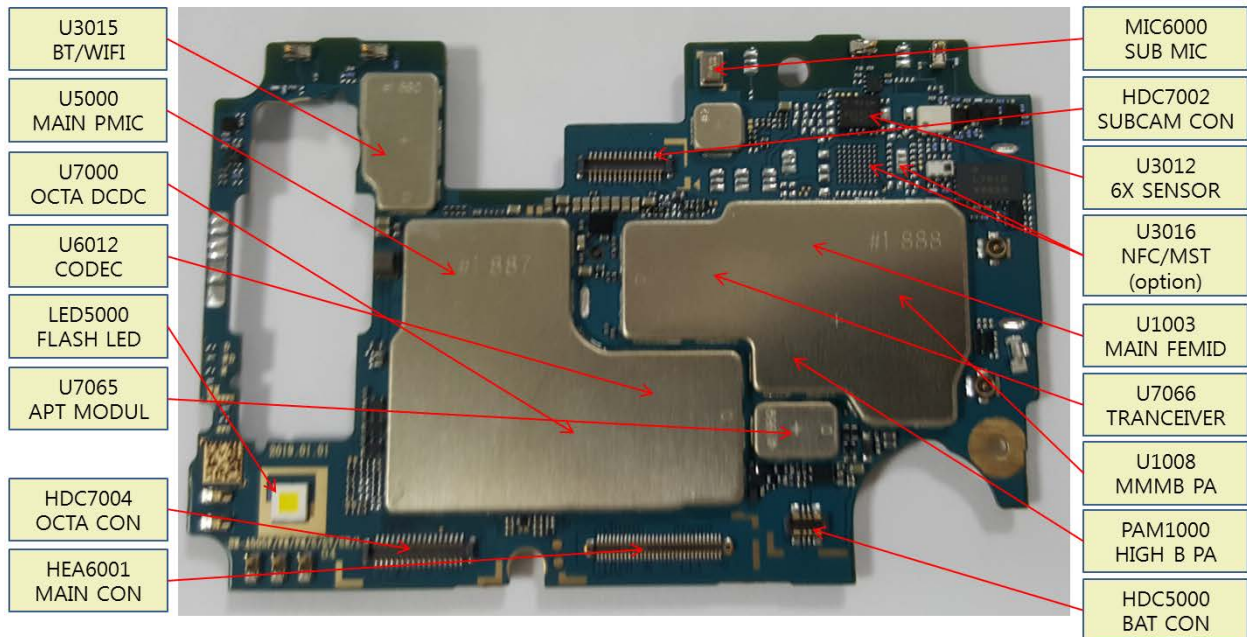


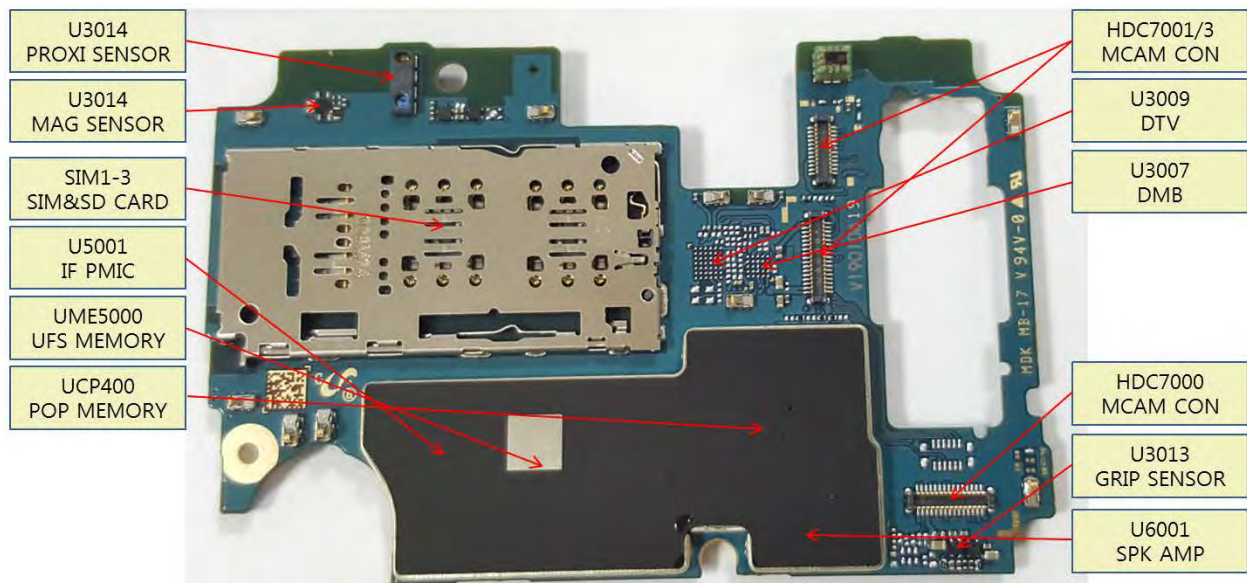
8. Level 3 Repair

8-1. Components Layout

MAIN PBA (TOP SIDE)

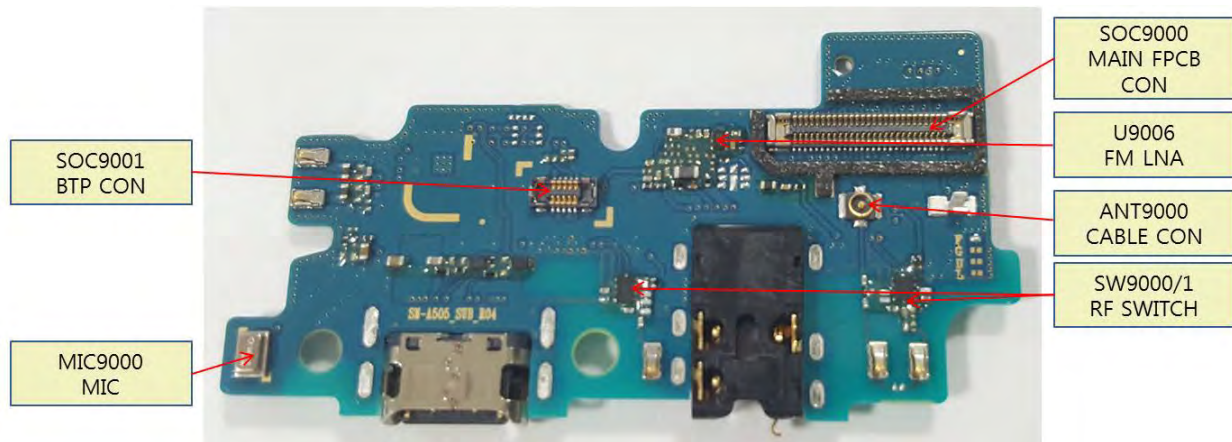


MAIN PBA (BOTTOM SIDE)

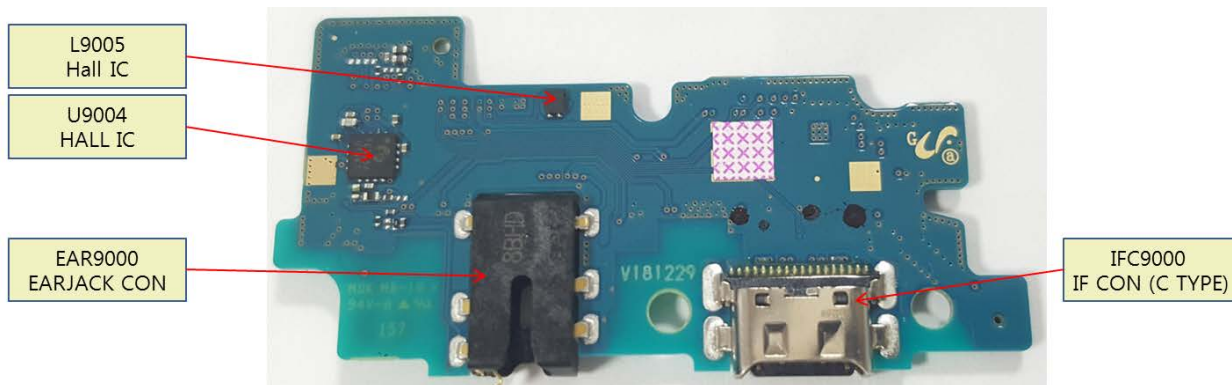


8. Level 3 Repair

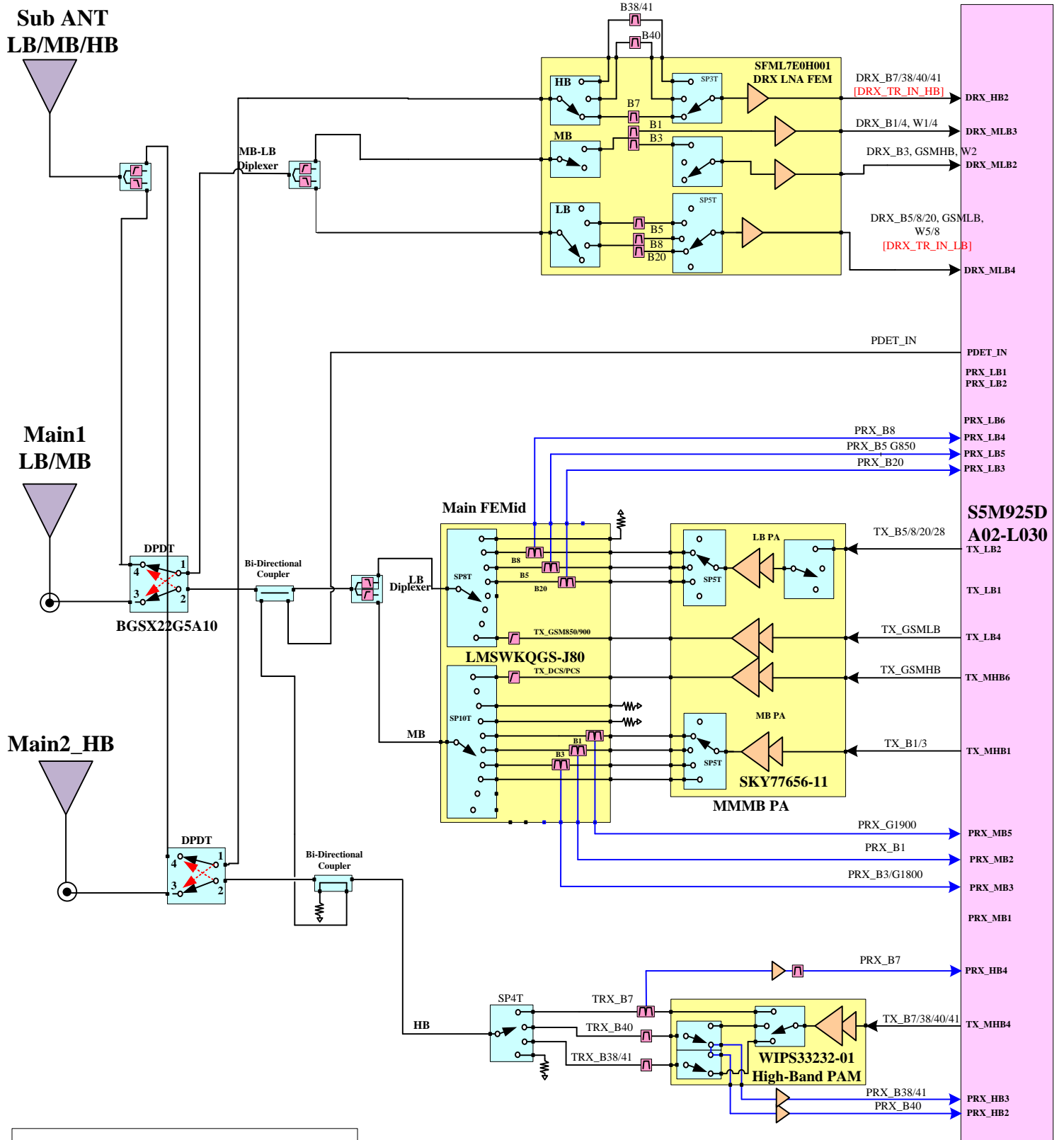
SUB PBA (TOP SIDE)



SUB PBA (BOTTOM SIDE)



SM-A505F/DS RF Block Diagram

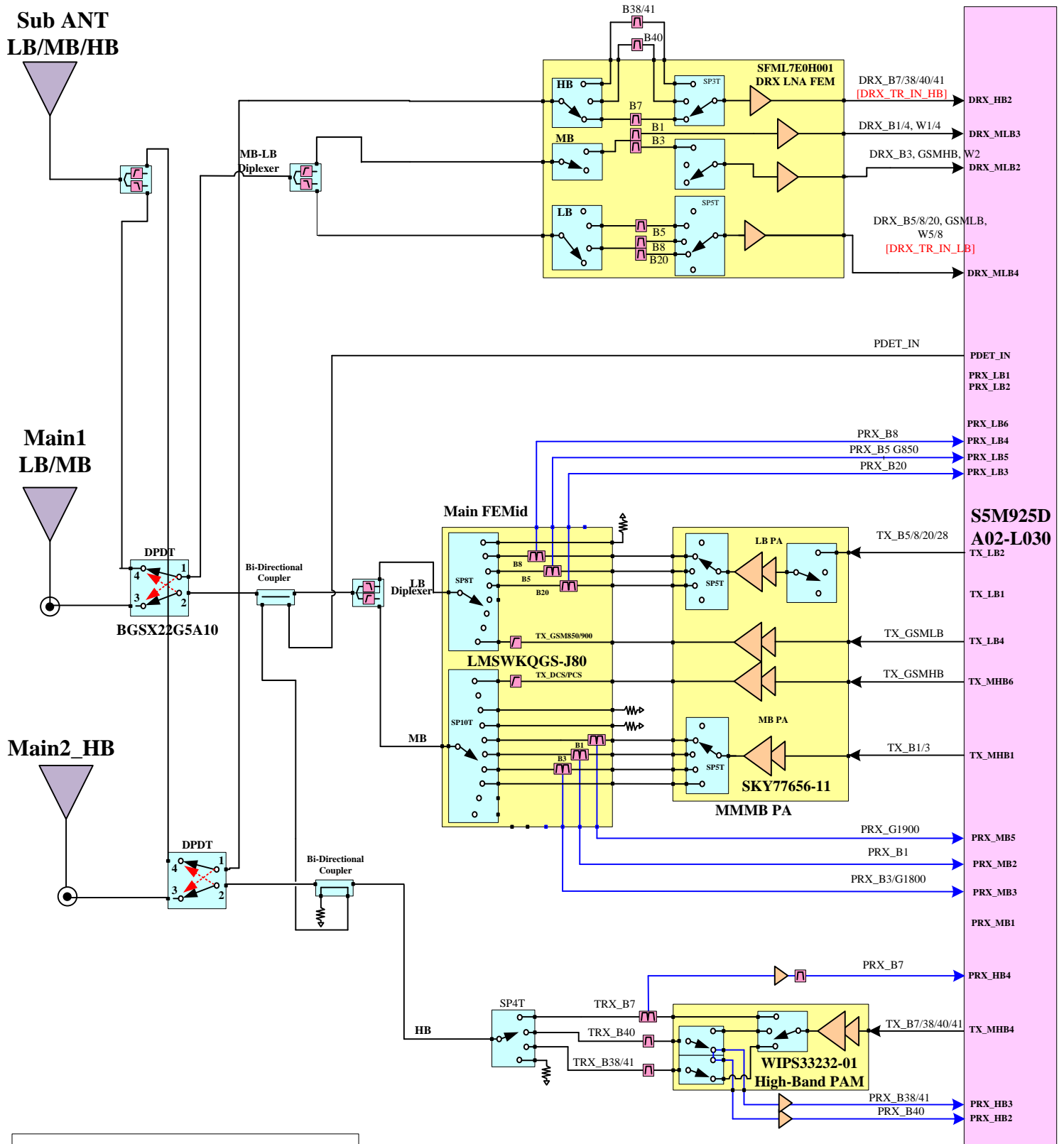


[SM-A505F/DS RF Band]
2G : Quad
3G : W1,W2,W5,W8
LTE FDD : B1/3/5/7/8/20
LTE TDD : B38/40/41

GSM/GPRS/EDGE 850 - Tx 824.2 - 848.8MHz / Rx 869.2 - 893.8MHz
 GSM/GPRS/EDGE 1900 - Tx 1850.2 - 1909.8MHz / Rx 1930.2 - 1989.8MHz
 UMTS Band 2 - Tx 1850 - 1910MHz / Rx 1930 - 1990MHz
 UMTS Band 5 - Tx 824 - 849 / Rx 869 - 894MHz
 LTE Band 5 - Tx 824 - 849MHz / Rx 869 - 894MHz
 LTE Band 41 - TRx 2496 - 2690MHz

WLAN 2.4G - TRx 2412 - 2462MHz within USA
 WLAN 2.4G - TRx 2412 - 2472MHz Non USA
 WLAN 5G - TRx 5180 - 5240MHz
 WLAN 5G - TRx 5260 - 5320MHz
 WLAN 5G - TRx 5500 - 5720MHz
 WLAN 5G - TRx 5745 - 5825MHz
 Bluetooth/EDR/LE - TRx 2402 - 2480MHz
 NFC - TRx 13.56MHz
 GNSS - Rx 1592 - 1606MHz

SM-A505FN/DS RF Block Diagram



[SM-A505FN/DS RF Band]

2G : Quad

3G : W1,W2,W5,W8

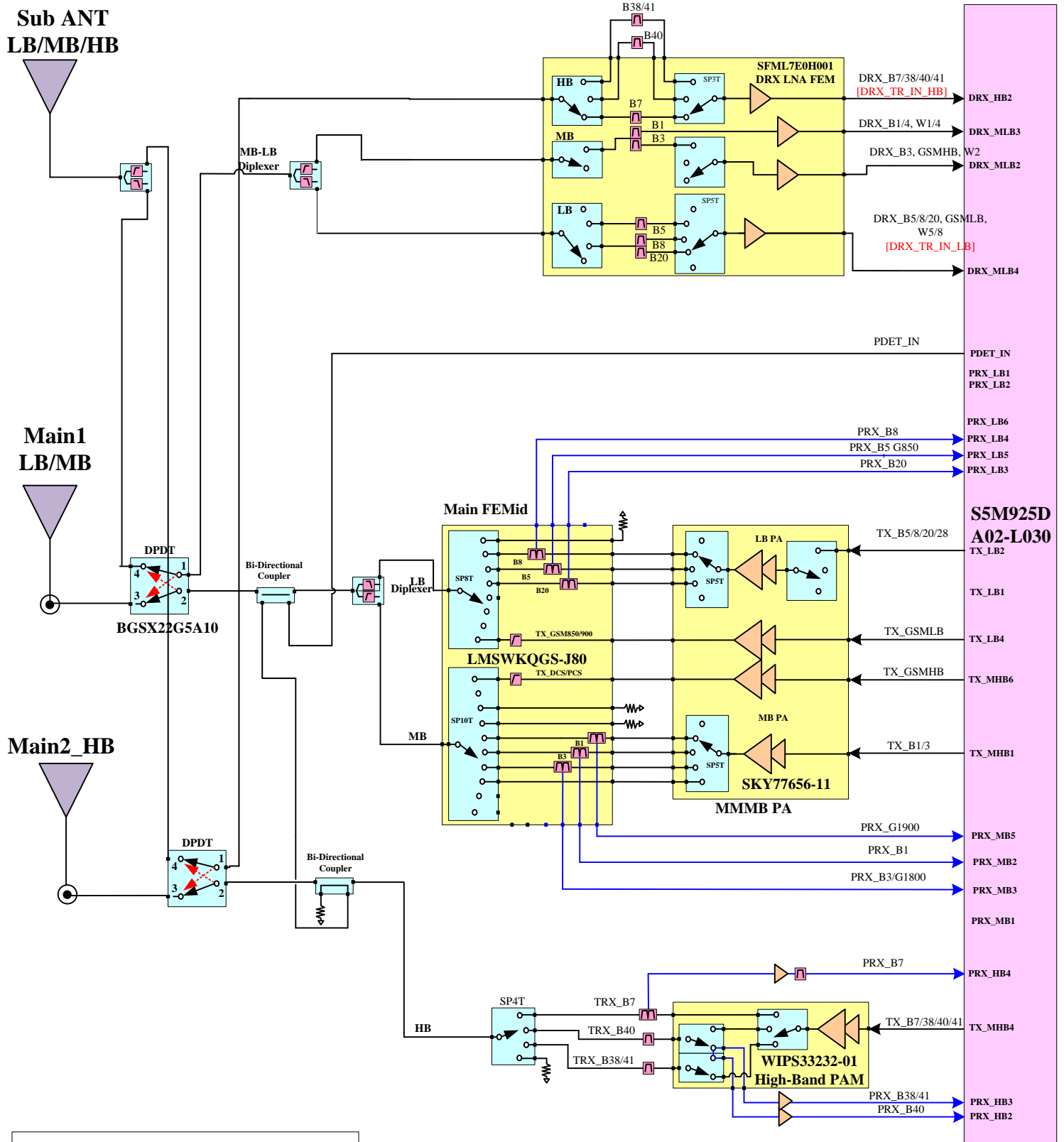
LTE FDD : B1/3/5/7/8/20

LTE TDD : B38/40/41

GSM/GPRS/EDGE 850 - Tx 824.2 - 848.8MHz / Rx 869.2 - 893.8MHz
 GSM/GPRS/EDGE 1900 - Tx 1850.2 - 1909.8MHz / Rx 1930.2 - 1989.8MHz
 UMTS Band 2 - Tx 1850 - 1910MHz / Rx 1930 - 1990MHz
 UMTS Band 5 - Tx 824 - 849 / Rx 869 - 894MHz
 LTE Band 5 - Tx 824 - 849MHz / Rx 869 - 894MHz
 LTE Band 41 - TRx 2496 - 2690MHz

