

AHP-2153

Onboard Intel® Atom™ D2550
1.86 GHz Processor
Touch Panel PC
With 15" TFT LCD

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Packing List

Before you begin operating your PC, please make sure that the following materials are enclosed:

- AHP-2153 Touch Panel PC
- Mounting brackets and screws
- DVD-ROM for manual (in PDF format) and drivers

If any of these items should be missing or damaged, please contact your distributor or sales representative immediately.

Safety & Warranty

1. Read these safety instructions carefully.
2. Keep this user's manual for later reference.
3. Disconnect this equipment from any AC outlet before cleaning. Do not use liquid or spray detergents for cleaning. Use a damp cloth.
4. For pluggable equipment, the power outlet must be installed near the equipment and must be easily accessible.
5. Keep this equipment away from humidity.
6. Put this equipment on a firm surface during installation. Dropping it or letting it fall could cause damage.
7. The openings on the enclosure are for air convection. Protect the equipment from overheating. **DO NOT COVER THE OPENINGS.**
8. Make sure the voltage of the power source is correct before connecting the equipment to the power outlet.
9. Position the power cord so that people cannot step on it. Do not place anything over the power cord.
10. All cautions and warnings on the equipment should be noted.
11. If the equipment is not used for a long time, disconnect it from the power source to avoid damage by transient over-voltage.
12. Never pour any liquid into an opening. This could cause fire or electrical shock.
13. Never open the equipment. For safety reasons, only qualified service personnel should open the equipment.
14. If any of the following situations arises, get the equipment checked by service personnel:
 - a. The power cord or plug is damaged.
 - b. Liquid has penetrated into the equipment.
 - c. The equipment has been exposed to moisture.

- d. The equipment does not work well, or you cannot get it to work according to the user's manual.
 - e. The equipment has been dropped and damaged.
 - f. The equipment has obvious signs of breakage.
15. DO NOT LEAVE THIS EQUIPMENT IN AN ENVIRONMENT WHERE THE STORAGE TEMPERATURE IS BELOW -20°C (-4°F) OR ABOVE 60°C (140°F). IT MAY DAMAGE THE EQUIPMENT.

FCC

Warning!



This device complies with Part 15 FCC Rules. Operation is subject to the following two conditions: (1) this device may not cause harmful interference, and (2) this device must accept any interference received including interference that may cause undesired operation.

Caution:

There is a danger of explosion if the 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 and your local government's recycling or disposal directives.

Below Table for China RoHS Requirements
 产品中有毒有害物质或元素名称及含量
 AAEON Panel PC/ Workstation

部件名称	有毒有害物质或元素					
	铅 (Pb)	汞 (Hg)	镉 (Cd)	六价铬 (Cr(VI))	多溴联苯 (PBB)	多溴二苯醚 (PBDE)
印刷电路板 及其电子组件	×	○	○	○	○	○
外部信号 连接器及线材	×	○	○	○	○	○
外壳	×	○	○	○	○	○
中央处理器 与内存	×	○	○	○	○	○
硬盘	×	○	○	○	○	○
液晶模块	×	○	○	○	○	○
光驱	×	○	○	○	○	○
触控模块	×	○	○	○	○	○
电源	×	○	○	○	○	○
<p>O: 表示该有毒有害物质在该部件所有均质材料中的含量均在 SJ/T 11363-2006 标准规定的限量要求以下。</p> <p>X: 表示该有毒有害物质至少在该部件的某一均质材料中的含量超出 SJ/T 11363-2006 标准规定的限量要求。</p> <p>备注： 一、此产品所标示之环保使用期限，系指在一般正常使用状况下。 二、上述部件物质中央处理器、内存、硬盘、光驱、触控模块为选购品。</p>						

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Chapter

1

**General
Information**

1.1 Introduction

The AHP-2153 operator panel is an Intel® Atom™ D2550 1.86 GHz processor computer that is designed to serve as a human machine interface (HMI). It is a PC-based system with 15" color TFT LCD display, onboard Ethernet controller, multi-COM port interfaces and an audio controller. With a built-in CompactFlash socket, the AHP-2153 is as compact and user friendly as a multi-function computer. In addition, its "fit anywhere" design makes it very flexible and able to be used in many different kinds of installations. It can be VESA 100 wall mounted.

For system integrators, this simple, complete, compact and highly integrated system let you easily build an operator panel into your applications. Common industrial applications include factory automation systems, precision machinery, and production process control. It is also suitable for many non-industrial applications, including vending machine, and car park automation. Our operator panel is a reliable, cost-effective solution to your application's processing requirements.

1.2 Specification

System

- CPU Onboard Intel® Atom™ D2550 1.86 GHz Processor
- System Memory DDR3 SODIMM x 1, Max. 4 GB
- Ethernet 10/100/1000Base-T, RJ-45 x 2
- LCD / CRT Controller Integrated in Processor
- I/O Port
 - USB2.0 x 4 (2 on front, 2 on rear)
 - RS-232 x 2
 - RS-232/422/485 x 1
 - LAN x 2
 - VGA x 1
 - Line-out x 1
 - Power switch x 1
- Storage Disk Drive
 - CFast™ slot x 1 (Internal);
 - 2.5" SATA Hard Disk Drive x 1
- Expansion Slot Mini Card x 1
- OS Support Windows® XP, Windows® 7 32 bits,
Linux Fedora

Mechanical

- Construction IP-65 aluminum die cast front bezel
- Mounting Panel/ Wall/ VESA 100/ Desktop
- Dimension 15.35"(W) x 12.74"(H) x 3.08"(D)

- (389.98mm x 323.48mm x 78.3mm)
- Carton Dimension 17.9"(W) x 12.6"(H) x 15.75"(D) (455mm x 320mm x 400mm)
 - Net Weight 13.64 lb (6.2 kg)
 - Gross Weight 18.96 lb (8.62 kg)

Environmental

- Operating Temperature -4°F~140°F (-20°C~60°C)
- Storage Temperature -4°F~158°F (-20°C~70°C)
- Operating Humidity 5% to 95%@ 40°C, non-condensing
- Vibration 1 g rms/ 5-500Hz/ Operation (HDD)
- Shock 20 G peak acceleration (11 msec. duration)
- EMC CE/FCC Class A
- Power Supply 9~30V DC input ;
Over-voltage protection
Low-voltage protection
Reverse protection

Power Supply

- DC Input 9~30V DC input ;
Over-voltage protection
Low-voltage protection
Reverse protection

