



AXIOMTEK

P1177S-881

**All-in-One
17" SXGA TFT Slim
PANEL PC**

User's Manual



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CAUTION

If you replace wrong batteries, it causes the danger of explosion. It is recommended by the manufacturer that you follow the manufacturer's instructions to only replace the same or equivalent type of battery, and dispose of used ones.

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Safety Precautions

Before getting started, read the following important cautions.

1. Be sure to ground yourself to prevent static charge when installing the internal components. Use a grounding wrist strap and place all electronic components in any static-shielded devices. Most electronic components are sensitive to static electrical charge.
2. Disconnect the power cords from the P1000 Series before making any installation. Be sure both the system and the external devices are turned OFF. Sudden surge of power could ruin sensitive components. Make sure the P1000 Series is properly grounded.
3. Do not open the system's top cover. If opening the cover for maintenance is a must, only a trained technician is allowed to do so. Integrated circuits on computer boards are sensitive to static electricity. To avoid damaging chips from electrostatic discharge, observe the following precautions:
 - Before handling a board or integrated circuit, touch an unpainted portion of the system unit chassis for a few seconds. This will help to discharge any static electricity on your body.
 - When handling boards and components, wear a wrist-grounding strap, available from most electronic component stores.

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Chapter 1

Introduction

This chapter contains general information and detailed specifications of the P1177S-881. Chapter 1 includes the following sections:



- General Description
- Specification
- Dimensions
- I/O Outlets
- Package List

1.1 General Description

The P1177S-881 adopts a 17-inch SXGA TFT LCD with 250-nits brightness and Intel® 4th Core™ i7/i5/i3 series, Pentium® and Celeron® processors and Intel® H81 chipset to provide excellent and powerful computing performance. Furthermore, P1177S-881 adopts built-in speaker and option WLAN module for wireless connectivity.

Industrial-grade front bezel

P1177S-881 adopts industrial-grade material front bezel which incorporates the advantages of light weight, high degree of hardness better heat releasing, easy-to-shape and anti-corrosion ability. Therefore, P1177S-881 is especially suitable for most rugged industrial environments.

Speaker and WLAN Antenna Supported

P1177S-881 features built-in speakers for kiosk application to display multimedia content program. It also supports WLAN module (optional) antenna for wireless network connectivity.

Powerful computing: Intel® 4th Core™ i7/i5/i3/Celeron processors

P1177S-881 features Intel® 4th Core™ i7/i5/i3 series, Pentium® and Celeron® processors and Intel® H81 chipset which deliver high computing performance capability. Haswell CPU offers reliable and stable performance and rugged environment.

1.2 Specifications

Main CPU Board

- **CPU**
 - Intel® 4th Core™ i7/i5/i3 series, Pentium® and Celeron® processors
- **System Chipset**
 - Intel® H81 Express Chipset
- **System Memory**
 - 2 x 204-pin DDR3 1600/1333 MHz SO-DIMM socket
 - Supporting 8GB per DIMM, maximum memory up to 16GB
- **BIOS**
 - America Megatrends BIOS

I/O System

- **Standard I/O**
 - 3 x RS-232/422/485 with 5V&12V, 1 x RS-232 with 5V/12V
 - 4 x USB 2.0
 - 2 x USB 3.0
 - 1 x HDMI
 - 1 x VGA
- **Ethernet**
 - 2 x RJ45 for Giga Ethernet
- **Audio**
 - 1 x Line-out
 - 1 x Mic-in
- **Expansion**
 - 1 x Wireless Module(optional)
- **Storage**
 - 2 x 2.5" or 1 x 3.5" SATA HDD
- **Power connector**
 - 1 x AC plug

System Specification

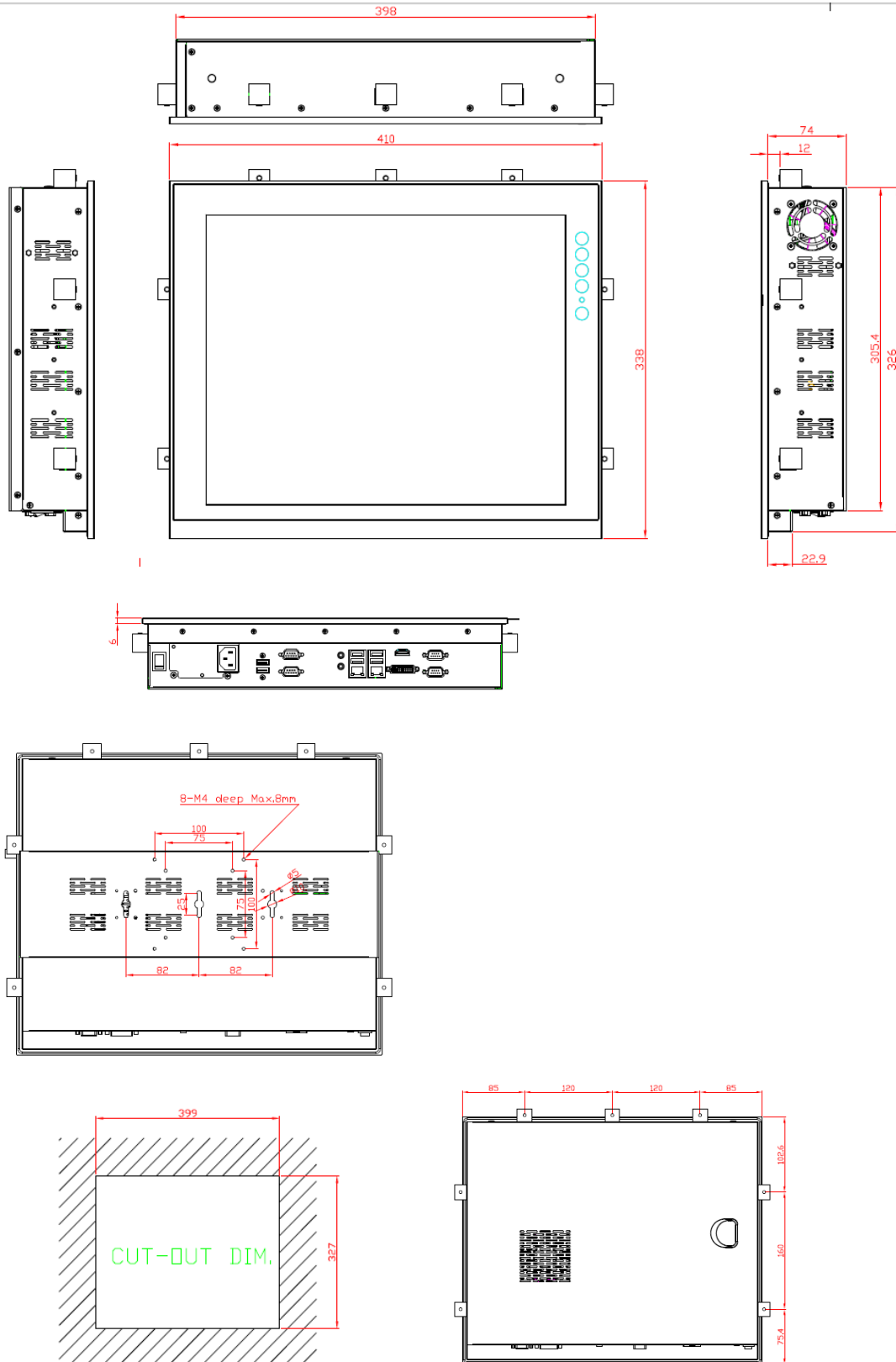
- 17" SXGA(1280 X 1024)LCD
- 5 wired resistive Touch
- IP65/NEMA4 aluminum front bezel
- IP65 aluminum front bezel
- Net Weight
 - 6.6 Kgs (14.55 lb)
- Dimension (Main Body Size)
 - 410 x 80 x 338mm
- Operation Temperature
 - 0°C to 45°C
- Relative Humidity
 - 10% to 90% @ 40°C, Non-Condensing
- Power Input
 - 100~240VAC power connector



NOTE 1. All specifications and images are subject to change without notice.
2. Long press the button of OSD doesn't have "repeat" function.
3. Because of issue of Intel H81 chipset "Display Port Aux", the errors will be occurred in LCD display. Please restart the system if the error happened.

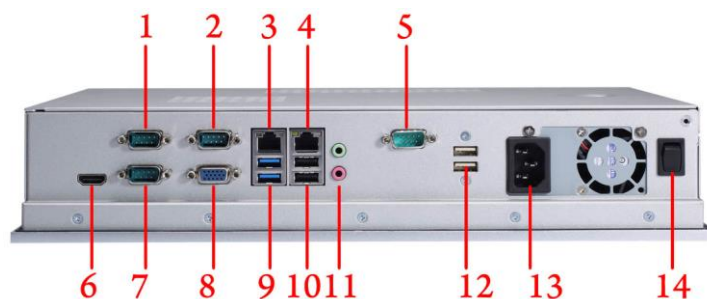
1.3 Dimensions and Outlines

The following diagrams show the dimensions and outlines of P1177S-881.



1.4 I/O Outlets

Please refer to the following illustration for I/O locations of the P1177S-881.



No	Function
1	1 x RS-232/422/485 with 5V&12V (COM1)
2	1 x RS-232/422/485 with 5V&12V (COM3)
3	1 x RJ45 for GIGA Ethernet (LAN1)
4	1 x RJ45 for GIGA Ethernet (LAN2)
5	1 x RS-232 with 5V&12V (COM4)
6	1 x HDMI
7	1 x RS-232/422/485 with 5V&12V (COM2)
8	1 x VGA
9	2 x USB3.0
10	2 x USB2.0
11	1 x MIC-in, 1 x Line-out
12	2 x USB2.0
13	1 x AC Plug
14	1 x switch for power on/off

1.5 Packing List

When you receive the P1177S-881, the bundled package should contain the following items:

- **P1177S-881 unit x 1**
- **Driver CD x1**
- **Panel mount kit x 6**
- **Wall/VESA mount kit x 1 (optional)**
- **Rack mount kit x 1 (optional)**
- **Power cord x 1**

If you can not find the package or any items are missing, please contact Axiomtek distributors immediately.

Chapter 2

Hardware and Installation

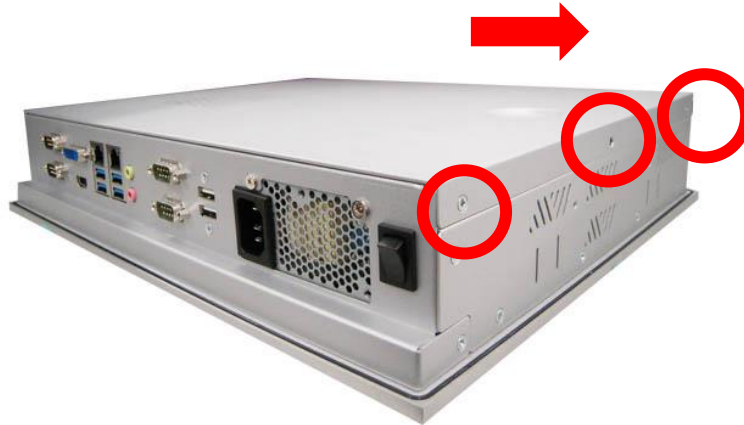
The P1177S-881 provides rich I/O ports and flexible expansions for you to meet different demand. The chapter will show you how to install the hardware. It includes:

- **Open back cover**
- **Serial Port Interface**
- **Ethernet**
- **Mounting Method**
- **Hard disk**
- **DRAM**
- **CPU**
- **CPU Cooler**
- **Wireless LAN Module(optional)**
- **Fan tunnel**

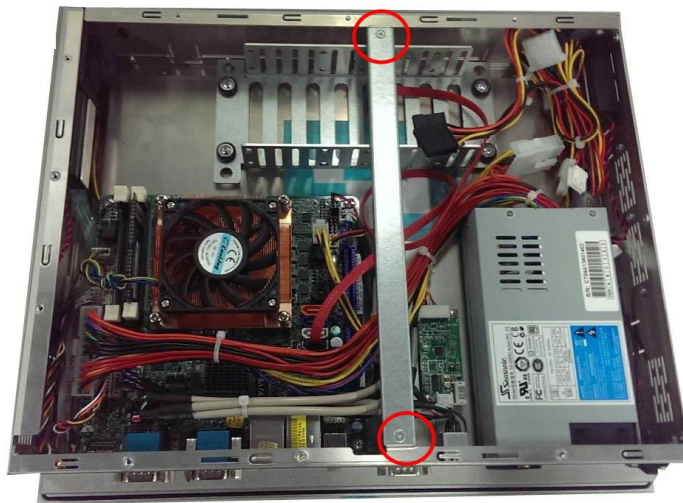
2.1 Open back cover

This section tells users how to open back cover. Please follow the steps below.

