POS 1000 / POS 4000
B69 / B79
User Manual

TRADEMARK

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and Windows® are registered trademarks of Microsoft Corporation. ELO Touch is the
registered trademark of ELO Touch Systems.

Safety

IMPORTANT SAFETY INSTRUCTIONS

1. To disconnect the machine from the electrial power supply, turn off the power switch and remove the power cord plug from the wall socket. The wall socket must be easily accessible and in close proximity to the machine.

2. Read these instructions carefully. Save these instructions for future reference.

3. Follow all warnings and instructions marked on the product.

4. Do not use this product near water.

5. Do not place this product on an unstable cart,stand,or table.The product may fall, causing serious damage to the product.

6. Slots and openings in the cabinet and the back or bottom are provided for ventilation;to ensure reliable operation of the product and to protect it from overheating. These openings must not be blocked or covered.The openings should never be blocked by placing the product on a bed, sofa, rug, or other similar surface.This product should never be placed near or over a radiator or heat register,or in a built-in installation unless proper ventilation is provided.

7. This product should be operated from the type of power indicated on the marking label.If you are not sure of the type of power available, consult your dealer or local power company.

8. Do not allow anything to rest on the power cord. Do not locate this product where persons will walk on the cord.

9. Never push objects of any kind into this product through cabinet slots as they may touch dangerous voltage points or short out parts that could result in a fire or electric shock.Never spill liquid of any kind on the product.

CE MARK

This device complies with the requirements of the EEC directive 89/336/EEC with regard to "Electromagnetic compatibility" and 73/23/EEC "Low Voltage Directive".

FCC

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
(2) This device must accept any interference received, including interference that may cause undesired operation.

CAUTION ON LITHIUM BATTERIES

There is a danger of explosion if the battery is replaced incorrectly. Replace only with the same or equivalent type recommended by the manufacturer. Discard used batteries according to the manufacturer's instructions.

LEGISLATION AND WEEE SYMBOL

2002/96/EC Waste Electrical and Electronic Equipment Directive on the treatment, collection, recycling and disposal of electric and electronic devices and their components.
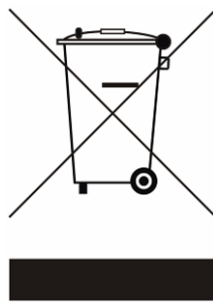
The crossed dustbin symbol on the device means that it should not be disposed of with other household wastes at the end of its working life. Instead, the device should be taken to the waste collection centres for activation of the treatment, collection, recycling and disposal procedure. To prevent possible harm to the environment or human health from uncontrolled waste disposal, please separate this from other types of wastes and recycle it responsibly to promote the sustainable reuse of material resources.

Household users should contact either the retailer where they purchased this product, or their local government office, for details of where and how they can take this item for environmentally safe recycling.

Business users should contact their supplier and check the terms and conditions of the purchase contract.
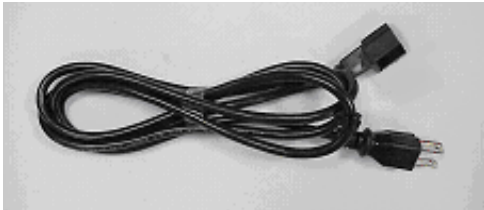
This product should not be mixed with other commercial wastes for disposal.

Table of Contents

1. Item Checklist

Take the system out of the carton. Remove the unit by carefully clutching the foam inserts and remove slowly to protect the system. The following contents should be found in the carton:
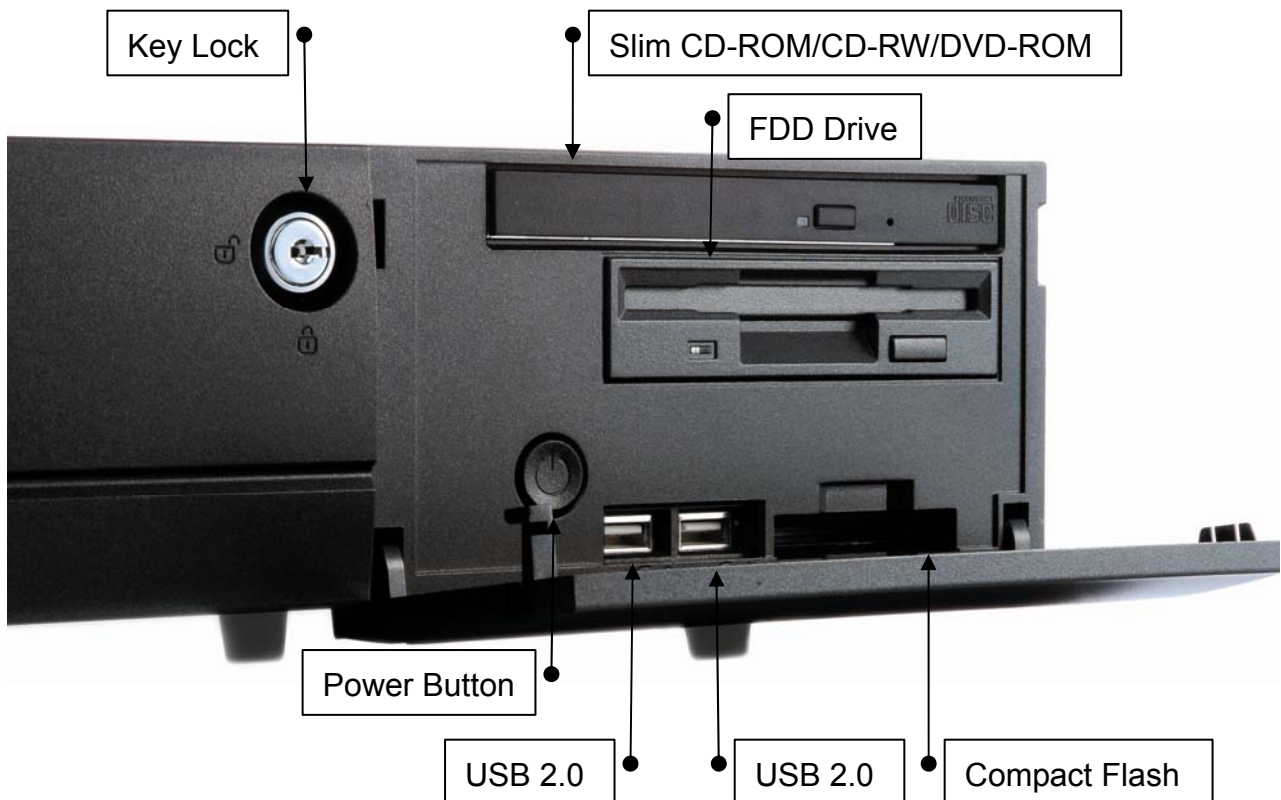

