USER'S MANUAL

PS6508 Series

Intel® Pentium® M

15" Point-of-Sale Terminal

PS6508 Series M2

PS6508 Series POS System
With LCD / Touchscreen

OPERATION MANUAL

COPYRIGHT NOTICE

ACKNOWLEDGEMENTS

CE NOTICE

This is a class A product. In a domestic environment this product may cause radio interference in which case the user may be required to take adequate measures.

FCC NOTICE

This equipment has been tested and found to comply with the limits for a Class A digital device, pursuant to part 15 of the FCC Rules. These limits are designed to provide reasonable protection against harmful interference when the equipment is operated in a commercial environment. This equipment generates, uses, and can radiate radio frequency energy and, if not installed and used in accordance with the instruction manual, may cause harmful interference to radio communications. Operation of this equipment in a residential area is likely to cause harmful interference in which case the user will be required to correct the interference at his own expense.

You are cautioned that any change or modifications to the equipment not expressly approve by the party responsible for compliance could void your authority to operate such equipment.

CAUTION! Danger of explosion if battery is incorrectly replaced. Replace only with the same or equivalent type recommended by the manufacturer. Dispose of used batteries according to the manufacturer's instructions.
WARNING! Some internal parts of the system may have high electrical voltage. And therefore we strongly recommend that qualified engineers can open and disassemble the system.
The LCD and Touchscreen are easily breakable, please handle them with extra care.

TABLE OF CONTENTS

INTRODUCTION

CHAPTER

1

This chapter gives you the information for PS6508 Series. It also outlines the System specifications.

Section includes:

- About This Manual
- System Specifications
- Safety precautions

Experienced users can skip to chapter 2 on page 2-1 for a Quick Start.

1-1. ABOUT THIS MANUAL

Thank you for purchasing our PS6508 Series System. The PS6508 Series is an updated system designed to be comparable with the highest performance of IBM AT personal computers. The PS6508 Series 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. The user can apply this manual for configuration according to the following chapters :

Chapter 1 Introduction

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

Chapter 2 Hardware Configuration

This chapter outlines the Prox6508LF component's location and their function. In the end of this chapter, you will learn how to set jumper and how to configure this card 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, Touch Screen Utility and Flash BIOS Update. It also describes the Wireless Utility.

Chapter 4 Award BIOS Setup

This chapter indicates you how to set up the BIOS configurations.

Appendix A System Assembly

This section gives you the exploded diagram for the whole system unit.

Appendix B Technical Summary

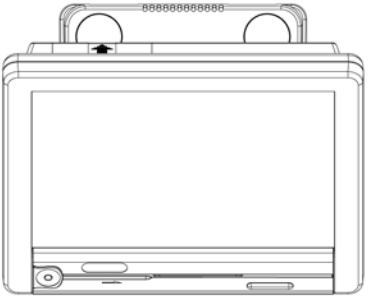
This section gives you the information about the Technical maps.

1-2. POS SYSTEM ILLUSTRATION

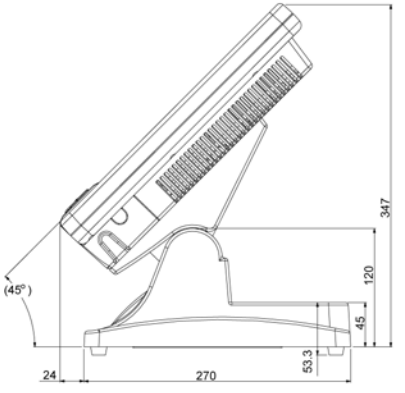
PS6508

Front View

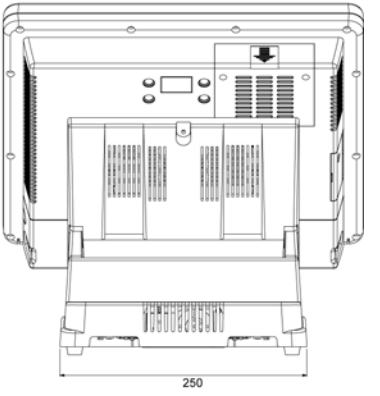
Top View



Side View

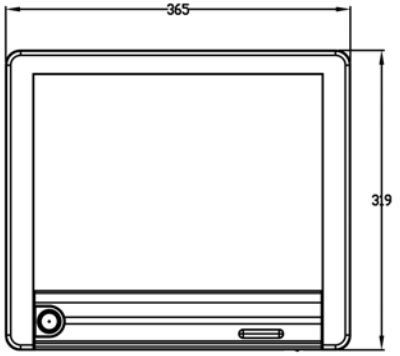


Back View

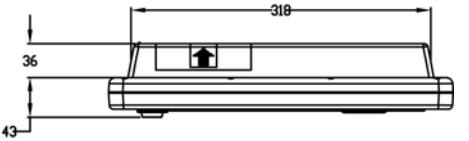


PS6508-PPC

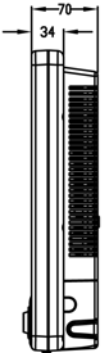
Front View



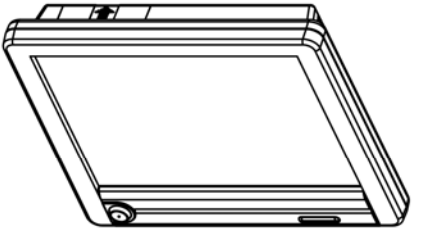
Top View



Side View

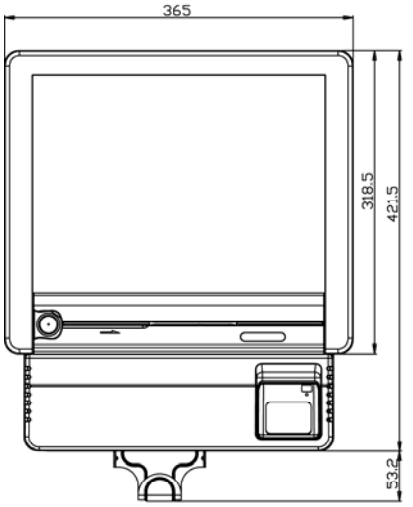


Quarter View

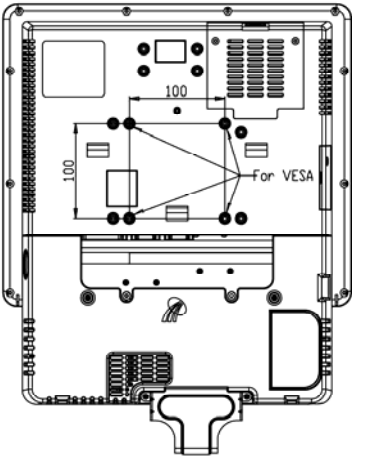


PS6508-MIT

Front View



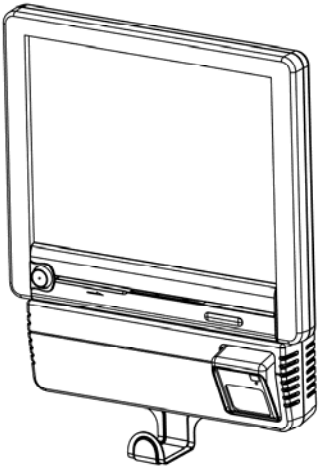
Rear View



Top View

Side View

Quarter View



1-3. SYSTEM SPECIFICATIONS

MAINBOARD (PROX6508LF)

- **CPU TYPE :**
  Celeron M1.5 GHz, up to Pentium M1.8 GHz

- **CHIPSET :**
  Intel 910GME + ICH6M
  (Support FSB=400MHz)

- **MEMORY :**
  Up to 1GB
  One 200-pin DDRII SO-DIMM socket on board.

- **CACHE :**
  Depended on CPU

- **REAL-TIME CLOCK / CALENDAR :**
  Embedded in Intel ICH6M South Bridge

- **BIOS :**
  PhoenixAward PnP BIOS
  4Mbytes with VGA BIOS

- **KEYBOARD CONNECTOR :**
  PC/AT Compatible, with mini DIN connecter on rear panel.

- **MOUSE CONNECTOR :**
  PS/2 Mouse, with mini DIN connecter on rear panel.

- **SERIAL PORT :**
  Four high speed 16550 Compatible UARTs
  COM1, COM2, COM3, COM4 all for RS-232,
  (All with 5v/12v power capability)
  COM 1,COM2, COM 3 - External D-sub 9-pin connector on rear panel

- **PARALLEL PORT :**
  Support SPP, ECP, EPP mode.
  Bi-directional parallel port

- **UNIVERSAL SERIAL BUS PORT :**
  Support up to 4 USB2.0 ports on rear panel.

