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# XPC User Guide

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For the : SH67H3/SH67H7

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Shuttle®

## XPC Installation Guide

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This device complies to Part 15 of the FCC Rules. Operation is subject to the following two conditions:

1. This device may not cause harmful interference.
2. This device must withstand any background interference including those that may cause undesired operation.

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## Safety Information

Read the following precautions before setting up a Shuttle XPC.

### CAUTION

Incorrectly replacing the battery may damage this computer. Replace only with the same or equivalent as recommended by Shuttle. Disposal of used batteries according to the manufacturer's instructions.

### Laser compliance statement

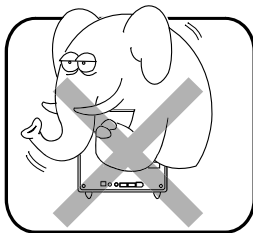
The optical disc drive in this server is a laser product. The drive's classification label is located on the drive.

### CLASS 1 LASER PRODUCT

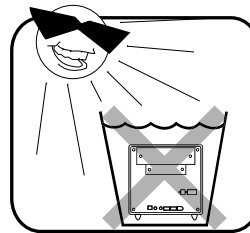
CAUTION : INVISIBLE LASER RADIATION WHEN OPEN.  
AVOID EXPOSURE TO BEAM.

## Installation Notices

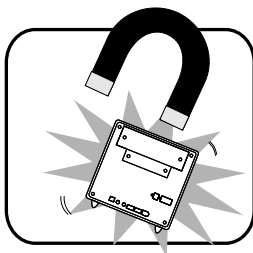
Do not place this device underneath heavy loads or in an unstable position.



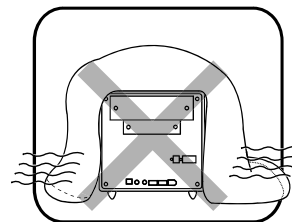
Do not expose this device to high levels of direct sunlight, high-humidity or wet conditions.



Do not use or expose this device around magnetic fields as magnetic interference may affect the performance of the device.



Do not block the air vents to this device or impede the airflow in any way.



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## Driver and Software Installation

### ■ Motherboard Driver DVD

 The DVD contents attached in SH67H3/SH67H7 Series motherboard are subject to change without notice.

The Motherboard Driver DVD contains all the motherboard drivers necessary to optimize the performance of this Shuttle Xvision in a Windows® OS. Install these drivers after installing Microsoft® Windows®.

Insert the attached DVD into your DVD-ROM drive. The DVD AutoRun screen should appear. If the AutoRun screen does not appear, double click on Autorun icon in My Computer to bring up Shuttle Mainboard Software Setup screen.

Navigation Bar Description :

- ☞ Auto Install Driver/ Utility.
- ☞ User Manuals - Motherboard Manual, Quick Guide.
- ☞ Link to Shuttle Website - Link to shuttle website homepage.
- ☞ Browse this DVD - Allows you to see contents of this DVD.



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## ■ User Manuals

- ☞ [Motherboard Manual](#)
- ☞ [Quick Guide](#)



## Starting BIOS

AMIBIOS has been integrated into many motherboards for over a decade. In the past, people often referred to the AMIBIOS setup menu as BIOS, BIOS setup, or CMOS setup.

American Megatrends refers to this setup as BIOS. Specifically, it is the name of the AMIBIOS8 BIOS setup utility. This chapter describes the basic navigation of the BIOS setup screens.

## Enter the BIOS

To enter the BIOS setup screens, follow the steps below:

Step1. Power on the motherboard.

Step2. Press the <Delete> key on your keyboard when you see the following text prompt: **Press DEL to run Setup.**

Step3. After you press the <Delete> key, the main BIOS setup menu displays. You can access the other setup screens from the main BIOS setup menu, such as the Chipset and Power menus.



This manual describes the standard look of the BIOS setup screen. The motherboard manufacturer has the ability to change any and all of the settings described in this manual. This means that some of the options described in this manual do not exist in your motherboard's AMIBIOS.



In most cases, the <Delete> key is used to invoke the BIOS setup screen. There are a few cases that other keys are used, such as <F1>, <F2>, and so on.

## BIOS Setup Menu

The main BIOS setup menu is the first screen that you can navigate. Each main BIOS setup menu option is described in this user's guide.

The Main BIOS setup menu screen has two main frames. The left frame displays all the options that can be configured. "Grayed-out" options cannot be configured. Options in blue can be.

The right frame displays the key legend. Above the key legend is an area reserved for a text message. When an option is selected in the left frame, it is highlighted in white.

Often a text message will accompany it.



AMIBIOS8 has default text messages built into it. The motherboard manufacture retains the option to include, leave out, or change any of these text messages. They can also add their own text messages. Because of this, many screen shots in this manual are different from your BIOS setup screen.

The BIOS setup/utility uses a key-based navigation system called hot keys. Most of the BIOS setup utility hot keys can be used at any time during the setup navigation process. These keys include <F1>, <F10>, <Enter>, <ESC>, <Arrow> keys, and so on.



There is a hot key legend located in the right frame on most BIOS setup screens.

| Hot Key           | Description  |
|-------------------|--|
| → Left<br>← Right | The Left and Right <Arrow> keys allow you to select a BIOS setup screen. For example: Main screen, Advanced screen, Chipset screen, and so on.   |
| ↑ Up<br>↓ Down    | The Up and Down <Arrow> keys allow you to select an BIOS setup item or sub-screen.   |
| + - Plus/Minus    | The Plus and Minus <Arrow> keys allow you to change the field value of a particular setup item. For example: Date and Time.  |
| Tab               | The <Tab> key allows you to select BIOS setup fields.  |
| F1                | The <F1> key allows you to display the General Help screen. Press the <F1> key to open the General Help screen.  |
| F10               | The <F10> key allows you to save any changes you have made and exit BIOS Setup. Press the <F10> key to save your changes. Press the <Enter> key to save the configuration and exit. You can also use the <Arrow> key to select Cancel and then press the <Enter> key to abort this function and return to the previous screen.                               |
| ESC               | The <Esc> key allows you to discard any changes you have made and exit the BIOS Setup. Press the <Esc> key to exit the BIOS setup without saving your changes. Press the <Enter> key to discard changes and exit. You can also use the <Arrow> key to select Cancel and then press the <Enter> key to abort this function and return to the previous screen. |
| Enter             | The <Enter> key allows you to display or change the setup option listed for a particular setup item. The <Enter> key can also allow you to display the setup sub-screens.  |



