

# BLÜ<sup>TM</sup>

P R O D U C T S



## BLÜ Jenny Service Manual



## CAUTIONS

Boards, which contain Electrostatic Sensitive Device(ESD), are indicated. Following information is ESD handling:

- Service personnel should ground themselves by using a wrist strap when exchanging system boards.
- When repairs are made to a system board, they should spread the floor with anti-static mat which is also grounded.
- Use a suitable, grounded soldering iron.
- Keep sensitive parts in their protective packages until they are used.
- When returning system boards or parts like EEPROM to the factory, use the protective packages as described

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## Chapter 1 Specification



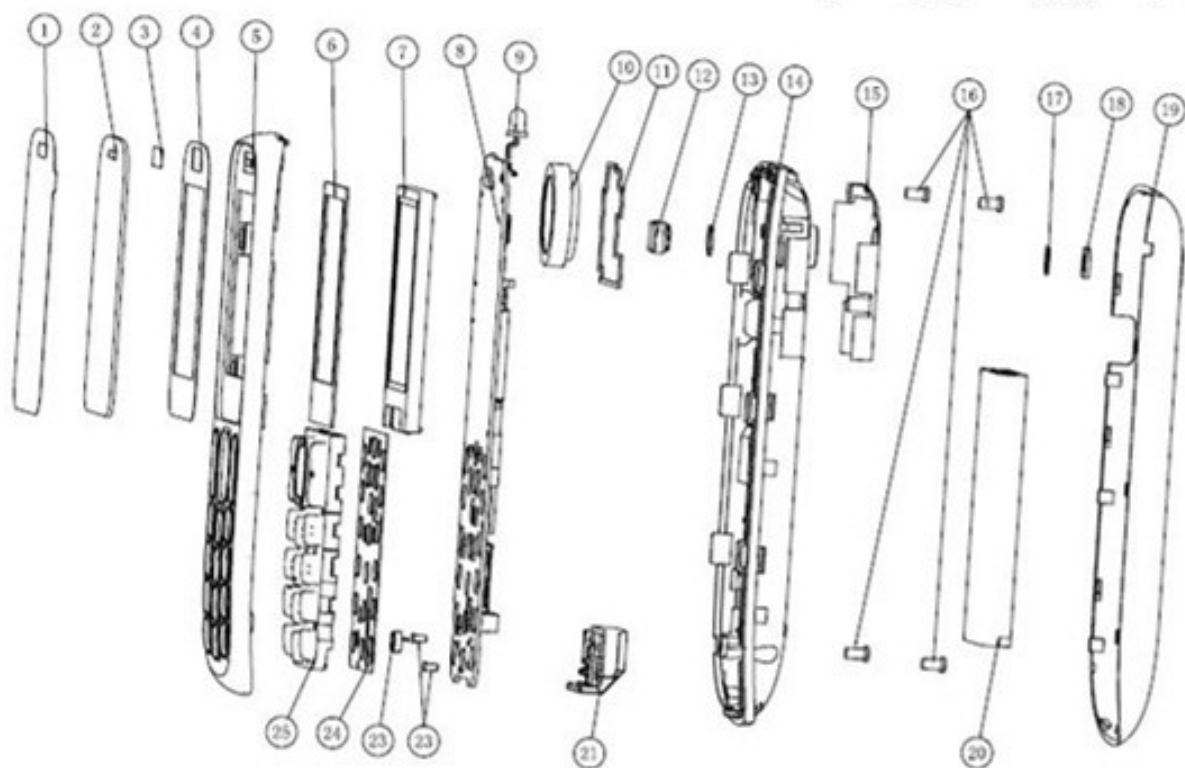
### Jenny T172i Features & Functions

- Dual SIM Dual Standby Single Connection
- Fashion bar phone
- FM
- Multi-Media application
- 0.08Mega with sw upgrade 0.3M
- T-Flash ( Support 8G
- T Card ) 1.8"TFT 128\*160
- MP3、MP4、 AVI 、 3GP
- USB1.1 , Mini USB

### Specification:

Network: 850/900/1800/1900MHz  
Display: 1.8"TFT 128\*160  
Camera: 0.08Mega with SW upgrade 0.3M;  
Talk time: 500 min  
Stand-by: 270 hour  
Lithium Battery: Standard (800mAh)  
USB Data cable: USB 1.1

## Chapter 2 Exploded View



- |                      |                    |                        |                 |
|----------------------|--------------------|------------------------|-----------------|
| 1. Lens Protect film | 2. Lens            | 3. Receiver dust gauze | 4. Lens gum     |
| 5. Front cover       | 6. LCD foam        | 7. LCD                 | 8. Main PCBA    |
| 9. White LED         | 10. 3 in 1 speaker | 11. Speaker seal foam  | 12. Camera      |
| 13. Camera seal foam | 14. Back cover     | 15. FM antenna         | 16. Screw       |
| 17. Camera lens gum  | 18. Camera lens    | 19. Battery cover      | 20. Battery     |
| 21. Antenna          | 22. Screw          | 23. Microphone         | 24. Keypad DOME |
| 25. Keypad           |                    |                        |                 |

## Chapter 3 Tools



Solder iron



Hot Air Gun



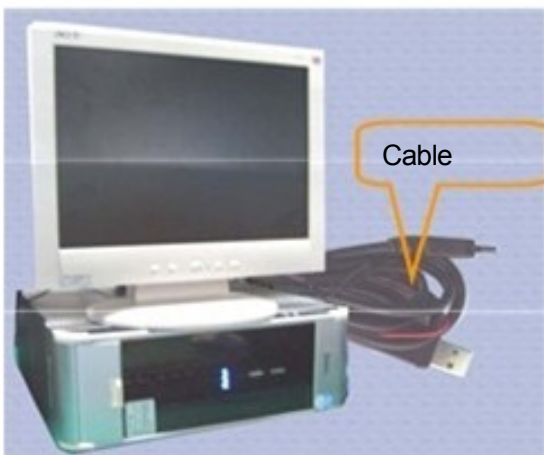
Power Supply



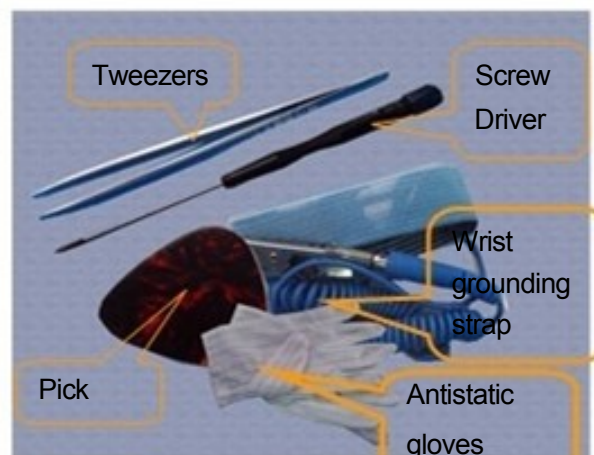
Multimeter



Solder wire, Flux



PC, Download cable



Others



## Chapter 4 Disassembly & Assembly

### 1. Disassembly Process



1. Remove the battery cover



2. Unfasten the 4 screws by screw driver



3. Prize up the back cover by pick



4. Stick protection film for LCM.



5. Stick protection film for front cover.



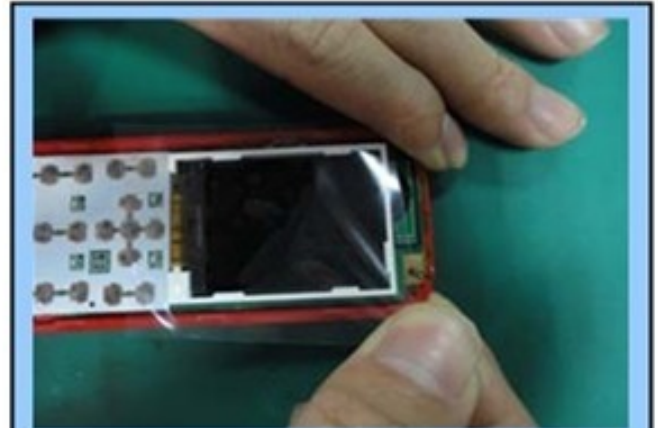
6. Take out the PCBA by pick.

Finished.

## 2. Assembly Process



1. Install the PCBA



2. Tear down the LCD protection film.



3. Tear down the protection film.



4. Install the rear cover module.



5. Fasten the 4 screws.



6. Install the back cover.

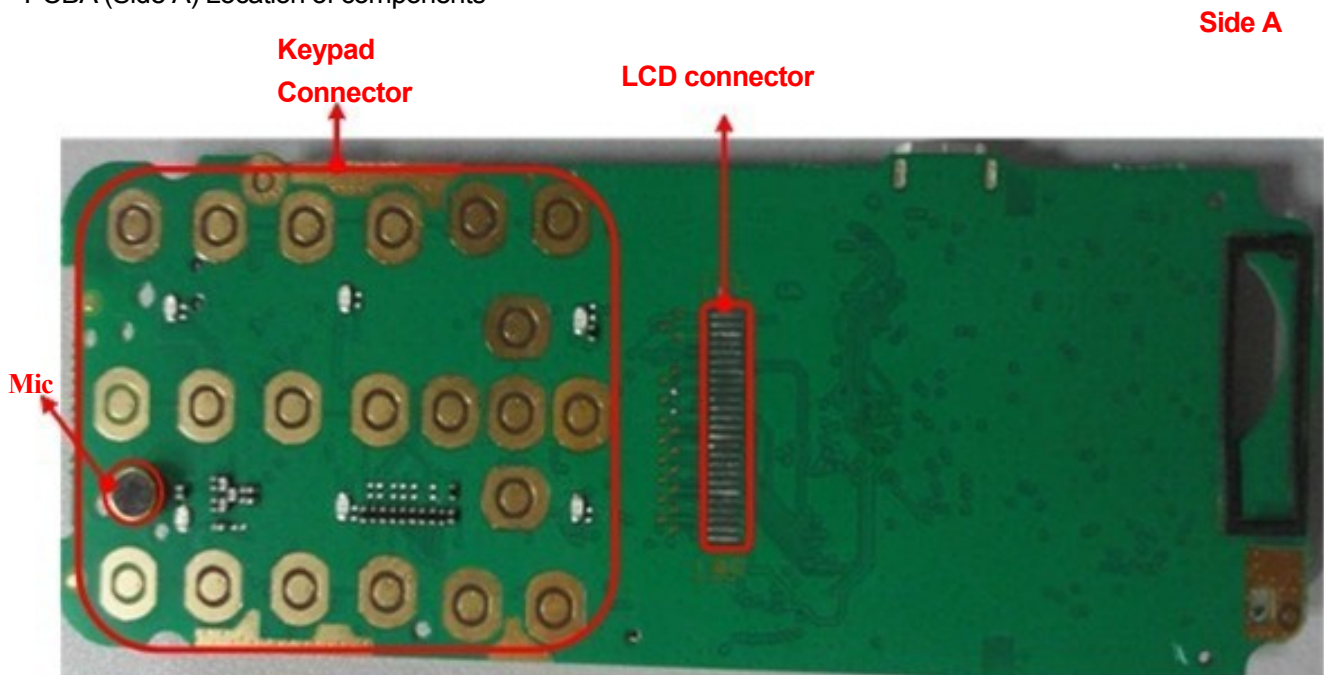
Finished.



## Chapter 5 Picture of PCBA

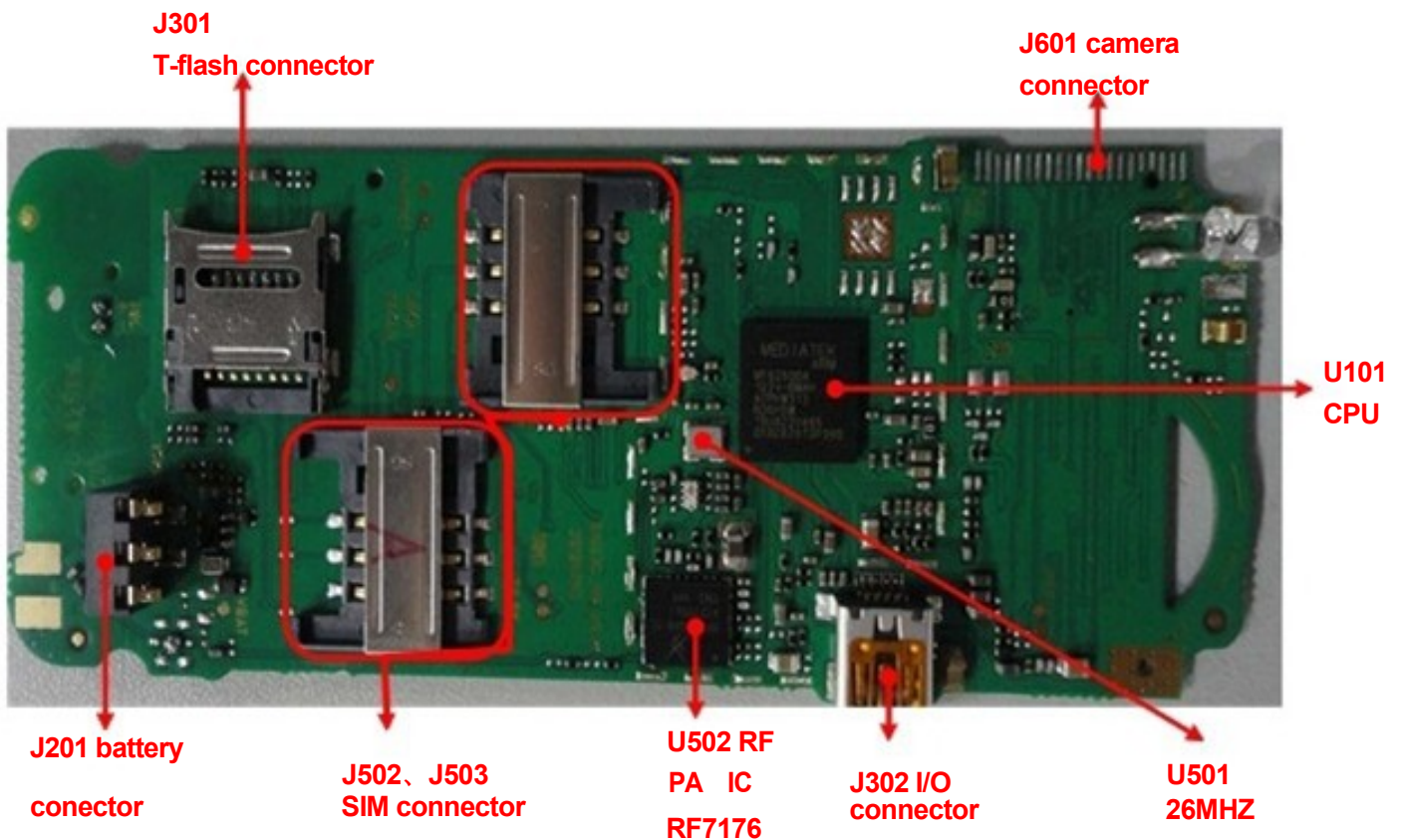
### 5.1 Side A

PCBA (Side A) Location of components

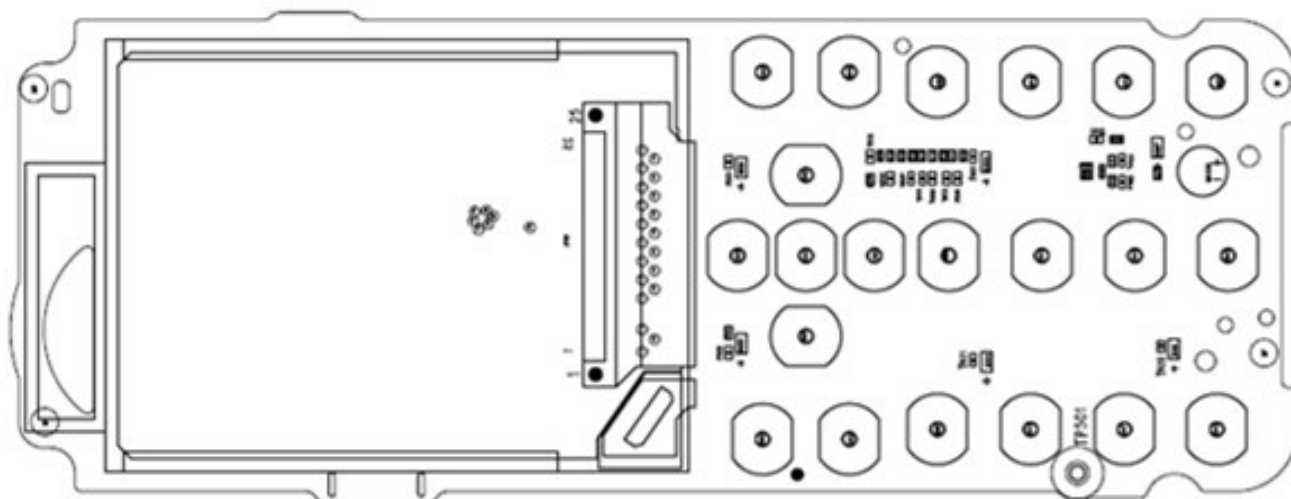


### 5.2 Side B

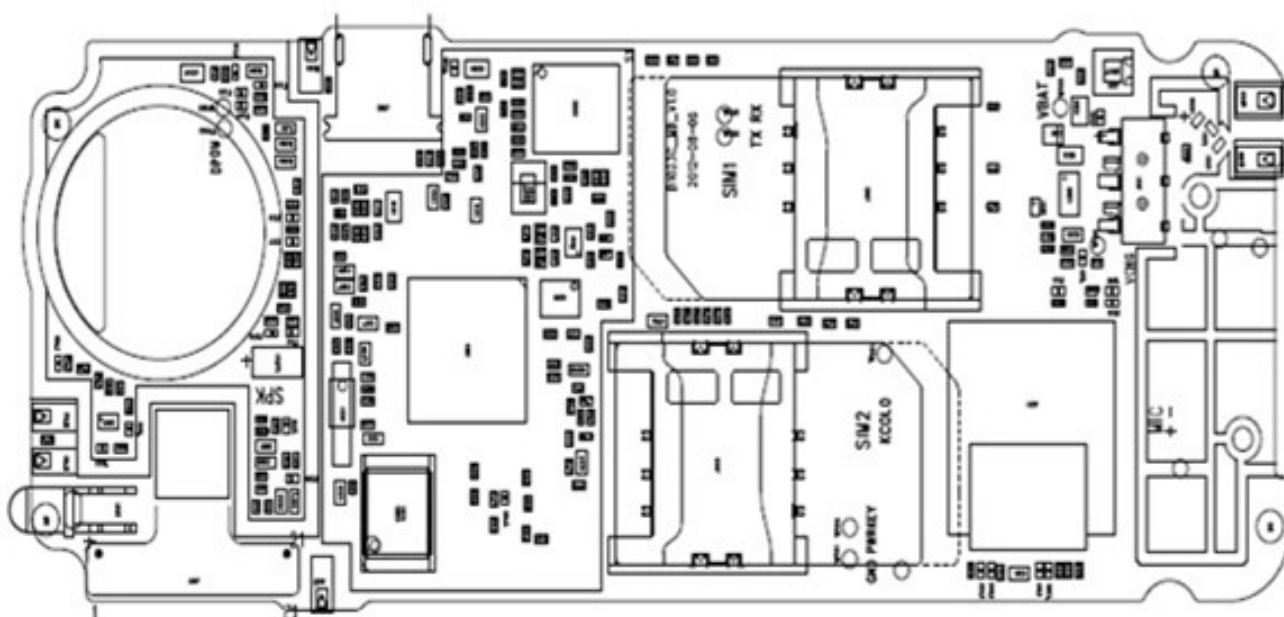
PCBA (Side B) Location of Components



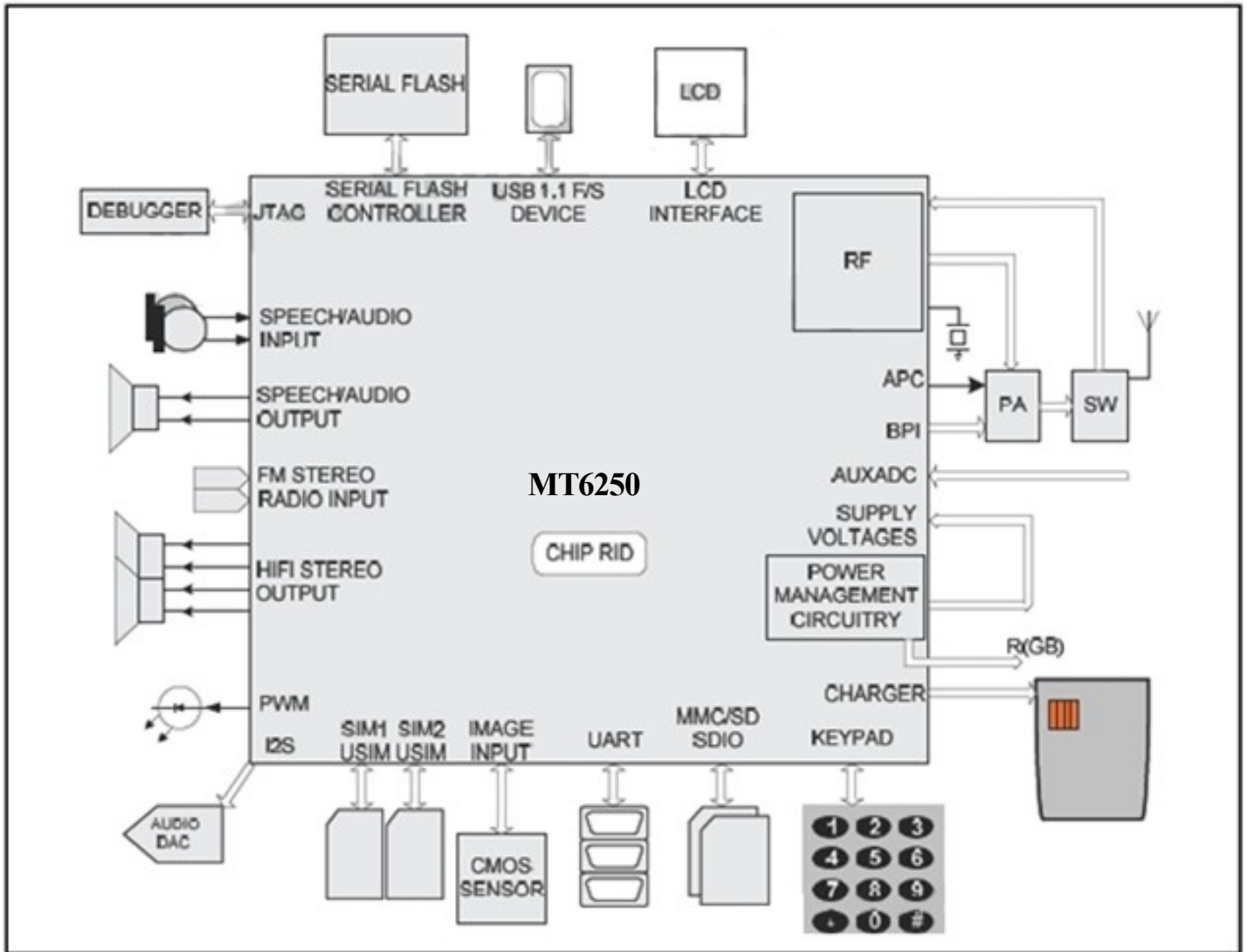
### 5.3 PCBA Layout side A



### 5.4 PCB Layout Side B



## Chapter 6 System Block Chart





## Chapter 7 Unit Circuit

### 7.1.1 System Overview

MT6250 is a GSM/GPRS handset chip solution which integrates RF, analog baseband, digital baseband as well as Power Management Unit(PMU) and can greatly reduce the component count and make a smaller PCB size MT6250 including Bluetooth and FM. Besides, MT6250 is capable of Single Antenna Interference Cancellation (SAIC) and AMR speech™Based on a 32-bit ARM7EJ-S RISC

