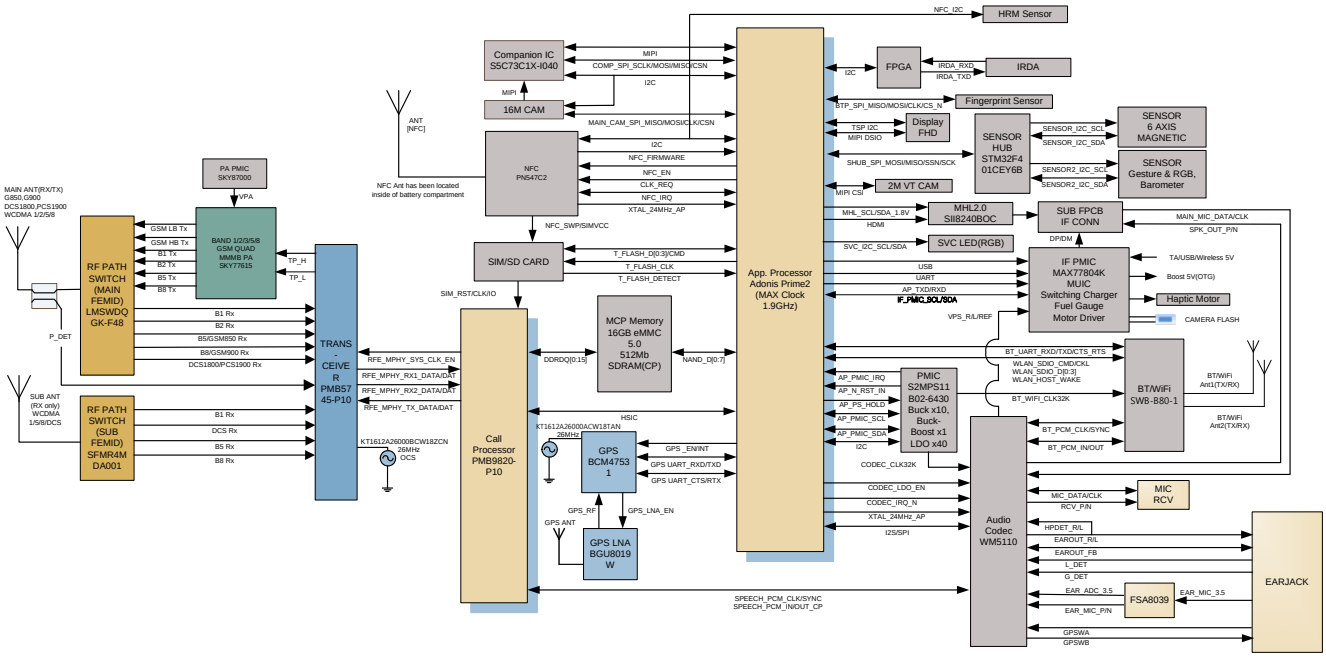
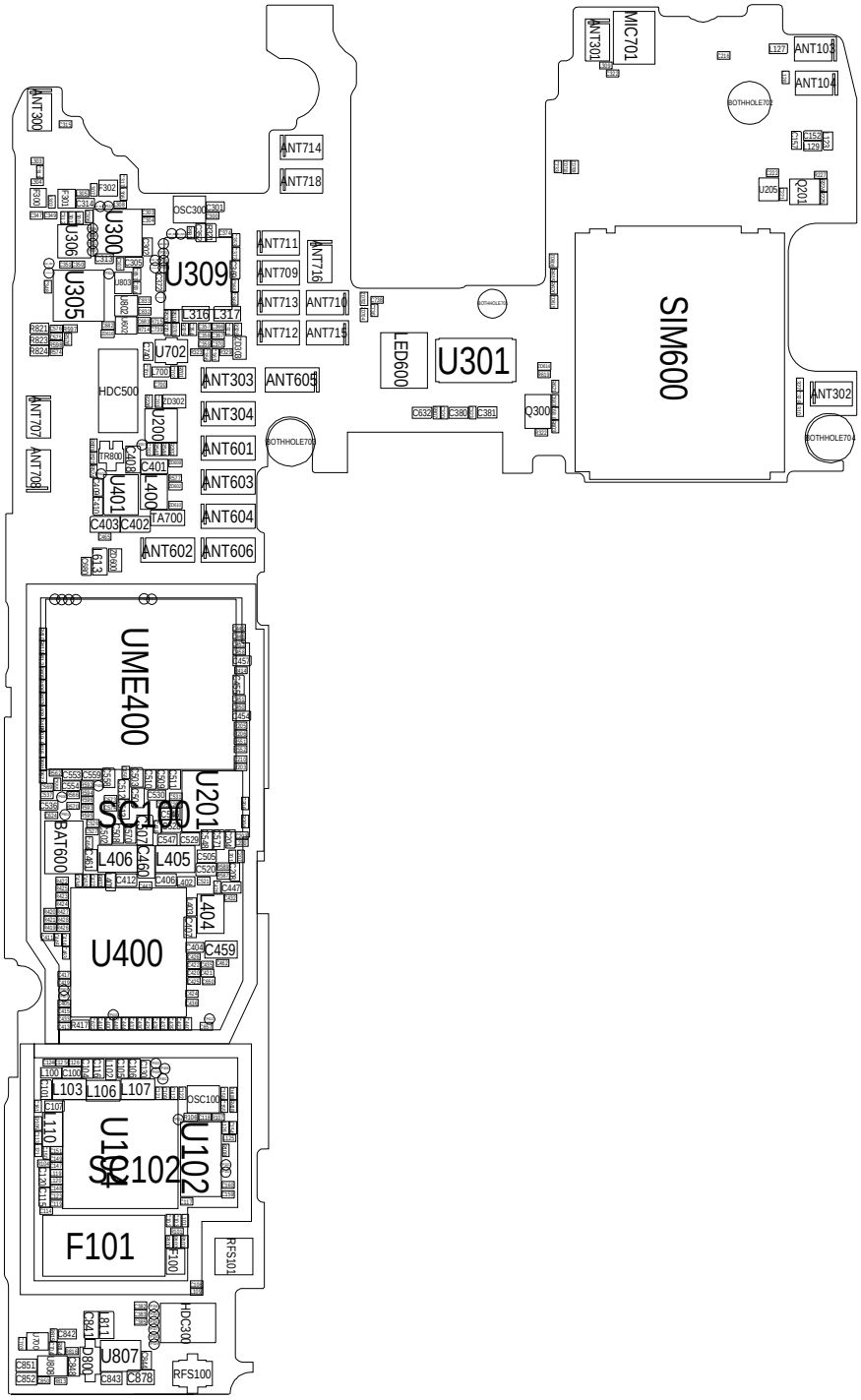
8. Level 3 Repair (VIETMOBILE.VN)

