



# NetTop S330 Series

## User Manual

Version 1.0

Published April 2009

Copyright©2009 ASRock INC. All rights reserved.

### **Copyright Notice:**

No part of this manual may be reproduced, transcribed, transmitted, or translated in any language, in any form or by any means, except duplication of documentation by the purchaser for backup purpose, without written consent of ASRock Inc.

Products and corporate names appearing in this manual may or may not be registered trademarks or copyrights of their respective companies, and are used only for identification or explanation and to the owners' benefit, without intent to infringe.

### **Disclaimer:**

Specifications and information contained in this manual are furnished for informational use only and subject to change without notice, and should not be constructed as a commitment by ASRock. ASRock assumes no responsibility for any errors or omissions that may appear in this manual.

With respect to the contents of this manual, ASRock does not provide warranty of any kind, either expressed or implied, including but not limited to the implied warranties or conditions of merchantability or fitness for a particular purpose.

In no event shall ASRock, its directors, officers, employees, or agents be liable for any indirect, special, incidental, or consequential damages (including damages for loss of profits, loss of business, loss of data, interruption of business and the like), even if ASRock has been advised of the possibility of such damages arising from any defect or error in the manual or product.



This device complies with Part 15 of the 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.

### **CALIFORNIA, USA ONLY**

The Lithium battery adopted on this product contains Perchlorate, a toxic substance controlled in Perchlorate Best Management Practices (BMP) regulations passed by the California Legislature. When you discard the Lithium battery in California, USA, please follow the related regulations in advance.

"Perchlorate Material-special handling may apply, see [www.dtsc.ca.gov/hazardouswaste/perchlorate](http://www.dtsc.ca.gov/hazardouswaste/perchlorate)"

**ASRock Website:** <http://www.asrock.com>

---

## Safety Instructions

Your system is designed and tested to meet the latest standards of safety for information technology equipment. However, to ensure your safety, it is important that you read the following safety instructions.

### Setting up your system

- Read and follow all instructions in the documentation before you operate your system.
- Do not use this product near water or a heated source such as a radiator.
- Set up the system on a stable surface.
- Openings on the chassis are for ventilation. Do not block or cover these openings. Make sure you leave plenty of space around the system for ventilation. Never insert objects of any kind into the ventilation openings.
- Use this product in environments with ambient temperatures between 0° C and 40° C.
- If you use an extension cord, make sure that the total ampere rating of the devices plugged into the extension cord does not exceed its ampere rating.

### Care during use

- Do not walk on the power cord or allow anything to rest on it.
- Do not spill water or any other liquids on your system.
- When the system is turned OFF, a small amount of electrical current still flows. Always unplug all power, modem, and network cables from the power outlets before cleaning the system.
- If you encounter the following technical problems with the product, unplug the power cord and contact a qualified service technician or your retailer.
  - The power cord or plug is damaged.
  - Liquid has been spilled into the system.
  - The system does not function properly even if you follow the operating instructions.
  - The system was dropped or the cabinet is damaged.
  - The system performance changes.

### No disassembly



#### NOTE:

The warranty does not apply to products (including HDD, ODD, memory and warranty seal) that have been damaged as a result of attempting to disassemble/reassemble the system or modifying the hardware configuration.

## Safety cautions and warnings

### Optical Drive Safety Information

Optical drives sold with this system contains a CLASS 1 LASER PRODUCT.



#### CAUTION:

Invisible laser radiation when open. Do not stare into beam or view directly with optical instruments.



#### WARNING:

Making adjustments or performing procedures other than those specified in the user's manual may result in hazardous laser exposure. Do not attempt to disassemble the optical drive. For your safety, have the optical drive serviced only by an authorized service provider.

### Product disposal notice



#### IMPORTANT:

This symbol of the crossed out wheeled bin indicates that the product (electrical and electronic equipment) should not be placed in municipal waste. Check local regulations for disposal of electronic products.

### Nordic Lithium Cautions (for lithium-ion batteries)



#### CAUTION!

Danger of explosion if battery is incorrectly replaced. Replace only with the same or equivalent type recommended by the manufacturer. Dispose of used batteries according to the manufacturer's instructions.

### Installation Notices



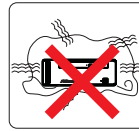
Do not place this product underneath heavy loads or in an unstable position.



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



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



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

## Contents

<b>1 Introduction .....</b>	<b>7</b>
1.1 Package Contents .....	7
1.2 Specifications .....	8
1.3 System Motherboard Components .....	9
1.4 Rear Panel Connections .....	11
1.5 System Chassis .....	12
1.6 Internal System Components .....	13
<b>2 System Quick Installation .....</b>	<b>14</b>
<b>3 System Components Reinstallation .....</b>	<b>16</b>
<b>4 Driver Installation .....</b>	<b>18</b>
<b>5 UTILITY MEMU .....</b>	<b>19</b>
5.1 Instant Boot .....	19
5.1.1 Introduction .....	19
5.1.2 Installation .....	20
5.2 ASRock OC Tuner .....	22
5.2.1 Introduction .....	22
5.2.2 Installation .....	22
<b>6 BIOS SETUP UTILITY .....</b>	<b>26</b>
6.1 Introduction .....	26
6.1.1 BIOS Menu Bar .....	26
6.1.2 Navigation Keys .....	27
6.2 Main Screen .....	27
6.3 Smart Screen .....	28
6.4 Advanced Screen .....	29
6.4.1 CPU Configuration .....	29
6.4.2 Chipset Configuration .....	30
6.4.3 ACPI Configuration .....	33
6.4.4 SATA Configuration .....	34
6.4.5 PCIPnP Configuration .....	34
6.4.6 USB Configuration .....	35
6.5 Boot Screen .....	35
6.5.1 Boot Settings Configuration .....	36
6.6 Security Screen .....	37
6.7 Exit Screen .....	38

---

<b>7 Software Support .....</b>	<b>39</b>
7.1 Install Operating System .....	39
7.2 Support CD Information .....	39
7.2.1 Running Support CD .....	39
7.2.2 Drivers Menu .....	39
7.2.3 Utilities Menu .....	39
7.2.4 Contact Information .....	39

## Chapter 1 Introduction

Thank you for purchasing ASRock **NetTop S330 Series**, a reliable product produced under ASRock's consistently stringent quality control. It delivers excellent performance with robust design conforming to ASRock's commitment to quality and endurance.

