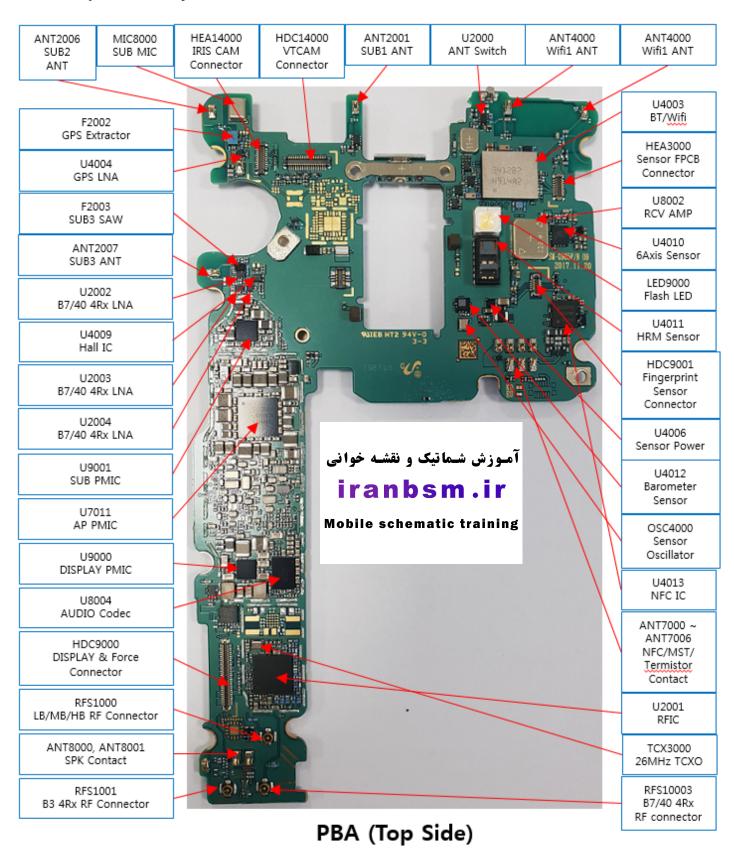
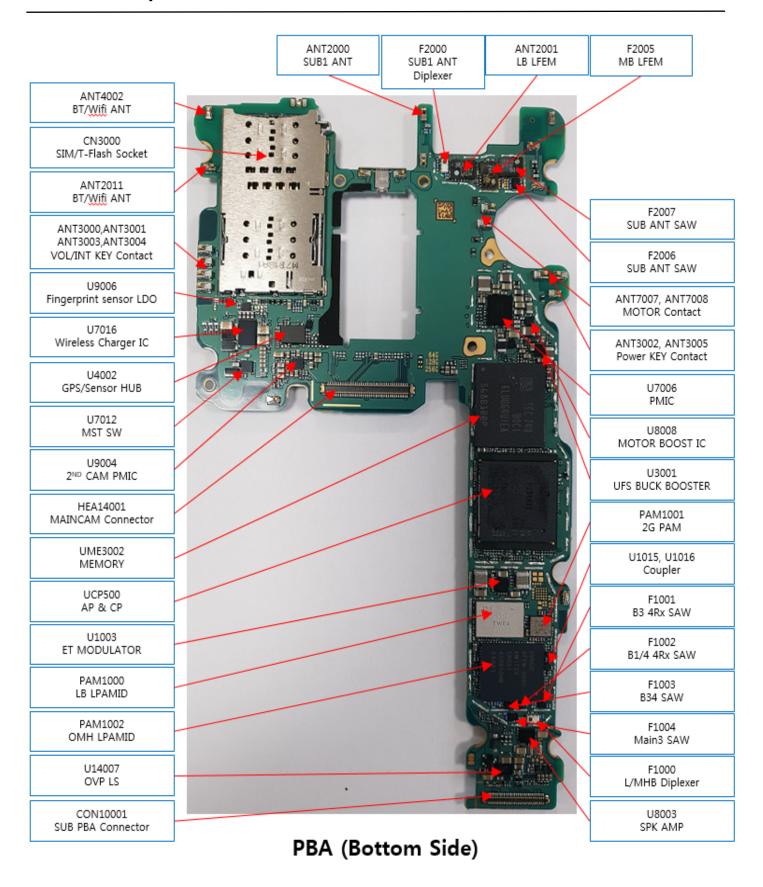
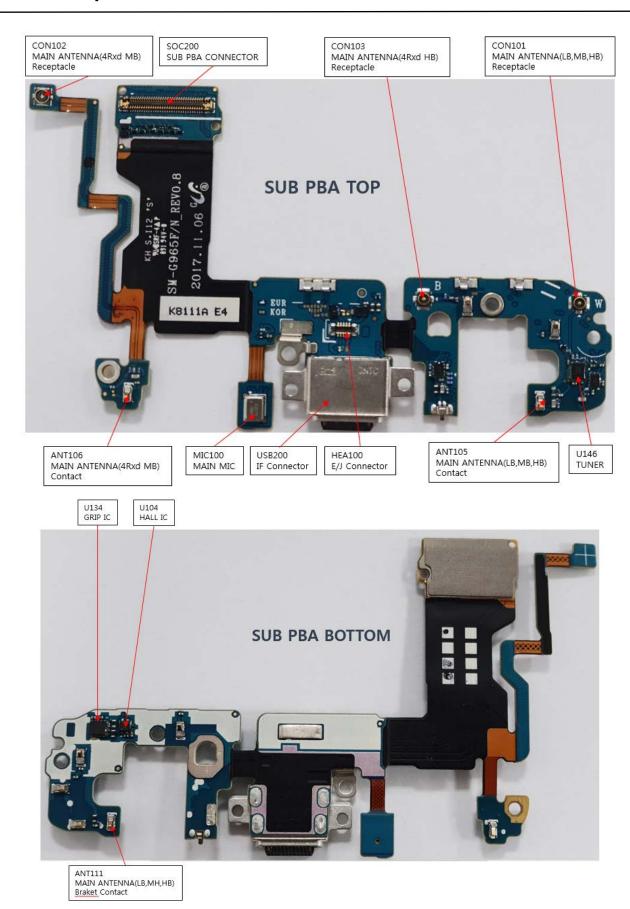
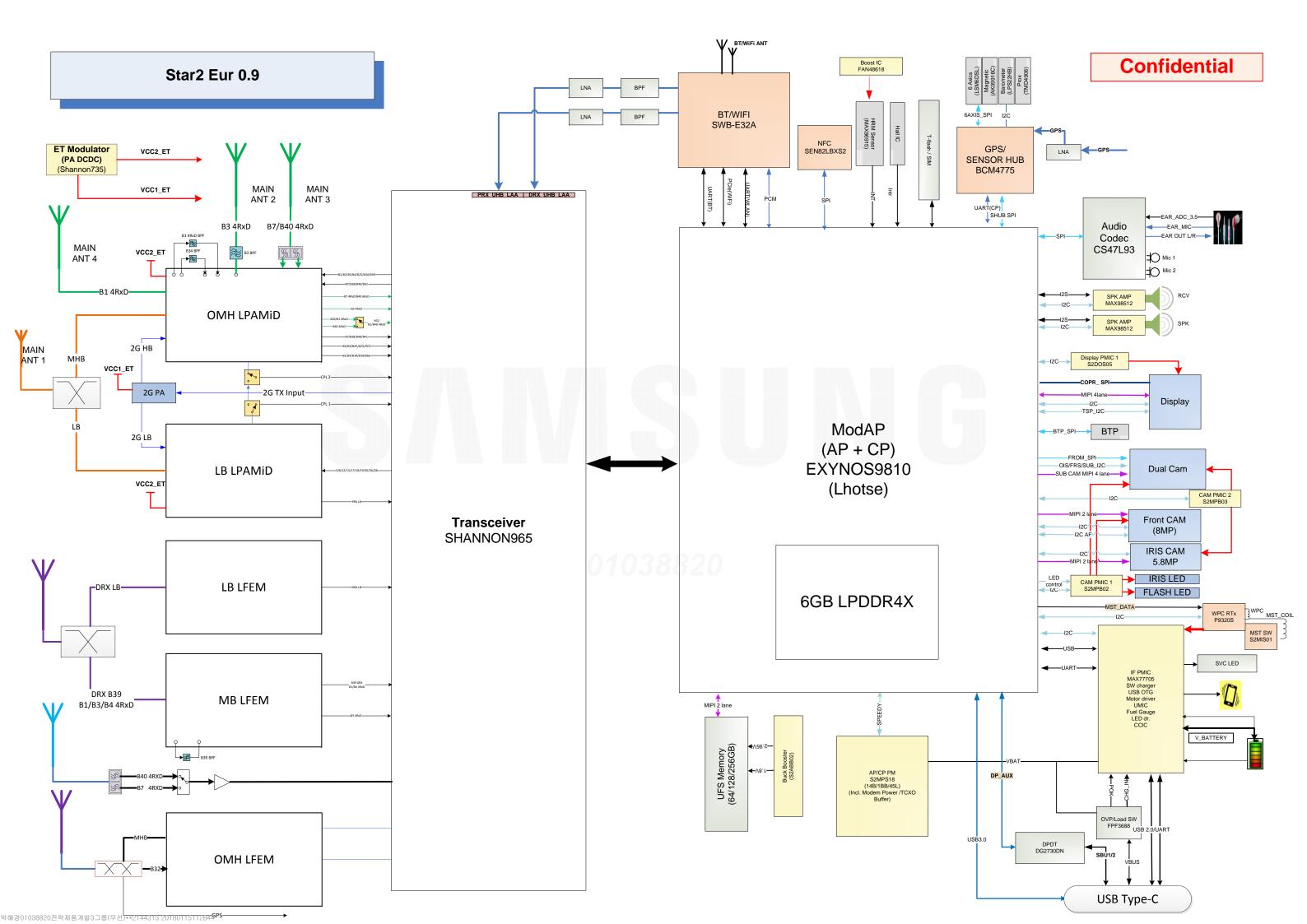
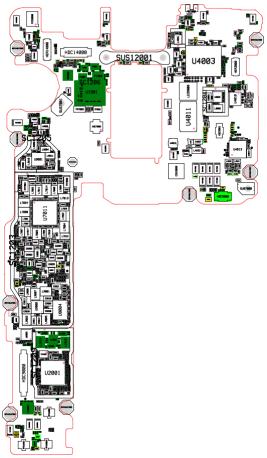
8-1. Components Layout

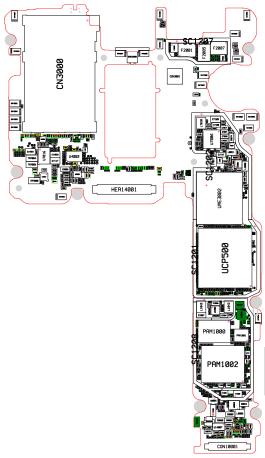




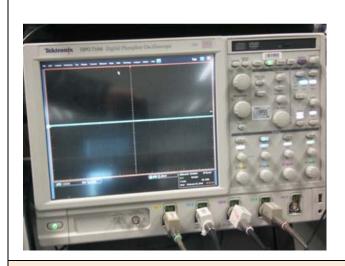








8-3. Flow chart of Troubleshooting.





