USER'S MANUAL

PS3100 Series

Mini POS Terminal Powered by Intel® Atom® Platform

PS3100 Series M11

INTRODUCTION

CHAPTER 1

This chapter gives you the information for the PS3100. It also outlines the system specifications.

Sections included:

- About This Manual
- POS System Illustration
- System Specifications
- Safety precautions

Experienced users can jump to chapter 2 on page 2-1 for a quick start.

1-1. ABOUT THIS MANUAL

Thank you for purchasing our PS3100 Series System. The PS3100 is an updated system designed to be comparable with the highest performance of IBM AT personal computers. The PS3100 provides faster processing speed, greater expandability and can handle more tasks than before. This manual is designed to assist you how to install and set up the whole system. It contains four chapters and two appendixes. Users can configure the system according to their own needs.

Chapter 1 Introduction

This chapter introduces you to the background of this manual. It also includes illustrations and specifications for the whole system. The final section of this chapter indicates some safety reminders on how to take care of your system.

Chapter 2 System Configuration

This chapter outlines the location of motherboard components and their function. You will learn how to set the jumpers and configure the system to meet your own needs.

Chapter 3 Software Utilities

This chapter contains helpful information for proper installations of the Intel Utility, VGA Utility, LAN Utility, Sound Utility, and Touch Screen Utility. It also describes the Wireless Utility.

Chapter 4 Award BIOS Setup

This chapter indicates you how to change the BIOS configurations.

Appendix A System Assembly

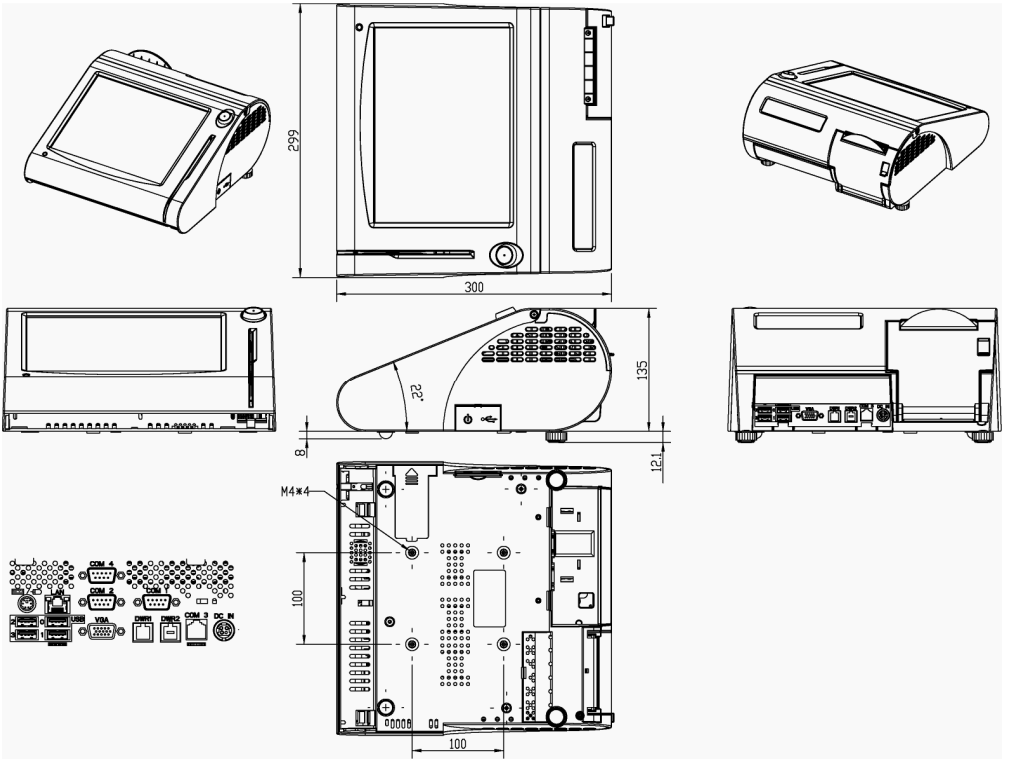
This appendix gives you the exploded diagrams and part numbers of the PS3100.

Appendix B Technical Summary

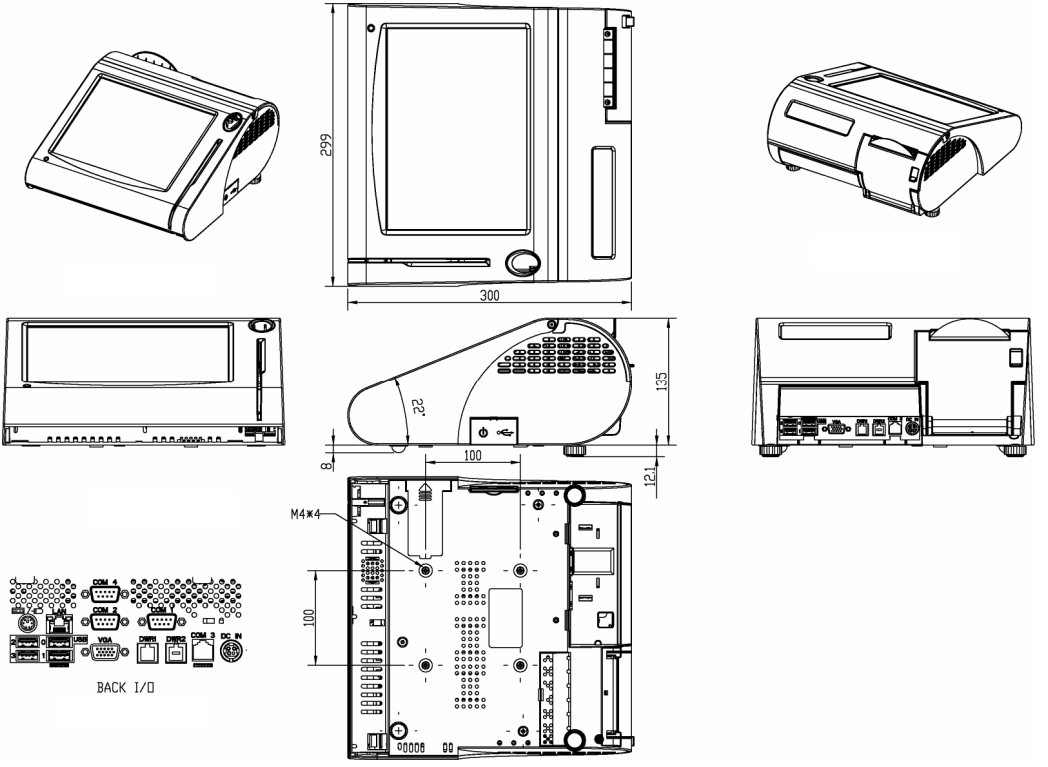
This appendix gives you the information about the allocation maps for the system resources.

1-2. POS SYSTEM ILLUSTRATION

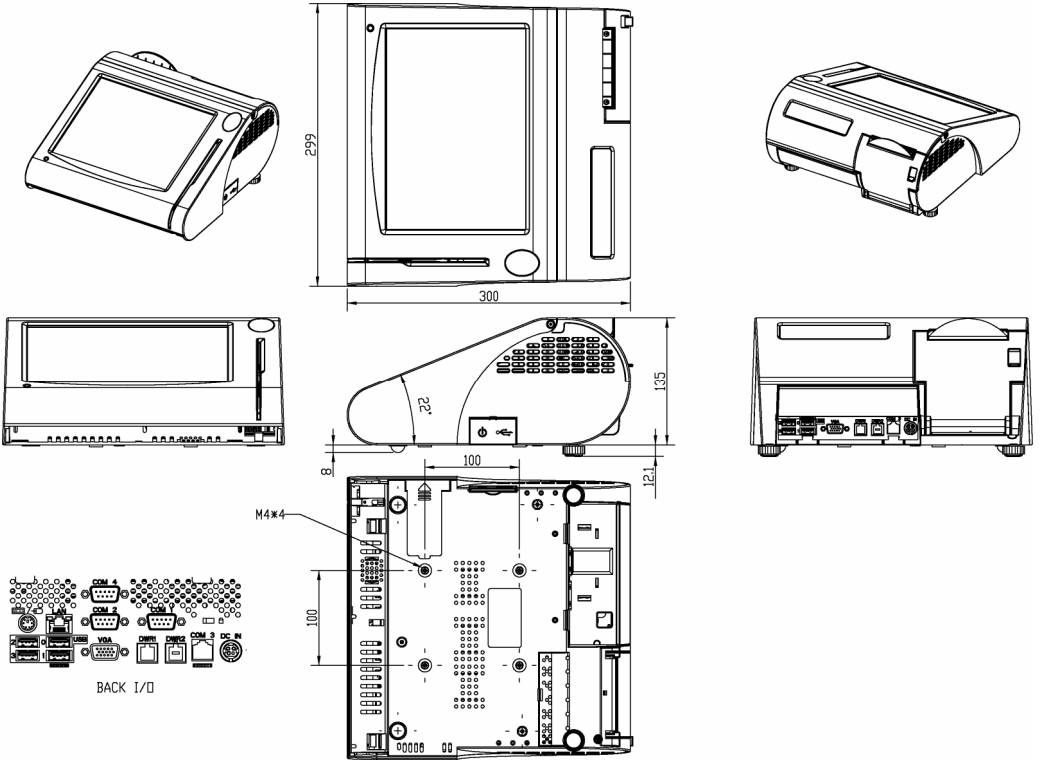
PS3100 I-BUTTON TYPE



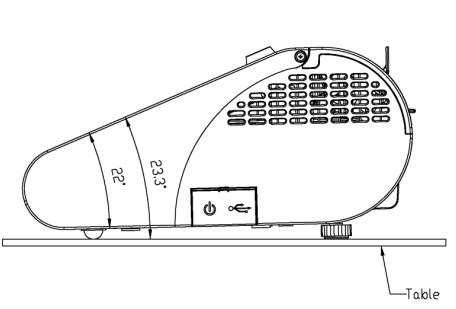
PS3100 FINGER PRINTER TYPE



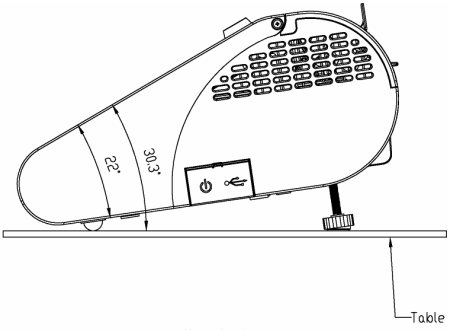
PS3100 EMPTY TYPE



PS3100 SIDE VIEW



Min. Angle



Max. Angle

1-3. SYSTEM SPECIFICATIONS

MAINBOARD (PB-3100)

- **CPU Type:**
  Intel® ATOM N270

- **Chipset:**
  Intel® 945GME + ICH7M

- **Memory:**
  One 200-pin DDRII SO-DIMM socket on board, up to 1GB

- **Cache:**
  Depended on CPU

- **Real-Time Clock / Calendar:**
  Embedded in Intel® ICH7M South Bridge

- **BIOS:**
  Phoenix Award PnP BIOS
  4Mbytes with VGA BIOS

- **Keyboard Connector:**
  PS/2 Keyboard, with mini DIN connecter on rear panel

- **Mouse Connector:**
  PS/2 Mouse, with mini DIN connecter on rear panel

- **Serial Port:**
  3 x DB-9(COM 1/2/4), 1 x RJ45 (COM3),
  +5/12V Selectable (COM 1~3)

- **Universal Serial BUS Port:**
  4 x USB2.0 ports
  1 x USB2.0 on side bezel

- **LAN Function:**
  1 x 10/100/1000 Mbps

- **Audio Function:**
  1 x 2W Speaker

- **VGA Function:**
  1 x DB-15 VGA Interface

- **Dimension (W x H x D):**
  300mm x 299mm x 135mm

- **System Weight:**
  4.5 kg

- **LCD PANEL:**

Type	XGA/SVGA
Max. Resolution	1024 x 768 / 800 x 600
Size/Type	10.4" / TFT
Viewing Angel (degree)	0~65 degrees
Pixel Pitch	0.206(W) x 0.206(H)/ 0.088(W) x 0.264(H)
Brightness	300 / 230 cd / m^2
Signal Interface (bit)	TTL (18-bit)
LCD MTBF	20,000
Back Light MTBF (Hrs)	20,000

- **Touch Panel:**
  10.4" 5wire Analog resistive

- **Printer:**
  2" or 3" easy loading thermal printer with Auto cutter
  (* Diameter of paper roll can not exceed 8 cm.)

- **i-Button (Optional):**
  Read only, output through PS/2 KB interface

- **MSR (Optional):**
  JIS-I or II, ISO Tracker 1+2+3 (PS/2 KB Interface)

- **Wireless LAN (Optional):**
  Mini PCI-e Wireless LAN Module (802.11b/g)

- **Fingerprint (Optional):**
  Embedded Fingerprint module (USB interface)

1-4. SAFETY PRECAUTIONS

The following messages are safety reminders on how to protect your systems from damages, and extending the life cycle of the system.

1. Check the Line Voltage

a. The operating voltage for the power supply should be within the range of 100V to 240V AC; otherwise the system may be damaged.

2. Environmental Conditions

a. Place your PS3100 on a sturdy, level surface. Be sure to allow enough space around the system to have easy access needs.

b. Avoid installing your PS3100 Series POS system in extremely hot or cold places.

c. Avoid exposure to sunlight for a long period of time (for example, in a closed car in summer time. Also avoid the system from any heating device.). Or do not use the PS3100 when it has been left outdoors in a cold winter day.

d. Bear in mind that the operating ambient temperature is between 0°C and 35°C (32°F and 95°F).

e. Avoid moving the system rapidly from a hot place to a cold place, and vice versa, because condensation may occur inside the system.

f. Protect your PS3100 against strong vibrations, which may cause hard disk failure.

g. Do not place the system too close to any radio-active device. Radio-active device may cause signal interference.

h. Always shutdown the operating system before turning off the power.

3. Handling

a. Avoid placing heavy objects on the top of the system.

b. Do not turn the system upside down. This may cause the hard drive to malfunction.

c. Do no allow any objects to fall into this product.

d. If water or other liquid spills into the product, unplug the power cord immediately.

4. Good Care

a. When the outside case gets stained, remove the stains using neutral washing agent with a dry cloth.

b. Never use strong agents such as benzene and thinner to clean the surface of the case.

c. If heavy stains are present, moisten a cloth with diluted neutral washing agent or alcohol and then wipe thoroughly with a dry cloth.

d. If dust is accumulated on the case surface, remove it by using a special vacuum cleaner for computers.

SYSTEM CONFIGURATION

CHAPTER

2

Helpful information that describes the jumper and connector settings, and component locations.

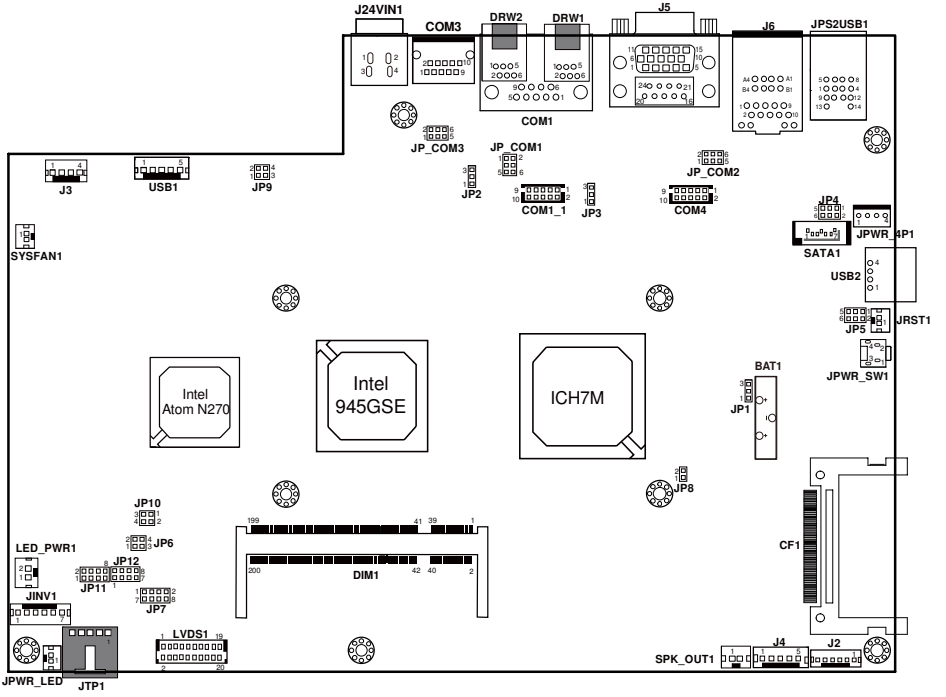
Sections included:

- Jumper & Connector Quick Reference Table
- Component Locations
- Configuration and Jumper settings
- Connector Pin Assignments

2-1. JUMPER & CONNECTOR QUICK REFERENCE TABLE

Connector & Jumper	Name	Page
COM Port & VGA Connector	COM1, COM3, COM4, COM1_1, J5	2-6
COM Port RI and Voltage Selection	JP_COM1, JP_COM2, JP_COM3	2-9
MINI-DIM and USB Connector	JPS2USB1, J4, USB1	2-10
USB Voltage Selection	JP4, JP5, JP9, JP10	2-12
LAN & USB Connector	JRJ45USB1	2-13
Cash Drawer Connector	DRW1	2-14
Cash Drawer Power Selection	JP3	2-15
POWER LED Connector	JPWR_LED	2-16
SYSFAN Connector	SYSFAN1	2-16
RST Switch Connector	JRST1	2-16
POWER FOR Thermal printer Connector	J3	2-17
External Speaker Connector	SPK_OUT1	2-17
Inverter Connector	JINV1	2-17
MSR/ Card Reader Connector	J2	2-18
LVDS Connector	LVDS1	2-18
LED Backlight Connector	LED_PWR1	2-19
SATA Connector	SATA1	2-19
SATA Power Connector	JPWR_4P1	2-19
Touch Panel Connector	JTP2	2-20
Touch Panel Selection	JP11, JP12	2-20
FWH & SPI BIOS Selection	JP8	2-21
Clear CMOS Data Selection	JP1	2-22
Compact Flash Connector	CF1	2-23
Reserved Pin	JP2	

2-2. COMPONENT LOCATIONS



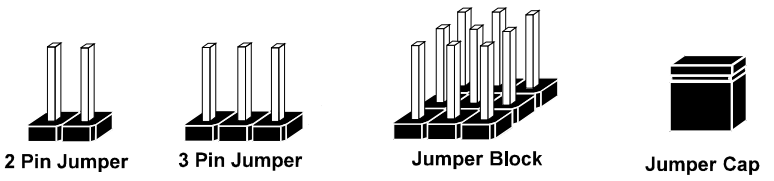
PS3100 Mainboard Connector, Jumper and Component locations

2-3. HOW TO SET THE JUMPERS

You can configure your board by setting the jumpers. Jumper is consists of two or three metal pins with a plastic base mounted on the card, and by using a small plastic "cap", Also known as the jumper cap (with a metal contact inside), you are able to connect the pins. So you can set-up your hardware configuration by "opening" or "closing" pins.

