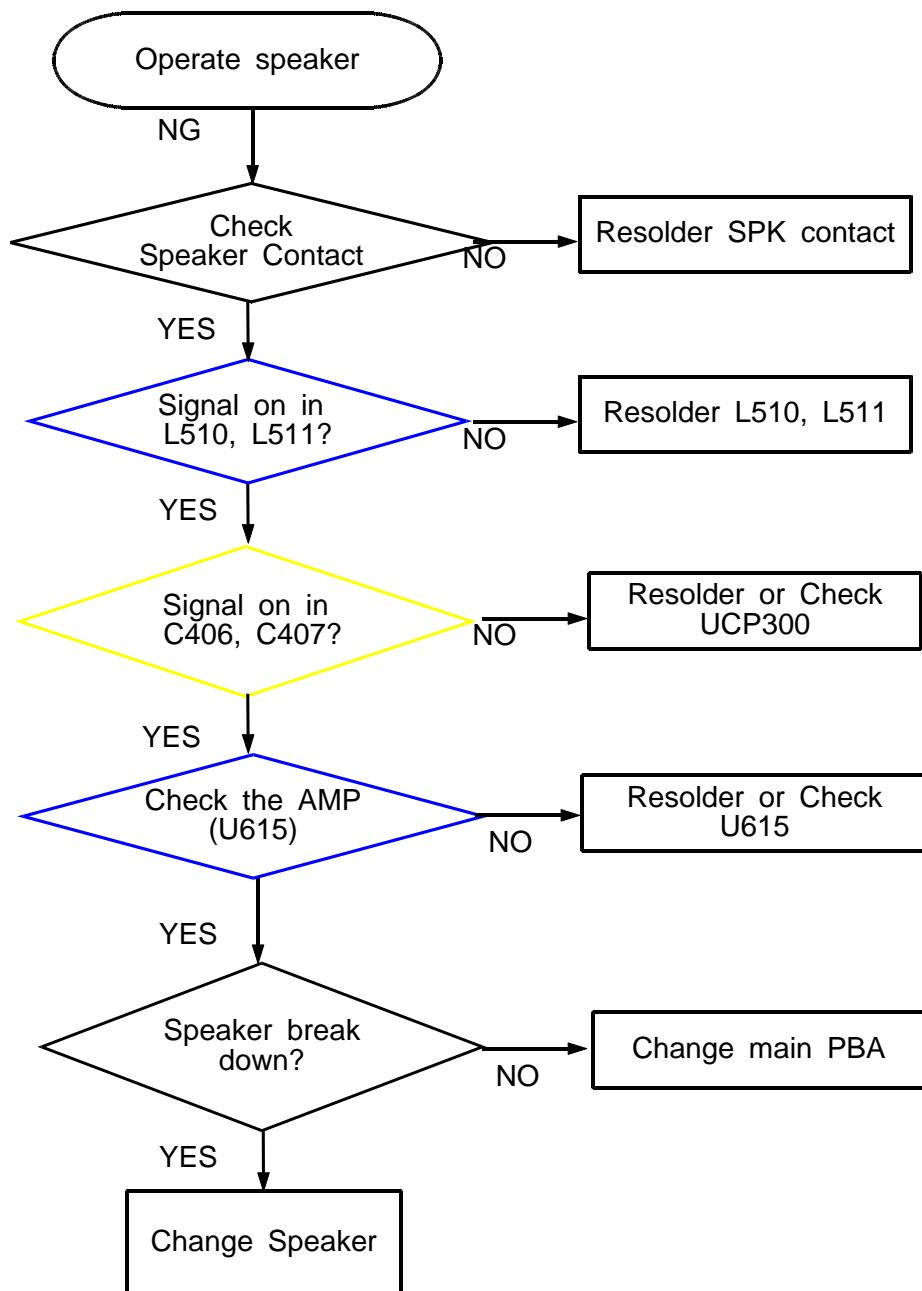
## 8-3-3. TSP

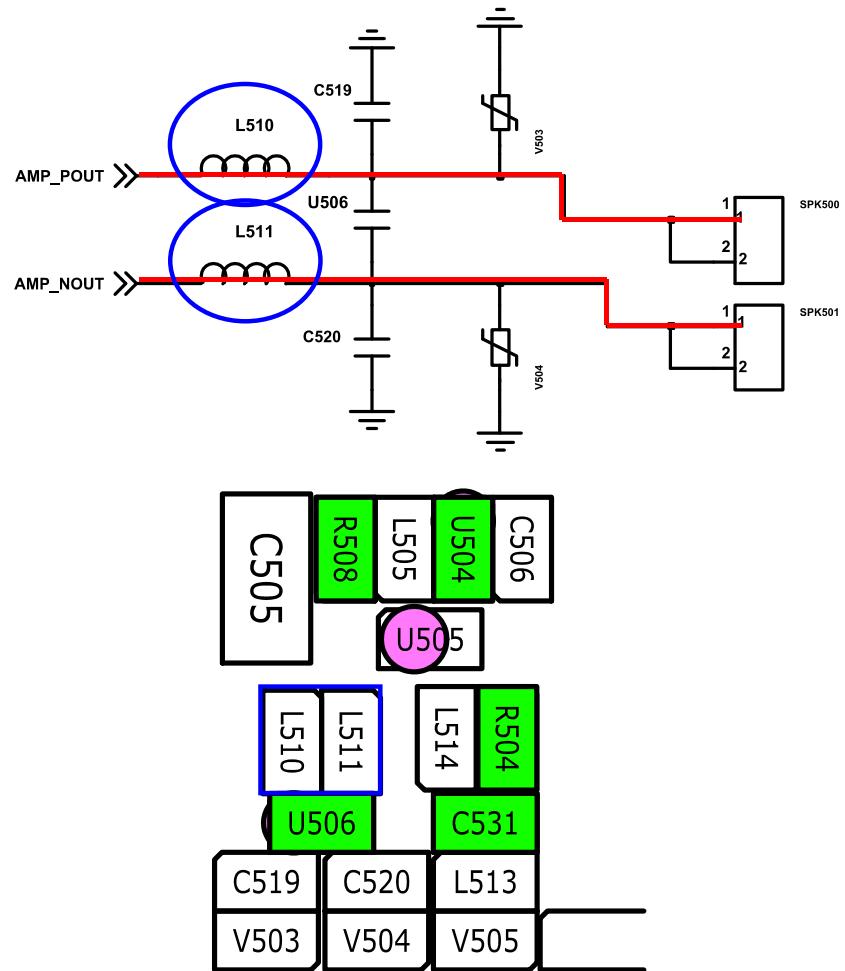


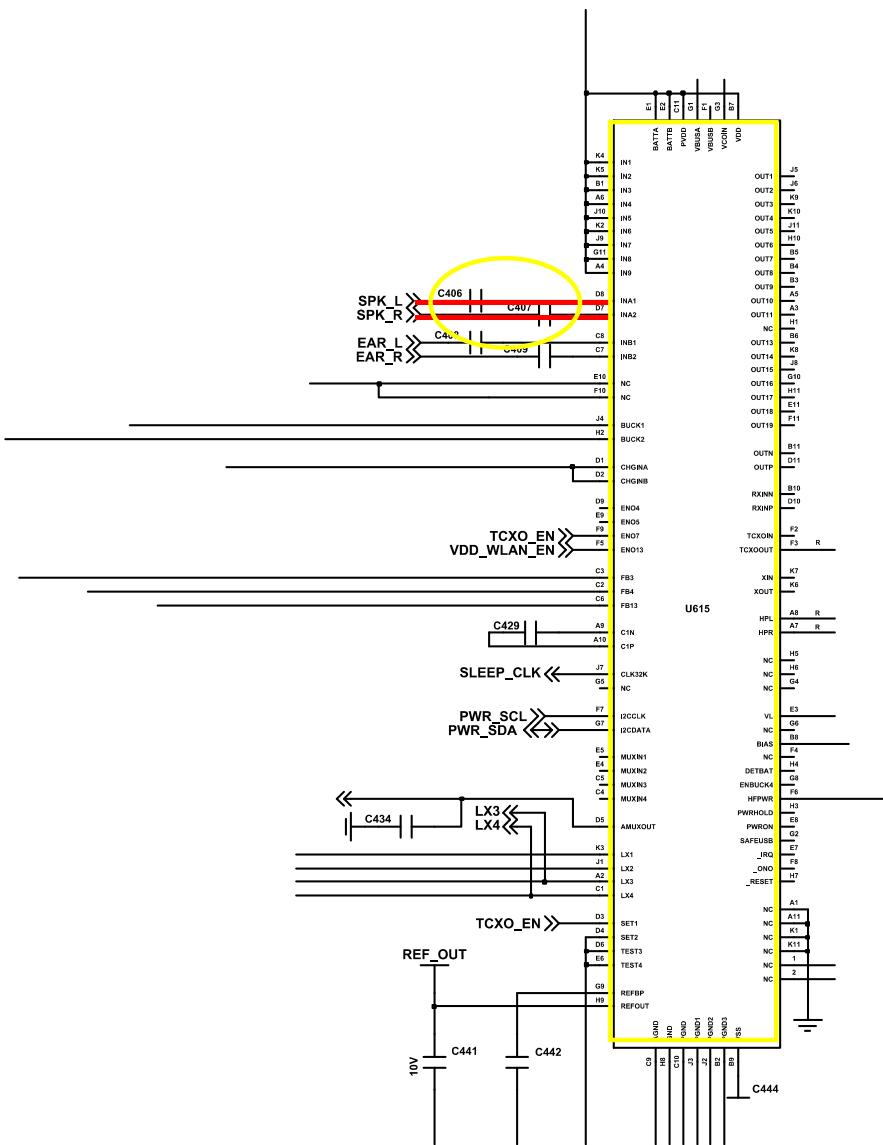


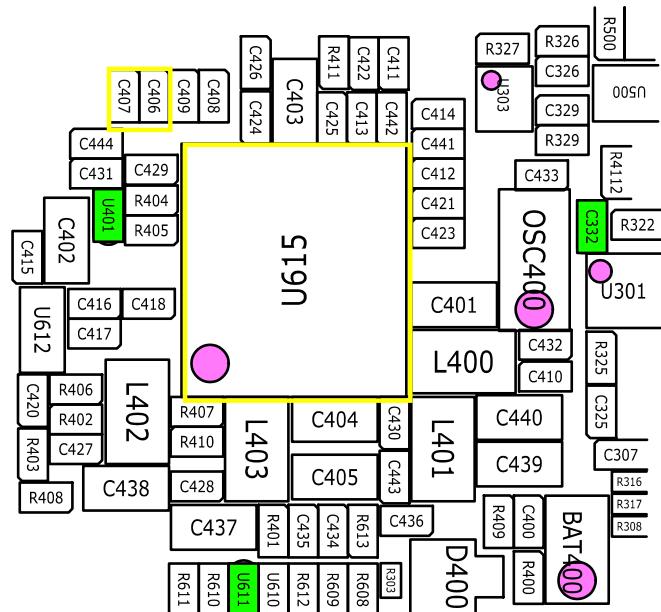


## 8-3-3. Audio Working

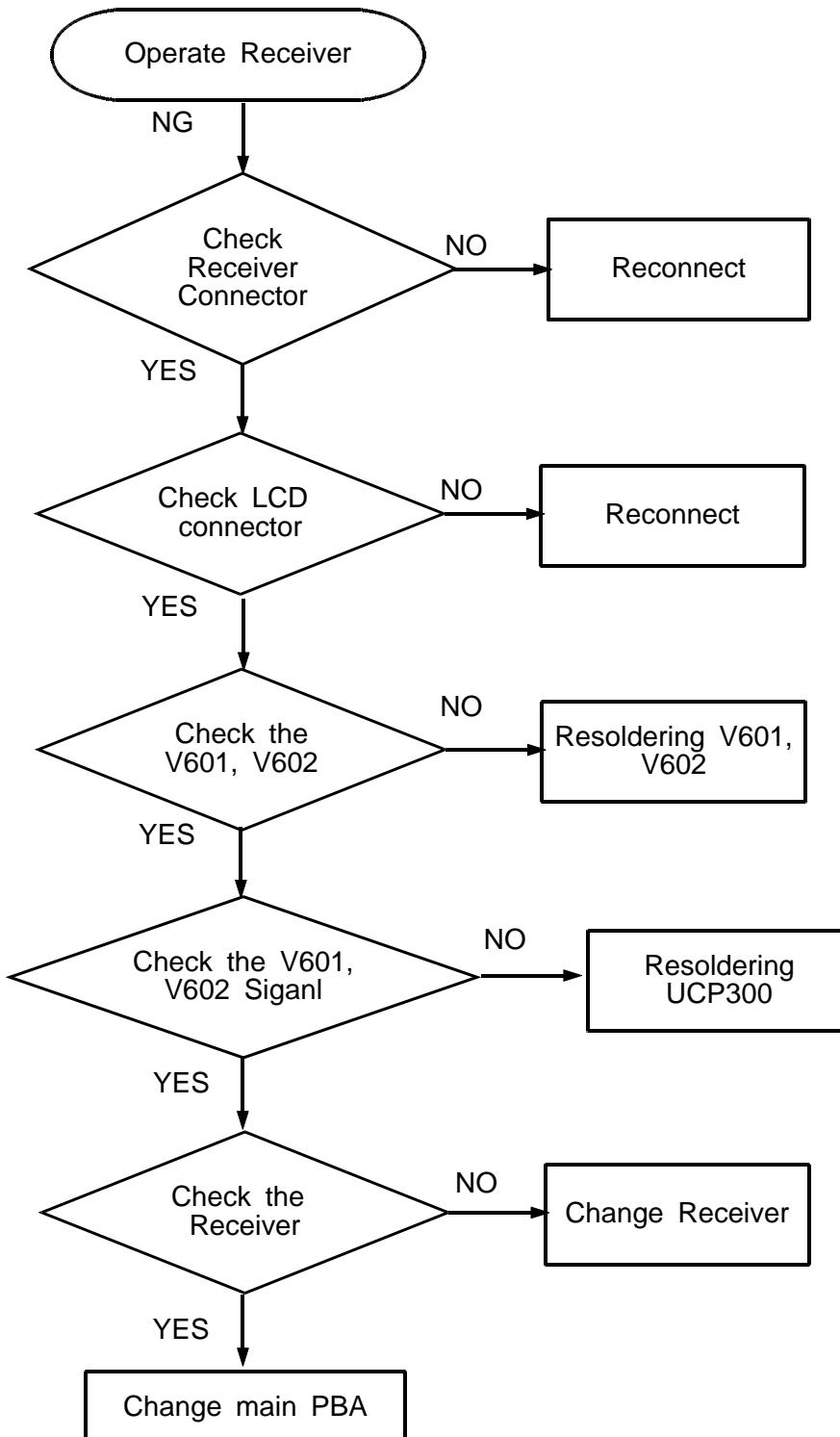
● Speaker Working

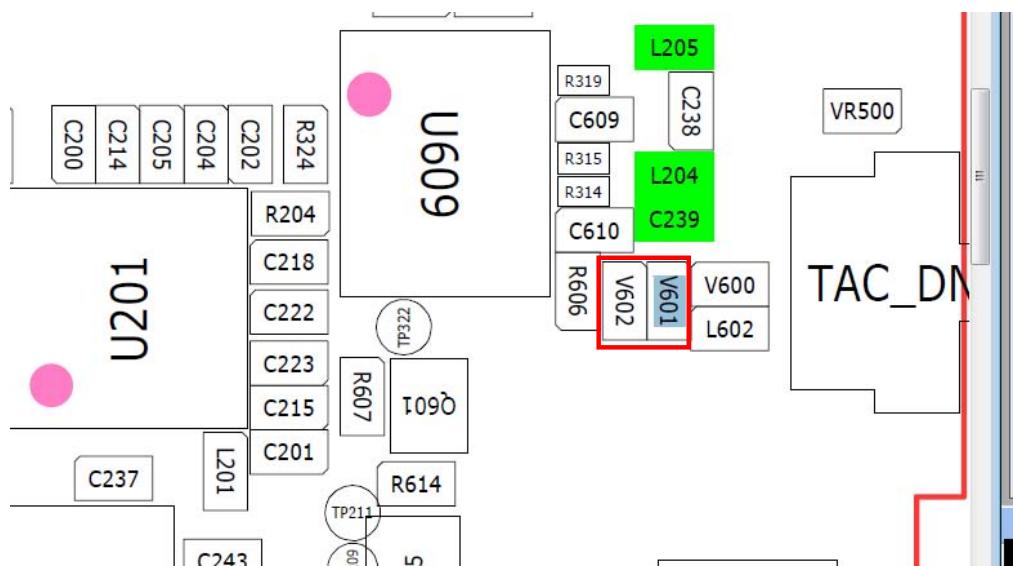
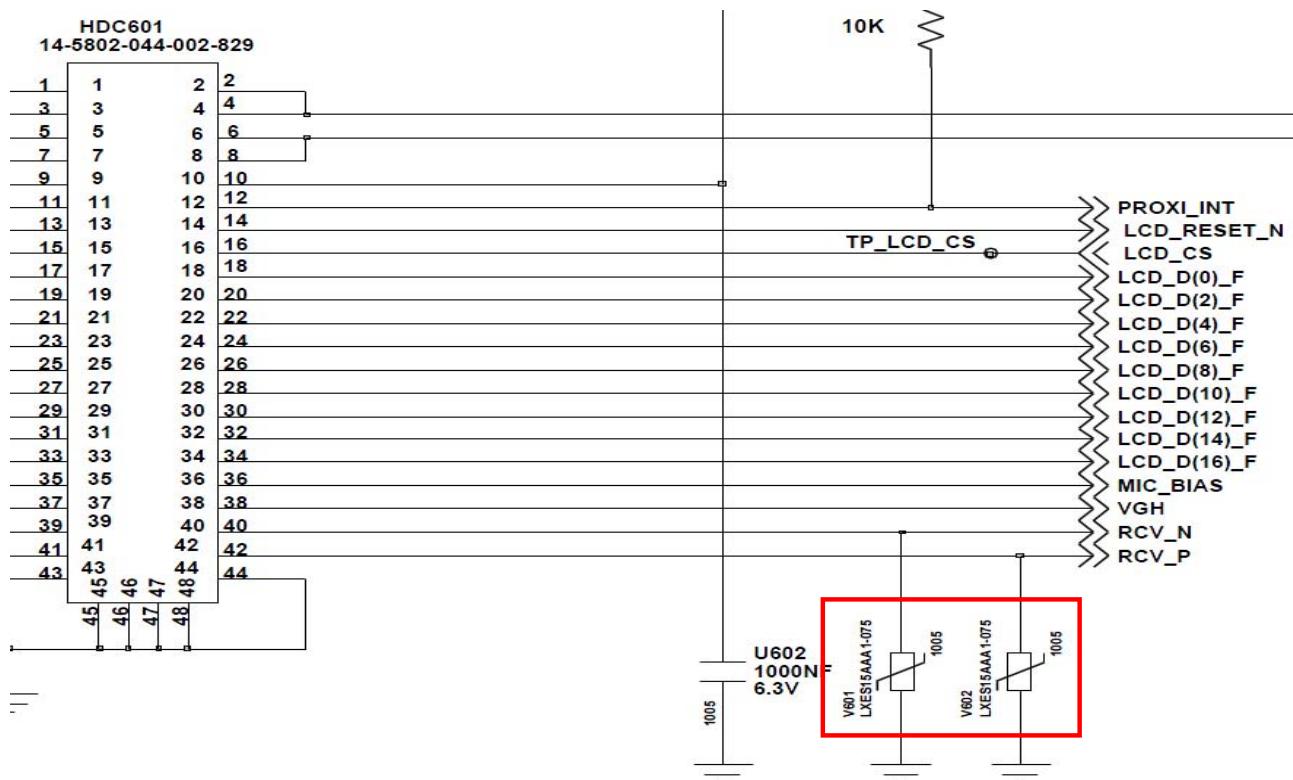




