

# BLU<sup>TM</sup>

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P R O D U C T S



## Tank II

## Service Manual

1. **Main Functions:**
  - cool surface and Fashionable design
  - Full keyboard for message writing
  - Audio Play/Video Recording/VGA Camera
  - CMOS Camera, 0.08 M Pixel
  - MMS/WAP/Email
  - Support 4G T-Flash Card
  - Support PC sync
  - Track ball function
  - Network GSM900/1800/850/1900
2. **Main Selling Points**
  - FM radio/record
  - 12.4 QQVGA 240\*320
3. **Other Functions**
  - USB1.1
  - SIZE 121.2\*50.7\*13.4mm



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The purpose of this document is to help service workshop technicians to service products. This service manual must be used only by authorized service suppliers. The content of it is confidential. Please note that provides other guidance documents for service suppliers. Follow these regularly and comply with the given instructions. While every effort has been made to ensure the accuracy of this document, some errors may exist. Please keep in mind also that this documentation is continuously being updated and modified, so always watch out for the newest version.

## CAUTIONS

Please refer to the phone's user's guide for instructions relating to operation, care, and maintenance, which includes important safety information.

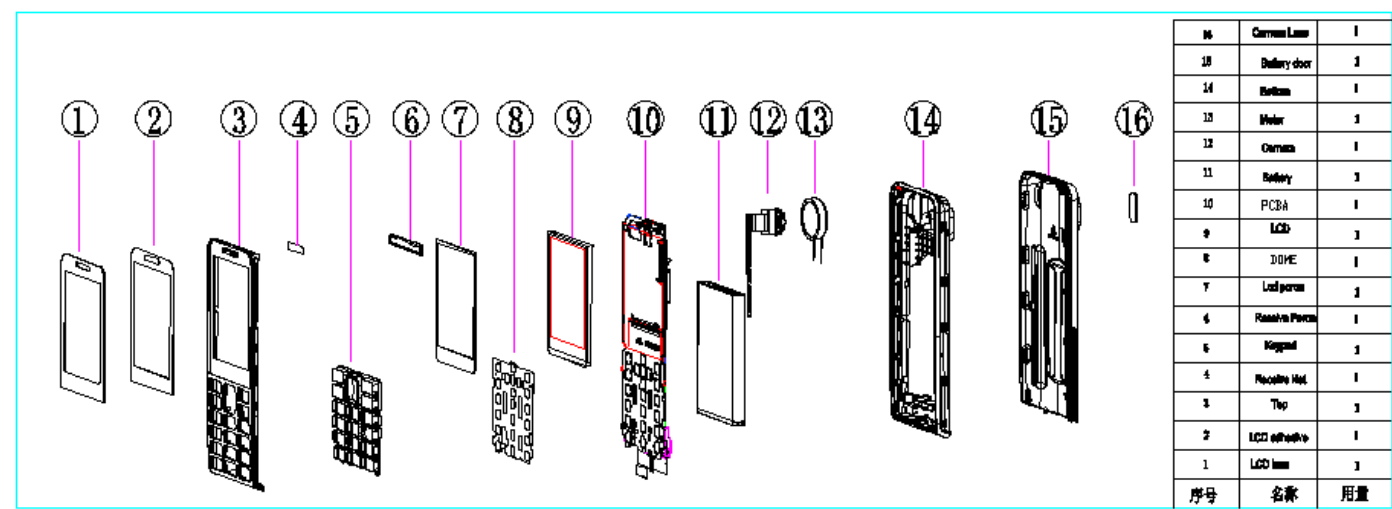
- 1      Servicing and alignment must be undertaken by qualified personnel only.
- 2      Ensure all work is carried out at an anti-static workstation and that an anti-static wrist strap is worn.
- 3      Use only approved components as specified in the parts list.
- 4      Ensure all components, modules, screws, and insulators are correctly re-fitted after servicing and alignment
- 5      Ensure all cables and wires are repositioned correctly electrostatic discharge can easily damage the sensitive components of electronic products. Therefore, every service supplier must observe the precautions which mentioned above.

## GENERAL REPAIR INFORMATION

- 1      Make sure your testing equipment is functioning properly before beginning repair work.
- 2      Before starting repairs you must observe ESD precautions such as being in your ESD protected area and connecting your wristband.
- 3      Use gloves to avoid corrosion and fingerprints.
- 4      Cover windows and displays with a protective film to avoid dust and scratches.
- 5      Use a lint-free cloth to clean the LCD.
- 6      When cleaning the pads use a soft cloth\ESD brush and isopropanol. Do not use a glass fiber pencil: this scratches the surface and will corrosion.
- 7      Non-faulty mechanical parts (except shielding lids and bent parts or soldered components).May be reused if they are not soldered.
- 8      When removing the shielding lids make sure to replace them with new ones, otherwise the high-frequency leakage can affect the device.
- 9      Always use the original spare parts.
- 10     Check the soldering joints of the parts concerned with regard to the fault symptom. And resolder them if necessary.
- 11     Remove excess soldering flux after repair.
- 12     Observe the torque requirements when assembling the unit.
- 13     Please aware that some malfunctions may be software related and solved by an update

Chapter 1

EXPLODED VIEW AND COMPONENT DISPOSAL EXPLODED



## DISASSEMBLY AND ASSEMBLY SERVICE TOOLS



Iron



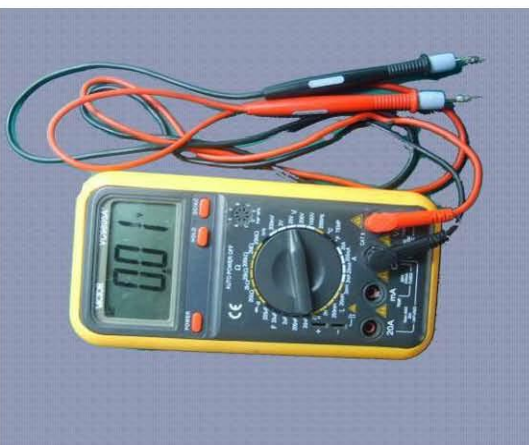
850 heater



Oscillograph



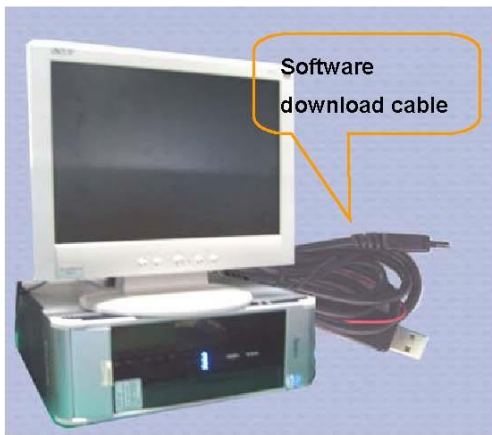
Voltage regulator



Multimeter



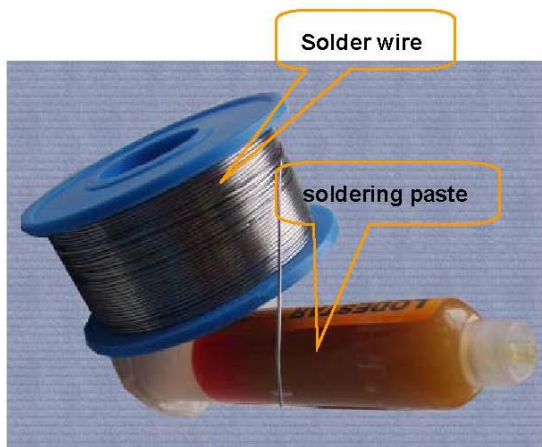
Constant temperature heater



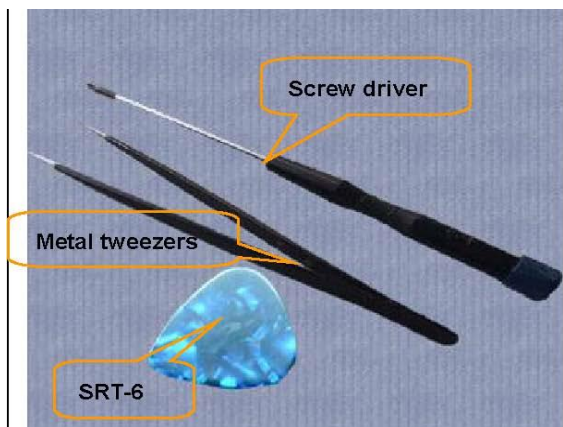
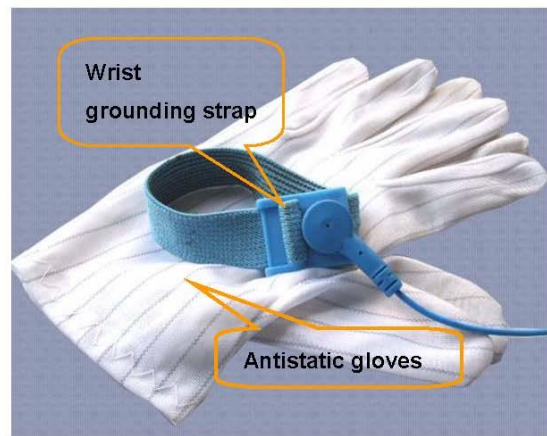
**Computer and software download cable**