The jumper can be combined into sets that called jumper blocks. When the jumpers are all in the block, you have to put them together to set up the hardware configuration. The figure below shows how this looks like.

JUMPERS AND CAPS

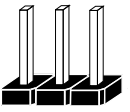


If a jumper has three pins for example, labelled PIN1, PIN2, and PIN3. You can connect PIN1 & PIN2 to create one setting and shorting. You can either connect PIN2 & PIN3 to create another setting. The same jumper diagrams are applied all through this manual. The figure below shows what the manual diagrams look and what they represent.

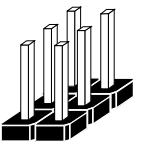
JUMPER DIAGRAMS

Jumper Cap looks like this

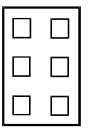
2 pin Jumper looks like this



3 pin Jumper looks like this

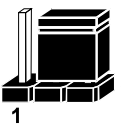


Jumper Block looks like this



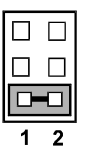
JUMPER SETTINGS

2 pin Jumper closed(enabled)
looks like this



3 pin Jumper
2-3 pin closed(enabled)
looks like this

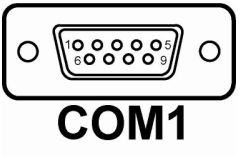
Jumper Block
1-2 pin closed(enabled)
looks like this



2-4. COM PORT & VGA CONNECTOR

There are four COM ports enhanced in this board namely: COM1, COM2, COM3 and COM4.

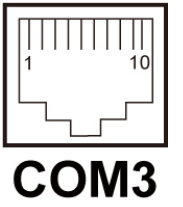
COM1: COM1 Connector
The pin assignments are as follows:



PIN	ASSIGNMENT
1	DCD1
2	RXD1
3	TXD1
4	DTR1
5	GND
6	DSR1
7	RTS1
8	CTS1
9	RI / +5V / +12V selectable

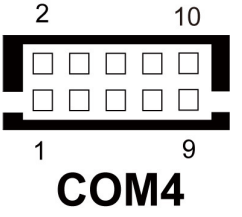
📖 COM1 and COM1_1 can't be used simultaneously.

COM3: COM3 Connector
The pin assignments are as follows:



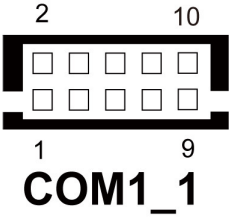
PIN	ASSIGNMENT
1	DCD3
2	RXD3
3	TXD3
4	DTR3
5	GND
6	DSR3
7	RTS3
8	CTS3
9	RI/+5V/+12 selectable
10	NC

COM4: COM4 Connector
The pin assignments are as follows:



PIN	ASSIGNMENT
1	DCD4
2	RXD4
3	TXD4
4	DTR4
5	GND
6	DSR4
7	RTS4
8	CTS4
9	RI
10	NC

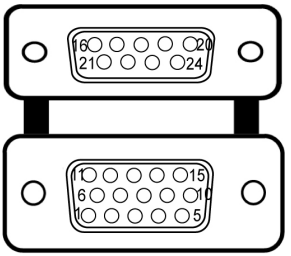
COM1_1: COM1_1 Connector
The pin assignments are as follows:



PIN	ASSIGNMENT
1	DCD1
2	RXD1
3	TXD1
4	DTR1
5	GND
6	DSR1
7	RTS1
8	CTS1
9	RI/+5V/+12 selectable
10	NC

🕮 COM1 and COM1_1 can't be used simultaneously.

J5: COM2 & VGA Connector
The pin assignments are as follows:



J5

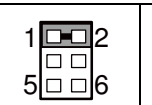
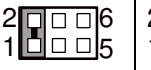
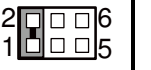
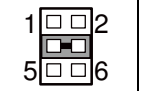
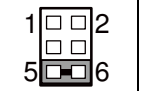
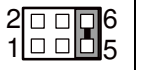
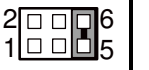
PIN	ASSIGNMENT
1	RED
2	GREEN
3	BLUE
4	NC
5	GND
6	GND
7	GND
8	GND
9	+5V
10	GND
11	NC
12	DDCA DATA
13	HSYNC
14	VSYNC
15	DDCA CLK
16	DCD2
17	RXD2
18	TXD2
19	DTR2
20	GND
21	DSR2
22	RTS2
23	CTS2
24	RI/+5V/+12 selectable

🕮 COM1~3 ports are selectable for RI, +5V or +12V. For more information, please refer to our "COM RI and Voltage Selection".

2-5. COM PORT RI & VOLTAGE SELECTION

JP_COM1 , JP_COM2, JP_COM3: COM Port RI & Voltage Selection

The selections are as follows:

SELECTION	JUMPER SETTINGS	JUMPER ILLUSTRATION		
RI	1-2	 JP_COM1	 JP_COM2	 JP_COM3
VCC12	3-4	 JP_COM1	 JP_COM2	 JP_COM3
VCC	5-6	 JP_COM1	 JP_COM2	 JP_COM3

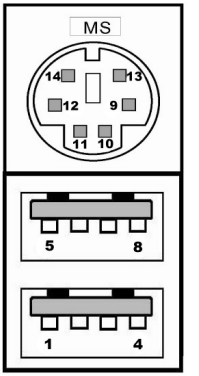
***Manufacturing Default – RI

2-6. MINI-DIM AND USB CONNECTOR

JPS2USB1: Two USB Ports Connector and MINI-DIM
MINI-DIN connector can support keyboard, Y-cable. Please use Y-cable if using PS/2 mouse.

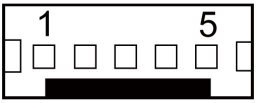
The pin assignments are as follows:

PIN	ASSIGNMENT
1	GND
2	USB2+
3	USB2-
4	VCC5
5	GND
6	USB3+
7	USB3-
8	VCC5
9	GND
10	KDAT
11	MDAT
12	V5SB
13	KCLK
14	MCLK



JPS2USB1

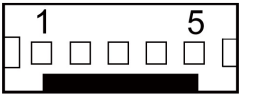
J4: Internal USB Ports Connector
The pin assignments are as follows:



J4

PIN	ASSIGNMENT
1	USB4-
2	USB4+
3	GND
4	VCC5
5	GND

USB1: Internal USB Ports Connector
The pin assignments are as follows:

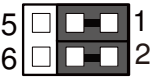
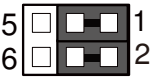
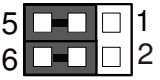
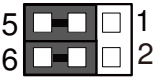


USB1

PIN	ASSIGNMENT
1	USB7-
2	USB7+
3	GND
4	VCC5
5	GND

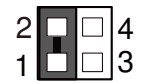
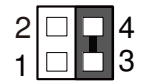
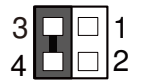
2-7. USB VOLTAGE SELECTION

JP4, JP5: USB Voltage Selection
The selections are as follows:

SELECTION	JUMPER SETTINGS	JUMPER ILLUSTRATION	
V5SB	1-3 2-4	 JP4	 JP5
VCC	3-5 4-6	 JP4	 JP5

*** Manufactory default – V5SB

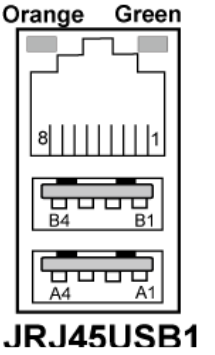
JP9, JP10: USB Voltage Selection
The selections are as follows:

FUNCTION	JUMPER SETTING (pin closed)	JUMPER ILLUSTRATION	
V5SB	1-2	 JP9	 JP10
VCC	3-4	 JP9	 JP10

*** Manufactory default – V5SB

2-8. LAN & USB CONNECTOR

JRJ45USB1: LAN & USB Connector
The pin assignments are as follows:



JRJ45USB1

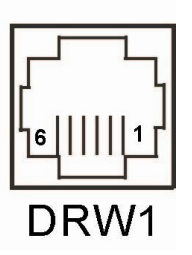
PIN	ASSIGNMENT
1	LAN1_MDIP0
2	LAN1_MDIN0
3	LAN1_MDIP1
4	LAN1_MDIN1
5	LAN1_MDIP2
6	LAN1_MDIN2
7	LAN1_MDIP3
8	LAN1_MDIN3

PIN	ASSIGNMENT
A1	VCC5
A2	USB0-
A3	USB0+
A4	GND
B1	VCC5
B2	USB1-
B3	USB1+
B4	GND

2-9. CASH DRAWER CONNECTOR

DRW1: Cash Drawer Connector
The pin assignments are as follows:

PIN	ASSIGNMENT
1	GND
2	Drawer Open
3	Drawer Sense
4	+12V
5	NC
6	GND



Prox-3100 cash drawer control in GPIO port

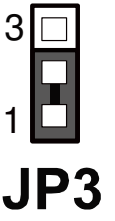
To Open Drawer1
Write "00"h to I/O Port "48F"h

To Close Drawer1
Write "02"h to I/O Port "48F"h

Detect Drawer1 Status
Read I/O "48D"h
Definition (bit7)

2-10. CASH DRAWER POWER SELECTION

JP3: Cash Drawer Power Selection
The jumper settings are as follows:

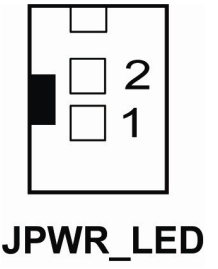
SELECTION	JUMPER SETTINGS	JUMPER ILLUSTRATION
+12V (default)	2-3	
+24V	1-2	

*** Manufactory default – +12V

2-11. POWER LED CONNECTOR

JPWR_LED: Power Switch Connector
The pin assignments are as follows:

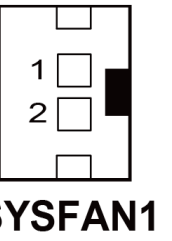
PIN	ASSIGNMENT
1	VCC_PWR_LED
2	PWRLED



2-12. SYSFAN1 CONNECTOR

SYSFAN1: Power Switch Connector
The pin assignments are as follows:

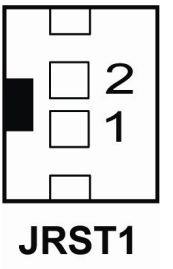
PIN	ASSIGNMENT
1	GND
2	VCC12



2-13. RST SWITCH CONNECTOR

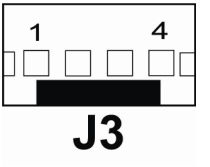
JRST1: Power Switch Connector
The pin assignments are as follows:

PIN	ASSIGNMENT
1	RST_SW
2	GND



2-14. POWER FOR Thermal printer CONNECTOR

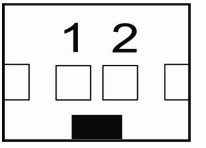
J3: Power for Thermal printer Connector
The pin assignments are as follows:



PIN	ASSIGNMENT
1	VCC24SB
2	VCC24SB
3	GND
4	GND

2-15. EXTERNAL SPEAKER CONNECTOR

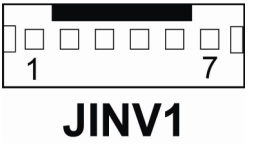
SPK_OUT1: External Speaker Connector
The pin assignments are as follows:



PIN	ASSIGNMENT
1	SPK_OUT
2	SPK_GND

2-16. INVERTER CONNECTOR

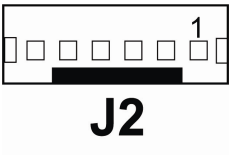
JINV1: Inverter Connector
The pin assignments are as follows:



PIN	ASSIGNMENT
1	+12V
2	+12V
3	GND
4	GND
5	LVDS_BKLTEN
6	BRCTR
7	GND

2-17. MSR/CARD READER CONNECTOR

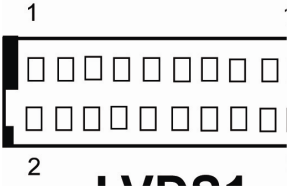
J2: MSR/ Card Reader Connector
The pin assignments are as follows:



PIN	ASSIGNMENT
1	KB_CLK (Output)
2	KB_CLK_C (Input)
3	KB_DATA_C (Input)
4	KB_DATA (Output)
5	+5V
6	GND

2-18. LVDS CONNECTOR

LVDS1: LVDS Connector
The pin assignments are as follows:

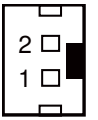


PIN	ASSIGNMENT	PIN	ASSIGNMENT
1	GND	2	LVDS_VCC
3	LVDS_YAP2	4	LVDS_VCC
5	LVDS_YAM2	6	GND
7	GND	8	GND
9	LVDS_YAP1	10	LVDS_CLKAP
11	LVDS_YAM1	12	LVDS_CLKAM
13	GND	14	GND
15	LVDS_YAP0	16	GND
17	LVDS_YAM0	18	LVDS_VCC
19	GND	20	LVDS_VCC

2-19. LED BACKLIGHT CONNECTOR

LED_PWR1: LED Backlight Connector
The pin assignments are as follows:

PIN	ASSIGNMENT
1	INV+
2	INV-



LED_PWR1

2-20. SATA CONNECTOR

SATA1: Serial ATA Connector
The pin assignments are as follows:

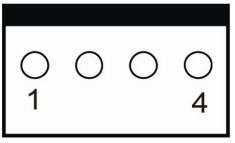
PIN	ASSIGNMENT
1	G1
2	TX+
3	TX-
4	G2
5	RX-
6	RX+
7	G3

SATA1

2-21. SATA POWER CONNECTOR

JPWR_4P1: Serial ATA Connector
The pin assignments are as follows:

PIN	ASSIGNMENT
1	VCC
2	GND
3	GND
4	VCC12

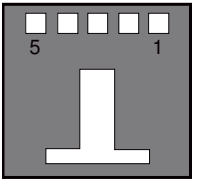


JPWR_4P1

2-22. TOUCH PANEL CONNECTOR

JTP2: Touch Panel Connector
The pin assignments are as follows:

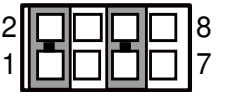
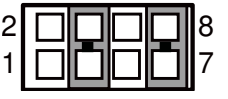
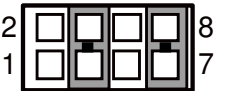
PIN	ASSIGNMENT
1	LR (Low Right)
2	LL (Low Left)
3	Probe
4	UR (Up Right)
5	UL (Up Left)



JTP2

2-23. TOUCH PANEL SELECTION

JP11, JP12: Touch Panel Selection.
The selections are as follows:

SELECTION	JUMPER SETTINGS	JUMPER ILLUSTRATION
Elo	1-2 5-6	 **JP-11/ JP-12**
e-Turbo	3-4 7-8	 **JP-12**
3M	3-4 7-8	 **JP-11**

*** Manufactory default – Elo

2-24. FWH & SPI BIOS SELECTION

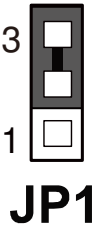
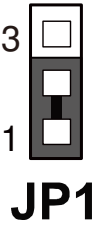
JP8: FWH & SPI SELECTION
The selections are as follows:

FUNCTION	JUMPER SETTING (pin closed)	JUMPER ILLUSTRATION
SPI	1-2	
LPC	Open	

*** Manufactory default – SPI

2-25. CLEAR CMOS DATA SELECTION

JP1: Clear CMOS Data Selection
The selections are as follows:

FUNCTION	JUMPER SETTING (pin closed)	JUMPER ILLUSTRATION
CLEAR CMOS	2-3	
NORMAL	1-2	

*** Manufacturing Default – Normal

📖 To clear CMOS data, user must power-off the computer and set the jumper to "Clear CMOS" as illustrated above. After five to six seconds, set the jumper back to "Normal" and power-on the computer.

2-26. COMPACT FLASH CONNECTOR

CF1: Compact Flash Connector.
The pin assignments are as follows:

PIN	ASSIGNMENT	PIN	ASSIGNMENT
1	GND	26	GND
2	D03	27	D11
3	D04	28	D12
4	D05	29	D13
5	D06	30	D14
6	D07	31	D15
7	CSJ1	32	CSJ3
8	GND	33	GND
9	GND	34	SDIORDJ
10	GND	35	SDIOWRJ
11	GND	36	+5V
12	GND	37	IRQ14
13	+5V	38	+5V
14	GND	39	-CSEL
15	GND	40	NC
16	GND	41	RESETJ
17	GND	42	IORDJ
18	A02	43	REQ
19	A01	44	ACKJ
20	A00	45	CF_LEDJ
21	D00	46	-PDIAG
22	D01	47	D08
23	D02	48	D09
24	NC	49	D10
25	GND	50	GND

SOFTWARE UTILITIES

CHAPTER

3

This chapter provides the detailed information users need to install driver utilities for the system.