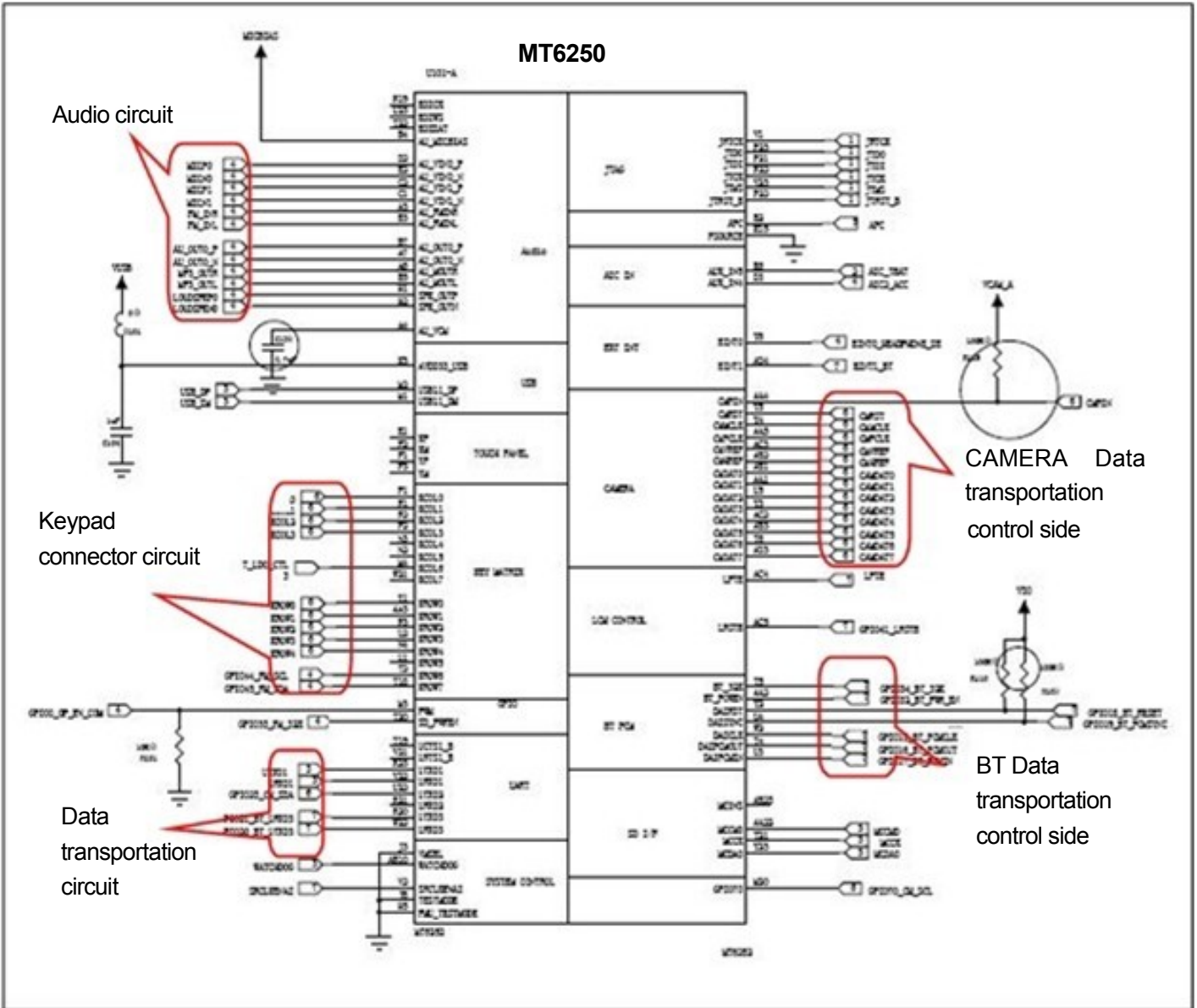
Processor,MT6250 provides an unprecedented platform with high quality modem performance. The typical application diagram is shown as Figure 1.



Figure 1. Ball diagram and top view

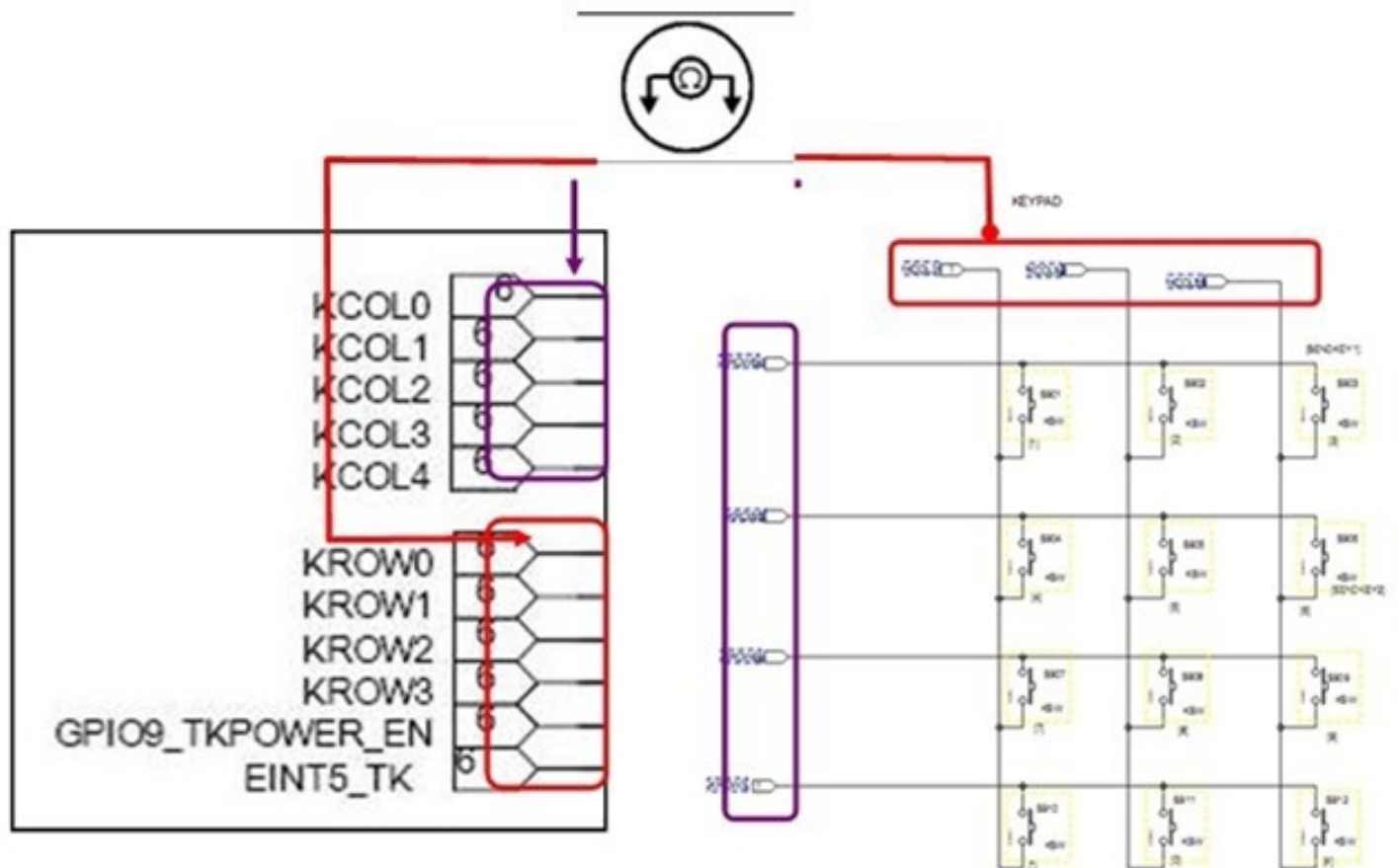
## Unit Circuit

### 7.1.2 Baseband & CPU

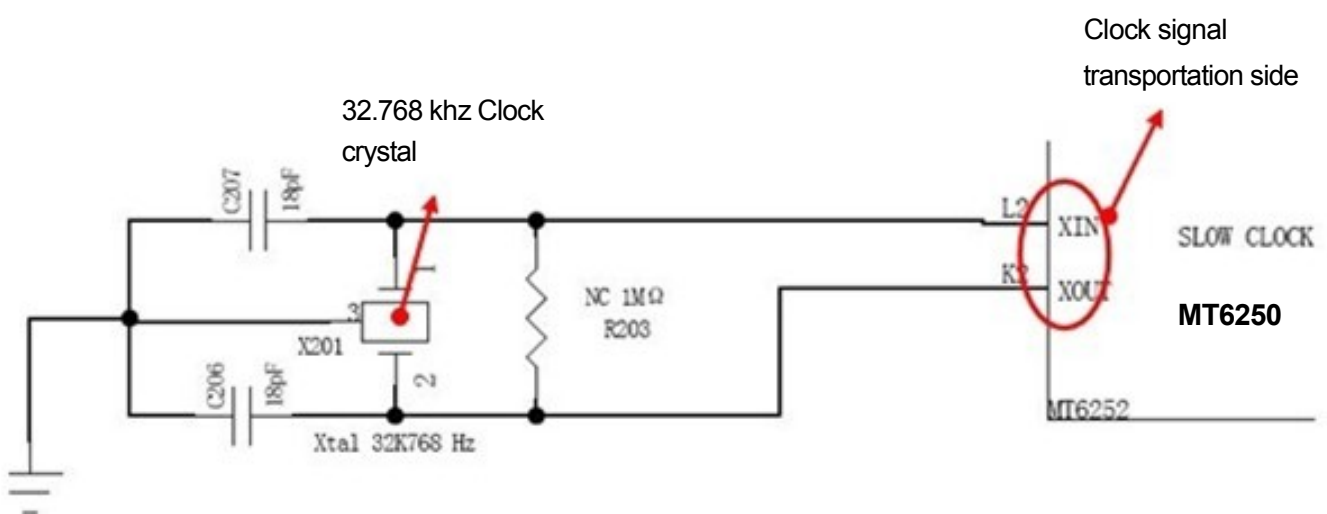




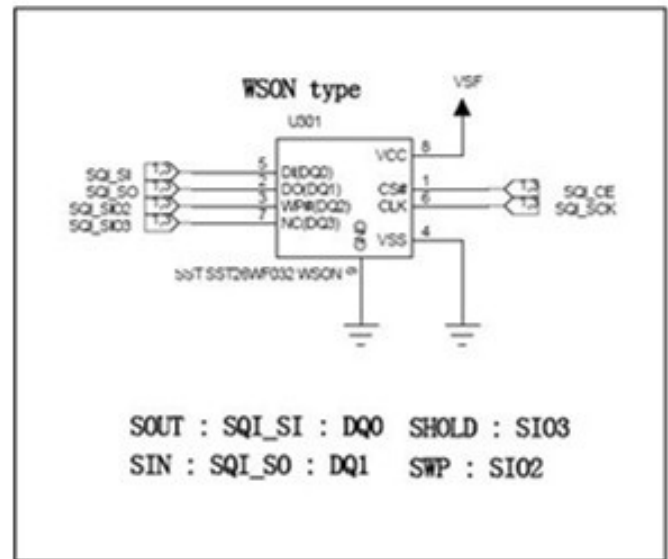
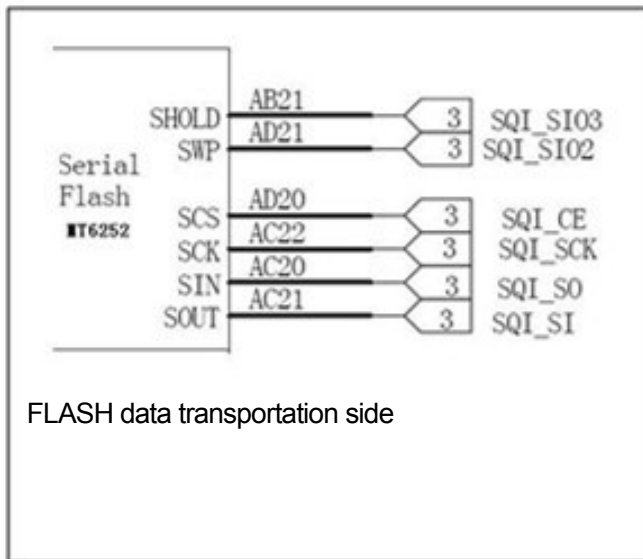
### 7.1.2 Baseband - Keypad



