

GA-8TRC410MF-FS-02

Intel® Pentium® 4 LGA775 Processor Motherboard

User's Manual

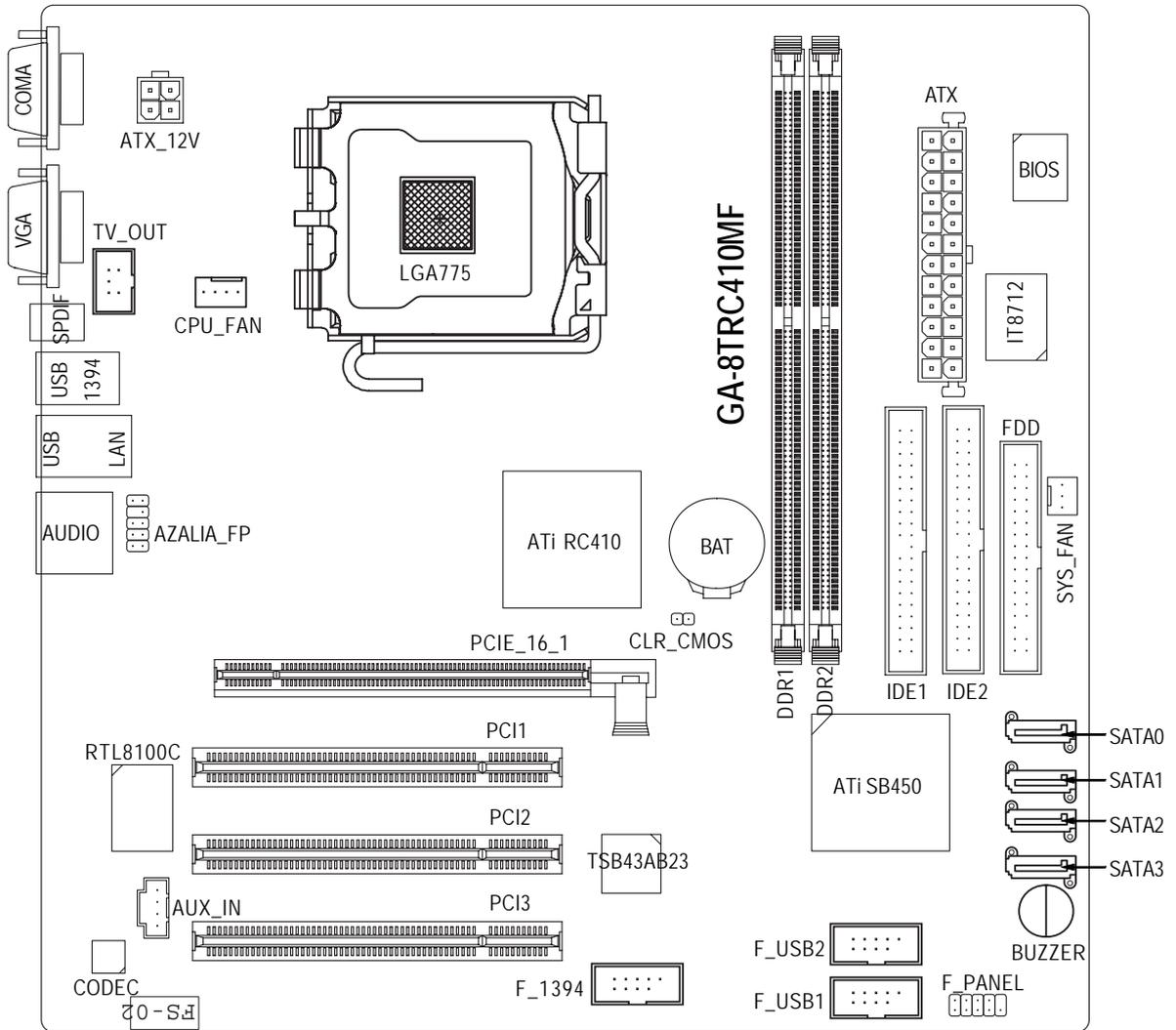
Rev. 1001



* The WEEE marking on the product indicates this product must not be disposed of with user's other household waste and must be handed over to a designated collection point for the recycling of waste electrical and electronic equipment!!

