

# MSI

MICRO-STAR INTERNATIONAL

## MS-6528 LE ATX Mainboard



**Version 1.0**  
**G52-MA00429**

Manual Rev: 1.0  
Release Date: August 2001



**FCC-B Radio Frequency Interference Statement**

This equipment has been tested and found to comply with the limits for a class B digital device, pursuant to part 15 of the FCC rules. These limits are designed to provide reasonable protection against harmful interference when the equipment is operated in a commercial environment. This equipment generates, uses and can radiate radio frequency energy and, if not installed and used in accordance with the instruction manual, may cause harmful interference to radio communications. Operation of this equipment in a residential area is likely to cause harmful interference, in which case the user will be required to correct the interference at his own expense.

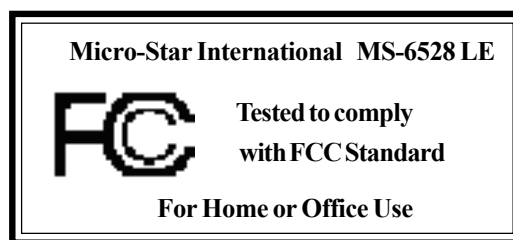
**Notice 1**

The changes or modifications not expressly approved by the party responsible for compliance could void the user's authority to operate the equipment.

**Notice 2**

Shielded interface cables and A.C. power cord, if any, must be used in order to comply with the emission limits.

**VOIR LA NOTICE D'INSTALLATION AVANT DE RACCORDER AU RESEAU.**



**Edition**

August 2001

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**Revision History**

<b>Revision</b>	<b>Revision History</b>	<b>Date</b>
V1.0	First release	August 2001

## Safety Instructions

1. Always read the safety instructions carefully.
2. Keep this User's Manual for future reference.
3. Keep this equipment away from humidity.
4. Lay this equipment on a reliable flat surface before setting it up.
5. The openings on the enclosure are for air convection hence protects the equipment from overheating. **DO NOT COVER THE OPENINGS.**
6. Make sure the voltage of the power source and adjust properly 110/220V before connecting the equipment to the power inlet.
7. Place the power cord such a way that people can not step on it. Do not place anything over the power cord.
8. Always Unplug the Power Cord before inserting any add-on card or module.
9. All cautions and warnings on the equipment should be noted.
10. Never pour any liquid into the opening that could damage or cause electrical shock.
11. If any of the following situations arises, get the equipment checked by a service personnel:
  - The power cord or plug is damaged
  - Liquid has penetrated into the equipment
  - The equipment has been exposed to moisture
  - The equipment has not work well or you can not get it work according to User's Manual.
  - The equipment has dropped and damaged
  - If the equipment has obvious sign of breakage
12. **DO NOT LEAVE THIS EQUIPMENT IN AN ENVIRONMENT UNCONDITIONED, STORAGE TEMPERATURE ABOVE 60°C (140°F), IT MAY DAMAGE THE EQUIPMENT.**



**CAUTION:** Danger of explosion if battery is incorrectly replaced. Replace only with the same or equivalent type recommended by the manufacturer.

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# Introduction

# 1

The MS-6528 LE ATX mainboard is a high-performance computer mainboard based on **Intel® 82845 & 82801BA** chipsets. It is optimized to support Intel® Pentium® 4 processor in the 478 pin package that delivers a high performance and professional desktop platform solution.

The Intel® 82845 Memory Controller Hub (MCH) provides the processor interface, SDRAM interface, AGP interface and hub interface. It supports: a single processor with a data transfer rate of 400MHz, SDRAM at 133MHz operation (PC133), AGTL+ host bus with integrated termination supporting 32-bit host addressing, 1.5V AGP interface with 4x data transfer and 4x fast write capability, and 8-bit, 66MHz 4x hub interface to the Intel ICH2.

