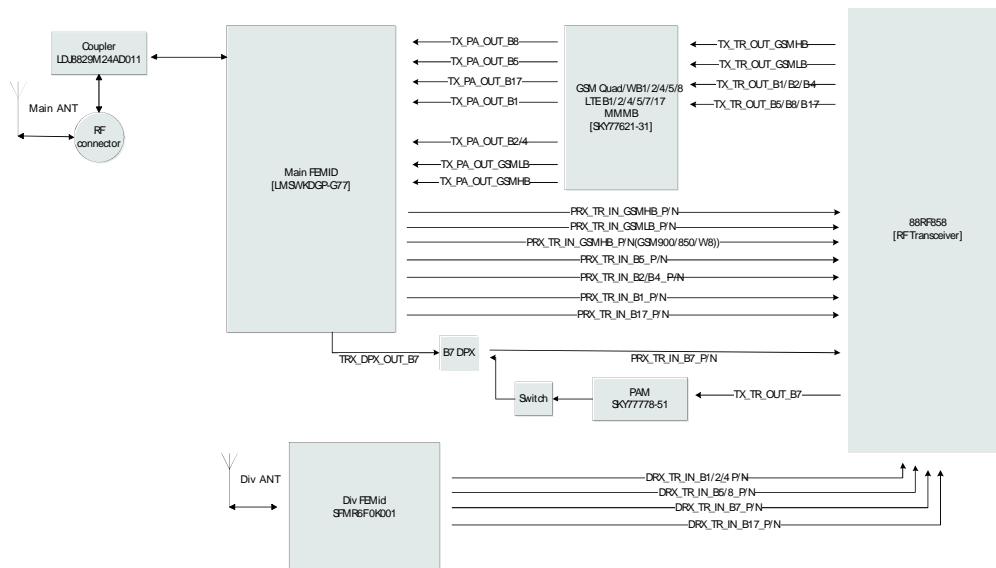
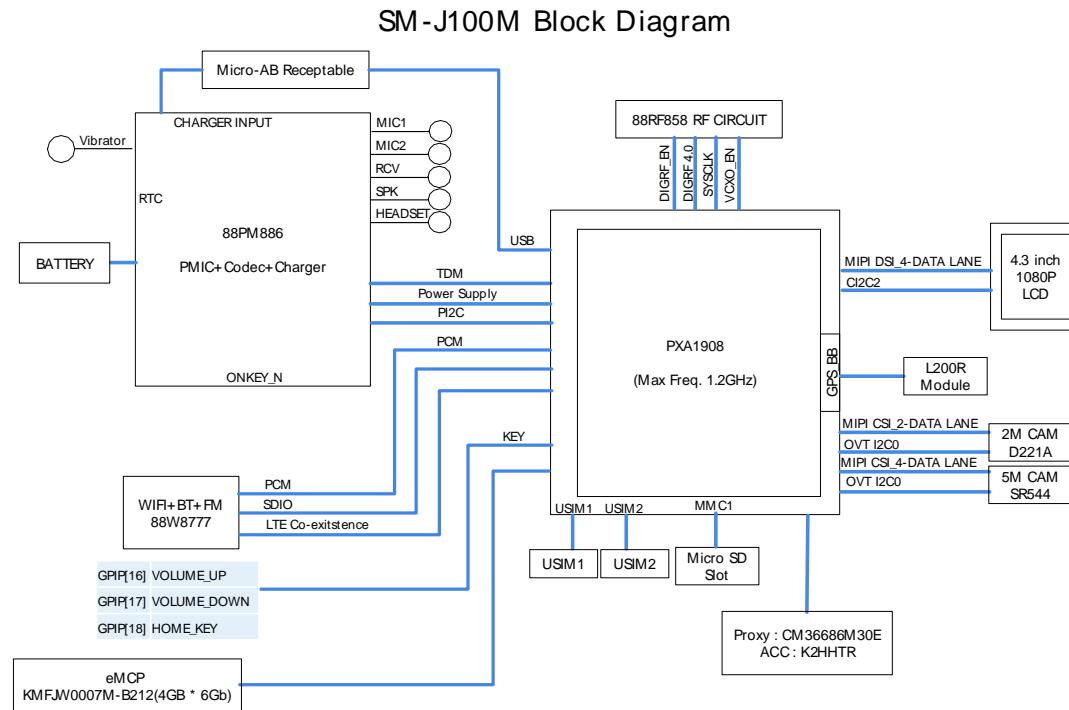


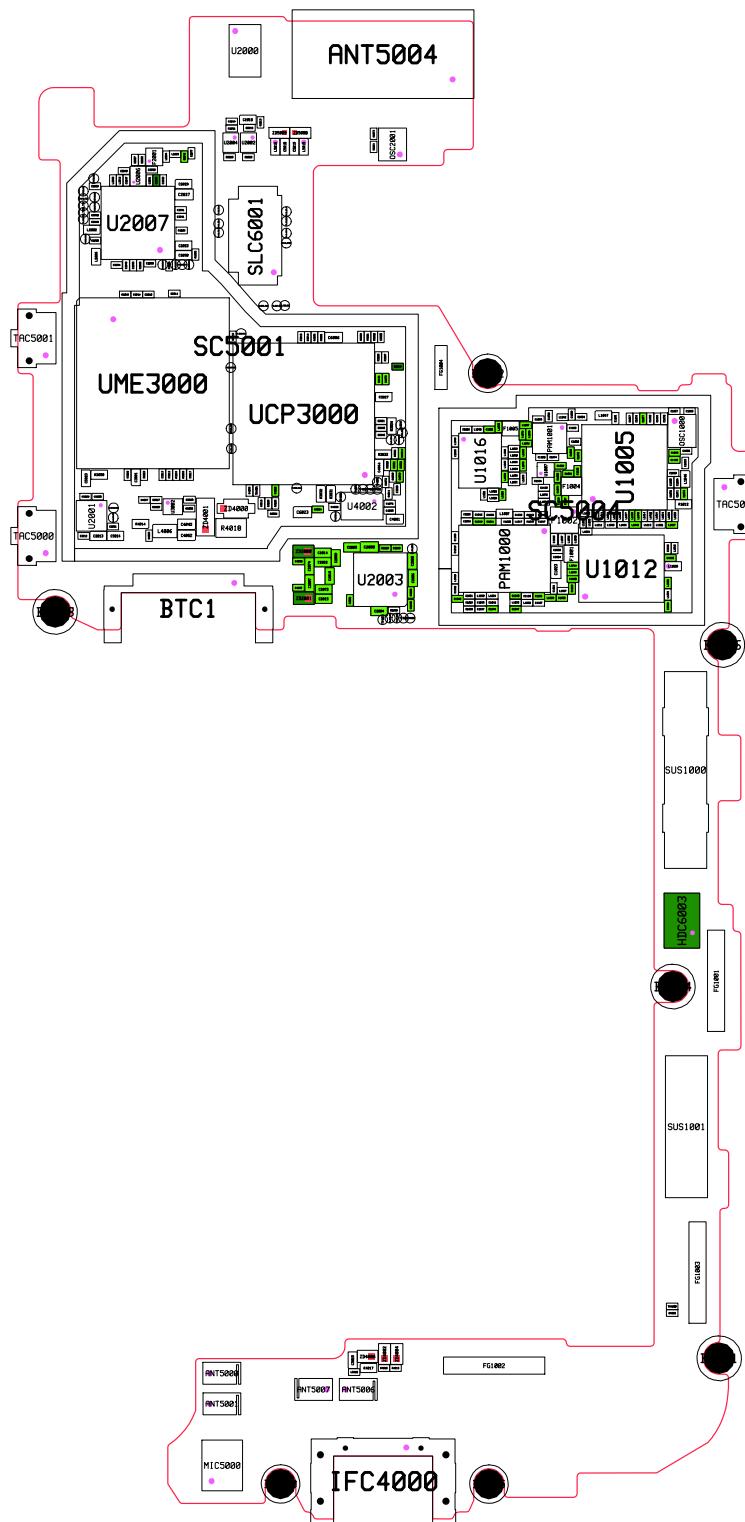
8. Level 3 Repair

8-1. Block Diagram

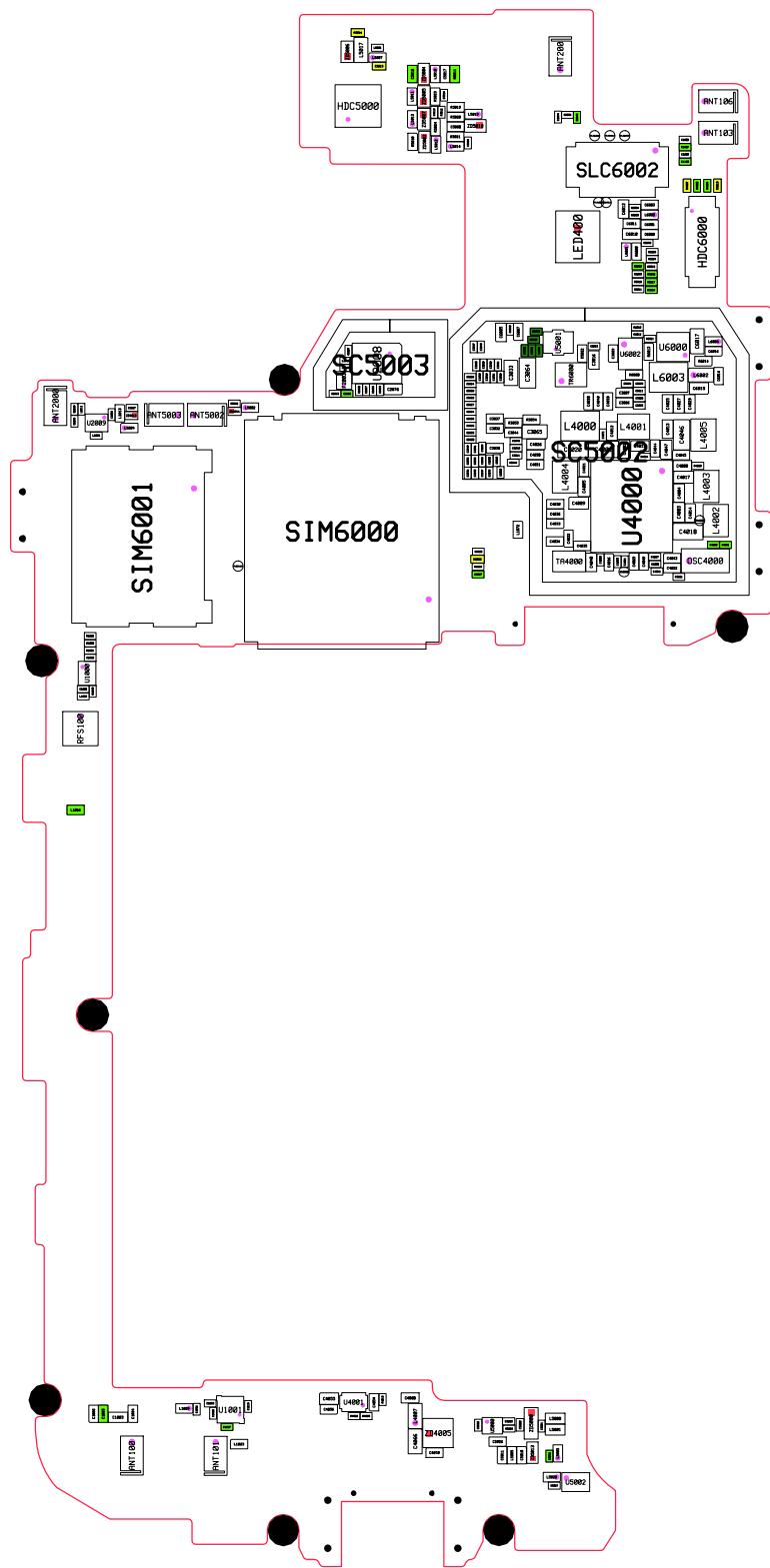


8-2. PCB Diagrams

8-2-1. Top

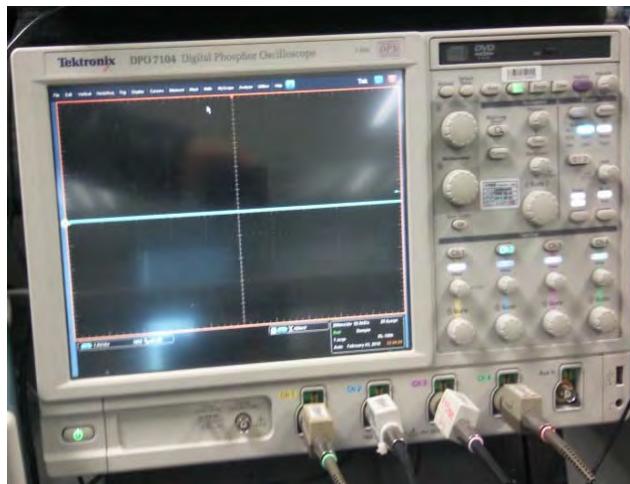


8-2-2. Bottom



8-3. Flow Chart of Troubleshooting

Equipments



↑ Oscilloscope



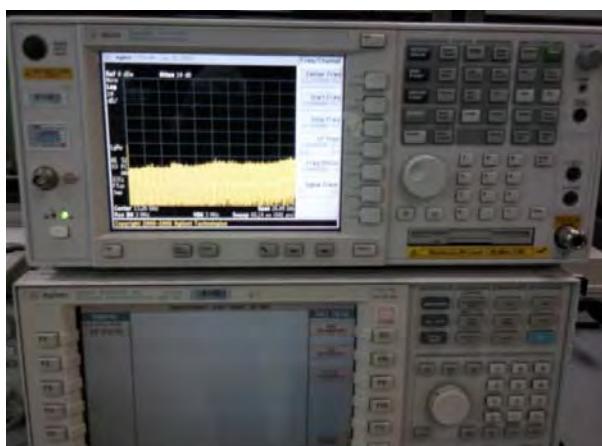
á Digital Multi-meter



á Power Supply



á + driver, ESD Safe Tweezer

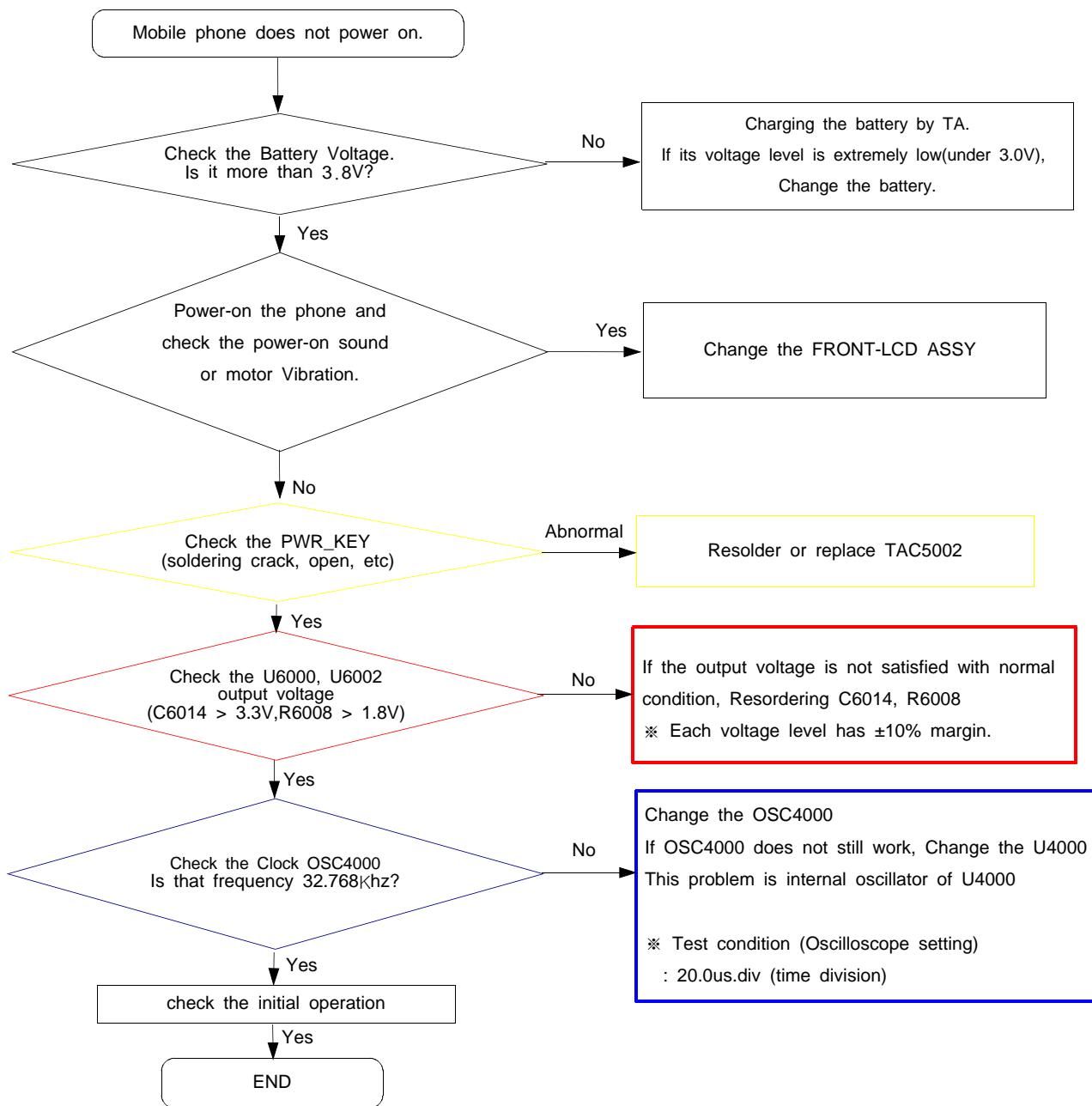


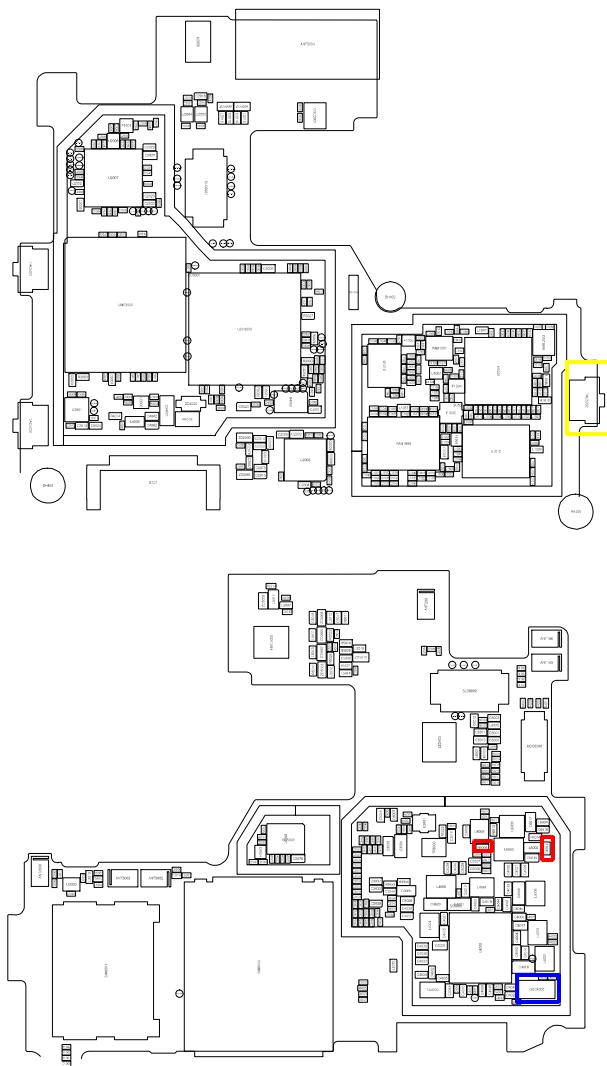
↑ 8960 & Spectrum Analyzer



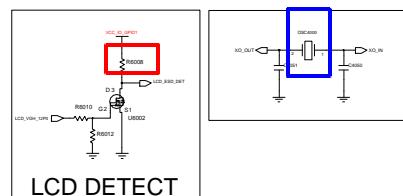
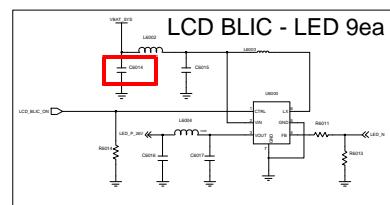
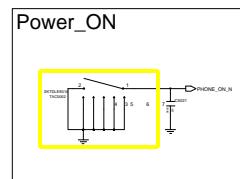
á Soldering iron

8-3-1. Power On

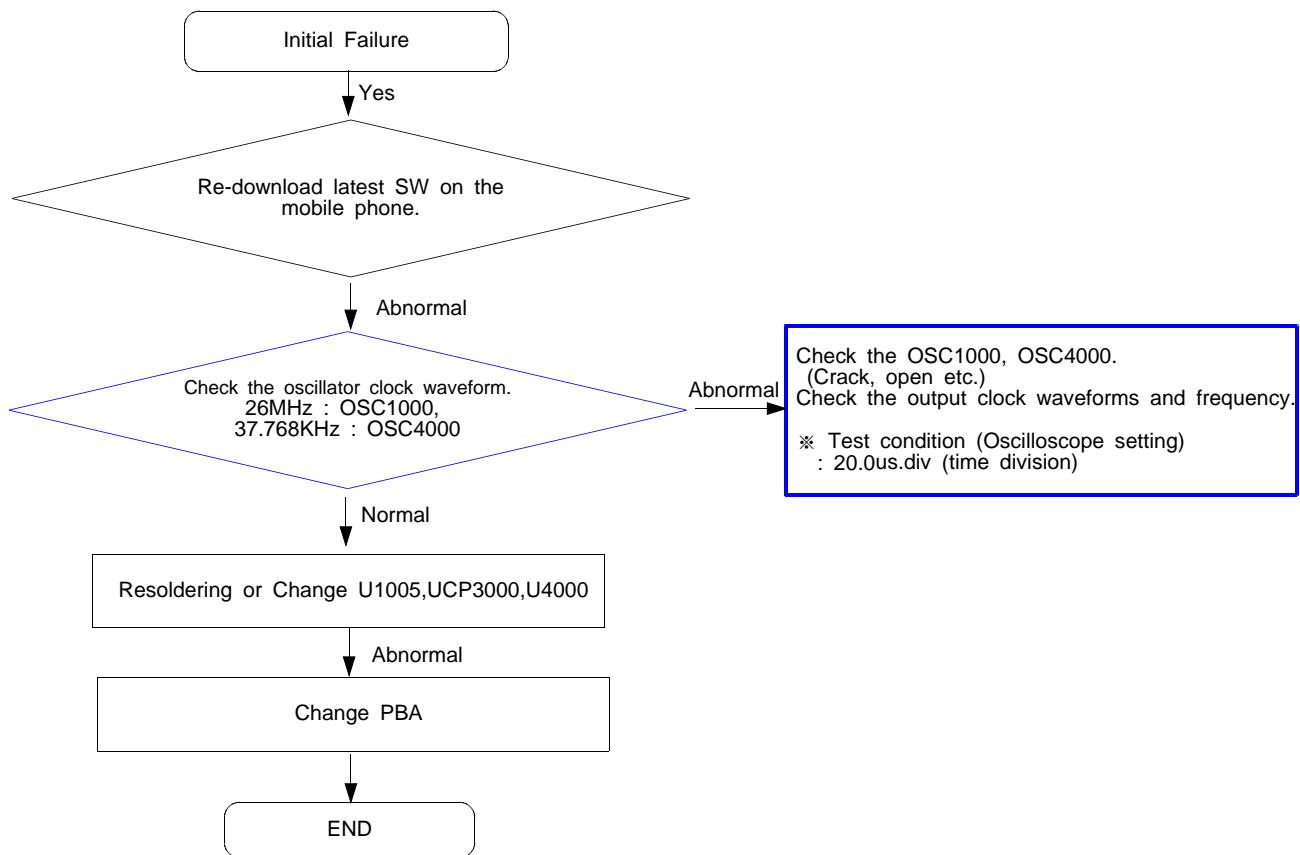


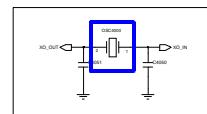
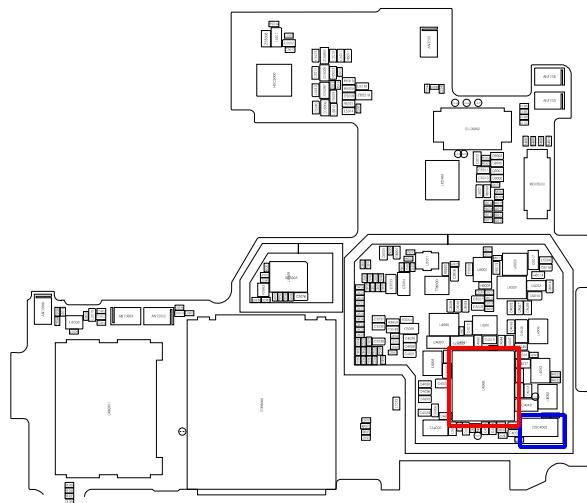
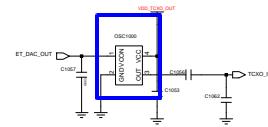
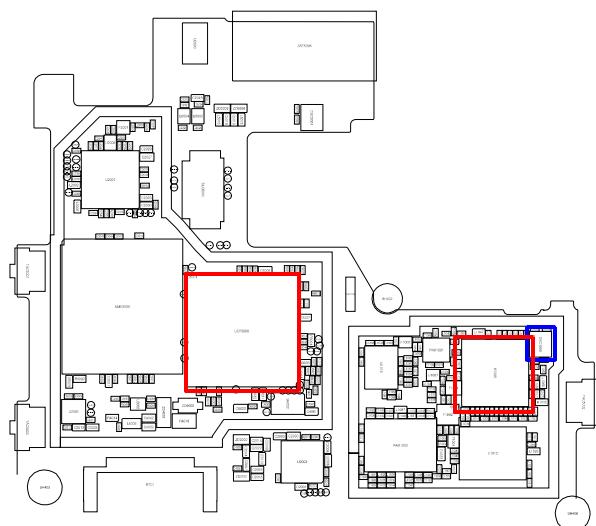