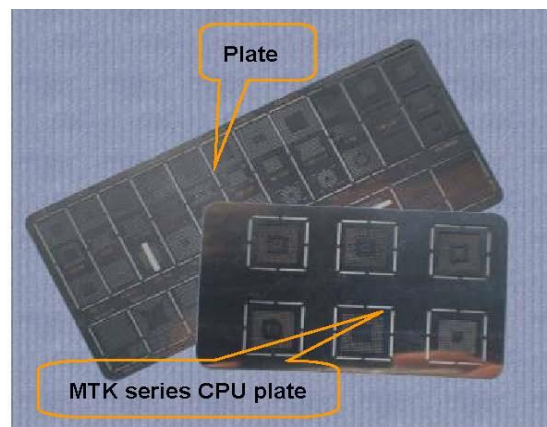
**Microscope**



**Solder wire, soldering paste Wrist grounding strap, Antistatic gloves**



**Metal tweezers, Screw driver, SRT-6 Plates**



## Chapter 2

### SYSTEM BLOCK DIAGRAM

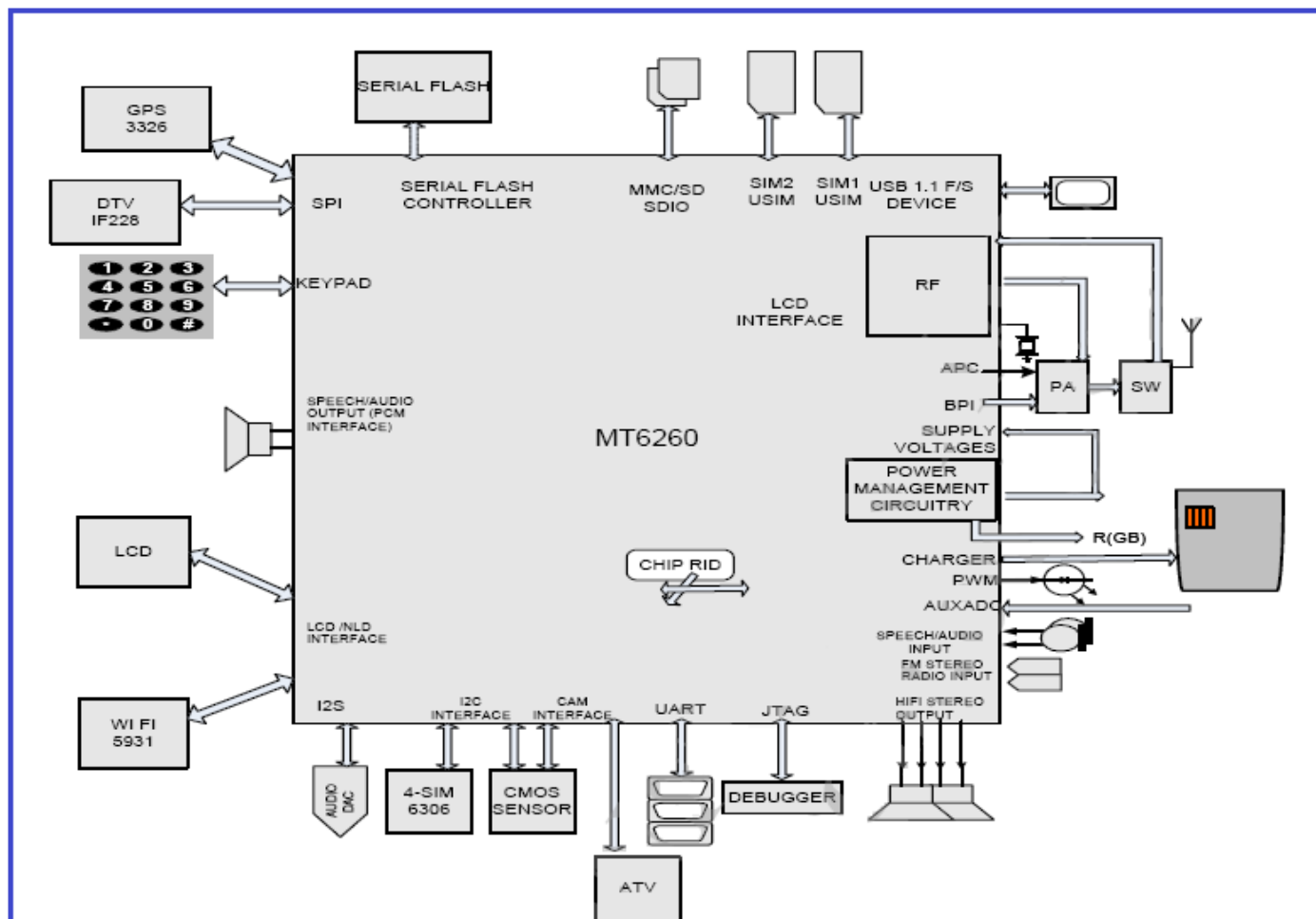
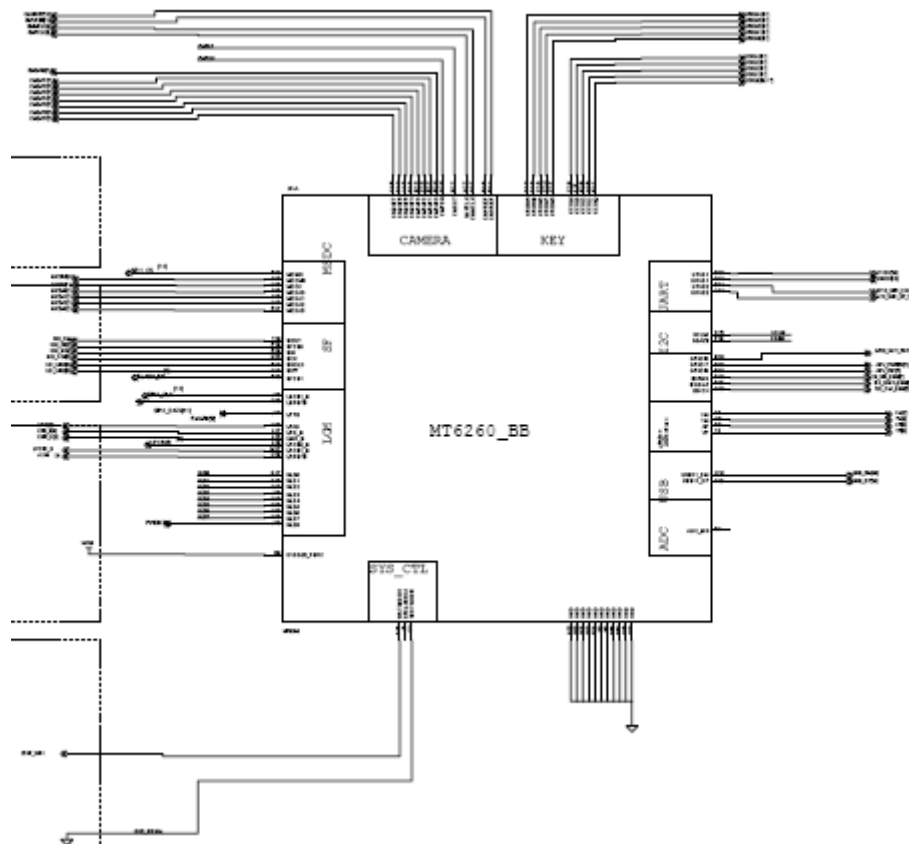


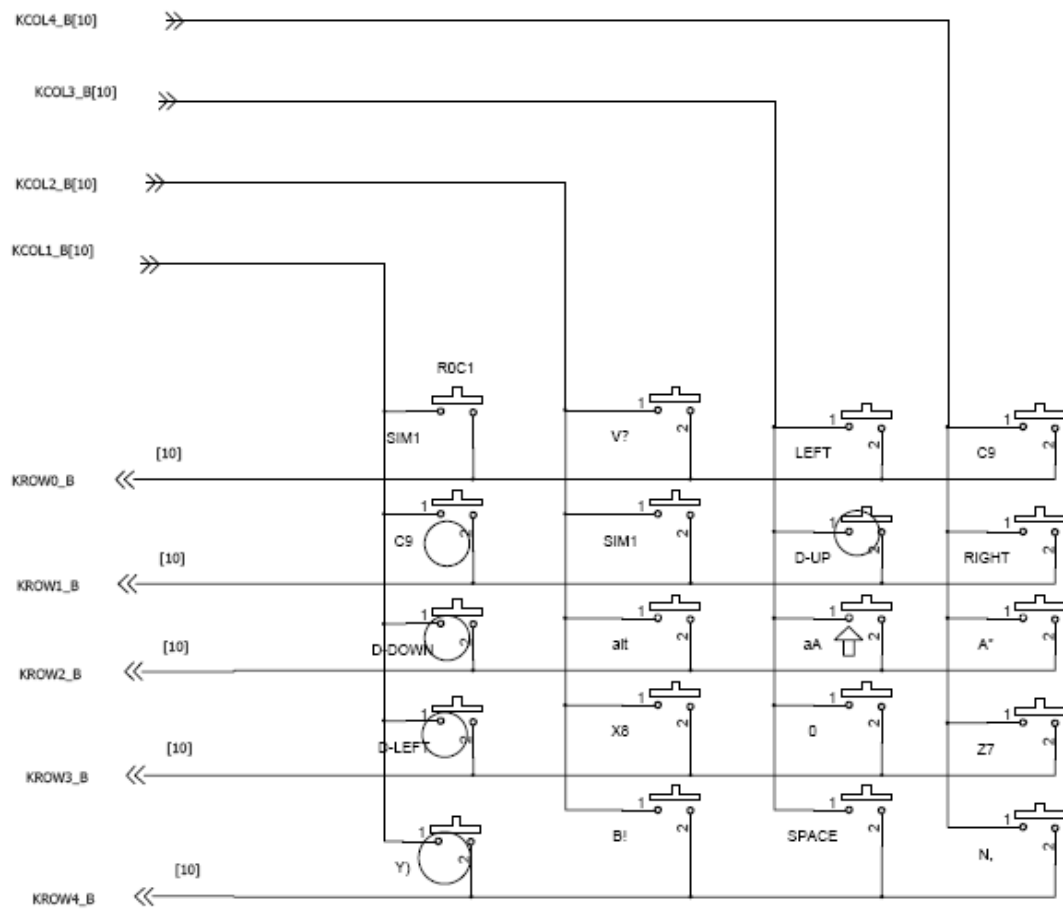
Figure 1. Typical application of MT6260

## INSTRUCTION OF THE UNIT CIRCUIT

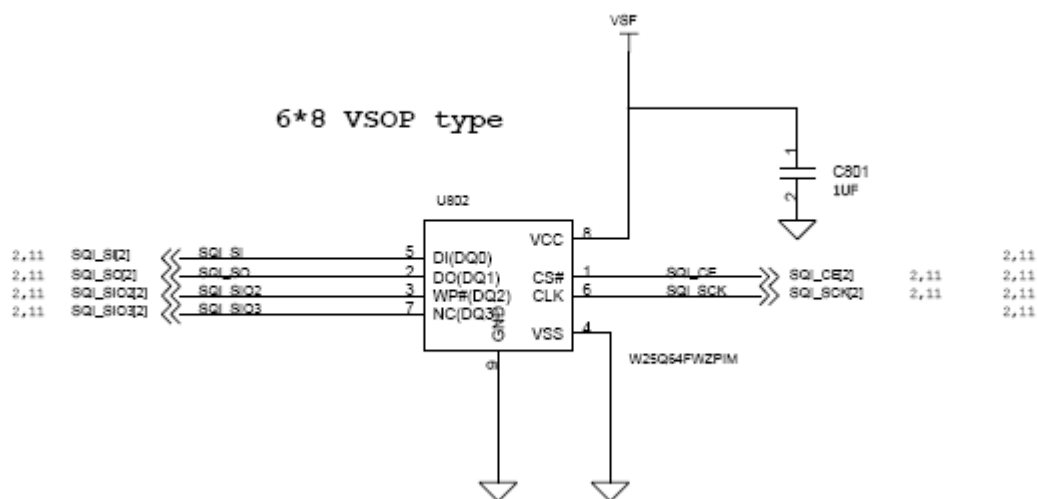
## Circuit instruction of CPU



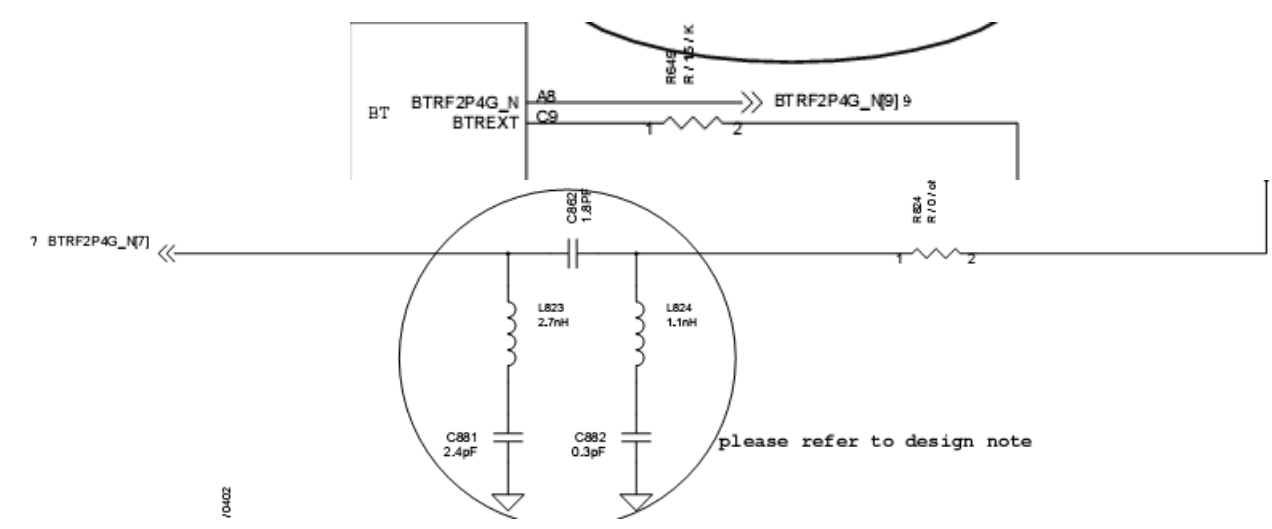
## CPU—input of the keypad



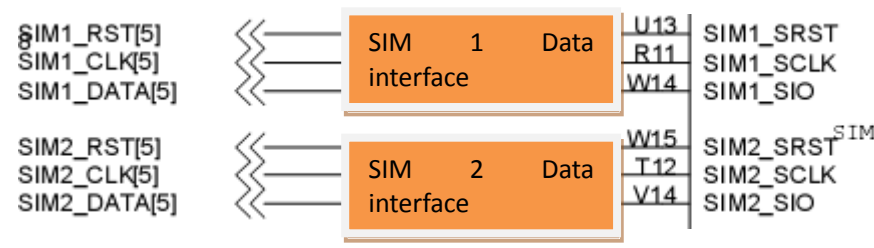
The joint circuit of the f master and the FLASH data



