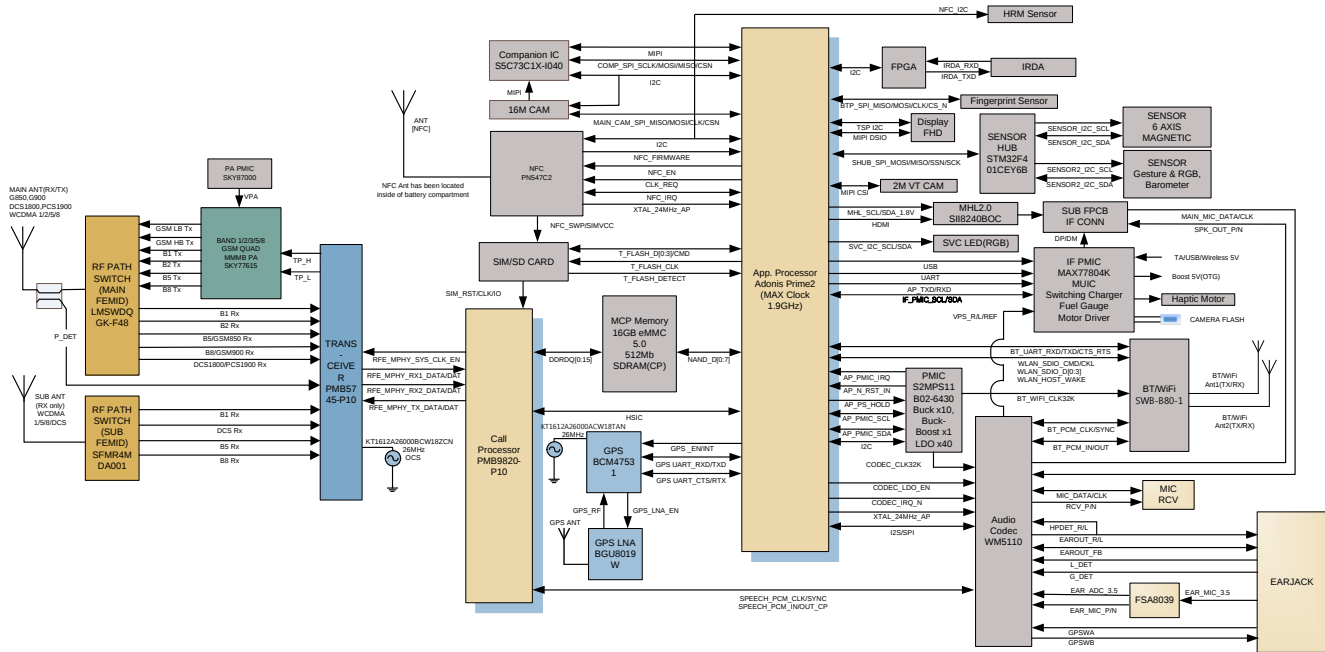


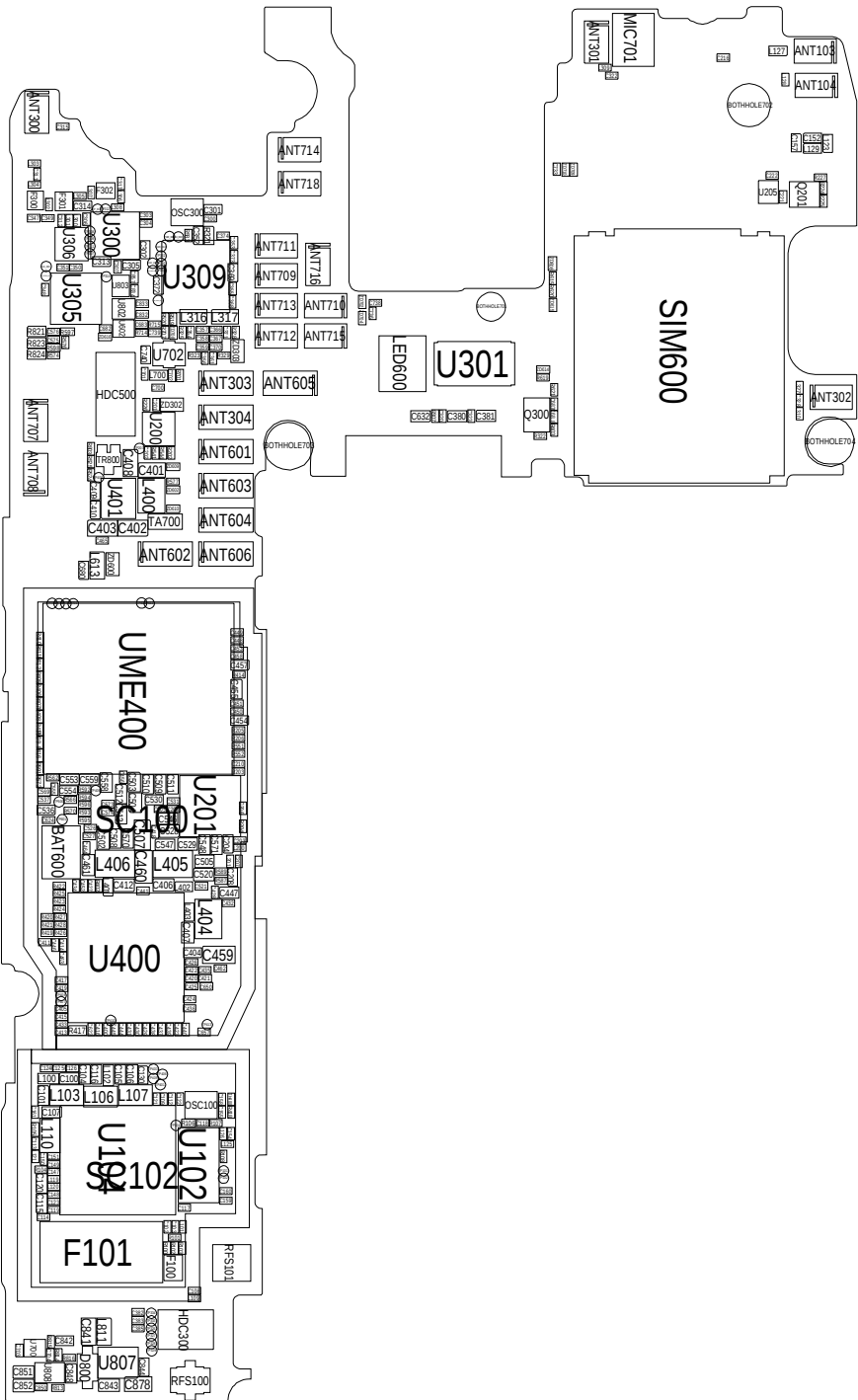
8. Level 3 Repair (VIETMOBILE.VN)

8-1. Block Diagram

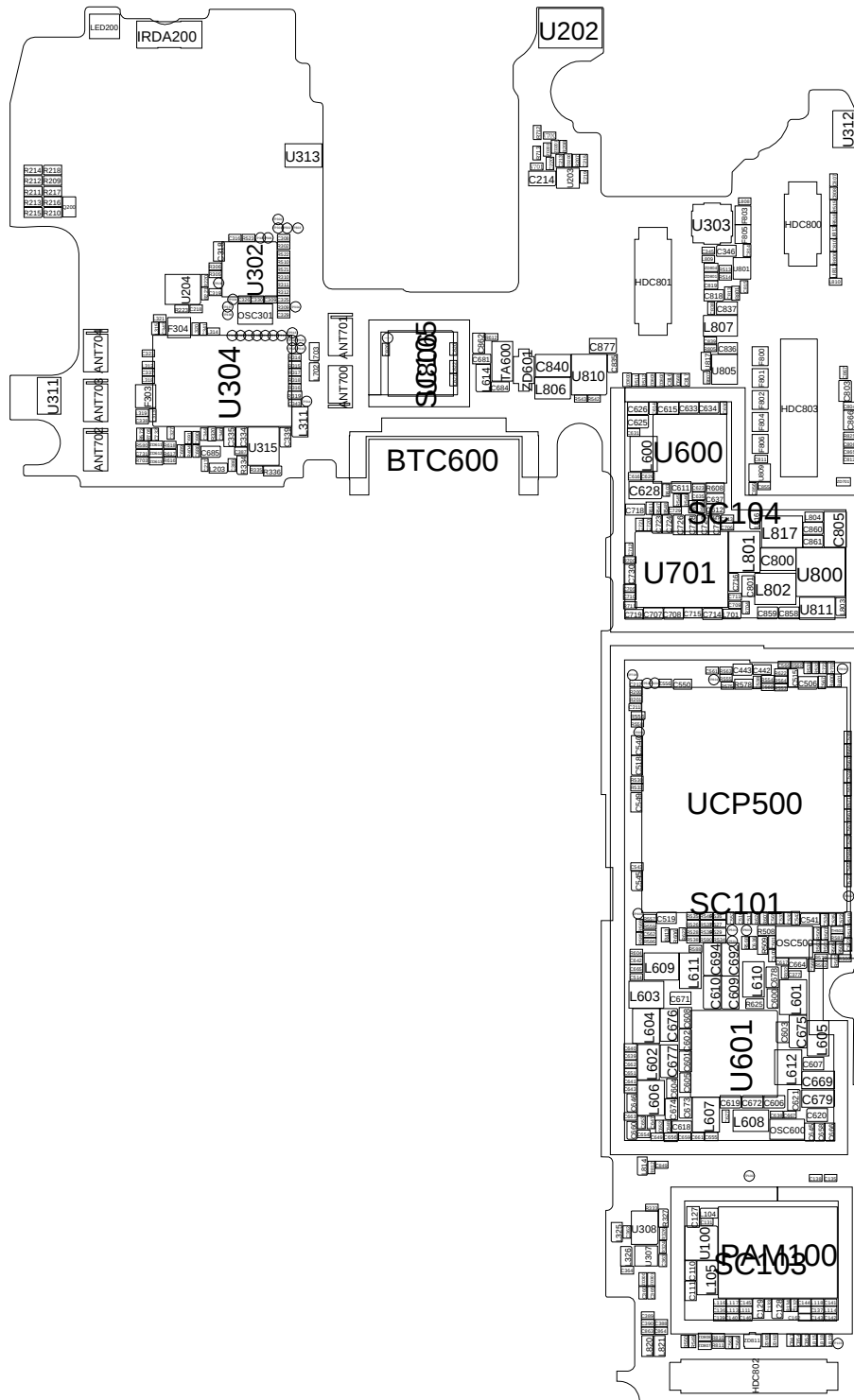


8-2. PCB Diagrams

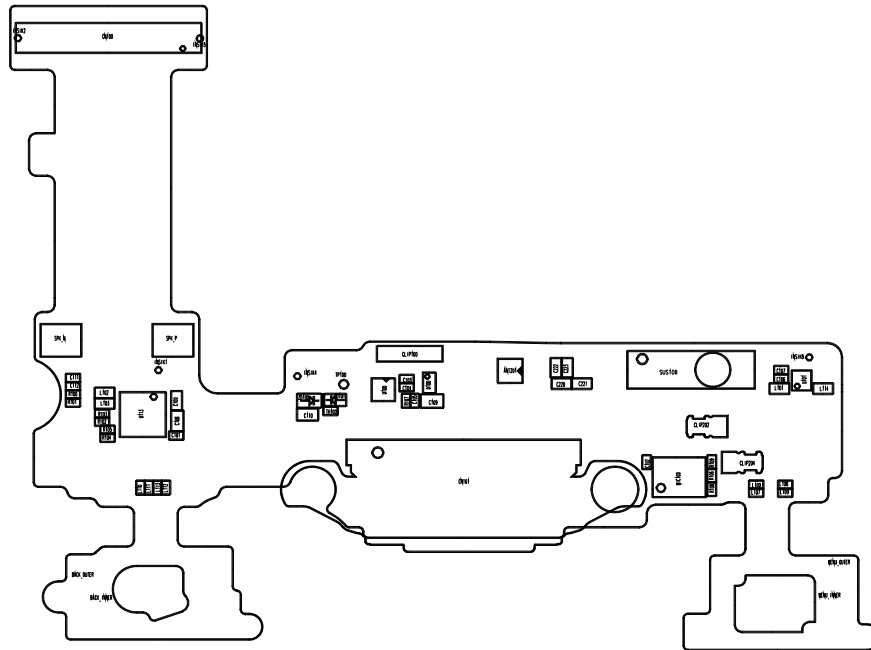
8-2-1. Main PCB Top



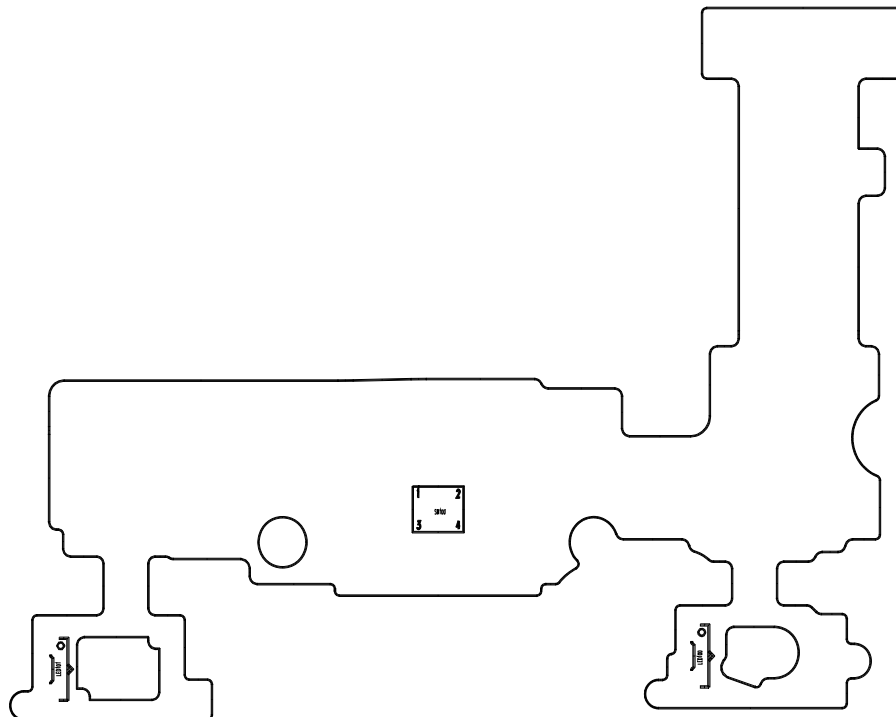
8-2-2. Bottom



8-2-3. Sub PCB Top

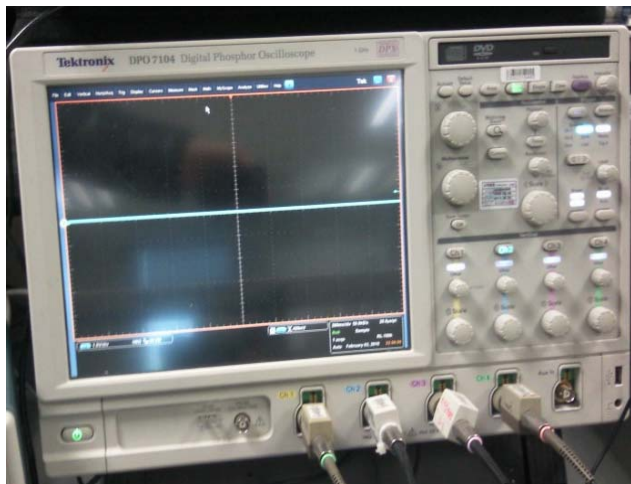


8-2-4. Sub PCB Bottom



8-3. Flow Chart of Troubleshooting

Equipments



↑ Oscilloscope



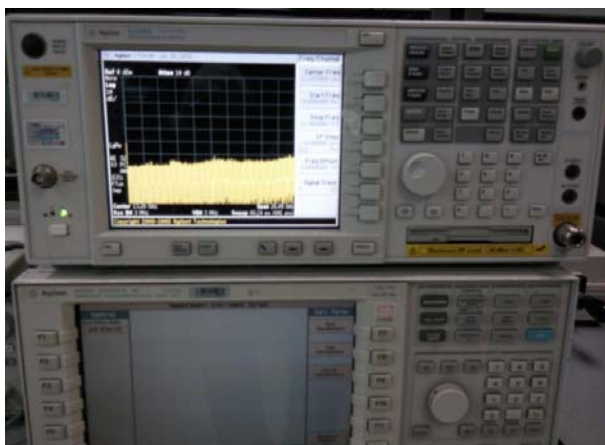
↗ Digital Multimeter



↗ Power Supply



↗ + driver, ESD Safe Tweezer

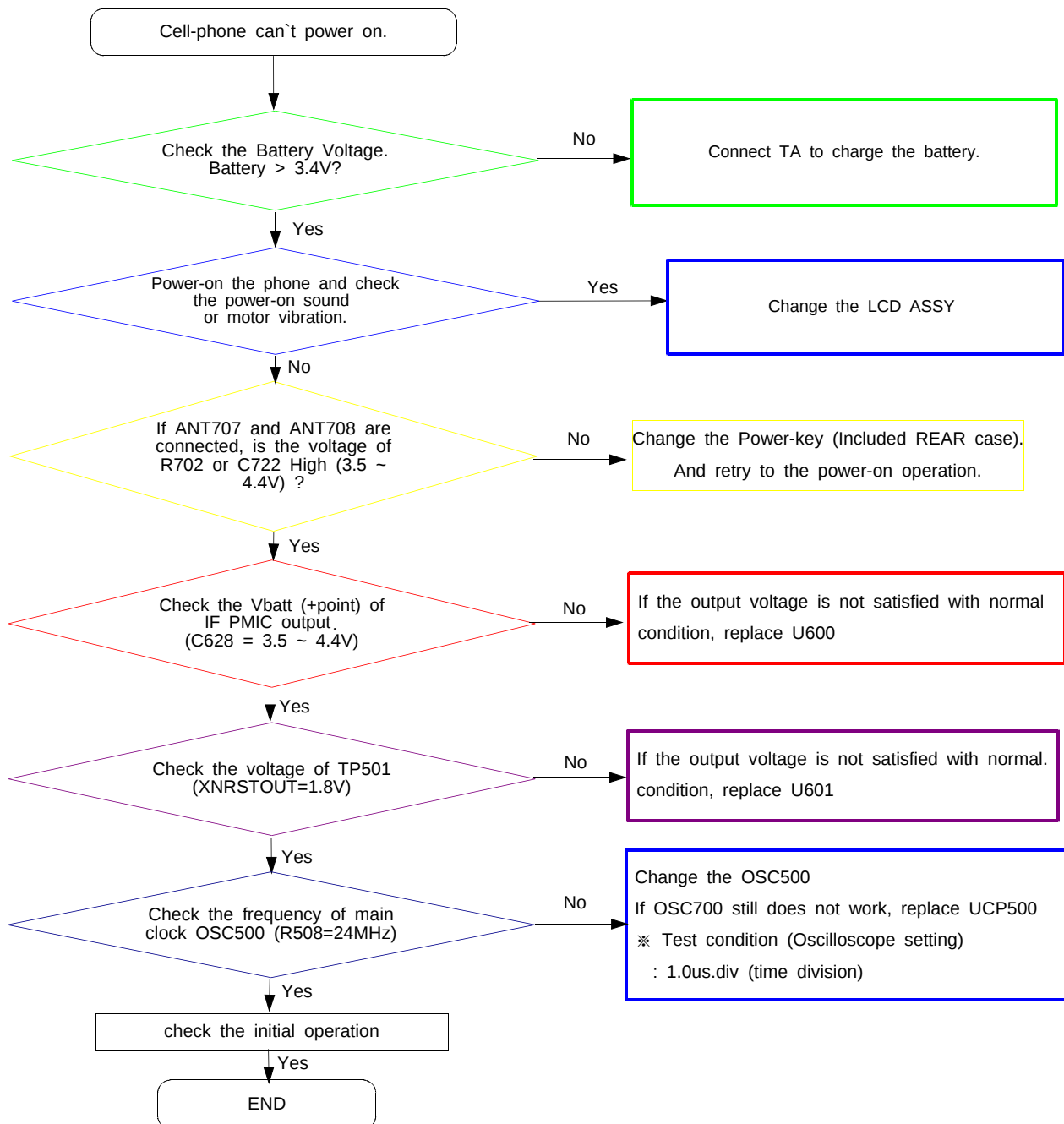


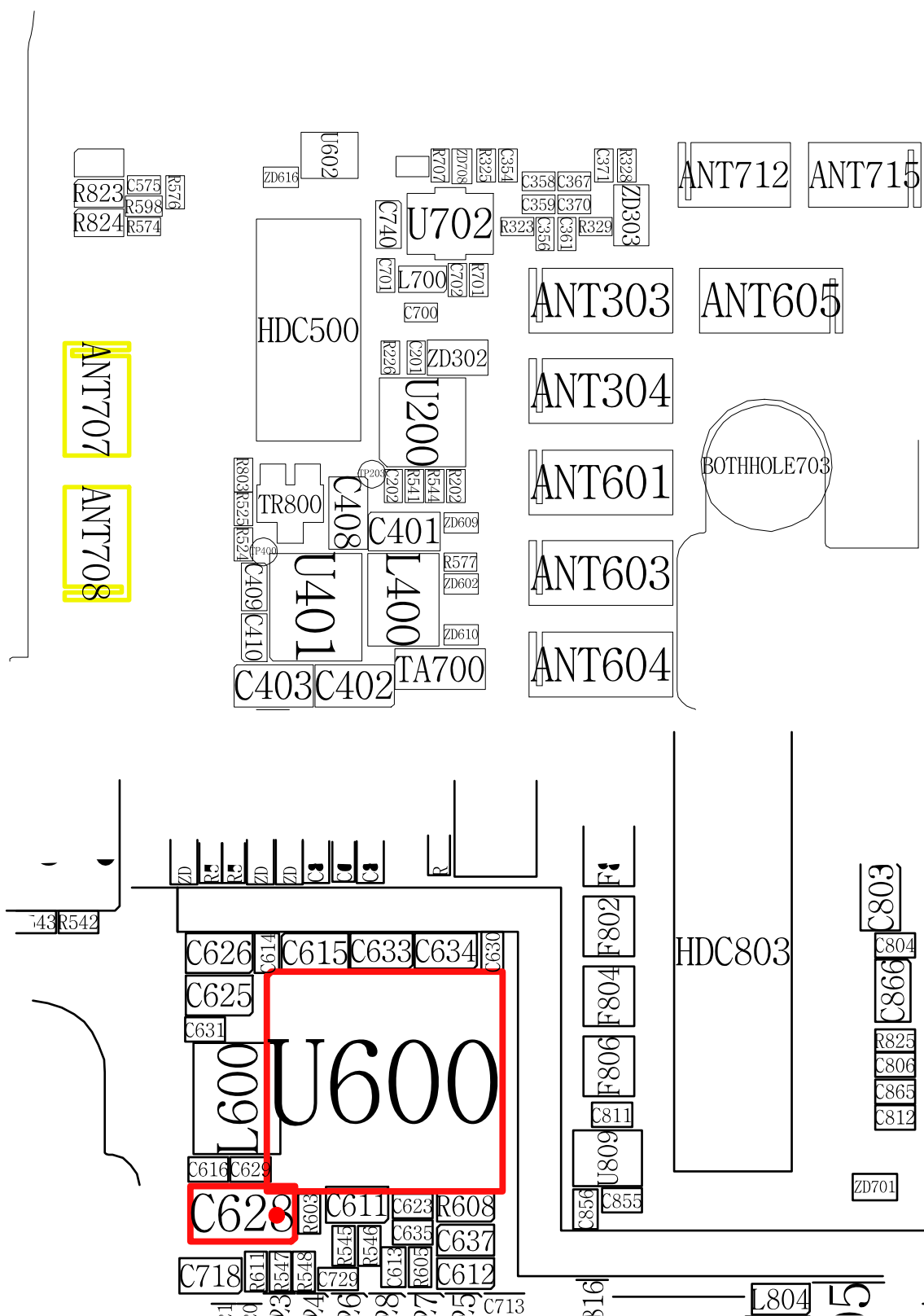
↑ 8960 & Spectrum Analyzer

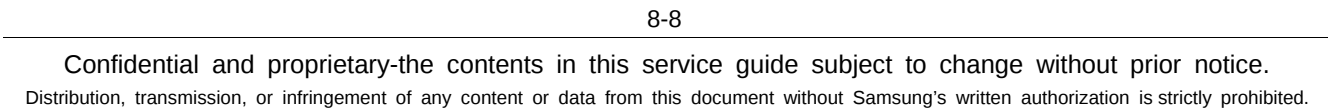


↗ Soldering iron

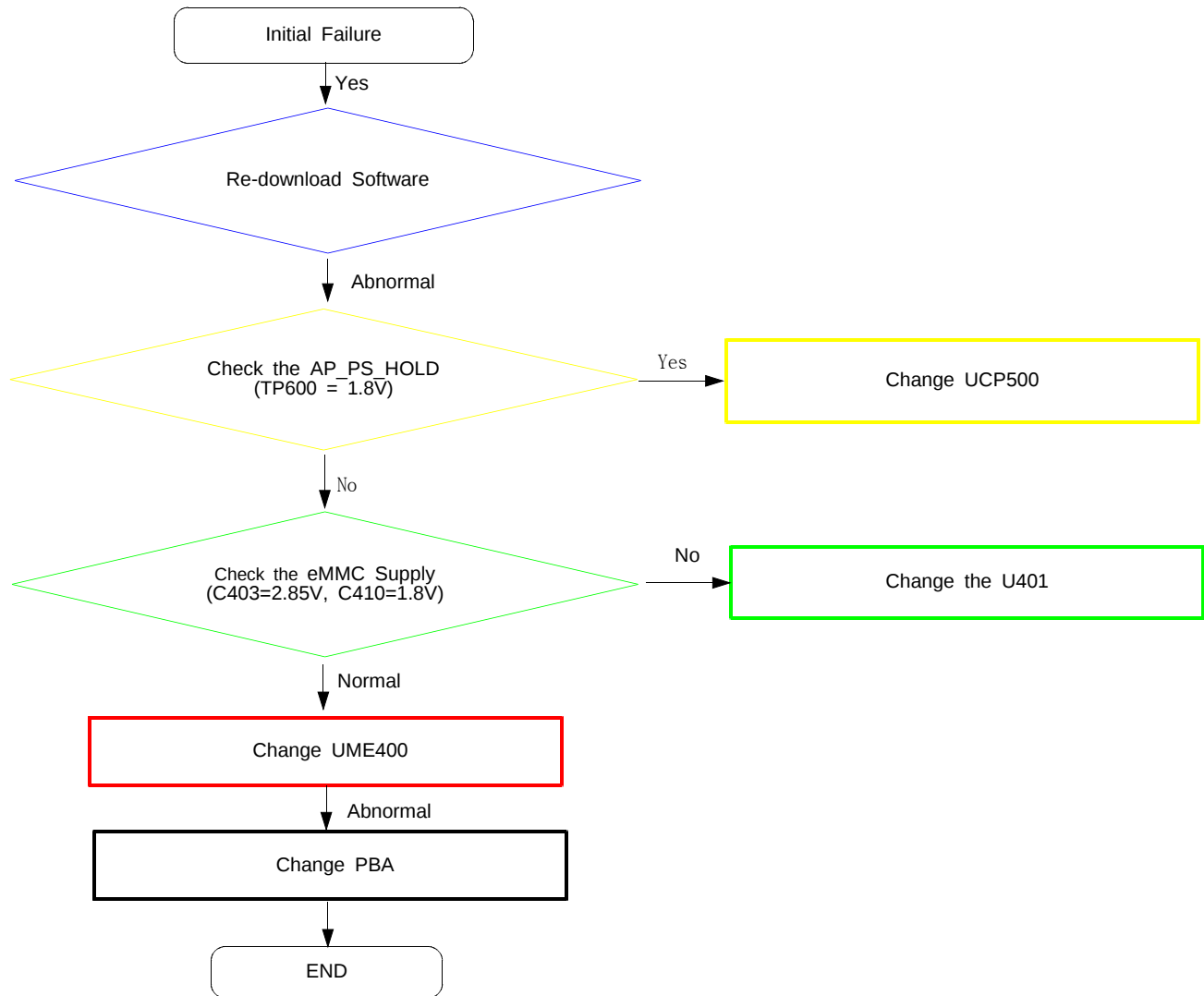
8-3-1. Power On

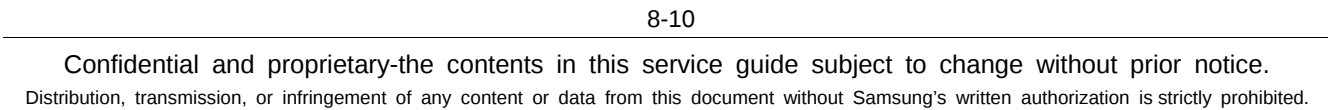




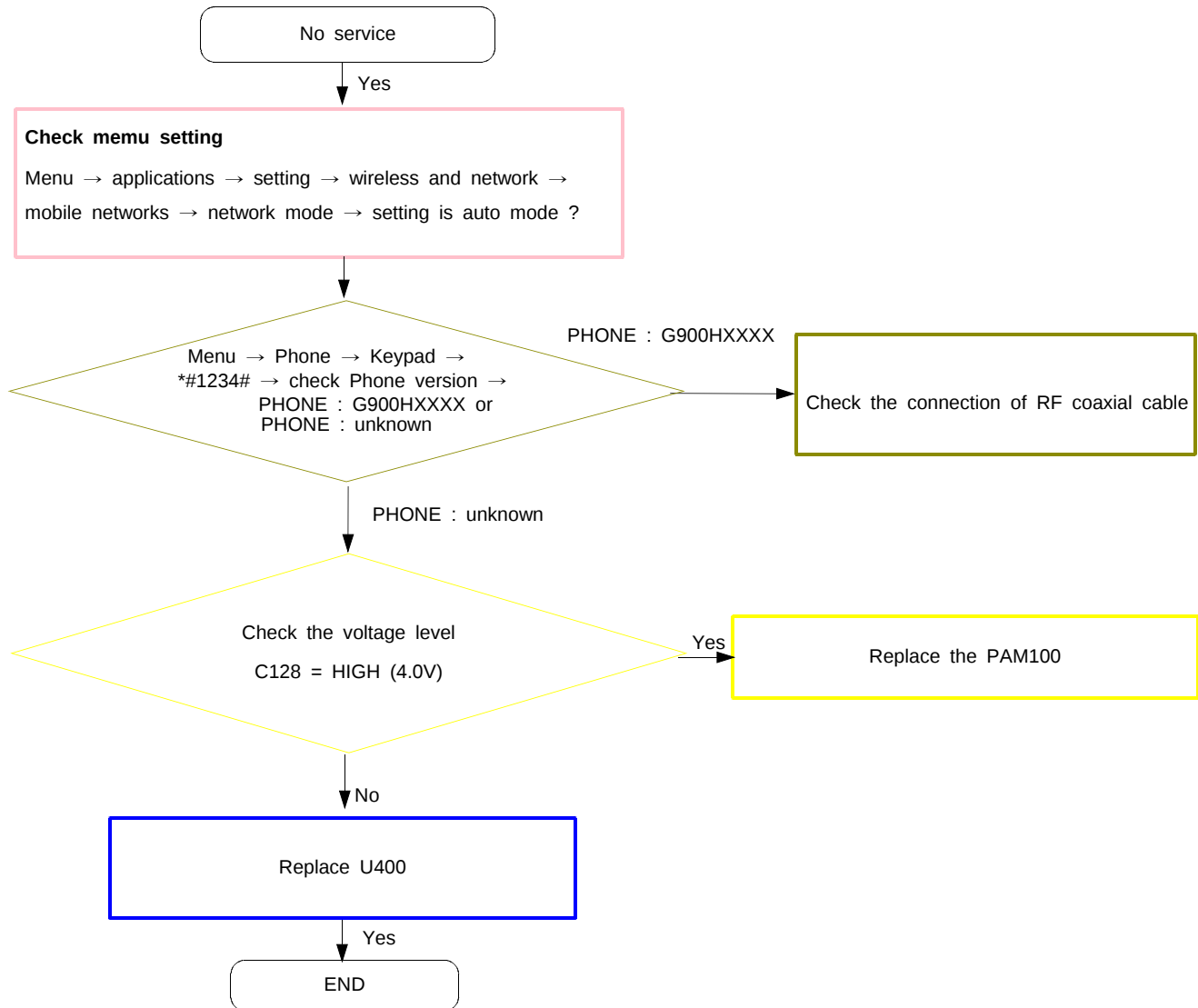


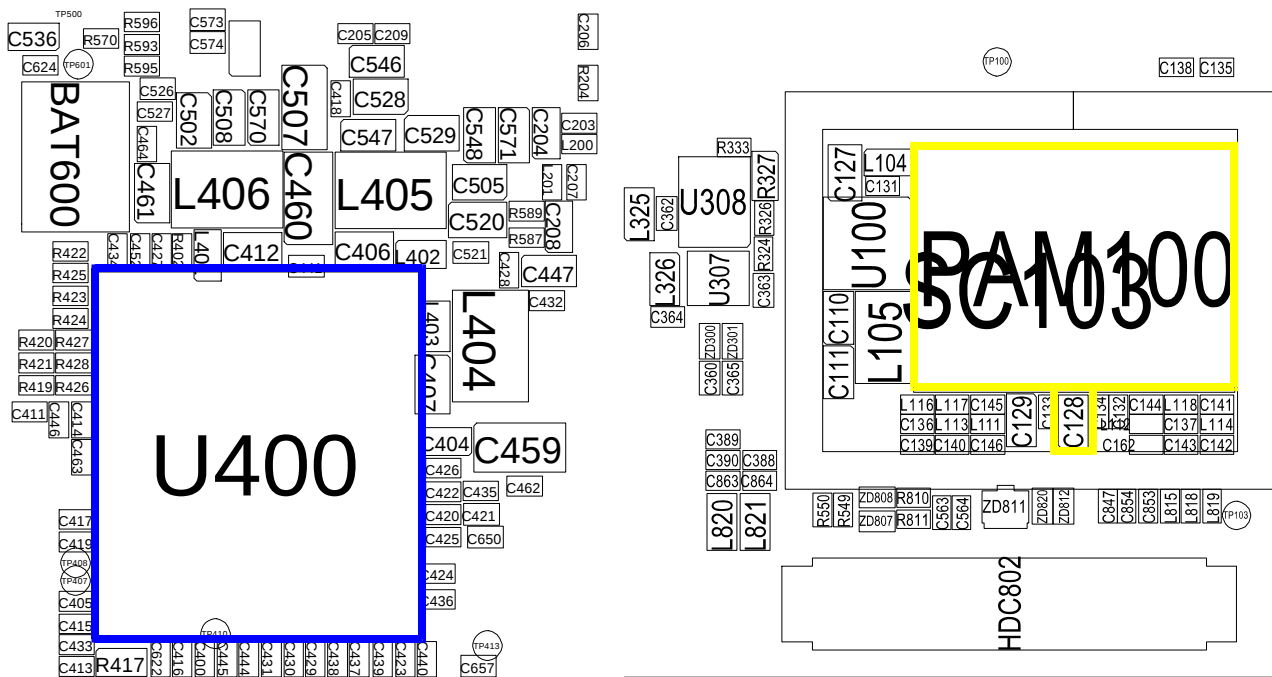
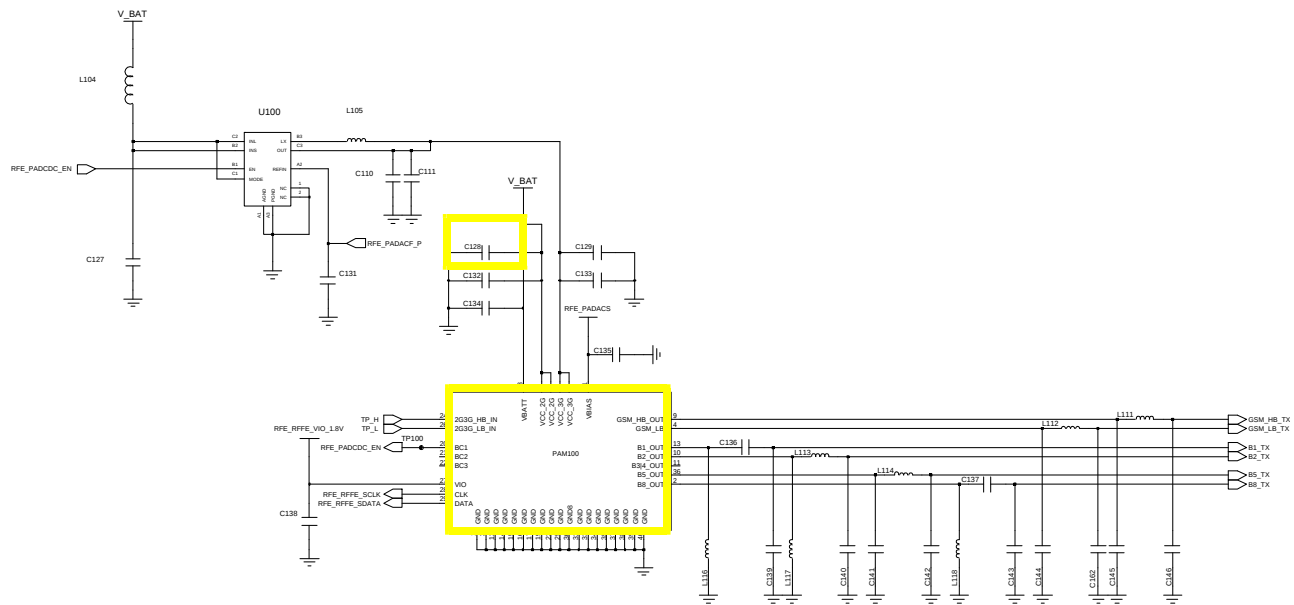
8-3-2. Initial



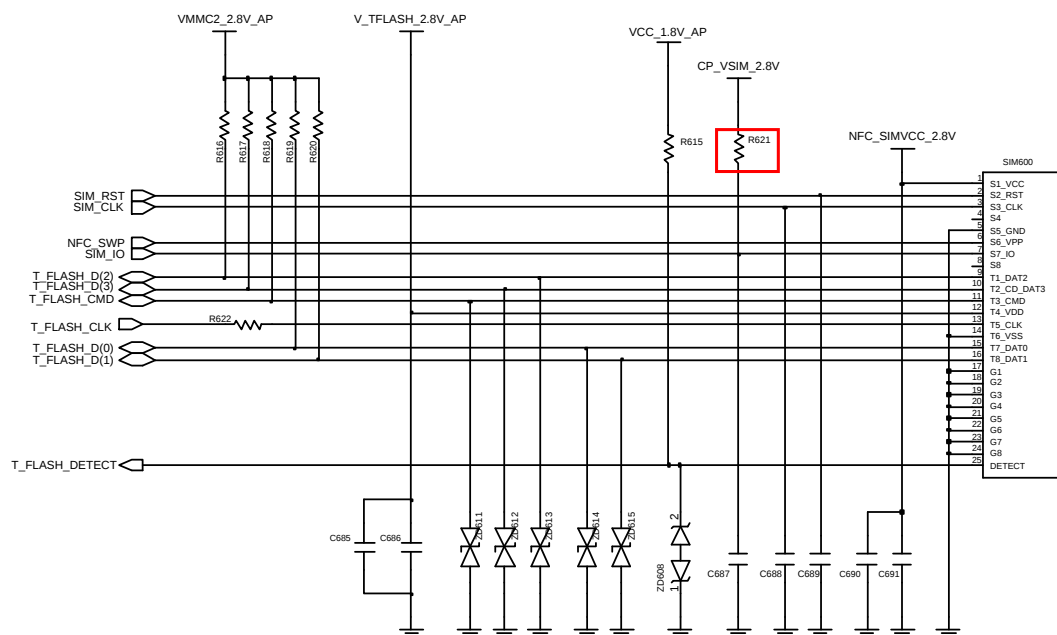
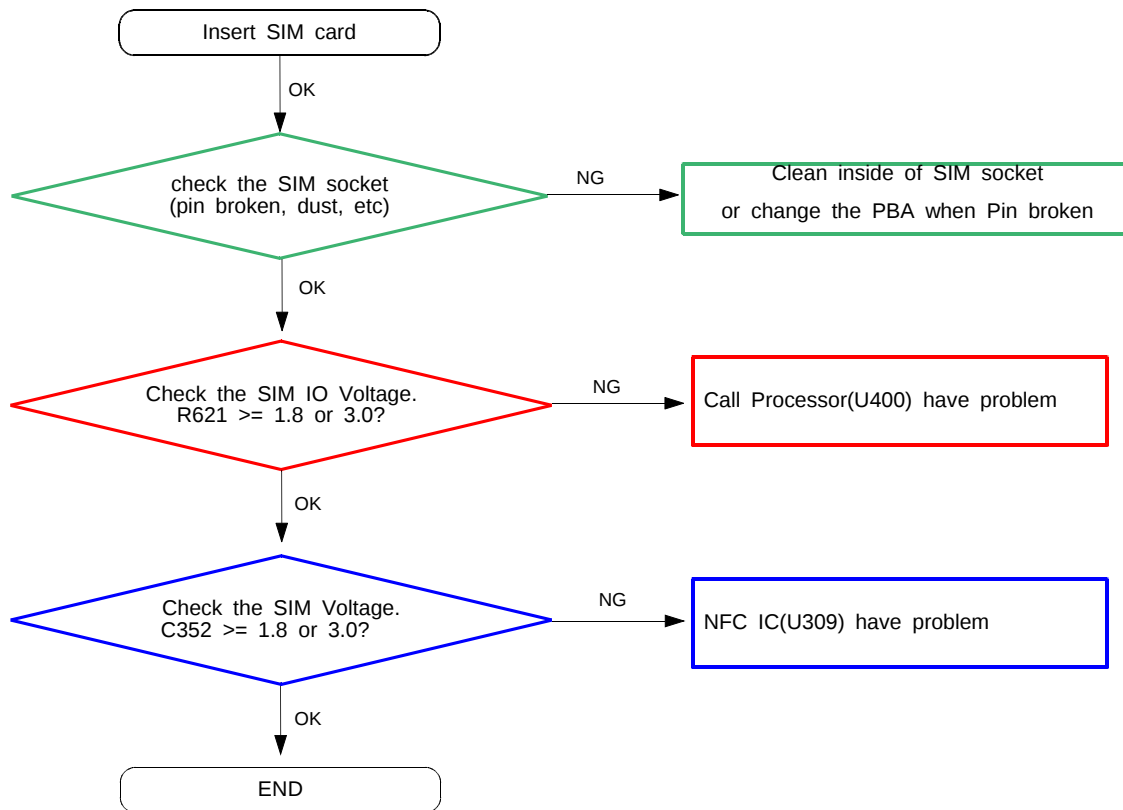


