

User Manual

Revision v1.3 December 2009

CS-200

Point-of-Sale

Hardware System



TOUCH

DYNAMIC



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Manual Version 1.3
Part Number:

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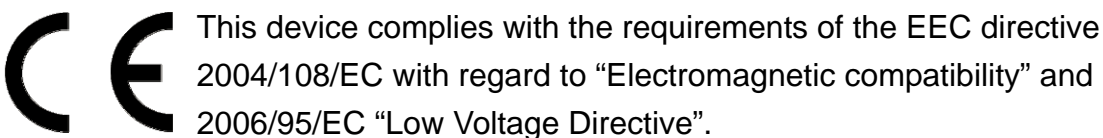
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Safety

IMPORTANT SAFETY INSTRUCTIONS

1. To disconnect the machine from the electrical 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



FCC

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

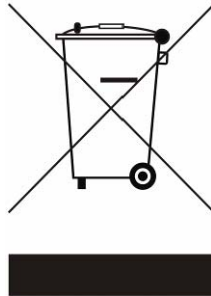
- (1) This device may not cause harmful interference.
- (2) This device must accept any interference received, including interference that may cause undesired operation.

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 centers 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.

Revision History

Changes to the original user manual are listed below:

Version	Date	Description
1.0	2007 December	● Initial release
1.1	2007 March	● System disassembly updated
1.2	2007 October	● Cover page update ● Wall mount bracket installation ● Connector Pin Definition update
1.3	2009 December	● Drivers installation removed from manual

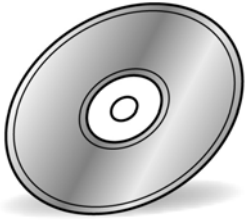
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1. Item Checklist

Take the system unit out of the carton. Remove the unit from the carton by holding it by the foam inserts. The following contents should be found in the carton:

1.1 Standard Items



- a. Driver CD

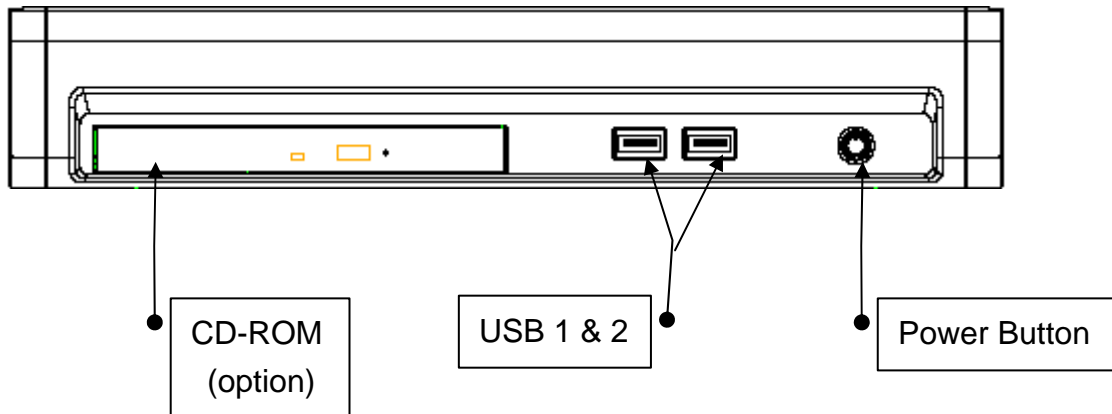


- b. Power Cable

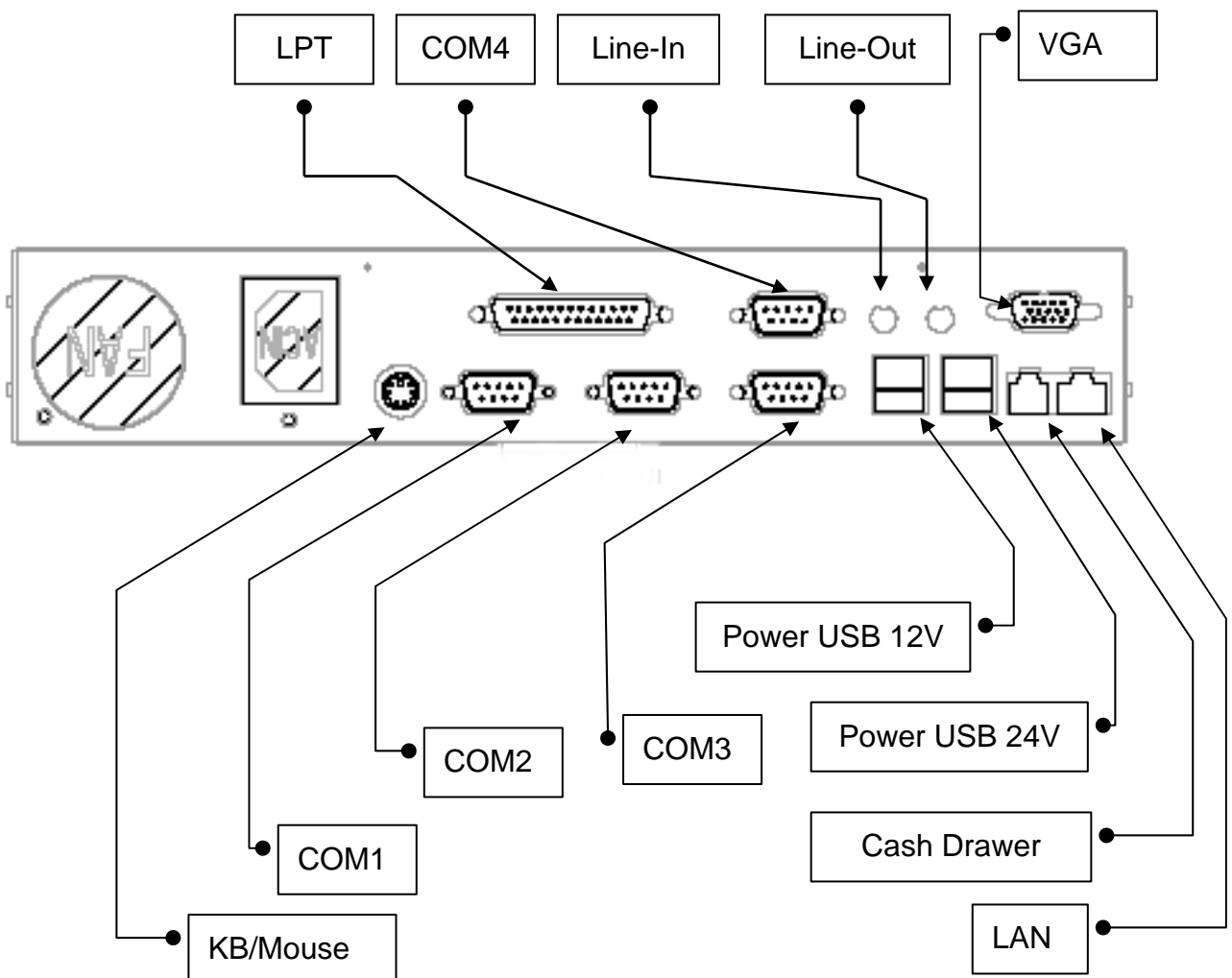
Note: The power cord type varies according to different country and region.