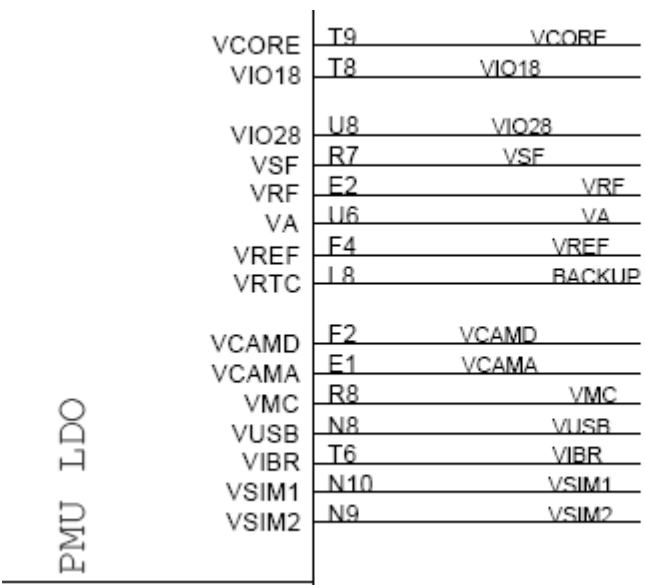
Bluetooth control and data transmit port of master



Data control port of Double SIM card



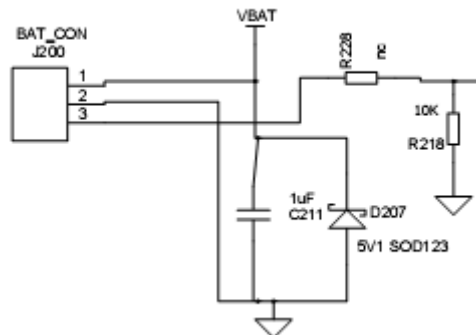
7.2 MT6260 CPU power supply port



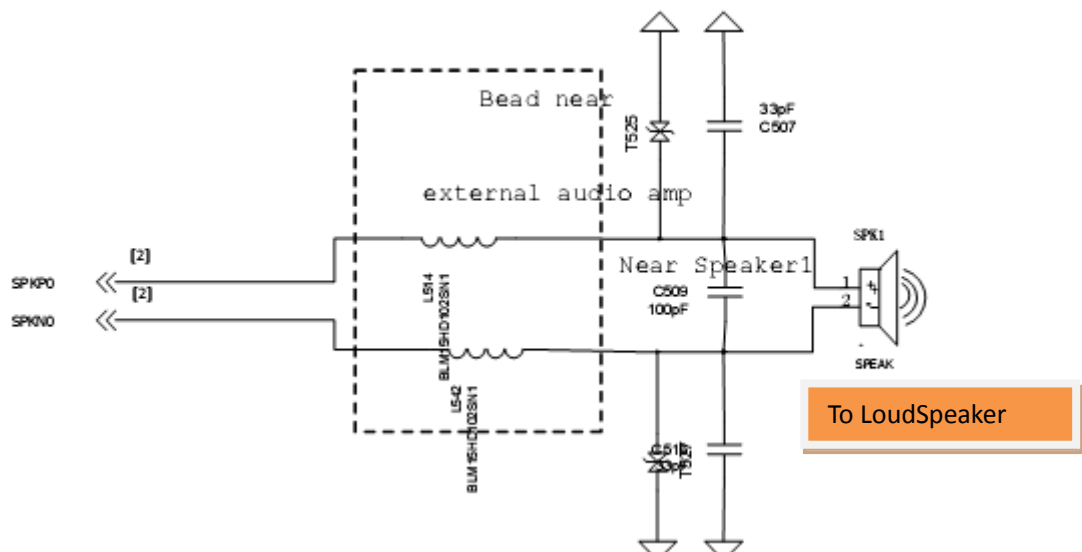
## CPU voltage and current reference

VCORE	1.2	200
VRF	2.8	150
VIO18	1.8	200
VSF	1.86/3.3	100
VCAMA	1.5/1.8/2.5/2.8	150
VA	2.8	150
VTCXO	2.8	50
VCAMD	1.3/1.5/1.8/2.5/2.8/3.0/3.3	100
VIO28	2.8	200
VBTT	2.8	100
VUSB	3.3	50
VSIM	1.8/3.0	30
VSIM2	1.3/1.5/1.8/2.5/2.8/3.0/3.3	30
VMC	1.6/1.8/2.8/3.0/3.3	200
VIBR	1.3/1.5/1.8/2.5/2.8/3.0/3.3	150
VRTC	2.8	2

