

AMI® BIOS Setup

3

The mainboard uses AMI® BIOS ROM that provides a Setup utility for users to modify the basic system configuration. The information is stored in a battery-backed CMOS RAM so it retains the Setup information when the power is turned off.

This chapter provides you with the overview of the BIOS Setup program. It contains the following topics:

Entering Setup	3-2
Control Keys	3-2
Getting Help	3-3
The Main Menu	3-4
Standard CMOS Setup	3-6
BIOS Features Setup	3-8
Chipset Features Setup	3-11
Power Management Setup	3-14
PNP/PCI Configuration	3-18
Integrated Peripherals	3-21
Hardware Monitor Setup	3-24
Load Optimized/Fail-Safe Defaults	3-26
Supervisor/User Password	3-27
IDE HDD Auto Detection	3-29
Save & Exit Setup	3-30
Exit without Saving	3-31

Chapter 3

Entering Setup

Power on the computer and the system will start POST (Power On Self Test) process. When the message below appears on the screen, press key to enter Setup.

Hit DEL if you want to run SETUP

If the message disappears before you respond and you still wish to enter Setup, restart the system by turning it OFF and On or pressing the RESET button. You may also restart the system by simultaneously pressing <Ctrl>, <Alt>, and <Delete> keys.

Control Keys

<↑>	Move to the previous item
<↓>	Move to the next item
<←>	Move to the item in the left hand
<→>	Move to the item in the right hand
<Enter>	Select the item
<Esc>	Jumps to the Exit menu or returns to the main menu from a submenu
<+/PU>	Increase the numeric value or make changes
<-/PD>	Decrease the numeric value or make changes
<F5>	Load previous values
<F6>	Load Fail-Safe defaults
<F7>	Load Optimized defaults
<F10>	Save all the CMOS changes and exit

Getting Help

After entering the Setup utility, the first screen you see is the Main Menu.

Main Menu

The main menu displays the setup categories the BIOS supplies. You can use the arrow keys (↑↓) to select the item. The on-line description for the selected setup category is displayed on the bottom of the screen.

Default Settings

The BIOS setup program contains two kinds of default settings: the Optimal and Fail Safe defaults. Optimal defaults provide optimum performance settings for all devices and the system. (The “default” value described in the chapter usually refers to the Optimal defaults unless otherwise specified.) Fail Safe defaults provide the safest set of parameters instead of the optimal system performance for the system.

Chapter 3

The Main Menu

Once you enter AMIBIOS SIMPLE SETUP UTILITY, the Main Menu will appear on the screen. The Main Menu displays twelve configurable functions and two exit choices. Use arrow keys to move among the items and press <Enter> to enter the sub-menu.

AMIBIOS SIMPLE SETUP UTILITY - VERSION 1.43 (C)2001 American Megatrends, Inc. All Rights Reserved	
STANDARD CMOS SETUP	LOAD FAIL-SAFE DEFAULTS
BIOS FEATURES SETUP	LOAD OPTIMIZED DEFAULTS
CHIPSET FEATURES SETUP	SUPERVISOR PASSWORD
POWER MANAGEMENT SETUP	USER PASSWORD
PNP/PCI CONFIGURATION	IDE HDD AUTO DETECTION
INTEGRATED PERIPHERALS	SAVE & EXIT SETUP
HARDWARE MONITOR SETUP	EXIT WITHOUT SAVING
ESC : Quit ↑↓←→ : Select Item F10 : Save & Exit	
Time, Date, Hard Disk Type...	

Standard CMOS Setup

Use this menu for basic system configurations, such as time, date etc.

BIOS Features Setup

Use this menu to setup the items of AMI® special enhanced features.

Chipset Features Setup

Use this menu to change the values in the chipset registers and optimize your system’s performance.

Power Management Setup

Use this menu to specify your settings for power management.

PNP/PCI Configuration

This entry appears if your system supports PnP/PCI.

Integrated Peripherals

Use this menu to specify your settings for integrated peripherals.

Hardware Monitor Setup

This entry shows your PC's current status.

Load Fail-Safe Defaults

Use this menu to load the BIOS default values for the minimal/stable performance for your system to operate.

Load Optimized Defaults

Use this menu to load factory default settings into the BIOS for optimal system performance operations.

Supervisor Password

Use this menu to set Supervisor Password.

User Password

Use this menu to set User Password.

Save & Exit Setup

Save changes to CMOS and exit setup.

Exit Without Saving

Abandon all changes and exit setup.

Chapter 3

STANDARD CMOS SETUP

The items inside STANDARD CMOS SETUP menu are divided into 9 categories. Each category includes none, one or more setup items. Use the arrow keys to highlight the item you want to modify and use the <PgUp> or <PgDn> keys to switch to the value you prefer.