2. System View

2.1 Front View

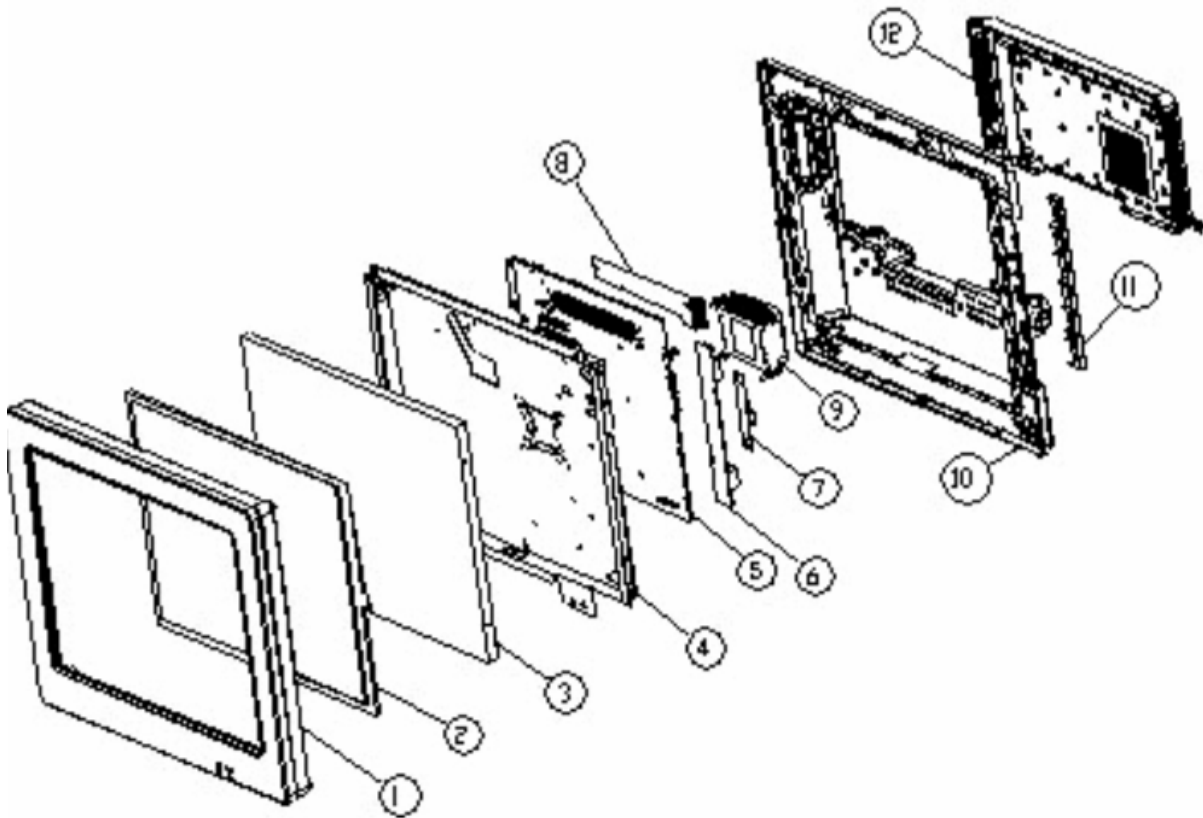


2.2 Rear View

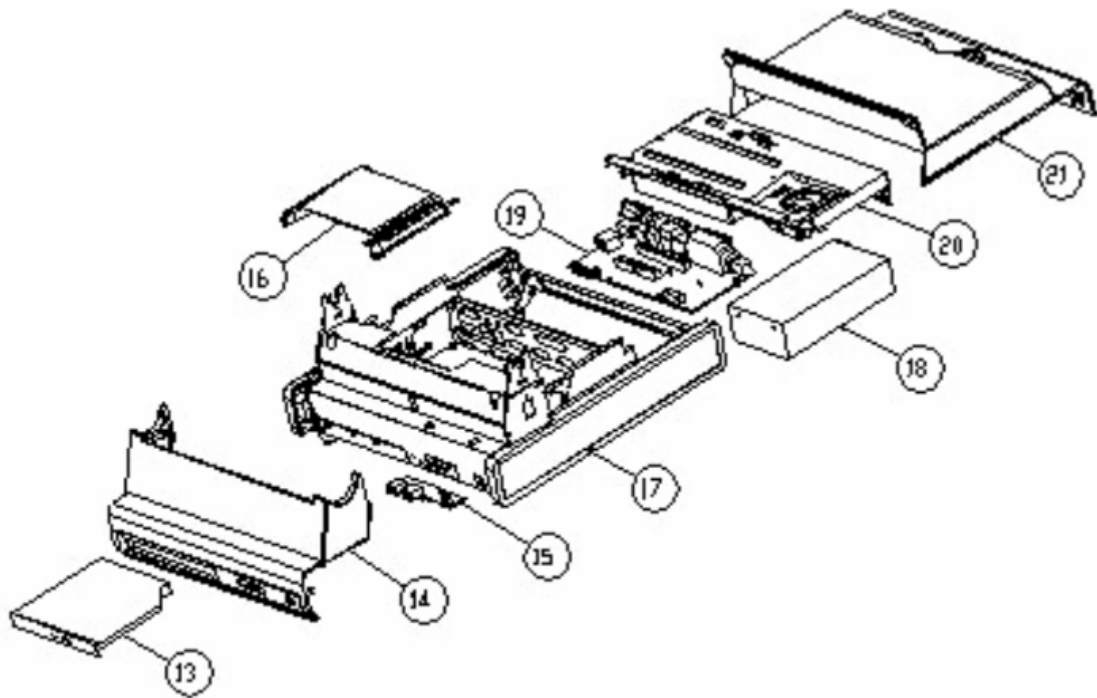


Note: The maximum current that can be drawn from each COM port is 500 mA.