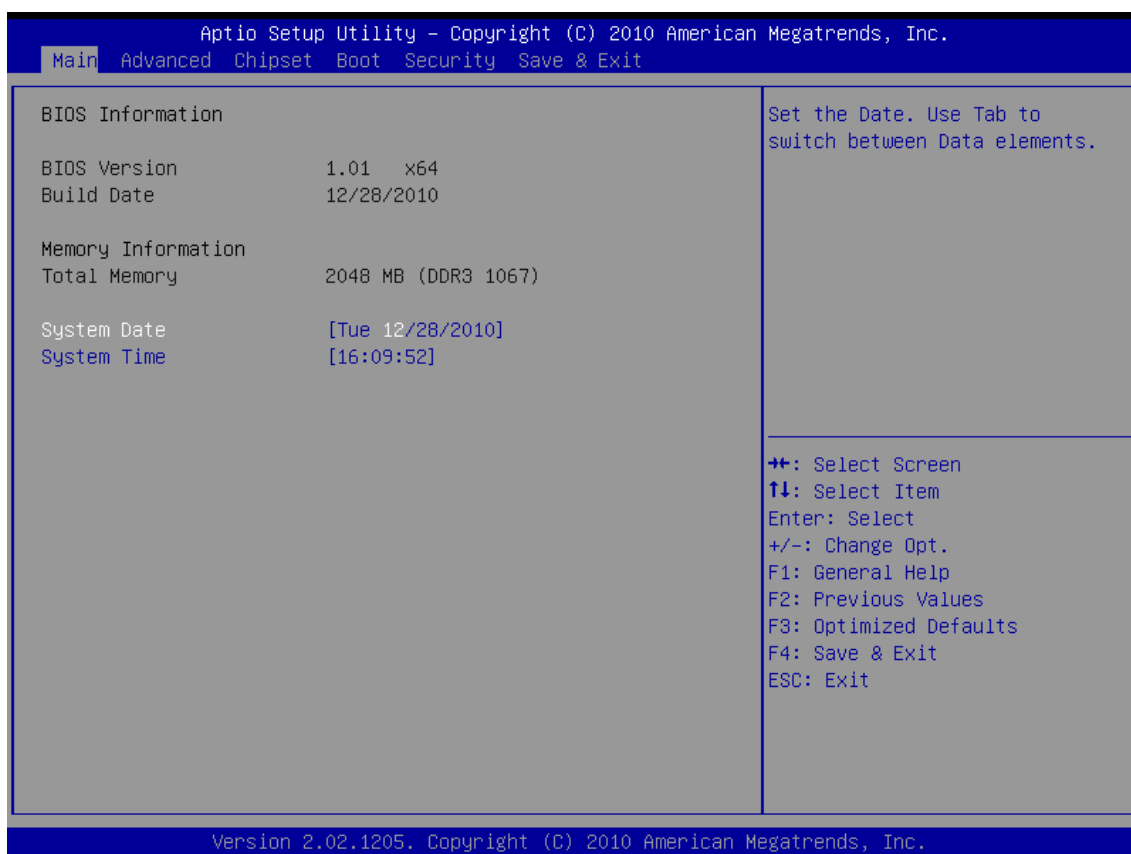
The <F8> key on your keyboard is the Fail-Safe key. It is not displayed on the BIOS key legend by default. To set the Fail-Safe settings of the BIOS, press the <F8> key on your keyboard. It is located on the upper row of a standard 101 keyboard. The Fail-Safe settings allow the motherboard to boot up with the least amount of options set. This can lessen the probability of conflicting settings.



## Main Setup

When you first enter the BIOS Setup Utility, you will enter the Main setup screen.

You can always return to the Main setup screen by selecting the Main tab. There are two Main Setup options. They are described in this section. The Main BIOS Setup screen is shown below.



### **System Time/System Date**

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



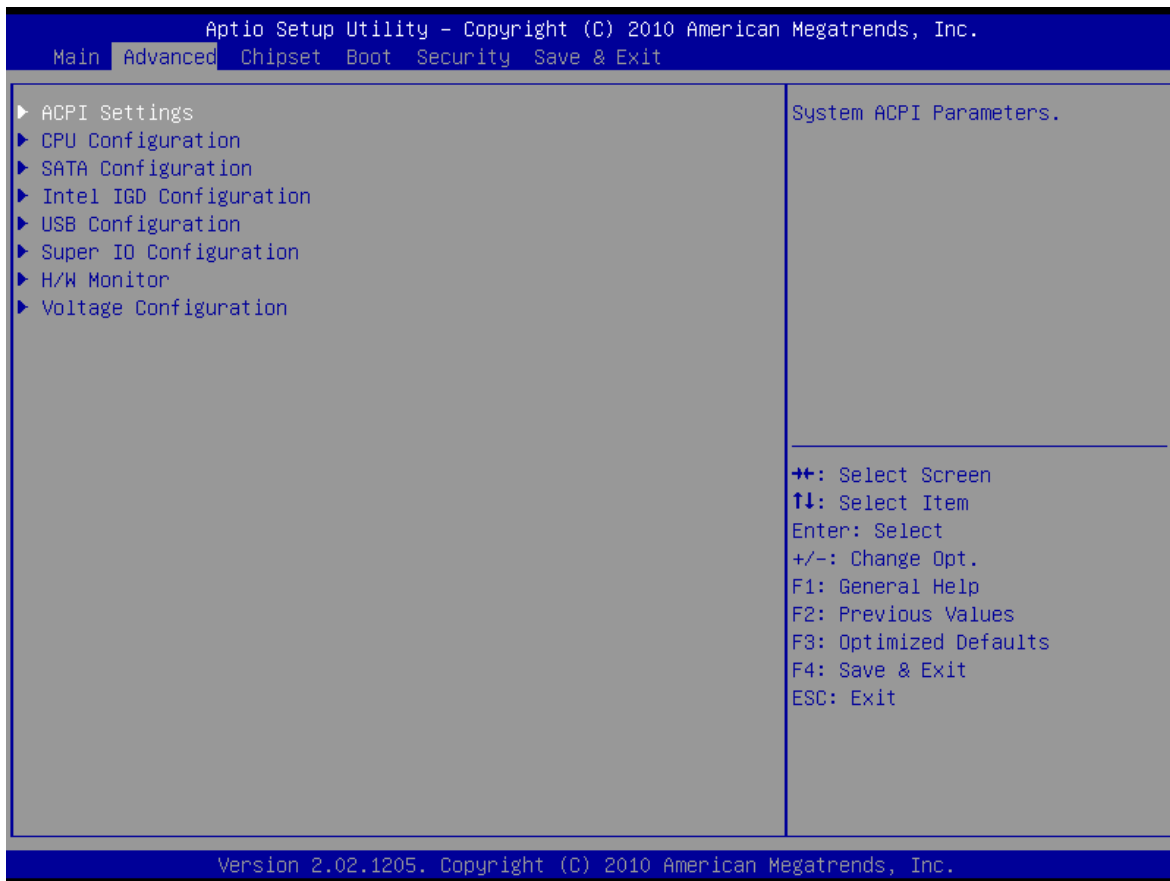
The time is in 24-hour format. For example, 5:30 A.M. appears as 05:30:00, and 5:30 P.M. as 17:30:00.

