

Service Manual

Contents

1 .Objective	1
2 .Scope	1
3. Definition for terms	1
4.Responsibility	1
5.Detail procedure	1
5.1.SC9863 system diagram	2
5.2. Vibration issue:.....	2
5.3. side key function abnormity.....	3
5.4. Microphone function abnormity	4
5.5. Headset function abnormity	4
5.6. Receiver function abnormity.....	5
5.7. Speaker function abnormity	5
5.8. SIM card theory and repair.....	6
5.9. LCD display abnormity	7
5.10.Camera function abnormity	8
5.11. T card function abnormity	8
5.12. Charging function abnormity	9
5.13. Camera flash.....	9
5.14. OTG abnormity	10

1 .Objective

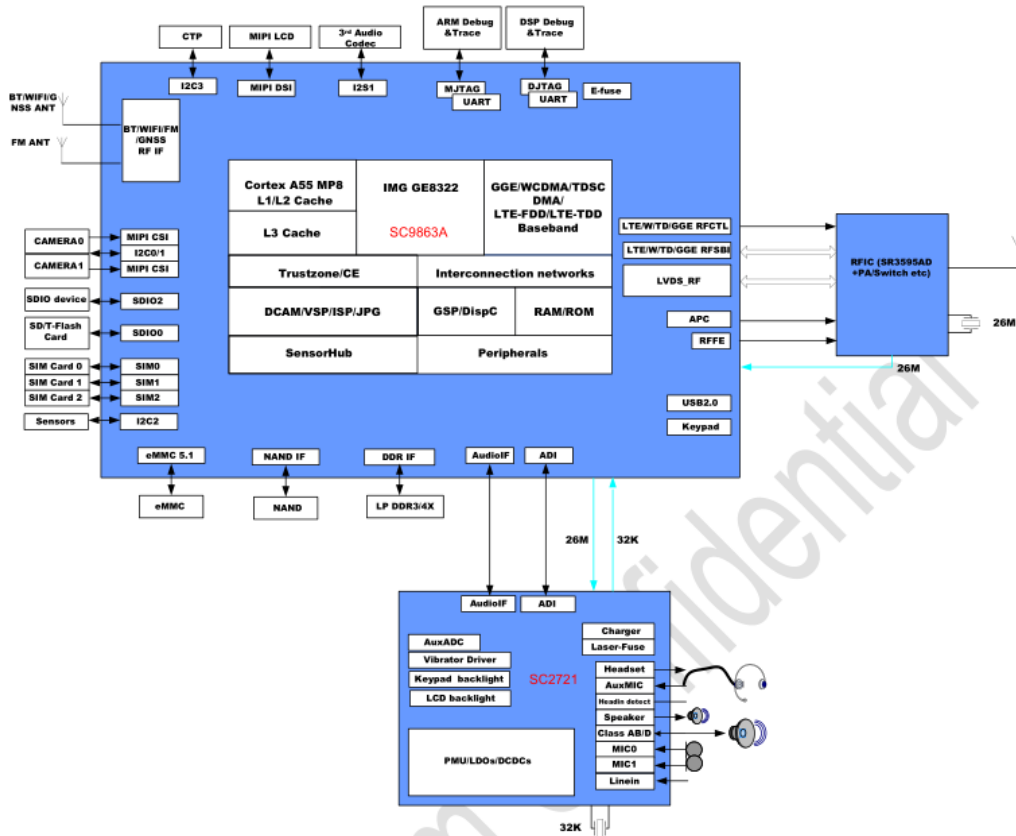
This document outlines the service manual for L5711AC

2. Scope

- 1.Use for radio analyzing in factory.
- 2.Use for radio analyzing in customer service.

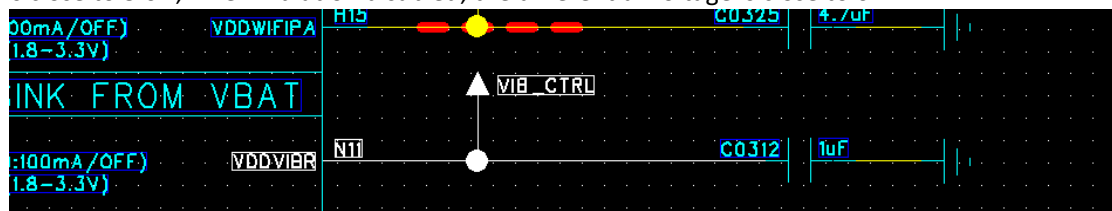
5.1.SC9863 system diagram.

5.2.system.diagram



5.2. Vibration issue.

The vibrator circuit is simple, one point connected to VIBR and the other to GND. VIBR voltage is approximately equal to battery voltage, and VIBR voltage outputs from the core chip and is controlled by the software. When vibration enabled, the differential voltage of the vibrator is close to 3.0 v, when vibration disabled, the differential voltage is close to 0 v.