KEY PART

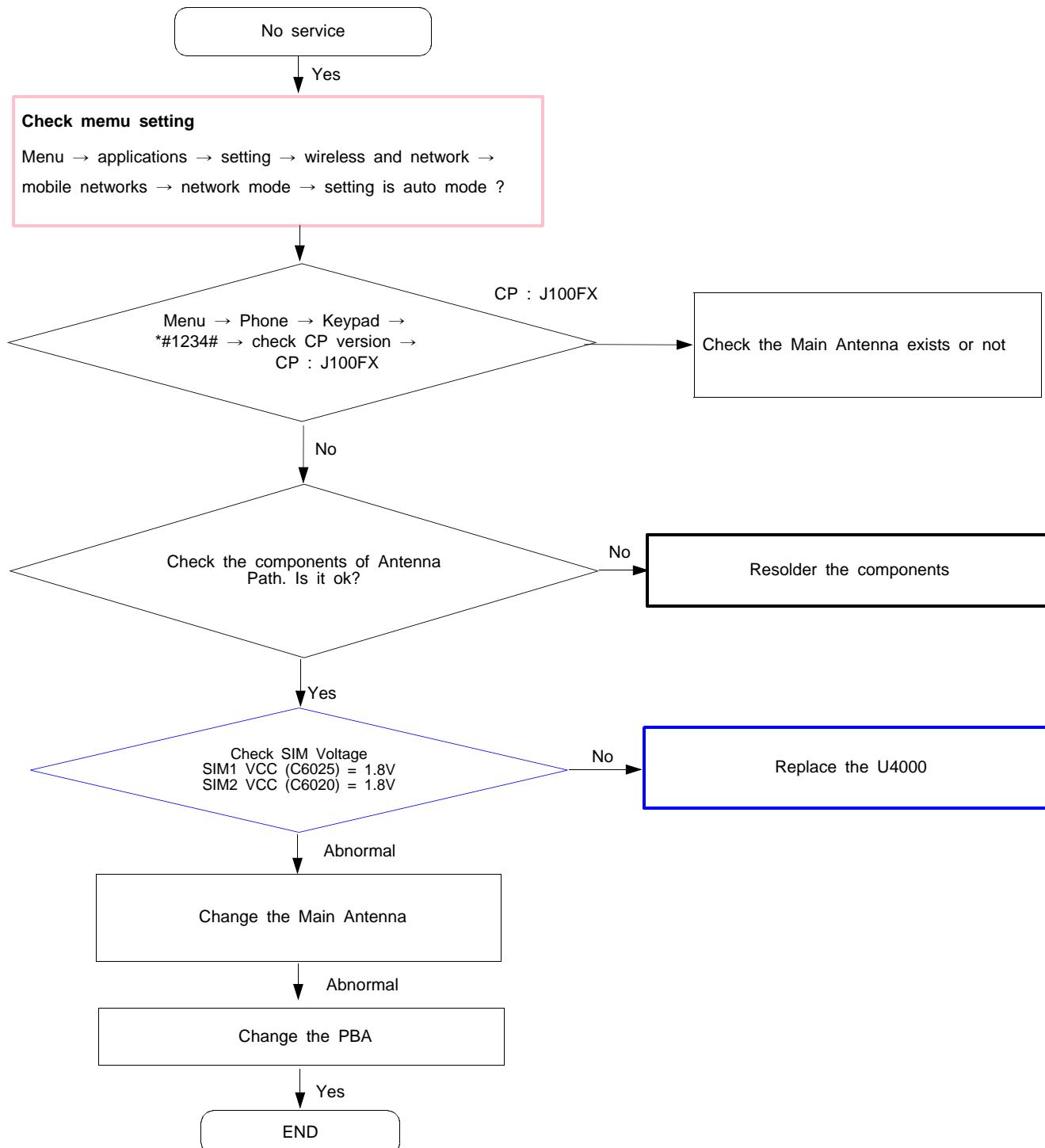


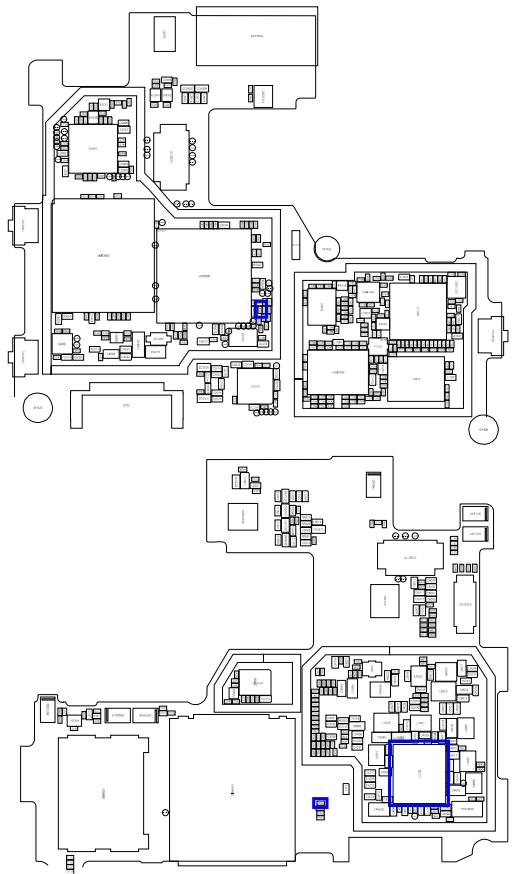
8-3-2. Initial



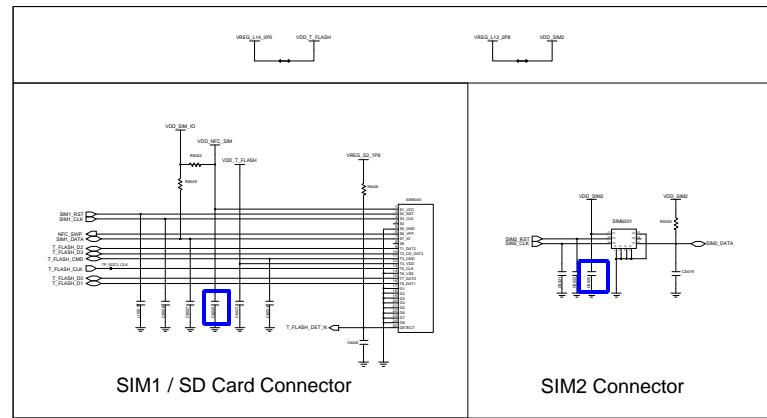


8-3-3. No Service

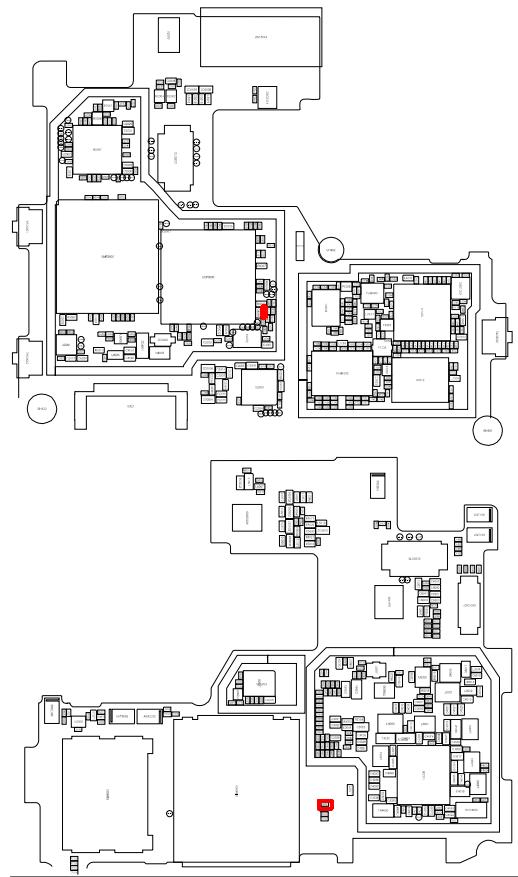
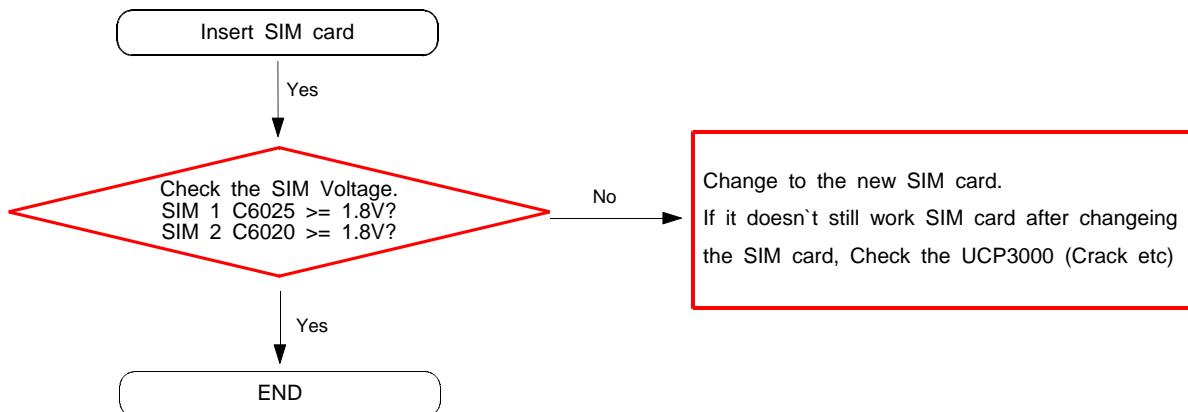




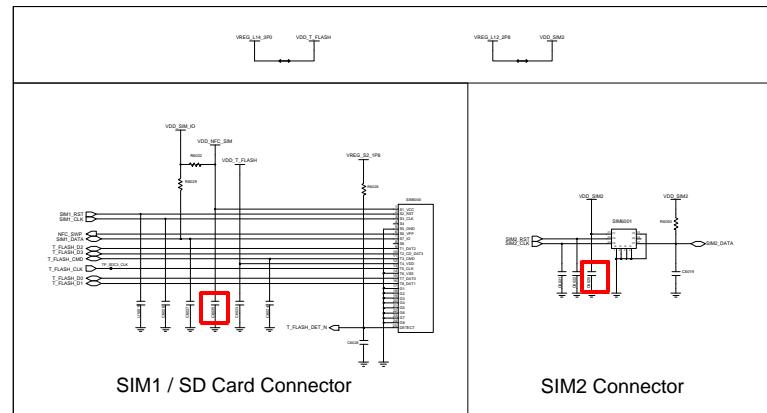
SIM / SD CARD PART



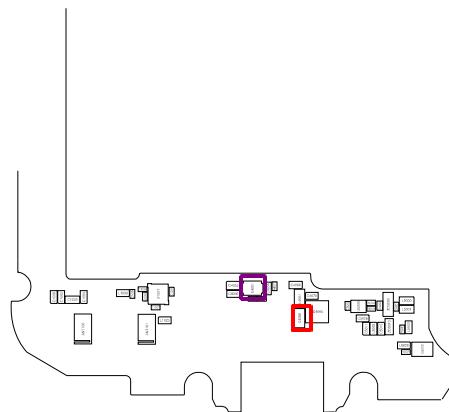
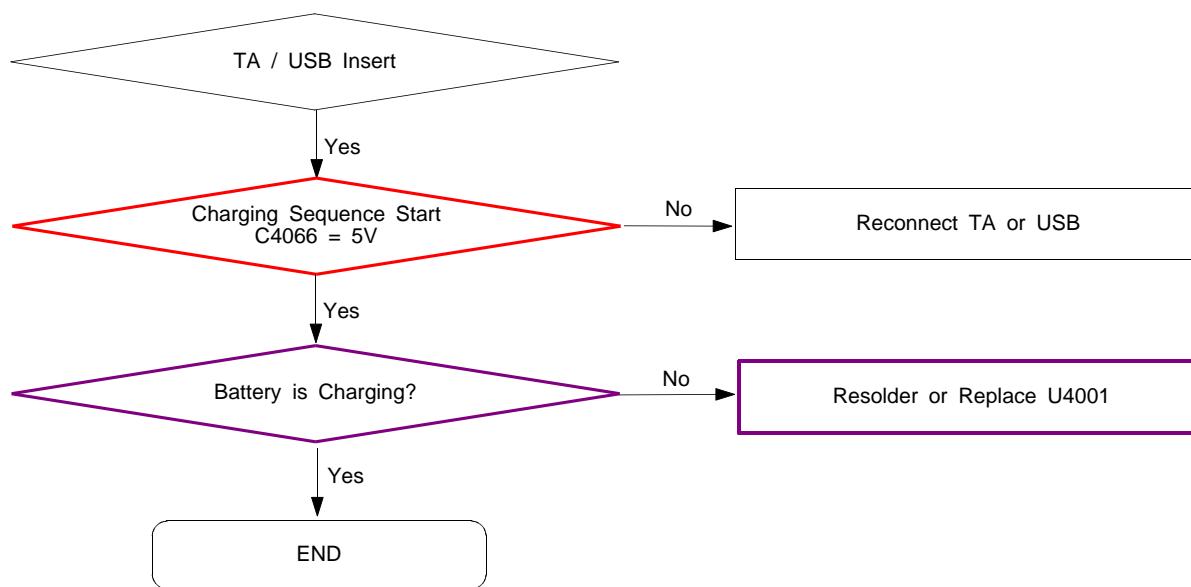
8-3-4. Sim Part



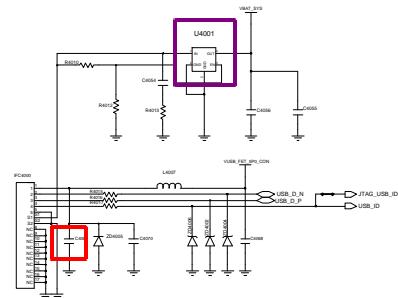
SIM / SD CARD PART



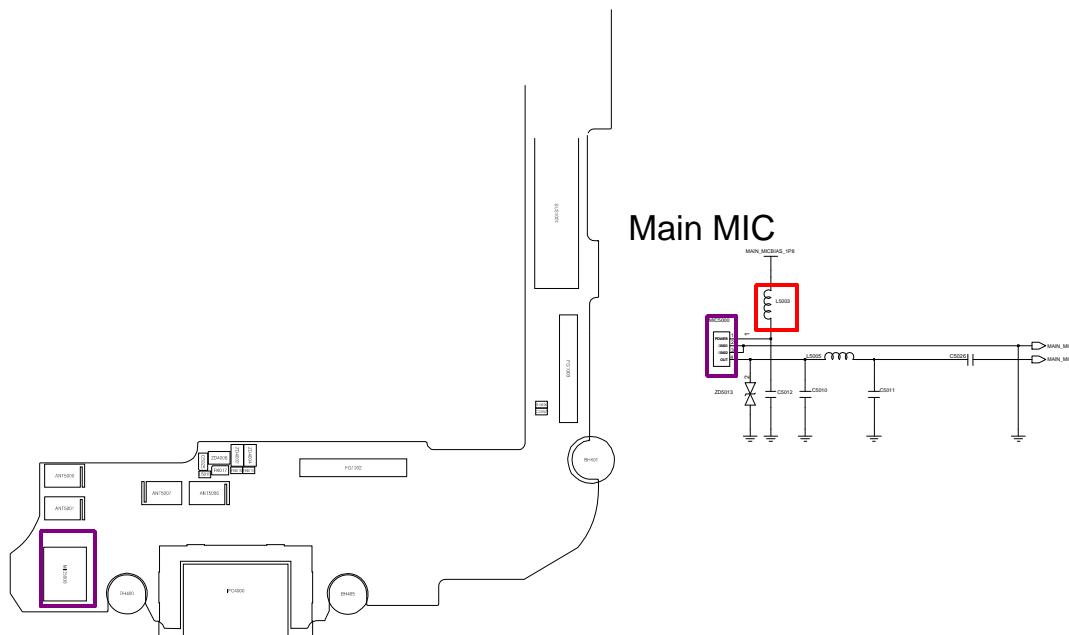
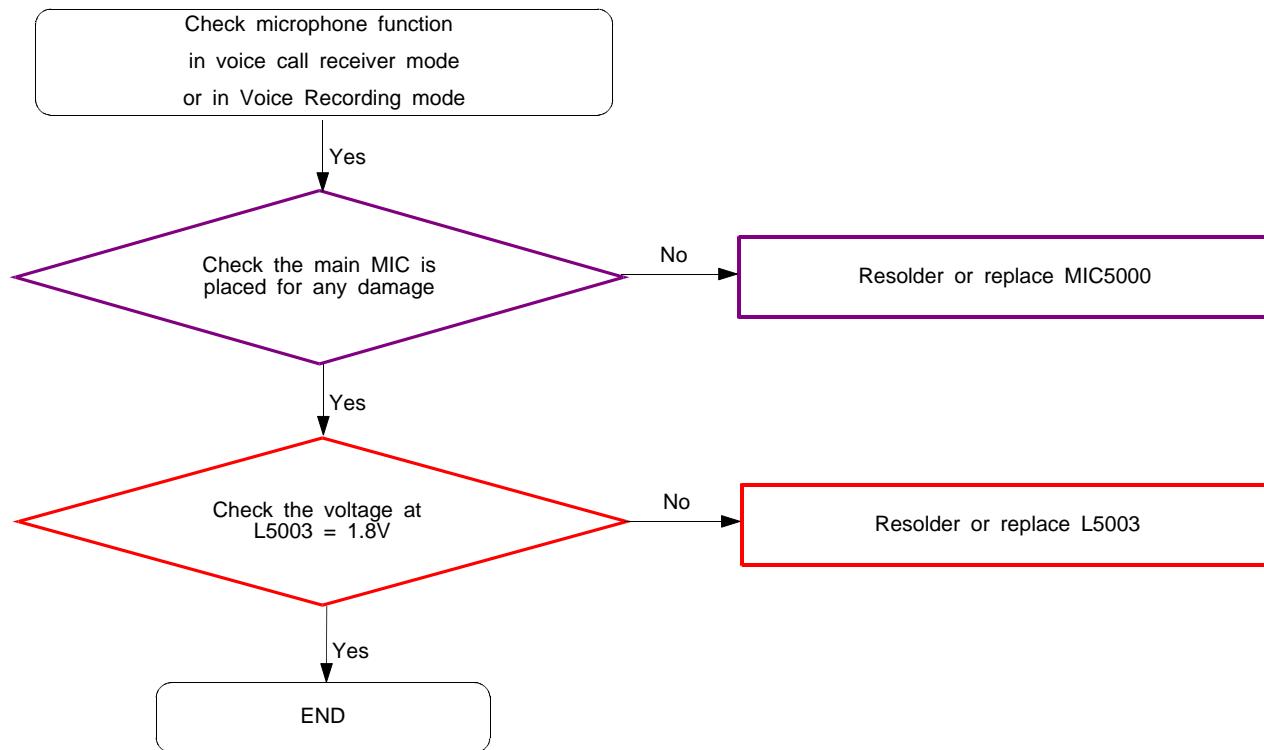
8-3-5. Charging Part

