AGP-3155

Intel® Core™ i7/i5 Processor

Rugged Touch Panel Computer

With 15" TFT LCD &

Two PCI/PCIe expansion slots

AGP-3155 Manual 4th Ed

July 2013

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respective owners.

Packing List

Before you begin installing your card, please make sure that the following materials have been shipped:

- 1 AGP-3155
- 1 Jumper Cap
- 2 Easy stand & 4 screws
- 12 Panel Mount clips & screws
- 1 HDD plate & 4 anti-vibration rubbers & 4 screws
- 1 Power Cord (optional)
- 1 DVD-ROM for manual (in PDF format) and drivers

If any of these items are missing or damaged, you should 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 reliable 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 users 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 UNCONTROLLED ENVIRONMENT WHERE THE STORAGE TEMPERATURE IS BELOW -20° C (-4°F) OR ABOVE 60° C (140° F). IT MAY DAMAGE THE EQUIPMENT.

16. External equipment intended for connection to signal input/output or other connectors, shall comply with relevant UL / IEC standard (e.g. UL 60950 for IT equipment and UL 2601-1 / IEC 60601 series for medical electrical equipment). In addition, all such combinations – systems – shall comply with the standard IEC 60601-1-1, Safety requirements for medical electrical systems. Equipment not complying with UL 2601-1 shall be kept outside the patient environment, as defined in the standard.

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.

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	×	○	○	○	○	○

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。

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。

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。

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Chapter

1

General Information

1.1 Introduction

AGP-3155 is the series product of the Rugged Expandable Touch Panel Solution. It adopts Intel® Core™ i7/i5 processor with two DDR3 800/1066 MHz SODIMM up to 8 GB.

Best performance for multimedia solution

AEON's AGP-3155 also supports Intel® Core™ i7/i5 + QM57 chipset and the LVD/CRT Controller has been integrated in QM57. In addition, it equips versatile I/O ports, such as two RS-232, one RS-232/422/485, six USB2.0, one Line-out/MIC-in/Line-in, one Keyboar/Mouse, and one VGA. Therefore, AGP-3155 can be broadly implemented in several markets, such as Factory Control Center, Railway Control Center, and Transportation markets.

Multi-Function Intel® Core™ i7/i5 Platform

AGP-3155 integrates 15" color TFT LCD. Moreover, the modular design for CPU board is easy for you to replace. With flexible expansion, you get easy access to solutions ranging from Modem, Storage, Sound Card, SCSI card, Audio/Video capture card, Wireless LAN module, to Bluetooth module. Furthermore, you may choose one Mini Card, two PCI or two PCI-Express slots for necessary expansions. If you are looking for powerful and robust Touch Panel Computer, AGP-3155 is an ideal solution for your applications.

1.2 Feature

- 15" XGA (1024 x 768) TFT LCD Display

- Intel® Core™ i7/i5 Processor

- Easy-To-Expand: Two PCI/PCIe Slots

- IP-65 Aluminum Die Cast Front Bezel

- Two Easy Access Front USB Ports

- 15" 250 Nits XGA CCFL Backlight; 15" 800 Nits XGA LED Backlight

- Modular Design For CPU Board

1.3 Specification

System

- Processor — Intel® Core™ i7/i5 Processor

- Memory — DDR3 800/1066 MHz SODIMM x 2, up to 8 GB

- Chipset — Intel® Core™ i7/i5 + QM57

- LCD / CRT — Integrated in QM57

- Ethernet — 10/100/1000Base-TX, RJ-45 x 2

- I/O Port — RS-232 x 2, RS-232/422/485 x 1, USB2.0 x 6 (2 on front, 4 on rear), Line-out/MIC-in/Line-in x 1, PS/2 x 1 for Keyboard/Mouse, VGA x 1, DVI-D x 1

- Storage Disk Drive — 3.5" SATA Hard Disk Drive x 2, Slim DVD-Combo (optional)

- Expansion Slot — Mini Card x 1, PCI slot x 2 or PCIe x 2

- OS Support — Windows® XP, Windows® 7, Linux Fedora

Mechanical

- Construction — IP-65/ NEMA4 for Aluminum die cast front bezel & Aluminum chassis

- Mounting   Panel/ Desktop

- Dimension   15.36" x 12.76" x 4.91" (390mm x 324mm x 124.7mm)

- Carton Dimension 24.21"(L) x 20.47"(W) x 12.99" (H) (615mm x 520mm x 330mm)

- Gross Weight   24.2 lb (11 kg)

- Net Weight   20.9 lb (9.5 kg)

Environmental

- Operating Temperature $32^{o}F \sim 131^{o}F$ ($0^{o}C \sim 55^{o}C$) (Ambient with airflow)

- Storage Tenoeratyre $-4^{o}F \sim 140^{o}F$ ($-20^{o}C \sim 60^{o}C$)

- Storage Humidity   10%~95% @ $40^{o}C$, non-condensing

- Vibration   1 g rms/ 5~500 Hz/ Random operation (HDD)

- Shock   15 G peak acceleration (11 msec. duration)

- EMC   CE/FCC Class A

Power Supply

- AC input 250W   110/230V AC power

LCD

- Display Type   15" Color TFT LCD

- Max. Resolution   1024 x 768

- Max. Colors   16.7 M colors (6/8-bit for R,G,B)

- Luminance   HTT: 250

- Viewing Angle   HTT: 170°(H)/ 160°(V)

- Back Light MTBF   HTT: 30,000
  (Hours)

Touch Screen

- Type   5-wire resistive

- Light transmission   80%

- Lifetime   35 million activations

1.4 Dimension

I/O interface

Chapter

2

Hardware Installation

2.1 Safety Precautions

Warning!

Always completely disconnect the power cord from your board whenever you are working on it. Do not make connections while the power is on, because a sudden rush of power can damage sensitive electronic components.

Caution!

Always ground yourself to remove any static charge before touching the board. Modern electronic devices are very sensitive to static electric charges. Use a grounding wrist strap at all times. Place all electronic components on a static-dissipative surface or in a static-shielded bag when they are not in the chassis

2.2 Location of Connectors and Jumpers of the Main Board

Component Side
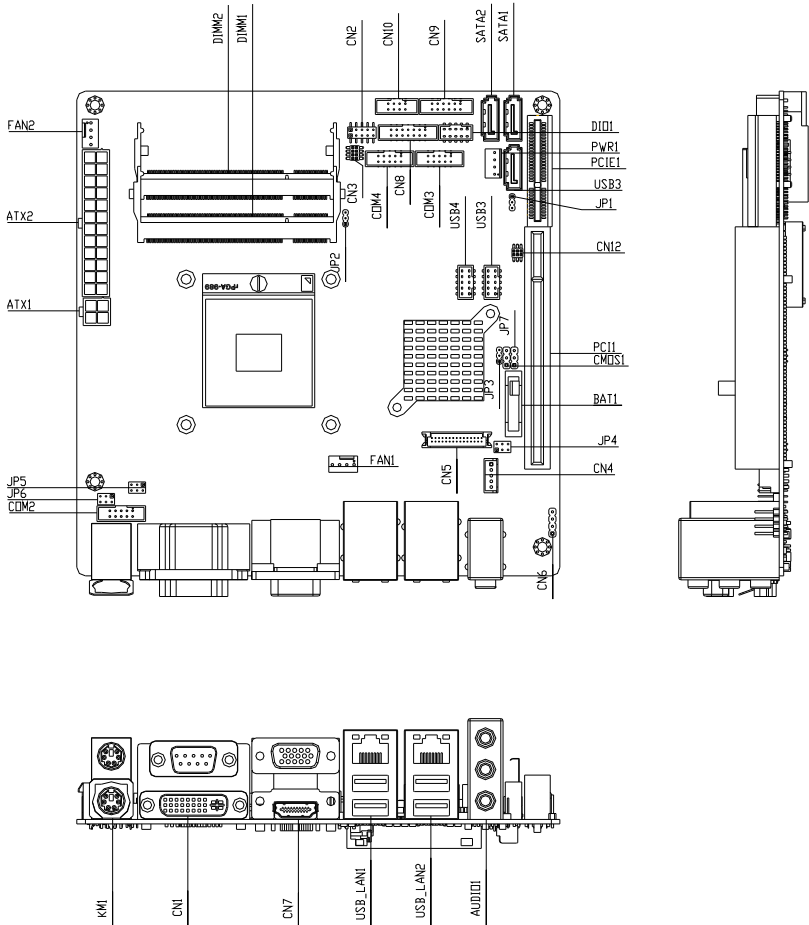
Solder Side
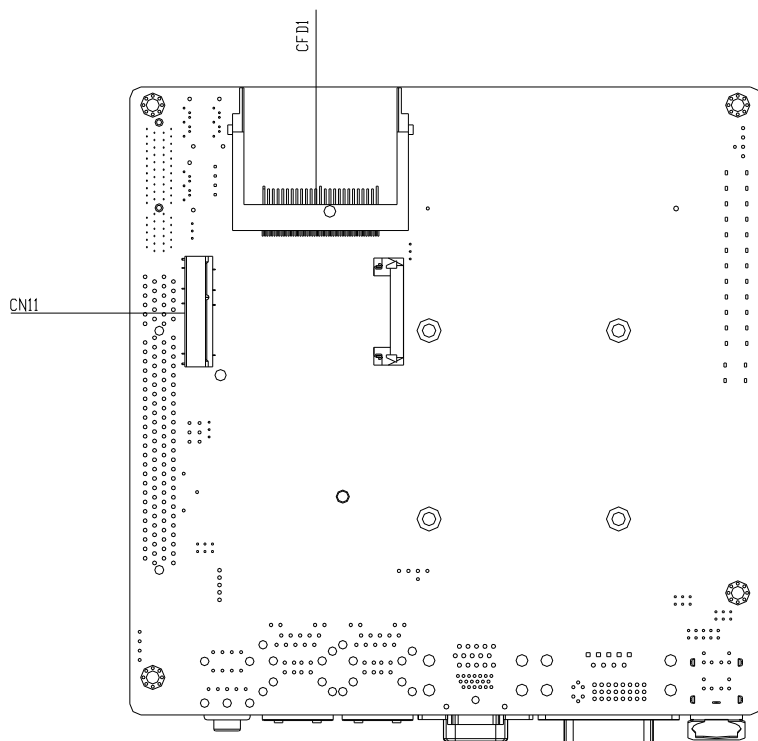
2.3 List of Jumpers

There are a number of jumpers in the board that allow you to configure your system to suit your application.