AMIBIOS SETUP - STANDARD CMOS SETUP (C)2001 American Megatrends, Inc. All Rights Reserved																
Date (mm/dd/yyyy) : Tue Nov 14, 2000 Time (hh/mm/ss) : 00:00:00																
<table><tr><td>TYPE</td><td>SIZE</td><td>CYLS</td><td>HEAD</td><td>PRECOMP</td><td>LANDZ</td><td>SECTOR</td><td>MODE</td></tr></table>									TYPE	SIZE	CYLS	HEAD	PRECOMP	LANDZ	SECTOR	MODE
TYPE	SIZE	CYLS	HEAD	PRECOMP	LANDZ	SECTOR	MODE									
Pri Master : Auto Pri Slave : Auto Sec Master : Auto Sec Slave : Auto																
Floppy Drive A : 1.44 MB 3½ Floppy Drive B : Not Installed				<div>Base Memory : 640 Kb Other Memory : 384 Kb Extended Memory : 127 Mb Total Memory : 128 Mb</div>												
Boot Sector Virus Protection : Disabled																
<div>ESC : Exit ↑ ↓ : Select Item PU/PD/+/- : Modify (Shift) F2 : Color</div>																

Date

This allows you to set the system to the date that you want (usually the current date). The format is <day><month> <date> <year>.

- day

Day of the week, from Sun to Sat, determined by BIOS. Read-only.
- month

The month from Jan. through Dec.
- date

The date from 1 to 31 can be keyed by numeric function keys.
- year

The year depends on the year of the BIOS.

Time

This allows you to set the system time that you want (usually the current time). The time format is <hour> <minute> <second>.

Pri Master/Pri Slave/Sec Master/Sec Slave

Press PgUp/<+> or PgDn/<-> to select the hard disk drive type. The specification of hard disk drive will show up on the right hand according to your selection.

TYPE	Type of the device.
SIZE	Capacity of the device.
CYLS	Number of cylinders.
HEAD	Number of heads.
PRECOMP	Write precompensation.
LANDZ	Cylinder location of Landing zone.
SECTOR	Number of sectors.
MODE	Access mode.

Floppy Drive A/B

This item allows you to set the type of floppy drives installed. Available options are *Not Installed*, *360 KB 5¼*, *1.2 MB 5¼*, *720 KB 3½*, *1.44 MB 3½*, or *2.88 MB 3½*. The default value for Floppy Drive A is *1.44 MB 3½*, and for Floppy Drive B is *Not Installed*.

Boot Sector Virus Protection

The item is to set the Virus Warning feature for IDE Hard Disk boot sector protection. When *Enabled*, BIOS will issue a virus warning message and beep if a write to the boot sector or the partition table of the HDD is attempted. Setting options are *Disabled* and *Enabled*. Default value is *Disabled*.

Note: *This feature only protects the boot sector, not the whole hard disk.*

BIOS FEATURES SETUP

AMIBIOS SETUP - BIOS FEATURES SETUP (C)2001 American Megatrends, Inc. All Rights Reserved		
Quick Boot	:Enabled	
1st Boot Device	:Floppy	
2nd Boot Device	:IDE-0	
3rd Boot Device	:CD-ROM	
Try Other Boot Devices	:Yes	
Full Screen LOGO Show	:BIOS	
S.M.A.R.T. for Hard Disks	:Disabled	
BootUp Num-Lock	:On	
Floppy Drive Swap	:Disabled	
Floppy Drive Seek	:Enabled	
Primary Display	:VGA/EGA	
Password Check	:Setup	
Boot To OS/2 > 64MB	:No	
L1 Cache	:WriteBack	
L2 Cache	:Enabled	
		ESC : Quit ↑↓←→ : Select Item F1 : Help PU/PD/+/- : Modify F5 : Load Previous Values F6 : Load Fail-Safe Defaults F7 : Load Optimized Defaults

Quick Boot

Setting the item to *Enabled* allows the system to boot within 5 seconds since it will skip some check items. Available options are *Enabled* and *Disabled*. The default value is *Enabled*.

1st/2nd/3rd Boot Device

The items allow you to set the sequence of boot devices where AMIBIOS attempts to load the operating system. The settings are:

- IDE0* The system will boot from the first HDD.
- IDE1* The system will boot from the second HDD.
- IDE2* The system will boot from the third HDD.

<i>IDE3</i>	The system will boot from the fourth HDD.
<i>Floppy</i>	The system will boot from floppy drive.
<i>ZIP A:/LS120</i>	The system will boot from LS-120/ZIP drive.
<i>ATAPI ZIP C:</i>	The system will boot from ATAPI ZIP drive.
<i>CD-ROM</i>	The system will boot from the CD-ROM.
<i>SCSI</i>	The system will boot from the SCSI.
<i>Network</i>	The system will boot from the Network drive.
<i>Disabled</i>	Disable this sequence.

Try Other Boot Devices

Setting the option to *Yes* allows the system to try to boot from other devices if the system fails to boot from the 1st/2nd/3rd boot device.