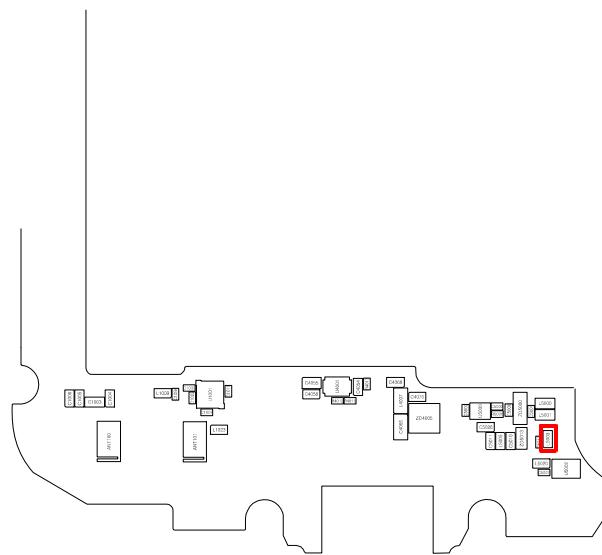


USB Connector

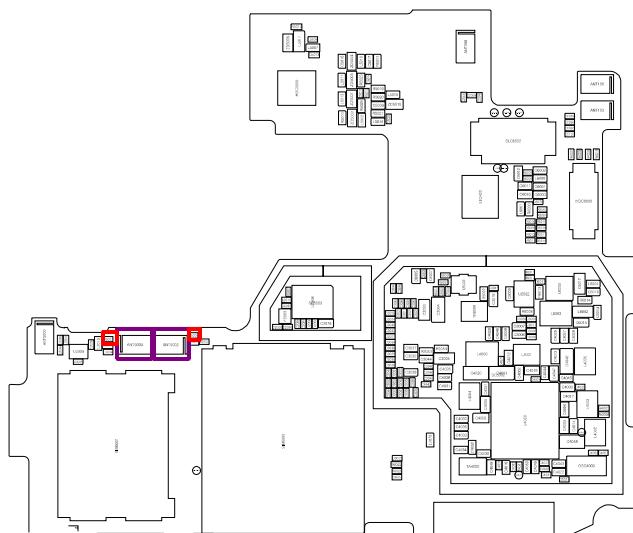
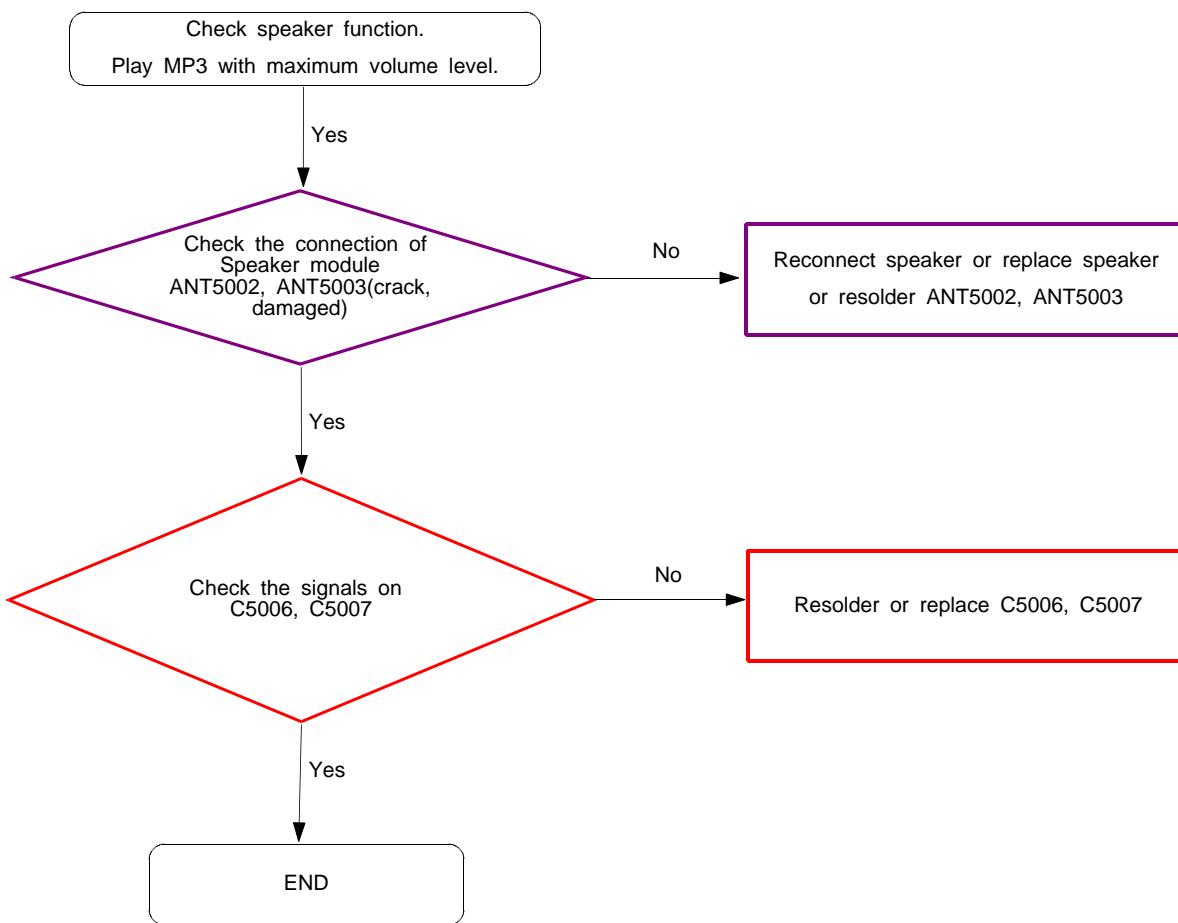


8-3-6. Microphone Part

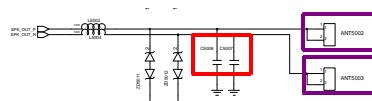




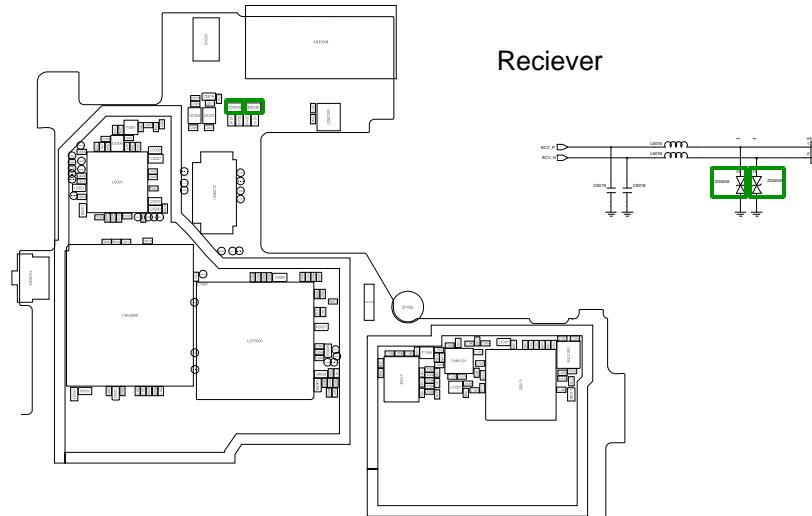
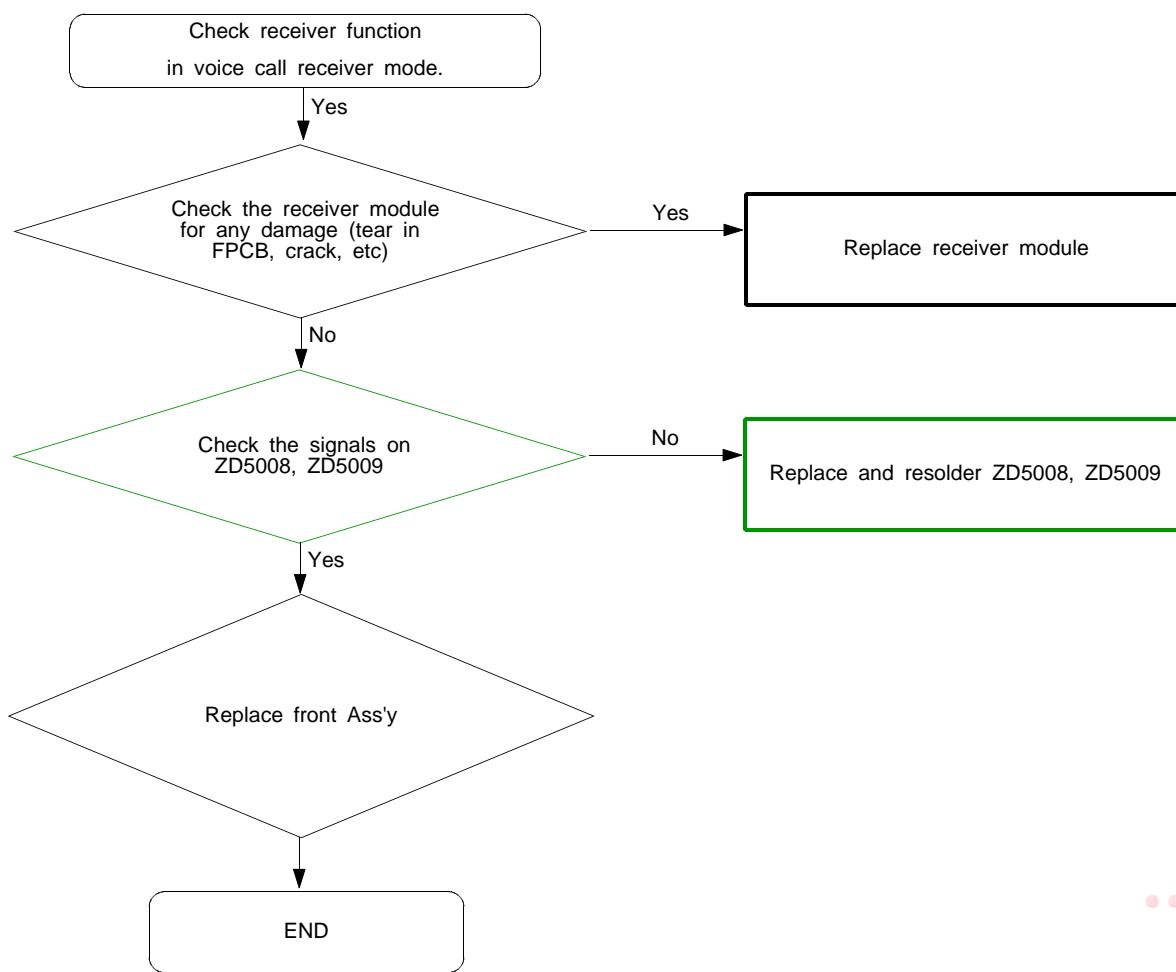
8-3-7. Speaker Part



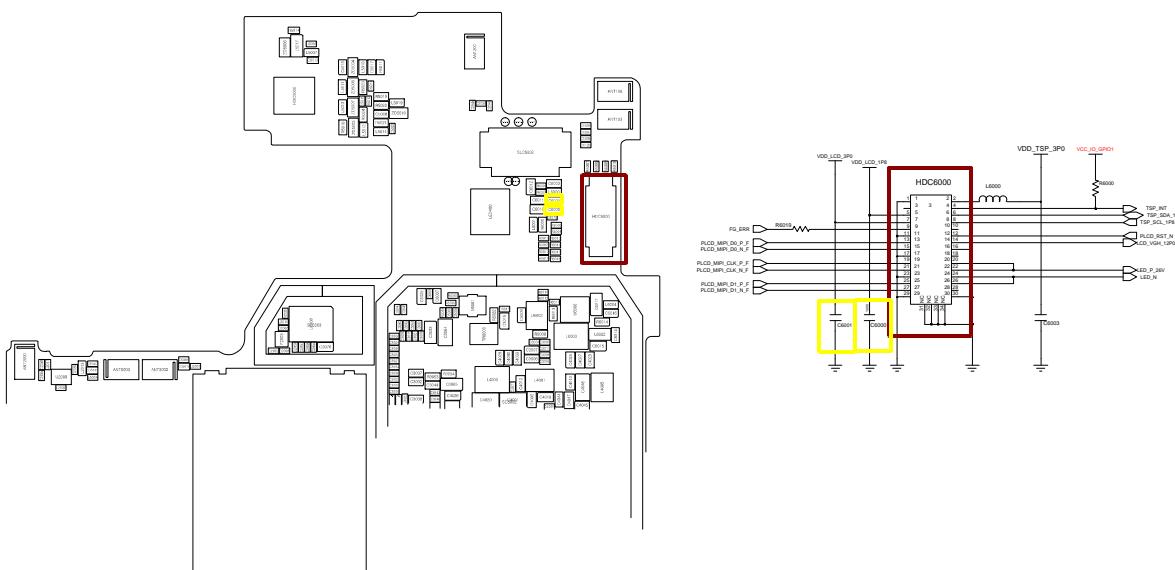
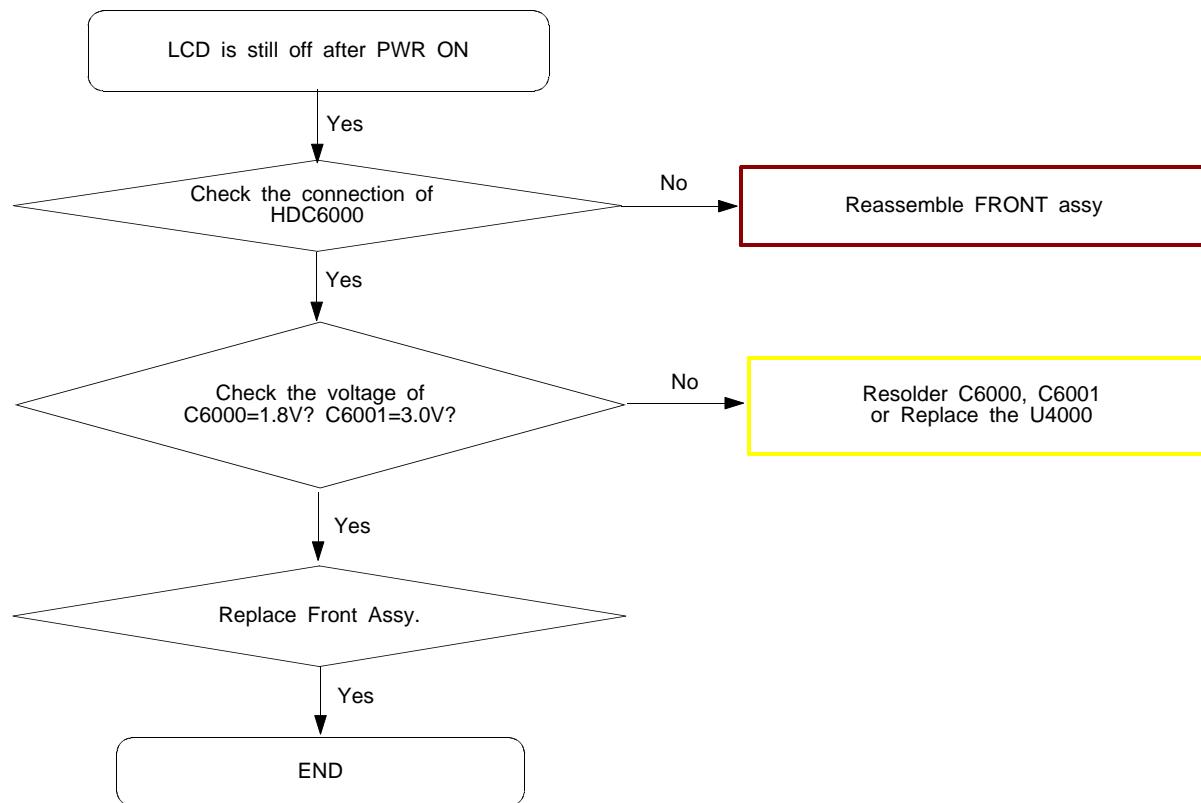
Speaker



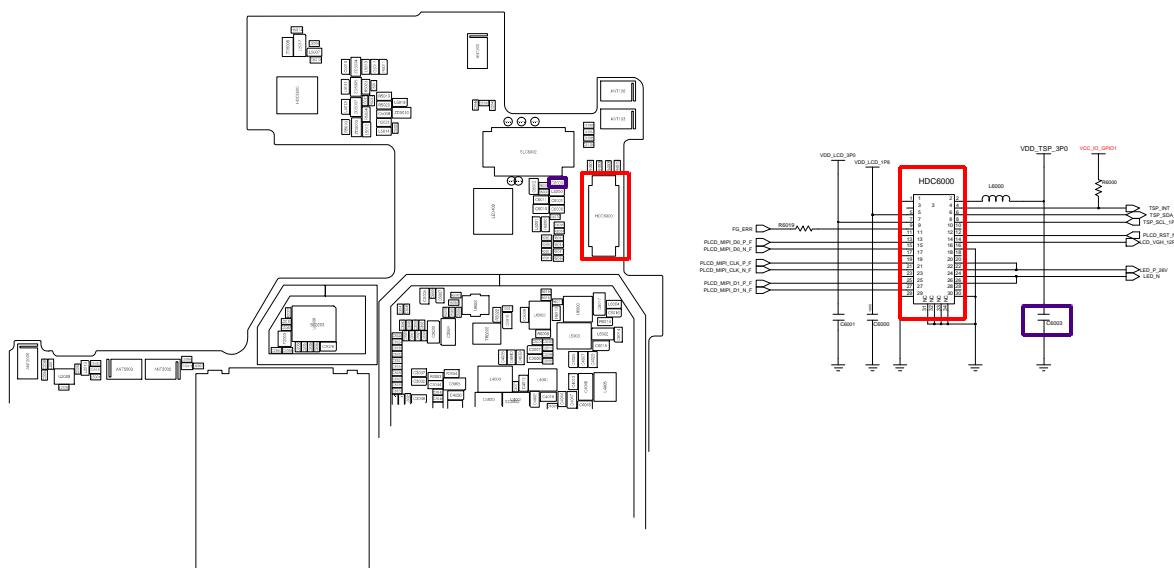
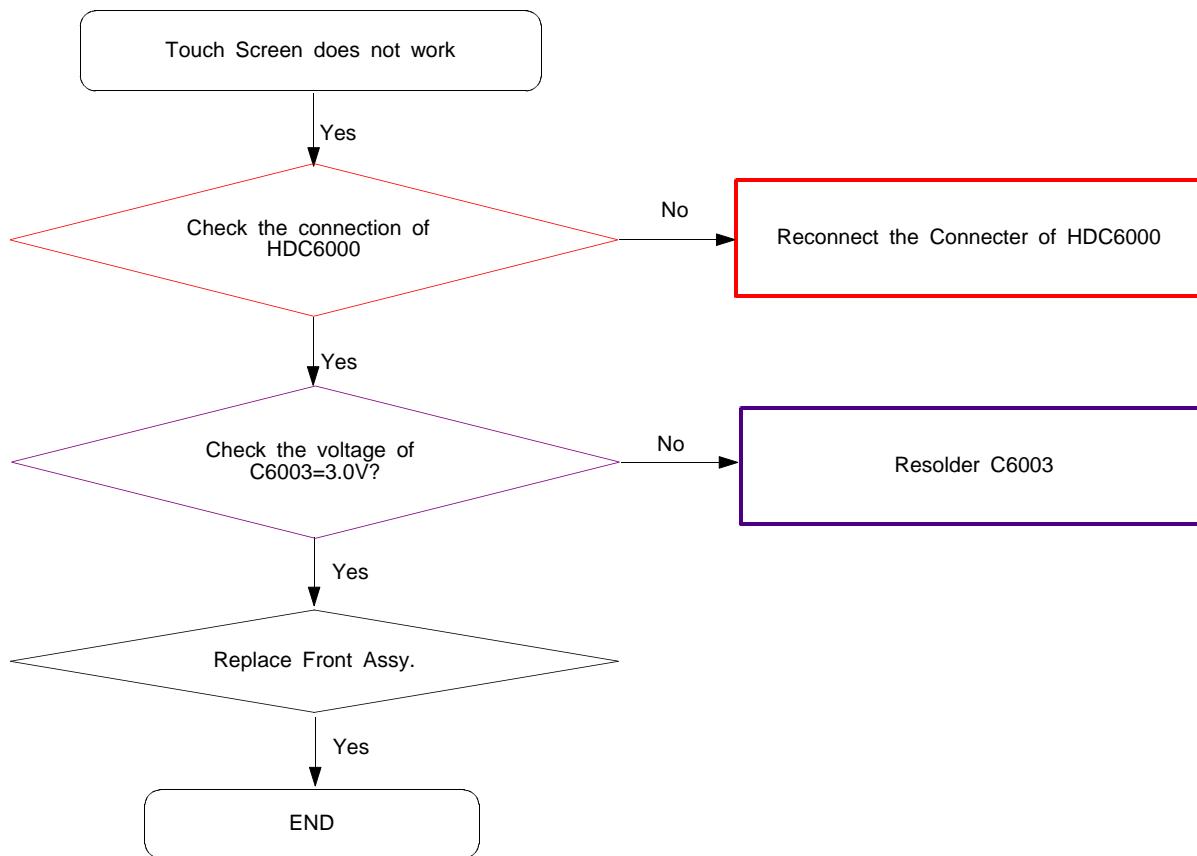
8-3-8 Receiver Part



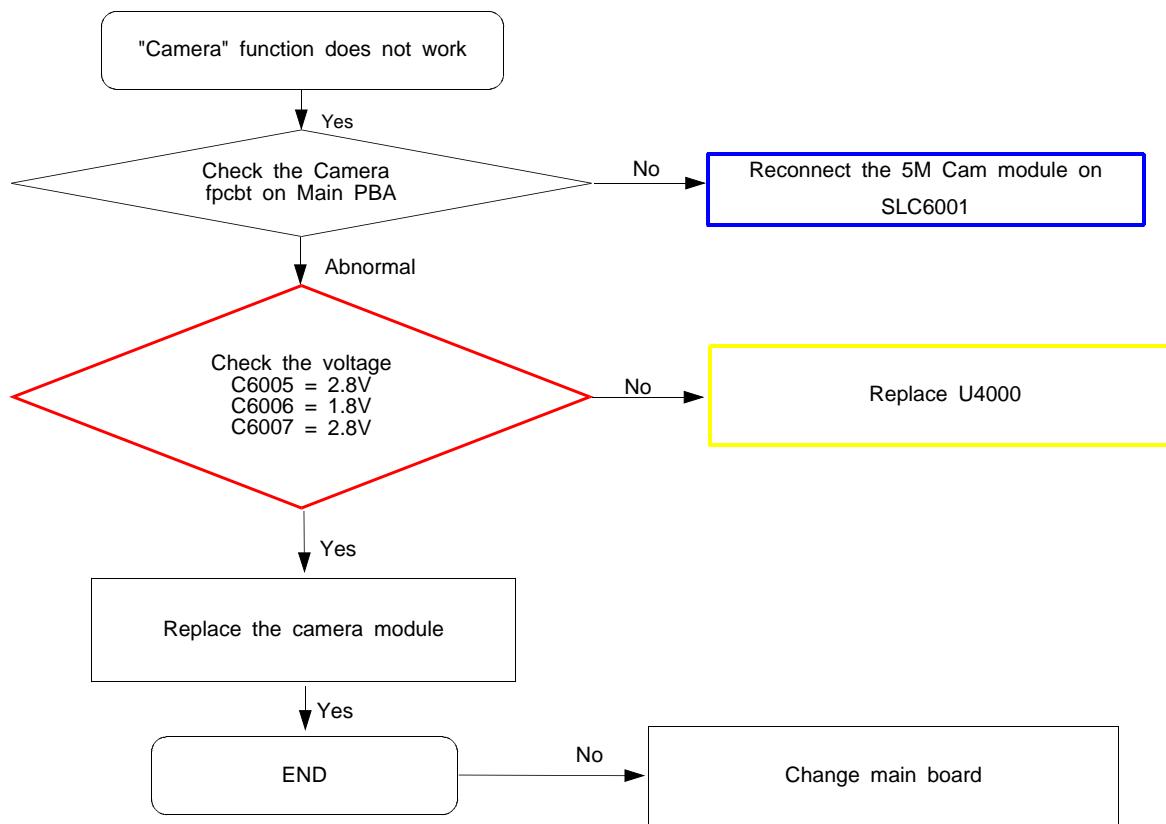
8-3-9. LCD

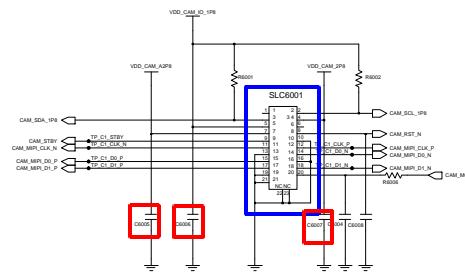
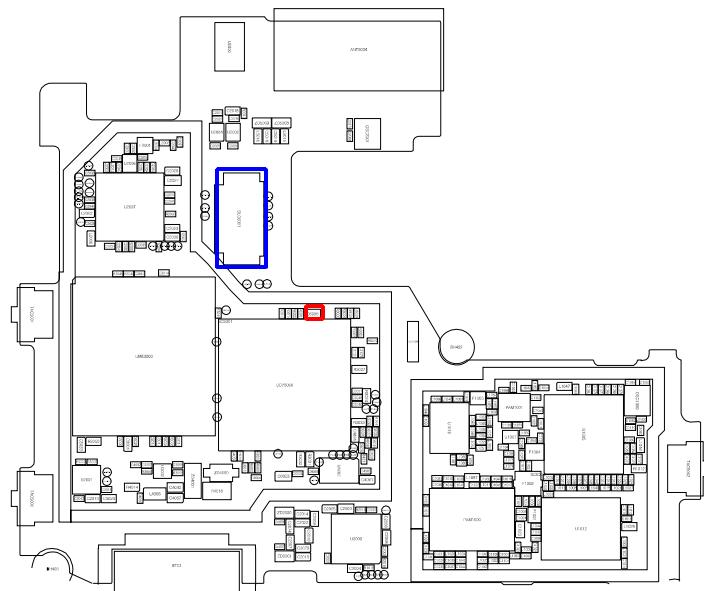