Sections included:

- Intel® Chipset Software Installation Utility
- VGA Driver Utility
- LAN Driver Utility
- Sound Driver Utility
- Touch Screen Driver Utility
- Wireless Driver Utility (Optional)

3-1. INTRODUCTION

Enclosed with the PS3100 Series package is our driver utilities, which comes in a CD ROM format. Refer to the following table for driver locations.

Filename (Assume that CD ROM drive is D:)	**Purpose**
D:\Driver\Plaform\XP,POSReady2009 (32-bit)\Main Chip or D:\Driver\Plaform\Win7,POSReady7(32-bit)\Main Chip	Intel® Chipset Software Installation Utility
D:\Driver\Plaform\XP,POSReady2009 (32-bit)\VGA or D:\Driver\Plaform\Win7,POSReady7(32-bit)\VGA	Intel® Graphics Media Accelerator 3150 for VGA driver installation
D:\Driver\Plaform\XP,POSReady2009 (32-bit)\LAN or D:\Driver\Plaform\Win7,POSReady7(32-bit)\LAN	For LAN driver installation depending on the version of mainboard: ▪ **RA version:** Realtek 8111DL ▪ **RB version:** Realtek 8119CG
D:\Driver\Plaform\XP,POSReady2009 (32-bit)\Sound or D:\Driver\Plaform\Win7,POSReady7(32-bit)\Sound	Realtek ALC888 for dound driver installation
D:\Driver\Device	Driver installation for touchscreen, embedded printer, wireless, MSR, etc.

🕭 Users must install the driver utilities right after the OS is fully installed.

3-2. INTEL® CHIPSET SOFTWARE INSTALLATION UTILITY

3-2-1. Introduction

The Intel® Chipset Software Installation Utility installs to the target system the Windows* INF files that outline to the operating system how the chipset components will be configured. This is needed for the proper functioning of the following features.

- SATA Storage Support (SATA & SATA II)
- USB Support (1.1 & 2.0)
- Identification of Intel® Chipset Components in Device Manager

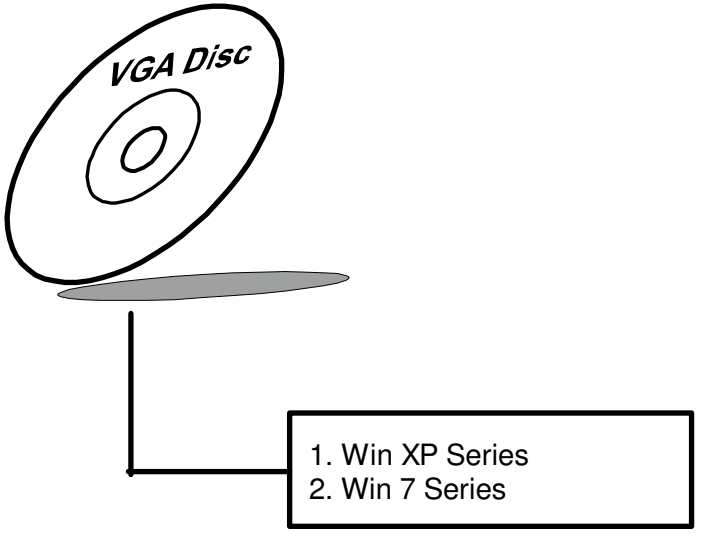
3-2-2. Installation of Intel® Chipset Driver

The utility pack is to be installed only for Windows XP/ 7 series, and it should be installed right after the OS installation. Please follow the steps below:

1. Connect the USB-CD ROM device to the PS3100 and insert the driver disk inside.
2. Enter the "Main Chip" folder where the Chipset driver is located (depending on your OS platform).
3. Click **Setup.exe** file for driver installation.
4. Follow the on-screen instructions to complete the installation.
5. Once installation is completed, shut down the system and restart the PS3100 for the changes to take effect.

3-3. VGA DRIVER UTILITY

The VGA interface embedded with the PS3100 series can support a wide range of display types. You can have dual displays via CRT and LVDS interfaces work simultaneously.



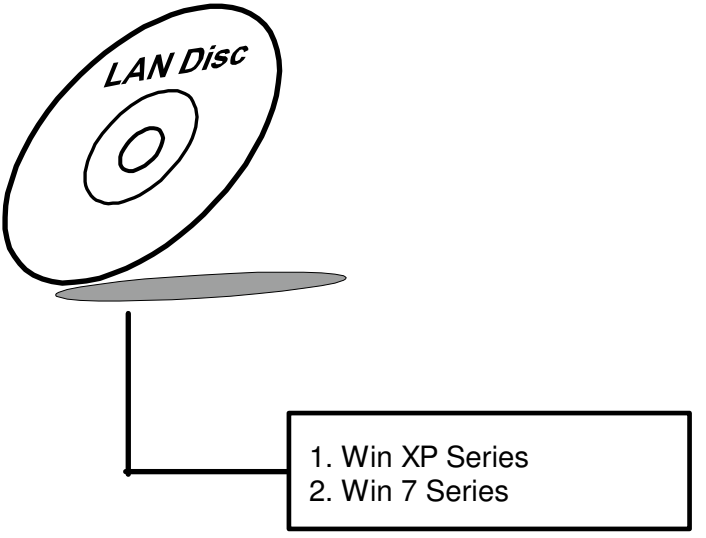
3-3-1. Installation of VGA Driver

To install the VGA Driver, follow the steps below:

1. Connect the USB-CD ROM device to the PS3100 and insert the driver disk inside.
2. Enter the "VGA" folder where the VGA driver is located (depending on your OS platform).
3. Click **Setup.exe** file for driver installation.
4. Follow the on-screen instructions to complete the installation.
5. Once installation is completed, shut down the system and restart the PS3100 for the changes to take effect.

3-4. LAN DRIVER UTILITY

The PS3100 Series is enhanced with LAN function that can support various network adapters. Installation platform for the LAN driver is listed as follows:



For more details on the Installation procedure, please refer to the Readme.txt file found on LAN Driver Utility.

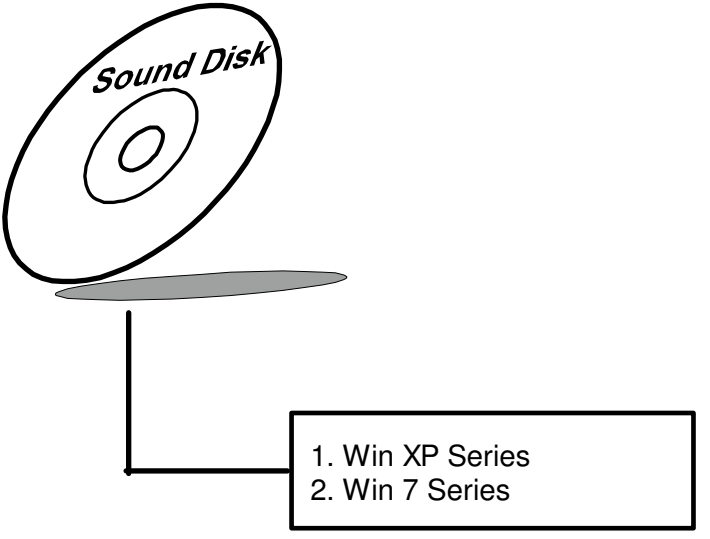
3-4-1. Installation of LAN Driver

To install the LAN Driver, follow the steps below:

1. Connect the USB-CD ROM device to the PS3100 and insert the driver disk inside.
2. Enter the "LAN" folder where the LAN driver is located (depending on your OS platform).
3. Click **Setup.exe** file for driver installation.
4. Follow the on-screen instructions to complete the installation.
5. Once installation is completed, shut down the system and restart the PS3100 for the changes to take effect.

3-5. SOUND DRIVER UTILITY

The sound function enhanced in this system is fully compatible with Windows XP/ 7 series. Below, you will find the content of the Sound driver.



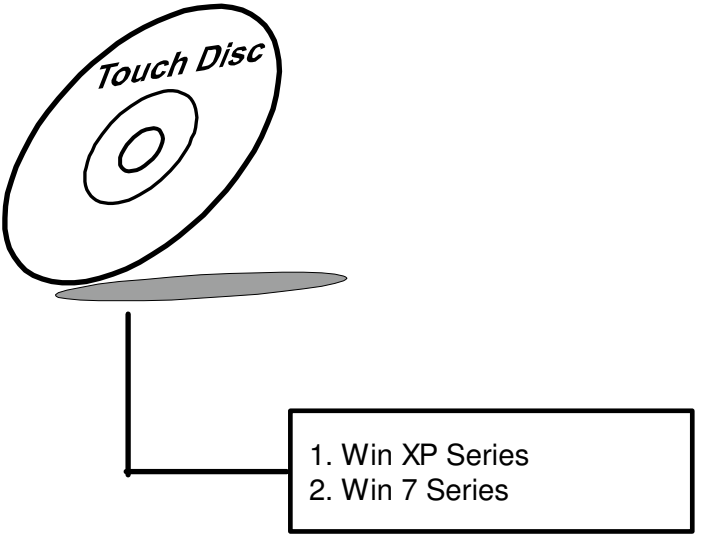
3-5-1. Installation of Sound Driver

To install the Sound Driver, refer to the readme.txt file on the driver disc (:\Sound\Realtek\Readme.txt).

1. Connect the USB-CD ROM device to the PS3100 and insert the driver disk inside.
2. Enter the "Sound" folder where the Sound driver is located (depending on your OS platform).
3. Click **Setup.exe** file for driver installation.
4. Follow the on-screen instructions to complete the installation.
5. Once installation is completed, shut down the system and restart the PS3100 for the changes to take effect.

3-6. TOUCHSCREEN DRIVER UTILITY

The touchscreen driver utility can only be installed on a Windows platform (XP/ 7 series), and it should be installed right after the OS installation.



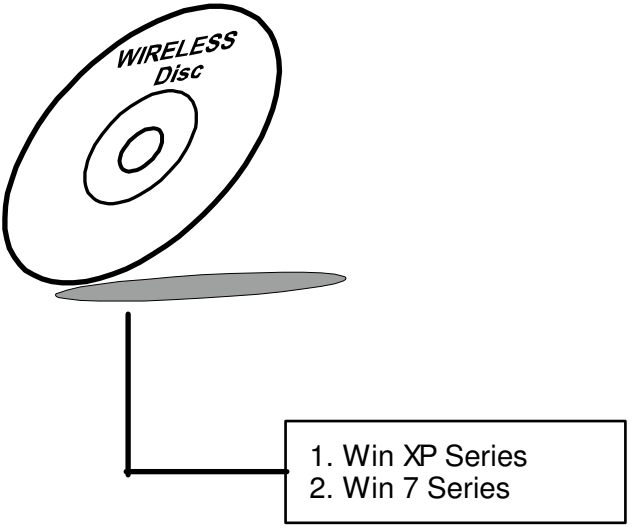
3-6-1. Installation of Touchscreen Driver

To install the Touchscreen Driver, follow the steps below:

1. Connect the USB-CD ROM device to the PS3100 and insert the driver disk inside.
2. Enter the "Device/Touchscreen" folder where the Touchscreen driver is located.
3. Click **Setup.exe** file for driver installation.
4. Follow the on-screen instructions to complete the installation.
5. Once installation is completed, shut down the system and restart the PS3100 for the changes to take effect.

3-7. WIRELESS DRIVER UTILITY (OPTIONAL)

The wireless driver utility can only be installed on a Windows platform (XP/ 7 series), and it should be installed right after the OS installation.



3-7-1. Installation of Wireless Driver

To install the Wireless Driver, follow the steps below:

1. Connect the USB-CD ROM device to the PS3100 and insert the driver disk inside.
2. Enter the "Device/Embedded Wireless Module" folder where the Wireless driver is located.
3. Click **Setup.exe** file for driver installation.
4. Follow the on-screen instructions to complete the installation.
5. Once installation is completed, shut down the system and restart the PS3100 for the changes to take effect.

AWARD BIOS SETUP

CHAPTER 4

This chapter shows how to configure the Award BIOS settings.

Sections included:

- Introduction
- Entering Setup
- The Standard CMOS Features
- The Advanced BIOS Features
- The Advanced Chipset Features
- Integrated Peripherals
- Power Management Setup
- PNP/PCI Configuration
- PC Health Status
- Frequency Control
- Load Fail-Safe Defaults
- Load Optimized Defaults
- Password Setting
- Save and Exit Setup
- Exit Without Saving

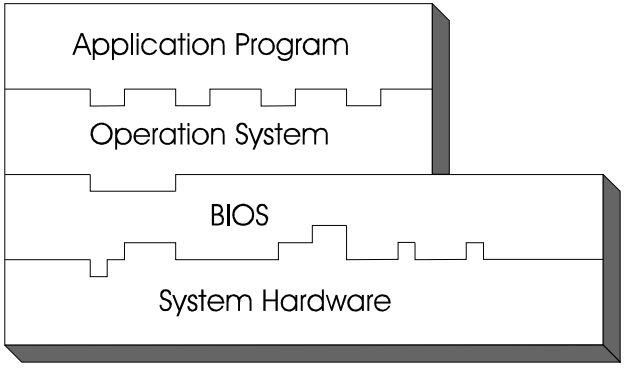
4-1. INTRODUCTION

This chapter will show you the function of the BIOS in managing the features of your system. The PS-3100LF is equipped with the BIOS for system chipset from Phoenix -Award Software Inc. This page briefly explains the function of the BIOS in managing the special features of your system. The following pages describe how to use the BIOS for system chipset Setup menu.

Your application programs (such as word processing, spreadsheets, and games) rely on an operating system such as DOS or OS/2 to manage such things as keyboard, monitor, disk drives, and memory.

The operating system relies on the BIOS (Basic Input and Output system), a program stored on a ROM (Read-only Memory) chip, to initialize and configure your computer's hardware. As the interface between the hardware and the operating system, the BIOS enables you to make basic changes to your system's hardware without having to write a new operating system.

The following diagram illustrates the interlocking relationships between the system hardware, BIOS, operating system, and application program:



4-2. ENTERING SETUP

When the system is powered on, the BIOS will enter the Power-On Self Test (POST) routines and the following message will appear on the lower screen:

PRESS <DEL> TO ENTER SETUP, ESC TO SKIP MEMORY TEST

As long as this message is present on the screen you may press the <Del> key (the one that shares the decimal point at the bottom of the number keypad) to access the Setup program. In a moment, the main menu of the Award SETUP program will appear on the screen:

Phoenix - AwardBIOS CMOS Setup Utility

►Standard CMOS Features	►Frequency Control
►Advanced BIOS Features	Load Fail-Safe Defaults
►Advanced Chipset Features	Load Optimized Defaults
►Integrated Peripherals	Set Supervisor Password
►Power Management Setup	Set User Password
►PnP/PCI Configurations	Save & Exit Setup
►PC Health Status	Exit Without Saving
Esc : Quit F10 : Save & Exit Setup	↑↓→← : Select Item
Time, Date, Hard Disk Type ….	

Setup program initial screen

You may use the cursor the up/down keys to highlight the individual menu items. As you highlight each item, a brief description of the highlighted selection will appear at the bottom of the screen.

4-3. THE STANDARD CMOS FEATURES

Highlight the "STANDARD CMOS FEATURES" and press the <ENTER> key and the screen will display the following table:

Phoenix - AwardBIOS CMOS Setup Utility
Standard CMOS Features

Date (mm:dd:yy)	Thu, Jun 22 2007	Item Help
Time (hh:mm:ss)	13 : 54 : 47	Menu Level ►
► IDE Channel 0 Master	[HDS728080PLA380]	
► IDE Channel 0 Slave	[None]	Change the day, month, year and century
► IDE Channel 2 Master	[None]	
► IDE Channel 2 Slave	[None]	
► IDE Channel 3 Master	[None]	
► IDE Channel 3 Slave	[None]	
Video	[EGA/VGA]	
Halt On	[All, But Keyboard]	
Base Memory	640K	
Extended Memory	514048K	
Total Memory	515072K	

↑↓→←: Move Enter: Select +/-/PU/PD:Value F10:Save ESC:Exit F1:General Help
F5: Previous Values F6: Fail-Safe Defaults F7:Optimized Defaults

CMOS Setup screen

In the above Setup Menu, use the arrow keys to highlight the item and then use the <PgUp> or <PgDn> keys to select the value you want in each item.

DATE:

< Month >, < Date > and <Year >. Ranges for each value are in the CMOS Setup Screen, and the week-day will skip automatically.

TIME:

< Hour >, < Minute >, and < Second >. Use 24 hour clock format, i.e., for PM numbers, add 12 to the hour. For example: 4: 30 P.M. You should enter the time as 16:30:00.

IDE CHANNEL 0/2/3 Master:
IDE CHANNEL 0/2/3 Slave:

The BIOS can automatically detect the specifications and optimal operating mode of almost all SATA hard drives. When you select type AUTO for a hard drive, the BIOS detect its specifications during POST, every time system boots.

If you do not want to select drive type AUTO, other methods of selecting drive type are available:

1. Match the specifications of your installed SATA hard drive(s) with the preprogrammed values for hard drive types 1 through 45.
2. Select USER and enter values into each drive parameter field.
3. Use the SATA HDD AUTO DETECTION function in Setup.

Here is a brief explanation of drive specifications:

Type: The BIOS contains a table of pre-defined drive types. Each defined drive type has a specified number of cylinders, number of heads, write precompensation factor, landing zone, and number of sectors. Drives whose specifications do not accommodate any predefine type are classified as type USER.

