8. Level 3 Repair

9-1. Battery Replacement

→ Whenever the battery should be changed from broken one to new one, "Battery accumulation usage-amount initialization" should be done like below.

9-1-1. Required items in order to repair battery

- SM-A500F/G/H Mobile Phone
- SM-A500F/G/H Battery
- PC
- JIG BOX (GH81-11888A)
- JIG Cable (GH81-10952A)
- Serial Cable

*** Settings**



Connect ANYWAY JIG
with JIG CABLE (Phone to JIG)
and PC to Anyway JIG Using Serial cable







- 9-1-2. Battery replacement procedure.
- To Be Determined soon.

9-1. Speaker module Replacement

→ Whenever speaker module should be changed from broken one to new one, "SPK calibration" should be done like below.

9-1-1. Required items in order to repair speaker module

- SM-A500F/G/H Mobile Phone
- SM-A500F/G/H Speaker module
- PC
- Earphone
- JIG BOX (GH81-11888A)
- JIG Cable (GH81-10952A)
- Serial Cable



Connect ANYWAY JIG
with JIG CABLE (Phone to JIG)
and PC to Anyway JIG Using Serial cable

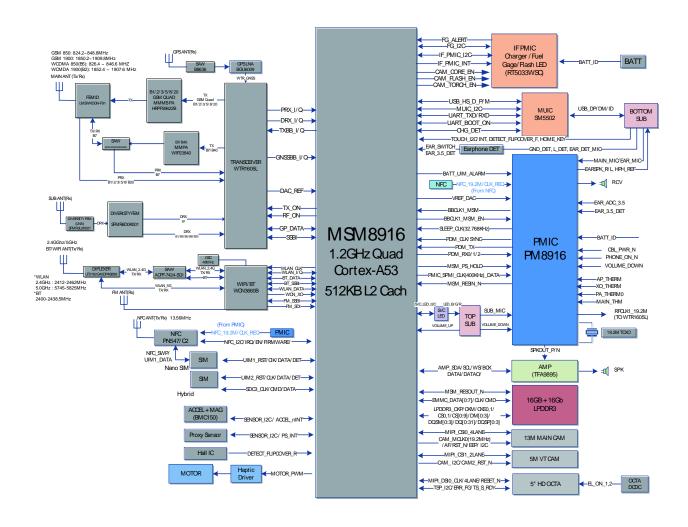






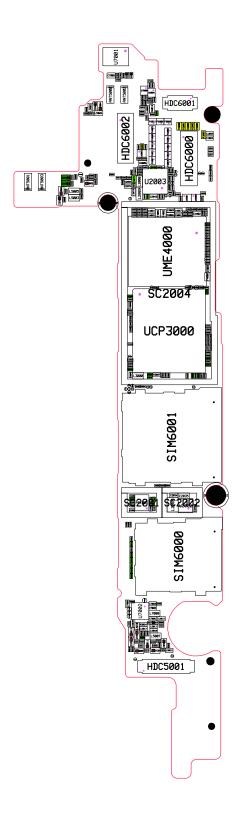
- 9-1-2. Speaker module replacement procedure.
 - To Be Determined soon.