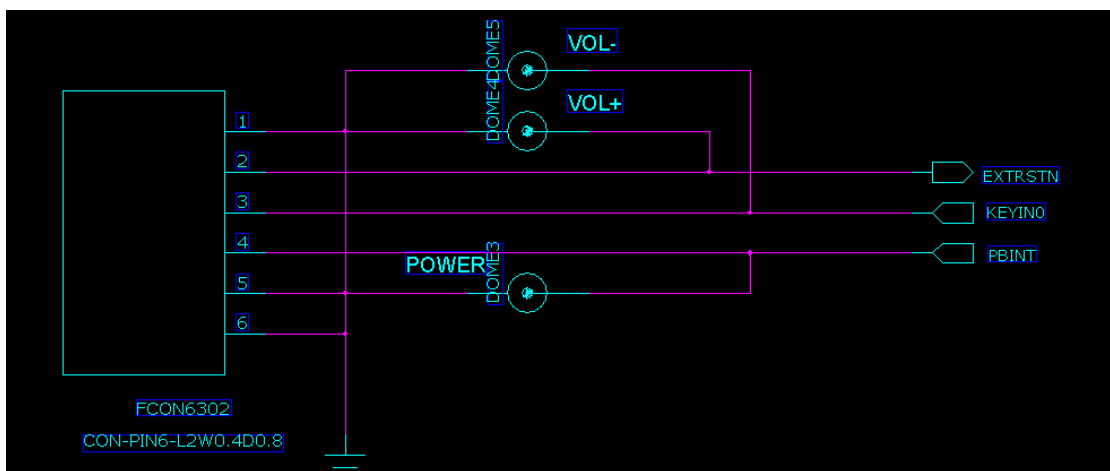
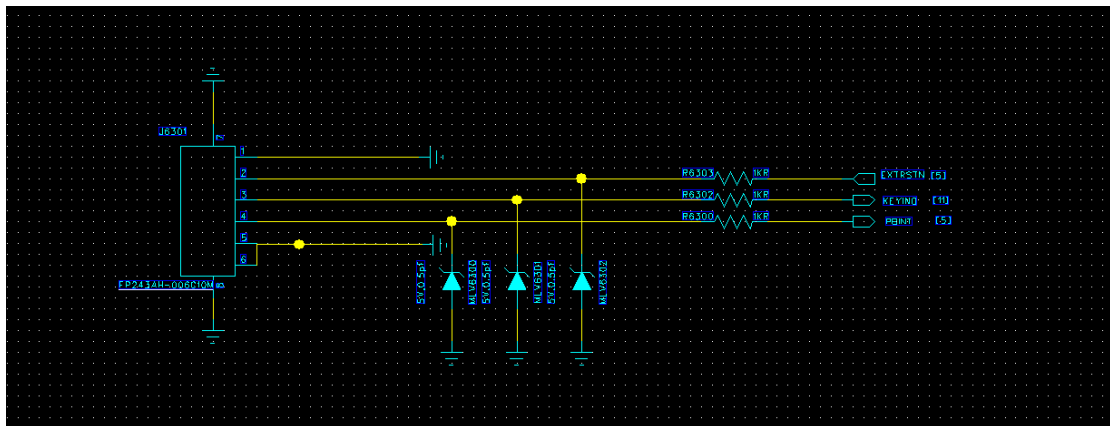
Repair steps:

1. Check whether the Vibrator is damaged and the soldering is well or not;
2. Check if the related circuits, have soldering issues, etc;
3. Replace with new Vibrator, and verify again;
4. Enable and disable vibration functions respectively, check whether both ends of the Vibrator voltage are normal or not. If abnormal, check if the U0200 has soldering or performance problems.

5.3. side key function abnormality

L5711AC provides a 3*1 keyboard, See the figure below, the column lines connected to the CPU AND PMU port through internal. when the button is not pressed,all output is high. representing no key is pressed. Bound output is low, once any key is

pressed, the input line will be down, so that by reading the state of input lines that check whether keys be pressed.



Repair steps:

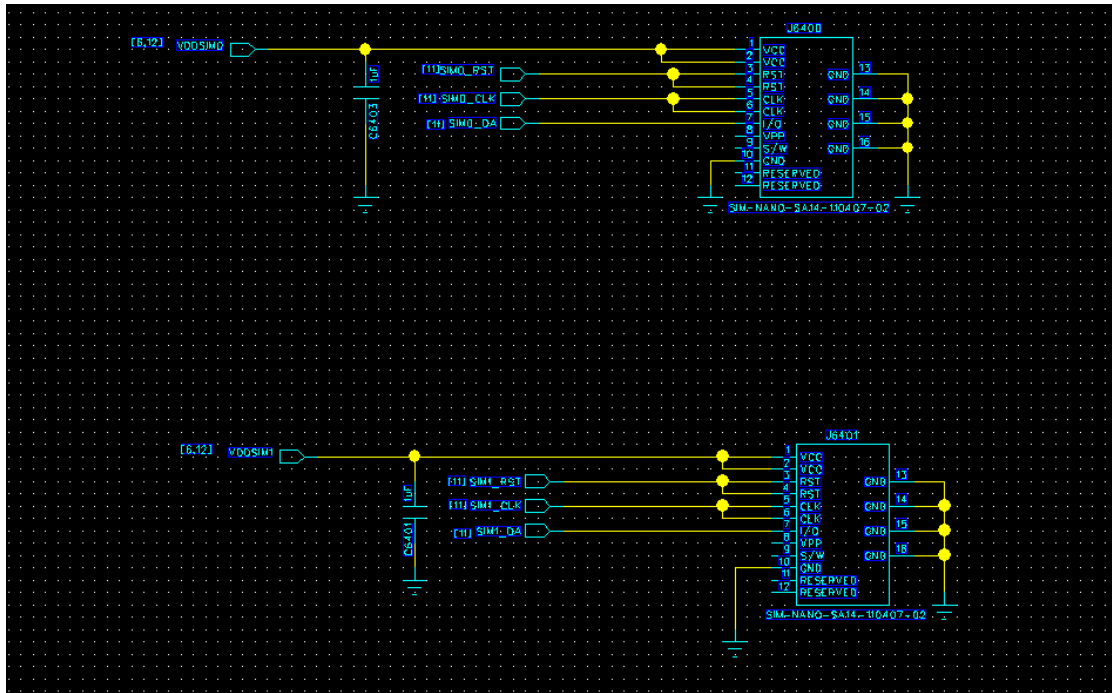
1. Check if keypad and DOME are damaged, the assembly OK ,and foreign matter exist, etc;
2. heck if the surrounding components(mainly varistors) on the main board are damaged and have soldering issues, etc;
3. Replace with new keypad or side key, and verify agai
4. you still have not found the problem, then check whether the U0200 and U2100.

