

SAMSUNG

GSM TELEPHONE

GT-S6810

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

	GSM850 Phase 1	EGSM 900 Phase 2	DCS1800 Phase 1	PCS1900	WCDMA2100	WCDMA900
Freq. Band[MHz] Uplink/Dow nlink	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:9612~988 8DL:10562~1 0838	UL:2712~2863 DL:2936~3088
Tx/Rx spacing	45MHz	45MHz	95MHz	80MHz	190MHz	45MHz
Mod. Bit rate/ Bit Period	270.833kbps 3.692us	270.833kbps 3.692us	270.833kbps 3.692us	270.833kbps 3.692us	3.84Mcps	3.84Mcps
Time Slot Period/Fram e Period	576.9us 4.615ms	576.9us 4.615ms	576.9us 4.615ms	576.9us 4.615ms	FrameLength: 10ms Slotlength: 0.667ms	FrameLength: 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+24dBm)	3(max+24dBm)
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

3. Operation Instruction and Installation

Main Function

- GSM(EDGE/GPRS) 850/900/1800/1900 , 3G(900/2100)
- HSDPA 7.2 Mbps
- 3.5" HVGA TFT
- Music player, Voice Recorder
- GPS / Glonass
- 5M Camera, VGA Camera
- FM Radio Receiver
- Bluetooth v4.0+HS
- USB 2.0 / Wi-Fi (802.11 b/g/n, 2.4GHz)
- Sensors : Accelerometer, Compass, Proxi sensor
- Android Jellybean OS
- SMS/MMS/Email

9. Reference Abbreviate

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

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.

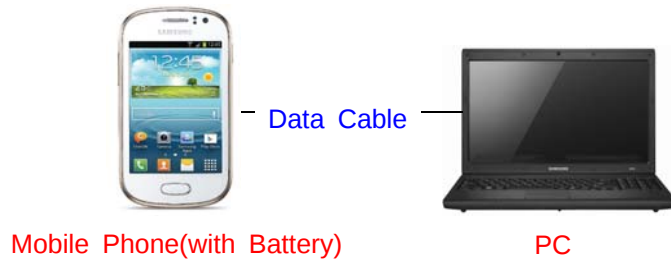
6. Level 1 Repair

6-1. Software Download

6-1-1. Pre-requisite for Download

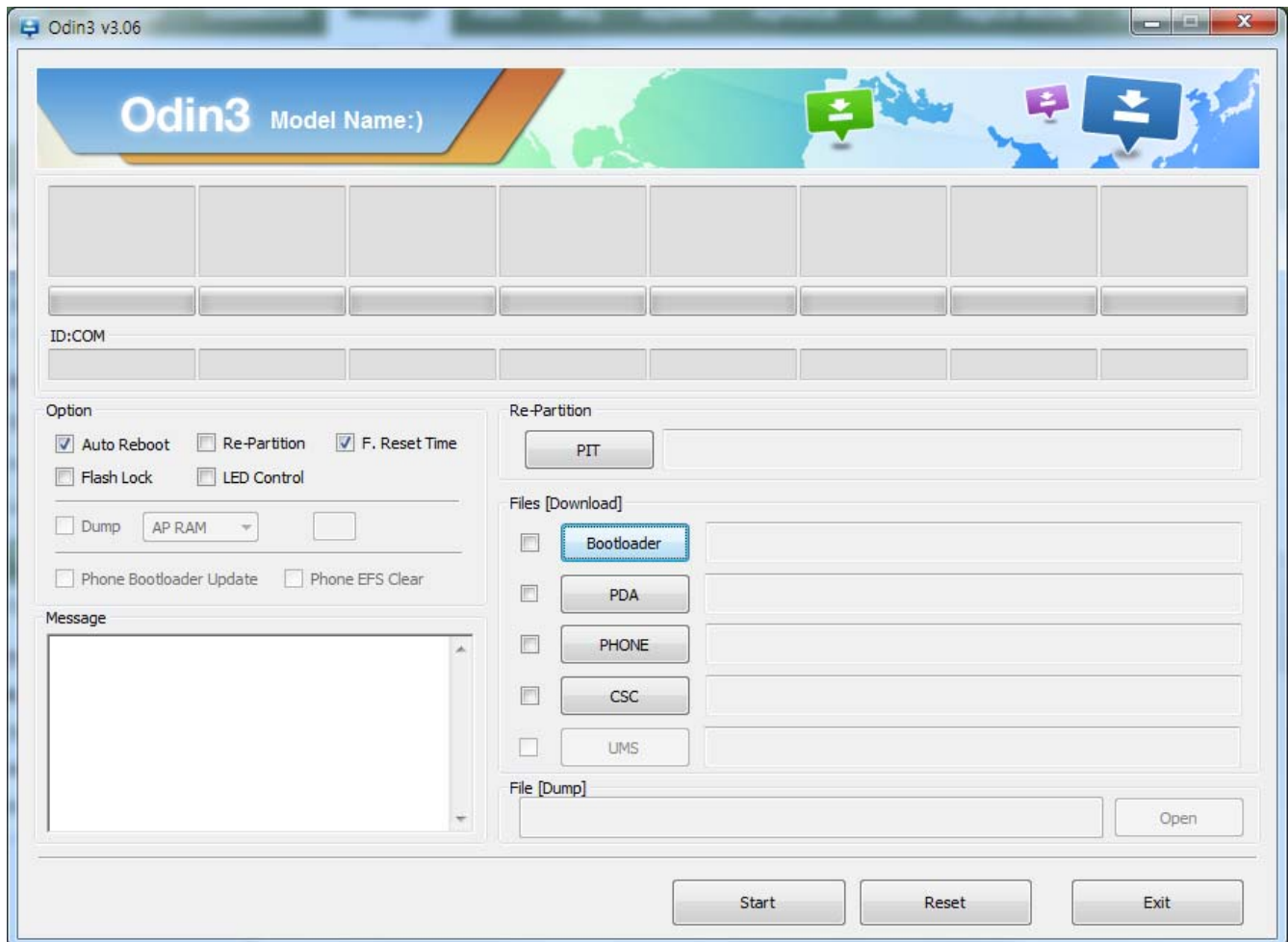
- Downloader Program ([Odin3 downloader](#))
- GT-S6810 Mobile Phone
- Data Cable (GH39-01527A)
- JIG BOX (GH99-36900B)
- RF Test Cable (GH39-00985A)
- JIG Cable (GH81-10952A)
- Adapter (GH99-38251A)
- Binary files

- Diagram of Connection:

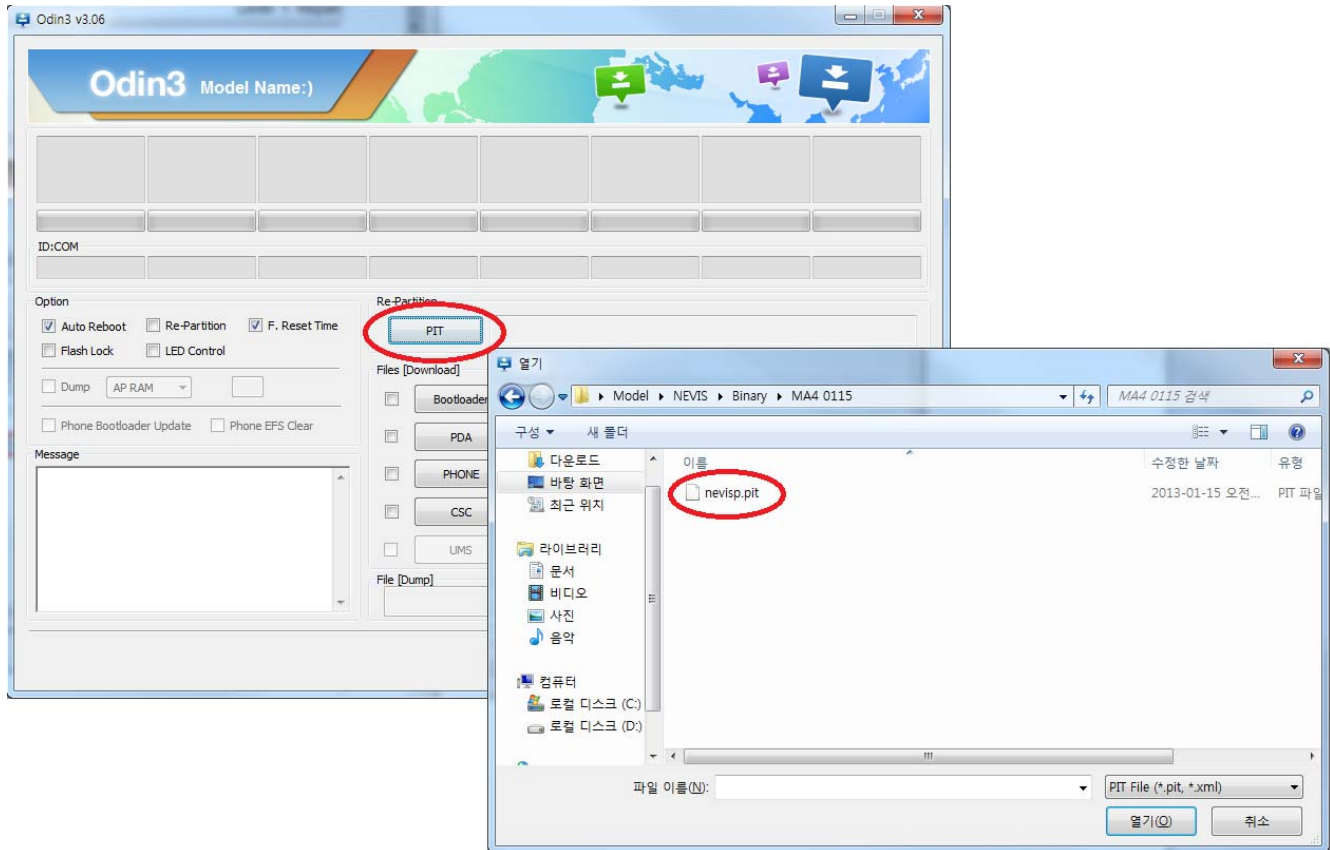


6-1-2. S/W Download Process

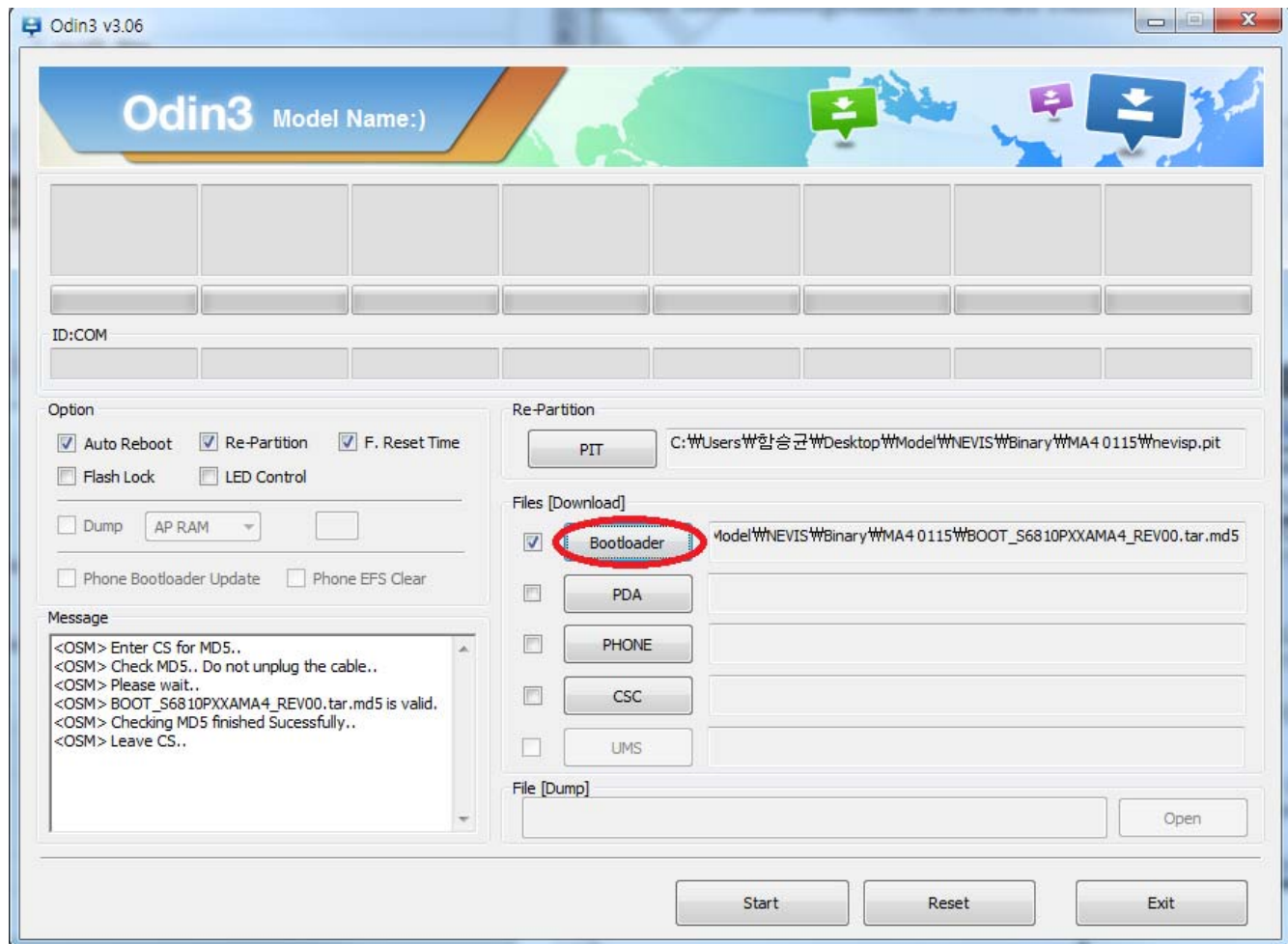
1. Load the binary download program by executing the "Odin3 Downloader"



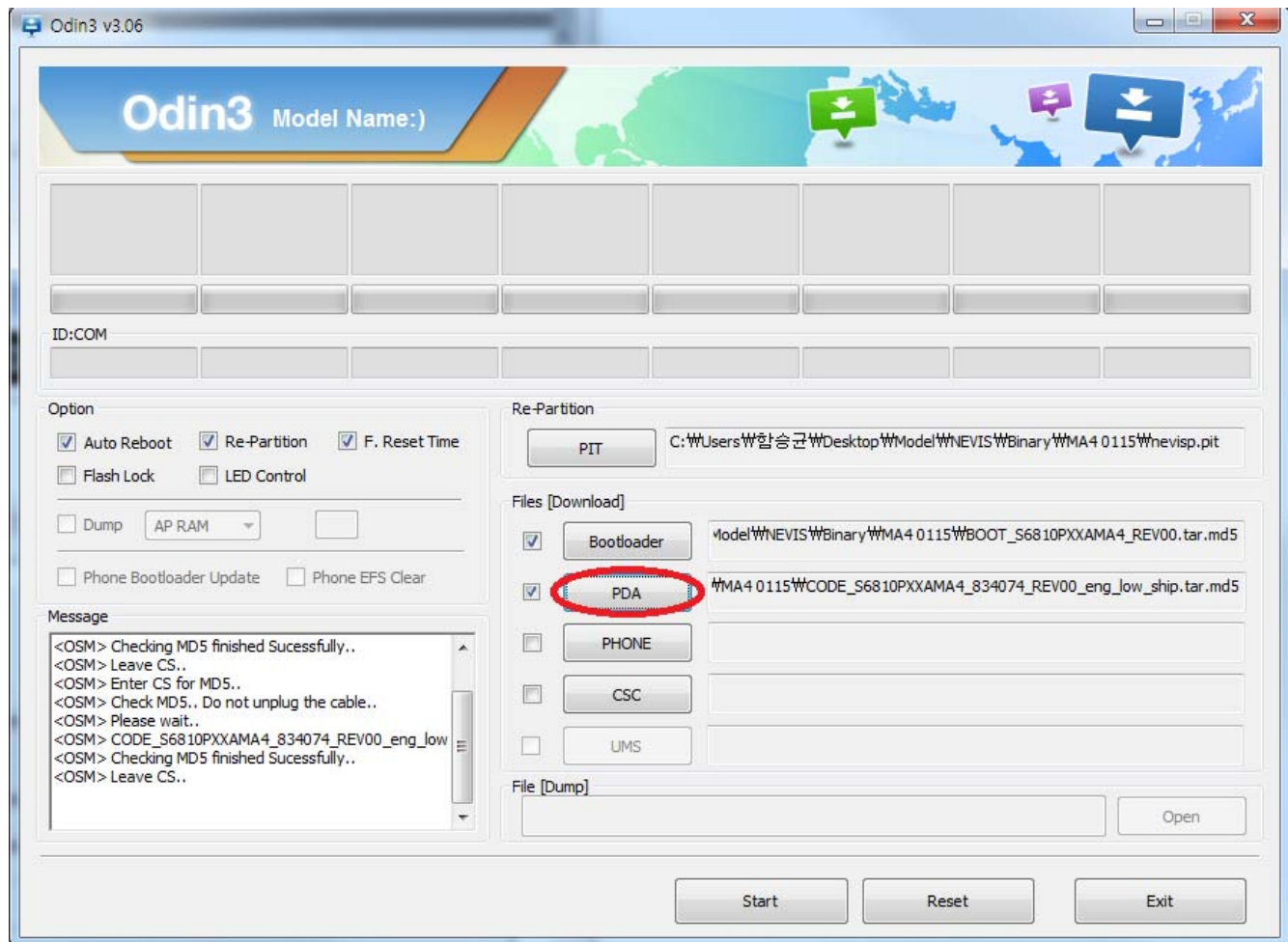
2. Click the PIT Button and Insert ".pit" binary file



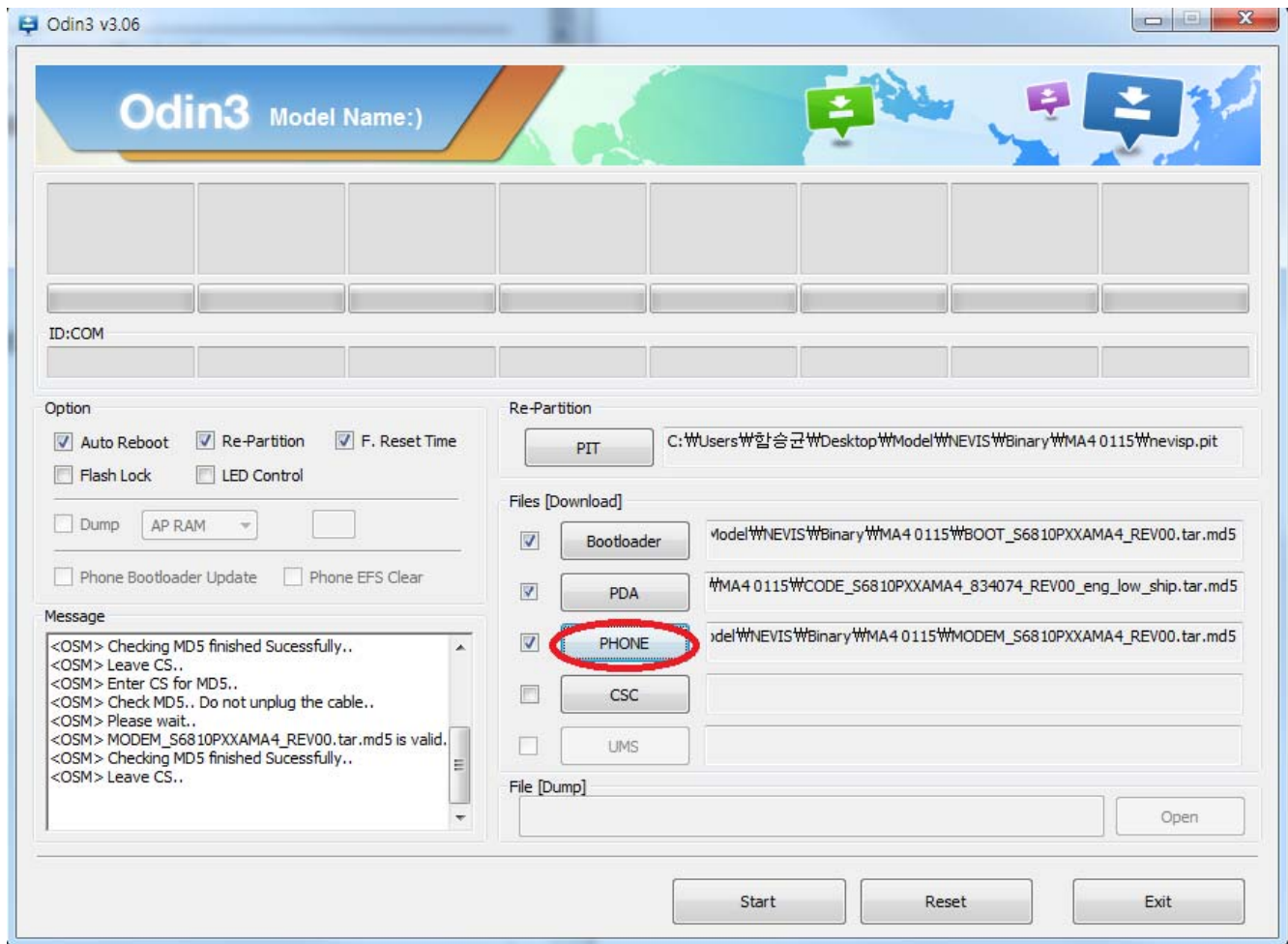
3. Click BOOTLOADER Button and Insert 'BOOT_..... " md5 file



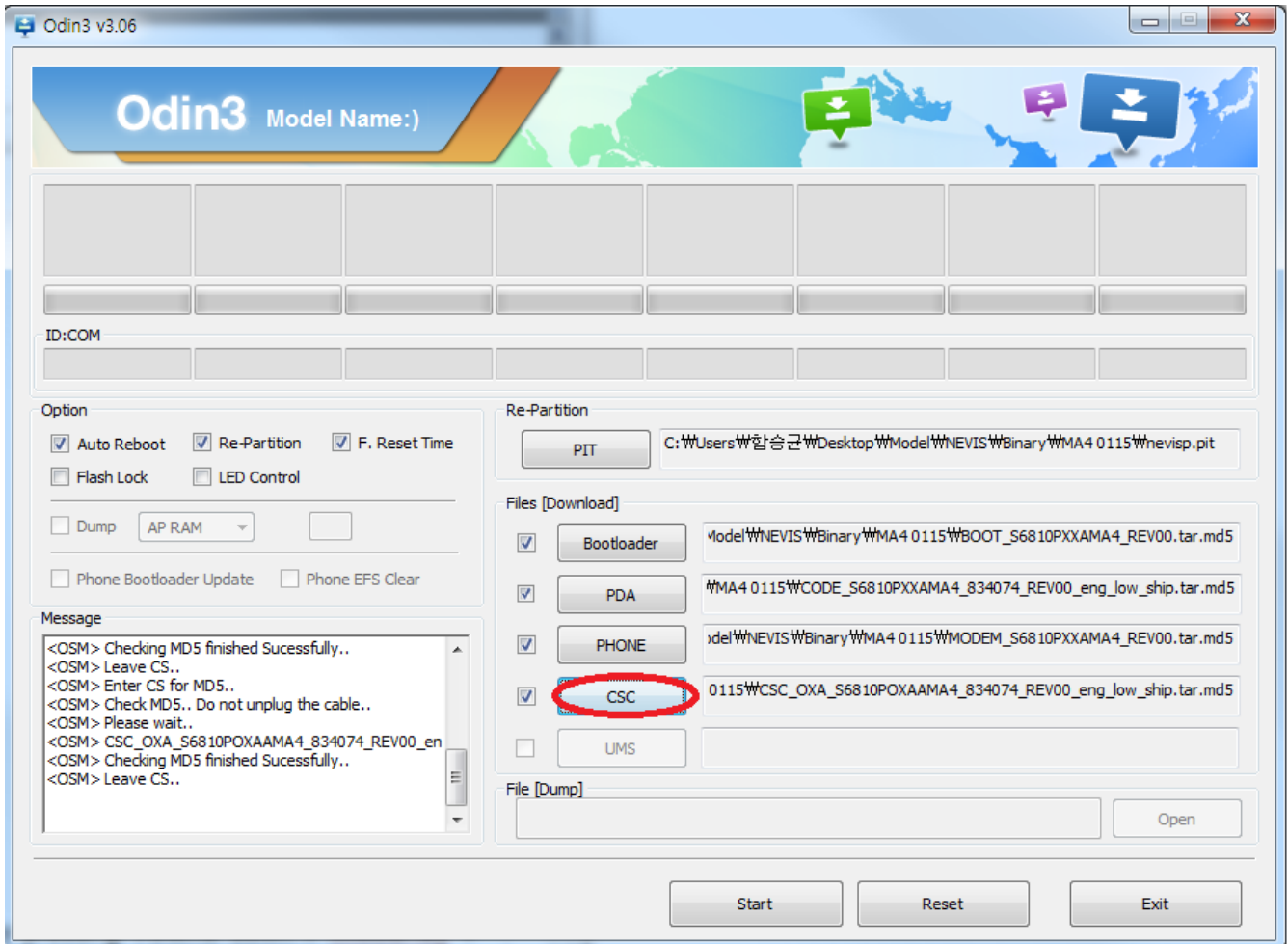
4. Click PDA Button and Insert 'CODE_.....' md5 file



5. Click PHONE Button and Insert 'MODEM_.....' md5 file



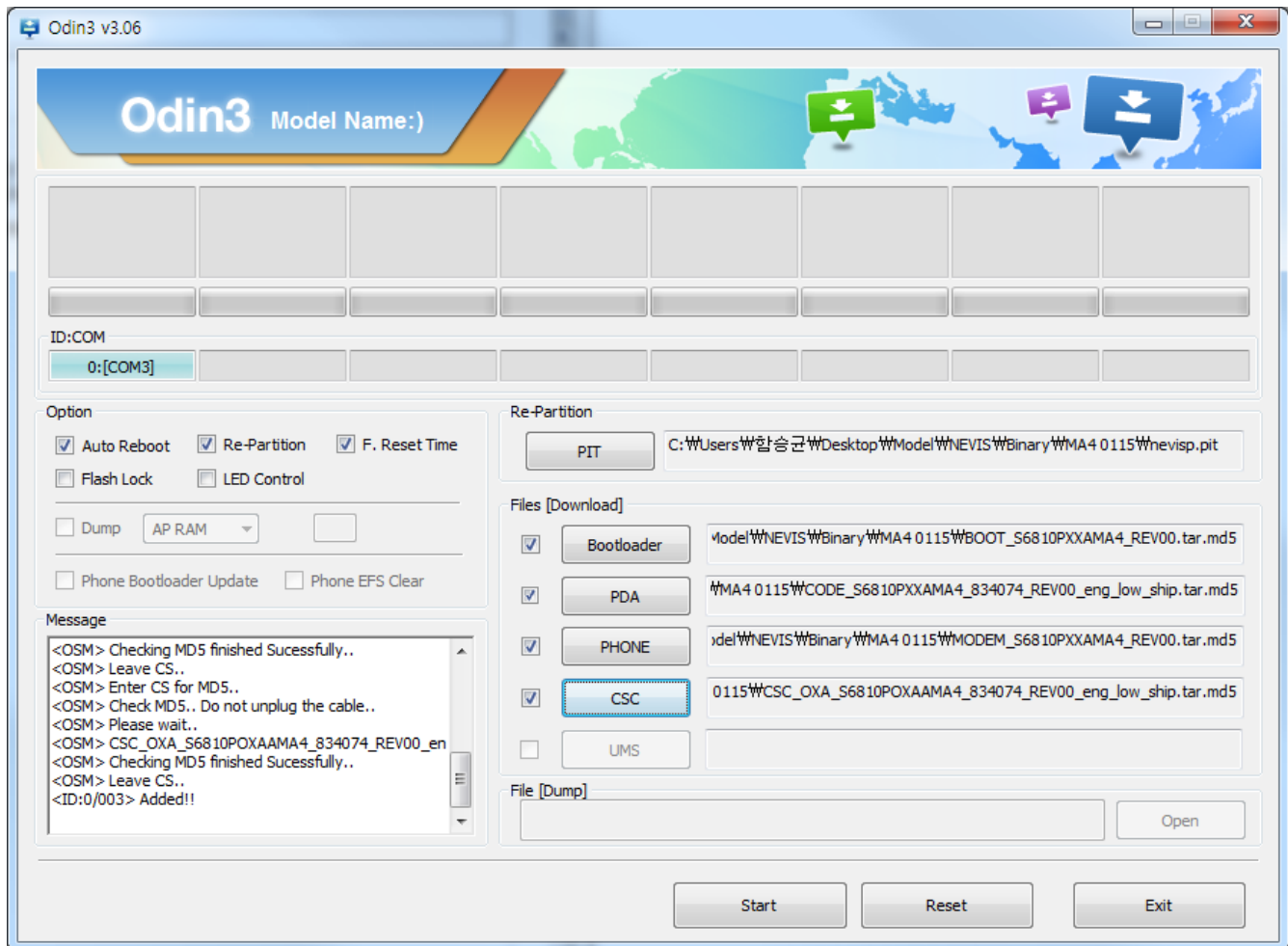
6. Click CSC Button and Insert 'CSC_.....' md5 file



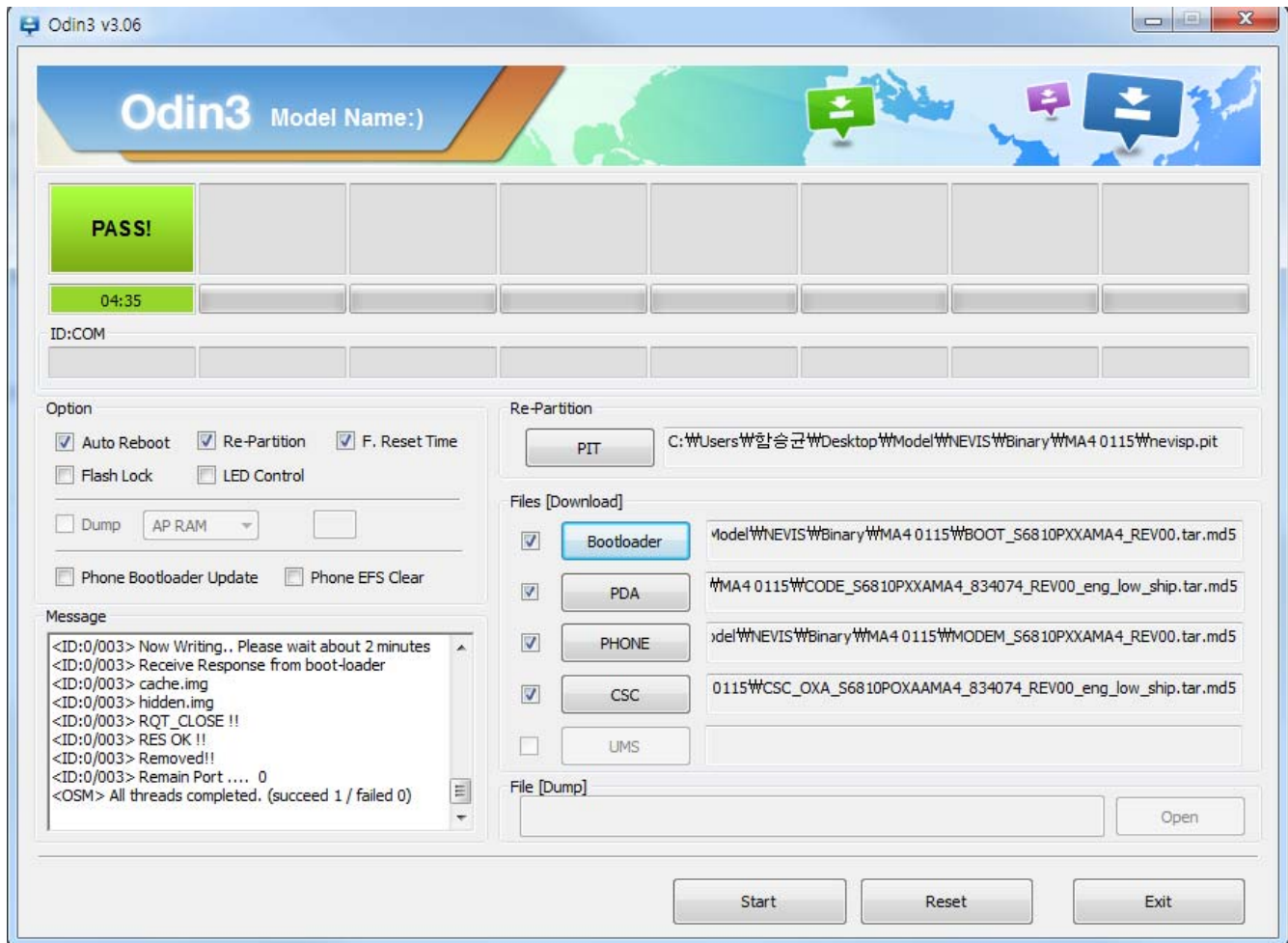
7. Connect phone to PC

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

Color will be changed to blue if PC recognize phone properly.