## Advanced

Select the Advanced tab from the BIOS setup screen to enter the Advanced BIOS Setup screen. You can select any of the items in the left frame of the screen, such as CPU Configuration, to go to the sub menu for that item.

You can display an Advanced BIOS Setup option by highlighting it using the <Arrow> keys. All Advanced BIOS Setup options are described in this section.

The Advanced BIOS Setup screen is shown below. The sub menus are described on the following pages.



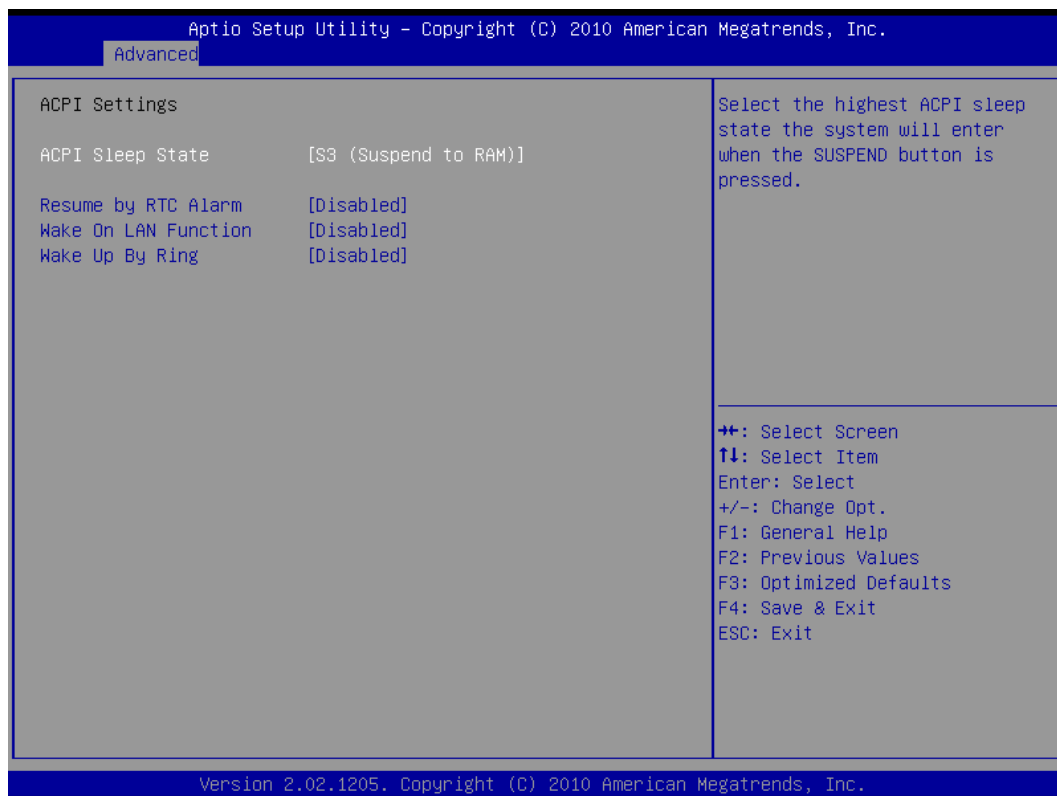
## ➤ **ACPI Settings**

System ACPI Parameters.

### **ACPI Sleep State**

Select the highest ACPI Sleep state the system will enter when the SUSPEND button is pressed.

- The choice: S1 (CPU Stop Clock) , S3(Suspend to RAM)



### **Resume by RTC Alarm**

Enable or disable System wake on alarm event., When enabled, System will wake on the hr::min::sec specified.

- The choice: Enabled , Disabled.

### **Wake On LAN Function**

Enable or disable system wake on LAN chip event.

- The choice: Enabled , Disabled.

### **Wake Up By Ring**

Enable or disable system wake up by ring event.

- The choice: Enabled , Disabled.

## ➤ CPU Configuration

You can use this screen to select options for the CPU Configuration Settings. Use the up and down <Arrow> keys to select an item. Use the <Plus> and <Minus> keys to change the value of the selected option. A description of the selected item appears on the right side of the screen. The settings are described on the following pages. An example of the CPU Configuration screen is shown below.



The CPU Configuration setup screen varies depending on the installed processor.

```

Aptio Setup Utility - Copyright (C) 2010 American Megatrends, Inc.
Advanced

CPU Configuration
Intel(R) Core(TM) i7-2600K CPU @ 3.40GHz
Max Processor Speed      3400 MHz
Min Processor Speed      1600 MHz
Processor Speed          3400 MHz
Processor Cores           4
Intel HT Technology       Supported
EMT64                    Supported

Hyper-threading          [Enabled]
Active Processor Cores    [All]
Limit CPUID Maximum       [Disabled]
Execute Disable Bit      [Enabled]

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.

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

Version 2.02.1205. Copyright (C) 2010 American Megatrends, Inc.

```

### Hyper-threading

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.

➤ The choice: Enabled , Disabled.

### Active Processor Cores

Number of cores to enable in each processor package.

➤ The choice: ALL , 1.

### **Limit CPUID Maximum**

Disabled for Windows XP.

- The choice: Enabled , Disabled.