a. Power Cord

b. Driver CD

c. Installation Guide

2. System View
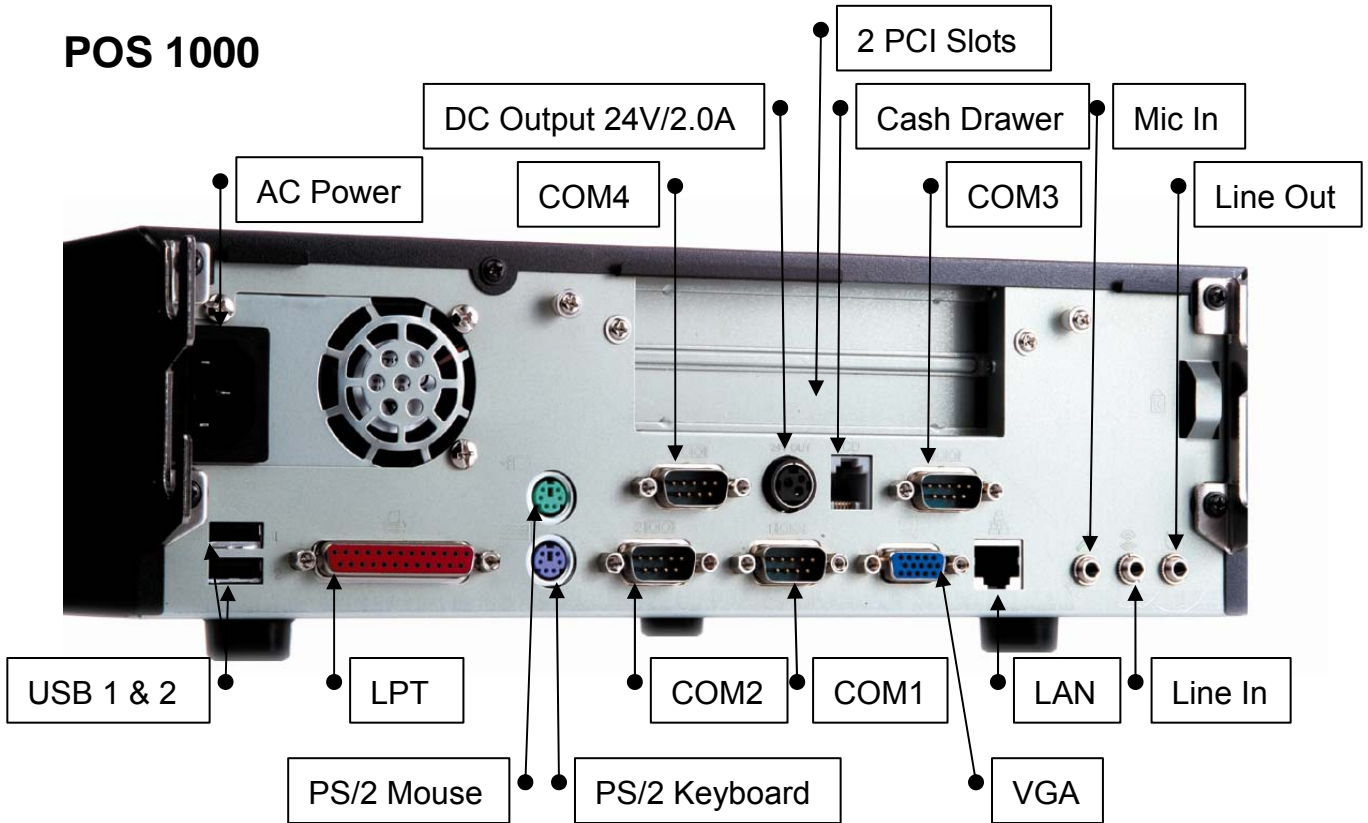
2.1. Front View (POS 1000 / POS 4000)

Power Button

USB 2.0

USB 2.0

Compact Flash

Key Lock

Slim CD-ROM/CD-RW/DVD-ROM

FDD Drive

Power Button

USB 2.0

USB 2.0

Compact Flash
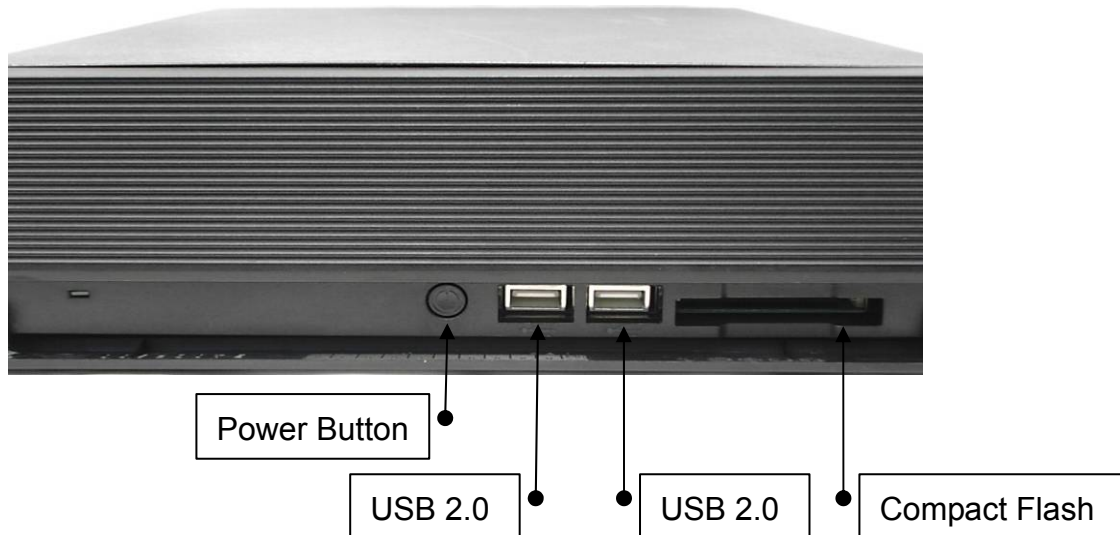
Notice: POS 4000 only supports either one ODD or one FDD.

2.2. Rear View

POS 1000

AC Power · DC Output 24V/2.0A · COM4 · 2 PCI Slots · Cash Drawer · Mic In · COM3 · Line Out · USB 1 & 2 · LPT · PS/2 Mouse · PS/2 Keyboard · COM2 · COM1 · VGA · LAN · Line In

POS 4000

AC Power · Line Out · DC Output 24V/2.0A · COM4 · 1 PCI Slot · Cash Drawer · COM3 · USB 1 & 2 · LPT · PS/2 Mouse · PS/2 Keyboard · COM2 · COM1 · VGA · LAN
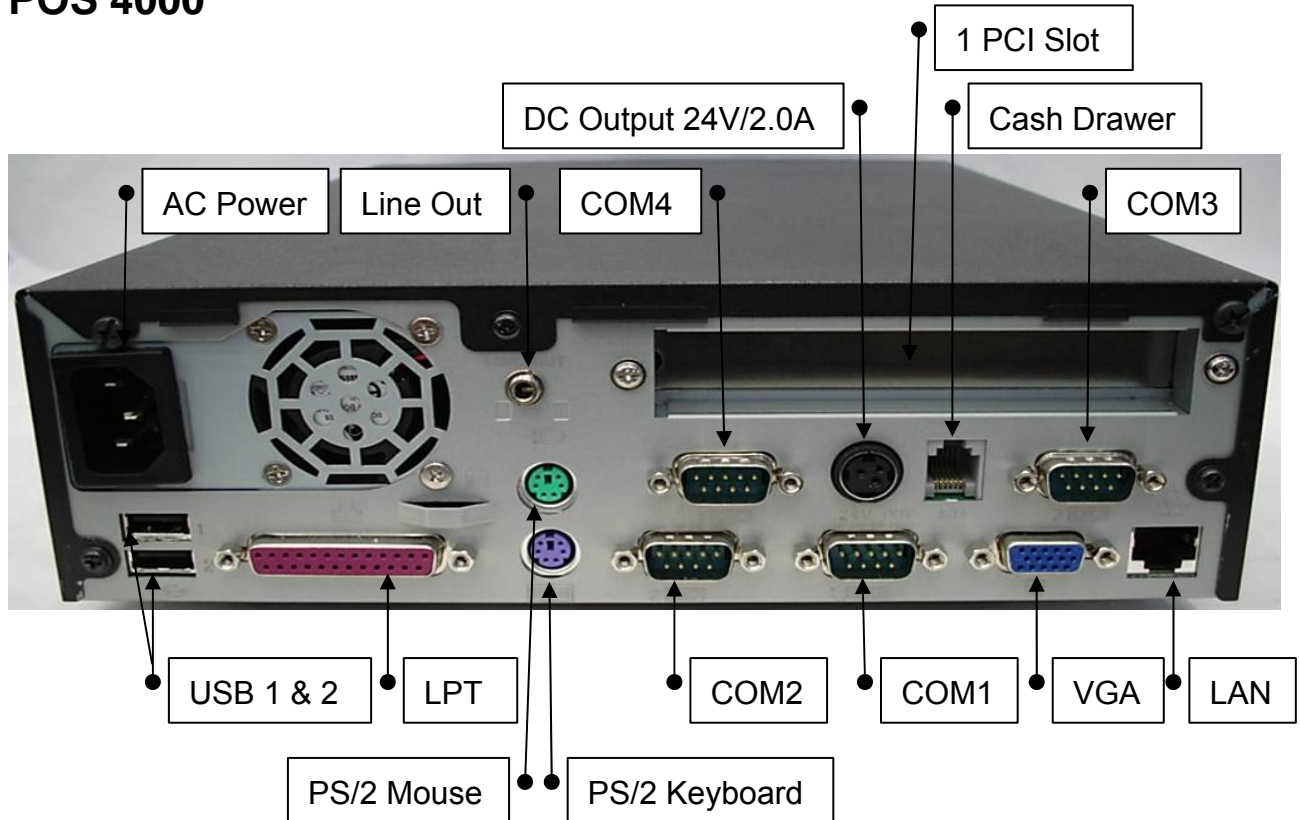
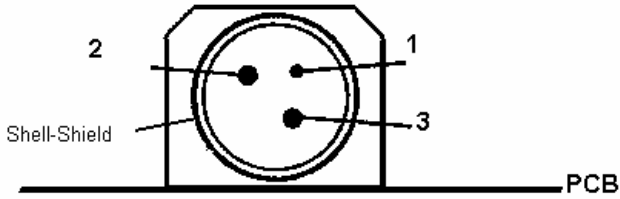**Note**: The maximum current that can be drawn from each COM port is 500 mA.

DC output 24 V Pin Assignment

Pin	Assignment
1	NC
2	+ 24V DC
3	Ground

3. Driver Installation

3.1. Driver List

B69

| Folder/File	File Description
<CD>:\B69.htm	B69 Driver List
<CD>:\Common\INTEL\Chipset	Chipset Driver
<CD>:\Common\INTEL\VGA\i815VGA	VGA Driver
<CD>:\Common\INTEL\IAA	Intel Application Accelerator
<CD>:\Common\Ac97_codec\ADI	Audio Driver
<CD>:\Common\Lan_driver\R8139_810x	LAN Driver

B79

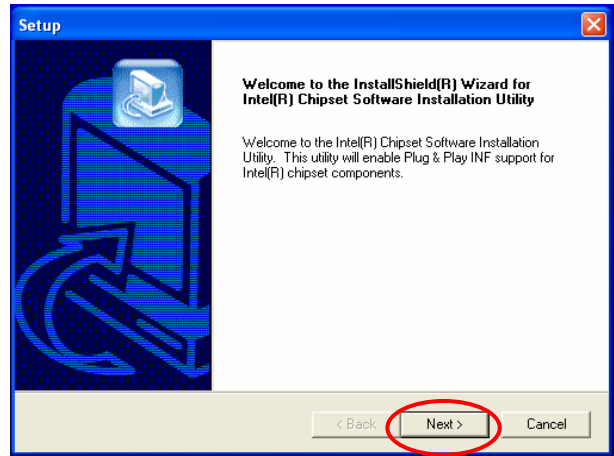| Folder/File	File Description
<CD>:\B79.htm	B79 Driver List
<CD>:\Common\INTEL\Chipset	Chipset Driver
<CD>:\Common\INTEL\USB20	USB2.0 Driver
<CD>:\Common\INTEL\VGA\i845VGA	VGA Driver
<CD>:\Common\Ac97_codec\ADI	Audio Driver
<CD>:\Common\Lan_driver\R8139_810x	LAN Driver

The following procedures are for Windows XP, other platforms are similar.