In this manual, chapter 1 and 2 contain introduction of the hardware and step-by-step guide to the hardware installation. Chapter 3 and 4 contain the configuration guide to BIOS setup and information of the Support CD.



Because the hardware specifications and the BIOS software might be updated, the content of this manual will be subject to change without notice. In case any modifications of this manual occur, the updated version will be available on ASRock website without further notice. You may find the latest VGA cards and CPU support lists on ASRock website as well. ASRock website <http://www.asrock.com>  
If you require technical support related to this product, please visit our website for specific information about the model you are using.  
[www.asrock.com/support/index.asp](http://www.asrock.com/support/index.asp)

### 1.1 Package Contents



ASRock **NetTop S330 Series**



ASRock Support CD



ASRock Quick Start Guide



One AC Power Cord



One AC/DC Adapter



One Anti-Slip Pad

## 1.2 Specifications

Processor	Intel® Atom™ 330 (Dual-Core CPU)
Chipset	Intel® 945GC + ICH7
Memory	DDR2 533MHz support up to 4GB * (2xDIMM Slots, Dual Channel)
VGA	Intel® GMA950, support DirectX9 3D Hardware Acceleration
HDD	2.5" HDD up to 500GB
DVD	DVD Super Multi (Slim type)
I/O	D-Sub VGA x1, USB 2.0 x6
LAN	Gigabit LAN
Sound	HD Audio 5.1 channel
Power	65W Adapter
Dimension	195mm(W)x70mm(H)x186m(L)
Volume (liters)	2.5L
Weight	1.74 Kg

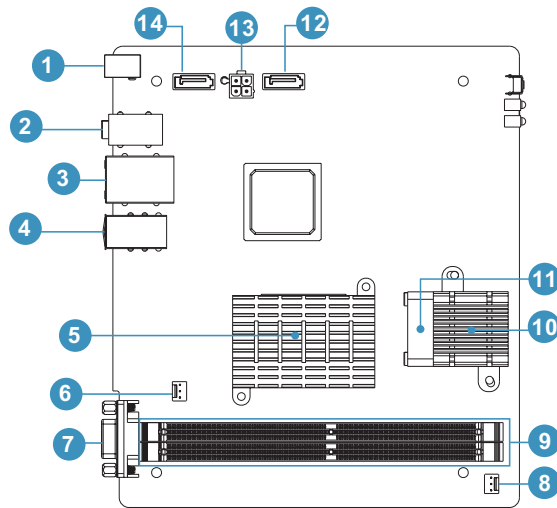
\* Due to the CPU and chipset limitation, the actual memory size may be less than 4GB for the reservation for system usage under Windows® XP, Windows® XP 64-bit, Windows® Vista™ and Windows® Vista™ 64-bit.

### WARNING

Please realize that there is a certain risk involved with overclocking, including adjusting the setting in the BIOS, or using the third-party overclocking tools. Overclocking may affect your system stability, or even cause damage to the components and devices of your system. It should be done at your own risk and expense. We are not responsible for possible damage caused by overclocking.



### 1.3 System Motherboard Components



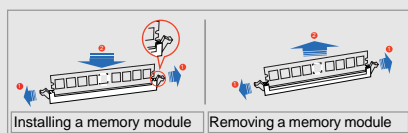
1. DC-In jack
2. Audio connectors
3. LAN & USB connectors
4. USB connectors
5. Northbridge heatsink
6. System fan connector
7. Display (VGA) port connector
8. CPU fan connector
9. Memory socket
10. CPU heatsink
11. CPU fan
12. SATA connector: For ODD SATA data cable
13. ATX5V power connector
14. SATA connector: For HDD SATA data cable