## Battery connector



## Audio frequency PA

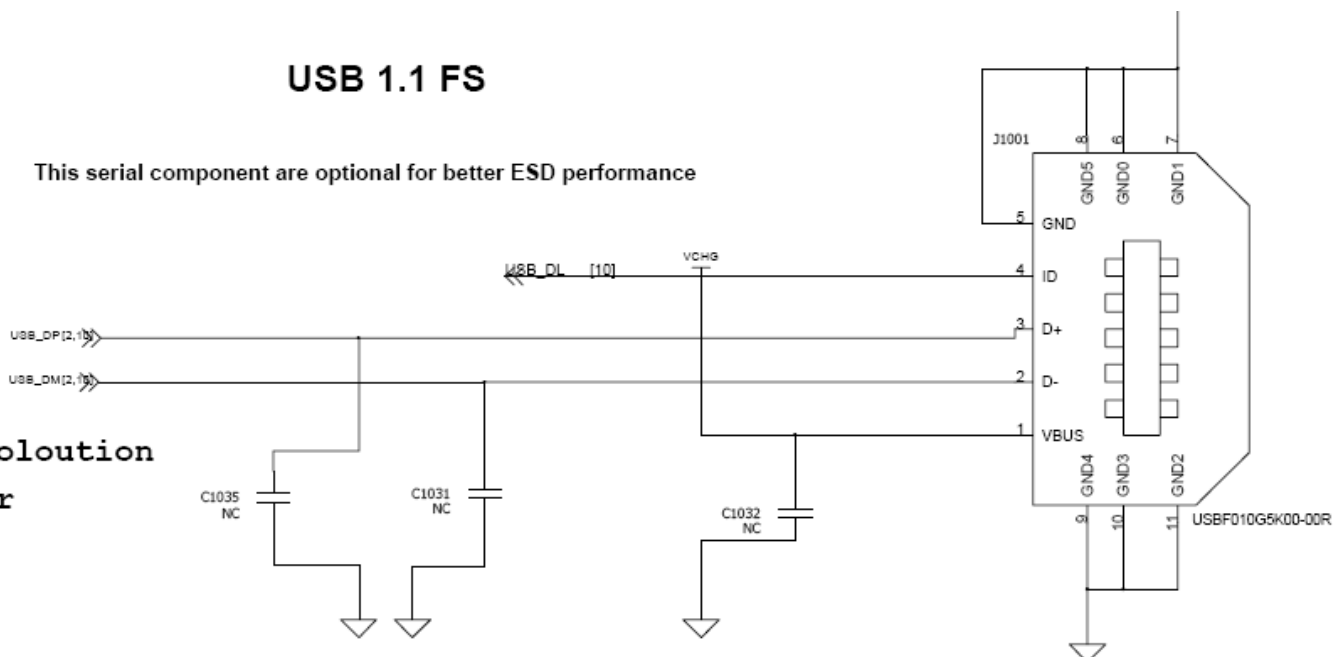


## I/O connector (5PIN)

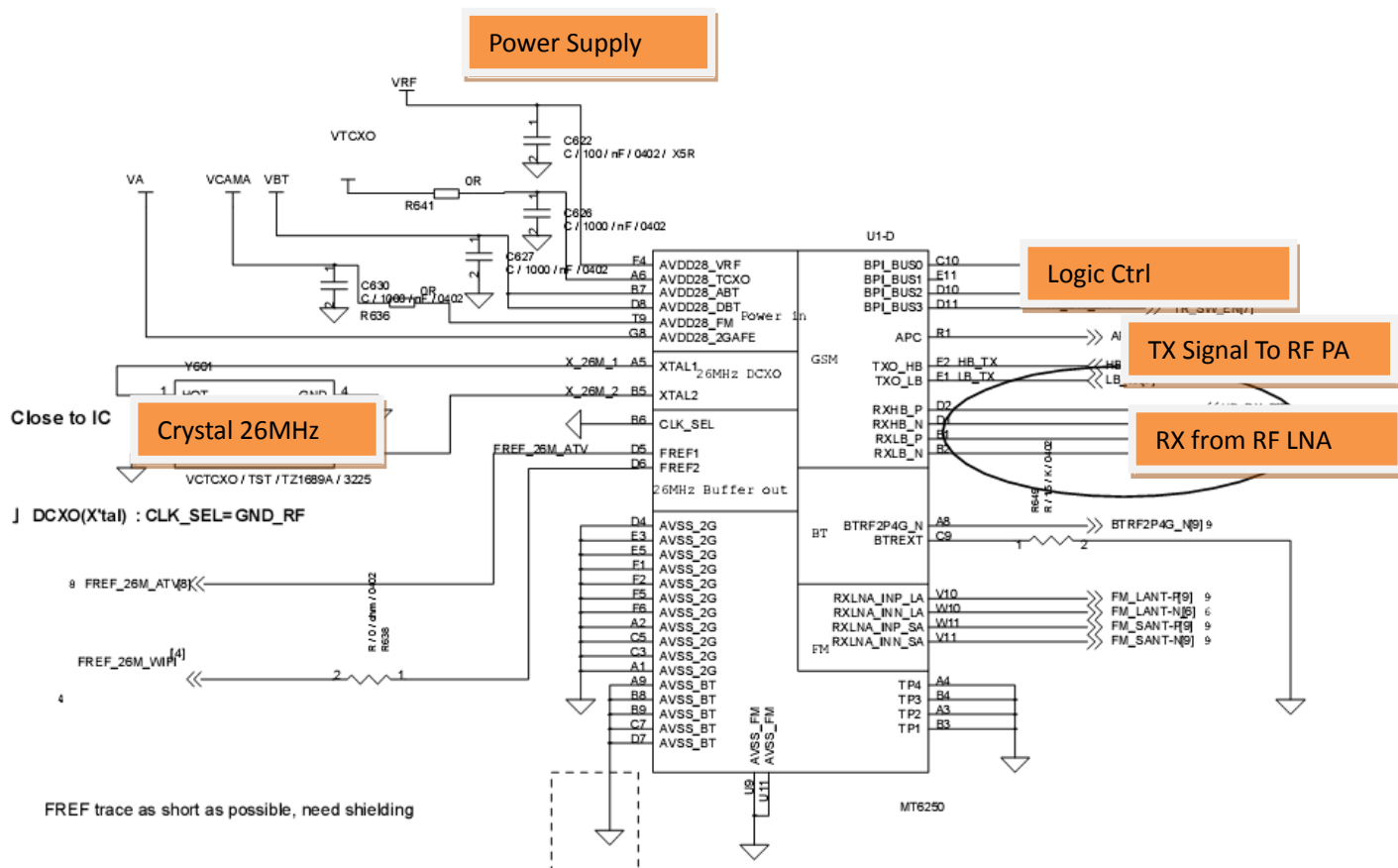
### USB 1.1 FS

This serial component are optional for better ESD performance

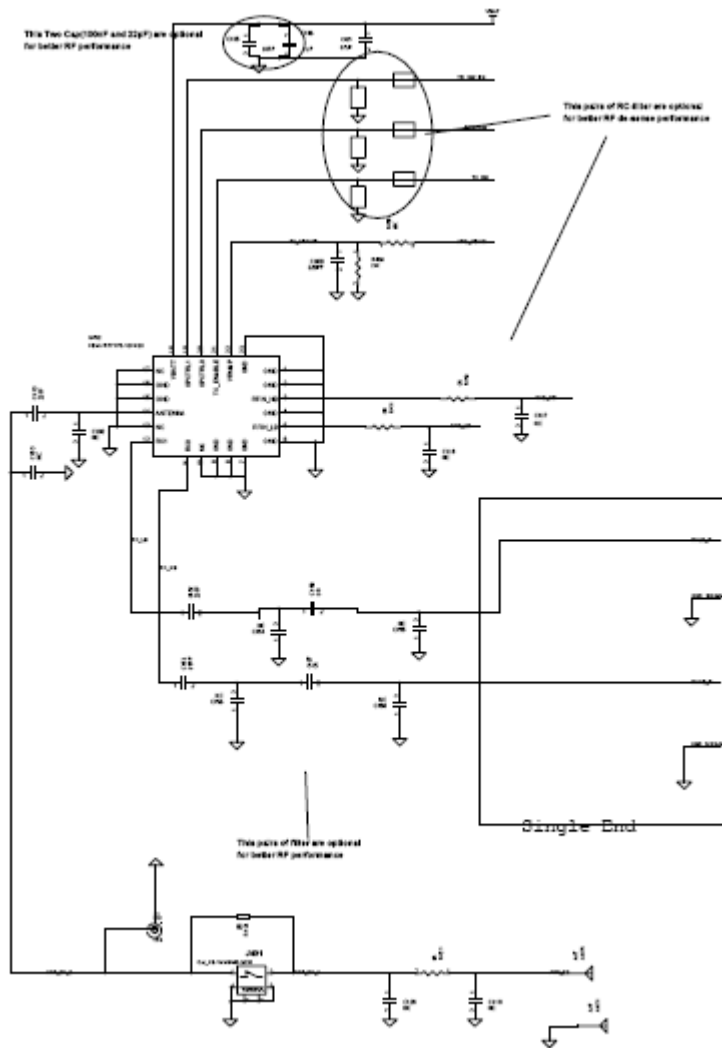
solution  
or



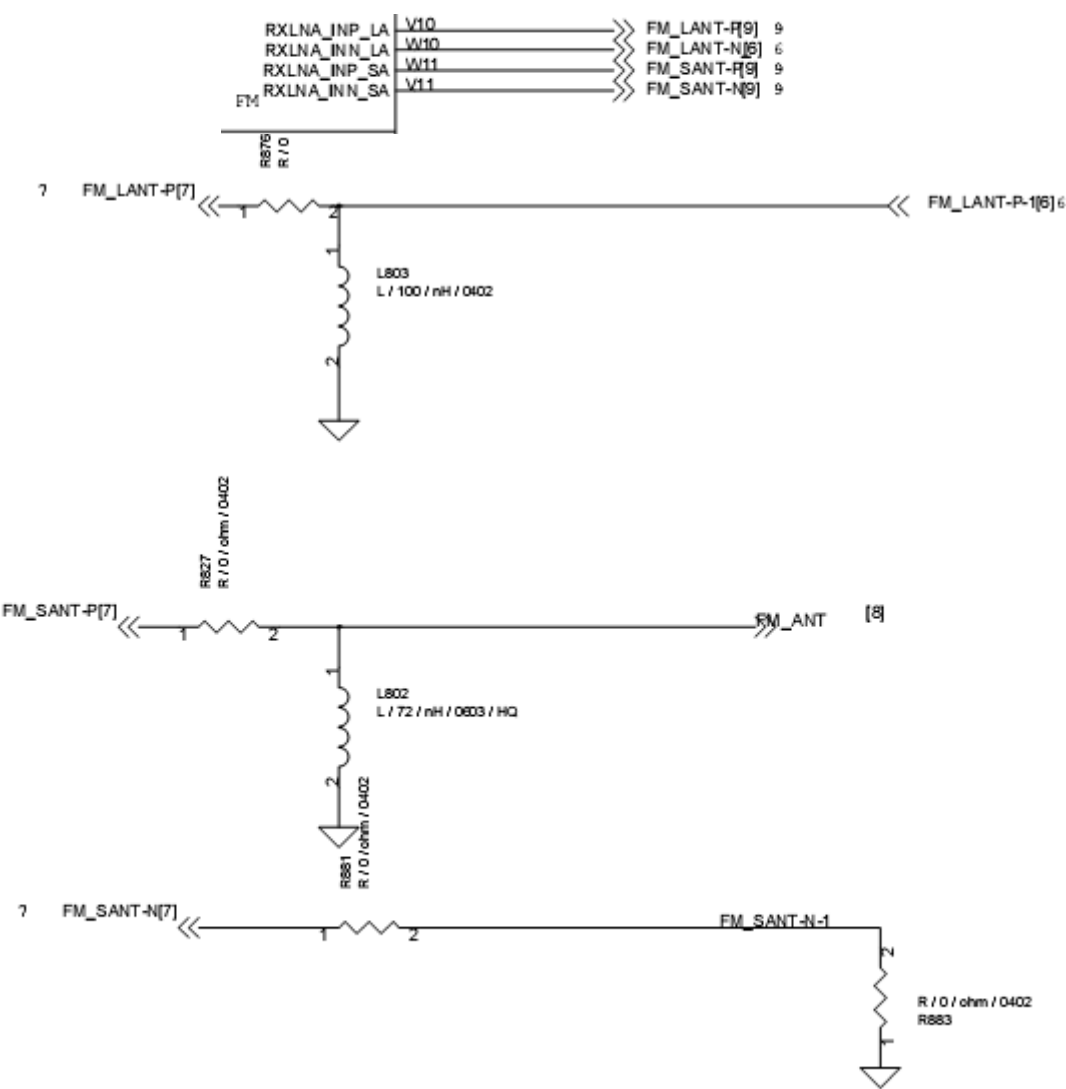
## RF IC Build in MT6260



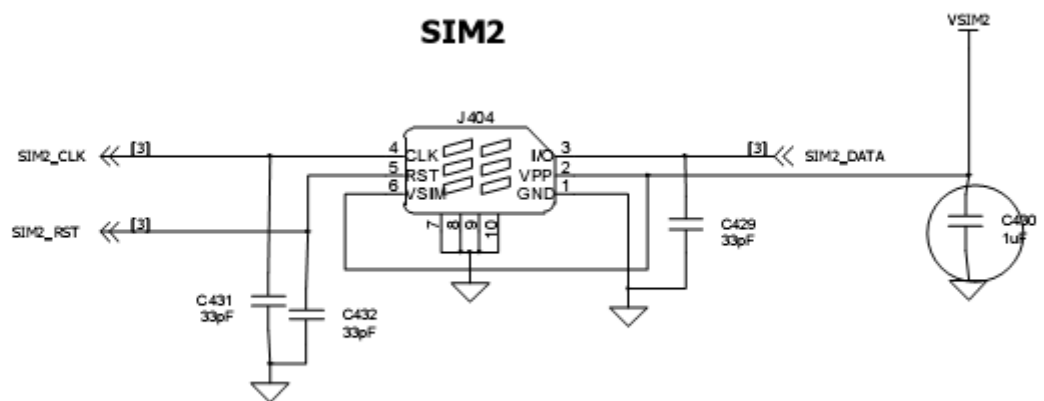
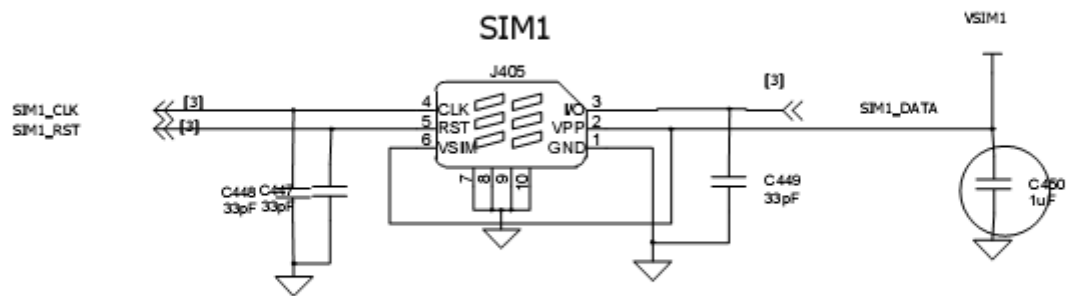
# RF PA IC