- Size: Disk drive capacity (approximate). Note that this size is usually greater than the size of a formatted disk given by a disk-checking program.
- Cyls: number of cylinders.
- Head: number of heads.
- Precomp: write precompensation cylinders.
- Landz: landing zone.
- Sector: number of sectors.
- Mode: Auto, Normal, Large or LBA.
  Auto: The BIOS automatically determines the optimal mode.
  - Normal: Maximum number of cylinders, heads, sectors supported are 1024, 16 and 63.
  - Large: For drives that do not support LBA and have more than 1024 cylinders.
  - LBA (Logical Block Addressing): During drive accesses, the SATA controller transforms the data address described by sector, head and cylinder number into a physical block address, significantly improving data transfer rates. For drives greater than 1024 cylinders.

VIDEO:

This category selects the type of video adapter used for the primary system monitor. Although secondary monitors are supported, you do not have to select the type in Setup. Available Options are as follows:

EGA/VGA	Enhanced Graphics Adapter/Video Graphics Array. For EGA, VGA, SEGA, SVGA or PGA monitor adapters.
CGA 40	Color Graphics Adapter, power up in 40 column mode.
CGA 80	Color Graphics Adapter, power up in 80 column mode.
MONO	Monochrome adapter, includes high resolution monochrome adapters.

HALT ON:

This category allows user to choose whether the computer will stop if an error is detected during power up. Available options are “All errors”, “No errors”, “All, But keyboard”, “All, But Diskette”, and “All But Disk/Key”.

BASE MEMORY:

Displays the amount of conventional memory detected during boot up.

EXTENDED MEMORY:

Displays the amount of extended memory detected during boot up.

TOTAL MEMORY:

Displays the total memory available in the system.

HARD DISK ATTRIBUTES:

Type	Cylinders	Heads	V-P comp	LZone	Sect	Capacity
1	306	4	128	305	17	10
2	615	4	300	615	17	20
3	615	6	300	615	17	30
4	940	8	512	940	17	62
5	940	6	512	940	17	46
6	615	4	65535	615	17	20
7	642	8	256	511	17	30
8	733	5	65535	733	17	30
9	900	15	65535	901	17	112
10	820	3	65535	820	17	20
11	855	5	65535	855	17	35
12	855	7	65535	855	17	49
13	306	8	128	319	17	20
14	733	7	65535	733	17	42
15	000	0	0000	000	00	00
16	612	4	0000	663	17	20
17	977	5	300	977	17	40
18	977	7	65535	977	17	56
19	1024	7	512	1023	17	59
20	733	5	300	732	17	30
21	733	7	300	732	17	42
22	733	5	300	733	17	30
23	306	4	0000	336	17	10
24	977	5	65535	976	17	40
25	1024	9	65535	1023	17	76
26	1224	7	65535	1223	17	71
27	1224	11	65535	1223	17	111
28	1224	15	65535	1223	17	152
29	1024	8	65535	1023	17	68
30	1024	11	65535	1023	17	93
31	918	11	65535	1023	17	83
32	925	9	65535	926	17	69
33	1024	10	65535	1023	17	85
34	1024	12	65535	1023	17	102
35	1024	13	65535	1023	17	110
36	1024	14	65535	1023	17	119
37	1024	2	65535	1023	17	17
38	1024	16	65535	1023	17	136
39	918	15	65535	1023	17	114
40	820	6	65535	820	17	40
41	1024	5	65535	1023	17	42
42	1024	5	65535	1023	26	65
43	809	6	65535	852	17	40
44	809	6	65535	852	26	61
45	776	8	65335	775	33	100
47			AUTO			

Award Hard Disk Type Table

4-4. THE ADVANCED BIOS FEATURES

Choose the "ADVANCED BIOS FEATURES" in the main menu, the screen shown as below.

Phoenix - AwardBIOS CMOS Setup Utility
Advanced BIOS Features

► CPU Feature	[Press Enter]	Item Help
► Hard Disk Boot Priority	[Press Enter]	
CPU L1 & L2 Cache	[Enabled]	
Hyper-Threading Technology	[Enabled]	Menu Level ►
Quick Power On Self Test	[Enabled]	
First Boot Device	[Hard Disk]	
Second Boot Device	[Hard Disk]	
Third Boot Device	[LS120]	
Boot Other Device	[Enabled]	
Boot Up NumLock Status	[On]	
Gate A20 Option	[Fast]	
Typematic Rate Setting	[Disabled]	
x Typematic Rate (Chars/Sec)	6	
x Typematic Delay (Msec)	250	
Security Option	[Setup]	
x APIC Mode	Enabled	
MPS Version Control For OS	[1.4]	

↑↓→←: Move Enter: Select +/-/PU/PD:Value F10:Save ESC:Exit F1:General Help
F5: Previous Values F6: Fail-Safe Defaults F7:Optimized Defaults

BIOS Features Setup Screen

The "BIOS FEATURES SETUP" allow you to configure your system for basic operation. The user can select the system's boot-up sequence and security.

A brief introduction of each setting is given below.

CPU FEATURE:

The options for these items are found in its sub menu. By pressing the <ENTER> key, you are prompt to enter the sub menu of the detailed options as shown below:

Phoenix – Award CMOS Setup Utility
CPU Feature

Delay Prior to Thermal	[16 Min]	Item Help
Limit CPUID MaxVal	[Disabled]	
C1E Function	[Disabled]	
Execute Disable Bit	[Enabled]	Menu Level ►
↑↓→←:Move Enter: Select +/-/PU/PD:Value F10:Save ESC:Exit F1:General Help		
F5: Previous Values F6:Fail-Safe Defaults F7:Optimized Defaults		

Descriptions on each item above are as follows:

1. **DELAY PRIOR TO THERMAL:**
   The Delay Prior To Thermal BIOS feature controls the activation of the Thermal Monitor's automatic mode. It allows you to determine when the Pentium-M's Thermal Monitor should be activated in automatic mode after the system boots.

2. **LIMIT CPUID MAXVAL:**
   The CPUID instruction of some CPUs will return a value greater than 3.If you are using Windows operating system. Please disable this feature.

3. **C1E FUNCTION:**
   This is enabled to reduce power during idle operation.

4. **EXECUTE DISABLE BIT:**
   To select enable or disable the No-Execution Page Protection Technology.

HARD DISK BOOT PRIORITY:

The options for these items are found in its sub menu. By pressing the <ENTER> key, you are prompt to enter the sub menu of the detailed options as shown below:

Phoenix – Award CMOS Setup Utility
Hard Disk Boot Priority

1. SATA 1. : HDS728080PLA380 2. Bootable Add-in Cards	Item Help
	Menu Level ►
	Use<↑> or <↓> to select a device, then press <+> to move it up, or <-> to move it down the list. Press <ESC> to exit this menu.
↑↓→←:Move Enter: Select +/-/PU/PD:Value F10:Save ESC:Exit F1:General Help F5: Previous Values F6:Fail-Safe Defaults F7:Optimized Defaults	

Select Hard Disk Boot Device Priority

CPU L1 & L2 CACHE:

This item allows you to enable or disable CPU internal Cache.

HYPER-THREADING TECHNOLOGY:

This item allows you to enable or disable CPU Hyper-Threading Technology function.

QUICK POWER ON SELF TEST:

This item allows you to speed up Power On Self Test (POST) after power-up the computer. When enabled, the BIOS will shorten or skip some check items during POST.

FIRST/SECOND/ THIRD/ OTHER BOOT DEVICE:

The BIOS attempt to load the operating system from the devices in the sequence selected in these items.

BOOT UP NUMLOCK STATUS:

Select power on state for NumLock.

GATE 20A OPTION:

This entry allows you to select how the gate A20 is handled. When Normal was set, a pin in the keyboard controller controls Gate A20. And when Fast was set, the chipset controls Gate A20.

TYPEMATIC RATE SETTING:

Enable this item if you wish to be able to configure the characteristics of your keyboard. Typematic refers to the way in which characters are entered repeatedly if a key is held down. For example, if you press and hold down the "A" key, the letter "a" will repeatedly appear on your screen on your screen until you release the key. When enabled, the typematic rate and typematic delay can be selected.

TYPEMATIC RATE (CHARS/SEC):

This item sets the number of times a second to repeat a key stroke when you hold the key down.

TYPEMATIC DELAY (MSEC):

The item sets the delay time after the key is held down before it begins to repeat the keystroke.

SECURITY OPTION:

This category allows you to limit access to the system and Setup, or just to Setup.

System	The system will not boot and access to Setup will be denied if the correct password is not entered at the prompt.
Setup	The system will boot, but access to Setup will be denied if the correct password is not entered at the prompt.

To disable security, select PASSWORD SETTING at Main Menu and then you will be asked to enter password. Do not type anything and just press <Enter>, it will disable security. Once the security is disabled, the system will boot and you can enter Setup freely.

APIC MODE:

To Enable Advanced Programmable Interrupt Controller

MPS VERSION CONTROL FOR OS:

This option is only valid for multiprocessor motherboards as it specifies the version of the Multiprocessor Specification (MPS) that the motherboard will use. The MPS is a specification by which PC manufacturers design and build Intel architecture systems with two or more processors.

4-5. ADVANCED CHIPSET FEATURES

Choose the "ADVANCED CHIPSET FEATURES" from the main menu, the screen shown as below.

Phoenix - AwardBIOS CMOS Setup Utility
Advanced Chipset Features

DRAM Timing Selectable	[By SPD]	Item Help
X CAS Latency Time	Auto	
X DRAM RAS# to CAS# Delay	Auto	
X DRAM RAS# Precharge	Auto	Menu Level ►
X Precharge dealy (tRAS)	Auto	
X System Memory Frequency	By SPD	
System BIOS Cacheable	[Enabled]	
Video BIOS Cacheale	[Disabled]	
** VGA Setting **		
On-Chip Frame Buffer Size	[8MB]	
DVMT Mode	[DVMT]	
DVMT/ FIXED Memory Size	[128 MB]	
Boot Display	[CRT+LFP]	
Panel Type	[800x600]	
PCI SERR# NMI	[Disabled]	

↑↓→←: Move Enter: Select +/-/PU/PD:Value F10:Save ESC:Exit F1:General Help
F5: Previous Values F6: Fail-Safe Defaults F7:Optimized Defaults

Chipset Features Setup Screen

This parameter allows you to configure the system based on the specific features of the installed chipset. The chipset manages bus speed and access to system memory resources, such as DRAM and the external cache.

It also coordinates communications between conventional ISA bus and the PCI bus. It must be stated that these items should never need to be altered. The default settings have been chosen because they provide the best operating conditions for the system. The only time you might consider making any changes would be if you discovered that data was being lost while using your system.

DRAM TIMEING SELECTABLE:

The value in this field depends on performance parameters of the installed memory chips (DRAM). Do not change the value from the factory setting unless you install new memory that has a different performance rating than the original DRAMs.

CAS LATENCY TIME:

When synchronous DRAM is installed, the number of clock cycles of CAS latency depends on the DRAM timing.

DRAM RAS# TO CAS# DELAY:

This item let you insert a timing delay between the CAS and RAS strobe signals, used when DRAM is written to, read from, or refreshed. Fast gives faster performance; and Slow gives more stable performance. This field applies only when synchronous DRAM is installed in the system. The choices are 2 and 3.

DRAM RAS# PRECHARGE TIME:

If an insufficient number of cycles is allowed for the RAS to accumulate its charge before DRAM refresh, the refresh may be incomplete and the DRAM may fail to retain data. Fast gives faster performance; and Slow gives more stable performance. This field applies only when synchronous DRAM is installed in the system. The choices are 2 & 3.

PRECHARGE DEALY (tRAS):

Precharge Delay This setting controls the precharge delay, which determines the timing delay for DRAM precharge

SYSTEM MEMORY FREQUENCY:

Allow to choose different frequency of memory module.

SYSTEM BIOS CACHEABLE:

This item allows you to enable caching of the system BIOS ROM at F0000h-FFFFFh, resulting in better system performance. However, if any program writes to this memory area, a system error may result.

VIDEO BIOS CACHEABLE:

This item allows you to enable caching of the video BIOS, resulting in better system performance. However, if any program writes to this memory area, a system error may result.

ON-CHIP FRAME BUFFER SIZE:

The On-Chip Frame Buffer Size can be set as 8MB. This memory is shared with the system memory.

DVMT MODE:

Intel Dynamic Video Memory Technology Mode.

DVMT/FIXED MEMORY SIZE:

DVMT Memory Size Select.

BOOT DISPLAY:

To select the boot-up display type.

PANEL NUMBER:

This field allows user to decide the LVDS panel resolution

PCI SERR# NMI:

To Enable/Disable the PCI SERR# interrupt.

4-6. INTEGRATED PERIPHERALS

Choose "INTEGRATED PERIPHERALS" from the main setup menu, a display will be shown on screen as below:

Phoenix - AwardBIOS CMOS Setup Utility
Integrated Peripherals

▶ OnChip IDE Device	[Press Enter]	Item Help
▶ Onboard Device	[Press Enter]	
▶ SuperIO Device	[Press Enter]	Menu Level ▶
Onboard Lan Boot ROM	[Enabled]	
Onboard Serial Port 3	[3E8/IRQ10]	
Onboard Serial Port 4	[2E8/IRQ11]	
▶ USB Device Setting	[Press Enter]	

↑↓→←: Move Enter: Select +/-/PU/PD:Value F10:Save ESC:Exit F1:General Help
F5: Previous Values F6: Fail-Safe Defaults F7:Optimized Defaults

Integrated Peripherals Setup Screen

By moving the cursor to the desired selection and by pressing the <F1> key, the all options for the desired selection will be displayed for choice.

If bios setup menu item supports USB device boot, it will cause Win9x detects the same storages twice when the system is rebooted, and USB HDD will fail.
Note: this cause just happen under Win9x, the phenomenon is a limitation.

ONCHIP IDE DEVICE:

The options for these items are found in its sub menu. By pressing the <ENTER> key, you are prompt to enter the sub menu of the detailed options as shown below:

Phoenix – Award CMOS Setup Utility
OnChip IDE Device

IDE HDD Block Mode	[Enabled]	Item Help
IDE DMA transfer access	[Enabled]	
OnChip Primary PCI IDE	[Enabled]	
IDE Primary Master PIO	[Auto]	Menu Level ►
IDE Primary Slave PIO	[Auto]	
IDE Primary Master UDMA	[Auto]	If your IDE hard drive supports block mode select Enabled for automatic detection of the optional number of block read/writes per sector the drive can support.
IDE Primary Slave UDMA	[Auto]	
OnChip Secondary PCI IDE	[Enabled]	
IDE Secondary Master PIO	[Auto]	
IDE Secondary Slave PIO	[Auto]	
IDE Secondary Master UDMA	[Auto]	
IDE Secondary Slave UDMA	[Auto]	
*** On-Chip Serial ATA Setting ***		
SATA Mode	[IDE]	
On-Chip Serial ATA	[Disabled]	
X PATA IDE Mode	Secondary	
SATA Port	P0, P2 is Primary	
↑↓→←:Move Enter: Select +/-/PU/PD:Value F10:Save ESC:Exit F1:General Help F5: Previous Values F6:Fail-Safe Defaults F7:Optimized Defaults		

Descriptions on each item above are as follows:

1. **IDE HDD BLOCK MODE:**
   Block mode is also called block transfer, multiple commands, or multiple sector read/write. If your IDE hard drive supports block mode (most new drives do), select Enabled for automatic detection of the optimal number of block read/writes per sector the drive can support.

2. **IDE DMA TRANSTER ACCESS:**
   To Enable/Disable the IDE DMA transfer access.

3. **ONCHIP PRIMARY/SECONDARY PCI IDE:**
   The integrated peripheral controller contains an IDE interface with support for two IDE channels. Select Enabled to activate each channel separately.

4. **PRIMARY MASTER/SLAVE PIO:**
   SECONDARY MASTER/SLAVE PIO:
   The four IDE PIO fields allow you to set a PIO mode (0-4) for each of the four IDE devices that the onboard IDE interface supports. Modes 0 through 4 provide successively increased performance. In Auto mode, the system automatically determines the best mode for each device.

5. **PRIMARY MASTER/SLAVE UDMA:**
   SECONDARY MASTER/SLAVE UDMA:
   Ultra DMA/33 implementation is possible only if your IDE hard drive supports it and the operating environment includes a DMA driver (Windows 95 OSR2 or a third-party IDE bus master driver). If you hard drive and your system software both support Ultra DMA/33, select Auto to enable BIOS support.

6. **SATA MODE:**
   Set the Serial ATA configuration. When set in Advanced Host Controller Interface (AHCI) , the SATA controller is set to Native mode. Configuration options: [IDE] [AHCI]

7. **ON-CHIP SERIAL ATA:**
   [Disabled]: Disabled SATA Controller.
   [Enhanced Mode]: Enable both SATA and PATA. Max.of 6 IDE drives are supported.
   [SATA Only]: SATA is operating in legacy mode.

8. **PATA IDE MODE:**
   To select PATA IDE Mode sequence.

9. **SATA PORT:**
   According PATA IDE Mode to determine SATA sequence.

ONBOARD DEVICE:

The options for these items are found in its sub menu. By pressing the <ENTER> key, you are prompt to enter the sub menu of the detailed options as shown below:

Phoenix – Award CMOS Setup Utility
Onboard Device

Audio Function	[Enabled]	Item Help
		Menu Level ►
↑↓→←:Move Enter: Select +/-/PU/PD:Value F10:Save ESC:Exit F1:General Help F5: Previous Values F6:Fail-Safe Defaults F7:Optimized Defaults		

Descriptions on each item above are as follows:

1. **AUDIO FUNCTION:**
   This item allows you to enable or disable onboard Audio function.

SUPER IO DEVICE:

The options for these items are found in its sub menu. By pressing the <ENTER> key, you are prompt to enter the sub menu of the detailed options as shown below:

Phoenix – Award CMOS Setup Utility
SuperIO Device

Onboard Serial Port 1	[3F8/IRQ4]	Item Help
Onboard Serial Port 2	[2F8/IRQ3]	
		Menu Level ►
↑↓→←:Move Enter: Select +/-/PU/PD:Value F10:Save ESC:Exit F1:General Help F5: Previous Values F6:Fail-Safe Defaults F7:Optimized Defaults		

Descriptions on each item above are as follows:

1. **ONBOARD SERIAL PORT 1/2:**
   Select an address and corresponding interrupt for the first and second serial ports.