Oscilloscope

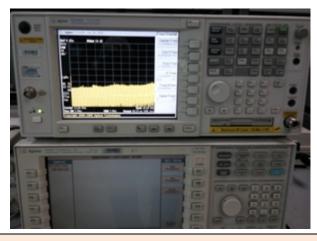
Digital Multimeter





Power Supply

+ driver, ESD Safe Tweezer



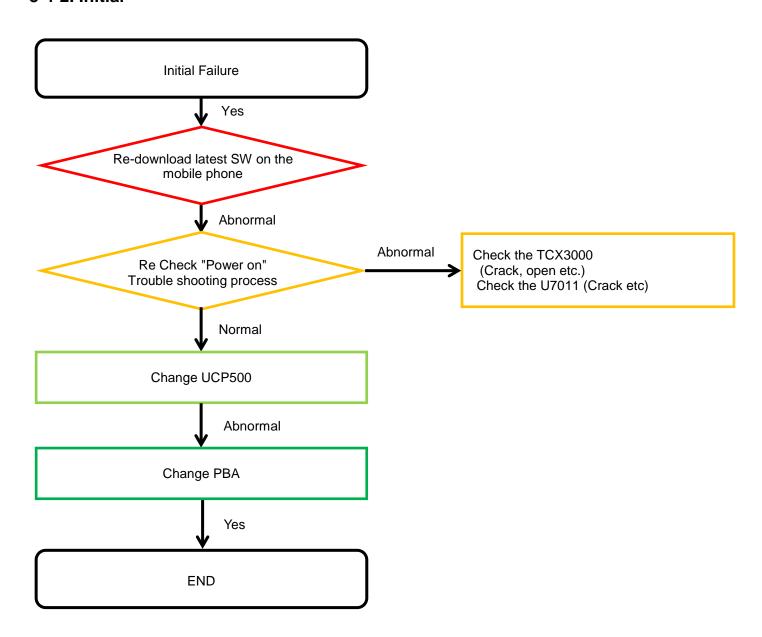


8960 & Spectrum Analyzer

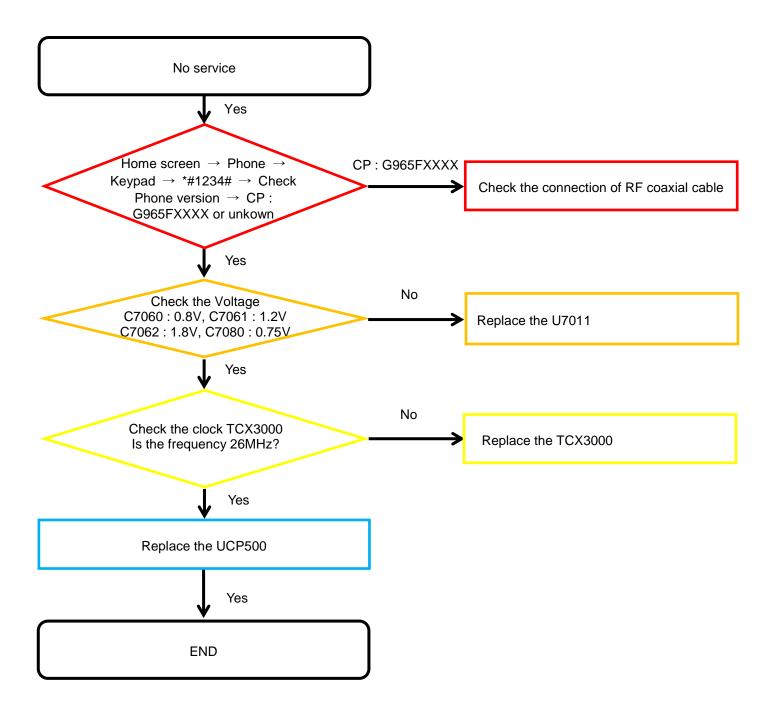
Soldering iron

8-4-1. Power On Mobile phone does not power on. Yes Charging the battery by TA. No If its voltage level is extremely low Check the Battery Voltage. Is it more than 3.8V? (under 3.0V), Change the battery. Yes Power-on the phone and check Yes the power-on sound Change the FRONT-LCD ASSY or motor Vibration. Sound or Vibration is ok? No Check the voltage level at No Replace the Power key FPCB R304 while pressing power key. Is the voltage high? Check the output voltage of U7011 L7000 > 0.75V, L7003 > 0.75V, L7004 > 0.75V, L7022 > 0.75V, L7006 > 0.75V, L7008 > 1.1V, No L7009 > 0.6V, L7010 > 0.85V, Check the signal of L7011 > 1.1V, L7012 > 1.3V $AP_PS_HOLD = 1.8V$ L7013 > 2.0V, U14017 > 0.75V If the output voltage is not normal, Change the U7002. Yes Each voltage level has ±10% margin. No Check the Clock OSC7000&U7002 Replace the OSC7000 & U7002 Is the frequency 32.768MHz? * Test condition (Oscilloscope setting) : 20.0us.div (time division) Yes Check the initial operation Yes **END**

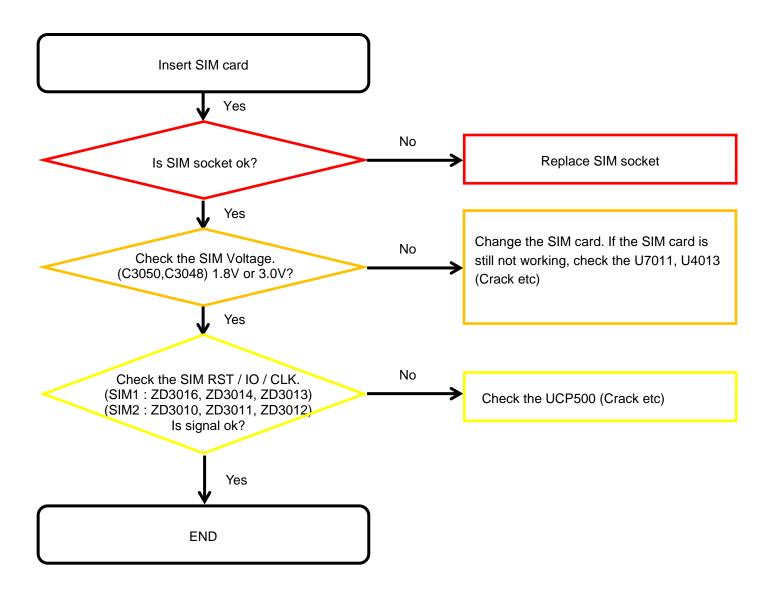
8-4-2. Initial



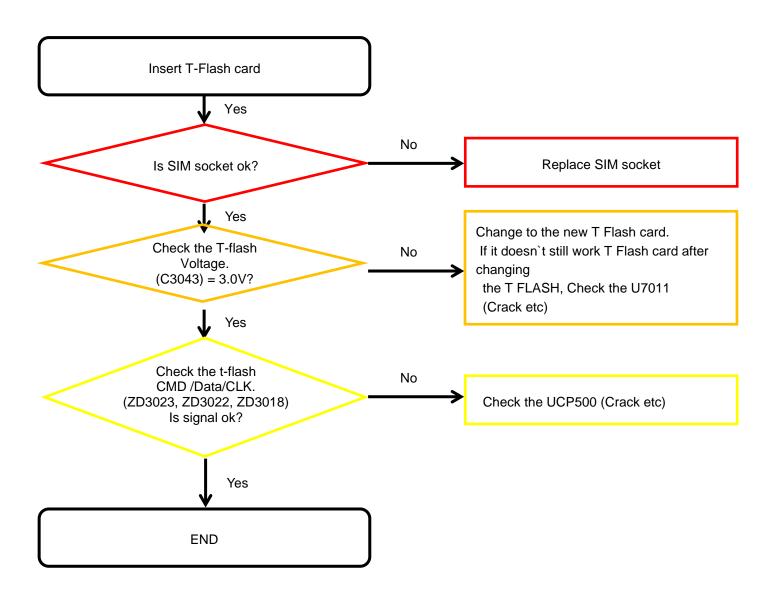
8-4-3. No Service



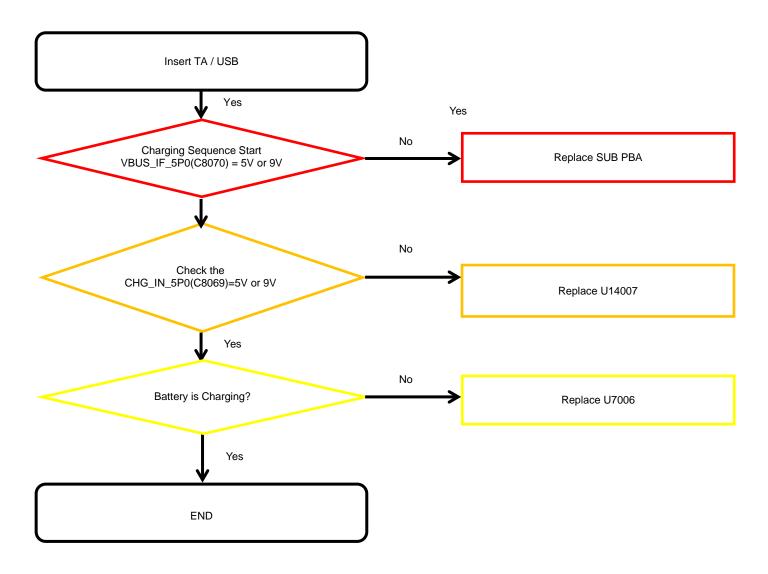
8-4-4. SIM Part



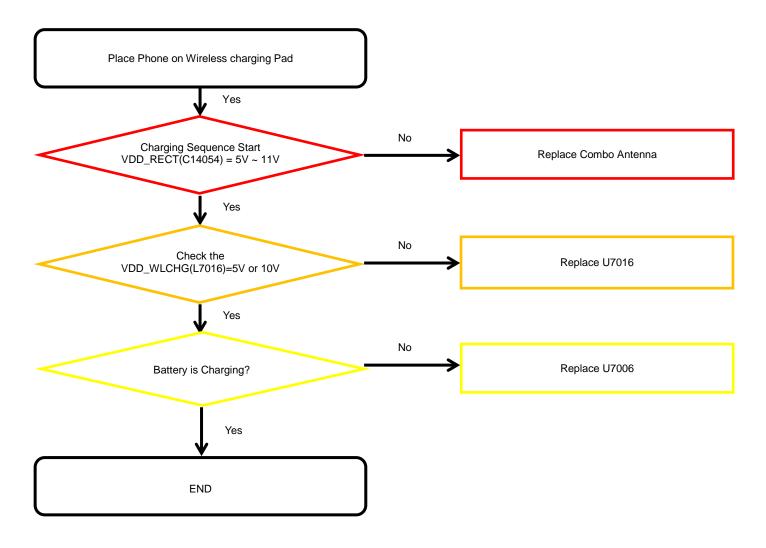
8-4-5. T-Flash Part



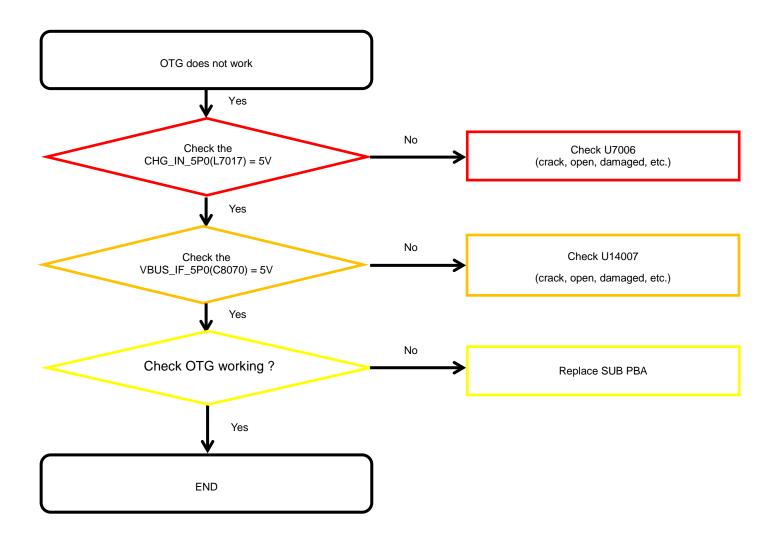
8-4-6-1. Cable Charging Part (Normal/Fast)



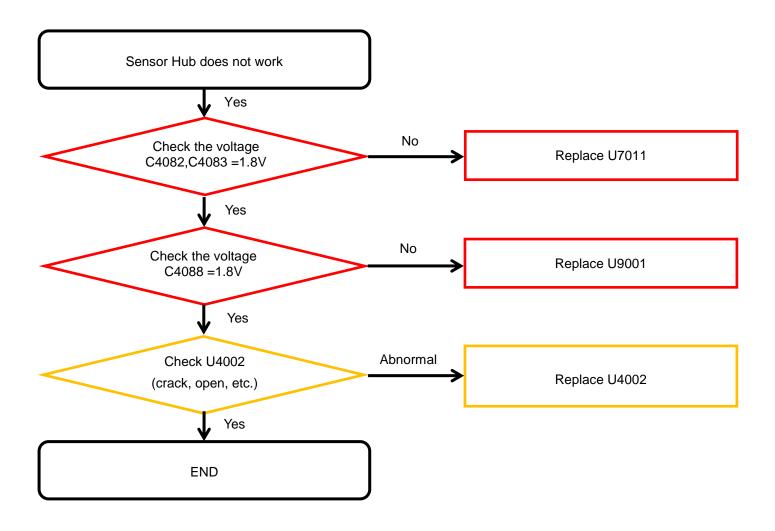
8-4-6-2. Wireless Charging Part (Normal/Fast)