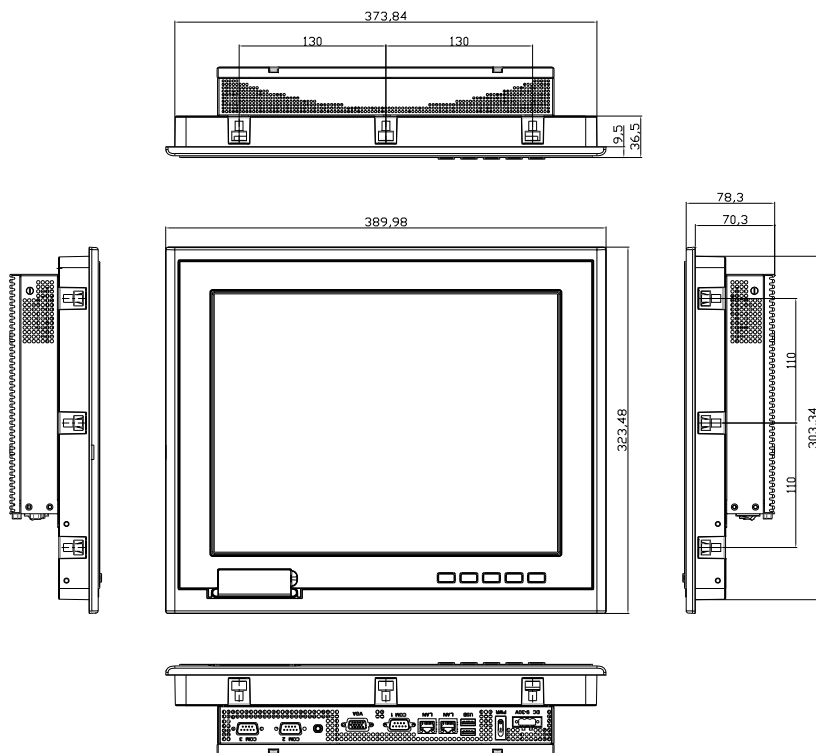
LCD

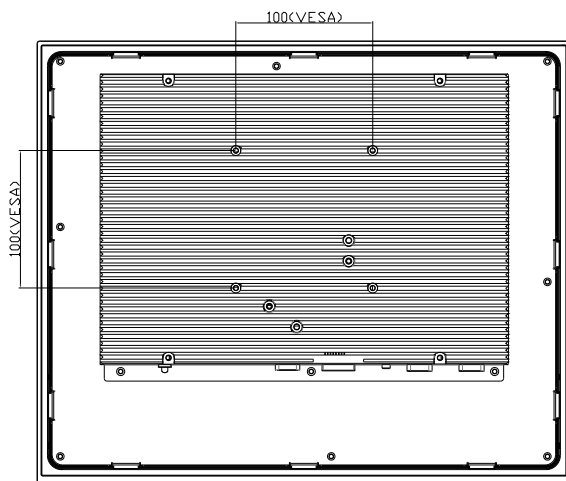
- Display Type 15" TFT LCD
- Max. Resolution 1024x768
- Max. Colors 16.7M colors
- Luminance (cd/m²)
HTT : 400
STT : 800
- Viewing Angle
HTT: 170° (H), 160° (V)
STT: 160° (H), 140° (V)
- Backlight LED
- Backlight MTBF (Hours)
HTT : 50,000
STT : 60,000

Touch Screen

- Type 5-wire analog resistive
- Resolution 2048x2048
- Light Transmission > 80%
- Lifetime 35 million activations

1.3 Dimension





Chapter

2

Hardware Installation

2.1 Panelmount Installation

The display panel can be mounted into the wall. You will need the screws along with the mounting brackets, which be packed in the accessory box. Follow the steps below:

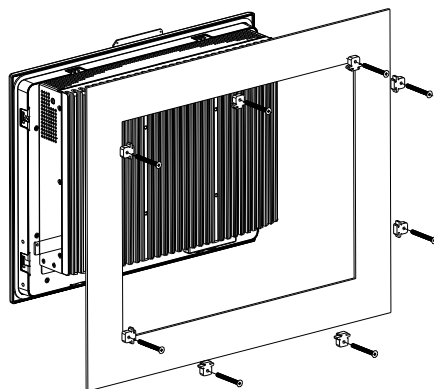
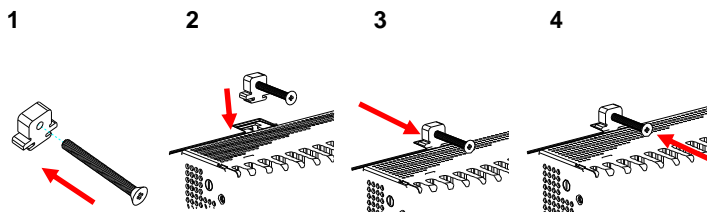
Before you start to follow the instructions, please place the display panel into the wall. See the following illustration on the left.

Step 1: Place the mounting brackets and plug the screw.

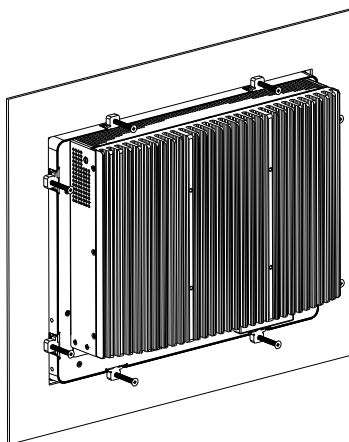
Step 2: Aim the mounting set at the hole on the monitor.

Step 3: Move the mounting set to the narrow gauge and fix it with screws.

Step 4: You've completed the preliminary when the mounting set is tightened. Next, repeat the steps and tighten all mounting set around the monitor until the monitor is firmly mounting on the wall.

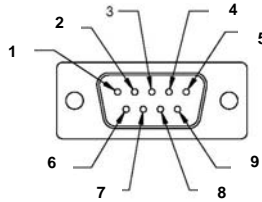


Complete Illustration



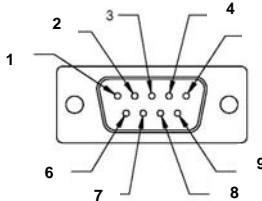
2.2 COM1/2/3 RS-232/422/485 Serial Port Connector

COM1/COM3 RS-232 (D-sub 9 male)



Pin	Signal	Pin	Signal
1	DCD	2	RXD
3	TXD	4	DTR
5	GND	6	DSR
7	RTS	8	CTS
9	RI		

COM2 RS-232/422/485 (D-sub 9 male)



Pin	Signal	Pin	Signal
1	DCD (422TXD-/485DATA-)	2	RXD (422RXD+)
3	TXD (422TXD+/485DATA+)	4	DTR (422RXD-)
5	GND	6	DSR
7	RTS	8	CTS
9	RI/+5Volt/+12Volt		