ONBOARD Lan Boot ROM:

This item allows you to enable or disable Boot from Lan function.

ONBOARD SERIAL PORT 3/4:

Select an address and corresponding interrupt for the third and forth serial ports

USB DEVICE SETTING:

The options for these items are found in its sub menu. By pressing the <ENTER> key, you are prompt to enter the sub menu of the detailed options as shown below:

Phoenix – Award CMOS Setup Utility
Onboard Device

USB 1.0 Controller	[Enabled]	Item Help
USB 2.0 Controller	[Enabled]	
USB Operation Mode	[High Speed]	
USB Keyboard Function	[Enabled]	Menu Level ►
USB Mouse Function	[Enabled]	
USB Storage Function	[Enabled]	
*** USB Mass Storage Device Boot	Setting ***	
USB Flash Disk 2.00	[Auto mode]	
↑↓→←:Move Enter: Select +/-/PU/PD:Value F10:Save ESC:Exit F1:General Help F5: Previous Values F6:Fail-Safe Defaults F7:Optimized Defaults		

Descriptions on each item above are as follows:

1. **USB 1.0 CONTROLLER:**
   This should be enabled if your system has a USB installed on the system board and you want to use it. Even when so equipped, if you add a higher performance controller, you will need to disable this feature.

2. **USB 2.0 CONTROLLER:**
   Enable the USB 2.0 controller.

3. **USB OPERATION MODE:**
   This item allows the user to decide USB device operation mode.

4. **USB KEYBOARD FUNCTION:**
   Select Enabled if your system contains a Universal Serial Bus (USB) controller and you have a USB keyboard.

5. USB MOUSE FUNCTION:
Select Enabled if your system contains a Universal Serial Bus (USB) controller and you have a USB Mouse.

6. USB STORAGE FUNCTION:
Enable the USB Storage Function

7. USB FLASH DISK 2.00:
Select USB Flash Disk Type.

4-7. POWER MANAGEMENT SETUP

Choose "POWER MANAGEMENT SETUP" option on the main menu, a display will be shown on screen as below :

Phoenix - AwardBIOS CMOS Setup Utility
Power Management Setup

ACPI Function	Enabled	Item Help
ACPI Suspend Type	S1(POS)	
MODEM Use IRQ	[3]	
Soft-Off by PWR-BTTN	[Instand-Off]	
PWRON After PWR-Fail	[On]	
Power On By Ring	[Enabled]	
Resume by Alarm	[Disabled]	
X Date (of Month) Alarm	0	
X Time (hh:mm:ss) Alarm	0 : 0: 0	
		Menu Level ►

↑↓→←: Move Enter: Select +/-/PU/PD:Value F10:Save ESC:Exit F1:General Help
F5: Previous Values F6: Fail-Safe Defaults F7:Optimized Defaults

Power Management Setup Screen

The "Power Management Setup" allows the user to configure the system to the most effectively save energy while operating in a manner consistent with your own style of computer use.

MODEM USE IRQ:

This item enable you to name the interrupt request (IRQ) line assigned to the modem (if any) on your system. Activity of the selected IRQ always awakens the system

SOFT-OFF BY PWR-BTTN:

Pressing the power button for more than 4 seconds forces the system to enter the Soft-Off state when the system has "hung". The choices are Delay 4 Sec and Instant-Off.

PWRON AFTER PWR-FAIL:

This item allows you to select if you want to power on the system after power failure. The choice: Off and On.

POWER ON BY RING:

This category enables or disables the powering up of the system when the modem receives a call while the computer is in Soft-Off state.

RESUME BY ALARM:

When enabled, you can set the date and time at which the RTC alarm awakens the system from Suspend mode.

4-8. PNP/PCI CONFIGURATION

Choose "PNP/PCI CONFIGURATION" from the main menu, a display will be shown on screen as below:

Phoenix - AwardBIOS CMOS Setup Utility
PnP/PCI Configurations

Reset Configuration Data	[Disabled]	Item Help
Resources Controlled By	[Auto (ESCD)]	Menu Level ►
X IRQ Resources	Press Enter	
↑↓→←: Move Enter: Select +/-/PU/PD:Value F10:Save ESC:Exit F1:General Help F5: Previous Values F6: Fail-Safe Defaults F7:Optimized Defaults		

PNP/PCI Configuration Setup Screen

The PNP/PCI Configuration Setup describes how to configure PCI bus system. PCI, also known as Personal Computer Interconnect, is a system, which allows I/O devices to operate at speeds nearing the speed of the CPU itself uses when communicating with its own special components.

This section covers technical items, which is strongly recommended for experienced users only.

RESET CONFIGURATION DATA:

Normally, you leave this field Disabled. Select Enabled to reset Extended System Configuration Data (ESCD) when you exit Setup if you have installed a new add-on and the system configuration has caused such a serious conflict that the operating system cannot boot.

RESOURCE CONTROLLED BY:

The Award Plug and Play Bios can automatically configure all of the booth and Plug and Play-compatible devices. However, this capability means absolutely nothing unless you are using a Plug and Play operating system such as Windows 95. By choosing "manual", you are allowed to configure the *IRQ Resources and DMA Resources*.

IRQ RESOURCES:

The options for these items are found in its sub menu. By pressing the <ENTER> key, you are prompt to enter the sub menu of the detailed options as shown below:

Phoenix – Award CMOS Setup Utility
IRQ Resources

IRQ-3 assigned to	[PCI Device]	Item Help
IRQ-4 assigned to	[PCI Device]	
IRQ-5 assigned to	[PCI Device]	
IRQ-7 assigned to	[PCI Device]	Menu Level ►
IRQ-9 assigned to	[PCI Device]	
IRQ-10 assigned to	[PCI Device]	Legacy ISA for devices compliant with the original PC AT bus specification, PCI/ISA PnP for devices compliant with the Plug and Play standard whether designed for PCI or ISA bus architecture
IRQ-11 assigned to	[PCI Device]	
IRQ-12 assigned to	[PCI Device]	
IRQ-14 assigned to	[PCI Device]	
IRQ-15 assigned to	[PCI Device]	
↑↓→←:Move Enter: Select +/-/PU/PD:Value F10:Save ESC:Exit F1:General Help F5: Previous Values F6:Fail-Safe Defaults F7:Optimized Defaults		

Descriptions on each item above are as follows:

1. **IRQ-n Assigned to:**
   You may assign each system interrupt a type, depending on the type of device using the interrupt.

4-9. PC HEALTH STATUS

Choose "PC HEALTH STATUS" from the main menu, a display will be shown on screen as below:

Phoenix - AwardBIOS CMOS Setup Utility
PC Health Status

Shutdown Temperature	[Disabled]	Item Help
Current CPU Temperature	28℃	Menu Level ►
Vcore	0.88V	
5V	4.89V	
12V	12.88V	

↑↓→←: Move Enter: Select +/-/PU/PD:Value F10:Save ESC:Exit F1:General Help
F5: Previous Values F6: Fail-Safe Defaults F7:Optimized Defaults

PC Health Status Setup Screen

The PC Health Status Setup allows you to select whether to choose between monitoring or to ignore the hardware monitoring function of your system.

SHUTDOWN TEMPERATURE:

This item allows you to set up the CPU Warning Temperature.

CURRENT CPU TEMPERATURE:

This item shows you the current CPU temperature.

VCORE:

This item shows you the current system voltage.

5V /12V:

Show you the voltage of 5V/12V.

4-10. FREQUENCY/VOLTAGE CONTROL

Choose "FREQUENCY CONTROL" from the main menu, a display will be shown on screen as below:

Phoenix – AwardBIOS CMOS Setup Utility
Frequency Control

Spread Spectrum	[Enabled]	Item Help
		Menu Level ►
↑↓→←:Move Enter: Select +/-/PU/PD:Value F10:Save ESC:Exit F1:General Help F5: Previous Values F6:Fail-Safe Defaults F7:Optimized Defaults		

Frequency / Voltage Control Setup Screen

SPREAD SPECTRUM:

This item allows you to enable or disable the spread spectrum modulate

4-11. LOAD FAIL-SAFE DEFAULTS

By pressing the <ENTER> key on this item, you get a confirmation dialog box with a message similar to the following:

```
Load Fail-Safe Defaults ( Y/N ) ? N
```

To use the BIOS default values, change the prompt to "Y" and press the <Enter > key. CMOS is loaded automatically when you power up the system.

4-12. LOAD OPTIMIZED DEFAULTS

When you press <Enter> on this category, you get a confirmation dialog box with a message similar to the following:

```
Load Optimized Defaults ( Y/N ) ? N
```

Pressing "Y" loads the default values that are factory setting for optimal performance system operations.

4-13. PASSWORD SETTING

User is allowed to set either supervisor or user password, or both of them. The difference is that the supervisor password can enter and change the options of the setup menus while the user password can enter only but do not have the authority to change the options of the setup menus.

TO SET A PASSWORD

When you select this function, the following message will appear at the center of the screen to assist you in creating a password.

Enter Password:

Type the password up to eight characters in length, and press < Enter >. The password typed now will clear any previously entered password from CMOS memory. You will be asked to confirm the password. Type the password again and press the < Enter > key. You may also press < Esc > to abort the selection and not enter a password.

User should bear in mind that when a password is set, you will be asked to enter the password everything you enter CMOS setup Menu.

TO DISABLE THE PASSWORD

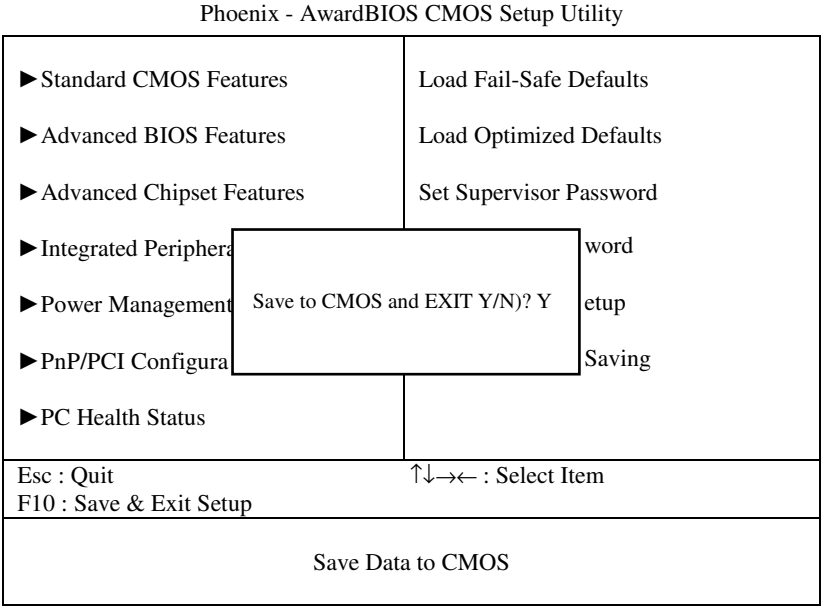
To disable the password, select this function (do not enter any key when you are prompt to enter a password), and press the <Enter> key and a message will appear at the center of the screen:

PASSWORD DISABLED!!! Press any key to continue...

Press the < Enter > key again and the password will be disabled. Once the password is disabled, you can enter Setup freely.

4-14. SAVE & EXIT SETUP

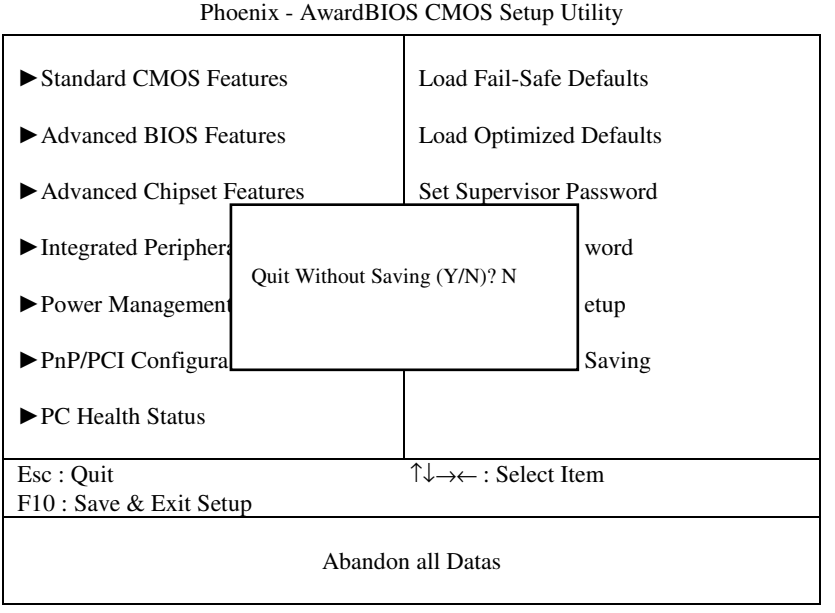
After you have completed adjusting all the settings as required, you must remember to save these setting into the CMOS RAM. To save the settings, select "SAVE & EXIT SETUP" and press <Enter>, a display will be shown as follows:



When you confirm that you wish to save the settings, your system will be automatically restarted and the changes you have made will be implemented. You may always call up the setup program at any time to adjust any of the individual items by pressing the <Del> key during boot up.

4-15. EXIT WITHOUT SAVING

If you wish to cancel any changes you have made, you may select the "EXIT WITHOUT SAVING" and the original setting stored in the CMOS will be retained. The screen will be shown as below:



SYSTEM ASSEMBLY

APPENDIX

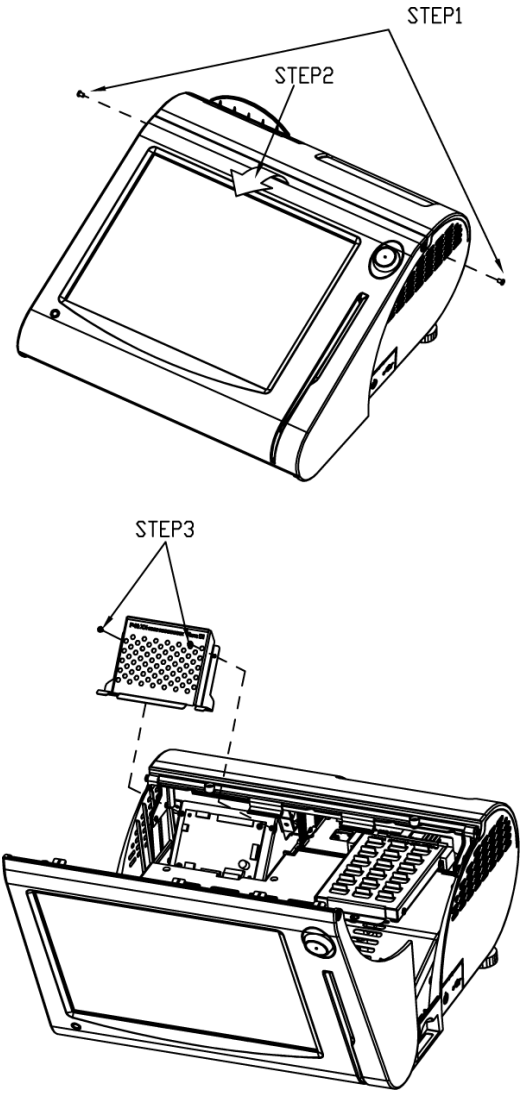
A

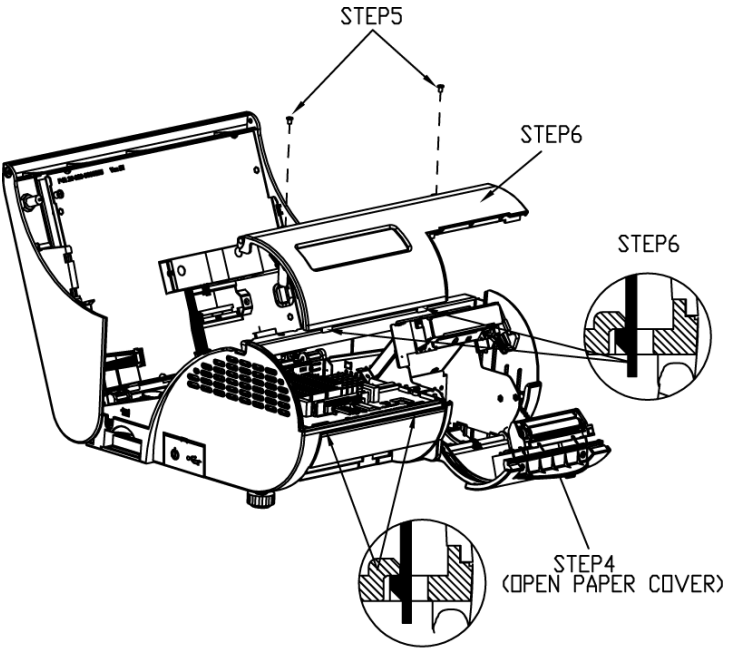
This appendix contains exploded diagrams of the PS3100 system.

