

Technical Document

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Notice :

- 1、 Once you modify the document, you need to fill in the table.
- 2、 Please fill “none” in the modification reason and main modification points during the initial document making.

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1 Production capability introduction

1.1 Production introduction

WP836 is CDMA wireless fixed phone, it bases on MSM6025 flat. The whole phone composes by CDMA mode、 the keyboard and LCD.

1.2 The main function and capability index

1.2.1 The Outlook of WP836



1.2.2 The configure of WP836

NO	Name	Quantity	Remark
1	Main frame	1	LCD(128*64)
2	Inner antenna	1	2dBi, TNC-M
3	Handset	1	
4	Handset cable	1	
5	Power adapter	1	Input AC: 90~270V, output DC: 12V
6	AC/DC power line	1	length is 2 m
7	Li battery	1	1000mAH, the time of standby >72 hours, the time of call >2 hours

2 The instruction of assemble and disassemble

2.1 The instruction of disassemble



Take out the handset cable



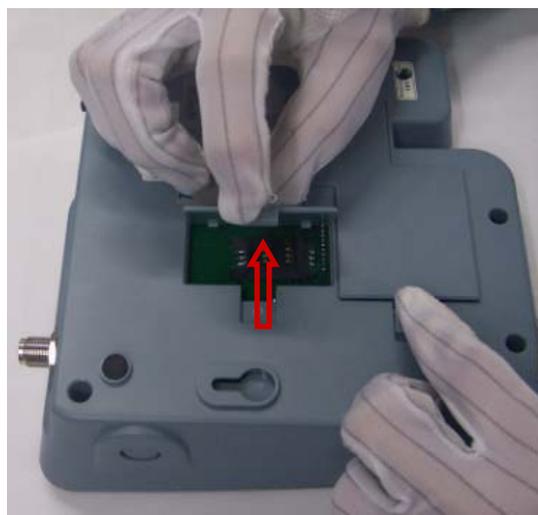
Take out antaean in counter-clockwise



Pay attention to the place of seven screws



Take out the screw



Take out the card socket cover



Take out the battery cover



Take out the connector of battery



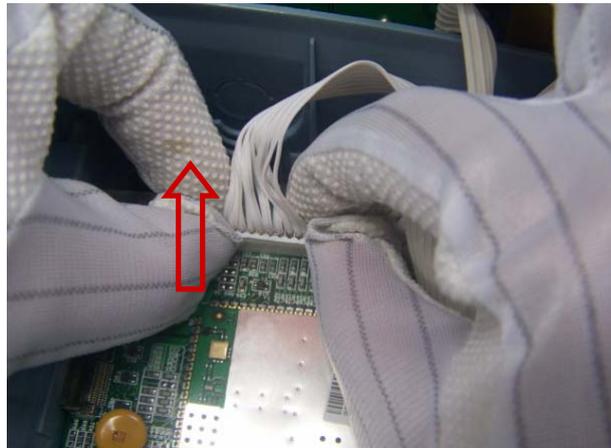
Pay attention to the lock of the left and right side