8. If you click start button, download is started.
And you can see "PASS!" with green when download is done.



9. Confirm the downloaded version name and etc :

***#1234#**

5. MAIN Electrical Parts List

Design LOC	Description	SEC CODE
D400	DIODE-SWITCHING	0401-001110
D401	DIODE-ZENER	0403-001870
D600	DIODE-SCHOTTKY	0404-001646
ZD505,ZD506,ZD507	DIODE-TVS	0406-001223
ZD508,ZD509,ZD510	DIODE-TVS	0406-001223
ZD502,ZD503	DIODE-TVS	0406-001267
D403,D404,D405,ZD500	DIODE-TVS	0406-001329
ZD501,ZD504	DIODE-TVS	0406-001329
D402,D406	DIODE-TVS	0406-001570
Q600	FET-SILICON	0505-002088
Q500	FET-SILICON	0505-002384
LED500,LED501	LED	0601-002397
LED600	LED	0601-003175
U501	IC	0801-003437
U401	IC	1001-001821
UME300	MEMORY	1108-000493
PAM100	IC	1201-003303
PAM101	IC	1201-003427
U202	IC	1201-003469
U100	IC	1201-003542
U500	IC	1202-001120
U600	IC	1203-007197
U403	IC	1203-007542
U603	IC	1203-007702
U605	IC	1203-007713
U102	IC	1205-004267
U203	IC	1205-004542
U204	IC	1205-004649
U408	IC	1205-004655

Design LOC	Description	SEC CODE
UCP300	IC	1205-004707
U604	IC	1209-002065
U601	IC	1209-002153
U602	IC	1209-002196
V100	THERMISTOR	1404-001726
V500,V501,V600	VARISTOR	1405-001346
R301,R521,R522	R-CHIP	2007-000139
R400,R401,R402	R-CHIP	2007-000140
R303,R310,R311,R312	R-CHIP	2007-000141
R317,R318	R-CHIP	2007-000141
R602,R604	R-CHIP	2007-000143
R505,R601,R603	R-CHIP	2007-000148
R520,R605,R610,R614	R-CHIP	2007-000162
R616	R-CHIP	2007-000162
U412	R-CHIP	2007-000163
R500,R501	R-CHIP	2007-000170
R503,R613	R-CHIP	2007-000172
R516,R517	R-CHIP	2007-000242
R502,R509	R-CHIP	2007-001295
R100,R101	R-CHIP	2007-001298
R606,U409	R-CHIP	2007-001339
R512,R513	R-CHIP	2007-002796
R408,R409,R612	R-CHIP	2007-003015
R404	R-CHIP	2007-007107
R305	R-CHIP	2007-007136
R214,U414	R-CHIP	2007-007156
R518	R-CHIP	2007-007317
R309	R-CHIP	2007-007517
R607	R-CHIP	2007-007529

Design LOC	Description	SEC CODE
R504	R-CHIP	2007-007573
R302	R-CHIP	2007-007698
R600	R-CHIP	2007-007798
R615	R-CHIP	2007-007875
R506	R-CHIP	2007-007943
R608,R611	R-CHIP	2007-007981
R107	R-CHIP	2007-008048
R106	R-CHIP	2007-008056
R407	R-CHIP	2007-008354
R510	R-CHIP	2007-008401
R102	R-CHIP	2007-008516
R109	R-CHIP	2007-008800
R104,R105	R-CHIP	2007-008806
R209	R-CHIP	2007-009155
C102,C245,C347	C-CERAMIC,CHIP	2203-000233
C262,C500,C610	C-CERAMIC,CHIP	2203-000254
C202,C203,C212,C236	C-CERAMIC,CHIP	2203-000278
C243,C246	C-CERAMIC,CHIP	2203-000278
C402,U400	C-CERAMIC,CHIP	2203-000425
C340,C344	C-CERAMIC,CHIP	2203-000438
C106	C-CERAMIC,CHIP	2203-000466
C248	C-CERAMIC,CHIP	2203-000585
C108,C255,C257,C611	C-CERAMIC,CHIP	2203-000627
C514	C-CERAMIC,CHIP	2203-000679
C241,C242,C249,C443	C-CERAMIC,CHIP	2203-000812
C507,C517,C518,C519	C-CERAMIC,CHIP	2203-000812
C523,C526,U407	C-CERAMIC,CHIP	2203-000812
C415,C502,C504	C-CERAMIC,CHIP	2203-000854
C244	C-CERAMIC,CHIP	2203-000940

Design LOC	Description	SEC CODE
C112,C131,C503,C513	C-CERAMIC,CHIP	2203-000995
C200	C-CERAMIC,CHIP	2203-001259
C105	C-CERAMIC,CHIP	2203-001383
C524,C527	C-CERAMIC,CHIP	2203-002443
C128,C140,C604,C605	C-CERAMIC,CHIP	2203-002709
R103	C-CERAMIC,CHIP	2203-005050
C103	C-CERAMIC,CHIP	2203-005053
C119,C120,C509,C520	C-CERAMIC,CHIP	2203-005057
C104	C-CERAMIC,CHIP	2203-005281
C414	C-CERAMIC,CHIP	2203-005481
C113,C114	C-CERAMIC,CHIP	2203-005682
C124	C-CERAMIC,CHIP	2203-005725
C121	C-CERAMIC,CHIP	2203-005729
C132	C-CERAMIC,CHIP	2203-005731
U101	C-CERAMIC,CHIP	2203-005806
C239	C-CERAMIC,CHIP	2203-006047
C214,C216,C232,C240	C-CERAMIC,CHIP	2203-006048
C253,C256,C300,C301	C-CERAMIC,CHIP	2203-006048
C302,C304,C305,C306	C-CERAMIC,CHIP	2203-006048
C307,C313,C314,C315	C-CERAMIC,CHIP	2203-006048
C316,C317,C318,C319	C-CERAMIC,CHIP	2203-006048
C321,C322,C323,C327	C-CERAMIC,CHIP	2203-006048
C328,C329,C330,C331	C-CERAMIC,CHIP	2203-006048
C332,C333,C334,C336	C-CERAMIC,CHIP	2203-006048
C337,C338,C339,C412	C-CERAMIC,CHIP	2203-006048
C413,C501,C511,C515	C-CERAMIC,CHIP	2203-006048
C618,U406	C-CERAMIC,CHIP	2203-006048
C434,C435	C-CERAMIC,CHIP	2203-006137
C231,C234,C260,C407	C-CERAMIC,CHIP	2203-006190

Design LOC	Description	SEC CODE
C144,C145,C146	C-CERAMIC,CHIP	2203-006194
C619,C620,C622	C-CERAMIC,CHIP	2203-006208
C110,C341,C343,C345	C-CERAMIC,CHIP	2203-006260
C346	C-CERAMIC,CHIP	2203-006260
C263,C264,C265	C-CERAMIC,CHIP	2203-006305
C603	C-CERAMIC,CHIP	2203-006324
C308,C309,C416,C418	C-CERAMIC,CHIP	2203-006399
C419,C420,C421,C426	C-CERAMIC,CHIP	2203-006399
C427,C428,C505,C516	C-CERAMIC,CHIP	2203-006399
C606,C609,C615,C623	C-CERAMIC,CHIP	2203-006399
C624,C625,U402	C-CERAMIC,CHIP	2203-006399
C130,C133	C-CERAMIC,CHIP	2203-006423
C115,C116,C134,C142	C-CERAMIC,CHIP	2203-006556
C250,C251,C252,C258	C-CERAMIC,CHIP	2203-006562
C259,C409,C432,C442	C-CERAMIC,CHIP	2203-006562
C101,C118	C-CERAMIC,CHIP	2203-006611
C117	C-CERAMIC,CHIP	2203-006620
C143	C-CERAMIC,CHIP	2203-006648
C201	C-CERAMIC,CHIP	2203-006753
C111,C126,C401,C602	C-CERAMIC,CHIP	2203-006824
C229,C230,C233	C-CERAMIC,CHIP	2203-006841
C311,C312,C431,C433	C-CERAMIC,CHIP	2203-006844
C436,C437	C-CERAMIC,CHIP	2203-006844
C254,C528,C607,C608	C-CERAMIC,CHIP	2203-006872
C616,C617	C-CERAMIC,CHIP	2203-006872
C506,C508	C-CERAMIC,CHIP	2203-007240
C107	C-CERAMIC,CHIP	2203-007270
C129,C320,C324,C325	C-CERAMIC,CHIP	2203-007271
C326,C335,C348,C349	C-CERAMIC,CHIP	2203-007271

Design LOC	Description	SEC CODE
C400,C422,C423,C424	C-CERAMIC,CHIP	2203-007271
C425,C429,C430	C-CERAMIC,CHIP	2203-007271
C410,C411,C417,C438	C-CERAMIC,CHIP	2203-007279
C439,C440,C441	C-CERAMIC,CHIP	2203-007279
C238,C621	C-CERAMIC,CHIP	2203-007317
C235	C-CERAMIC,CHIP	2203-007342
C303	C-CERAMIC,CHIP	2203-007392
C215,C237,C613	C-CERAMIC,CHIP	2203-007393
C404	C-CERAMIC,CHIP	2203-007693
C135,C138,C139,C141	C-CERAMIC,CHIP	2203-007449
C127,C403,C405	C-CERAMIC,CHIP	2203-007456
C600	C-CERAMIC,CHIP	2203-007634
C136,C137,C406,C408	C-CERAMIC,CHIP	2203-007775
C601,C614,C626,C627	C-CERAMIC,CHIP	2203-007795
C310	C-CERAMIC,CHIP	2203-007840
TA400	C-TA,CHIP	2404-001506
TA401,TA402,TA403	C-TA,CHIP	2404-001572
L402	INDUCTOR-SMD	2703-001231
L209	INDUCTOR-SMD	2703-001409
L101	INDUCTOR-SMD	2703-001726
L100	INDUCTOR-SMD	2703-001729
L120,L202,L208	INDUCTOR-SMD	2703-002170
L105	INDUCTOR-SMD	2703-002176
L109	INDUCTOR-SMD	2703-002199
L119	INDUCTOR-SMD	2703-002201
L110	INDUCTOR-SMD	2703-002203
C123	INDUCTOR-SMD	2703-002207
L201	INDUCTOR-SMD	2703-002269
L508,L510	INDUCTOR-SMD	2703-002309

Design LOC	Description	SEC CODE
L108	INDUCTOR-SMD	2703-002367
C100	INDUCTOR-SMD	2703-002368
L107	INDUCTOR-SMD	2703-002369
L124	INDUCTOR-SMD	2703-002901
L122	INDUCTOR-SMD	2703-002903
L123	INDUCTOR-SMD	2703-002951
L112	INDUCTOR-SMD	2703-002953
L132,L134	INDUCTOR-SMD	2703-002999
L121	INDUCTOR-SMD	2703-003121
L500	INDUCTOR-SMD	2703-003476
L601	INDUCTOR-SMD	2703-003485
L405,L604,U410,U411	INDUCTOR-SMD	2703-003686
L506	INDUCTOR-SMD	2703-003878
L605	INDUCTOR-SMD	2703-003911
L129,L131	INDUCTOR-SMD	2703-004013
L130	INDUCTOR-SMD	2703-004032
L104,L114	INDUCTOR-SMD	2703-004036
L127,L128	INDUCTOR-SMD	2703-004038
L210	INDUCTOR-SMD	2703-004212
L125	INDUCTOR-SMD	2703-004288
U413	INDUCTOR-SMD	2703-004318
L118,L126	INDUCTOR-SMD	2703-004328
L207	INDUCTOR-SMD	2703-004338
L102,L106	INDUCTOR-SMD	2703-004366
L103	INDUCTOR-SMD	2703-004368
L116	INDUCTOR-SMD	2703-004369
L113,L117	INDUCTOR-SMD	2703-004371
OSC400	CRYSTAL-UNIT	2801-004909
OSC100	CRYSTAL-UNIT	2801-005083

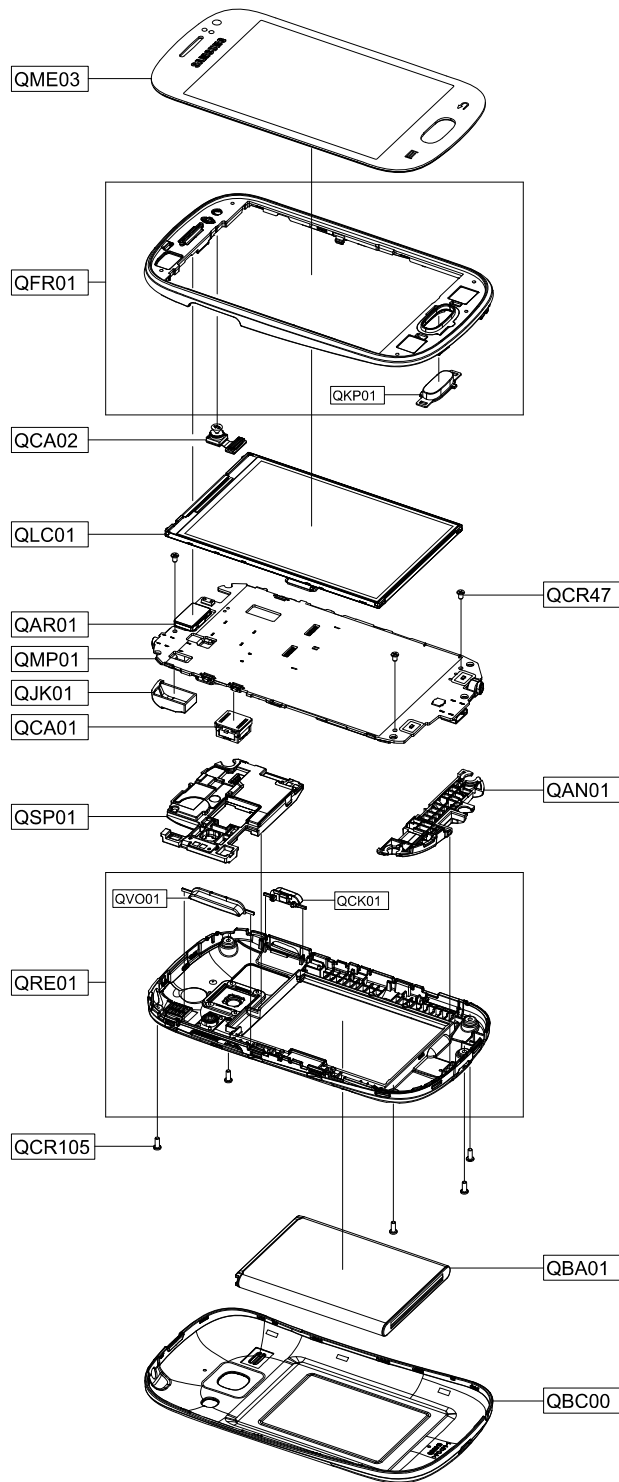
Design LOC	Description	SEC CODE
OSC200	OSCILLATOR	2805-001098
F600,F601,F602,F603	FILTER-EMI SMD	2901-001701
F604	FILTER-EMI SMD	2901-001701
F101	FILTER-SAW	2904-002030
F201,F202	FILTER-SAW	2904-002085
F100	FILTER-SAW	2904-002111
F200	FILTER-DUPLEXER	2909-001324
DUF101	FILTER	2910-000185
DUF100	FILTER	2910-000198
U201	FILTER	2911-000222
L211	CORE-FERRITE BEAD	3301-001438
L205,L300	CORE-FERRITE BEAD	3301-001534
L206	CORE-FERRITE BEAD	3301-001659
L603	CORE-FERRITE BEAD	3301-001756
L513,L514	CORE-FERRITE BEAD	3301-001789
L511,L512	CORE-FERRITE BEAD	3301-001820
L400,L401,L403,L404	CORE-FERRITE BEAD	3301-001885
L501,L502,L503,L504	CORE-FERRITE BEAD	3301-001885
L505,L507,L509,L602	CORE-FERRITE BEAD	3301-001885
L204	CORE-FERRITE BEAD	3301-001895
L600	CORE-FERRITE BEAD	3301-002063
TACT500,TACT501	SWITCH-TACT	3404-001460
TACT502	SWITCH-TACT	3404-001460
SW500	SWITCH-TACT	3404-001485
RFS100	CONNECTOR-COAXIAL	3705-001731
CD500	CONNECTOR-CARD EDGE	3709-001734
SIM500	CONNECTOR-CARD EDGE	3709-001769
SOC600	CONNECTOR-SOCKET	3710-003861
HDC601	CONNECTOR-HEADER	3711-008011

Design LOC	Description	SEC CODE
HDC600	CONNECTOR-HEADER	3711-008182
BTC400	CONNECTOR-HEADER	3711-008463
ANT100,ANT101	CONNECTOR	3712-001348
ANT400,ANT401	CONNECTOR	3712-001363
ANT200,ANT201,ANT500	CONNECTOR	3712-001378
ANT501	CONNECTOR	3712-001378
IFC400	JACK-PHONE	3722-003678
EAR500	JACK-PHONE	3722-003703

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

4. Exploded View and Parts List

4-1. Cellular phone Exploded View



7. Level 2 Repair

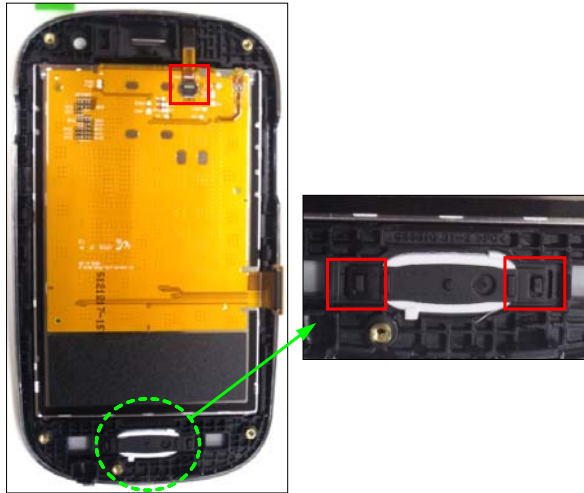
7-1. Disassembly and assembly Instructions

7-1-1. Disassembly

1 Unscrew the 5 point of the REAR.	2 Disassemble the rear cover with the front cover by using the hook Hooks
Be careful not to scratch cover.	Be careful not to scratch cover.
3 Disassemble Top and Bottom career of the REAR	4 Detach LCD Connector and MIC from the board. After detach FRONT Hook 2point, when detach PBA, lift PCB from the PBA . Hook Hook MIC PCB pick up point
Be careful not to scratch cover	Be careful not to damage the FPCBs

5

Remove HOME KEY
Detach TSP FPCB.



Be careful not to damage the FPCBs

6

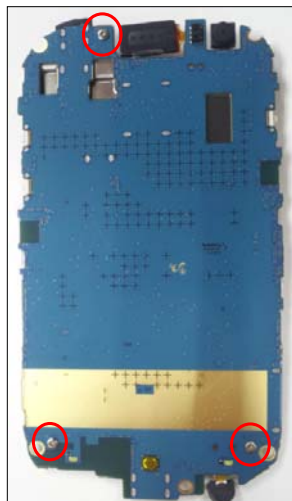
Detach LCD from the FRONT.
Detach TSP from the FRONT.



Be careful not to scratch cover

7

Unscrew 3 point.



Be careful not to damage the PBA

8

Disassemble Ear jack Rubber and 2 CAMERA..
(When detach CAMERA, USE disassemble camera jig)
Detach Shield Can from the PBA.



Be careful not to damage the PBA

7-1-2. assemble

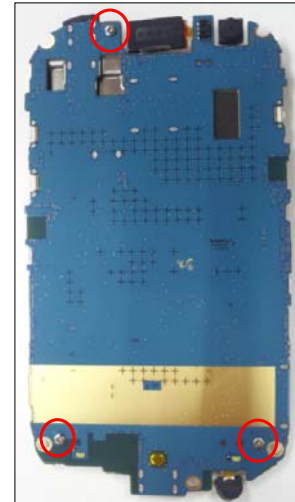
1

Assemble Shield Can to the PBA.
Assemble Ear jack Rubber and CAMERA.



2

Screw PBA 3 point.

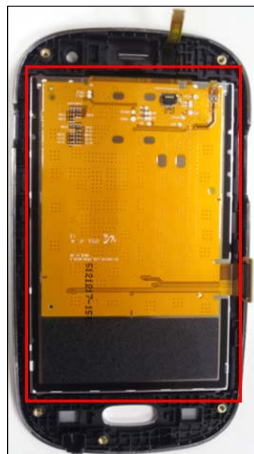


Be careful not to damage the PBA

Be careful not to damage the PBA

3

Assemble TSP.
Place LCD to the FRONT.



4

Insert TSP FPCB.
Assemble HOME KEY to the FRONT.



Be careful not to scratch cover

Be careful not to damage the FPCBs

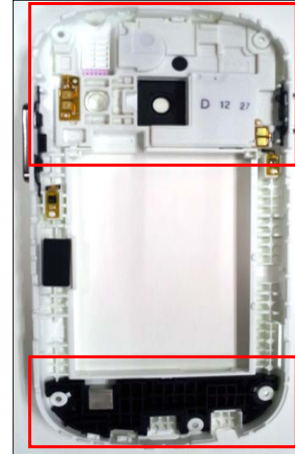
5

Place PBA to the FRONT.
After Insert MIC , assemble LCD Connector
from the board.



6

Assemble top and bottom carrier to the REAR.



Be careful not to damage the FPCBs

Be careful not to scratch cover

7

Assemble the REAR CASE.



8

SCREW 5 Point.
Torque :1.1~1.3 Kgf·cm / Size:1.4*3.5

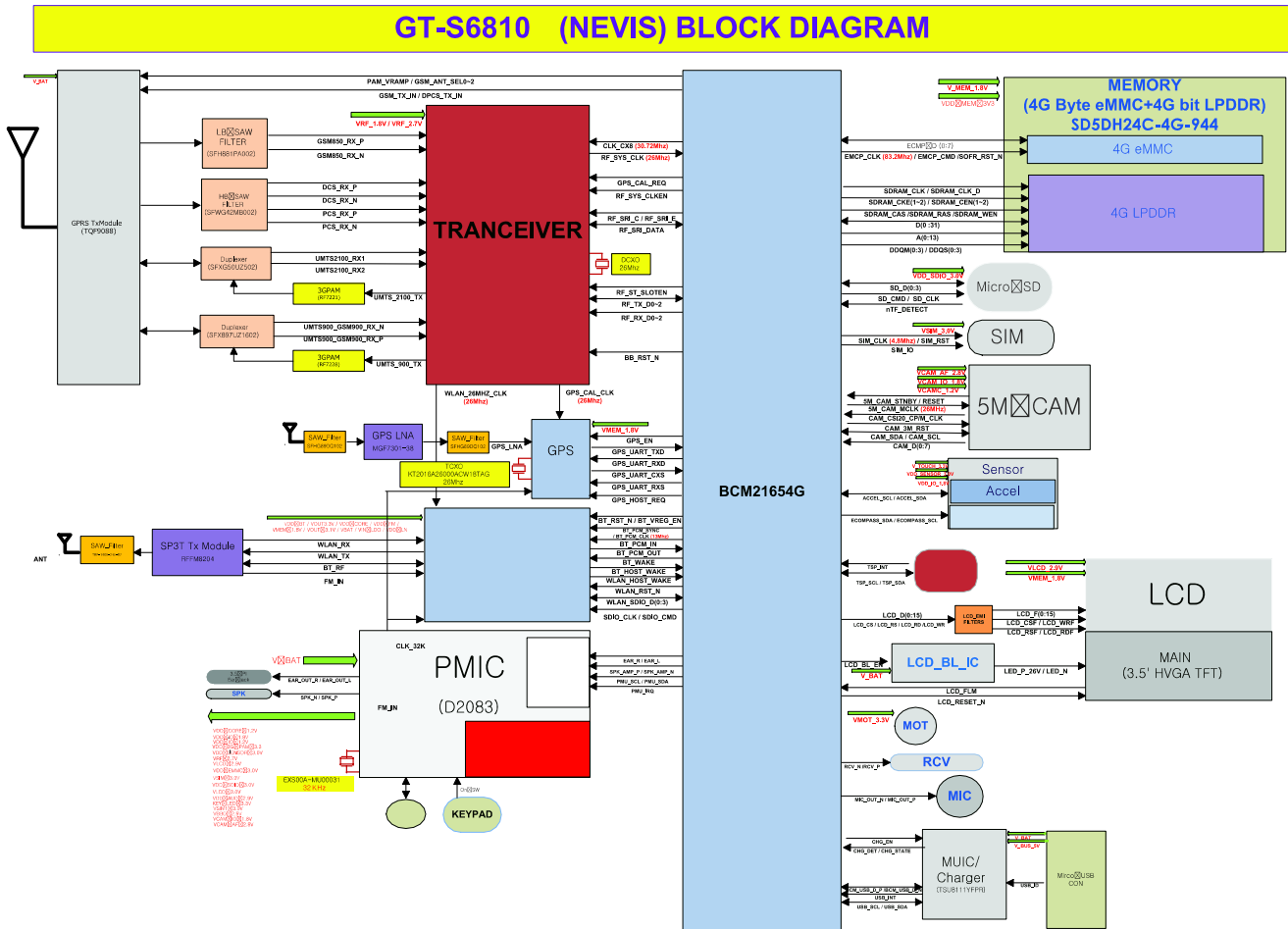


Be careful not to scratch cover.