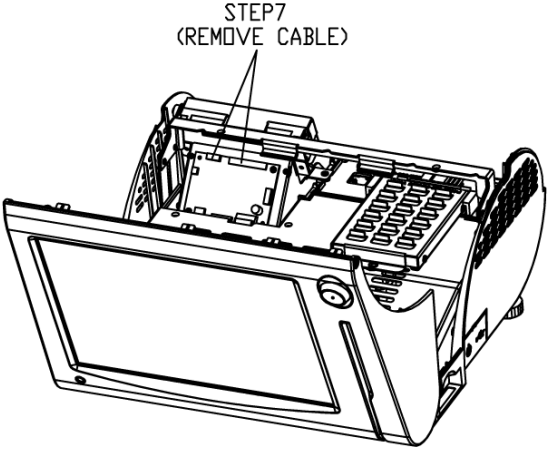
Sections included:

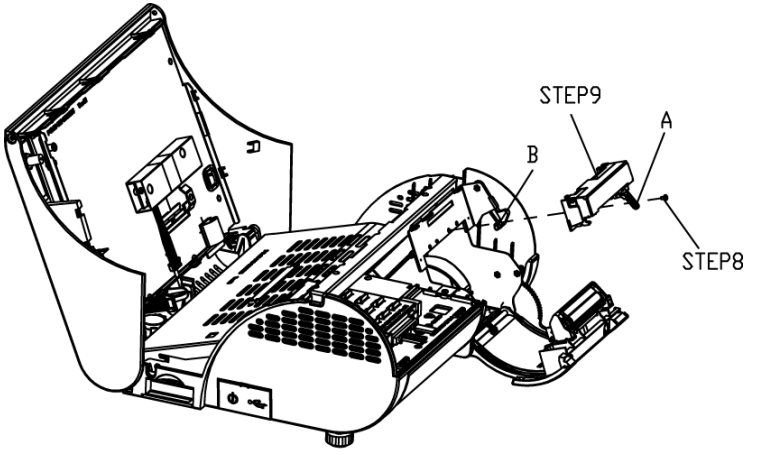
- Exploded Diagram for 2 Inch Thermal Printer Remove/ Install
- Exploded Diagram for 3 Inch Thermal Printer Remove/ Install
- Exploded Diagram for 3 Inch Thermal Printer Platen Block Remove/ Install
- Exploded Diagram for Thermal Printer Control PCB Remove/ Install
- Exploded Diagram for PS3100 CF Card Remove/ Install
- Exploded Diagram for PS3100 Mini PCIE Card Remove/ Install
- Exploded Diagram for PS3100 MSR Installation
- Exploded Diagram for PS3100 MSR Remove
- Exploded Diagram for PS3100 RAM Remove/ Install
- Exploded Diagram for PS3100 HDD Remove/ Install

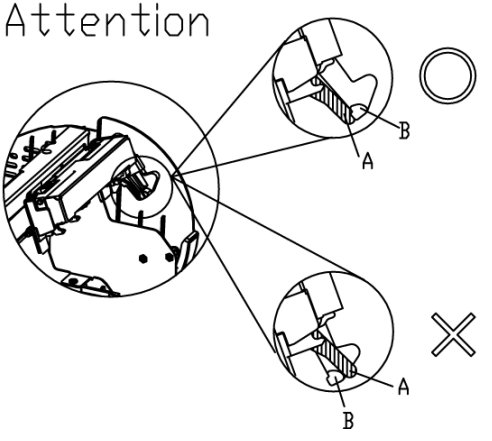
EXPLODED DIAGRAM FOR 2 INCH THERMAL PRINTER REMOVE/ INSTALL



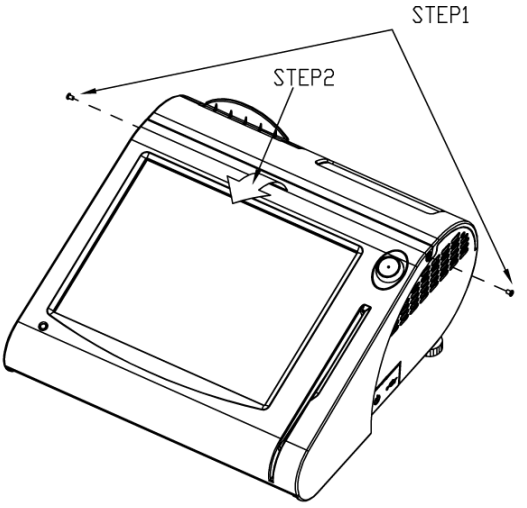

STEP5
STEP6
STEP6
STEP4
(OPEN PAPER COVER)

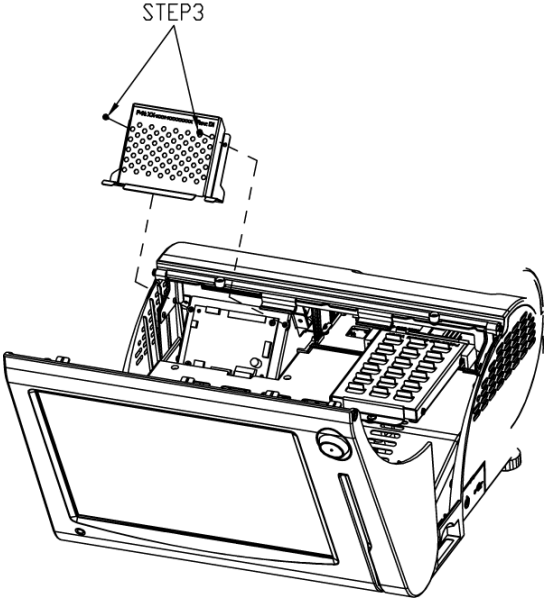

STEP7
(REMOVE CABLE)

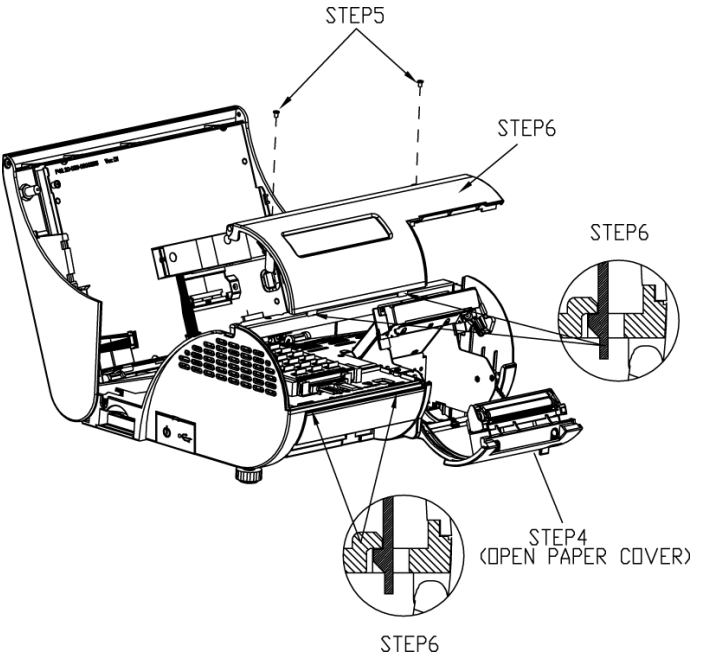

STEP9
A
B
STEP8

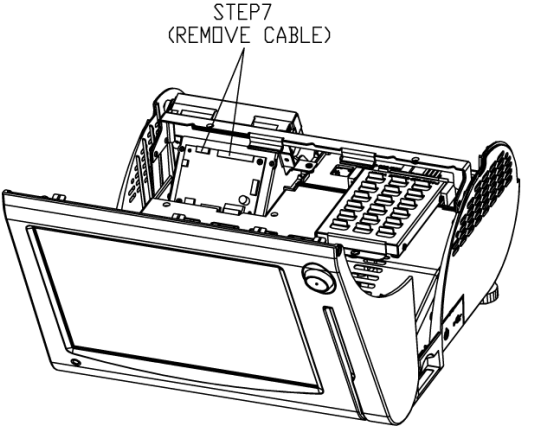

Attention
B
A
A
B

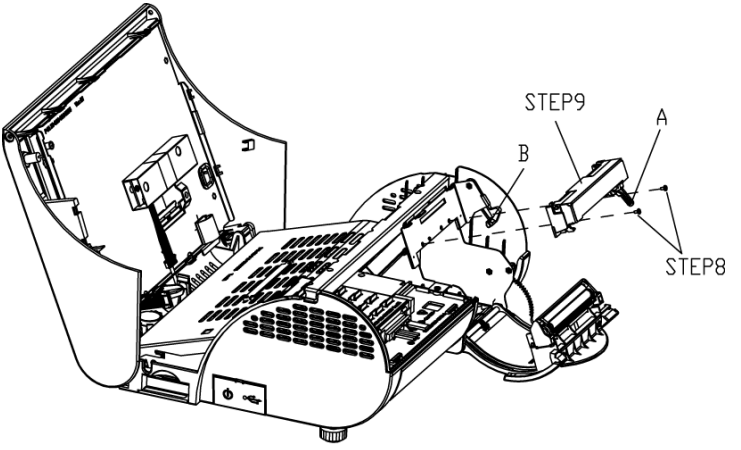
EXPLODED DIAGRAM FOR 3 INCH THERMAL PRINTER REMOVE/ INSTALL

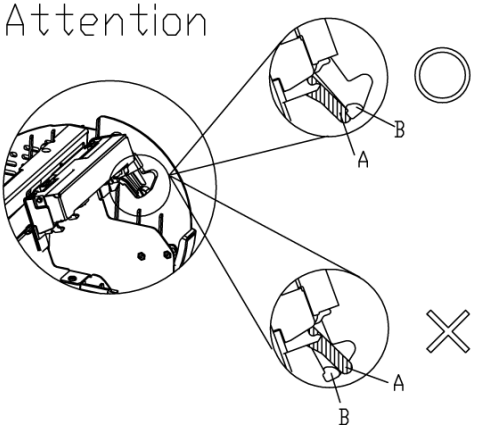




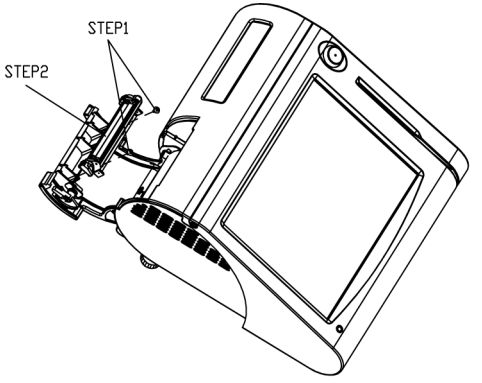

STEP5
STEP6
STEP6
STEP4
(OPEN PAPER COVER)
STEP6


STEP7
(REMOVE CABLE)

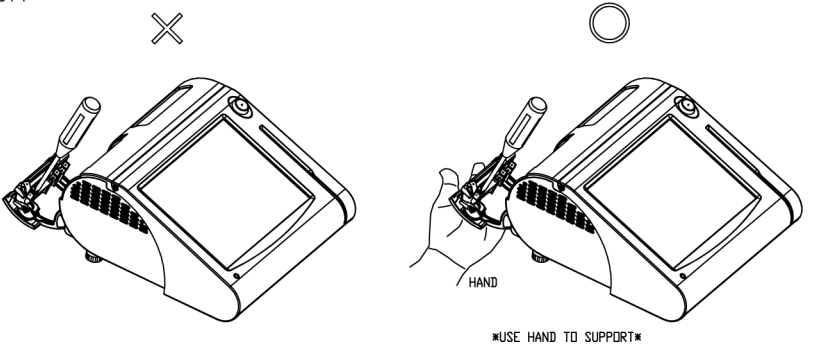

STEP9
A
B
STEP8


Attention
B
A
A
B

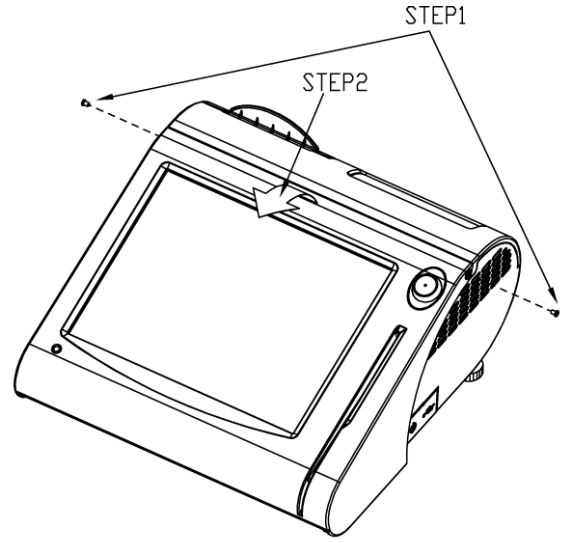
EXPLODED DIAGRAM FOR 3 INCH THERMAL PRINTER PLATEN BLOCK REMOVE/ INSTALL

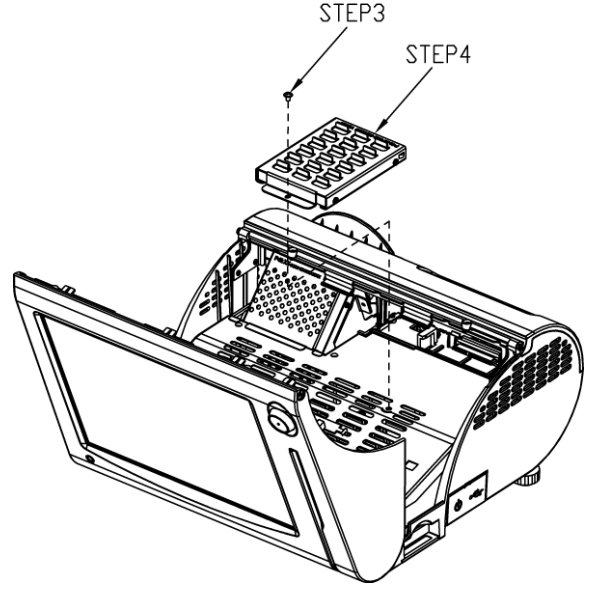


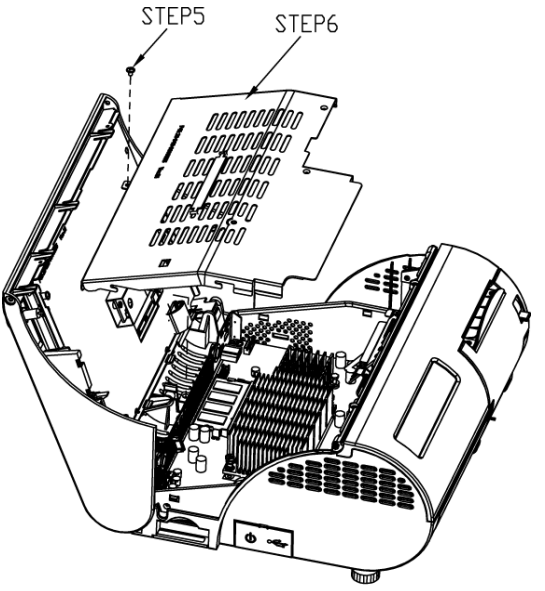
Attention

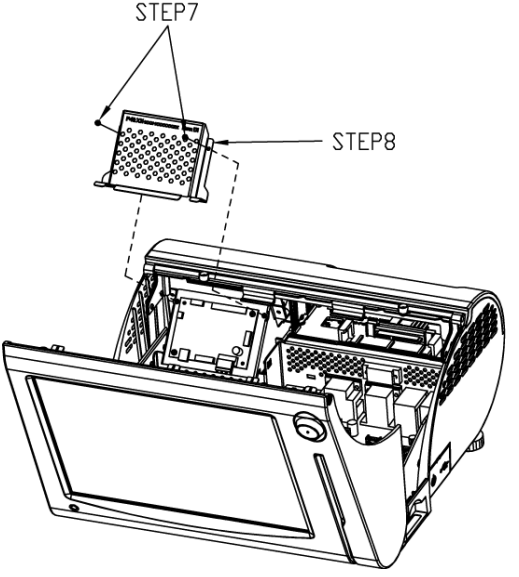


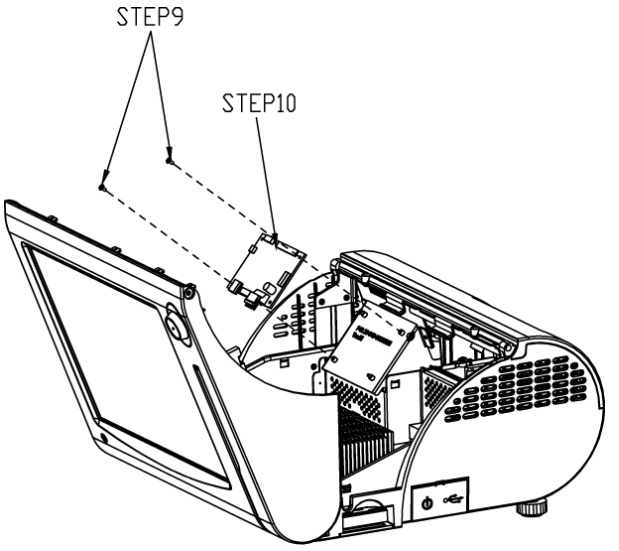
EXPLODED DIAGRAM FOR THERMAL PRINTER CONTROL PCB REMOVE/ INSTALL