The table below shows the function of each jumper in the board:

Label	Function
CMOS1	CMOS Setting Selection
JP1	Auto PWRBTN Selection
JP2	CFD Voltage 3.3V/5V Selection
JP3	ME Setting Selection
JP4	LCD Power and Inverter Power Selection
JP5	COM1 +12V/+5V/RING Selection
JP6	COM2 +12V/+5V/RING Selection

2.4 List of Connectors

There are a number of connectors in the board that allow you to configure your system to suit your application. The table below shows the function of each connector in the board:

Label	Function
CN1	DVI-I & COM Port Connector
CN2	Front Panel Connector
CN3	SPI Programming Connector
CN4	LCD Inverter Power Connector
CN5	LVDS Connector
CN6	CD-IN
CN8	COM1~2 Port LED

CN9	COM3~4 Port LED
CN10	LAN Port LED
COM2	RS-232/422/485 Pin header
COM3~4	RS-232 Pin header
KM1	PS2 Keyboard/Mouse Connector
USB_LAN1	100/1000Base-TX Ethernet & Dual USB Connector
USB_LAN2	100/1000Base-TX Ethernet & Dual USB Connector
AUDIO1	Audio Lin-in/Lin-out/MIC
DIMM1,DIMM2	DDR3 DIMM Slot
USB3,USB4	USB Pin header
FAN1, FAN2	4-pin System Fan Connector
ATX1	4-pin ATX Power +12V Connector
ATX2	24-pin ATX Power
SATA1~SATA3	SATA Connector
DIO1	Digital I/O
PIC1	PCI Slot
PCIE1	PCIE Slot
CN11	Mini-PCIE Slot
PWR1	SATA Power Connector

2.5 Setting Jumpers

You configure your card to match the needs of your application by setting jumpers. A jumper is the simplest kind of electric switch. It consists of two metal pins and a small metal clip (often protected by a plastic cover) that slides over the pins to connect them. To "close" a jumper you connect the pins with the clip.

To "open" a jumper you remove the clip. Sometimes a jumper will have three pins, labeled 1, 2 and 3. In this case you would connect either pins 1 and 2 or 2 and 3.

Open   **Closed**   **Closed 2-3**
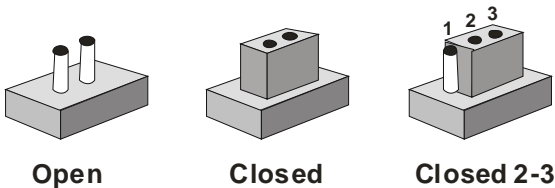
A pair of needle-nose pliers may be helpful when working with jumpers.

If you have any doubts about the best hardware configuration for your application, contact your local distributor or sales representative before you make any change.

Generally, you simply need a standard cable to make most connections.

2.6 CMOS Setting (CMOS1)

JP1	Function
1-2	Normal (Default)
2-3	Clear CMOS

2.7 Auto PWRBTN Selection (JP1)

JP1	Function
1-2	Don't use Auto PWRBTN (Default)
2-3	Use Auto PWRBTN

2.8 CFD Voltage 3.3V/5V Selection (JP2)

JP2	Function
1-2	+3.3V
2-3	+5V (Default)

2.9 ME Setting (JP3)

JP3	Function
1-2	Save ME Register (Default)
2-3	Clear ME Register

2.10 LCD Power and Inverter Power Selection (JP4)

JP4	Function
1-3	Inverter Power +5V (Default)
3-5	Inverter Power +12V
4-6	LCD Power +3.3V (Default)
2-4	LCD Power +5V

2.11 COM1 +12V/+5V/RING Selection (JP5)

JP5	Function
1-2	+12V
3-4	Ring (Default)
5-6	+5V

2.12 COM2 +12V/+5V/RING Selection (JP6)

JP6	Function
1-2	+12V
3-4	Ring (Default)
5-6	+5V

2.13 Front Panel Connector (CN2)

Pin	Signal	Pin	Signal
1	Power On Button (-)	2	Power On Button (+)
3	HDD LED(-)	4	HDD LED(+)
5	External Speaker (-)	6	External Speaker (+)
7	Power LED (-)	8	Power LED (+)
9	Reset Switch (-)	10	Reset Switch (+)

2.14 SPI Programming Connector (CN3)

Pin	Signal	Pin	Signal
1	+3.3V_SPI	2	GND
3	SPI_CE#	4	SPI_CLK
5	SPI_SO	6	SPI_SI
7	NC	8	NC

2.15 LVDS Inverter (CN4)

Pin	Signal
1	12V / 5V
2	VCON
3	GND
4	GND
5	INV_EN

2.16 LVDS Connector (CN5)

Pin	Signal	Pin	Signal
1	BKL_EN	2	N.C.
3	VLCD	4	GND
5	LA_CLK#	6	LA_CLK
7	VLCD	8	GND
9	LA_DATA0#	10	LA_DATA0
11	LA_DATA1#	12	LA_DATA1
13	LA_DATA2#	14	LA_DATA2
15	LA_DATA3#	16	LA_DATA3
17	LVDS_DDC_DATA	18	LVDS_DDC_CLK
19	LB_DATA0#	20	LB_DATA0
21	LB_DATA1#	22	LB_DATA1
23	LB_DATA2#	24	LB_DATA2
25	LB_DATA3#	26	LB_DATA3
27	VLCD	28	GND
29	LB_CLK#	30	LB_CLK

2.17 CD-IN Pin Header (CN6)

Pin	Signal
1	CD-R
2	CD-GND
3	CD-GND
4	CD-L

2.18 COM1~2 Port LED Connector (CN8)

Pin	Signal	Pin	Signal
1	COM1_RS232_PWR	2	GND
3	TX_LED_COM1	4	GND
5	RX_LED_COM1	6	GND
7	COM2_RS232_PWR	8	GND
9	TX_LED_COM2	10	GND
11	RX_LED_COM2	12	GND
13	COM2_RS485_PWR	14	COM2_RS422_PWR

2.19 COM3~4 Port LED Connector (CN9)

Pin	Signal	Pin	Signal
1	COM3_RS232_PWR	2	GND
3	TX_LED_COM3	4	GND
5	RX_LED_COM3	6	GND
7	COM4_RS232_PWR	8	GND
9	TX_LED_COM4	10	GND
11	RX_LED_COM4	12	GND

2.20 LAN Port LED Connector (CN10)

Pin	Signal	Pin	Signal
1	LAN1_LED_D2	2	LAN1_LED_LNK#_ACT
3	LAN1_LED_1000#	4	LAN1_LED_100#
5	LAN2_LED_D2	6	ACT_2_LED
7	SPD1K_2_LED	8	SPD100_2_LED

2.21 RS-232/422/485 Pin Header (COM2)

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

2.22 RS-232 Pin Header (COM3~4)

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

2.23 Pin Header (USB3, USB4)

Pin	Signal	Pin	Signal
1	+5V	2	GND
3	USBD1-	4	GND
5	USBD1+	6	USBD2+
7	GND	8	USBD2-

9	GND	10	+5V

2.24 FAN Connector (FAN1, FAN2)

Pin	Signal	Pin	Signal
1	GND	2	+12V
3	FAN_TAC	4	FAN_CTL

2.25 4-pin ATX Power Connector (ATX1)

Pin	Signal	Pin	Signal
1	GND	2	GND
3	+12V	4	+12V

2.26 24-pin ATX Power Connector (ATX2)

Pin	Signal	Pin	Signal
1	+3.3V	2	+3.3V
3	GND	4	+5V
5	GND	6	+5V
7	GND	8	PWROK
9	+5VSB	10	+12V
11	+12V	12	+3.3V
13	+3.3V	14	-12V
15	GND	16	PS_ON
17	GND	18	GND
19	GND	20	NC
21	+5V	22	+5V
23	+5V	24	GND

2.27 SATA Connector (SATA 1~3)

Pin	Signal	Pin	Signal
1	GND	2	TXP

3	TXN	4	GND
5	RXN	6	RXP
7	GND		

2.28 Digital I/O Pin Header (DIO1)

The Base Address are A40H, A42H, and A43H

Pin	Signal	Pin	Signal
1	IN0 (U5 Pin34)	2	IN1 (U5 Pin33)
3	IN2 (U5 Pin32)	4	IN3 (U5 Pin31)
5	OUT0 (U5 Pin12)	6	OUT1 (U5 Pin11)
7	OUT2 (U5 Pin70)	8	OUT3 (U5 Pin66)
9	+5V	10	GND

BIOS Setting	Connector Definition	Address	IT8781F GPIO Setting
DIO_P#1	BC3 Pin 1	Bit 1(A40H)	U5 Pin 34 (GPIO11)
DIO_P#2	BC3 Pin 2	Bit 2(A40H)	U5 Pin 33 (GPIO12)
DIO_P#3	BC3 Pin 3	Bit 3(A40H)	U5 Pin 32 (GPIO13)
DIO_P#4	BC3 Pin 4	Bit 4(A40H)	U5 Pin 31 (GPIO14)
DIO_P#5	BC3 Pin 5	Bit 6(A42H)	U5 Pin 12 (GPIO36)
DIO_P#6	BC3 Pin 6	Bit 7(A42H)	U5 Pin 11 (GPIO37)
DIO_P#7	BC3 Pin 7	Bit 6(A43H)	U5 Pin 70 (GPIO46)
DIO_P#8	BC3 Pin 8	Bit 7(A43H)	U5 Pin 66 (GPIO47)

Note:
1. DIO_P#1, DIO_P#2, DIO_P#3, DIO_P#4 use Base Address: A40H
2. DIO_P#5, DIO_P#6 use Base Address: A42H
3. DIO_P#7, DIO_P#8 use Base Address: A43H

2.29 SATA Power Connector (PWR1)

Pin	Signal	Pin	Signal
1	+12V	2	GND
3	GND	4	+5V

2.30 Hard Disk Drive Installation

In the following, we will guide you how to install Hard Disk Drive (HDD). Make sure that all parts are provided before you start the installation.