Pay attention to the lock of the front and back side



Open the back cover



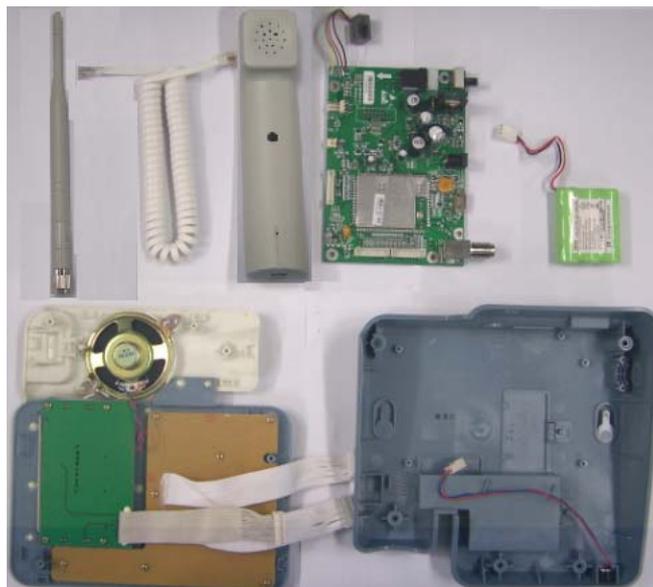
Take out the flexible cable



The front cover and the back cover



Take out the main board



All structure

2.2 The introduction of Assemble

The process is in reverse order

3 Software download

3.1 The equipment of downloading

Startup multithreaded flash Download software

- (1) Startup computer.
- (2) Find the file “DL_MULTI_C6025_FWPV1.00.03.exe” in corresponding folder.
- (3) Double-click the file, start up Download application. The host interface of the application is shown as fig. 1.

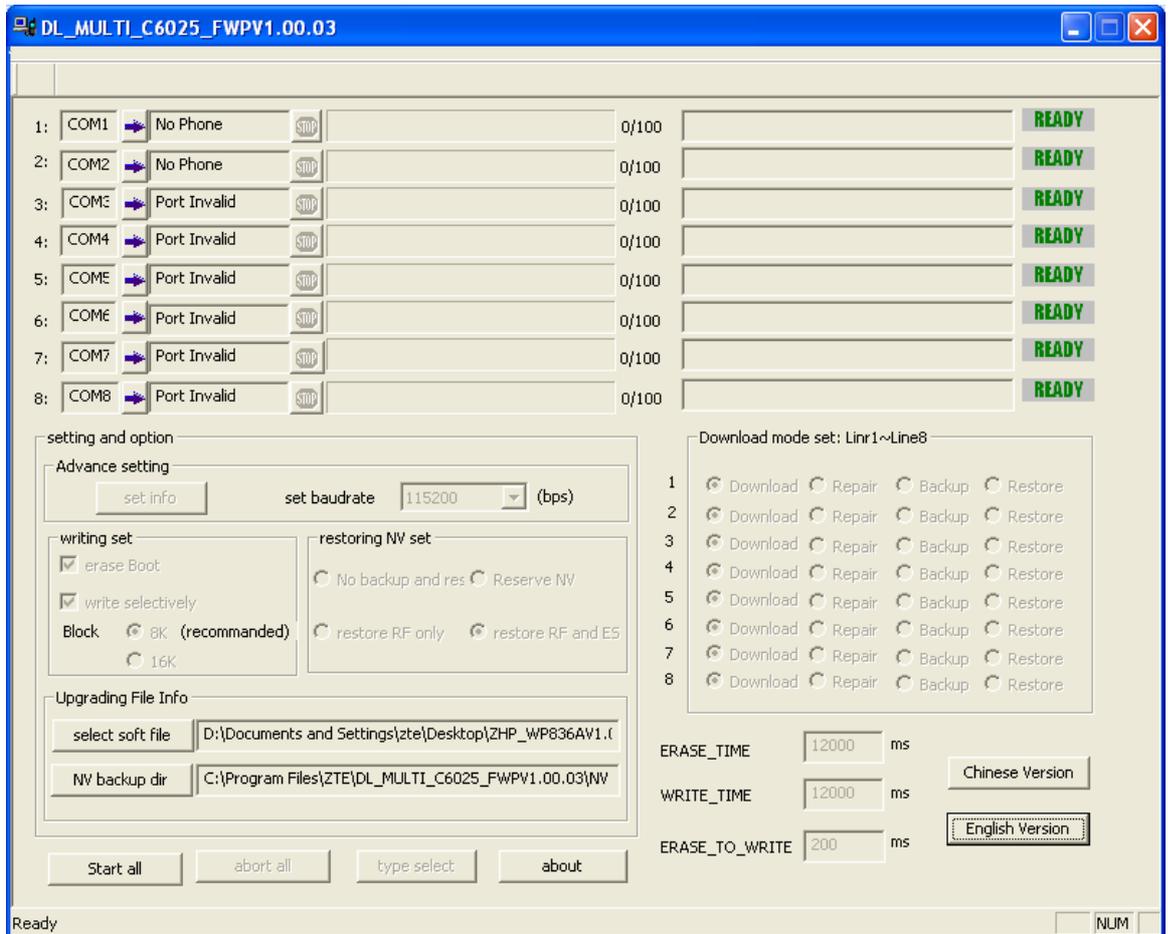


fig.1.