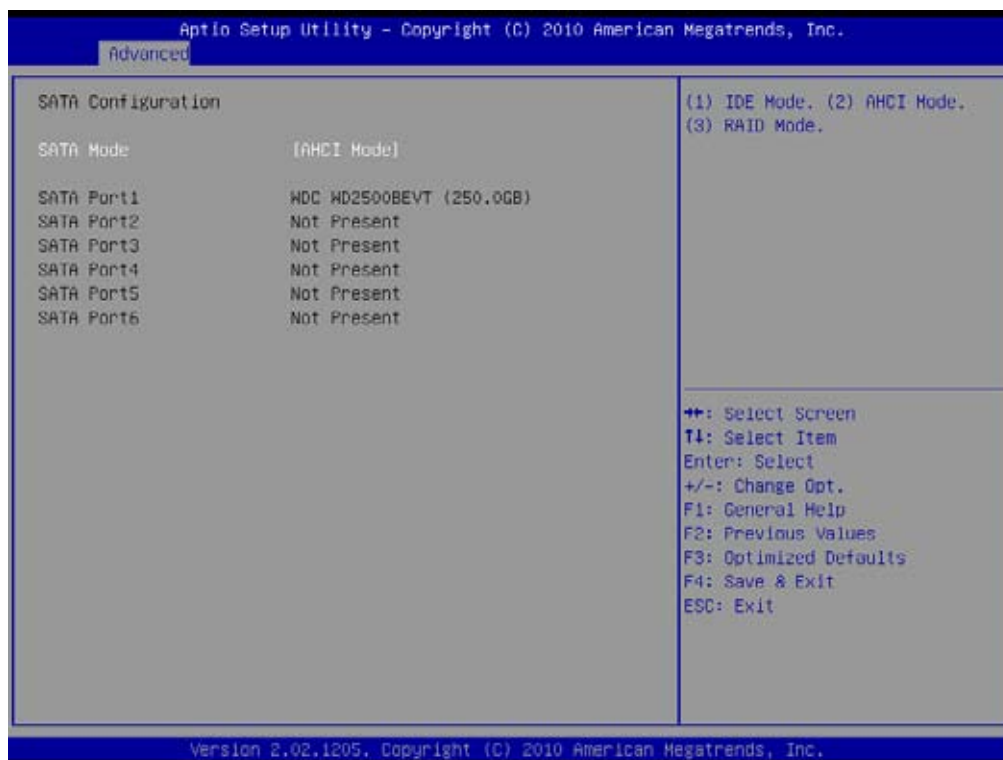
### **Execute Disable Bit**

XD can prevent certain classes of malicious buffer overflow attacks when combined with a supporting OS (Windows Server 2003 SP1, Windows XP SP2, SuSE Linux 9.2, RedHat Enterprise 3 Update 3.)

- The choice: Enabled , Disabled.

## ➤ **SATA Configuration**

SATA Devices Configuration.



### **SATA Mode**

(1) IDE Mode. (2) AHCI Mode. (3) RAID Mode.

## ➤ Intel IGD Configuration

Intel IGD Function.



### DVMT Mode Select

Select DVMT Mode used by Internal Graphics Device.

- The choice: Fixed Mode , DVMT Mode.

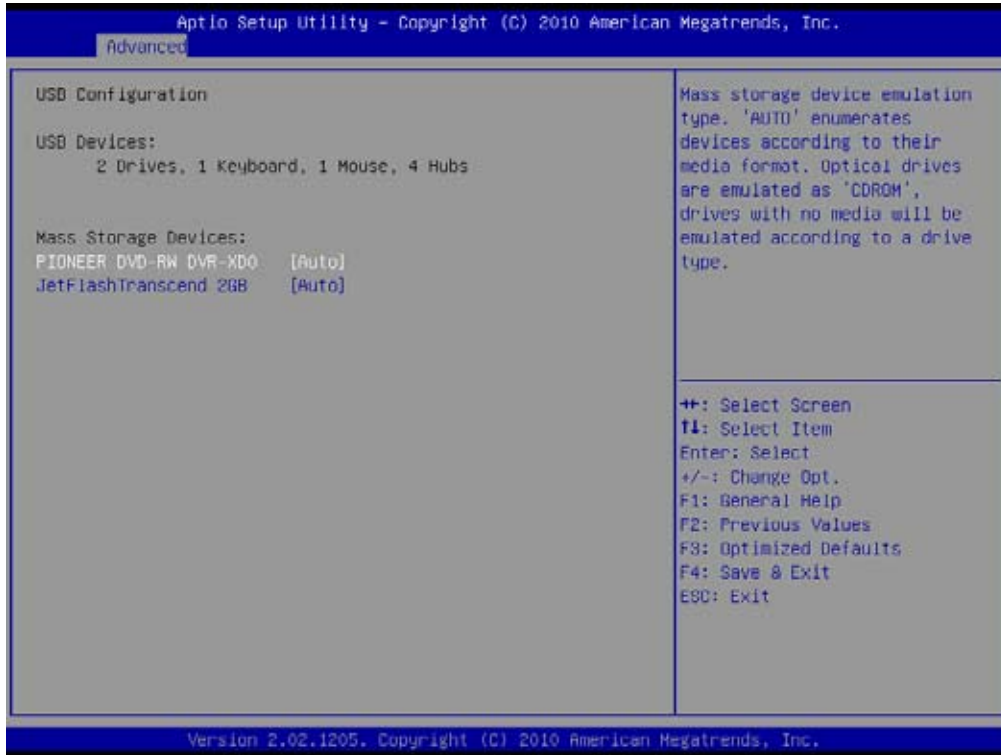
### DVMT / FIXED Memory

Select DVMP/FIXED Mode Memory size used by internal Graphics Device.

- The choice: 128MB , 256MB, Maximum.