The 82801BA I/O Controller Hub 2 (ICH2) provides the I/O subsystem with access to the rest of the system and additionally integrates many I/O functions. It supports: upstream hub interface for access to the Intel MCH, 2-channel Ultra ATA/100 bus master IDE controller, USB controller 1.1 (expanded capabilities for 4 ports), I/O APIC, SMBus controller, FWH interface, LPC interface, AC'97 2.1 interface, PCI 2.2 interface, and integrated system management controller.

This chapter includes the following topics:

Mainboard Specifications	1-2
Mainboard Layout	1-4
Quick Components Guide	1-5
Connectors & Jumpers	1-6
Back Panel	1-8

## Chapter 1

### Mainboard Specifications

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#### CPU

- Supports Intel® Pentium® 4 processor in the 478 pin package.
- Supports 1.3GHz, 1.4GHz, 1.5GHz, 1.6GHz, 1.7GHz, 1.8GHz, 1.9GHz, 2GHz and up.

#### Chipset

- Intel® 845 chipset (593 FC-BGA)
  - Supports a single processor with a data transfer rate of 400MHz.
  - Supports SDRAM at 133MHz operation (PC133).
  - AGTL+ host bus with integrated termination supporting 32-bit host addressing.
  - 1.5V AGP interface with 4x data transfer and 4x fast write capability.
  - 8-bit, 66MHz 4x hub interface to the Intel ICH2.
- Intel® ICH2 chipset (360 EBGA)
  - Upstream hub interface for access to the Intel MCH.
  - 2-channel Ultra ATA/100 Bus Master IDE controller.
  - USB controller 1.1 (expanded capabilities for 4 ports).
  - I/O APIC.
  - SMBus controller.
  - FWH interface.
  - LPC interface.
  - AC'97 2.1 interface.
  - PCI 2.2 interface.
  - Integrated system management controller.

#### Main Memory

- Supports three PC133 SDRAM sockets.
- Supports up to 3GB memory size.

#### Slots

- One AGP (Accelerated Graphics Port) 4x slot.
- Six PCI 2.2 32-bit PCI bus slots (support 3.3v/5v PCI bus interface).
- One CNR (Communication Network Riser) slot.



*Note: The AGP slot **does NOT support 3.3V AGP 2x card**. Use of 3.3V AGP 2x card may cause damages to the mainboard.*

## ***Introduction***

### **On-Board IDE**

- An IDE controller on the ICH2 chipset provides IDE HDD/CD-ROM with PIO, Bus Master and Ultra DMA66/100 operation modes.
- Can connect up to four IDE devices.

### **On-Board Peripherals**

- On-Board Peripherals include:
  - 1 floppy port supports 2 FDDs with 360K, 720K, 1.2M, 1.44M and 2.88Mbytes.
  - 2 serial ports (COM A + COM B)
  - 1 parallel port supports SPP/EPP/ECP mode
  - 4 USB ports (Rear \* 2/ Front \* 2)
  - 1 audio/game port

### **Audio**

- C-Media CMI8738 / PCI-6ch supports 2/4/6 ch speaker (optional)

### **BIOS**

- The mainboard BIOS provides “Plug & Play” BIOS which detects the peripheral devices and expansion cards of the board automatically.
- The mainboard provides a Desktop Management Interface (DMI) function which records your mainboard specifications.

### **Dimension**

- ATX Form Factor 30.5cm x 23cm

### **Mounting**

- 6 mounting holes





## Quick Components Guide

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Component	Function
JWR1	ATX 20-pin power connector
JPW1	ATX 12V power connector
JKBMS1	Mouse connector
JKBMS1	Keyboard connector
USB Connectors	Connecting to USB devices
COM A & COM B	Serial port connector
LPT1	Parallel port connector
FDD1	Floppy disk drive connector
J9	IrDA infrared module connector
IDE1~ IDE2	Hard disk connectors
JFP1	Case connector
JCD1	CD-in connector
JAUX1	Aux line-in connector
JPHN1	Modem-in connector
JGL1	Power saving LED connector
J2	TOP Tech. III
JGS1	Power saving switch connector
JMDM1	Wake on ring connector
JWOL1	Wake on LAN connector
CPU/PS/SYS FAN	Fan power connectors
JUSB1	Connecting to USB devices
J8 (optional)	D-Bracket connector
J4	Chassis intrusion switch connector
JBAT1	Clear CMOS jumper
J6	BIOS flash jumper
AGP Slot	Connecting to AGP cards
PCI Slots	Connecting to expansion cards
CNR Slot	Connecting to expansion cards