Step 1 Unscrew 3 screws on the back cover and push to the right side. Please refer the photo below.



Step 2 Remove the back cover and unscrew 2 screws.



2.2 Serial Ports Interface

This motherboard supports RS-232/422/485 on COM1~COM3 ports and 1 x RS-232 (COM4). The pin assignments are listed in table below. If you need to adjust these COM ports to work as RS-232/422/485, please refer to BIOS setting in section 5.4.

Pin	RS-232	RS-422	RS-485
1	DCD, Data Carrier Detect	TX-	RTX-
2	RXD, Receive Data	RX+	N/A
3	TXD, Transmit Data	TX+	RTX+
4	DTR, Data Terminal Ready	RX-	N/A
5	GND	GND	GND
6	DSR, Data Set Ready	N/A	N/A
7	RTS, Request To Send	N/A	N/A
8	CTS, Clear To Send	N/A	N/A
9	No Power/+5V/+12V	N/A	N/A

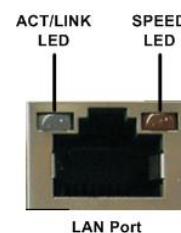
2.3 Ethernet

The P1177S-881 is equipped with two high performance plug and play Ethernet interfaces (RJ-45) which are fully compliant with the IEEE 802.3 standard. Connection can be established by plugging one end of the Ethernet cable into this RJ-45 connector and the other end to a 1000/100/10-Base-T hub.

There are two LEDs next to the LAN port. Please refer to the table below for the LAN port LED indications.

LAN Port LED Indications

Activity/Link LED		SPEED LED	
Status	Description	Status	Description
OFF	No link	OFF	10Mbps connection
Blinking	Data activity	Orange	100Mbps connection
ON	Link	Green	1Gbps connection



2.4 Mountings: Panel / Wall / Rack / Desktop / VESA

There are 5 application options for the P1177S-881, including Panel/Wall/Rack/ Desktop/VESA mounting ways.

2.4.1 VESA-ARM / Wall-Mount / Desktop-mount

The P1177S-881 provides VESA mount: 75x75 mm or 100x100mm. Screw six screws to fix the kit in the back chassis.



▲VESA/ Wall mount bracket



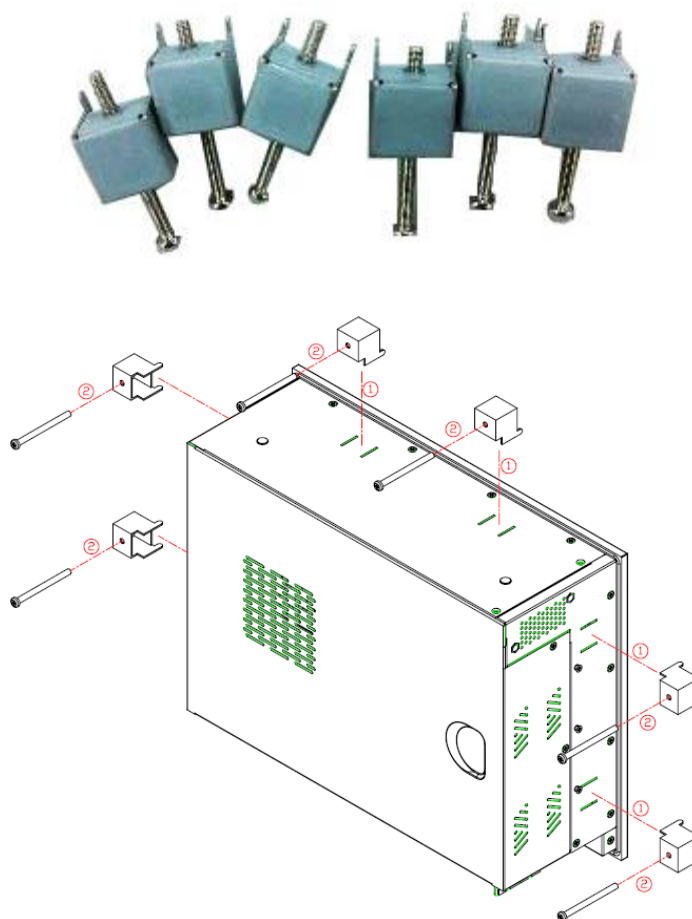
▲ Putting the bracket on the back of system



▲ Fixing the bracket by six screws on the left and right side.

2.4.2 Panel-mount Kit Assembly

The P1177S-881 is designed for panel mount application. To mount the P1177S-881, the standard set of mounting kit (included in the system packaging) is needed.



2.4.3 Rack-mount Kit Assembly

The P1177S-881 is designed for rack mount application. To mount the P1177S-871, the standard set of mounting kit (included in the system packaging) is needed.



Step 1 **Unscrew the fix screws from the left and right side of the system.**



Step 2 **Fixing the rack-mount bracket to the left and right of the system.**



2.5 HDD Installation

The P1177S-881 provides a convenient Hard Disk Drive (HDD) bracket for users to install 2 x 2.5" or 1 x 3.5" SATA HDD. Please follow the steps:

Step 1 Refer section 2.1 to open the back cover.

Step 2 Unscrew 4 screws to take off the HDD bracket.



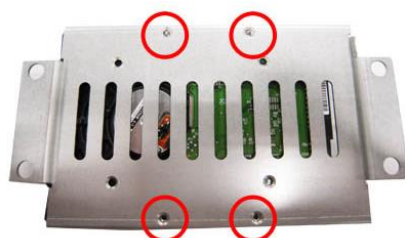
Step 3 Fix the HDD on bracket by the screws.



▲ 1 x 3.5" SATA HDD Kit



▲ 1 x 2.5" or 2 x 2.5" SATA HDD Kit



▲ Fix the 3.5" HDD on the back of bracket



▲ Fix the 2.5" HDD on the right and left side bracket

Step 4 Fix the HDD bracket into the main base.



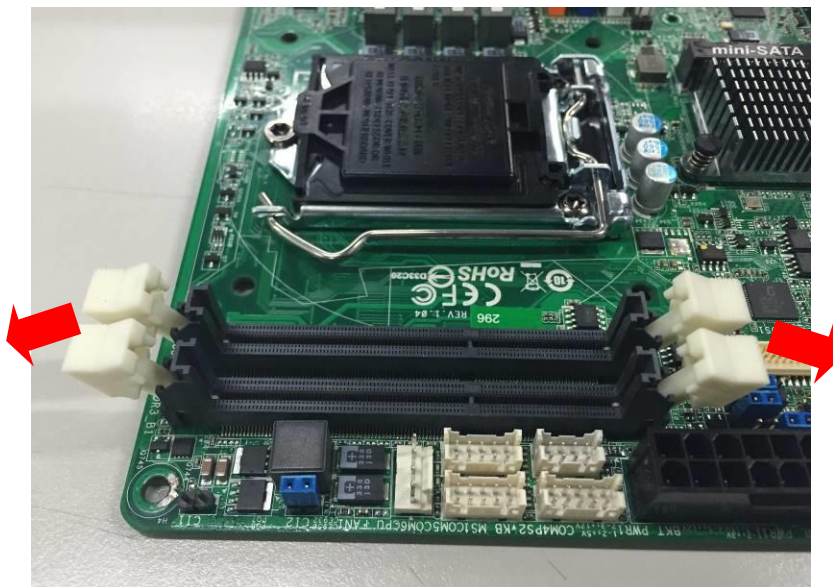
Step 5 Plug the power and SATA cables to connectors. Installation completes.



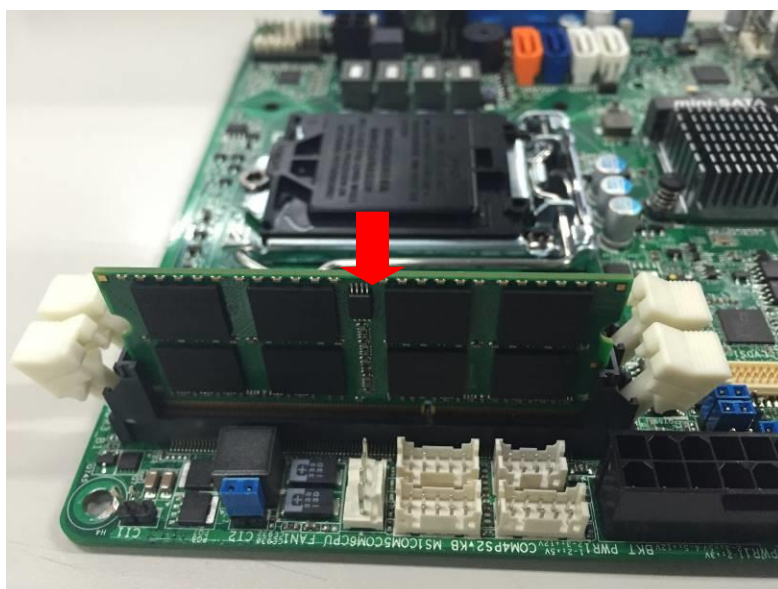
2.6 DRAM Installation

The P1177S-881 provides two 204-pin DDR3 SO-DIMM sockets that support system memory up to 16GB. Please follow steps below to install the memory modules:

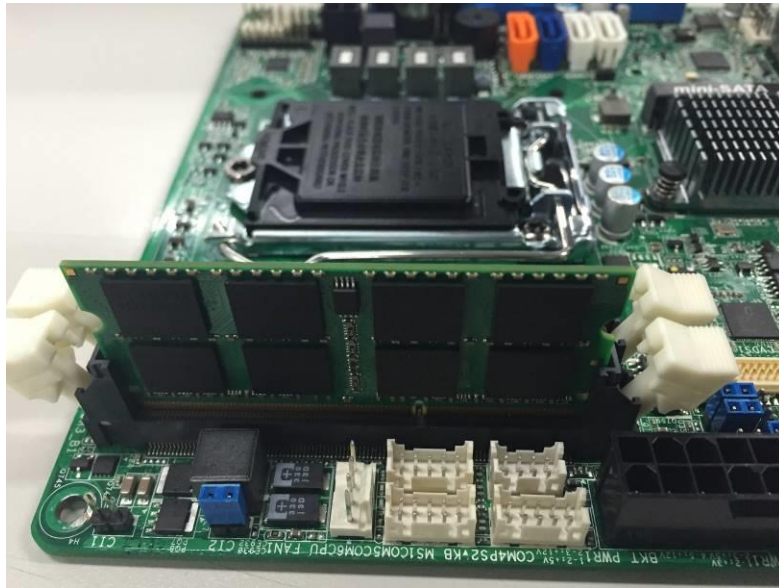
- Step 1** Refer to section 2.1 to open the back cover and find out DIMM socket on mainboard (MANO881).