## NOTE.

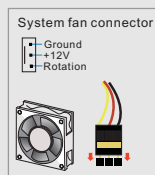
### 1. SATA and Power Connections



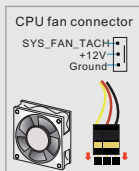
### 2. System Memory Socket Connection



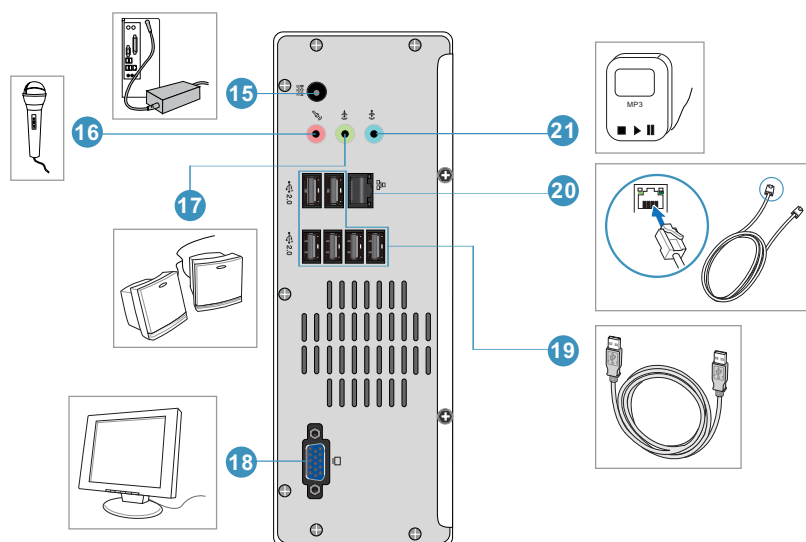
### 3. System Fan Connection



### 4. CPU Fan Connection

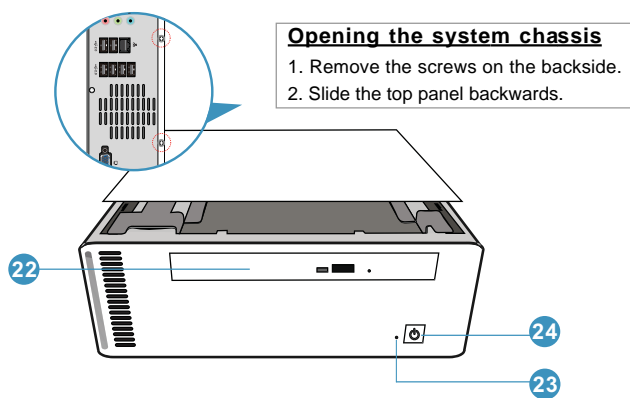


## 1.4 Rear Panel Connections



- 15. DC-In jack
- 16. Mic In (Pink): Microphone
- 17. Front L/R Out (Lime): Stereo speakers or headphones
- 18. Display (VGA) port: VGA monitor
- 19. USB2.0 ports: USB devices
- 20. LAN (RJ-45) port: Local Area Network
- 21. Line In (Blue): External audio device

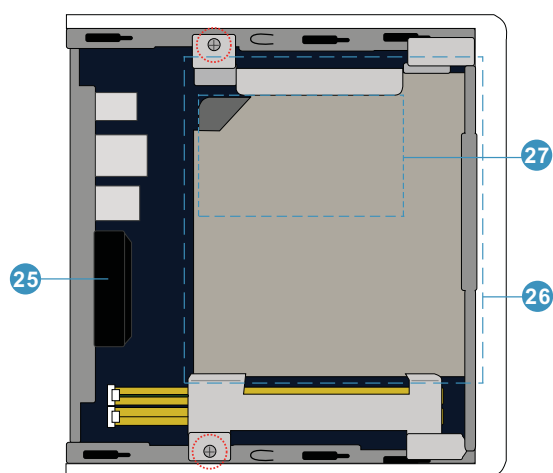
## 1.5 System Chassis



## 1.6 Internal System Components

### Optical disc & Hard disk drives

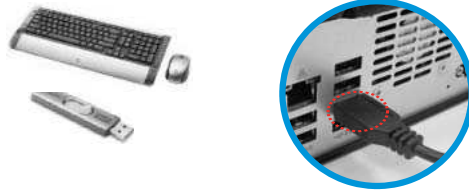
The optical disc and hard disc drives are mounted in a drive cage. The cage can be removed by removing the top screws.



- 25. System Cooling Fan
- 26. Optical Disc Drive
- 27. Hard Disc Drive

## ***Chapter 2 System Quick Installation***

### **1. Connecting USB Devices (USB2.0 Ports)**



### **2. Connecting VGA Monitor (Display (VGA) Port)**



### **3. Connecting the Network (LAN (RJ-45) Port)**



### **4. Connecting Microphone (Mic In Port)**



---

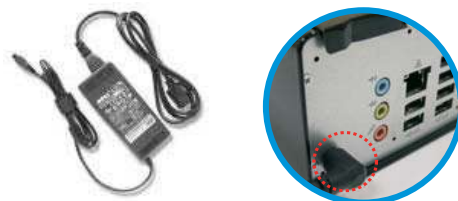
**5. Connecting Stereo Speakers or Headphones (Front L/R Out Port)**



**6. Connecting External Audio Device (Line In Port)**



**7. Connecting Power (DC-In Jack Port)**



**8. Power on the System (Power Switch)**



---

## ***Chapter 3 System Components Reinstallation***

1. Remove the cover screws on the rear panel.



**Note:** For safety reasons, please ensure that the power cord is disconnected before opening the case.

2. Slide the side cover toward the rear panel.



3. Pull the side cover upwards.



4. To change the storage drives, you need to remove SATA and power cables from ODD / HDD first, and unscrew the screws from both side.





5. Pull ODD / HDD rack backwards and take it out from the bay.



6. Unscrew the screws from the side of ODD / HDD rack, and change your required ODD / HDD.

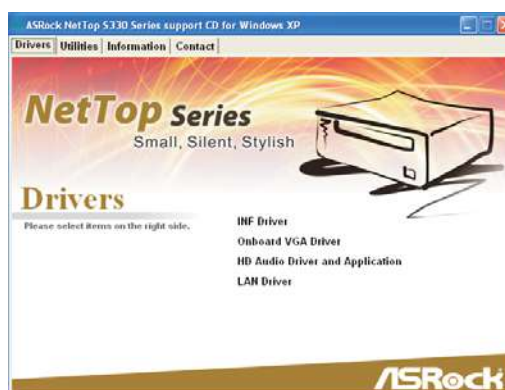


7. Refer to above steps to place the new ODD / HDD to the chassis.  
Replace the side cover and fasten the screws.



## Chapter 4 Driver Installation

To install the drivers to your system, please insert the support CD to your optical drive first. Then, the drivers compatible to your system can be auto-detected and listed on the support CD driver page. Please follow the order from up to bottom side to install those required drivers. Therefore, the drivers you install can work properly.



