Technology Document

Document Title: ZTEC160 CDMA 1X After-sales Service Manual (Level 1)

Document Number:

Version: A

Document Quality Grade:

Total 25 pages

(Cover Included)

Drafted	Zhang Wei
Checked	Ying Chenguang
Signed	
Standardized	
Approved	

ZTE CORPORATION

<ZTE corporation copyright reserved. No spreading aboard.>

Modification Record

File No.	Version No.	Drafted	Date	Modification Reason	Main Modification Content
	A	Zhang Wei	2008-1-7	None	None

Notice: 1. Fill in the table while modify the document.

2. The modification reason and main modification content columns are filled in none during first document making.

<ZTE corporation copyright reserved. No spreading aboard.>

CONTENT

1. PRODUCT SUMMARY 1

1.1 STANDARD INSTALLATION 1
1.2 SPECIFICATION 1
1.3 MAIN FUNCTIONS 1
1.4 INNER TYPE 2

2. INNER STRUCTURE AND ELEMENTS 2

2.1 FUNCTION TEST 2
2.2 SOFTWARE DOWNLOAD 2
2.3 DISASSEMBLY FLOW 11
2.4 COMPOSING 14
2.5 BLOCK DIAGRAM 15
2.6 BASIC DESCRIPTION 15

3. BASIC FLOW CHART OF FAMILIAR TROUBLESHOOTING (LEVEL 1) 16

3.1 STRUCTURAL PART FAILURE 16
3.2 SWITCHING ON FAILURE 16
3.3 HANGING 17
3.4 AUTOMATICALLY SWITCH OFF 17
3.5 CHARGING FAILURE 17
3.6 HANDSET OVERHEATED /LARGE POWER CONSUMPTION/SHORT STAND_BY TIME 18
3.7 CARD UNIDENTIFIED 19
3.8 NO TRANSMISSION VOICE 19
3.9 NO RECEIVE VOICE 20
3.10 NO RINGING TONE 20
3.11 KEY FAILURE 21
3.12 DISPLAY FAILURE 21
3.13 KEY_LIGHT FAILURE 22
3.14 NO SIGNAL 22
3.15 NO CALL OUT 22
3.16 VIBRATION FAILURE 23

4. PART LIST 23

<ZTE corporation copyright reserved. No spreading aboard.>

1. Product Summary

1.1 Standard Installation

Serial No.	Name	Quantity
1	Handset	1
2	Lithium Battery	1
3	Charger	1

1.2 Specification

- Network: CDMA
- Dimension: 44mm*107mm*19mm
- Weight: 78g(including 800mAh standard battery)
- Talk Time: 2 ---4hrs
- Standby Time: 80---160 hrs

1.3 Main Functions

- phonebook: 200 × 6(groups) of phone numbers and personal information(3 phone numbers,1 E-mail,1 adress,1 website)
- message:20 items of both inbox and outbox,support PRI and UTK
- ringing tone:20 items of ringing tone,support vibration;6 items of message ringing tone
- call record:10 items of dialed, 10 items of answered,10 items of unanswered
- games: 2 playing card games
- encryption: PIN code setting and change,restrained call(need supported by

<ZTE corporation copyright reserved. No spreading aboard.>

network),restrained incoming call(need supported by network)

- tools: alarm clock/counter/calender/stopwatch

1.4 Inner Type

Inner Type	Outer Type
P300A2	C160

2. Inner Structure and Elements

2.1 Function Test

Inner ESN number test / version test

- Input '*#06#' to test ESN to see if the inner ESN number is the same as that on the handset.

Simple Function Test

- Type in '*983*3641#' → Type 'OK' → Type '*'into 'Quick Test' estate in turn test LCD →Ring tone →Motor→ keypad → audio loop →Earphone →Automatically re--start

Main Test Items

- LCD test: check whether there is any displaying default such as line defect, point defect or askew displayer.
- Ring tone/vibration test: check whether there is any abnormal cacophony or whether the vibration is even.
- Key test: see whether concerning letters or words could be inputted with even pressing strength and whether the keys are with enough springiness and fine handle.
- Volume frequency circuit test: huff to MIC to see whether only susurrus echoing but not any other cacophony.
- Earphone test: insert earphone and huff to MIC to see whether only susurrus echoing in earphone.
- Press 'End call' after all the tests to restart the phone.

2.2 Software Download

<ZTE corporation copyright reserved. No spreading aboard.>

- **Software download illumination**

  Each handset to be repaired should be upgraded to the latest version, and each repaired handset should be in the latest version.

  Note

  - Note: a. The handset must be able to switch on and connect with PC successfully before downloading the software. If the handset can't be switched on, it can't download the software.
  - b. The handset must have continuous power supply and mustn't be taken out during downloading the software. When it finishes and appears 'PASS' word, the handset can be taken out. Otherwise, the handset can not be switched on.

- **Data cable**
- E798 standard universal data cable ： IS011259

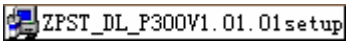
- **C700 download data cable**
- **P/N: ISO10158**

- **Data cable driver**

  Using E798 data cable (P/N: ISO11259) to download needs installing the cable driver

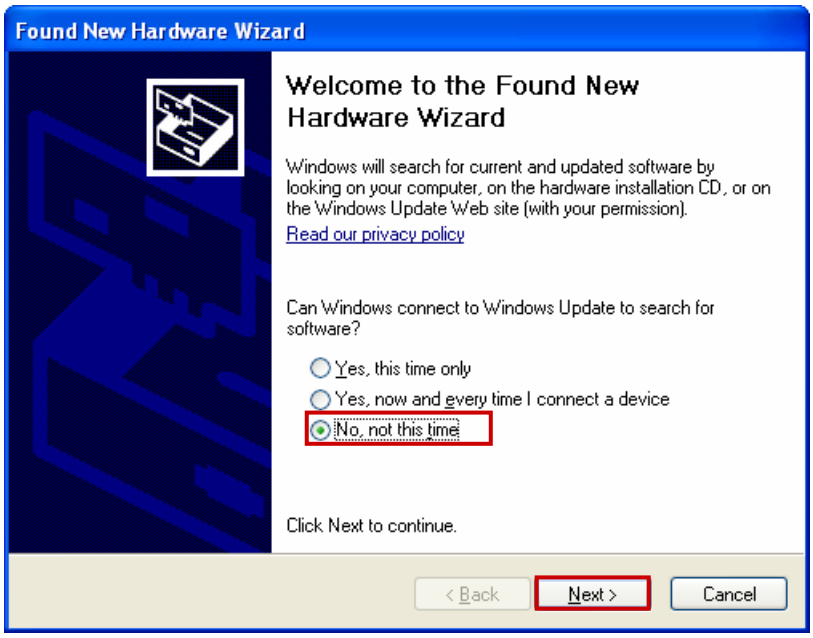
  Data Cable Driver: E798 USB Driver

- **Download platform installation:** ZPST_DL_P300V1.01.01setup

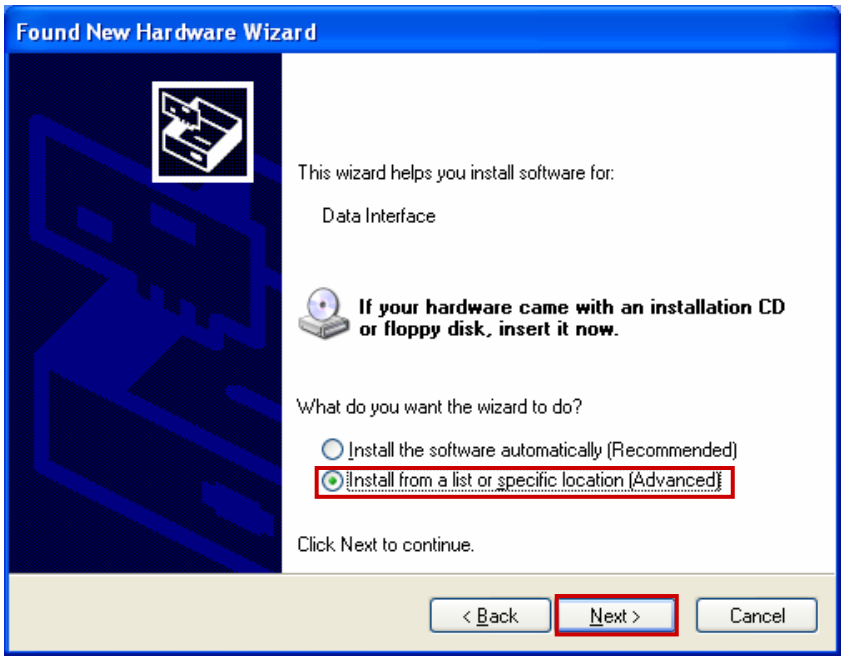


- Connect handset and data cable with PC. PC will appear installing driver interface automatically. Select "No, not this time". Click 'Next

