

SAMSUNG

GSM TELEPHONE

GT-P3100

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.

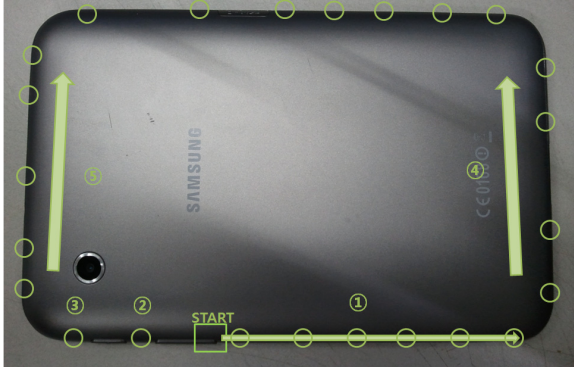
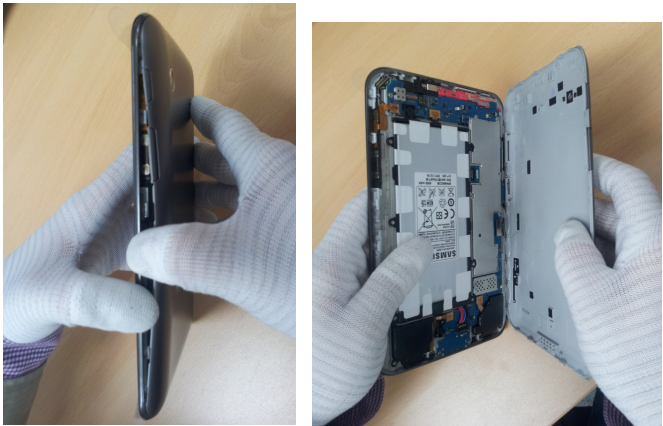
**SAMSUNG
ELECTRONICS**



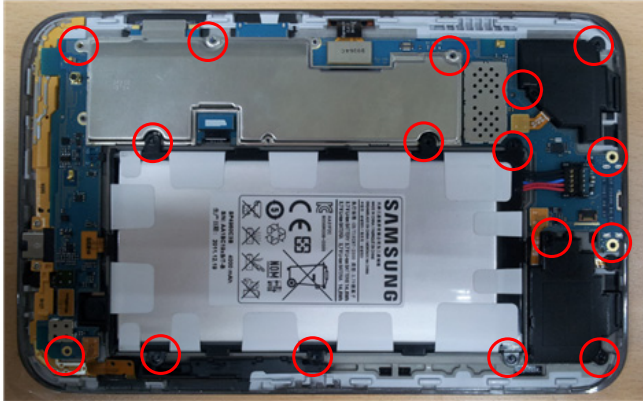
7. Level 2 Repair

7-1. Disassembly and assembly Instructions

7-1-1. Disassembly

1 Disassemble the rear cover with the front cover by using the hook  : Hook (24 Point)  Be careful not to scratch cover. Follow the numbered sequence when you disjoint	2 Put the disassemble jig as shown in the picture below. And disassemble hooks in regular sequence.  Be careful not to scratch cover. Follow the numbered sequence when you disjoint
3 Disassemble the rest of the hooks.  Be careful not to scratch cover. Follow the numbered sequence when you disjoint	4 Put your hand has opened between the front assy and the rear cover. First, disassemble the hooks in the direction of IF connector. And then disassemble all the remain hooks.  Be careful not to scratch cover. Follow the numbered sequence when you disjoint

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



Be careful not to scratch cover

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



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

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



Be careful not to damage the FPCBs

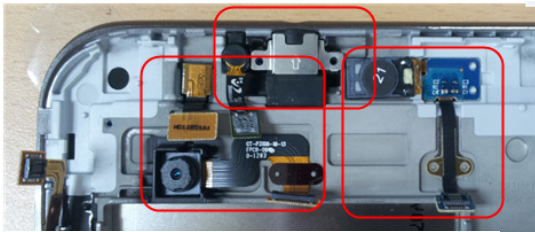
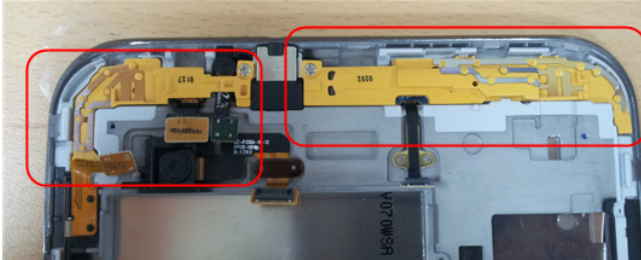
- 8** Separate PBA from the Front.



Be careful not to scratch cover

9

Separate the Antenna, 3M Camera, Earjack, Volume FPCB, VGA Camera, Sensor FPCB from the Front.

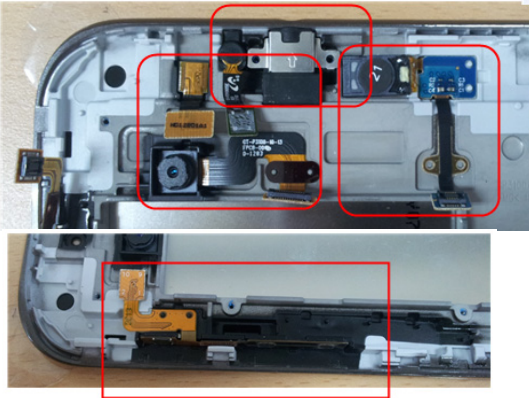


Be careful not to damage the FPCBs

7-1-2. assemble

1

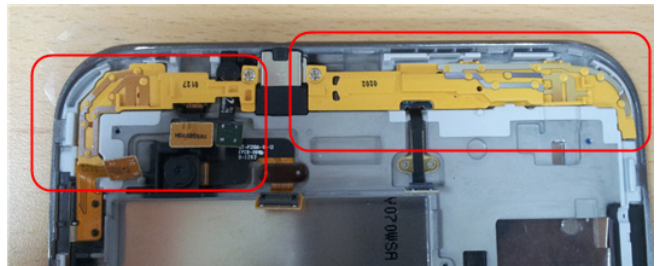
Assemble the 3M Camera, Earjack, Volume FPCB, VGA Camera, Sensor FPCB



Be careful not to damage the FPCBs

2

Assemble the Antenna



Be careful not to damage the FPCBs

3

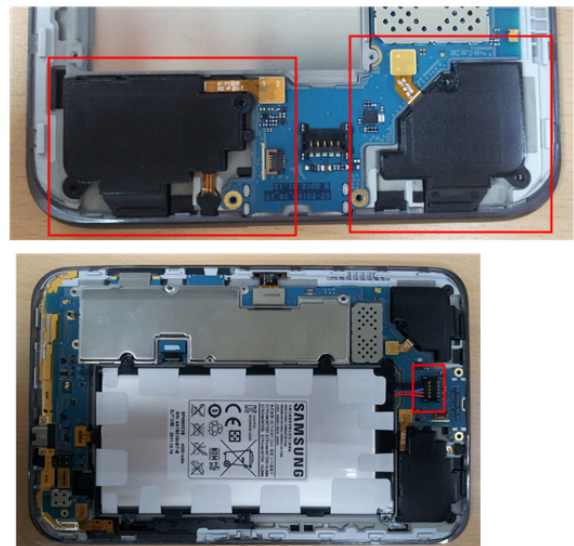
Assemble PBA and all Connectors



Be careful not to damage the FPCBs

4

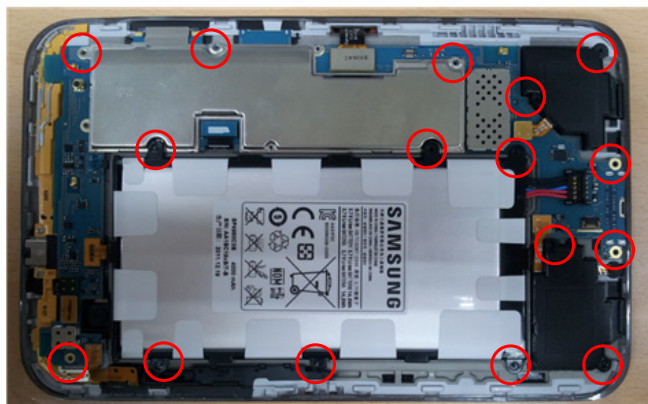
Assemble the Speakers Battery



Be careful not to damage the FPCBs

5

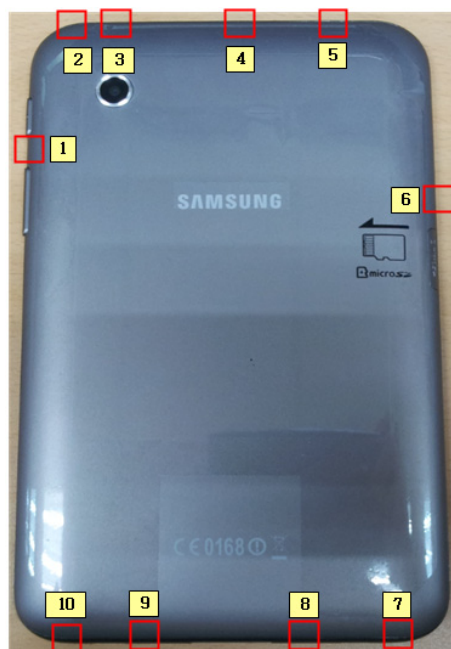
Screw at 16 point
(L1.4*3.0, Torque 0.9 ~ 1.0 kgf.cm)



Be careful not to damage the FPCBs

6

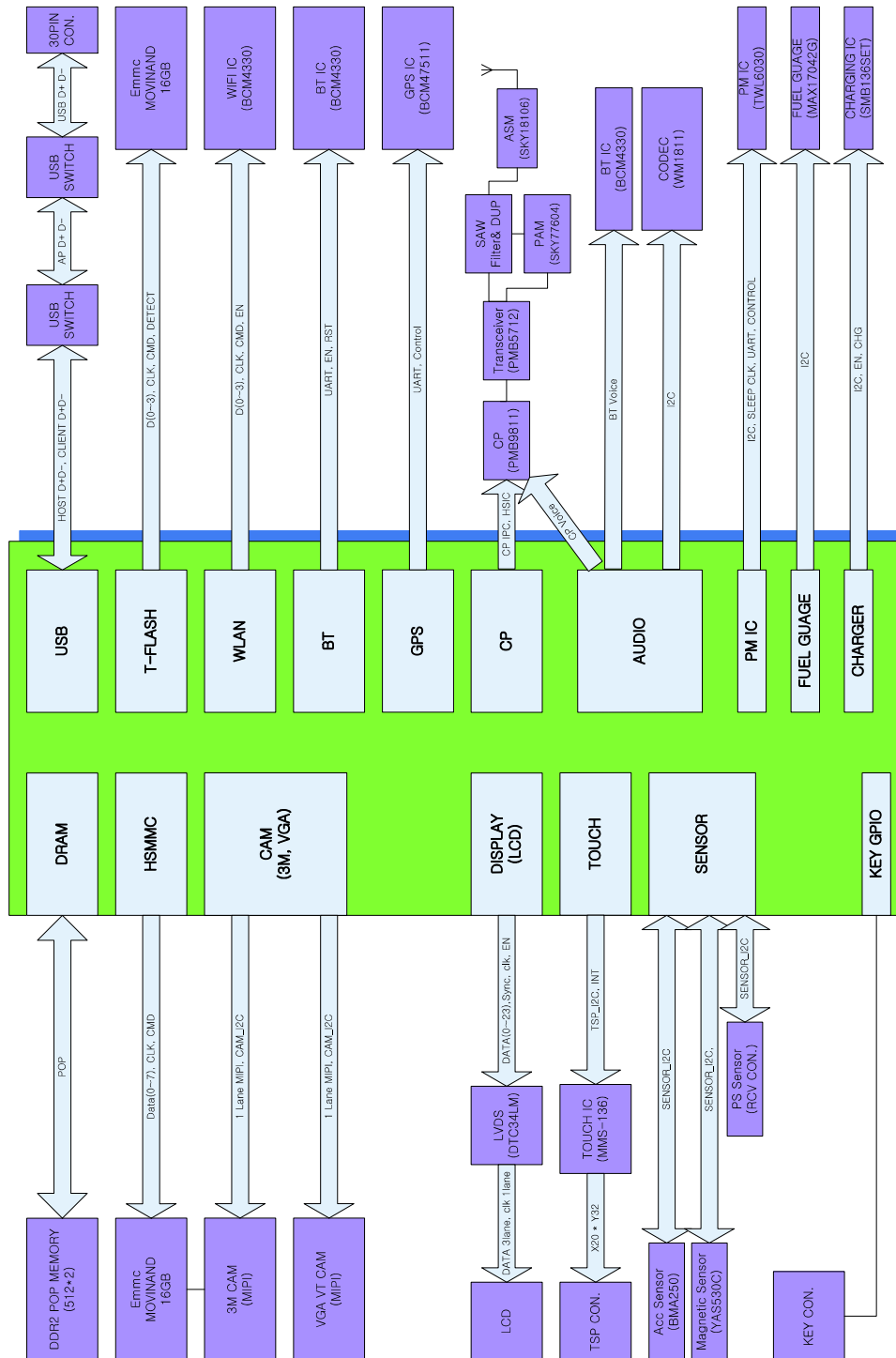
Assemble the Rear.