8-3-3. No Service

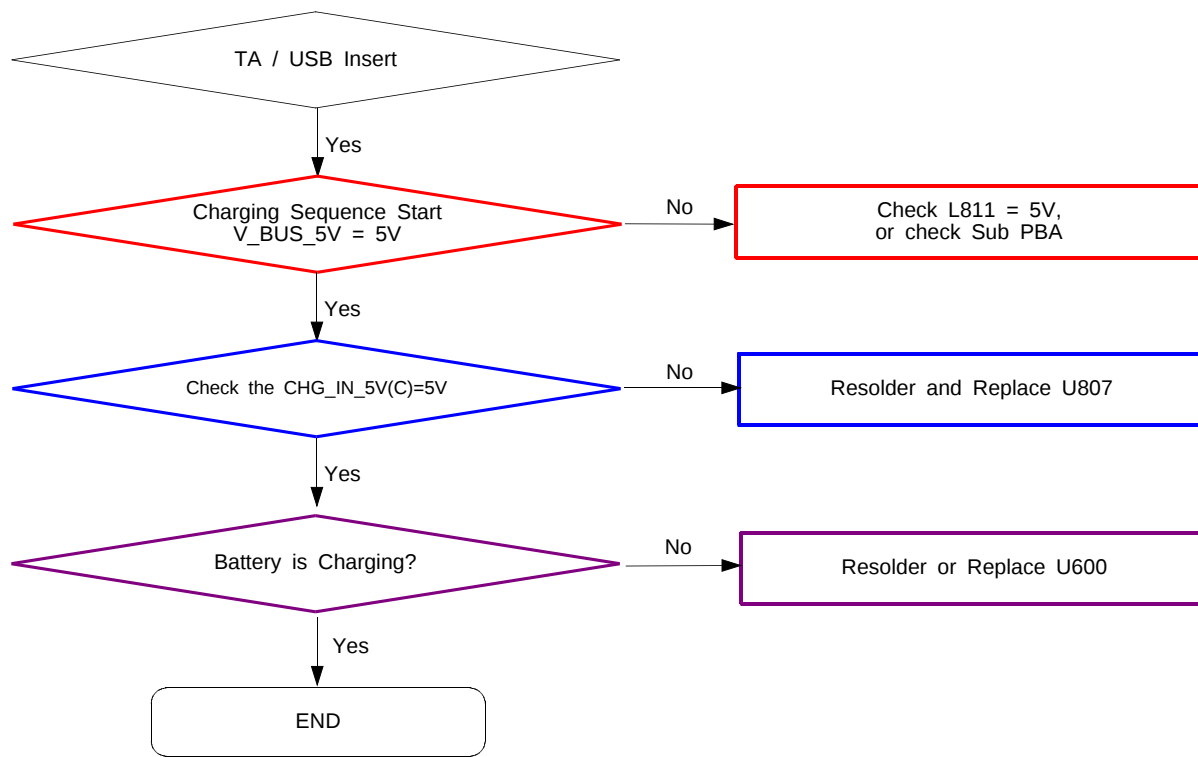


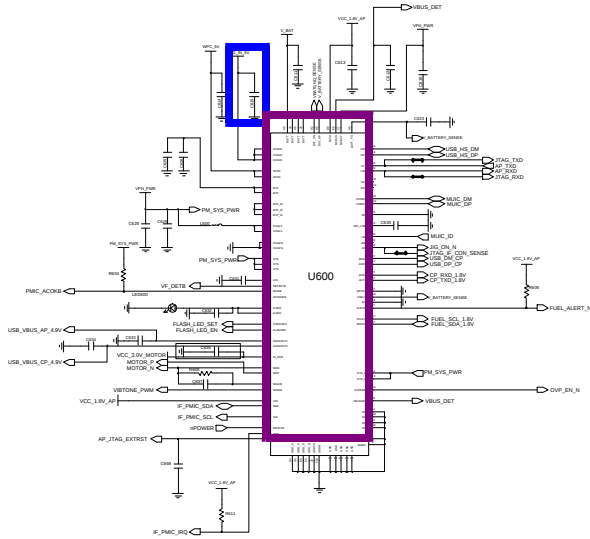


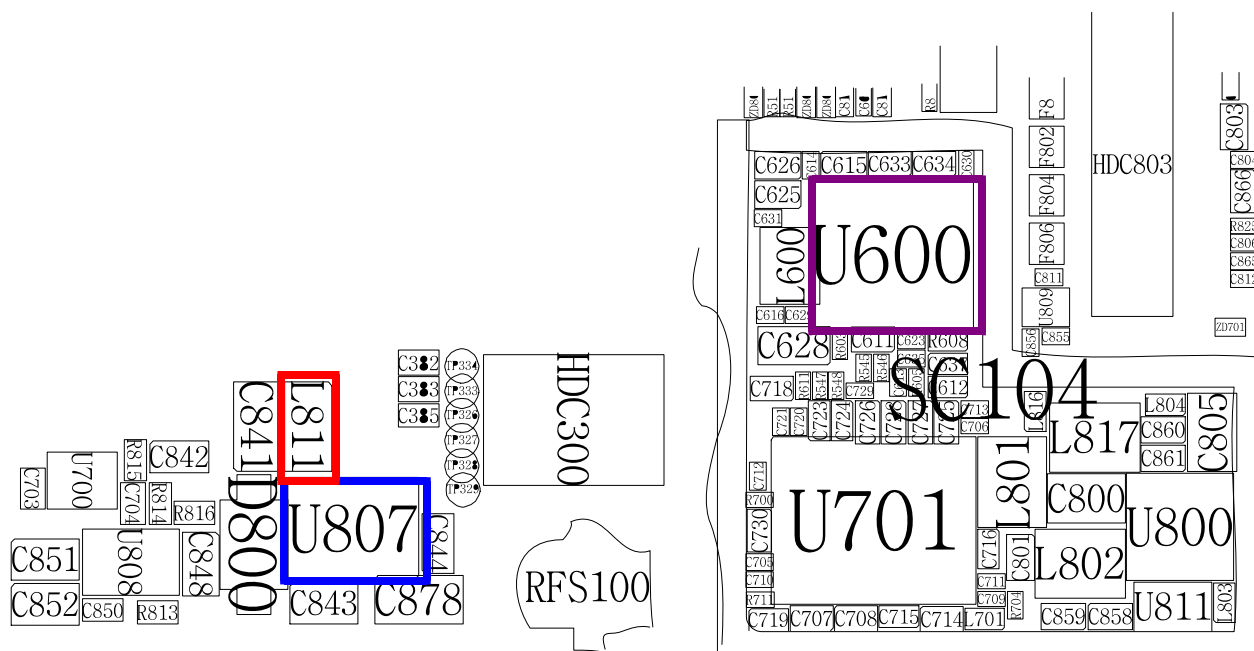
8-3-4. Sim Part



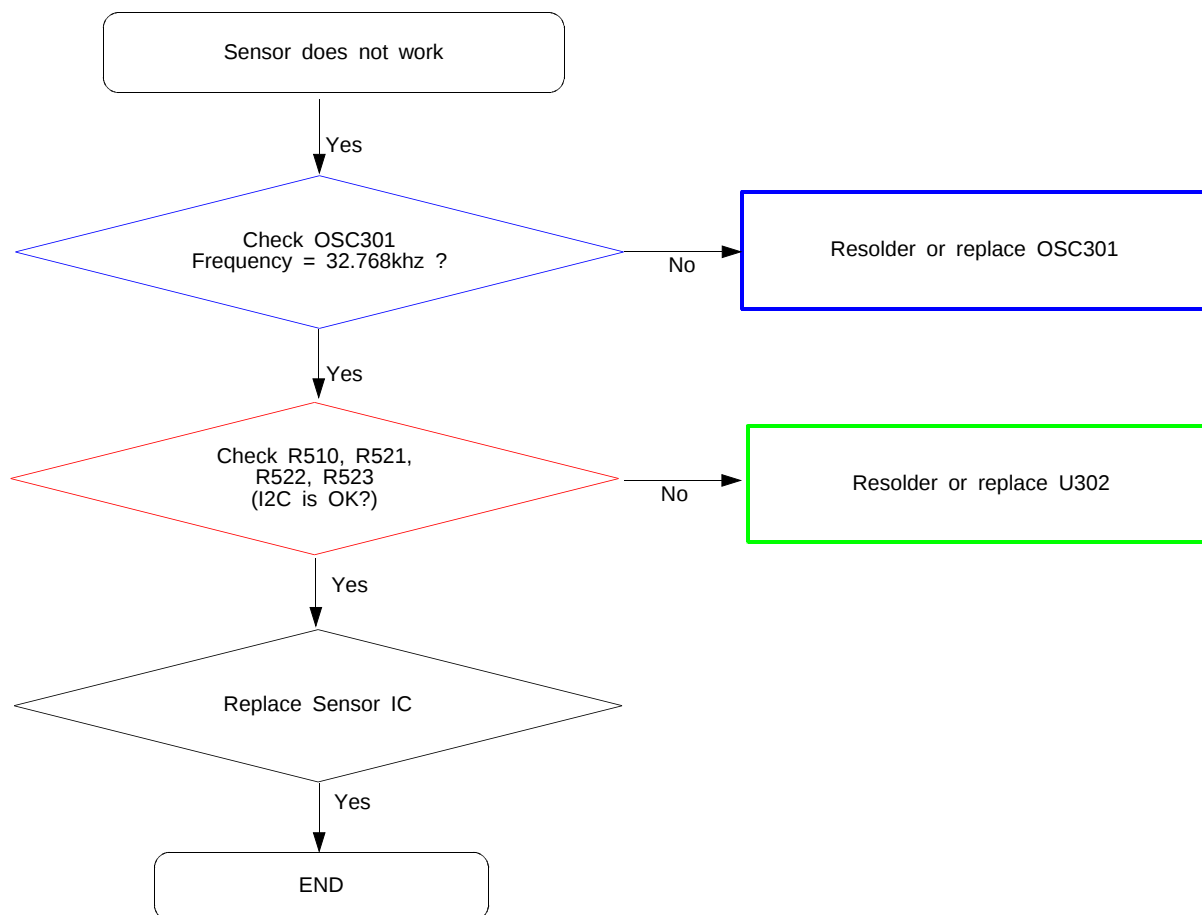
8-3-5. Charging Part

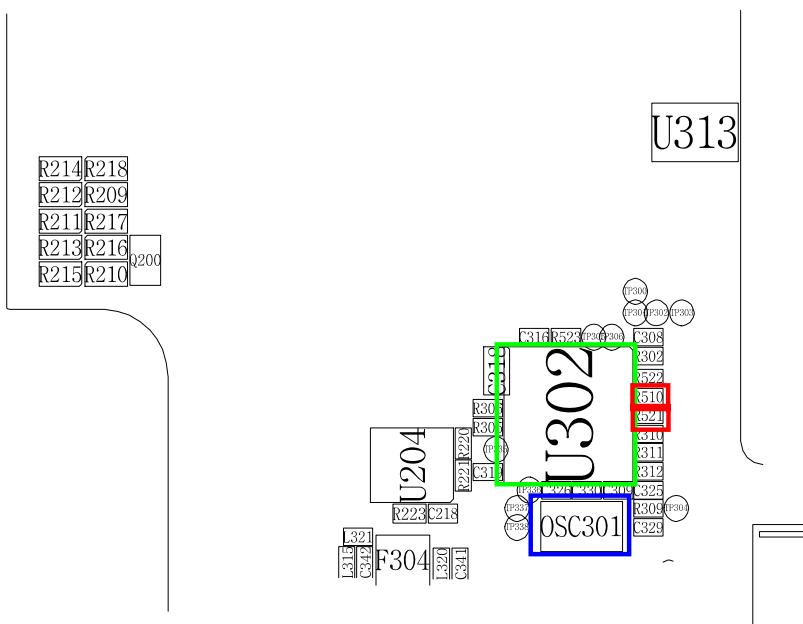
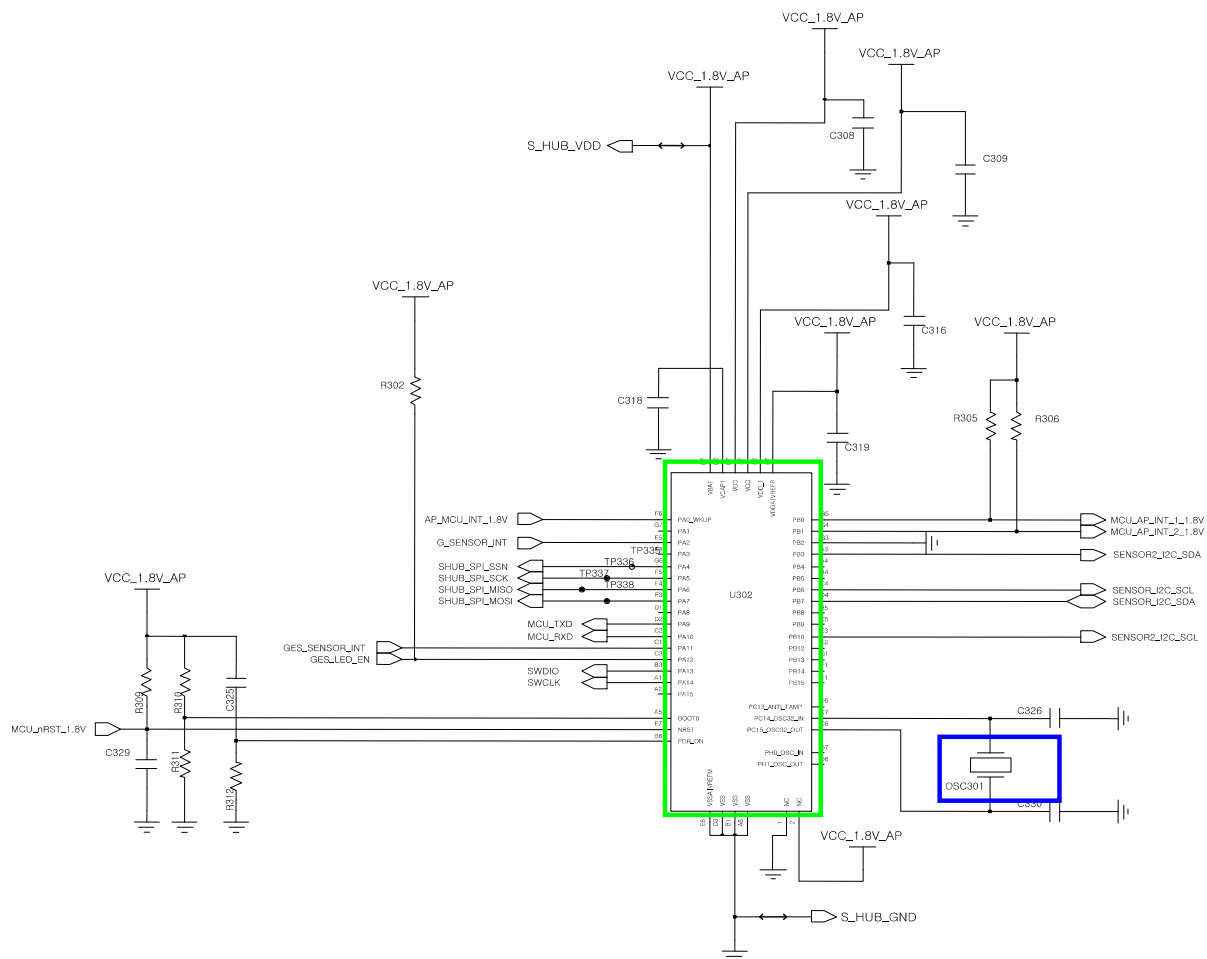




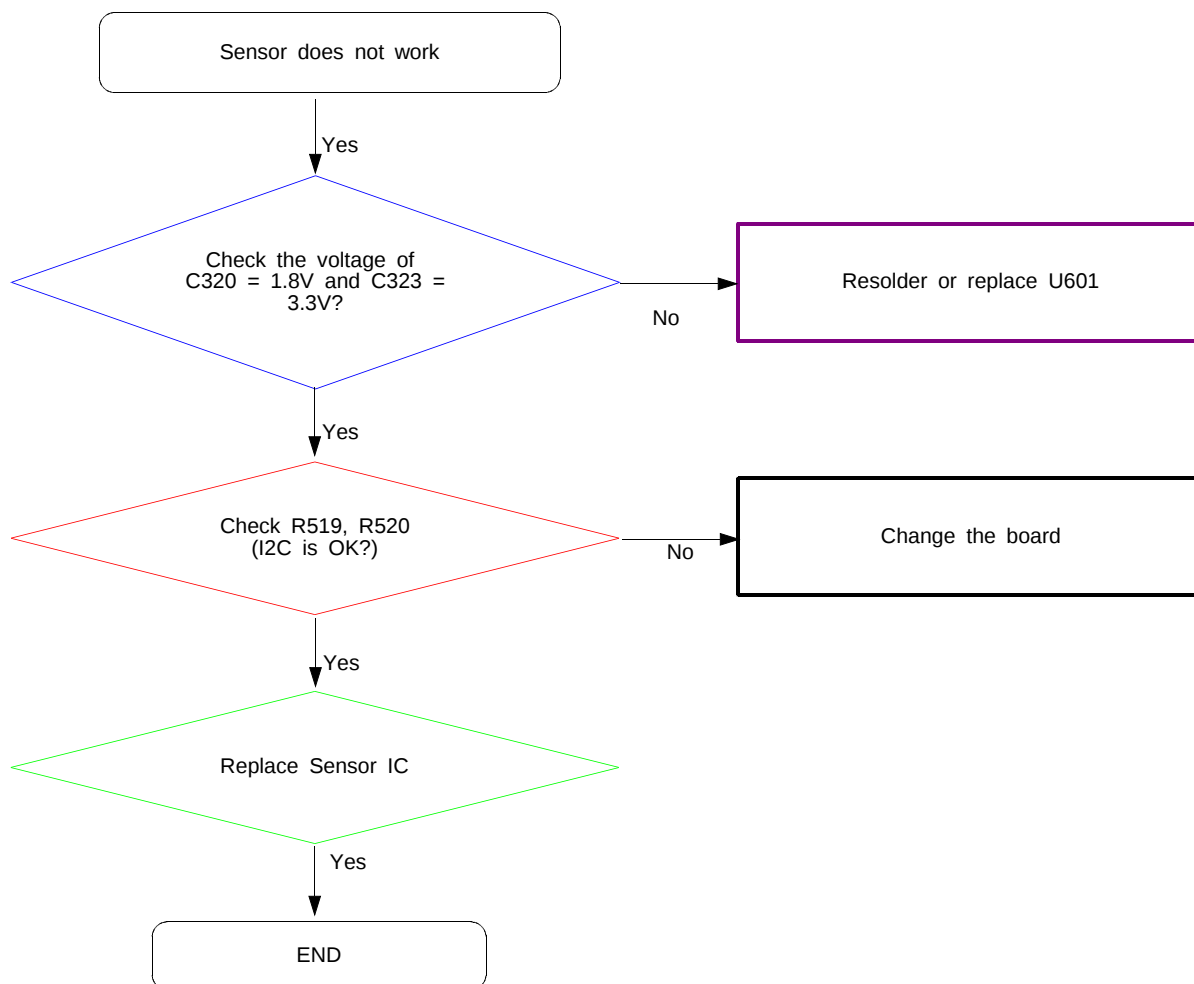


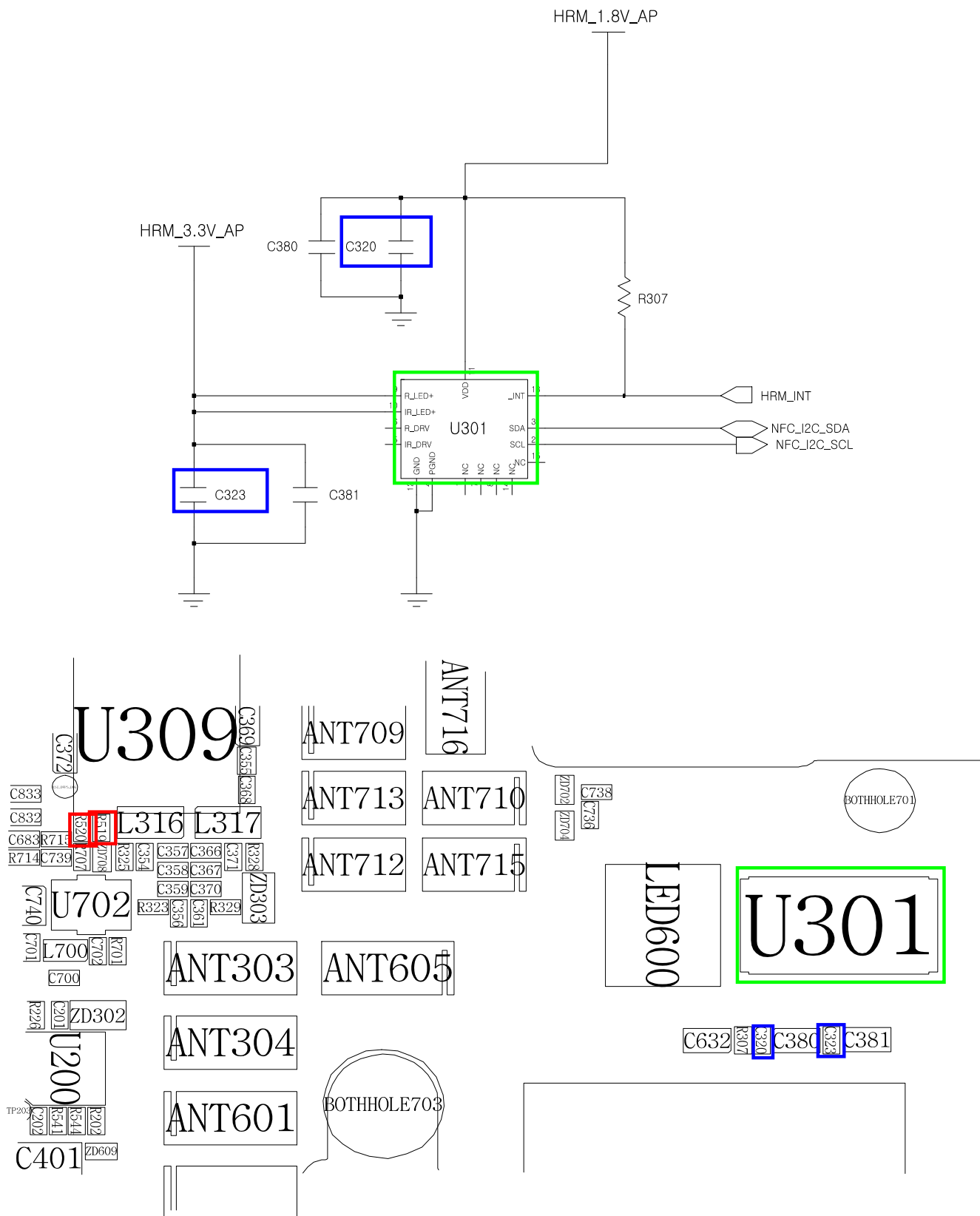
8-3-7-1. Sensor - Accelerometer, Barometer, Gyro, Gesture, Proximity, RGB, Magnetic



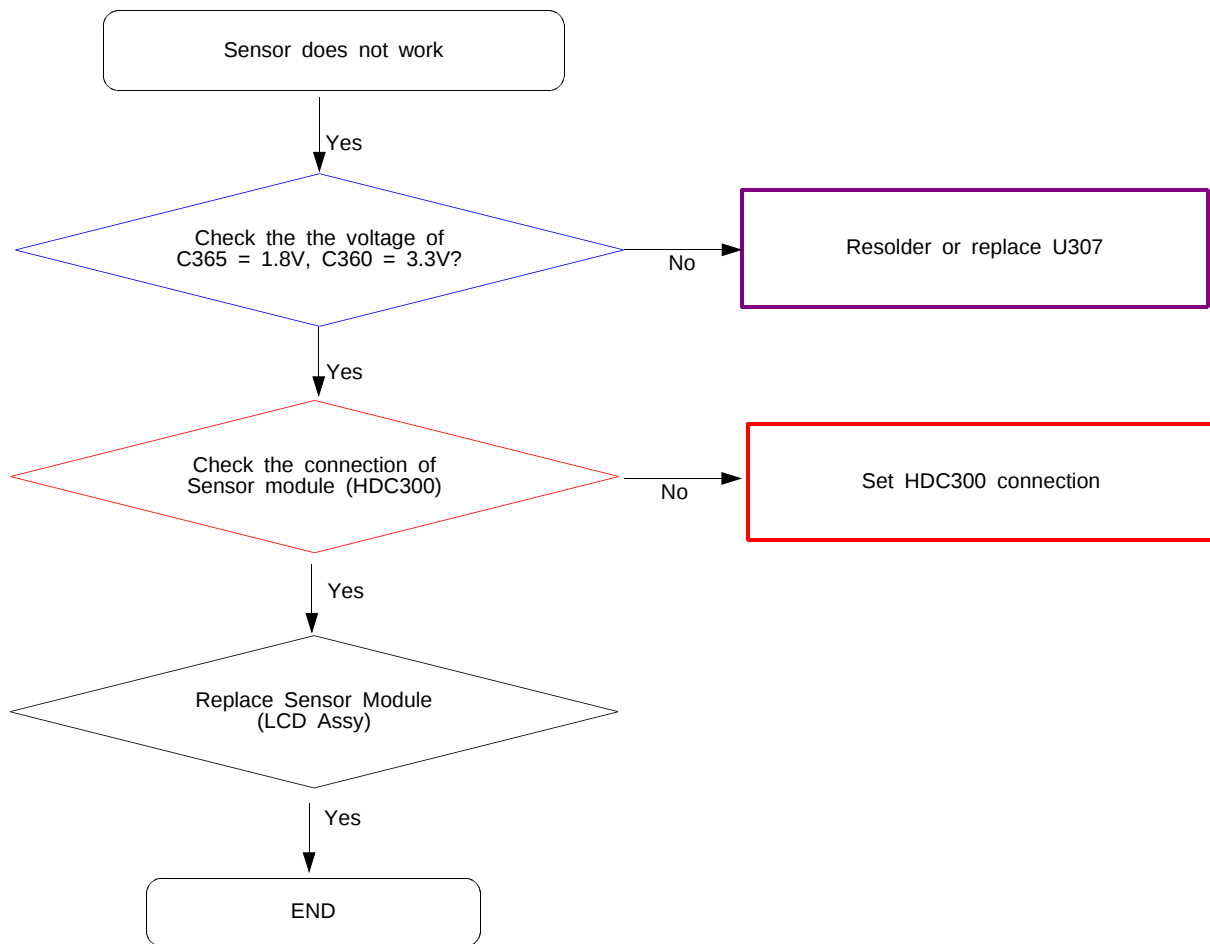


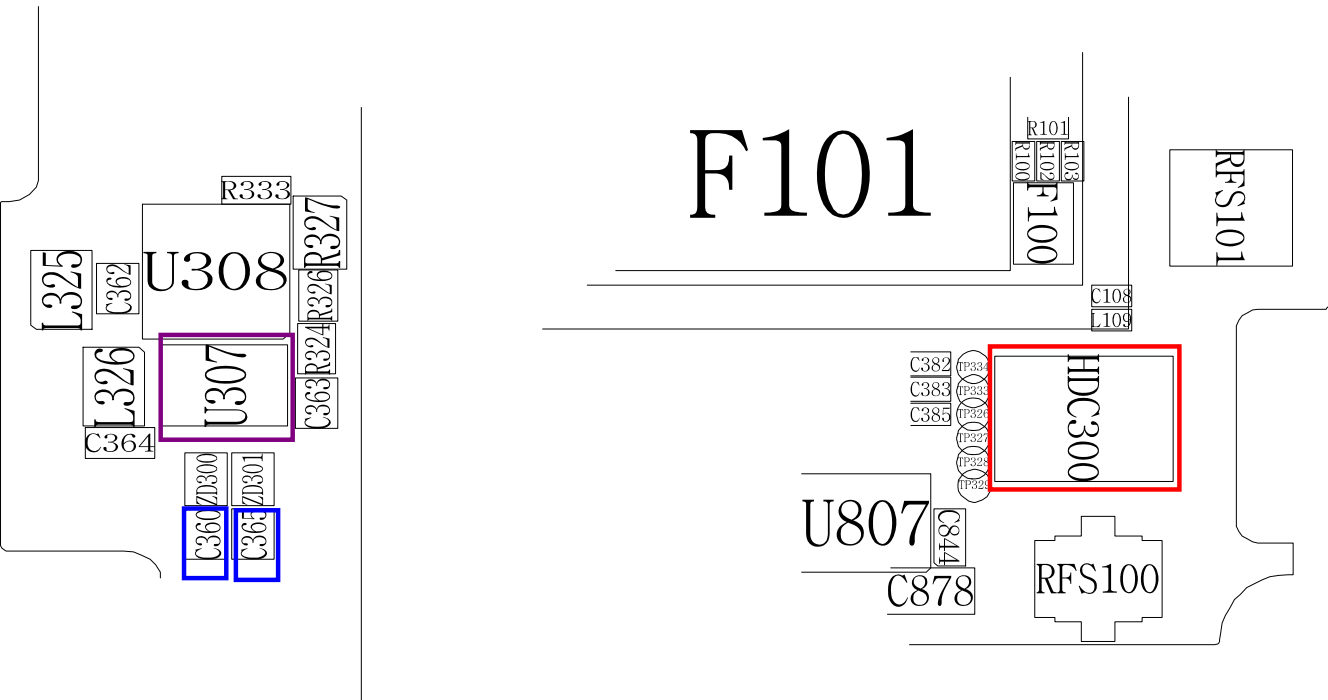
8-3-7-2. Sensor - HRM





8-3-7-3. Sensor - Fingerprint



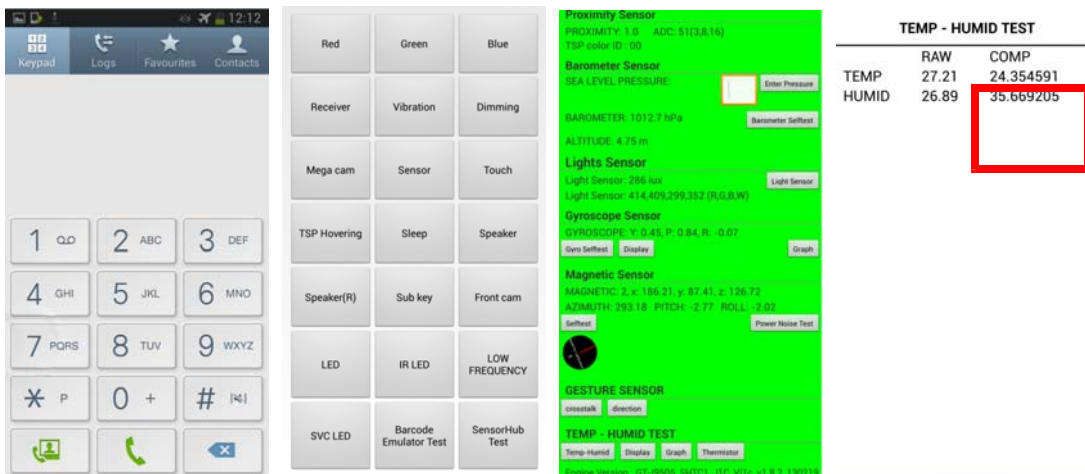


※ CAUTION

Temperature/Humidity sensor should not be directly exposed to the heat-gun when you replace USB connector, because excessive heat can cause abnormal operation of the sensor. The temperature that Temperature/Humidity sensor sees should not exceed 260°C. Use proper heat-shielding material to protect Temperature/Humidity sensor.

※ Temp/Humi Sensor After Repair

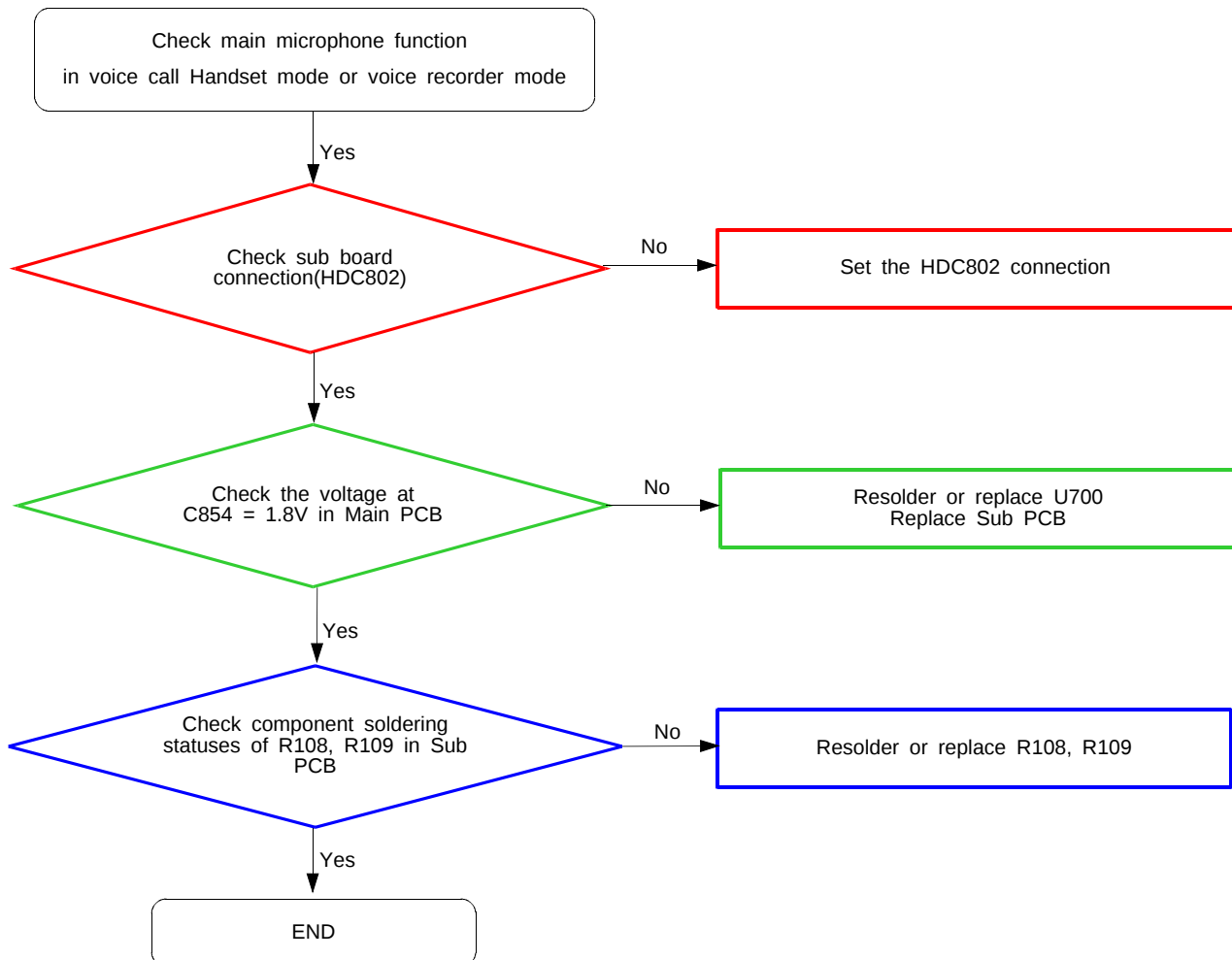
- 1) Keypad : press *#0*#
- 2) Select "Sensor"
- 3) Select "Temp-Humid"
- 4) Read the COMP data (ignore the RAW data)

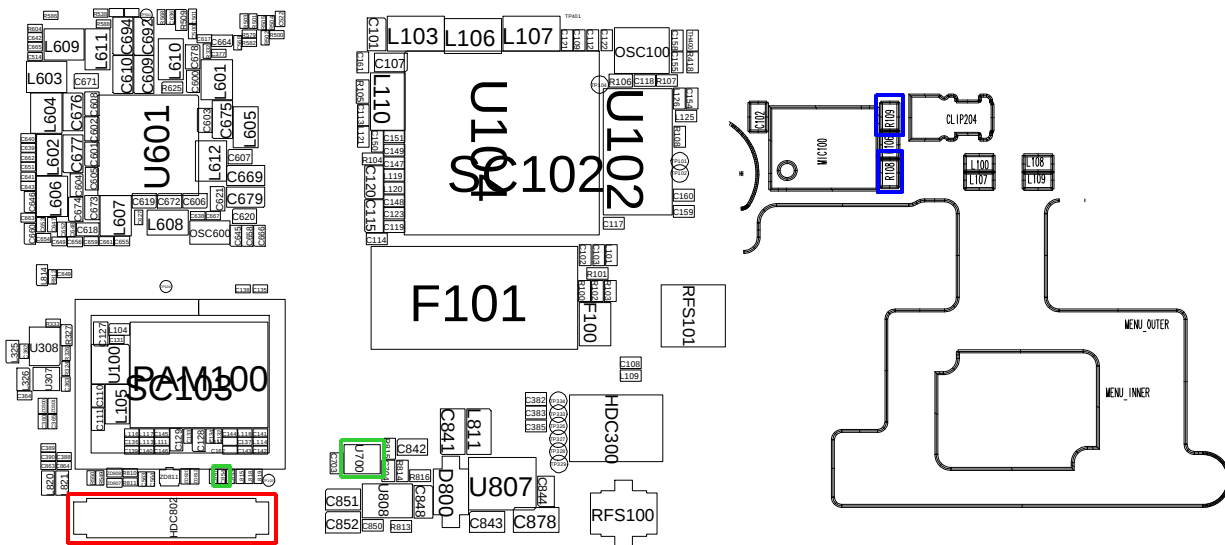
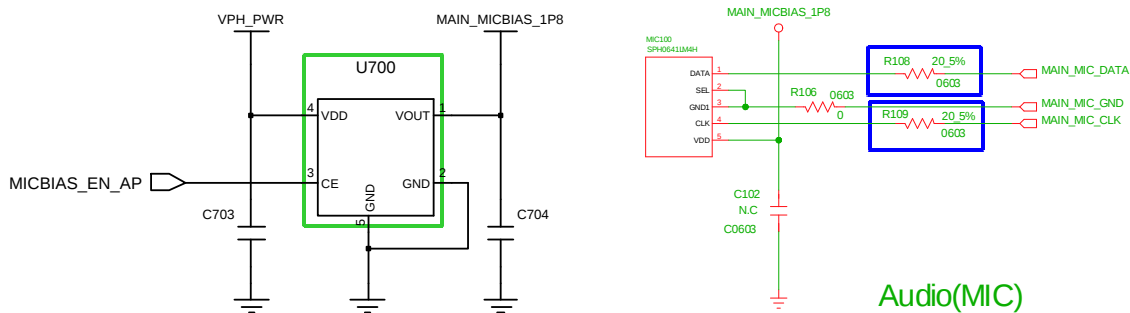
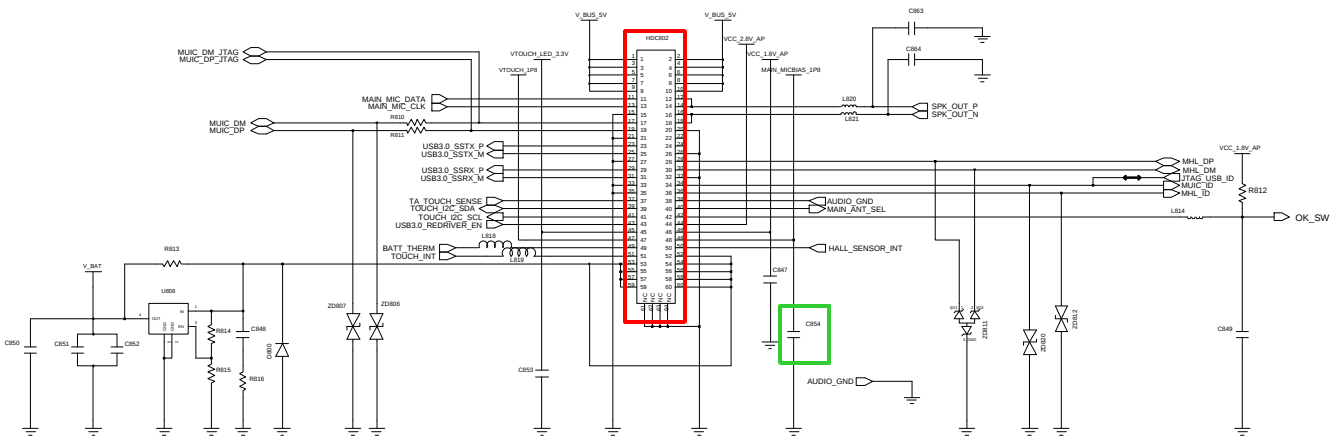


The screenshot displays the Samsung service menu interface. On the left is a numeric keypad with function keys like 'Red', 'Green', 'Blue', 'Receiver', 'Vibration', 'Dimming', etc. The main screen shows various sensor test options including Proximity Sensor, Barometer Sensor, Lights Sensor, Gyroscope Sensor, Magnetic Sensor, and GESTURE SENSOR. The 'TEMP - HUMID TEST' option is selected, leading to a table of test results.

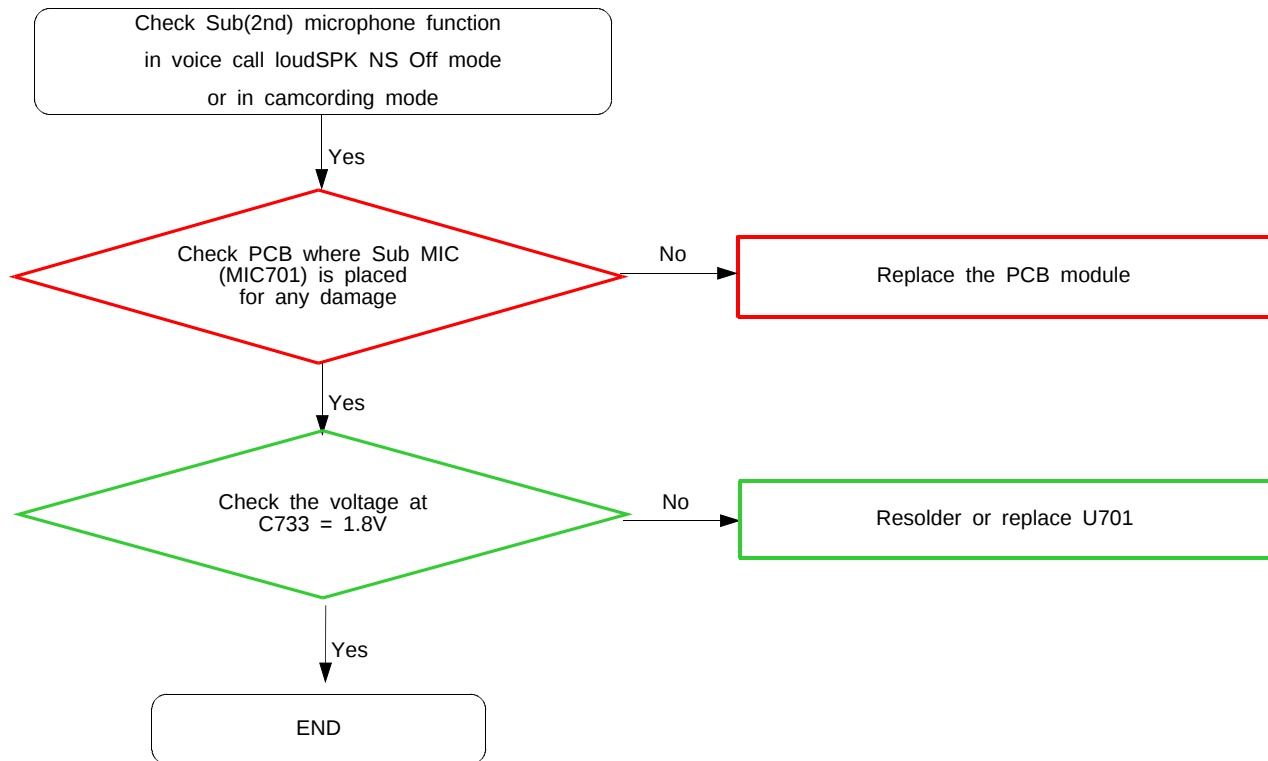
TEMP - HUMID TEST		
	RAW	COMP
TEMP	27.21	24.354591
HUMID	26.89	35.659205

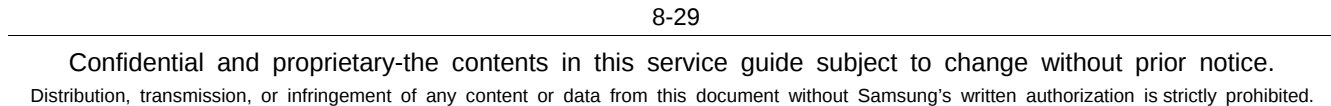
8-3-8-1 Microphone Part - Main MIC



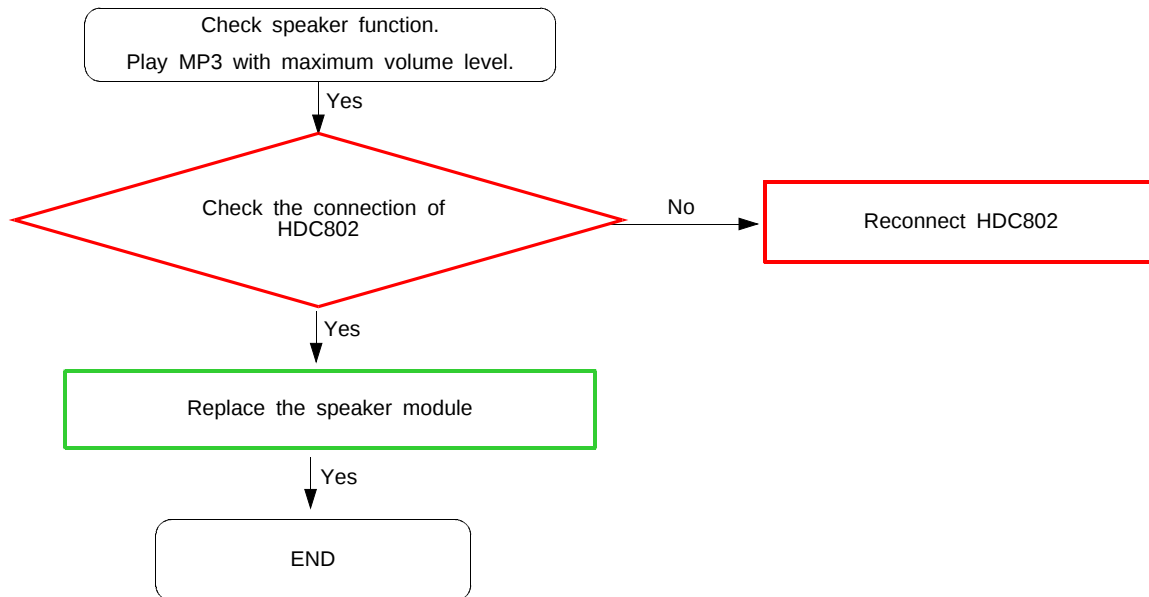


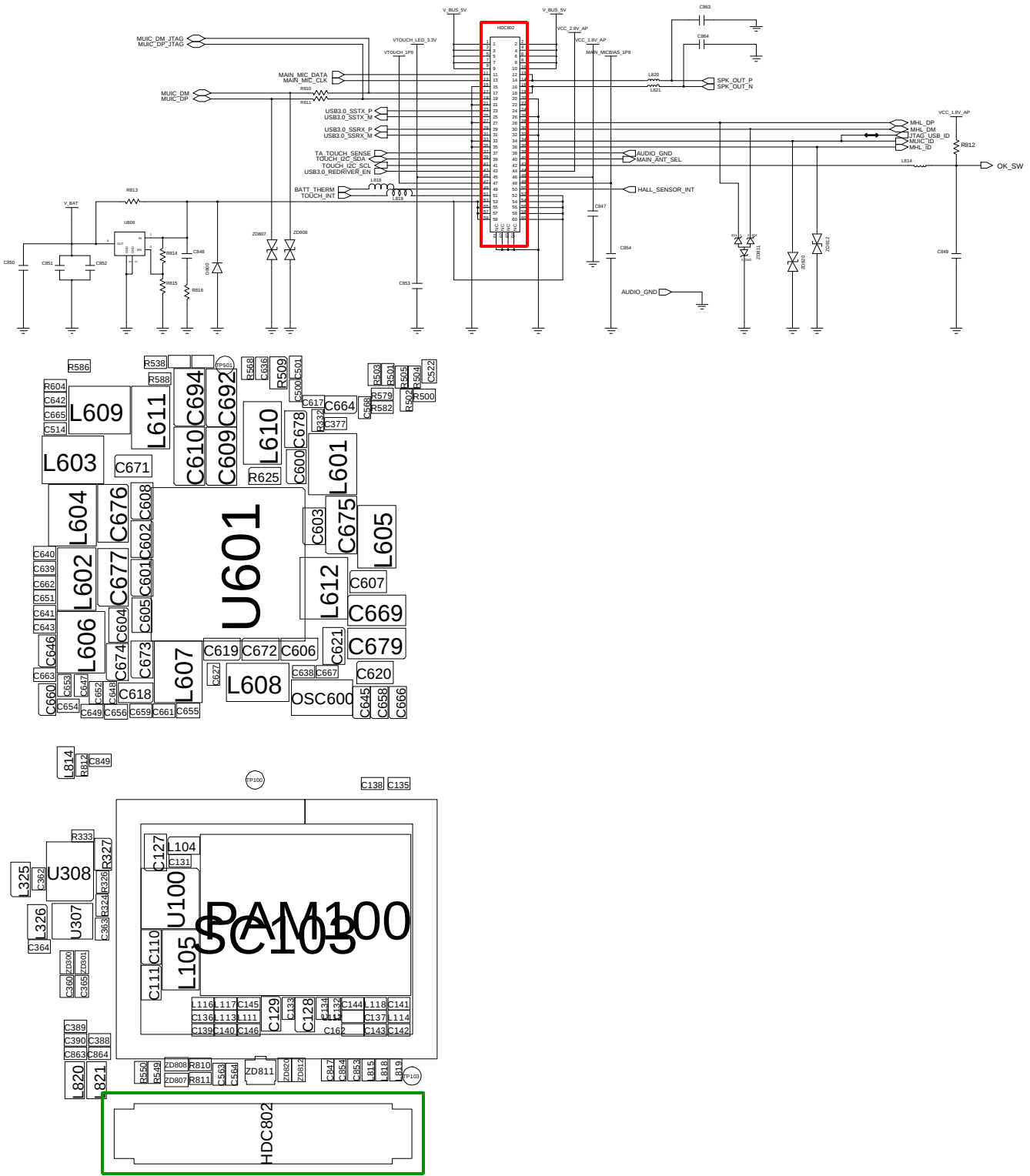
8-3-8-2. Microphone Part - Sub(2nd) MIC



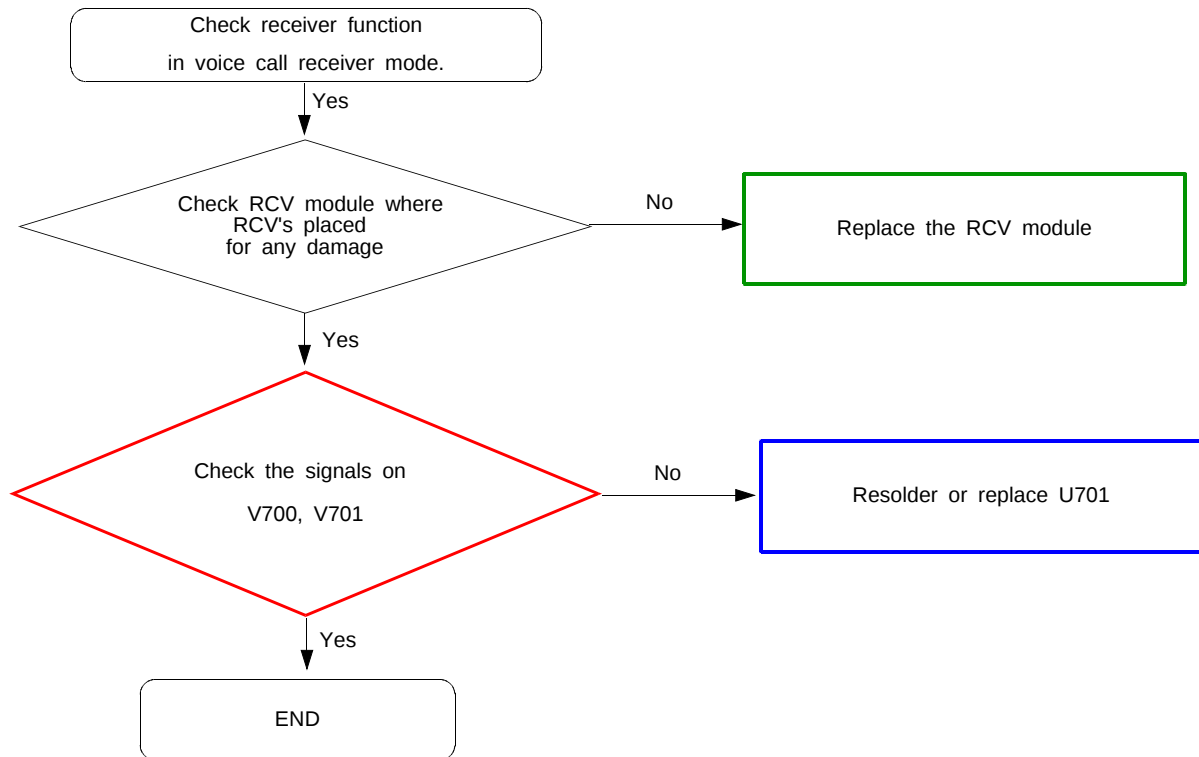


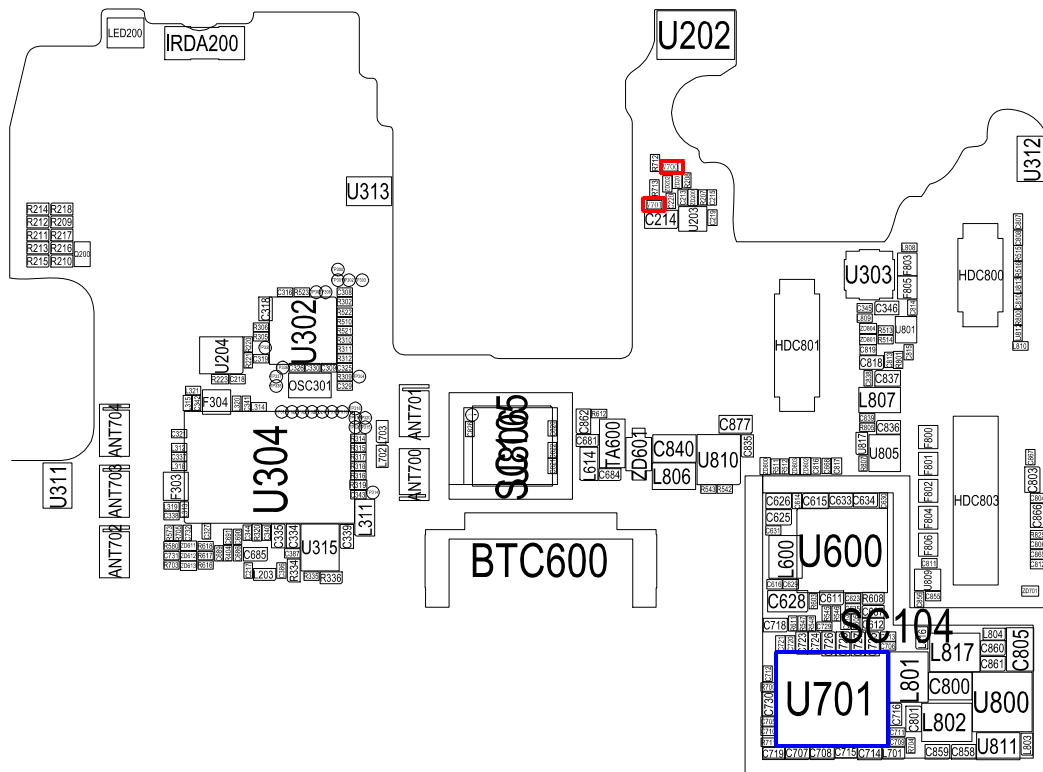
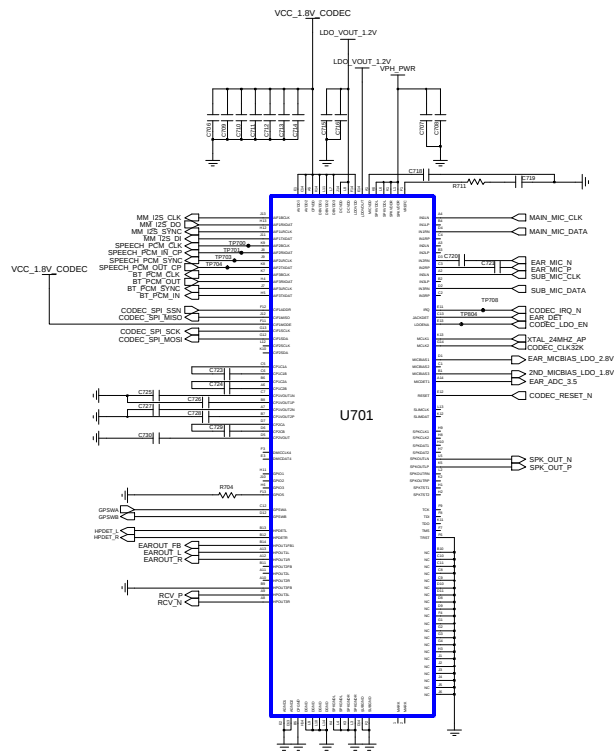
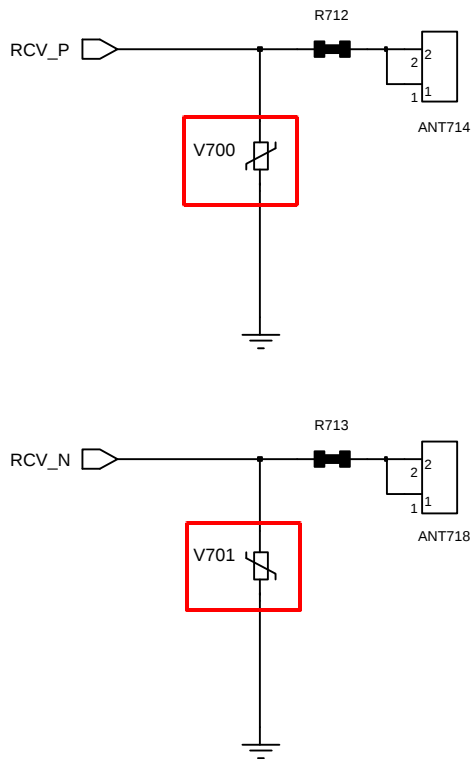
8-3-9. Speaker Part