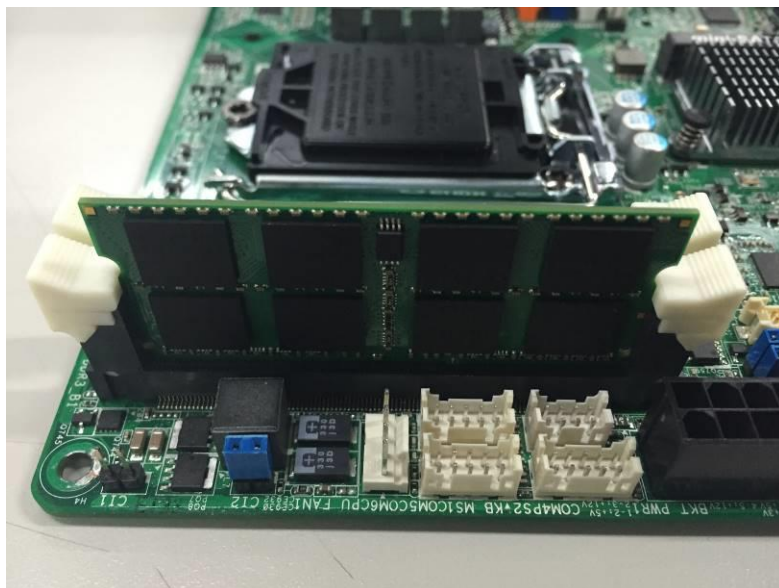
- Step 2** Push the latches on each side of the SO-DIMM slot down.



- Step 3** **Install the SO-DIMM module into the slot and press it firmly down until it seats correctly.**



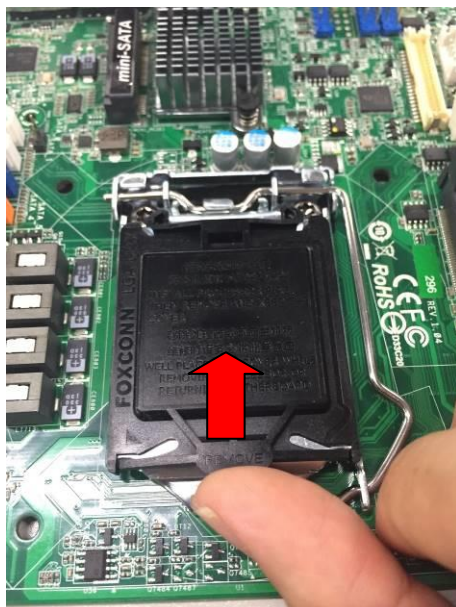
- Step 4** **The slot latches are levered upwards and latch on to the edges of the SO-DIMM.**



2.7 CPU Installation

The P1177S-881 has an LGA1150 socket supporting Intel® 4th Core™ i7/i5/i3 series, Pentium® and Celeron® processors and provides high computing performance for users.

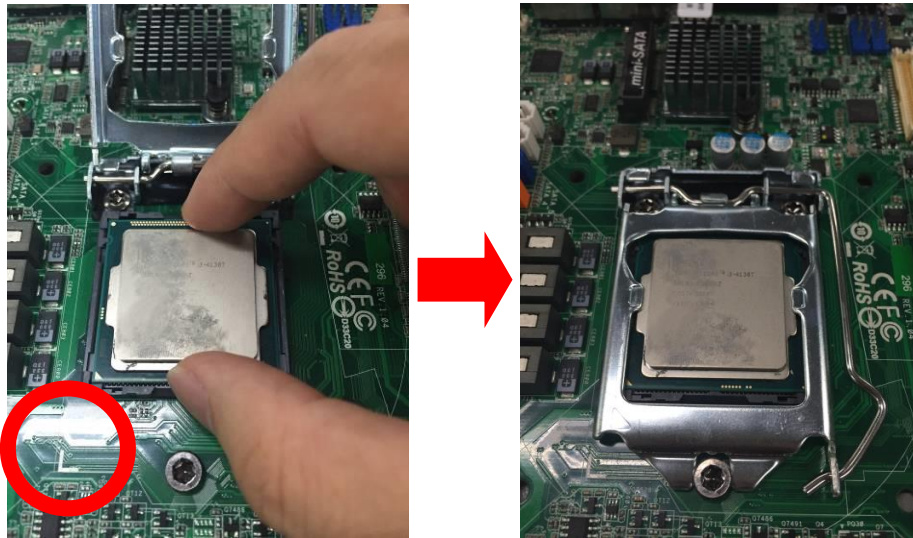
Step 1 Remove the CPU cover before you install CPU.



Step 2 Press the hook of lever down with your thumb and pull it to the right side to release it from retention tab.



- Step 3** CPU aims at the socket and places the package carefully into the socket by purely vertical motion.



NOTE Never touch fragile socket contacts to avoid damage and do not touch processor sensitive contacts at any time during installation.

2.8 CPU Cooler Installation

Step 1 Making sure your CPU settled correctly on the socket.



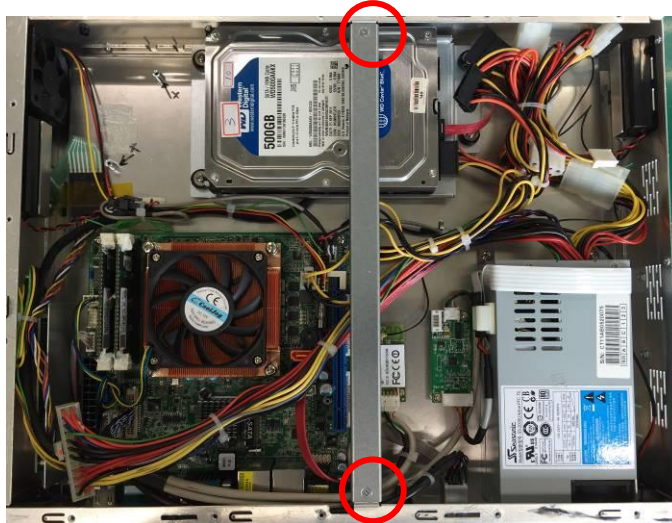
Step 2 Screw the cooling fan supporting base onto the CPU socket on the Motherboard and make sure the CPU fan is plugged to the CPU fan connector. And, Connect the CPU cooler power connector to the FAN1 connector



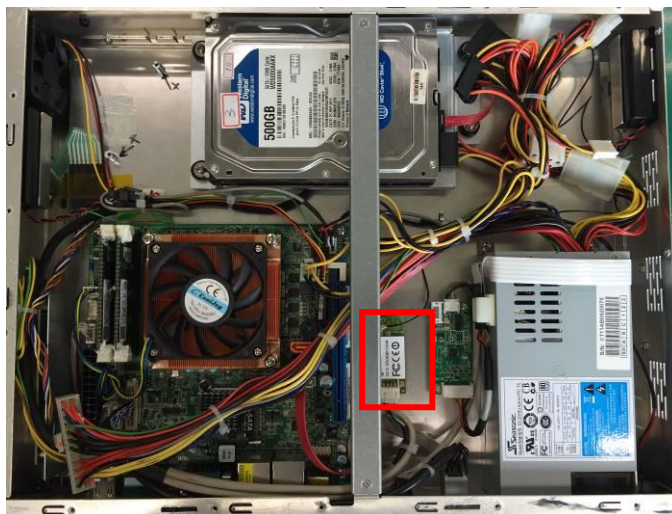
2.9 Wireless LAN Module Installation (optional)

The P1177S-881 provides one wireless LAN module to install. When installing the wireless LAN module, refer to the following instructions and illustration:

Step 1 Refer to section 2.1 to open the back cover and find out the wireless LAN module located.



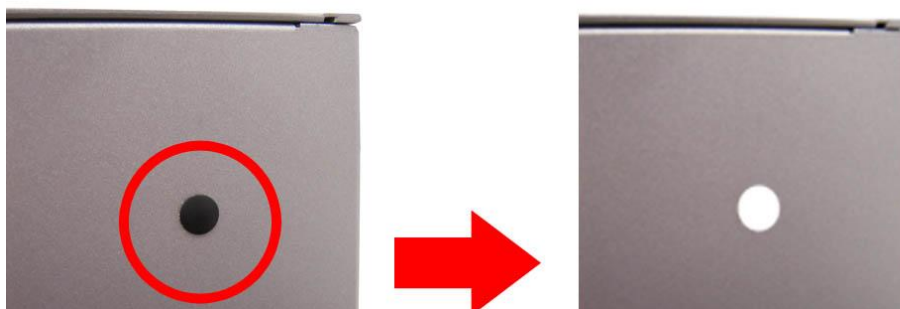
Step 2 Fixing the wireless LAN module by 2 screws.



- Step 3** Plug in USB cable to the connector of WIFI module. And, find the built-in Antenna cable and connect it wireless LAN card.



- Step 4** Lift the rubber stopper from the top of back cover.



- Step 5** Install the antenna on the antenna connector.



2.10 Fan Tunnel Installation

The P1177S-881 provides one fan tunnel to install. When installing the fan tunnel, refer to the following instructions and illustration:

Step1 Spread the fan tunnel out flat.



Step2 Tear the releasing paper from the dual face tape.



Step3 Fold each curved line.



Step4 Stick each side together.



Step5 **Let fan cable through the fan tunnel and stick to the cooler.**



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Chapter 3

AMI BIOS Setup Utility

The AMI UEFI BIOS provides users with a built-in setup program to modify basic system configuration. All configured parameters are stored in a flash chip to save the setup information whenever the power is turned off. This chapter provides users with detailed description about how to set up basic system configuration through the AMI BIOS setup utility.

3.1 Starting

To enter the setup screens, follow the steps below:

1. Turn on the computer and press <F2> or during the Power On Self Test (POST) to enter BIOS setup, otherwise, POST will continue with its test routines.
2. After you press the key, the main BIOS setup menu displays. You can access the other setup screens from the main BIOS setup menu, such as the Advanced and Chipset menus.



NOTE *If your computer cannot boot after making and saving system changes with BIOS setup, you can restore BIOS optimal defaults by setting CLRCMOS1 (see section 2.3.1).*

If you wish to enter BIOS setup after POST, restart the system by pressing <Ctrl>+<Alt>+<Delete>, or by pressing the reset button on the system chassis. You may also restart by turning the system off and then back on.

It is strongly recommended that you should avoid changing the chipset's defaults. Both AMI and your system manufacturer have carefully set up these defaults that provide the best performance and reliability.



NOTE *Because the BIOS setup software is constantly being updated, the following setup screens and descriptions are for reference purpose only, and they may not exactly match what you see on your screen.*

3.2 Menu Bar

The top of the screen has a menu bar with the following selections:

Menu Bar	Description
Main	To set up the system time/date information.
Advanced	To set up the advanced BIOS features.
H/W Monitor	To display current hardware status.
Boot	To set up the default system device to locate and load the operating system.
Security	To set up the security features.
Exit	To exit the current screen or the BIOS setup utility.

Use <←> key or <→> key to choose among the selections on the menu bar, and then press <Enter> to get into the sub screen. You can also use the mouse to click your required item.

3.3 Navigation Keys

The BIOS setup/utility uses a key-based navigation system called hot keys. Most of the BIOS setup utility hot keys can be used at any time during the setup navigation process. These keys include <F1>, <F7>, <Enter>, <ESC>, <Arrow> keys, and so on.