<ZTE corporation copyright reserved. No spreading aboard.>

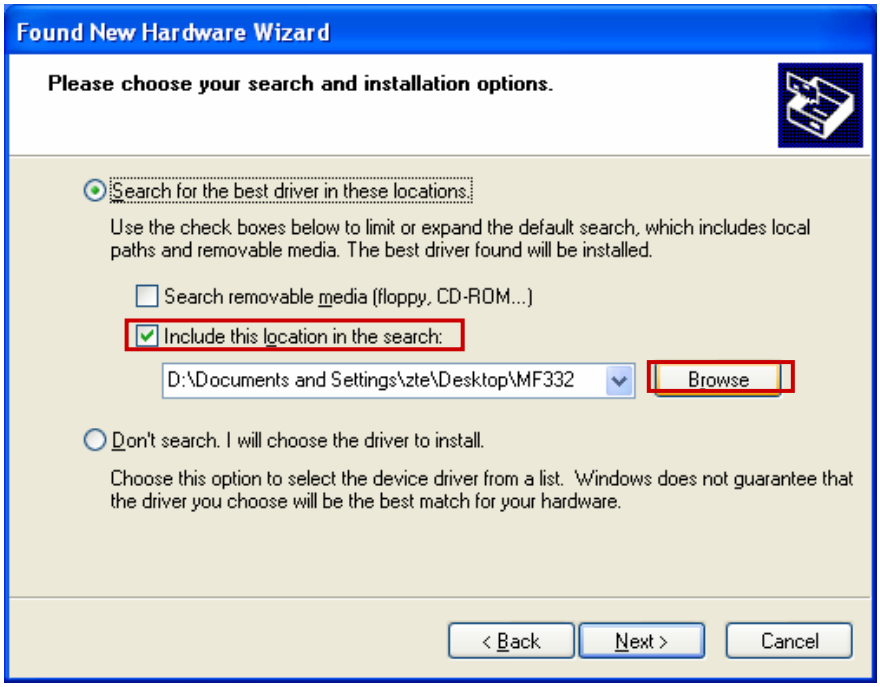


♦ Select ‘lnstall from a list or specific location (Advanced)’



<ZTE corporation copyright reserved. No spreading aboard.>

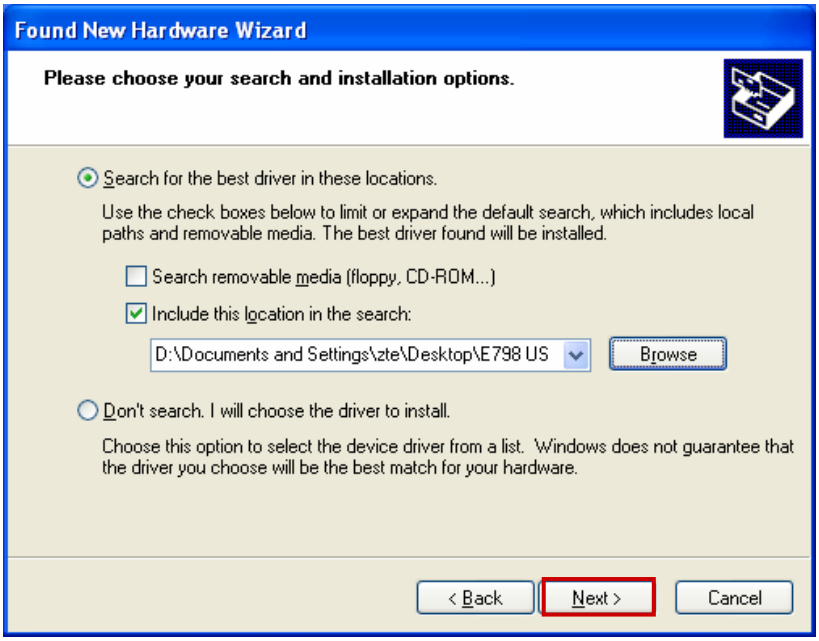
♦ Select ‘lnclude this location in the search’. Click ‘Browse’.



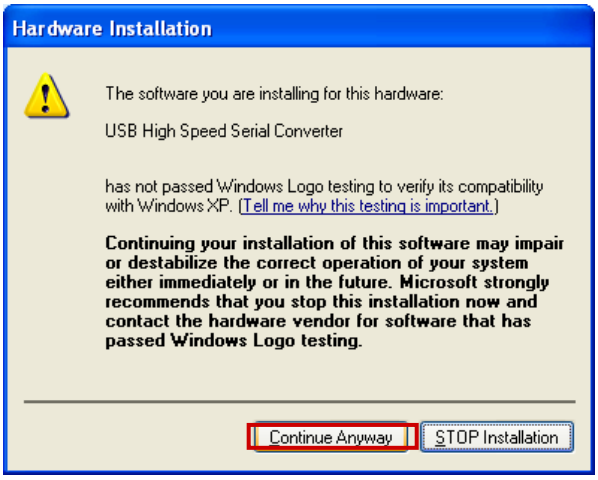
♦ Choose “E798 USB Driver” Click ‘OK’

<ZTE corporation copyright reserved. No spreading aboard.>

- Click ‘Next’

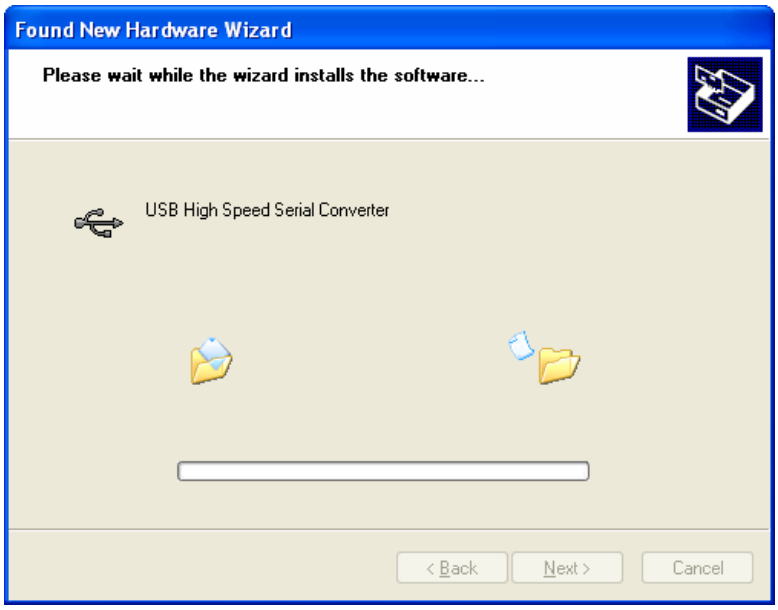


- Click ‘continue Anyway’

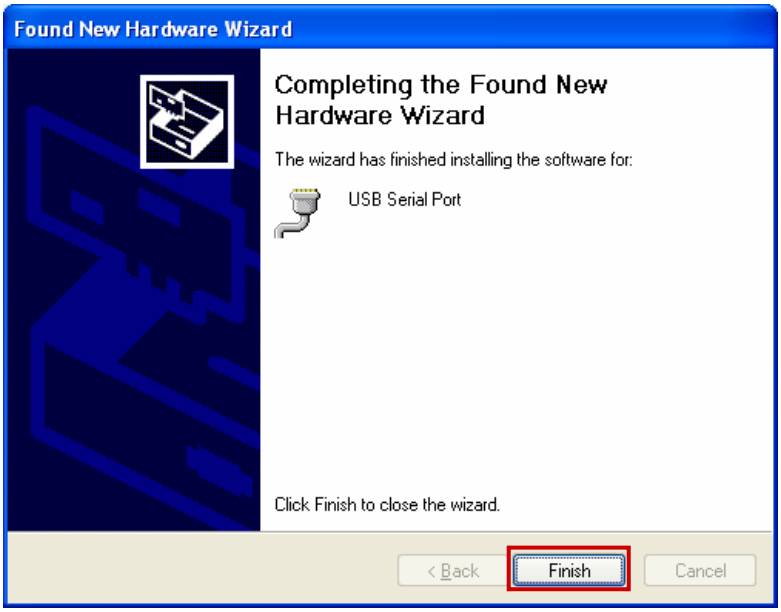


- lnstalling

<ZTE corporation copyright reserved. No spreading aboard.>

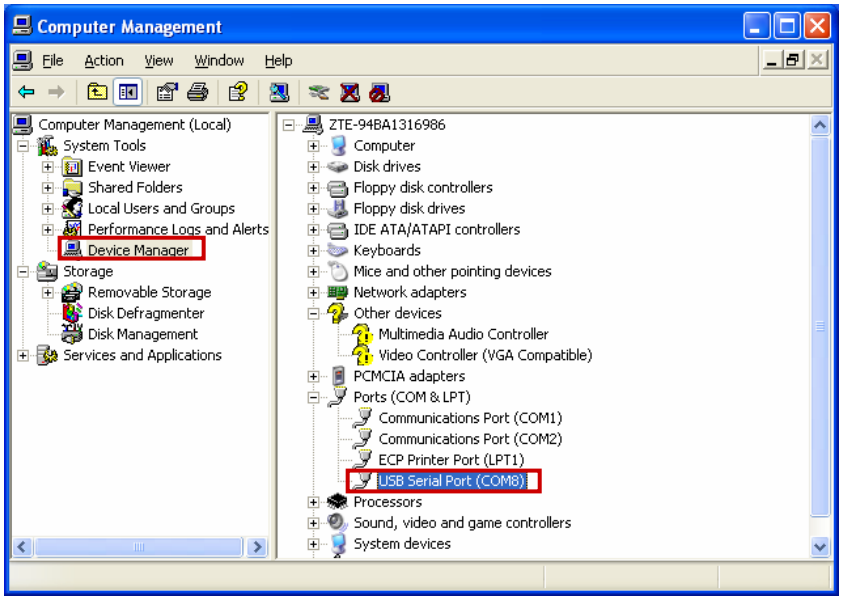


- Click ‘finish’