WLAN 2.4G - TRx 2412 - 2462MHz within USA
 WLAN 2.4G - TRx 2412 - 2472MHz Non USA
 WLAN 5G - TRx 5180 - 5240MHz
 WLAN 5G - TRx 5260 - 5320MHz
 WLAN 5G - TRx 5500 - 5720MHz
 WLAN 5G - TRx 5745 - 5825MHz
 Bluetooth/EDR/LE - TRx 2402 - 2480MHz
 NFC - TRx 13.56MHz
 GNSS - Rx 1592 - 1606MHz

SM-A505FN/DS RF Block Diagram



[SM-A505FN/DS RF Band]

2G : Quad

3G : W1,W2,W5,W8

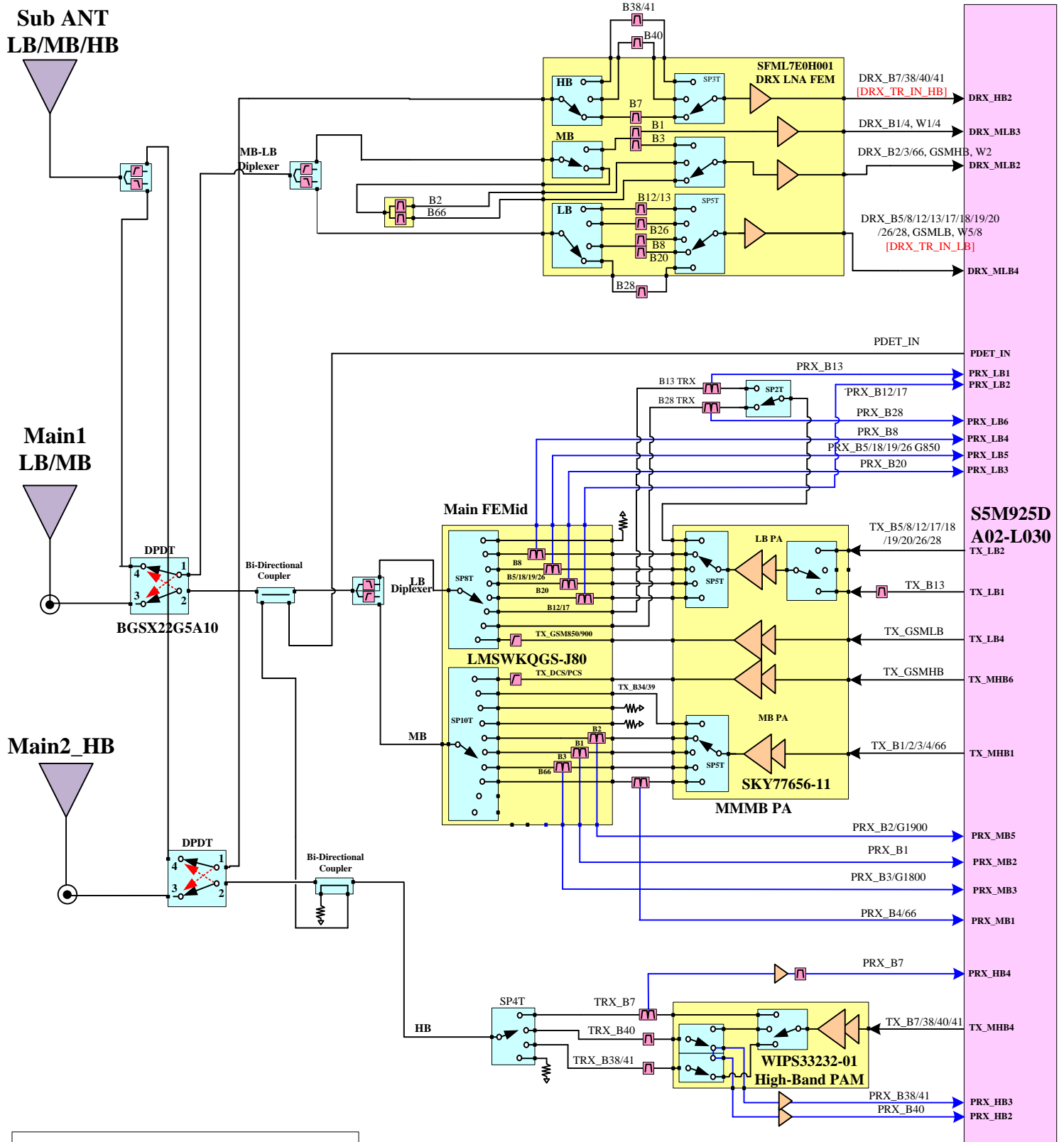
LTE FDD : B1/3/5/7/8/20

LTE TDD : B38/40/41

GSM/GPRS/EDGE 850 - Tx 824.2 - 848.8MHz / Rx 869.2 - 893.8MHz
 GSM/GPRS/EDGE 1900 - Tx 1850.2 - 1909.8MHz / Rx 1930.2 - 1989.8MHz
 UMTS Band 2 - Tx 1850 - 1910MHz / Rx 1930 - 1990MHz
 UMTS Band 5 - Tx 824 - 849 / Rx 869 - 894MHz
 LTE Band 5 - Tx 824 - 849MHz / Rx 869 - 894MHz
 LTE Band 41 - TRx 2496 - 2690MHz

WLAN 2.4G - TRx 2412 - 2462MHz within USA
 WLAN 2.4G - TRx 2412 - 2472MHz Non USA
 WLAN 5G - TRx 5180 - 5240MHz
 WLAN 5G - TRx 5260 - 5320MHz
 WLAN 5G - TRx 5500 - 5720MHz
 WLAN 5G - TRx 5745 - 5825MHz
 Bluetooth/EDR/LE - TRx 2402 - 2480MHz
 NFC - TRx 13.56MHz
 GNSS - Rx 1592 - 1606MHz

SM-A505GT/DS RF Block Diagram



[SM-A505GT/DS RF Band]

2G : Quad

3G : W1,W2,W4,W5,W8

LTE FDD :

B1/2/3/4/7/8/12(17)/13/20/26(5/18/19)/28

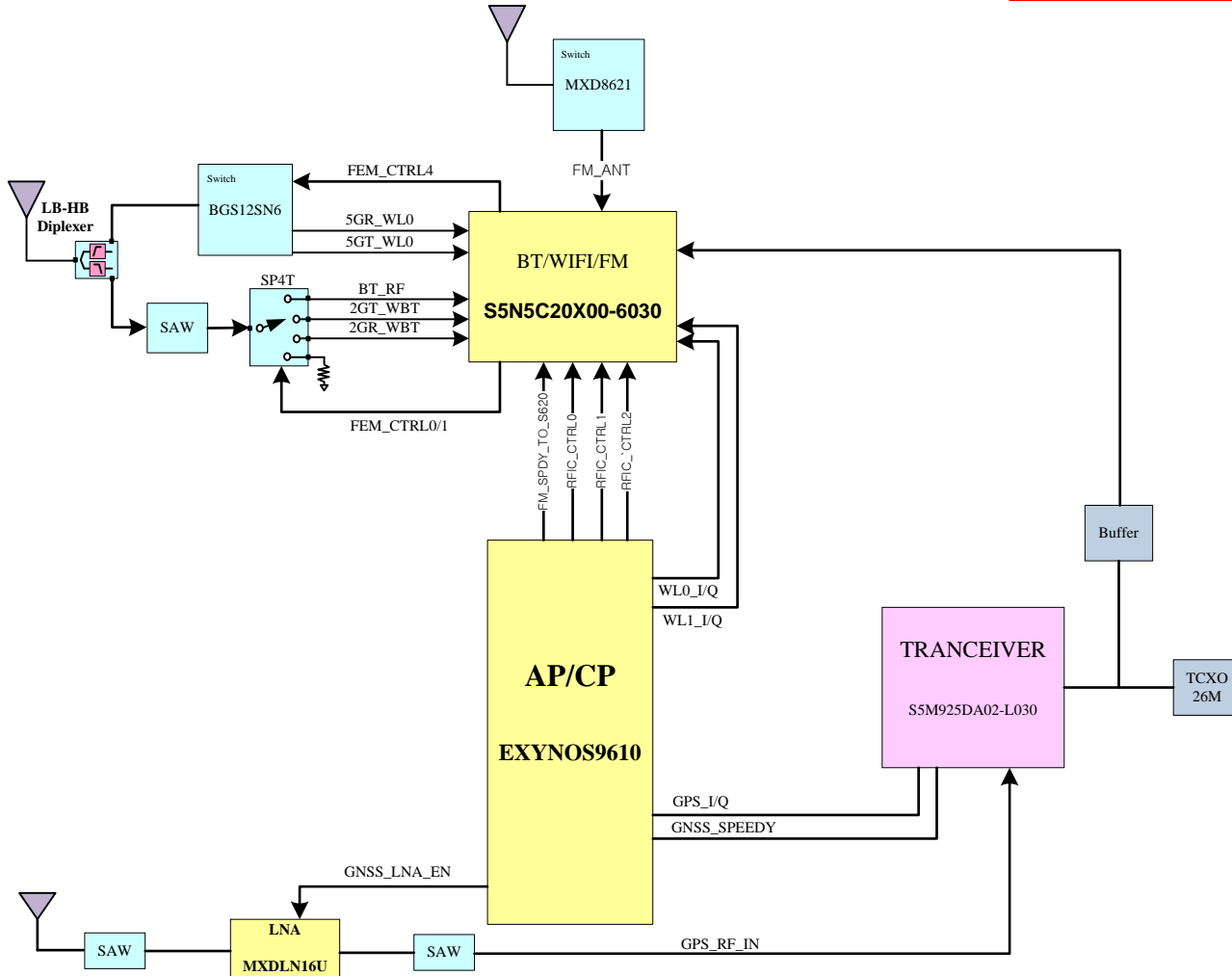
LTE TDD : B38/40/41

GSM/GPRS/EDGE 850 - Tx 824.2 - 848.8MHz / Rx 869.2 - 893.8MHz
 GSM/GPRS/EDGE 1900 - Tx 1850.2 - 1909.8MHz / Rx 1930.2 - 1989.8MHz
 UMTS Band 2 - Tx 1850 - 1910MHz / Rx 1930 - 1990MHz
 UMTS Band 4 - Tx 1710 - 1755 / Rx 2110 - 2155MHz
 UMTS Band 5 - Tx 824 - 849 / Rx 869 - 894MHz
 LTE Band 2 - Tx 1850 - 1910MHz / Rx 1930 - 1990MHz
 LTE Band 4 - Tx 1710 - 1755MHz / Rx 2110 - 2155MHz
 LTE Band 5 - Tx 824 - 849MHz / Rx 869 - 894MHz
 LTE Band 12 - Tx 699 - 716MHz / Rx 729 - 746MHz
 LTE Band 13 - Tx 777 - 787MHz / Rx 746 - 756MHz
 LTE Band 17 - Tx 704 - 716MHz / Rx 734 - 746MHz
 LTE Band 26 - Tx 814 - 849MHz / Rx 859 - 894MHz
 LTE Band 41 - TRx 2496 - 2690MHz
 LTE Band 66 - Tx 1710 - 1780MHz / Rx 2110 - 2200MHz

WLAN 2.4G - TRx 2412 - 2462MHz within USA
 WLAN 2.4G - TRx 2412 - 2472MHz Non USA
 WLAN 5G - TRx 5180 - 5240MHz
 WLAN 5G - TRx 5260 - 5320MHz
 WLAN 5G - TRx 5500 - 5720MHz
 WLAN 5G - TRx 5745 - 5825MHz
 Bluetooth/EDR/LE - TRx 2402 - 2480MHz
 GNSS - Rx 1592 - 1606MHz

A50 Connectivity Block Diagram

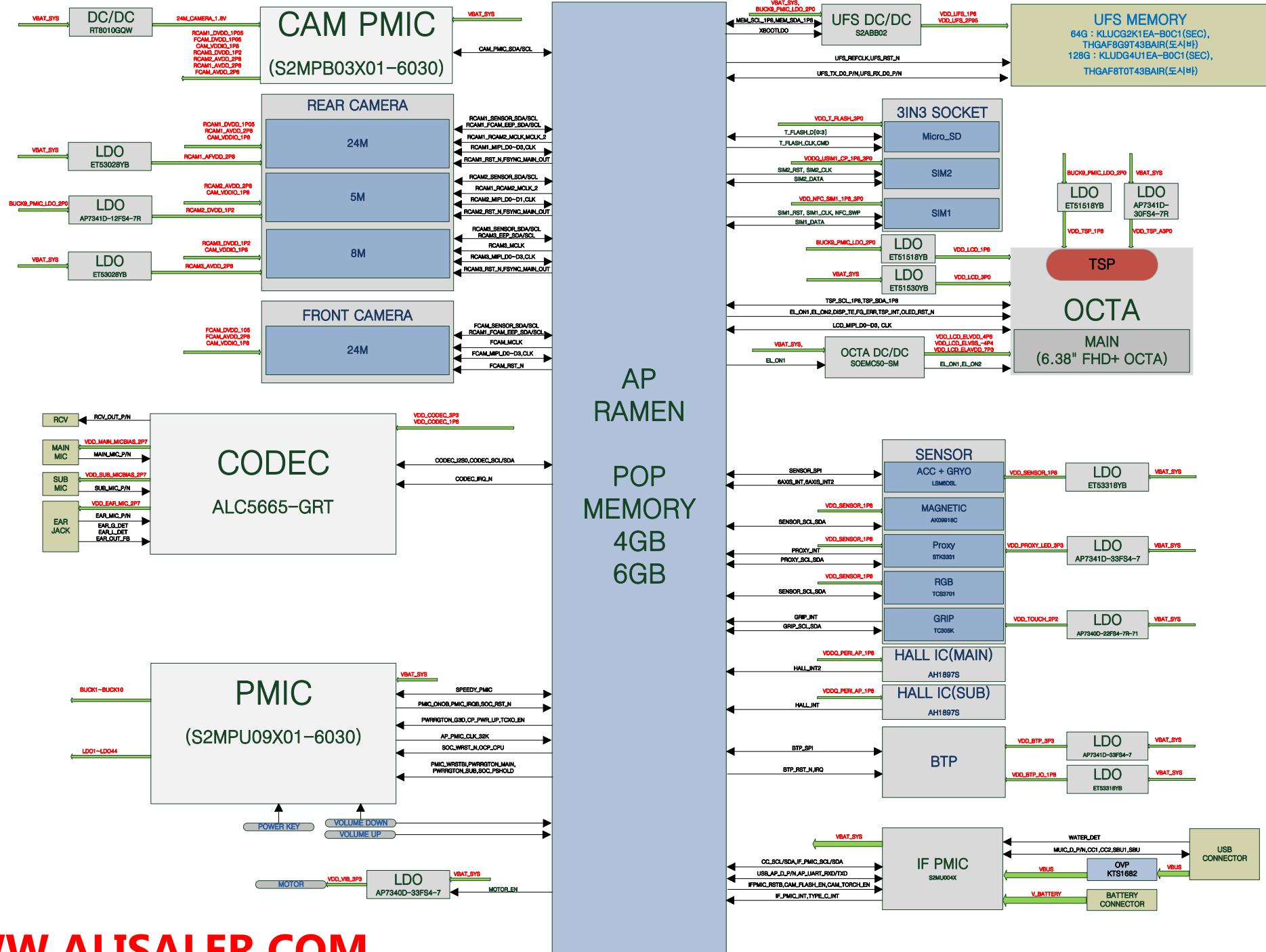
SM-A505F/GT/G/GN/FN/FM
Common



A50 BB Block Diagram

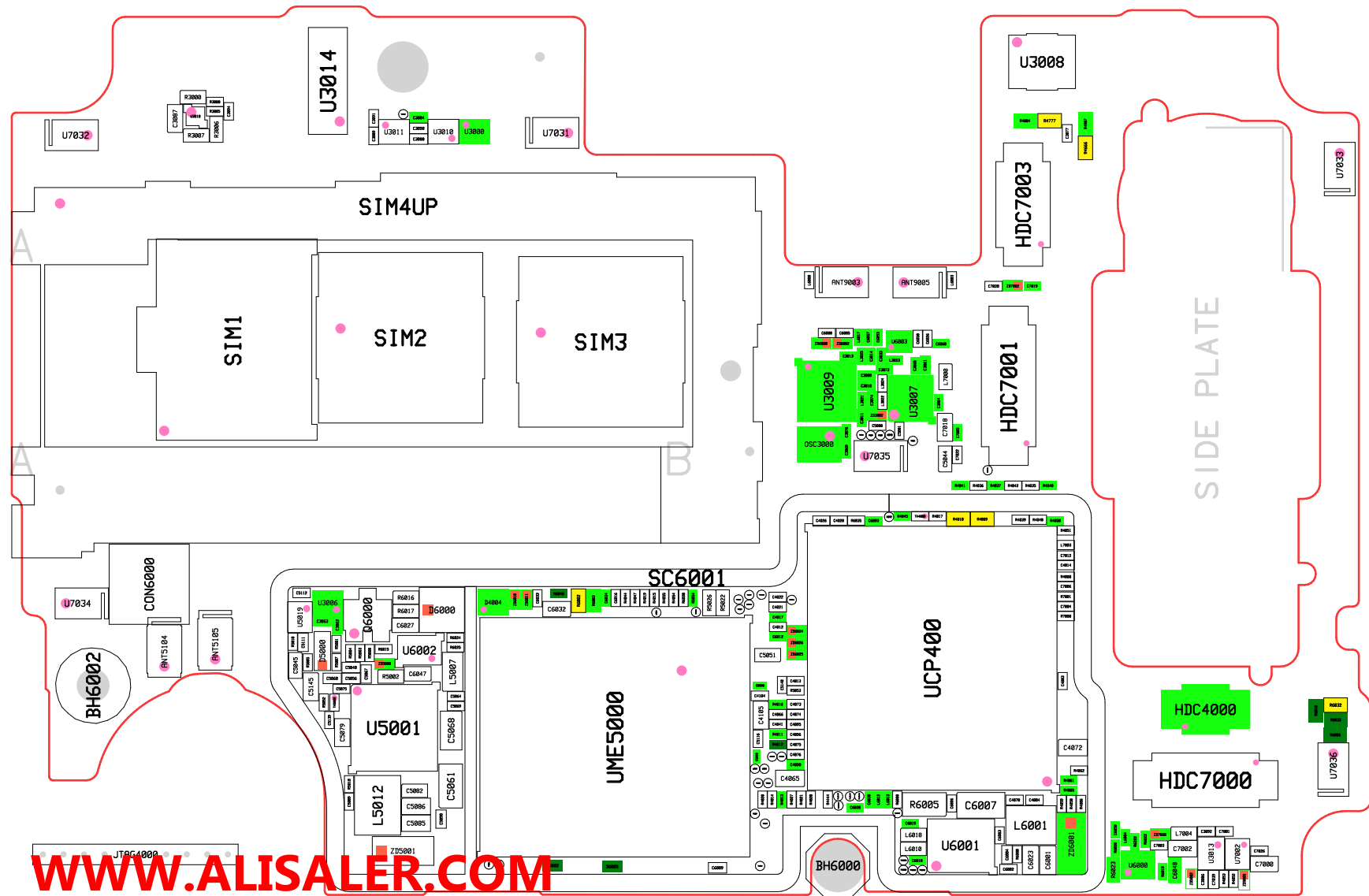
SM-A505F/GT/G/GN/FN/FM
Common

AliFixit.COM



SM-A505F/GT/G/GN/FN/FM
Common

WWW.AliFixit.COM

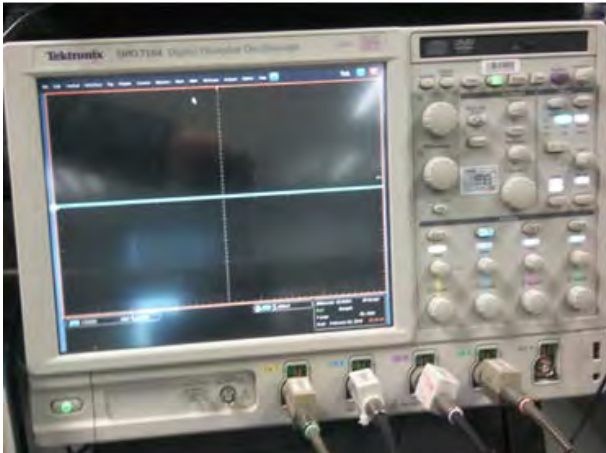


WWW.ALISALER.COM



8. Level 3 Repair

8-3. Flow chart of Troubleshooting.