**Chapter 1**

**Connectors & Jumpers**

**JFP1**

The Keylock, Power Switch, Reset Switch, Power LED, Speaker, and HDD LED are all connected to the JFP1 connector block.  
 If Onboard Buzzer is available, then:  
 Short pin 14-15: Onboard Buzzer Enabled  
 Open pin 14-15: Onboard Buzzer Disabled

**J9**

This connector is for optional wireless transmitting and receiving infrared module.

**J6**

Use the jumper to lock or unlock the boot block area on BIOS. When unlocked, the BIOS boot block area can be updated.

**JBAT1**

A battery must be used to retain the mainboard configuration in CMOS RAM. Short 1-2 pins of JBAT1 to store the CMOS data.

**JGL1**

This connector is used to connect the power saving LED.

**JGS1**

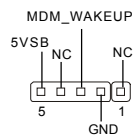
Attach a power saving switch to JGS1. When the switch is pressed, the system immediately enters the suspend/sleep mode.

**J4**

Connect a 2-pin chassis intrusion switch to the connector.

## Introduction

### JMDM1



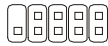
This connector allows you to connect to a modem card with Wake On Ring function. The connector will power up the system when a signal is received through the modem card.

### JWOL1



This connector allows you to connect to a LAN card with Wake On LAN function. You can wake up the computer via remote control through a local area network.

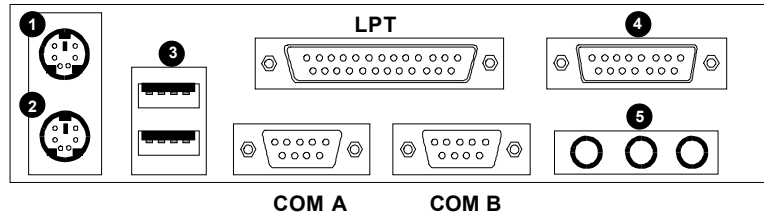
### JUSB1



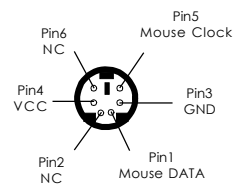
The mainboard provides an additional USB front header for you to connect extra USB devices.

Chapter 1

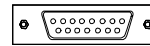
Back Panel



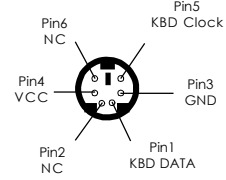
**1** Mouse Connector



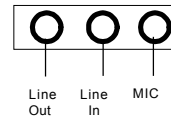
**4** Midi/Joystick



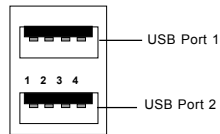
**2** Keyboard Connector



**5** Audio Ports



**3** USB Ports



PIN	SIGNAL
1	VCC
2	-Data
3	+Data
4	GND

---

## AWARD® BIOS Setup

# 2

The mainboard uses AWARD® 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:

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## Chapter 2

### Entering Setup

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Power on the computer. When the below message appears briefly at the bottom of the screen during the POST (Power On Self Test), press <Del> key or simultaneously press <Ctrl>, <Alt>, and <Esc> keys to enter Setup.