8-1. Block Diagram

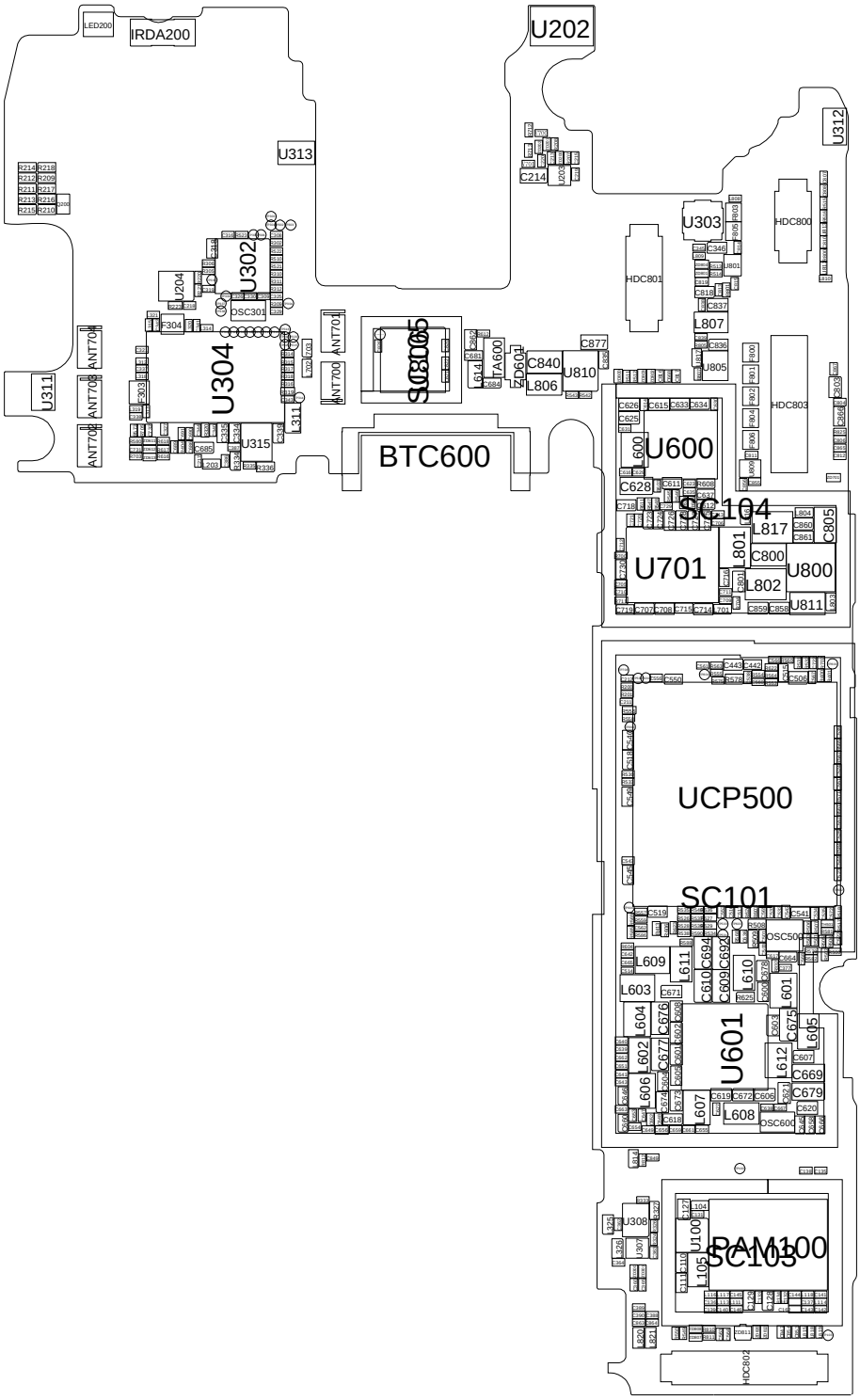


8-2. PCB Diagrams

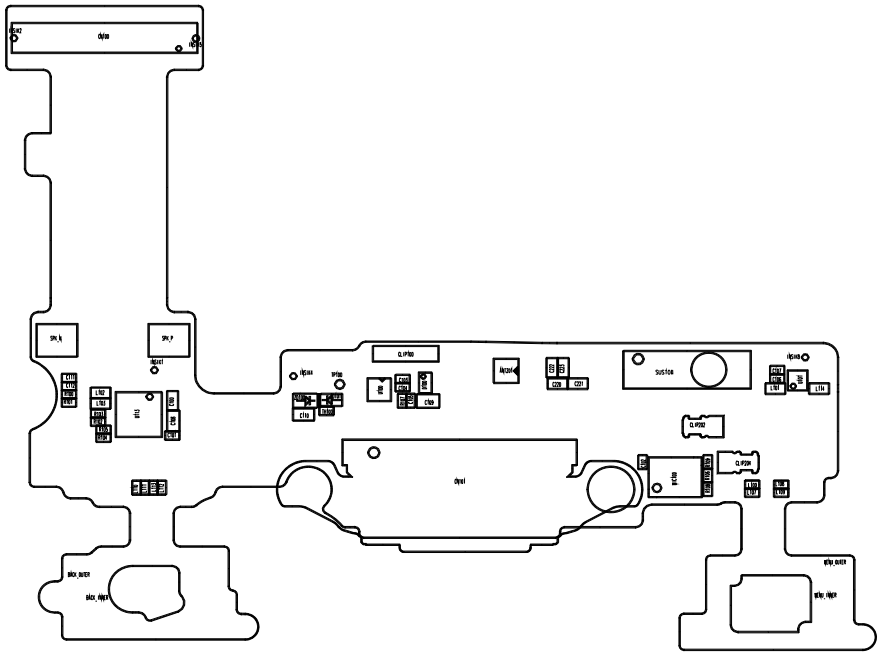
8-2-1. Main PCB Top



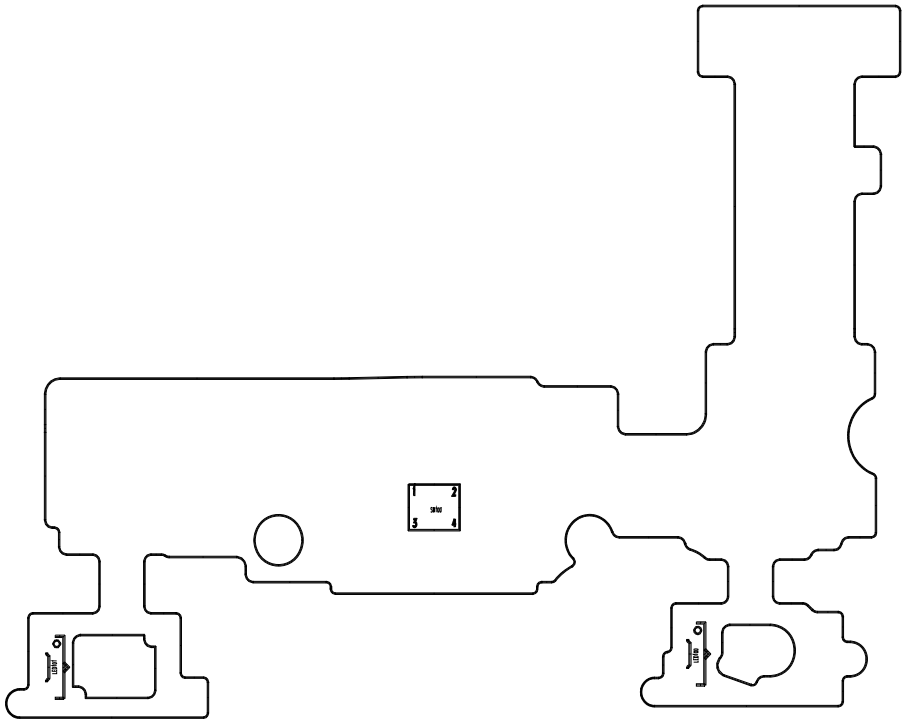
8-2-2. Bottom



8-2-3. Sub PCB Top

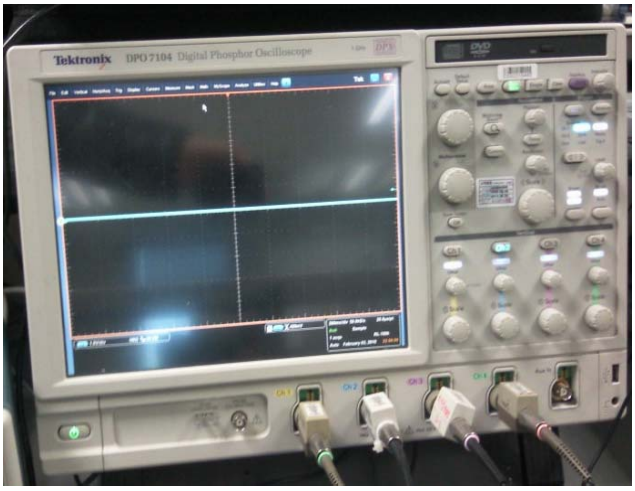


8-2-4. Sub PCB Bottom



8-3. Flow Chart of Troubleshooting

Equipments

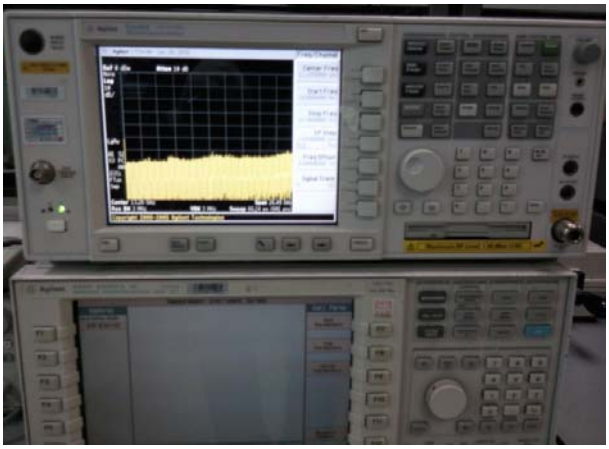


↑ Oscilloscope

á Digital Multimeter

á Power Supply

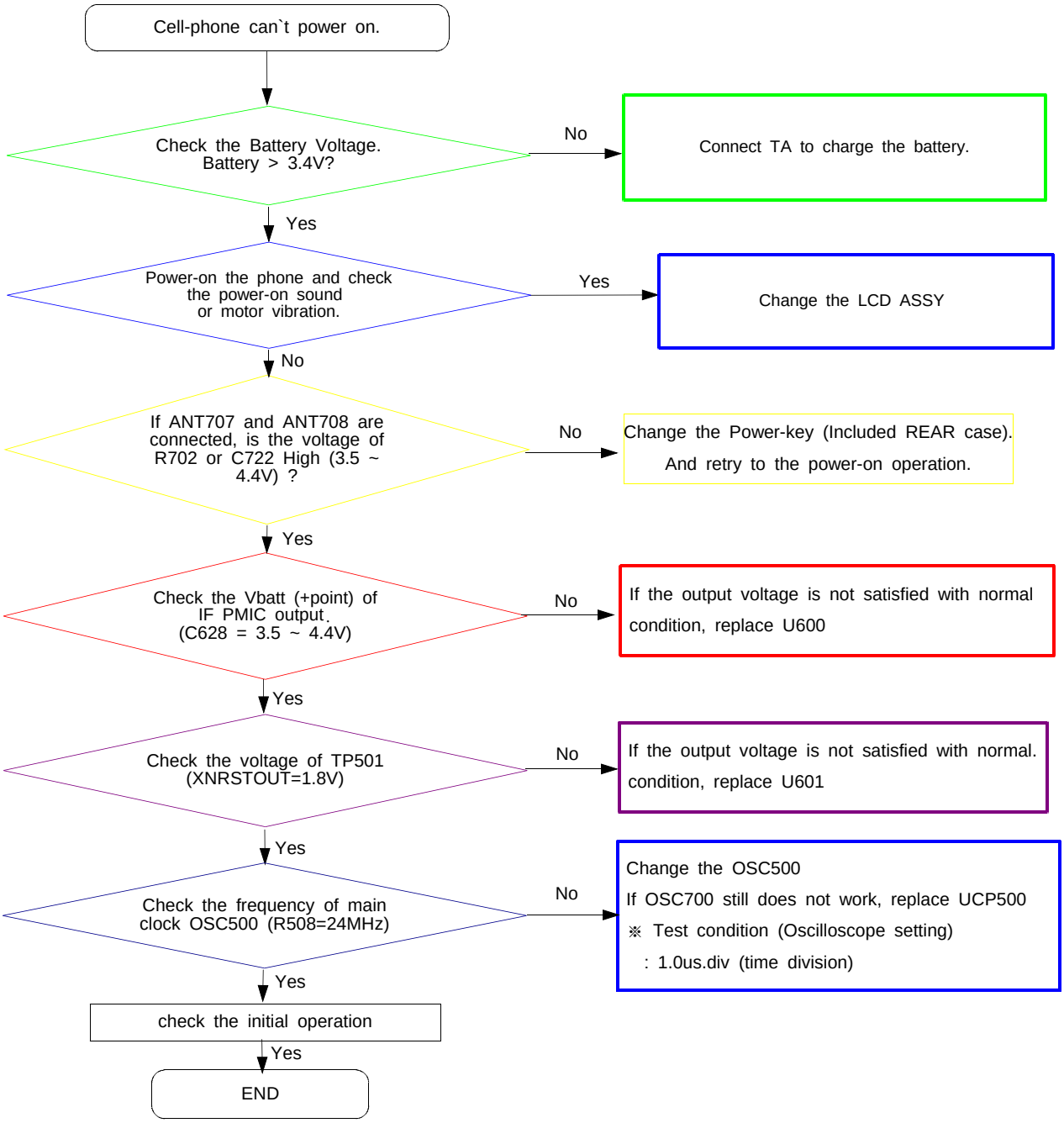
á + driver, ESD Safe Tweezer

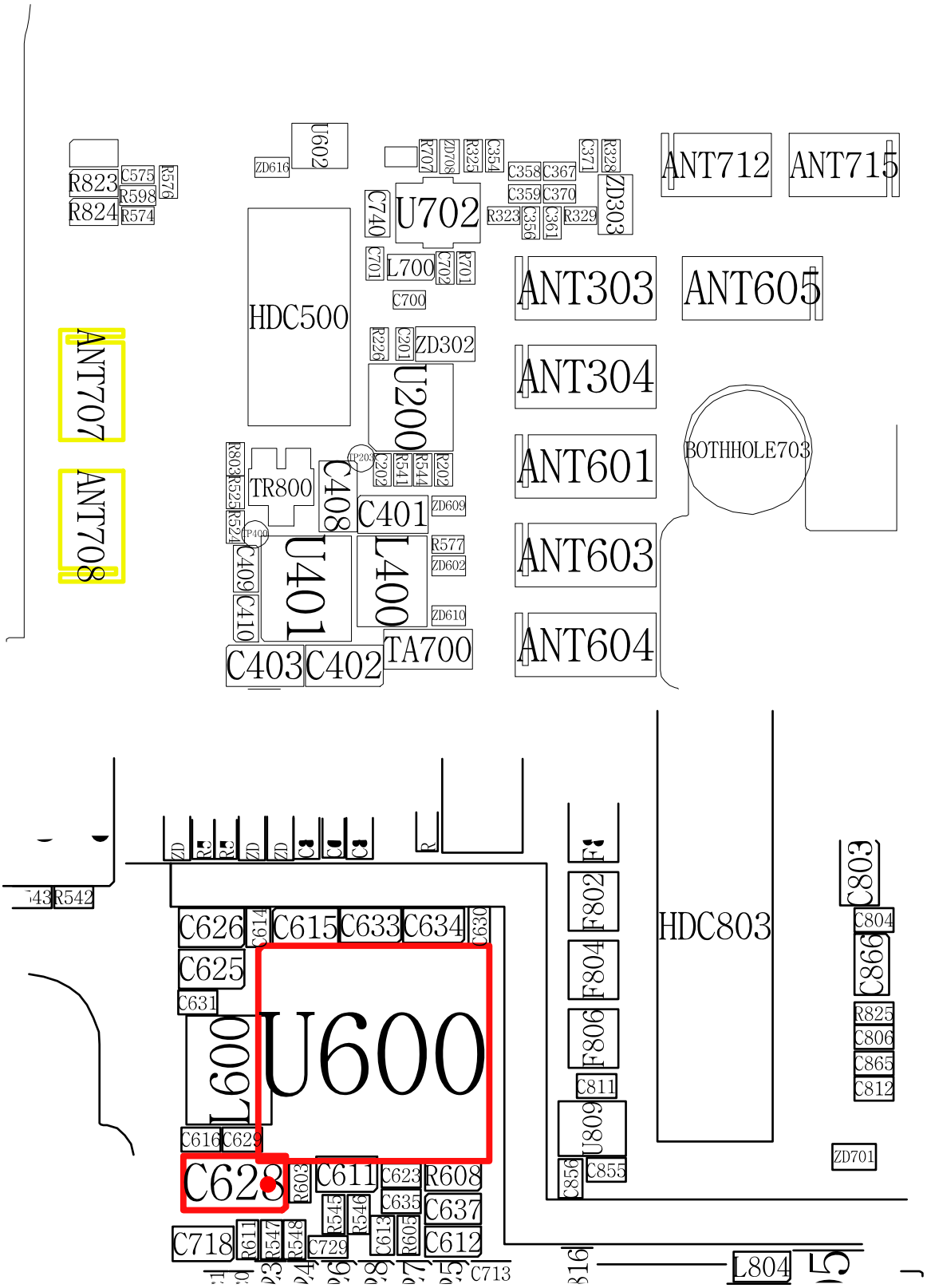


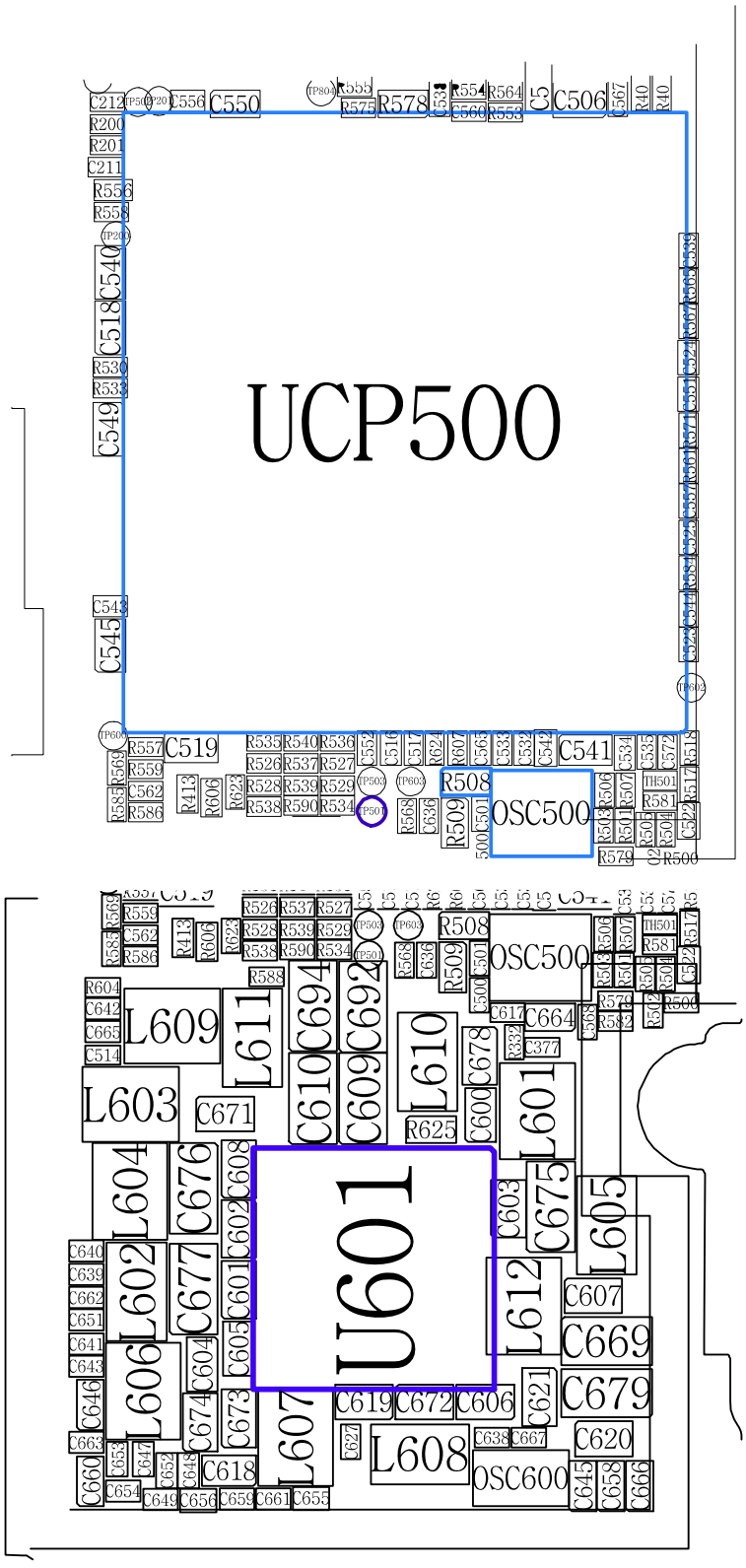
↑ 8960 & Spectrum Analyzer

á Soldering iron

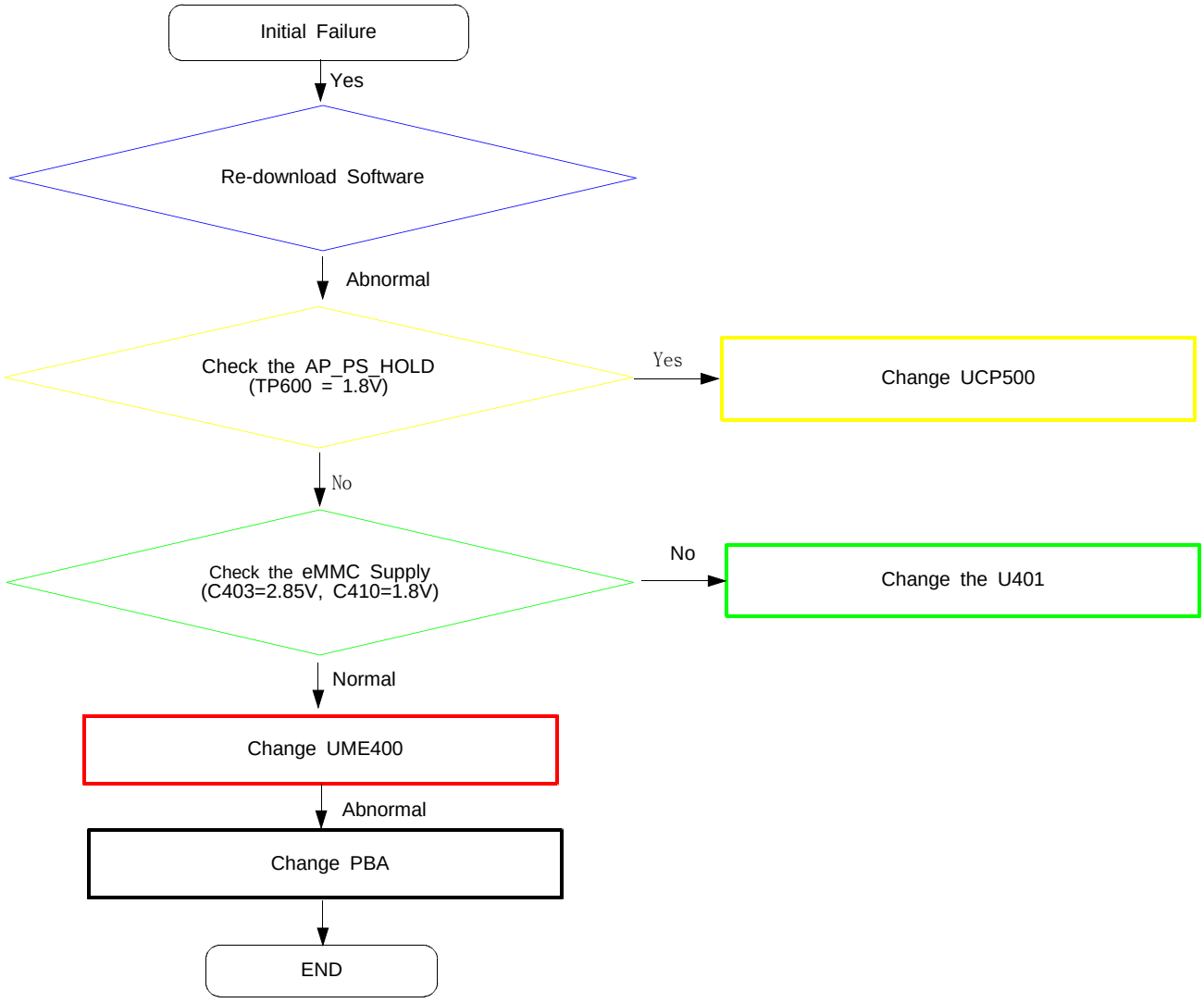
8-3-1. Power On

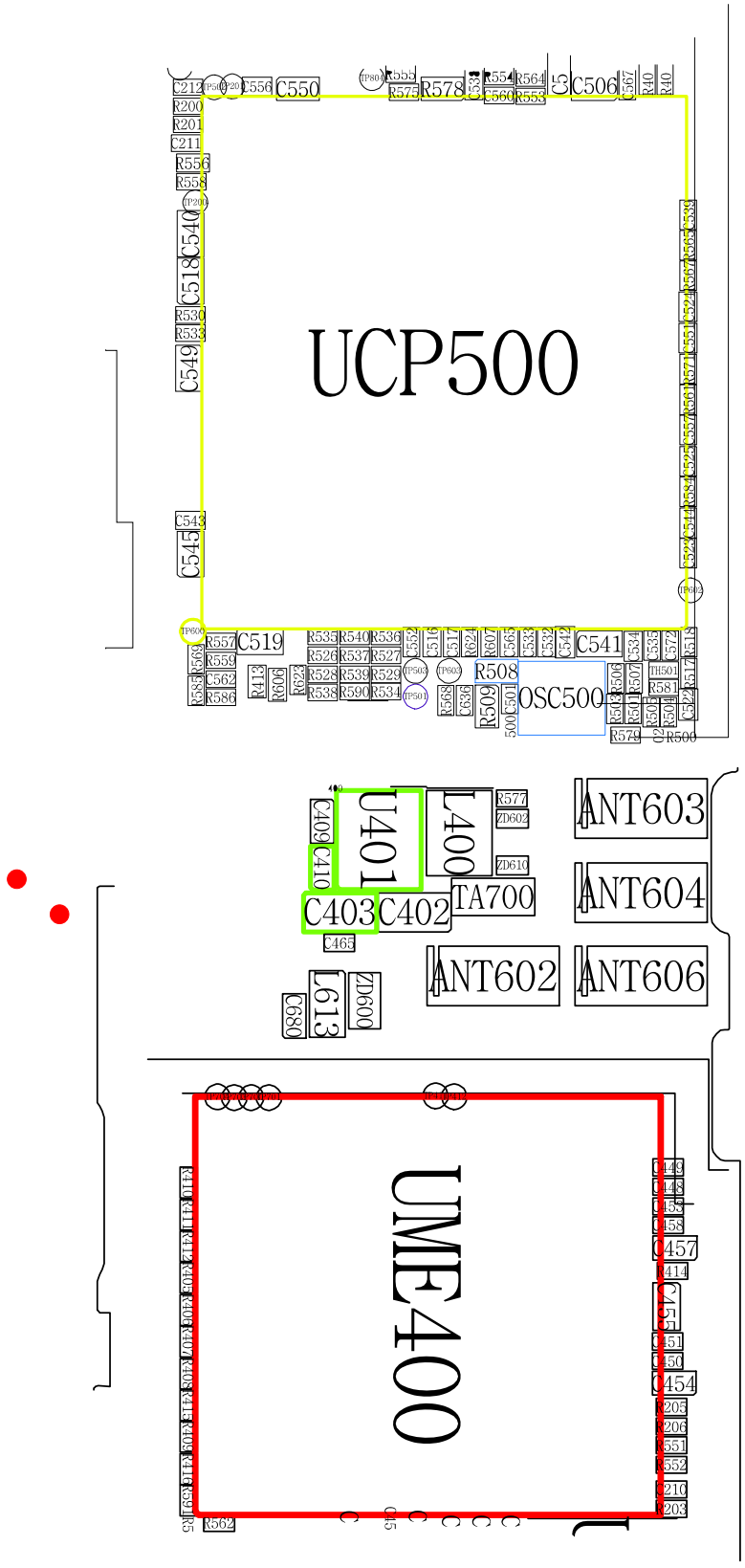




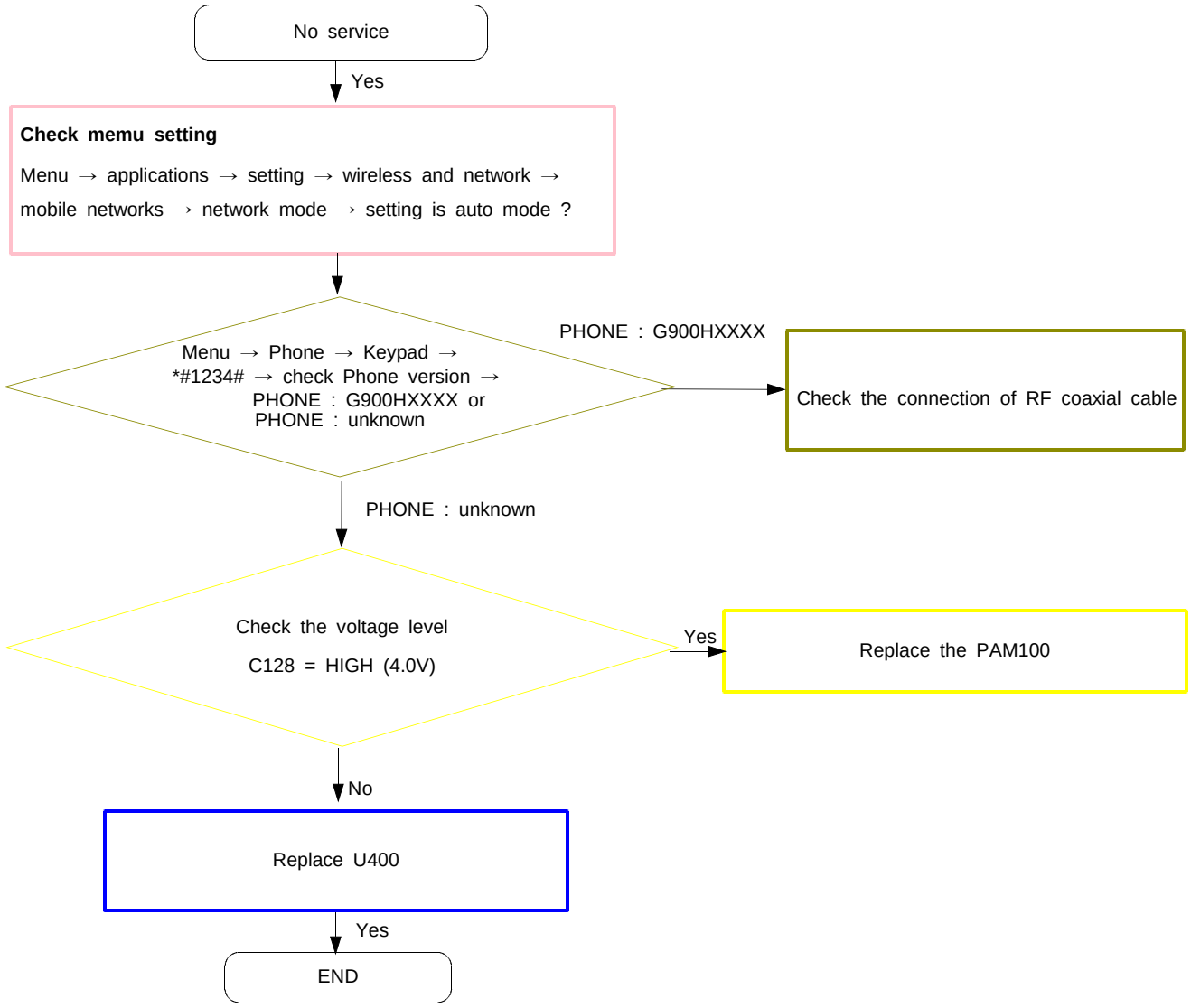


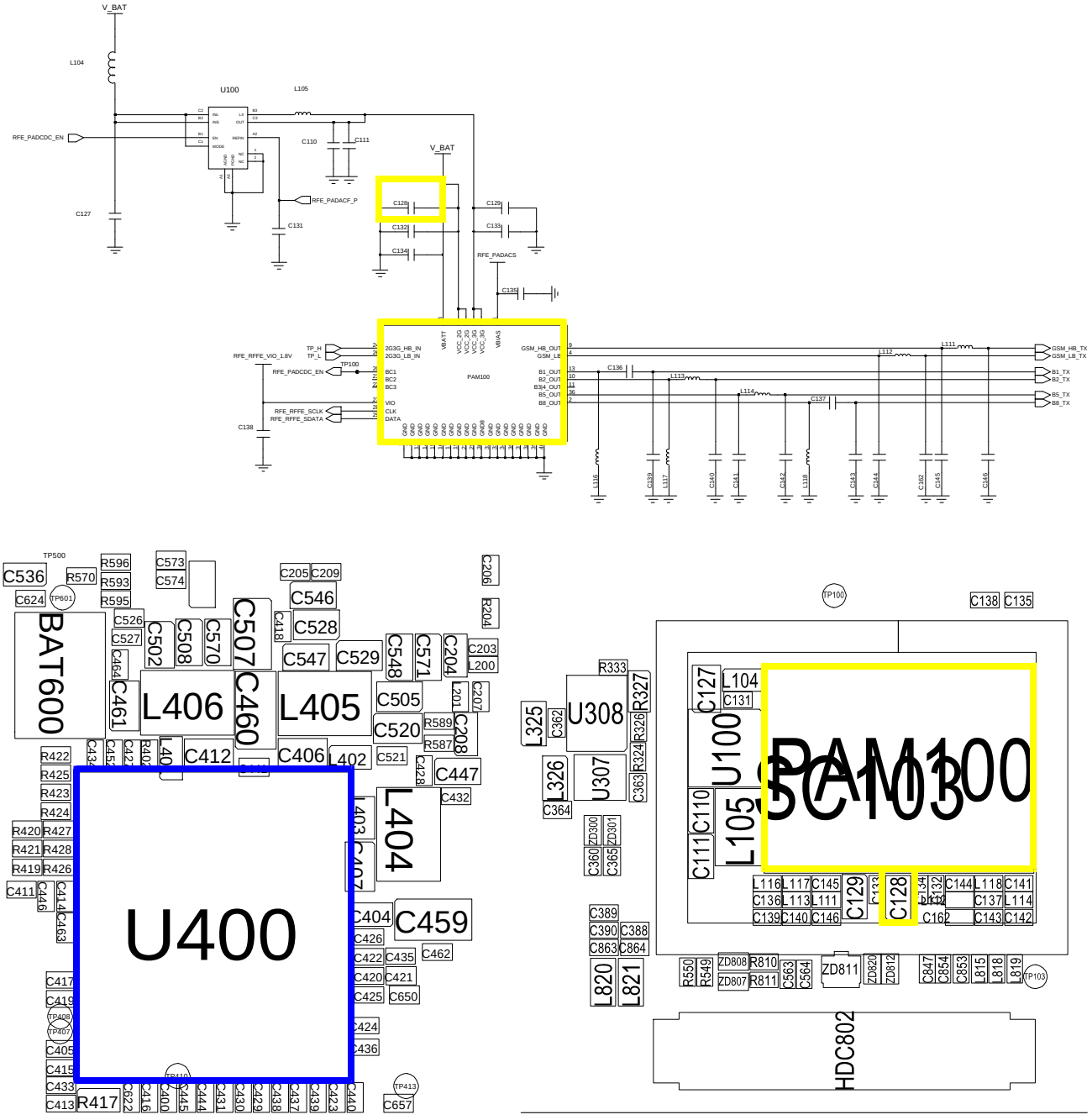
8-3-2. Initial



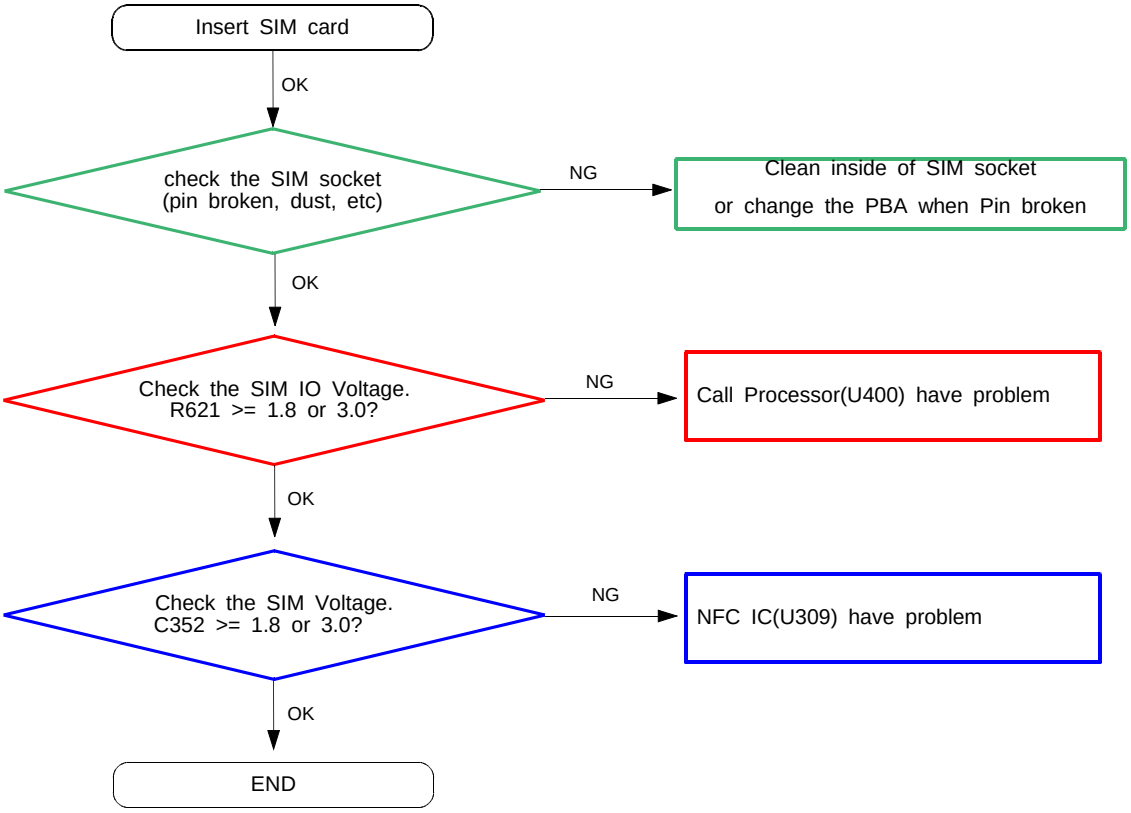


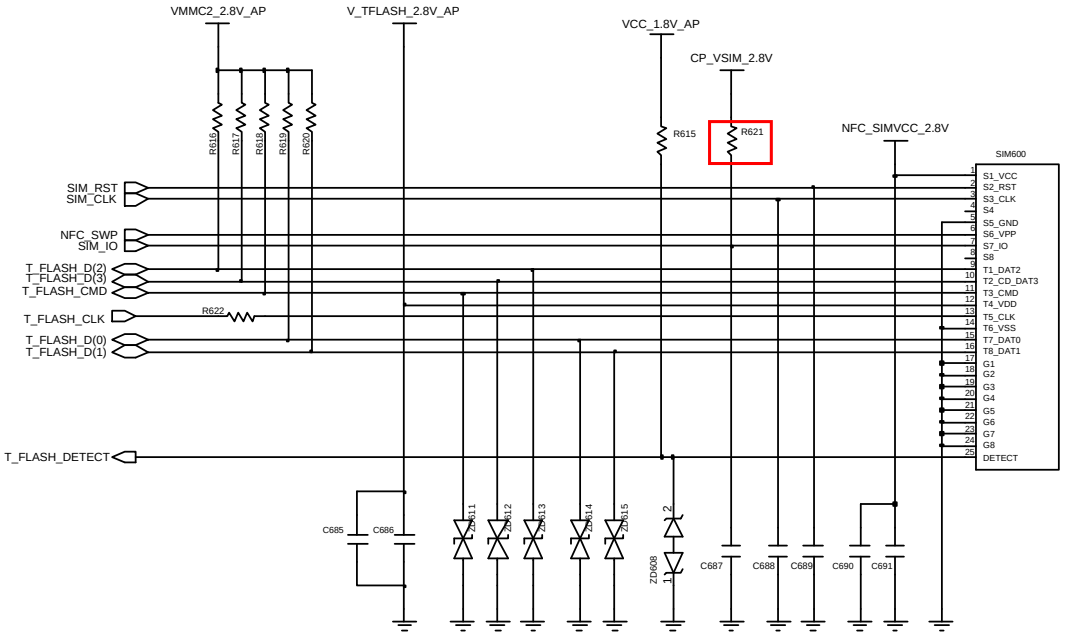
8-3-3. No Service

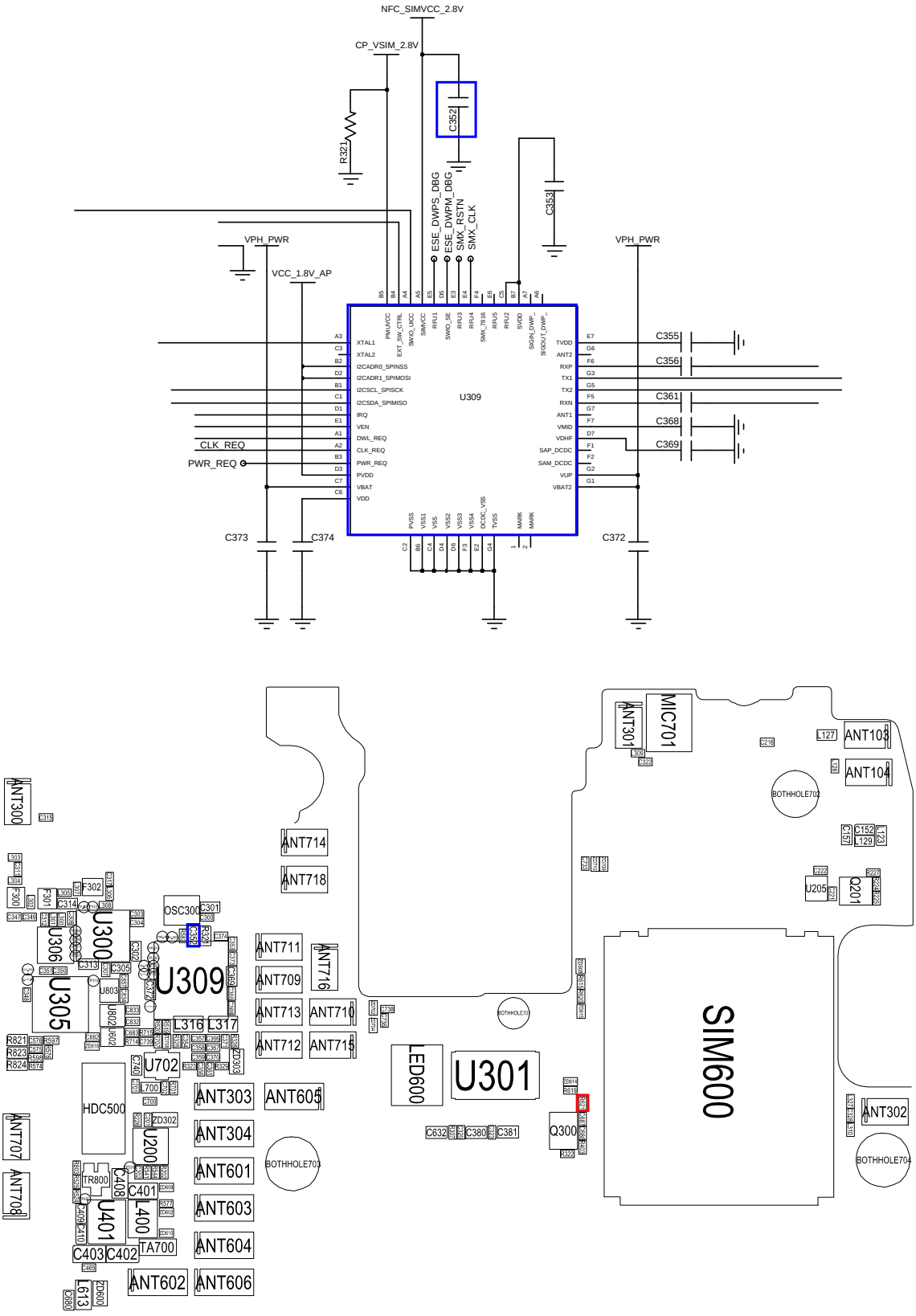




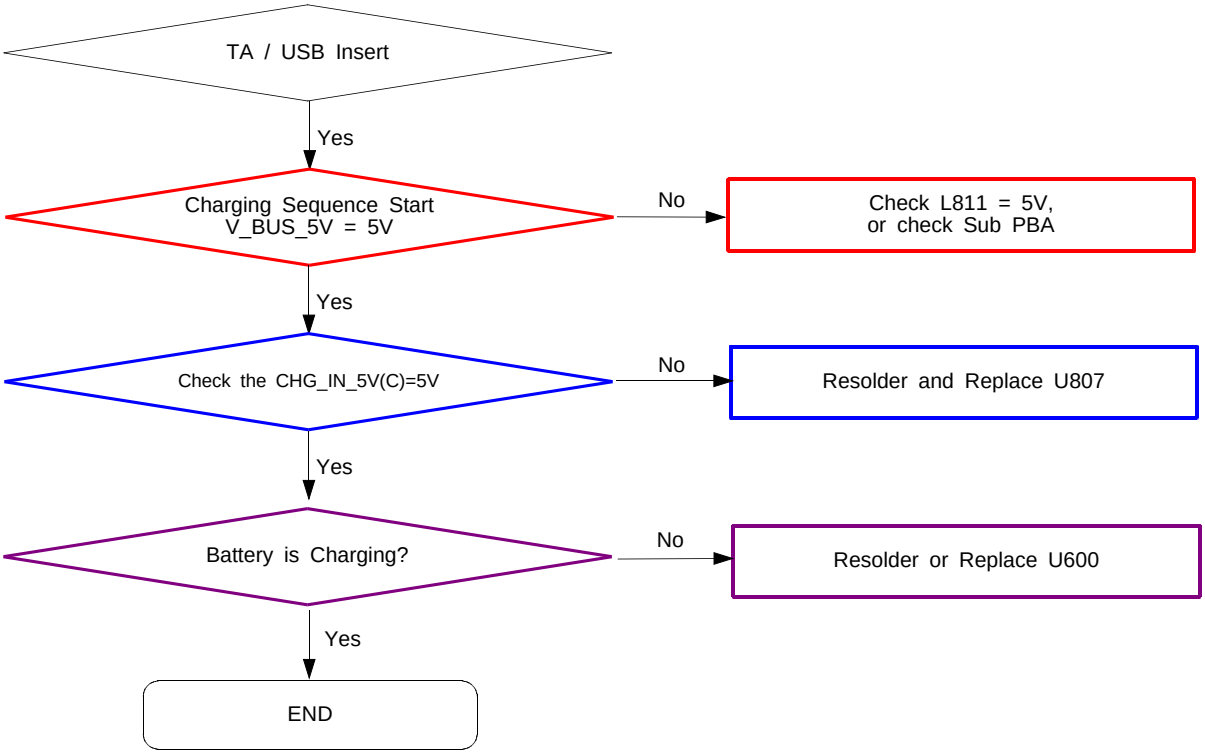
8-3-4. Sim Part

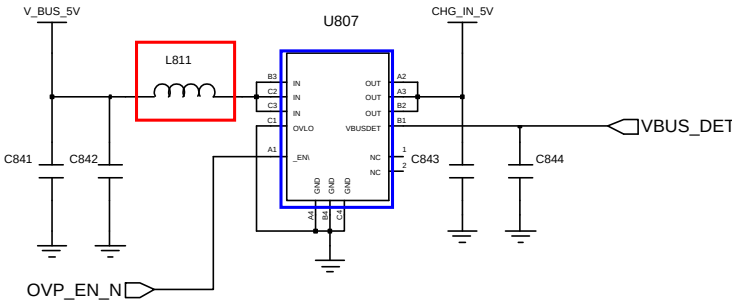


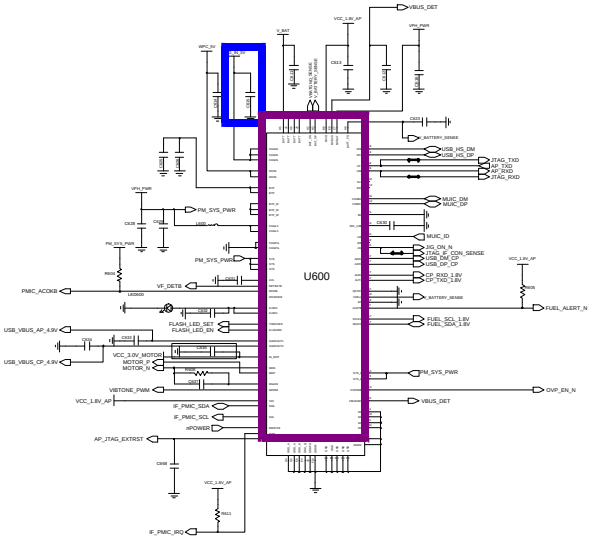


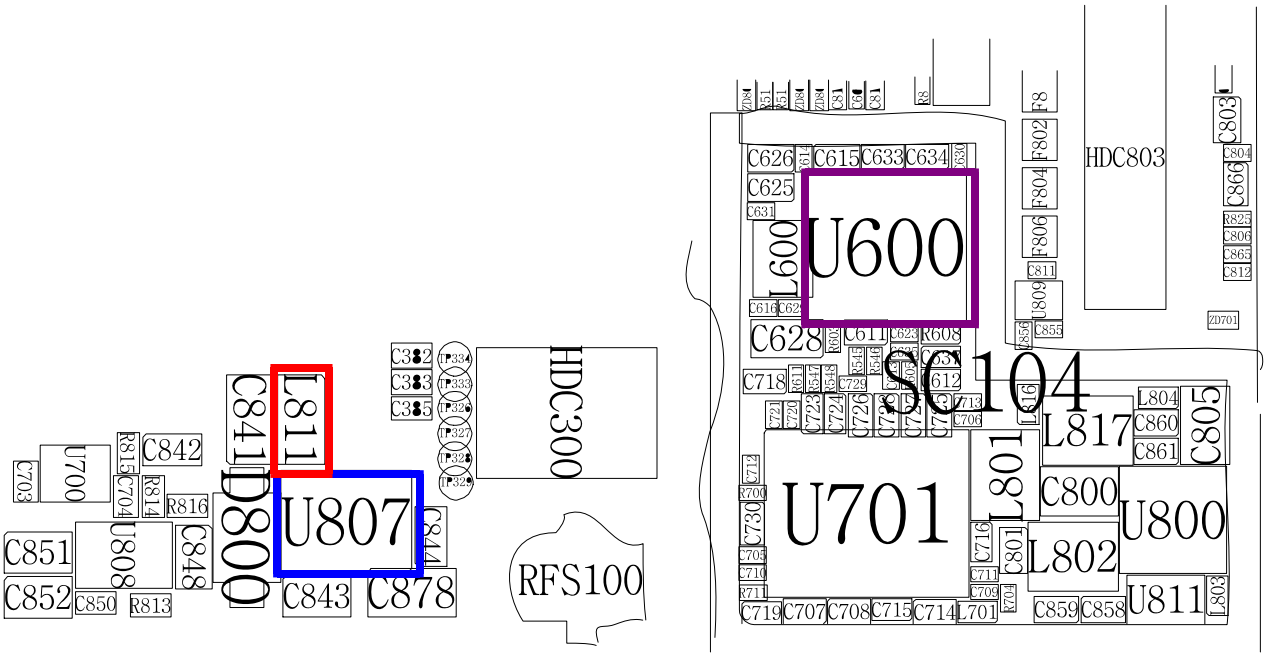


8-3-5. Charging Part

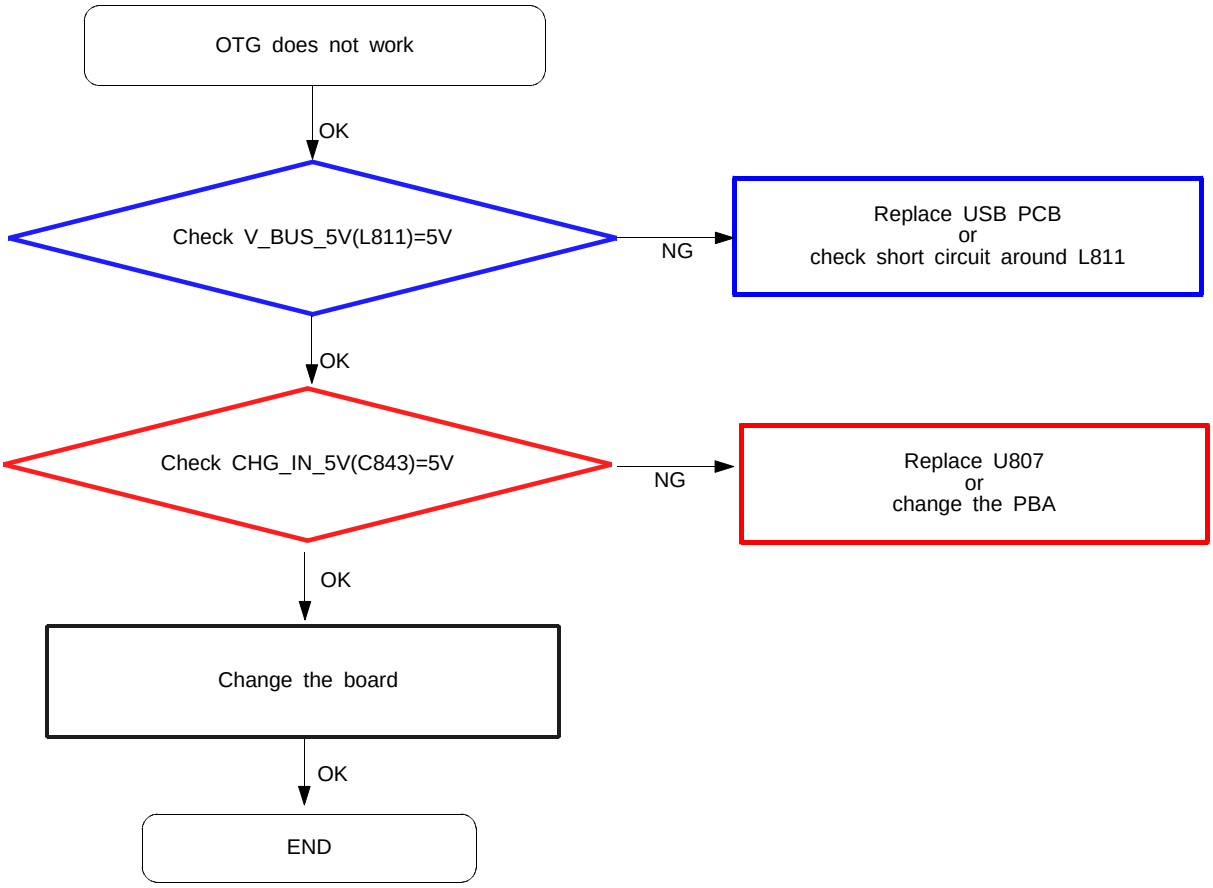


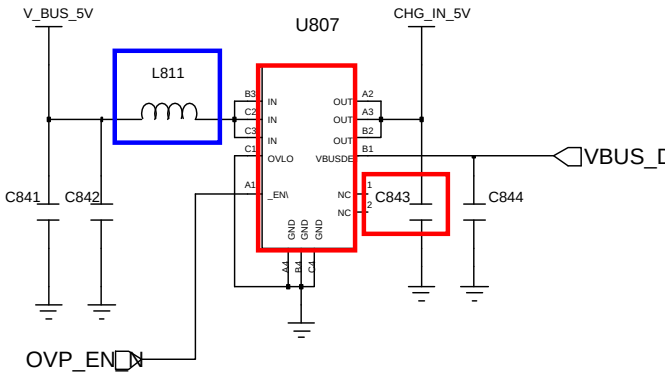


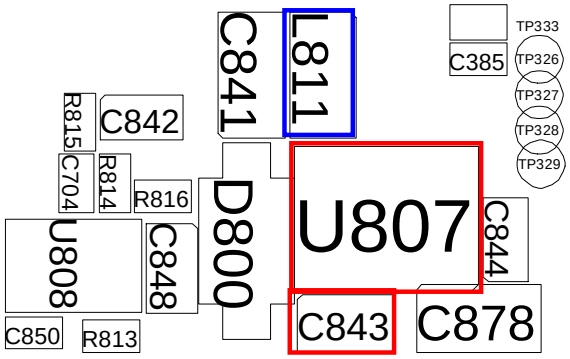




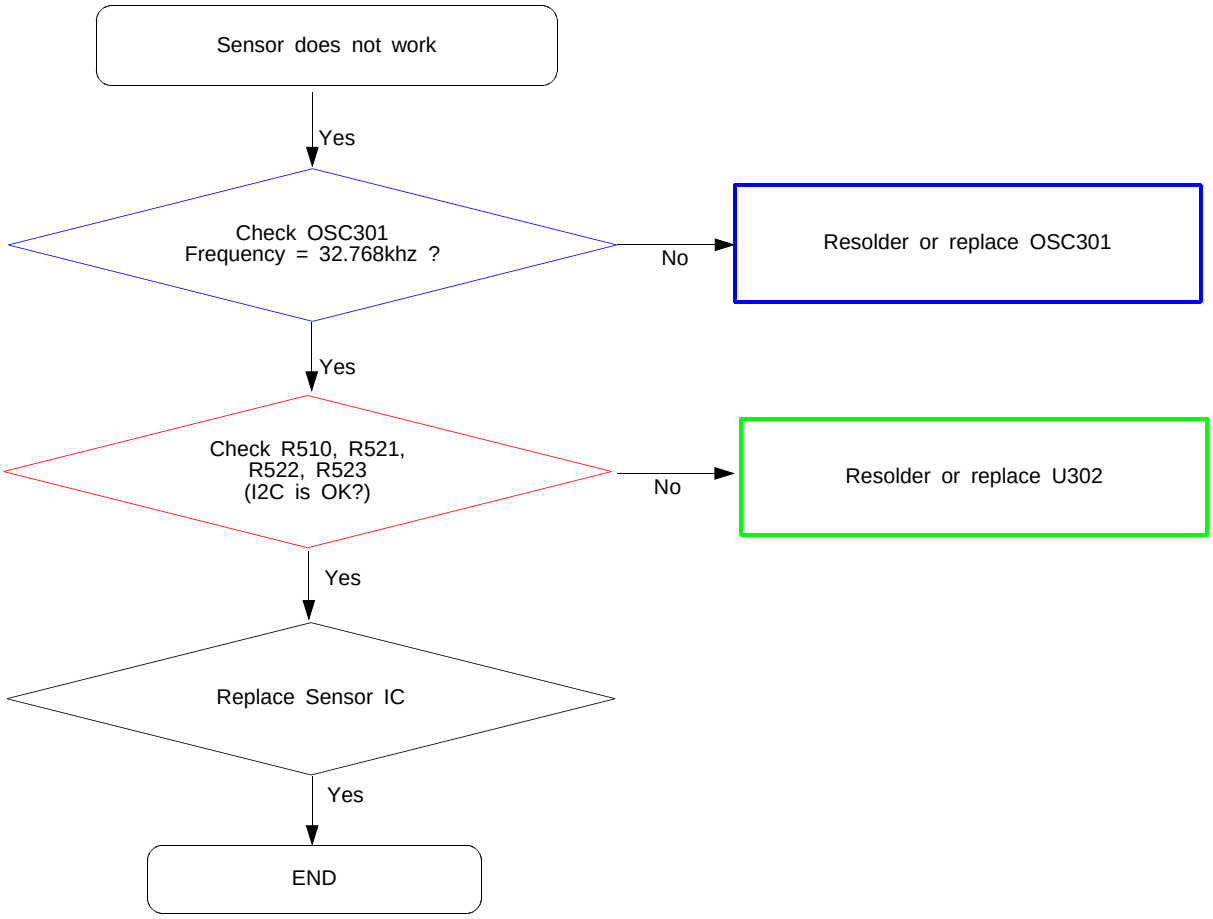
8-3-6. OTG

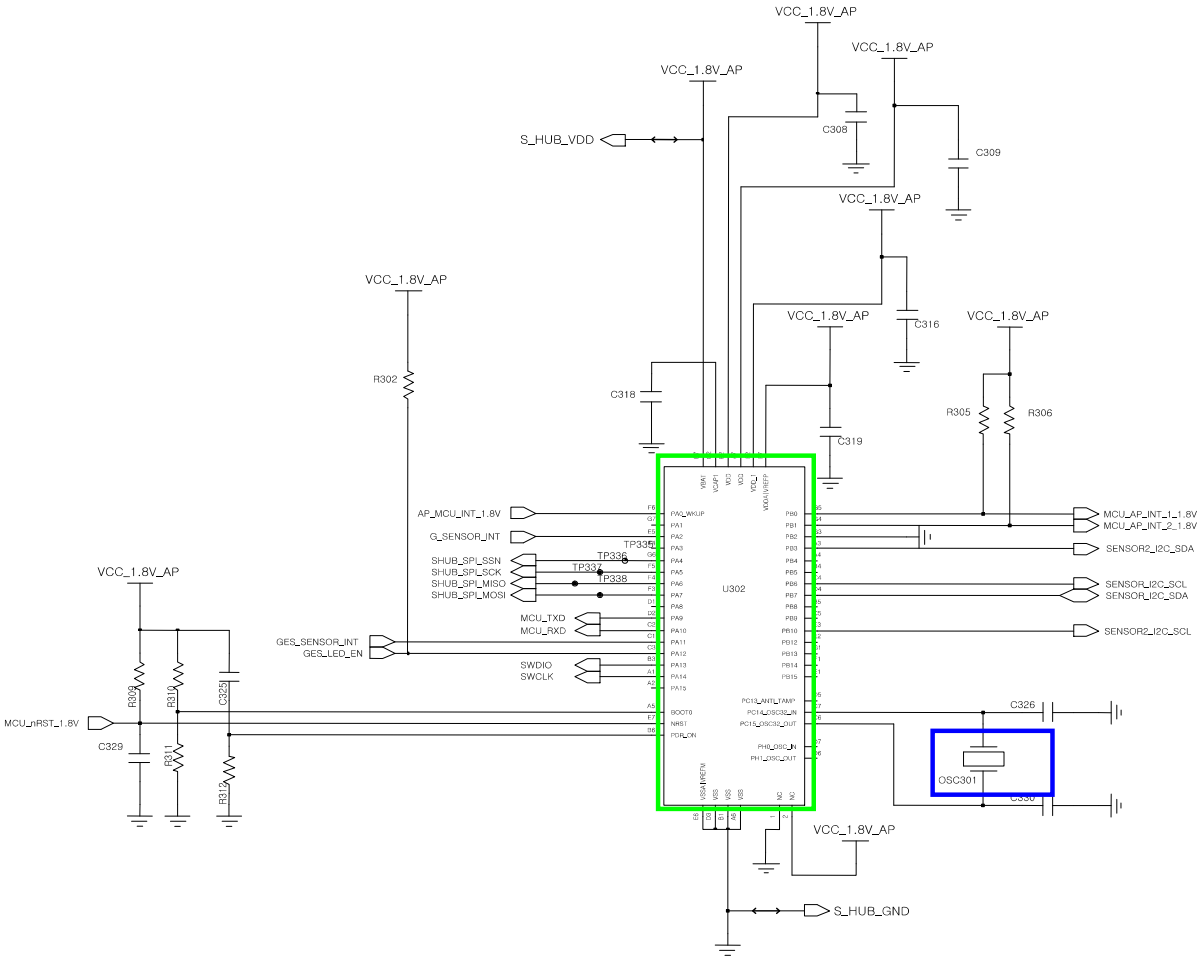


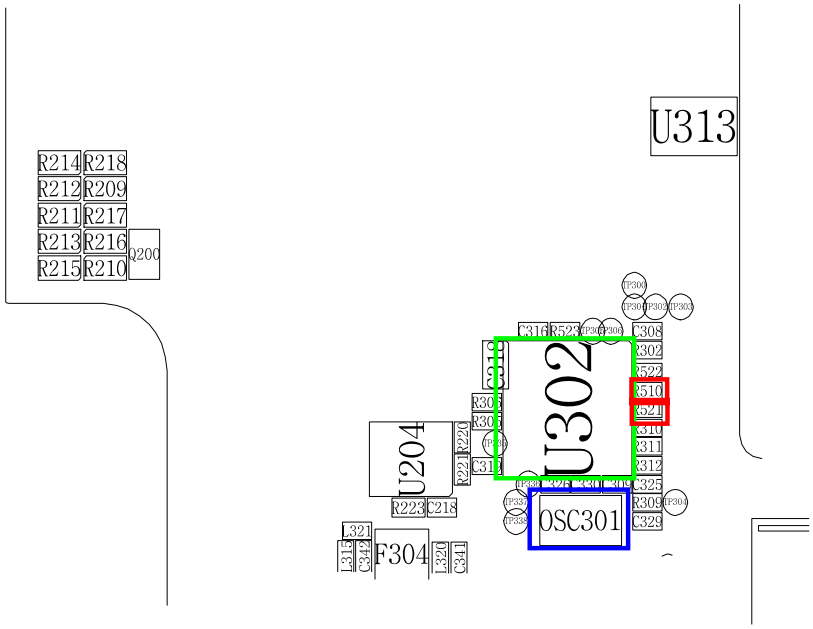




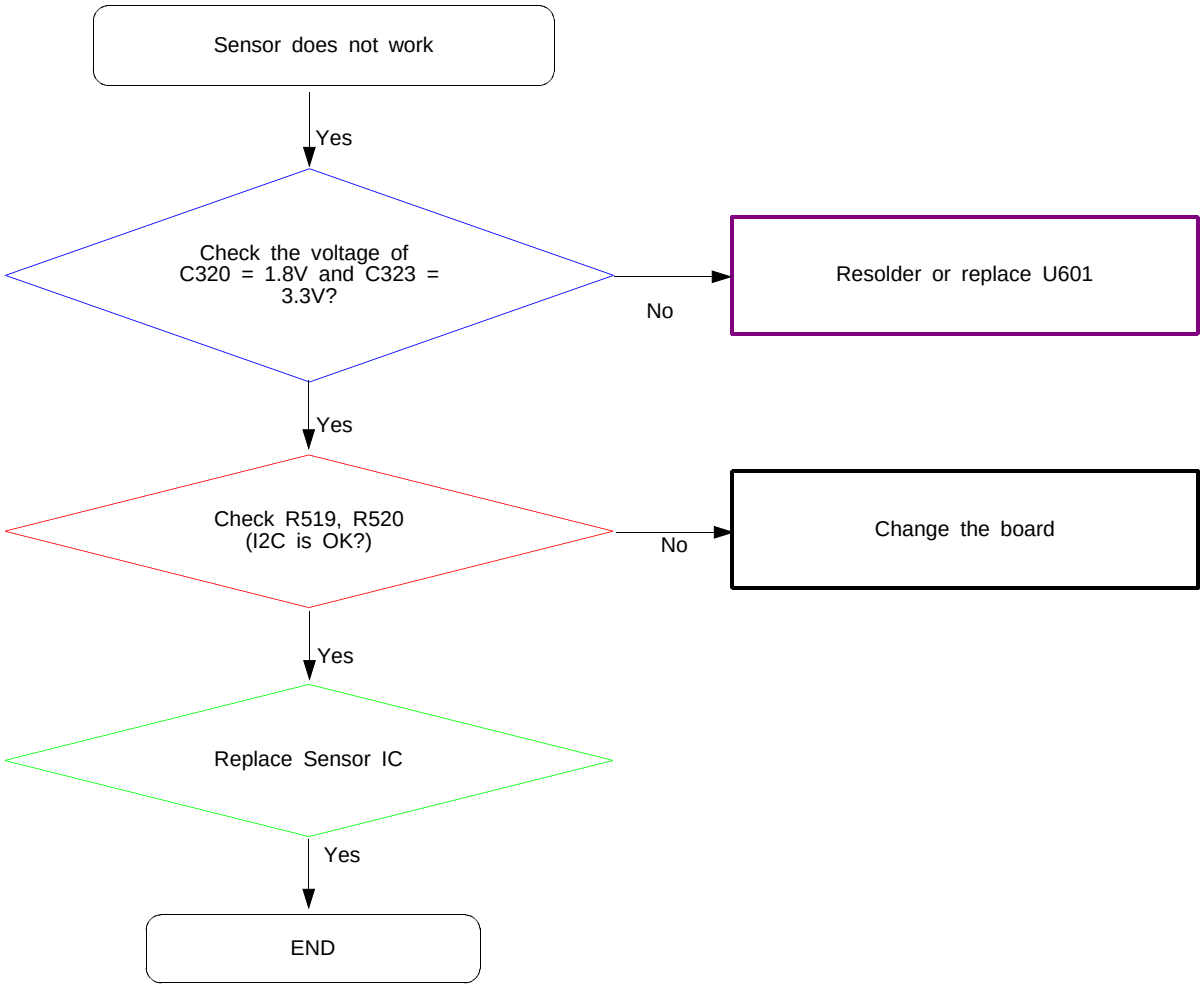
8-3-7-1. Sensor - Accelerometer, Barometer, Gyro, Gesture, Proximity, RGB, Magnetic

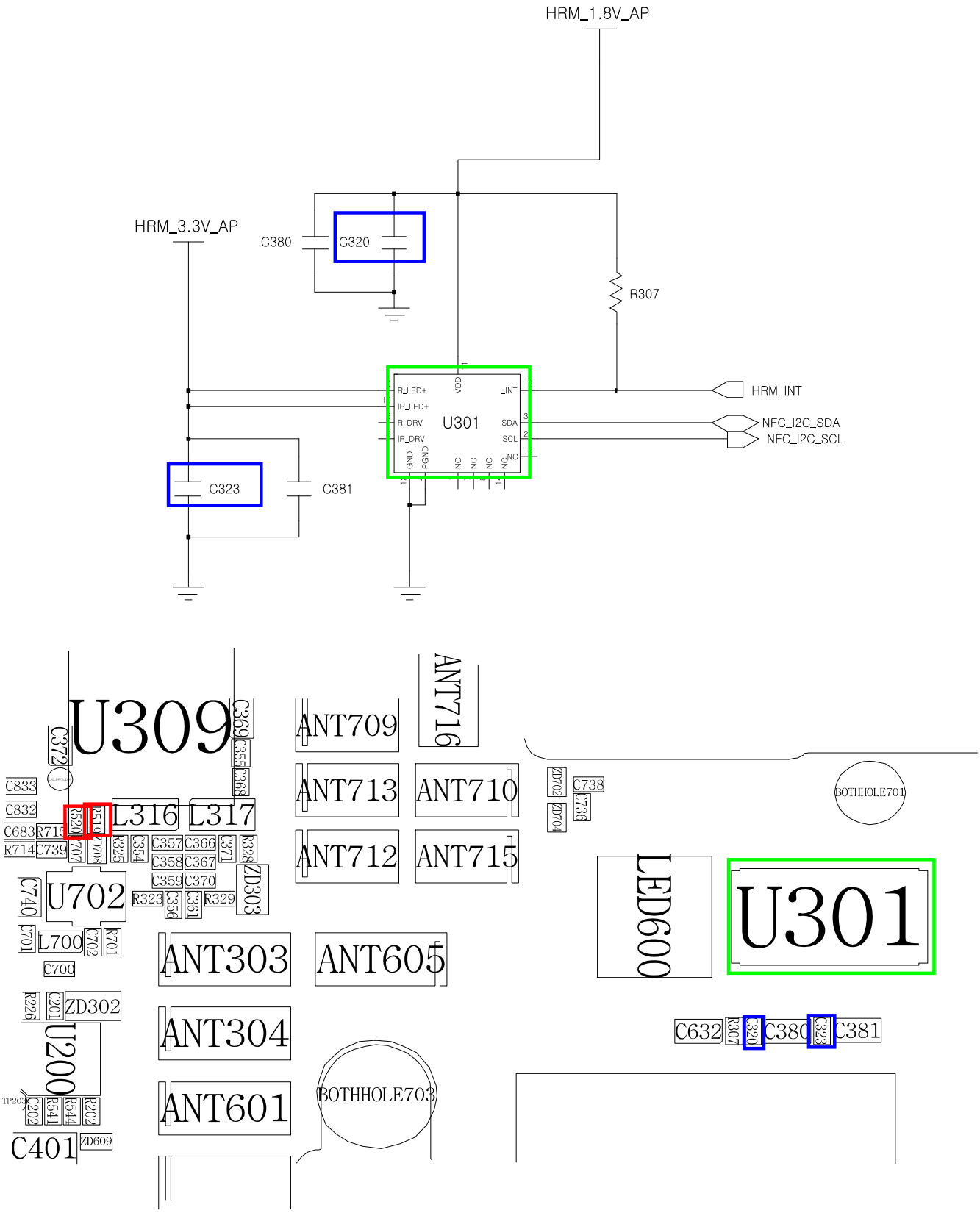




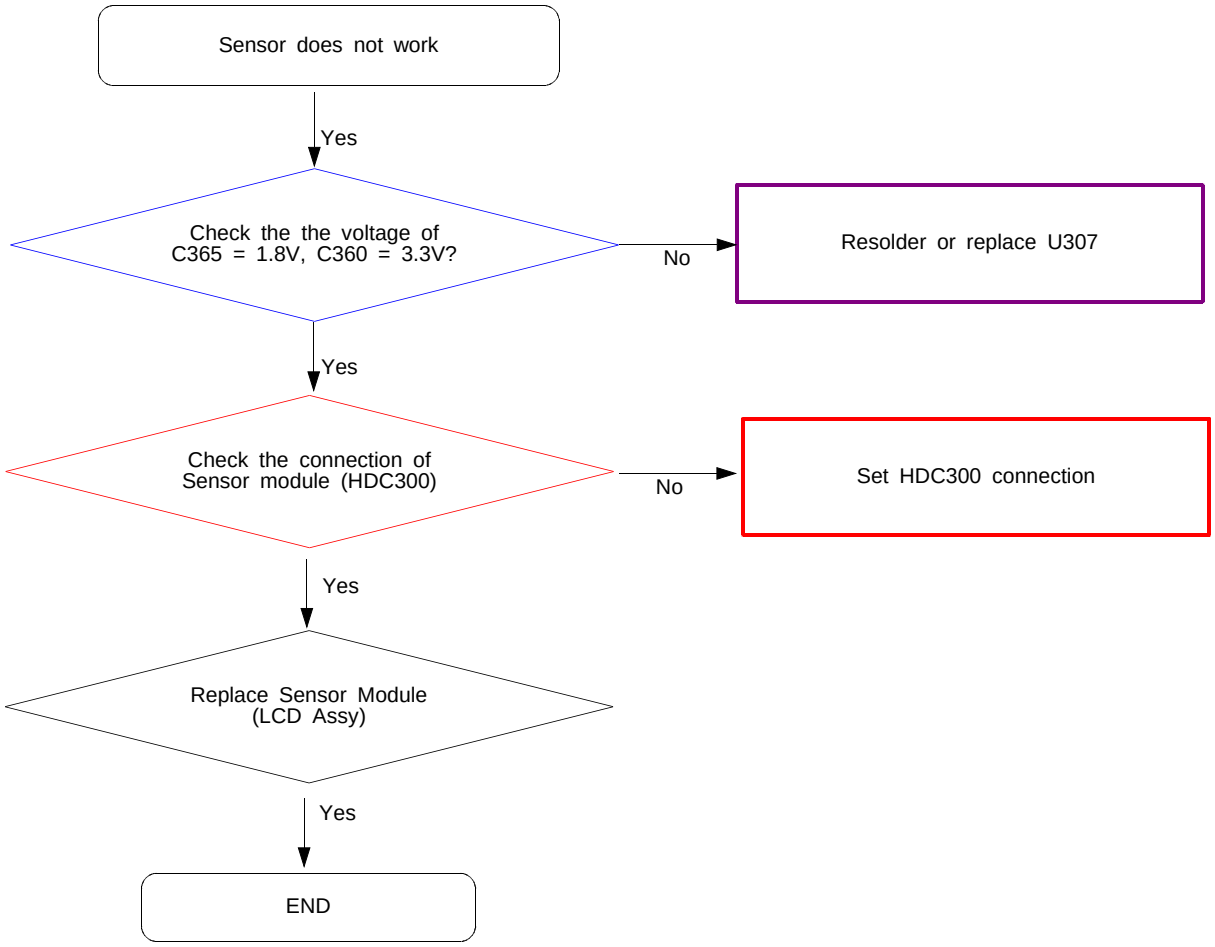


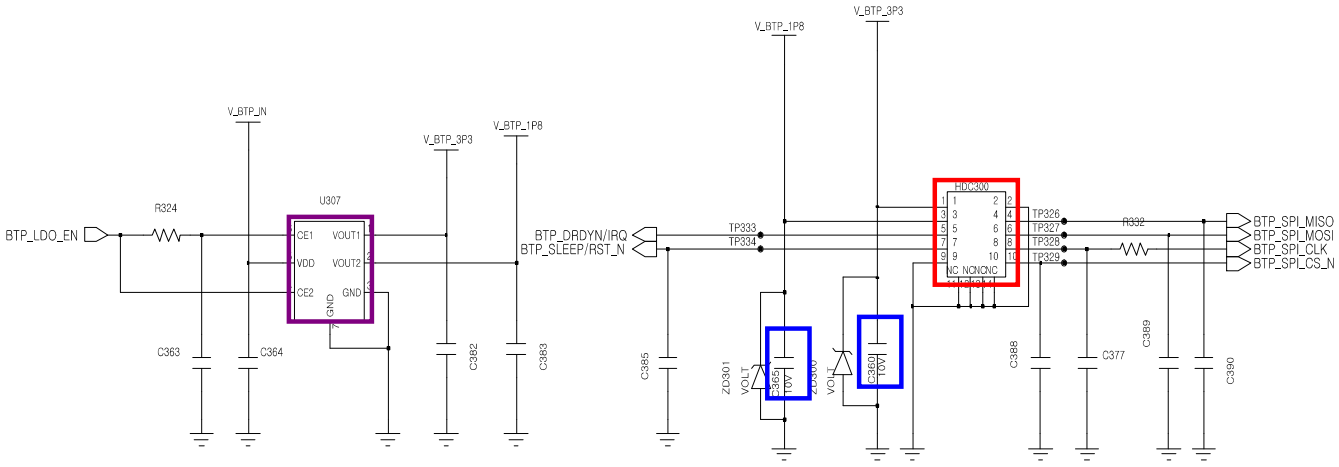
8-3-7-2. Sensor - HRM

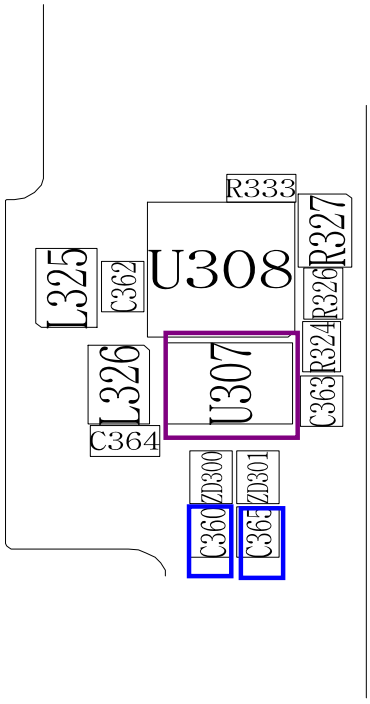


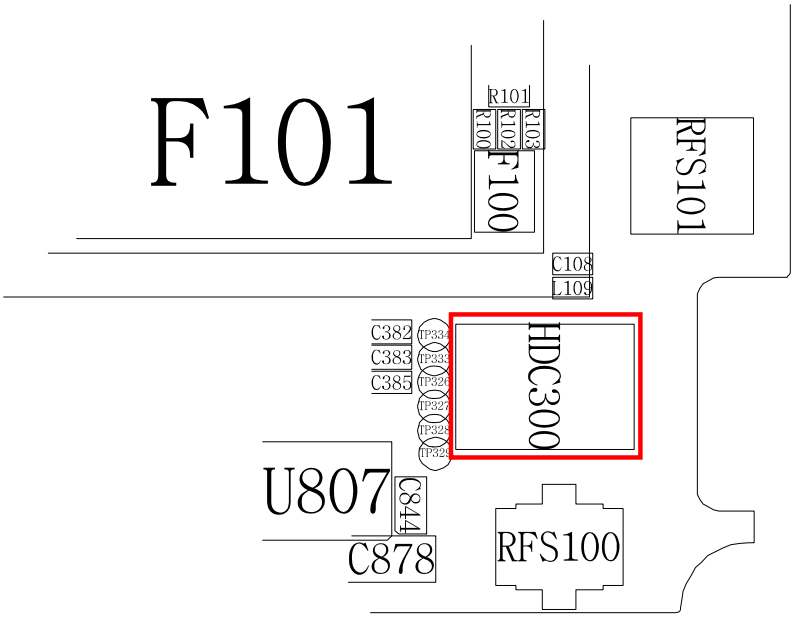


8-3-7-3. Sensor - Fingerprint







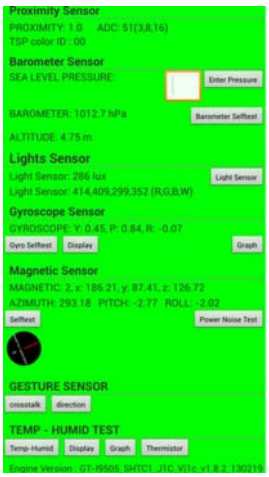


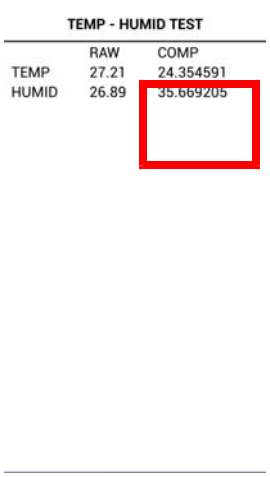
※ CAUTION

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.

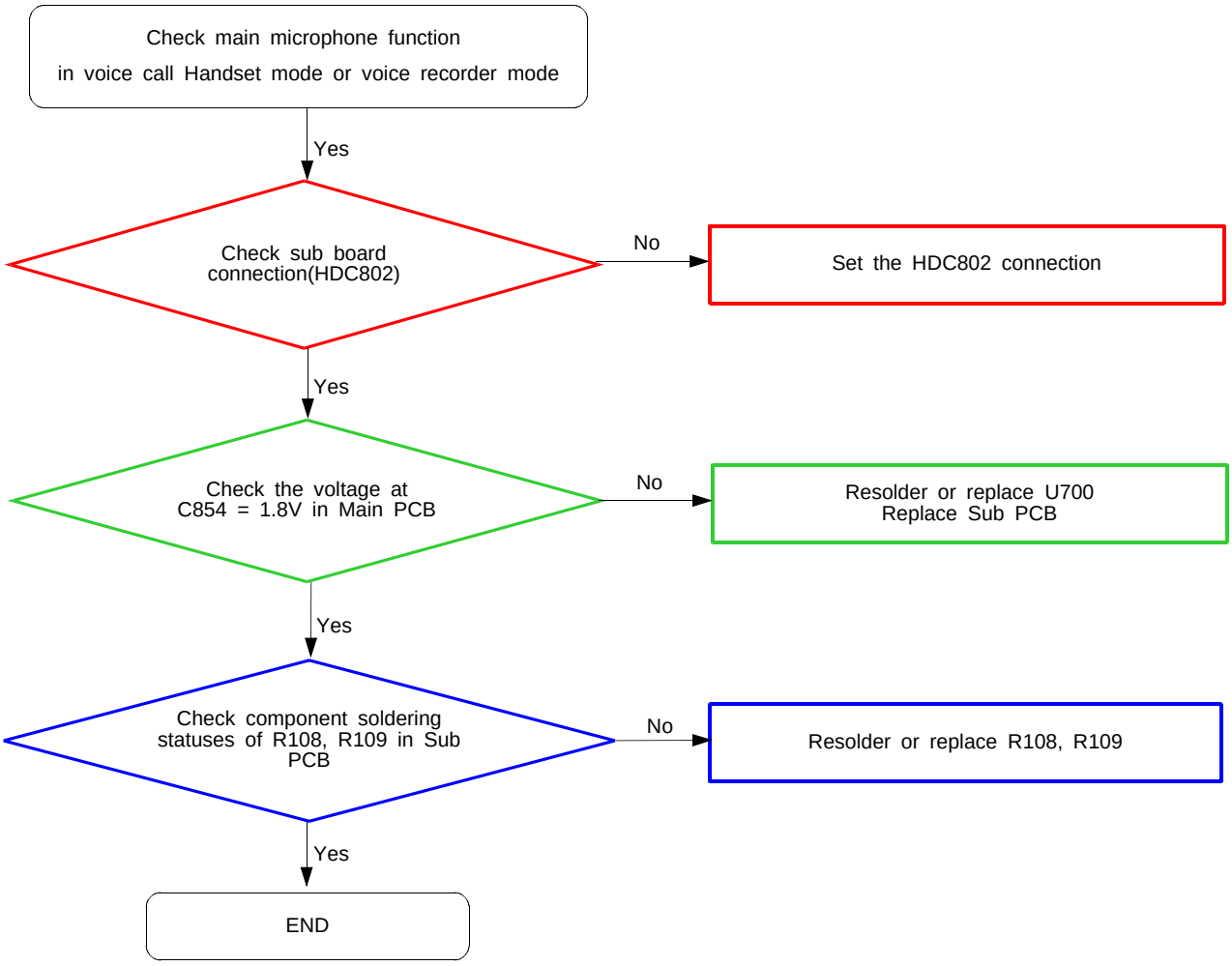
※ Temp/Humi Sensor After Repair

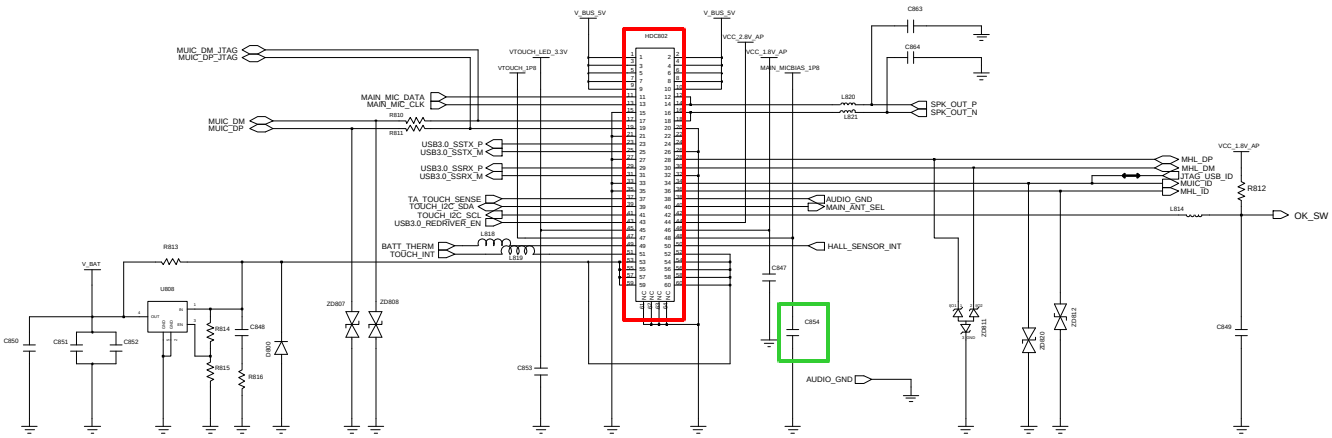
1) Keypad : press *#0*#
2) Select "Sensor"
3) Select "Temp-Humid"
4) Read the COMP data (ignore the RAW data)

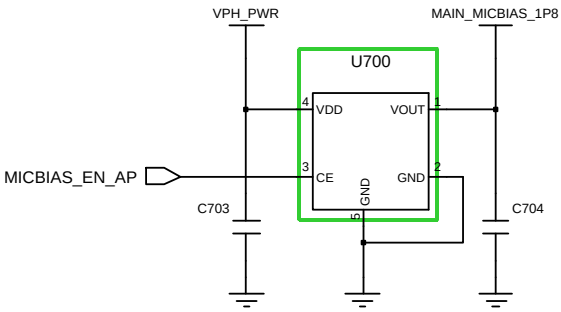


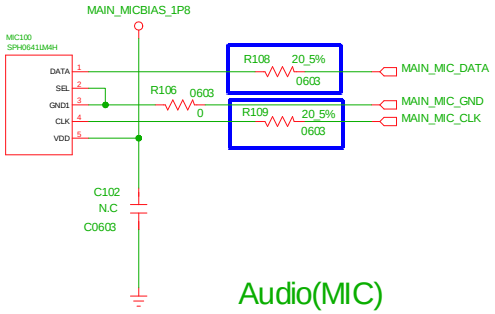


8-3-8-1 Microphone Part - Main MIC

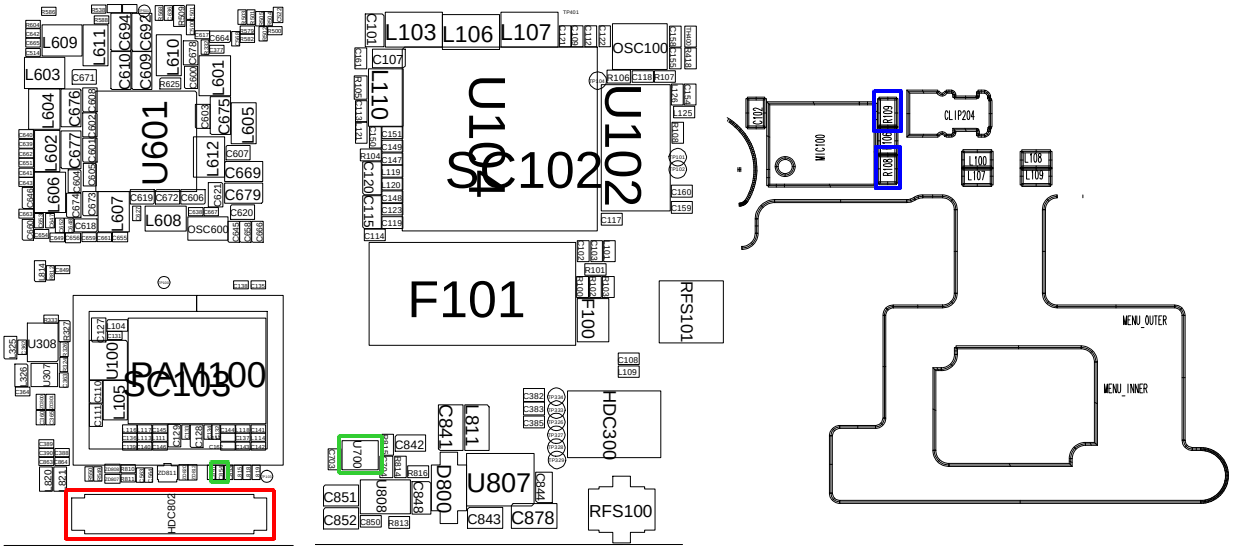




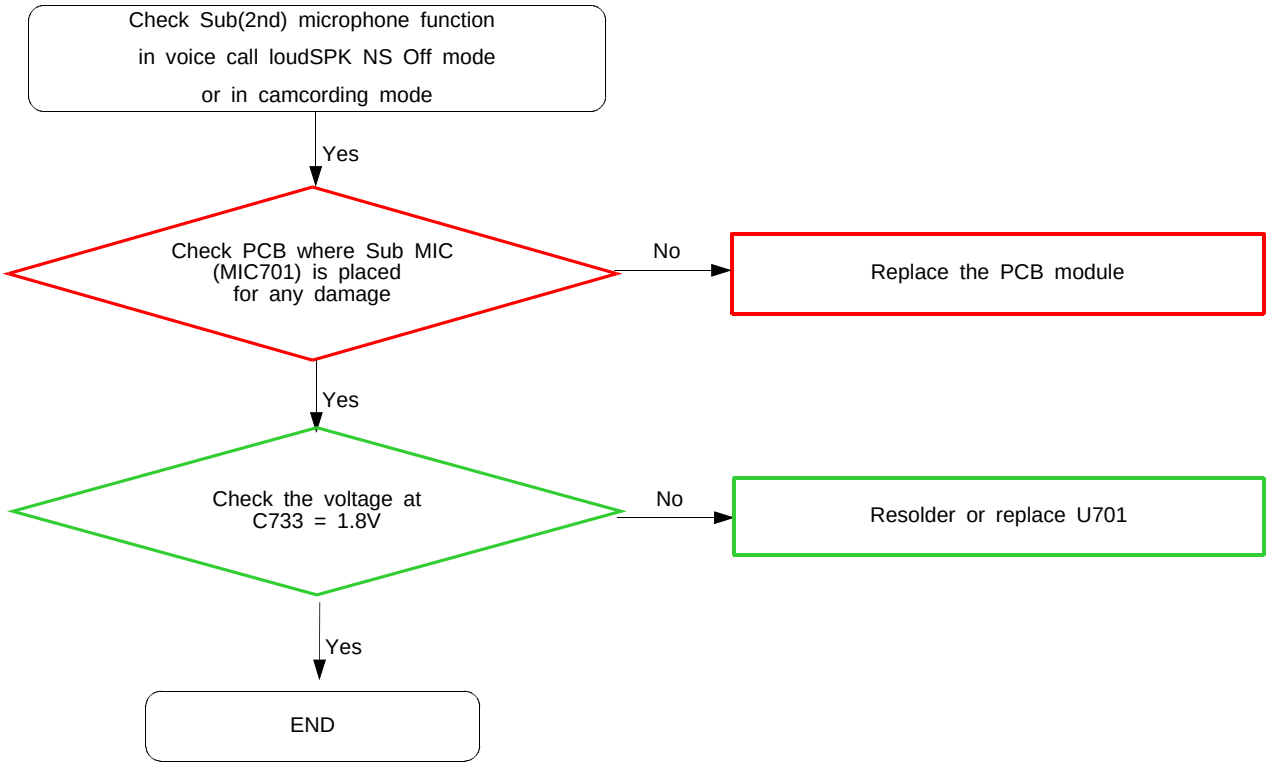


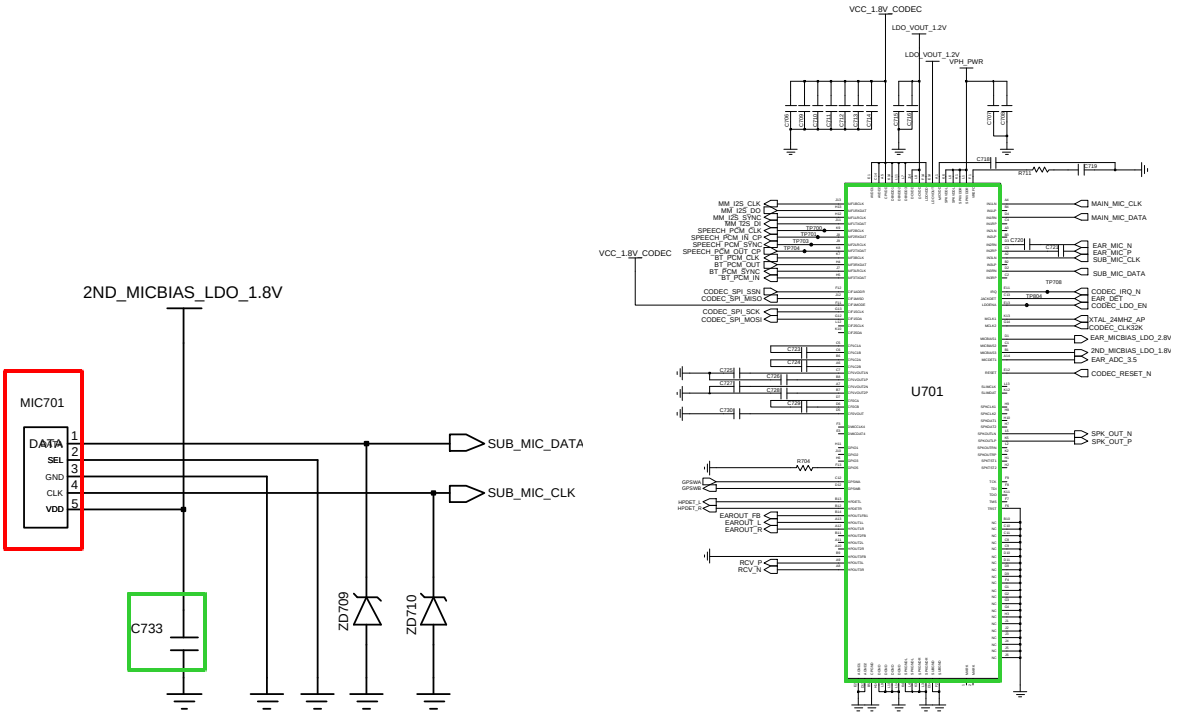


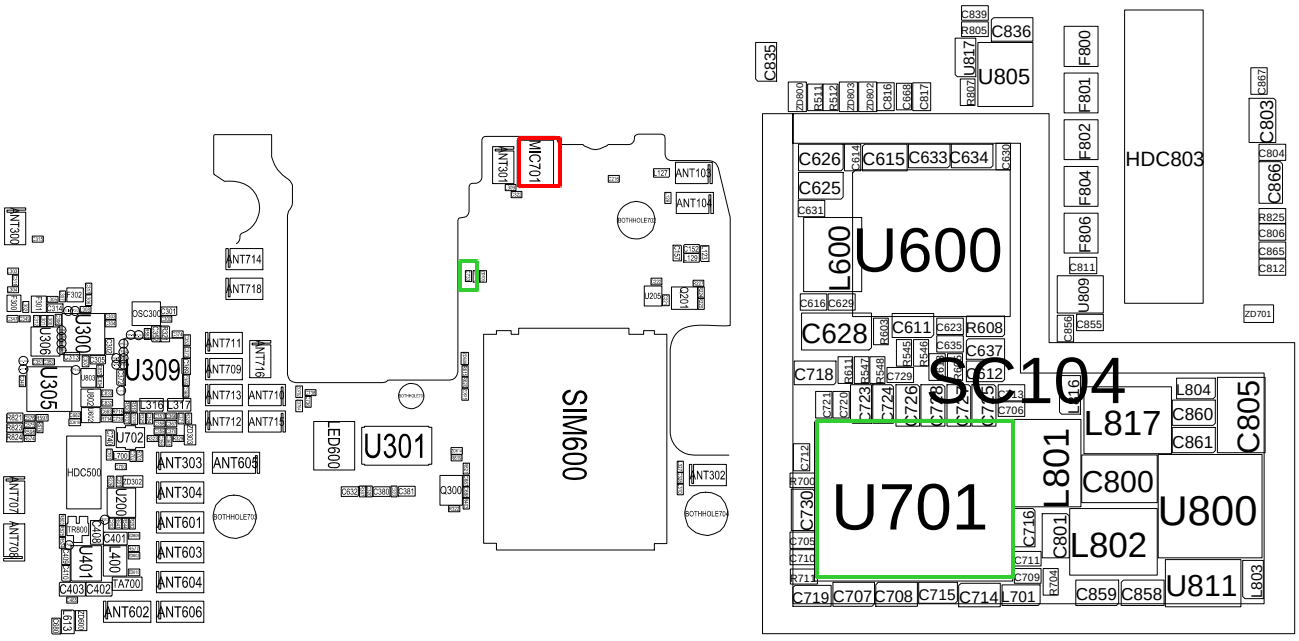
Audio(MIC)



