Technical Document

Document Title: A135 GSM Dual Frequency Digital Mobile Phone After-sales Services Manual (Level 1)

All 29 Pages

(Cover Included)

Drafted	Li Ye\Kuang Fengzhi
Checked	Ren Zonghao
Signed	
Standardize	
Approved	

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Notice ·					

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1. Product Overview

1.1 Standard Configuration

No.	Part Name	Qty
1	Phone Set	1
2	Lithium Ion Battery	1
3	Battery Charger	1

1.2 Specifications

- Standard: GSM.
- Dimension: about 41.3mm*100mm*11.4mm.
- Weight: about 85g (Standard Battery Included).
- Talk Time: About 2~4 hours.
- Standby Time: About 80~160 hrs.

1.3 Feature Introduction

- Zi input method;
- ♦ 16-chord sounds;
- Any Key Answer;
- Call minutes prompt;
- Call record and talk time record;
- ♦ Support STK;
- Support Calling Identity Delivery (CID) and call connection prompt, etc;
- Brand new Contextual models (including normal, conference, outdoor and mute contextual models);
- Various alarm clock (including single alarm clock, daily alarm clock, weekly alarm clock and working day alarm clock);

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 Support short message, new message reading immediately, all short messages deletion and group sending message, etc.

1.4 Internal Number

Internal Model	External Model
P108A9	A135

2. Internal Structure and Principle

2.1 Function Test

Function Test

- Input "*983*0#" instruction to enter test mode.
- Check LCD: LCD displays full black screen and then full white screen. Check if there are faulty pixel points, faulty lines or other disharmony pixel points.
- Keypad test: Later keypad test appears, testing each key. Pay attention to check if each key can display the corresponding characters. It is required that the user has a sense of switching and uniform exertion.
- Ring tone: check the ring tone for abnormity, cacophony and miscellaneous.
- Audio Loop Test: Blow to MIC to check if the rustle sound can be heard.
- After these tests, press **Back** key to exit test mode.

IMEI Number Check

• Input "*#06#" instruction. Check if IMEI number displaying on the phone is consistent with that on the label of the phone set.

Software Version Check

• Input "*983*839#" instruction. Check if the phone's FLASH software version displays and if this version is consistent with the updated one (the latest version).

2.2 Software Download

• About software download

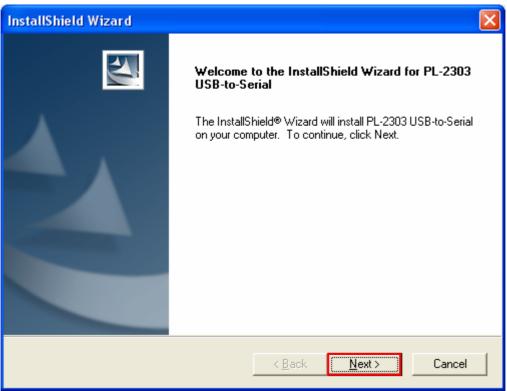
Every handset sent to repair must be updated to the latest version.

Make ensure that the mobile phone is switched on and connects to the computer successfully, and its battery must be installed when its software is downloaded. During the download process, the mobile phone can not be powered off. And it could not be removed until software download finishes and PASS identification appears. Otherwise, the mobile phone can not be switched on.

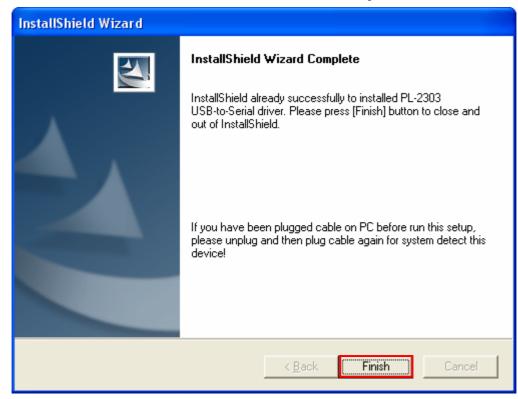
• Install drive of data download cable. Double click USB drive icon to perform driver installation.

R52&VX Drive

• Click Next.