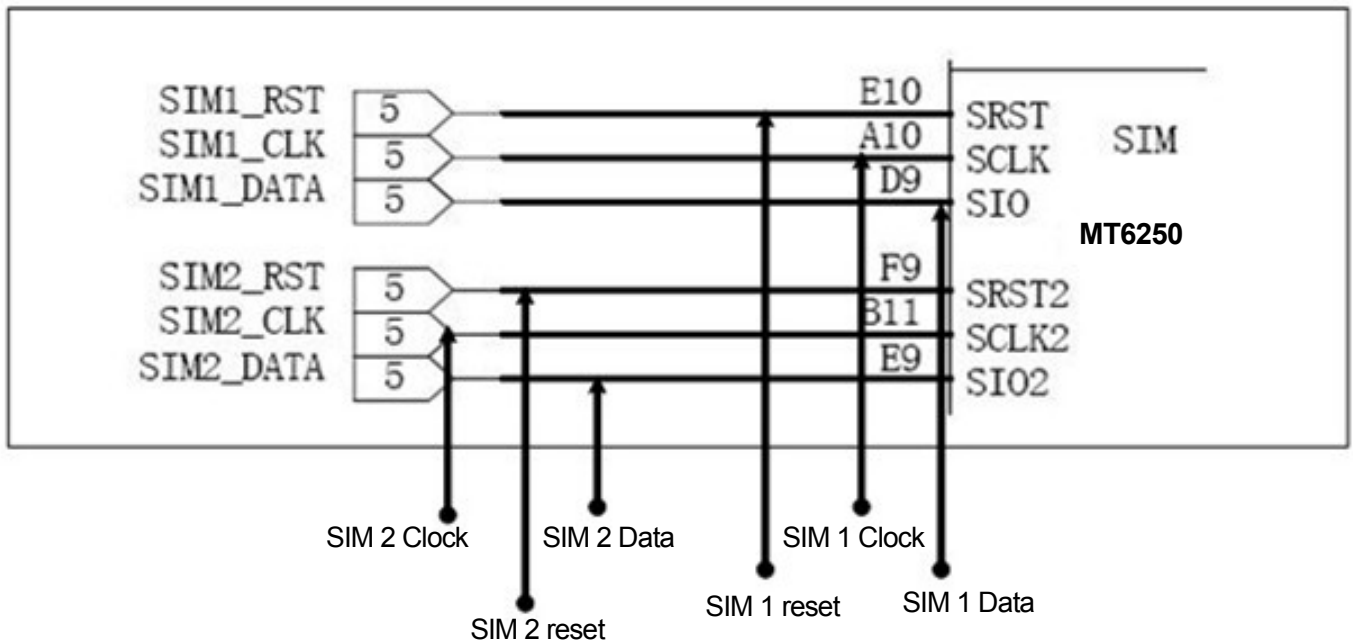
### 7.1.3 Clock 32.768KHZ Circuit



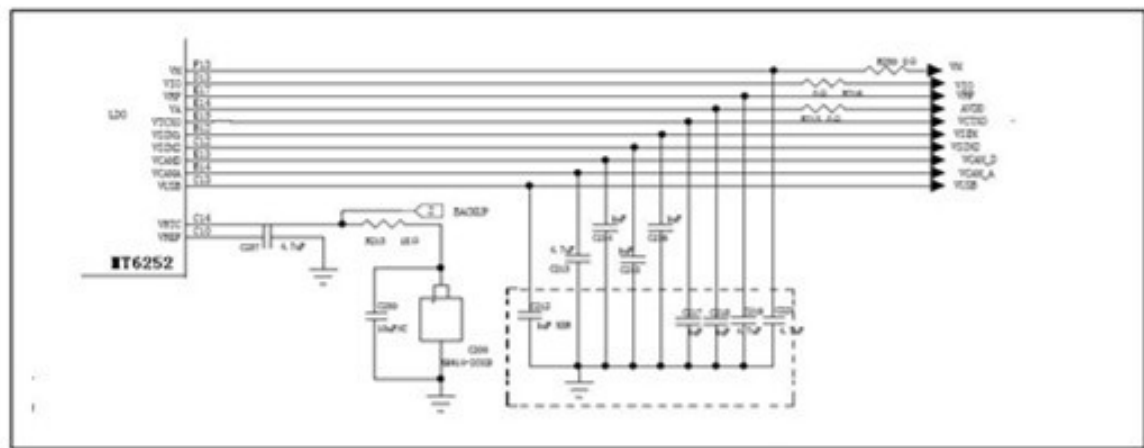
#### 7.1.4 CPU to Flash



#### 7.1.5 SIM data output

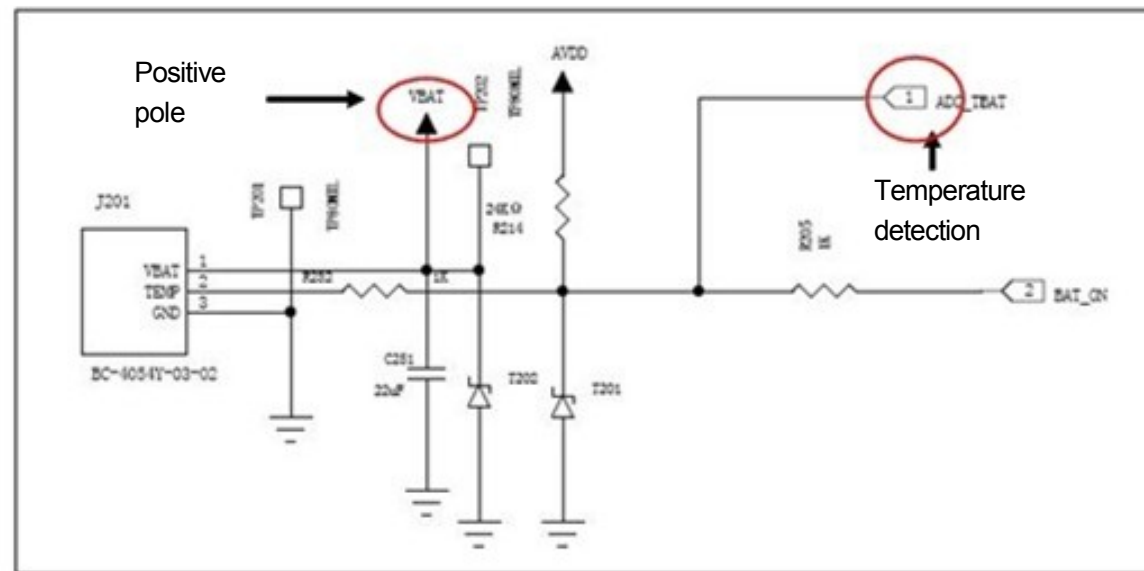


7.2 MT6250 CPU Power output

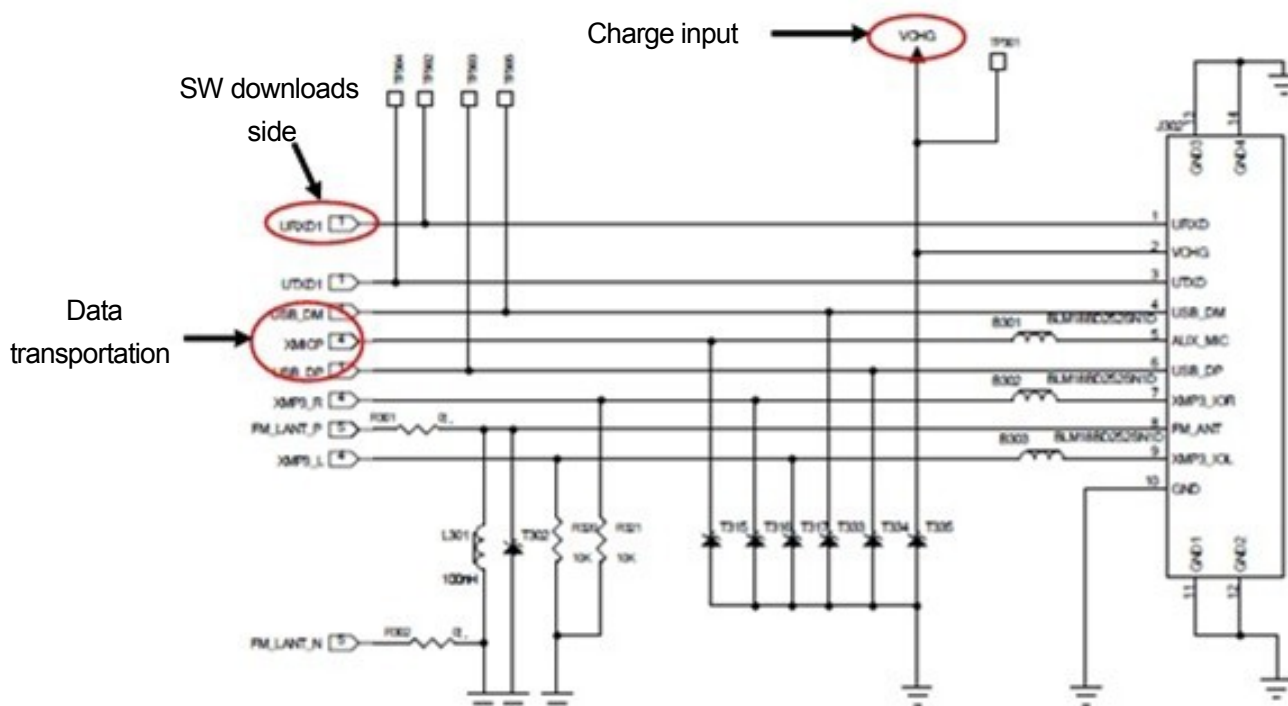


item	voitage	current
Vcore	1.2v	200ma
Vio	2.8v	100ma
Vadd	2.8v	150ma
Vtcxo	2.8v	20ma
Vrtc	1.2v	200ma
Vmem	2.8v	150ma
Vsim	2.8v	20ma
Vcs	2.8v	200ma
vcs	1.8v	150ma

7.3 Battery connector



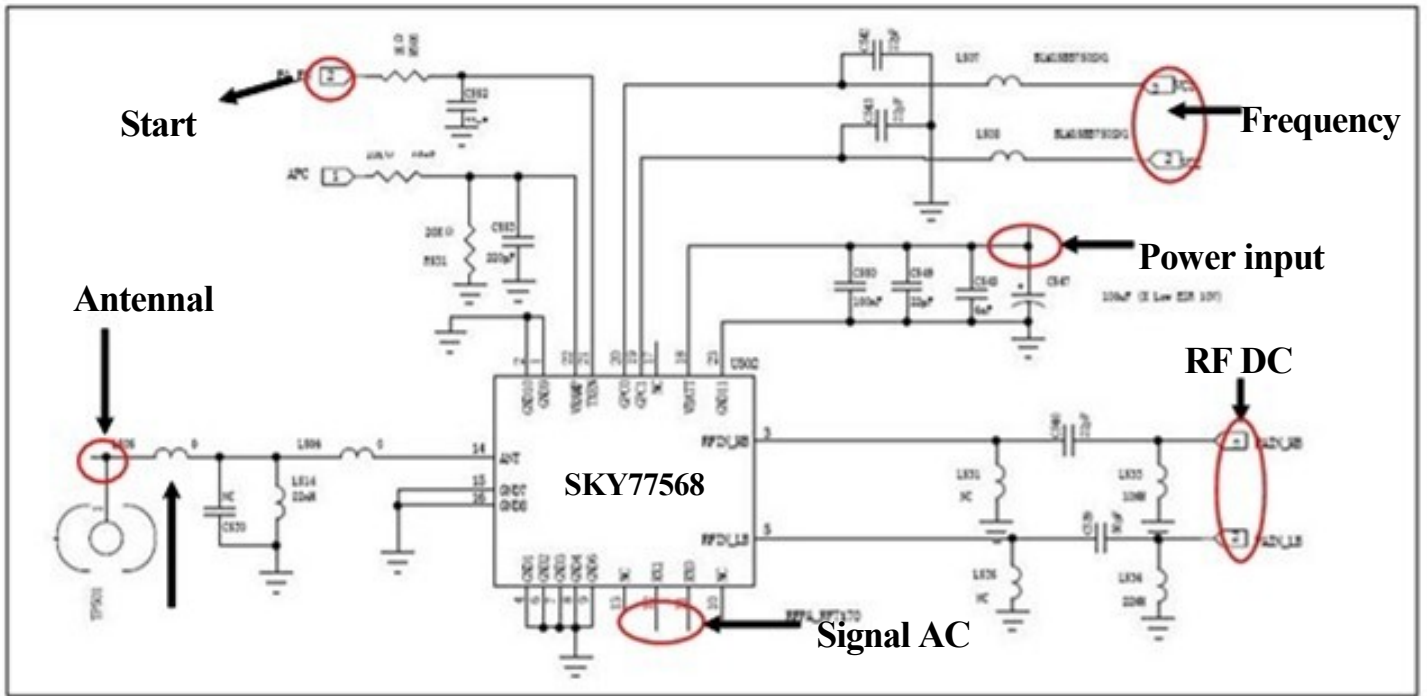
## 7.4 I/O Interface (10 PIN)



## 7.5 System Overview

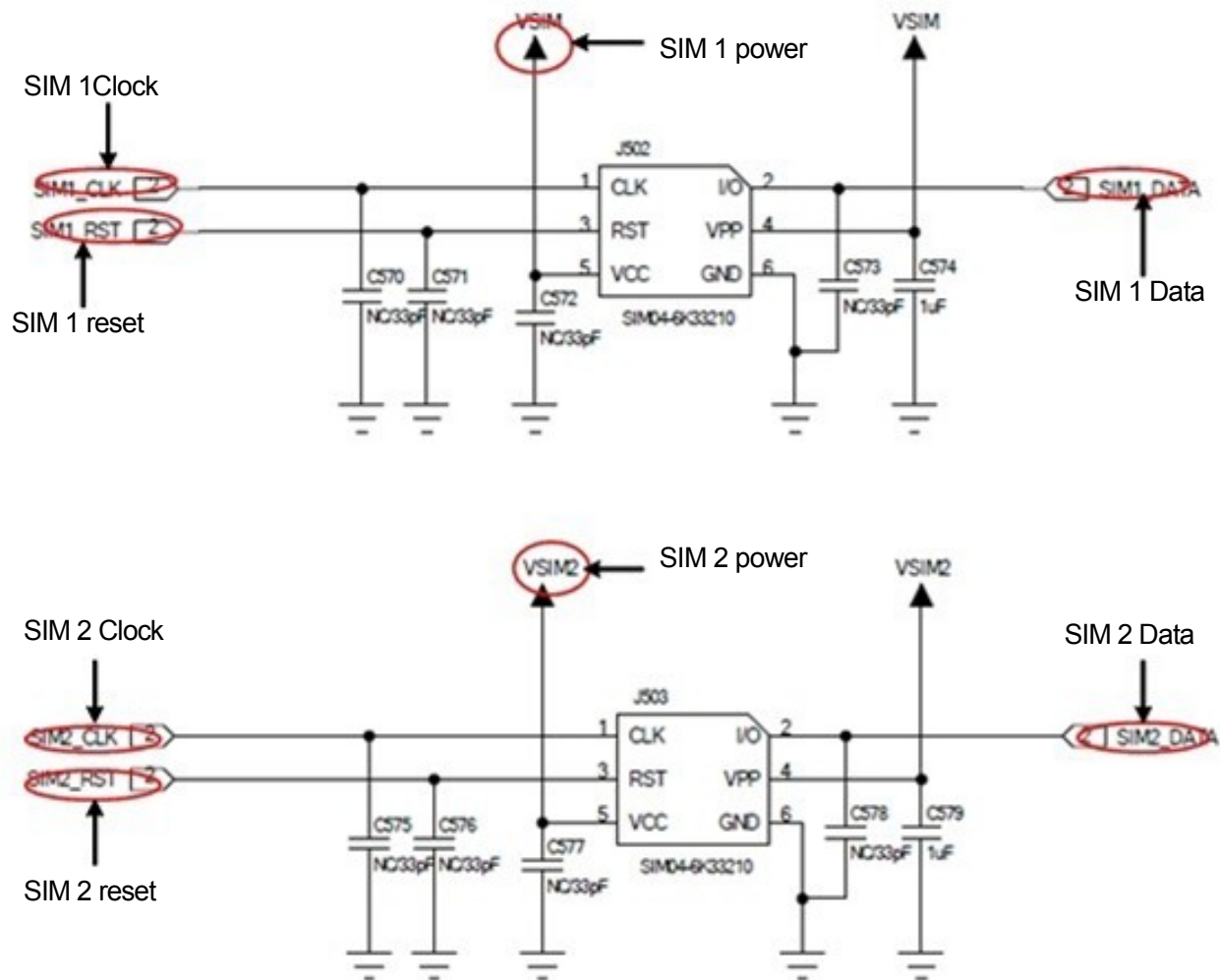
The SKY77568 is a dual-band transmits and receive front-end module (FEM) with integrated power Amplifier control (iPAC) for cellular handsets comprising GSM850, GSM900, DCS1800 and PCS1900 operation. The FEM has capability in applications of US and euro dual-band platforms. Designed in a low profile, compact form factor, the SKY77568 offers a complete Transmit VCO-to-Antenna and Antenna-to-receive SAW filter solution. The FEM also supports Class 12 General Packet Radio Service (GPRS) multi-slot operation.