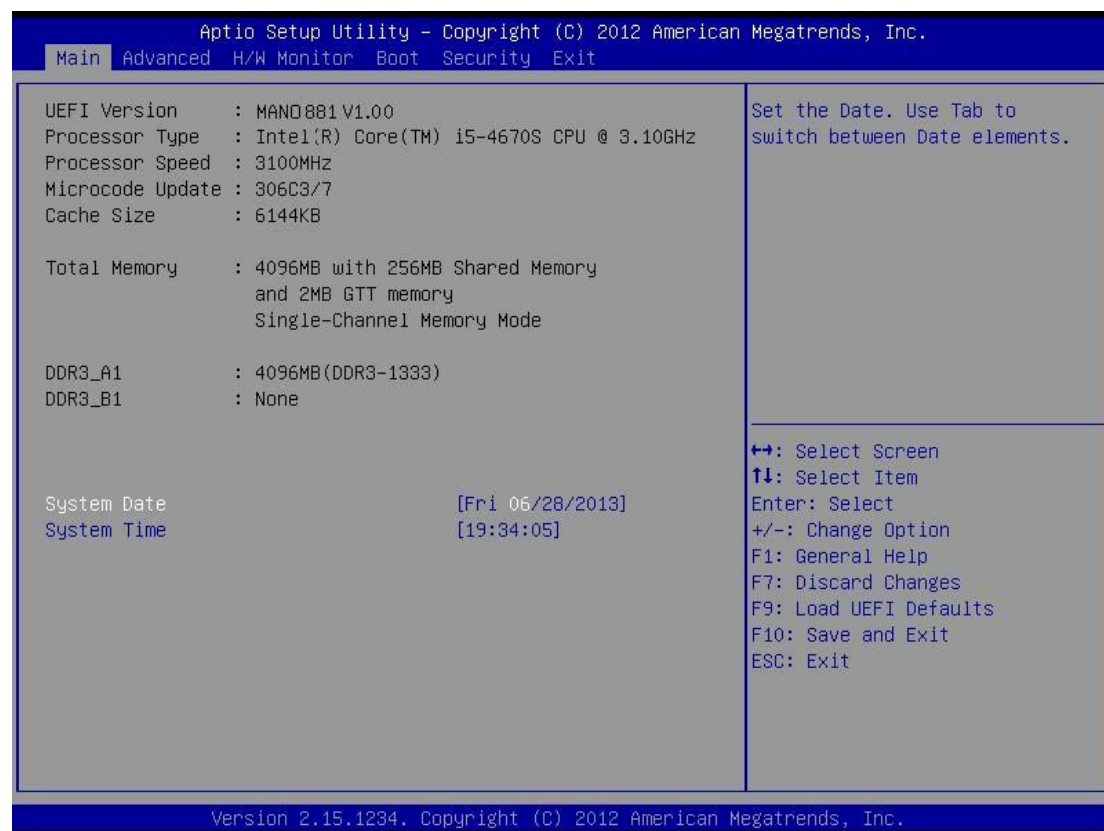
NOTE Some of the navigation keys differ from one screen to another.

Please check the following table for the function description of each navigation key.

Hot Keys	Description
→← Left/Right	The Left and Right <Arrow> keys allow you to select a setup screen.
↑↓ Up/Down	The Up and Down <Arrow> keys allow you to select a setup screen or sub-screen.
+– Plus/Minus	The Plus and Minus <Arrow> keys allow you to change the field value of a particular setup item.
Enter	The <Enter> key allows you to display or change the setup option listed for a particular setup item. The <Enter> key can also allow you to display the setup sub- screens.
F1	The <F1> key allows you to display the General Help screen.
F7	Discard changes.
F9	The <F9> key allows you to load optimal default values for all the settings.
F10	The <F10> key allows you to save any changes you have made and exit Setup. Press the <F10> key to save your changes.
Esc	The <Esc> key allows you to discard any changes you have made and exit the Setup. Press the <Esc> key to exit the setup without saving your changes.

3.4 Main Menu

When you first enter the setup utility, you will enter the Main setup screen. You can always return to the Main setup screen by selecting the Main tab. System Time/Date can be set up as described below. The Main BIOS setup screen is shown below.



BIOS Information

Display the auto-detected BIOS information.

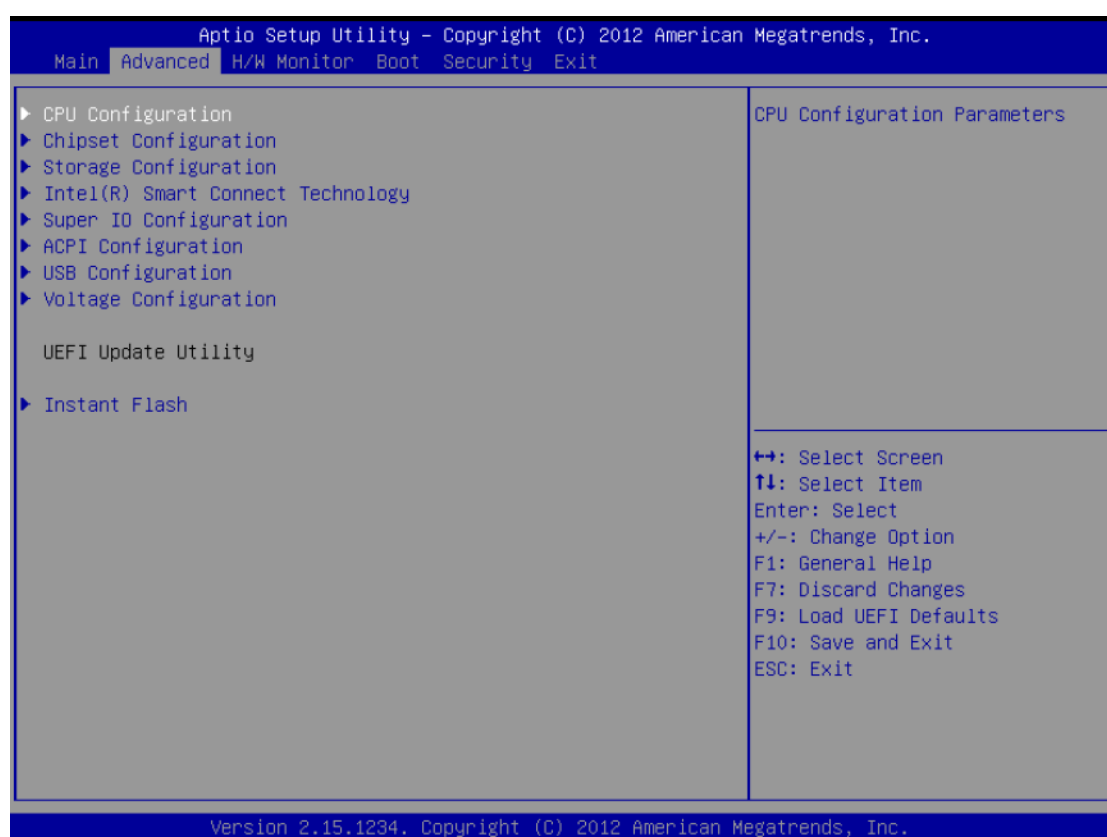
System Date/Time

Use this option to change the system time and date. Highlight System Time or System Date using the <Arrow> keys. Enter new values through the keyboard. Press the <Tab> key or the <Arrow> keys to move between fields. The date must be entered in MM/DD/YY format. The time is entered in HH:MM:SS format.

3.5 Advanced Menu

The Advanced menu also allows users to set configuration of the CPU and other system devices. You can select any of the items in the left frame of the screen to go to the sub menus:

- ▶ CPU Configuration
- ▶ Chipset Configuration
- ▶ Storage Configuration
- ▶ Intel(R) Smart Connect Technology
- ▶ Super IO Configuration
- ▶ ACPI Configuration
- ▶ USB Configuration
- ▶ Voltage Configuration
- ▶ Instant Flash



For items marked with "▶", please press <Enter> for more options.



NOTE Setting wrong values in this section may cause the system to malfunction.

Instant Flash

Instant Flash is a UEFI flash utility embedded in Flash ROM. This convenient UEFI update tool allows you to update system UEFI without entering operating systems first like MS-DOS or Windows®. Just launch this tool and save the new UEFI file to your USB flash drive, floppy disk or hard drive, then you can update your UEFI only in a few clicks without preparing an additional floppy diskette or other complicated flash utility. Please be noted that the USB flash drive or hard drive must use FAT32/16/12 file system. If you execute Instant Flash utility, the utility will show the UEFI files and their respective information. Select the proper UEFI file to update your UEFI, and reboot your system after UEFI update process completes.

- **CPU Configuration**

Aptio Setup Utility - Copyright (C) 2012 American Megatrends, Inc.		
Advanced		
Intel(R) Core(TM) i7-4770 CPU @3.40GHz		Intel Hyper Threading Technology allows multiple threads to run on each core, so that the overall performance on threaded software is improved.
Max CPU Speed	3400 MHz	
Min CPU Speed	800 MHz	
Processor Cores	4	
Intel HT Technology	Supported	
Intel VT-x Technology	Supported	
Intel SMX Technology	Supported	
64 bit	Supported	
Intel Hyper Threading Technology	[Enabled]	
Active Processor Cores	[All]	
CPU C States Support	[Auto]	
Enhanced Halt State(C1E)	[Auto]	
CPU C3 State Support	[Auto]	
Package C State Support	[Disabled]	
Intel SpeedStep Technology	[Enabled]	
Intel Turbo Boost Technology	[Enabled]	
CPU Thermal Throttling	[Enabled]	
No-Execute Memory Protection	[Enabled]	
Intel Virtualization Technology	[Enabled]	
Hardware Perfectcher	[Enabled]	
Adjacent Cache Line Prefetch	[Enabled]	
→ ← : Select Screen ↑ ↓ : Select Item Enter : Select + / - : Change Opt. F1 : General Help F2 : Previous Values F3 : Optimized Defaults F4 : Save & Exit ESC : Exit		
Version 2.15.1234 Copyright (C) 2012 American Megatrends, Inc.		

Active Processor Cores

Select the number of cores to enable in each processor package.

CPU C States Support

Enable CPU C States Support for power saving. It is recommended to keep C3, C6 and C7 all enabled for better power saving.

Enhanced Halt State (C1E)

Enable Enhanced Halt State (C1E) for lower power consumption.

CPU C3 State Support

Enable C3 sleep state for lower power consumption.

Package C State Support

Enable CPU, PCI-Express, Memory, Graphics C State Support for power saving.

Intel SpeedStep Technology

Intel® SpeedStep technology is Intel®'s new power saving technology. Processors can switch between multiple frequencies and voltage points to enable power saving. The default value is Enabled. Configuration options are Enabled and Disabled. If you install Windows® 7 / 8 and want to enable this function, please set this item to [Enabled]. This item will be hidden if the current CPU does not support Intel SpeedStep technology.



NOTE Please note that enabling this function may reduce CPU voltage and lead to system stability or compatibility issues with some power supplies. Please set this item to Disabled if above issues occur.

Intel Turbo Boost Technology

Use this item to enable or disable Intel® Turbo Boost Mode Technology. Turbo Boost Mode allows processor cores to run faster than marked frequency in specific conditions. The default value is Enabled.

CPU Thermal Throttling

You may select Enabled to enable CPU internal thermal control mechanism to keep the CPU from overheating.

No-Execute Memory Protection

No-Execution (NX) Memory Protection Technology is an enhancement to the IA-32 Intel Architecture. An IA-32 processor with "No Execute (NX) Memory Protection" can prevent data pages from being used by malicious software to execute codes. This option will be hidden if the current CPU does not support No-Execute Memory Protection.

Intel Virtualization Technology

When this option is set to Enabled, a VMM (Virtual Machine Architecture) can utilize the additional hardware capabilities provided by Vanderpool Technology. This option will be hidden if the installed CPU does not support Intel® Virtualization Technology.

Hardware Prefetcher

Use this item to turn on/off the MLC streamer prefetcher.

Adjacent Cache Line Prefetch

Use this item to turn on/off prefetching of adjacent cache lines.

- **Chipset Configuration**

Aptio Setup Utility - Copyright (C) 2012 American Megatrends, Inc.		
Advanced		
VT-d Capability	Supported	If [Auto] is selected, the motherboard will detect the memory module(s) inserted and assign the appropriate frequency automatically.
DRAM Frequency	[Auto]	
Primary Graphics Adapter	[PCI Express]	
VT-d	[Disabled]	
PCIe1 Link Speed	[Auto]	
Share Memory	[Auto]	→ ← : Select Screen ↑ ↓ : Select Item Enter : Select + / - : Change Opt. F1 : General Help F2 : Previous Values F3 : Optimized Defaults F4 : Save & Exit ESC : Exit
IGPU Multi-Monitor	[Disabled]	
Render Standby	[Enabled]	
Onboard HD Audio	[Enabled]	
Front Panel	[Auto]	
Onboard HDMI HD Audio	[Enabled]	
Onboard LAN1	[Enabled]	
Onboard LAN2	[Enabled]	
Deep Sleep	[Disabled]	
Restore on AC/Power Loss	[Power off]	
Active LVDS	[Enabled]	
Primary IGFX Boot Display	[VBIOS Default]	

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DRAM Frequency

If Auto is selected, the motherboard will detect the memory module(s) inserted and assign the appropriate frequency automatically.