---

## ***Chapter 5 Utility Menu***

The utilities menu shows the applications and other software that this product supports.

### **5.1 Instant Boot**

#### **5.1.1 Introduction**

Instant Boot, a user-friendly tool that allows you to turn on your PC in just a few seconds, provides a much more efficient way to save energy, time, money, and improves system running speed for your system \*. It is applicable to both Windows® XP and Windows® Vista™.

Instant Boot leverages the S3 and S4 ACPI (Advanced Configuration and Power Interface) features which normally enable the Sleep/Standby and Hibernation modes in Windows® to shorten boot up time. By calling S3 and S4 at specific timing during the shutdown and startup process, Instant Boot allows you to enter your Windows® desktop in a few seconds.

There are two modes of Instant Boot available: Fast Mode and Regular Mode. In Fast Mode, it uses S3 and takes only a few seconds for OS to resume to working state, which is 10 times faster than traditional boot up time (50 to 60 seconds). Even the Regular Mode is 3 times faster than traditional boot up time.

Instant Boot guarantees a clean Windows® boot to consume less power, time and money without any accumulated garbage data, and you can still keep your data safe even there is a power cut. Also, the Windows® update speed will become faster.

\* This function is applicable ONLY to single user that does not secure ID and Password to their systems.

\* The boot up time depends on the hardware configuration.

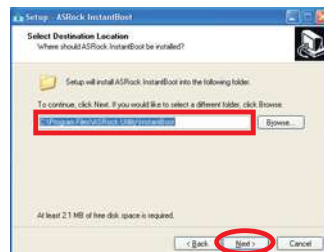
## 5.1.2 Installation

Please read below procedures carefully before you install Instant Boot.

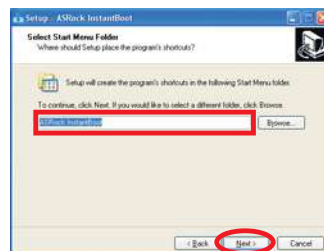
- A. Install Instant Boot driver from ASRock support CD, or you may click following link to get the latest utility and BIOS:  
<http://www.asrock.com/feature/InstantBoot/download.asp>
- B. Execute the Instant Boot installation program under Windows®. Please follow the instructions on Instant Boot setup page.
  - a. Click “Next” to continue.



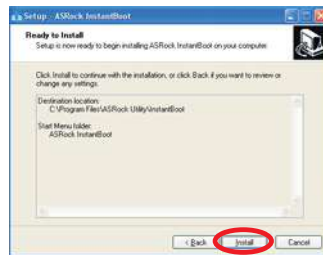
- b. Select destination location. You may choose a different folder if you need, and click “Next”.



- c. Select the start menu folder. You may choose a different folder if you need, and click “Next”.



d. Click "Install" to begin installing Instant Boot driver.



e. Click "Finish" to complete and exit the setup.



C. After the installation is completed, you will find an ASRock Instant Boot icon on the Windows® desktop.



D. Double click ASRock Instant Boot icon on the desktop, then Instant Boot main menu will pop up.



E. On Instant Boot main menu, you can choose "Fast Mode", "Regular Mode" or "Disable Instant Boot". After that, please click "Apply" to save the change.

Please notice that you need to keep AC power on if you select "Fast Mode".

F. When you want to shut down the computer, please simply select "Shut Down" from Windows® "Start menu".

G. Now, the system will restart once automatically. After reentering into OS, the system will shutdown again.

H. Next time when you turn on your system, you can enjoy the benefit of Instant Boot.

## 5.2 ASRock OC Tuner

### 5.2.1 Introduction

ASRock OC Tuner is a user-friendly overclocking tool which allows you to guard your system by hardware monitor function and overclock your hardware devices to get the best system performance.

There are 3 major sections that are easy to fine-tune and monitor: Overclocking, Voltage Control, and Hardware Monitor. In Overclocking section, you are allowed to overclock CPU/PCI frequency for optimal system performance. In Voltage Control section, you can adjust voltage for CPU, DRAM, and VTT to enhance compatibility and the boost overclocking. In Hardware Monitor section, it shows the major readings of your system.

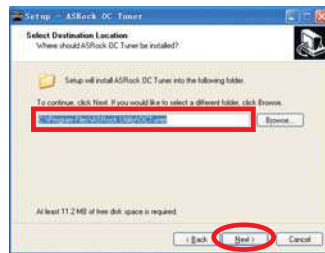
### 5.1.2 Installation

Please read below procedures carefully before you install ASRock OC Tuner.

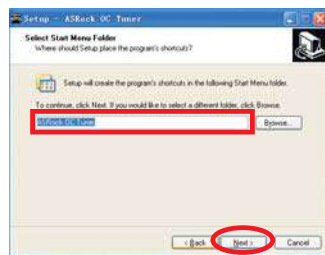
- A. Install ASRock OC Tuner driver from ASRock support CD, or you may click following link to get the latest utility:  
<http://www.asrock.com/feature/OCTuner/download.asp>
- B. Execute the ASRock OC Tuner installation program under Windows®. Please follow the instructions on Instant Boot setup page.
  - a. Click "Next" to continue.



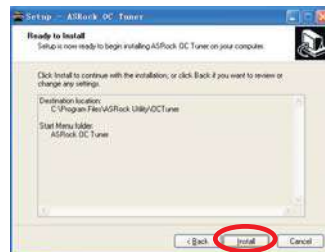
- b. Select destination location. You may choose a different folder if you need, and click “Next”.



- c. Select the start menu folder. You may choose a different folder if you need, and click “Next”.



- d. Click “Install” to begin installing ASRock OC Tuner driver.