Step 1**:** Loose the five screws on the back chassis of AGP-3155

Step 2**:** Open the back cover of the AGP-3155
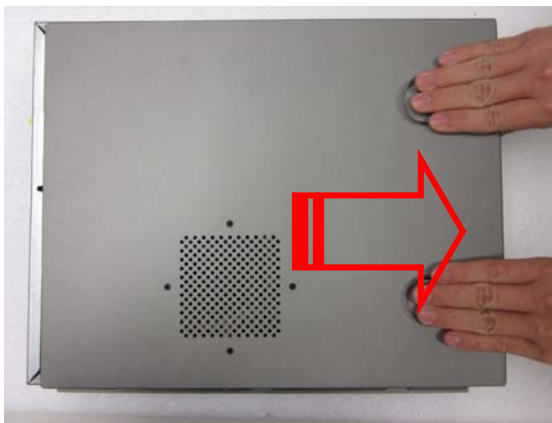
Step 3**:** Install the four anti-shock dampers to the HDD bracket
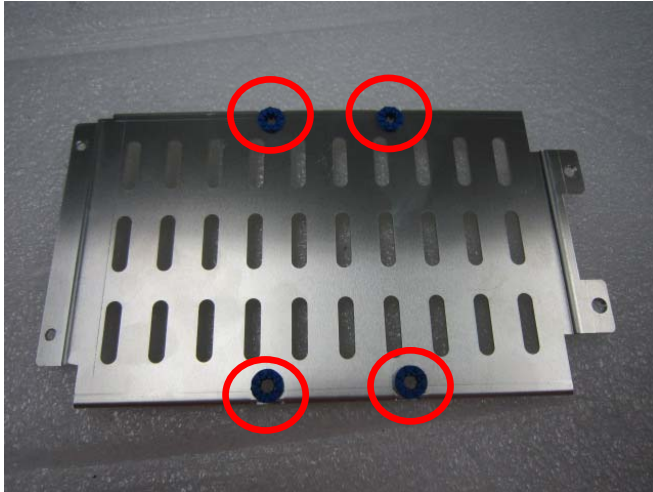
Step 4**:** Fasten the four screws to fix the bracket and HDD
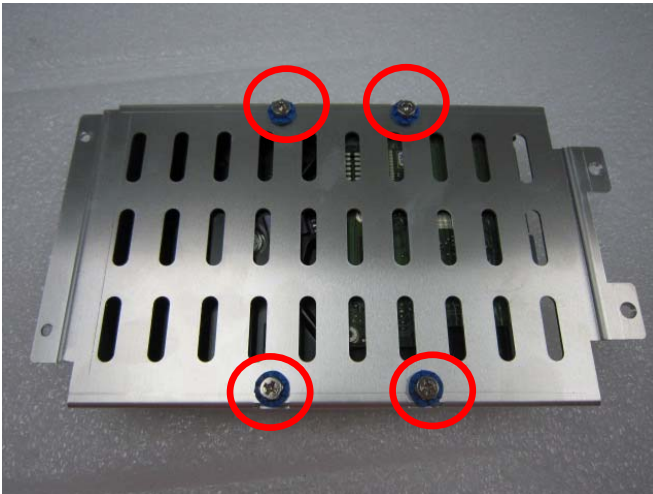
Step 5**:** Connect the SATA and Power Cables to the HDD
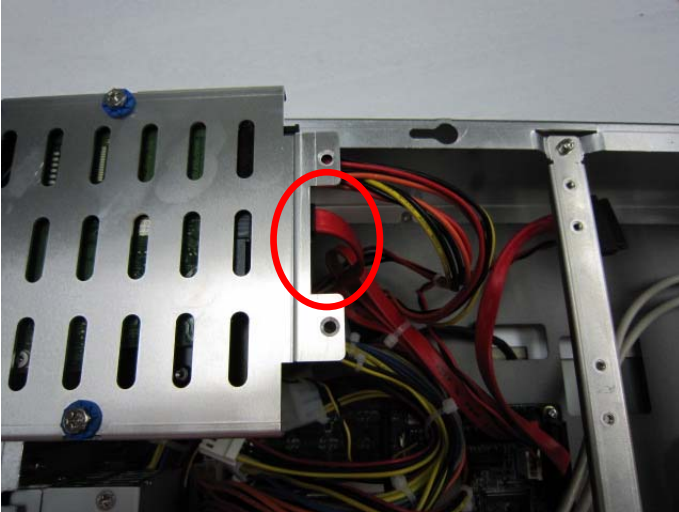
Step 6**:** Fasten the four screws to fix the HDD bracket and

AGP-3155
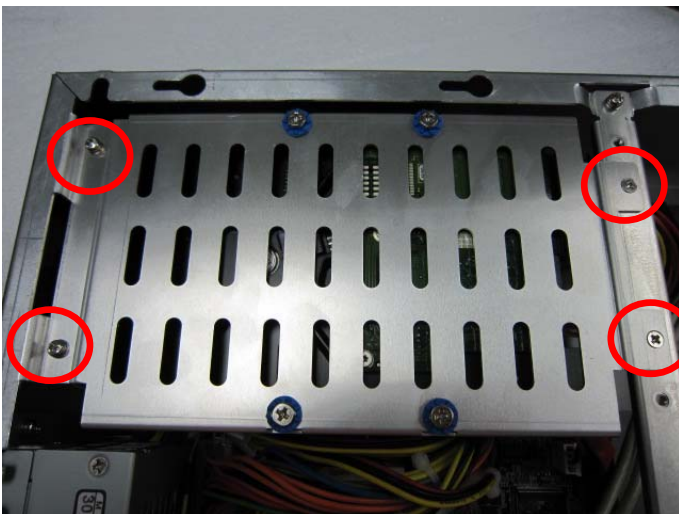
Install the second HDD (Optional)

Step 1**:** Install the four anti-shock dampers to the HDD bracket

Step 2**:** Fasten the four screws to fix the bracket and HDD

Step 3**:** Connect the SATA and Power Cables to the HDD

Step 4**:** Connect the SATA cable to the main board

Step 5**:** Fasten the four screws to fix the HDD bracket with

AGP-3155

2.31 DVD-ROM Installation

<u>Step 1</u>**:** Fasten the two screws to fix the DVD-ROM and bracket

<u>Step 2</u>**:** Connect the cables to the DVD-ROM
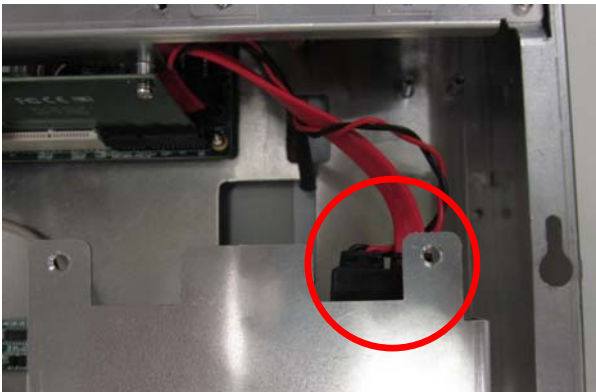
Step 3**:** Fasten the four screws to fix the DVD-ROM bracket with

AGP-3155
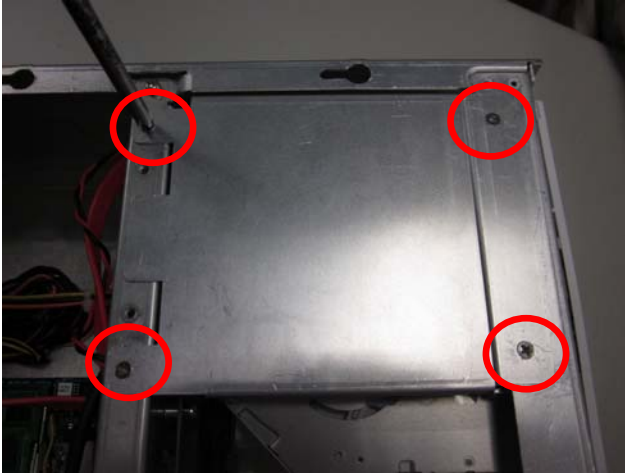
2.32 Easy Stand Installation

Fix two the L-shaped easy stands with the screws on both sides of the AGP-3155.

2.33 Panel Mount Kit Installation

Some screw sets will come with the product for user to mount the AGP-3155 on the wall. See the steps below along with the illustration.

Step 1: Bore the screw into the screw nut.

Step 2: Locate the screw set into the hole around the monitor as the right illustration and pull it back to lock the screw set on the hole.

Step 3: Turn the screw around to make it tight until it is closed to the wall.

Step 4: Lock the monitor to the wall with the screw set and finish the installation

Panel Mounting
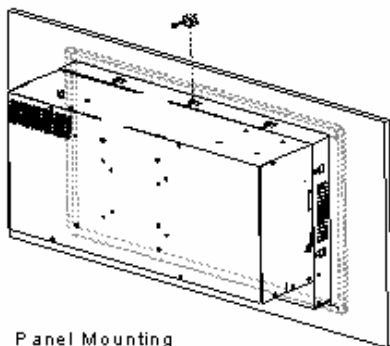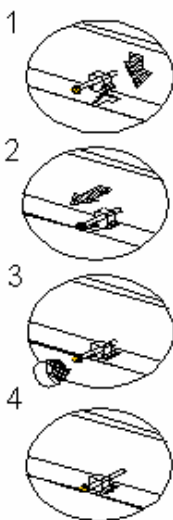
2.34 Waterproof Protection

Step 1: Remove the non-sticky aspect of the double sided tape from the waterproof rubber border.

Step 2: Put the waterproof rubber border along the bracket of the AGP-3155 chassis.

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 AGP-3155 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 <Del> 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/disable quiet boot option.

Security
Set setup administrator password.

Save&Exit
Exit system setup after saving the changes.

Setup Menu

Setup submenu: Main

```
                Aptio Setup Utility – Copyright (C) 2009 American Megatrends, Inc.
    Main  Advanced  Chipset  Boot  Security  Save & Exit

    BIOS Information                                            Choose the system default
       AGP-3155 V2 R1.0(3155BM10) (04/12/2013)                 language

    BIOS Vendor                    American Megatrends
    Model Name                     AGP-3155 V2
    Bios Version                   1.0
    Build Date                     04/12/2013 19:58:55

    Memory Information
    Total Memory                   4096 MB (DDR3 1066)

    System Language                [English]

    System Date                    [Fri 04/12/2013]            →←: Select Screen
    System Time                    [21:23:55]                  ↑↓: Select Item
                                                               Enter: Select
    Access Level                   Administrator               +/-: Change Opt.
                                                               F1: General Help
                                                               F2: Previous Values
                                                               F3: Optimized Defaults
                                                               F4: Save  ESC: Exit




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```

Setup submenu: Advanced

```
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   Main   Advanced   Chipset   Boot   Security   Save & Exit

                                                        Enable or Disable Boot Option
                                                        for Legacy Network Devices.
   Legacy OpROM Support
   Launch 82577 PXE OpROM              [Disabled]
   Launch 82574 PXE OpROM              [Disabled]
   COM2 Type Select                    [RS232]

 ▶ ACPI Settings
 ▶ S5 RTC Wake Settings
 ▶ CPU Configuration
 ▶ SATA Configuration
 ▶ Intel VGA Setting
 ▶ Super IO Configuration
 ▶ H/W Monitor                                          →←: Select Screen
 ▶ AMT Configuration                                    ↑↓: Select Item
 ▶ CompactFlash Controller Configuration                Enter: Select
 ▶ Serial Port Console Redirection                      +/-: Change Opt.
                                                        F1: General Help
                                                        F2: Previous Values
                                                        F3: Optimized Defaults
                                                        F4: Save  ESC: Exit




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```

Options summary:

Launch 82577 PXE OpROM	Disabled	Optimal Default, Failsafe Default
	Enabled	
En/Disable Legacy Boot Option for 82577.		
Launch 82574 PXE OpROM	Disabled	Optimal Default, Failsafe Default
	Enabled	
En/Disable Legacy Boot Option for 82574.		
COM2 Type Select	RS232	Optimal Default, Failsafe Default
	RS422	
	RS485	
Select COM2 Type		

ACPI Settings

```
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       Advanced

 Enable ACPI Auto Configuration        [Disabled]              Enables or Disables BIOS ACPI
                                                               Auto Configuration.
 Enable Hibernation                    [Enabled]
 ACPI Sleep State                      [S3 (Suspend to R...]




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



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```

Options summary:

Enable ACPI Auto Configuration	Disabled	Optimal Default, Failsafe Default
	Enabled	
Enables or Disables BIOS ACPI Auto Configuration		
Enable Hibernation	Disabled	
	Enabled	Optimal Default, Failsafe Default
Enables or Disables System ability to Hibernate (OS/S4 Sleep State). This option may be not effective with some OS.		
ACPI Sleep State	Suspend Disabled	
	S1 only (CPU Stop Clock)	
	S3 only (Suspend to RAM)	Optimal Default, Failsafe Default
Select the highest ACPI sleep state the system will enter, when the SUSPEND button is pressed.		

S5 RTC Wake Settings (Fixed Time)

Options summary:

Wake system with Fixed Time	Disabled	Optimal Default, Failsafe Default
	Enabled	
En/Disable System wake on alarm event. When enabled, System will wake on the hr:min:sec specified		
Wake up day	0-31	Default 0
Select 0 for daily system wake up, 1-31 for witch day of the moth that you would like the system to wake up.		
Wake up day	0-23	Default 0
Select 0-23 For example enter 3 for 3am and 15 for 3pm		
Wake up day	0-59	Default 0
Select 0-59		
Wake up day	0-59	Default 0
Select 0-59		

S5 RTC Wake Settings (Dynamic Time)