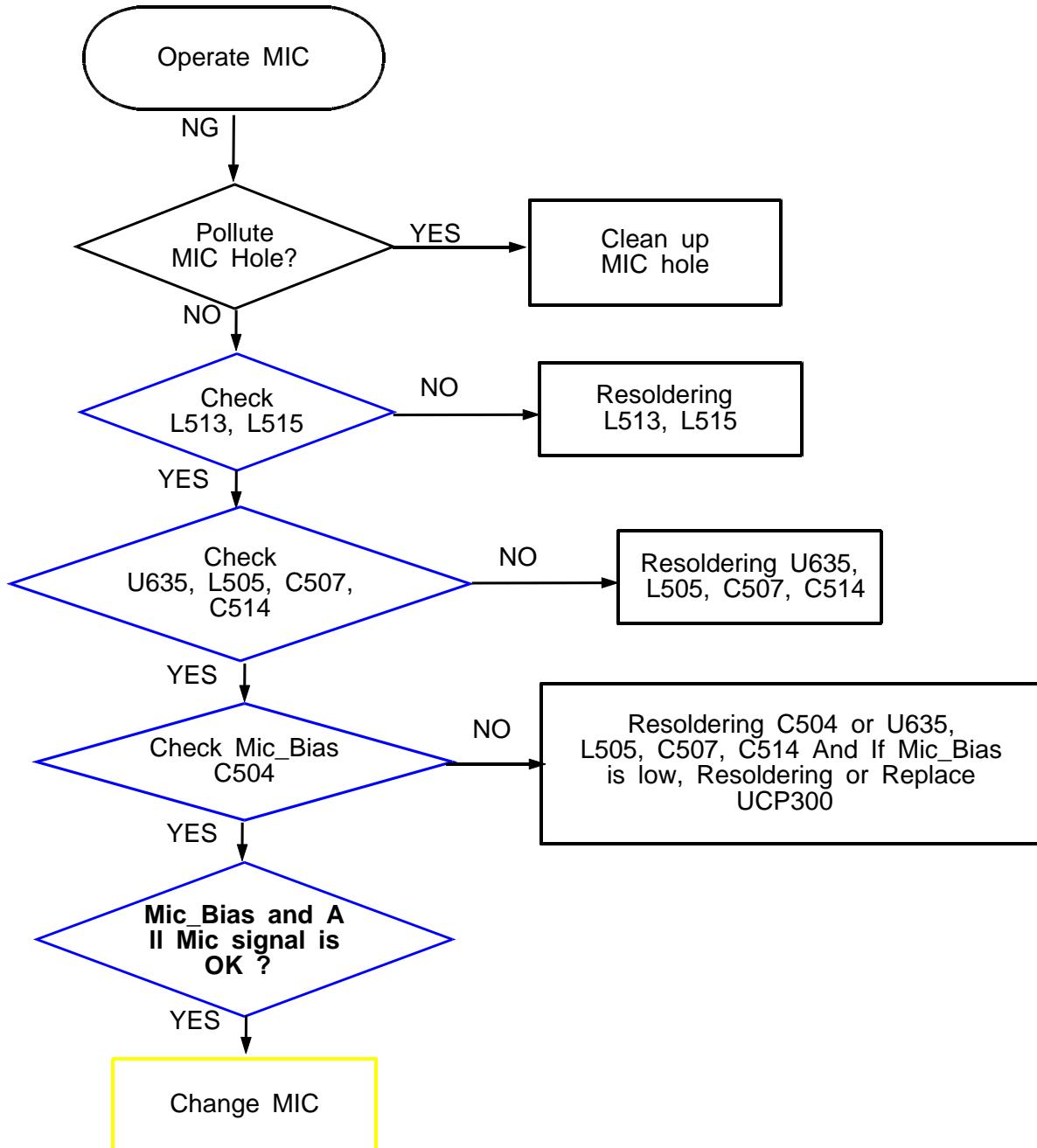


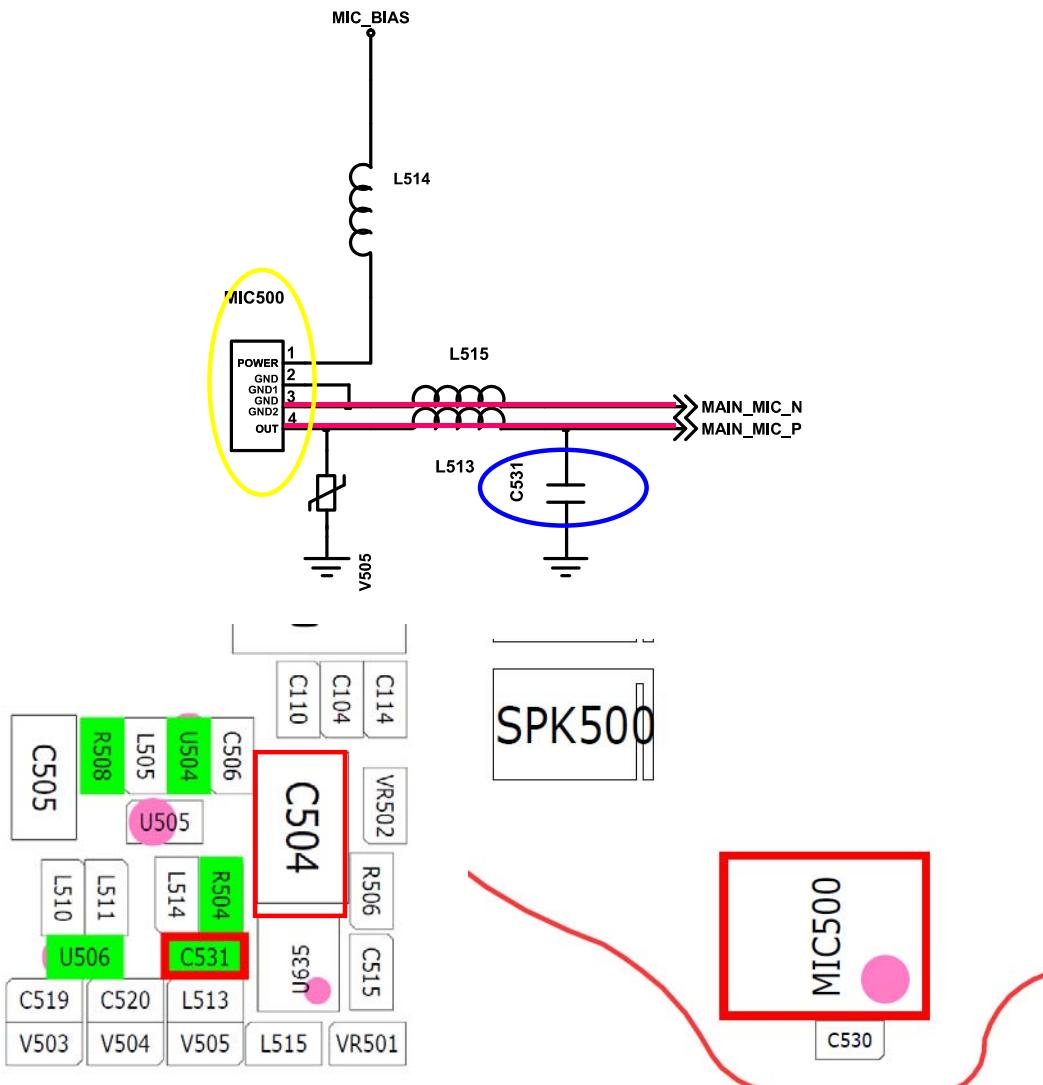
- Receiver Working

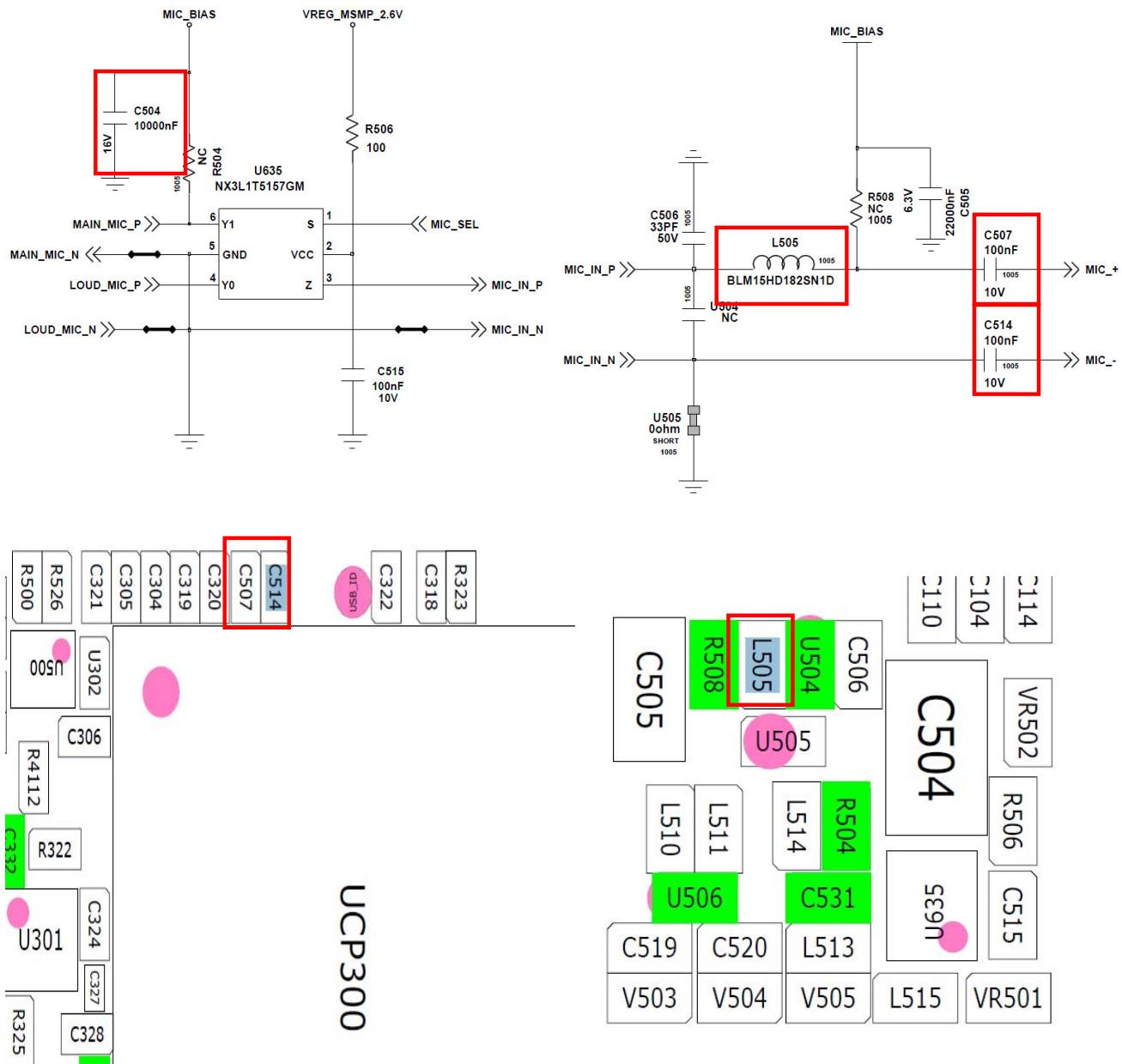


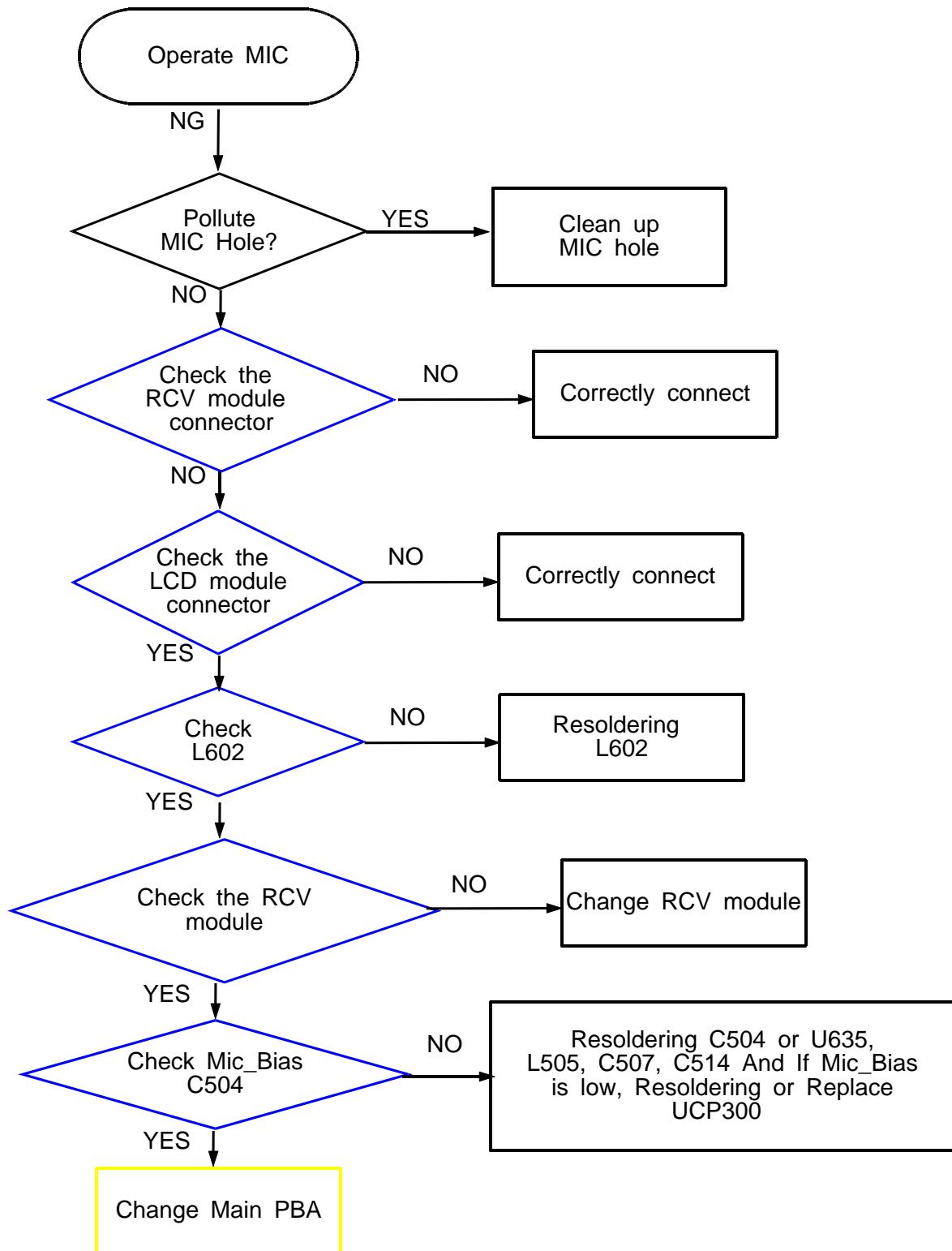


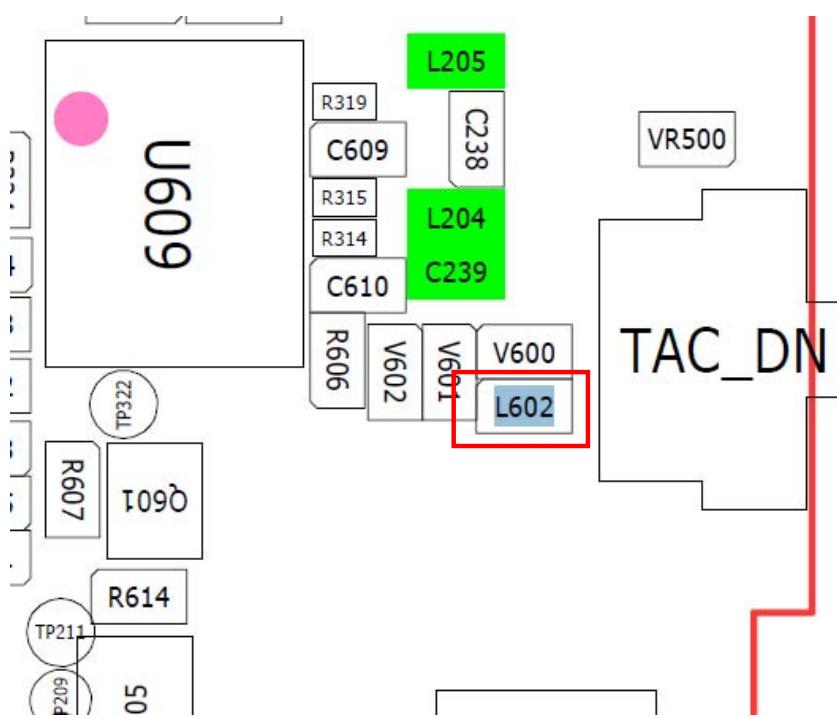
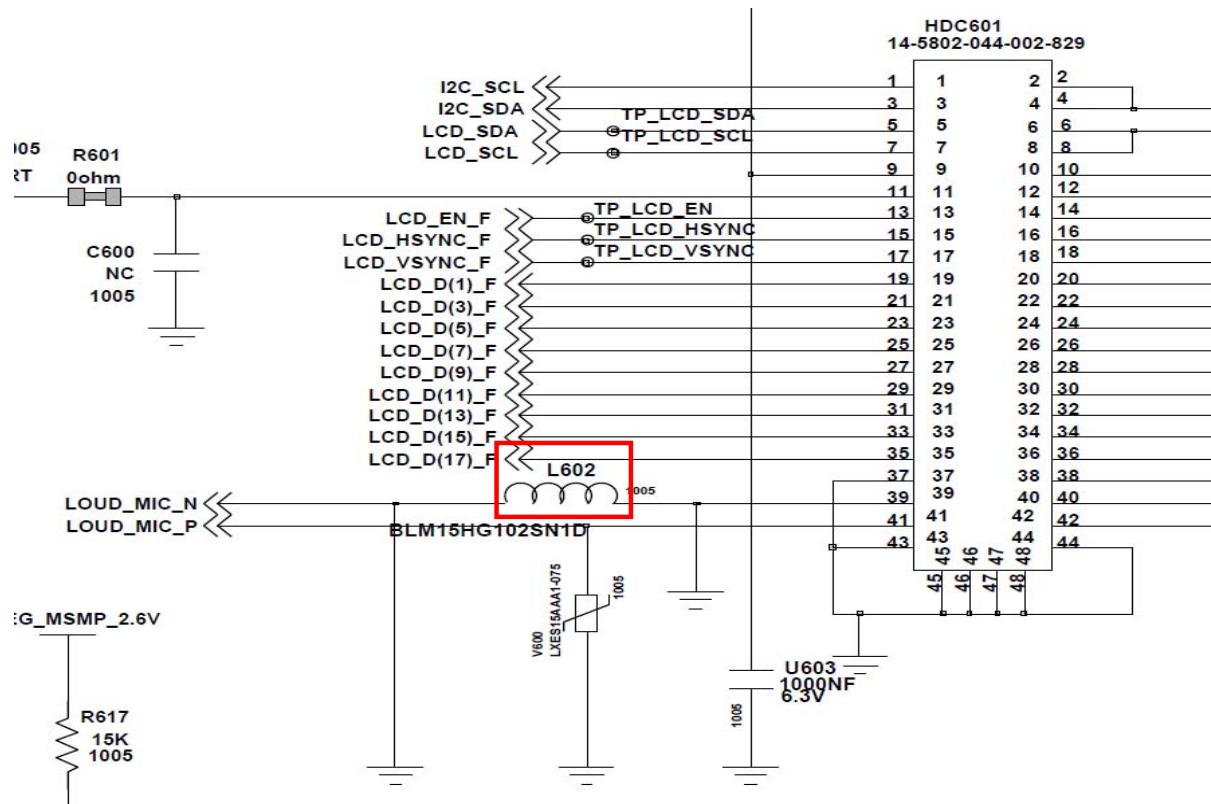
- Main MIC Working



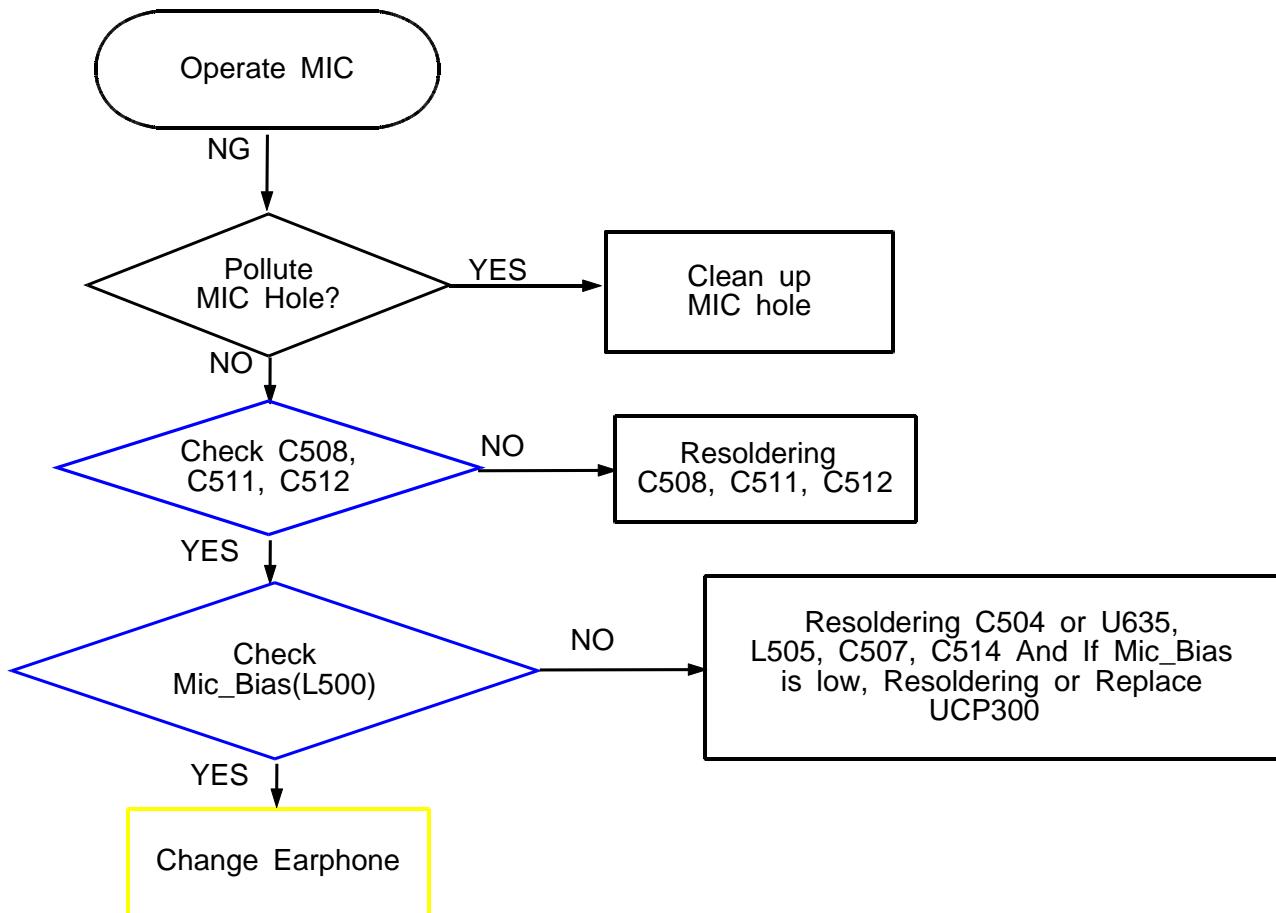


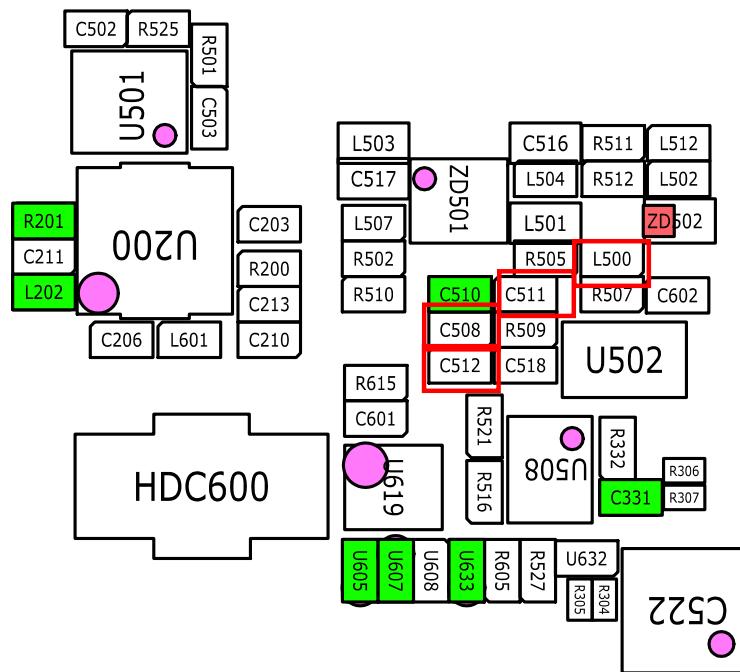
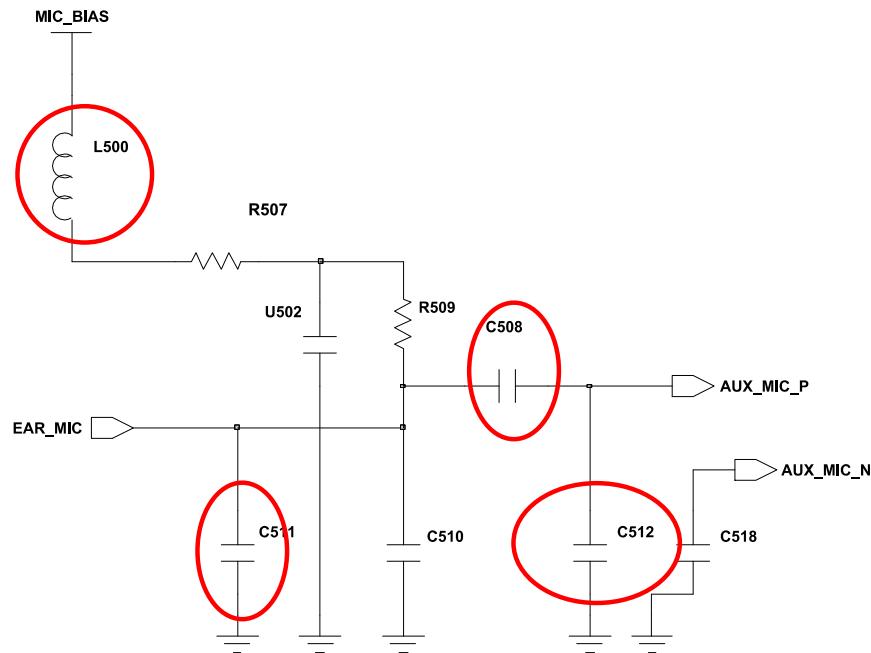


