

Bluetooth VoIP Phone

Features:

- Bluetooth v1.2 Compliant.
- Class II , up to 0 dBm
- Headset and Hands-free profile supported.
- Up to 2hours Hands-free mode Talking time
- Up to 3.4hours Headset mode Talking time
- Audio DSP support Echo cancellation / Noise Reducing.
- Battery charge via PCMCIA (5V)
- CE, FCC, BQB certification

Product Specification

Model# :

Customer: K33406

J3: CP-2010,CP-2020

Doc. Version#: 1.2

Control Number: 1

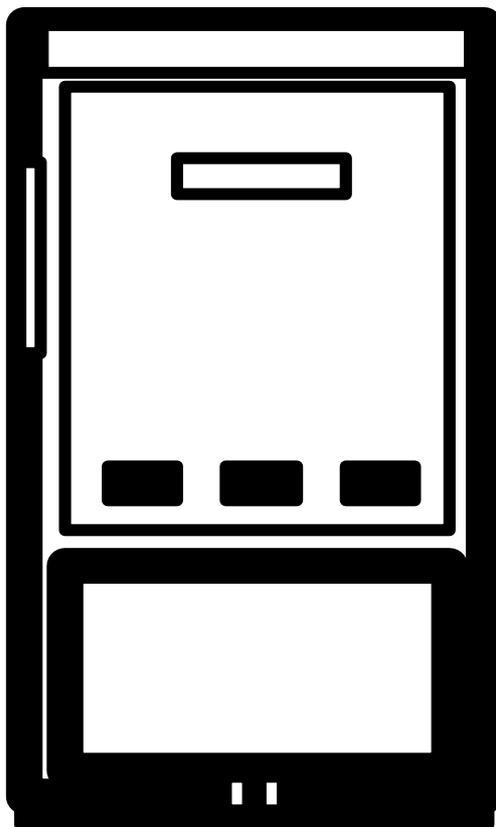
PCB version: E/F

Key Parts version: K00

Firmware version: A0

ME version: M01

Package version: P00



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1. Key Features

Bluetooth :

- Bluetooth v1.2 compliant or above.

Radio:

Carrier Frequency: 2.4~2.480GHz

Spread Spectrum:

- FHSS (Frequency Hopping Spread Spectrum)

Data Rate: 723K bps (Data channels)

(The maximum operating range depends on the environmental factors.)

Operating Distance:

- Up to 10-meter maximum (33 ft) Operation Range (in open space)

(The maximum operating range depends on the paired phone model, battery power, and environmental factors.)

Bluetooth Profile Supported:

- HSP (Headset Profile)
- HFP (Hands-Free Profile)

Main Module & DSP:

- CSR BC04 with 8Mbits Flash.
- Audio DSP: Echo cancellation / Noise Reducing DSP
- Full Duplex Communication

Antenna: Printed Antenna

Talking Time / Standby Time:

- Headset mode : 3.4 hours per 170mAh Battery
- Hands-Free mode : 2 hours per 170mAh Battery
- Standby mode : 30 hours per 170mAh Battery

(The maximum operating time depends on the usage frequency and environmental factors. A long distance wireless connection and use with a mobile phone will increase the power consumption.)

Software/ OS Support:

OS Requirement

- WIDCOMM Bluetooth Software 4.0

Software Supporting

- Audio Conversation Function: SKYPE V1.2, MSN Messenger, Yahoo Messenger

Power Source:

- Rechargeable Battery
 - 3.7V / 170mA / Removable Li-Polymer Battery
- Battery Charging:
 - Charge via PCMCIA Directly (5V)
 - Charging Hours: 60% within 1.5Hrs, Full Charge within 4Hrs

Connector:

- 68 pins PCMCIA Connector for Battery Power Charge

Buttons & LEDs:

- Buttons:
 - Power , Pairing, HS/HF
- LEDs:
 - Blue , Amber

Environment:

- Operating Temperature: 0°C ~ +50°C
Humidity 10~90%
- Storage Temperature: 0°C ~ +70°C
Humidity 10~90%

Certifications:

- FCC, CE, BQB(by Request)

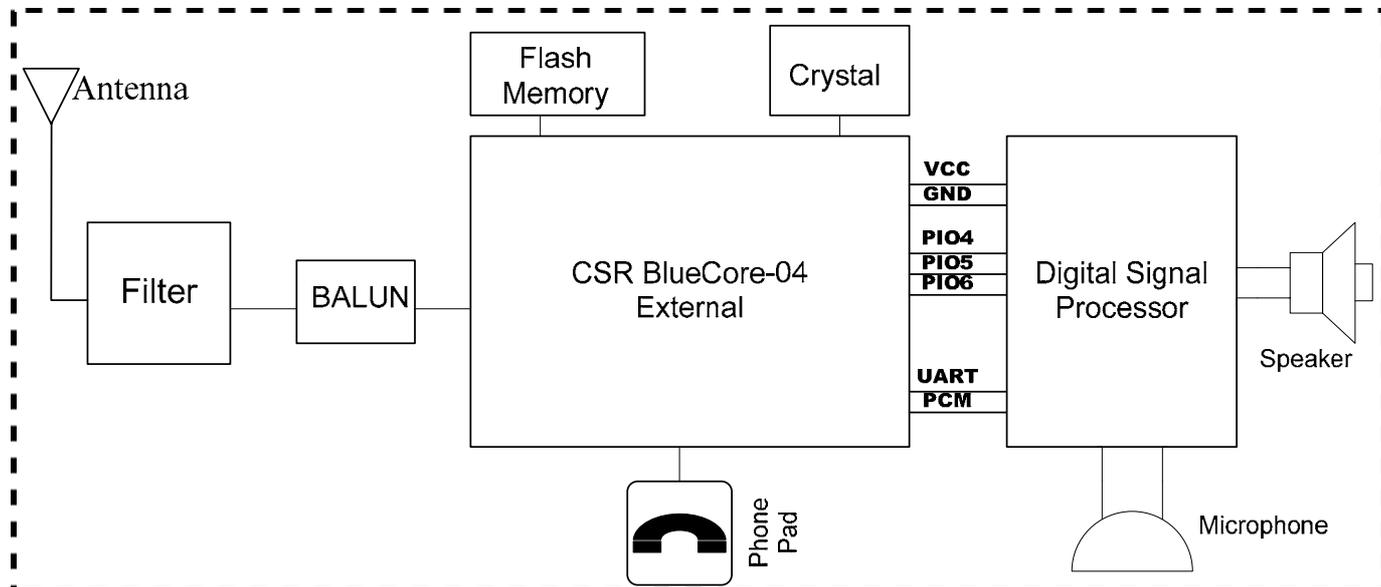
Weight and Dimension:

- Weight : 29g
- Dimension: 85.6 x 54 x 5 mm

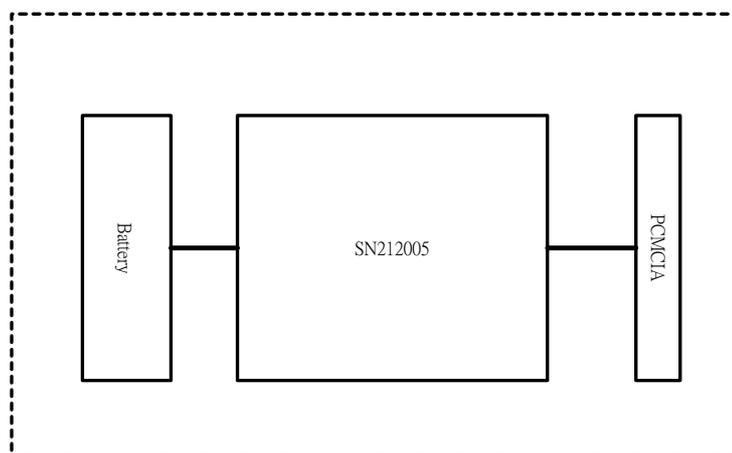


2. Technical Information

2.1 Block Diagram



Bluetooth Cardphone Block Diagram



Charger Block Diagram

2.2 Electrical Characteristics

	Min	Typ.	Max.	Unit
Supply Voltage	2.8	3.7	4.2	V
Sleep Supply Current	-	-	-	mA
Storage Temperature	-20	-	+85	°C

■ Power Consumption

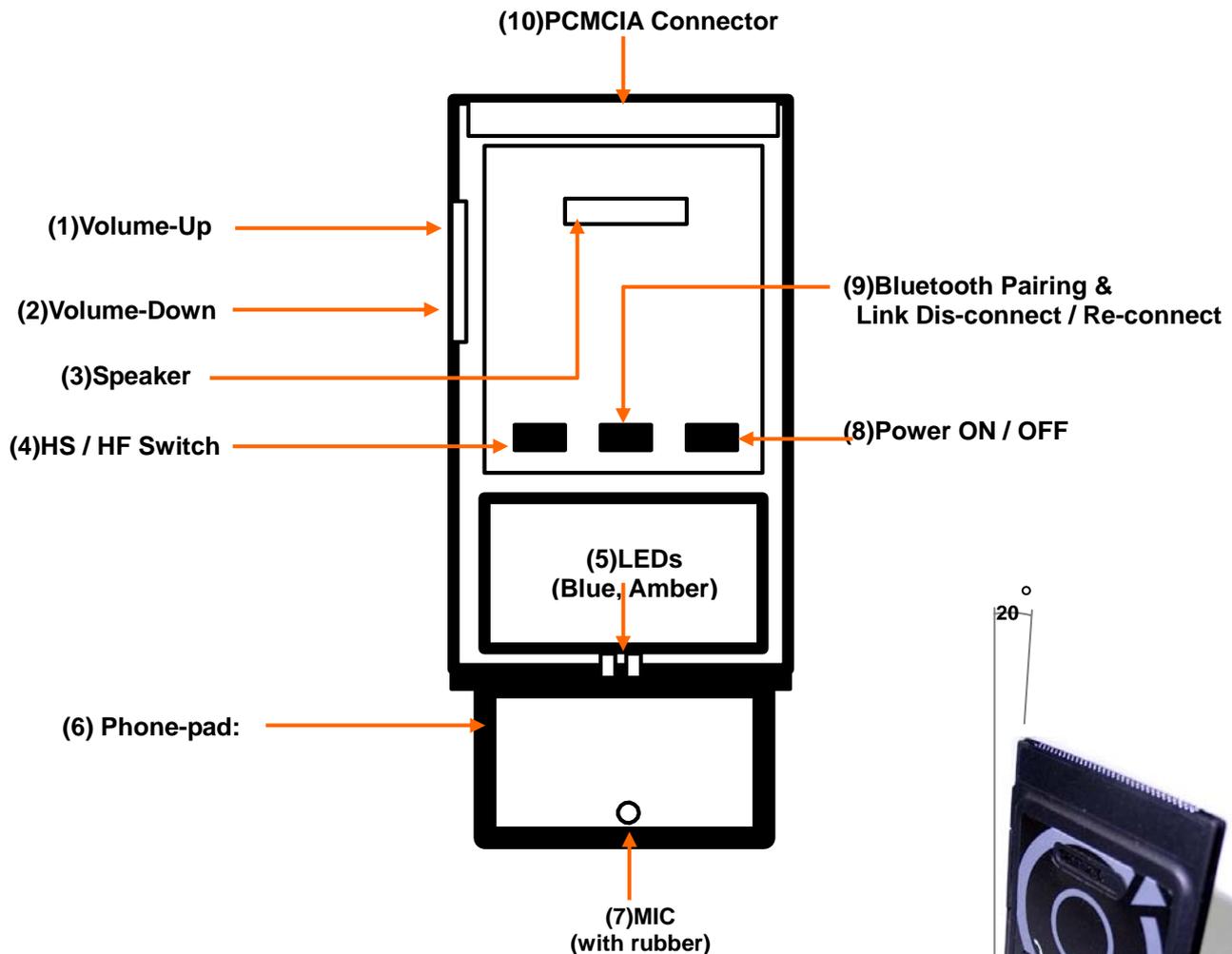
Mode	Avg.
Standby	6mA
Transmit	38mA
Receive	34mA

※ Not Include DSP

■ Operating Conditions

Voltage Range	4.2~2.8V
Operating Temperature Range	-20 °C ~ 60 °C
Storage Temperature Range	-20 °C ~ 80 °C
Relative Humidity (Operating)	≤90%
Relative Humidity (Storage)	≤90%

2.3 Button and LED Definitions



	Type	Description
1	Volume-Up	● Adjust volume up.
2	Volume-Down	● Adjust volume down.
3	Speaker	● Speaker out.
4	HS / HF Switch	● Switch to Headset or Hands-free mode.
5	LEDs	● Status display. (Blue & Amber LED)
6	Phone-pad	● Opening Phone-pad to pick-up phone call (Default=Headset mode) ● Fold-up Phone-pad to hang-up phone call.
7	MICphone	● Voice Input.
8	Power ON / OFF	● Power ON / OFF
9	BT Pairing & Link	● Active Bluetooth Pairing and link Dis-connect / Re-connect.
10	PCMCIA Connector	● Card Phone battery charge.