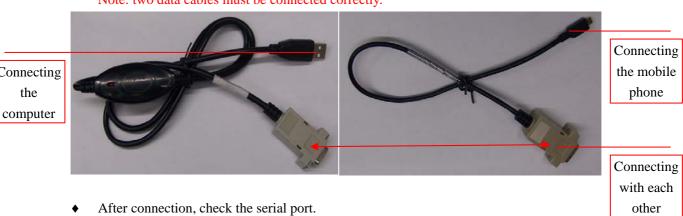
• Click Finish. Driver installation of data download cable is completed.



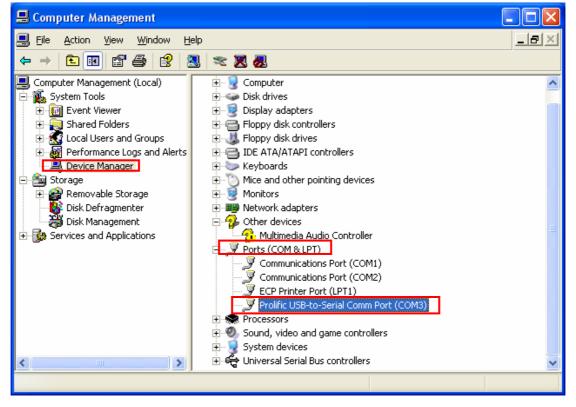
Material code of GSM data cable: IS033211; Material code of GSM data patch cable: IS063280.

Note: two data cables must be connected correctly.

Connecting the



Check it though the path: My computer > Management > Device Management > Port.



Install download platform: FlashTool_E2.exe.



• Main interface of the software download setup.

🐟 Download Setup	×
<u>F</u> ile <u>H</u> elp	
⊙ Normal O Binary	
NAND NAND Boot System Software	
Phone Software	×
EEPROM File	
In the second se	
FLASH File System	×
Solution	≽
Add-ons	
📝 🗌 Tools	
Communication Setup	*
COM Port Baud Rate # Channels Communication Driver	
v.2.6 DLL v.2.20_beta_1	

• Correct option settings of **Communication Setup** are shown in the following figure:

Communication Setup			*			
-COM F	Port	-Baud Rate		-# Channels	Communication Driver	
3	*	921600	*	1	COM Port Driver	~

• Select **Phone Software** option. Click button and select the software file with the name like *.fls.

Phone Software Phon	*
Phone Software File (*.fls):	
	✓ …

Load Phone Sof	ftware File	? 🗙
Look jn:	🗁 ZH_P108A9V1.0.0B05 🛛 🕑 🤔 📂 🛄•	
My Recent Documents	ZH_P108A9V1.0.0B05secury.fls	
My Documents		
My Computer		
My Network	File name: ZH_P108A9V1.0.0B05secury Files of type: Phone Software File (*.fls)	<u>O</u> pen Cancel

Select FLASH File System option. Click button and select the software file with the name like *.dffs.

FLASH File System	*
Flash File System File (*.dffs;*.dfat):	▼
Download Dynamic Part Download Static Part	

Load Flash File	e System	? 🗙
Look <u>i</u> n:	🗁 ZH_P108A9V1.0.0B05 🛛 🕑 🤔 📂 🛄 🗸	
My Recent Documents Desktop My Documents	TH_P108A9V1.0.0B05.dffs	
	File name: ZH_P108A9V1.0.0B05	<u>O</u> pen
My Network	Files of type: Flash File System File (*.dffs;*.dfat)	Cancel

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• Select Customization option. Click Add... button and select t

button and select the software file with

the name like *.cust.

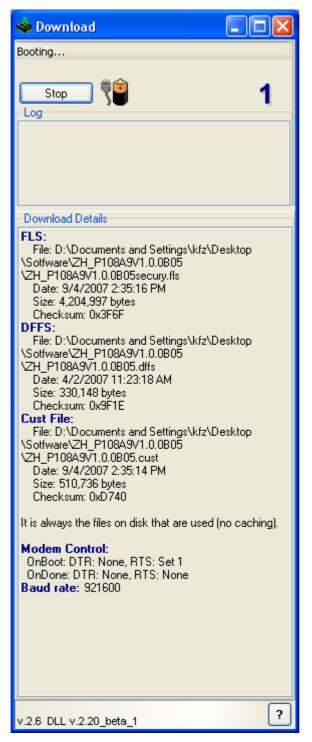
🔊 🗹 <u>C</u> ustomi	zation	*
Customization File	es (*.cust):	
Add	Remove Remove All	≷

Load Customization File				
Look jn:	🗁 ZH_P108A9V1.0.0B05 🛛 🕑 🤔 📂 🖽•			
My Recent Documents	E ZH_P108A9V1.0.0B05.cust			
My Documents				
My Computer				
S	File name: ZH_P108A9V1.0.0B05	<u>O</u> pen		
My Network	Files of type: Customization File (*.cust)	Cancel		

After the above configuration operations, close the software and open it again.
The purpose of doing this is that the configuration can be saved when the software is closed abnormally.