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

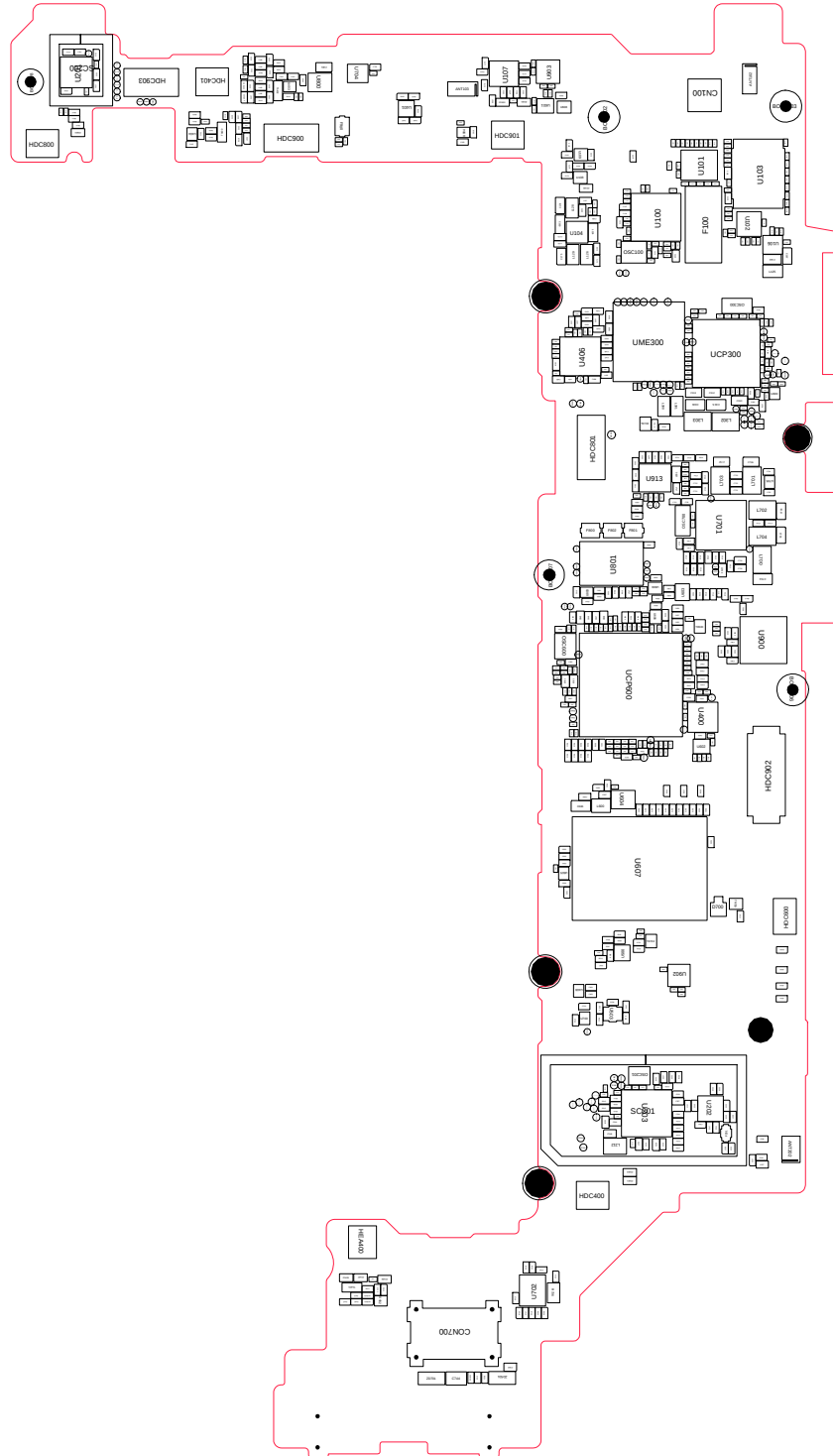
8. Level 3 Repair

8-1. Block Diagram



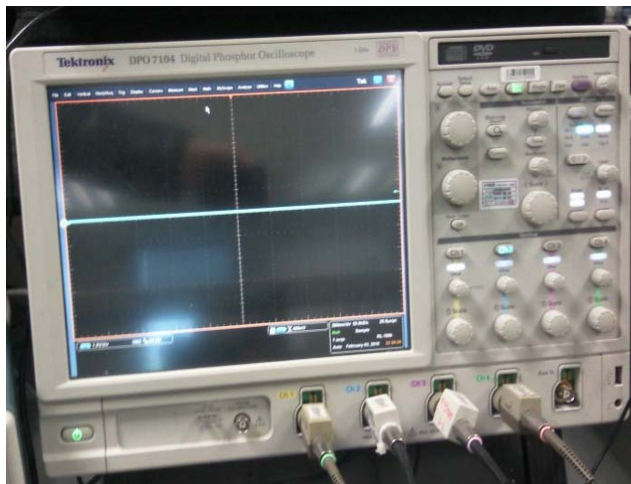
8-2. PCB Diagrams

8-2-1. Top



8-3. Flow Chart of Troubleshooting

Equipments



↑ Oscilloscope



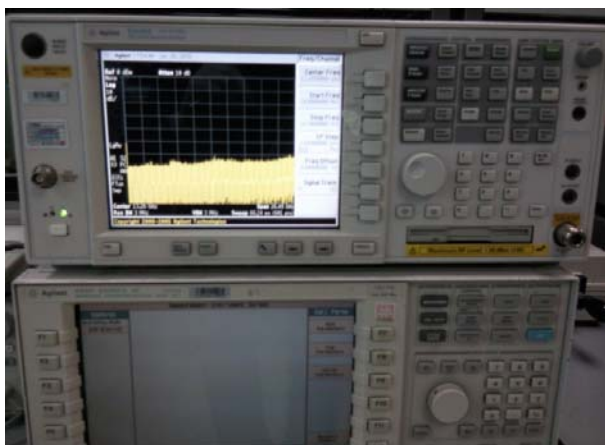
↑ Digital Multimeter



↑ Power Supply



↑ + driver, ESD Safe Tweezer

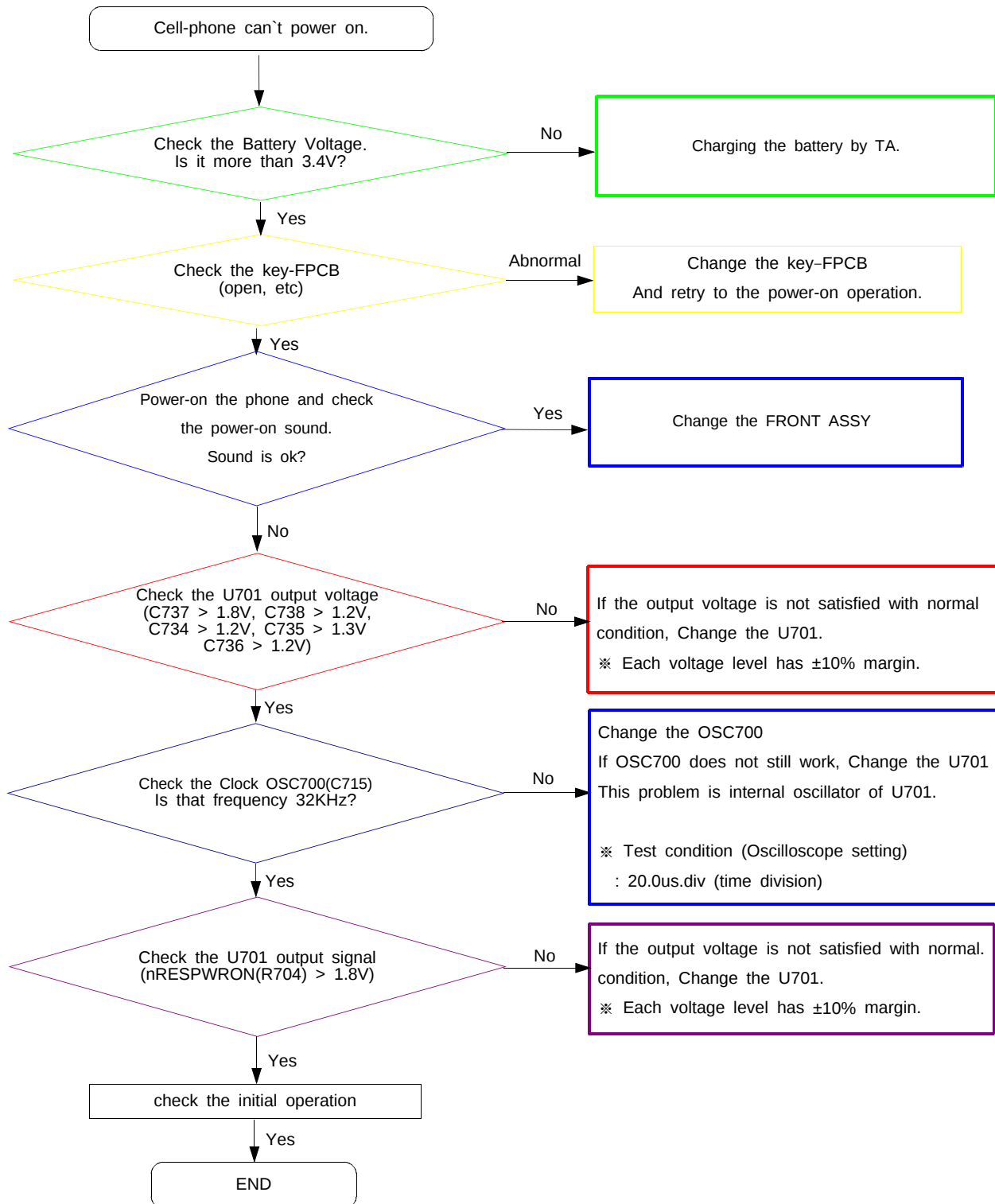


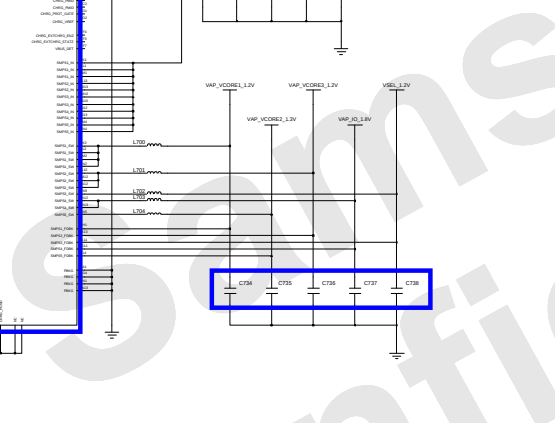
↑ 8960 & Spectrum Analyzer



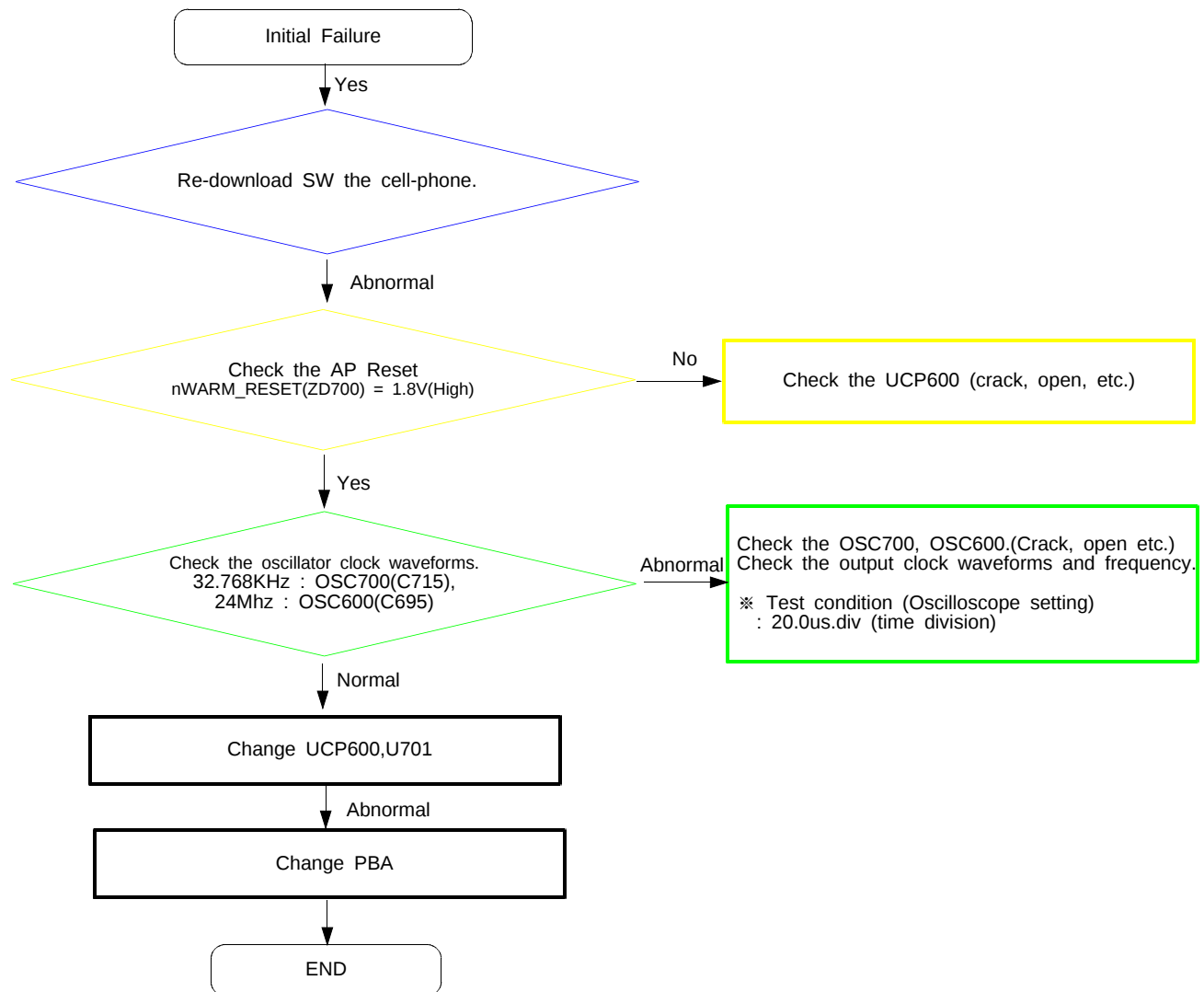
↑ Soldering iron

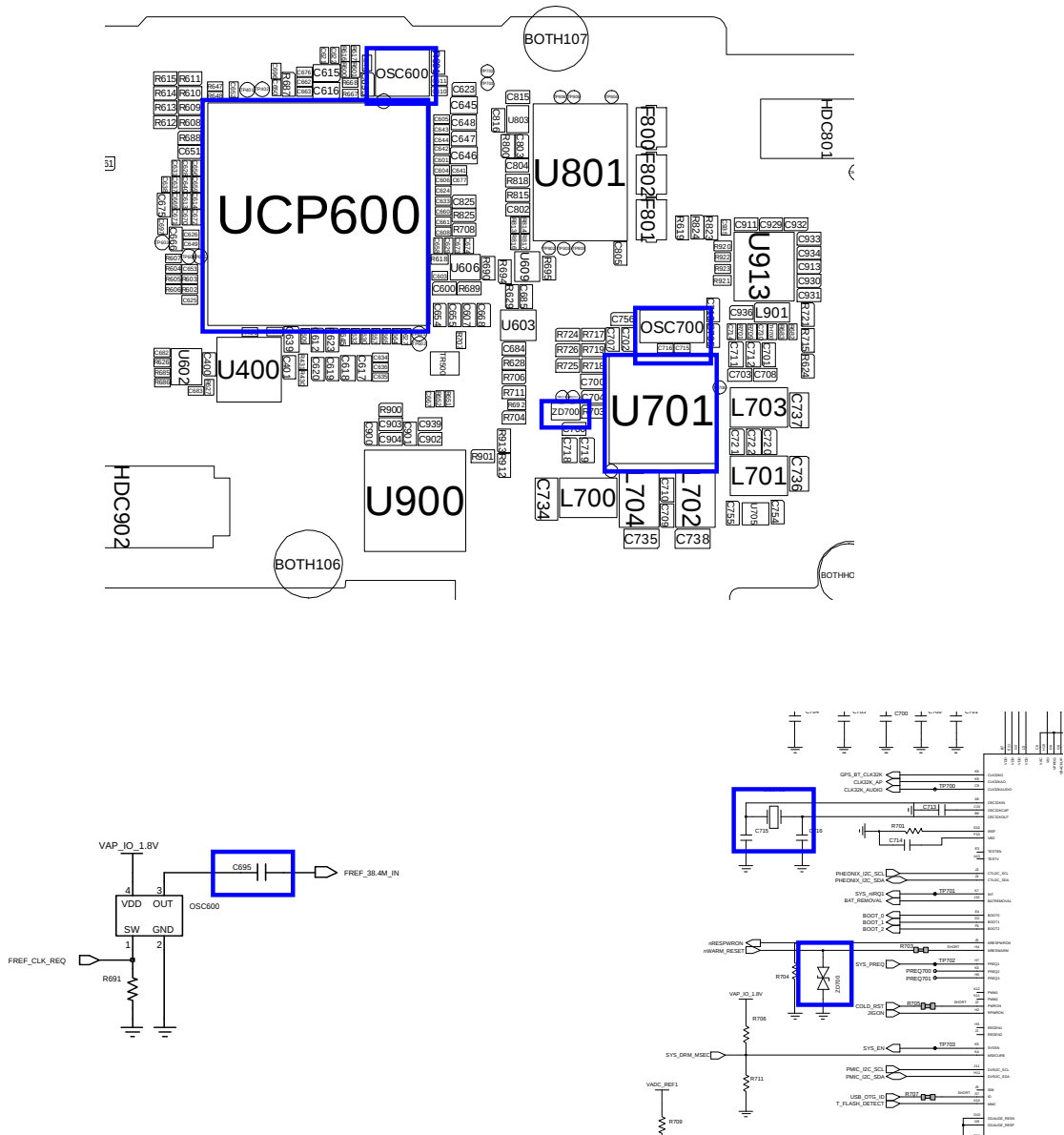
8-3-1. Power On



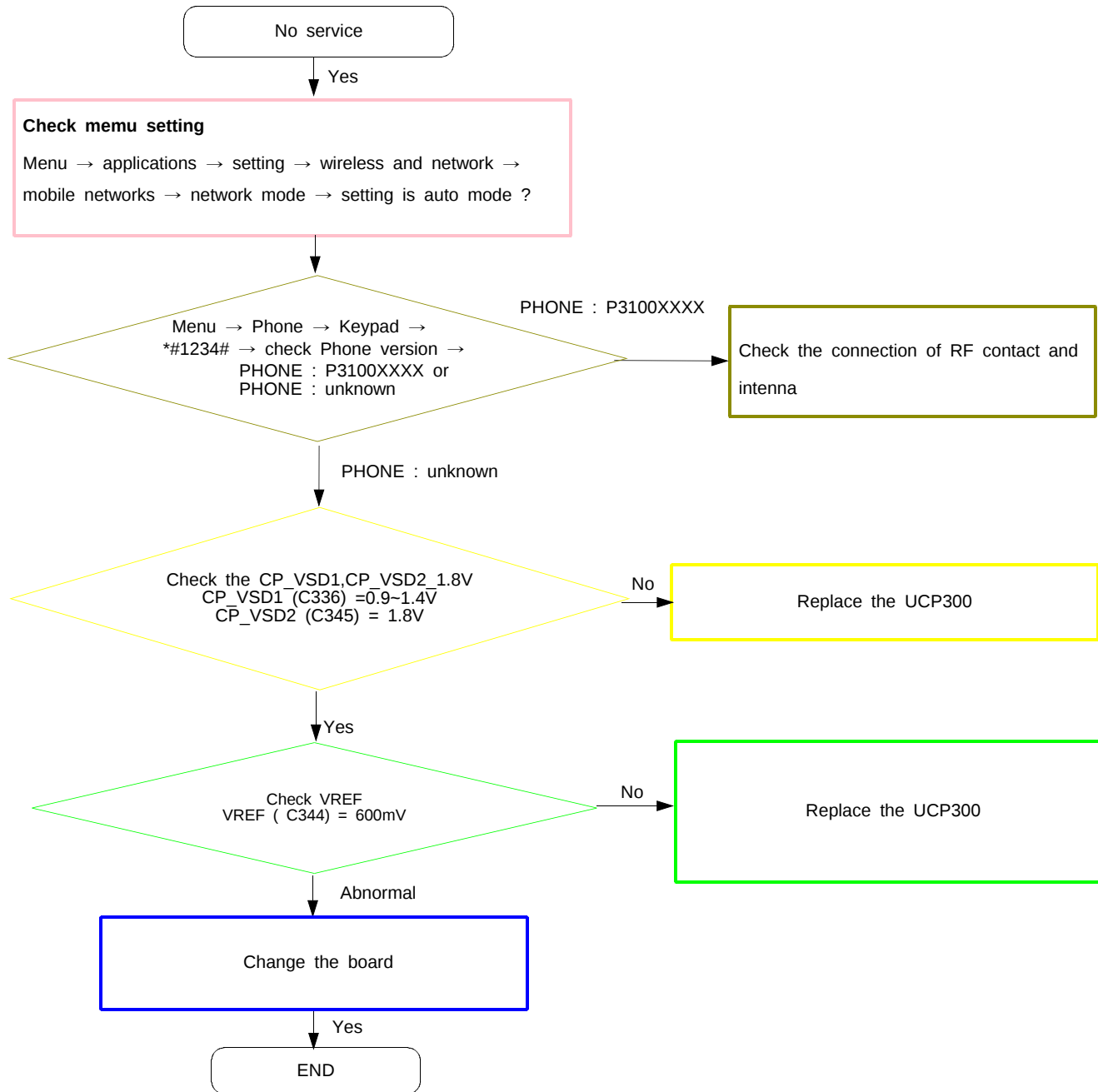


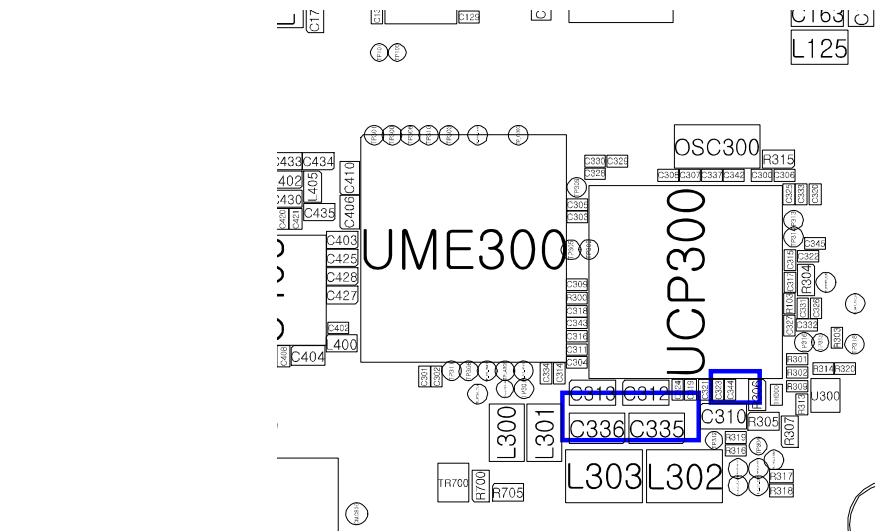
8-3-2. Initial



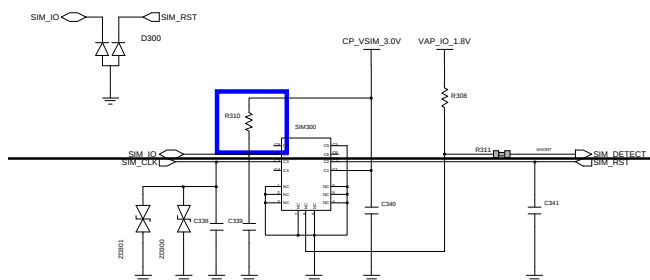
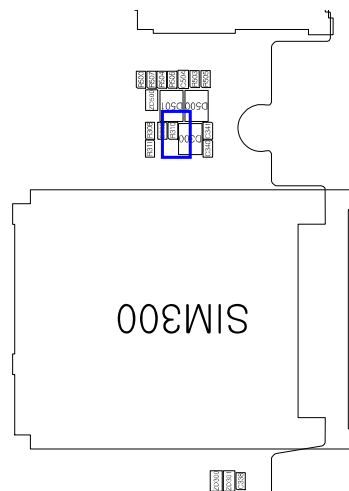
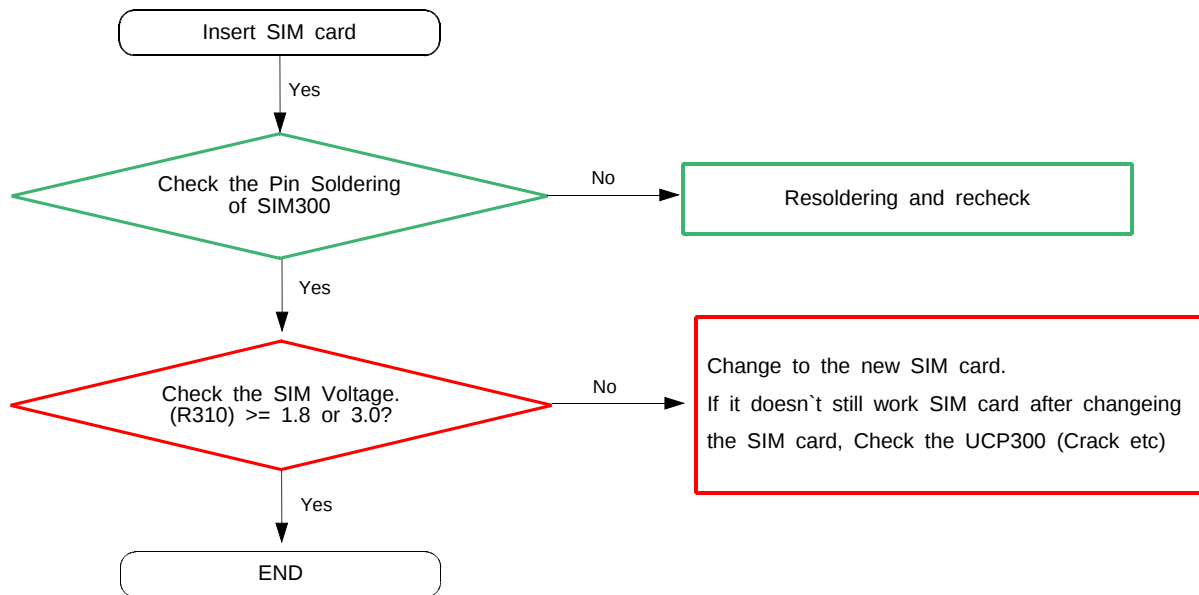


8-3-3. No Service

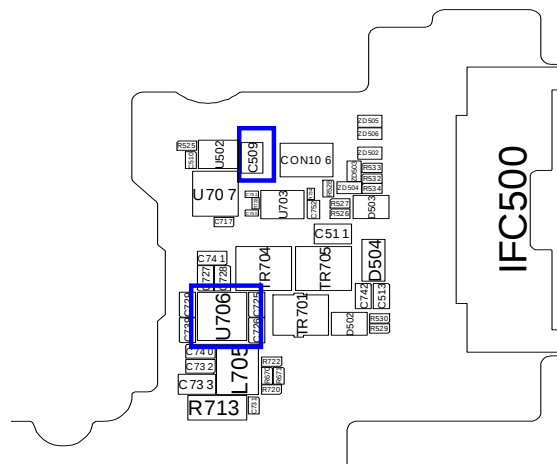
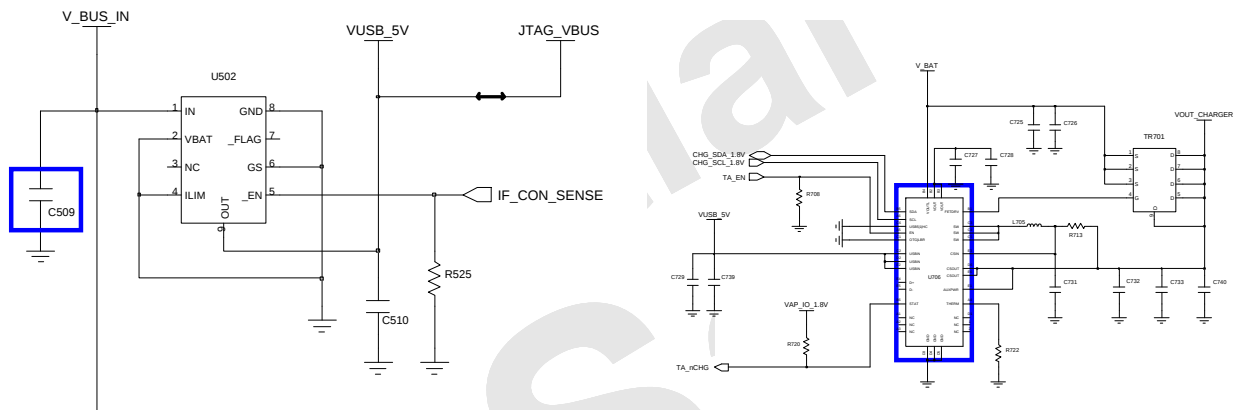
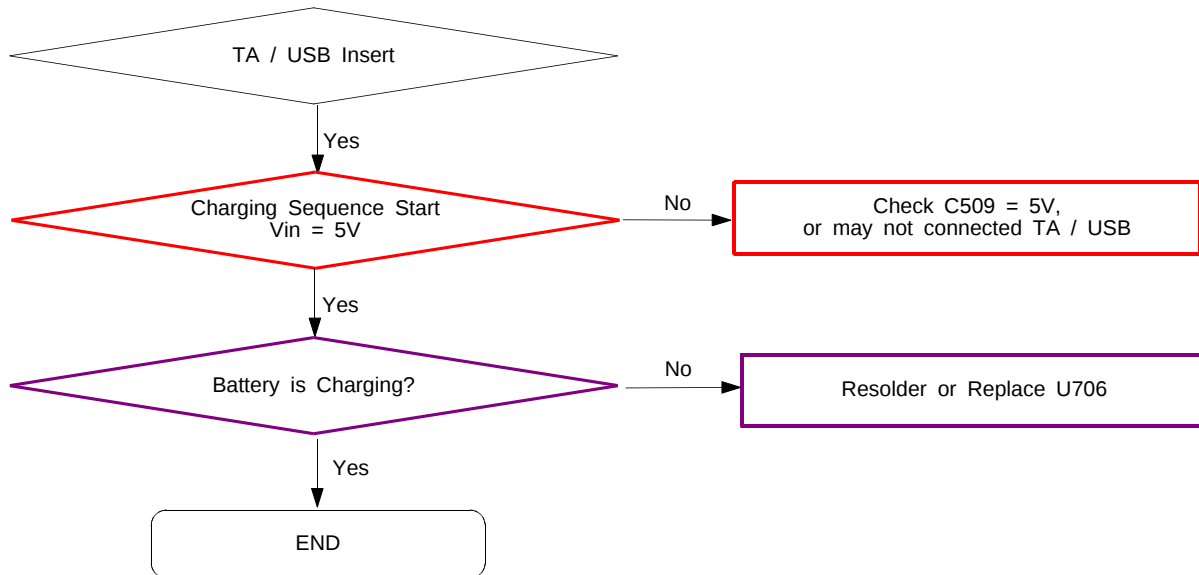




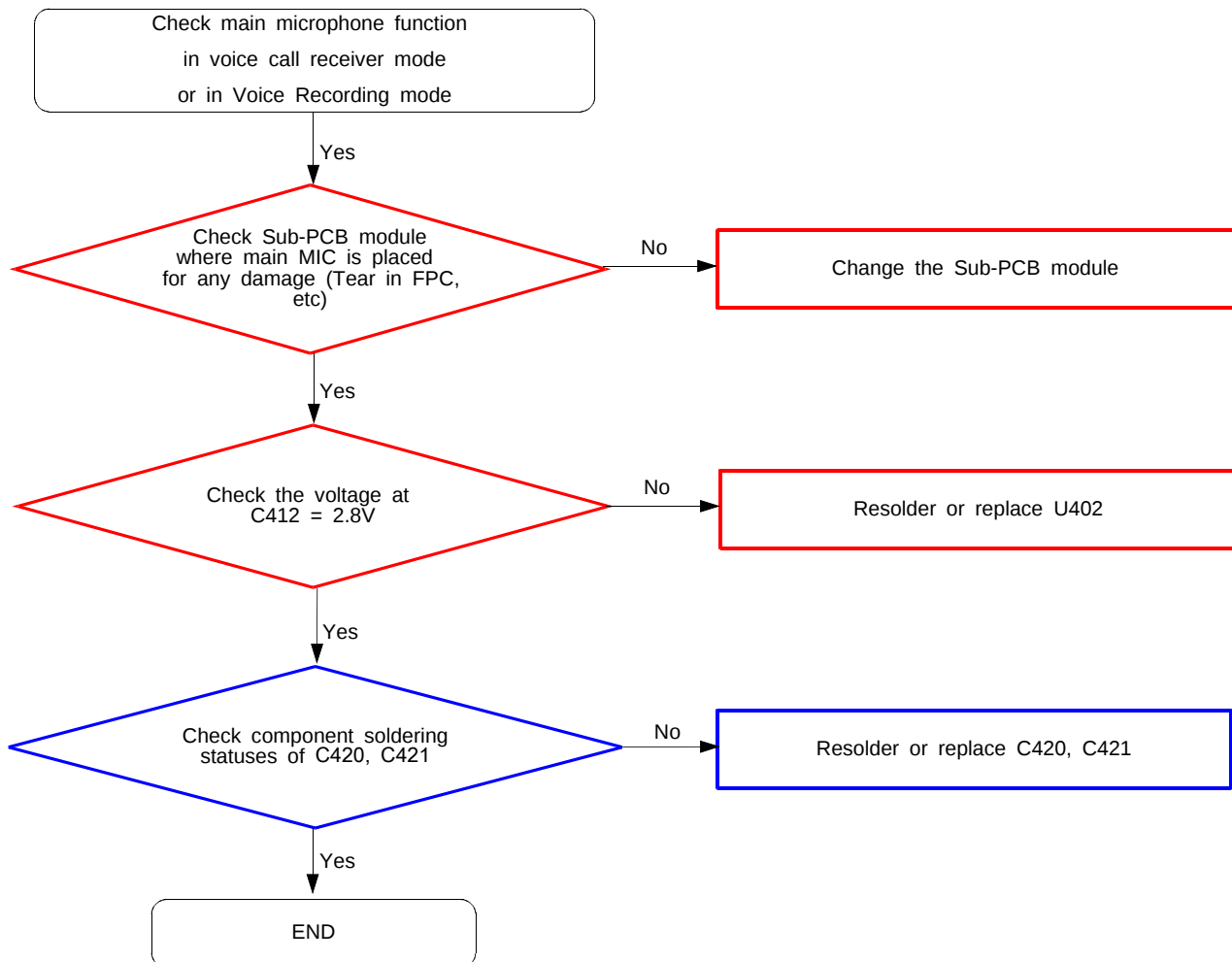
8-3-4. Sim Part

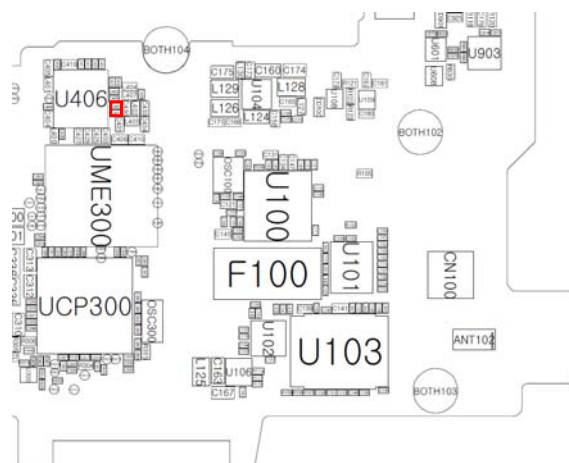
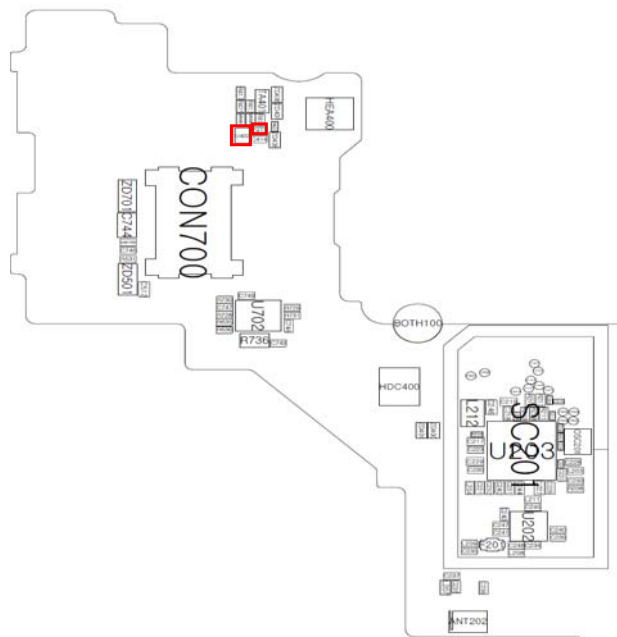