Full Screen LOGO Show

This item enables you to show the company logo on the bootup screen.

Settings are:

<i>BIOS (default)</i>	Shows the POST messages at boot.
<i>Silent</i>	Shows a still image (logo) on the full screen at boot.

S.M.A.R.T. for Hard Disks

This allows you to activate the S.M.A.R.T. (Self-Monitoring Analysis & Reporting Technology) capability for the hard disks. S.M.A.R.T is a utility that monitors your disk status to predict hard disk failure. This gives you an opportunity to move data from a hard disk that is going to fail to a safe place before it becomes offline. Settings are *Enabled* and *Disabled* (default).

BootUpNum-Lock

This item is to set the Num Lock status when the system is powered on. Setting to *On* will turn on the Num Lock key when the system is powered on. Setting to *Off* will allow end users to use the arrow keys on the numeric keypad. Setting options are *On* and *Off*. Default value is *On*.

Floppy Drive Swap

Setting to *Enabled* will swap floppy drives A: and B:. The default value is *Disabled*.

Chapter 3

Floppy Drive Seek

Setting to *Enabled* will make BIOS seek floppy drive A: before booting the system. Settings are *Disabled* and *Enabled*. The default value is *Enabled*.

Primary Display

This configures the primary display subsystem in the computer. Available options are *Mono (monochrome)*, *CGA40x25*, *CGA80x25*, *VGA/EGA* and *Absent*. The default value is *VGA/EGA*.

Password Check

This specifies the type of AMIBIOS password protection that is implemented. Setting options are described below.

Option	Description
Setup (default)	The password prompt appears only when end users try to run Setup.
Always	A password prompt appears every time when the computer is powered on or when end users try to run Setup.

Boot to OS/2 > 64MB


This allows you to run the OS/2[®] operating system with DRAM larger than 64MB. When you choose the default value *No*, you cannot run the OS/2[®] operating system with DRAM larger than 64MB. But it is possible if you choose *Yes*. The default value is *No*.

L1 Cache

This sets the type of caching algorithm used by AMIBIOS and the CPU for L1 cache memory. Setting options are:

WriteBack (default) A write-back algorithm is used.

Disabled AMIBIOS does not specify the type of caching algorithm. The algorithm is set by the CPU.


 **Note:** The L1 cache is built inside the processor.

L2 Cache

The items enable or disable the L2 (external) cache memory for CPU. Setting to *Enabled* will speed up the system performance.

CHIPSET FEATURES SETUP

AMIBIOS SETUP - CHIPSET FEATURES SETUP (C)2001 American Megatrends, Inc. All Rights Reserved		
CPU SysAckLimit	:	8
DDR/SDR CAS Select	:	2.5/3
Dram Performance	:	Normal
AGP Driving Strength	:	Auto
AGP Delay Offset	:	Auto
Graphics Aperture Size	:	128MB
Passive Release	:	Disabled
DMA Line Buffer	:	Disabled
I/O Recovery Timer	:	1 us
BIOS Protection	:	Enabled
		ESC : Quit ↑↓←→ : Select Item F1 : Help PU/PD/+/- : Modify F5 : Load Previous Values F6 : Load Fail-Safe Defaults F7 : Load Optimized Defaults

 **Note:** Change these settings only if you are familiar with the chipset.

CPU SysAckLimit

This item controls how many commands CPU can send to North Bridge or vice versa at a time. Selecting 8 will provide better system performance while selecting 1 offers more reliable performance. Settings are 1, 2, 4 and 8.

DDR/SDR CAS Select

Use this item to select the CAS latency timing (in clock cycles) for DDR/SDR DRAMs. CAS latency is the time delay before the memory starts a read command after receiving it. Settings are 2.5/3 and 2.0/2.

Dram Performance

This controls the timing of the DRAMs installed in your system including

Chapter 3

RAS, CAS, precharge timing setting and the like. Settings are *Normal*, *Slow*, *Failsafe*, *Auto*, *Ultra* and *Fast*. *Failsafe* provides the longest DRAM timing but the most reliable system performance. *Ultra* provides the shortest DRAM timing and the fastest system performance. Selecting *Auto* enables the BIOS to detect the installed DIMMs and determine the best mode. Speeds of different settings are *Ultra* > *Fast* > *Normal* > *Slow* > *Failsafe*. The default value is *Normal*.

AGP Driving Strength

This field configures the strength of the AGP signals. Different settings will affect the reliability of the AGP card. Selecting *Auto* allows BIOS to determine the best value. Settings are *Auto*, *Low*, *Middle* and *High*. The default value is *Auto*.

AGP Delay Offset

This field configures the AGP Delay Offset feature. Settings are *+1*, *+2*, *+3*, *+4*, *+5*, *+6*, *+7*, *-1*, *-2*, *-3*, *-4*, *-5*, *-6*, *-7* and *Auto*. The default value is *Auto*.