- e. Click “Finish” to complete and exit the setup.



C. After the installation is completed, you will find an ASRock OC Tuner icon on the Windows® desktop.



D. Double click ASRock OC Tuner icon on the desktop, then ASRock OC Tuner main menu will pop up.

**Auto apply when program starts**

Auto apply when program starts

If you check this button, it will save your settings when you close OC Tuner window. And next time when you run OC Tuner, it will start with the settings you made. If you do not check this button, next time when you run OC tuner, it will start with the default settings.

Note: Before you select "Auto apply when program starts", it is recommended to run some test programs to make sure your system is running very stably.

**Auto run when Windows starts**



If you click this button, every time you turn on your system and enter Windows®, the system will automatically start the OC Tuner.

Note: It is not recommended to overclock your system. Overclocking and over-voltage may affect your system stability, or even cause damage to your hardware devices. It should be done at your own risk and expense. ASRock is not responsible for possible damage caused by overclocking and and over-voltage.

Note: If system hangs after overclocking, please remove AC power cord and plug AC power cord again before you power on your system.

E. There are three sections in ASRock OC Tuner main menu: **Overclocking**, **Voltage Control**, and **Hardware Monitor**.





**Overclocking** – In the Overclocking section, there are CPU and PCIE chapters for parameter settings adjustment in pursuit of optimal system performance. Under the CPU chapter, you are able to fine-tune the CPU frequency and CPU ratio by clicking the “Up/Down” arrows at the display panel. After confirmation of the settings, please click on the “Go” button. Under the PCIE chapter, you are able to adjust the PCIE Frequency by clicking on the “Up/Down” arrows and press “Go” for confirmation.



**Voltage Control** – In the Voltage Control section, there are many voltage adjustment items, such as CPU, DRAM, and VTT items. The voltage control is relevant to overclocking. You may adjust respective voltages by clicking the “Up/Down” arrows and confirm by “Go” respectively.



**Hardware Monitor** – In the Hardware Monitor section, it shows the major readings of your system. There are CPU speed, Current FSB, Ratio, PCIE Speed and respective voltages.

## Chapter 6 BIOS SETUP UTILITY

### 6.1 Introduction

This section explains how to use the BIOS SETUP UTILITY to configure your system. The BIOS chip on the system stores the BIOS SETUP UTILITY. You may run the BIOS SETUP UTILITY when you start up the computer. Please press <F2> during the Power-On-Self-Test (POST) to enter the BIOS SETUP UTILITY, otherwise, POST will continue with its test routines.

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



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

#### 6.1.1 BIOS Menu Bar

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

<b>Main</b>	To set up the system time/date information
<b>Smart</b>	To load the BIOS according to your requirements
<b>Advanced</b>	To set up the advanced BIOS features
<b>Boot</b>	To set up the default system device to locate and load the Operating System
<b>Security</b>	To set up the security features
<b>Exit</b>	To exit the current screen or the BIOS SETUP UTILITY

Use <←> key or <→> key to choose among the selections on the menu bar, and then press <Enter> to get into the sub screen.

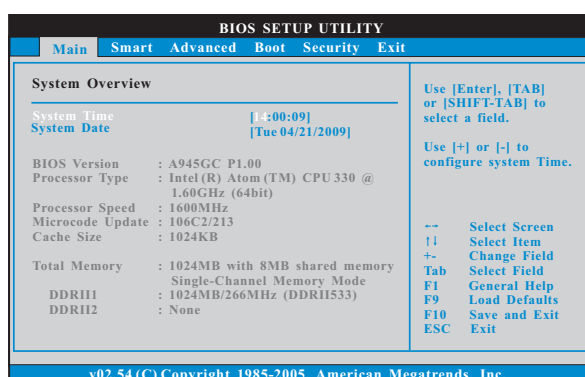
## 6.1.2 Navigation Keys

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

Navigation Key(s)	Function Description
← / →	Moves cursor left or right to select Screens
↑ / ↓	Moves cursor up or down to select items
+ / -	To change option for the selected items
<Enter>	To bring up the selected screen
<F1>	To display the General Help Screen
<F9>	To load optimal default values for all the settings
<F10>	To save changes and exit the BIOS SETUP UTILITY
<ESC>	To jump to the Exit Screen or exit the current screen

## 6.2 Main Screen

When you enter the BIOS SETUP UTILITY, the Main screen will appear and display the system overview



### System Time [Hour:Minute:Second]

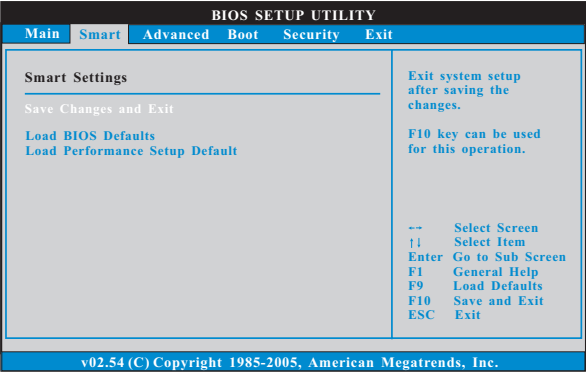
Use this item to specify the system time.

### System Date [Day Month/Date/Year]

Use this item to specify the system date.

### 6.3 Smart Screen

In the Smart screen, you can load the BIOS setup according to your requirements.



#### Save Changes and Exit

When you select this option, it will pop-out the following message, “Save configuration changes and exit setup?” Select [OK] to save the changes and exit the BIOS SETUP UTILITY.