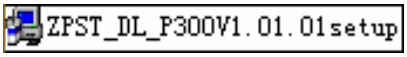


- Check the serial port after connecting to the data cable.
- Checking path: my computer→attribute→hardware→facility manager→port

<ZTE corporation copyright reserved. No spreading aboard.>

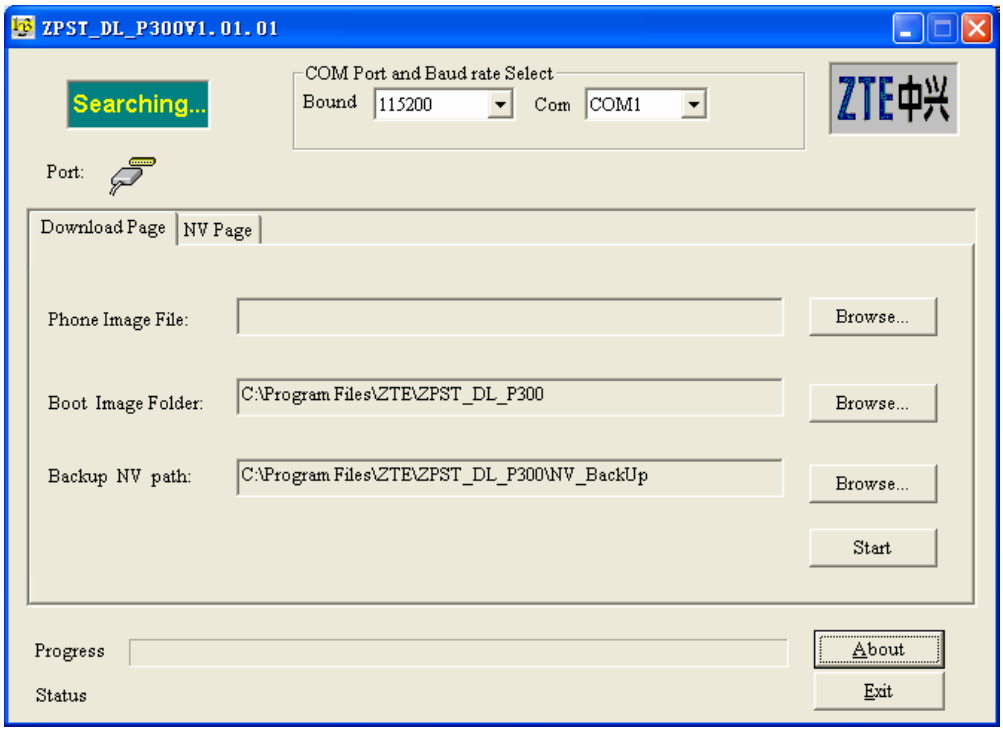


- **Install the download platform:**ZPST-DL-P300V1.01.01setup



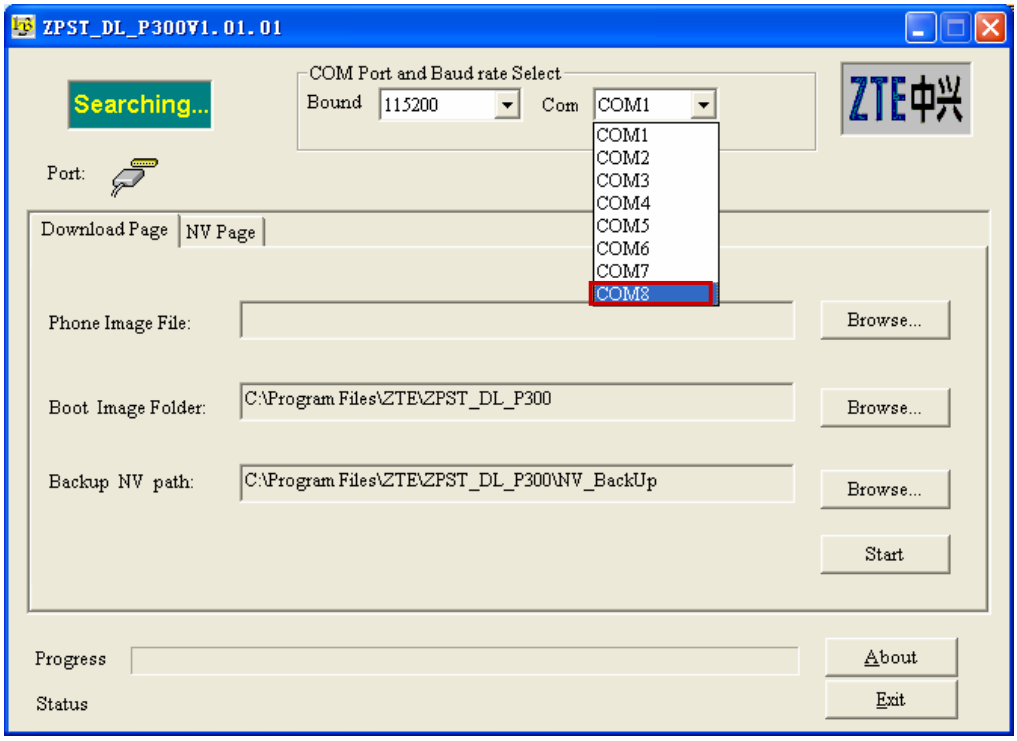
- Double click the shortcut icon after platform downloading

- Program main interface

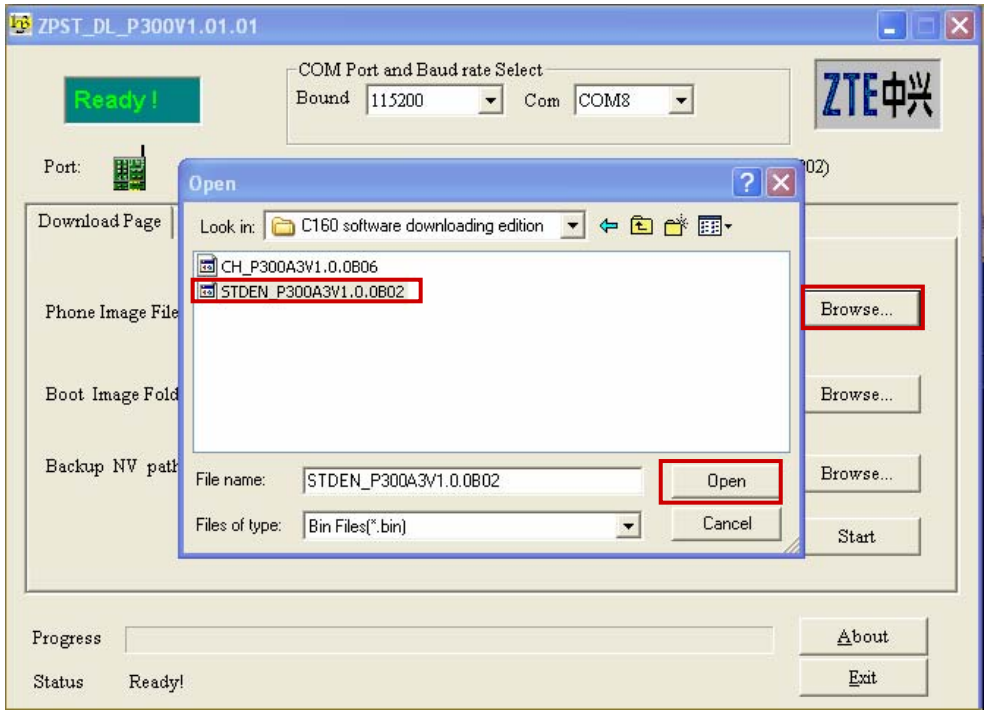


<ZTE corporation copyright reserved. No spreading aboard.>

♦ Click ‘Com’ select ‘com8’

