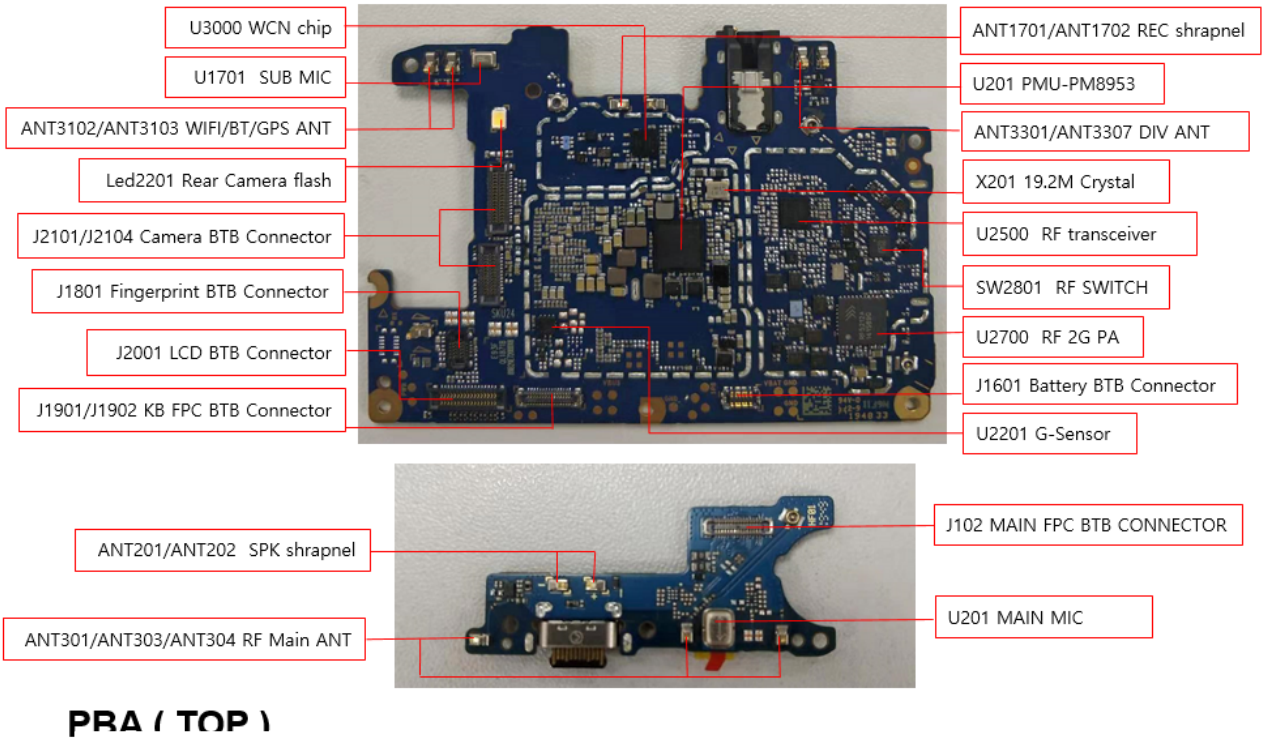
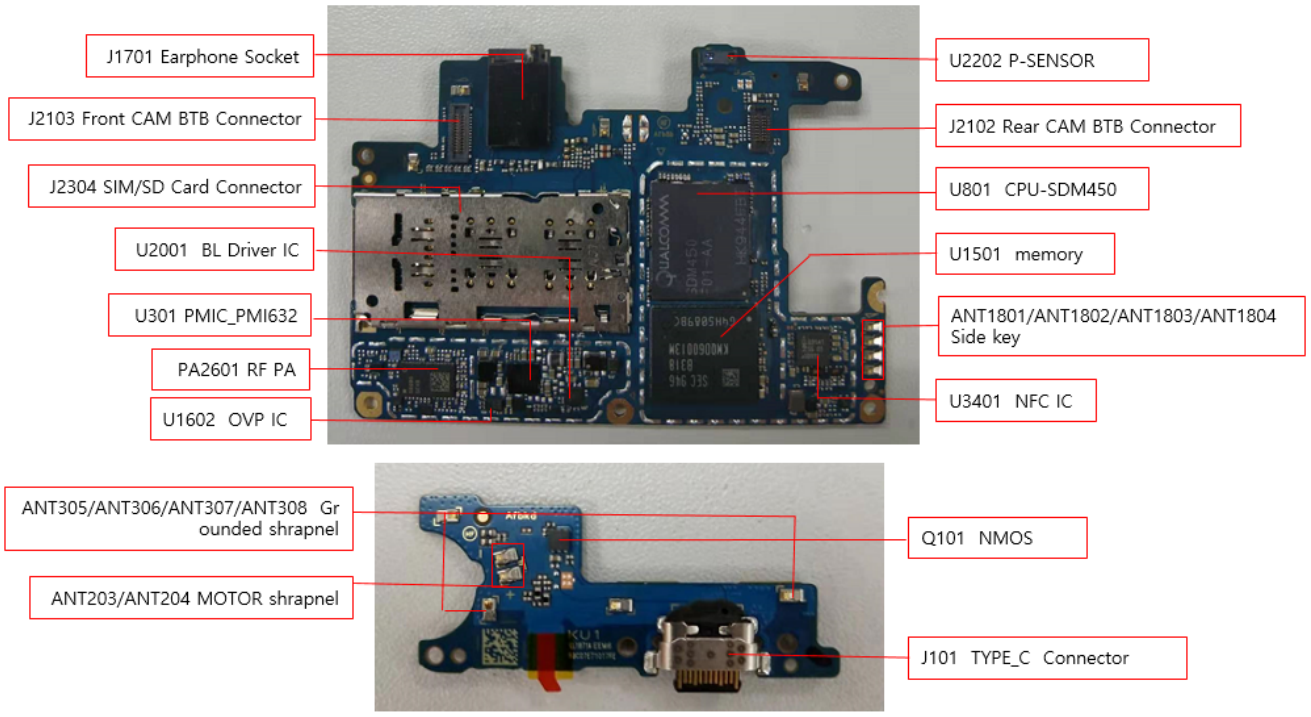
8. Level 3 Repair

8-1. Components Layout

PBA (Bottom)