TO ENTER SETUP BEFORE BOOT, PRESS <CTRL-ALT-ESC>  
OR <DEL> KEY

If the message disappears before you respond and you still wish to enter Setup, restart the system by turning it OFF then On or pressing the RESET button to try again. You may also restart 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
<F1>	General help, only for Status Page Setup Menu and Option Page Setup Menu
<F5>	Restore the previous CMOS value from CMOS, only for Option Page Setup Menu
<F6>	Load the default CMOS value from Fail-Safe default table, only for Option Page Setup Menu
<F7>	Load Optimized defaults
<F10>	Save all the CMOS changes and exit

## Getting Help

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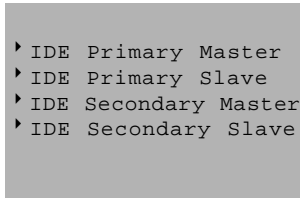
After entering the Setup menu, the first menu you will see is the Main Menu.

### Main Menu

The main menu lists the setup functions you can make changes to. You can use the control keys ( ↑↓ ) to select the item. The on-line description of the highlighted setup function is displayed at the bottom of the screen.

### Sub-Menu

If you find a right pointer symbol (as shown in the right view) appears to the left of certain fields that means a sub-menu containing additional options can be launched from this field. You can use control keys ( ↑↓ ) to highlight the field and press <Enter> to call up the sub-menu. Then you can use the control keys to enter values and move from field to field within a sub-menu. If you want to return to the main menu, just press <Esc>.



```
▶ IDE Primary Master
▶ IDE Primary Slave
▶ IDE Secondary Master
▶ IDE Secondary Slave
```

### General Help <F1>

The BIOS setup program provides a General Help screen. You can call up this screen from any menu by simply pressing <F1>. The Help screen lists the appropriate keys to use and the possible selections for the highlighted item. Press <Esc> to exit the Help screen.



## Chapter 2

### The Main Menu

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Once you enter Award® BIOS CMOS Setup Utility, the Main Menu (Figure 1) will appear on the screen. The Main Menu allows you to select from twelve setup functions and two exit choices. Use arrow keys to select among the items and press <Enter> to accept or enter the sub-menu.

CMOS Setup Utility - Copyright(C) 1984-2001 Award Software

Standard CMOS Features	Frequency/Voltage Control
Advanced BIOS Features	Load High Performance Defaults
Advanced Chipset Features	Load BIOS Setup Defaults
Integrated Peripherals	Set Supervisor Password
Power Management Setup	Set User Password
PnP/PCI Configurations	Save & Exit Setup
PC Health Status	Exit Without Saving
Esc : Quit F9: Menu in BIOS ↑↓→← : Select Item	
F10 : Save & Exit Setup	
Time, Date, Hard Disk Type...	

## Standard CMOS Features

The items in Standard CMOS Features Menu are divided into 10 categories. Each category includes no, one or more than one setup items. Use the arrow keys to highlight the item and then use the <PgUp> or <PgDn> keys to select the value you want in each item.

CMOS Setup Utility - Copyright(C) 1984-2001 Award Software  
Standard CMOS Features

Date(mm:dd:yy):	Mon, Jun 4, 2001	Item Help
Time(hh:mm:ss):	00:00:00	
IDE Primary Master		Menu Level >
IDE Primary Slave		
IDE Secondary Master		
IDE Secondary Slave		
Drive A	[1.44M, 3.5in.]	
Drive B	[None]	
Video	[EGA/VGA]	
Halt On	[All, But Keyboard]	
Base Memory	640K	
Extended Memory	65472K	
Total Memory	1024K	
↑↓→← Move Enter:Select +/-/PU/PD:Value F10:Save ESC:Exit F1:General Help F5:Previous Values F6:Fail-Safe Defaults F7:Optimized Defaults		

**Chapter 2**

**Advanced BIOS Features**

CMOS Setup Utility - Copyright(C) 1984-2001 Award Software  
Advanced BIOS Features