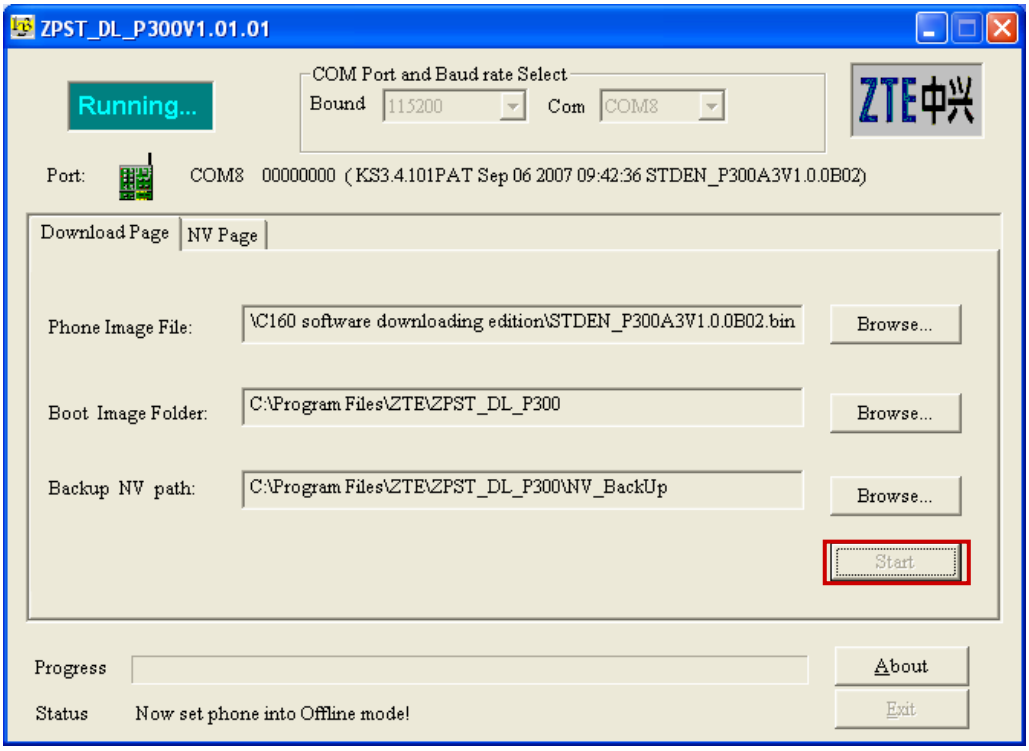


♦ Click ‘Browse’ select correct version click ‘ok’

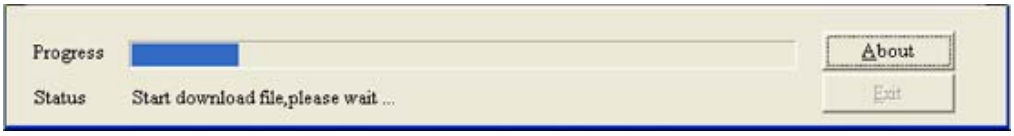


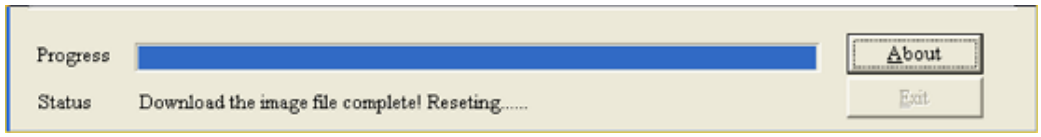
<ZTE corporation copyright reserved. No spreading aboard.>

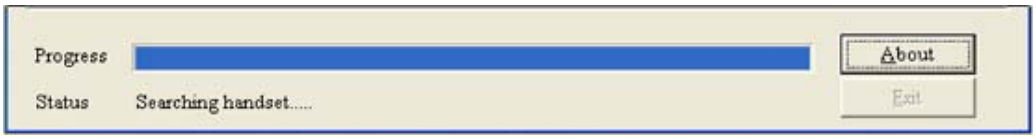
♦ Click “Start” to start downloading

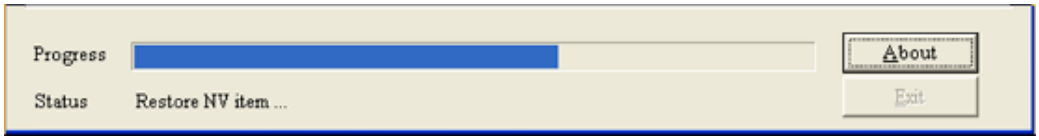


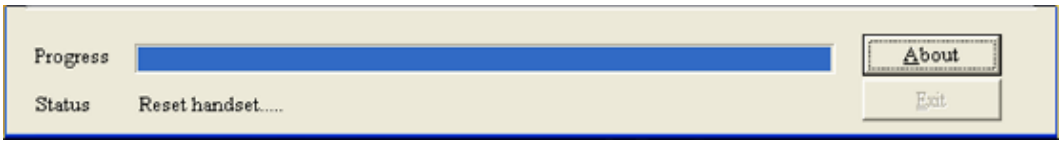
♦ Downloading.