5.4 Microphone function abnormity

Repair steps:

- 1.

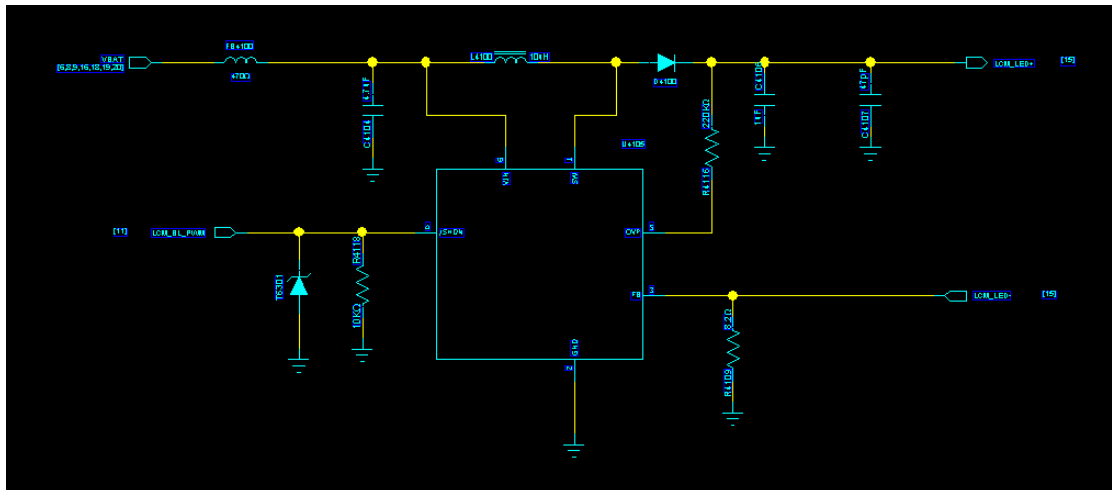
Repair steps:

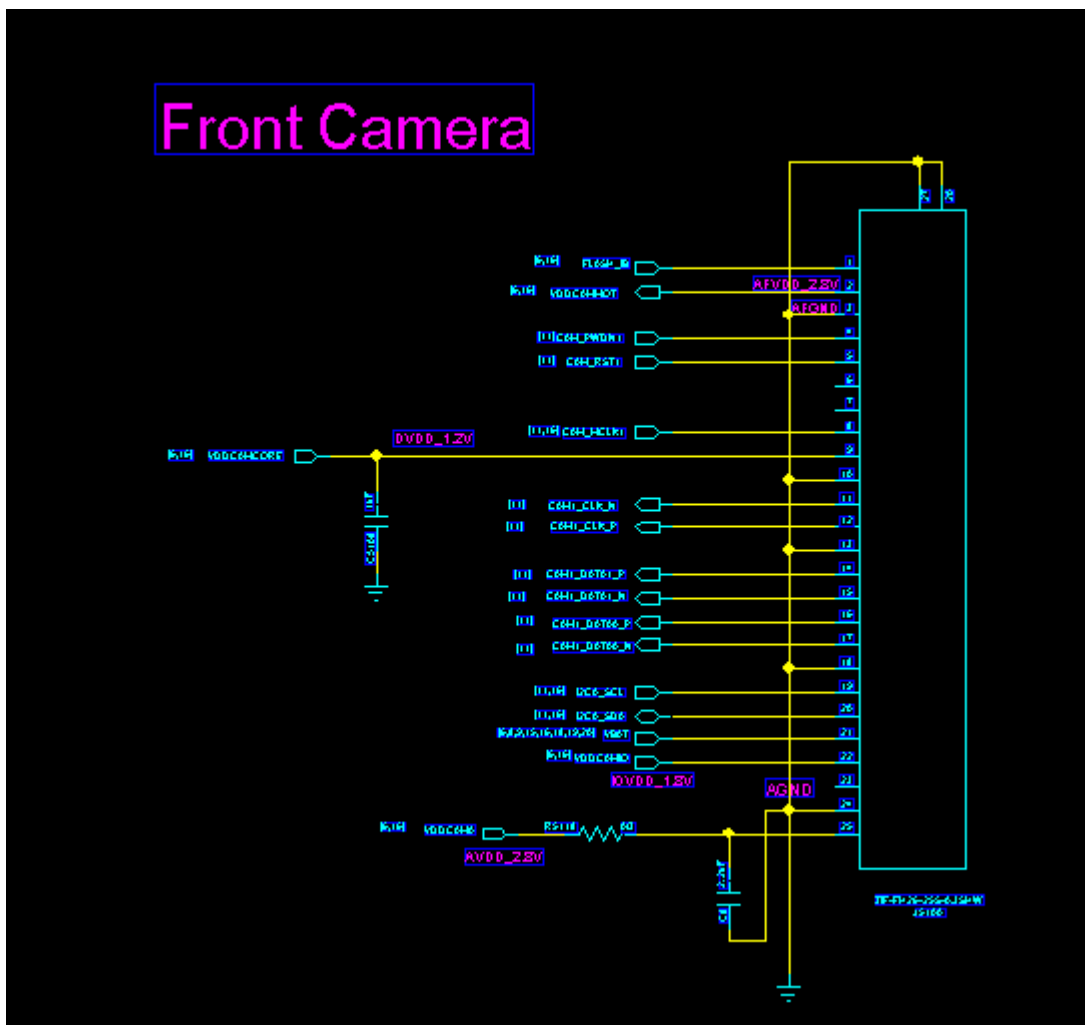
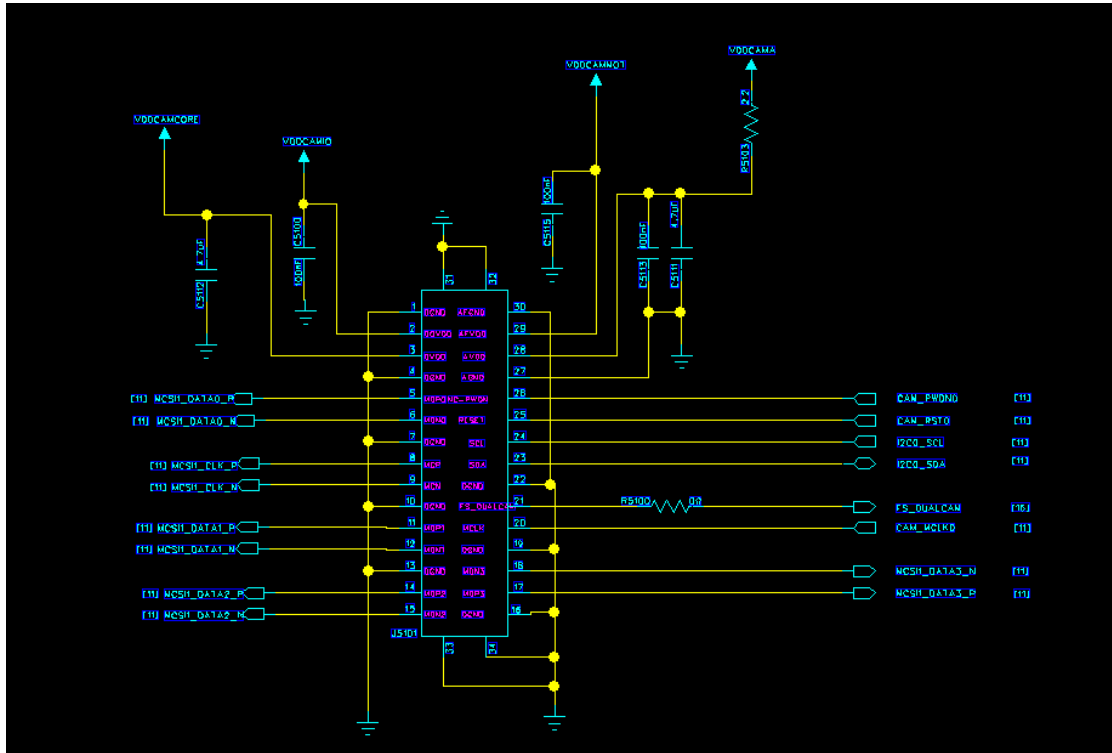


1. Check if the dual- cards' insertion direction is OK;
2. Check if the card connector metal contact points have problems, such as existing foreign matters or are rusting, etc;
3. Check if the SIM card connectors and components around have soldering problems;
4. If failed to find out problems, check whether U2100 chips have soldering or performance issues.