Graphics Aperture Size

This item specifies how much system RAM can be allocated to AGP for video purpose. The AGP aperture is memory-mapped while the graphics data structure can reside in an AGP aperture. The aperture range should be programmed as non-cacheable in the processor cache. Access with the aperture range is forwarded to the main memory and then translated to the original issued address via a translation table maintained on the main memory. Available options for the size of aperture are *128MB*, *64MB*, *32MB*, *16MB*, *8 MB*, *4 MB*, *256MB*, *Failsafe*, *Slow* and *Fast*. The default value is *128MB*.

Passive Release

Selecting *Enabled* allows CPU to access PCI buses during passive release. Otherwise, the arbiter only allows another PCI master to access DRAM. Settings are *Enabled* and *Disabled*. The default value is *Disabled*.

DMA Line Buffer

The item enables or disables DMA line buffer feature. Settings are *Enabled* and *Disabled*.

I/O Recovery Timer

This item specifies the length of a delay inserted between consecutive Input/Output operations. The delay is needed because the CPU operates much faster than Input/Output bus and the CPU must be delayed to allow for the completion of Input/Output request. Settings are *1 us* (default), *2 us*, *3 us* and *Disabled*.

BIOS Protection

Setting to *Enabled* will prevent BIOS from performing any BIOS update/flash utility. Settings are *Enabled* (default) and *Disabled*.

Chapter 3

POWER MANAGEMENT SETUP

AMIBIOS SETUP - POWER MANAGEMENT SETUP (C)2001 American Megatrends, Inc. All Rights Reserved			
IPCA Function	:Yes	CPU Critical Temperature	:Disabled
Sleep State	:S1 (POS)	Power Button Function	:Suspend
USB Power On Function	:Disabled	Wake Up On Ring/LAN	:Enabled
Sleep State LED	:Dual Color	Wake Up On PME	:Enabled
Suspend Time Out (Minute)	:Disabled	Resume By Alarm	:Disabled
Modem Use IRQ	:N/A	Alarm Date	:15
Monitor Video	:No	Alarm Hour	:12
Monitor Audio	:No	Alarm Minute	:30
Monitor Serial Port	:Yes	Alarm Second	:30
Monitor Parallel Port	:Yes		
Monitor Floppy	:No		
Monitor Primary HDD(s)	:Yes		
Monitor Secondary HDD(s)	:No		
System Thermal	:Ignore		
		ESC : Quit ↑↓←→ : Select Item F1 : Help PU/PD/+/- : Modify F5 : Load Previous Values F6 : Load Fail-Safe Defaults F7 : Load Optimized Defaults	

IPCA Function

This item is to activate the ACPI (Advanced Configuration and Power Management Interface) Function. If your operating system is ACPI-aware, such as Windows 98SE/2000/ME, select *Yes*. Available options are *Yes* and *No*. The default value is *Yes*.

Sleep State

This item specifies the power saving modes for ACPI function. Options are:

S1 (POS) The S1 sleep mode is a low power state. In this state, no system context is lost (CPU or chipset) and hard-

<i>S3 (STR)</i>	ware maintains all system context. The S3 sleep mode is a lower power state where the information of system configuration and open applications/files is saved to main memory that remains powered while most other hardware components turn off to save energy. The information stored in memory will be used to restore the system when an “wake up” event occurs.
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The default value is *S1 (POS)*.

USB Power On Function

This item enables or disables the activity on the USB device to wake up the system from sleep states. Available options are *Enabled* and *Disabled*. The default value is *Disabled*.

Sleep State LED

This item sets how the system uses sleep state LED on the case to indicate the sleep state. Available options are:

<i>Blinking</i>	The sleep state LED blinks to indicate the sleep state.
<i>Single Color</i>	The sleep state LED remains the same color.
<i>Dual Color</i>	The sleep state LED changes its color to indicate the sleep state.

The default value is *Dual Color*.

Suspend Time Out (Minute)

The item specifies the length of the period of system inactivity before the system enters the suspend mode from the standby mode. Nearly all power use is reduced in the suspend mode. Settings are *Disabled* (default), *1*, *2*, *4*, *8*, *10*, *20*, *30*, *40*, *50* and *60* (Minutes).

Modem Use IRQ

This allows users to specify an IRQ (interrupt request) line for the installed modem module. Settings are *N/A*, *3*, *4*, *5*, *7*, *9*, *10* and *11*.

Chapter 3

Monitor Video/Audio/Serial Port/Parallel Port/Floppy/Primary HDD(s)/Secondary HDD(s)

These items specify if the BIOS will monitor the activity of the specified hardware peripheral or component. If set to *Yes*, any activity detected on the specified hardware peripheral or component will wake up the system or prevent the system from entering the power saving modes. Settings are *Yes* and *No*. The default values for different items are listed below:

Monitor Video	<i>No</i>
Monitor Audio	<i>No</i>
Monitor Serial Port	<i>Yes</i>
Monitor Parallel Port	<i>Yes</i>
Monitor Floppy	<i>No</i>
Monitor Primary HDD(s)	<i>Yes</i>
Monitor Secondary HDD(s)	<i>No</i>

System Thermal

If set to *Monitor*, the system will always monitor the system temperature after the system is turned on. The default value is *Ignore*.