2.3 Hard Disk Drive Installation

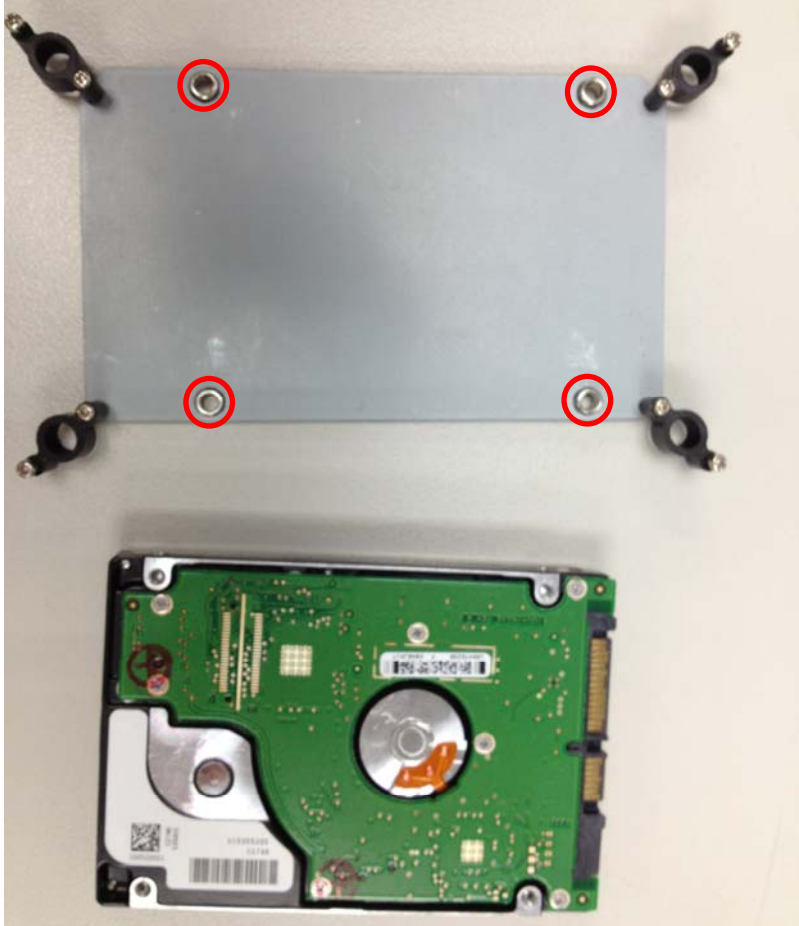
Step 1: Unfasten the screws of the heatsink



Step 2: Get the Bracket of Hard Disk Drive from the package



Step 3: Fasten the Hard Disk onto the bracket



Step 4: Fasten the screws of the hard disk bracket onto the AHP-2153



Chapter

3

**AMI
BIOS Setup**

3.1 System Test and Initialization

These routines test and initialize board hardware. If the routines encounter an error during the tests, you will either hear a few short beeps or see an error message on the screen. There are two kinds of errors: fatal and non-fatal. The system can usually continue the boot up sequence with non-fatal errors.

System configuration verification

These routines check the current system configuration against the values stored in the CMOS memory. If they do not match, the program outputs an error message. You will then need to run the BIOS setup program to set the configuration information in memory.

There are three situations in which you will need to change the CMOS settings:

1. You are starting your system for the first time
2. You have changed the hardware attached to your system
3. The CMOS memory has lost power and the configuration information has been erased.

The AHP-2153 CMOS memory has an integral lithium battery backup for data retention. However, you will need to replace the complete unit when it finally runs down.

3.2 AMI BIOS Setup

AMI BIOS ROM has a built-in Setup program that allows users to modify the basic system configuration. This type of information is stored in battery-backed CMOS RAM so that it retains the Setup information when the power is turned off.

Entering Setup

Power on the computer and press or <F2> immediately. This will allow you to enter Setup.

Main

Set the date, use tab to switch between date elements.

Advanced

Enable/disable boot option for legacy network devices.

Chipset

Host bridge parameters.

Boot

Enables/disables quiet boot option.

Security

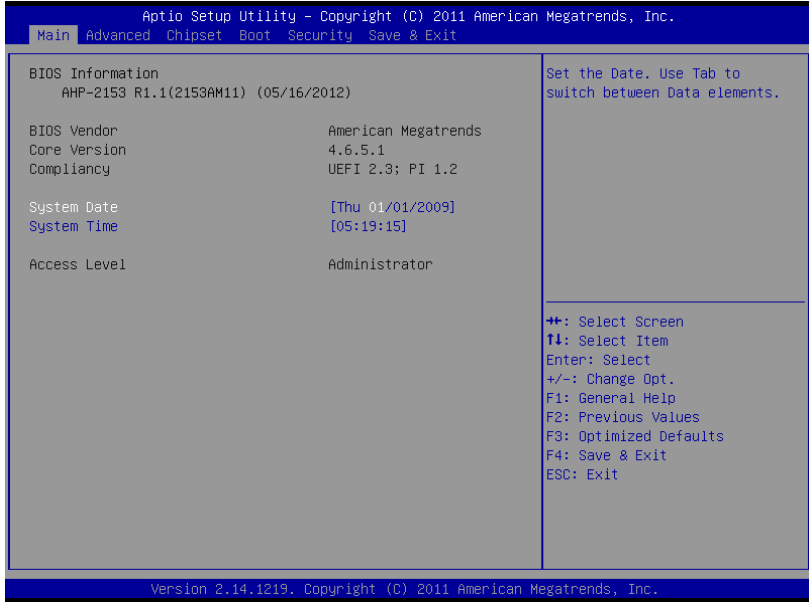
Set setup administrator password.

Save&Exit

Exit system setup after saving the changes.

Setup Menu

Setup submenu: Main



Options summary: **(default setting)**

System Date	Day MM:DD:YYYY	
Change the month, year and century. The 'Day' is changed automatically.		
System Time	HH : MM : SS	
Change the clock of the system.		

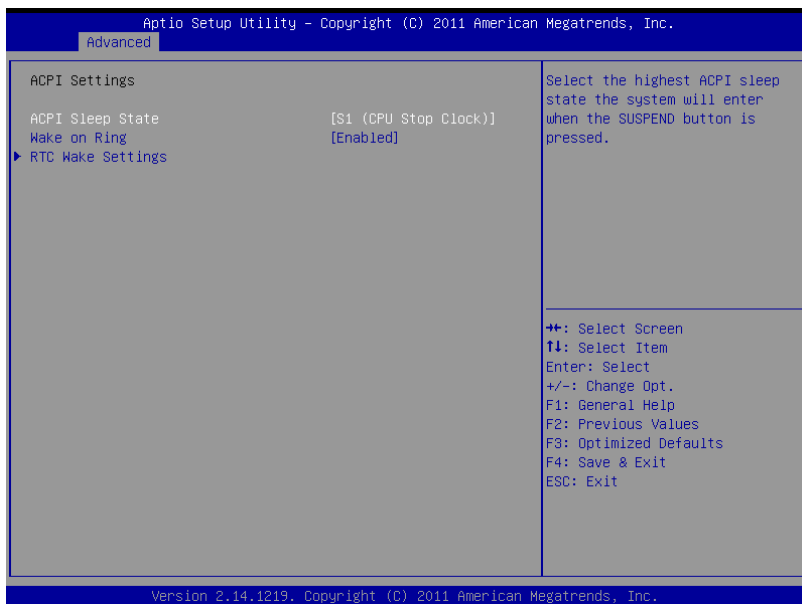
Setup submenu: Advanced

Options summary: (**default setting**)

ACPI Settings		
System ACPI Parameters		
CPU Configuration		
CPU Configuration Parameters		
SATA Configuration		
SATA Device Options Settings		
USB Configuration		
USB Configuration Parameters		
Super IO Configuration		

System Super IO Chip Parameters		
H/W Monitor		
Monitor hardware status		

ACPI Settings



Options summary: **(default setting)**

ACPI Sleep State	Suspend Disabled	
	S1 only(CPU Stop Clock)	
	S3 only(Suspend to RAM)	
Select the ACPI state used for System Suspend		
Wake on Ring	Enabled	

	Disabled	
Enabled or disabled wake on ring function.		
RTC Wake Settings		
Enable system to wake from S5 using RTC alarm.		