2.3 System Drawing



Item	Description
1	Front Bezel
2	Touch Panel
3	LCD Panel
4	LCD Chassis
5	Main Board
6	Inverter
7	MSR Function Board
8	Touch Bridge Board
9	Thermal Module
10	LCD Cover Assembly
11	MSR Dummy Door
12	CPU / RAM Door



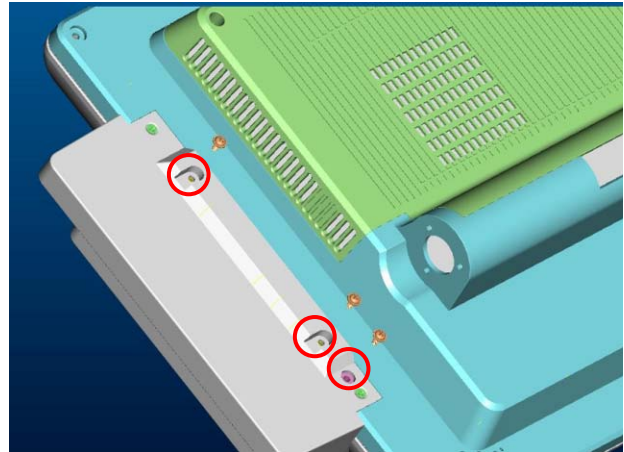
Item	Description
13	CD-ROM
14	Base Front Cover
15	Front I/O Board
16	CD-ROM Guide Bracket
17	Side Cover
18	Power Supply
19	Rear I/O Board
20	Base Cover Bracket
21	Base Cover

4. Peripherals Installation

4.1 Biometric Magnetic Stripe Reader Installation



a. Plug-in the cables (2) into the connectors on the terminal.

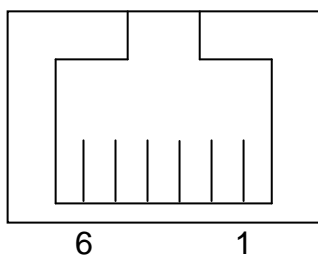


b. Secure the screws (3) to stabilize the module to the terminal.

4.2 Cash Drawer Installation

You can install a cash drawer through the cash drawer port. Please verify the pin assignment before installation.

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

4.2.2 Cash Drawer Controller Register

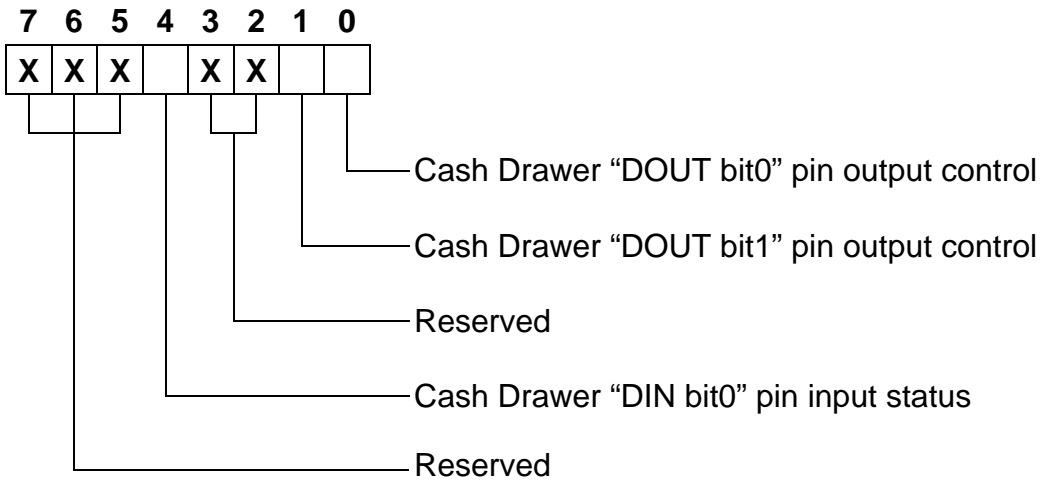
The Cash Drawer Controller use one I/O addresses to control the Cash Drawer. The Cash Drawer Control Register and the Cash Drawer Status Register.

Register Location: 4B8h

Attribute: Read / Write

Size: 8bit

BIT	BIT7	BIT6	BIT5	BIT4	BIT3	BIT2	BIT1	BIT0
Attribute	Reserved	Reserved	Reserved	Read	Reserved	Reserved	Write	Write



- Bit 7: Reserved.
- Bit 6: Reserved.
- Bit 5: Reserved.
- Bit 4: Cash Drawer "DIN bit0" pin input status.
 - = 1: the Cash Drawer closed or no Cash Drawer.
 - = 0: the Cash Drawer opened.
- Bit 3: Reserved.
- Bit 2: Reserved.
- Bit 1: Cash Drawer "DOUT bit1" pin output control.
 - = 1: Opening the Cash Drawer
 - = 0: Allow closing the Cash Drawer
- Bit 0: Cash Drawer "DOUT bit0" pin output control.
 - = 1: Opening the Cash Drawer
 - = 0: Allow closing the Cash Drawer

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

4.2.3 Cash Drawer Control Command Example

Use Debug.EXE program under DOS or Windows98

Command	Cash Drawer
O 4B8 01	Opening
O 4B8 00	Allow to closing

- Set the I/O address 4B8h bit0 =1 for opening the Cash Drawer by "DOUT bit0" pin control.
- Set the I/O address 4B8h bit0 = 0 to allow closing Cash Drawer.