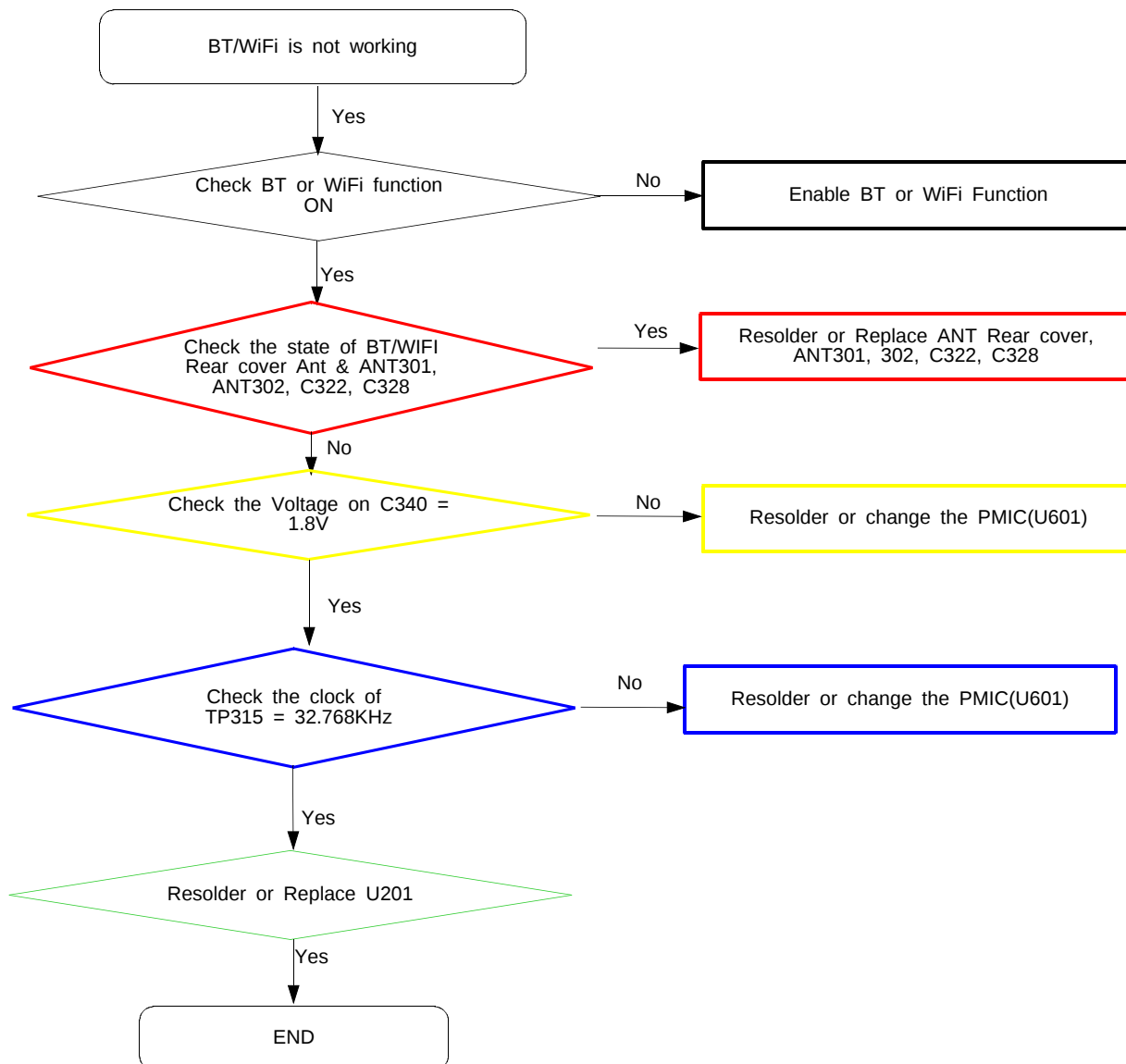


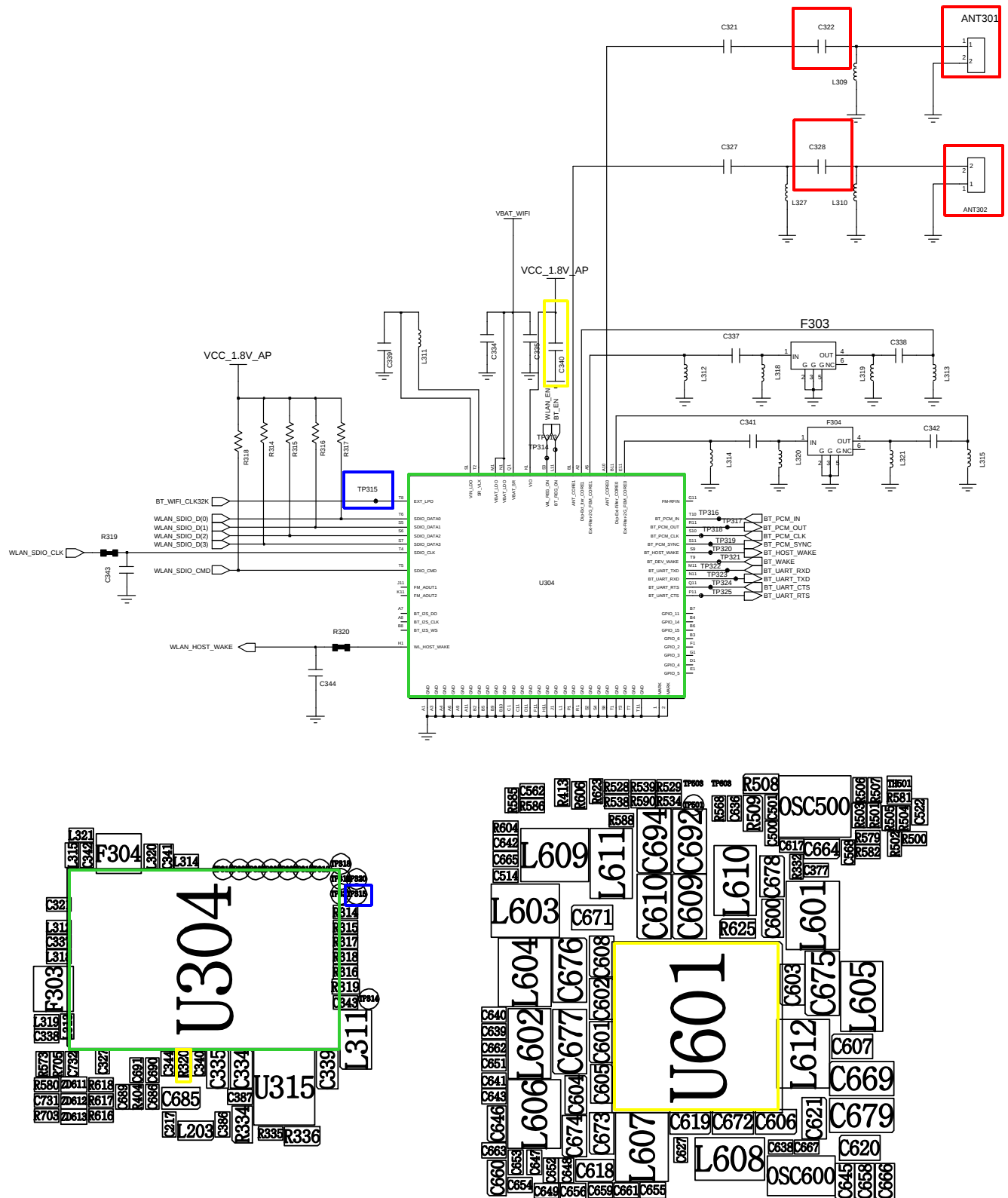
8-3-10. Receiver Part

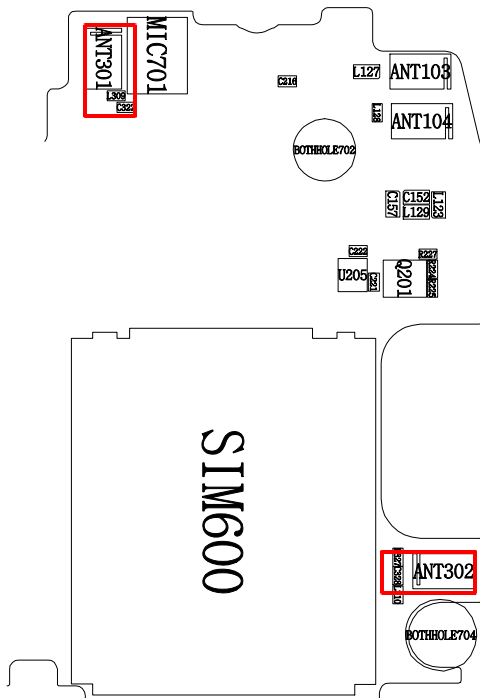




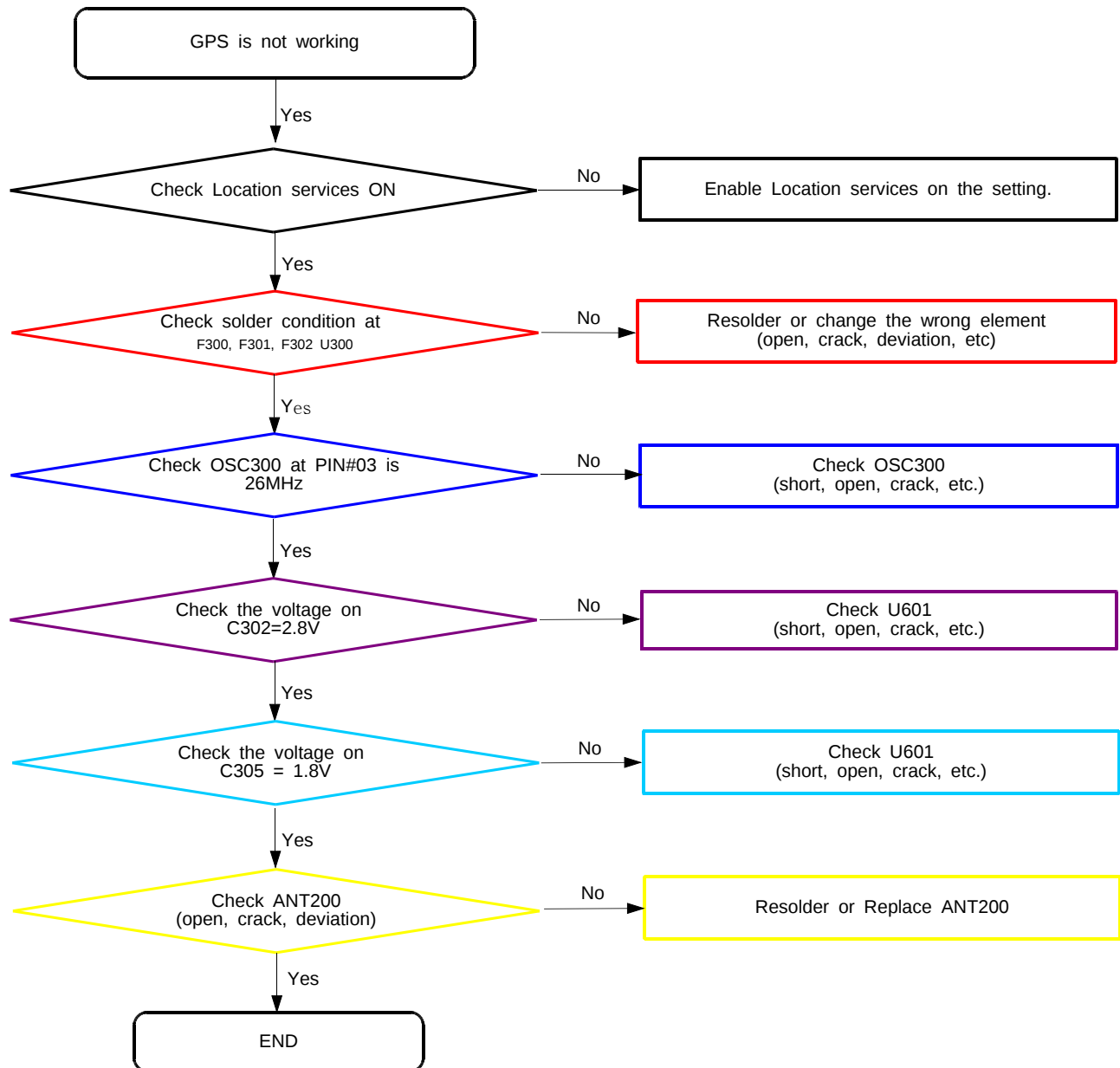
8-3-11. BT/WIFI

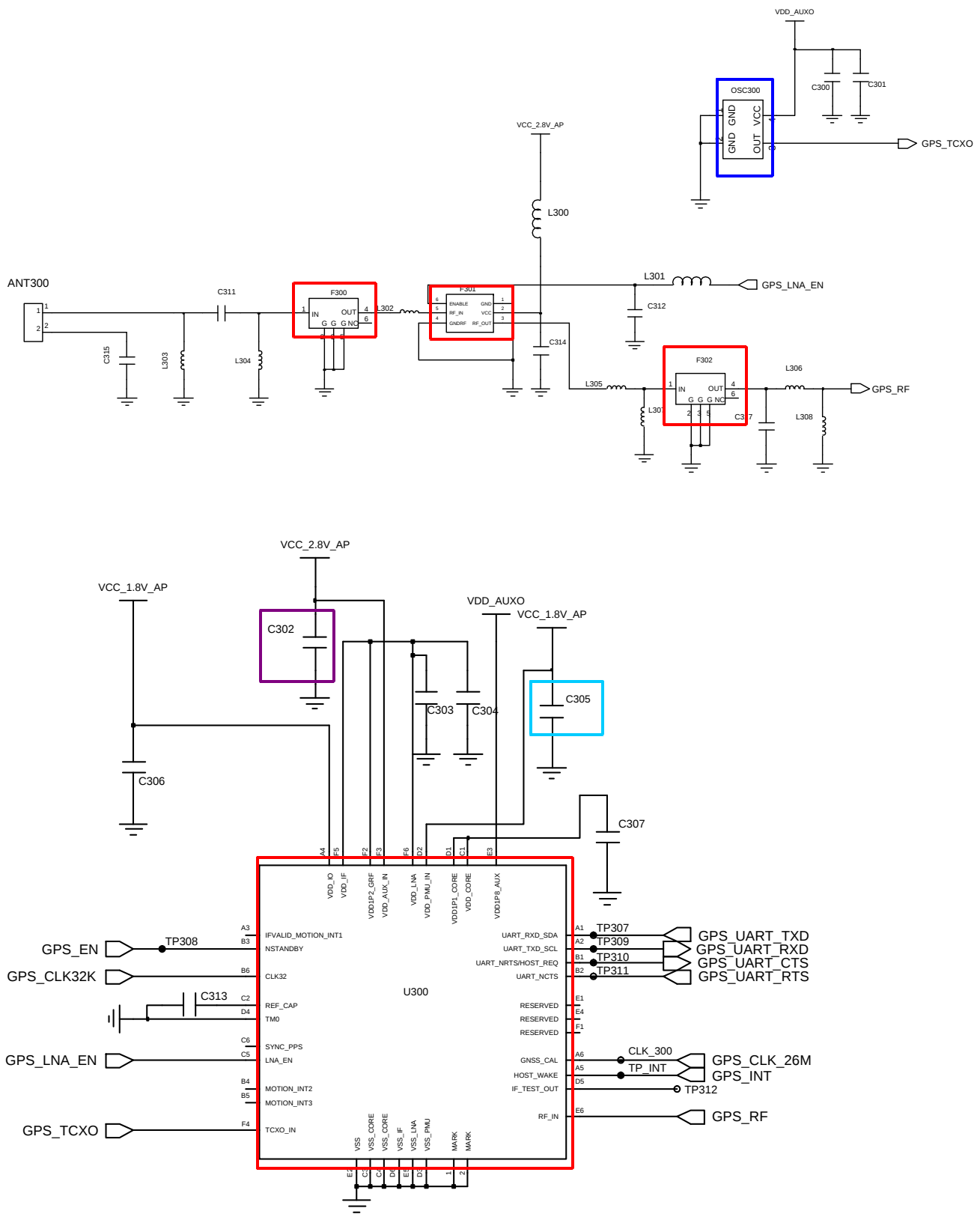


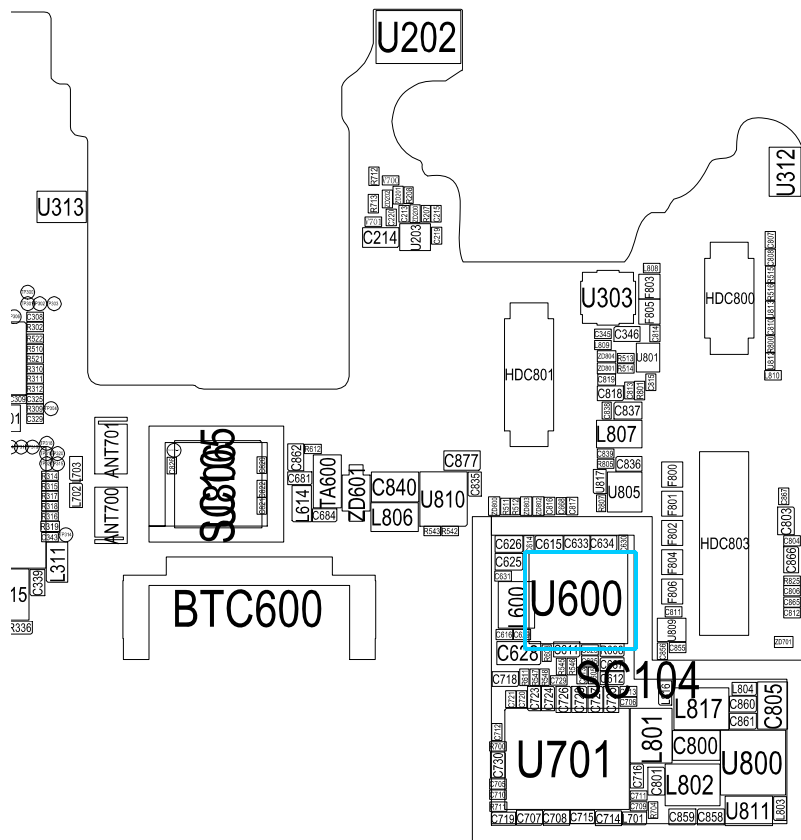
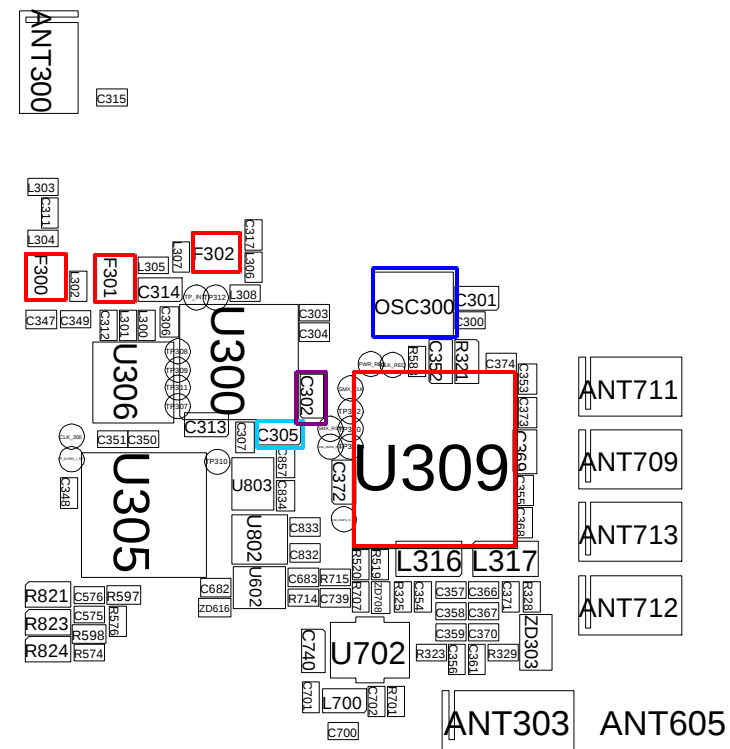