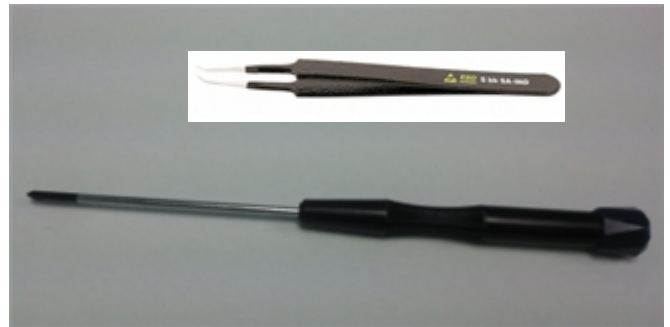
Oscilloscope



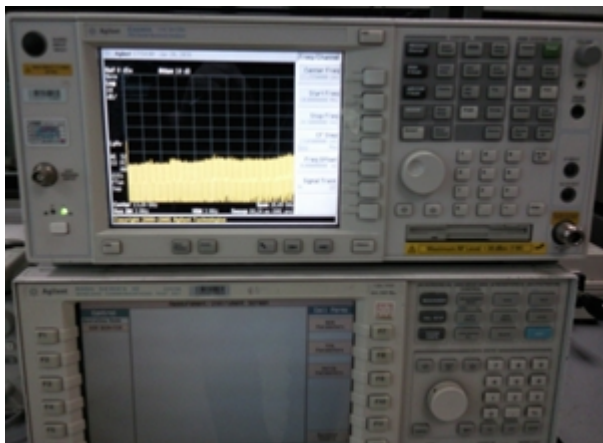
Digital Multimeter



Power Supply



+ driver, ESD Safe Tweezer



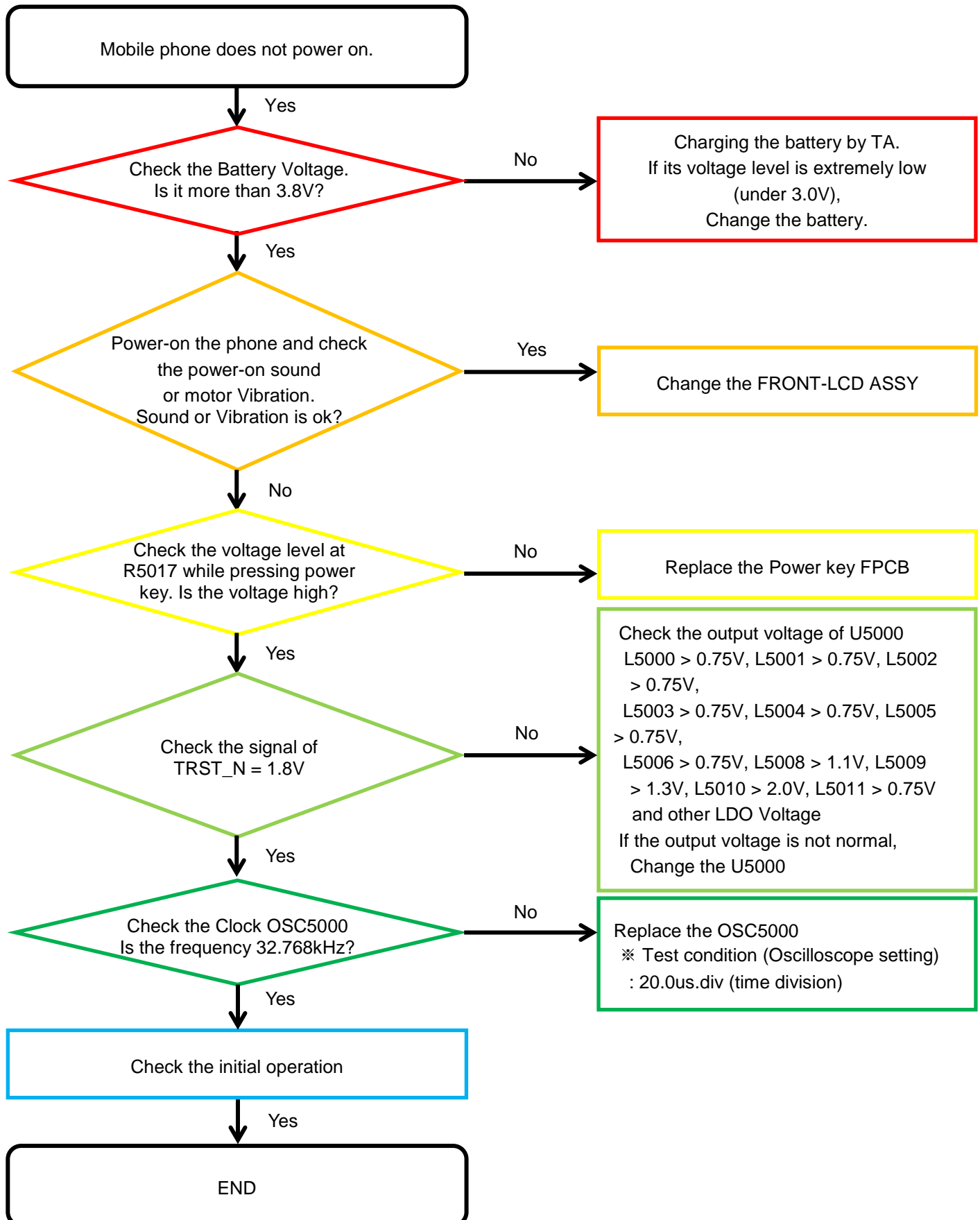
8960 & Spectrum Analyzer



Soldering iron

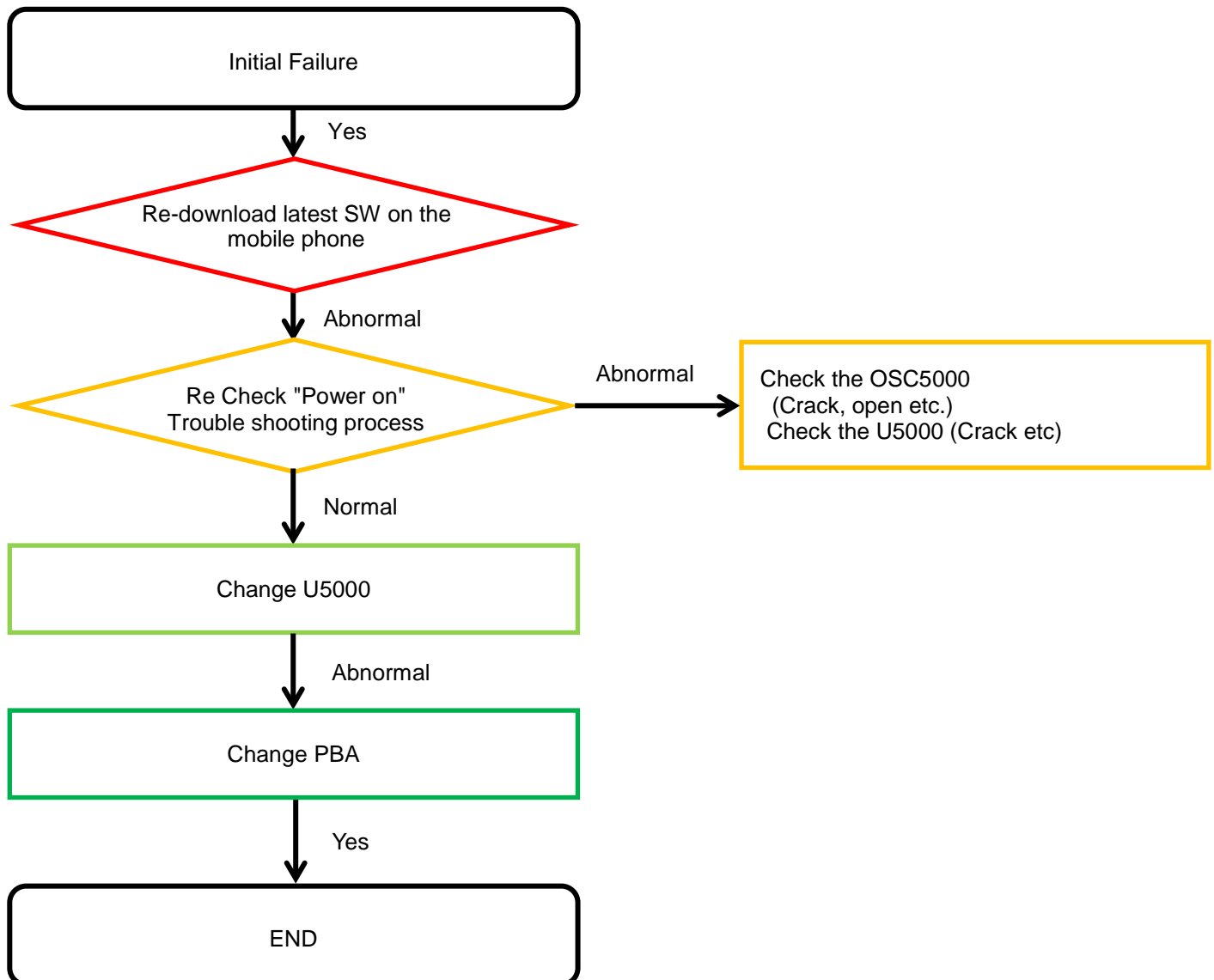
8. Level 3 Repair

8-4-1. Power On



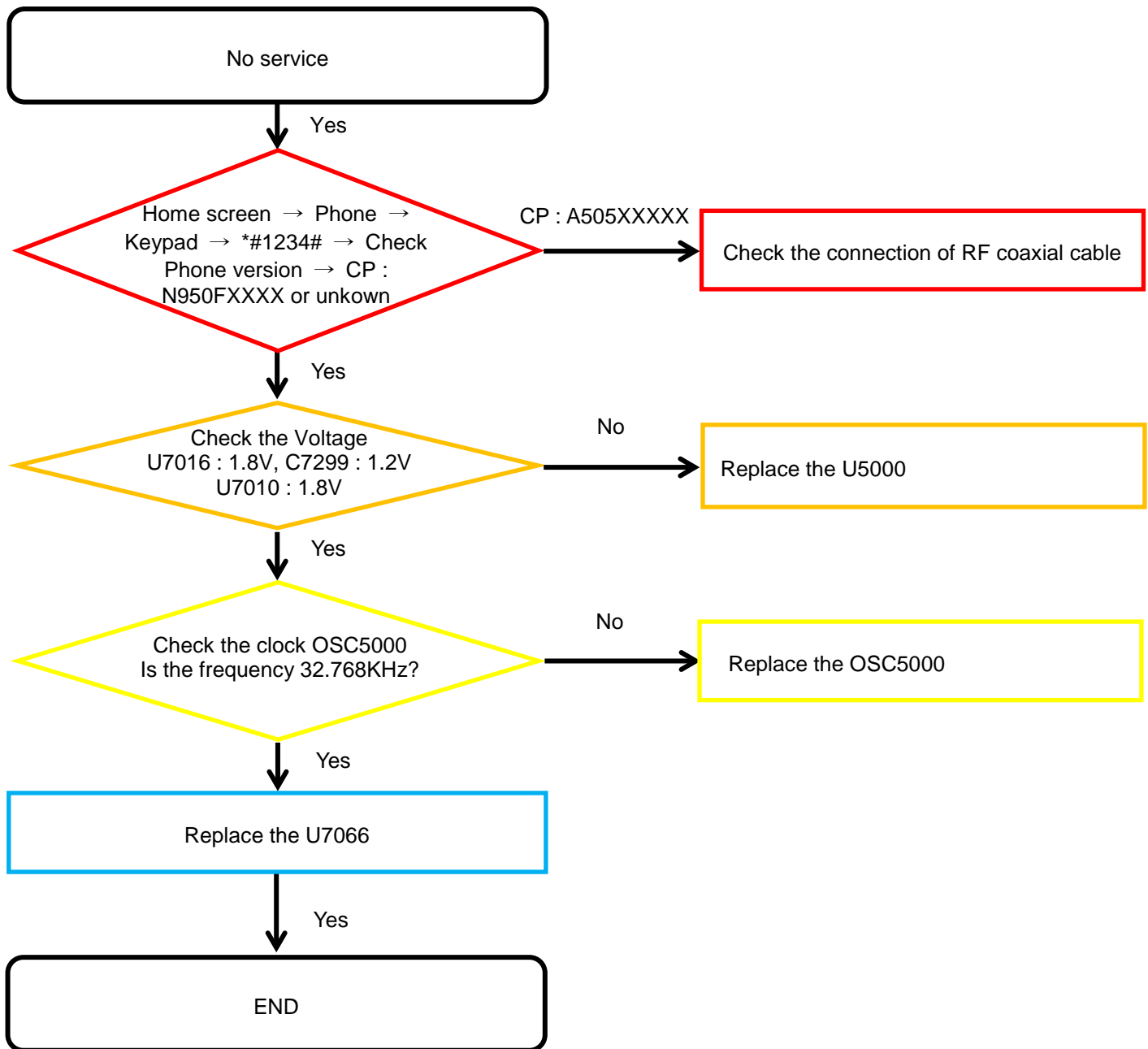
8. Level 3 Repair

8-4-2. Initial



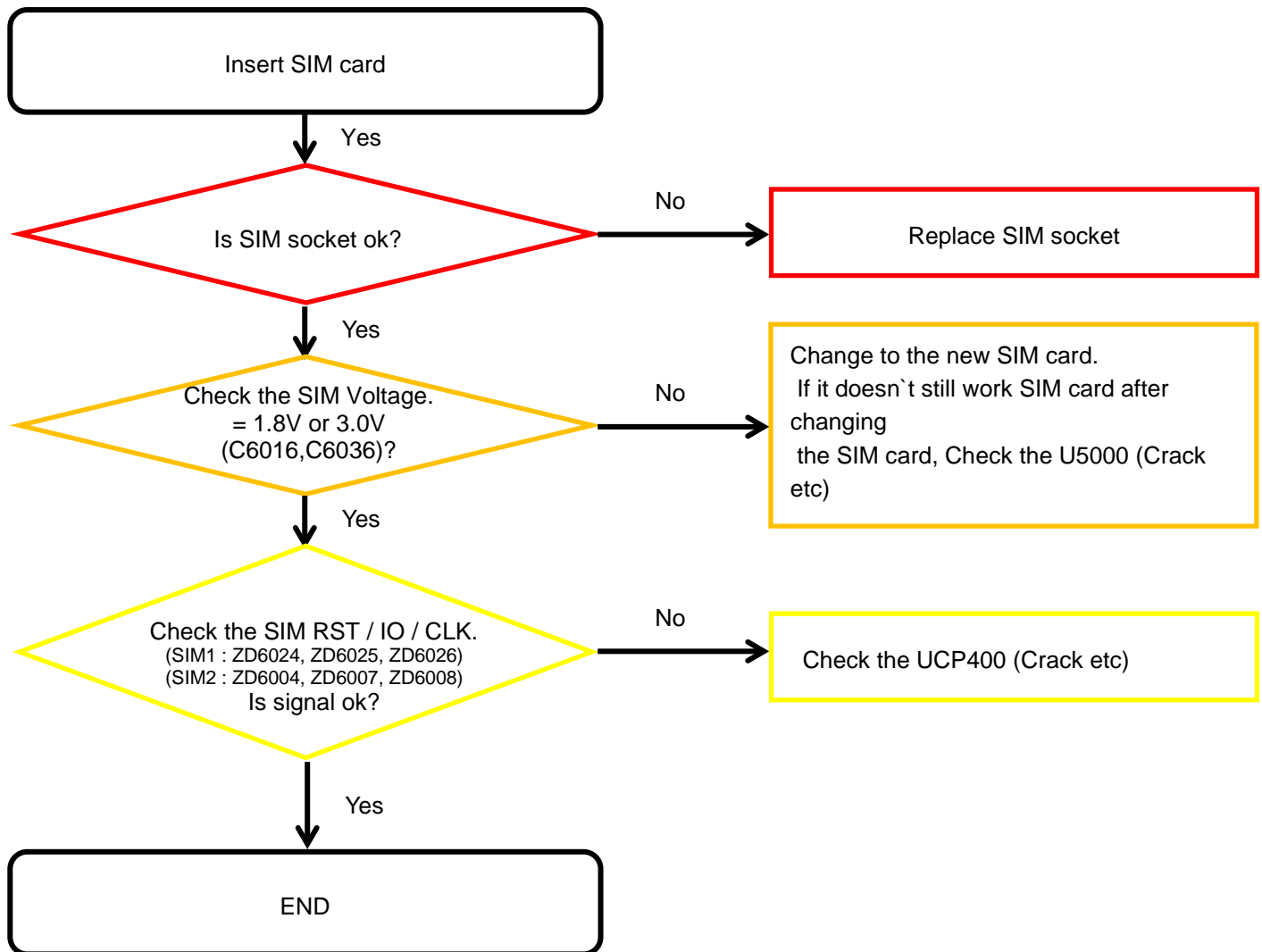
8. Level 3 Repair

8-4-3. No Service



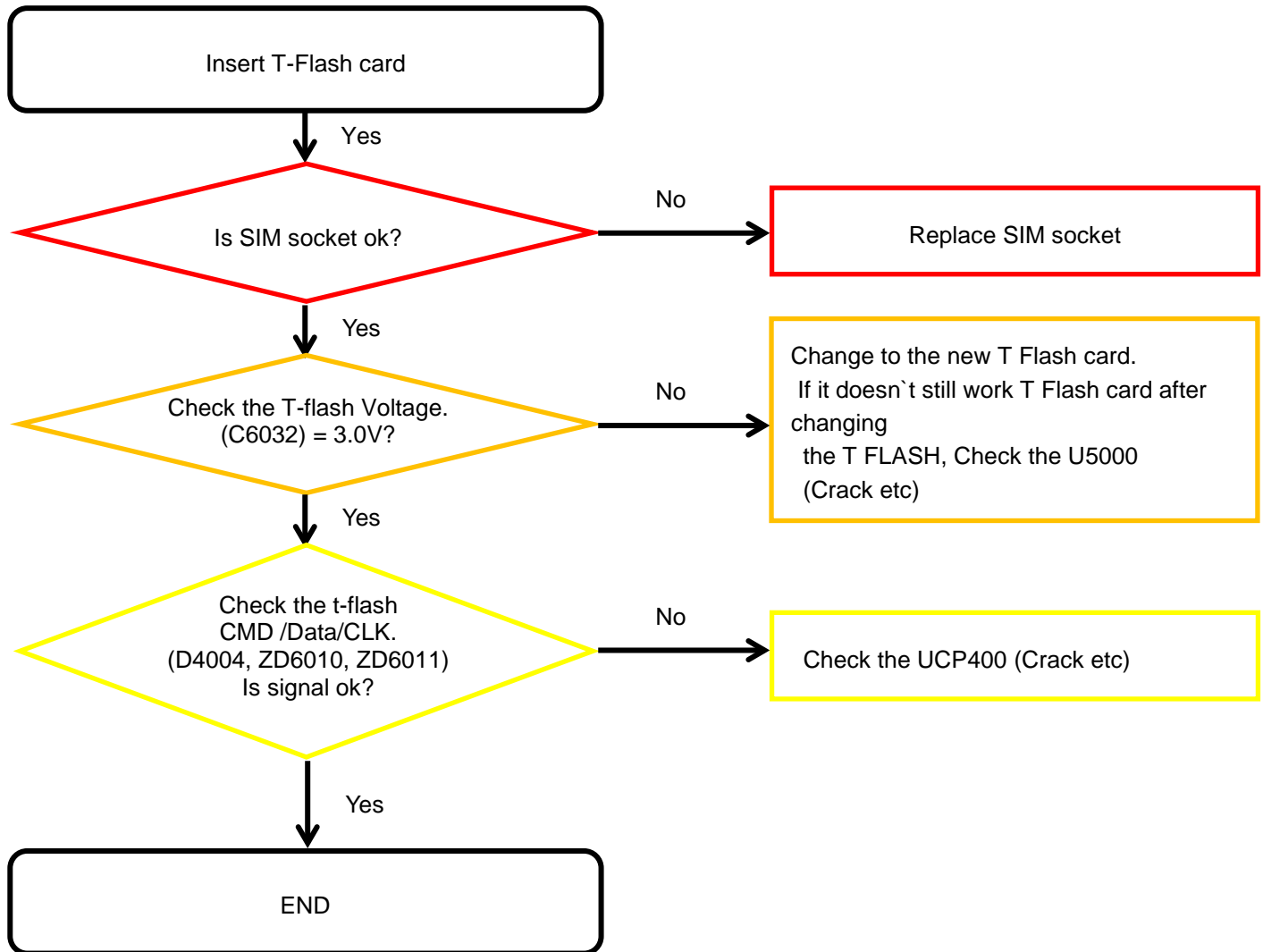
8. Level 3 Repair