Command	Cash Drawer
I 4B8	Check status

- The I/O address 4B8h bit4 =1 means the Cash Drawer is closed or no Cash Drawer.
- The I/O address 4B8h bit4 =0 means the Cash Drawer is open.

4.3 Customer Display Installation



a. Pass the cable through the hole.



b. Pass the cable through the pole.
Place the short or long pole into the hole.



c. Tighten the screws (2) under the pole.



d. Connect the cable. Please setup the COM port power.



e. Connect the cable into the display.



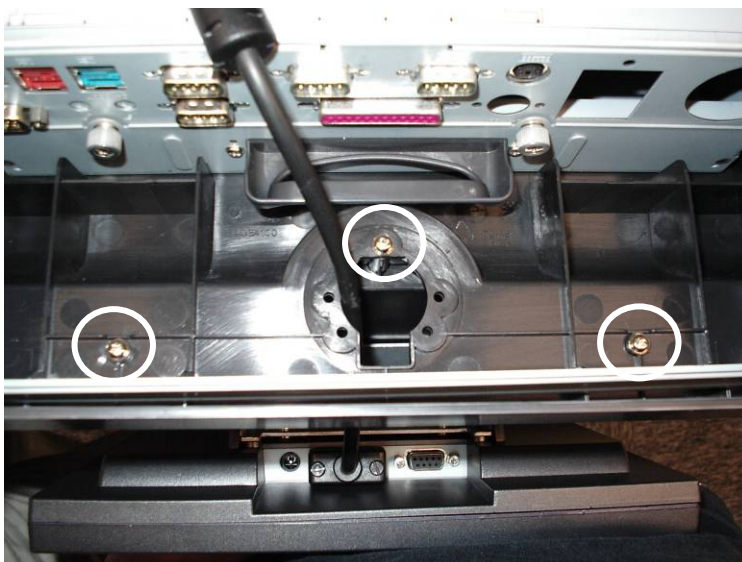
f. Tighten the screws as shown in the picture.

4.4 Second Display Installation

Please switch off the system power before connecting the second display.



- a. Connect the VGA cable (male) into the second display.



- b. Mount the second display on the rear of the system and tighten the screws (3) on the supporter (All these screws are behind the supporting pole).



- c. Connect the other end of the VGA cable (female) into the system.

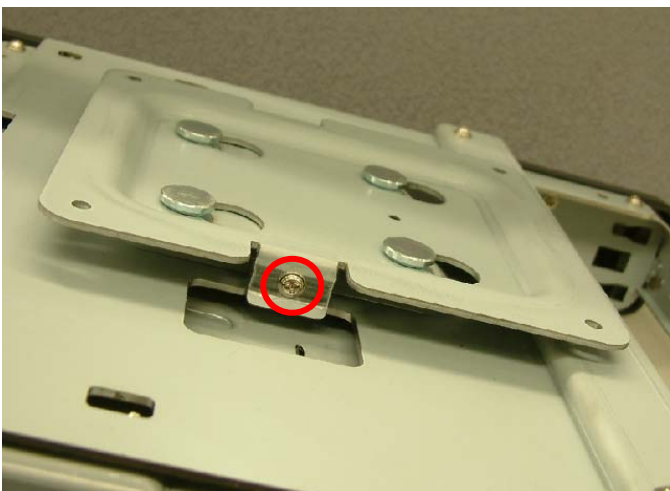
4.5 Wall Mount Bracket Installation



- a. Place the wall mount bracket into the hooks and slide the bracket to the direction as shown by the arrows



- b. The bracket should be located properly as shown by the photo.



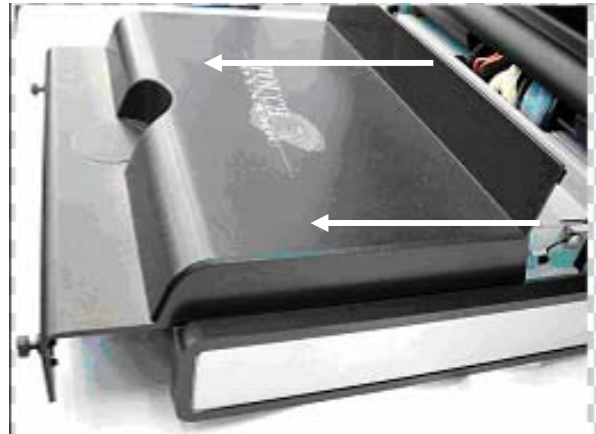
- c. Tighten the screws (2) (one on each side) to finish the installation.

5. System Disassembly

5.1. Removing the Base Cover



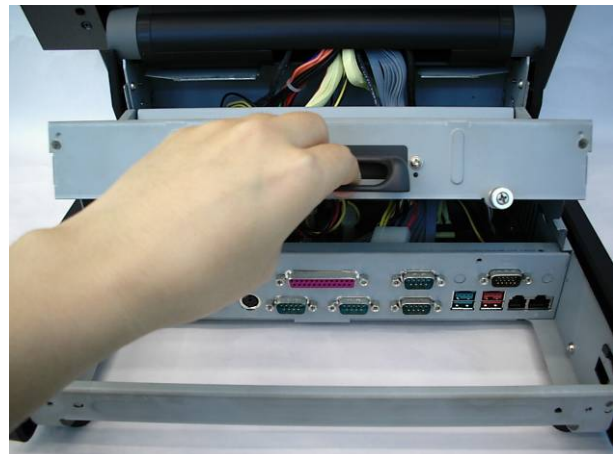
a. Release the thumbscrews (2).



b. Slide the top cover towards the back and remove it.



c. Release the thumbscrews (2).



d. Pull the base cover bracket towards you by the handle, and lift it up.



e. Fix the base cover in the open position as shown in the picture.

5.2. Replacing the HDD

To replace the HDD, please first follow the steps in chapter 5.1.



a. Disconnect the IDE cable (1) and power cable (1).