RTC Wake Settings

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Advanced

Wake system with Fixed Time	[Enabled]	Enable or disable System wake on alarm event. When enabled, System will wake on the hr::min::sec specified
Wake up hour	0	
Wake up minute	0	
Wake up second	0	
Wake system with Dynamic Time	[Disabled]	
Wake up minute increase	1	

++: Select Screen
 F4: Select Item
 Enter: Select
 +/-: Change Opt.
 F1: General Help
 F2: Previous Values
 F3: Optimized Defaults
 F4: Save & Exit
 ESC: Exit

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Options summary: (**default setting**)

Wake system with Fixed Time	Disabled	
Time	Enabled	
Enable or disable System wake on alarm event. Wake up time is setting by following settings.		

Wake up hour	0-23	
Wake up minute	0-59	
Wake up second	0-59	
Wake system with	Disabled	
Dynamic Time	Enabled	
Enable or disable System wake on alarm event. Wake up time is current time + Increase minutes.		
Wake up minute increase	1-5	

CPU Configuration

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Advanced

CPU Configuration		Enabled for Windows XP and Linux (OS optimized for Hyper-Threading Technology) and Disabled for other OS (OS not optimized for Hyper-Threading Technology).
Processor Type	Intel(R) Atom(TM) CPU	
EMT64	Supported	
Processor Speed	2132 MHz	
System Bus Speed	533 MHz	
Ratio Status	16	
Actual Ratio	16	
System Bus Speed	533 MHz	
Processor Stepping	30661	
Microcode Revision	269	
L1 Cache RAM	2x56 k	
L2 Cache RAM	2x512 k	
Processor Core	Dual	
Hyper-Threading	Supported	
Hyper-Threading	[Enabled]	

++: Select Screen
 ↑↓: Select Item
 Enter: Select
 +/-: Change Opt.
 F1: General Help
 F2: Previous Values
 F3: Optimized Defaults
 F4: Save & Exit
 ESC: Exit

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Options summary: *(default setting)*

Hyper-Threading	Disabled	
	Enabled	
En/Disable CPU Hyper-Threading function		

SATA Configuration (IDE)

Options summary: *(default setting)*

SATA Controller(s)	Disabled	
	Enabled	
En/Disable SATA controller		
Configure SATA as	IDE	

	AHCI	
Configure SATA controller operating as IDE/AHCI mode.		

SATA Configuration (AHCI)

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Advanced

SATA Port0	MAXTOR STM3320 (320.0	SATA Ports (0-3) Device Names If Present and Enabled.
SATA Port1	Not Present	
SATA Controller(s)	[Enabled]	
Configure SATA as	[AHCI]	
SATA Port 0	[Enabled]	
SATA Port 0 Hot Plug	[Enabled]	
SATA Port 1	[Enabled]	
SATA Port 1 Hot Plug	[Enabled]	

++: Select Screen
 ↑↓: Select Item
 Enter: Select
 +/-: Change Opt.
 F1: General Help
 F2: Previous Values
 F3: Optimized Defaults
 F4: Save & Exit
 ESC: Exit

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Options summary: (**default setting**)

SATA Controller(s)	Disabled	
	Enabled	
En/Disable SATA controller		
Configure SATA as	IDE	
	AHCI	
Configure SATA controller operating as IDE/AHCI mode.		

SATA Port 0/Port 1	Disabled	
	Enabled	
En/Disable the selected port.		
SATA Port 0/Port 1 Hot Plug	Disabled	
	Enabled	
En/Disable Hot Plug feature for specified port.		

USB Configuration

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Advanced

<p>USB Configuration</p> <p>USB Devices: 1 Drive, 1 Keyboard</p> <p>Legacy USB Support [Enabled]</p> <p>Mass Storage Devices: USB FLASH DRIVE PMAP [Auto]</p>	<p>Enables Legacy USB support. AUTO option disables legacy support if no USB devices are connected. DISABLE option will keep USB devices available only for EFI applications.</p> <hr/> <p> ++: Select Screen ↑↓: Select Item Enter: Select +/-: Change Opt. F1: General Help F2: Previous Values F3: Optimized Defaults F4: Save & Exit ESC: Exit </p>
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Options summary: **(default setting)**

Legacy USB Support	Enabled	
	Disabled	
	Auto	

Enables BIOS Support for Legacy USB Support. When enabled, USB can be functional in legacy environment like DOS. AUTO option disables legacy support if no USB devices are connected. DISABLE option will keep USB devices available only for EFI application

Device Name (Emulation Type)	Auto	
	Floppy	
	Forced FDD	
	Hard Disk	
	CD-ROM	

If Auto. USB devices less than 530MB will be emulated as Floppy and remaining as Floppy and remaining as hard drive. Forced FDD option can be used to force a HDD formatted drive to boot as FDD(Ex. ZIP drive)

Super IO Configuration

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Advanced

Super IO Configuration		Set Parameters of Serial Port 1 (COMA)
Super IO Chip	IT8783F	
▶ Serial Port 1 Configuration		
▶ Serial Port 2 Configuration		
▶ Serial Port 3 Configuration		
Restore AC Power Loss	[Power Off]	

++: Select Screen
 ↑↓: Select Item
 Enter: Select
 +/-: Change Opt.
 F1: General Help
 F2: Previous Values
 F3: Optimized Defaults
 F4: Save & Exit
 ESC: Exit

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Options summary: **(default setting)**

Serial Port 1/2/3 Configuration		
Set Parameters of Serial Port 1/2/3		
Restore AC Power Loss	Power Off	
	Power On	
	Last State	
Select AC power state when power is re-applied after a power failure.		

Serial Port 1 Configuration

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Advanced

Serial Port 1 Configuration		Enable or Disable Serial Port (COM)
Serial Port	[Enabled]	
Device Settings	IO=3F8h; IRQ=4;	
Change Settings	[Auto]	

++: Select Screen
 ↑↓: Select Item
 Enter: Select
 +/-: Change Opt.
 F1: General Help
 F2: Previous Values
 F3: Optimized Defaults
 F4: Save & Exit
 ESC: Exit

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Options summary: (**default setting**)

Serial Port	Disabled	
	Enabled	
En/Disable specified serial port.		
Change Settings	Auto	
	IO=3F8h; IRQ=4;	
	IO=3F8h; IRQ=3,4,5,7,10,11,12;	
	IO=2F8h; IRQ=3,4,5,7,10,11,12;	
	IO=3E8h; IRQ=3,4,5,7,10,11,12;	
	IO=2E8h; IRQ=3,4,5,7,10,11,12;	

Select a resource setting for Super IO device.

Serial Port 2 Configuration

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Advanced

Serial Port 2 Configuration		Enable or Disable Serial Port (COM)
Serial Port	[Enabled]	
Device Settings	IO=2F8h; IRQ=3;	
Change Settings	[Auto]	
COM2 Type Select	[RS232]	
		++: Select Screen ↑↓: Select Item Enter: Select +/-: Change Opt. F1: General Help F2: Previous Values F3: Optimized Defaults F4: Save & Exit ESC: Exit

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Options summary: **(default setting)**

Serial Port	Disabled	
	Enabled	
En/Disable specified serial port.		
Change Settings	Auto	
	IO=2F8h; IRQ=3;	
	IO=3F8h; IRQ=3,4,5,7,10,11,12;	
	IO=2F8h; IRQ=3,4,5,7,10,11,12;	

	IO=3E8h; IRQ=3,4,5,7,10,11,12;	
	IO=2E8h; IRQ=3,4,5,7,10,11,12;	
Select a resource setting for Super IO device.		
COM2 Type Select	RS232	
	RS422	
	RS485	
Configure COM2 operated as RS232, RS422 or RS485.		