#### Load BIOS Defaults

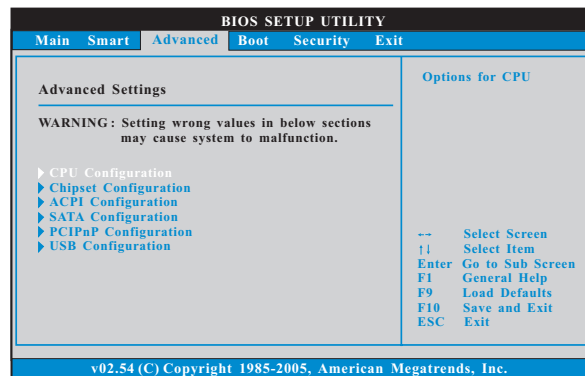
Load BIOS default values for all the setup questions. F9 key can be used for this operation.

#### Load Performance Setup Default

This performance setup default may not be compatible with all system configurations. If system boot failure occurs after loading, please resume optimal default settings. F5 key can be used for this operation.

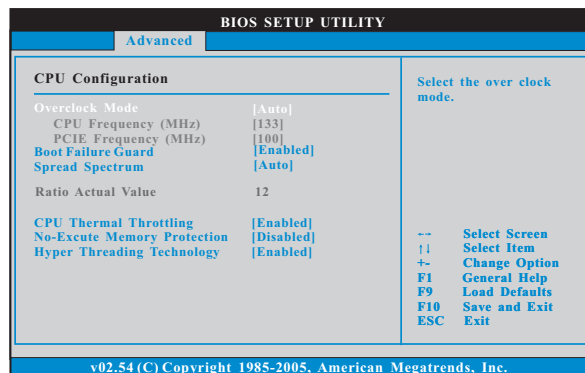
## 6.4 Advanced Screen

In this section, you may set the configurations for the following items: CPU Configuration, Chipset Configuration, ACPI Configuration, SATA Configuration, PCIPnP Configuration and USB Configuration.



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

### 6.4.1 CPU Configuration



#### Overclock Mode

Use this to select Overclock Mode. The default value is [Auto]. Configuration options: [Auto], [Manual] and [Optimized].

#### CPU Frequency (MHz)

Use this option to adjust CPU frequency.

#### PCIe Frequency (MHz)

Use this option to adjust PCIe frequency.

### Boot Failure Guard

Enable or disable the feature of Boot Failure Guard.

### Spread Spectrum

This item should always be [Auto] for better system stability.

### Ratio Actual Value

This is a read-only item, which displays the ratio actual value of this motherboard.

### CPU Thermal Throttling

You may select [Enabled] to enable CPU internal thermal control mechanism to keep the CPU from overheated.

### No-Execute Memory Protection

No-Execution (NX) Memory Protection Technology is an enhancement to the IA-32 Intel Architecture. An IA-32 processor with “No Execute (NX) Memory Protection” can prevent data pages from being used by malicious software to execute code.

### Hyper Threading Technology

To enable this feature, it requires a computer system with an Intel Pentium® 4 processor that supports Hyper-Threading technology and an operating system that includes optimization for this technology, such as Microsoft® Windows® XP. Set to [Enabled] if using Microsoft® Windows® XP, or Linux kernel version 2.4.18 or higher.

## 6.4.2 Chipset Configuration

BIOS SETUP UTILITY			
Advanced			
Chipset Settings		DRAM CAS# Latency Timing	
DRAM tCL	[Auto]		
DRAM tRCD	[Auto]		
DRAM tRP	[Auto]		
DRAM tRAS	[Auto]		
Advanced DRAM Configuration		[Auto]	
Internal Graphics Mode Select	[Auto]		
DVMT Mode Select	[DVMT Mode]		
DVMT/FIXED Memory	[Maximum DVMT]	--	Select Screen
Onboard GPU Clock	[Normal]	F1	Select Item
Onboard HD Audio	[Enabled]	+ -	Change Option
OnBoard Lan	[Enabled]	F1	General Help
VCORE Voltage	[Auto]	F9	Load Defaults
DRAM Voltage	[Auto]	F10	Save and Exit
VTT Voltage	[Auto]	ESC	Exit
v02.54 (C) Copyright 1985-2005, American Megatrends, Inc.			

### DRAM tCL

Use this item to adjust the means of memory accessing. Configuration options are [5], [4], [3] and [Auto].

#### **DRAM tRCD**

This controls the latency between the DRAM active command and the read / write command. Configuration options: [2 DRAM Clocks], [3 DRAM Clocks], [4 DRAM Clocks], [5 DRAM Clocks], [6 DRAM Clocks] and [Auto].

#### **DRAM tRP**

This controls the idle clocks after a precharge command is issued. Configuration options: [2 DRAM Clocks], [3 DRAM Clocks], [4 DRAM Clocks], [5 DRAM Clocks], [6 DRAM Clocks] and [Auto].

#### **DRAM tRAS**

This controls the number of DRAM clocks for TRAS. Configuration options: [4 DRAM Clocks], [5 DRAM Clocks], [6 DRAM Clocks], [7 DRAM Clocks], [8 DRAM Clocks], [9 DRAM Clocks], [10 DRAM Clocks], [11 DRAM Clocks], [12 DRAM Clocks], [13 DRAM Clocks], [14 DRAM Clocks], [15 DRAM Clocks] and [Auto].

#### **Advanced DRAM Configuration**

This item allows you to adjust advanced DRAM configuration. The default value is [Auto]. Configuration options: [Auto] and [Manual].

#### **Internal Graphics Mode Select**

If you select [Auto], the onboard VGA will be automatically disabled when you install VGA card; the onboard VGA will be enabled without the installation of any add-on VGA card. If you select [Enabled, 8MB] or [Enabled, 1MB], the onboard VGA will be enabled.