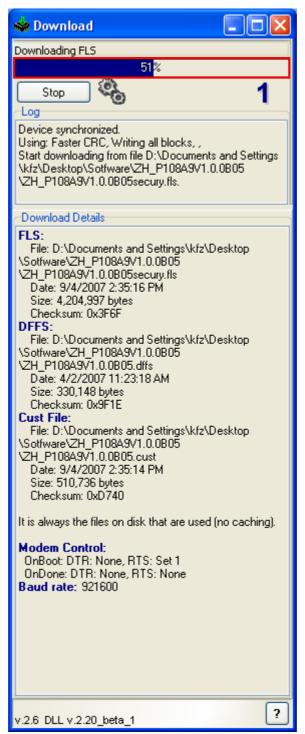
🐟 Download Setup 📃 🗖 🔀				
<u>File</u> <u>H</u> elp				
Normal O Binary				
NRND NAND Boot System Software				
Reference Software				
Phone Software File (*.fls):				
D:\Documents and Settings\kfz\Desktop\Sotfware\ZH_P10 🔽				
EEP DEEPROM File				
I DSP File				
✓ FLASH File System				
Flash File System File (*.dffs;*.dfat):				
D:\Documents and Settings\kfz\Desktop\Sotfware\ZH_P10 🗸 []				
Download Dynamic Part Download Static Part				
WARNING: This will overwrite all user data in the phone				
Customization Files (*.cust):				
D:\Documents and Settings\kfz\Desktop\Sotfware\ZH_P108A9V1.0.I				
Add Remove Remove All				
Install Add-ons				
🔎 🗌 Tools				
√u Communication Setup 😞				
COM Port Baud Rate # Channels Communication Driver 3 921600 1 COM Port Driver				
v.2.6 DLL v.2.20_beta_1				

• Click **Start**, the following interface appears:



• Connect the mobile phone and switch it on.

Note: the mobile phone should download files with its battery installed. Click **Start** button and then connect the phone.

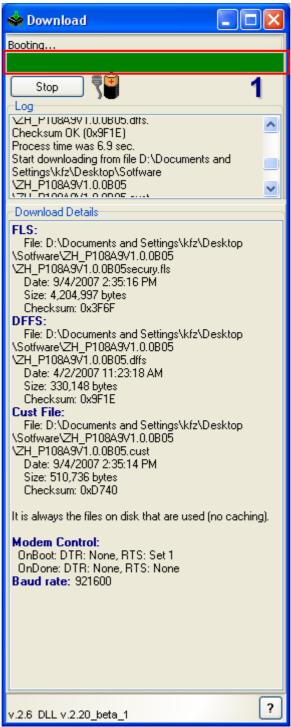


• The mobile phone is downloading files, and the interfaces are as shown below.

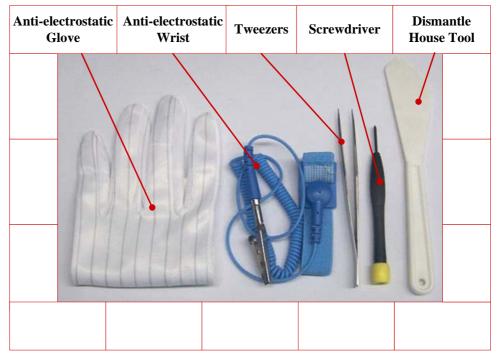
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Downloading DFFS					
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Log 1					
VZH_P108A9V1.0.0B05secury.fls. Checksum OK (0x3F6F) Process time was 42.2 sec. Start downloading from file D:\Documents and Settings\kfz\Desktop\Sotfware VZH_P108A9V1.0.0B05					
Download Details					
FLS: File: D:\Documents and Settings\kfz\Desktop \Sotfware\ZH_P108A9V1.0.0B05 \ZH_P108A9V1.0.0B05secury.fls Date: 9/4/2007 2:35:16 PM Size: 4,204,997 bytes Checksum: 0x3F6F DFFS: File: D:\Documents and Settings\kfz\Desktop \Sotfware\ZH_P108A9V1.0.0B05 \ZH_P108A9V1.0.0B05.dffs Date: 4/2/2007 11:23:18 AM Size: 330,148 bytes Checksum: 0x9F1E Cust File: File: D:\Documents and Settings\kfz\Desktop \Sotfware\ZH_P108A9V1.0.0B05 \ZH_P108A9V1.0.0B05.cust Date: 9/4/2007 2:35:14 PM Size: 510,736 bytes Checksum: 0xD740 It is always the files on disk that are used (no caching). Modem Control: OnBoot: DTR: None, RTS: Set 1 OnDone: DTR: None, RTS: None Baud rate: 921600					
v.2.6 DLL v.2.20_beta_1					