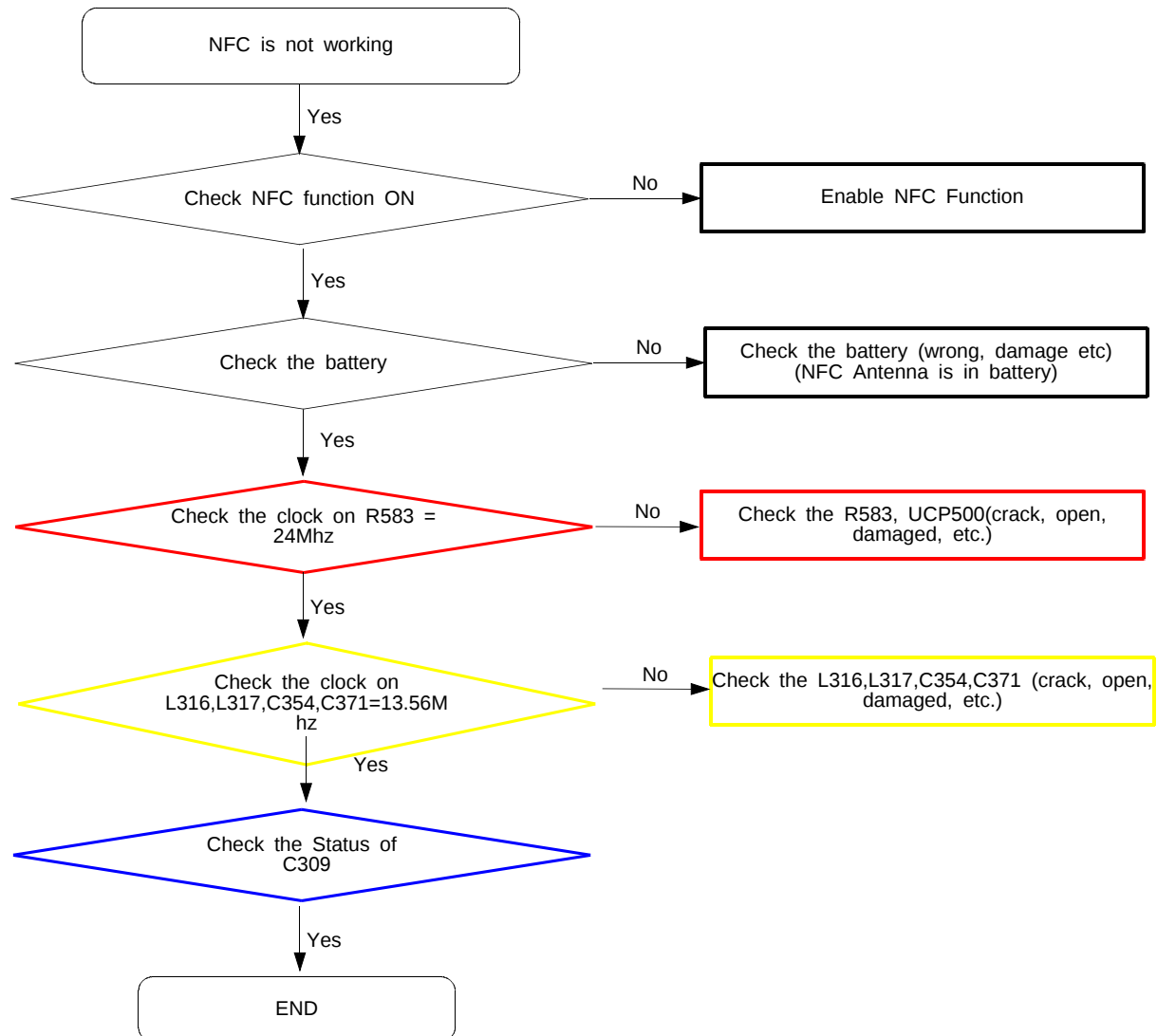
8-3-12. GPS

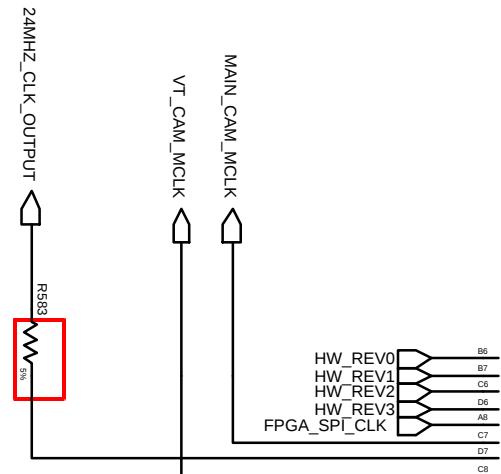




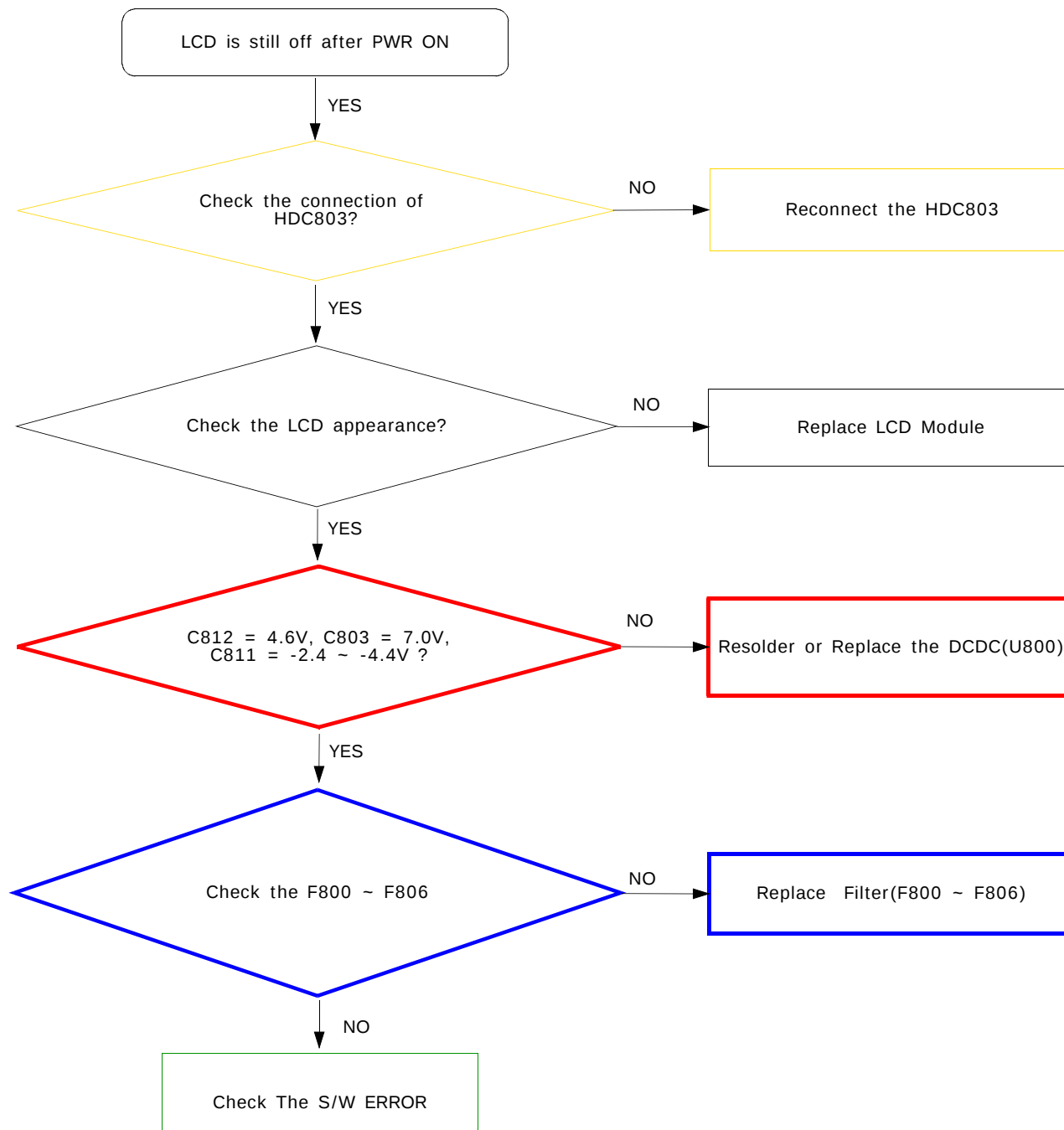


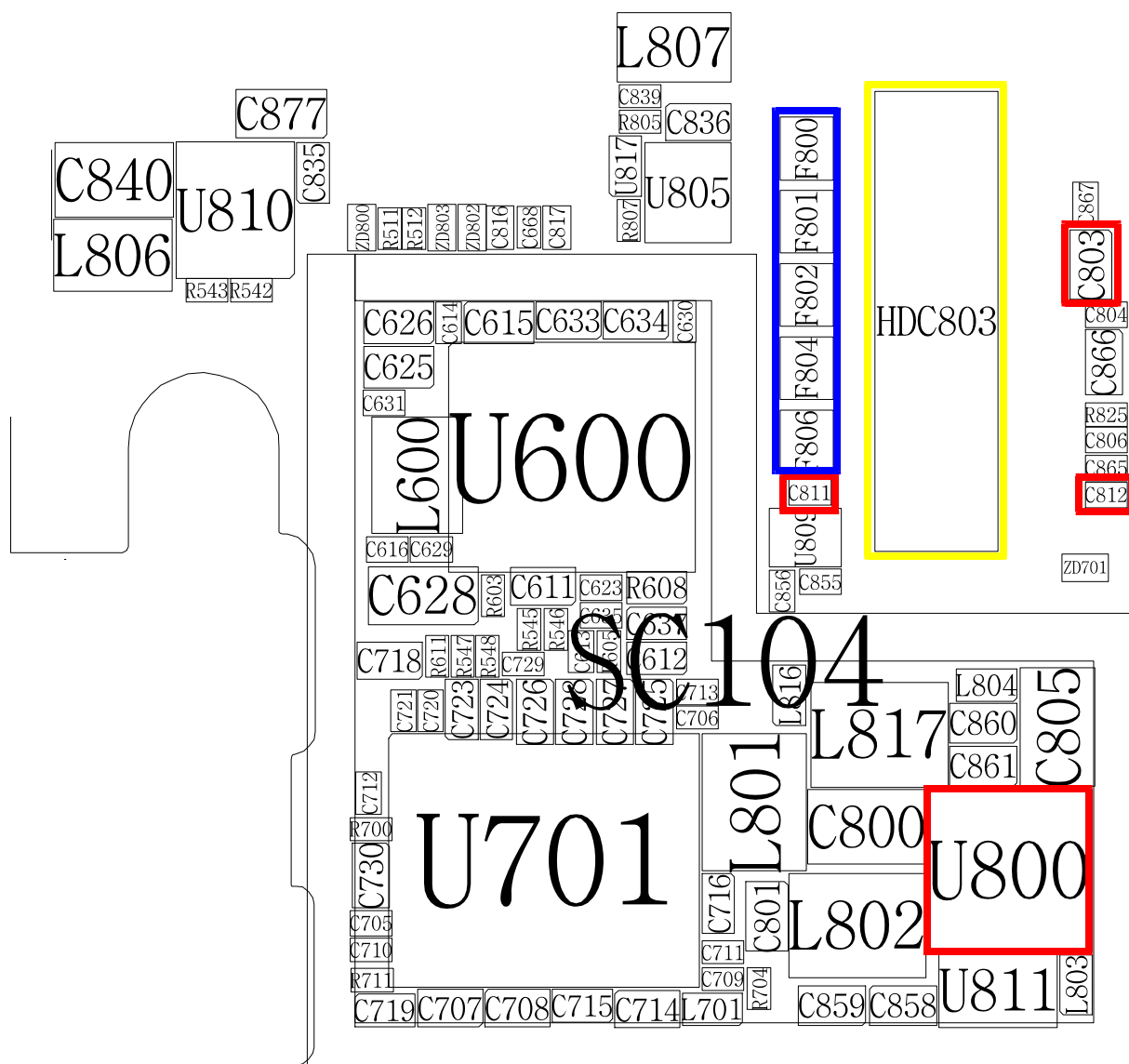
8-3-13. NFC



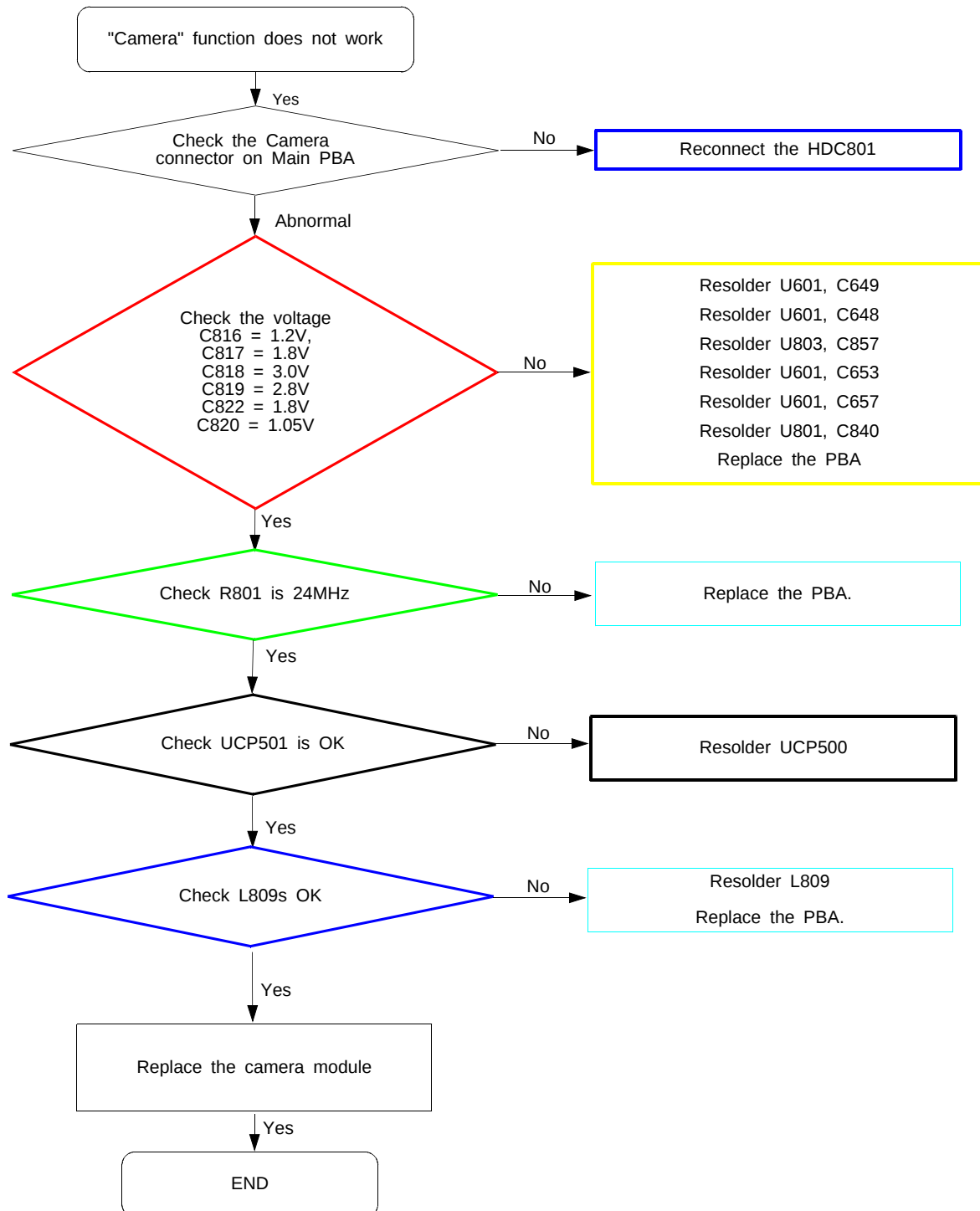


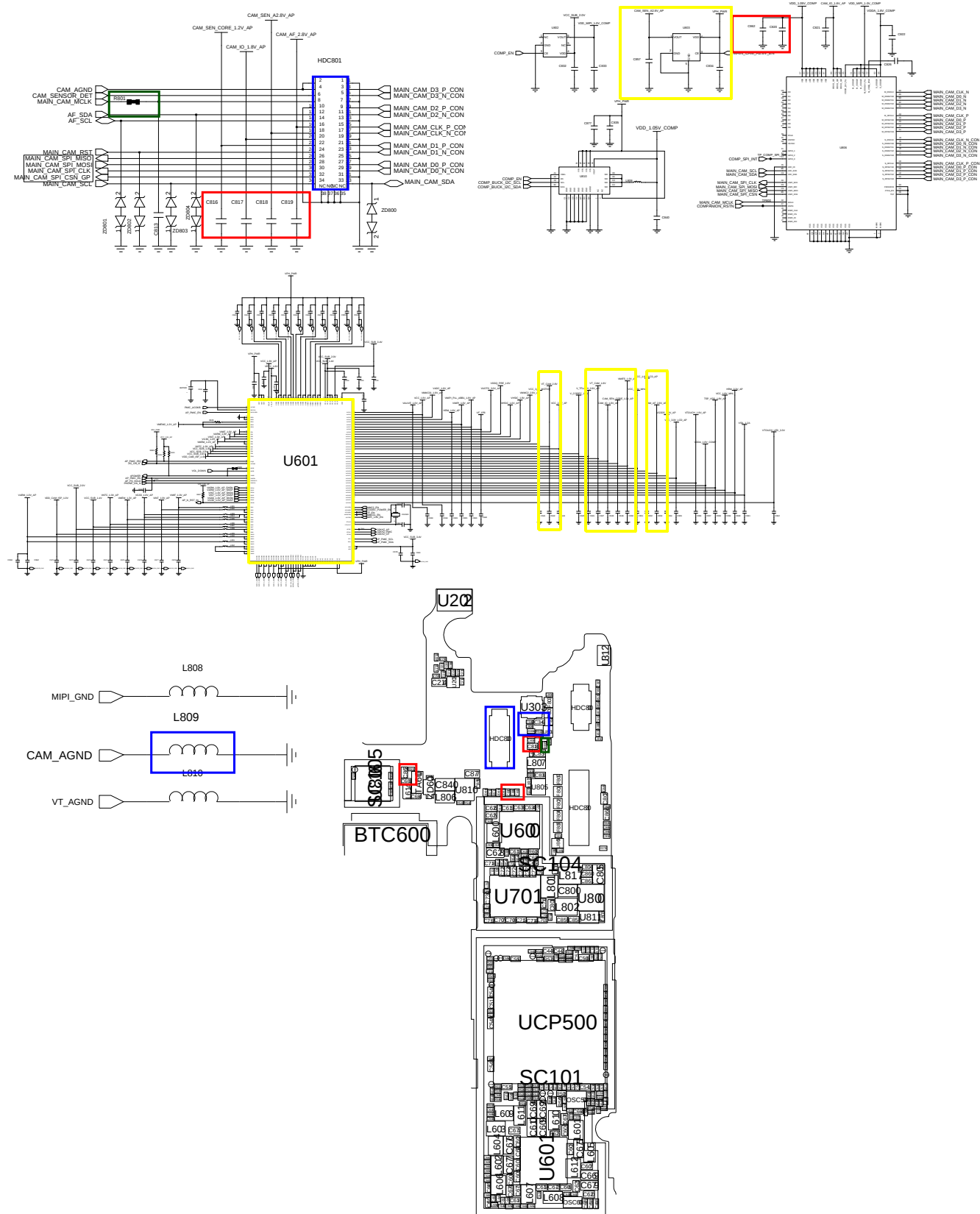
8-3-14. LCD



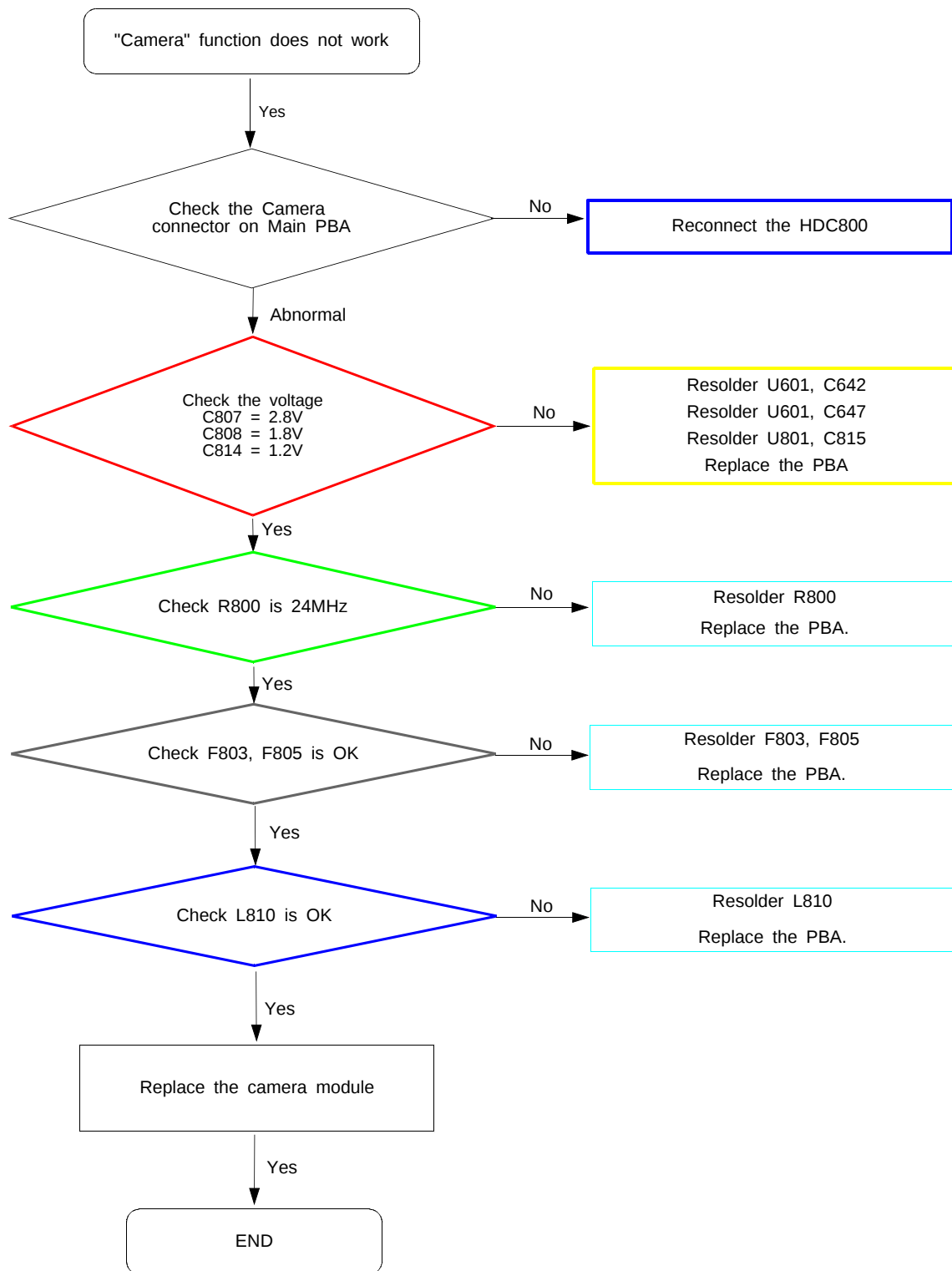


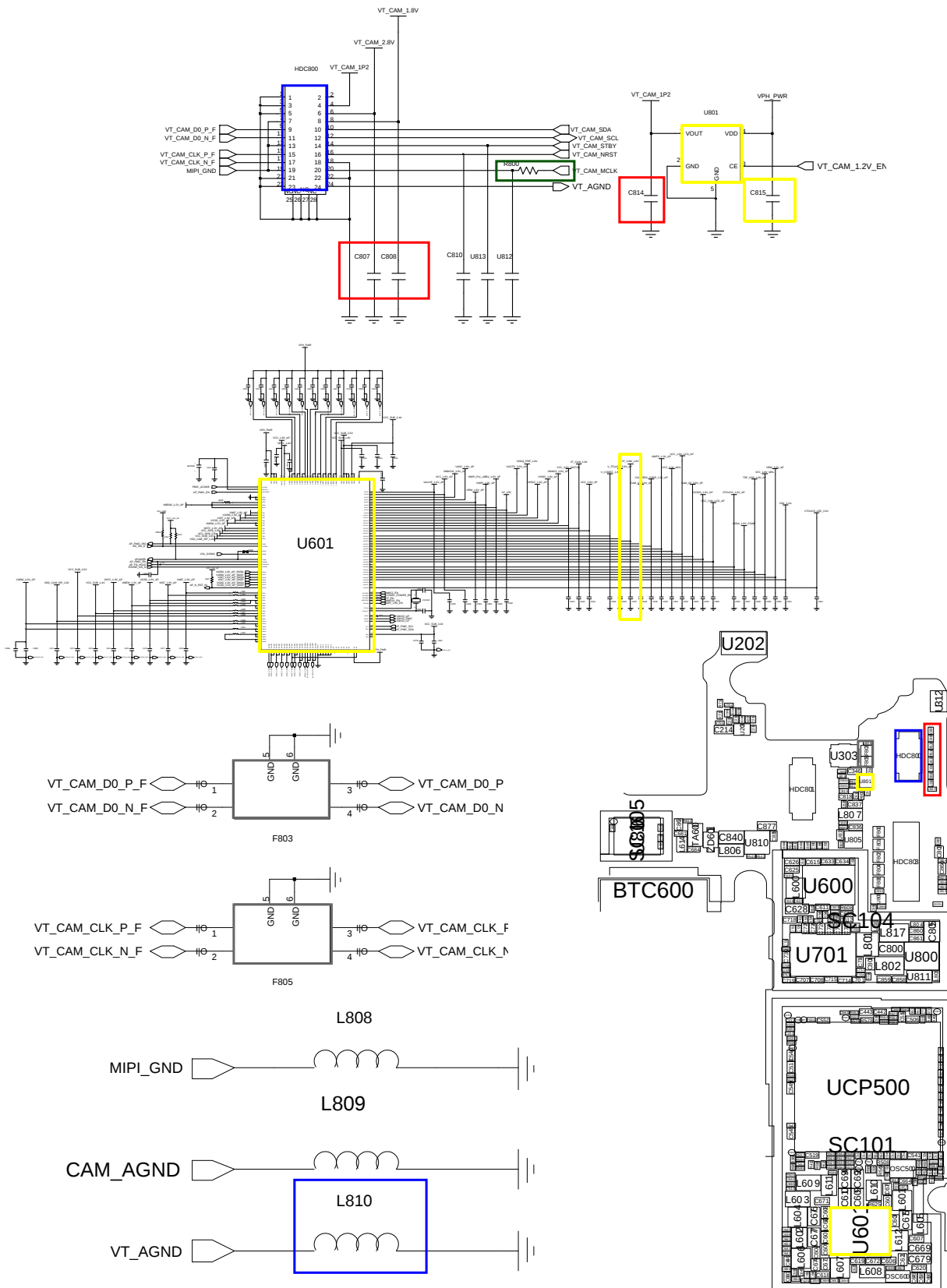
8-3-15. 16M CAM



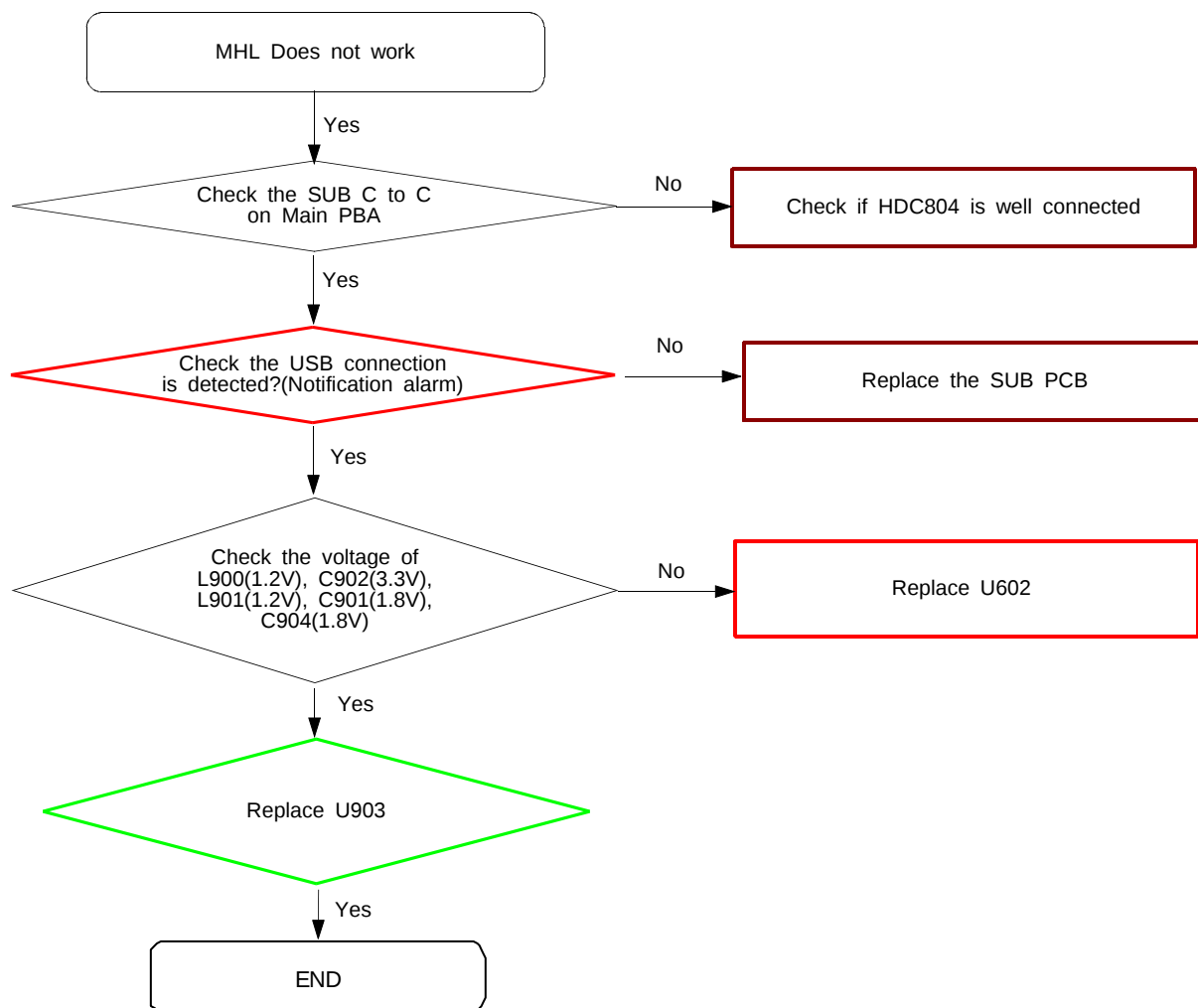


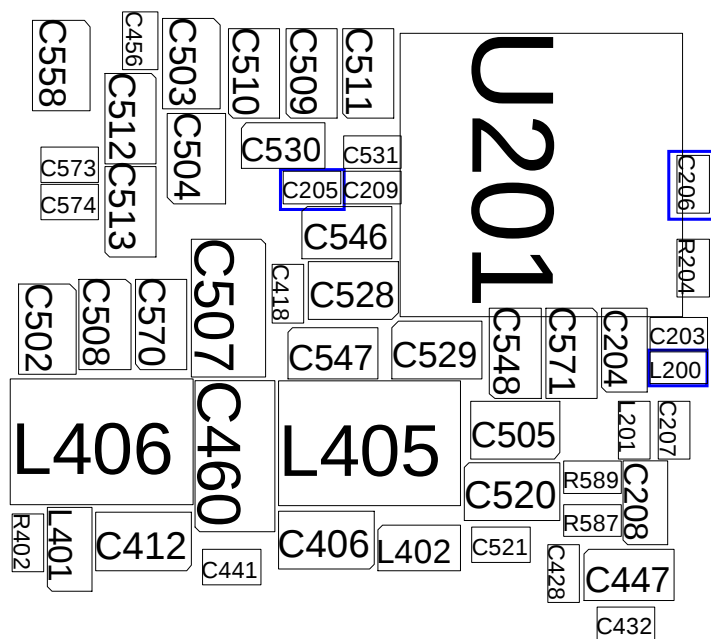
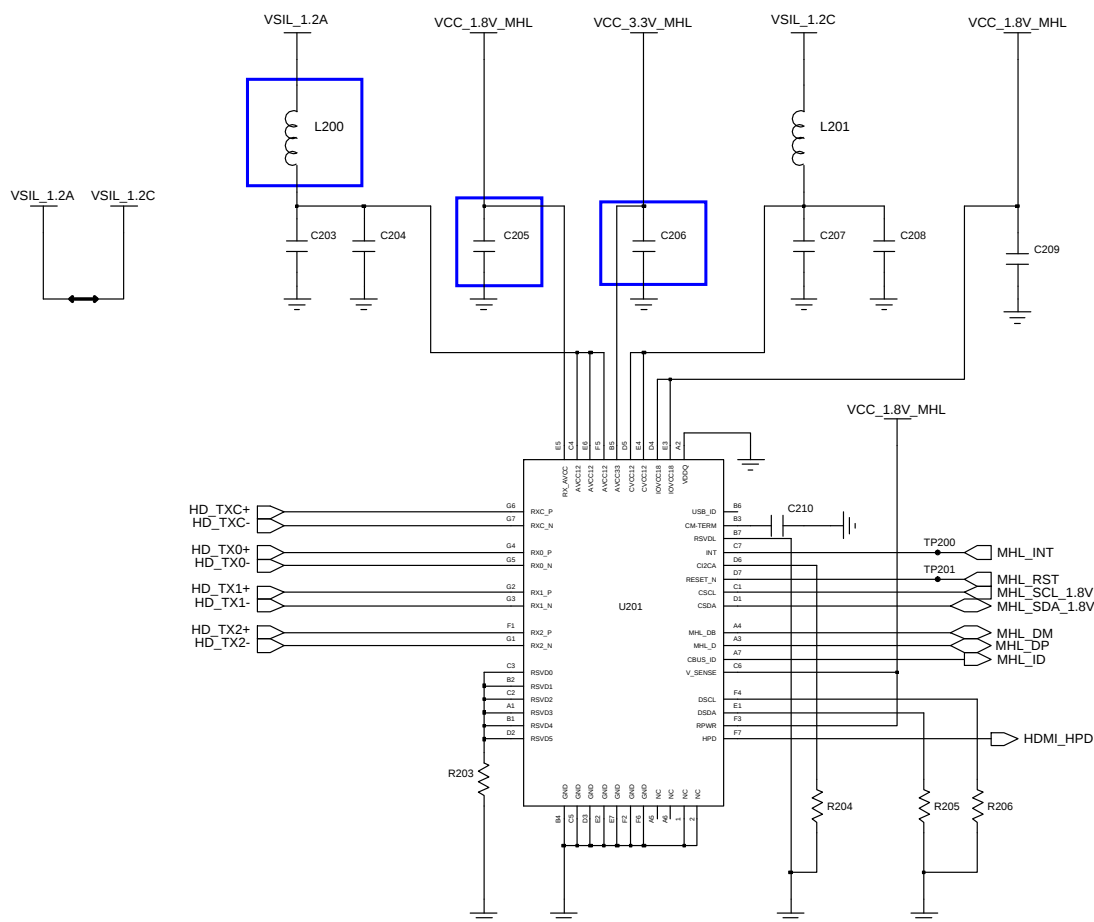
8-3-16. VT CAM



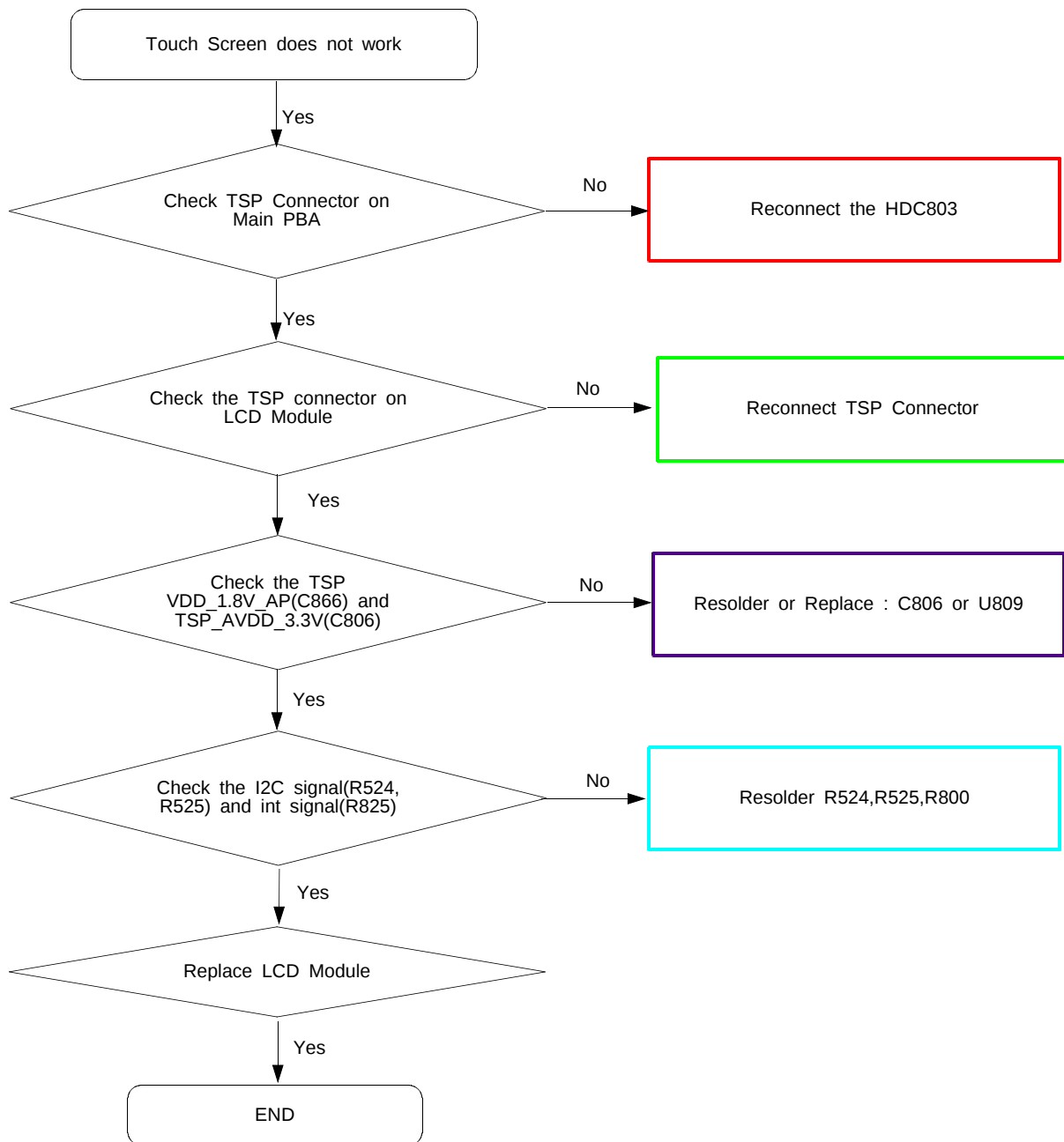


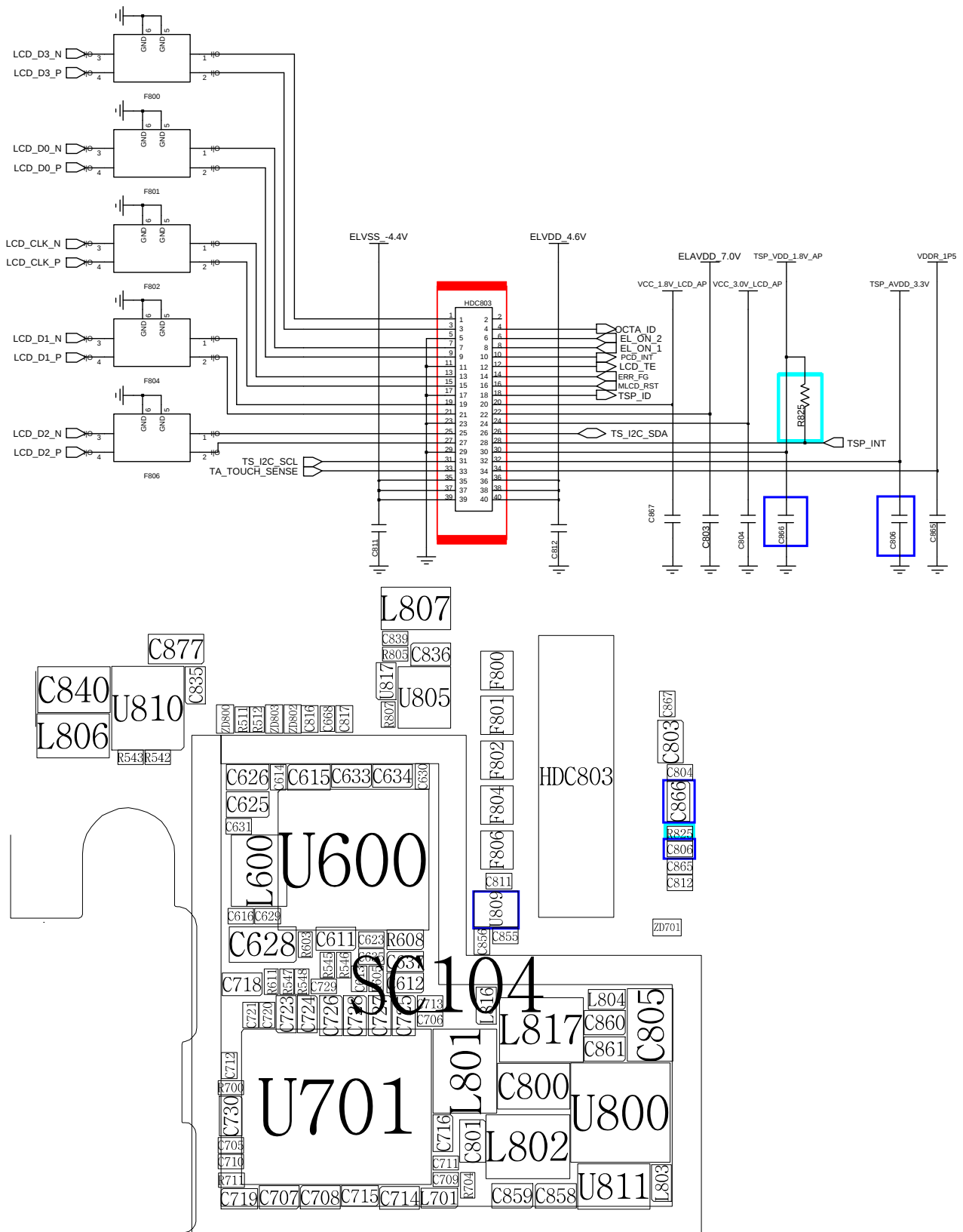
8-3-17. MHL

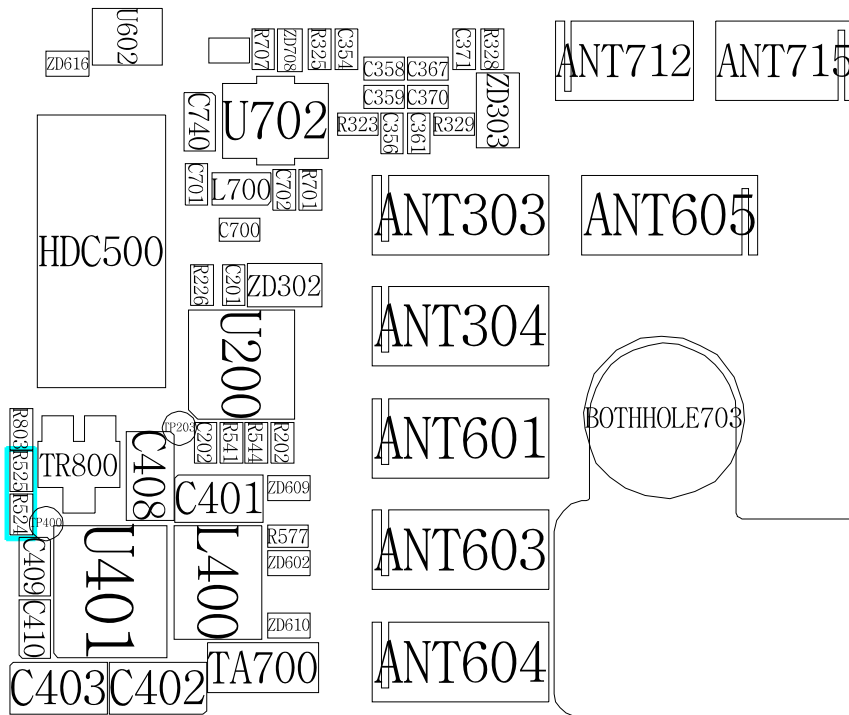




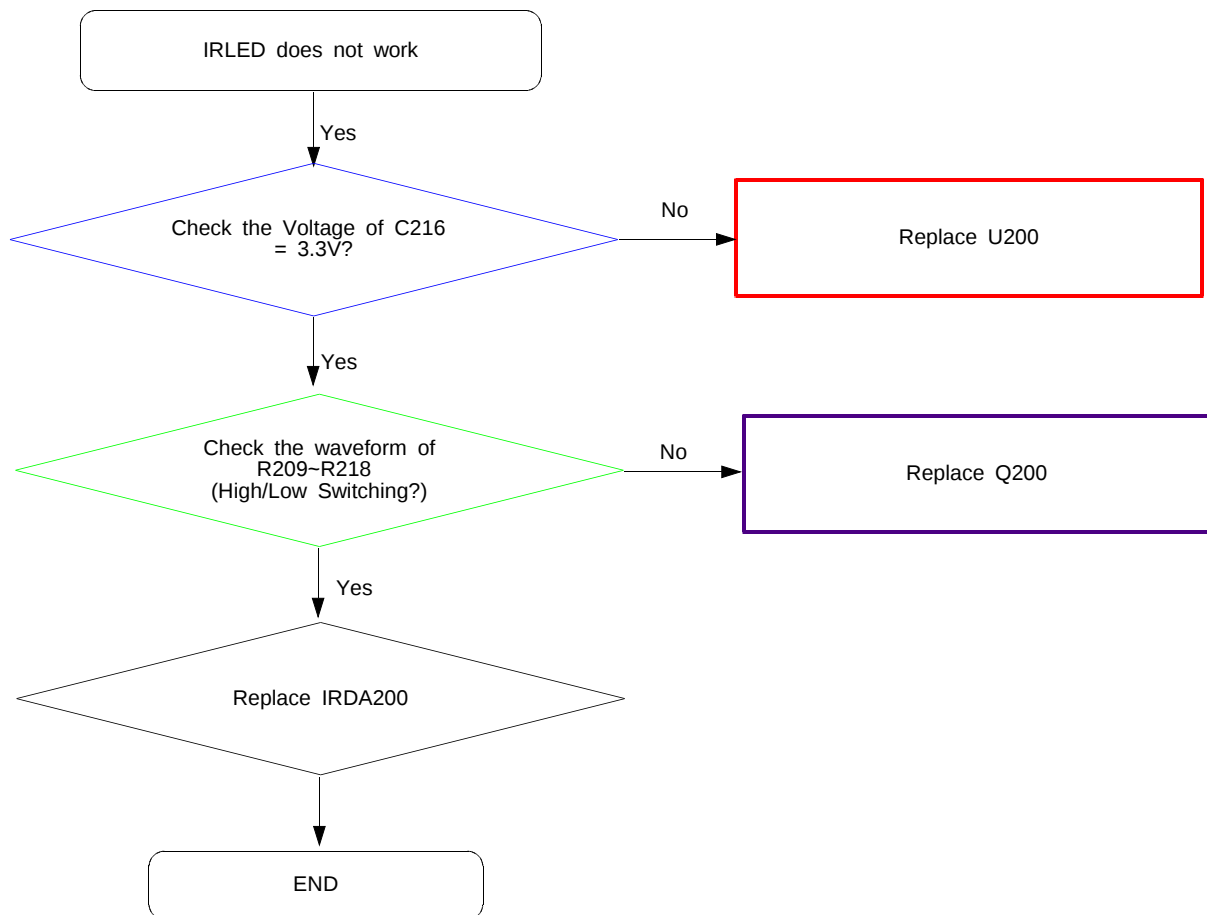
8-3-18. TSP

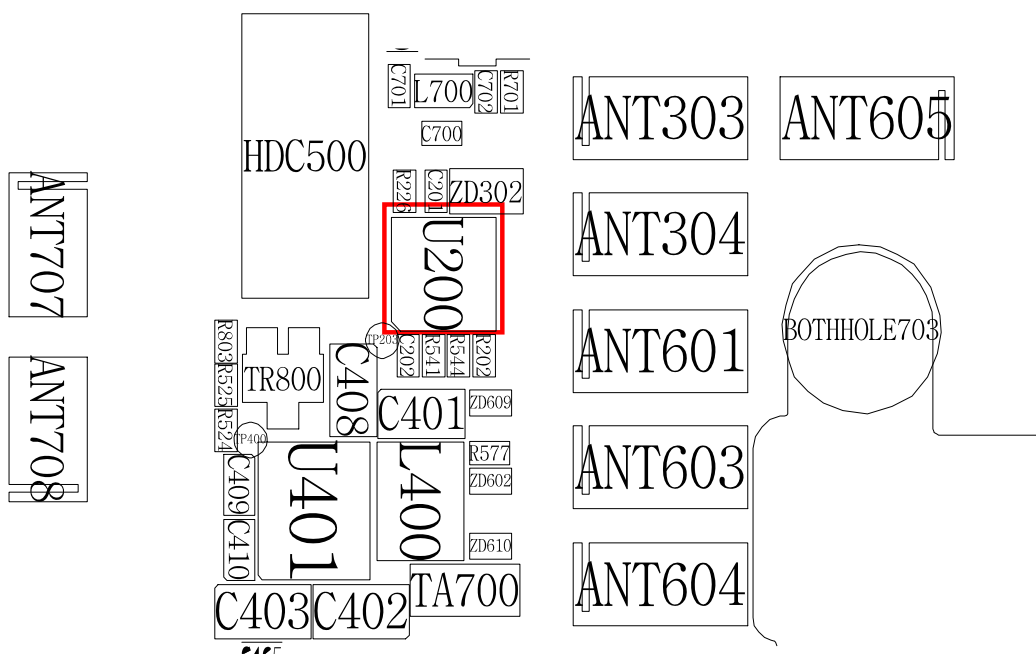
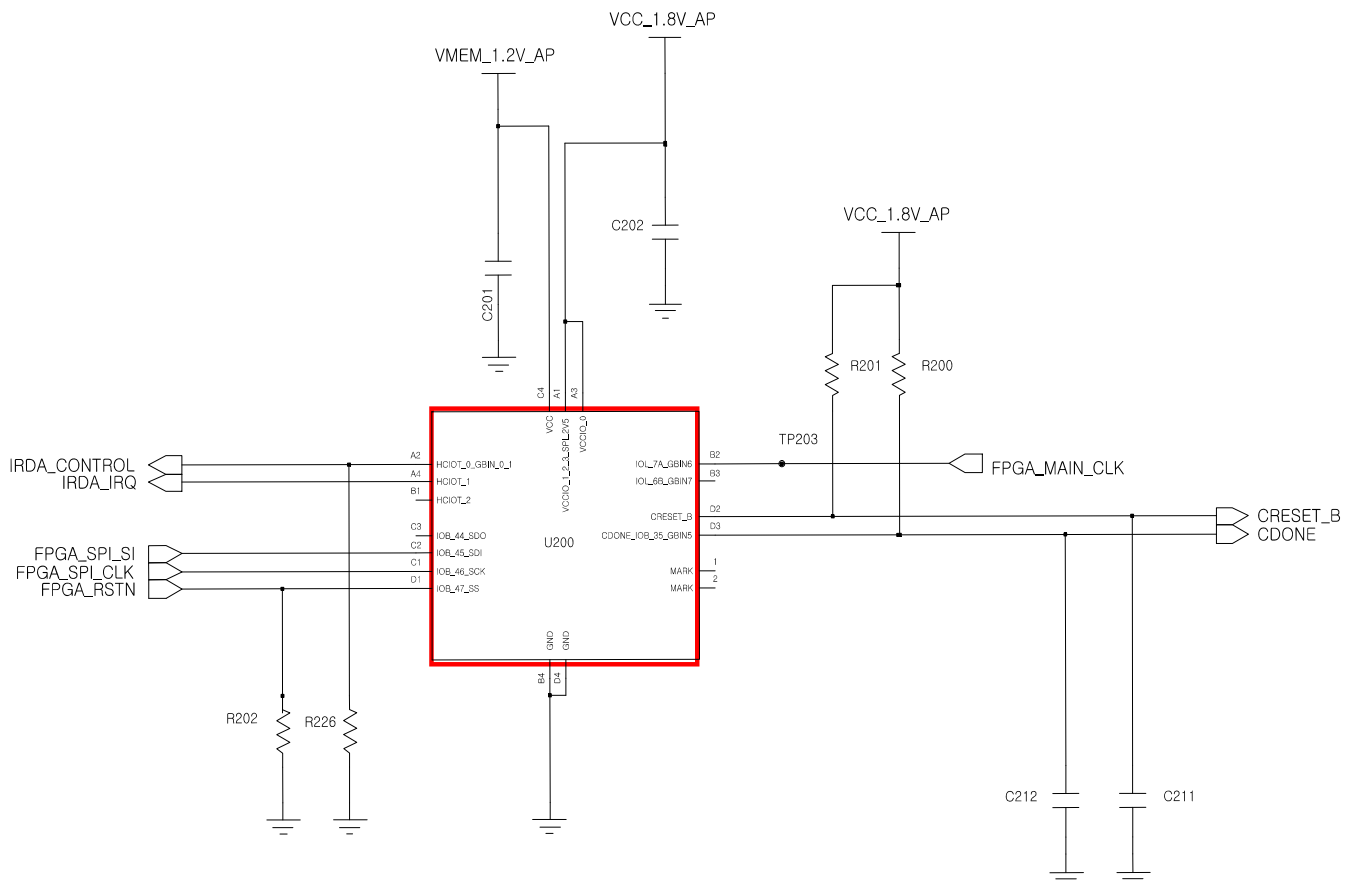


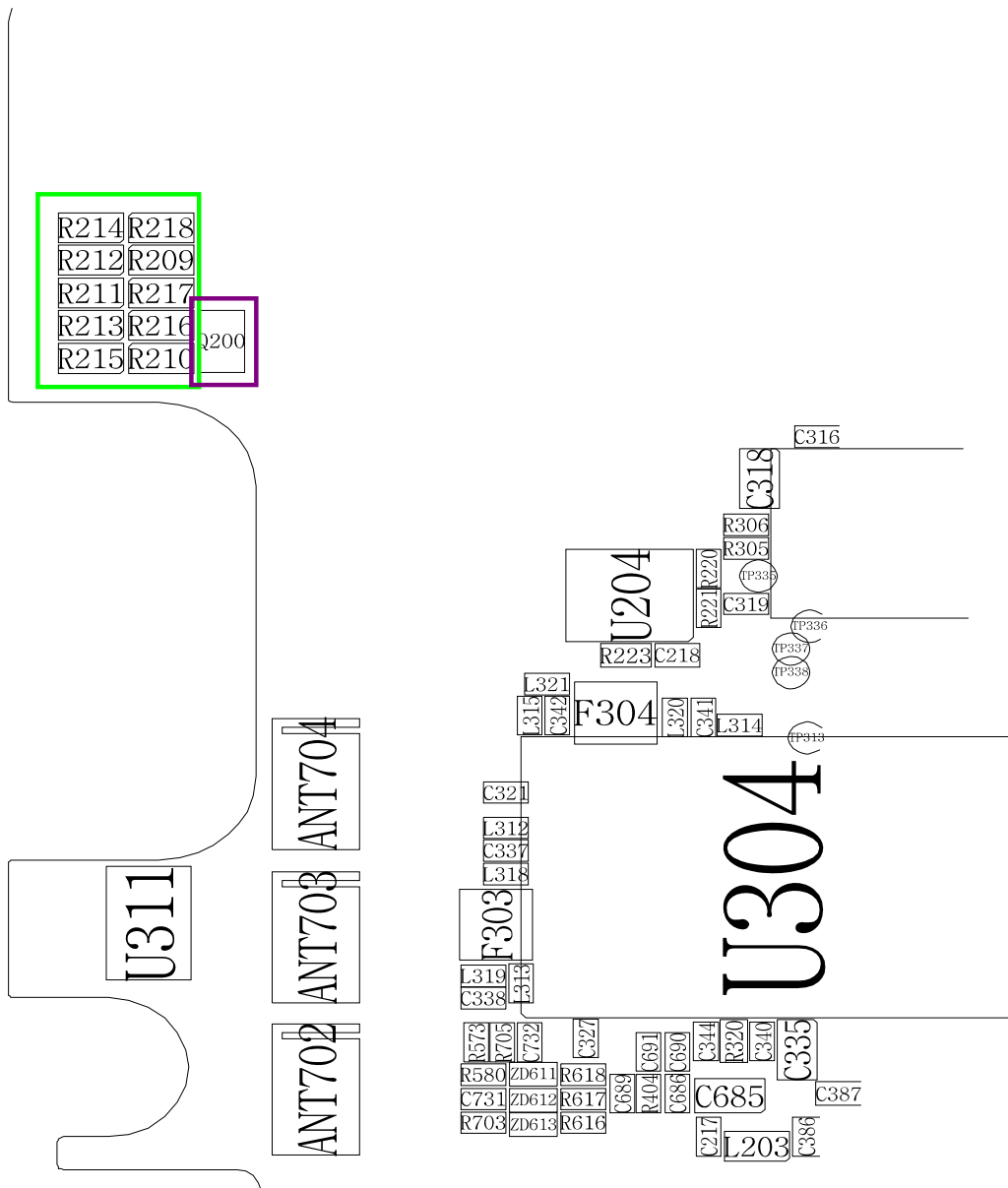




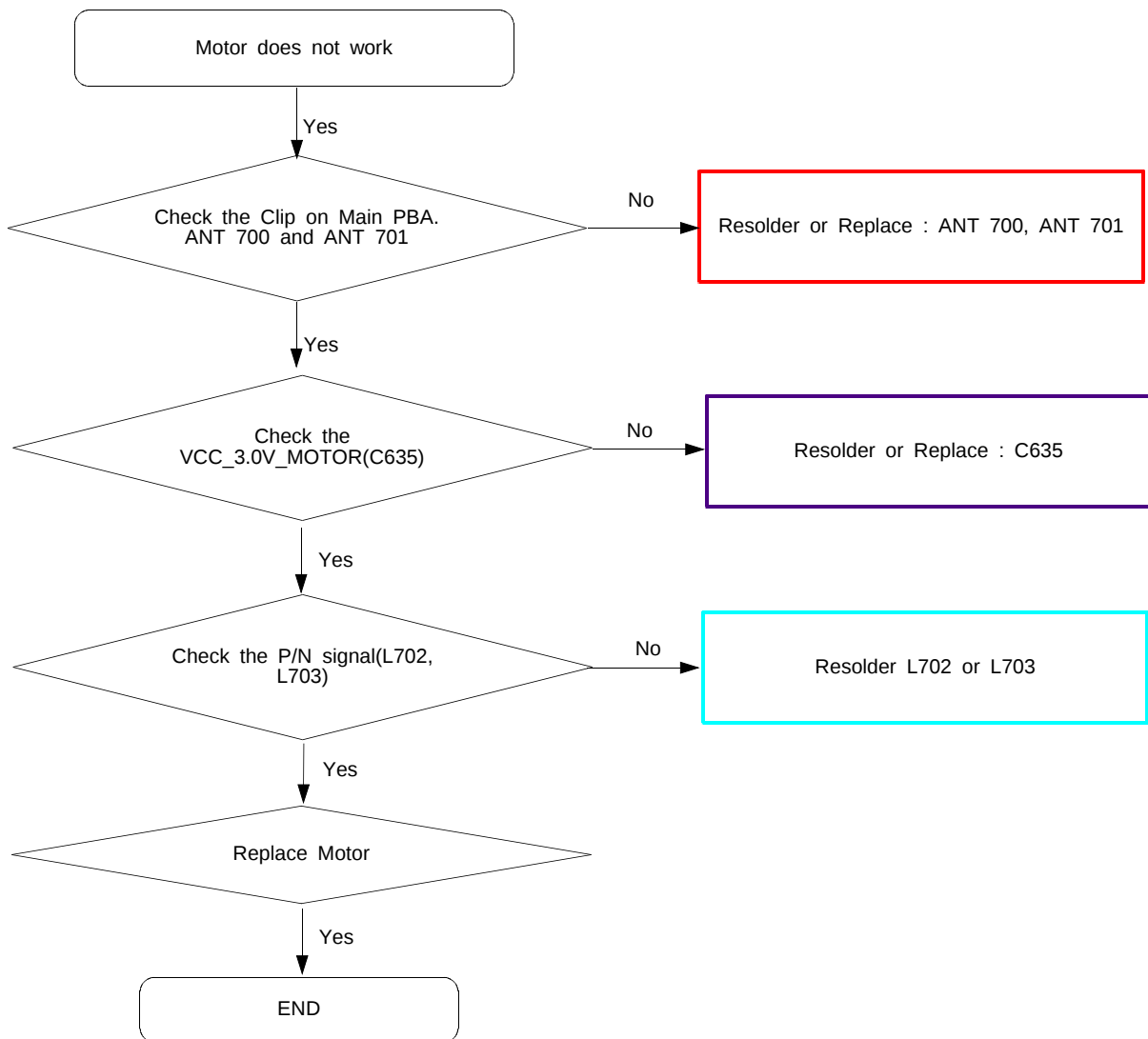
8-3-19. IRLED

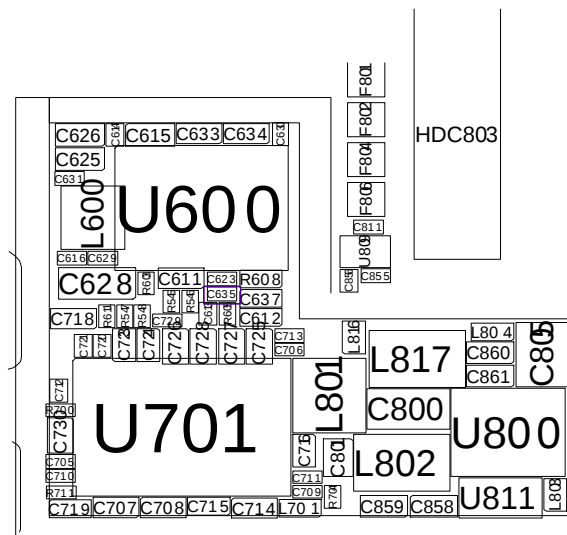
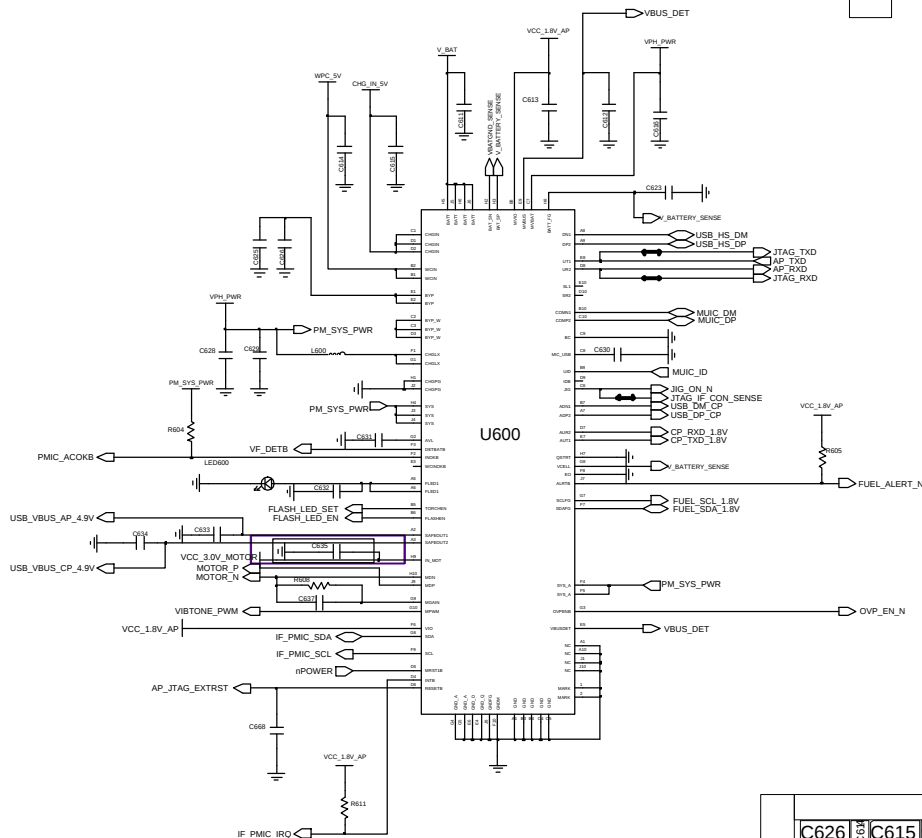
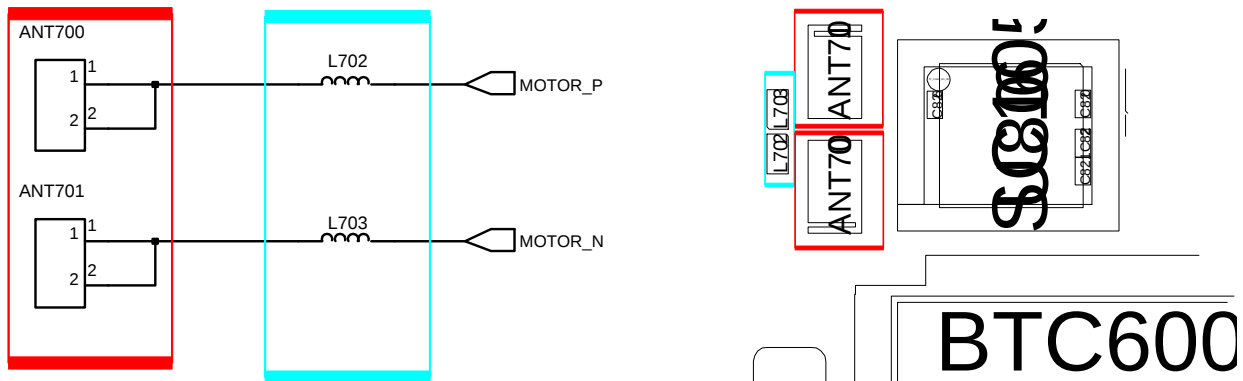




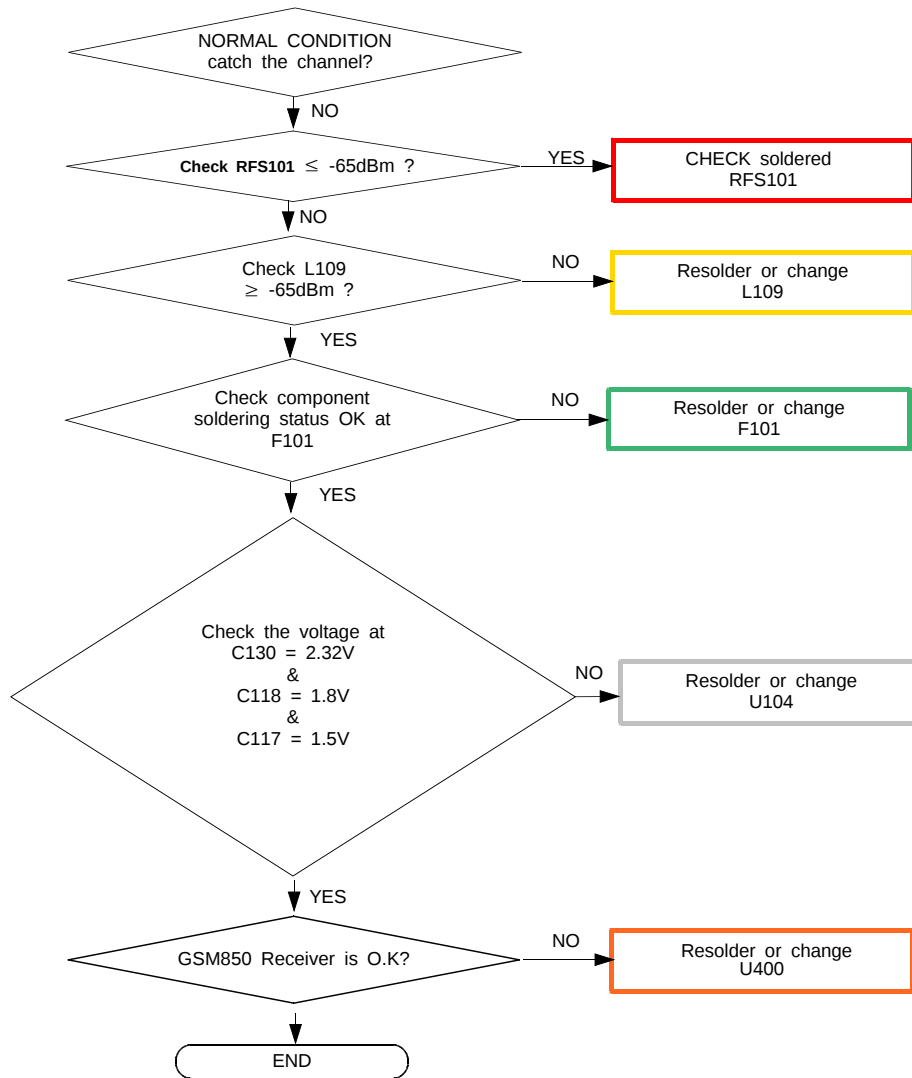


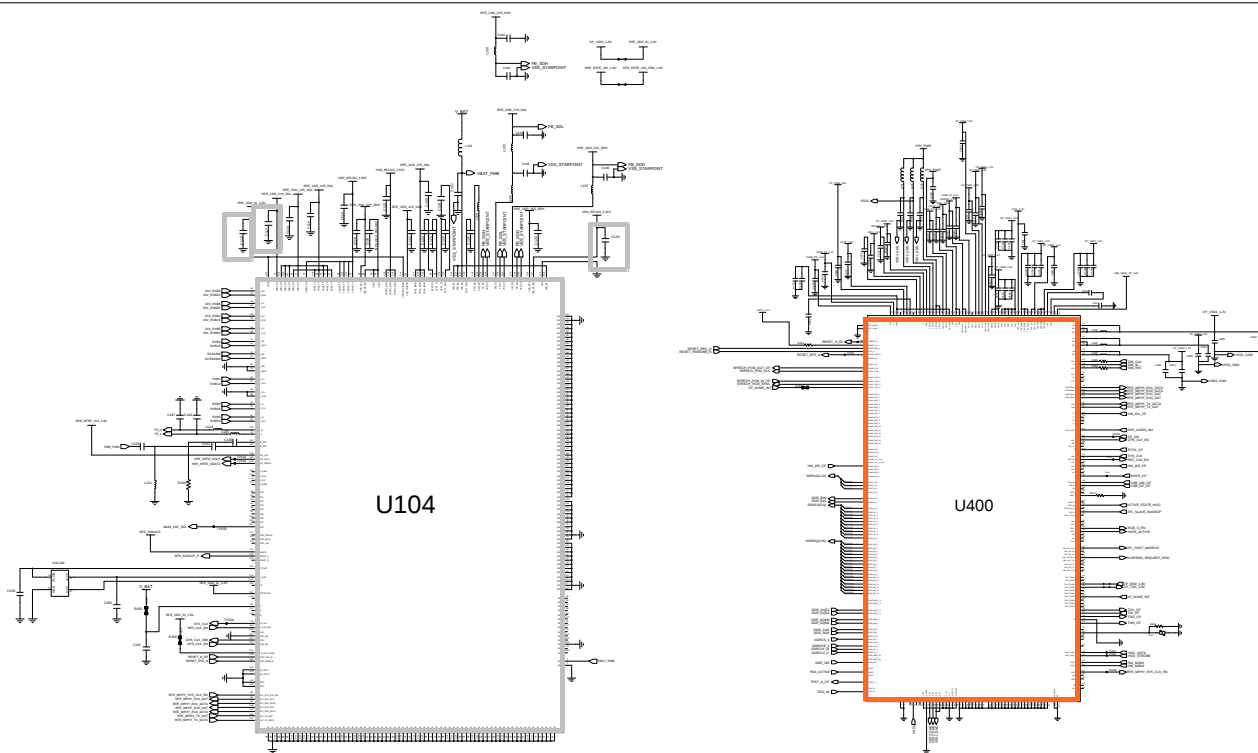
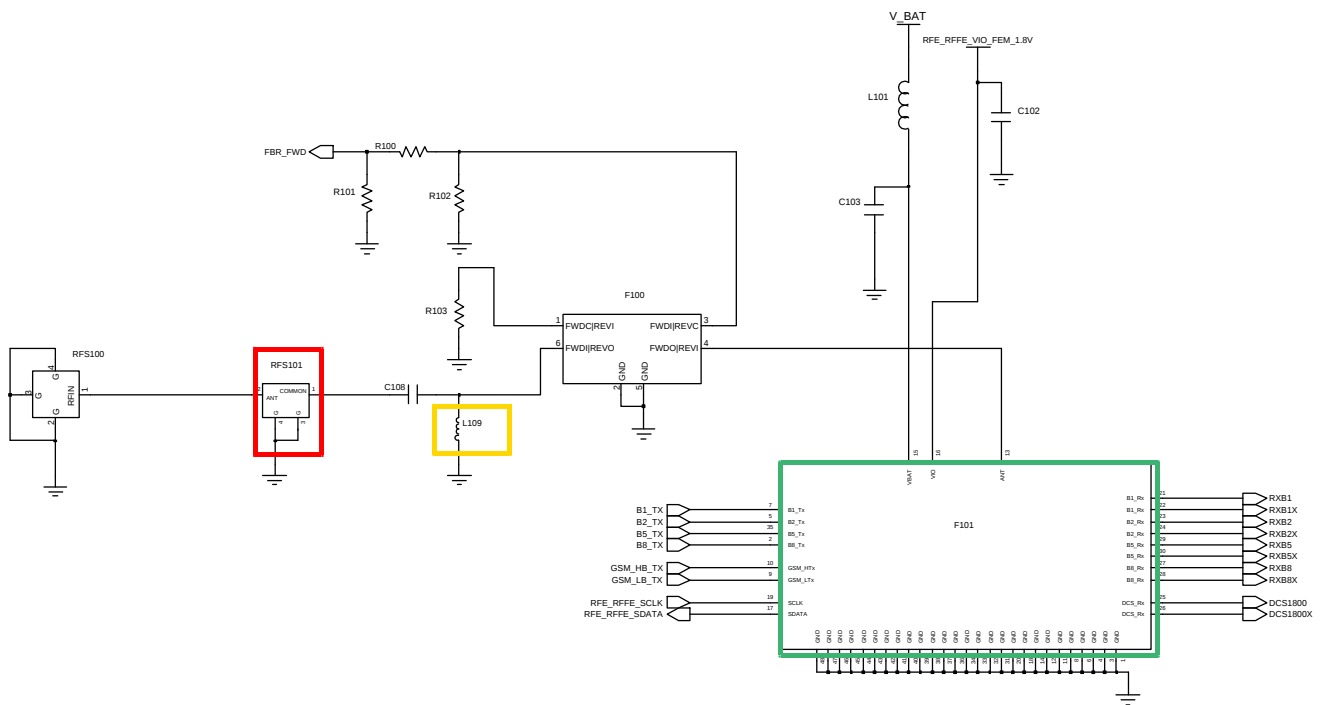
8-3-20. Motor