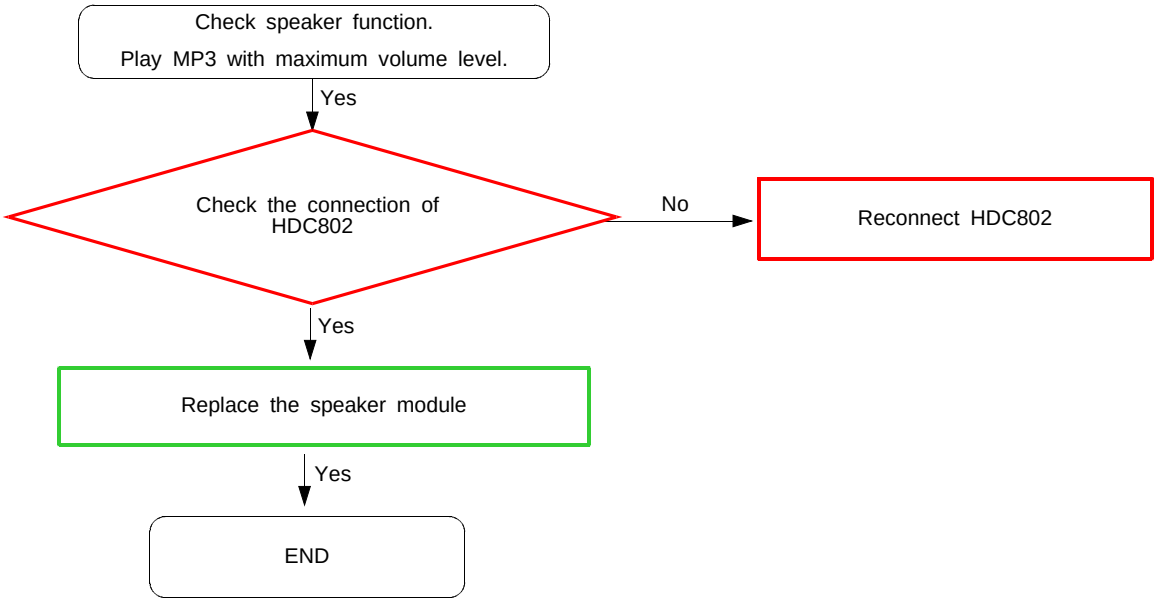
8-3-8-2. Microphone Part - Sub(2nd) MIC

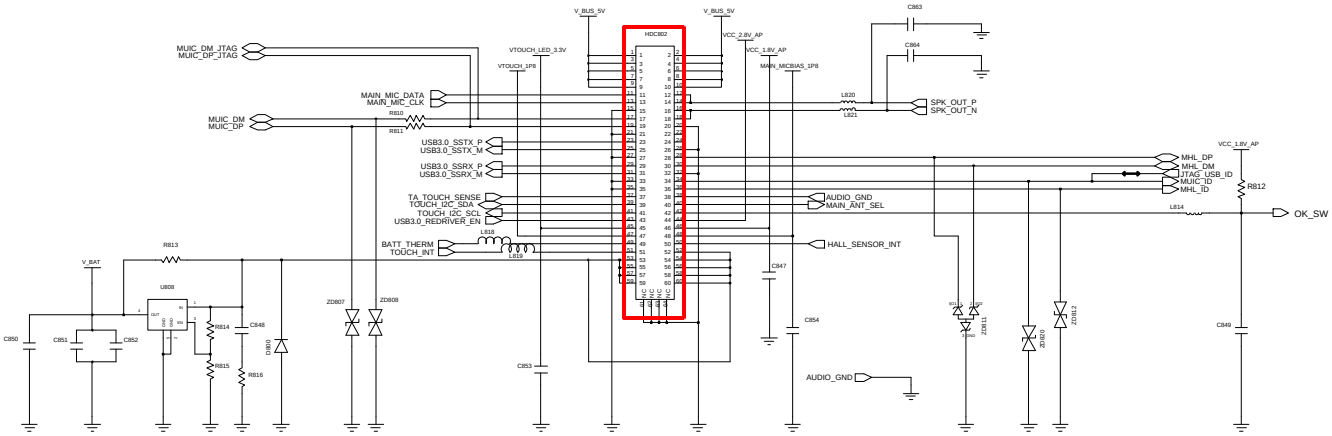


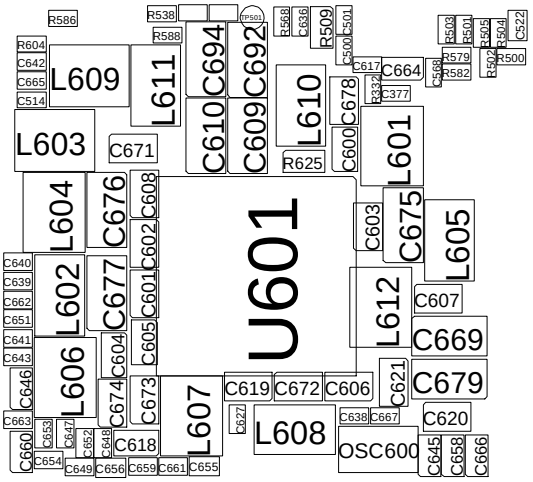


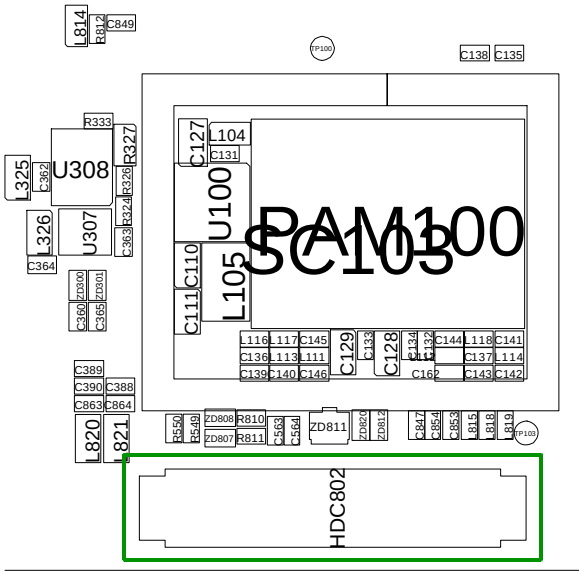


8-3-9. Speaker Part

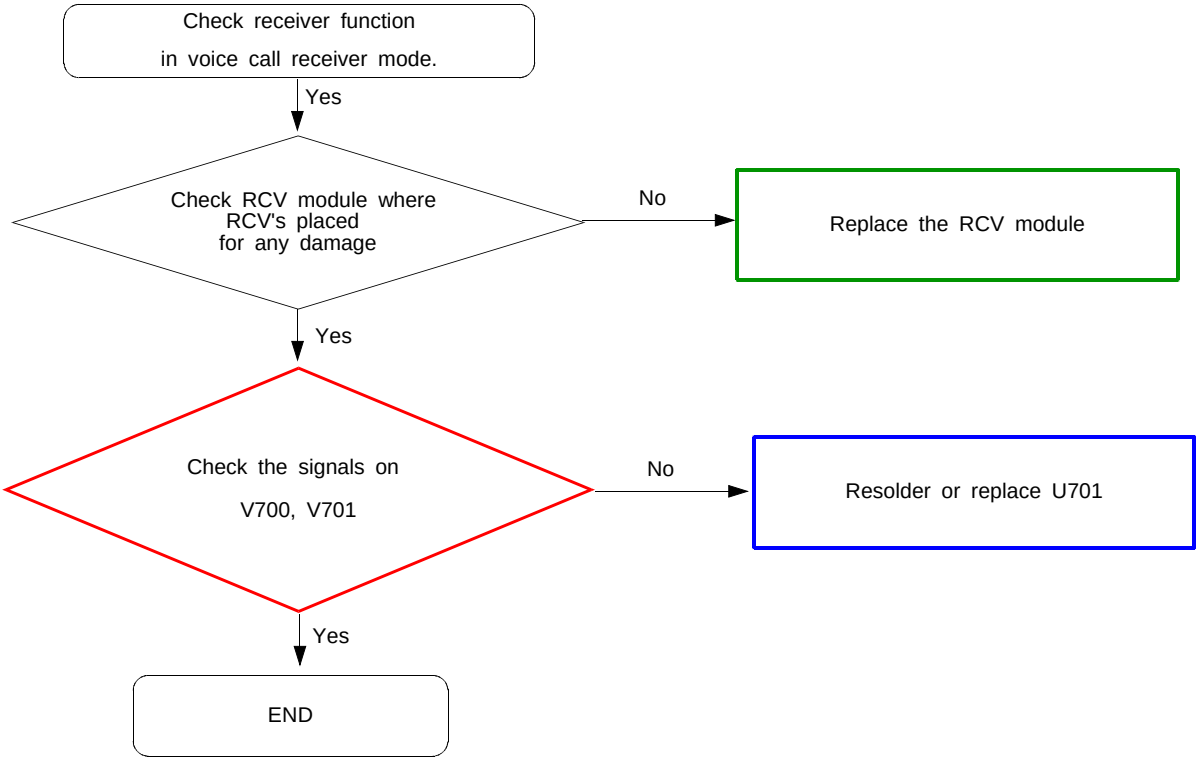


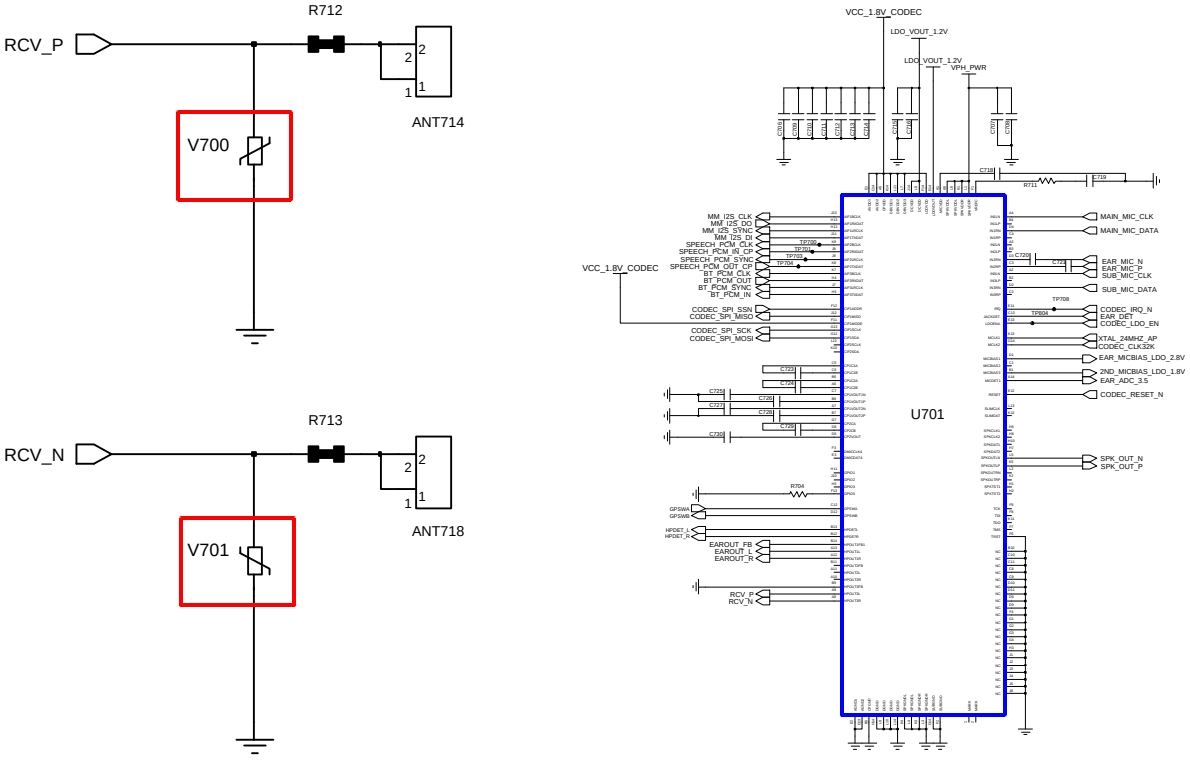


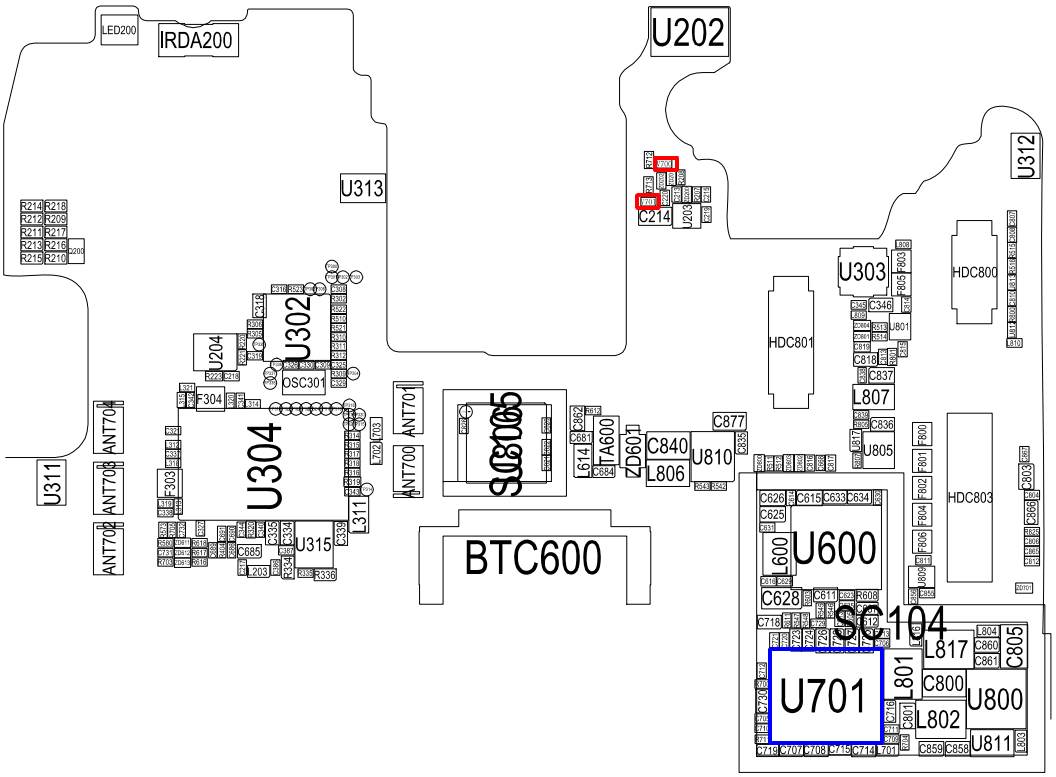




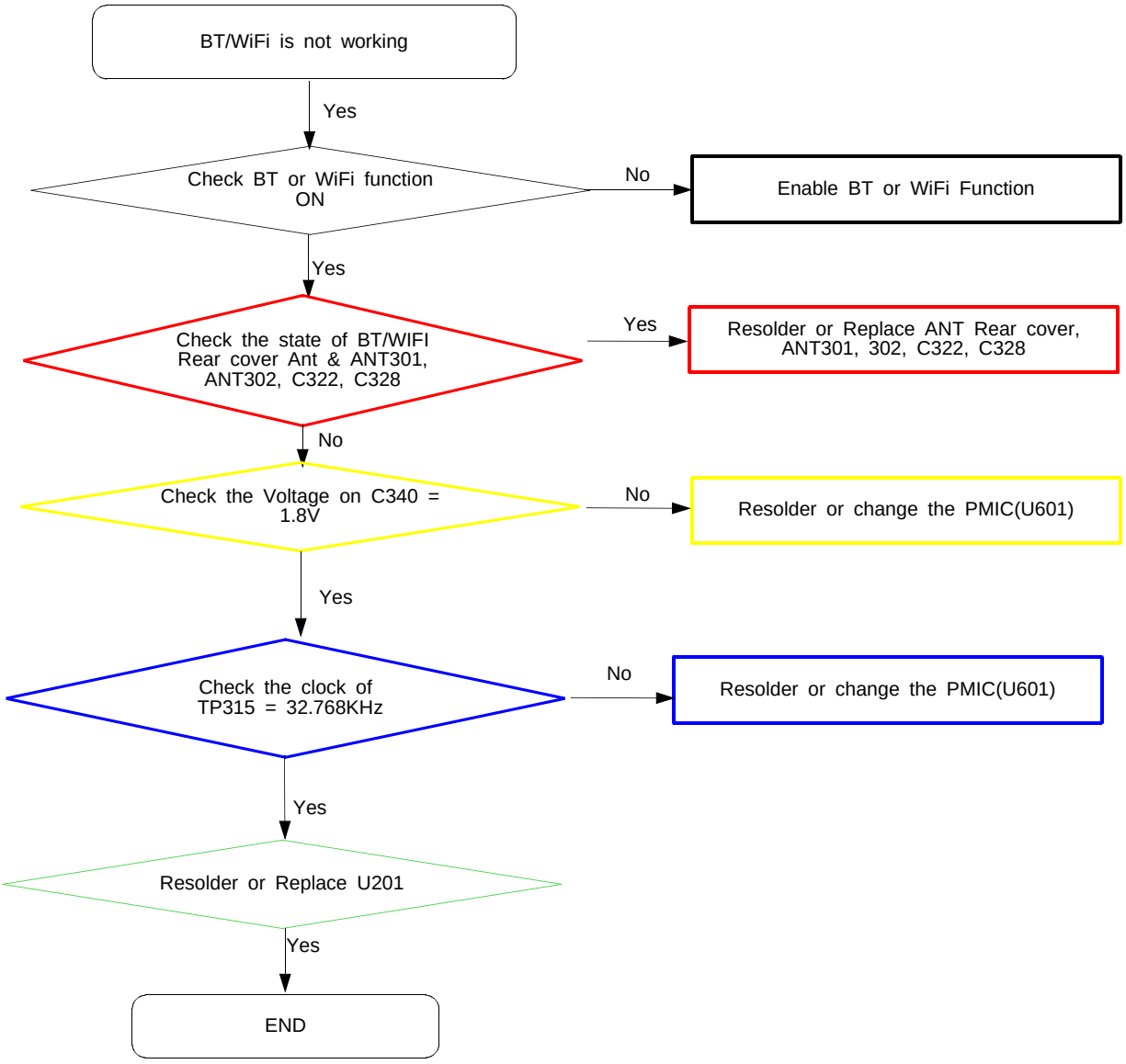
8-3-10. Receiver Part

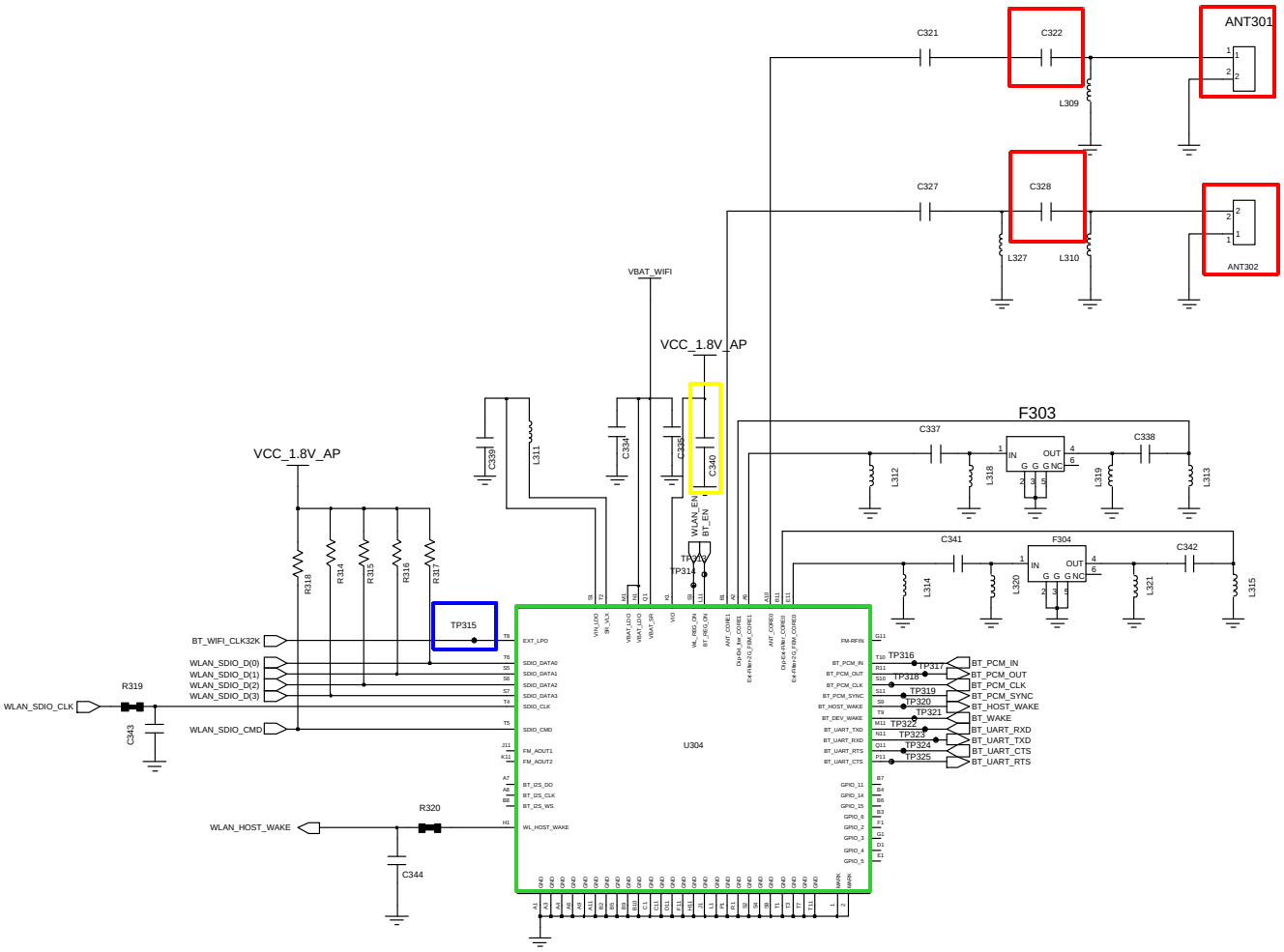


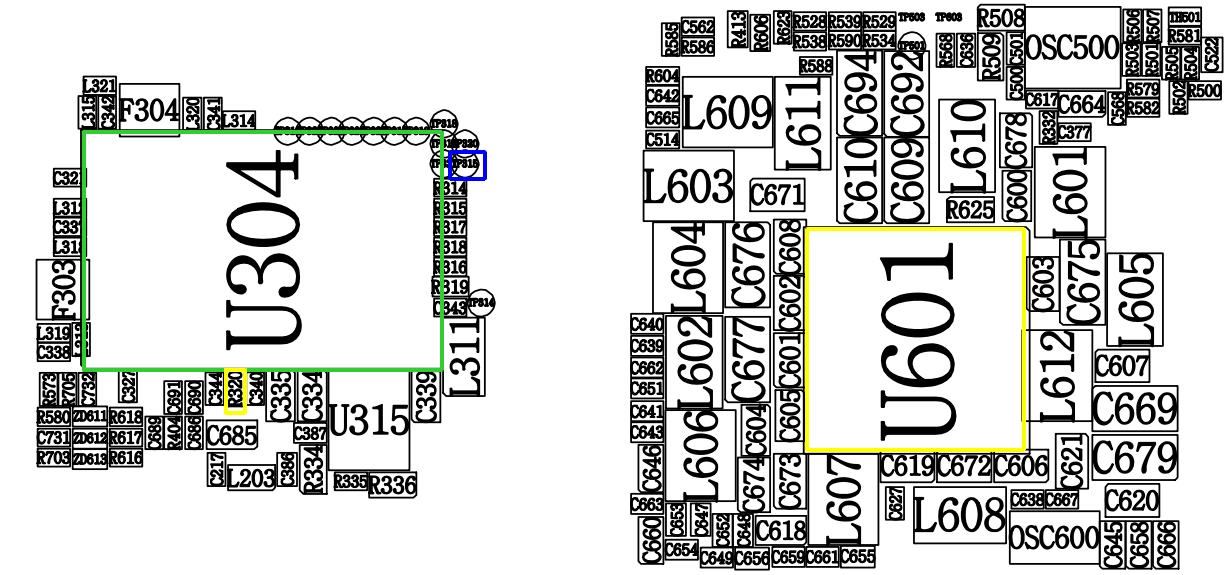


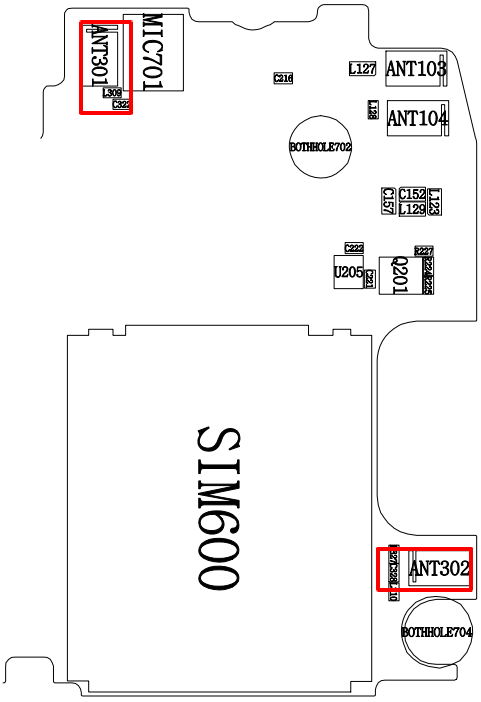


8-3-11. BT/WIFI

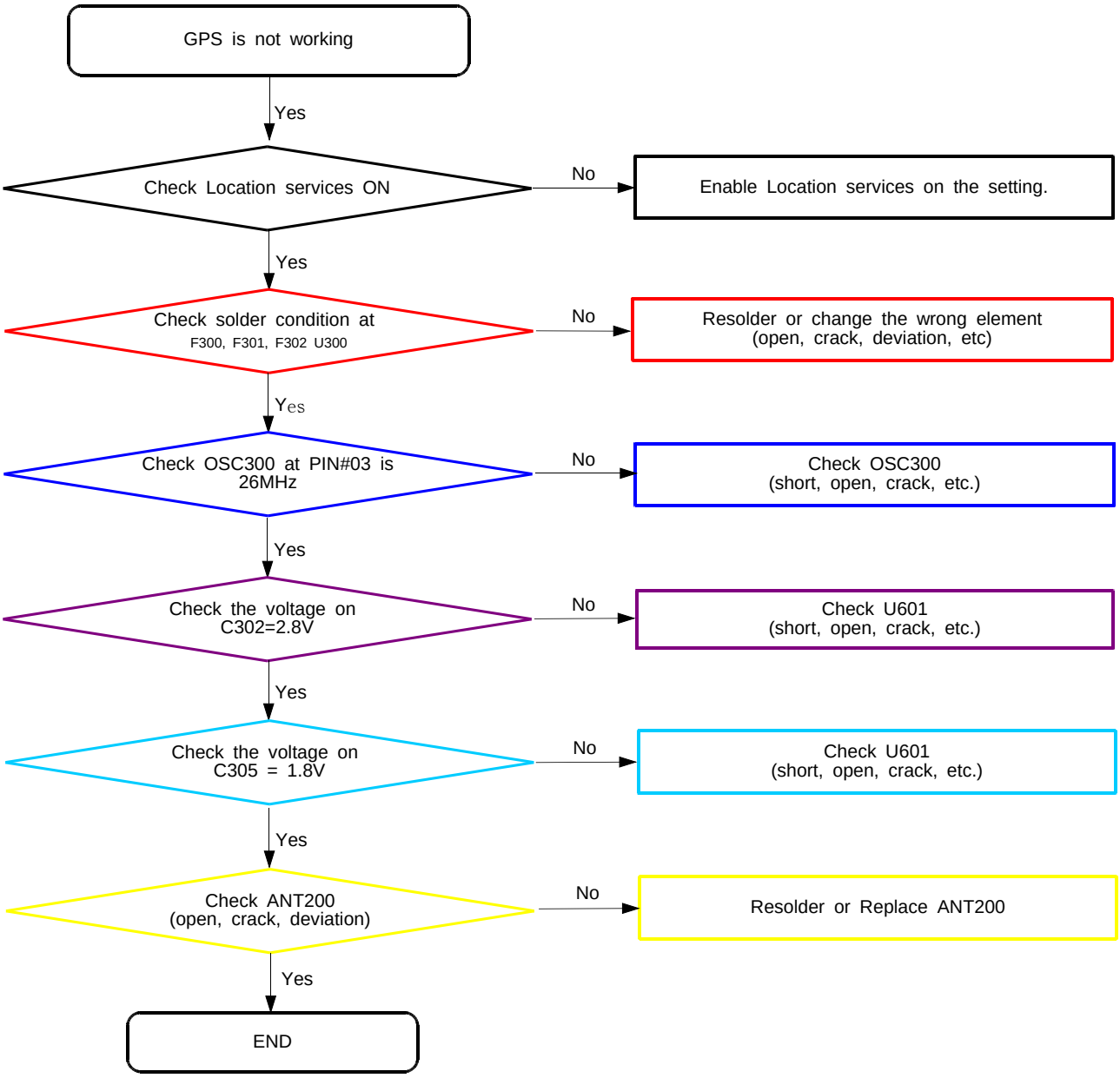


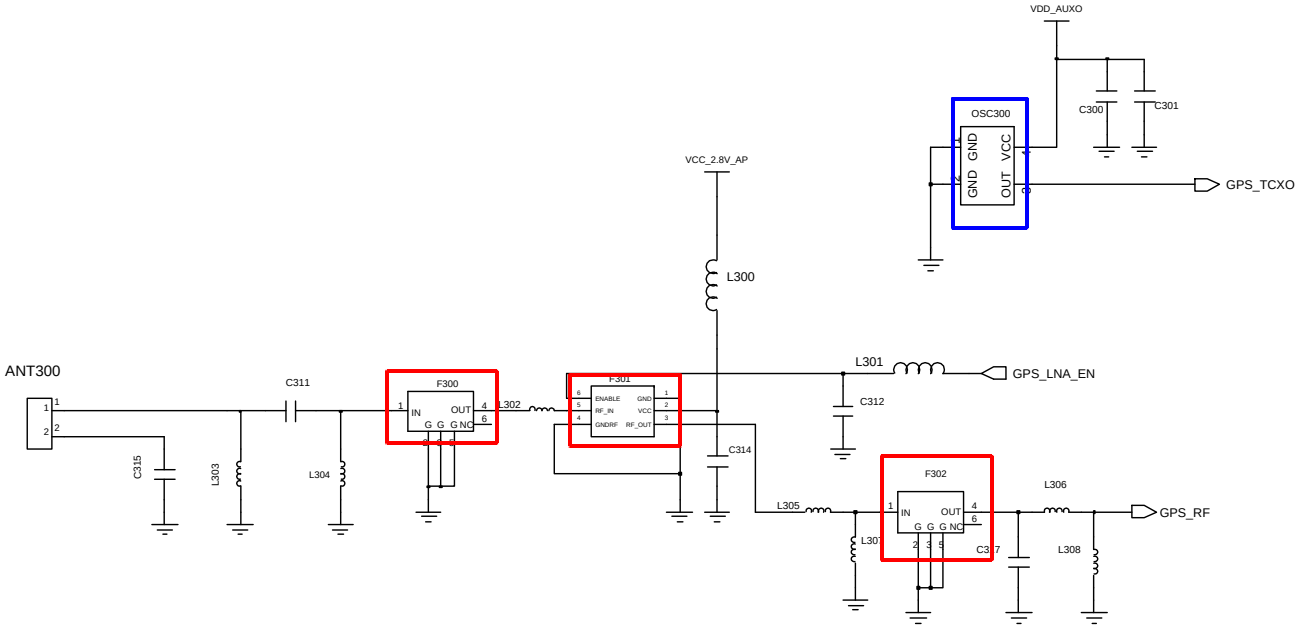


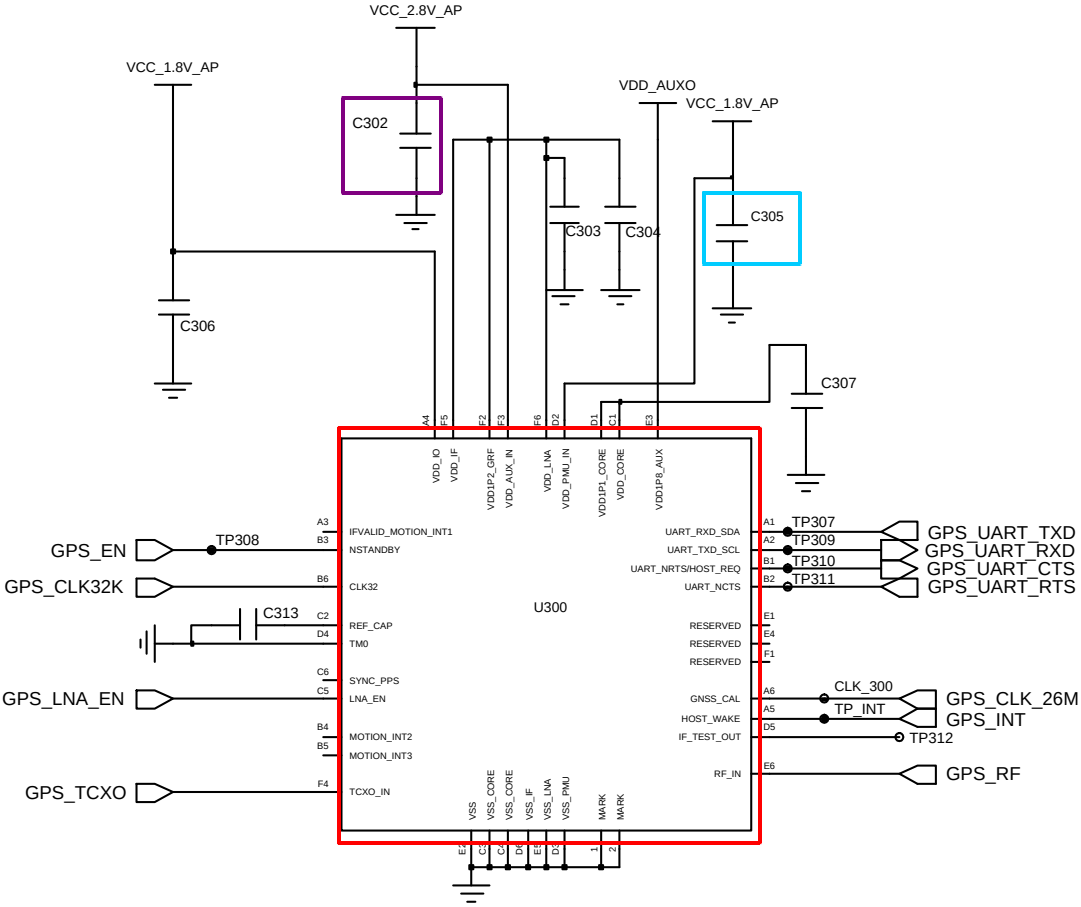


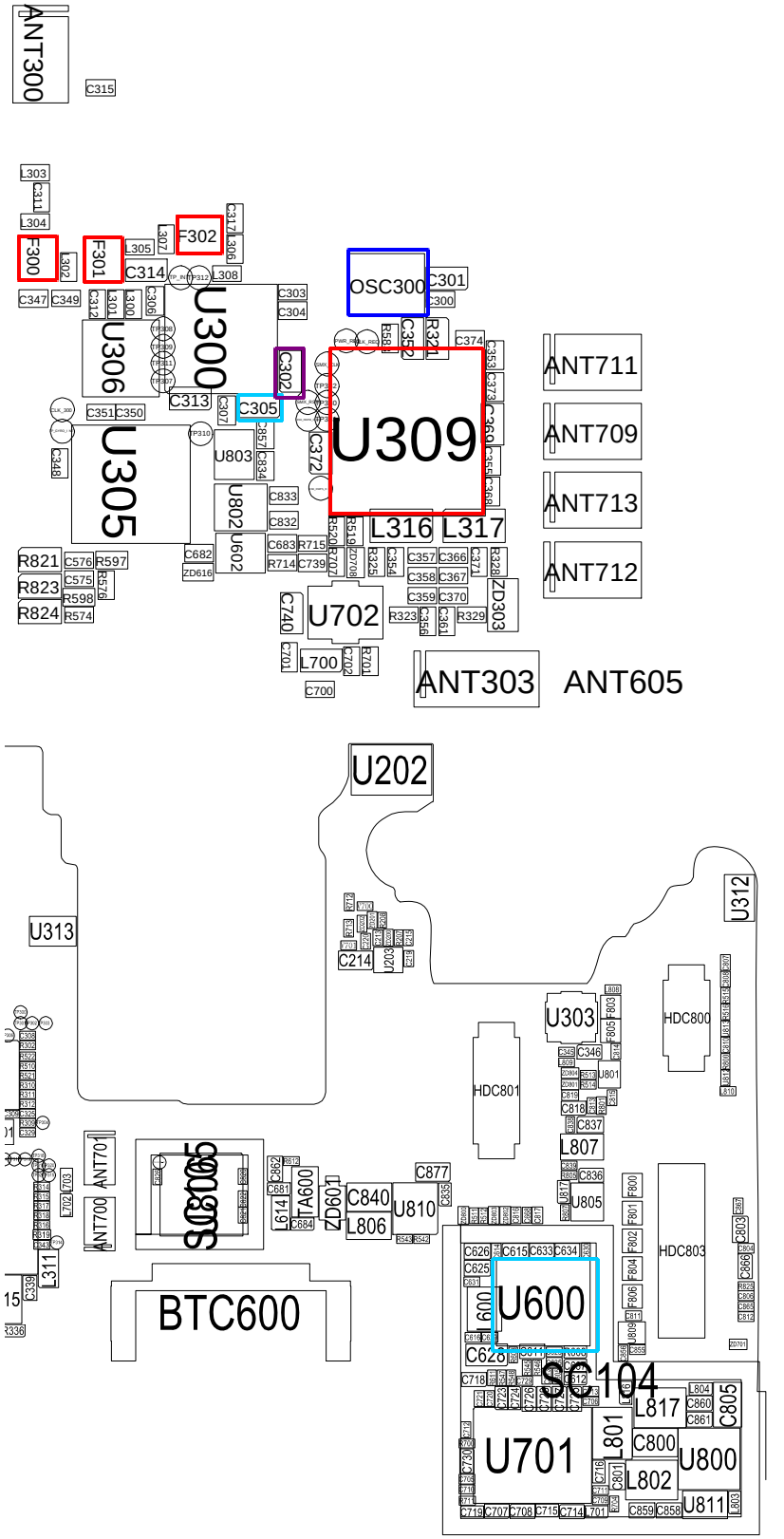


8-3-12. GPS

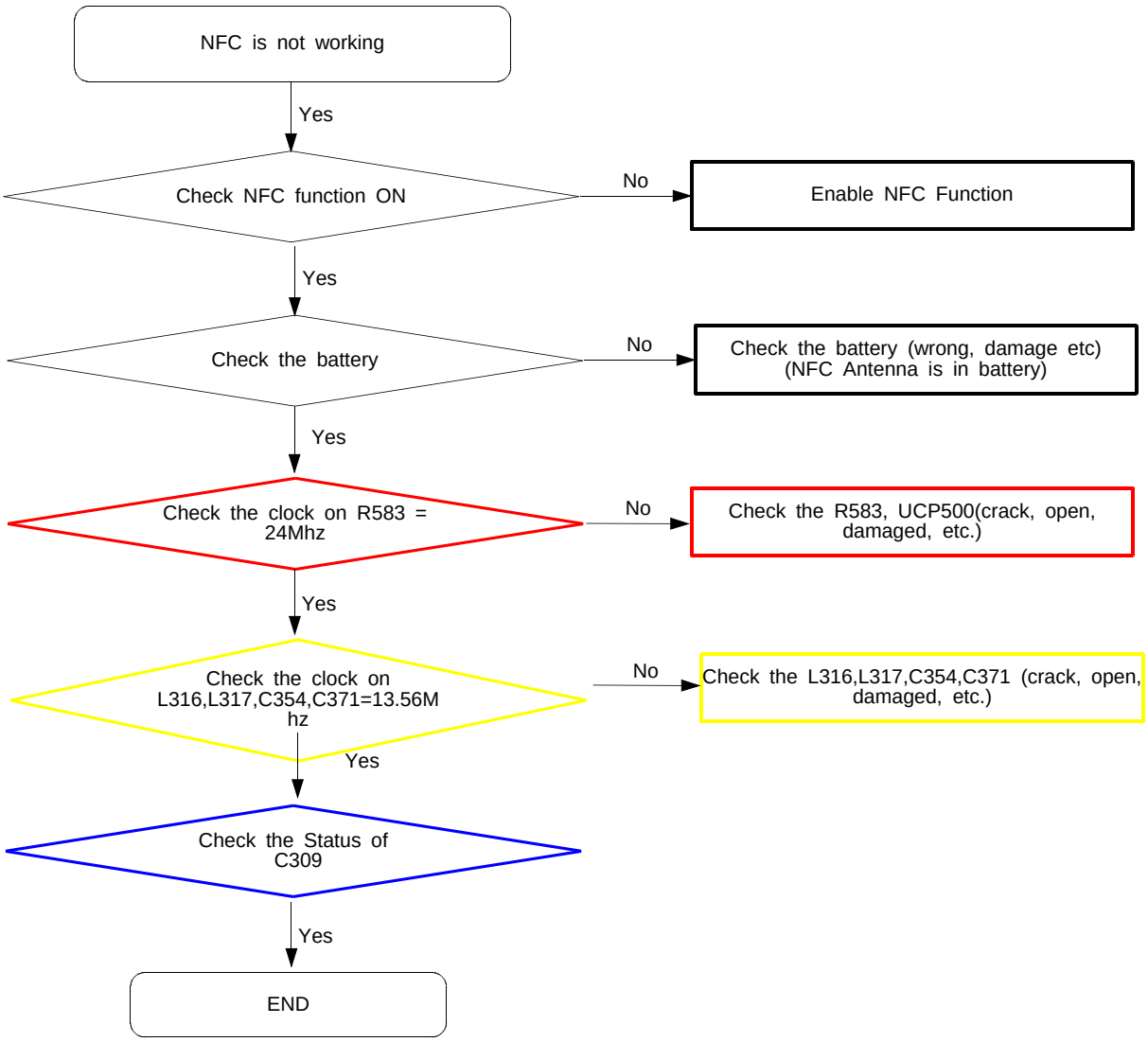


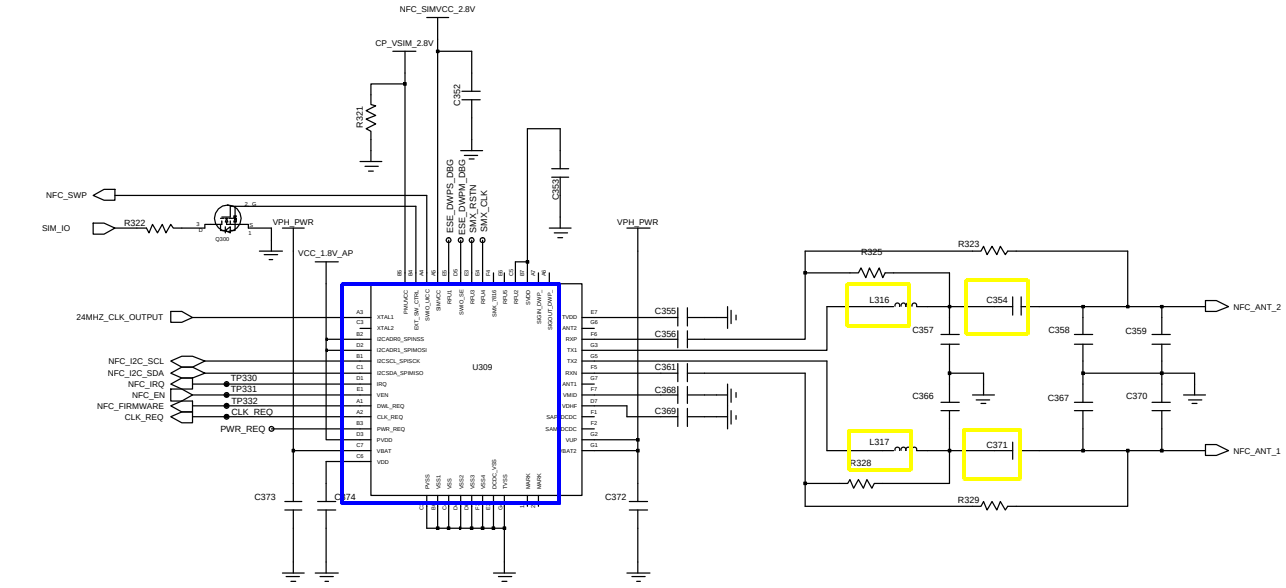


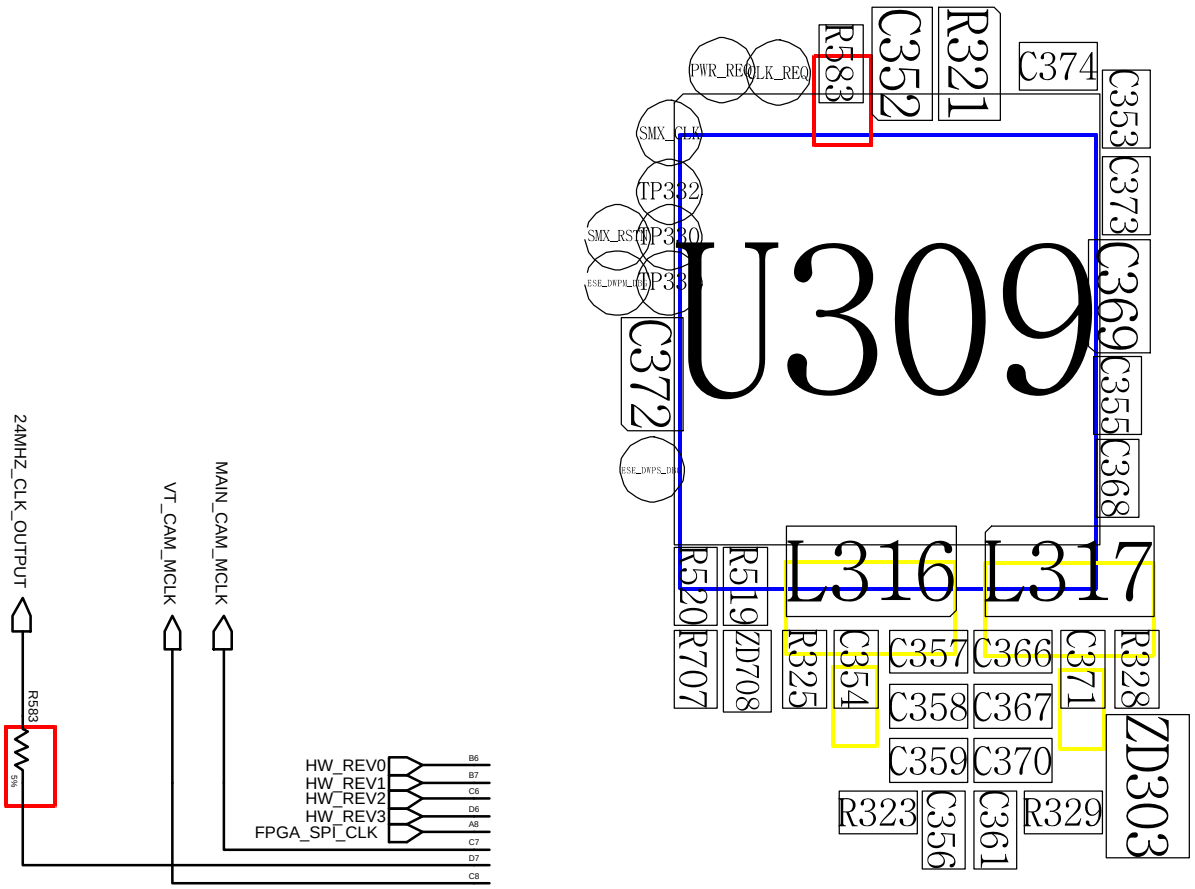




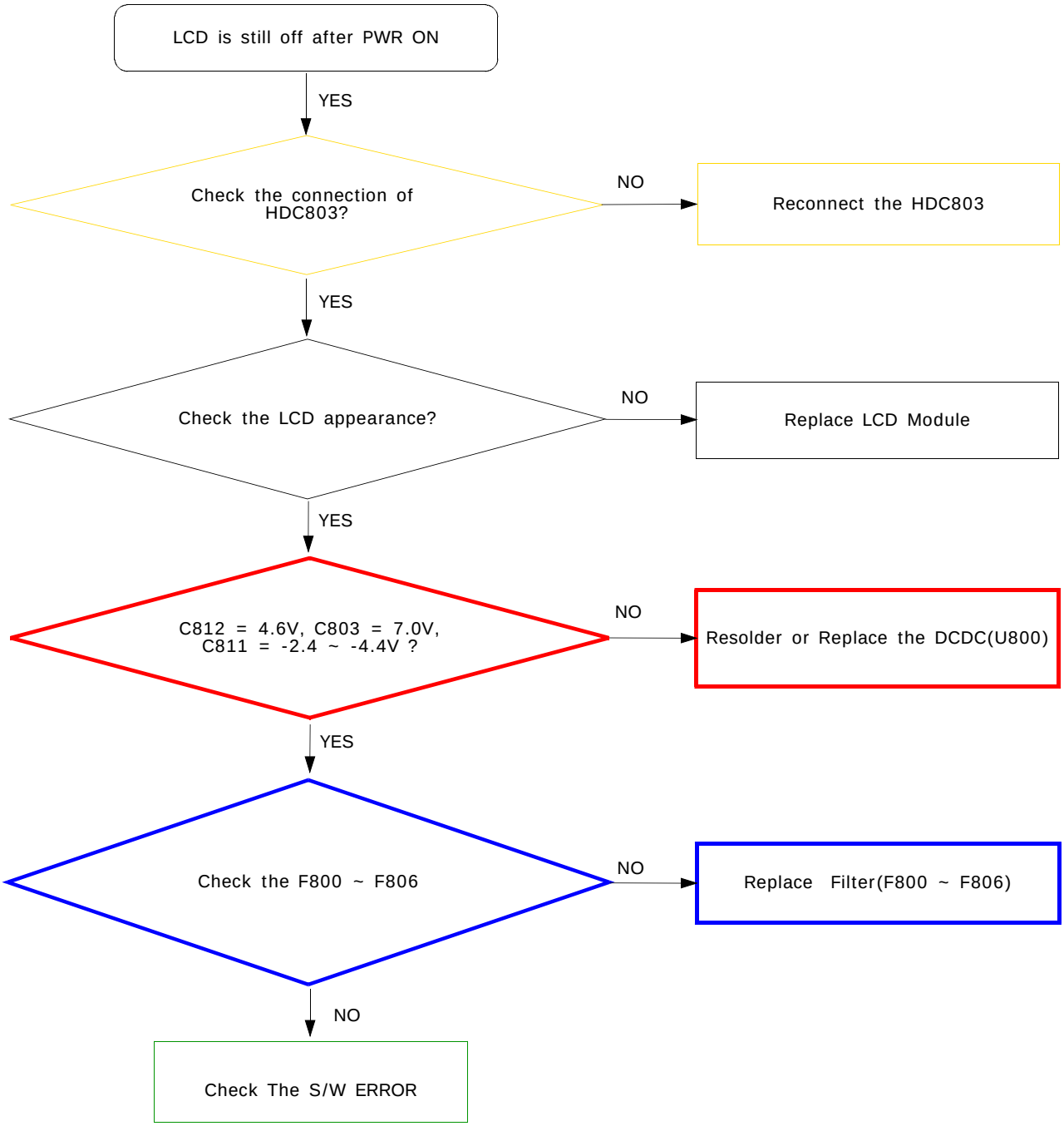
8-3-13. NFC