Serial Port 3 Configuration

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Advanced		
Serial Port 3 Configuration		Enable or Disable Serial Port (COM)
Serial Port	[Enabled]	
Device Settings	IO=3E8h; IRQ=10;	
Change Settings	[Auto]	
		++: Select Screen ↑↓: Select Item Enter: Select +/-: Change Opt. F1: General Help F2: Previous Values F3: Optimized Defaults F4: Save & Exit ESC: Exit
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Options summary: (**default setting**)

Serial Port	Disabled	
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	Enabled	
En/Disable specified serial port.		
Change Settings	Auto	
	IO=3E8h; IRQ=10;	
	IO=3F8h; IRQ=3,4,5,6,7,9,10,11,12;	
	IO=2F8h; IRQ=3,4,5,6,7,9,10,11,12;	
	IO=3E8h; IRQ=3,4,5,6,7,9,10,11,12;	
	IO=2E8h; IRQ=3,4,5,6,7,9,10,11,12;	
Select a resource setting for Super IO device.		

H/W Monitor

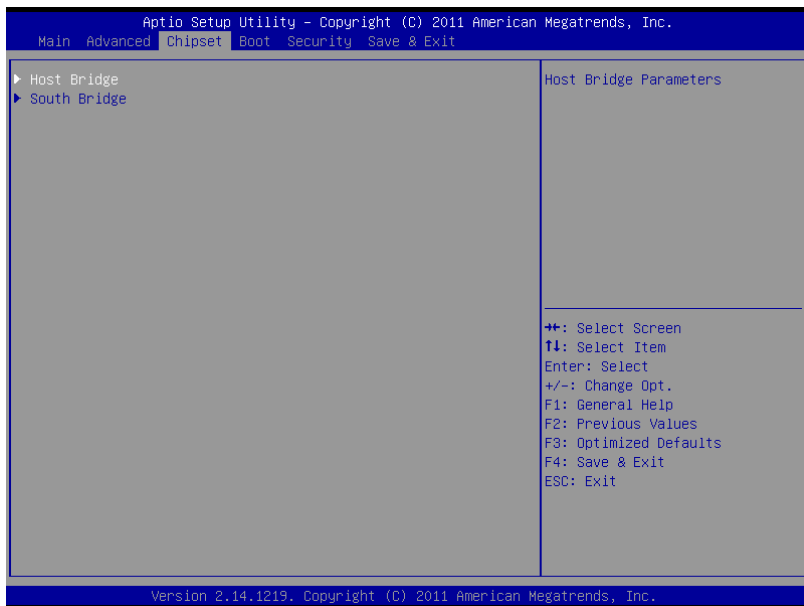
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Advanced

<p>Pc Health Status</p> <p>CPU temperature : +41 C SB temperature : +39 C System temperature : +34 C Vcore : +1.213 V Vcc 1.5V : +1.541 V Vcc 3.3V : +3.412 V Vcc 5V : +5.048 V Vcc 12V : +11.772 V 5V Dual : +5.040 V VBAT : +3.271 V</p>	<p> +*: Select Screen ↑↓: Select Item Enter: Select +/-: Change Opt. F1: General Help F2: Previous Values F3: Optimized Defaults F4: Save & Exit ESC: Exit </p>
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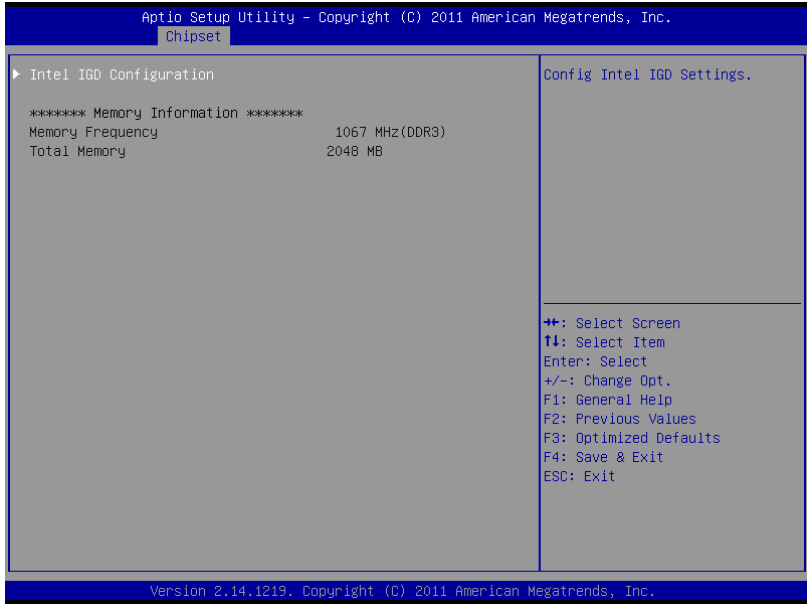
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Setup submenu: Chipset

Options summary: (**default setting**)

Host Bridge		
Host Bridge Parameters		
South Bridge		
South Bridge Parameters		

Host Bridge



Options summary: (**default setting**)

Intel IGD Configuration		
Config Intel IGD Settings.		

Intel IGD Configuration

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Chipset

<pre> Intel IGD Configuration IGFX - Boot Type [VBIOS Default] LCD Panel Type [1024x768 24Bit] Control LVDS1 [Enable] Fixed Graphics Memory Size [256MB] </pre>	<p>Select the Video Device which will be activated during POST. This has no effect if external graphics present.</p> <hr/> <pre> +/: Select Screen ↑↓: Select Item Enter: Select +/-: Change Opt. F1: General Help F2: Previous Values F3: Optimized Defaults F4: Save & Exit ESC: Exit </pre>
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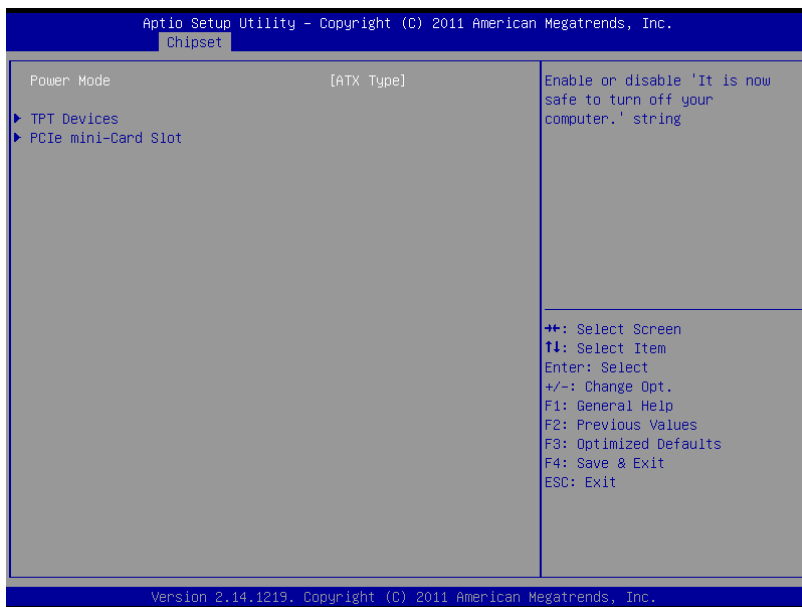
Version 2.14.1219. Copyright (C) 2011 American Megatrends, Inc.