🔹 Download 📃 🗖 🔀				
Downloading Customization				
71%				
Stop 🦓 1				
Log				
V∠H_P108A9V1.0.0805.dtts. Checksum OK (0x9F1E)				
Process time was 6.9 sec. Start downloading from file D:\Documents and				
Settings\kfz\Desktop\Sotfware				
Download Details				
FLS: File: D:\Documents and Settings\kfz\Desktop \Sotfware\ZH_P108A9V1.0.0B05 \ZH_P108A9V1.0.0B05secury.fls Date: 9/4/2007 2:35:16 PM Size: 4,204,997 bytes Checksum: 0x3F6F DFFS: File: D:\Documents and Settings\kfz\Desktop \Sotfware\ZH_P108A9V1.0.0B05 \ZH_P108A9V1.0.0B05.dffs Date: 4/2/2007 11:23:18 AM Size: 330,148 bytes Checksum: 0x9F1E Cust File: File: D:\Documents and Settings\kfz\Desktop \Sotfware\ZH_P108A9V1.0.0B05 \ZH_P108A9V1.0.0B05.cust Date: 9/4/2007 2:35:14 PM Size: 510,736 bytes Checksum: 0xD740				
It is always the files on disk that are used (no caching).				
Modem Control: OnBoot: DTR: None, RTS: Set 1 OnDone: DTR: None, RTS: None Baud rate: 921600				
v.2.6 DLL v.2.20_beta_1				

• The download is finished, and the interface is as shown below:

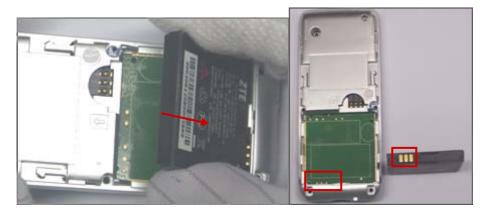


2.3 Disassembling Flow

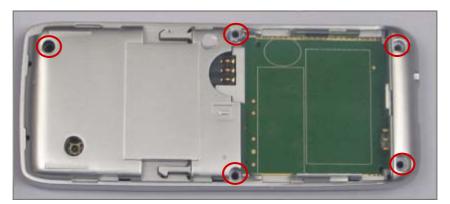


• Tools Used to Disassemble

• Take out the battery carefully. Pay attention to the touch point and the touch plate, as shown below:

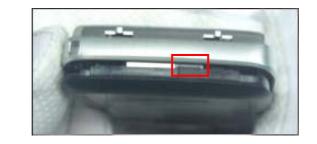


• Notes: Positions of five screws are as shown below:



• Disassemble the front and back shells using the disassemble toll, paying attention to the card holder position, as shown below:



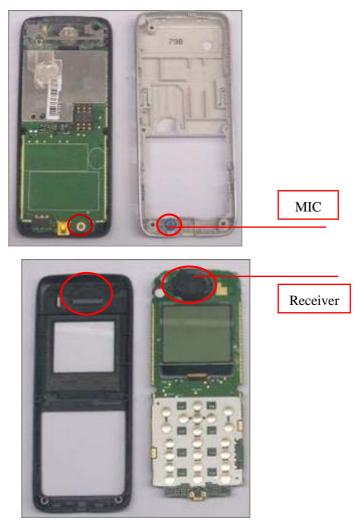








- Notes: The disassembled front and back shells are as shown below:
- Note: Pay attention to the installation positions of the MIC and receiver. MIC should contact well with its contact, as shown below.



• Pay attention to the position of the card holder position when the built-in antenna is disassembled, as shown below:



• Position of the built-in antenna touch plate and touch point.

