# USER'S MANUAL

## POS-3152 Series

Mini POS System Powered by
Intel® Atom® Platform

**POS-3152 Series M2**

# *POS-3152 Series POS System*
## *With LCD / Touchscreen*

# *PREFACE*

### 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.

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## CHAPTER 2 SYSTEM CONFIGURATION

## CHAPTER 3 SOFTWARE UTILITIES



## CHAPTER 4 AMI BIOS SETUP



## APPENDIX A SYSTEM ASSEMBLY

## APPENDIX B TECHNICAL SUMMARY



## APPENDIX C QUICK MANUAL

# *INTRODUCTION*

*CHAPTER*

***1***

This chapter gives you the information for the POS-3152. 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 POS-3152 Series System. The POS-3152 is an updated system designed to be comparable with the highest performance of IBM AT personal computers. The POS-3152 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 three 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 AMI 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 POS-3152.

***Appendix B Technical Summary***

This appendix gives you the information about the allocation maps for the system resources, Watchdog Timer Configuration, and Flash BIOS Update.

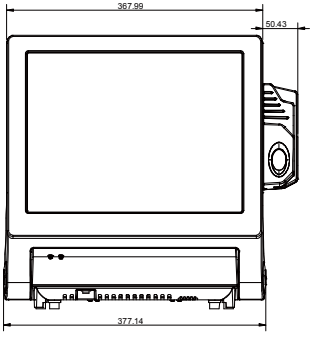
***Appendix C Quick Manual***

This appendix gives you the information about the assembly procedures of Advertisement Board and the 2nd Display.

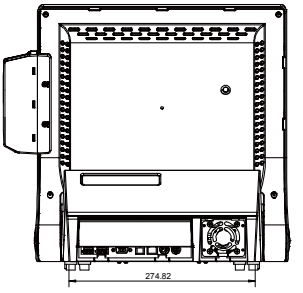
## 1-2. POS SYSTEM ILLUSTRATION

**POS-3152 80 degree**

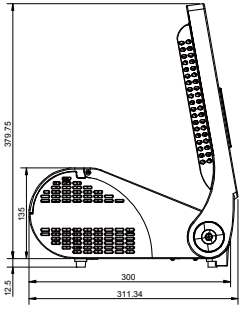
### Front View

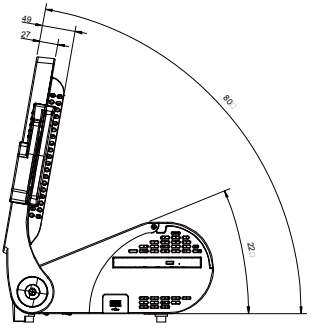



### Rear View

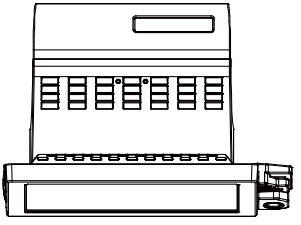



### Side View

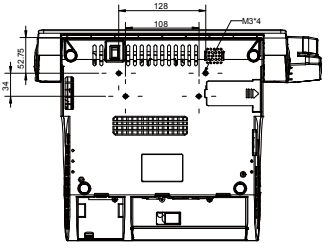


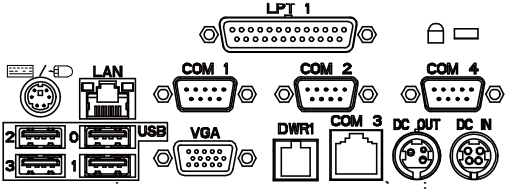

### Top View



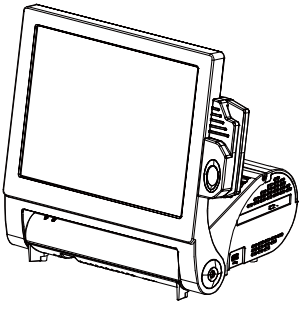
### Bottom View

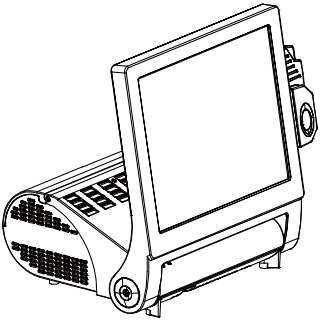


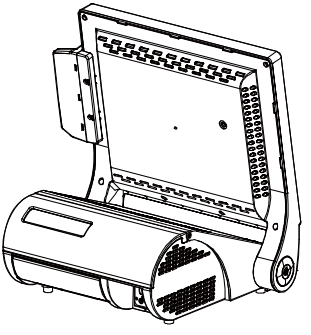
## I/O View

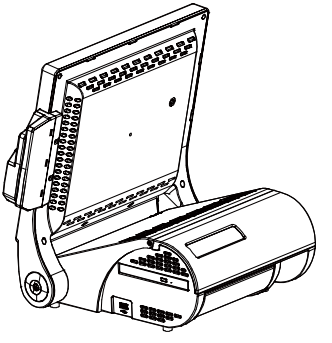



## Quarter View



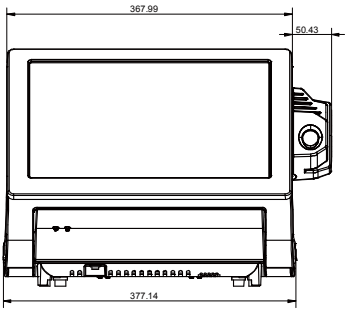




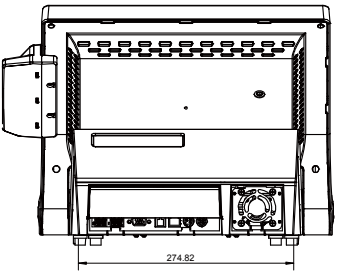


**POS-3152 40 degree**

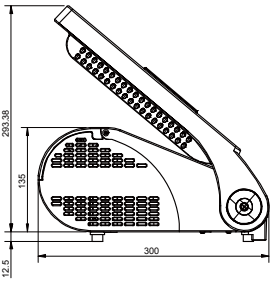
## Front View

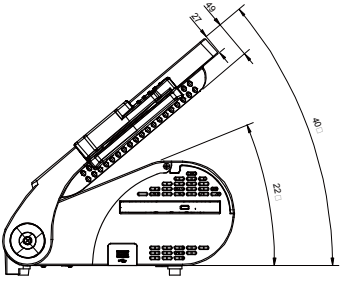



## Rear View

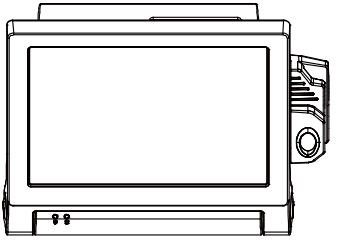



## Side View

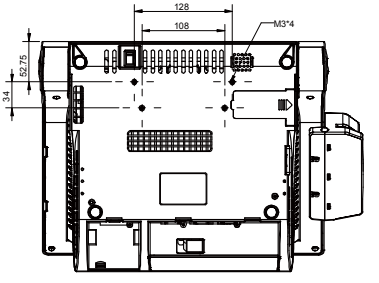


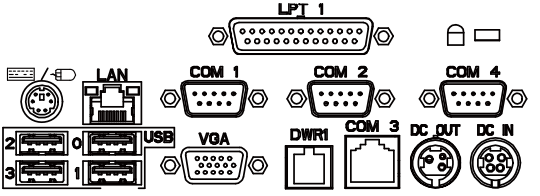

## Top View



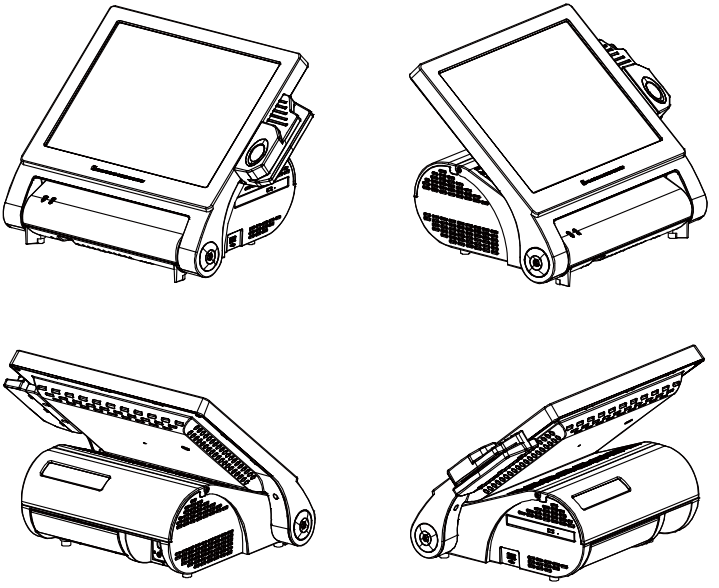
## Bottom View



## I/O View




## Quarter View



# 1-3. SYSTEM SPECIFICATIONS

## MAINBOARD (PROX-A3152LF-D525)

- **CPU Type (with North Bridge):**
  Intel® ATOM Pineview D525

- **Chipset:**
  Intel® ICH8M

- **Memory:**
  One 204-pin DDRIII SO-DIMM socket on board, up to 4GB

- **Cache:**
  Depended on CPU

- **Real-Time Clock / Calendar:**
  Embedded in Intel® ICH8M South Bridge

- **BIOS:**
  AMI SPI BIOS
  8Mbits with VGA BIOS

- **Keyboard & Mouse Connector:**
  PS/2 Keyboard, combined 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 1~4)

- **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):**
  368mm x 291mm x 301mm (angle: 40 degrees)

- **System Weight:**
  8.3 kg (without DVD inside)

- **LCD Panel:**

| | |
|---|---|
| **Type** | XGA |
| **Max. Resolution** | 1024 x 768 |
| **Size/Type** | 15" / TFT |
| **Viewing Angel (degree)** | 0~65 degrees |
| **Pixel Pitch** | 0.297(H) x 0.297(V) |
| **Brightness** | 250 cd / $m^2$ |
| **Signal Interface (bit)** | TTL (24-bit) |

- **Touch Panel:**
  15" 5wire Analog resistive

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

- **MSR / Fingerprint (Optional):**
  External vertical module, MSR, Read only, ISO Tracker 1+2+3 (PS/2 KB Interface) + Fingerprint (USB Interface)

- **MSR / i-Button / RFID (Optional):**
  External vertical module, MSR, Read only, JIS-I or II, ISO Tracker 1+2+3; i-Button, Read only; RFID, Read / Write, ISO 14443A 13.56MHz (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 POS-3152 on a sturdy, level surface. Be sure to allow enough space around the system to have easy access needs.

b. Avoid installing your POS-3152 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 POS-3152 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 POS-3152 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.

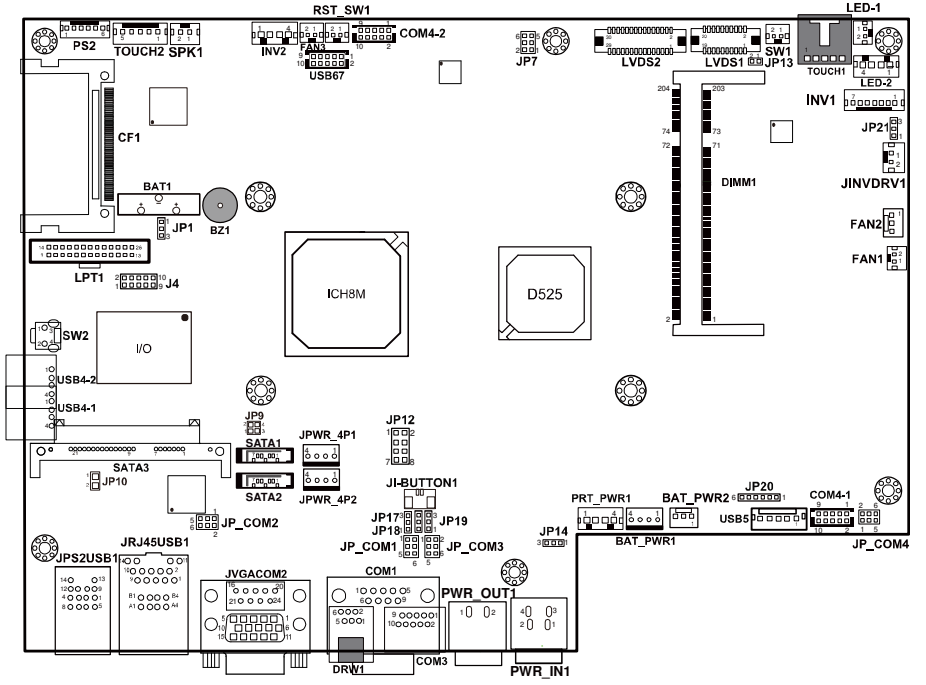
Sections included:

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

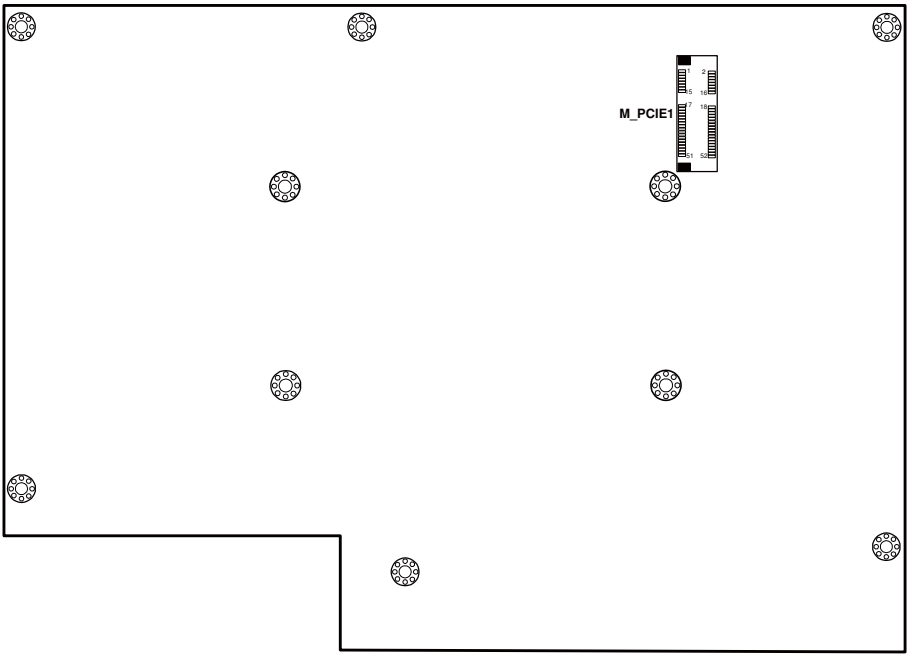
# 2-1. JUMPER & CONNECTOR QUICK REFERENCE TABLE

# 2-2. COMPONENT LOCATIONS

M/B: PROX-A3152LF-G1A




**POS-3152 Mainboard Front Connector, Jumper and Component locations**



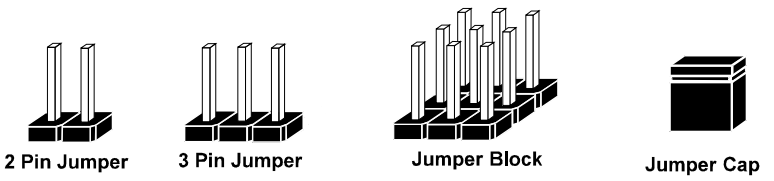

**POS-3152 Mainboard Rear Connector, Jumper and Component locations**

## 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

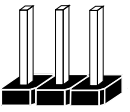



If a jumper has three pins for example, labelled PIN1, PIN2, and PIN3. You can connect PIN1 & PIN2 to create one setting and shorting. You can either connect PIN2 & PIN3 to create another setting. The same jumper diagrams are applied all through this manual. The figure below shows what the manual diagrams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

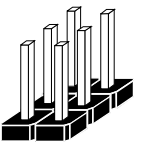
## JUMPER DIAGRAMS

Jumper Cap looks like this

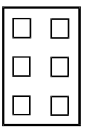
2 pin Jumper looks like this



3 pin Jumper looks like this

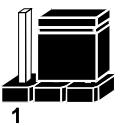


Jumper Block looks like this



## JUMPER SETTINGS

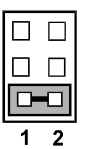

2 pin Jumper closed(enabled)
looks like this


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



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

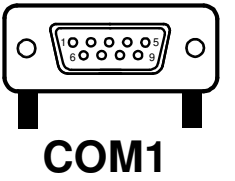


## 2-4. COM PORT CONNECTOR

There are four COM ports enhanced in this board namely: COM1, COM3, COM4 and JVGACOM2.

**Caution:** When using a 72W power adaptor, do not set the voltage at "12V" for three COM ports or above; otherwise, the system may shut down due to power deficiency.

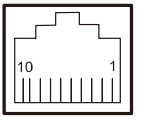
**COM1:** COM1 Connector
The pin assignments are as follows:




**COM1**

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

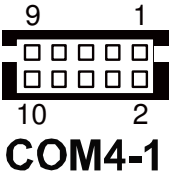
**COM3:** COM3 Connector
The pin assignments are as follows:




**COM3**

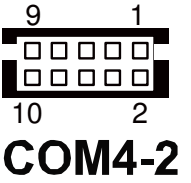
| PIN | ASSIGNMENT |
|---|---|
| 1 | DCD3 |
| 2 | RXD3 |
| 3 | TXD3 |
| 4 | DTR3 |
| 5 | GND |
| 6 | DSR3 |
| 7 | RTS3 |
| 8 | CTS3 |
| 9 | RI / +5V / +12V selectable |
| 10 | NC |

**COM4:** COM4-1 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 / +12V selectable |
| 10 | NC |

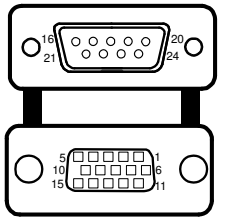
**COM4:** COM4-2 Connector
The pin assignments are as follows:




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

**JVGACOM2:** COM2 & 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 | DCD2 |
| 17 | RXD2 |
| 18 | TXD2 |
| 19 | DTR2 |
| 20 | GND |
| 21 | DSR2 |
| 22 | RTS2 |
| 23 | CTS2 |
| 24 | RI / +5V / +12V selectable |

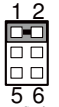
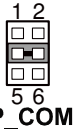
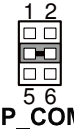
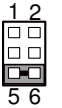
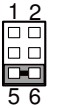



**JVGACOM2**

🕮 All COM port is 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, JP_COM4:**
COM Port RI & Voltage Selection
The selections are as follows:

| SELECTION | JUMPER SETTINGS | JUMPER ILLUSTRATION | | | |
|---|---|---|---|---|---|
| RI | 1-2 |  **JP_COM1** (default) |  **JP_COM2** (default) |  **JP_COM3** (default) |  **JP_COM4** |
| VCC12 | 3-4 |  **JP_COM1** |  **JP_COM2** |  **JP_COM3** |  **JP_COM4** (default) |
| VCC | 5-6 |  **JP_COM1** |  **JP_COM2** |  **JP_COM3** |  **JP_COM4** |

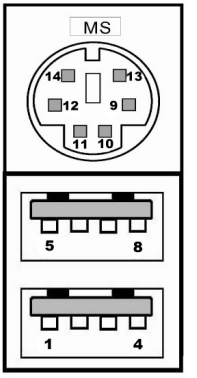
*** The "JP_COM1" jumper controls the COM2 voltage, and the "JP_COM2" jumper controls the COM1 voltage.

**Caution:** When using a 72W power adaptor, do not set the voltage at "12V" for three COM ports or above; otherwise, the system may shut down due to power deficiency.