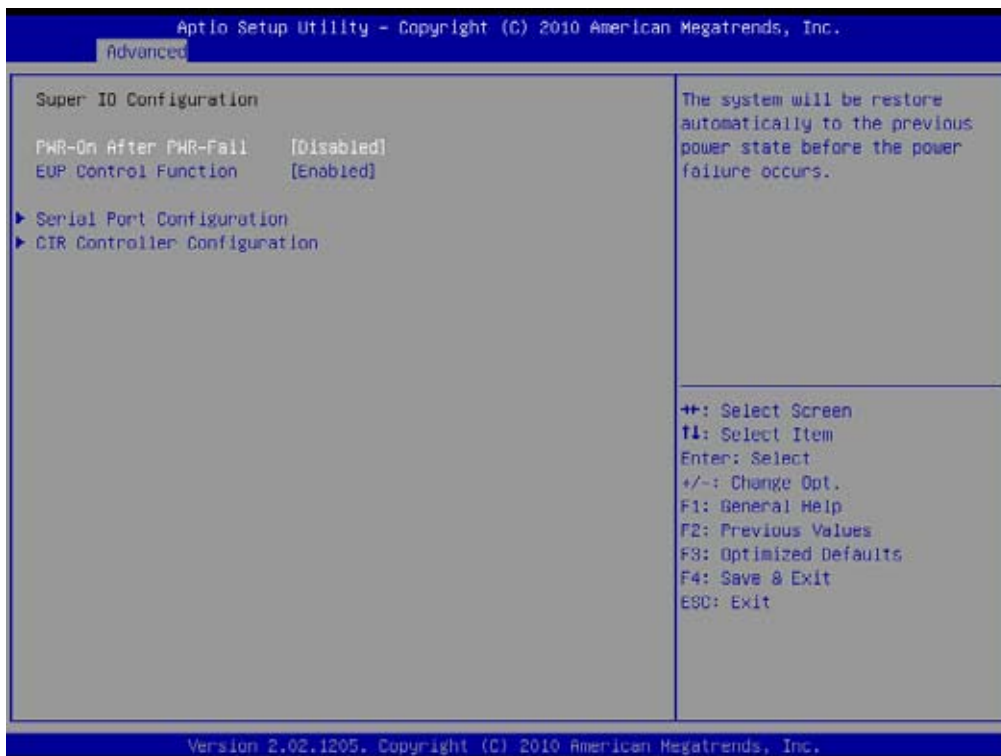
➤ **USB Configuration**

USB Configuration Parameters.



## ➤ Super IO Configuration

You can use this screen to select options for the Power Management Configuration. Use the up and down <Arrow> keys to select an item. Use the <Plus> and <Minus> keys to change the value of the selected option. The settings are described on the following pages. The screen is shown below.



### PWR-On After PWR-Fail

The system will be restore automatically to the previous power state before the power failure occurs.

- The choice: Enabled , Disabled.

### EUP Control Function

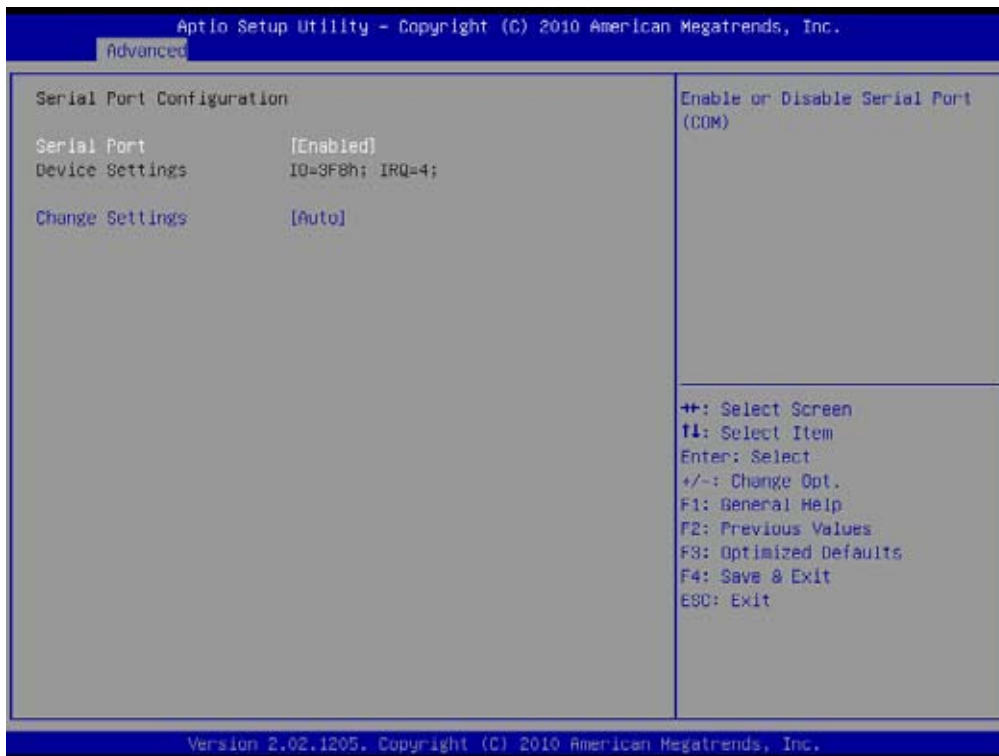
Enable or disable EUP function.

- The choice: Enabled , Disabled.



### ➤ **Serial Port Configuration**

You can use this screen to select options for the Hardware Health Configuration. Use the up and down <Arrow> keys to select an item. Use the <Plus> and <Minus> keys to change the value of the selected option. The settings are described on the following pages. The screen is shown below.



### **Serial Port**

Enable or Disable Serial Port (COM)

- The choice: Enabled , Disabled.

### **Change Settings**

Select an optimal setting for Super IO device.

- The choice: Auto,

IO=3F5h; IRQ=4;

IO=3F8h; IRQ=3;4,5,6,7,9,10,11,12;