I Sub MIC Working

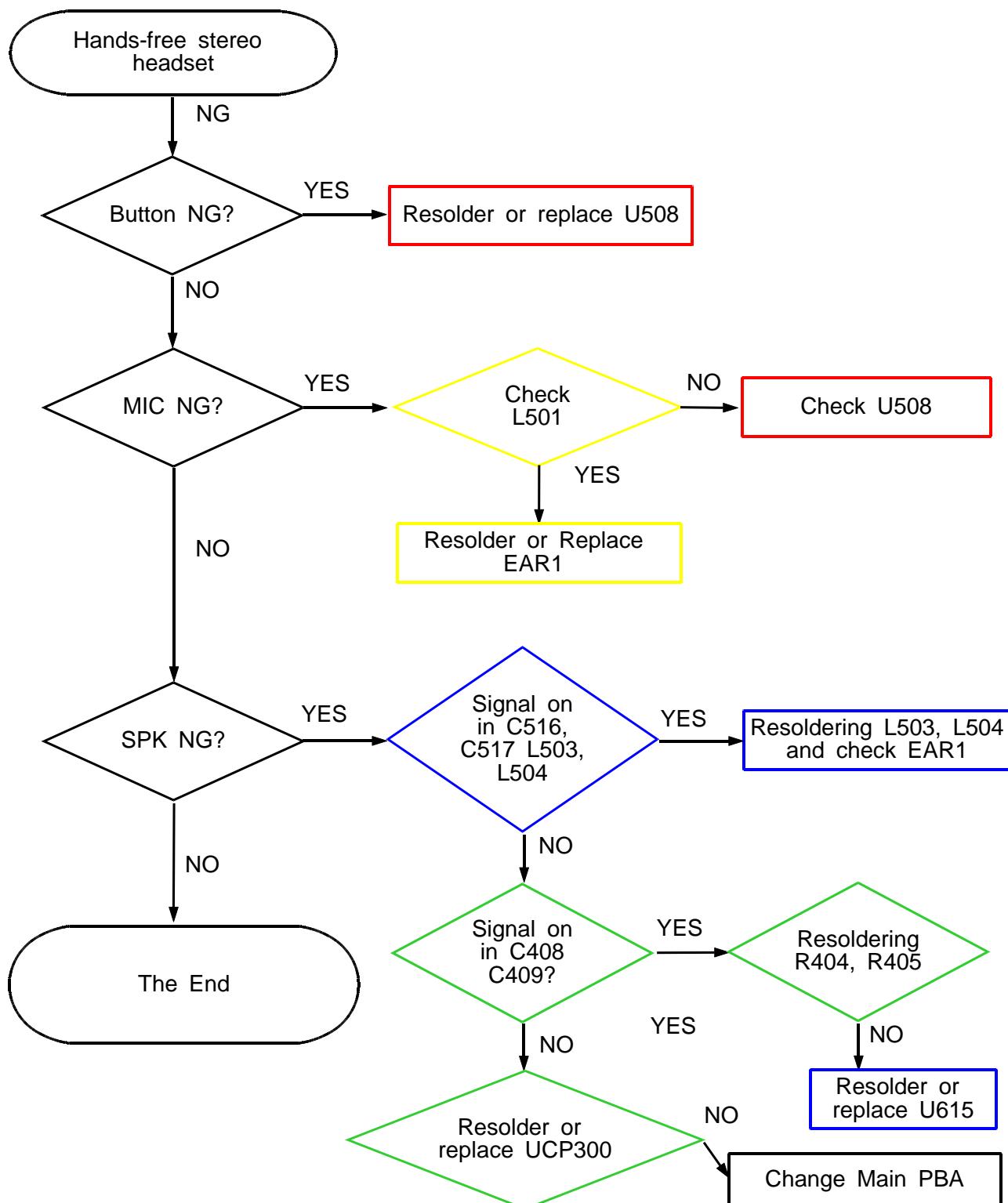


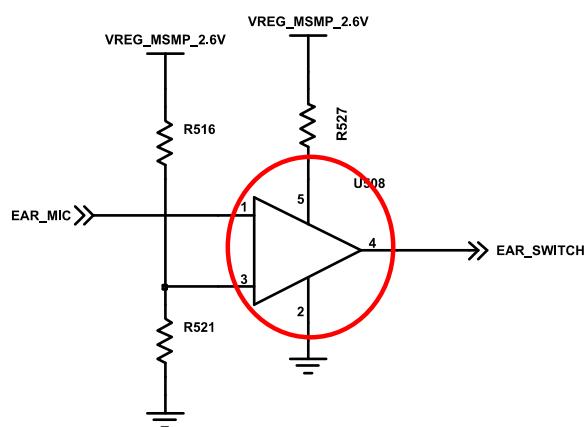
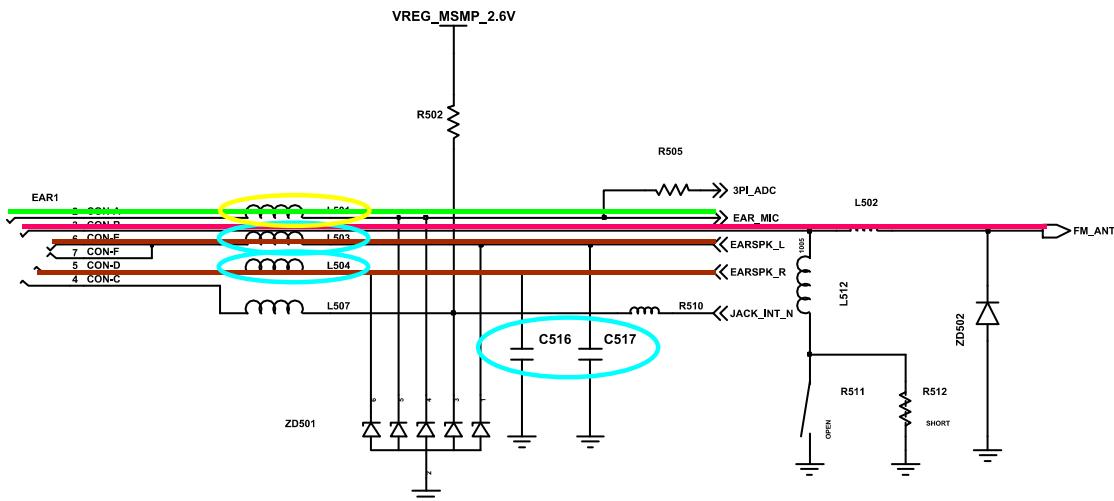
- Ear MIC Working

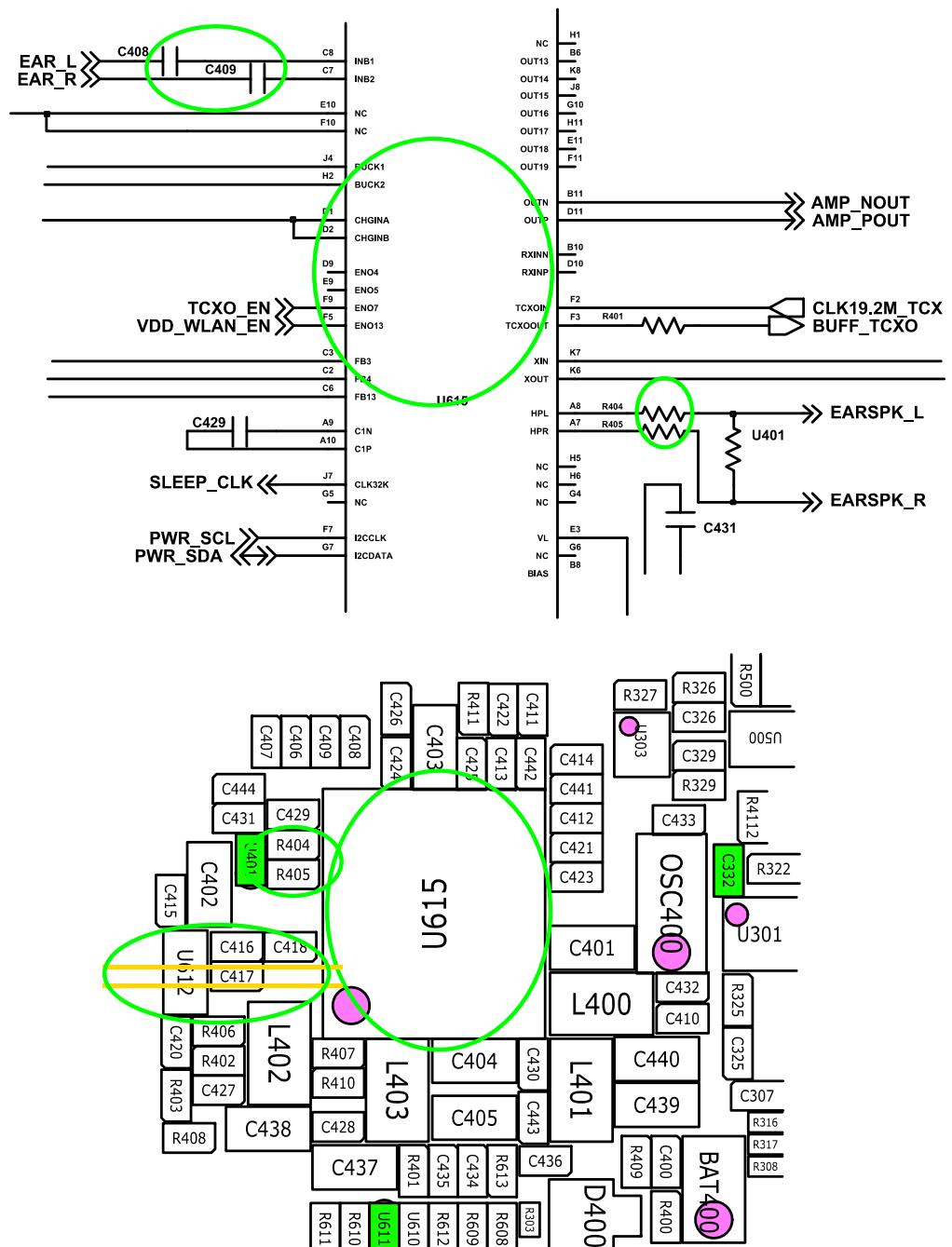




- Stereo Headset Working

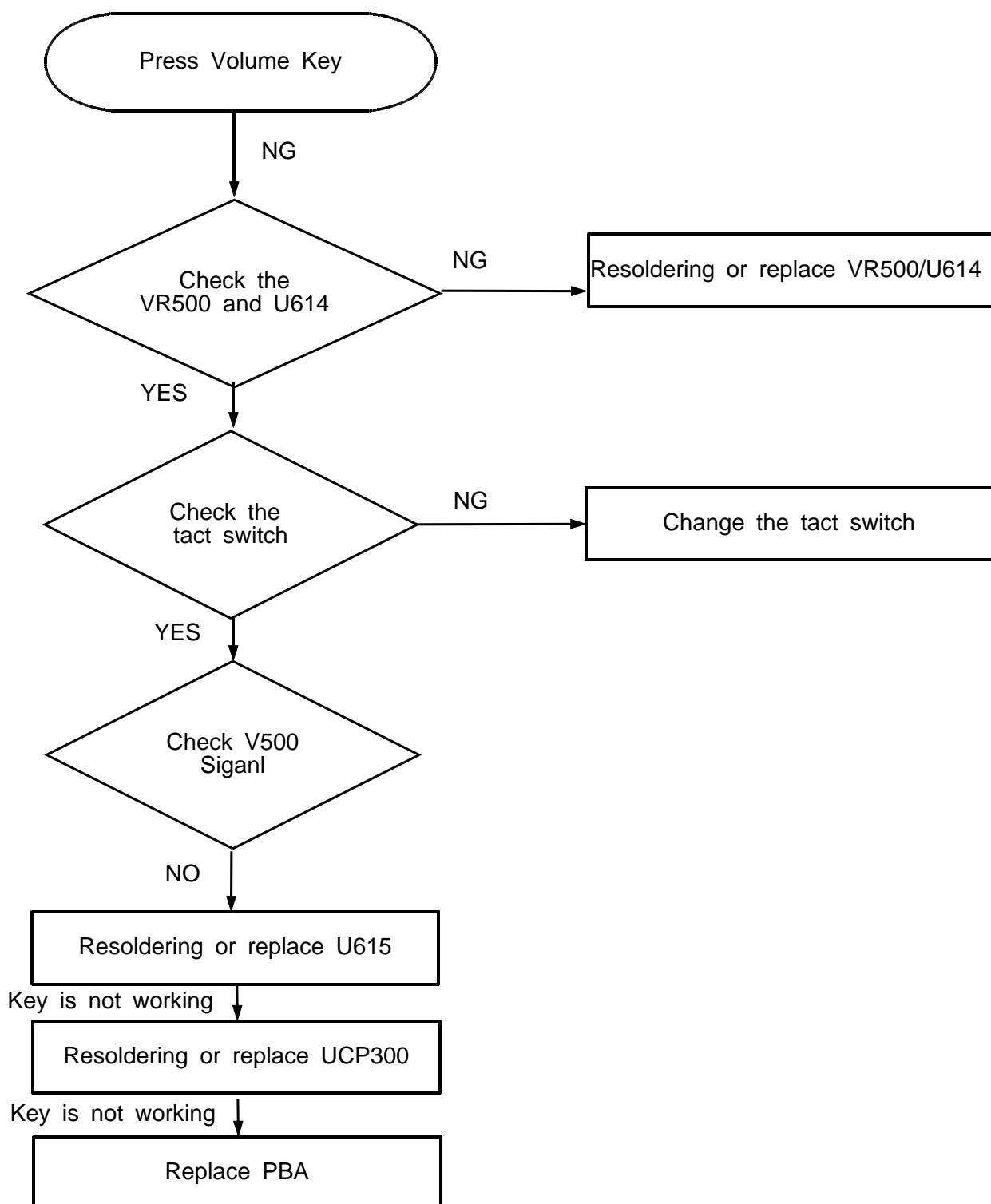


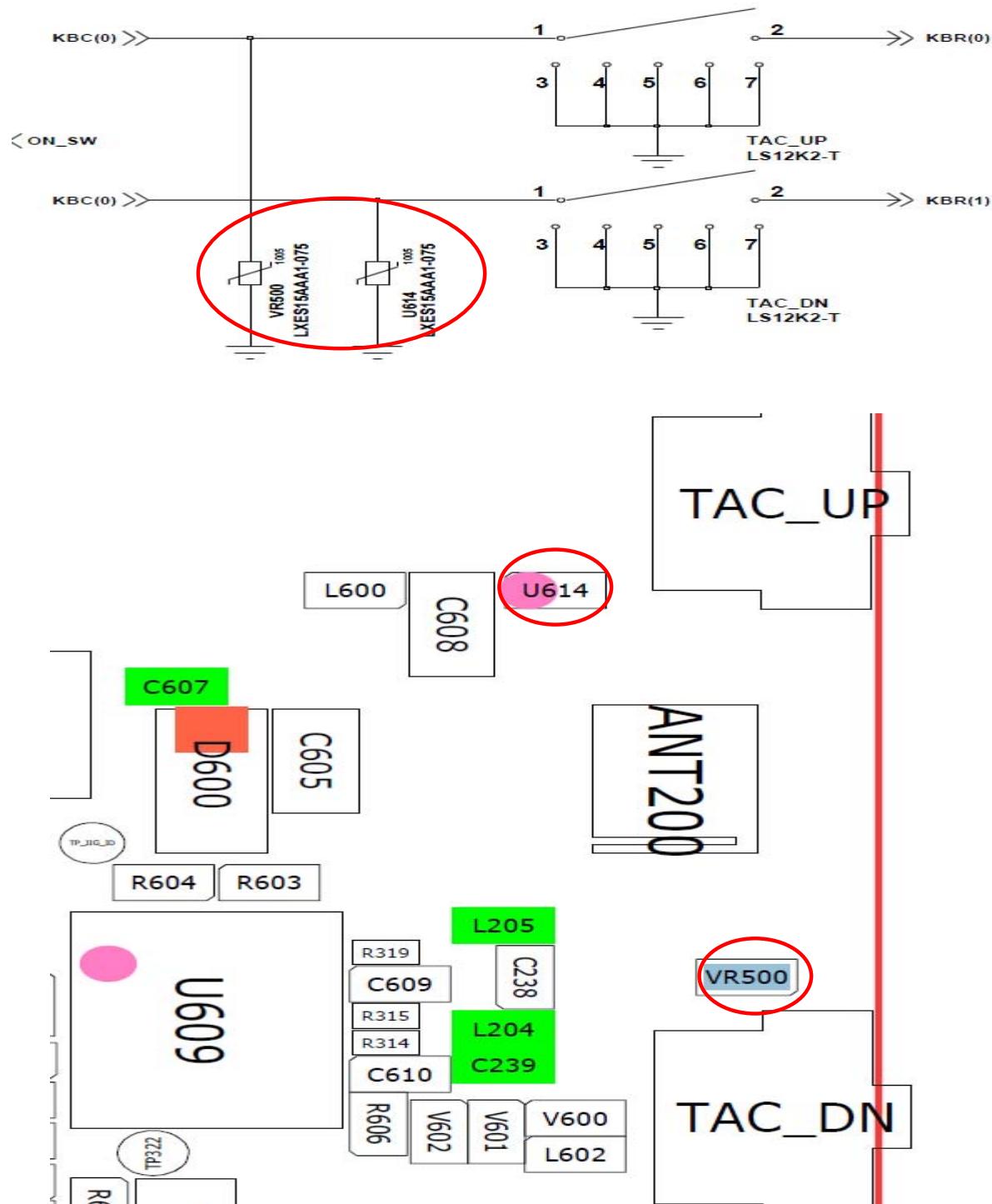




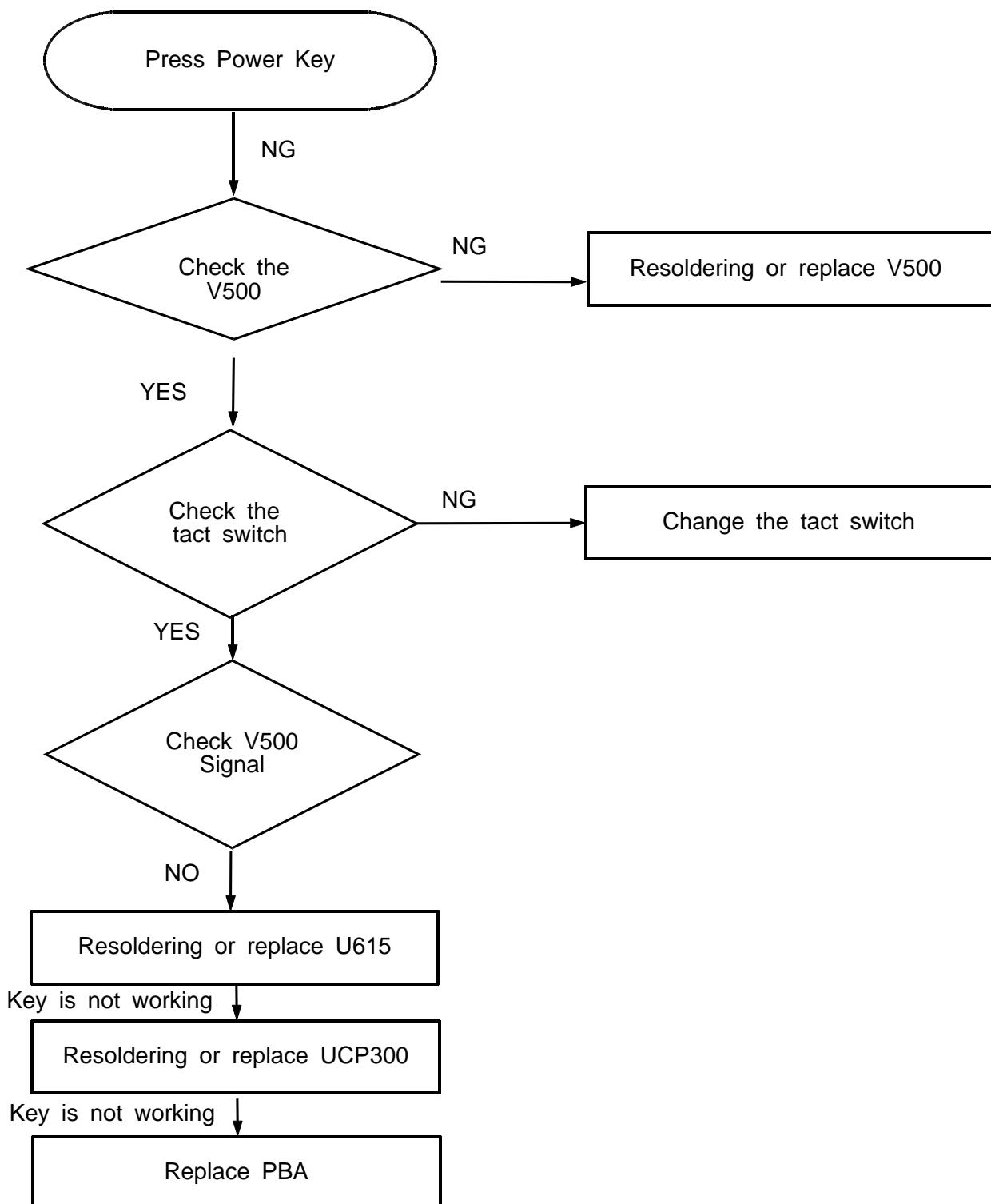
## 8-3-5. KEY Working

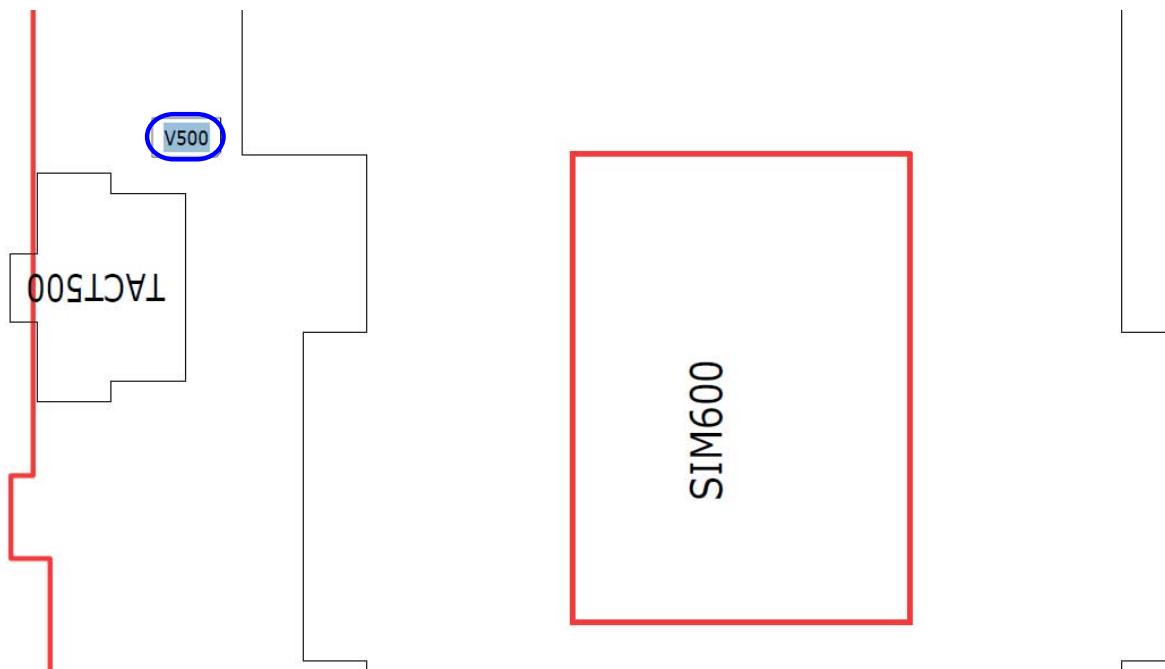
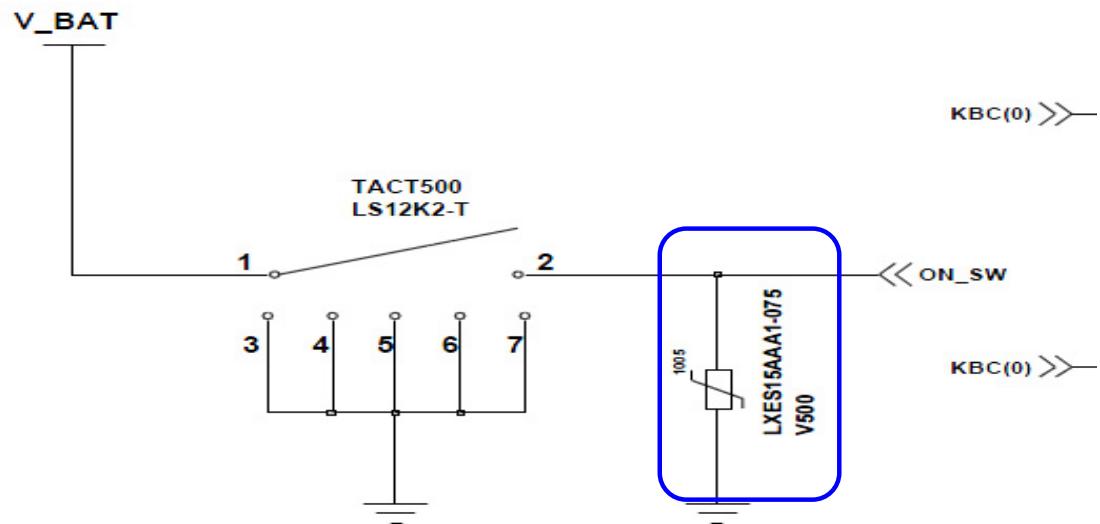
- Volume KEY