- **LED INDICATOR :**
  3 LED indicators (Power, HDD, LAN-on/working)

- **LAN FUNCTION :**
  10/100Mbps Fast Ethernet.
  Interface: RJ-45 Jack on board

- **SOUND FUNCTION : (PS6508-MIT & PS6508-PPC)**
  Realtek ALC 202A, AC'97 Sound MAX® Codec
  Integrated Sound Blaster / DirectSound AC97 audio.
  1 Line-out connector on rear panel
  1X2 pin header on board connecting to internal speaker (Max1.9Watt)

- **VGA FUNCTION :**
  Built-in North Bridge
  Support simultaneous display of CRT and LCD

- **BOARD DIMENSION :**
  Prox6508LF 254mm x 205mm

LCD PANEL

Type	XGA
Max. Resolution	XGA (1024 x 768)
Size/Type	15" / TFT
Viewing Angel (degree) Up Down Left Right	 40 60 60 60
Pixel Pitch	0.297 (W) x 0.297 (H)
Brightness	250 cd / m^2
Signal Interface (bit)	TTL (18-bit)
LCD MTBF	30,000
Back Light MTBF (Hrs)	30,000

TOUCHSCREEN (OPTIONAL)

TYPE	**RESISTIVE (5 wire)**
Resolution	1024 x 768
Controller	USB Interface
Power Consumption	+5V
Durability (Lifetime)	10 million

TYPE	**SURFACE CAPACITIVE**
Resolution	1024 x 768
Controller	USB Interface
Power Consumption	+5V
Durability (Lifetime)	Over 160 million

CARD READER (OPTIONAL)

TYPE	Triple Track
Function	Read
Interface	Keyboard Wedge
Speed	10-100cm/sec
Recording Method	F2F(FM)
Lift Cycle	300,000 passes
Voltage	+5V
Standard	ISO 7811

GENERAL INFORMATION

- **POWER ADAPTER :**
  Model: FSP120-ACB
  Input: 100 Vac/ 240 Vac, 47Hz to 63 Hz
  Output: 24V, 0A to 5A
  Dimension: 167mm x 65mm x 37mm

- **DISK DRIVE HOUSING :**
  One slim HDD

- **HOUSING CONSTRUCTION:**
  High quality plastic frame architecture

- **DIMENSION :**
  [PS6508-POS]: 365 x 363 x 297 mm (14.37” x 14.37” x 11.69”)
  [PS6508-PPC] 365 x 318 x 70 mm (14.37” x 12.54 x 2.76”)
  [PS6508-MIT] 365x421.5x70mm(14.37”x16.59”x2.76”)

- **NET WEIGHT :**
  [PS6508-PPC] 9kg(19.84lb)
  [PS6508-POS]: 5.5kg (12.13lb)
  [PS6508-MIT]: 7.4kg (16.31lb)

1-4. SAFETY PRECAUTIONS

Following messages are safety reminders on how to protect your systems from damages. And thus, helps you lengthen the life cycle of the system.

1. Check the Line Voltage

a. The operating voltage for the power supply should cover the range of 100VAC-240VAC, otherwise the system may be damaged.

2. Environmental Conditions

a. Place your PS6508 on a sturdy, level surface. Be sure to allow enough room on each side to have easy access.

b. Avoid extremely hot or cold places to install your PS6508 Book-sized PC.

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 PS6508 when it's been left outdoors in a cold winter day.

d. Bear in mind that the operating ambient temperature is from 0°C up to +35°C.

e. Avoid moving the system rapidly from a hot place to a cold place or vice versa because condensation may come from inside of the system.

f. Place PS6508 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 interference.

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

3. Handling

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

b. The power of COM1 and COM4 is co-used with 2nd display, please be sure COM1 and COM4 are set at RI mode while using 2nd display. Otherwise, COM1 and COM4 may cause operating problem.

c. If the system isn't full system in DOS mode, please adjust BIOS setting as following instruction.
Advanced Chipset Feature => Boot display => choose "LFP"

4. Good Care

a. When the outside of the case is stained, remove the stain with neutral washing agent with a dry cloth.

b. Never use strong agents such as benzene and thinner to clean the system.

c. If heavy stains are present, moisten a cloth with diluted neutral washing

agent or with alcohol and then wipe thoroughly with a dry cloth.

d. If dust has been accumulated on the outside, remove it by using a special made vacuum cleaner for computers.

e. Please don't contact the surface of capacitive touch before entering your operation system, or capacitive touch may have position problem for electrostatics interference.

SYSTEM CONFIGURATION

CHAPTER

2

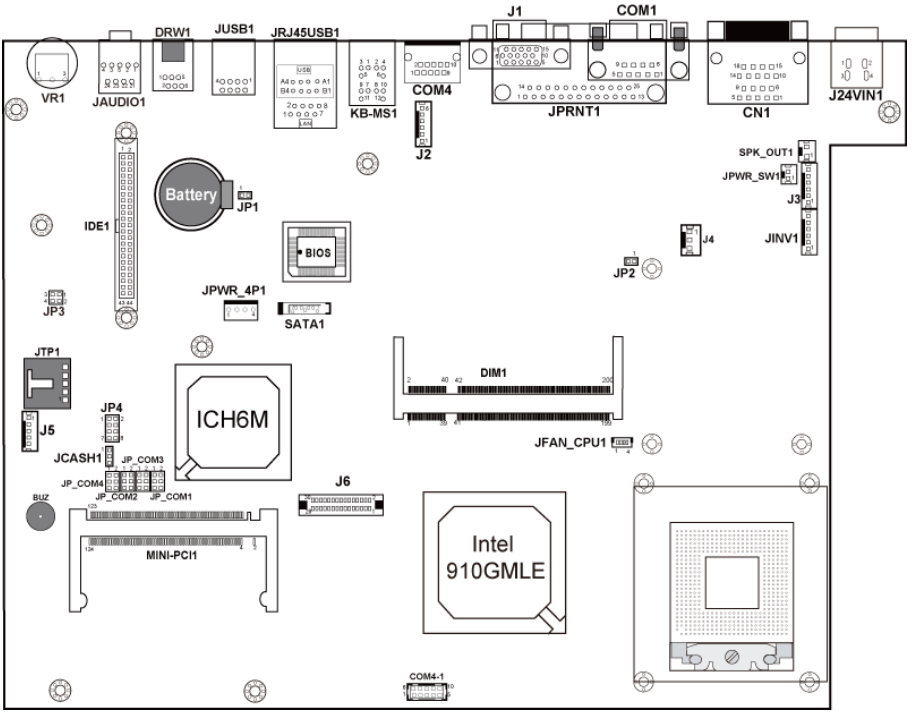
Helpful information that describes the jumper & connector settings, and component locations.

Section includes:

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

2-1. JUMPER & CONNECTOR QUICK REFERENCE TABLE

2-2. COMPONENT LOCATIONS



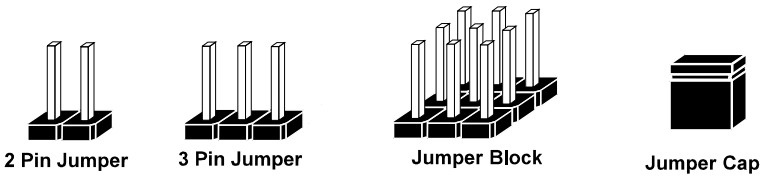
PS6508 SERIES Connector, Jumper and Component locations

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.

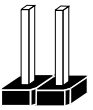
JUMPERS AND CAPS



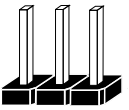
If a jumper has three pins for example, labelled PIN1, PIN2, and PIN3. You can connect PIN1 & PIN2 to create one setting and shorting. You can either connect PIN2 & PIN3 to create another setting. The same jumper diagrams are applied all through this manual. The figure below shows what the manual diagrams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

JUMPER DIAGRAMS

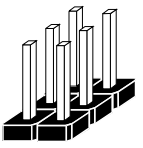
Jumper Cap looks like this



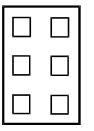
2 pin Jumper looks like this



3 pin Jumper looks like this

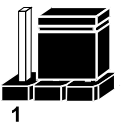


Jumper Block looks like this

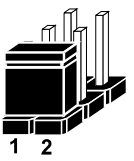


JUMPER SETTINGS

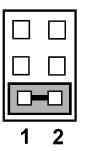
2 pin Jumper closed(enabled)
looks like this



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

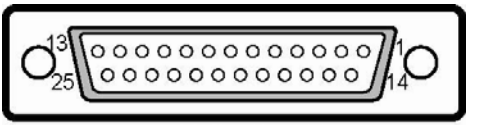


Jumper Block
1-2 pin closed(enabled)
looks like this



2-4. PRINTER CONNECTOR

JPRNT1 : Printer Connector
The Printer Connector assignments are as follows :



JPRNT1

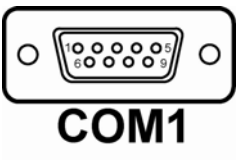
PIN	ASSIGNMENT	PIN	ASSIGNMENT
1	STBJ	14	ALFJ
2	PDR0	15	ERRJ
3	PDR1	16	PAR_INITJ
4	PDR2	17	SLCTINJ
5	PDR3	18	GND
6	PDR4	19	GND
7	PDR5	20	GND
8	PDR6	21	GND
9	PDR7	22	GND
10	ACKJ	23	GND
11	BUSY	24	GND
12	PE	25	GND
13	SLCTJ		

2-5. COM PORT CONNECTOR

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

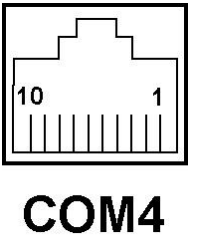
COM1 : COM1 Connector
The COM1 Connector assignments are as follows :

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



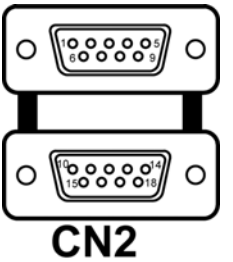
COM4 : COM4 Connector
The pin assignments are as follows :

PIN	ASSIGNMENT
1	DCD4
2	RXD4
3	TXD4
4	DTR4
5	GND
6	DSR4
7	RTS4
8	CTS4
9	RI/+5V/+12 selectable
10	NC



CN2 : COM2 & COM3 Connector
The COM2 & COM3 Connector assignments are as follows :

PIN	ASSIGNMENT
1	DCD2
2	RXD2
3	TXD2
4	DTR2
5	GND
6	DSR2
7	RTS2
8	CTS2
9	RI/+5V/+12 selectable
10	DCD3
11	RXD3
12	TXD3
13	DTR3
14	GND
15	DSR3
16	RTS3
17	CTS3
18	RI/+5V/+12 selectable

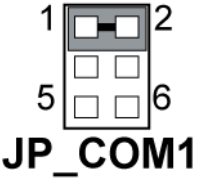
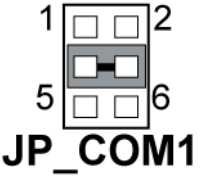
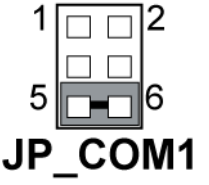


🕮 All COM port is selectable for RI, +5V or +12V. For more information, please refer to our "COM RI and Voltage Selection".