## 7.6 power amplifier



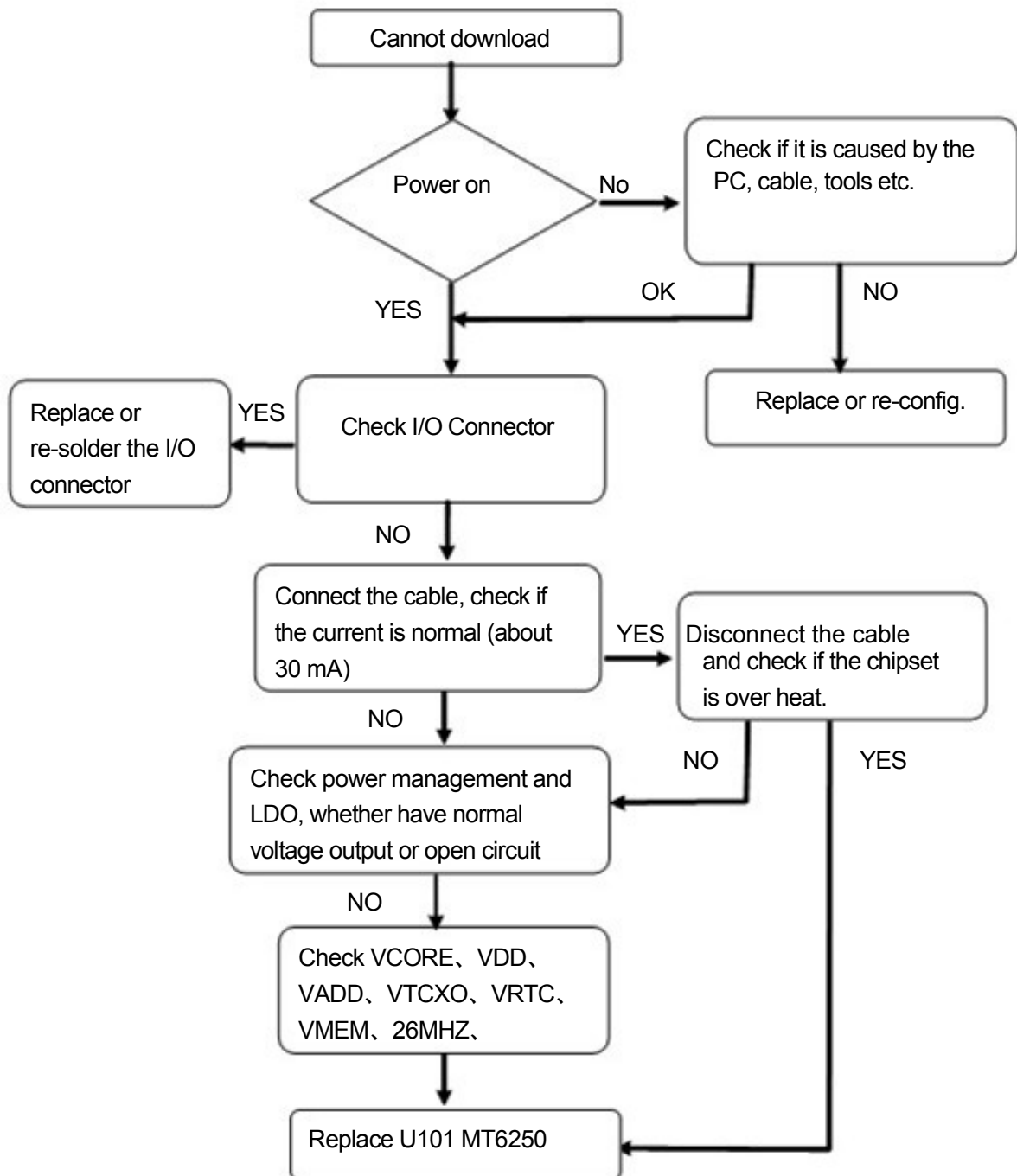


7.7 SIM circuit

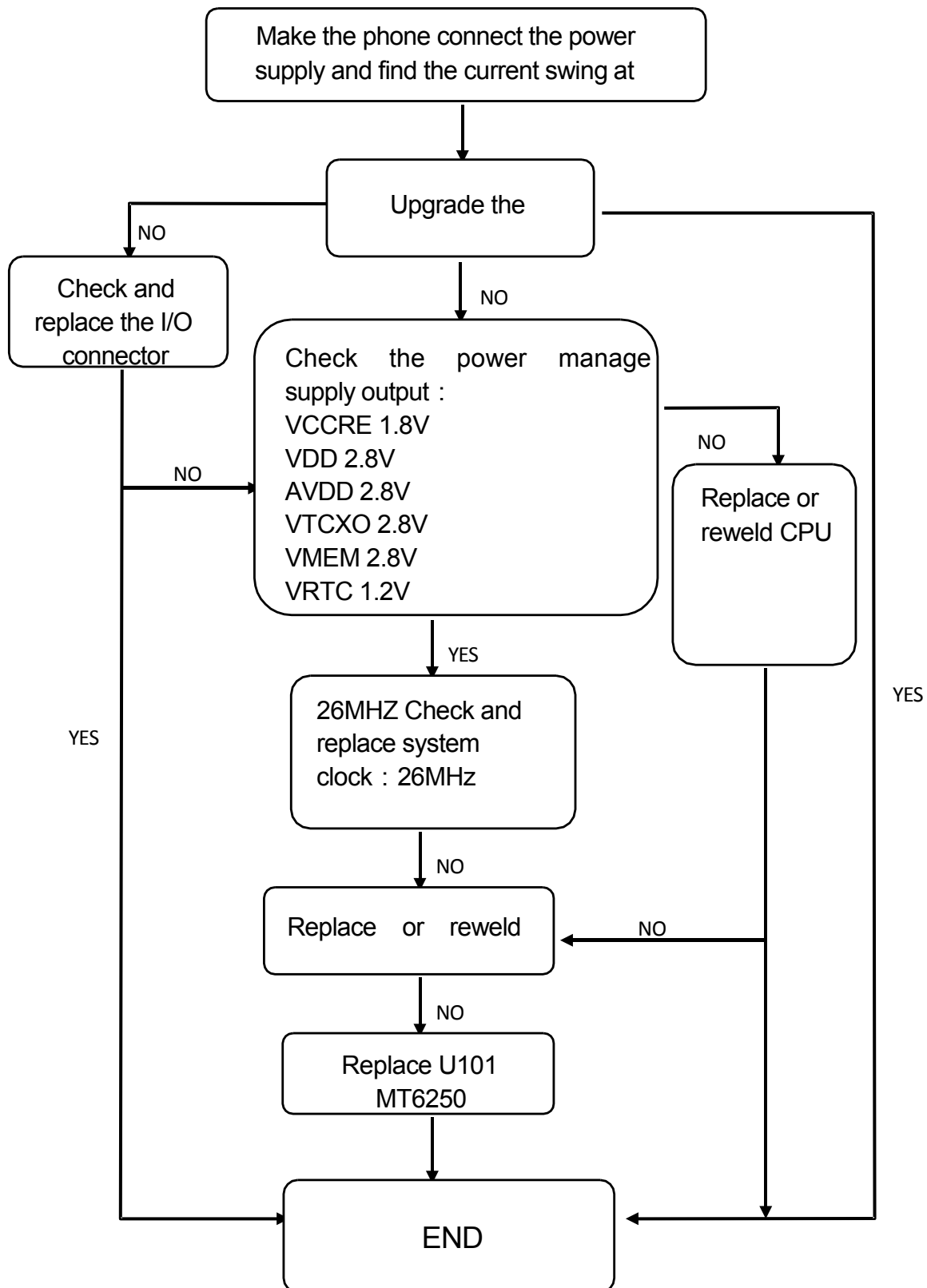


## Chapter 8 Trouble shooting guide

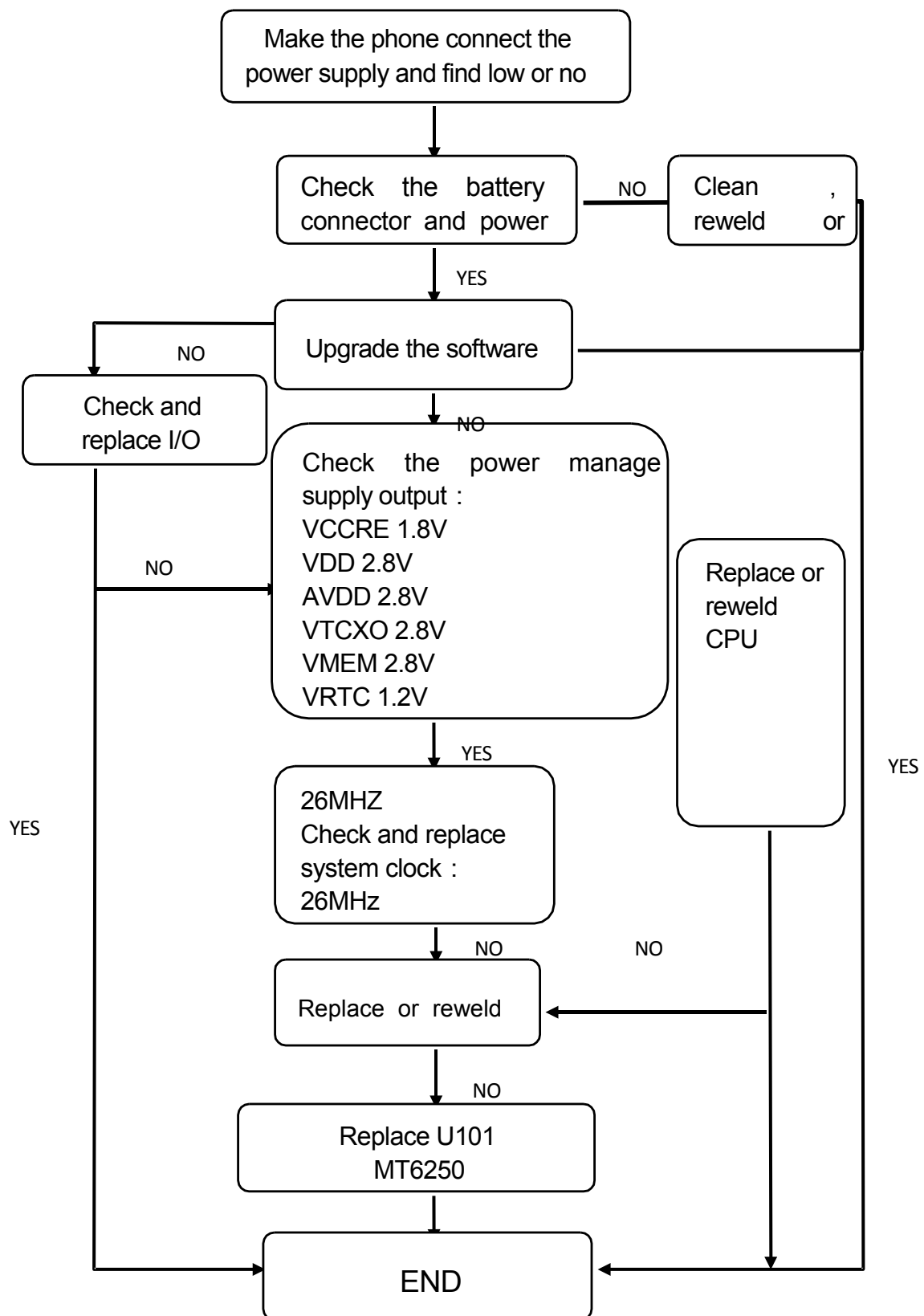
### Can't Download



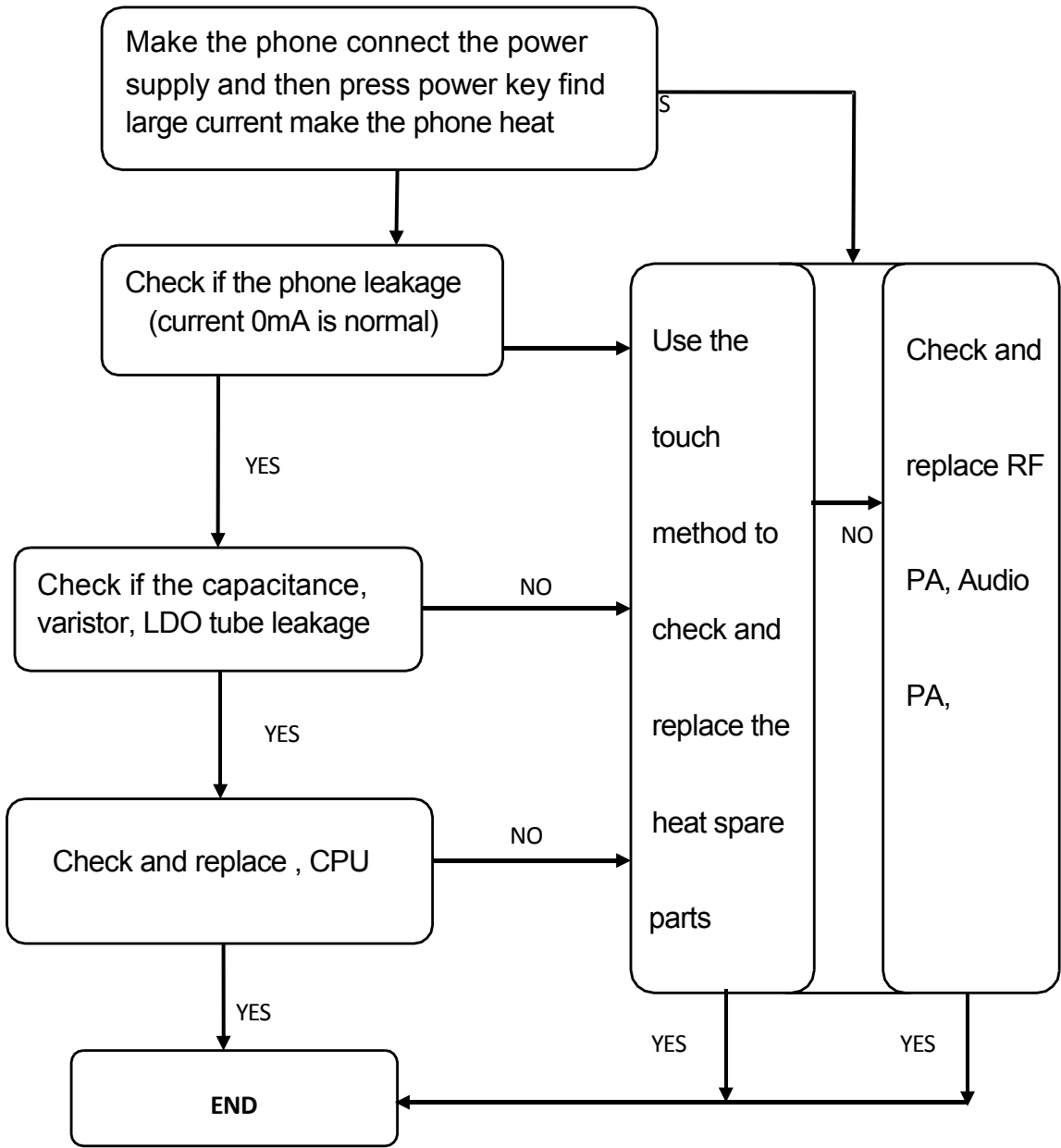
## Cannot power on-current swing instability



## Cannot power on-low or no current



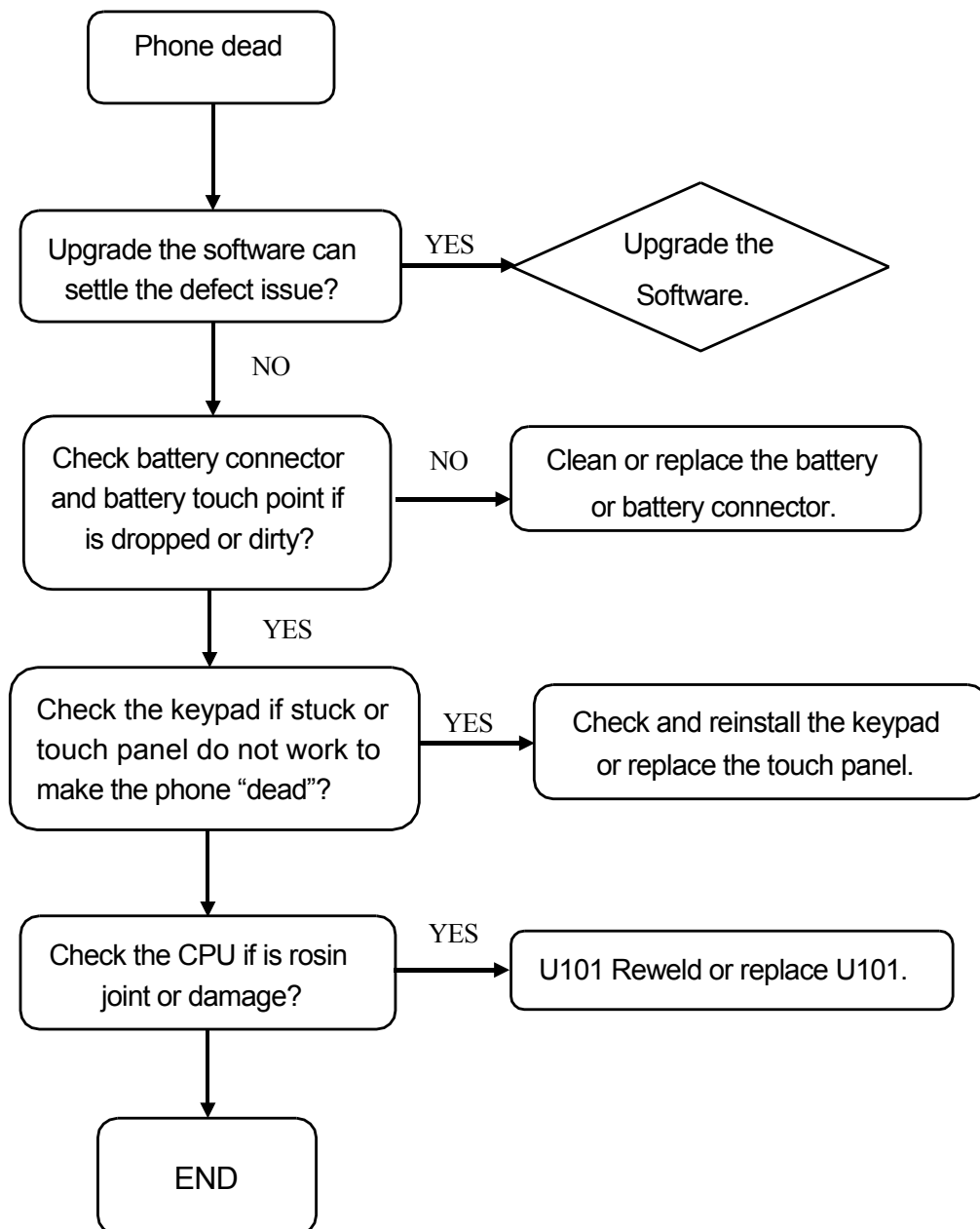
Cannot Power on-large current





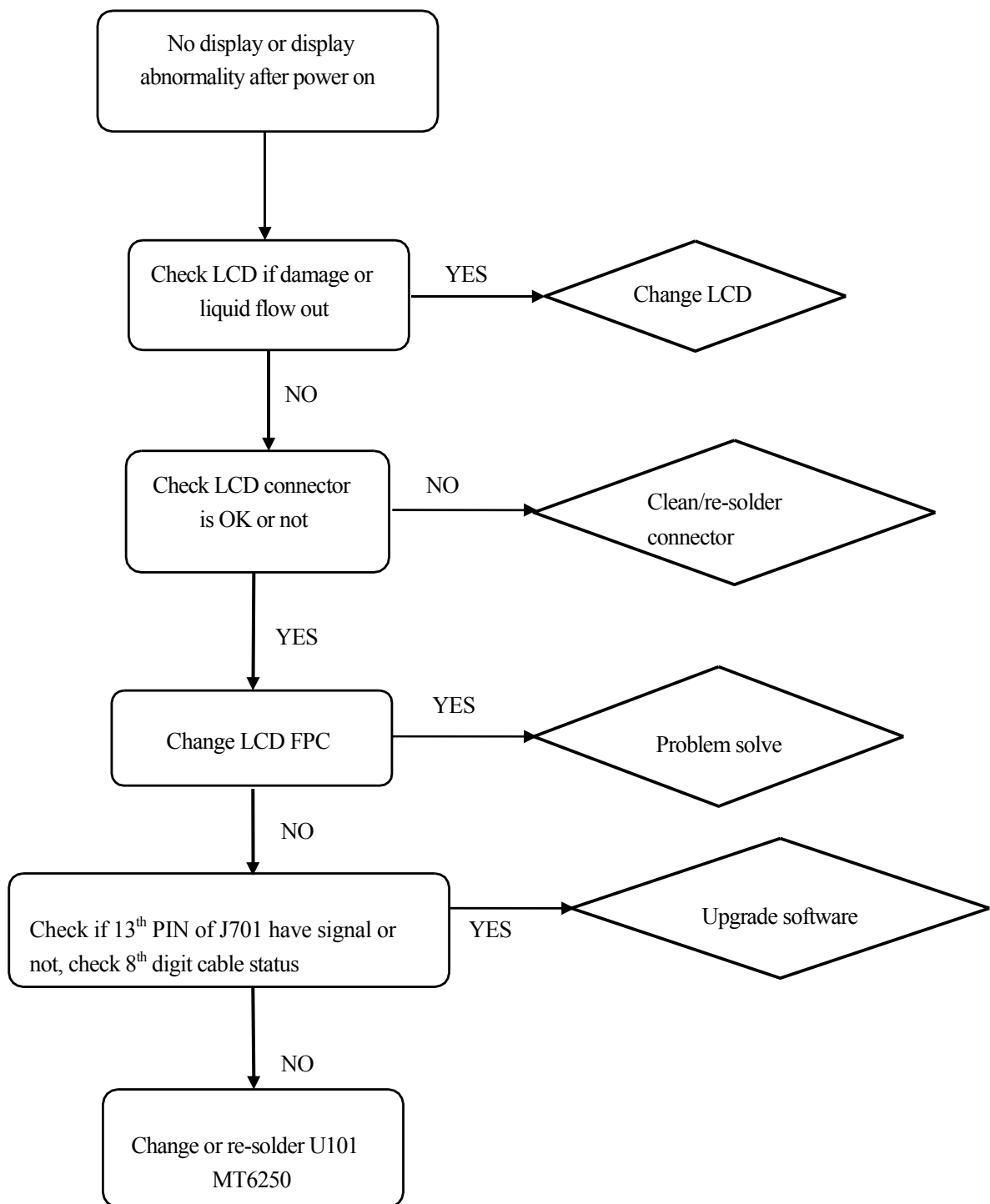
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## Repair flow for phone dead

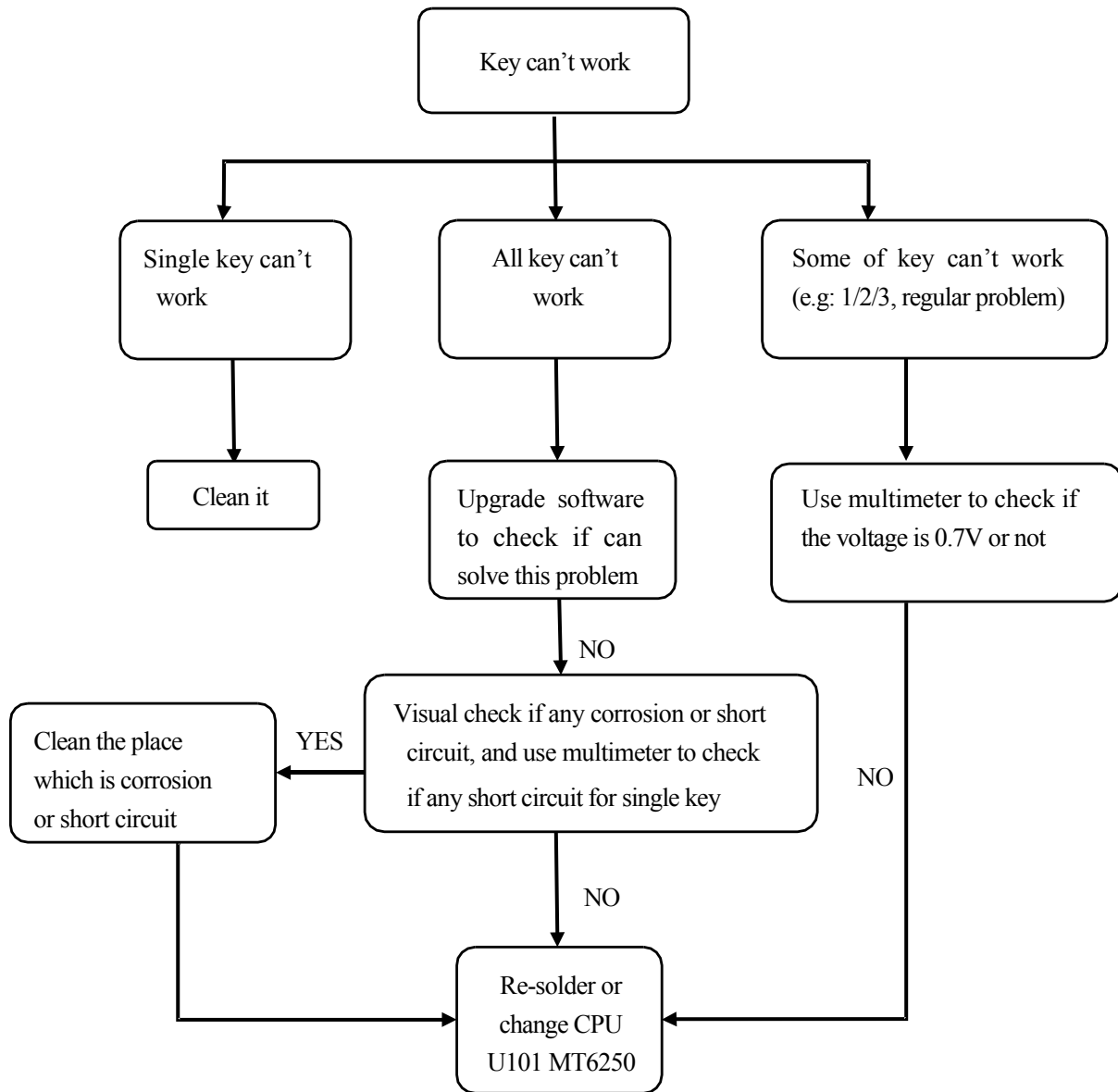


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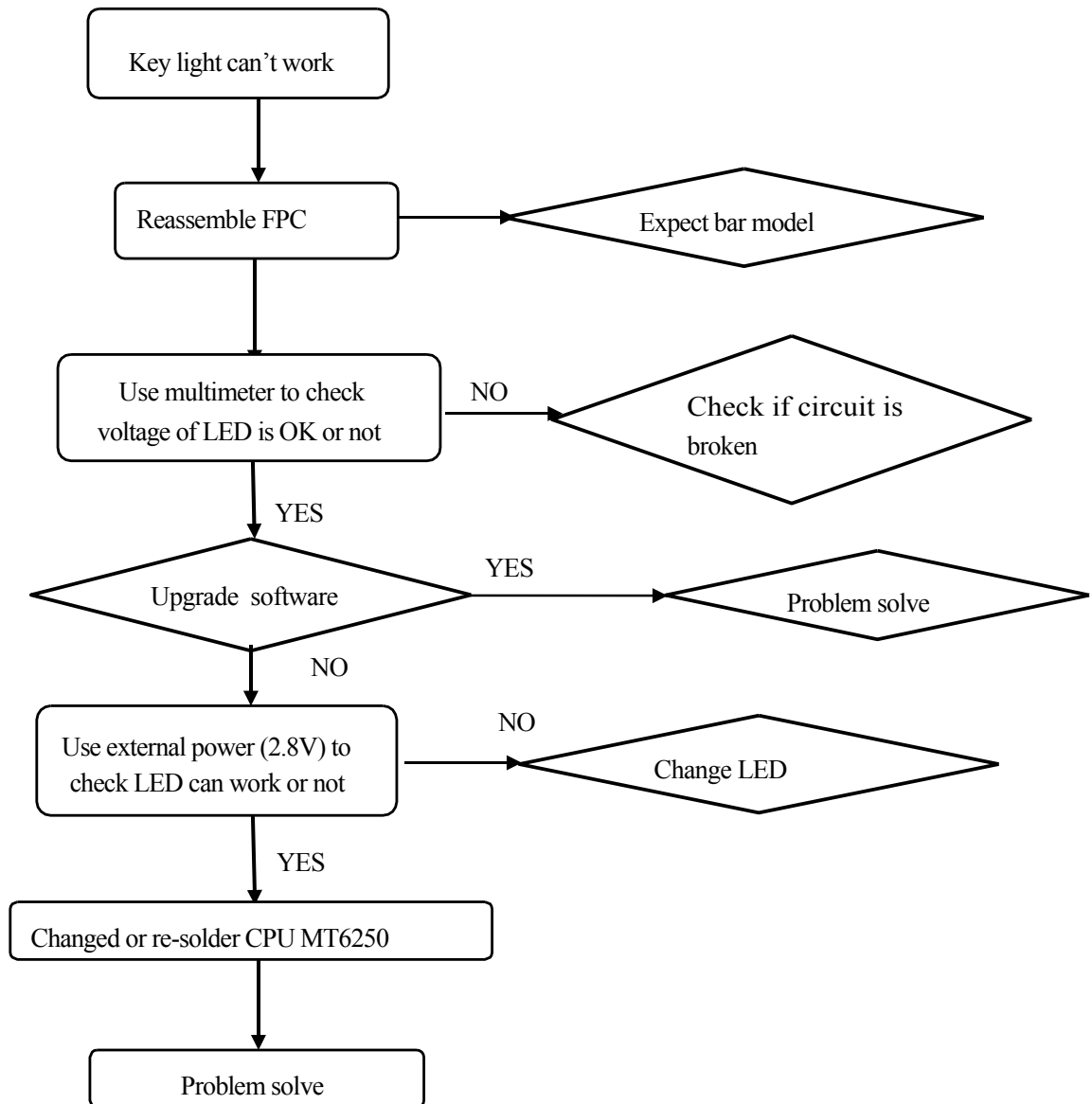
## No display or display abnormality