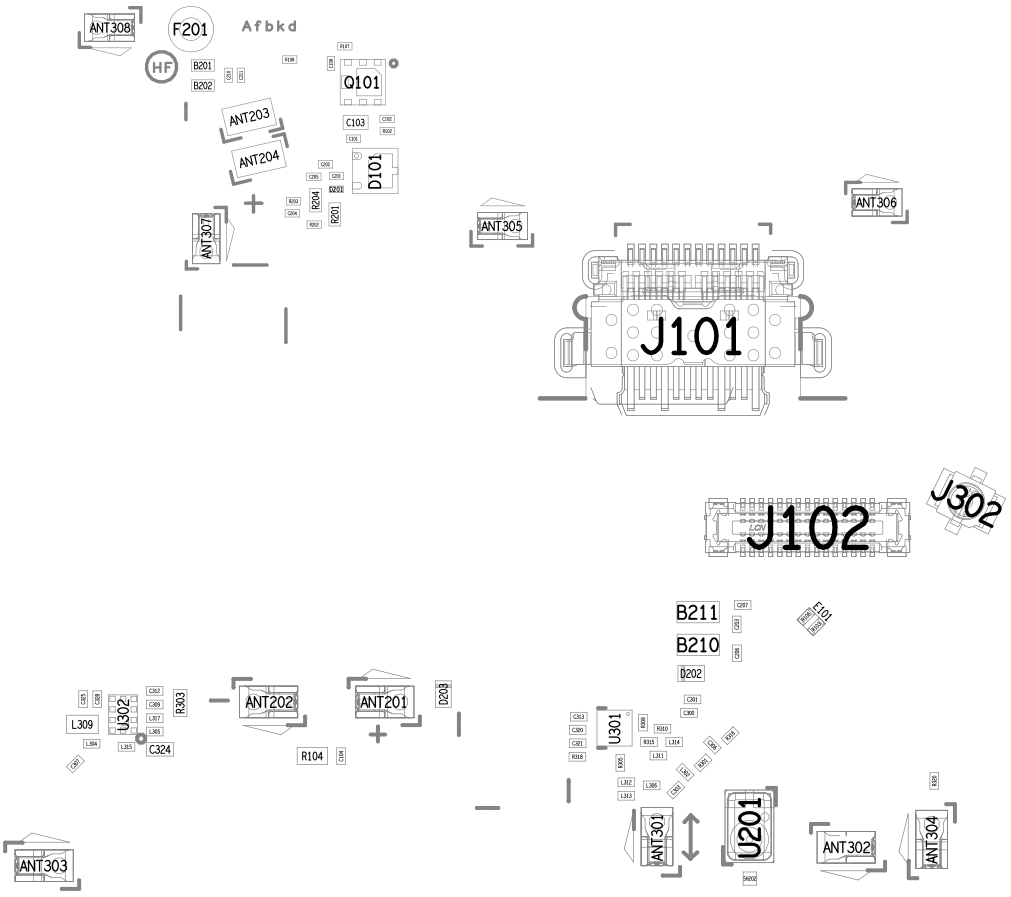


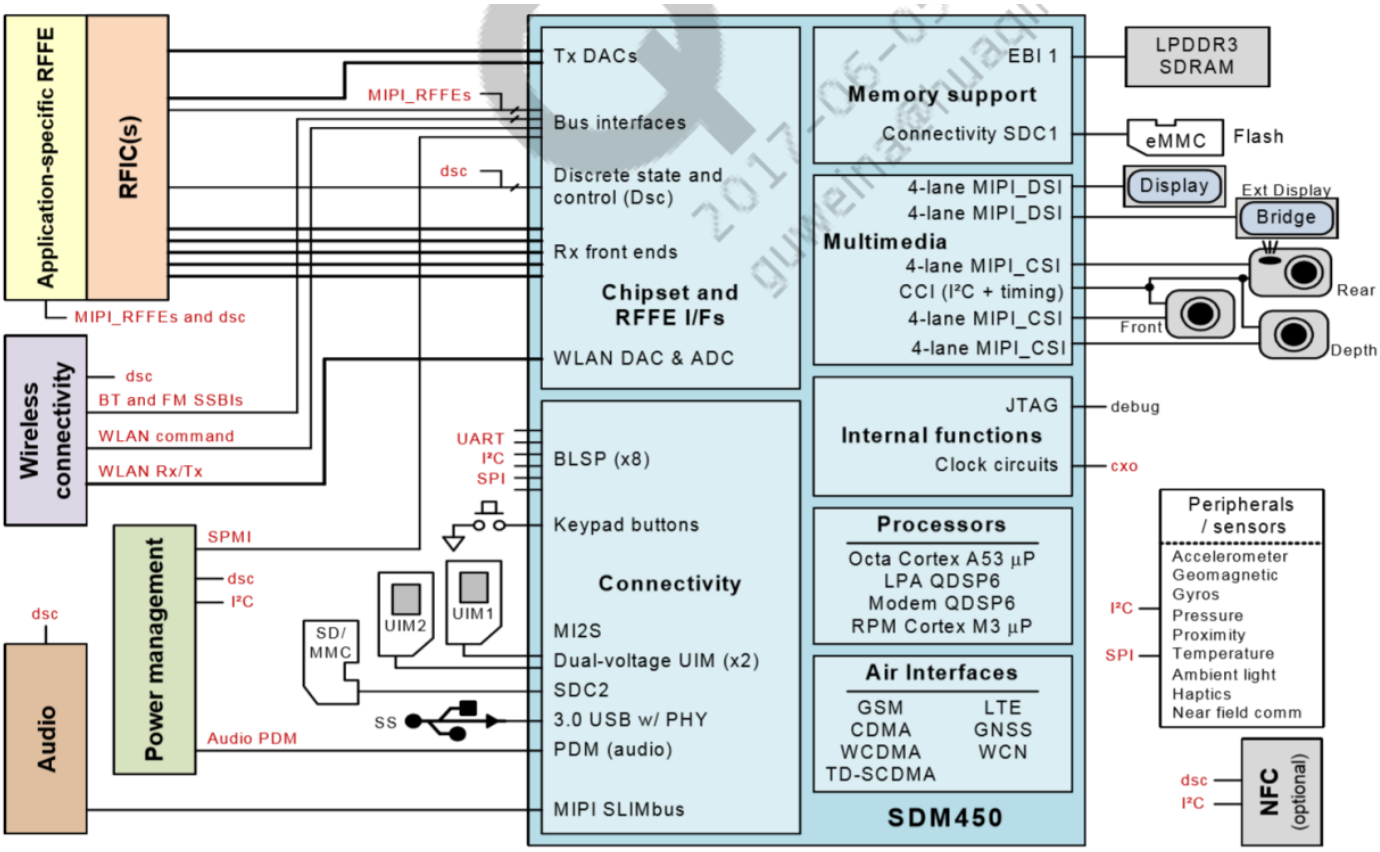
PBA (TOP)