2-6. COM1 RI & VOLTAGE SELECTION

JP_COM1 : COM1 RI & Voltage Selection

The selections are as follows:

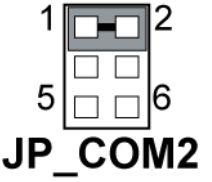
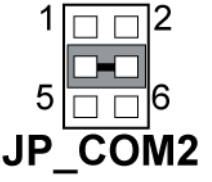
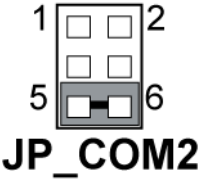
SELECTION	JUMPER SETTINGS	JUMPER ILLUSTRATION
RI	1-2	
VCC12	3-4	
VCC	5-6	

***Manufacturing Default – RI.

2-7. COM2 RI & VOLTAGE SELECTION

JP_COM2 : COM2 RI & Voltage Selection

The selections are as follows:

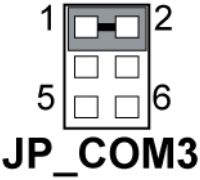
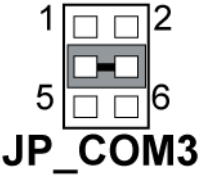
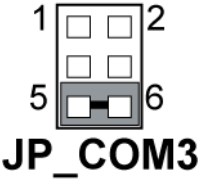
SELECTION	JUMPER SETTINGS	JUMPER ILLUSTRATION
RI	1-2	
VCC12	3-4	
VCC	5-6	

***Manufacturing Default – RI.

2-8. COM3 RI & VOLTAGE SELECTION

JP_COM3 : COM3 RI & Voltage Selection

The selections are as follows:

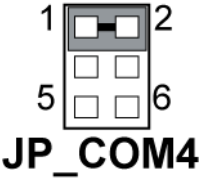
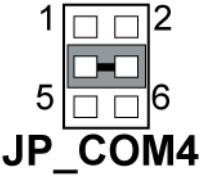
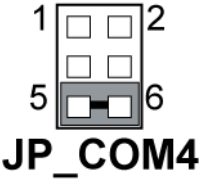
SELECTION	JUMPER SETTINGS	JUMPER ILLUSTRATION
RI	1-2	
VCC12	3-4	
VCC	5-6	

***Manufacturing Default – RI.

2-9. COM4 RI & VOLTAGE SELECTION

JP_COM4 : COM4 RI & Voltage Selection

The selections are as follows:

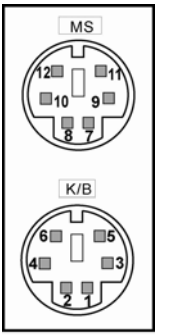
SELECTION	JUMPER SETTINGS	JUMPER ILLUSTRATION
RI	1-2	
VCC12	3-4	
VCC	5-6	

***Original Manufacturing Default – RI.

2-10. KEYBOARD AND PS/2 MOUSE CONNECTOR

KB-MS1 : PC/AT Keyboard and PS/2 Mouse Connector
The pin assignments are as follows :

PIN	ASSIGNMENT	PIN	ASSIGNMENT
	KB		MS
1	KB DATA	7	MS DATA
2	NC	8	NC
3	GND	9	GND
4	5VSB	10	5VSB
5	KB CLK	11	MS CLK
6	NC	12	NC

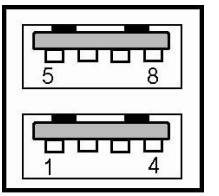


KB-MS1

2-11. UNIVERSAL SERIAL BUS CONNECTOR

JUSB1 : Two USB Ports Connector
The pin assignment is as follows :

PIN	ASSIGNMENT
1	USBV3
2	USB2-
3	USB2+
4	GND
5	USBV4
6	USB3-
7	USB3+
8	GND



JUSB1

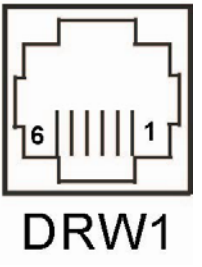
JUSB2 : Internal USB Ports Connector
The pin assignment is as follows :

PIN	ASSIGNMENT
1	USB4-
2	USB4+
3	GND
4	USBV4
5	GND

2-12. CASH DRAWER CONNECTOR

DRW1 : Cash Drawer Connector
The pin assignment is as follows :

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



Prox-6508 cash drawer control in GPIO port

To Open Drawer
Write "13h " to I/O Port "48f"h
To Close Drawer
Write "1bh " to I/O Port "48f"h

Detect Drawer Status
Read I/O “48f”h
Definition (BIT0)
MSB LSB
Check whether BIT0 = 1
1 : the drawer was close
0 : the drawer was open

2-13. CASH DRAWER POWER SELECTION

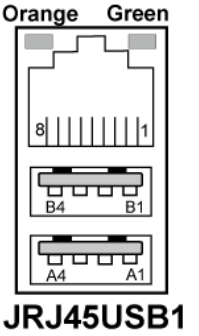
JCASH1 : Cash Drawer Power Selection
The jumper settings are as follows :

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

*** Manufactory default --- +12V.

2-14. LAN & USB CONNECTOR

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



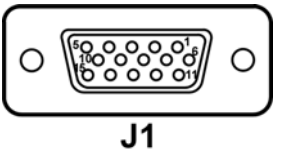
JRJ45USB1

PIN	ASSIGNMENT
1	TX+
2	TX-
3	RX+
4	ISOLATED GND
5	ISOLATED GND
6	RX-
7	ISOLATED GND
8	ISOLATED GND

PIN	ASSIGNMENT
A1	USBV0
A2	USB0-
A3	USB0+
A4	GND
B1	USBV1
B2	USB1-
B3	USB1+
B4	GND

2-15. VGA CONNECTOR

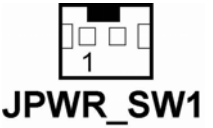
J1 : VGA Connector
The pin assignments are as follows:



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	NC

2-16. POWER SWITCH CONNECTOR

JPWR_SW1 : Power Switch Connector
The pin assignment is as follows :



PIN	ASSIGNMENT
1	5VSB
2	PWB_SIOJ

2-17. POWER/HDD/LAN LED CONNECTOR

JLED1 : Power/HDD/LAN LED Connector
The pin assignment is as follows :

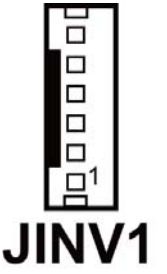
PIN	ASSIGNMENT
1	PWR_VCC
2	GND
3	HDD_VCC
4	HDD_LEDJ
5	LAN_ACTLEDJ
6	LAN_LILEDJ

2-18. EXTERNAL SPEAKER CONNECTOR

SPK_OUT1 : External Speaker Connector
The pin assignment is as follows :

PIN	ASSIGNMENT
1	SPK_OUT
2	GND

2-19. INVERTER CONNECTOR



JINV1 : Inverter Connector
The pin assignment is as follows :

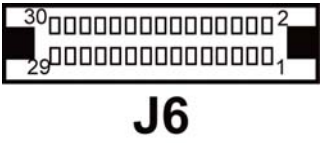
PIN	ASSIGNMENT
1	+12V
2	GND
3	GND
4	BRCTR
5	LVDS_BKLTEN
6	+12V

2-20. MSR/ CARD READER CONNECTOR

J2 : MSR/ Card Reader Connector
The pin assignment is 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

2-21. LVDS CONNECTOR



J6 : LVDS Connector
The pin assignments are as follows :

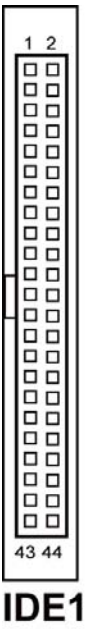
PIN	ASSIGNMENT	PIN	ASSIGNMENT
1	LVDS_VCC	2	GND
3	ZCM	4	ZCP
5	GND	6	Z2M
7	Z2P	8	GND
9	Z1M	10	Z1P
11	Z3P	12	Z3M
13	Z0P	14	Z0M
15	GND	16	YCP
17	YCM	18	GND
19	Y2P	20	Y2M
21	GND	22	Y1P
23	Y1M	24	GND
25	Y0P	26	Y0M
27	Y3P	28	Y3M
29	LVDS_VCC	30	LVDS_VCC

2-22. HARD DISK DRIVE 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

IDE1 : Hard Disk Drive Connector for CF Card
The pin assignments are as follows:

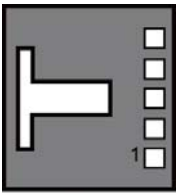


PIN	ASSIGNMENT	PIN	ASSIGNMENT
1	IDERSTJ	2	GND
3	SDD7	4	SDD8
5	SDD6	6	SDD9
7	SDD5	8	SDD10
9	SDD4	10	SDD11
11	SDD3	12	SDD12
13	SDD2	14	SDD13
15	SDD1	16	SDD14
17	SDD0	18	SDD15
19	GND	20	NC
21	SDREQ	22	GND
23	SDIOWJ	24	GND
25	SDIORJ	26	GND
27	SDIORDY	28	PULL LOW
29	SDDACKJ	30	GND
31	IRQ15	32	NC
33	SDA1	34	SD66_DETECT
35	SDA0	36	SDA2
37	SDCSJ1	38	SDCSJ3
39	IDEACTSJ	40	GND
41	+5V	42	+5V
43	GND	44	GND

2-23. TOUCH PANEL CONNECTOR

JTP1 : 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)

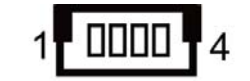


JTP1

2-24. FAN CONNECTOR

JFAN_CPU1 : Fan Connector
The pin assignment is as follows :

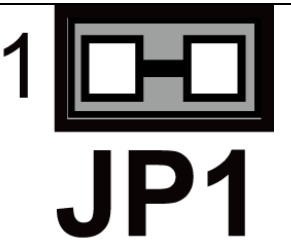
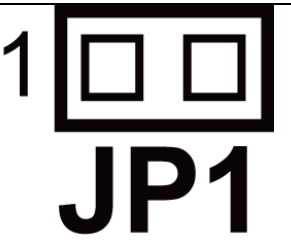
PIN	ASSIGNMENT
1	GND
2	Fan Detect
3	+5V
4	PWM Fan Control



JFAN_CPU1

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	1-2	
NORMAL	Open	

*** 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.

SOFTWARE UTILITIES

CHAPTER

3

This chapter comprises the detailed information of VGA driver, LAN driver, and Flash BIOS update. It also describes how to install the watchdog timer configuration.