## 2-6. MINI-DIM AND USB CONNECTOR

**JPS2USB1:** Two USB Ports Connector and MINI-DIM
MINI-DIN connector can support keyboard, Y-cable or PS/2 mouse.
The pin assignments are as follows:

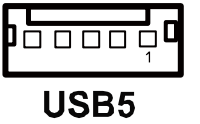
| PIN | ASSIGNMENT |
|---|---|
| 1 | GND |
| 2 | USB2+ |
| 3 | USB2- |
| 4 | VCC5 |
| 5 | GND |
| 6 | USB3+ |
| 7 | USB3- |
| 8 | VCC5 |
| 9 | GND |
| 10 | KDAT |
| 11 | MDAT |
| 12 | V5SB |
| 13 | KCLK |
| 14 | MCLK |



**USB4-1, USB4-2:** Two USB Ports Connector
The pin assignments are as follows:

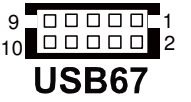
| PIN | ASSIGNMENT |
|---|---|
| 1 | VCC5 |
| 2 | USB4- |
| 3 | USB4+ |
| 4 | GND |

**USB5:** Internal USB Ports Connector
The pin assignments are as follows:




| PIN | ASSIGNMENT |
|---|---|
| 1 | USB5- |
| 2 | USB5+ |
| 3 | GND |
| 4 | VCC5 |
| 5 | GND |

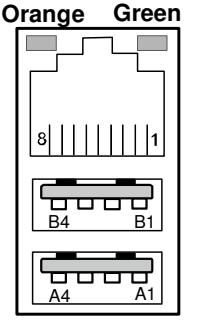
**USB6, USB7:** Internal USB Ports Connector
The pin assignments are as follows:




| PIN | ASSIGNMENT |
|---|---|
| 1 | VCC5 |
| 2 | VCC5 |
| 3 | USB6- |
| 4 | USB7- |
| 5 | USB6+ |
| 6 | USB7+ |
| 7 | GND |
| 8 | GND |
| 9 | GND |
| 10 | GND |

## 2-7. LAN & USB Connector

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



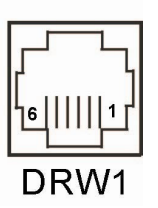

**JRJ45USB1**

| 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 |

## 2-8. 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 |

### Cash drawer control in GPIO port

**To Open Drawer 1 (GPIO 7)**
Write "0" to I/O space register "50C"h Bit 7
**To Close Drawer1**
Write "1" to I/O space register "50C"h Bit 7

**Detect Drawer1 Status**
Read I/O space register "50E"h (GPIO 20)
Definition (bit4)

## 2-9. CASH DRAWER POWER SELECTION

**JP14:** Cash Drawer Power Selection
The pin assignments are as follows:

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

*** Manufactory default – +12V

## 2-10. BACKLIGHT TYPE SELECTION

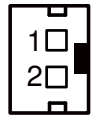
**JP21:** Backlight Type Selection
The pin assignments are as follows:

| SELECTION | JUMPER SETTINGS | JUMPER LUSTRATION |
|---|---|---|
| CCFL Backlight (default) | 2-3 |  |
| LED Backlight | 1-2 |  |

## 2-11 POWER LED AND HDD LED CONNECTOR

**LED-1:** LED Connector
The pin assignments are as follows:

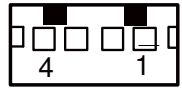
| PIN | ASSIGNMENT |
|---|---|
| 1 | GND |
| 2 | VCC_PWR_LED |



LED-1

**LED-2:** LED Connector
The pin assignments are as follows:

| PIN | ASSIGNMENT |
|---|---|
| 1 | VCC |
| 2 | VCC_PWR_LED |
| 3 | PWRLED |
| 4 | VCC |

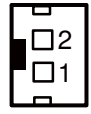


LED-2

## 2-12. FAN CONNECTOR

**FAN1:** Fan Connector.
The pin assignments are as follows:

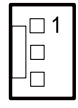
| PIN | ASSIGNMENT |
|---|---|
| 1 | VCC12 |
| 2 | GND |



FAN1

**FAN2:** Fan Connector.
The pin assignments are as follows:

| PIN | ASSIGNMENT |
|---|---|
| 1 | GND |
| 2 | 12V |
| 3 | CPUFANIN |

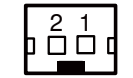


FAN2

## 2-13. RESET SWITCH CONNECTOR

**RST_SW1:** Power Reset Switch Connector
The pin assignments are as follows:

| PIN | ASSIGNMENT |
|---|---|
| 1 | RST_SW |
| 2 | GND |

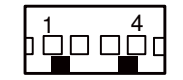


RST_SW1

## 2-14. POWER FOR THERMAL PRINTER CONNECTOR

**PRT_PWR1:** Power for Thermal printer Connector
The pin assignments are as follows:

| PIN | ASSIGNMENT |
|---|---|
| 1 | VCC24SB |
| 2 | VCC24SB |
| 3 | GND |
| 4 | GND |



PRT_PWR1

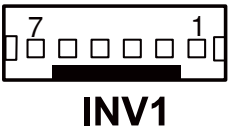
## 2-15. EXTERNAL SPEAKER CONNECTOR

**SPK1:** External Speaker Connector
The pin assignments are as follows:

| PIN | ASSIGNMENT |
|---|---|
| 1 | SPK_GND |
| 2 | SPK_OUT |

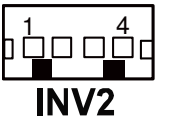
## 2-16. INVERTER CONNECTOR

**INV1:** 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 |

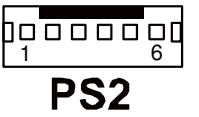
**INV2:** Inverter Connector
The pin assignments are as follows:




| PIN | ASSIGNMENT |
|---|---|
| 1 | +12V |
| 2 | GND |
| 3 | LVDS_BKLTEN |
| 4 | BRCTR |

## 2-17. MSR/ CARD READER CONNECTOR

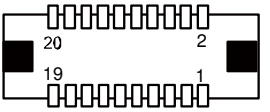
**PS2:** MSR/ Card Reader Connector
The pin assignments are as follows:




| 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

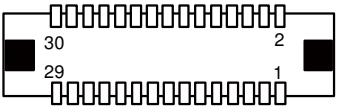
**LVDS1:** LVDS connector
The pin assignments are as follows:




**LVDS1**

| 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 |

**LVDS2:** LVDS Connector.
The pin assignments are as follows:

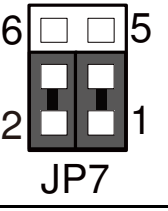
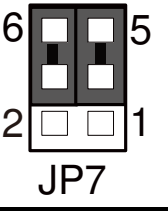



**LVDS2**

| PIN | ASSIGNMENT | PIN | ASSIGNMENT |
|---|---|---|---|
| 1 | LVDS_VCC | 2 | GND |
| 3 | NC | 4 | NC |
| 5 | GND | 6 | NC |
| 7 | NC | 8 | GND |
| 9 | NC | 10 | NC |
| 11 | NC | 12 | NC |
| 13 | NC | 14 | NC |
| 15 | GND | 16 | CLKO+ |
| 17 | CLKO- | 18 | GND |
| 19 | RINO2+ | 20 | RINO2- |
| 21 | GND | 22 | RINO1+ |
| 23 | RINO1- | 24 | GND |
| 25 | RINO0+ | 26 | RINO0- |
| 27 | NC | 28 | NC |
| 29 | LVDS_VCC | 30 | LVDS_VCC |

## 2-19 LVDS VOLTAGE SELECTION

**JP7:** LVDS voltage selection.
The pin assignments are as follows:

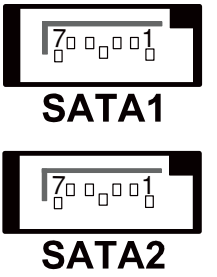
| SELECTION | JUMPER SETTINGS | JUMPER ILLUSTRATION |
|---|---|---|
| 3.3V (default) | 1-3<br>2-4 |  |
| 5V | 3-5<br>4-6 |  |

*** Manufactory default – 3.3V

## 2-20. SATA CONNECTOR

**SATA1, SATA2:** Serial ATA Connector
The pin assignments are as follows:

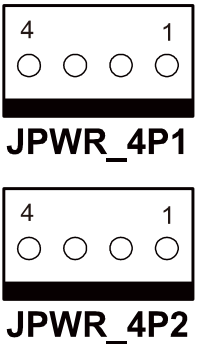
| PIN | ASSIGNMENT |
|---|---|
| 1 | G1 |
| 2 | TX+ |
| 3 | TX- |
| 4 | G2 |
| 5 | RX- |
| 6 | RX+ |
| 7 | G3 |




## 2-21. SATA POWER CONNECTOR

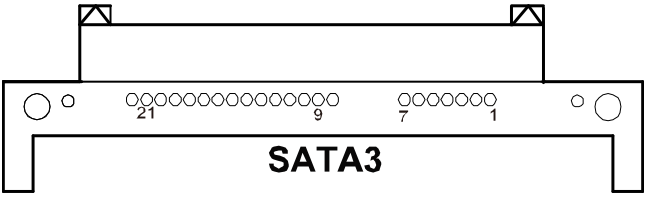
**JPWR_4P1, JPWR_4P2:** Serial ATA Connector
The pin assignments are as follows:

| PIN | ASSIGNMENT |
|---|---|
| 1 | VCC |
| 2 | GND |
| 3 | GND |
| 4 | VCC12 |



## 2-22. SATA CONNECTOR

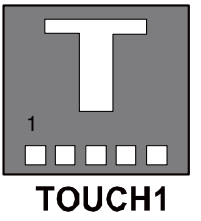
**SATA3:** Serial ATA and Serial ATA Power Connector
The pin assignments are as follows:




| PIN | ASSIGNMENT |
|---|---|
| 1 | G1 |
| 2 | TX+ |
| 3 | TX- |
| 4 | G2 |
| 5 | RX- |
| 6 | RX+ |
| 7 | G3 |
| 8 | N/A |
| 9 | N/A |
| 10 | N/A |
| 11 | GND |
| 12 | GND |
| 13 | GND |
| 14 | VCC5 |
| 15 | VCC5 |
| 16 | VCC5 |
| 17 | GND |
| 18 | N/A |
| 19 | GND |
| 20 | VCC12 |
| 21 | VCC12 |
| 22 | VCC12 |

## 2-23. TOUCH PANEL CONNECTOR

**TOUCH1:** 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) |

**TOUCH2:** 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) |

## 2-24. 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 (default) | 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.

## 2-25. COMPACT FLASH CONNECTOR

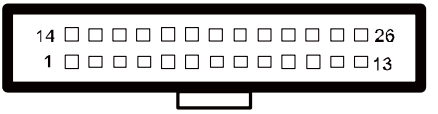
**CF1:** Compact Flash Connector
The pin assignments are as follows:

| 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 |

## 2-26. PRINTER CONNECTOR

**LPT1:** Printer Connector

The pin assignments are as follows:

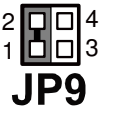



**LPT1**

| 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 | 26 | NC |

## 2-27. WATCH DOG FUNCTION SELECTION

**JP9:** Watch Dog Function Selection.
The pin assignments are as follows:

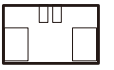
| SELECTION | JUMPER SETTINGS | JUMPER ILLUSTRATION |
|---|---|---|
| Reset (default) | 1-2 |  JP9 |
| NMI | 3-4 |  JP9 |

***Manufacturing Default – Reset

## 2-28. I-Button CONNECTOR

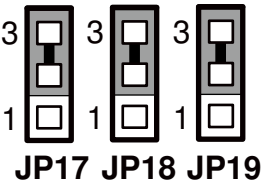
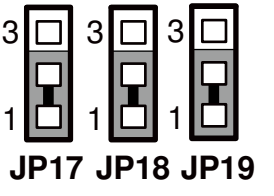
**JI-BUTTON1:** I-Button Connector
The pin assignments are as follows:

| PIN | ASSIGNMENT |
|---|---|
| 1 | COM2_DTR_R_I |
| 2 | COM2_RXD_R_I |


JI-BUTTON1

## 2-29. I-BUTTON FUNCTION SELECTION

**JP17, JP18, JP19:** I-Button Function Selection
The pin assignments are as follows:

| SELECTION | JUMPER SETTINGS | JUMPER ILLUSTRATION |
|---|---|---|
| I-Button | 2-3 |  |
| COM 4 (default) | 1-2 |  |

***Manufacturing Default – COM4

# *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 POS-3152 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<br>or<br>D:\Driver\Plaform\Win7,POSReady7(32-bit)\Main Chip | Intel® Chipset Software Installation Utility |
| D:\Driver\Plaform\XP,POSReady2009 (32-bit)\VGA<br>or<br>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<br>or<br>D:\Driver\Plaform\Win7,POSReady7(32-bit)\LAN | Realtek® 8111DL for LAN Driver installation |
| D:\Driver\Plaform\XP,POSReady2009 (32-bit)\Sound<br>or<br>D:\Driver\Plaform\Win7,POSReady7(32-bit)\Sound | Realtek® ALC888 for Sound 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.

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

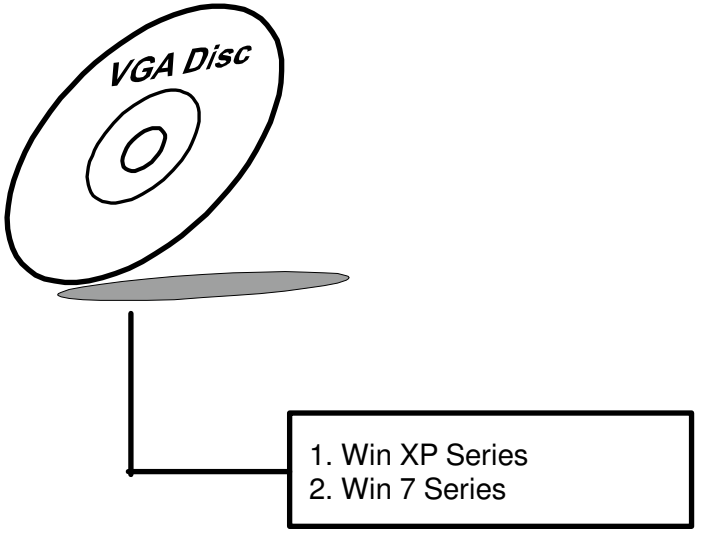
## 3-2-2. Installation of Intel® Chipset Driver

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 POS-3152 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 POS-3152 for the changes to take effect.

## 3-3. VGA DRIVER UTILITY

The VGA interface embedded with the POS-3152 series can support a wide range of display types. You can have dual displays via CRT and LVDS interfaces work simultaneously.



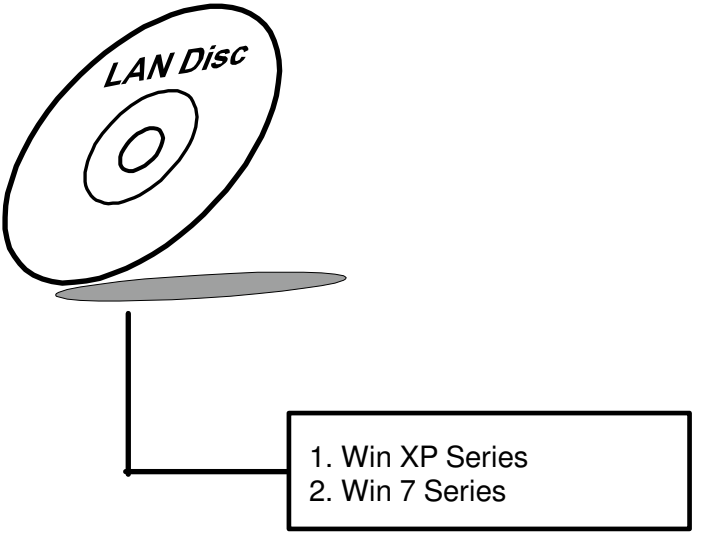

### 3-3-1. Installation of VGA Driver

To install the VGA Driver, follow the steps below:

1. Connect the USB-CD ROM device to the POS-3152 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 POS-3152 for the changes to take effect.

## 3-4. LAN DRIVER UTILITY

The POS-3152 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.**

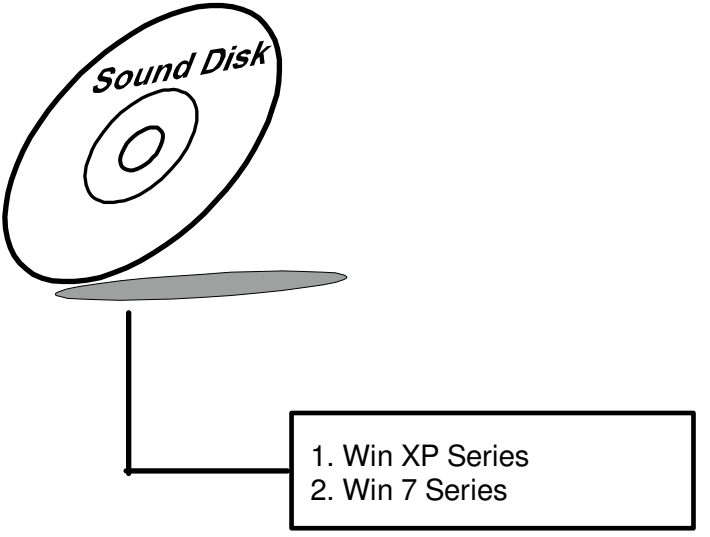
### 3-4-1. Installation of LAN Driver

To install the LAN Driver, follow the steps below:

1. Connect the USB-CD ROM device to the POS-3152 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 POS-3152 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.



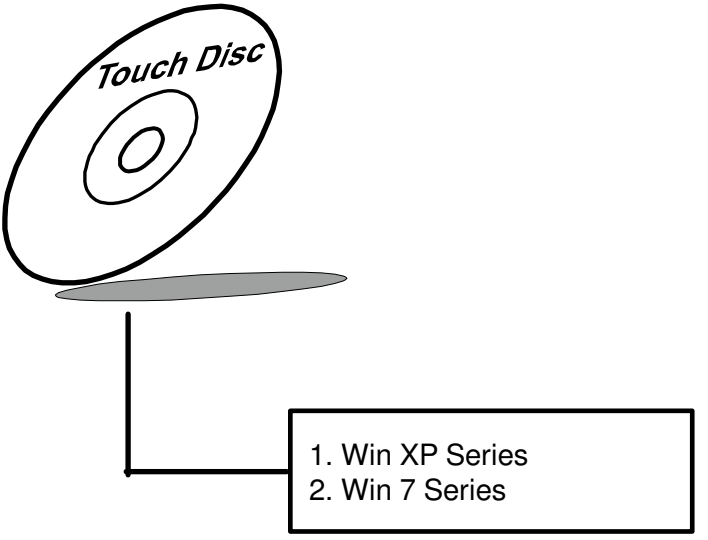

### 3-5-1. Installation of Sound Driver

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 POS-3152 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 POS-3152 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.



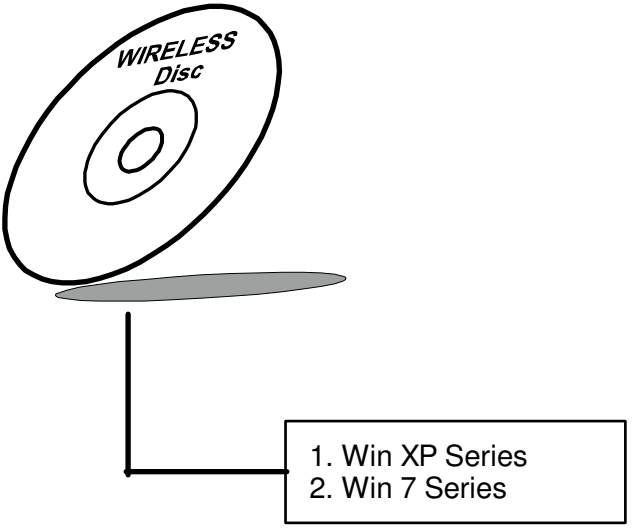

### 3-6-1. Installation of Touchscreen Driver

To install the Touchscreen Driver, follow the steps below:

1. Connect the USB-CD ROM device to the POS-3152 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 POS-3152 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 POS-3152 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 POS-3152 for the changes to take effect.

CHAPTER

4

# AMI BIOS SETUP

This chapter shows how to configure the AMI BIOS settings.

Sections included:

- Introduction
- Entering Setup
- Main
- Advanced
- Boot
- Security
- Chipset
- Exit

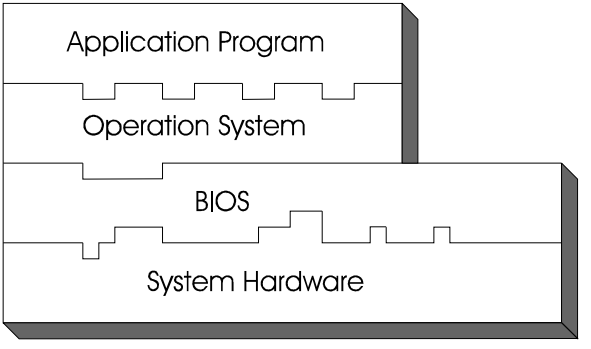
# 4-1. INTRODUCTION

This chapter will illustrate functions of the BIOS (Basic Input/Output System) in managing features of your system. The **A3152LF** motherboard is equipped with the BIOS from AMI (American Megatrends Inc). Following pages describe how to use the BIOS in order to configure system hardware by BIOS setup menu.

When the PC starts up, its first job for the BIOS is to initialize and identify all system devices such as video display card, keyboard and mouse, hard disk, CD/DVD drive and other hardware. The BIOS then locates operating system(s) saved on storage device (designated as a 'boot device'), be it a hard disk, USB flash disk or a CD/DVD, and loads and executes that operating system, giving it control over the PC.

BIOS code is stored on a non-volatile ROM chip built into the system and the BIOS software is specifically designed to work with the particular type of system in question. That includes having understanding of principles for each device included in the PC.. BIOS also provides an user interface -- in this document refferet to as setup menu -- in a form of a menu system accessed by pressing a certain key on the keyboard when the PC starts. In the BIOS setup menu, user can configure hardware, set the system clock, enable or disable system components, and most importantly, select which devices are eligible to be a potential boot device. It is also possible to set various password prompts, for instance a password for securing access to the BIOS setup menu functions itself and preventing unauthorized users from booting undesirable operating systems from peripheral devices.

Following diagram illustrates the relationships between system hardware, BIOS, operating system and application program:

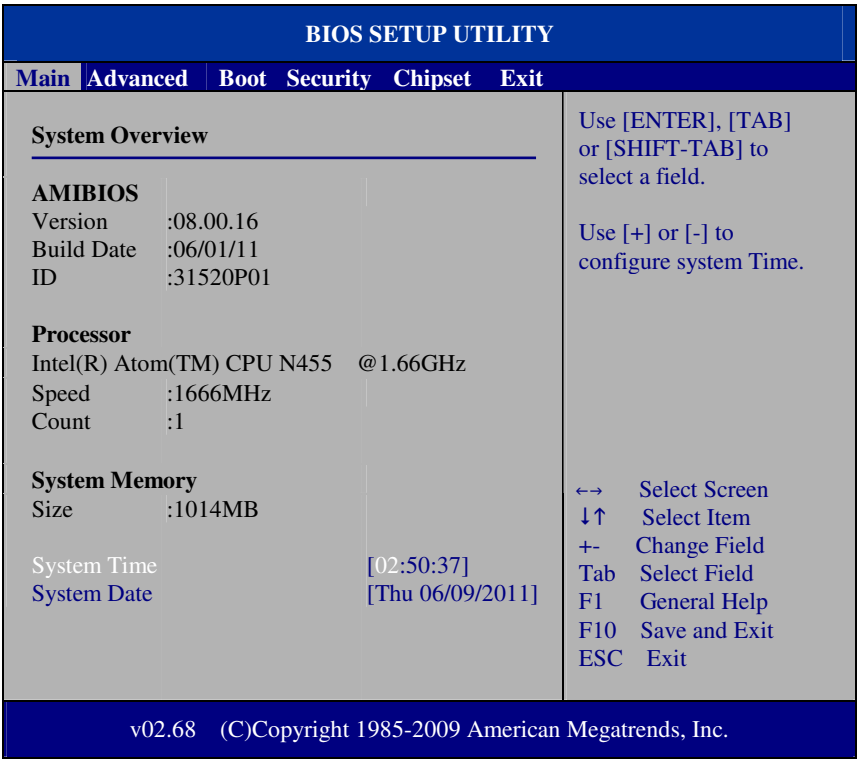


## 4-2 ENTERING SETUP

When system is powered on, BIOS will enter the Power-On Self Test (POST) routine and it displays screen as shown bellow:


**POST Screen**

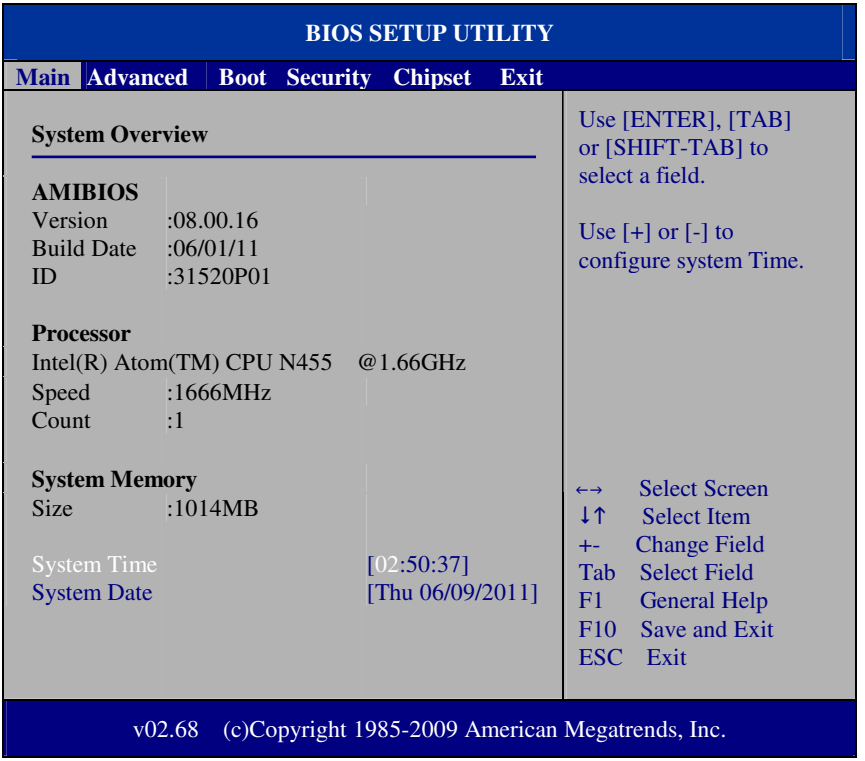
As long as this screen is displayed you may press the <Del> key (the one sharing decimal point at the bottom of the number keypad) to enter the BIOS setup menu. In a moment, the main menu of the AMI BIOS Setup Utility will be shown on the screen:




**Setup program initial screen**

You may move the cursor by 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 right side of the screen.