There are two buttons on the right of the host interface: “Chinese version” and “English version”. You can choose the language you want by clicking them. Followed instruction is for English version.

3.2. Introduction of the Host Interface of the Software

3.2.1. Information of the Lines' Status

From the host interface, it can be seen that eight lines are set, through which software can be downloaded to eight mobiles at the same time. The previous part of the application host interface corresponds to eight Download lines. The significant of widget corresponding to each line is shown as below figure:

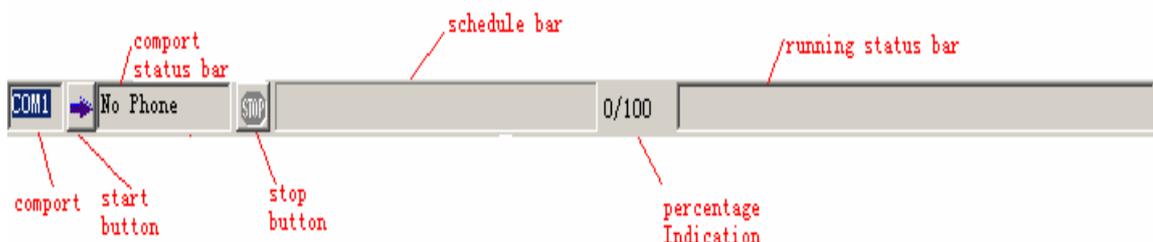


Fig.2

Thereinto:

ComPort Bar: Indicate current line's corresponding serial port number:

Start Button: After starting pressing this button, the operational thread in the current line begins to execute (Any sort of the four operations: Download software, repair mobile, back NV area and recover NV area):

ComPort Status Bar: Indicate the status of line's corresponding serial port, if there is no serial port, "Port Invalid" will be indicated in this bar; If the serial port is working normally and there is not connected mobile in the serial port, "No Phone" will be indicated in this bar: if the serial port works normally and the connection mobile is normal, the current software version number of the connection mobile will be indicated; in additional, if the current line is running the thread of "repair mobile", then "repairing" will be indicated in this bar.

Stop Button: Stopping all the working operation threads;

Schedule Bar and Indication of Schedule's percentage: Indicate the running schedule of current thread:

Running Status Bar: Indicate the running status information of corresponding operation line of current line.

3.2.2. Relative Setup Options

The left of software's latter part is the button widget option relative to setup shown as below fig:

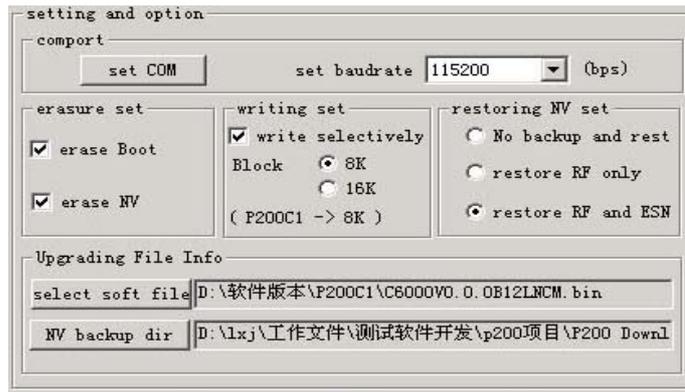


Fig.3

- (1) Select BaudRate of all serial ports via `set baudrate 115200 (bps)` ;
- (2) The edit box next to the button of “select soft file” `select soft file` is used to indicate the would-be upgraded mobile software version number and to press the button of “select soft file” to select would-be upgrade software version number;
- (3) The edit box next to the button of “NV backup dir” `NV backup dir` is used to indicate all the stored directory path names of NV area’s backup file. By pressing the button of “NV area backup content” to select the stored directory path of NV area’s backup file;
- (4) When the optional box of `erase NV` is not selected, the thread will not erase the NV area of mobile in the process of Download software; When the optional box is selected, the thread will erase the NV area; When the optional box of `erase Boot` is selected, the thread will not erase the boot area of mobile, but when the optional box is selected, the thread will erase boot area.
- (5) There is an option of “write selectively” `write selectively` in input mode. When this option is selected, the application will firstly judge whether the data in the block are all 0xff or not when it inputs data to mobile each time. If the block is not required to input, directly bounce to next block to do operation. You also can choose the size of the block by choose “8K” or “16k”. When you will download software to the mobile, we recommend you choose “8K”.
- (6) There are three radio boxes in the selection of “restoring NV set” `restoring NV set`: “No backup and Restore”, “Restore RF Only” and “restore RF and ESN”. When “No Backup and Restore” is selected, the thread will not have the backup NV area and restoring working; When “Restore RF Only” is selected, before beginning to Download, the thread will firstly backup the parameters of NV area and after the completion of Download, the thread will re-input the radio frequency alignment parameters (ESN number is not included) of the backup NV area to mobile. When “Restore RF and ESN” is selected, the parameter of NV area will firstly backup before the thread begins to Download. After the completion of Download, re-write the radio frequency alignment parameter and ESN number to NV area.
- (7) The button of “set COM” is used to set the each line’s corresponding serial port. When clicking it, A dialog box of serial port setup as below fig. shown will pop-up:

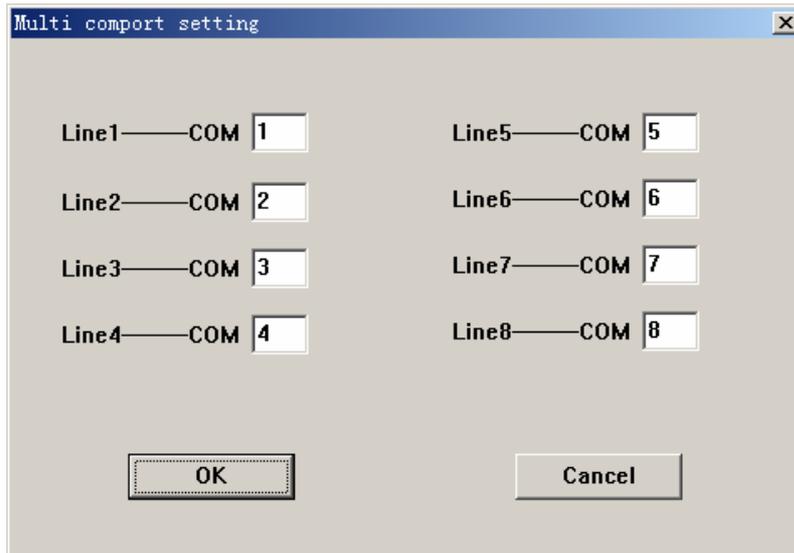


Fig-4

According to the subscriber's requirements, configure each line's corresponding serial port. After the completion of configuration, click "OK" to close the dialogue box and at that time the serial port information after configuration will appear in all lines' serial port bar.

3.2.3. Selection of Operation Mode

The right of the latter part of host interface is the selection box of operation mode of every line, as below figure:

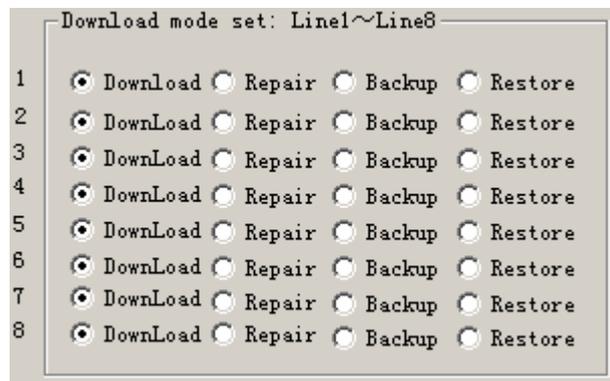


Fig. 5

Via each line's radio box, you can select to press each line's  button, and then the current line is running what operation can be seen. It can be seen that there are four operation modes of each line against radio box: Download, Repair, Backup, Restore which are respectively corresponding to the four operation modes of Download, repair, backup NV area and restore NV area.