8-3-10. TSP

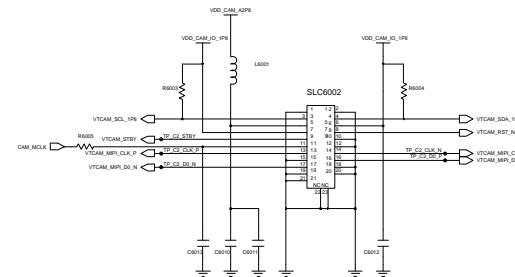
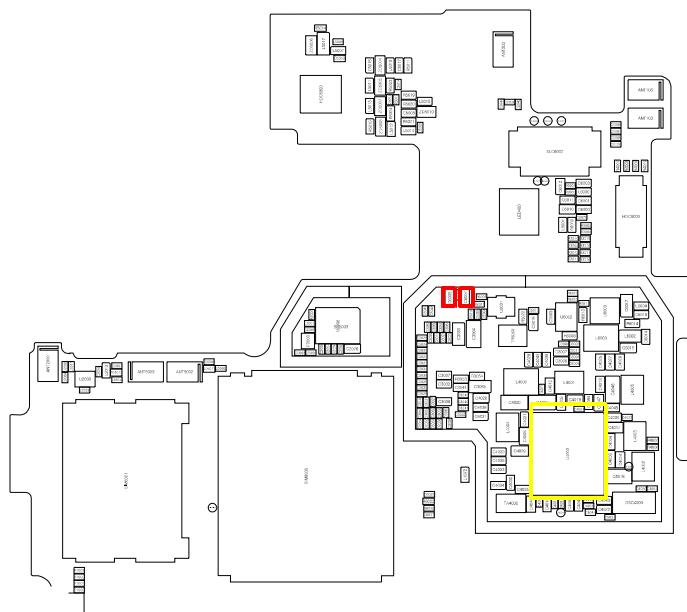


8-3-11. 5M CAM



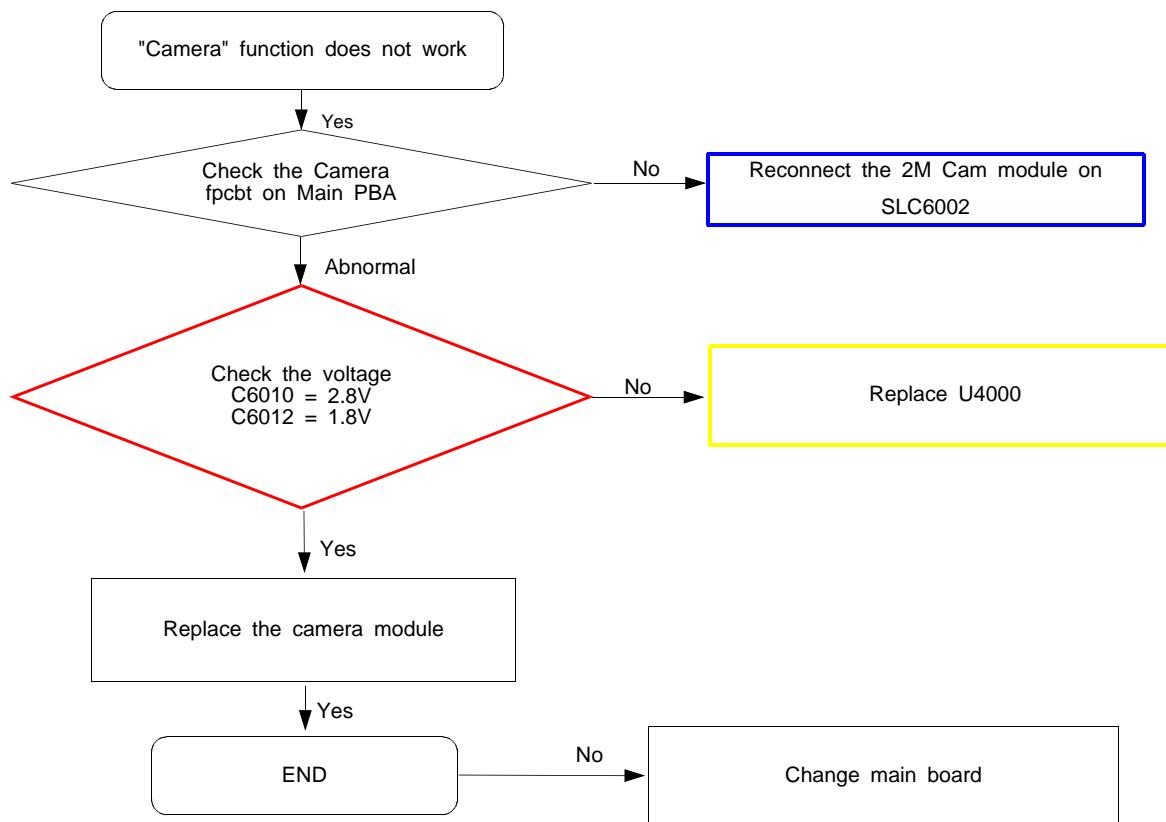


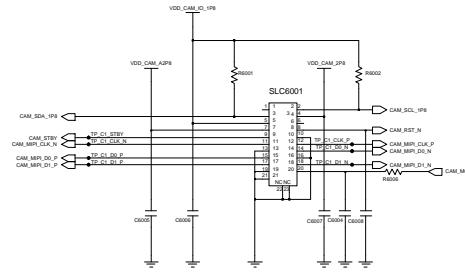
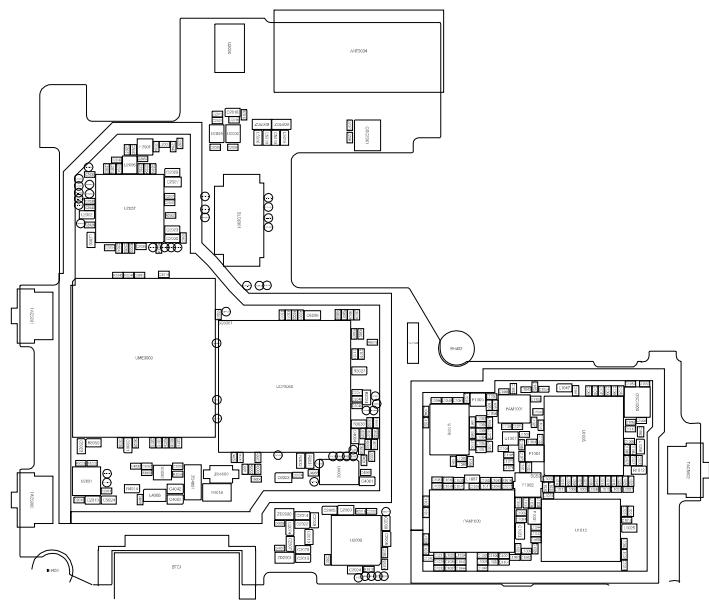
5M_Main_CAM



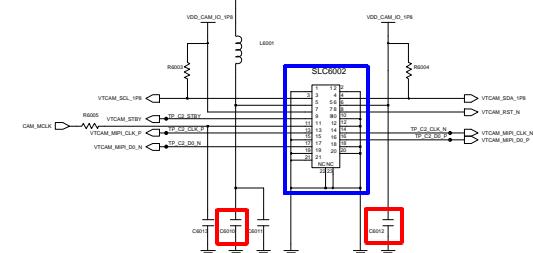
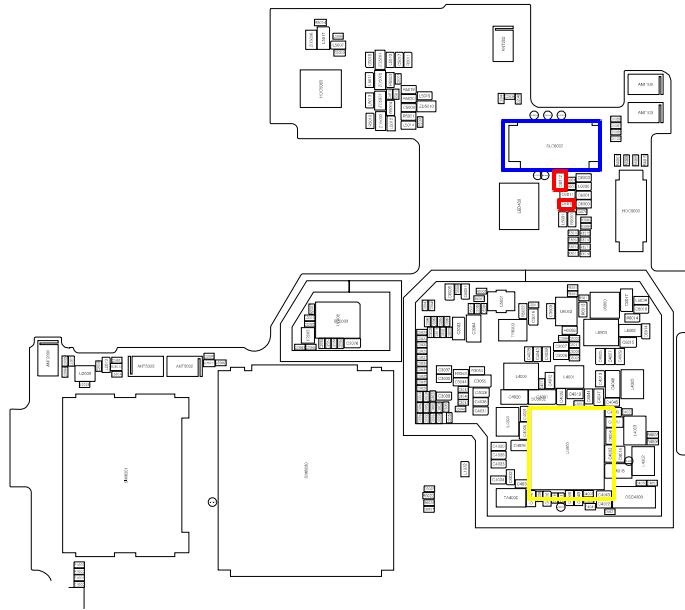
2M_Sub_CAM

8-3-12. 2M CAM



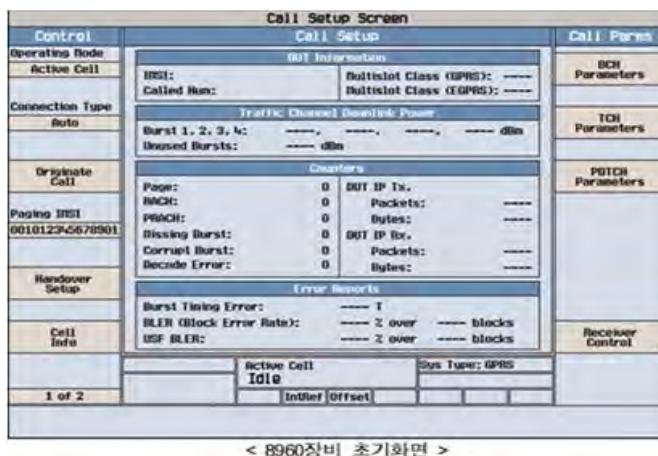


5M_Main_CAM



2M_Sub_CAM

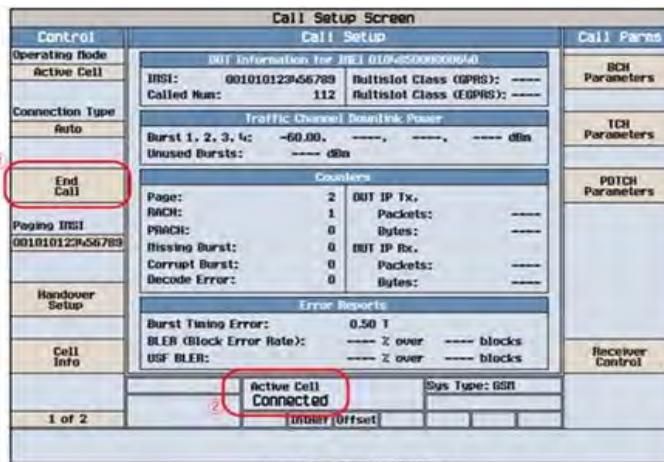
※ presetting 8960 (or CMW500)



< 8960장비 초기화면 >

(Rx setting)

1. Active Cell : select GSM or GPRS
2. Connection Type : select Auto(GSM), BLER(GPRS)
3. BCH Parameter : select measuring band (DCS or EGSM)
4. Cell power : -60dBm



< Call이 연결된 화면 >

(Tx setting)

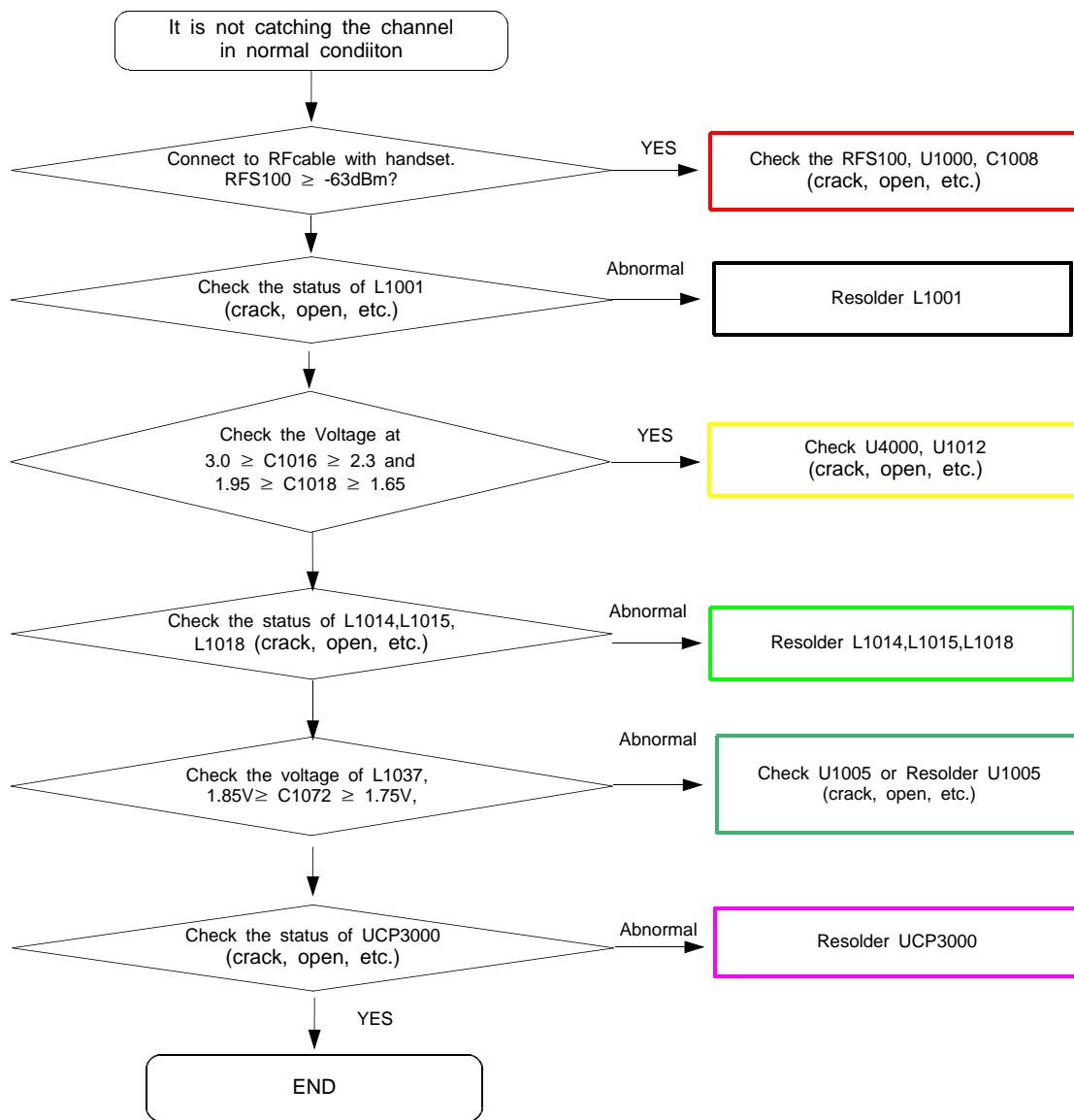
※ After setting 8960 (or CMW500) (EGSM / DCS)

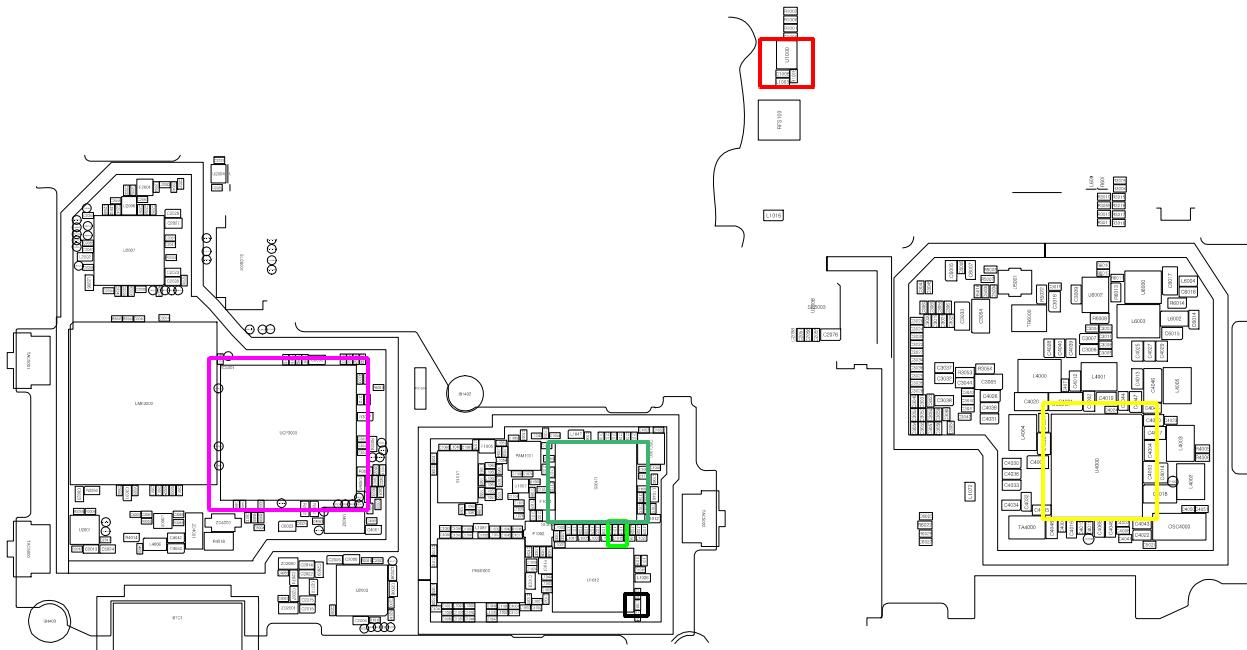
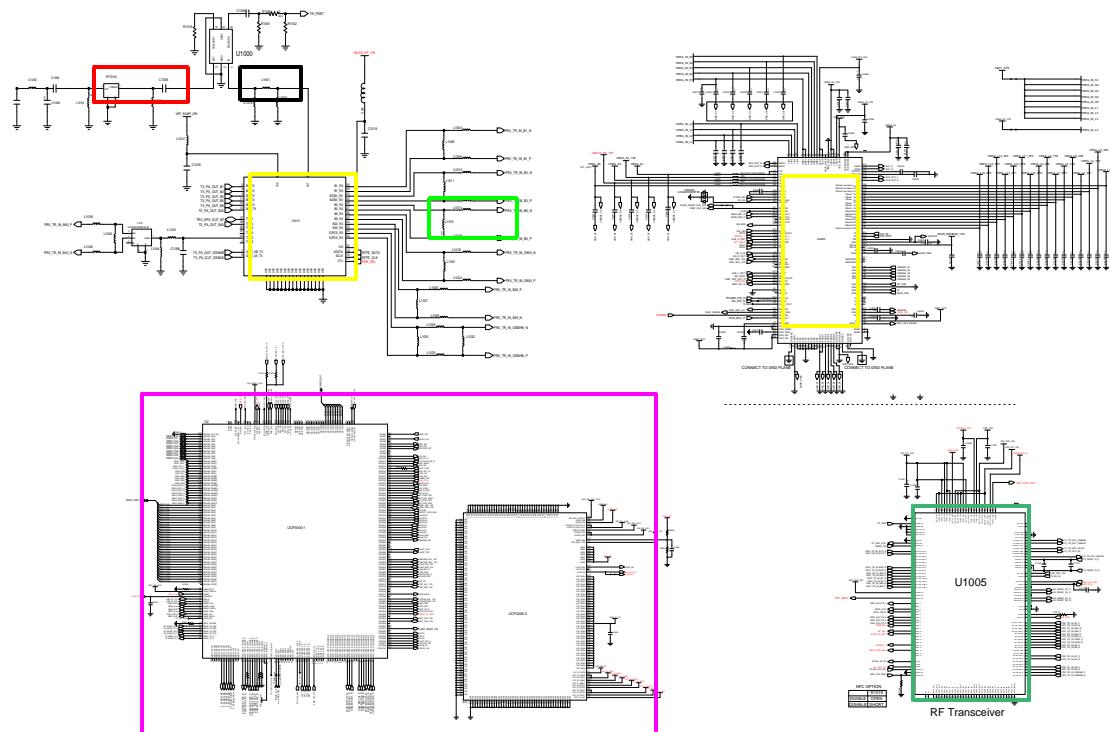
1. After setting, prepare the call setup Display
2. Using an Originate Call, make a call.
3. Confirm the display "connected"
4. start the measuring

※ 8960 (or CMW500) & spectrum analyzer (down & up at picture)

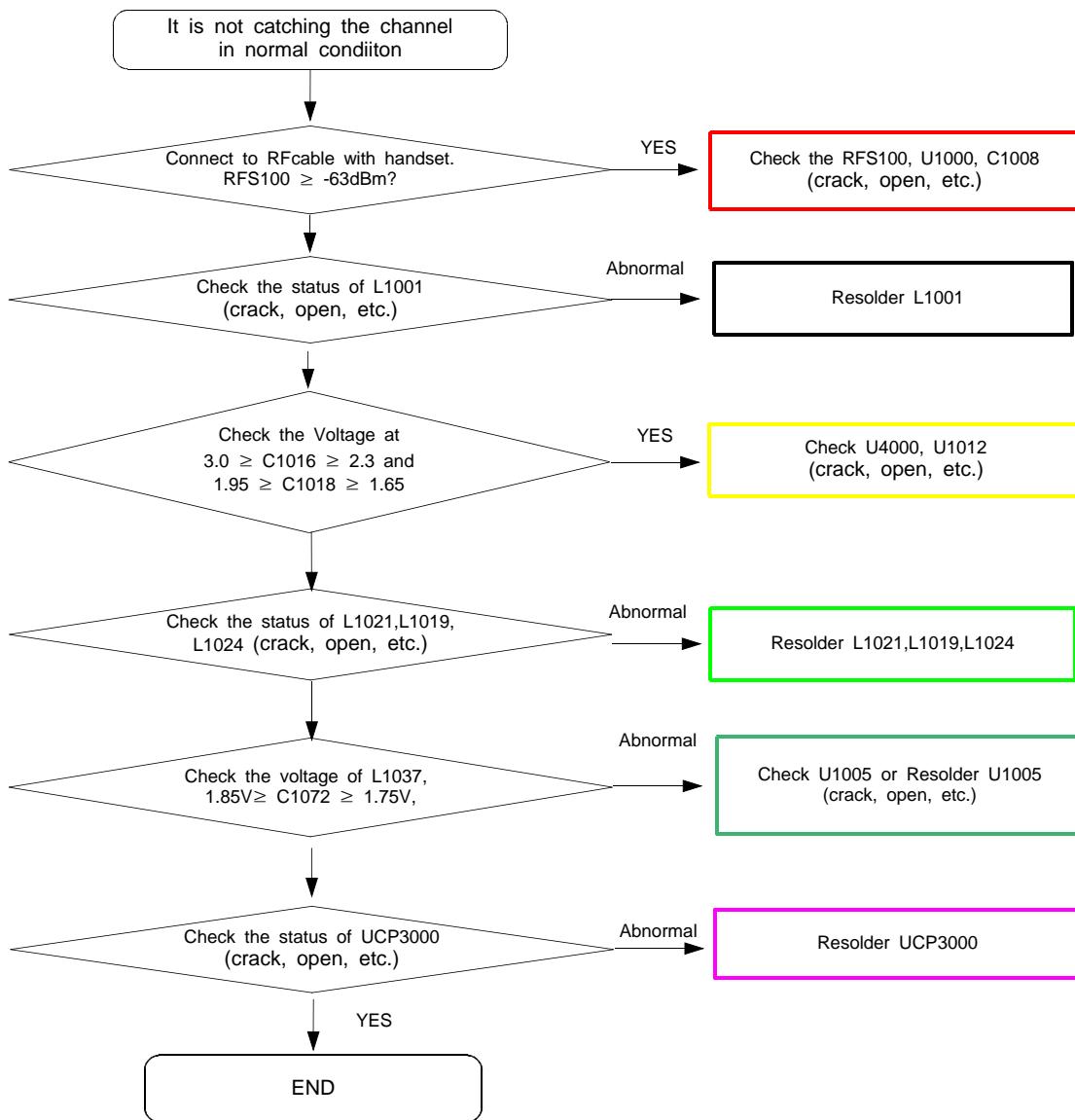
- spectrum analyzer : testing method = the way using an Oscilloscope
- 8960(or CMW500) : connect using RF Cable between 8960(or CMW500) & RF Connector in board.