CPU Critical Temperature

This item is used to specify a thermal limit for CPU. If CPU temperature reaches the specified limit, the system will issue a warning to prevent the CPU overheat problem. Settings are *Disabled*, *45°C/113°F*, *50°C/122°F*, *55°C/131°F*, *60°C/140°F*, *65°C/149°F*, *70°C/158°F* and *75°C/167°F*.

Power Button Function

This feature sets the function of the power button. Settings are:

<i>On/Off</i>	The power button functions as normal on/off button.
<i>Suspend</i>	When you press the power button, the computer enters the suspend/sleep mode, but if the button is pressed for more than four seconds, the computer is turned off.

Wake Up On Ring/LAN/PME

When setting to *Enabled*, the features allow your system to be awakened from the power saving modes through an incoming call from the modem, an input signal from the LAN or any event on PME (Power Management

Event). Settings are *Enabled* and *Disabled*.

Note: You need to install a modem/LAN card supporting power on function for Wake Up On Ring/LAN function.

Resume By Alarm

This is used to enable or disable the feature of booting up the system on a scheduled time/date from the soft off (S5) state. Settings are *Enabled* and *Disabled*.

Alarm Date/Hour/Minute/Second

If **Resume By Alarm** is set to *Enabled*, the system will automatically resume (boot up) on a specific date/hour/minute/second specified in these fields.

Settings for each item are:

Alarm Date	01 ~ 31, Every Day
Alarm Hour	00 ~ 23
Alarm Minute	00 ~ 59
Alarm Second	00 ~ 59

Note: If you change these settings, you must reboot the system until it enters the operating system and then power off the system. By doing so, the changed settings will go into effect next time you power on the system.

PNP/PCI CONFIGURATION

This section describes configuring the PCI bus system and PnP (Plug & Play) feature. PCI, or Personal Computer Interconnect, is a system which allows I/O devices to operate at speeds nearing the speed the CPU itself uses when communicating with its special components. This section covers some very technical items and it is strongly recommended that only experienced users should make any changes to the default settings.

AMIBIOS SETUP- PNP/PCI CONFIGURATION (C)2001 American Megatrends, Inc. All Rights Reserved		
Clear NVRAM	:No	
Primary Graphics Adapter	:PCI	
PCI VGA Palette Snoop	:Disabled	
DMA Channel 0	:PnP	
DMA Channel 1	:PnP	
DMA Channel 3	:PnP	
DMA Channel 5	:PnP	
DMA Channel 6	:PnP	
DMA Channel 7	:PnP	
IRQ3	:PCI/PnP	
IRQ4	:PCI/PnP	
IRQ5	:PCI/PnP	
IRQ7	:PCI/PnP	
IRQ9	:PCI/PnP	
IRQ10	:PCI/PnP	
IRQ11	:PCI/PnP	
IRQ14	:PCI/PnP	
IRQ15	:PCI/PnP	
		ESC : Quit ↑↓←→ : Select Item
		F1 : Help PU/PD/+/- : Modify
		F5 : Load Previous Values
		F6 : Load Fail-Safe Defaults
		F7 : Load Optimized Defaults

ClearNVRAM

The ESCD (Extended System Configuration Data) NVRAM (Non-volatile Random Access Memory) is where the BIOS stores resource information for both PNP and non-PNP devices in a bit string format. When the item is set to *Yes*, the system will reset ESCD NVRAM right after the system is booted up and then set the setting of the item back to *No* automatically. The default value is *No*.

Primary Graphics Adapter

This item specifies which VGA card is your primary graphics adapter. Settings are *AGP* and *PCI*. The default value is *PCI*.

PCI VGA Palette Snoop

When set to *Enabled*, multiple VGA devices operating on different buses can handle data from the CPU on each set of palette registers on every video device. Bit 5 of the command register in the PCI device configuration space is the VGA Palette Snoop bit (0 is disabled). For example, if there are two VGA devices in the computer (one PCI and one ISA) and the:

VGA Palette Snoop Bit Setting	Action
<i>Disabled</i>	Data read or written by the CPU is only directed to the PCI VGA device's palette registers.
<i>Enabled</i>	Data read or written by the CPU is directed to both the PCI VGA device's palette registers and the ISA VGA device's palette registers, permitting the palette registers of both VGA devices to be identical.

The setting must be set to *Enabled* if any ISA adapter card installed in the system requires VGA palette snooping. The default value is *Disabled*.