In additional, there are three buttons of "start all"、"abort all" and "Security code" below the operation mode selection. There are three operational time setup option: ERASE_TIMER、WRITE_TIMER、ERASE TO_WRITE。

After click the button of "start all", the application will scan each line one by one: if the line is already running, the application will directly skip without any operations; if the mobile connection of current scanning line is normal and the thread does not begin, the application will start the thread of the line.

Click the button of “abort all”, the application will stop all the running threads in all the current lines.

Click the button of “Security code”, you can choose the correct security code that will be used in the download thread. If the security code is incorrect, the download will fail.

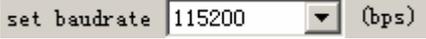
ERASE_TIMER means the maximum latency time in erasing between block and block, WRITE_TIMER means the maximum latency time in writing between block and block ERASE TO_WRITE means the latency time in the period of transferring into writing process after the completion of erasing. . Recommend you to use the default values of these three options. Please be careful when make any changes.

3.3. Connecting Mobile

- (1) Use private data line and extension port to connect mobile (Eight at most at the same time) with computer, and start up the mobile. If use exterior power to supply, the voltage is 4~4.5V and the maximum current is about 1A.
- (2) Correctly select each line’s corresponding data line and the serial port number of computer connection via the “Set COM” in the relative setup option.
- (3) When the mobile in the line is normal power-on and normally connected to computer via serial port, at this time the status bar of serial port in this line will indicate the current software version in mobile’s flash. For example, if the connection mobile’s current software version number in certain line is C880V1.0.0B0, then the serial port status bar of the line is , which shows the normal of mobile’s current connection and the Download operation can be taken according to the current configuration.

3.4. Configure Download Software

The relative setup option area in the left of the latter part of host interface can configure the Download thread,

- (1) software via the button of “ select soft file”
- (2) Select NV parameter backup in the stored directory path in local PC via “NV backup dir”;
- (3) To confirm whether the NV area should be erased or not in the Download process via the option box “erase NV”; Select “Erase Boot” via option box to confirm whether the boot are should be erased or not in the process of Download.
- (4) Use  to configure your required serial port’s speed. The default speed is 115200 and 230400 (Ordinary computer serial port may not support such high speed. It is advised to use USB virtual serial port) , if it does not support because of the hardware, it is advised to use the speed of 115200.

3.5. Download Operation of Multithreaded Flash

This software of multithreaded Download offers four operations of Software Download, Software Repair, Backup of mobile’s important data and Restore. Via the operation mode option box of each line in the latter part of the host interface, decide that each line should execute what operation.

Press each line’s  key to let the operation thread in the current thread begin running, press  key to end the operation thread in the current line. You can also press the button of “start all” in the relative setup option area to start running all the prepared but not starting line’s thread. Press the button of “abort all” in the relative setup option area to end all the running line’s thread.