Be careful not to scratch cover.

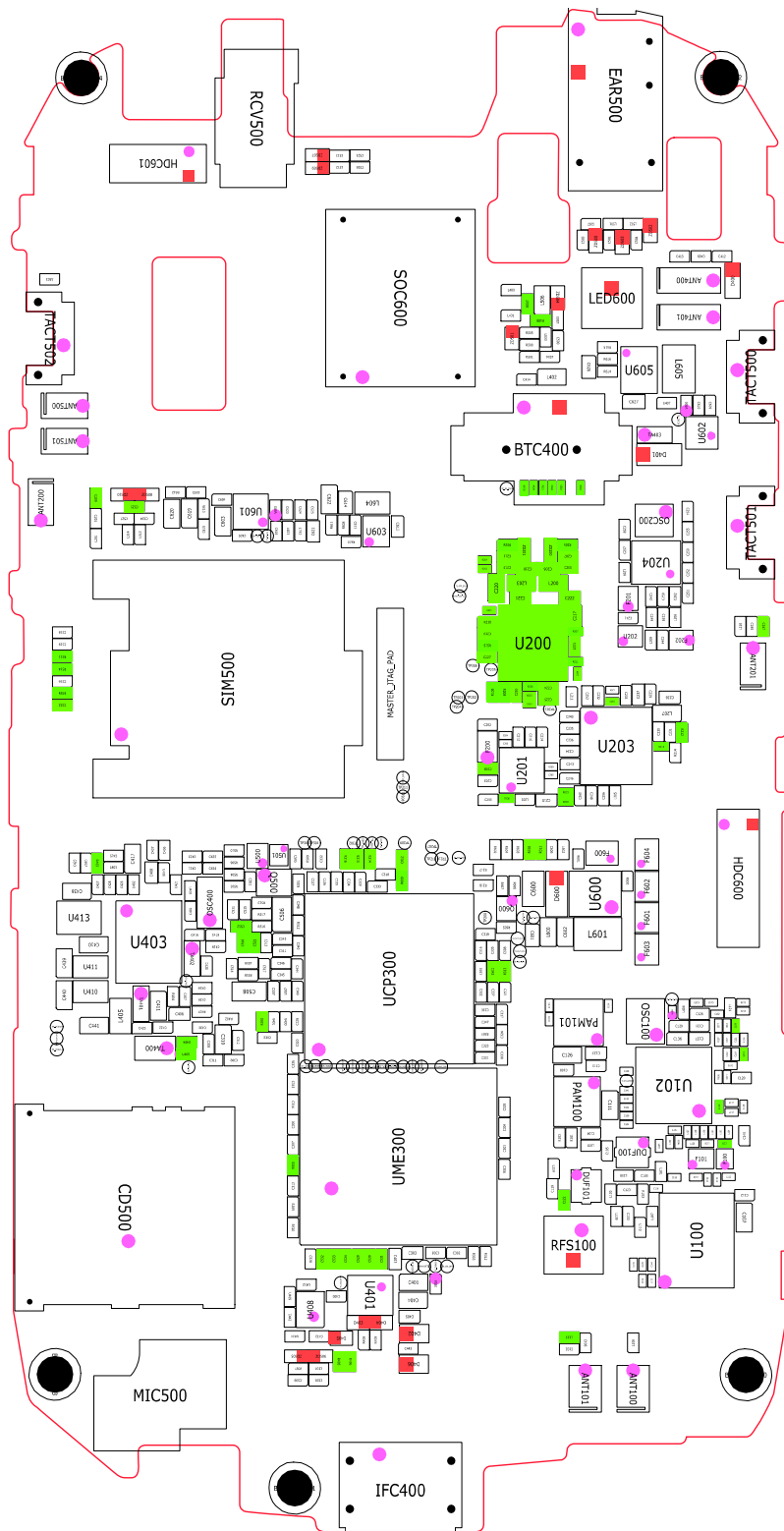
8. Level 3 Repair

8-1. Block Diagram

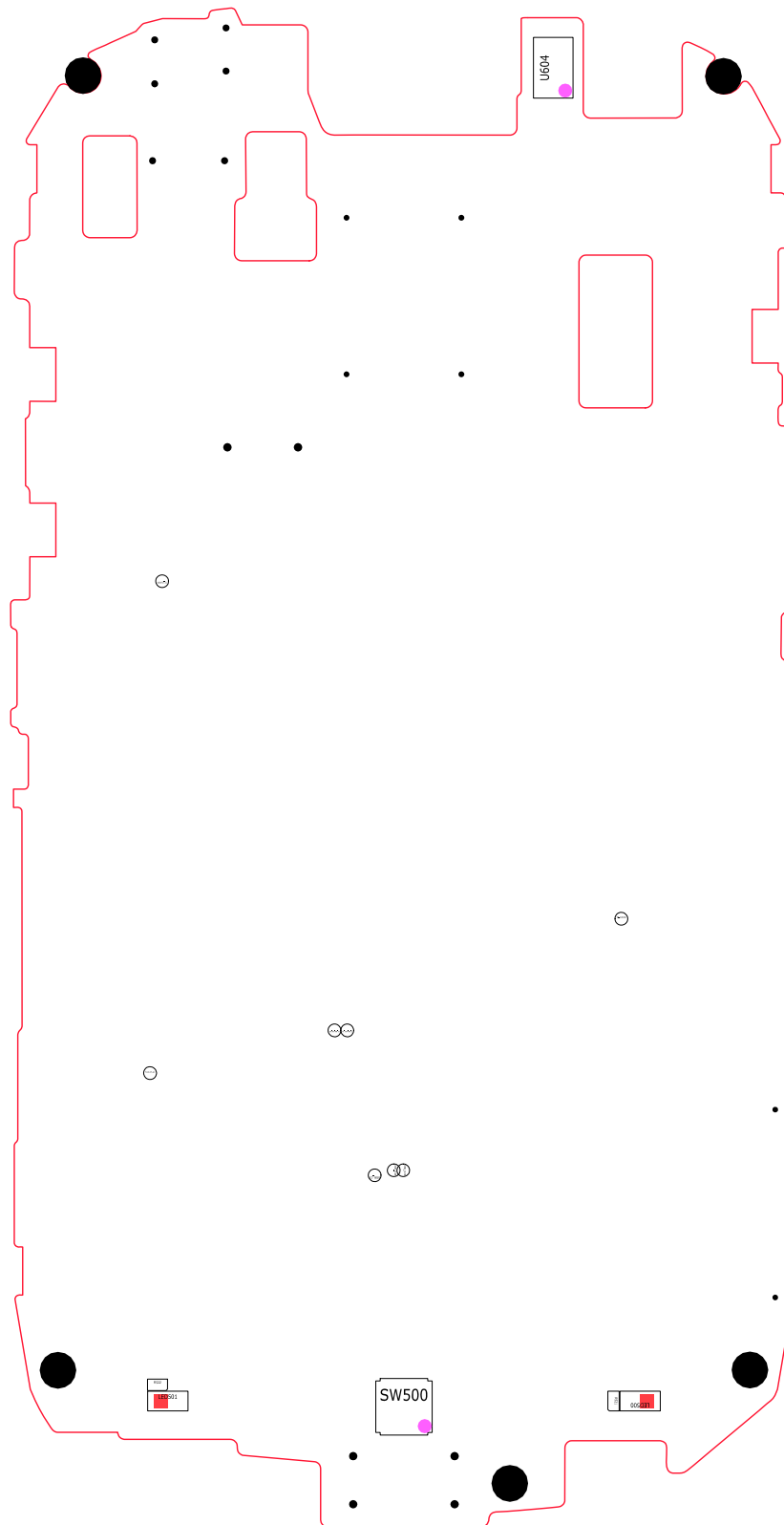


8-2. PCB Diagrams

8-2-1. Top

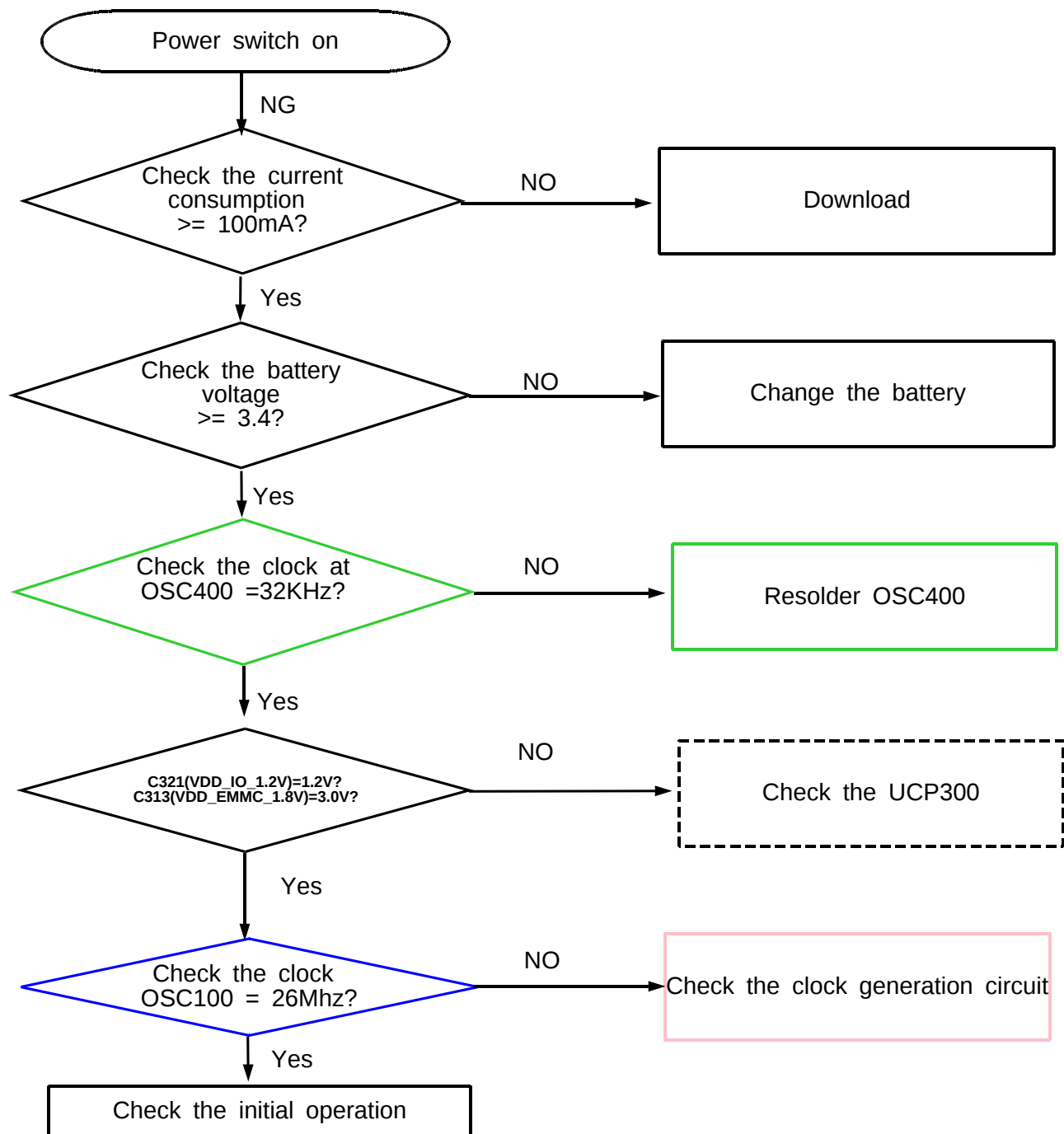


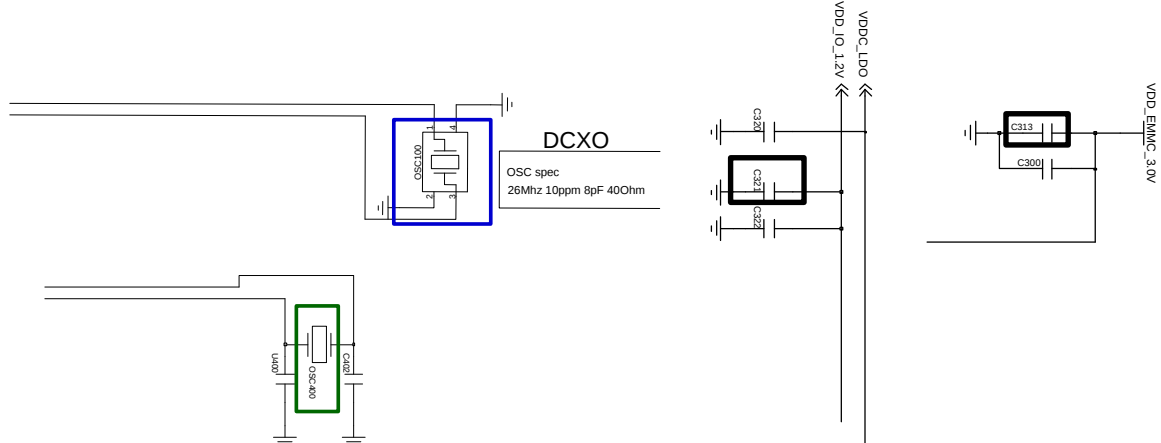
8-2-1. Bottom



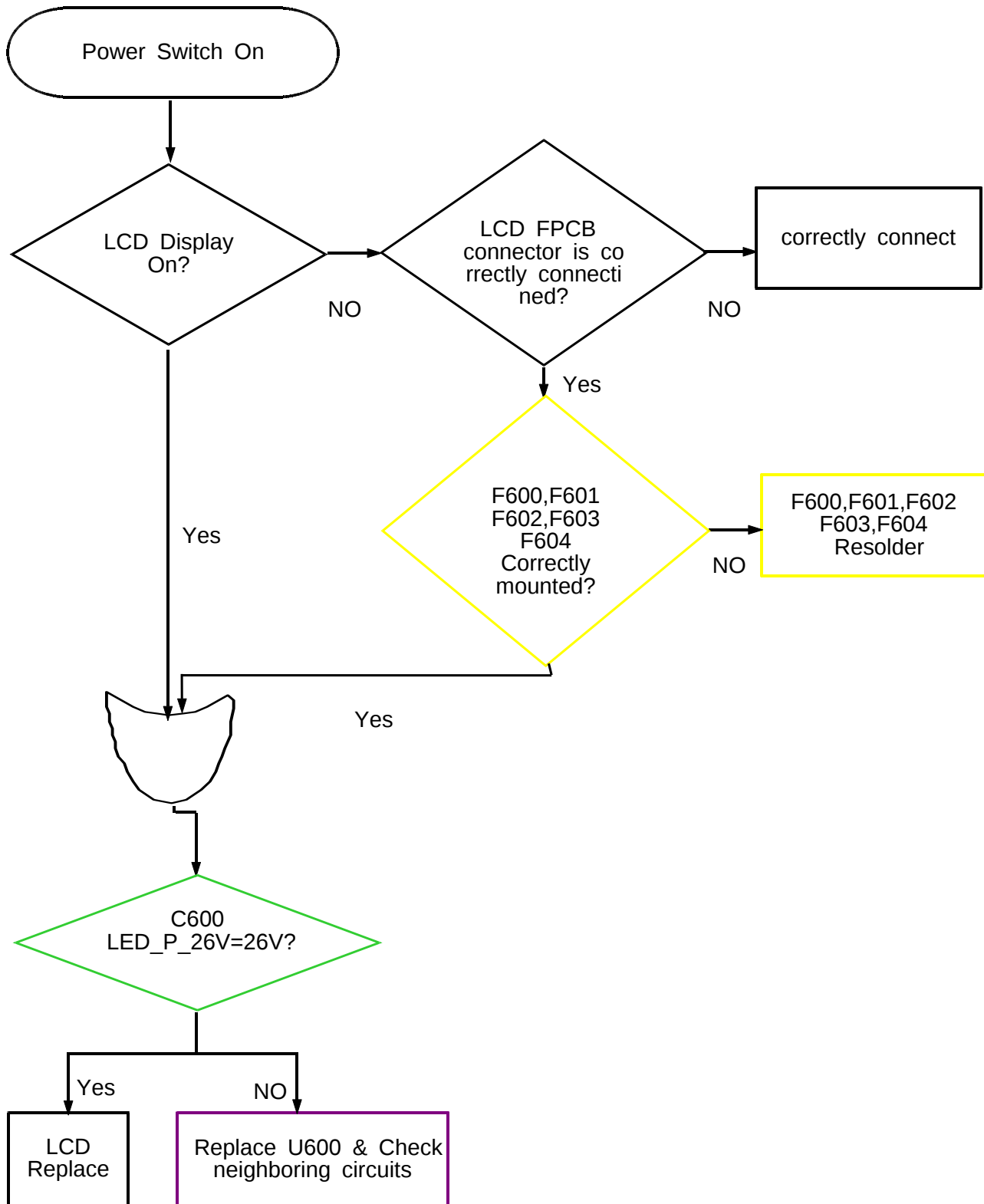
8-3. LOGIC

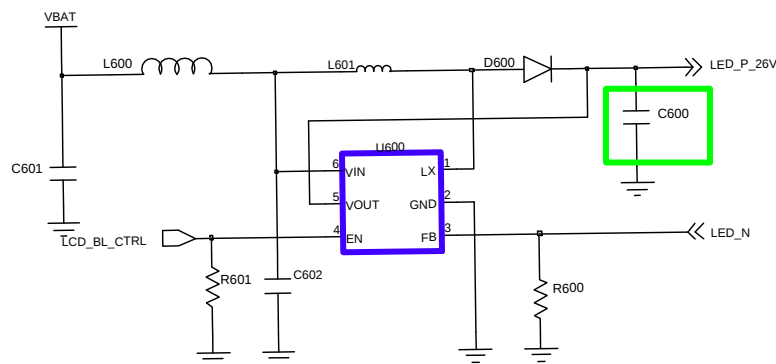
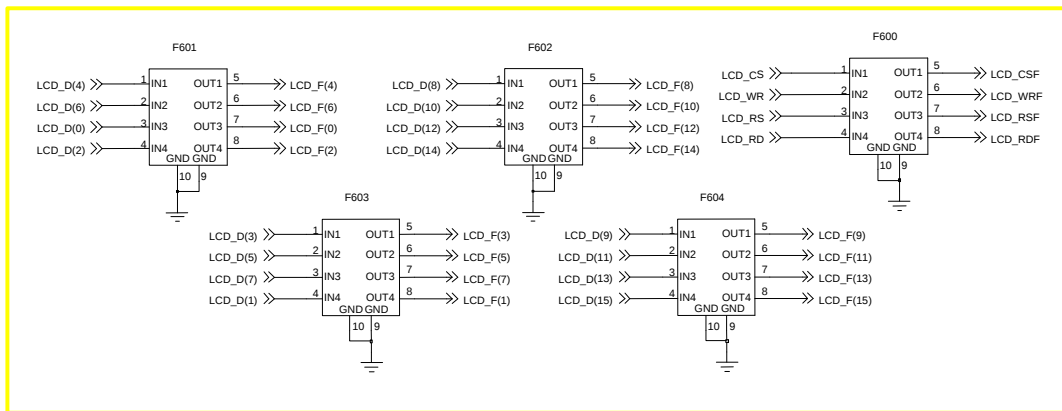
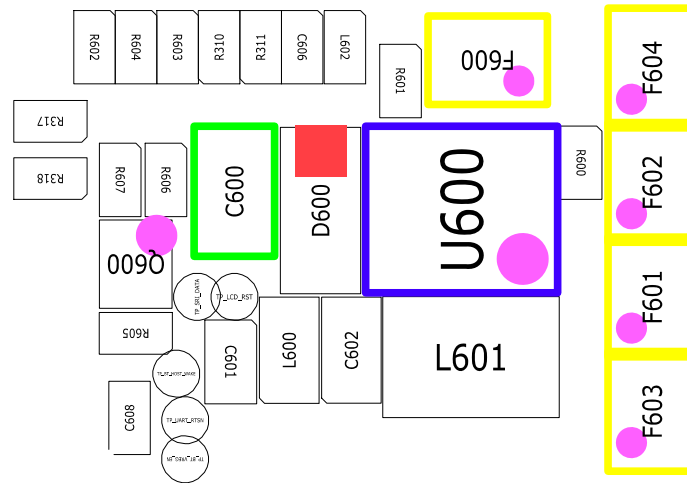
8-3-1. Power On





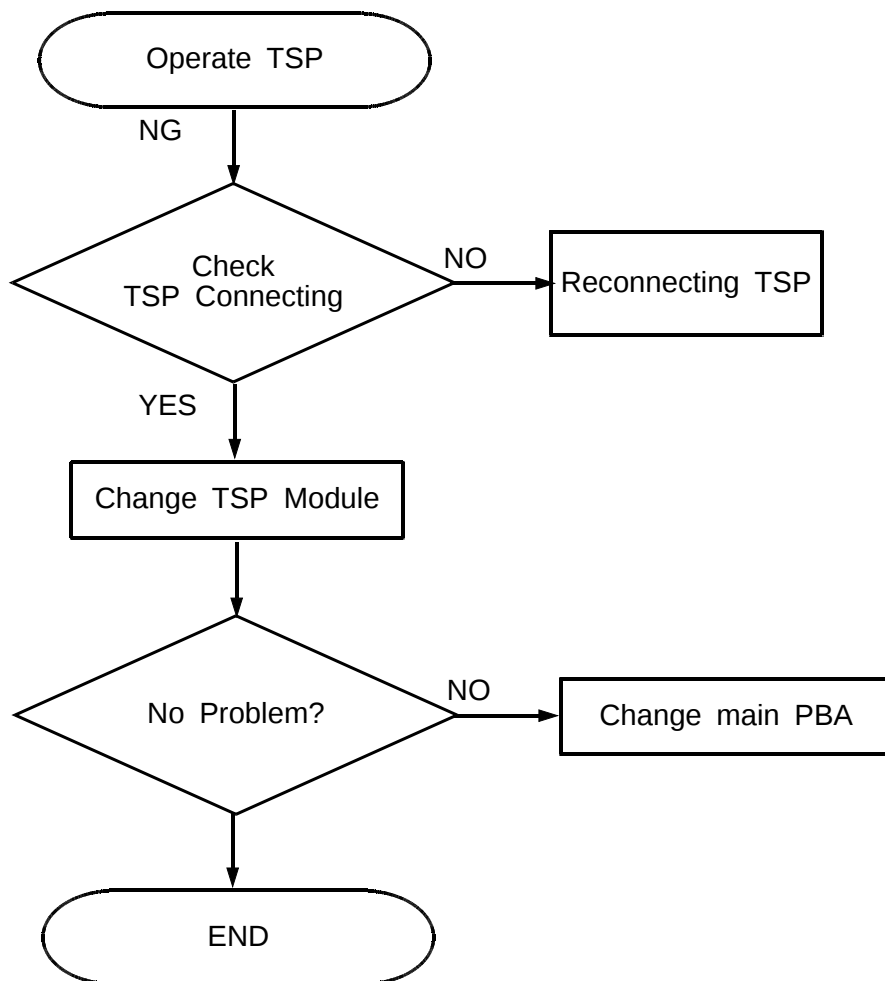
8-3-2. LCD Working



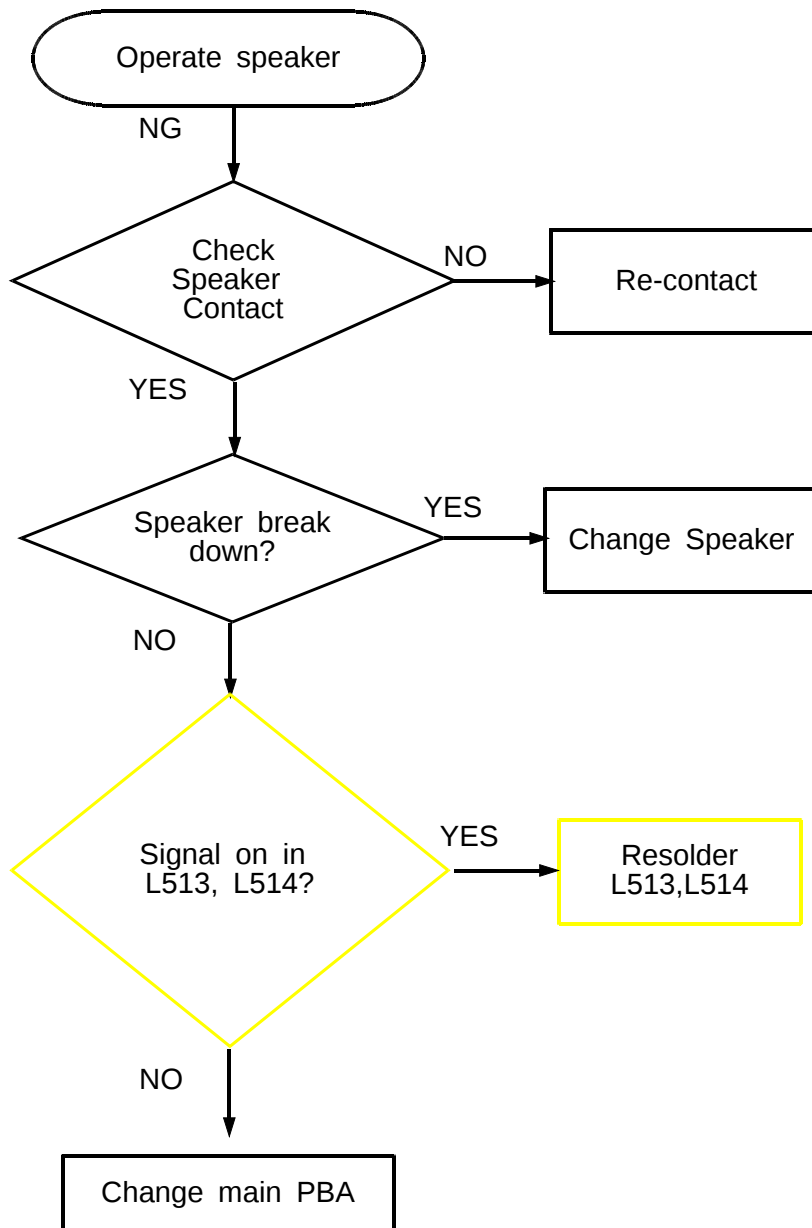


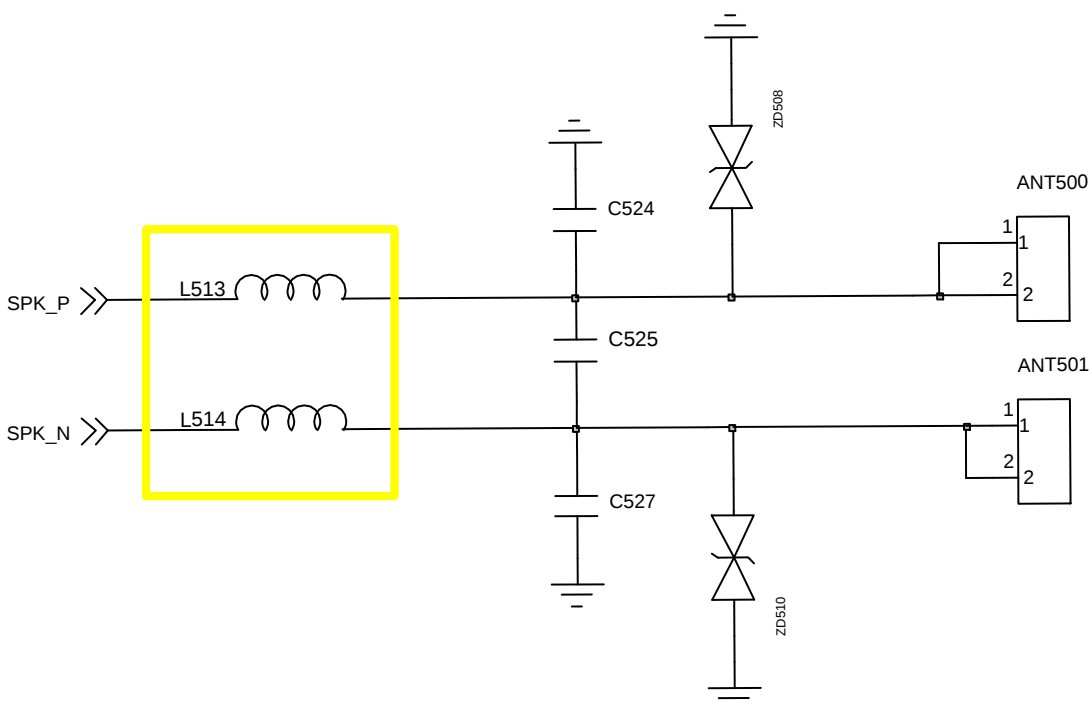
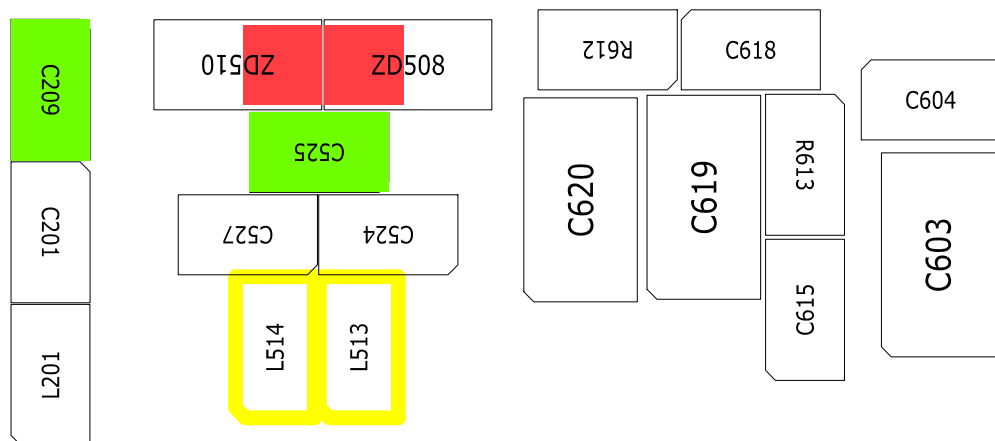
LCD_LED DRIVER IC