8-1. Block Diagram

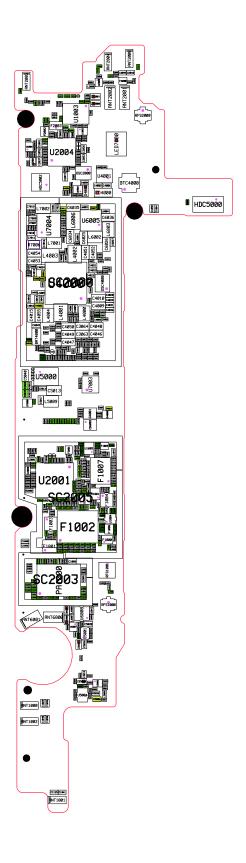


8-2. PCB Diagrams

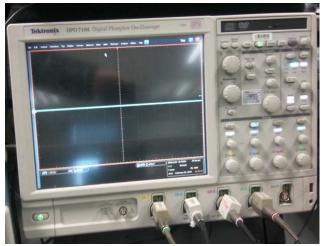
8-2-1. Main PCB Top



8-2-2. Bottom



8-2-3. Equipments



↑ Oscilloscope



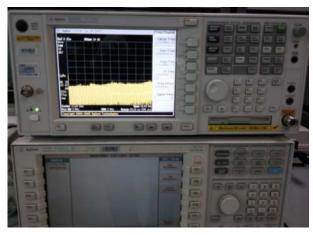
↑ Digital Multimeter



↑ Power Supply



↑ + driver, ESD Safe Tweezer



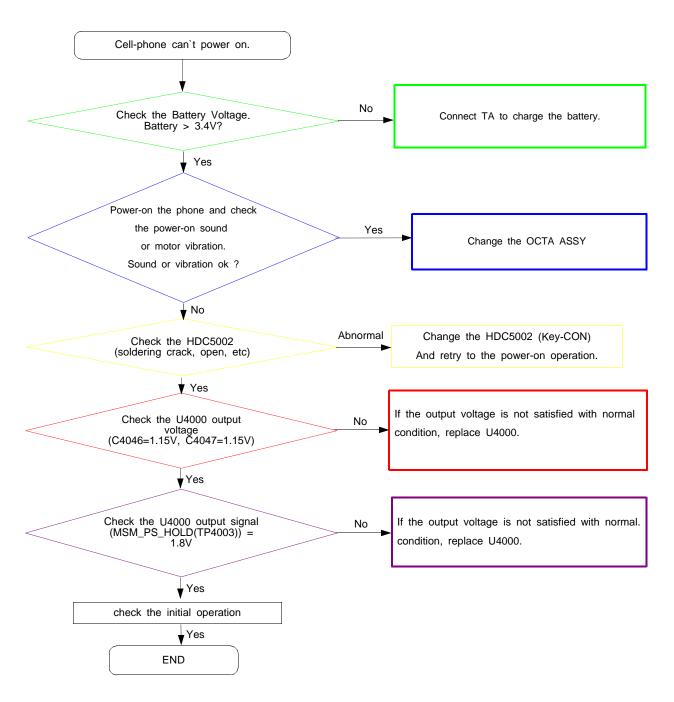
↑ 8960 & Spectrum Analyzer

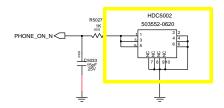


↑ Soldering iron

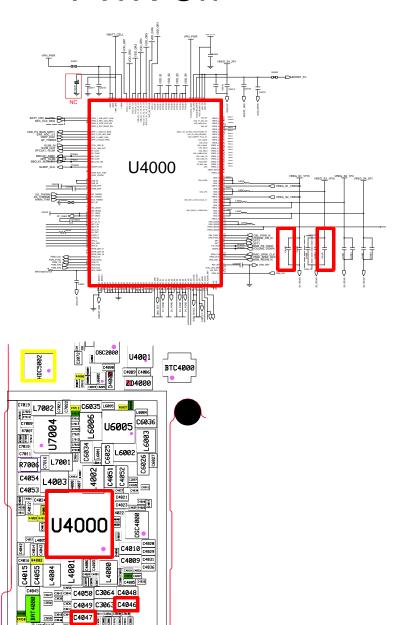
8-3. Flow Chart of Troubleshooting

8-3-1. Power On

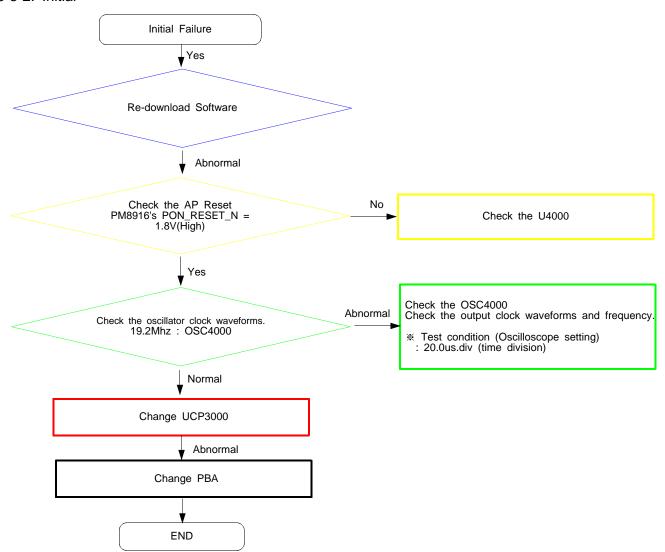


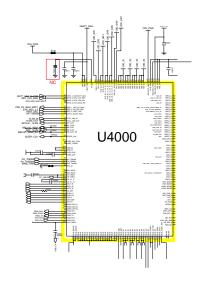


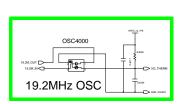
PWR On

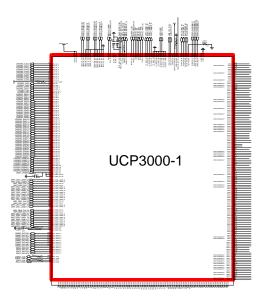


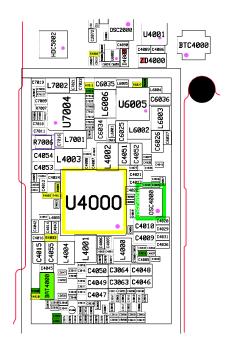
8-3-2. Initial

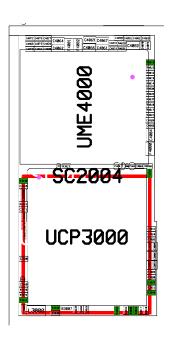




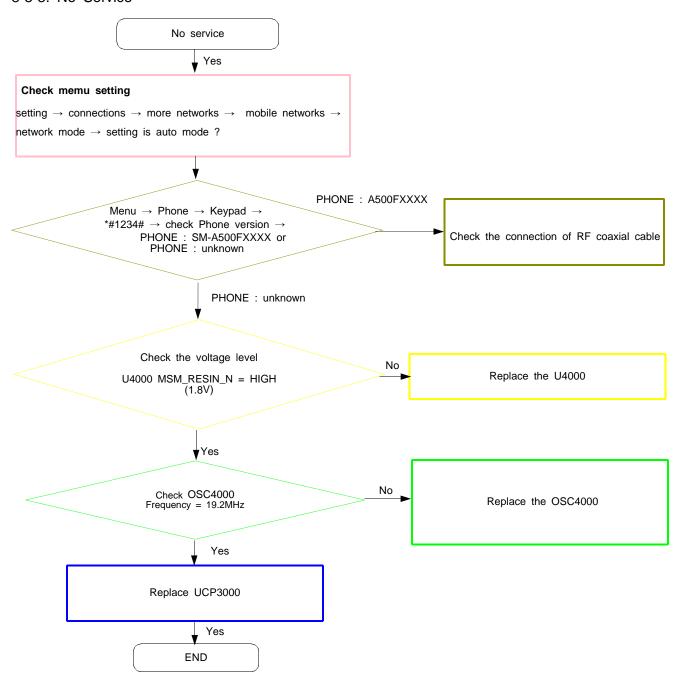


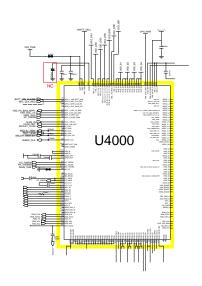


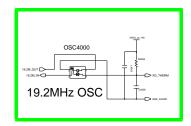


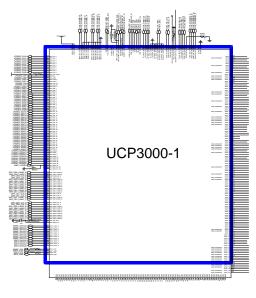


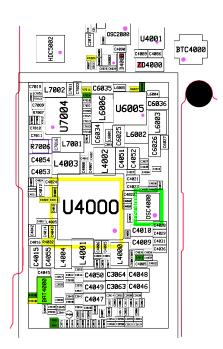
8-3-3. No Service

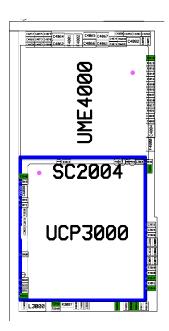




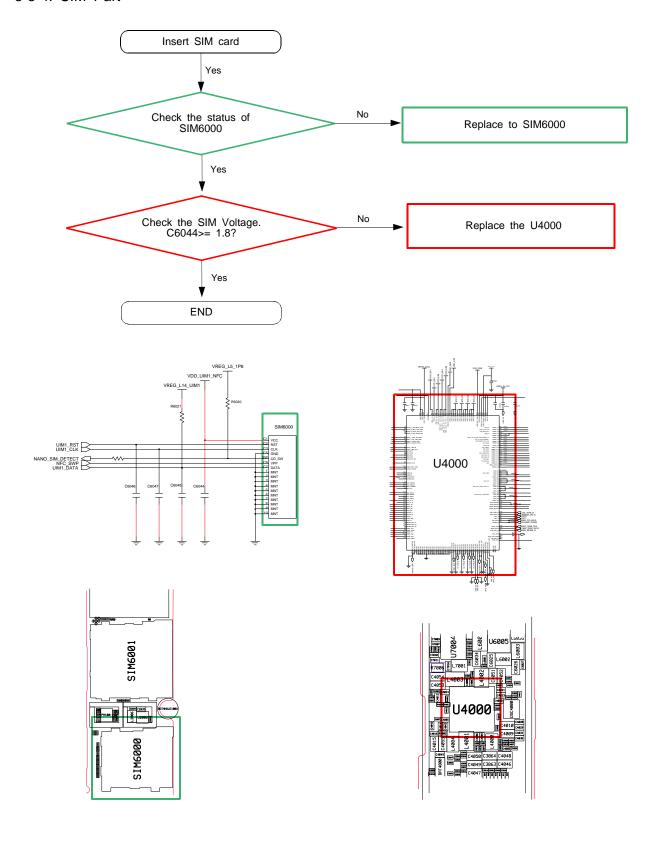




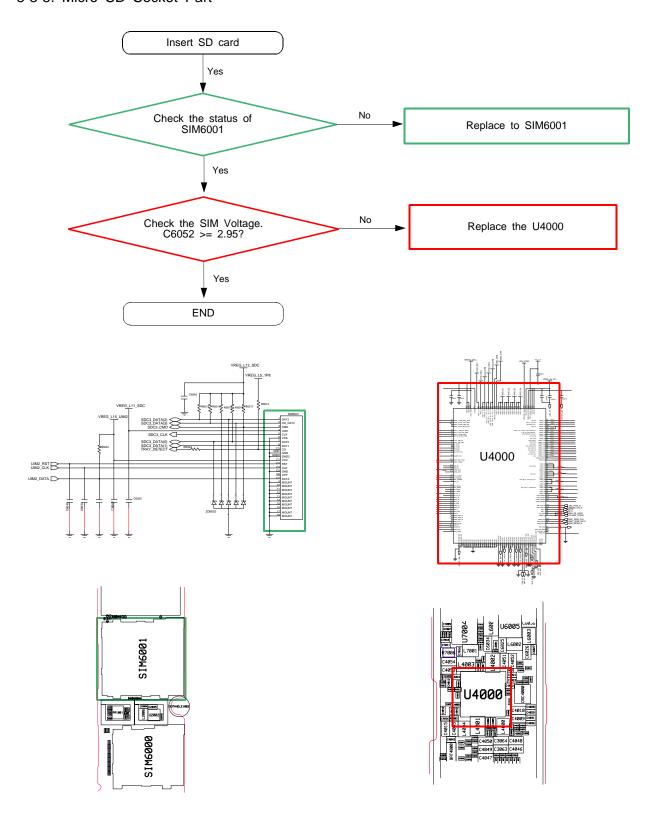




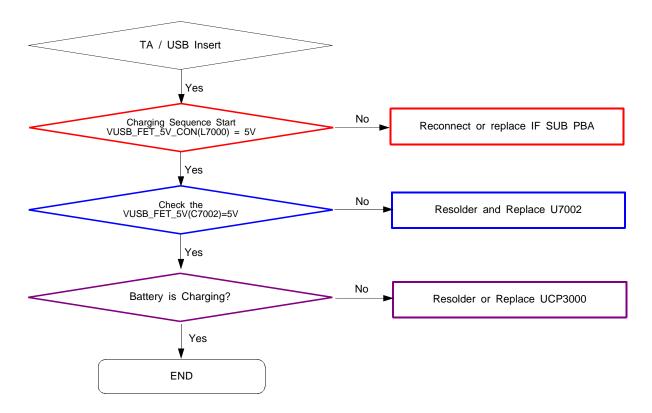
8-3-4. SIM Part

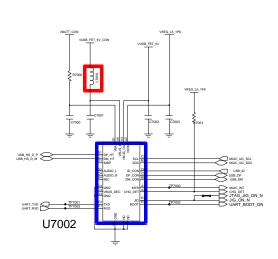


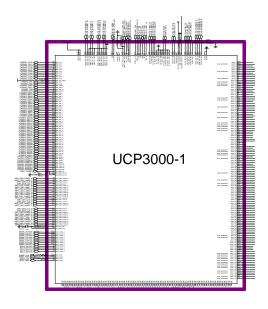
8-3-5. Micro SD Socket Part

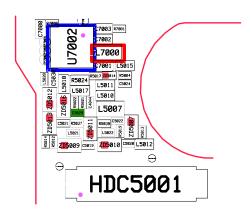


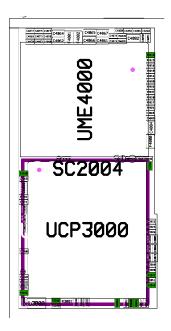
8-3-6. Charging Part



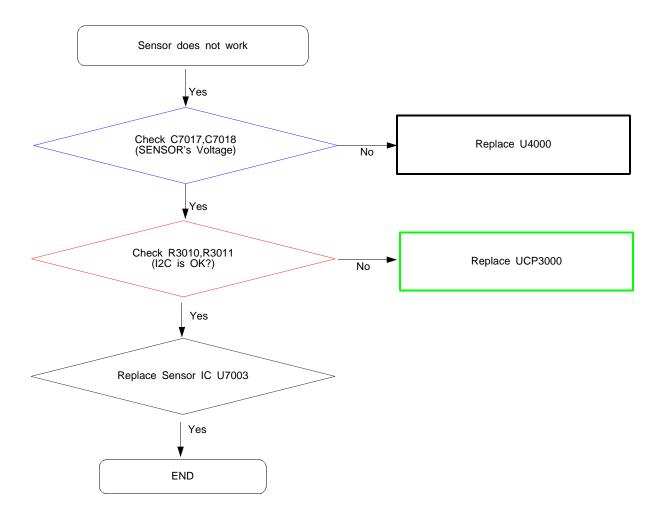


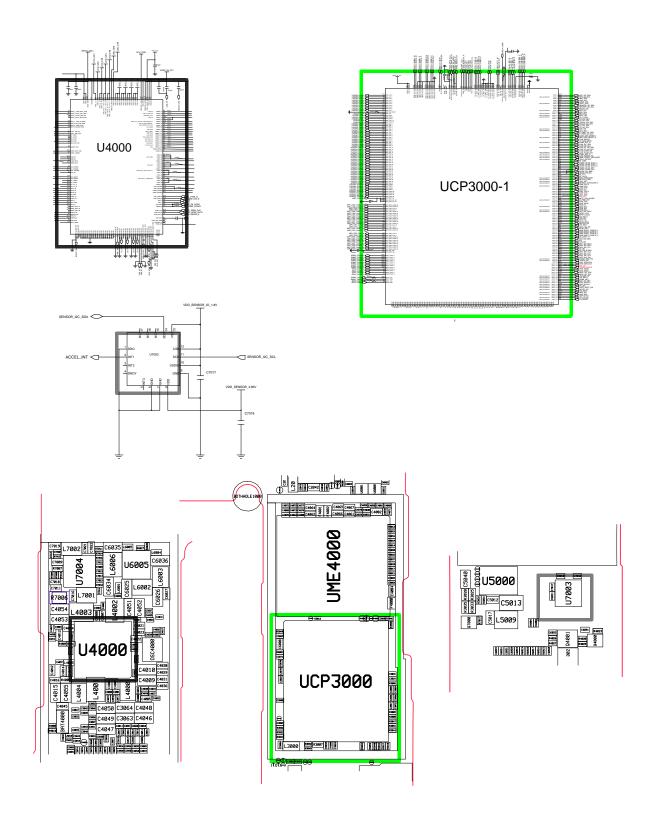




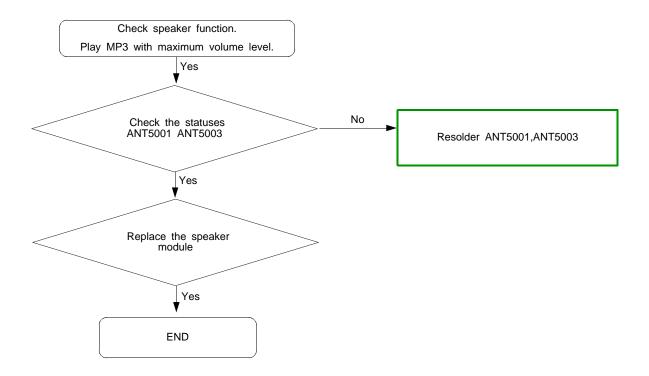


8-3-7. 6Axics Sensor

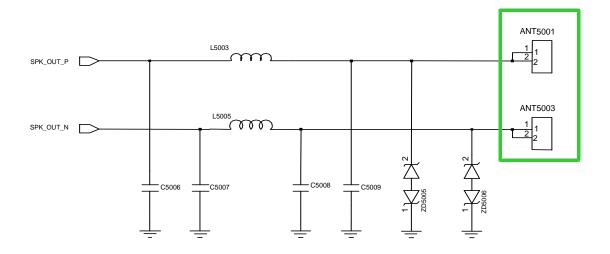


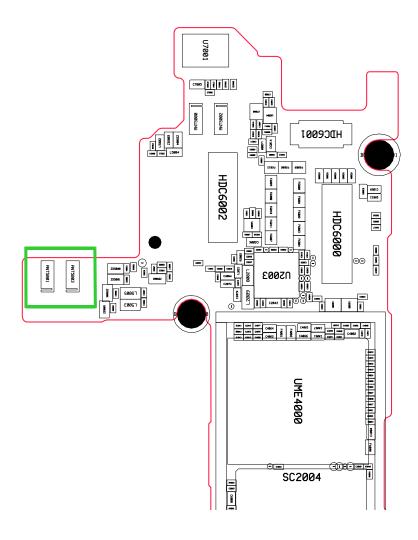


8-3-8. Speaker Part

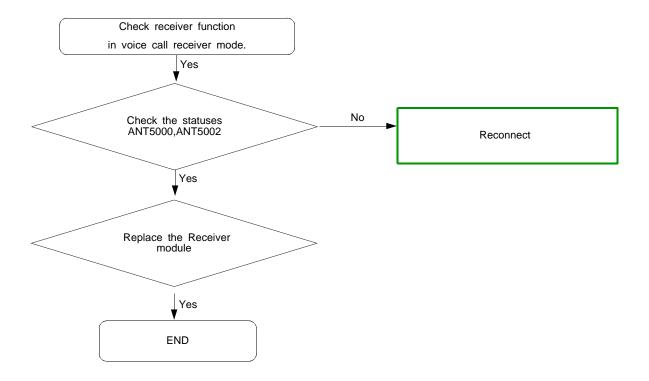


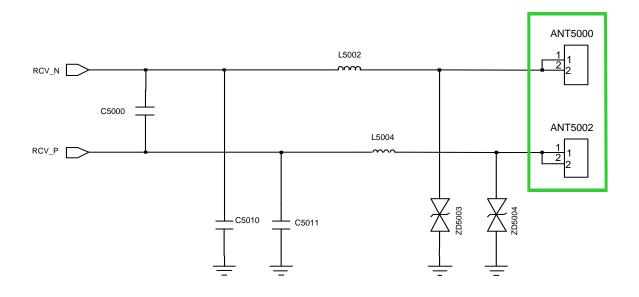
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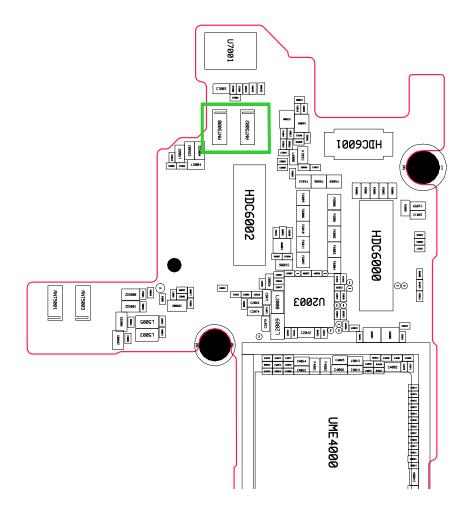