Notes: the antenna touch plate and touch point should connect well when the built-in antenna is installed.



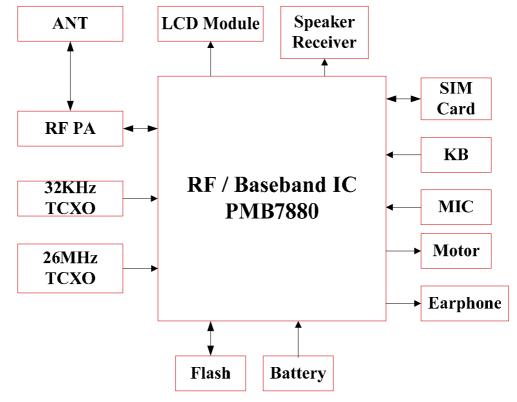
2.4 Components

Front CoverBatterySpeaker&ReceiverInner AntennaImage: Speaker & ReceiverImage: Speaker & ReceiverI

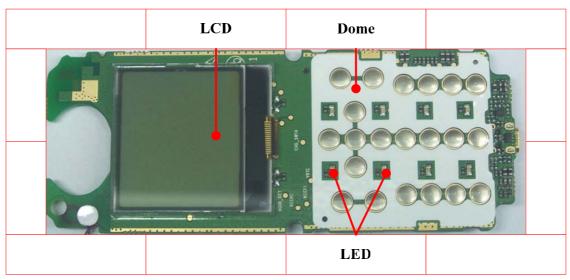
The mobile phone includes the components as shown below:

2.5 Block Diagram for Principle

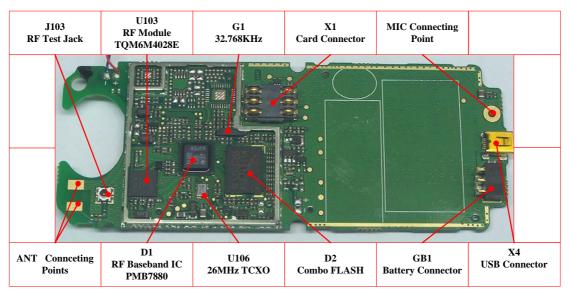
The principle of the mobile phone is as shown in the block diagram below:



2.6 Hardware Material Object Picture



MB Top Distributing



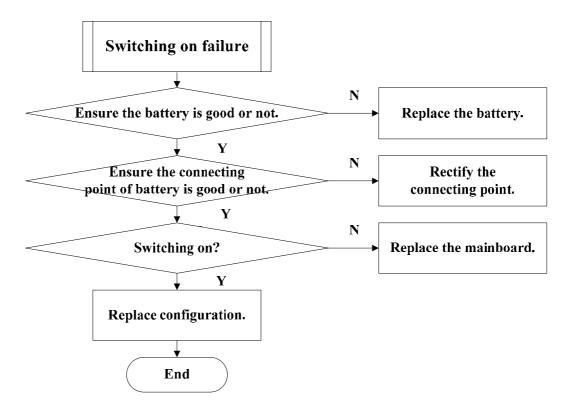
MB Bottom Distributing

3. Flow Chart of Familiar Troubleshooting (Level 1)

3.1 Components Failure

Please replace the faulty components referring to the disassembling steps.