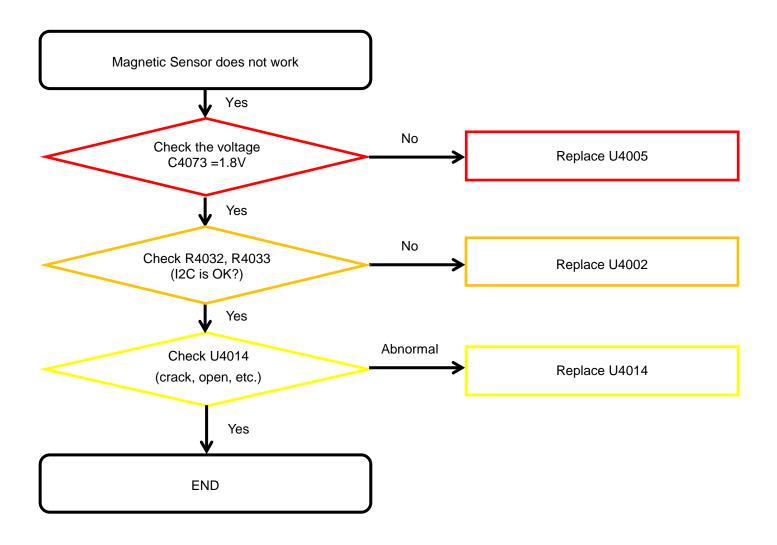
8-4-7. OTG



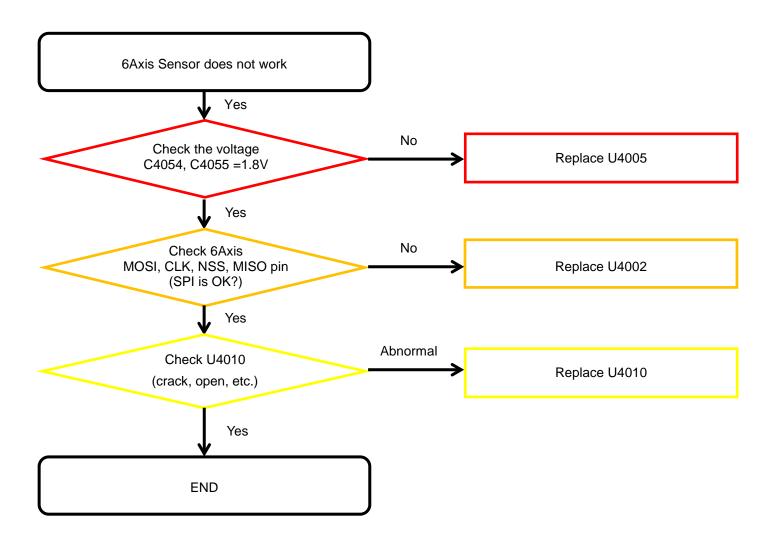
8-4-8-1. Sensor Hub



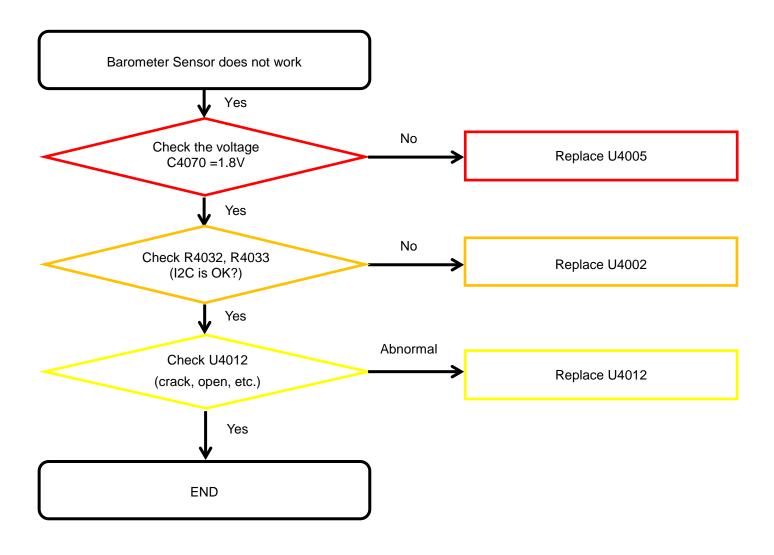
8-4-8-2. Magnetic Sensor



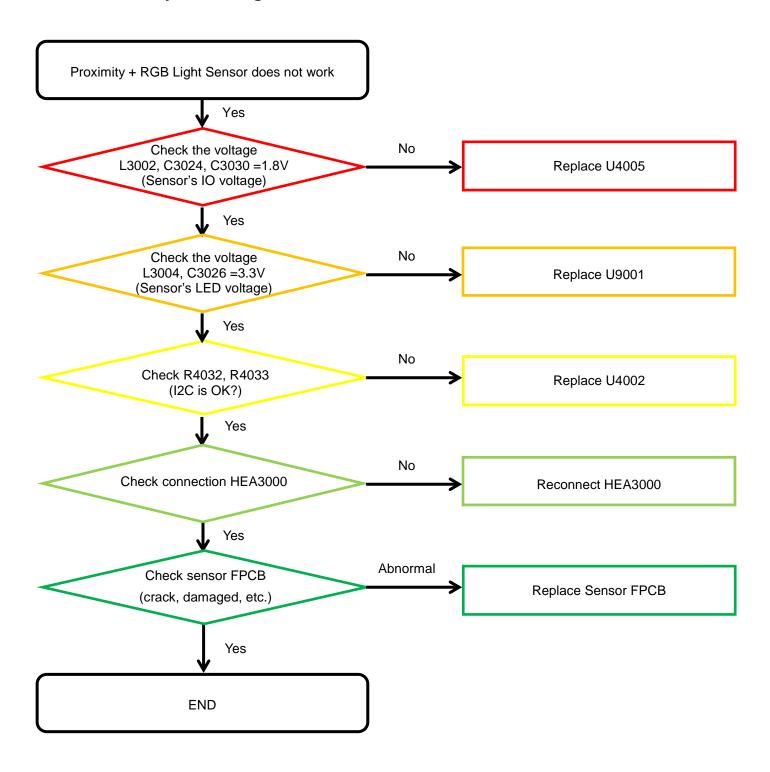
8-4-8-3. 6Axis Sensor



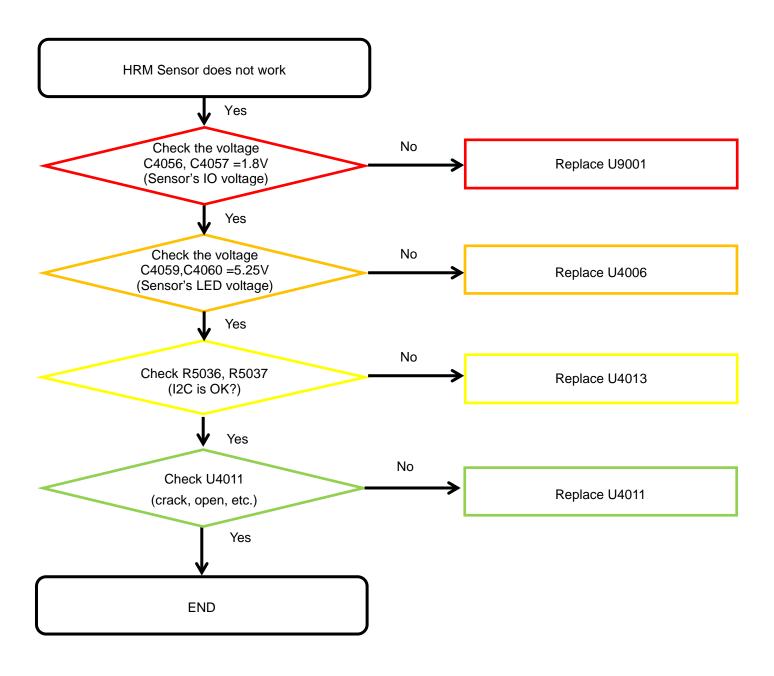
8-4-8-4. Barometer sensor



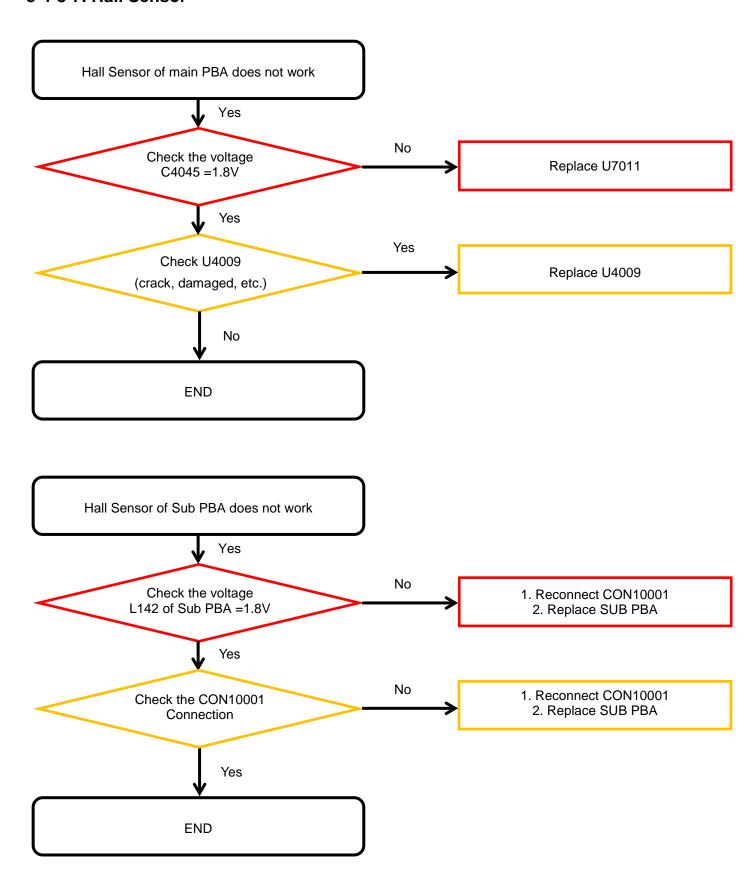
8-4-8-5. Proximity + RGB Light sensor



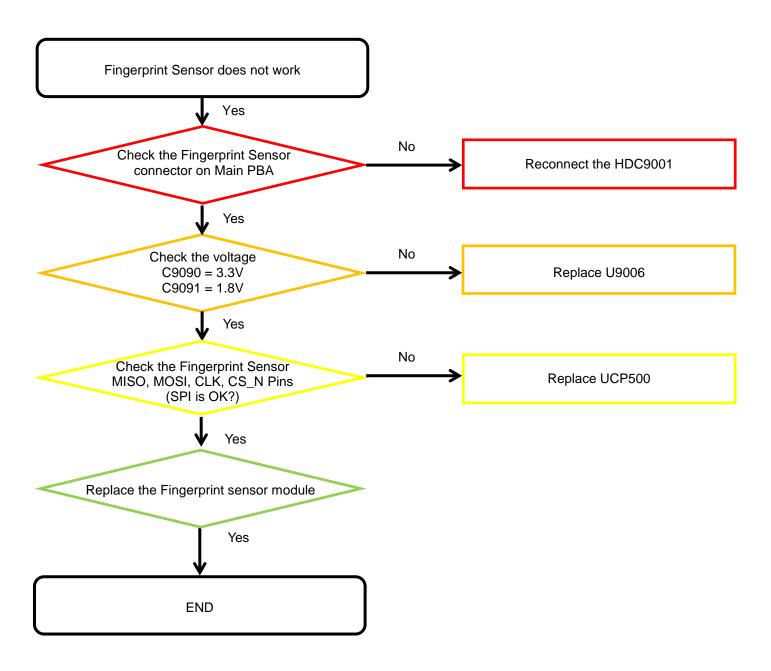
8-4-8-6. HRM Sensor



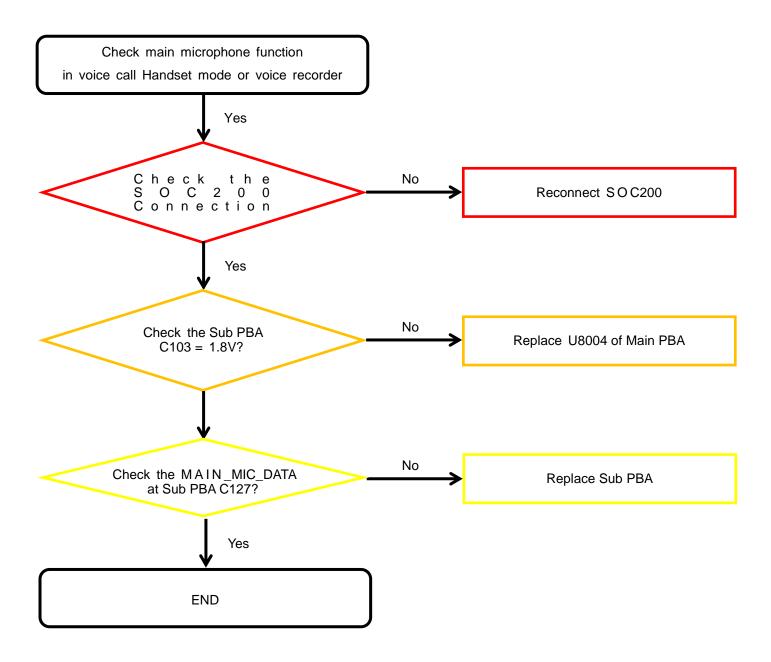