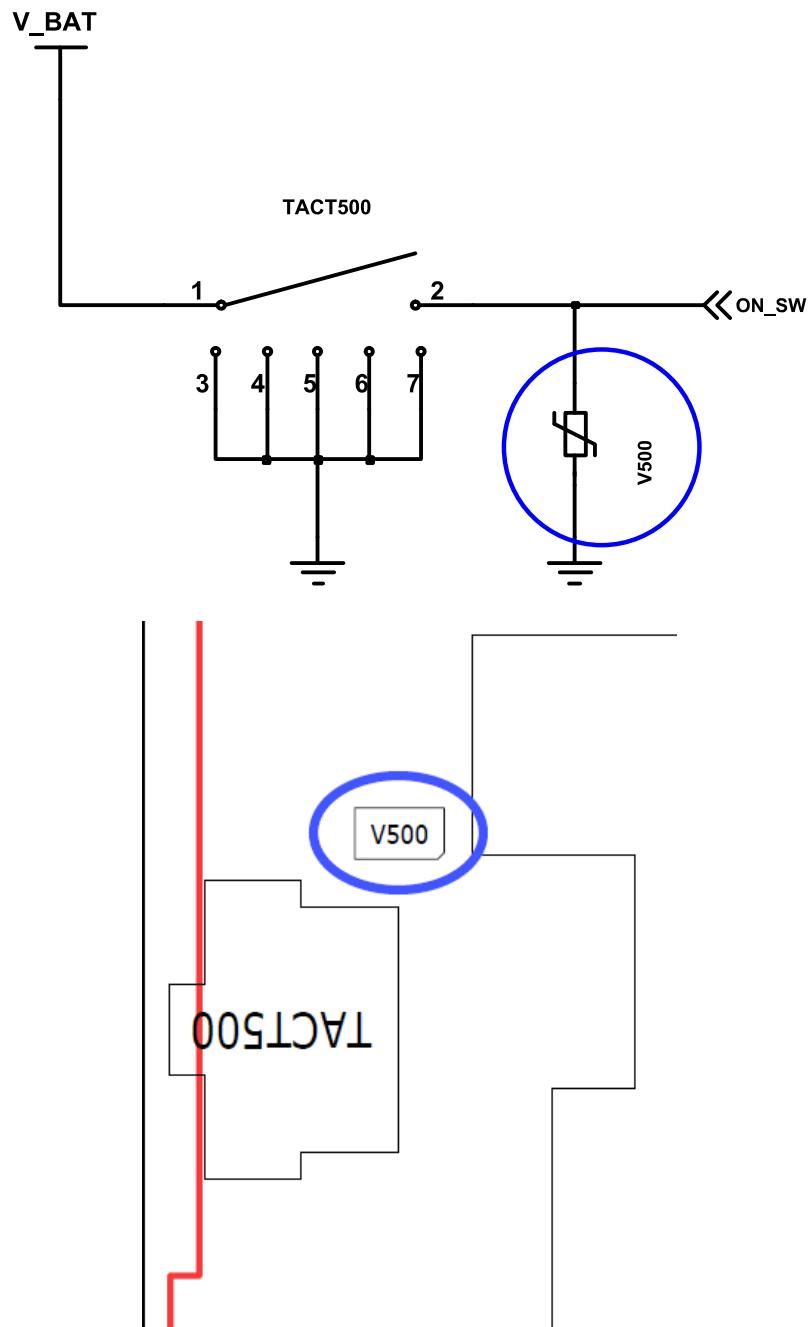




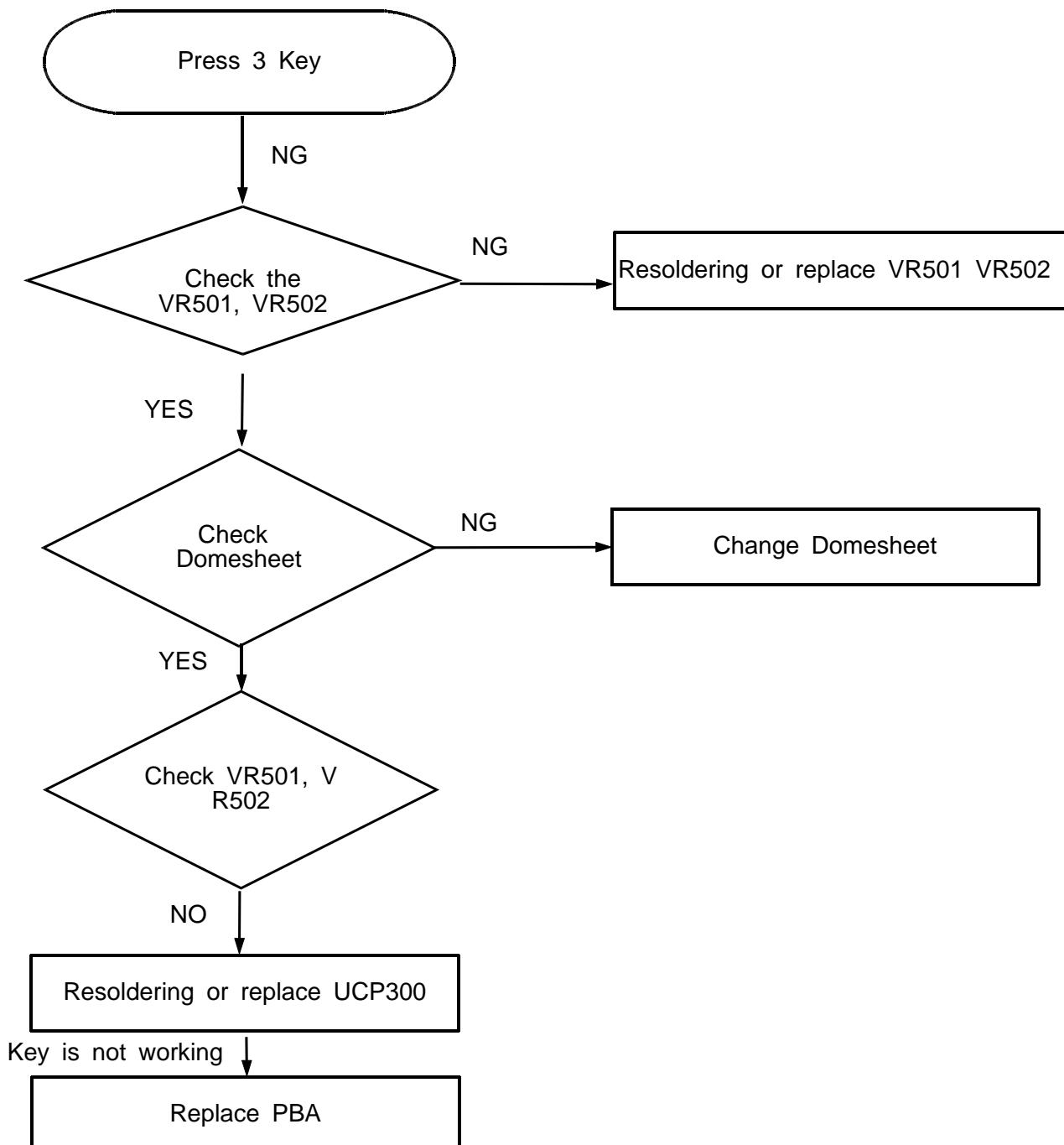
- Power Key

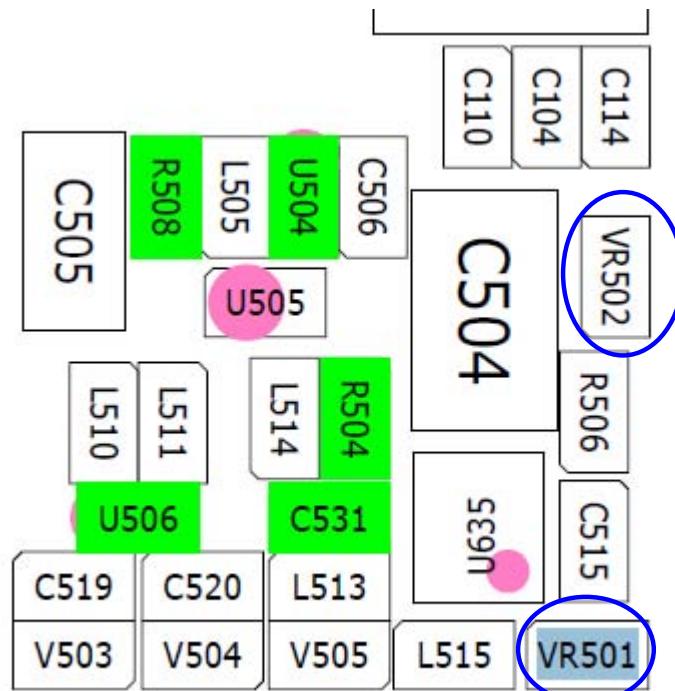
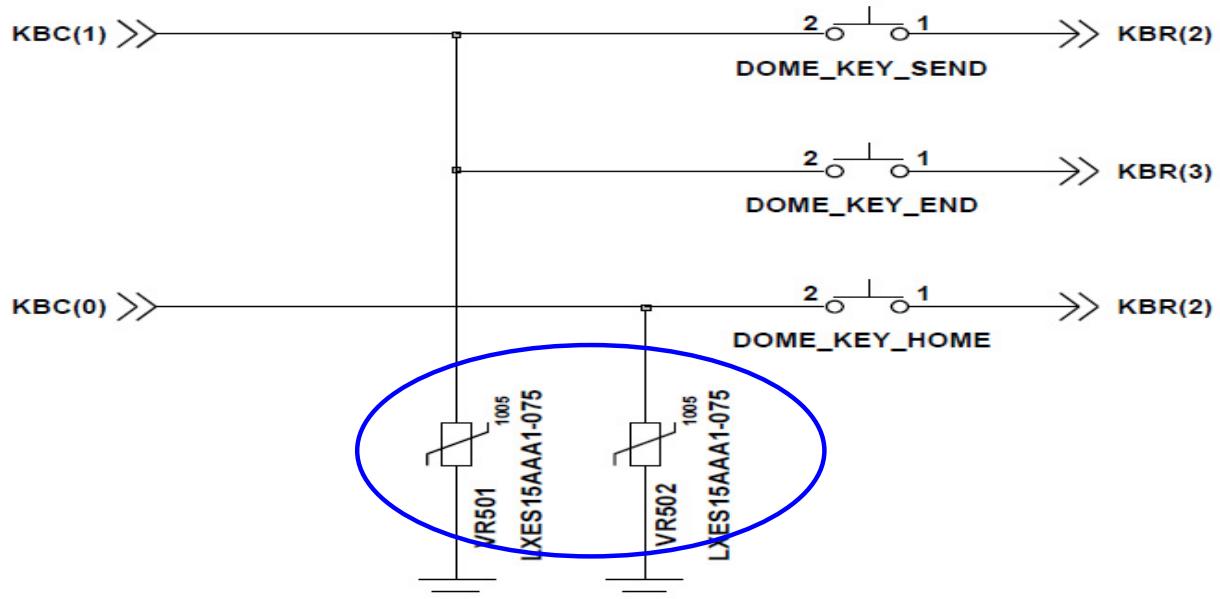