Section includes:

- VGA Driver Utility
- Flash BIOS Update
- LAN Driver Utility
- Intel® Chipset Software Installation Utility
- USB2.0 Chipset Software Installation Utility

3-1. INTRODUCTION

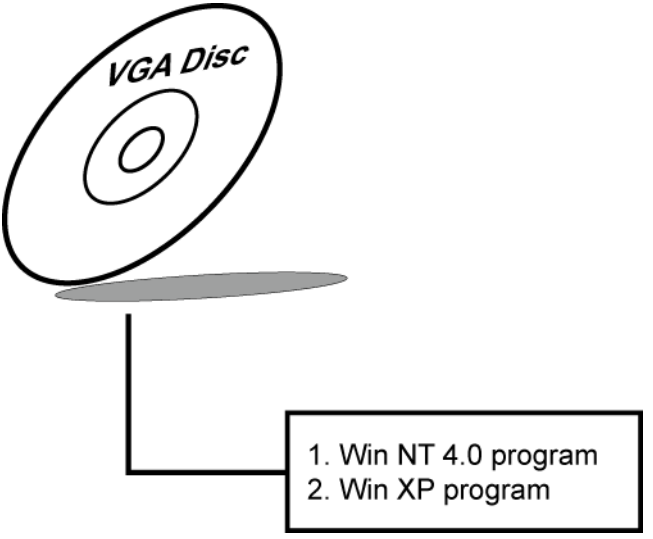
Enclosed with our PS6508 SERIES package is our driver utility, which may comes in a form of a CD ROM disc or floppy diskettes. For CD ROM disc user, you will only need some of the files contained in the CD ROM disc, please kindly refer to the following chart:

Filename (Assume that CD ROM drive is D:)	**Purpose**
D:\Driver\VGA	Intel® 910GMLE For VGA driver installation
D:\Driver\FLASH	For BIOS update utility
D:\Driver\LAN	For LAN Driver installation
D:\Driver\Sound	Realtel ALC655 AC97 For Sound driver installation
D:\Driver\UTILITY	Intel® Chipset Software Installation Utility For Win XP
D:\Driver\USB 2.0	USB 2.0 Software Installation Utility For Win ME, XP
D:\Driver\Touch	For Win ME, XP, Linux
D:\Driver\Wireless	For Win ME, XP, Linux
D:\Driver\MSR_AP	For Win XP

🔔 User should remember to install the Utility right after the OS is fully installed.

3-2. VGA DRIVER UTILITY

The VGA interface embedded with our PS6508 SERIES can support a wide range of display. You can display CRT, LVDS simultaneously with the same mode.



3-2-1. Installation of VGA Driver:

To install the VGA Driver, simply follow the following steps:

1. Please insert the Utility Disk into Floppy Disk Drive A/B or CD ROM drive.
2. Under Windows NT4.0/XP system, go to the directory where VGA driver is located.
3. Click **Setup.exe** file for VGA driver installation.
4. Follow the instructions on the screen to complete the installation.
5. Once installation is completed, shut down the system and restart it in order to complete the changes.

3-3. FLASH BIOS UPDATE

3-3-1. System BIOS Update:

Users of PS6508 SERIES can use the program "Awdflash.exe" contained in the Utility Disk for system BIOS and VGA BIOS update.

3-3-2. To update VGA BIOS for LCD Flat Panel Display:

As a user of PS6508 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 H15bxxxx.bin
4. The screen will display as the table below:

FLASH MEMORY WRITER v7.XX (C) Award Software 2001 All Rights Reserved
Flash Type – SST 49LF004A /3.3V File Name to Program: H20bxxxx.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 v7.XX (C) Award Software 2001 All Rights Reserved
Flash Type – SST 49LF004A /3.3V File Name to Program: H20bxxxx.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:

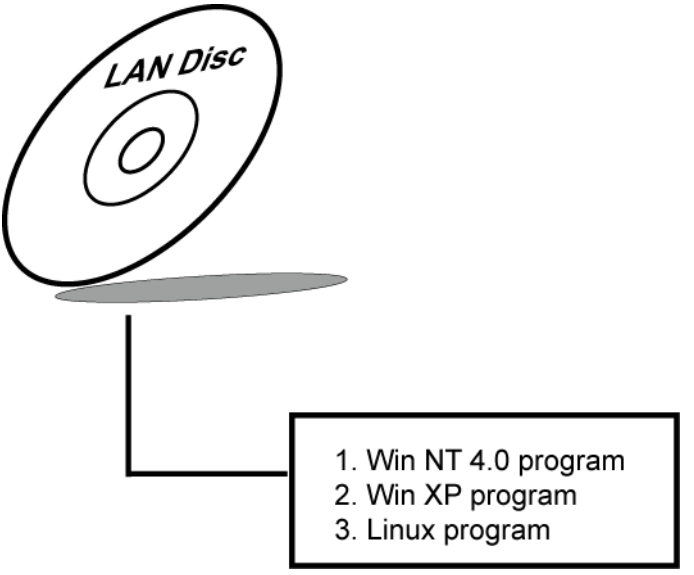
FLASH MEMORY WRITER v7.XX (C) Award Software 2001 All Rights Reserved
Flash Type – SST 49LF004A /3.3V File Name to Program: H20bxxxx.bin Checksum: XXXXX Reset System or Power off to accomplish update process!
F1: Reset F10: Exit

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

3-4. LAN DRIVER UTILITY

3-4-1. Introduction

PS6508 SERIES is enhanced with LAN function that can support various network adapters. Installation programs for LAN driver is listed as follows:

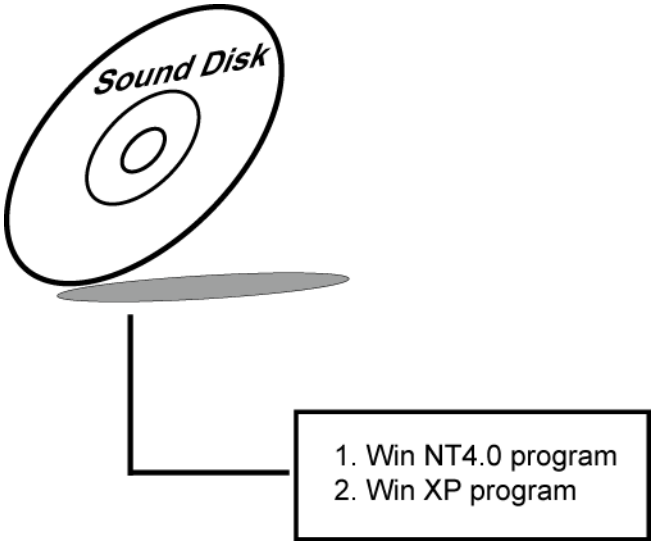


For more details on Installation procedure, please refer to Readme.txt file found on LAN DRIVER UTILITY.

3-5. SOUND DRIVER UTILITY

3-5-1. Introduction

The sound function enhanced in this system is fully compatible with Windows NT 4.0, Windows XP. Below, you will find the content of the Sound driver :



3-5-2. Installation Procedure

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

3-6. INTEL® CHIPSET SOFTWARE INSTALLATION UTILITY

3-6-1. 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:

- Core PCI and ISAPNP Services
- AGP Support
- SATA Storage Support
- USB Support
- Identification of Intel® Chipset Components in Device Manager

3-6-2. Installation of Utility for Windows XP

The Utility Pack is to be installed only for Windows XP program.
It should be installed right after the OS installation, kindly follow the following steps:

1. Please insert the Utility Disk into Floppy Disk Drive A/B or CD ROM drive.
2. Under Windows XP system, go to the directory where Utility Disc is located.
3. Click **Setup.exe** file for utility installation.
4. Follow the instructions on the screen to complete the installation.
5. Once installation is completed, shut down the system and restart it in order to complete the changes.

3-7. USB2.0 SOFTWARE INSTALLATION UTILITY

3-7-1. Installation of Utility for Windows 98SE/ 2000/XP/2003

Intel USB 2.0 Enhanced Host Controller driver can only be used on Windows XP on Intel Desktop boards. It should be installed right after the OS installation, kindly follow the following steps:

1. Please insert the Utility Disk into Floppy Disk Drive A/B or CD ROM drive.
2. Under Windows XP system, go to the directory where Utility Disc is located.
3. Start the "System" wizard in control panel. (Click Start/Settings/Control Panel).
4. Select "Hardware" and click "Device Manager " button.
5. Double Click "USB Root Hub".
6. Select "Driver".
7. Click "Install" to install the driver.
8. Follow the instructions on the screen to complete the installation.
9. Click "Finish" after the driver installation is complete.

3-8. TOUCHSCREEN DRIVER UTILITY

The touchscreen driver utility is to be installed only for Windows XP, Windows NT 4.0 and Linux program.
It should be installed right after the OS installation, kindly follow the following steps:

1. Please insert the Utility Disk into Floppy Disk Drive A/B or CD ROM drive.
2. Under Windows XP/NT4.0/Linux system, go to the directory where Utility Disc is located.
3. Click **Setup.exe** file for utility installation.
4. Follow the instructions on the screen to complete the installation.
5. Once installation is completed, shut down the system and restart it in order to complete the changes.