3.2. B69 / B79 Driver Installation
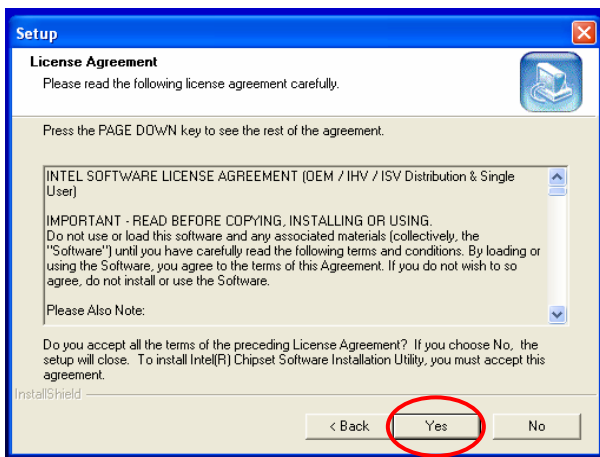
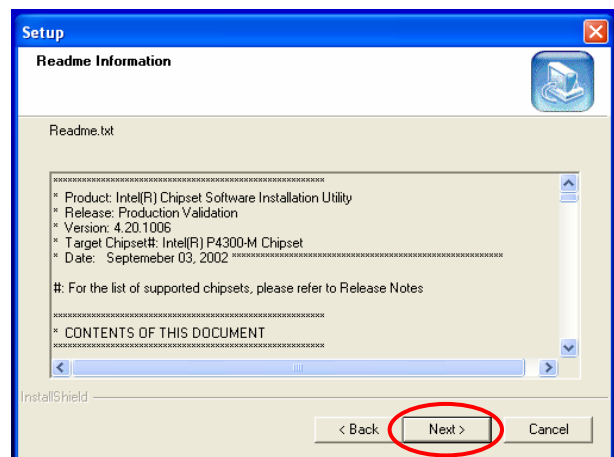## 3.2.1. Chipset Driver Installation
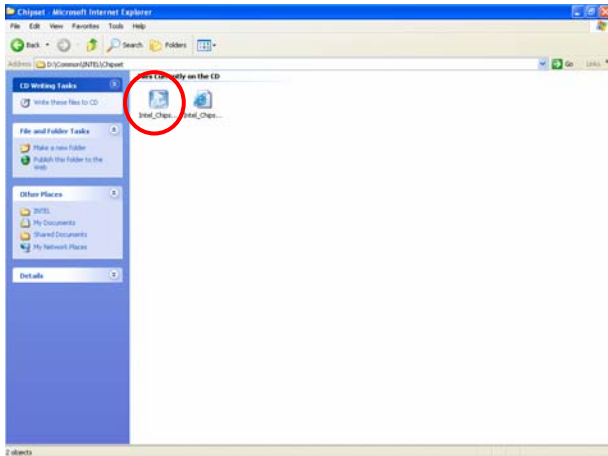
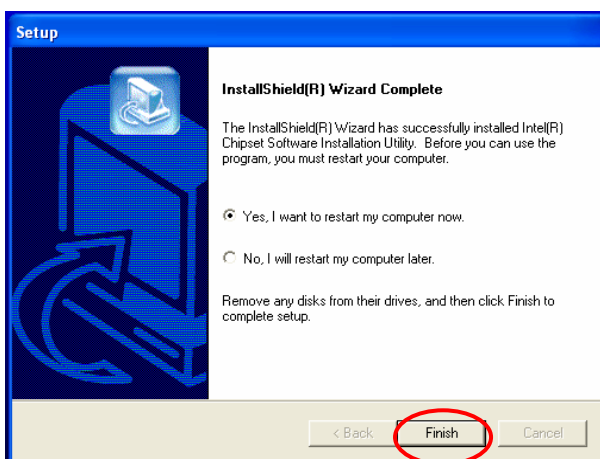a. Click "Intel_Chipset_4_20_1006" on the "My Computer" window.

b. Click the "Next" button on the "Setup" window.
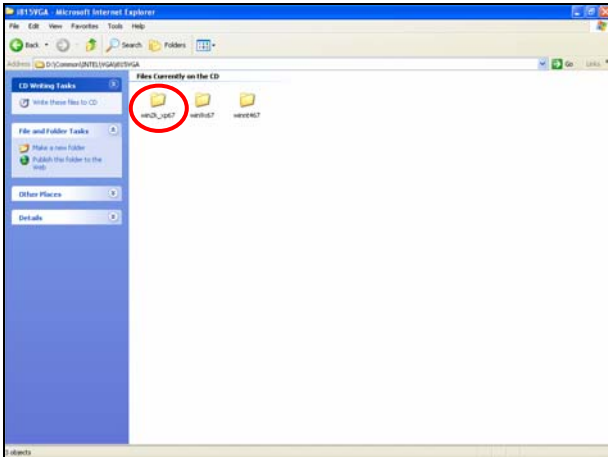

c. Click the "Yes" button on the "Setup" window.

d. Click the "Next" button on the "Setup" window.

e. Select the "Yes" and click the "Finish" button and restart your system.

3.2.2. VGA Driver Installation

a. Select the "win2k_xp67" on the "i815VGA" window.

b. Select the "Setup" on the "win2k_xp67" window.

c. Click the "Next" button on the "Intel(R) Chipset Graphics Software" window.

d. Click the "Yes" button on the "License Agreement" window.
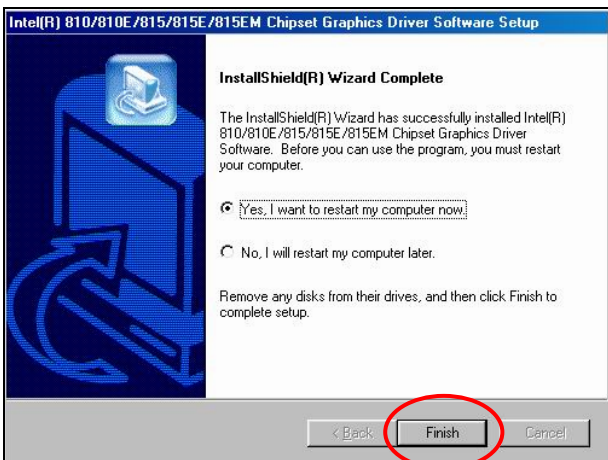
e. Select the "Yes" and click the "Finish" button and restart your system.

3.2.3. Intel Application Accelerator Driver Installation

(For B69 Motherboard)
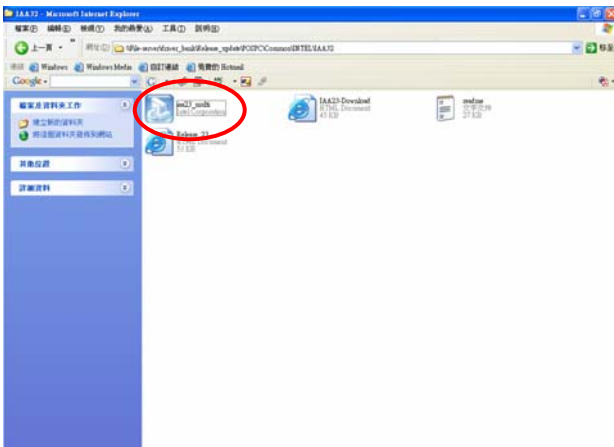
a. Select the "iaa23_multi" on the "IAA23" window.
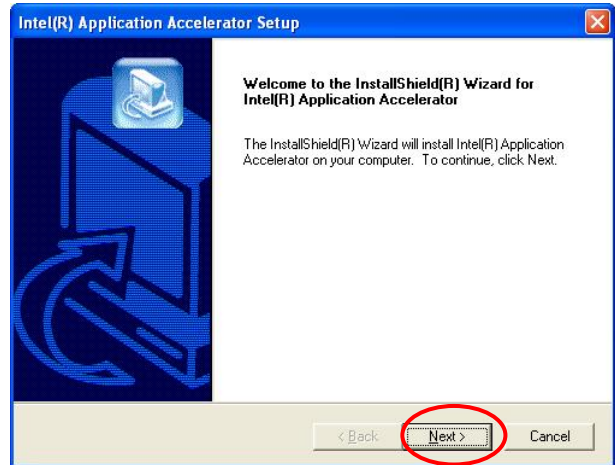
b. Click the "Next" button on the "Intel (R) Application Accelerator Setup" window.
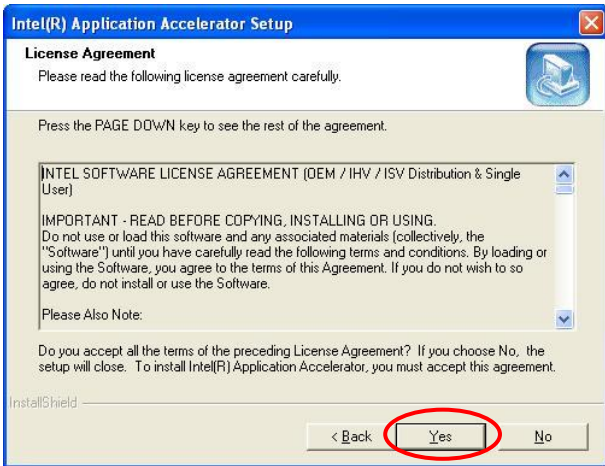
c. Click the "Yes "button on the "Intel (R) Application Accelerator Setup" window.
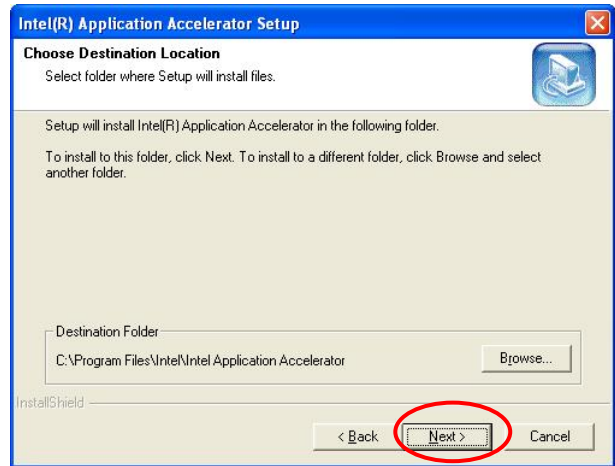
d. Click the "Next" button on the "Intel (R) Application Accelerator Setup" window.