## 4-3. Main




**Main Screen**

Use < ↑ > or < ↓ > arrow keys to highlight the item and key in the value you want in each item. This menu provides basic system configurations, such as time and date.

### AMI BIOS, Processor, System Memory

This items shows the BIOS version, BIOS build date, processor and system memory information of your system.

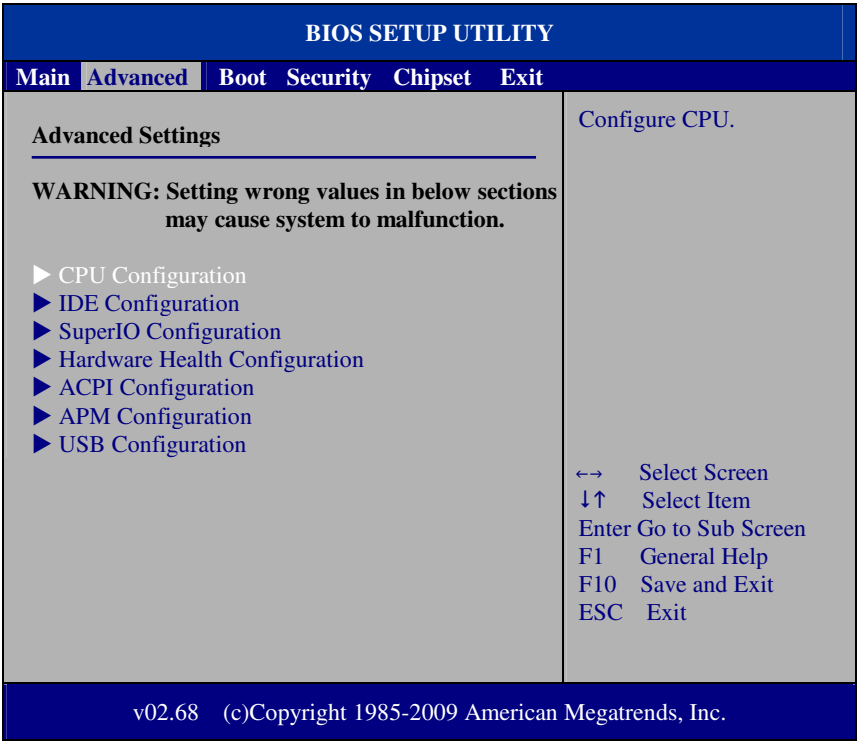
### System Time

This setting allows you to set the system time. The format is [Hour: Minute: Second]. User can directly key-in value or use <+> or <-> arrow keys to increase/decrease it.

### System Date

This setting allows you to set the system date. The format is [Day: Month: Date: Year]. User can directly key-in value or use <+> or <-> arrow keys to set each value.

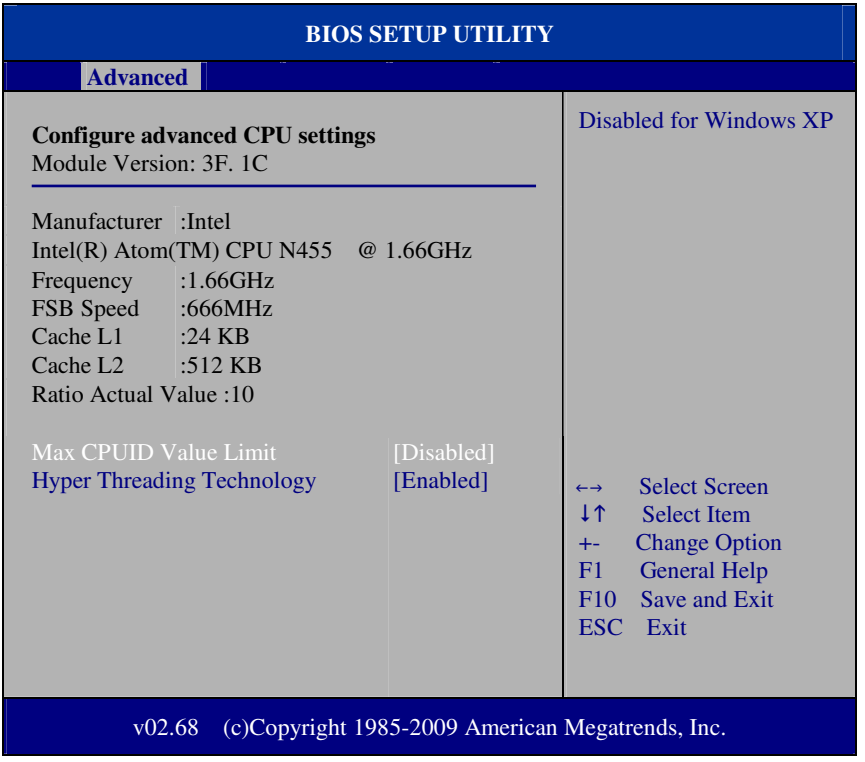
## 4-4. Advanced




**Advanced Screen**

This menu provides advanced configurations items such as CPU Configuration, IDE Configuration, SuperIO Configuration, etc.

### 4-4.1. CPU Configuration




**CPU Configuration Screen**

This menu provides advanced CPU settings and certian information about CPU.

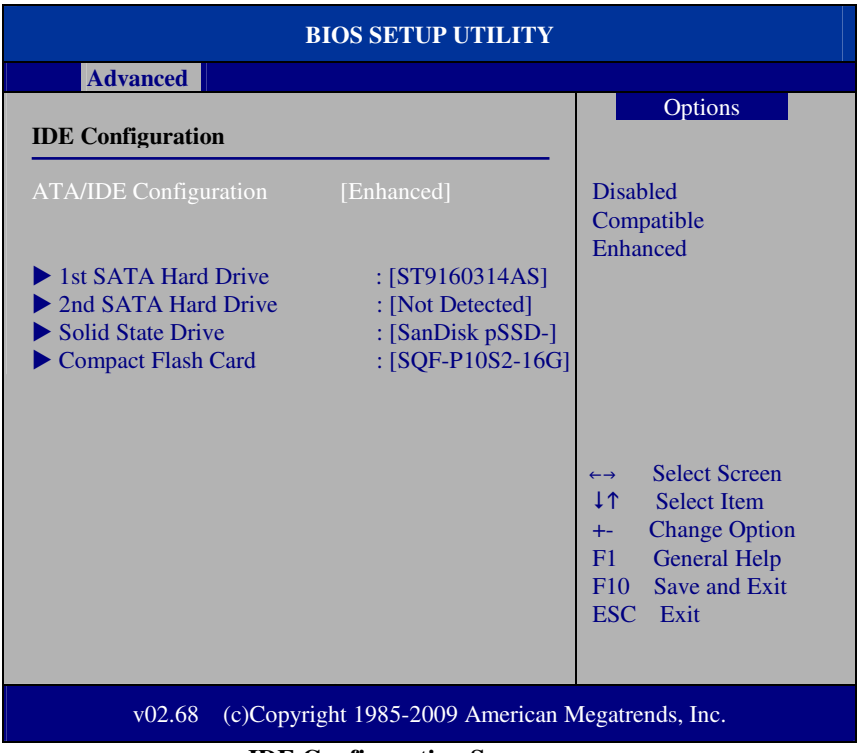
#### Hyper Threading Technology

Hyper Threading is Intel's term for its simultaneous multithreading implementation in their CPUs. When enabled this function will improve parallelization of computation performed on PC microprocessor. For each processor core that is physically present, the operation system addresses two virtual processors, and shares the workload between them when possible.

### Max CPUID Value Limit

Setting this item to [Enable] allows legacy operating systems to boot even without support for CPUs with extended CPUID functions.

## 4-4.2. IDE Configuration



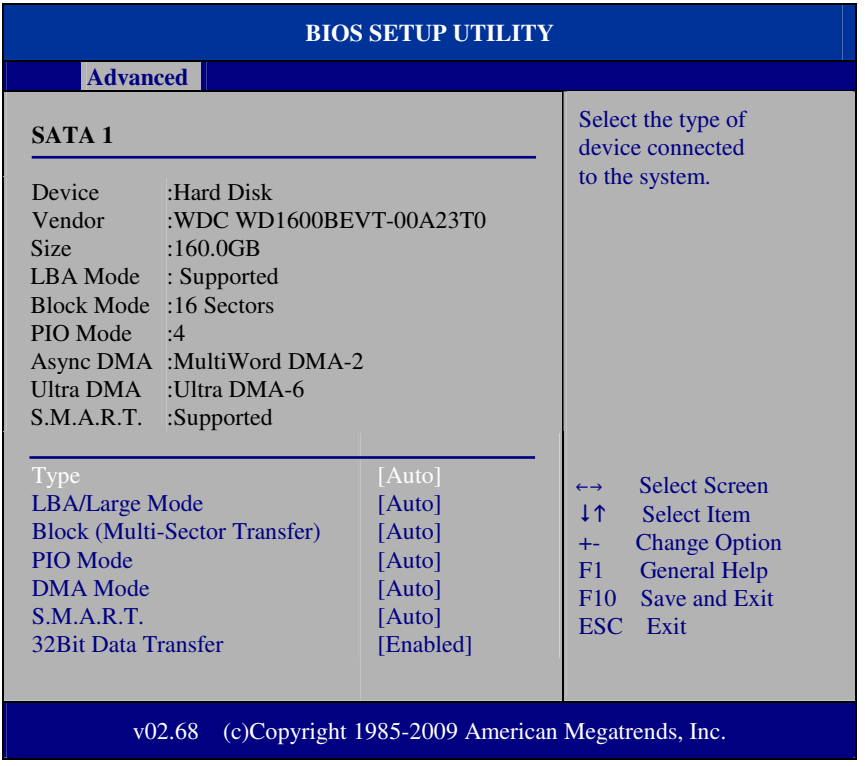

**IDE Configuration Screen**

This menu provides advanced IDE configuration for hard drive. The control items of 1st SATA Hard Drive / 2nd SATA Hard Drive / Solid State Drive / Compact Flash Card are all the same and describe in next section.

### ATA/IDE Configuration

Select [Compatible] if user wants to install legacy operating system such as Windows NT. If user want to install mainstream operating system such as Windows XP, Vista or Win7, it is recommended to select [Enhanced] for better hard drive performance.

## 4-4.2.1 Primary IDE Master ~ Secondary IDE Slave




**Primary IDE Master Screen**

### Type

Select the type of device connected to the system.

### LBA/Large Mode
Enabling LBA causes Logical Block Addressing to be used in place of Cylinders, Heads and Sectors.

### Block (Multi-Sector Transfer)
Any selection except Disabled determines the number of sectors transferred per block.

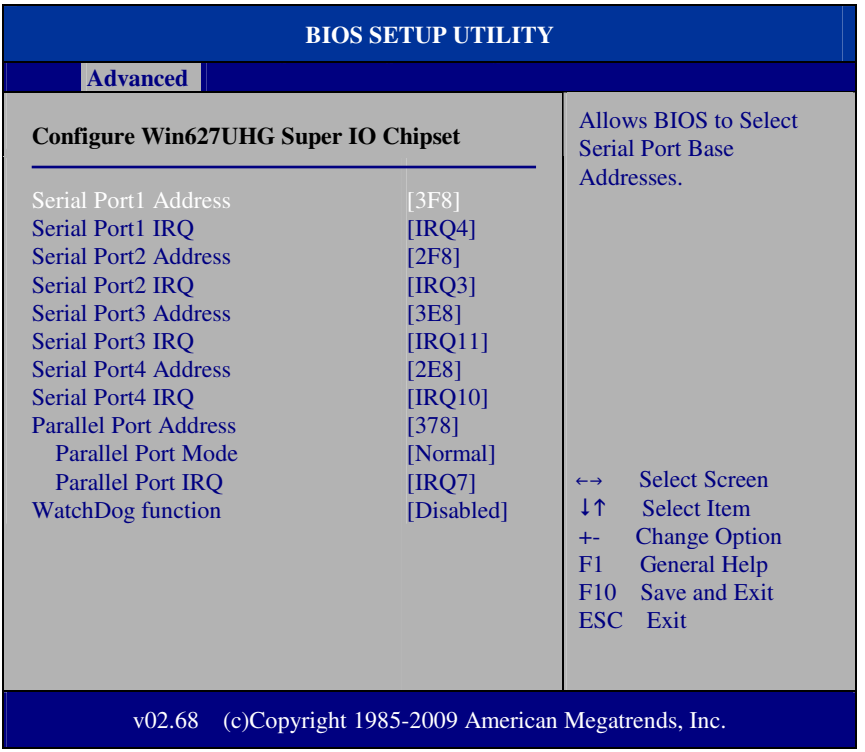
### PIO Mode
Configure the type of PIO (Programmed Input/Output) mode 0-4 for IDE device. Mode 0 through 4 provides successively increased performance.

### DMA Mode
Select the type of Ultra DMA mode on a hard drive.

### S.M.A.R.T
This allows you to activate the S.M.A.R.T. (Self-Monitoring Analysis & Reporting Technology) capability for the hard disks. S.M.A.R.T is a utility that monitors your disk status to predict hard disk failure. This gives you an opportunity to move data from a hard disk that is going to fail to a safe place before the hard disk becomes offline.

### 32Bit Data Transfer
Enables/Disable 32-bit data transfer.

### 4-4.3. SuperIO Configuration




**SuperIO Configuration Screen**

#### Serial Port1~4 Address
Select IO address as serial ports default resource.

#### Serial Port1~4 IRQ
Select IO IRQ as serial ports default resource.

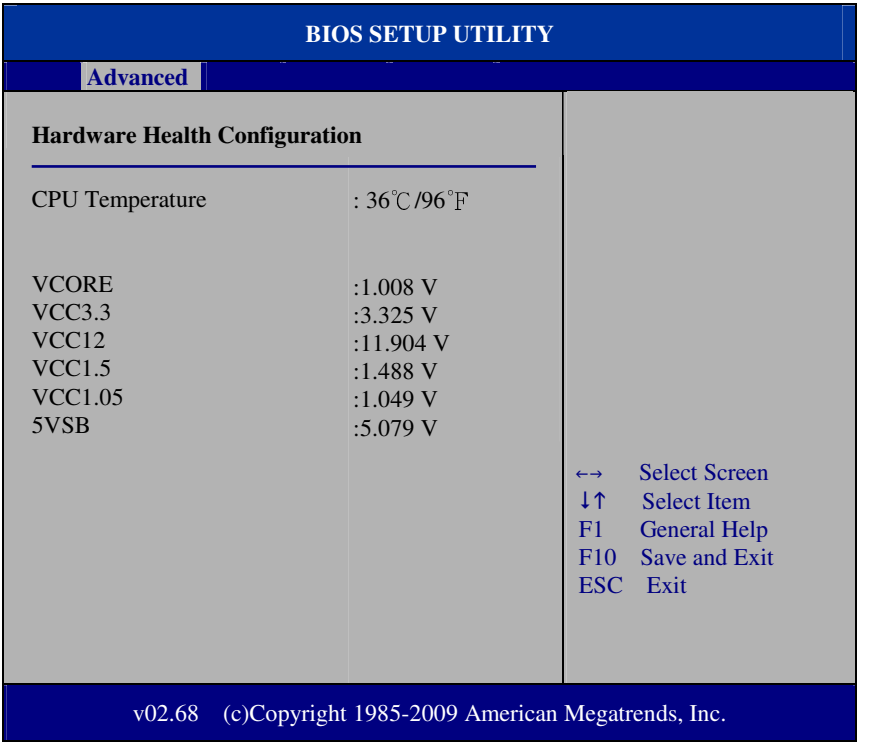
#### Parallel Port Address
Select IO address for parallel ports resource allocation.

#### Parallel Port Mode
Select the operation mode for parallel port.

### Parallel Port IRQ
Select IRQ for parallel ports resource allocation.

### * WatchDog function
If system hang or not respond for user, enable watchdog function can triggers a system reset by an user given value count down to zero.

## 4-4.4. Hardware Health Configuration

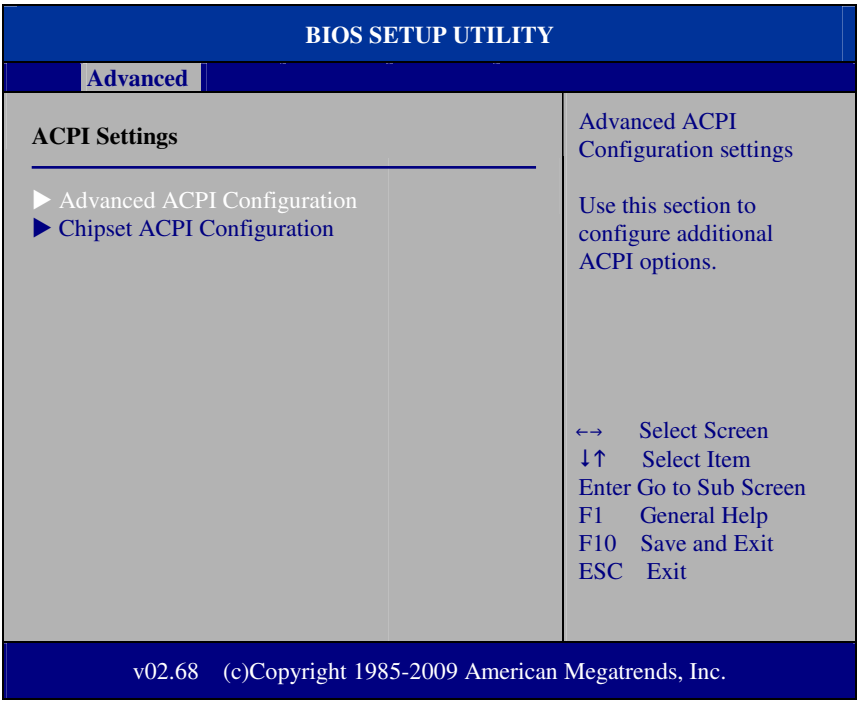



**Hardware Health Configuration**

### CPU Temperature
This section shows CPU current temperature.

### VCORE / VCC3.3 / VCC12 / VCC1.5 / VCC1.05 / 5VSB
These items provide hardware health information.

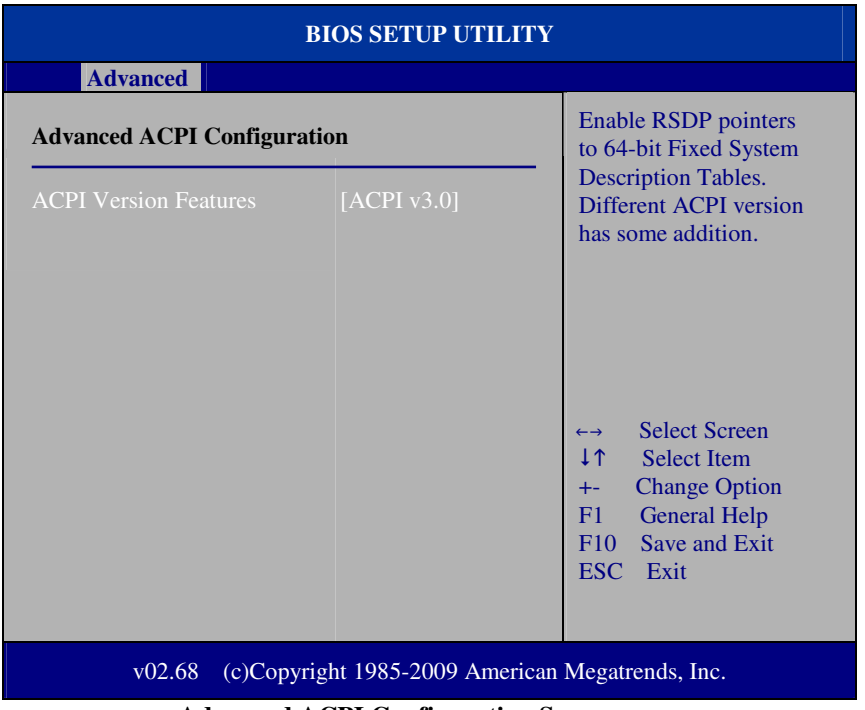
### 4-4.5. ACPI Configuration




**ACPI Configuration Screen**

This menu provides the configuration for ACPI (Advanced Configuration and Power Interface) relates settings.