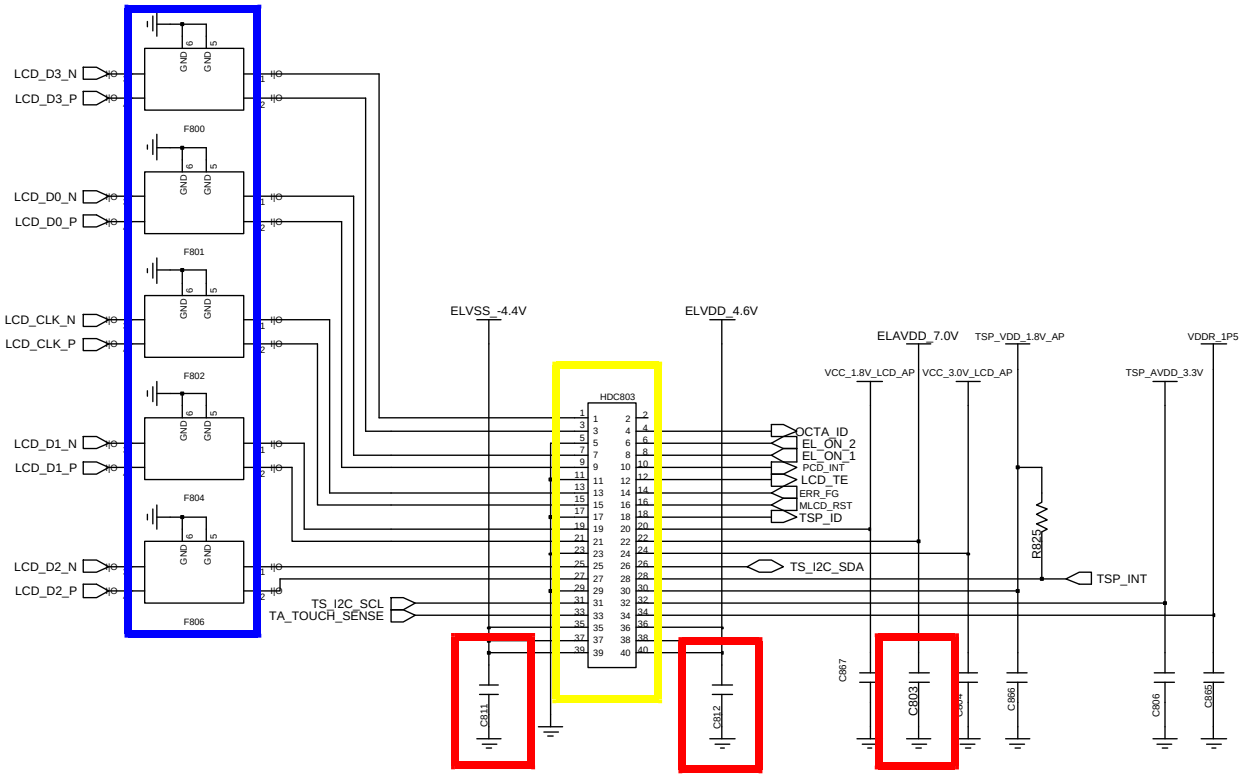


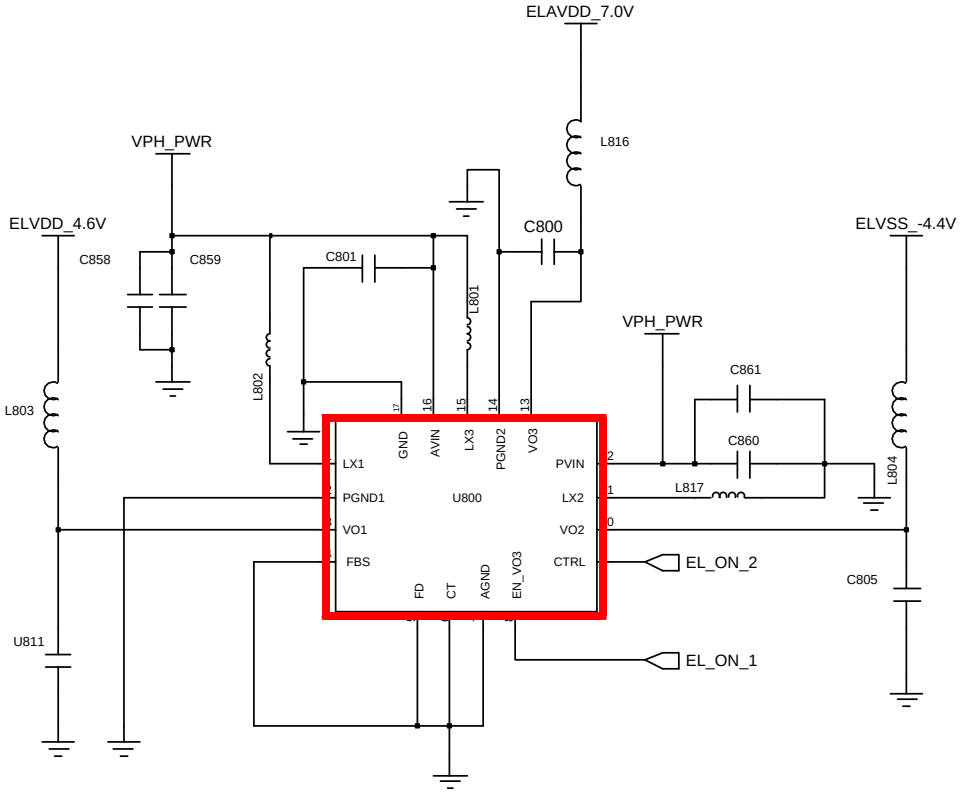


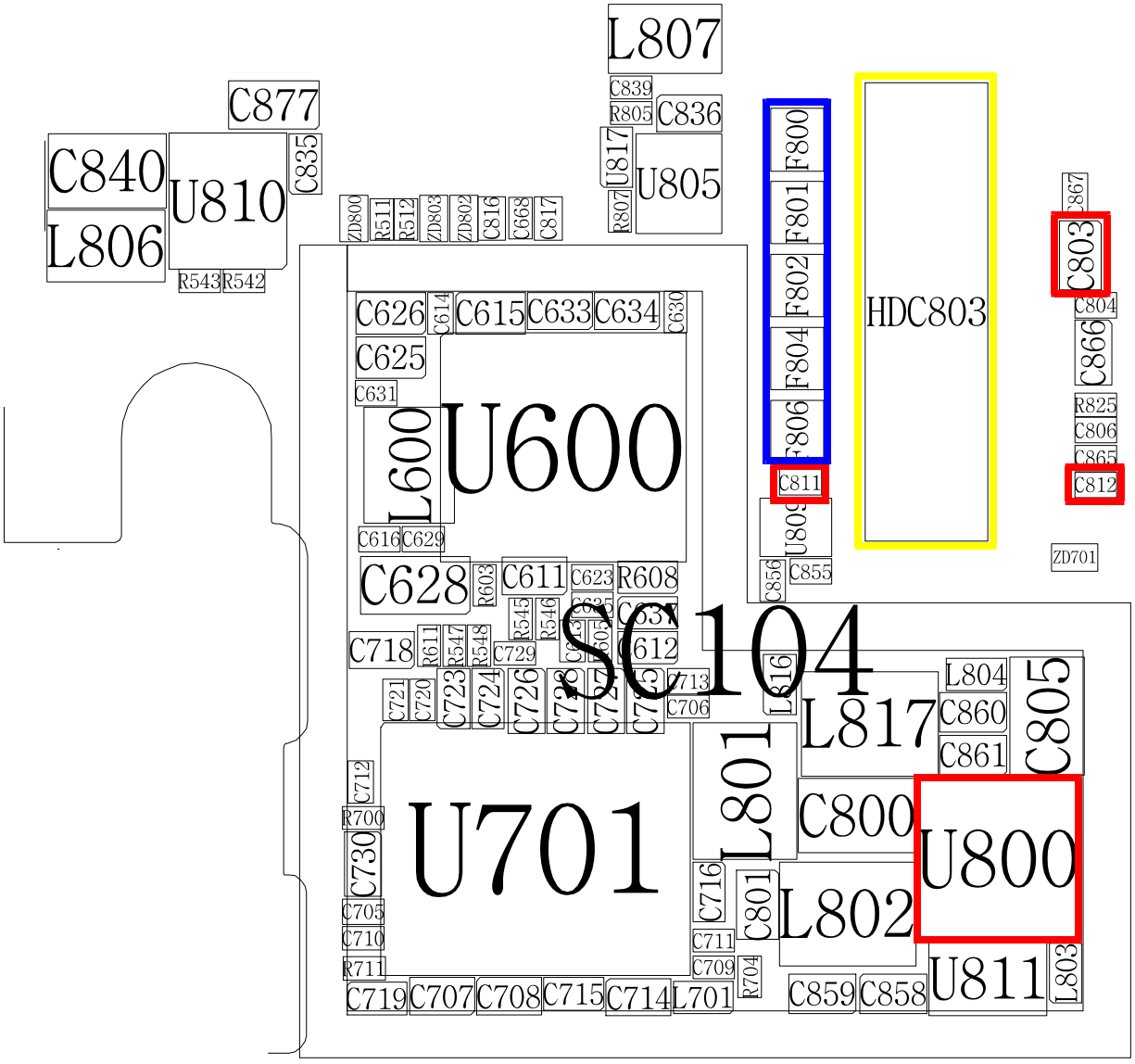


8-3-14. LCD

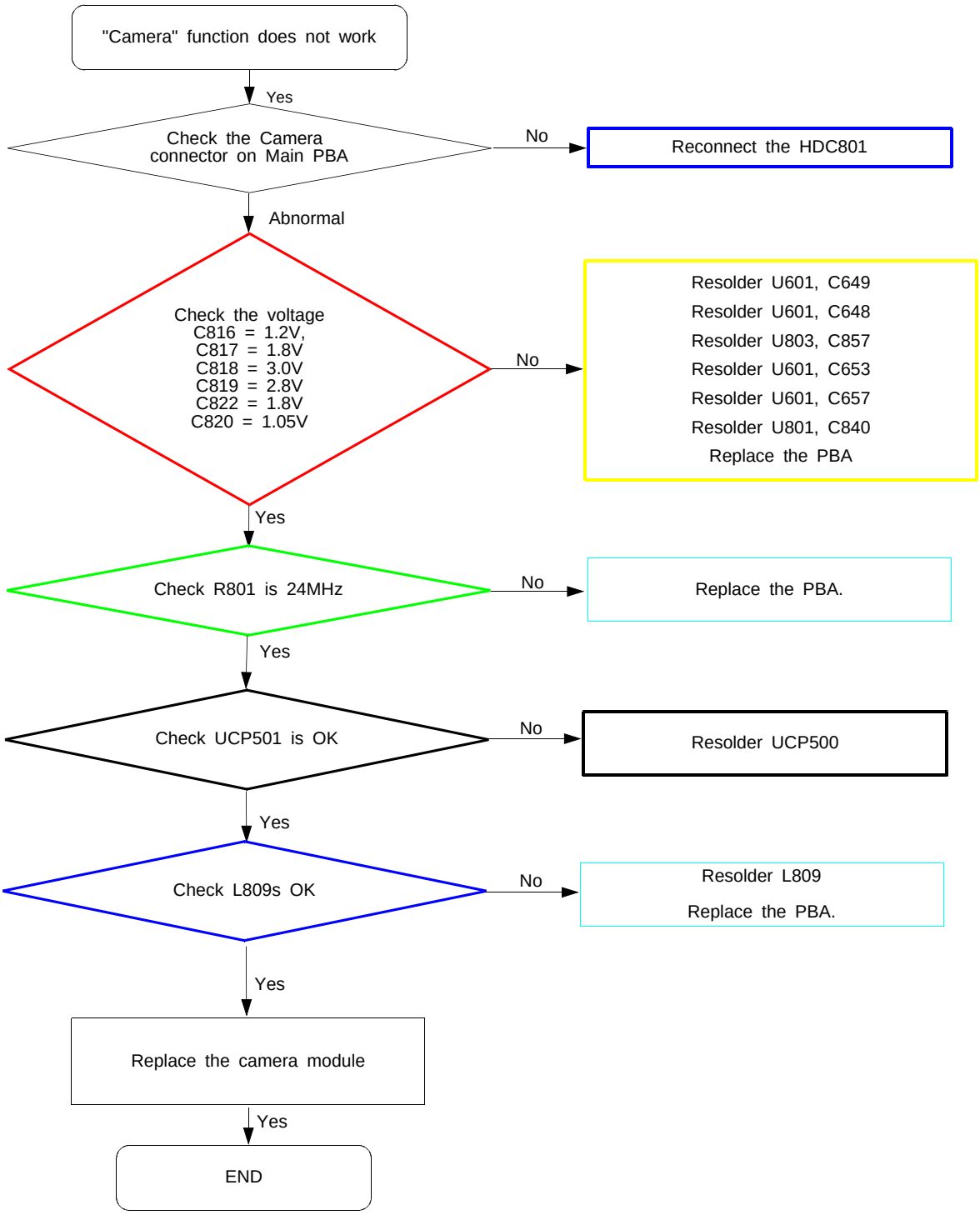


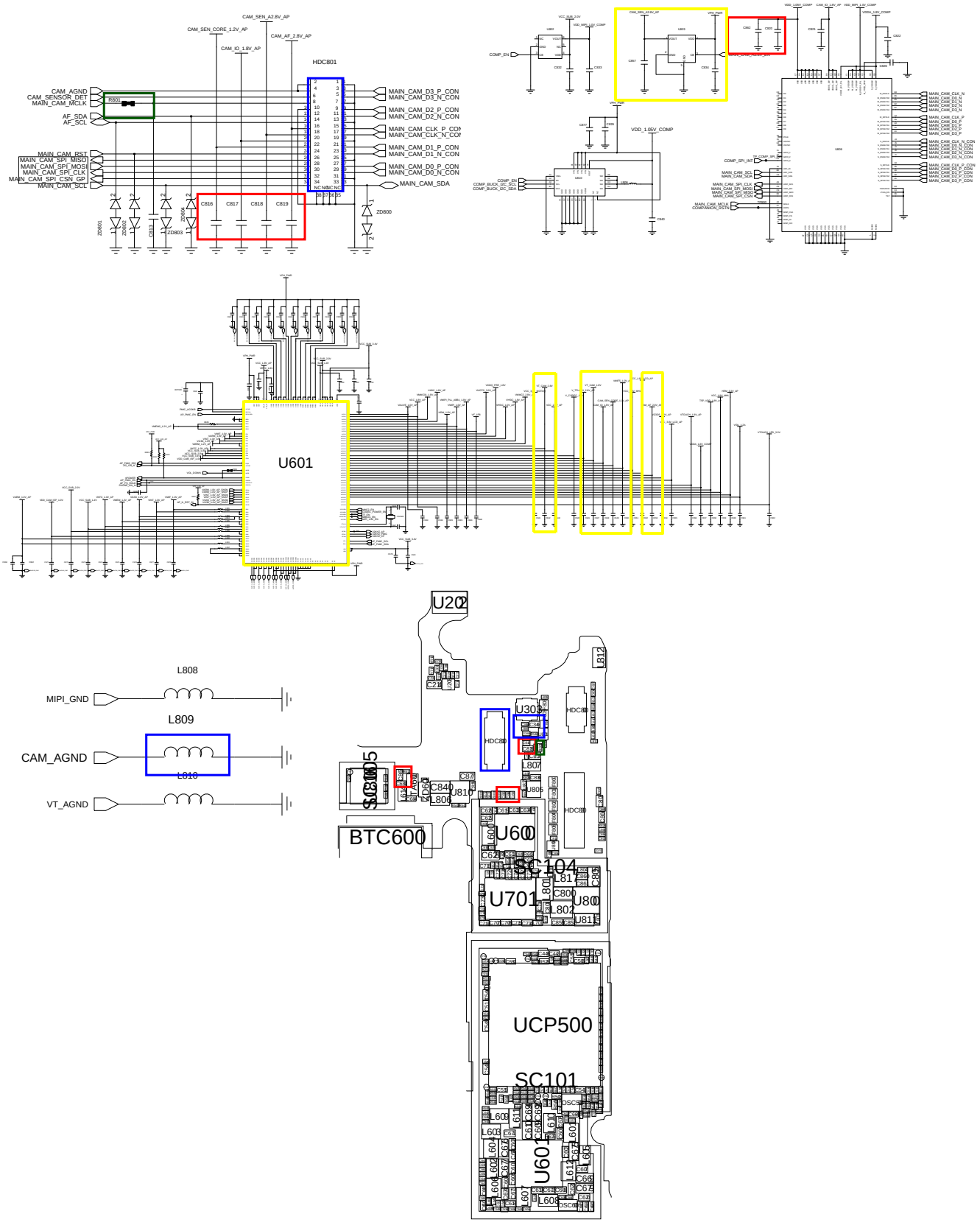




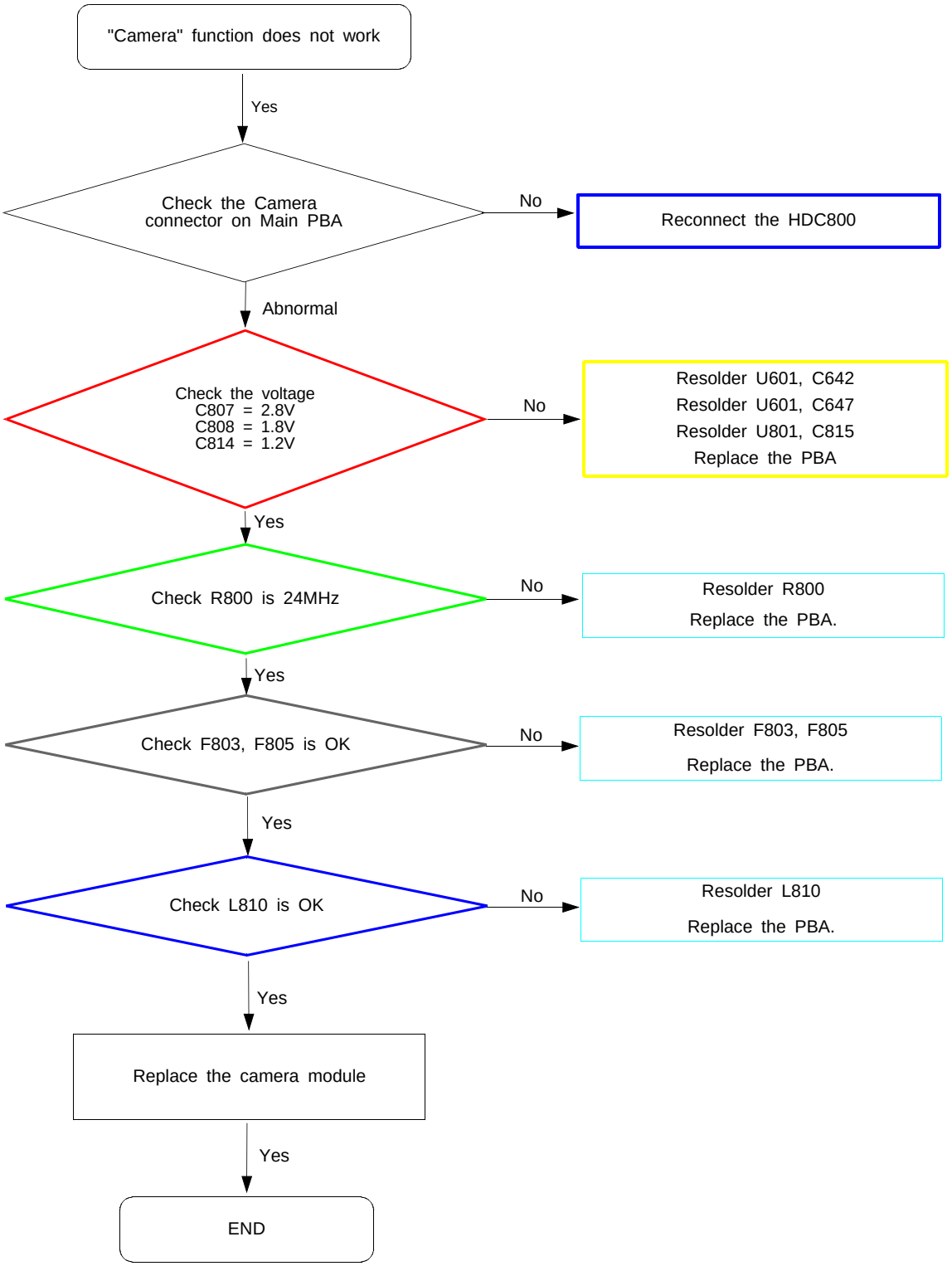


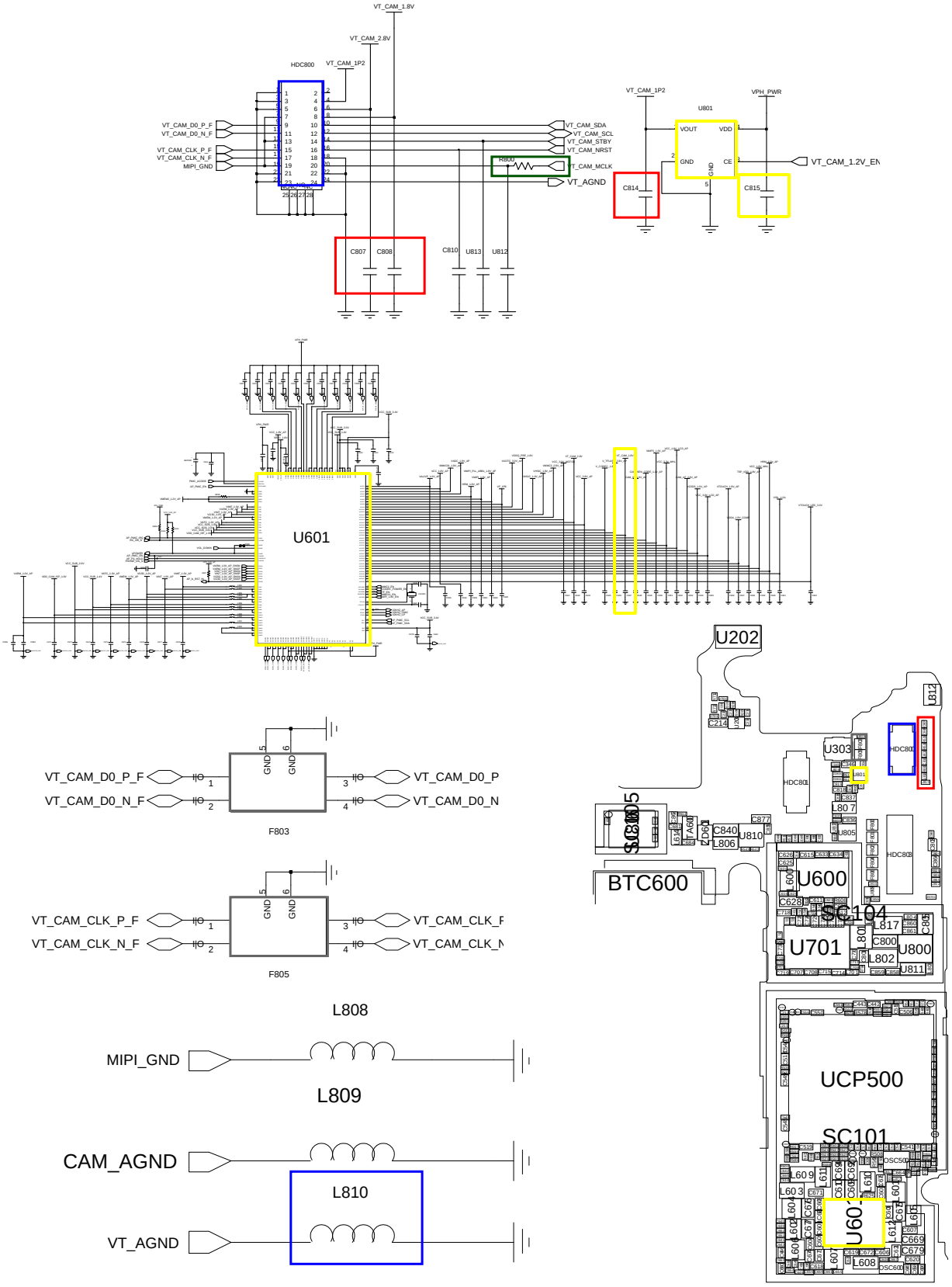
8-3-15. 16M CAM



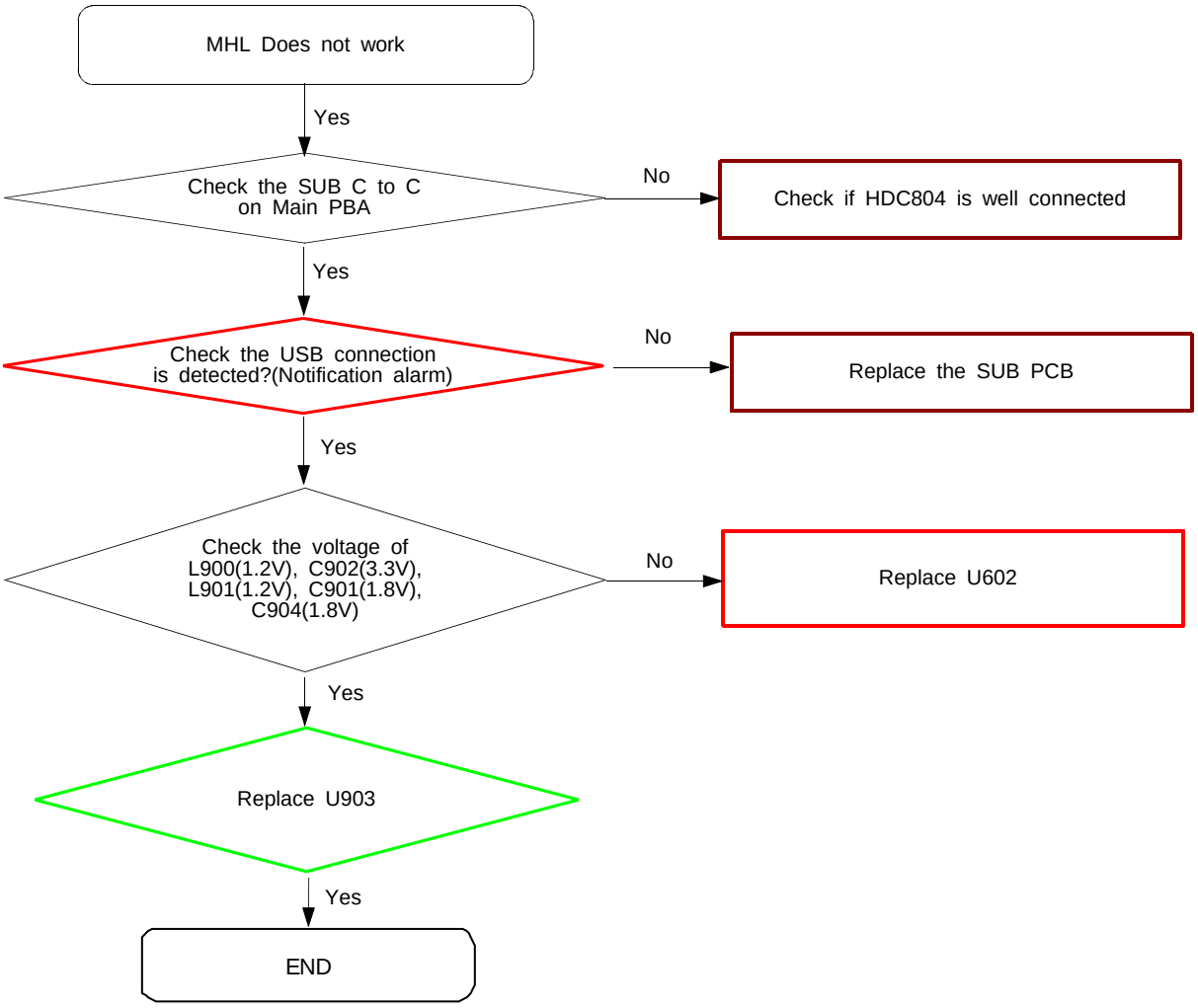


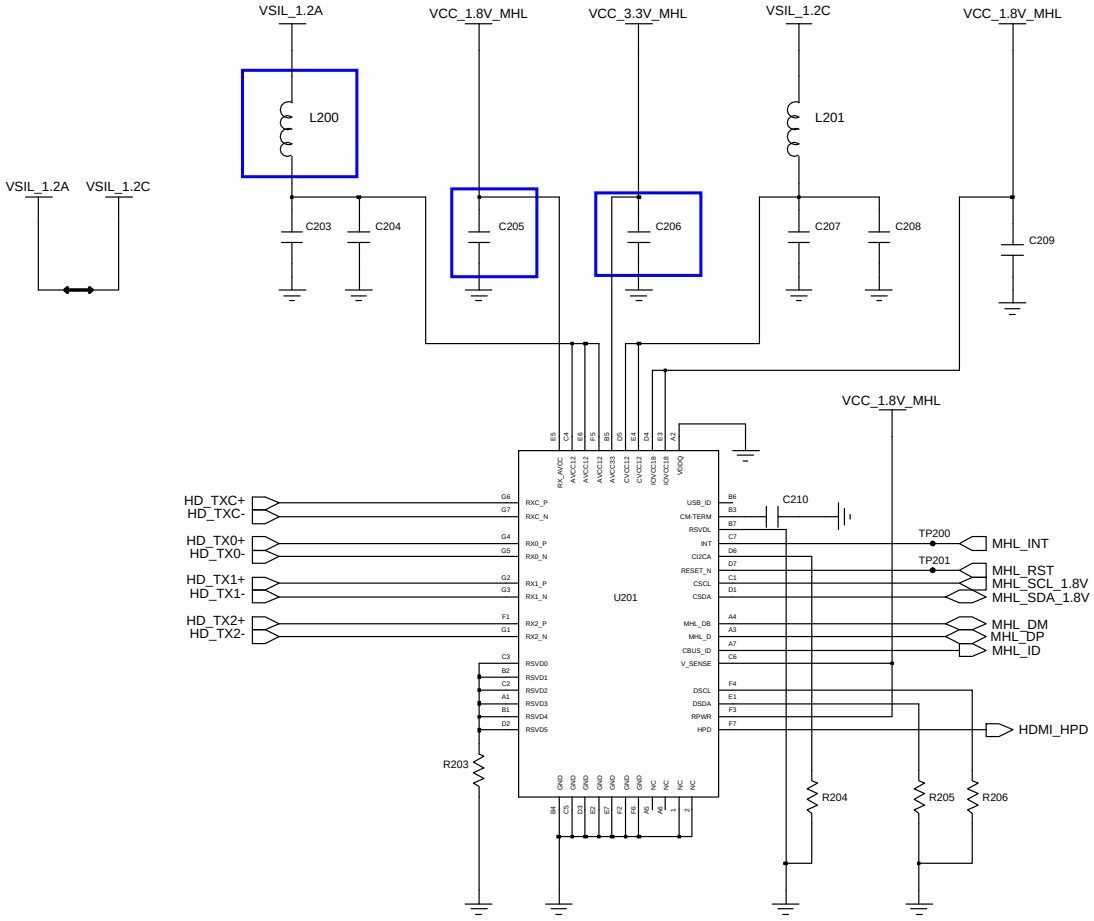
8-3-16. VT CAM

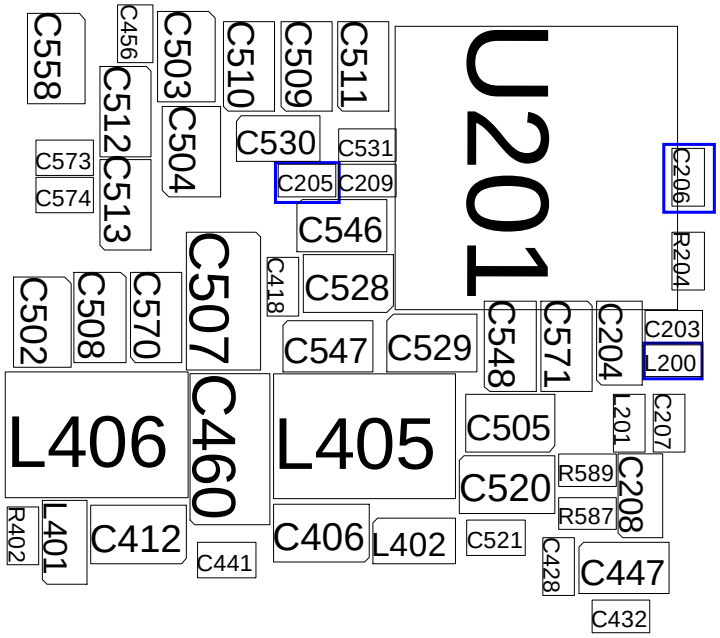




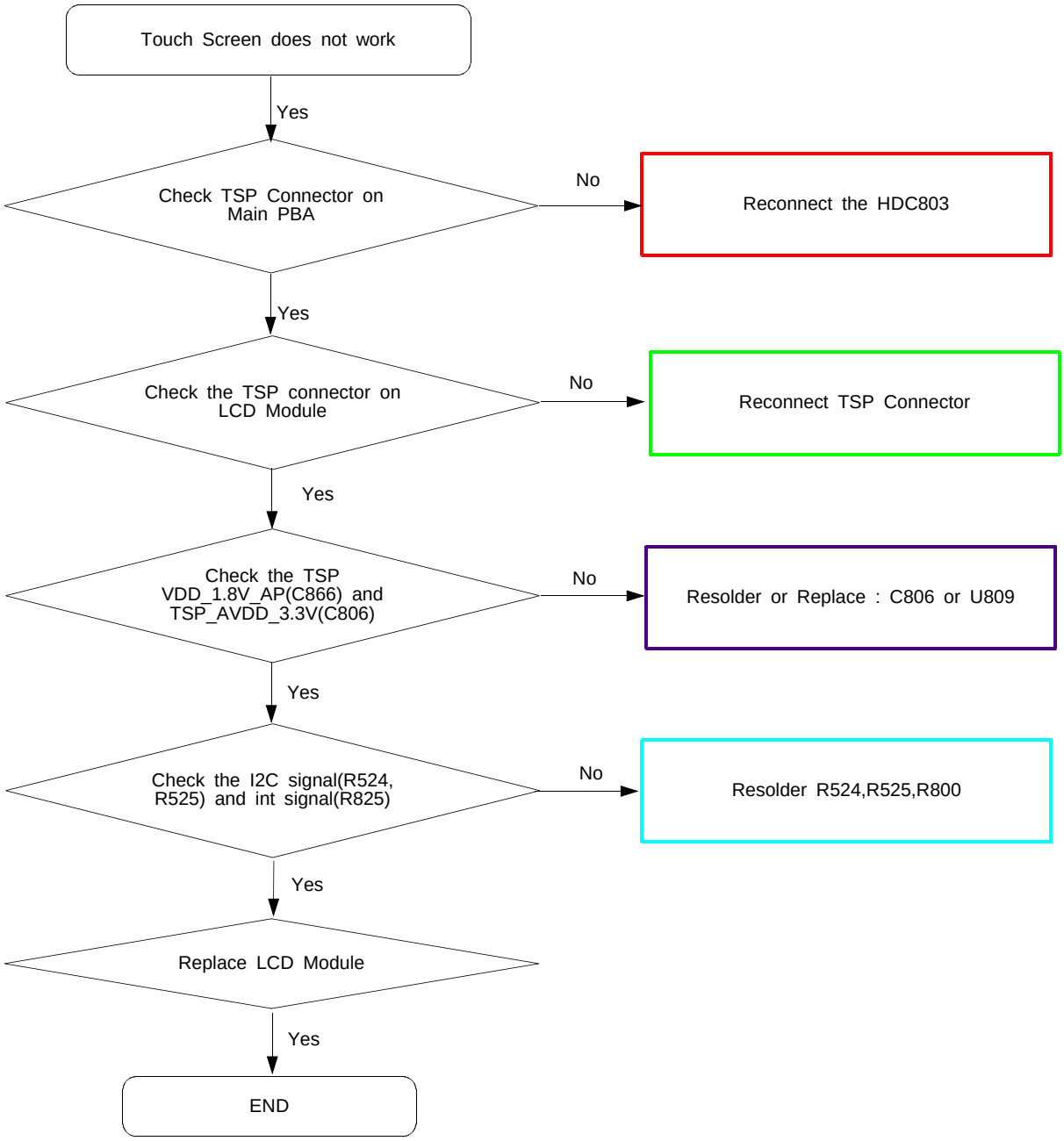
8-3-17. MHL

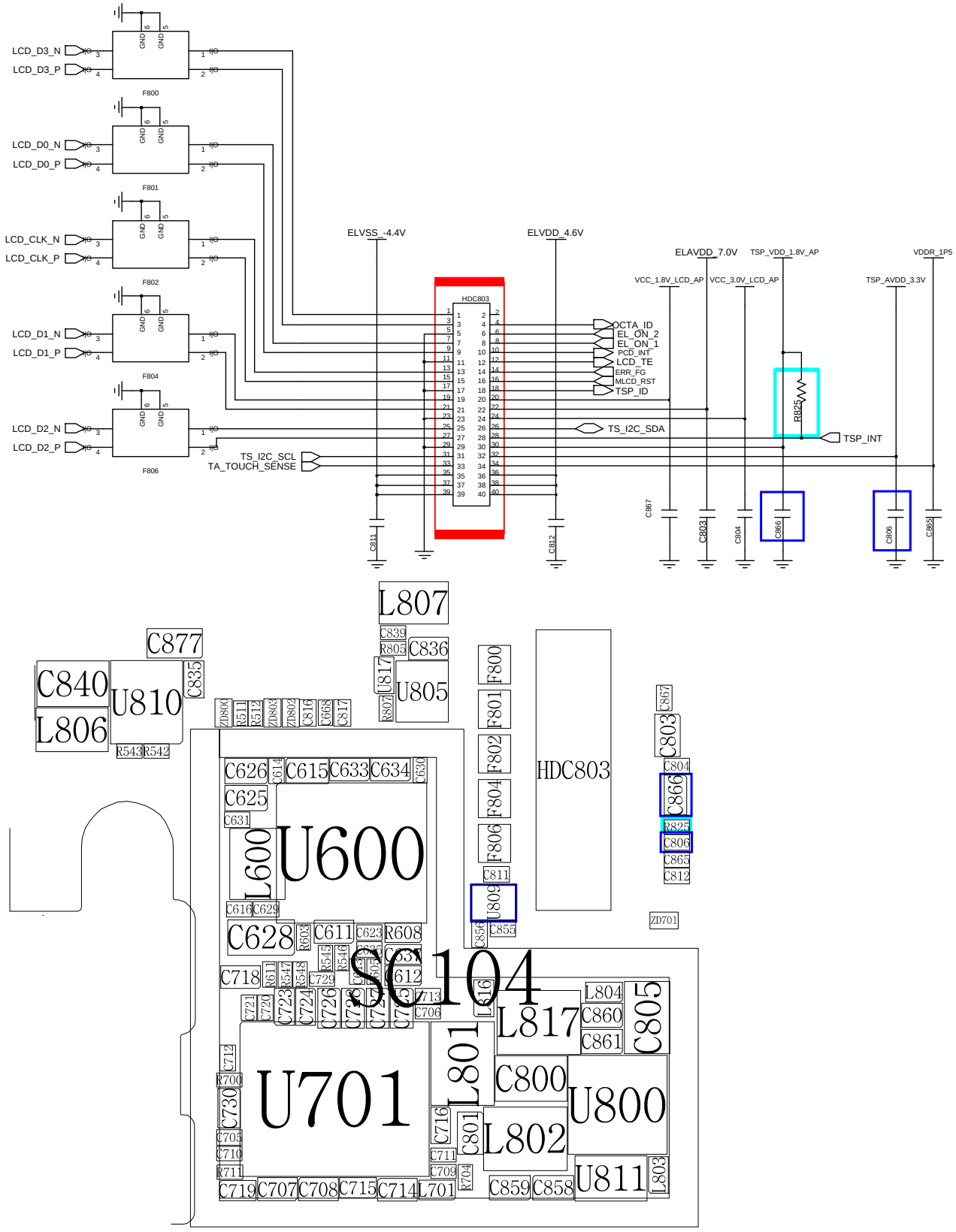


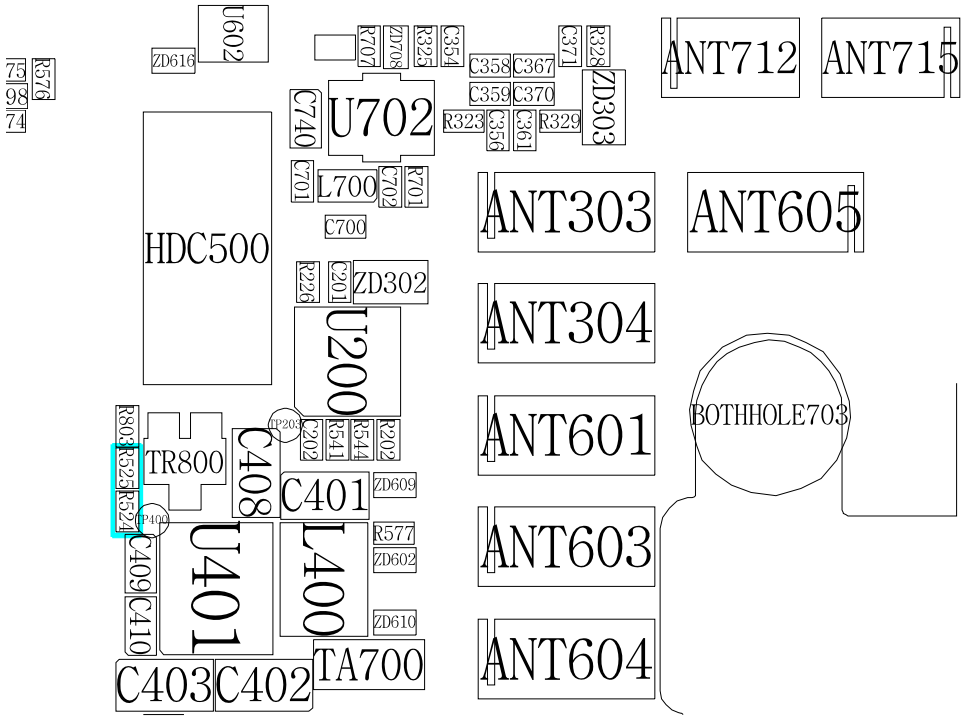




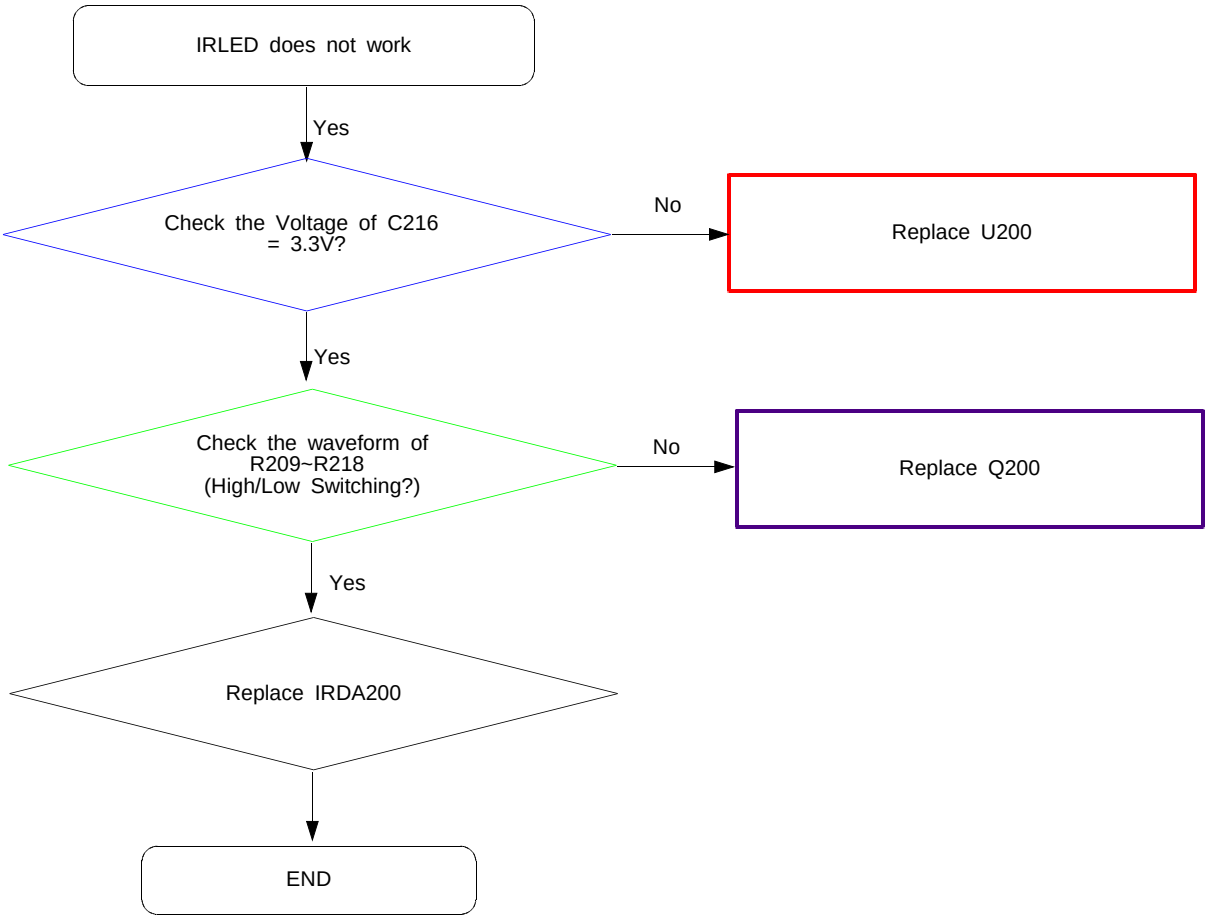
8-3-18. TSP

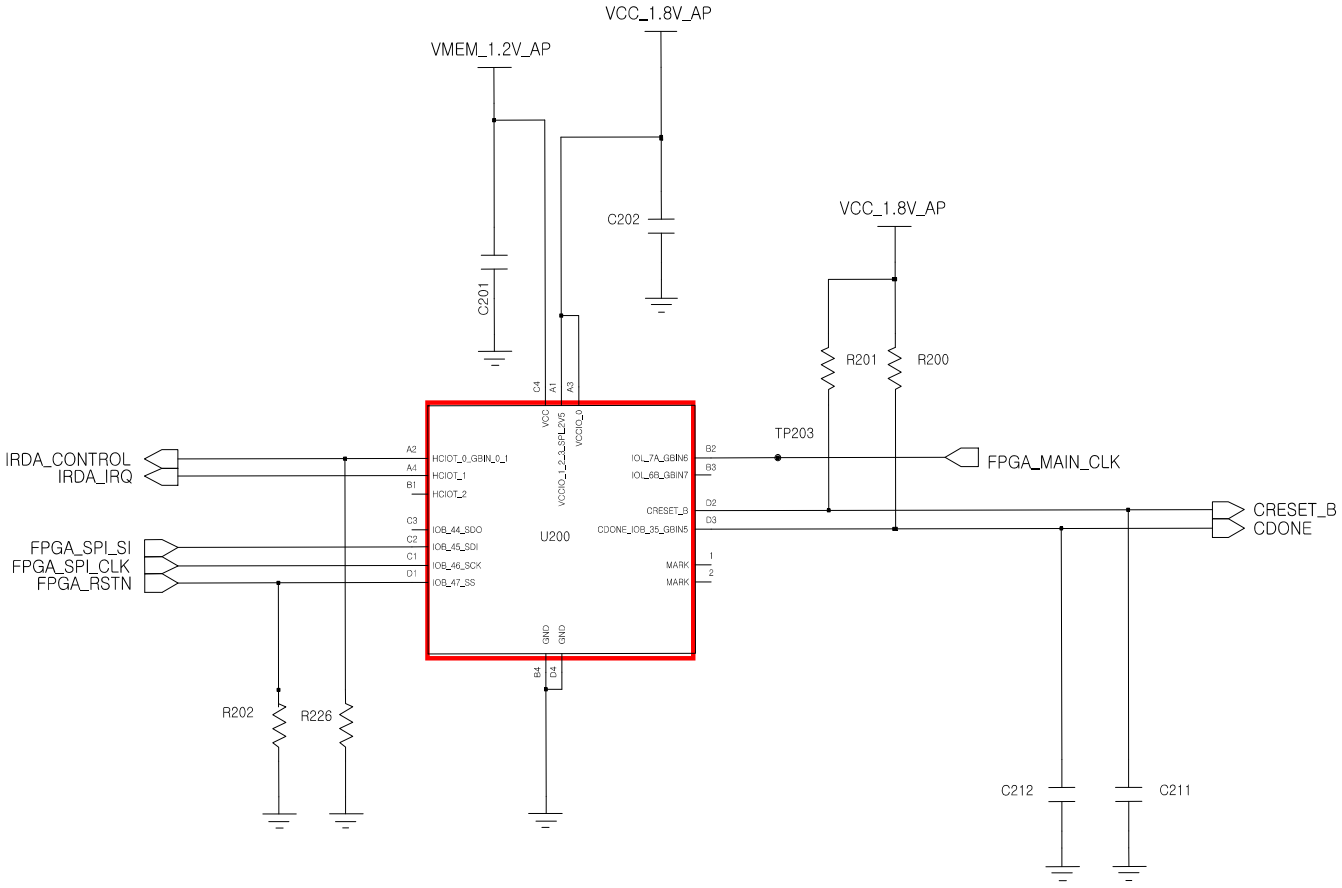


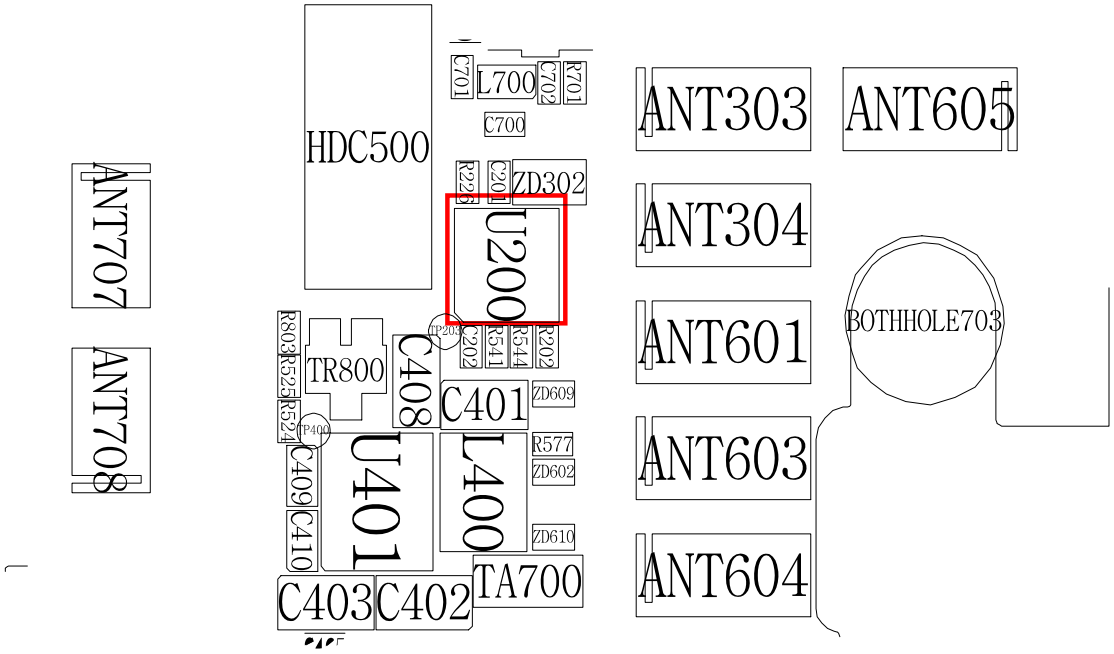


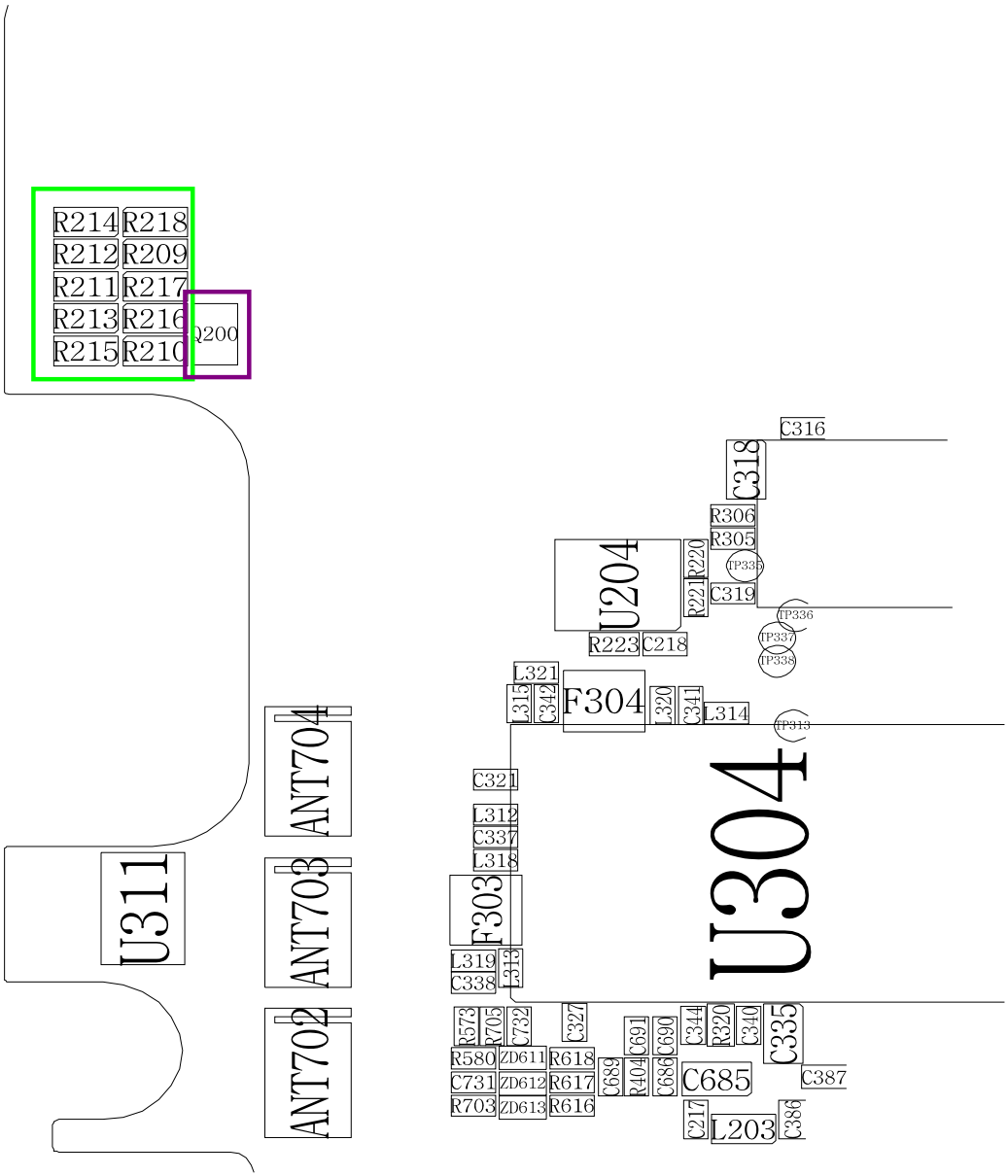


8-3-19. IRLED

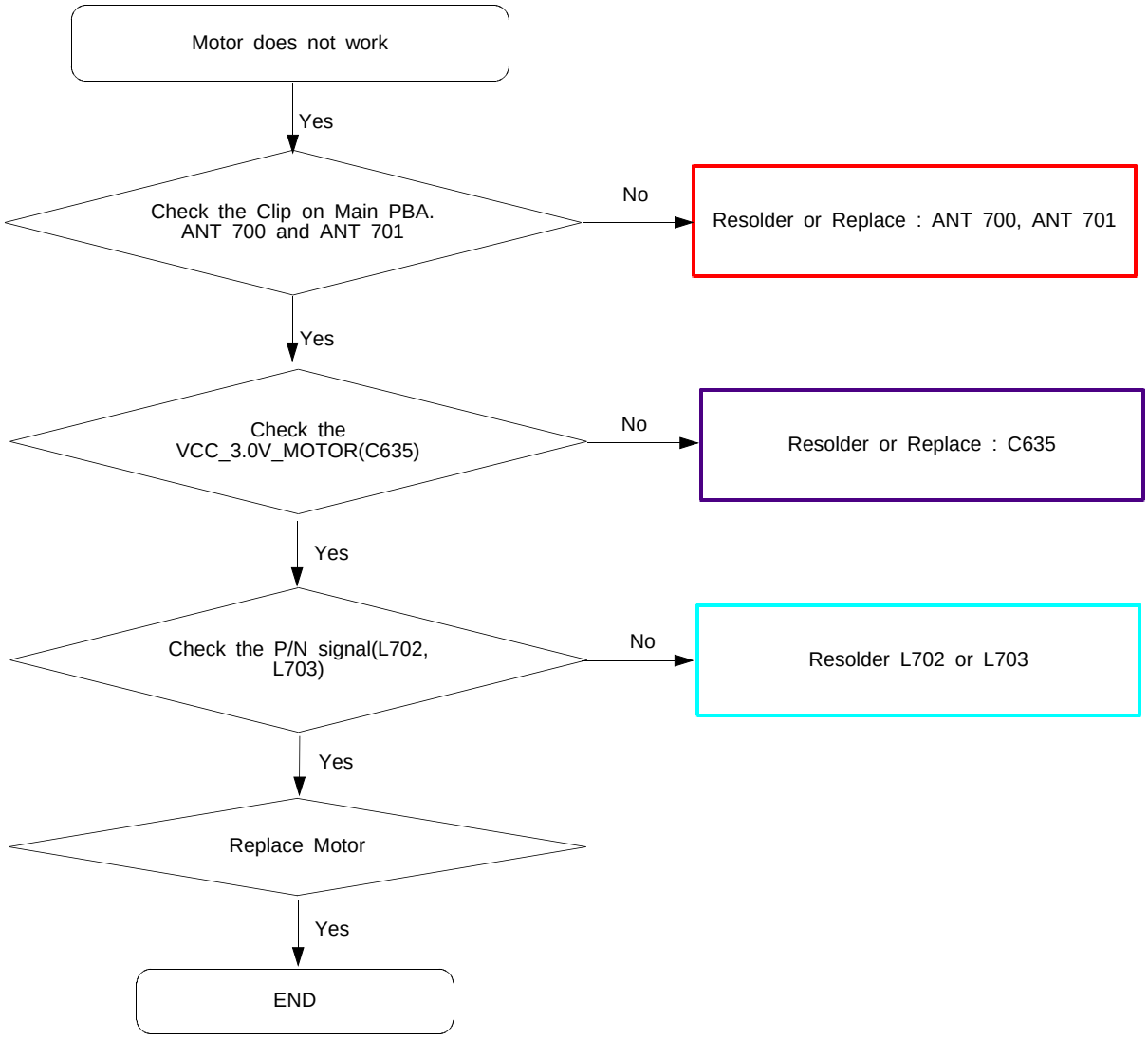


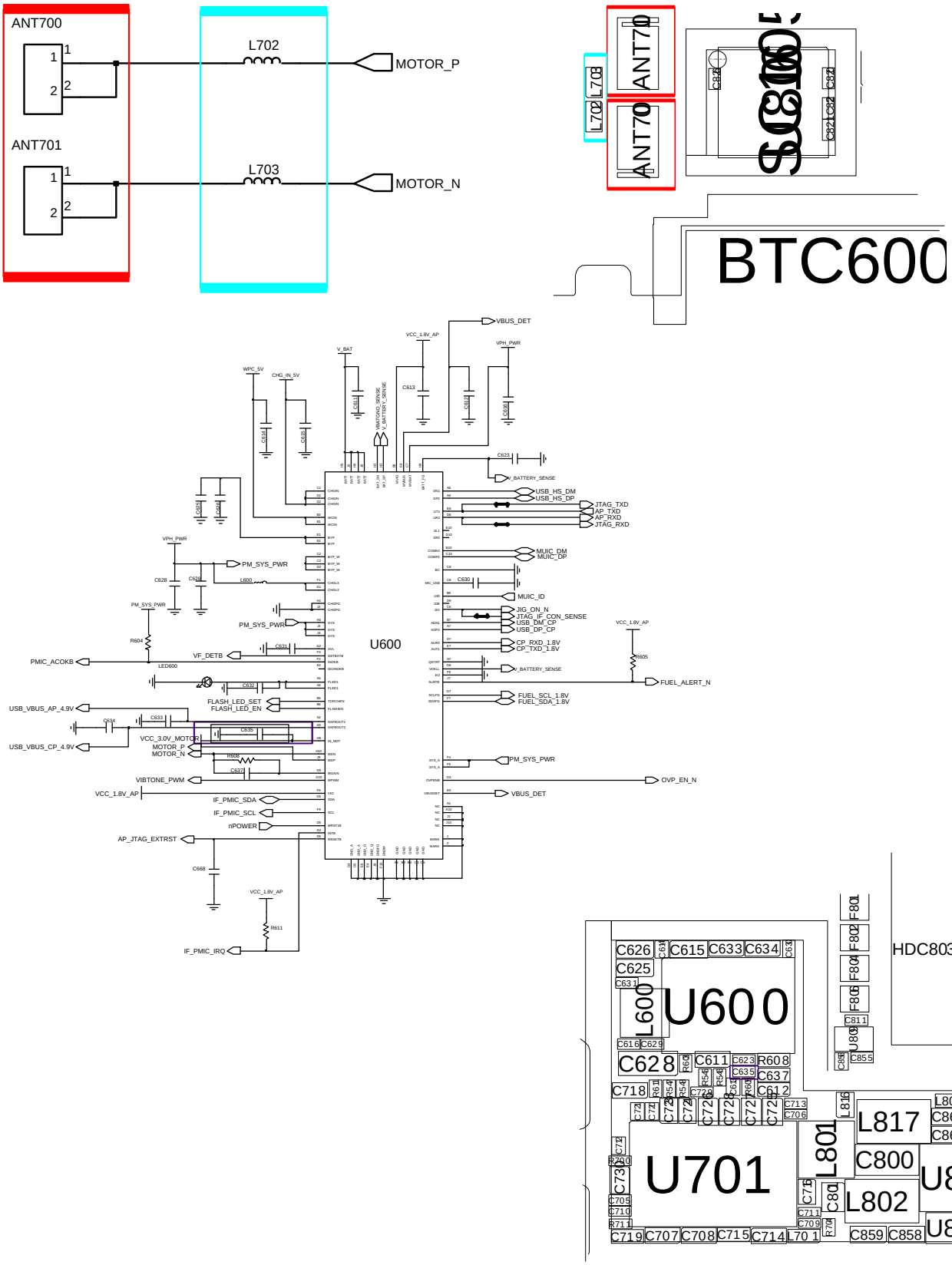




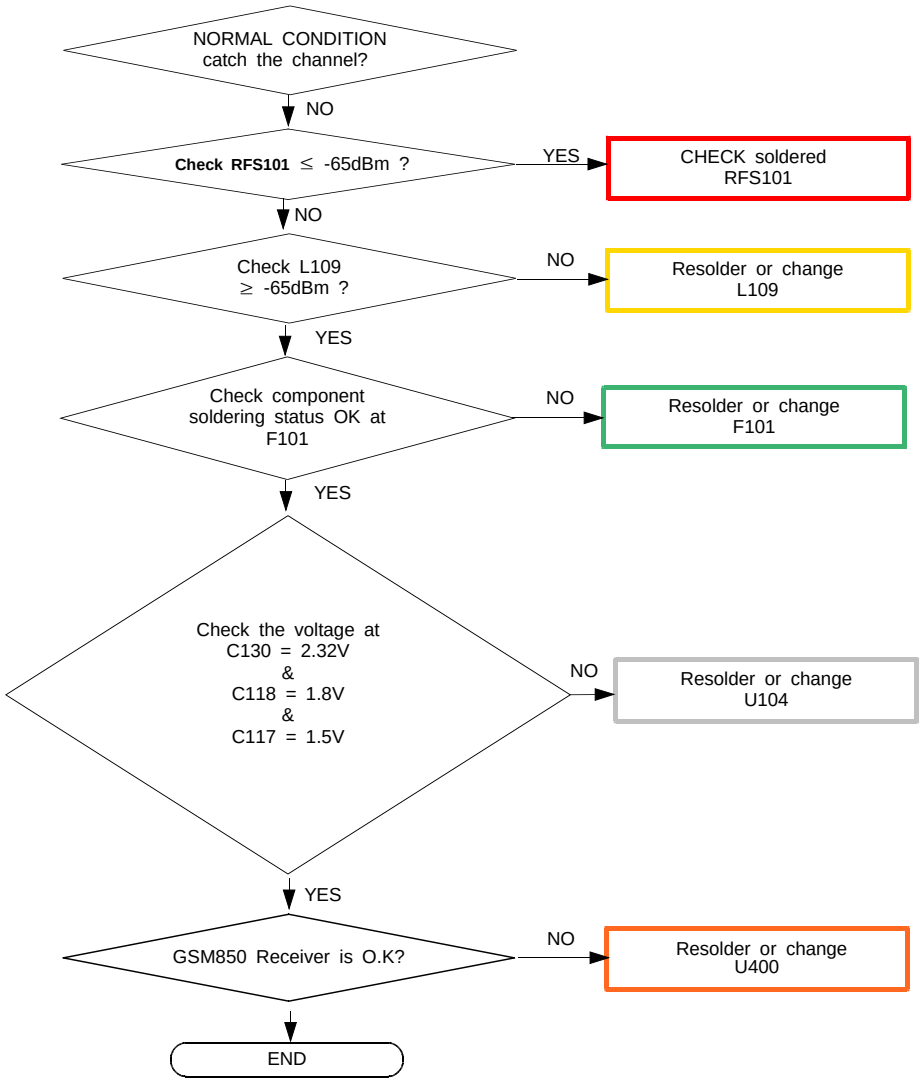