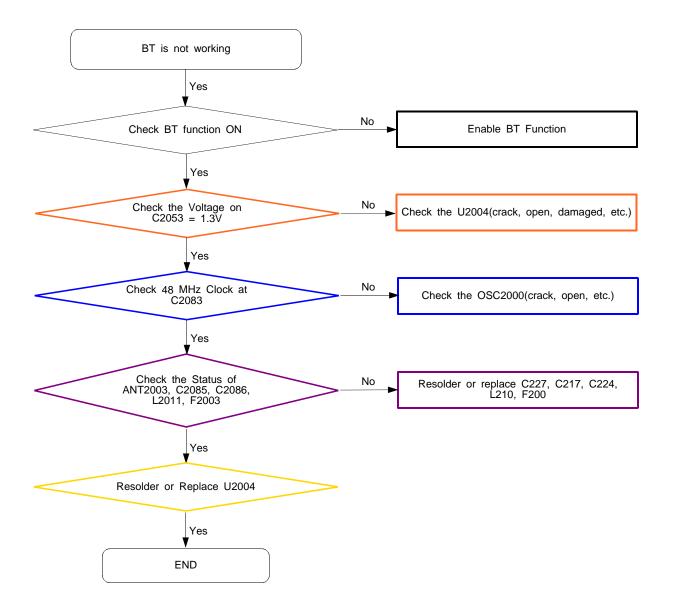
8-3-9. Receiver Part

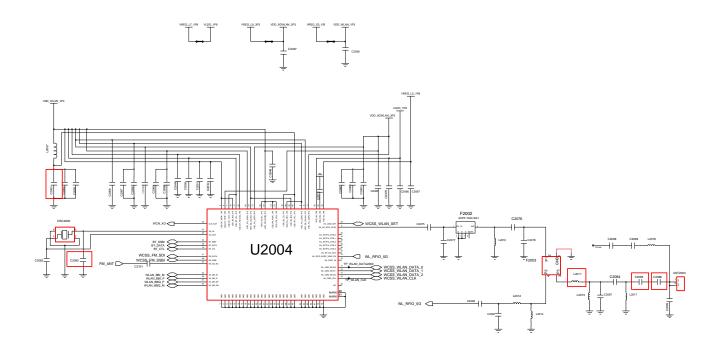


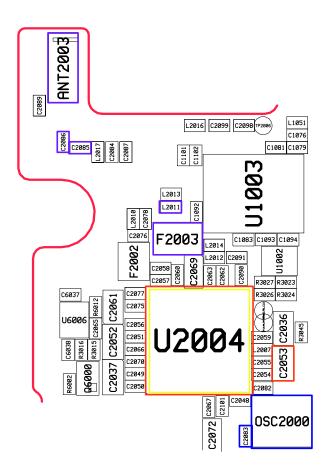




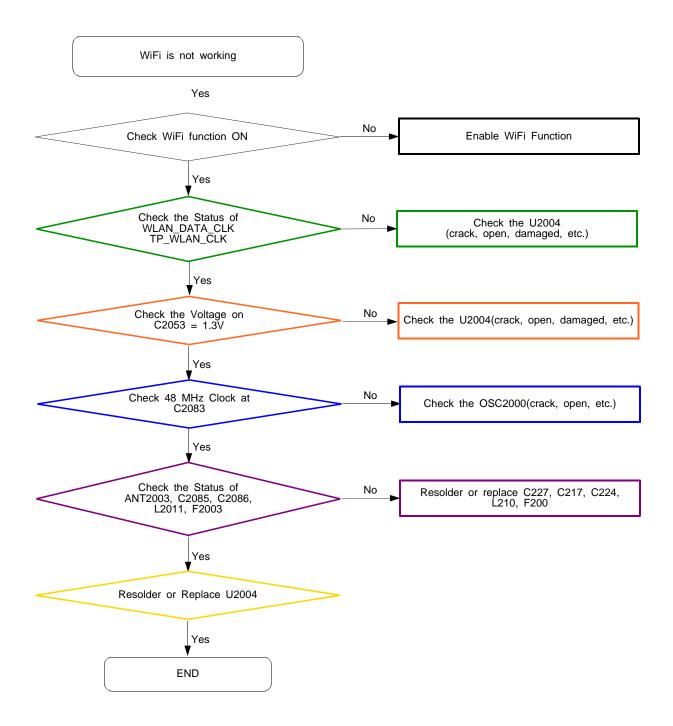
8-3-6. BT Part

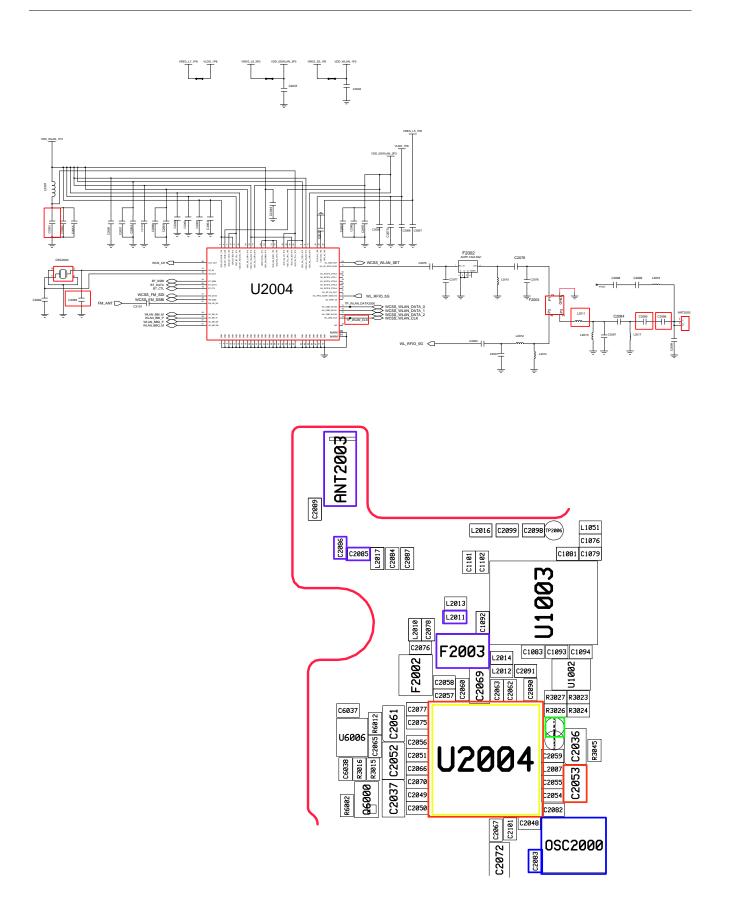




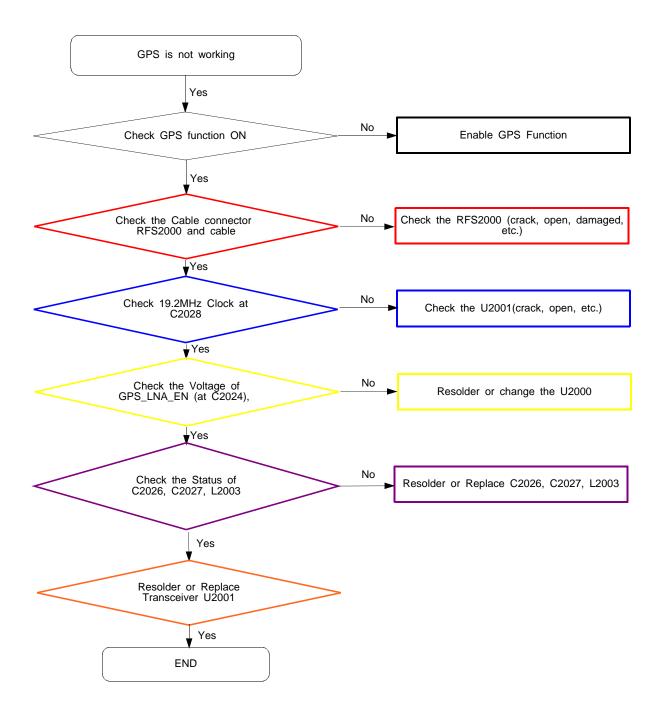


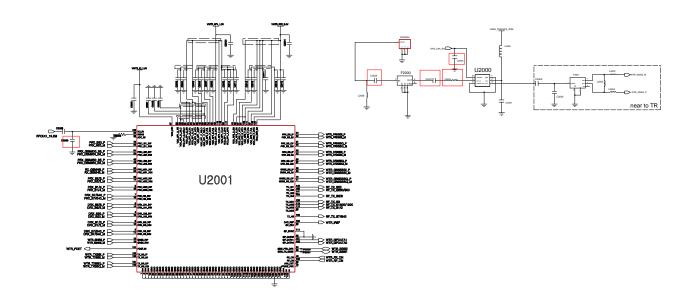
8-3-7. WIFI Part

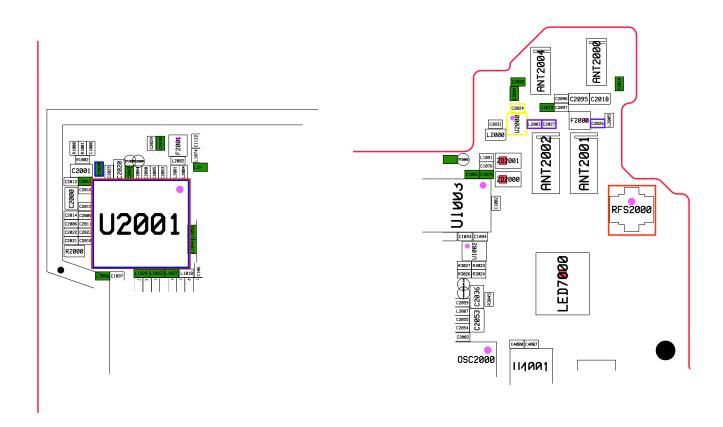




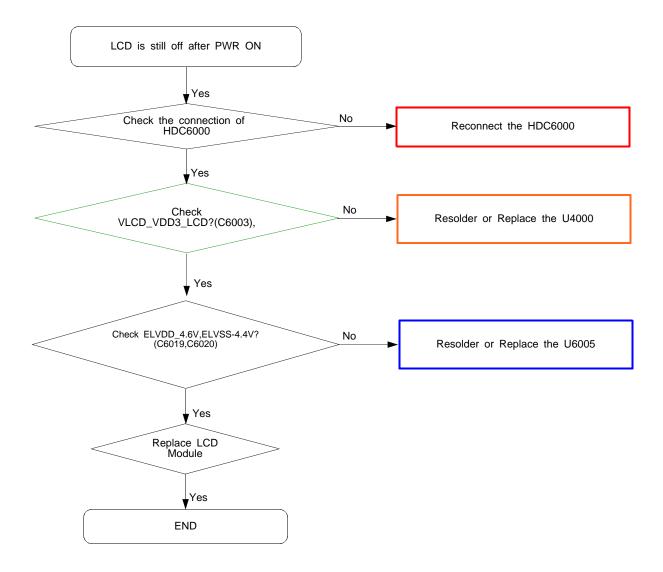
8-3-8. GPS Part

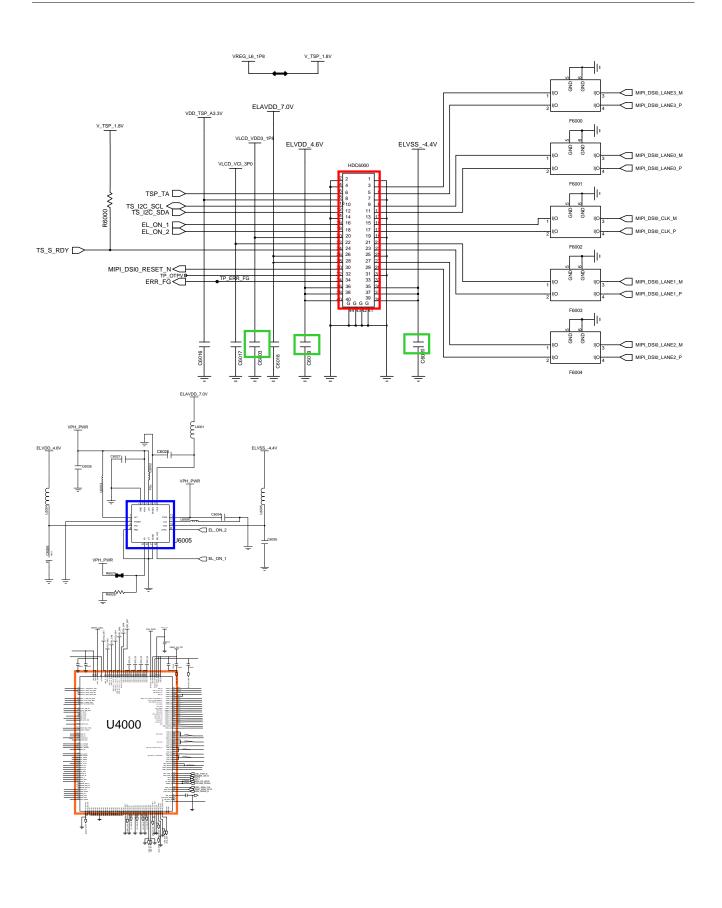


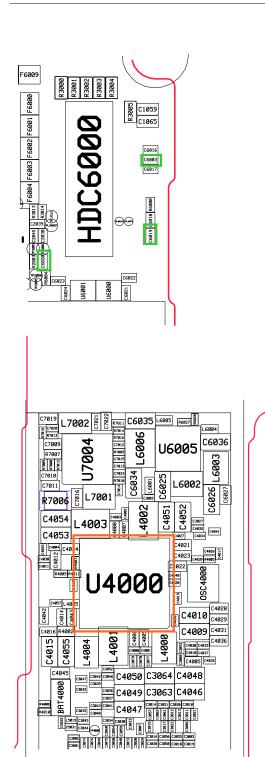


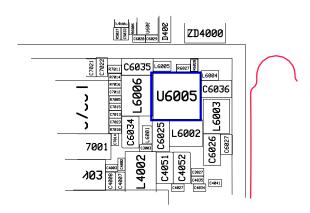


8-3-12. LCD

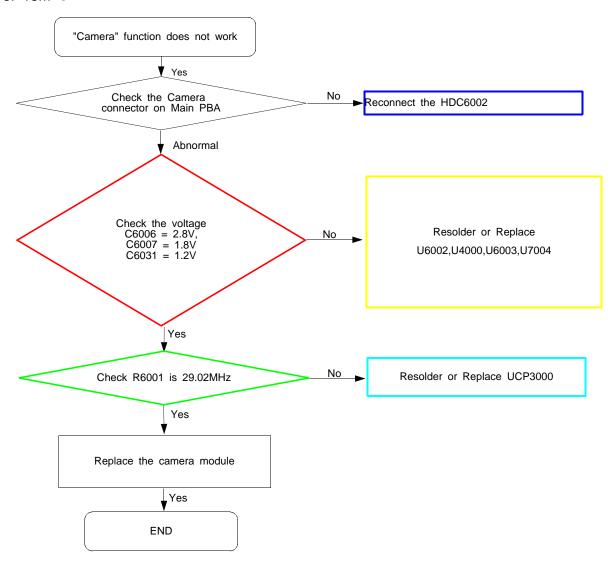


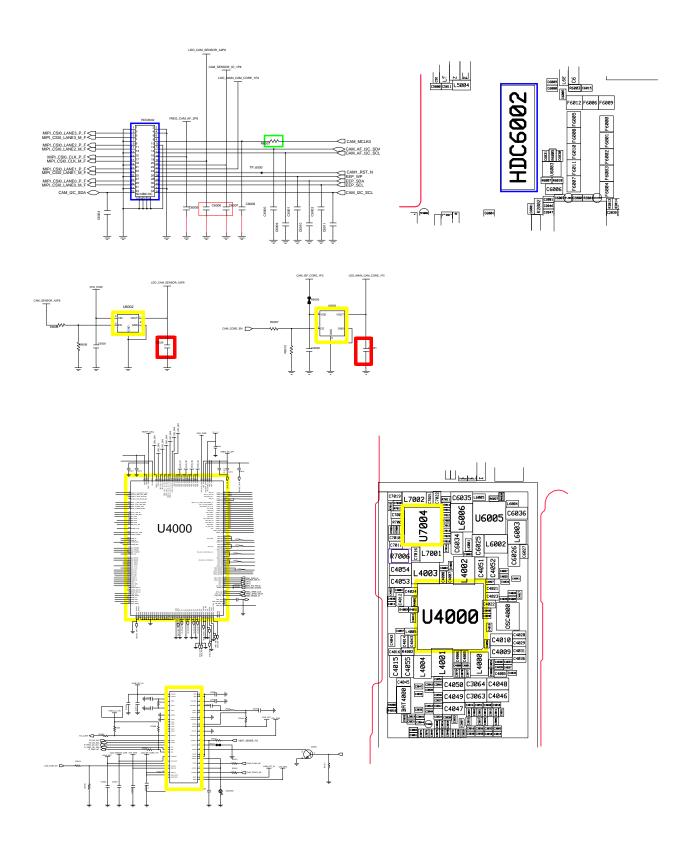


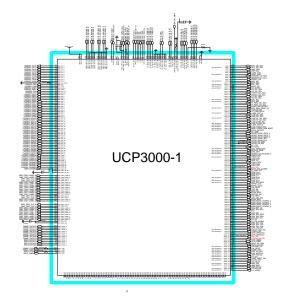


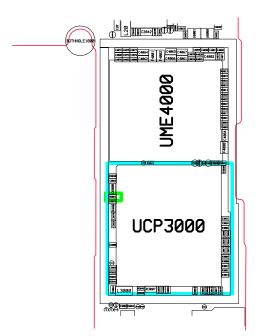


8-3-13. 13M CAM

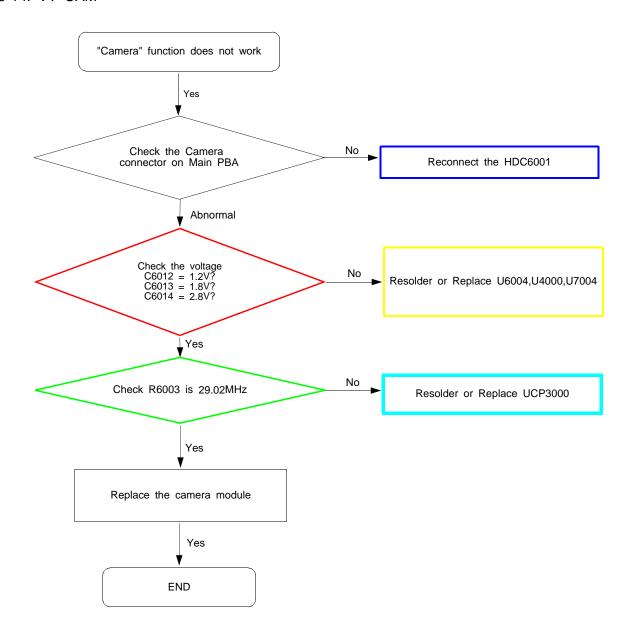


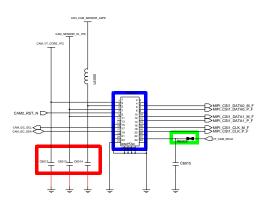


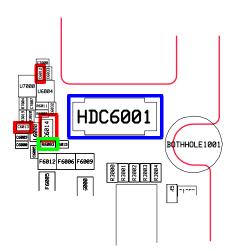