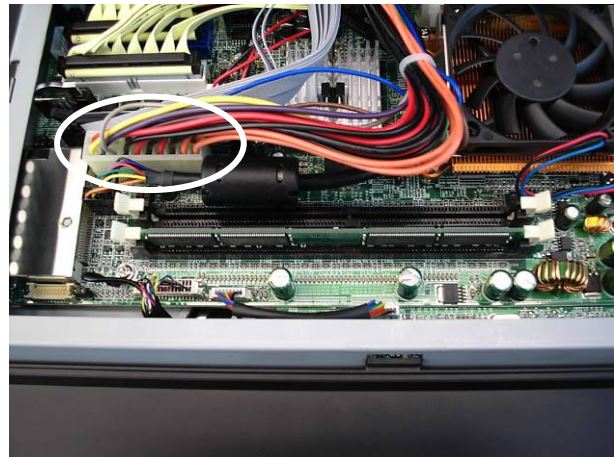


b. Remove the screws (4) to replace the HDD.

5.4. Replacing the Power Supply



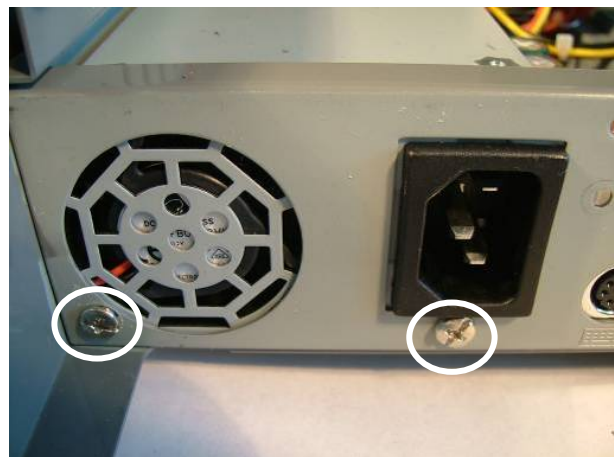
a. Remove the screws (2).



b. Disconnect the 20pin cable (1).



c. Remove the screw (1).



d. Remove the screws (2).
You can now remove the power supply.

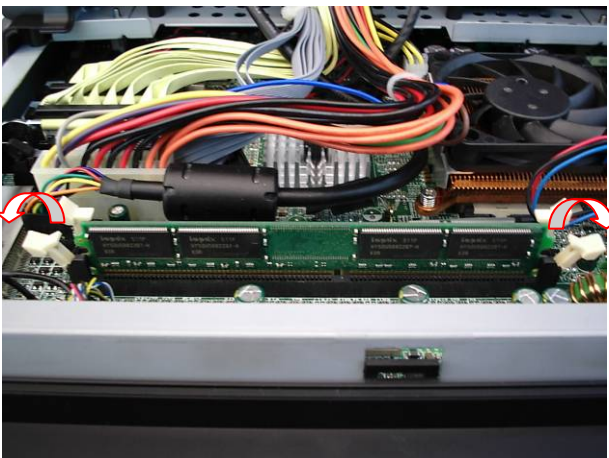
5.5. Replacing the RAM



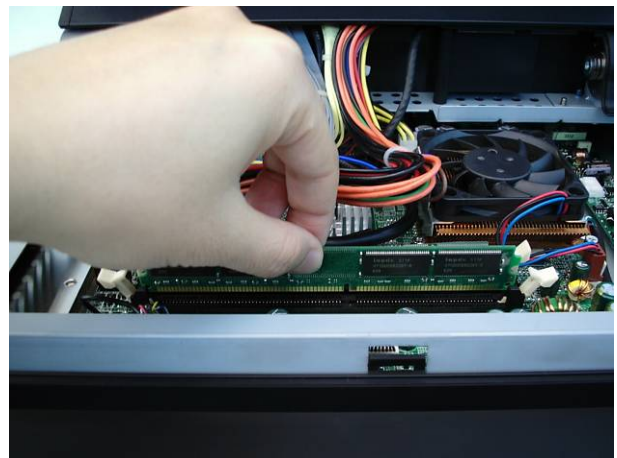
a. Remove the screws (2).



b. Lift the cover up and remove it.



c. The memory slots are located on the mainboard. To remove the memory module, use your finger to push the DIMM slot ejector clips into the down position.



d. Remove the memory module from the slot.