Software Download

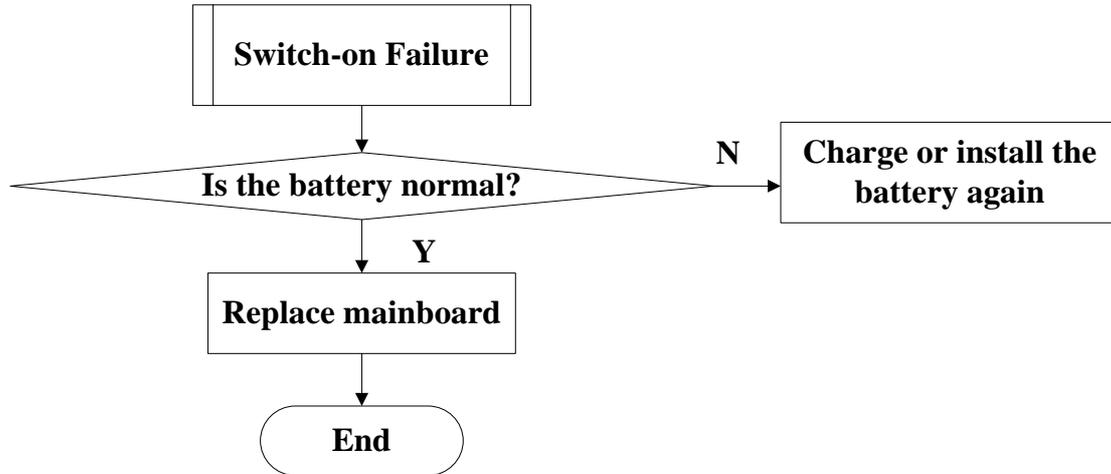
- (1) The function of software Download is actually to transform mobile's origin software version such as version upgrading and degrading. Therefore, mobile must have relative application and can be started up, and the origin version should be complete, otherwise this function can not be used.
- (2) Before executing Downloading thread, it should be ensured that the mobile has been connected to PC via correct serial port and the corresponding line's serial port's status bar can normally indicate mobile's current software version number. At the same time, it should be ensured that the correct upgrading software path selection has been made as well as the configuration work such as "whether to erase NV area or not?" and NV backup directory path selection. Correct speed of serial port should be selected and the operation mode of corresponding line should be selected as Download.
- (3) After the completion of above-mentioned work, begin the software Download thread in the corresponding line by clicking corresponding line's  key and end it by clicking  key. You can also press button of "start all" to begin running all the prepared but not starting line's Download thread. Press "abort all" to end all the running line's Download threads. Usually, do not end the Download process at will to avoiding the damage of Download failure. In the process of Download, Try your best to ensure that the mobile do not have power breaking and do not automatically shut up because of deficiency of power of battery.
- (4) After all codes are Downloaded to mobile's flash, the mobile will automatically re-start. If the re-start is normal, mobile's current upgraded software version number will indicate in corresponding line's serial port status bar which shows mobile's Downloading is successful. The Download version is complete; otherwise, it shows the Download fails.
 - Note: if "Restore RF Only" or "Restore RF and ESN" is selected, then the important NV parameter backup in the mobile will be automatically saved to local PC before flash Download. It is saved to the configuration path of Chapter 3.4. The file is composed by mobile's ESN number and line index number. The format is as "XXXXXXXX_N.nvm", among which the "XXXXXXXX" represents eight-digit hex ESN number and N represents line number. After all the codes Download to mobile's flash, mobile will automatically re-start , restore the automatically-backup NV parameter to mobile as well as re-start (The mobile can be removed before the completion of re-starting this time).