8-4-4. SIM Part



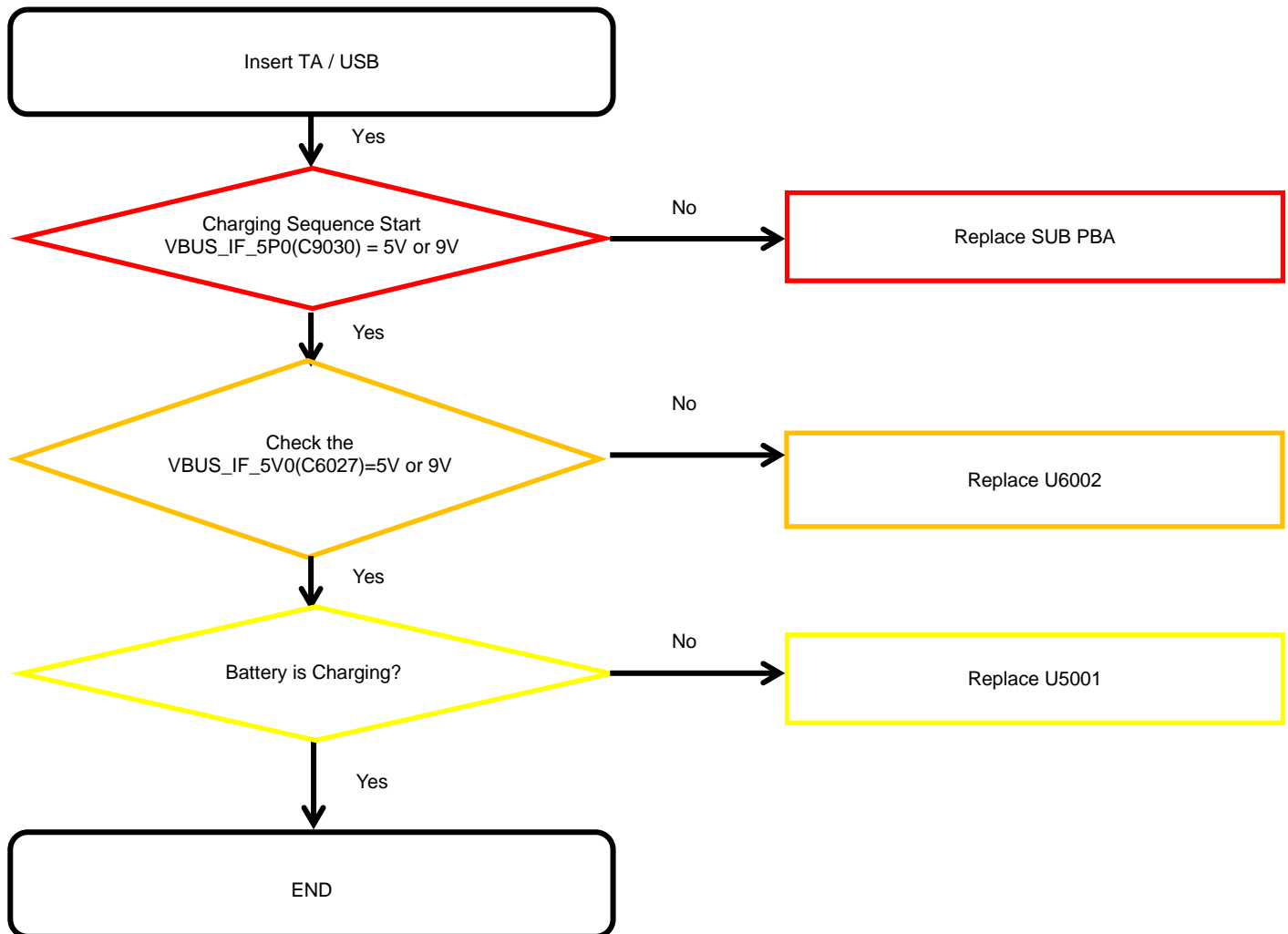
8. Level 3 Repair

8-4-5. T-Flash Part



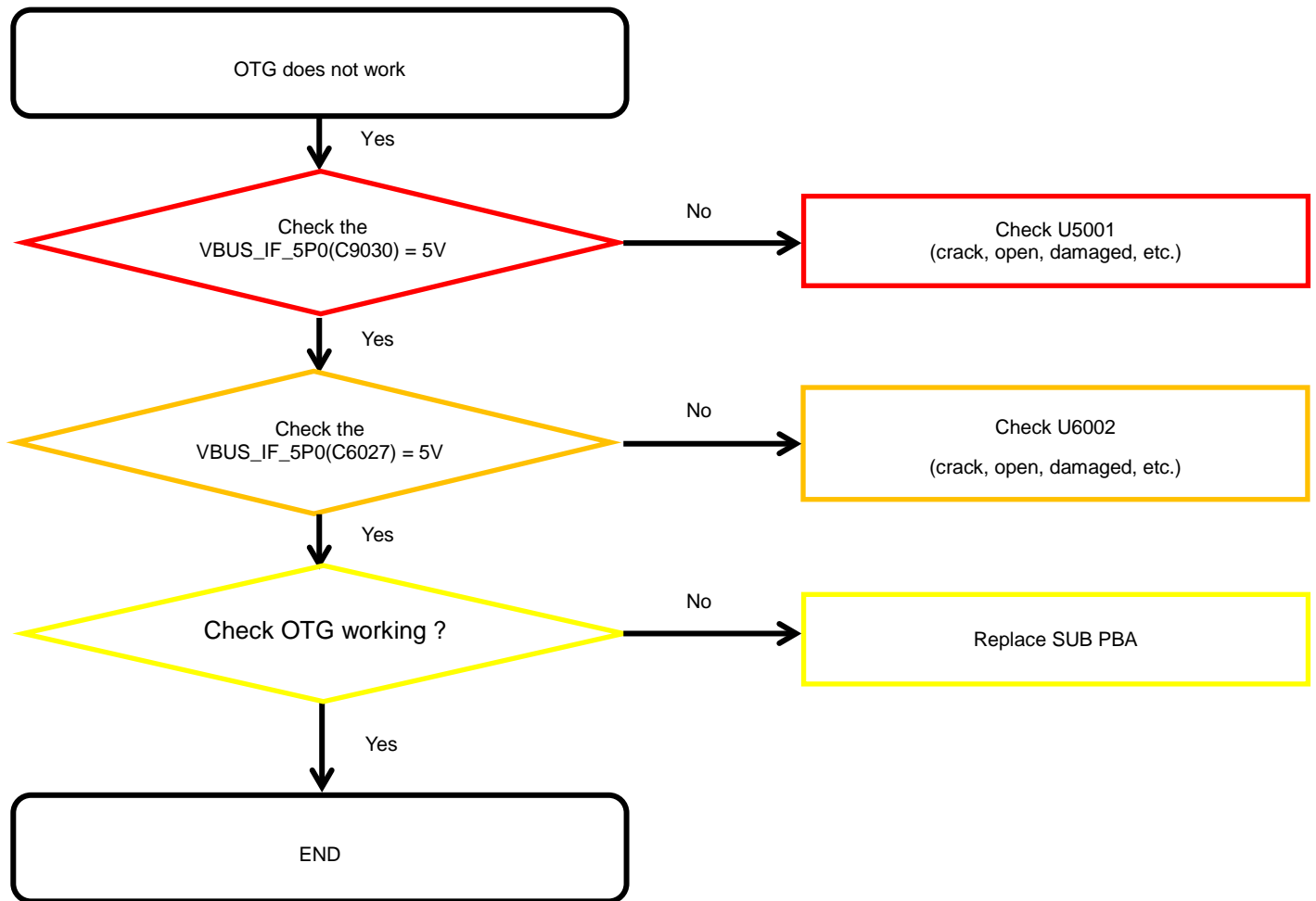
8. Level 3 Repair

8-4-6. Cable Charging Part



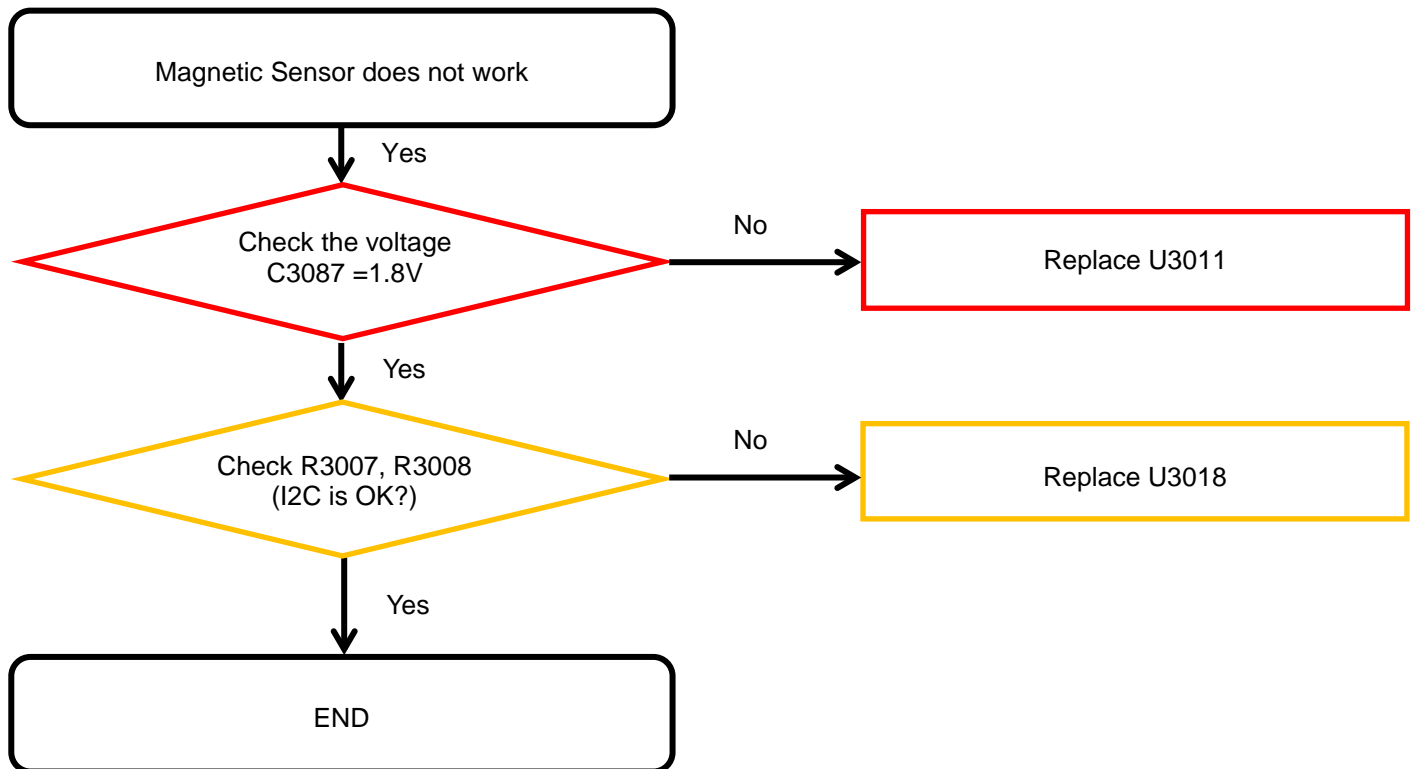
8. Level 3 Repair

8-4-7. OTG



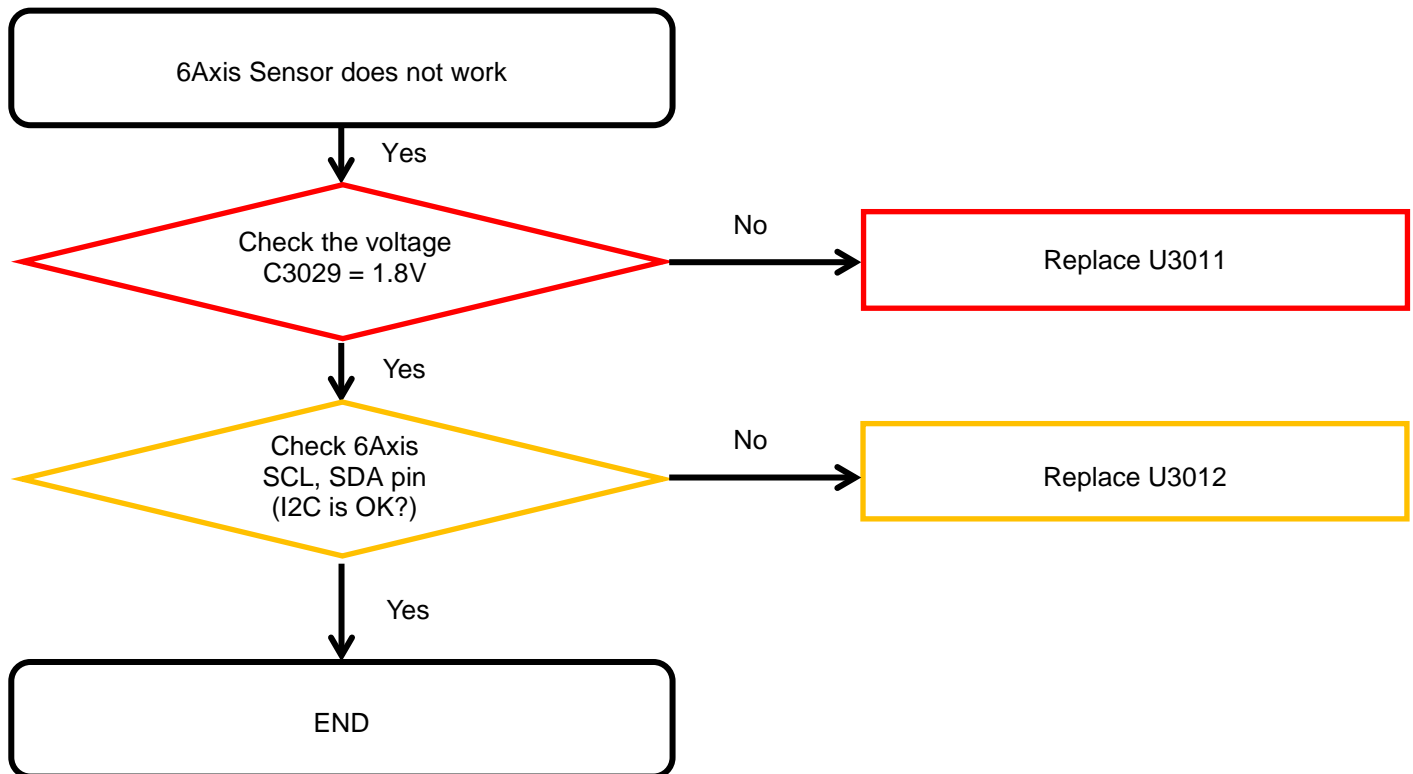
8. Level 3 Repair

8-4-8-1. Magnetic Sensor



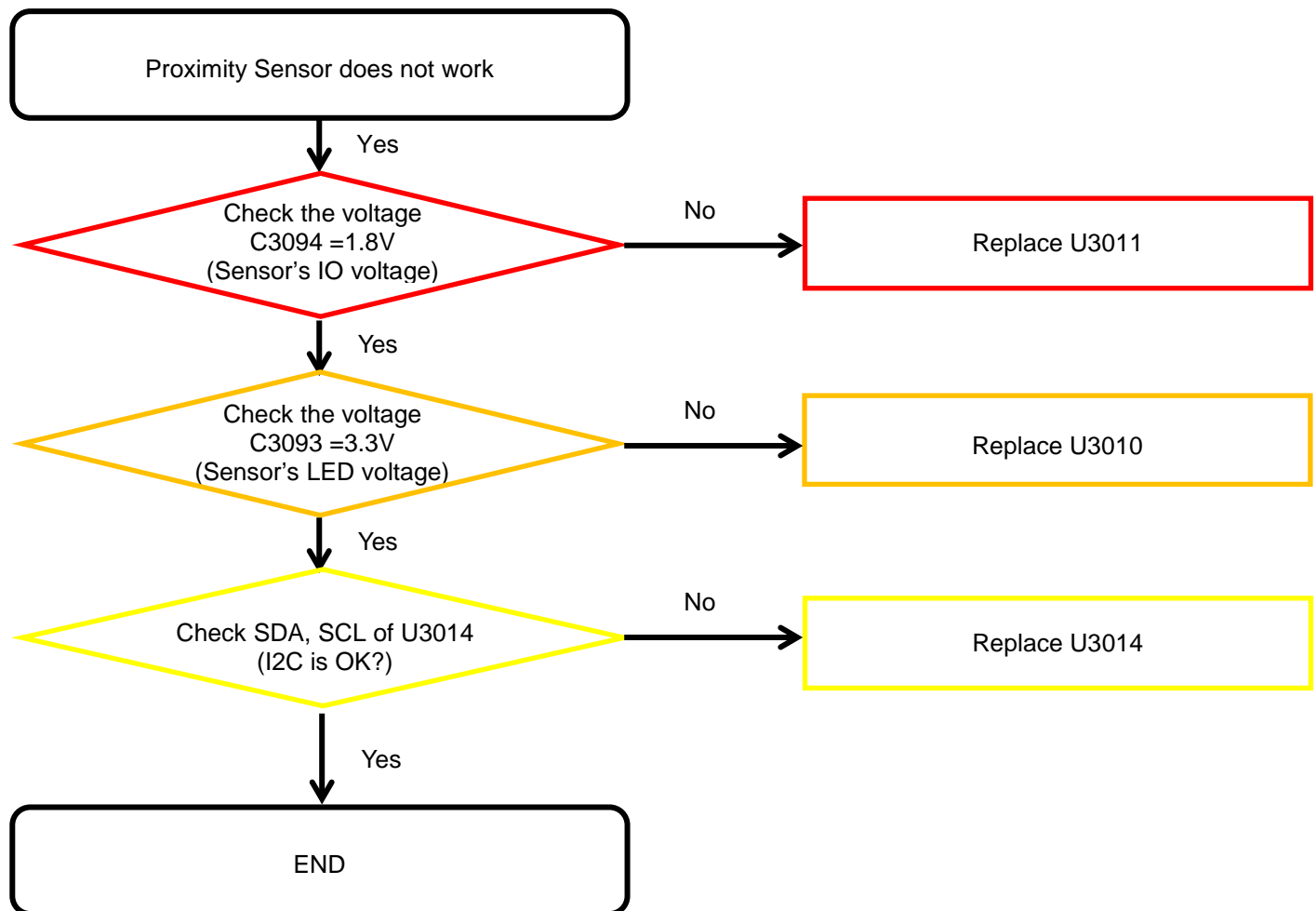
8. Level 3 Repair

8-4-8-2. 6Axis Sensor



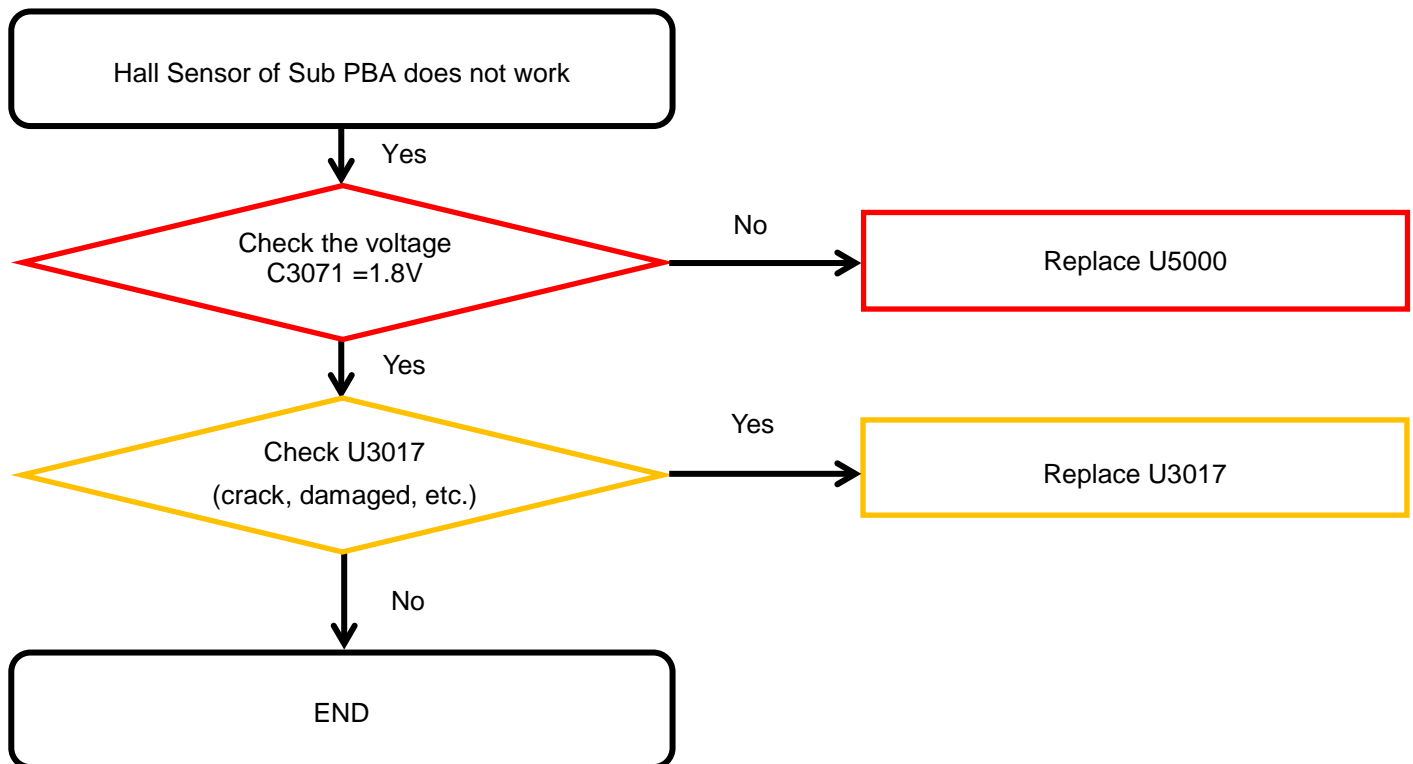
8. Level 3 Repair

8-4-8-3. Proximity