Primary Graphics Adapter

This allows you to select Onboard or PCI Express as the boot graphic adapter priority. The default value is PCI Express.

VT-d

Use this to enable or disable Intel® VT-d technology (Intel® Virtualization Technology for Directed I/O). The default value of this feature is Disabled.

PCIe1 Link Speed

Select the link speed for PCIe1.

Share Memory

Configure the size of memory that is allocated to the integrated graphics processor when the system boots up.

IGPU Multi-Monitor

Select Disabled to disable the integrated graphics when an external graphics card is installed. Select Enabled to keep the integrated graphics enabled at all times.

Render Standby

Use this to enable or disable Render Standby by Internal Graphics Device. The default value is Enabled.

Onboard HD Audio

Select Auto, Enabled or Disabled for the onboard HD Audio feature. If you select Auto, the onboard HD Audio will be disabled when PCI Sound Card is plugged.

Front Panel

Select Auto or Disabled for the onboard HD Audio Front Panel.

Onboard HDMI HD Audio

This allows you to enable or disable the Onboard HDMI HD Audio feature.

Onboard LAN1

This allows you to enable or disable the Onboard LAN1 feature.

Onboard LAN2

This allows you to enable or disable the Onboard LAN2 feature.

Deep Sleep

Mobile platforms support Deep S4/S5 in DC only and desktop platforms support Deep S4/S5 in AC only. The default value is Disabled.

Restore on AC/Power Loss

This allows you to set the power state after an unexpected AC/power loss. If Power Off is selected, the AC/power remains off when the power recovers. If Power On is selected, the AC/power resumes and the system starts to boot up when the power recovers.

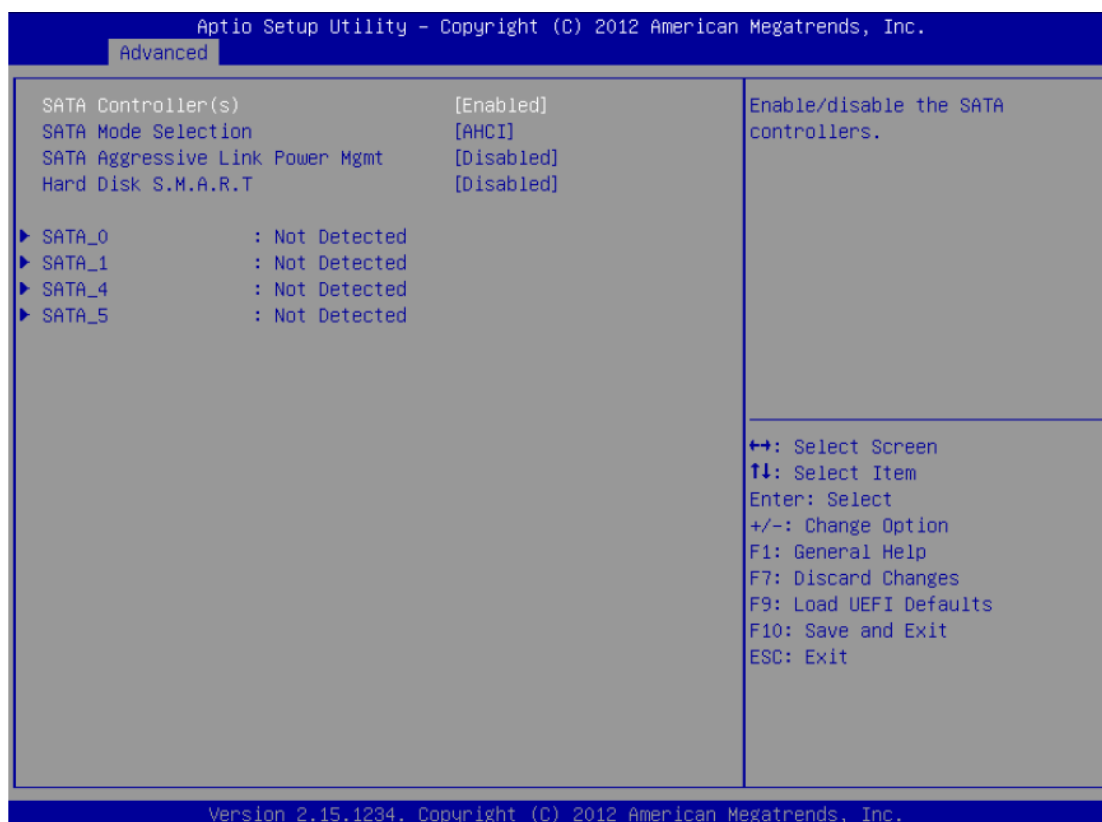
Active LVDS

Use this to enable or disable the LVDS. The default value is Enabled.

Primary IGFX Boot Display

Select the video device which will be activated during POST. This has no effect if external graphics present. Secondary boot display selection will appear based on your selection. VGA modes will be supported only on primary display. Configuration options are VBIOS Default, CRT, DVI, HDMI and LVDS. The default value is VBIOS Default.

- Storage Configuration



SATA Controller(s)

Use this item to enable or disable the SATA Controller feature.

SATA Mode Selection

Use this to select SATA mode. Configuration options are IDE Mode and AHCI Mode. The default value is AHCI Mode.



NOTE AHCI (Advanced Host Controller Interface) supports NCQ and other new features that will improve SATA disk performance but IDE mode does not have these advantages.

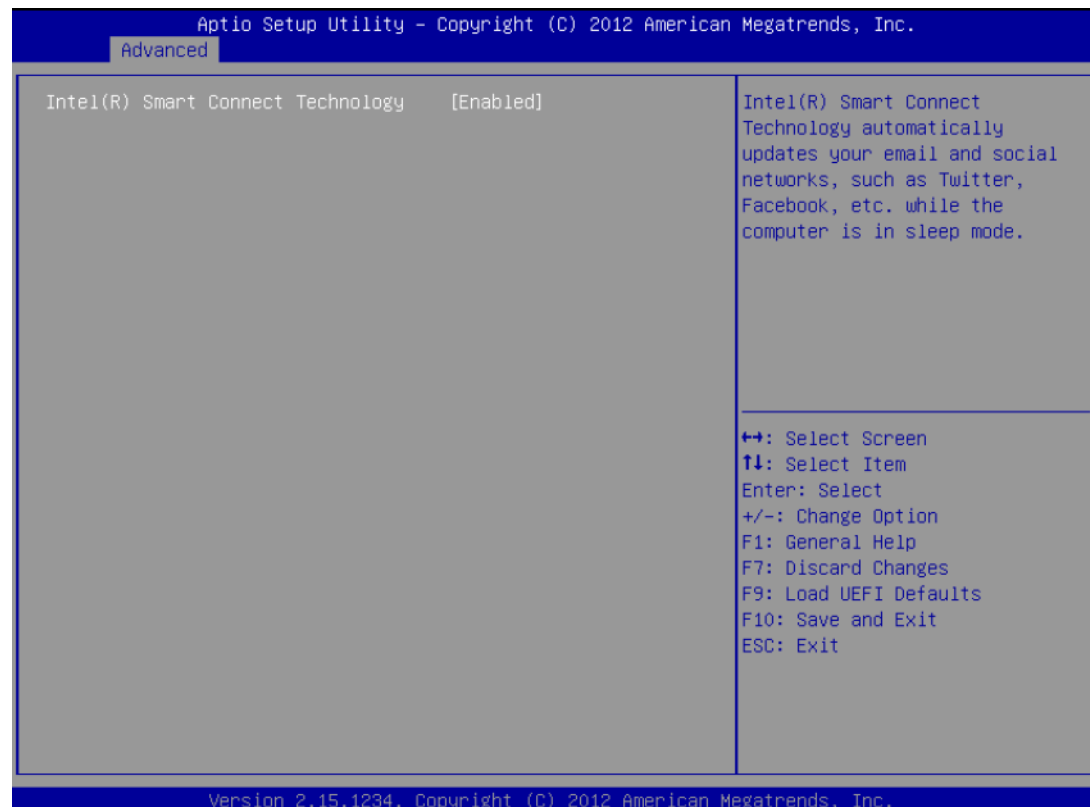
SATA Aggressive Link Power Mgmt

Use this item to configure SATA Aggressive Link Power Management.

Hard Disk S.M.A.R.T.

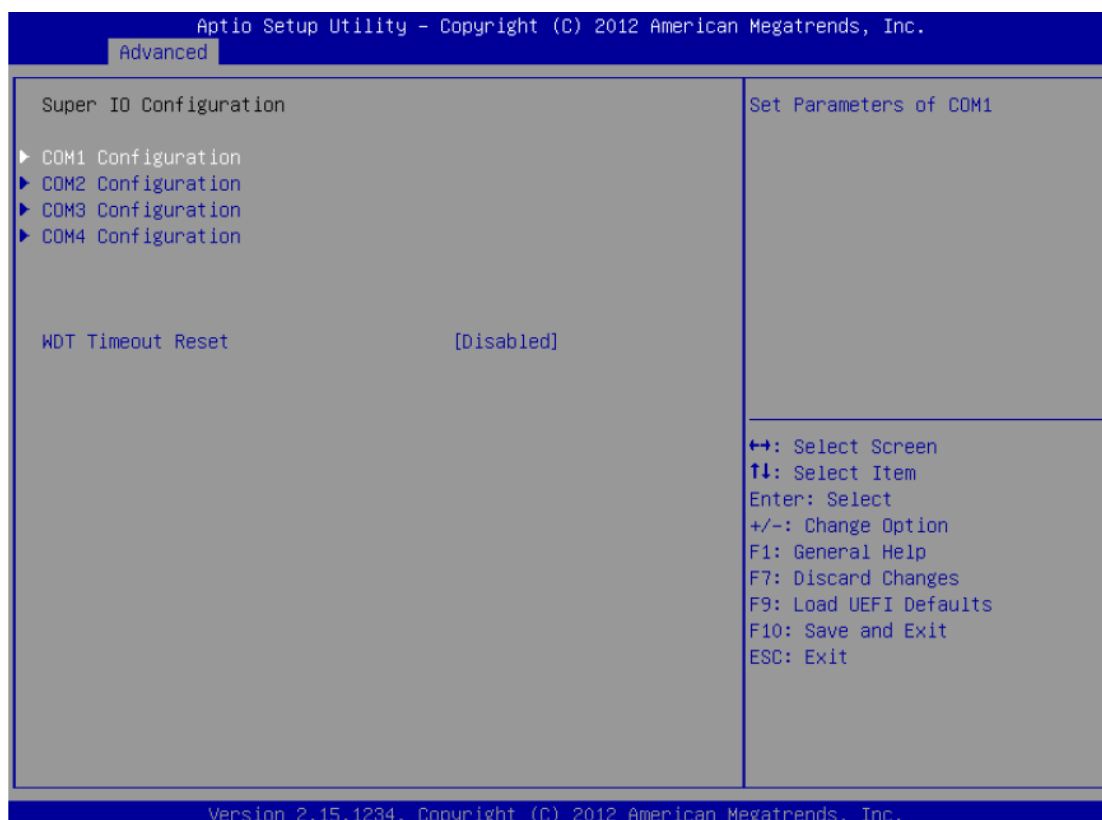
Use this item to enable or disable the S.M.A.R.T. (Self-Monitoring, Analysis, and Reporting Technology) feature. Configuration options are Disabled and Enabled.

- **Intel(R) Smart Connect Technology**

**Intel(R) Smart Connect Technology**

Use this item to enable or disable Intel(R) Smart Connect Technology. Intel(R) Smart Connect Technology keeps your e-mail and social networks, such as Twitter, Facebook, etc. updated automatically while the computer is in sleep mode. The default is Enabled.