3-9. WIRELESS DRIVER UTILITY (OPTIONAL)

The wireless driver utility is to be installed only for Windows XP, Windows NT 4.0 and Linux program.
It should be installed right after the OS installation, kindly follow the following steps:

1. Please insert the Utility Disk into Floppy Disk Drive A/B or CD ROM drive.
2. Under Windows XP/NT4.0/Linux system, go to the directory where Utility Disc is located.
3. Click **Setup.exe** file for utility installation.
4. Follow the instructions on the screen to complete the installation.
5. Once installation is completed, shut down the system and restart it in order to complete the changes.

AWARD BIOS SETUP

CHAPTER

4

This chapter shows how to set up the Award BIOS.

Section includes:

- 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

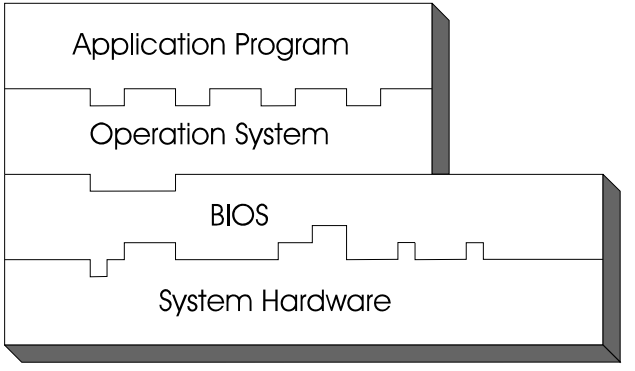
4-1. INTRODUCTION

This chapter will show you the function of the BIOS in managing the features of your system. The PS6508 SERIES 15" POS Terminal is equipped with the BIOS for system chipset from 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 presented 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 – Award BIOS 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 press the arrow keys of up/down to move the cursor 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 – Award CMOS Setup Utility
Standard CMOS Features

Date (mm:dd:yy)	Mon , Jan 13 2003	Item Help
Time (hh:mm:ss)	16 : 21 : 43	Menu Level ►
► IDE Channel 0 Master	[None]	
► IDE Channel 0 Slave	[None]	Change the day, month, year and century.
► IDE Channel 1 Master	[None]	
► IDE Channel 1 Slave	[None]	
Halt On	[All, But Keyboard]	
Base Memory	640K	
Extended Memory	227328K	
Total Memory	228352K	

↑↓→←: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 be skipped 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 Master / Slave:
IDE Channel 1 Master / Slave:

The BIOS can automatically detect the specifications and optimal operating mode of almost all IDE hard drives. When you select "AUTO" for a hard drive, the BIOS will detect it's specifications during POST every time system boots.

If you do not want to select "AUTO", select drive type will be the next choice:

1. Match the specifications of your installed IDE 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 IDE 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

IDE 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.

HALT ON:

In this category users could decide the solutions if the computer should stop booting or not if any errors are detected. 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.

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

▶ Hard Disk Boot Priority	[Press Enter]	Item Help
USB Flash Disk Type	[Auto]	
First Boot Device	[Floppy]	Menu Level ►
Second Boot Device	[Hard Disk]	
Third Boot Device	[LS120]	Allows you to choose the VIRUS warning feature for IDE Hard Disk boot sector protection. If this function is enabled and someone attempt to write data into this area, BIOS will show a warning message on screen and alarm beep
Boot Other Device	[Enabled]	
Security Option	[Setup]	
APIC Mode	[Enabled]	
MPS Version Control for O.S.	[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

Advanced BIOS Features Setup Screen

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

A brief introduction of each setting in the BIOS FEATURES SETUP program is given below.

HARD DISK BOOT PRIORITY:

You could expand the whole menu by pressing <ENTER>, and you will see a screen like the one listed below.

Phoenix – AwardBIOS CMOS Setup Utility
Hard Disk Boot Priority

1. CH 0 M. : ST320014A 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	

Table 2 – Hard Disk Boot Priority sub menu

Descriptions of each item in the above chart are listed below:

1. CH 0M.:
2. Bootable Add-in Cards

USB FLASH DISK TYPE:

Select USB Flash type as one boot device.

FIRST/SECOND/THIRD/OTHER BOOT DEVICE:

The BIOS load the operating system in a sequence selected by these items.

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 :

Advanced Programmable Interrupt Controller Mode.

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	3	
X DRAM RAS# to CAS# Delay	3	Menu Level ►
X DRAM RAS# Precharge	3	
X Precharge dealy (tRAS)	9	
X System Memory Frequency	400 MHz	
** VGA Setting **		
DVMT Mode	[DVMT]	
DVMT/FIXED Memory Size	[128MB]	
Boot Display	[LED]	

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

Advanced Chipset Features Setup

The parameters in this setup screen are for system designers, service personnel, and technically competent users only. Do not reset these values unless you understand the consequences of your changes.

DRAM TIMING 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 field let's 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.

DRAM RAS# PRECHARGE:

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.

PRECHARGE DEALY (tRAS) :

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

SYSTEM MEMORY FREQUENCY:

Front Side Bus Frequency.

DVMT MODE:

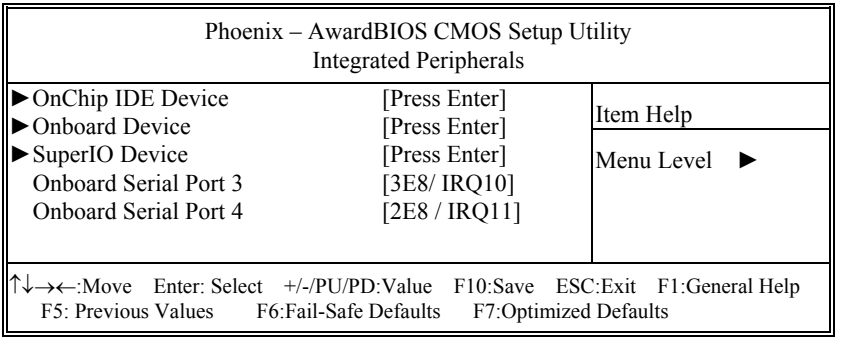
Intel Dynamic Video Memory Technology Mode.

DVMT/ FIXED MEMORY SIZE :

DVMT Memory Size Select

4-6. INTEGRATED PERIPHERALS

Choose "INTEGRATED PERIPHERALS" from the main setup menu, and you will see a screen like the one listed below.



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:

You could expand the whole menu by pressing <ENTER>, and you will see a screen like the one listed below.

Phoenix – AwardBIOS CMOS Setup Utility
OnChip IDE Device

IDE HDD Block Mode	[Enabled]	Item Help
IDE DMA transfer access	[Enabled]	
On-Chip Primary PCI IDE	[Enabled]	Menu Level ►►
IDE Primary Master PIO	[Auto]	
IDE Primary Slave PIO	[Auto]	
IDE Primary Master UDMA	[Auto]	
IDE Primary Slave UDMA	[Auto]	
*** On-Chip Serial ATA Setting ***		
On-Chip Serial ATA	[Auto]	
↑↓→←:Move Enter: Select +/-/PU/PD:Value F10:Save ESC:Exit F1:General Help F5: Previous Values F6:Fail-Safe Defaults F7:Optimized Defaults		

Table 1 – VIA On-Chip IDE Device sub menu

Descriptions of each item in the above chart are listed below:

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 Transfer Access
3. On-Chip Primary PCI IDE
   The integrated peripheral controller contains an IDE interface which supports two IDE channels. Select Enabled to activate each channel separately.
4. IDE Primary Master/Slave PIO
   The four IDE PIO fields allow you to set up PIO mode for each IDE devices supported by the onboard IDE interface. Greater value will provide better performance. Auto mode will determine the best mode for each device automatically.
5. IDE Primary Master/Slave UDMA
   To support Ultra DMA, both of the following items must be supported.

a. Your IDE hard drive must support Ultra DMA.
b. DMA driver must be included in your OS. (Windows 95 must have OSR2 or a third-party IDE bus master driver)
If your system supports both of the above items, then please select Auto and the system will support it automatically.

6. On-Chip Serial ATA

ONBOARD DEVICE:

You could expand the whole items by pressing <ENTER>, and you will see a screen like the one listed below:

Phoenix – AwardBIOS CMOS Setup Utility
Onboard Device

USB Controller	[Enabled]	Item Help
USB 2.0 Controller	[Enabled]	Menu Level ►►
USB Keyboard Support	[Disabled]	
↑↓→←:Move Enter: Select +/-/PU/PD:Value F10:Save ESC:Exit F1:General Help F5: Previous Values F6:Fail-Safe Defaults F7:Optimized Defaults		

Table 2 –Onboard Device sub menu

Descriptions of each item above are listed below:

1. USB 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 Support
   Enable the USB 2.0 controller
3. USB Keyboard Support
   Select Enabled if your system contains a Universal Serial Bus (USB) controller and you have a USB keyboard.

SUPER IO DEVICE:

You could expand the whole menu by pressing <ENTER>, and you will see a screen like the one listed below:

Phoenix – Award CMOS Setup Utility
SuperIO Device

Onboard Serial Port 1	[3F8/IRQ4]	Item Help
Onboard Serial Port 2	[2F8/IRQ3]	
Onboard Parallel Port	[378/IRQ7]	
Parallel Port Mode	[SPP]	Menu Level ►
X ECP Mode Use DMA	3	
↑↓→←:Move Enter: Select +/-/PU/PD:Value F10:Save ESC:Exit F1:General Help F5: Previous Values F6:Fail-Safe Defaults F7:Optimized Defaults		

Table 3 – SuperIO Device sub menu

Descriptions of each item above are listed below:

1. Onboard Serial Port 1/2
   Select an address and corresponding interrupt for the first and second serial ports
2. Onboard Parallel Port
   This item allows you to determine access onboard parallel port controller with which I/O address.
3. Parallel Port Mode
   Select an operating mode for the onboard parallel (printer) port. Select *Normal*, *Compatible*, or *SPP* unless you are certain your hardware and software both support one of the other available modes.
4. ECP Mode Use DMA
   Select a DMA channel for the parallel port for use during ECP mode

ONBOARD SERIAL PORT 3
ONBOARD SERIAL PORT 4:

Select a logical COM port name and matching address for the third and forth serial ports. Select an address and corresponding interrupt for third and forth serial port.