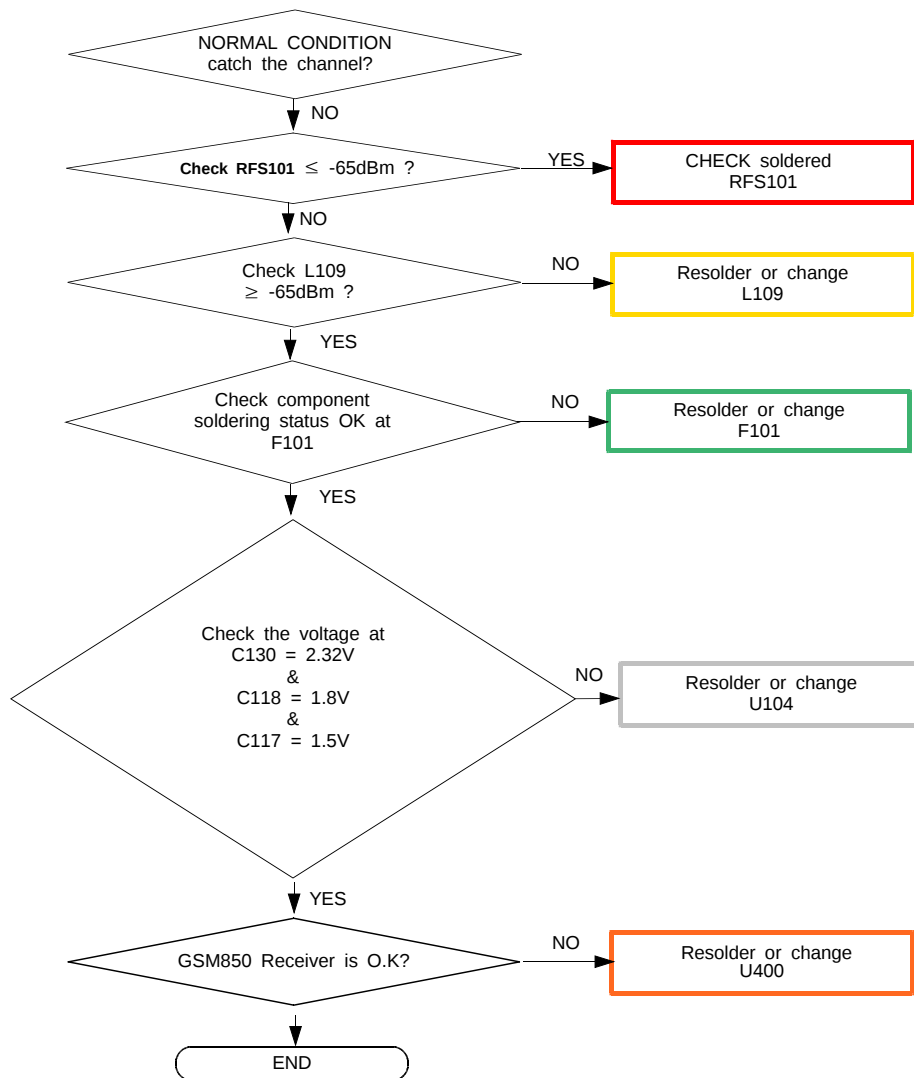


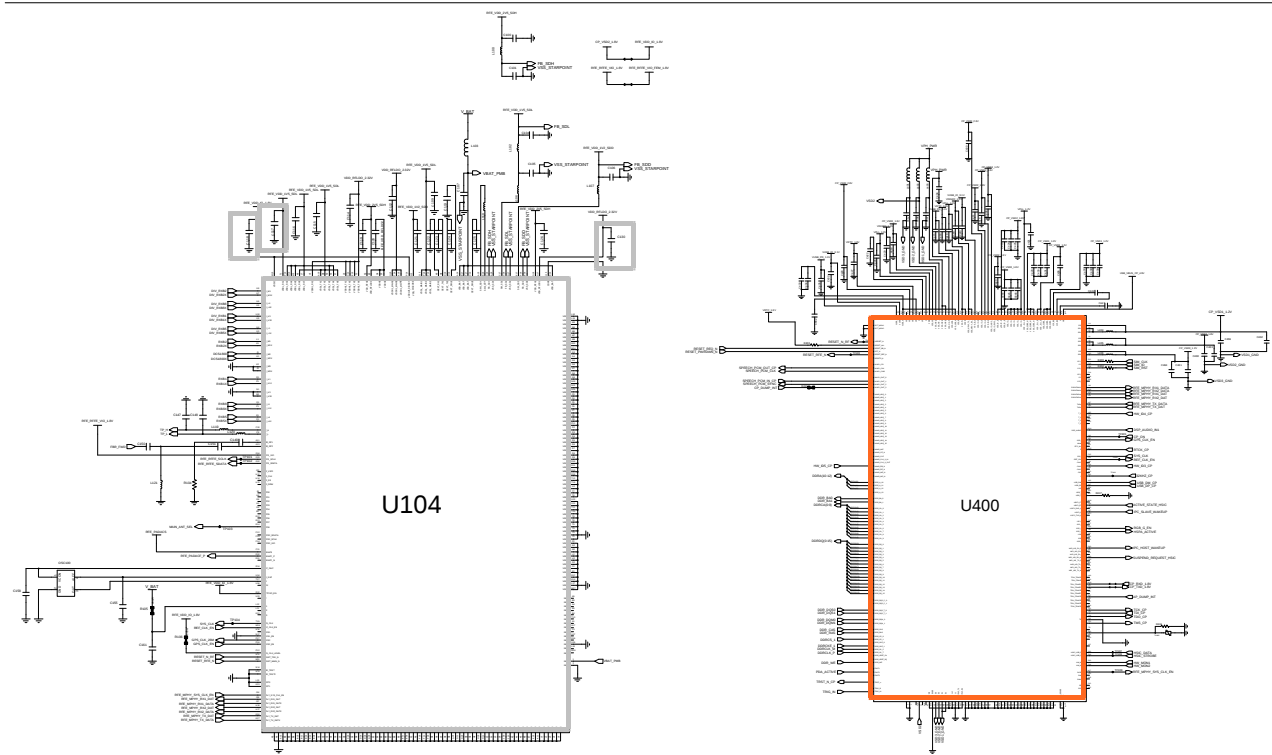
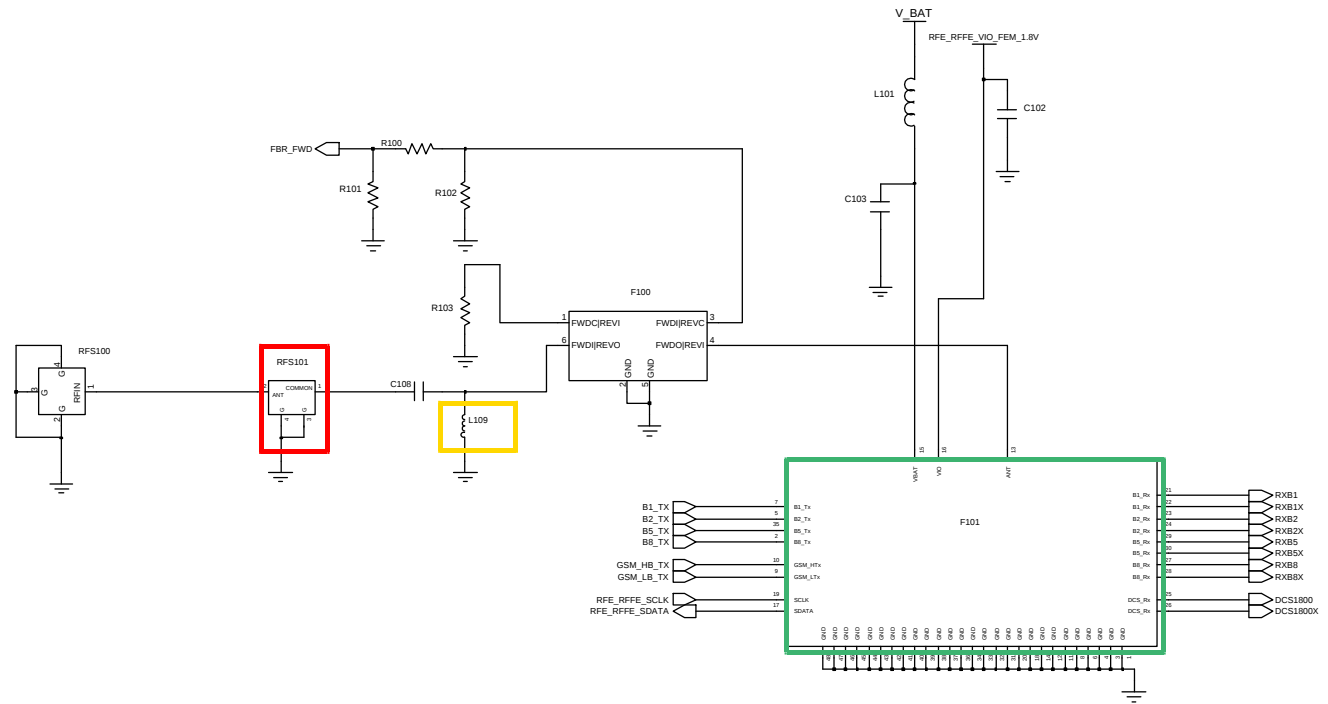
8-3-21. GSM850 RX

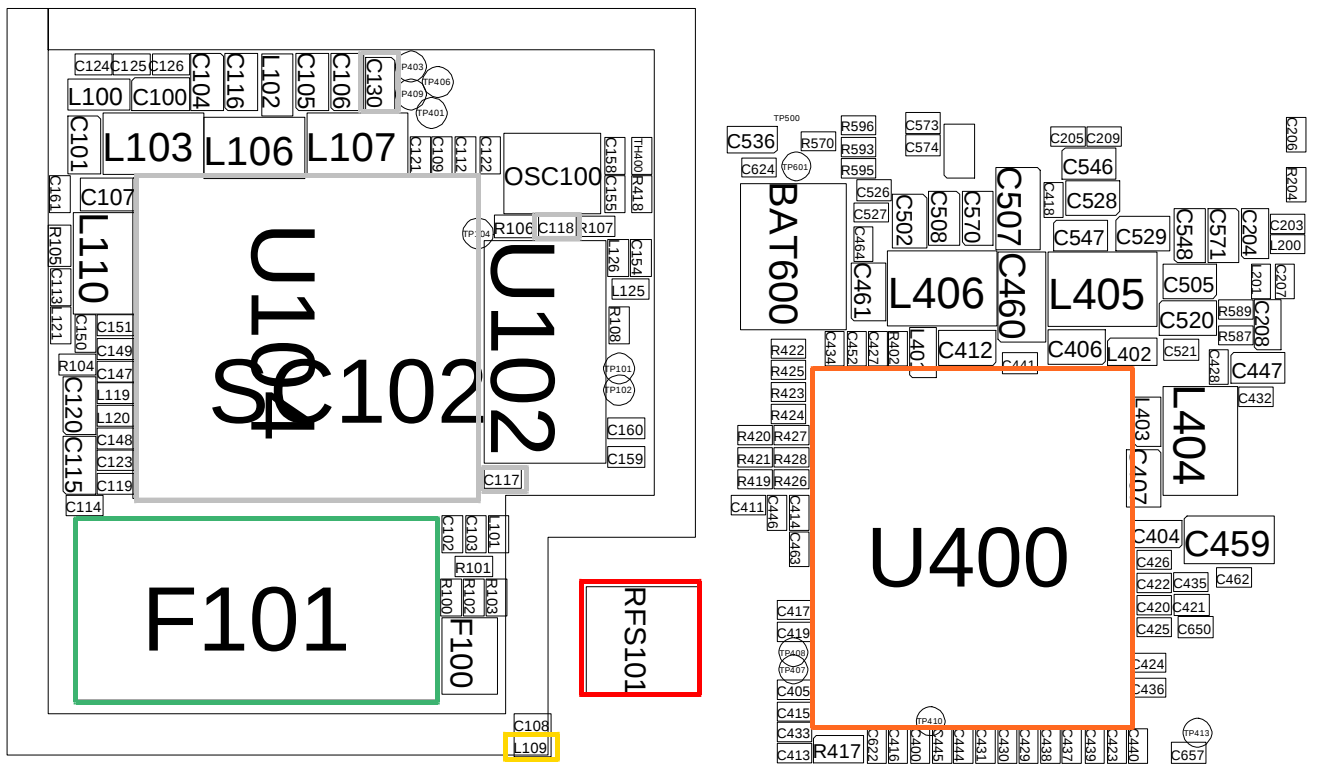




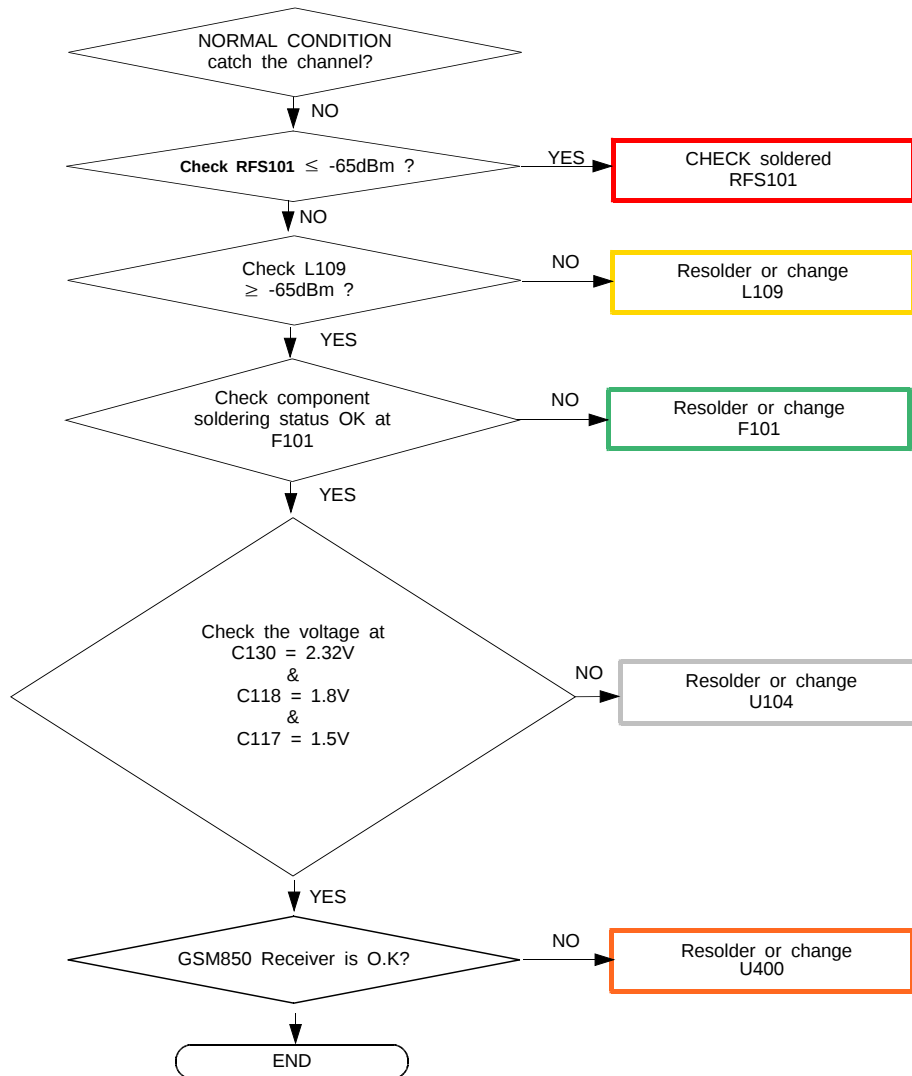
8-3-22. GSM900 RX

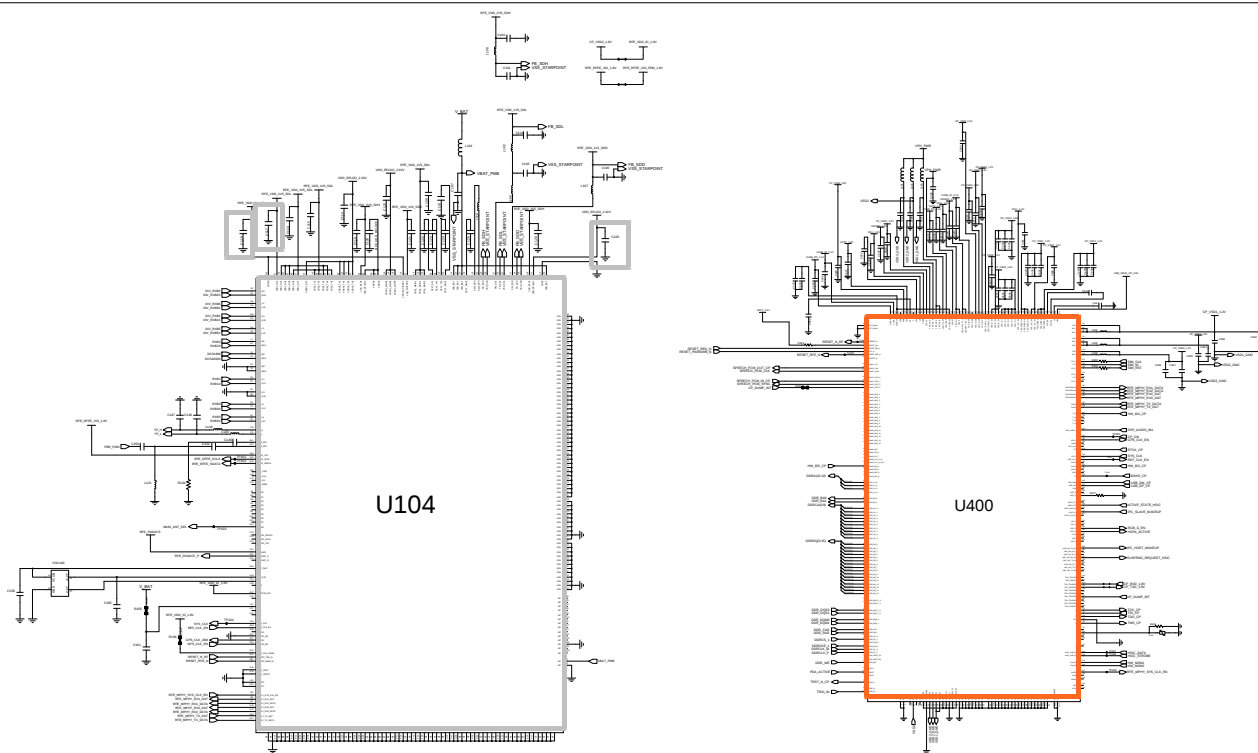
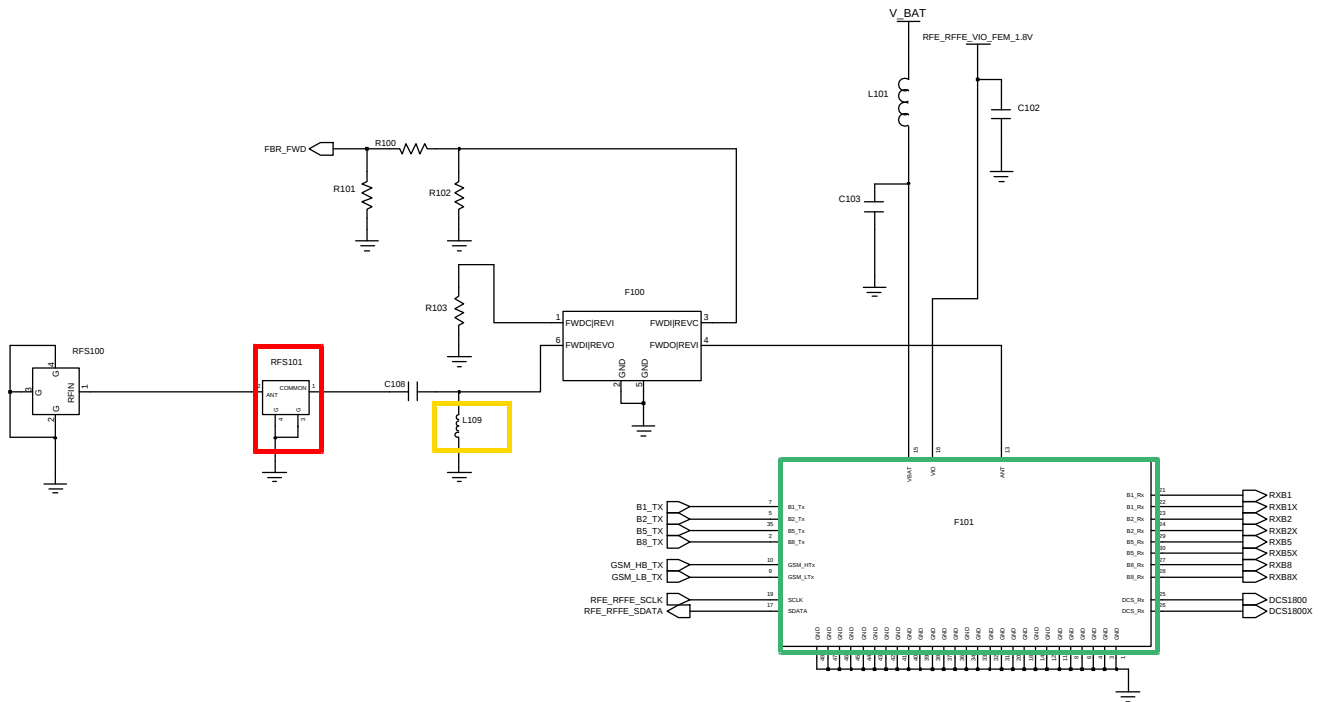


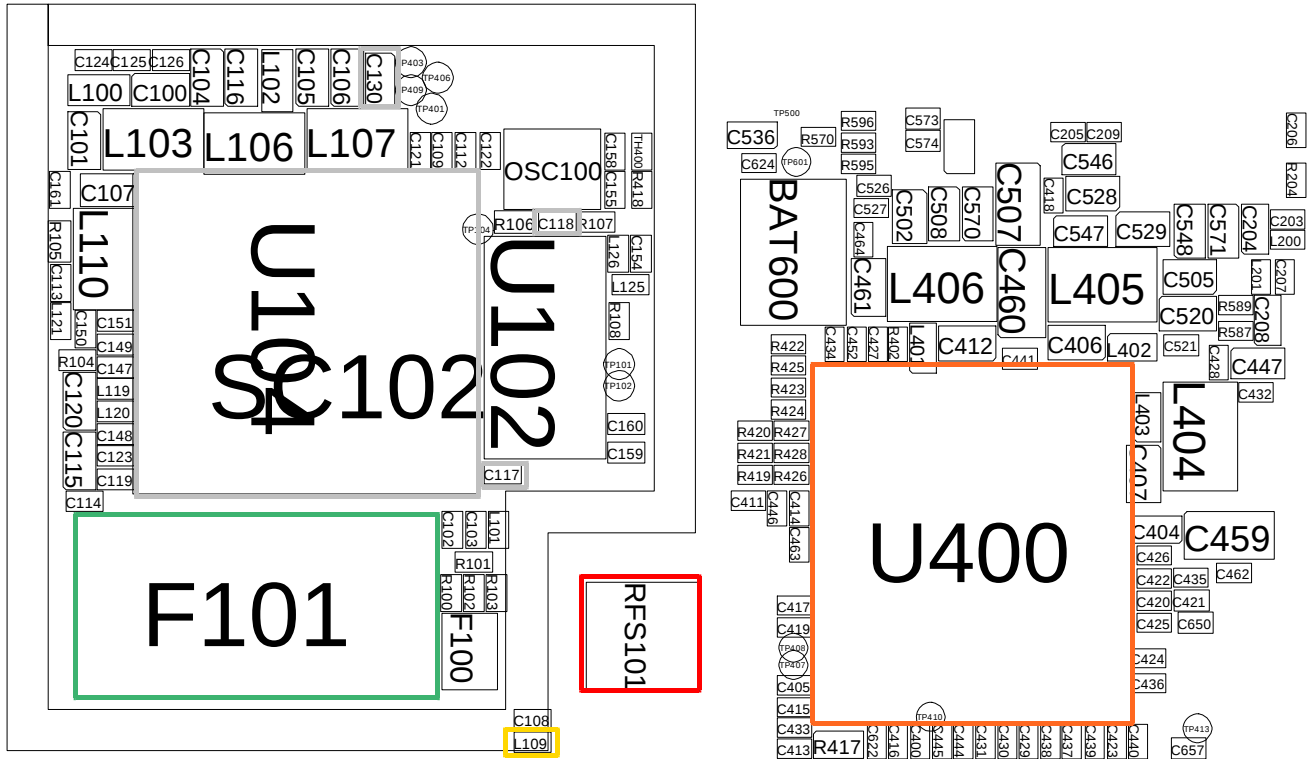




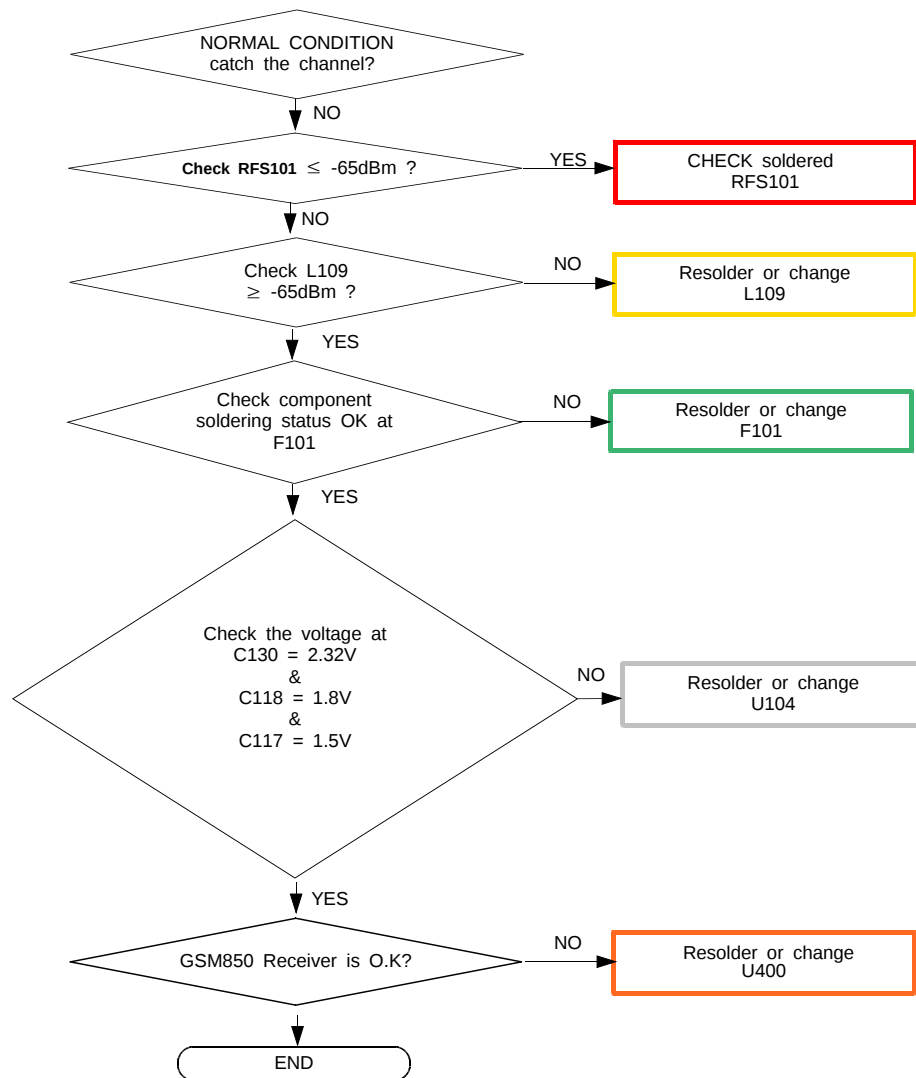
8-3-23. GSM1800/1900 RX



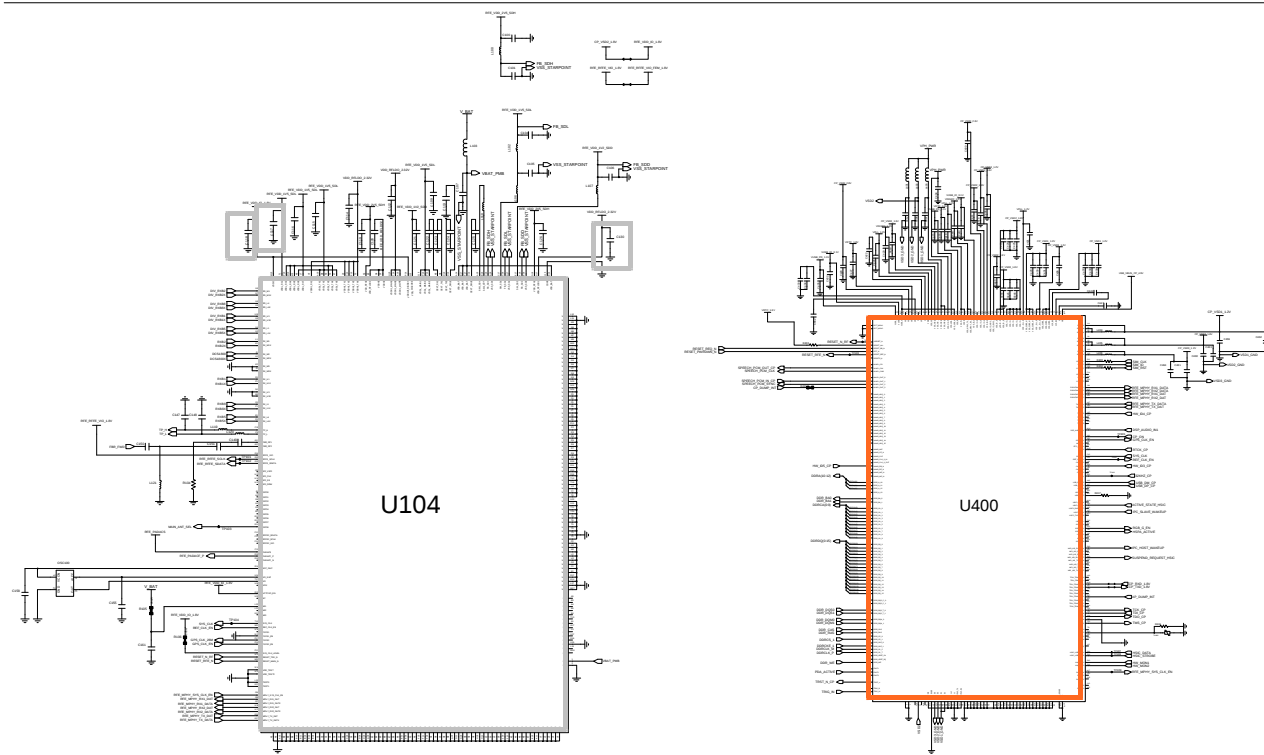
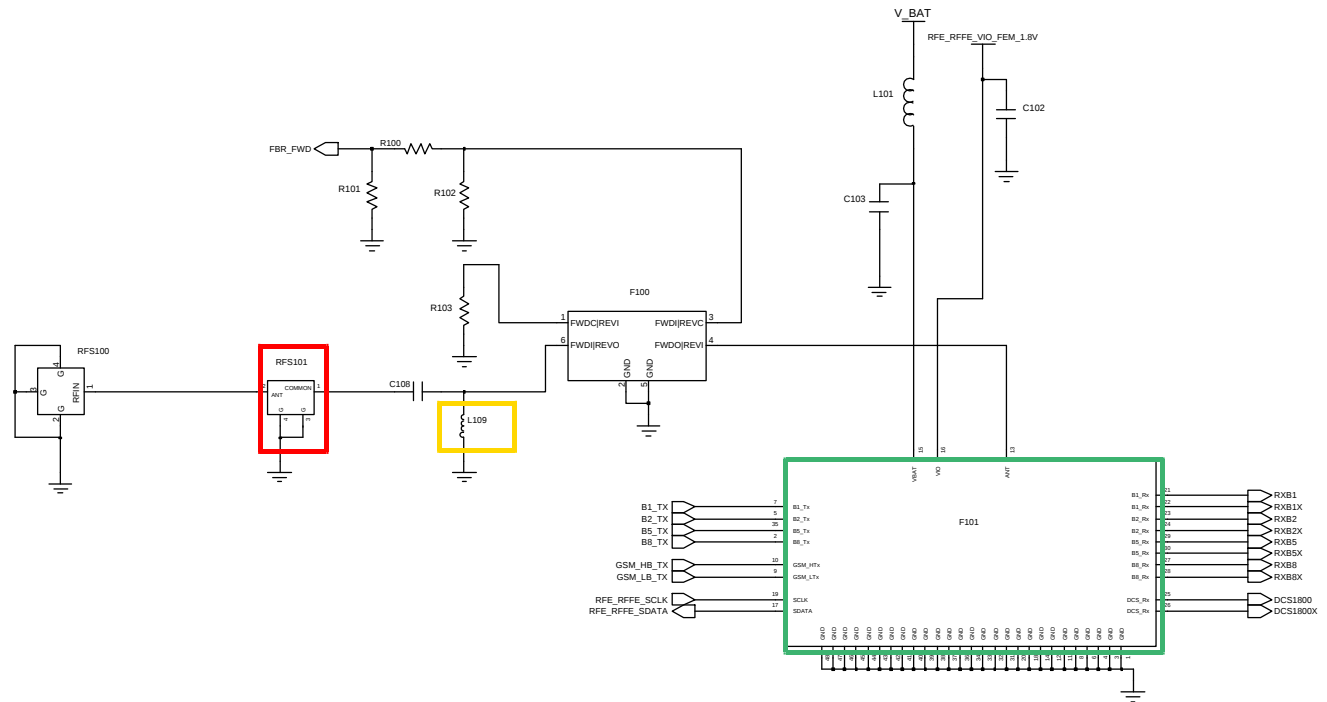


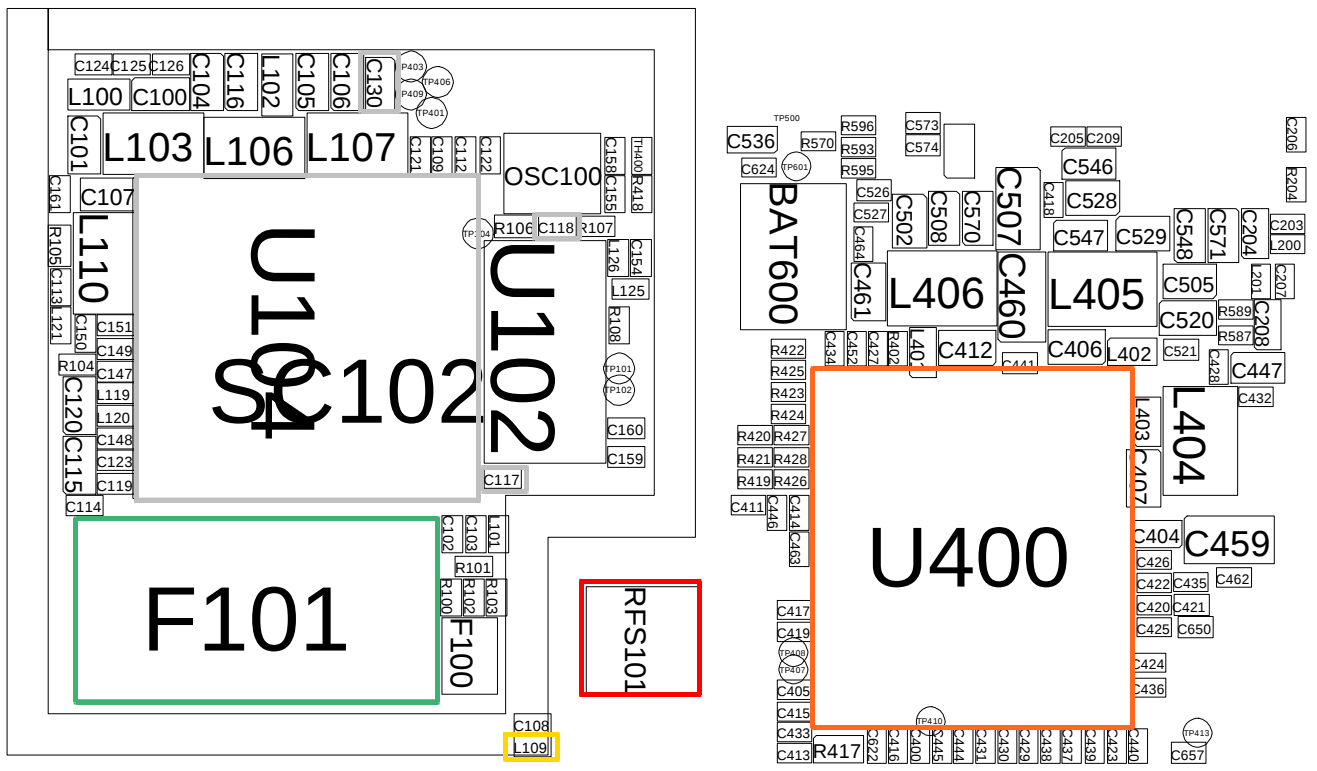


8-3-24. WCDMA 2100 RX

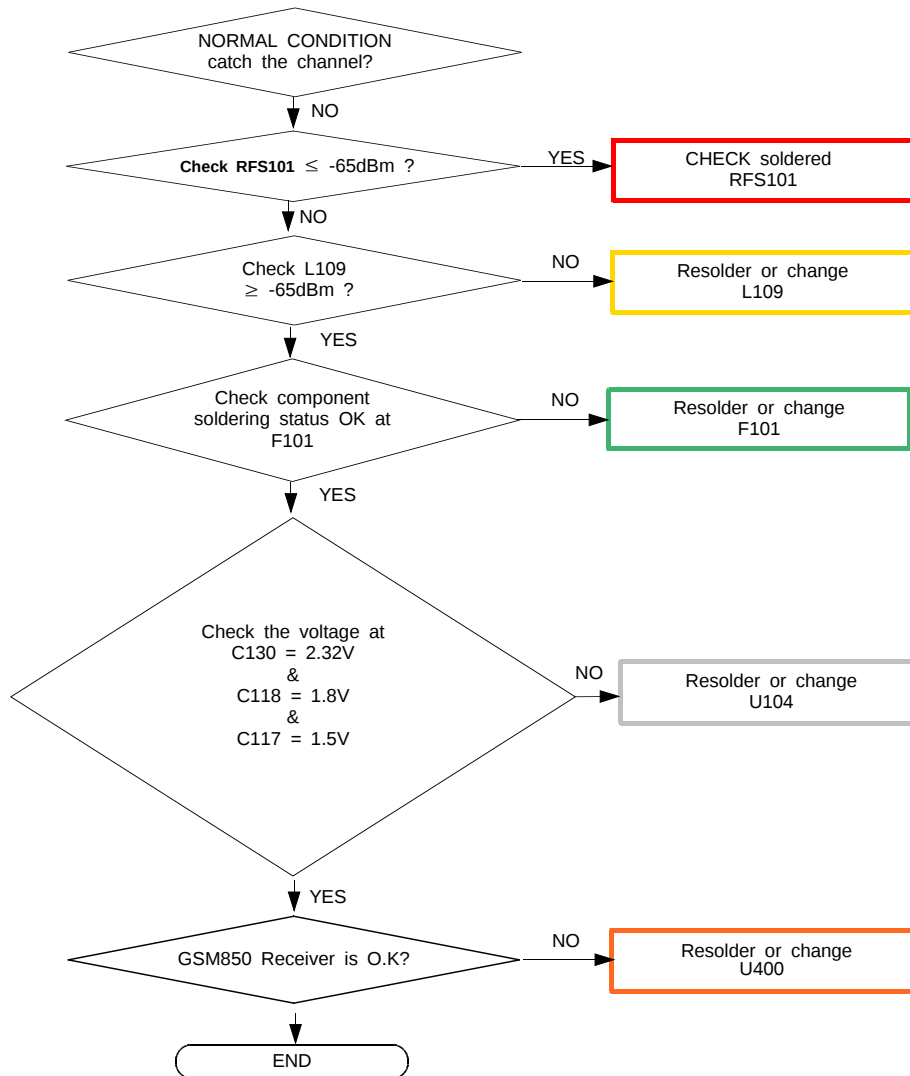


CONTINUOUS RX ON
RF INPUT : 9800CH
AMP : -50dBm

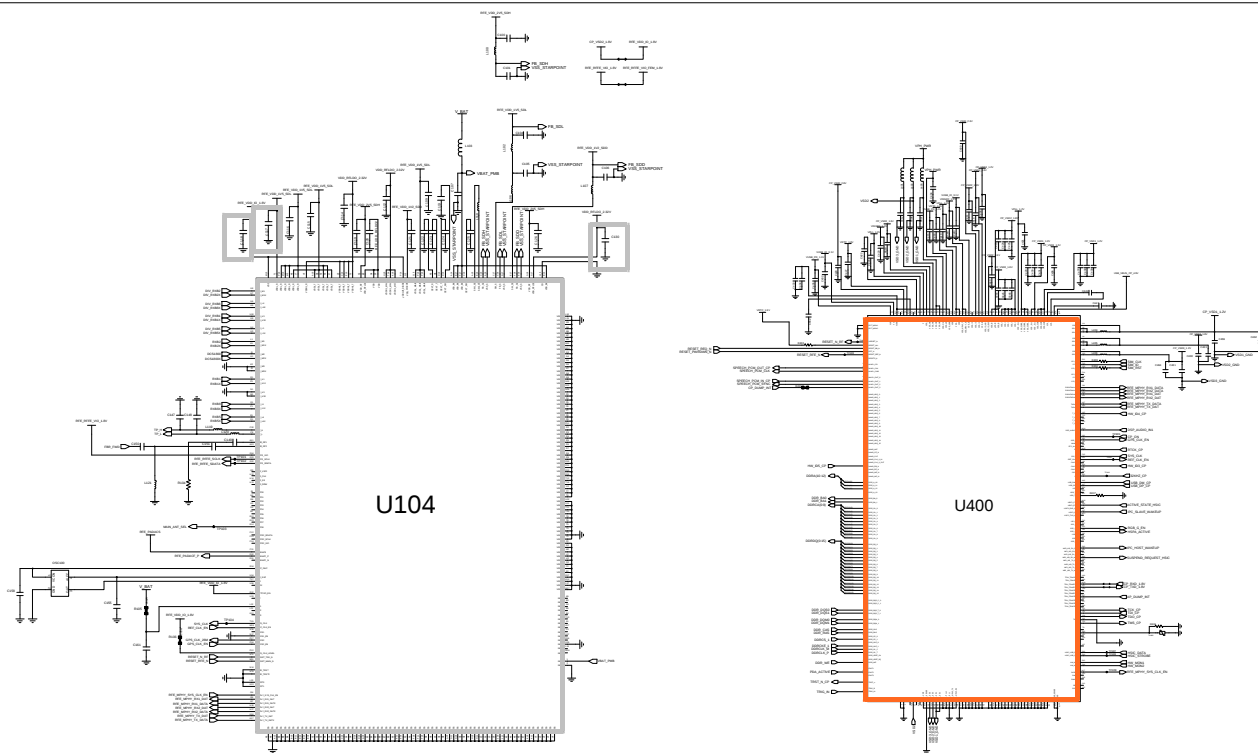
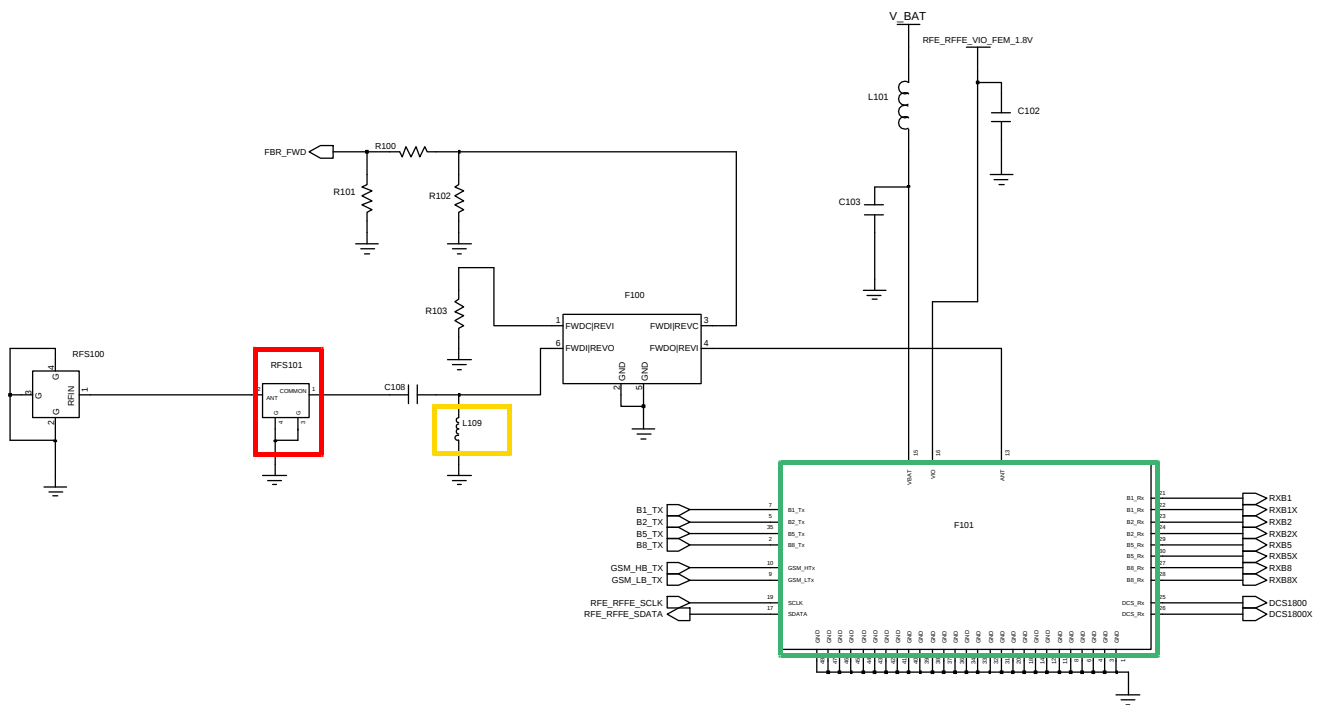