8-4-8-7. Hall Sensor



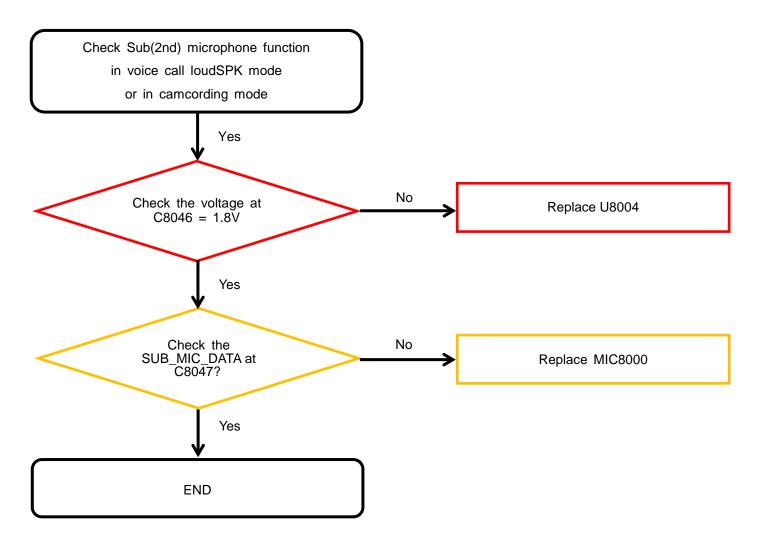
8-4-8. Fingerprint Sensor



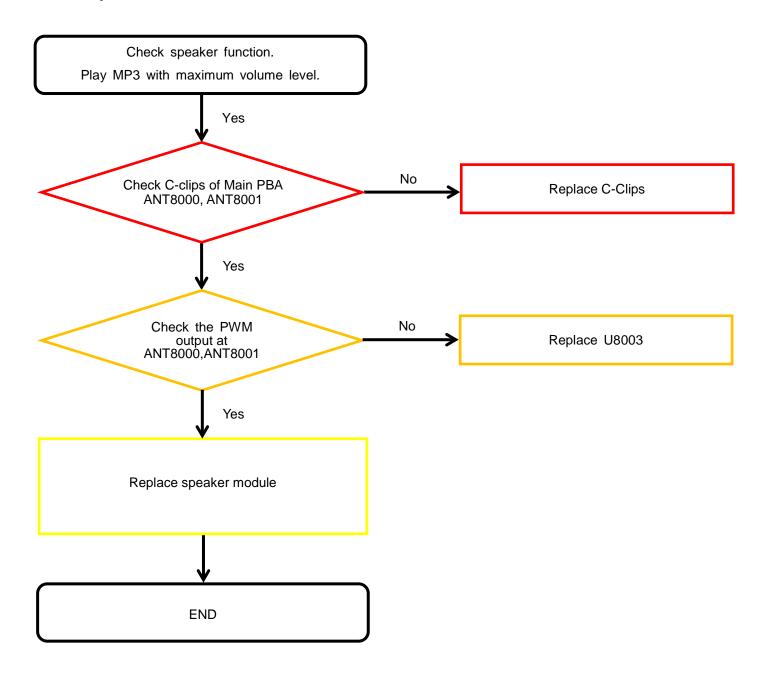
8-4-9-1. Microphone Part - Main MIC



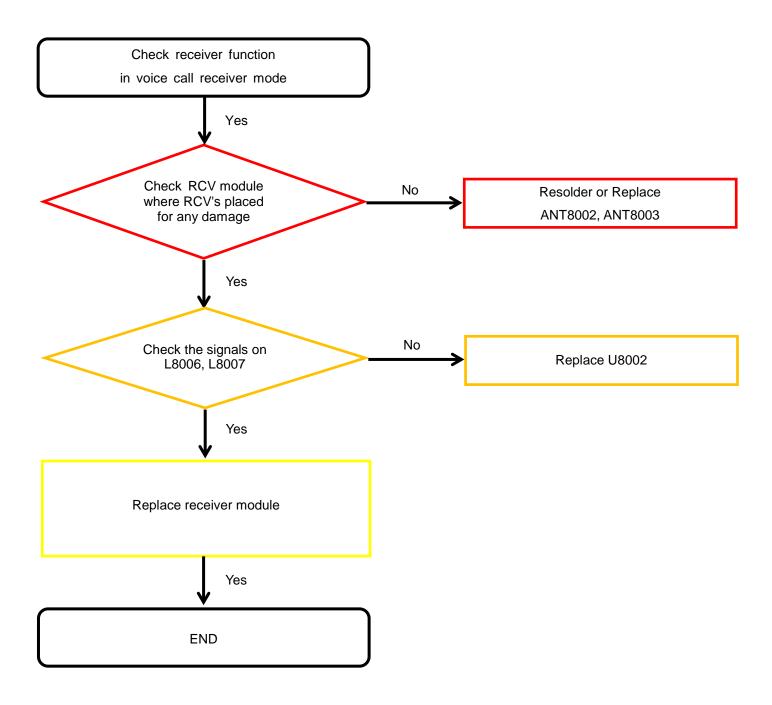
8-4-9-2. Microphone Part - Sub(2nd) MIC



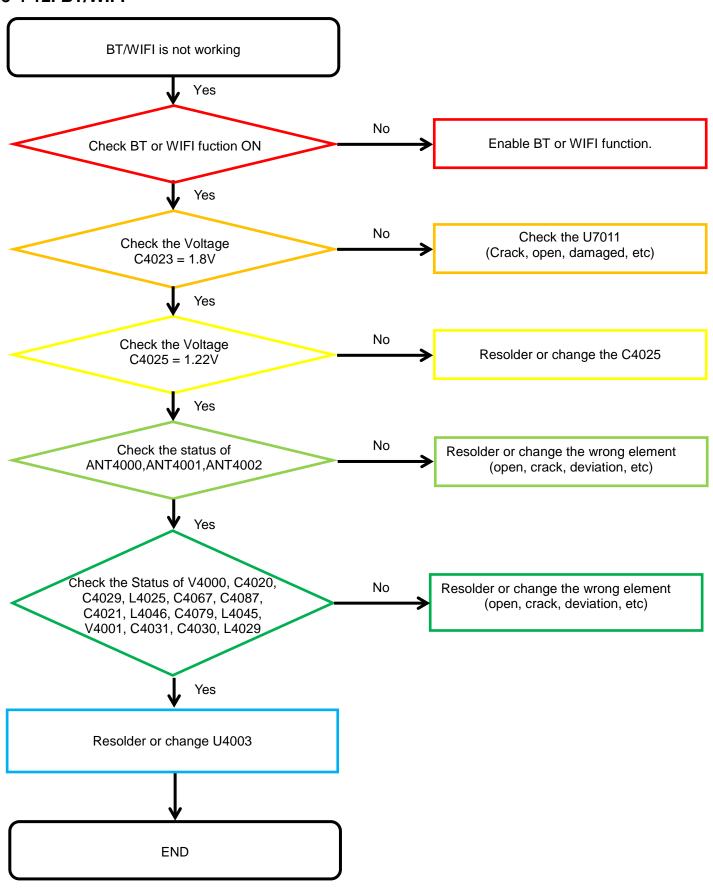
8-4-10. Speaker Part



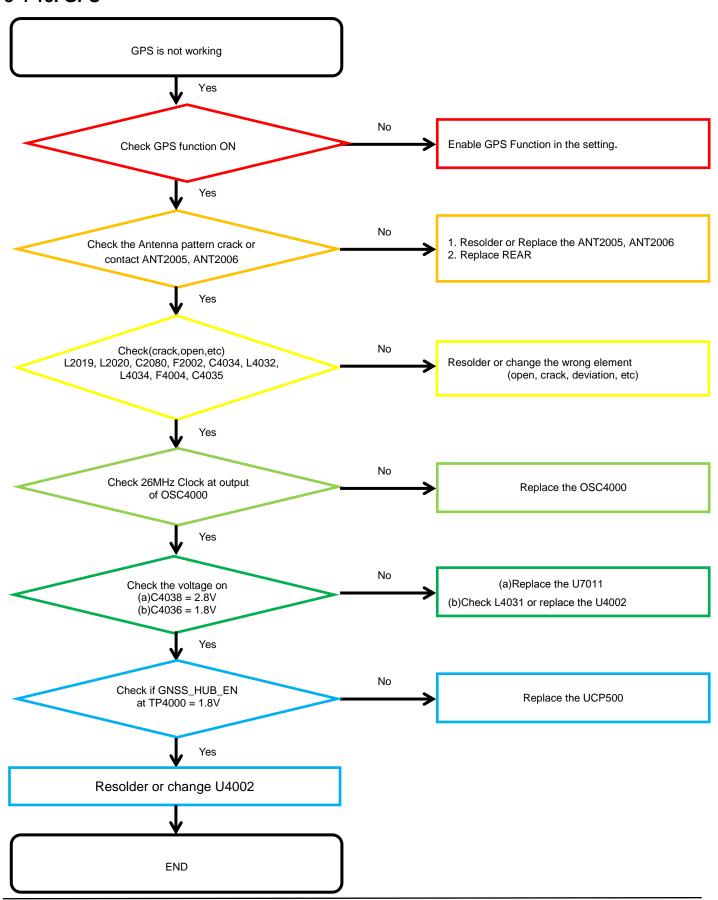
8-4-11. Receiver Part



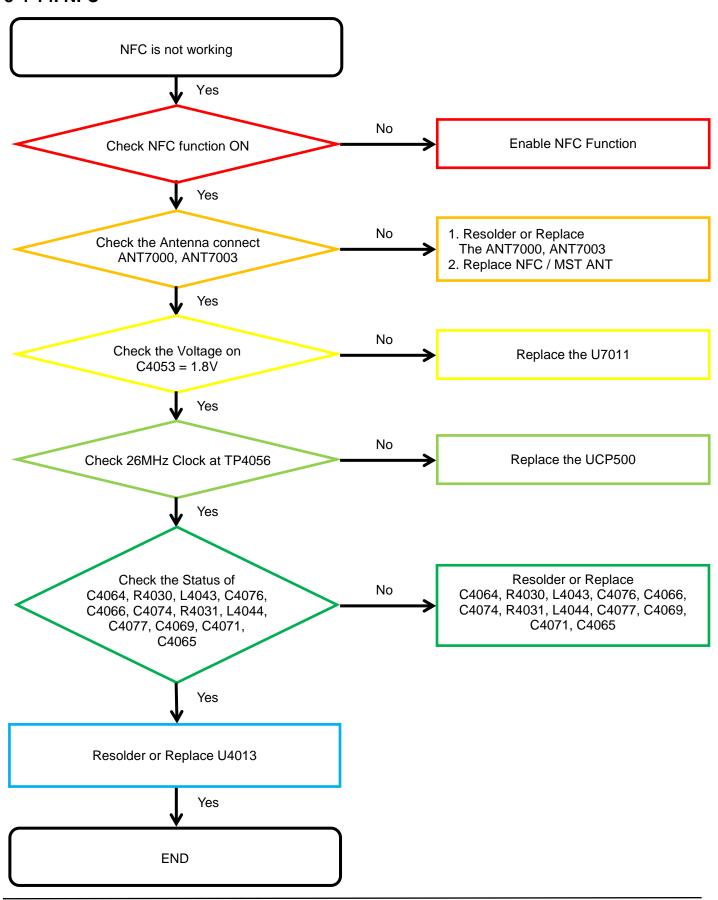
8-4-12. BT/WIFI



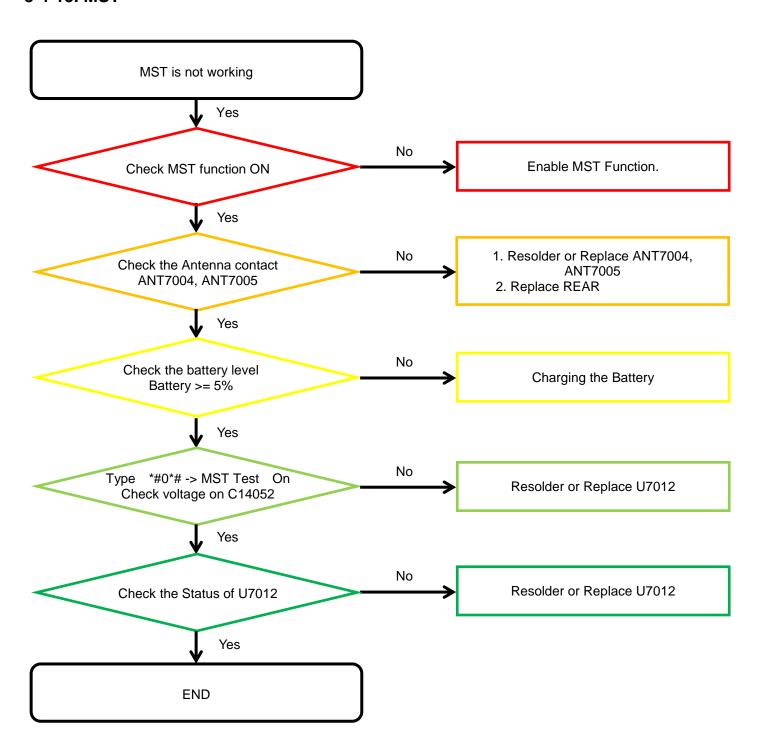
8-4-13. GPS