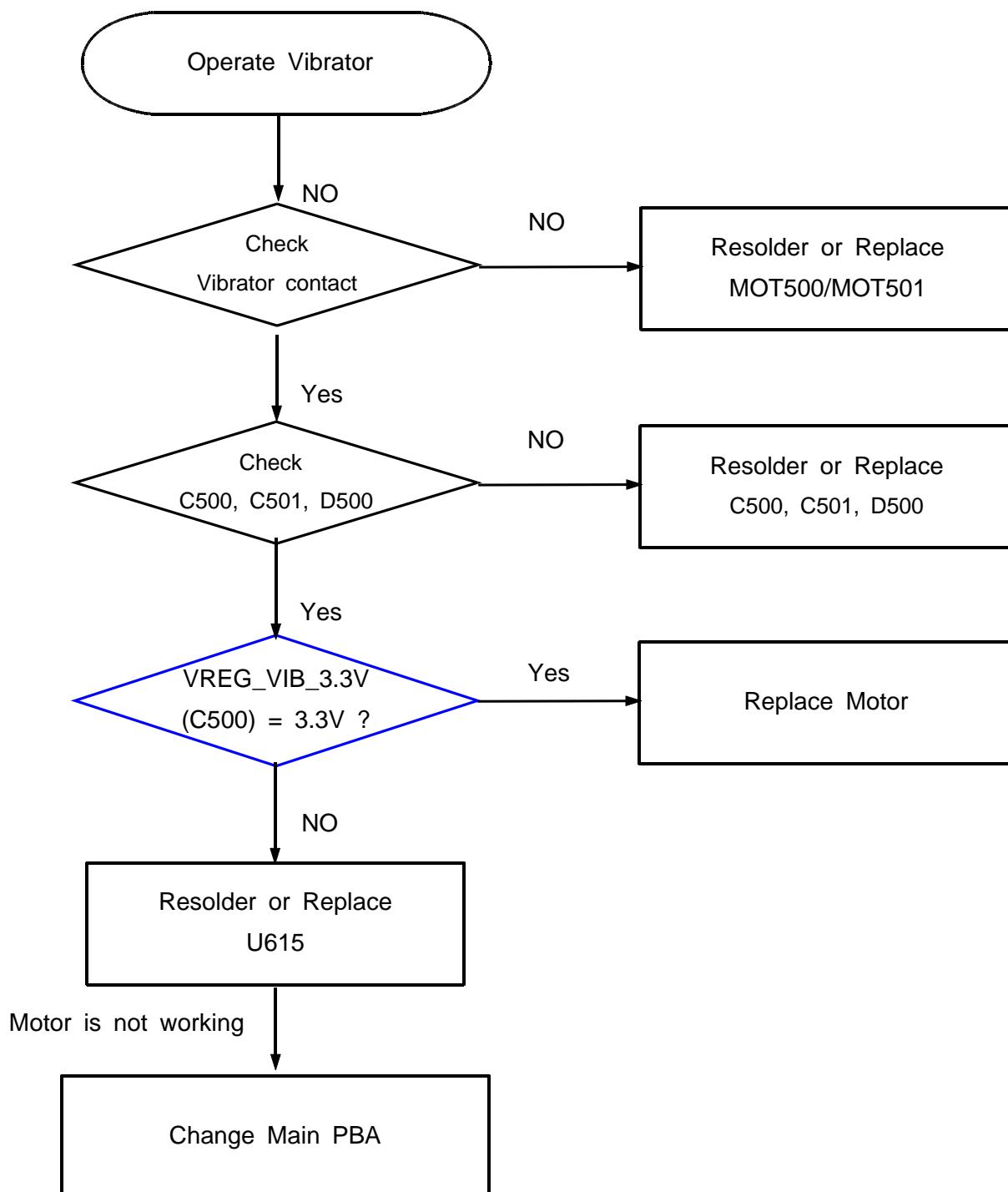


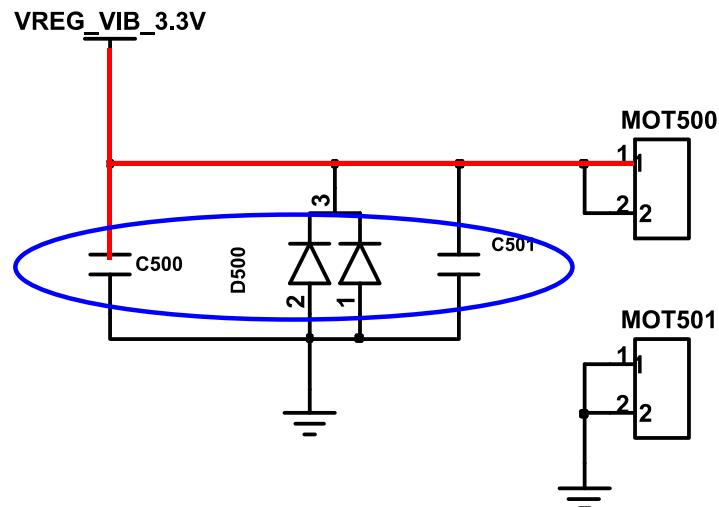
- 3 Key
- 



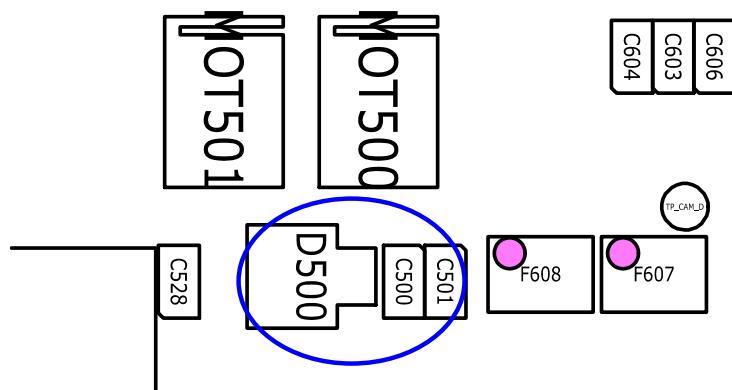


## 8-3-6. Vibrator Working

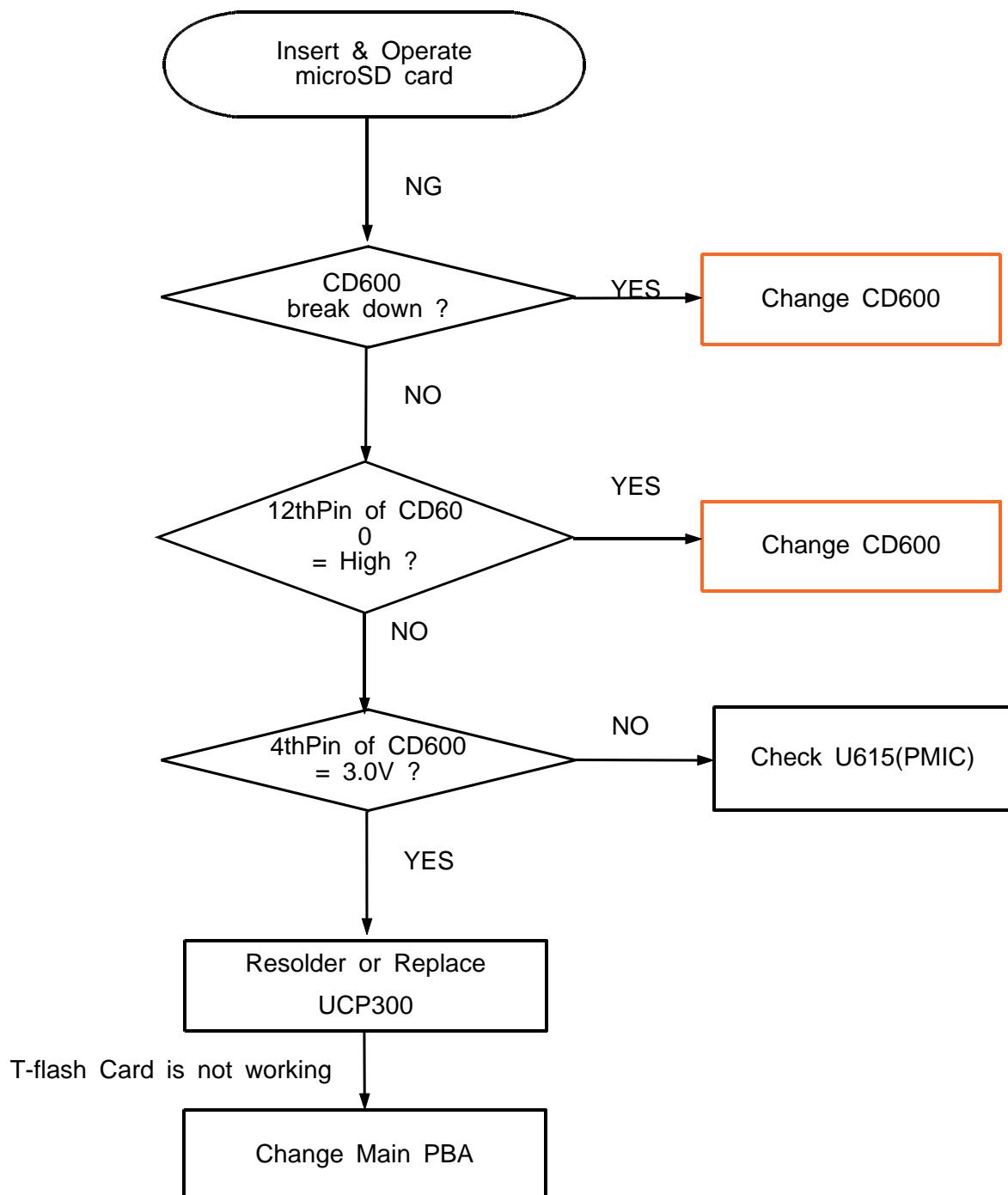


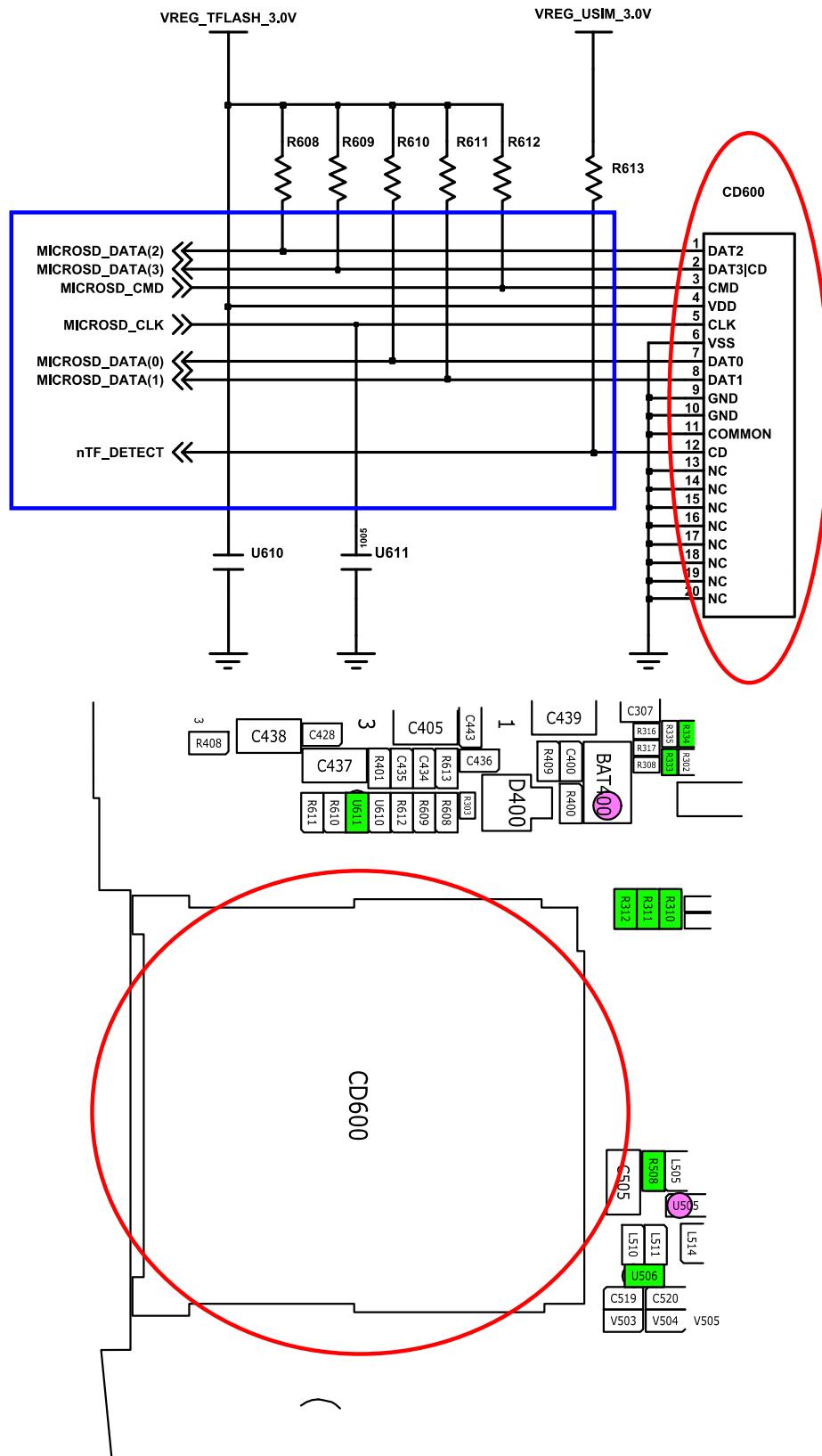


# MOTOR

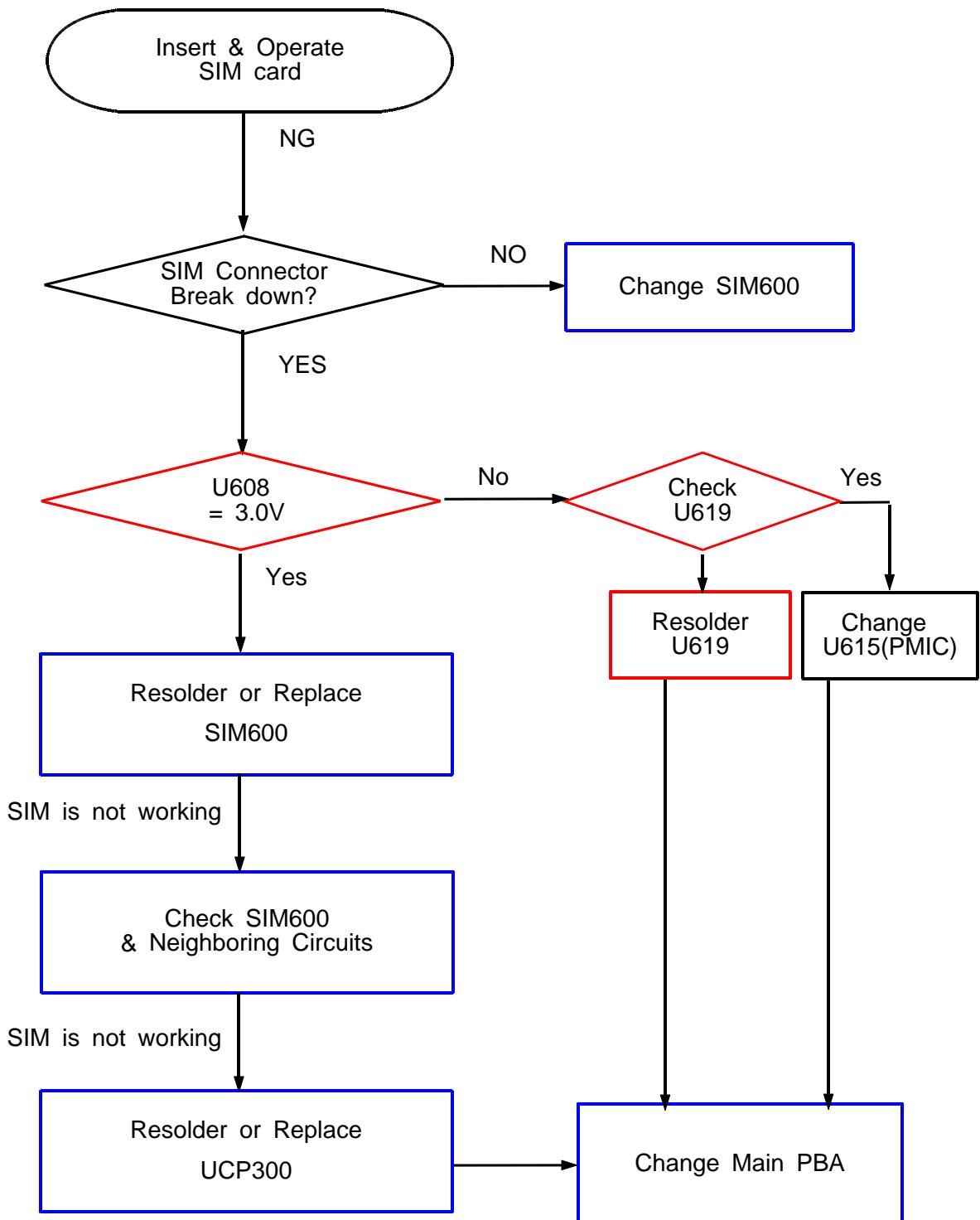


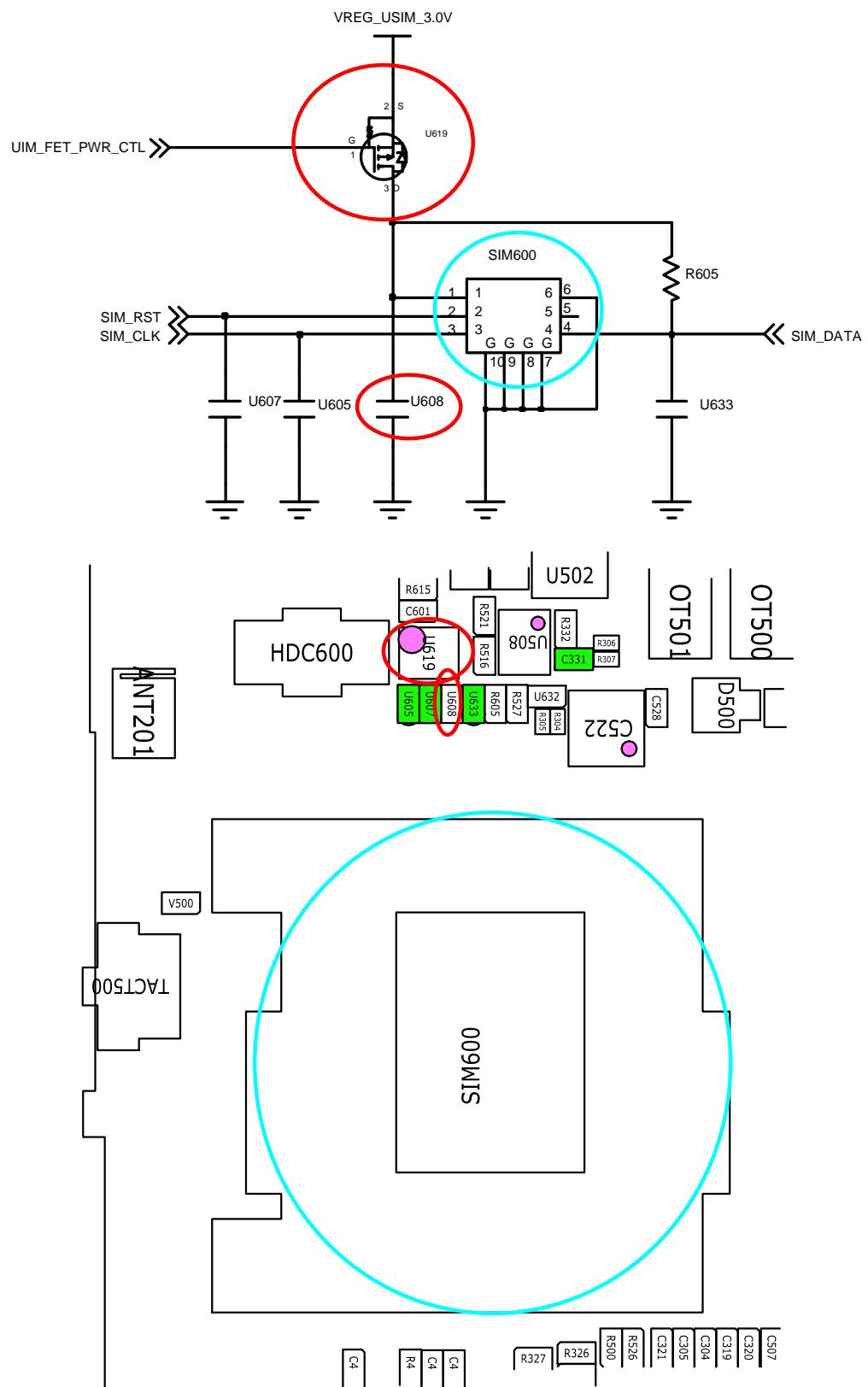
## 8-3-7. T-Flash Card Working

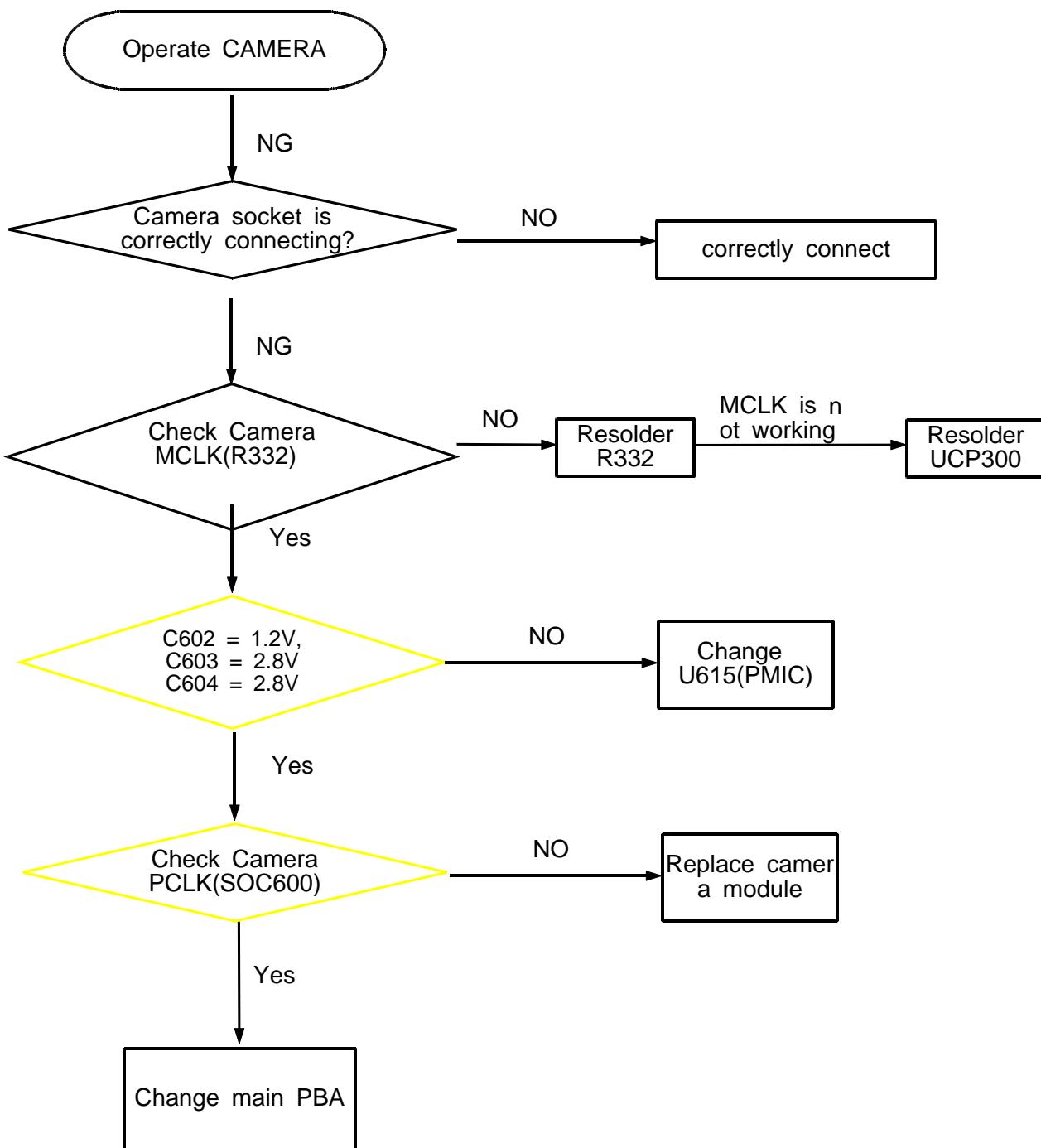


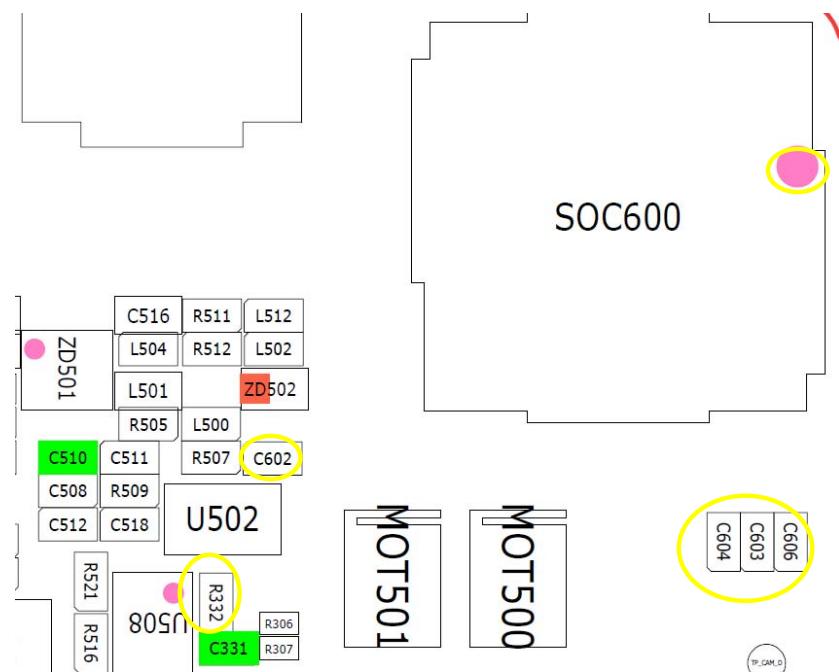
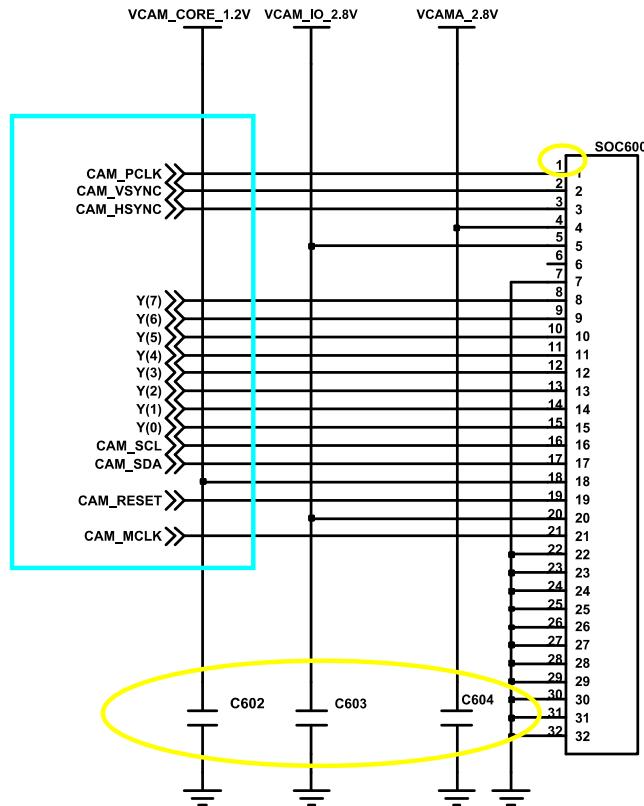