■ Cardphone Operations

	Operation	Button	LED	Tone
1	Power ON	Press Power ON /OFF(8) , keep 3sec on	●Blue LED: off ●Amber LED: Blinking ⁽¹⁾ .	2 short tone (Bi,Bi)
	Power OFF	Press Power ON /OFF(8) , keep 3sec on	●Blue LED: off ●Amber LED: turn on and then off.	3 short tone (Bi,Bi,Bi)
2	Bluetooth Pairing ⁽¹⁾	Press BT Pairing & Link(9) , keep 3sec on	●Blue LED:Flashing ⁽²⁾ ●Amber LED: Blinking	1 long tone (Bi)
	Link Recognized	Open Phone-pad(6)	●Blue LED: Blinking ●Amber LED: off	3 short tone (Dane,Dane,Dane)
	Bluetooth Link Dis-connect	Press BT Pairing & Link(9)	●Blue LED: off ●Amber LED: Blinking	x
	Bluetooth Link Re-connect	Press BT Pairing & Link(9)	●Blue LED: Blinking ●Amber LED: off	x
3	HS / HF Switch	Press HS/HF(4)	NC	x
4	Volume Up	Press Volume-Up(1)	NC	x
	Volume Down	Press Volume-Up(1)	NC	x
5	Low Battery Indicator ⁽³⁾	x	●Blue LED: ●Amber LED: Flashing	x
	Battery Charge	Plug Card-Phone into PCMCIA slot of NB	●Blue LED: ●Amber LED: on	x
6	Sound On	Open Phone-pad	NC	x
	Sound Off	Fold-up Phone-pad	NC	x

Note:

(1).Blinking: LED state change periodically (0.3 sec on/ 3 sec off) when activity happens unless otherwise noted

(2). Flashing: LED state change 5 times within 1 sec

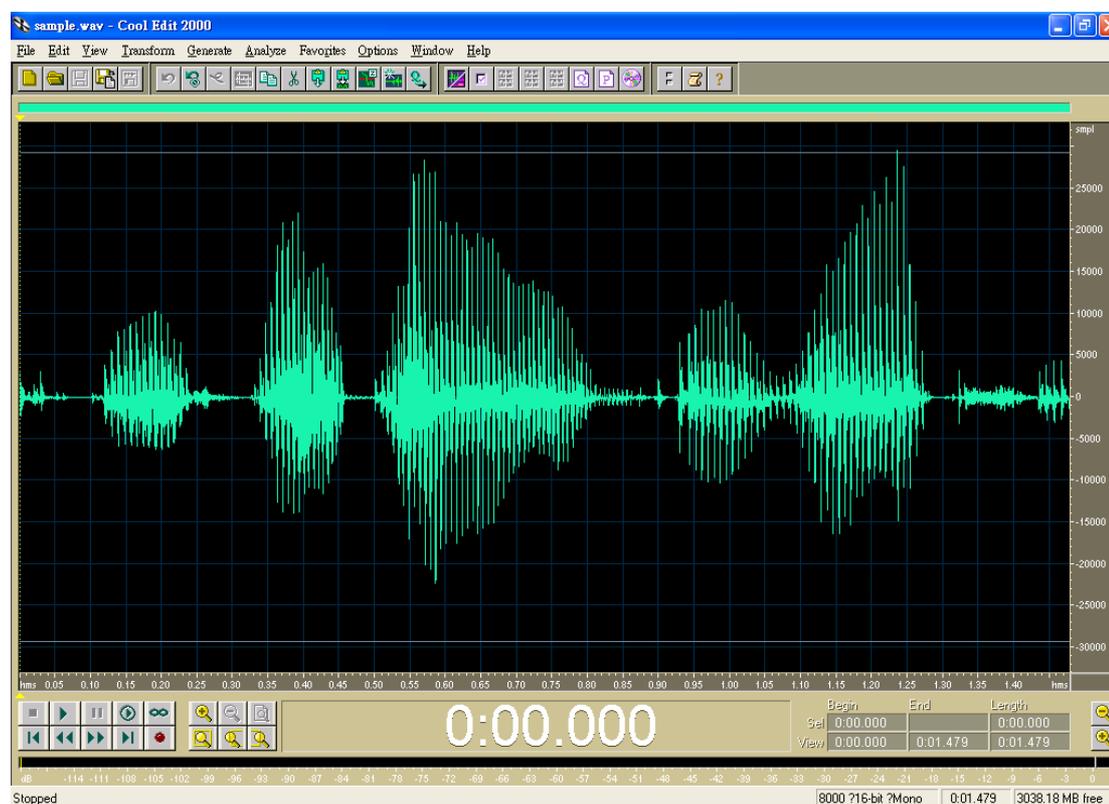
(3).The battery voltage is less than 10%.

2.4 Voice Recording & Playback

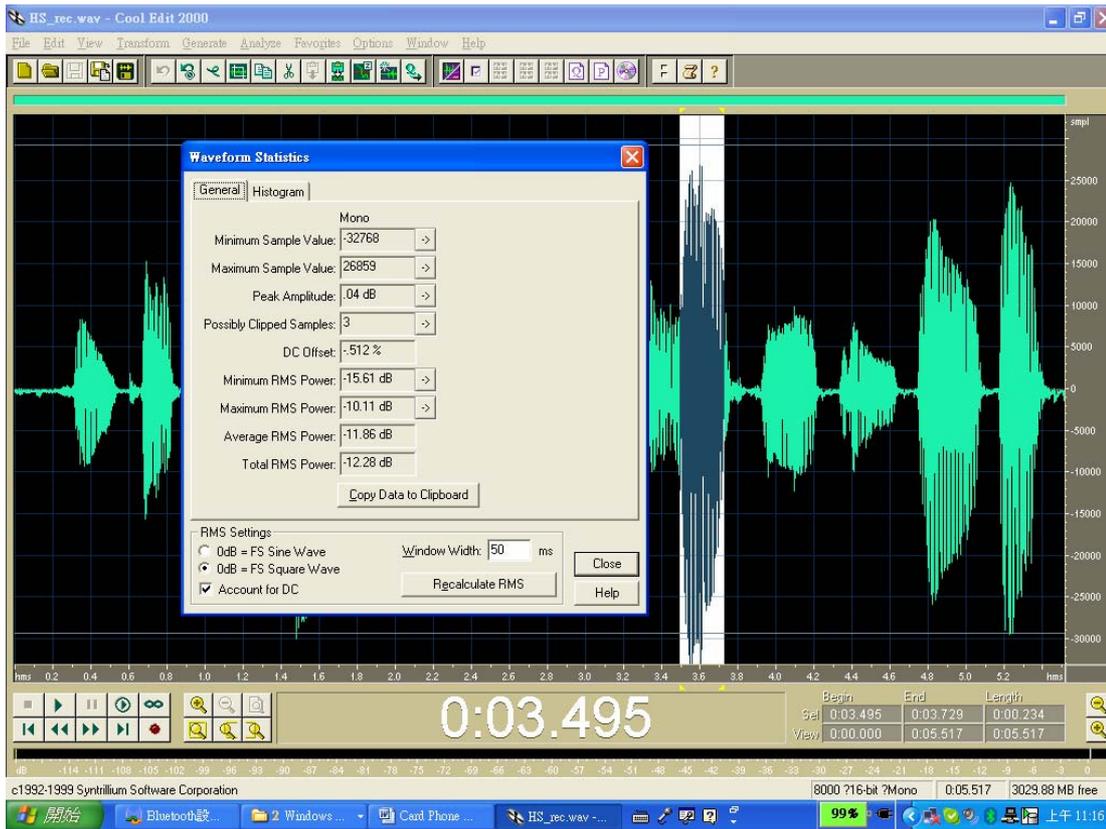
Test Procedure:

1. Record voice @ 60cm, 1m & 1.5m to simulate far-end hearing volume
2. With item 1 for handset and hands-free mode to come out HS_rec.wav and HF_rec.wav
3. Use cool edit to measure volume level of recording volume.
4. Play sample wave file (sample.wav) and measure volume by sound level meter @ 1cm to simulate Skype speaker volume @ near-end.
5. Call 168 and measure volume by sound level meter @ 1cm to simulate phone communication speaker volume @ near-end.
6. Call far-end with real time communication and measure volume by sound level meter @ 1cm to simulate speaker volume @ near-end.

Picture of sample.wav

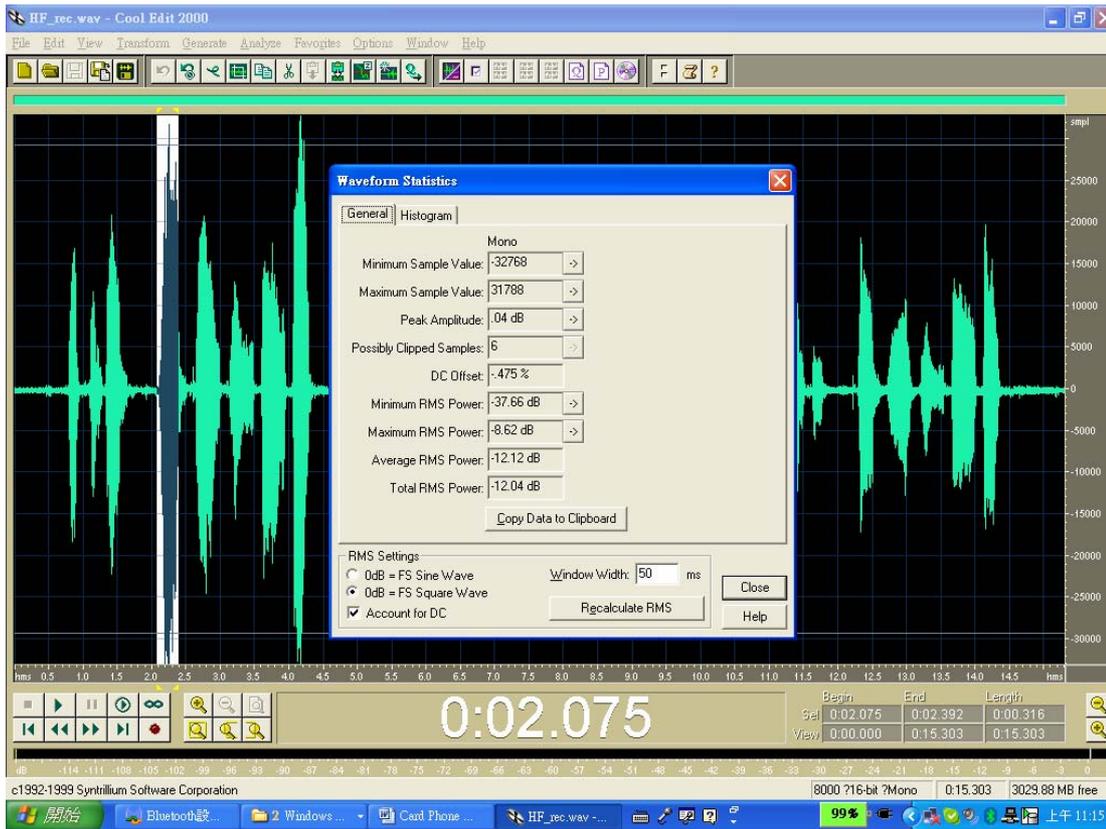


HS_rec.wav



Result; recording volume @ handset mode is good.

HF_rec.wav



Result; recording volume @ hands-free mode is good.

Speaker Volume test Result:

Item 4. Max. = 110dB, Range = 92dB ~ 110dB

Item 5. Max = 112dB, Range = 102dB ~ 112dB

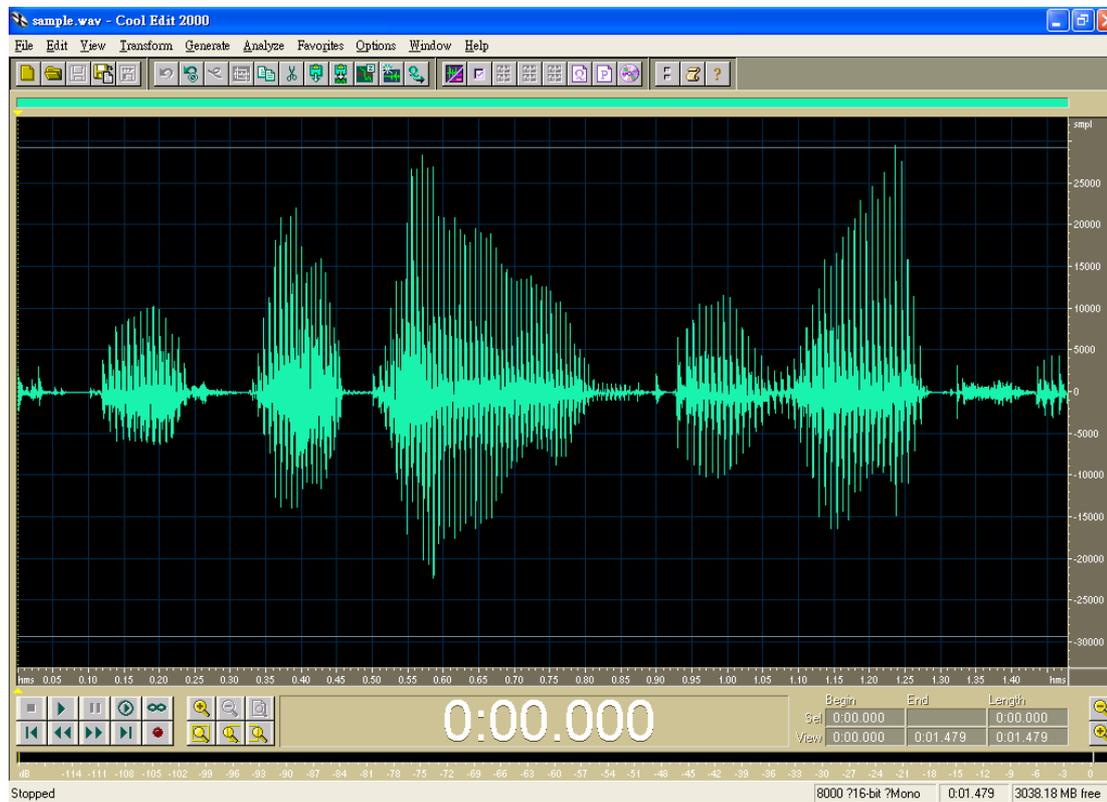
Item 6. Max = 108dB, Range = 92dB ~ 109dB