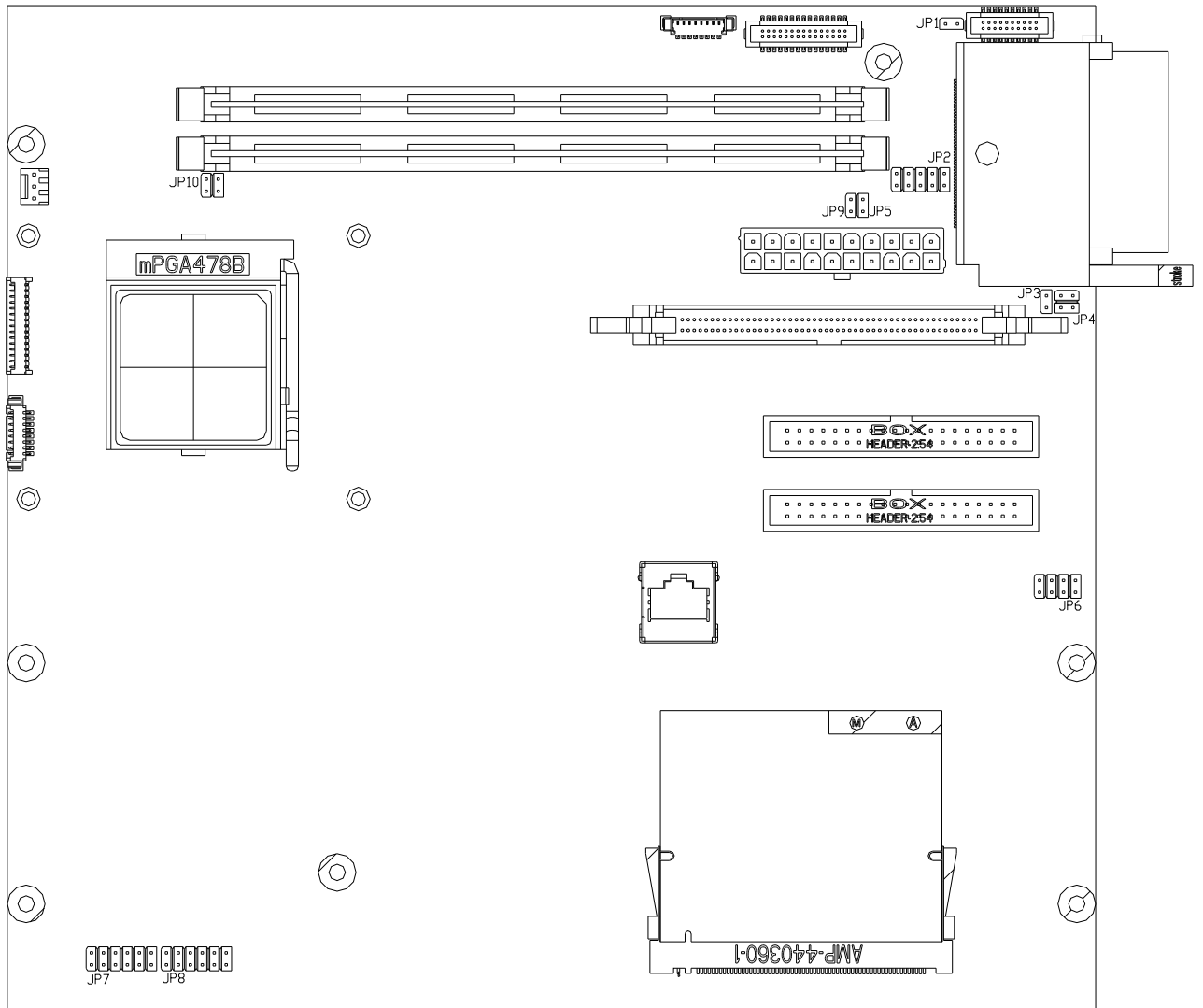
Appendix A: Specification

Main board	B82	
CPU Support	Intel SK478 CPU Up to P4 2.8G, Celeron 2.0/2.5G, Mobile Celeron 1.2G	
Chipset	Intel 852GME&ICH4 FSB 400/ 533Mhz(selectable by jumper)	
System Memory	2 x DDR DIMM sockets supported with memory size up to 2GB	
Graphic Memory	UMA Share Memory up to 64MB	
LCD Touch Panel		
LCD Size	12.1" TFT	15" TFT
Brightness	200cd/m ²	250cd/m ²
Maximal Resolution	800 x 600	1024 x 768
Touch Screen Type	Resistive	
Tilt Angle (Degree)	0°~70°	
Storage		
HDD	1 x 3.5" Drive Bay	
ODD	1 x Slim CD-ROM / CD-RW / CD-ROM (optional)	
Flash Memory	Compact Flash (Type I & II)	
Expansion		
Mini-PCI Socket	1	
External I/O Ports		
Front I/O: Line in, Line out (optional)		
USB	2 (V2.0)	
Rear I/O		
PS/2 Keyboard	1	
PS/2 Mouse	1	
USB	2 (V2.0)	
Powered USB	2 (12V / 24V)	
Serial / COM	4 x powered COM ports (pin 1/ pin 9 support +5V / +12V by Jumper)	
Parallel	1	
LAN (10 / 100)	1 (RJ45)	
2 nd VGA Output	1 male type connector with power	
Cash Drawer Port	1 x RJ11 (with 12V / 24V)	
Audio Jack	Line-in, line-out (option)	
Internal Speaker	2 x 2W	
Internal Interface		
USB	USB 5 / 6	
COM	COM5 for touch	
2 nd VGA	1 x 10pin header	

Control / Indicator	
Power Button	1
Indicator LED	2 (Power, HDD)
Power	
Power Supply	Internal 180W ATX switching mode power supply
Environment	
EMC & Safety	FCC Class A, CE, LVD
Operating Temperature	5°C ~ 35°C (41°F ~ 95°F)
Storage Temperature	-20°C ~ 60°C (-4°F ~ 140°F)
Operating Humidity	20% ~ 80% RH non condensing
Storage Humidity	20% ~ 85% RH non condensing
Peripherals	
Input Device	
Magnetic Card Reader	3 Tracks (PS2 Interface)
Magnetic Card Reader + Finger print module	3 Tracks (PS2 Interface) USB interface
Mini-PCI Wireless Lan card + Antenna(optional)	IEEE802.11a/b/g
Output Device	
Second Display	12.1" TFT LCD
Customer Display	VFD / LCD
Dimension (W x D x H)	CP200: 378 x 364 x 358 mm / 14.9" x 14.3" x 14.1"

Appendix B: Jumper Settings

B-1 M/B



1. Connector Jumper Setting

Compact Flash Master/Slave Setting

⊙ Factory Default Setting

Function	JP1 (SHORT)
Master	⊙1-2
Slave	NC

CMOS Operation Mode Setting

Function	JP5 (SHORT)
CMOS Normal	⊙NC
CMOS Reset	1-2

Power Mode Setting

Function	JP9 (SHORT)
ATX	⊙NC
AT	1-2

CPU Frequency Setting

Function	JP10 (SHORT)
⊙FSB 400	1-2,3-4
FSB 533	3-4

CPU Voltage Setting

CPU Type	JP7 (SHORT)	JP8 (SHORT)
Mobile Celeron 1.2 G (1.3V)	NC	3-4, 1-2 (NC) 9-10, 5-6 (NC) 7-8 (NC) 11-12 (NC)
⊙P4, Celeron	1- 2, 3-4 5-6, 7-8 9-10, 11-12	NC

LCD ID Setting

Panel Number	Resolution	LVDS		JP6 (SHORT)			
		Bits	Channel	1-2	3-4	5-6	7-8
0	640 x 480	18	Single	SHORT	SHORT	SHORT	SHORT
1	800 x 600	18	Single	SHORT	SHORT	SHORT	OPEN
2	1024 x 768	18	Single	SHORT	SHORT	OPEN	SHORT
3	1280 x 1024	24	Dual	SHORT	SHORT	OPEN	OPEN
4	1024 x 768	24	Single	SHORT	OPEN	SHORT	SHORT
5	800 x 600	24	Single	SHORT	OPEN	SHORT	OPEN

2. Connector Pin Definition

CN1: Touch

Pin 1	GND	Pin 2	RS232_TX#
Pin 3	RS232_RX#	Pin 4	RS232_CTS#
Pin 5	RS232_RTS#	Pin 6	RS232_DSR#
Pin 7	RS232_DTR#	Pin 8	+5V