DMA Channel 0/1/3/5/6/7

These items specify the bus that the system DMA (Direct Memory Access) channel is used. These options allow you to reserve DMAs for Legacy ISA adapter cards.

The settings determine if AMIBIOS should remove a DMA from the available DMAs passed to devices that are configurable by the system BIOS. The available DMA pool is determined by reading the ESCD NVRAM. If more DMAs must be removed from the pool, the end user can reserve the DMA by assigning an *ISA/EISA* setting to it. The default value is *PnP*.

Chapter 3

IRQ 3/4/5/7/9/10/11/14/15

These items specify the bus where the specified IRQ line is used. These options allow you to reserve IRQs for Legacy ISA adapter cards.

The settings determine if AMIBIOS should remove an IRQ from the pool of available IRQs passed to devices that are configurable by the system BIOS. The available IRQ pool is determined by reading the ESCD NVRAM. If more IRQs must be removed from the IRQ pool, the end user can use these settings to reserve the IRQ by assigning an *ISA/EISA* setting to it. Onboard I/O is configured by AMIBIOS. All IRQs used by onboard I/O are configured as *PCI/PnP*. If all IRQs are set to *ISA/EISA*, and IRQ 14/15 are allocated to the onboard PCI IDE, IRQ 9 will still be available for PCI and PnP devices. Available settings are *ISA/EISA* and *PCI/PnP*. The default value is *PCI/PnP*.

INTEGRATED PERIPHERALS

AMIBIOS SETUP-INTEGRATED PERIPHERALS (C)2001 American Megatrends, Inc. All Rights Reserved		
FDC Function	:Auto	
Serial Port1	:Auto	
Serial Port2	:Auto	
Serial Port2 Mode	:Normal	
Serial Port3	:Disabled	
Serial Port3 Mode	:N/A	
Serial Port3 IRQ	:N/A	
Serial Port3 DMA	:N/A	
Parallel Port	:Auto	
Parallel Port Mode	:ECP+EPP	
EPP Version	:1.7	
Parallel Port IRQ	:Auto	
Parallel Port DMA	:Auto	
KeyBoard PowerOn	:Disabled	
HotKey Select	:N/A	
IDE Function	:Both	
USB Function	:Enabled	
USB Legacy Support	:Disabled	
OnBoard Audio	:Enabled	
OnChip MC'97 Modem	:Disabled	
		ESC : Quit ↑↓←→ : Select Item F1 : Help PU/PD/+/- : Modify F5 : Load Previous Values F6 : Load Fail-Safe Defaults F7 : Load Optimized Defaults

FDC Function

This is used to enable or disable the onboard Floppy controller.

Option	Description
Auto (default)	BIOS will automatically determine whether to enable the onboard Floppy controller or not.
Enabled	Enables the onboard Floppy controller.
Disabled	Disables the onboard Floppy controller.

Chapter 3

Serial Port1/2/3

These items specify the base I/O port address of the onboard Serial Port 1 (COM 1)/Serial Port 2 (COM 2)/Serial Port 3 (COM 3). Selecting *Auto* allows AMIBIOS to automatically determine the correct base I/O port address. Settings are *Auto*, *3F8h/COM1*, *2F8h/COM2*, *3E8h/COM3*, *2E8h/COM4* and *Disabled*. The default value is *Auto*.

Serial Port2/3 Mode

This item sets the operation mode for Serial Port 2/3. Settings are *Normal*, *IrDA*, *ASKIR* and/or *FIR* (*the last three operation modes are setting options for IR function*).

Serial Port3 IRQ

This is used to select the IRQ line for Serial Port 3. Settings are *3*, *4*, *10* and *11*.

Serial Port3 DMA

This is used to select the DMA channel for Serial Port 3 when Serial Port3 is set to the *FIR* mode. Settings are *1* and *3*.

Parallel Port

This feature specifies the base I/O port address for the onboard Parallel Port. Settings are *Auto*, *378h*, *278h*, *3BCh* and *Disabled*. Default is *Auto*.

Parallel Port Mode

This item selects the operating mode for the onboard parallel port: *Normal*, *Bi-Dir*, *EPP* or *ECP+EPP*. Default is *ECP+EPP*.

EPP Version

The item selects the EPP version used by the parallel port if the port is set to *EPP* or *ECP+EPP* mode. Settings are *1.7* and *1.9*.

Parallel Port IRQ

When **Parallel Port** is set to *Auto*, the item shows *Auto* indicating that BIOS determines the IRQ for the parallel port automatically.

Parallel Port DMA

This feature needs to be configured only when **Parallel Port Mode** is set to the *ECP+EPP* mode. When **Parallel Port** is set to *Auto*, the field will show *Auto* indicating that BIOS automatically determines the DMA channel for the parallel port.

KeyboardPowerOn

This controls how and whether the PS/2 keyboard is able to power on the system.

HotKey Select

This item allows you to specify a hot key combination for the **Keyboard PowerOn** function.