2.5 Acoustic Echo Cancellation

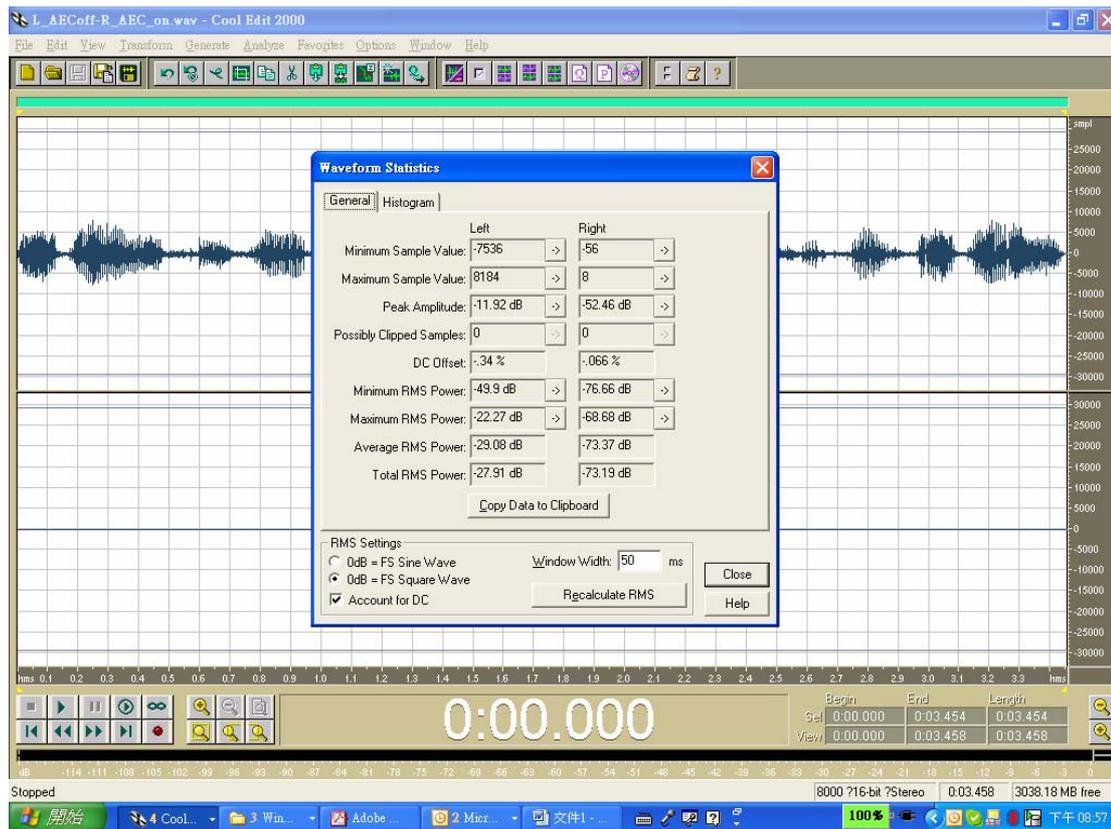
Test Procedure:

1. Play sample wave file to simulate far-end talking condition. Refer to sample.wav
2. Record voice to simulate echo/non-echo condition for far-end. Refer to L_AECoff-R_AECon.wav
3. Use cool edit to measure echo cancellation performance. Target: 45dB
4. Turn off AEC (Acoustic Echo Cancellation) parameters of DSP and record its condition @ left channel. * echo will be recorded
5. Turn on AEC (Acoustic Echo Cancellation) parameters of DSP and record its condition @ right channel. * echo will be cancelled
6. Compare dB difference for performance of acoustic echo cancellation.

Picture of sample.wav



Picture of L_AECoff-R_AECon.wav



3. Software

3.1 Main function

3.1.1 Cardphone battery charge

In some systems the power does not output to Cardphone when Cardphone is inserted in PCMCIA slot. This application can force to turn on the power when Cardphone is inserted in PCMCIA slot.

3.1.2 Switch system audio device

This application can detect the bluetooth linking status of the Cardphone. It switches the system audio device to Bluetooth Audio when Cardphone is linking to computer. It switches the system audio device to original audio device (AC97) when Cardphone is not linking to computer.

3.2 User interface

3.2.1 Shortcut

After setup the application, it puts a shortcut in the following...

1. Start -> All programs -> Acer Bluetooth VoIP Phone folder
2. Desktop

3.2.2 Execute

This application auto-runs after entering OS. Then it will reside in memory and does not provide an interface to let the user terminate the program.

3.2.3 Operation

3.2.3.1 System tray icon

Normally, the application puts an icon in the system tray. The icon and tip provide the linking status of the Cardphone. The user can double-click the icon, and the application removes the icon and opens a window on the OS desktop area.

3.2.3.2 Window on OS desktop

The window contains the linking status of the Cardphone. Normally, it will show on the top right of the desktop area. The user can drag the window to another place. It has one minimize button and one close button.



3.2.3.3 Minimize button

Clicking the minimize button will close the window and create an icon on the system tray.

2.3.4 Close button

Clicking the close button will close the window. The user needs to execute the shortcut to regain the visual feedback (desktop window or system tray icon).