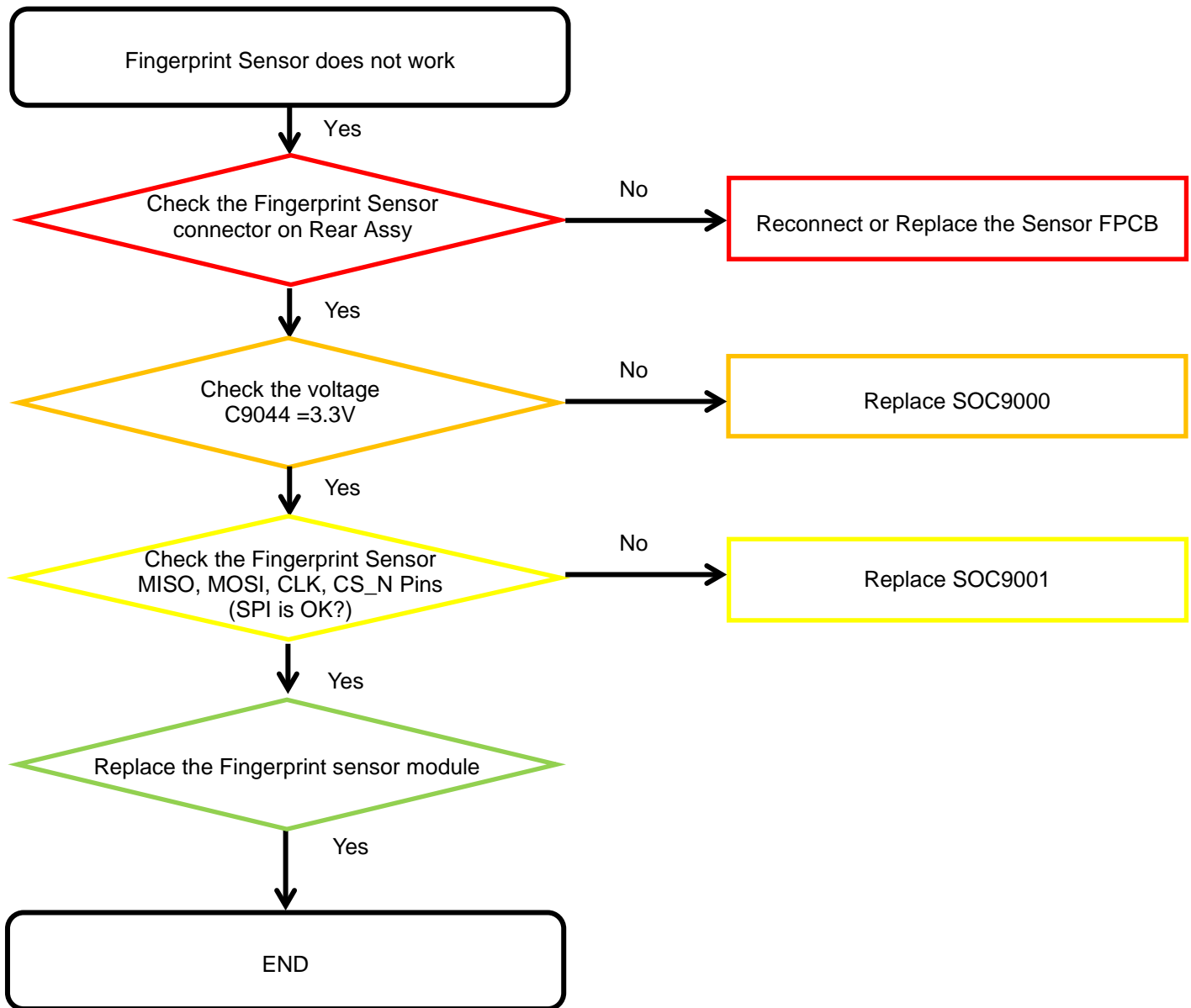
8. Level 3 Repair

8-4-8-4. Hall Sensor



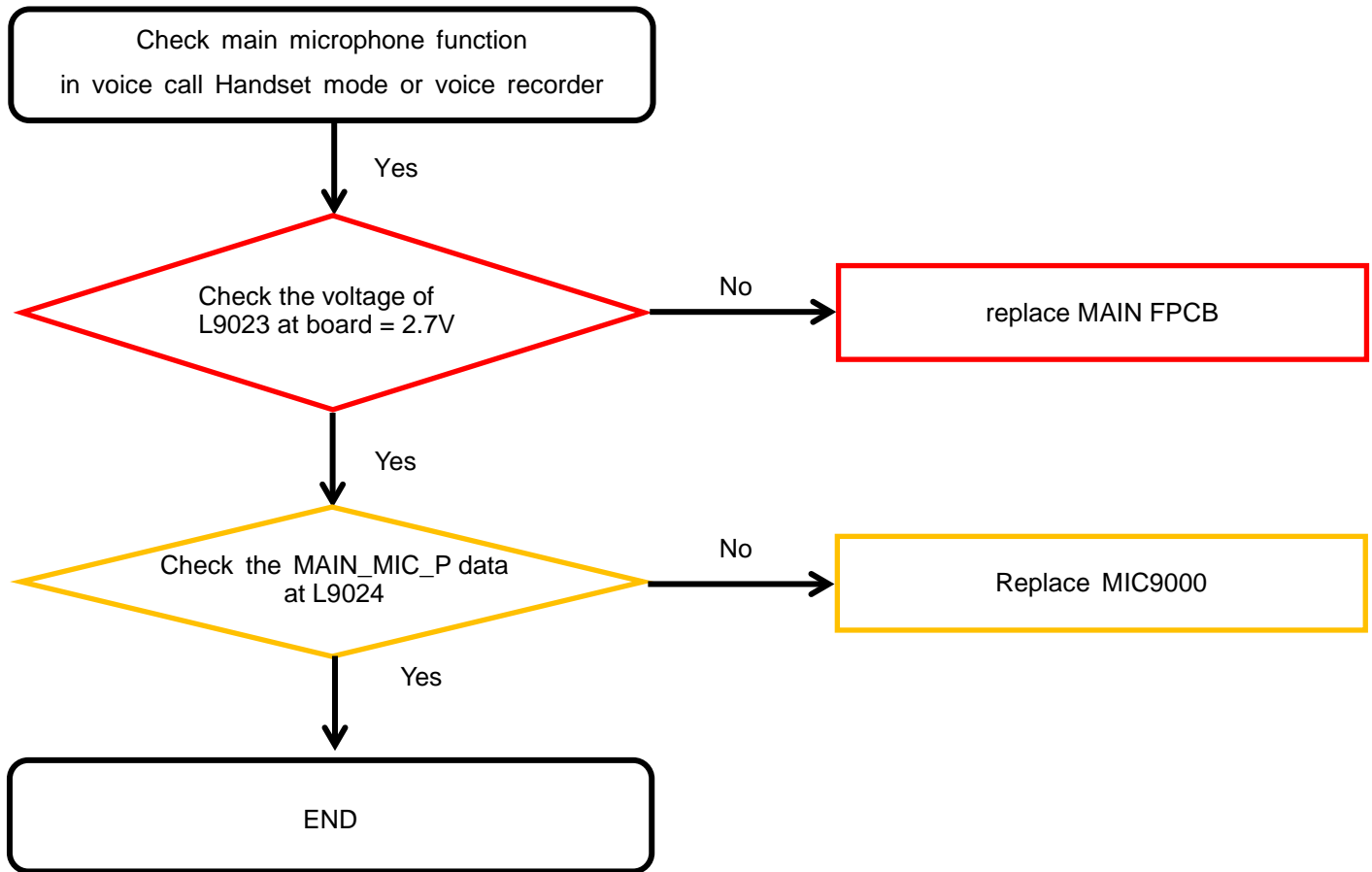
8. Level 3 Repair

8-4-8-5. Fingerprint Sensor



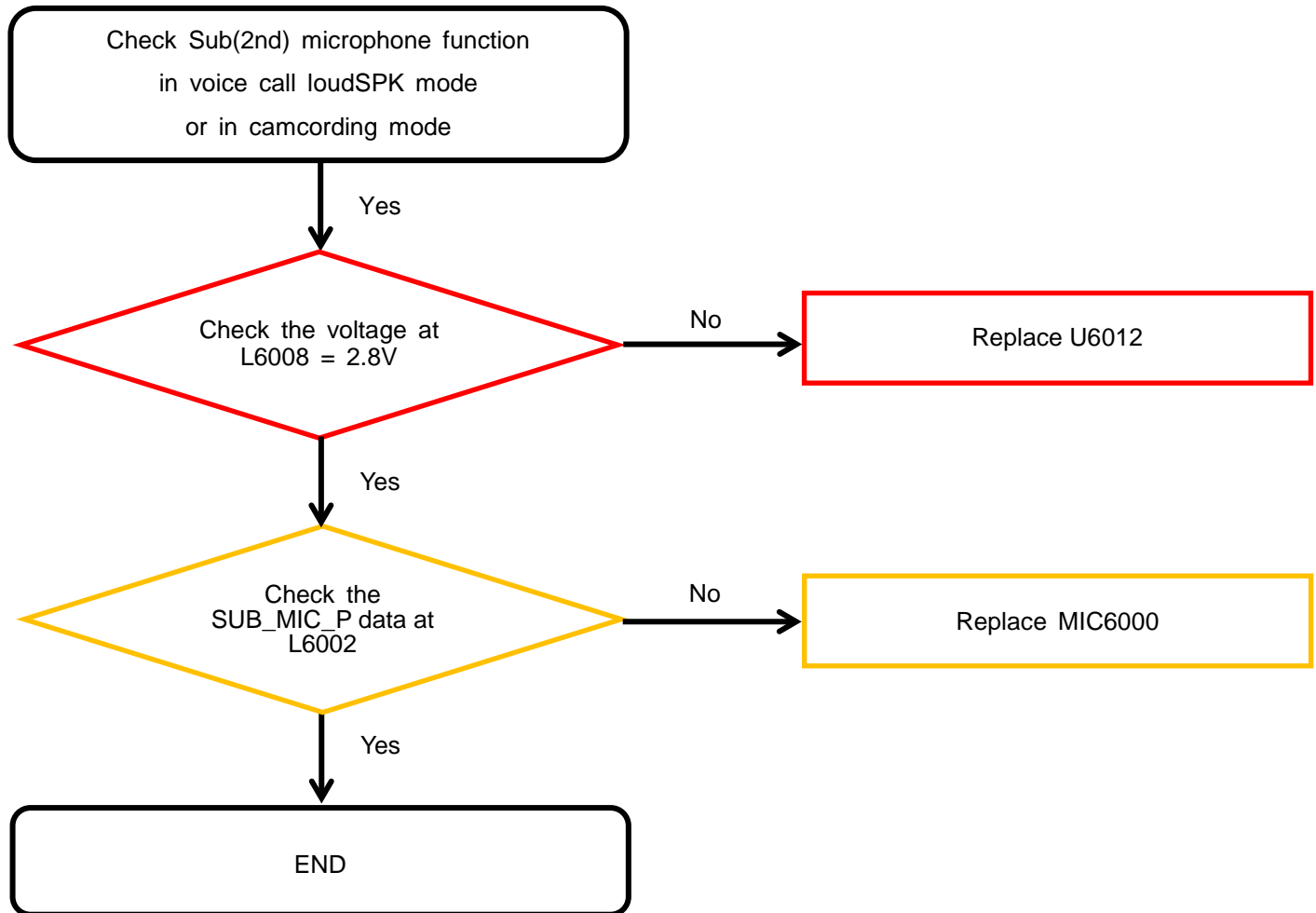
8. Level 3 Repair

8-4-9-1. Microphone Part - Main MIC



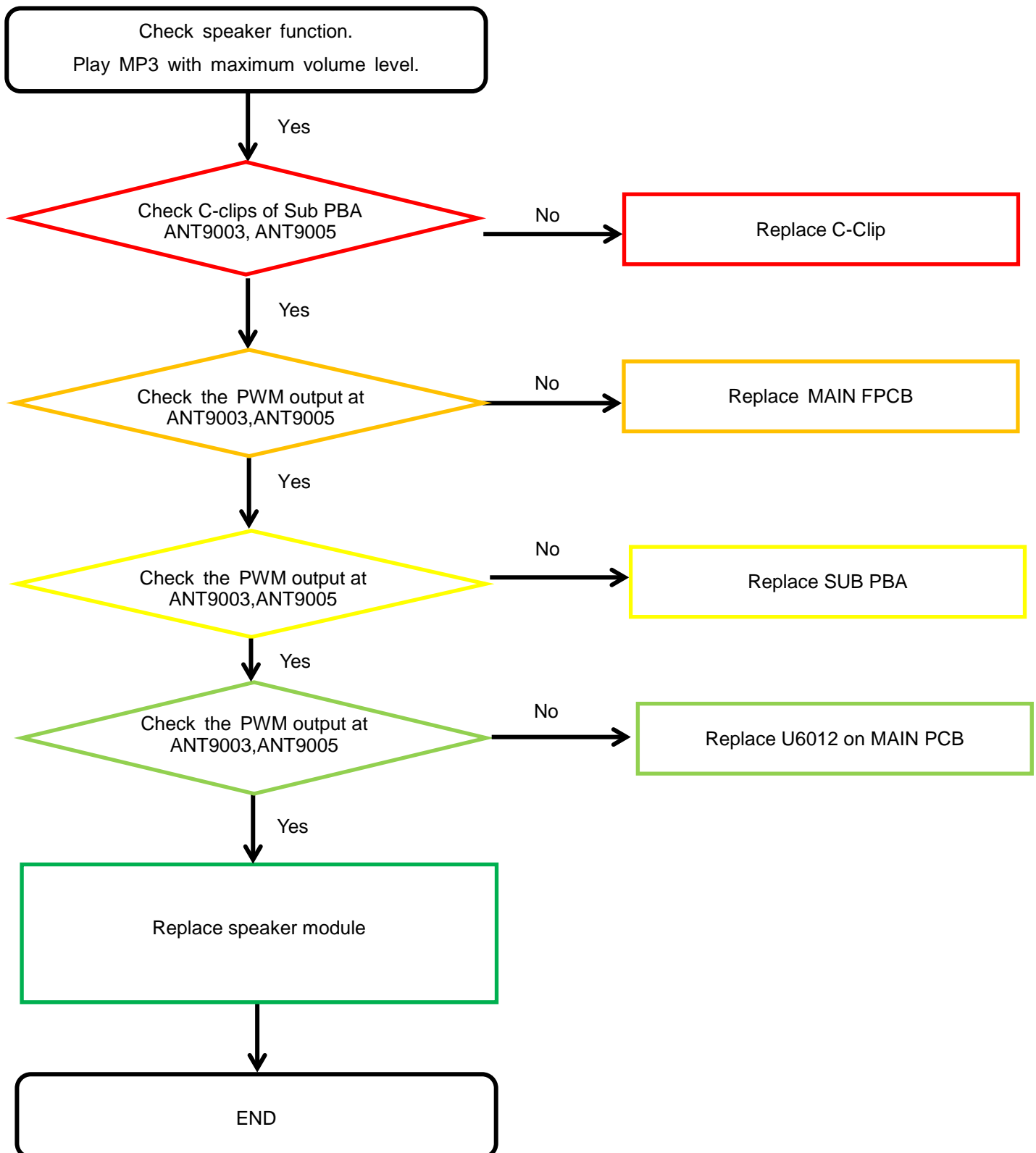
8. Level 3 Repair

8-4-9-2. Microphone Part - Sub(2nd) MIC



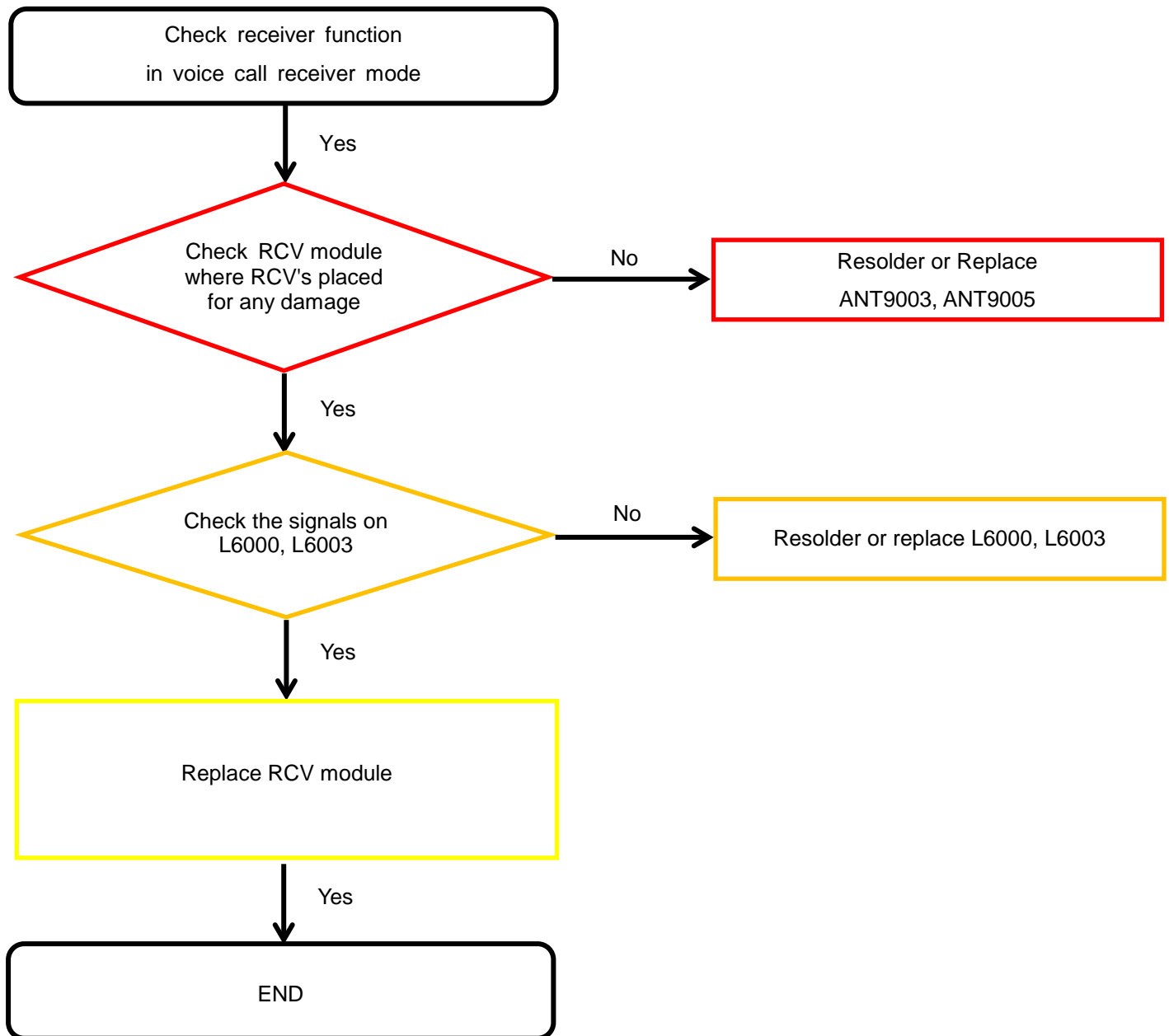
8. Level 3 Repair

8-4-10. Speaker Part



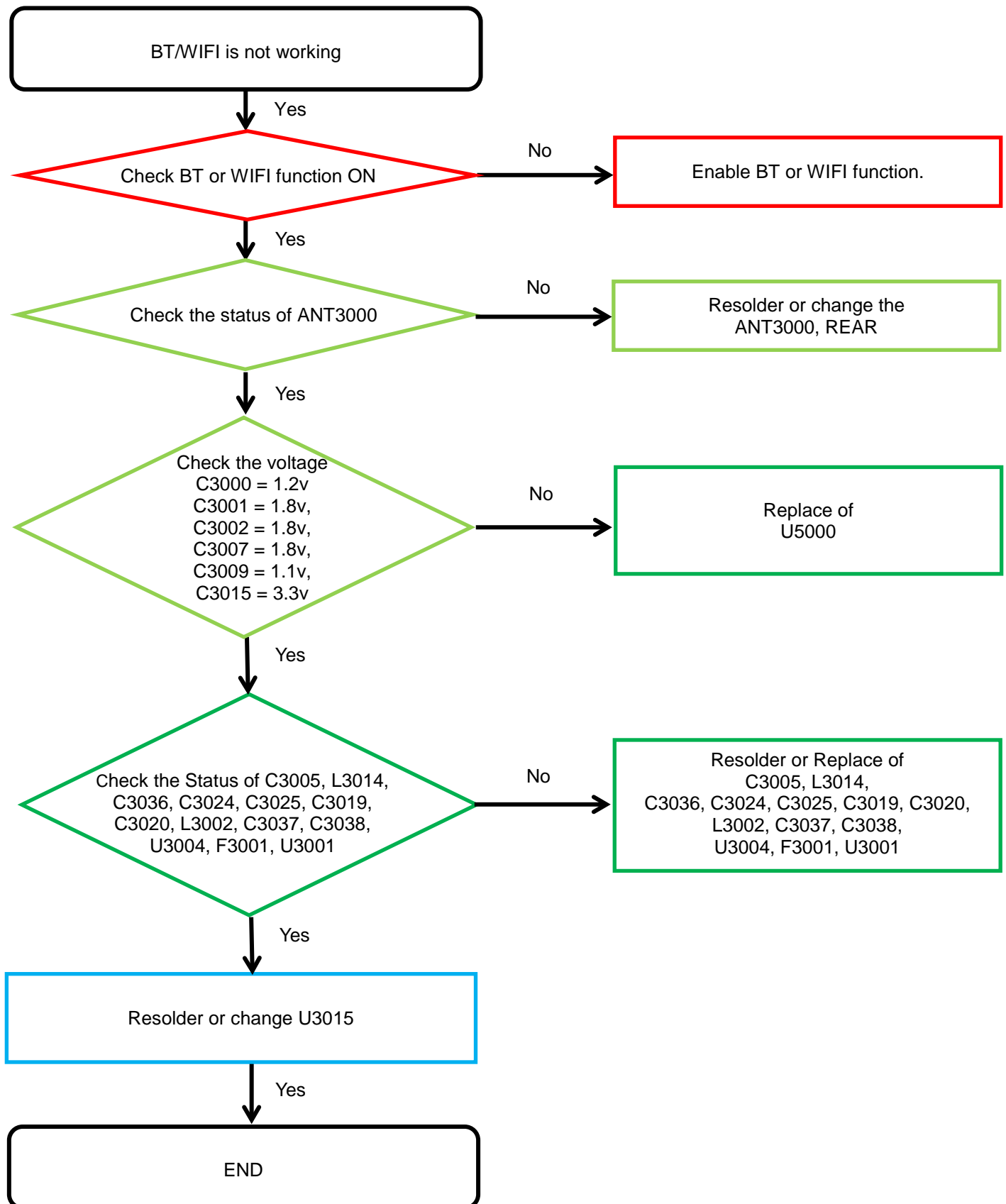
8. Level 3 Repair

8-4-11. Receiver Part