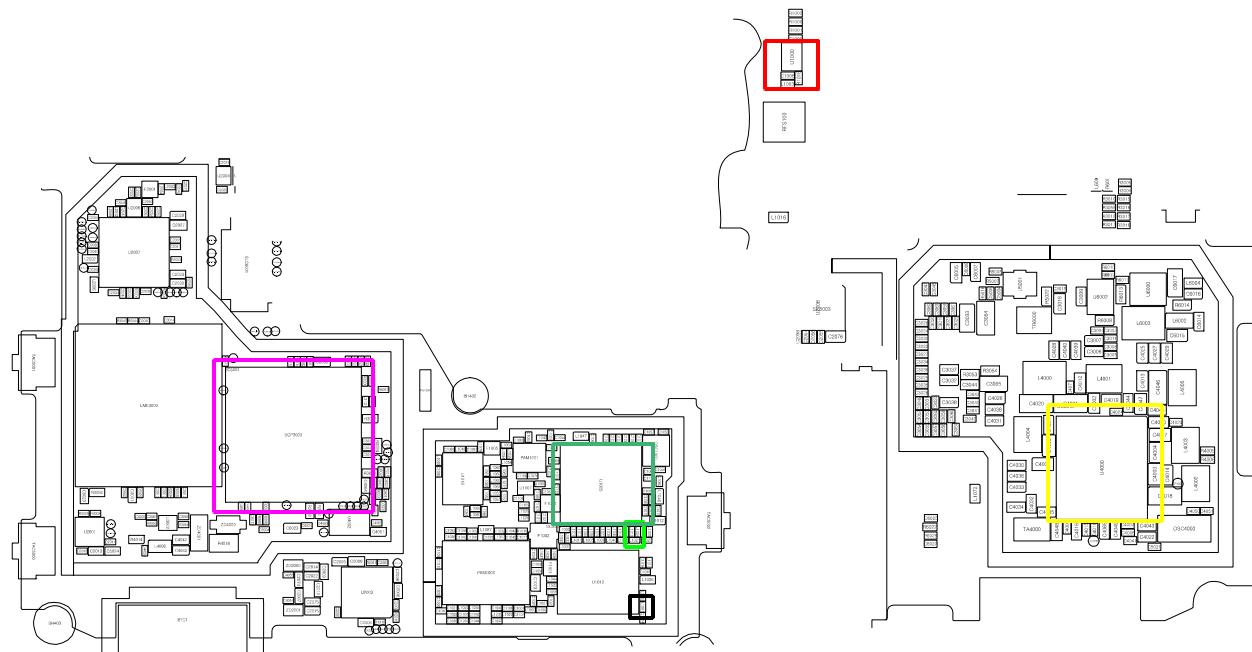
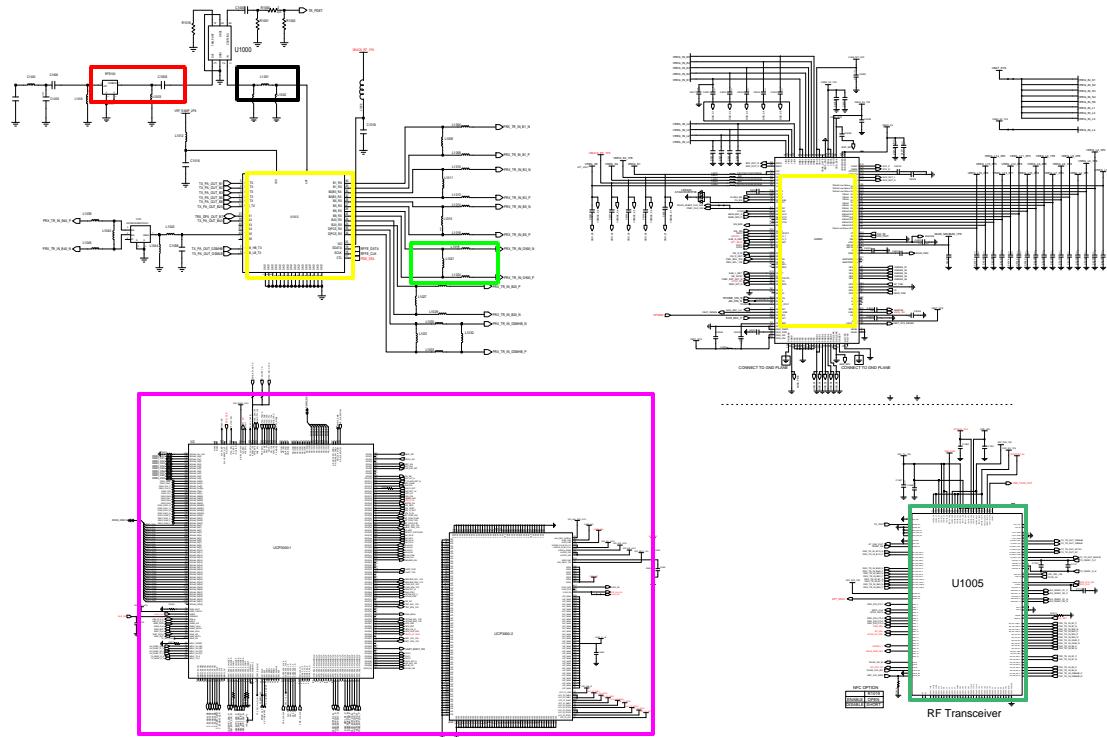
8-3-13. GSM850 / WCDMA B5 (850) Rx



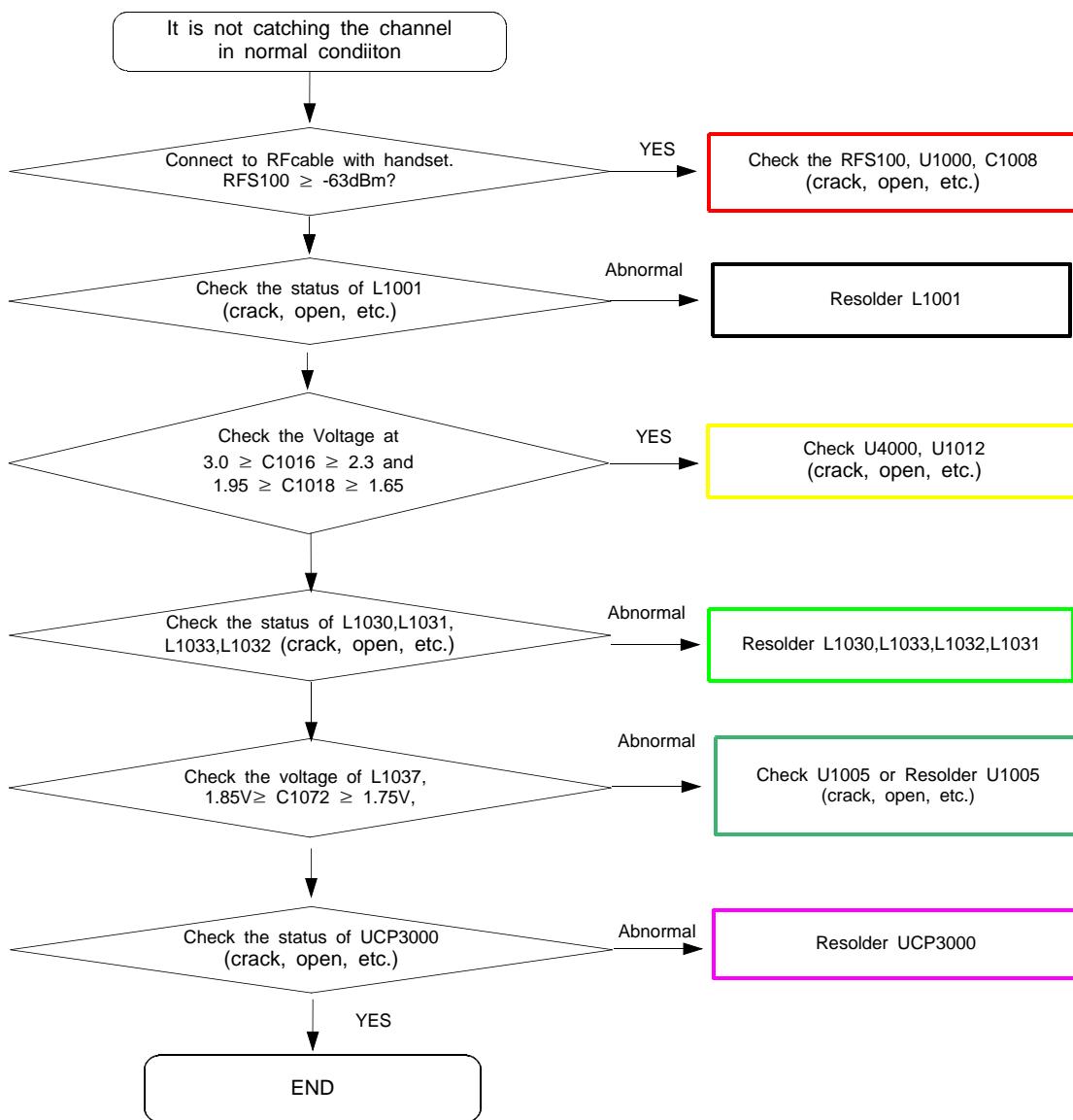


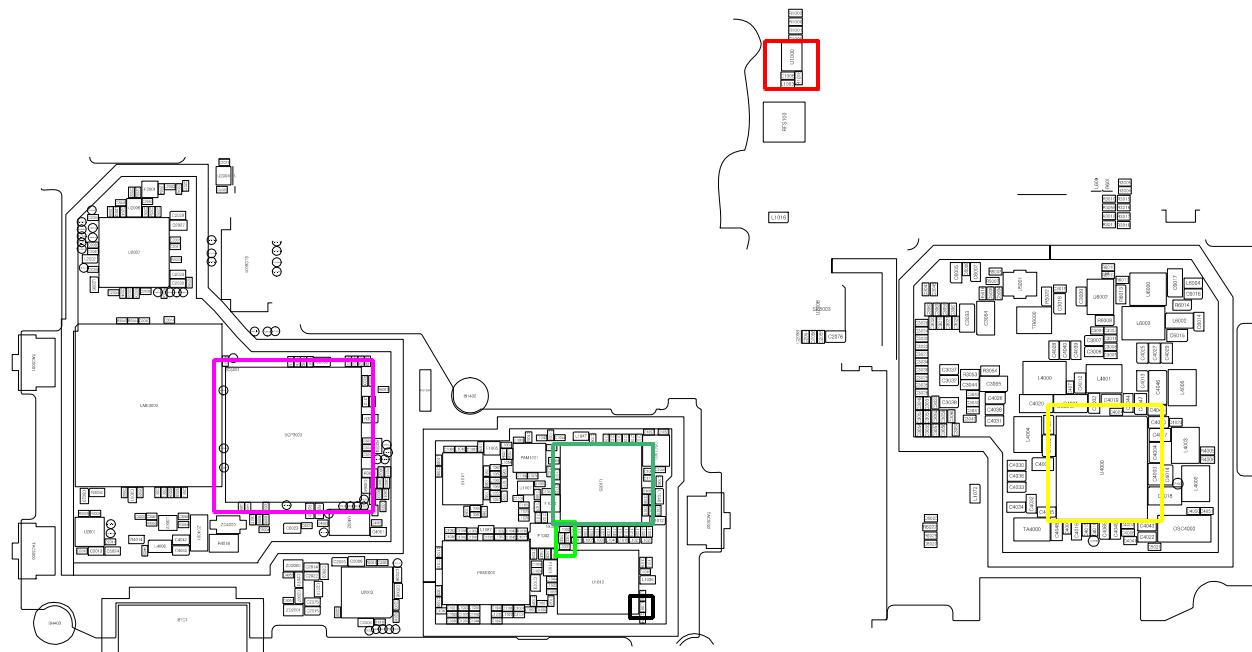
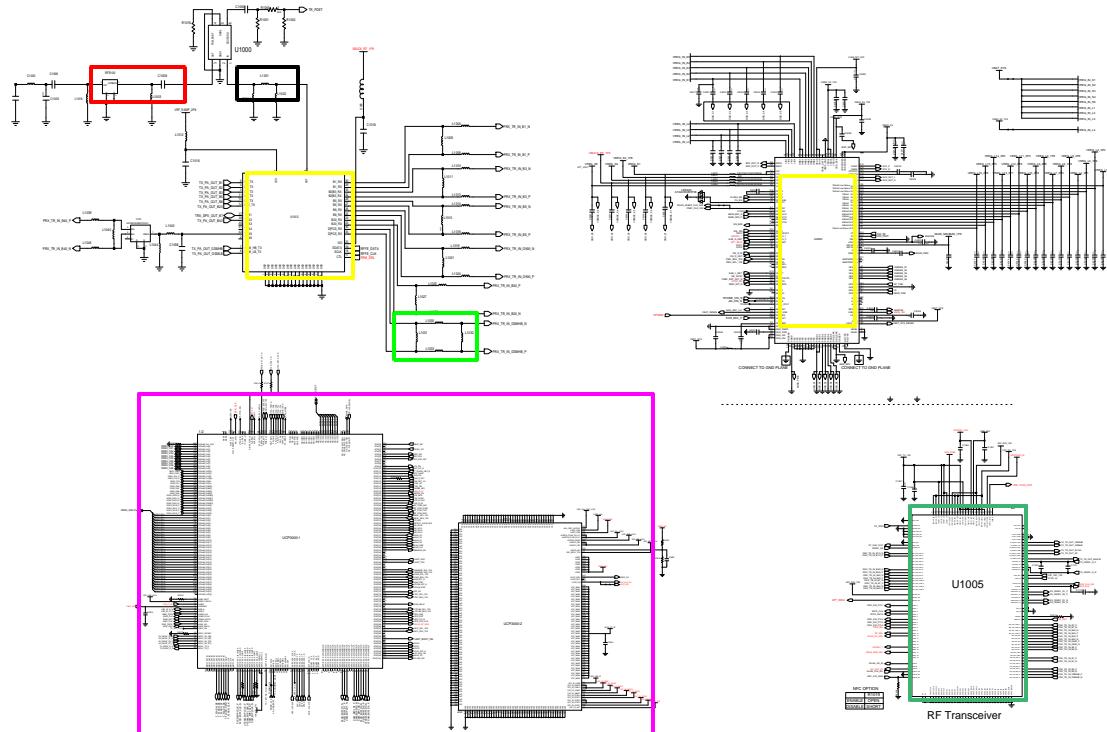
8-3-14. GSM900 / WCDMA Band8 / LTE Band8 (900) Rx



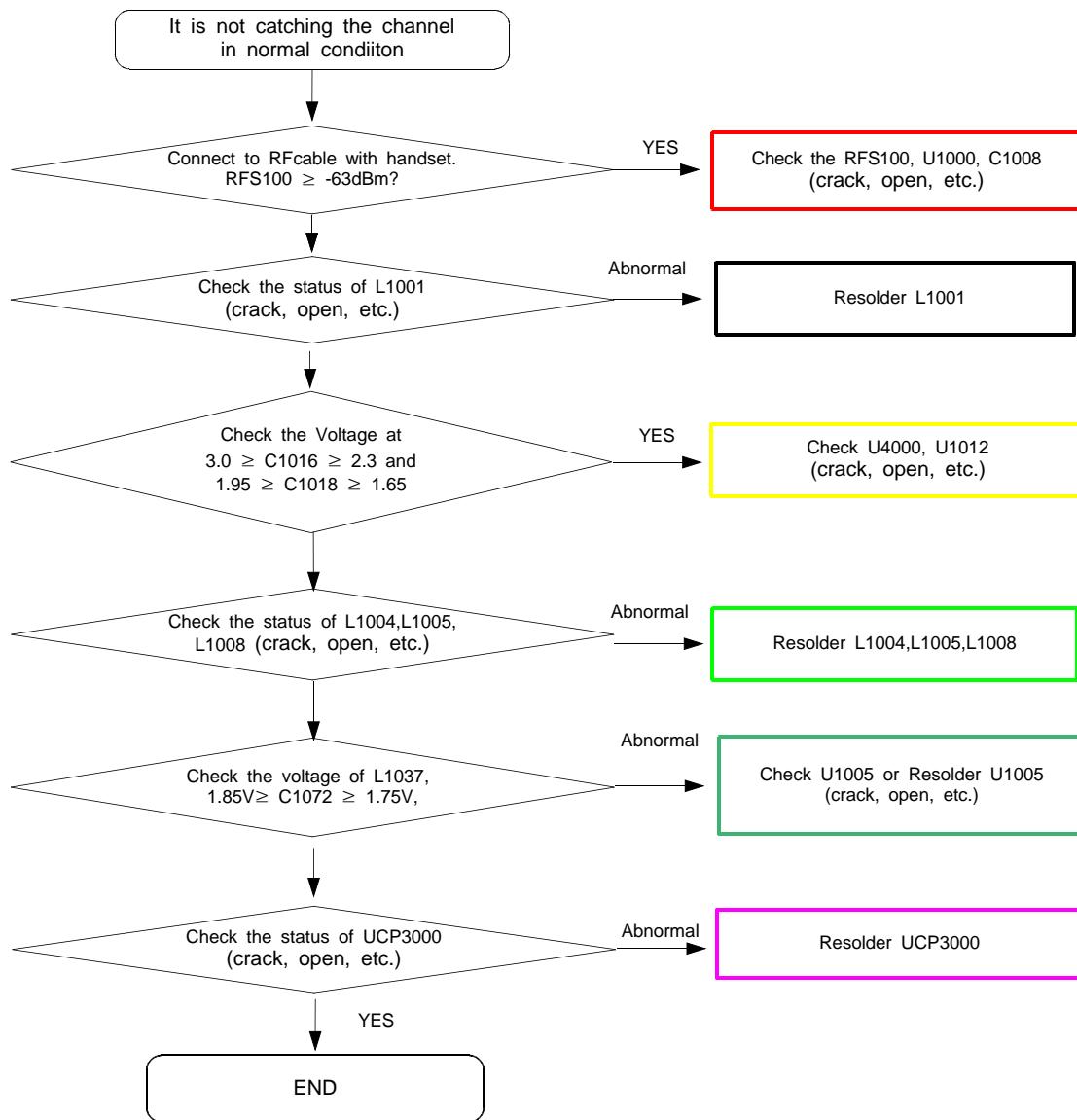


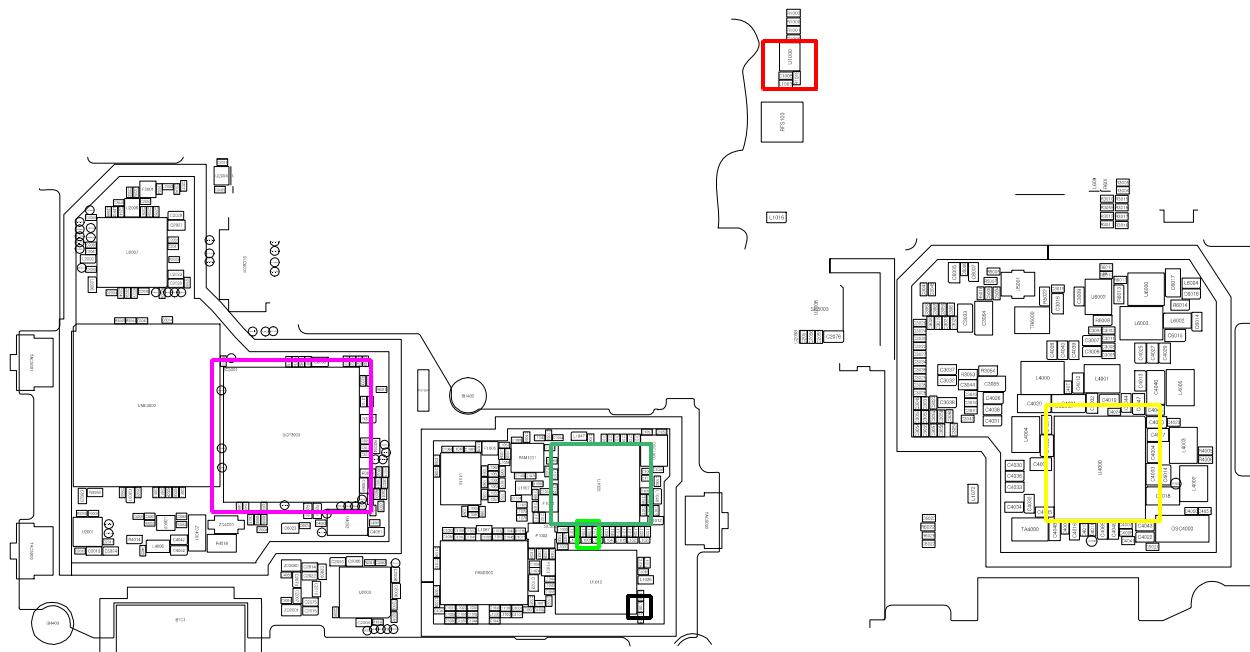
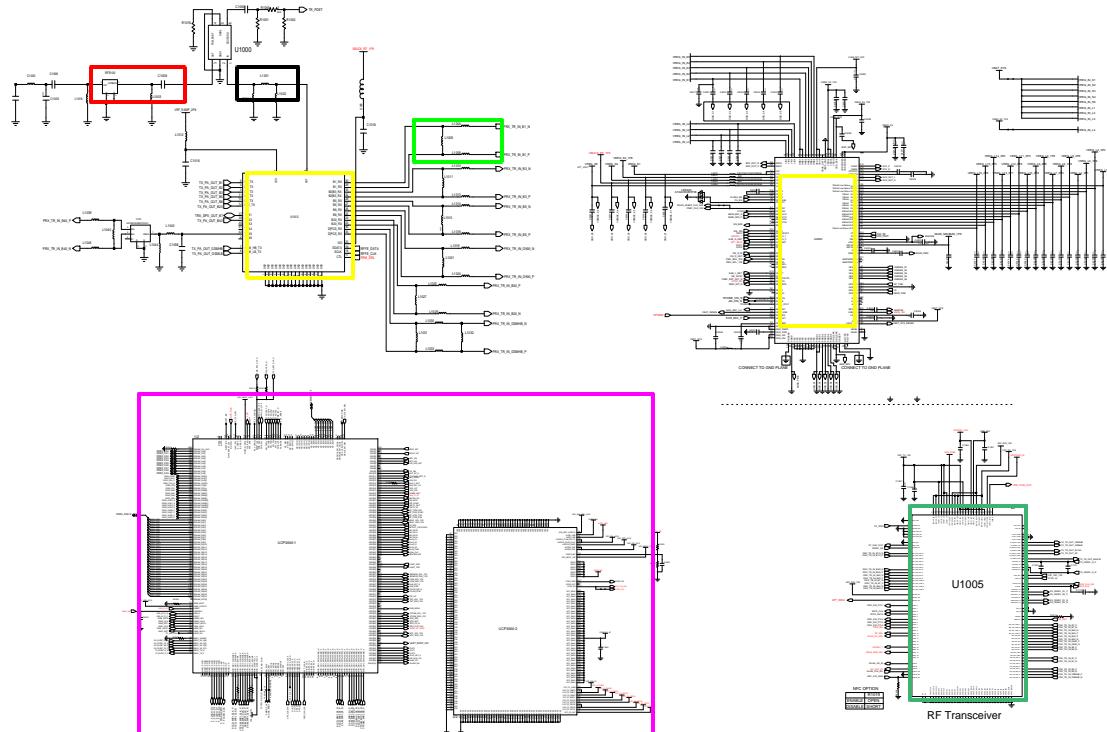
8-3-15. GSM1800 / DCS1900 Rx