8-3-5. Charging Part

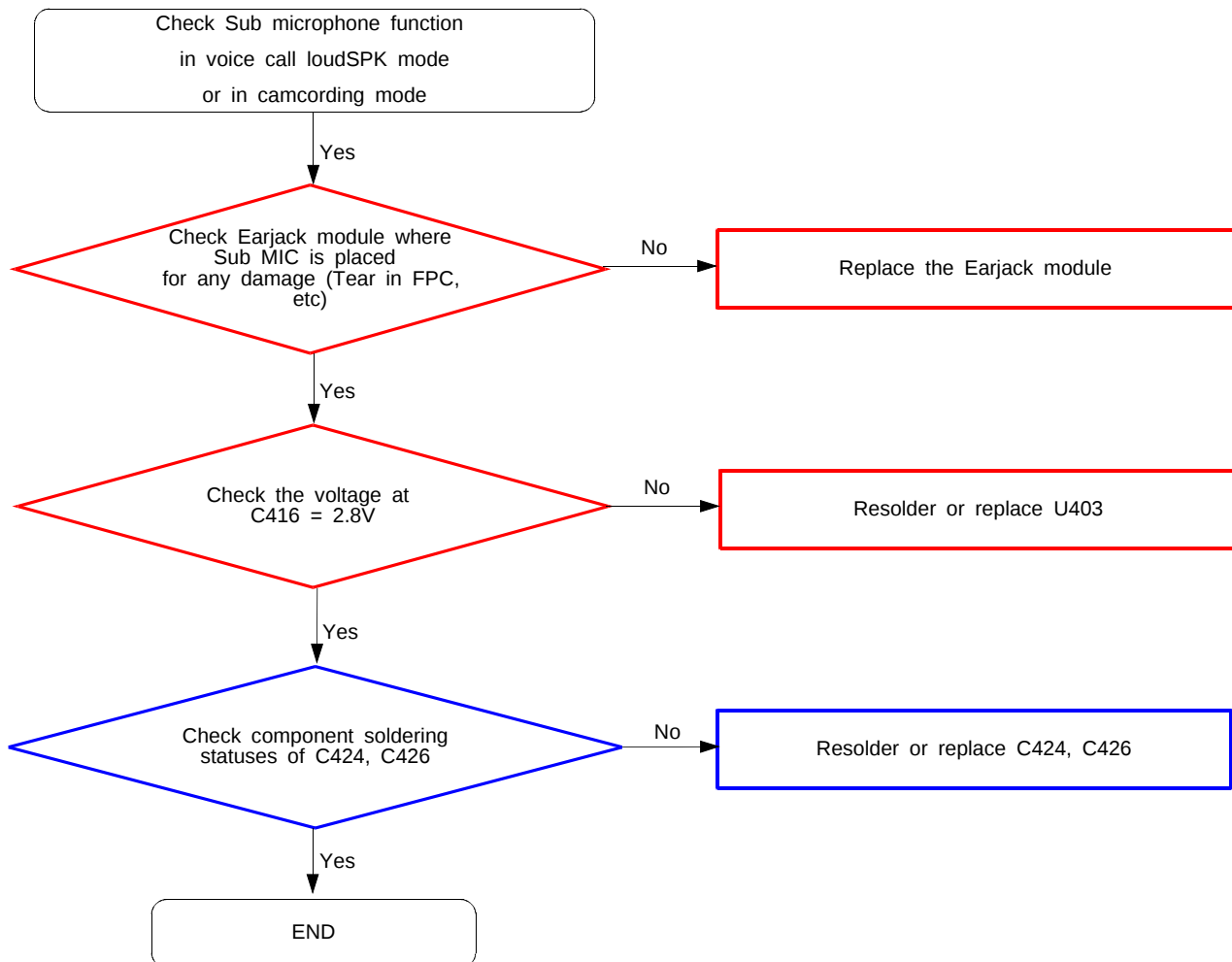


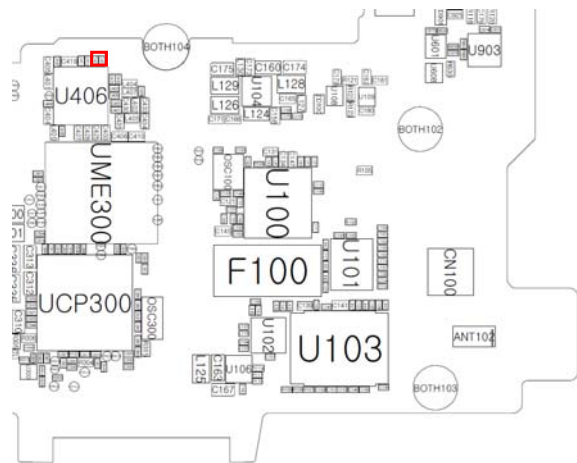
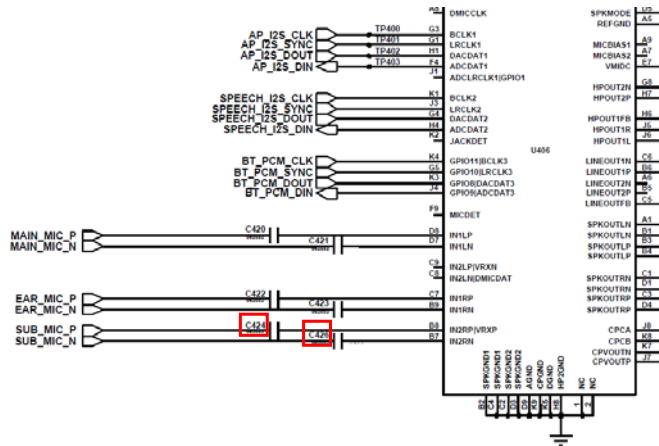
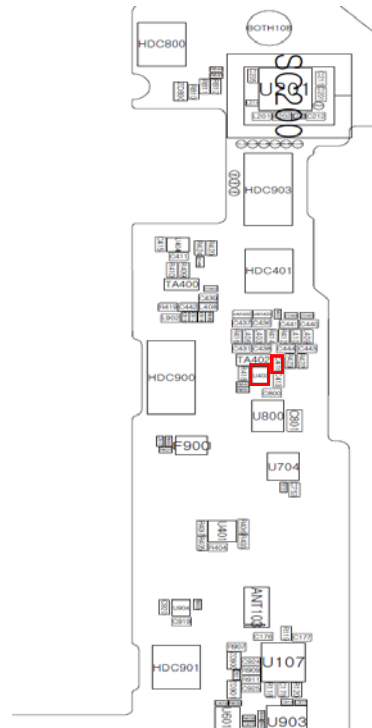
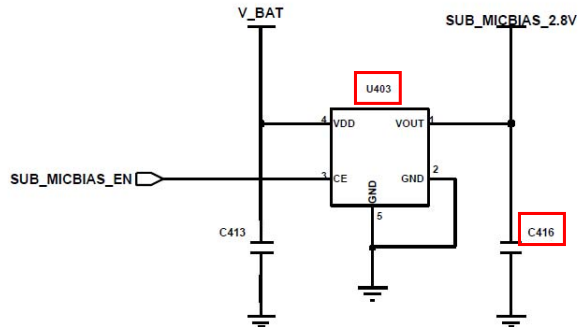
8-3-6. Microphone Part (Main MIC)



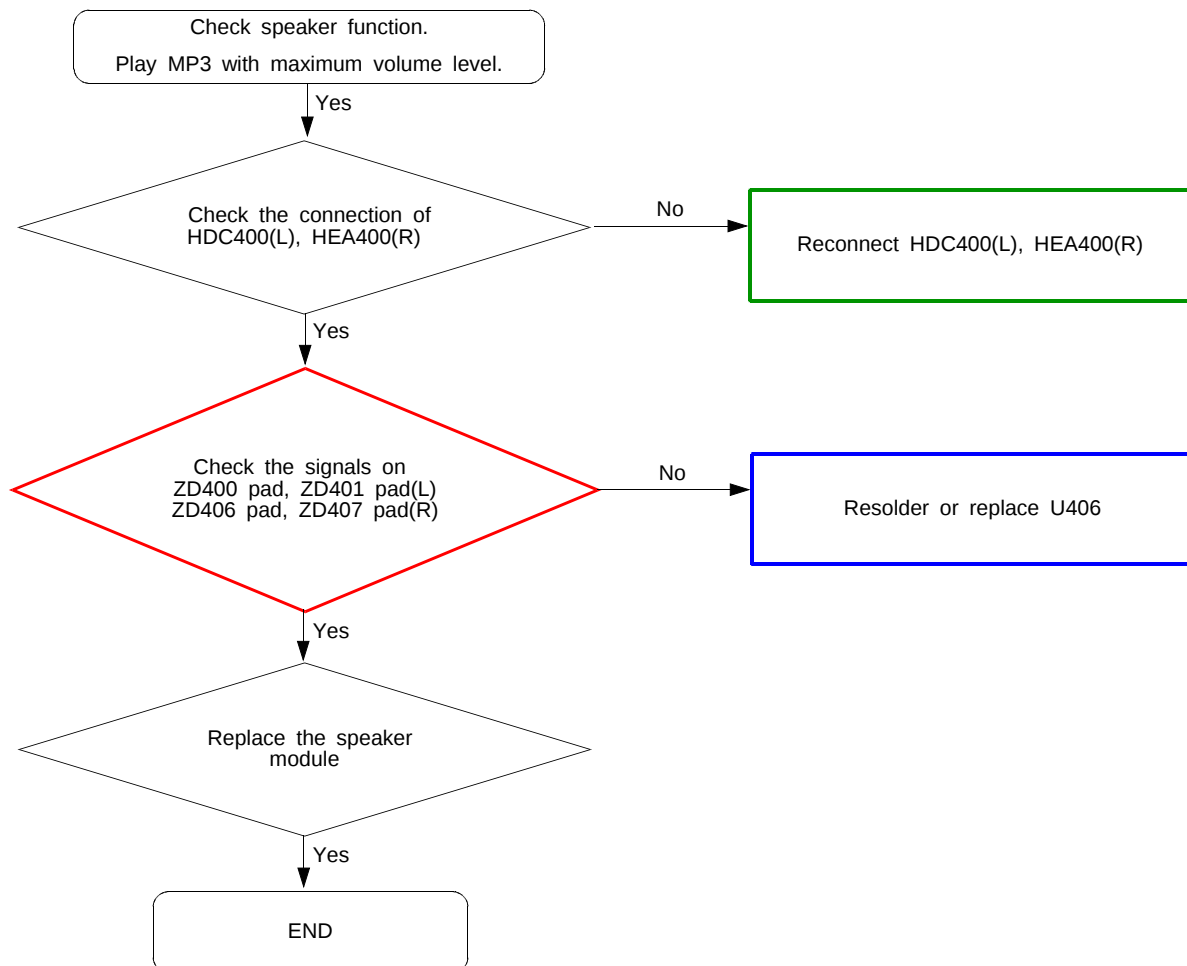


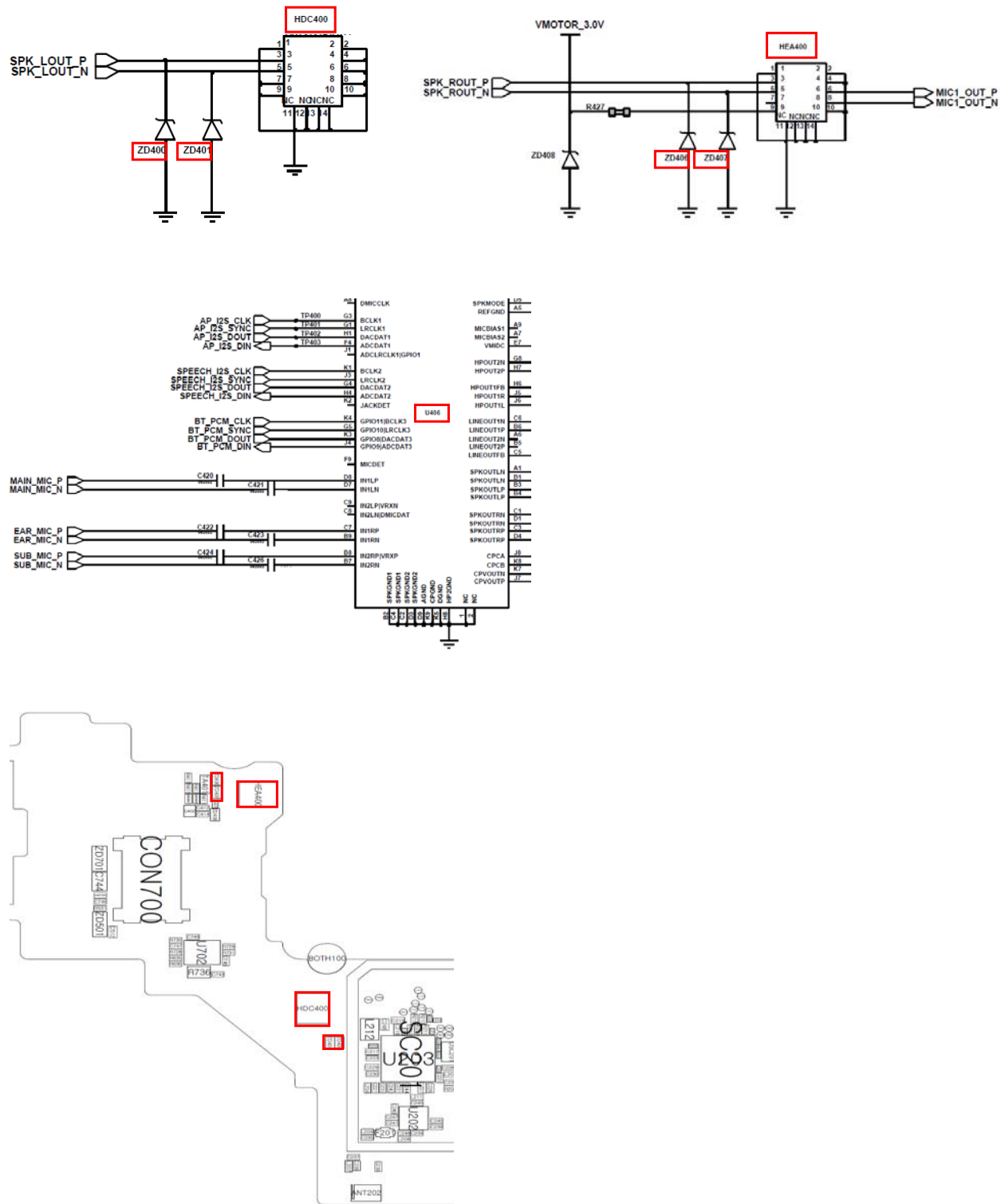
8-3-6-1. Microphone Part (Sub MIC)



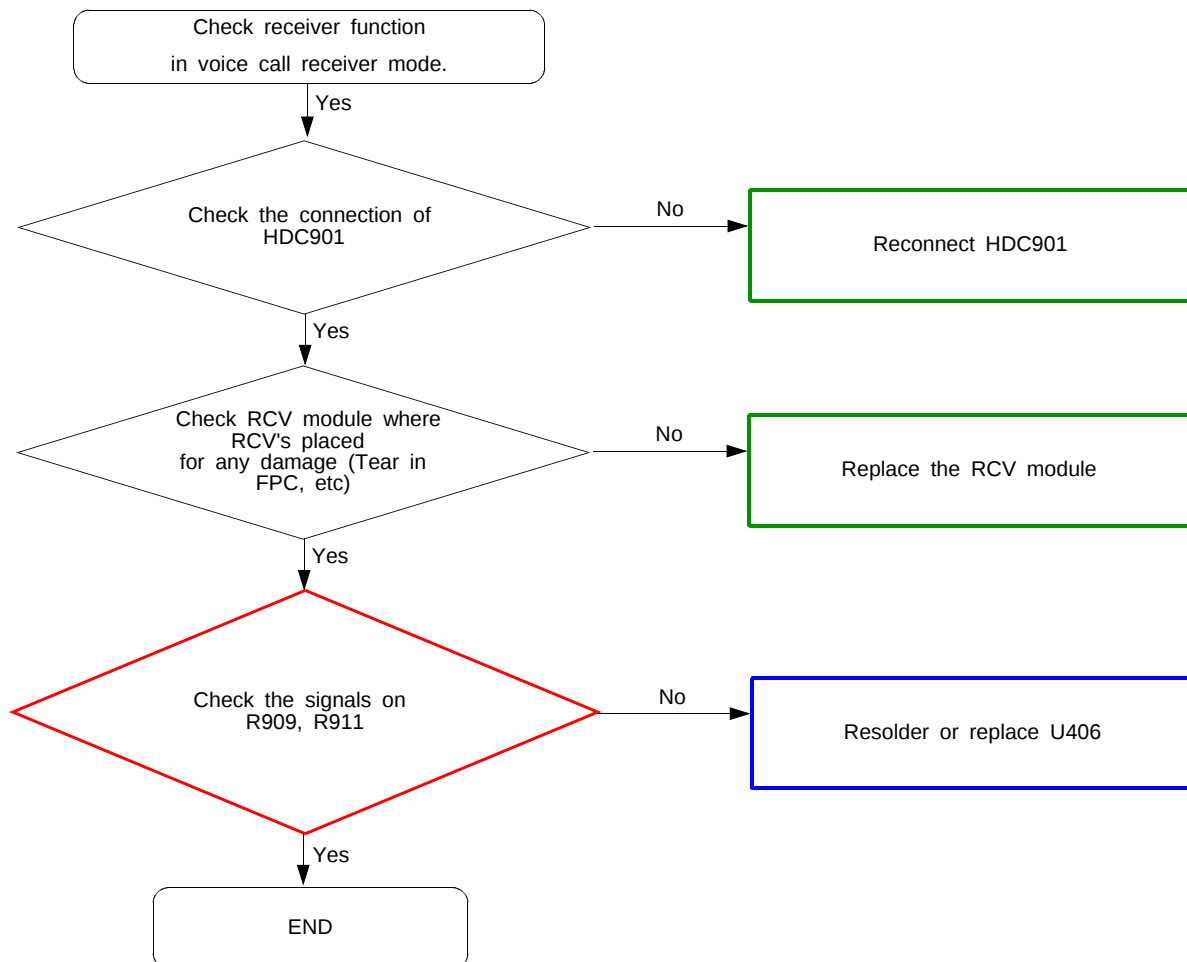


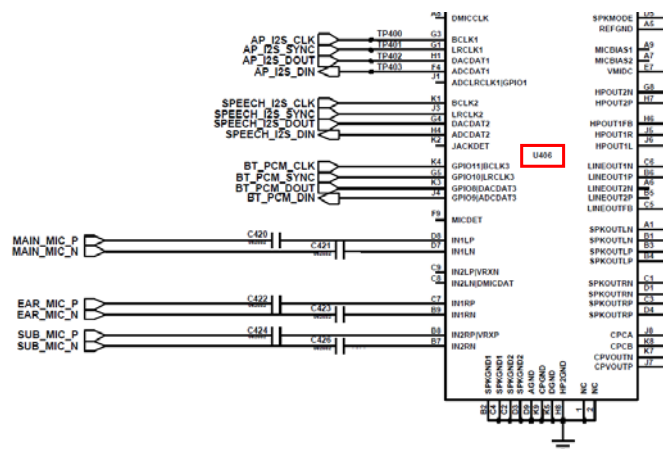
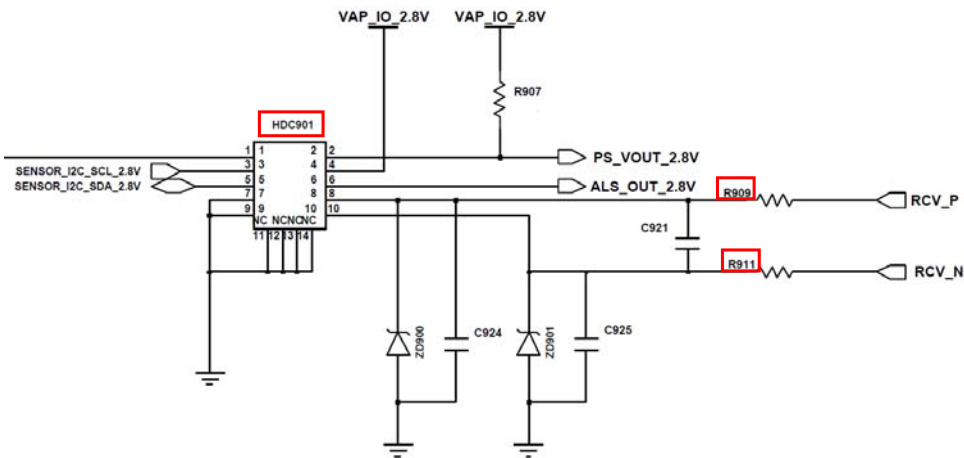
8-3-7. Speaker Part