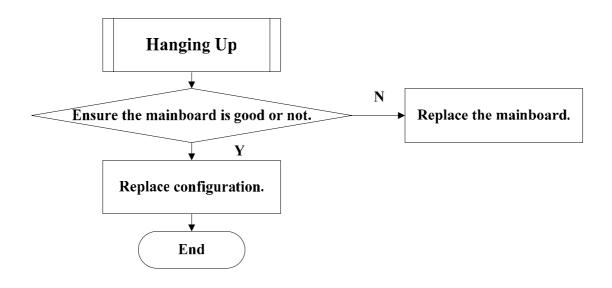
3.2 Switching On Failure



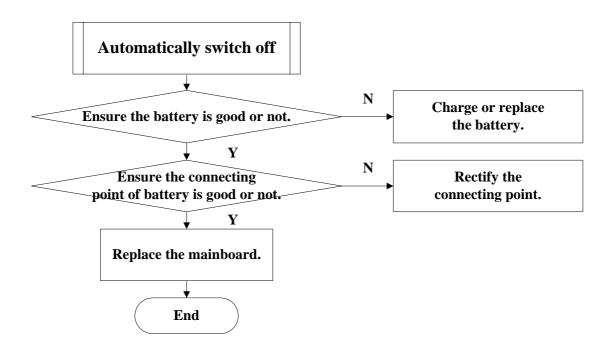
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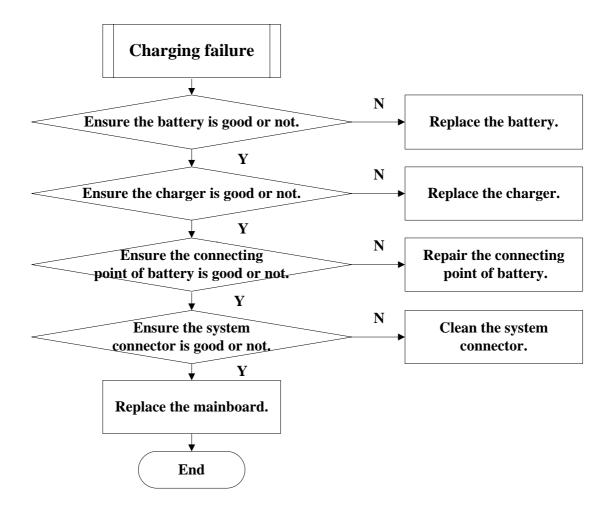
3.3 Hanging



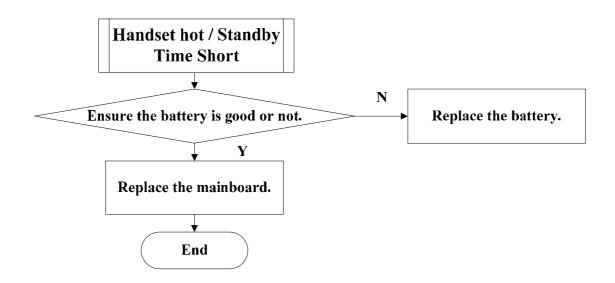
3.4 Automatically Switch Off



3.5 Charging Failure

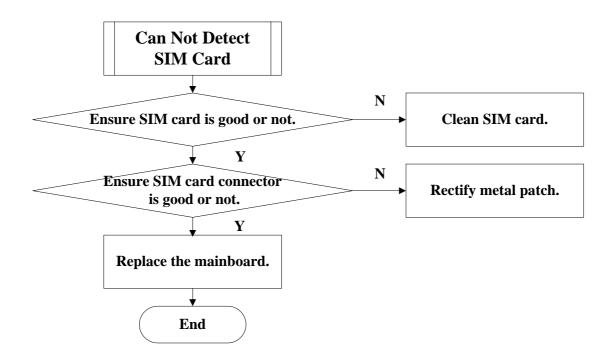


3.6 Handset Hot

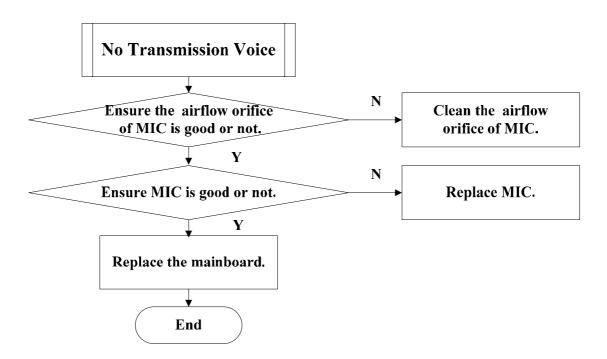


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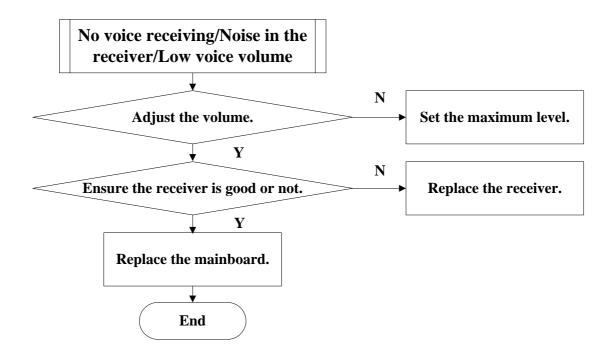
3.7 SIM Card Failure