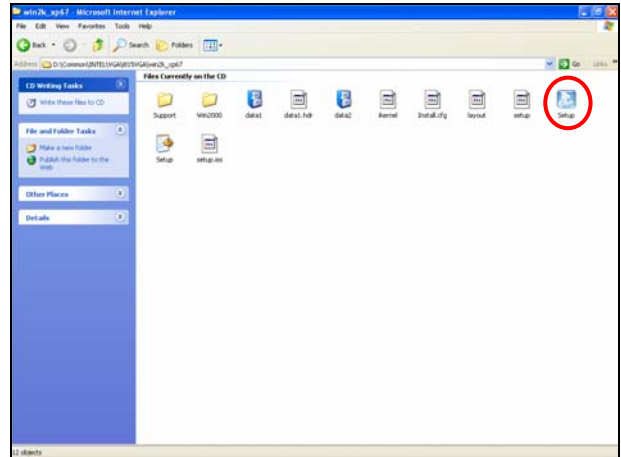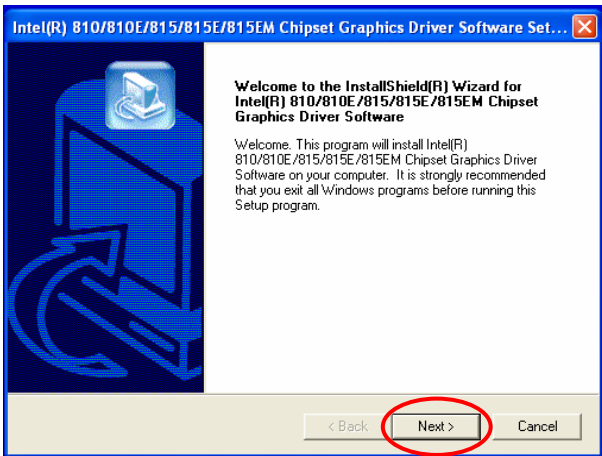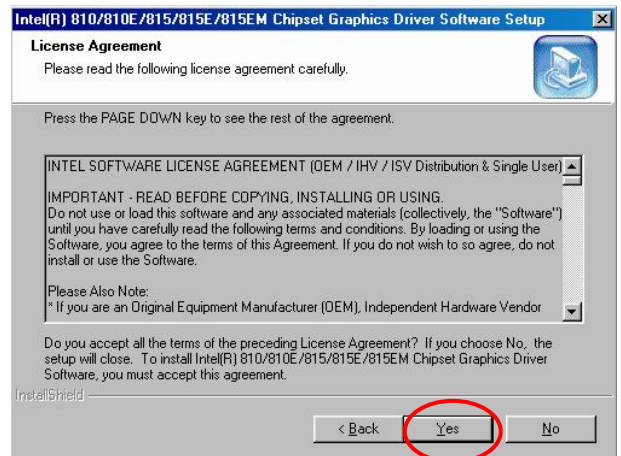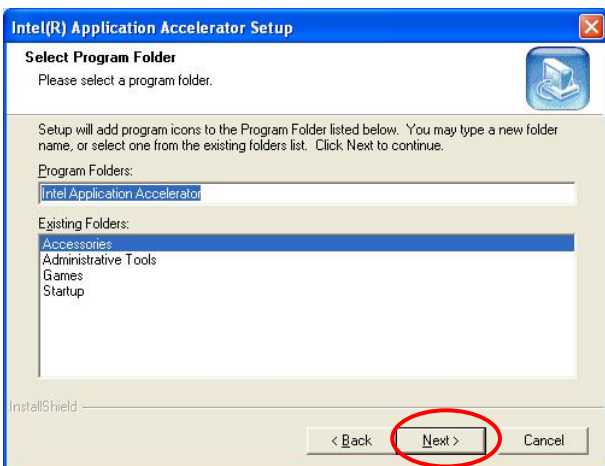e. Click the "Next" button on the "Intel (R) Application Accelerator Setup" window.
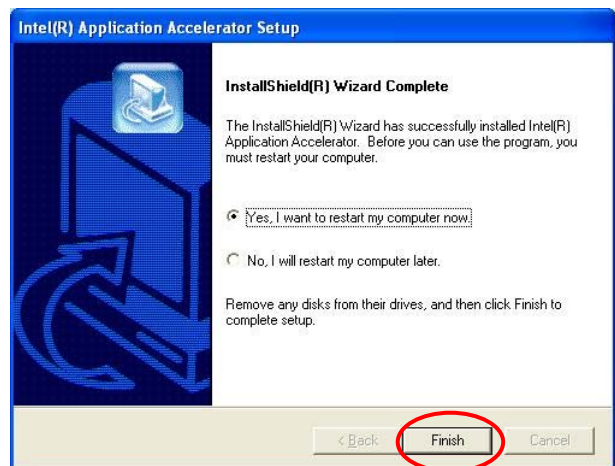
f. Select the "Yes" and click the "Finish" button and restart your system.

3.2.4. LAN Driver Installation
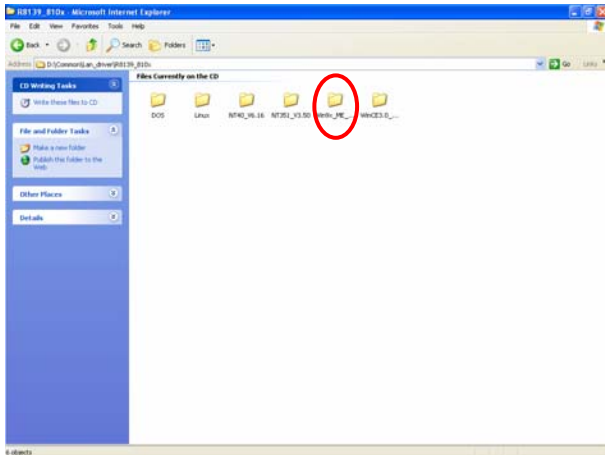
a. Click the "Win9x_ME_..." on the "R8139_810x" window.
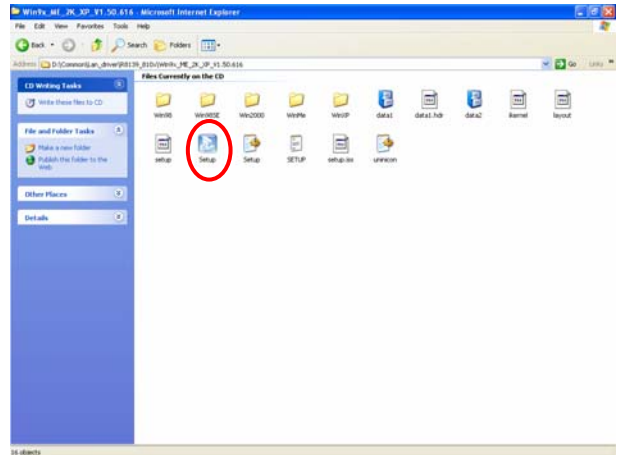
b. Click the "Setup" button on the "Win9x_ME_2K_XP_..." window.
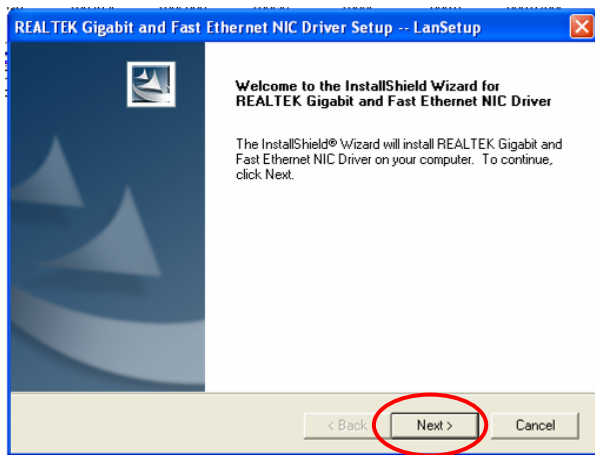
c. Click the "Next" on the "REALTEX Gigabit and Fast Ethernet NIC Driver Setup" window.
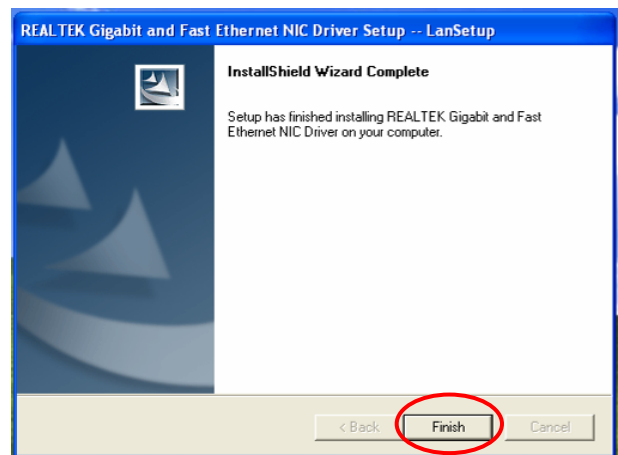
d. Click the "Finish" on the "REALTEX Gigabit and Fast Ethernet NIC Driver Setup" window.