CN3: LCD Interface

Pin 1	GND	Pin 2	LVDS_A3+
Pin 3	BKLEN	Pin 4	LVDS_A3-
Pin 5	GND	Pin 6	GND
Pin 7	+5V	Pin 8	LVDS_CLKA+
Pin9	+3.3V	Pin 10	LVDS_CLKA-
Pin 11	GND	Pin 12	GND
Pin 13	+3.3V_LCDVDD	Pin 14	LVDS_A2+
Pin 15	+3.3V_LCDVDD	Pin 16	LVDS_A2-
Pin 17	NA	Pin 18	GND
Pin 19	NA	Pin 20	LVDS_A1+
Pin 21	NA	Pin 22	LVDS_A1-
Pin 23	NA	Pin 24	GND
Pin 25	NA	Pin 26	LVDS_A0+
Pin 27	NA	Pin 28	LVDS_A0-
Pin 29	NA	Pin 30	GND

CN6: Inverter

Pin 1	+12V	Pin 2	+12V
Pin 3	+12V	Pin 4	BKLEN
Pin 5	VRSET	Pin 6	GND
Pin 7	GND	Pin 8	GND

CN11: Power Switch

Pin 1	SW_PWRBT#	Pin 2	GND
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CN12: 15"POS Card Reader

Pin 1	+5V	Pin 2	+5V
Pin 3	KDATA_SIO_TO_MSR	Pin 4	KDATA_SIO_TO_MSR
Pin 5	KDATA_MSR_TO_IBT	Pin 6	KDATA_MSR_TO_IBT
Pin 7	RS232_CR_RX#	Pin 8	RS232_CR_TX#
Pin 9	RS232_CR_CTS#	Pin 10	RS232_CR_RTS#
Pin 11	KB_EN	Pin 12	GND
Pin 13	USB20_MSR_P4+	Pin 14	USB20_MSR_P4-
Pin 15	GND		

CN13 CN14: USB Interface

Pin 1	+5V	Pin 2	USB20_P-
Pin 3	USB20_P+	Pin 4	GND

CN19: USB3 / USB4 port

Pin 1	+5V	Pin 2	+5V
Pin 3	USB20_P3+	Pin 4	USB20_P3-
Pin 5	GND	Pin 6	USB20_P2-
Pin 7	USB20_P2+	Pin 8	GND

CN20: I-BUTTON

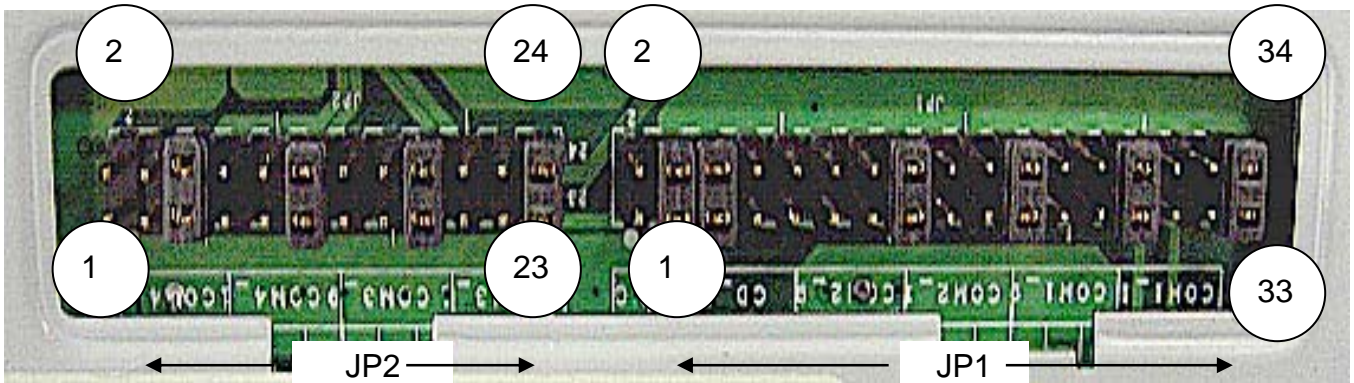
Pin 1	GND	Pin 2	GND
Pin 3	KCLK_IBT_TO_IO	Pin 4	KDATA_IBT_TO_IO
Pin 5	KCLK_MSR_TO_IBT	Pin 6	KDATA_MSR_TO_IBT
Pin 7	GND	Pin 8	+5V

CN12: 15"POS Card Reader

Pin 1	+5V_LCDVDD	Pin 2	LVDS_B0+
Pin 3	+5V_LCDVDD	Pin 4	LVDS_B0-
Pin 5	+5V_LCDVDD	Pin 6	LVDS_B1+
Pin 7	+5V_LCDVDD	Pin 8	LVDS_B1-
Pin 9	+5V_LCDVDD	Pin 10	LVDS_B2+
Pin 11	GND	Pin 12	LVDS_B2-
Pin 13	GND	Pin 14	LVDS_B3+
Pin 15	GND	Pin 16	LVDS_B3-
Pin 17	GND	Pin 18	LVDS_CLKB+
Pin 19	GND	Pin 20	LVDS_CLKB-

B-2 I/O Board

Tilt the terminal and remove the Jumper Cover Plate (1 screw) on the bottom of the terminal to gain access to the jumpers.



1. Connector Jumper Setting

COM1/COM2/Cash Drawer DC Power Jumper Setting: JP1 (SHORT)

Cash Drawer					COM2						COM1					
1-2	3-4	5-6	7-8	9-10	11-12	13-14	15-16	17-18	19-20	21-22	23-24	25-26	27-28	29-30	31-32	33-34
NC	+24V ⊙	+24V ⊙	+12V	+12V	+12V	+5V	RI ⊙	+12V	+5V	DCD ⊙	+12V	+5V	RI ⊙	+12V	+5V	DCD ⊙
					PIN9			PIN1			PIN9			PIN1		

⊙Factory Default Setting

COM3/COM4 DC Power Jumper Setting: JP2 (SHORT)

COM4						COM3					
1-2	3-4	5-6	7-8	9-10	11-12	13-14	15-16	17-18	19-20	21-22	23-24
+12V	+5V	RI ⊙	+12V	+5V	DCD ⊙	+12V	+5V	RI ⊙	+12V	+5V	DCD ⊙
PIN9			PIN1			PIN9			PIN1		