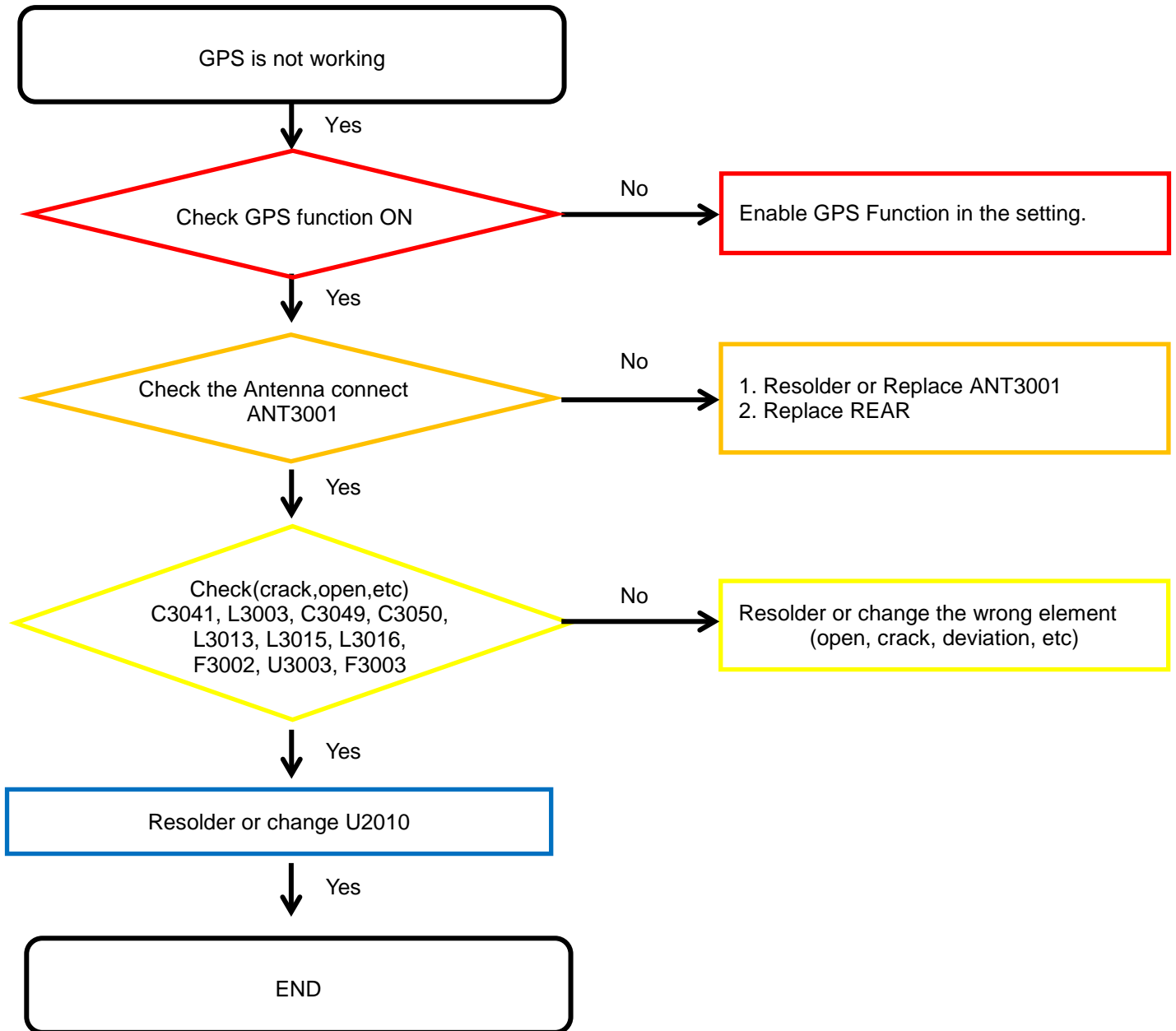
8. Level 3 Repair

8-4-12. BT/WIFI



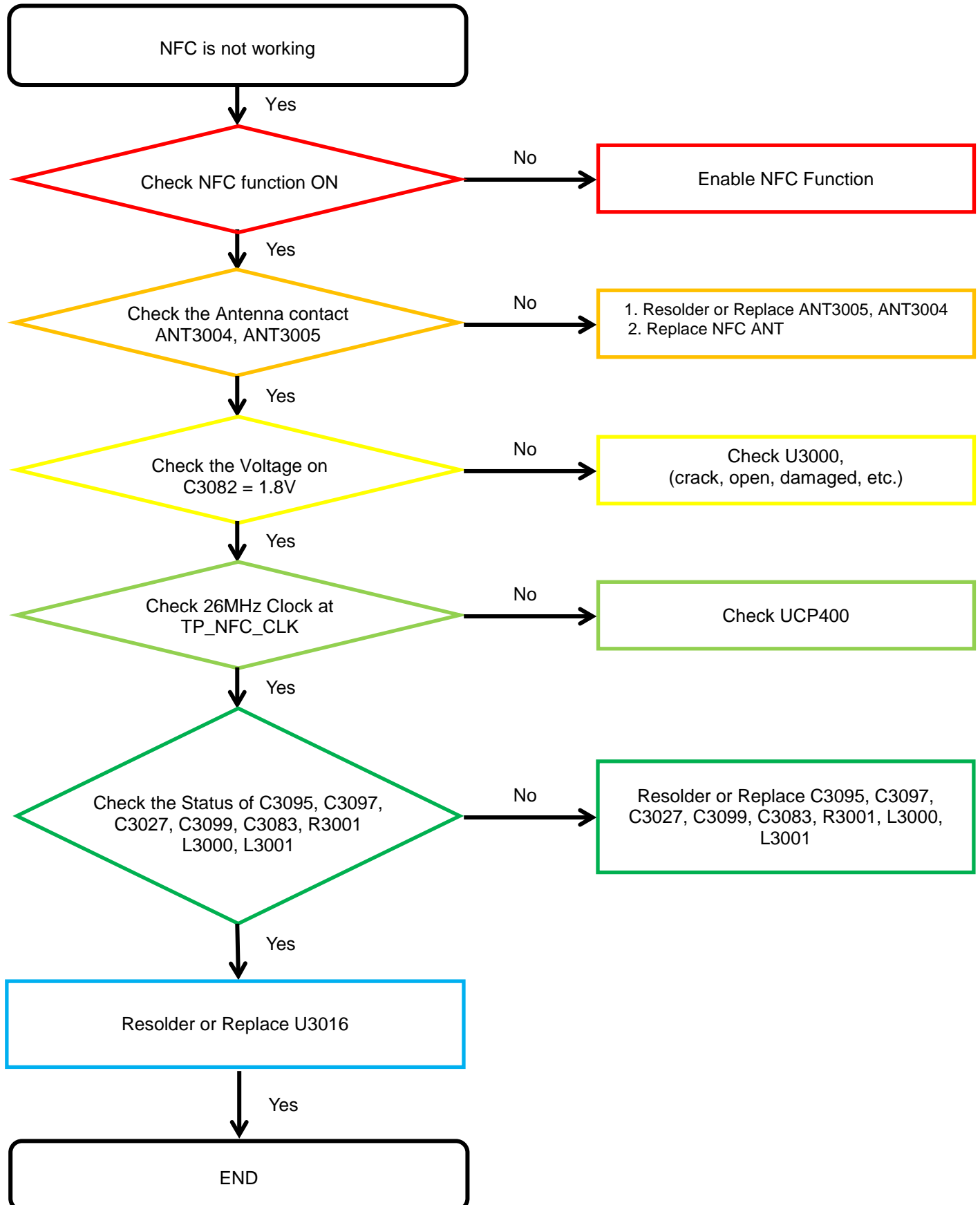
8. Level 3 Repair

8-4-13. GPS



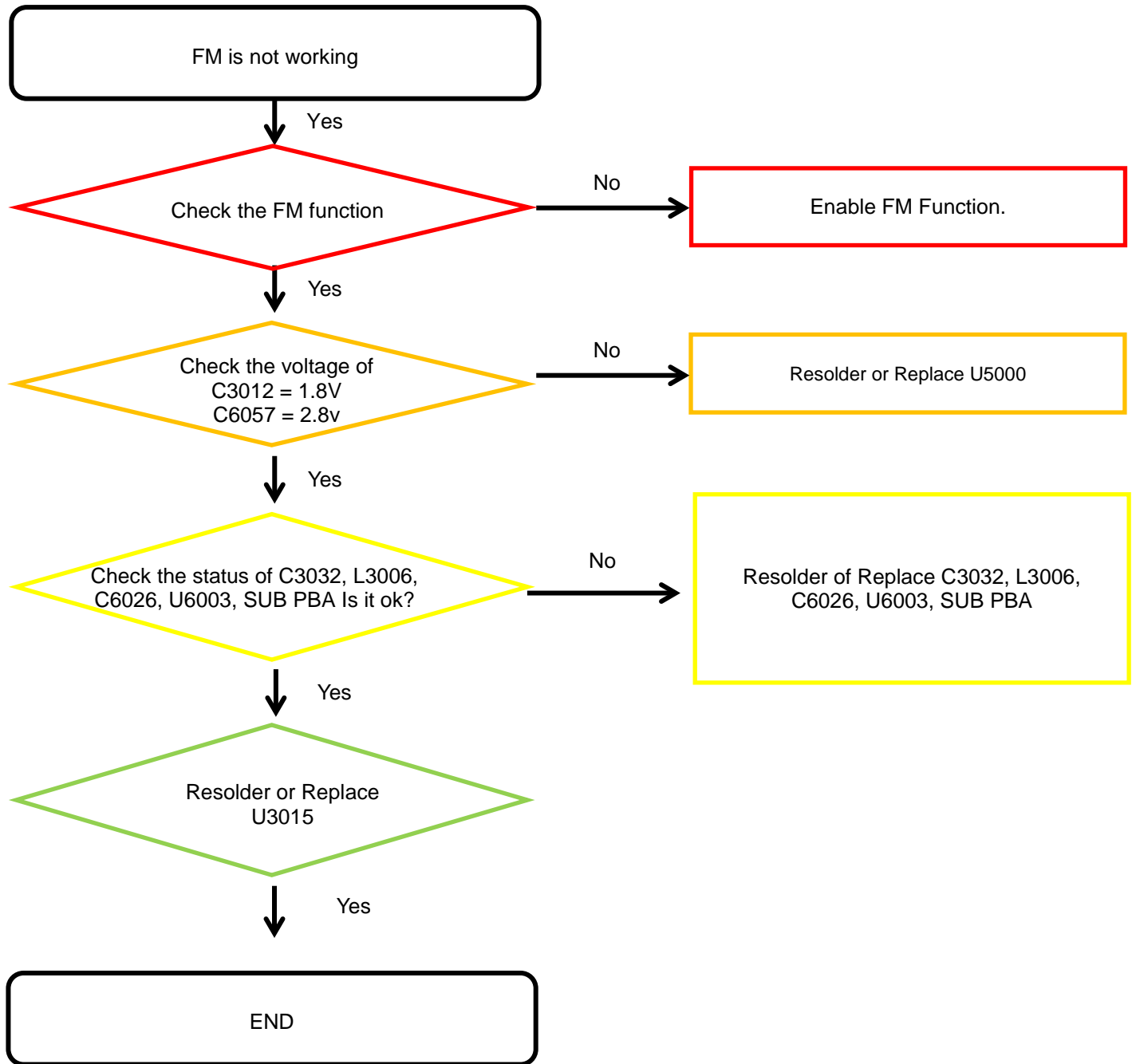
8. Level 3 Repair

8-4-14. NFC



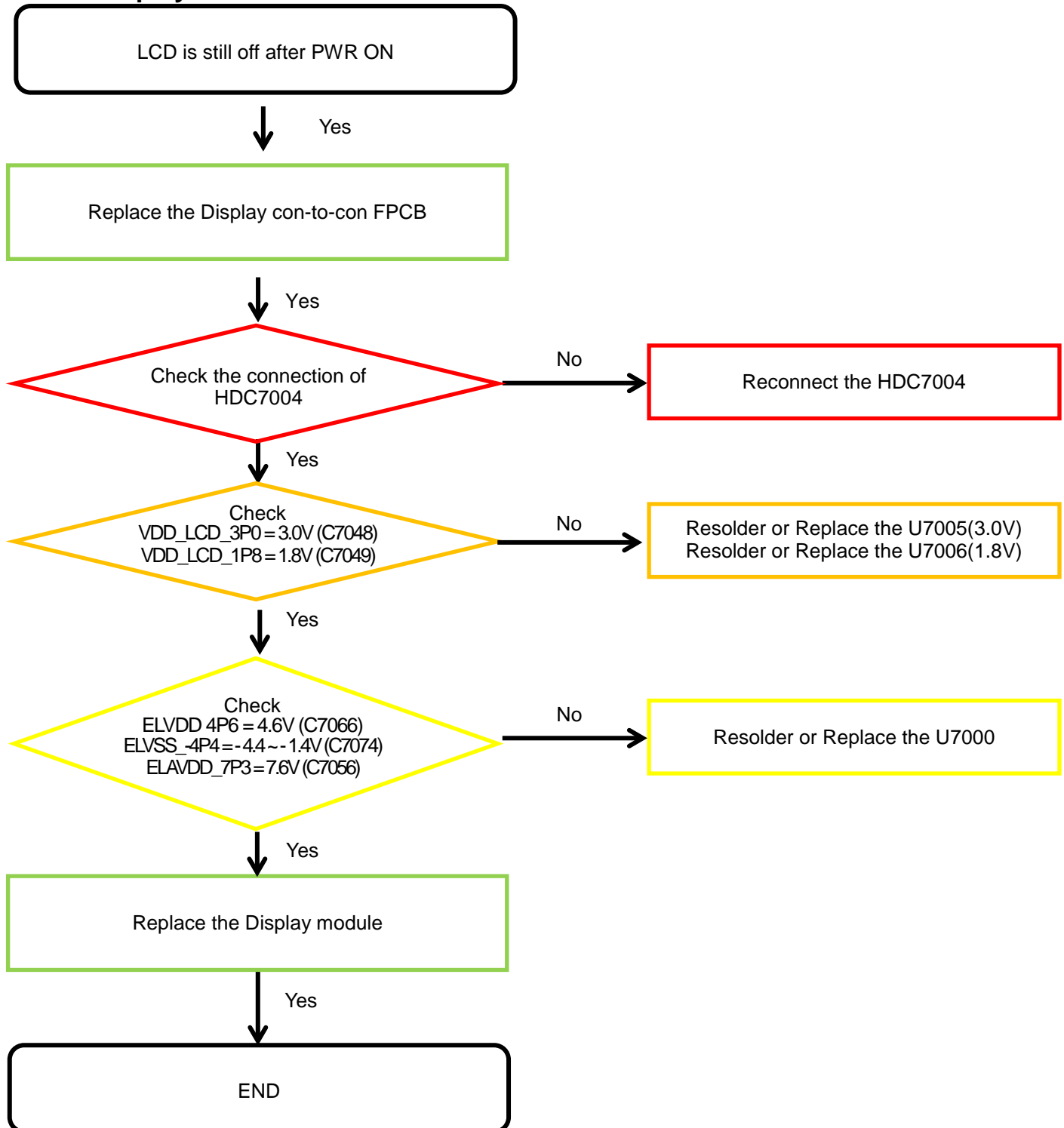
8. Level 3 Repair

8-4-15. FM radio part



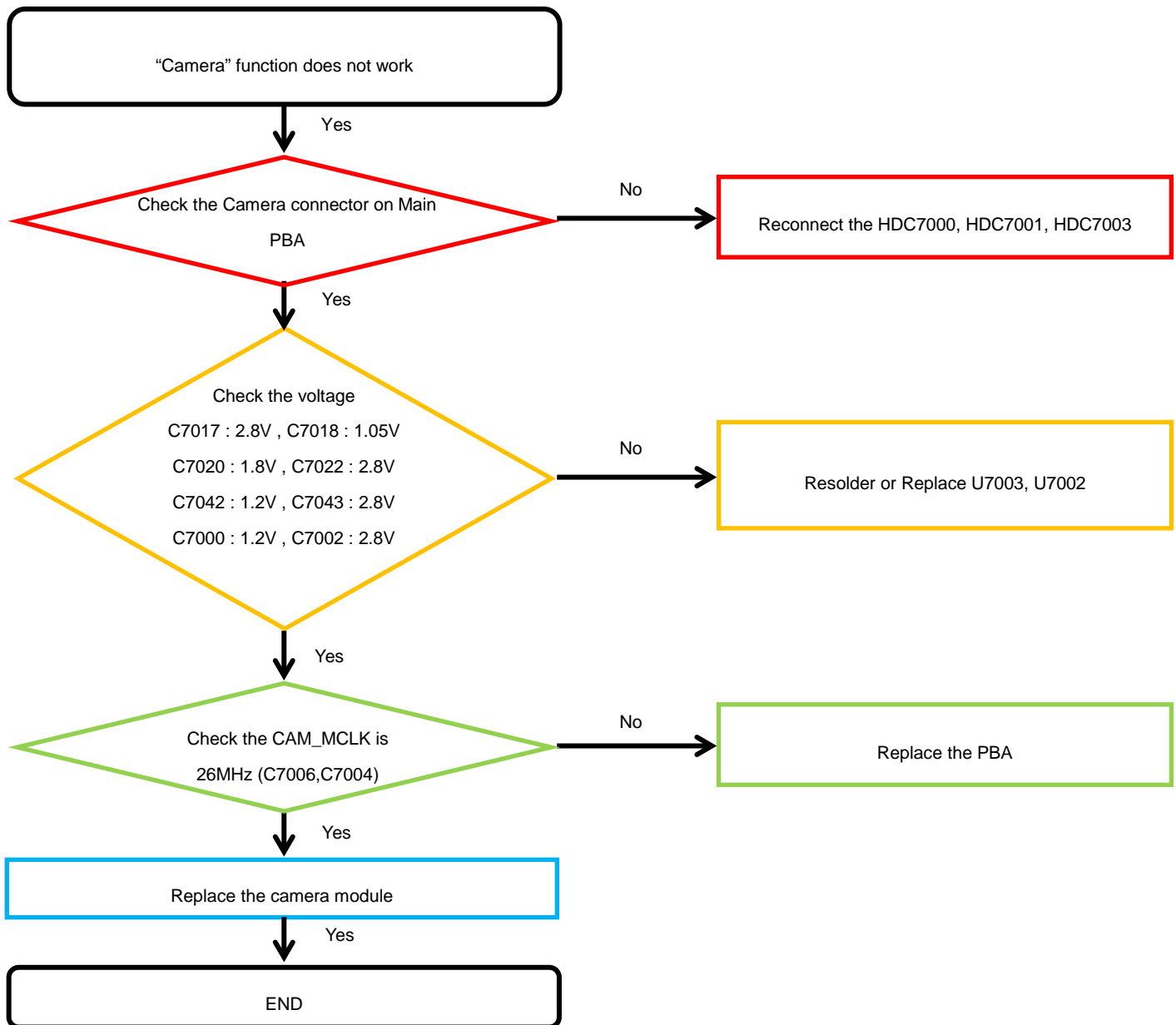
8. Level 3 Repair

8-4-16. Display



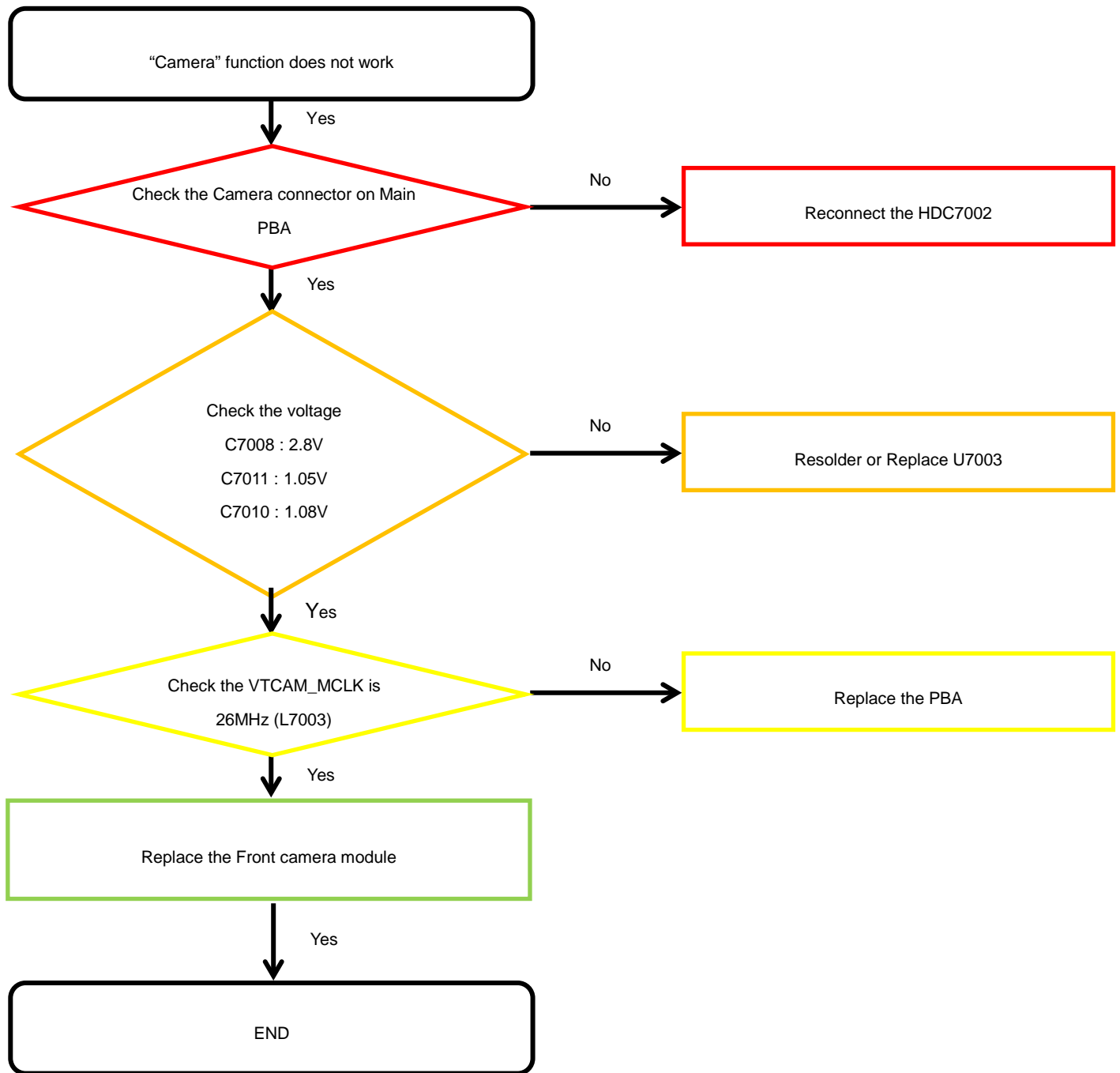
8. Level 3 Repair

8-4-17. Triple Camera



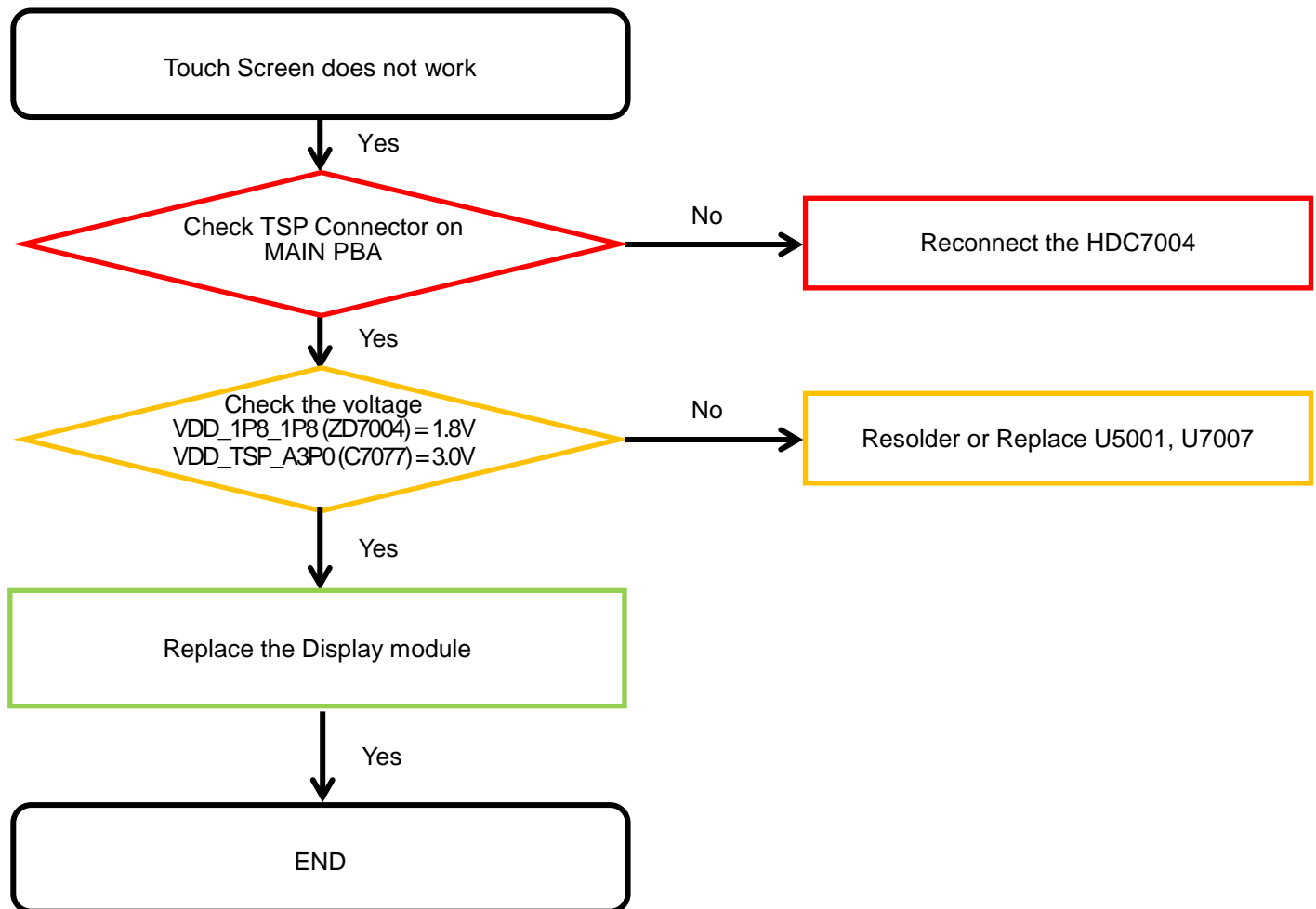
8. Level 3 Repair