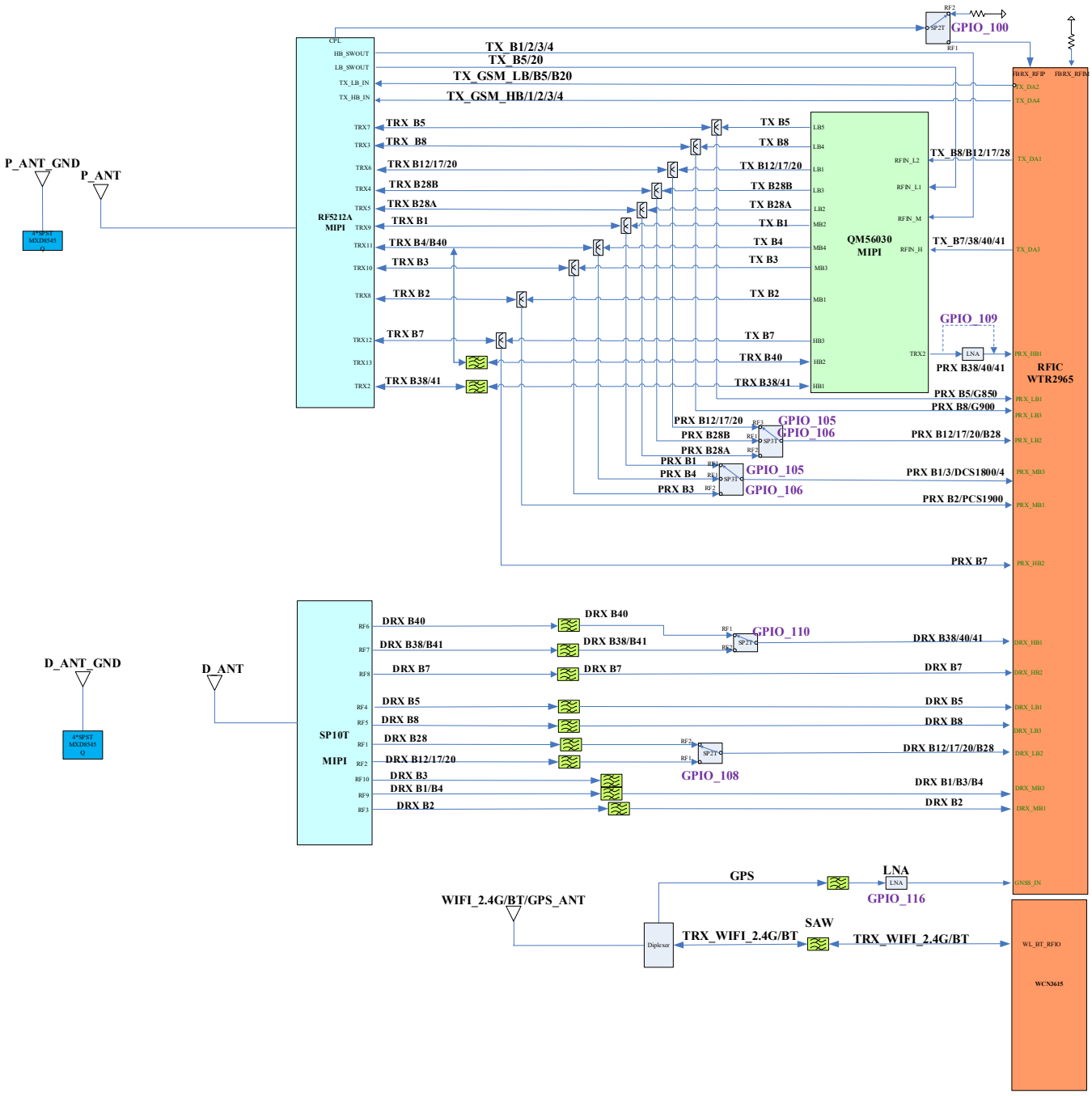
8. Level 3 Repair

8. Level 3 Repair

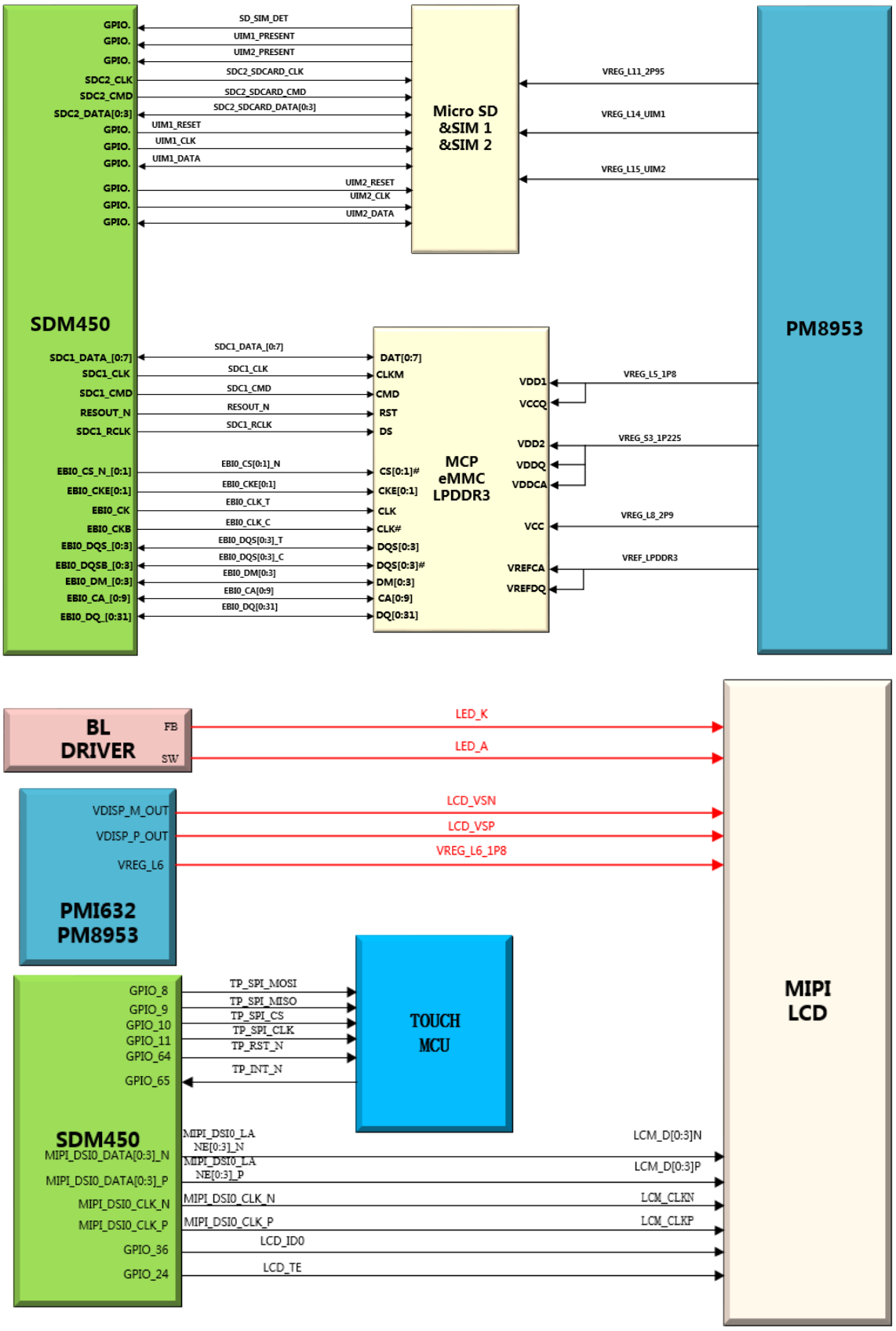




8. Level 3 Repair

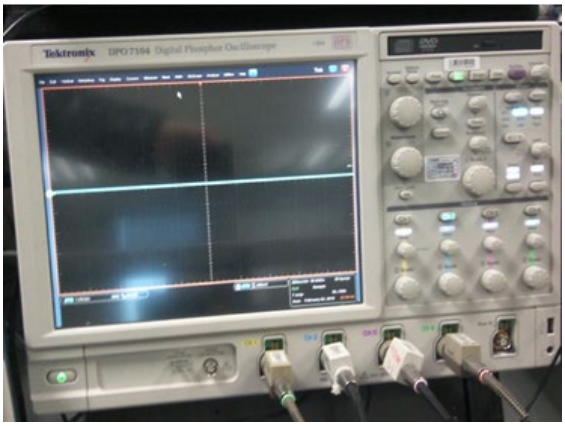
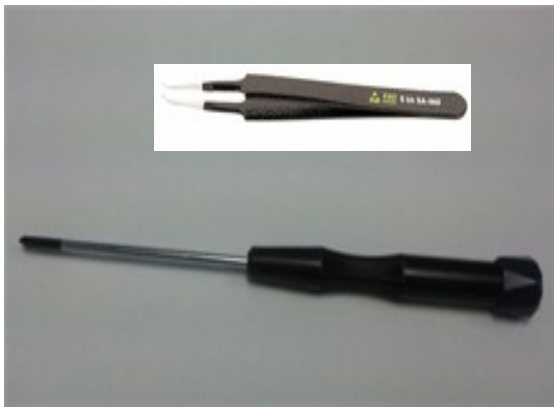
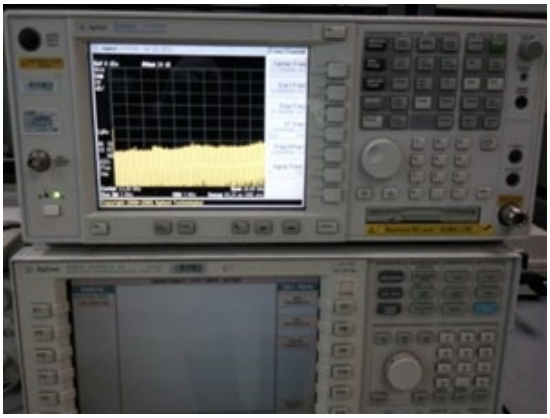


8. Level 3 Repair



8. Level 3 Repair

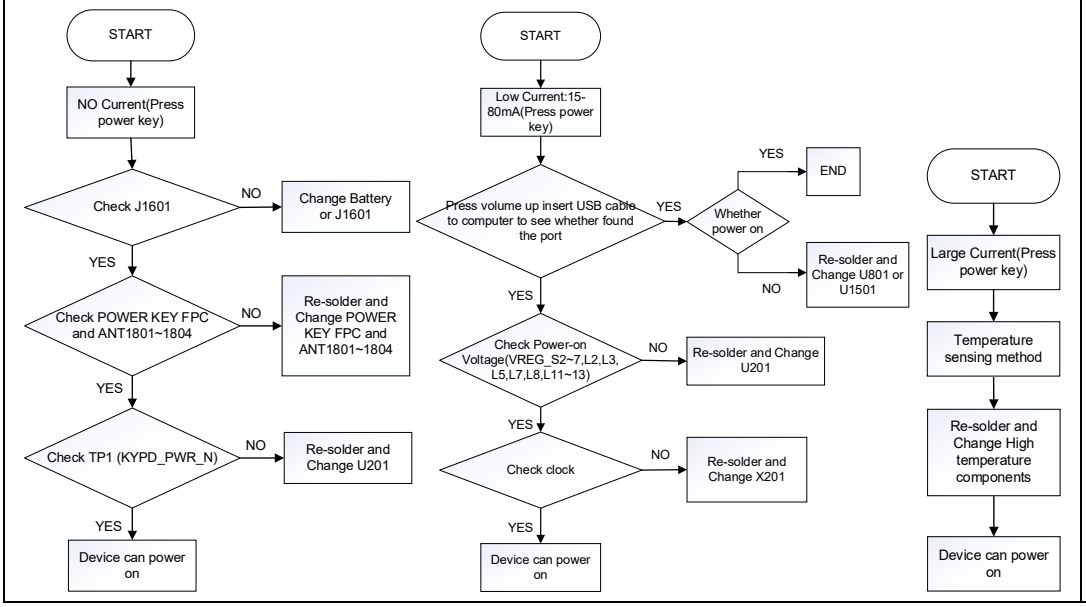
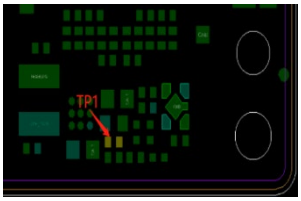
8-3. Flow chart of Troubleshooting.