- **Super IO Configuration**



COM1 Configuration

Use this to set parameters of COM1. COM1 port type options are RS232, RS422 or RS485.

COM2 Configuration

Use this to set parameters of COM2. COM2 port type options are RS232, RS422 or RS485. COM2 does not support Auto Flow control function on RS485.

COM3 Configuration

Use this to set parameters of COM3. COM3 port type options are RS232, RS422 or RS485.

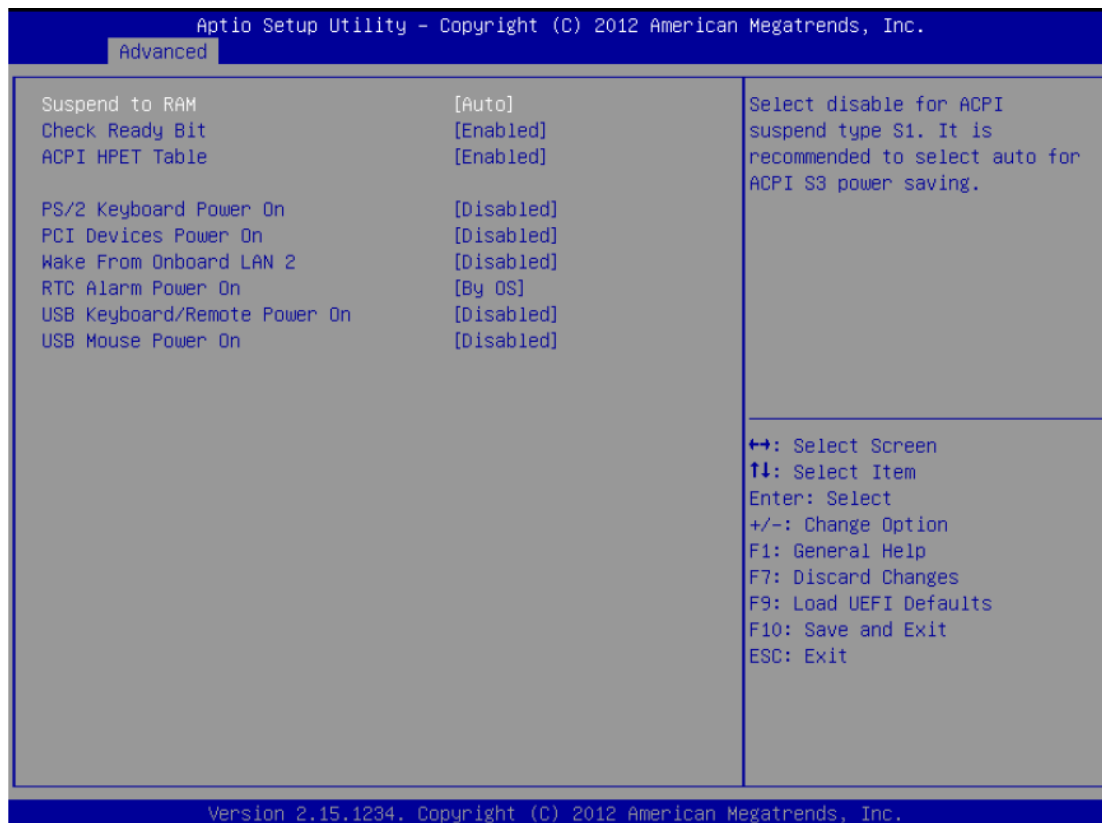
COM4 Configuration

Use this to set parameters of COM4. COM4 port type is RS232.

WDT Timeout Reset

This allows users to enable/disable the Watchdog timer timeout to reset system. The default value is Disabled.

● ACPI Configuration



Suspend to RAM

Use this item to select whether to auto-detect or disable the Suspend-to-RAM feature. Select Auto will enable this feature if the OS supports it.

Check Ready Bit

Use this item to enable or disable the feature Check Ready Bit.

ACPI HPET Table

Use this item to enable or disable ACPI HPET Table. The default value is Enabled. Please set this option to Enabled if you plan to use this motherboard to submit Windows® certification.

PS/2 Keyboard Power On

Use this item to enable or disable PS/2 keyboard to turn on the system from the power-soft-off mode.

PCI Devices Power On

Use this item to enable or disable PCI devices to turn on the system from the power-soft-off mode.

Wake From Onboard LAN 2

Use this item to enable or disable the Wake From Onboard LAN 2 feature.

RTC Alarm Power On

Use this item to enable or disable RTC (Real Time Clock) to power on the system.

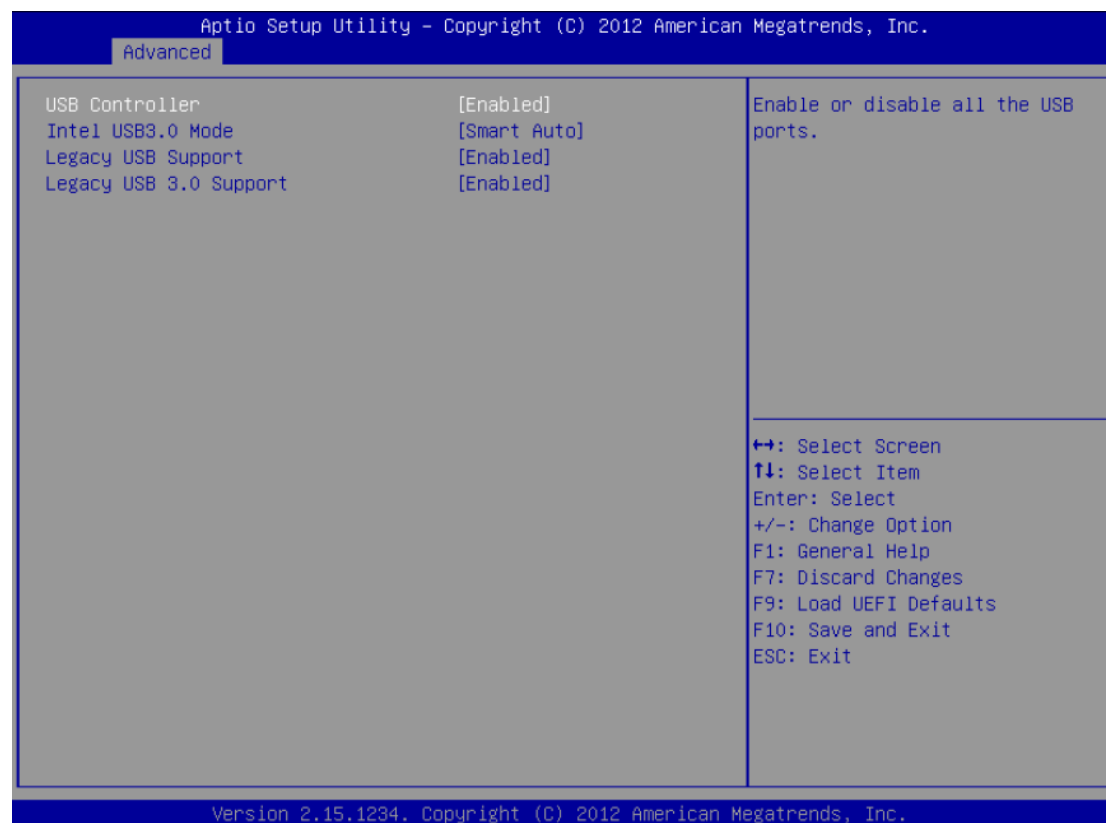
USB Keyboard/Remote Power On

Use this item to enable or disable USB Keyboard/Remote to power on the system.

USB Mouse Power On

Use this item to enable or disable USB Mouse to power on the system.

• USB Configuration



USB Controller

Use this item to enable or disable the use of USB controller.

Intel USB 3.0 Mode

Use this item to enable or disable the use of Intel® USB 3.0 mode.

Legacy USB Support

Use this option to select legacy support for USB devices. There are four configuration options: Enabled, Auto, Disabled and UEFI Setup Only. The default value is Enabled. Please refer to below descriptions for the details of these four options:

[Enabled] - Enable support for legacy USB.

[Auto] - Enable legacy support if USB devices are connected.

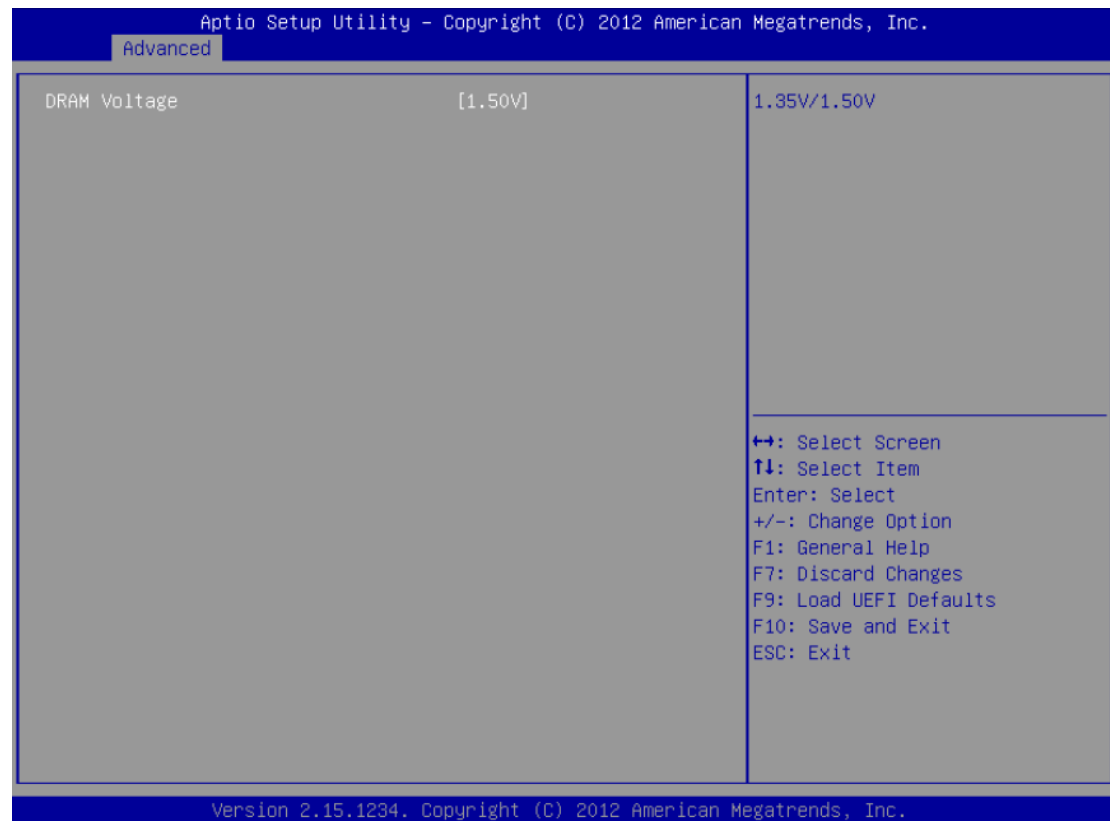
[Disabled] - USB devices are not allowed to use under legacy OS and UEFI setup when Disabled is selected. If you have USB compatibility issues, it is recommended to select Disabled to enter OS.

[UEFI Setup Only] - USB devices are allowed to use only under UEFI setup and Windows® / Linux OS.

Legacy USB 3.0 Support

Use this option to enable or disable legacy support for USB 3.0 devices. The default value is Enabled.