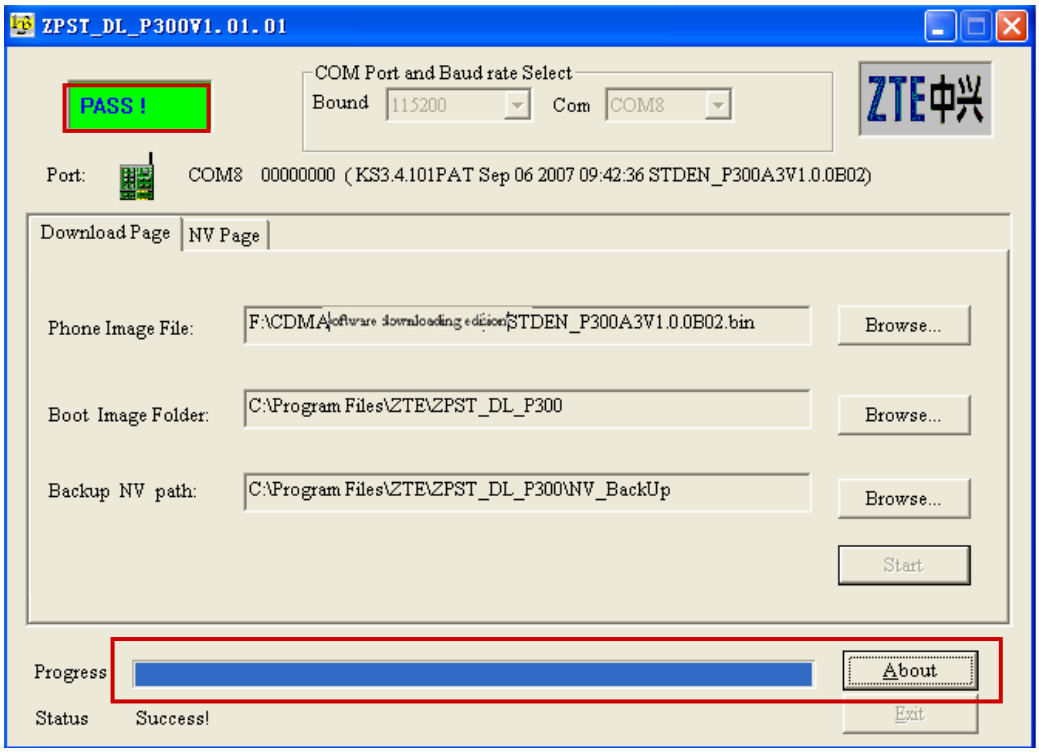




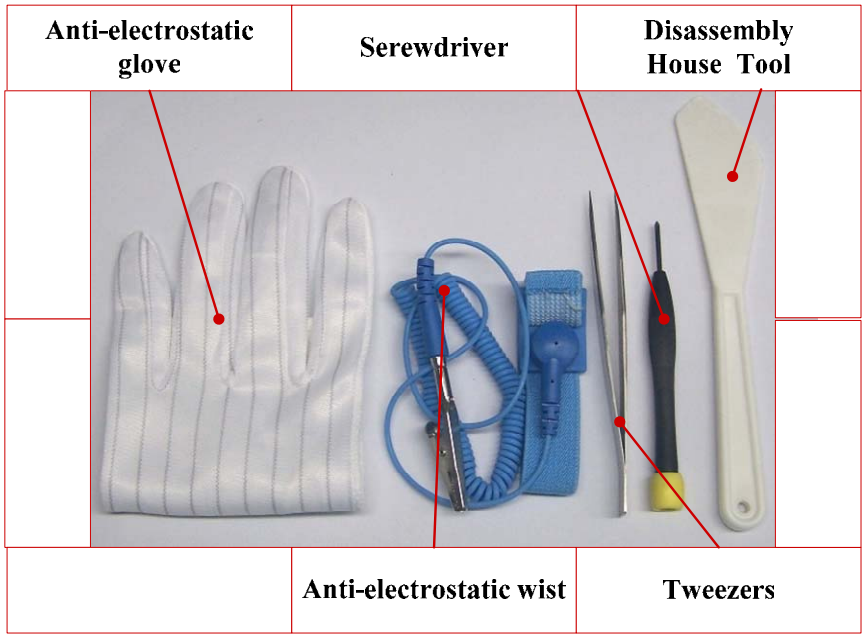


♦ Interface of successful download

<ZTE corporation copyright reserved. No spreading aboard.>

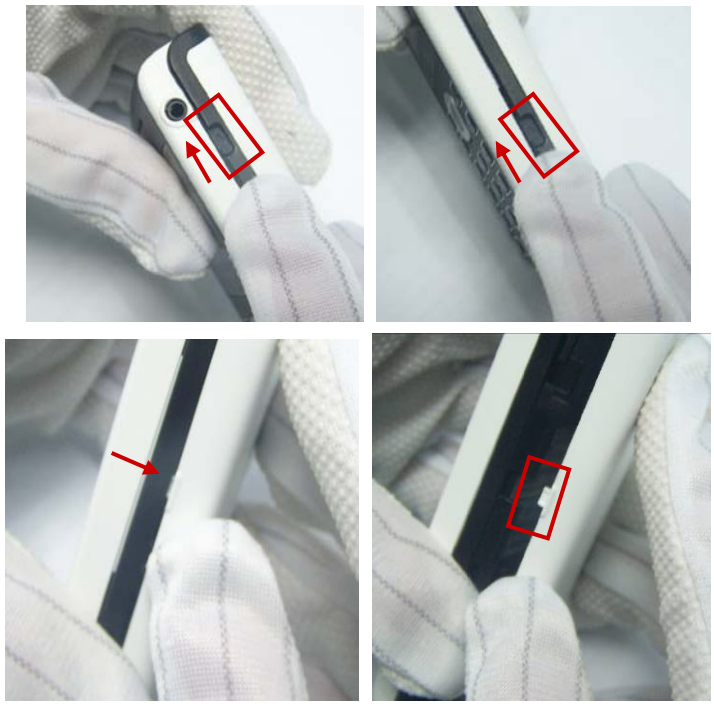


2.3 Disassembly Flow



- Press then take out the battery cover
- Pay attention to locks direction

<ZTE corporation copyright reserved. No spreading aboard.>

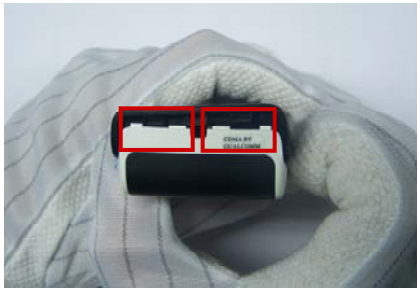


- Take out the battery.

- Pay attention to five screws.

- Separate the down back cover with dismantle rind tool. Pay attention to the positions of side keys and the locks.

<ZTE corporation copyright reserved. No spreading aboard.>

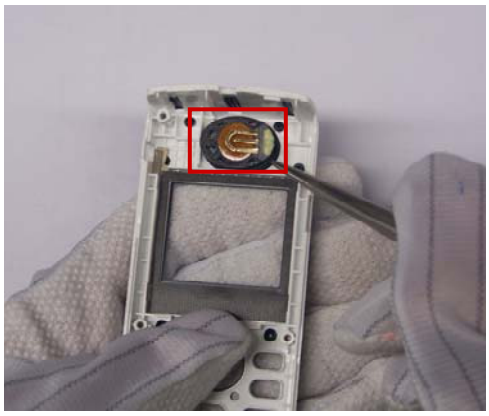


♦ Front cover after separating .pay attention speaker direction

♦ Back cover and main board after direction .

♦ Take out speaker by tweezer.

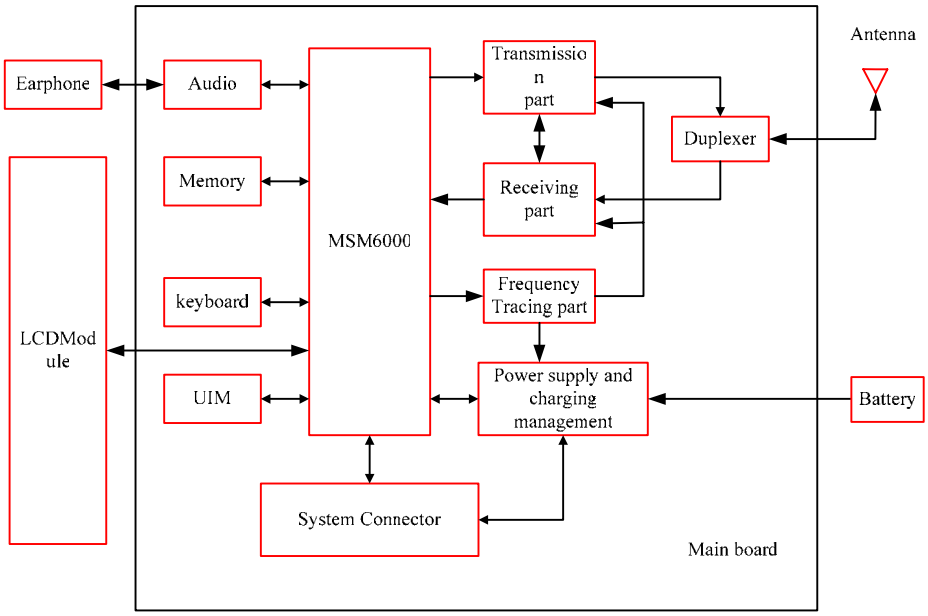
<ZTE corporation copyright reserved. No spreading aboard.>