8-3-3. TSP



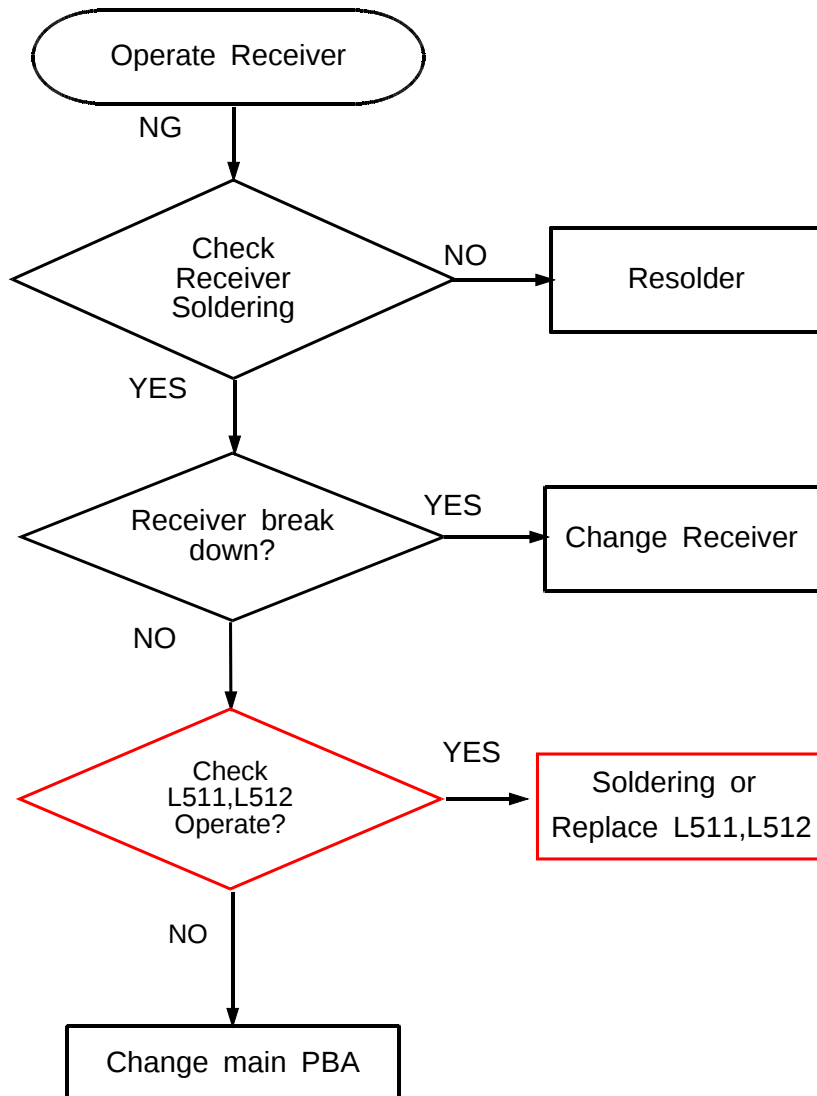
8-3-4 Audio Working

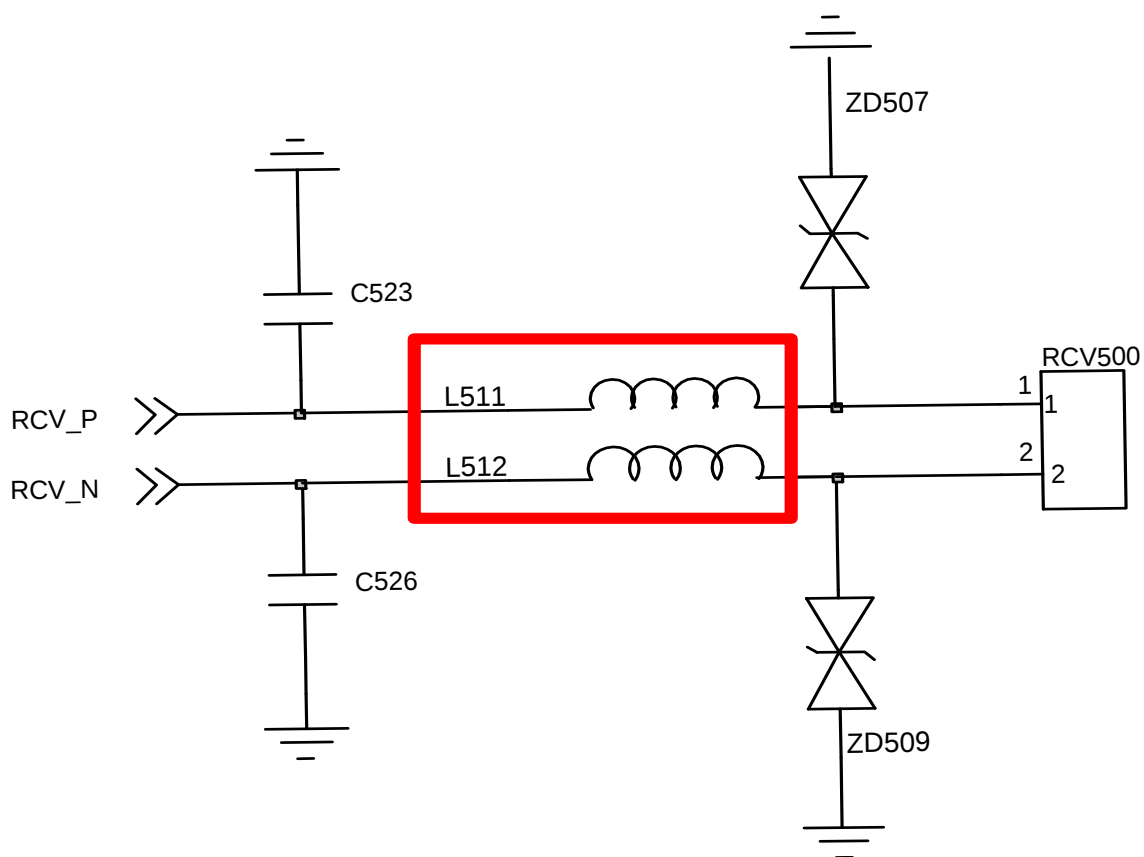
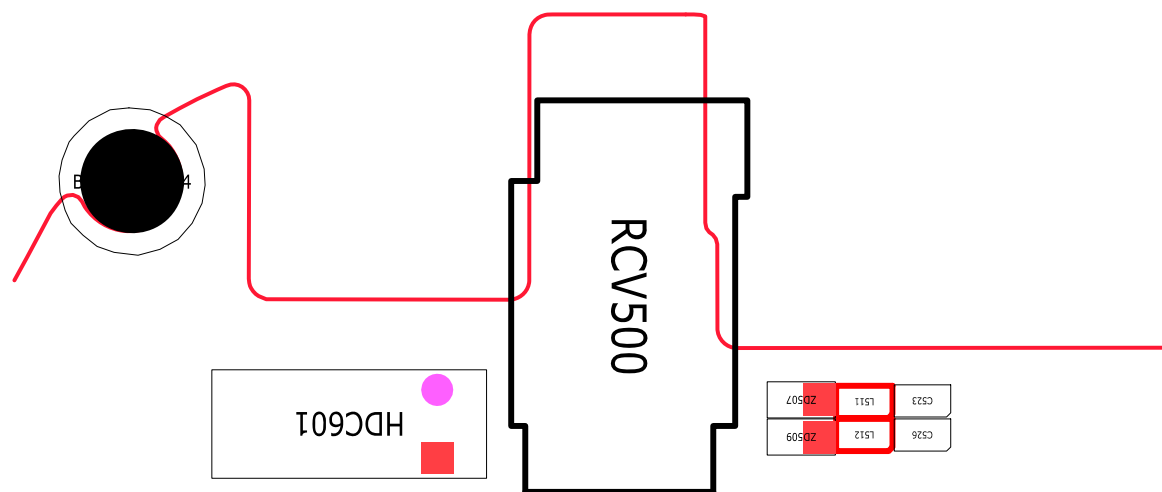
● Speaker Working



SPEAKER

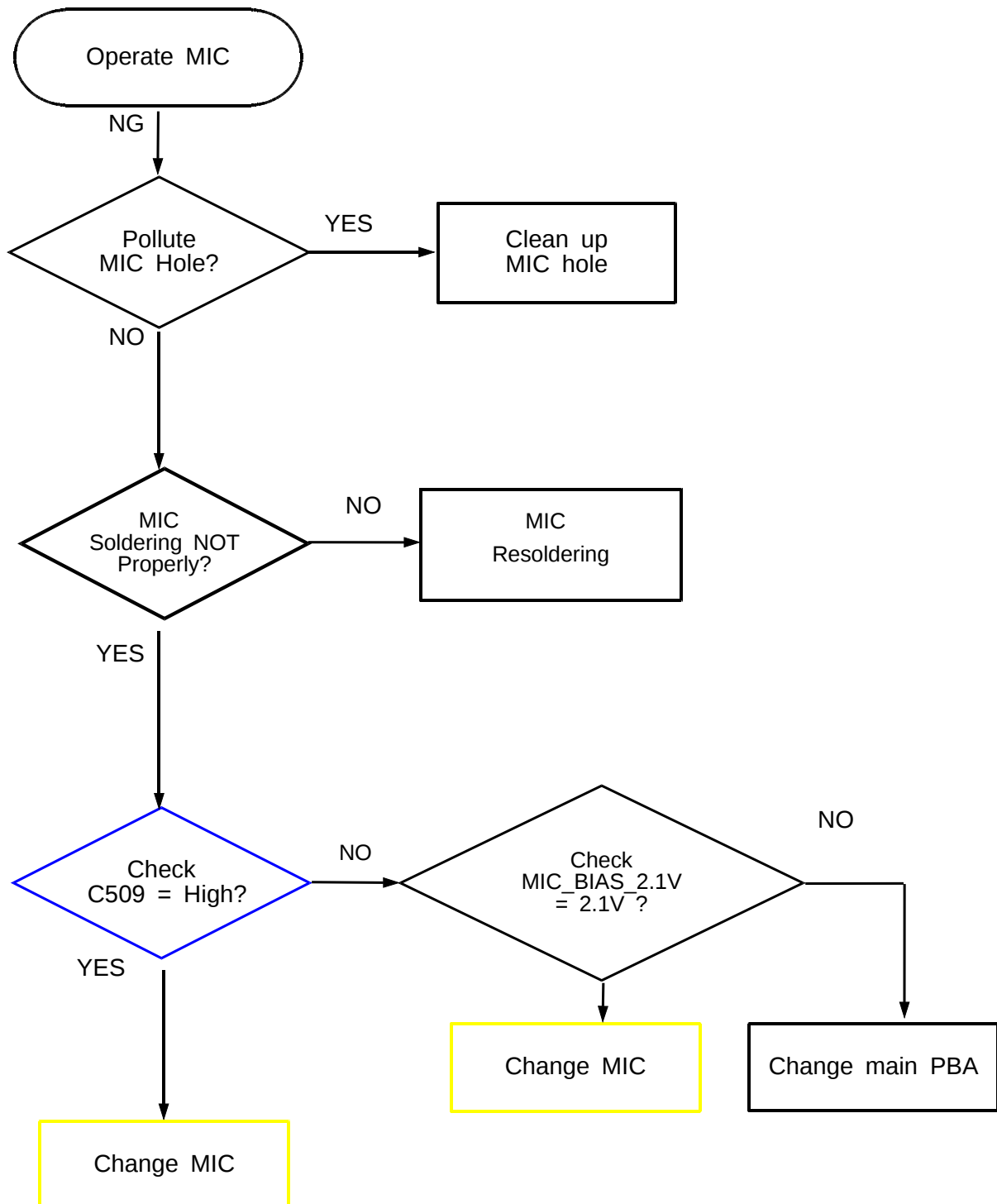
■ Receiver Working

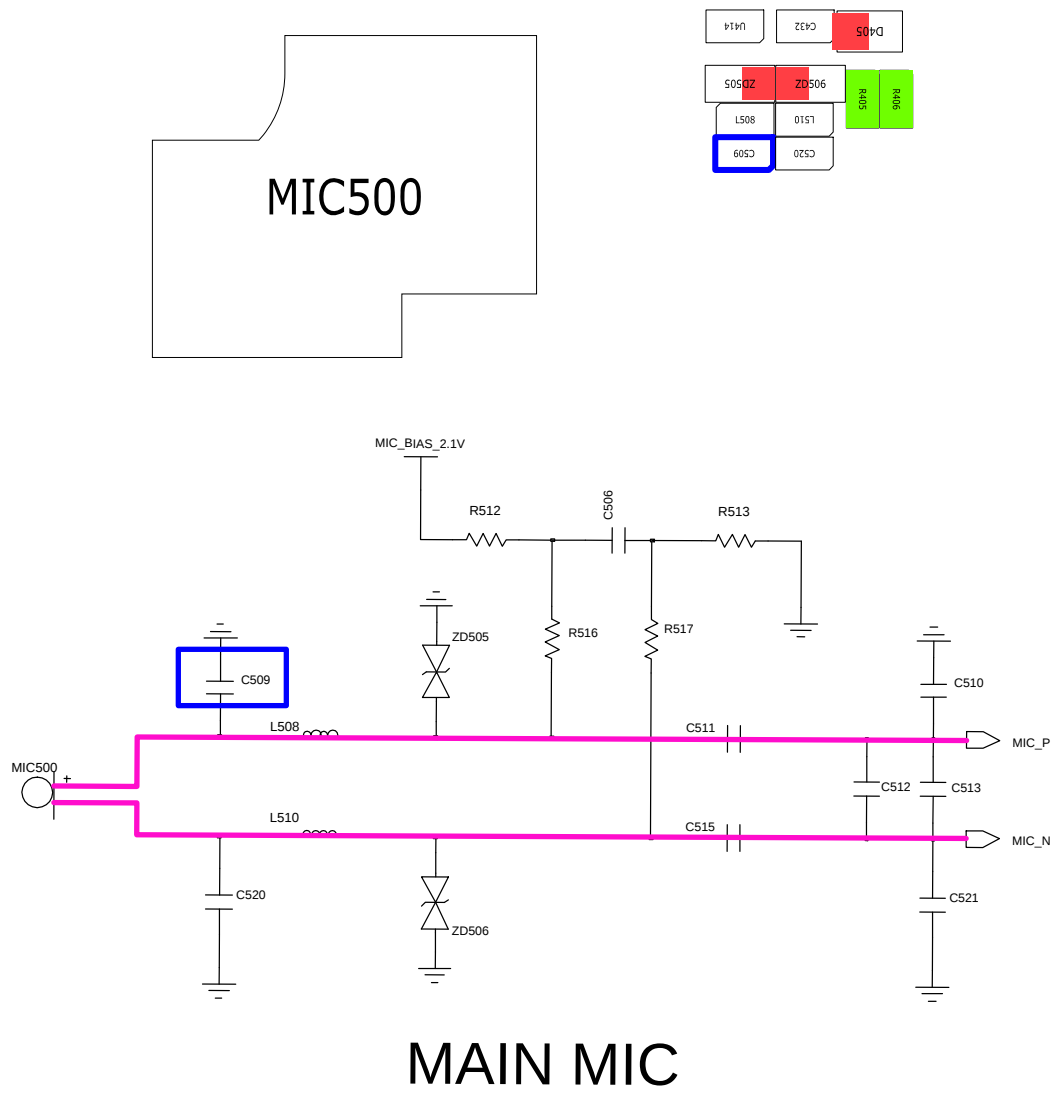




RECEIVER

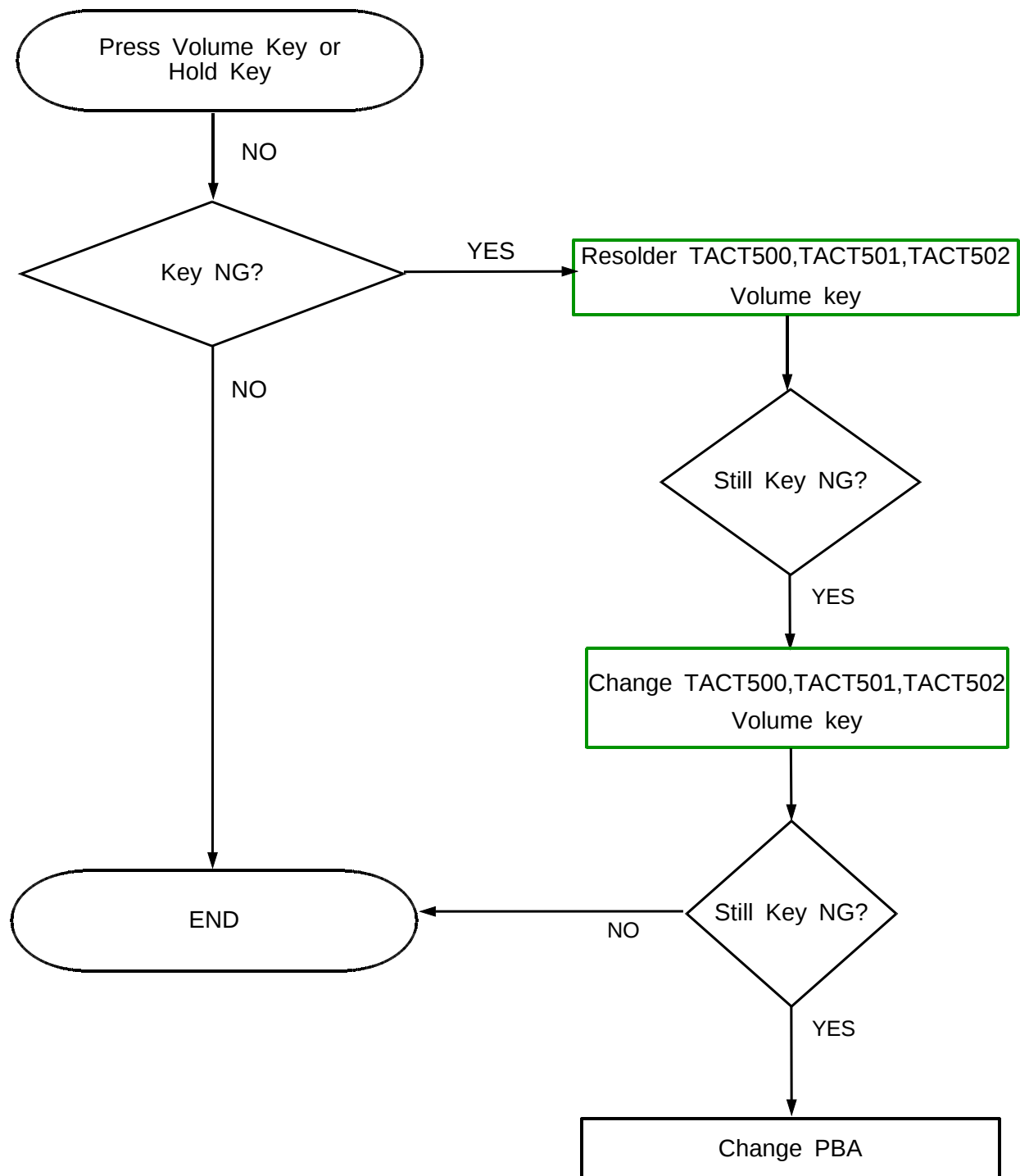
- Main MIC Working

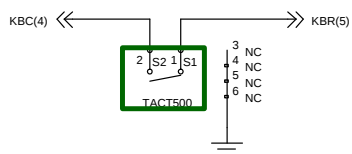
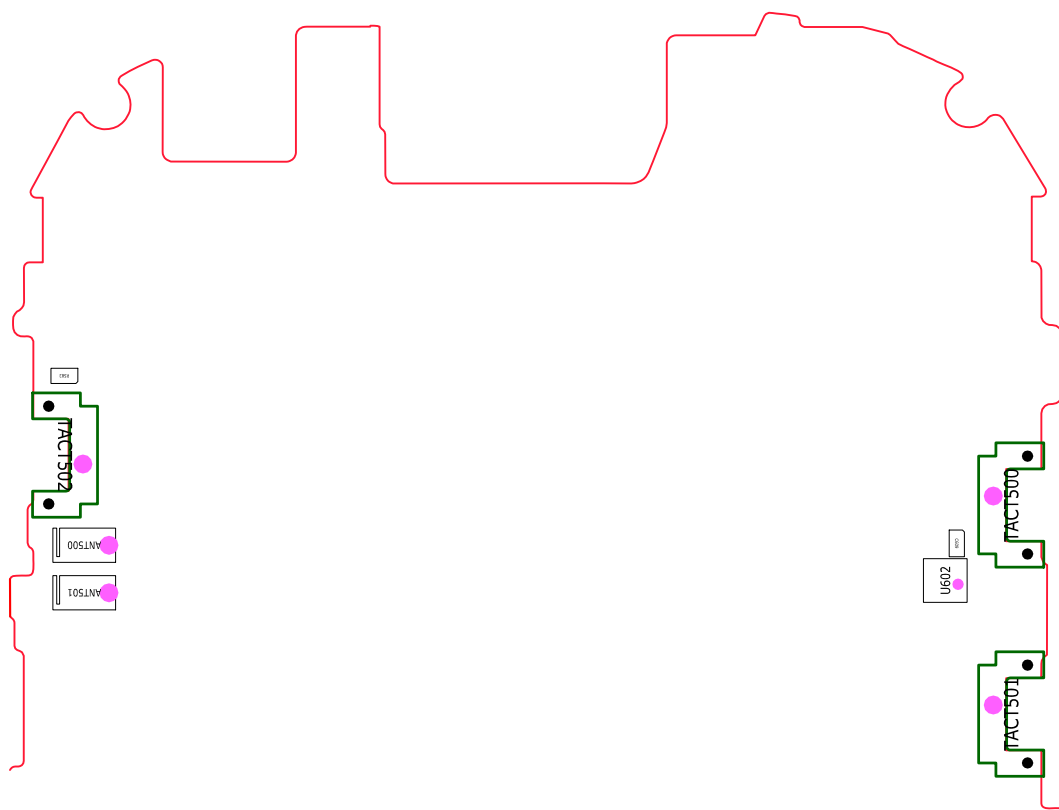