Options summary: (**default setting**)

IGFX - Boot Type	VBIOS Default	
	CRT	
	LVDS	
	CRT+LVDS	
Select Primary boot display device		
LVDS Panel Type	640x480 18-Bit	
	800x600 18-Bit	
	1024x768 18-Bit	
	800x480 18-Bit	

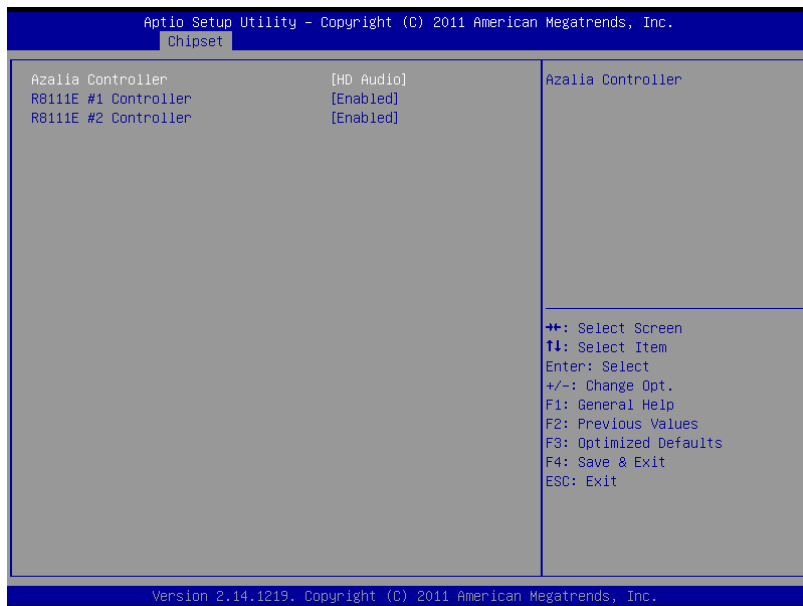
	1280x768 18-Bit	
	640x480 24-Bit	
	800x600 24-Bit	
	1024x768 24-Bit	
	1280x768 24-Bit	
	1366x768 24-Bit	
Select panel native resolution.		
Control LVDS1	Disable	
	Enable	
Enable/Disable LVDS		
Fixed Graphics Memory Size	128MB	
	256MB	
Configure Fixed Graphics Memory Size		

South Bridge

Options summary: (**default setting**)

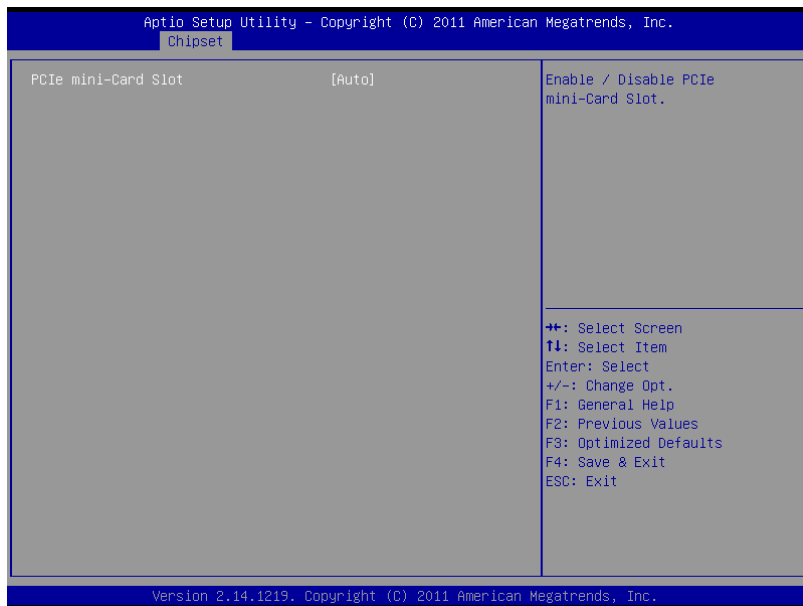
Power Mode	ATX Type	
	AT Type	
Select the power type used on the system		
TPT Devices		
HD audio and onboard LAN Settings.		
PCIe mini-Card Slot		
PCIe mini-Card Slot Settings.		

TPT Devices

Options summary: (*default setting*)

Azalia Controller	Disabled	
	HD Audio	
Enable or disabled Azalia controller		
R8111E #1 Controller	Disabled	
	Enabled	
Enable or disable PCIE Lan.		
R8111E #2 Controller	Disabled	
	Enabled	
Enable or disable PCIE Lan.		

PCIe mini-Card Slot



Options summary: **(default setting)**

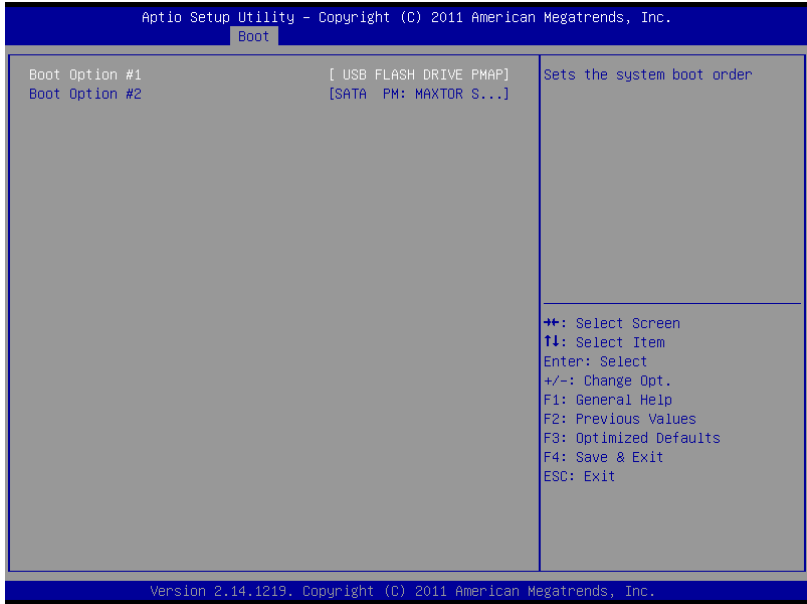
PCIe MiniCard Slot	Disabled	
	Enabled	
Control the PCI Express Root Port.		

Setup submenu: Boot

Options summary: (*default setting*)

Quiet Boot	Disabled	
	Enabled	
En/Disable showing boot logo.		
Launch RTL8111E PXE OpROM	Disabled	
	Enabled	
En/Disable PXE boot for RTL8111E LAN		
Boot Option #X/ XXXX Drive BBS Priorities		
The order of boot priorities.		

BBS Priorities



Options summary: (**default setting**)

Boot Option #x	Disabled	
	Device name	
Sets the system boot order		

Setup submenu: Security

Aptio Setup Utility - Copyright (C) 2011 American Megatrends, Inc.