Anti-Virus Protection	[Disabled]	Item Help
CPU L1 & L2 Cache	[Enabled]	
Quick Boot	[Enabled]	
Promise & SCSI Boot Order	[Promise,SCSI]	
1st Boot Device	[Floppy]	Menu Level >
2nd Boot Device	[HDD-0]	
3rd Boot Device	[CDROM]	
Boot Other Device	[Enabled]	
Swap Floppy	[Disabled]	
Seek Floppy	[Disabled]	
Boot Up Num-Lock LED	[On]	
Gate A20 Option	[Fast]	
Typematic Rate Setting	[Disabled]	
x Typematic Rate (Chars/Sec)	6	
x Typematic Delay (Msec)	250	
Security Option	[Setup]	
APIC Mode	[Enabled]	
MPS Version Control For OS	[1.1]	
Boot OS/2 for DRAM > 64MB	[No]	
Hard Disk S.M.A.R.T.	[Disabled]	

↑↓→← Move Enter:Select +/-/PU/PD:Value F10:Save ESC:Exit F1:General Help  
F5:Previous Values F6:Fail-Safe Defaults F7:Optimized Defaults

## Advanced Chipset Features

The Advanced Chipset Features Setup option is used to change the values of the chipset registers. These registers control most of the system options in the computer.

Choose the “ADVANCED CHIPSET FEATURES” from the Main Menu and the following screen will appear.

CMOS Setup Utility - Copyright(C) 1984-2001 Award Software  
Advanced Chipset Features

Configure DRAM Timing	[By SPD]	Item Help
CAS# Latency	[3]	
Precharge Delay	[6]	
RAS# to CAS# Delay	[3]	
RAS# Precharge	[3]	
DRAM Data Integrity Mode	[Non-ECC]	Menu Level >
Memory Hole At 15M-16M	[Disabled]	
Delayed Transaction	[Enabled]	
AGP Aperture Size (MB)	[64]	
↑ ↓ → ← Move Enter:Select +/-/PU/PD:Value F10:Save ESC:Exit F1:General Help F5:Previous Values F6:Fail-Safe Defaults F7:Optimized Defaults		



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

**Chapter 2**

**Integrated Peripherals**

CMOS Setup Utility - Copyright(C) 1984-2001 Award Software  
Integrated Peripherals

On-Chip Primary PCI IDE	[Enabled]	Item Help
On-Chip Secondary PCI IDE	[Enabled]	
IDE Primary Master PIO	[Auto]	Menu Level >
IDE Primary Slave PIO	[Auto]	
IDE Secondary Master PIO	[Auto]	
IDE Secondary Slave PIO	[Auto]	
IDE Primary Master UDMA	[Auto]	
IDE Primary Slave UDMA	[Auto]	
IDE Secondary Master UDMA	[Auto]	
IDE Secondary Slave UDMA	[Auto]	
USB Controller	[Enabled]	
USB Keyboard Support	[Disabled]	
Init Display First	[AGP]	
AC'97 Audio	[Auto]	
AC'97 Modem	[Auto]	
Onboard Sound Chip	[Enabled]	
IDE RAID Controller	[Enabled]	
IDE HDD Block Mode	[Enabled]	
Floppy Controller	[Enabled]	
Serial Port A	[3F8/IRQ4]	
Serial Port B	[2F8/IRQ3]	
Serial Port B Mode	[Normal]	
RxD, TxD Active	[Hi,Lo]	
IR Transmission Delay	[Enabled]	
IR Duplex Mode	[Half]	
IR Pin Select	[IR-Rx2Tx2]	
Parallel Port	[378/IRQ7]	
Parallel Port Mode	[ECP]	
EPP Version	[1.7]	
ECP Mode Use DMA	[3]	
Onboard Game Port	[201]	
Onboard Midi Port	[330]	
Midi IRQ Select	[10]	
↑↓ → ← Move Enter:Select +/-/PU/PD:Value F10:Save ESC:Exit F1:General Help F5:Previous Values F6:Fail-Safe Defaults F7:Optimized Defaults		

## Power Management Setup

The Power Management Setup allows you to configure your system to most effectively save energy while operating in a manner consistent with your own style of computer use.