FM radio

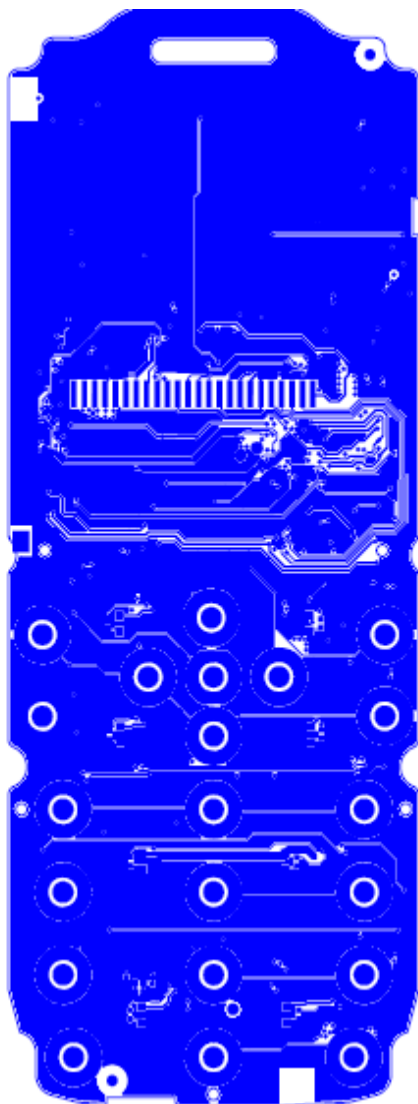


## SIM card circuit

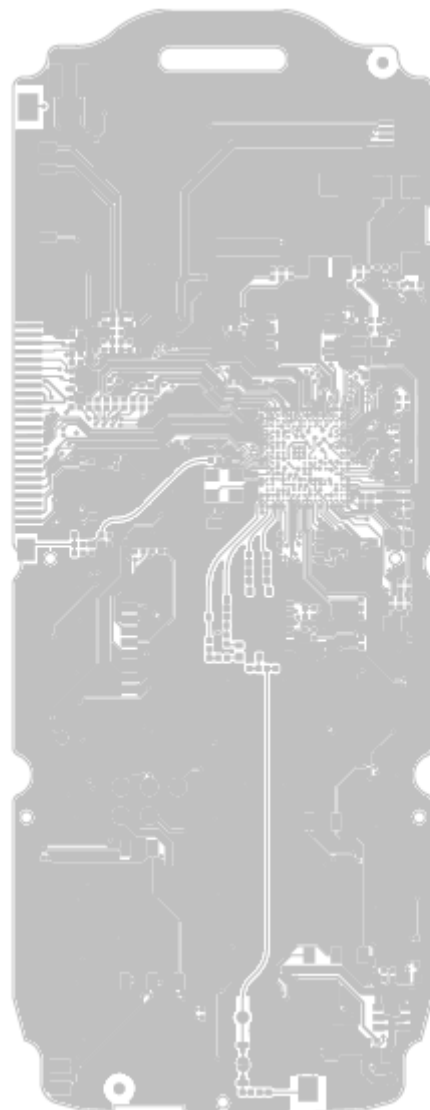


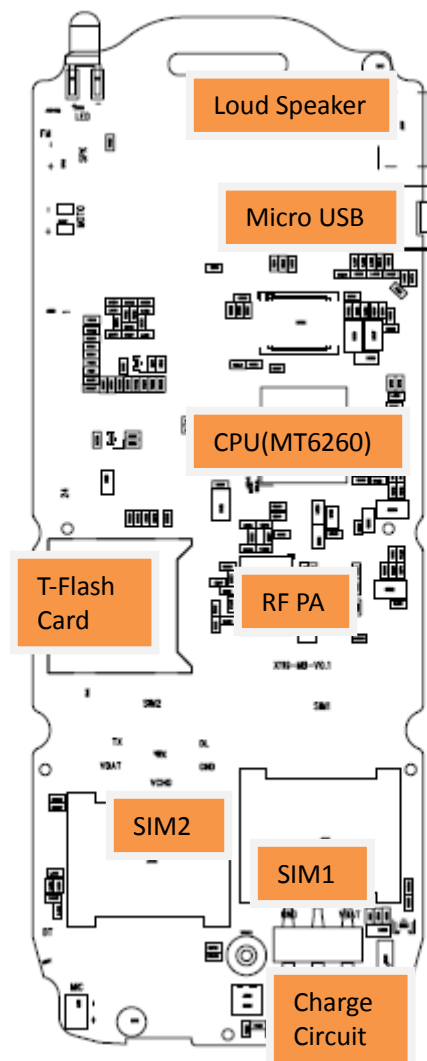
## Chapter 4 PCB Layout chart

PCB layout SIDE A



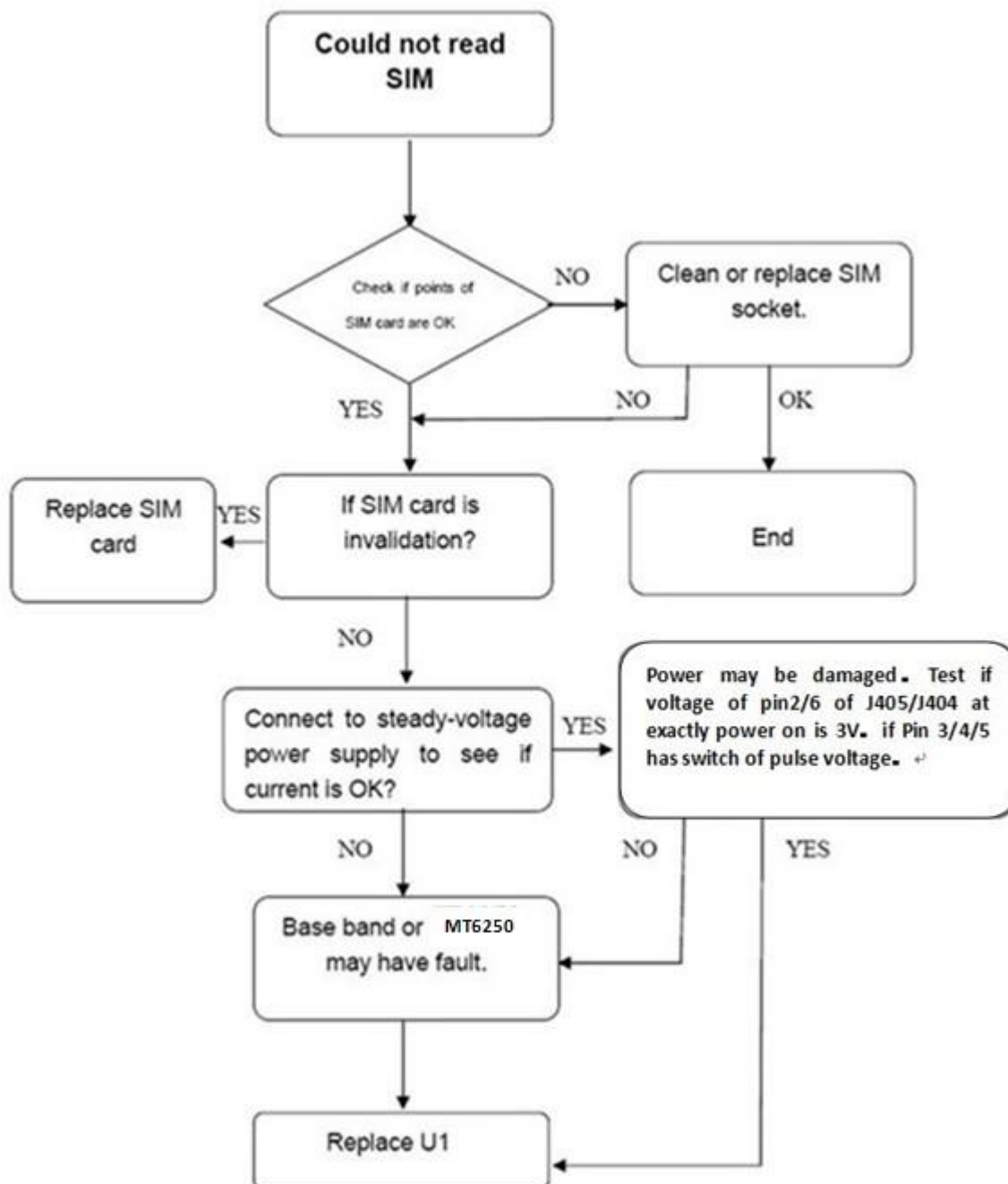
PCB layout SIDE B



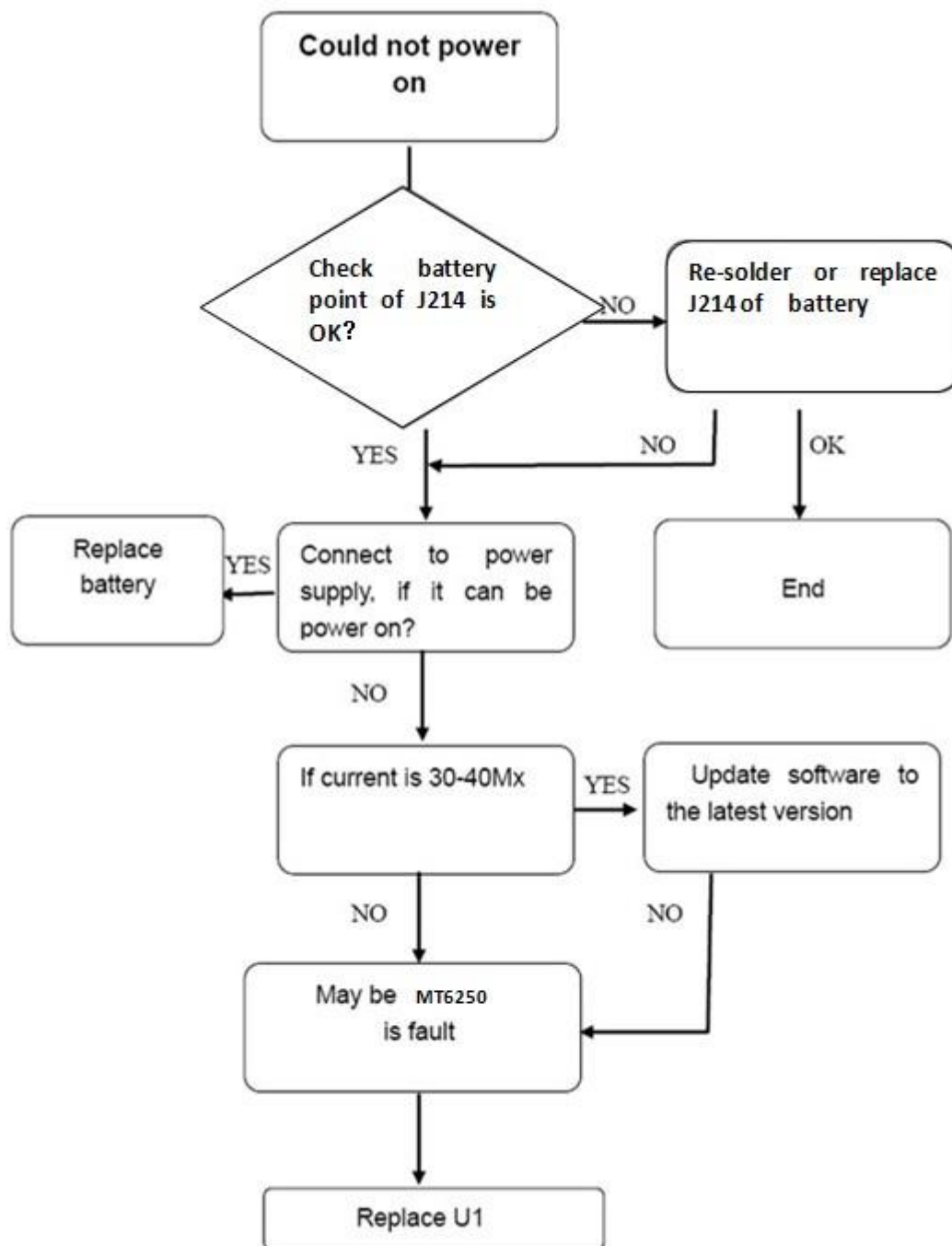


## Chapter 5

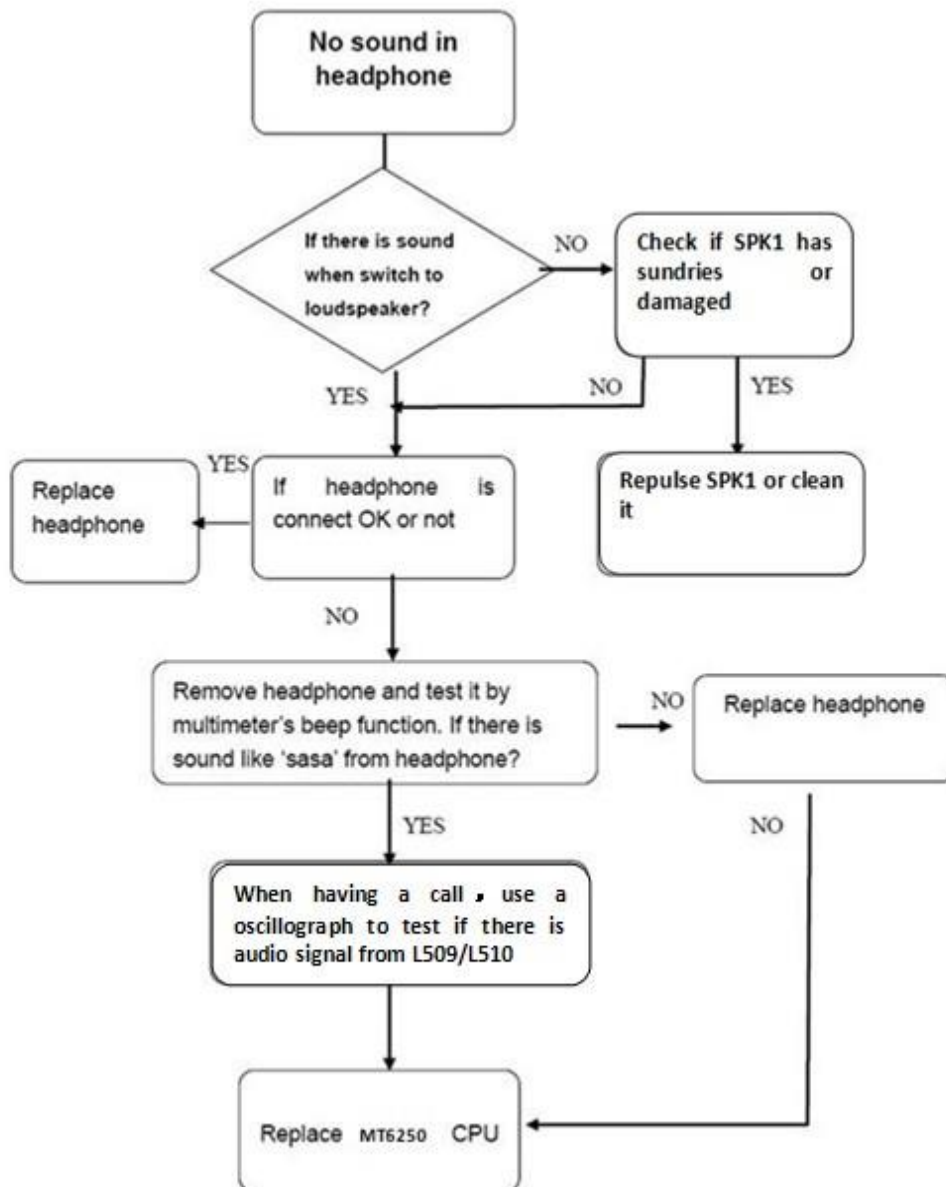
### TROUBLE SHOOTING Test flow chart of test SIM card



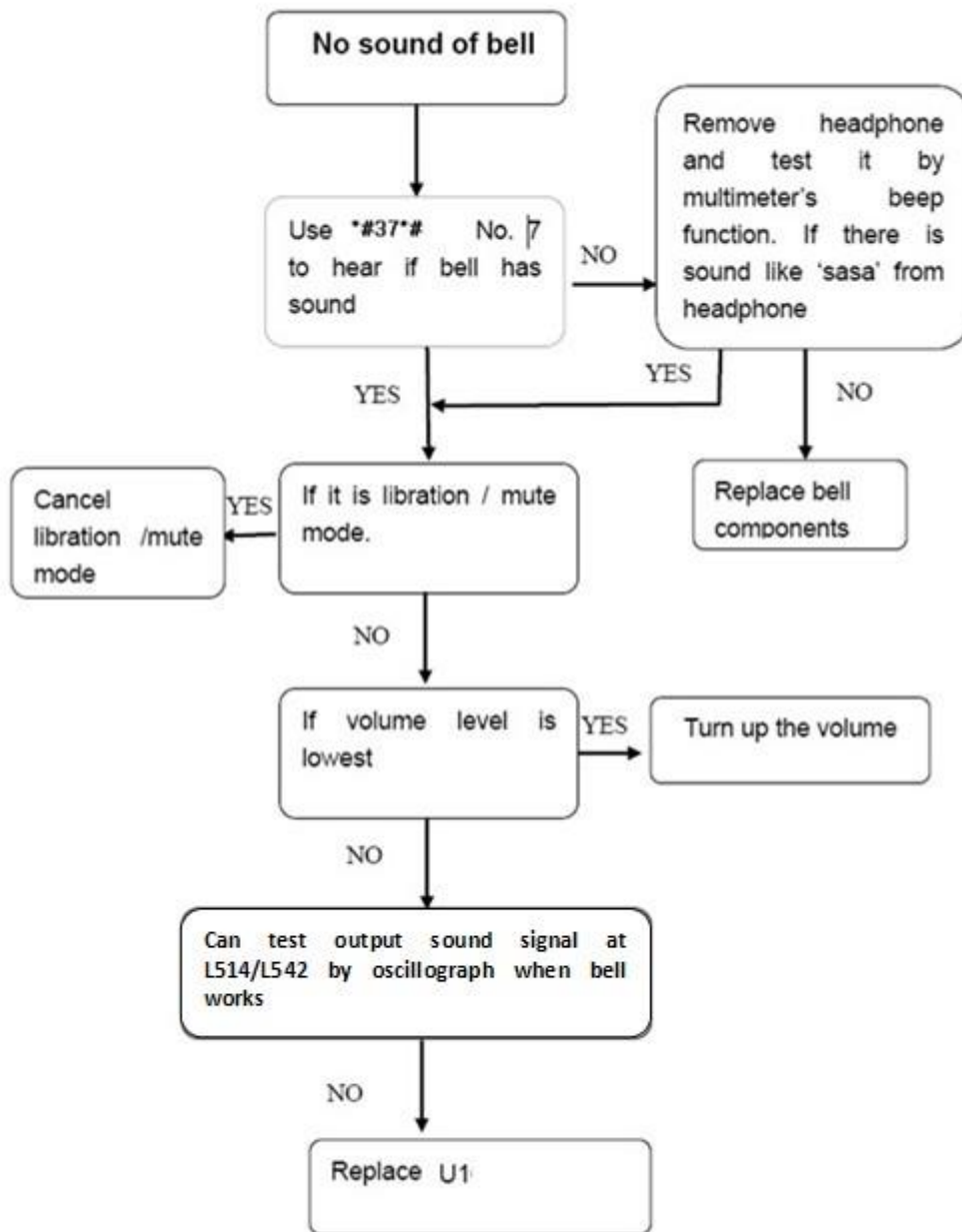
## Test flowchart of cannot power on (main)