Main Advanced Chipset Boot Security Save & Exit

<p>Password Description</p> <p>If ONLY the Administrator's password is set, then this only limits access to Setup and is only asked for when entering Setup.</p> <p>If ONLY the User's password is set, then this is a power on password and must be entered to boot or enter Setup. In Setup the User will have Administrator rights.</p> <p>The password length must be in the following range:</p> <table style="width: 100%; border: none;"> <tr> <td style="padding-right: 20px;">Minimum length</td> <td>3</td> </tr> <tr> <td>Maximum length</td> <td>20</td> </tr> </table> <p>Administrator Password</p> <p>User Password</p> <p>HDD Security Configuration:</p> <p>HDD 0:MAXTOR STM33</p>	Minimum length	3	Maximum length	20	<p>Set Administrator Password</p> <hr/> <p> ++: Select Screen ↑↓: Select Item Enter: Select +/-: Change Opt. F1: General Help F2: Previous Values F3: Optimized Defaults F4: Save & Exit ESC: Exit </p>
Minimum length	3				
Maximum length	20				

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Options summary: (*default setting*)

Administrator Password/	Not set	
User Password		

You can install a Supervisor password, and if you install a supervisor password, you can then install a user password. A user password does not provide access to many of the features in the Setup utility.

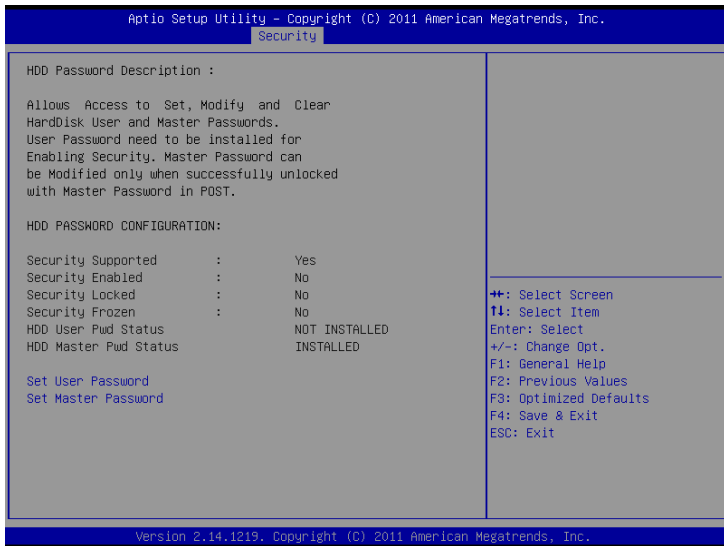
Install the Password:

Press Enter on this item, a dialog box appears which lets you enter a password. You can enter no more than six letters or numbers. Press Enter after you have typed in the password. A second dialog box asks you to retype the password for confirmation. Press Enter after you have retyped it correctly. The password is required at boot time, or when the user enters the Setup utility.

Removing the Password:

Highlight this item and type in the current password. At the next dialog box press Enter to disable password protection.

HDD Security



Options summary: (*default setting*)

Set User Password/	Not set	
Set Master Password		

You can install a Master and User password. Before booting to OS, HDD will be set to frozen state. On S3 resume HDD will be unlocked using the HDD Password we entered while system booting.

Install the Password:

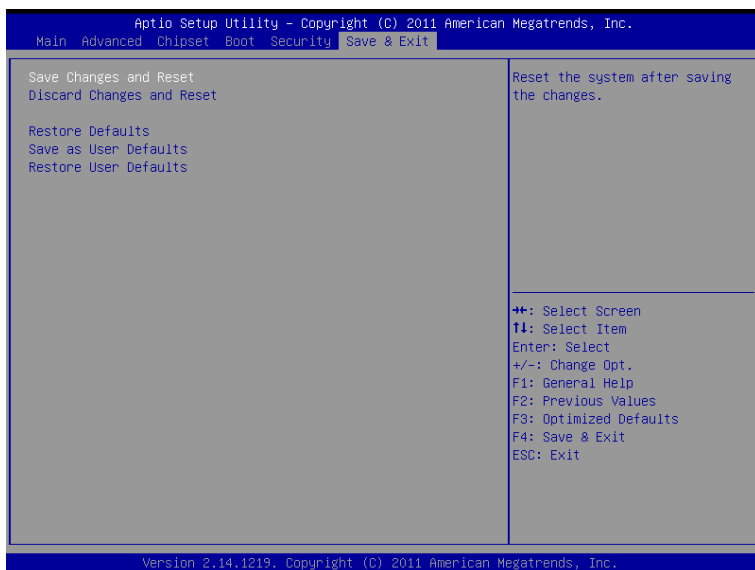
Press Enter on this item, a dialog box appears which lets you enter a password. You can enter no more than six letters or numbers. Press Enter after you have typed in the password. A second dialog box asks you to retype the password for confirmation.

Press Enter after you have retyped it correctly. The password is required at boot time, or when the user enters the Setup utility.

Removing the Password:

Highlight this item and type in the current password. At the next dialog box press Enter to disable password protection.

Setup submenu: Exit



Options summary: (**default setting**)

Save Changes and Reset		
Reset the system after saving the changes		
Discard Changes and Reset		
Reset system setup without saving any changes		
Restore Defaults		
Restore/Load Default values for all the setup options.		
Save as User Defaults		
Save the changes done so far as User Defaults		
Restore User Defaults		
Restore the User Defaults to all the setup options		

Chapter

4

**Driver
Installation**

The AHP-2153 comes with a DVD-ROM that contains all drivers and utilities that meet your needs.

Follow the sequence below to install the drivers:

Step 1 – Install Chipset Driver

Step 2 – Install VGA Driver

Step 3 – Install LAN Driver

Step 4 – Install Audio Driver

Step 5 – Install AHCI Driver

Step 6 – Install Touch Panel Driver

Step 7 – Install Wireless LAN & Bluetooth Driver (Optional)

Step 8 – Install GPS (Optional)

Step 9 – Install Huawei EM820W (Optional)

Please read instructions below for further detailed installations.

4.1 Installation:

Insert the AHP-2153 DVD-ROM into the DVD-ROM Drive. And install the drivers from Step 1 to Step 9 in order.

Step 1 – Install Chipset Driver

1. Click on the **STEP1-CHIPSET** and select the OS folder your system is
2. Double click on the **Setup.exe** file located in each OS folder
3. Follow the instructions that the window shows
4. The system will help you install the driver automatically

Step 2 – Install VGA Driver

For Windows® 7

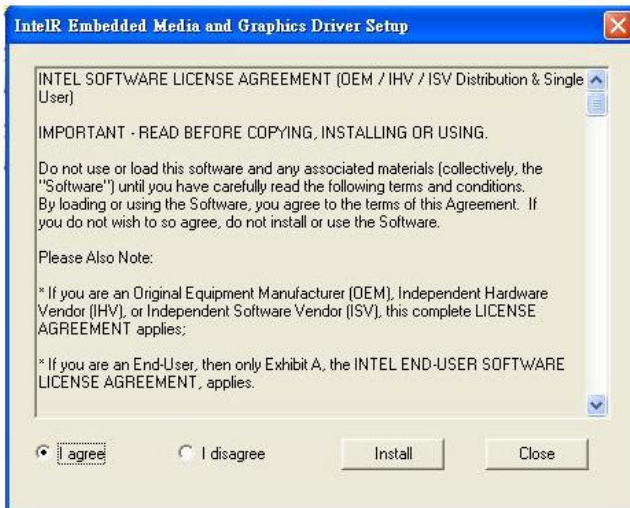
1. Click on the **STEP2-VGA** folder and select the folder of **WIN7_32**
2. Double click on the **Setup.exe** file
3. Follow the instructions that the window shows
4. The system will help you install the driver automatically

For Windows® XP

1. Install Framework 3.5
 - Double click on the **dotnetfx35.exe**
 - Follow the instructions that the window shows
 - The system will help you install the driver automatically

2. Install IEMGD

- Double click on the **WindowsDriverSETUP.exe**
- Select the configuration
- Follow the instructions that the window shows
- The system will help you install the driver automatically

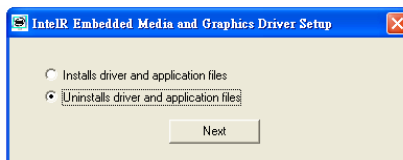




If you want to update driver, please uninstall driver first.