IDEFunction

This allows you to enable or disable on-chip IDE controller. Settings are *Disabled*, *Primary*, *Secondary* and *Both*. The default value is *Both*.

USB Function

This is used to enable or disable the USB ports. Settings are *Enabled* and *Disabled*. The default is *Enabled*.

USB Legacy Support

Set to *Keyboard* if your system installs and uses an USB keyboard. Set to *Keyb+Mouse* if the system installs and uses the USB keyboard and mouse. Default is *Disabled*.

OnBoard Audio

This allows you to enable or disable the onboard hardware audio. Settings are *Disabled* and *Enabled*. The default value is *Enabled*.

OnChipMC'97Modem

This item is used to enable or disable the onboard MC'97 feature. Settings are *Disabled* and *Enabled*. The default value is *Disabled*.

HARDWARE MONITOR SETUP

This section is to set CPU FSB frequency, monitor the current hardware status including CPU/system temperature, CPU/System Fan speeds, Vcore etc. This is available only if there is hardware monitoring onboard.

AMIBIOS SETUP - HARDWARE MONITOR SETUP (C)2001 American Megatrends, Inc. All Rights Reserved	
CPU FSB/DRAM Clock :By HW Spread Spectrum :Enabled -- Hardware Monitor -- CPU Temperature :46°C/114°F CPU FAN :3860 RPM System FAN :0 RPM 3.3V :3.344V 12V :12.205V Vcore :1.760V 5V :4.906V	ESC : Quit ↑↓←→ : Select Item F1 : Help PU/PD/+/- : Modify F5 : Load Previous Values F6 : Load Fail-Safe Defaults F7 : Load Optimized Defaults

CPU FSB/SDRAM Clock

This item is used to set clock frequencies (in MHz) for CPU FSB (Front Side Bus) and SDRAM. Selecting *By HW* will enable the CPU FSB and SDRAM to follow the hardware configurations based on jumper settings. Settings are *By HW*, *100/100*, *100/133*, *133/100* and *133/133*.

Spread Spectrum

This is to enable or disable Clock Generator’s Spread Spectrum function. When overclocking the processor, always set it to *Disabled*. The default value is *Enabled*.

Hardware Monitor

Hardware Monitor displays the current status of all of the monitored hardware devices/components such as system voltages, temperatures and fan speeds.

LOAD OPTIMIZED/FAIL-SAFE DEFAULTS

The two options on the main menu allow users to restore all of the BIOS settings to the default Optimized or Fail-Safe defaults. The Optimized Defaults are the default values set by the mainboard manufacturer specifically for the optimized performance of the mainboard. The Fail-Safe Defaults are the default values set by the BIOS vendor for the stable system performance.

AMIBIOS SIMPLE SETUP UTILITY - VERSION 1.43 (C)2001 American Megatrends, Inc. All Rights Reserved	
STANDARD CMOS SETUP	LOAD FAIL-SAFE DEFAULTS
BIOS FEATURES SETUP	LOAD OPTIMIZED DEFAULTS
CHIPSET FEATURES SETUP	SUPERVISOR PASSWORD
POWER MANAGEMENT SETUP	USER PASSWORD
PNP/PCI CONFIGURATION	IDE HDD AUTO DETECTION
INTEGRATED PERIPHERALS	SAVE & EXIT SETUP
HARDWARE MONITOR SETUP	EXIT WITHOUT SAVING
ESC : Quit ↑↓←→ : Select Item F10 : Save & Exit	
Time, Date, Hard Disk Type...	

SUPERVISOR/USER PASSWORD

When you select this function, a message as below will appear on the screen:

AMIBIOS SIMPLE SETUP UTILITY - VERSION 1.43 (C)2001 American Megatrends, Inc. All Rights Reserved	
STANDARD CMOS SETUP	LOAD FAIL-SAFE DEFAULTS
BIOS FEATURES SETUP	LOAD OPTIMIZED DEFAULTS
CHIPSET FEATURES SETUP	SUPERVISOR PASSWORD
POWER MANAGEMENT SETUP	USER PASSWORD
PNP/PCI CONFIGURATION	ENTER PASSWORD
INTEGRATED PERIPHERALS	
HARDWARE MONITOR SETUP	EXIT WITHOUT SAVING
ESC : Quit ↑↓←→ : Select Item F10 : Save & Exit	
Time, Date, Hard Disk Type...	

Type the password, up to six characters in length, and press <Enter>. The password typed now will clear any previously set password from CMOS memory. You will be prompted to confirm the password. Retype the password and press <Enter>. You may also press <Esc> to abort the selection and not enter a password.

To clear a set password, just press <Enter> when you are prompted to enter the password. A message will show up confirming the password will be disabled. Once the password is disabled, the system will boot and you can enter Setup without entering any password.

When a password has been set, you will be prompted to enter it every time you try to enter Setup. This prevents an unauthorized person from changing any part of your system configuration.