#### **DVMT Mode Select**

Use this option to adjust DVMT mode. Configuration options: [Fixed Mode], [DVMT Mode] and [Fixed+DVMT Mode]. The default value is [DVMT Mode]. DVMT (Dynamic Video Memory Technology) is an architecture that offers breakthrough performance for the motherboard through efficient memory utilization. In Fixed mode, a fixed-size fragment of the system memory is allocated to the graphics core. In DVMT mode, the graphics driver allocates memory as needed for running graphics applications and is cooperatively using this memory with other system components. In Fixed+DVMT mode, the graphics processor gets a fixed-size chunk of 64MB of memory and up to 64MB of dynamically-allotted memory. This mode guarantees that at least 64MB of memory is available to the graphics core, with a possibility to increase this amount to 128MB, if necessary. This item will not be used under Windows® Vista™ OS because the driver will intelligently detect physical memory available and allocate necessary video memory.

#### **DVMT/FIXED Memory**

You are allowed to adjust the shared memory size in this item if you set DVMT Mode Select as [DVMT Mode]. Configuration options: [64MB], [128MB] and [Maximum DVMT].

---

#### **Onboard GPU Clock**

Select [Normal] or [Overclock] for onboard GPU clock. The default value is [Normal].

#### **Onboard HD Audio**

Select [Auto], [Enabled] or [Disabled] for the onboard HD Audio feature.

#### **OnBoard Lan**

This allows you to enable or disable the “OnBoard Lan” feature.

#### **VCORE Voltage**

Use this to select VCORE Voltage. Configuration options: [Auto], [1.10V], [1.15V], [1.20V] and [1.25V]. The default value of this feature is [Auto].

#### **DRAM Voltage**

Use this to select DRAM Voltage. Configuration options: [Auto], [1.794V], [1.908V], [2.029V] and [2.144V]. The default value of this feature is [Auto].

#### **VTT Voltage**

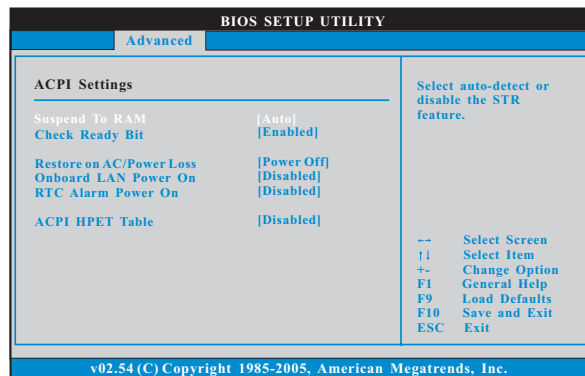
Use this to select VTT Voltage. Configuration options: [Auto], [1.11V], [1.21V], [1.31V] and [1.41V]. The default value of this feature is [Auto].

#### **+9V Voltage**

Use this to select +9V Voltage. Configuration options: [Auto], [8.25V] and [9.20V]. The default value of this feature is [Auto].



### 6.4.3 ACPI Configuration



#### Suspend to RAM

This field allows you to select whether to auto-detect or disable the Suspend-to-RAM feature. Select [Auto] will enable this feature if the system supports it.

#### Check Ready Bit

Use this item to enable or disable the feature Check Ready Bit. This option only appears when you set "Suspend to RAM" to [Auto].

#### Restore on AC/Power Loss

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

#### Onboard LAN Power On

Use this item to enable or disable onboard LAN to power on the system.

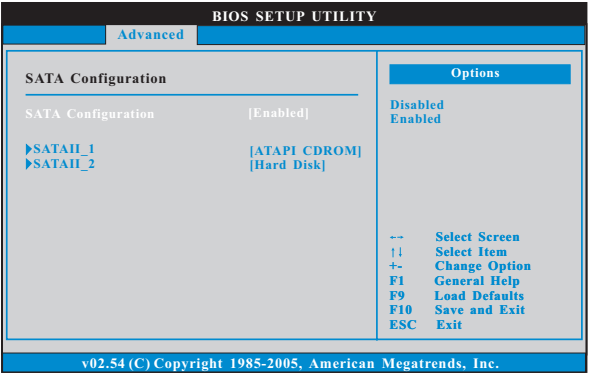
#### RTC Alarm Power On

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

#### ACPI HPET Table

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

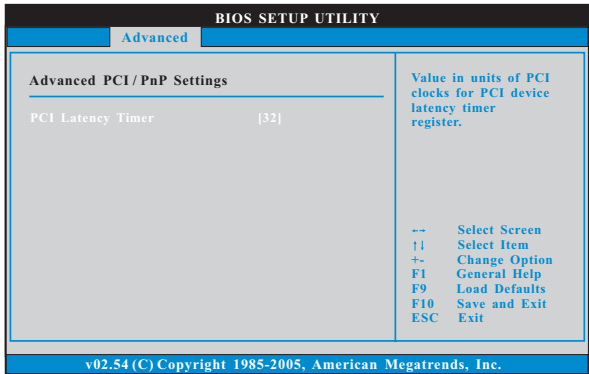
6.4.4 SATA Configuration



SATA Configuration

Use this item to enable or disable the “SATA Configuration” feature.

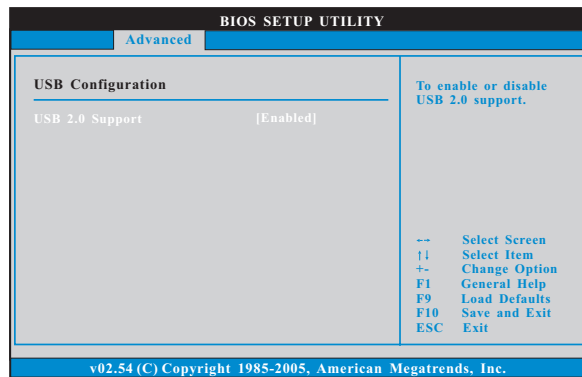
6.4.5 PCIPnP Configuration



PCI Latency Timer

The default value is 32. It is recommended to keep the default value unless the installed PCI expansion cards' specifications require other settings.