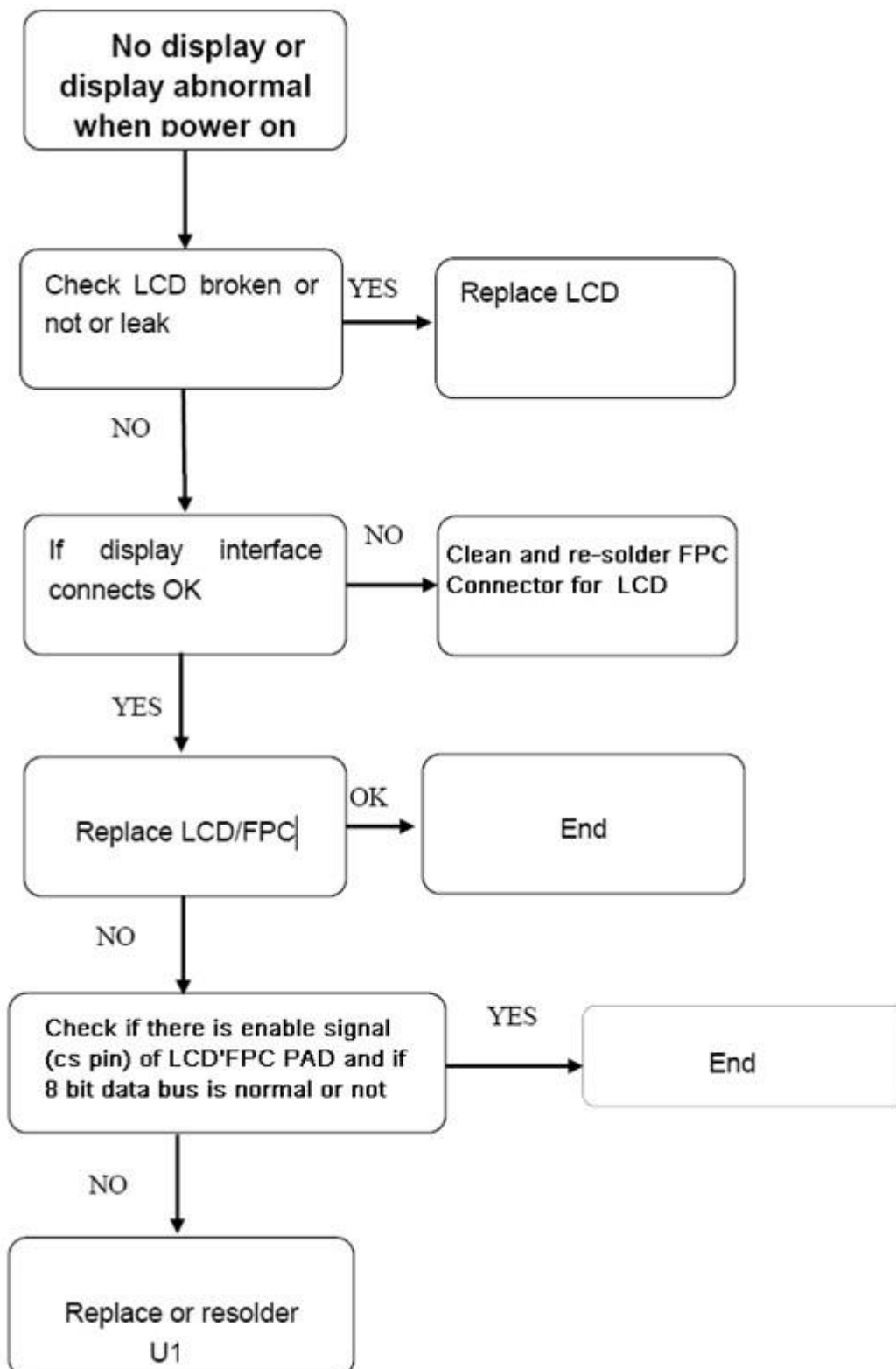
## The test flowchart of head phone



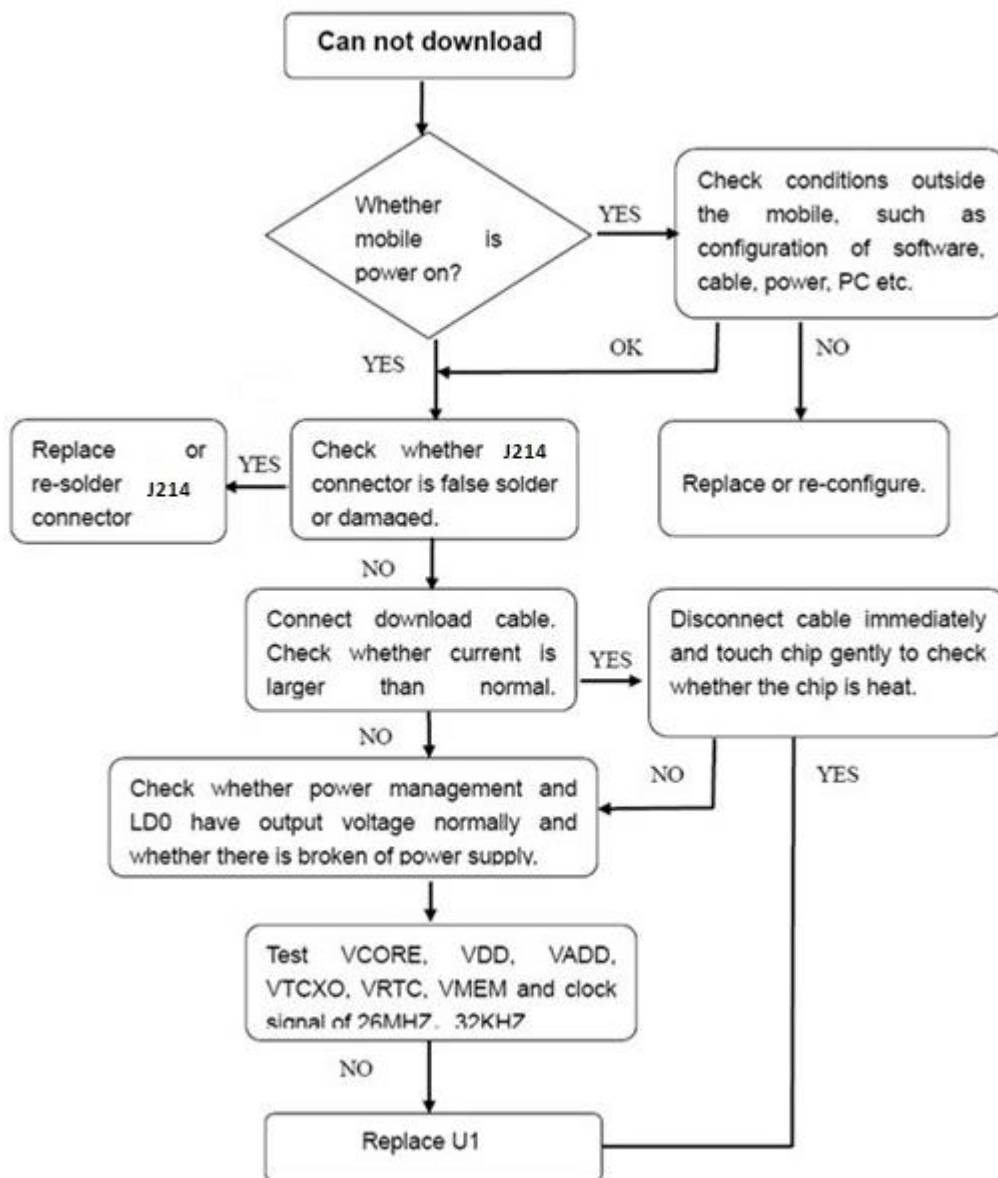
## Test flowchart of incoming call with no ring.



## Test flowchart of no display or display abnormally.



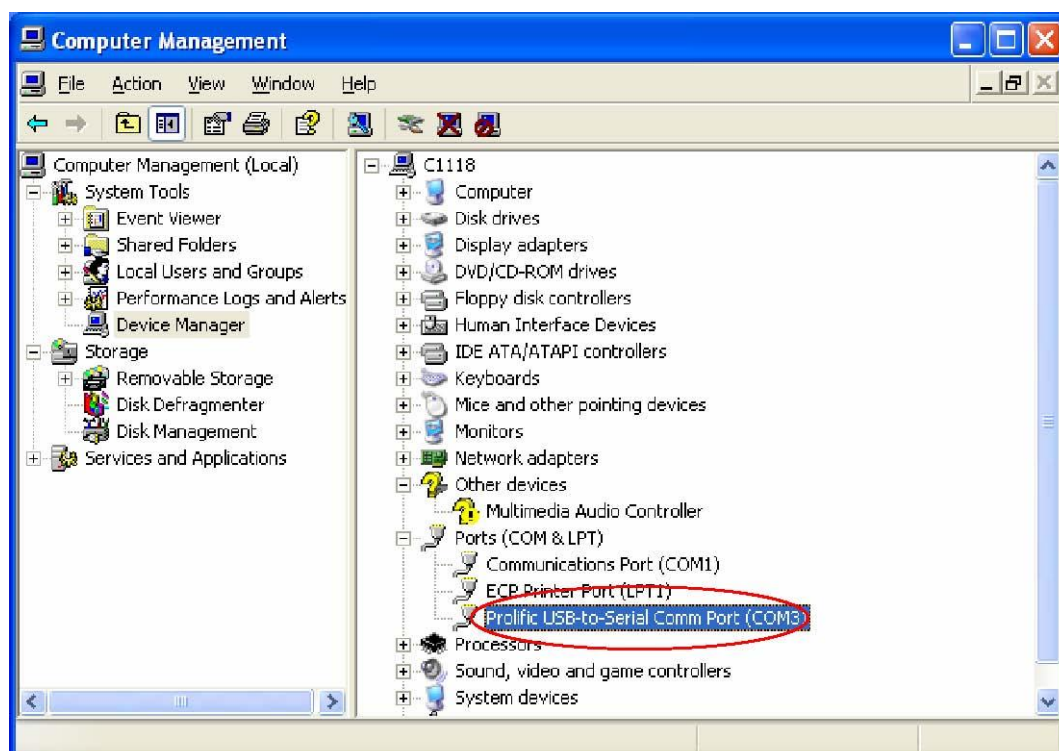
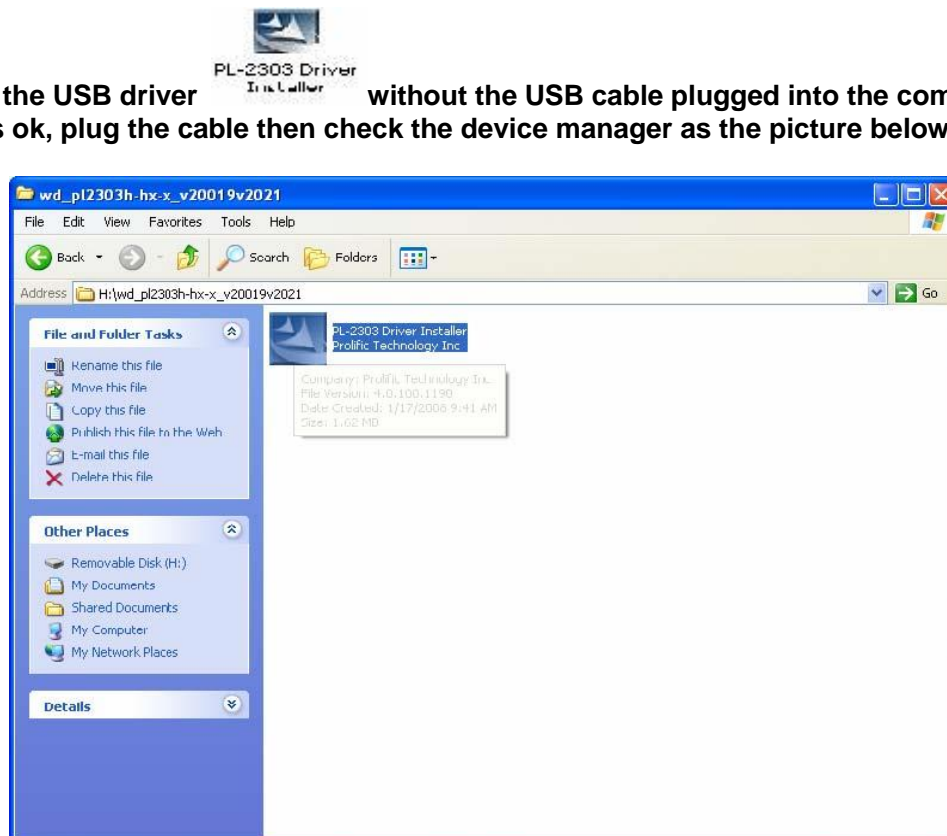
## The test flowchart of download failed