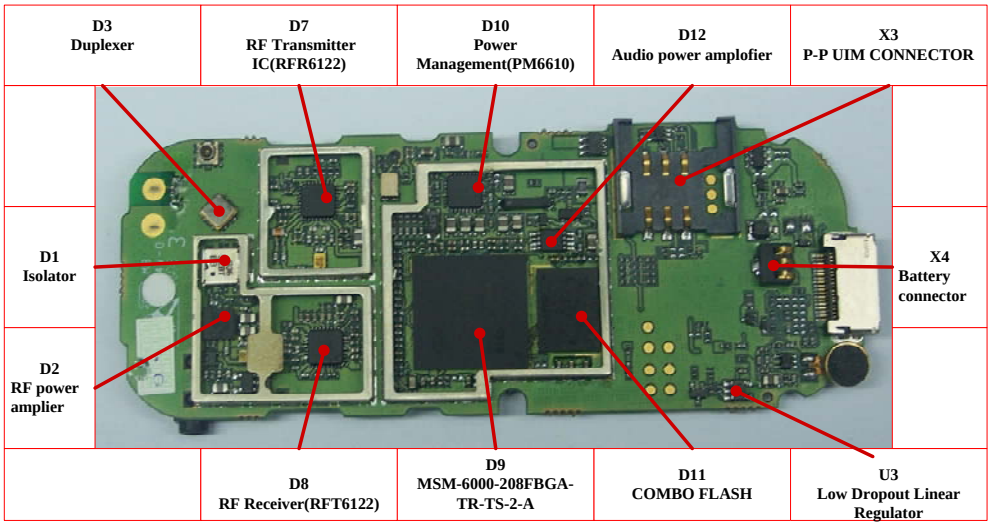
2.4 Composing

<ZTE corporation copyright reserved. No spreading aboard.>

2.5 Block Diagram

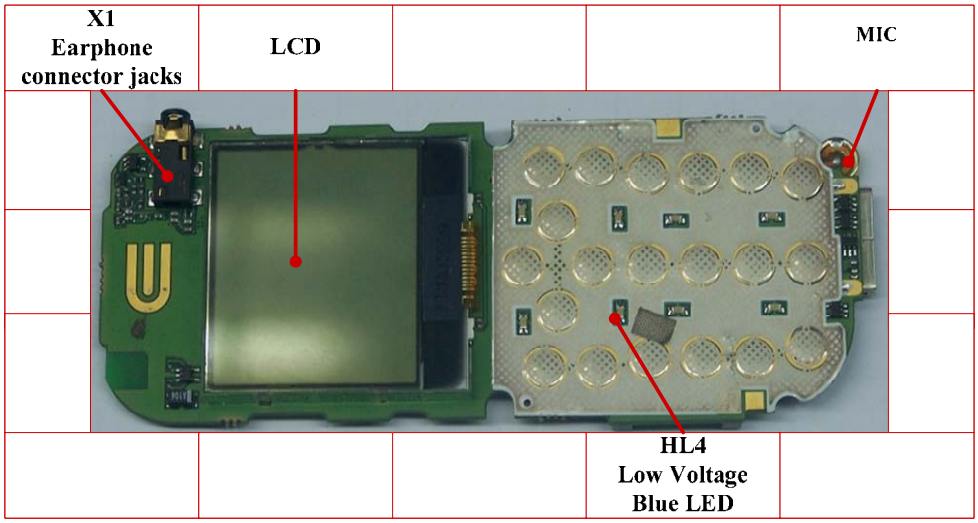


2.6 Basic Description



Top Distributing

<ZTE corporation copyright reserved. No spreading aboard.>



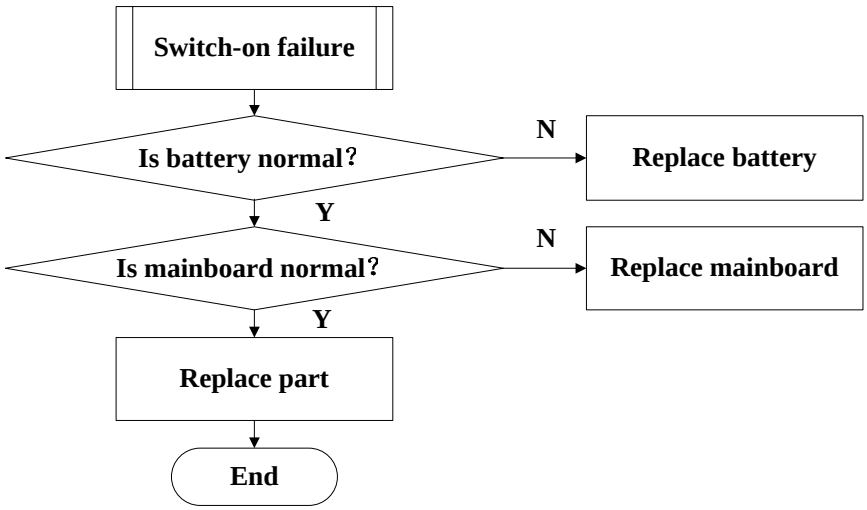
Bottom Distributing

3. Basic flow chart of familiar troubleshooting (Level 1)

3.1 Structural Part Failure

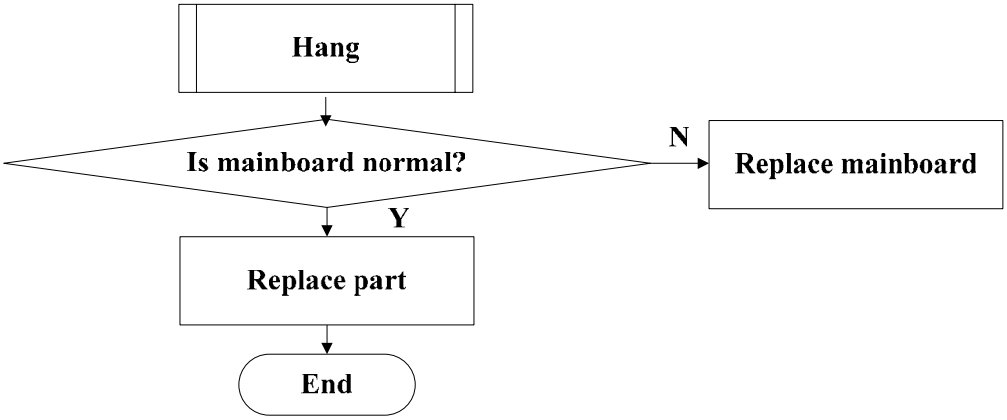
Please replace the defaulted structural part with references to the handset disassembly process.