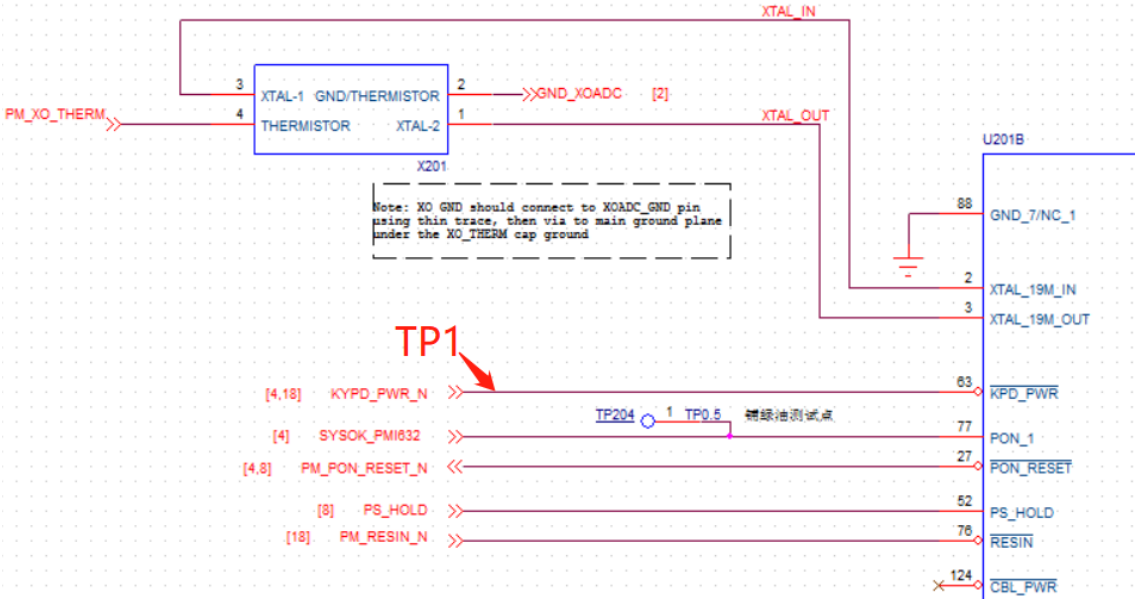
	
Oscilloscope	Digital Multimeter
	
Power Supply	+ driver, ESD Safe Tweezer
	
8960 & Spectrum Analyzer	Soldering iron

8. Level 3 Repair

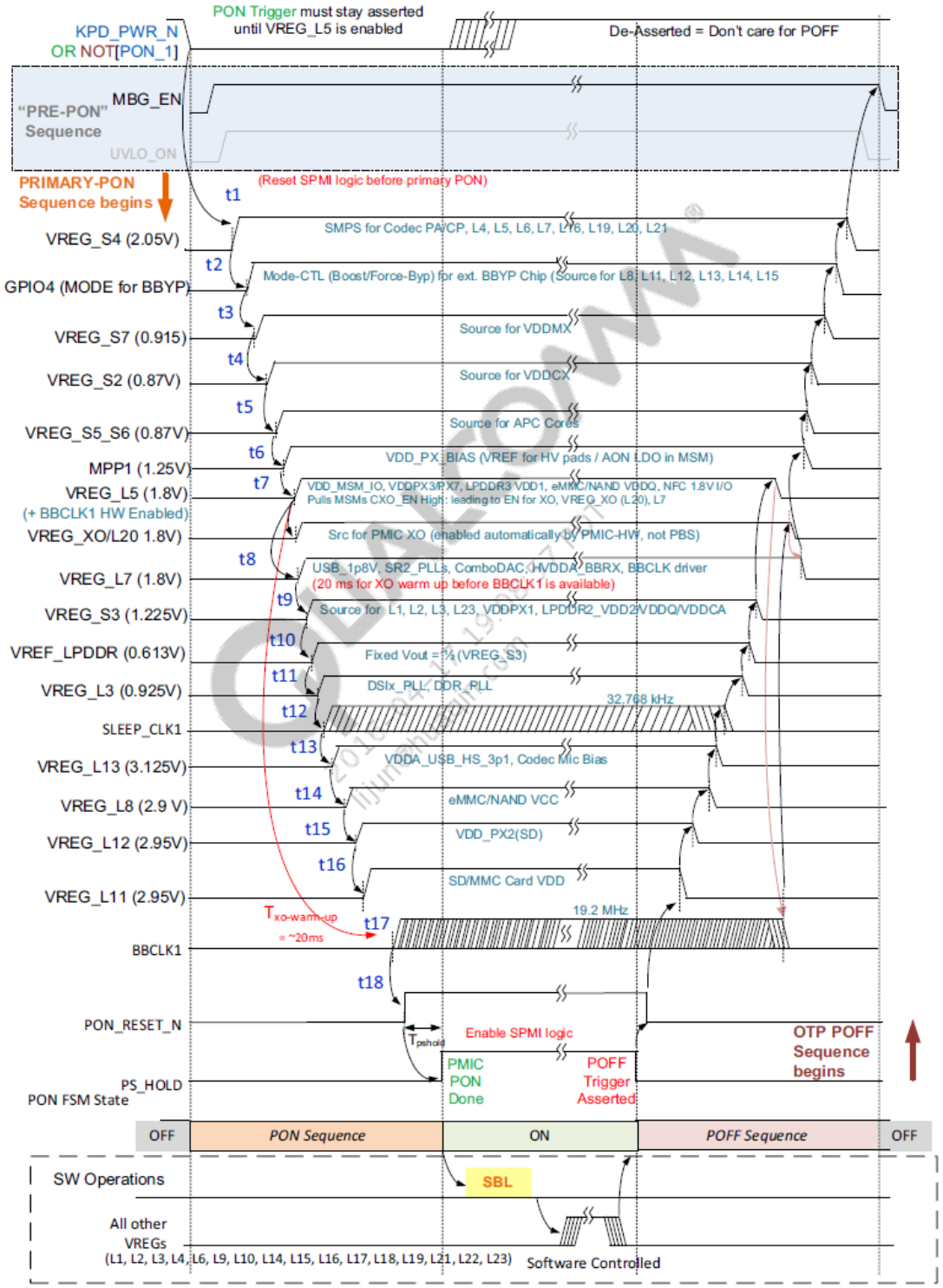
8-4-1. Power On

■ Checking Power signal (Battery connector, PMU, Clock)

CHECKING FLOW	IMAGE
	

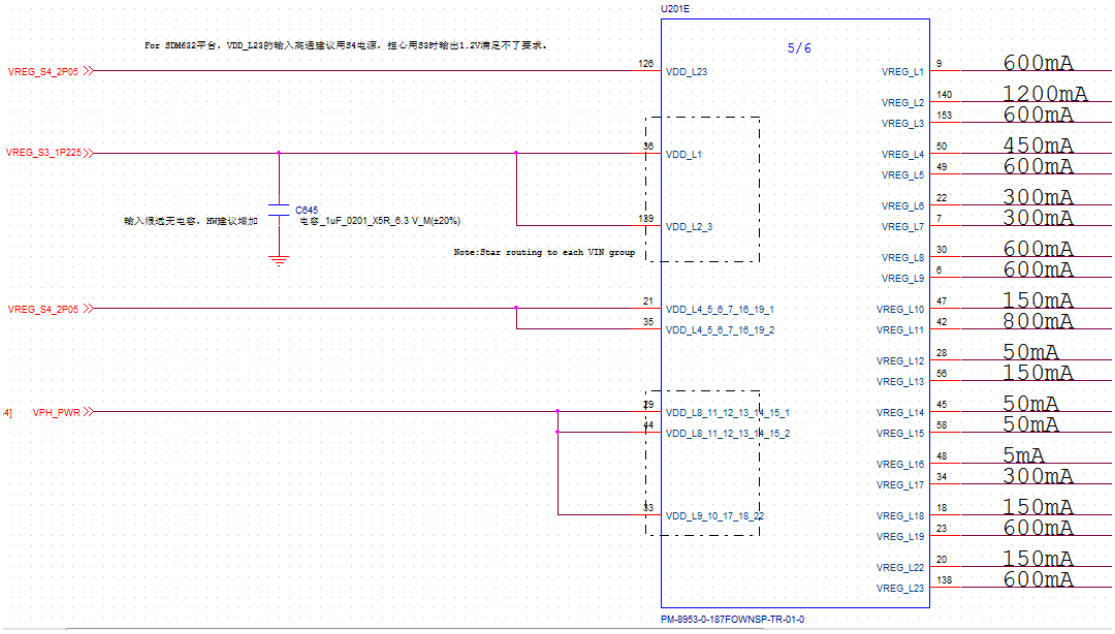


8. Level 3 Repair



Power-on Voltage (VREG_S2~7, L2, L3, L5, L7, L8, L11~13)

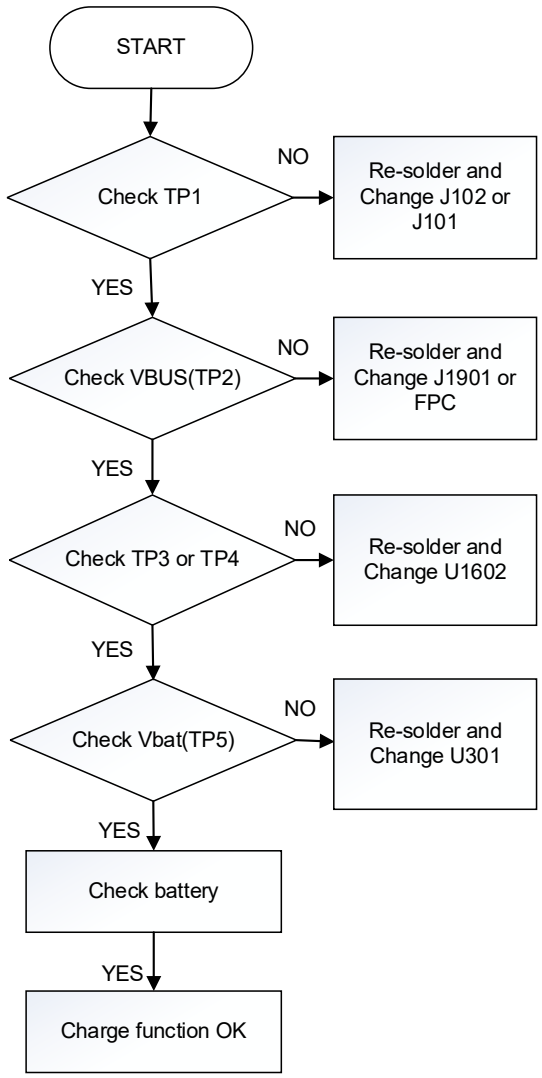
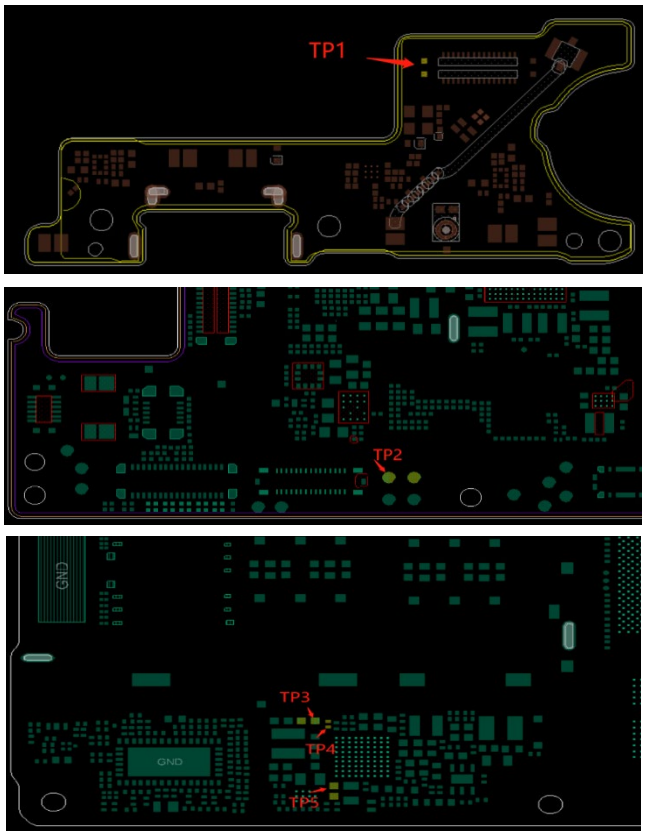
8. Level 3 Repair