# Chapter6

## Instruction of SW update

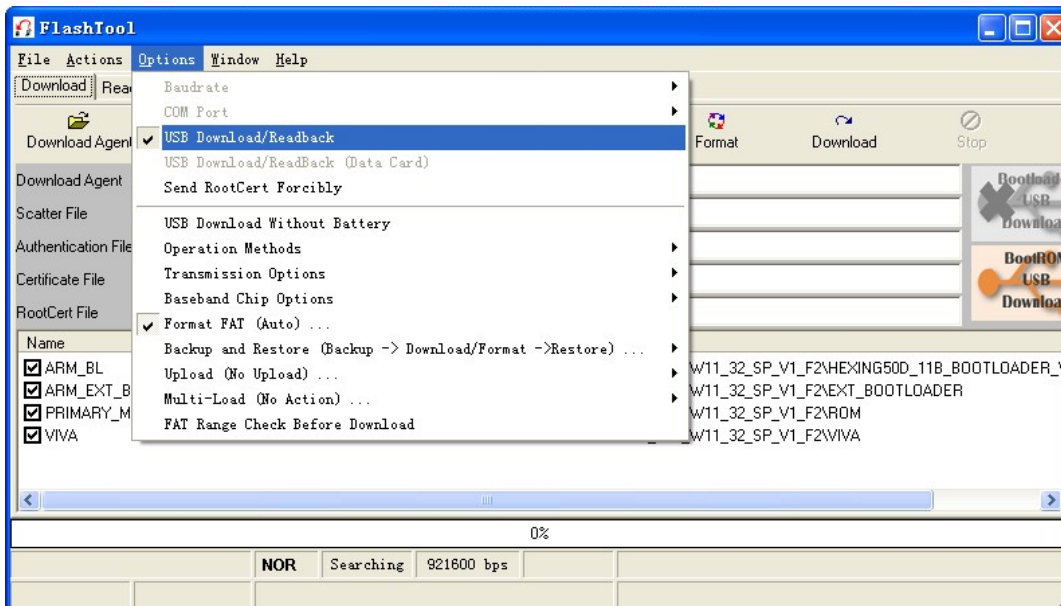
1. Install the USB driver **without the USB cable plugged into the computer.**
2. After it is ok, plug the cable then check the device manager as the picture below:





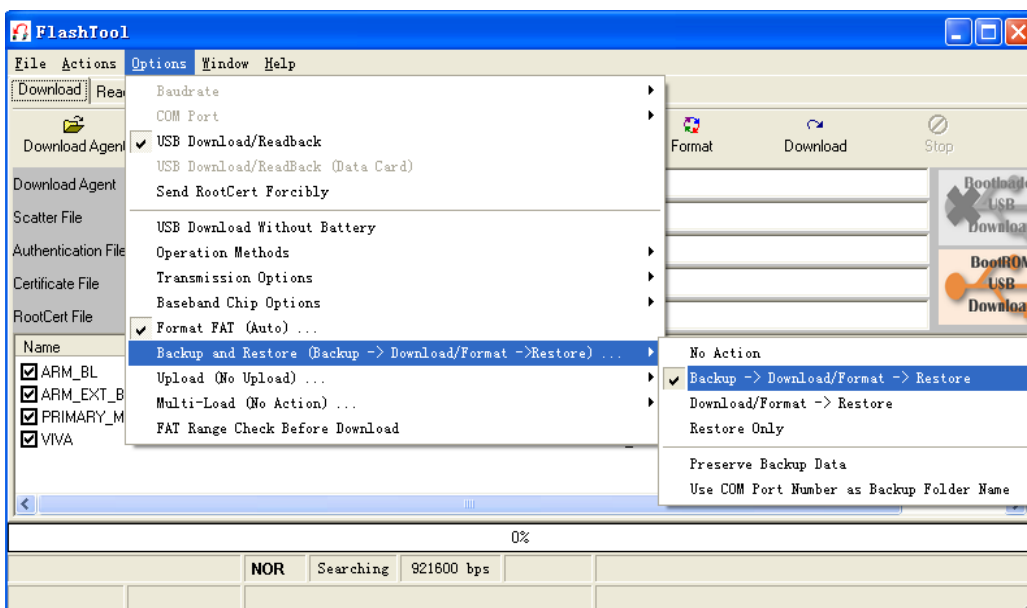
3. Double click **Flash\_tool\_v3.0848** to FlashTool\_v3.0848

### Choose right com port

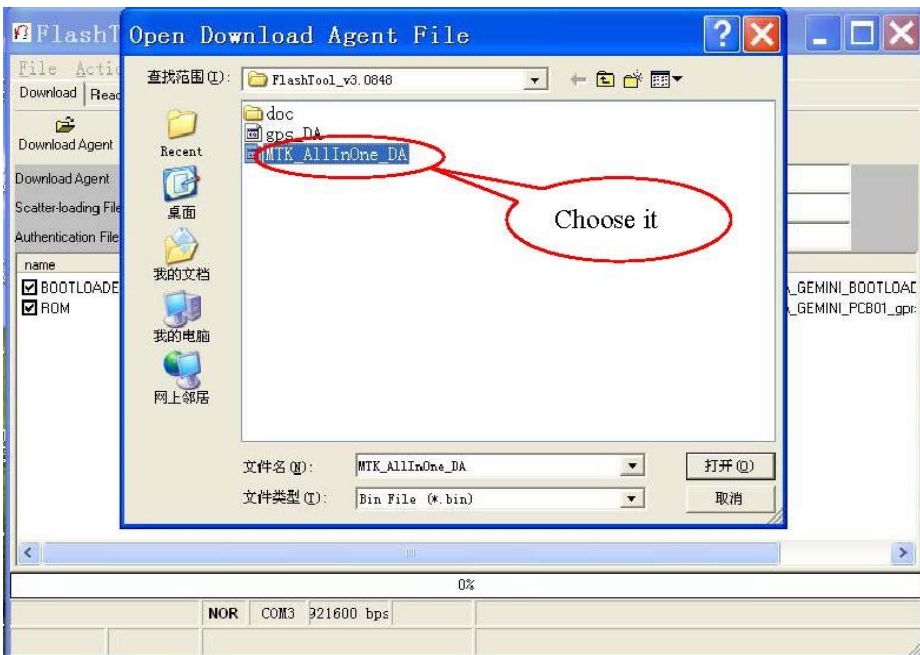
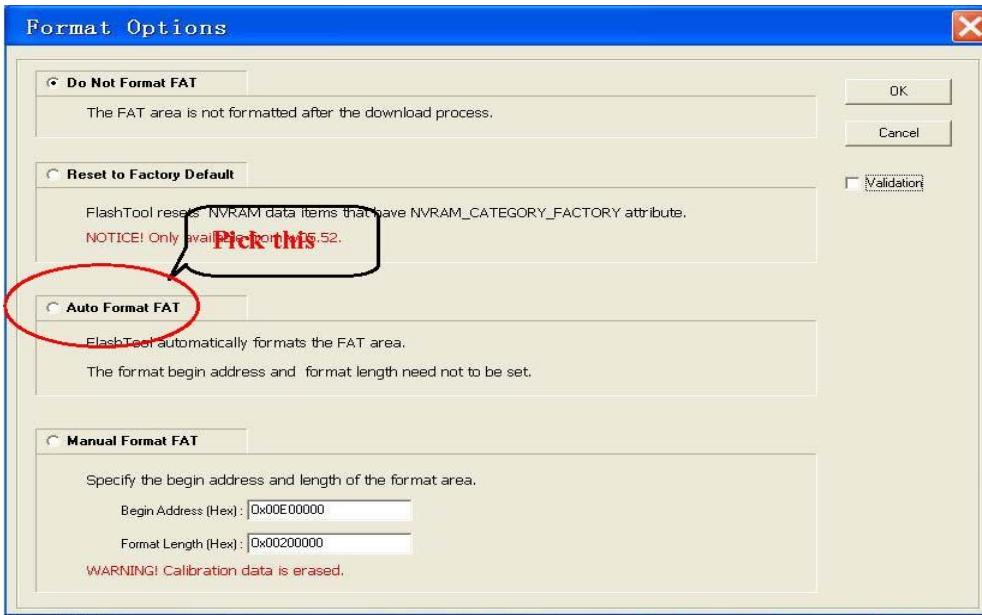


1 Please choose auto format FAT in “Format FAT” as demonstrated below.

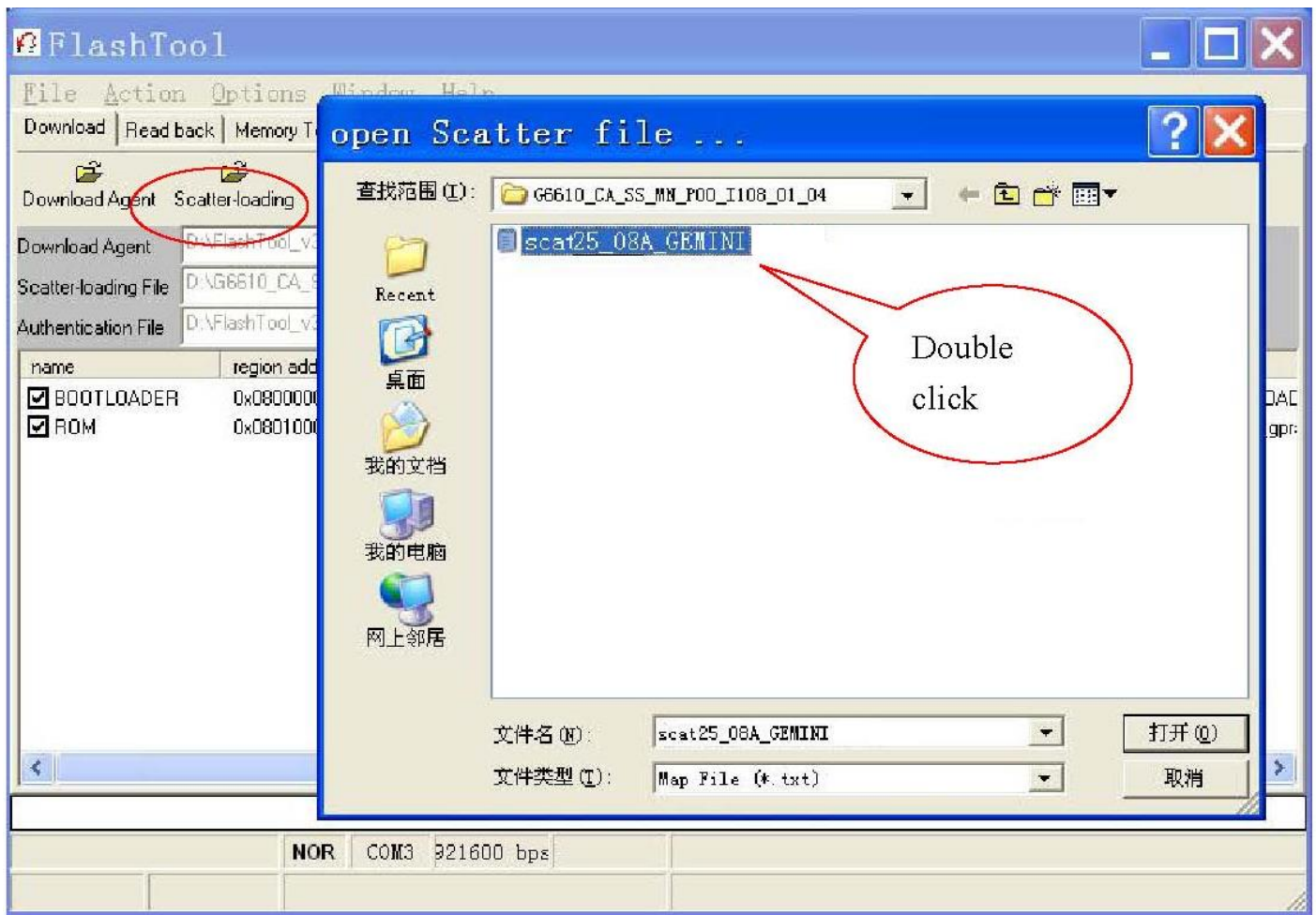
2 Tip **Download Agent**, choose **MTK-ALLInOne.bin**