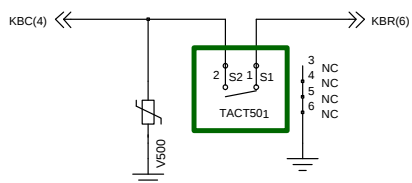
8-3-5. KEY Working

- Volume KEY, Hold KEY

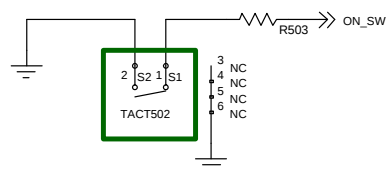




VOL UP

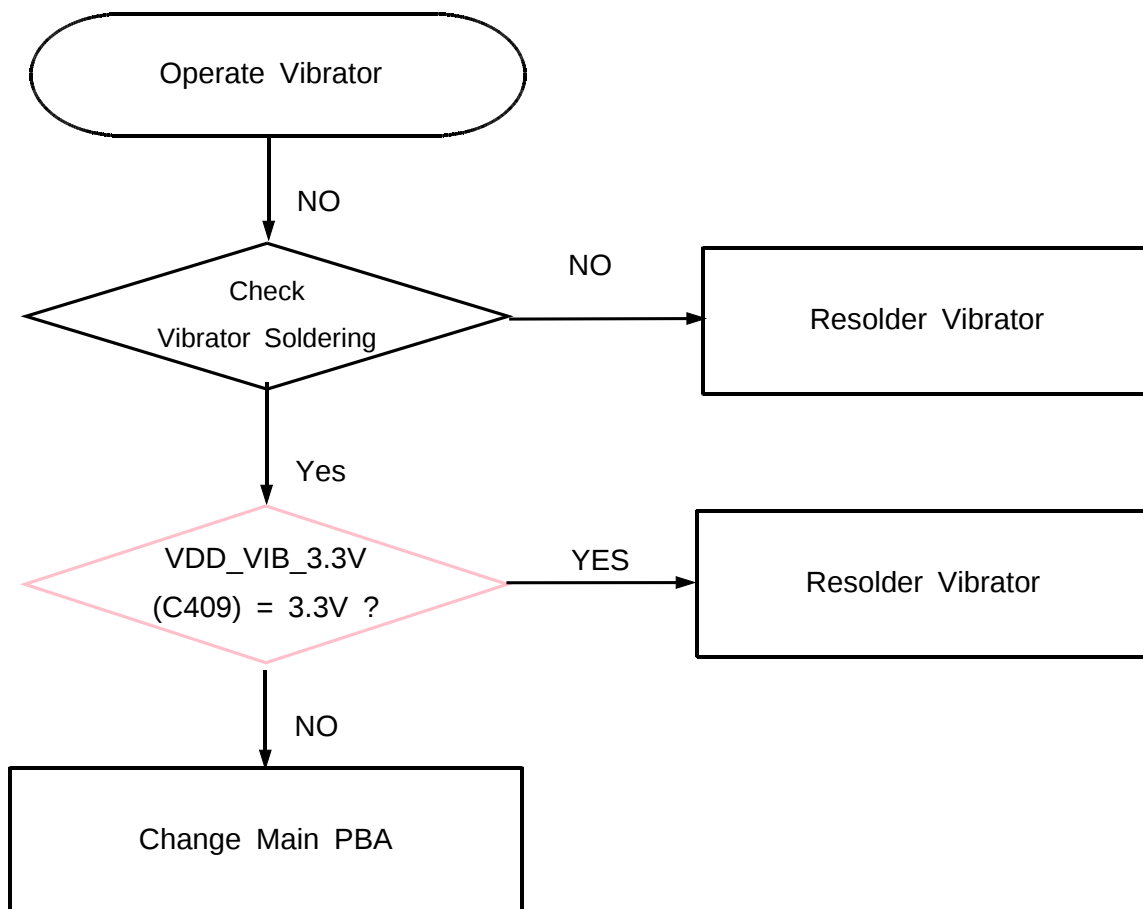


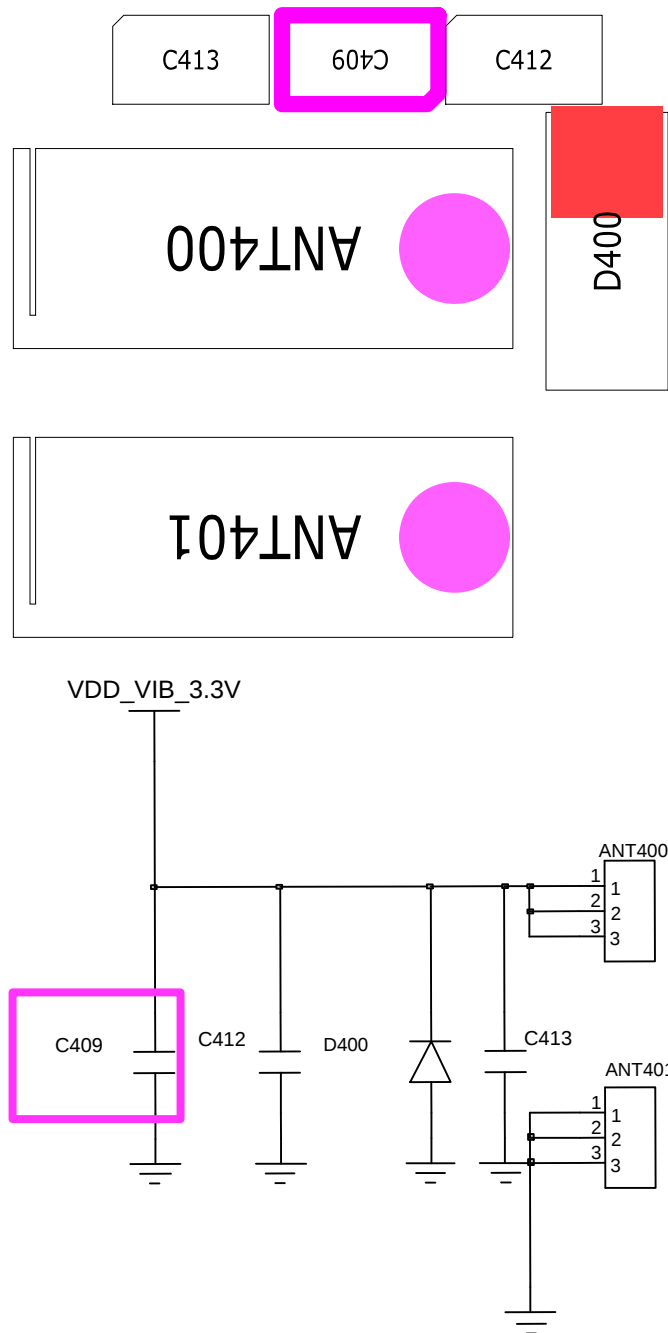
VOL DOWN



HOLD KEY

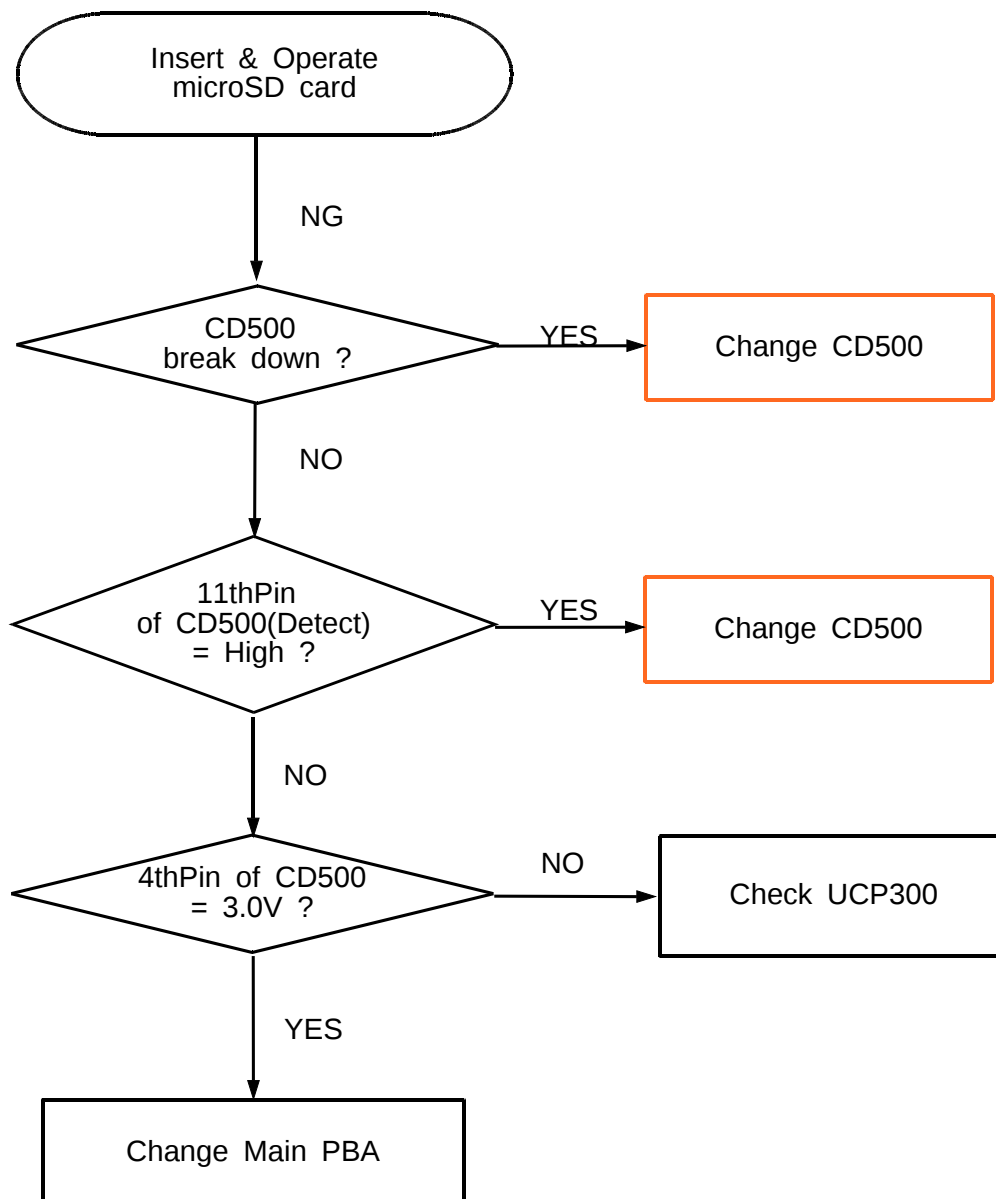
8-3-6. Vibrator Working

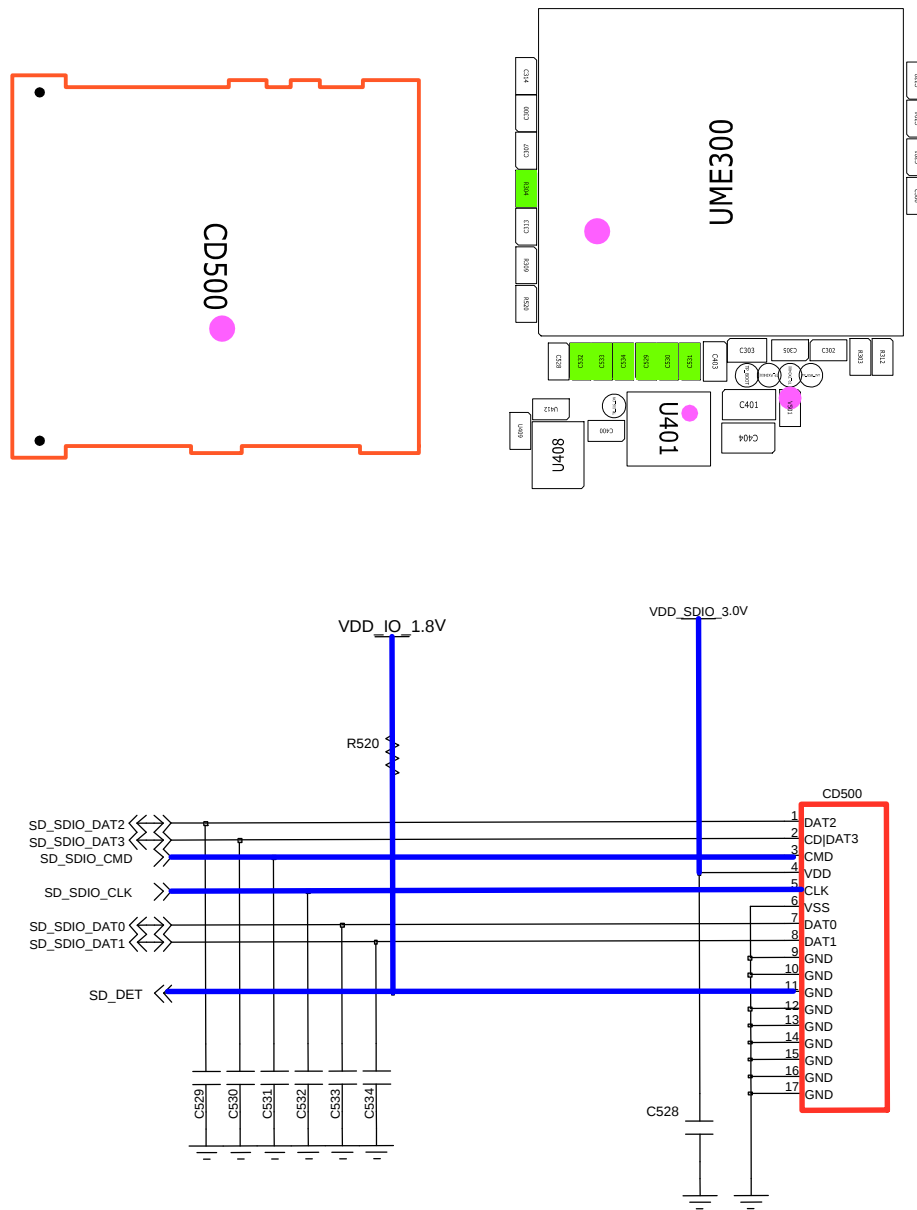




MOT PAD

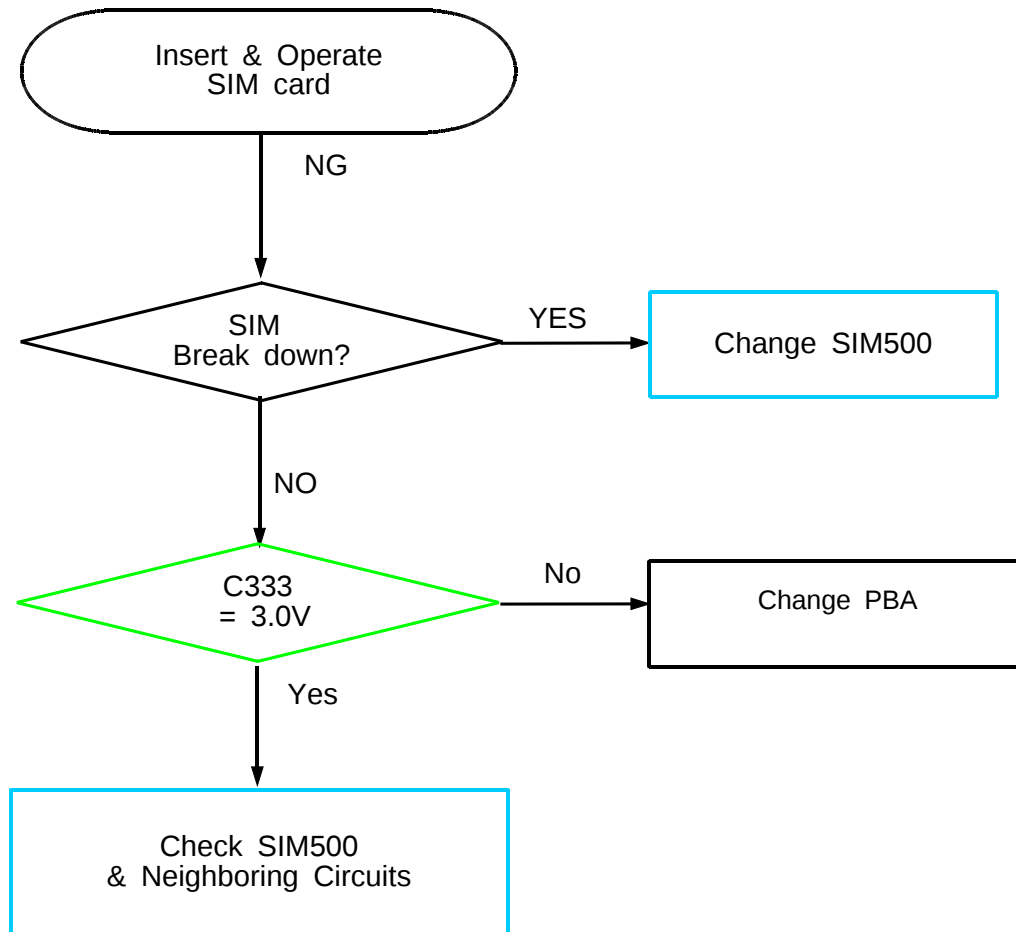
8-3-7. T-Flash Card Working

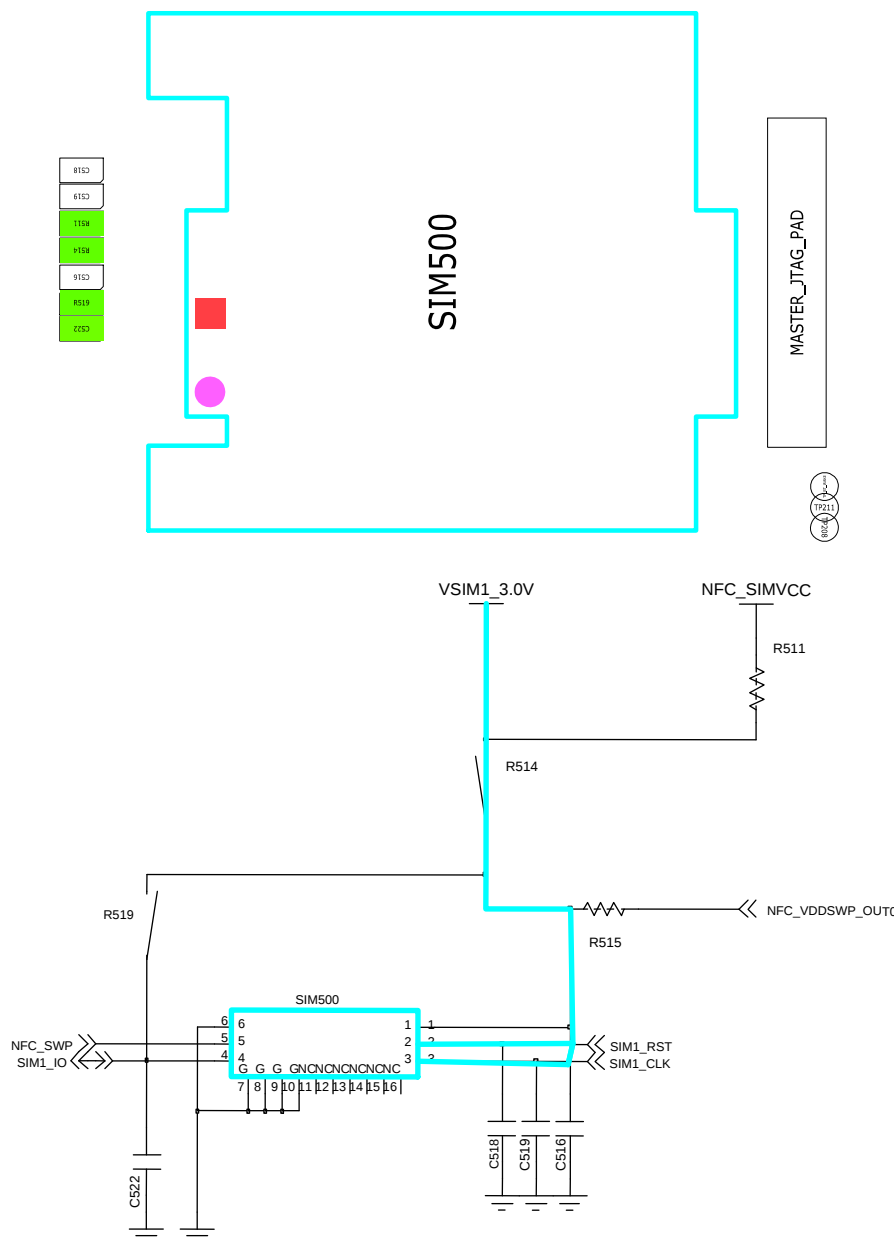




MicroSD Card CON

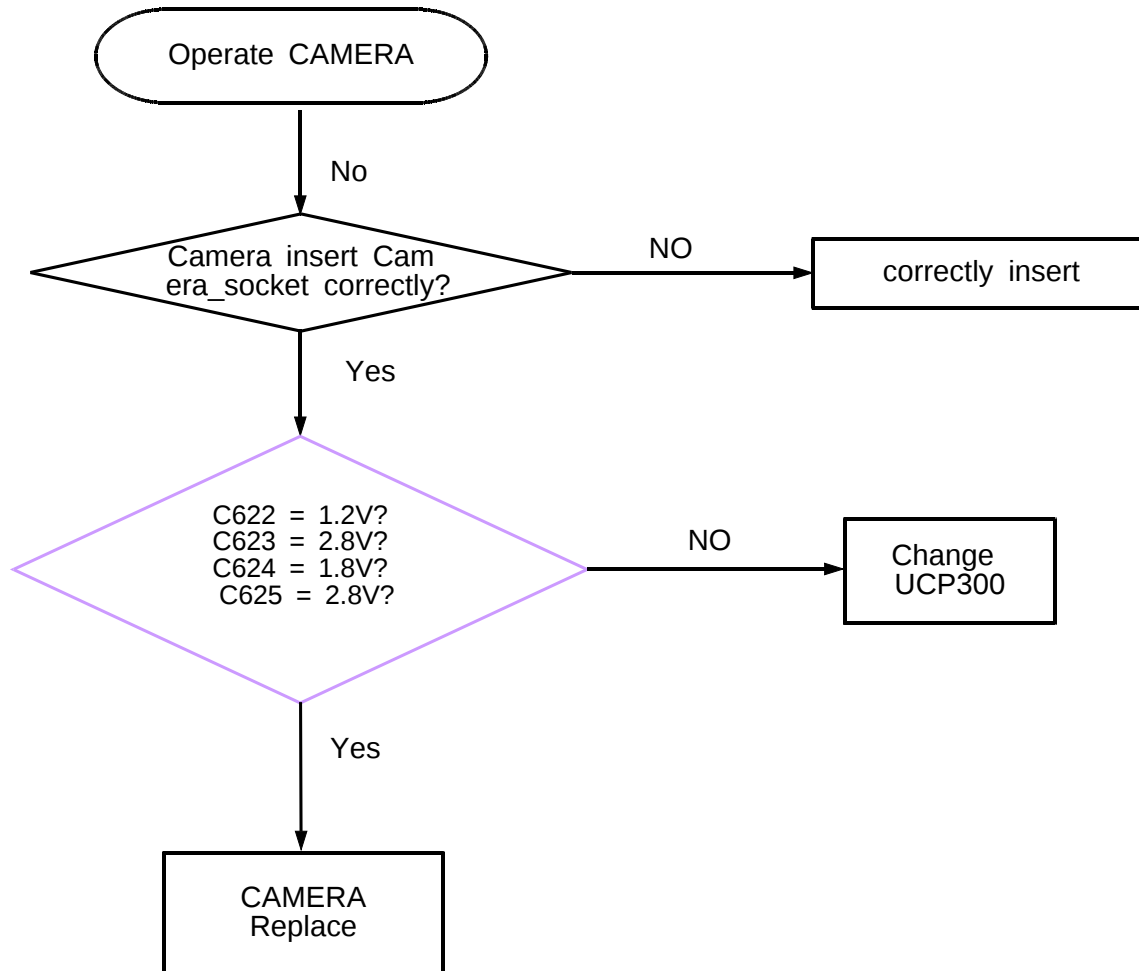
8-3-8. SIM Card Working

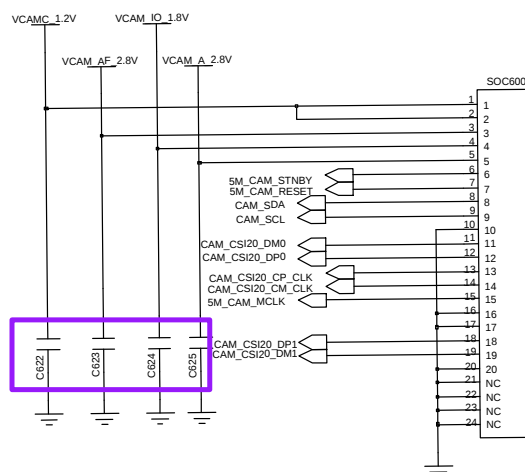
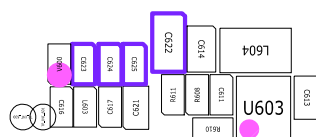
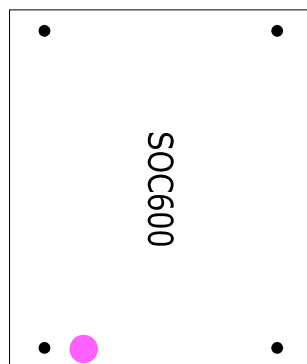




SIM CON

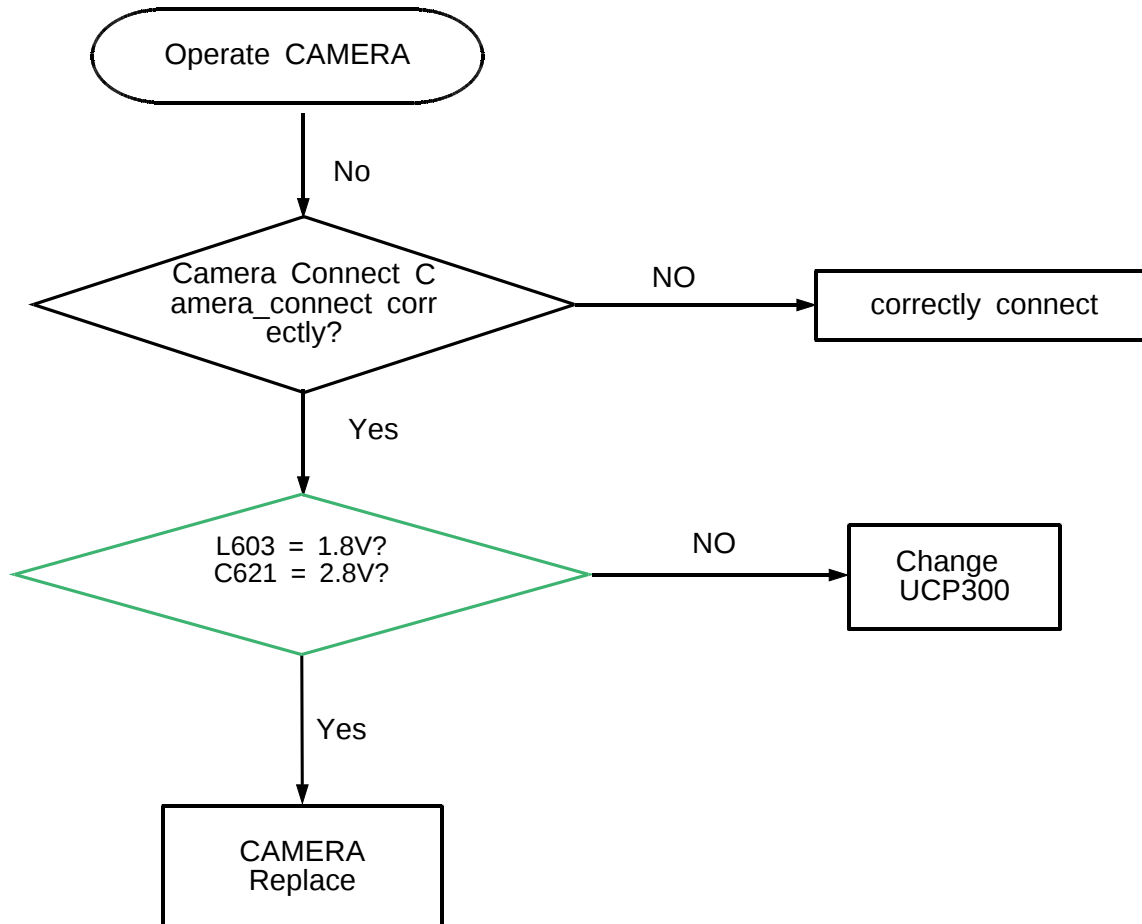
8-3-9 Main(5M) CAMERA Working

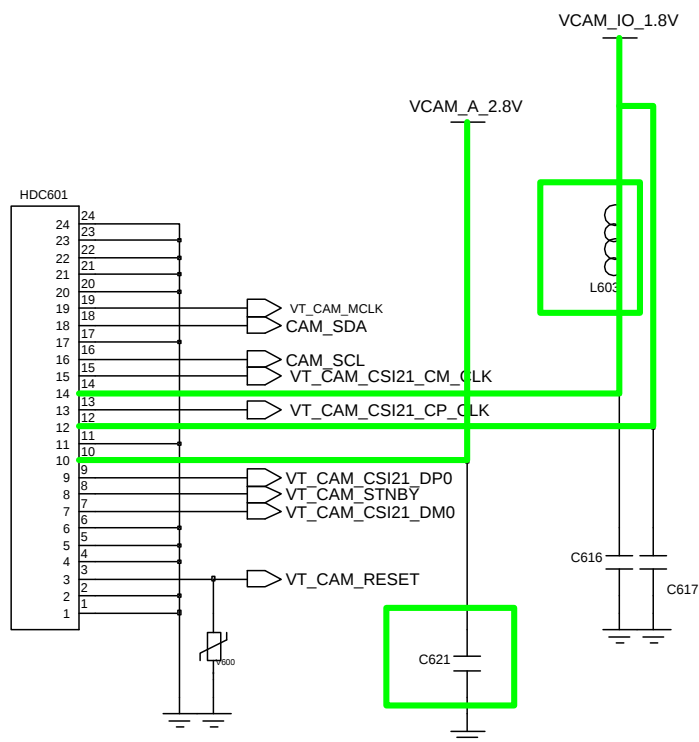
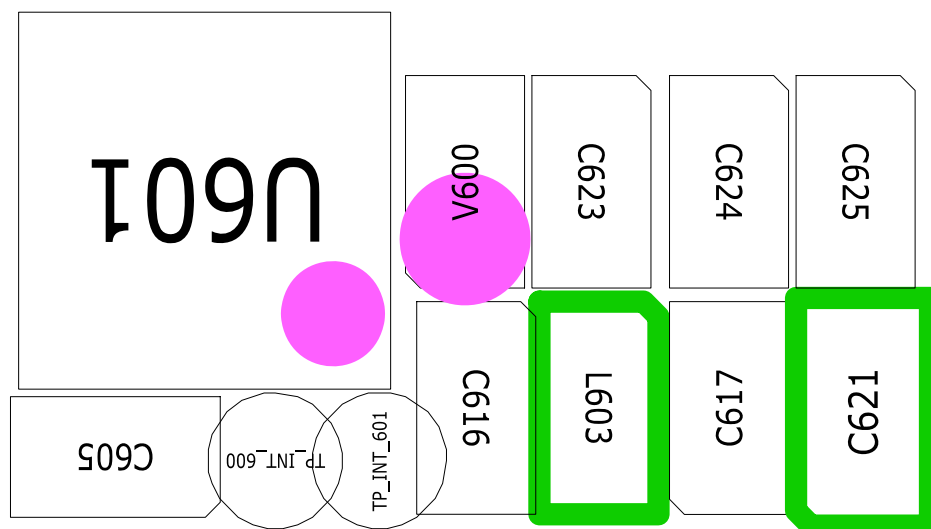