3.2.5. Audio Driver Installation
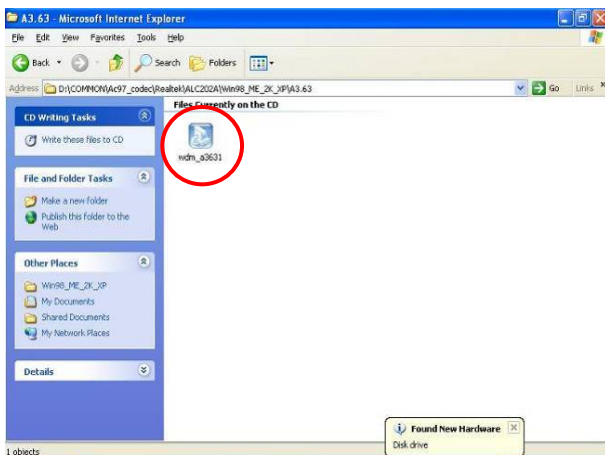
a. Click the "wdm_a3631.exe" on the "My Computer" window.
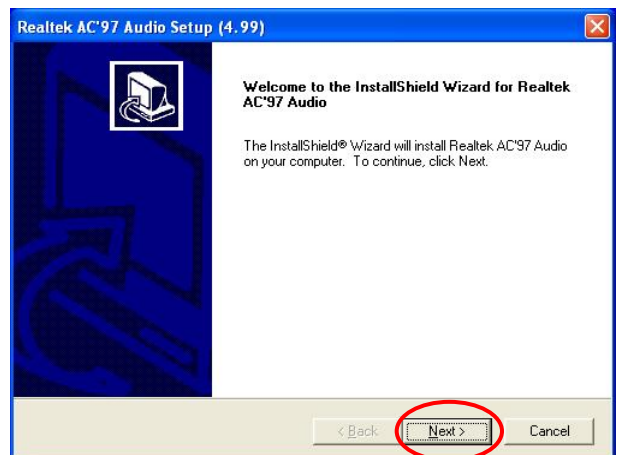
b. Click the "Next" button on the "Welcome" window.
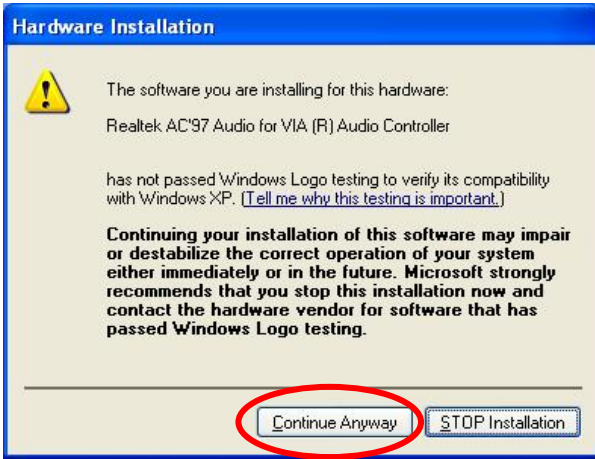
c. Click the "Continue Anyway" button on the "Hardware Installation" window.

d. Click the "Finish" button and restart your system.

3.2.6. USB 2.0 Driver Installation (For B79 Motherboard)

OS Requirements

OS	USB 2.0 requirements
Windows XP	USB 2.0 drivers are provided in Service Pack 1 (SP1) for Windows XP, which is available through Windows Update.
Windows 2000	USB 2.0 drivers are available through Windows Update or Service Pack 4.
Windows 98SE/Me	USB 2.0 drivers are available on the Intel developer site.
Windows 98 (Retail)	Developers and OEMs should contact Orange Ware. For end-users, if your device does not ship with Windows 98 drivers, contact your device or system manufacturer. If USB 2.0 drivers are not available, your device will operate at USB 1.1 speeds
Linux	USB 2.0 support is available in kernel 2.4.19 or later development kernels, or in the 2.4.19 or later production kernel. More information.
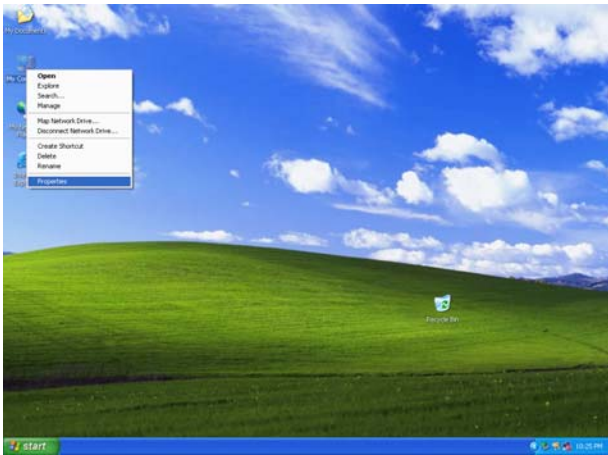
a. Right click "My Computer" on the windows desktop and select "properties".
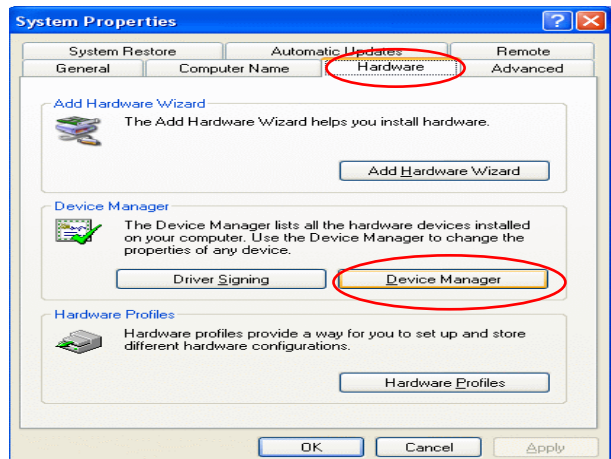
b. Select "Hardware"→"Device Manager" on system properties.
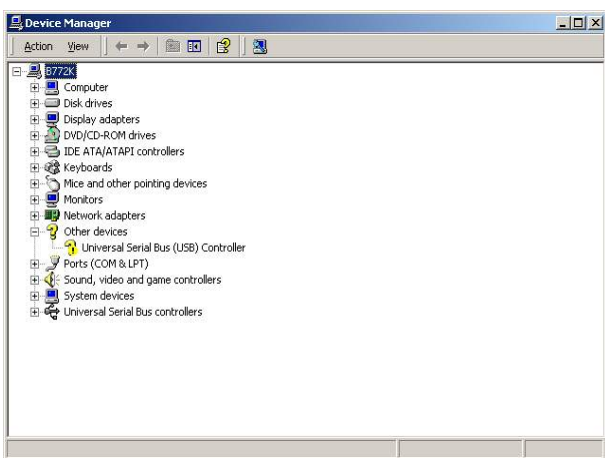
c. Select "Other Devices" → "Universal Serial Bus (USB) Controller" →"Properties" in the Device Manager.
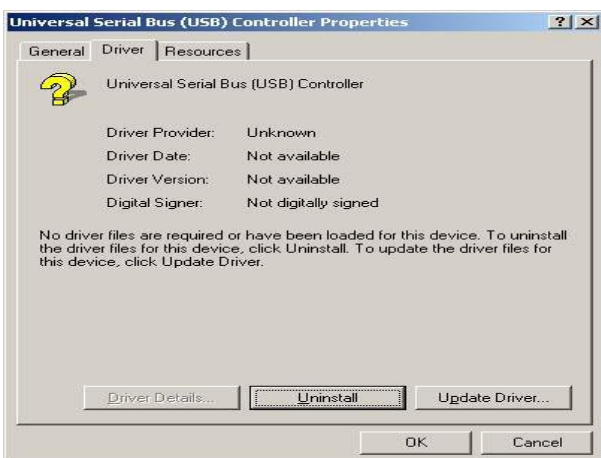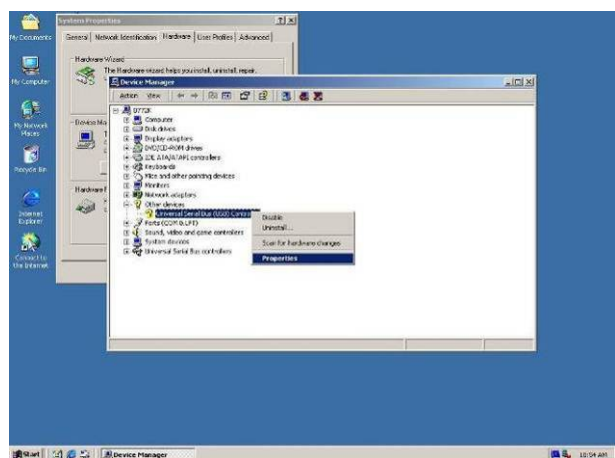
d. Select "Device"→ "Update Driver…".

e. Click the "Next" button on the "Welcome" window.