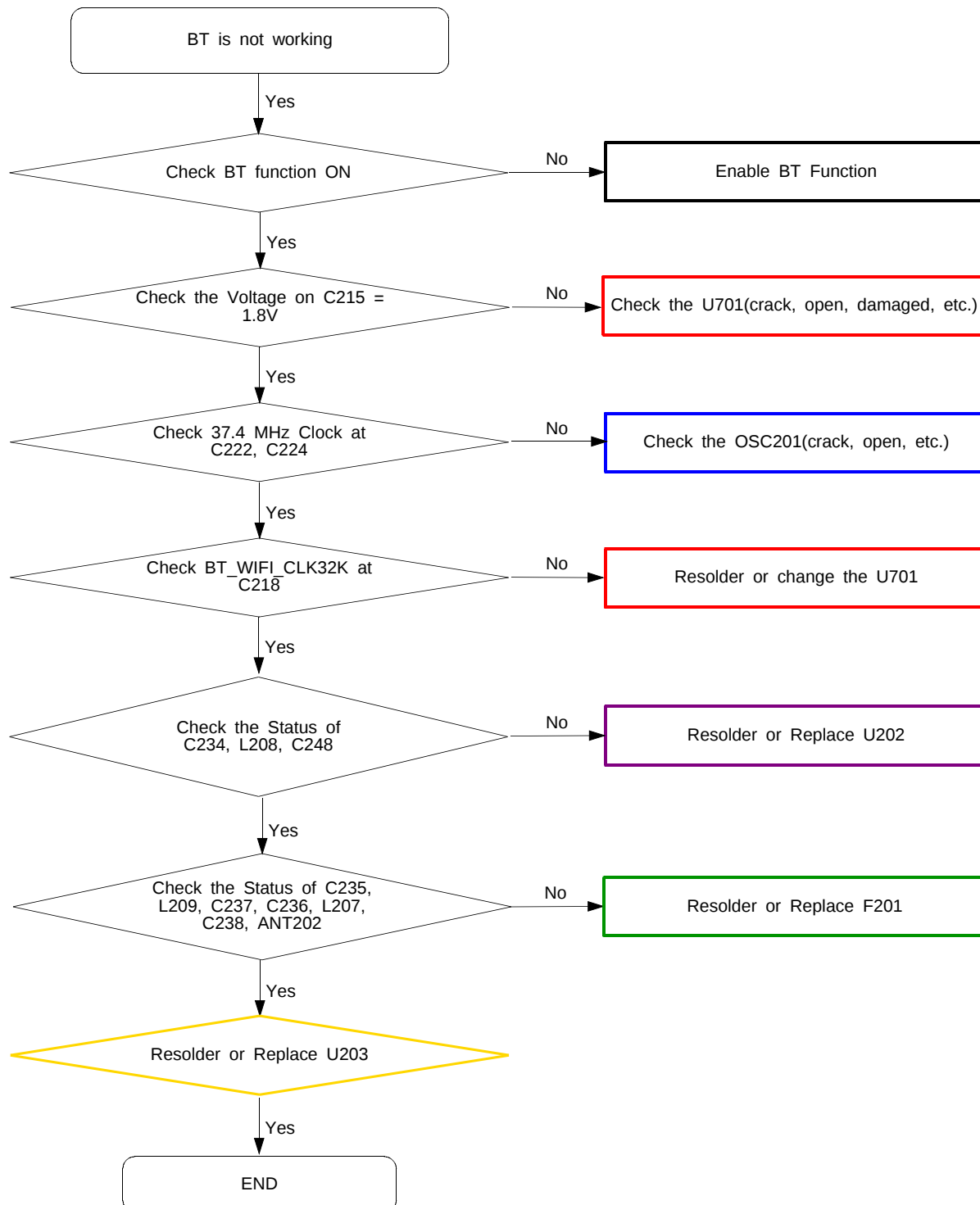


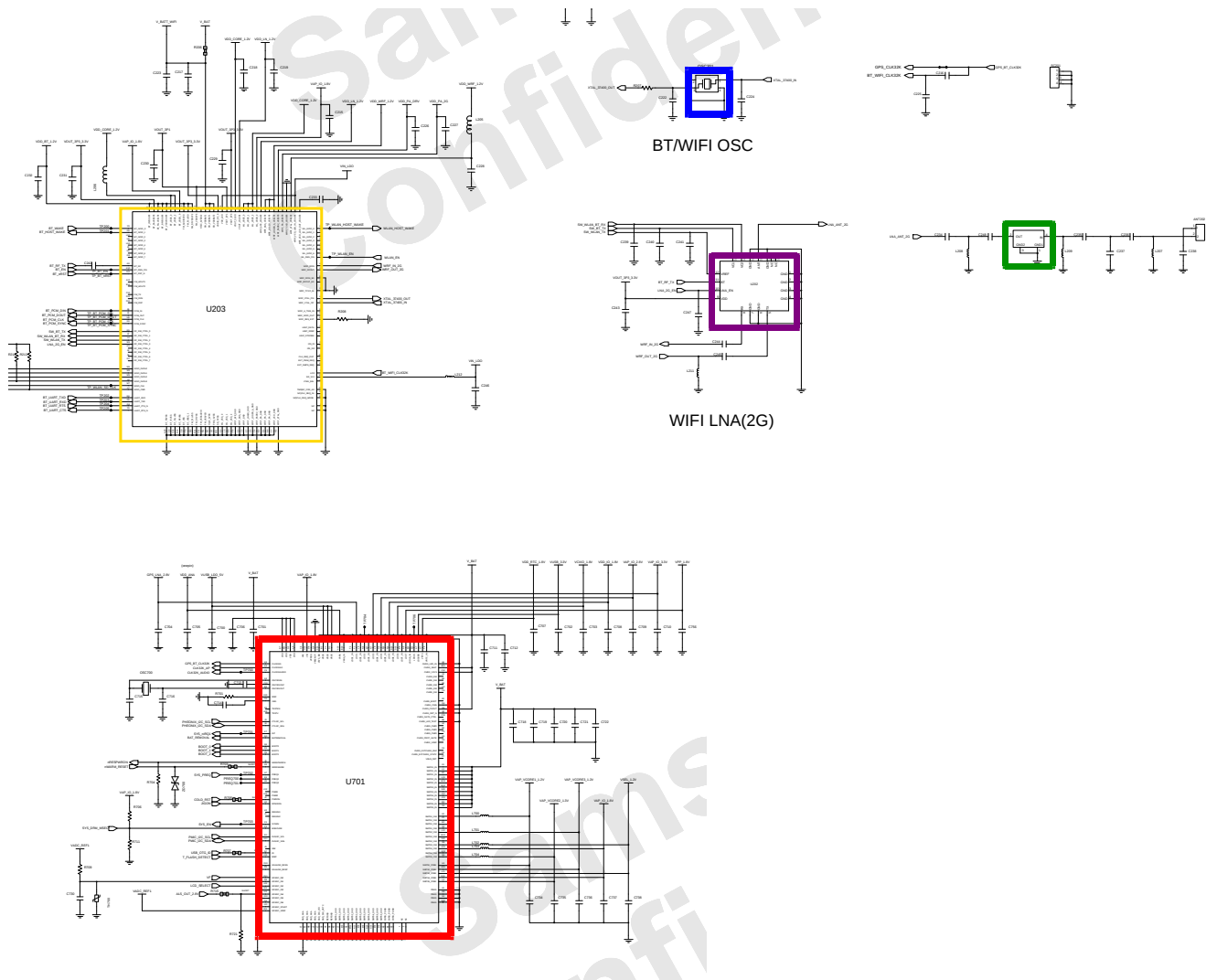
8-3-8. Receiver Part

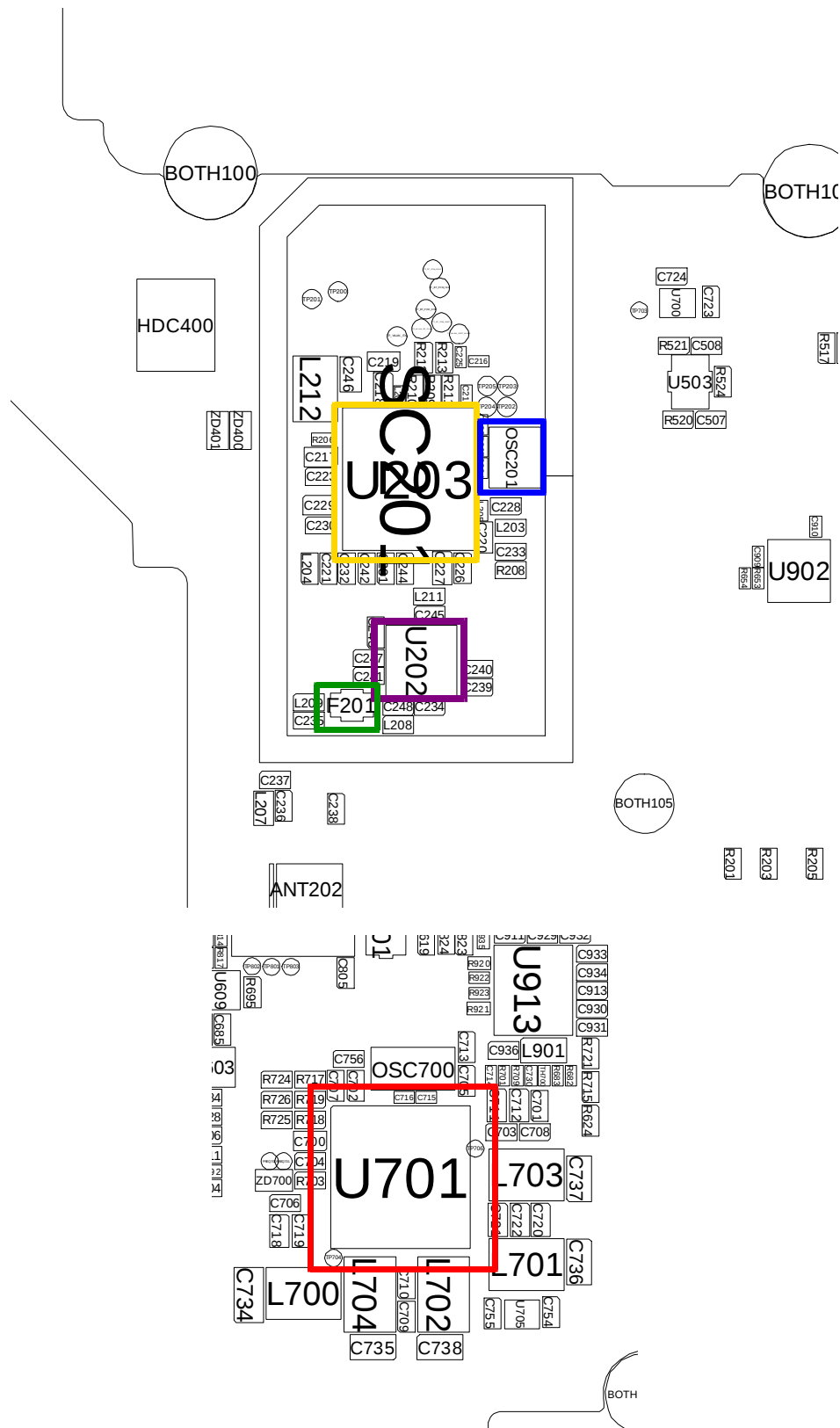




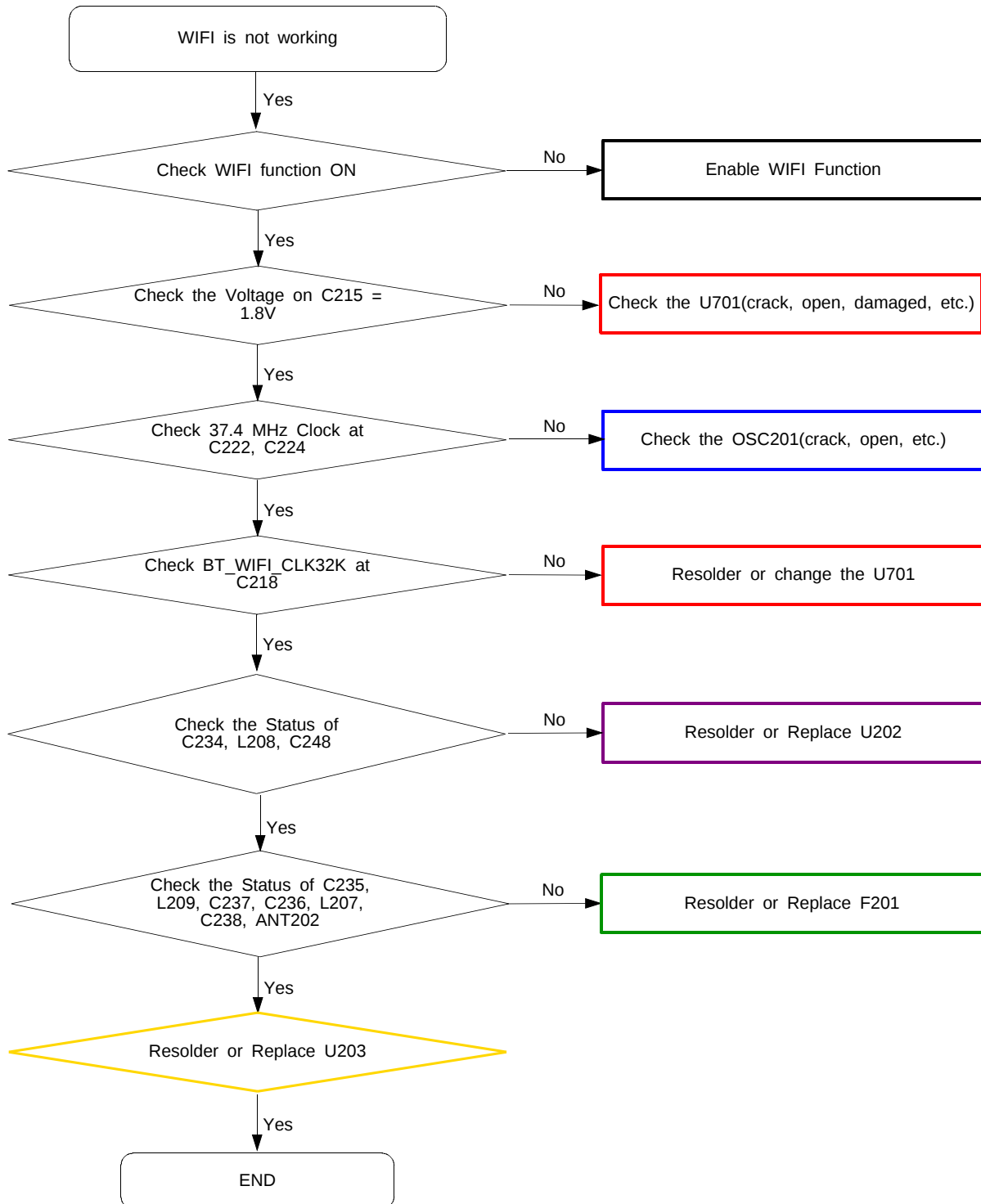
8-3-9. BT

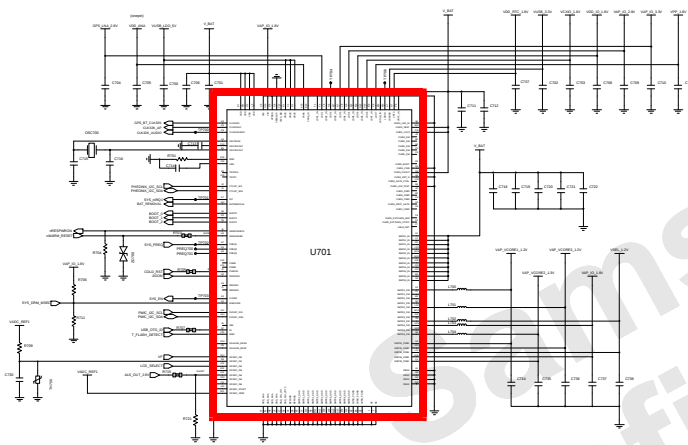
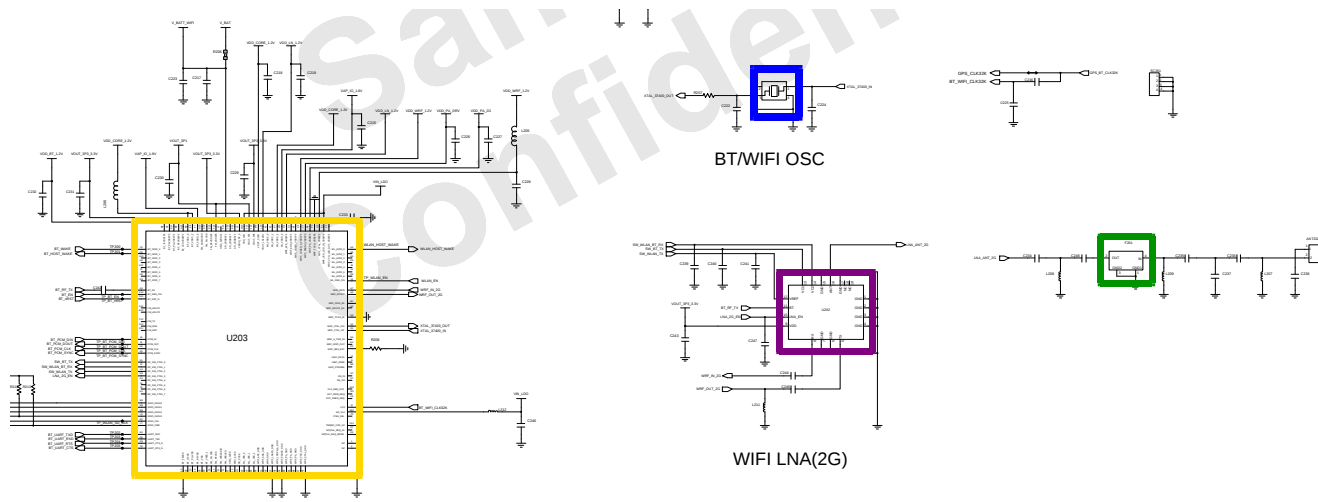