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
Video Off In Suspend	[Yes]	
Soft-Off by PWR-BTTN	[Instant-Off]	Menu Level ►
PWRON After PWR-Fail	[Off]	
Wake-Up by PCI card	[Enabled]	

↑↓→←: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.

ACPI FUNCTION:

Users are allowed to enable or disable the Advanced Configuration and Power Management (ACPI).

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".

WAKE-UP BY PCI CARD:

An input signal on the serial Ring Indicator (RI) line (in other words, an incoming call on the modem) awakens the system from the soft-off state.

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

Resources Controlled By	[Auto (ESCD)	Item Help
X IRQ Resources	Press Enter	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		

PNP/PCI CONFIGURATION

This section 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.

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*, *DMA Resources* and *Memory Resources*. The choices are Auto(ESCD) and Manual.

IRQ RESOURCES:

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	29℃	
VCC	3.36V	Menu Level ►
+ 5 V	5.05V	
+12V	12.09V	
Fan 1 Speed	0 RPM	
Fan 2 Speed	4963 RPM	

↑↓→←: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

SHUTDOWN TEMPERATURE:

User is allowed to set the temperature on which the system automatically shutdown when reaches or exceeds the temperature set.

CURRENT CPU TEMPERATURE:

This item displays the current CPU temperature.

VCC / +5V / +12V:

Show you the voltage of VCC/+5V/+12V.

FAN 1/2 SPEED:

This item shows you the current System FAN speed

4-10. FREQUENCY/VOLTAGE CONTROL

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

Phoenix – AwardBIOS CMOS Setup Utility
Frequency/Voltage Control

Auto Detect PCI Clk	[Enabled]	Item Help
Spread Spectrum	[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

Frequency / Voltage Control Setup Screen

AUTO DETECT DIMM/PCI CLK:

This item allows you to enable or disable auto detect DIMM/PCI Clock.

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

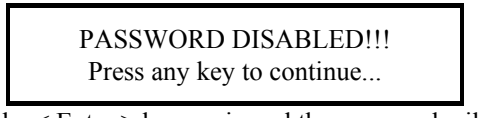
When you select this function, the following message will appear at the center of the screen to assist you in creating a password.

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

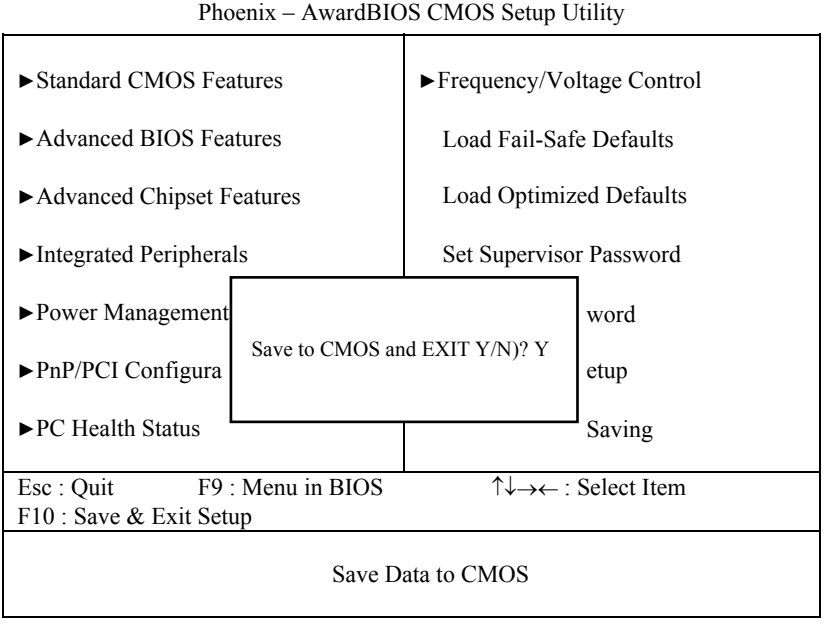
To disable the password, select this function (do not enter any key when you are prompt to enter a password), and press the <Enter> key and a message will appear at the center of the screen:



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

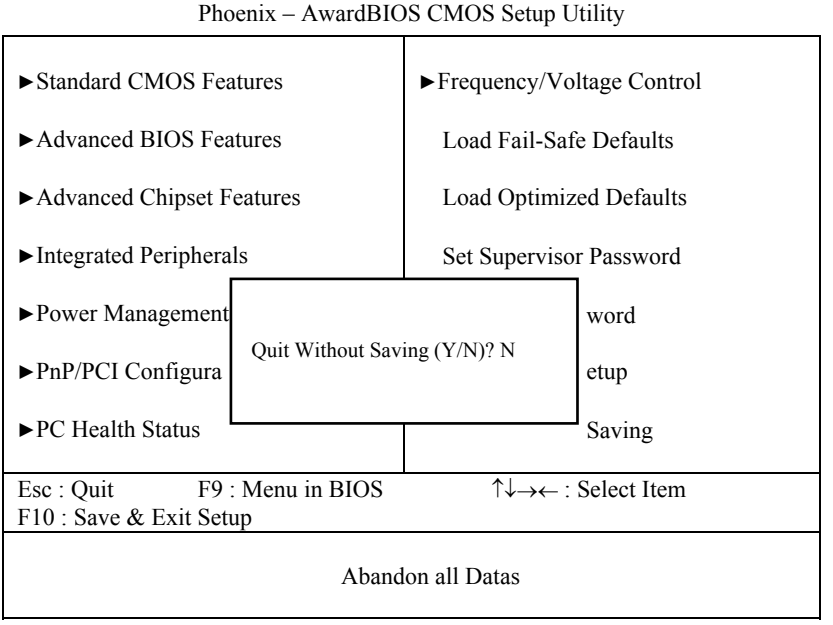
After you have completed adjusting all the settings as required, you must remember to save these setting into the CMOS RAM. To save the settings, select "SAVE & EXIT SETUP" and press <Enter>, a display will be shown as follows:



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.

4-14. 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

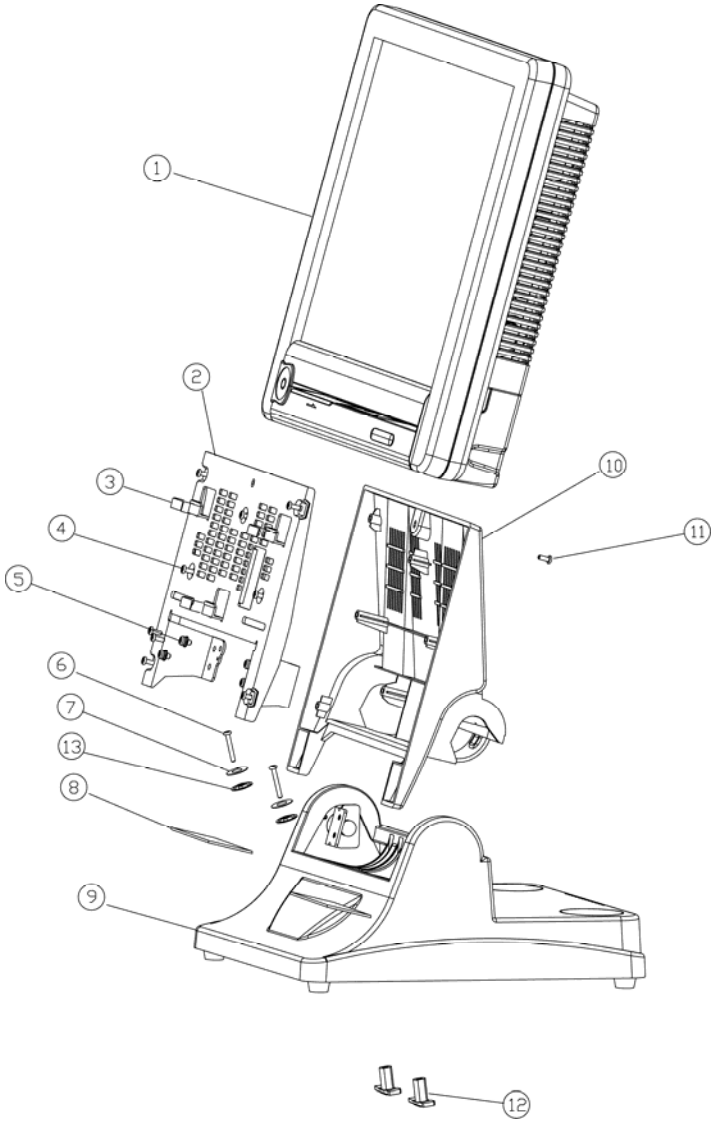
A

This appendix contains exploded diagram of the system.