4 Familiar troubleshooting analyze flow chart (level 1)

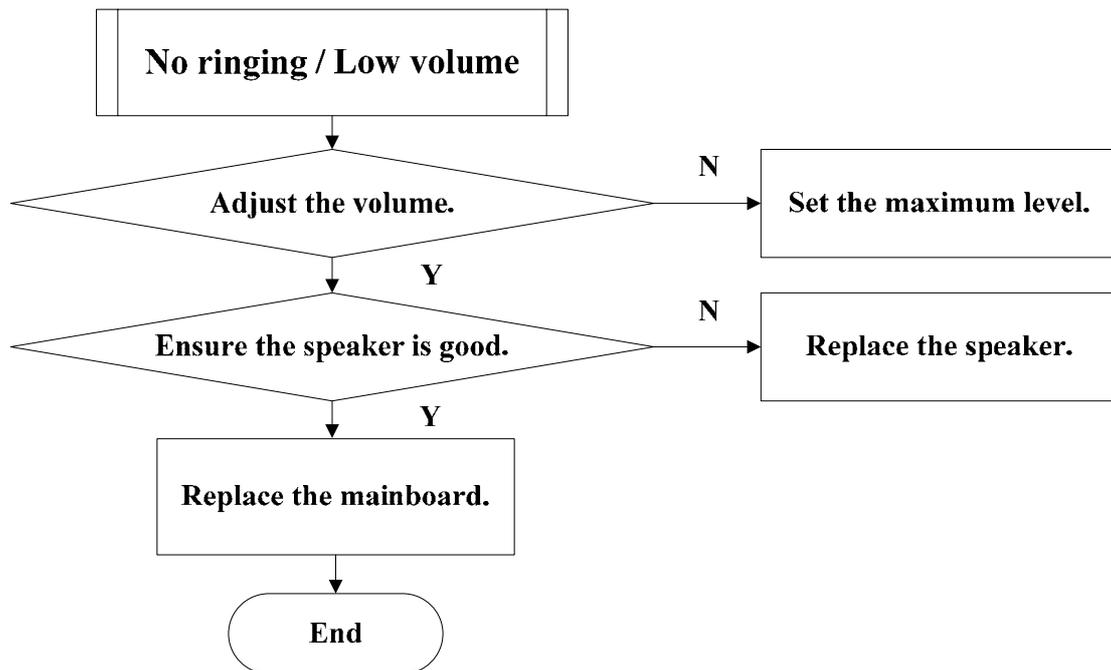
4.1 Configuration failure

For the configuration problem, you should change as the process of assemble of the terminal.