5M AF CAMERA

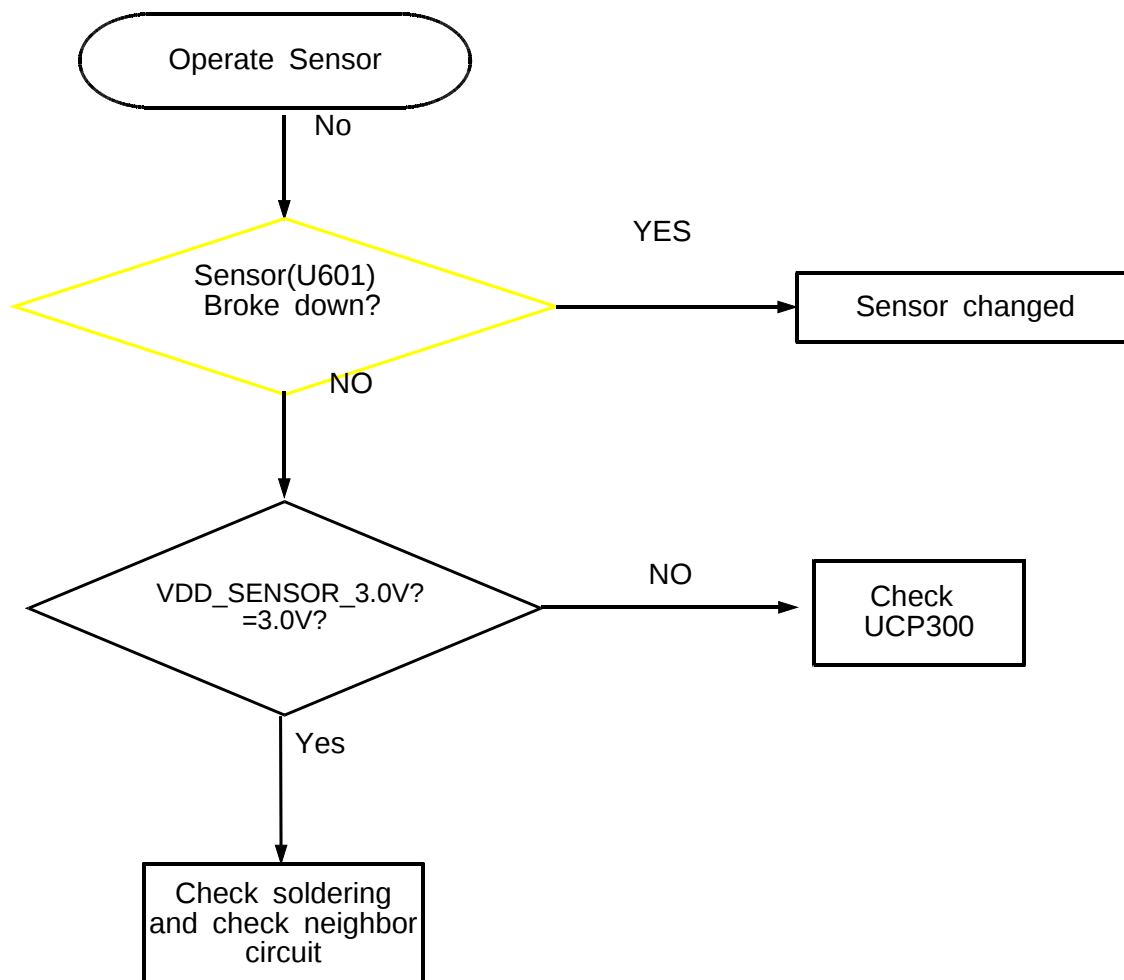
8-3-10 Main(VGA) CAMERA Working

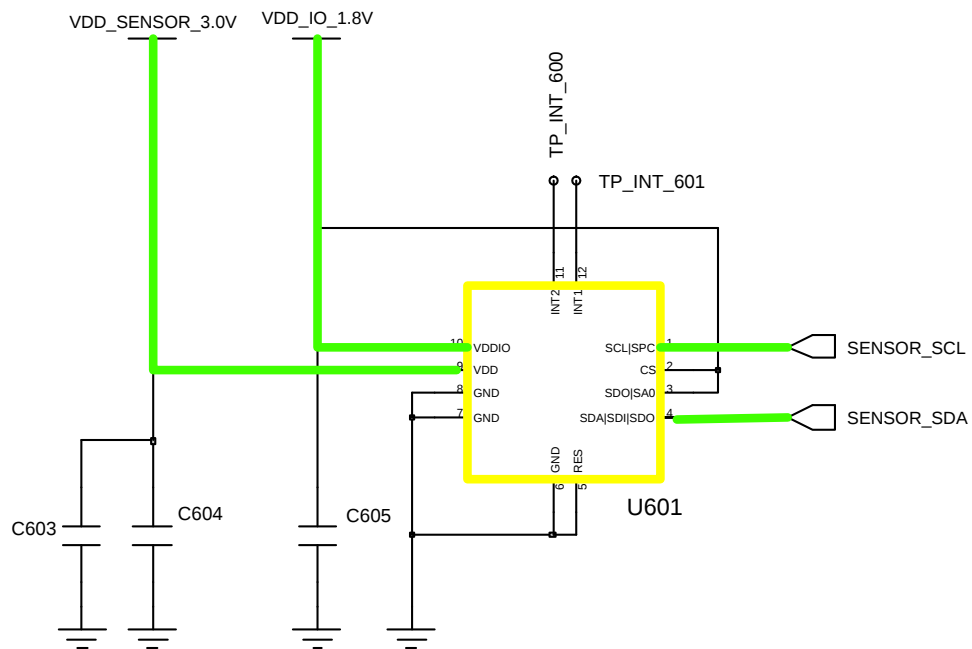
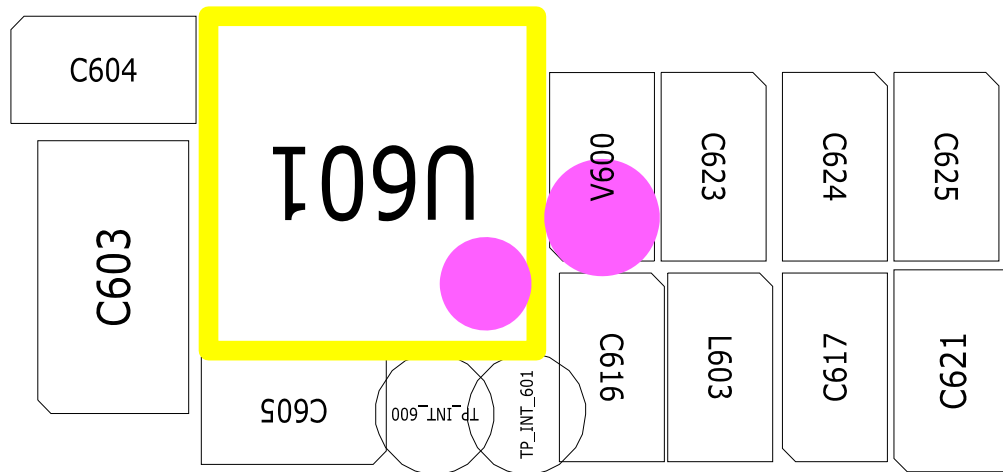




VGA CAM

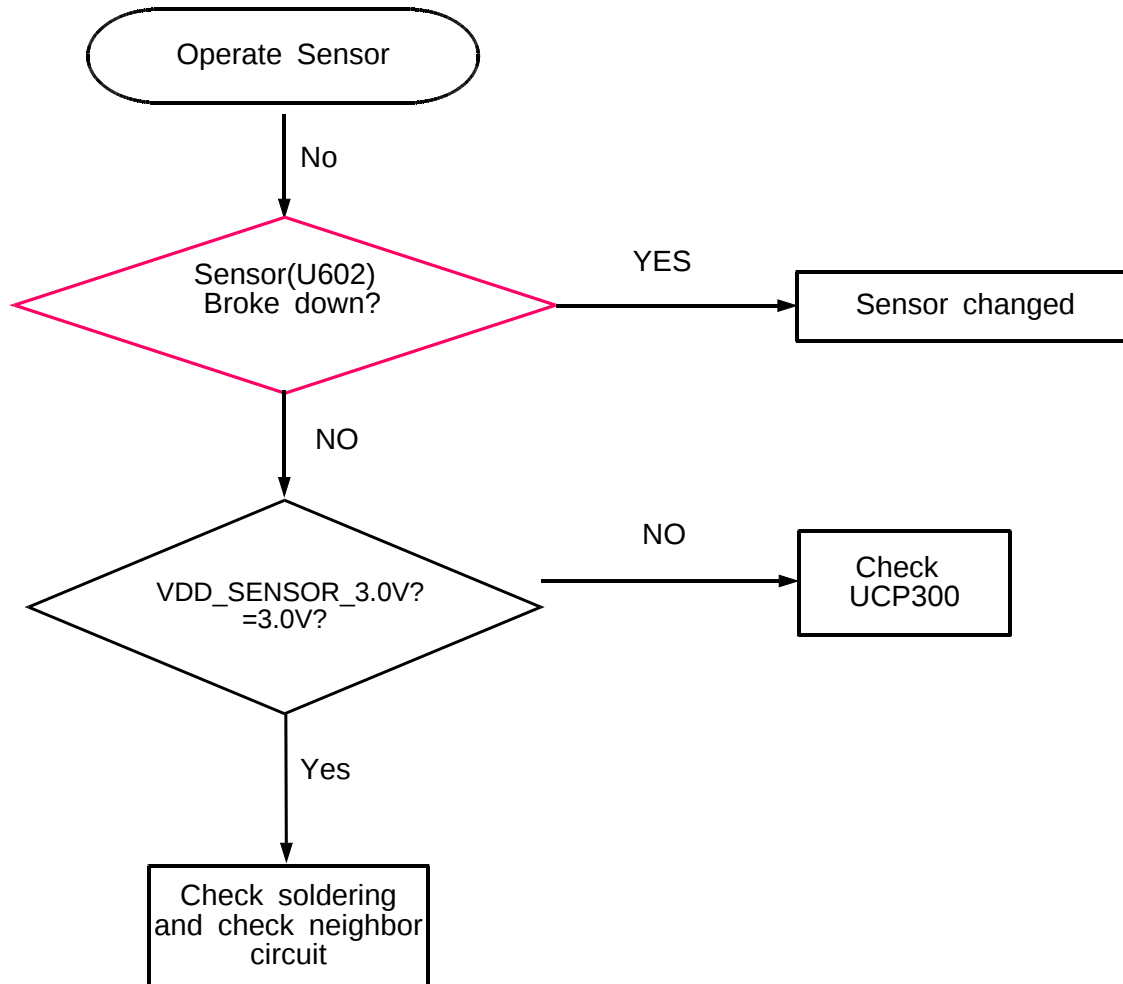
8-3-10 Accelerometer sensor

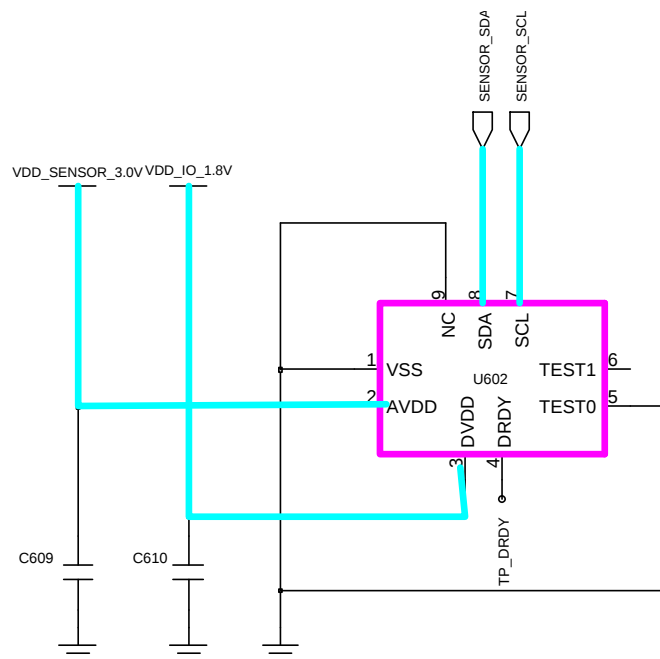
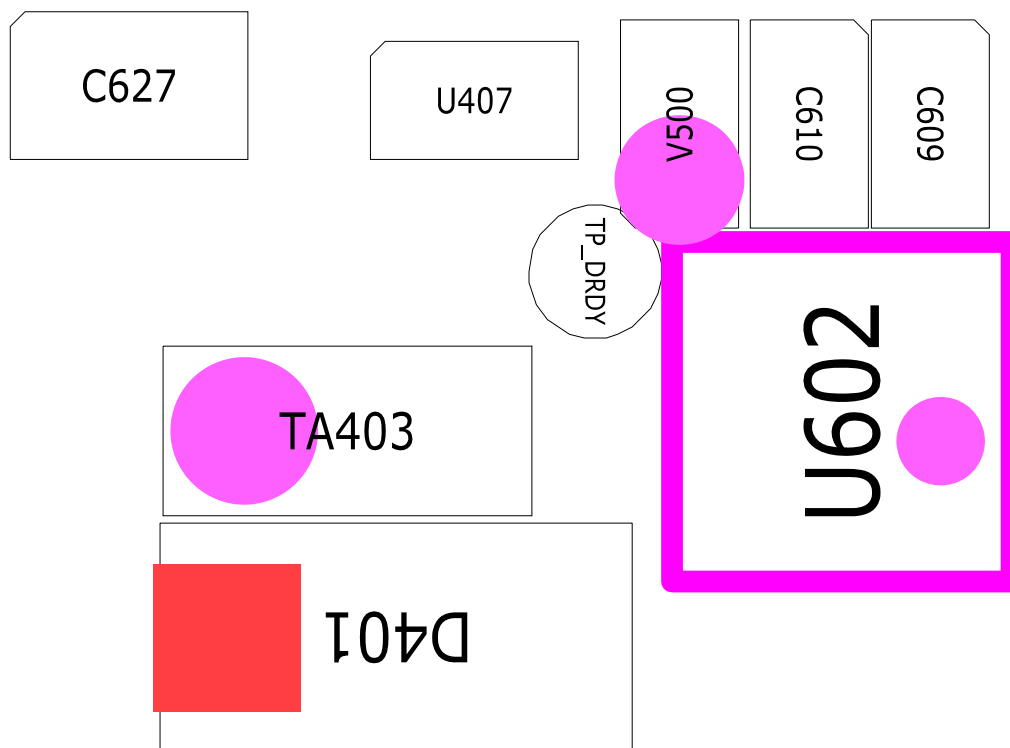




Accelerometer SENSOR

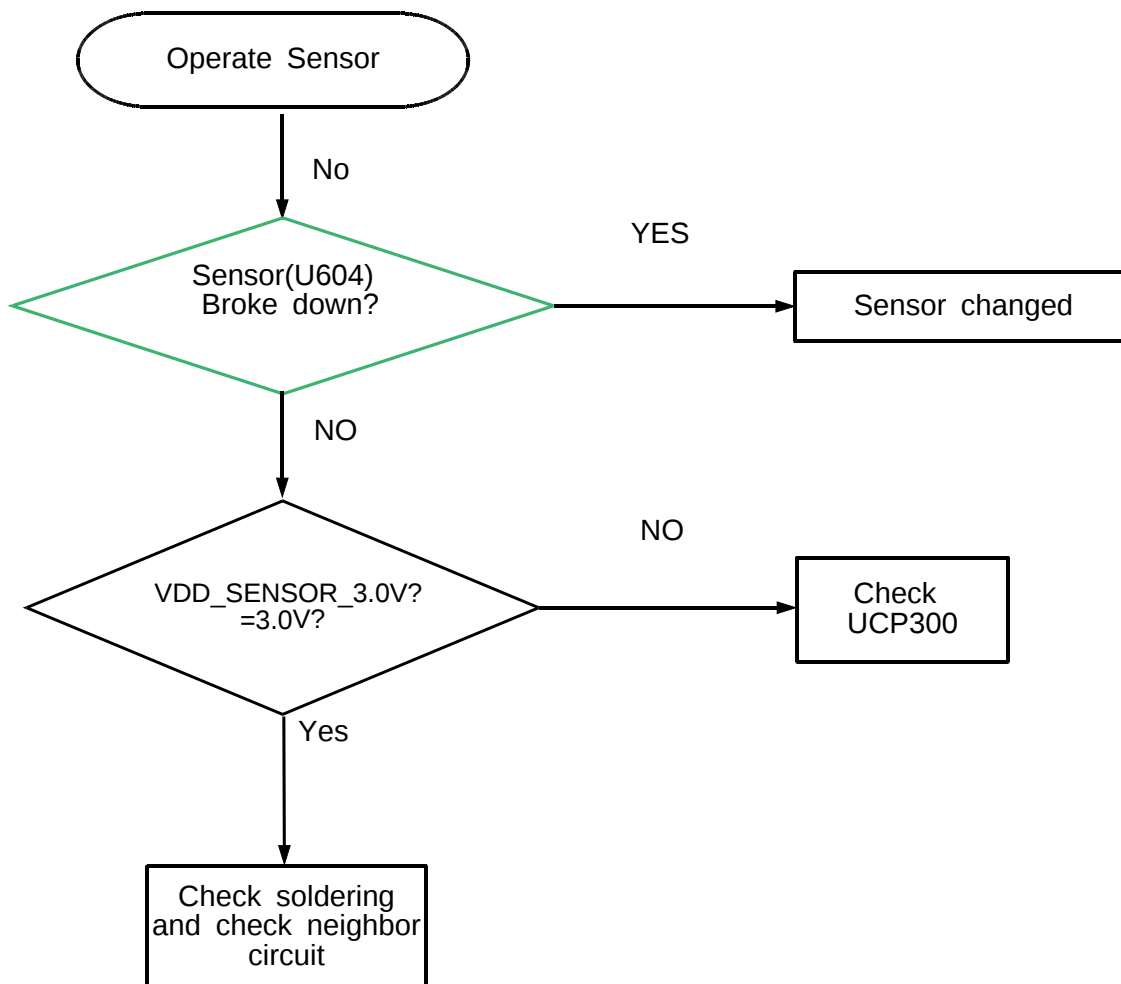
8-3-11 E-Compass sensor

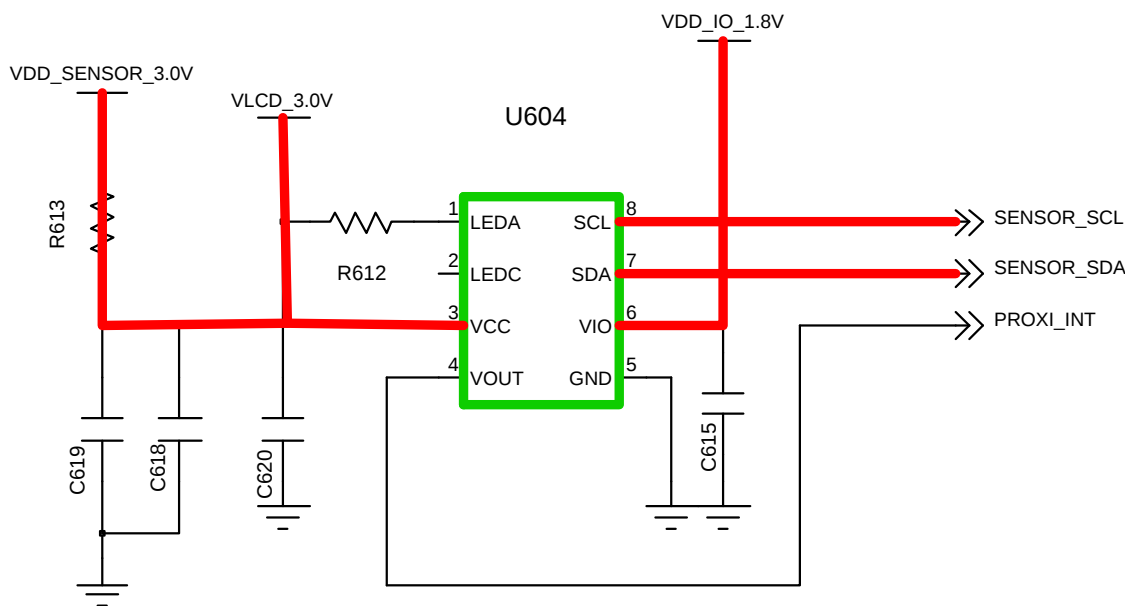
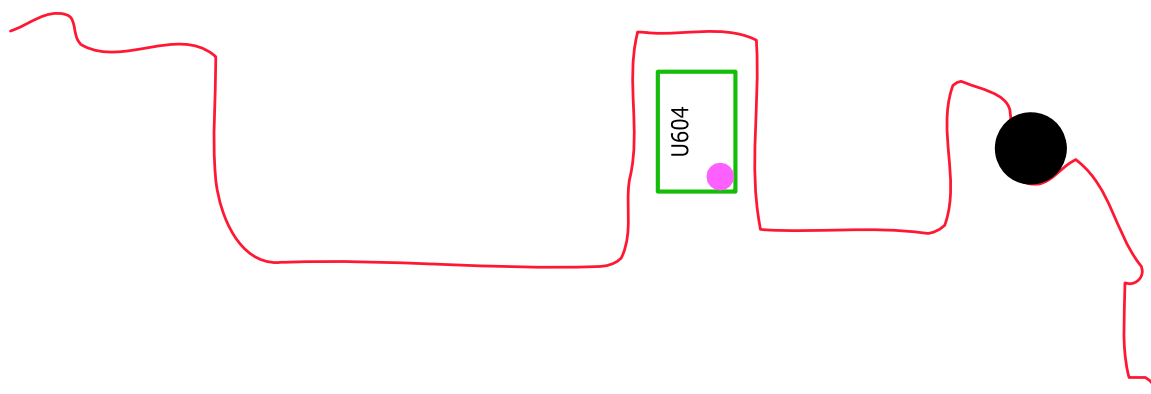




E-COMPASS SENSOR

8-3-12. PROXI sensor



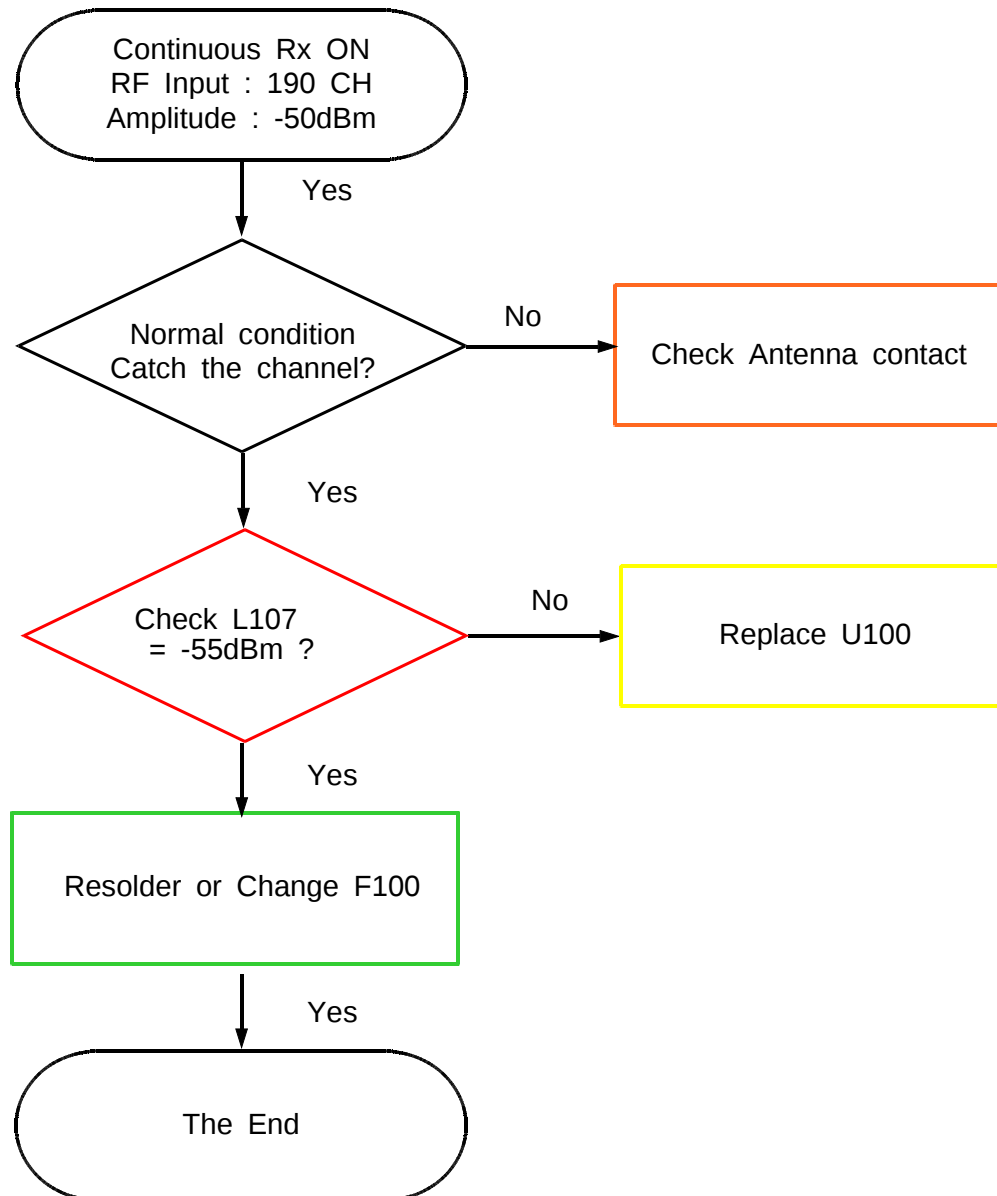


PROXI SENSOR

8-4-1. GSM850 RX

**If you check the tx chain,

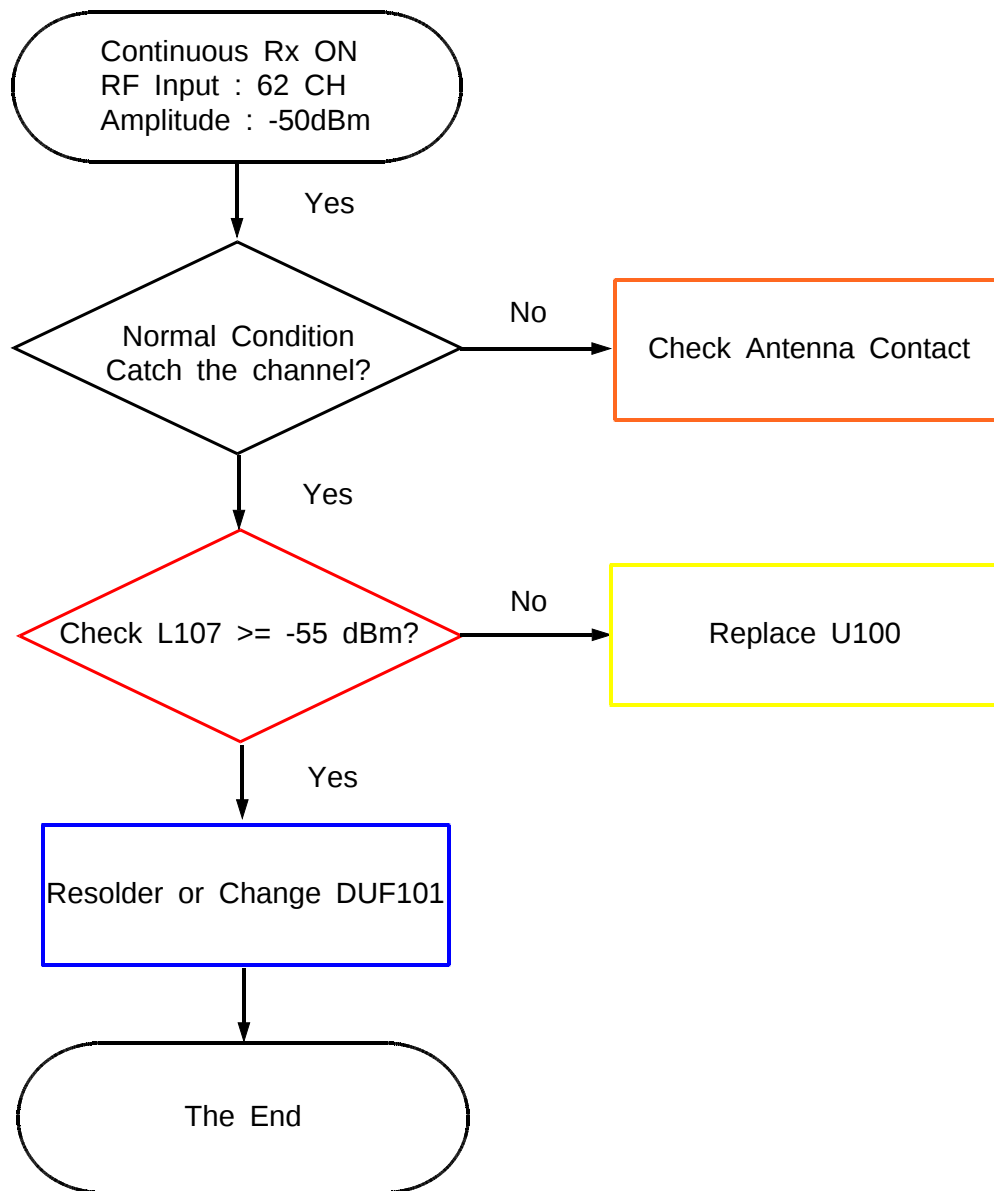
Check the not only RF Device but also resistor, inductor and capacitor.



8-4-2. GSM900 RX

**If you check the tx chain,

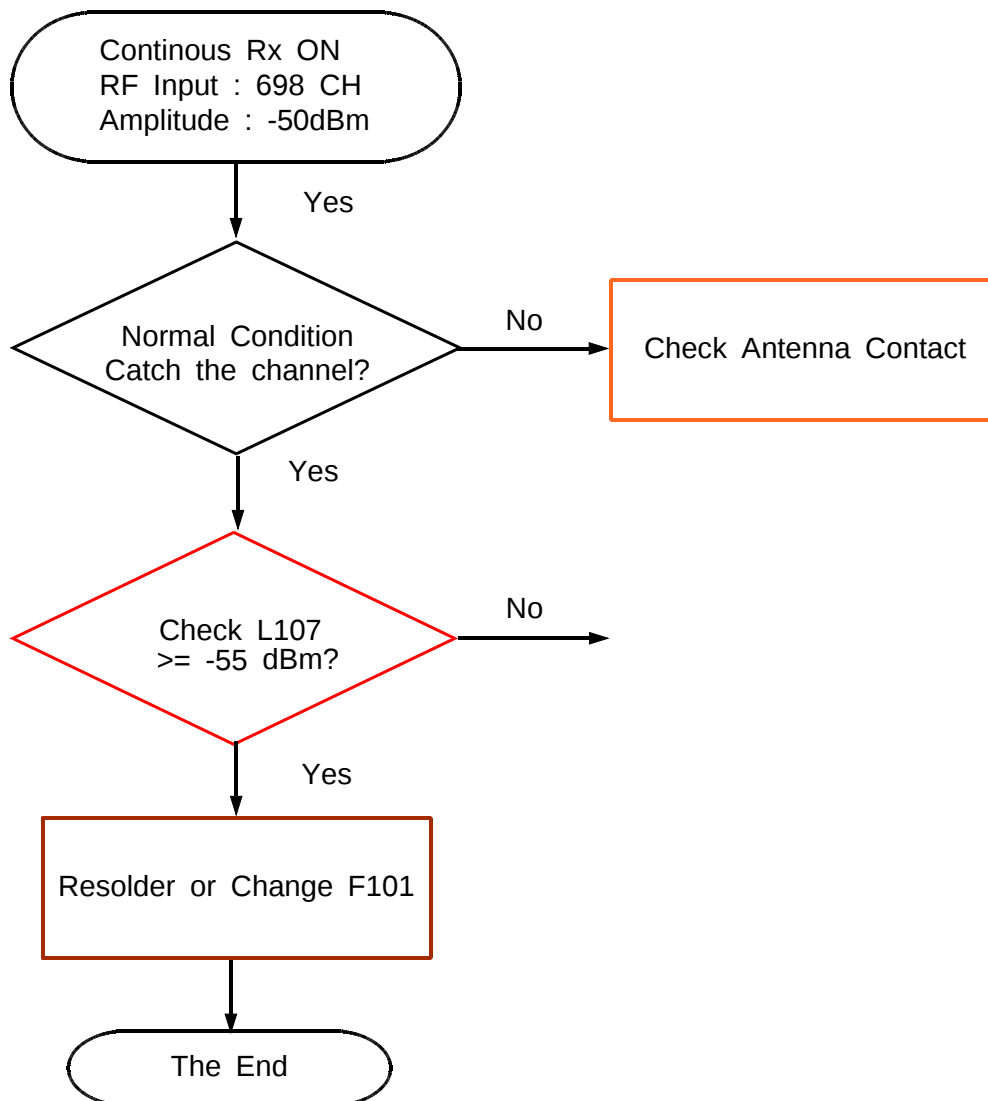
Check the not only RF Device but also resistor, inductor and capacitor.