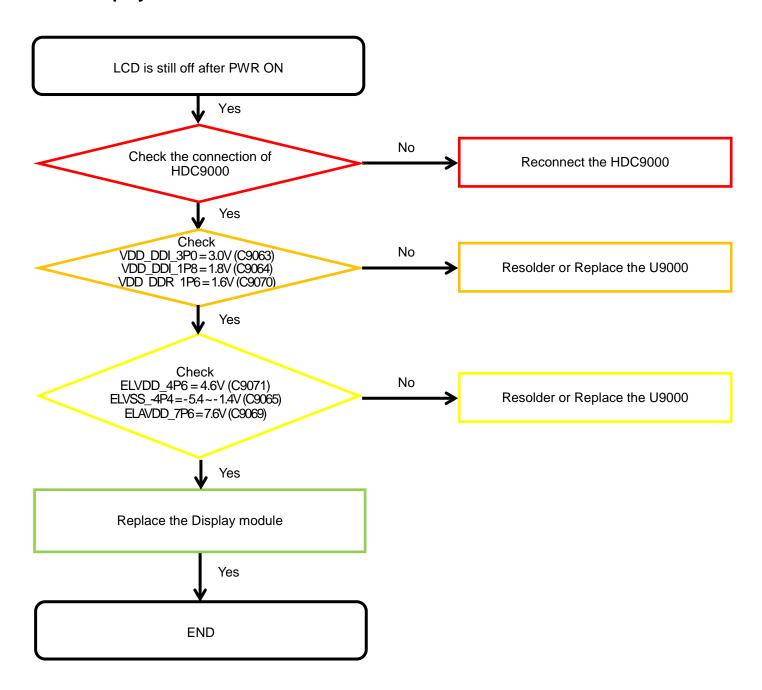
8-4-14. NFC



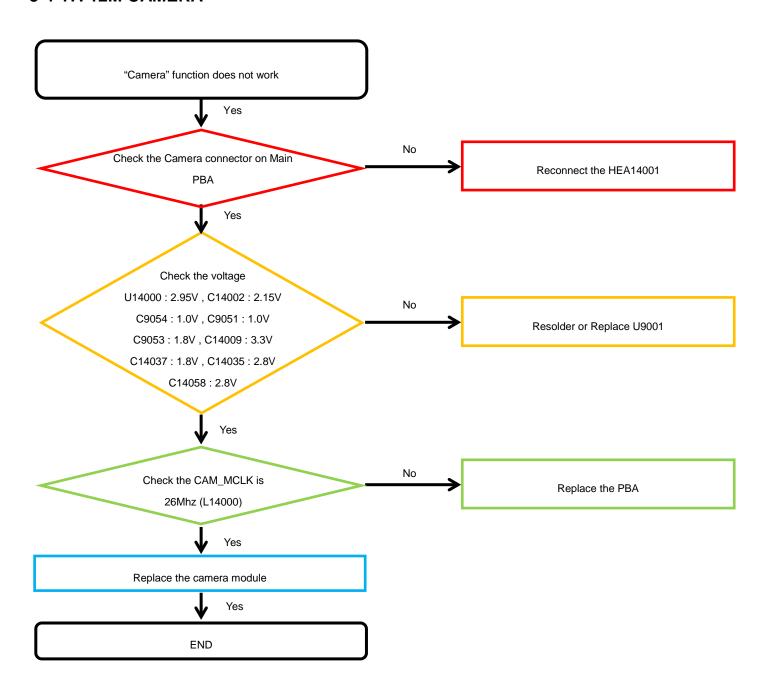
8-4-15. MST



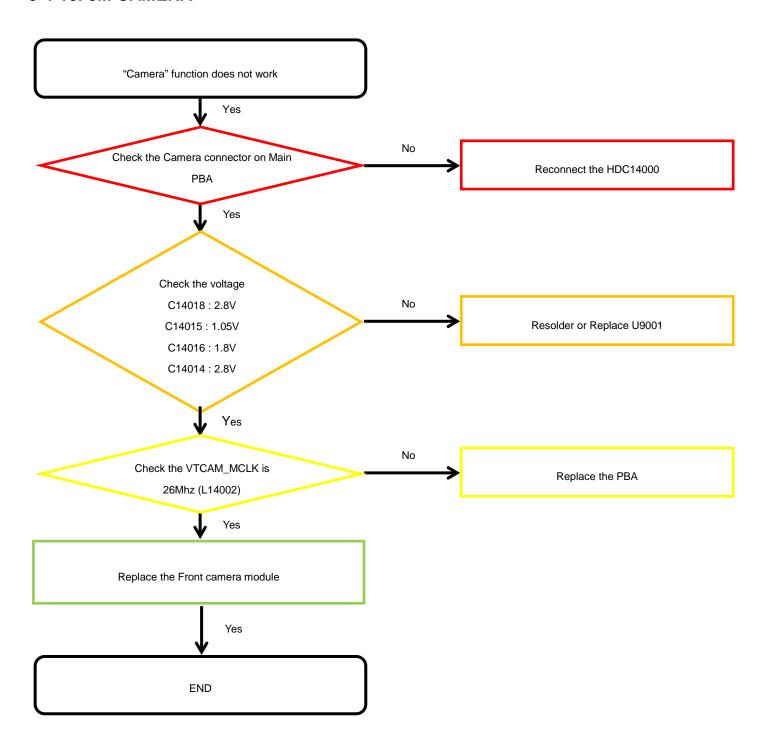
8-4-16. Display



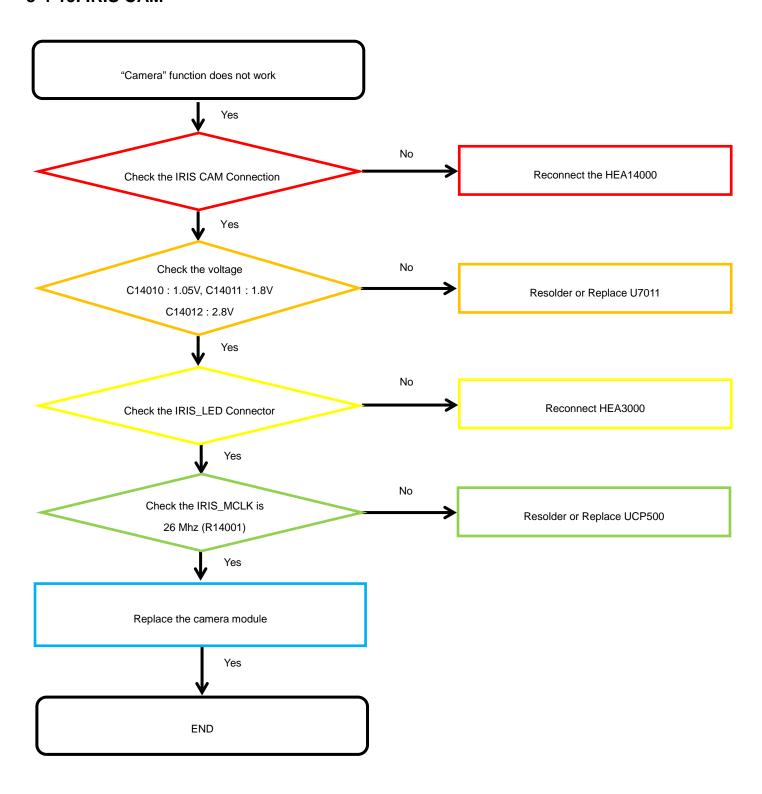
8-4-17. 12M CAMERA



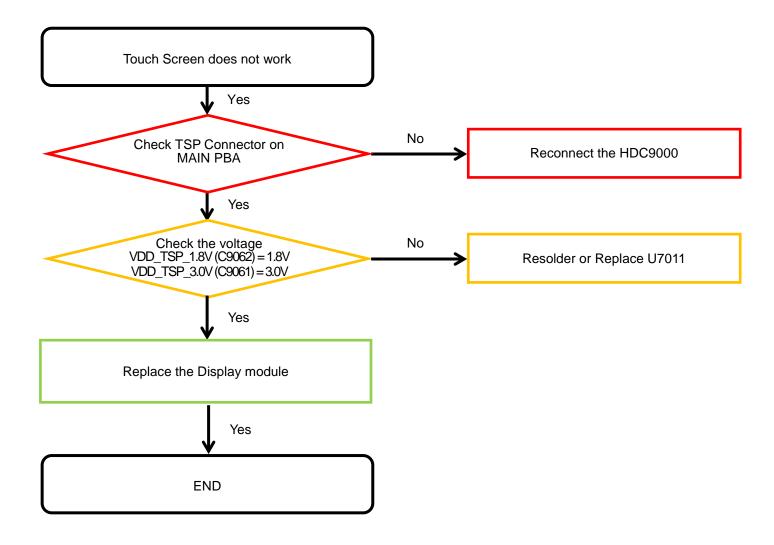
8-4-18. 8M CAMERA



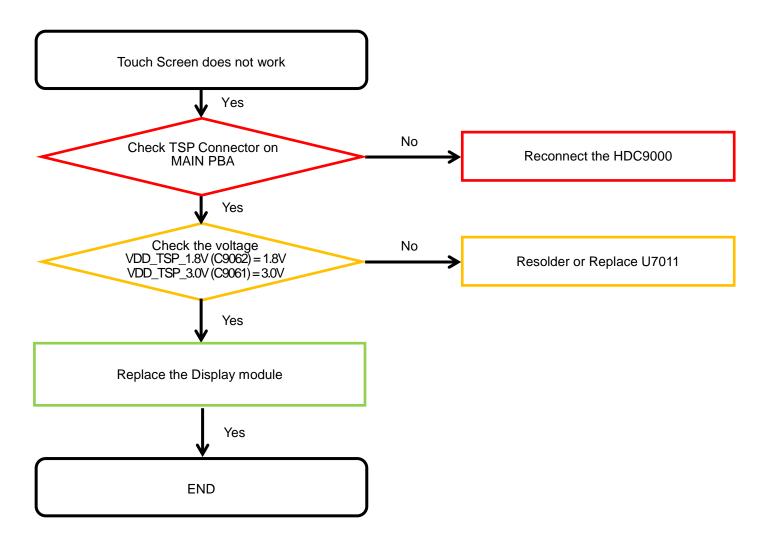
8-4-19. IRIS CAM



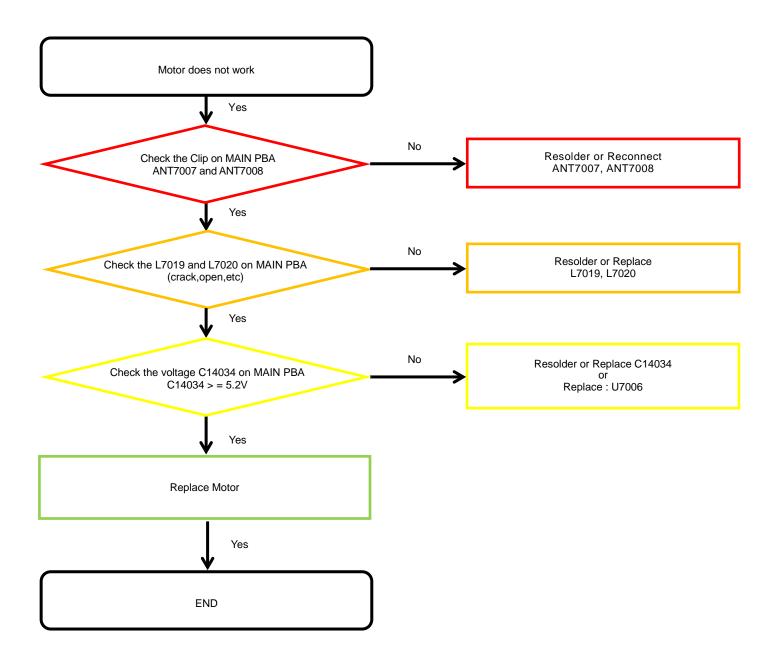
8-4-20. TSP



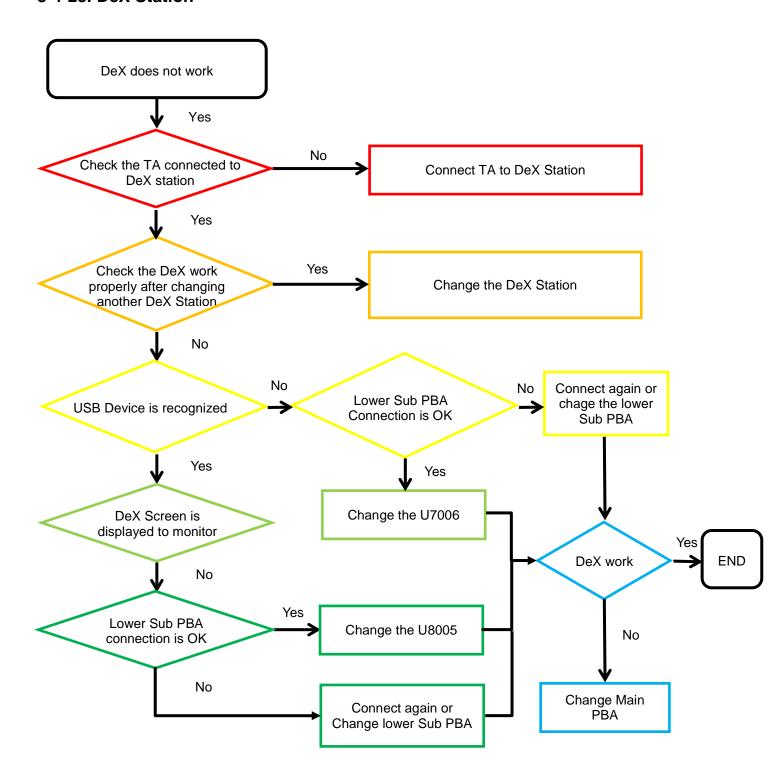
8-4-21. Pressure Touch (Home Button function)