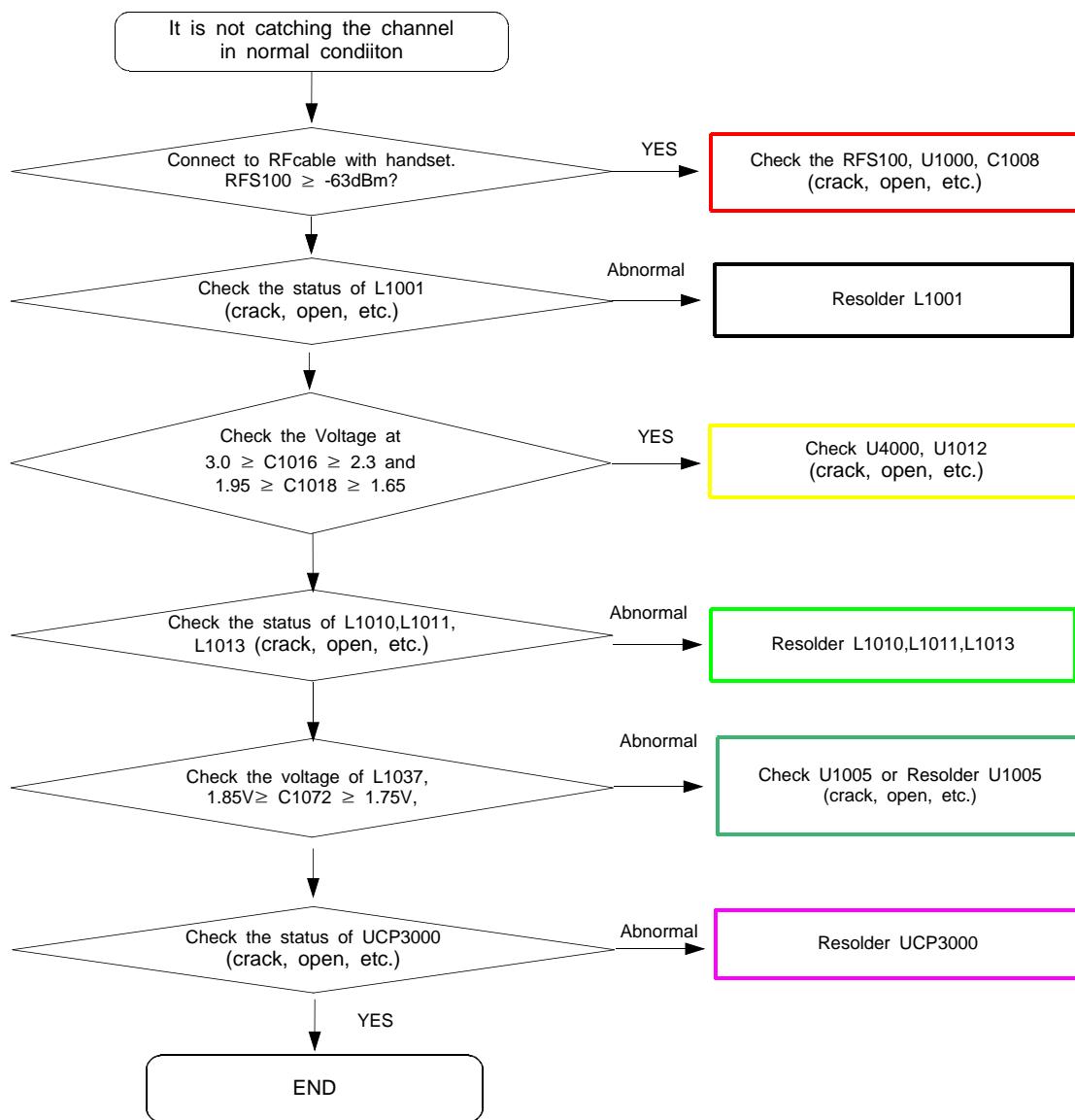


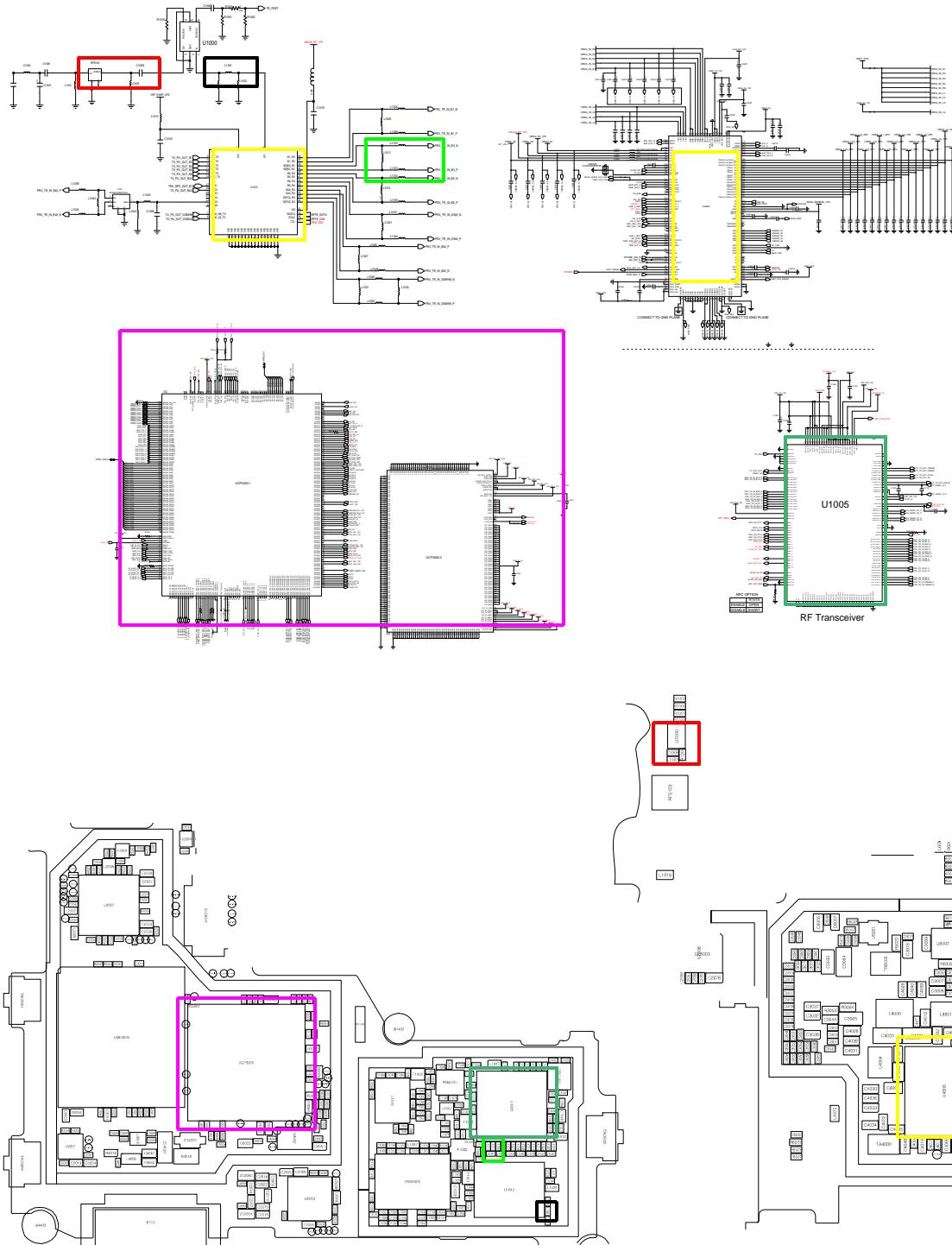
8-3-16. WCDMA Band1 ,LTE Band1 (2100) Rx



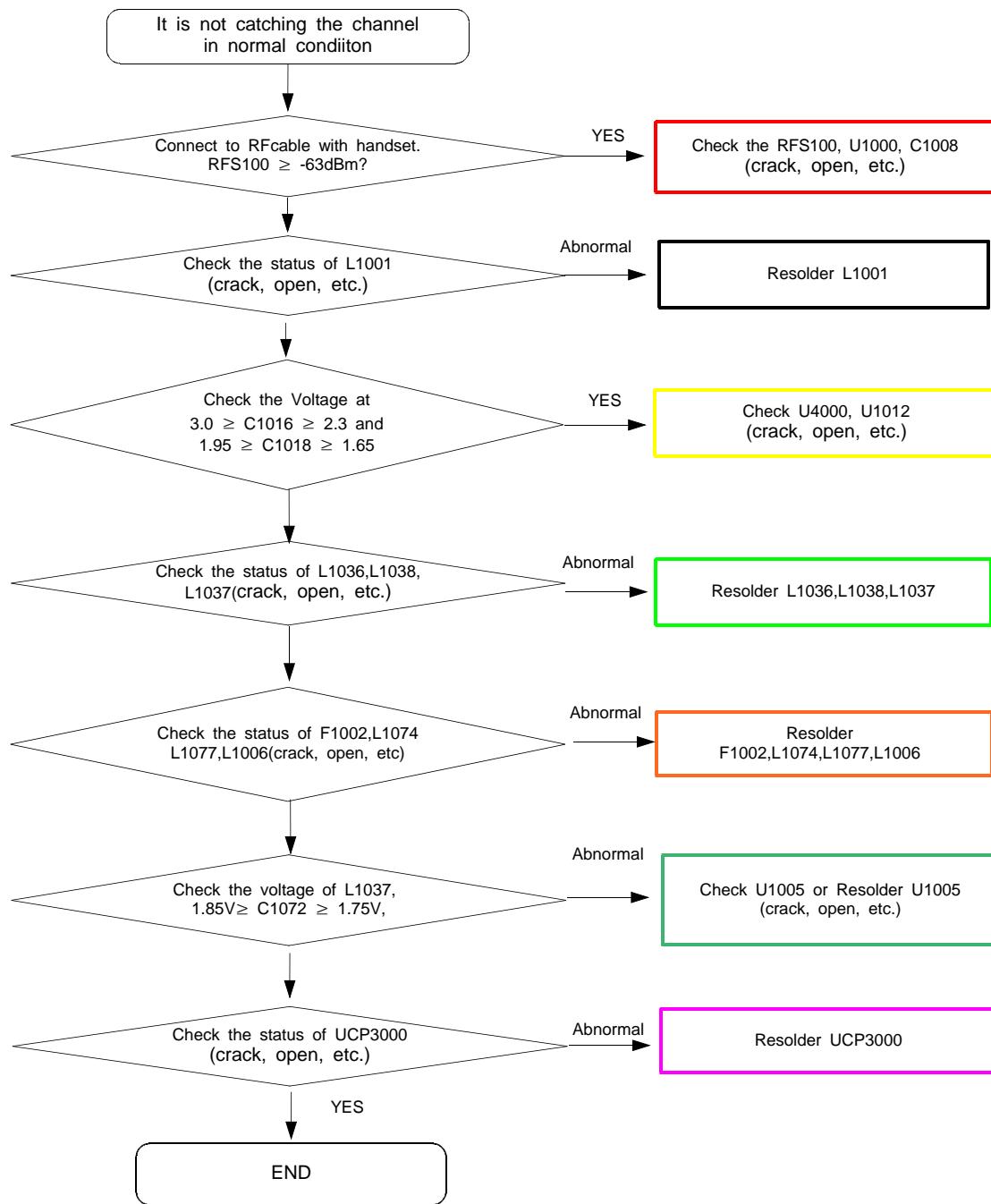


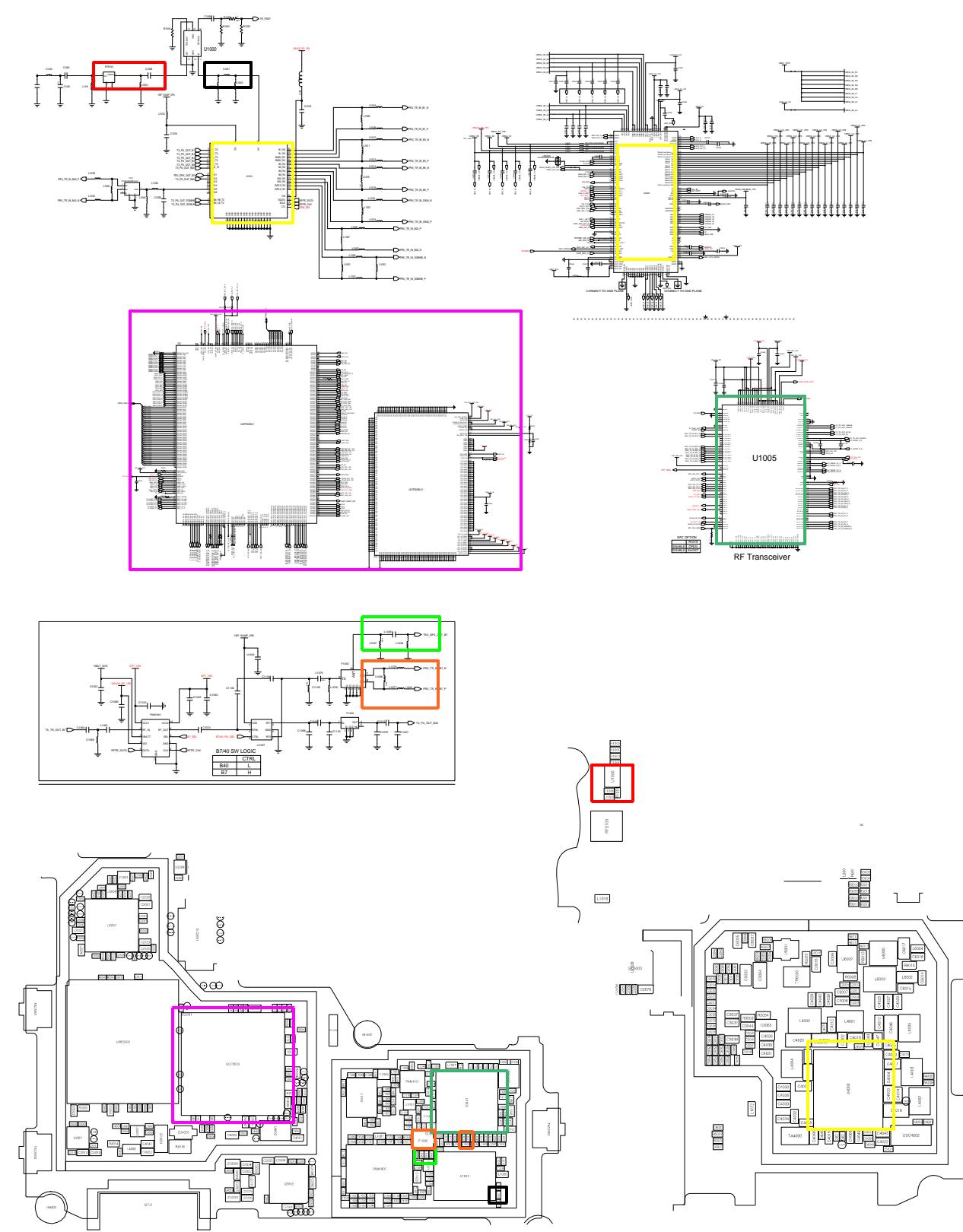
8-3-17. WCDMA Band2 / Bamd4, LTE Band2 / Band4



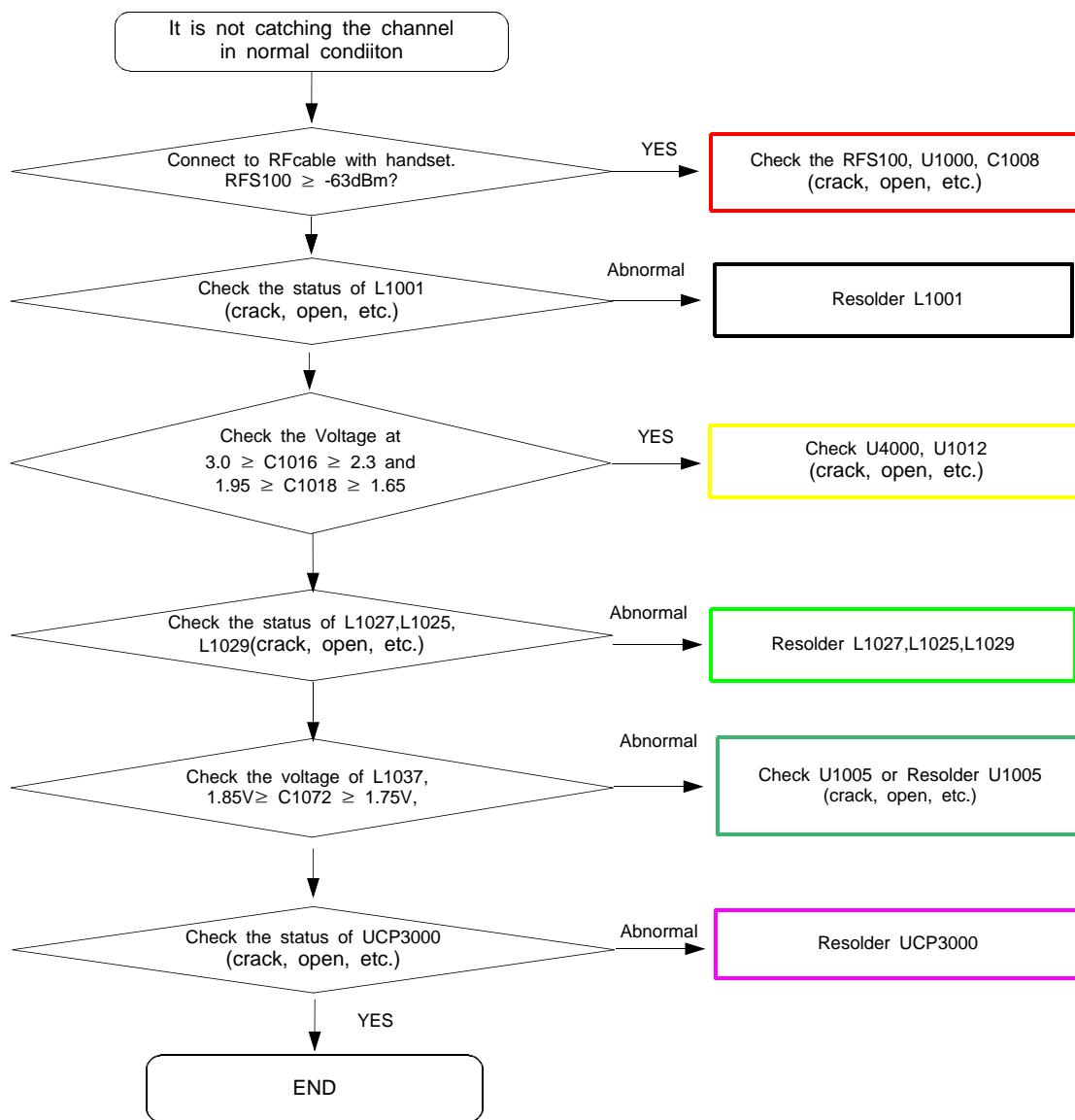


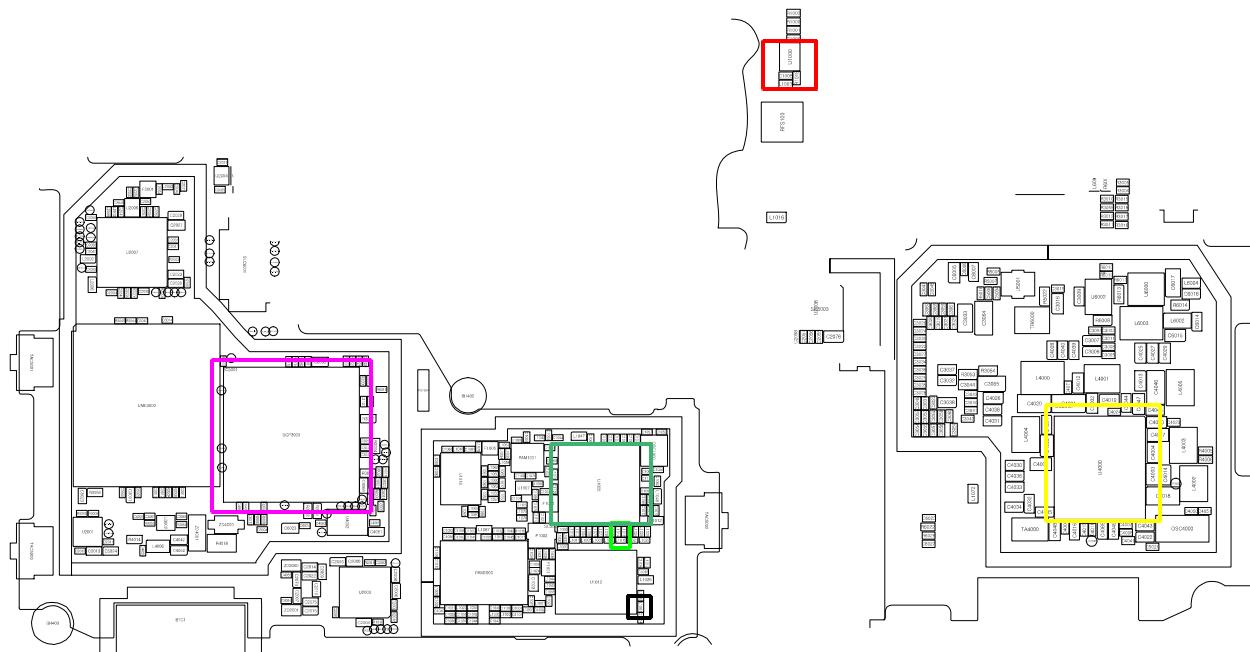
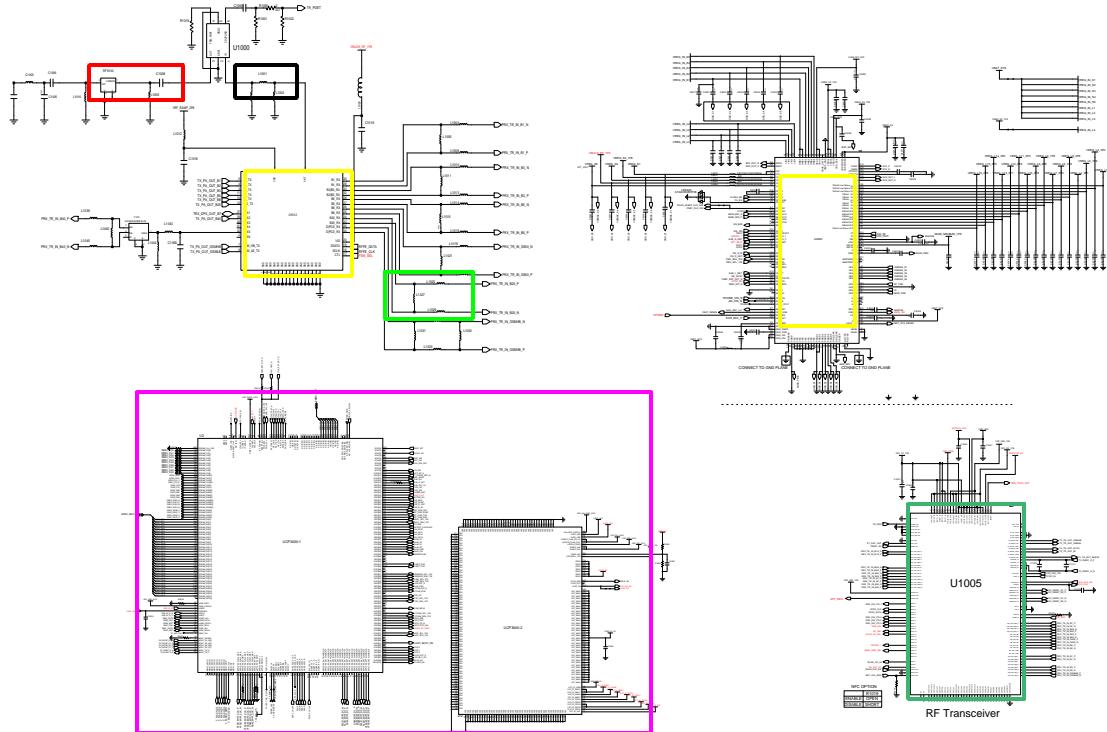
8-3-18. LTE Band7 Rx