3.3 NLS (National Language Support)

1. English
2. French
3. German
4. Italian
5. Spanish
6. Portuguese
7. Dutch
8. Simplified Chinese
9. Traditional Chinese
10. Japanese
11. Korean

4. Packing and Label Information

4.1 Label Information

Diagram illustrating the assembly and packaging of the VP-25010 device. The assembly includes the device (1), Connector Label (2), Mylar (3), Battery Mylar (4), and ID Label (5). The device is shown from the Front End and Back End. The packaging includes a carton (6) with the following information:

Manufacturer : J-Three
 Model: VP-25010
 P/O No.: 94081001
 Spec.: Bluetooth VoIP Phone
 Q'ty : 1200 pcs
 BD Address: 000A3A000001 to 000A3A0004B0

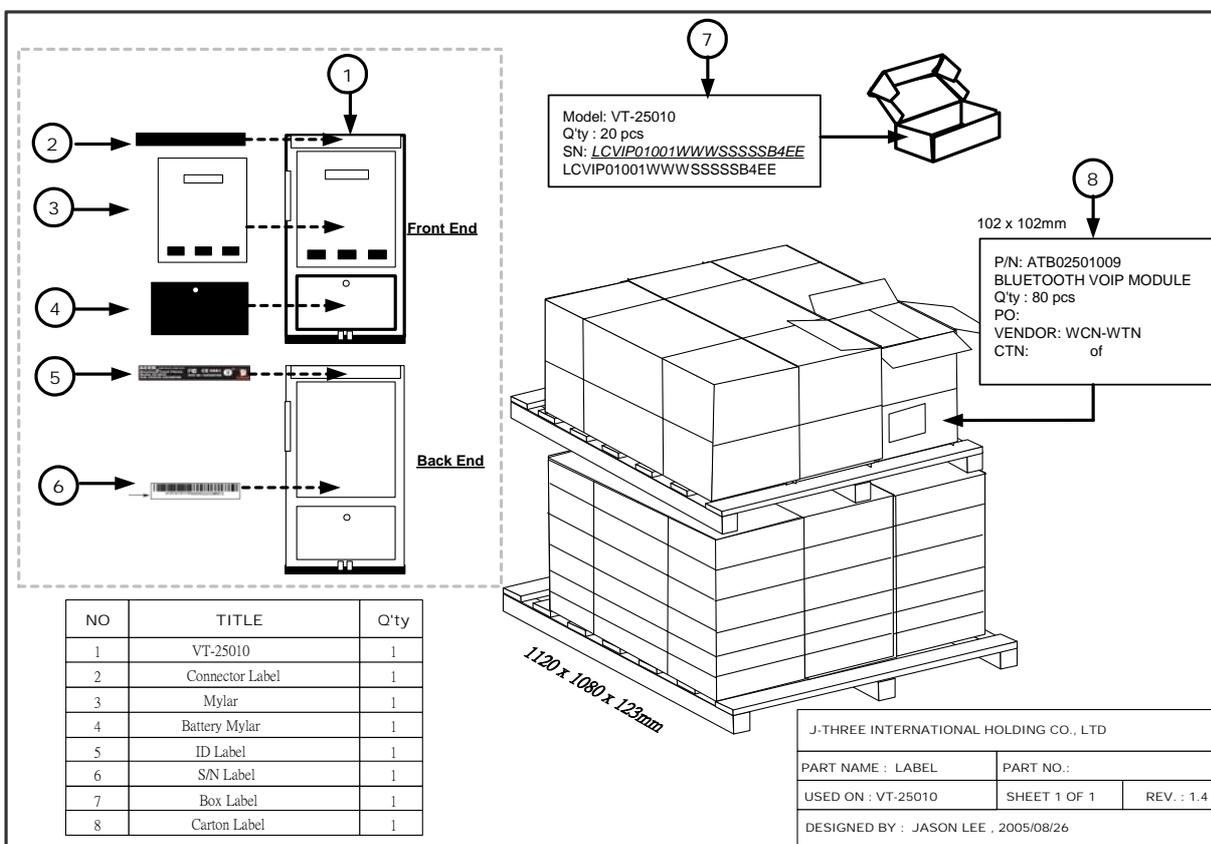
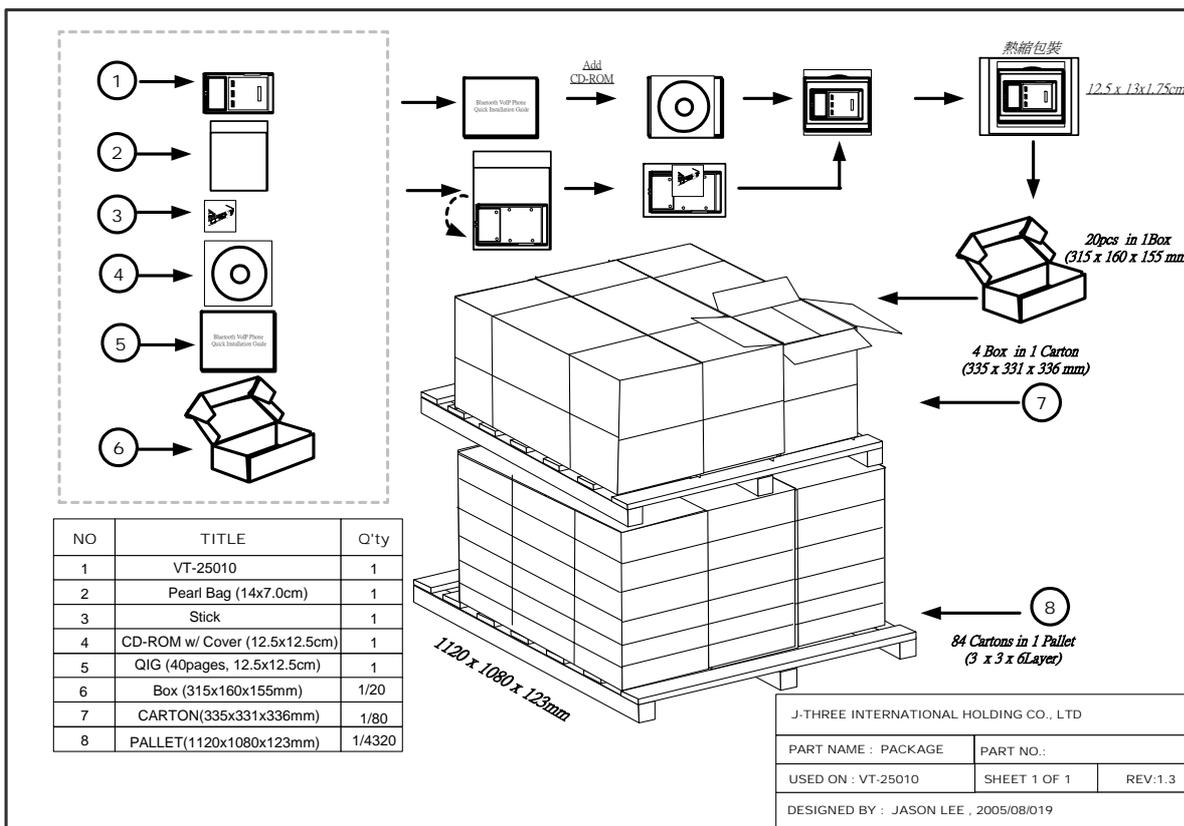
102 x 102mm