```
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        Advanced

  Wake system with Fixed Time         [Disabled]              Enable or disable System wake
                                                              on alarm event. When enabled,
  Wake system with Dynamic Time       [Enabled]               System will wake on the
  Wake up minute increase             1                       current time + Increase
                                                              minute(s)




                                                              →←: 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:

Wake system with Dynamic Time	Disabled	Optimal Default, Failsafe Default
	Enabled	
En/Disable System wake on alarm event. When enabled, System will wake on current time + Increases minutese(s)		
Wake up day	1-5	Default 1
Select 1-5		

CPU Configuration

```
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        Advanced

    CPU Configuration                                      Enabled for Windows XP and
                                                           Linux (OS optimized for
    Intel(R) Core(TM) i7 CPU M 620 @ 2.67GHz              Hyper-Threading Technology)
    EMT64                            Supported             and Disabled for other OS (OS
    Processor Speed                  2660 MHz             not optimized for
    Processor Stepping               20652                Hyper-Threading Technology).
    Microcode Revision               9                    When Disabled only one thread
    Processor Cores                  2                    per enabled core is enabled.
    Intel HT Technology              Supported

    Hyper-threading                  [Enabled]
    Intel Virtualization Technology  [Disabled]
    Turbo Mode                       [Disabled]
                                                          ++: Select Screen
                                                          ↑↓: Select Item
                                                          Enter: Select
                                                          +/-: Change Opt.
                                                          F1: General Help
                                                          F2: Previous Values
                                                          F3: Optimized Defaults
                                                          F4: Save  ESC: Exit



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```

Options summary:

Hyper-Threading	Disabled	
	Enabled	Optimal Default, Failsafe Default
Enabled for Windows XP and Linux (OS optimized for Hyper-Threading Technology) and Disabled for other OS (OS not optimized for Hyper-Threading Technology). When Disabled only one thread per enabled core is enabled.		
Intel Virtualization Technology	Disabled	Optimal Default, Failsafe Default
	Enabled	
When enabled, a VMM can utilize the additional hardware capabilities provided by Vanderpool Technology		
Turbo Mode	Disabled	Optimal Default, Failsafe Default
	Enabled	
En/Disable Turbo Mode.		

IDE Configuration (IDE)

```
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      Advanced

   SATA Configuration                                     (1) IDE Mode. (2) AHCI Mode.
                                                          (3) RAID Mode.
   SATA Port0                      Not Present
   SATA Port1                      Not Present

   SATA Mode                       [IDE Mode]
   Serial-ATA Controller 0         [Enhanced]
   Serial-ATA Controller 1         [Enhanced]




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




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```

IDE Configuration (AHCI)

```
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   Advanced

 SATA Configuration                                  (1) IDE Mode. (2) AHCI Mode.
                                                     (3) RAID Mode.
 SATA Port1                    Not Present
 SATA Port2                    Not Present
 SATA Port3                    Not Present

 SATA Mode                     [AHCI Mode]

 Port 1 Hot Plug               [Disable]
 Port 2 Hot Plug               [Disable]
 Port 3 Hot Plug               [Disable]

 External SATA Port 1          [Disable]
 External SATA Port 2          [Disable]    →←: Select Screen
 External SATA Port 3          [Disable]    ↑↓: Select Item
                                            Enter: Select
                                            +/-: Change Opt.
                                            F1: General Help
                                            F2: Previous Values
                                            F3: Optimized Defaults
                                            F4: Save  ESC: Exit




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```

IDE Configuration (RAID)

```
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      Advanced

   SATA Configuration                                          (1) IDE Mode. (2) AHCI Mode.
                                                               (3) RAID Mode.
   SATA Port1                        Not Present
   SATA Port2                        Not Present
   SATA Port3                        Not Present

   SATA Mode                         [RAID Mode]

   Port 1 Hot Plug                   [Disable]
   Port 2 Hot Plug                   [Disable]
   Port 3 Hot Plug                   [Disable]


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



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```
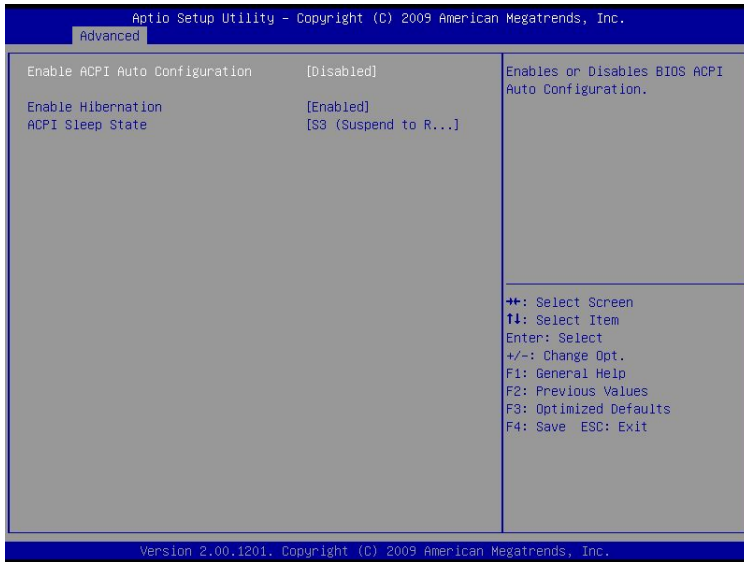
Options summary:

SATA Mode	Disable	Optimal Default, Failsafe Default
	IDE	
	AHCI	
	RAID	
IDE: Configure SATA controllers as legacy IDE		
AHCI: Configure SATA controllers to operate in AHCI mode		
RAID: Configure SATA controllers to operate in RAID mode		
Serial-ATA Controller #	Disabled	
	Enhanced	Optimal Default, Failsafe Default
Enable/Disable Serial ATA Controller		
Port # Hot plog	Disabled	Optimal Default, Failsafe Default
	Enabled	
SATA Ports Hot Plug Support		
External SATA Port #	Disabled	Optimal Default, Failsafe Default
	Enabled	
eSATA Ports Support		

Intel VGA Configuration

```
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      Advanced

                                                              Select DVMT/FIXED Mode Memory
    Intel VGA Configuration                                   size used by Internal Graphics
                                                              Device
    DVMT/FIXED Memory              [256MB]
    VGA - Boot Type                [CRT + LVDS]
    Active LVDS                    [Int-LVDS]




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




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```

Options summary:

DVMT/FIXED Memory	128MB	
	256MB	Optimal Default, Failsafe Default
	Maximum	
Select DVMT/FIXED Mode Memory size used by Internal Graphics Device		
IGD – Boot Type	VBIOS Default	
	CRT	
	LVDS	
	CRT + LVDS	Optimal Default, Failsafe Default
	DVI	
	HDMI	
	CRT + DVI	
Select the Video Device which will be activated during POST. This has no effect if external graphics present.		
Active LFP	No LVDS	
	Int-LVDS	Optimal Default, Failsafe Default
Select the Active LFP configuration. No LVDS: VBIOS does not enable LVDS. Int-LVDS: VBIOS enables LVDS driver by Integrated encoder.		

Super IO Configuration

```
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      Advanced

    Super IO Configuration                                Set Parameters of Serial Port
                                                          1 (COMA)
    Super IO Chip                      ITE IT8781F
  ▶ Serial Port 1 Configuration
  ▶ Serial Port 2 Configuration
  ▶ Serial Port 3 Configuration


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


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```

Serial Port 1 Configuration
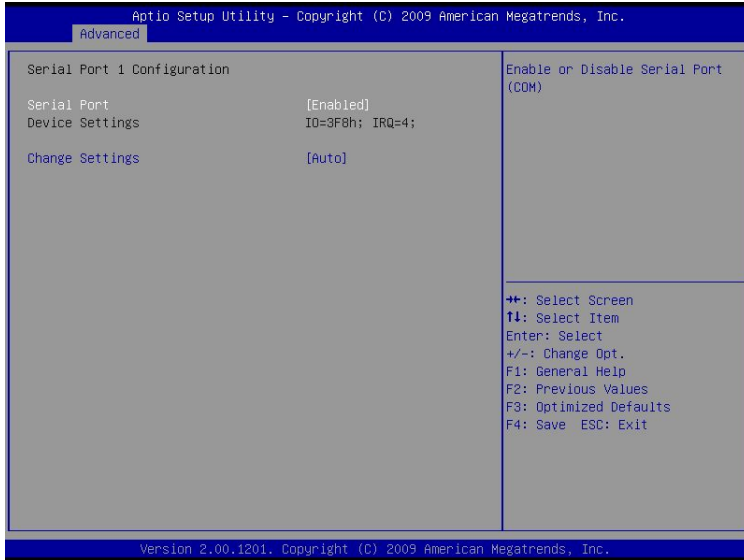
```
              Aptio Setup Utility - Copyright (C) 2009 American Megatrends, Inc.
      Advanced

   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  ESC: Exit




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```

Options summary:

Serial Port	Disabled	
	Enabled	Default
Allows BIOS to En/Disable correspond serial port.		
Change Settings	Auto	Default
	IO=3F8h; IRQ=4;	
	IO=3F8h; IRQ=3,4,5,6,7,10,11,12;	
	IO=2F8h; IRQ=3,4,5,6,7,10,11,12;	
	IO=3E8h; IRQ=3,4,5,6,7,10,11,12;	
	IO=2E8h; IRQ=3,4,5,6,7,10,11,12;	
Allows BIOS to select serial port resource.		

Serial Port 2 Configuration
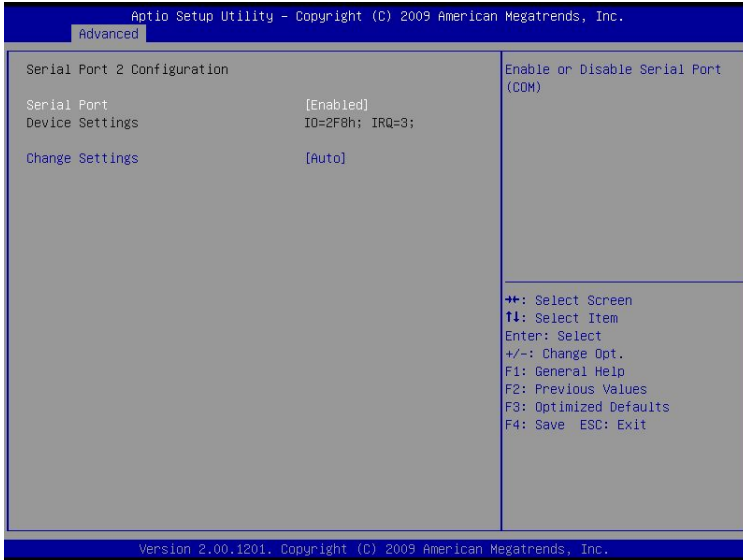
```
            Aptio Setup Utility – Copyright (C) 2009 American Megatrends, Inc.
   Advanced

   Serial Port 2 Configuration                                    Enable or Disable Serial Port
                                                                  (COM)
   Serial Port                          [Enabled]
   Device Settings                      IO=2F8h; IRQ=3;

   Change Settings                      [Auto]



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



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```

Options summary:

Serial Port	Disabled	
	Enabled	Default
Allows BIOS to En/Disable correspond serial port.		
Change Settings	Auto	Default
	IO=2F8h; IRQ=3;	
	IO=3F8h; IRQ=3,4,5,6,7,10,11,12;	
	IO=2F8h; IRQ=3,4,5,6,7,10,11,12;	
	IO=3E8h; IRQ=3,4,5,6,7,10,11,12;	
	IO=2E8h; IRQ=3,4,5,6,7,10,11,12;	
Allows BIOS to select serial port resource.		