VREG_S2~7, L2, L3, L5, L7, L8, L11~13 schematic diagram

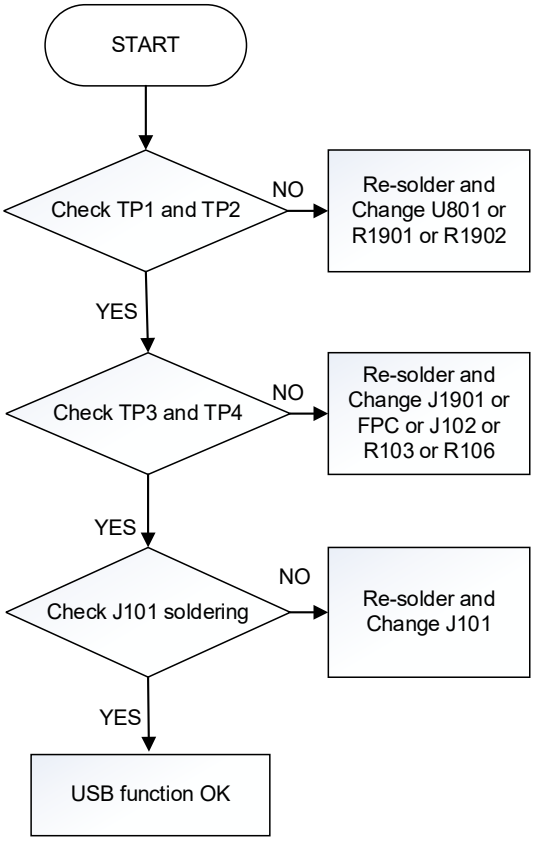
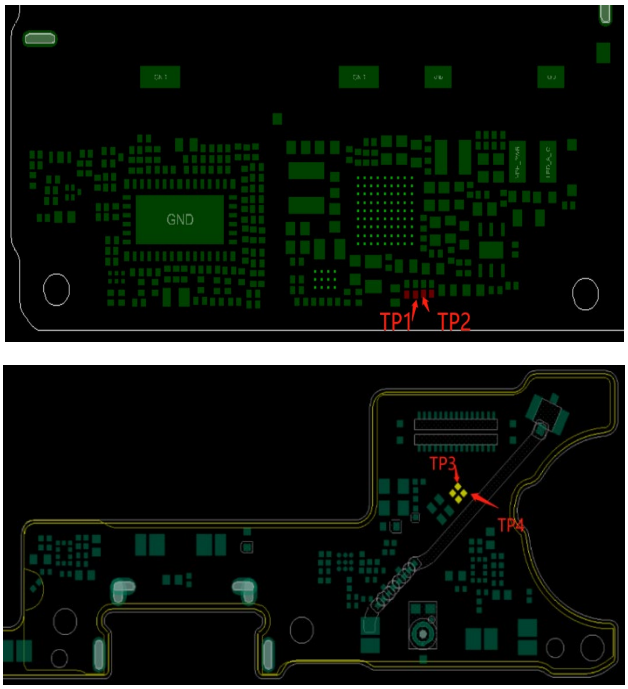
8-4-2. Charging

■ The charging controlled by PMU chip PMI632 (U301) and OVP chip U1602

CHECKING FLOW	IMAGE
	

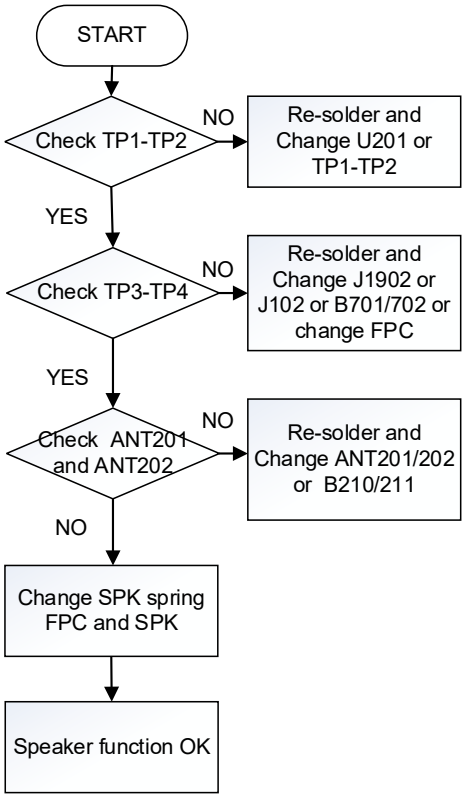
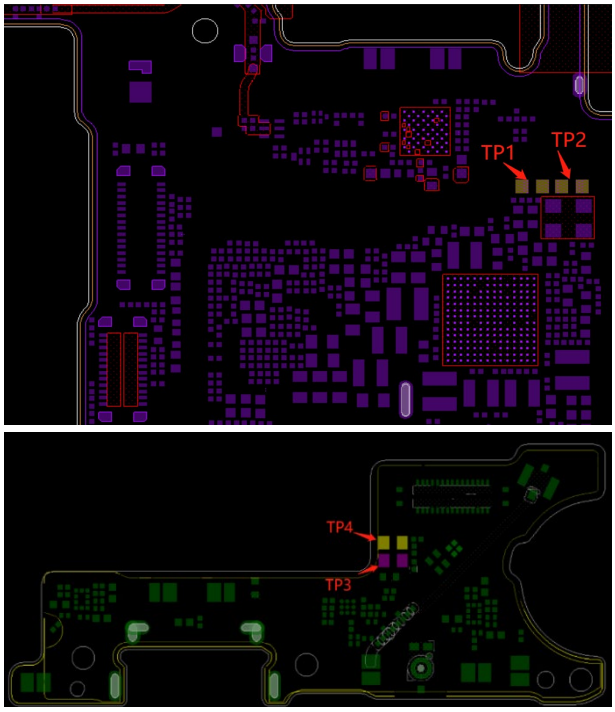
8-4-3. USB

■ I/O connector is used as the USB port.

CHECKING FLOW	IMAGE
	

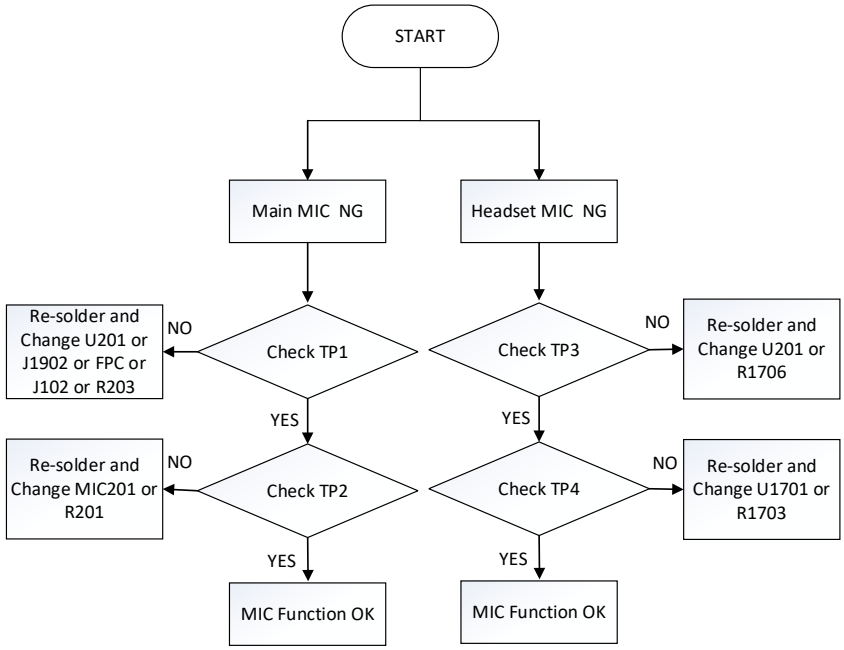
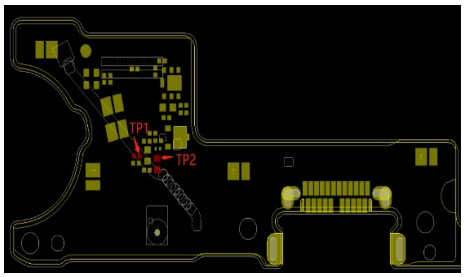
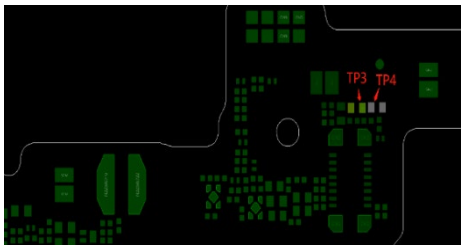
8-4-4. Audio speaker

■ The Speaker control signals are generated by chip PM8953 (U201), the chip and the speaker are to be checked out.