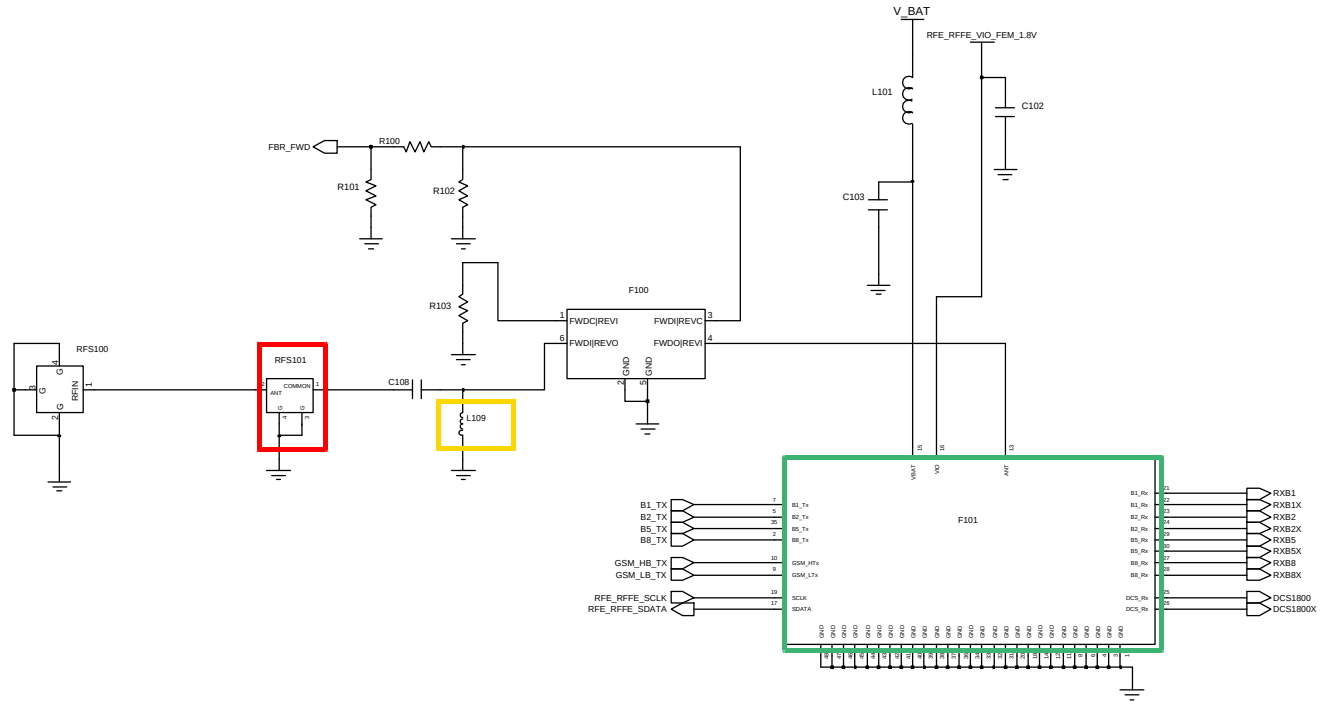
8-3-20. Motor

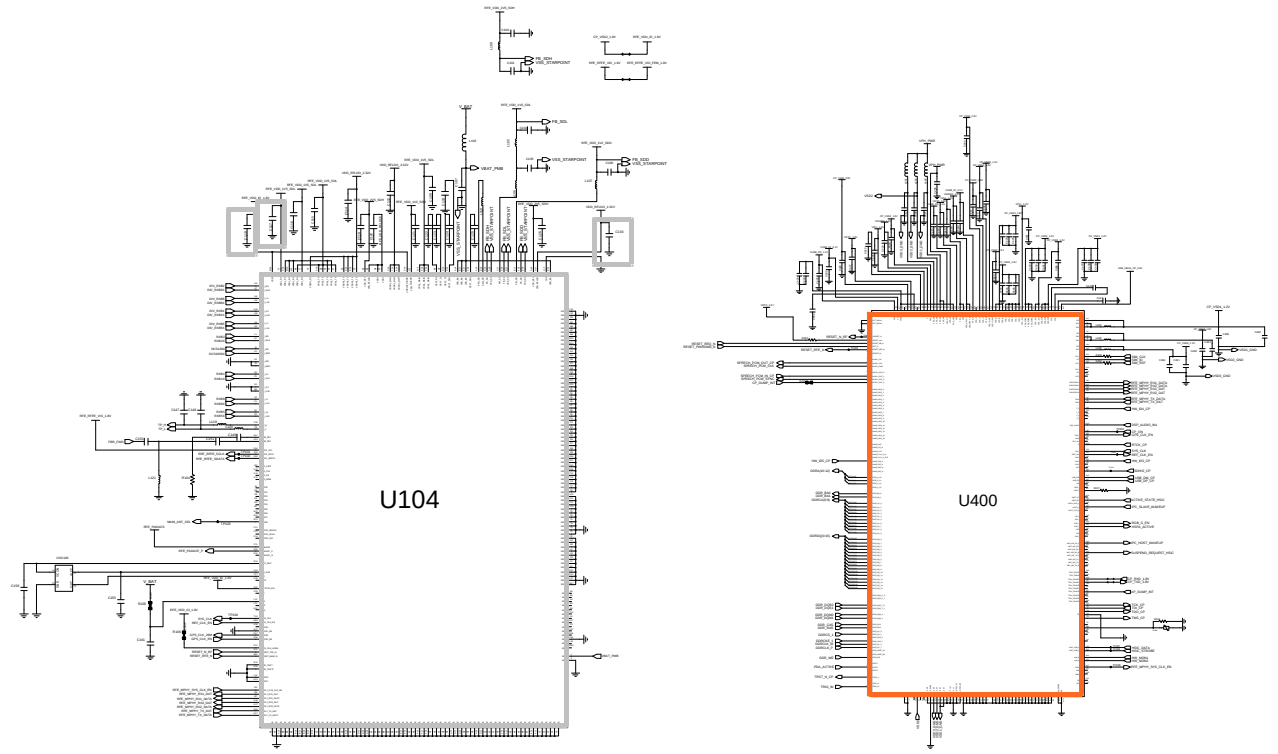


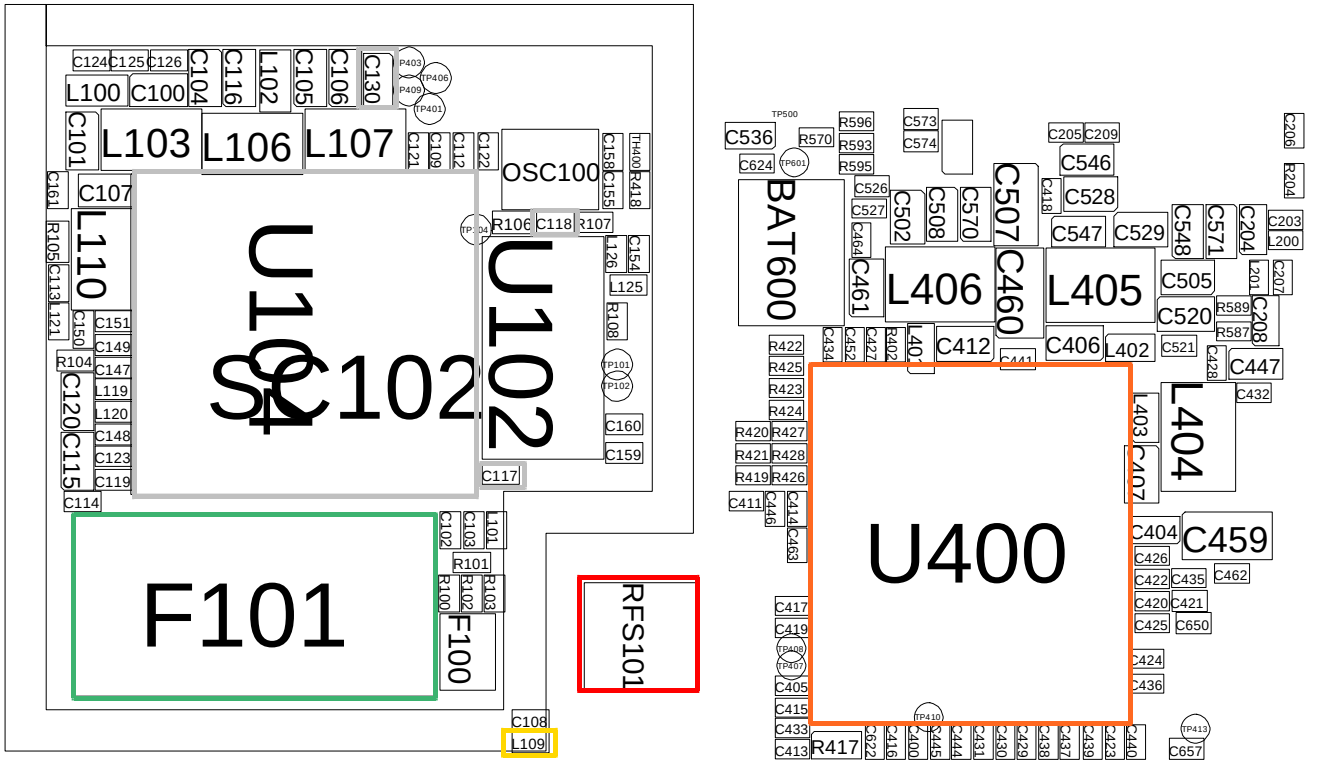


8-3-21. GSM850 RX

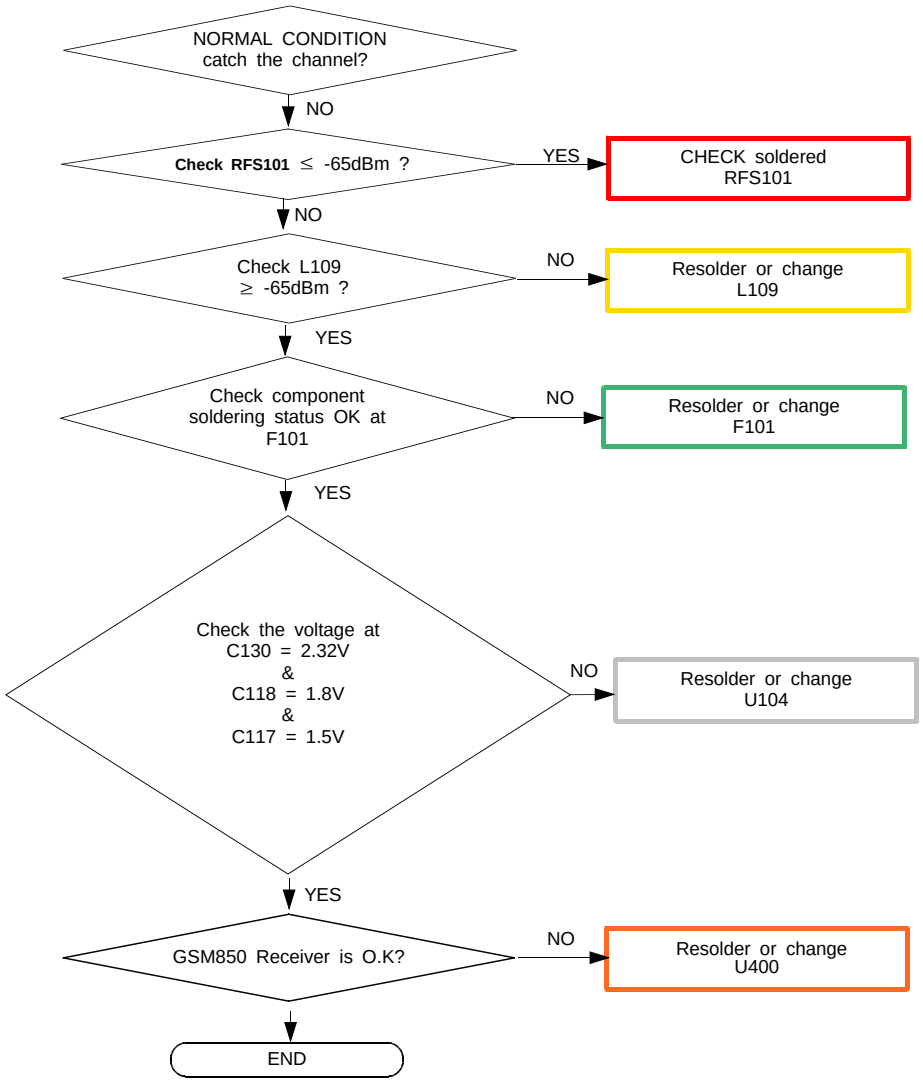


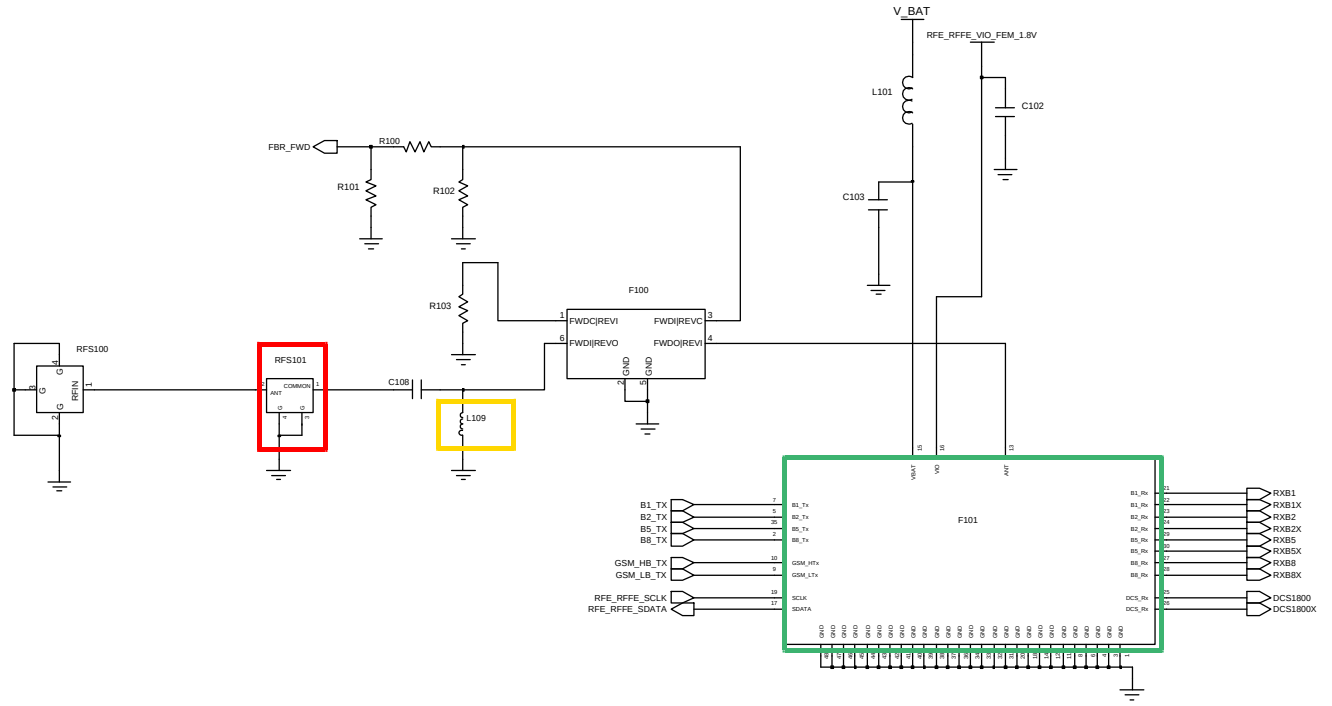


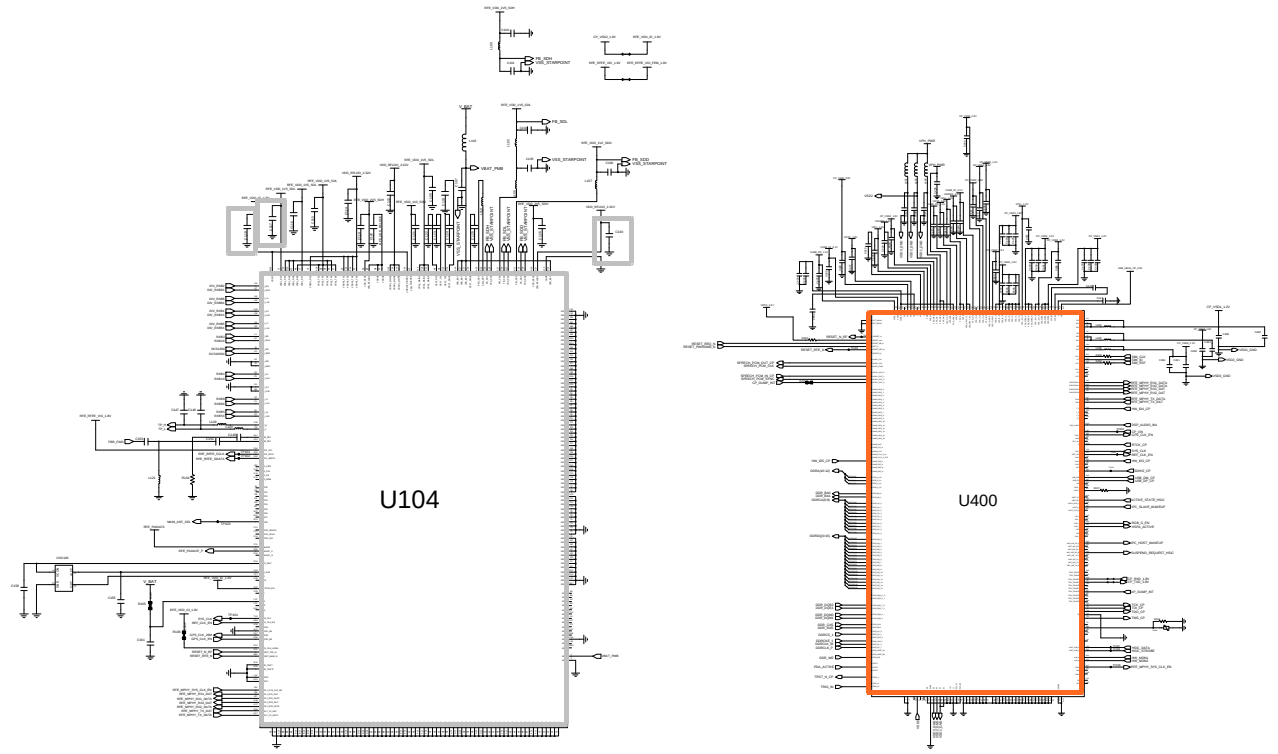


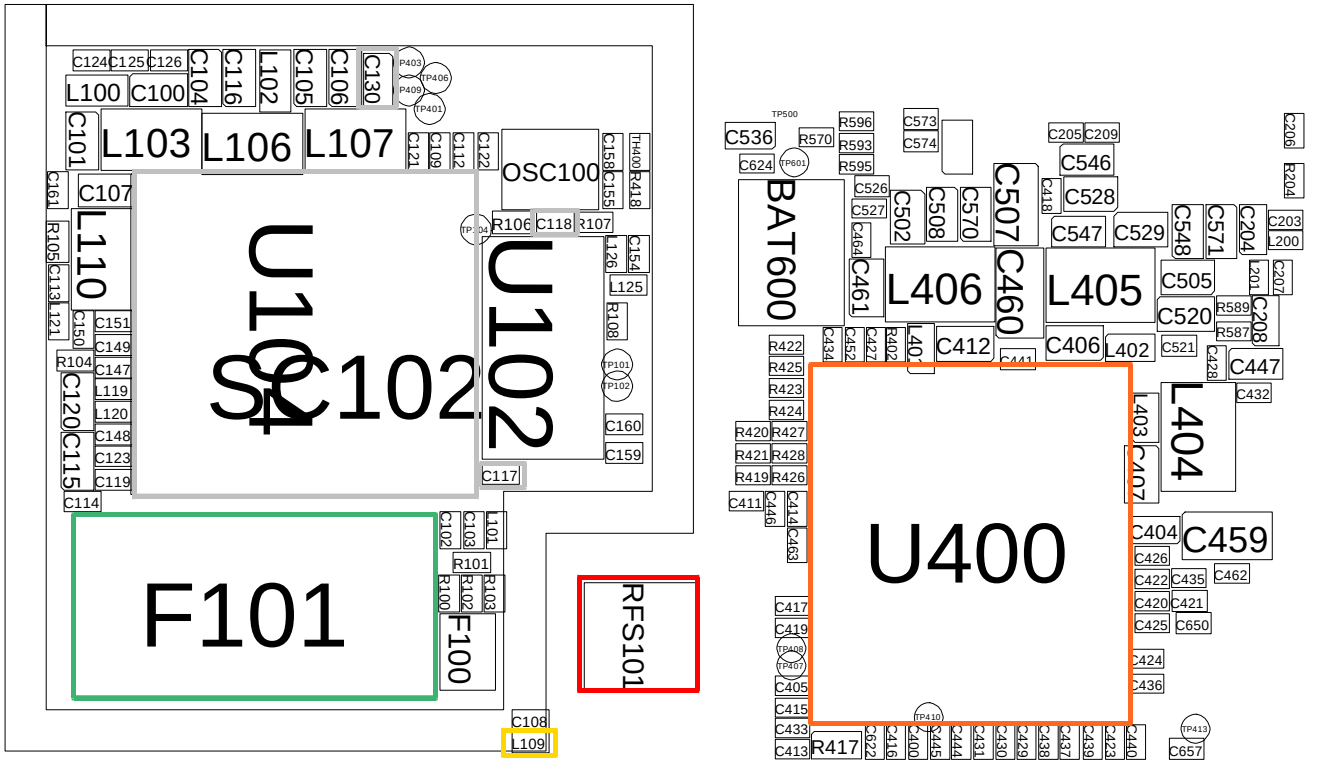


8-3-22. GSM900 RX

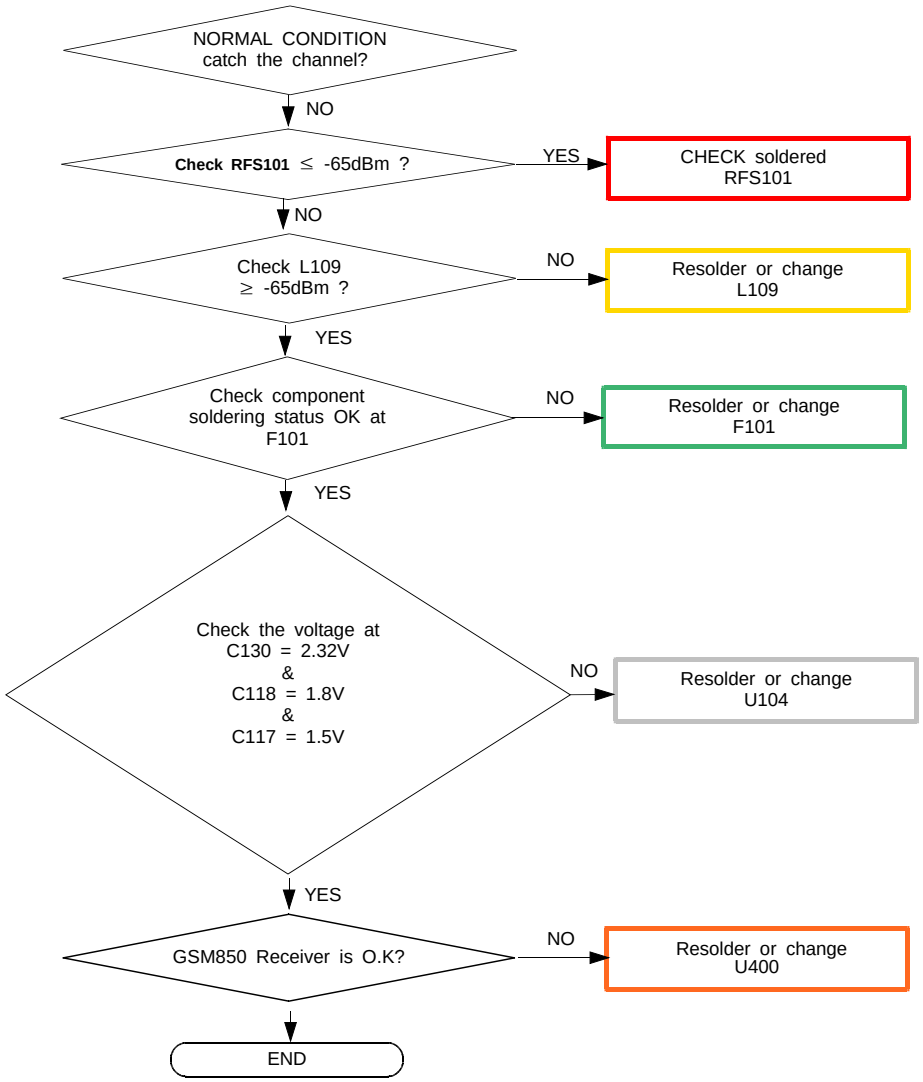


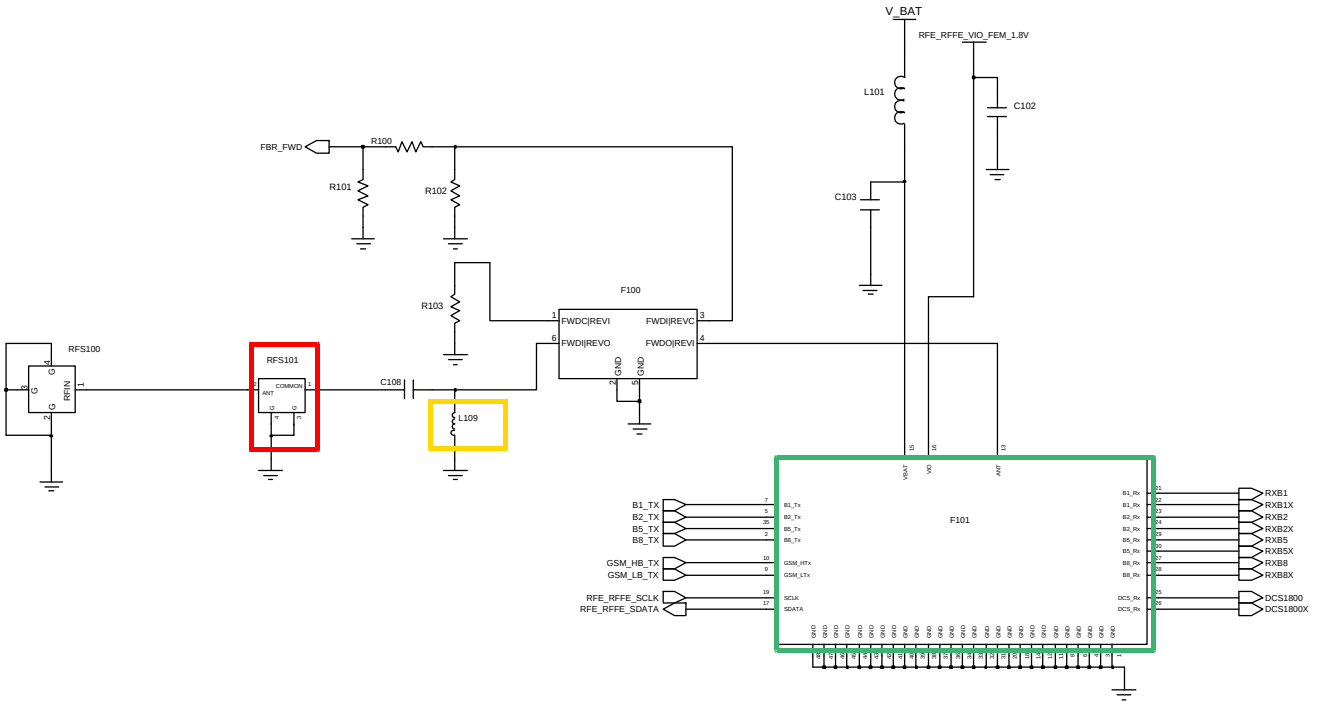


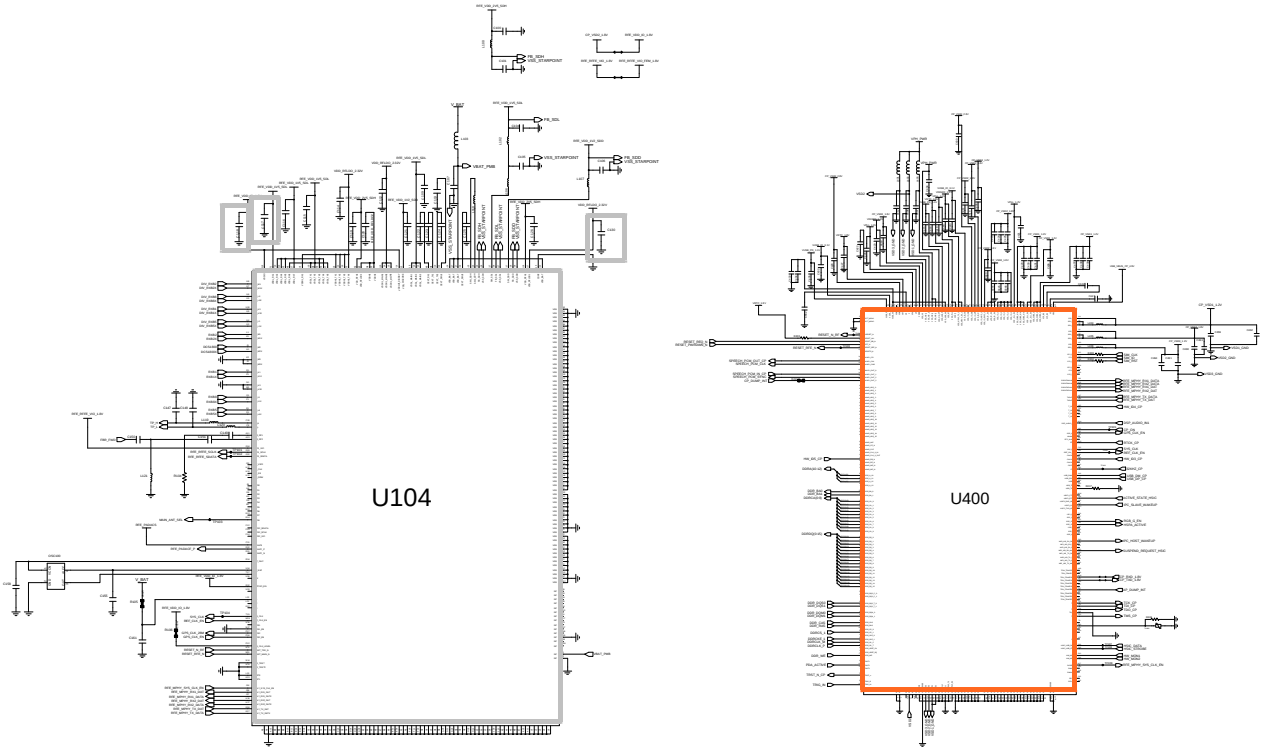


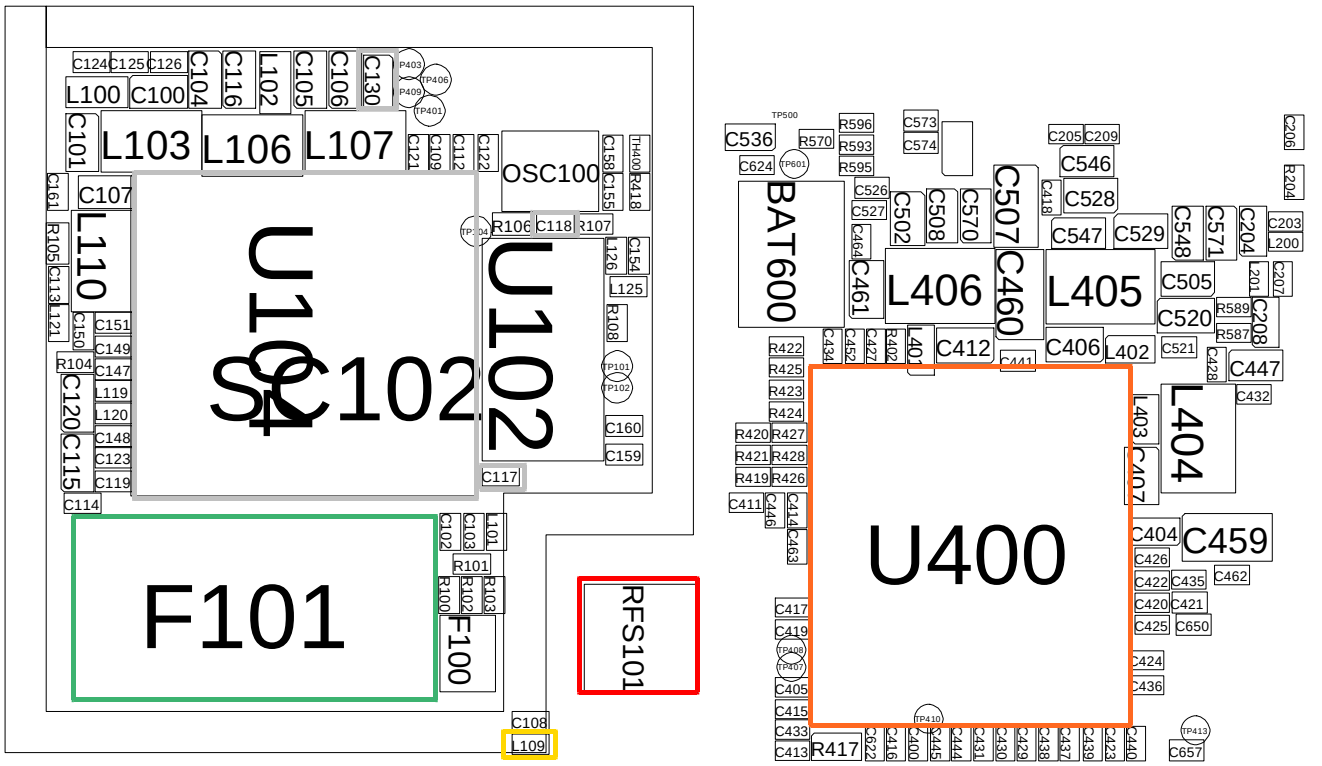


8-3-23. GSM1800/1900 RX



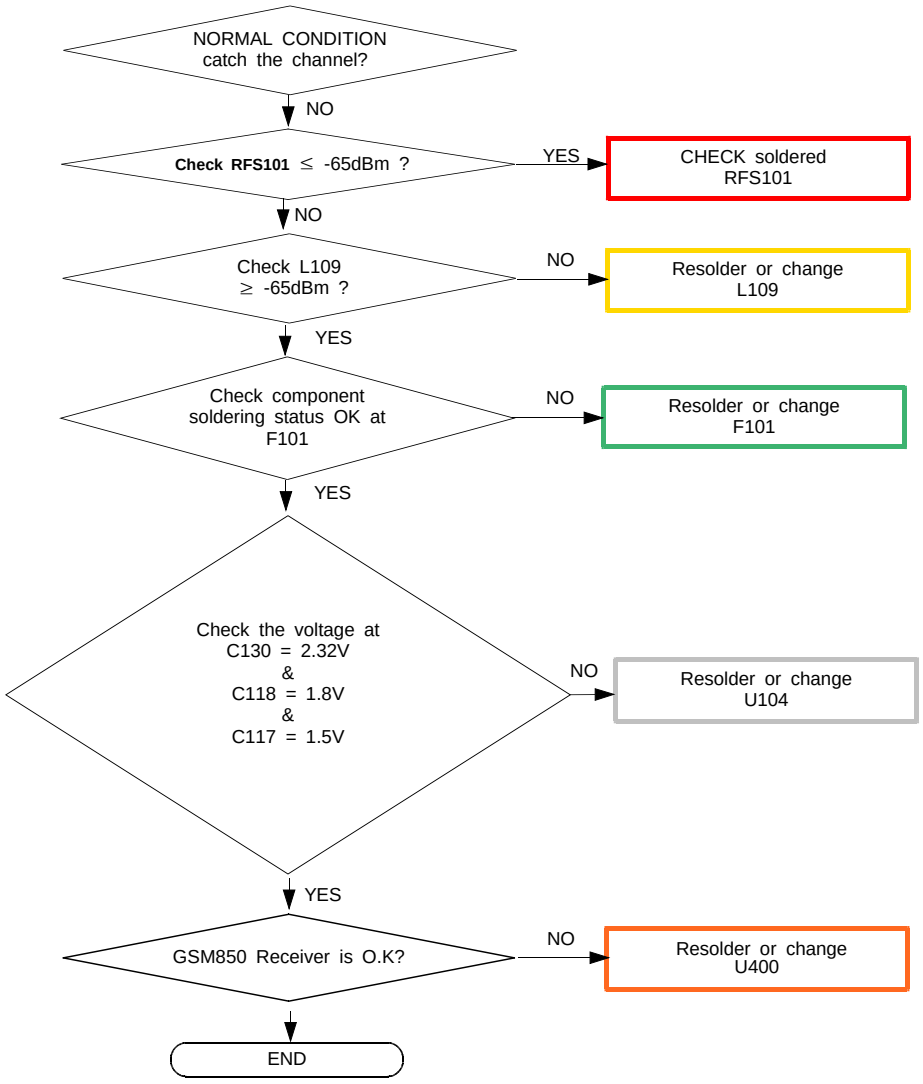


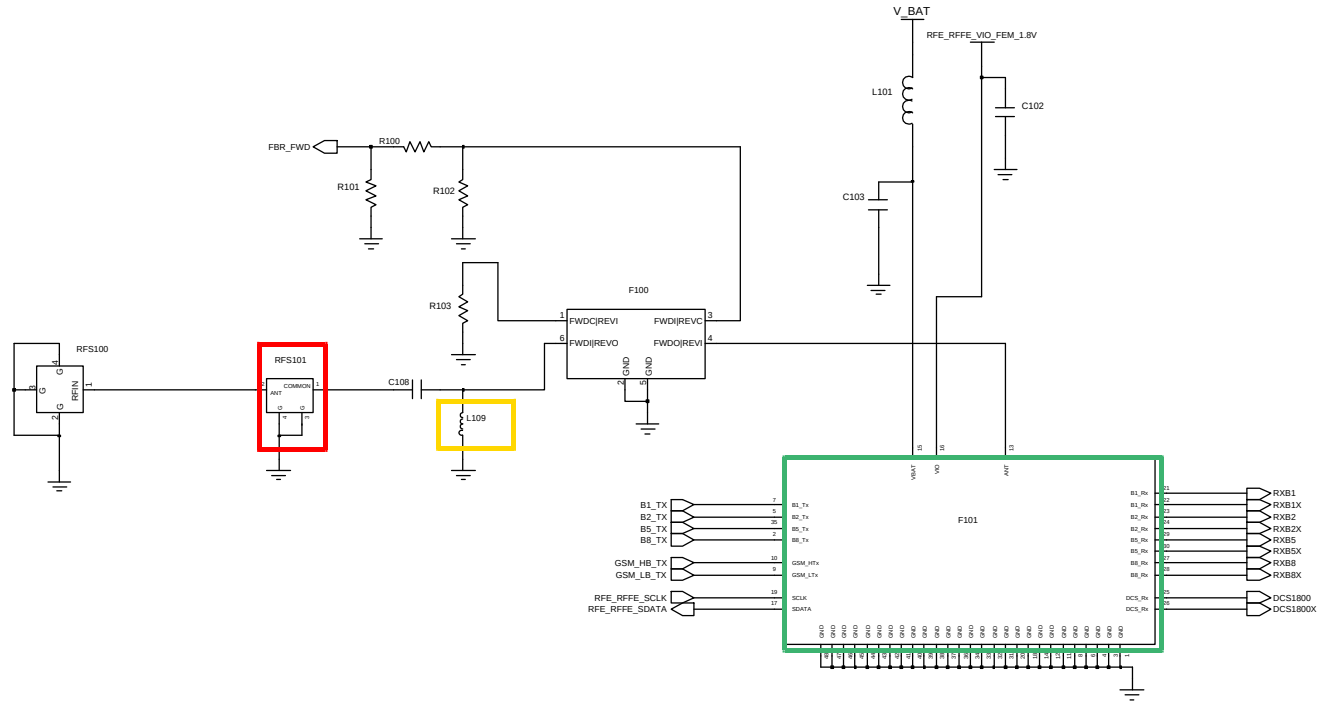


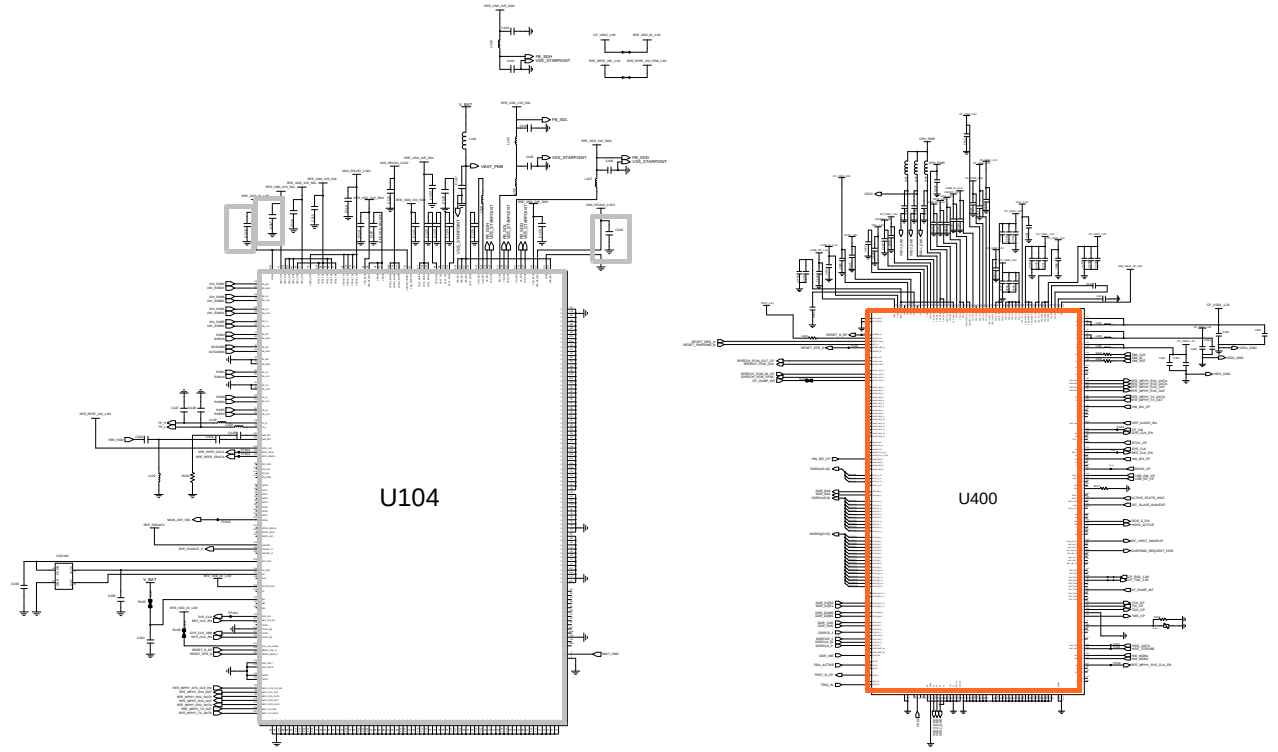


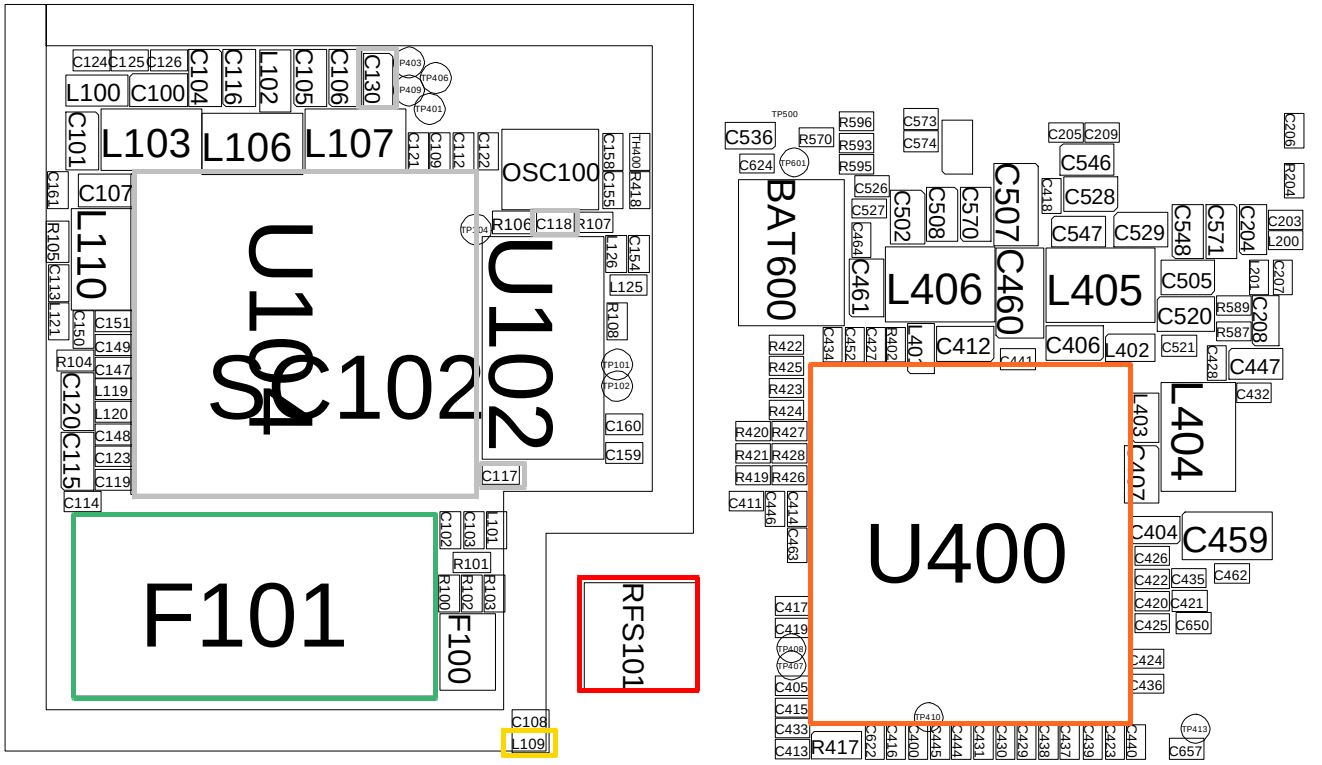
8-3-24. WCDMA 2100 RX

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



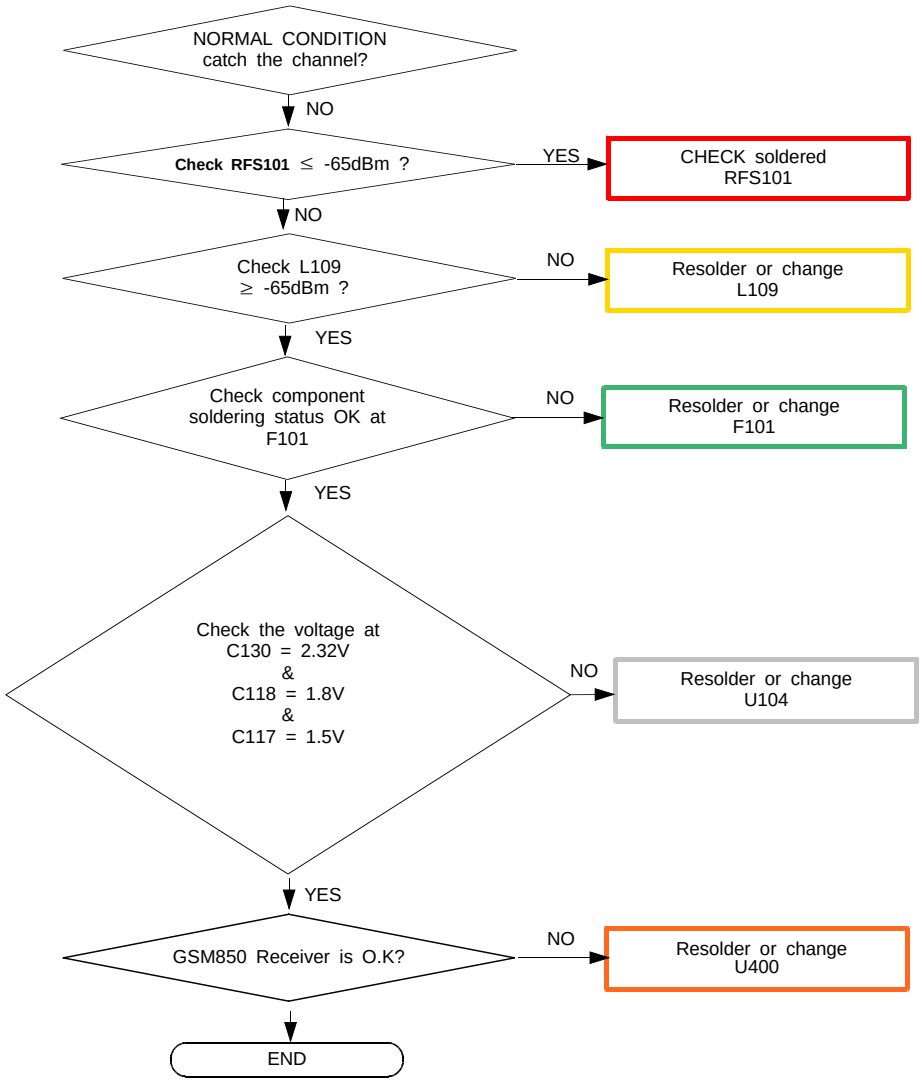


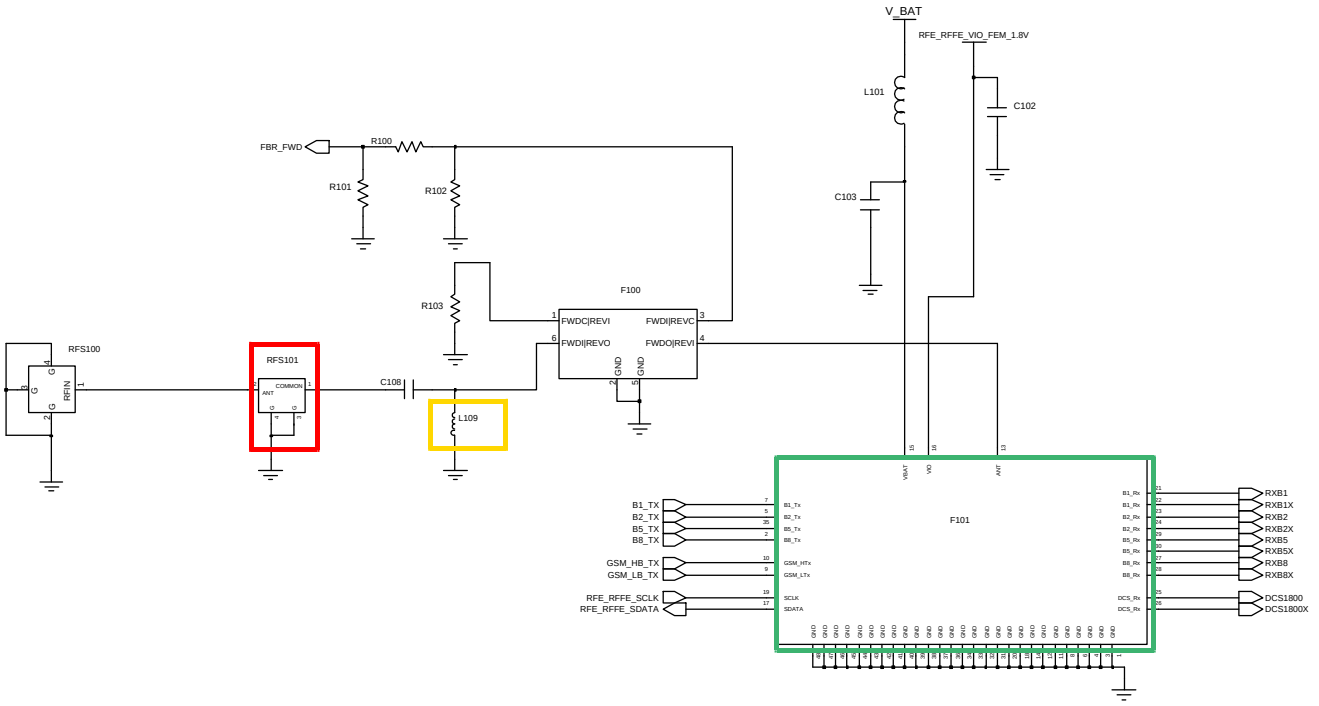


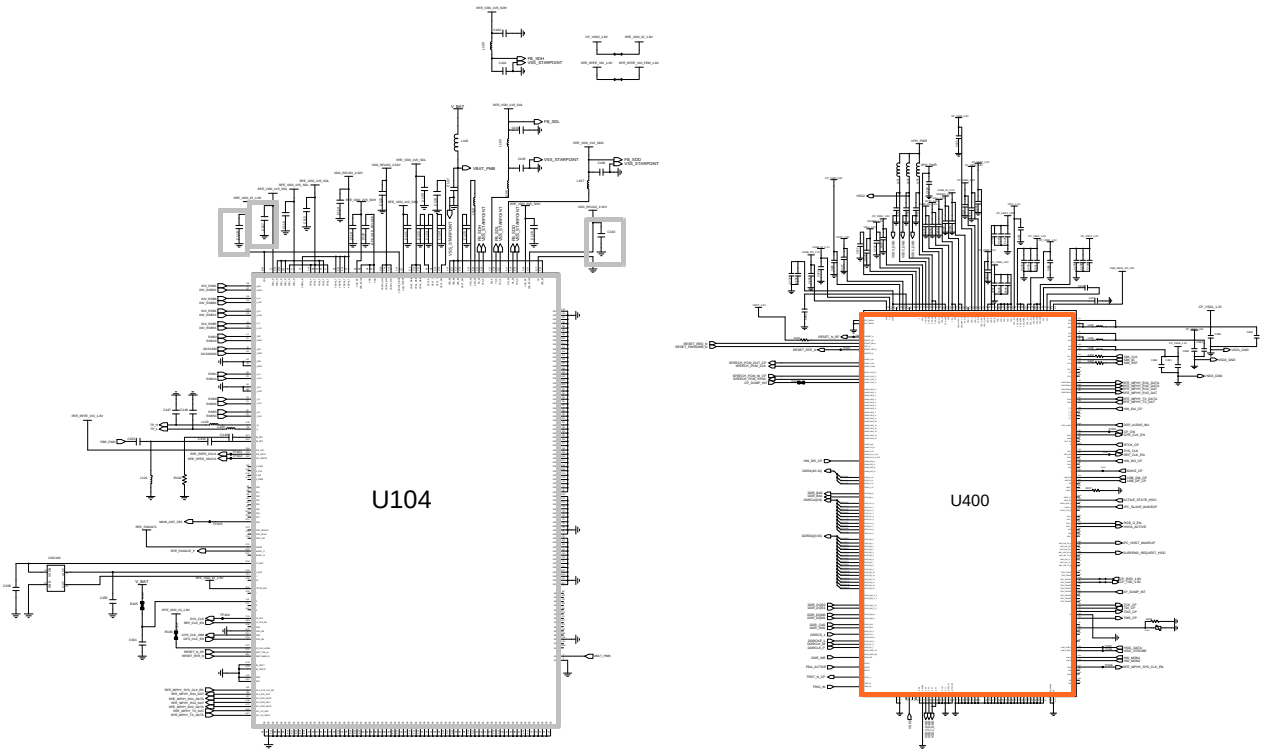


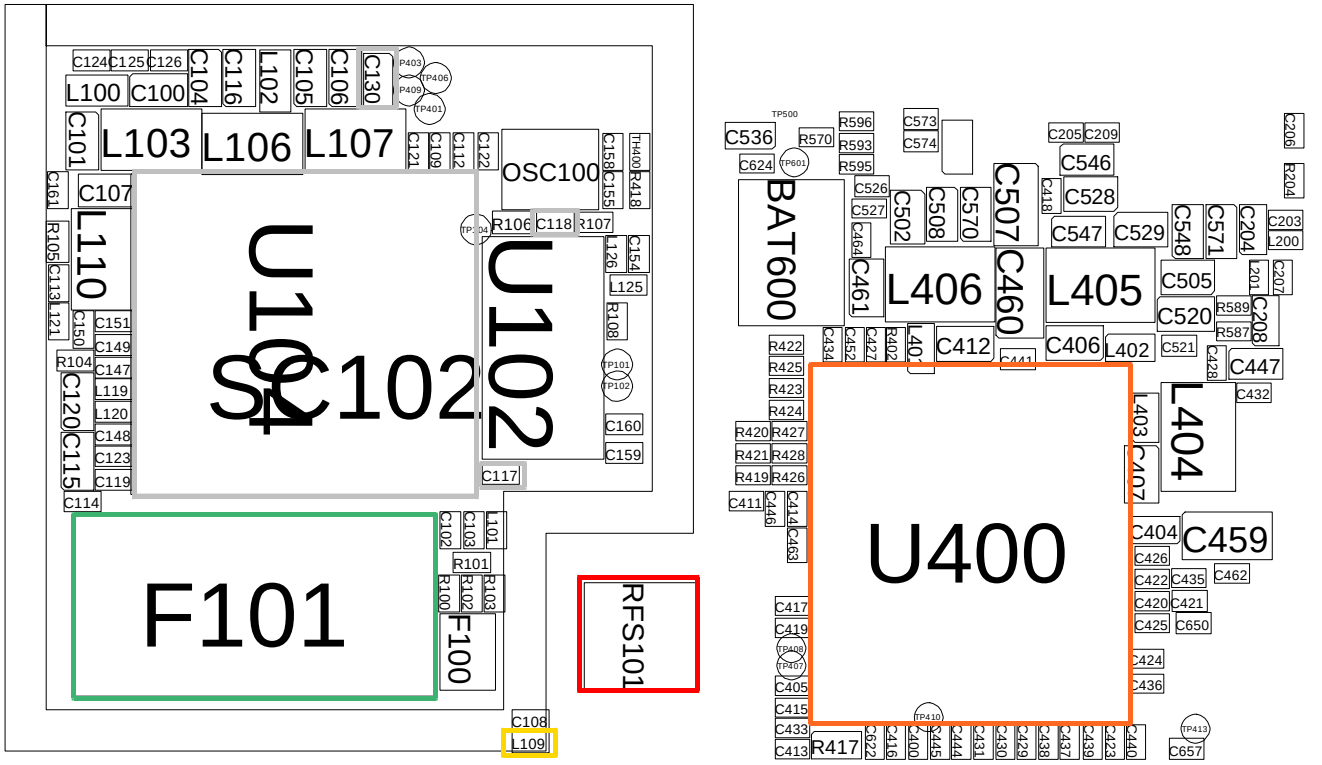