Chapter 3

Additionally, when a password is enabled, you can also have AMIBIOS to request a password each time the system is booted. This would prevent unauthorized use of your computer. The setting to determine when the password prompt is required is the PASSWORD CHECK option of the BIOS FEATURES SETUP menu. If the PASSWORD CHECK option is set to *Always*, the password is required both at boot and at entry to Setup. If set to *Setup*, password prompt only occurs when trying to enter Setup.

About Supervisor Password & User Password:

Supervisor password : Can enter and change the settings of the setup menus.

User password: Can only enter but do not have the right to change the settings of the setup menus

IDE HDD AUTO DETECTION

You can use this utility to AUTOMATICALLY detect the characteristics of most hard drives.

AMIBIOS SETUP - STANDARD CMOS SETUP (C)2001 American Megatrends, Inc. All Rights Reserved																															
Date (mm/dd/yyyy) : Tue Nov 14, 2000 Time (hh/mm/ss) : 00:00:00																															
<table><tr><td>TYPE</td><td>SIZE</td><td>CYLS</td><td>HEAD</td><td>PRECOMP</td><td>LANDZ</td><td>SECTOR</td><td>MODE</td></tr><tr><td colspan="8">Pri Master : Auto Pri Slave : Auto Sec Master : Auto Sec Slave : Auto</td></tr><tr><td colspan="4">Floppy Drive A : 1.44 MB 3½ Floppy Drive B : Not Installed Boot Sector Virus Protection : Disabled</td><td colspan="4">Base Memory : 640 Kb Other Memory : 384 Kb Extended Memory : 127 Mb Total Memory : 128 Mb</td></tr></table>								TYPE	SIZE	CYLS	HEAD	PRECOMP	LANDZ	SECTOR	MODE	Pri Master : Auto Pri Slave : Auto Sec Master : Auto Sec Slave : Auto								Floppy Drive A : 1.44 MB 3½ Floppy Drive B : Not Installed Boot Sector Virus Protection : Disabled				Base Memory : 640 Kb Other Memory : 384 Kb Extended Memory : 127 Mb Total Memory : 128 Mb			
TYPE	SIZE	CYLS	HEAD	PRECOMP	LANDZ	SECTOR	MODE																								
Pri Master : Auto Pri Slave : Auto Sec Master : Auto Sec Slave : Auto																															
Floppy Drive A : 1.44 MB 3½ Floppy Drive B : Not Installed Boot Sector Virus Protection : Disabled				Base Memory : 640 Kb Other Memory : 384 Kb Extended Memory : 127 Mb Total Memory : 128 Mb																											
ESC : Exit ↑ ↓ : Select Item PU/PD/+/- : Modify (Shift) F2 : Color																															

Chapter 3

SAVE & EXIT SETUP

When you want to quit the Setup menu, you can select this option to save the changes and quit. A message as below will appear on the screen:

AMIBIOS SIMPLE SETUP UTILITY - VERSION 1.43	
(C)2001 American Megatrends, Inc. All Rights Reserved	
STANDARD CMOS SETUP	LOAD FAIL-SAFE DEFAULTS
BIOS FEATURES SETUP	LOAD OPTIMIZED DEFAULTS
CHIPSET FEATURES SETUP	SUPERVISOR PASSWORD
POWER MANAGEMENT SETUP	USER PASSWORD
PNP/PCI CONFIGURATION	EXIT WITHOUT SAVING
INTEGRATED PERIPHERALS	
HARDWARE MONITOR SETUP	
SAVE to CMOS and Exit(Y/N)? Y	
ESC : Quit ↑↓←→ : Select Item	
F10 : Save & Exit	
Time, Date, Hard Disk Type...	

Typing *Y* will allow you to quit the Setup Utility and save the user setup changes to RTC CMOS.

Typing *N* will return to the Setup Utility.

EXIT WITHOUT SAVING

When you want to quit the Setup menu, you can select this option to abandon the changes. A message as below will appear on the screen:

AMIBIOS SIMPLE SETUP UTILITY - VERSION 1.43 (C)2001 American Megatrends, Inc. All Rights Reserved	
STANDARD CMOS SETUP	LOAD FAIL-SAFE DEFAULTS
BIOS FEATURES SETUP	LOAD OPTIMIZED DEFAULTS
CHIPSET FEATURES SETUP	SUPERVISOR PASSWORD
POWER MANAGEMENT SETUP	USER PASSWORD
PNP/PCI CONFIGURATION	SECTION
INTEGRATED PERIPHERALS	P
HARDWARE MONITOR SETUP	EXIT WITHOUT SAVING

ESC : Quit ↑↓←→ : Select Item

F10 : Save & Exit

Time, Date, Hard Disk Type..

Typing *Y* will allow you to quit the Setup Utility without saving any changes to RTCMOS.

Typing *N* will return to the Setup Utility.