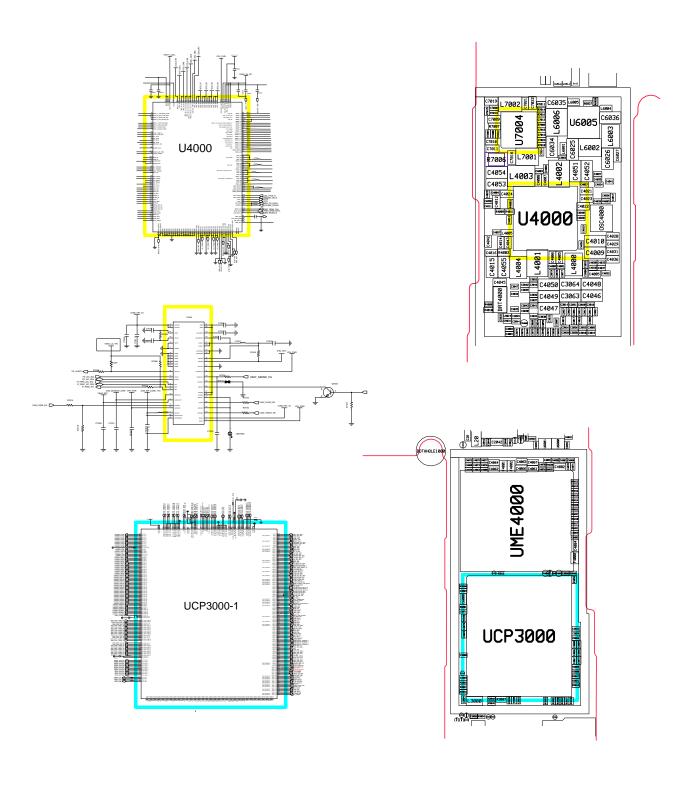


8-3-14. VT CAM

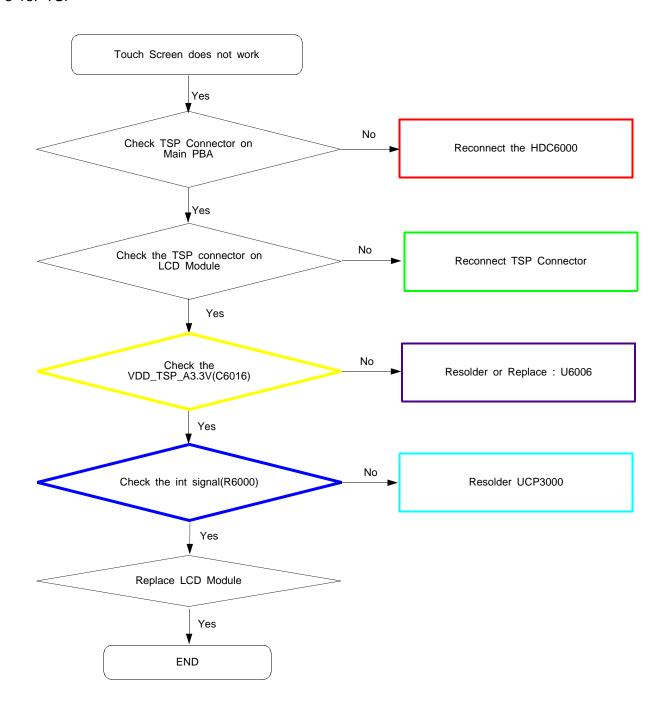


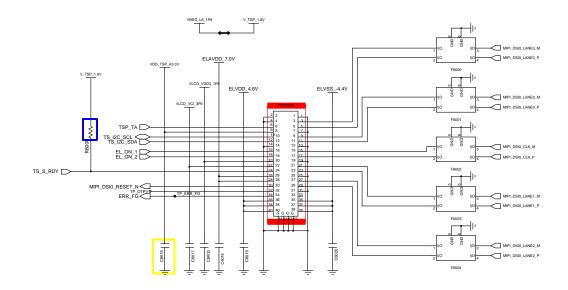


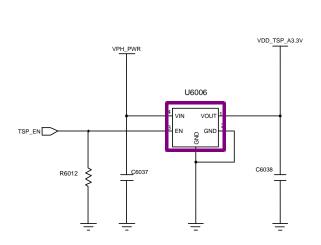


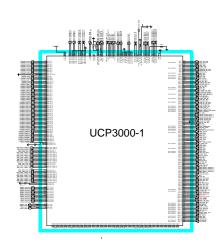


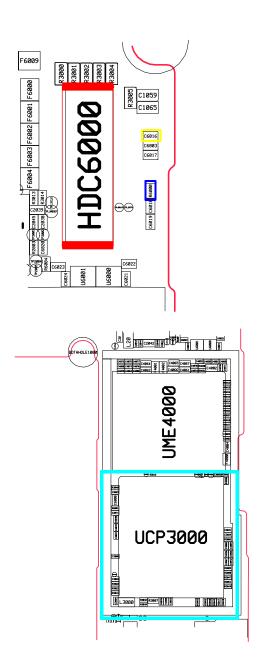
8-3-15. TSP

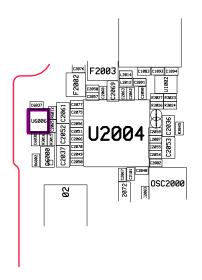




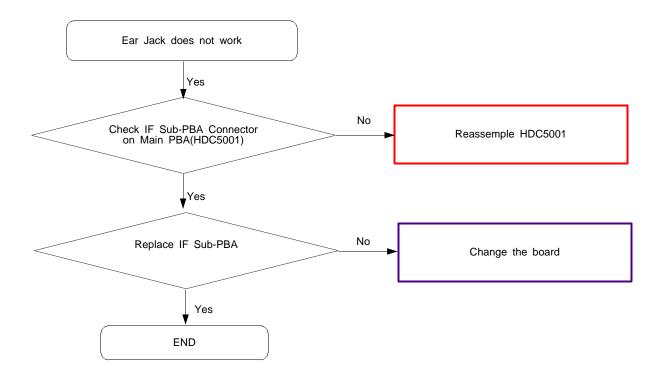


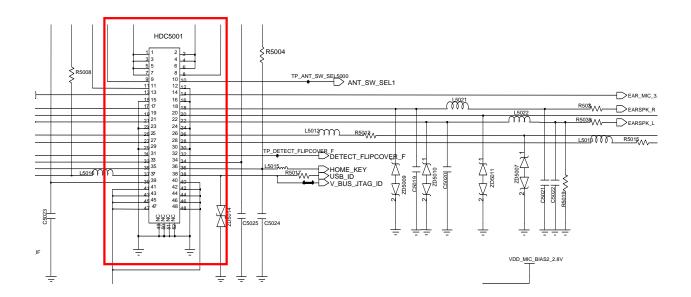




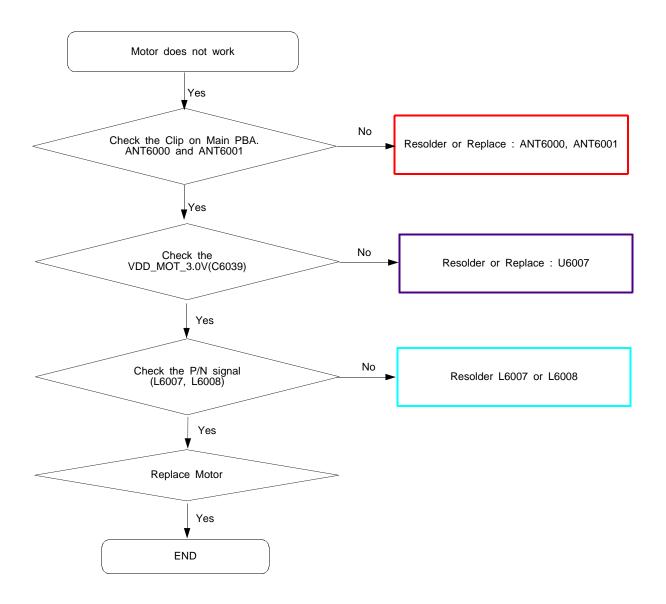


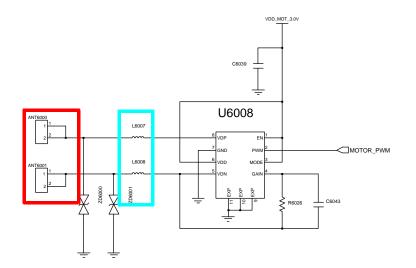
8-3-16. Ear Jack

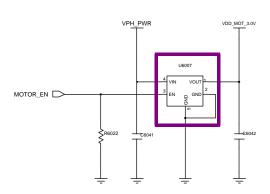


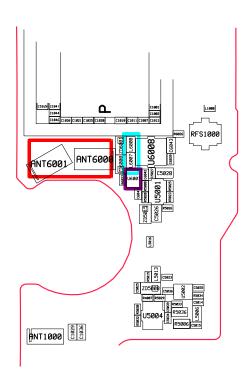


8-3-17. Motor

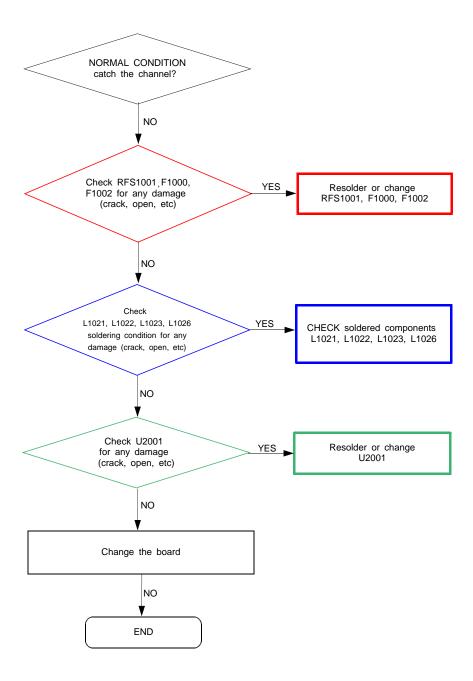


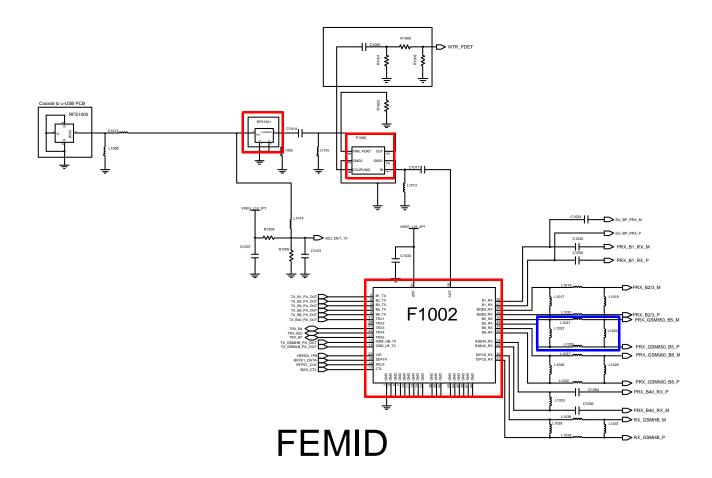


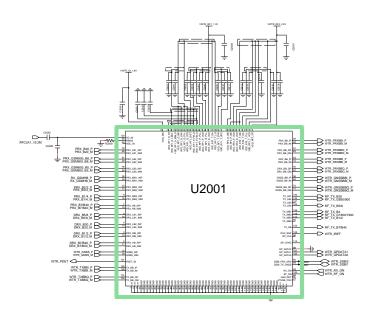




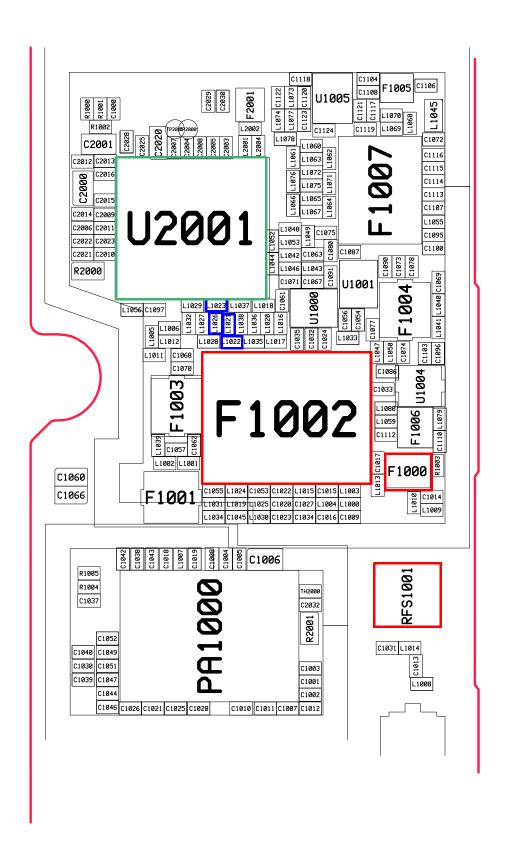
8-3-18. GSM850 / WCDMA B5 / LTE5 RX



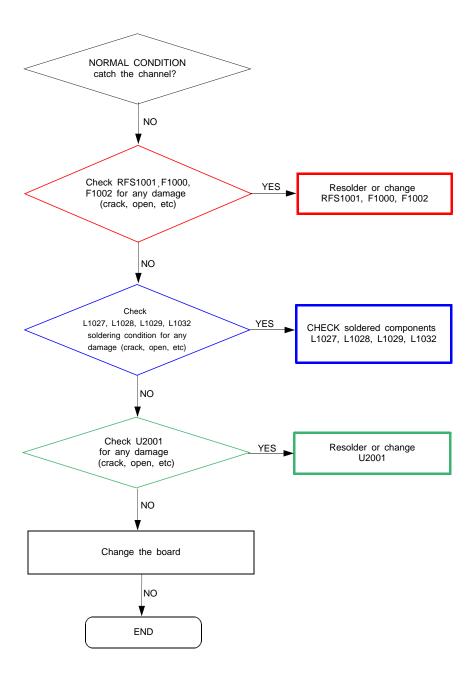


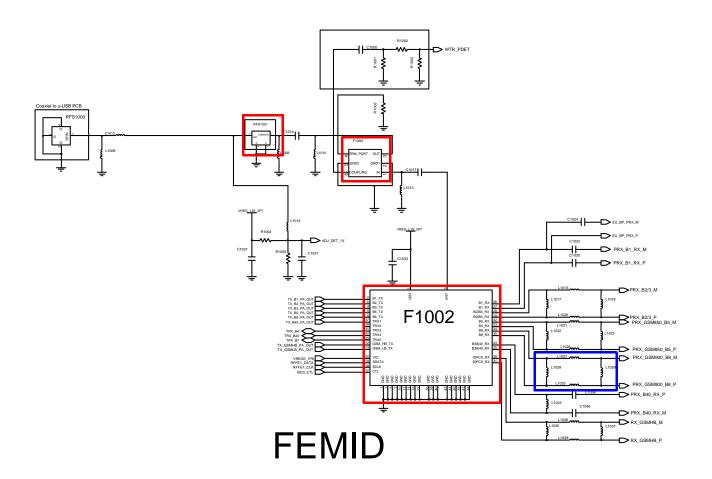