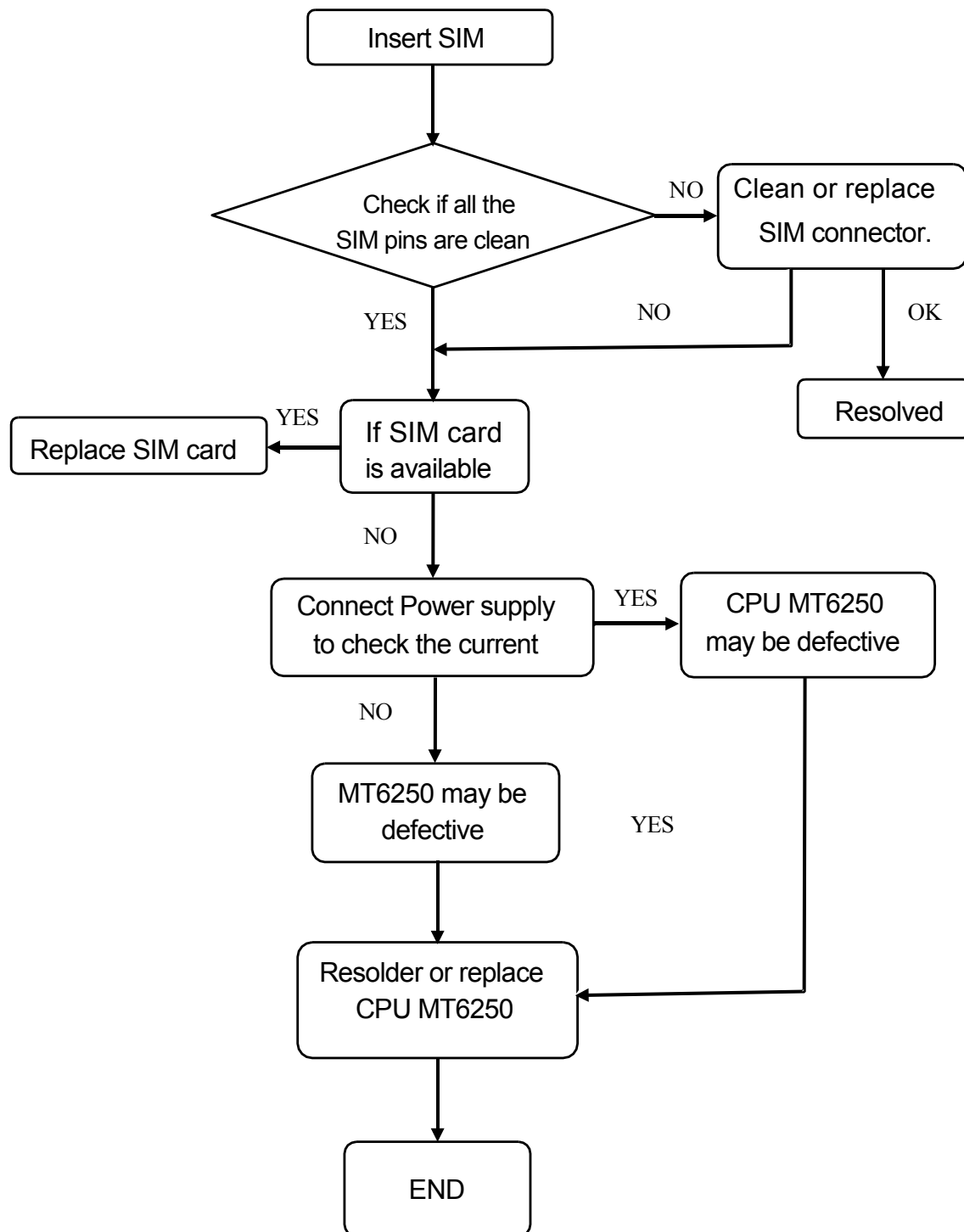
## Test process for Key can't work



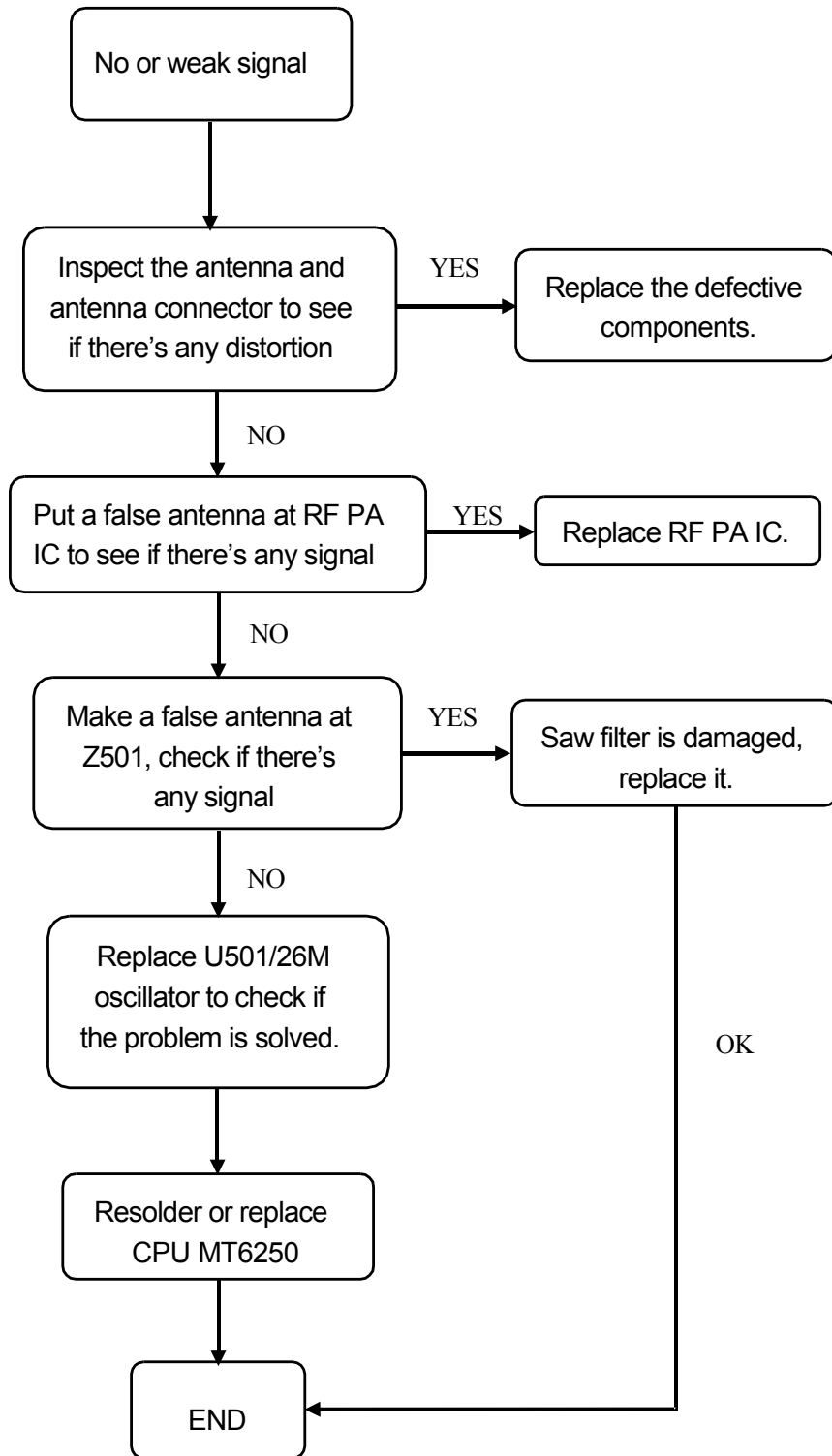
## Key light can't work



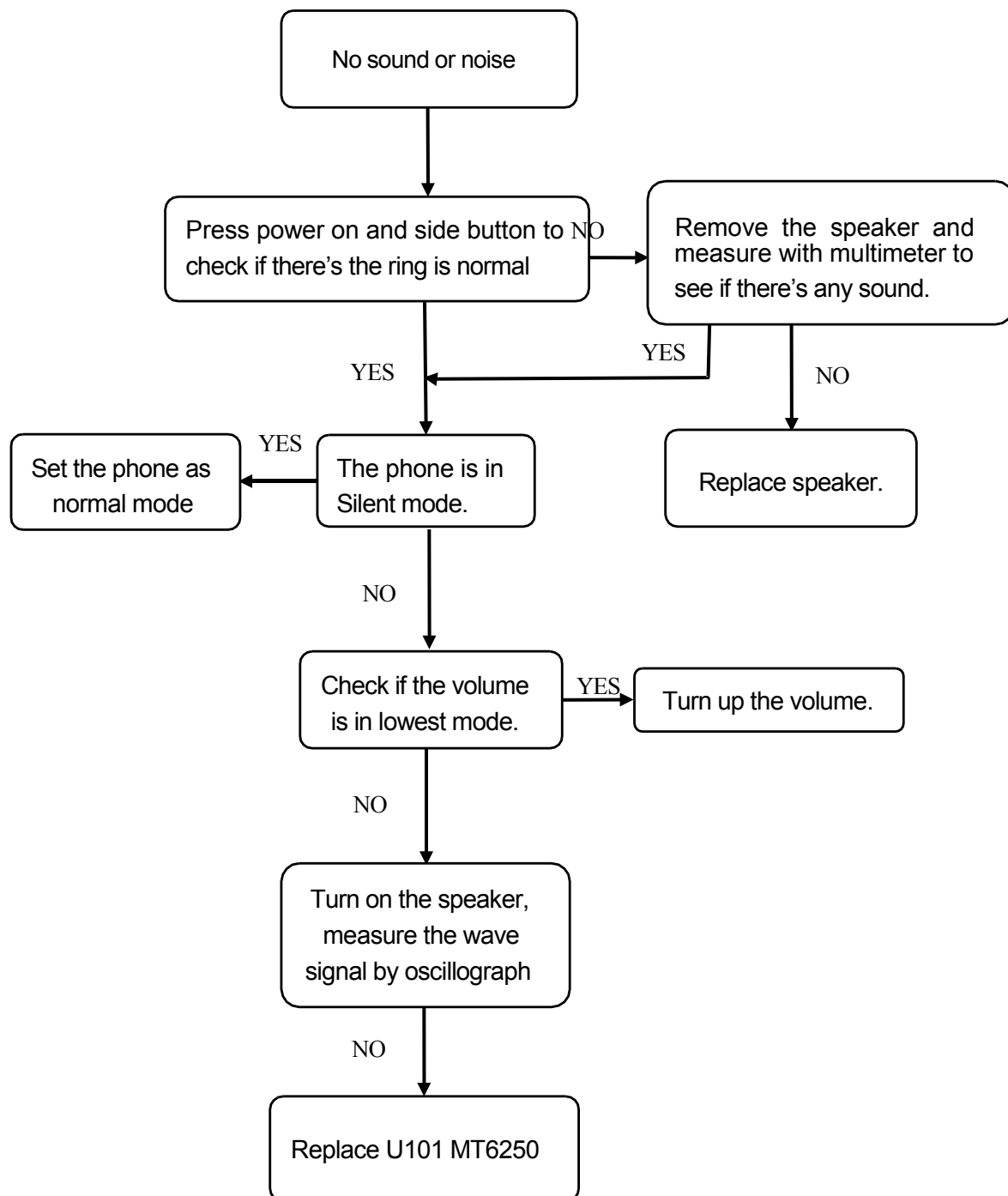
## Insert SIM Repair Process



## N0/weak signal trouble shooting

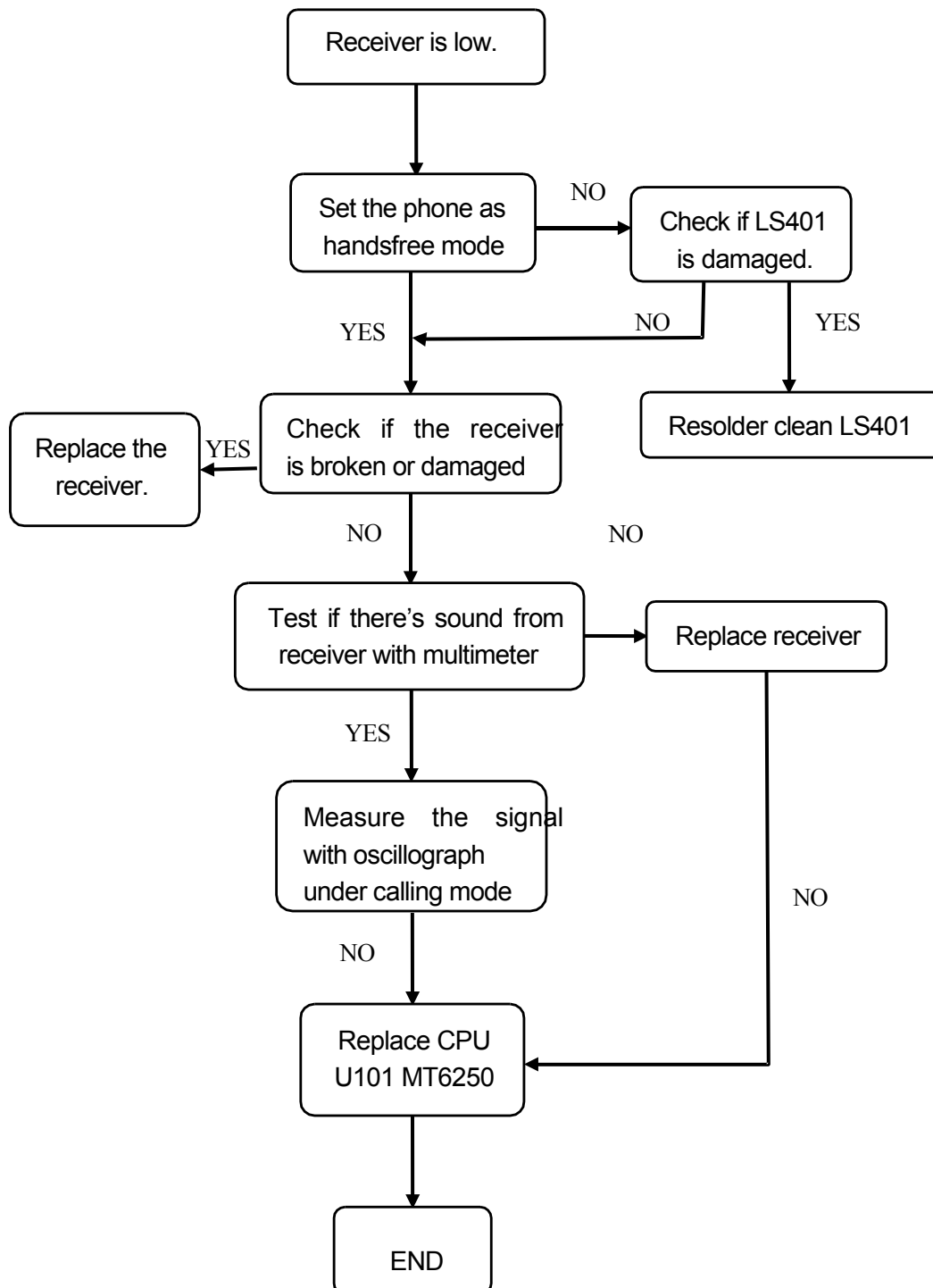


## No/Low sound from Speaker



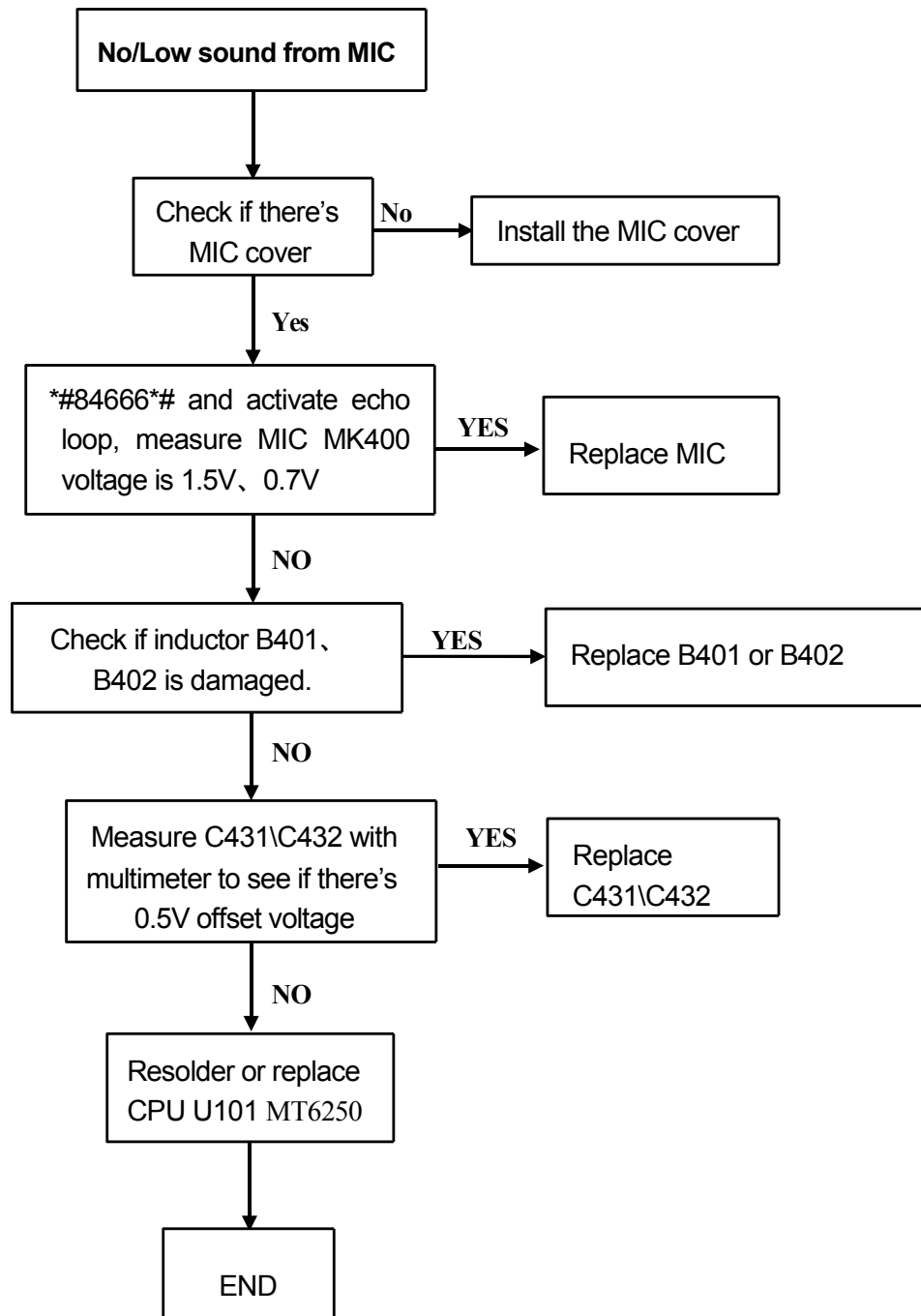


## Receiver low voice or no voice

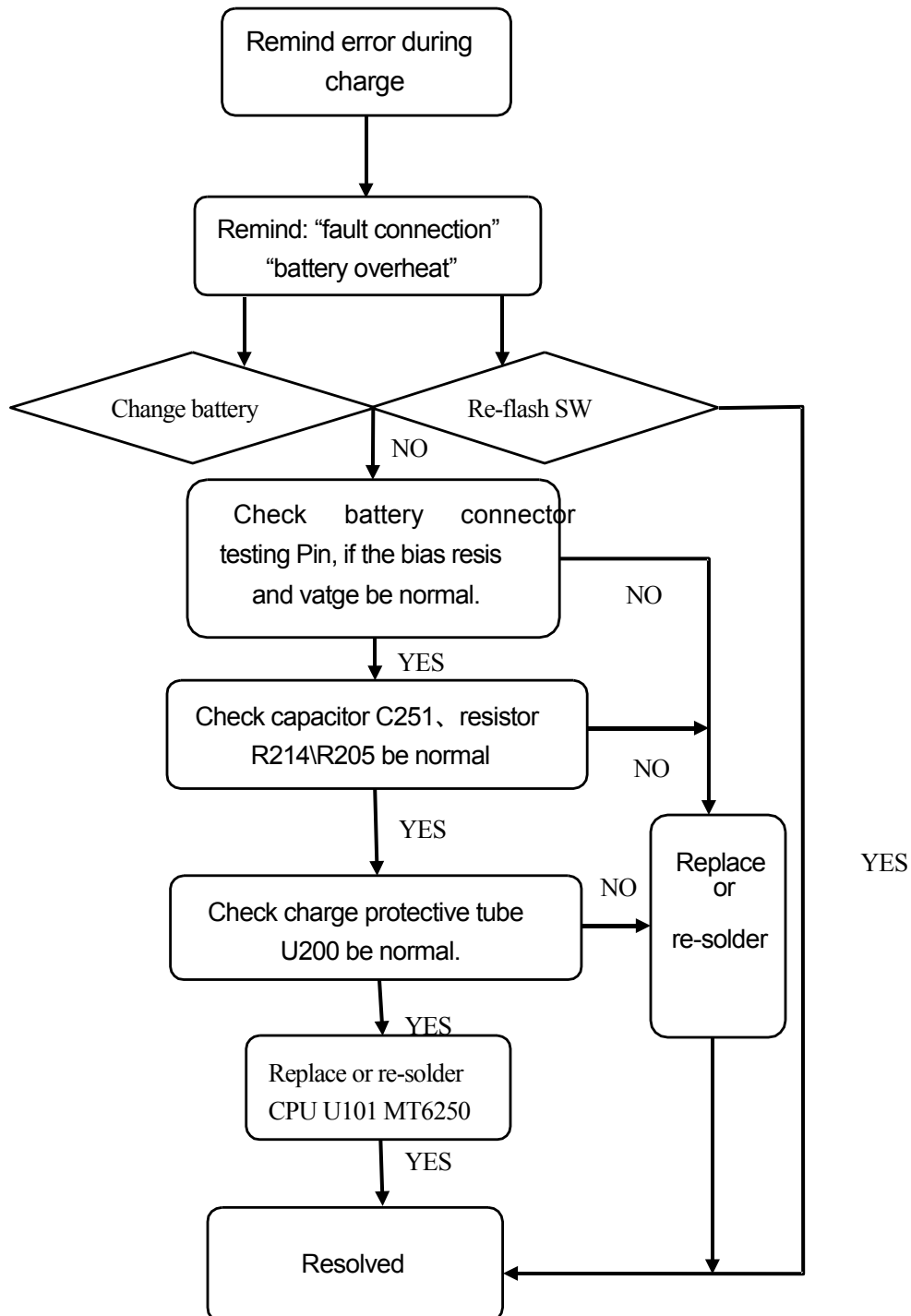


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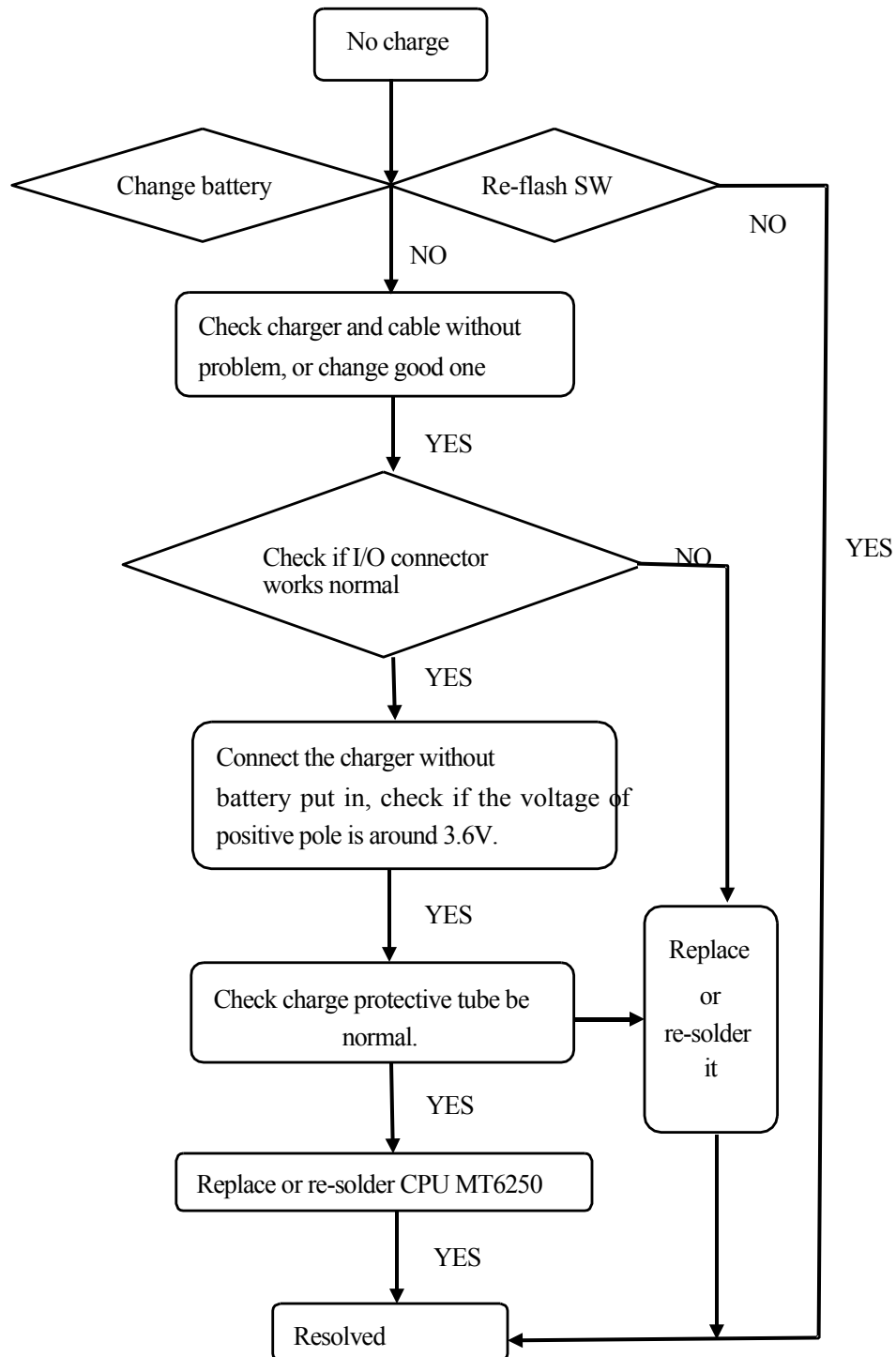
## No/Low sound from MIC



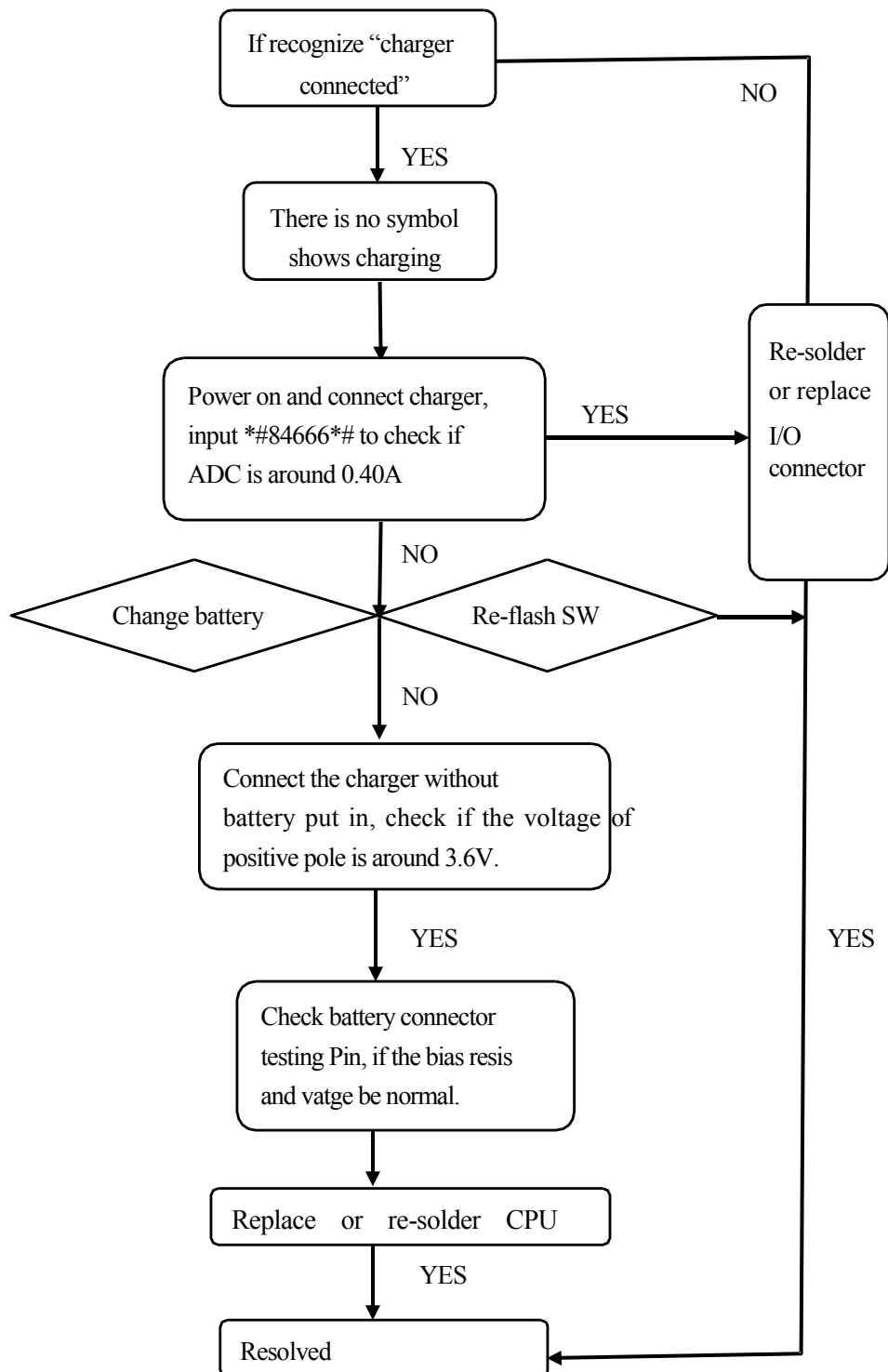