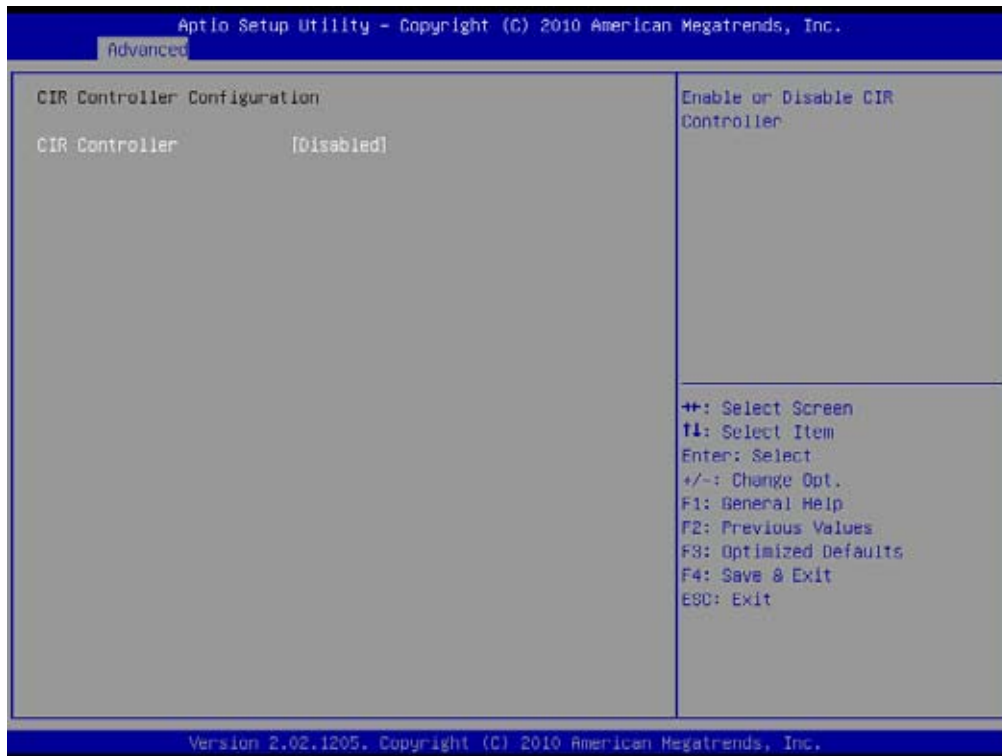
IO=2F8h; IRQ=3;4,5,6,7,9,10,11,12;

IO=3E8h; IRQ=3;4,5,6,7,9,10,11,12;

IO=2E8h; IRQ=3;4,5,6,7,9,10,11,12;

➤ **CIR Controller Configuration**

Set Parameters of CIR Controller (CIR)



**CIR Controller**

Enable or Disable CIR Controller

➤ The choice: Enabled , Disabled.

➤ **H/W Monitor**

Monitor hardware status.



**Fan Speed Control**

Fan Speed Control function.

- The choice: Smart Fan Mode , Ultra-Low Speed, Low Speed , Mid Speed , Full Speed.

**Power LED Brightness**

Power LED Brightness Control function.

- The choice: Auto , Low Brightness , Mid Brightness , High Brightness.

## ➤ Voltage Configuration

You can use this screen to select options for the Hardware Health Configuration. Use the up and down <Arrow> keys to select an item. Use the <Plus> and <Minus> keys to change the value of the selected option. The settings are described on the following pages. The screen is shown below.



### CPU Voltage Set

CPU Voltage Set Parameter.

- The choice: Auto , +50mv , +100mv , +150mv , +200mv , +250mv , +300mv.

### CPU VTT 1.05 Voltage S

CPU VTT 1.05 Voltage Set Parameter.

- The choice: Auto , +50mv , +100mv , +150mv , +200mv , +250mv , +300mv.

### VDIMM Voltage Set

VDIMM Voltage Set Parameter.

- The choice: Auto , +50mv , +100mv , +150mv , +200mv , +250mv , +300mv.

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### **SB 1.05 Voltage Set**

SB 1.05 Voltage Set Parameter.

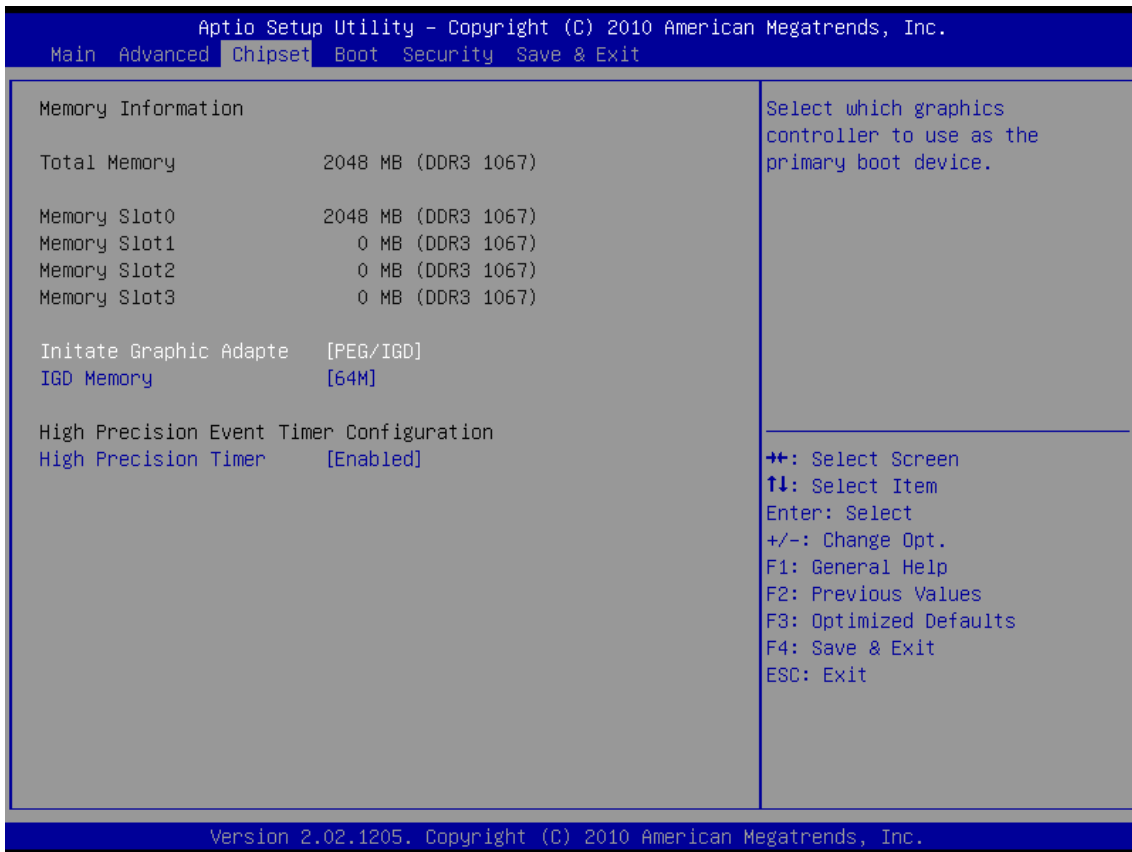
- The choice: Auto , +50mv , +100mv , +150mv , +200mv , +250mv , +300mv.