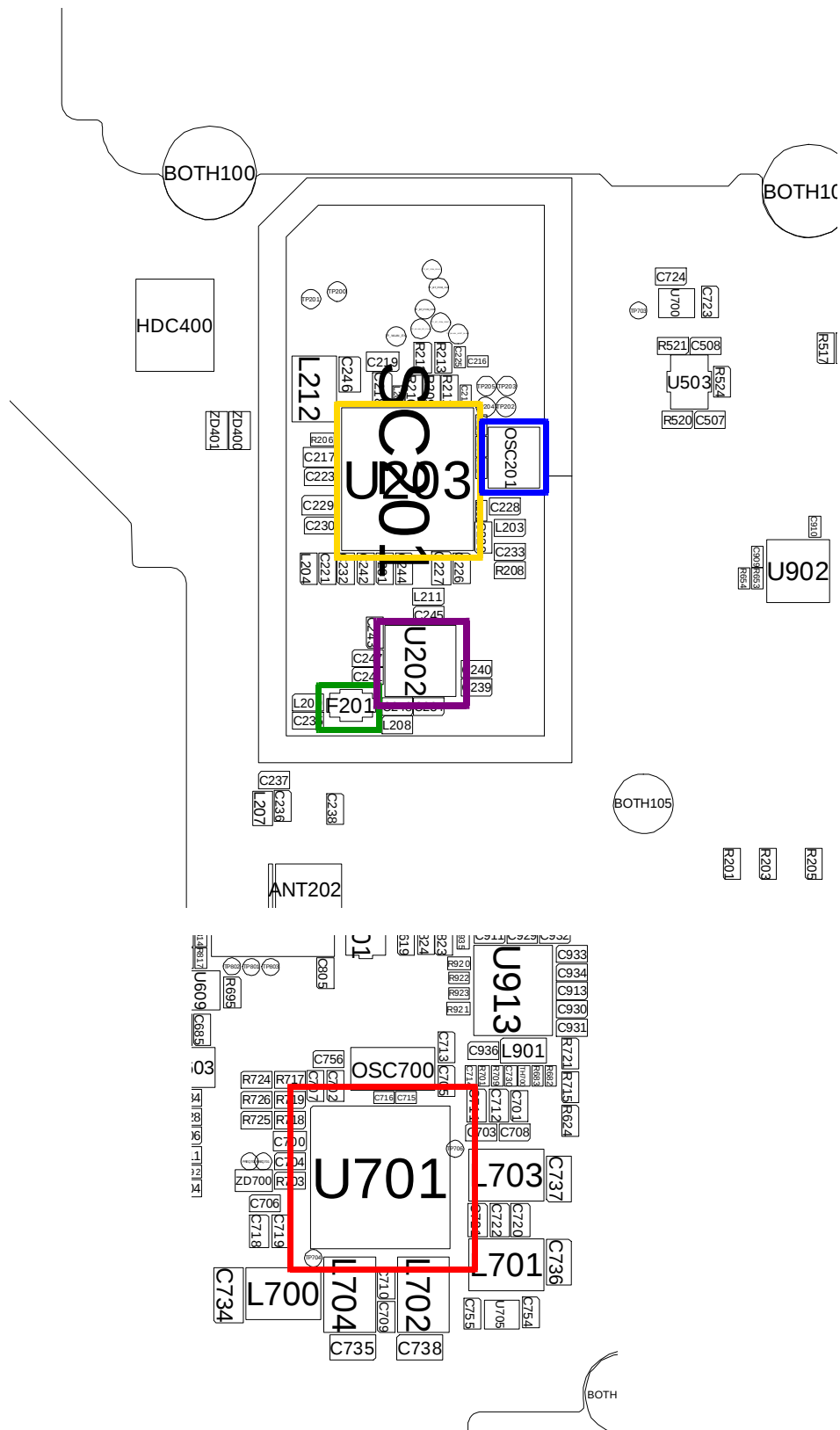




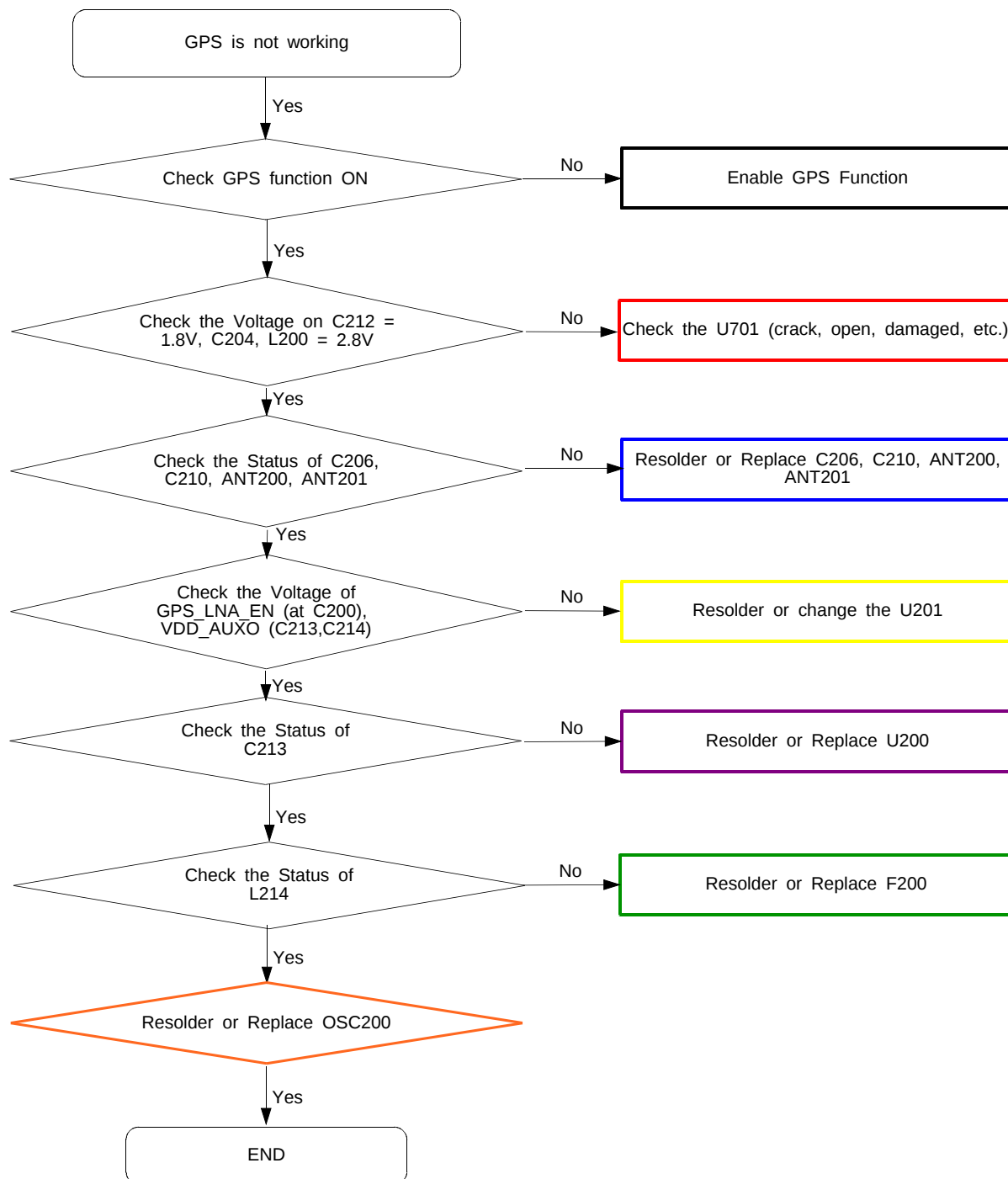
8-3-10. WIFI

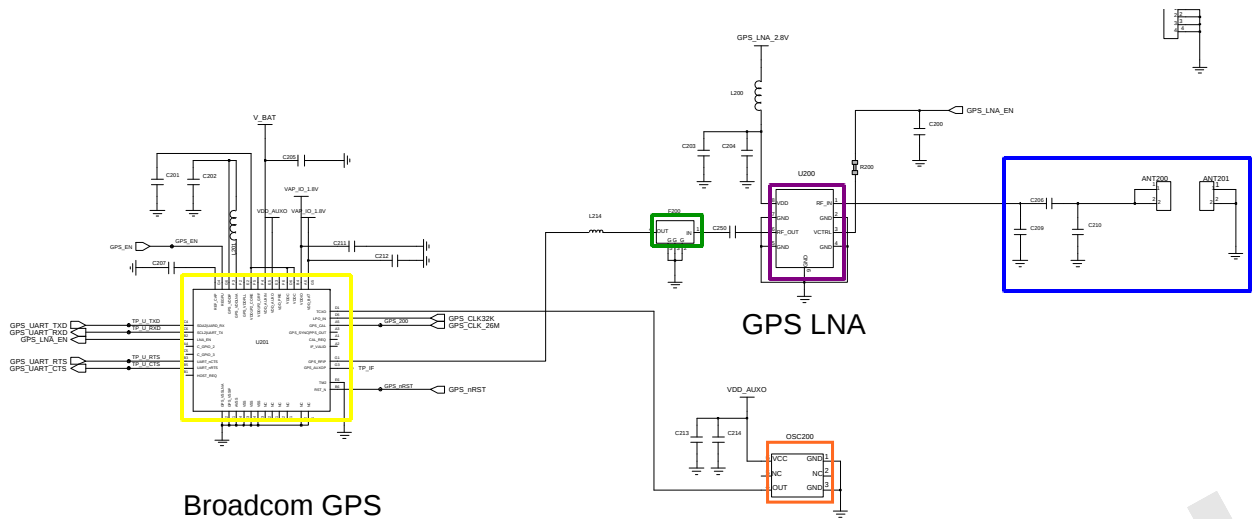




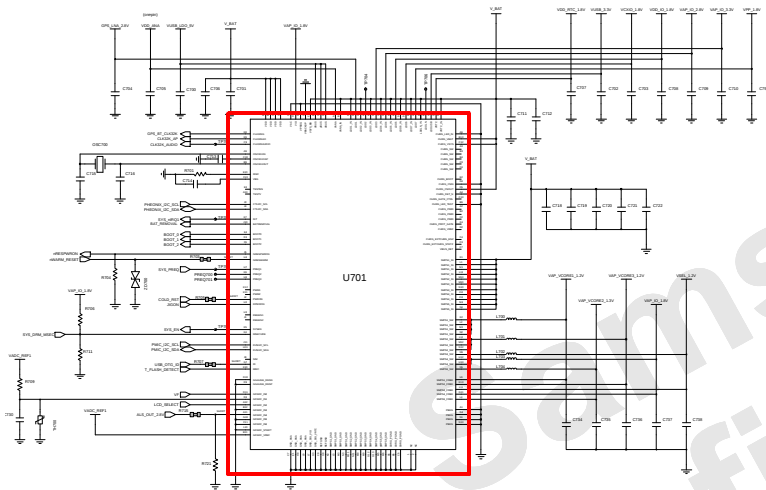


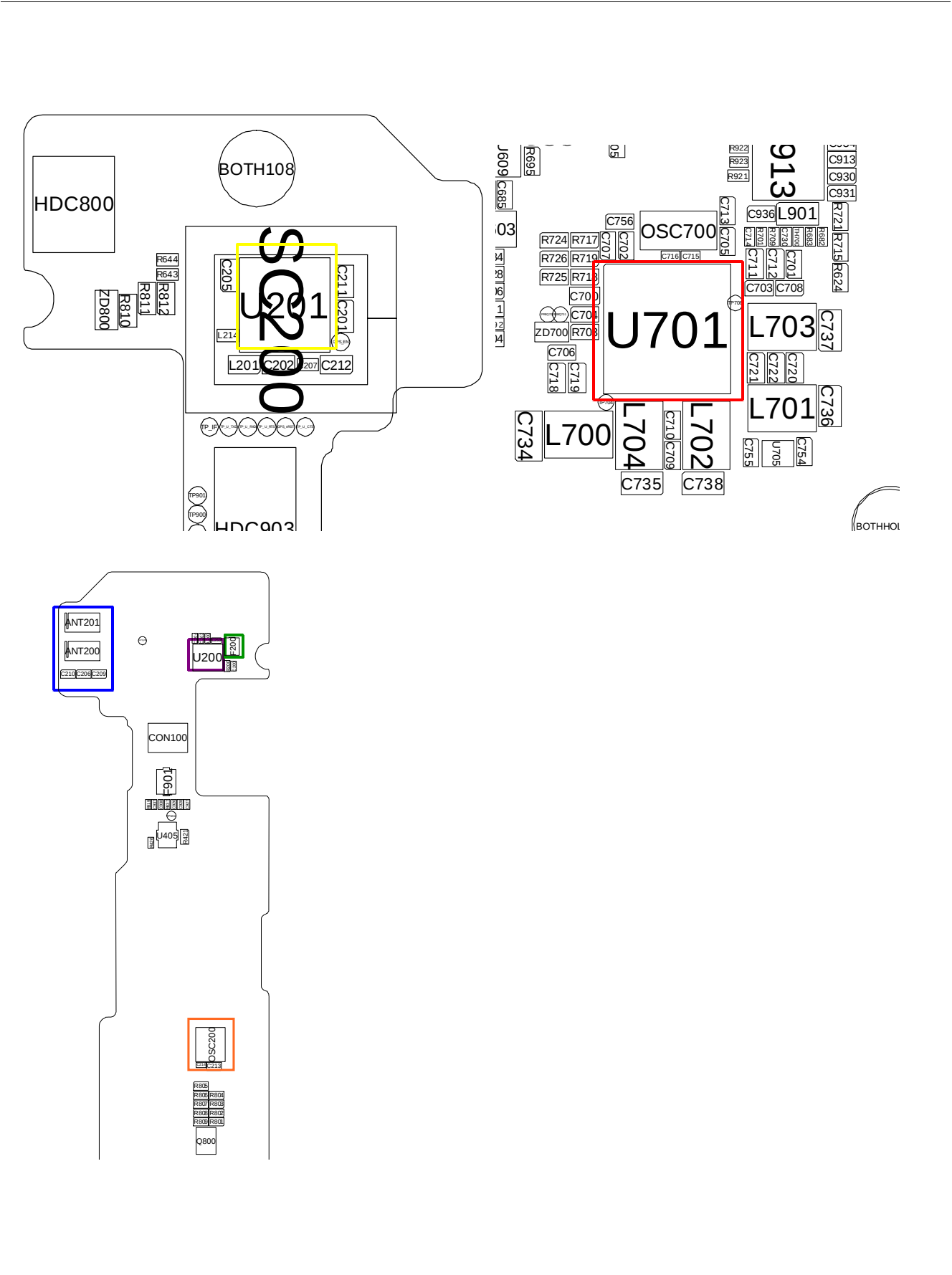
8-3-11. GPS



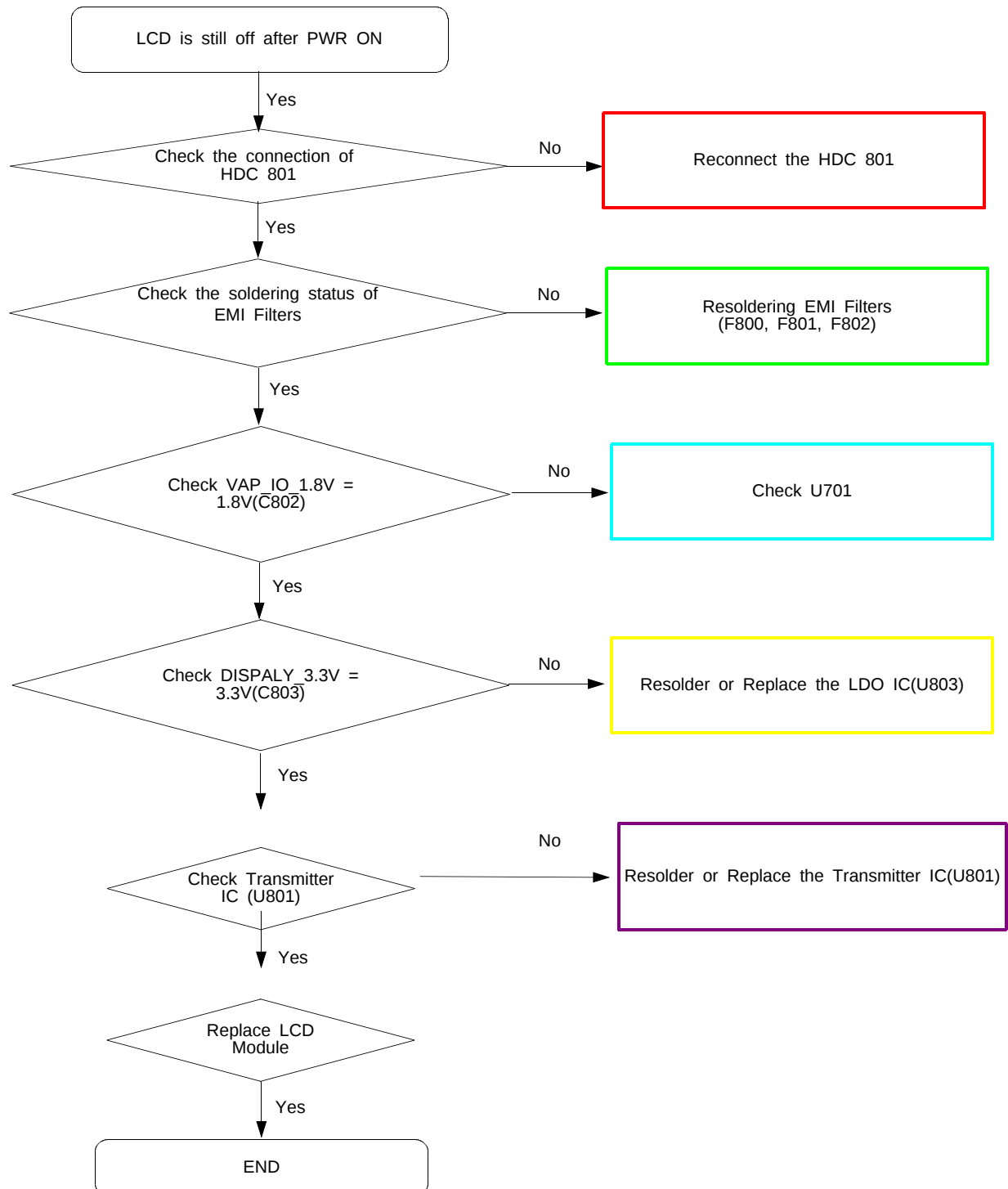


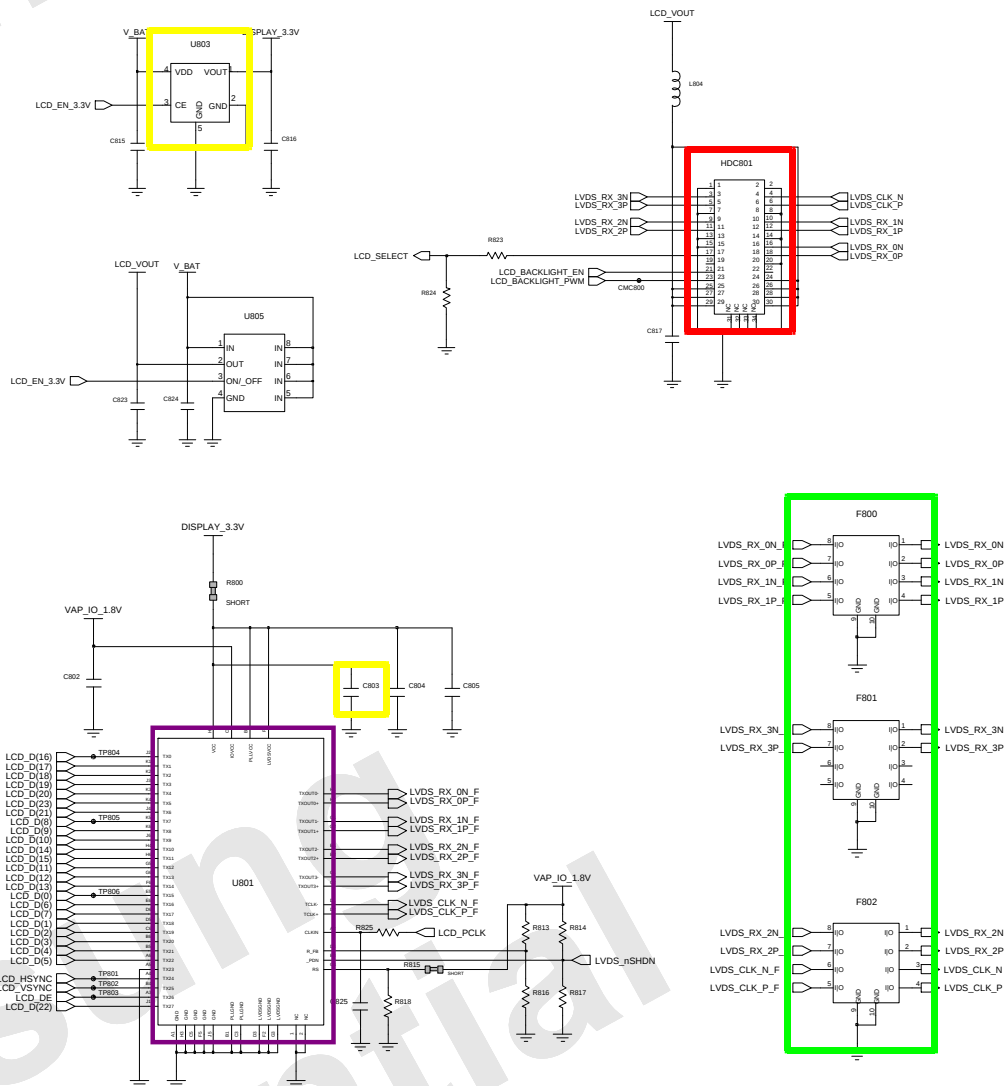
Broadcom GPS



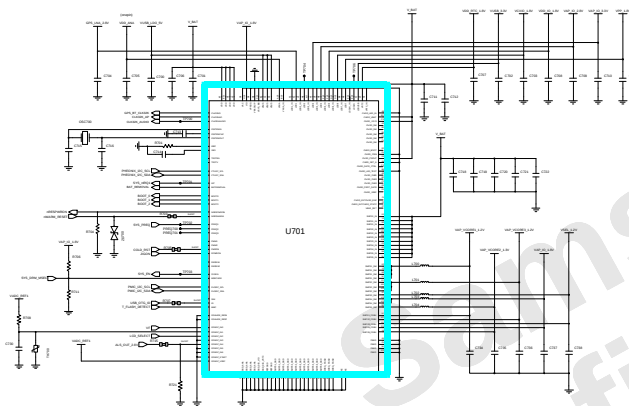


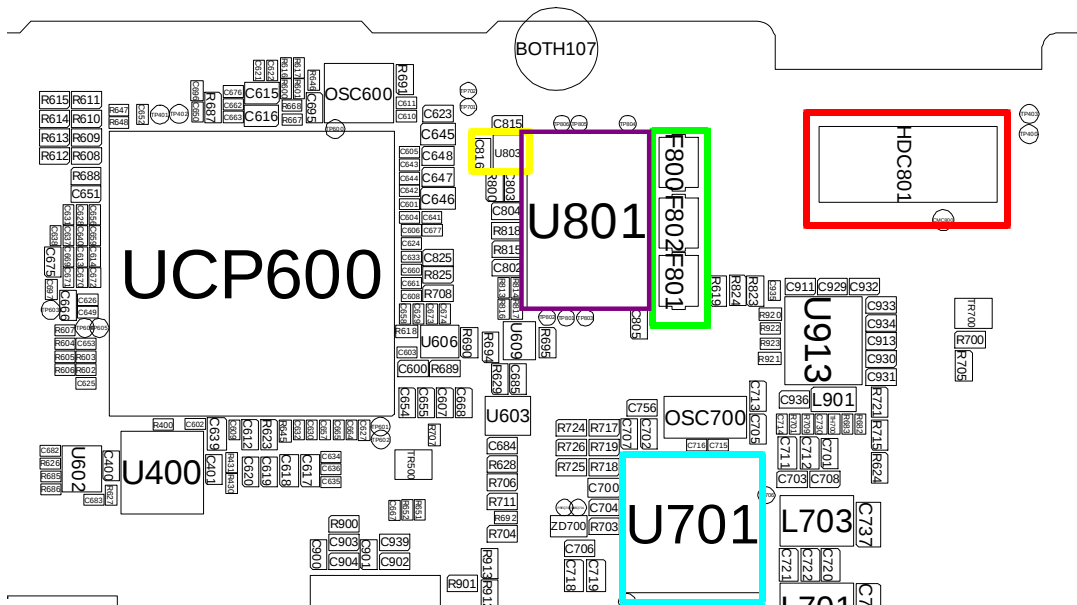
8-3-12. LCD



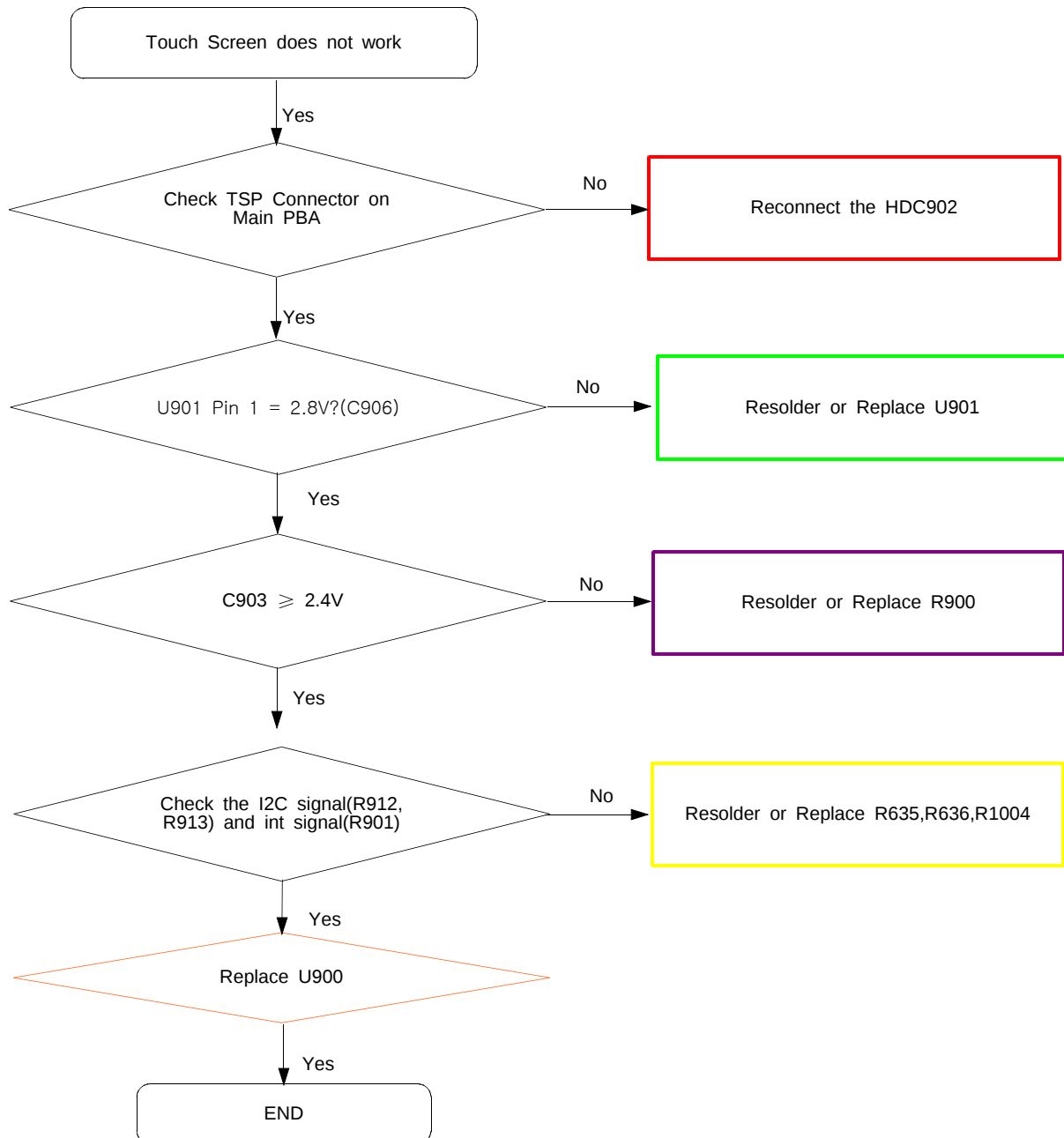


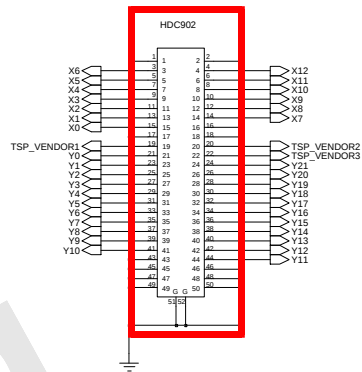
LVDS Transmitter



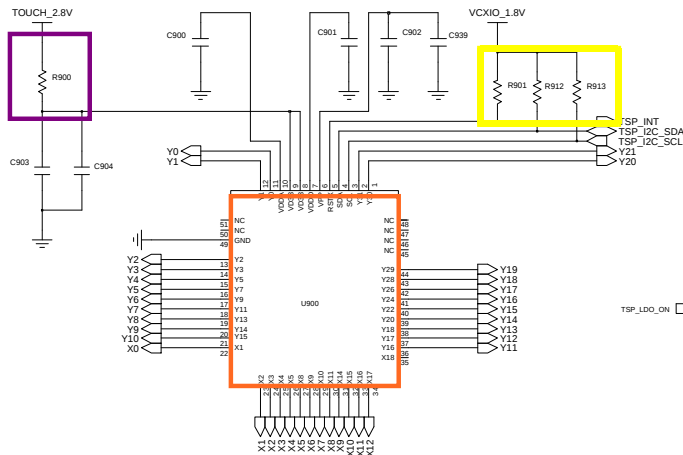


8-3-13. TSP

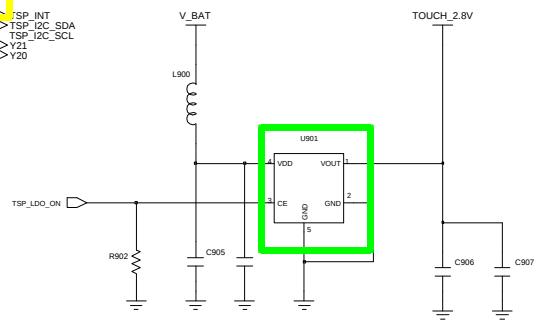




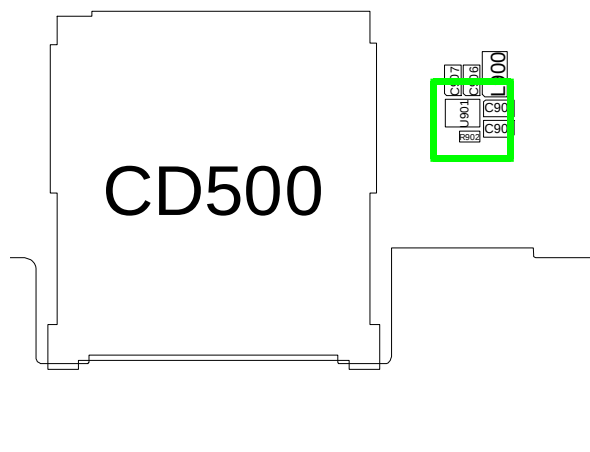
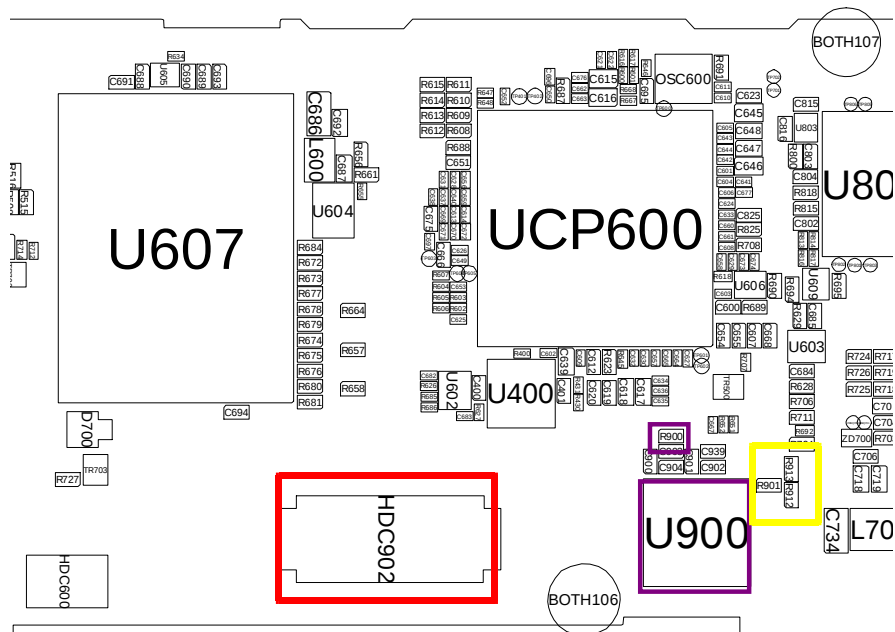
50Pin TOUCH Con.



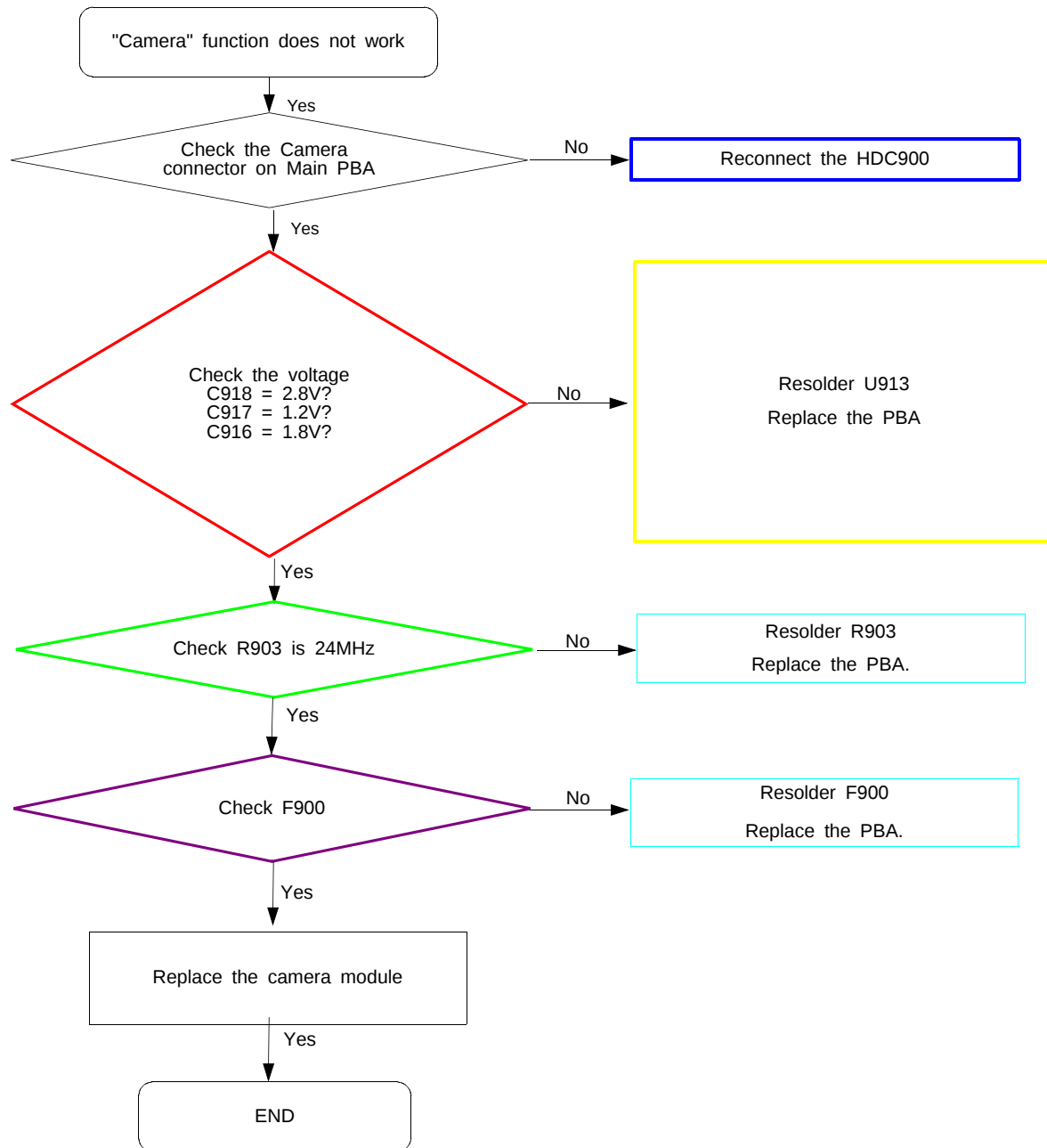
TOUCH SENSOR IC

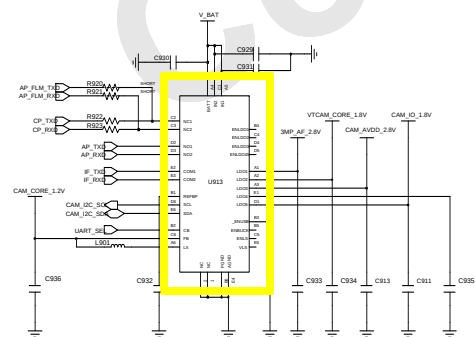
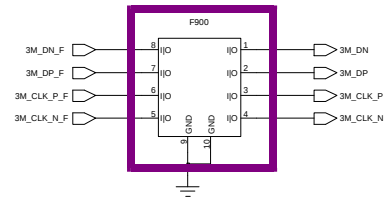


TOUCH LDO

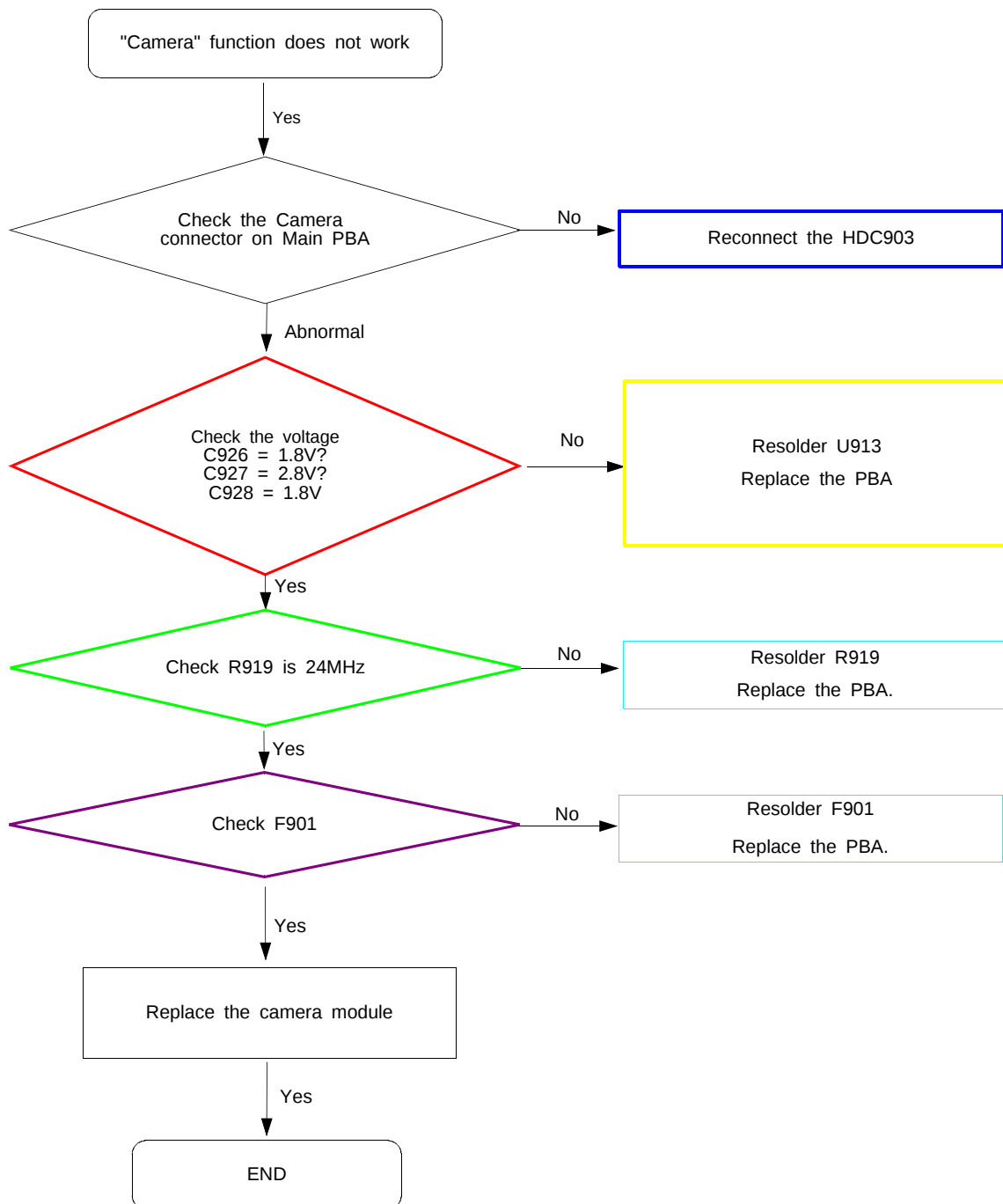


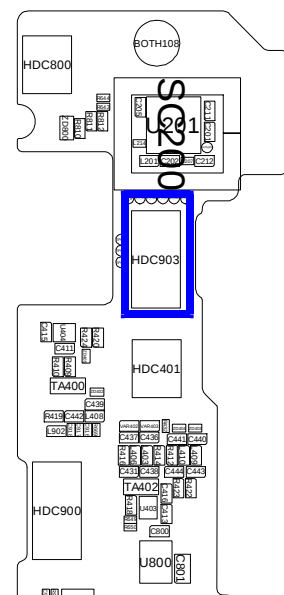
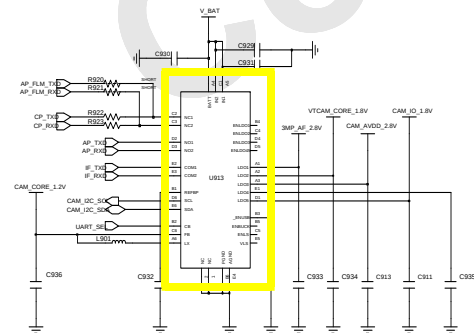
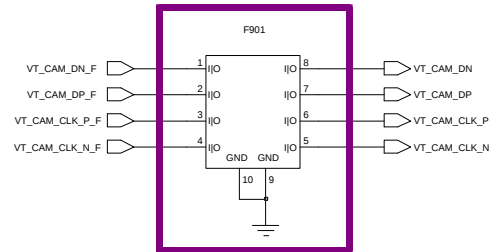
8-3-14. 3M CAM