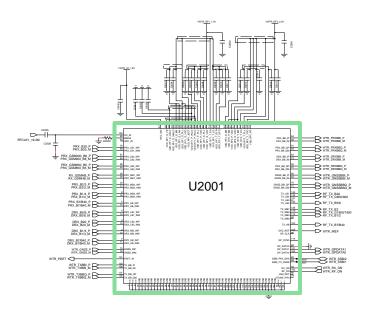
RF Transceiver



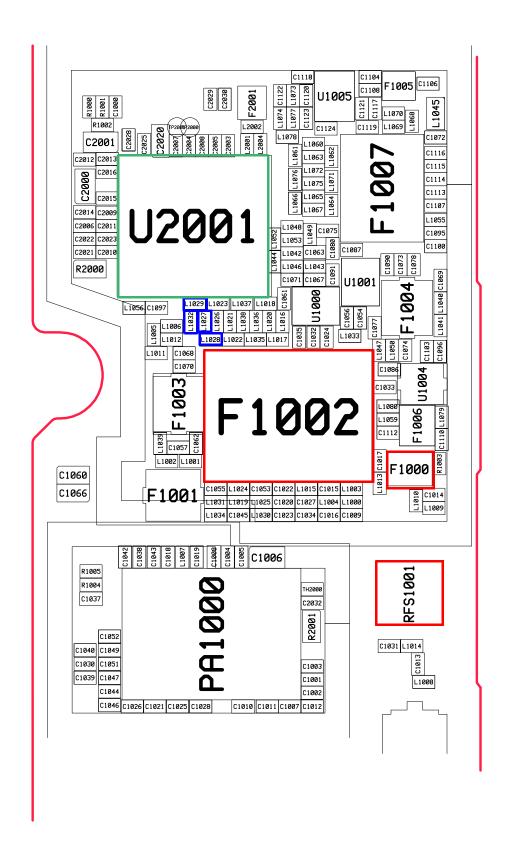
8-3-19. GSM900 / WCDMA B8 / LTE8 RX



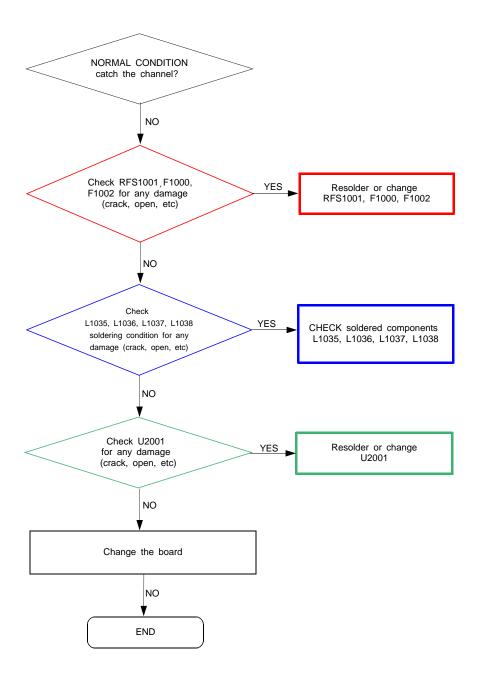


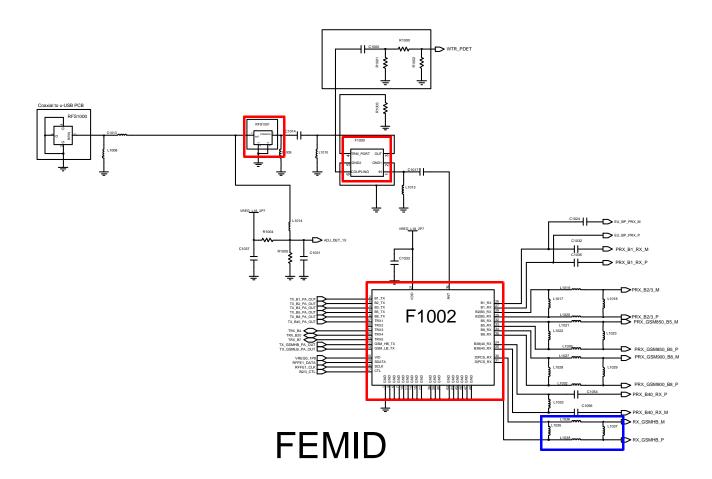


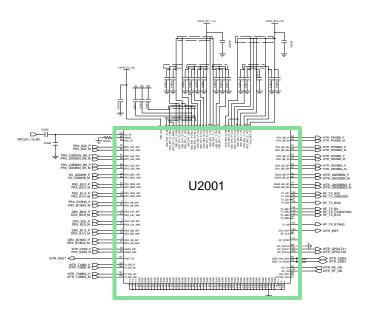
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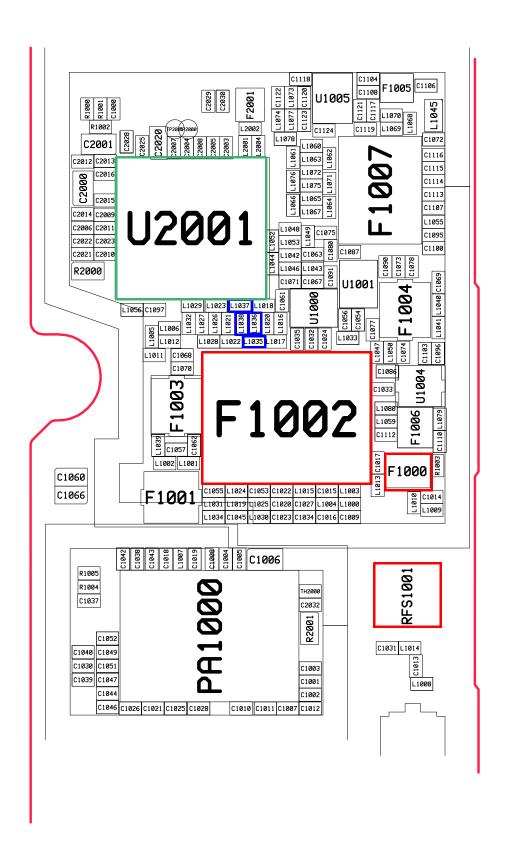
8-3-20. GSM1800 / GSM1900 RX



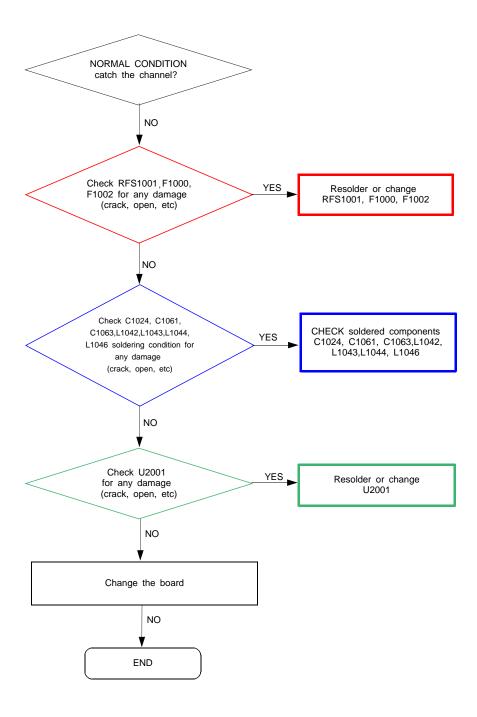


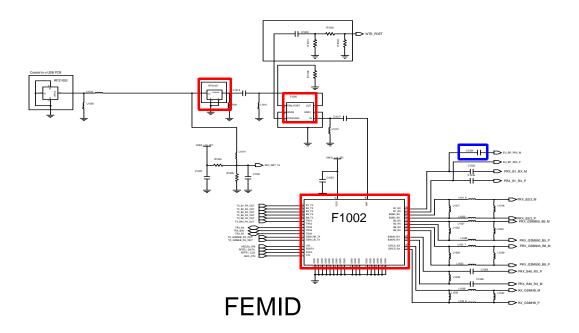


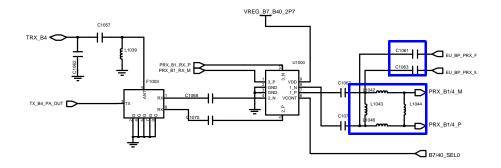
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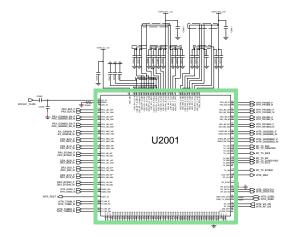


8-3-21. WCDMA B1 / LTE1 RX

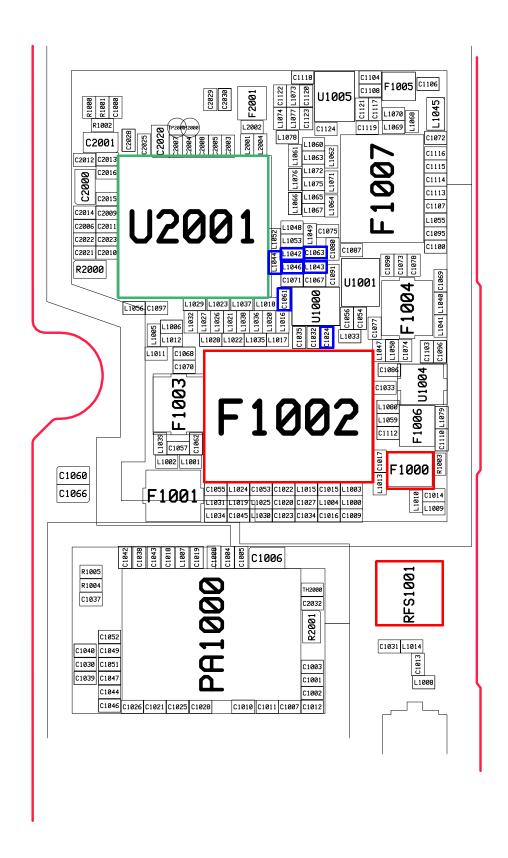




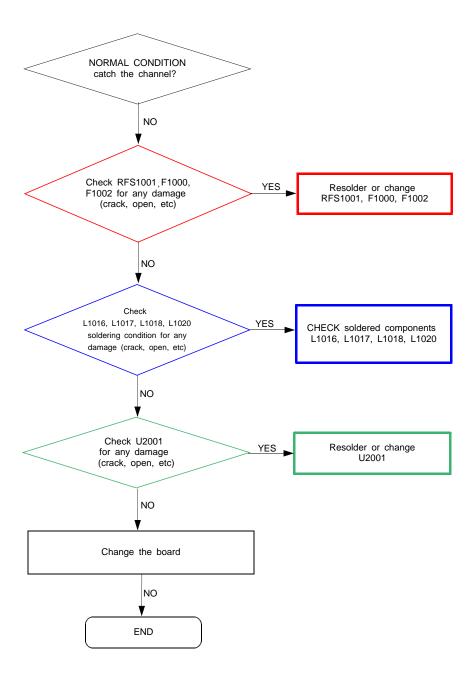


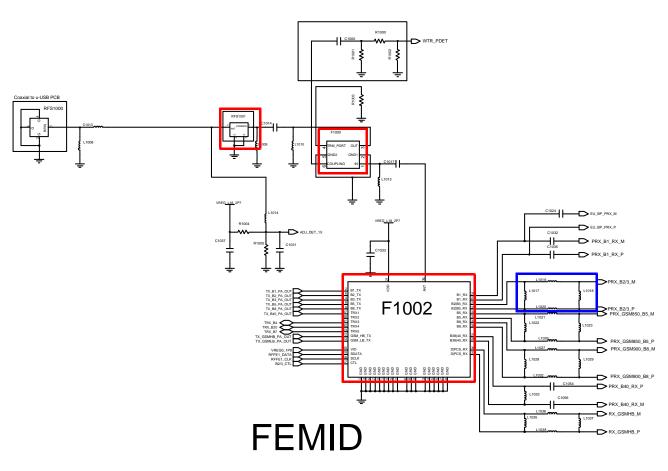


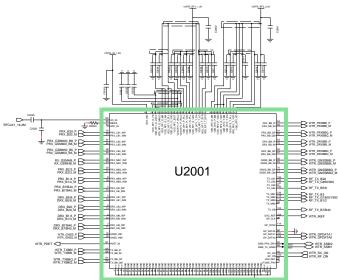
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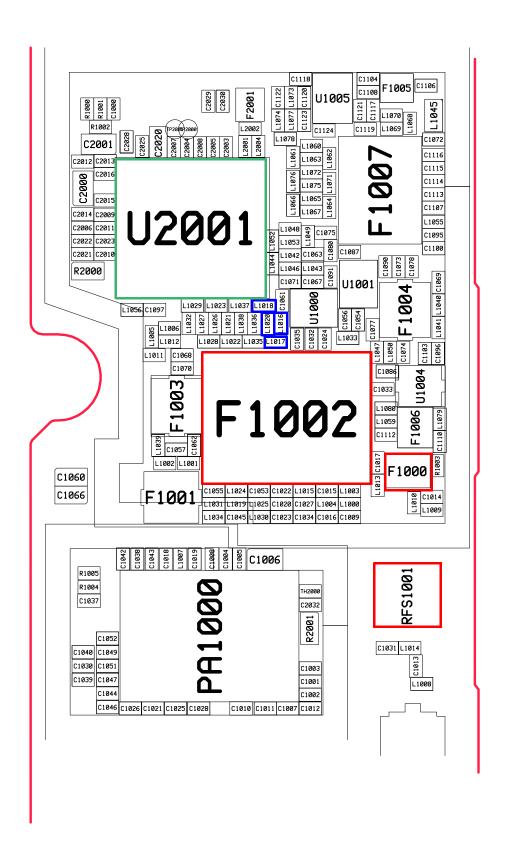
8-3-22. WCDMA B2 / LTE3 RX