## Does not charge - remind error charge



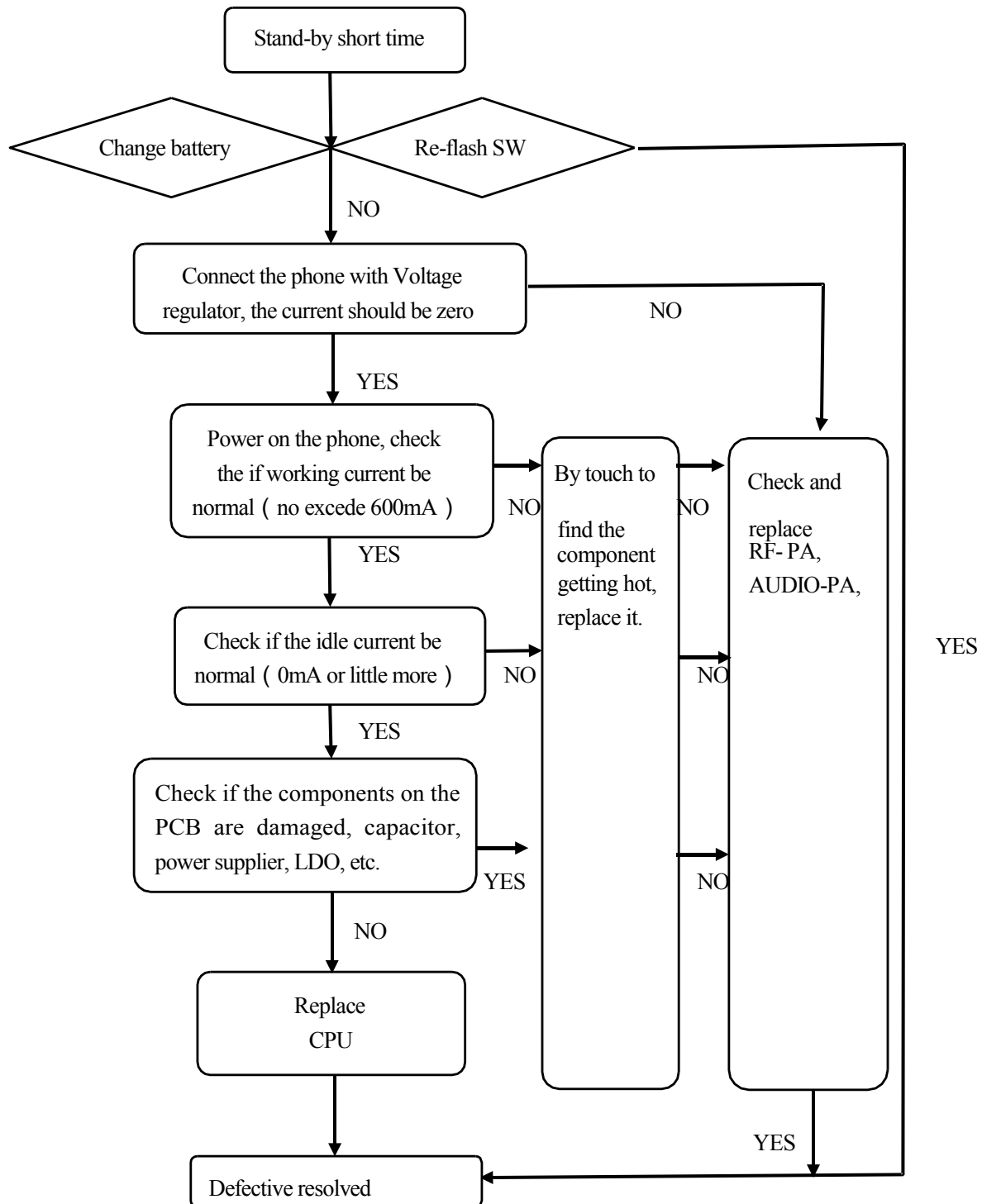
## Does not charge - no charge



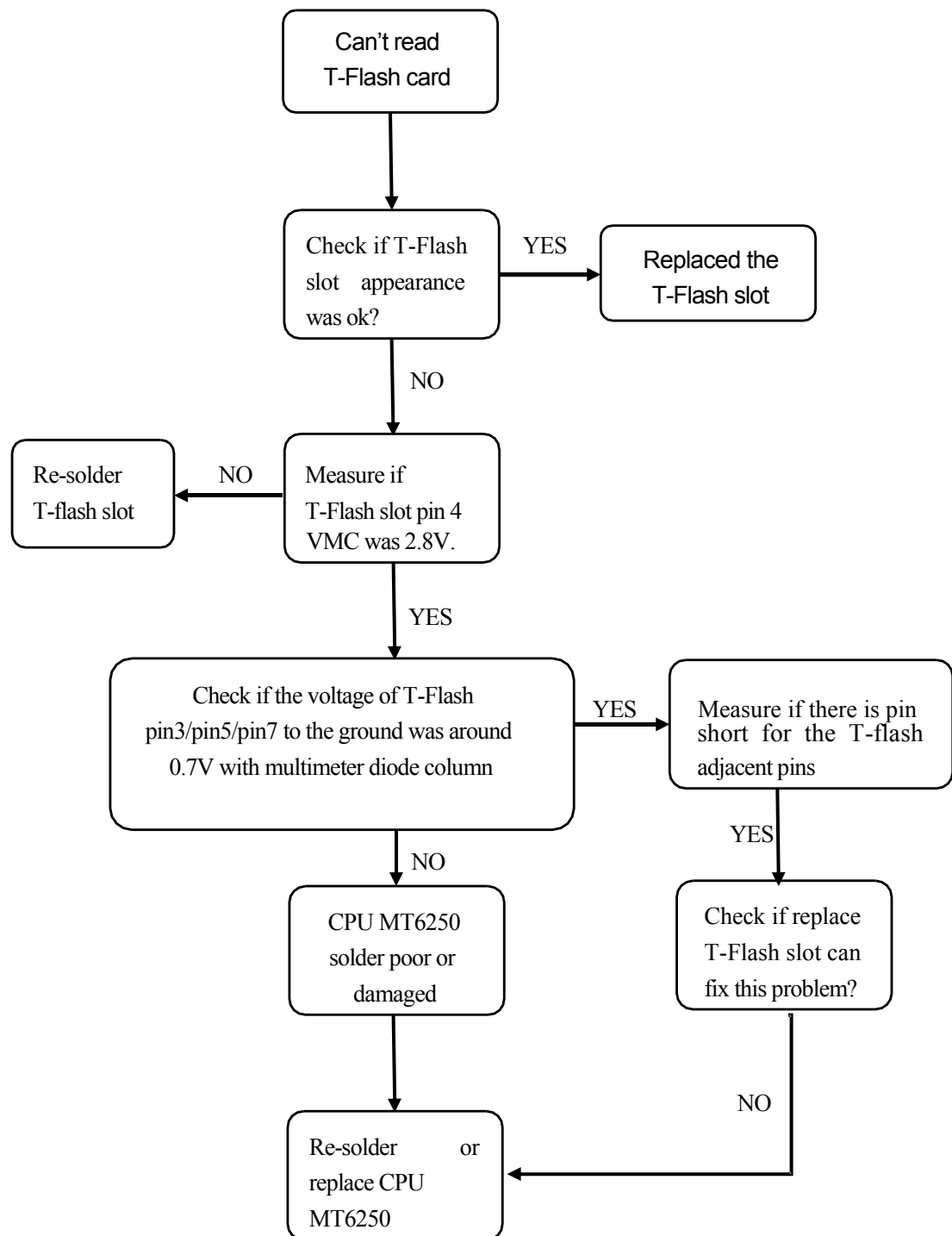
## Does not charge - does not recognize charging



## Stand-by short time



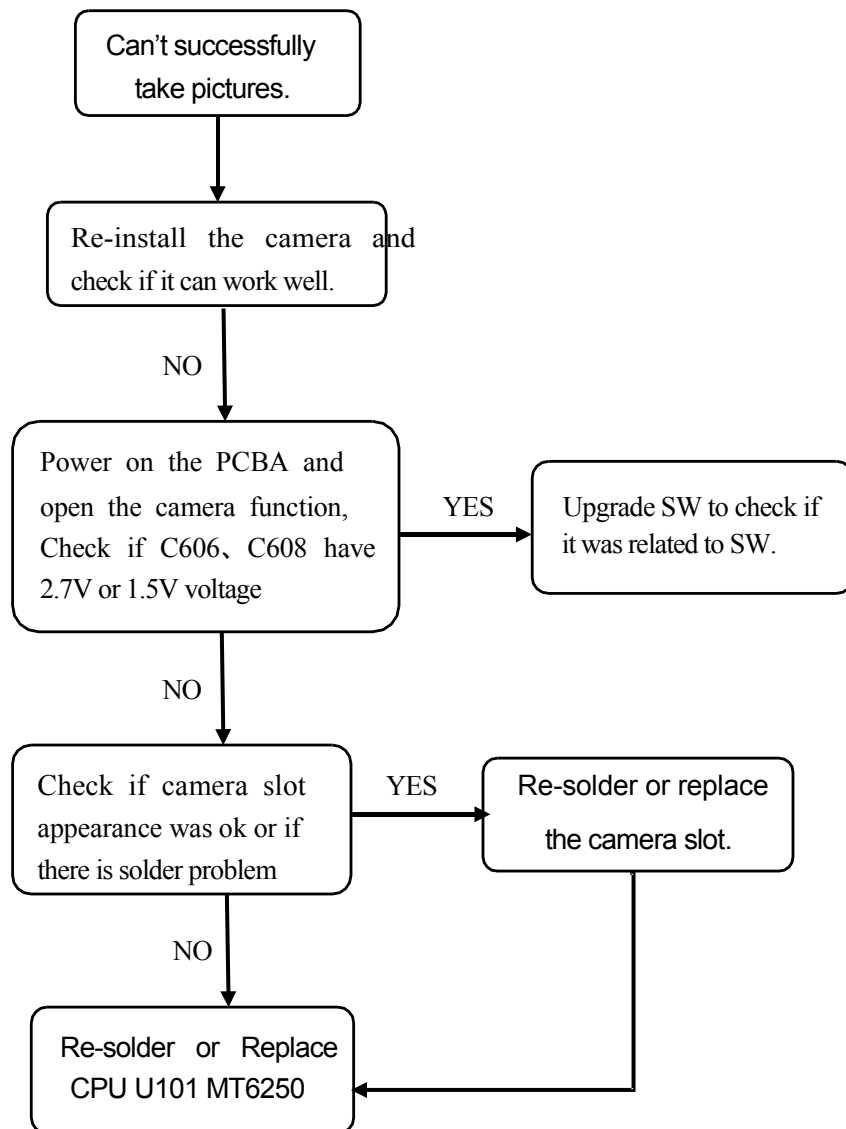
## Can't read T-Flash card





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## Can't successfully take picture



# Chapter 9    Firmware Upgrading Guide

## 9.1 Firmware Upgrading

### 9.1.1 Install USB driver

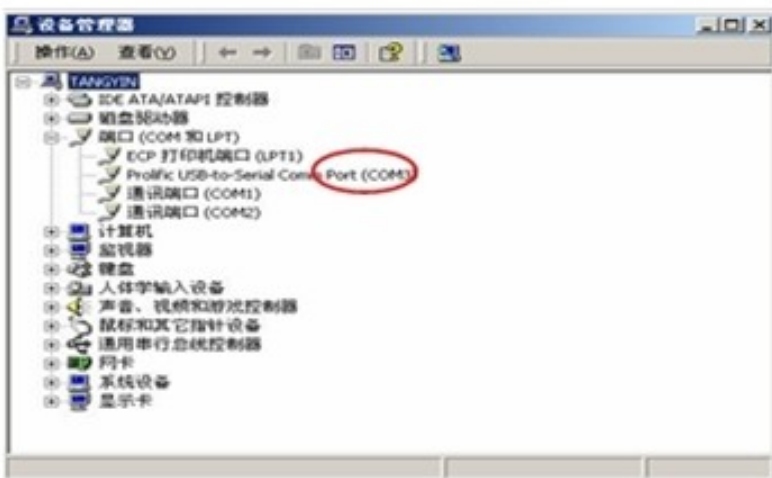
The maximum downloading speed can be up to 921600bit/s when using USB-Serial cable.