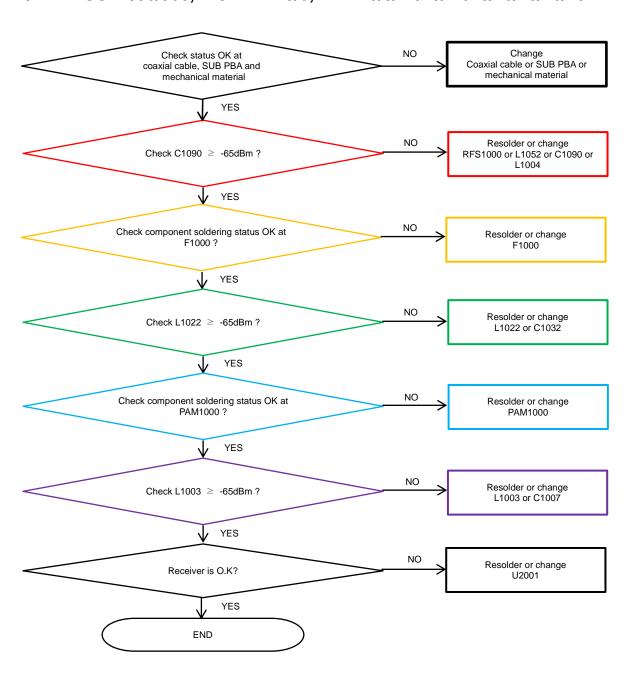
8-4-22. Motor



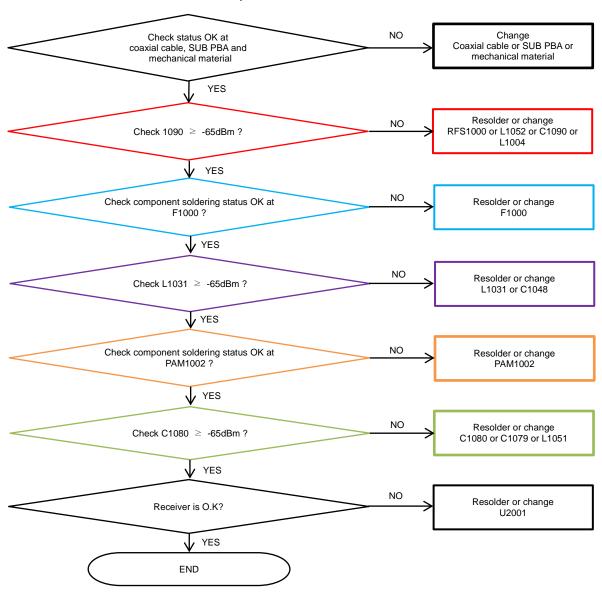
8-4-23. DeX Station



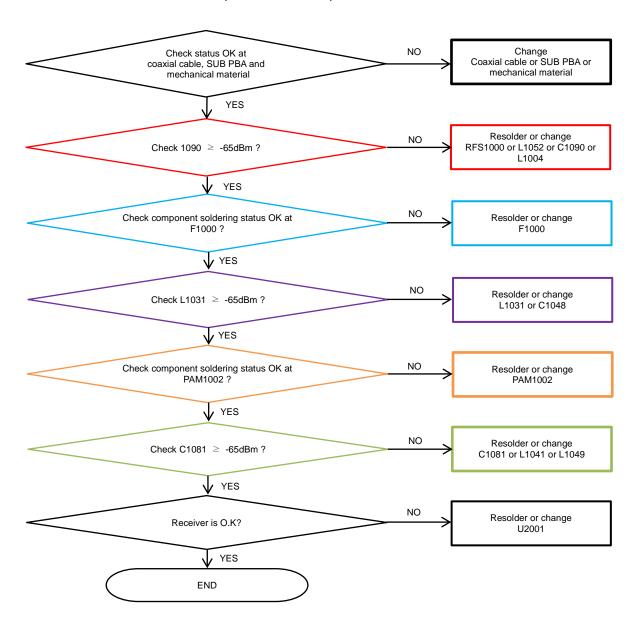
8-4-24. GSM 850/900, WCDMA B5/8, LTE B5/8/12/13/17/18/19/20/26/28 PRx



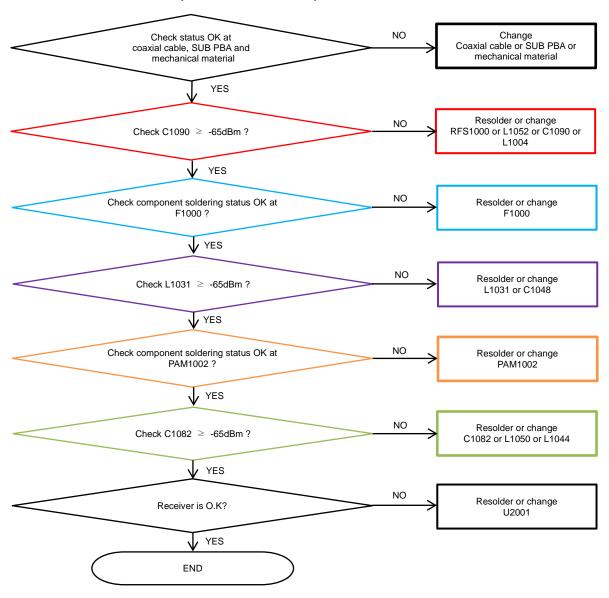
8-4-25. TDSCDMA B38/40/41, LTE B7/38/40/41 PRx



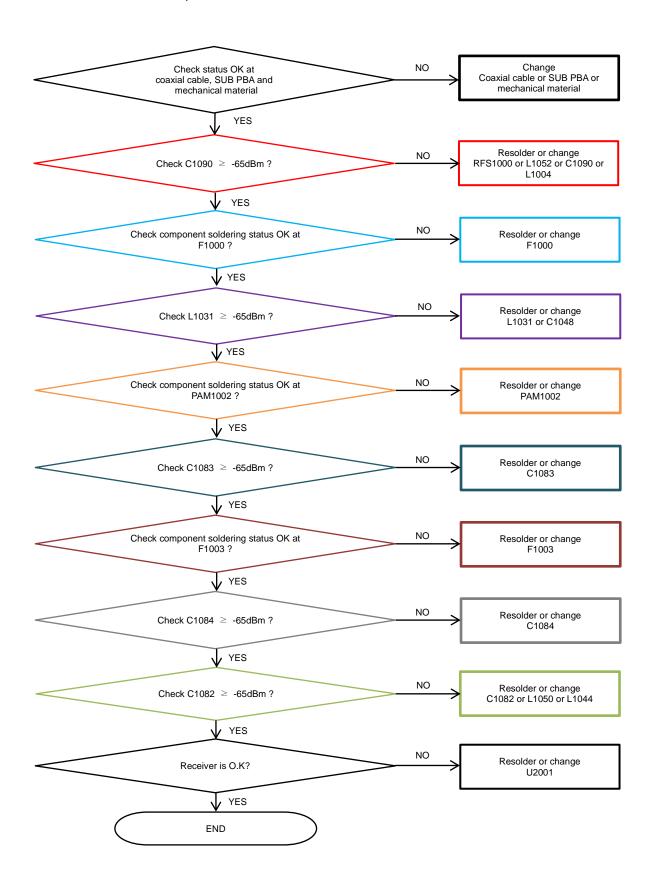
8-4-26. DCS1800/PCS1900, WCDMA B2, LTE B2/3/25 PRx



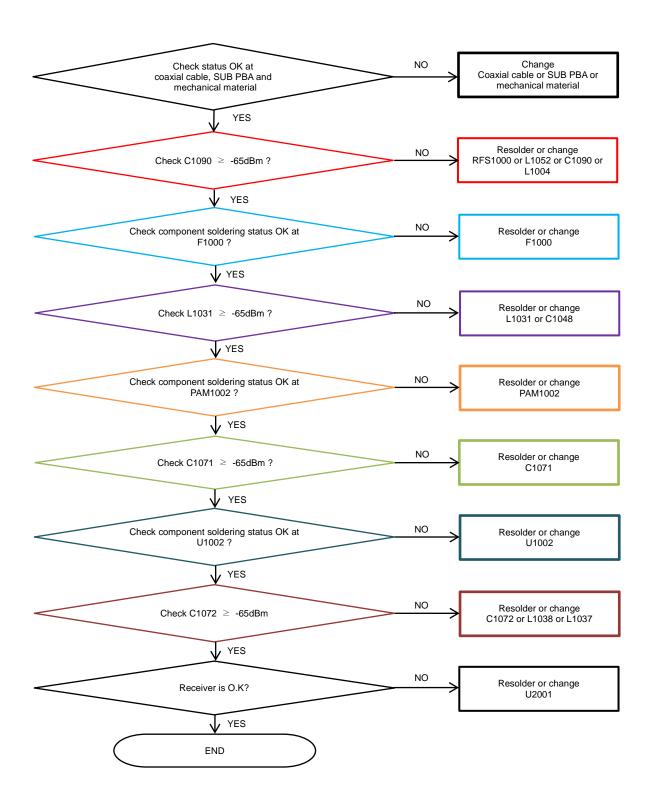
8-4-27. WCDMA B1/4, TDSCDMA B39, LTE B1/4/39/66 PRx