8-4-18. VT CAMERA



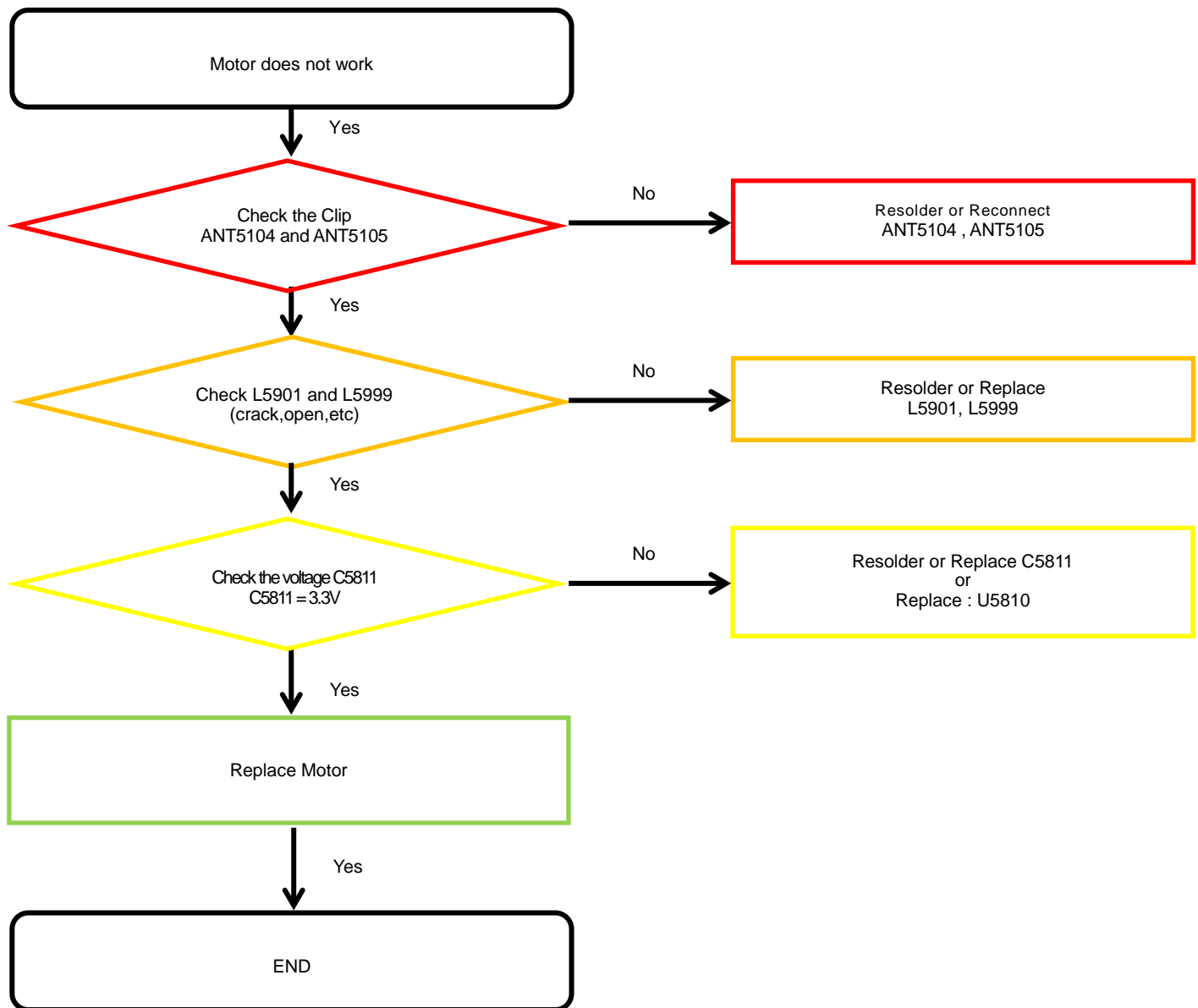
8. Level 3 Repair

8-4-19. TSP



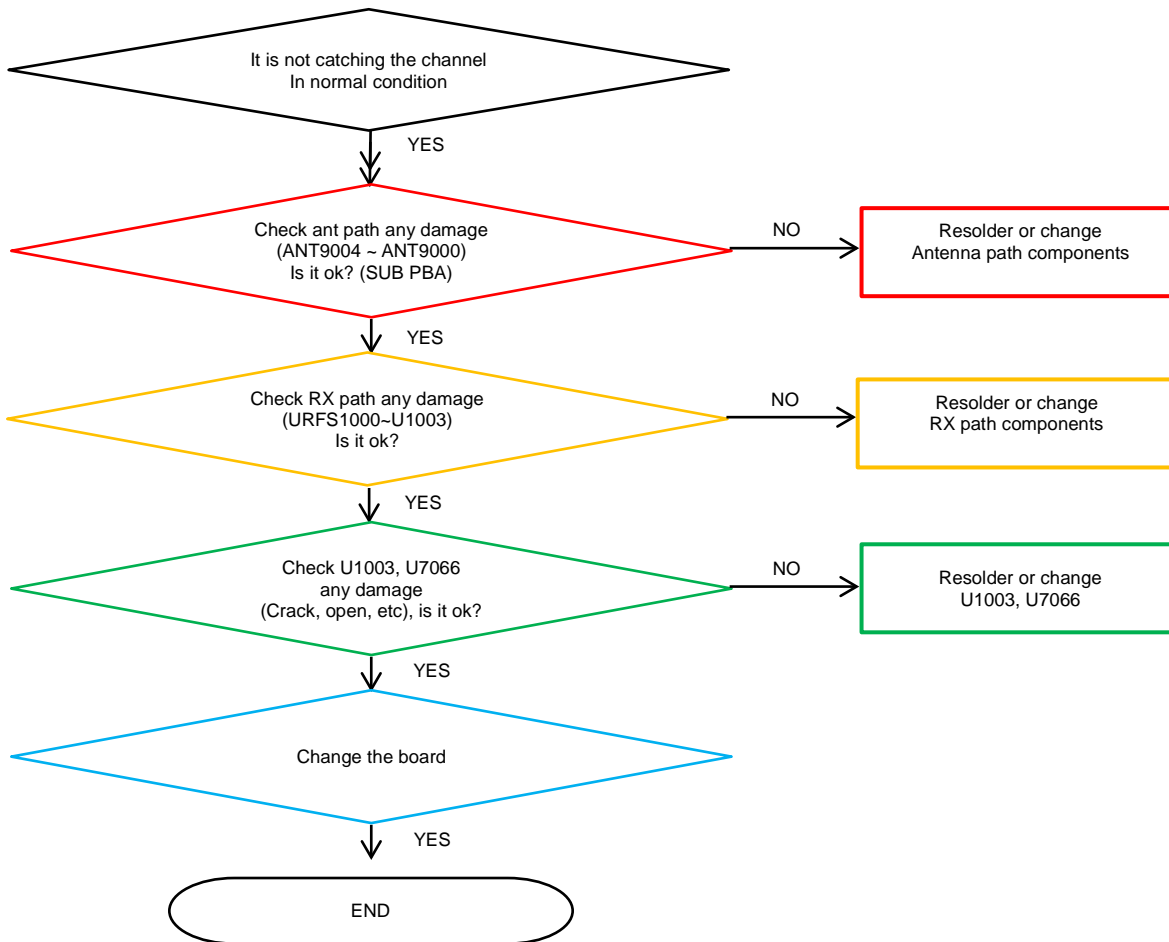
8. Level 3 Repair

8-4-20. Motor



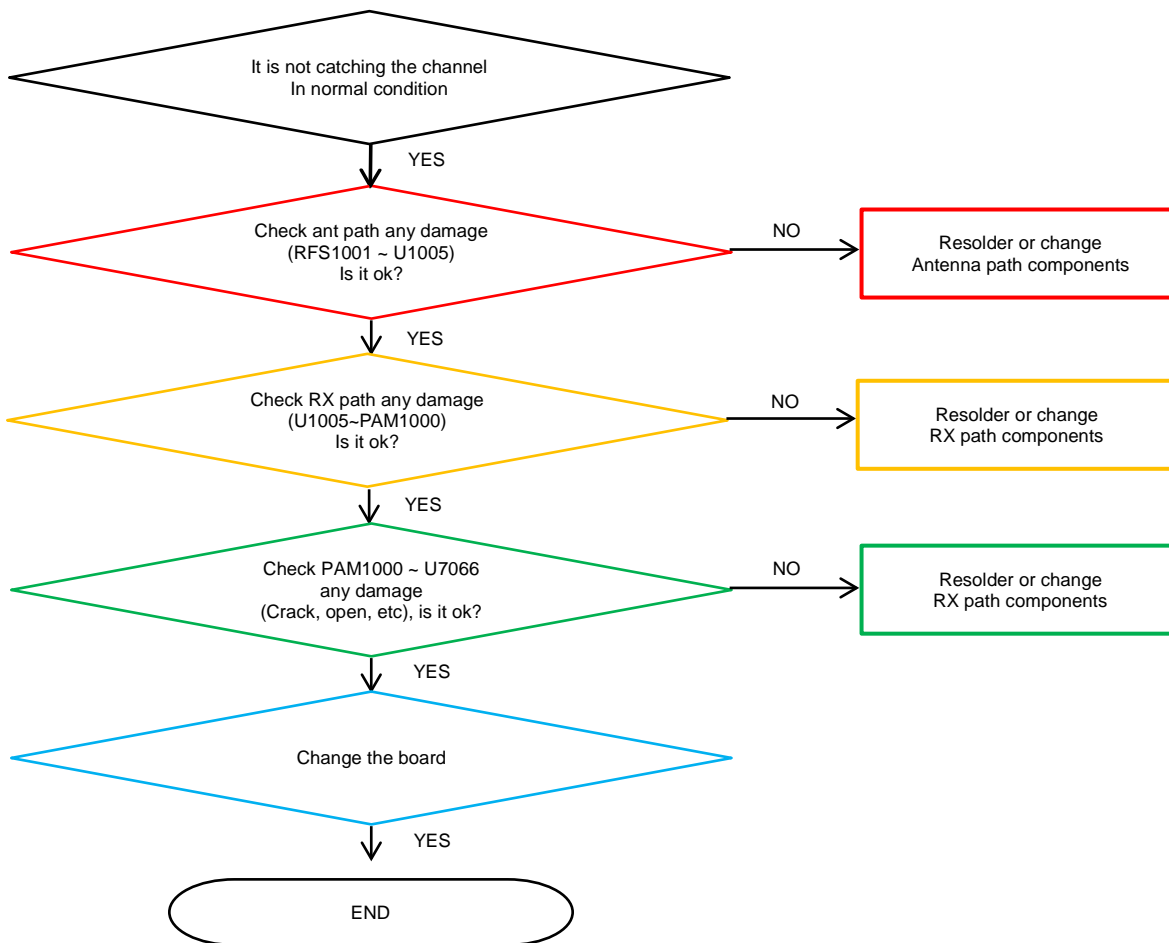
8. Level 3 Repair

8-4-21. GSM 850/900, WCDMA B5/8, LTE B5/8/12/13/17/20/28 PRx



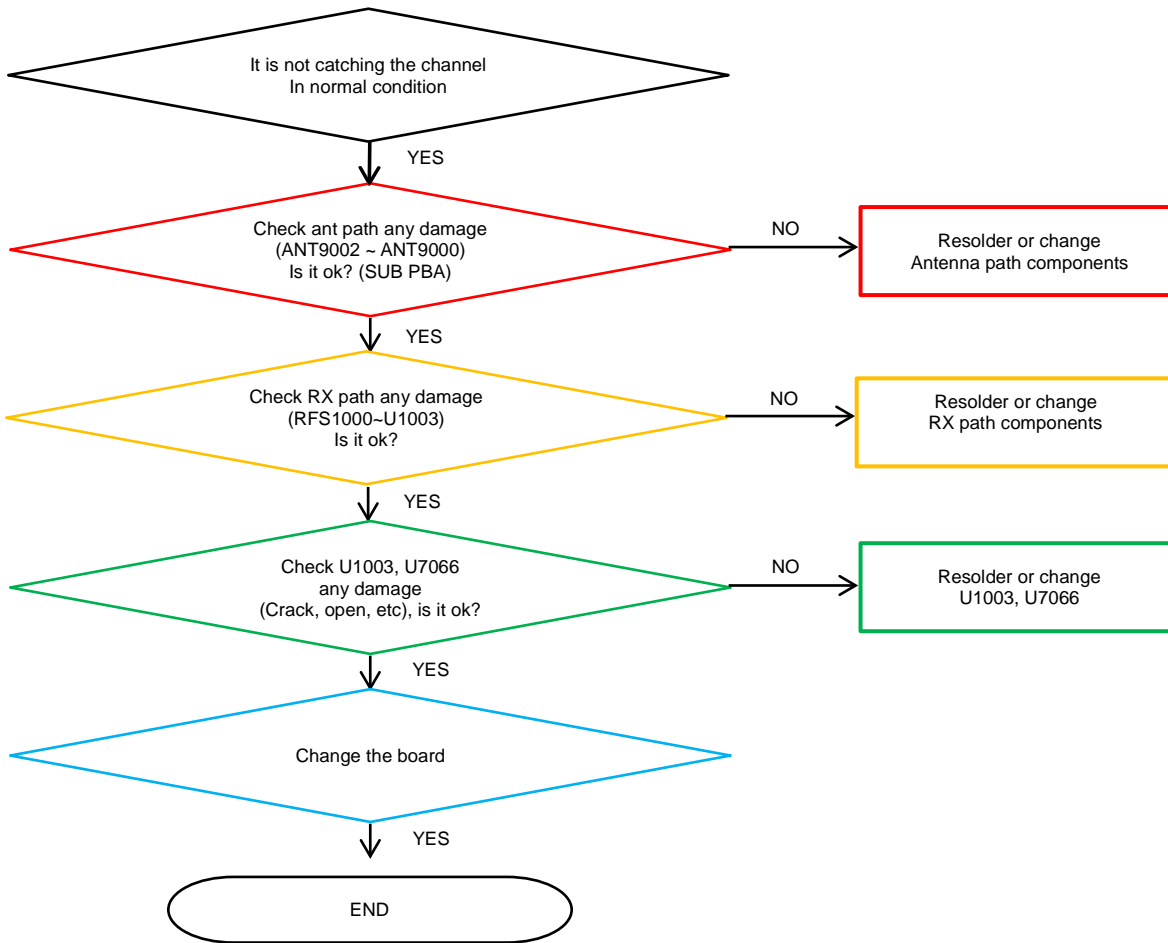
8. Level 3 Repair

8-4-22. LTE B7/38/40/41 PRx



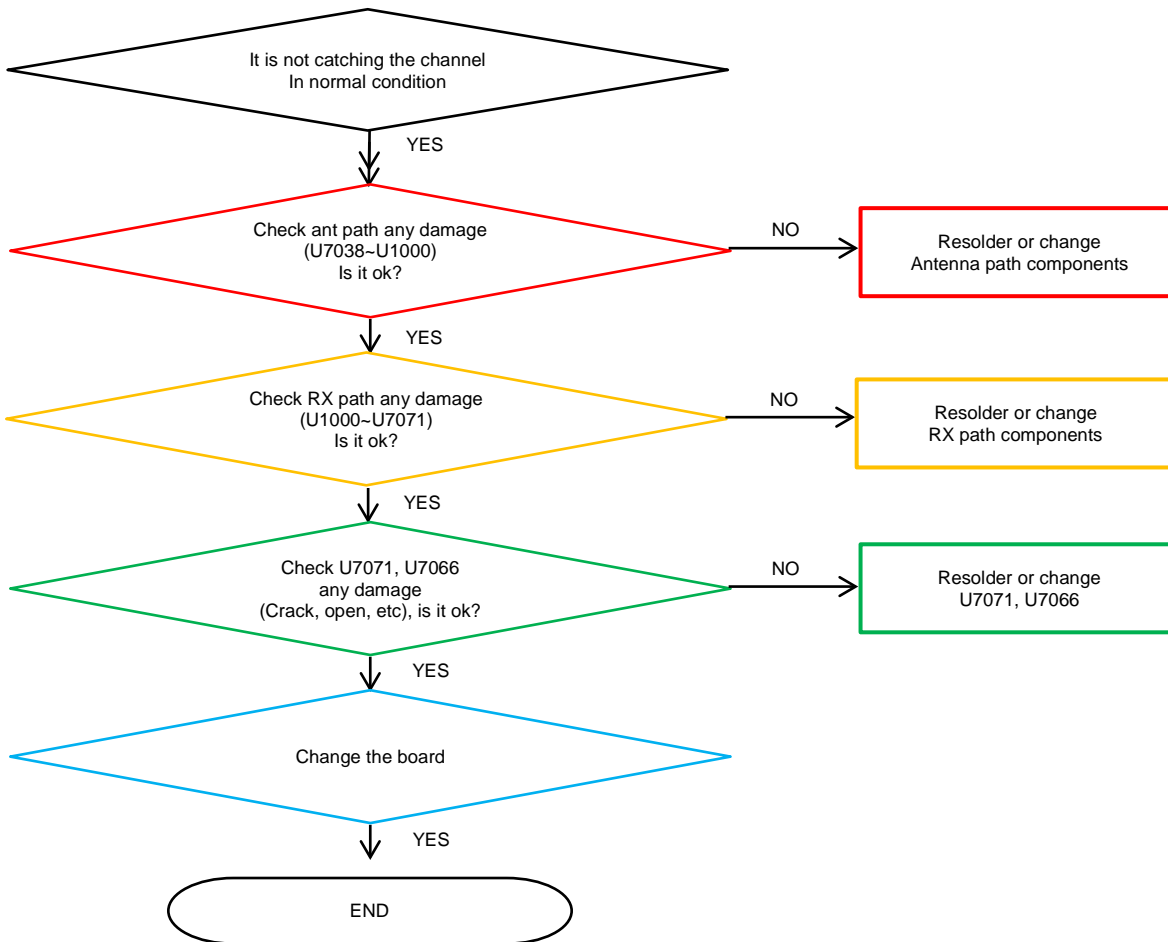
8. Level 3 Repair

8-4-23. GSM DCS/PCS, WCDMA B1/2/4, LTE B1/2/3/4/66 PRx



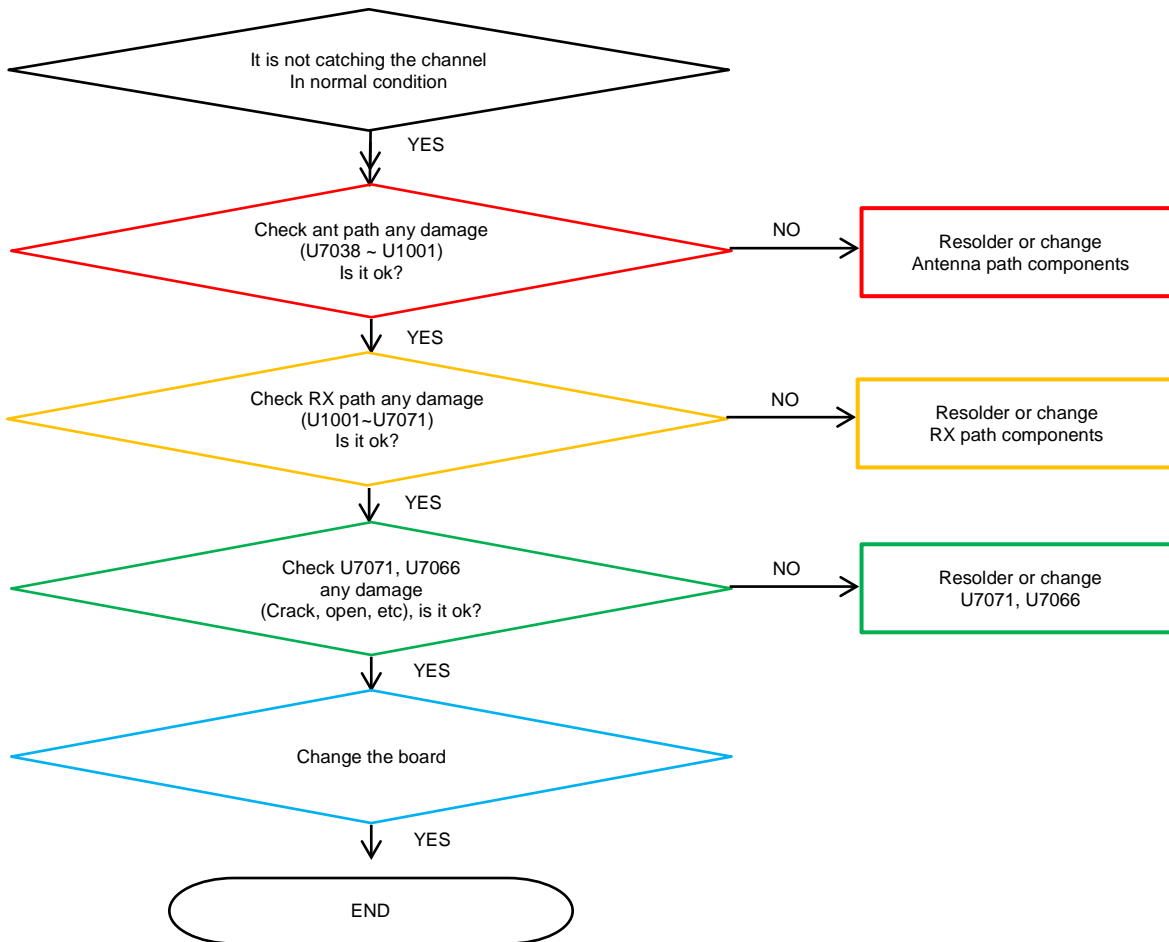