CHECKING FLOW	IMAGE
	

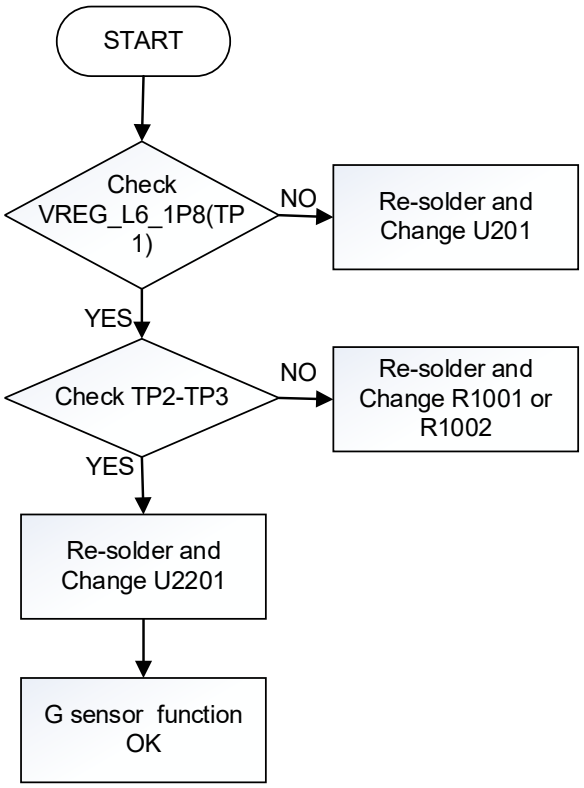
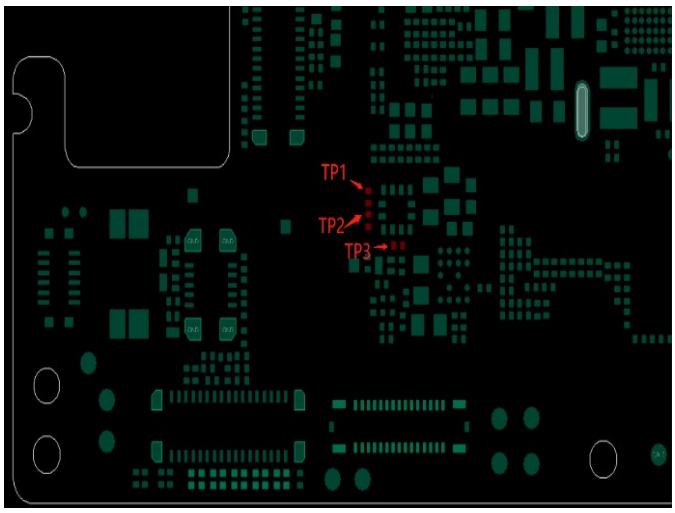
8-4-5. Audio_ MIC

- The MIC control signals are generated by chip PM8953 (U201), the chip and the MIC (main micU201 and headset micU1701) are to be checked out.

CHECKING FLOW	IMAGE
	 

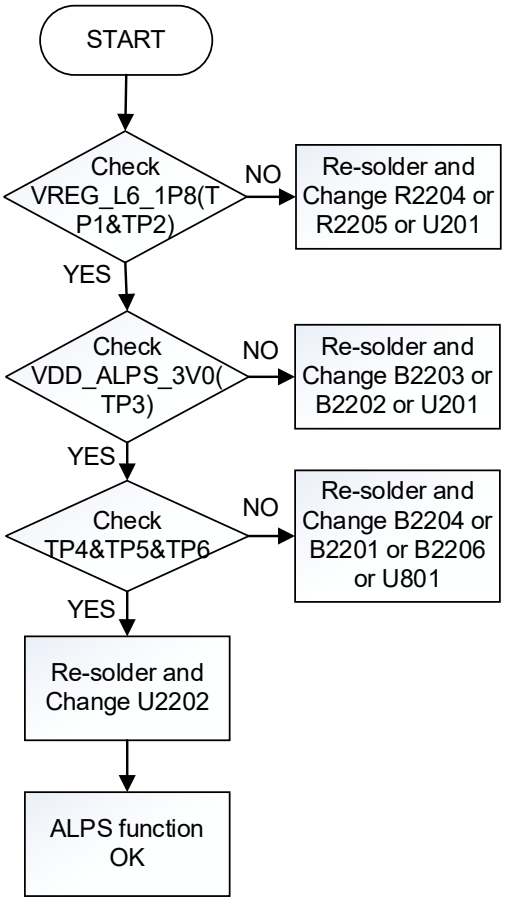
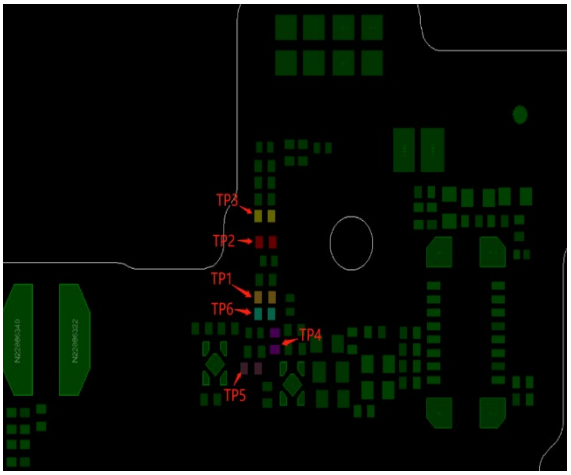
8-4-6. G sensor

■ The G sensor is calibrated by using SW algorithm.

CHECKING FLOW	IMAGE
	

8-4-7. Proximity and light sensor

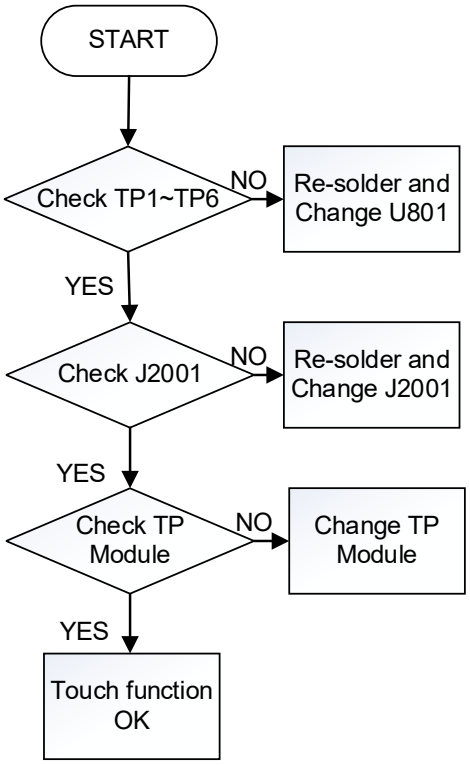
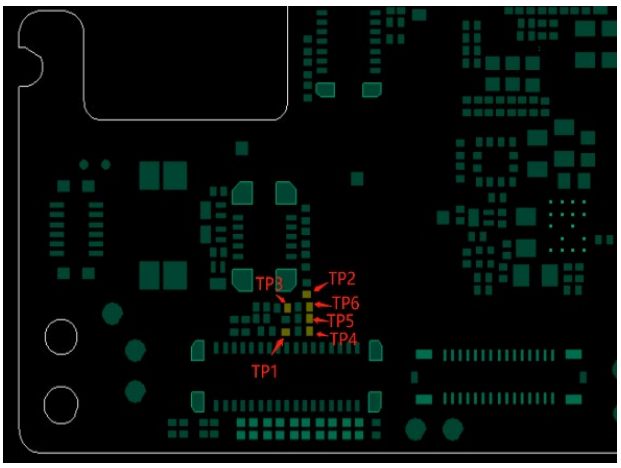
■ Proximity and Light Sensor is worked as below: Control the screen's on/off operation automatically while making phone calls, and adjust the screen brightness according to ambient light.