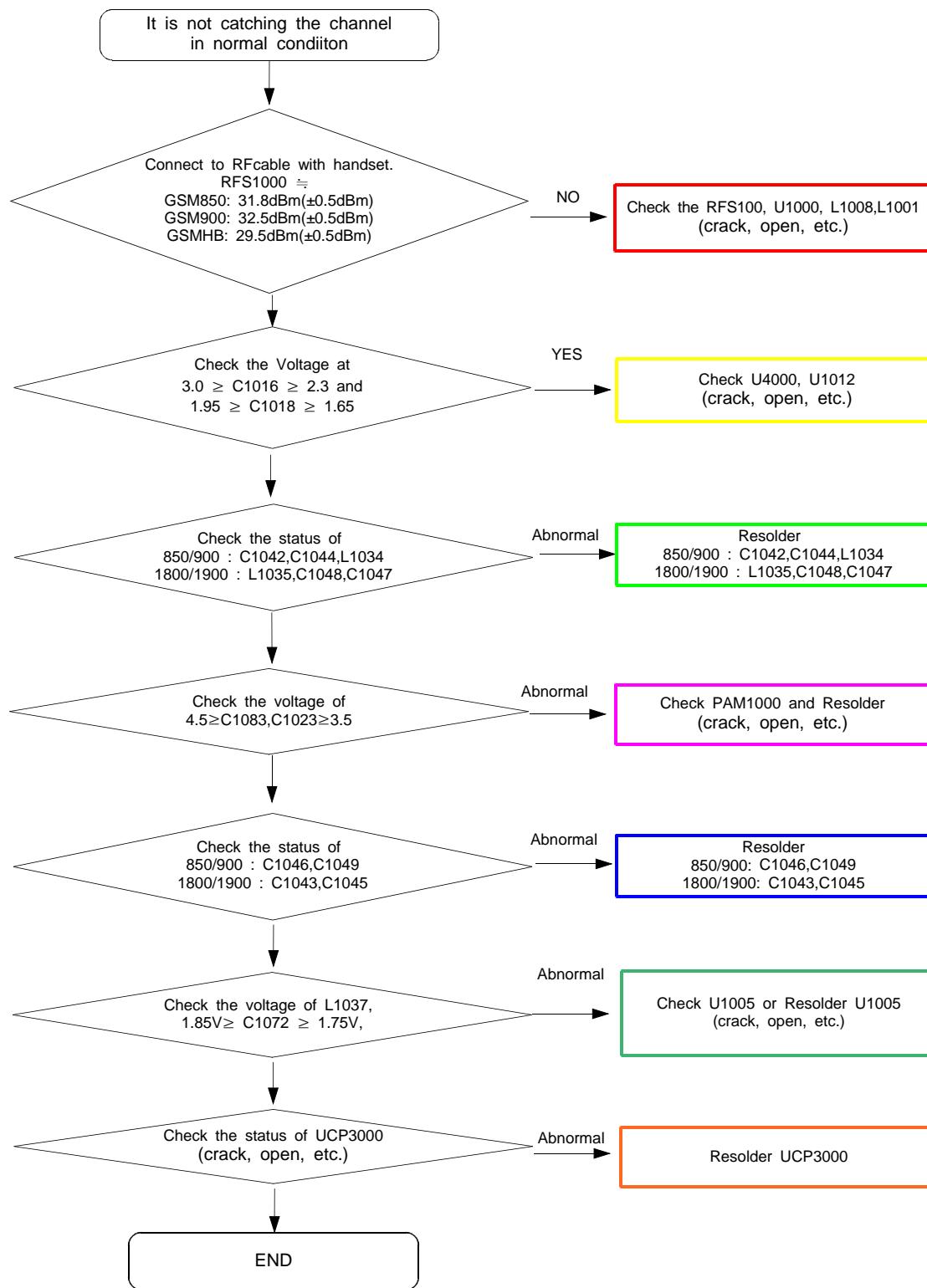


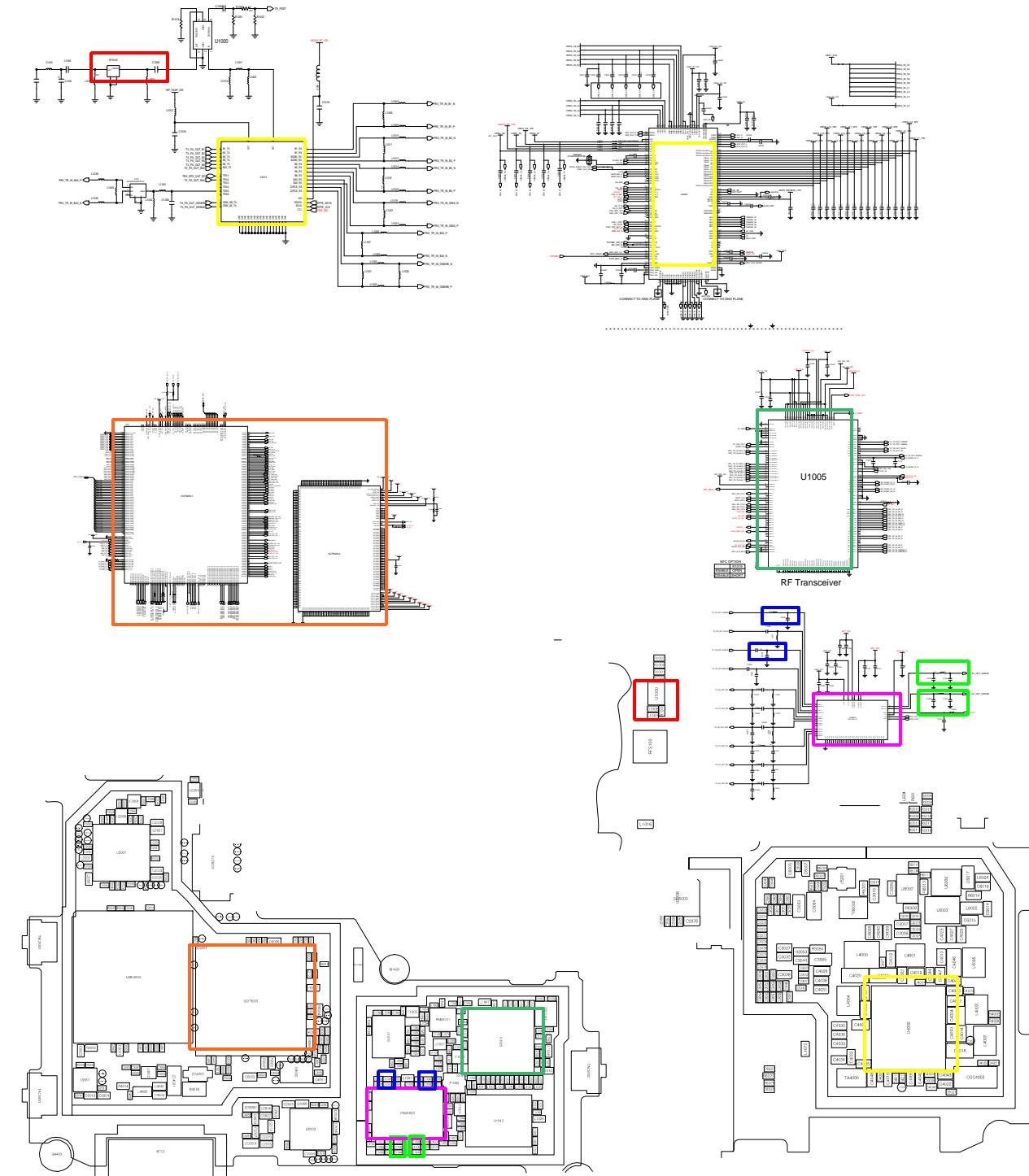
8-3-19. LTE Band17 Rx



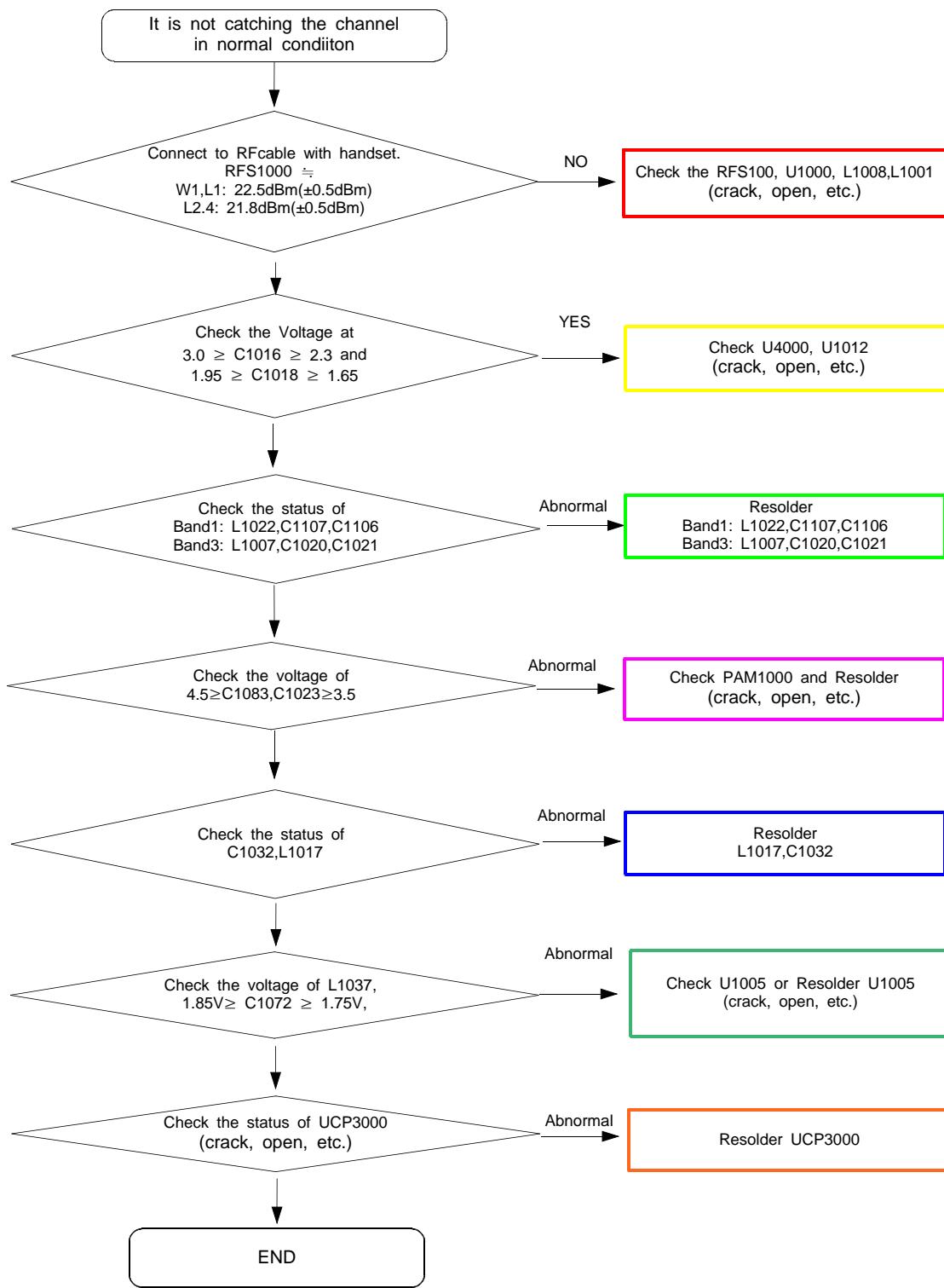


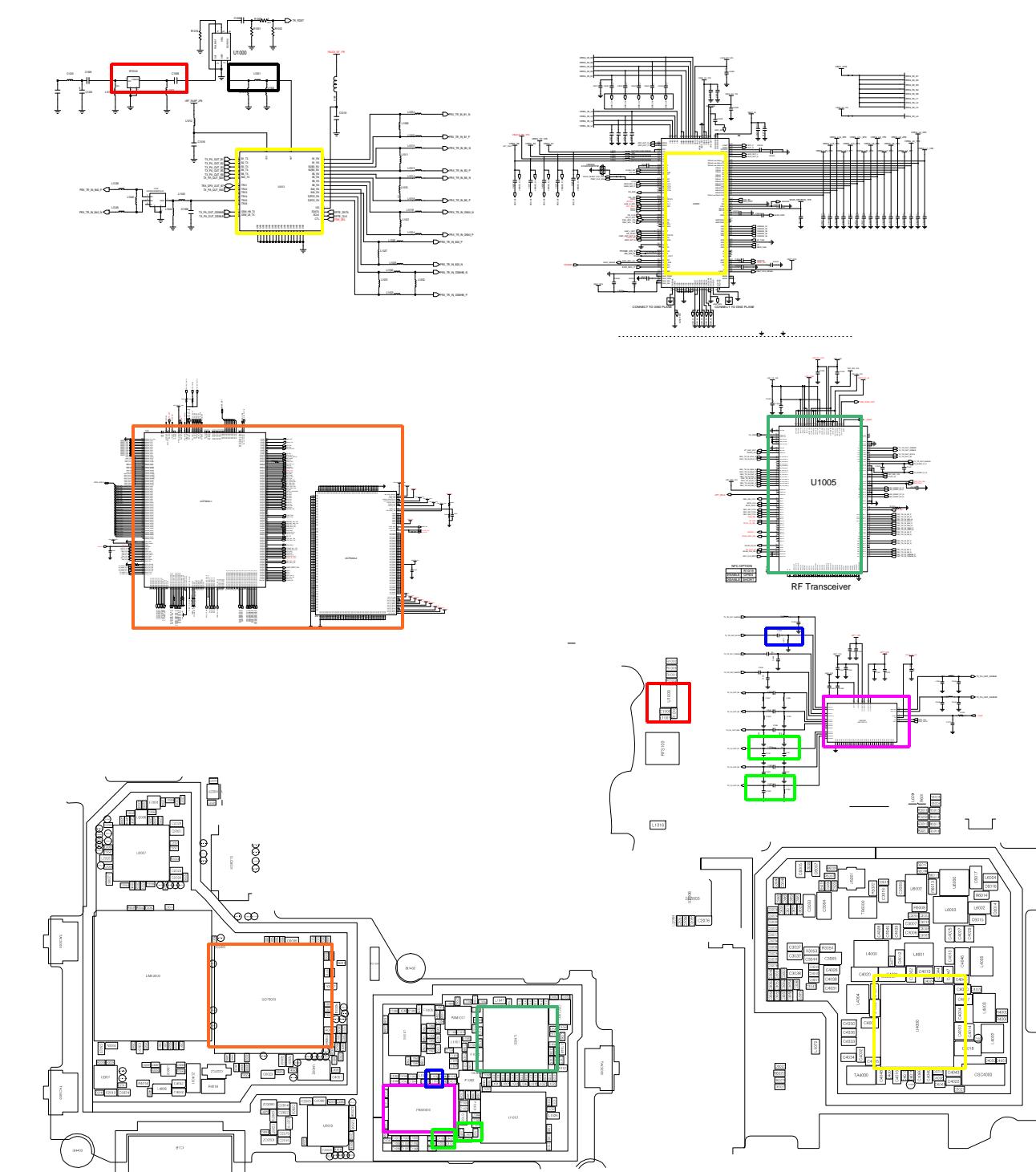
8-3-20. GSM LB(850/900) / HB(1800/1900) Tx



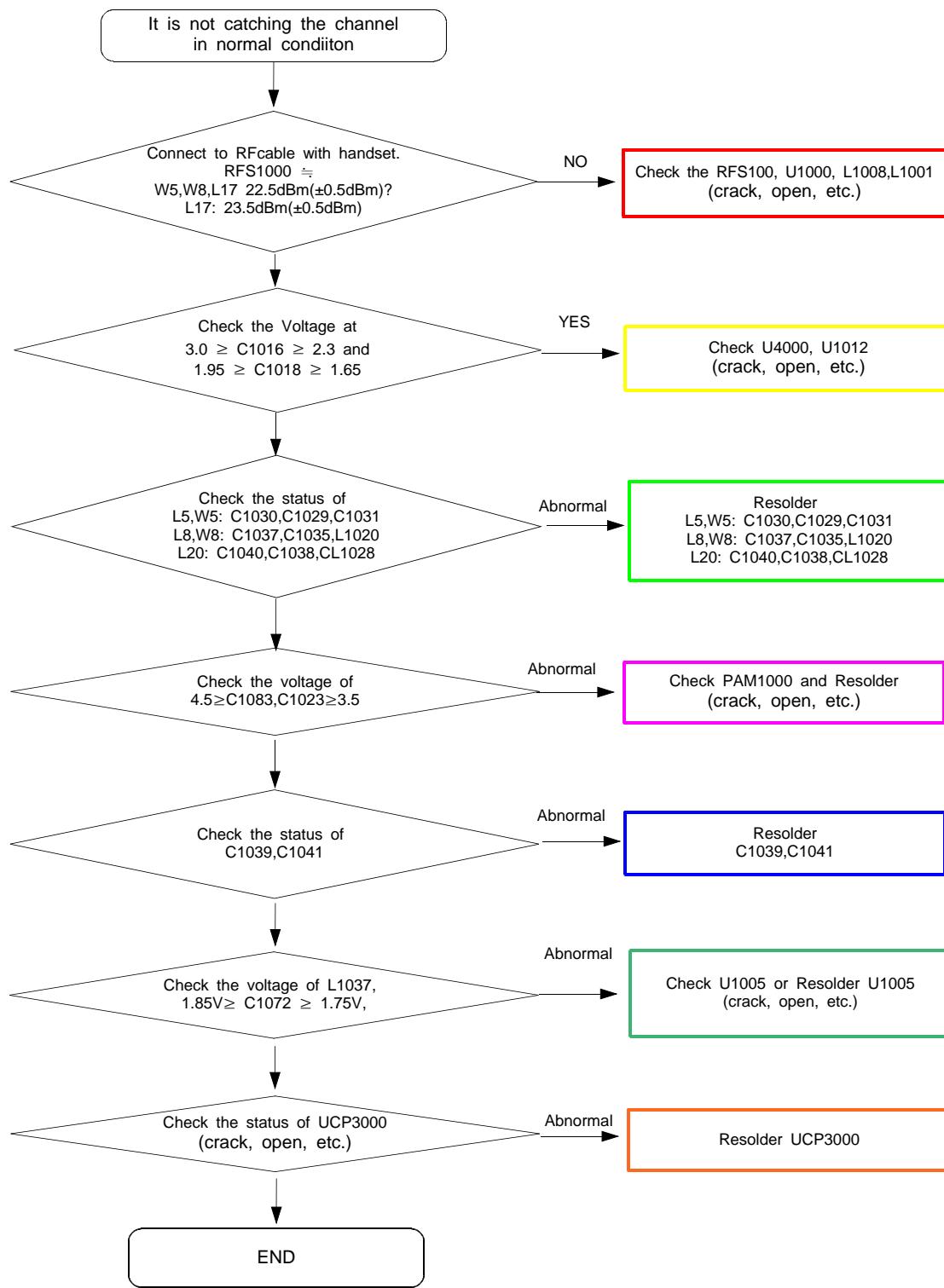


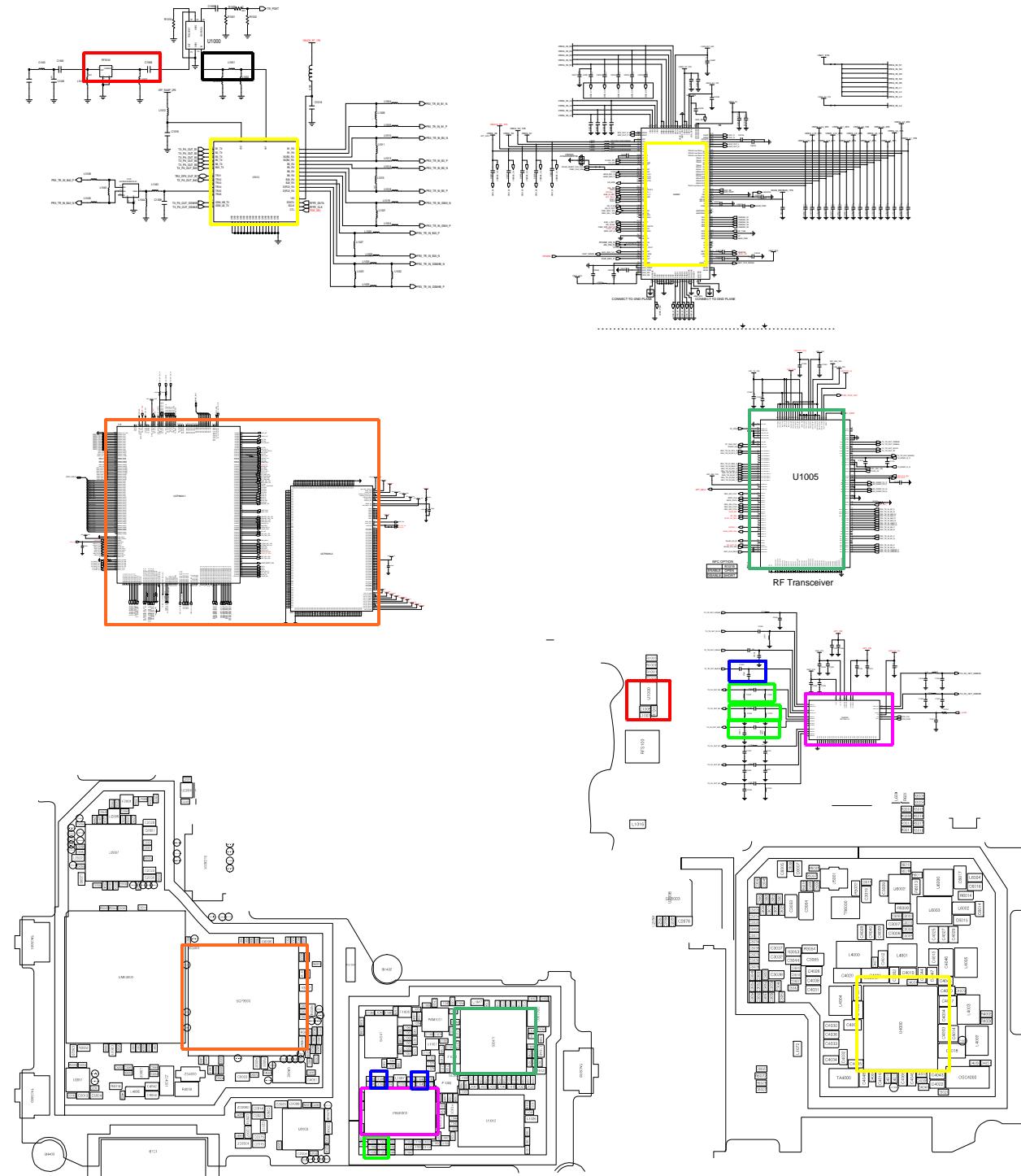
8-3-21. WCDMA Band1, LTE Band1 / WCDMA Band2 / Band4, LTE Band2 / Band4