5.9. LCD display abnormity

L5711AC LCD backlight is directly drive by U4100, LCD data and control lines connect to LCD interface through the capacitor, specific circuit as follows:



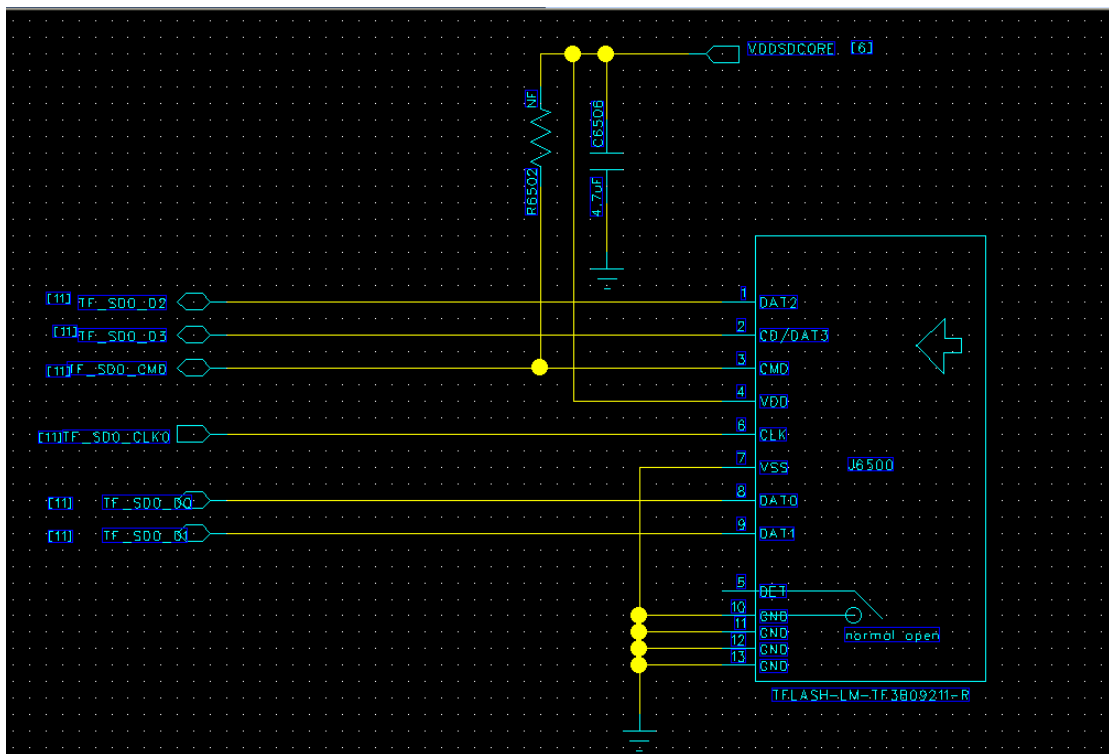


Repair steps:

1. Check if the camera has quality problem, and Camera has assembly problem;
2. Check if the camera's power supply voltage AVDD DVDD is normal , and components around J5100 J5101 have soldering problems;
3. Replace with new camera, and verify again.
4. If still failed to find out problems, check whether U2100 chip has soldering or performance problems.

5.11. T card function abnormity

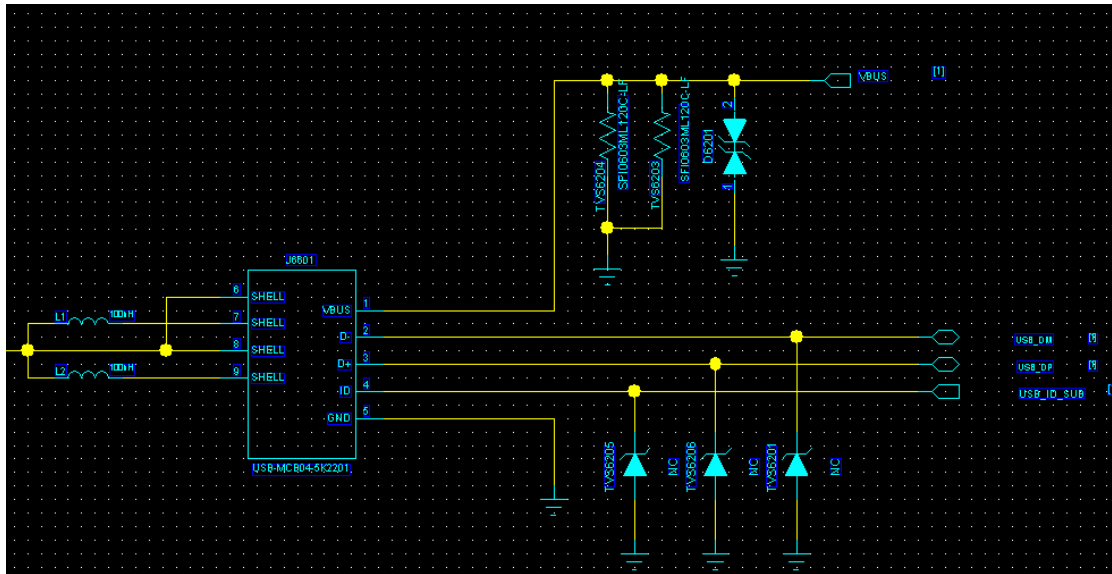
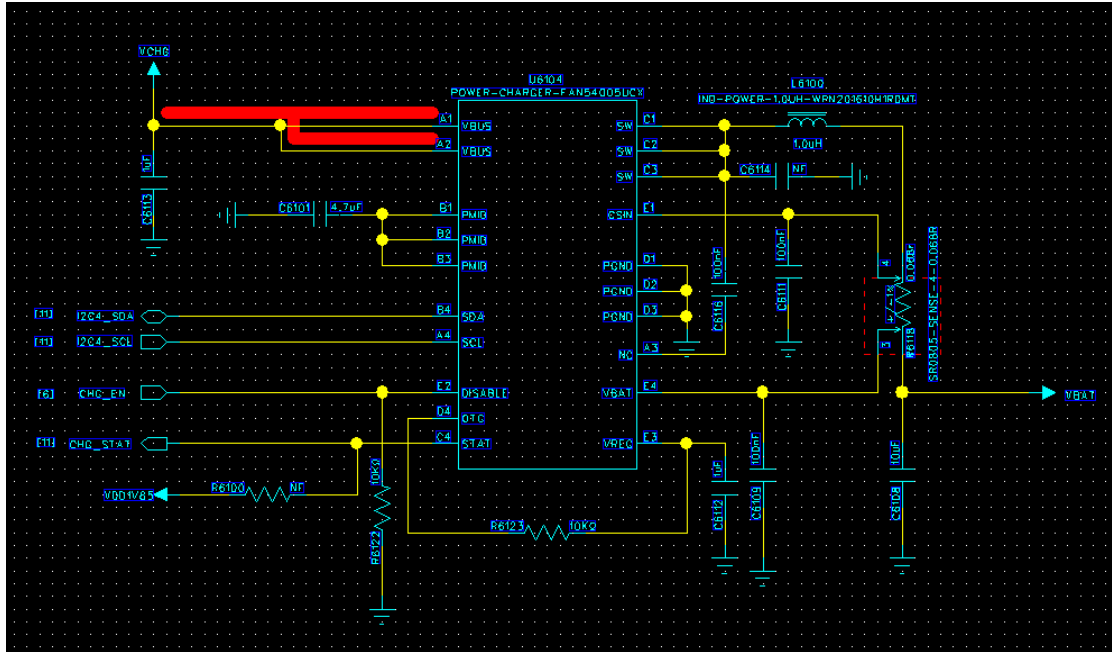
Repair steps:



1. Check if the T card connector's has quality problem, metal contact points abnormal;
2. Check if T card connector and components around have soldering problems;
3. If still failed to find out problems,check whether U2100 chip has soldering or performance problems.

5.12. Charging function abnormity

You can charge the phone through two methods: through hrough DC charger with about 1A charging current or through the USB cable connecting to a computer with about 450mA charging current. Both charging is controlled by U6104, Specific circuits as follows:

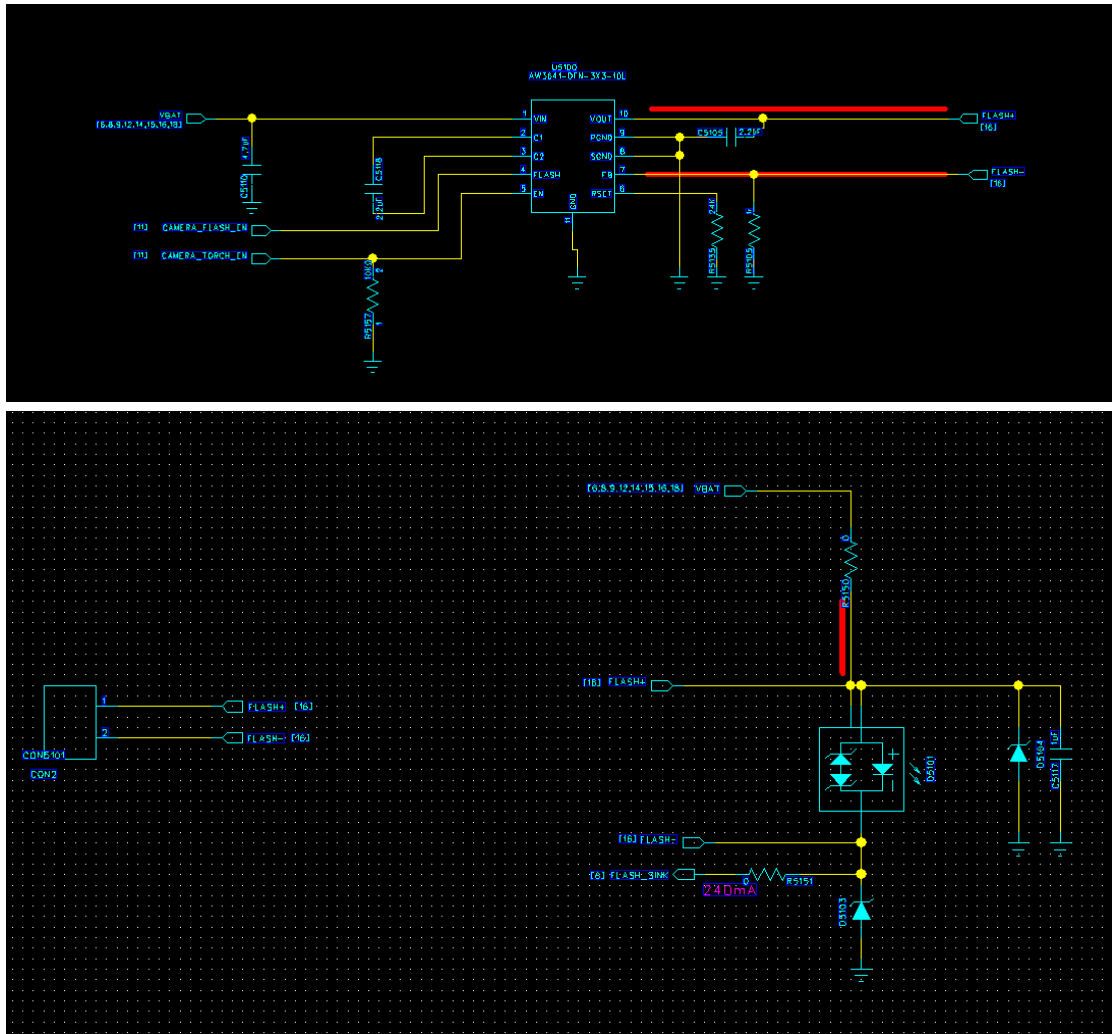