## 6.4.6 USB Configuration

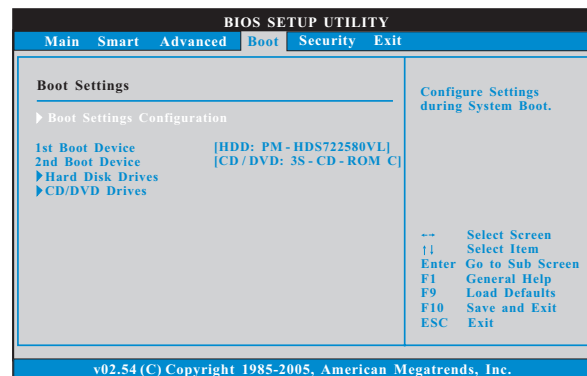


### USB 2.0 Support

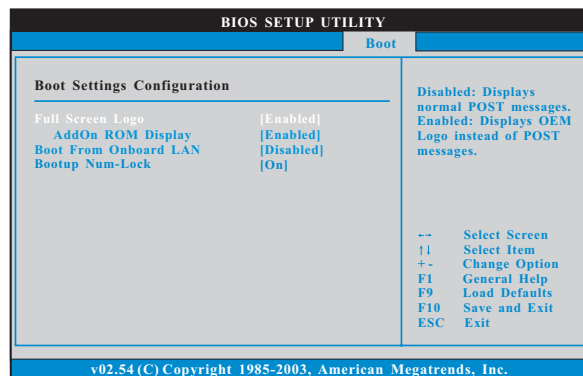
Use this item to enable or disable the USB 2.0 support.

## 6.5 Boot Screen

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



### 6.5.1 Boot Settings Configuration



#### Full Screen Logo

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

#### AddOn ROM Display

Use this option to adjust AddOn ROM Display. If you enable the option "Full Screen Logo" but you want to see the AddOn ROM information when the system boots, please select [Enabled]. Configuration options: [Enabled] and [Disabled]. The default value is [Enabled].

#### Boot From Onboard LAN

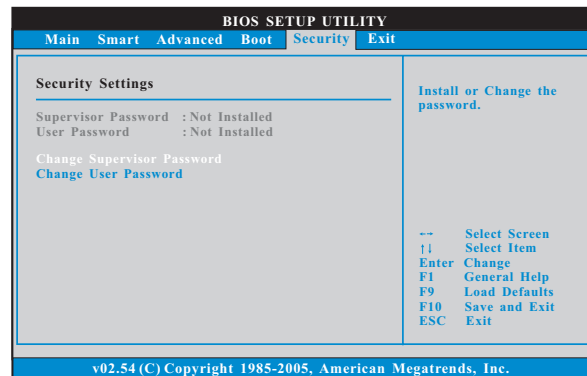
Use this item to enable or disable the Boot From Onboard LAN feature.

#### Boot Up Num-Lock

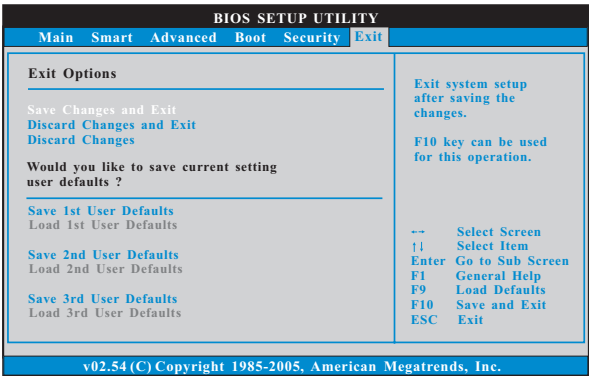
If this item is set to [On], it will automatically activate the Numeric Lock function after boot-up.

## 6.6 Security Screen

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



## 6.7 Exit Screen



### Save Changes and Exit

When you select this option, it will pop-out the following message, "Save configuration changes and exit setup?" Select [OK] to save the changes and exit the BIOS SETUP UTILITY.

### Discard Changes and Exit

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

### Discard Changes

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

### Would you like to save current setting user defaults?

In this option, you are allowed to load and save three user defaults according to your own requirements.

---

## ***Chapter 7 Software Support***

### **7.1 Install Operating System**

This system supports various Microsoft® Windows® operating systems: XP / XP 64-bit / Vista™ / Vista™ 64-bit. Refer to your OS documentation for more information.

### **7.2 Support CD Information**

The Support CD contains necessary drivers and useful utilities that enhance the system features.

#### **7.2.1 Running The Support CD**

To begin using the support CD, insert the CD into your CD-ROM drive. The CD automatically displays the Main Menu if "AUTORUN" is enabled in your computer. If the Main Menu did not appear automatically, locate and double click on the file "ASSETUP.EXE" from the BIN folder in the Support CD to display the menus.

#### **7.2.2 Drivers Menu**

The Drivers Menu shows the available devices drivers if the system detects installed devices. Please install the necessary drivers to activate the devices.

#### **7.2.3 Utilities Menu**

The Utilities Menu shows the applications software that the system supports. Click on a specific item then follow the installation wizard to install it.

#### **7.2.4 Contact Information**

If you need to contact ASRock or want to know more about ASRock, welcome to visit ASRock's website at <http://www.asrock.com>; or you may contact your dealer for further information.