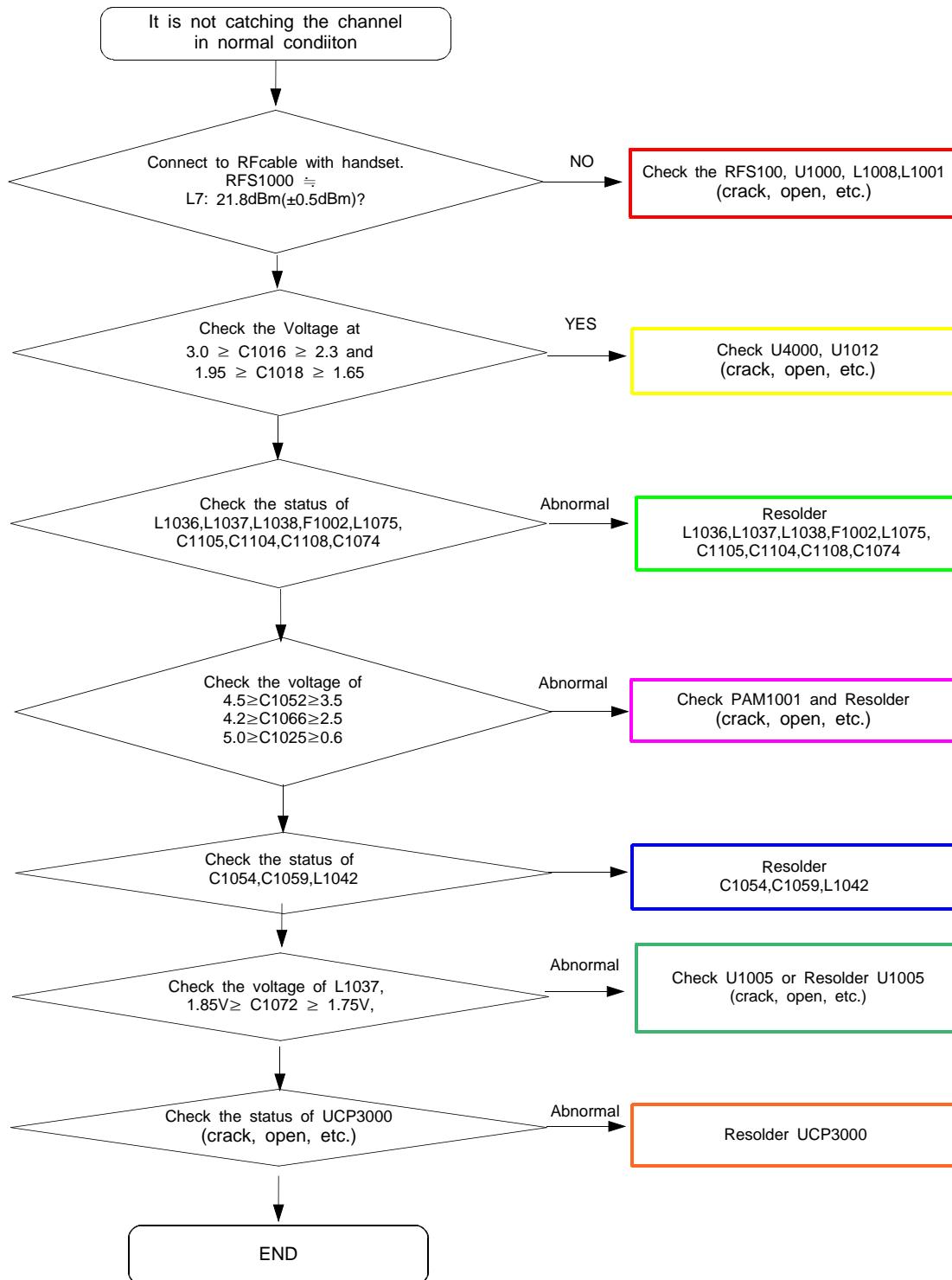


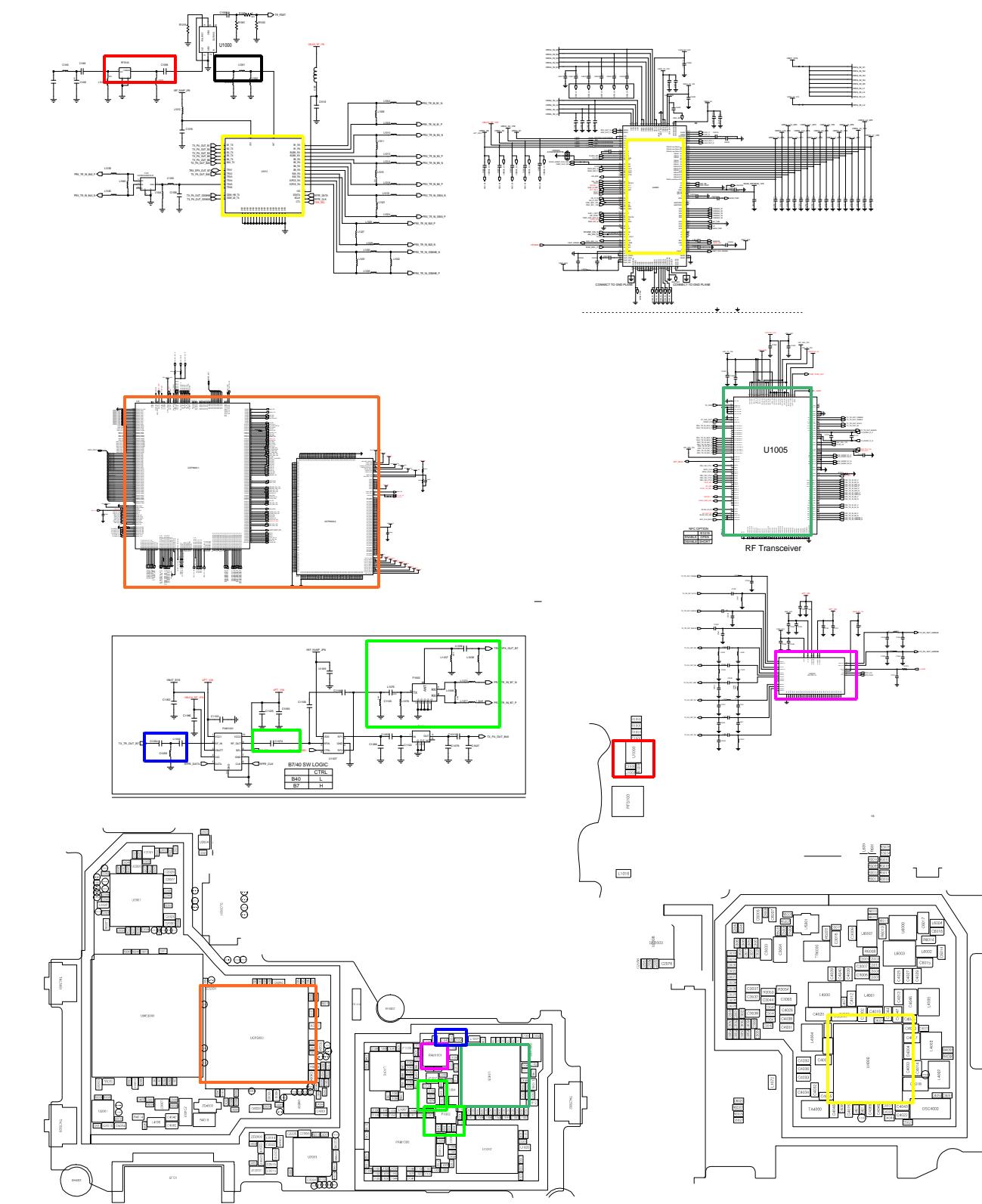
8-3-22. WCDMA Band5(850) / Band8(900), LTE Band17 /LTE Band5 / Band8 Tx



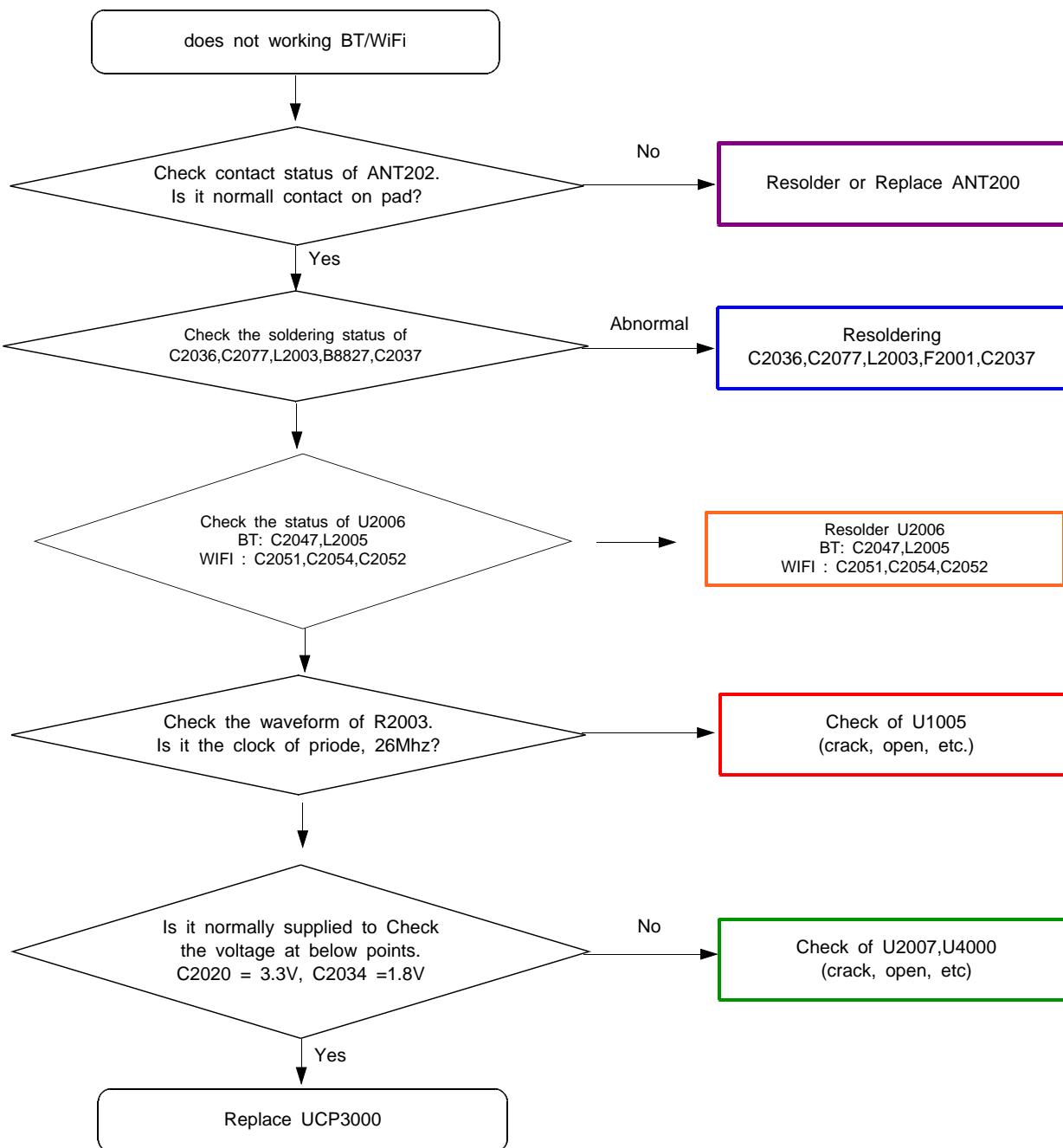


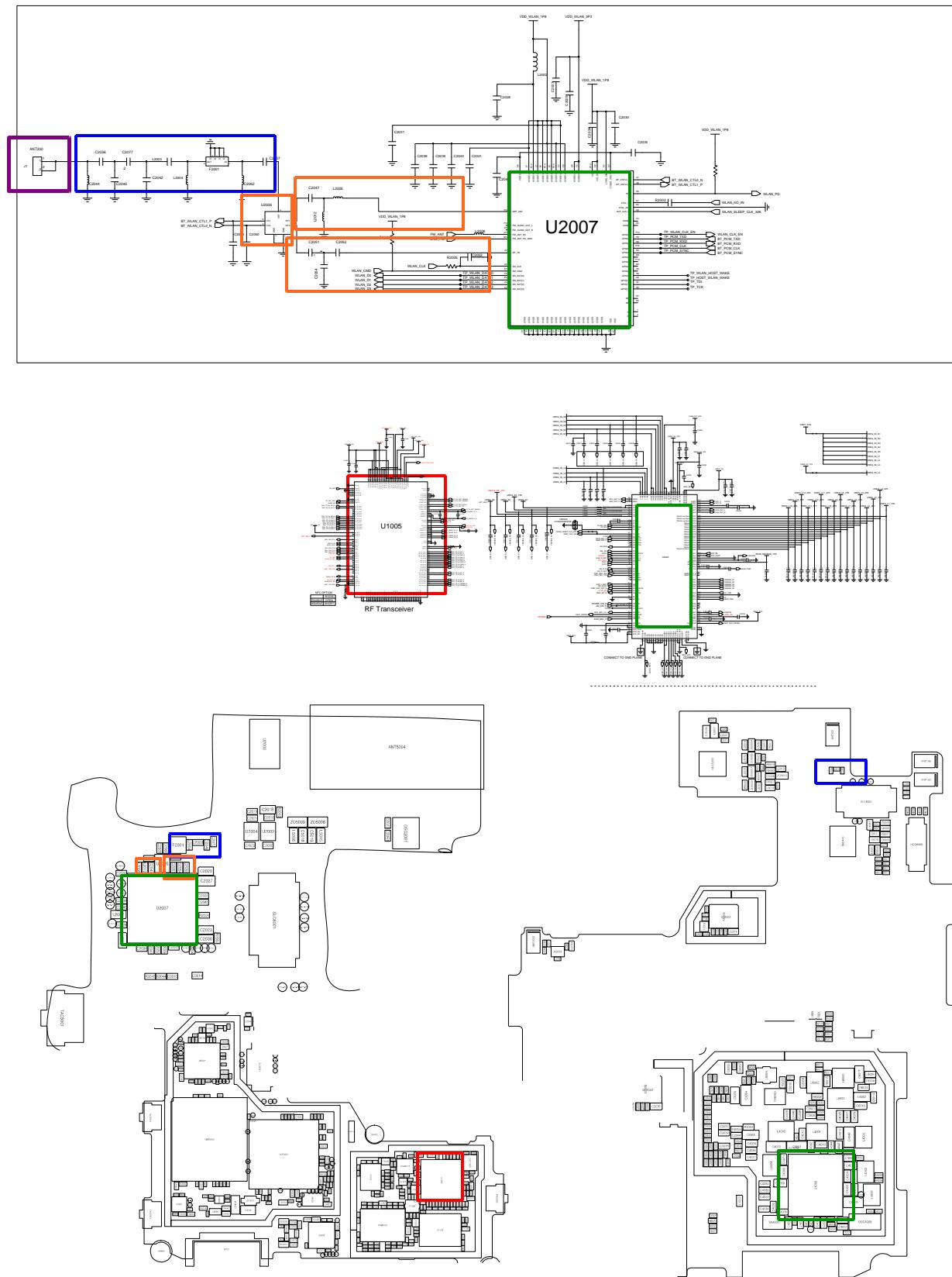
8-3-23. LTE Band7 Tx



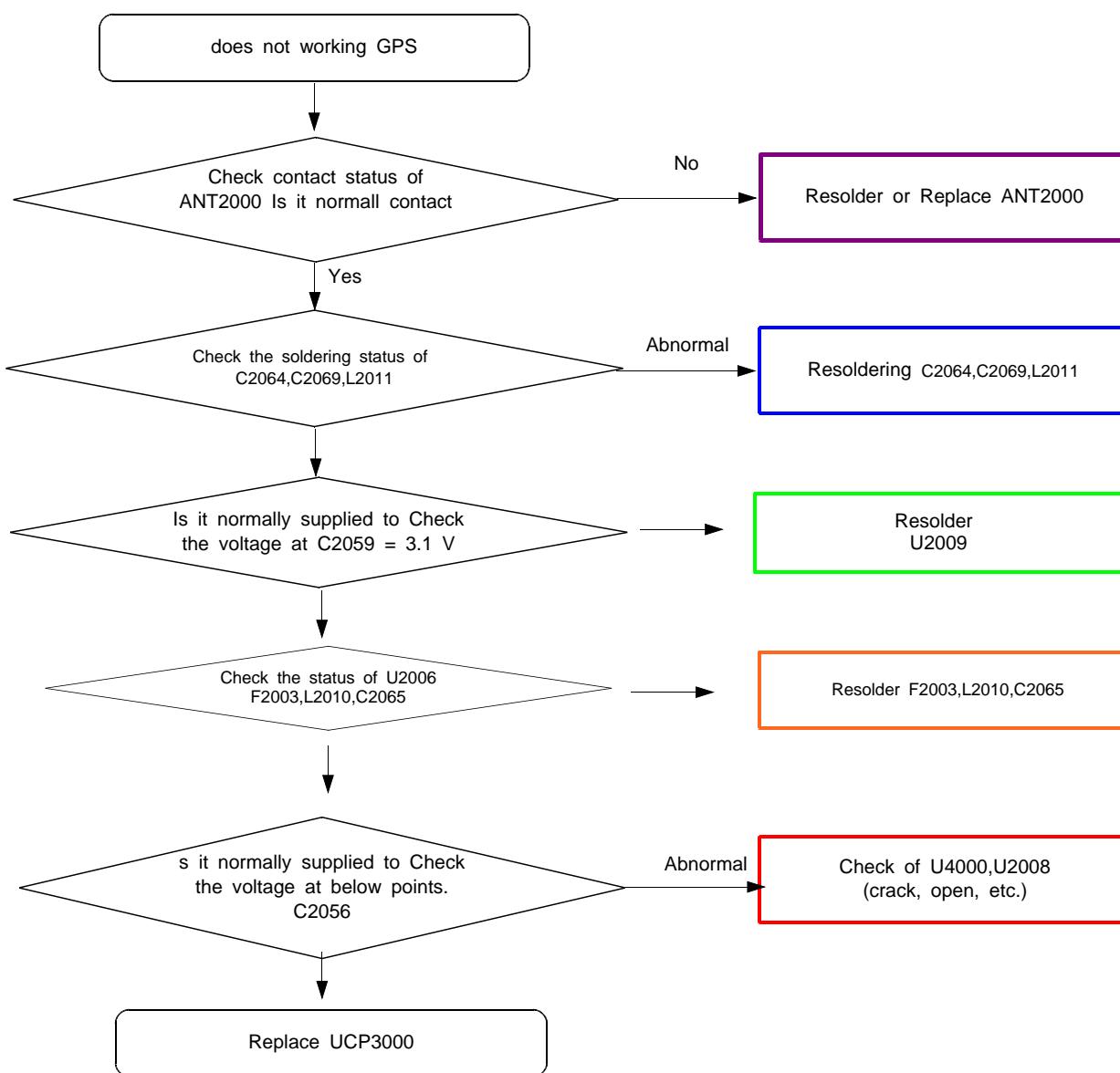


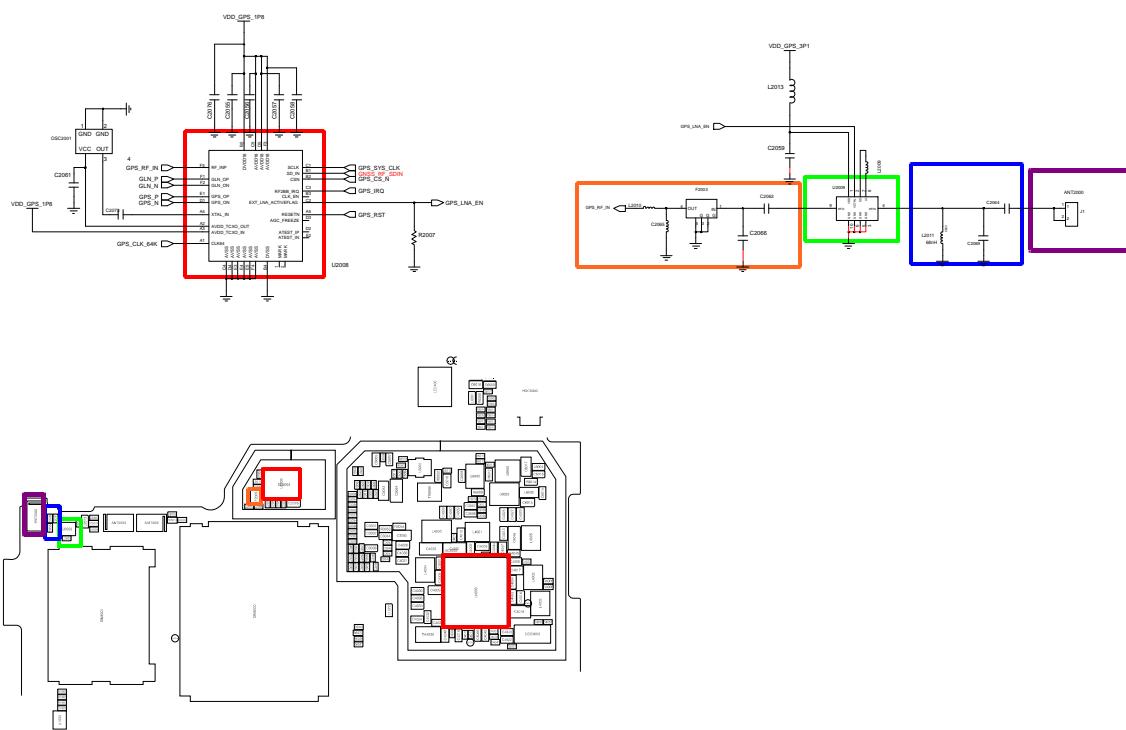
8-3-24. BT/WIFI





8-3-25 GPS





8-6. Service Schematics**- NC Point(Top View)****U4000**

● : NC

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