## 8-3-8. SIM Card Working





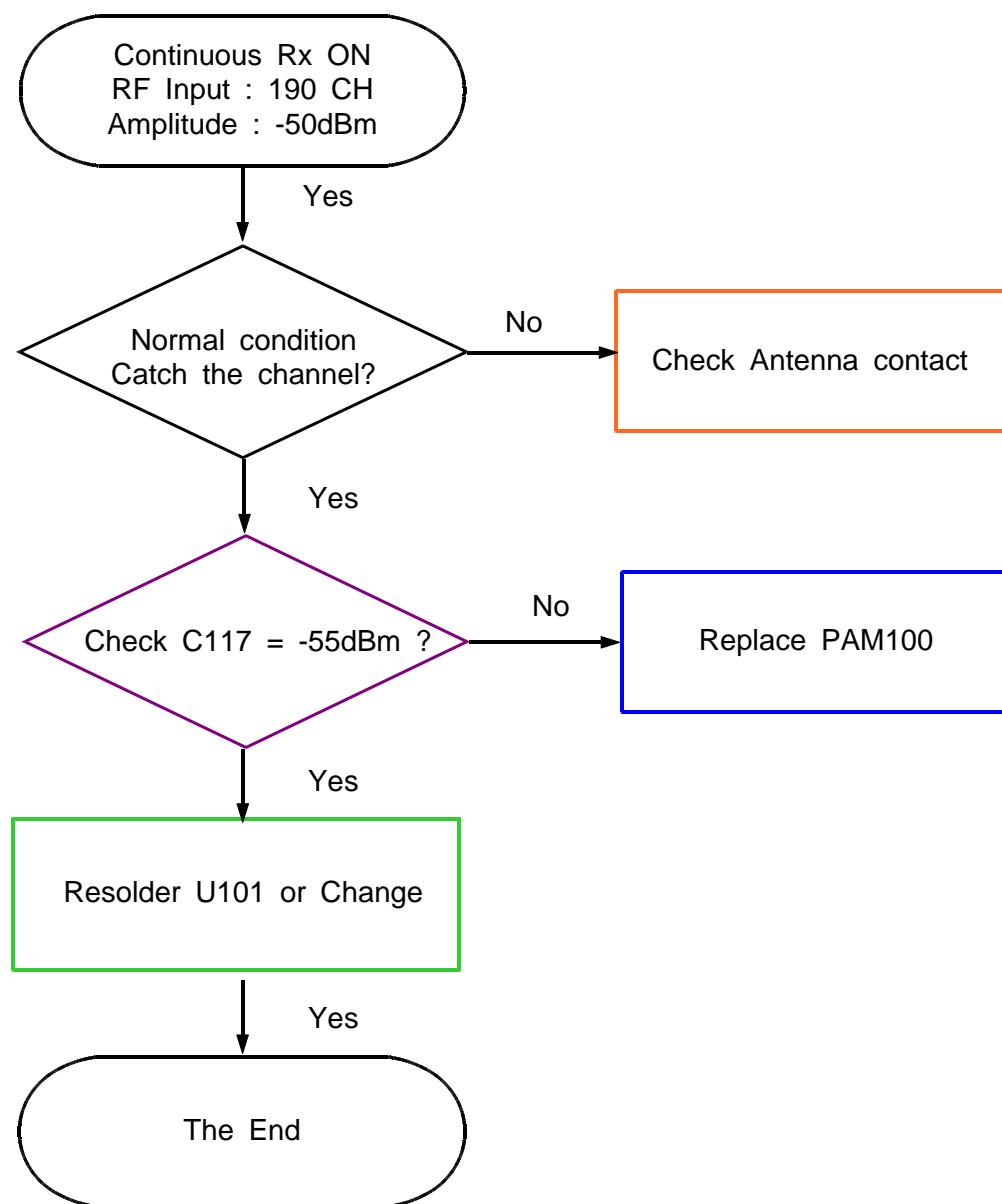
**8-3-9 CAMERA Working**



### 8-4-1. GSM850 RX

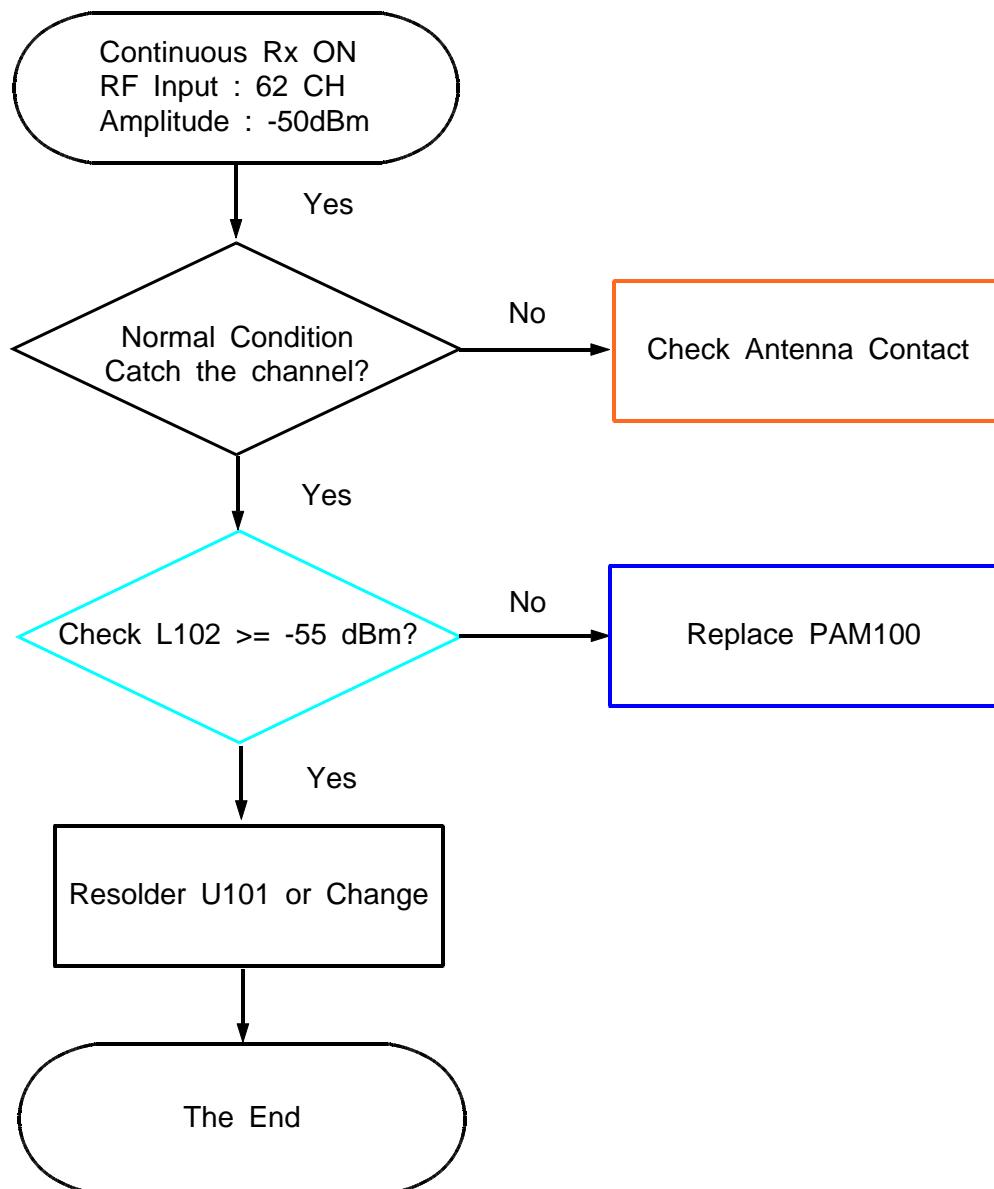
\*\*If you check the tx chain,

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



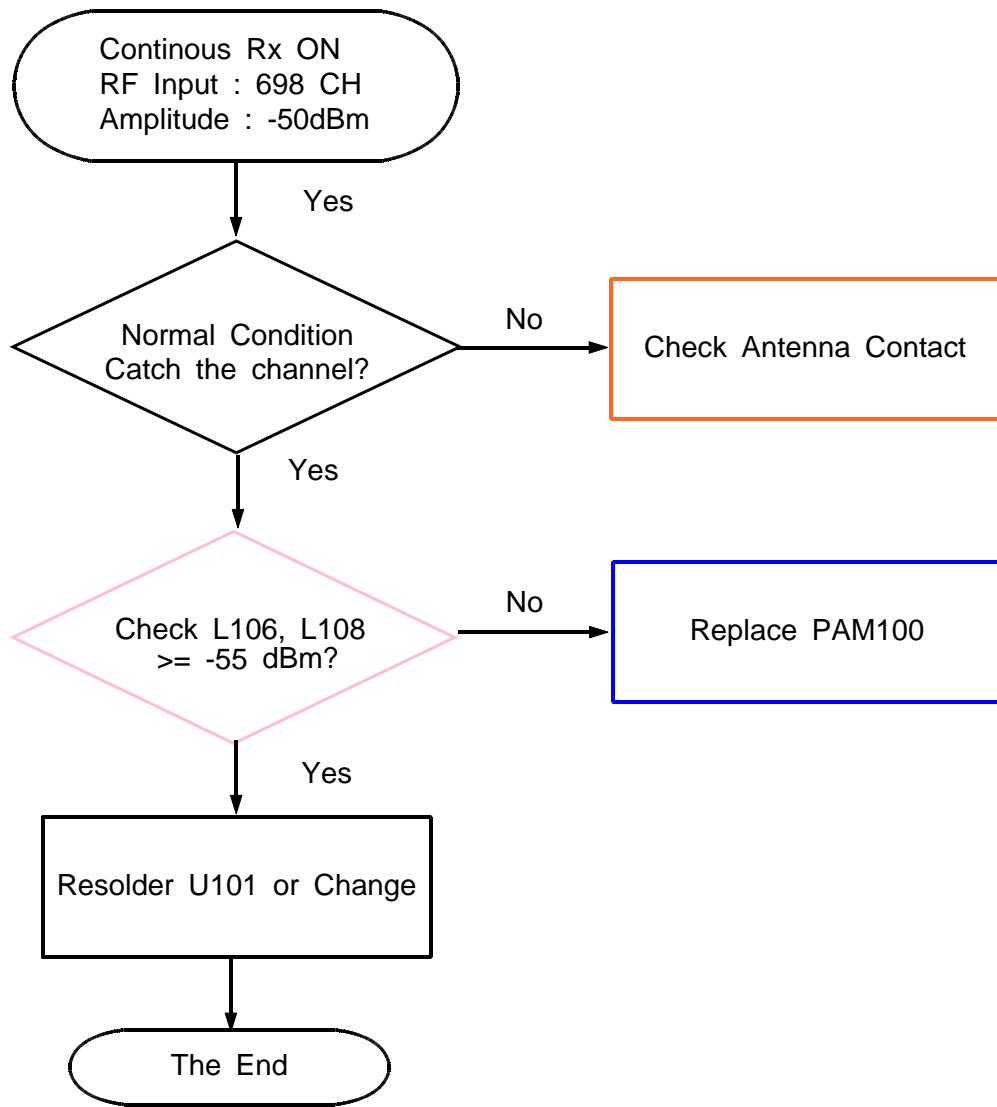
## 8-4-2. GSM900 RX

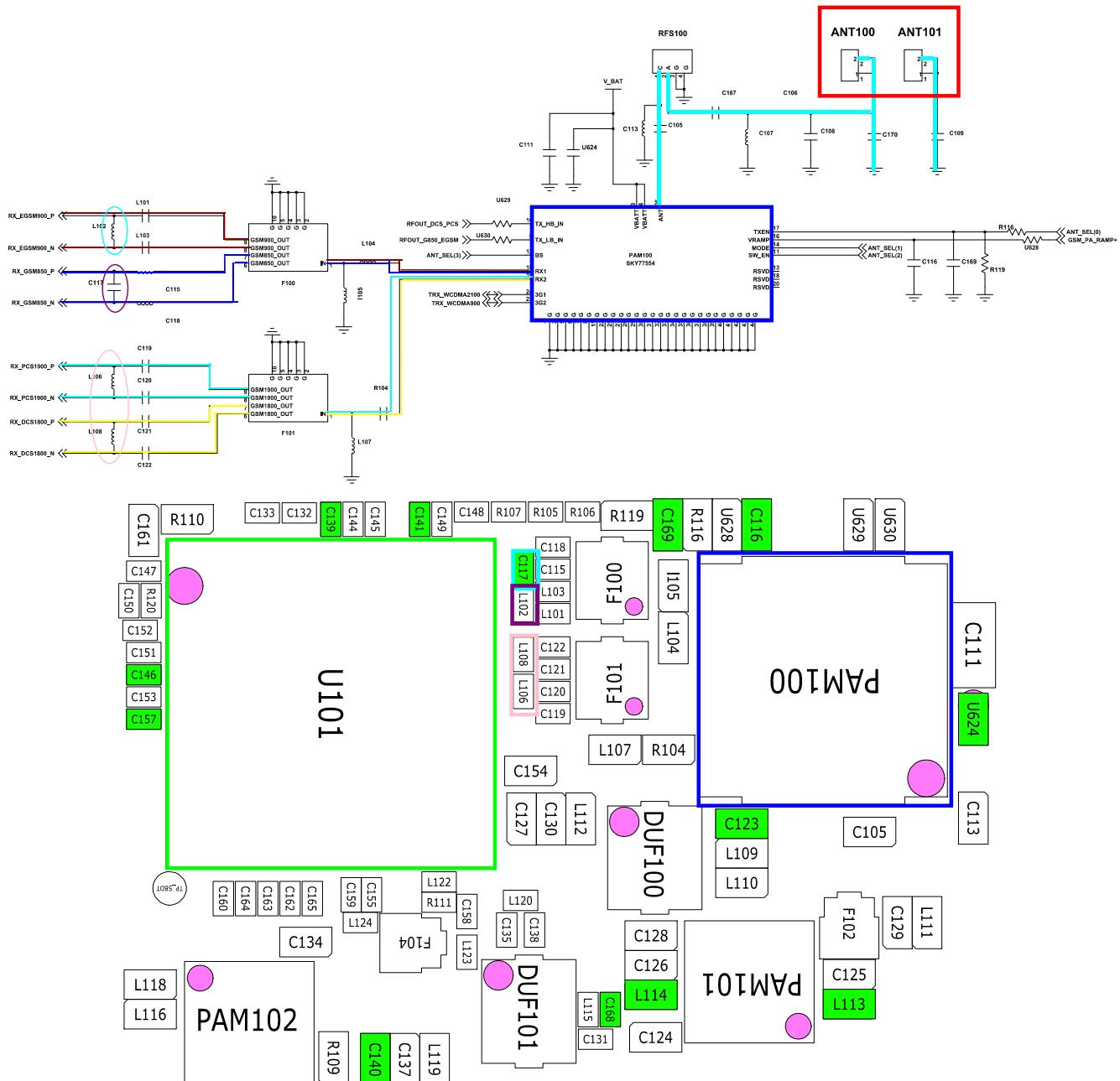
\*\*If you check the tx chain,  
Check the not only RF Device but also resistor, inductor and capacitor.



### 8-4-3. DCS/PCS RX

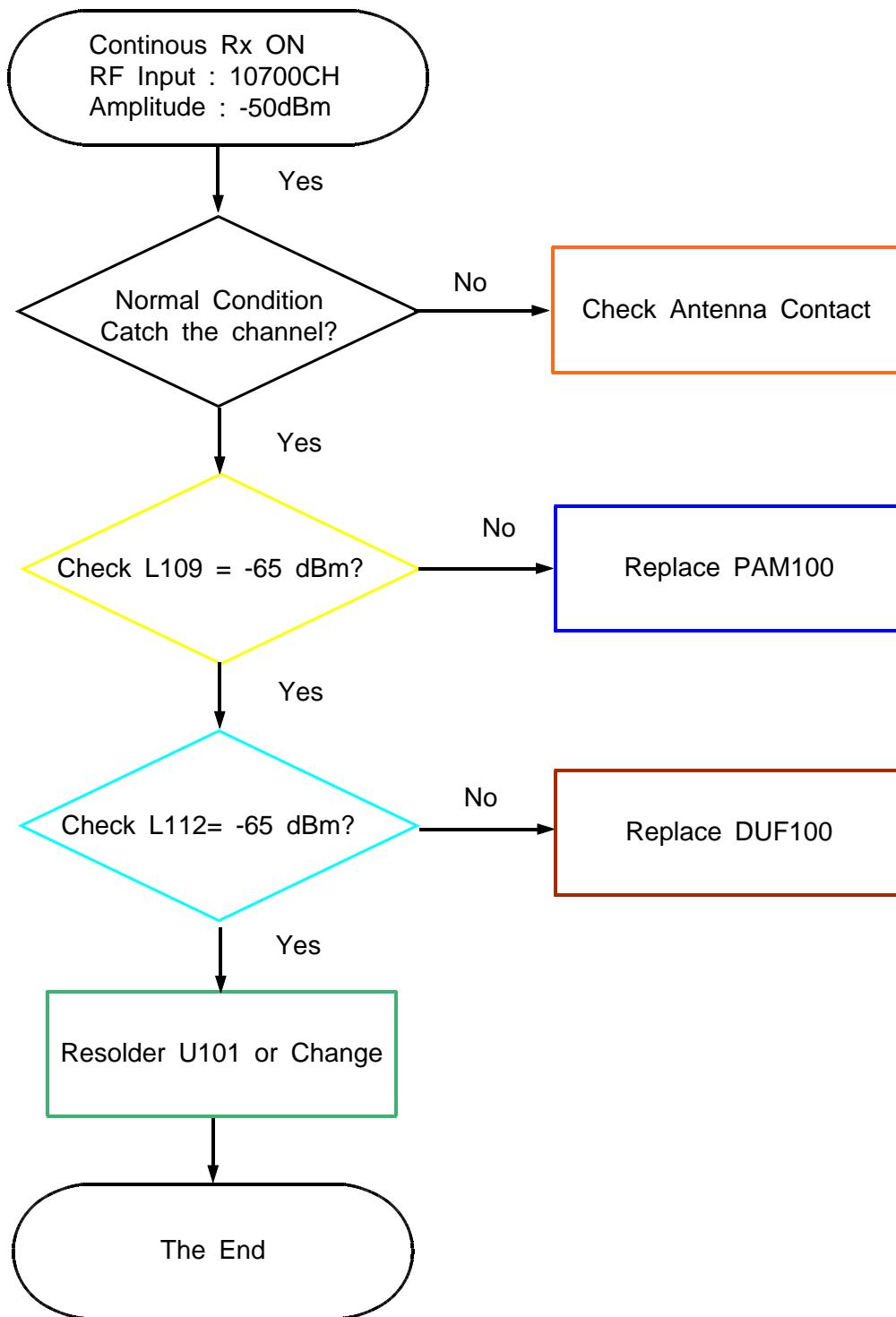
\*\*If you check the tx chain,  
Check the not only RF Device but also resistor, inductor and capacitor.





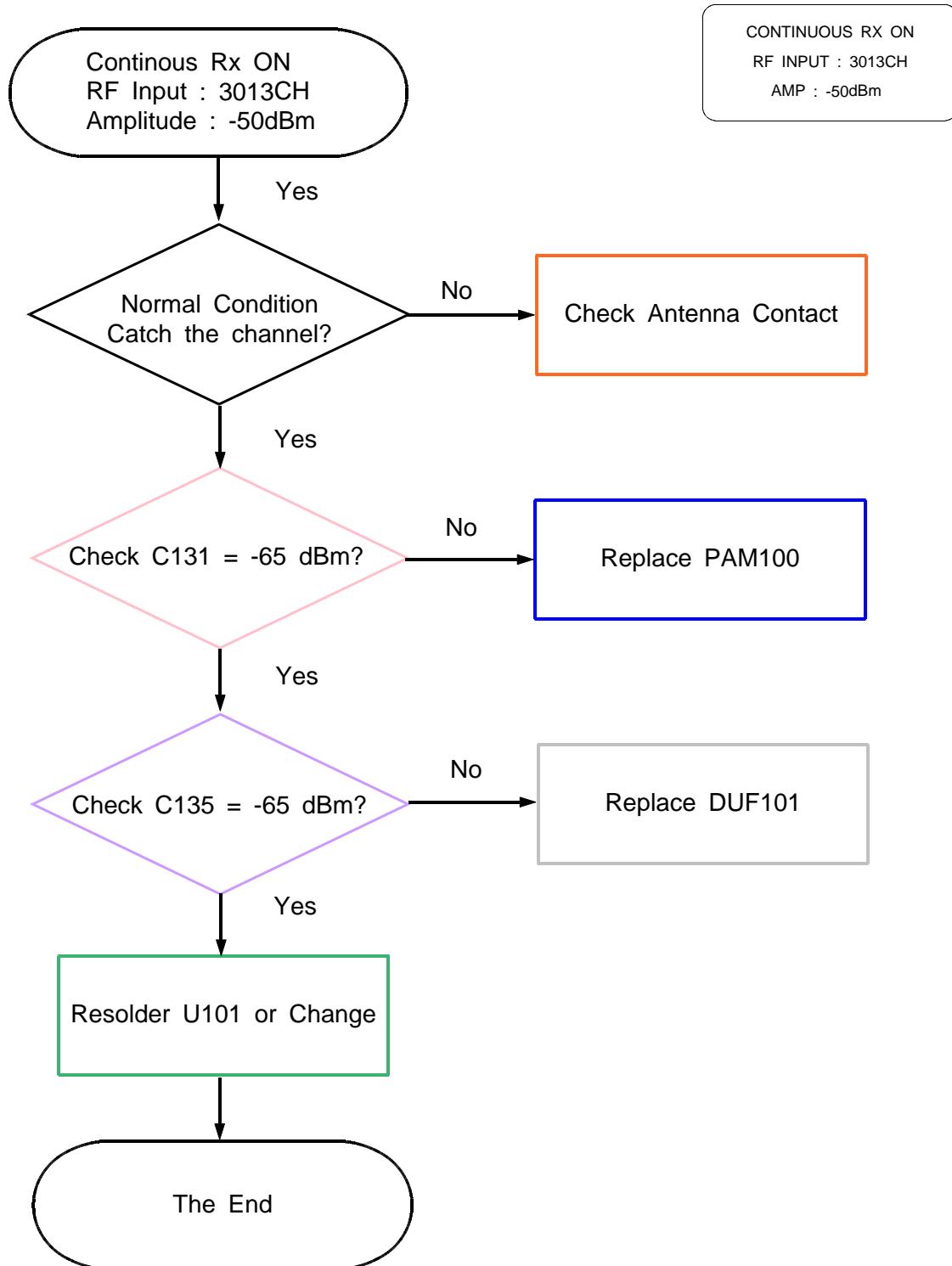
## 8-4-4. WCDMA Band1 RX

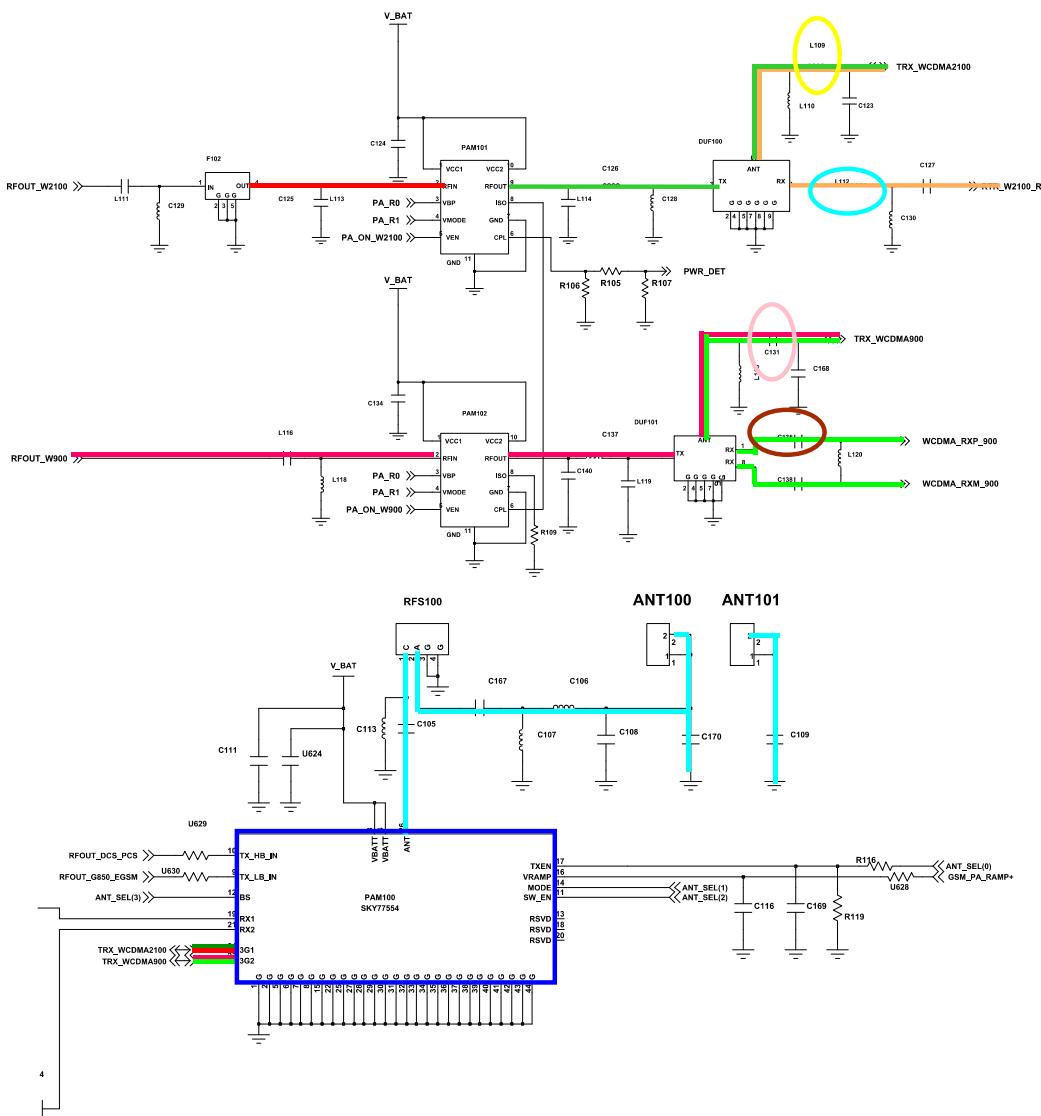
\*\*If you check the tx chain,  
Check the not only RF Device but also resistor, inductor and capacitor.

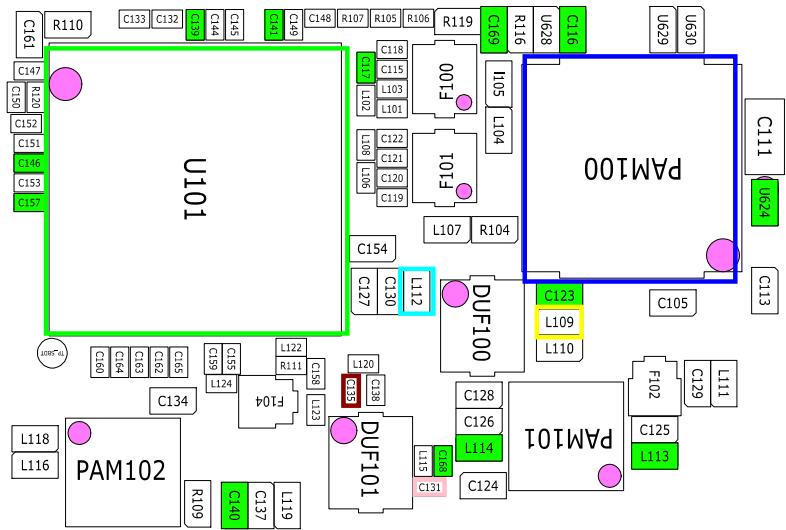


## 8-4-5. WCDMA Band8 RX

\*\*If you check the tx chain,  
Check the not only RF Device but also resistor, inductor and capacitor.