The driver need to be installed before using the USB cable.



Please keep the USB cable unplugged when installing the driver.

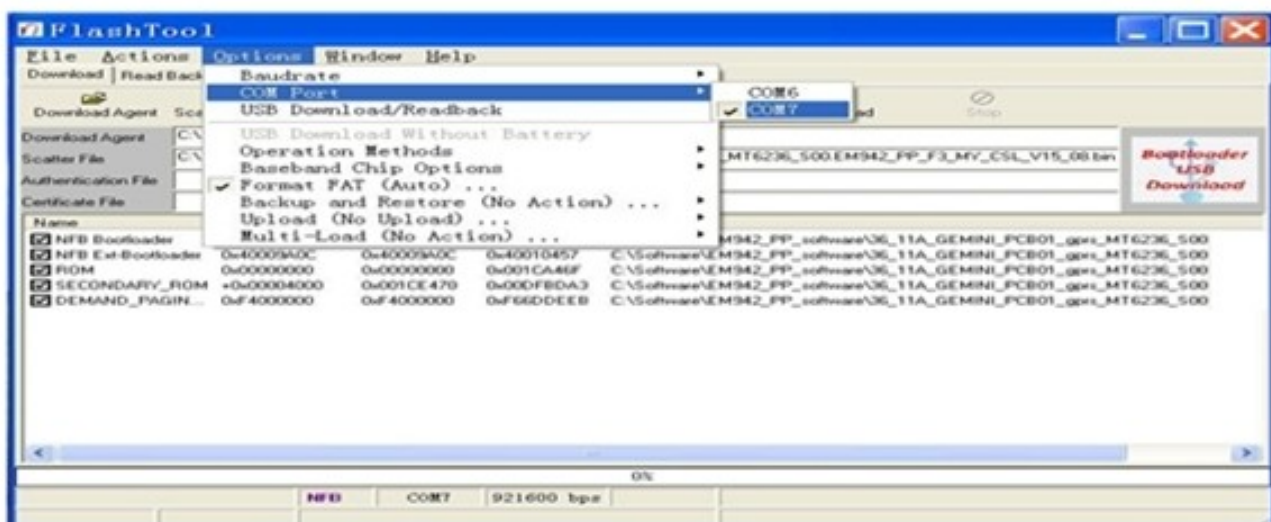
Plug the USB cable when installing is completed. And check device manager of the PC.



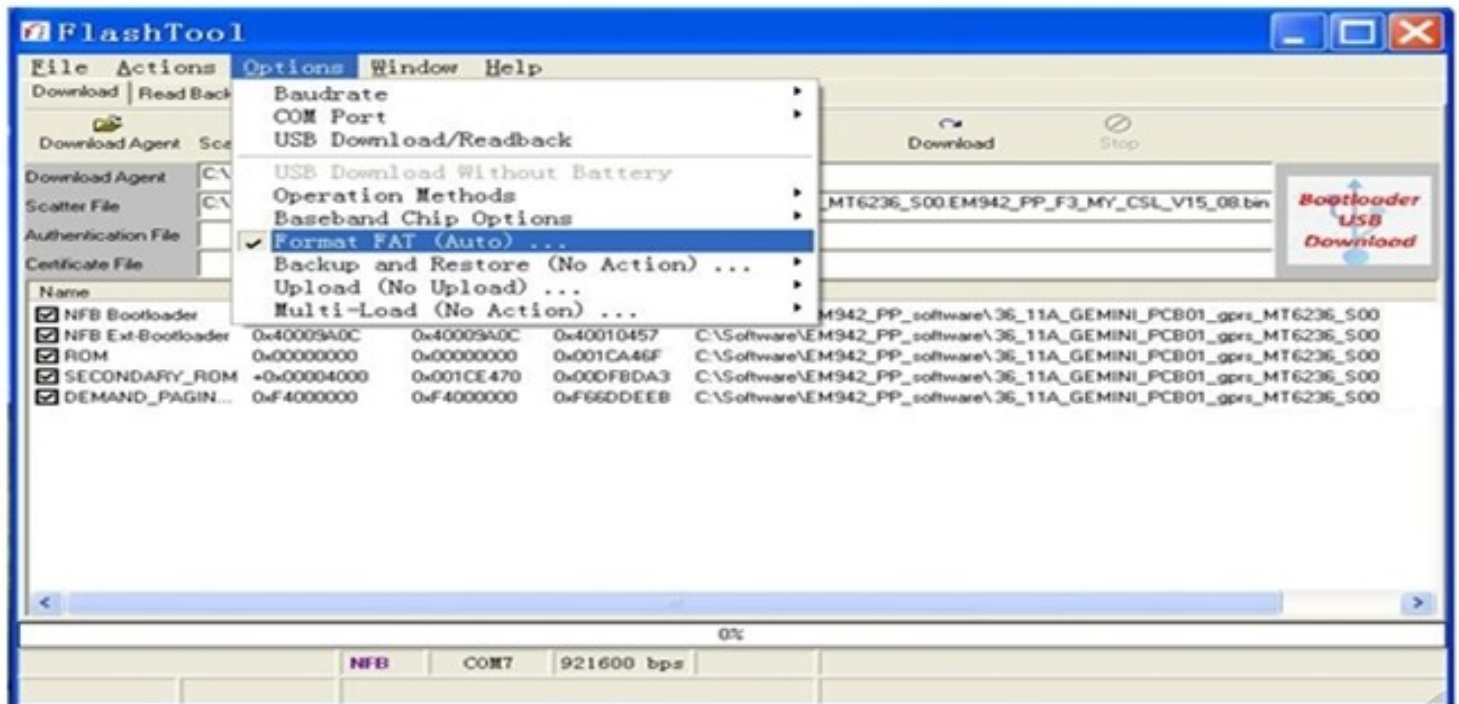
### 9.1.2 Run the “Flash\_tool.exe” of FlashTool\_v5.1112.00



9.1.3 Please select “Options”-“COM port”-Choose the port which is same as the one in “Device Manager”.



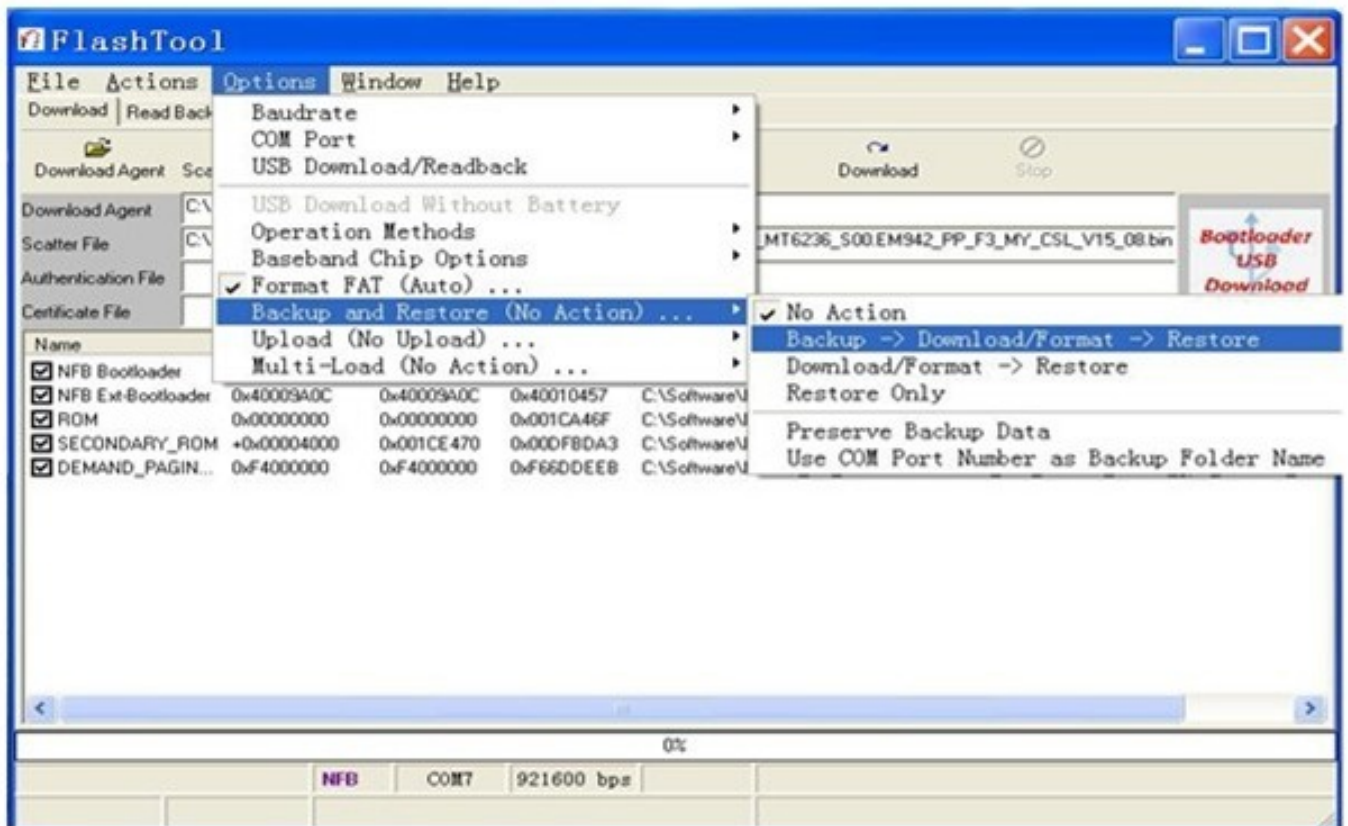
9.1.4 Select “Options”-“Format FAT (DISABLED)...” and please do NOT select “validation”.



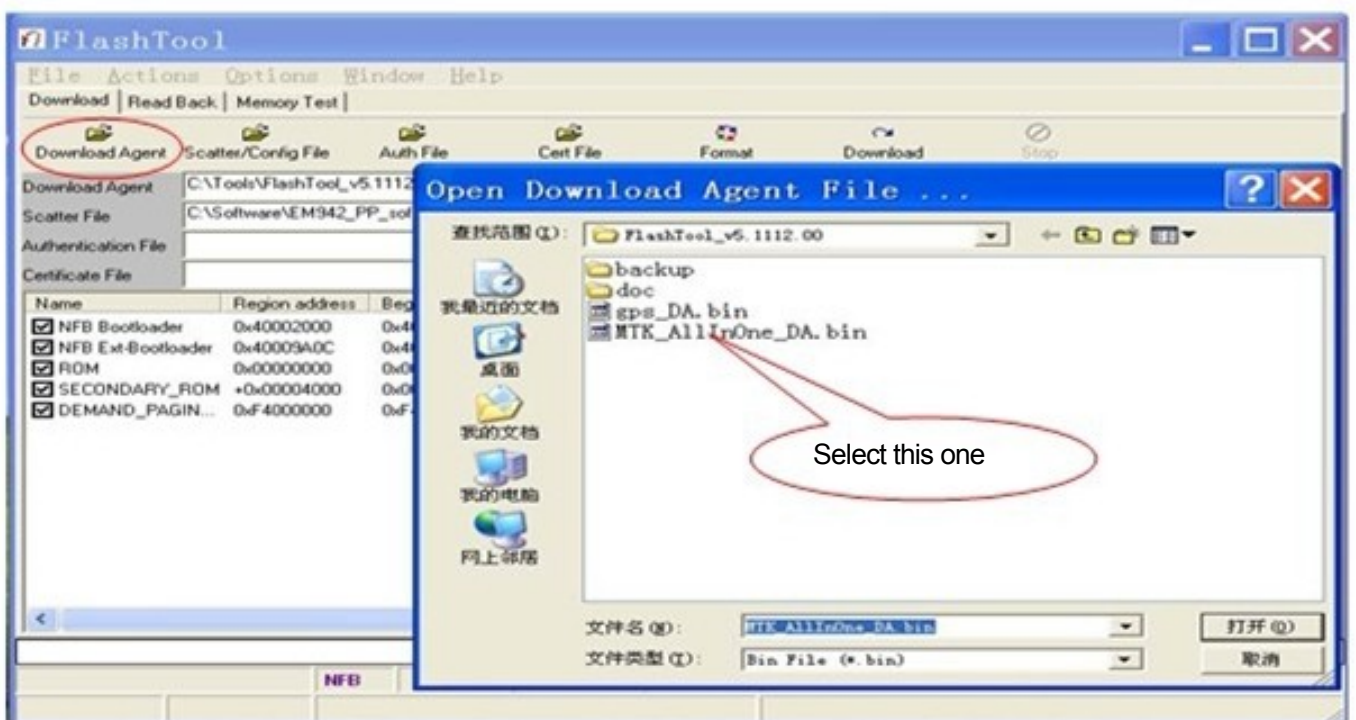
9.1.5 Please select “Format FAT”.



9.1.6 Select "Options" - "Backup and Restore", then select the "Backup -> Download/format -> Restore".

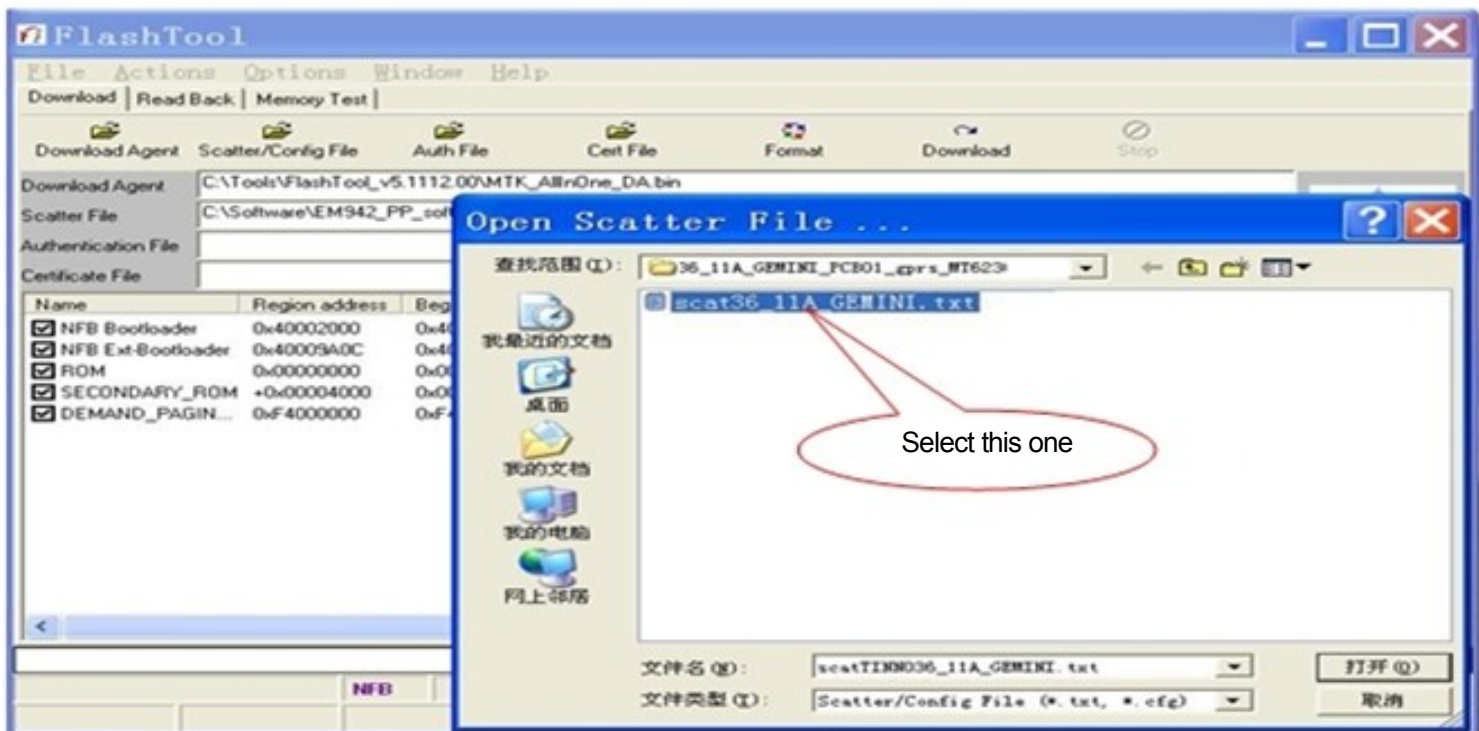


9.1.7 Click the "Download Agent" and select the file "MTK-ALLInOne-DA.bin".

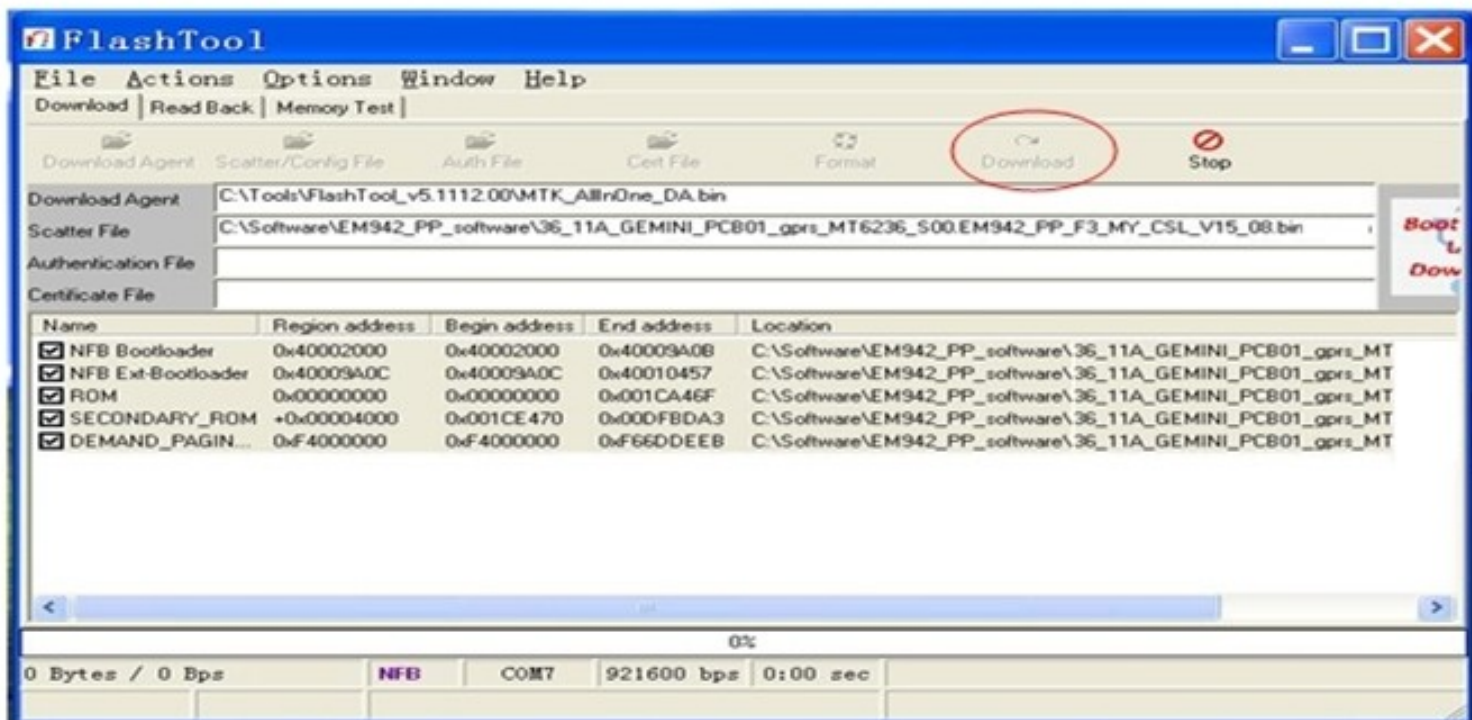




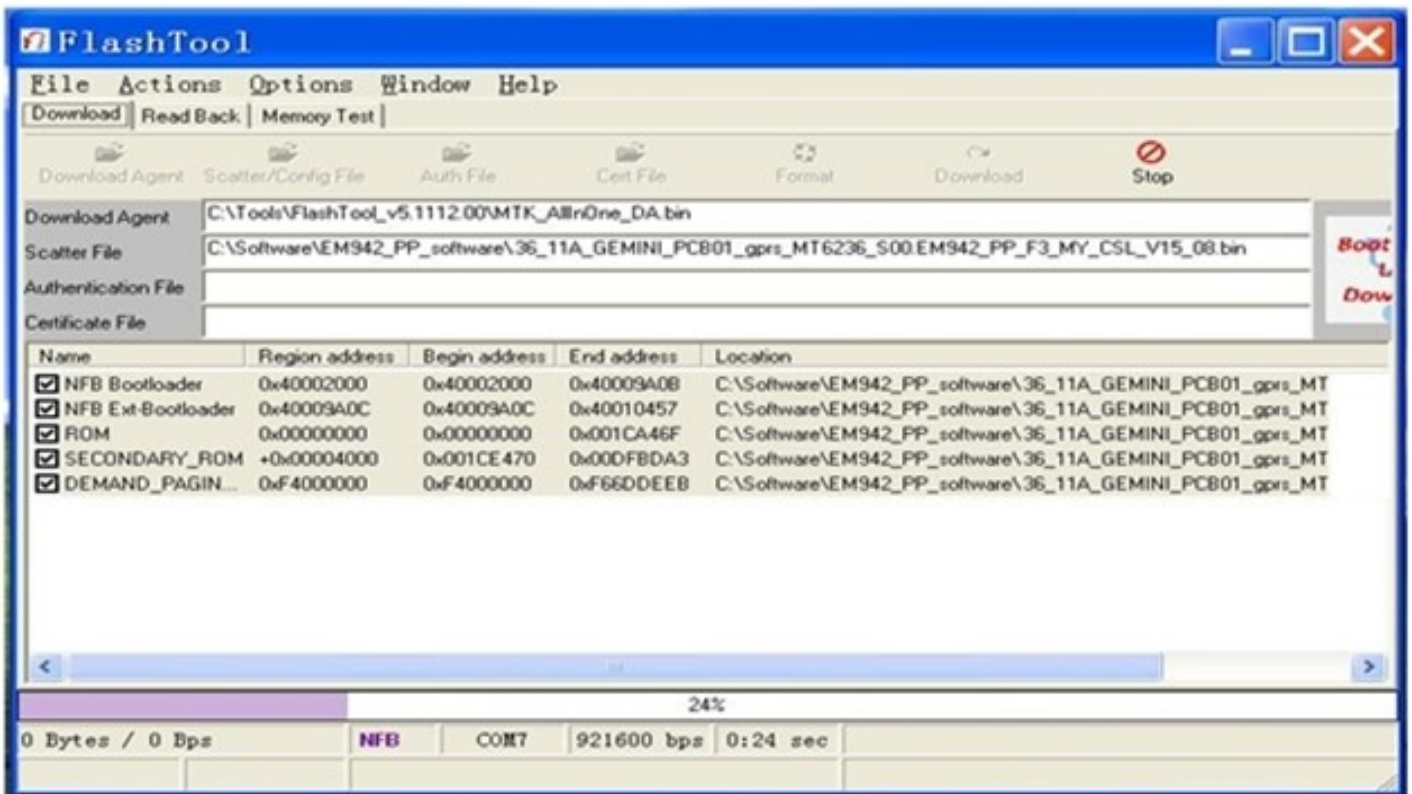
9.1.8 Click the “Scatter/config file” and select the “scat36\_11A\_GEMINI.txt”.