1100 x 945 x 110mm

NO	TITLE	Q'ty
1	VP-25010	1
2	Connector Label	1
3	Mylar	1
4	Battery Mylar	1
5	ID Label	1
6	Carton Label	1

J-THREE INTERNATIONAL HOLDING CO., LTD		
PART NAME : LABEL	PART NO.:	
USED ON : VP-25010	SHEET 1 OF 1	REV. : 1.1
DESIGNED BY : JASON LEE , 2005/08/05		

4.2 Packing



5. Appendix

5.1 Appendix-A 序號背貼&外包裝貼紙規範

I. 序號背貼

條碼種類 barcode type: Code128B

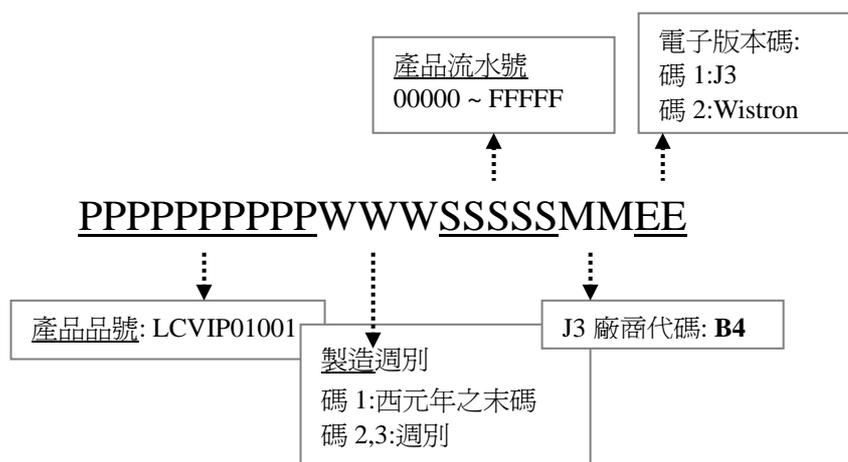
條碼高度 barcode height: 2~4mm

條碼寬窄比 barcode : 2 (13.64 CPI)

Label Size : 0.7 x 4cm



說明:

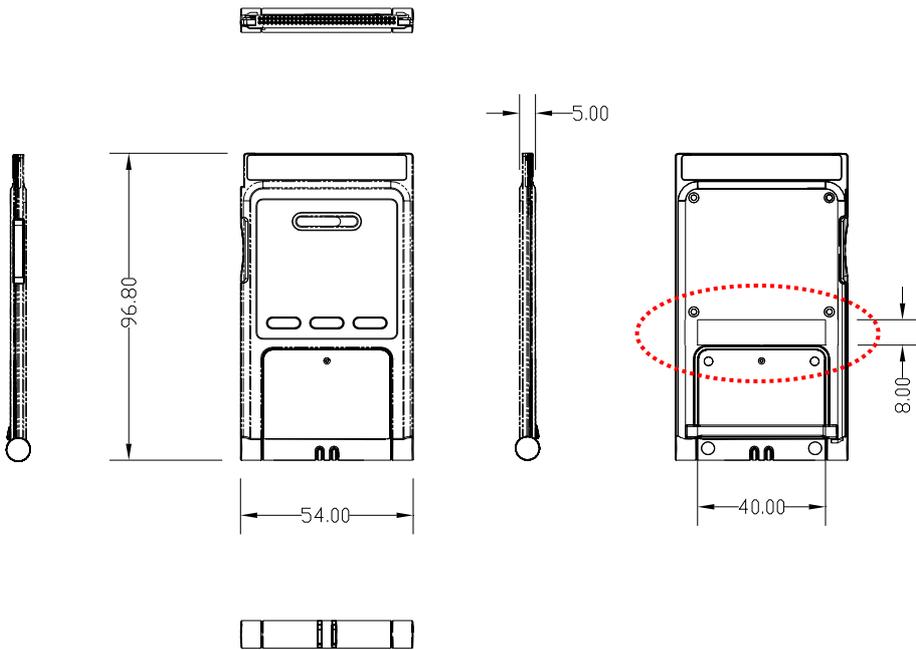


	類別	欄位	說明	
1	產品品號	PPPPPPPPP	LCVIP01001	VT25010 Cardphone
2	製造週別	WWW	碼 1:西元年之末碼 碼 2,3:週別	如: 2005/8/26 → 534 2005/8/29 → 535
3	產品流水號	SSSSS	a.數值: 00000 ~ FFFFF b.每週生產流水號	
4	廠商代碼	MM	B4	J3 代碼
5	電子版本碼	EE	02	0: PCB: E/F, F.W.:A0 1:

例如: 2005/8/26 生產 1000pcs

→ LCVIP0100153400000B402 ~ LCVIP01001534003E7B402

貼紙黏貼位置:

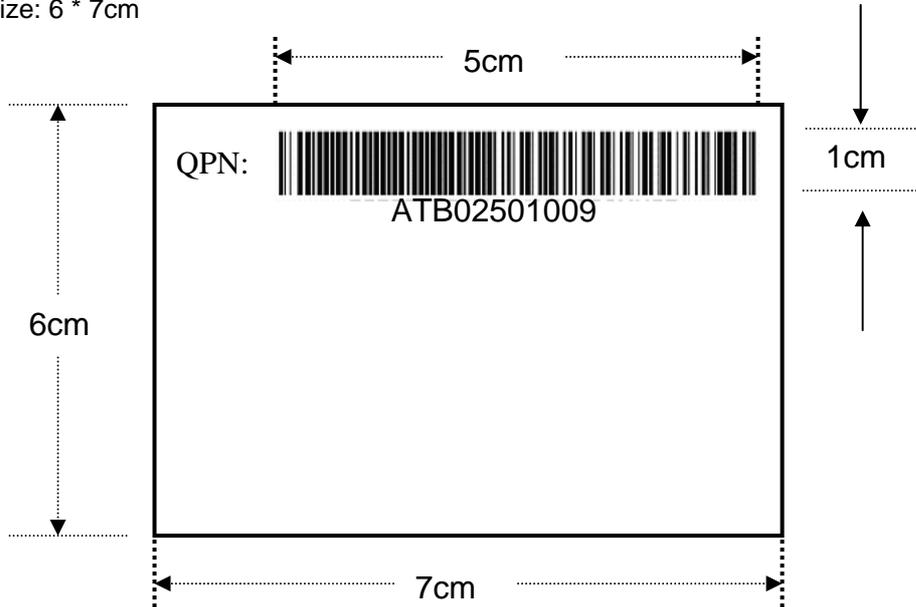


II. 外包裝貼紙

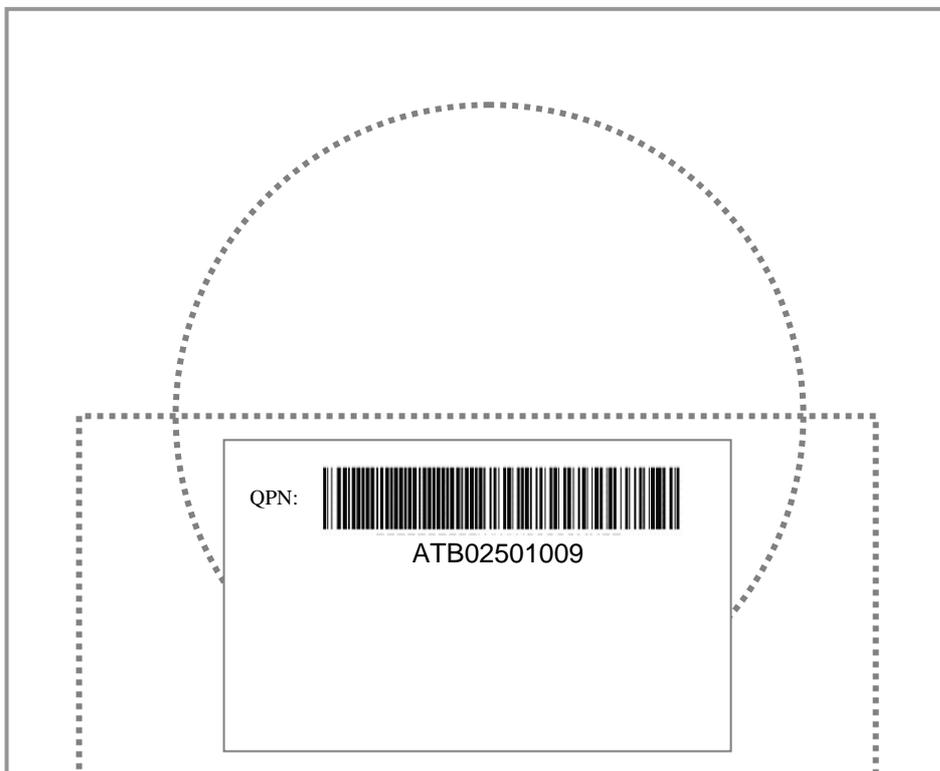
Content : “ QPN : ATB02501009 ”

Barcode size: 5 * 1 cm

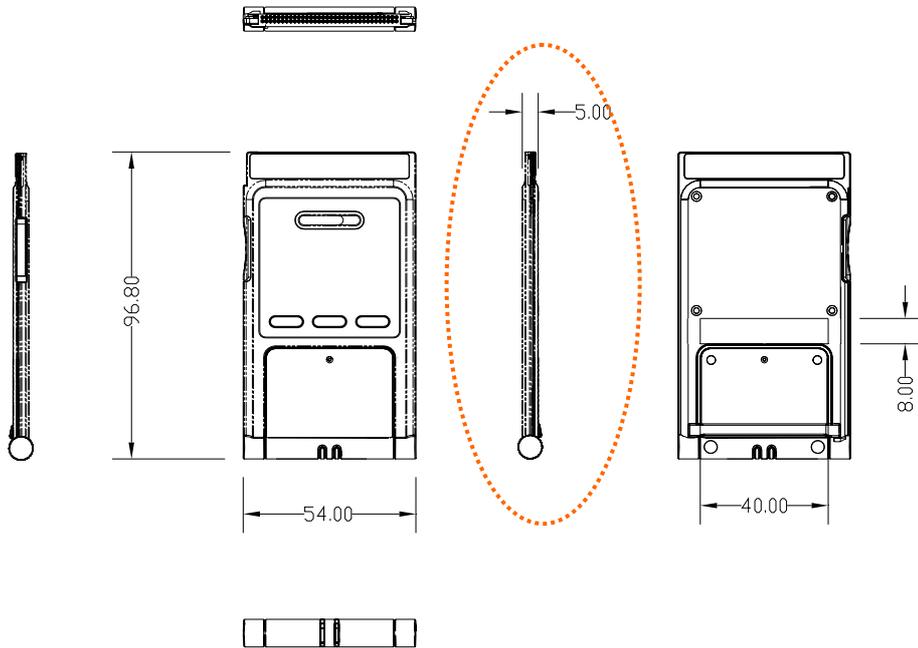
Label size: 6 * 7cm



貼紙黏貼位置: (背面)



5.2 Appendix-B Mechanical Requirement



FCC ID: GV333406

Federal Communication Commission Interference

Statement

This equipment has been tested and found to comply with the limits for a Class B digital device, pursuant to Part 15 of the FCC Rules. These limits are designed to provide reasonable protection against harmful interference in a residential installation.

This equipment generates, uses and can radiate radio frequency energy and, if not installed and used in accordance with the instructions, may cause harmful interference to radio communications. However, there is no guarantee that interference will not occur in a particular installation. If this equipment does cause harmful interference to radio or television reception, which can be determined by turning the equipment off and on, the user is encouraged to try to correct the interference by one of the following measures:

- Reorient or relocate the receiving antenna.
- Increase the separation between the equipment and receiver.
- Connect the equipment into an outlet on a circuit different from that to which the receiver is connected.
- Consult the dealer or an experienced radio/TV technician for help.

FCC Caution :To assure continued compliance, any changes or modifications not expressly approved by the party responsible for compliance could void the user's authority to operate this equipment. (Example - use only shielded interface cables when connecting to computer or peripheral devices).

FCC Radiation Exposure Statement

This device complies with Part 15 of the FCC Rules. Operation is subject to the following two conditions:

(1) This device may not cause harmful interference, and (2) This device must accept any interference received, including interference that may cause undesired operation.

This transmitter must not be co-located or operating in conjunction with any other antenna or transmitter.