3.2 Switching On Failure

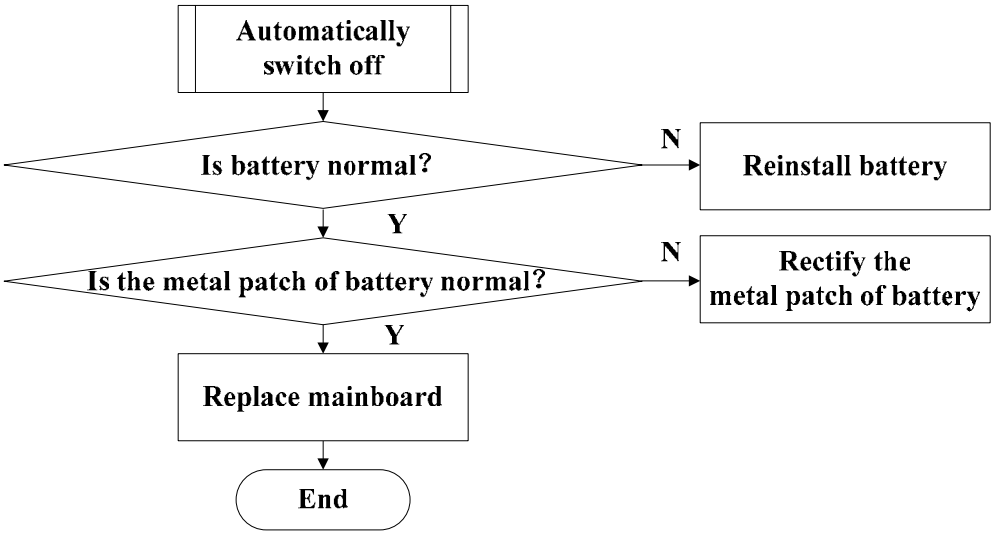


<ZTE corporation copyright reserved. No spreading aboard.>

3.3 Hanging

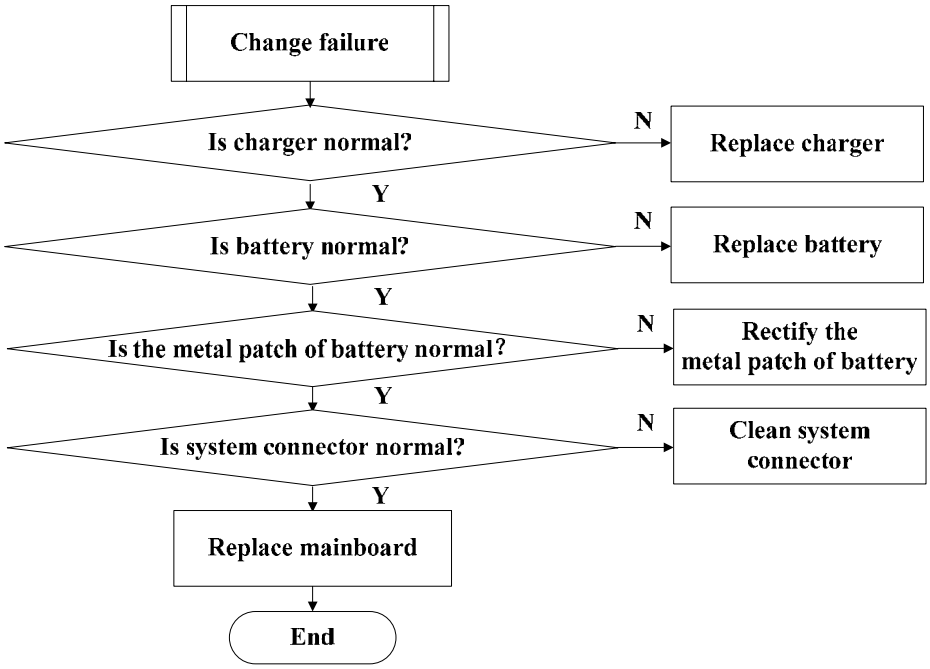


3.4 Automatically Switch Off

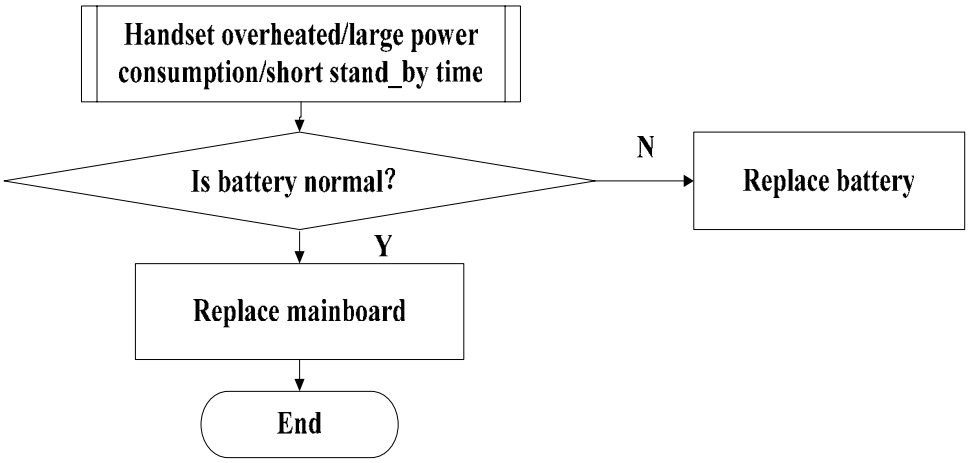


3.5 Charging Failure

<ZTE corporation copyright reserved. No spreading aboard.>

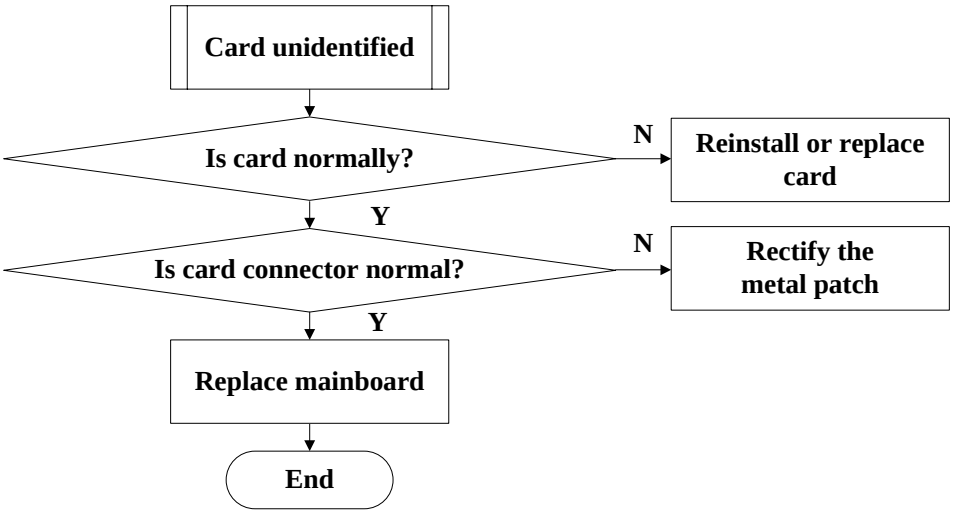


3.6 Handset overheated /large power consumption/Short stand_by time

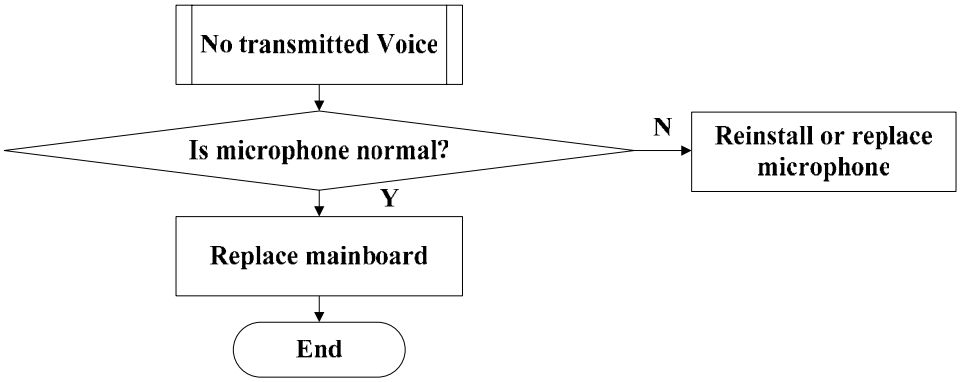


<ZTE corporation copyright reserved. No spreading aboard.>

3.7 Card unidentified

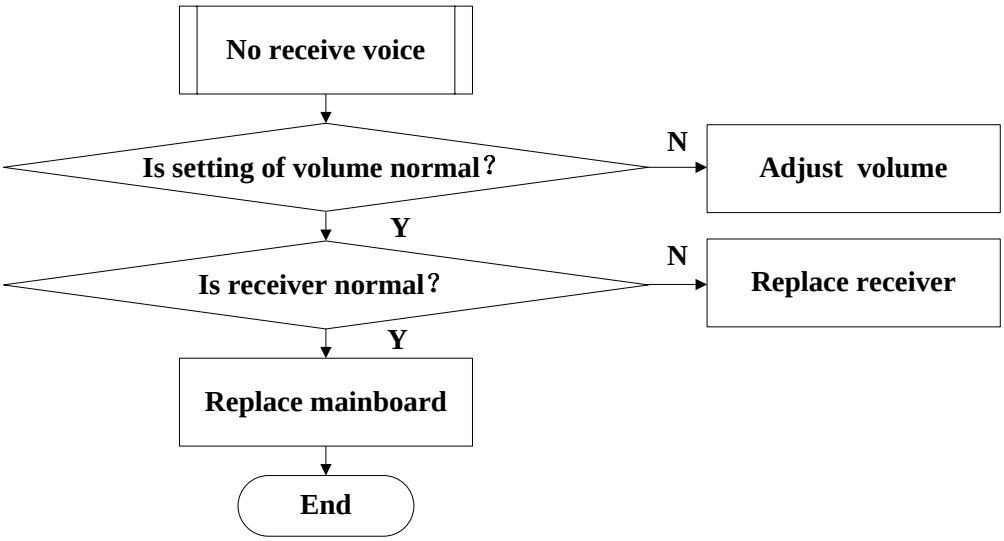


3.8 No Transmission Voice

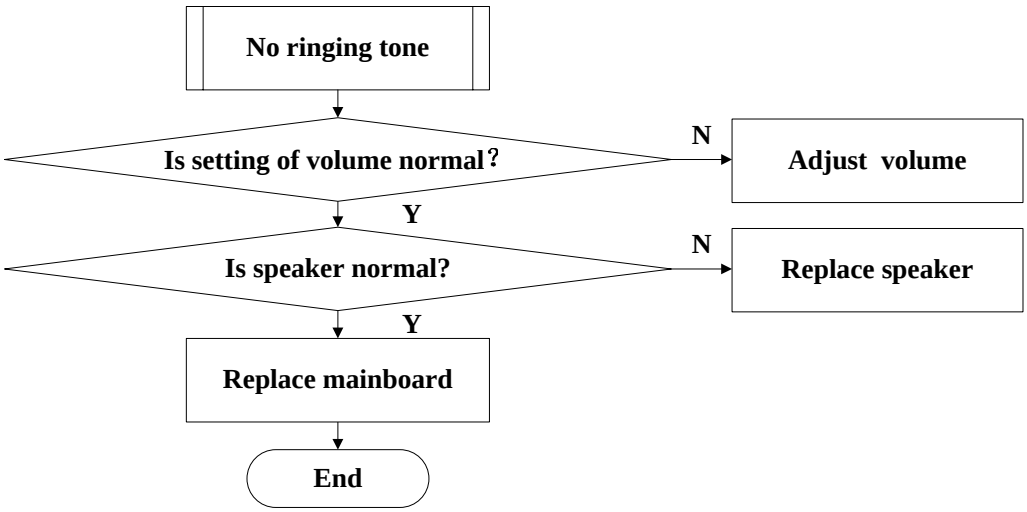


<ZTE corporation copyright reserved. No spreading aboard.>

3.9 No receive voice

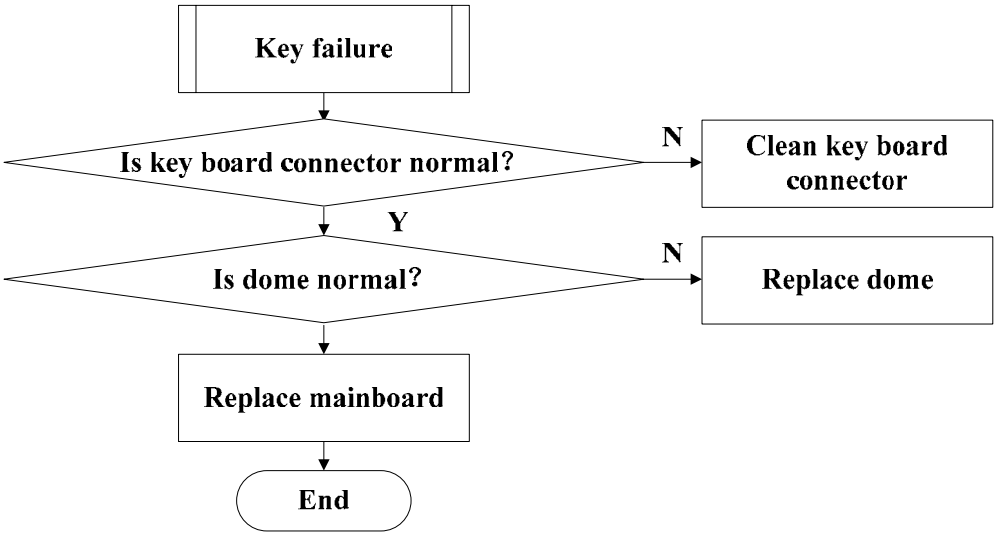


3.10 No ringing tone

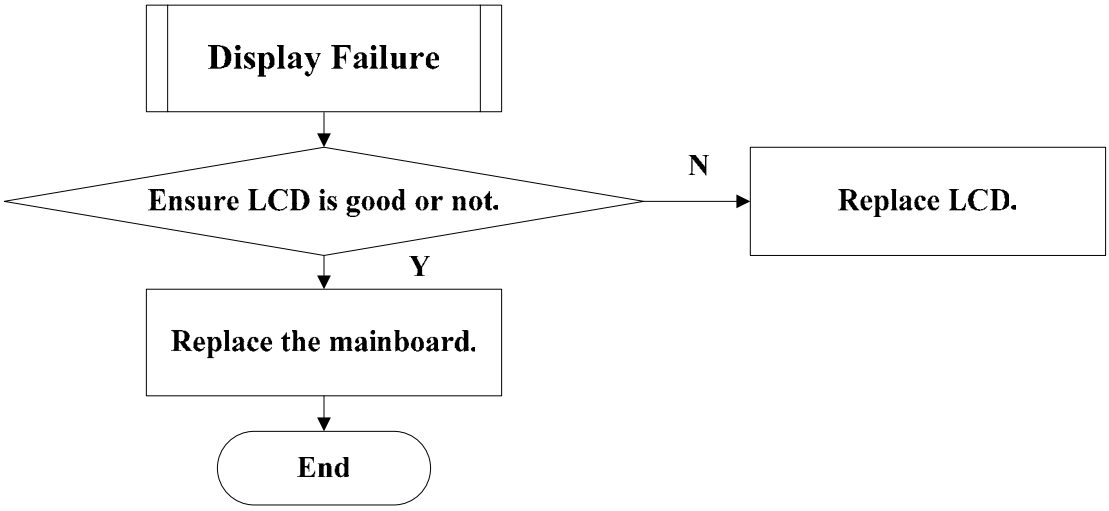