CHECKING FLOW	IMAGE
	

8. Level 3 Repair

8-4-11. TOUCH SCREEN

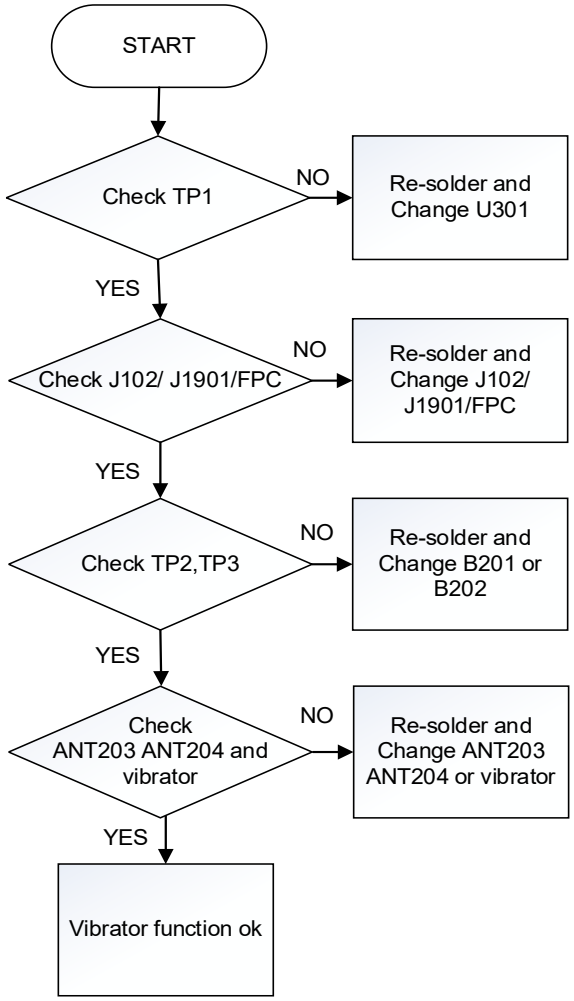
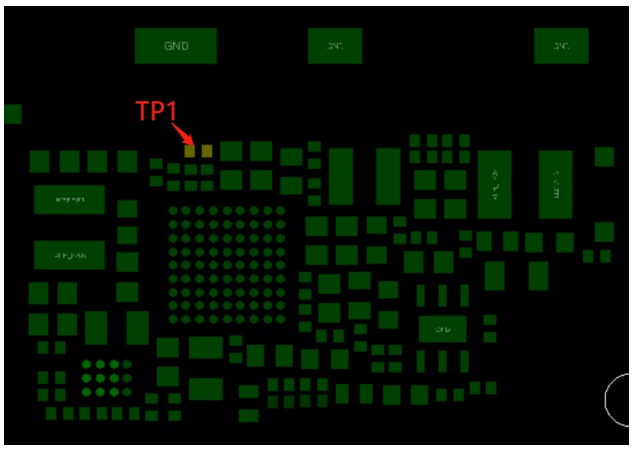
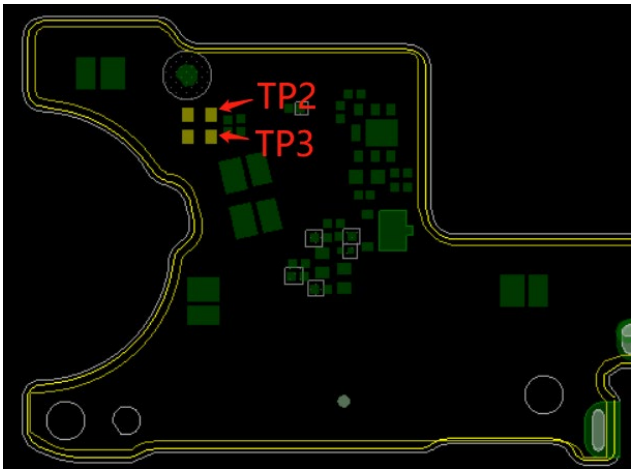
■ The Touch control signals are generated by SDM450 (U801). It is assembled with LCD.

CHECKING FLOW	IMAGE
	

8. Level 3 Repair

8-4-12. Vibrator

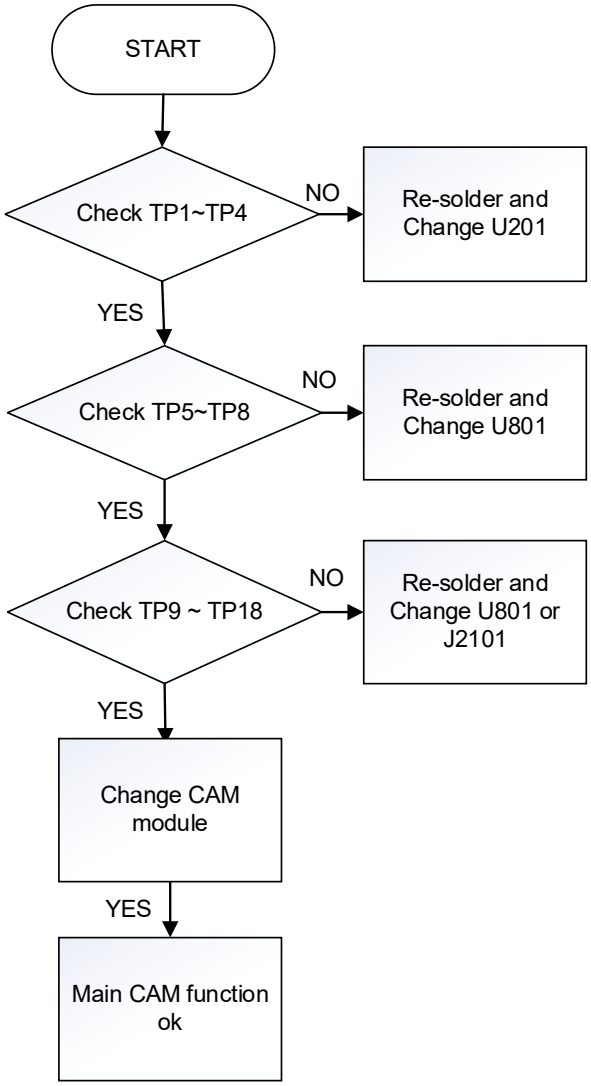
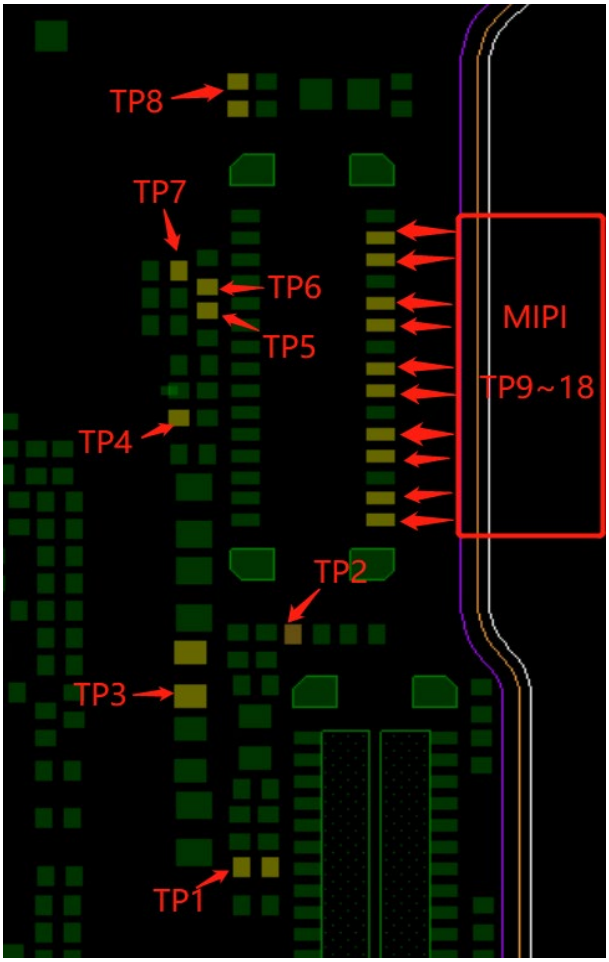
■ The Vibrator control signals are generated by PMI632 (U301).

CHECKING FLOW	IMAGE
	 

8. Level 3 Repair

8-4-13.Main Camera

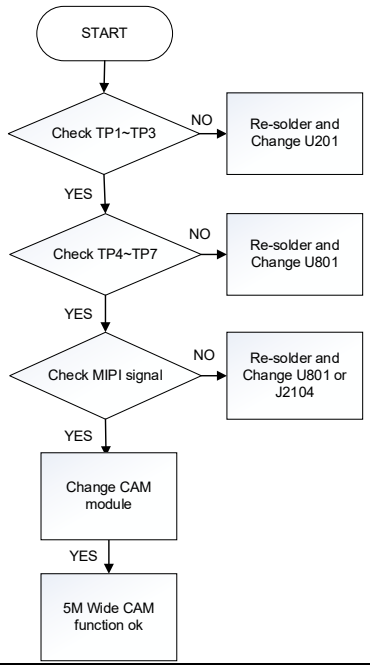
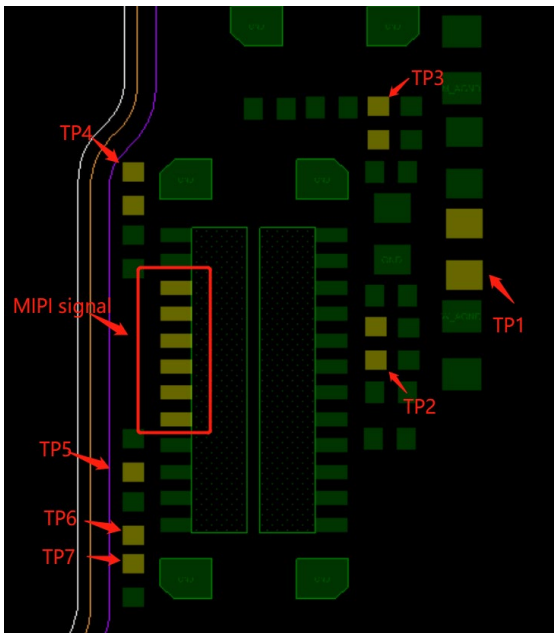
■ The Camera control signals are generated by PM8953（U201） and SDM450(U801).