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=11;

    Change Settings                  [Auto]




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




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```

Options summary:

Serial Port	Disabled	
	Enabled	Default
Allows BIOS to En/Disable correspond serial port.		
Change Settings	Auto	Default
	IO=3E8h; IRQ=11;	
	IO=3F8h; IRQ=3,4,5,6,7,10,11,12;	
	IO=2F8h; IRQ=3,4,5,6,7,10,11,12;	
	IO=3E8h; IRQ=3,4,5,6,7,10,11,12;	
	IO=2E8h; IRQ=3,4,5,6,7,10,11,12;	
Allows BIOS to select serial port resource.		

H/W Monitor

```
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        Advanced

   Pc Health Status                                          Manual Mode: Depends on PWM
                                                             Duty
   CPU Fan1 Control               [Enabled]                  Automatic Mode: Fan Speed is
     Fan Control Mode             [Automatic Mode]           depends on CPU Temperature
     Spin PWM                     50
     Off Control Temperature      30
     Start Control Temperature    50
     Full Speed Temperature       80
     PWM Slope                    3
   SYS Fan1 Control               [Enabled]
     Fan Control Mode             [Manual Mode]
     PWM Duty                     100

   CPU Temperature                : +64 C                    →←: Select Screen
   System Temperature1            : +42 C                    ↑↓: Select Item
   System Temperature2            : +37 C                    Enter: Select
   CPU FAN Speed                  : 5869 RPM                 +/-: Change Opt.
   System FAN Speed               : N/A                      F1: General Help
   Vcore                          : +0.928 V                 F2: Previous Values
   Vcc 1.5V                       : +1.504 V                 F3: Optimized Defaults
   Vcc 3.3V                       : +3.392 V                 F4: Save  ESC: Exit
   Vcc 12V                        : +12.096 V
   Vcc 5V                         : +5.076 V
   Vsb 5V                         : +5.103 V
   VBAT                           : +3.056 V

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```

Options summary:

CPU Fan1 Control	Disabled	Optimal Default, Failsafe Default
	Enabled	
En/Disable CPU Fan 1 Control		
SYS Fan2 Control	Disabled	Optimal Default, Failsafe Default
	Enabled	
En/Disable SYS Fan 2 Control		
Fan Control Mode	Manual Mode	Optimal Default, Failsafe Default
	Automatic Mode	
Manual Mode : Depends on PWM Duty Automatic Mode : Fan Speed is depends on CPU Temperature		
PWM Duty	Optimal Default : 100	
	Failsafe Default : 100	
Manual Mode PWM Duty value Range : [0 - 127]		
Spin PWM	Optimal Default : 50	
	Failsafe Default : 50	
The PWM Duty of Fan Spin Range : [0 - 127]		

Off Control Temperature	Optimal Default : 30
	Failsafe Default : 30
Temperature Limit Value of Fan Off	
Note : Some fans have the minimum speed even if the PWM value is 0	
Start Control Temperature	Optimal Default : 50
	Failsafe Default : 50
Temperature Limit Value of Fan Start Control	
Full Speed Temperature	Optimal Default : 80
	Failsafe Default : 80
Temperature Limit Value of Fan Full Speed	
PWM Slope	Optimal Default : 3
	Failsafe Default : 3
Slope PWM value/Degree C for Fan Speed Control	
Range : [1 - 7]	

AMT Configuration

```
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    Advanced

 AMT                              [Enabled]                    AMT Help
 Unconfigure AMT/ME               [Disabled]
 WatchDog Timer                   [Disabled]
  OS WatchDog Timer               0
  BIOS WatchDog Timer             0




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



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```
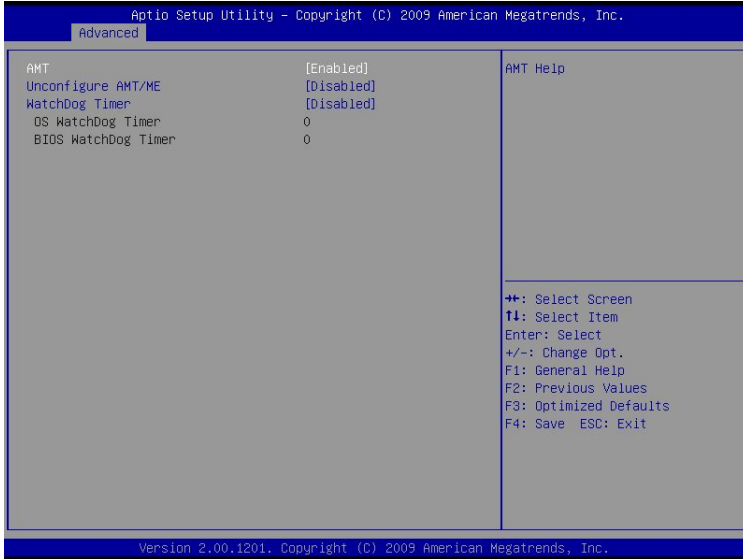
Options summary:

AMT	Disabled	
	Enabled	Optimal Default, Failsafe Default
Intel AMT Enable/Disable		
Unconfigure AMT/ME	Disabled	Optimal Default, Failsafe Default
	Enabled	
Perform AMT/ME unconfigure without password operation		
WatchDog Timer	Disabled	Optimal Default, Failsafe Default
	Enabled	
Enable/Disable WatchDog Timer		
OS WatchDog Timer	0~255 (0)	Optimal Default, Failsafe Default
Set OS WatchDog Timer		
BIOS WatchDog Timer	0~255 (0)	Optimal Default, Failsafe Default
Set BIOS WatchDog Timer		

CompactFlash Controller Configuration

```
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      Advanced

   CF Port0                        Not Present            Select an operative mode for
                                                          ATA controller.
   ATA Controller                  [IDE Mode]




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




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```

Options summary:

ATA Controller	Disabled	
	IDE Mode	Optimal Default, Failsafe Default
Select an operative mode for ATA controller		

Serial Port Condole Redirection

```
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   Advanced

                                                              Console Redirection
                                                              Enable/Disable
 COM0 (Disabled)
 Console Redirection              Port Is Disabled

 Serial Port for Out-of-Band Management/
 Windows Emergency Management Services (EMS)
 Console Redirection             [Enabled]
 Out-of-Band Mgmt Port           COM0 (Disabled)
 Data Bits                       8
 Parity                          None
 Stop Bits                       1
 Terminal Type                   [VT-UTF8]
                                                              →←: Select Screen
                                                              ↑↓: Select Item
                                                              Enter: Select
                                                              +/-: Change Opt.
                                                              F1: General Help
                                                              F2: Previous Values
                                                              F3: Optimized Defaults
                                                              F4: Save  ESC: Exit



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```

Options summary:

Console Redirection	Disabled	Optimal Default, Failsafe Default
	Enabled	
Console Redirection Enable/Disable		
Terminal Type	VT100	
	VT100+	
	VT-UTF8	Optimal Default, Failsafe Default
	ANSI	
VT-UTF8 is the preferred terminal type for out-of-band management. The next best choice is VT100+ and then VT100.		

Setup submenu: Chipset

```
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     Main  Advanced  Chipset  Boot  Security  Save & Exit

  ▶ North Bridge                                          North Bridge Parameters
  ▶ South Bridge




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


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```
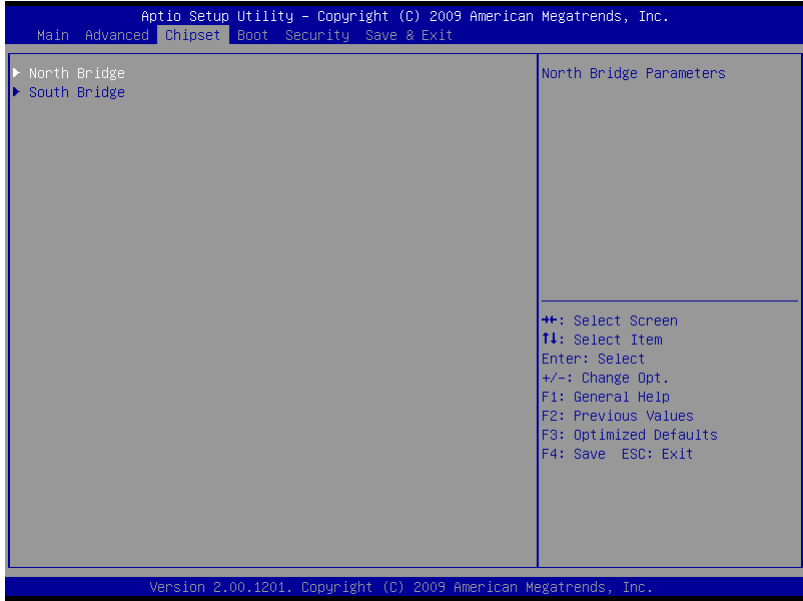
North Bridge

```
            Aptio Setup Utility - Copyright (C) 2009 American Megatrends, Inc.
              Chipset

  Memory Information                                        ▲   Select which graphics
                                                               controller to use as the
  CPU Type                       Arrandale                      primary boot device.

  Total Memory                   4096 MB (DDR3 1066)

  Memory Slot1                   4096 MB (DDR3 1066)
  Memory Slot2                      0 MB (DDR3 1066)

  CAS# Latency(tCL)                    7
  RAS# Active Time(tRAS)              20
  Row Precharge Time(tRP)             7
  RAS# to CAS# Delay(tRCD)            7
  Write Recovery Time(tWR)            8                          ➔➔: Select Screen
  Row Refresh Cycle Timea(tRFC)      86                         ↑↓: Select Item
  Write to Read Delay(tWTR)          4                          Enter: Select
  Active to Active Delay(tRRD)       4                          +/-: Change Opt.
  Read CAS# Precharge(tRTP)          5                          F1: General Help
                                                               F2: Previous Values
                                                               F3: Optimized Defaults
  Initate Graphic Adapter         [IGD]                         F4: Save  ESC: Exit

  VT-d                            [Disabled]

                                                          ▼

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```

Options summary:

Initiate Graphic Adapter	IGD	Optimal Default, Failsafe Default
	PCI/IGD	
Select which graphics controller to use as the primary boot device		
VT-d	Disabled	Optimal Default, Failsafe Default
	Enabled	
Check to enable VT-d function on MCH		

South Bridge

```
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 Chipset

                                                    82577 GbE Controller help.
SB Chipset Configuration
82577 GbE Controller              [Enable]
82577 Wake on Lan from S5         [Enable]

Restore AC Power Loss             [Power Off]

Audio Configuration
Azalia HD Audio                   [Enabled]


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



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```

Options summary:

82577 GbE Controller	Disabled	
	Enabled	Optimal Default, Failsafe Default
82577 GbE Controller Enable/Disable		
82577 Wake on LAN from S5	Disabled	
	Enabled	Optimal Default, Failsafe Default
82577 Wake on LAN from S5 Enable/Disable		
Restore AC Power Loss	Power Off	Optimal Default, Failsafe Default
	Power On	
	Last State	
Select AC power state when power is re-applied after a power failure.		
Azalia HD Audio	Disabled	
	Enabled	Optimal Default, Failsafe Default
Control Detection of the Azalia device. Disabled = Azalia will be unconditionally disabled; Enabled = Azalia will be unconditionally enabled		

Setup submenu: Boot

```
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       Main  Advanced  Chipset  Boot  Security  Save & Exit

     Boot Configuration                                      Enables/Disables Quiet Boot
     Quiet Boot                        [Enabled]             option

     Bootup NumLock State              [On]



     Boot Option Priorities
     Boot Option #1                    [TOSHIBA TransMem...]
     Boot Option #2                    [UEFI: TOSHIBA Tr...]