CMOS Setup Utility - Copyright(C) 1984-2001 Award Software  
Power Management Setup

IPCA Function	[Enabled]	Item Help
ACPI Standby State	[S1/POS]	
Power Management/APM	[User Define]	Menu Level >
Modem Use IRQ	[3]	
Suspend Time Out	[Disabled]	
Power Button Function	[Power Off]	
Wake Up On PME	[Disabled]	
Wake Up On Ring	[Enabled]	
Wake Up On LAN	[Enabled]	
USB Wakeup From S3	[Disabled]	
CPU THRM-Throttling	[50.0%]	
Resume By RTC Alarm	[Disabled]	
x Date(of Month) Alarm	0	
x Date(hh:mm:ss) Alarm	0 : 0 : 0	
POWER ON Function	[Button Only]	
KB Power On Password	[Enter]	
Hot Key Power ON	[Ctrl-F1]	
Power Again	[Power Off]	
Sleep State LED	[Single]	
**Reload Global Timer Events**		
Primary Master IDE	[Disabled]	
Primary Slave IDE	[Disabled]	
Secondary Master IDE	[Disabled]	
Secondary Slave IDE	[Disabled]	
FDC/LPT/COM Ports	[Disabled]	
↓ → ← Move Enter:Select +/-/PU/PD:Value F10:Save ESC:Exit F1:General Help F5:Previous Values F6:Fail-Safe Defaults F7:Optimized Defaults		

## Chapter 2

### PNP/PCI Configurations

This section describes configuring the PCI bus system. 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 own 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.

CMOS Setup Utility - Copyright(C) 1984-2001 Award Software  
PnP/PCI Configurations

PNP OS Installed	[No]	Item Help
Reset Configuration Data	[Disabled]	
Resources Controlled By	[Auto<ESCD>]	Menu Level >
x IRQ Resources	Press Enter	
x DMA Resources	Press Enter	
PCI/VGA Palette Snoop	[Disabled]	
↑↓ → ← Move Enter:Select +/-/PU/PD:Value F10:Save ESC:Exit F1:General Help F5:Previous Values F6:Fail-Safe Defaults F7:Optimized Defaults		

## PC Health Status

This section shows the status of your CPU, fan, warning for overall system status.

CMOS Setup Utility - Copyright(C) 1984-2001 Award Software  
PC Health Status

Current System Temp.	32°C/89°F	Item Help
Current CPU Temperature	48°C/122°F	
Current Top Tech. III Temp.	NA	Menu Level >
SYSTEM fan	0	
POWER fan	0	
CPU fan	4963RPM	
Vcore	1.71V	
3.3V	3.32V	
+5V	4.91V	
+12V	11.61V	
-12V	-12.69V	
-5V	-5.14V	
VBAT(V)	3.21V	
5VSB(V)	4.94V	
Chassis Intrusion Detect	[Disabled]	
CPU Critical Temperature	[Disabled]	
↑↓→← Move Enter:Select +/-/PU/PD:Value F10:Save ESC:Exit F1:General Help F5:Previous Values F6:Fail-Safe Defaults F7:Optimized Defaults		