Uninstall IEMGD

1. Double click on the **WindowsDriverSETUP.exe**
2. Follow the instructions that the window shows
3. The system will help you uninstall the driver automatically



Step 3 – Install LAN Driver

1. Click on the **STEP3-LAN** folder and select the OS folder your system is
2. Double click on the **setup.exe** located in each OS folder
3. Follow the instructions that the window shows
4. The system will help you install the driver automatically

Step 4 – Install Audio Driver

1. Click on the **STEP4-AUDIO** folder and select the OS folder your system is
2. Double click on the **Setup.exe** located in each OS folder
3. Follow the instructions that the window shows
4. The system will help you install the driver automatically

Step 5 – Install AHCI Driver

For Windows® 7:

1. Click on the **STEP5-AHCI** folder and select the **WIN7_32** folder
2. Double click on the **setup.exe** file
3. Follow the instructions that the window shows
4. The system will help you install the driver automatically

For Windows® XP:

Please refer to Appendix A AHCI Setting

Step 6 – Install Touch Panel Driver

1. Click on the **STEP6-TOUCH PANEL** folder and select the OS folder your system is
2. Double click on the **setup.exe** located in each OS folder
3. Follow the instructions that the window shows
4. The system will help you install the driver automatically

Step 7 – Install Wireless LAN & Bluetooth Driver (Optional)

1. Click on the **STEP7-WIRELESS LAN&BT (option)** folder and select the OS folder your system is
2. Double click on the **setup.exe** located in **Install_CD** folder under each OS folder
3. Follow the instructions that the window shows
4. The system will help you install the driver automatically

Step 8 – Install GPS Driver (Optional)

1. Click on the **STEP8-GPS (option)** folder and select the OS folder your system is.
2. Double click on the **Setup.exe** located in each OS folder
3. Follow the instructions that the window shows
4. The system will help you install the driver automatically

Step 9 – Install Huawei EM820W Driver (Optional)

1. Click on the **STEP9-Huawei EM820W(option)** folder and select the OS folder your system is.

2. Double click on the **.exe** located in each OS folder
3. Follow the instructions that the window shows
4. The system will help you install the driver automatically

Appendix

A

AHCI Setting

A.1 Setting AHCI

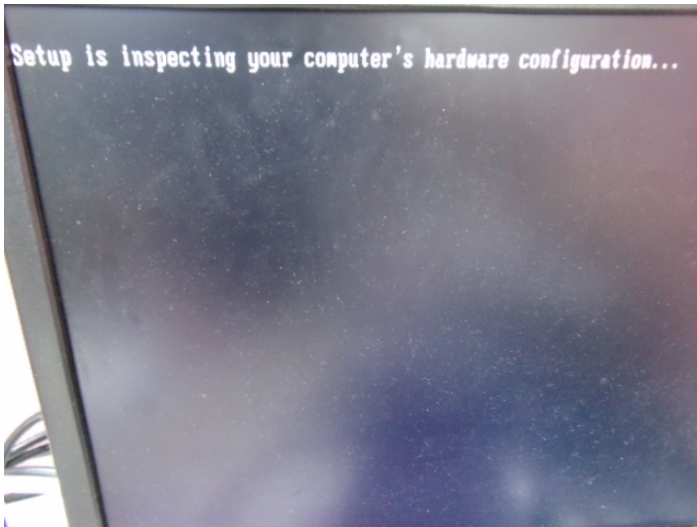
OS installation to setup AHCI Mode.

Step 1: Copy the files below from “Driver CD -> STEP5-AHCI\WINXP_32” to Disk



Step 2: Connect the USB Floppy to the system

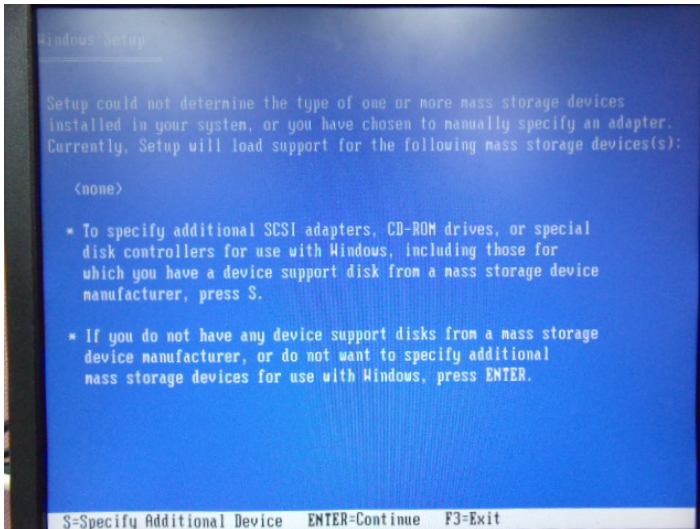
Step 3: Setup OS

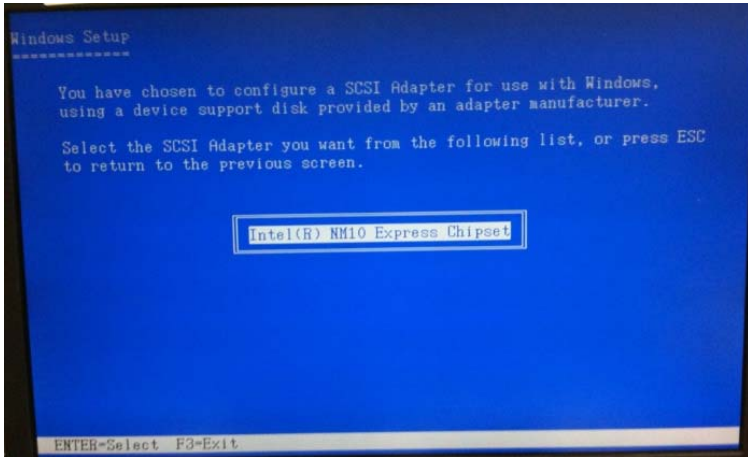


Step 4: Press "F6"



Step 5: Choose "S"



Step 6: Choose "Intel(R) NM10 Express Chipset"

Step 7: It will show the model number you select and then press "**ENTER**"

Step 8: Setup is loading files, follow the instruction when it's finished