8-3-25. WCDMA 1900 RX

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



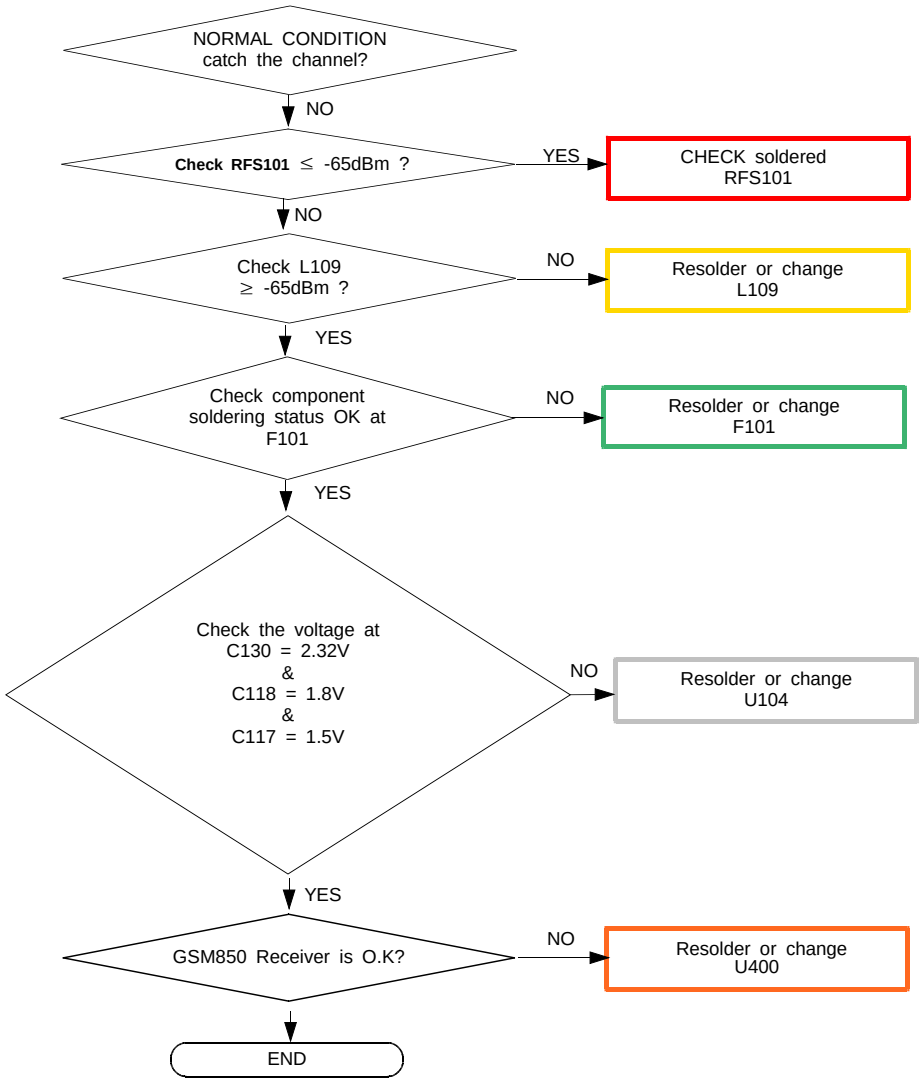


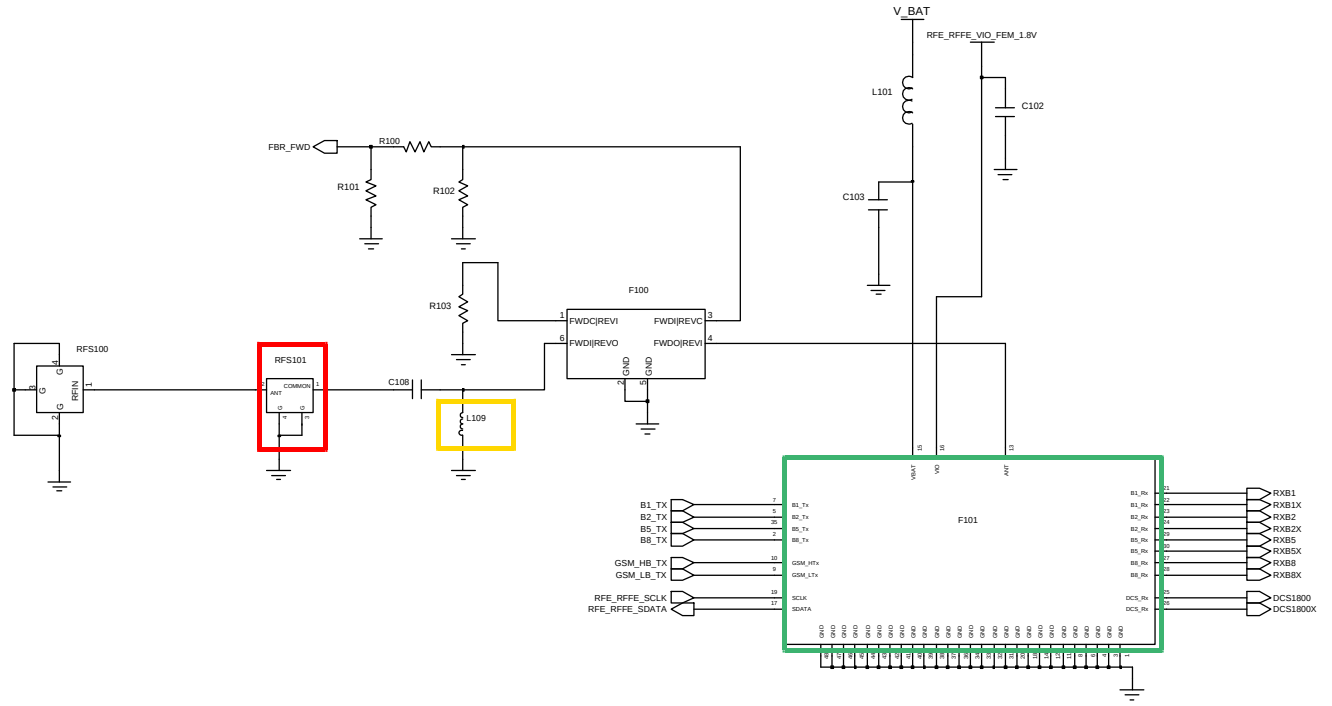


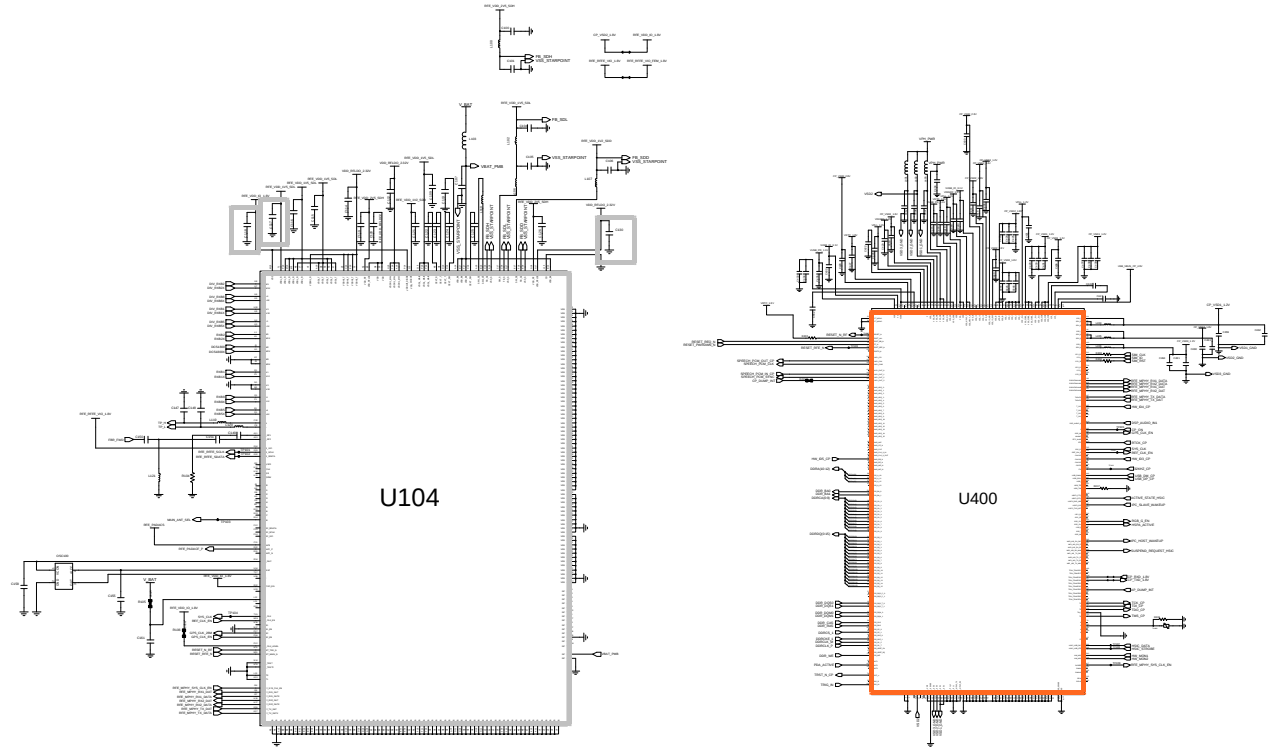


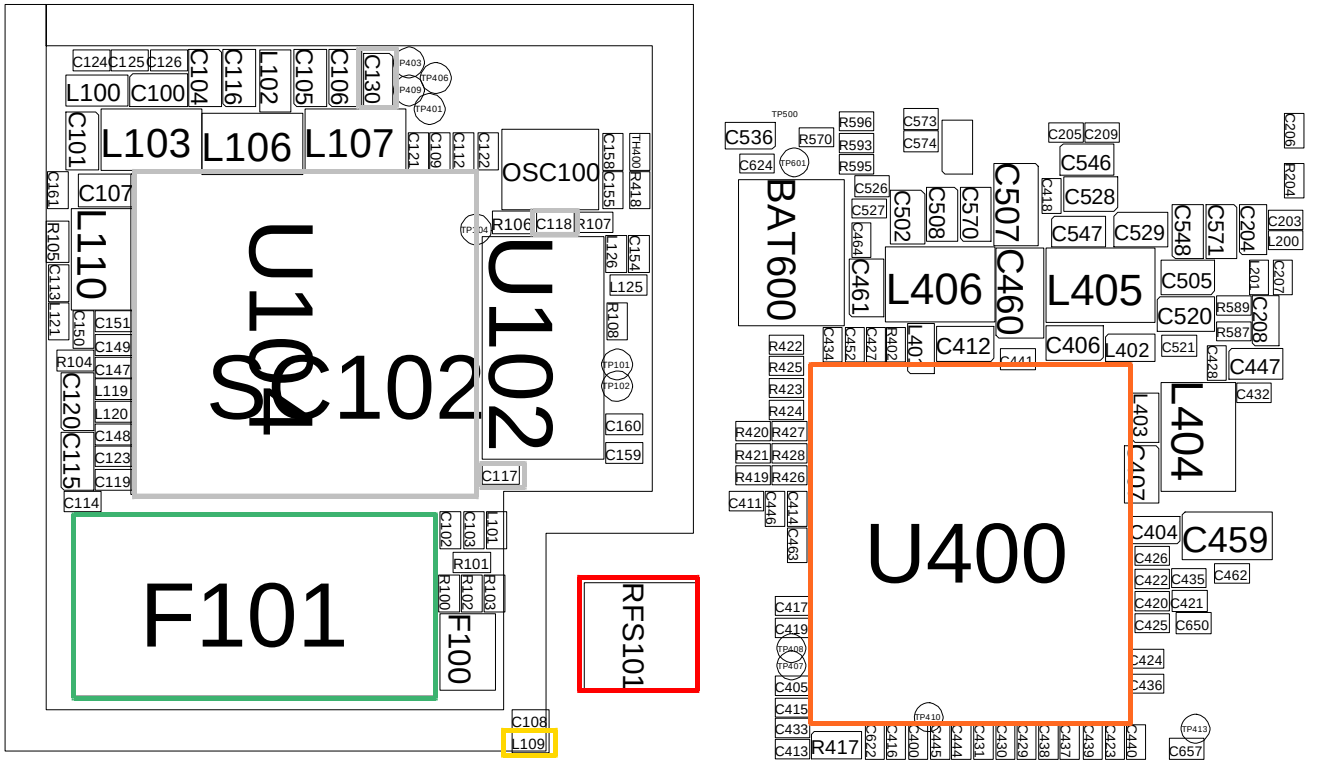
8-3-26. WCDMA850 RX

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



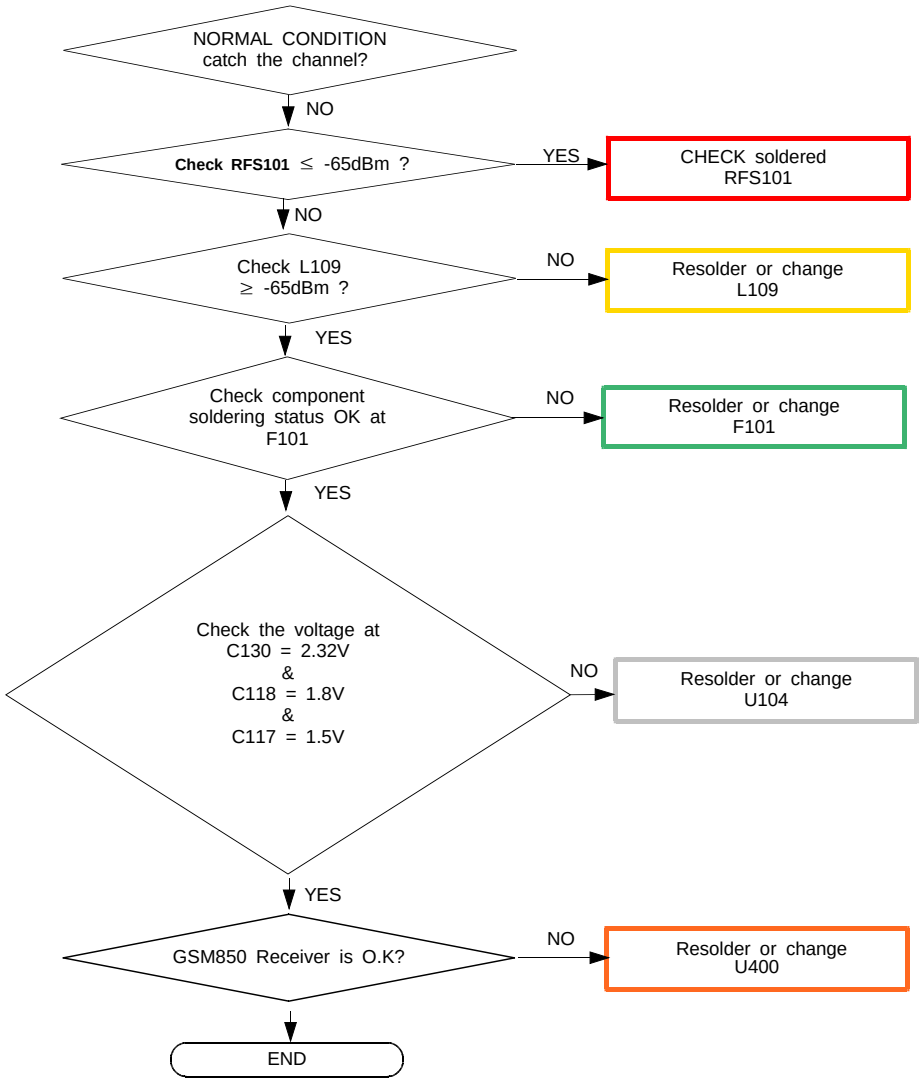


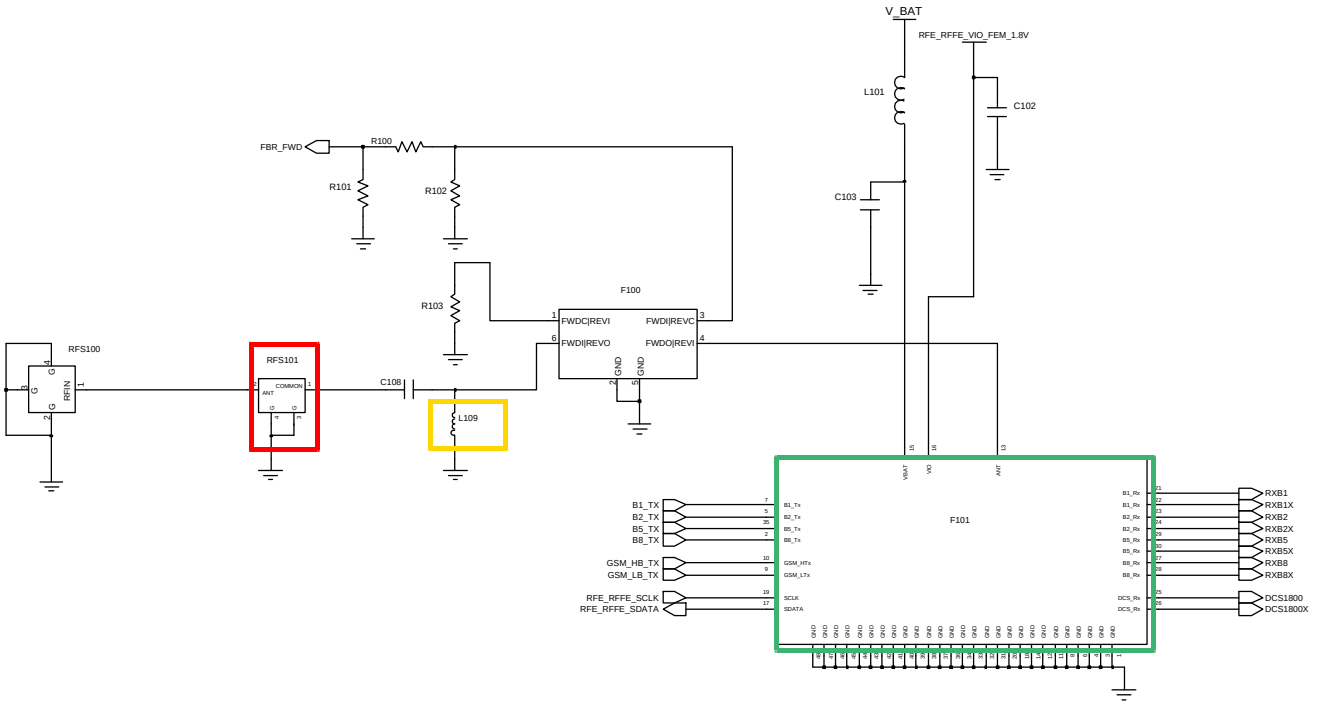


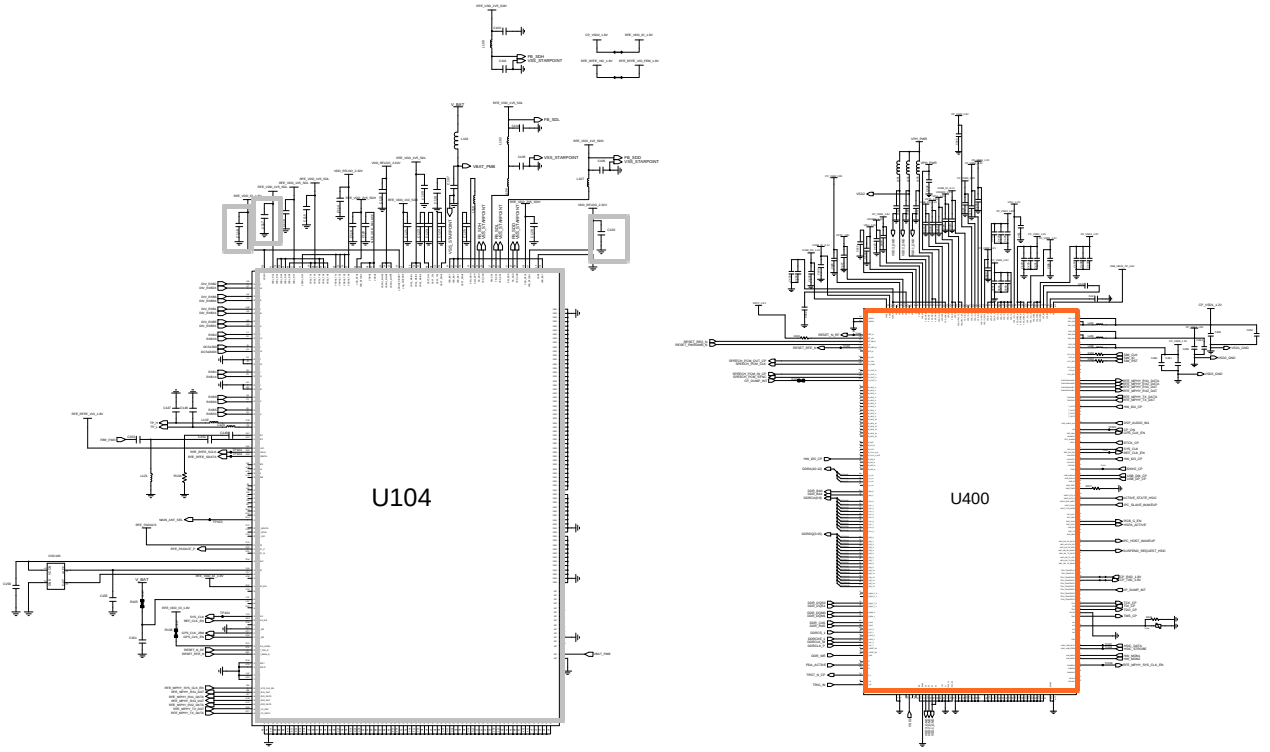


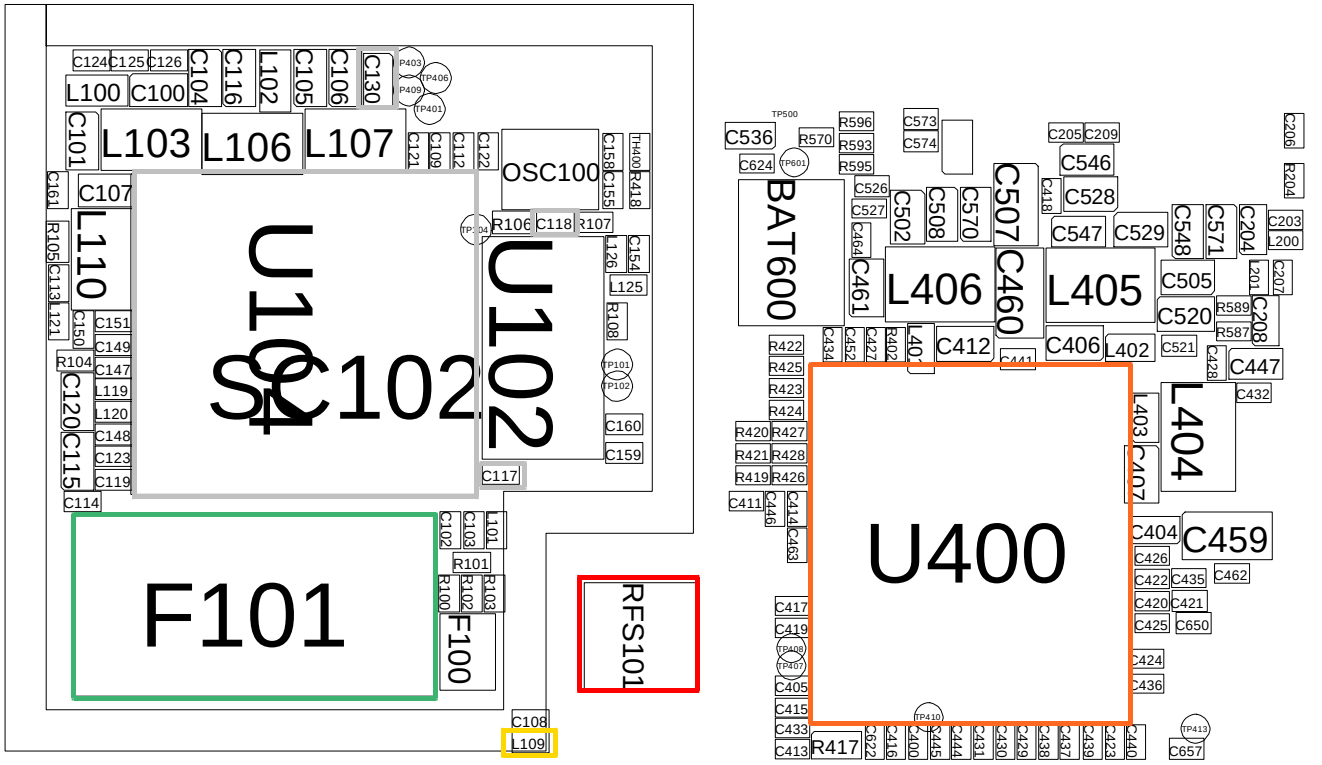
8-3-27. WCDMA900 RX

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



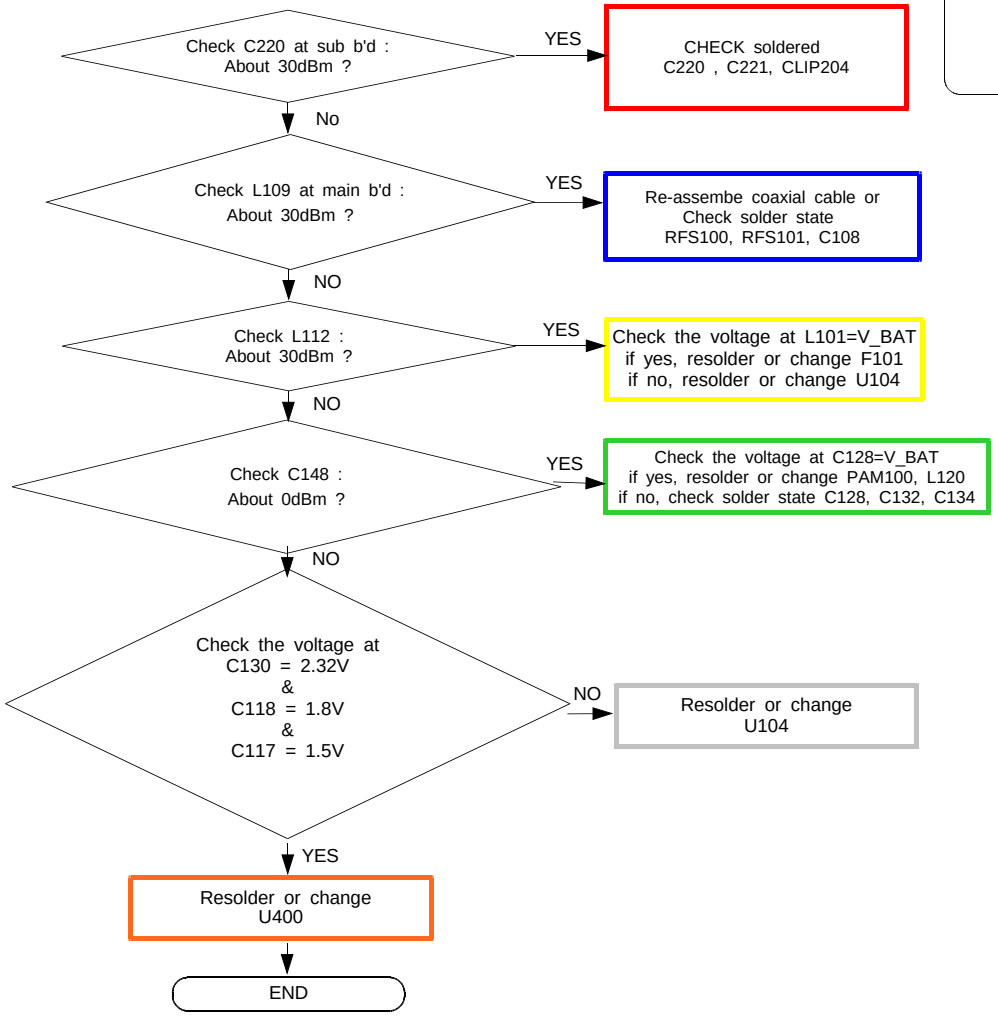


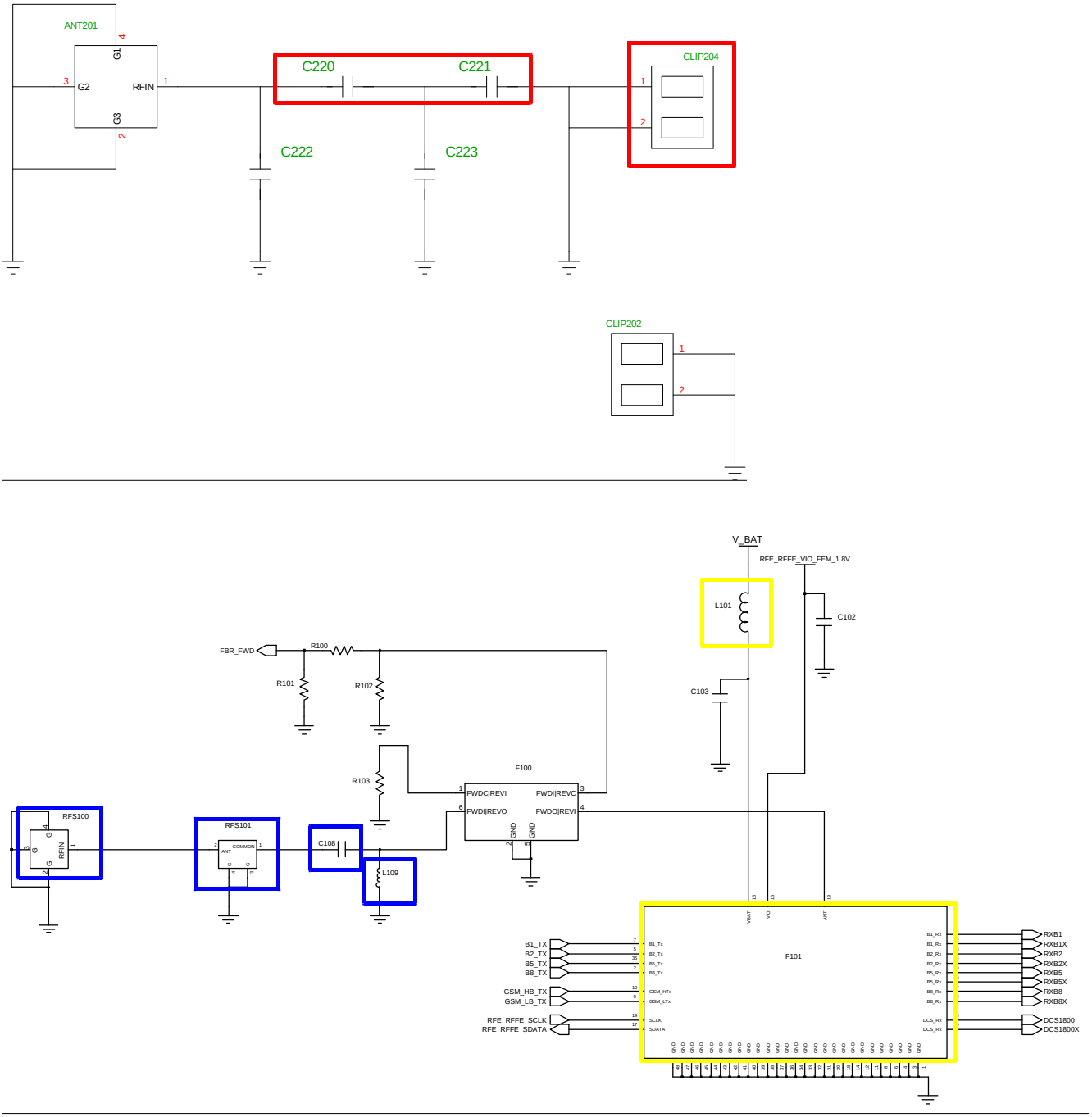


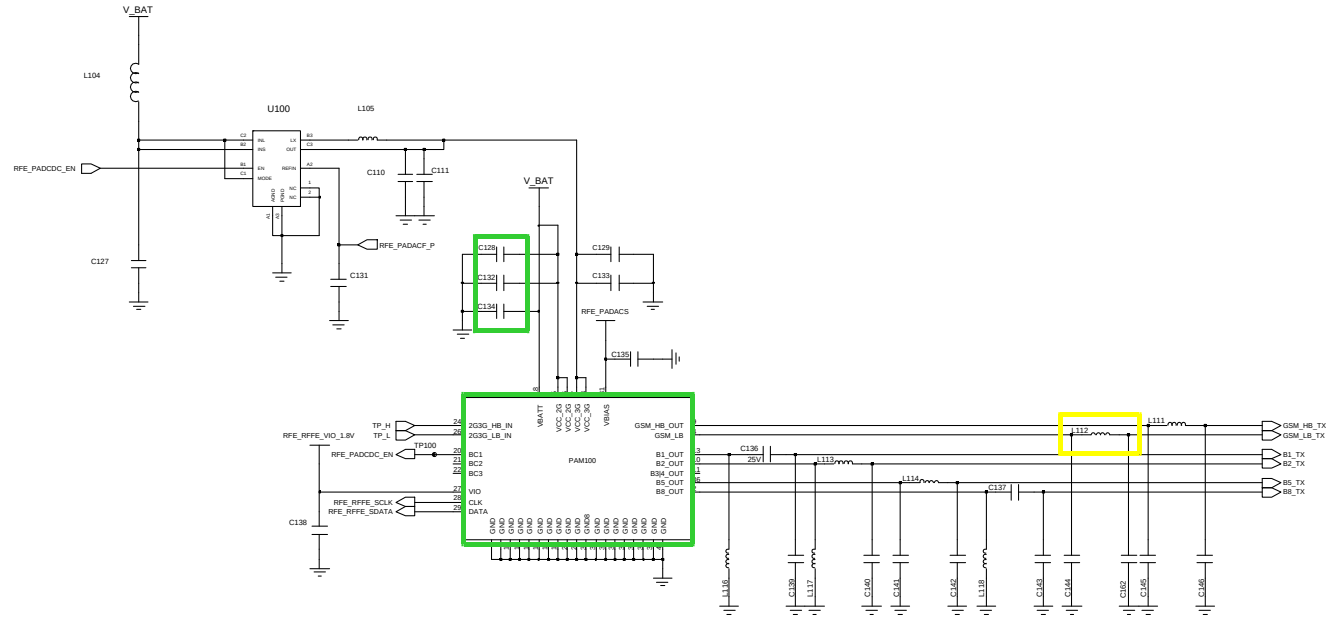


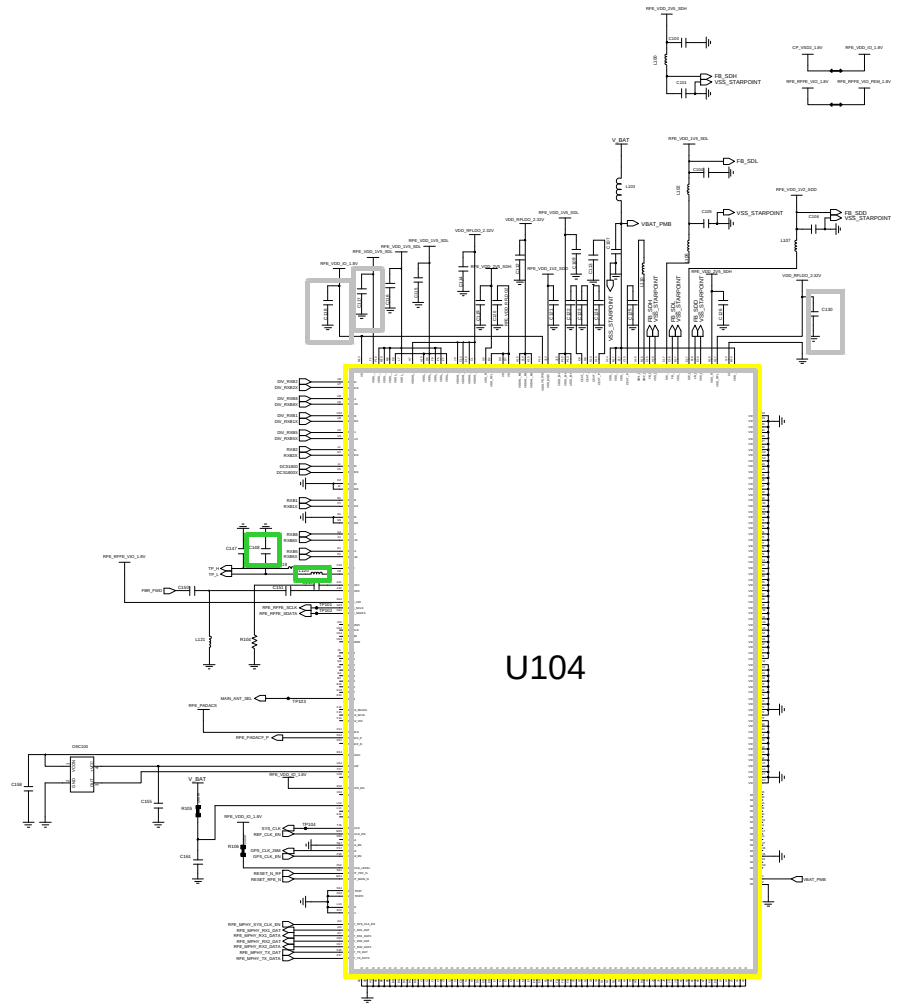
8-3-28. GSM850/GSM900 TX

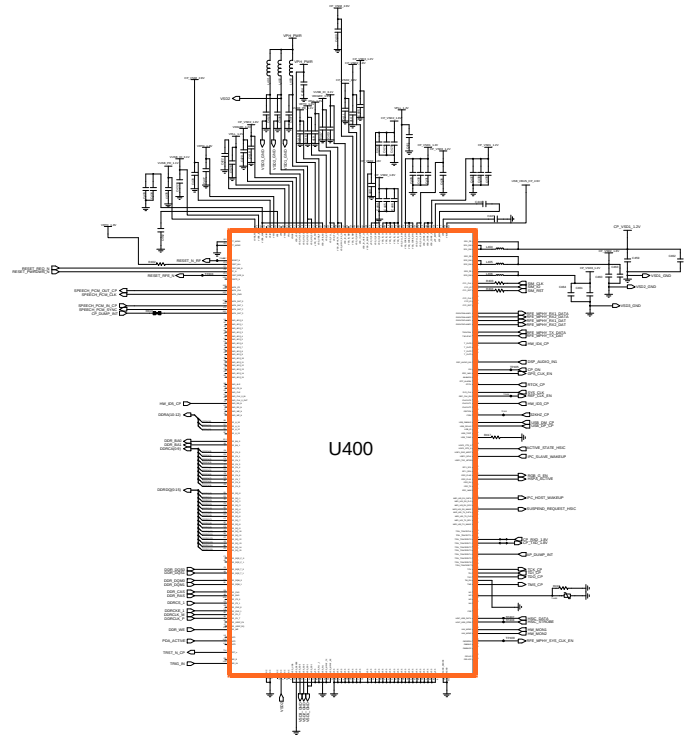
CONTINUOUS TX ON CONDITION
TX POWER IDX1 APPLIED
GSM850 CH : 190
GSM900 CH : 62
RBW : 100KHz
VBW : 100KHz
SPAN : 10MHz
REF LEV. : 10dBm
ATT. : 20dB