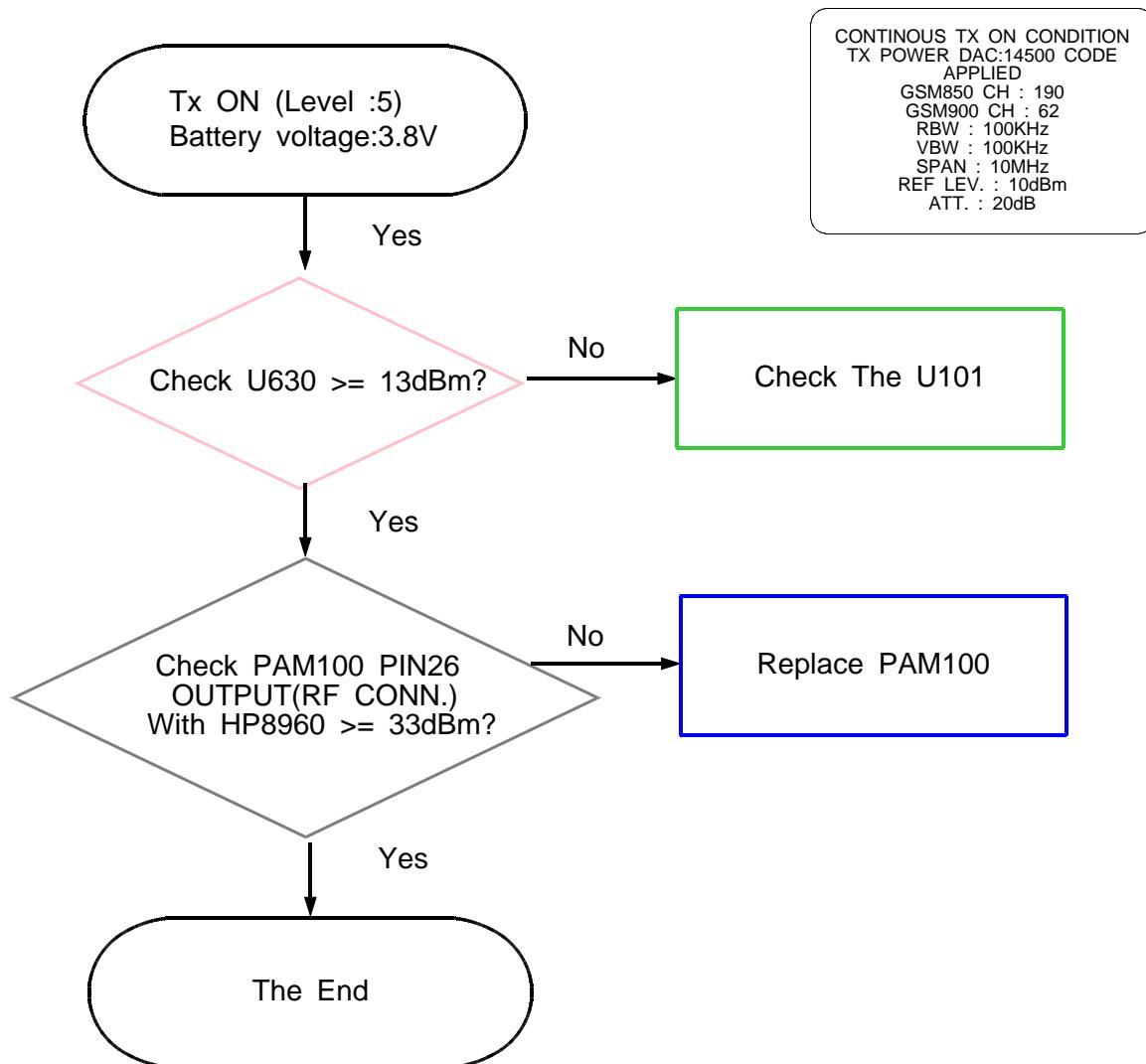




### 8-4-6. GSM850/900 TX

\*\*If you check the tx chain,

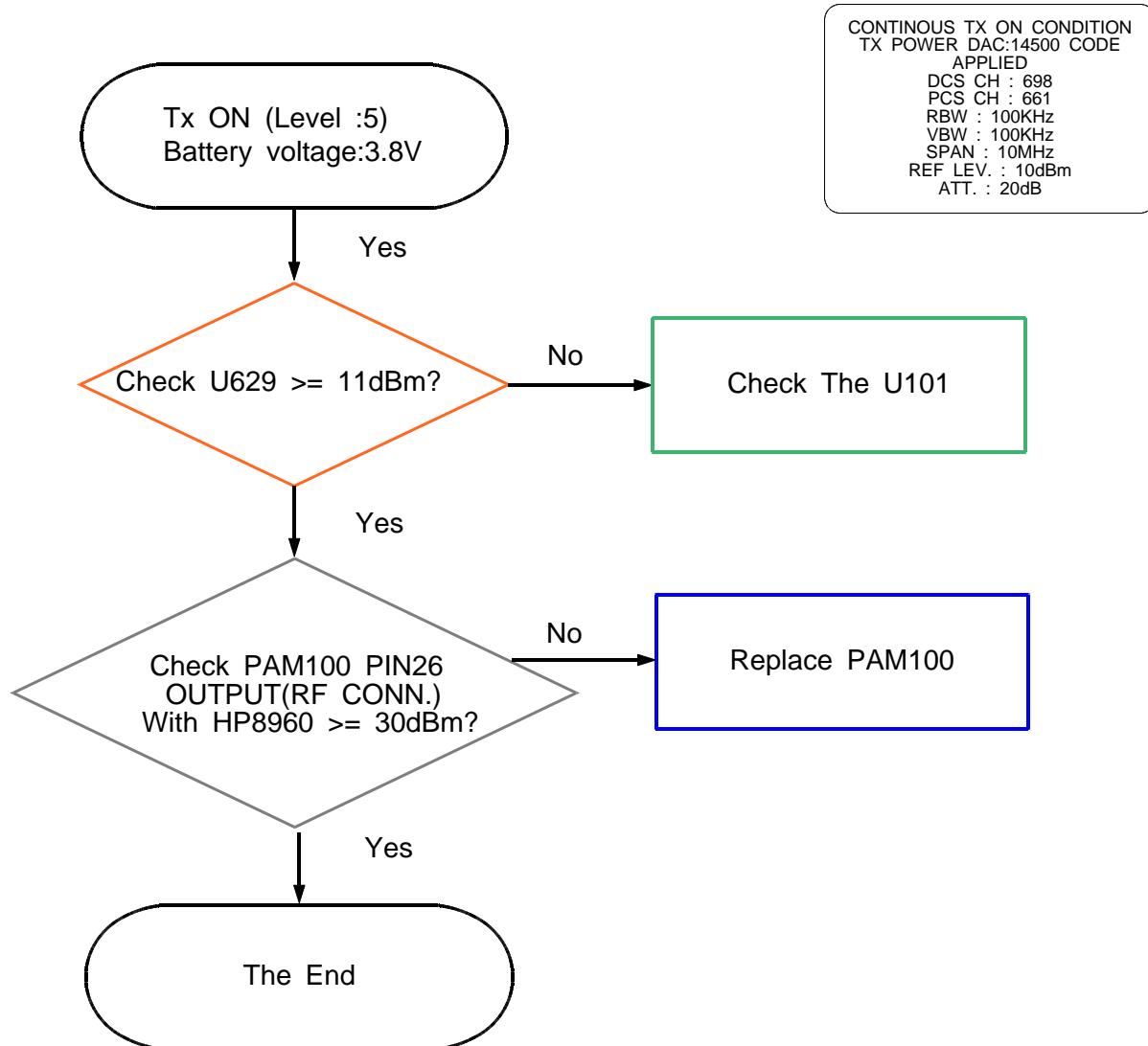
Check the not only RF Device but also resistor, inductor and capacitor.

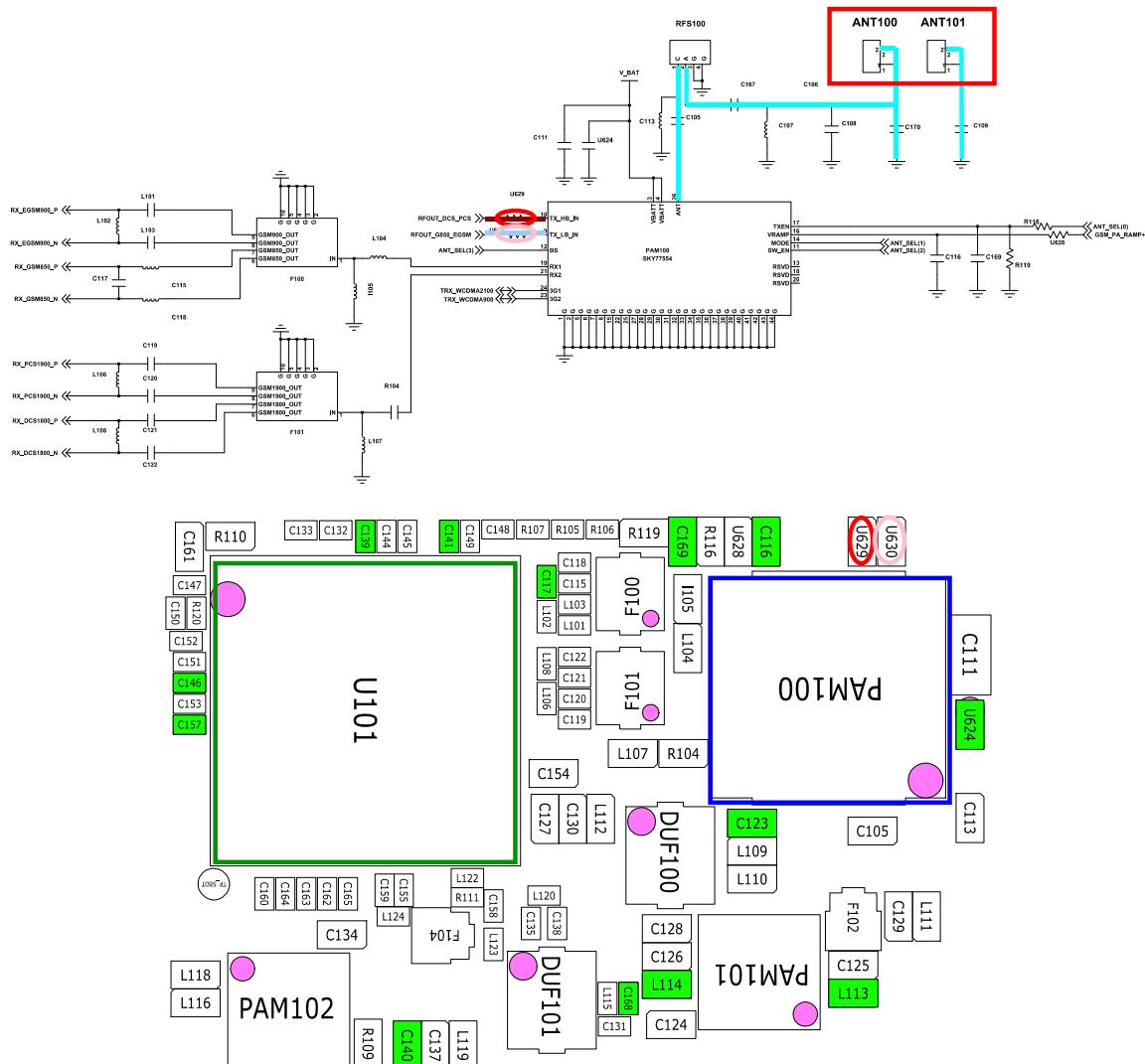


## 8-4-7. DCS/PCS TX

\*\*If you check the tx chain,

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

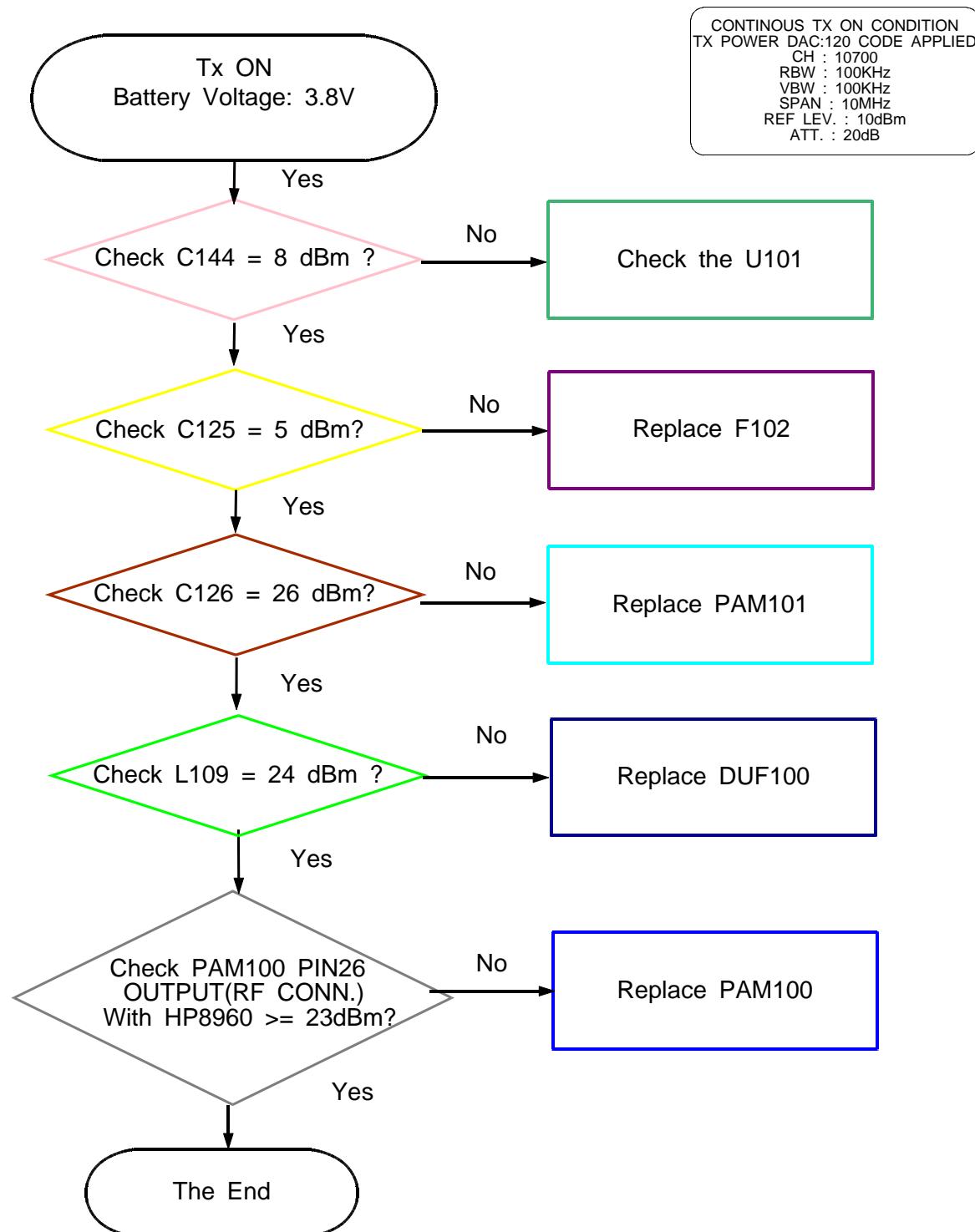




## 8-4-8. WCDMA Band1 TX

\*\*If you check the tx chain,

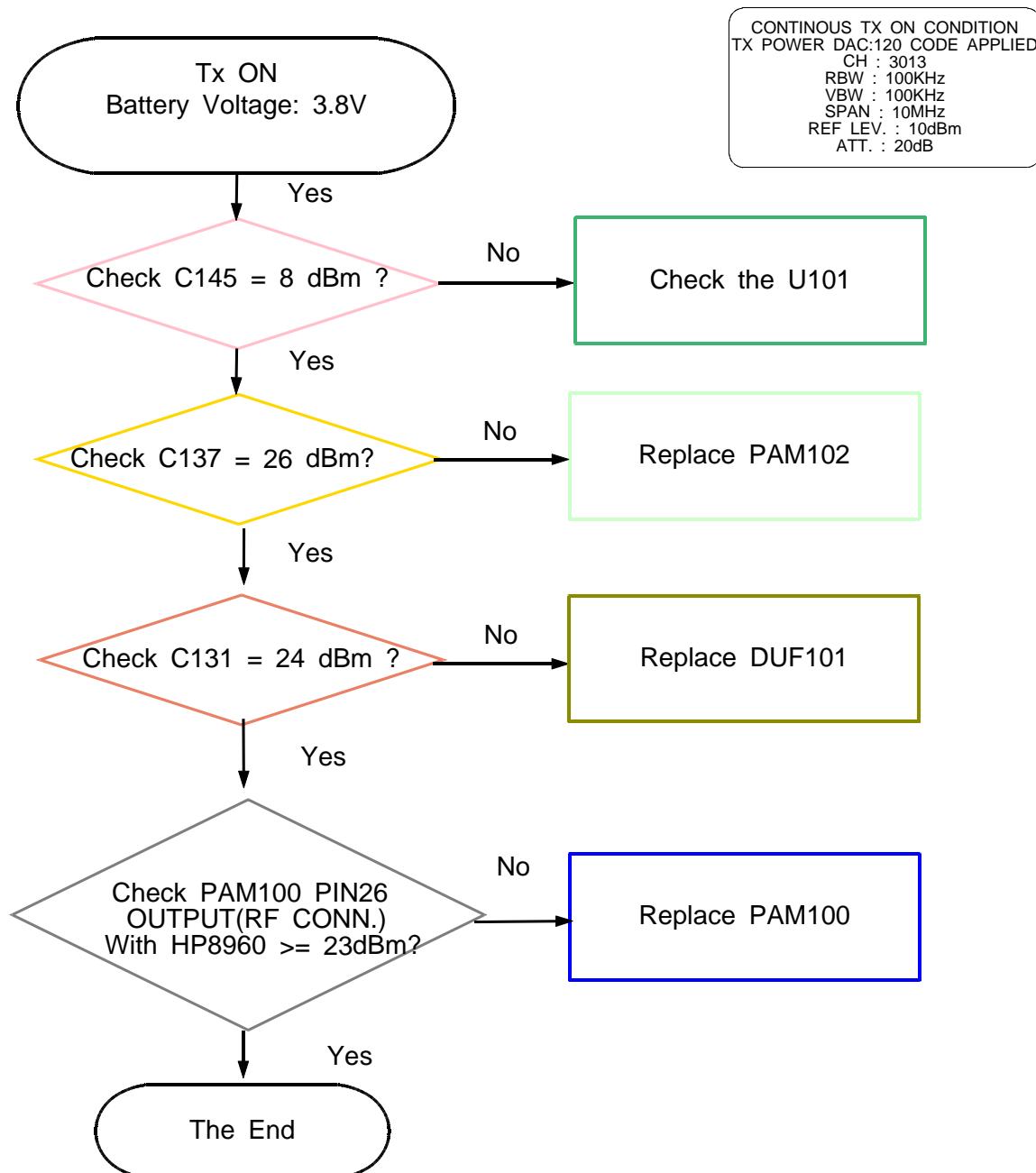
Check the not only RF Device but also resistor, inductor and capacitor.

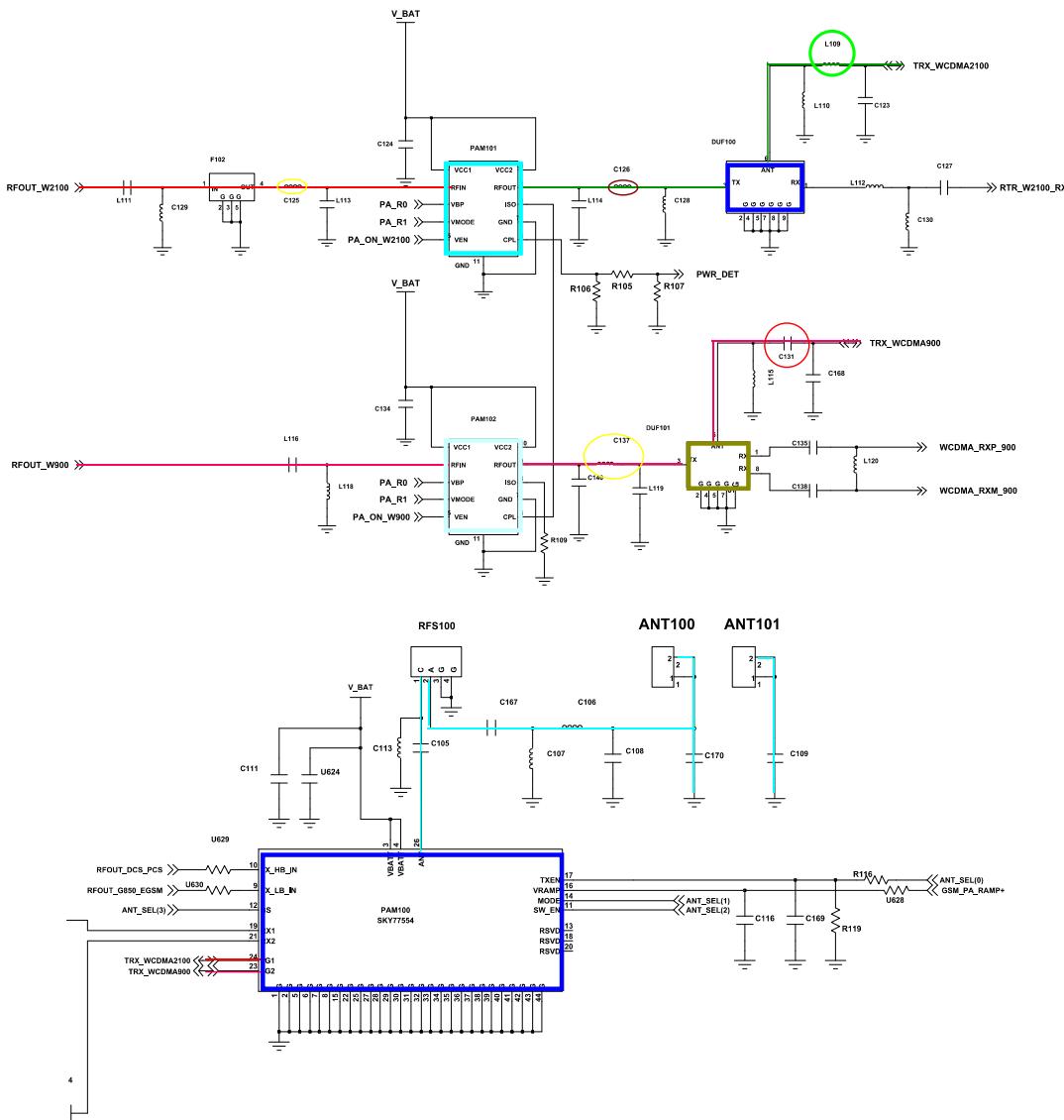


## 8-4-9. WCDMA Band8 TX

\*\*If you check the tx chain,

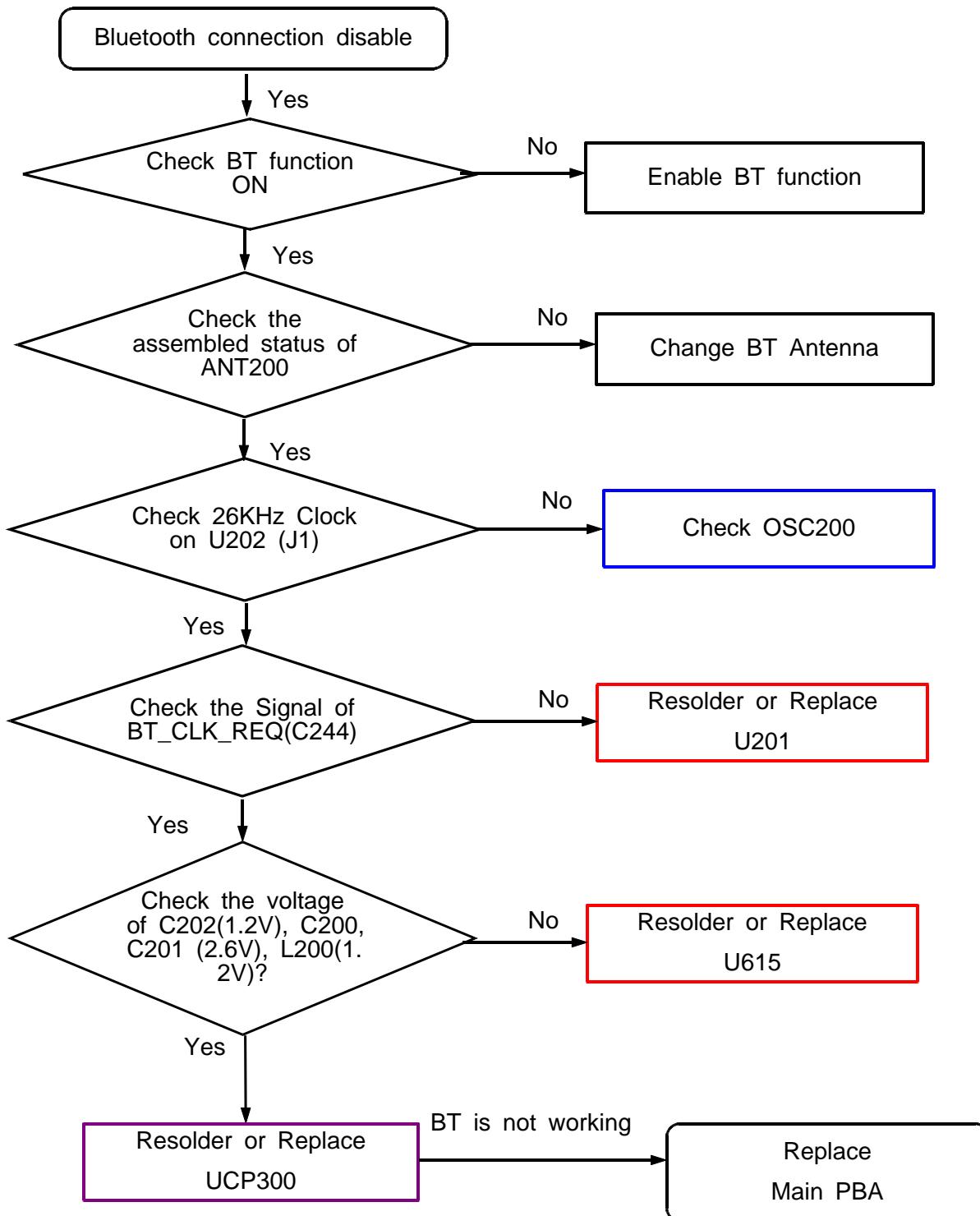
Check the not only RF Device but also resistor, inductor and capacitor.