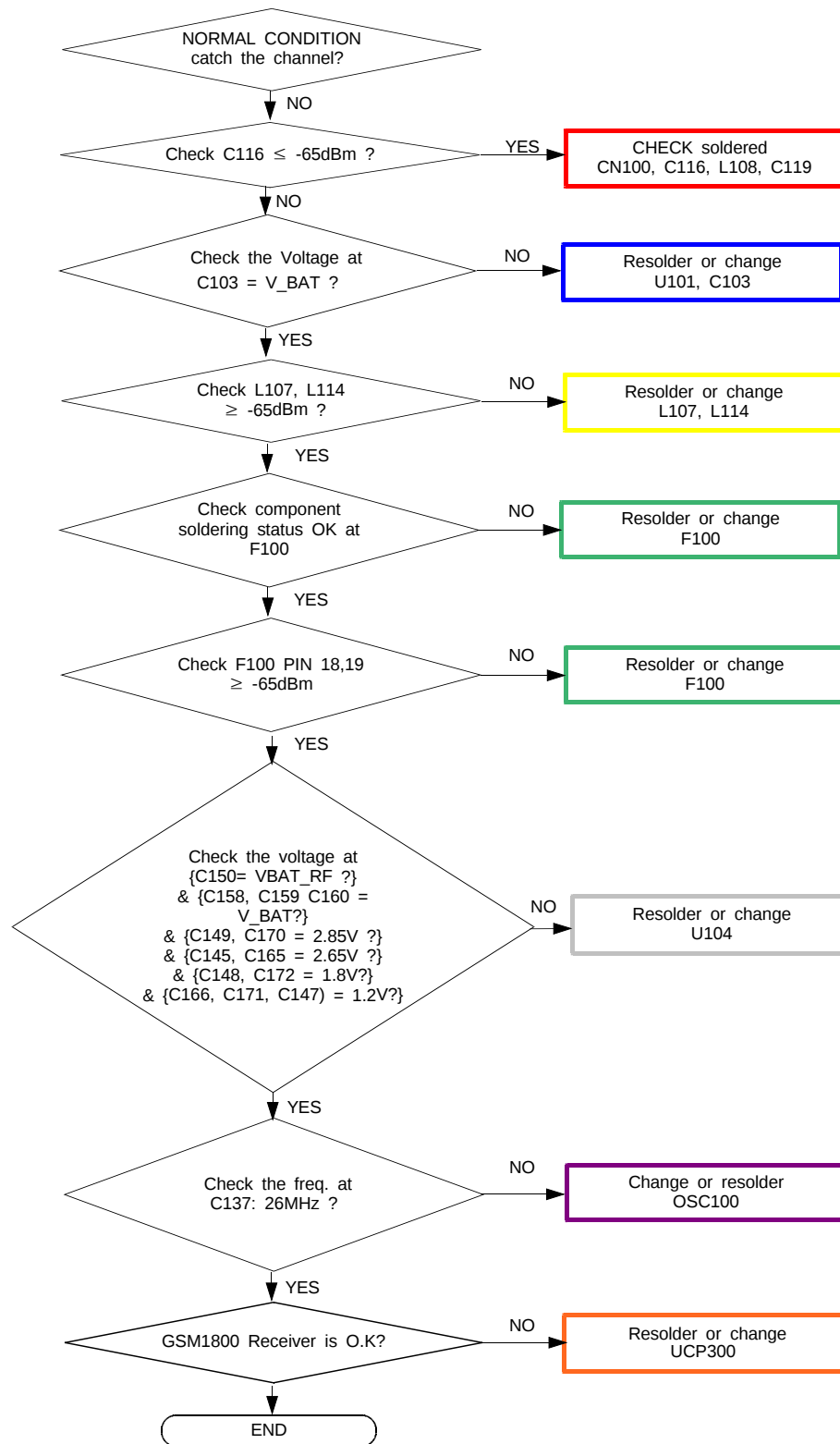


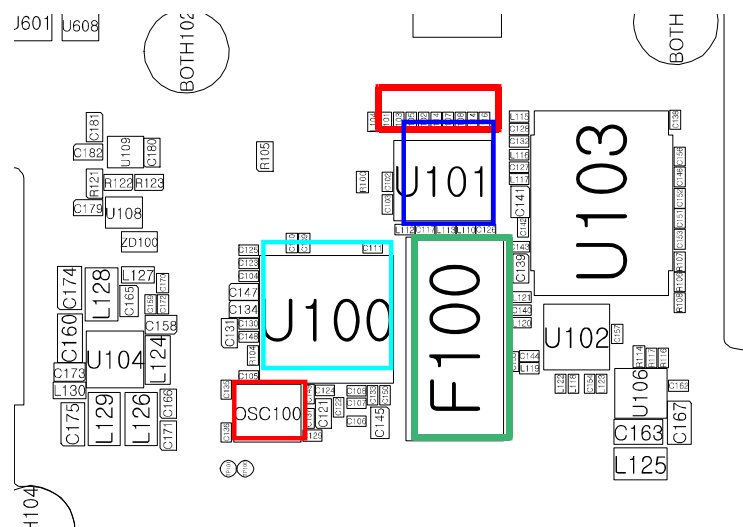
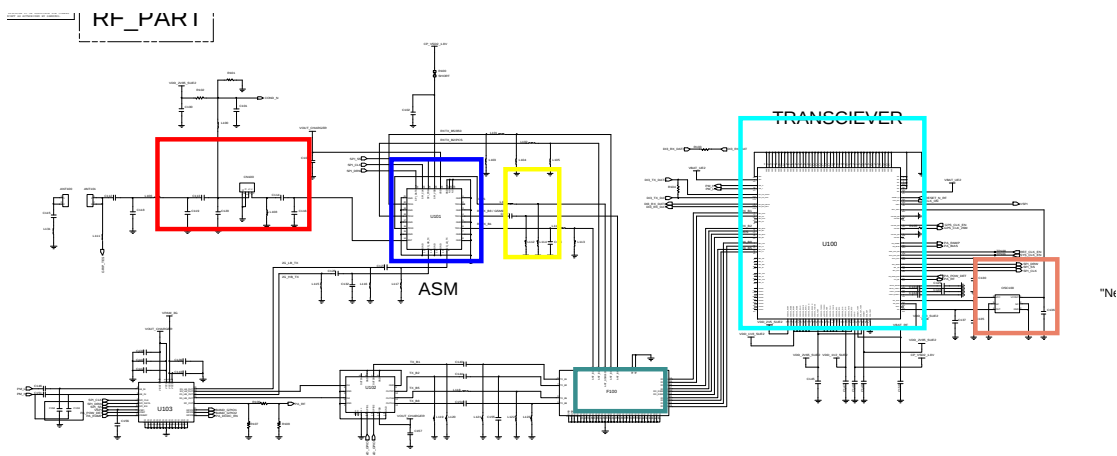
8-3-15. VGA CAM





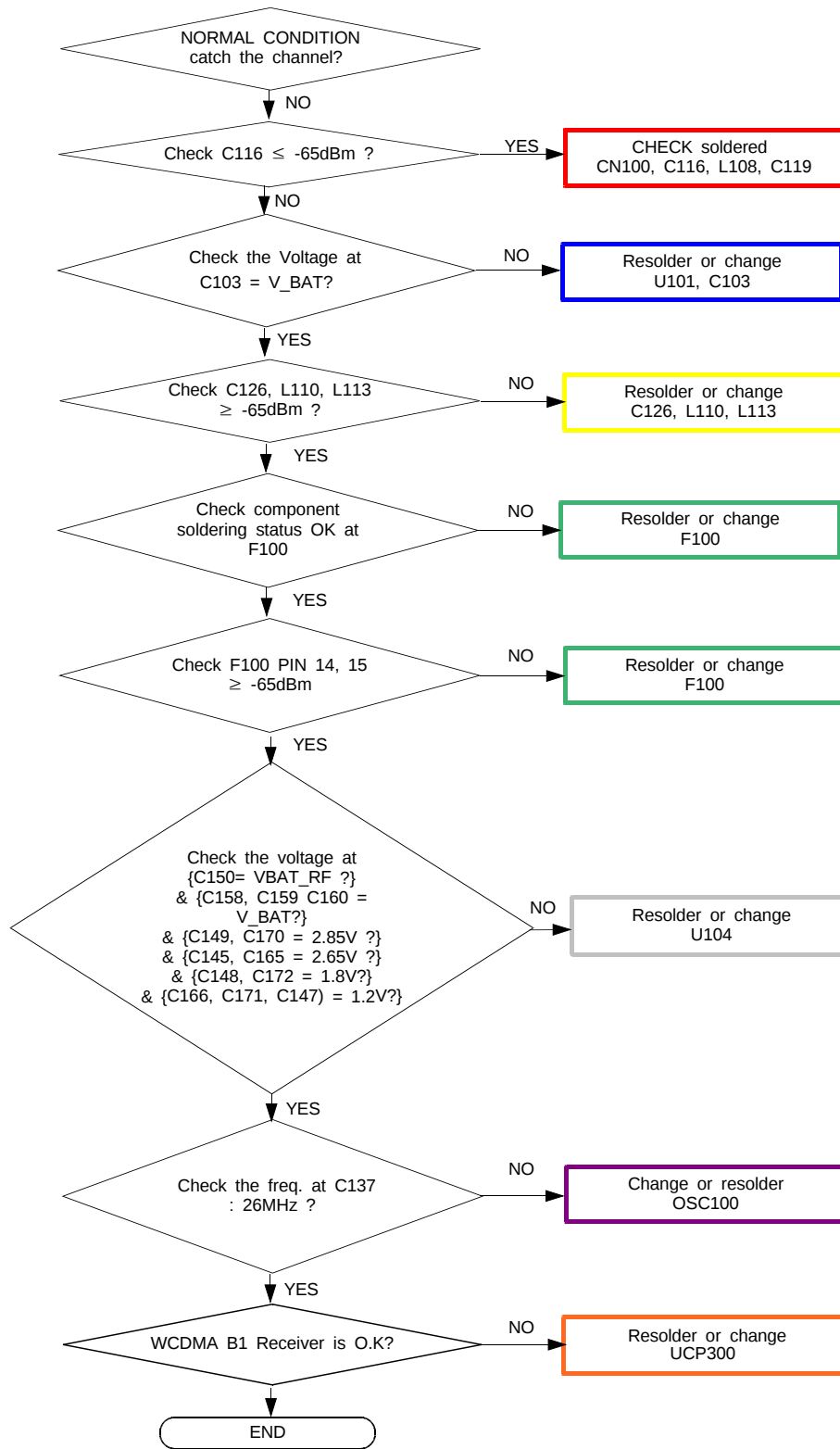
8-3-16. GSM1800 RX





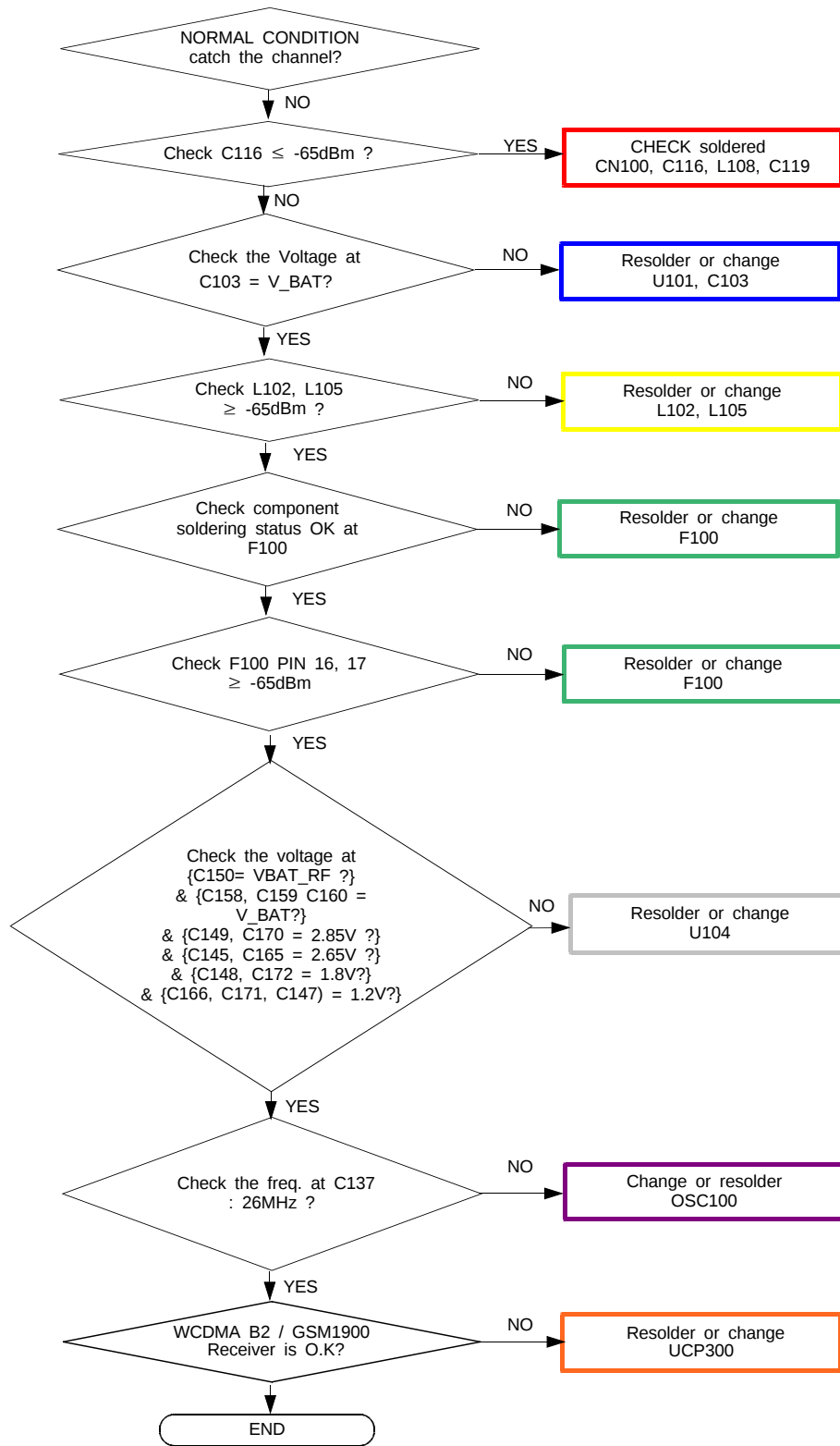
8-3-17. WCDMA Band1 RX

CONTINUOUS RX ON
RF INPUT : 10700CH
AMP : -50dBm



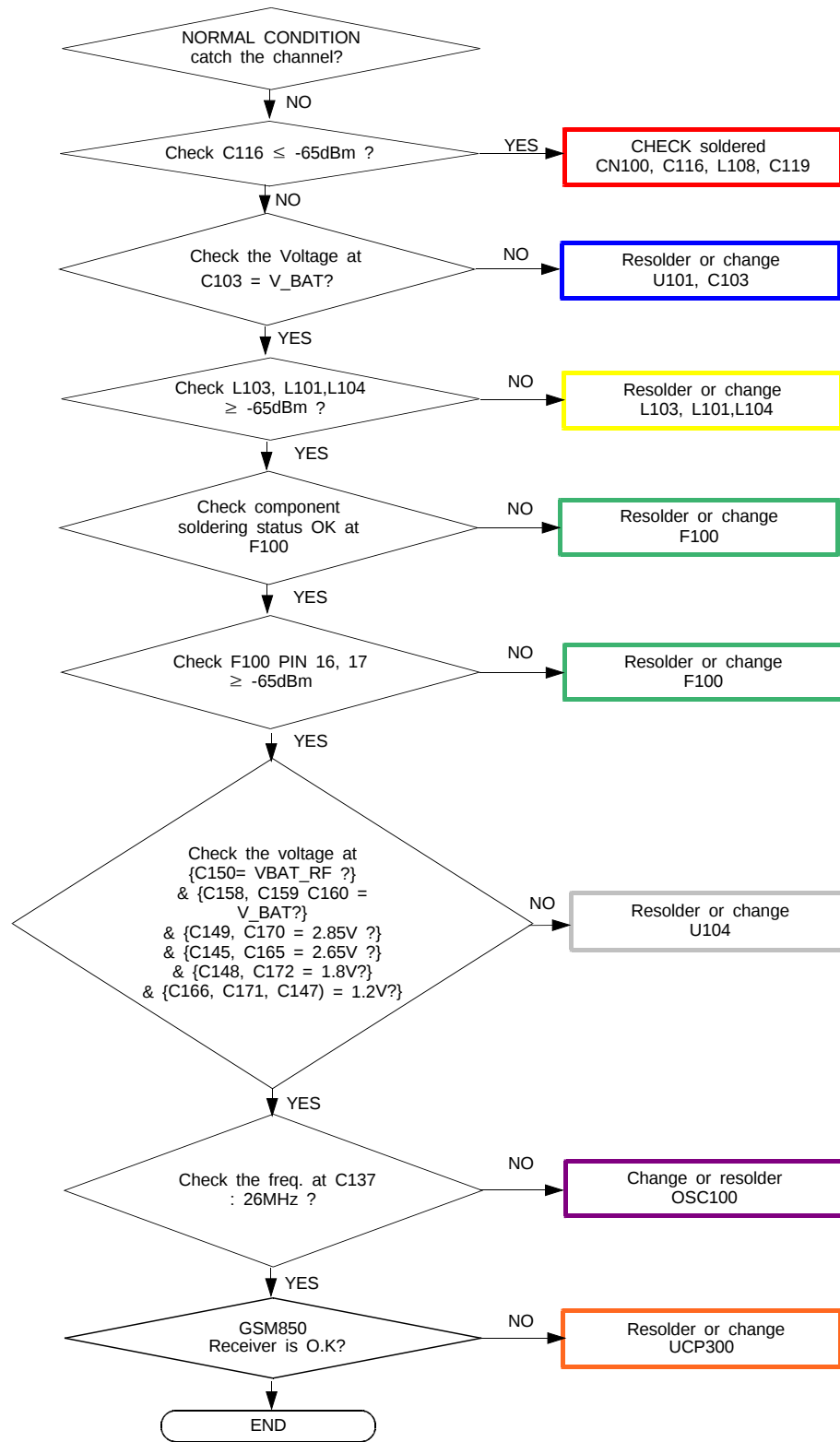
8-3-18. WCDMA Band2 / GSM1900 RX

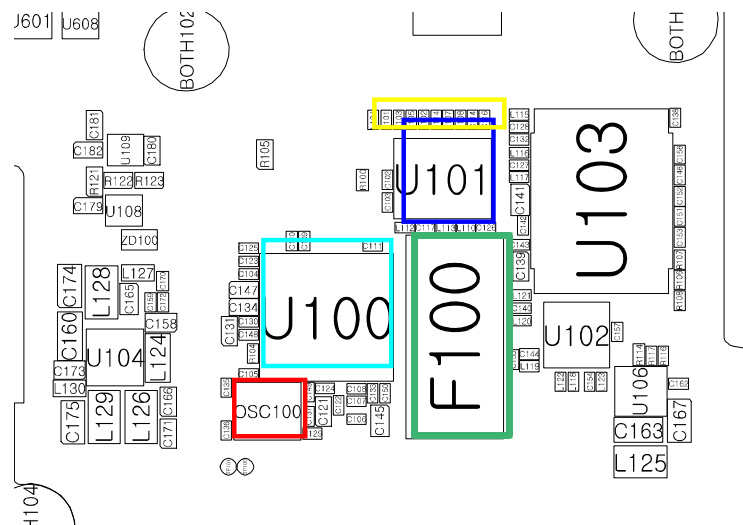
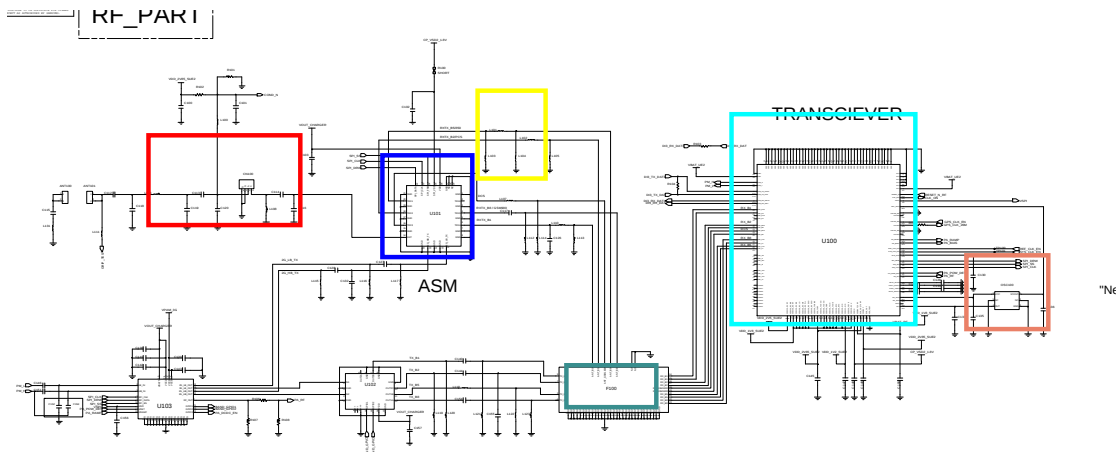
CONTINUOUS RX ON
RF INPUT : 9880CH
AMP : -50dBm



8-3-19. GSM 850 RX/WCDMA850

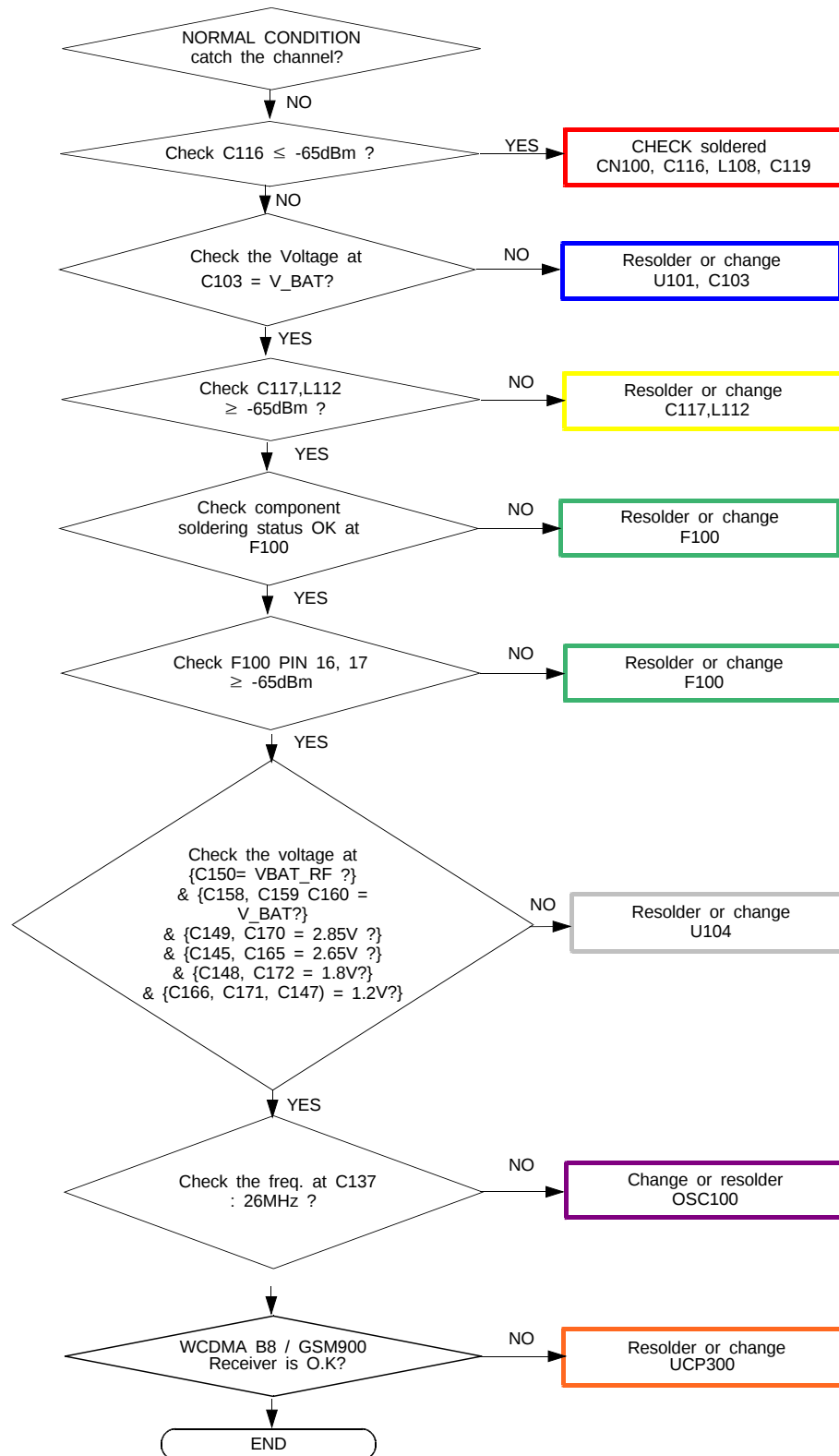
CONTINUOUS RX ON
RF INPUT : 4408CH
AMP : -50dBm

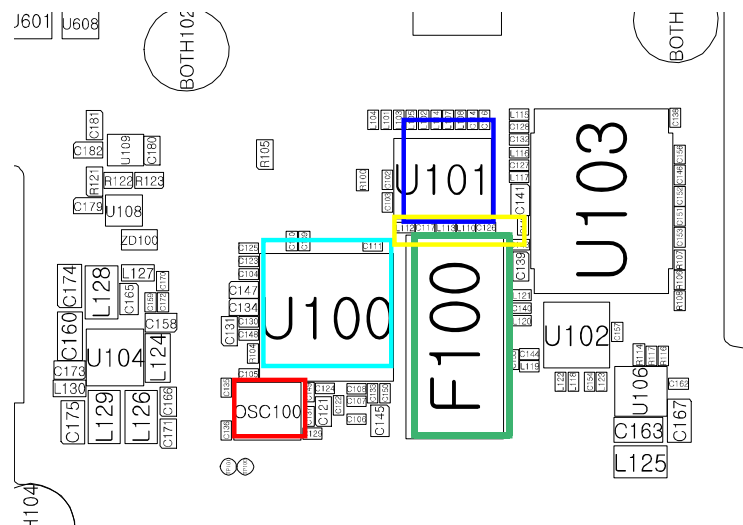
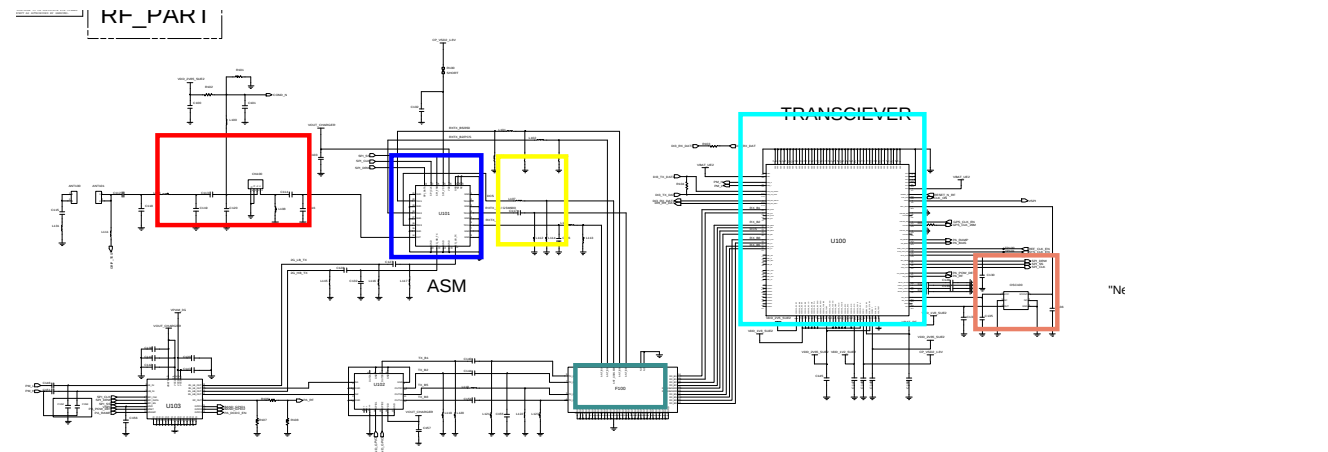