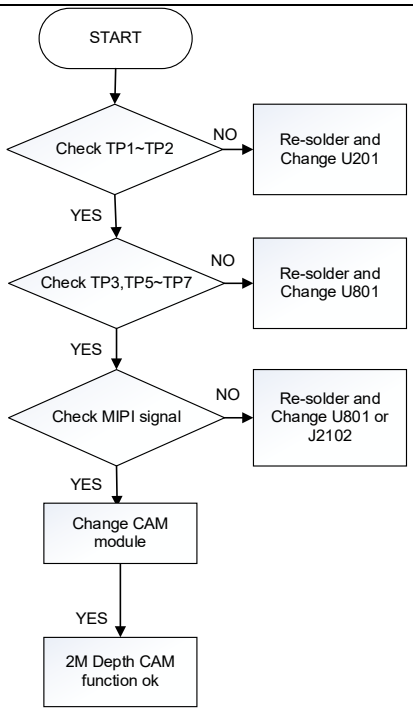
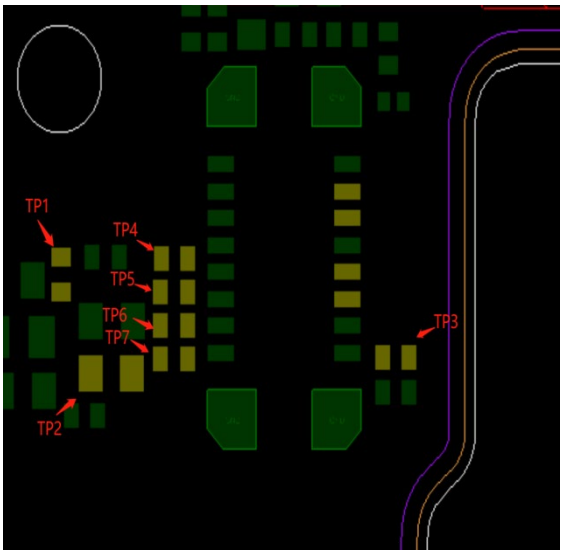
CHECKING FLOW	IMAGE
	

8. Level 3 Repair

8-4-14. Rear auxiliary Camera

■ The Camera control signals are generated by PM8953（U201） and SDM450(U801).

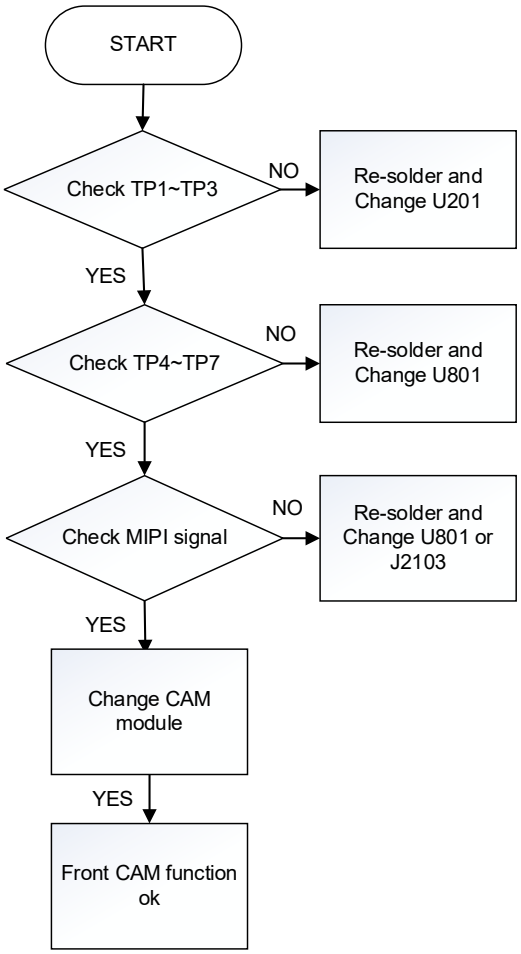
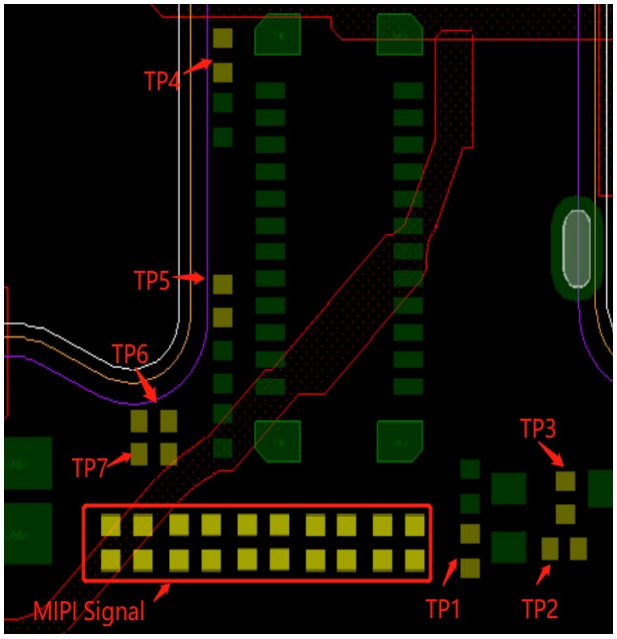
CHECKING FLOW(5M Wide CAM)	IMAGE
	

CHECKING FLOW(2M Depth CAM)	IMAGE
	

8. Level 3 Repair

8-4-15. Front Camera

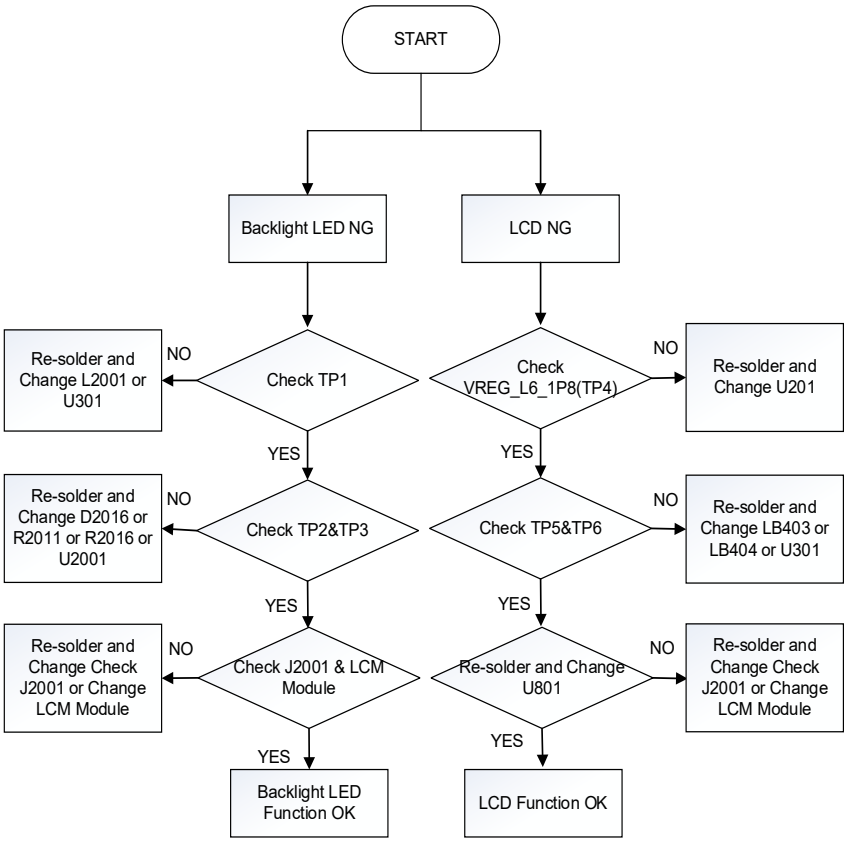
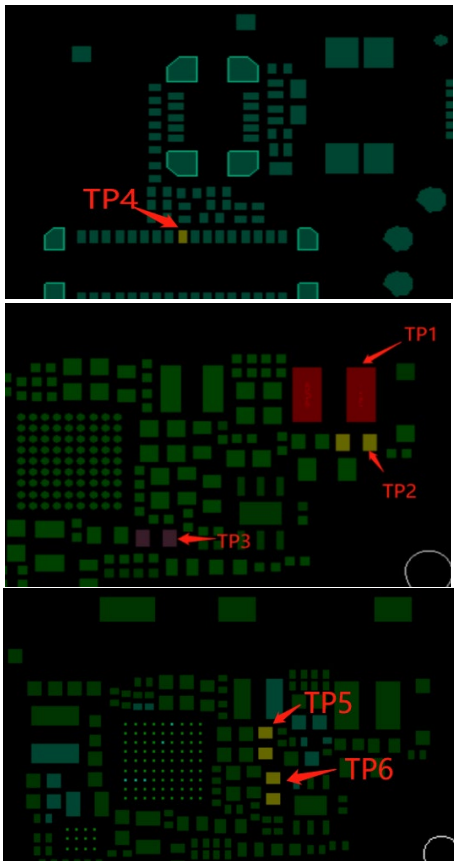
■ The Camera control signals are generated by PM8953（U201）and SDM450(U801).

CHECKING FLOW(Front CAM)	IMAGE
	

8. Level 3 Repair

8-4-16. LCD

■ The LCD control signals are generated by SDM450 (U801).

CHECKING FLOW	IMAGE
	

8. Level 3 Repair

8-5. Service Schematics

■ U801_SDM450_BB chip IC , Digital Baseband Processor(Top)