

1. Vibration circuit:

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;

2 Keypad/side key function circuit

There are 16 keys totally, KEYOUT is output for row scan, and KEYIN is input for column scan. When some key is pressed, the column detects low level, CPU start the keypad scan program, judge the key value, and start the corresponding operation.

Repair steps:

1. Check if keypad and DOME are damaged, the assembly OK, and foreign matter exist, etc.;
2. Check if the surrounding components (mainly varistor) on the main board are damaged and have soldering issues, etc.
3. Replace with new keypad or side key, and verify again;
4. If you still have not found the problem, then check whether the U0100 chip has soldering or performance problems or not.

3 Microphone circuit

Repair steps:

1. Check if the microphone and lead is well, and soldering is well;
2. Check whether the relevant components have soldering problems or not;
3. Replace with new microphone, and verify again;

4. Enter the call state (or engineering test mode), measuring if microphone's bias voltage is normal: the voltage is when the microphone works about 1.8V, and 0V when off;
5. If you still have not found the problem, then check whether the U0100 chip has soldering or performance problems or not.

4 Receiver function

1. Check if the receiver shrapnel's elasticity is well, and contact with PCB well;
2. Check if the relevant components have soldering problems;
3. Replace with new receiver, and verify again;
4. If you still have not found the problem, then check whether the U0100 chip has soldering or performance problems or not.

5 Speaker function circuit

Repair steps:

1. Check if the speaker and the lead are well, and soldering is well;
2. Check if the relevant components have soldering problems;
3. Replace with new speaker, and verify again;
4. If you still have not found the problem, then check whether the U0100 chip has soldering or performance problems or not.

6 Earphone function circuit

Earphone Detection: when the headset is plugged into the phone, EINT_HEADSET signal changes from high level to low level, and CPU will treat it as "earphones plugged", and a earphone mark will displayed accordingly.

Headset microphone on-hook and off-hook principle: generally, there is a hook button on the earphone. Press the button, then MIC will short-circuit to ground, ADC_USB signal changes from high level to low level, when the signal is detected as low, and the phone is on incoming call state, then answer the call; if the phone is on answering call state, then end the call.

Repair steps:

1. Check if the headset can be detected by the phone after being plugged. If cannot, replace with a new headset and verify again;
2. Check if the relevant components have soldering problems;

3. If you still have not found the problem, then check whether the U0100 chip has soldering or performance problems or not.

7 SIM card theory circuit

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 U0100 chips have soldering or performance issues.

8 LCD display circuit

C930 LCD backlight is directly drive by U0100, without extra drive circuit. LCD data and control lines connect to LCD interface through the capacitor, specific circuit as follows:

Repair steps:

1. Check if the LCD is damaged, and FPC has soldering problems;
2. Check if the relevant components have soldering problems;
3. Replace with new LCD, and verify again;
4. If still failed to find out problems, check whether U0100 chip has soldering or performance problems.

9 Camera function circuit

The data and control lines which connect to the main chip's camera interface directly

.The main camera's power supply is provided by U0100 , Specific circuits as follows:

1. Check if the camera has quality problem, and FPC has assembly problem;
2. Check if the camera's power supply voltage is normal, and components around J3 have soldering problems;
3. Replace with new camera, and verify again.
4. If still failed to find out problems, check whether U0100 chip has soldering or performance problems.

10 T card function

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 U0100 chip has soldering or performance problems.

11 Charging function

Repair steps:

1. Check if the USB socket 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 new battery, and verify again;
5. If still failed to find out problems, check whether U0100 chip has soldering or performance problem

12 BT Function