8-3-20. WCDMA Band8 / GSM900 RX

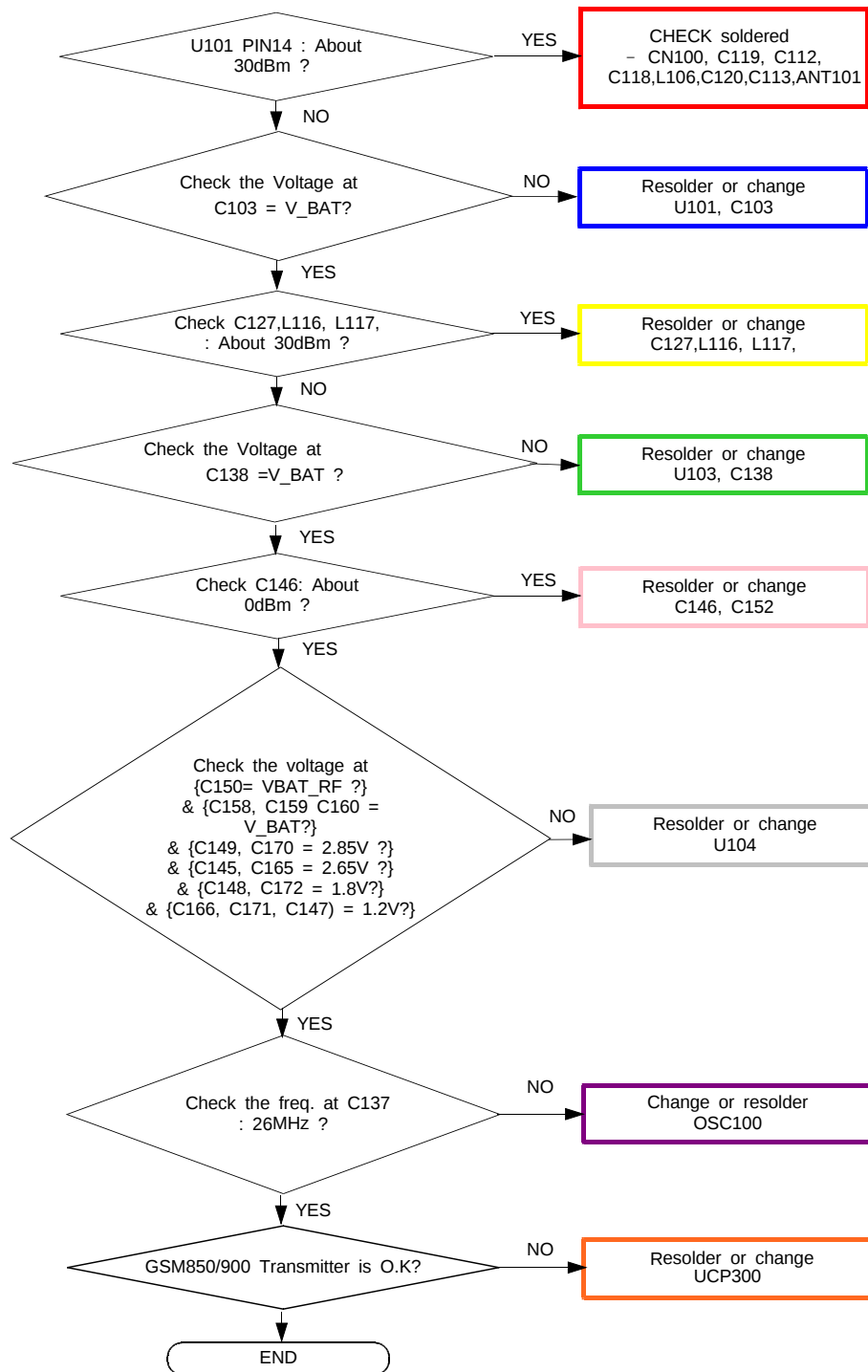
CONTINUOUS RX ON
RF INPUT : 3013CH
AMP : -50dBm

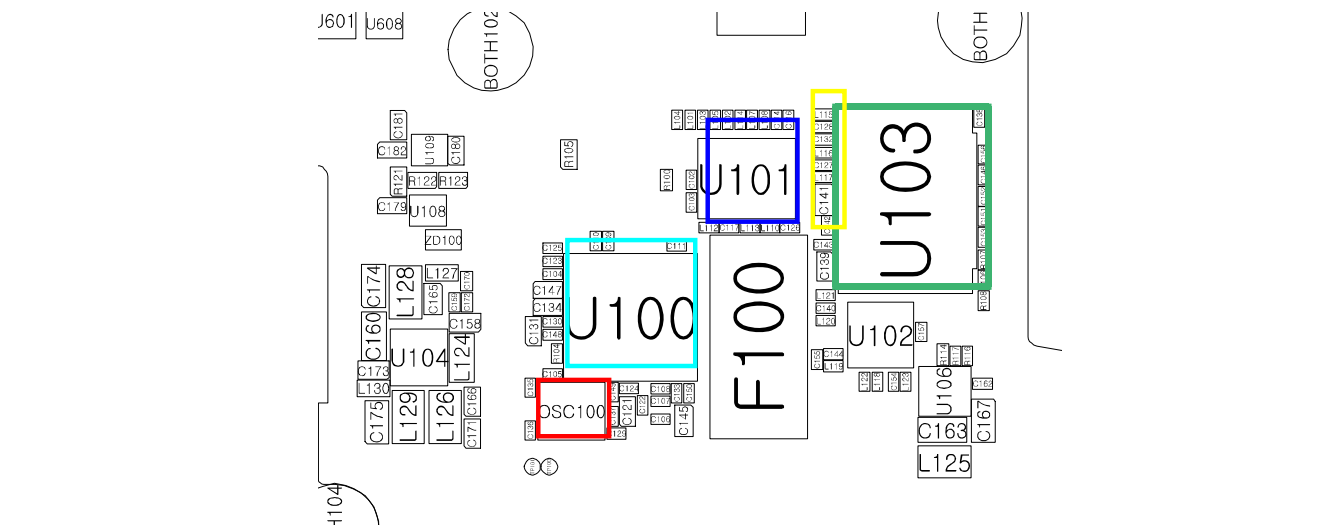
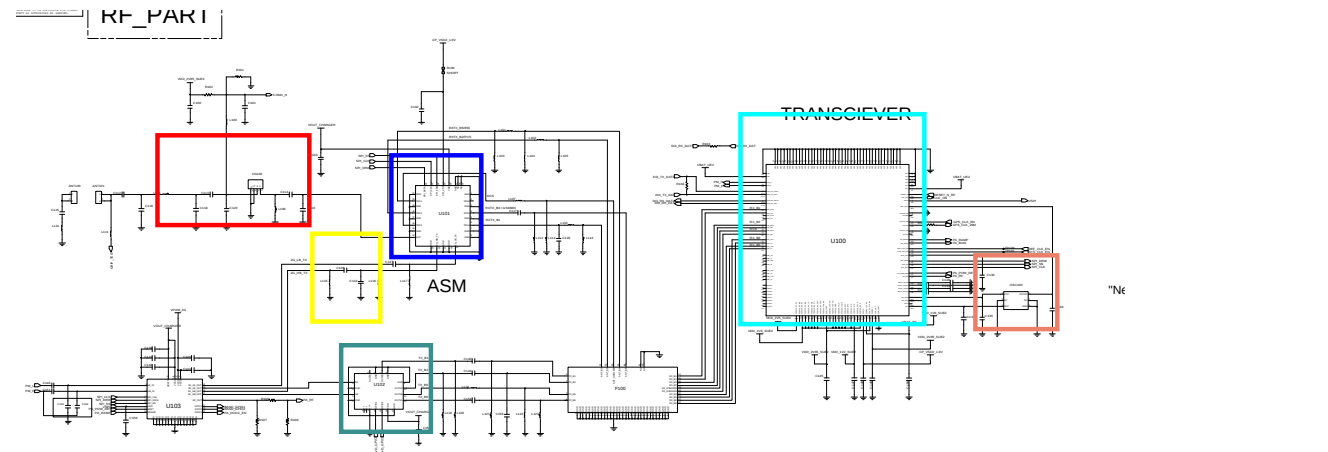




8-3-21. GSM850/GSM900 TX

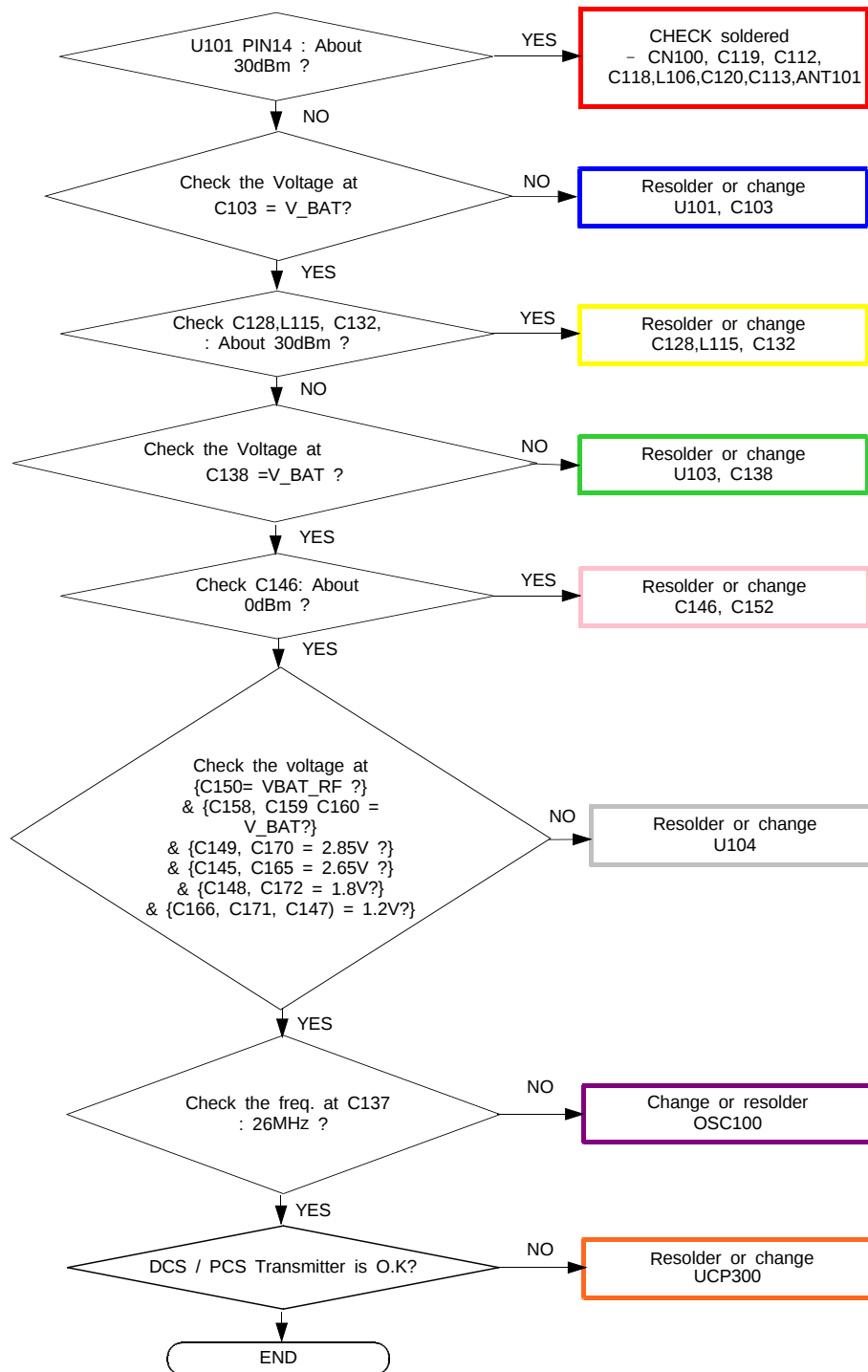
CONTINUOUS TX ON CONDITION
TX POWER DAC:14500 CODE
APPLIED
GSM850 CH : 190
GSM900 CH : 62
RBW : 100KHz
VBW : 100KHz
SPAN : 10MHz
REF LEV. : 10dBm
ATT. : 20dB

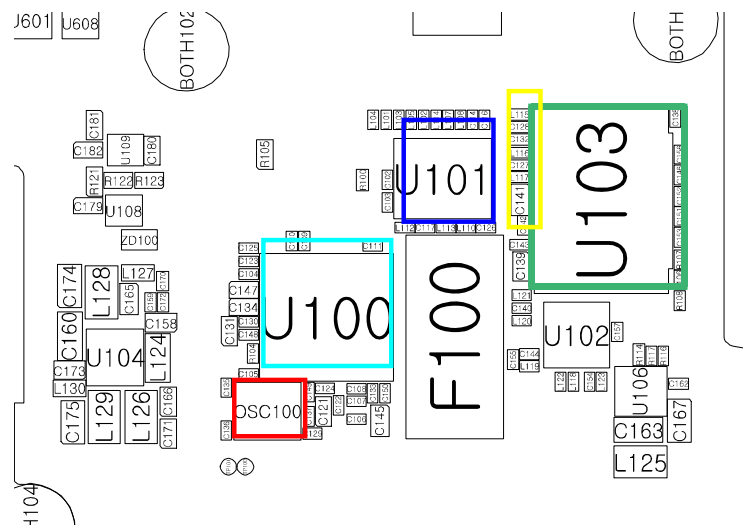
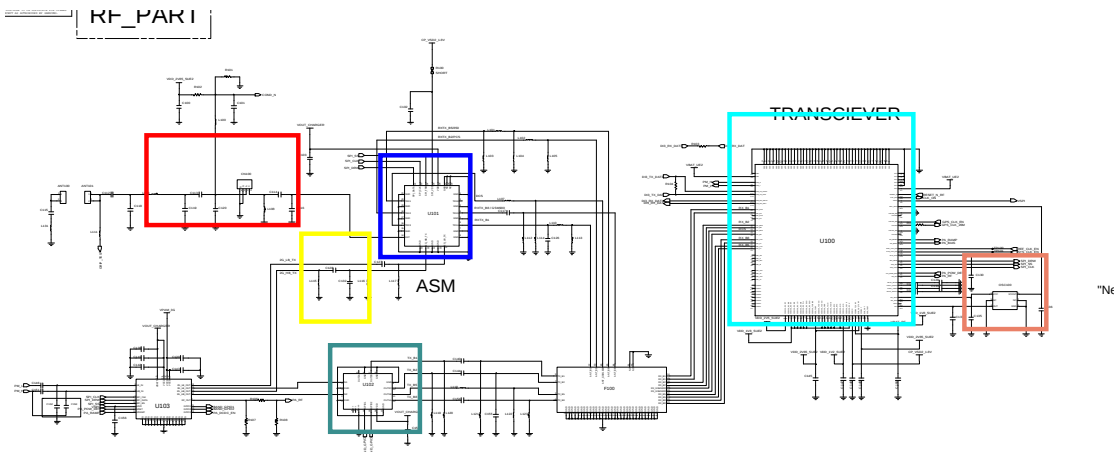




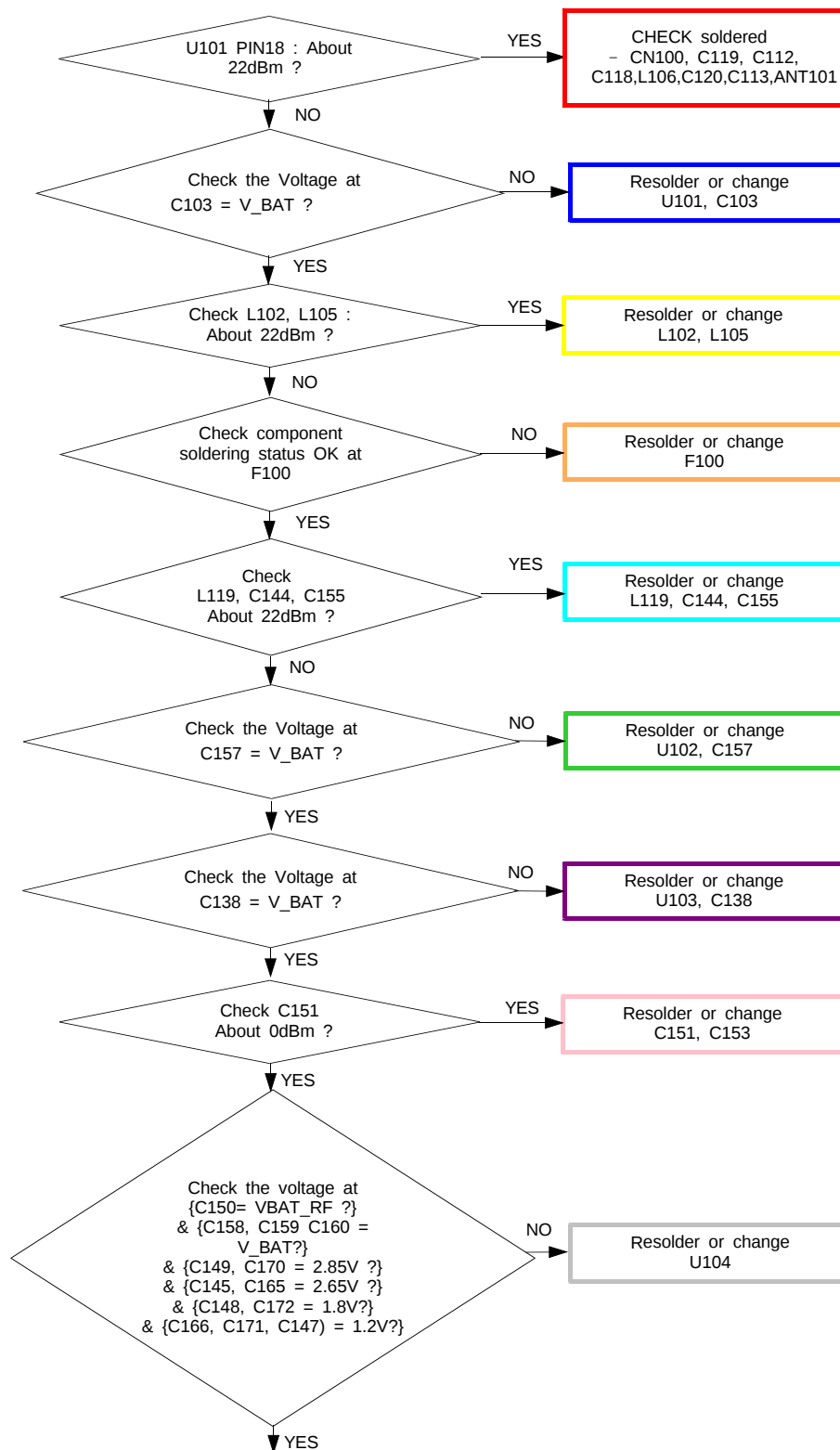
8-3-22. DCS/PCS TX

CONTINUOUS TX ON CONDITION
TX POWER DAC:14500 CODE
APPLIED
GSM850 CH : 190
GSM900 CH : 62
RBW : 100KHz
VBW : 100KHz
SPAN : 10MHz
REF LEV. : 10dBm
ATT. : 20dB

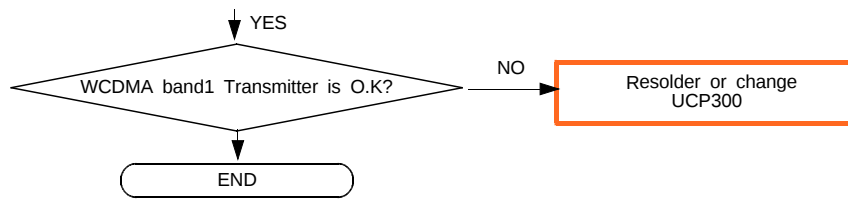


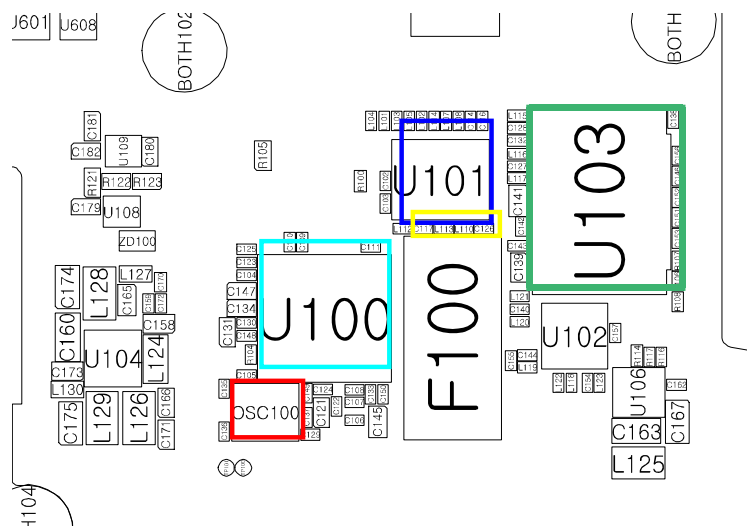
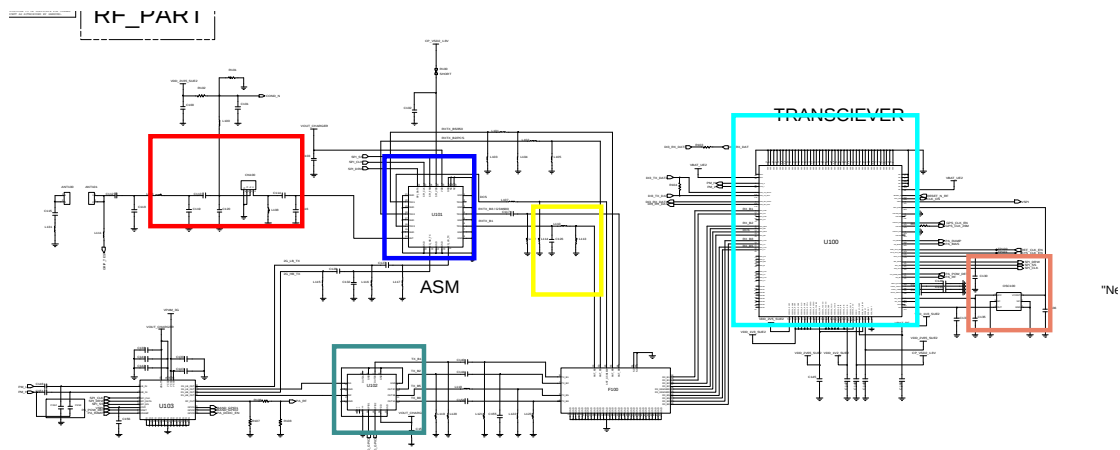


8-3-23. WCDMA BAND1 TX

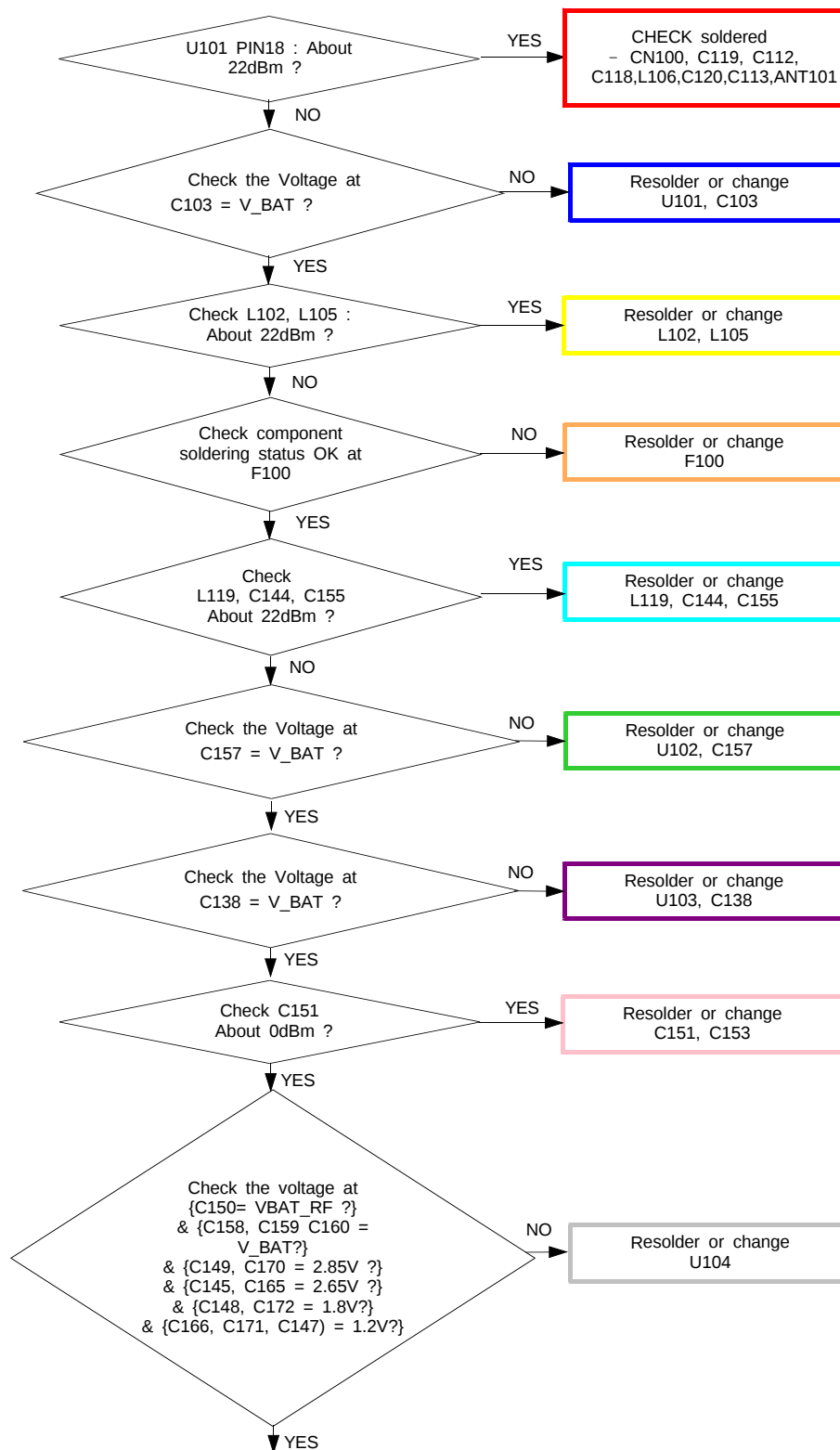


CONTINUOUS TX ON CONDITION
TX POWER DAC:14500 CODE
APPLIED
WCDMA Band1 CH : 10700
RBW : 100KHz
VBW : 100KHz
SPAN : 10MHz
REF LEV. : 10dBm
ATT. : 20dB