### **Integrated Graphic Vol**

Integrated Graphic Voltage Set Parameter.

- The choice: Auto , +50mv , +100mv , +150mv , +200mv , +250mv , +300mv.

## Chipset



### **Initate Graphic Adapte**

Select which graphics controller to use as the primary boot device.

- The choice: IGD , PEG/IGD.

### **IGD Memory**

IGD Share Memory Size.

- The choice: IGD , 32M , 64M , 128M .

### **High Precision Timer**

Enabled/Disabled the High Precision Event Timer.

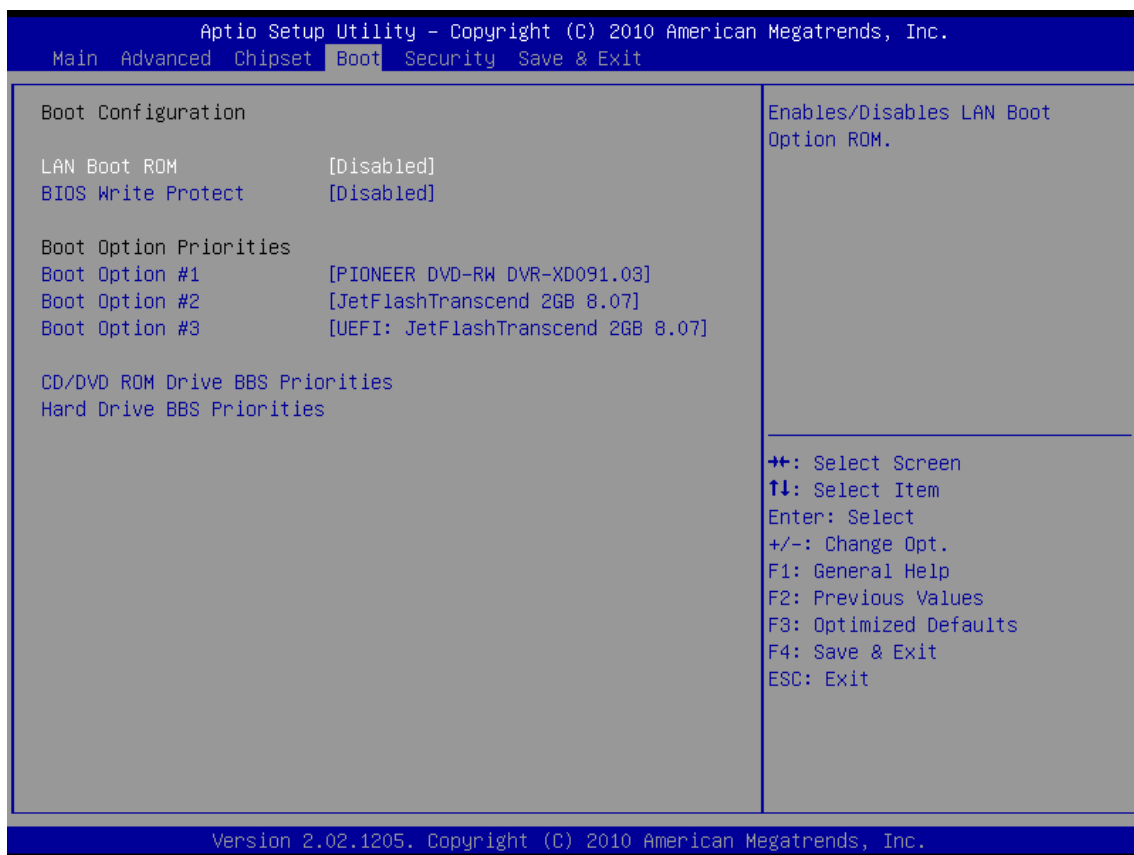
- The choice: Enabled , Disabled.

## Boot

Select the Boot tab from the BIOS setup screen to enter the Boot BIOS Setup screen. You can select any of the items in the left frame of the screen, such as Boot Settings Configuration, to go to the sub menu for that item.

You can display an Boot BIOS Setup option by highlighting it using the <Arrow> keys. All Boot BIOS Setup options are described in this section.

The Boot BIOS Setup screen is shown below. The sub menus are described on the following pages.



### **LAN Boot ROM**

Enabled/Disabled LAN Boot Option ROM

- The choice: Enabled , Disabled.

### **BIOS Write Protect**

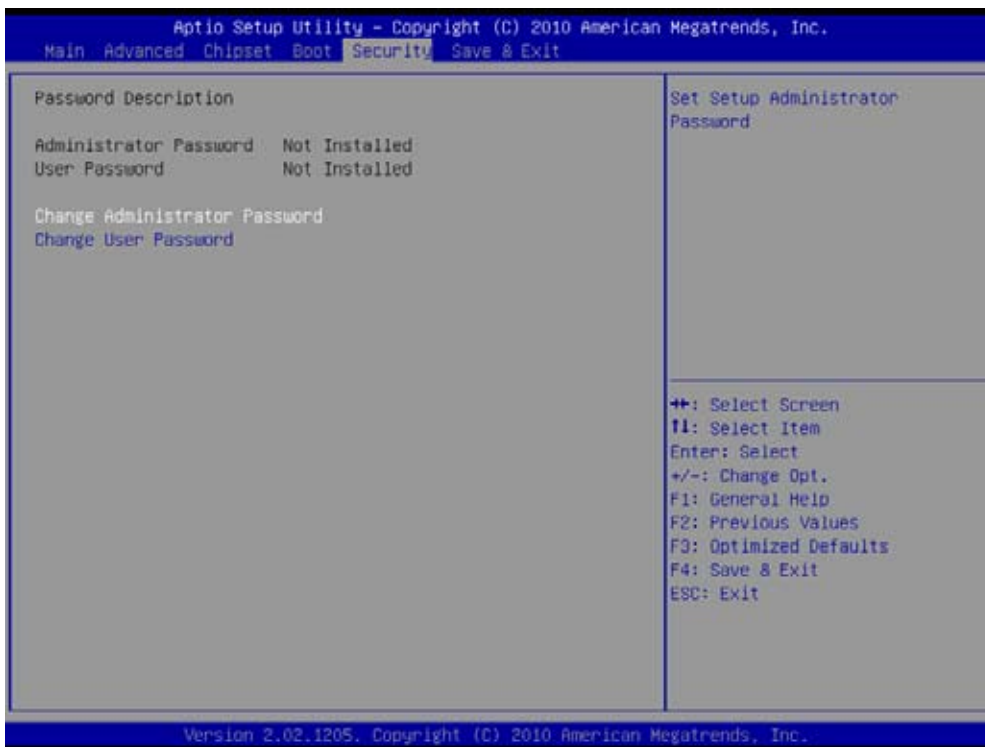
Enables/Disables BIOS Write Protect control function.