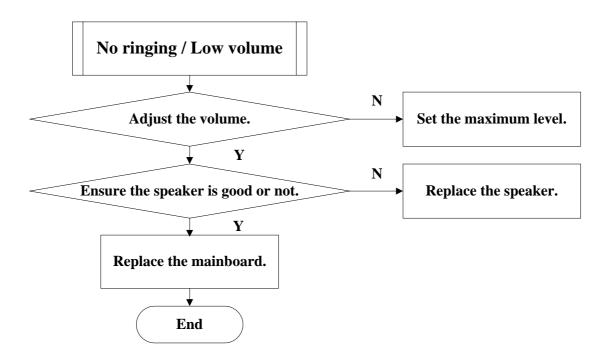
3.8 No Transmission Voice



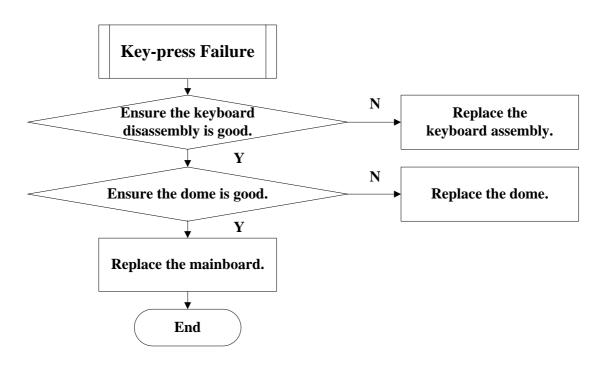
3.9 No voice receiving/Noise in the receiver/Low voice volume



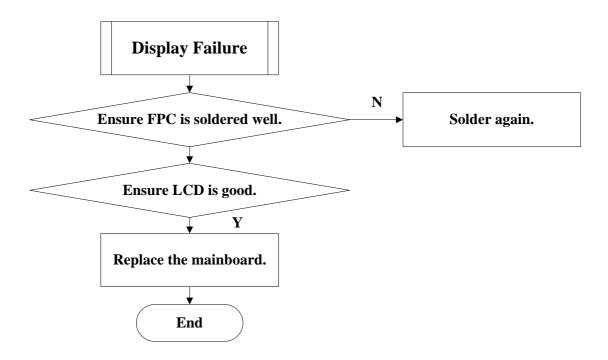
3.10 No ringing or low volume



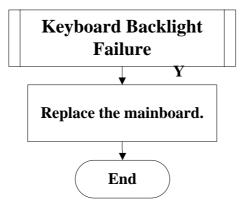
3.11 Key-press Failure



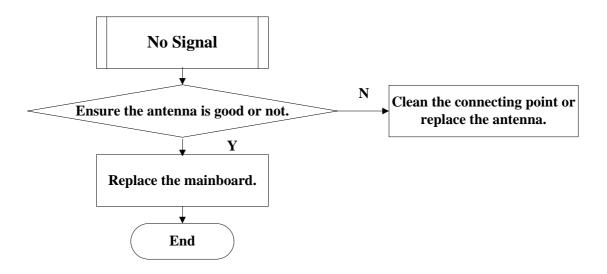
3.12 Display Failure



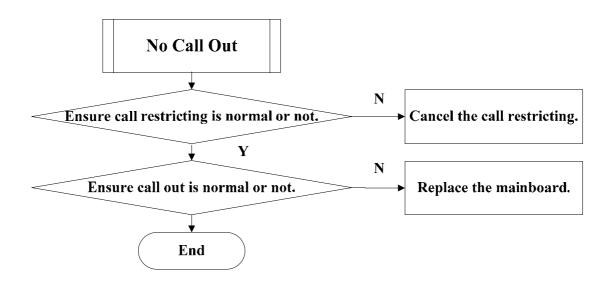
3.13 Key Backlight Failure



3.14 No Signal



3.15 No Call Out



4. Parts List

A135 GSM Dual Frequency Digital Mobile Phone After-sales Parts Lists			
No.	P/N	Part Name	
1	126709150001	P108A9 Main Board Components	
2	055401002199	P108A1 Front Shell Components	
3	055401002200	P108A1 Back Shell Components	
4	050603100107	P108A1 Antenna Components	
5	035030100172	P108A1 LCD module	
6	035040300038	MIC	
7	035040100040	SPEAKER/receiver	

Note: This is the main parts list. If you need a detail one, please apply it from local after-sales service manager.