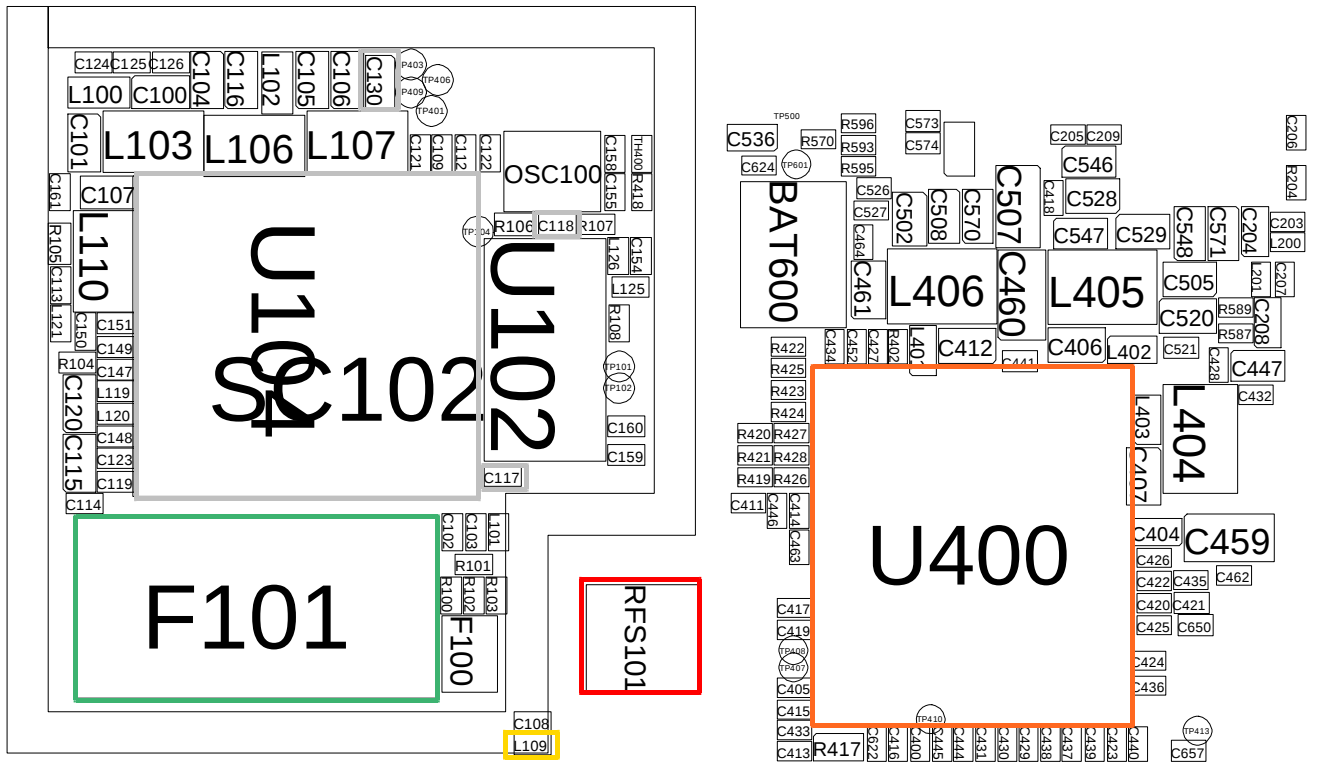


8-3-25. WCDMA 1900 RX

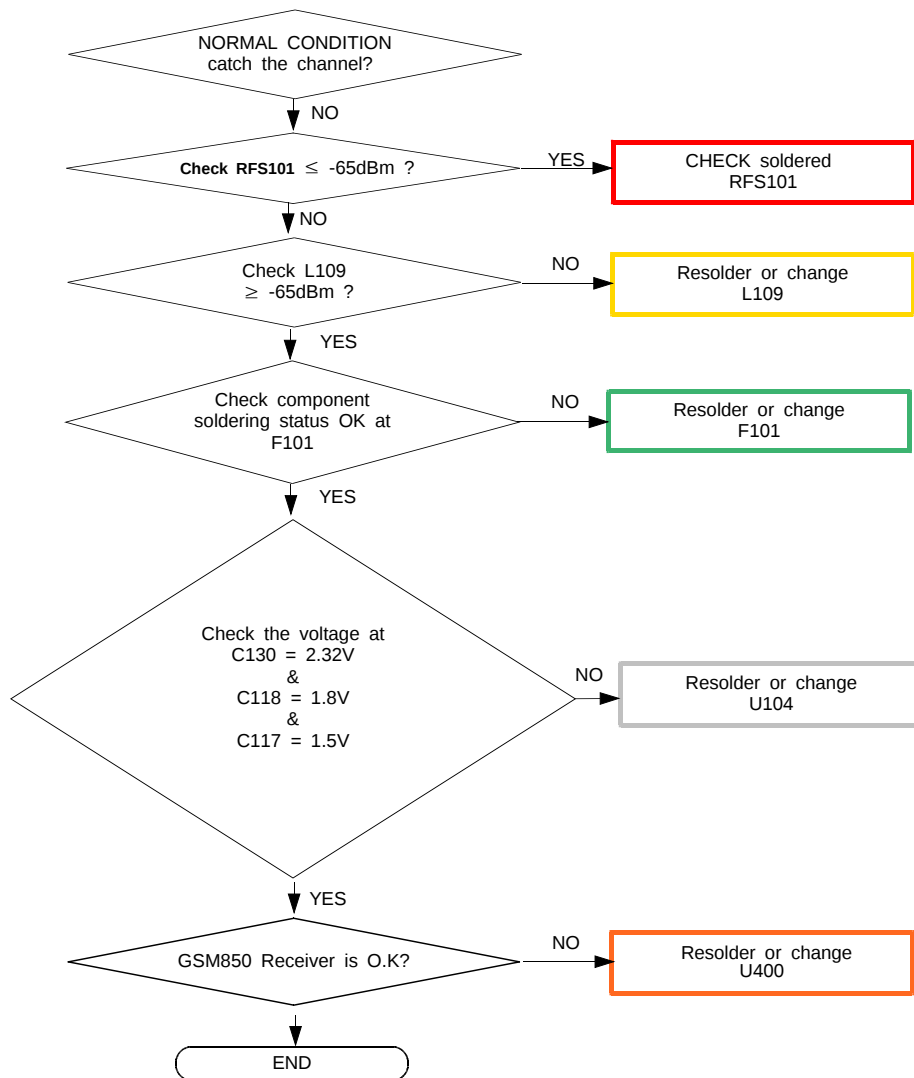


CONTINUOUS RX ON
RF INPUT : 9800CH
AMP : -50dBm

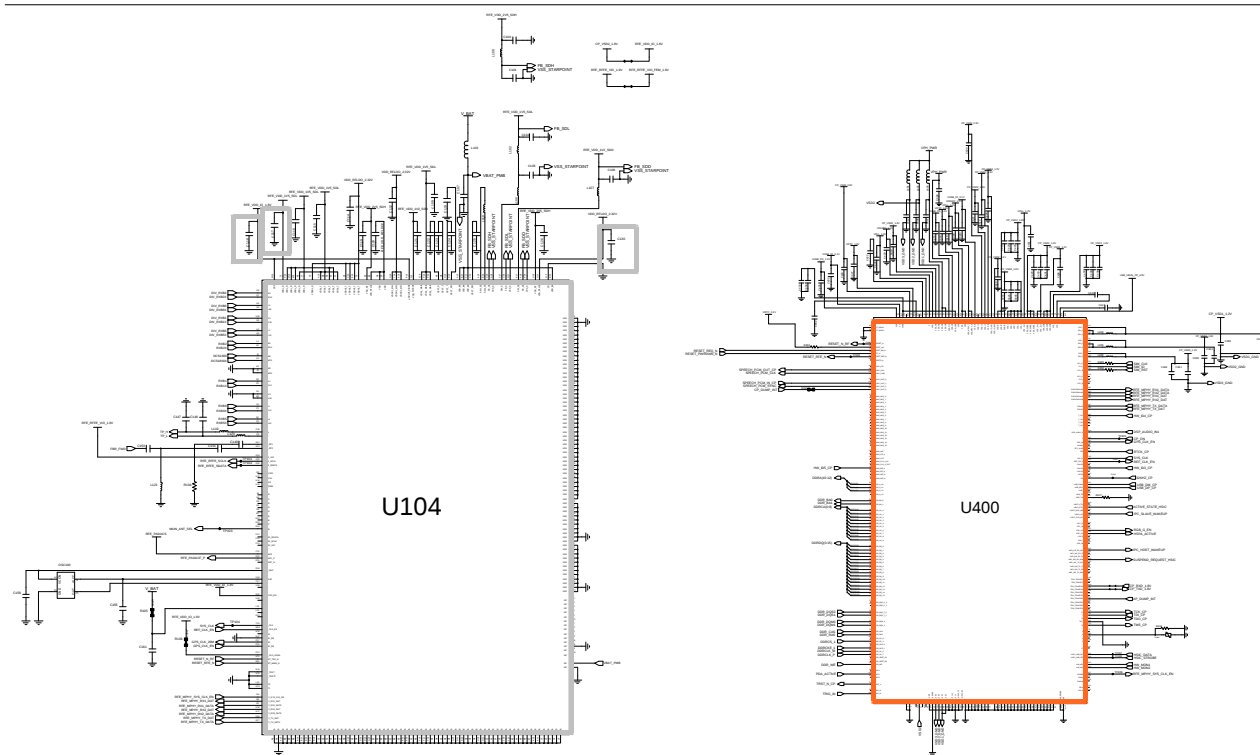
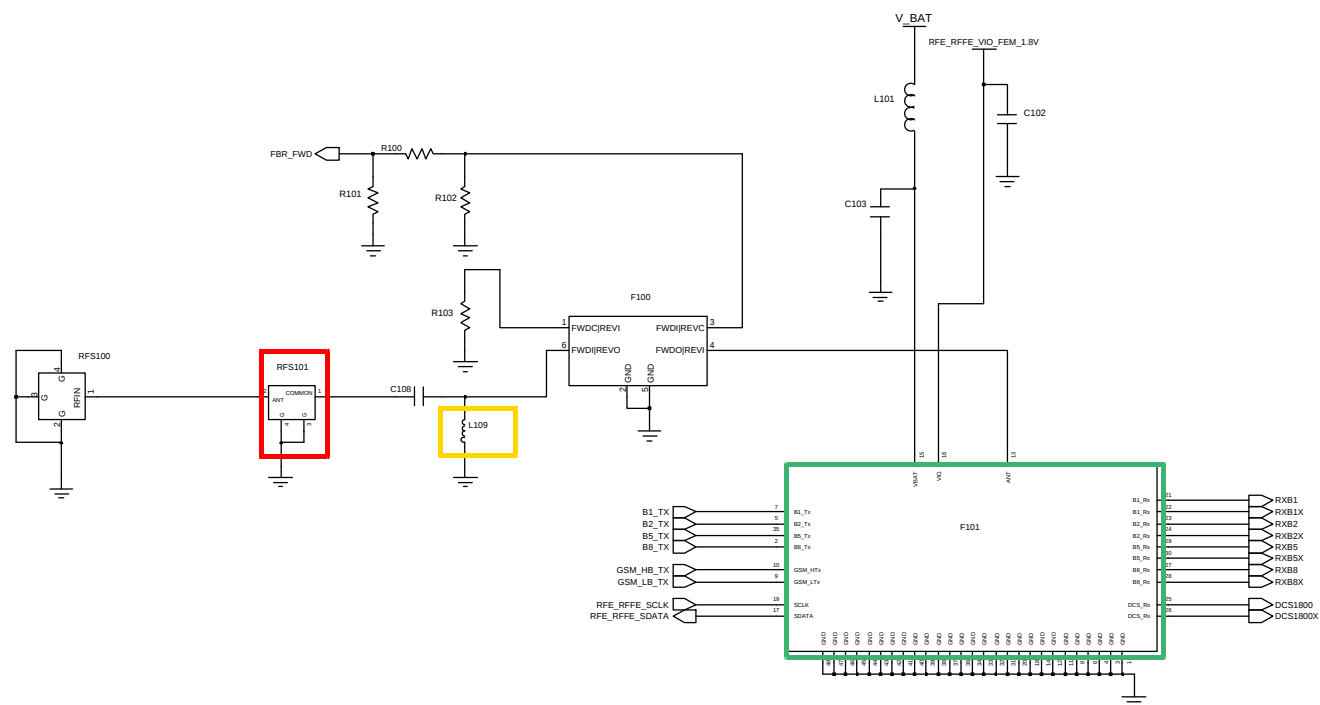


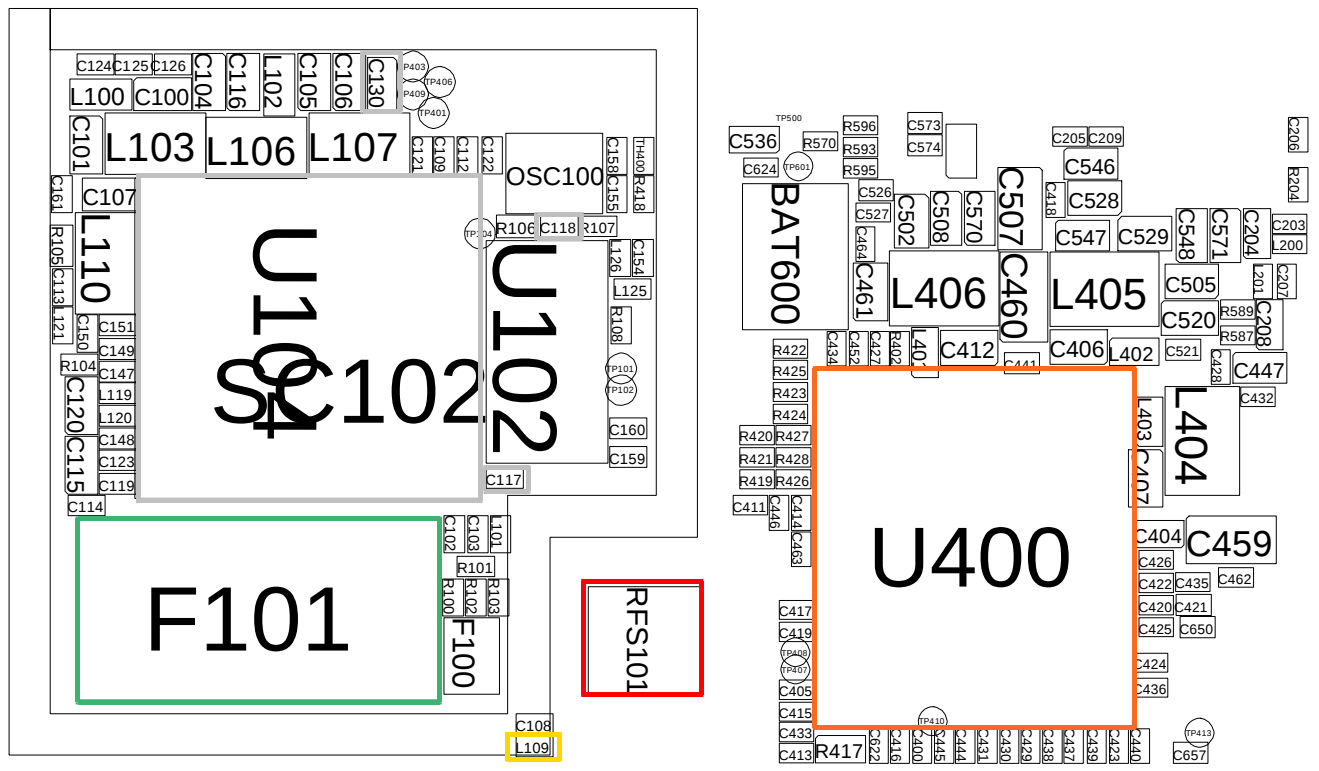


8-3-26. WCDMA850 RX

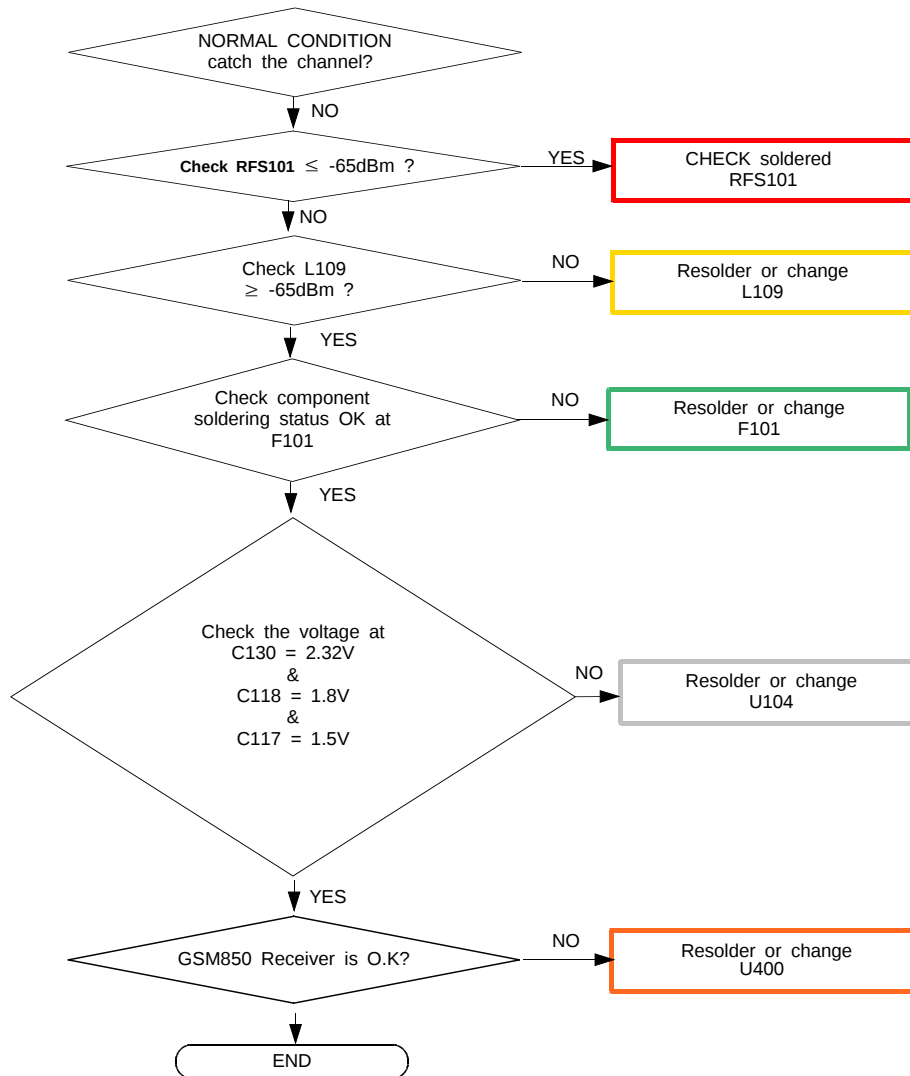


CONTINUOUS RX ON
RF INPUT : 9800CH
AMP : -50dBm

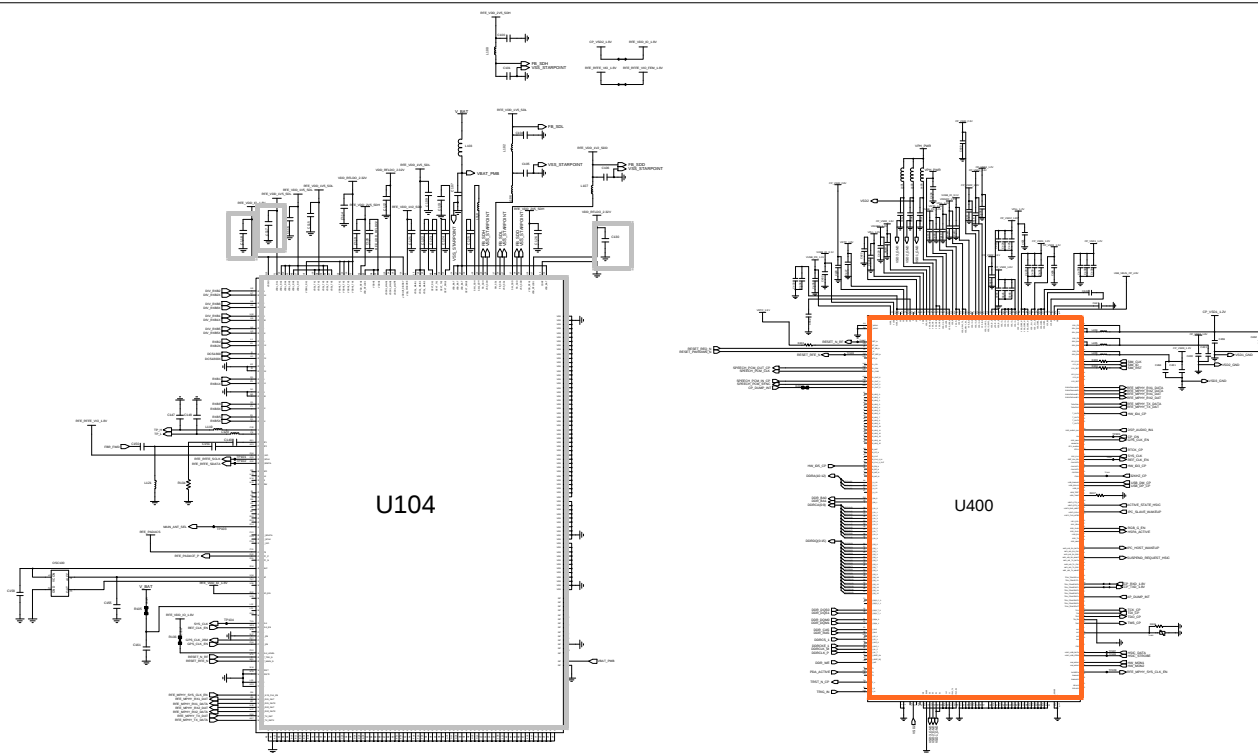
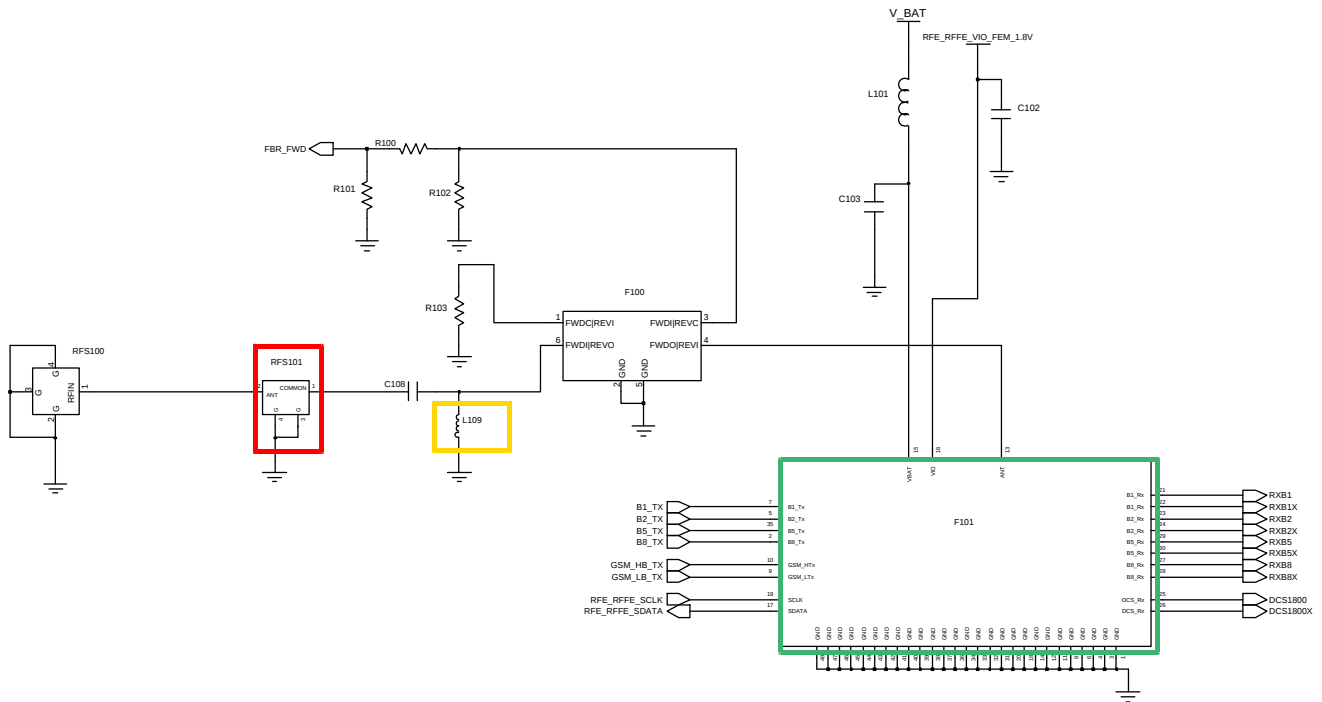


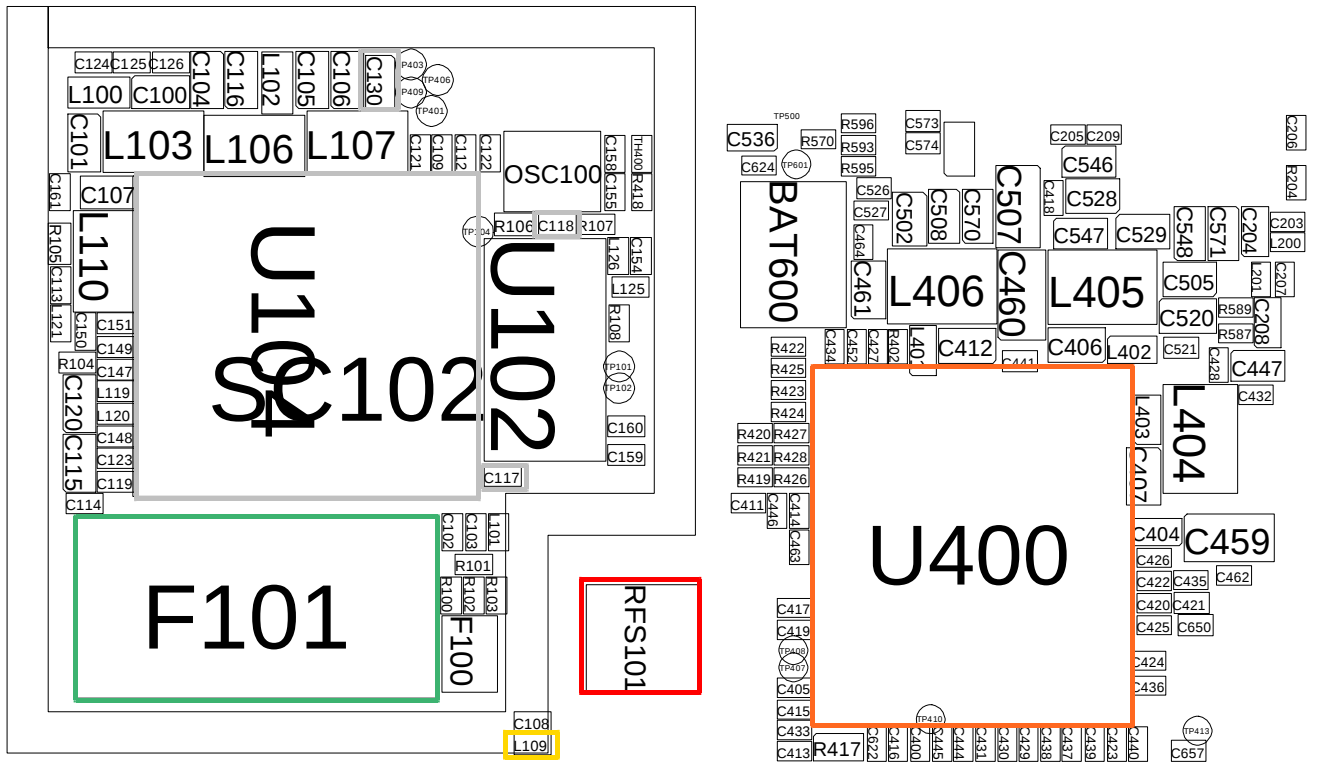


8-3-27. WCDMA900 RX



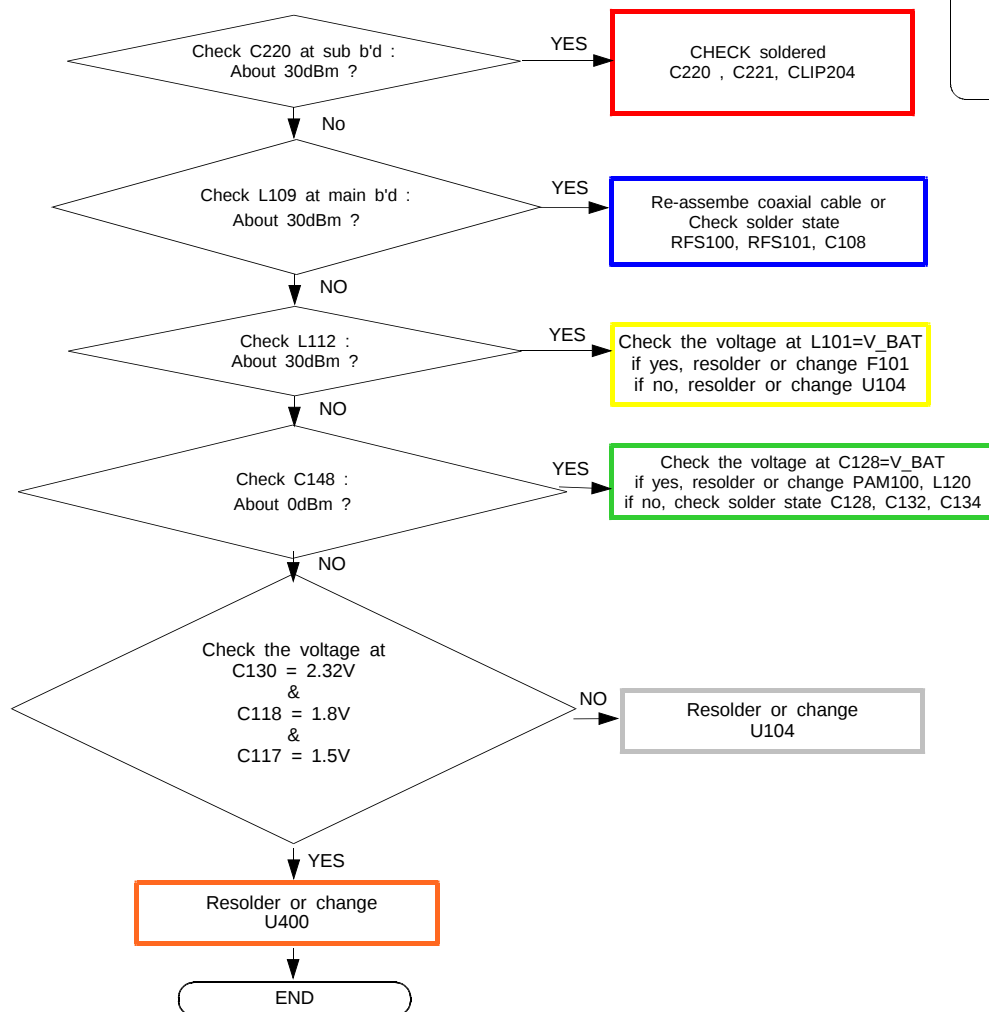
CONTINUOUS RX ON
RF INPUT : 9800CH
AMP : -50dBm

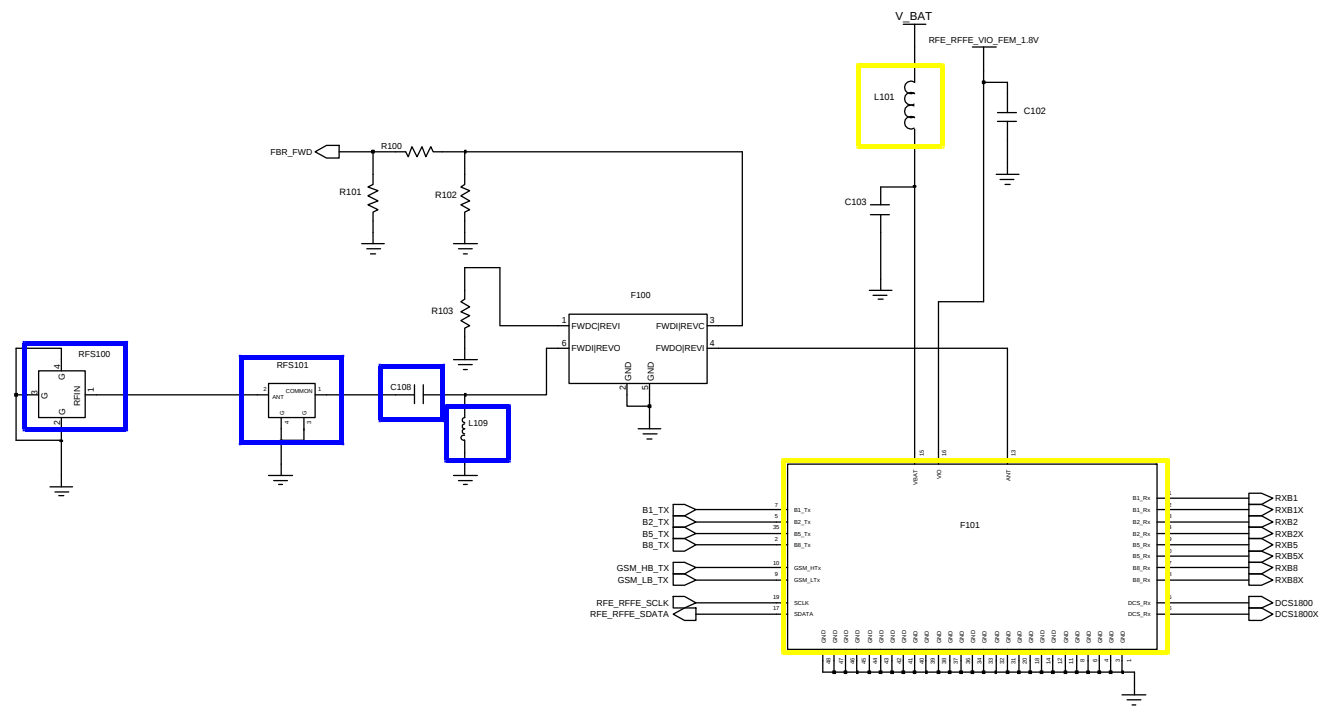
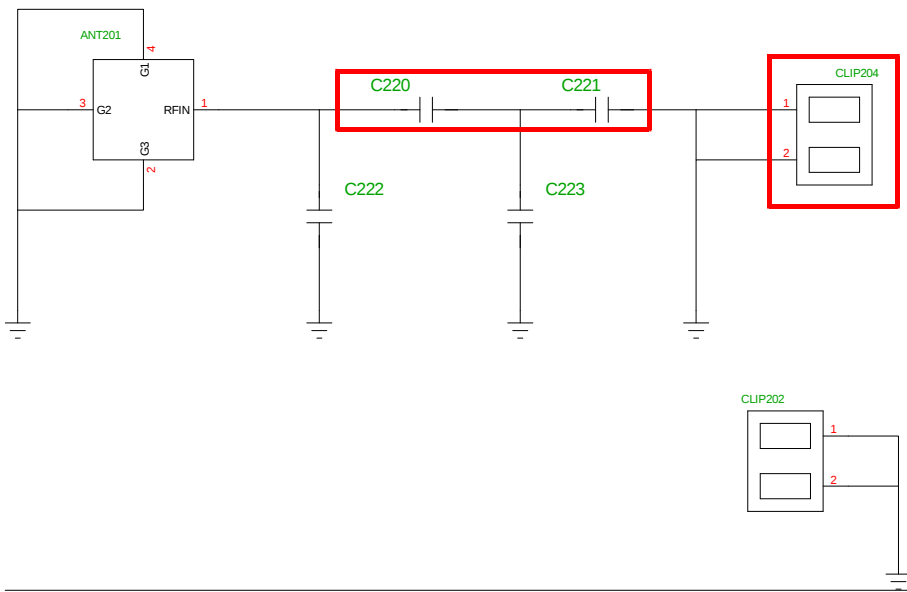


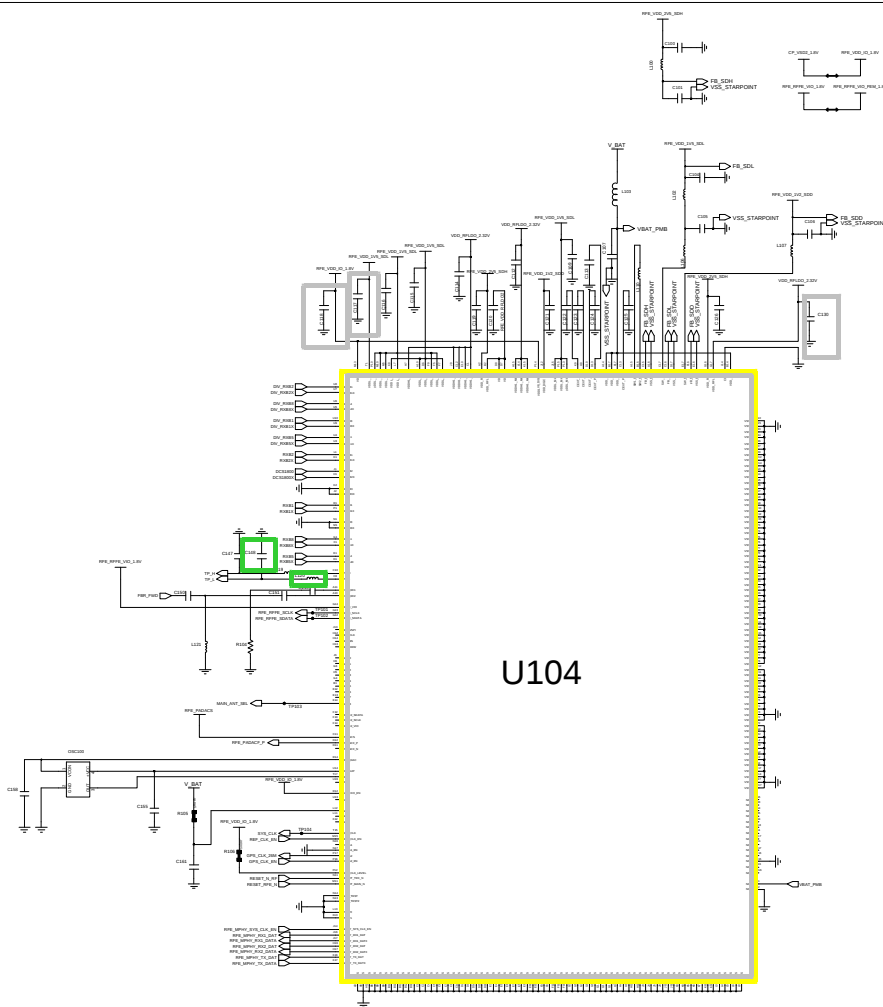
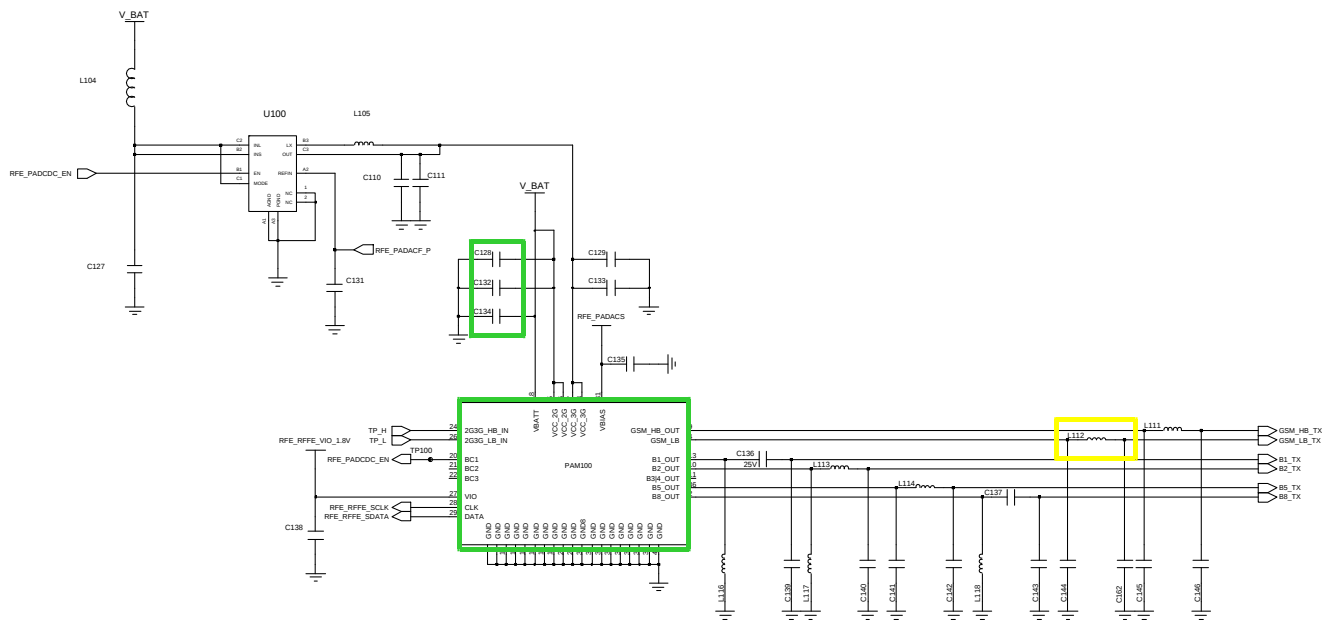


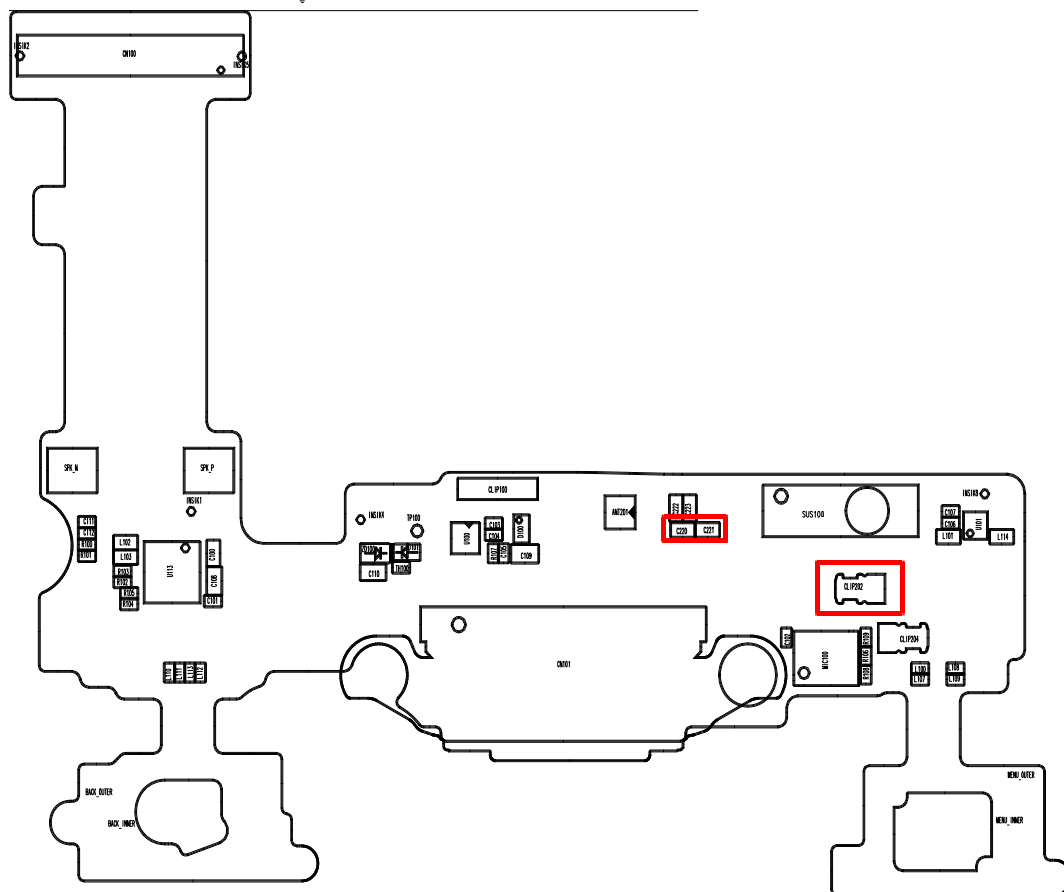
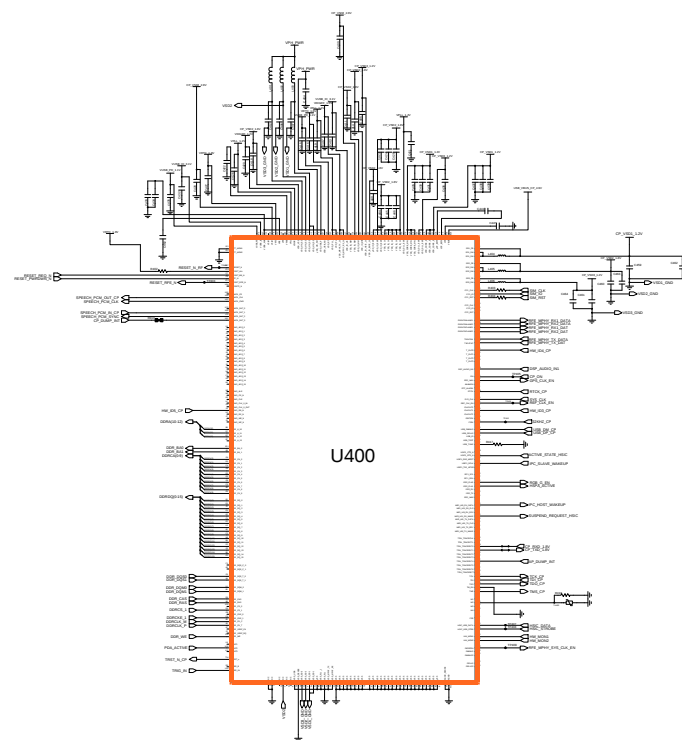
8-3-28. GSM850/GSM900 TX

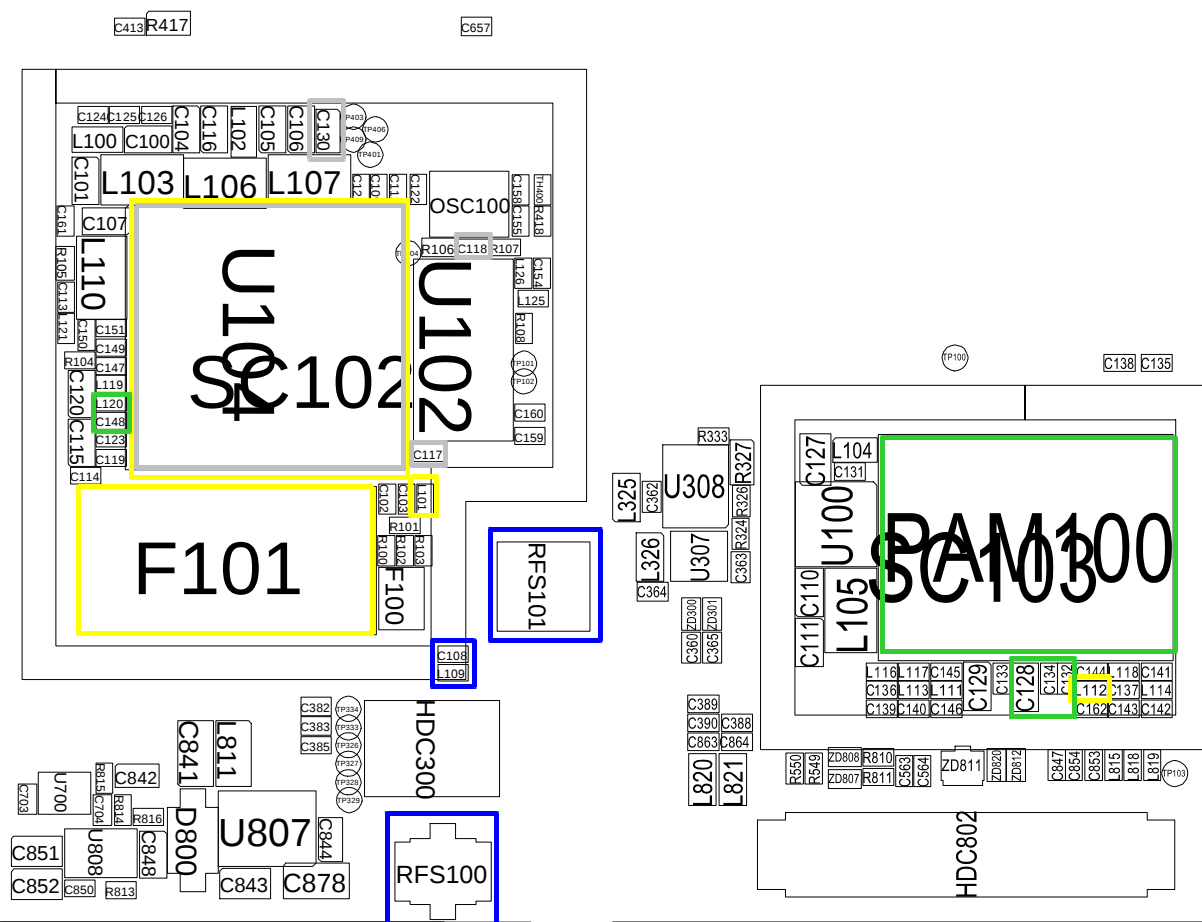
CONTINUOUS TX ON CONDITION
 TX POWER IDX1 APPLIED
 GSM850 CH : 190
 GSM900 CH : 62
 RBW : 100KHz
 VBW : 100KHz
 SPAN : 10MHz
 REF LEV. : 10dBm
 ATT. : 20dB