- The choice: Enabled , Disabled.

## Security

Select the Security tab from the BIOS setup screen to enter the Security BIOS Setup screen. You can display an Security BIOS Setup option by highlighting it using the <Arrow> keys. All Security BIOS Setup options are described in this section.

The Security Setup screen is shown below. The sub menus are documented on the following pages.



- Change Supervisor Password

When this item is selected, a message box shall appear on the screen as below:

Enter New Password

Type a maximum of 6-digit password and press [Enter]. The password typed now will replace any previously set password from CMOS memory. You may also press [ESC] to abandon new password setting.

When the Supervisor Password is set, new items Change User Password and Password Check will be added in the menu.



---

Select Change User Password to give or to abandon password setting same as Change Supervisor Password item above.

Note that Supervisor Password field allows users to enter and change the settings of the BIOS SETUP UTILITY, while User Password field only allows users to enter the BIOS SETUP UTILITY without having the authorization to make any change.

The Password Check item is used to specify the type of BIOS password protection that is implemented. Settings are described below:

---

|        |  |
|--------|--|
| Setup  | The password is required only when users try to access to BIOS SETUP UTILITY.  |
| Always | The password is required every time when the Notebook is powered on or when users try to access to BIOS SETUP UTILITY. |

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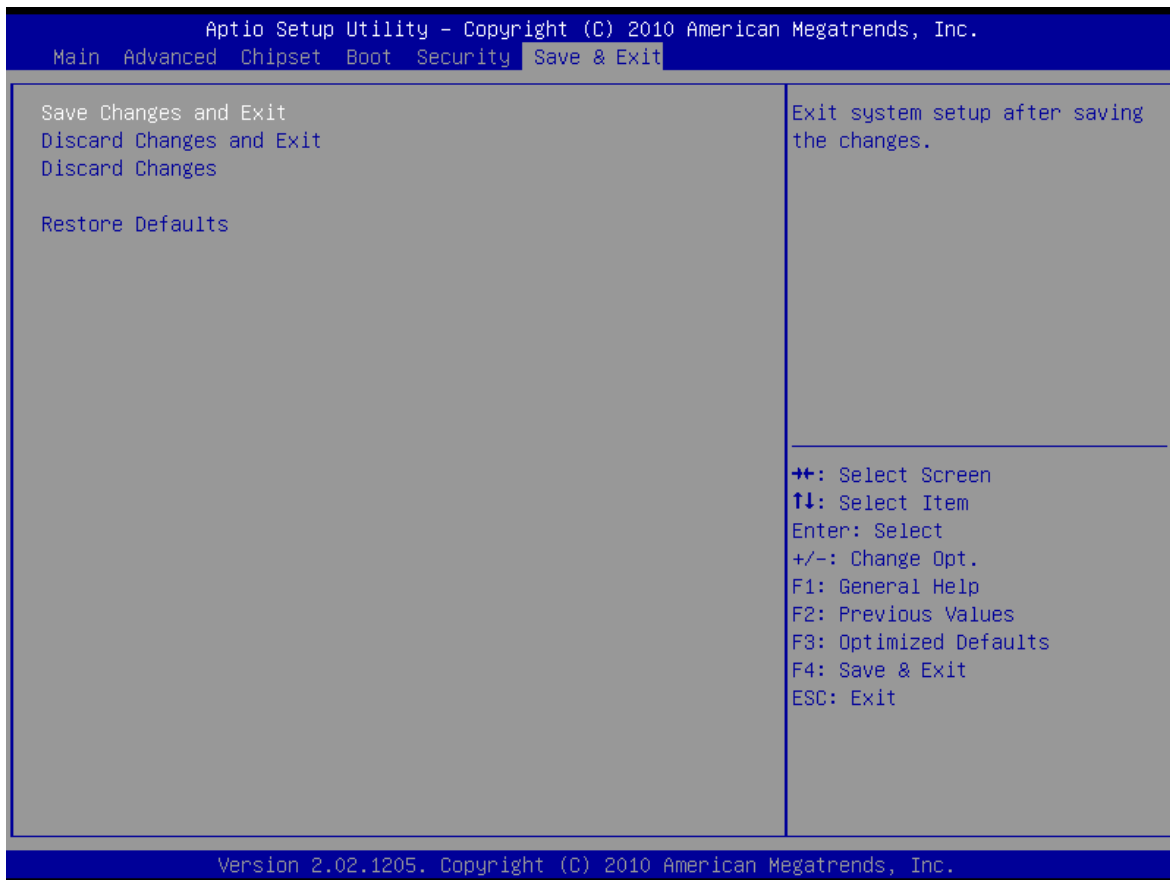
To clear a set Supervisor Password/ User Password, just press [Enter] under Change Supervisor Password/ Change User Password field when you are prompted to enter the password. Please note that when Supervisor Password has been cleared, User Password will be cleared as well. A message box will pop up confirming password will be disabled. Once the password is disabled, the system will boot and user can enter setup without entering password.

## Save & Exit

Select the Exit tab from the BIOS setup screen to enter the Exit BIOS Setup screen.

You can display an Exit BIOS Setup option by highlighting it using the <Arrow> keys. All Exit BIOS Setup options are described in this section.

The Exit BIOS Setup screen is shown below.



---

### **Save Changes and Exit**

When you have completed the system configuration changes, select this option to leave BIOS Setup and reboot the computer so the new system configuration parameters can take effect.

Select "Save Changes and Exit" from the Exit menu and press <Enter>.

Save Configuration Changes and Exit Now?

[Ok] [Cancel]

appears in the window. Select Ok to save changes and exit.

### **Discard Changes and Exit**

Exit system setup without saving any changes.

### **Discard Changes**

Discards changes done so far to any of the setup questions.

### **Destore Defaults**

Load Optimal Default values for all the setup questions.