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f. Select "Search for a suitable…"and click the "Next" button on the "Install Hardware Device Drivers" window.

g. Select "Specify a location" and click the "Next" button on the "Locate Driver Files" window.

h. Press "Browse" to select driver and then click the "OK" button to next page.
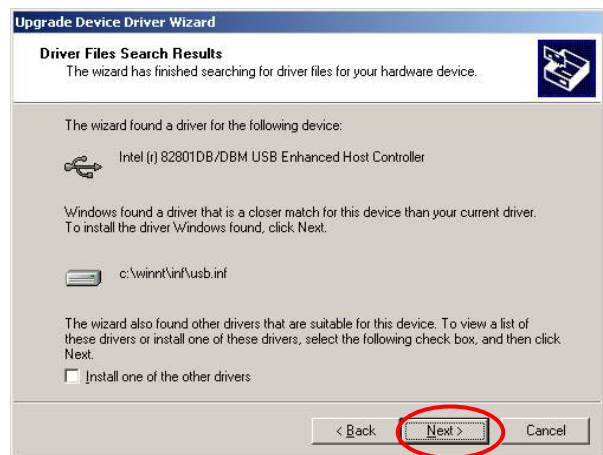
i. Click the "Next" button on "Driver Files Search Results" window.

j. Click the "Finish" button to complete this process.
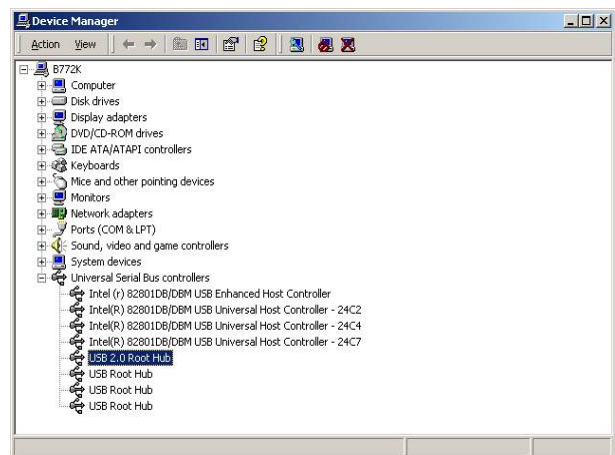
k. Finished.

4. Peripherals Installation

4.1. Cable Cover Installation

a. Remove the screws (5).

b. Tighten the screws (2) with the bracket (on each side).

c. Place the cable cover into the bracket as shown in the picture.

d. Finished.

4.2. Cash Drawer Installation

You can install a cash drawer through the Cash Drawer port.

4.2.1. Cash Drawer Pin Assignment

Pin	Signal
1	GND
2	DOUT bit0
3	DIN bit0
4	12V/24V
5	DOUT bit1
6	GND

Data out address (200h)

Data in address (201h)

4.2.2. Cash Drawer Controller Register

The Cash Drawer Controller use two I/O addresses to control Cash Drawer –Cash Drawer Control Register and Cash Drawer Status Register.

1. Cash Drawer Control Register

Register Location: 200h

Attribute: Write only

Size: 8bit


```
  7   6   5   4   3   2   1   0
┌───┬───┬───┬───┬───┬───┬───┬───┐
│ X │ X │ X │ X │ X │ X │   │   │
└───┴───┴───┴───┴───┴───┴───┴───┘
                              └─── Cash Drawer "DOUT bit0" pin output control
                          └─────── Cash Drawer "DOUT bit1" pin output control
  └───────────────────────────── Reserved
```
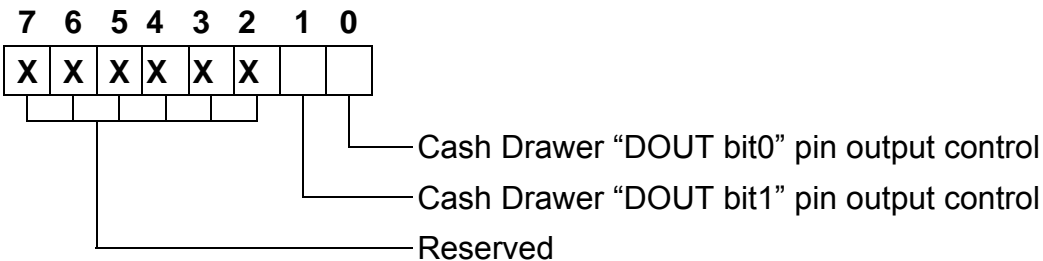
Bit 7-2: Reserved

Bit 1: Cash Drawer "DOUT bit1" pin output control.

    = 1: Opening the Cash Drawer

    = 0: Allow close the Cash Drawer

Bit 0: Cash Drawer "DOUT bit0" pin output control.

    = 1: Opening the Cash Drawer

    = 0: Allow close the Cash Drawer

Note: Please follow the Cash Drawer control signal design to control the Cash Drawer.

    Suggestion: control the bit 1/0 at the same time.

2. Cash Drawer Status Register

Register Location: 201h

Attribute: Read only

Size: 8bit

```
  7  6  5  4  3  2  1  0
 ┌──┬──┬──┬──┬──┬──┬──┬──┐
 │X │X │X │X │X │X │X │  │
 └──┴──┴──┴──┴──┴──┴──┴──┘
```

———Cash Drawer "DIN bit0" pin output control
———Reserved
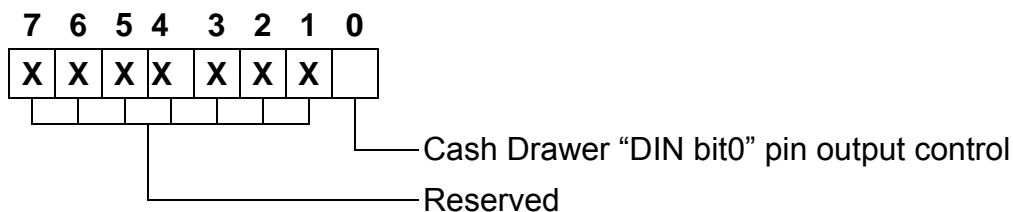
Bit 7-1: Reserved

Bit 0: Cash Drawer "DIN bit0" pin input status.

   = 1: the Cash Drawer opened or not exist.

   = 0: the Cash Drawer closed.

3. Cash Drawer Control Command Example

Use Debug.EXE program under DOS or Windows98

Command	Cash Drawer
O 200 01	Opening
O 200 00	Allow to close

➢ Set the I/O address 200h bit0 =1 for opening Cash Drawer by "DOUT bit0" pin control.

➢ Set the I/O address 200h bit0 = 0 for allow close Cash Drawer.

Command	Cash Drawer
I 201	Check status

➢ The I/O address 201h bit0 =1 mean the Cash Drawer is opened or not exist.

➢ The I/O address 201h bit0 =0 mean the Cash Drawer is closed.

5. System Disassembly

5.1. Remove the Top Cover

a. Remove the screw (1).

b. Remove the screw (1).

c. Remove the screws (5).

d. Slide the top cover towards the back
    and lift it up.

5.2. Replace the Memory and CPU

Remove the top cover as described in chapter 5.1.

a. Use your finger to push the DIMM slot ejector clips into the down position.
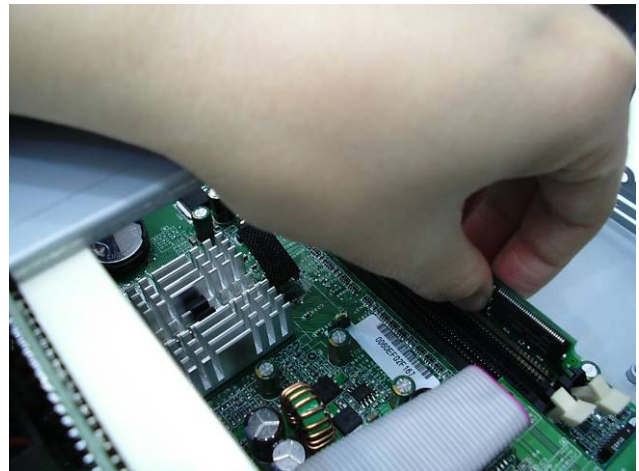
b. Remove the memory module from the slot.
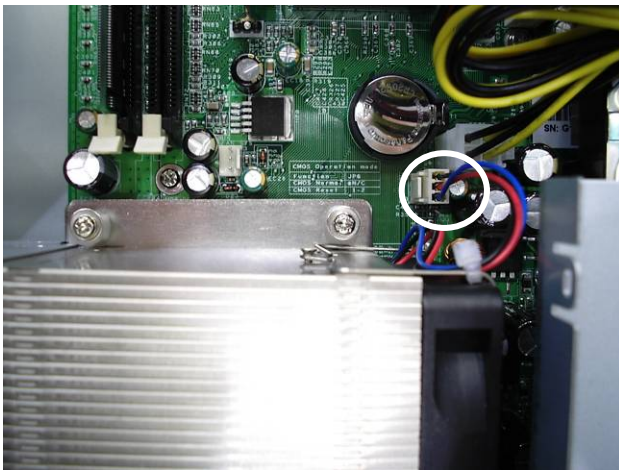
c. Disconnect the fan cable.
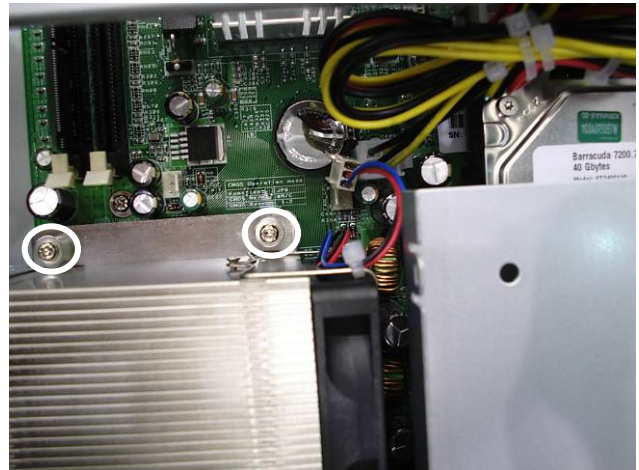
d. Remove the screws (2) that secure the heatsink and the fan.
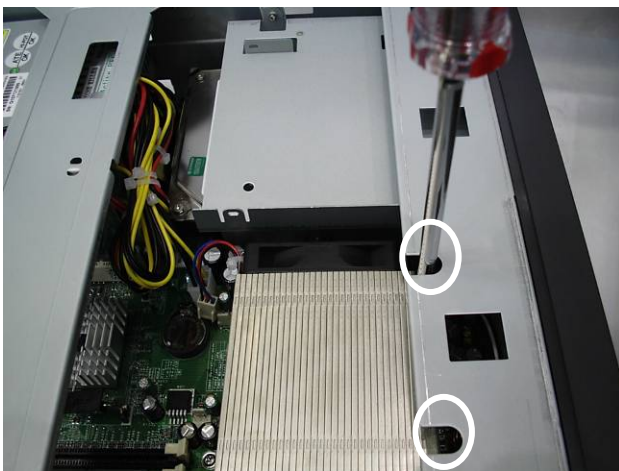
e. Remove the screws (2) to remove the heatsink and the fan.
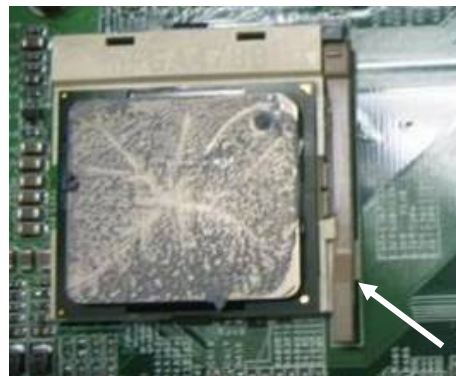
f. To remove the CPU, push the CPU socket lever down and away from the socket, and lift it up.