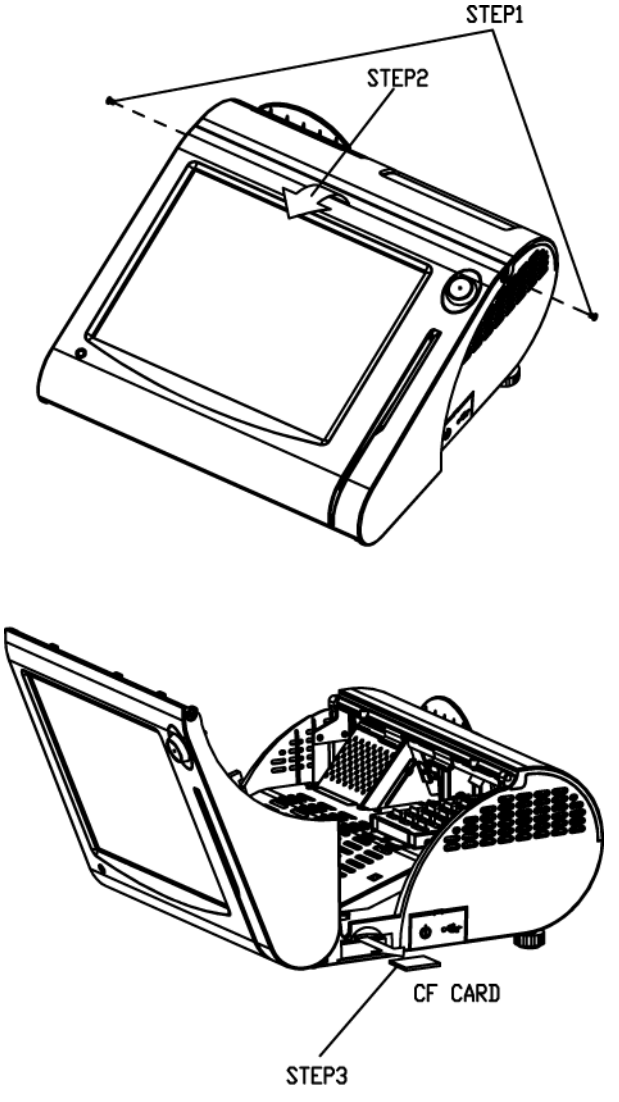



STEP5
STEP6

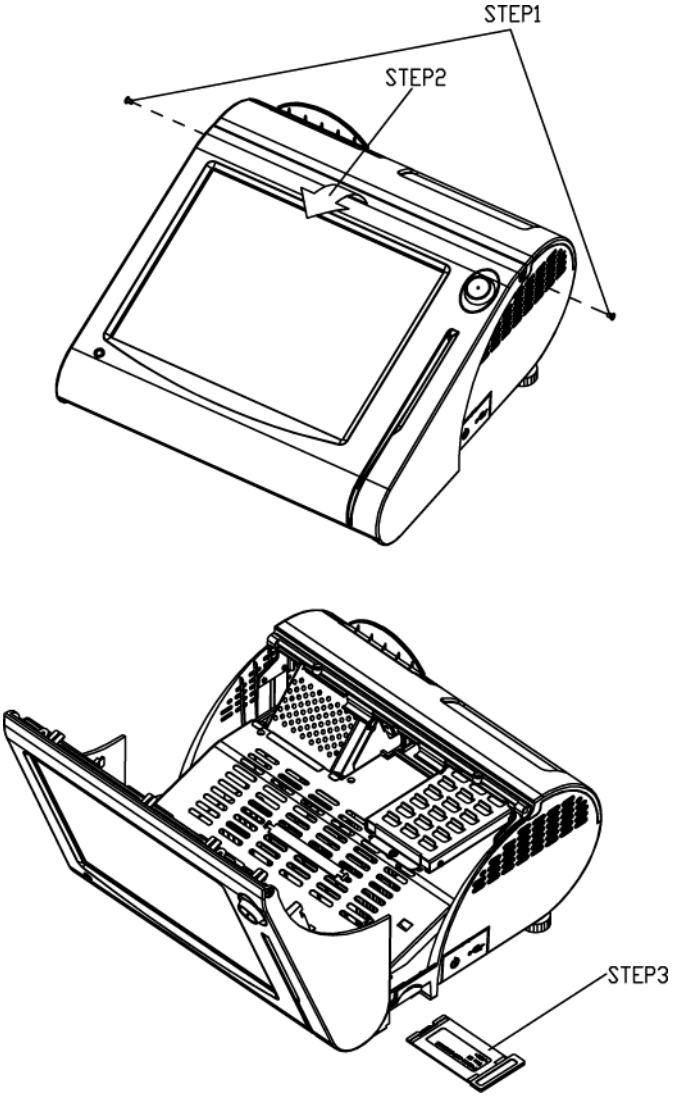

STEP7
STEP8

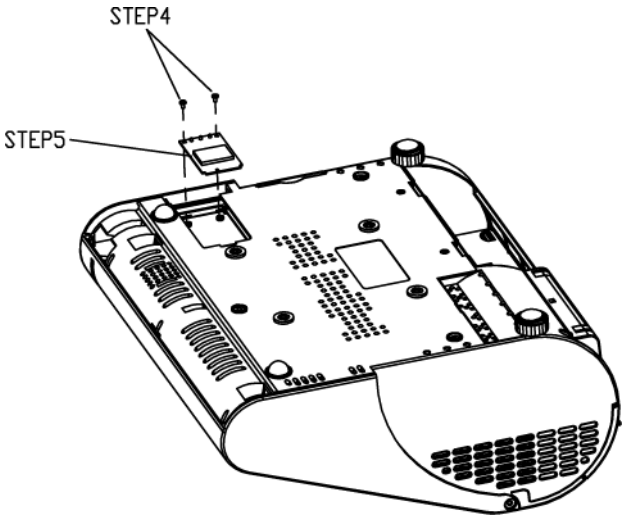

STEP9
STEP10

EXPLODED DIAGRAM FOR PS3100 CF CARD REMOVE/ INSTALL

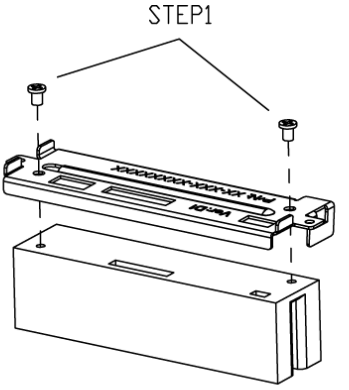


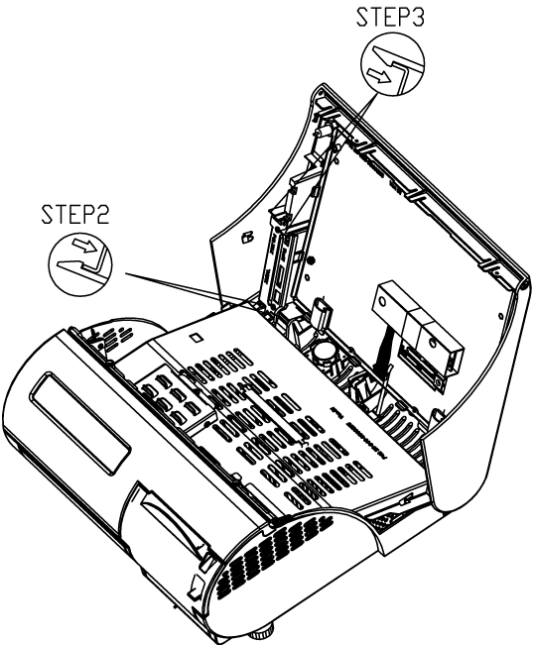
EXPLODED DIAGRAM FOR PS3100 MINI-PCIE CARD REMOVE/ INSTALL

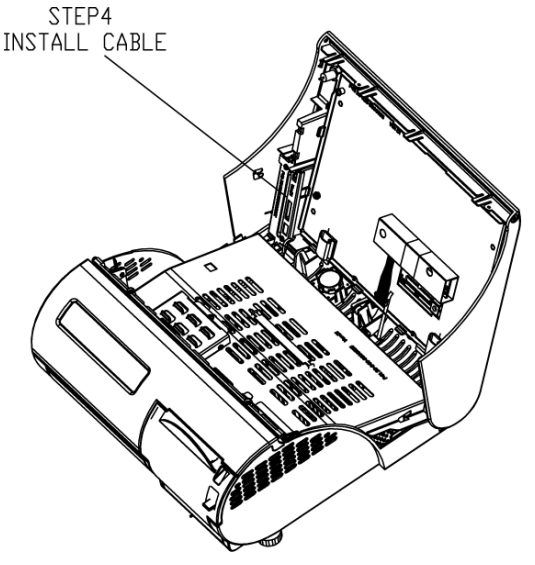


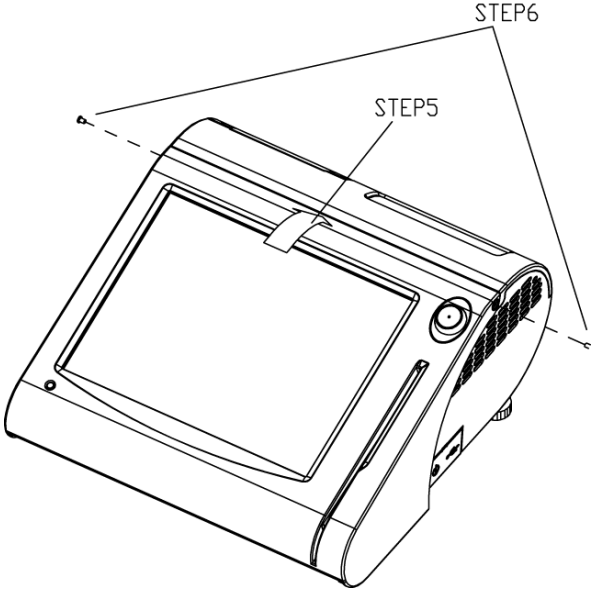

STEP4
STEP5

EXPLODED DIAGRAM FOR PS3100 MSR INSTALLATION

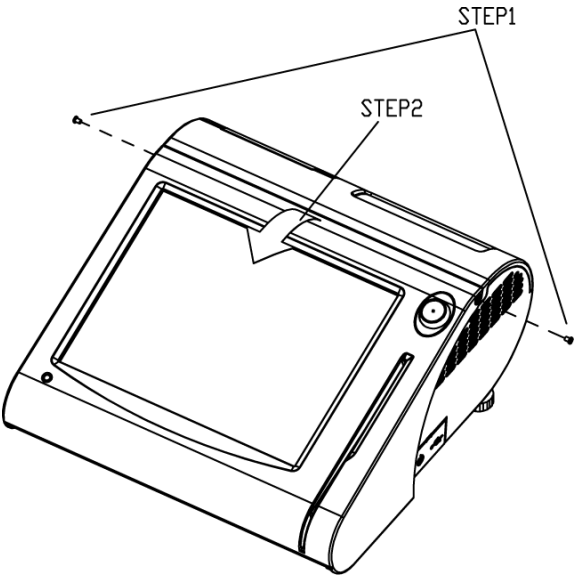


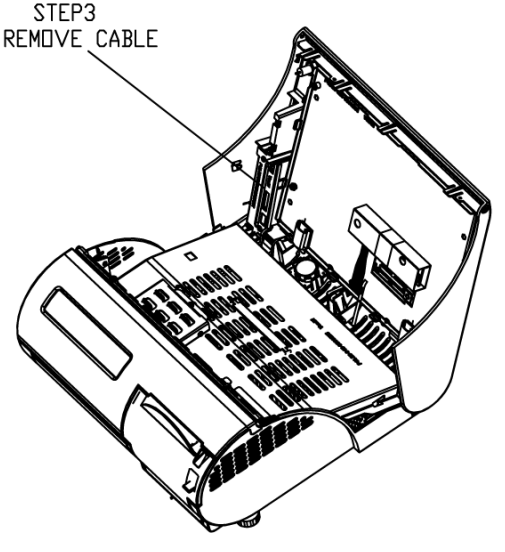


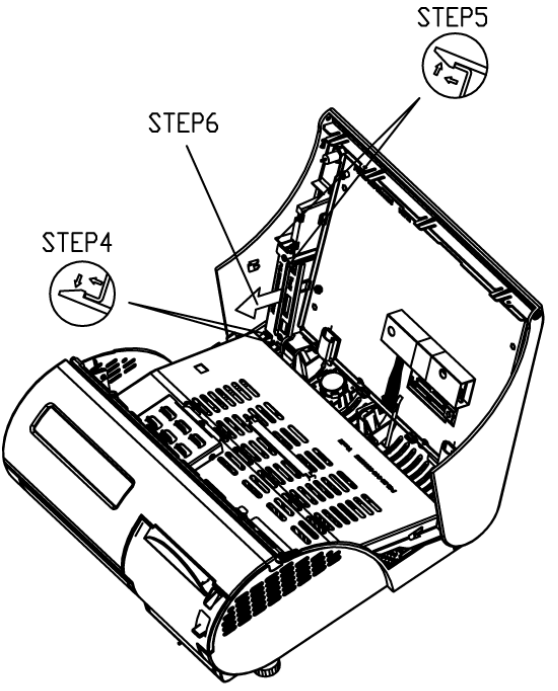

STEP4
INSTALL CABLE

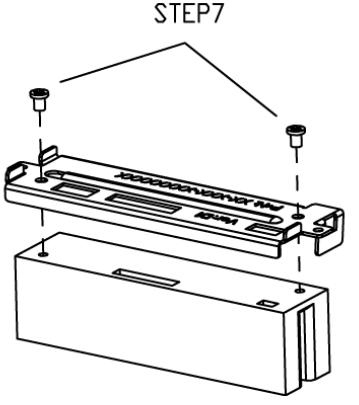

STEP6
STEP5

EXPLODED DIAGRAM FOR PS3100 MSR REMOVE

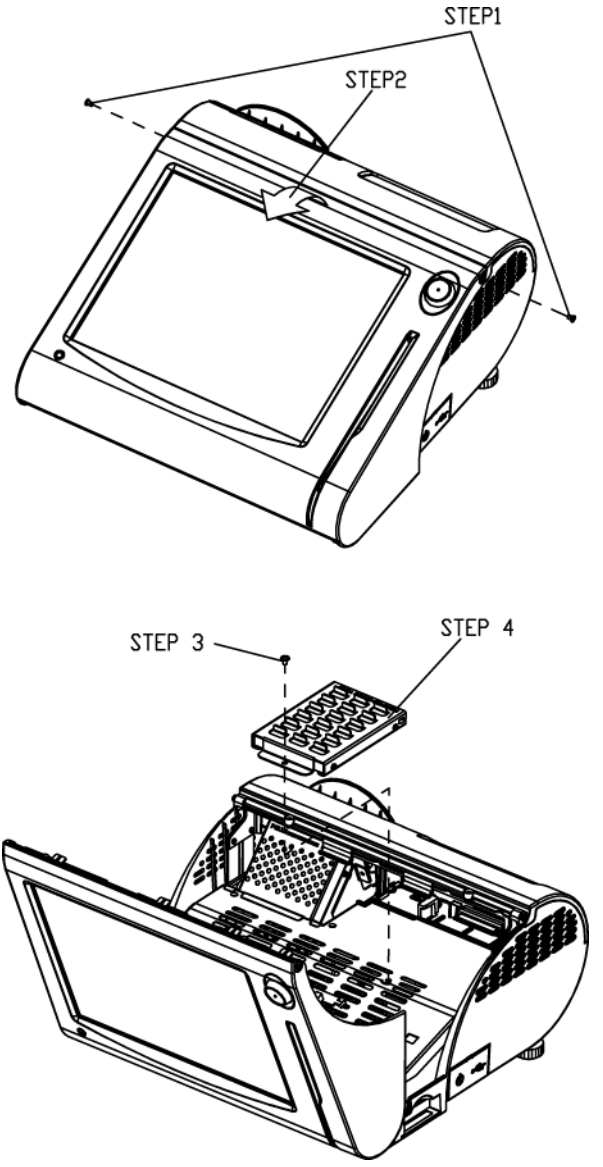


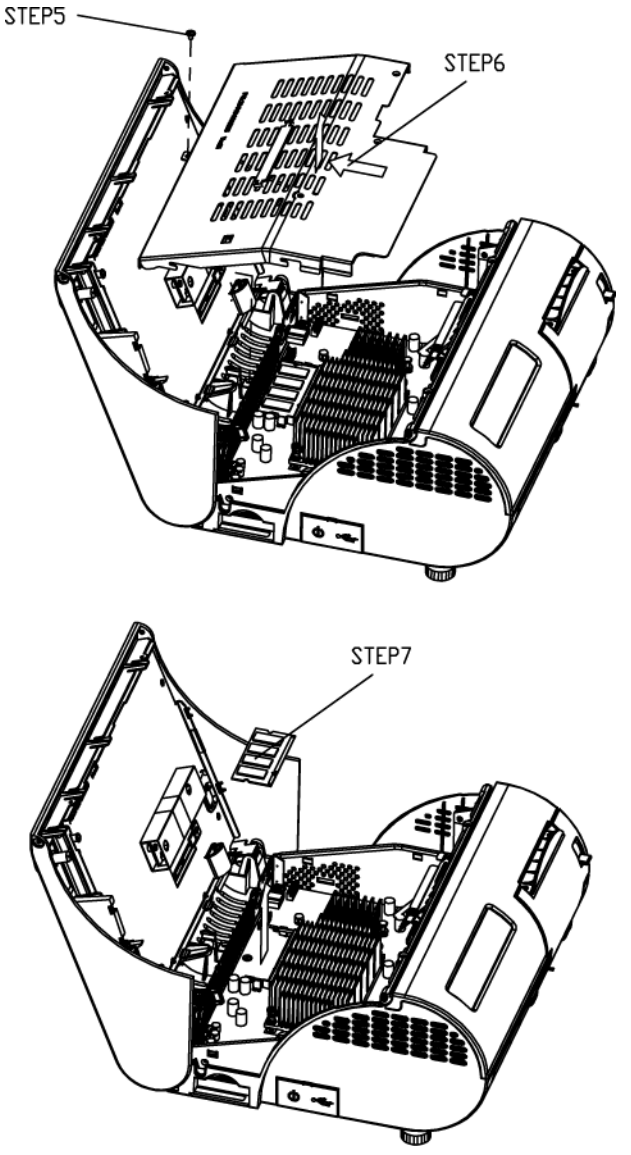



STEP5
STEP6
STEP4

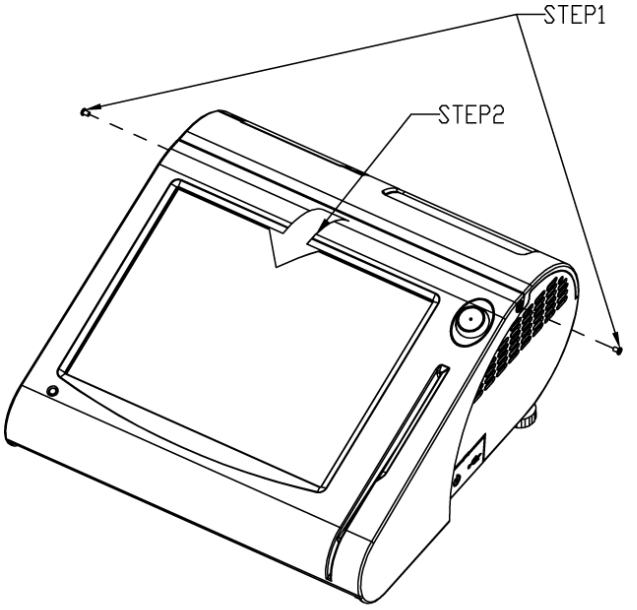

STEP7

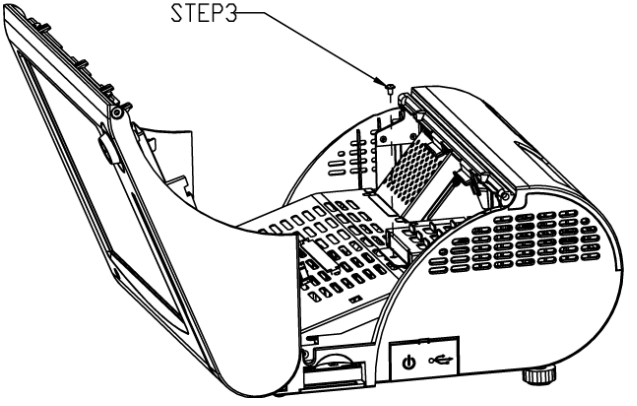
EXPLODED DIAGRAM FOR PS3100 RAM REMOVE/ INSTALL