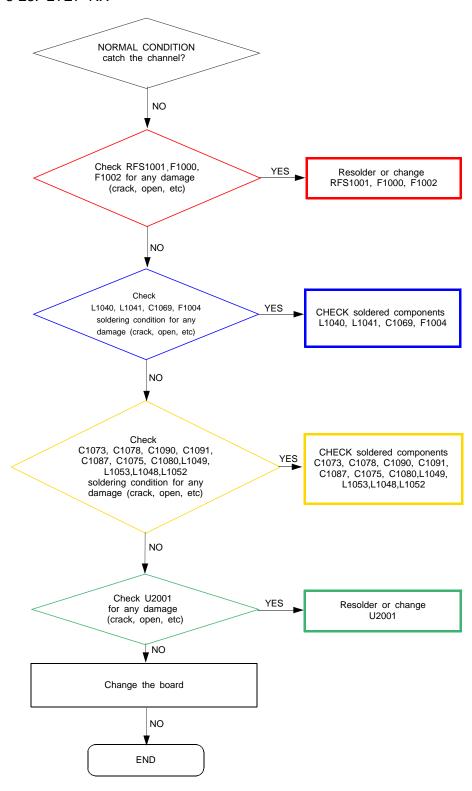


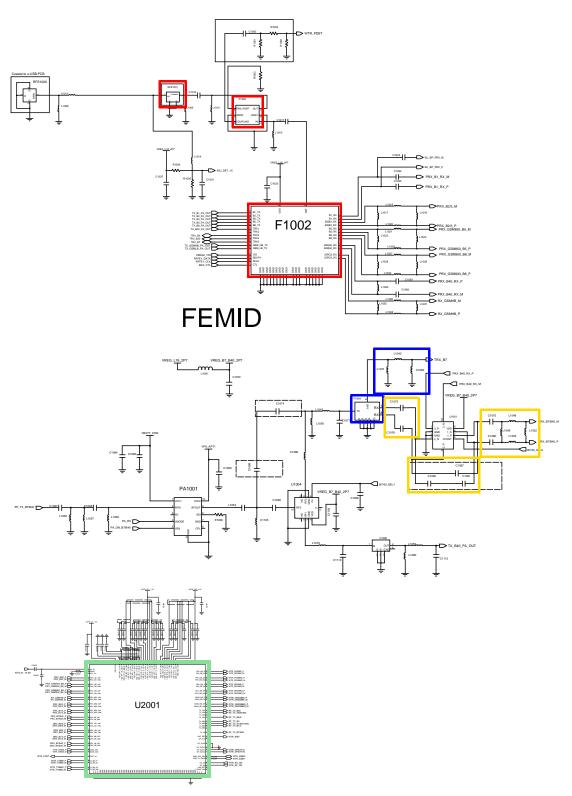


RF Transceiver

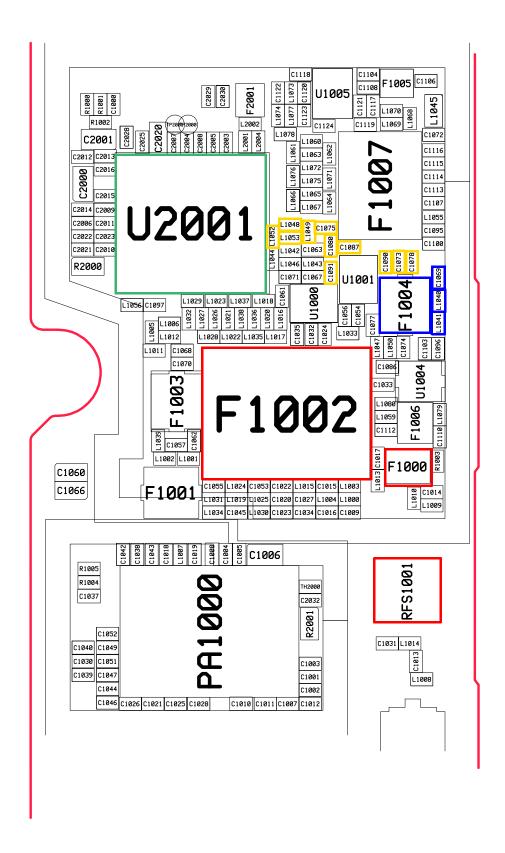


8-3-23. LTE7 RX

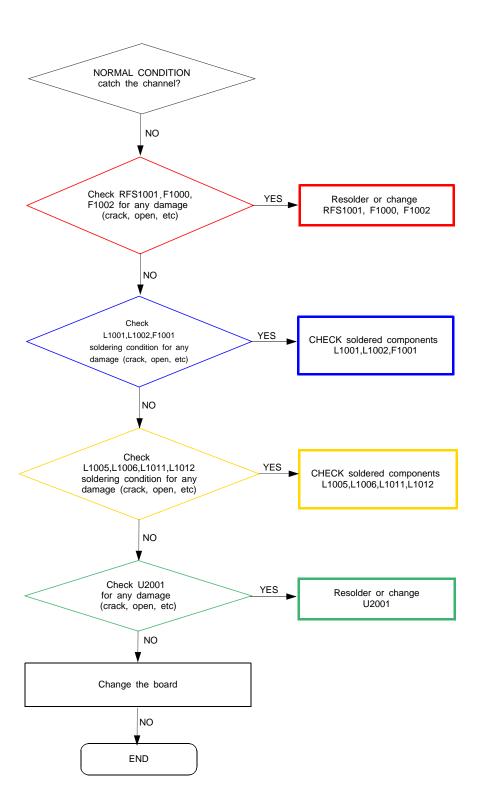


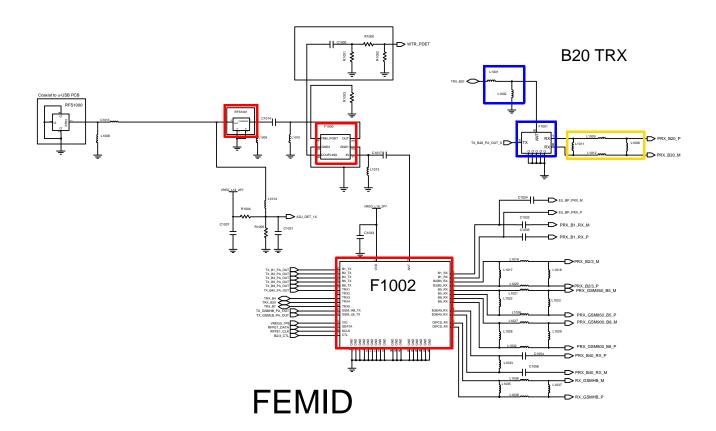


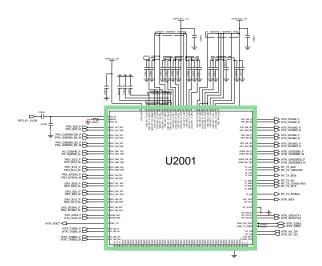
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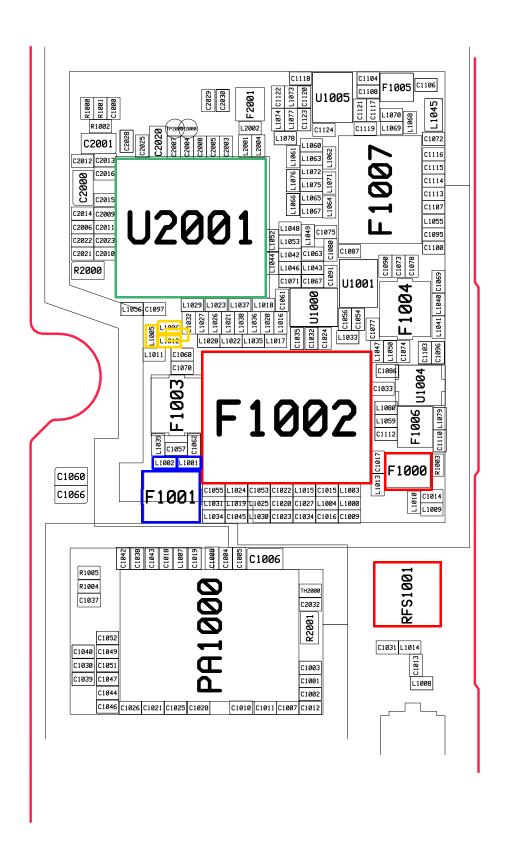
8-3-24. LTE20 RX



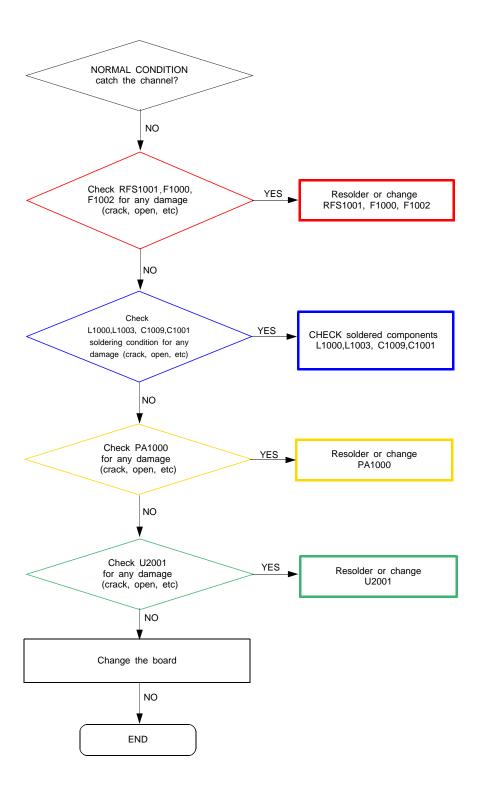


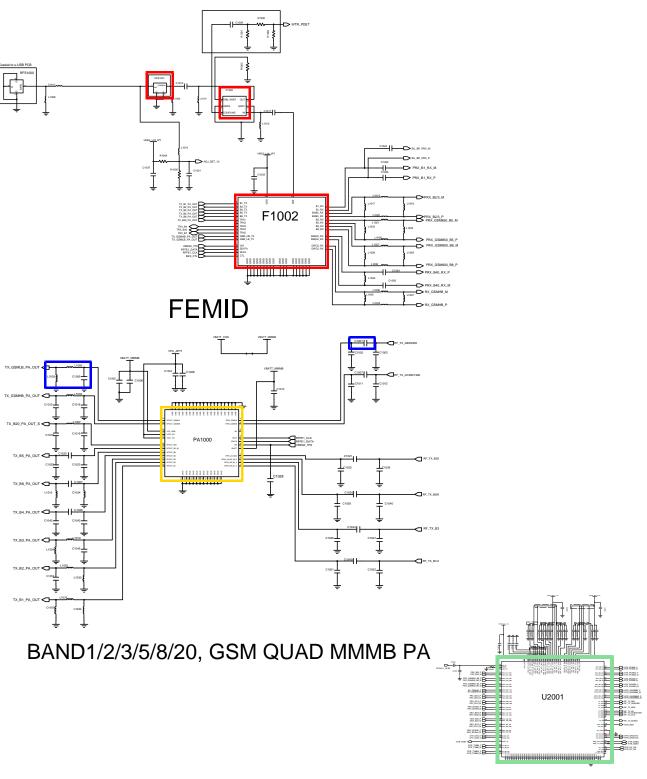


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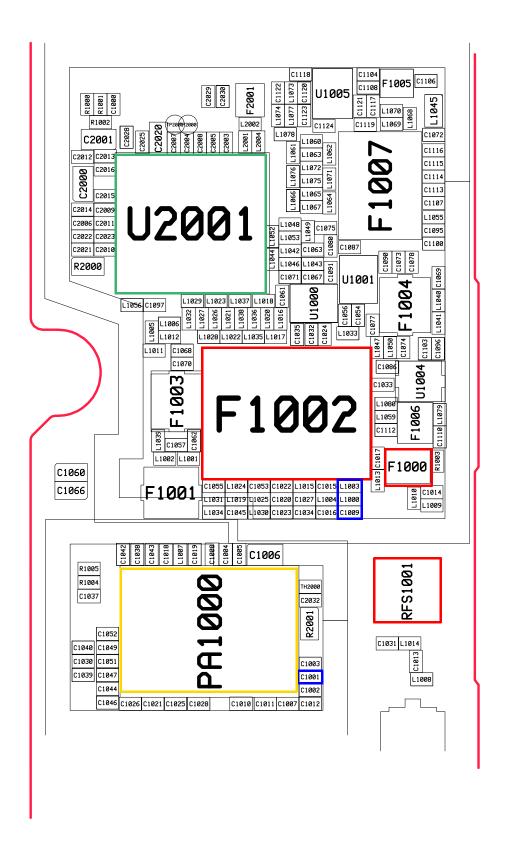