     Hard Drive BBS Priorities
                                                             →←: Select Screen
                                                             ↑↓: Select Item
                                                             Enter: Select
                                                             +/-: Change Opt.
                                                             F1: General Help
                                                             F2: Previous Values
                                                             F3: Optimized Defaults
                                                             F4: Save  ESC: Exit




              Version 2.00.1201. Copyright (C) 2009 American Megatrends, Inc.
```
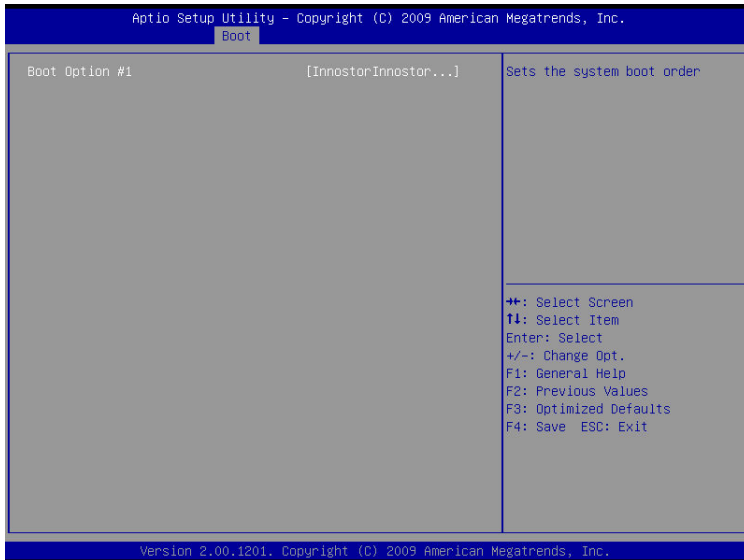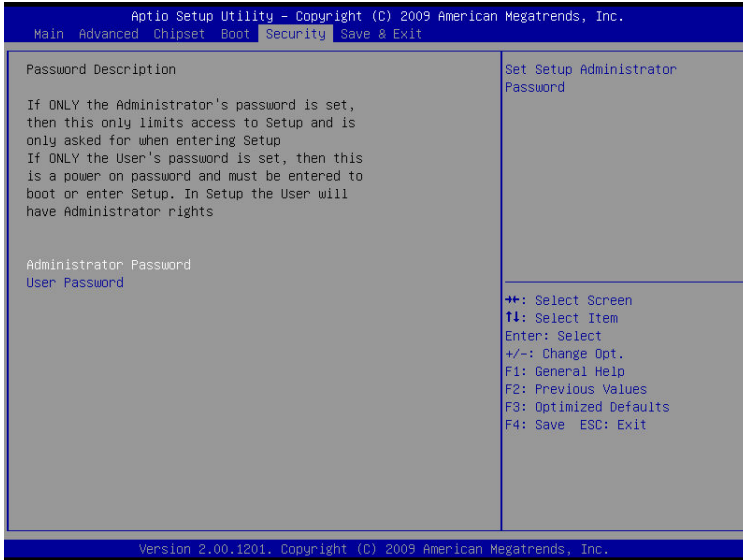
Options summary:

Quiet Boot	Disabled	
	Enabled	Optimal Default, Failsafe Default
En/Disable showing boot logo.		
Setup Prompt Timeout	1~65535 (1)	Optimal Default, Failsafe Default
Number of seconds to wait for setup activation key. 65535(0xFFFF) means indefinite waiting.		
Bootup NumLock State	On	Optimal Default, Failsafe Default
	Off	
Select the keyboard NumLock state		

BBS Priorities

```
              Aptio Setup Utility - Copyright (C) 2009 American Megatrends, Inc.
                    Boot

    Boot Option #1                     [InnostorInnostor...]          Sets the system boot order




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




              Version 2.00.1201. Copyright (C) 2009 American Megatrends, Inc.
```

Security

```
                    Aptio Setup Utility - Copyright (C) 2009 American Megatrends, Inc.
     Main  Advanced  Chipset  Boot  Security  Save & Exit

      Password Description                                    Set Setup Administrator
                                                             Password
      If ONLY the Administrator's password is set,
      then this only limits access to Setup and is
      only asked for when entering Setup
      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


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



                    Version 2.00.1201. Copyright (C) 2009 American Megatrends, Inc.
```

Change User/Supervisor 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.

If you highlight these items and press Enter, 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

```
          Aptio Setup Utility - Copyright (C) 2009 American Megatrends, Inc.
    Main   Advanced   Chipset   Boot   Security   Save & Exit

    Save Changes and Reset                              Reset the system after saving
    Discard Changes and Reset                           the changes.

    Save Options
    Save Changes
    Discard Changes

    Restore Defaults
    Save as User Defaults
    Restore User Defaults

    Boot Override
    TOSHIBA TransMemory PMAP
    UEFI: TOSHIBA TransMemory PMAP
                                                        →←: Select Screen
                                                        ↑↓: Select Item
                                                        Enter: Select
                                                        +/-: Change Opt.
                                                        F1: General Help
                                                        F2: Previous Values
                                                        F3: Optimized Defaults
                                                        F4: Save  ESC: Exit