8-4-3. DCS/PCS RX

**If you check the tx chain,

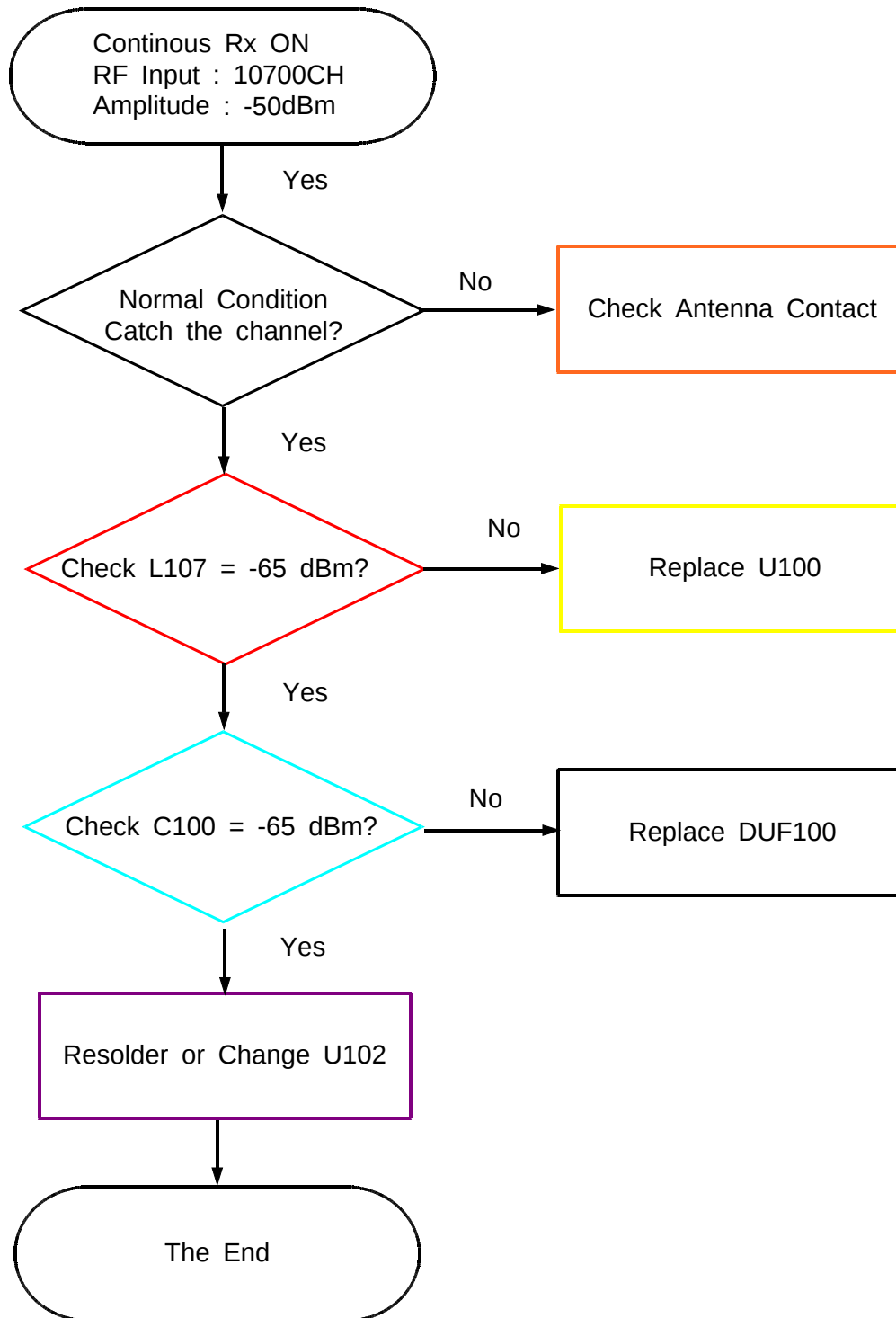
Check the not only RF Device but also resistor, inductor and capacitor.



8-4-4. WCDMA Band1 RX

**If you check the tx chain,

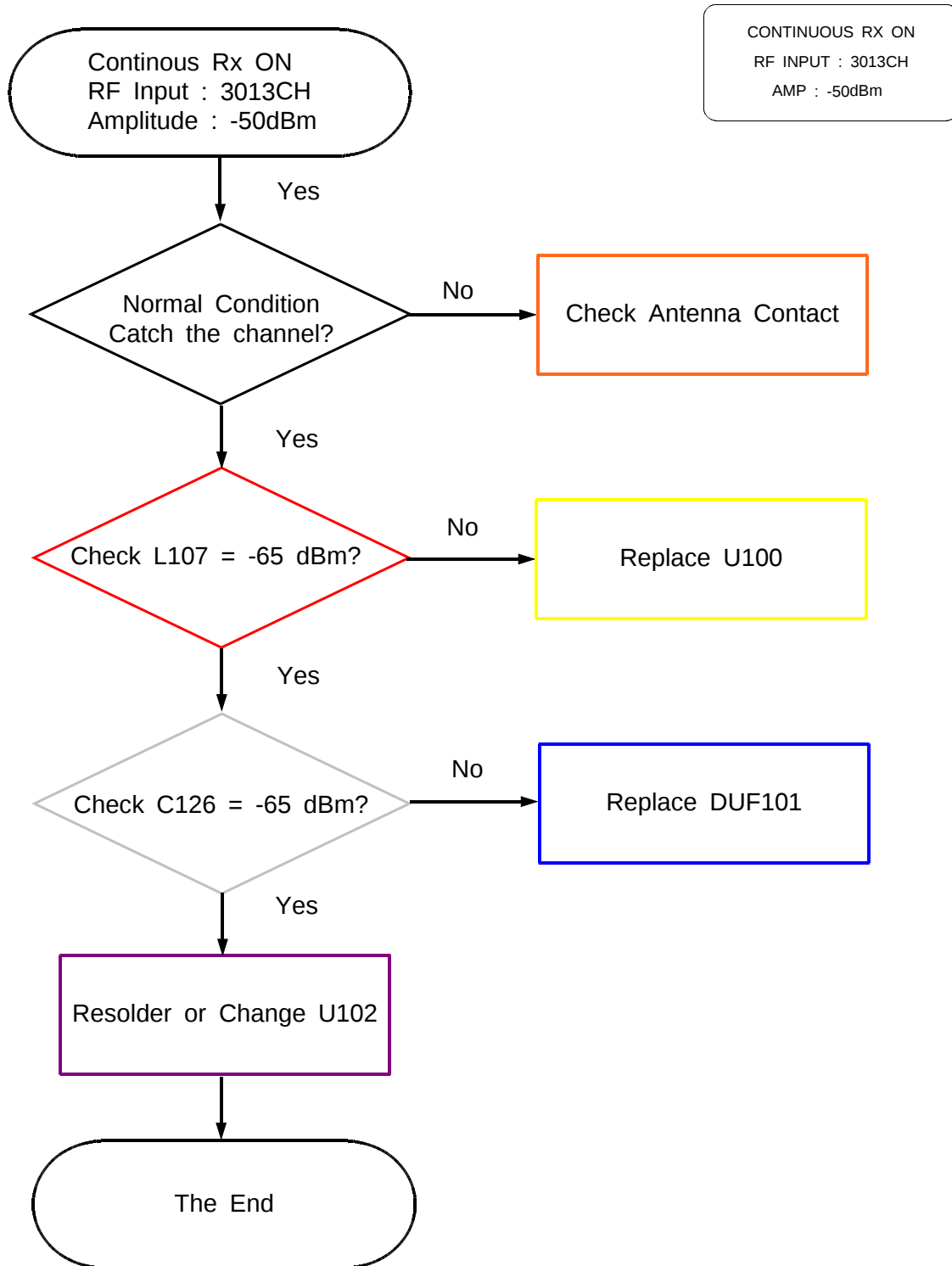
Check the not only RF Device but also resistor, inductor and capacitor.



8-4-5. WCDMA Band8 RX

**If you check the tx chain,

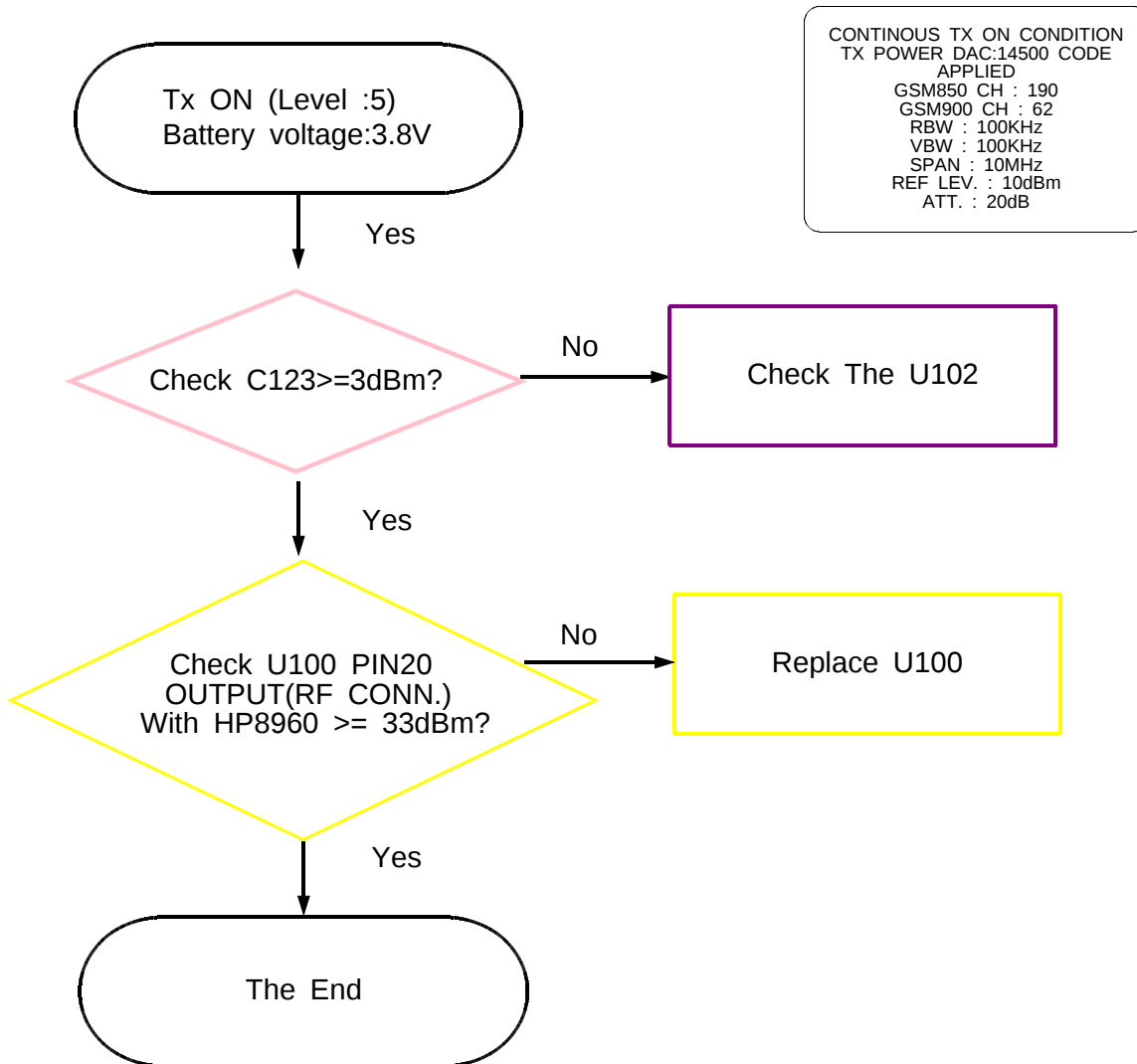
Check the not only RF Device but also resistor, inductor and capacitor.



8-4-6. GSM850/900 TX

**If you check the tx chain,

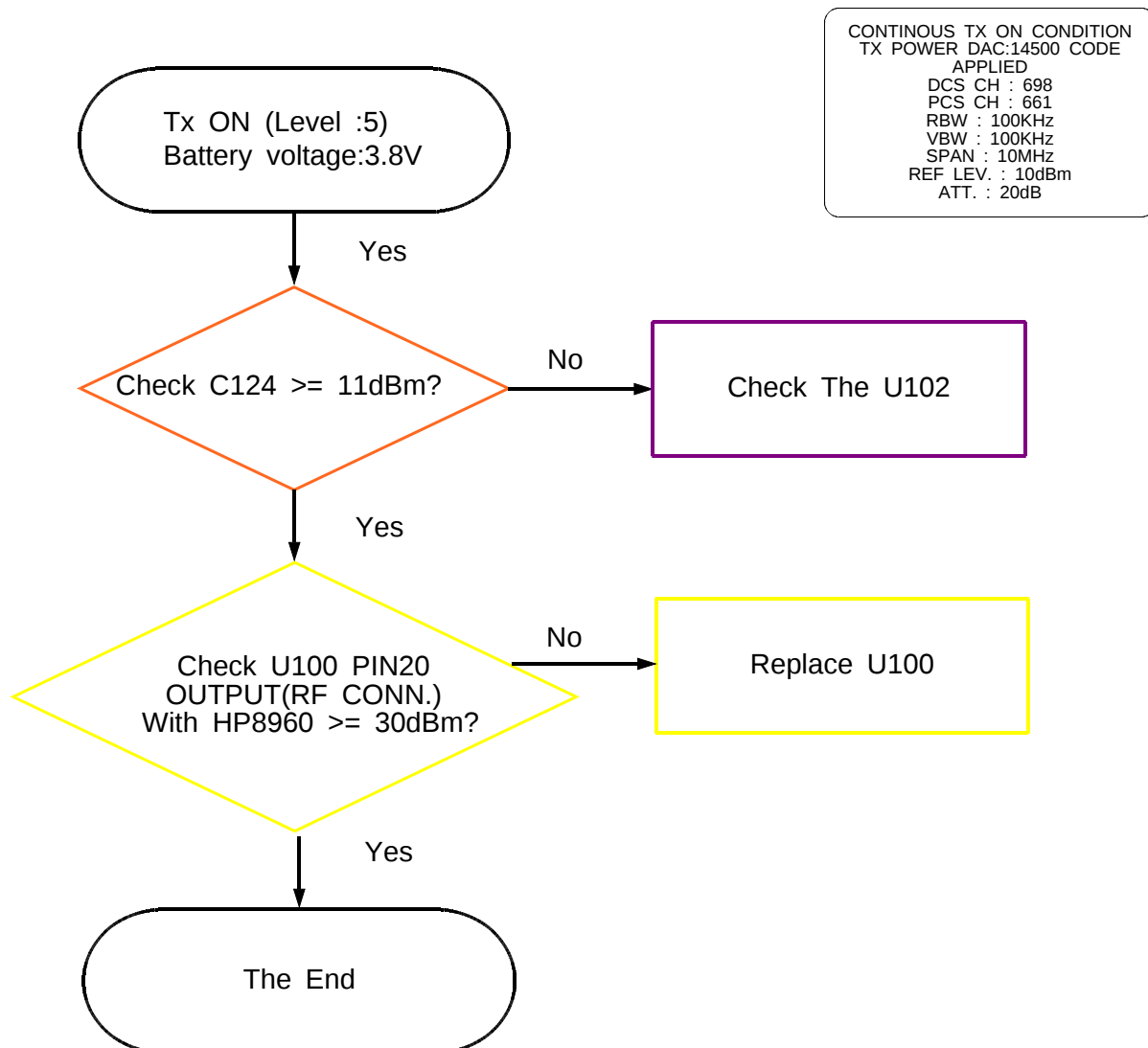
Check the not only RF Device but also resistor, inductor and capacitor.



8-4-7. DCS/PCS TX

**If you check the tx chain,

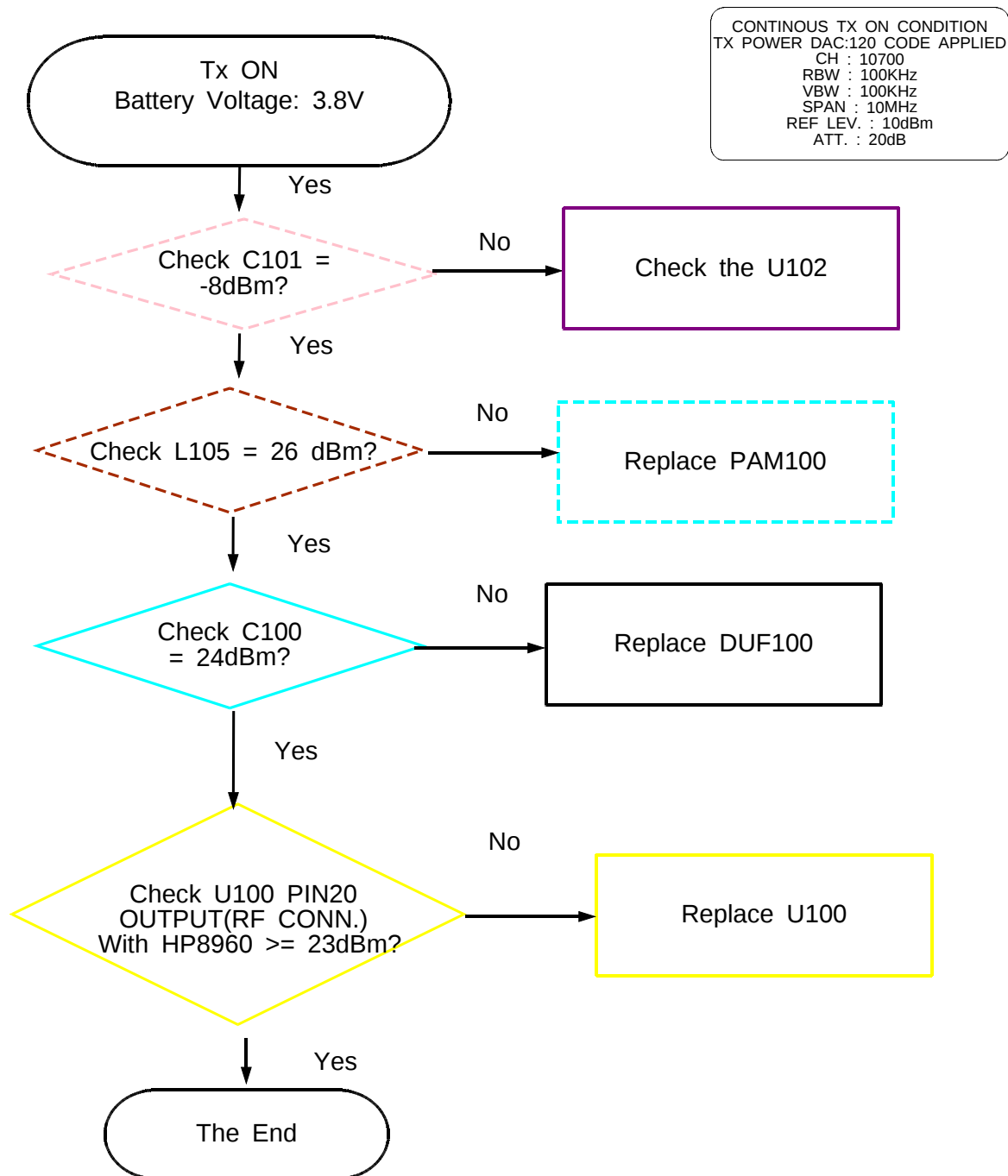
Check the not only RF Device but also resistor, inductor and capacitor.



8-4-8. WCDMA Band1 TX

**If you check the tx chain,

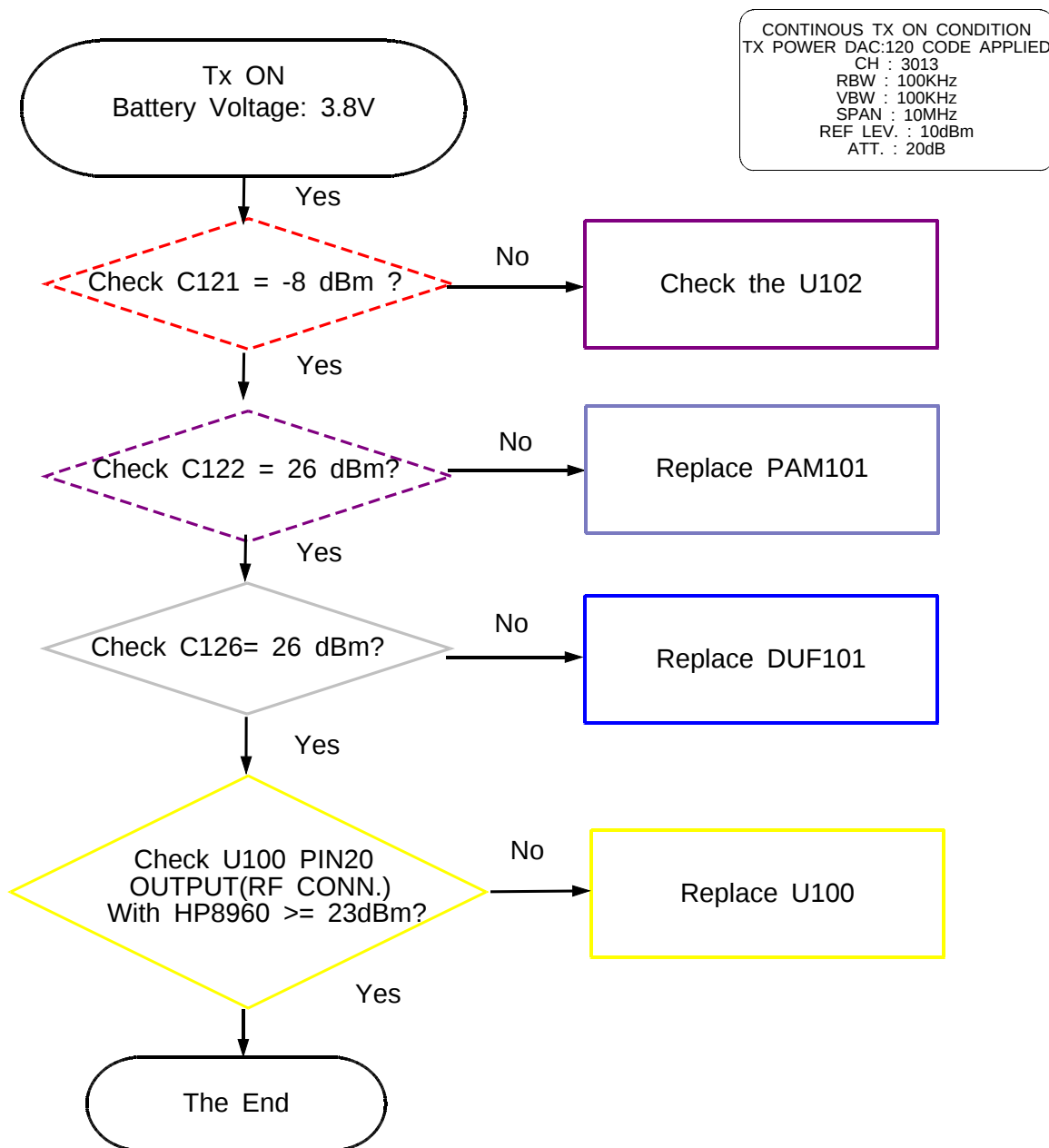
Check the not only RF Device but also resistor, inductor and capacitor.