- **Voltage Configuration**

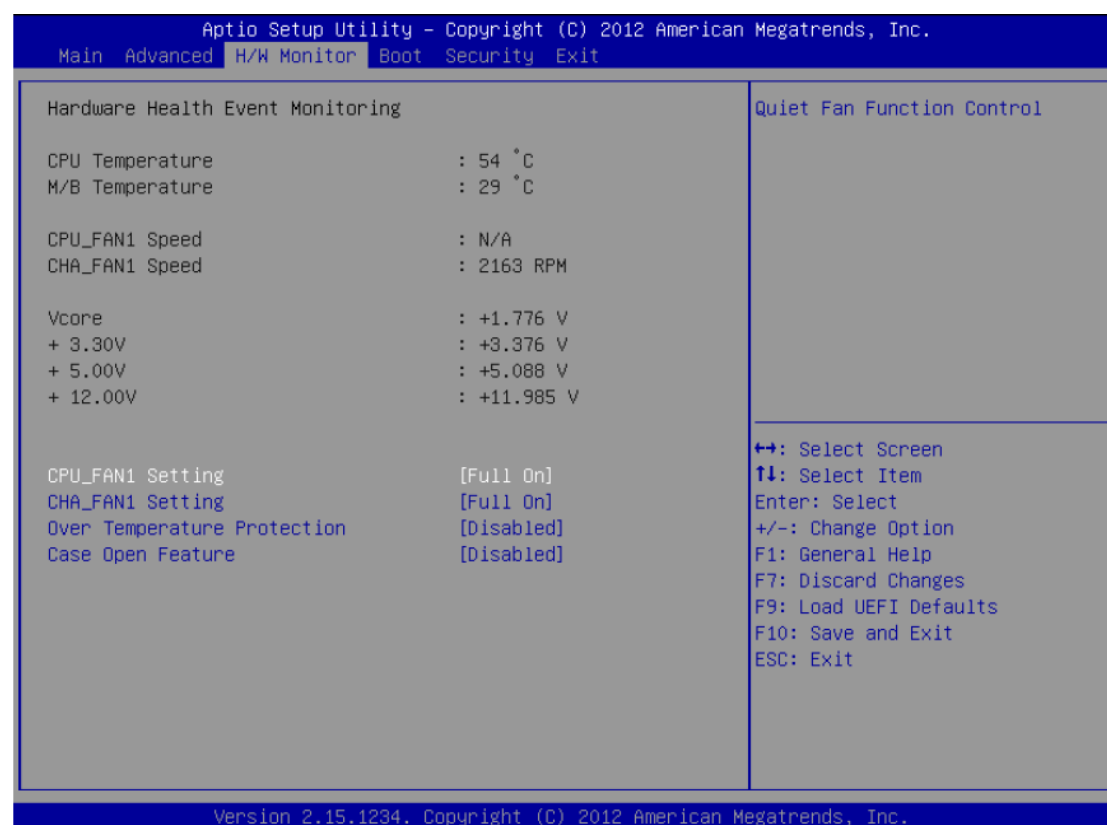


DRAM Voltage

Use this to select DRAM Voltage. The default value is 1.50V.

3.6 H/W Monitor Menu

In this section, it allows you to monitor the status of the hardware on your system, including the parameters of the CPU temperature, motherboard temperature, CPU fan speed, chassis fan speed, and the critical voltage.



CPU_FAN1 Setting

This allows you to set CPU fan 1's speed. Configuration options are Full On and Automatic Mode. The default value is Full On.

CHA_FAN1 Setting

This allows you to set chassis fan 1's speed. Configuration options are Full On and Automatic Mode. The default value is Full On.

Over Temperature Protection

Use this to enable or disable Over Temperature Protection. The default value is Enabled.

Case Open Feature

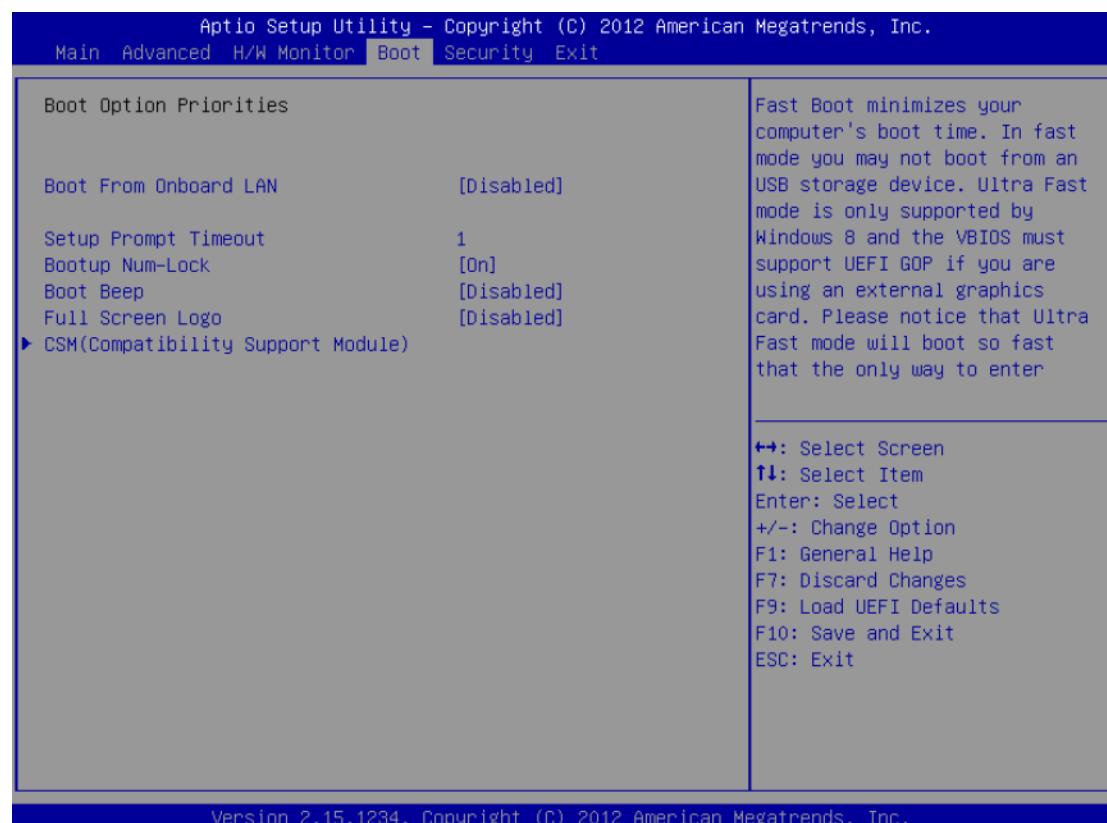
This allows you to enable or disable case open detection feature. The default value is Disabled.

Clear Status

This option appears only when the case open has been detected. Use this option to keep or clear the record of previous chassis intrusion status.

3.7 Boot Menu

In this section, it will display the available devices on your system for you to configure the boot settings and the boot priority.



Boot From Onboard LAN

Use this item to enable or disable the Boot From Onboard LAN feature.

Setup Prompt Timeout

This shows the number of seconds to wait for setup activation key. 65535(0xFFFF) means indefinite waiting.

Bootup Num-Lock

If this item is set to On, it will automatically activate the Numeric Lock function after boot-up.

Boot Beep

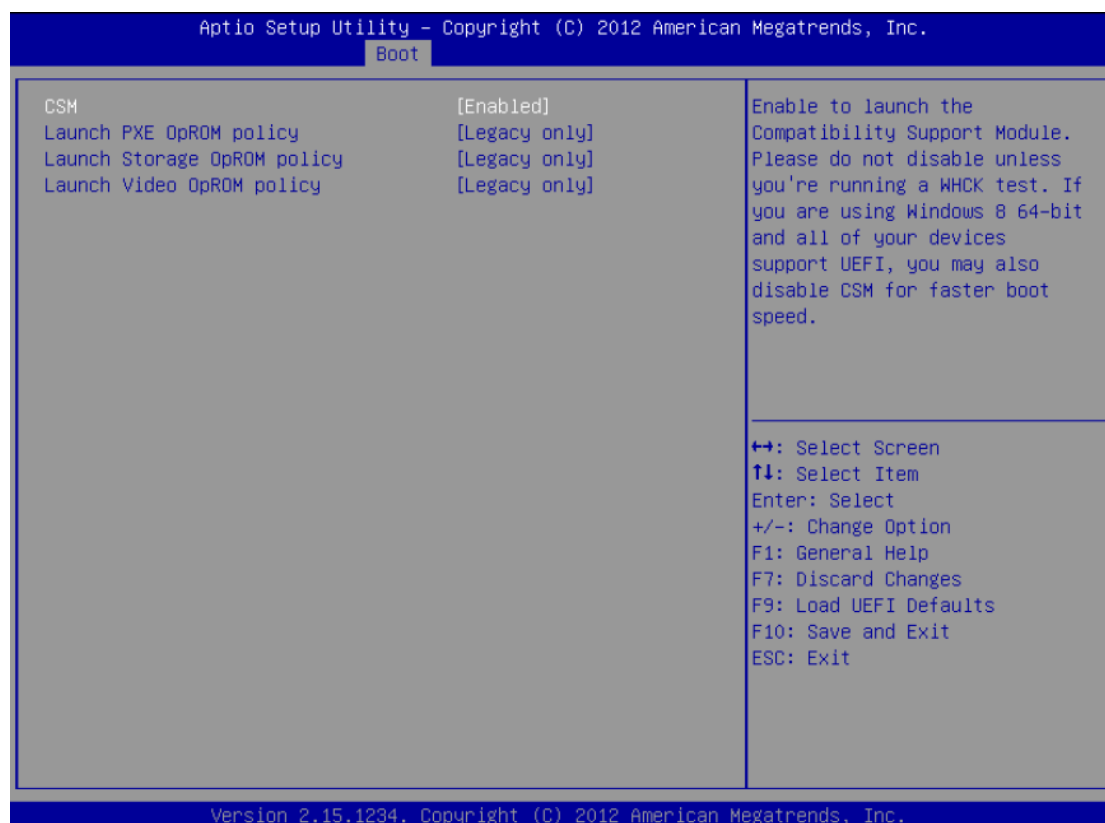
Select whether the Boot Beep should be turned on or off when the system boots up. Please note that a buzzer is needed.

Full Screen Logo

Use this item to enable or disable OEM Logo. The default value is Enabled.

CSM

Please disable CSM when you enable Fast Boot option. The default value is Enabled.

**CSM**

Enable to launch the Compatibility Support Module. Please do not disable unless you're running a WHCK test. If you are using Windows® 8 64-bit and all of your devices support UEFI, you may also disable CSM for faster boot speed.

Launch PXE OpROM Policy

Select UEFI only to run those that support UEFI option ROM only. Select Legacy only to run those that support legacy option ROM only.

Launch Storage OpROM Policy

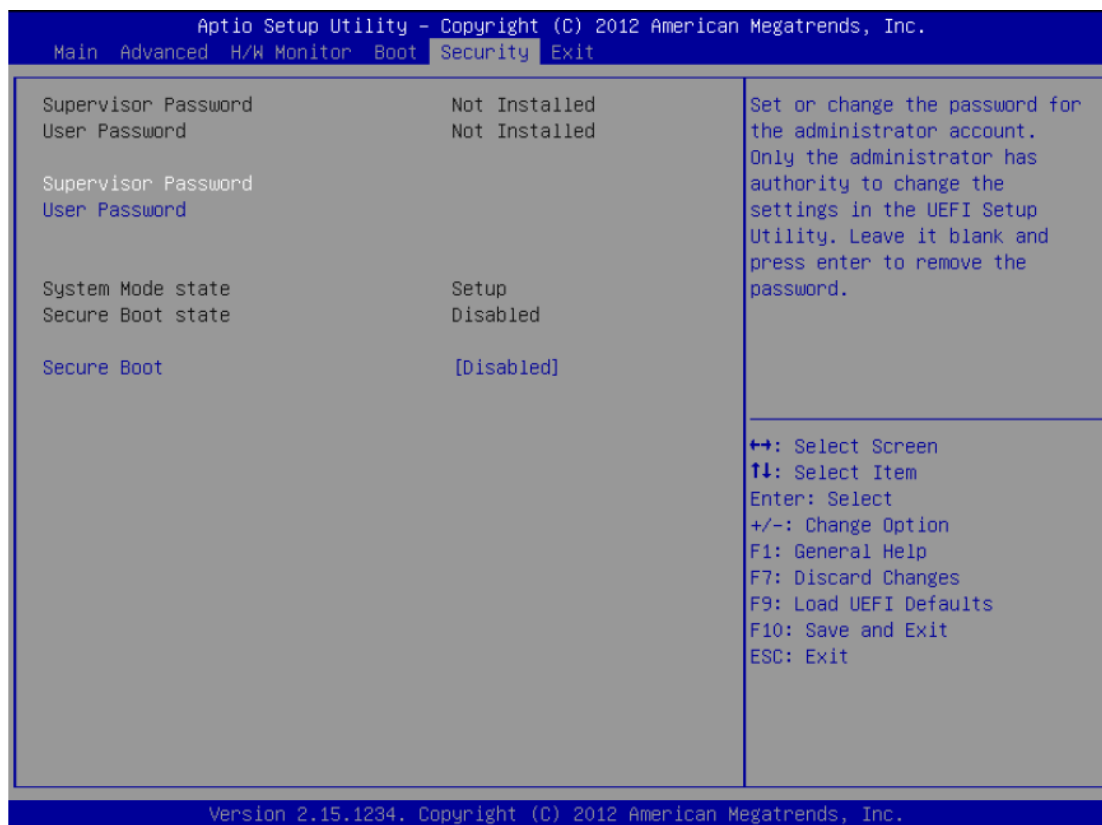
Select UEFI only to run those that support UEFI option ROM only. Select Legacy only to run those that support legacy option ROM only.