          Version 2.00.1201. Copyright (C) 2009 American Megatrends, Inc.
```

Chapter

4

Driver Installation

The AGP-3155 comes with a DVD-ROM that contains all drivers your need.

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 ME Driver

Step 6 – Install RAID & AHCI Driver

Step 7 – Install Touch Panel Driver

Step 8 – Install Serial Port Driver (Optional)

Please read following instructions for detailed installations.

4.1 Installation:

Insert the AGP-3155 DVD-ROM into the DVD-ROM Drive. And
install the drivers from Step 1 to Step 8 in order.

Step 1 – Install Chipset Driver

1. Click on the *Step1 - INF* folder and double click on the *infinst_autol.exe* file

2. Follow the instructions that the window shows

3. The system will help you to install the driver automatically

Step 2 – Install VGA Driver

1. Click on the *Step2 - VGA* folder and select the OS your system is

2. Double click on *Setup.exe* file located in each OS folder

3. Follow the instructions that the window shows

4. The system will help you to install the driver automatically

Step 3 – Install LAN Driver

1. Click on the *Step3 - LAN* folder and select the OS your system is

2. Double click on *.exe* file located in each OS folder

3. Follow the instructions that the window shows

4. The system will help you to install the driver automatically

Step 4 – Install AUDIO Driver

1. Click on the *Step4 - AUDIO* folder and select the OS your system is

2. Double click on *.exe* file located in each OS folder

3. Follow the instructions that the window shows

4. The system will help you to install the driver automatically

Step 5 – Install ME Driver

1. Click on the *Step5 - ME* folder and double click on *Setup.exe* file

2. Follow the instructions that the window shows

3. The system will help you to install the driver automatically

Step 6 – Install RAID & AHCI Driver

Please refer to Appendix A RAID & AHCI Settings

Step 7 – Install Touch Panel Driver

1. Click on the *Step7 -Touch Panel Driver* folder and select the OS your system is

2. Double click on *setup.exe* file located in each OS folder

3. Follow the instructions that the window shows

4. The system will help you to install the driver automatically

Step 8 – Install Serial Port Driver (Optional)

1. Click on the *Step8 - Serial Port (Option)* folder and double click on *Serial Patch v1.0.1* file

2. Follow the instructions that the window shows

3. The system will help you to install the driver automatically

Appendix

A

RAID & AHCI Settings

A.1 Setting RAID

OS installation to setup RAID Mode

Step 1: Copy the files below from "*Driver CD -> Step6 - RAID&AHCI\F6*

Floppy - x86" to Disk

Step 2: Connect the USB Floppy (disk with RAID files) to the board

Step 3: The setting procedures " **In BIOS Setup Menu**"
A: Advanced -> SATA Configuration -> SATA Mode -> RAID Mode
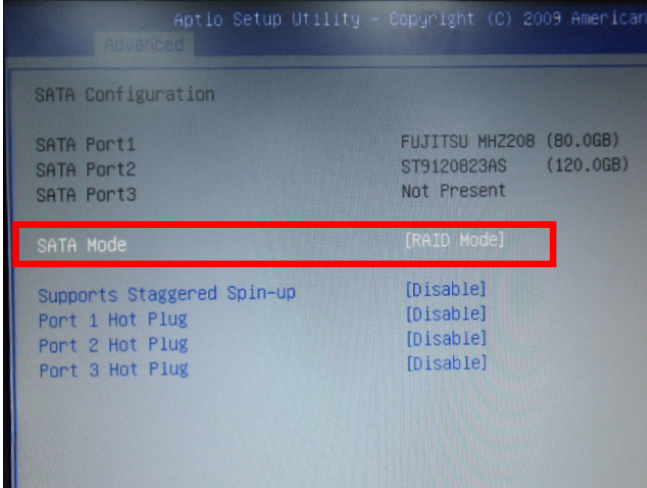
Step 4: The setting procedures "**In BIOS Setup Menu**"
B: Advanced -> Launch Storage OpROM -> Enabled
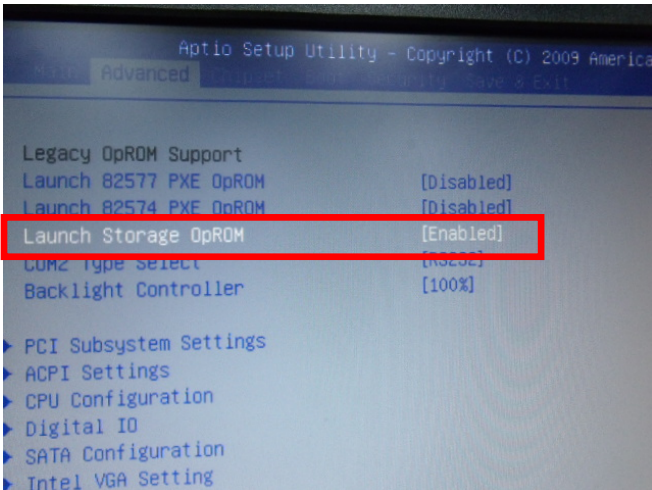
Step 5: The setting procedures "**In BIOS Setup Menu"**
C: Boot -> Boot Option #1 -> DVD-ROM Type
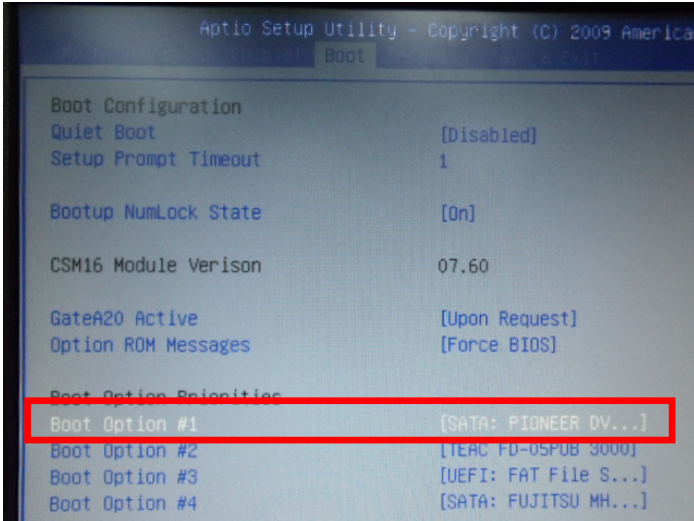
Step 6: The setting procedures "**In BIOS Setup Menu"**
D: Save & Exit -> Save Changes and Exit
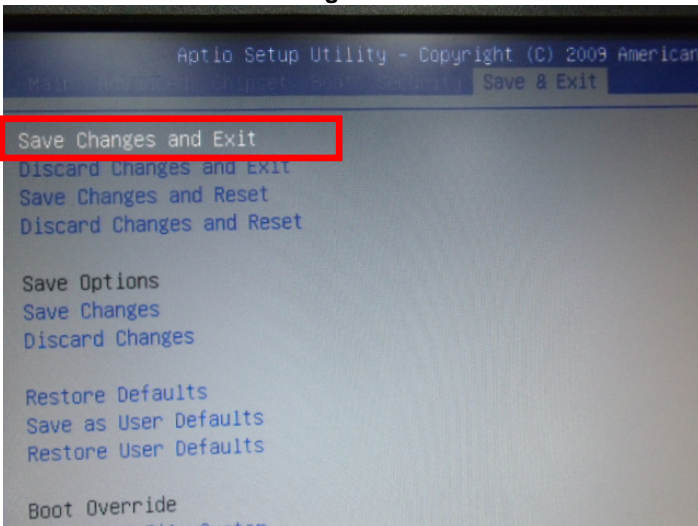
Step 7: Press **Ctrl-I** to enter **MAIN MENU**
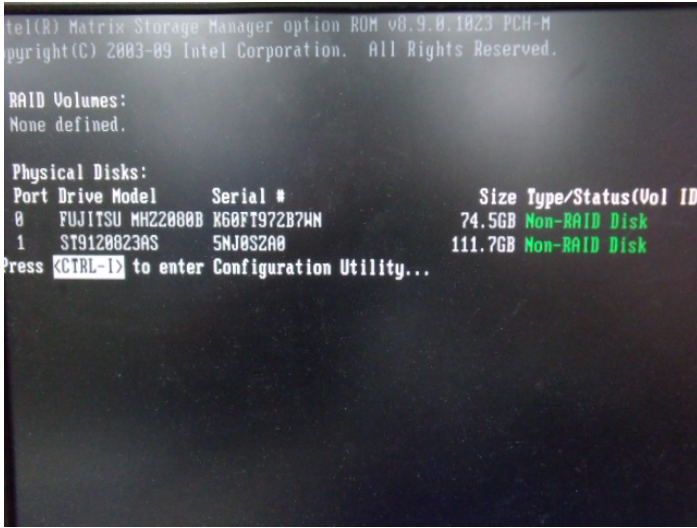
Step 8: Choose "**1.Create RAID Volume**"
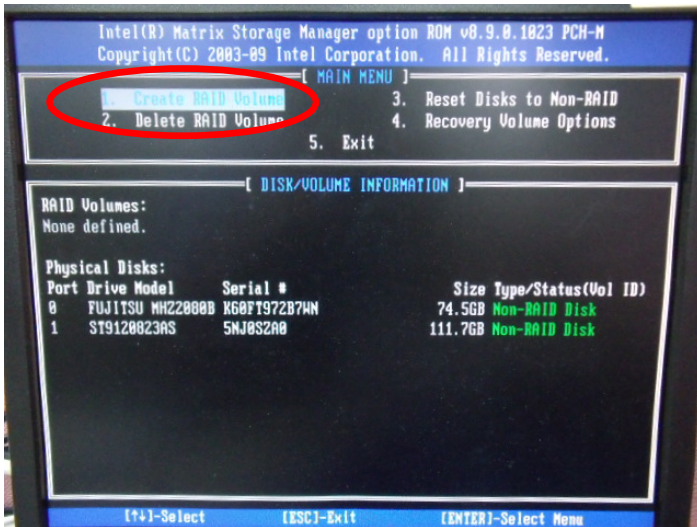
Step 9: RAID Level -> RAID0(Stripe)
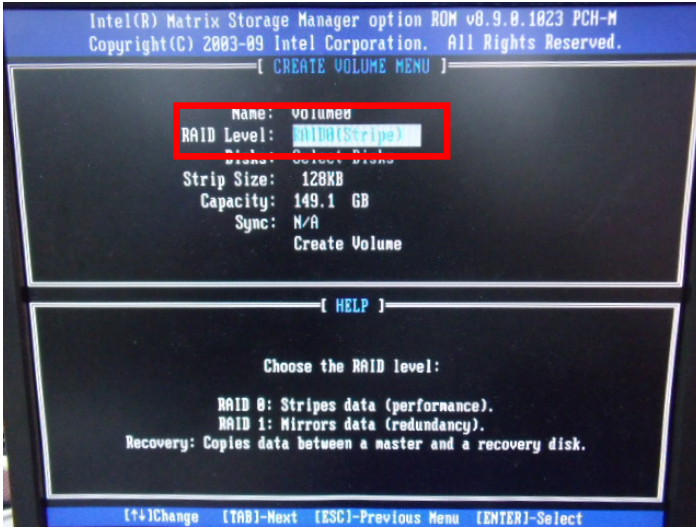
Step 10: Choose "**Create Volume**"
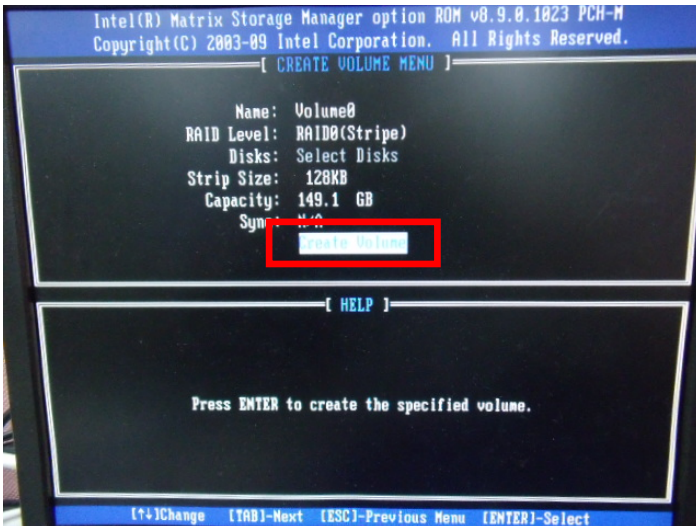
Step 11: Choose "**Y**"
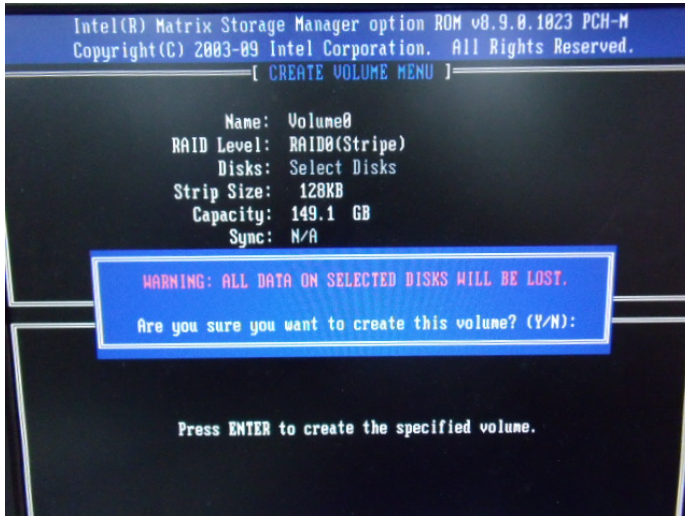
Step 12: Choose "**5. Exit**"
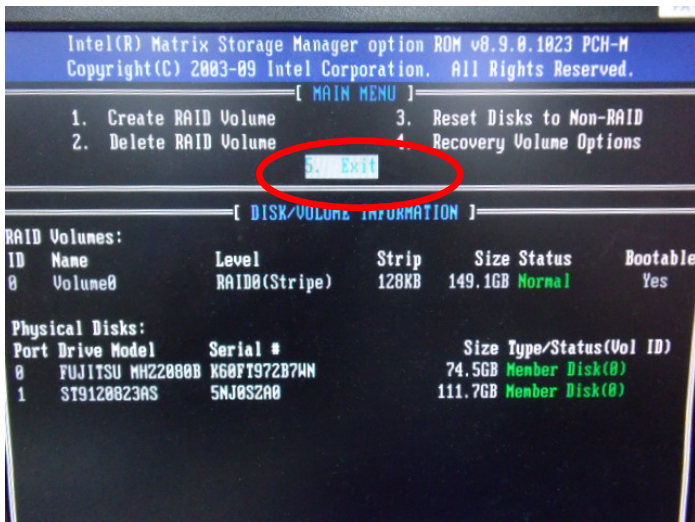
Step 13: Choose "**Y**"
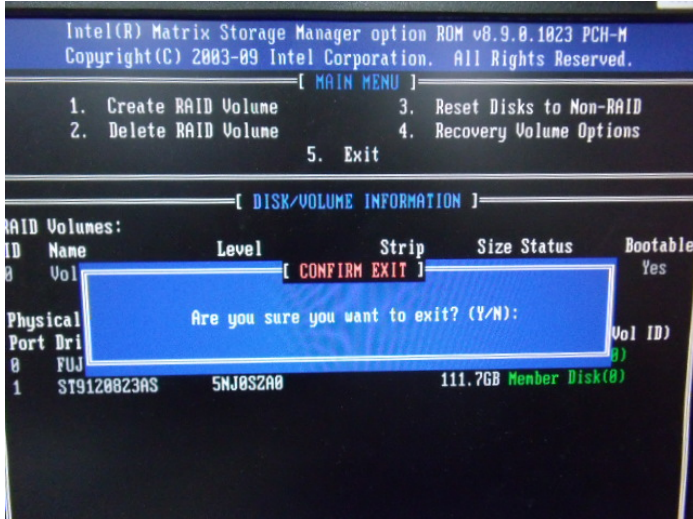
Step 14: Setup OS

Step 15: Press "**F6**"

Press F6 if you need to install a third party SCSI or RAID driver...

Step 16: Choose "**S**"

Windows Setup

Setup could not determine the type of one or more mass storage devices installed in your system, or you have chosen to manually specify an adapter. Currently, Setup will load support for the following mass storage devices(s):

    <none>

    * To specify additional SCSI adapters, CD-ROM drives, or special
      disk controllers for use with Windows, including those for
      which you have a device support disk from a mass storage device
      manufacturer, press S.

    * If you do not have any device support disks from a mass storage
      device manufacturer, or do not want to specify additional
      mass storage devices for use with Windows, press ENTER.

S=Specify Additional Device   ENTER=Continue   F3=Exit

Step 17: Choose "**Intel(R) ICH8M-E/ICH9M-E/5 Series SATA RAID Controller**"
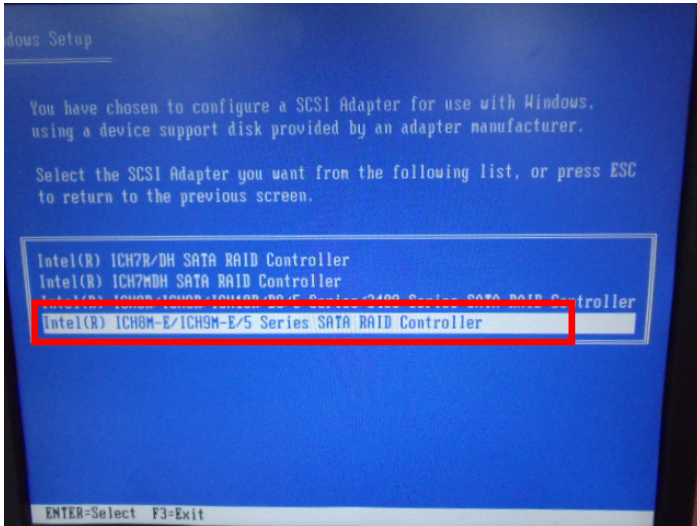
Step 18: It will show the model number you select and then press "**ENTER**"

Step 19: Setup is starting Windows
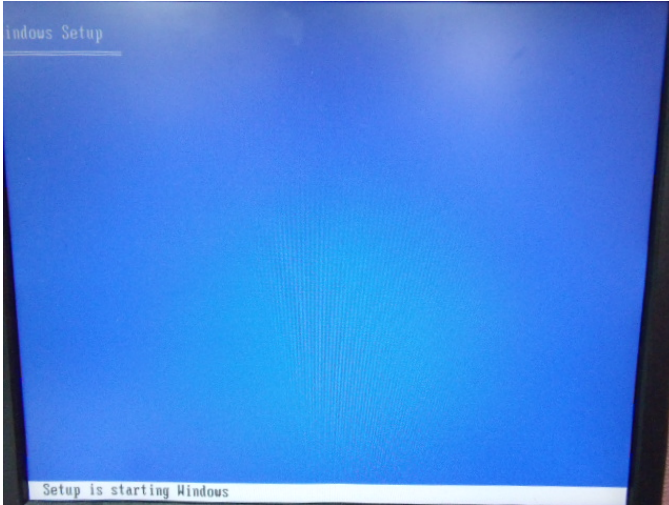
A.2 Setting AHCI

OS installation to setup AHCI Mode

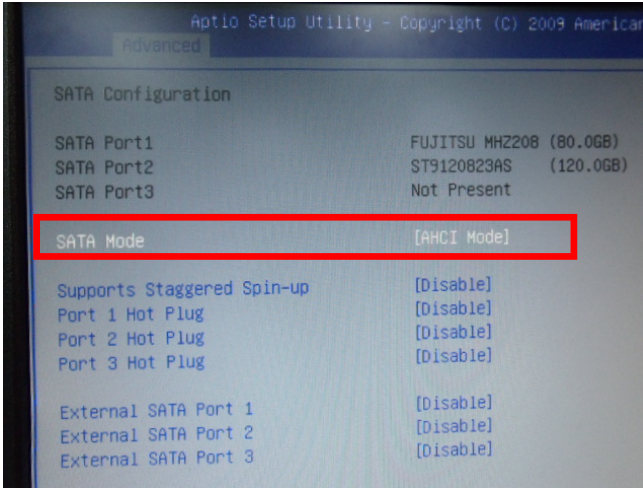Step 1: Copy the files below from "**Driver CD -> Step6 - RAID&AHCI\F6 Floppy - x86**" to Disk

Step 2: Connect the USB Floppy (disk with RAID files) to the board
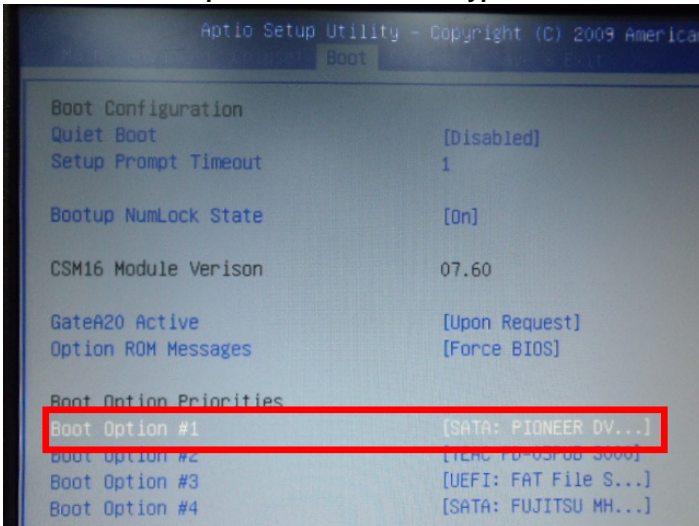
Step 3: The setting procedures " **In BIOS Setup Menu**"
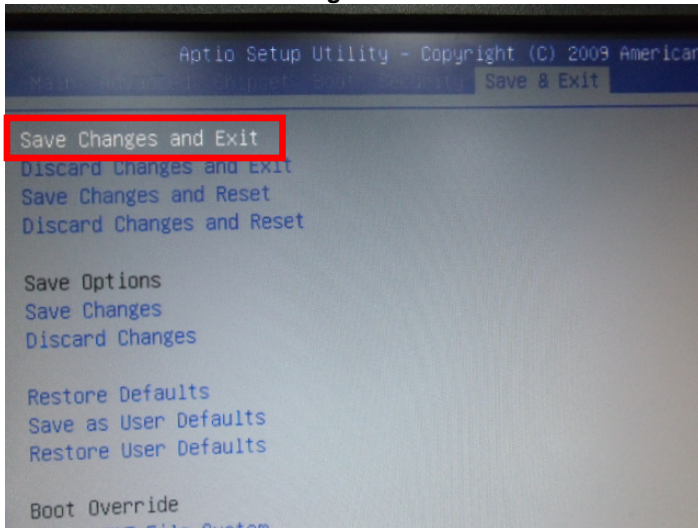**A: Advanced -> SATA Configuration -> SATA Configuration -> SATA Mode -> AHCI Mode**

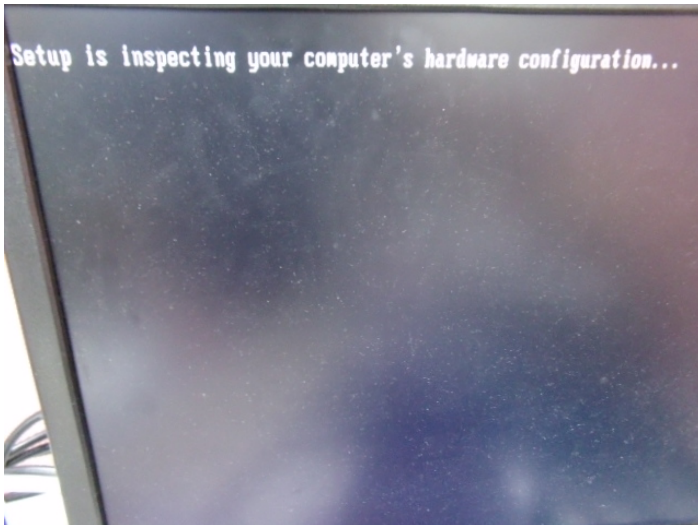Step 4: The setting procedures "**In BIOS Setup Menu**"
B: Boot -> Boot Option #1 -> DVD-ROM Type

Step 5: The setting procedures "**In BIOS Setup Menu**"
C: Save & Exit -> Save Changes and Exit
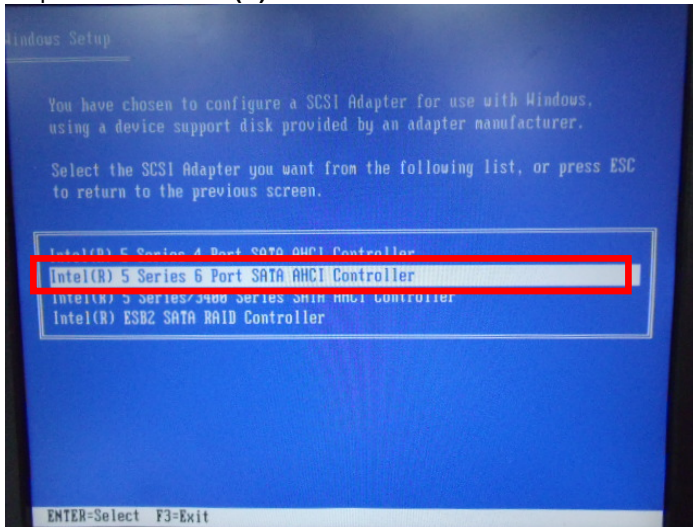

Step 6: Setup OS

Step 7: Press "**F6**"