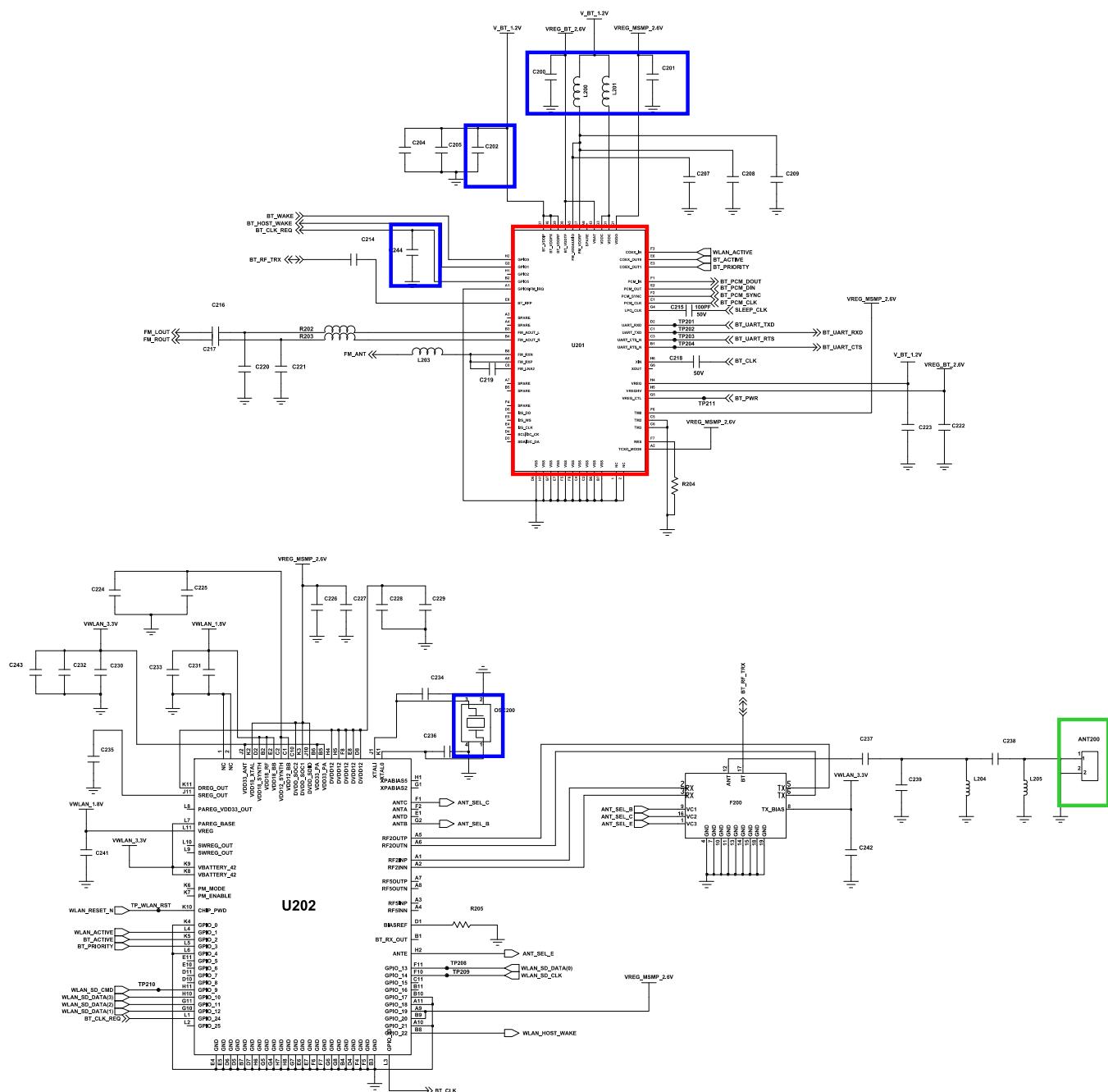


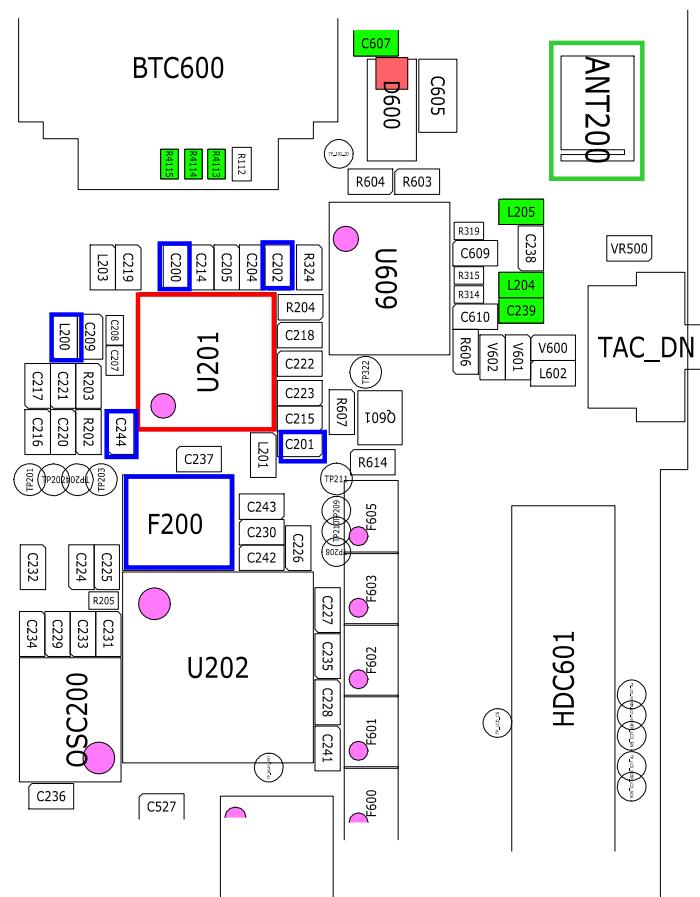




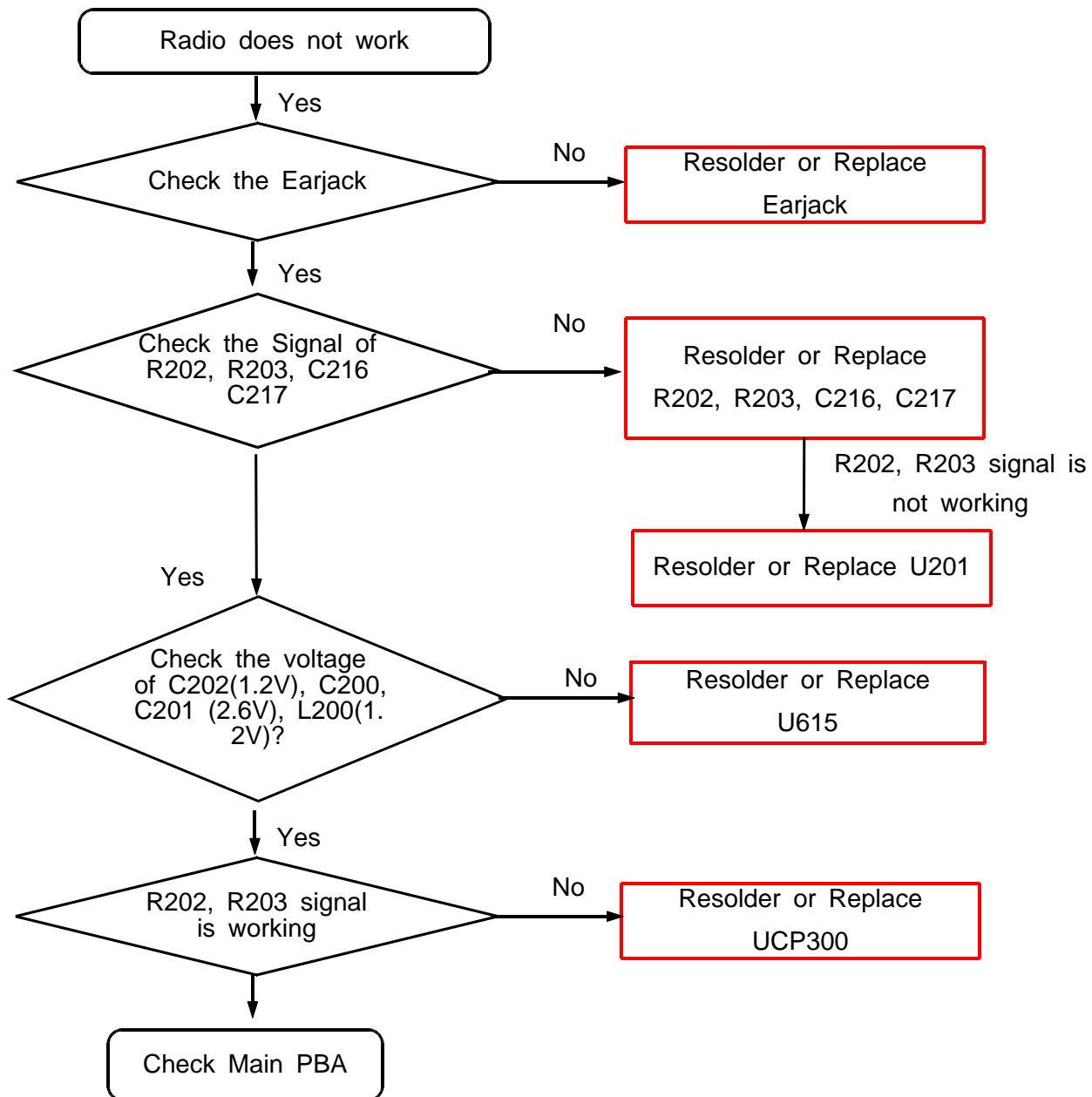
## 8-4-10. BLUETOOTH

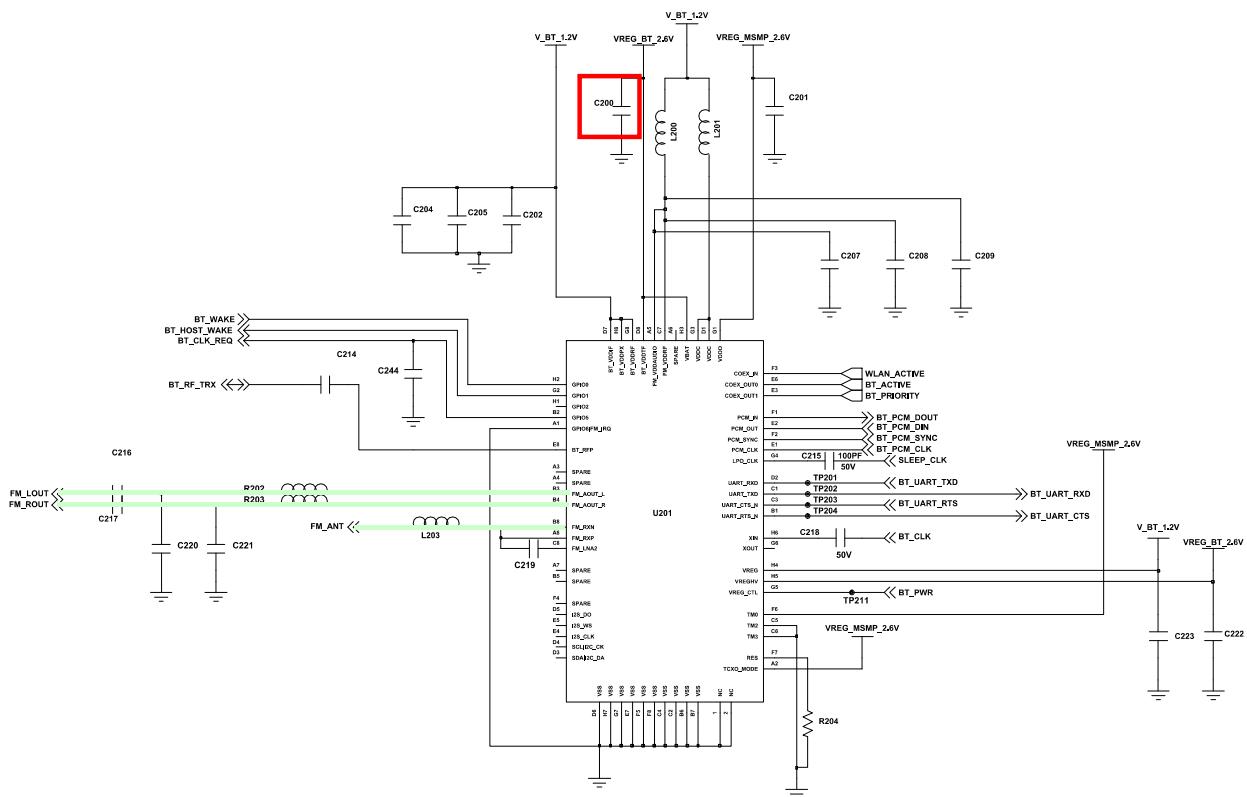


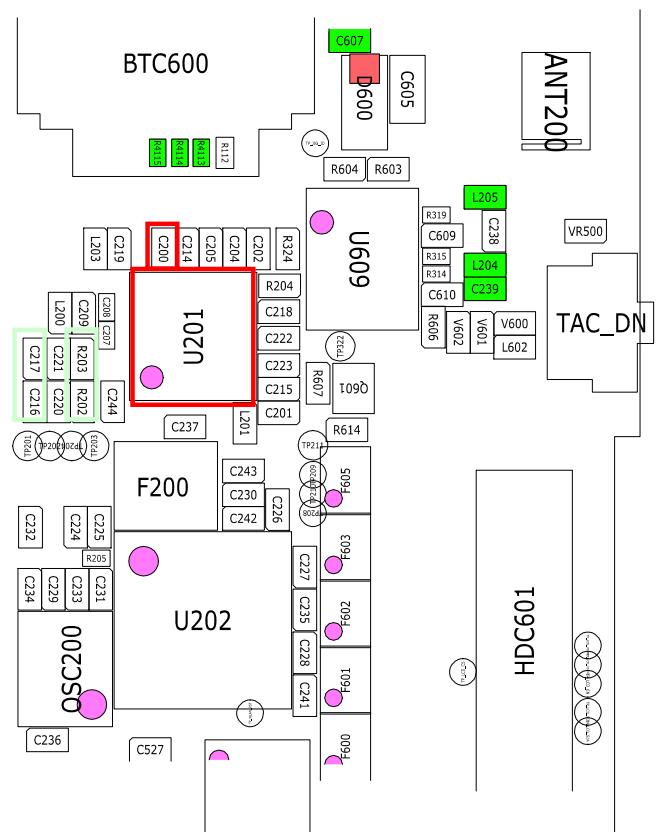




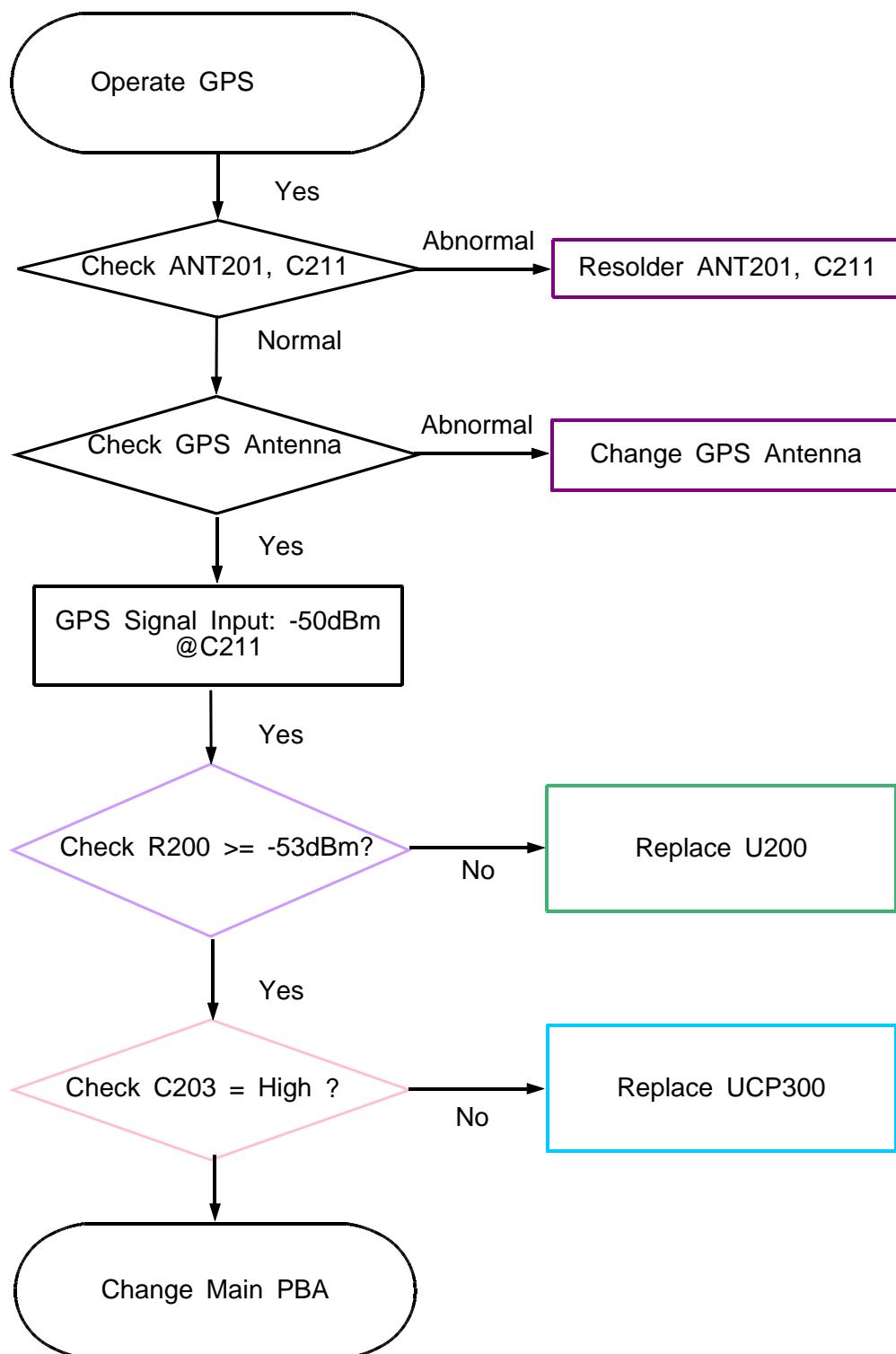
## 8-4-11. FM RADIO

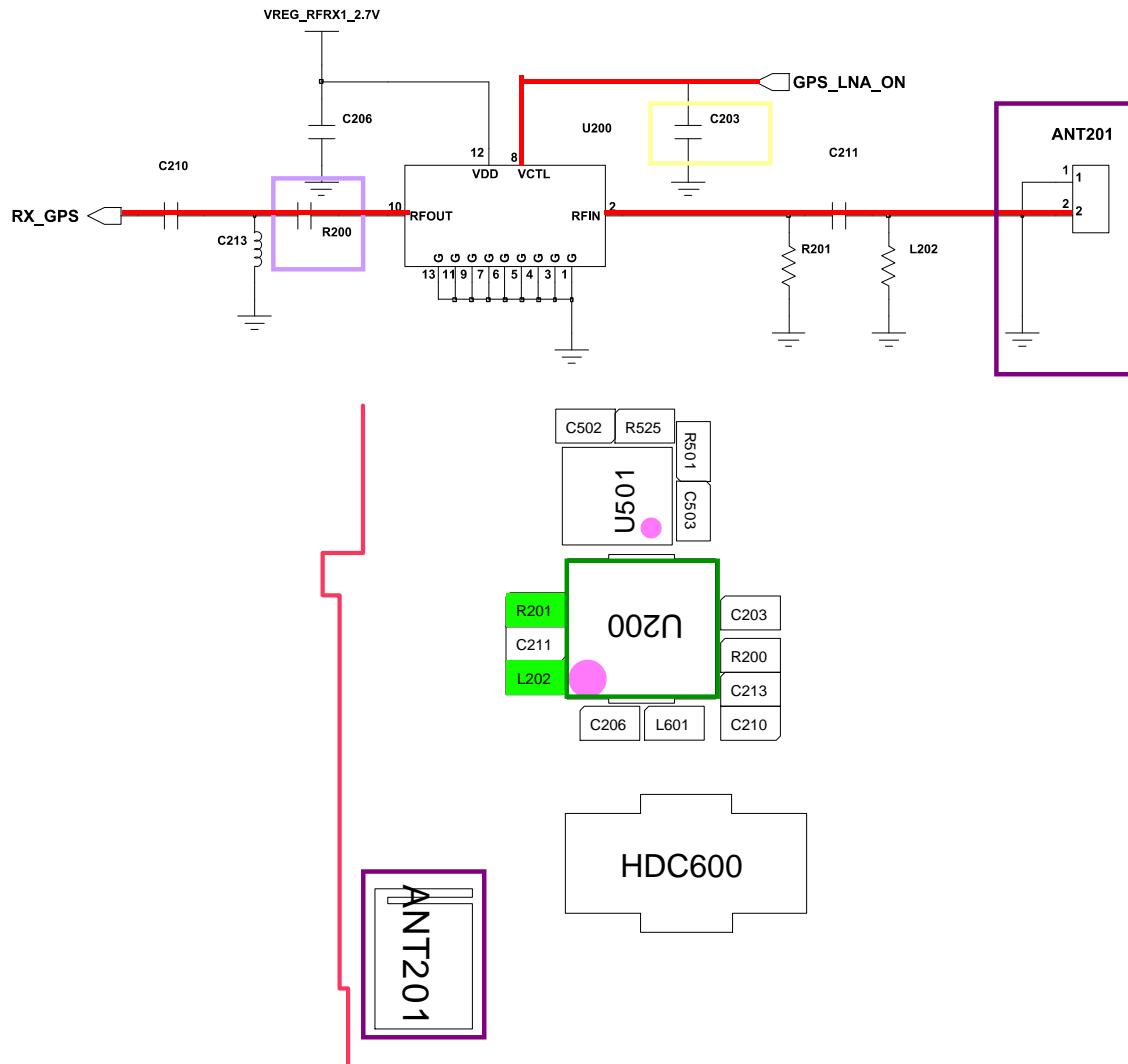






## 8-4-12. GPS





## 8-5. Service Schematics

**- NC Point(Top View)**

● : NC

**UME300**

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

**U401**

	1	2	3	4	5	6	7	8	9	10	11
A	●	○	○	○	○	○	○	○	○	○	●
B	○	○	○	○	○	○	○	○	○	○	○
C	○	○	○	○	○	○	○	○	○	○	○
D	○	○	○	○	○	○	○	○	○	○	○
E	○	○	○	○	○	○	○	○	○	●	○
F	○	○	○	●	○	○	○	○	○	●	○
G	○	○	○	●	●	●	○	○	○	○	○
H	●	○	○	○	●	●	○	○	○	○	○
J	○	○	○	○	○	○	○	○	○	○	○
K	●	○	○	○	○	○	○	○	○	○	●

## UCP300

	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28
A	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●
B	●	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○	●	
C	●	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○	●	
D	●	○	○																						○	○	●	
E	●	○	○																						○	○	●	
F	●	○	○																						○	○	●	
G	●	○	○																						○	○	●	
H	●	○	○																						○	○	●	
J	●	○	○																						○	○	●	
K	●	○	○																						○	○	●	
L	●	○	○														○	○	○	○	○	○	○	○	○	●		
M	●	○	○														○	○	○	○	○	○	○	○	○	●		
N	●	○	○														○	○	○	○	○	○	○	○	○	●		
P	●	○	○														○	○	○	○	○	○	○	○	○	●		
R	●	○	○														○	○	○	○	○	○	○	○	○	●		
T	●	○	○														○	○	○	○	○	○	○	○	○	●		
U	●	○	○														○	○	○	○	○	○	○	○	○	●		
V	●	○	○															○	○	○	○	○	○	○	○	●		
W	●	○	○														○	○	○	○	○	○	○	○	○	●		
Y	●	○	○														○	○	○	○	○	○	○	○	○	●		
AA	●	○	○																			○	○	○	●	AA		
AB	●	○	○														○	○	○	○	○	○	○	○	○	●		
AC	●	○	○														○	○	○	○	○	○	○	○	○	●		
AD	●	○	○																					○	○	●		
AE	●	○	○														○	○	○	○	○	○	○	○	○	●		
AF	●	○	○														○	○	○	○	○	○	○	○	○	●		
AG	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●		

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