**Chapter 2**

**Frequency/Voltage Control**

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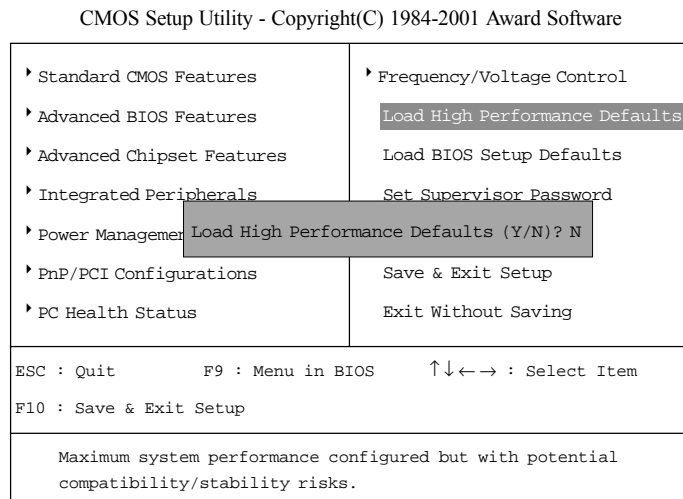
CMOS Setup Utility - Copyright(C) 1984-2001 Award Software  
Frequency/Voltage Control

AGP Voltage Adjust	[1.60V]	Item Help
DRAM Voltage Adjust	[3.5V]	
CPU Ratio Selection	[X 8]	Menu Level >
Auto Detect PCI Clock	[Enabled]	
Spread Spectrum	[+/-0.25%]	
CPU FSB Clock (Mhz)	[100]	
CPU Vcore Adjust	[1.475V]	
↑↓ → ← Move Enter:Select +/-/PU/PD:Value F10:Save ESC:Exit F1:General Help F5:Previous Values F6:Fail-Safe Defaults F7:Optimized Defaults		


## Load High Performance Defaults

This option on the main menu allows users to restore all the BIOS settings to the default High Performance values. The High Performance Defaults are the default values set by the mainboard manufacturer specifically for optimal system performance. To optimize the system performance, techniques like CPU overclocking are applied. Please make sure, however, that your components are able to tolerate the abnormal settings while doing overclocking. Any attempt to operate beyond product specifications is not recommended. We do not guarantee the damages or risks caused by inadequate operation or beyond product specifications.

When you select Load High Performance Defaults, a message as below appears:



Pressing Y loads the BIOS default values for optimal, high performance system operations.

	<p><b>This setting is for experienced or overclocking users only.</b> If the system crashes or hangs after enabling the feature, please CLEAR CMOS DATA to resolve the problem. For more information, refer to Clear CMOS Jumper: JBAT1 in Chapter 1.</p>
<p><b>WARNING!</b></p>	

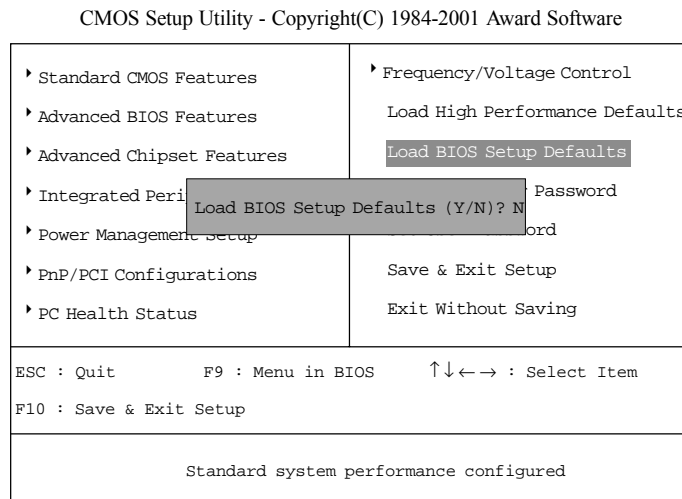
## Chapter 2

### Load BIOS Setup Defaults

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This option on the main menu allows users to restore all the BIOS settings to the default BIOS Setup values. The BIOS Setup Defaults are the default values set by the mainboard manufacturer specifically for minimal/stable system performance.