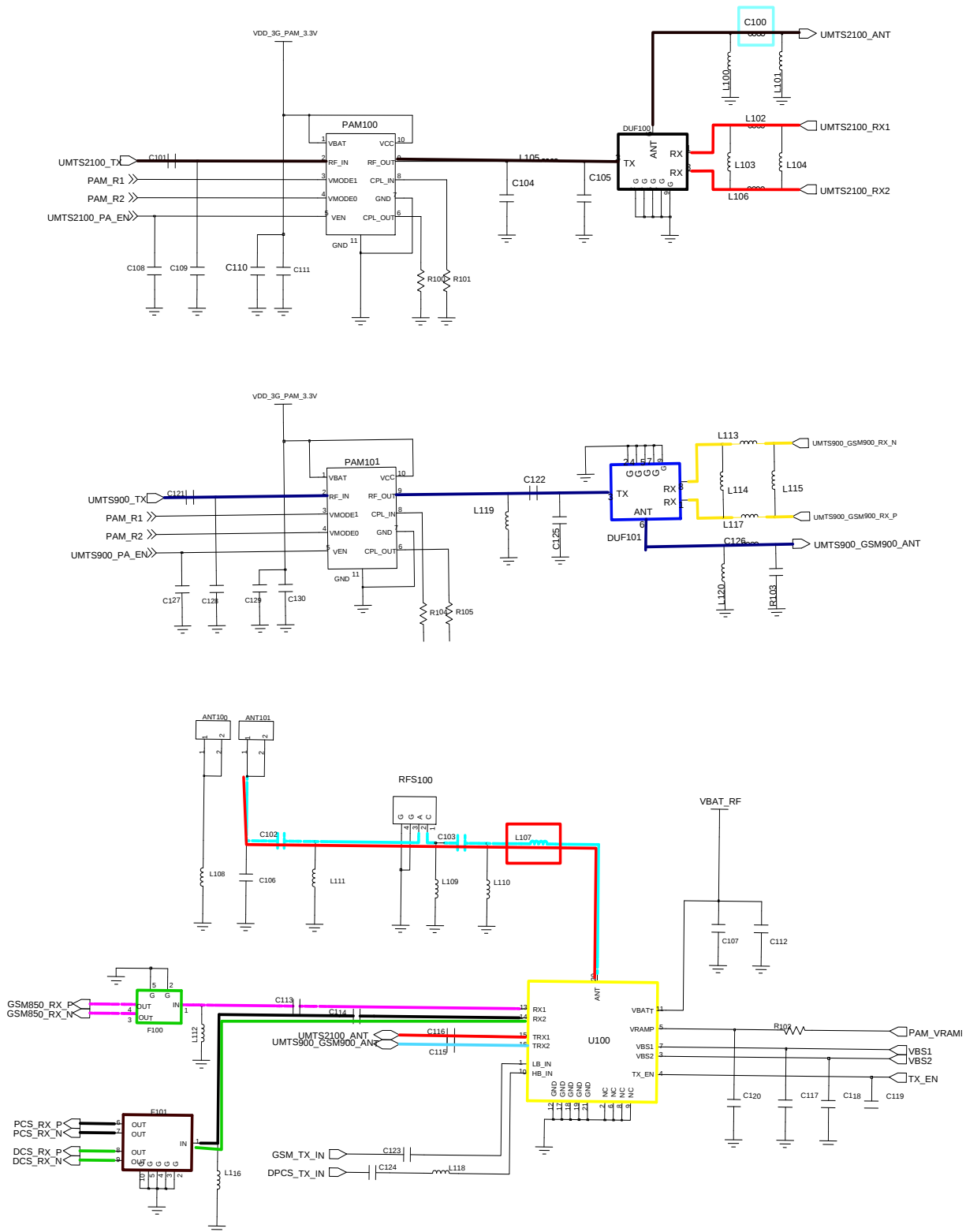


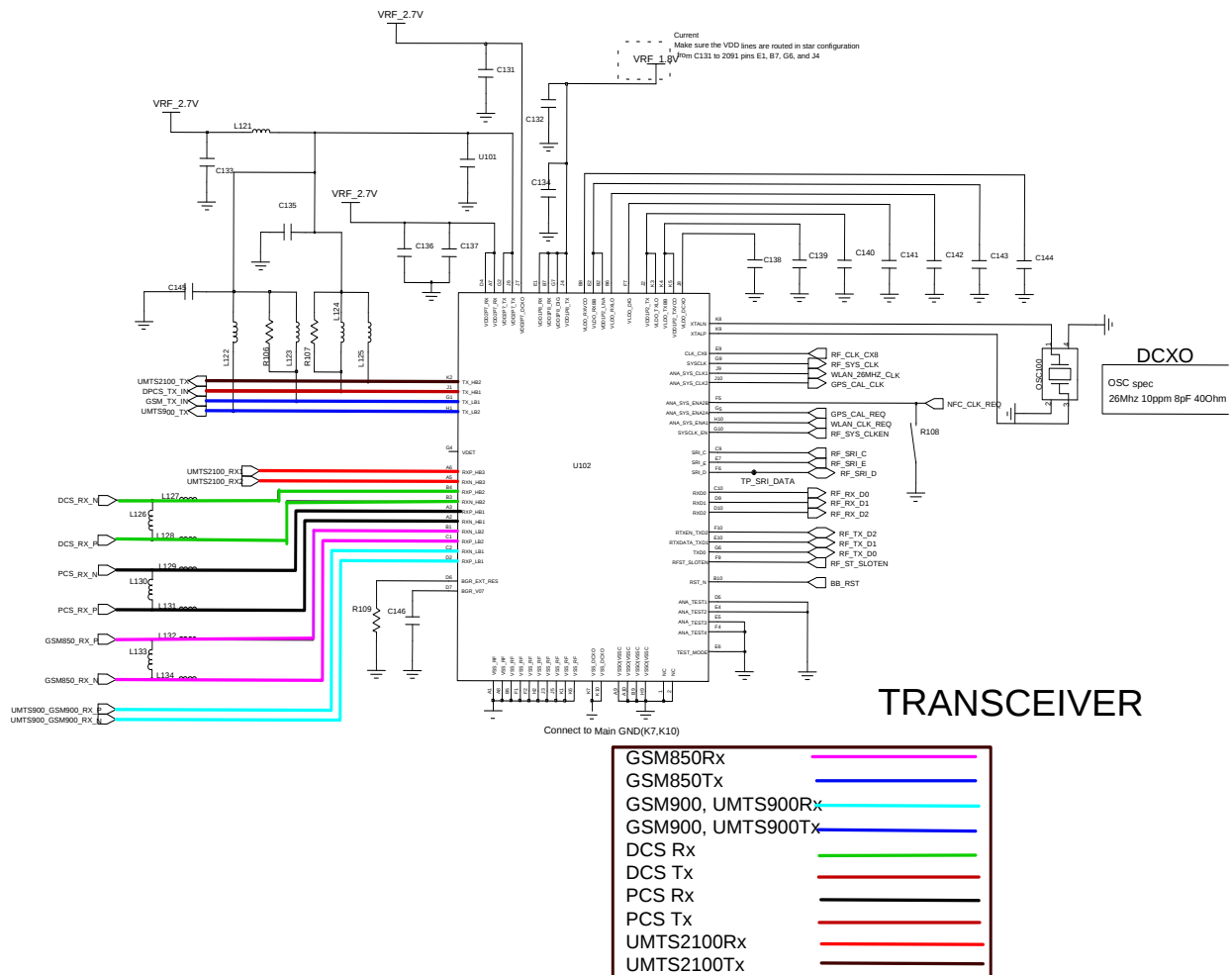
8-4-9. WCDMA Band8 TX

**If you check the tx chain,

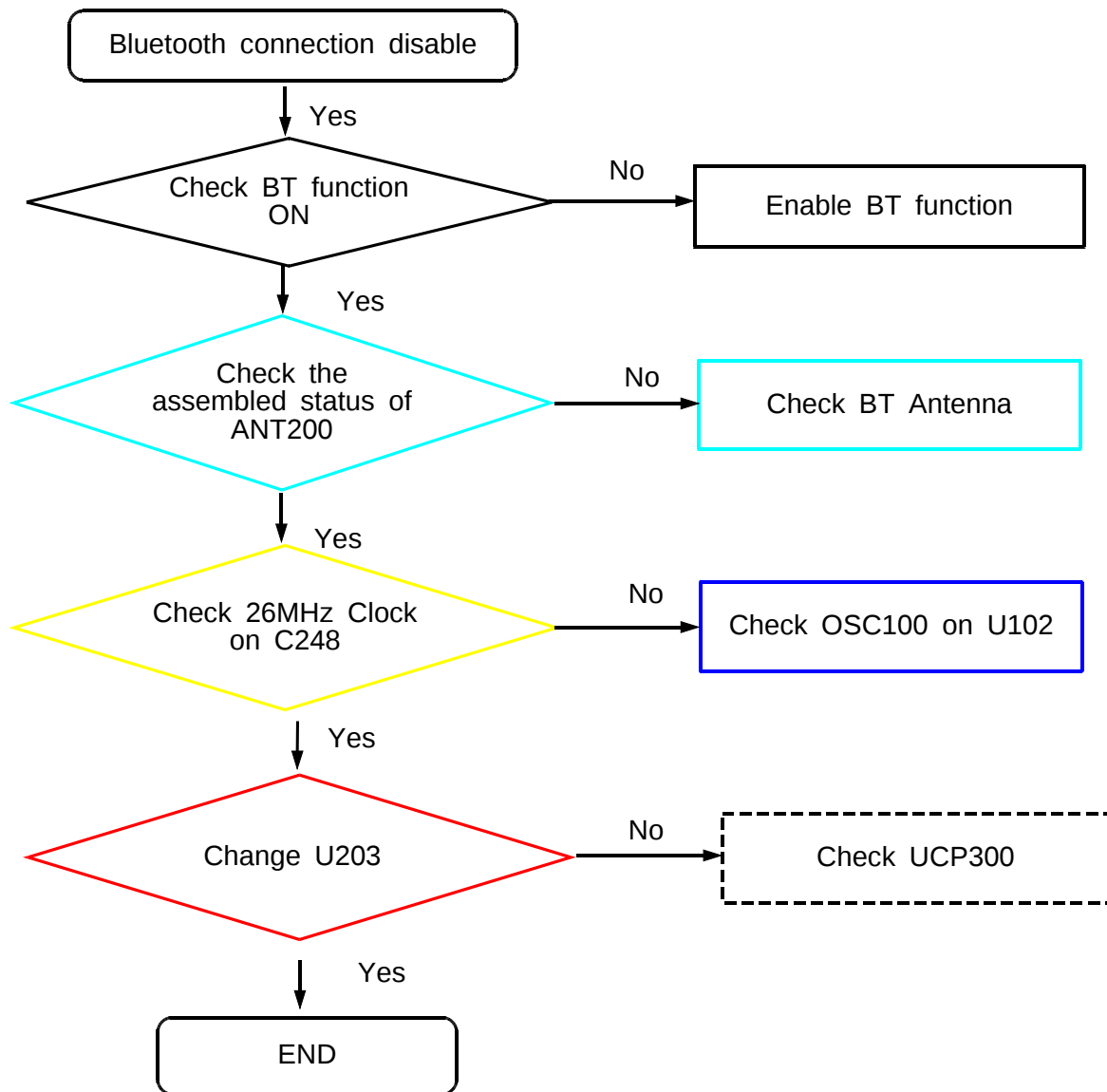
Check the not only RF Device but also resistor, inductor and capacitor.

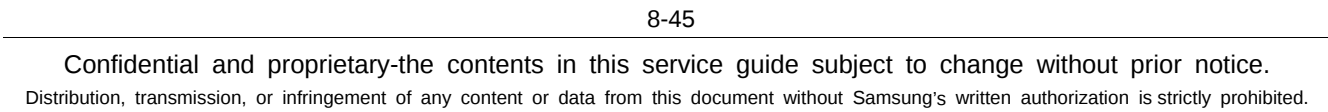




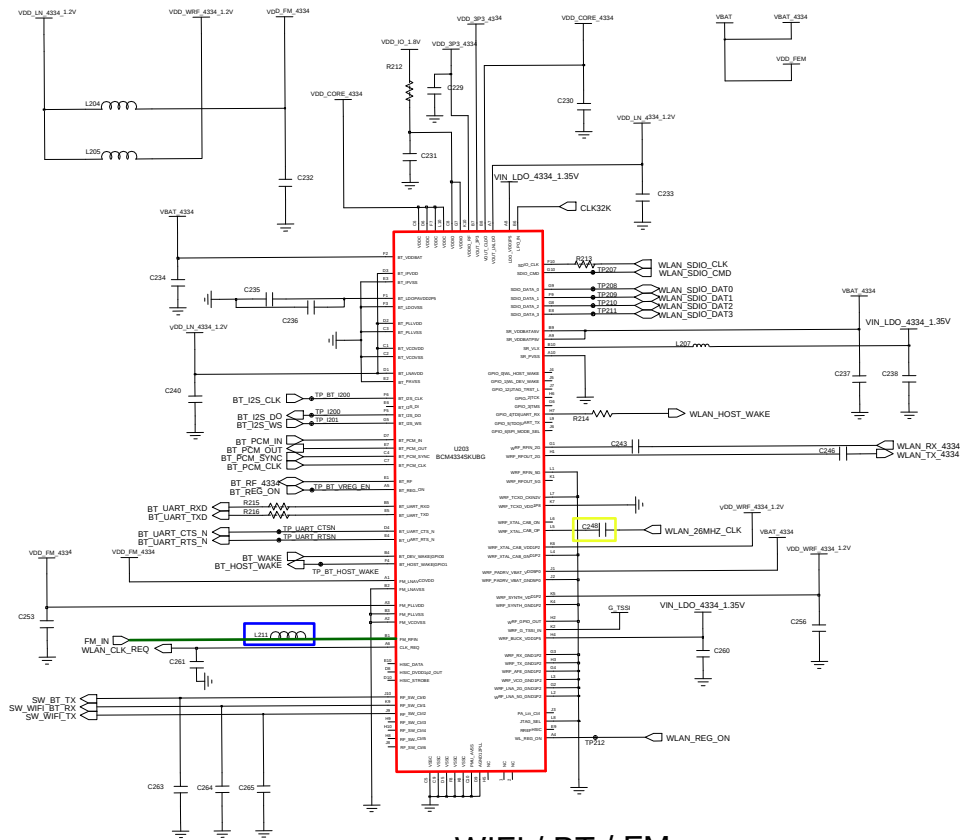
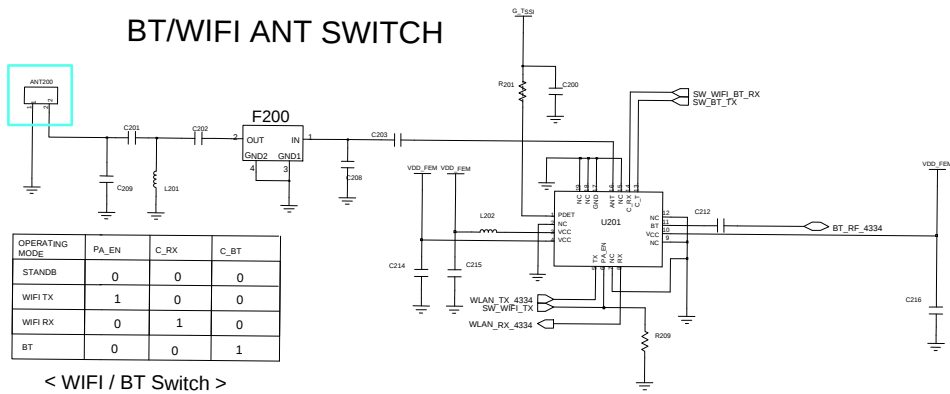


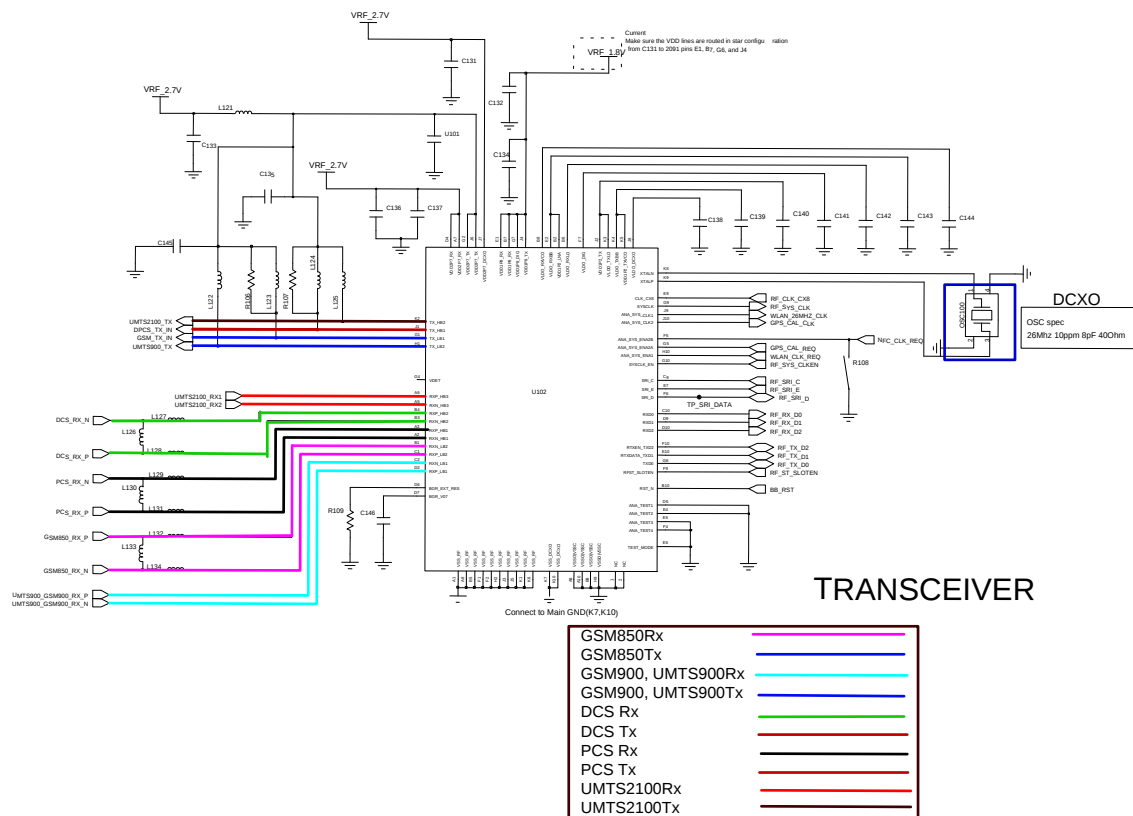
8-4-10. BLUETOOTH

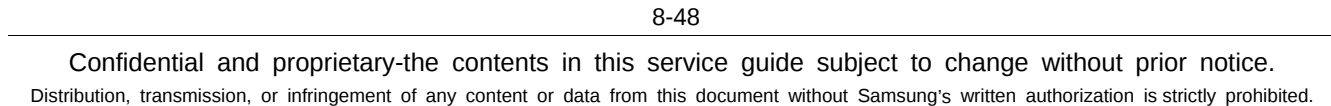




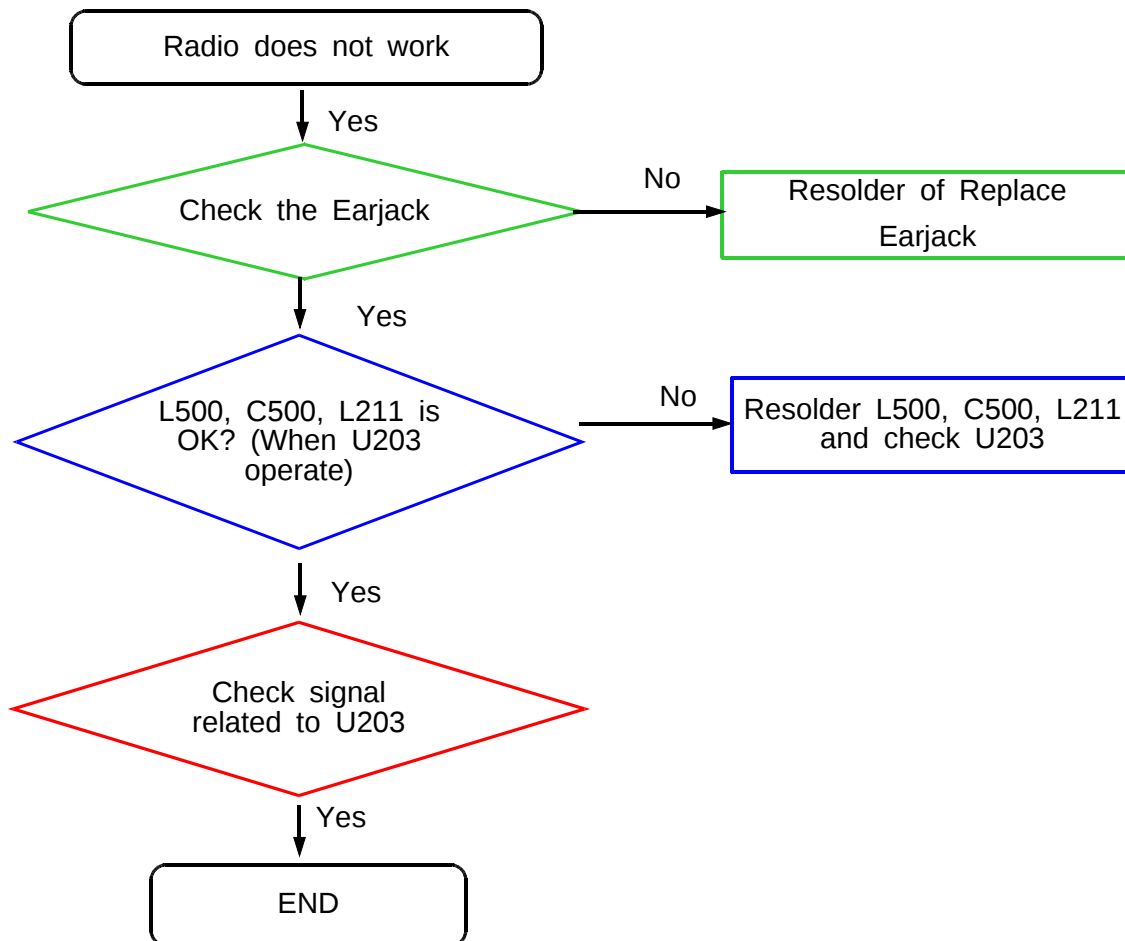
BT/WIFI ANT SWITCH

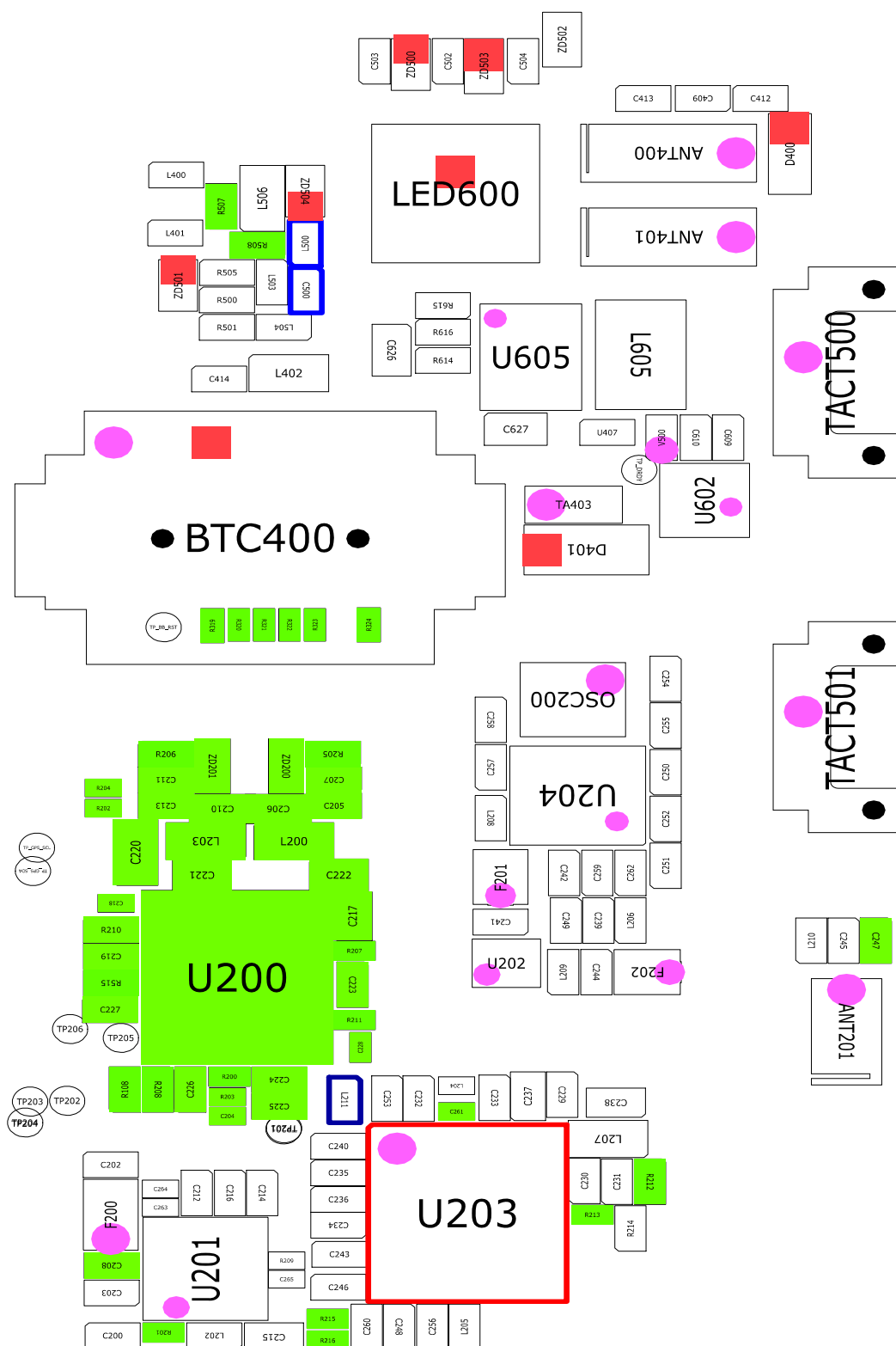


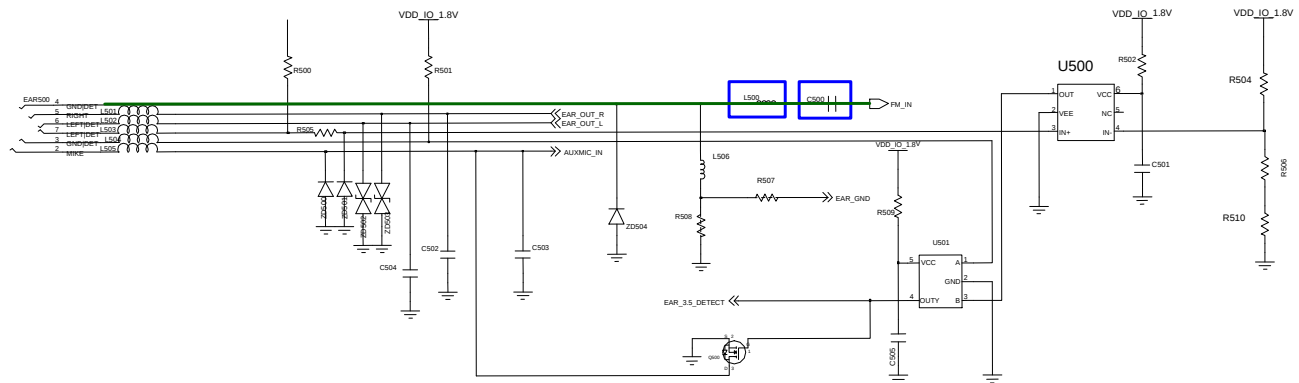




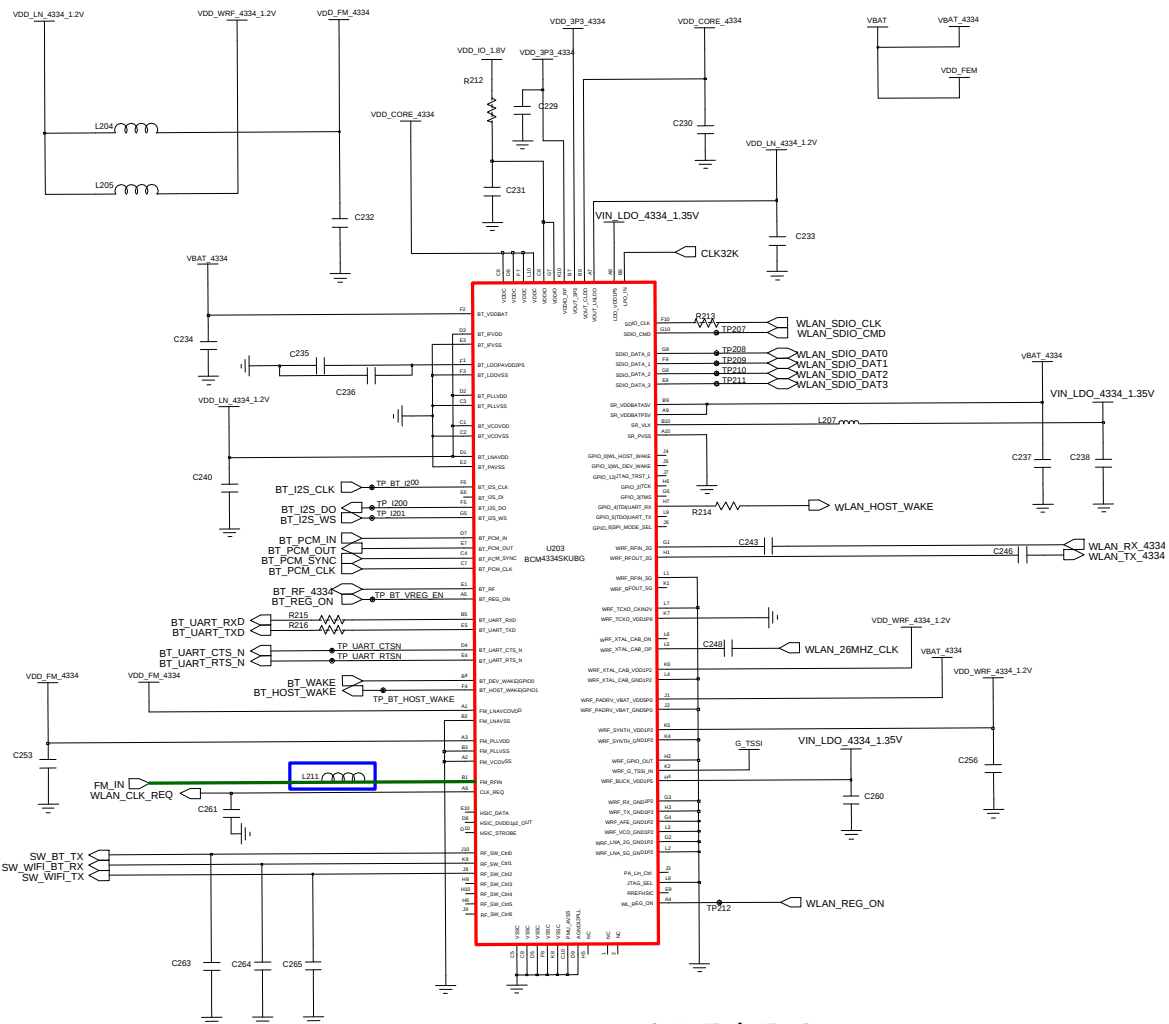
8-4-11. FM RADIO







3.5 PHI EARJACK



WIFI / BT / FM



8-5. Service Schematics

- NC Point(Top View)

● : NC

UME300

	1	2	3	4	5	6	7	8	9	10
A	○	○	○	○	○	○	○	○	○	○
B	○	○	○	○	○	○	○	○	○	○
C	○	●	○	●	○	●				
D	●	●	●	●	●	●				
E	○	●	●		○	○	●	●	●	○
F	○	○	●		○	○	○	●	○	○
G	○	○	○		○	●	●	●	●	○
H	●	○	○		●	●	●	○	○	○
J	●	○	○		○	○	○	○	○	○
K	○	○	○		○	○	○	○	○	○
L	●	○	○		○	○				
M	●	●	○		○	○	○	○	○	
N	○	●	●		○	○				
P	○	●	●		○	○	○	○	○	○
R	○	○	○		○	○	○	○	○	○
T	●	●	○		●	●	●	○	○	○
U	○	○	○		○	●	●	●	●	○
V	○	○	●		○	○	○	●	○	○
W	○	●	●		○	○	●	●	●	○
Y	○	○							○	○

	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	
A	○	○	○	○	○	○	○	○	○		○		○	○	○	○	○	○	○	●	●	A
B	○	○	○	○	○	○		○	○	○	○	○	○	○	○	○	○	○	○		●	B
C	○	○	○	○		○	○	○		○	○	○	○	○	○	○		○	○	○	○	C
D	○		○	○	○		○	○	○	○	○	○	○		○			○	○	○	○	D
E	○		○	○	○	○	○	○	○	○		○	○								○	E
F	○		○	○	○													○	○	○	○	F
G	○		○	○	○		○	○	○	○	○	○	○	○	○			○	○	○	○	G
H	○	○	○	○	○		○	○	○	○	○	○	○	○	○		○	○	○	○	○	H
J			○	○	○		○	○						○			○	○	○	○	○	J
K	○	○	○	○	○		○	○	○	○	○	○	○	○	○		○	○	○	●	○	K
L	○	○	○	○	○		○	○	○	○	○	○	○		○			○	○	○	○	L
M	○	○	○	○	○		○	○	○	○	○	○	○	○		○	○	○	○	○	○	M
N	○	○	○	○	○		○	○	○	○	○	○		○		○	○	○	○	○	○	N
P	○	○	○	○			○	○	○	○	○	○	○	○	○			○	○	○	○	P
R	○	○	○	○	○		○		○	○	○	○	○	○	○			○	○	○	○	R
T	○		○	○	○													○	○	○	○	T
U	○	○	○	○	○	○	○	○									○	○	○	○	○	U
V	○	○	○		○	○	○	○		○		○	○	○	○	○	○	○	○	○	○	V
W	○	○	○	○	○	●			○	○	○	○	○	○	○	○	○	○	○	○		W
Y	○	○	○	○		●	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○	Y
AA	○	○		○	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○	AA
	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	