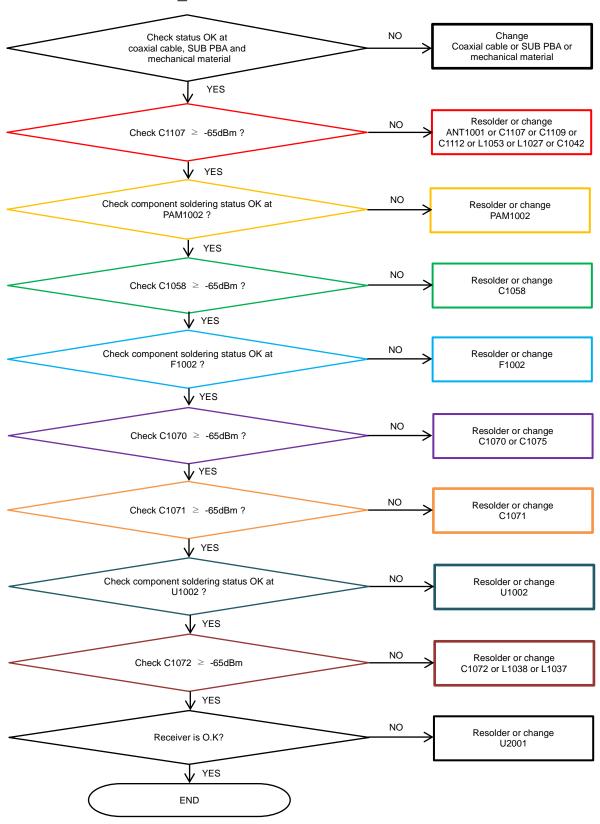
8-4-28. TDSCDMA B34, LTE B34 PRx



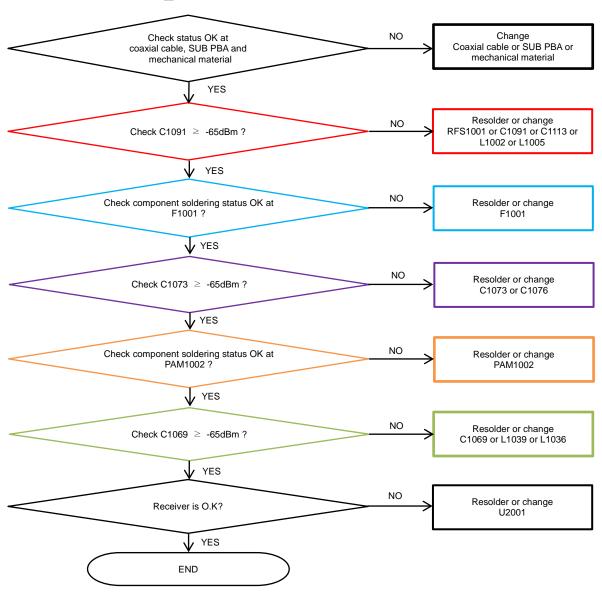
8-4-29. LTE B32 PRx



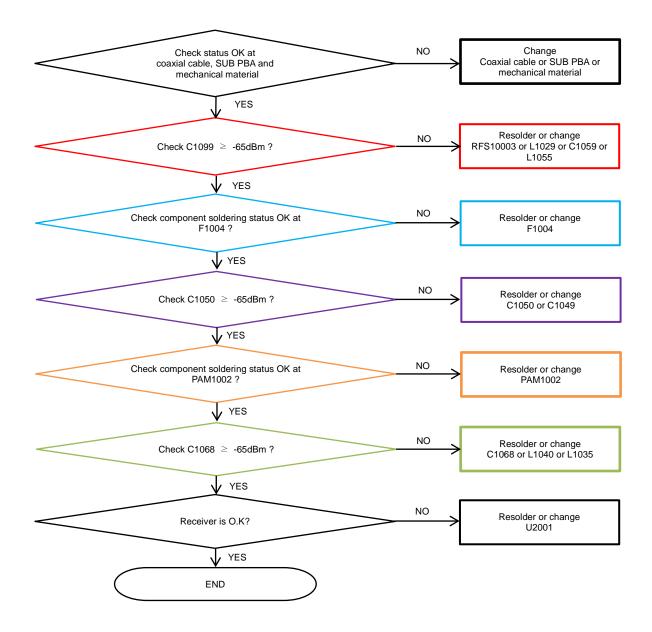
8-4-30. LTE B1/4 4Rx PRx



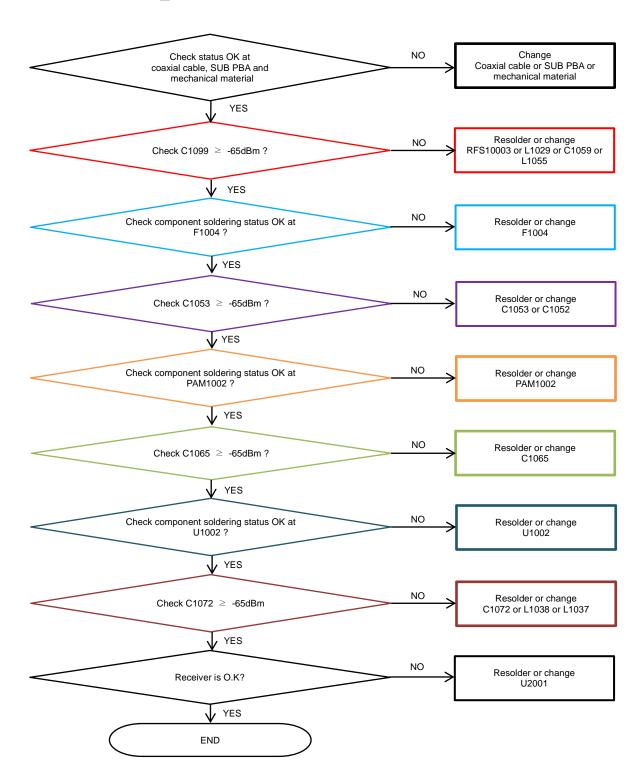
8-4-31. LTE B3 4Rx_PRx



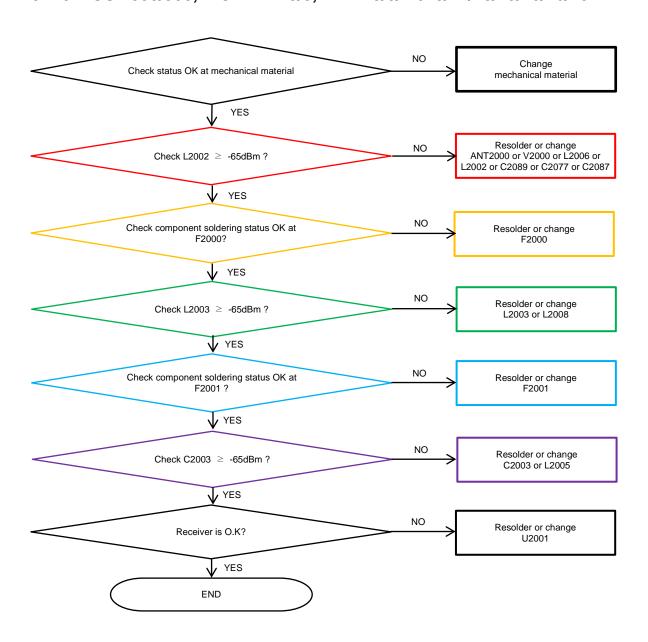
8-4-32. LTE B7 4Rx PRx



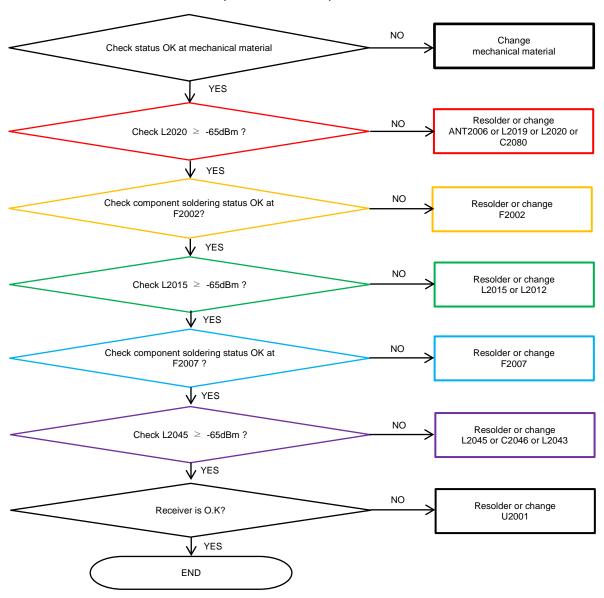
8-4-33. LTE 40 4Rx_PRx



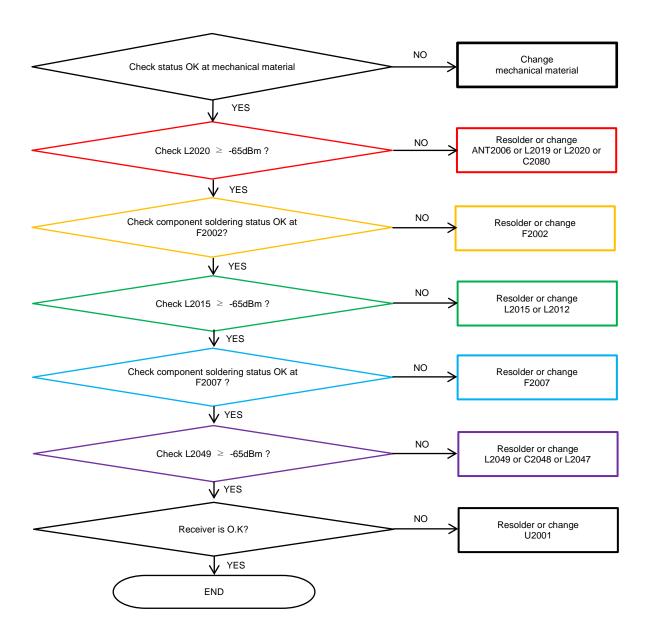
8-4-34. GSM850/900, WCDMA B5/8, LTE B5/8/12/13/17/18/19/20/26/28 DRx



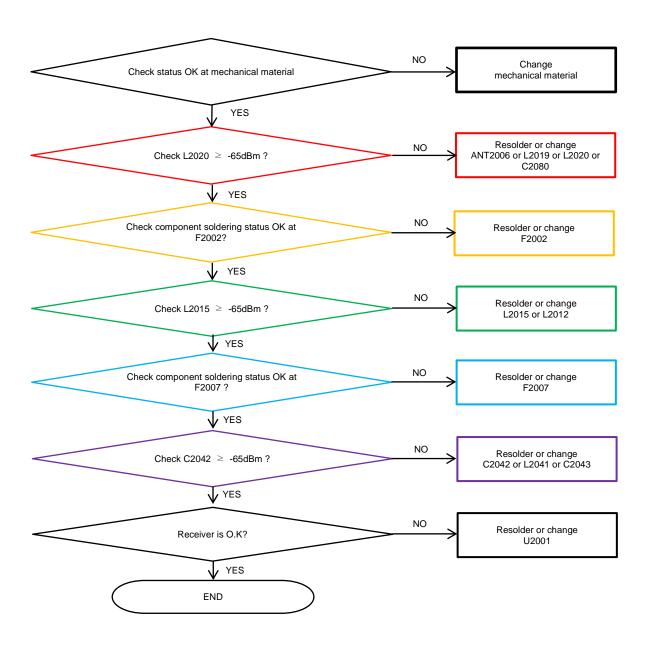
8-4-35. DCS1800/PCS1900, WCDMA B2, LTE B2/3/25 DRx



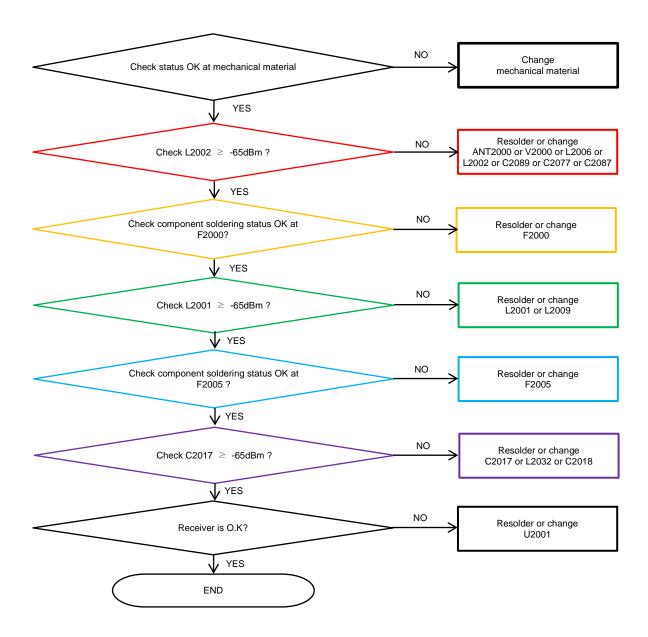
8-4-36. WCDMA B1/4, LTE B1/4/32/66 DRx



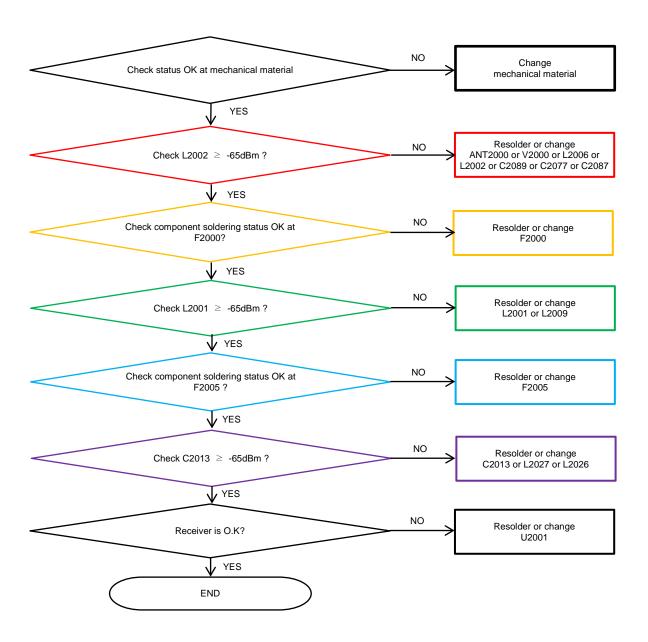
8-4-37. TDSCDMA B38/40/41, LTE B7/38/40/41 DRx