Repair steps:

1. Check if the USB socket J6601 pins rust or have soldering problems;
2. Check if the battery connector’s metal contact well or not, such as existing foreign matters, rusting or soldering badly, etc;
3. Check if the relevant components of the charging circuits have soldering problems;
4. Replace with U6104, and verify again;
5. If still failed to find out problems, check whether U0200 chip has soldering or performance problems.

5.13. Camera flash.

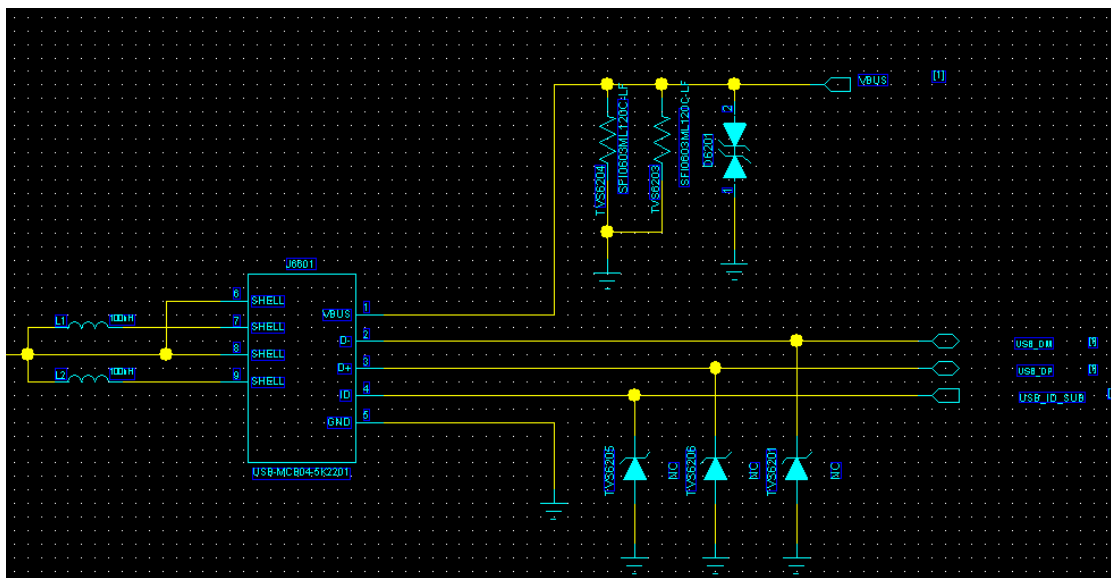
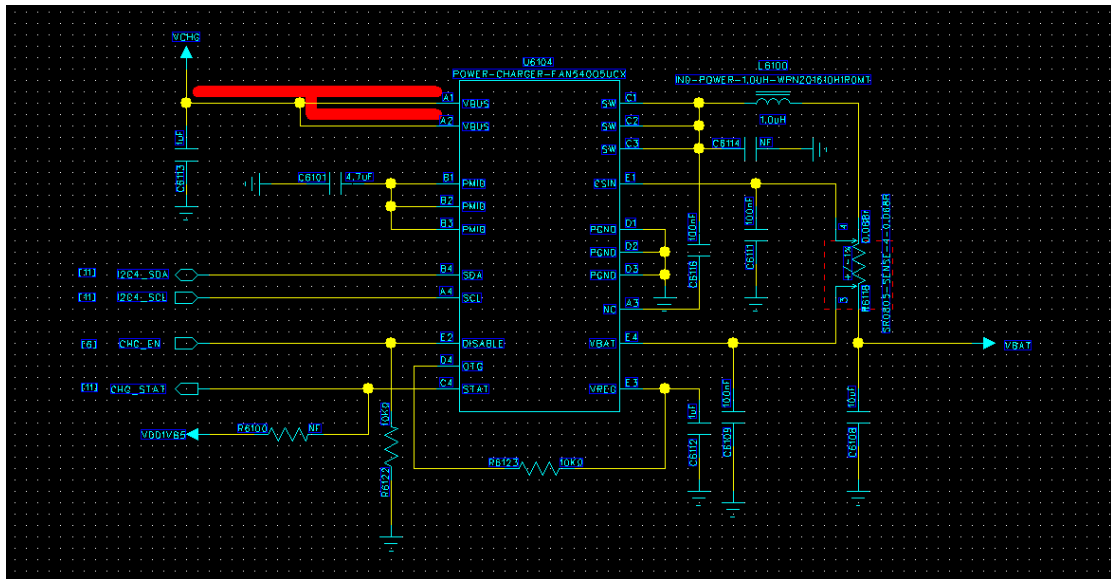
Repair steps:



1. Check if the relevant components have soldering problems;
2. Check if the FINGERPRINT is damaged, and D5101 has soldering problems;
4. Replace with D5101, and verify again;
5. If still failed to find out problems, check whether U2100 U5100 chip hassoldering or performance problems.

a) OTG abnormity

Repair steps:



1. Enter the otg state ,measuring if VCHG voltage is normal: the voltage is when the otg output about 5V.
2. Check if the relevant components have soldering problems; After the OTG is inserted, the USB_ID PIN becomes normal when 1.8V becomes 0V.
3. If still failed to find out problems, check whether U6104 U2100 chip performance problems.

Baseband functions test under the engineering mode

Power on the phone to the idle screen, and input "#789#" to enter the "item test menu";

FCC Statement

1. This device complies with Part 15 of the FCC Rules. Operation is subject to the following two conditions:

- (1) This device may not cause harmful interference.
- (2) This device must accept any interference received, including interference that may cause undesired operation.

2. Changes or modifications not expressly approved by the party responsible for compliance could void the user's authority to operate the equipment.

NOTE:

This equipment has been tested and found to comply with the limits for a Class B digital device, pursuant to Part 15 of the FCC Rules. These limits are designed to provide reasonable protection against harmful interference in a residential installation.

This equipment generates uses and can radiate radio frequency energy and, if not installed and used in accordance with the instructions, may cause harmful interference to radio communications. However, there is no guarantee that interference will not occur in a particular installation. If this equipment does cause harmful interference to radio or television reception, which can be determined by turning the equipment off and on, the user is encouraged to try to correct the interference by one or more of the following measures:

- Reorient or relocate the receiving antenna.
- Increase the separation between the equipment and receiver.
- Connect the equipment into an outlet on a circuit different from that to which the receiver is connected.
- Consult the dealer or an experienced radio/TV technician for help.

SAR Information Statement

Your wireless phone is a radio transmitter and receiver. It is designed and manufactured not to exceed the emission limits for exposure to radiofrequency (RF) energy set by the Federal Communications Commission of the U.S. Government. These limits are part of comprehensive guidelines and establish permitted levels of RF energy for the general population. The guidelines are based on standards that were developed by independent scientific organizations through periodic and thorough evaluation of scientific studies. The standards include a substantial safety margin designed to assure the safety of all persons, regardless of age and health. The exposure standard for wireless mobile phones employs a unit of measurement known as the Specific Absorption Rate, or SAR. The SAR limit set by the FCC is 1.6 W/kg. * Tests for SAR are conducted with the phone transmitting at its highest certified power level in all tested frequency bands. Although the SAR is determined at the highest certified power level, the actual SAR level of the phone while operating can be well below the maximum value. This is because the phone is designed to operate at multiple power levels so as to use only the power required to reach the network. In general, the closer you are to a wireless base station antenna, the lower the power output. Before a phone model is available for sale to the public, it must be tested and certified to the FCC that it does not exceed the limit established by the government adopted requirement for safe exposure. The tests are performed in positions and locations (e.g., at the ear and worn on the body) as required by the FCC for each model. The highest SAR value for this model phone when tested for use at the ear is 0.606W/Kg and when worn on the body, as described in this user guide, is 0.914W/Kg (Body-worn measurements differ among phone models, depending upon available accessories and FCC requirements). The maximum scaled SAR in hotspot mode is 0.914W/Kg. While there may be differences between the SAR levels of various phones and at various positions, they all meet the government requirement for safe exposure. The FCC has granted an Equipment Authorization for this model phone with all reported SAR levels evaluated as in compliance with the FCC RFexposure guidelines. SAR information on this model phone is on file with the FCC and can be found under the Display Grant section of <http://www.fcc.gov/oet/fccid> after searching on

FCC ID: 2ALP3-T2 Additional information on Specific Absorption Rates (SAR) can be found on the Cellular Telecommunications Industry Association (CTIA) web-site at <http://www.wow-com.com>. * In the United States and Canada, the SAR limit for mobile phones used by the public is 1.6 watts/kg (W/kg) averaged over one gram of tissue. The standard incorporates a substantial margin of safety to give additional protection for the public and to account for any variations in measurements.

Body-worn Operation

This device was tested for typical body-worn operations. To comply with RF exposure requirements, a minimum separation distance of 15mm must be maintained between the user's body and the handset, including the antenna. Third-party belt-clips, holsters, and similar accessories used by this device should not contain any metallic components. Body-worn accessories that do not meet these requirements may not comply with RF exposure requirements and should be avoided. Use only the supplied or an approved antenna.