### 4-4.5.1 Advanced ACPI Configuration

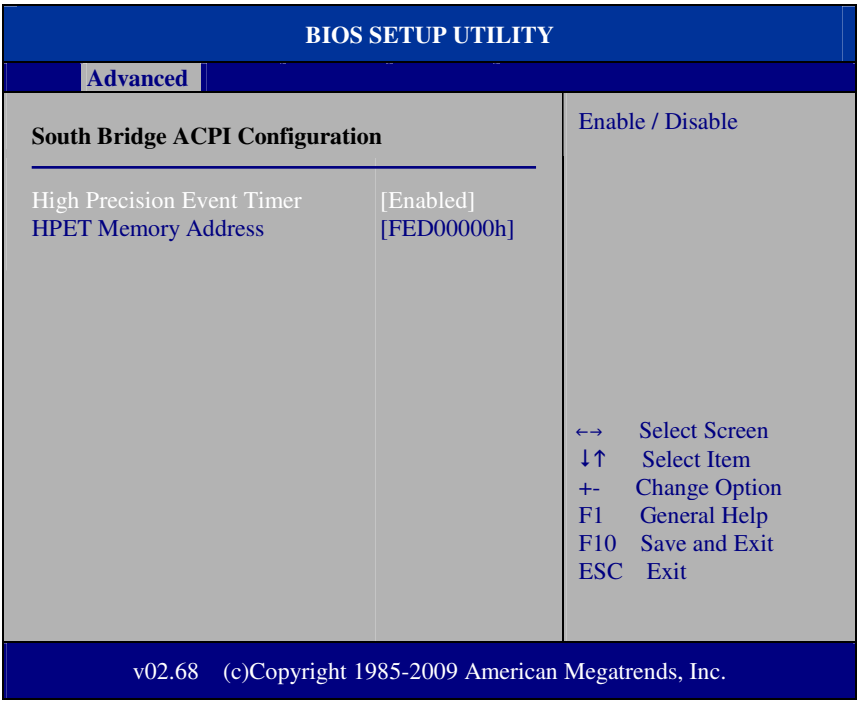



**Advanced ACPI Configuration Screen**

#### ACPI Version Features

Select which ACPI version that BIOS supports to OS. Newer version brings more benefits to device configuration and power management control capabilities.

### 4-4.5.2 Chipset ACPI Configuration




**Chipset ACPI Configuration Screen**

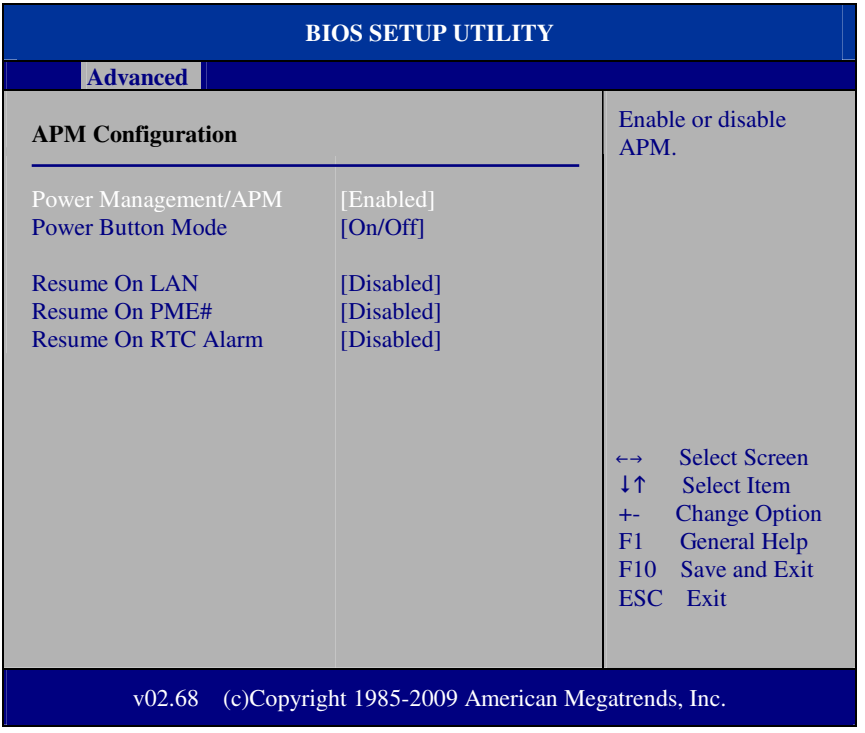
#### High Precision Event Timer

The High Precision Event Timer (HPET) can produce periodic interrupts at a much higher resolution than the RTC and is often used to synchronize multimedia streams and reducing the need to use other timestamp calculations. It can be enabling for Windows Vista/7 operating system.

#### HPET Memory Address

Choose High Precision Event Timer (HPET) base memory address.

### 4-4.6. APM Configuration




**APM Configuration Screen**

#### Power Management/APM

This is the main control item for enable/disable below APM functions.

#### Power Button Mode

This setting controls shutdown action by pressing power button. The system will be shutdown immediately after pressing power button when set to "On/Off". If set the power button mode to "Delay 4 seconds", system will be shutdown after pressing and hold the power button over 4 seconds.

#### Resume on LAN

When user set this option to [Enable], System can be wake up from sleep state and boot into OS once received an incoming message from LAN device.

### Resume On PME#

When user set this option to [Enable], System can be wake up from sleep state and boot into OS once received PME (power management event) from onboard devices.

### Resume On RTC Alarm

When user set this option to [Enable], it allows system to be wake up at specific date/time.

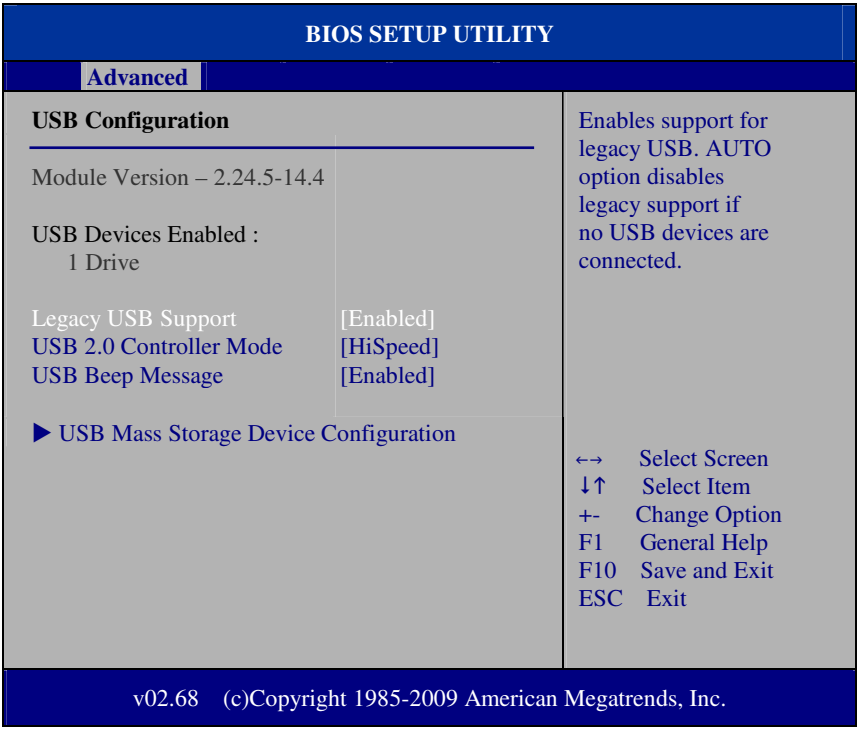
### RTC Alarm Date (Days)

Set a specific date value for RTC alarm function to wakeup system from soft off state.

### System Time

Set a specific time value for RTC alarm function to wakeup system from soft off state.

### 4-4.7 USB Configuration




**USB Configuration Screen**

#### Legacy USB Support

Set to [Enabled] if you want to use USB device in the legacy operating system, such as MS-DOS or SCO Unix.

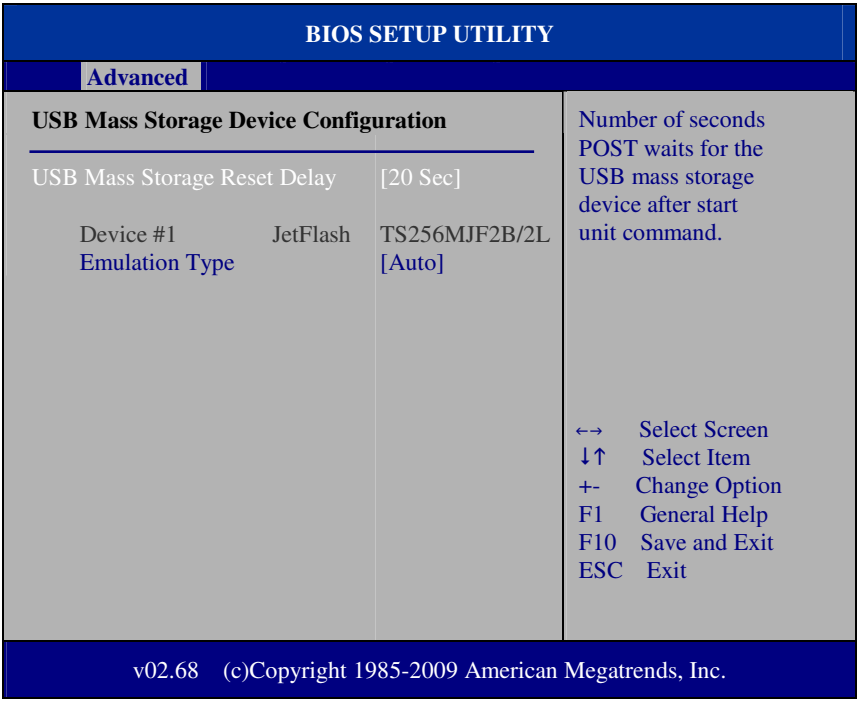
#### USB 2.0 Controller Mode

Configure the onboard USB 2.0 controller operation mode to high Speed or full speed mode.

#### USB Beep Message

System will generate beep sound during USB device enumeration.

### 4-4.7.1 USB Mass Storage Device Configuration




**USB Mass Storage Device Configuration Screen**

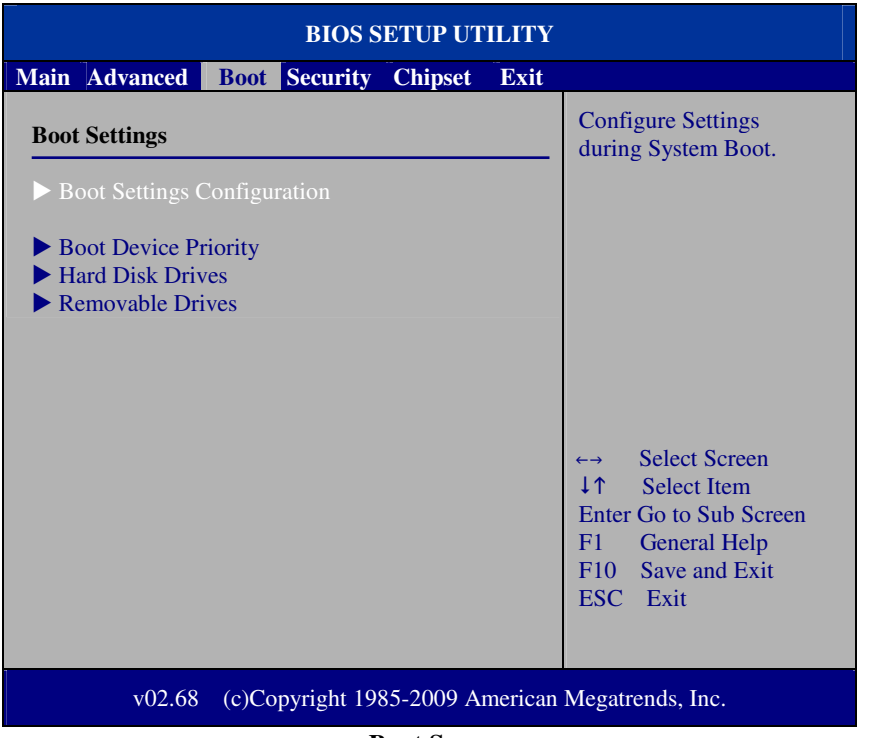
#### USB Mass Storage Reset Delay

This setting decides number of seconds POST waits for USB mass storage device after start unit command.

#### Emulation Type

Select which type of device that USB mass storage emulation. When user select to [Auto], the USB storage size less than 530MB will be emulated as floppy drive and remaining as hard drive.

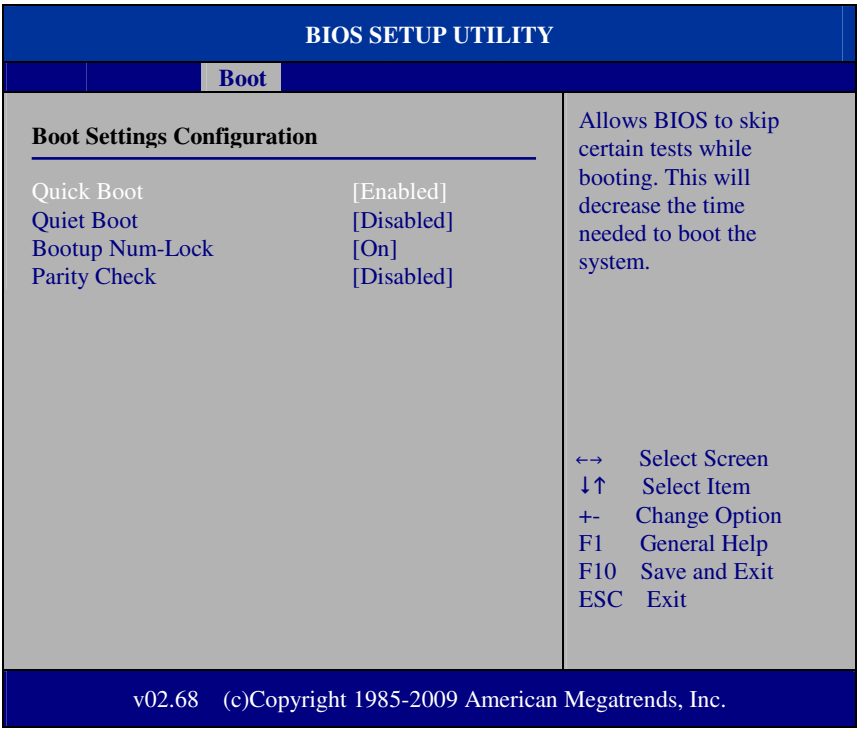
## 4-5. Boot




**Boot Screen**

This menu provides control items for system boot configuration.

### 4-5.1 Boot Settings Configuration




**Boot Settings Configuration Screen**

#### Quick Boot

Enable this item allows BIOS POST to skip some tests during boot-up for saving boot time.

#### Quiet Boot

When set this option to [disabled], BIOS will display normal POST messages.

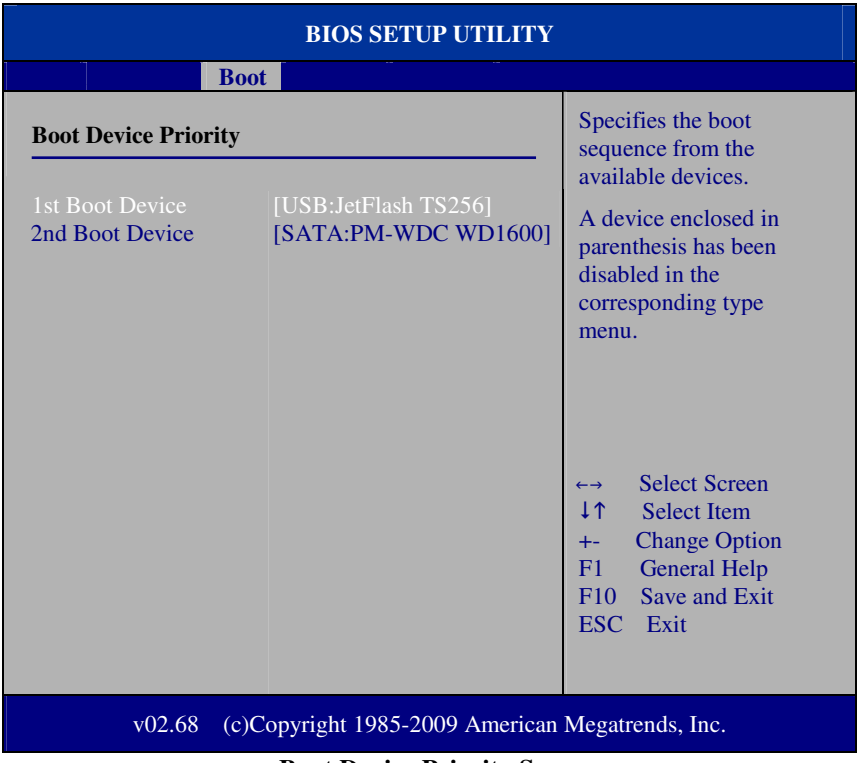
#### Bootup Num-Lock

This setting is for the Num-Lock state when system powered on. Setting to [On] will turn on the Num Lock key when the system power on. Set to [Off] means user can use arrow keys on the numeric keypad.

### Parity Check

This setting enables or disables memory or parity error check.

## 4-5.2 Boot Device Priority

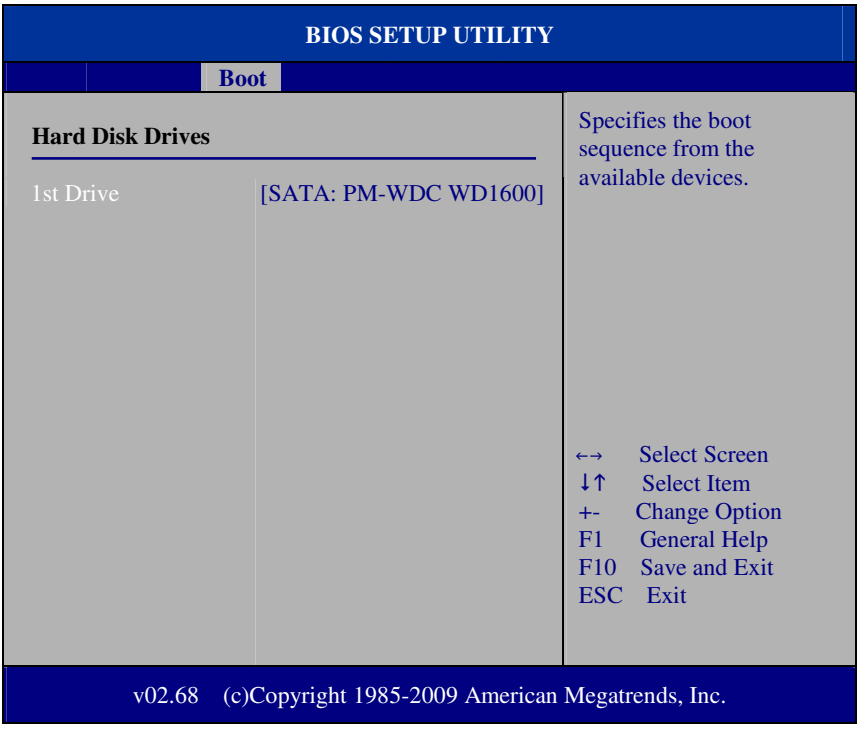



**Boot Device Priority Screen**

### 1st / 2nd / 3rd …Boot Device

Choose the boot sequence from the available devices.

### 4-5.3 Hard Disk Drives

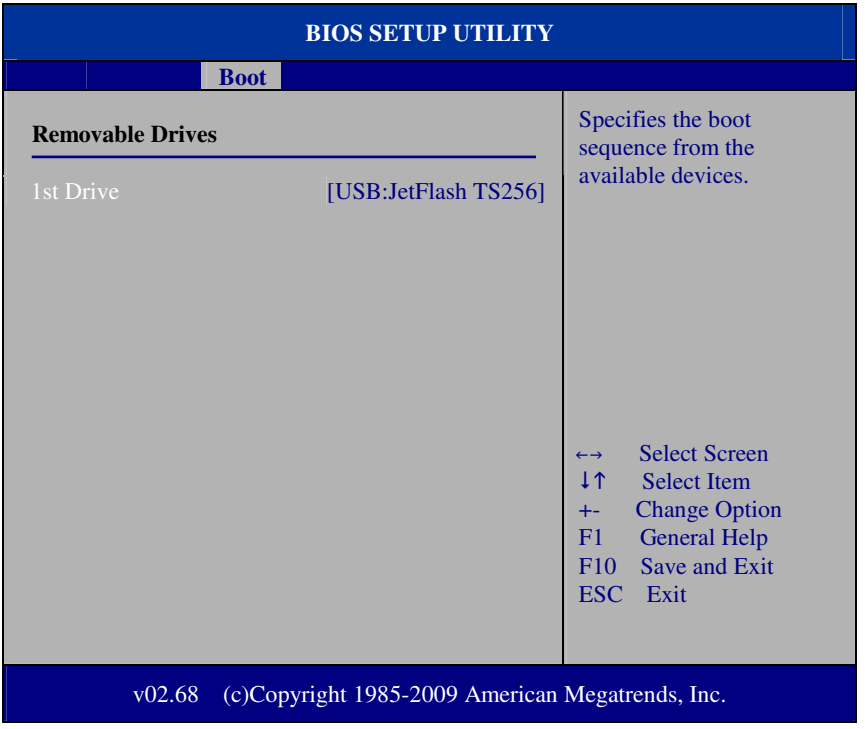



**Hard Disk Drives Screen**

#### 1st / 2nd …Drive

This setting allows user to set the priority of hard drive or another bootable USB storages. Press <Enter> to enter the sub-menu and press < ↑ > or < ↓ > arrow keys to select the device. Another way is to press <+> or <-> to move it up/down in the priority list.