Section includes:

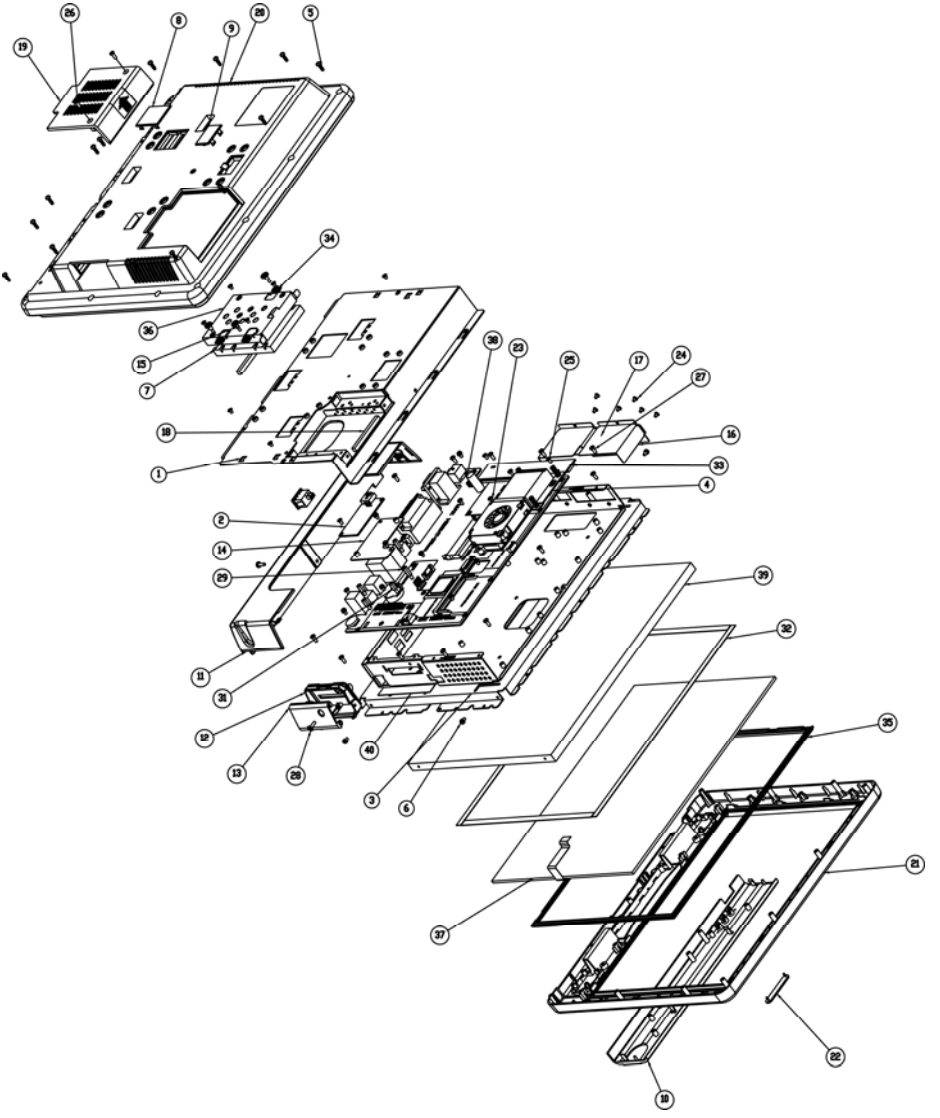
- Exploded Diagram for PS6508-POS Whole System Unit
- Exploded Diagram for Front Panel
- Exploded Diagram for PS6508-POS Stand
- Exploded Diagram for PS6508-MIT Rear Part

EXPLODED DIAGRAM FOR PS6508-POS WHOLE SYSTEM UNIT



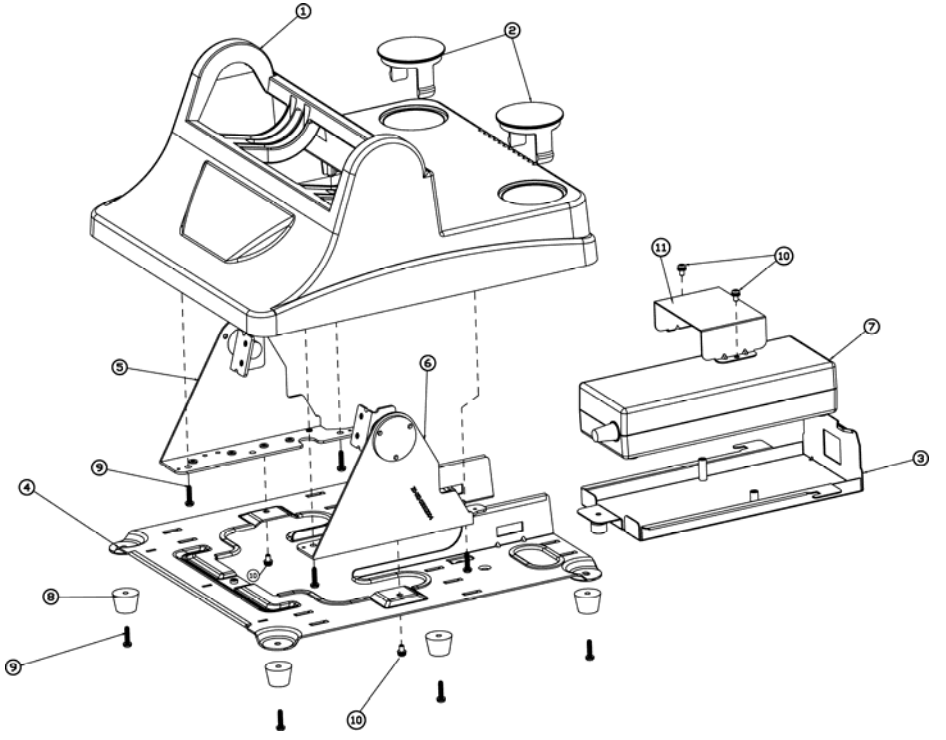
13	WASHER	23-605-58040161	2
12	SLIP BLOCK	30-061-02100012	2
11	SCREW	22-275-30010011(22-2753010120)	1
10	ROTATE (BLACK)	30-001-08200010	1
9	STAND	STAND ASSY	1
8	ROTATE PAD (BLACK)	30-013-24200010	2
7	WASHER	23-312-40010121	2
6	SCREW	22-232-40025011	2
5	SCREW	22-234-40008211	4
4	SCREW	22-122-40008011	9
3	ROTATE BRACKET PAD	30-013-24100010	3
2	ROTATE BRACKET	20-006-03004010	1
1	PANEL	PANEL ASSY	1
	Name	Part no.	Q'TY

EXPLODED DIAGRAM FOR FRONT PANEL



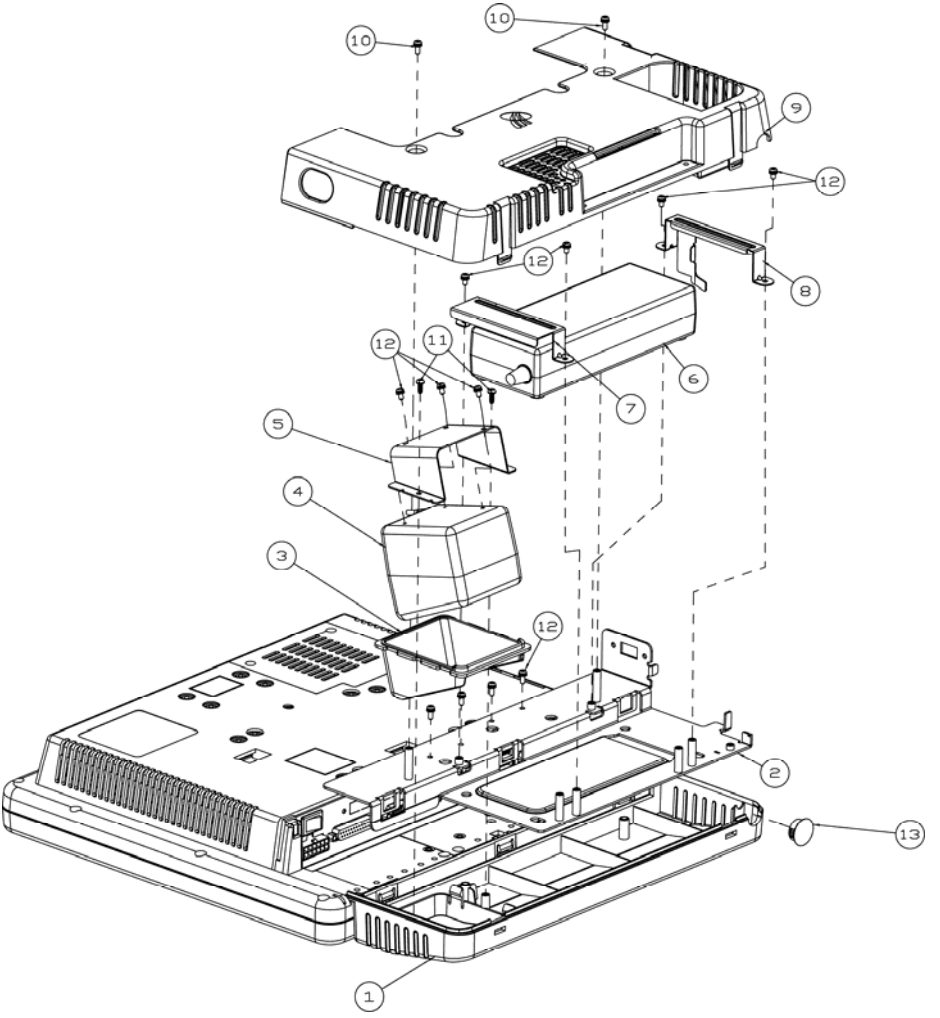
NO.	Component Name	Part No.	Q'ty	Remark
1	6508_CHASSIS_UP_ASM	20-015-03002086	1	
2	CONTROL_BOARD_ASM	52-370-01700004	1	
3	LCD_HOLDER_ASM	22-015-03101128	1	
4	THERMO_MODULE	21-008-22372001	1	
5	SCREW	22-145-30010011	14	Torque: 3~4 Kgf-cm
6	SCREW	22-232-30060211	12	Torque: 6~7 Kgf-cm
7	2INCH_HDD	52-451-30020105	1	
8	BACK_COVER_S	30-002-08100010	1	
9	BACK_COVER_S2	30-002-02800010	1	
10	C_D_COVER	30-002-08910091	1	
11	CABLE_COVER	30-002-08500010	1	
12	CF_BASE	30-027-08100010	1	
13	CF_COVER	30-002-08600010	1	
14	CONTROL_BRACKET_ASM	20-006-03001128	1	
15	CUSHION_SCREW_L	22-272-25011011	3	Torque: 2.5 Kgf-cm
16	FAN_BRACKET	20-006-03002010	1	
17	FAN_BRACKET_B	20-006-03003010	1	
18	GASKET	20-028-00001010	2	
19	HDD_COVER	30-002-08520010	1	
20	ID2_PANEL_BACK	30-002-28110128	1	
21	ID2_PANEL_FRONT	30-002-08900010	1	
22	LENS	30-021-10200010	1	
23	SCREW	22-232-25006811	3	Torque: 2.5 Kgf-cm
24	SCREW	22-222-30004011	14	Torque: 2.5 Kgf-cm
25	SCREW	22-215-30060011	3	Torque: 2.5 Kgf-cm
26	SCREW	22-275-30008811	2	Torque: 2.5 Kgf-cm
27	SCREW	22-122-30080011	13	Torque: 3.0 Kgf-cm
28	SCREW	22-275-30010011	2	Torque: 3.0 Kgf-cm
29	NUT_M3	22-258-30012051	2	Torque: 2.5 Kgf-cm
30	NUT_M3	22-692-40048051	10	Torque: 2.5 Kgf-cm
31	NUT_M3	22-290-30009051	3	Torque: 2.5 Kgf-cm
32	PORON_PANEL	30-013-24100000	4	
33	INVERTER PCB	52-101-63000000	1	
34	R_CUSHION	23-680-39580963	3	
35	RUBBER_TOUCH_SCREEN	30-013-01100010	1	
36	S_HDD_BRACKET_E	20-006-02021010	1	
37	TURBOTOUCH	52-380-00791701	1	
38	MAIN_BOARD_6508	PROX6508LF/478P-POS-G1A	1	
39	PANEL	52-351-03650519	1	
40	PORON_92_13	30-036-24100004	1	