8-3-25. GSM850 / GSM900 TX

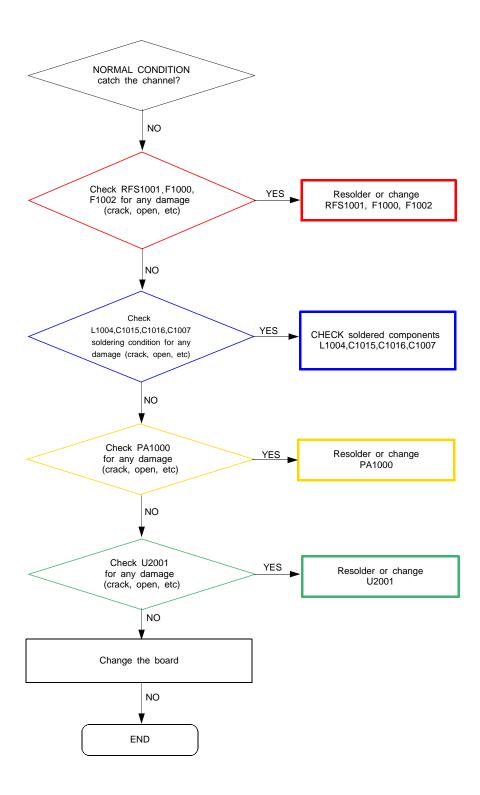


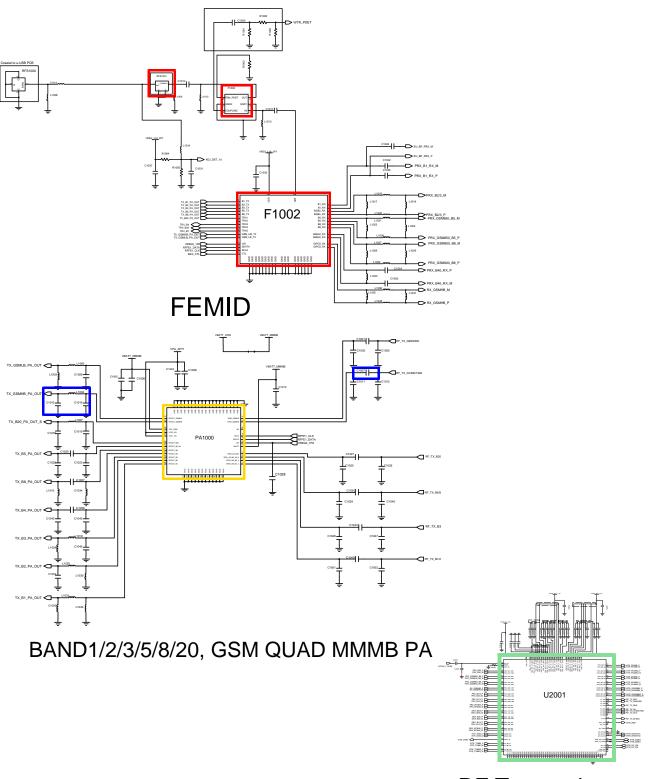


RF Transceiver

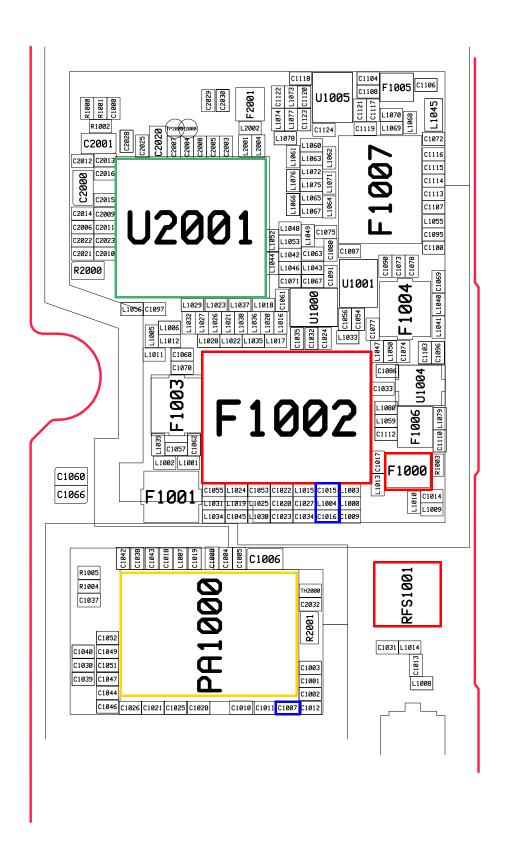


8-3-26. GSM1800 / GSM1900 TX

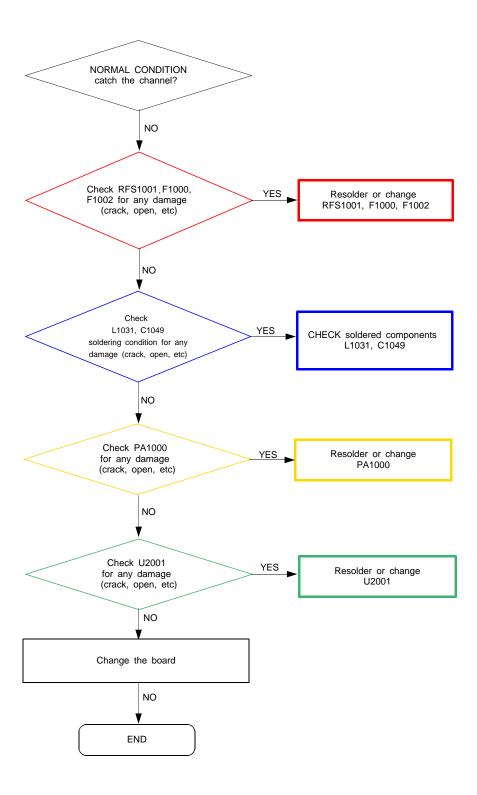


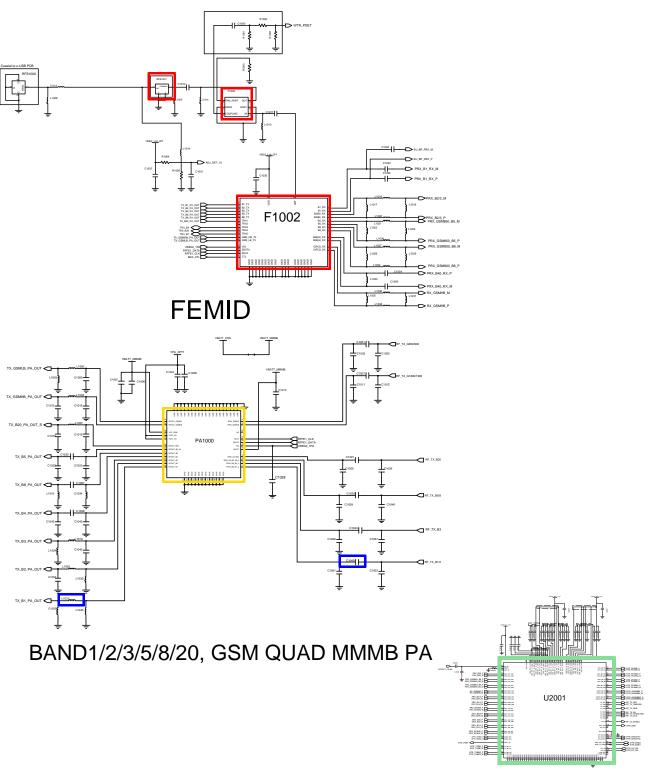


RF Transceiver

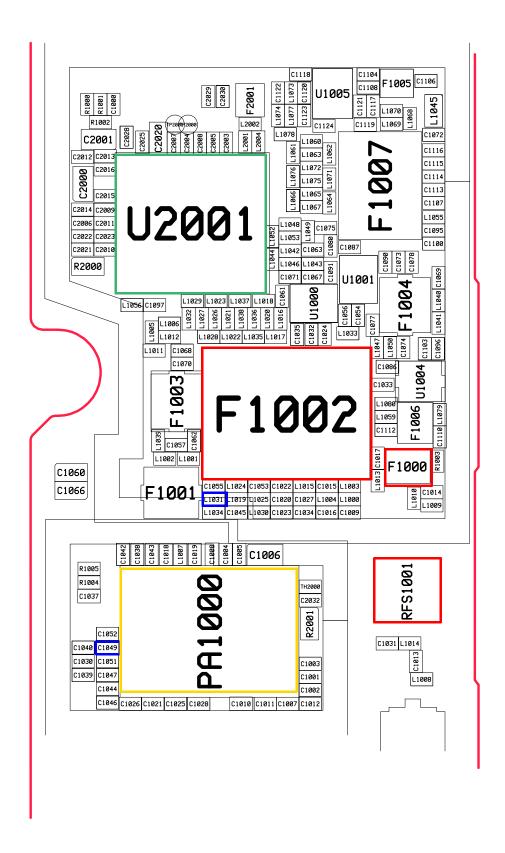


8-3-27. WCDMA B1 / LTE1 TX

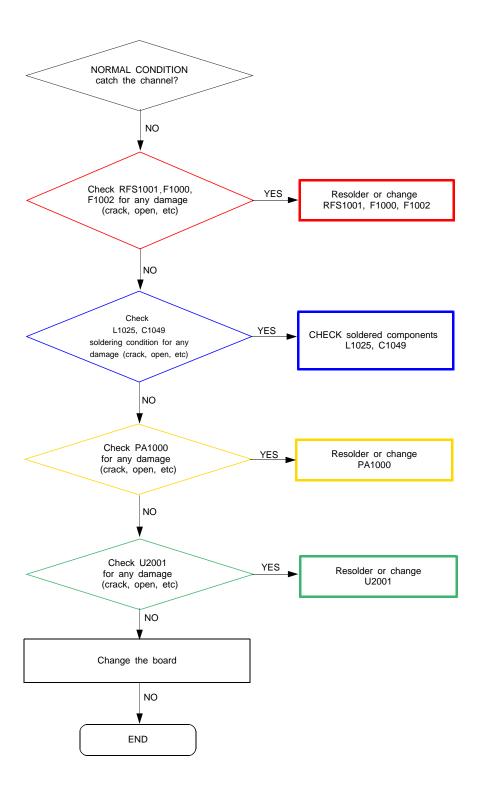


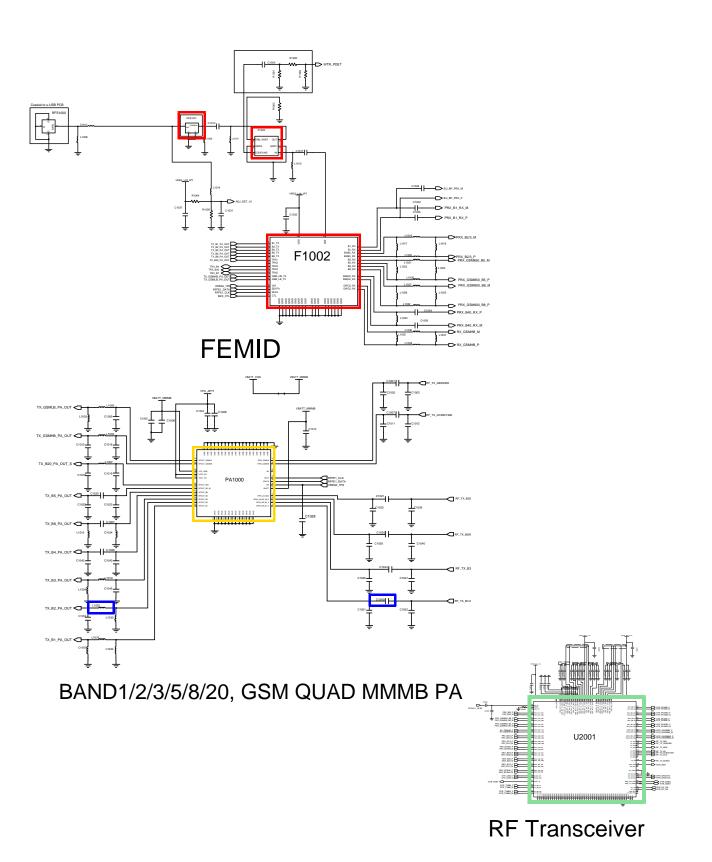


RF Transceiver

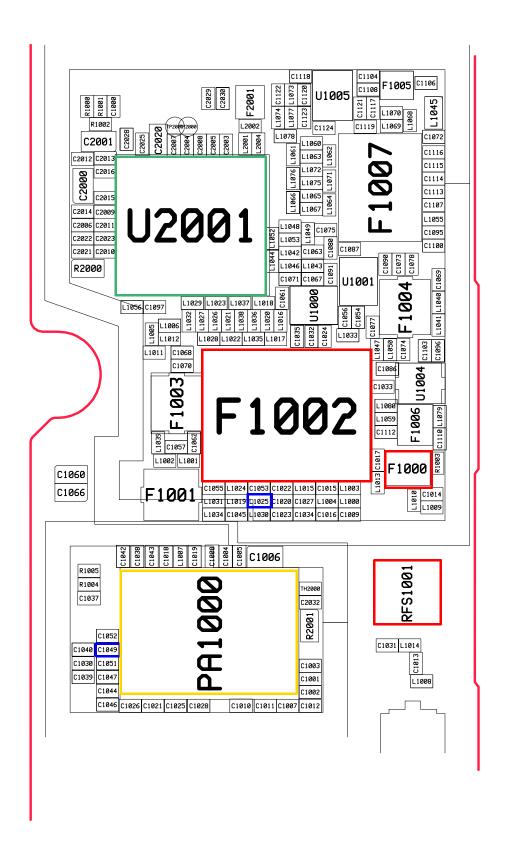


8-3-28. WCDMA B2 TX

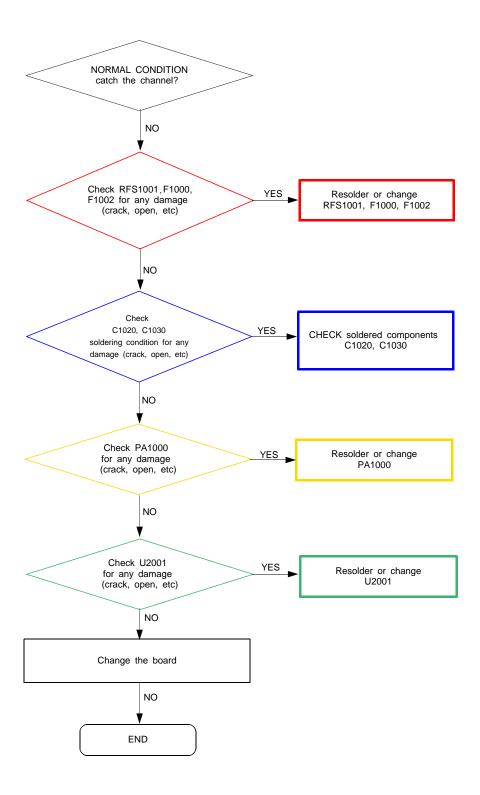


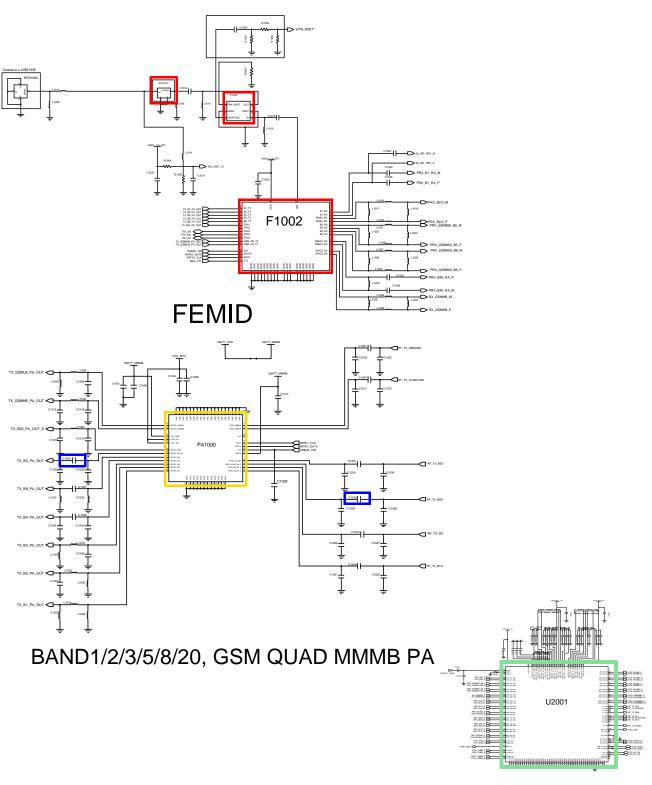


8-78

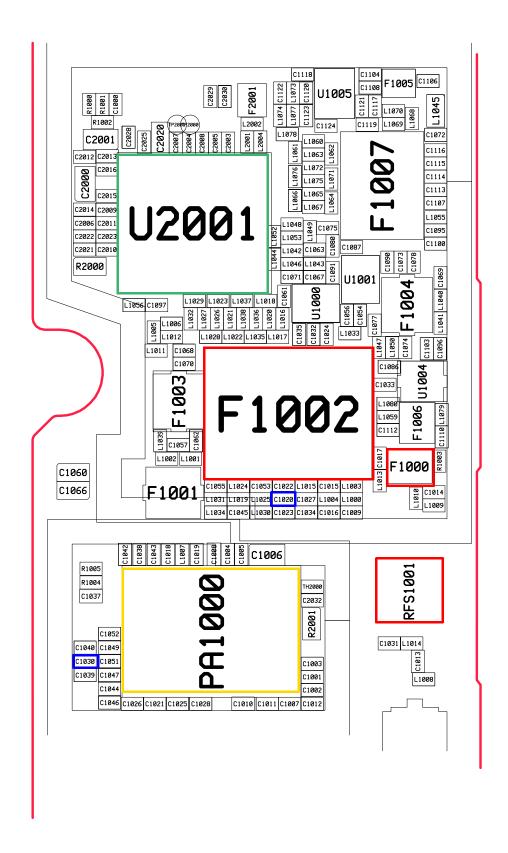


8-3-29. WCDMA B5 / LTE5 TX

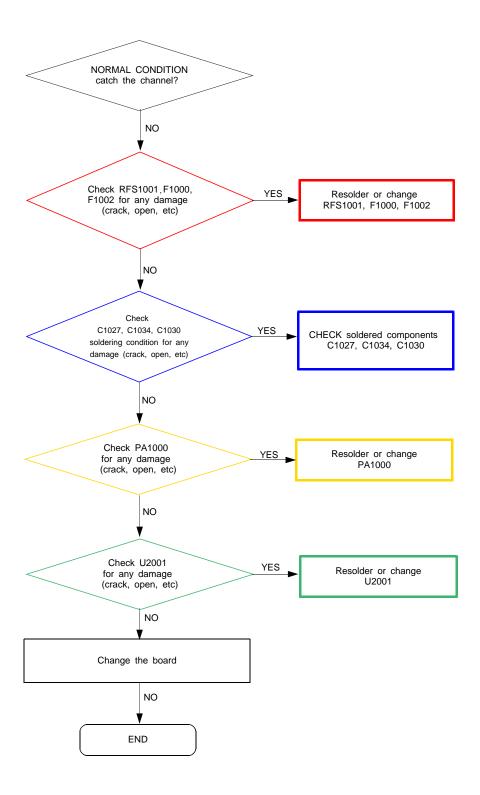


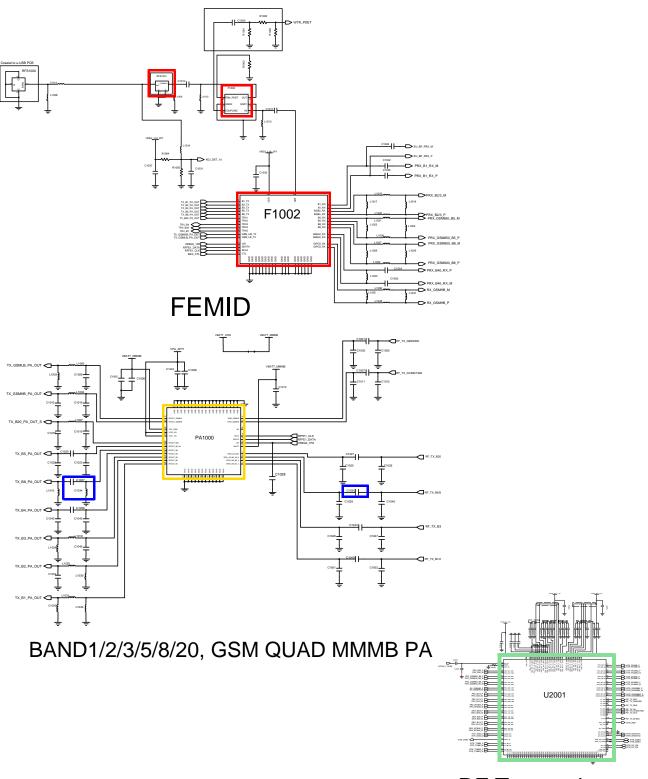


RF Transceiver

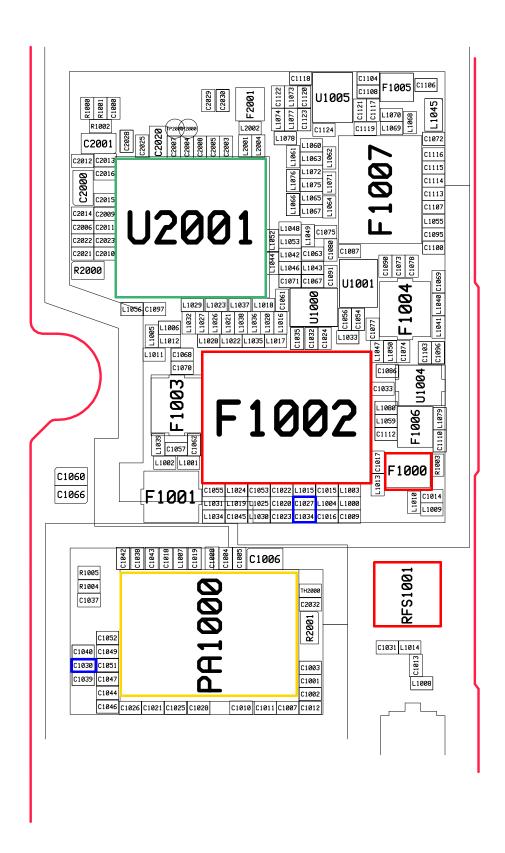


8-3-30. WCDMA B8 / LTE8 TX

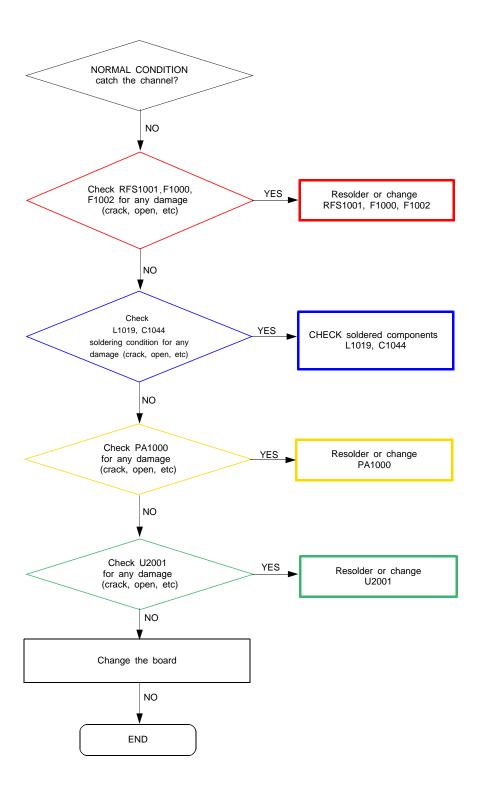


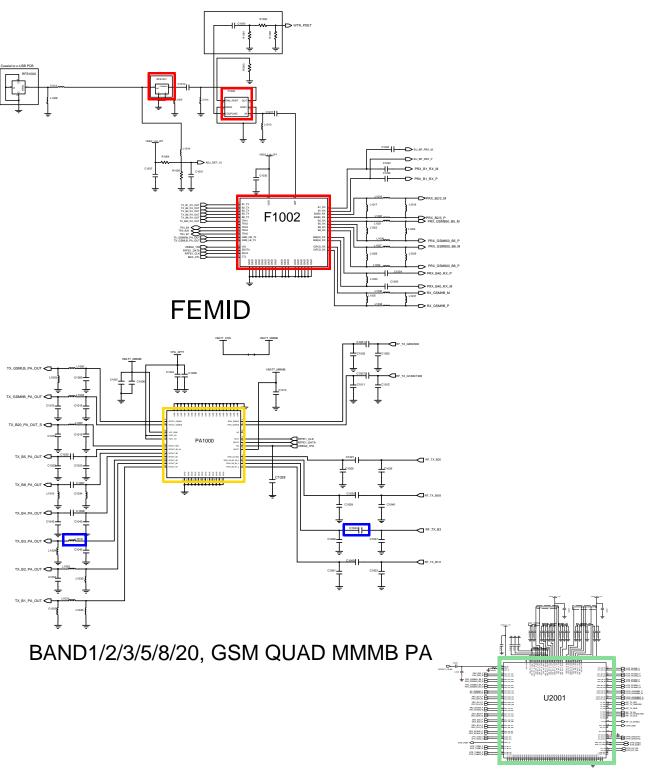


RF Transceiver

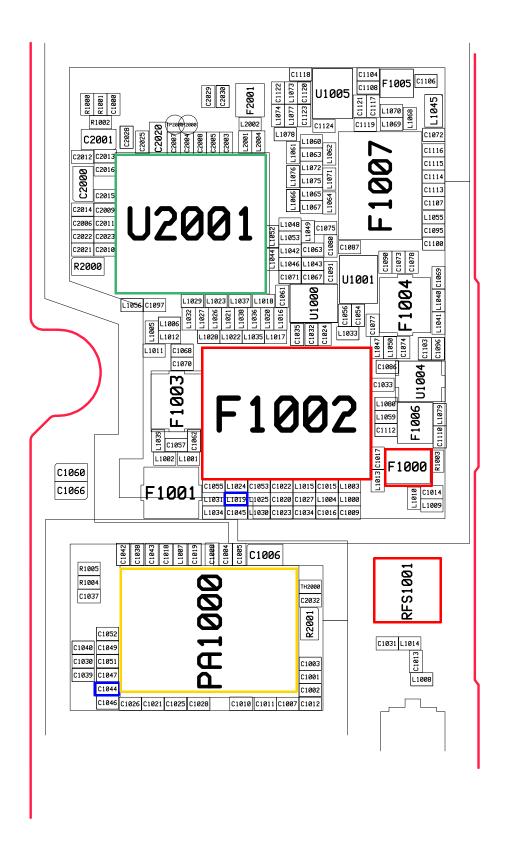


8-3-31. LTE3 TX