### 4-5.4 Removable Drives

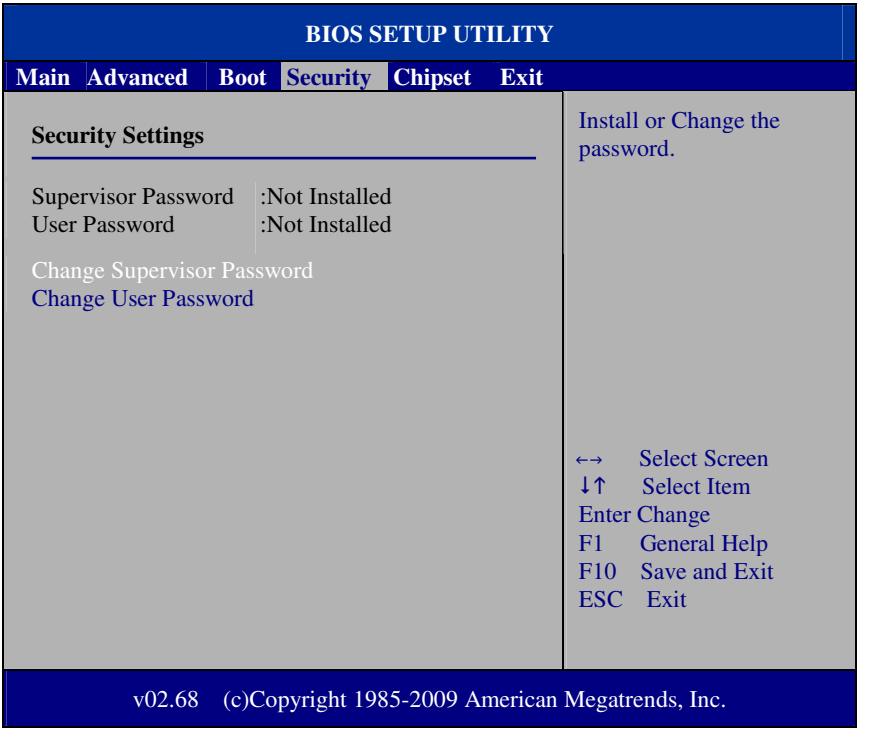



**Removable Drives Screen**

#### 1st / 2nd …Drive

This setting allows users to set the priority of the removable devices such as floppy drive. Press <Enter> to enter the sub-menu and press < ↑ > or < ↓ > arrow keys to select the device. Another way is to press <+> or <-> to move it up/down in the priority list.

## 4-6. Security




**Security Settings Screen**

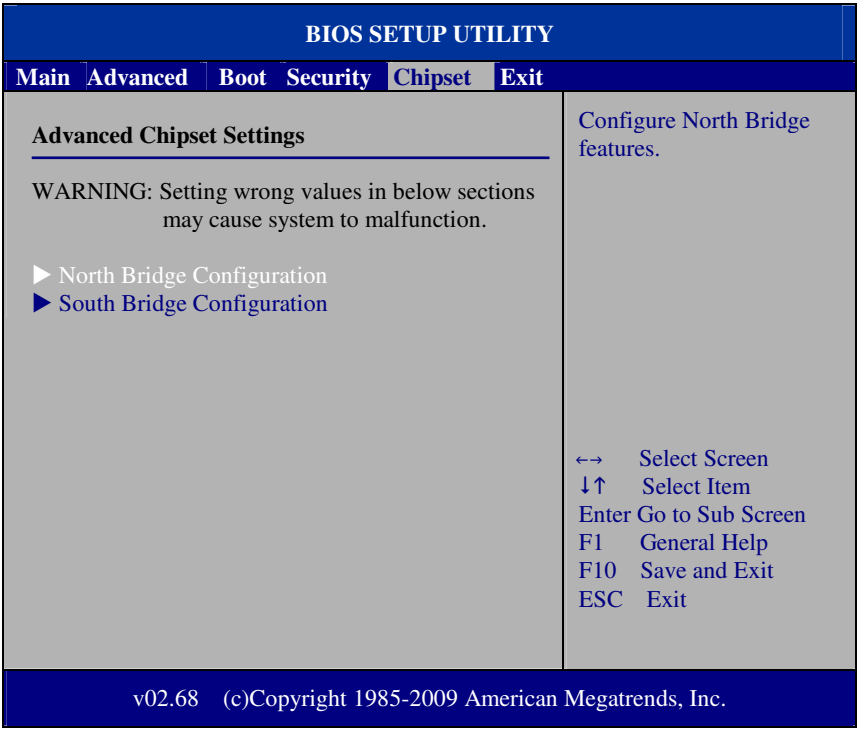
### Change Supervisor Password

Supervisor Password controls the access right to the BIOS Setup utility. These settings allow user to set or change the supervisor password.

### Change User Password

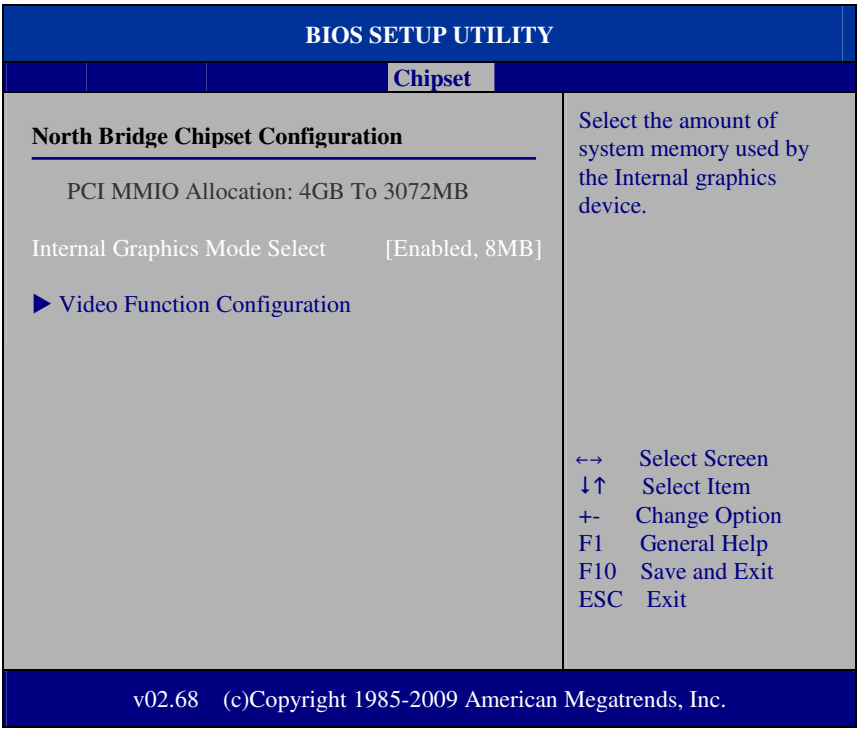
User Password controls system access right when power on. These settings allow user to set or change the user password.

## 4.7 Chipset




**Advanced Chipset Settings Screen**

### 4-7.1 North Bridge Chipset Configuration

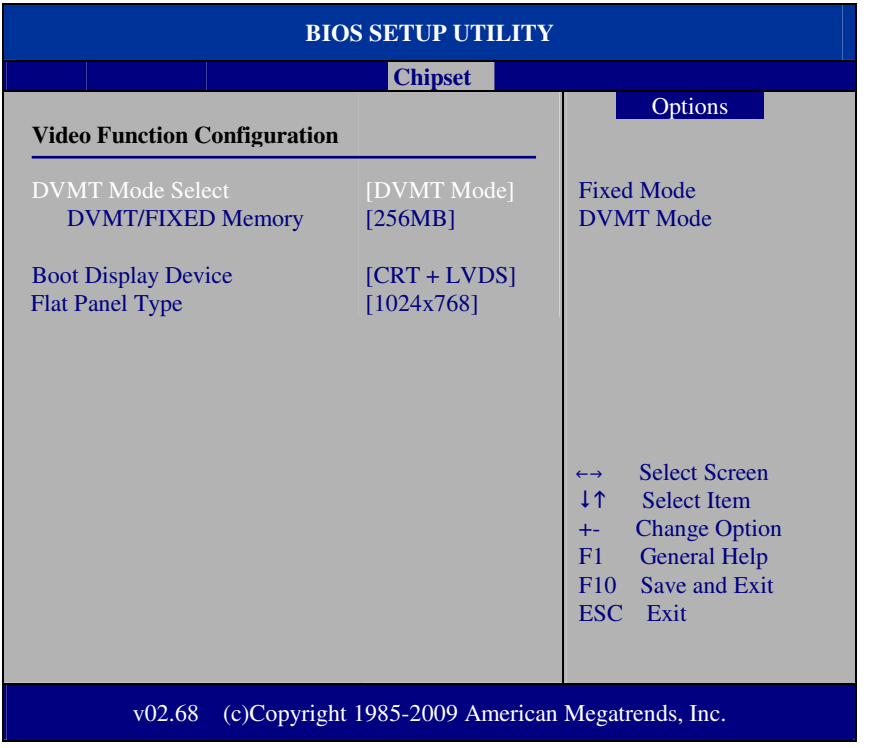



**North Bridge Chipset Configuration**

#### Internal Graphics Mode Select

Select the amount of system memory that allocated to the integrated graphics device.

### 4-7.1.1 Video Function Configuration




**Video Function Configuration Screen**

#### DVMT Mode Select / DVMT/FIXED Memory

Intel's Dynamic Video Memory Technology (DVMT) allows the system to dynamically allocated memory resources according to the demands of the system at any point in time. The key idea in DVMT is to improve the efficiency of the memory allocated to either system or graphics processor. It is recommended that user select this option to DVMT Mode that system memory is dynamically allocated for optimal balance between graphics and system performance.

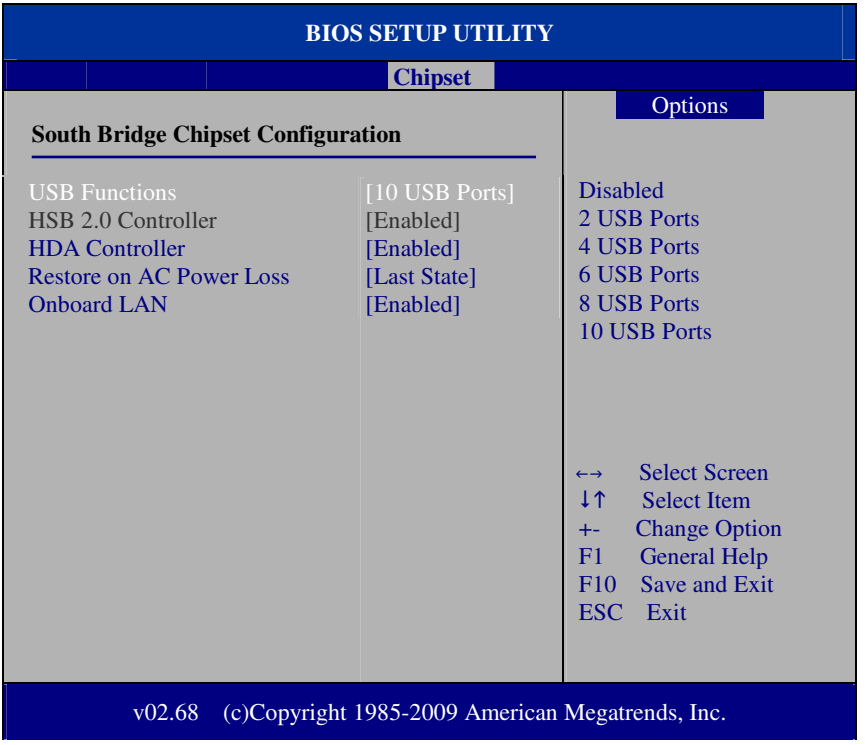
### Boot Display Device

Choose the default boot display device by user requirement such as [CRT], [LVDS] and [CRT+LVDS].

### Flat Panel Type

Select the resolution for the connected LVDS panel such as [800x600] and [1024x768].

## 4-7.2 South Bridge Chipset Configuration




**South Bridge Chipset Configuration Screen**

### USB Functions
Select the number of supported USB ports.

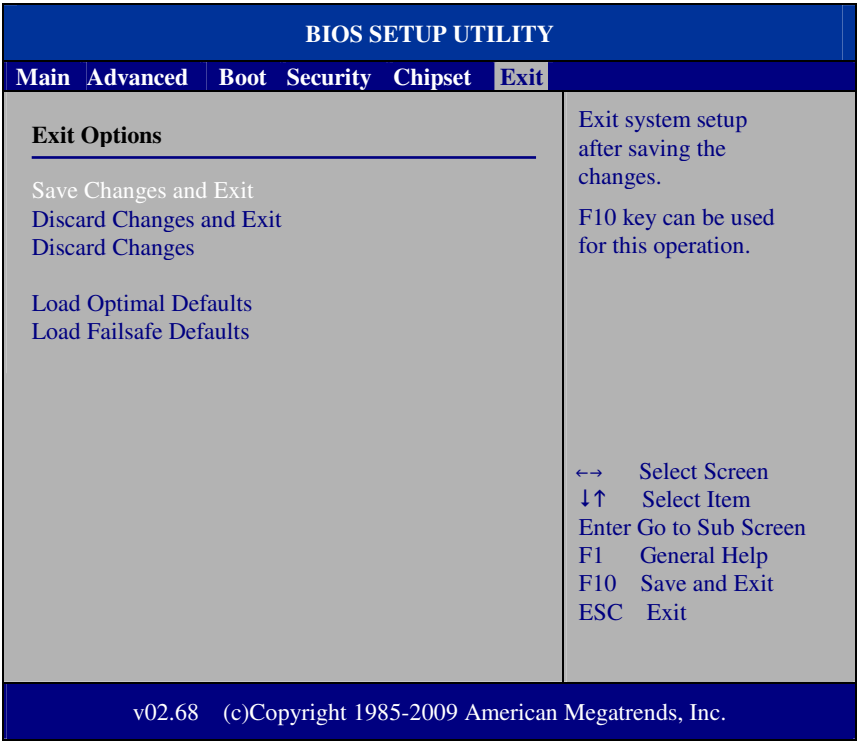
### USB 2.0 Controller
Enable or disable the USB 2.0 Controller.

### HDA Controller
Enable or disable the onboard High-definition Audio controller.

### Restore on AC/Power Loss
Once a power failure situation happens, this item decides the system power state after AC power restore back.

### Onboard LAN
Enable or disable the onboard LAN device.

## 4.8 Exit




**Exit Screen**

### Save Changes and Exit

Save changes to CMOS and then exit the BIOS setup screen. User can also press the [F10] key for this operation.

### Discard Changes and Exit

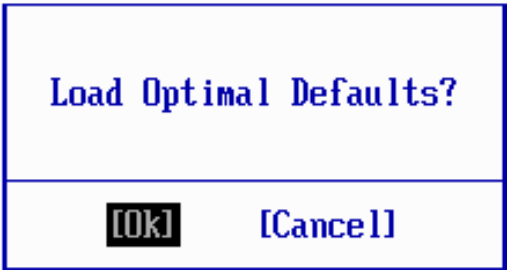
Abandon all changes and exit the BIOS setup screen. User can also press the [ESC] key for this operation.

### Discard Changes

Discard all changes done so far to the setup items. User can press the [F7] key for this operation.

### Load Optimal Defaults

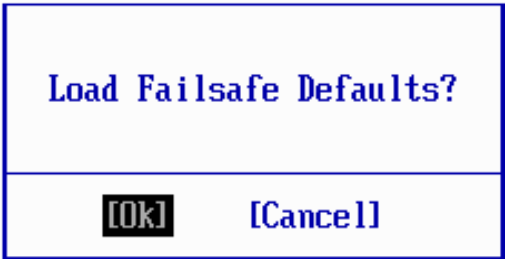
Press <Enter> on this item, it will show a confirmation dialog box with a message like below:




Pressing "Ok" to loads the factory recommended optimal setting for system operations. User can also press the [F9] key for this operation.

### Load Failsafe Defaults

Press <Enter> on this item, it will show a confirmation dialog box with a message like below:




To use the BIOS failsafe default values, change the prompt to "Ok" and press the <Enter > key. User can also press the [F8] key for this operation.

# *SYSTEM ASSEMBLY*

*APPENDIX*

***A***

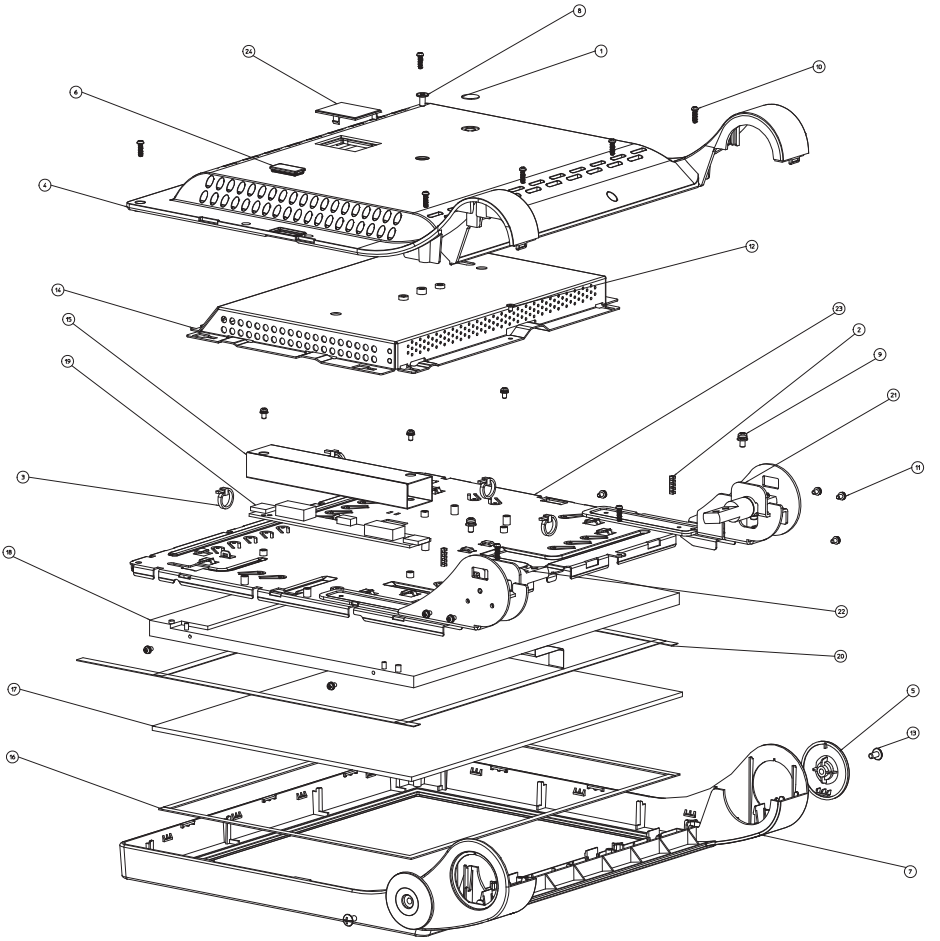
This appendix contains exploded diagrams and part numbers of the POS-3152 system.

Sections included:

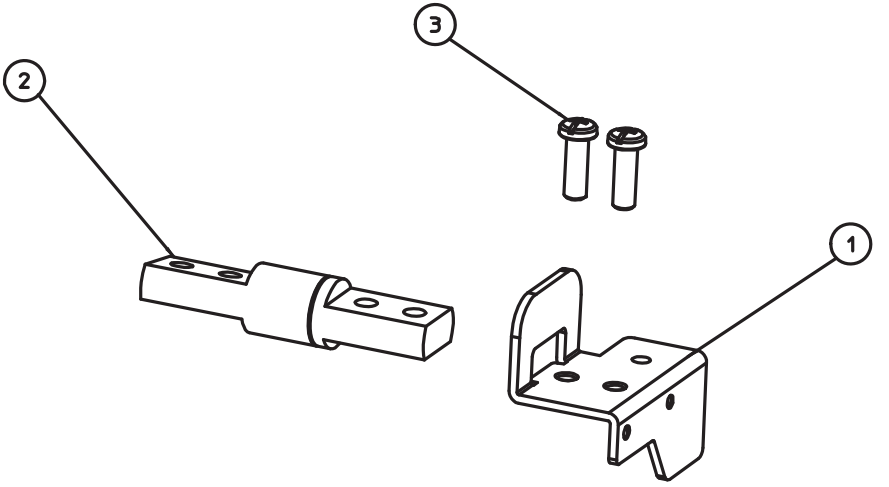
- Exploded Diagram for POS-3152 Front Panel
- Exploded Diagram for POS-3152 Wireless LAN Assembly
- Exploded Diagram for POS-3152 Rear Cover
- Exploded Diagram for POS-3152 LCD Assembly
- Exploded Diagram for POS-3152 DVD ROM Assembly
- Exploded Diagram for POS-3152 Bottom Cover Assembly
- Exploded Diagram for POS-3152 Fan Assembly
- Exploded Diagram for POS-3152 Mainboard Assembly
- Exploded Diagram for POS-3152 Bottom Case Assembly
- Exploded Diagram for POS-3152 Top Cover
- Exploded Diagram for POS-3152 HDD Assembly
- Exploded Diagram for POS-3152 VFD Cover

## EXPLODED DIAGRAM FOR POS-3152 FRONT PANEL

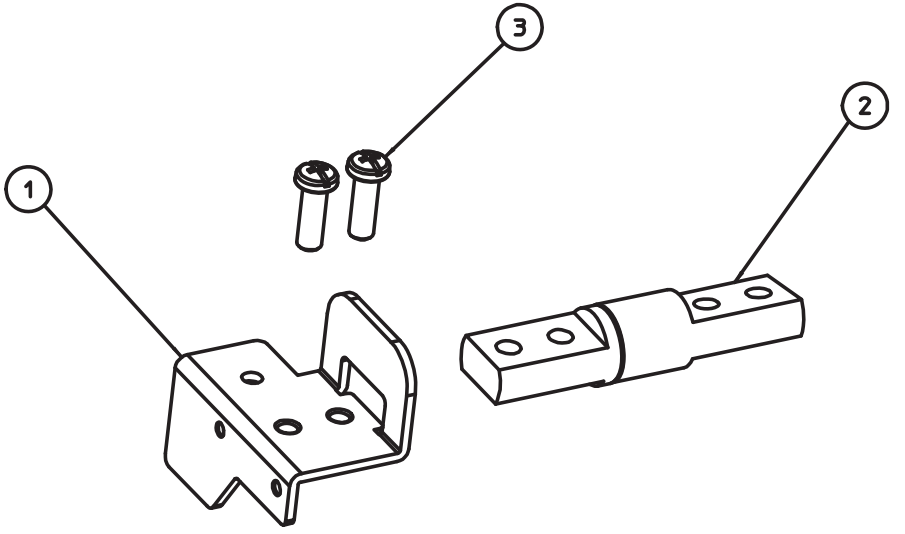
Type 1 (Black):



| NO. | COMPONENT NAME | PART NO. | Q'TY |
|---|---|---|---|
| 1 | MYLAR FOR ADJUSTOR | 90-056-36100181 | 1 |
| 2 | MOVEABLE BUSHING | 30-018-04100005 | 2 |
| 3 | CABLE TIE | 30-015-04100044 | 4 |
| 4 | 15 IN BACK PANEL | 30-003-12210208 | 1 |
| 5 | HINGE SIDE COVER | 30-002-12211181 | 2 |
| 6 | FINGERPRINT COVER | 30-013-06100124 | 1 |
| 7 | 15 IN FRONT PANEL | 30-003-12120181 | 1 |
| 8 | SCREW | 22-275-40008011 | 1 |
| 9 | SCREW | 22-232-40008211 | 2 |
| 10 | SCREW | 22-125-30012061 | 8 |
| 11 | SCREW | 22-232-30060211 | 11 |
| 12 | SCREW | 22-222-30004011 | 1 |
| 13 | SCREW | 22-245-40008011 | 2 |
| 14 | 15IN BACK CHASSIS | 20-015-03001181 | 1 |
| 15 | MYLAR FOR INVERTER | 90-056-02100181 | 1 |
| 16 | SPONGE | 30-013-15100139 | 2 |
| 17 | TOUCH PANEL | **-***-********* | 1 |
| 18 | 15 IN PANEL | **-***-********* | 1 |
| 19 | INVERTER | **-***-********* | 1 |
| 20 | PORON | 30-013-24100000 | 4 |
| 21 | HINGE L ASSY | | 1 |
| 22 | HINGE R ASSY | | 1 |
| 23 | 15IN PANEL HOLDER ASSY | 20-029-03003181 | 1 |
| 24 | VFD COVER | 30-002-12110208 | 1 |