⊙Factory Default Setting

USB DC Power Jumper Setting: JP3/JP4 (SHORT)

JP3 (SHORT)		JP4 (SHORT)	
1-2	3-4	1-2	3-4
+24V	⊙+12V	⊙+24V	+12V

⊙Factory Default Setting

2. Connector Pin Definition

CN9: COM6

Pin 1	COM6_DCCD6	Pin 2	COM6_RXD2
Pin 3	COM6_TXD2	Pin 4	COM6_DTR2
Pin 5	GND	Pin 6	COM6_DSR2
Pin 7	COM6_RTS2	Pin 8	COM6_CTS2
Pin 9	COM6_RI2	Pin 10	COM6_POWER

CN12: CDIN

Pin 1	CDIN_L	Pin 2	CDIN_REF
Pin 3	CDIN_R	Pin 4	CDIN_REF

CN20: I-BUTTON

Pin 1	+24V	Pin 2	+24V
Pin 3	GND	Pin 4	GND

Note:

OPEN



SHORT



Appendix C: BIOS Setting

1. BIOS Setup Utility

The BIOS setup defines how the system is configured. You need to run this program the first time you configure this product. You may need to run it again if you change the configuration.

You need to connect a PC keyboard to the keyboard connector to run the BIOS setup utility.

2. Starting the BIOS Setup

1. Turn on or reboot this product.
2. Press the DEL key immediately after the product is turned on, or press the DEL key when the following message is displayed during POST (the Power on Self-Test).

Press DEL to enter SETUP.

3. The main menu of the BIOS setup is displayed.
4. If the supervisor password is set, you must enter it here.

3. When a Problem Occurs

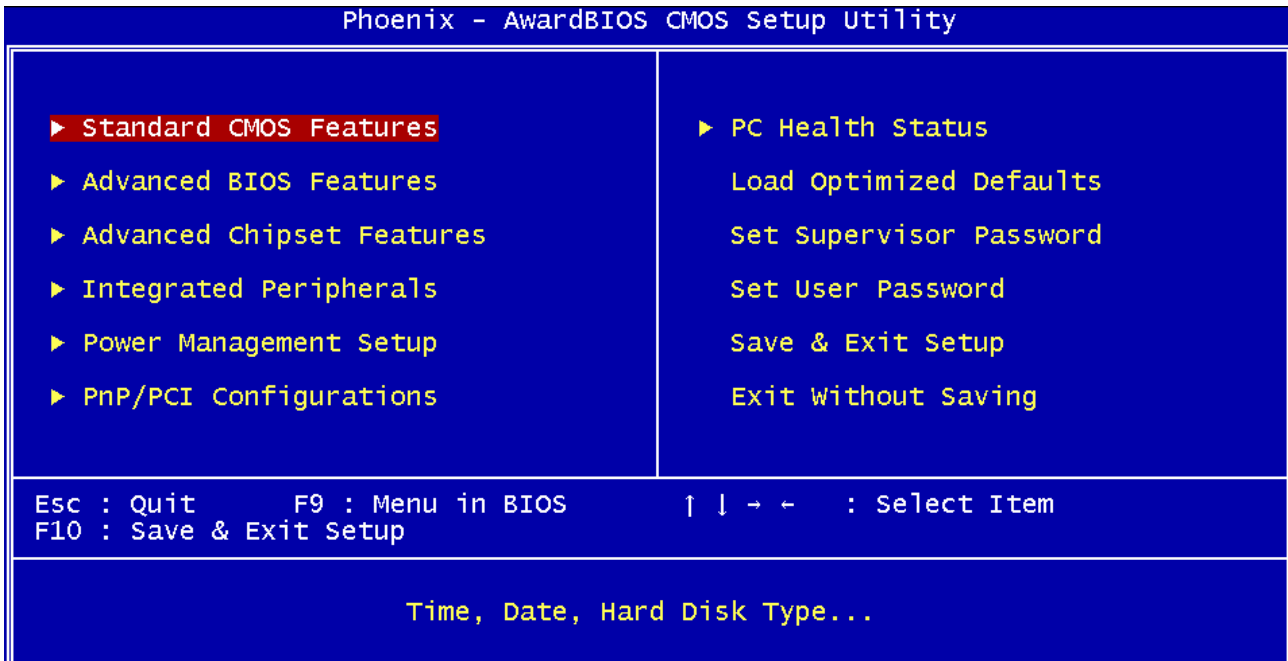
If, after making and saving system changes with the Setup utility, you find that this product no longer boots, start the BIOS setup and execute the following.

Load Optimized Defaults

4. BIOS Main Menu

When the BIOS Main Menu is displayed, the following items can be selected. Use the arrow keys to select items and the Enter key to accept and enter the sub-menu.

Note: The BIOS menu below is from B82 BIOS version B82FV10A.BIN. If you have a different BIOS version, the contents of the menu may differ.



Standard CMOS Features

This setup page includes the standard CMOS features.

Advanced BIOS Features

This setup page includes the enhanced AWARD BIOS features.

Advanced Chipset Features

This setup page includes the Chipset features

Integrated Peripherals

Change, set, or disable on board super I/O functions.

Power Management Setup

This category determines the system power consumption of the system.

PNP/PCI Configurations

This category specifies the value (in units of PCI bus clocks) of the latency timer for the PCI bus master and the IRQ level for PCI devices.

PC Health Status

This page shows hardware monitor information.

Load Optimized Defaults

BIOS defaults indicate the most appropriate value of the system parameters for a standard system performance.

Set Supervisor Password

Change, set, or disable the password. It allows the supervisor to change BIOS settings.

Set Password

Change, set, or disable the password. It allows you to limit access to the system and to the setup, or just to the setup.

Save & Exit Setup

Save CMOS value changes to CMOS and exit setup.

Exit Without Saving

Discard all CMOS value changes and exit setup.

Appendix D: Drivers Installation

The shipping package includes a Driver CD in which you can find every individual driver and utility that enables you to install the drivers on the system.

Please insert the Driver CD into the drive and double click on the “index.htm” to select the models. You can refer to the drivers installation guide for each driver in the “Driver/Manual List”.