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5.3. Replace the Power Supply

Remove the top cover as described in chapter 5.1.

a.   Remove the screws (2).

b.   Lift the power supply up.
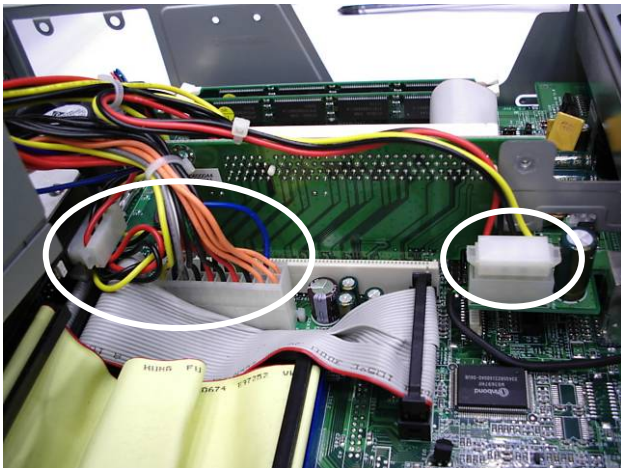
c.   Disconnect the cables (4) as shown in the picture.

5.4. Replace the HDD

Remove the top cover as described in chapter 5.1.

a.   Remove the screw (1).
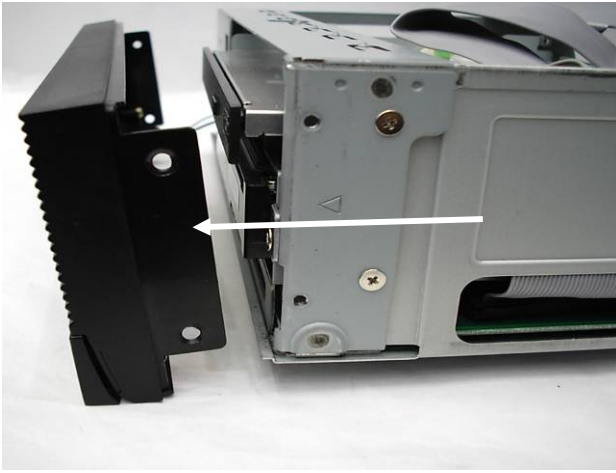
b.   Remove the screw (1).

c. Remove the front bezel.

d. Remove the screws (2).

e. Remove the screw (1).
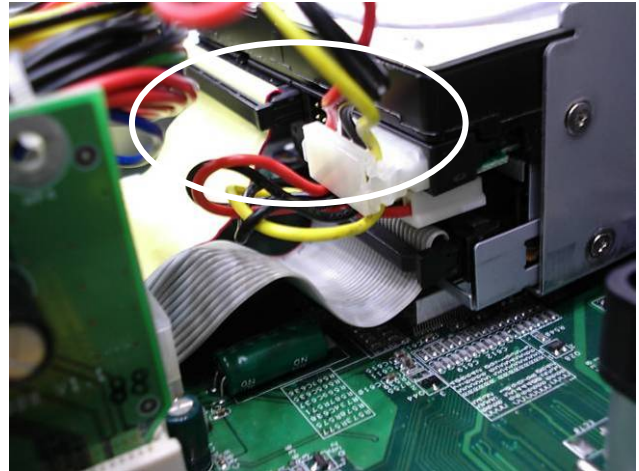
f. Disconnect the cables (2) as shown in the picture.

g. Remove the HDD.

6. Specification

6.1. POS1000 Specification

Model Name	POS 1000	
Mainboard	**B69**	**B79**
CPU Supports	Intel Celeron, PIII, PIIIT FSB 100 / 133 MHz	Intel P4 mP478-Pin FSB 400 / 533 MHz
Chipset	Intel 815EB&ICH2	Intel 845GV&ICH4
System Memory	2 x SDRAM DIMM sockets supported with memory size up to 512MB	2 x DDR DIMM sockets supported with memory size up to 2GB
Graphic Memory	UMA Shared Memory up to 32MB	UMA Shared Memory up to 64MB
Storage		
HDD	1 x 3.5" Drive bay	
ODD	1 x Slim CD-ROM / CD-RW / DVD-ROM Drive Bay	
FDD	1 x 3.5" FDD	
PCI Slot	2	
External I/O Ports		
Front I/O		
USB	2 (V1.1)	2 (V2.0)
Compact Flash	1	
Rear I/O		
PS/2 Keyboard	1	
PS/2 Mouse	1	
USB	2 (V1.1)	2 (V2.0)
Serial / COM	4 (Pin1/Pin9 with 5V/12V)	
Parallel	1	
LAN (10/100)	1	
VGA	1	
Line In / Line Out	1	
POS Printer Jack	1	
Cash Drawer Port	1 (12V/24V)	
Control / Indicators		
Power Button	1 (Front)	
Indicator LED	Power / HDD	
Power		
Power Supply	Internal 180W ATX switching mode power supply	
Environment		
EMC & Safety	FCC Class B, CE, LVD	

Environment	
Operating Temperature	5°C~ 35°C (41°F ~95°F)
Storage Temperature	10% - 90% RH non condensing
Storage Humidity	10% - 90% RH non condensing
Options	
Customer Display	VFD (Vacuum Fluorescent Display) / LCD
Other	
Dimension (W x D x H mm/inch)	300 x 335 x 90 mm / 11.8" x 13.2" x 3.5"
OS Support	Windows XP,WEPOS, XP Embedded, XP professional Embedded, WIN 2000 professional Embedded, WIN NT 4.0

6.2. POS 4000 Specification

Model Name	POS 4000	
Mainboard	**B69**	**B79**
CPU Supports	Intel Celeron, PIII, PIIIT FSB 100 / 133 MHz	Intel P4 mP478-Pin FSB 400 / 533 MHz
Chipset	Intel 815EB&ICH2	Intel 845GV&ICH4
System Memory	2 x SDRAM DIMM sockets supported with memory size up to 512MB	2 x DDR DIMM sockets supported with memory size up to 2GB
Graphic Memory	UMA Shared Memory up to 32MB	UMA Shared Memory up to 64MB
Storage		
HDD	1 x 3.5" Drive bay	
ODD	1 x Slim CD-ROM / CD-RW / DVD-ROM Drive Bay	
FDD	1 x 3.5" FDD / 4000 supports only either one ODD or one FDD	
PCI Slot	1	
External I/O Ports		
Front I/O		
USB	2 (V1.1)	2 (V2.0)
Compact Flash	1	
Rear I/O		
PS/2 Keyboard	1	
PS/2 Mouse	1	
USB	2 (V1.1)	2 (V2.0)
Serial / COM	4 (Pin1/Pin9 with 5V/12V)	