```
Press F6 if you need to install a third party SCSI or RAID driver...
```

Step 8: Choose "**S**"


```
Windows Setup

Setup could not determine the type of one or more mass storage devices
installed in your system, or you have chosen to manually specify an adapter.
Currently, Setup will load support for the following mass storage devices(s):

    <none>

  * To specify additional SCSI adapters, CD-ROM drives, or special
    disk controllers for use with Windows, including those for
    which you have a device support disk from a mass storage device
    manufacturer, press S.

  * If you do not have any device support disks from a mass storage
    device manufacturer, or do not want to specify additional
    mass storage devices for use with Windows, press ENTER.



  S=Specify Additional Device    ENTER=Continue    F3=Exit
```

Step 9: Choose "**Intel(R) 5 Series 6 Port SATA AHCI Controller**"

Step 10: It will show the model number you select and then press "**ENTER**"
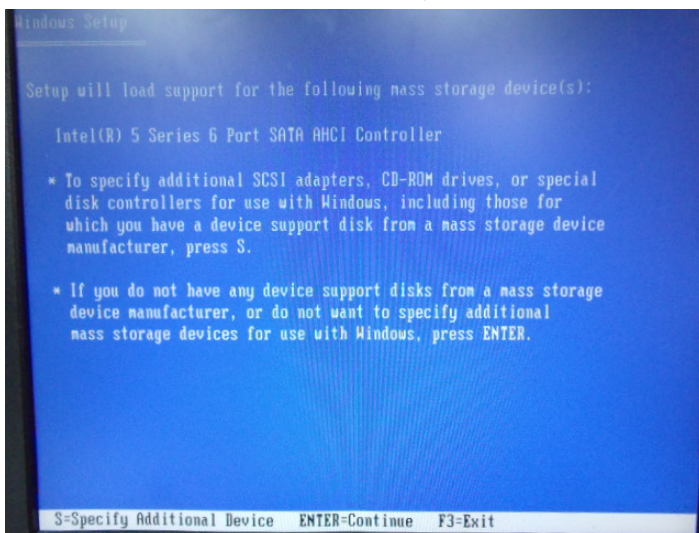
Step 11: Setup is loading files

Setup is loading files (Compaq Drive Array)...