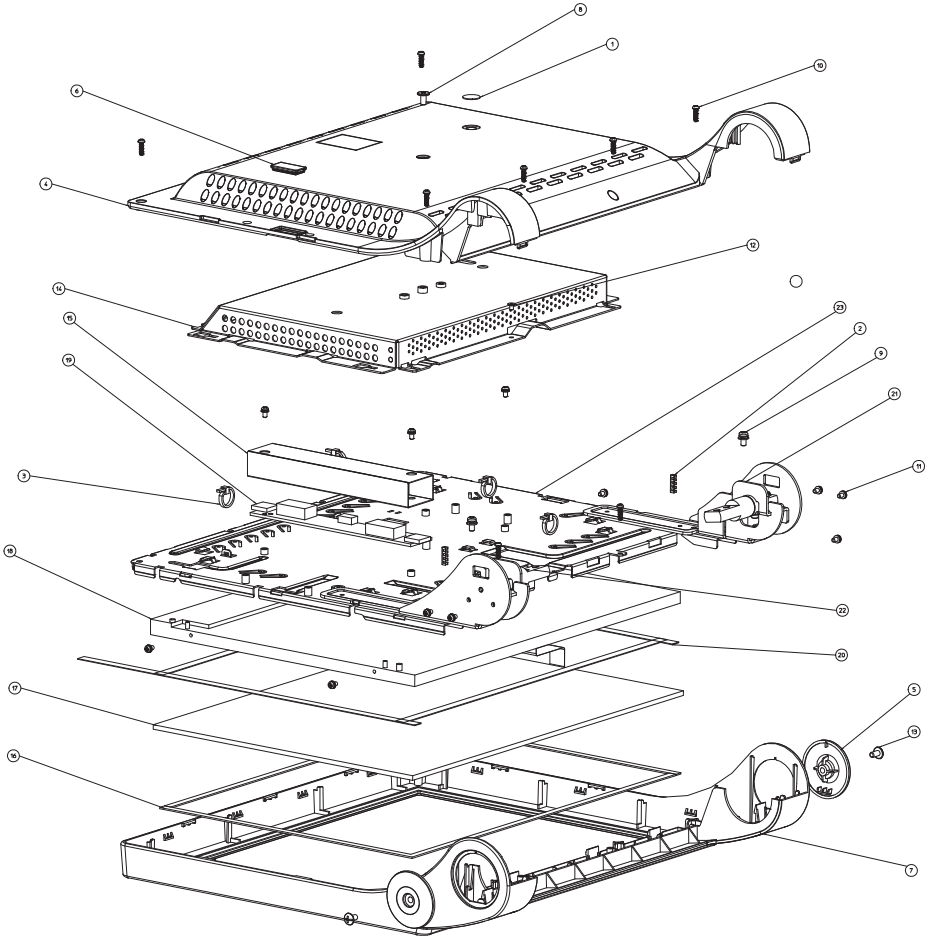



| NO. | COMPONENT NAME | PART NO. | Q'TY |
|---|---|---|---|
| 1 | HINGE BRACKET L | 20-006-03002181 | 1 |
| 2 | HINGE L | 20-012-19002181 | 1 |
| 3 | SCREW | 22-232-50015011 | 2 |

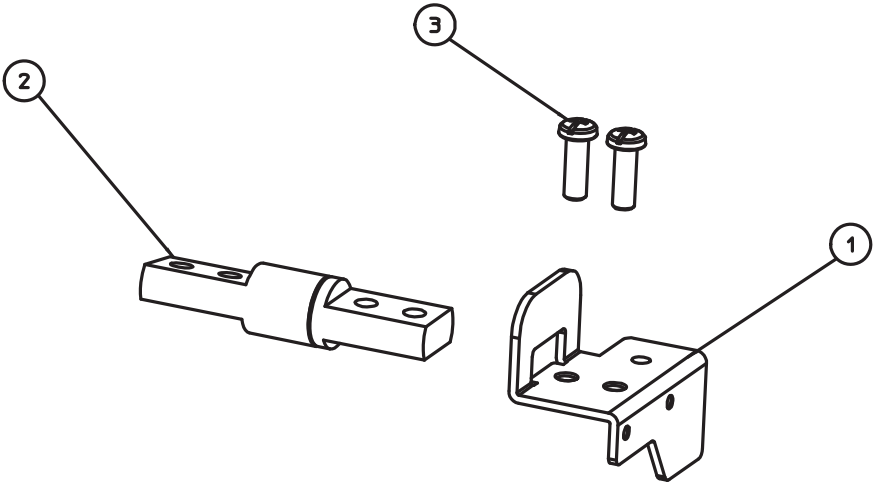



| NO. | COMPONENT NAME | PART NO. | Q'TY |
|---|---|---|---|
| 1 | HINGE BRACKET R | 20-006-03001181 | 1 |
| 2 | HINGE R | 20-012-19001181 | 1 |
| 3 | SCREW | 22-232-50015011 | 2 |

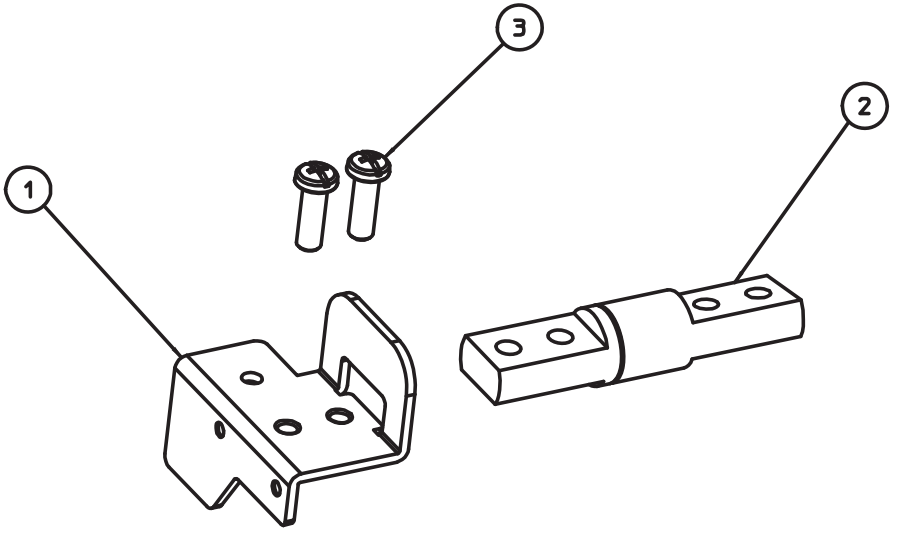
Type 2 (White):



| NO. | COMPONENT NAME | PART NO. | Q'TY |
|---|---|---|---|
| 1 | MYLAR FOR ADJUSTOR | 90-056-43100181 | 1 |
| 2 | MOVEABLE BUSHING | 30-018-04100005 | 2 |
| 3 | CABLE TIE | 30-015-04100044 | 4 |
| 4 | 15 IN BACK PANEL | 30-003-12110208 | 1 |
| 5 | HINGE SIDE COVER | 30-002-12111181 | 2 |
| 6 | FINGERPRINT COVER | 30-013-06100124 | 1 |
| 7 | 15 IN FRONT PANEL | 30-003-12110181 | 1 |
| 8 | SCREW | 22-272-40008011 | 1 |
| 9 | SCREW | 22-232-40008211 | 2 |
| 10 | SCREW | 22-125-30012061 | 8 |
| 11 | SCREW | 22-232-30060211 | 11 |
| 12 | SCREW | 22-222-30004011 | 1 |
| 13 | SCREW | 22-242-40008011 | 2 |
| 14 | 15IN BACK CHASSIS | 20-015-03001181 | 1 |
| 15 | MYLAR FOR INVERTER | 90-056-02100181 | 1 |
| 16 | SPONGE | 30-013-15100139 | 2 |
| 17 | TOUCH PANEL | **-***-******** | 1 |
| 18 | 15 IN PANEL | **-***-******** | 1 |
| 19 | INVERTER | **-***-******** | 1 |
| 20 | PORON | 30-013-24100000 | 4 |
| 21 | HINGE L ASSY | | 1 |
| 22 | HINGE R ASSY | | 1 |
| 23 | 15IN PANEL HOLDER ASSY | 20-029-03003181 | 1 |

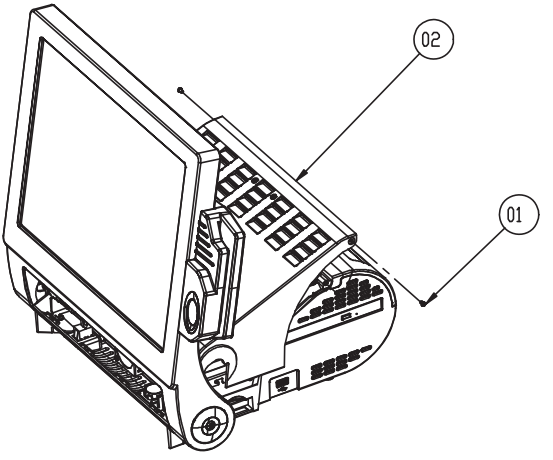


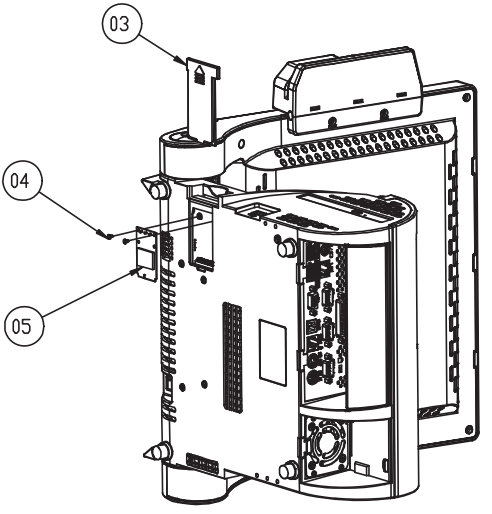

| NO. | COMPONENT NAME | PART NO. | Q'TY |
|---|---|---|---|
| 1 | HINGE BRACKET L | 20-006-03002181 | 1 |
| 2 | HINGE L | 20-012-19002181 | 1 |
| 3 | SCREW | 22-232-50015011 | 2 |




| NO. | COMPONENT NAME | PART NO. | Q'TY |
|---|---|---|---|
| 1 | HINGE BRACKET R | 20-006-03001181 | 1 |
| 2 | HINGE R | 20-012-19001181 | 1 |
| 3 | SCREW | 22-232-50015011 | 2 |

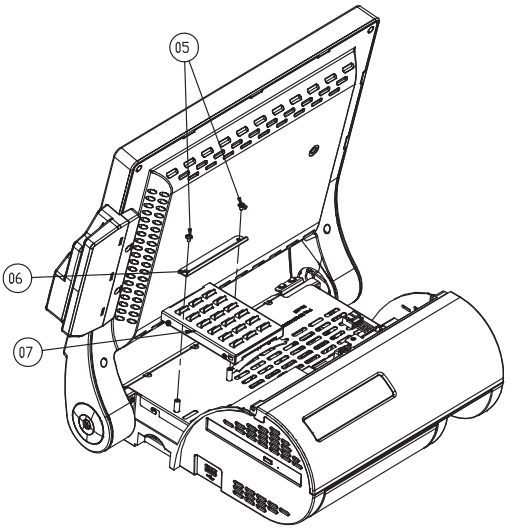
## EXPLODED DIAGRAM FOR POS-3152 WIRELESS LAN CARD ASSEMBLY

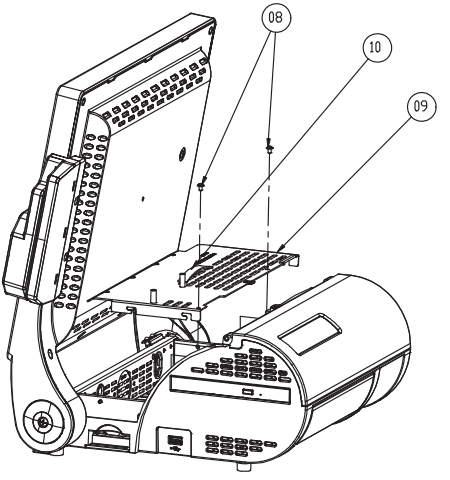


| No. | Component Name | Part No. | Qty |
|---|---|---|---|
| 1 | M3_L4_I_B (Black)<br>M3_L4_I_Ni (White) | 22-272-30004318<br>82-272-30004018 | 2 |
| 2 | POD3150-TOP Assembly | See Item 53 | 1 |
| 3 | MINI_PCIE_DOOR (Black)<br>MINI_PCIE_DOOR (White) | 30-007-28110165<br>30-007-28310165 | 1 |
| 4 | M2_L4_I_Ni | 22-272-20004011 | 2 |
| 5 | WIRELESS LAN_CARD | XX-XXX-XXXXXXXX | 1 |

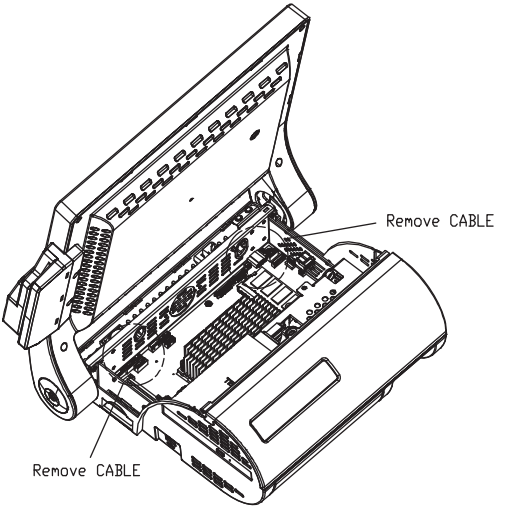
## EXPLODED DIAGRAM FOR POS-3152 REAR COVER

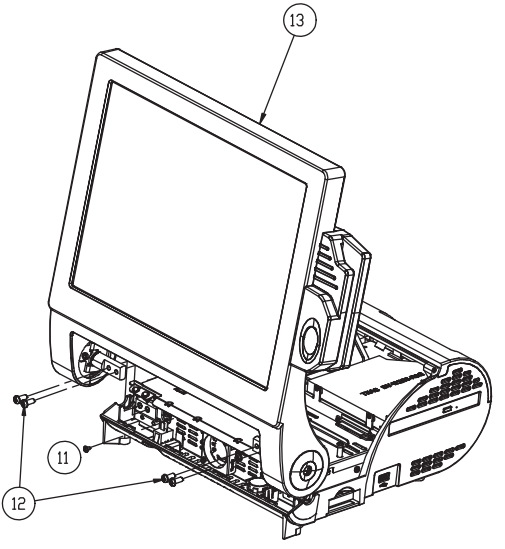


| No. | Component Name | Part No. | Qty |
|---|---|---|---|
| 5 | M3_L5_Washer_Ni | 22-242-30005311 | 2 |
| 6 | POD3150 HDD LOCK | 80-025-0300118 | 1 |
| | EVA Sponge | 90-013-15100181 | 1 |
| 7 | HDD Assembly | See Item 56 | 1 |
| 8 | M3_L5_Washer_Ni | 22-242-30005311 | 2 |
| 9 | POD3150_INSIDE_TOP_CASE_V2 | 20-001-03002181 | 1 |
| 10 | Puller | 30-080-04100000 | 1 |

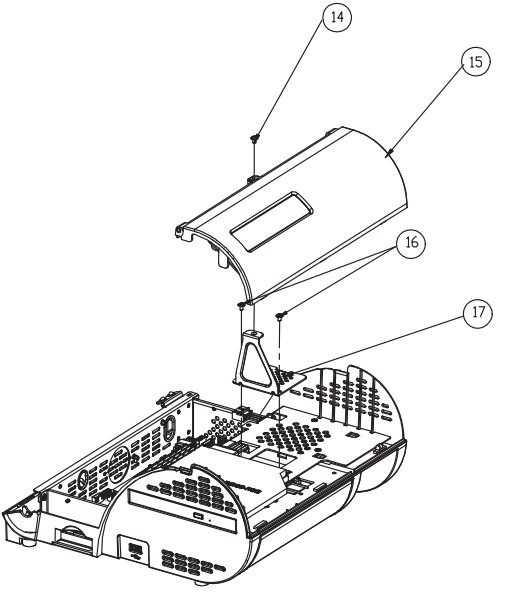
## EXPLODED DIAGRAM FOR POS-3152 LCD ASSEMBLY



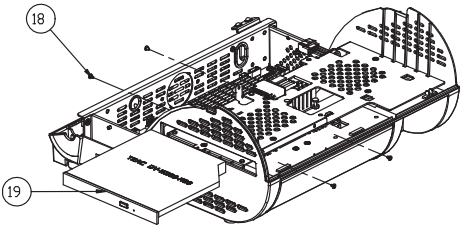



| No. | Component Name | Part No. | Qty |
|---|---|---|---|
| 11 | M3_L5_Washer_Ni | 22-242-30005311 | 1 |
| 12 | M5_L15 | 22-232-50015011 | 4 |
| 13 | LCD Assembly | See Lcd Assembly | 1 |

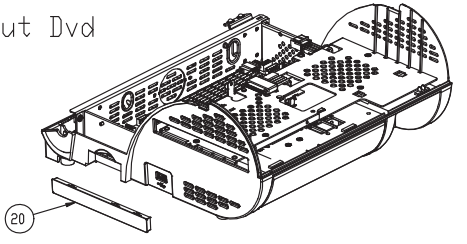
# EXPLODED DIAGRAM FOR POS-3152 DVD ROM ASSEMBLY




With DVD

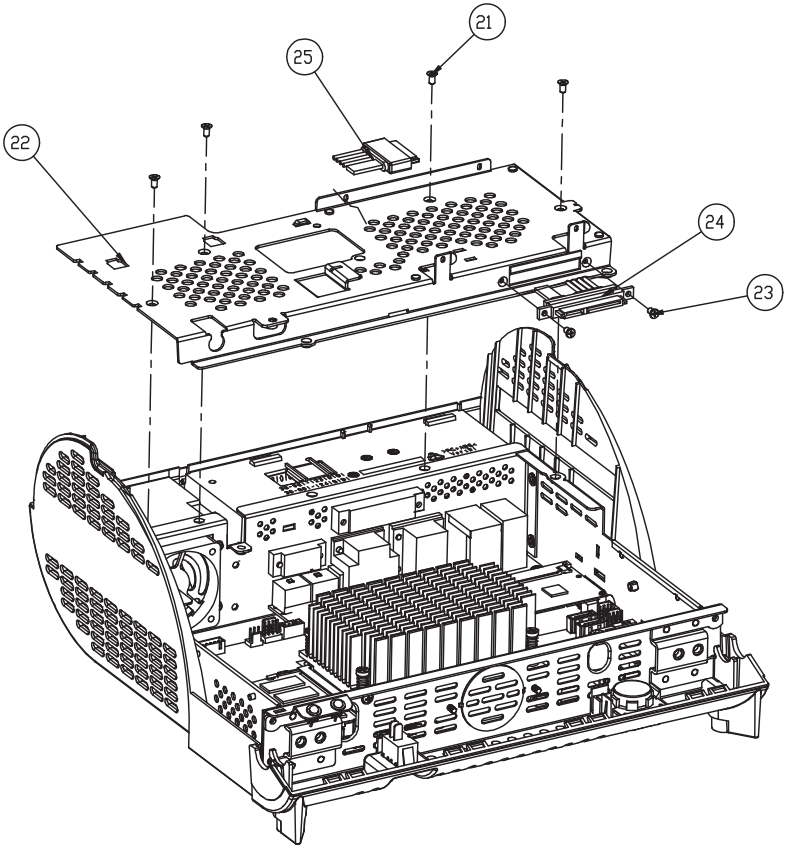



Without Dvd



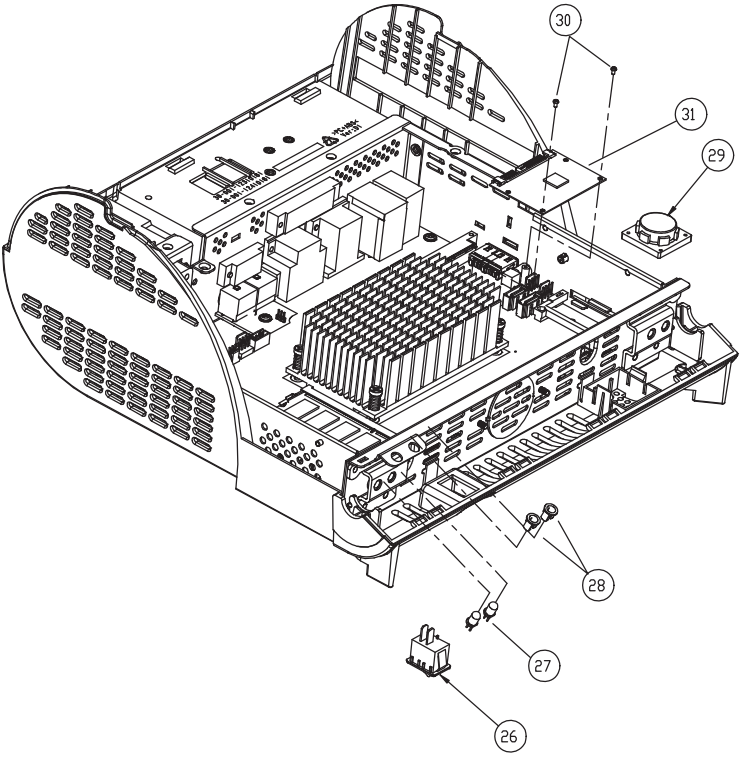
| No. | Component Name | Part No. | Qty |
|---|---|---|---|
| 14 | M3_L5_Washer_Ni | 22-242-30005311 | 1 |
| 15 | VFD Assembly | See Item 58 & 59 | 1 |
| 16 | M3_L5_Washer_Ni | 22-242-30005311 | 2 |
| 17 | Jump door | 80-047-03001181 | 1 |
| 18 | M2_L2.5I_Ni | 22-272-20002011 | 4 |
| 19 | DVD ROM | 52-480-05224905 | 1 |
| 20 | DVD Cover (Black)<br>DVD Cover (White) | 30-002-12710181<br>30-002-12610181 | 1 |