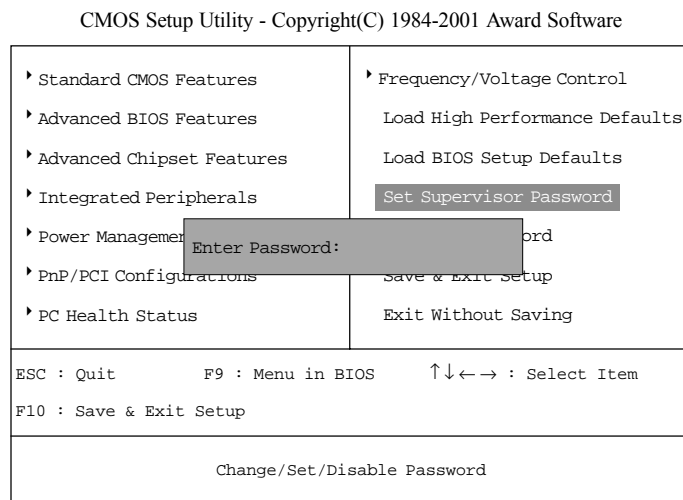
When you select Load BIOS Setup Defaults, a message as below appears:



Pressing *Y* loads the BIOS default values for the most stable, minimal system performance.

## Set Supervisor/User Password

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



Type the password, up to eight 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. Re-type 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.

Additionally, when a password is enabled, you can also have BIOS 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

## **Chapter 2**

required is the Security Option of the Advanced BIOS Features menu. If the Security Option is set to *System*, 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:***

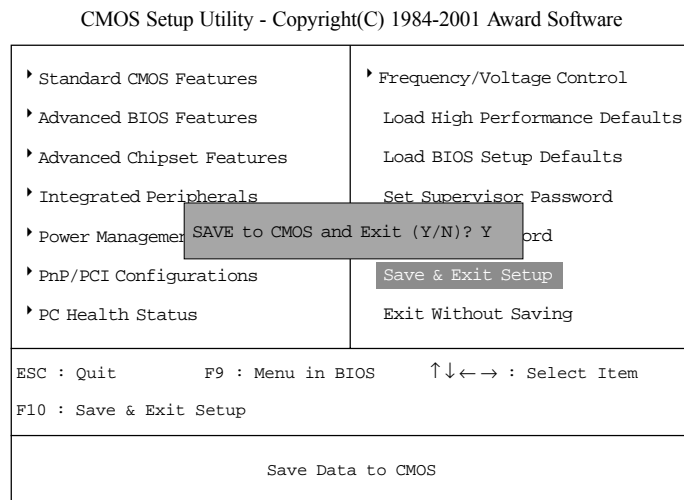
*Supervisor password :* Can enter and change the settings of the setup menus.

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

## Save & Exit Setup

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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:



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

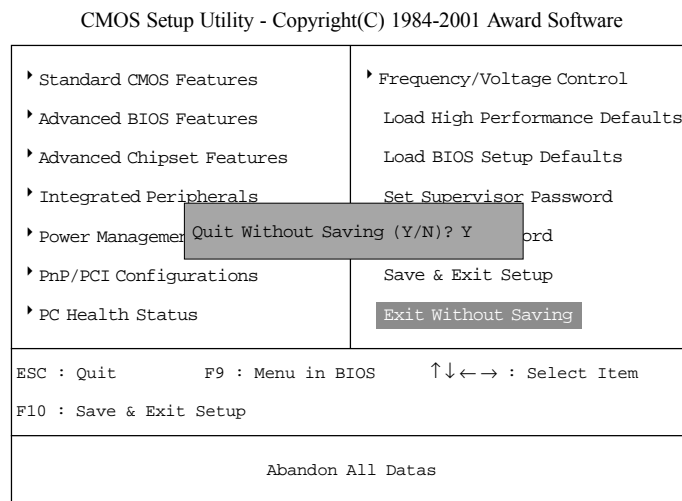
Typing “N” will return to the Setup Utility.

## Chapter 2

### Exit Without Saving

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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:



Typing “Y” will allow you to quit the Setup Utility without saving any changes to RTC CMOS.

Typing “N” will return to the Setup Utility.