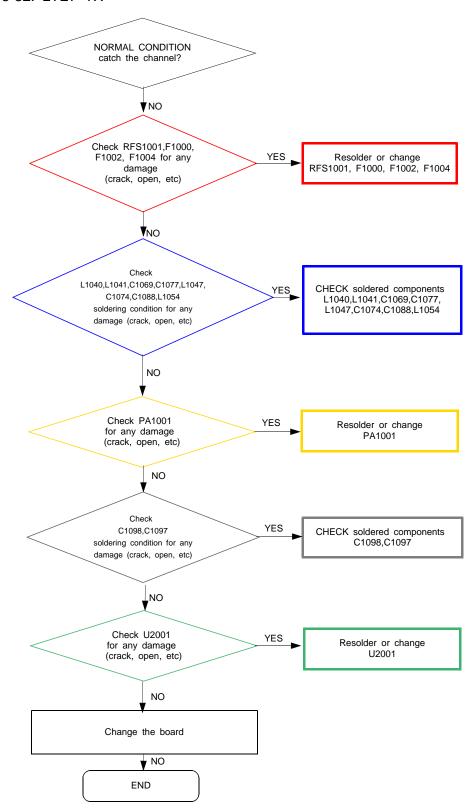


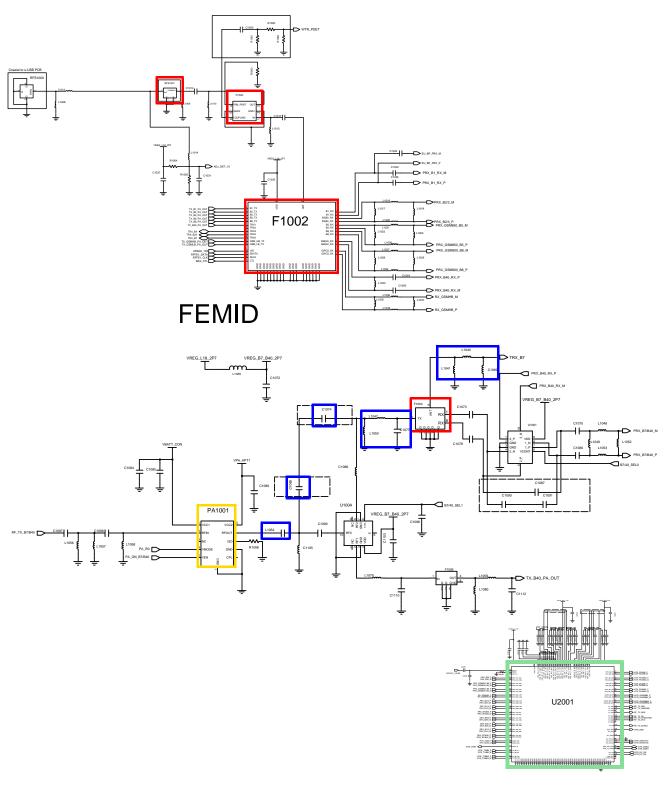


RF Transceiver

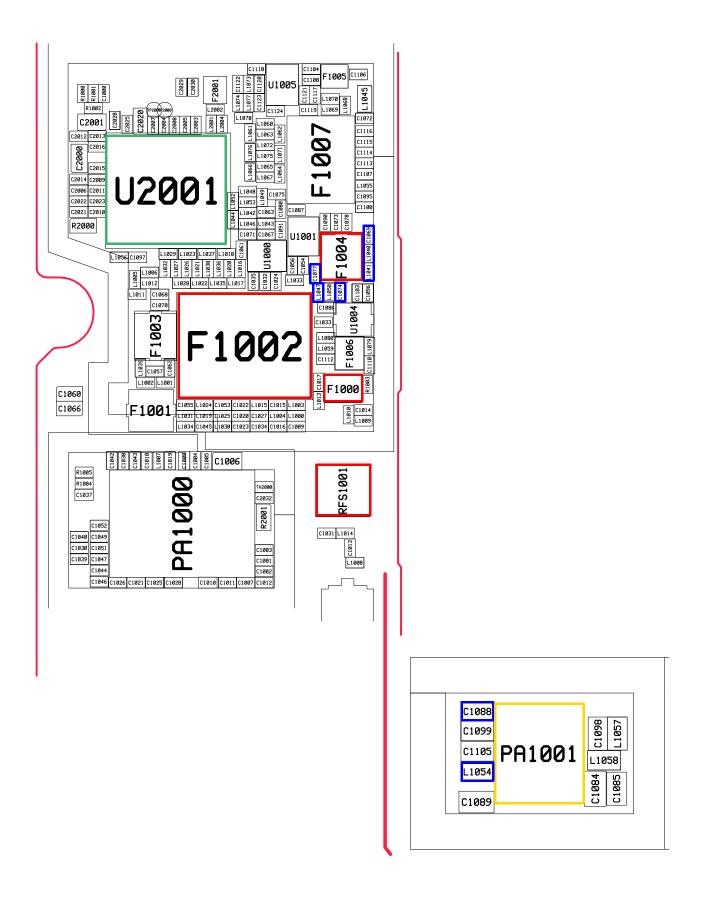


8-3-32. LTE7 TX

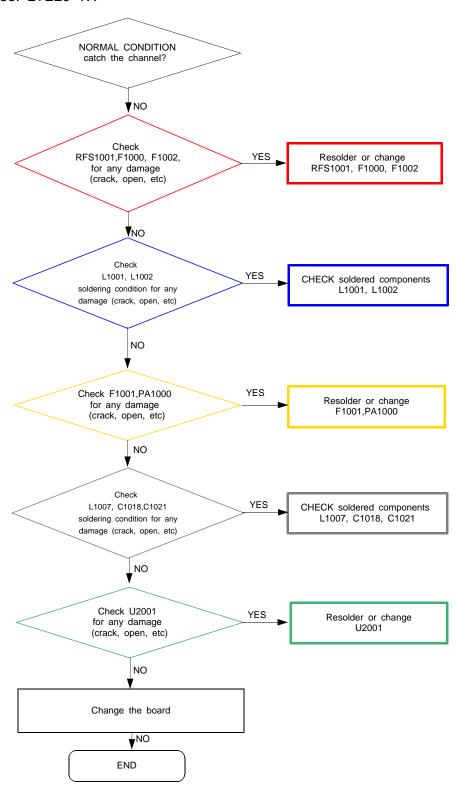


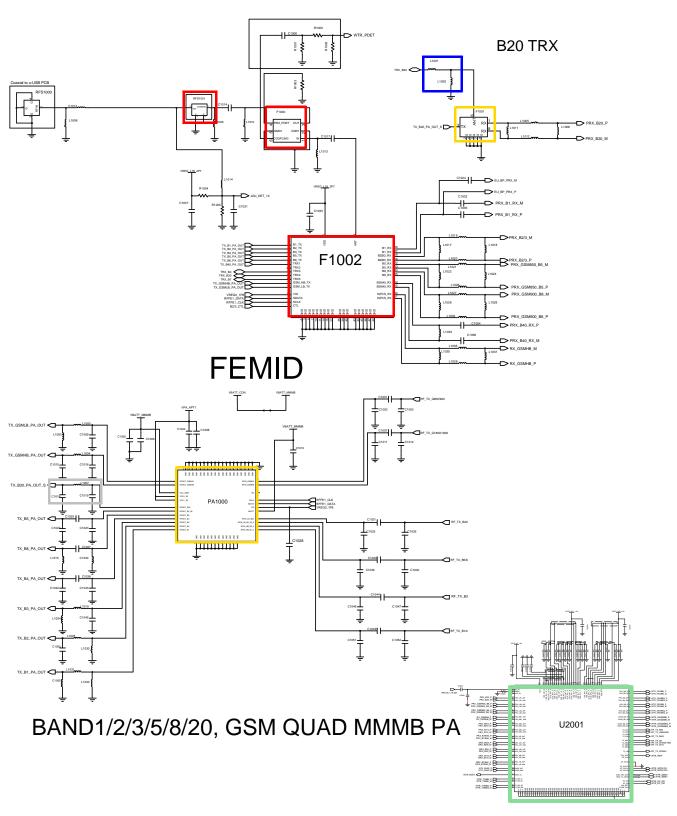


RF Transceiver

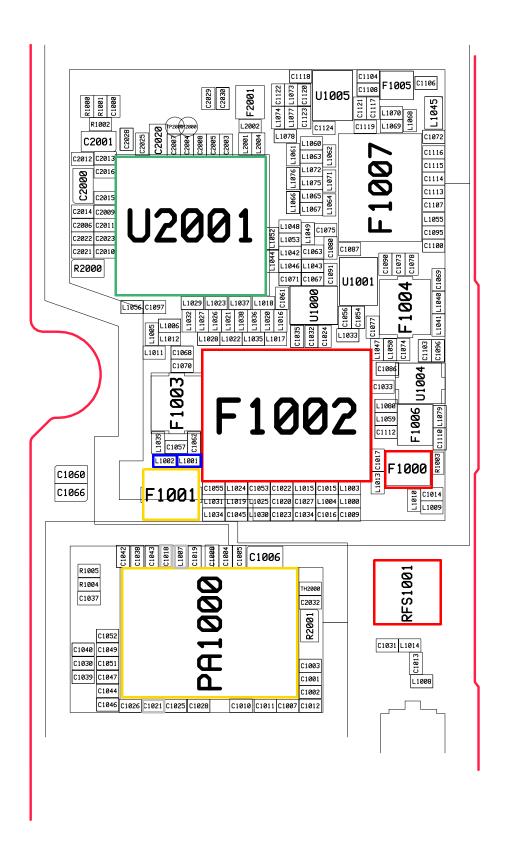


8-3-33. LTE20 TX





RF Transceiver

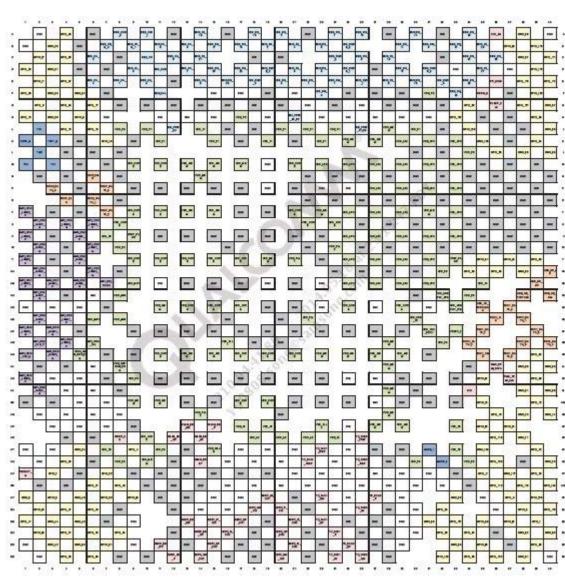


-NC Point(Top View)

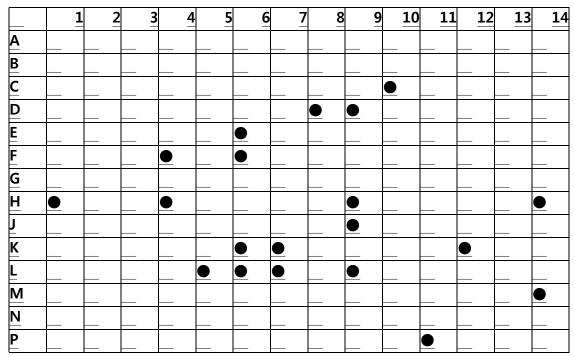
•: NC

		1	2	3 4	5	6	7	8	9	10	11	12	13	14
Α														
A B C D														
С	•													lacktriangle
D	•								•	•	•	•	•	lacktriangle
E	•	•	•	•	•	•	•	•	•	•	•	•	•	lacktriangle
F	•					•	•							•
G	•					•	•							•
H	•					•	•							•
I	•					•	•							•
J							•							
K							•							
L							lacksquare							
M							•							
N							lacksquare							
P							•							lacktriangle
R T							lacksquare							
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U V W Y	•					•	•							•
V	•					•	•							•
W	•					•	•							•
Υ	•					•	•							•
AA						•	•							
AB						•	•							

UME4000



UCP3000



U4000