## EXPLODED DIAGRAM FOR POS-3152 BOTTOM COVER ASSEMBLY



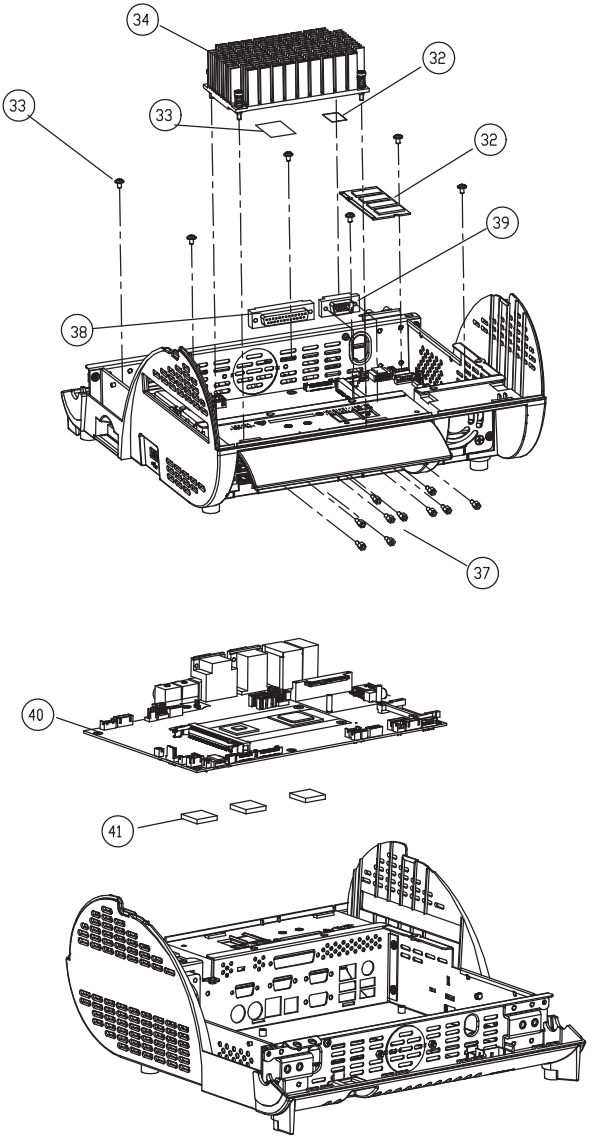
| No. | Component Name | Part No. | Qty |
|---|---|---|---|
| 21 | M3_6_FLAT_B | 22-215-30060011 | 4 |
| 22 | INSIDE-TOP-HOLDER | 80-029-03001181 | 1 |
| 23 | M3_L4_I_B (Black) | 22-272-30004318 | 2 |
| 24 | HDD Cable | 27-012-16504081 | 1 |
| 25 | DVD Cable | 27-008-18105081 | 1 |

## EXPLODED DIAGRAM FOR POS-3152 FAN ASSEMBLY



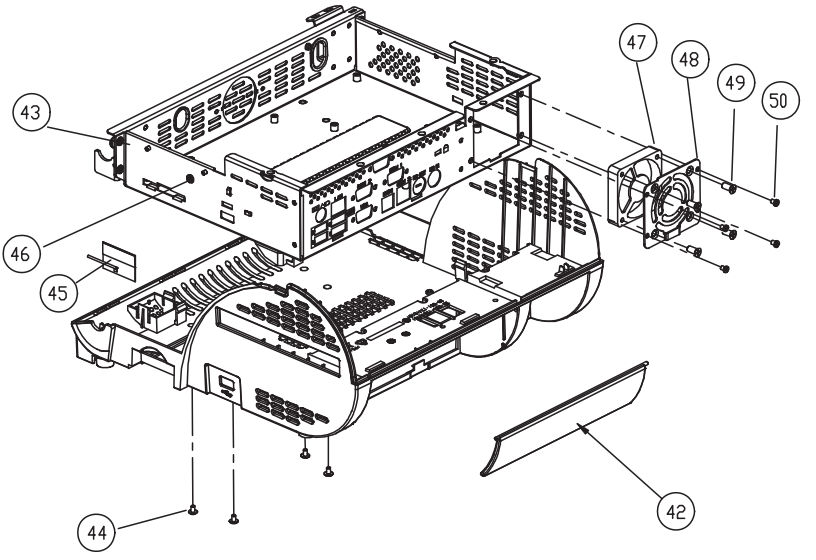

| No. | Component Name | Part No. | Qty |
|---|---|---|---|
| 26 | Switch Cable | 27-019-12804071 | 1 |
| 27 | LED Cable | 27-018-18103071 | 1 |
| 28 | Led support | 30-014-04100009 | 2 |
| 29 | SPEAKER | 13-500-08280018 | 1 |
| 30 | M1.6_L3 | 22-222-16003015 | 2 |
| 31 | SSD CARD | XX-XXX-XXXXXXXX | 1 |

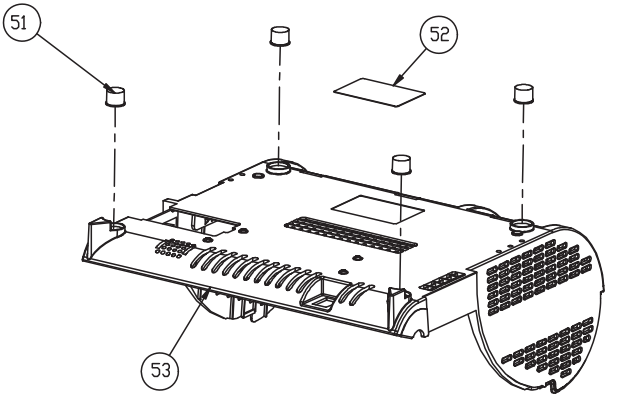
## EXPLODED DIAGRAM FOR POS-3152 MAINBOARD ASSEMBLY



| No. | Component Name | Part No. | Qty |
|---|---|---|---|
| 32 | RAM | -- | 1 |
| 33 | M3_L5_Washer_Ni | 22-242-30005311 | 6 |
| 34 | 6620 Heatsink | 21-002-11564004 | 1 |
| 35 | CPU Thermal pad | 81-006-01010001 | 1 |
| 36 | SB Thermal pad | 81-006-03030001 | 1 |
| 37 | No.4 BOSS | 22-692-40048051 | 10 |
| 38 | LPT Cable | 27-004-20804031 | 1 |
| 39 | COM Cable | 27-024-20804031 | 1 |
| 40 | Prox6620 | | 1 |
| 41 | Thermal Pad | 21-006-82020002 | 3 |

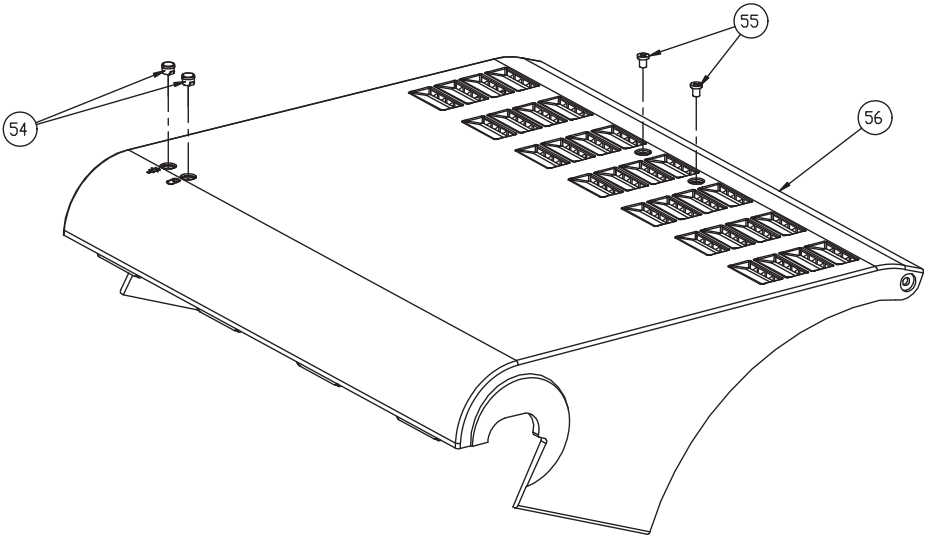
## EXPLODED DIAGRAM FOR POS-3152 BOTTOM CASE ASSEMBLY



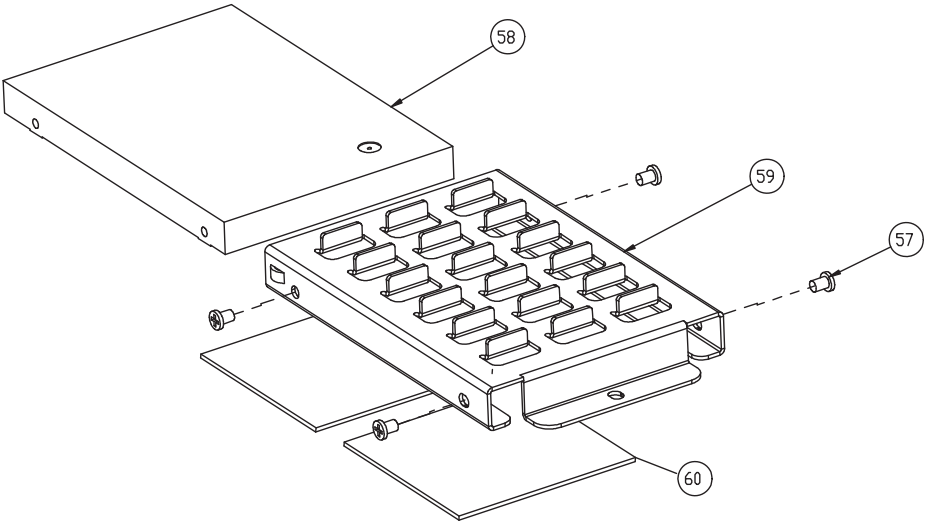
| No. | Component Name | Part No. | Qty |
|---|---|---|---|
| 42 | POD3150 I/O Cover (Black)<br>POD3150 I/O Cover (White) | 30-002-12910181<br>30-002-12810181 | 1 |
| 43 | POD3152-INSIDE-BOX | 80-040-03001208 | 1 |
| 44 | M3-L3 screw | 22-232-30003311 | 4 |
| 45 | WIRELESS_ANTENNA | 27-029-00003072 | 1 |
| 46 | OPEN CLOSED BUSHING | 30-026-04100008 | 1 |
| 47 | FAN | 21-004-05050031 | 1 |
| 48 | Fan holder | 80-029-03001208 | 1 |
| 49 | T4.6 screw | 22-212-46011011 | 4 |
| 50 | M3_L5_I_B | 22-272-30004318 | 6 |
| 51 | Foot (R1511) | 90-004-01100181 | 4 |
| 52 | Label | XX-XXX-XXXXXXXX | 1 |
| 53 | POD3150_BOT_CASE_V2 (Black)<br>POD3150_BOT_CASE_V2 (White) | 30-001-12113181<br>30-001-12114181 | 1 |

## EXPLODED DIAGRAM FOR POS-3152 TOP COVER



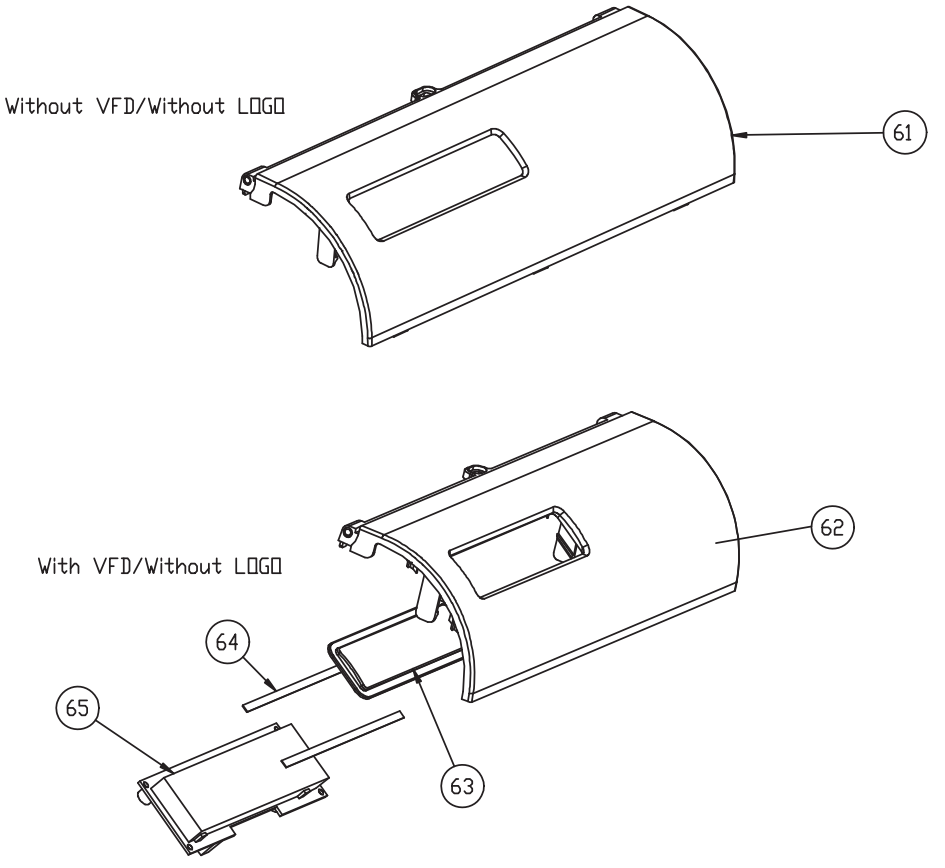

| No. | Component Name | Part No. | Qty |
|---|---|---|---|
| 54 | Led Caps (HHP-4F) | 30-012-02100000 | 2 |
| 55 | M3_L4_I_B (Black) | 22-272-30004318 | 2 |
| | M3_L4_I_Ni (White) | 82-272-30004018 | |
| 56 | POD3150-TOP-CASE_V2 (Black) | 30-001-12111181 | 1 |
| | POD3150-TOP-CASE_V2 (White) | 30-001-12910181 | |

## EXPLODED DIAGRAM FOR POS-3152 HDD ASSEMBLY




| No. | Component Name | Part No. | Qty |
|---|---|---|---|
| 57 | M3_L4_I_B (Black) | 22-272-30004318 | 4 |
| 58 | HDD | XX-XXX-XXXXXXXX | 1 |
| 59 | PS3100_ALU_HDD_HOLDER | 20-029-01001165 | 1 |
| 60 | 45x35x2_Thermal_pad | 21-006-84535001 | 2 |

## EXPLODED DIAGRAM FOR POS-3152 VFD COVER



| No. | Component Name | Part No. | Qty |
|---|---|---|---|
| 61 | Without VFD-COVER (Black) | 30-002-12114181 | 1 |
| | Without VFD-COVER (White) | 30-002-12210181 | |
| 62 | With VFD-COVER (Black) | 30-002-12115181 | 1 |
| | With VFD-COVER (White) | 30-002-12010181 | |
| 63 | vfd windows | 30-002-02230165 | 1 |
| 64 | PRON Tape | 90-013-24100165 | 2 |
| 65 | Mini VFD | 52-901-17001703 | 1 |

# *TECHNICAL SUMMARY*

*APPENDIX*

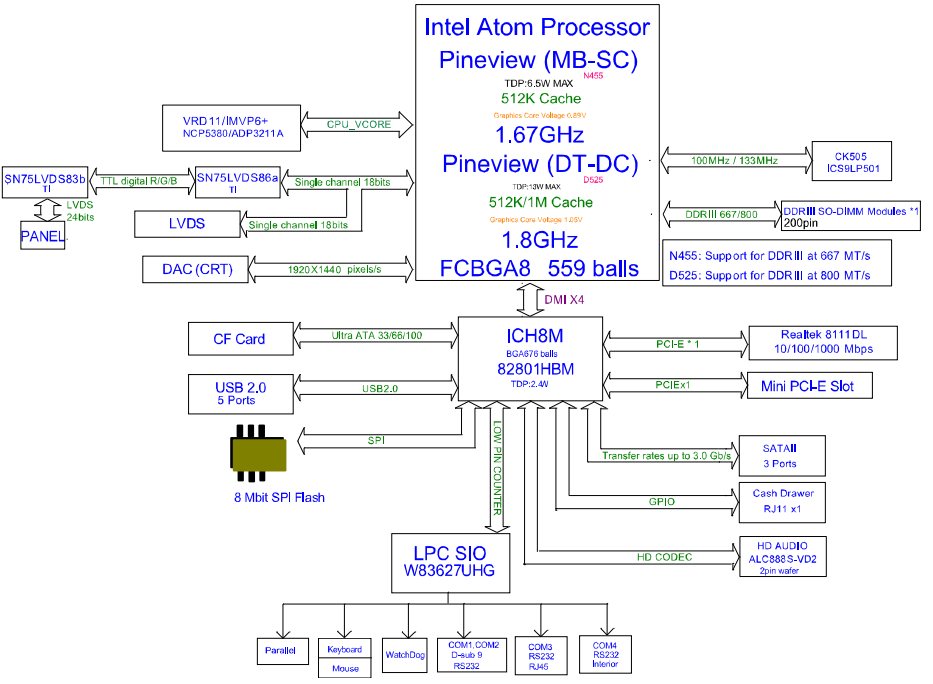
***B***

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
- I / O Map
- Watchdog Timer Configuration
- 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) |
| 5 | Intel(R) ICH8 Family SMBus Controller - 283E |
| 8 | System CMOS/real time clock |
| 9 | Microsoft ACPI-Compliant System |
| 10 | Communications Port (COM4) |
| 11 | Communications Port (COM3) |
| 12 | Microsoft PS/2 Mouse |
| 13 | Numeric data processor |
| 14 | Primary IDE Channel |
| 16 | Intel(R) Graphics Media Accelerator 3150 |
| 16 | Intel(R) ICH8 Family USB Universal Host Controller - 2834 |
| 17 | Realtek PCIe GBE Family Controller |
| 18 | Intel(R) ICH8 Family USB2 Enhanced Host Controller - 283A |
| 18 | Intel(R) ICH8 Family USB Universal Host Controller - 2832 |
| 18 | Intel(R) ICH8M 3 port Serial ATA Storage Controller - 2828 |
| 19 | Intel(R) ICH8 Family USB Universal Host Controller - 2831 |
| 21 | Intel(R) ICH8 Family USB Universal Host Controller - 2835 |
| 21 | Microsoft UAA Bus Driver for High Definition Audio |
| 22 | Intel(R) ICH8 Family PCI Express Root Port 1 - 283F |
| 23 | Intel(R) ICH8 Family PCI Express Root Port 6 - 2849 |
| 23 | Intel(R) ICH8 Family USB Universal Host Controller – 2830 |
| 23 | Intel(R) ICH8 Family USB2 Enhanced Host Controller - 2836 |

## DMA CHANNELS MAP

| DMA Channel | Assignment |
|---|---|
| 4 | Direct memory access controller |

## 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 |
| 0x00000070-0x00000071 | System CMOS/real time clock |
| 0x00000072-0x0000007F | Motherboard resources |
| 0x00000080-0x00000080 | Motherboard resources |
| 0x00000081-0x00000083 | Direct memory access controller |
| 0x00000084-0x00000086 | Motherboard resources |
| 0x00000087-0x00000087 | Direct memory access controller |
| 0x00000088-0x00000088 | Motherboard resources |
| 0x00000089-0x0000008B | Direct memory access controller |
| 0x0000008C-0x0000008E | Motherboard resources |
| 0x0000008F-0x0000008F | Direct memory access controller |
| 0x00000090-0x0000009F | Motherboard resources |
| 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) |

| I/O MAP | ASSIGNMENT |
|---|---|
| 0x00000378-0x0000037F | Printer Port (LPT1) |
| 0x000003B0-0x000003BB | Intel(R) Graphics Media Accelerator 3150 |
| 0x000003C0-0x000003DF | Intel(R) Graphics Media Accelerator 3150 |
| 0x000003E8-0x000003EF | Communications Port (COM3) |
| 0x000003F6-0x000003F6 | Primary IDE Channel |
| 0x000003F8-0x000003FF | Communications Port (COM1) |
| 0x00000400-0x0000041F | Motherboard resources |
| 0x00000400-0x0000041F | Intel(R) ICH8 Family SMBus Controller - 283E |
| 0x000004D0-0x000004D1 | Motherboard resources |
| 0x00000500-0x0000053F | Motherboard resources |
| 0x00000800-0x0000087F | Motherboard resources |
| 0x00000A00-0x00000A0F | Motherboard resources |
| 0x00000D00-0x0000FFFF | PCI bus |
| 0x0000C080-0x0000C087 | Intel(R) Graphics Media Accelerator 3150 |
| 0x0000C400-0x0000C41F | Intel(R) ICH8 Family USB Universal Host Controller - 2835 |
| 0x0000C480-0x0000C49F | Intel(R) ICH8 Family USB Universal Host Controller - 2834 |
| 0x0000C800-0x0000C81F | Intel(R) ICH8 Family USB Universal Host Controller - 2832 |
| 0x0000C880-0x0000C89F | Intel(R) ICH8 Family USB Universal Host Controller - 2831 |
| 0x0000CC00-0x0000CC1F | Intel(R) ICH8 Family USB Universal Host Controller - 2830 |
| 0x0000D080-0x0000D08F | Intel(R) ICH8M 3 port Serial ATA Storage Controller - 2828 |
| 0x0000D400-0x0000D40F | Intel(R) ICH8M 3 port Serial ATA Storage Controller - 2828 |
| 0x0000D480-0x0000D483 | Intel(R) ICH8M 3 port Serial ATA Storage Controller - 2828 |
| 0x0000D800-0x0000D807 | Intel(R) ICH8M 3 port Serial ATA Storage Controller - 2828 |
| 0x0000D880-0x0000D883 | Intel(R) ICH8M 3 port Serial ATA Storage Controller - 2828 |
| 0x0000DC00-0x0000DC07 | Intel(R) ICH8M 3 port Serial ATA Storage Controller - 2828 |
| 0x0000E000-0x0000EFFF | Intel(R) ICH8 Family PCI Express Root Port 6 - 2849 |
| 0x0000E800-0x0000E8FF | Realtek PCIe GBE Family Controller |
| 0x0000FFA0-0x0000FFAF | Intel(R) ICH8M Ultra ATA Storage Controllers - 2850 |

## WATCHDOG TIMER CONFIGURATION

Watchdog timer can be configured via I/O port address 2E (hex) and 2F (hex). 2E (hex) is the address port. 2F (hex) is the data port. User can assign the target offset by writing value into address port 2E (hex) and then write/read data to/from the target offset by data port 2F (hex).