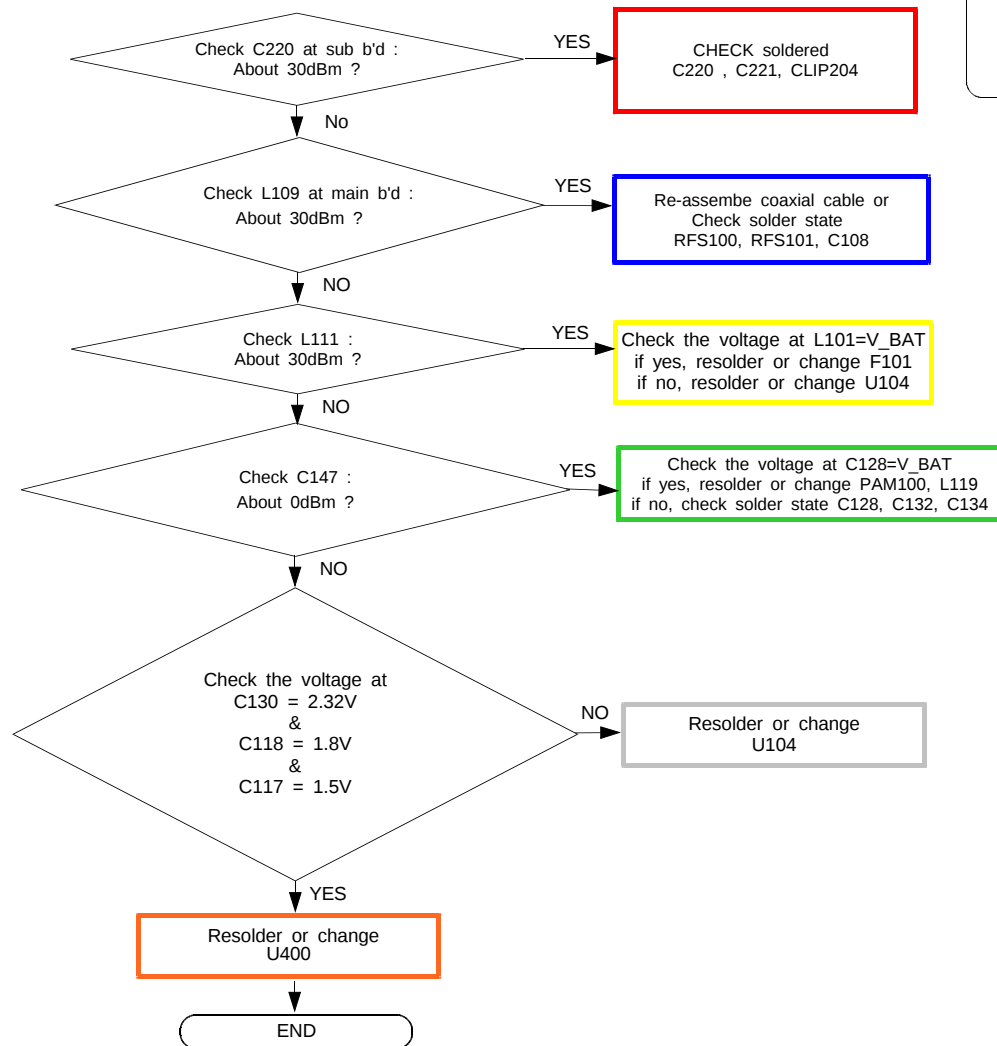




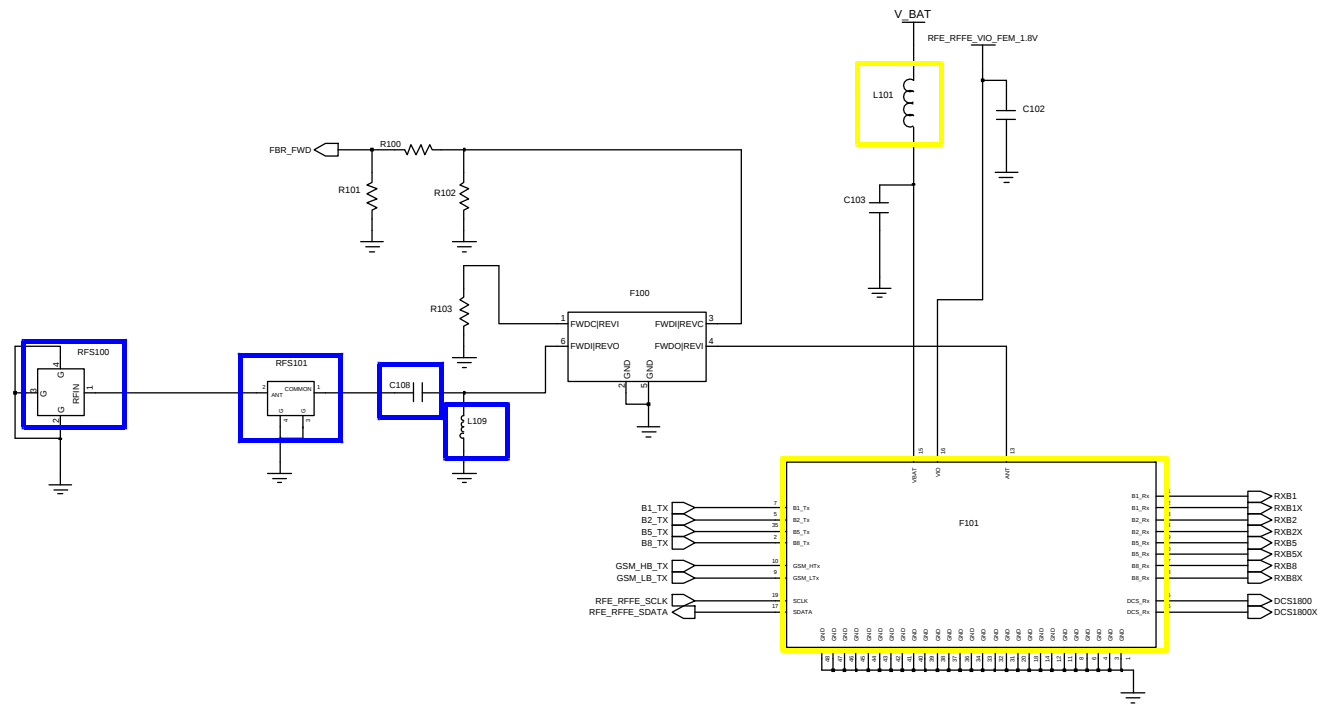
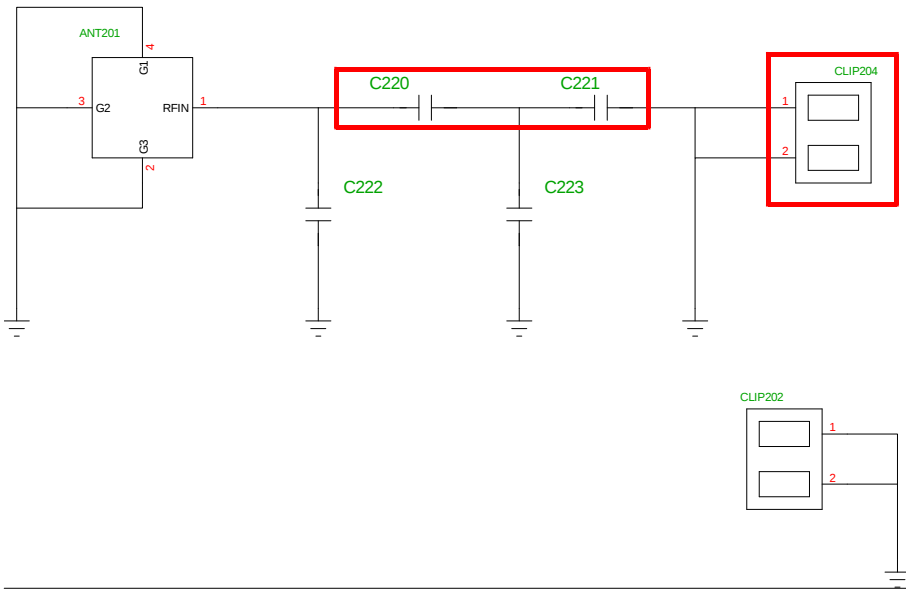


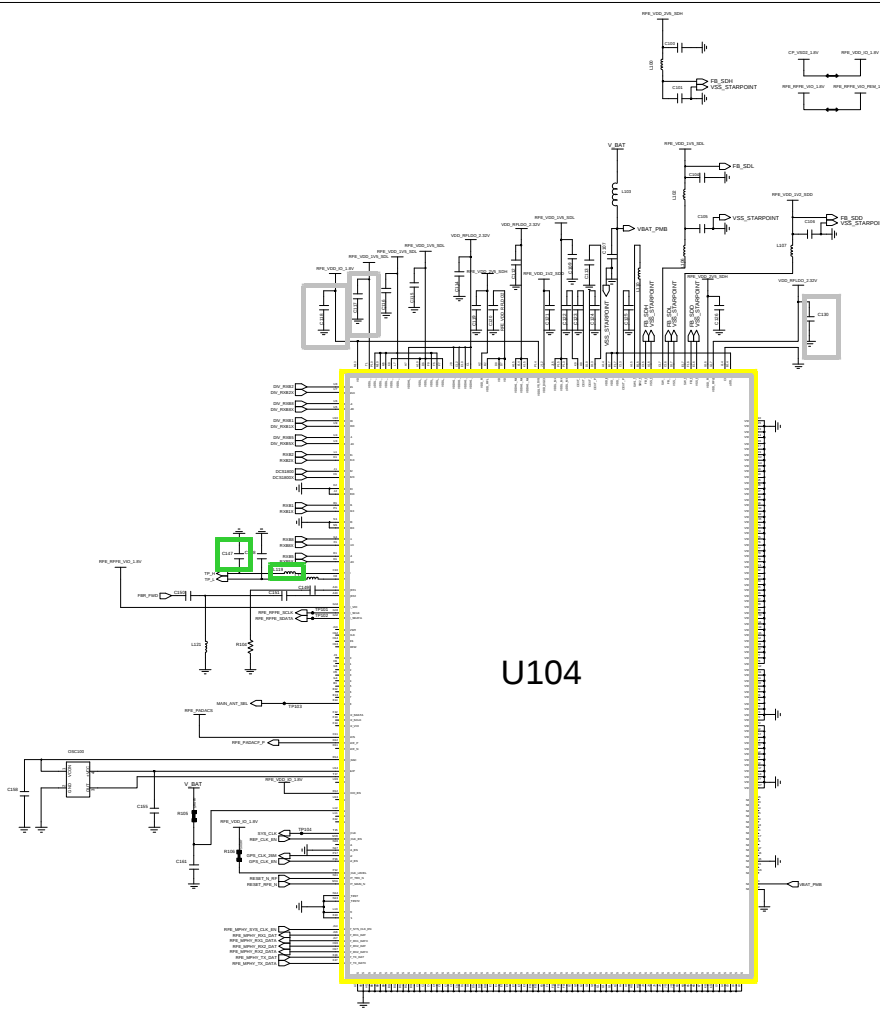
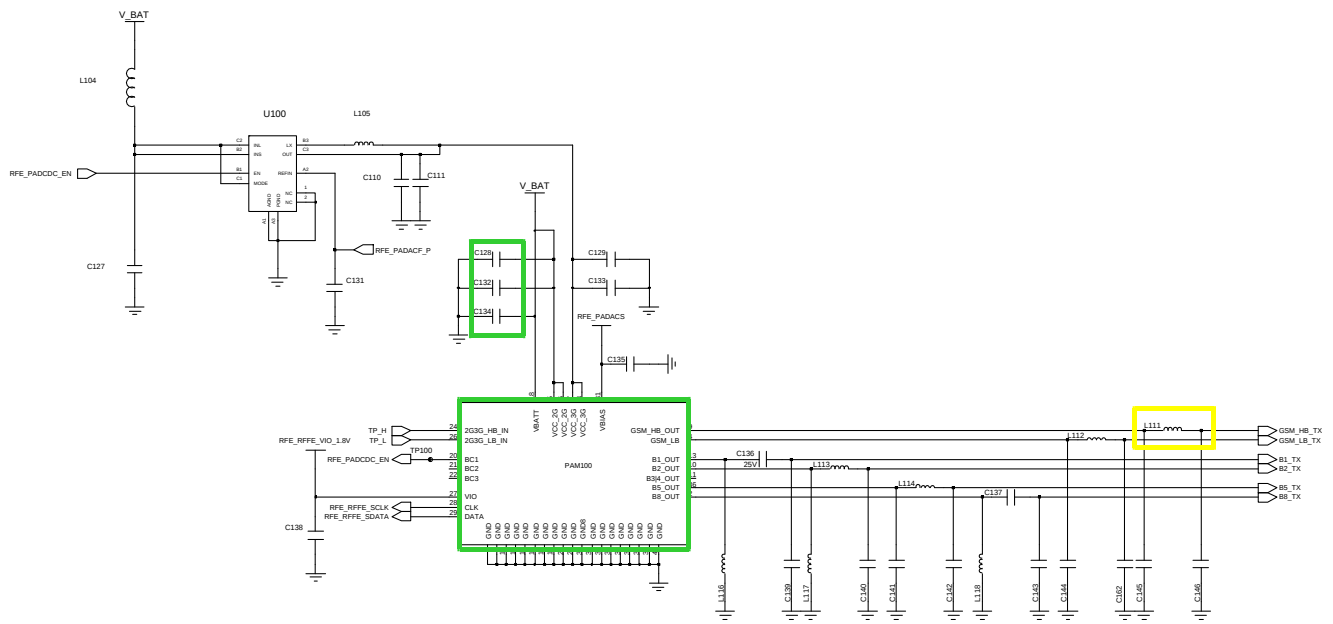


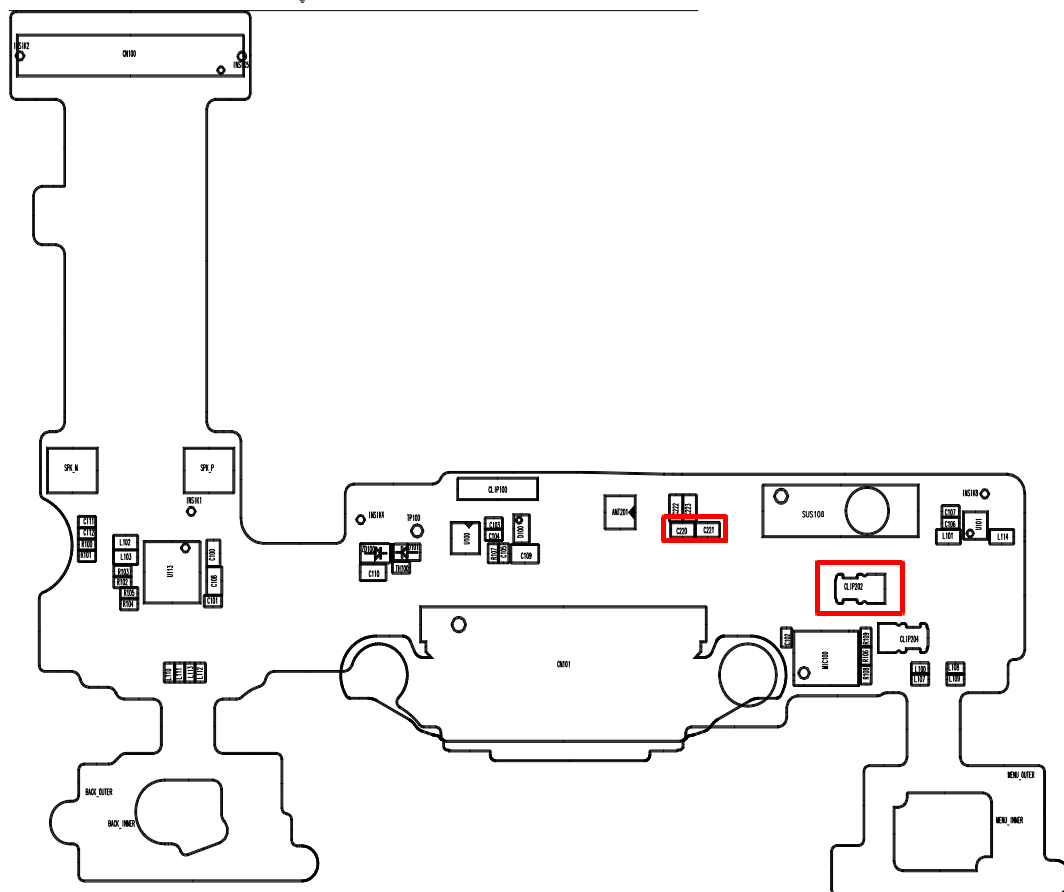
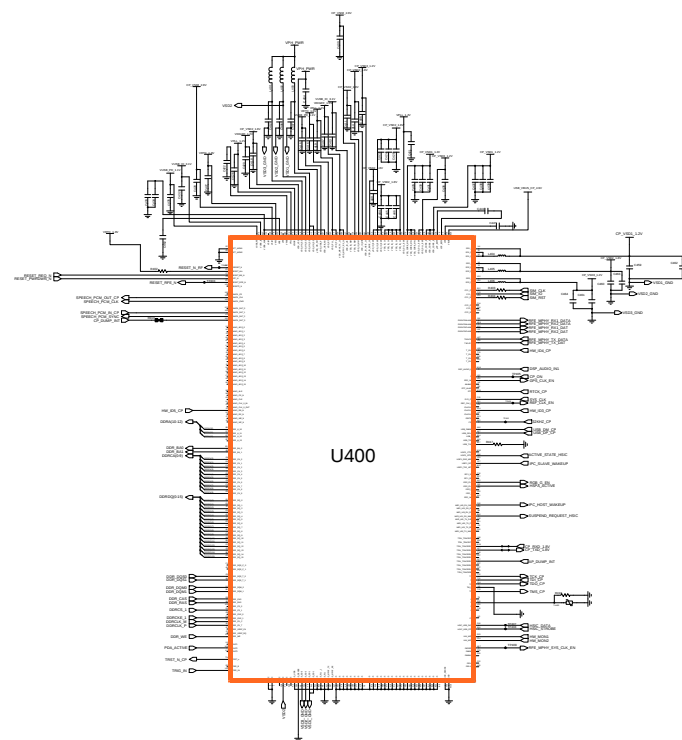
8-3-29. DCS/PCS TX

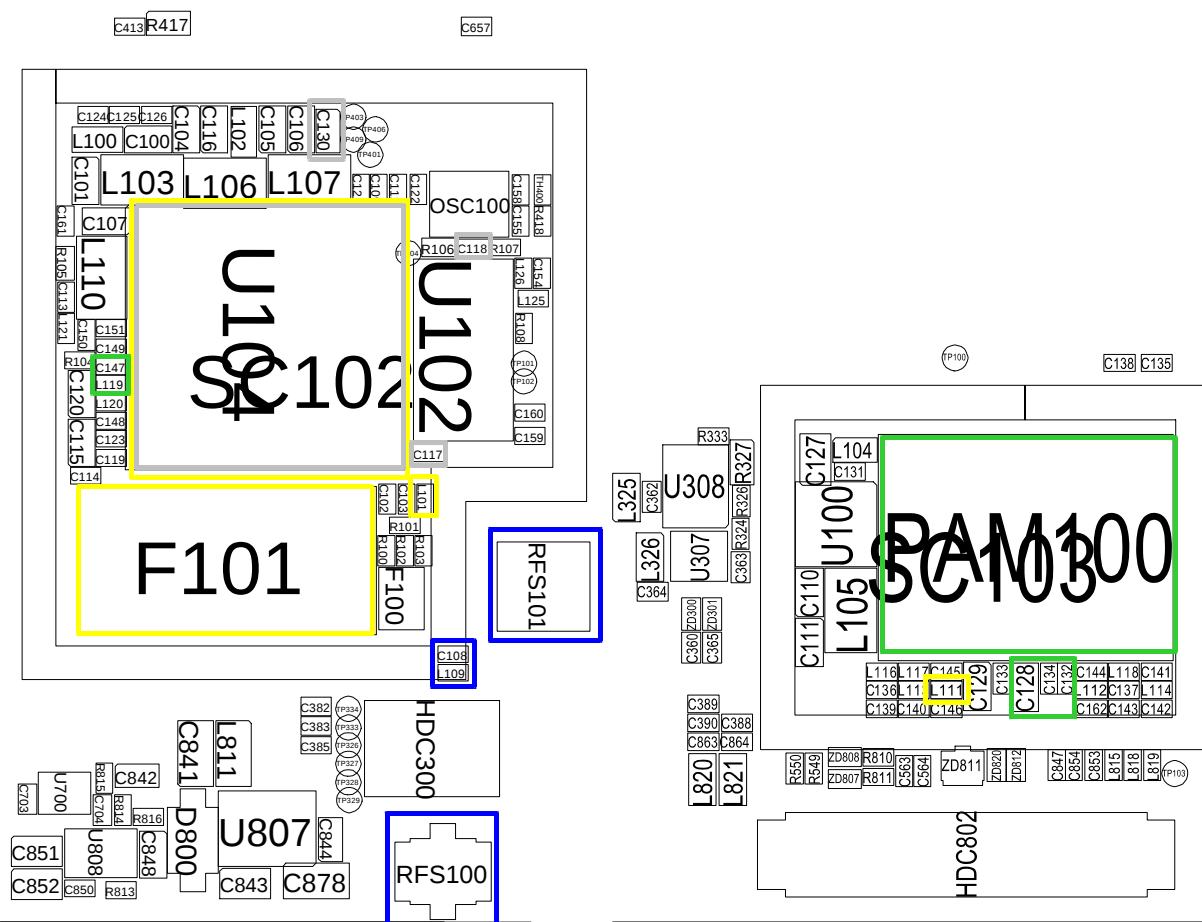


CONTINUOUS TX ON CONDITION
TX POWER IDX1 APPLIED
DCS CH : 698
PCS CH : 661
RBW : 100KHz
VBW : 100KHz
SPAN : 10MHz
REF LEV. : 10dBm
ATT. : 20dB

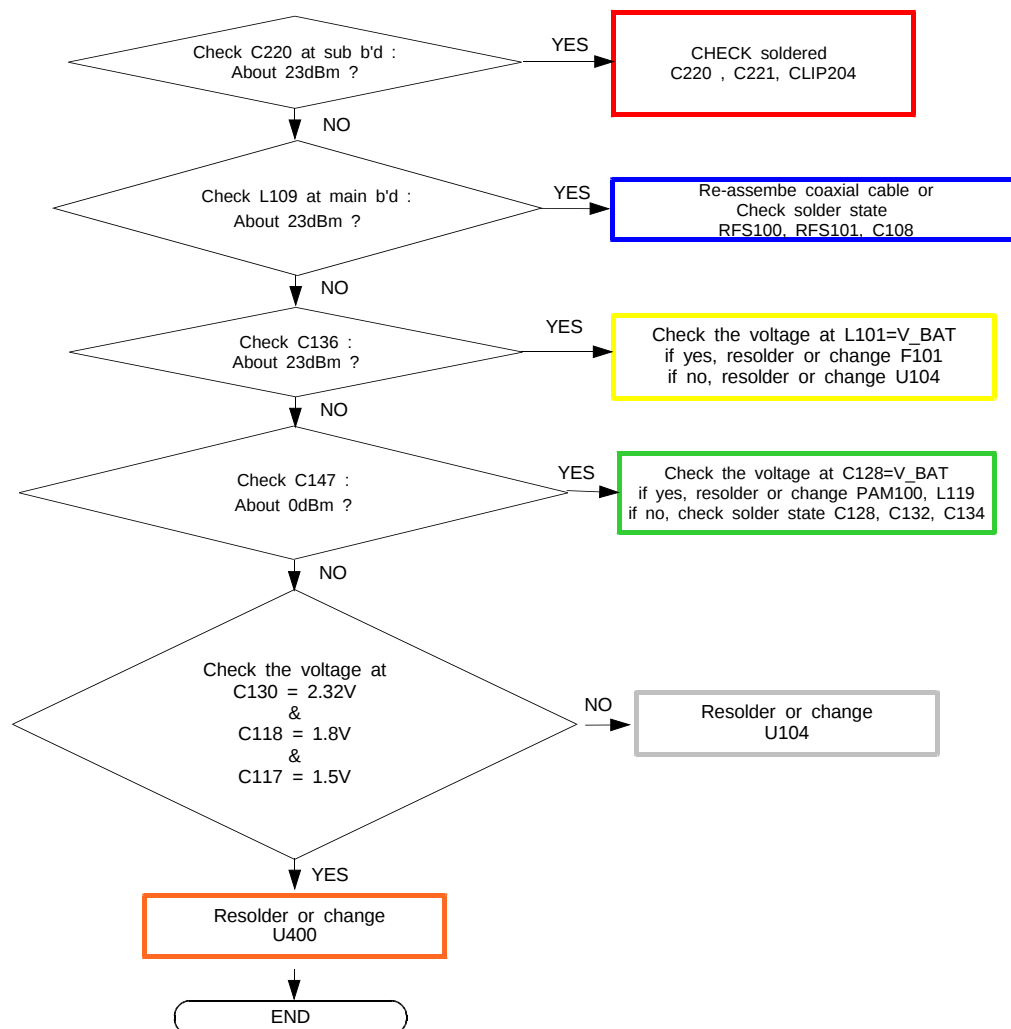


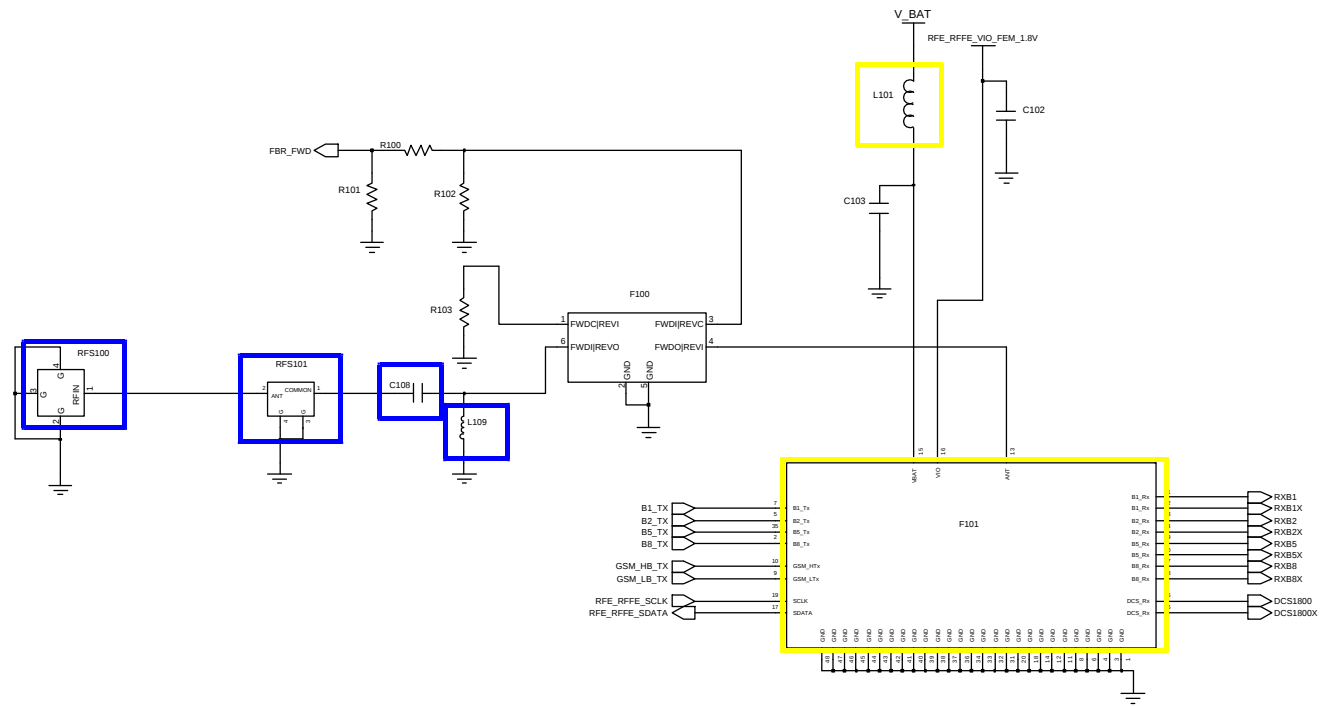
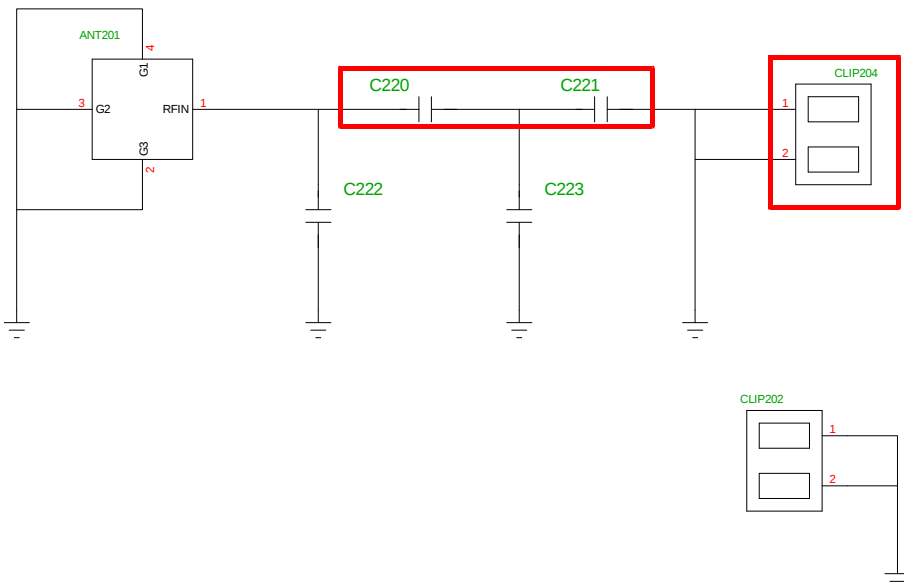


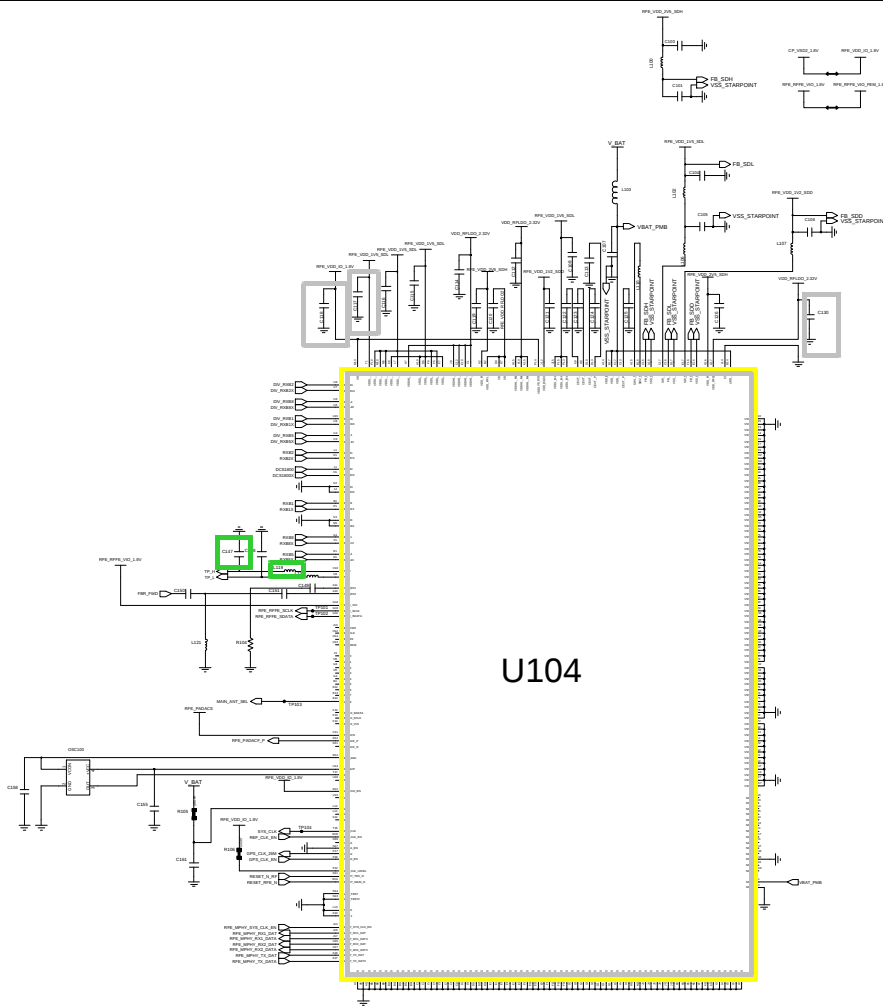
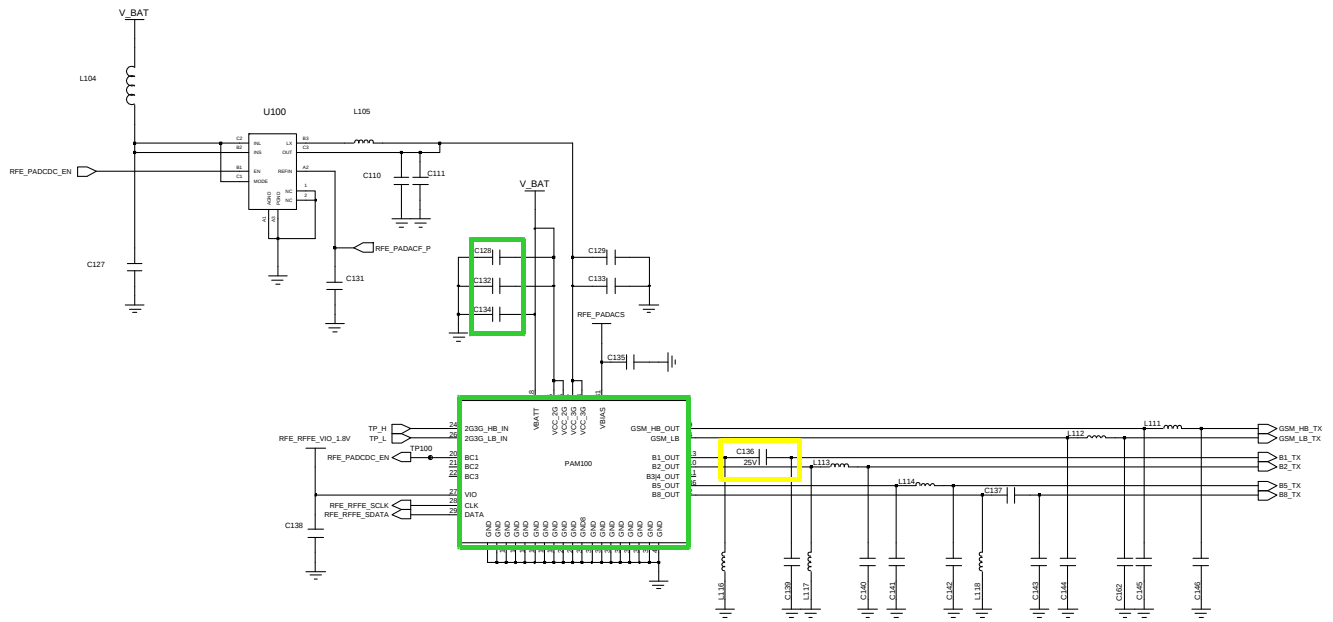


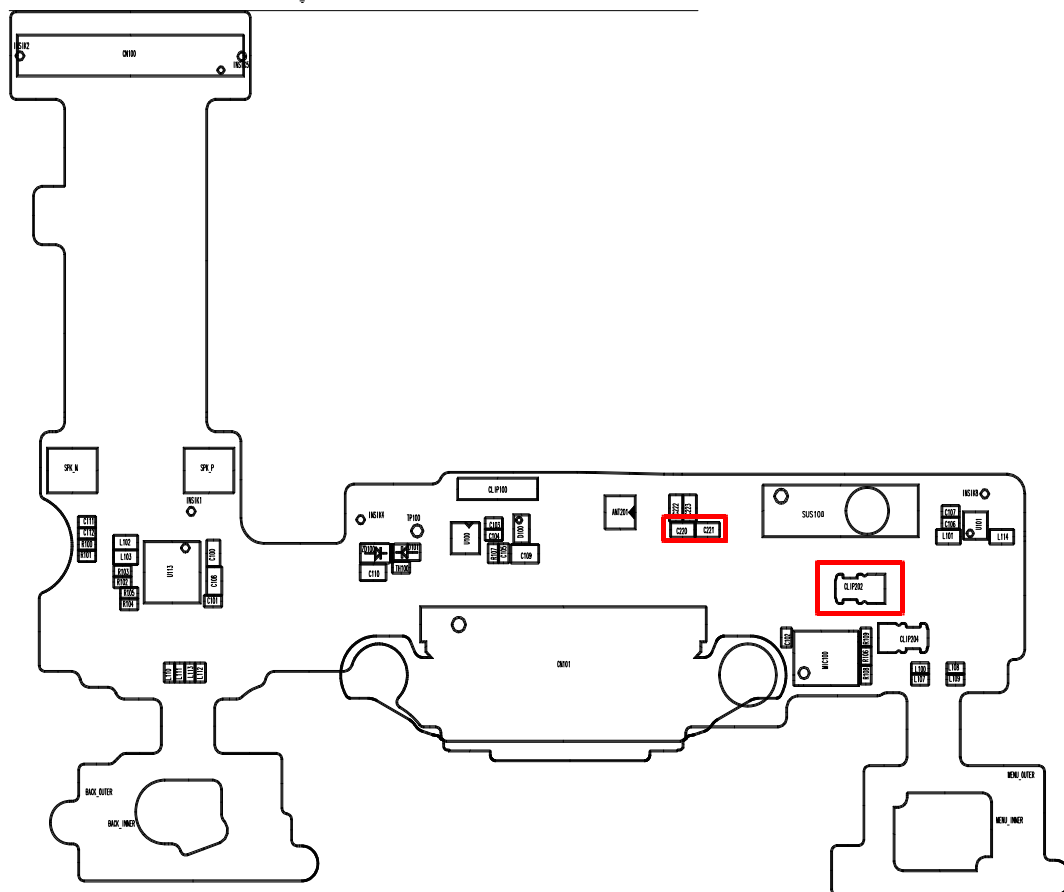
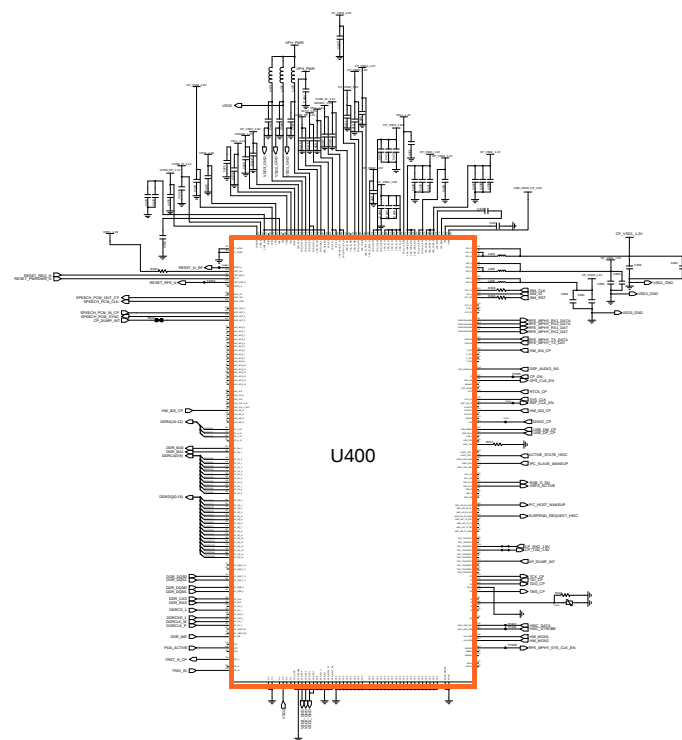


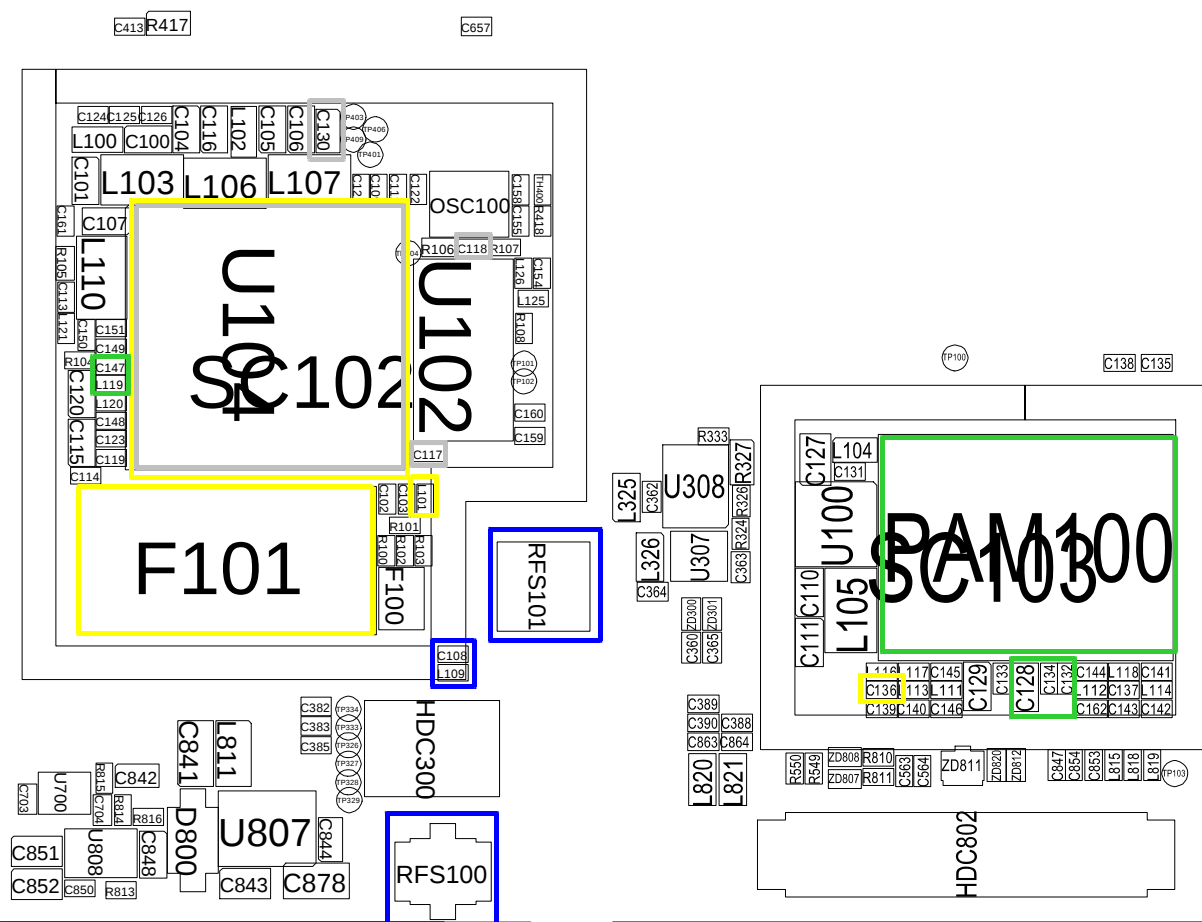
8-3-30. WCDMA2100 TX

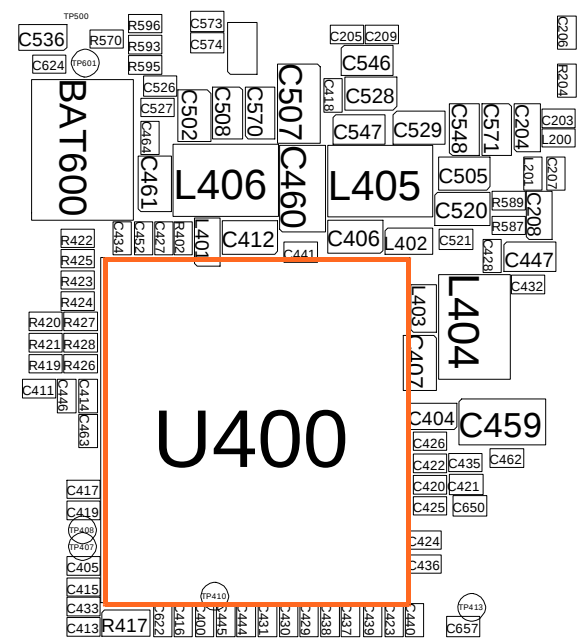




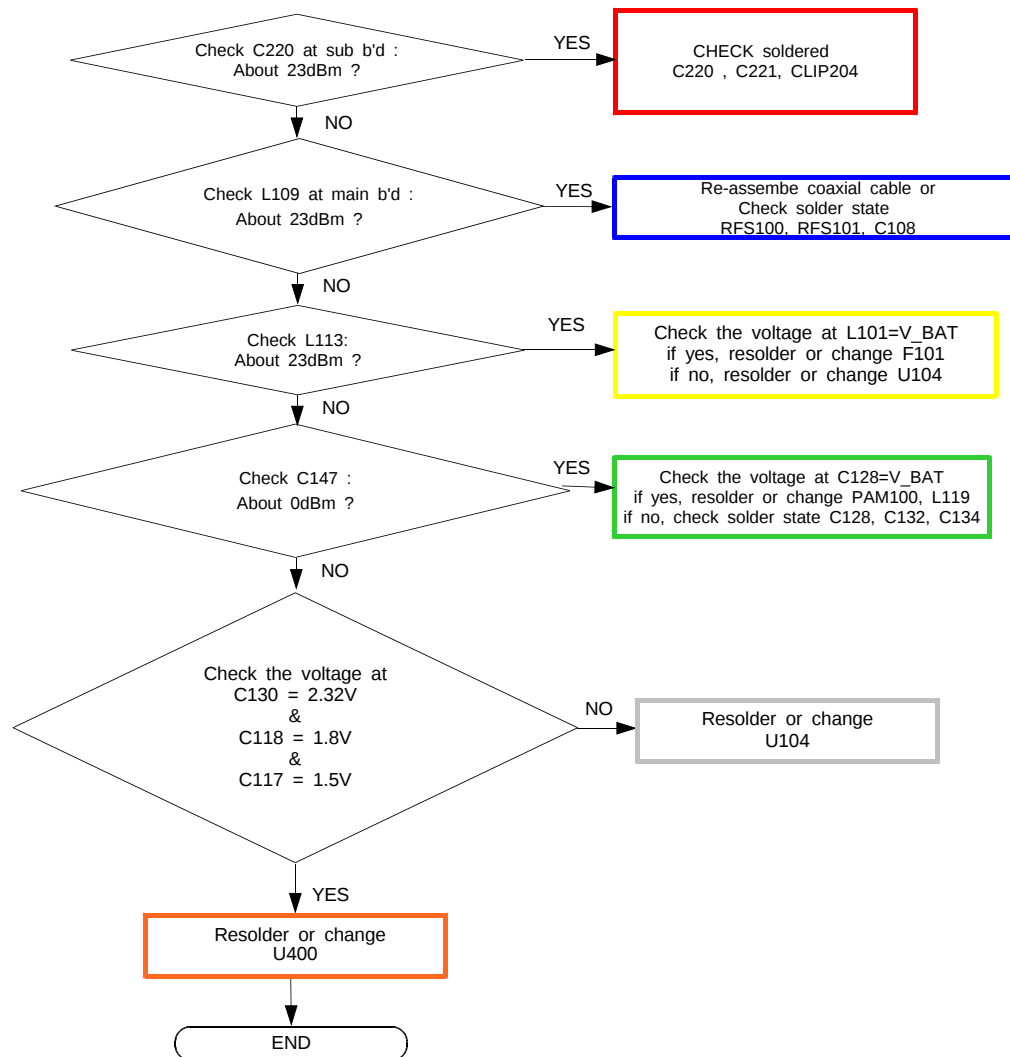


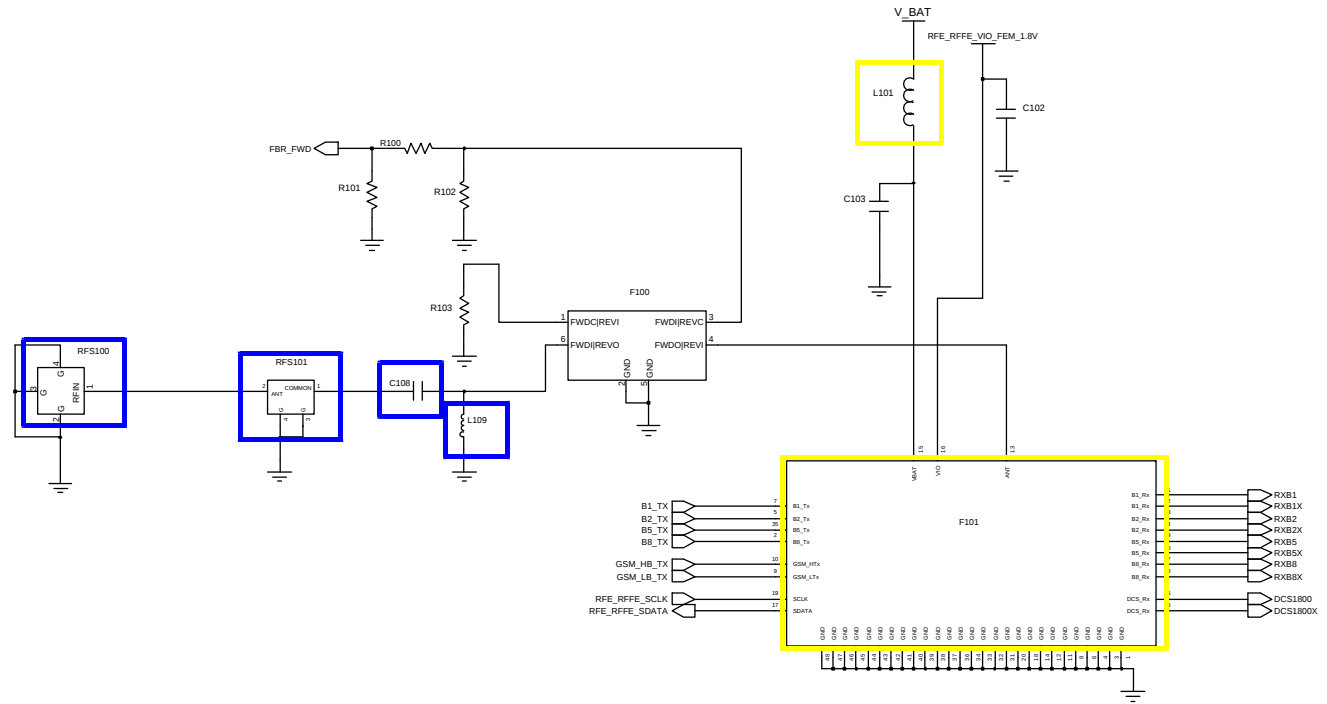
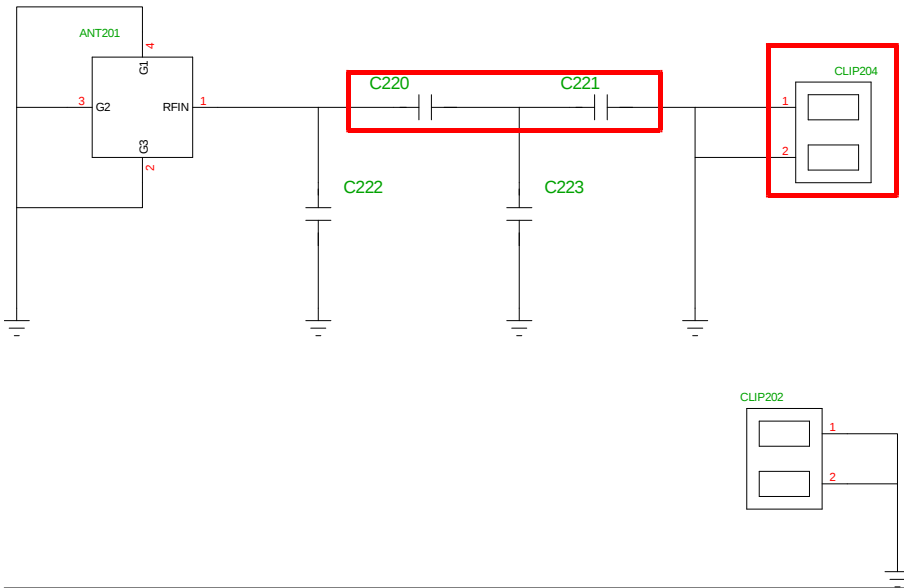