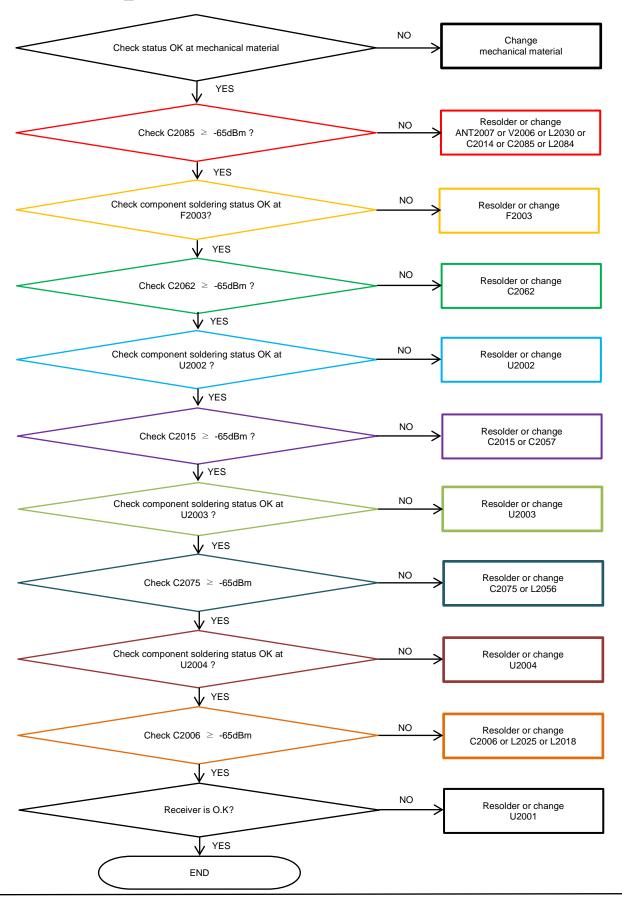
8-4-38. LTE B1/4 4Rx_DRx



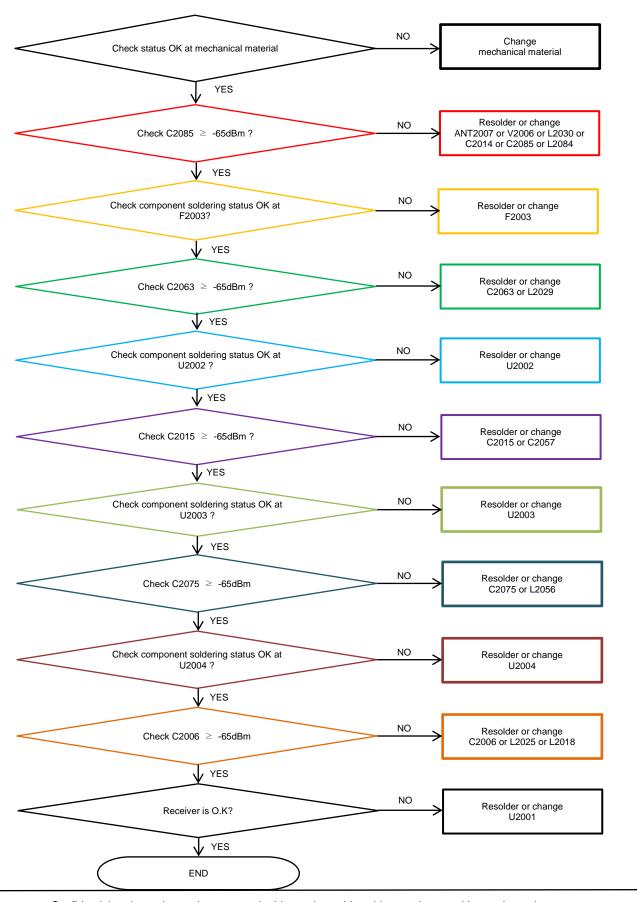
8-4-39. LTE B3 4Rx_DRx



8-4-40. LTE B7 4Rx_DRx



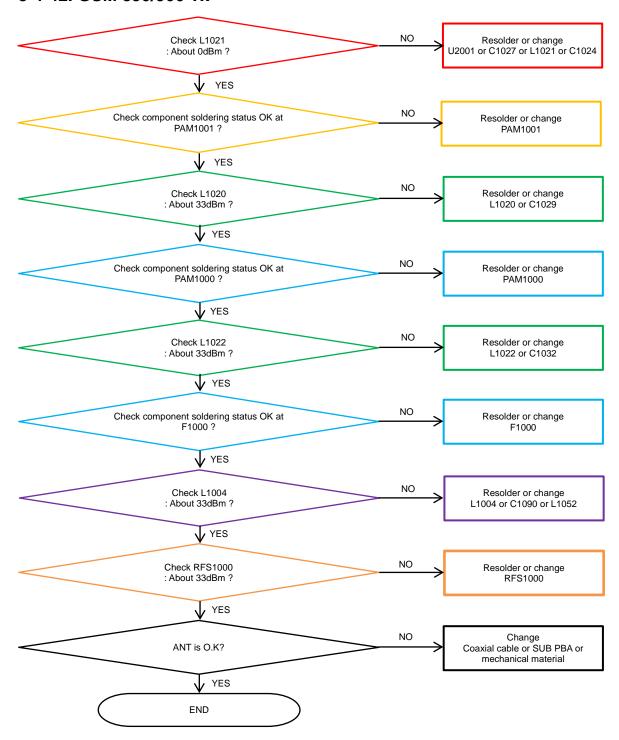
8-4-41. LTE B40 4Rx_DRx



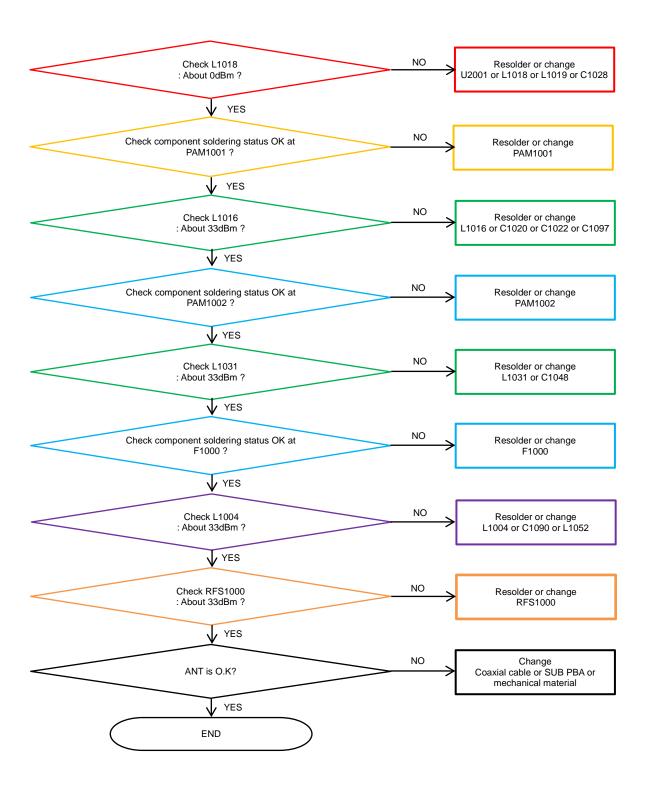
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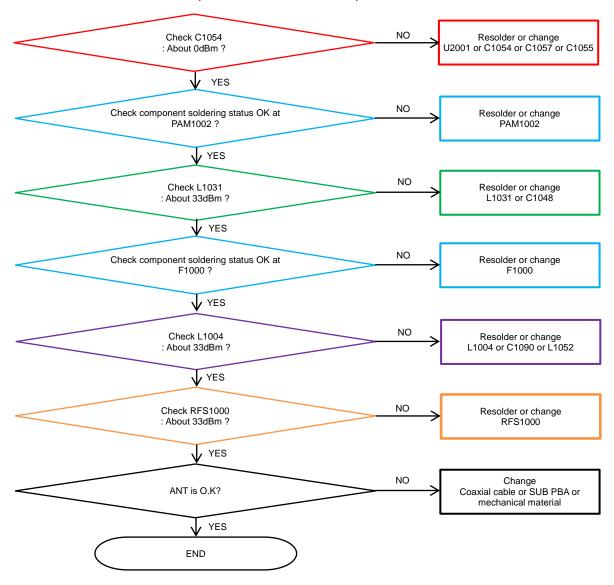
8-4-42. GSM 850/900 Tx



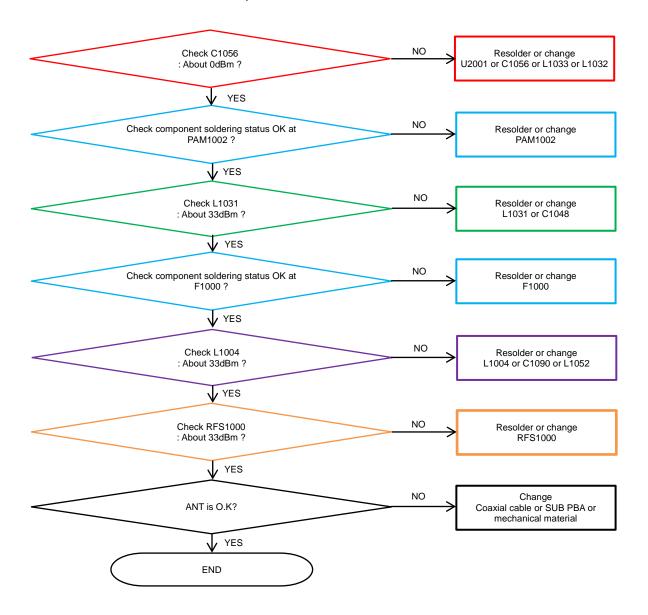
8-4-43. DCS1800/PCS1900 Tx



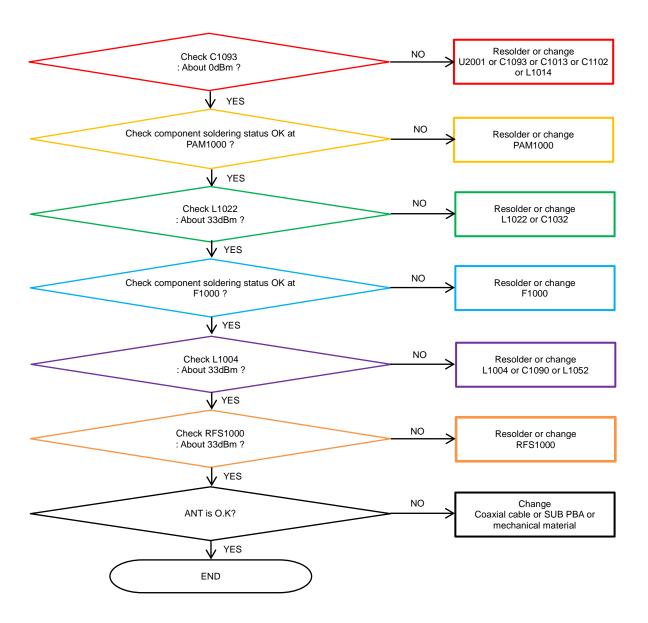
8-4-44. WCDMA B1/2/4, TDSCDMA B34/39, LTE B1/2/3/4/25/34/39 Tx



8-4-45. TDSCDMA B38/40/41, LTE B7/38/40/41 Tx



8-4-46. WCDMA B5/8, LTE B5/8/12/13/17/18/19/20/26/28 Tx



8-5. Service Schematics

- AP Top view