<ZTE corporation copyright reserved. No spreading aboard.>

3.11 Key Failure

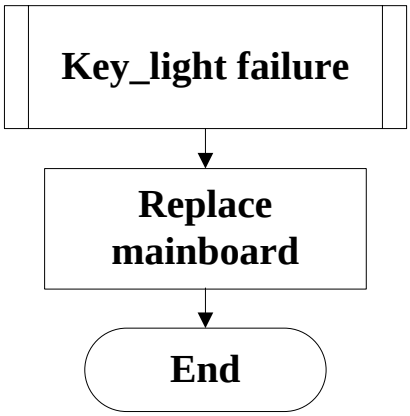


3.12 Display Failure

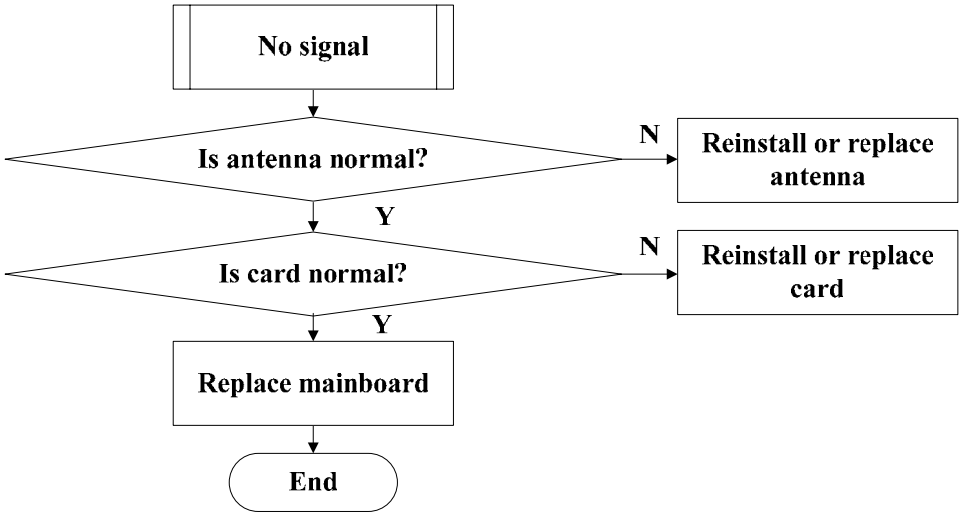


<ZTE corporation copyright reserved. No spreading aboard.>

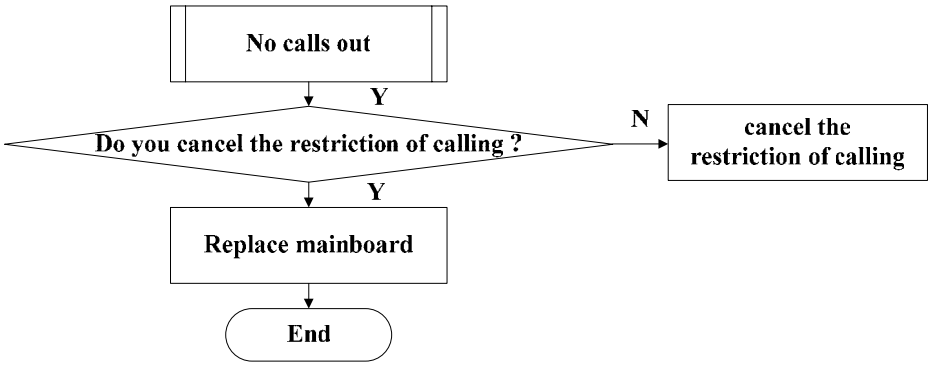
3.13 Key_light Failure



3.14 No Signal

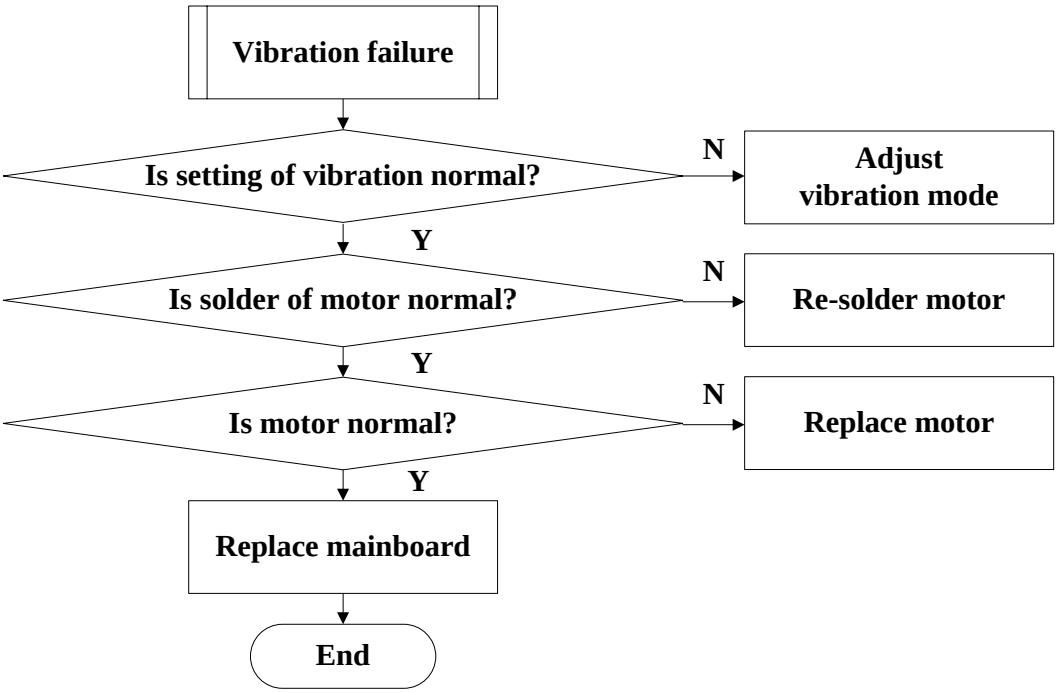


3.15 No Call Out



<ZTE corporation copyright reserved. No spreading aboard.>

3.16 Vibration failure



4. Part List

Parts list P300A3 CDMA 1X	
Material Code	**Material Name**
55401001791	P300A3 Front Assembly
55401001672	P300A3 Back Assembly
55402000421	P300A3 Keyboard Assembly
55402000310	P300A1 DOME
35030100010	R45C1 LCD Module
35070100001	VX2 Motor
35040100031	Speaker & receiver
35040300026	V767 Microphone
126750850026E	P300A1 Mainboard

<ZTE corporation copyright reserved. No spreading aboard.>