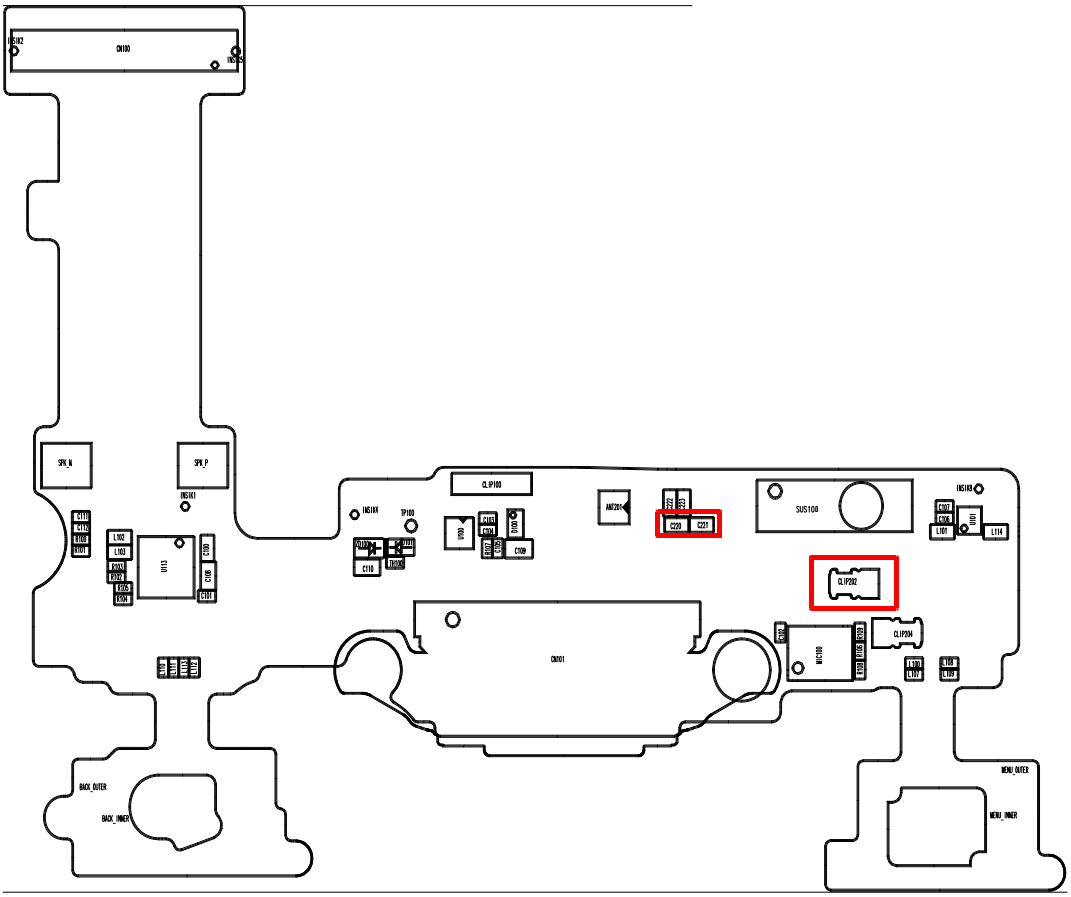


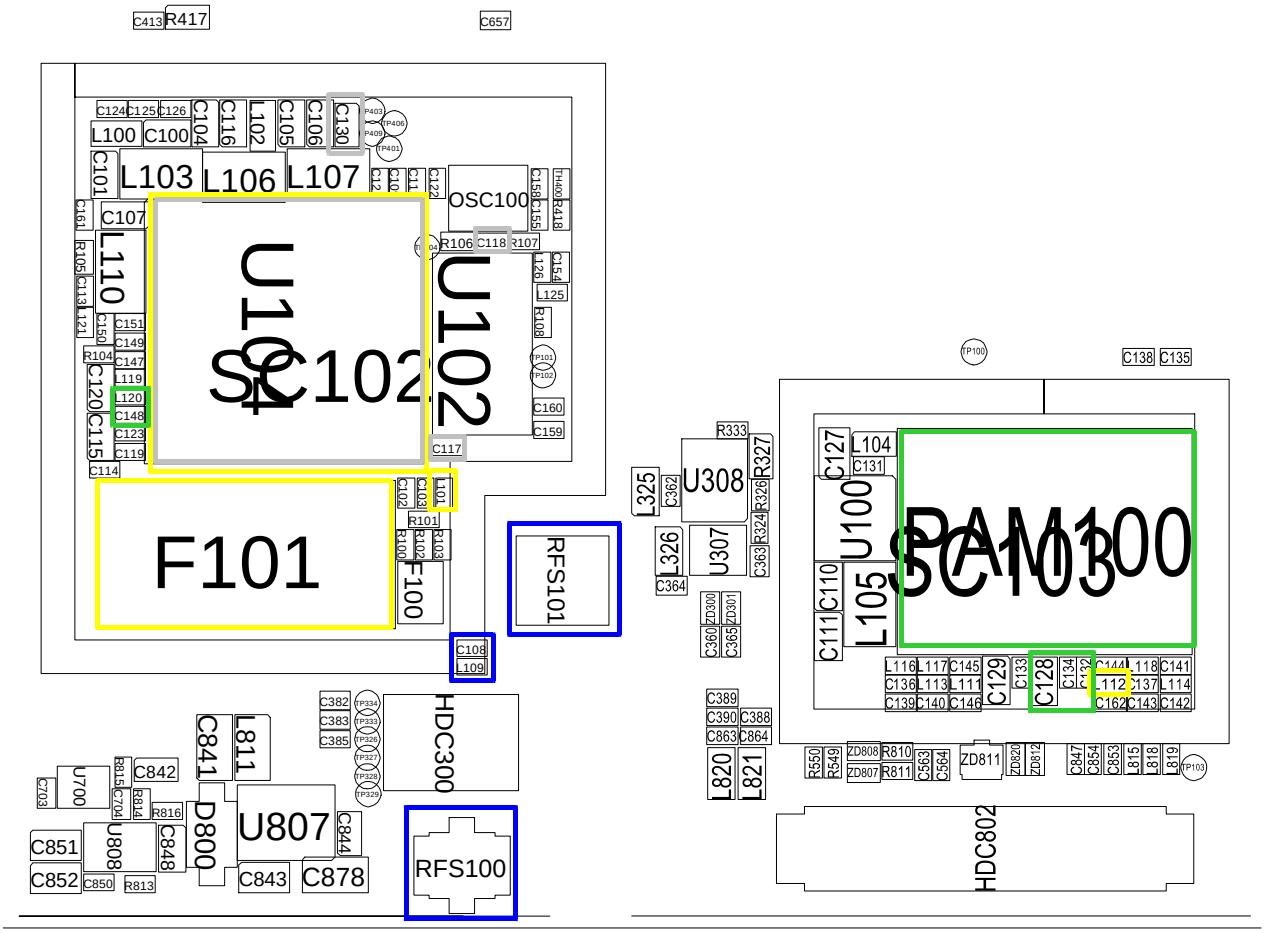


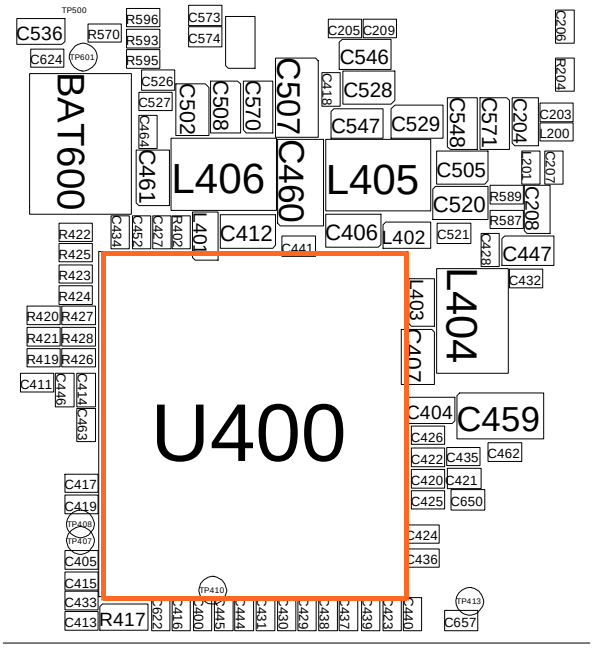






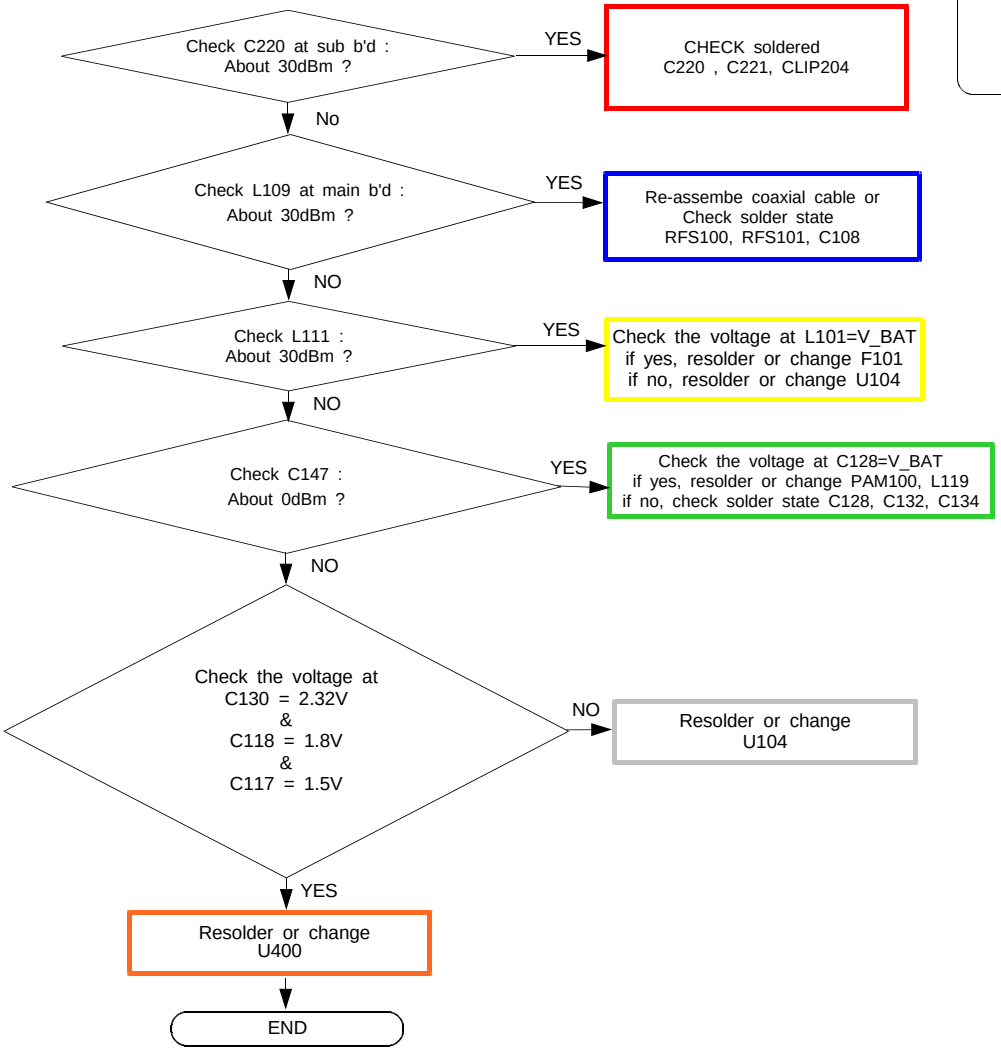


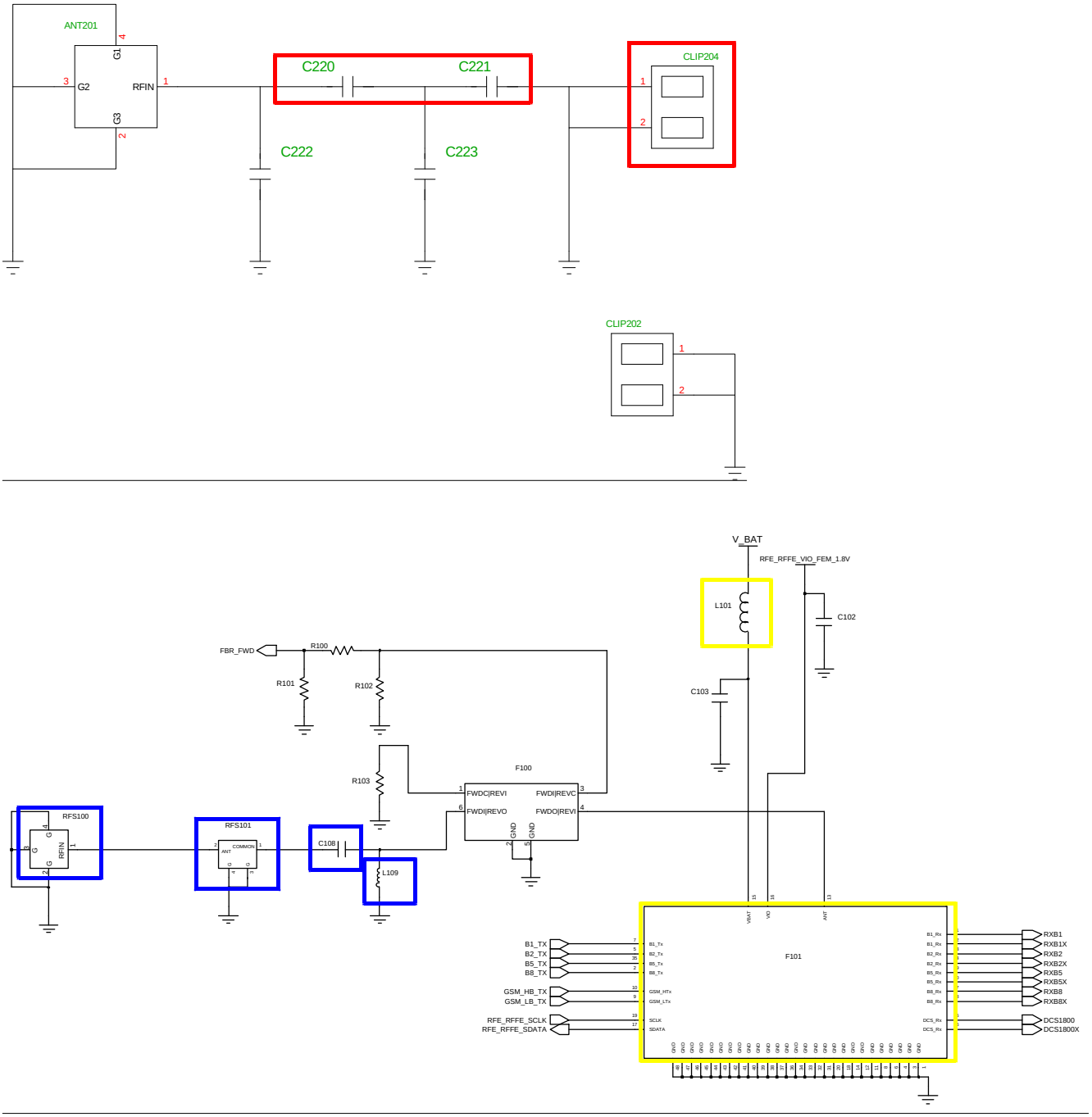


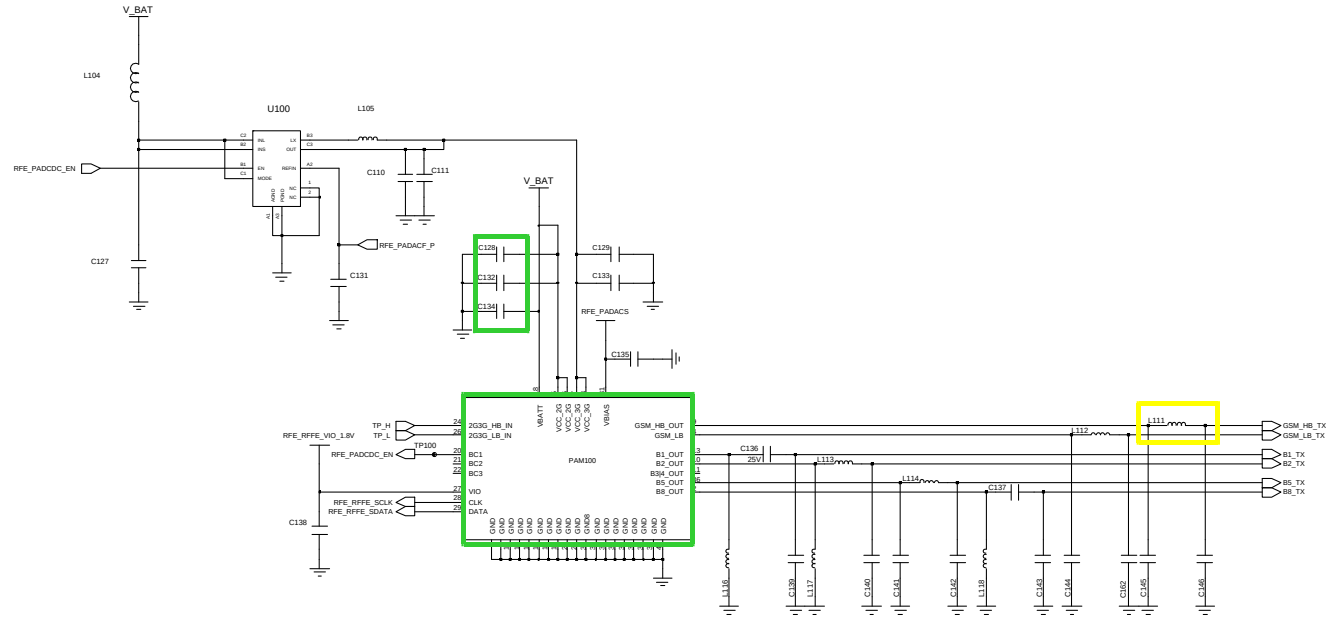


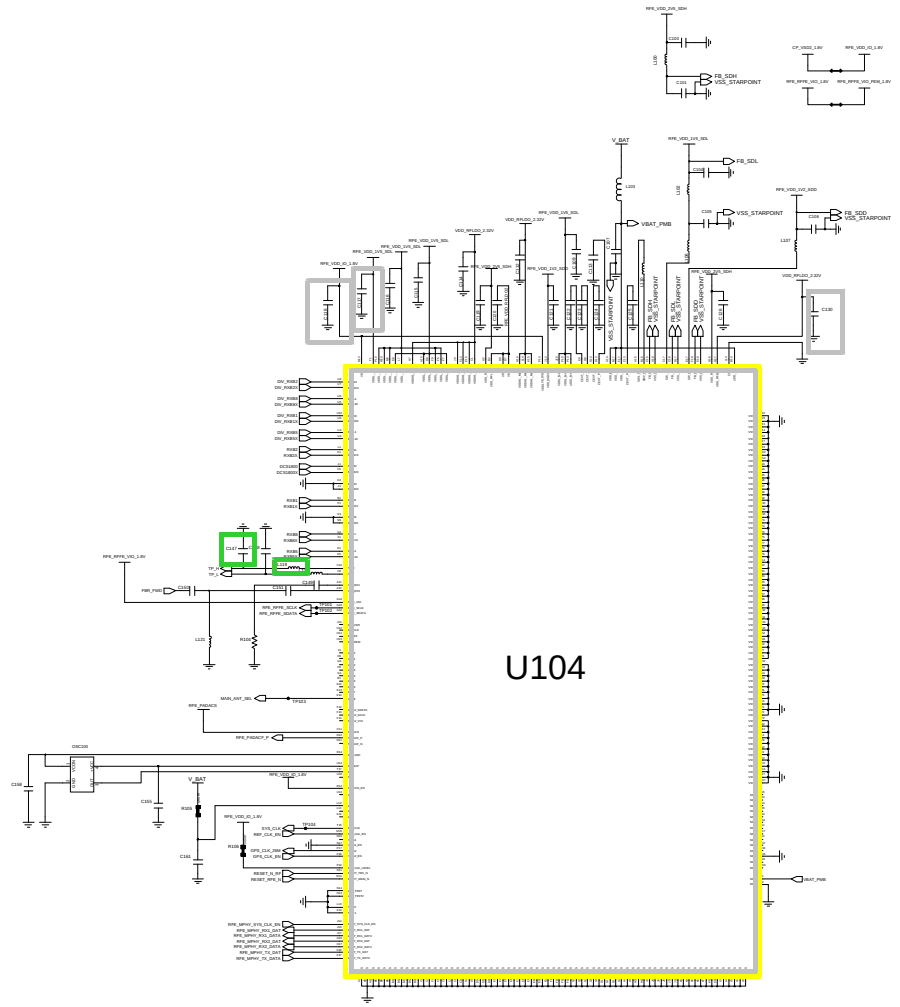
8-3-29. DCS/PCS TX

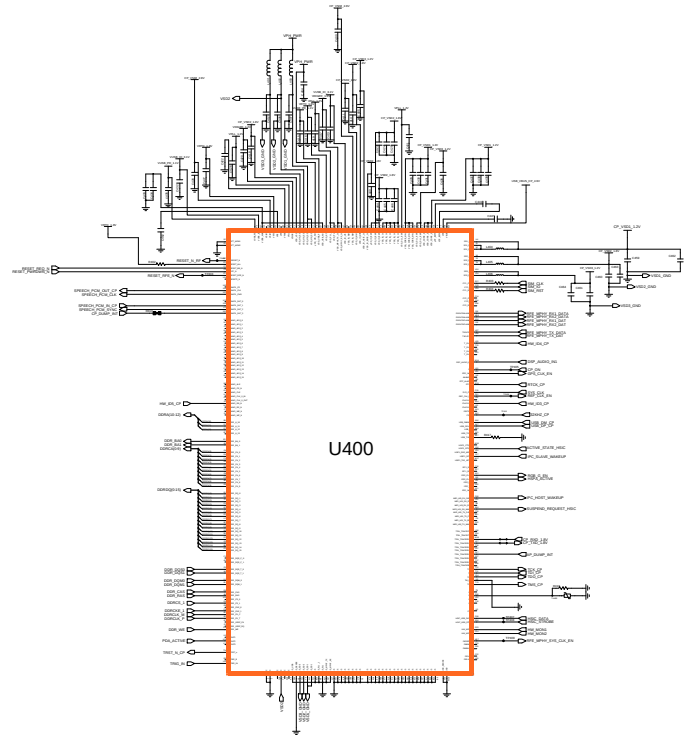
CONTINUOUS TX ON CONDITION
TX POWER IDX1 APPLIED
DCS CH : 698
PCS CH : 661
RBW : 100KHz
VBW : 100KHz
SPAN : 10MHz
REF LEV. : 10dBm
ATT. : 20dB