Launch Video OpROM Policy

Select UEFI only to run those that support UEFI option ROM only. Select Legacy only to run those that support legacy option ROM only.

3.8 Security Menu

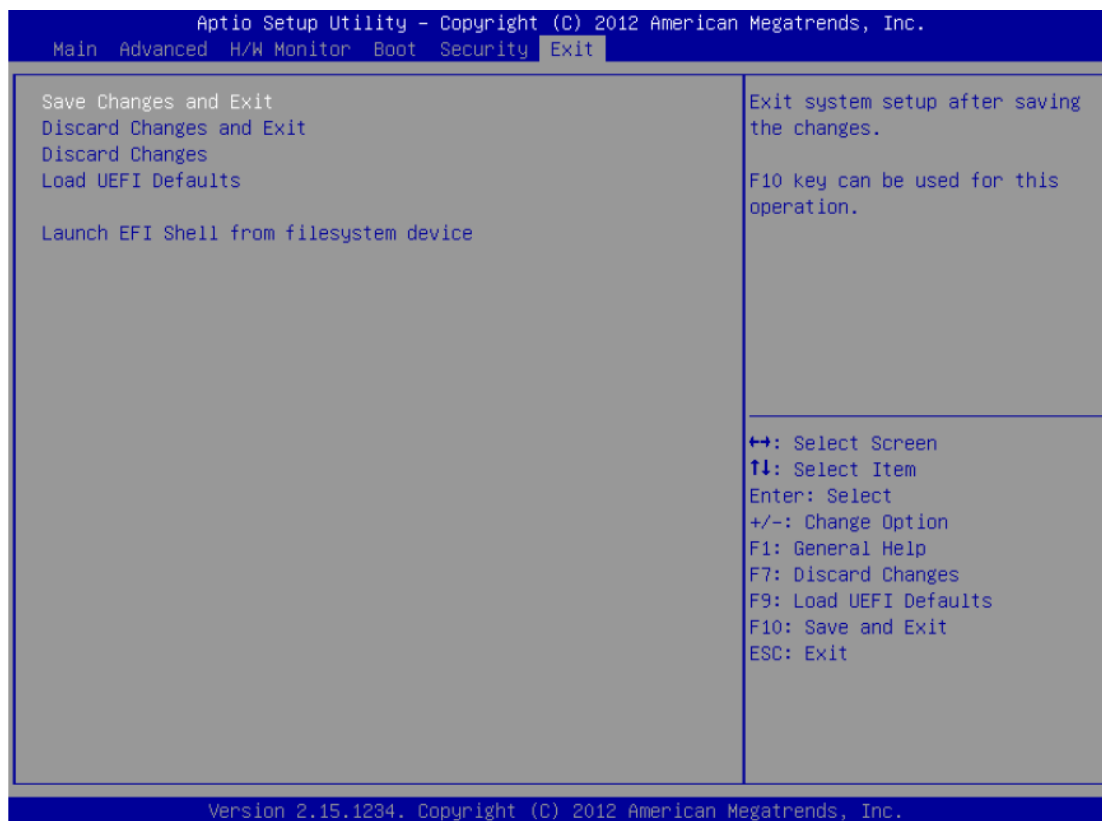
In this section, you may set, change or clear the supervisor/user password for the system.



Secure Boot

Use this to enable or disable Secure Boot. The default value is Disabled.

3.9 Exit Menu



Save Changes and Exit

When you select this option, it will pop-out the following message, "Save configuration changes and exit setup?". Select OK to save the changes and exit the UEFI setup utility.

Discard Changes and Exit

When you select this option, it will pop-out the following message, "Discard changes and exit setup?". Select OK to exit the UEFI setup utility without saving any changes.

Discard Changes

When you select this option, it will pop-out the following message, "Discard changes?". Select OK to discard all changes.

Load UEFI Defaults

Load UEFI default values for all the setup questions. F9 key can be used for this operation.

Launch EFI Shell from filesystem device

Attempt to Launch EFI Shell application (Shell64.efi) from one of the available filesystem devices.

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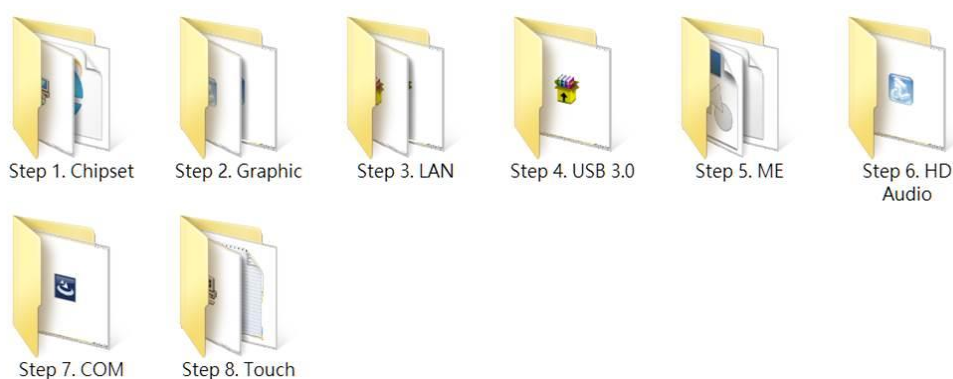
Chapter 4

Drivers Installation

4.1 System

P1177S-881 supports Windows 7 and WES 7. To facilitate the installation of system driver, please carefully read the instructions in this chapter before start installing.

Step 1 Insert Driver CD and select the “\Drivers”.



Step 2 Select all files and follow the installing procedure.

4.2 Touch Screen

The P1177S-881 uses the 5-wire analog resistive. There are the specification and driver installation which are listed below.

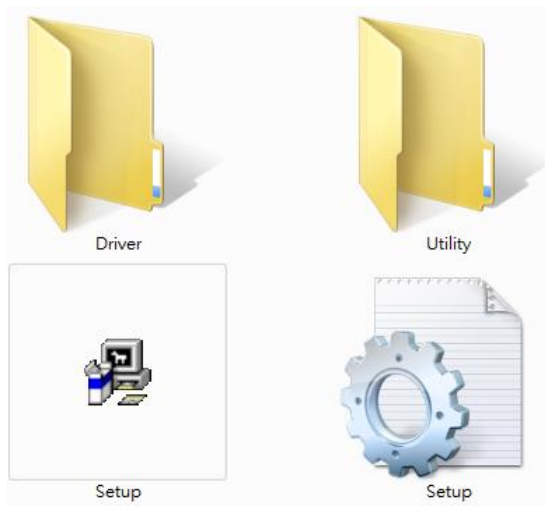
- **Specification**

Touch Screen	5-wire Analog Resistive type
Touch Screen Controller	PenMount 6500 USB Touch Screen Controller IC
Communications	USB interface
Baud Rate	19200 baud rate fixed
Resolution	1280 X 1024

- **Driver Installation- Windows 7**

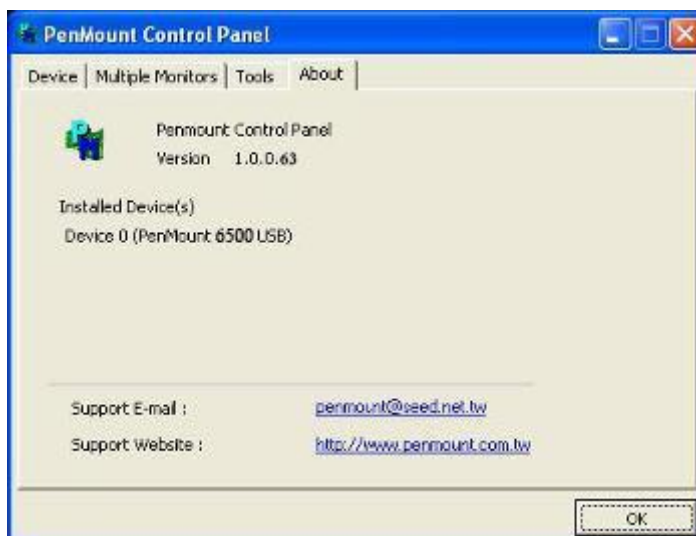
The P1177S-881 provides a touch screen driver that users can install it under the operating system Windows 7. To facilitate installation of the touch screen driver, you should read the instructions in this chapter carefully before you attempt installation.

Step 1 **Insert Driver CD and follow the path to select the “\Drivers\Step 6. Touch”.**



Step 2 **Follow the installing procedure and press OK.**

Step 3 **Click Start menu and select “PenMount Utilities”; and then, a “PenMount Control Panel” pops out.**

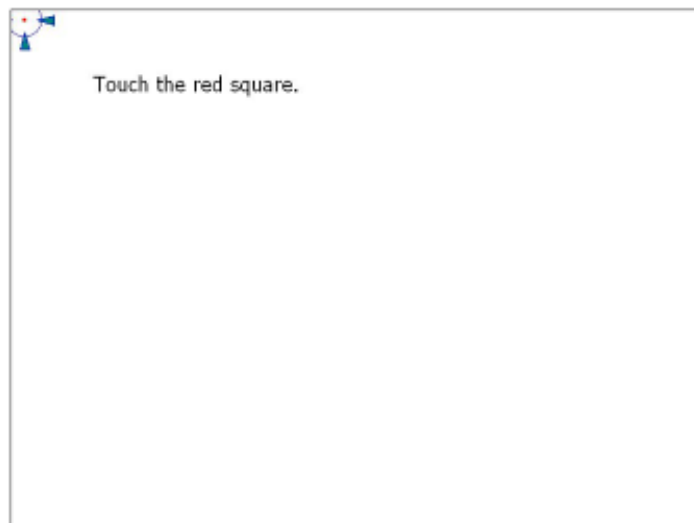


Step 4 Select the “Standard Calibrate” tab.



Step 5 **Calibrations:**

To adjust the display with touch panel, click “Calibration” and follow the calibrate point to do calibration; there are five points on screen for calibration.



Step 6 Press OK.

4.3 Embedded O.S.

The P1177S-881 provides the Windows 7 Embedded. The O.S. is supported devices which are listed below.

- **WES 7**

Here are supported onboard devices:

- Onboard Multi I/O
- SATA HDD
- USB
- PS2 Keyboard and mouse
- CRT/LCD display
- 10/100/1000 base-T Ethernet
- Onboard Audio
- Touch Screen

PenMount Touch screen

Before you can use and calibrate it, here is what you should do:

1. Set up Penmount touch device driver by executing C:\Penmount\ Windows 2000-XP V5.0\setup.exe. When the installation is finished, an icon "PM" appears on the Taskbar.
2. Calibrate Penmount touch by clicking on the "PM" icon, and the go on the calibration.
3. Restart the computer.