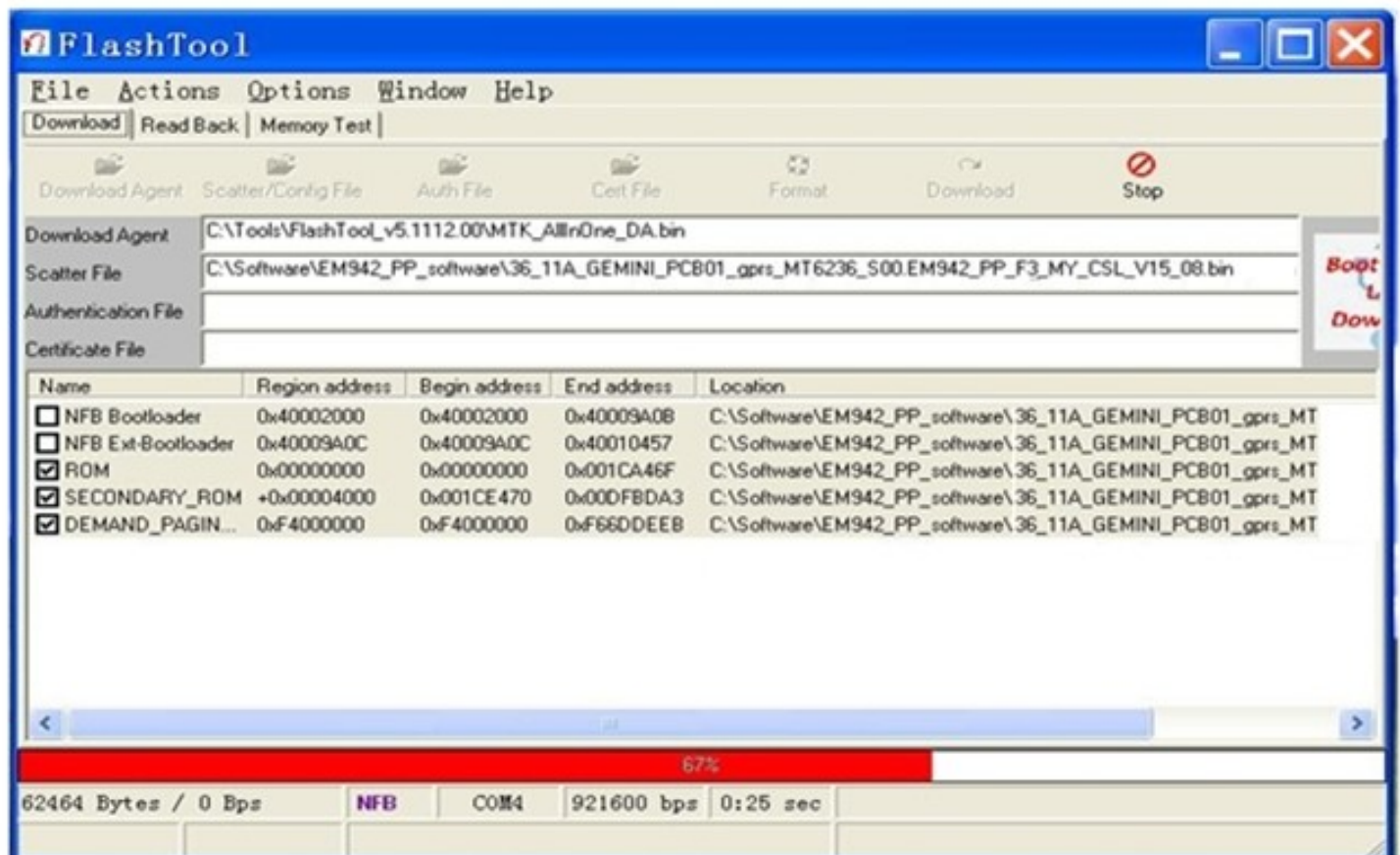
9.1.9 Power off the handset, remove the battery, click “Download”, and connect the cable with handset, then insert the battery, press the power on button, the gray, red, blue, green and gray progress bar shall appear. Then upgrade would be completed when appear “OK”.



### 9.1.10 Backup the data. (gray progress bar)

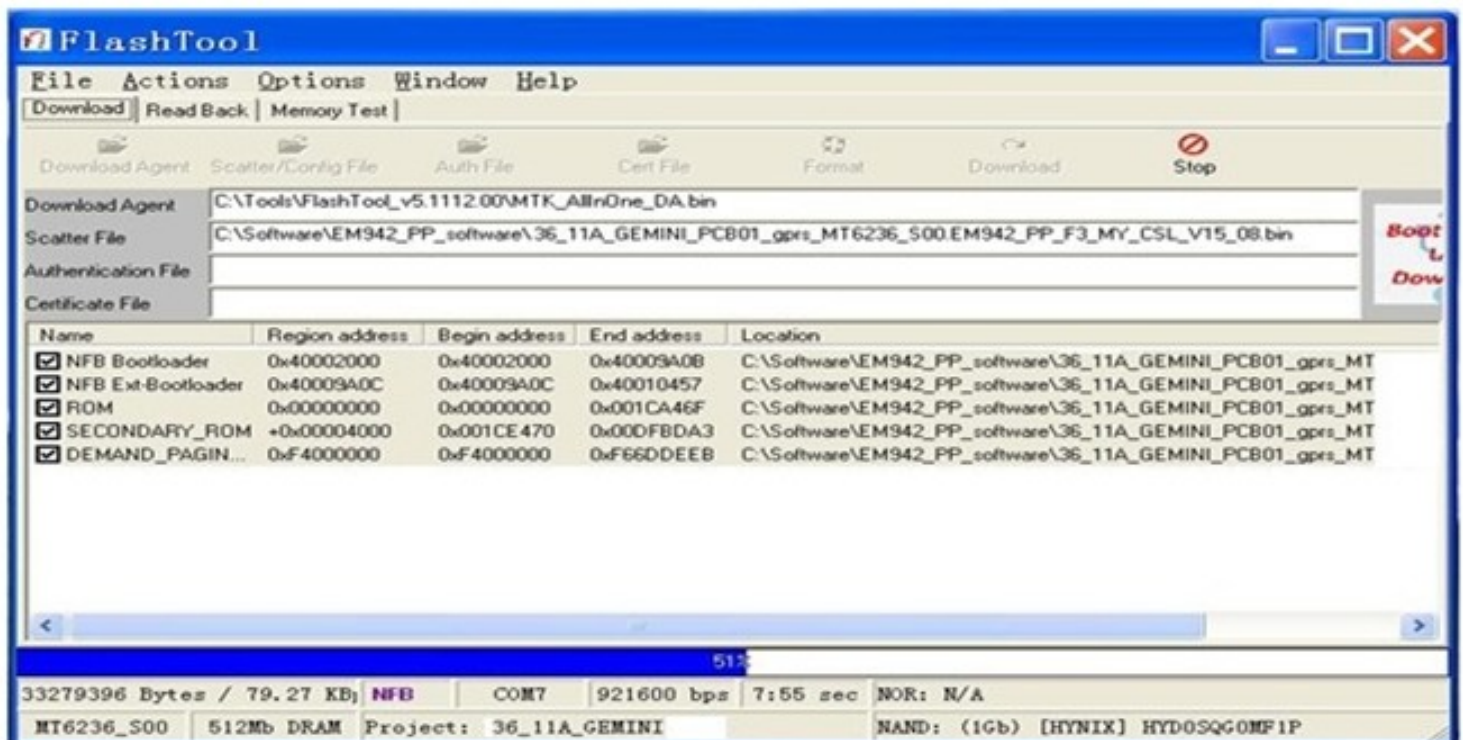


### 9.1.11 Connect to phone. (red progress bar)

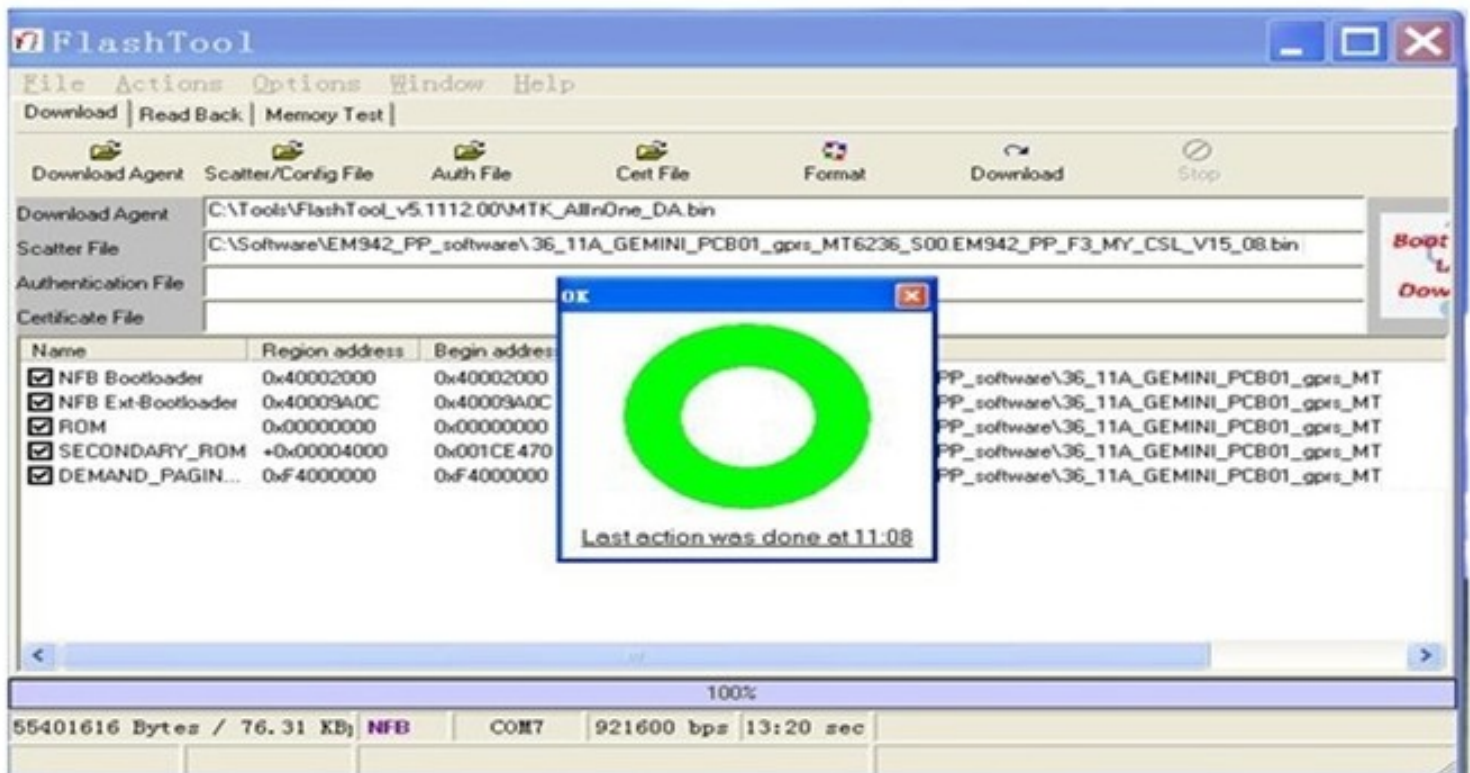




9.1.12 Downloading is in process. (blue progress bar)



9.1.13 Downloading is completed.



9.1.14 Power on phone and input “\*#84666\*#”, select “one key Restore”, phone will be reboot, then the user's setting could be eliminated entirely.



Description: can't power on(also upgrade software fail)

Root cause: red scroll 100% run completely when upgrade software, the detail as figure 1, also it prove power supply, clock is normal and defective typical issue is focus on CPU or FLASH poor soldering or damage, and maybe software do not fit for hardware.

Corrective action: check software fit for hardware whether or not, resoldering CPU and FLASH or exchange new CPU and FLASH.

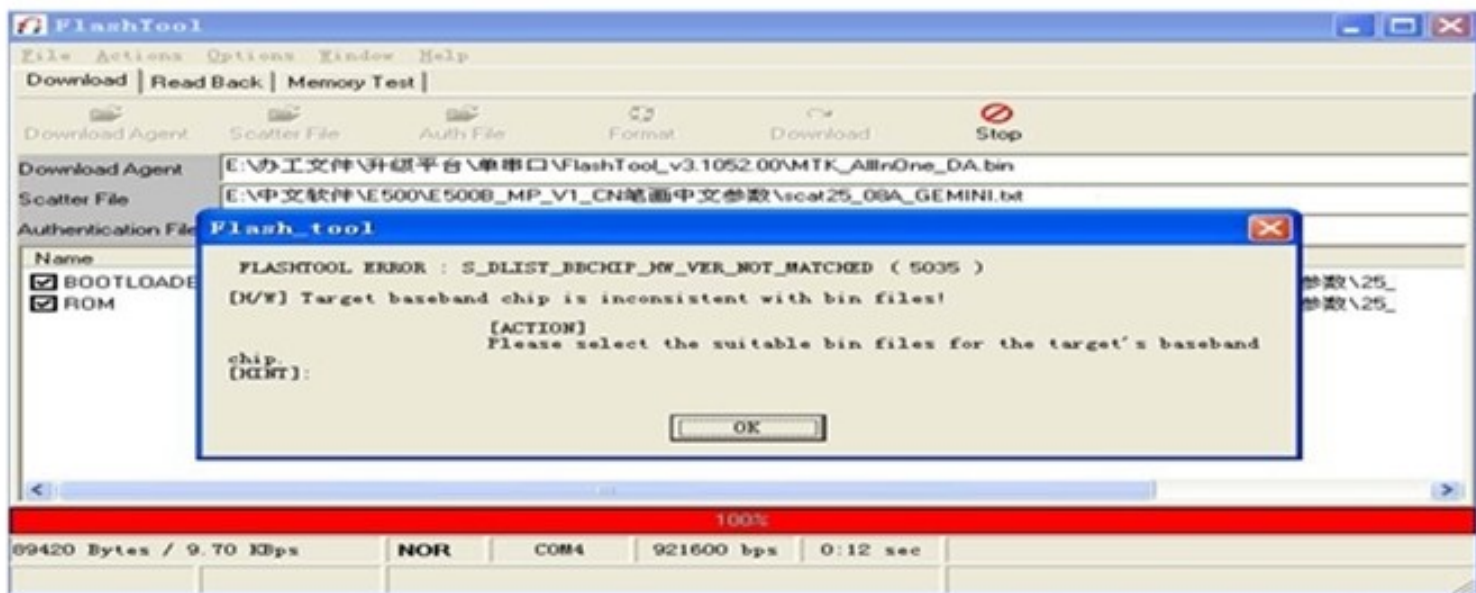


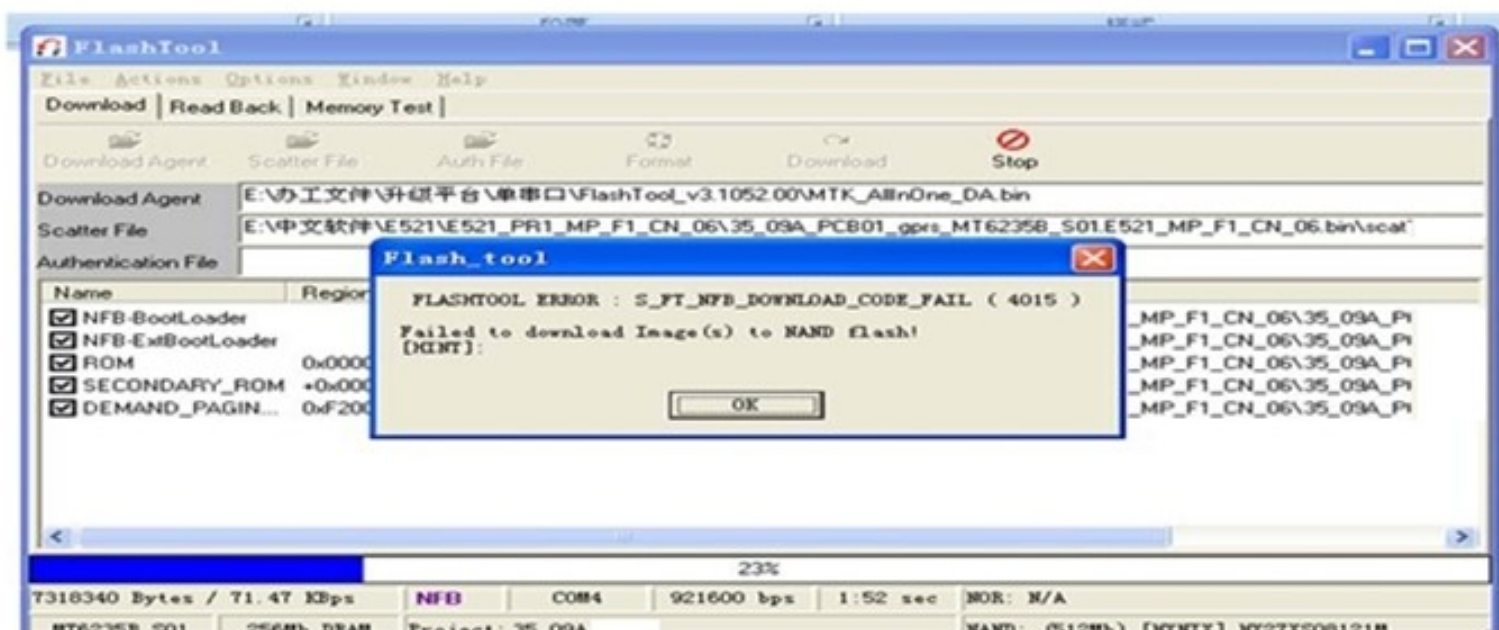
图 1(figure 1)

Description: E930 can't power on (handset is dead when upgrade software.)details as figure 2.

Root cause: the power supply and clock both work on as common during upgrade software.

The typical defective issue as poor soldering or go to fall, other way as exchange CPU or Flash.

Corrective action: re-solder CPU and Flash, or replace them.



## Chapter 10 CIT Testing

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Input “\*#84666\*#” in the standby mode.

1. Version: Confirm the firmware version.
2. Echo Loop: Receiver shall produce sound when blowing over the microphone.
3. Keypad: Press every button on the handset until the screen is clear.
4. Vibrator: Press “start” then the vibration shall start.
5. Loud SPK: Press “start” the speaker shall work.
6. Ringtone: Press “start” the ringtone shall be played.
7. LED: Press “OK” to test the LED.
8. LCD: Select “Auto Display” LCD shall perform the self-testing.
9. Receiver: Press “start” the receiver shall produce sound.
10. Camera: Menu- Camera, test the capture and shooting, no need to save.