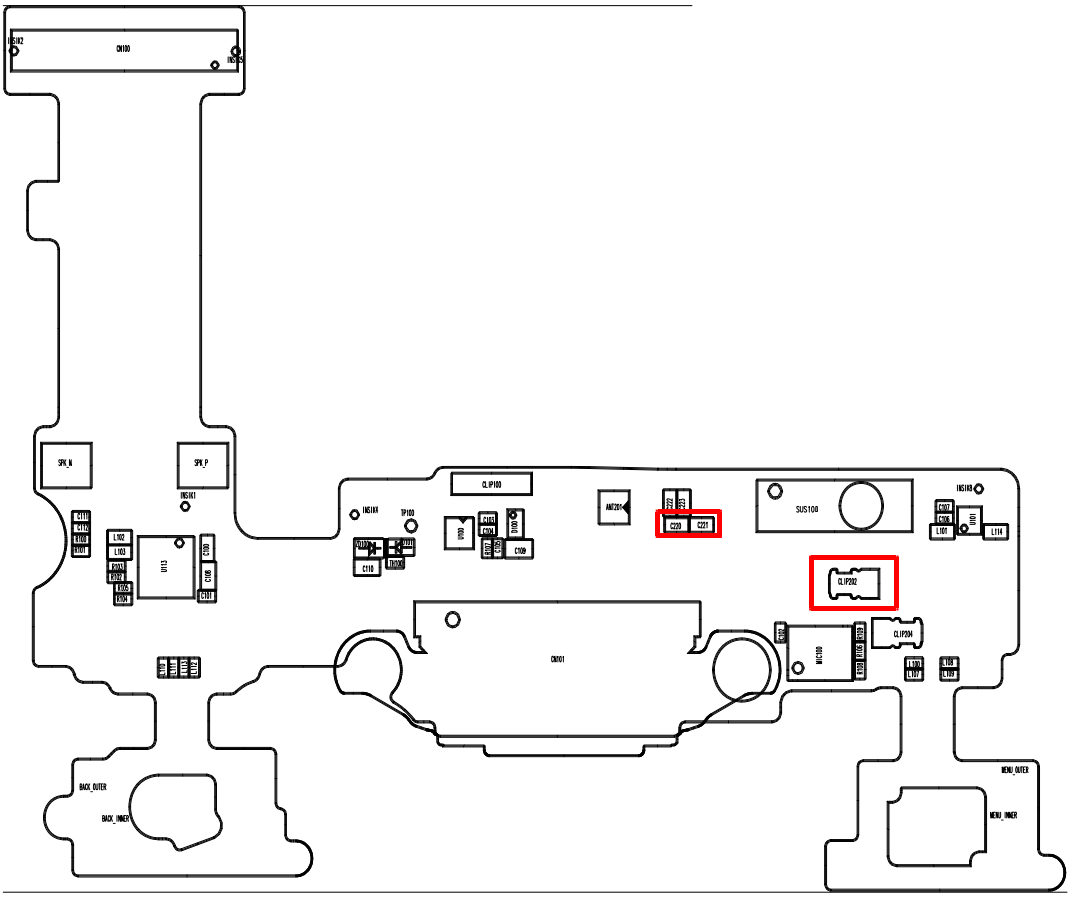


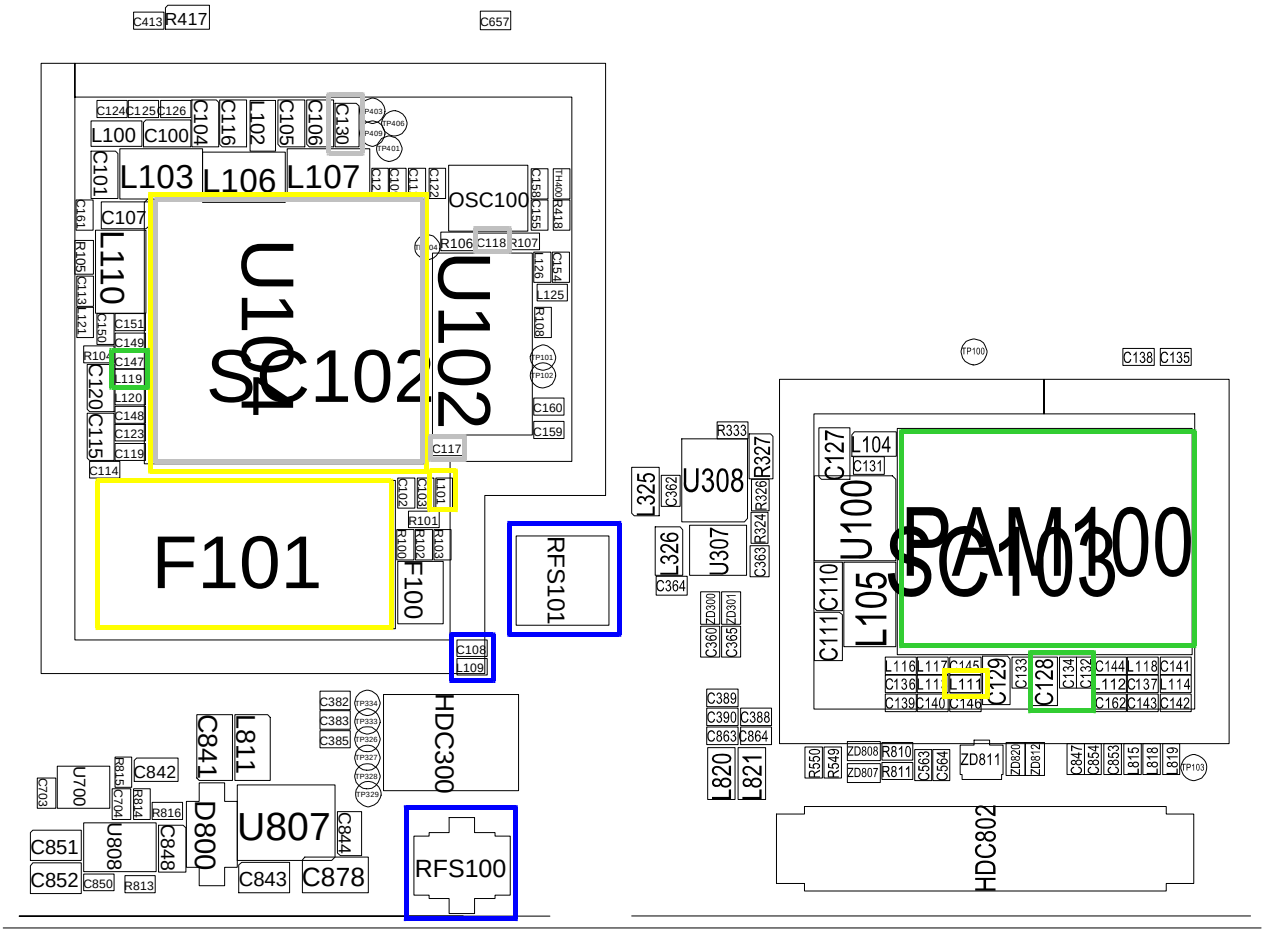


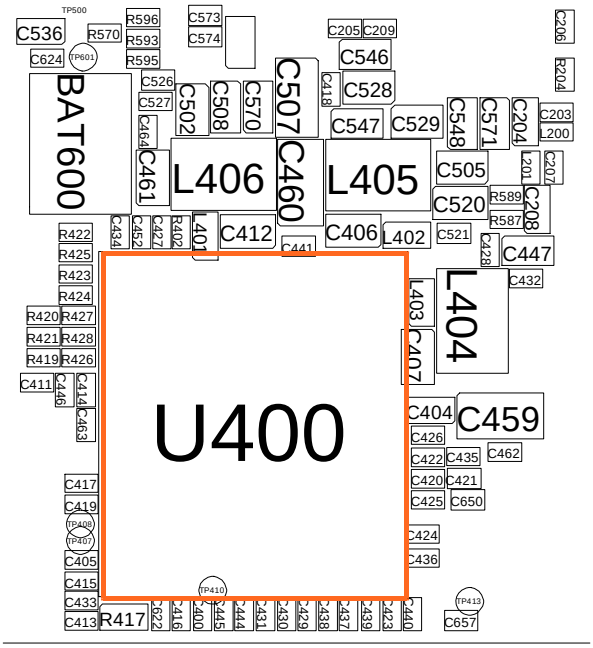




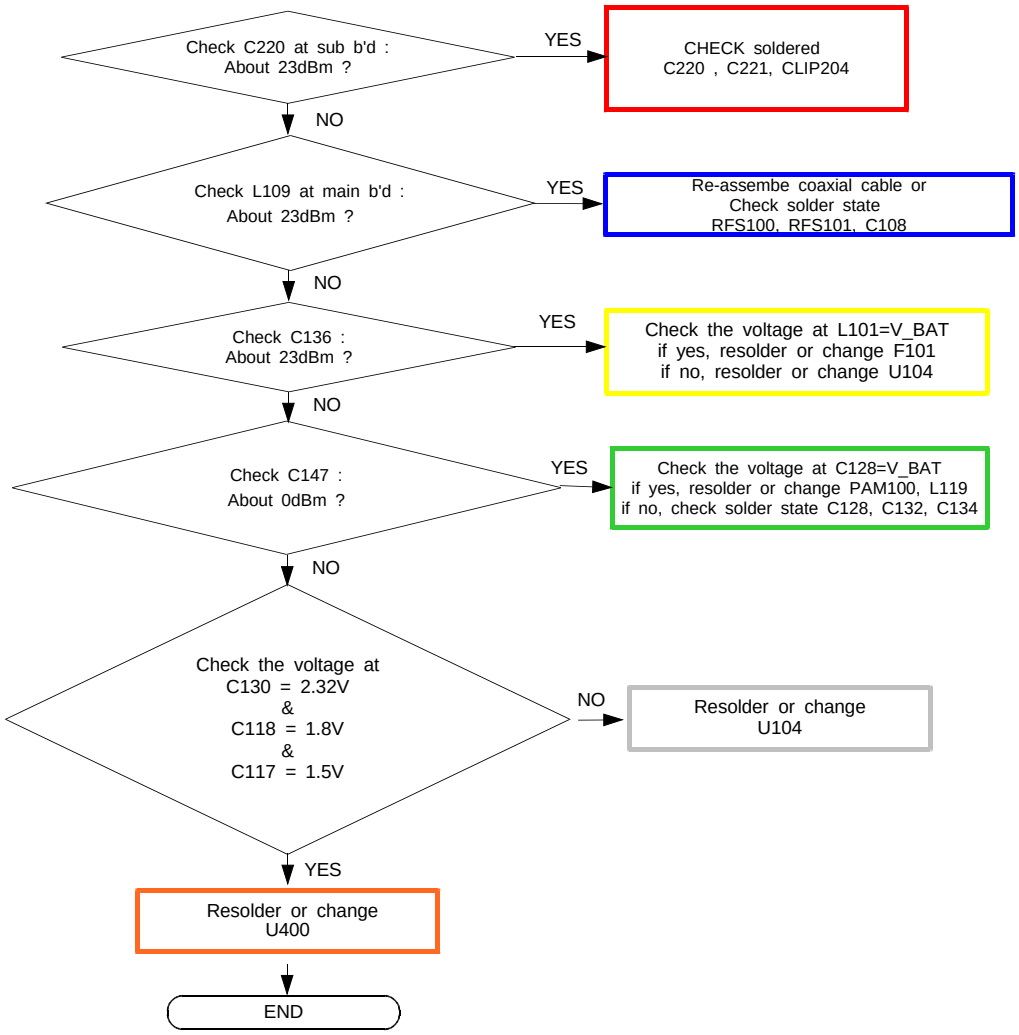


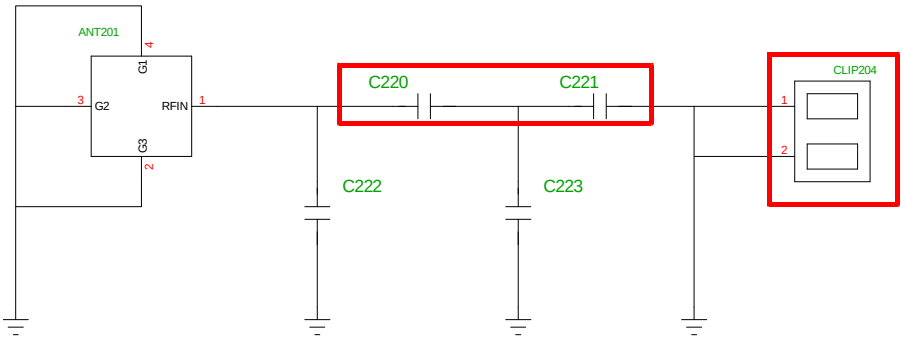


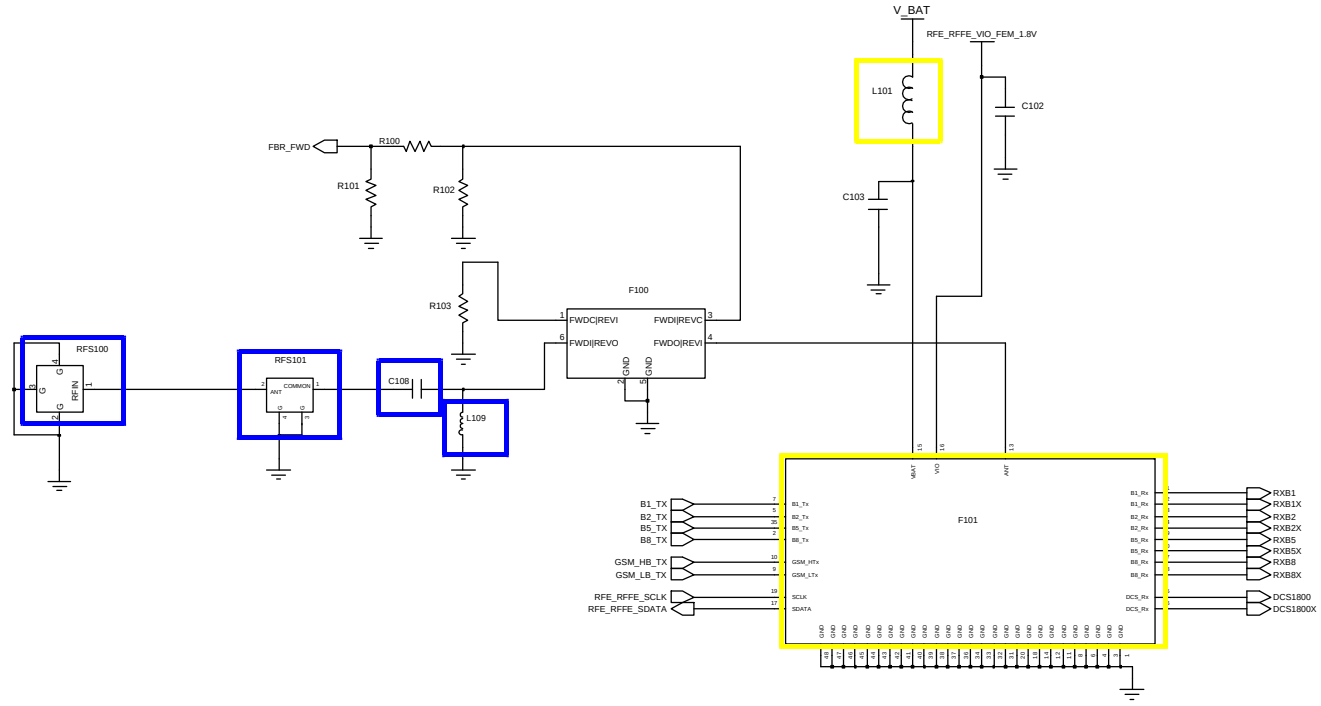


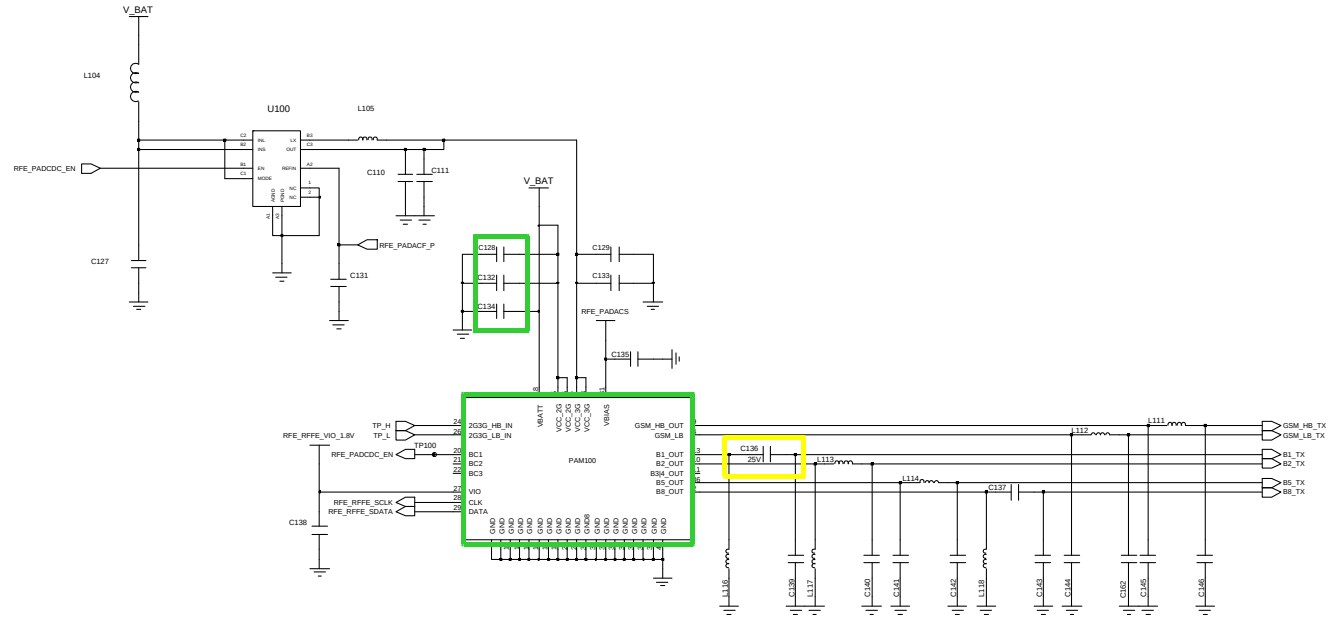


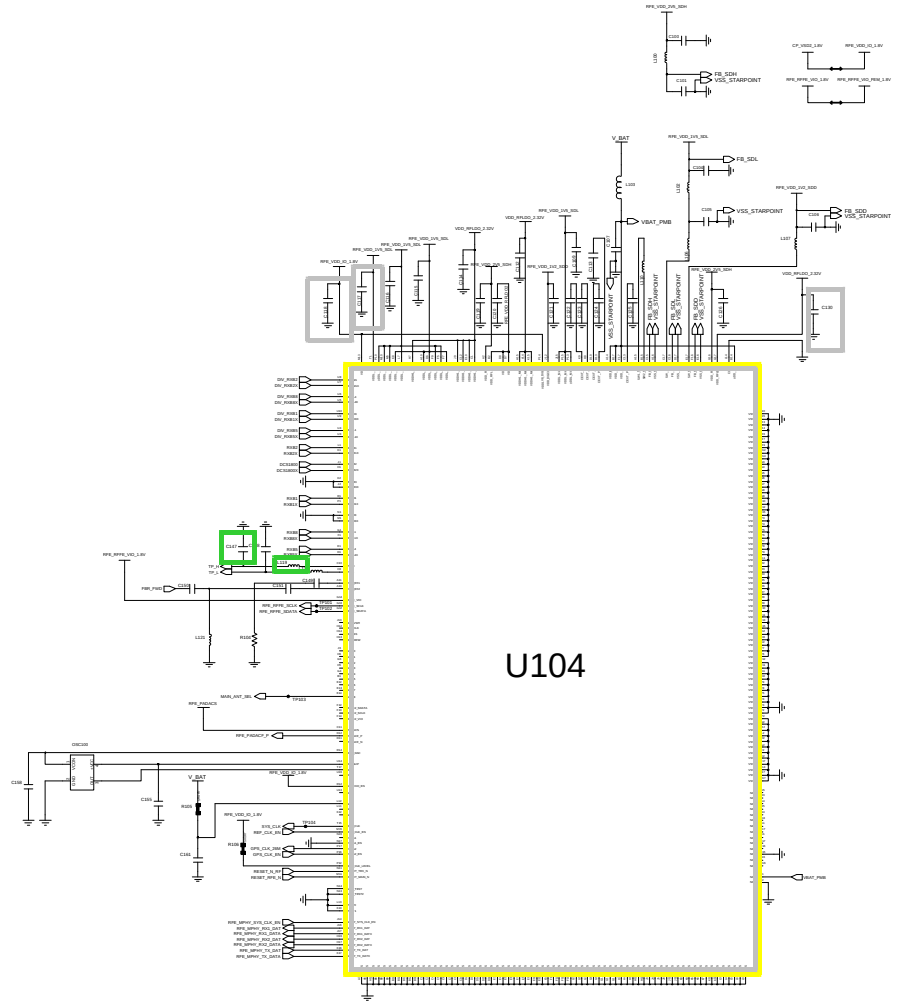
8-3-30. WCDMA2100 TX

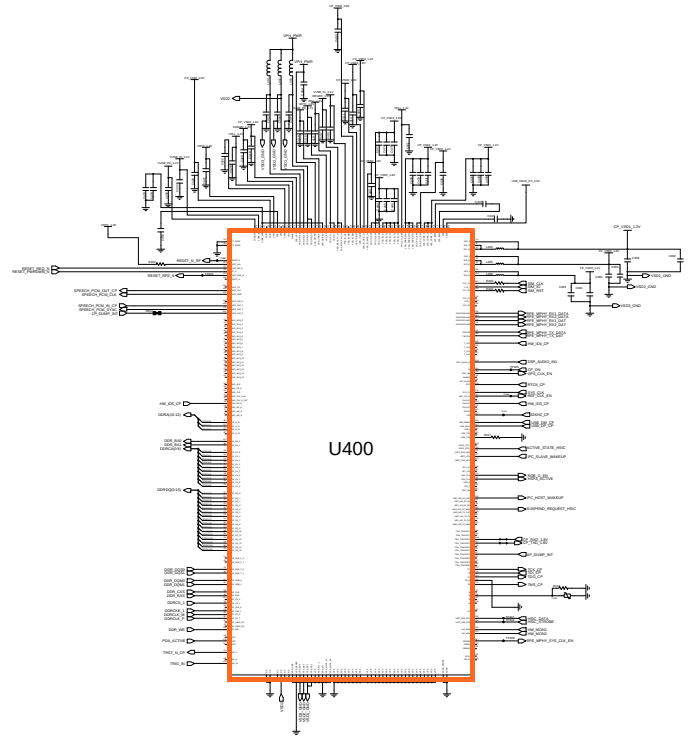


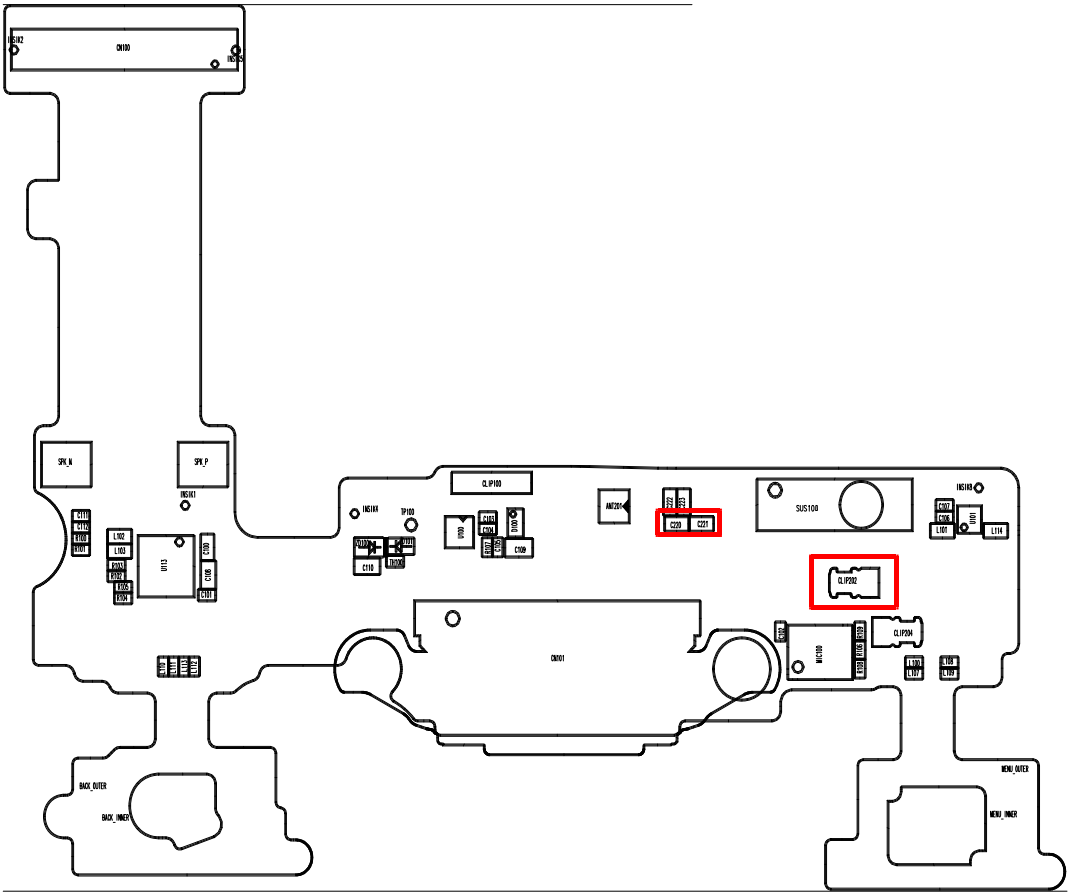


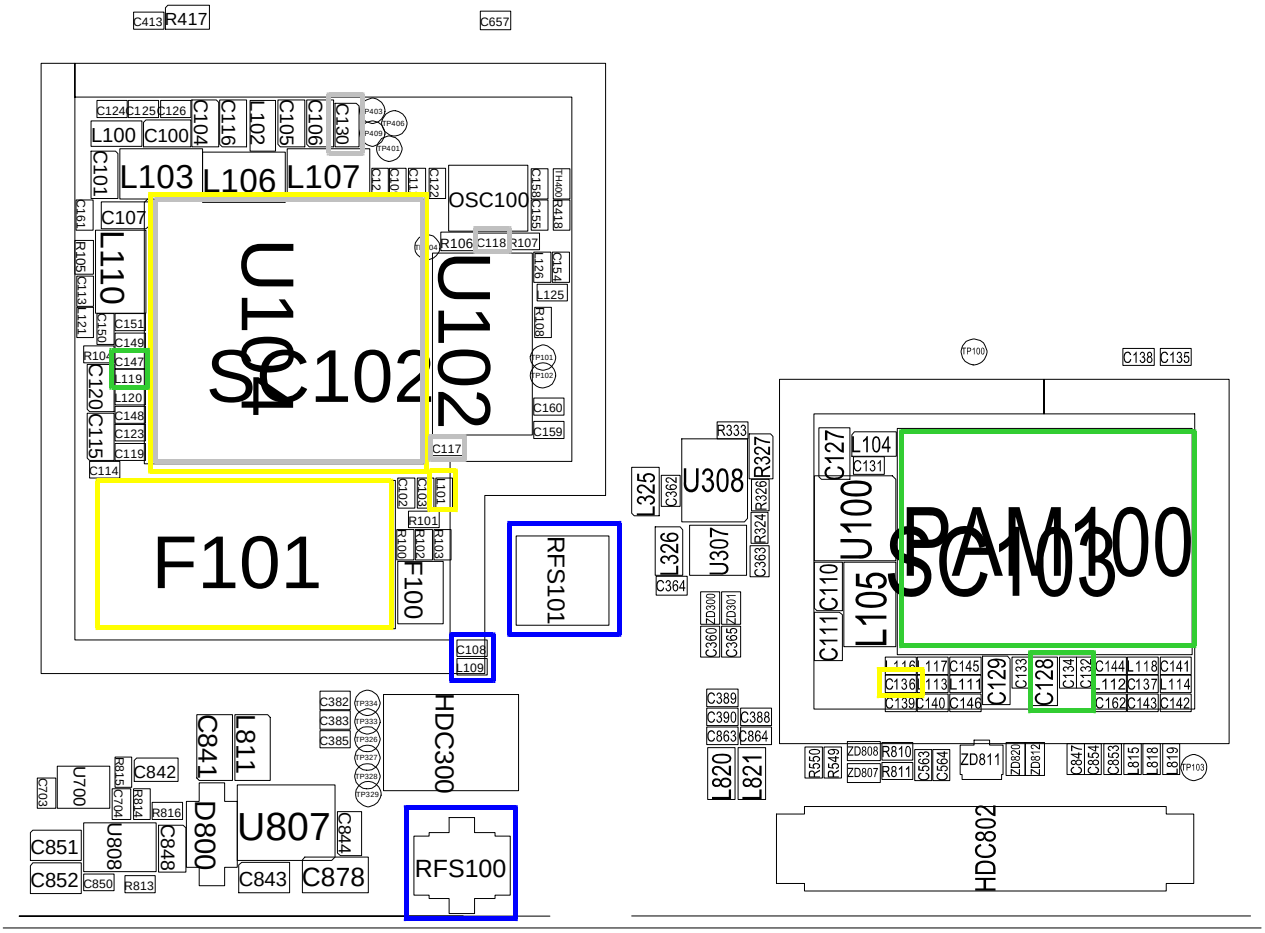


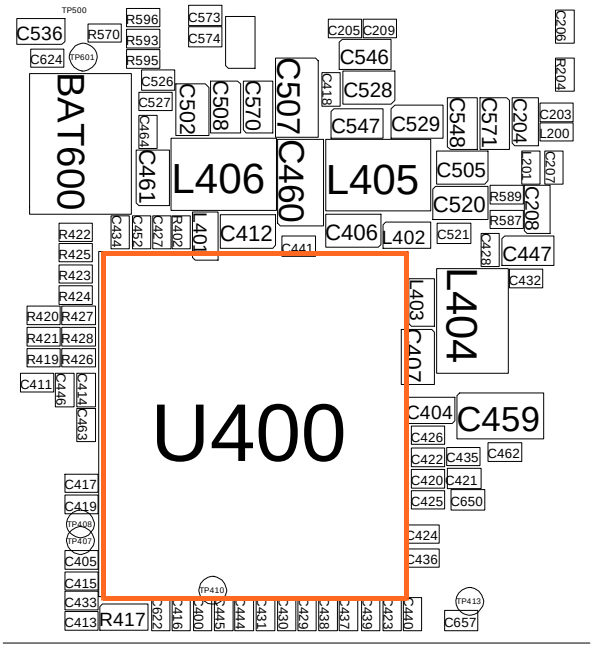




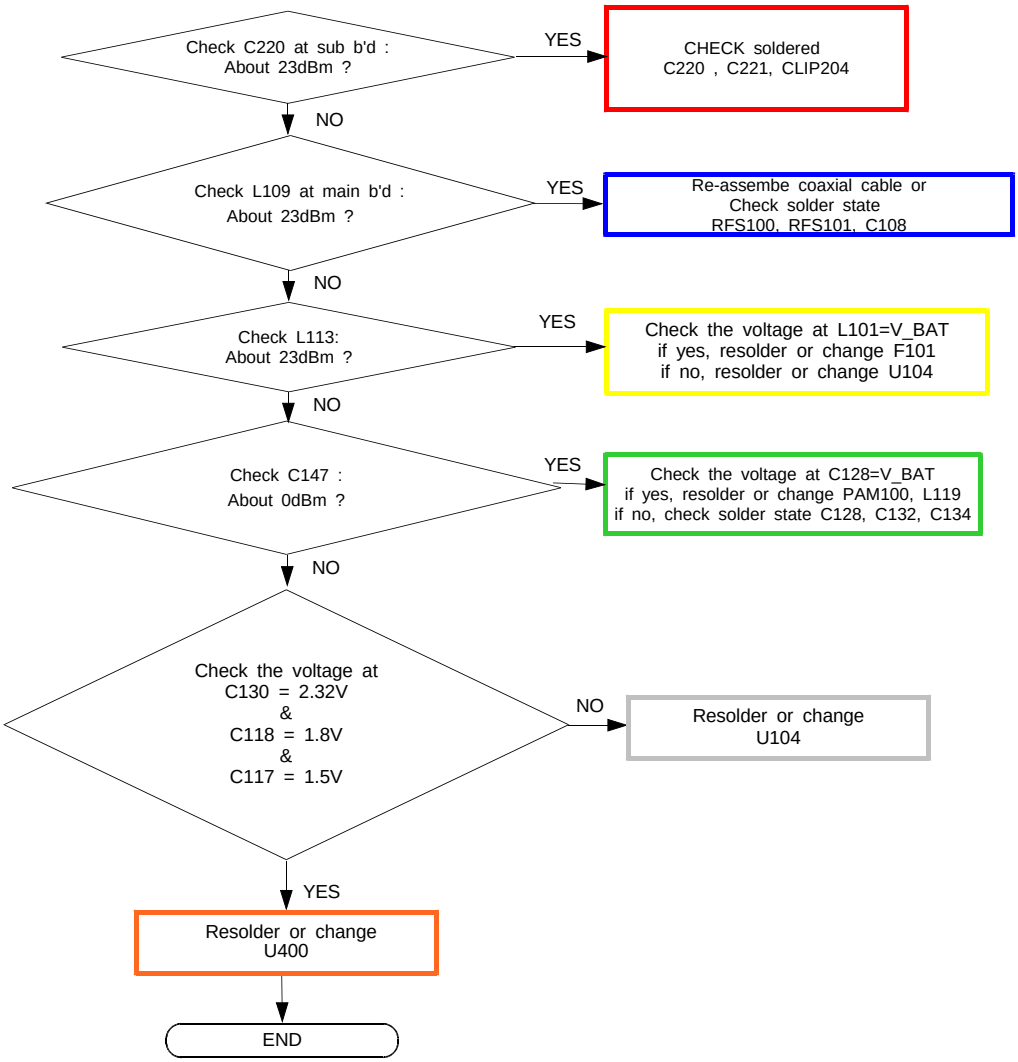


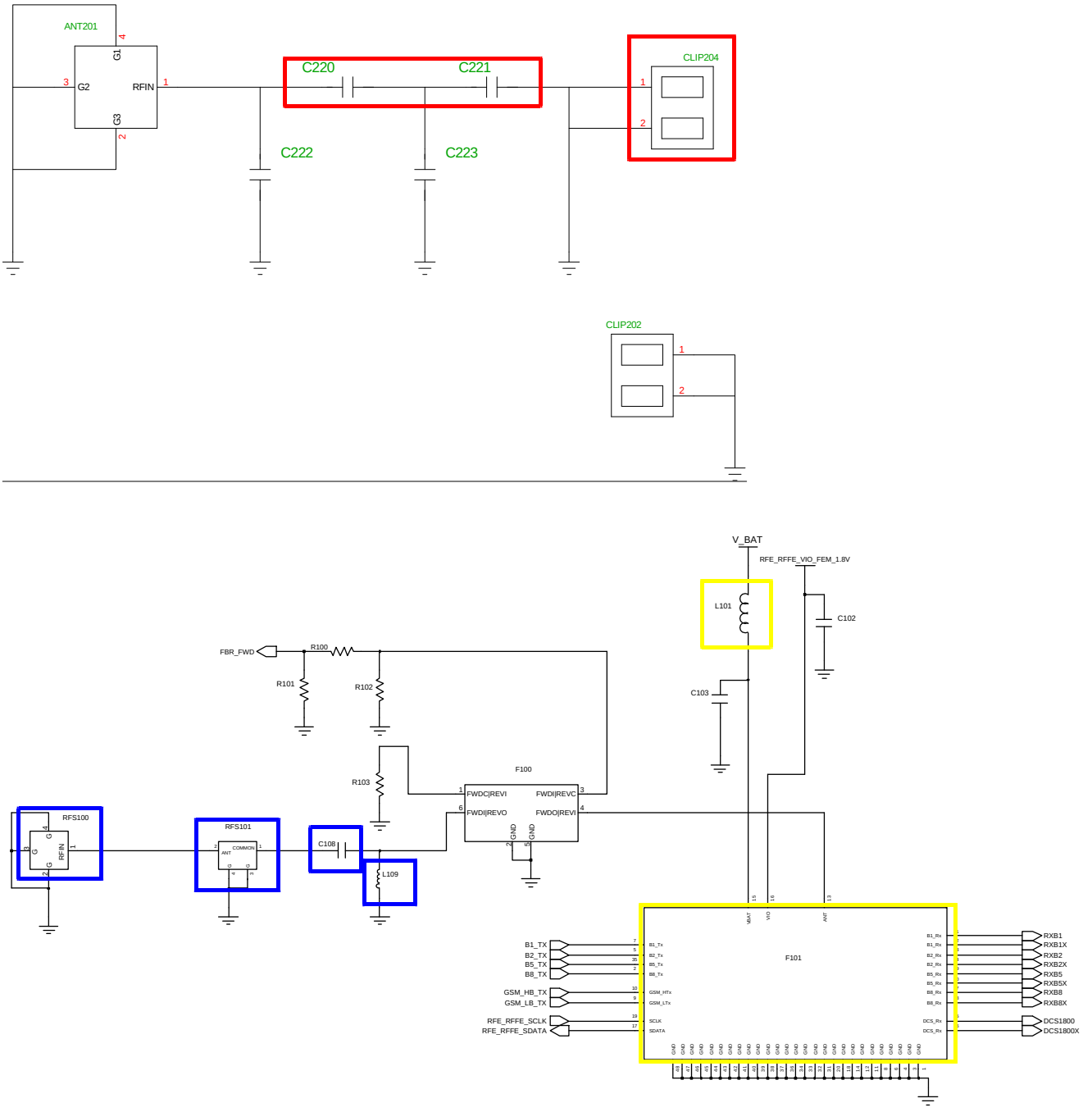


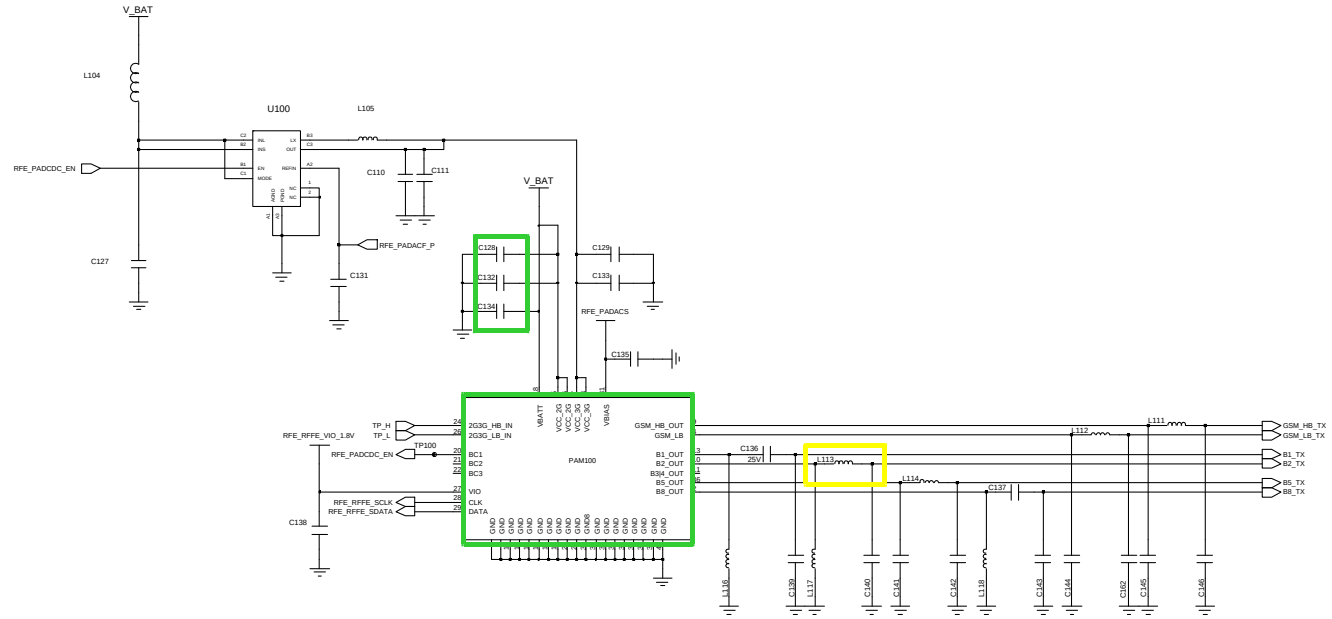


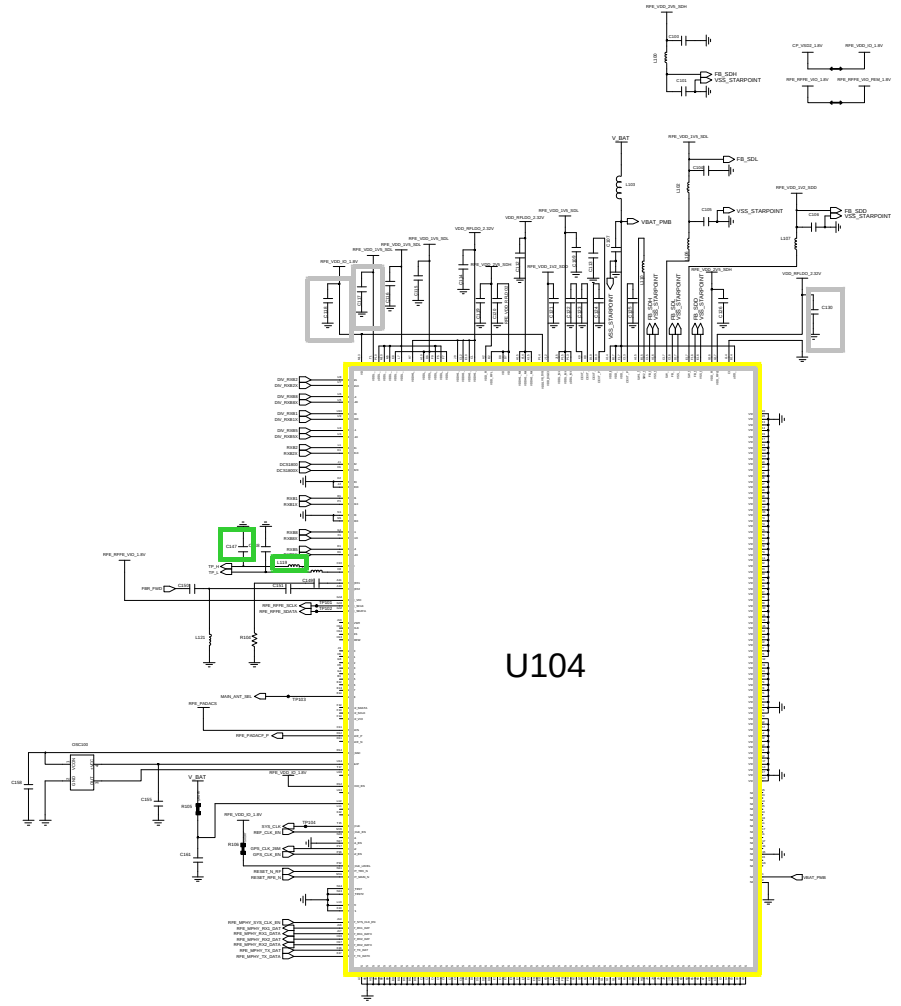


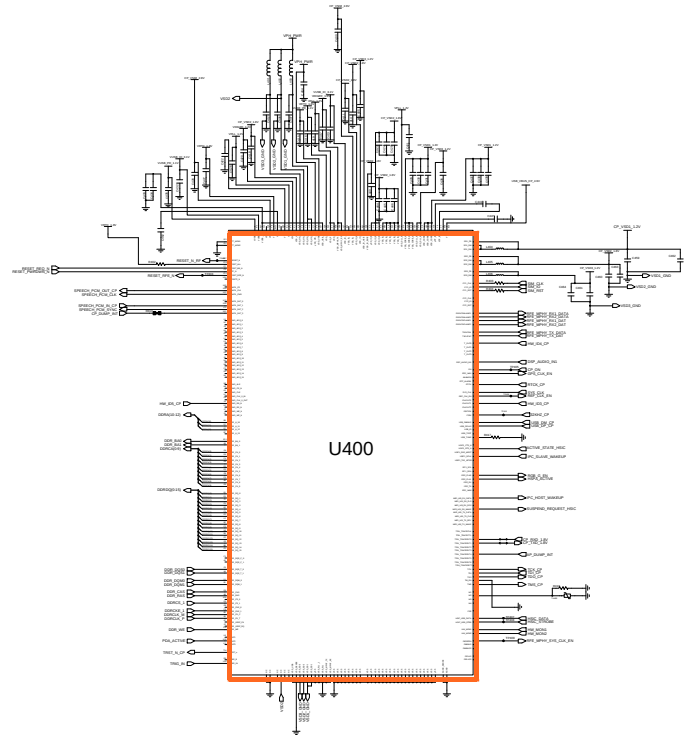
8-3-31. WCDMA1900 TX

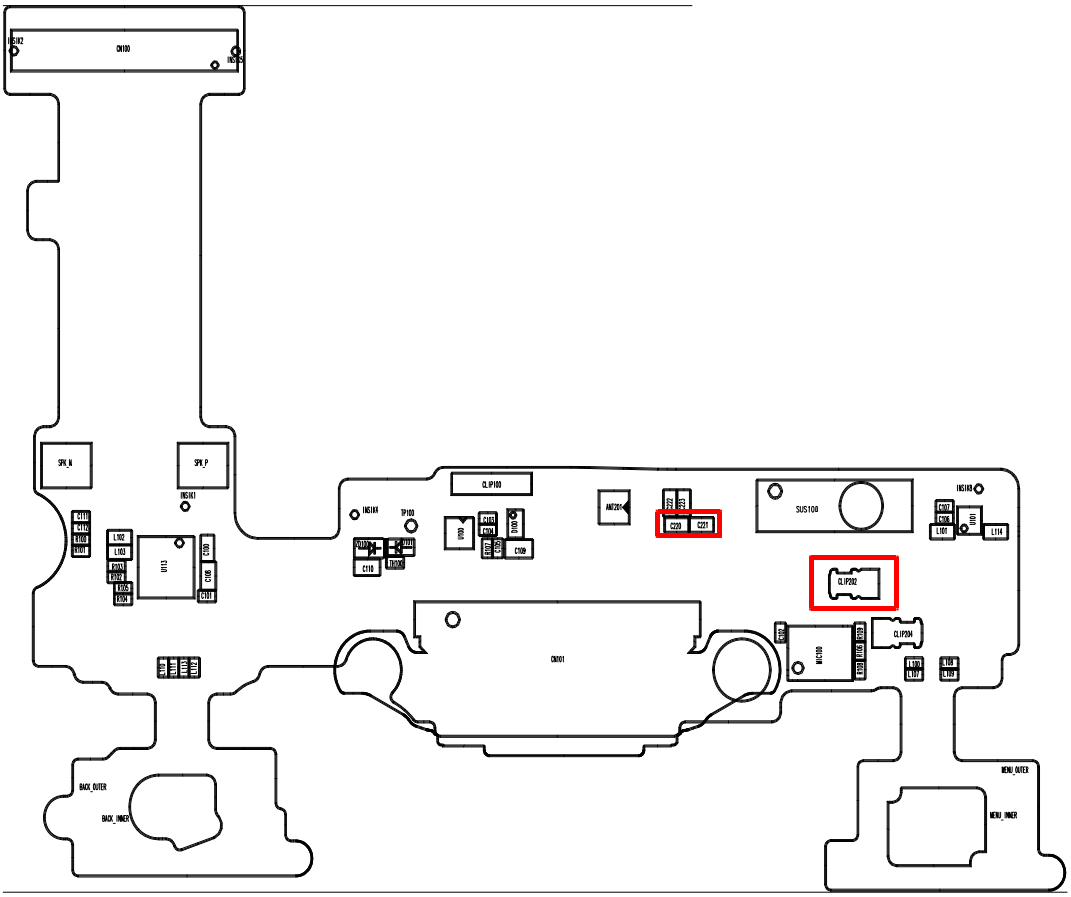


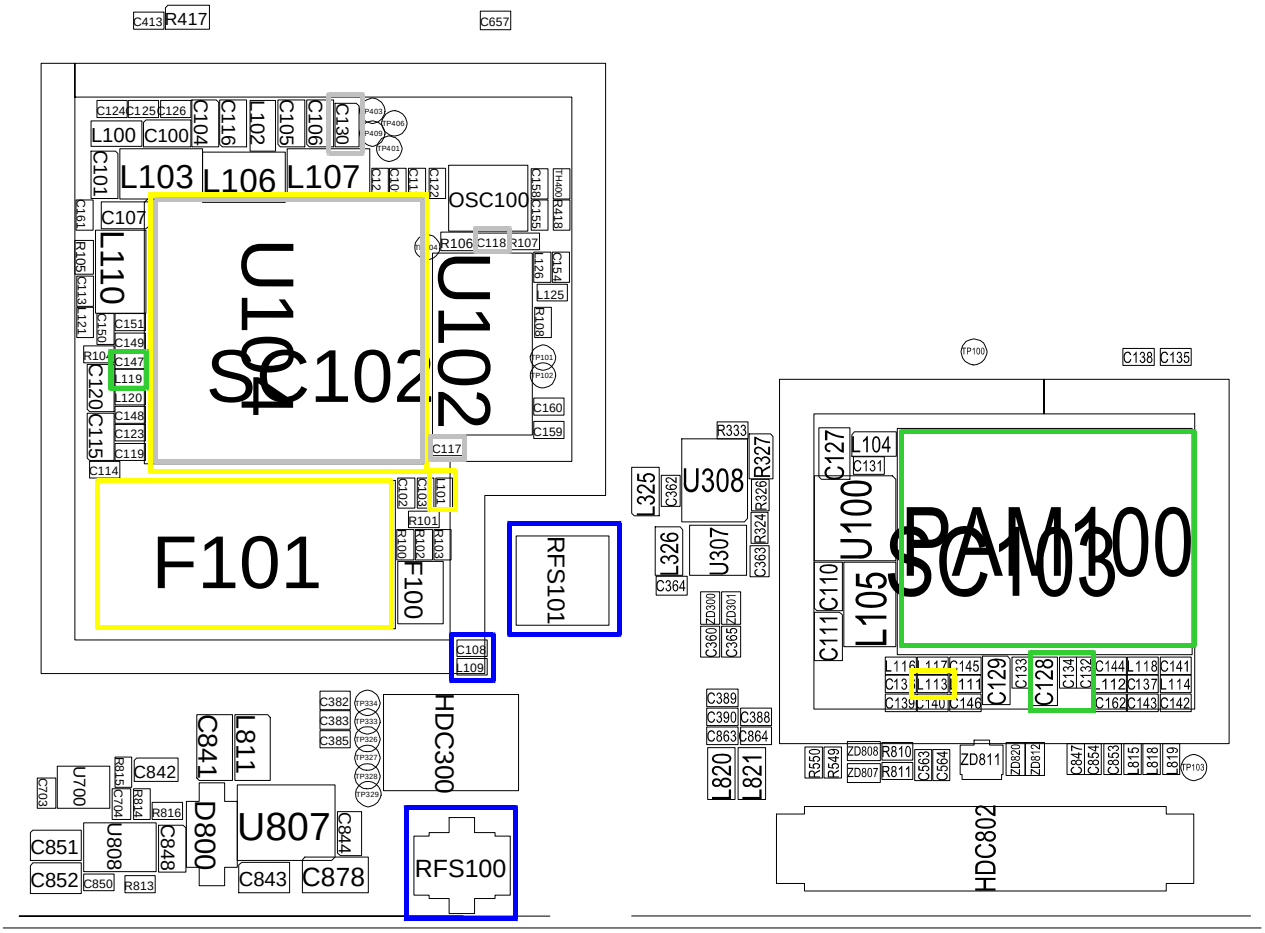


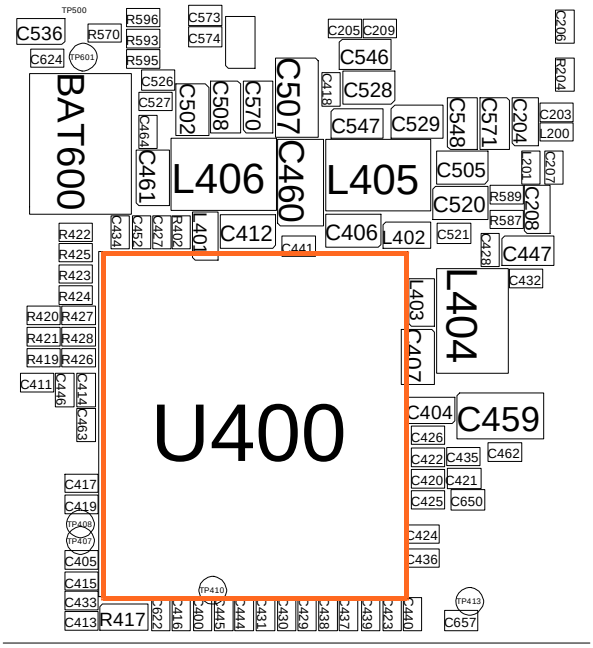




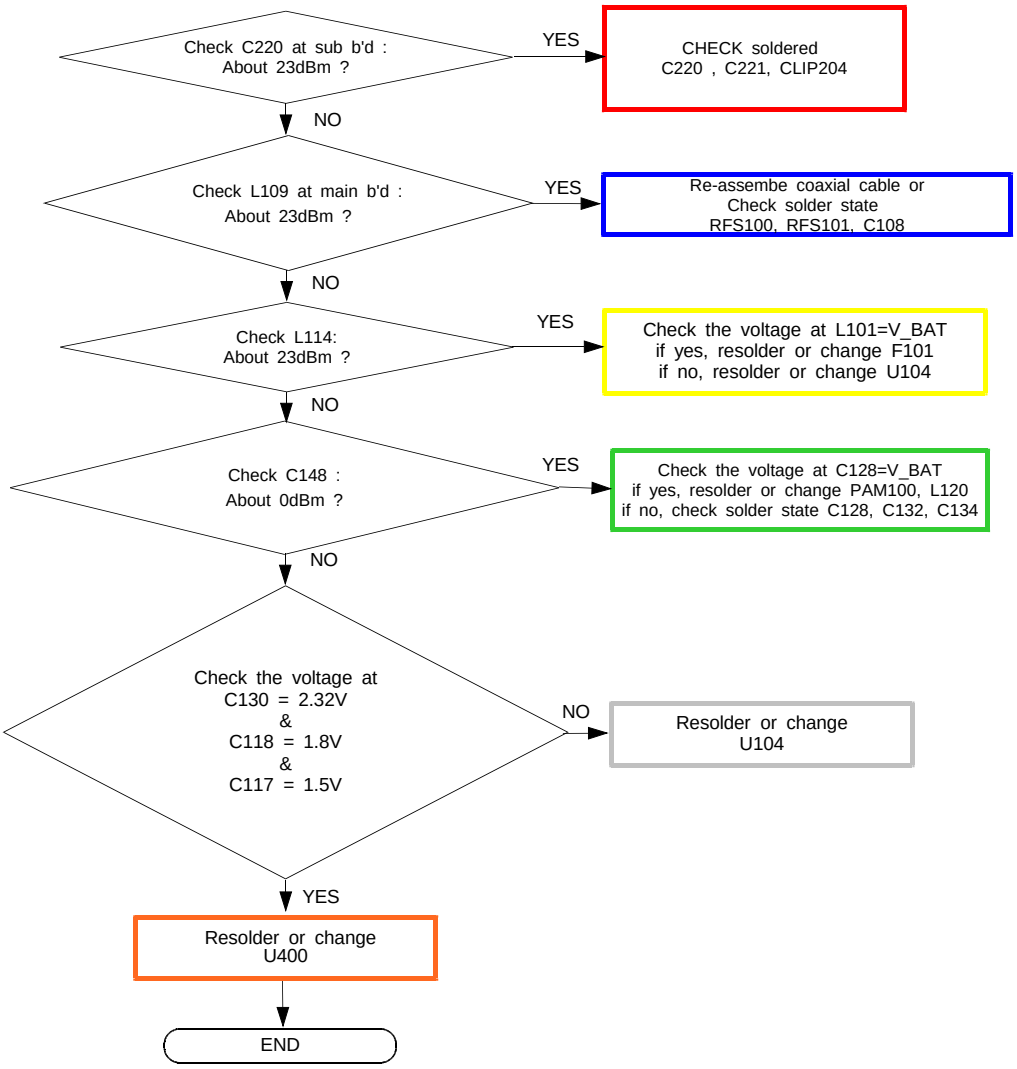


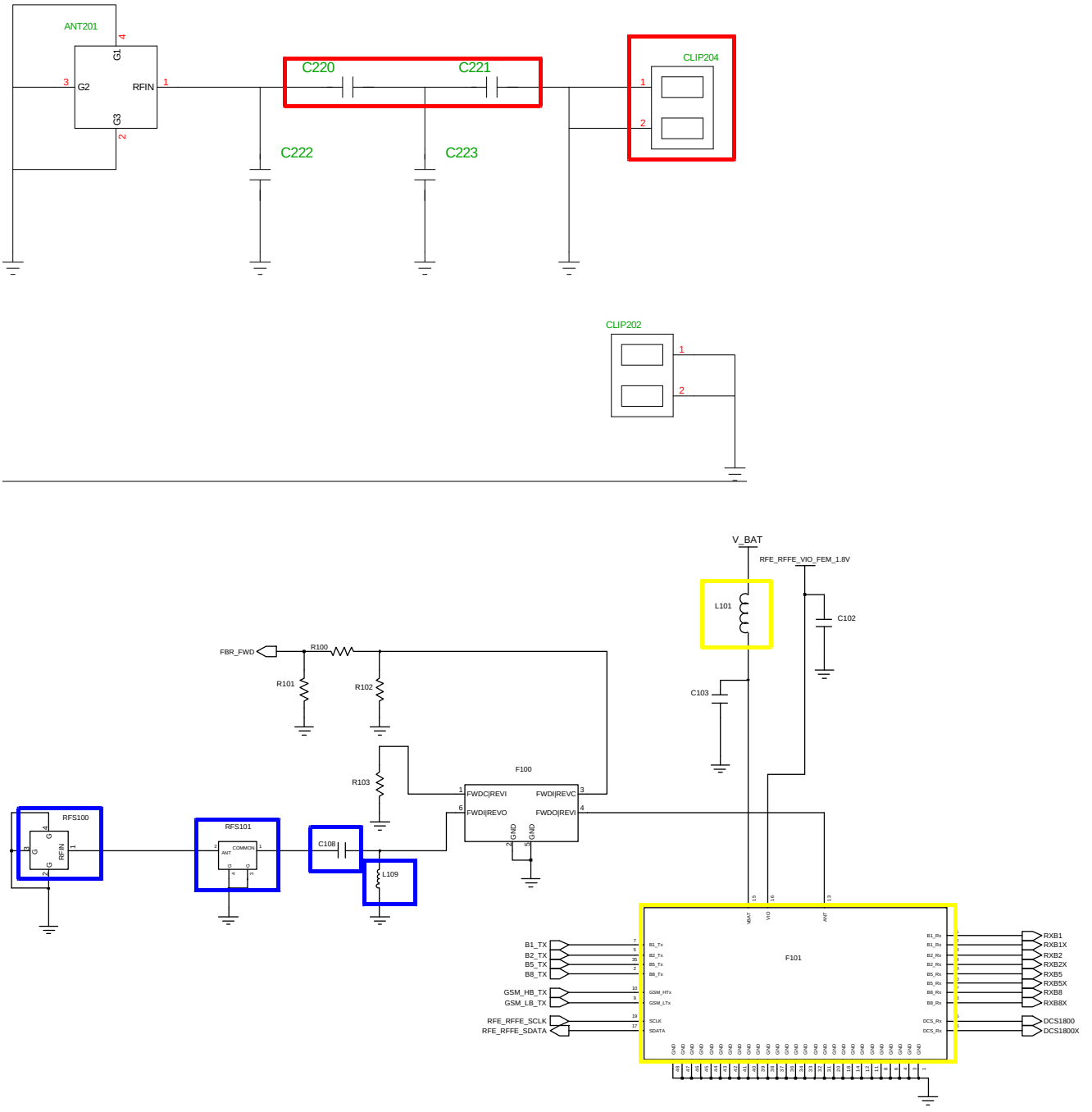


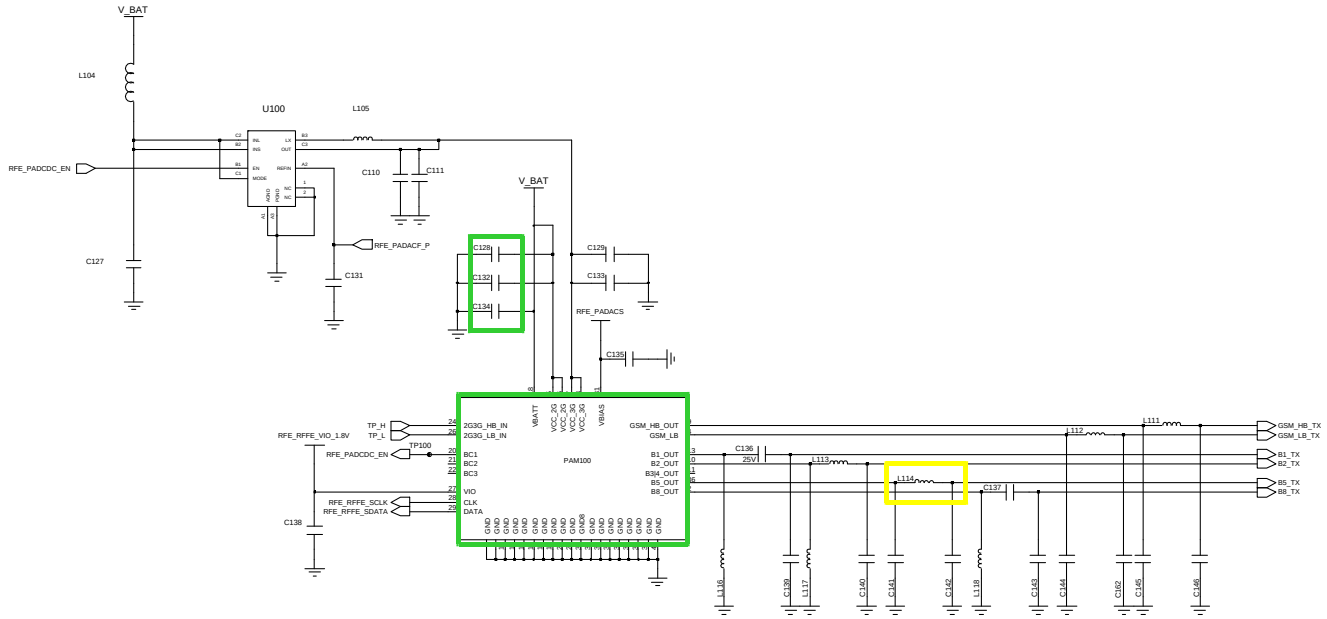


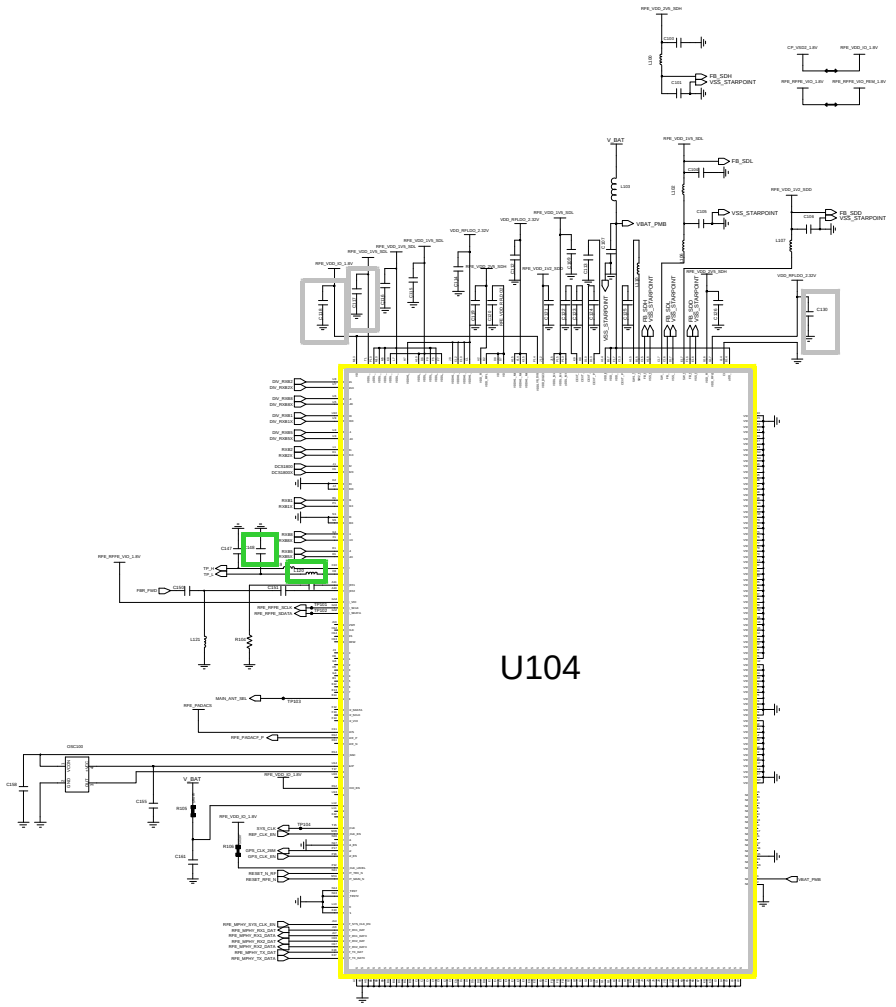


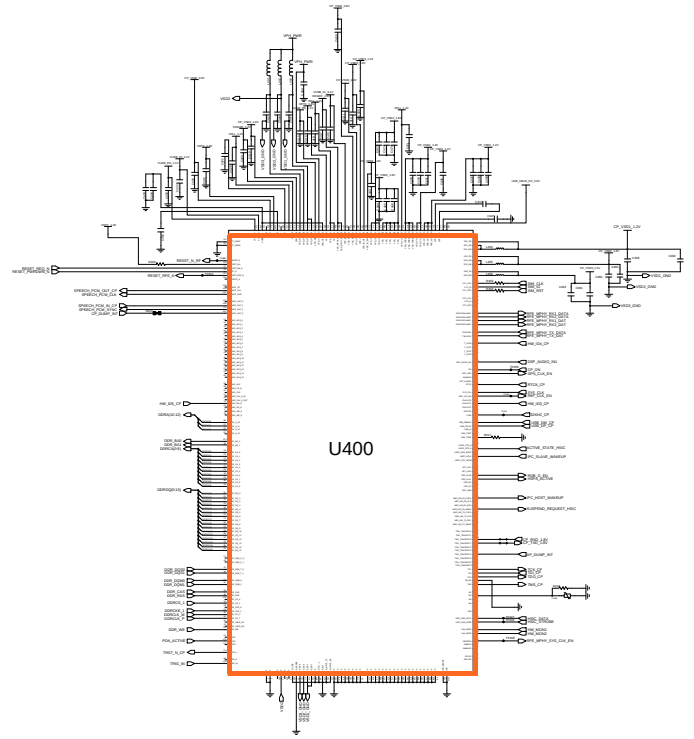
8-3-32. WCDMA850 Tx

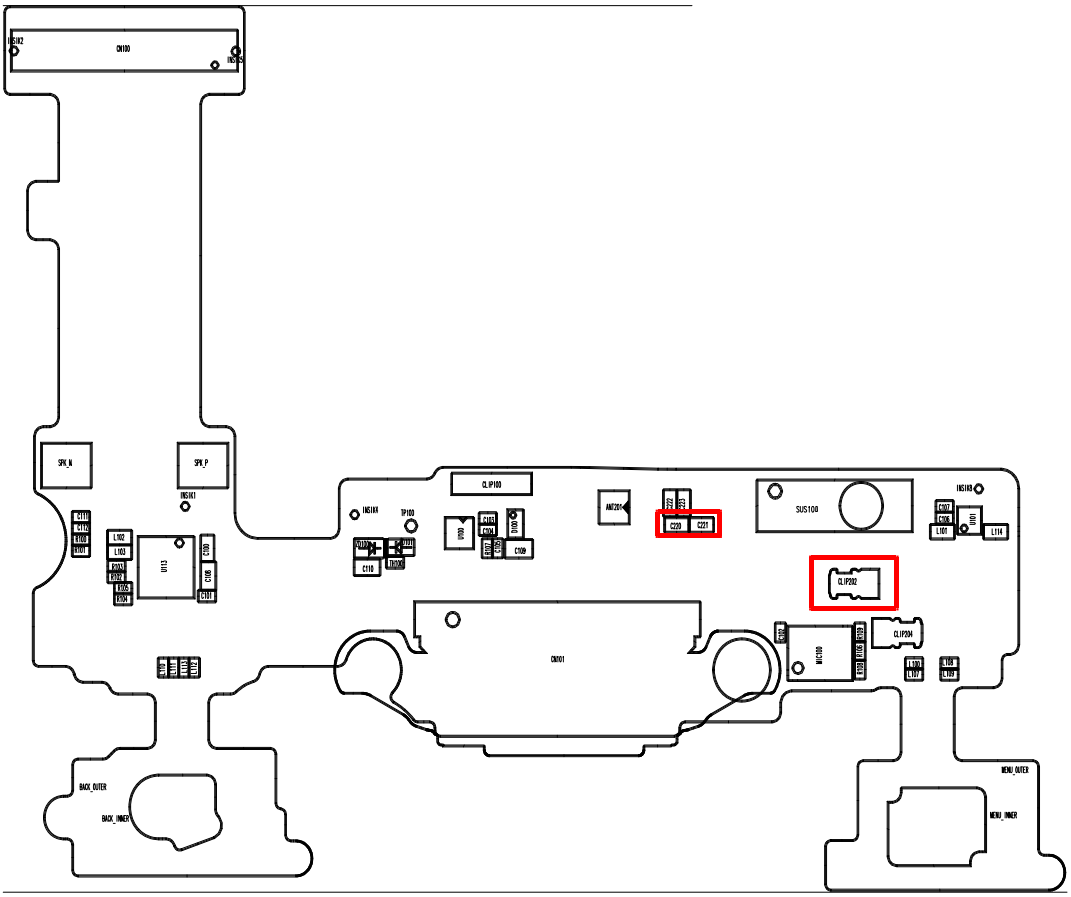


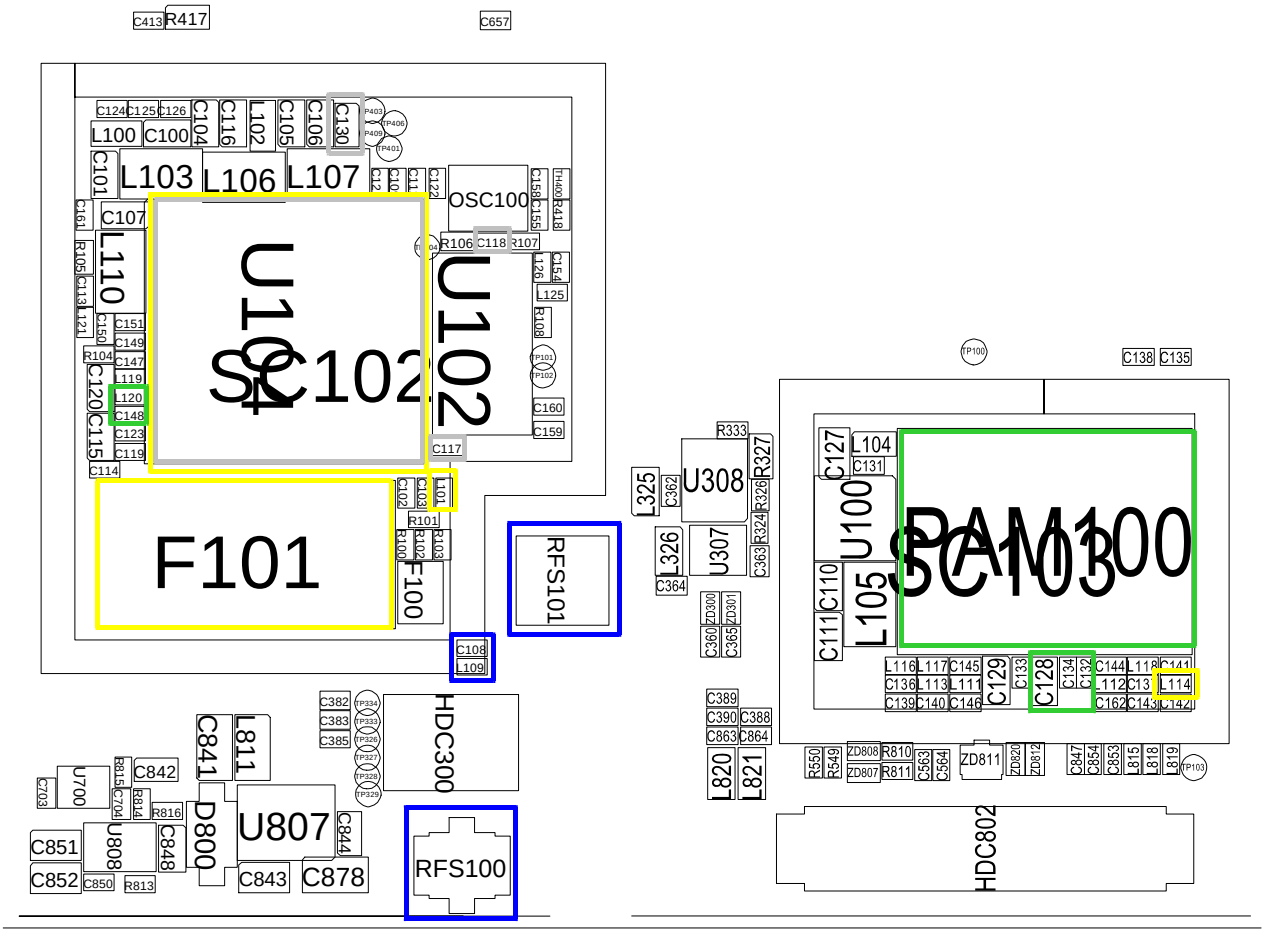


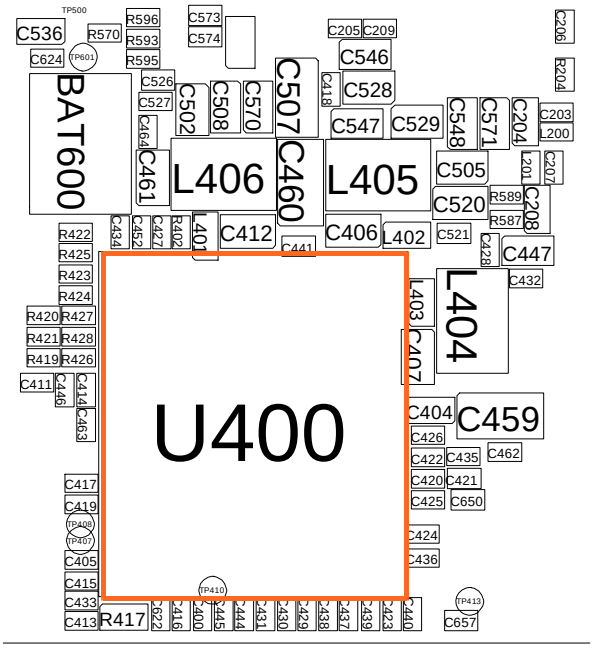




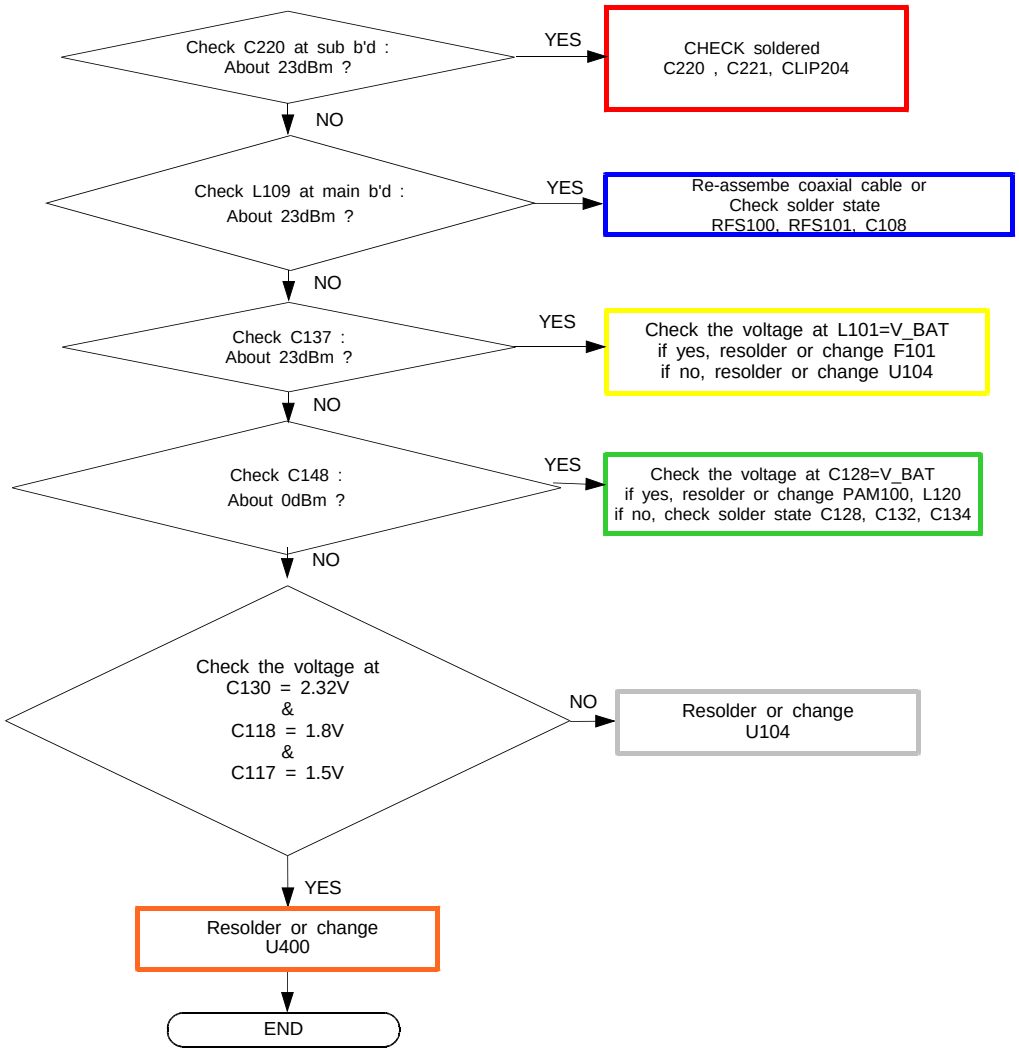


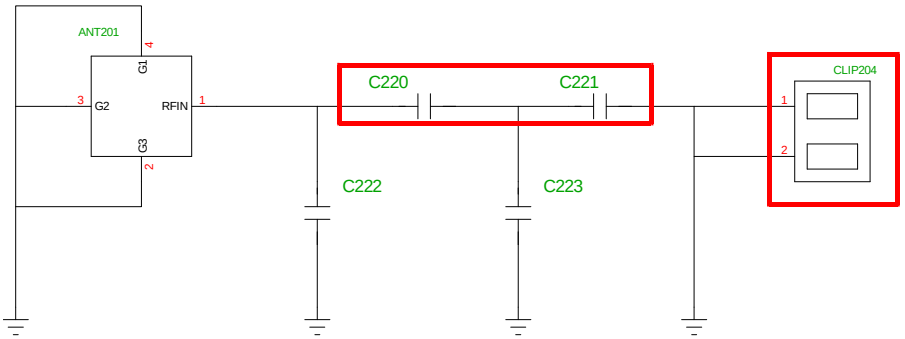


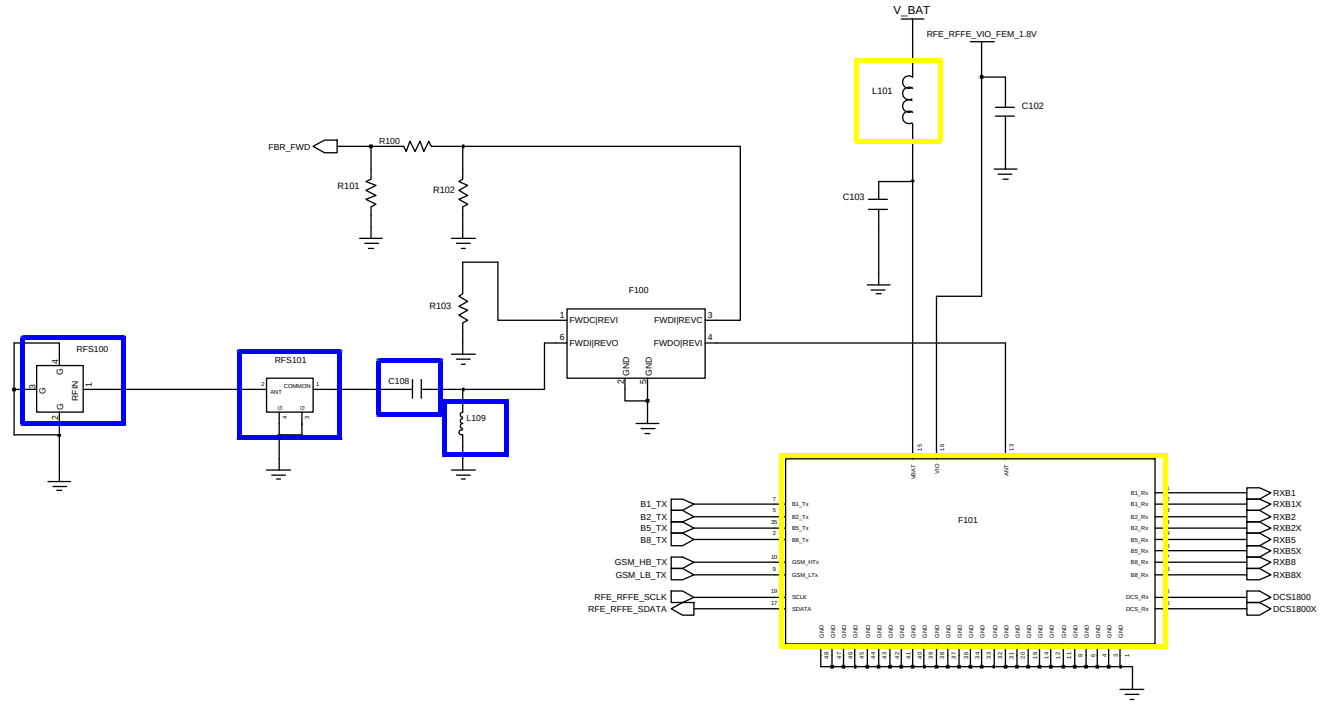


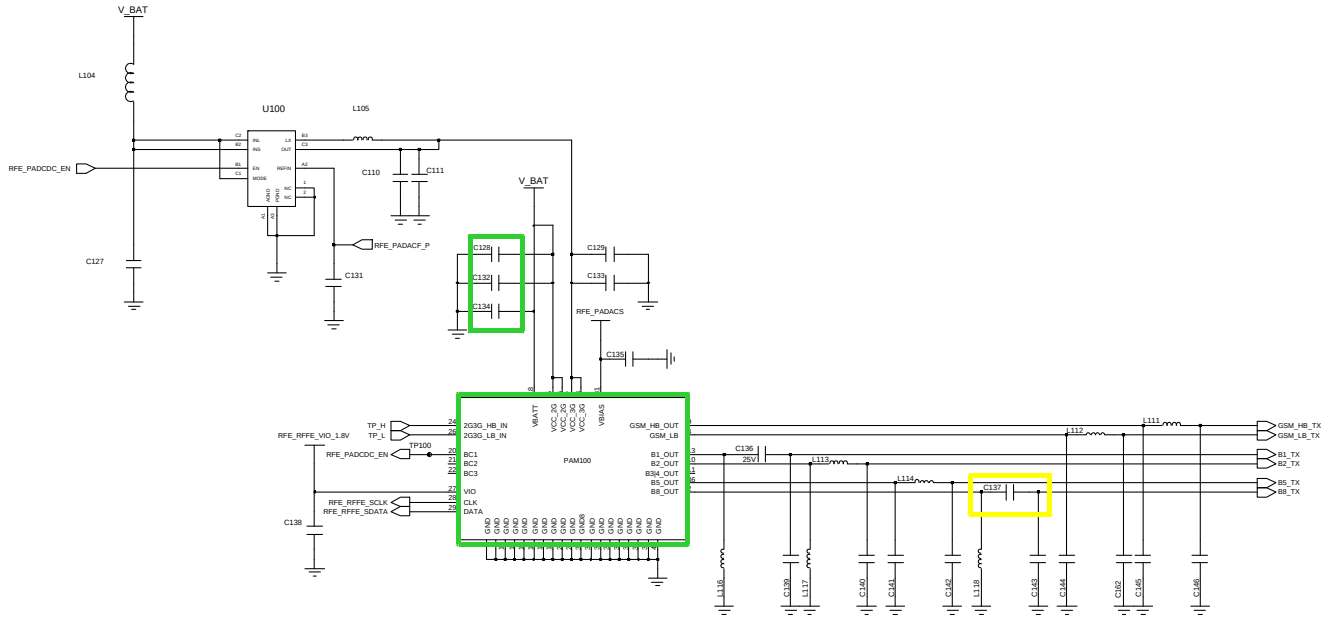


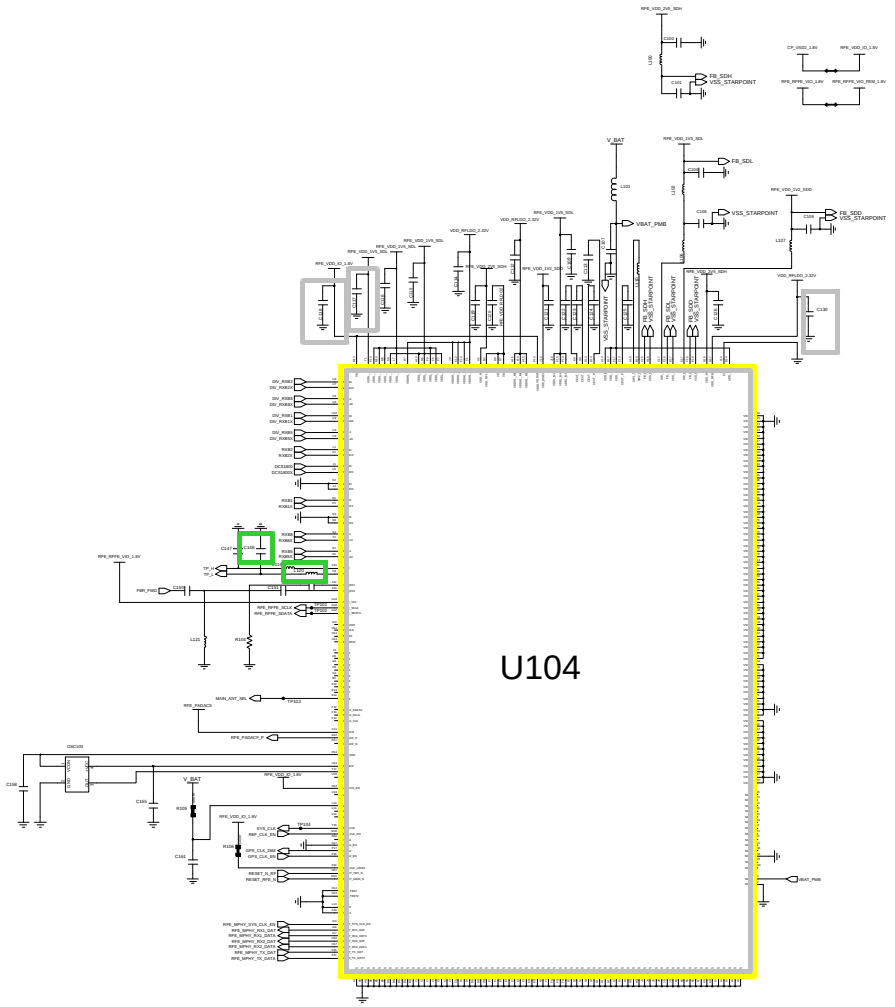
8-3-33. WCDMA900 TX

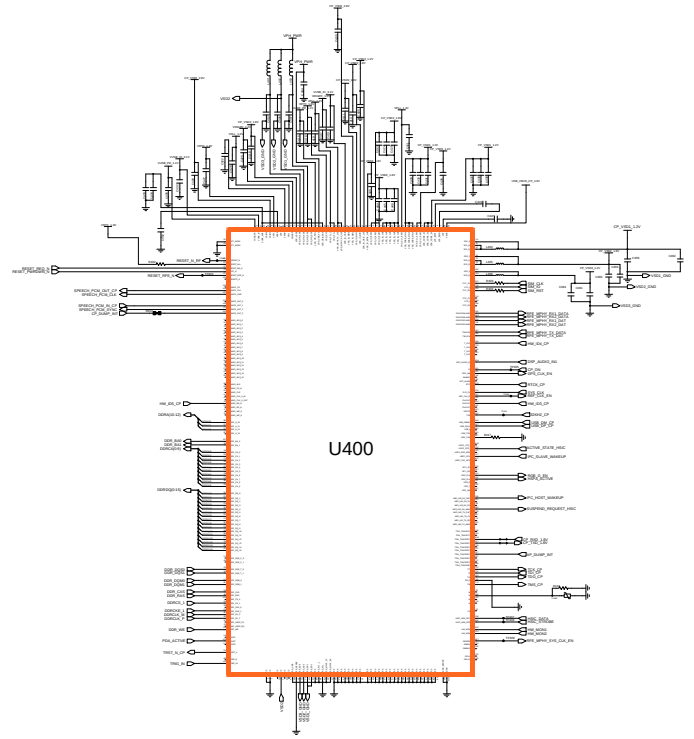


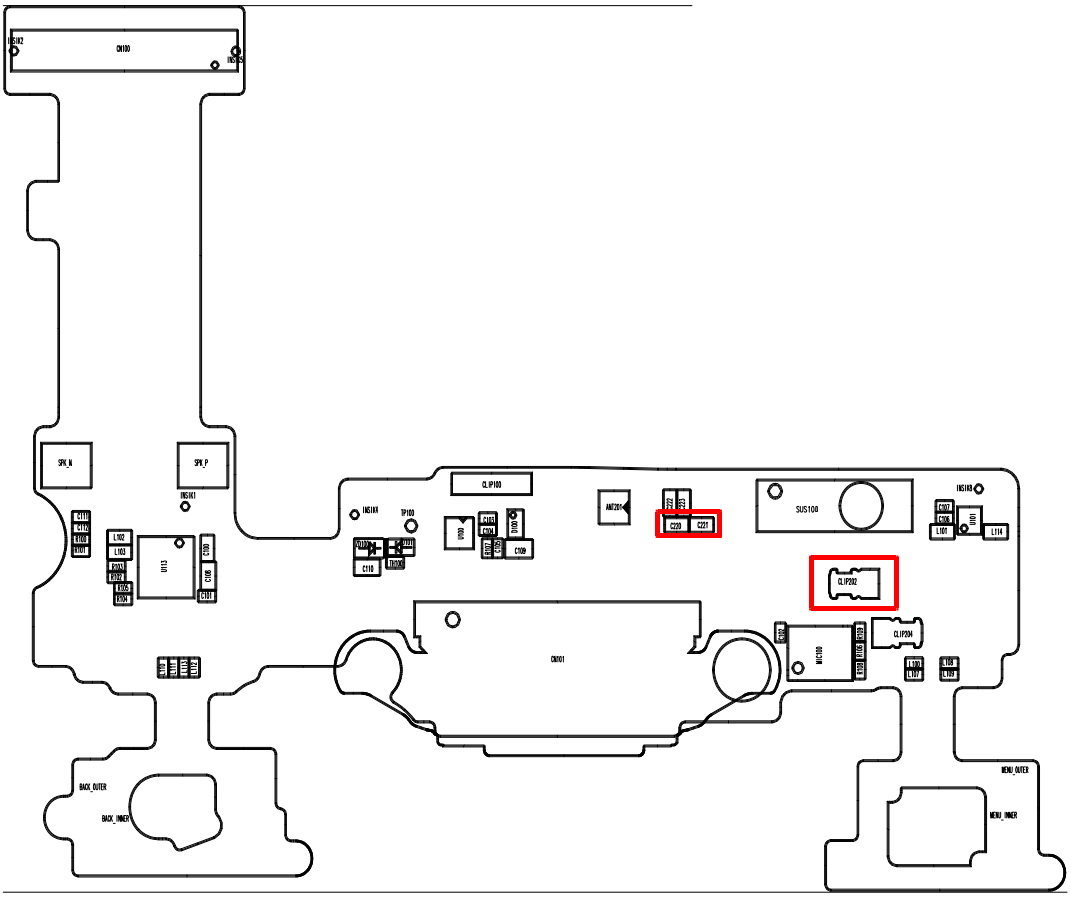


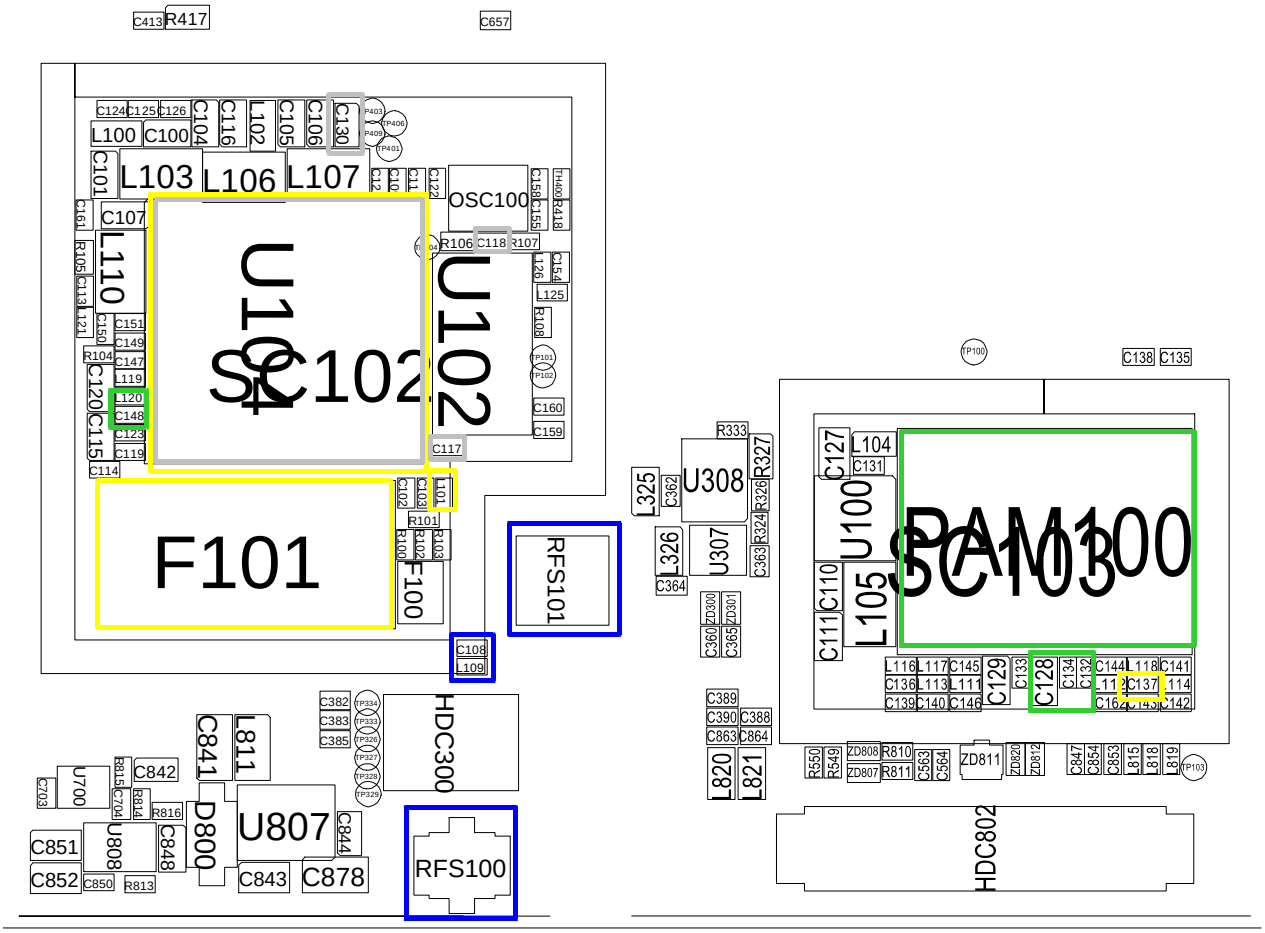


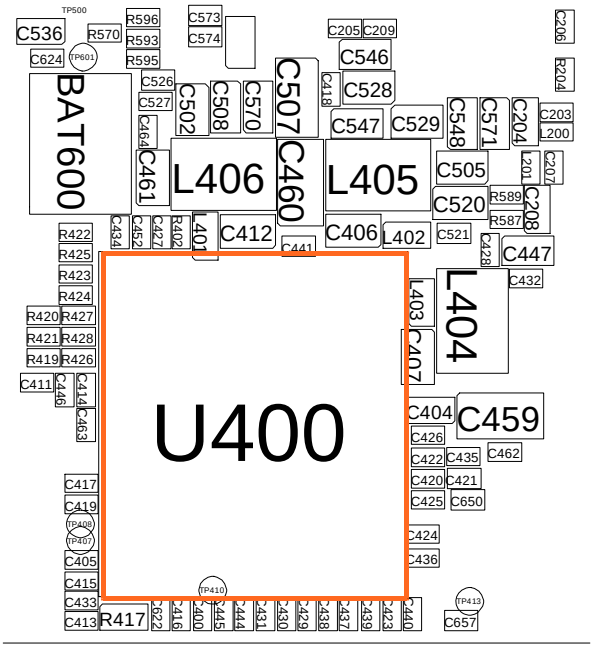












8-4. Service Schematics

- 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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