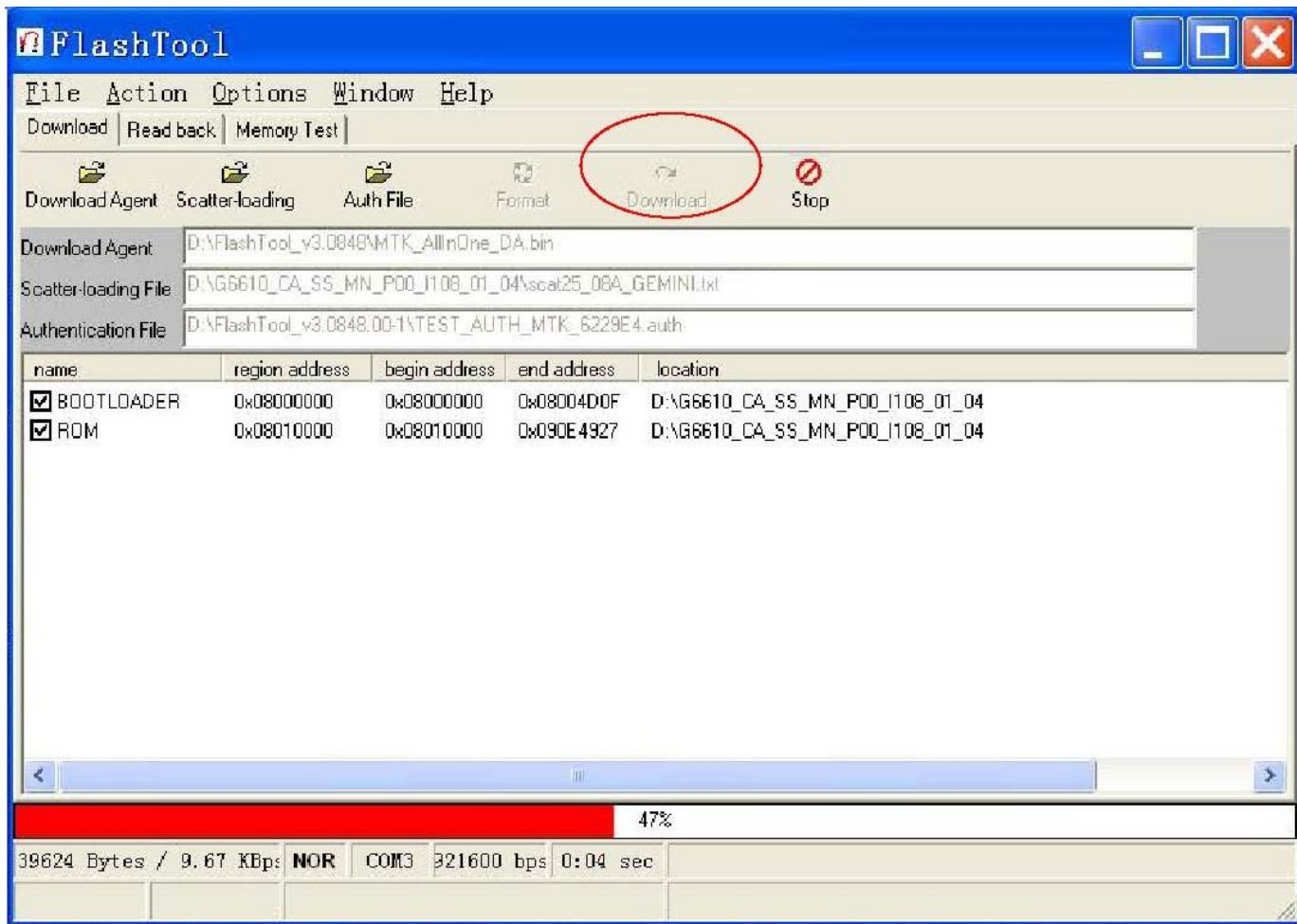
Choose “Auto Format FAT”,

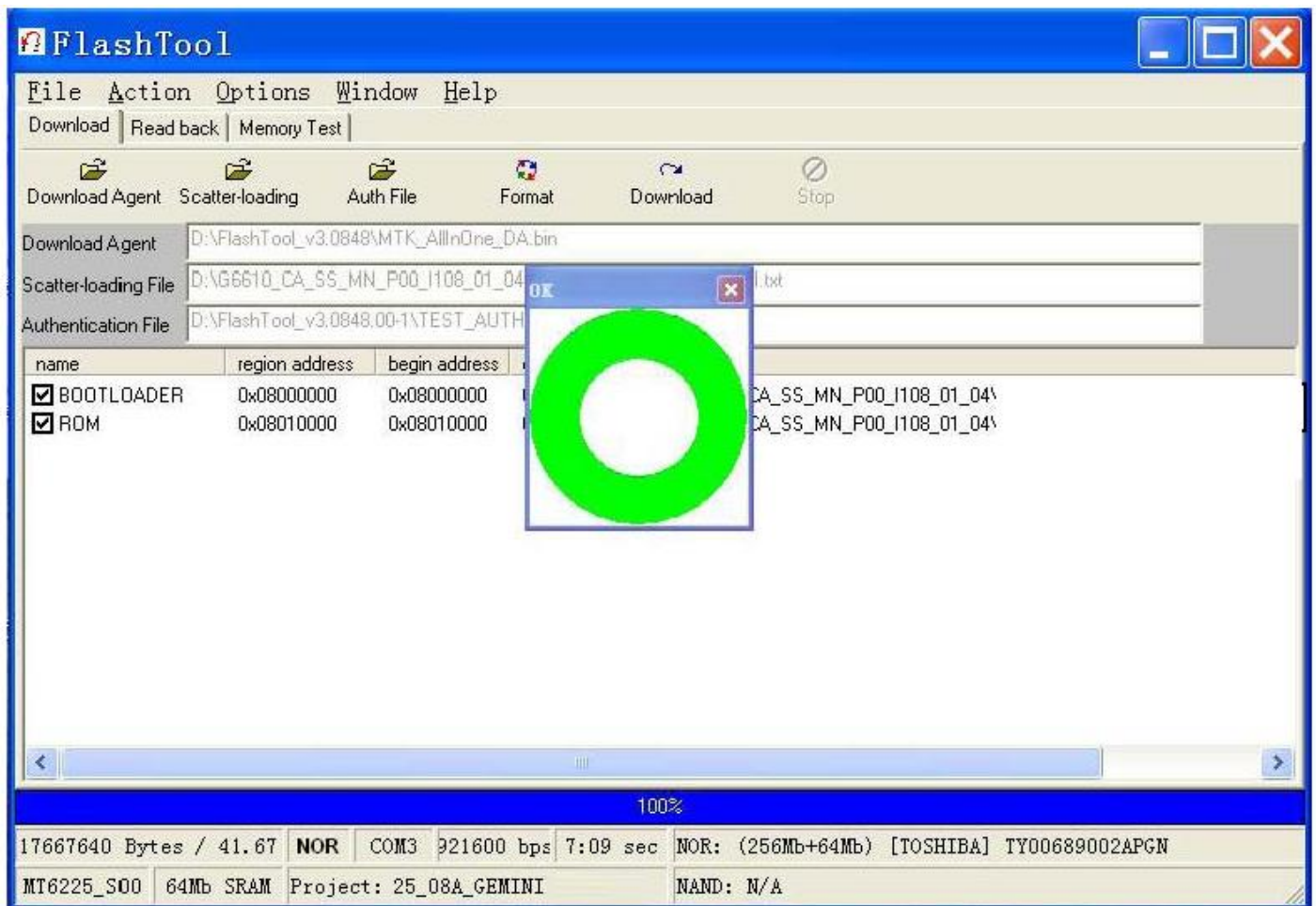


6. Tip **Scatter-loading** to choose “txt” file in the SW folder, such as **scat25\_08A\_GEMINI**. Then the BOOTLOADER and ROM will also set to be well .



7. Keep phone off , and tip **Download** to run the program, and the red bar appear, it shows the phone can connect with this tool successfully, then it will write data into phone and tool will show the blue bar , after **Ok** appear with the green circle. The process finish.





¾ Check if the SW is correctly

8. Power on the phone and input“#\*37#\*”, check its version number on the first option.

## Chapter 7

### FUNCTION TEST

**Press “\*#37\*#” to check these items in standby mode:**

- 1      Version: to check the version of the software
- 2      Echo Loop: blow on the microphone, the receiver will emit a sound
- 3      Key: press relevant keys appear in the screen
  
- 1      Vibration: The cellphone will vibrate
- 2      Loud SPK: the speaker will emit a sound
- 3      Ring: press start there will be some music from the speaker
- 4      LED: press confirm button to check if LED is normal
- 5      LCD: LCD will Auto Display

## Chapter 8

### PARAMETER SETTING INSTRUCTION China mobile as an example, other countries please

inquire the local operator

#### 1. WAP parameter setting instruction

1) Data Account Process: Menu→Services→Data Account

GSM Data:      Account Name: (default)  
                    Number: 17266  
                    User Name: WAP  
                    Password: WAP  
                    Line Type: ISDN  
                    Speed: 9.6 Kbps  
                    DNS: 010.000.000.172  
GPRS:            Account Name: (default)  
                    APN: cnwap  
                    User Name: WAP  
                    Password: WAP

Auth. Type: (default)

2) WAP setting process: Menu→Services→WAP→Settings→Edit Profile

Edit Profile:    Rename Profile: Optional    Homepage: <http://monternet.com>

Data Account: GSM/GPRS    Connection Type: HTTP (Proxy Address: 010.000.000.172)

Username: Optional    Password: Optional

After setting as above, the WAP is ready.

#### 2. MMS parameter setting instruction (Premise is WAP is valid)

Setting process: Menu→Messages→MMS→Message Settings→Server Profile→Edit profile

Edit Profile:    Rename Profile: Same as WAP Profile name    Homepage:  
<http://mmsc.monternet.com>    Data Account: Same as WAP Data Account  
Connection Type: Same as WAP Data Account    Username: Optional  
Password: Optional

After setting as above, the MMS is ready.

#### 3. Email parameter setting instruction (Premise is WAP is valid)

1) GPRS setting process: Menu→Services→Data Account→GPRS

Edit Profile:    Account Name: Optional    APN: cmnet 2) Email

Profile setting process: Menu→Messages→Email→Email Profile

A. Outgoing server: stmp.126.com (depend on the user's Email website )

E-Mail Address: Full E-Mail Address of the user's Password: Password of the use's E-Mail

B. Incoming server: pop3.126.com (depend on the user's Email website ) E-Mail Address: Full E-Mail

Address of the user's Password: Password of the use's E-Mail

After setting as above, the MMS is ready.