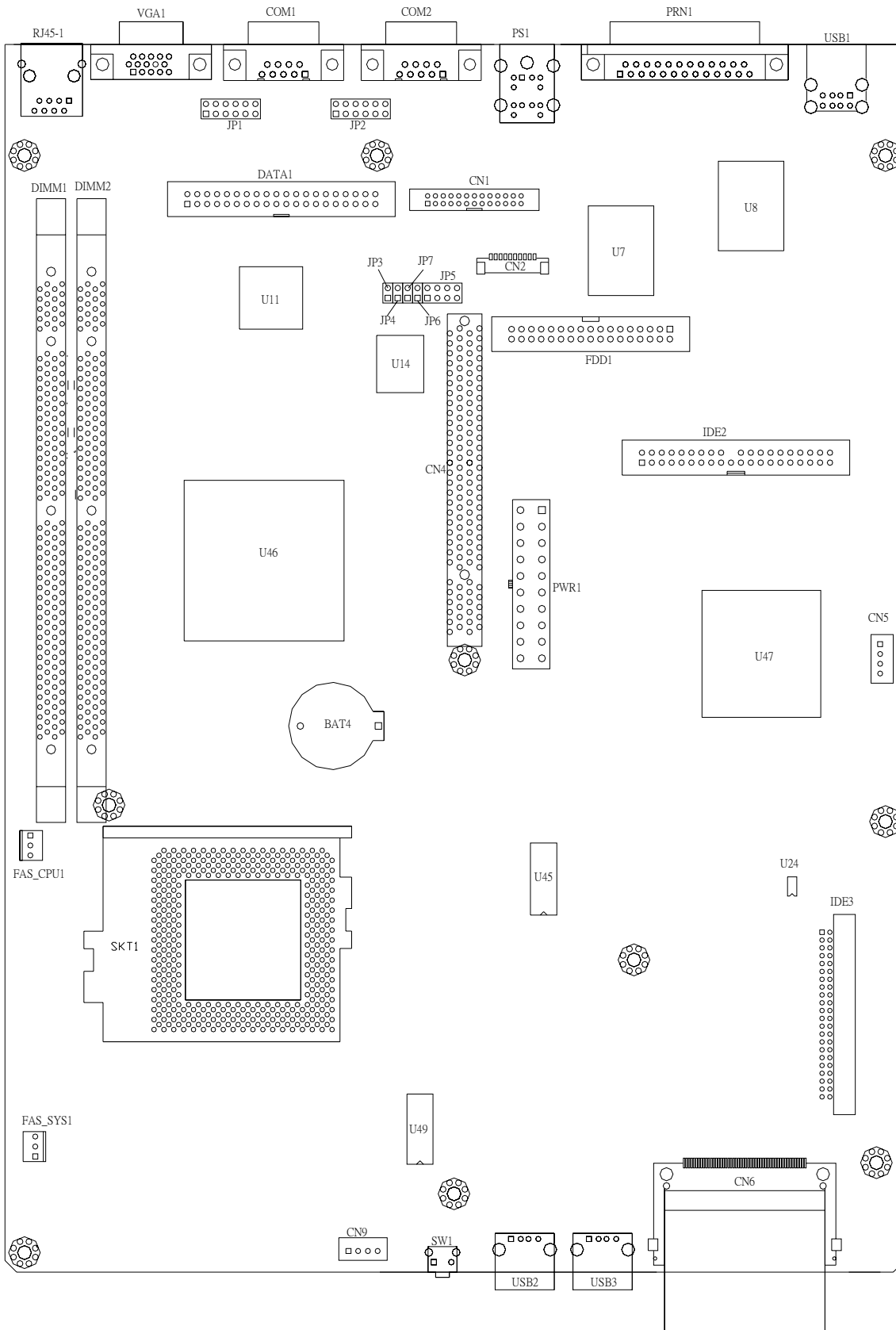| External I/O Ports	
Parallel	1
LAN (10/100)	1
VGA	1
POS Printer Jack	1
Cash Drawer Port	1 (12V/24V)
Control / Indicators	
Power Button	1 (Front)
Indicator LED	Power / HDD
Power	
Power Supply	Internal 180W ATX switching mode power supply
Environment	
EMC & Safety	FCC Class B, CE, LVD
Operating Temperature	5°C~ 35°C (41°F ~95°F)
Storage Temperature	10% - 90% RH non condensing
Storage Humidity	10% - 90% RH non condensing
Options	
Customer Display	VFD (Vacuum Fluorescent Display) / LCD
Other	
Dimension (W x D x H mm/inch)	240 x 335 x 72 mm / 9.4" x 13.2" x 2.8"
OS Support	Windows XP,WEPOS, XP Embedded, XP professional Embedded, WIN 2000 professional Embedded, WIN NT 4.0

7. Jumper Settings

7.1. B69 Mainboard

1. COM 1 Power Setting   ◎Factory Default Setting

Pin	Function	JP1 (SHORT)
1	◎DCD#	1-2
	VCC	3-4
	+12V	5-6
9	◎RI#	7-8
	VCC	9-10
	+12V	11-12

2. COM 2 Power Setting

Pin	Function	JP2 (SHORT)
1	◎DCD#	1-2
	VCC	3-4
	+12V	5-6
9	◎RI#	7-8
	VCC	9-10
	+12V	11-12

3. Power Mode Setting

Function	JP3 (SHORT)
ATX Power	◎N/C
AT Power	1-2

4. CMOS Operation Mode

Function	JP6 (SHORT)
CMOS Normal	◎N/C
CMOS Reset	1-2

5. Compact Flash Master/Slave Setting

Function	JP7 (SHORT)
Master	◎N/C
Slave	1-2

Note: OPEN   SHORT

7.2. B79 Mainboard

1. COM 1 Power Setting   ◎Factory Default Setting

Pin	Function	JP1(SHORT)
1	◎DCD#	1-2
	VCC	3-4
	+12V	5-6
9	◎RI#	7-8
	VCC	9-10
	+12V	11-12

2. COM 2 Power Setting

Pin	Function	JP2(SHORT)
1	◎DCD#	1-2
	VCC	3-4
	+12V	5-6
9	◎RI#	7-8
	VCC	9-10
	+12V	11-12

3. Power Mode Setting

Function	JP3 (SHORT)
ATX Power	◎N/C
AT Power	1-2

4. CMOS Operation Mode

Function	JP6 (SHORT)
CMOS Normal	◎N/C
CMOS Reset	1-2

5. Compact Flash Master/Slave Setting

Function	JP7 (SHORT)
Master	◎N/C
Slave	1-2

Note:

OPEN   SHORT

7.3. I/O Board

1. Support Cable Remove Setting   ◎Factory Default Setting

Function	JP 1 (SHORT)
Disable	◎1-2
Enable	2-3

2. Cash Drawer Voltage Setting

Function	JP 2 (SHORT)
+24V	1-2
+12V	◎2-3

3. COM Port Voltage Set Table JP4 (COM3) / JP3 (COM4) Setting

Function	JP 3 / JP 4 (SHORT)
Standard COM Port	◎1-2 / 7-8
(Pin 1/9) +5V	3-4 / 9-10
(Pin 1/9) +12V	5-6 / 11-12

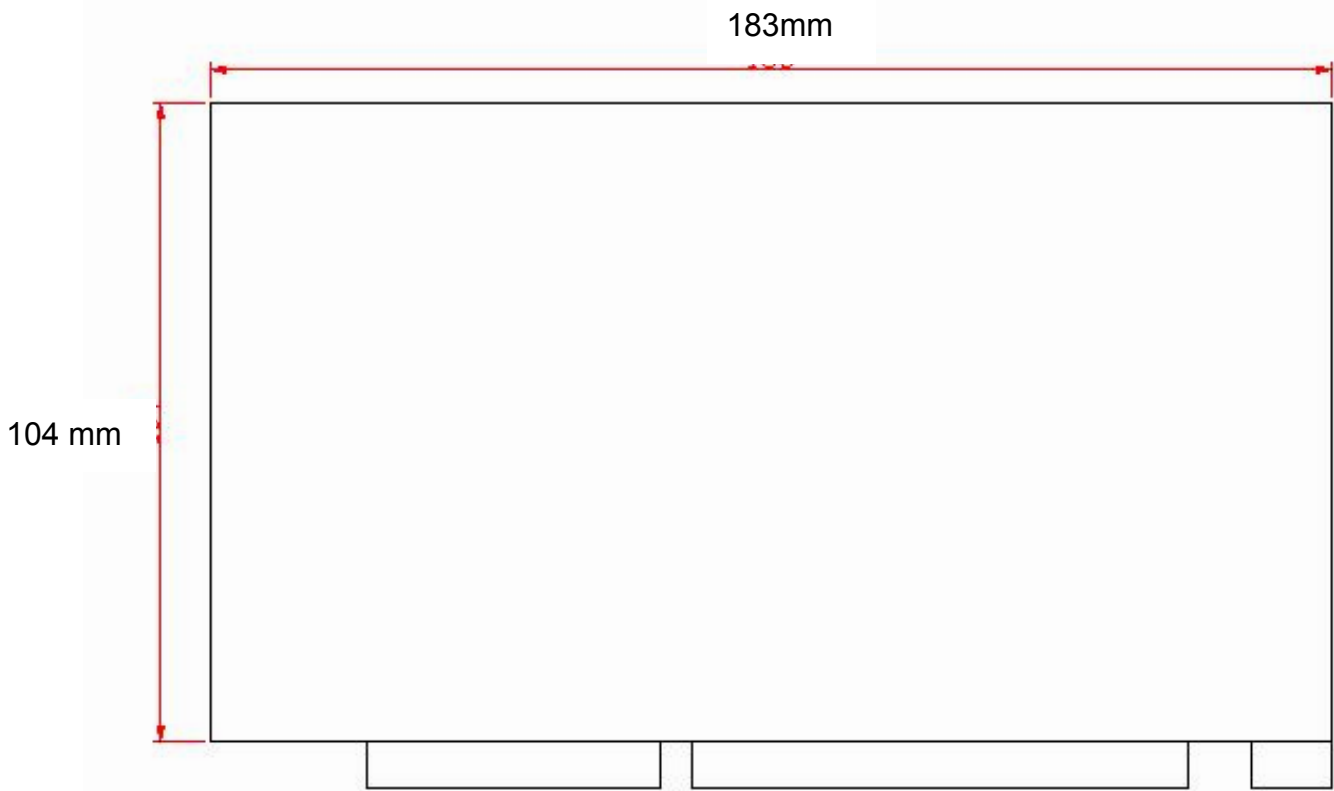Note:

OPEN   SHORT

Appendix - A

1. Maximum Dimension of Interface Card

(Maximum dimension of Interface card: 183 mm x 104 mm)

183mm

104 mm

2. Airflow Requirements

Do not block the air vents on the CPU. These vents are necessary for cooling purposes.

Do not place the CPU in an enclosed area where sufficient ventilation is not available.

Leave at least 150 mm (6 in) of clearance on the sides where air vents are located.