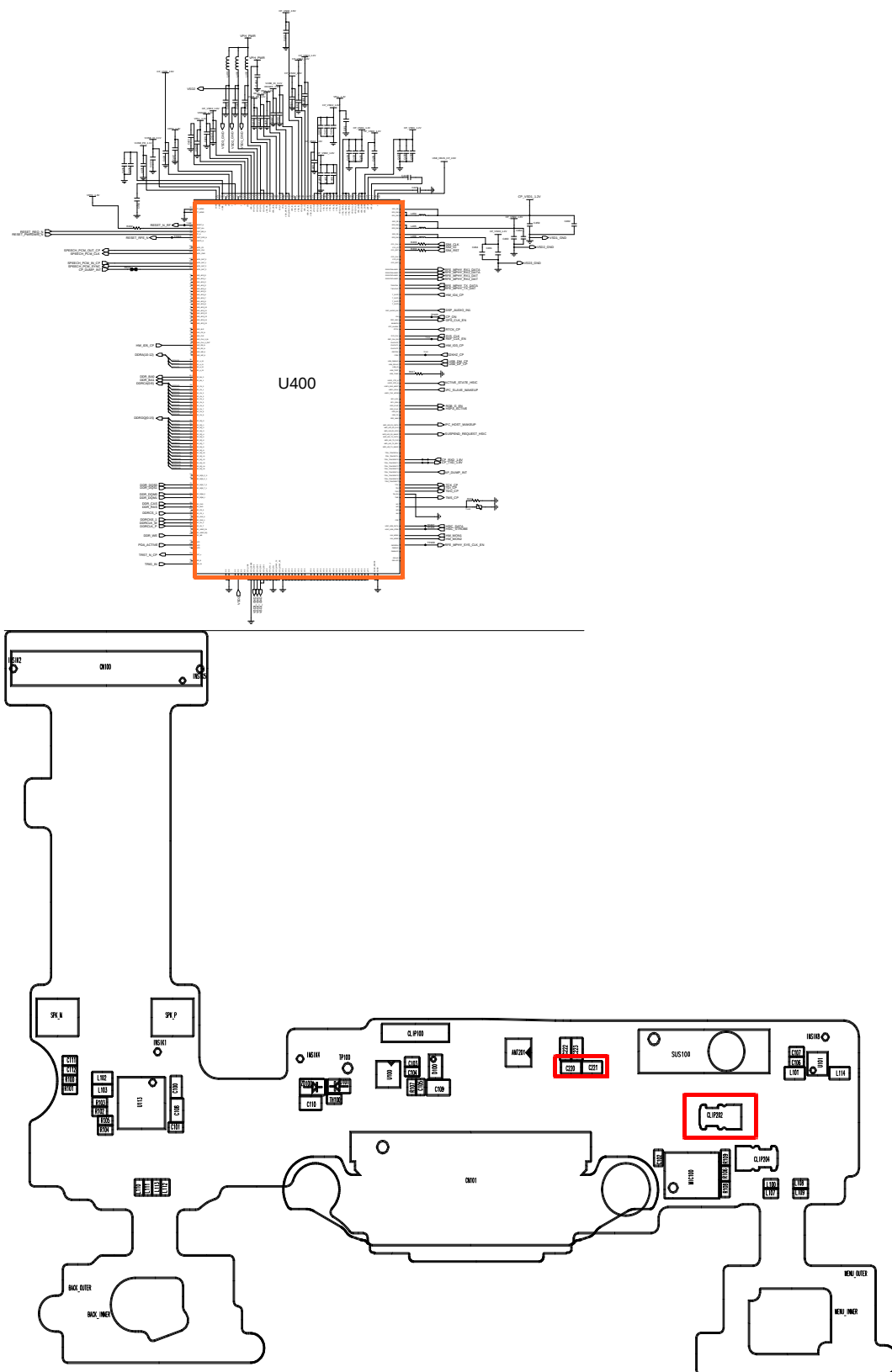


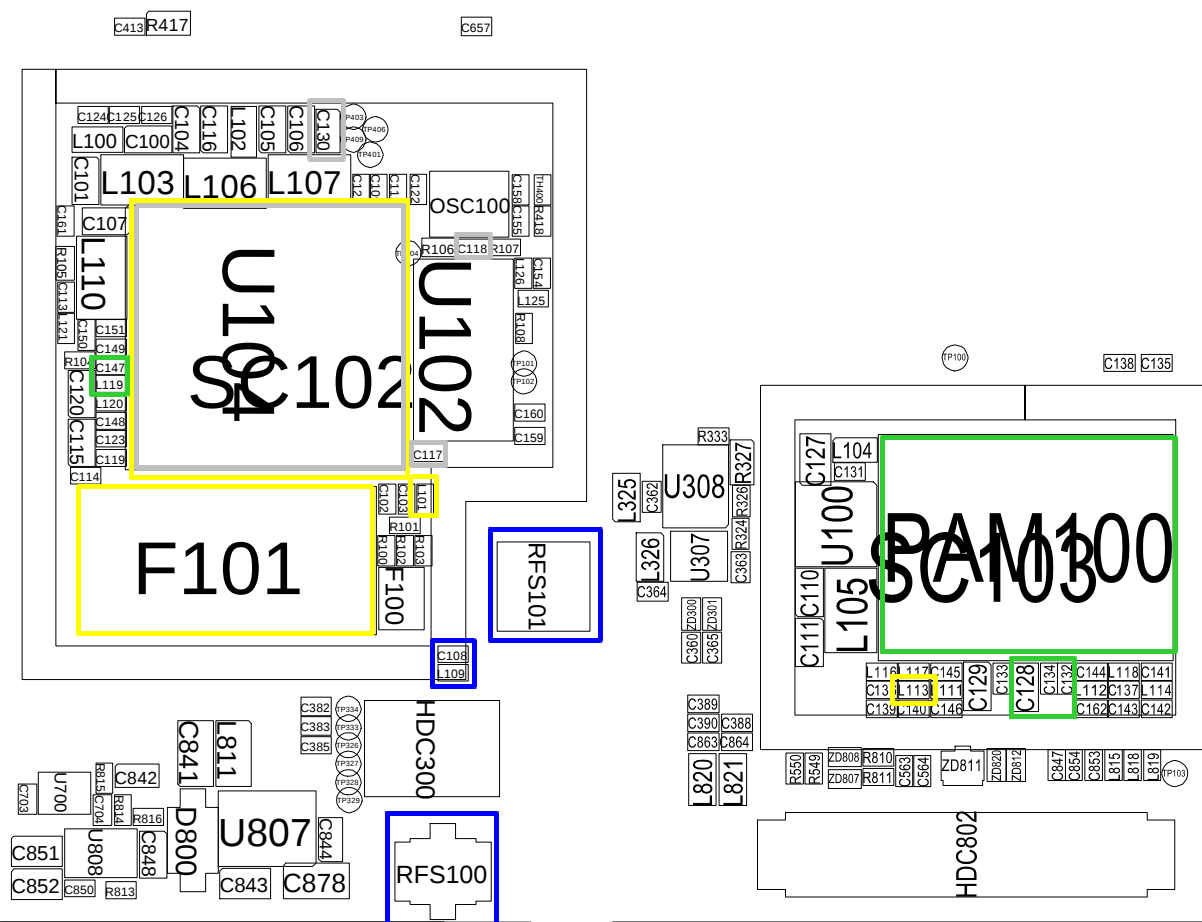


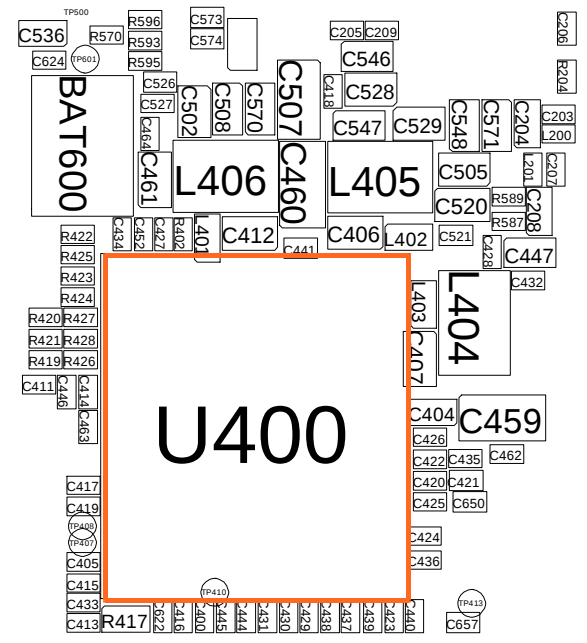
8-3-31. WCDMA1900 TX



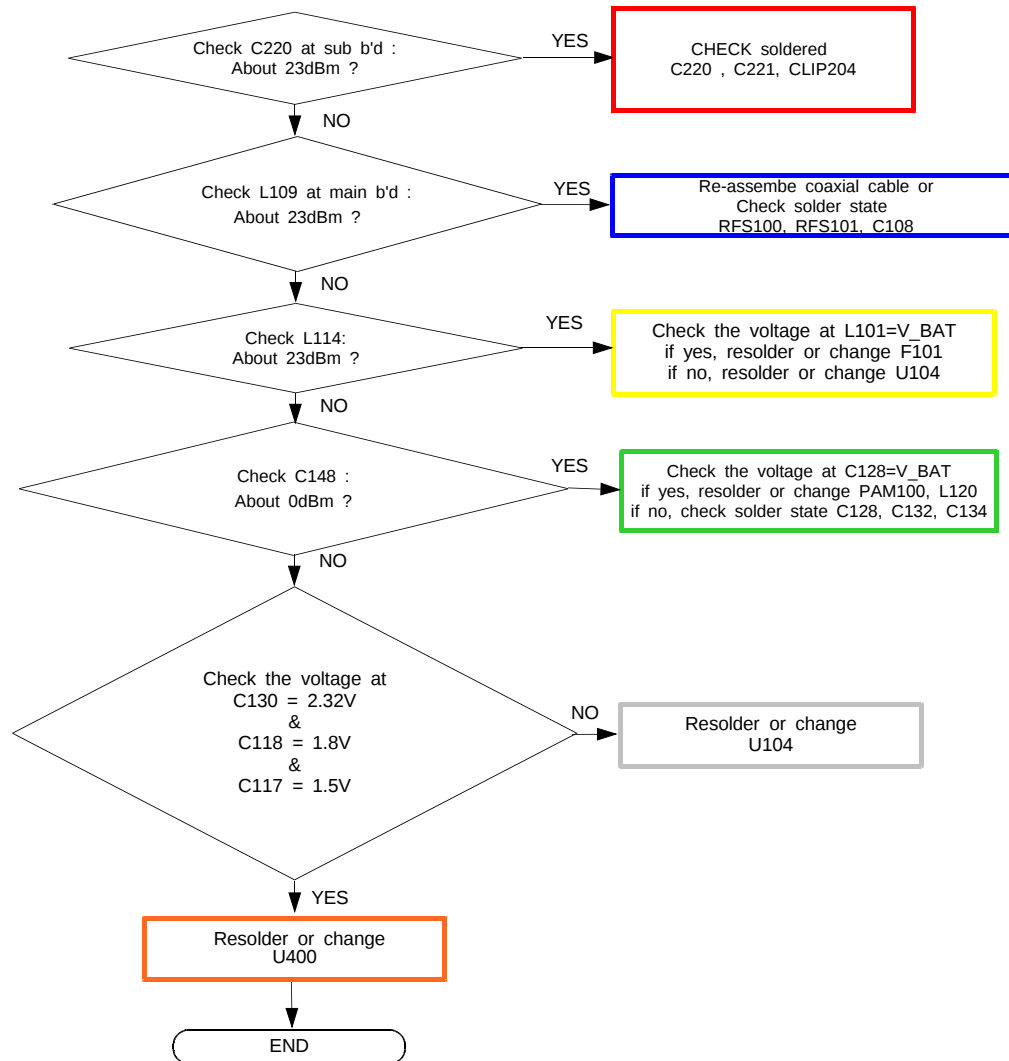


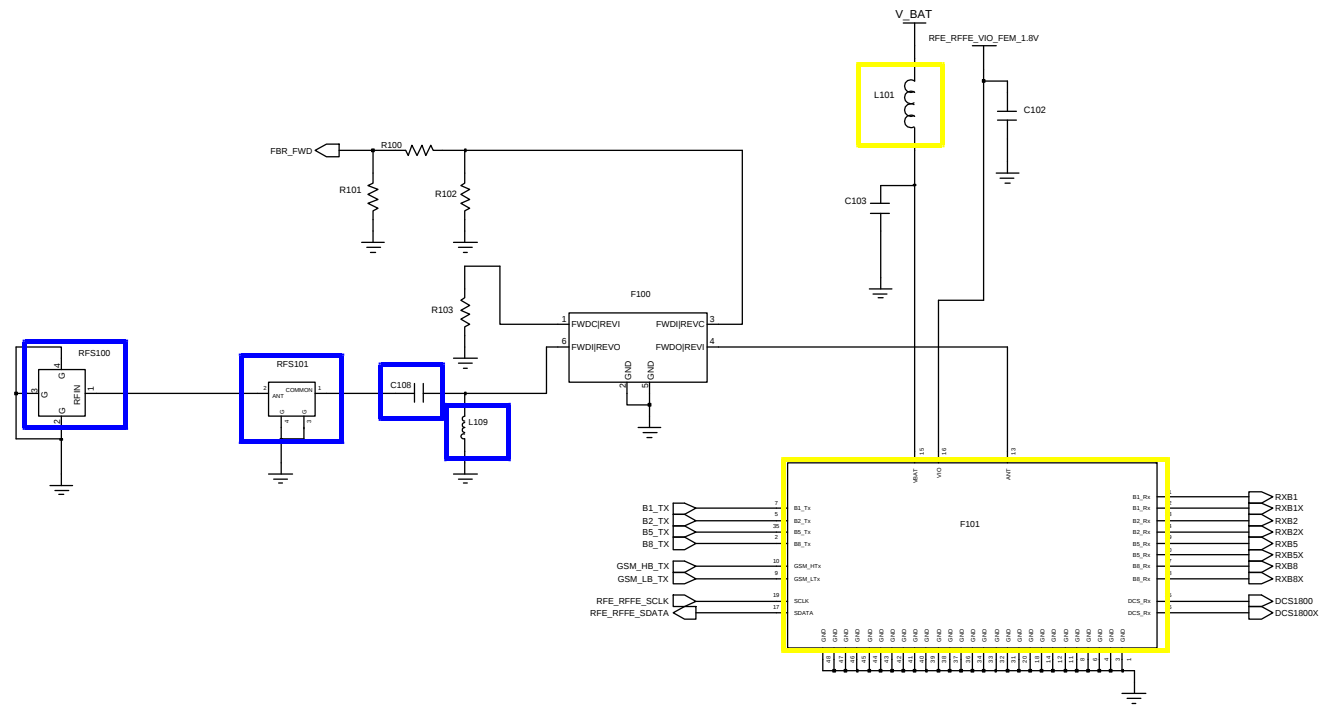
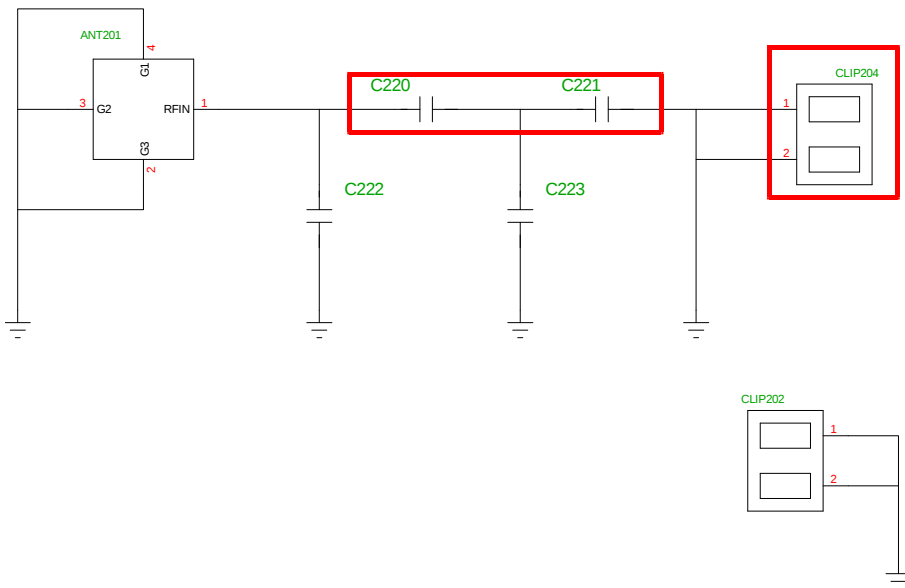


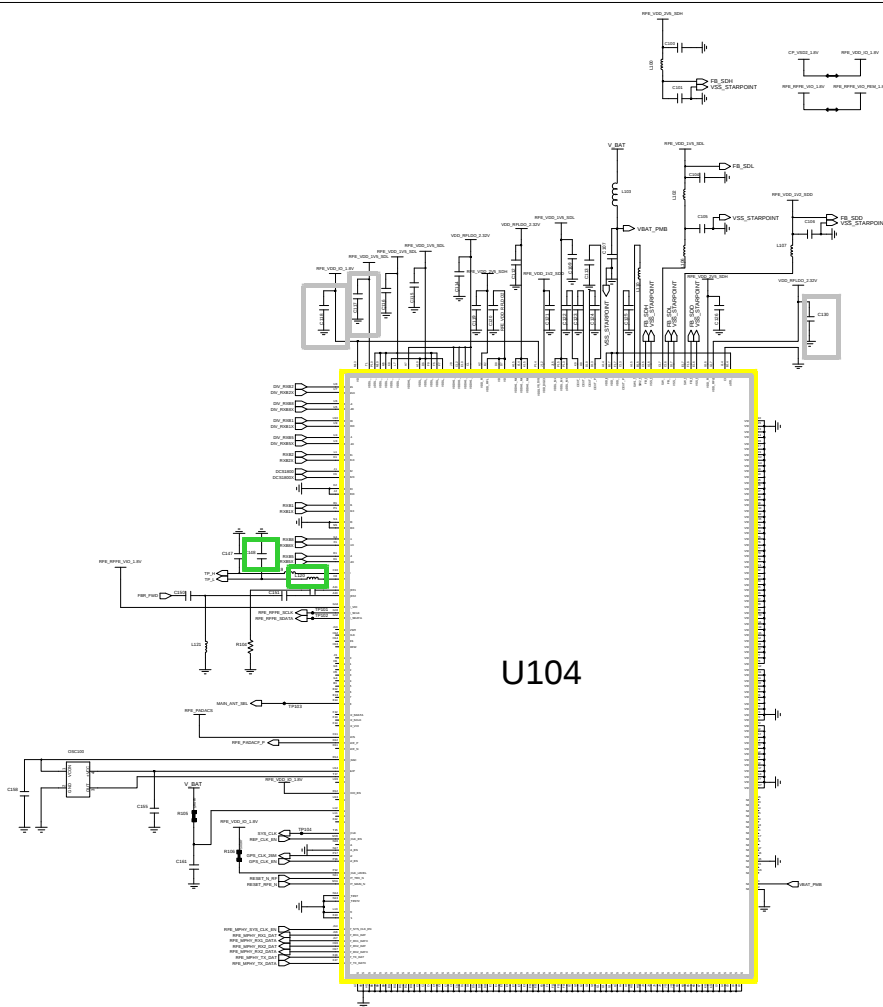
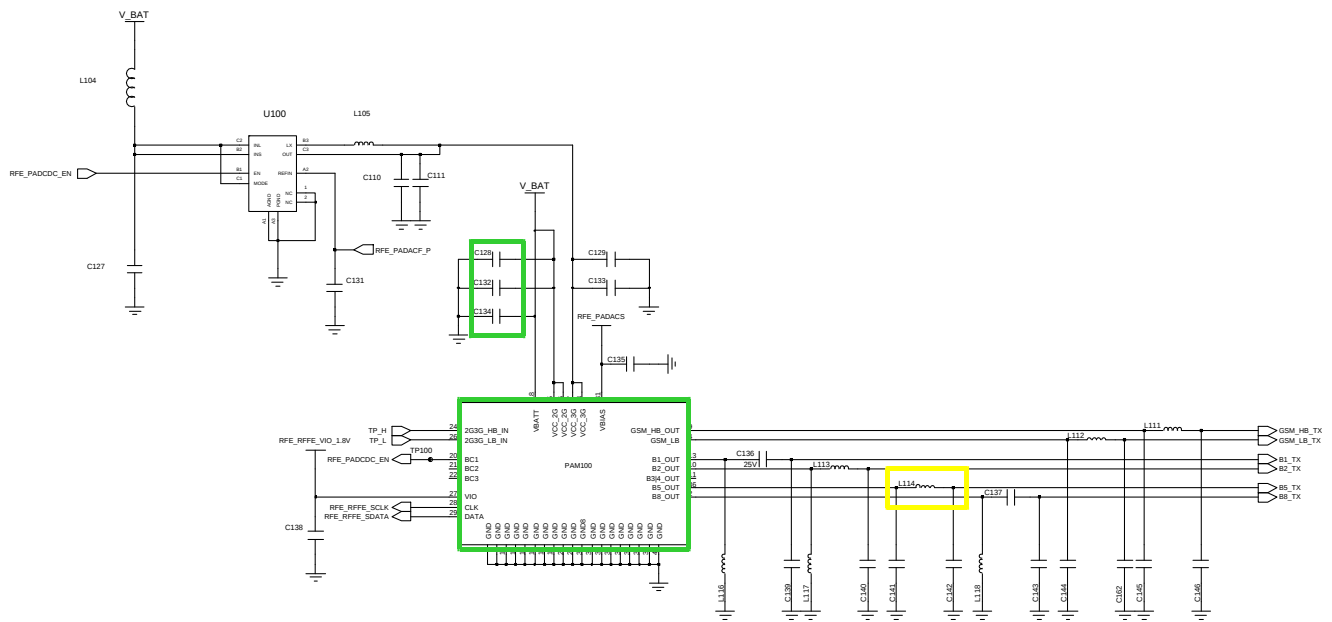


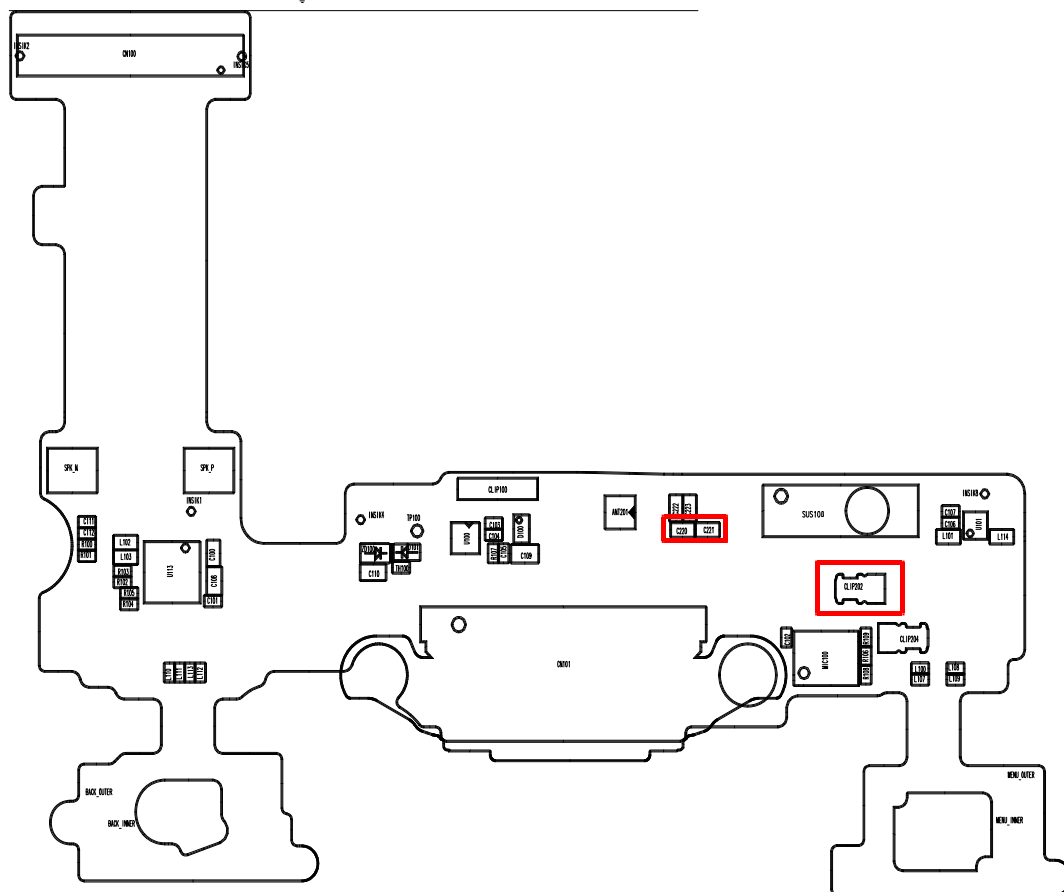
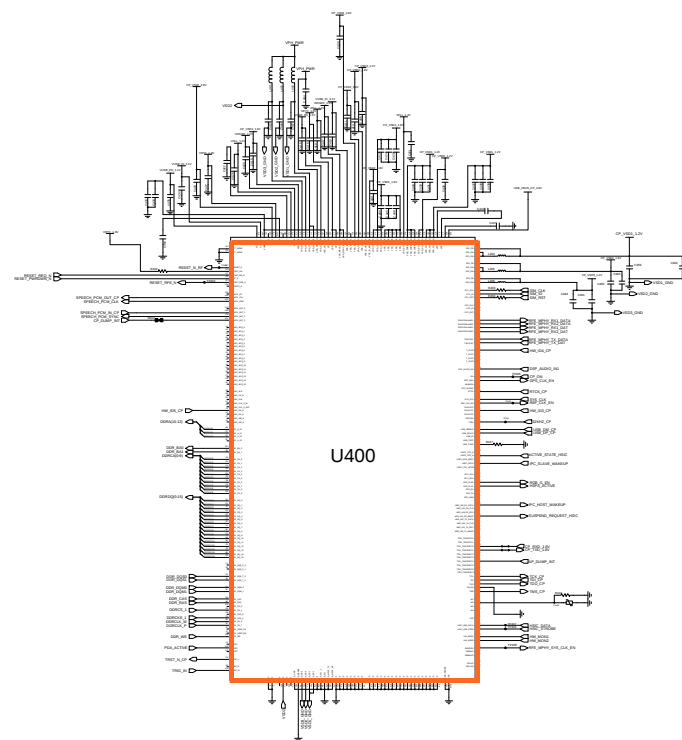


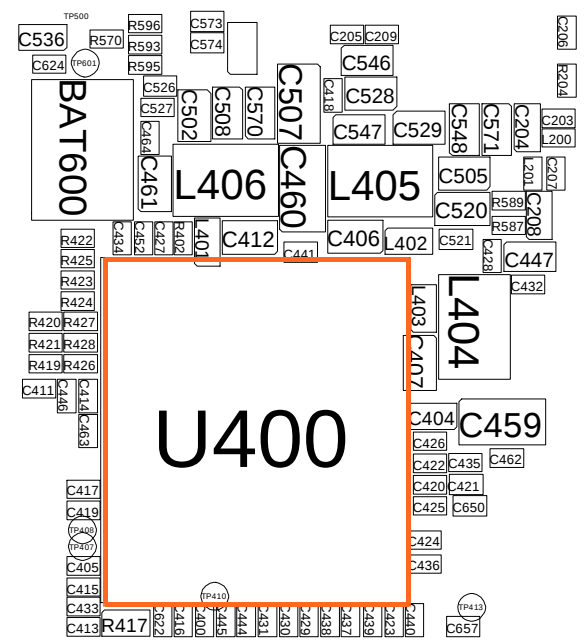
8-3-32. WCDMA850 Tx



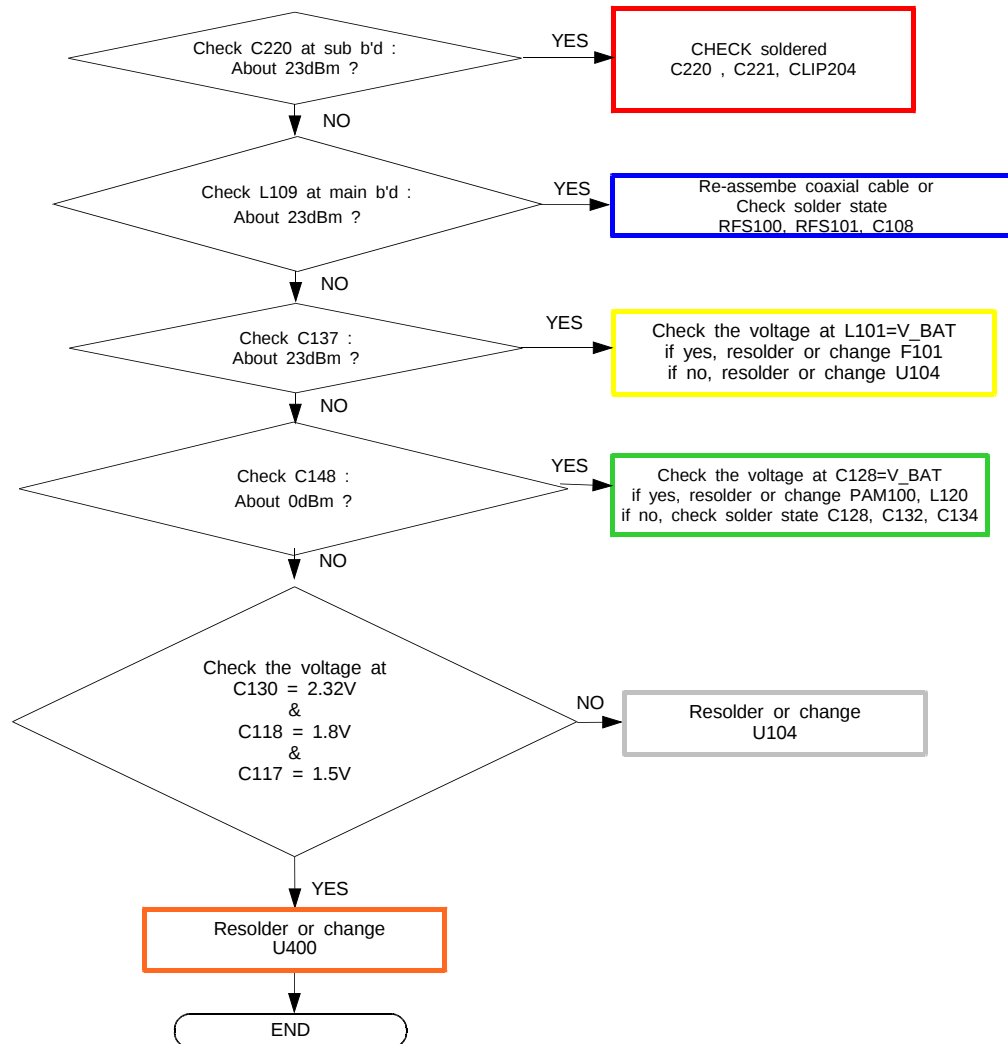


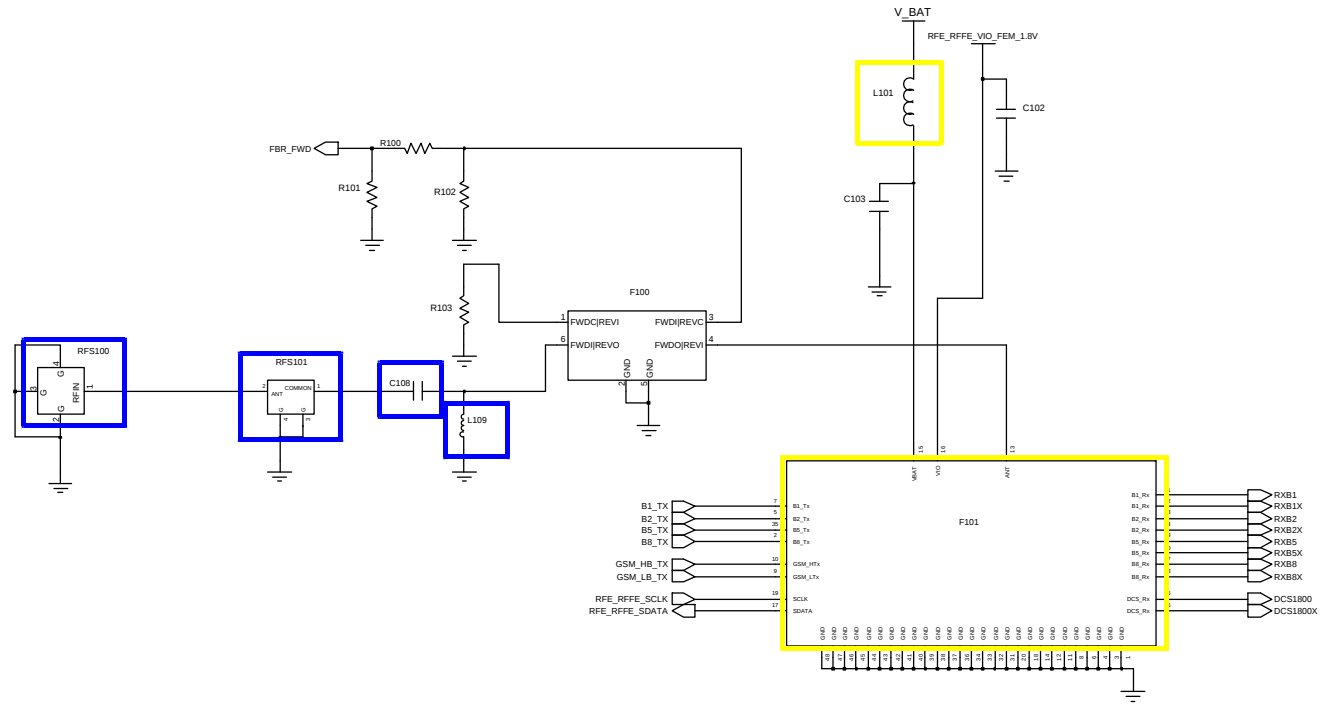
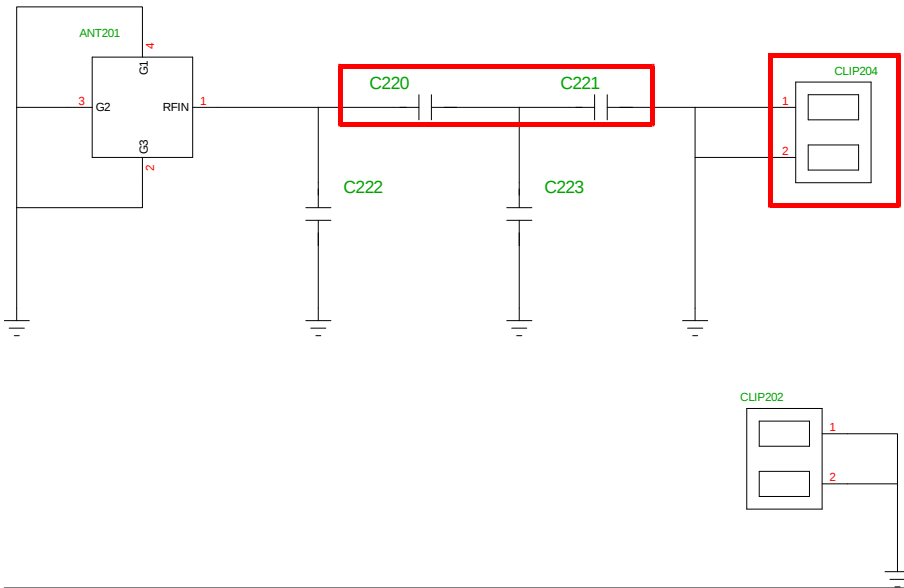


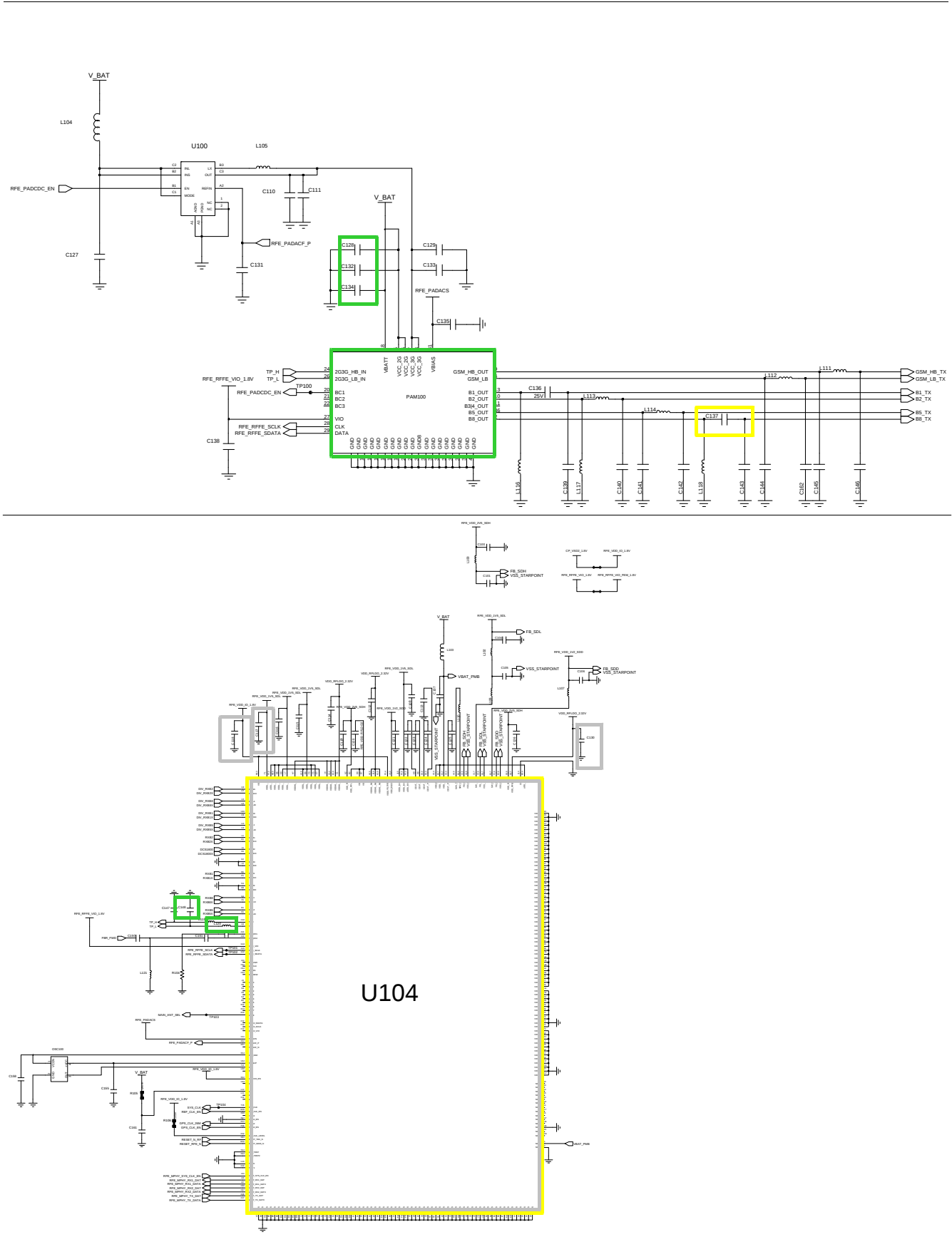


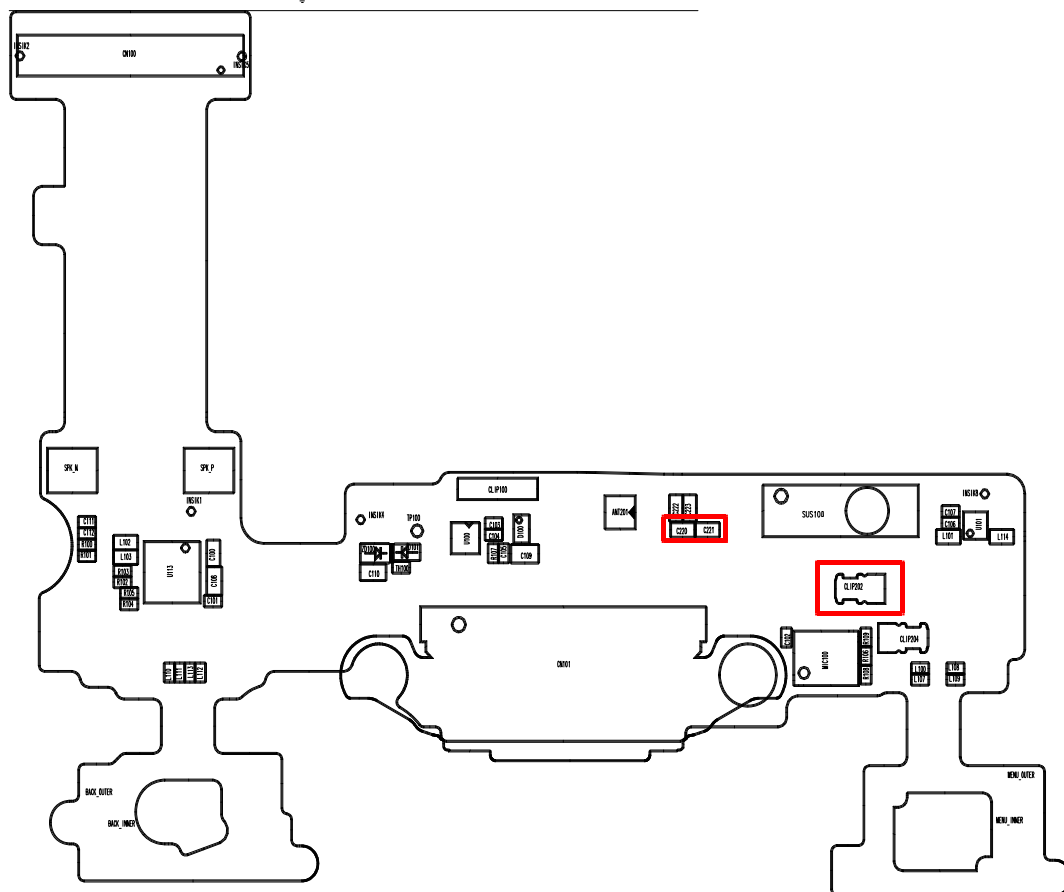
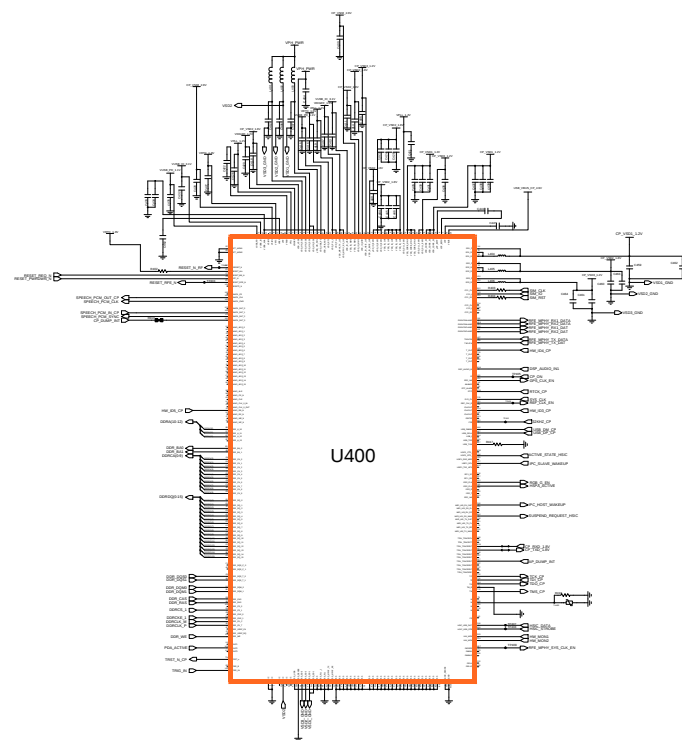


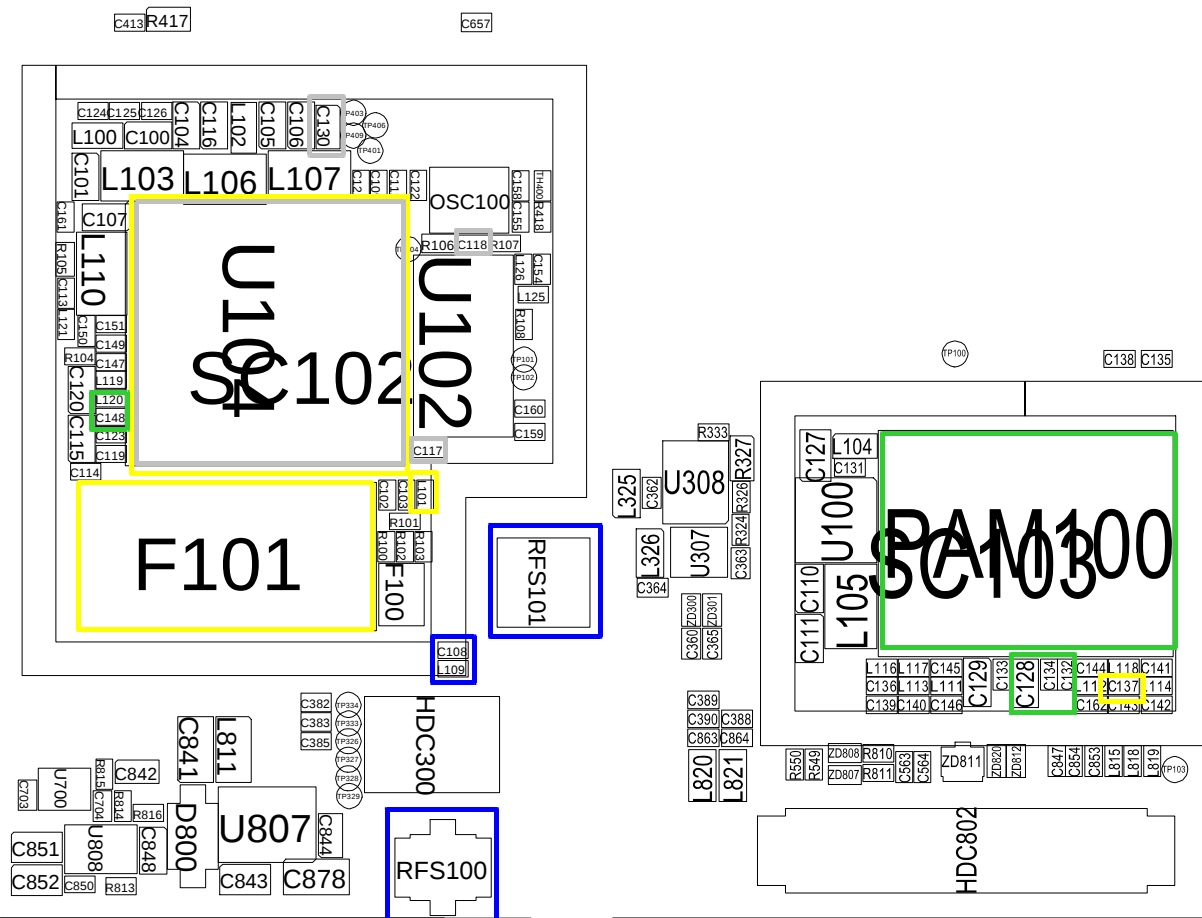
8-3-33. WCDMA900 TX

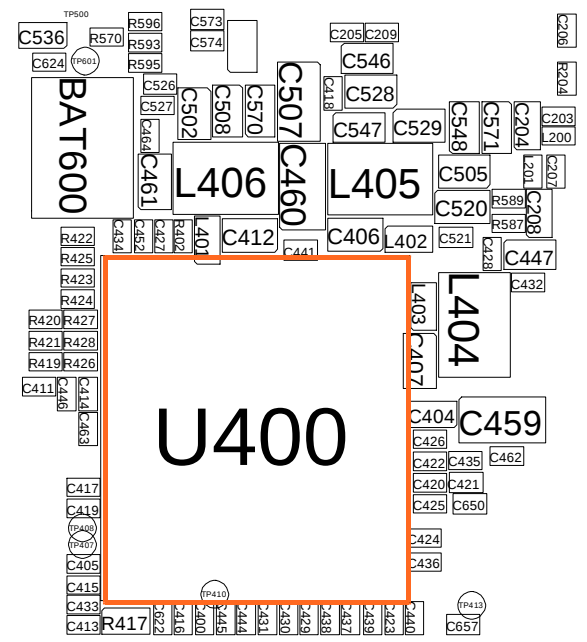












8-4. Service Schematics

- NC Point(Top View)

●: NC

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

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	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	●	●	○	○	○	○	●	○	○	●	○	○	●	●

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