### Configuration Sequence

Please follow the following steps to program W83627UHG configuration registers.
(1) Enter the extended function mode.
(2) Configure the configuration registers.
(3) Exit the extended function mode.

### (1) Enter the extended function mode

To place W83627UHG into the Extended Function Mode, two successive writes of 0x87 must be applied to Extended Function Enable Registers (EFERs, i.e. 2Eh or 4Eh).

### (2) Configure the configuration registers

User must select to the desired Logical Device number and activates the desired Logical Devices through Extended Function Index Register (EFIR) and Extended Function Data Register (EFDR). The EFIR is located at the same address as the EFER, and the EFDR is located at address (EFIR+1). First, write the Logical Device Number (i.e. 0x07) to the EFIR and then write the number of the desired Logical Device to the EFDR. If accessing the Chip (Global) Control Registers, this step is not required. Secondly, write the address of the desired configuration register within the Logical Device to the EFIR and then write (or read) the desired configuration register through the EFDR.

### (3) Exit the extended function mode

To exit the Extended Function Mode, writing 0xAA to the EFER is required. Once SuperIO exits the Extended Function Mode, it goes back to the normal running mode.

## Code example for watch dog timer

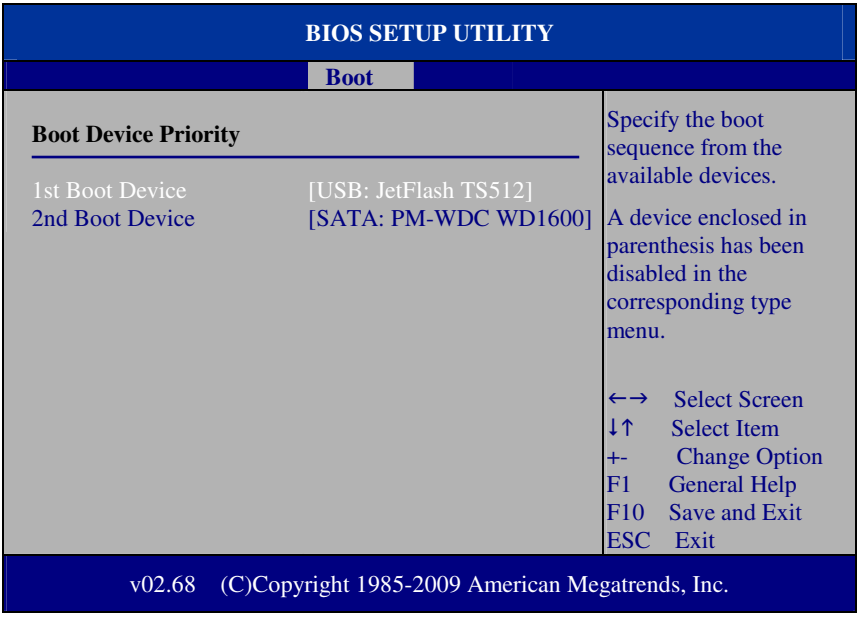
Enable watchdog timer and set timeout interval to 30 seconds.

```
;------ Enter to extended function mode ------------------------------------------------------
mov     dx,     2Eh
mov     al,     87h
out     dx,     al
out     dx,     al
;------ Select Logical Device 8 of watchdog timer ----------------------------------------
mov     al,     07h
out     dx,     al
inc     dx
mov     al,     08h
out     dx,     al
;------ Logic device activation for watch dog timer ----------------------------------------
dec     dx
mov     al,     030h
out     dx,     al
inc     dx
mov     al,     01h
out     dx,     al
;------ Set second as counting unit ----------------------------------------------------------
dec     dx
mov     al,     0F5h
out     dx,     al
inc     dx
in      al,     dx
and     al,     not 08h
out     dx,     al
;------ Set timeout interval as 30seconds and start counting ---------------------------------
dec     dx
mov     al,     0F6h
out     dx,     al
inc     dx
mov     al,     30
out     dx,     al
;------ Exit the extended function mode ------------------------------------------------------
dec     dx
mov     al,     0AAh
out     dx,     al
```

## Flash BIOS Update

**I. Before System BIOS update**

1. Prepare a bootable media (ex. USB storage device) which can boot system to DOS prompt.
2. Get flash utility (AFUDOS.exe) and BIOS file (ex. 31520P01.ROM) from CD then save them to a bootable device.
3. Copy AMI flash utility – AFUDOS.exe (v4.38) into bootable device.
4. Make sure the target system can first boot to the bootable device.
   (1) Connect the bootable USB device.
   (2) Turn on the system and press <Del> key during BIOS POST procedure.
   (3) System will go into the BIOS setup menu.
   (4) Select [Boot] menu.
   (5) Select [Boot Devices Priority] sub-menu, set the USB bootable device to be the 1st boot device.
   (6) Press <F10> key to save configuration and exit the BIOS setup menu.



**II. AFUDOS command for system BIOS update**

AFUDOS.exe is the AMI firmware update utility; the command line is shown as below:

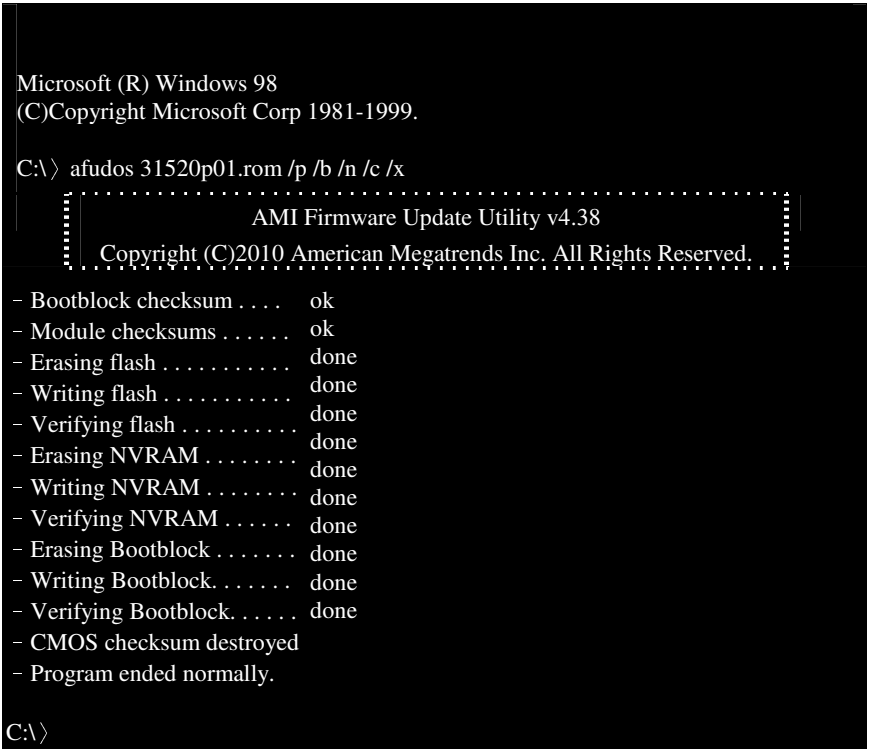
**AFUDOS <ROM File Name> [option1] [option2]….**

User can type "AFUDOS/?" to see all the definition of each control options. The recommended options for BIOS ROM update include following parameters:

**/P**: Program main BIOS image.
**/B**: Program Boot Block.
**/N**: Program NVRAM.
**/C**: Destroy CMOS checksum.
**/X**: Don't check ROM ID.

**III. BIOS update procedure**

1. Use the bootable USB storage to boot up system into the DOS command prompt.
2. Type "**AFUDOS 3152xxxx.ROM /p /b /n /c /x**" and press enter to start the flash procedure.
   (Note that xxxx means the BIOS revision part, ex. 0P01…)
3. During the update procedure, you will see the BIOS update process status and its percentage. Beware! Do not turn off system power or reset your computer if the whole procedure are not complete yet, or it may crash the BIOS ROM and make system unable to boot up next time.
4. After BIOS update procedures is complete, the messages should be like the figure shown below.




5. User can restart the system and boot up with new BIOS now.

# *QUICK MANUAL*

*APPENDIX*

***C***

This appendix contains the assembly procedure of the advertisement board and the 2nd display.

Sections included:

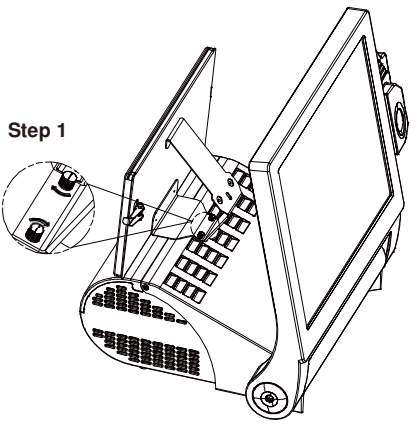
- Assembly Procedure of Advertisement Board
- Assembly Procedure of 2nd Display

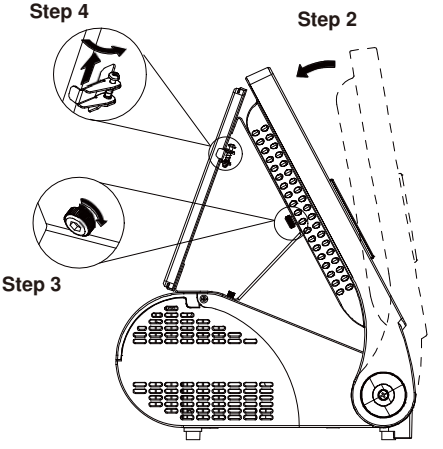
# Assembly Procedure of Advertisement Board

**Packing Checklist:**

- Transparent Acrylic x 1
- Acrylic Bracket x 1
- LCD Screw x 1
- Body Screw x 2

**Assembly Steps:**



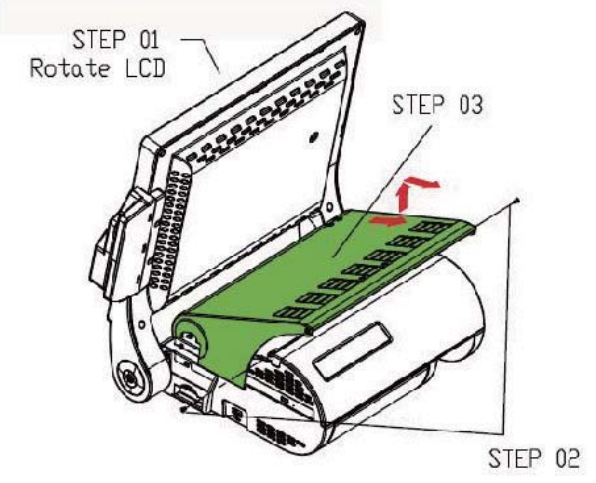



## Assembly Procedure of 2nd Display

### Packing Checklist:

- 8.4" LCD x 1
- Driver CD x 1
- Power Cable (D-sub 9 to Power Jack) x 1
- VGA Cable (Twin D-sub 15) x 1
- LCD Holder (Metal) x 1
- LCD Fixed Screw x 4
- LCD Bracket Fixed Screw x 2

### STEP 1:

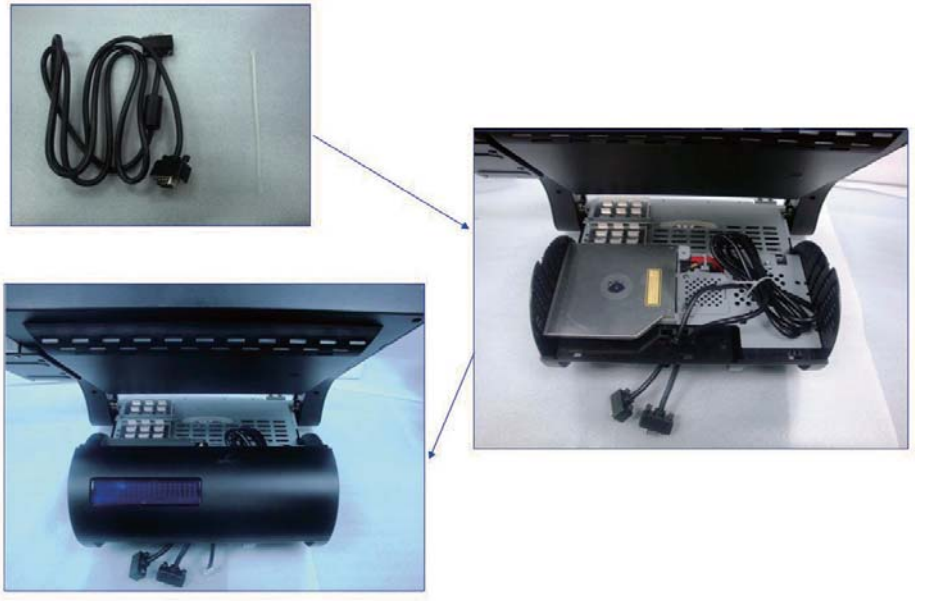


**STEP 2:**

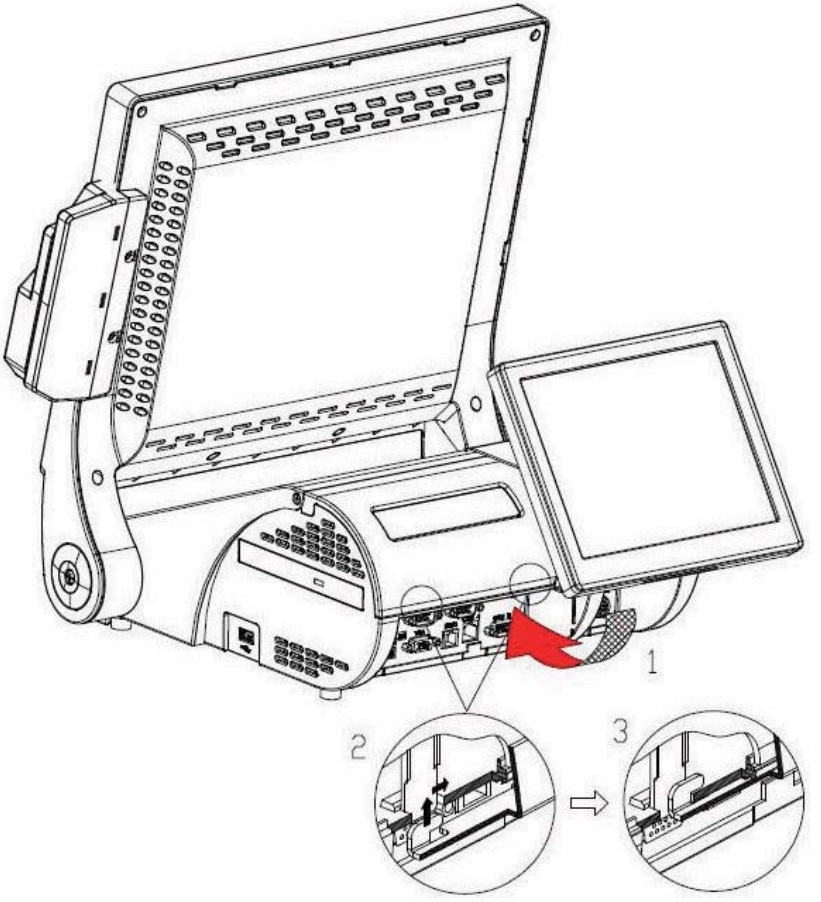

| SELEC -TION | JUMPER SETTINGS | |
|---|---|---|
| RI | 1-2 | 6 5 2 1 JP_COM1 |
| VCC12 | 3-4 | 6 5 2 1 JP_COM1 |
| VCC | 5-6 | 6 5 2 1 JP_COM1 |

*Manufacturing Default – RI.

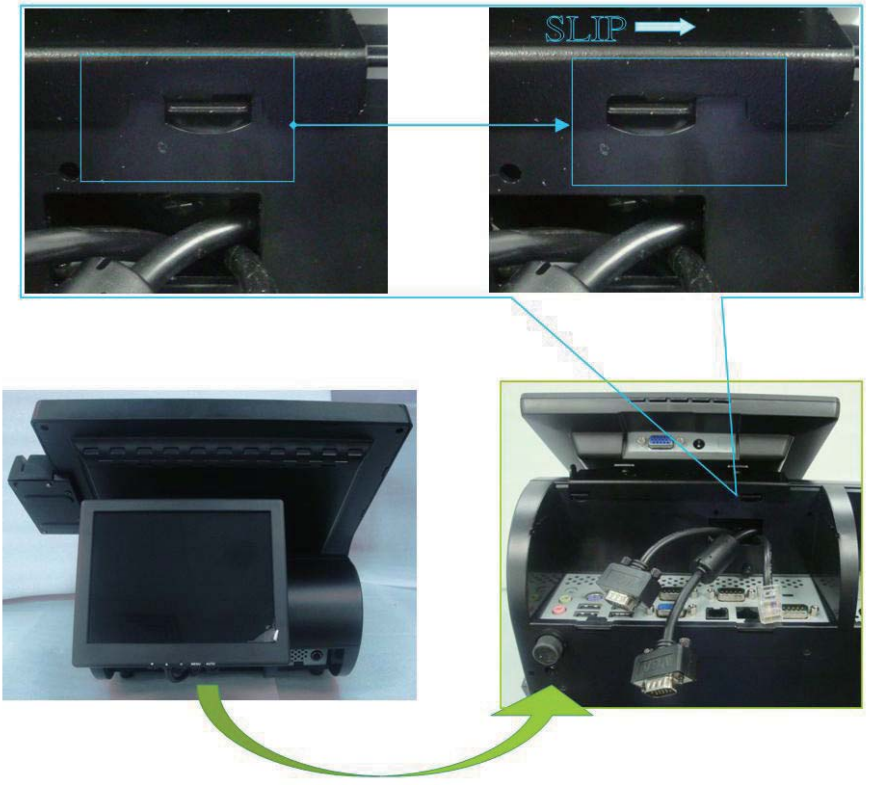
**STEP 3:**



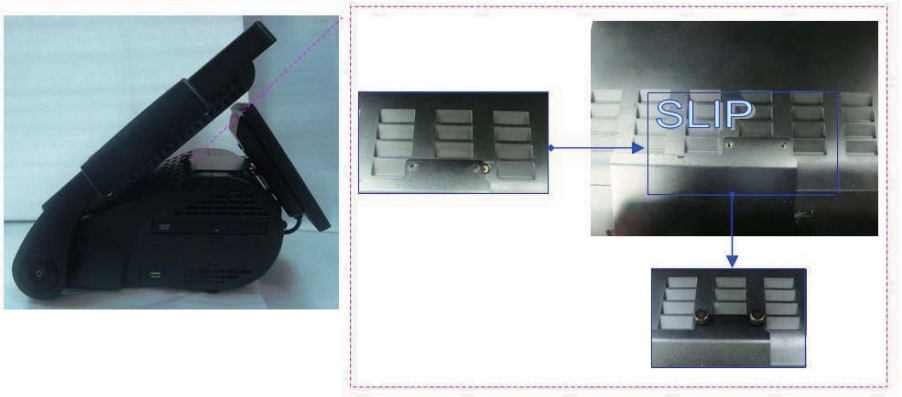
**STEP 4:**



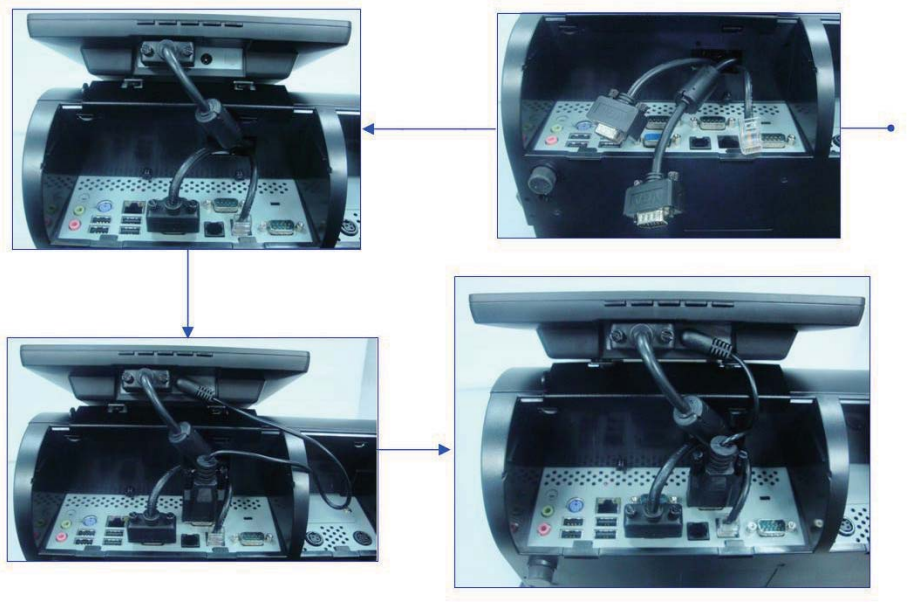
**STEP 5:**



**STEP 6:**




**STEP 7:**



**STEP 8:**