EXPLODED DIAGRAM FOR PS6508-POS STAND



11	Power adapter holder	20-029-03001128	1
10	M3 w/spring washer screw	22-232-30060211	4
9	D3xL12 tap screw	22-122-30012061	8
8	Foot pad	30-004-06100000	4
7	Power adapter	52-002-02861001	1
6	R-Hinge sub asm.	20-012-03002086	1
5	L-Hinge sub asm.	20-012-03001086	1
4	Stand bottom cover	20-032-03061086	1
3	Power adapter tray	20-054-03001128	1
2	Optional cover(B)	30-062-08110086	2
1	Stand top cover(B)	30-002-08110086	1
No	Description	P/N	Qt'y

EXPLODED DIAGRAM FOR PS6508-MIT REAR PART



13	30-067-04100012	Hloe plug (Pingood M-16)	1	Option
12	22-232-30060211	M3XP0.5 L=6 Round-head with washer and spring	11	Torque: 6~7 Kgf-cm
11	22-145-30010011	TP3 L=10 black	2	Torque: 3~4 Kgf-cm
10	22-232-30008211	M3XP0.5 L=8 Round-head with washer and spring	2	Torque: 4~5 Kgf-cm
9	30-002-38210010	Checker back cover	1	
8	20-029-03002128	Power holder B	1	
7	20-029-03003128	Power holder A	1	
6	52-002-02861001	120W Power adaptor	1	
5	20-006-03112010	Omni laser scanner bracket	1	Option
4	52-820-50000101	Omni laser scanner(Zebex)	1	Option
3	30-002-38410010	Omni laser scanner cover	1	Option
2	20-006-03113010	Checker base bracket	1	
1	30-002-38110010	Checker front cover	1	
ITEM	PART NUMBER	DESCRIPTION	Q'ty	Remark

TECHNICAL SUMMARY

APPENDIX

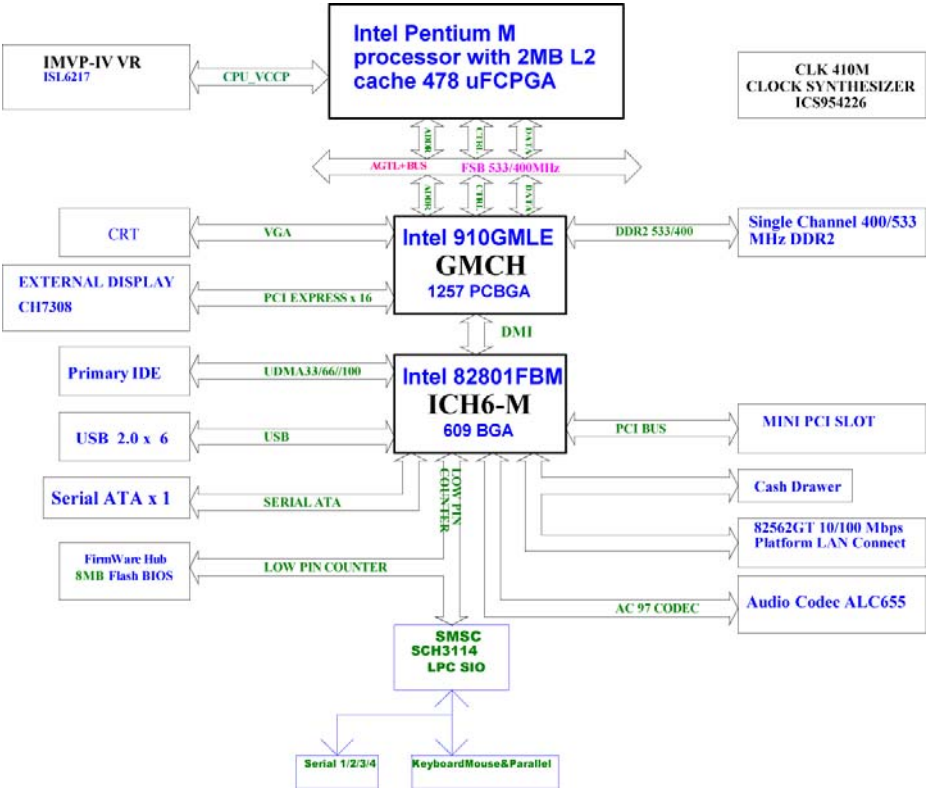
B

This section will give you a brief introduction of the maps.

Section includes:

- Block Diagram
- Interrupt Map
- RTC (Standard) RAM Bank
- Timer & DMA Channels Map
- I / O & Memory Map

BLOCK DIAGRAM



INTERRUPT MAP

IRQ	ASSIGNMENT
0	System TIMER interrupt from TIMER-0
1	Keyboard
2	Cascade for IRQ 8-15
3	Serial port 2
4	Serial port 1
5	SMBVS
6	Floppy disk
7	Parallel port 1
8	RTC Alarm clock
9	IRQ2 Redir
10	COM3
11	COM4
12	PS/2 Mouse
13	Coprocessor
14	IDE1
15	IDE2
16	USB Controller, VG
17	Audio
18	USB
19	USB
20	NIC
23	USB

RTC & CMOS RAM MAP

CODE	ASSIGNMENT
00	Seconds
01	Second alarm
02	Minutes
03	Minutes alarm
04	Hours
05	Hours alarm
06	Day of week
07	Day of month
08	Month
09	Year
0A	Status register A
0B	Status register B
0C	Status register C
0D	Status register D
0E	Diagnostic status byte
0F	Shutdown byte
10	Floppy Disk drive type byte
11	Reserve
12	Hard Disk type byte
13	Reserve
14	Equipment byte
15	Base memory low byte
16	Base memory high byte
17	Extension memory low byte
18	Extension memory high byte
30	Reserved for extension memory low byte
31	Reserved for extension memory high byte
32	Date Century byte
33	Information Flag
34-3F	Reserve
40-7f	Reserved for Chipset Setting Data

TIMER & DMA CHANNELS MAP

Timer Channel Map :

Timer Channel	Assignment
0	System timer interrupt
1	DRAM Refresh request
2	Speaker tone generator

DMA Channel Map :

DMA Channel	Assignment
0	Available
1	Available
2	Floppy
3	Available
4	Cascade for DMA controller 1
5	Available
6	Available
7	Available

I/O & MEMORY MAP

Memory Map :

MEMORY MAP	ASSIGNMENT
0000000-009FFFF	System memory used by DOS and application
00A0000-00BFFFF	Display buffer memory for VGA/ EGA / CGA / MONOCHROME adapter
00C0000-00DFFFF	Reserved for I/O device BIOS ROM or RAM buffer.
00E0000-00EFFFF	Reserved for PCI device ROM
00F0000-00FFFFF	System BIOS ROM
0100000-FFFFFFF	System extension memory

I/O Map :

I/O MAP	ASSIGNMENT
000-01F	DMA controller (Master)
020-021	Interrupt controller (Master)
022-023	Chipset controller registers I/O ports.
040-05F	Timer control regsiters.
060-06F	Keyboard interface controller (8042)
070-07F	RTC ports & CMOS I/O ports
080-09F	DMA register
0A0-0BF	Interrupt controller (Slave)
0C0-0DF	DMA controller (Slave)
0F0-0FF	Math coprocessor
1F0-1F8	Hard Disk controller
278-27F	Parallel port-2
2B0-2DF	Graphics adapter controller
2F8-2FF	Serial port-2
360-36F	Net work ports
378-37F	Parallel port-1
3B0-3BF	Monochrome & Printer adapter
3C0-3CF	EGA adapter
3D0-3DF	CGA adapter
3F0-3F7	Floppy disk controller
3F8-3FF	Serial port-1