8. Level 3 Repair

8-4-24. GSM 850/900, WCDMA B5/8, LTE B5/8/12/13/17/20/28 DRx



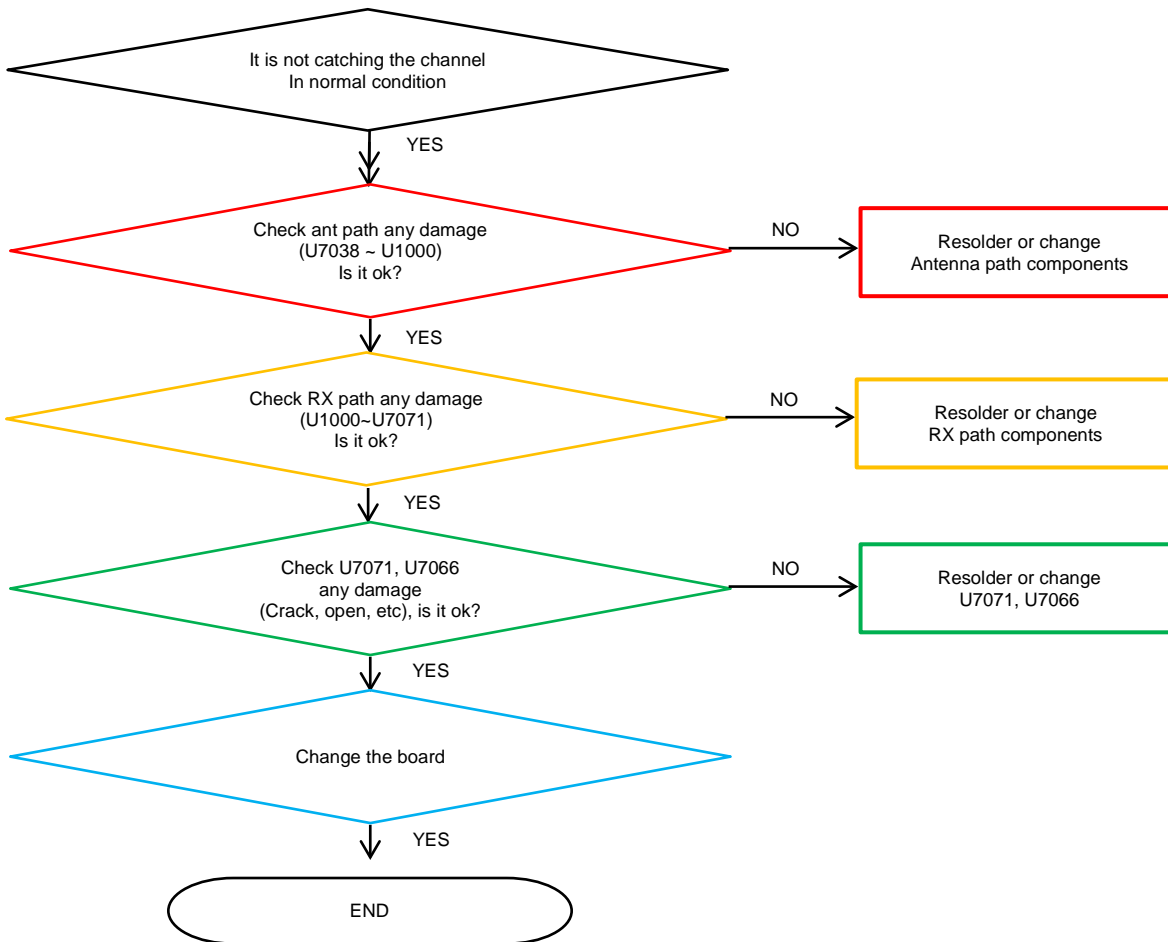
8. Level 3 Repair

8-4-25. LTE B7/38/40/41 DRx



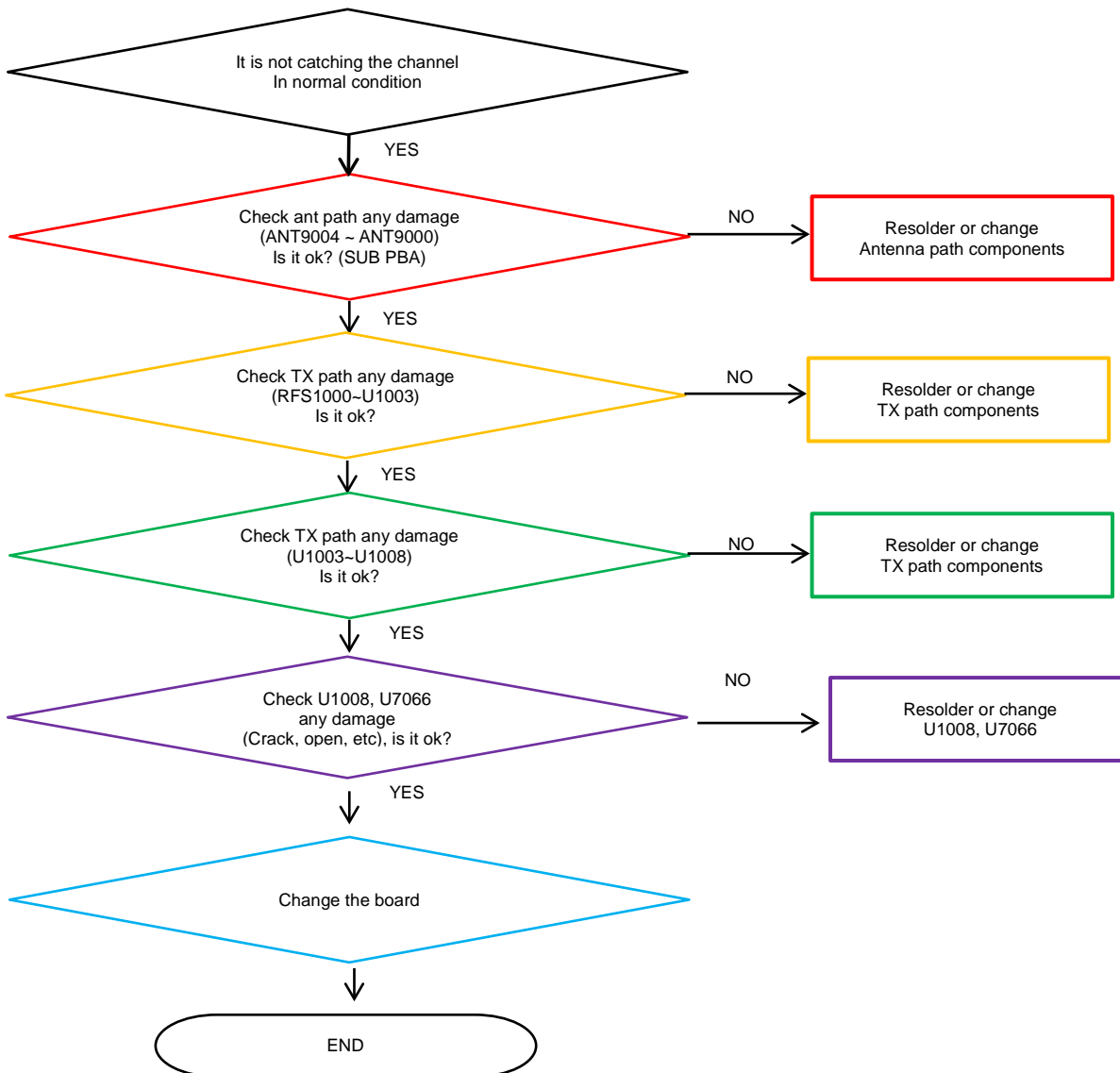
8. Level 3 Repair

8-4-26. GSM DCS/PCS, WCDMA B1/2/4, LTE B1/2/3/4/66 DRx



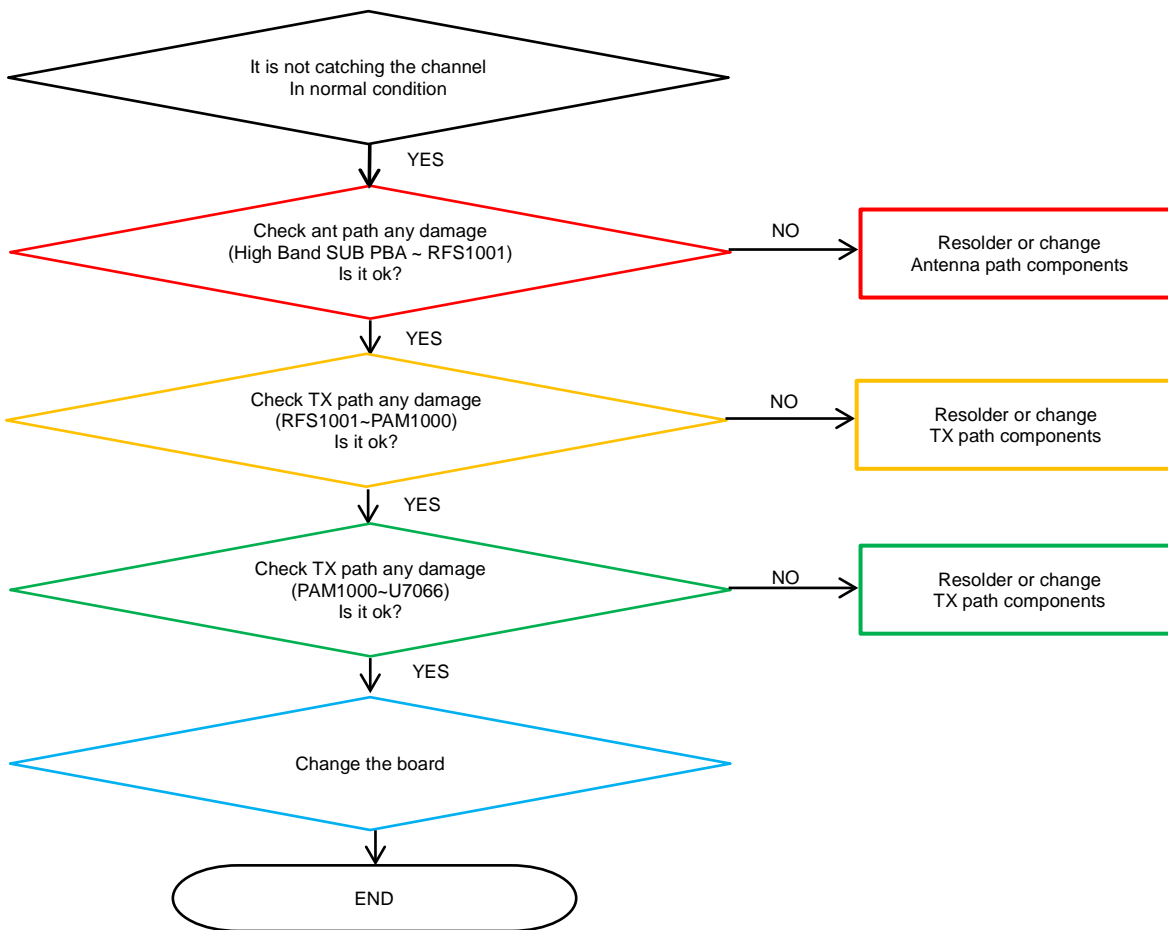
8. Level 3 Repair

8-4-27. GSM 850/900, WCDMA B5/8, LTE B5/8/12/13/17/20/28 TX



8. Level 3 Repair

8-4-28. LTE B7/38/40/41 Tx



8. Level 3 Repair

8-4-29. GSM DCS/PCS, WCDMA B1/2/4, LTE B1/2/3/4/66 Tx