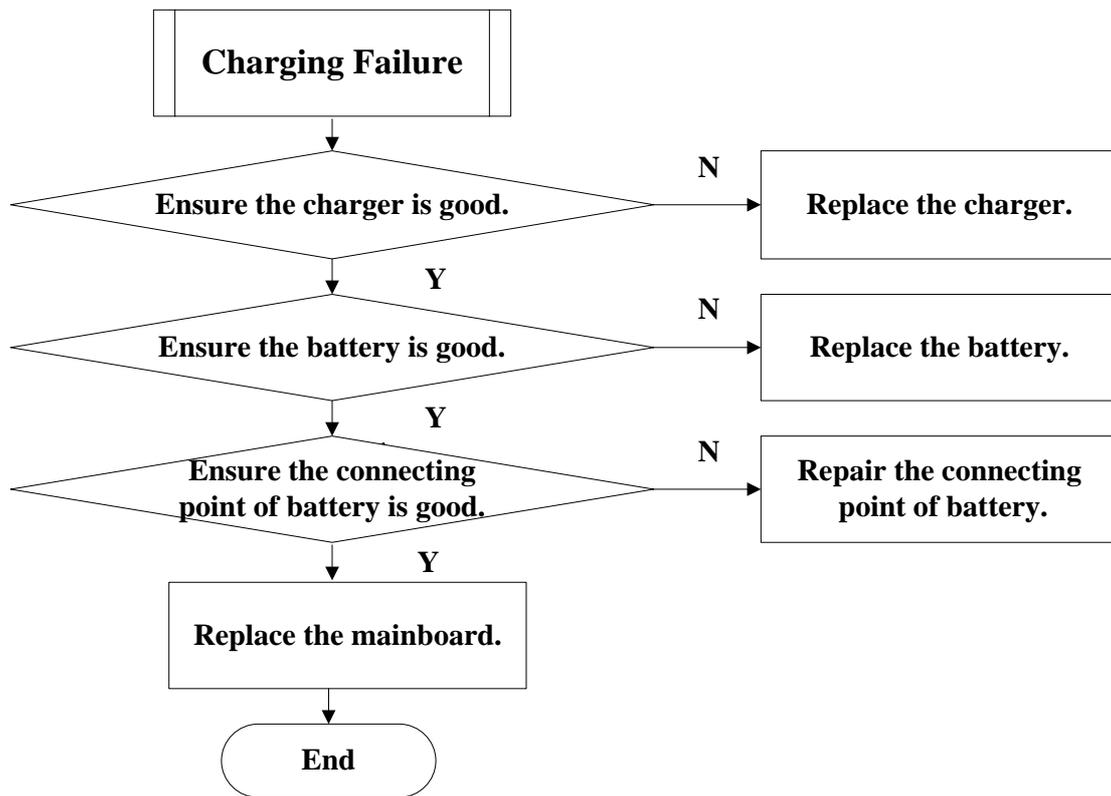
4.2 Switching on failure



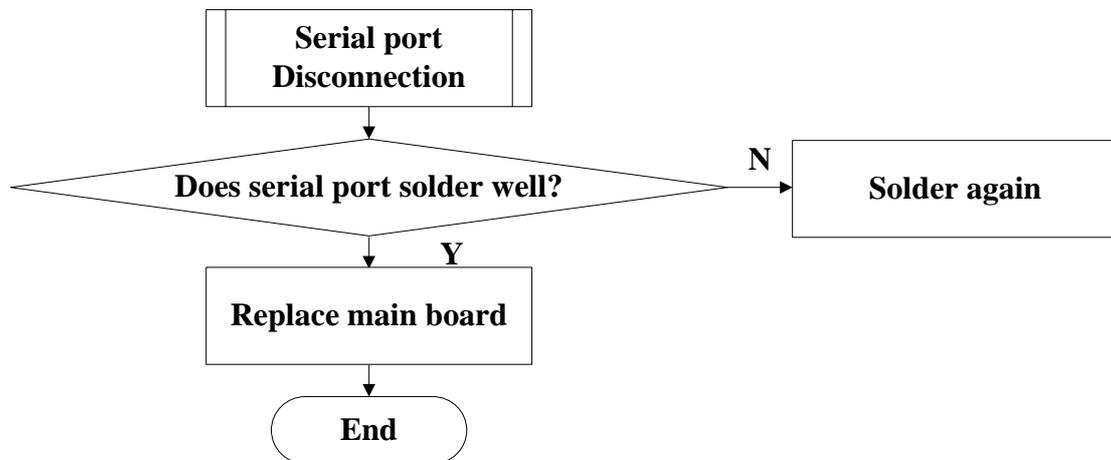
4.3 Ring problem



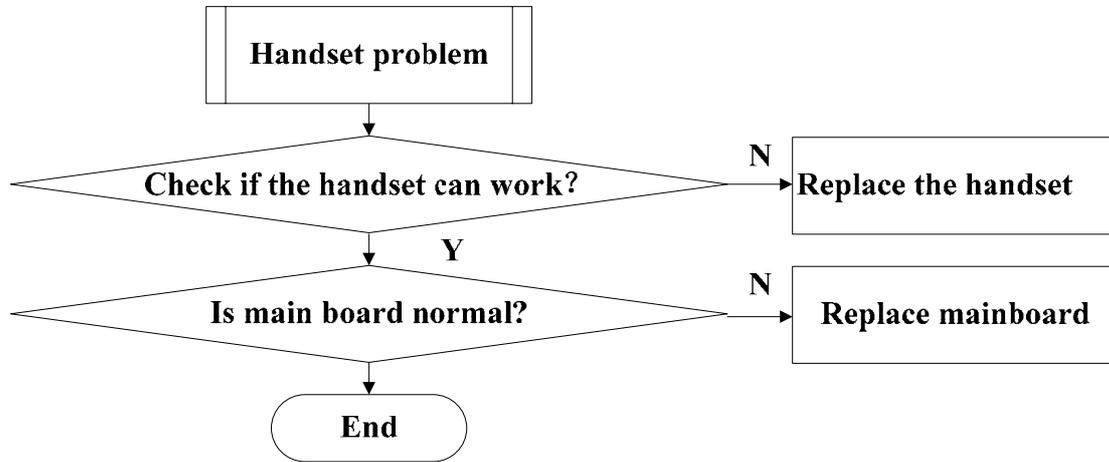
4.4 charging problem



4.5 port problem



4.6 No voice in handset



4.7 Can not recognize the UIM card