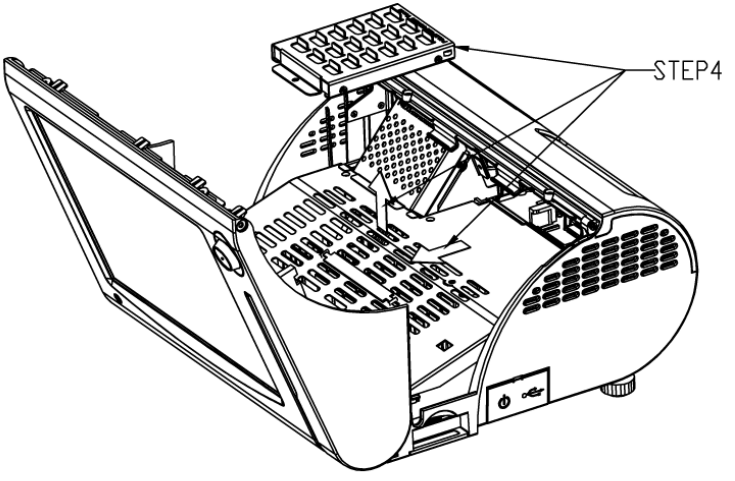


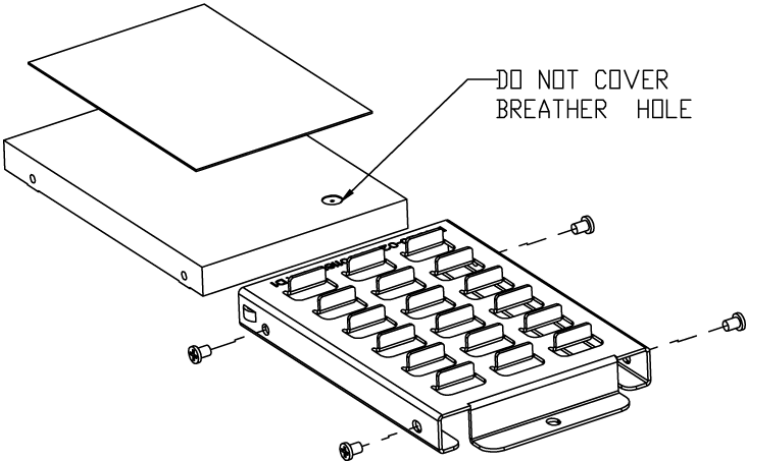

STEP5
STEP6
STEP7

EXPLODED DIAGRAM FOR PS3100 HDD REMOVE/ INSTALL






STEP4


DO NOT COVER
BREATHER HOLE

TECHNICAL SUMMARY

APPENDIX

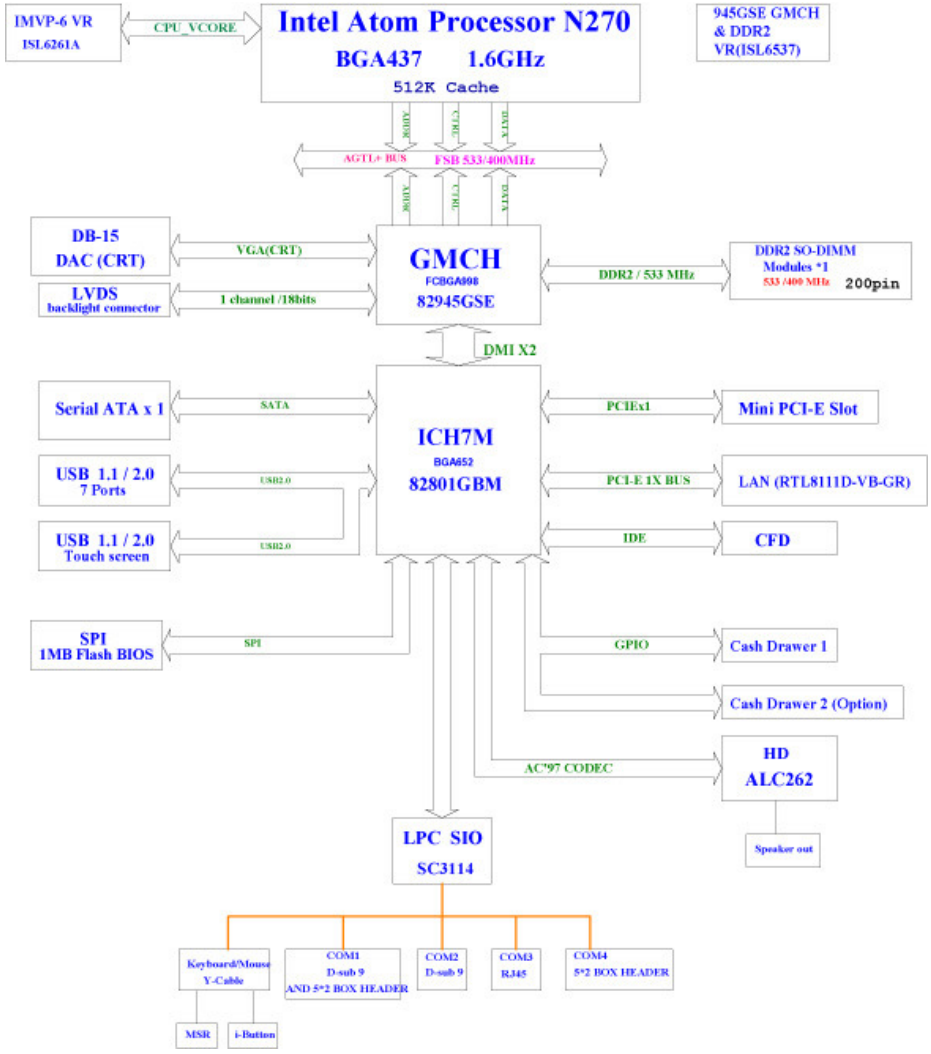
B

This appendix will give you a brief introduction of the allocation maps for the system resources.

Sections included:

- Block Diagram
- Interrupt Map
- DMA Channels Map
- Memory Map
- I / O Map
- Flash BIOS Update

BLOCK DIAGRAM



INTERRUPT MAP

IRQ	ASSIGNMENT
0	System Timer
1	Standard 101/102-Key or Microsoft Natural PS/2 Keyboard
3	Communications Port (COM2)
4	Communications Port (COM1)
6	Standard floppy disk controller
8	System CMOS/real time clock
9	Microsoft ACPI-Compliant System
10	Communications Port (COM3)
11	Communications Port (COM4)
12	PS/2 Compatible Mouse
13	Numeric data processor
14	Primary IDE Channel
15	ntel(R) 82801G (ICH7 Family) SMBus Controller - 27DA
16	Mobile Intel(R) 945 Express Chipset Family
16	Microsoft UAA Bus Driver for High Definition Audio
16	Intel(R) 82801G (ICH7 Family) PCI Express Root Port - 27D0
16	Intel(R) 82801G (ICH7 Family) USB Universal Host Controller - 27CB
17	Intel(R) 82801G (ICH7 Family) PCI Express Root Port - 27D2
17	Realtek PCIe GBE Family Controller
18	Intel(R) 82801G (ICH7 Family) USB Universal Host Controller - 27CA
19	Intel(R) 82801G (ICH7 Family) USB Universal Host Controller - 27C9
19	Intel(R) 82801GBM/GHM (ICH7-M Family) Serial ATA Storage Controller - 27C4
23	Intel(R) 82801G (ICH7 Family) USB Universal Host Controller - 27C8
23	Intel(R) 82801G (ICH7 Family) USB2 Enhanced Host Controller - 27CC

DMA CHANNELS MAP

DMA Channel	Assignment
2	Standard floppy disk controller
4	Direct memory access controller

MEMORY MAP

MEMORY MAP	ASSIGNMENT
0xFDE80000-0xFDEFFFFF	Mobile Intel(R) 945 Express Chipset Family
0xD0000000-0xDFFFFFFF	Mobile Intel(R) 945 Express Chipset Family
0xFDF80000-0xFDFBFFFF	Mobile Intel(R) 945 Express Chipset Family
0xFEB80000-0xFEBFFFFF	Mobile Intel(R) 945 Express Chipset Family
0xFDFF8000-0xFDFFBFFF	Microsoft UAA Bus Driver for High Definition Audio
0xFDB00000-0xFDBFFFFF	Intel(R) 82801G (ICH7 Family) PCI Express Root Port - 27D0
0xFD800000-0xFD8FFFFF	Intel(R) 82801G (ICH7 Family) PCI Express Root Port - 27D0
0xFDD00000-0xFDDFFFFF	Intel(R) 82801G (ICH7 Family) PCI Express Root Port - 27D2
0xFDC00000-0xFDCFFFFF	Intel(R) 82801G (ICH7 Family) PCI Express Root Port - 27D2
0xFDCFF000-0xFDCFFFFF	Realtek PCIe GBE Family Controller
0xFDCF8000-0xFDCFBFFF	Realtek PCIe GBE Family Controller
0xFDFFF000-0xFDFFF3FF	Intel(R) 82801G (ICH7 Family) USB2 Enhanced Host Controller - 27CC
0xFFB80000-0xFFBFFFFF	Intel(R) 82802 Firmware Hub Device
0xFDFFE000-0xFDFFE3FF	Intel(R) 82801GBM/GHM (ICH7-M Family) Serial ATA Storage Controller - 27C4
0xE0000000-0xEFFFFFFF	Motherboard resources
0x0000-0x9FFF	System board
0xFEC00000-0xFEC00FFF	System board
0xFED13000-0xFED1DFFF	System board
0xFED20000-0xFED8FFFF	System board
0xFEE00000-0xFEE00FFF	System board
0xFFB00000-0xFFB7FFFF	System board
0xFFF00000-0xFFFFFFFF	System board
0xA0000-0xBFFFF	PCI bus
0xA0000-0xBFFFF	Mobile Intel(R) 945 Express Chipset Family
0xC0000-0xDFFFF	PCI bus
0xE0000-0xEFFFF	System board
0xF0000-0xFFFFF	System board
0x100000-0x3F6DFFFF	System board
0x3F6E0000-0x3F6FFFFF	System board
0x3F700000-0xFEBFFFFF	PCI bus

I/O MAP

I/O MAP	ASSIGNMENT
0x00000000-0x00000CF7	PCI bus
0x00000000-0x00000CF7	Direct memory access controller
0x00000010-0x0000001F	Motherboard resources
0x00000020-0x00000021	Programmable interrupt controller
0x00000022-0x0000003F	Motherboard resources
0x00000040-0x00000043	System timer
0x00000044-0x0000005F	Motherboard resources
0x00000060-0x00000060	Standard 101/102-Key or Microsoft Natural PS/2 Keyboard
0x00000061-0x00000061	System speaker
0x00000062-0x00000063	Motherboard resources
0x00000064-0x00000064	Standard 101/102-Key or Microsoft Natural PS/2 Keyboard
0x00000065-0x0000006F	Motherboard resources
0x00000070-0x00000073	System CMOS/real time clock
0x00000074-0x0000007F	Motherboard resources
0x00000080-0x00000090	Direct memory access controller
0x00000091-0x00000093	Motherboard resources
0x00000094-0x0000009F	Direct memory access controller
0x000000A0-0x000000A1	Programmable interrupt controller
0x000000A2-0x000000BF	Motherboard resources
0x000000C0-0x000000DF	Direct memory access controller
0x000000E0-0x000000EF	Motherboard resources
0x000000F0-0x000000FF	Numeric data processor
0x000001F0-0x000001F7	Primary IDE Channel
0x00000274-0x00000277	ISAPNP Read Data Port
0x00000279-0x00000279	ISAPNP Read Data Port
0x000002E8-0x000002EF	Communications Port (COM4)
0x000002F8-0x000002FF	Communications Port (COM2)
0x000003B0-0x000003BB	Mobile Intel(R) 945 Express Chipset Family
0x000003C0-0x000003DF	Mobile Intel(R) 945 Express Chipset Family
0x000003E8-0x000003EF	Communications Port (COM3)
0x000003F0-0x000003F5	Standard floppy disk controller
0x000003F6-0x000003F6	Primary IDE Channel
0x000003F7-0x000003F7	Standard floppy disk controller
0x000003F8-0x000003FF	Communications Port (COM1)

I/O MAP	ASSIGNMENT
0x000004D0-0x000004D1	Motherboard resources
0x00000500-0x0000051F	Intel(R) 82801G (ICH7 Family) SMBus Controller - 27DA
0x00000800-0x0000087F	Motherboard resources
0x00000880-0x0000088F	Motherboard resources
0x00000A79-0x00000A79	ISAPNP Read Data Port
0x00000D00-0x0000FFFF	PCI bus
0x00004000-0x000040BF	Motherboard resources
0x0000C000-0x0000CFFF	Intel(R) 82801G (ICH7 Family) PCI Express Root Port - 27D0
0x0000E000-0x0000EFFF	Intel(R) 82801G (ICH7 Family) PCI Express Root Port - 27D2
0x0000EE00-0x0000EEFF	Realtek PCIe GBE Family Controller
0x0000F500-0x0000F50F	Intel(R) 82801GBM/GHM (ICH7-M Family) Serial ATA Storage Controller - 27C4
0x0000F600-0x0000F603	Intel(R) 82801GBM/GHM (ICH7-M Family) Serial ATA Storage Controller - 27C4
0x0000F700-0x0000F707	Intel(R) 82801GBM/GHM (ICH7-M Family) Serial ATA Storage Controller - 27C4
0x0000F800-0x0000F803	Intel(R) 82801GBM/GHM (ICH7-M Family) Serial ATA Storage Controller - 27C4
0x0000F900-0x0000F907	Intel(R) 82801GBM/GHM (ICH7-M Family) Serial ATA Storage Controller - 27C4
0x0000FA00-0x0000FA0F	Intel(R) 82801G (ICH7 Family) Ultra ATA Storage Controllers - 27DF
0x0000FB00-0x0000FB1F	Intel(R) 82801G (ICH7 Family) USB Universal Host Controller - 27CB
0x0000FC00-0x0000FC1F	Intel(R) 82801G (ICH7 Family) USB Universal Host Controller - 27CA
0x0000FD00-0x0000FD1F	Intel(R) 82801G (ICH7 Family) USB Universal Host Controller - 27C9
0x0000FE00-0x0000FE1F	Intel(R) 82801G (ICH7 Family) USB Universal Host Controller - 27C8
0x0000FF00-0x0000FF07	Mobile Intel(R) 945 Express Chipset Family

FLASH BIOS UPDATE

I. Before System BIOS Update
Users of PS3100 Series can use the program "Awdflash.exe" contained in the Utility Disk for system BIOS update.

II. BIOS update procedure
As a user of PS3100 Series, you have to update the VGA BIOS for the specific LCD flat panel you are going to use. For this purpose, you need two files. One is the "Awdflash.exe" file and the other one is the VGA BIOS for ATI Rage Mobility M6 file for LCD panel display. Both files must be provided by the vendor or manufacturer. When you get these two files ready, follow the following steps for updating your VGA BIOS:

1. Install "Awdflash.exe" from Utility Disk to Drive C.
2. Insert the VGA BIOS file you have obtained from the vendor.
   Type the path of Awdflash.exe and execute the VGA BIOS update with file H15bxxxx.bin
3. C:\UTIL\AWDFLASH>AWDFLASH 31000LTX.bin
4. The screen will display as the table below:

FLASH MEMORY WRITER v8.XX (C) Award Software 2001 All Rights Reserved
Flash Type – SST 49LF008A /3.3V File Name to Program: 31000LTX.bin Checksum: XXXXX
Error Message: Do You Want To Save BIOS (Y/N)

If you want to save the original BIOS, enter "Y" and press < Enter >. If you choose "N", the following table will appear on screen.

FLASH MEMORY WRITER v8.XX (C) Award Software 2001 All Rights Reserved
Flash Type – SST 49LF008A /3.3V File Name to Program: 31000LTX.bin Checksum: XXXXX
Error Message : Are You Sure To Program (Y/N)

Select "Y", and the BIOS will be renewed. When you are refreshing the BIOS, do not turn off or reset the system, or you will damage the BIOS. After you have completed all the programming, the screen displays the table below:

FLASH MEMORY WRITER v8.XX (C) Award Software 2001 All Rights Reserved
Flash Type – SST 49LF004A /3.3V File Name to Program: 31000LTX.bin Checksum: XXXXX Reset System or Power off to accomplish update process!
F1: Reset F10: Exit

Please reset or power off the system, and then the Flash BIOS is fully implemented.