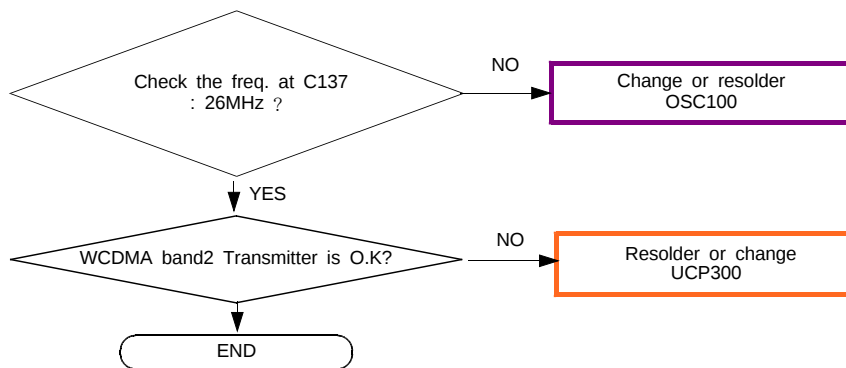


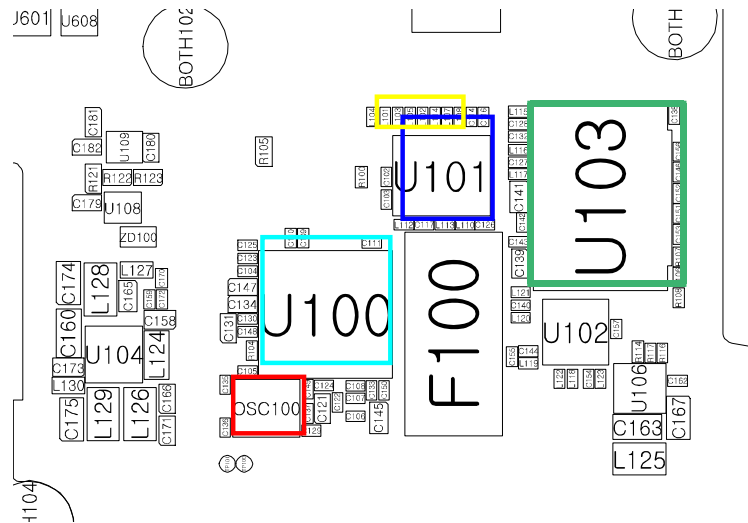
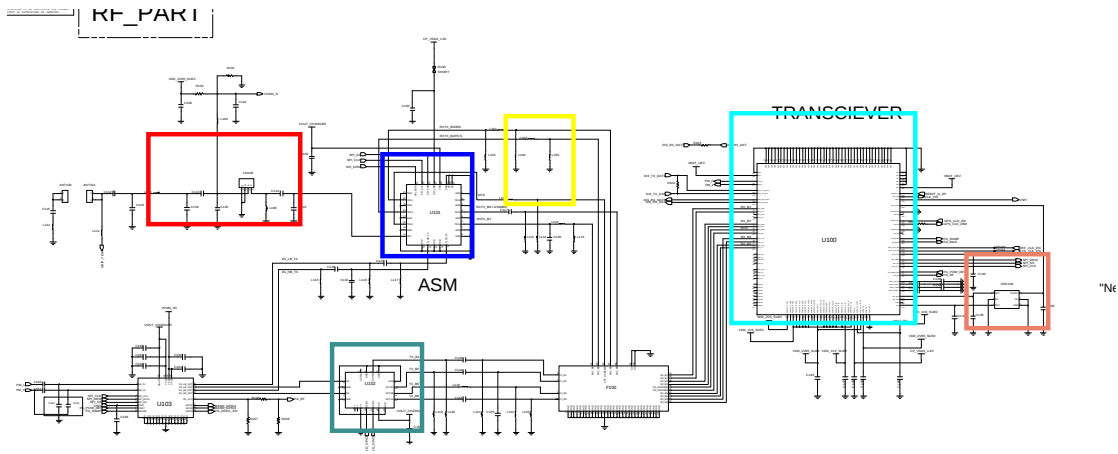


8-3-24. WCDMA BAND2 TX

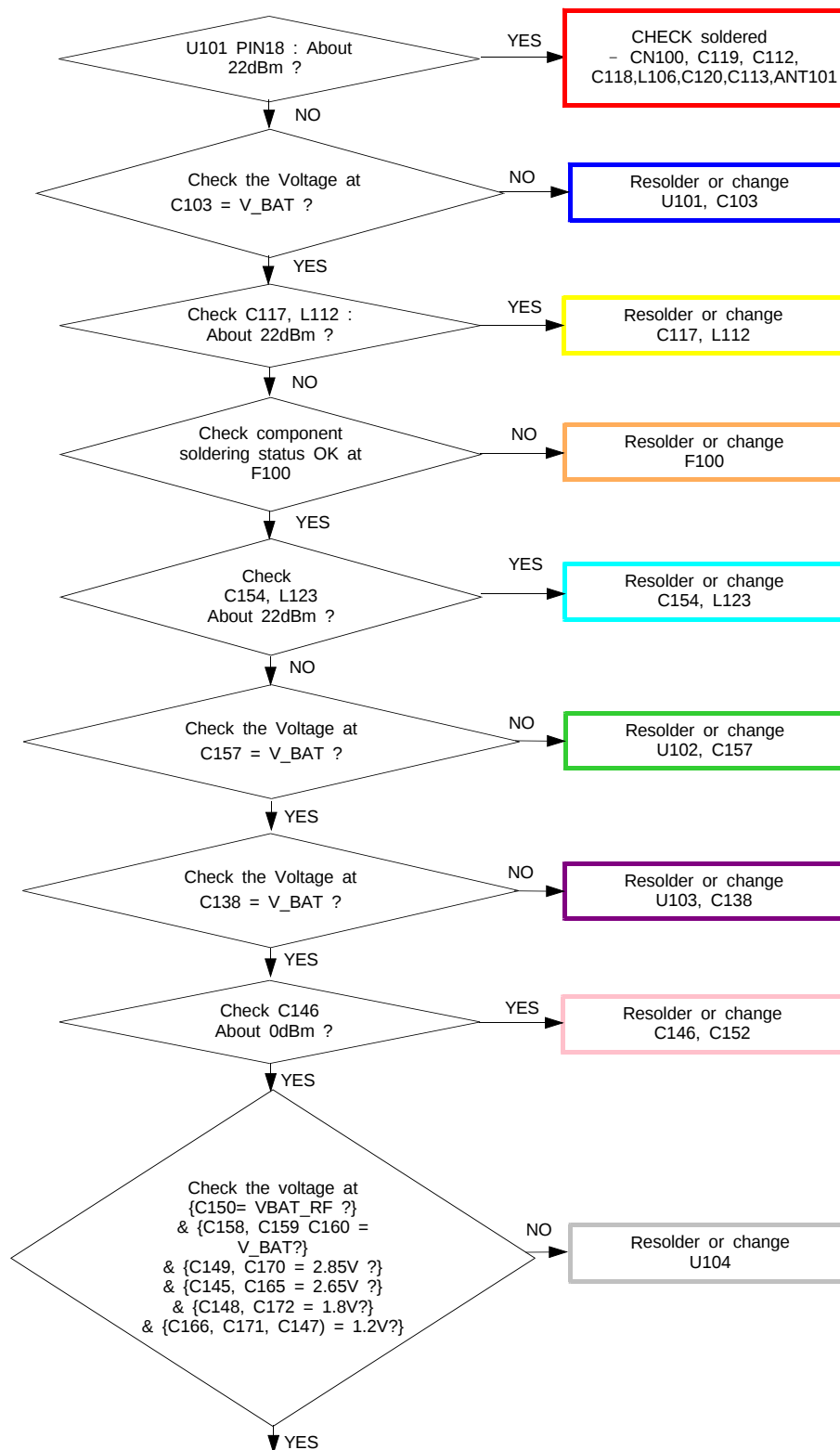


CONTINUOUS TX ON CONDITION
TX POWER DAC:14500 CODE
APPLIED
WCDMA Band2 CH : 9880
RBW : 100KHz
VBW : 100KHz
SPAN : 10MHz
REF LEV : 10dBm
ATT : 20dB

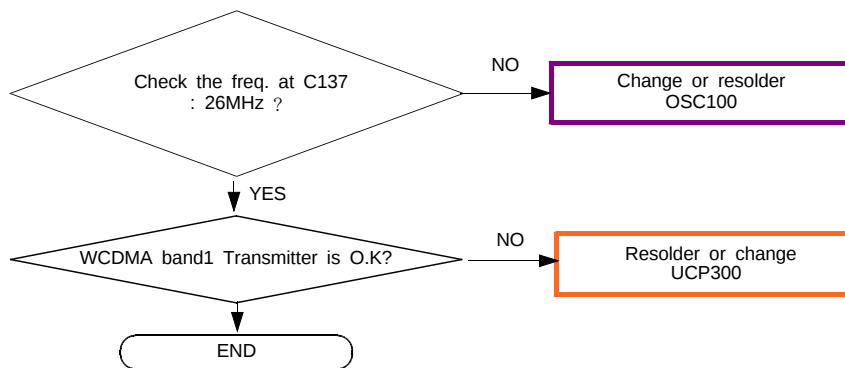


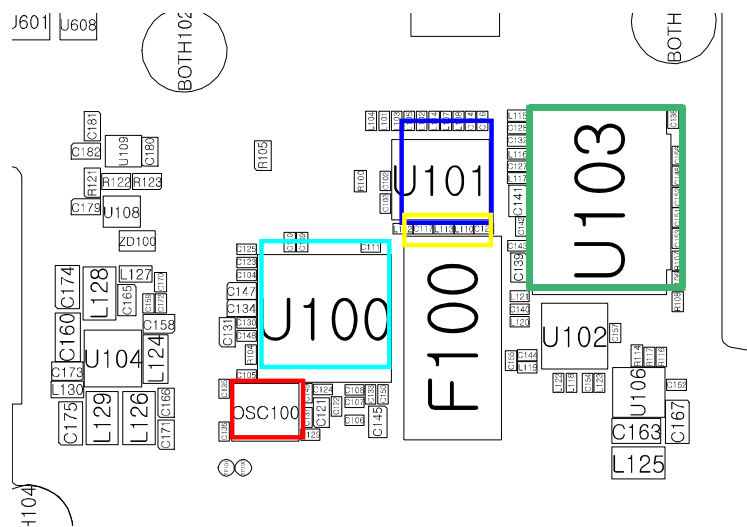
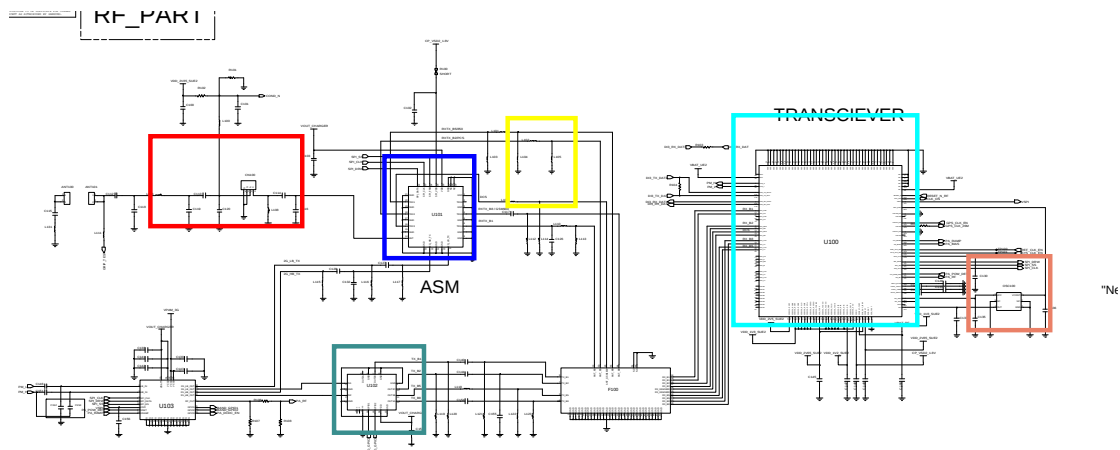


8-3-25. WCDMA BAND8 TX

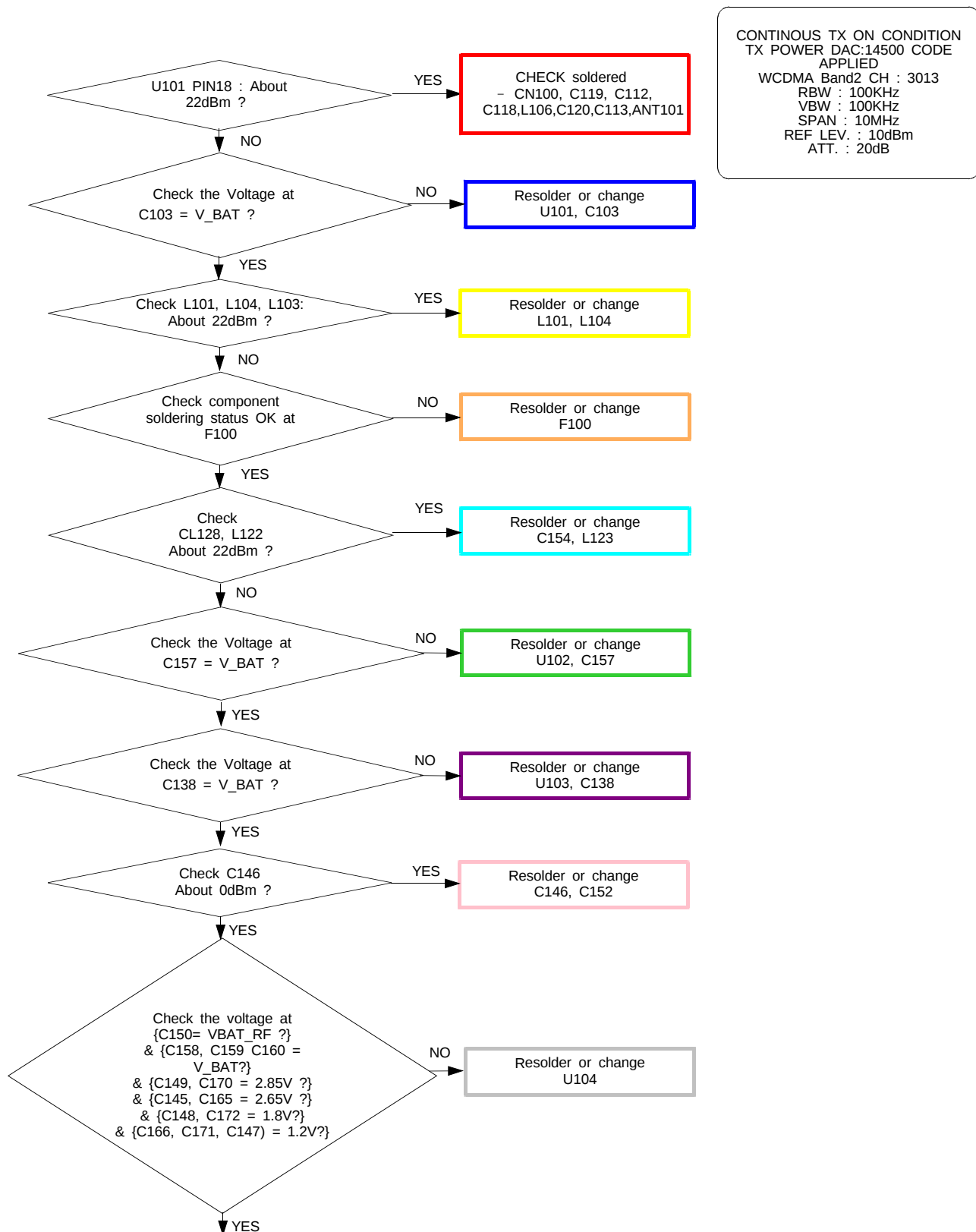


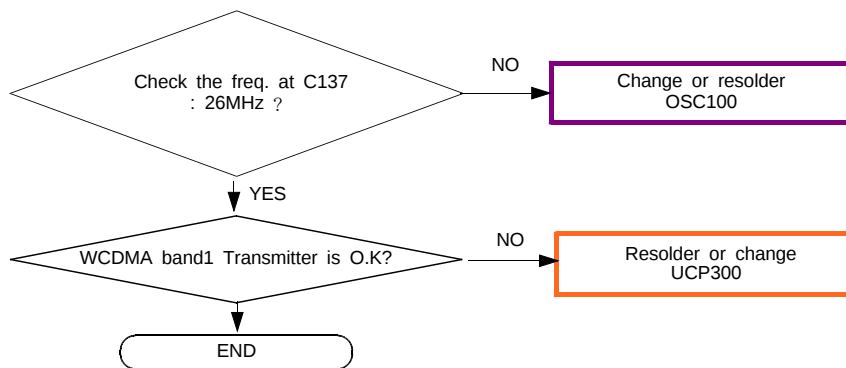
CONTINUOUS TX ON CONDITION
TX POWER DAC:14500 CODE
APPLIED
WCDMA Band2 CH : 3013
RBW : 100KHz
VBW : 100KHz
SPAN : 10MHz
REF LEV. : 10dBm
ATT. : 20dB

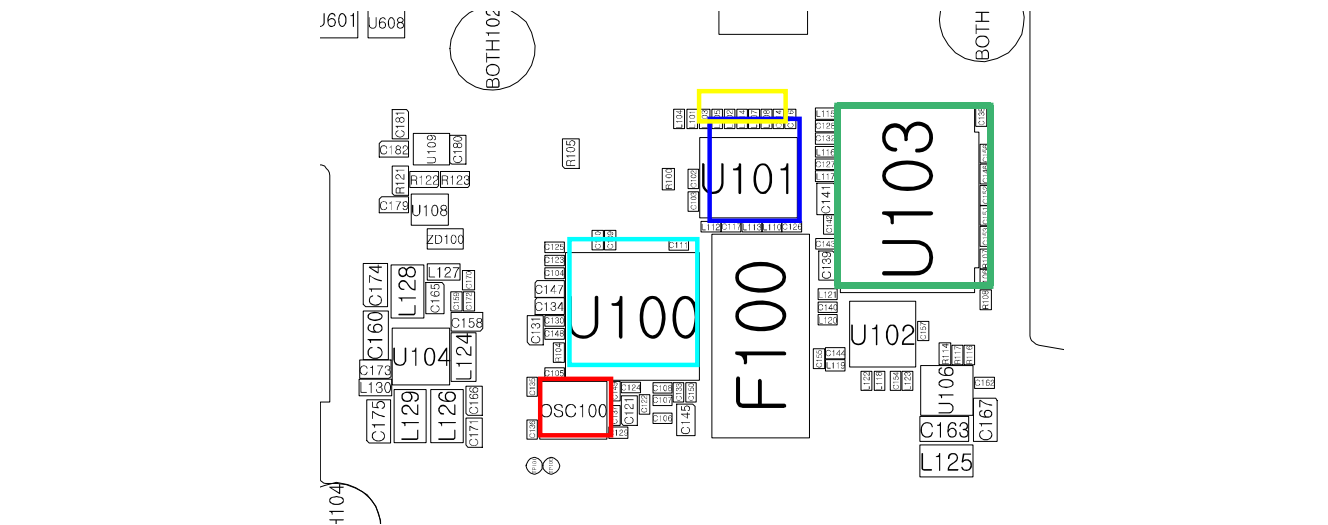
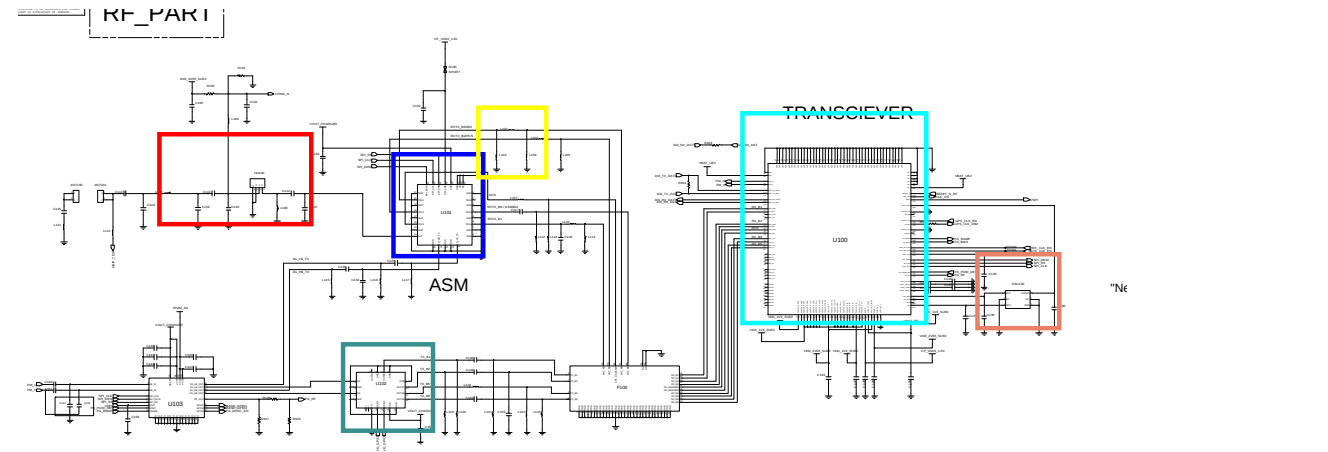




8-3-26. WCDMA BAND5 TX

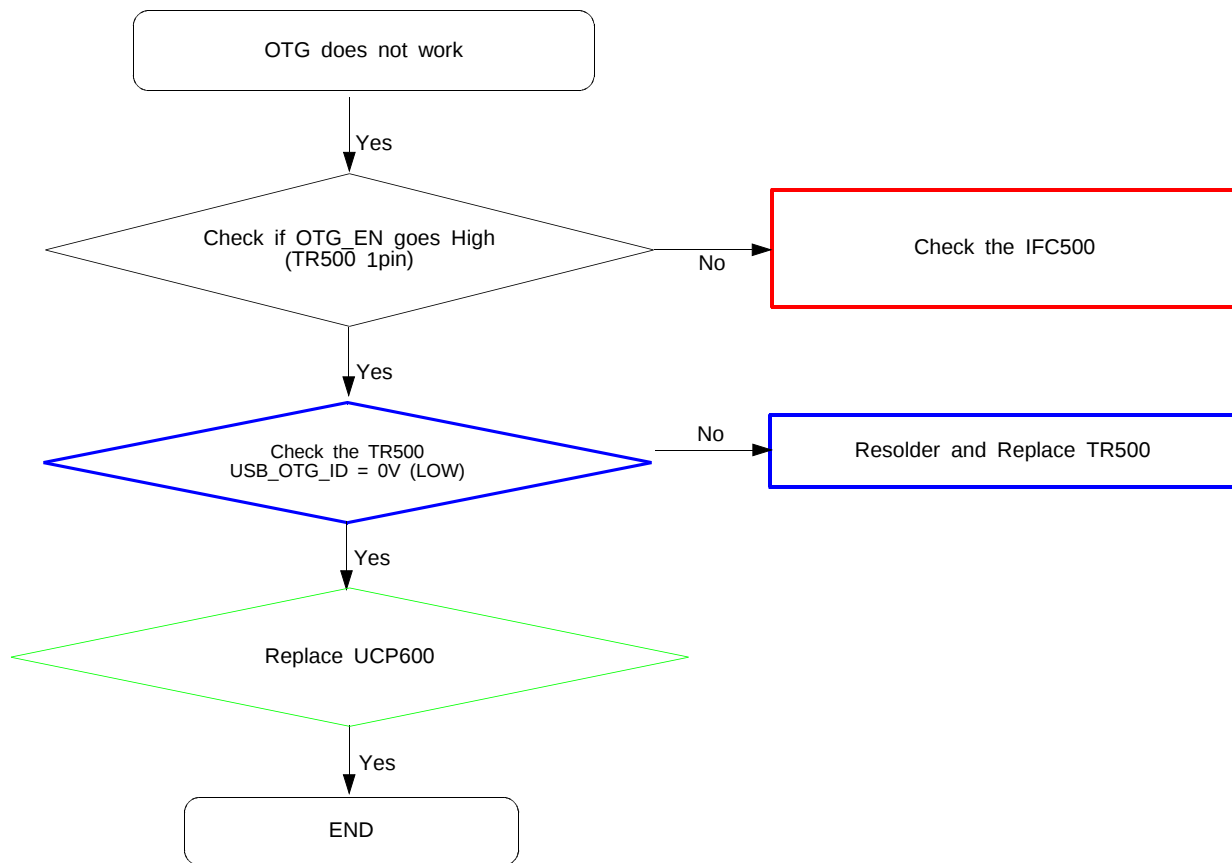


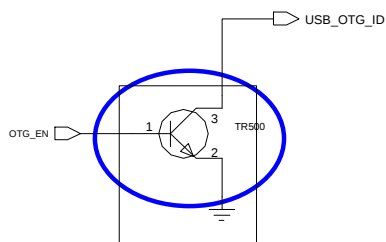
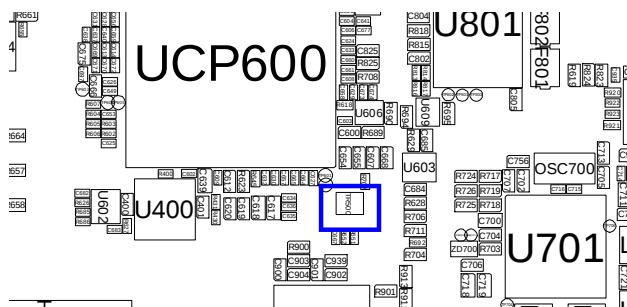
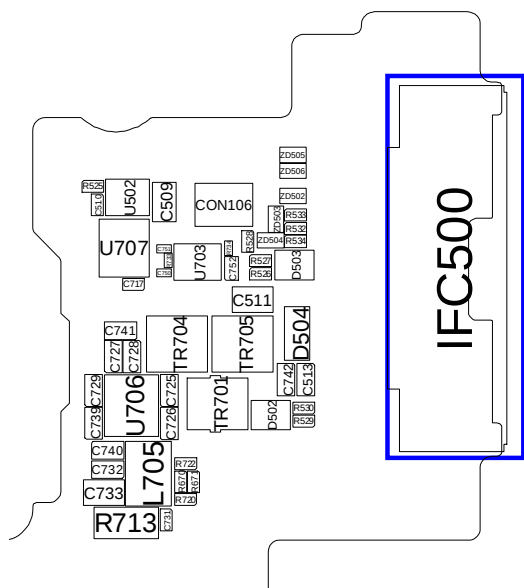






8-3-27. OTG





8-4. NC Point
-UCP600

[illegible]

-U607