* The WEEE marking applies only in European Union's member states.

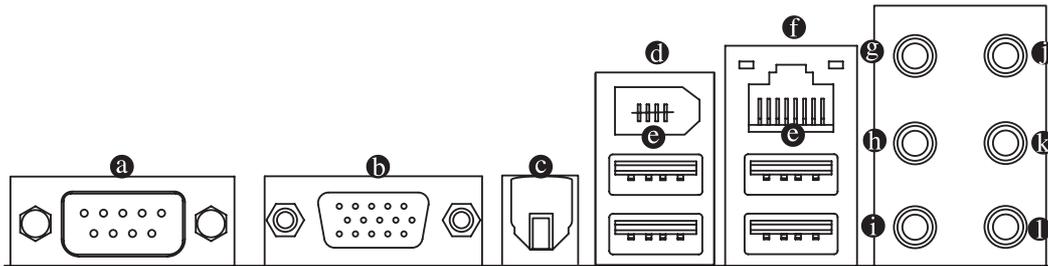
GA-8TRC410MF-FS-02 Motherboard Layout



1-1 Feature Summary

CPU	<ul style="list-style-type: none"> ◆ Supports LGA775 Intel® Pentium® 4 Processor ◆ Supports 800/533MHz FSB ◆ L2 cache varies with CPU
Chipset	<ul style="list-style-type: none"> ◆ North Bridge: ATi RC410 ◆ South Bridge: ATi SB450 ◆ Supported on the Win XP operating systems
Memory	<ul style="list-style-type: none"> ◆ 2 DDR DIMM memory slots (supports up to 2GB memory) ◆ Supports DDR 400/333/266/200 DIMM
Slots	<ul style="list-style-type: none"> ◆ 1 PCI Express x 16 slot ◆ 3 PCI slots
IDE Connections	<ul style="list-style-type: none"> ◆ 2 IDE connection (UDMA 33/ATA 66/ATA 100/ATA 133), allows connection of 4 IDE devices
FDD Connections	<ul style="list-style-type: none"> ◆ 1 FDD connection, allows connection of 2 FDD devices
Onboard SATA	<ul style="list-style-type: none"> ◆ 4 Serial ports from ATi SB450 controller ◆ Supported on the Win XP operating systems
Peripherals	<ul style="list-style-type: none"> ◆ 1 VGA port, 1 COMA port, onboard TV-OUT connection ◆ 8 USB 2.0/1.1 ports (rear x 4, front x 4 via cable) ◆ 1 front audio connector ◆ 2 IEEE1394 ports (rear x 1, front x1 via cable)
Onboard LAN	<ul style="list-style-type: none"> ◆ Onboard Realtek 8100C chip (10/100Mbit) ◆ 1 RJ 45 port
Onboard Audio	<ul style="list-style-type: none"> ◆ ALC880 CODEC ◆ High Definition Audio ◆ Supports 2 / 4 / 6 / 8 channel audio ◆ Supports Line In; Line Out (Front Speaker Out); MIC; Surround Speaker Out (Rear Speaker Out); Center/Subwoofer Speaker Out; Side Speaker Out connection ◆ Supports SPDIF Out connection ◆ AUX In connection ◆ Supported on the Win XP operating systems
I/O Control	<ul style="list-style-type: none"> ◆ IT8712
Hardware Monitor	<ul style="list-style-type: none"> ◆ System voltage detection ◆ CPU temperature detection ◆ CPU / System fan speed detection ◆ CPU warning temperature ◆ CPU smart fan control
Onboard SATA RAID	<ul style="list-style-type: none"> ◆ Onboard ATi SB450 chipset - supports data striping (RAID 0) or mirroring (RAID 1) function - supports data transfer rate of up to 150 MB/s - supports hot plugging function - supports a maximum of 4 SATA connections - supported on the Win XP operating systems
Form Factor	<ul style="list-style-type: none"> ◆ Micro ATX form factor; 24.4cm x 24.4cm

1-2 I/O Back Panel Introduction

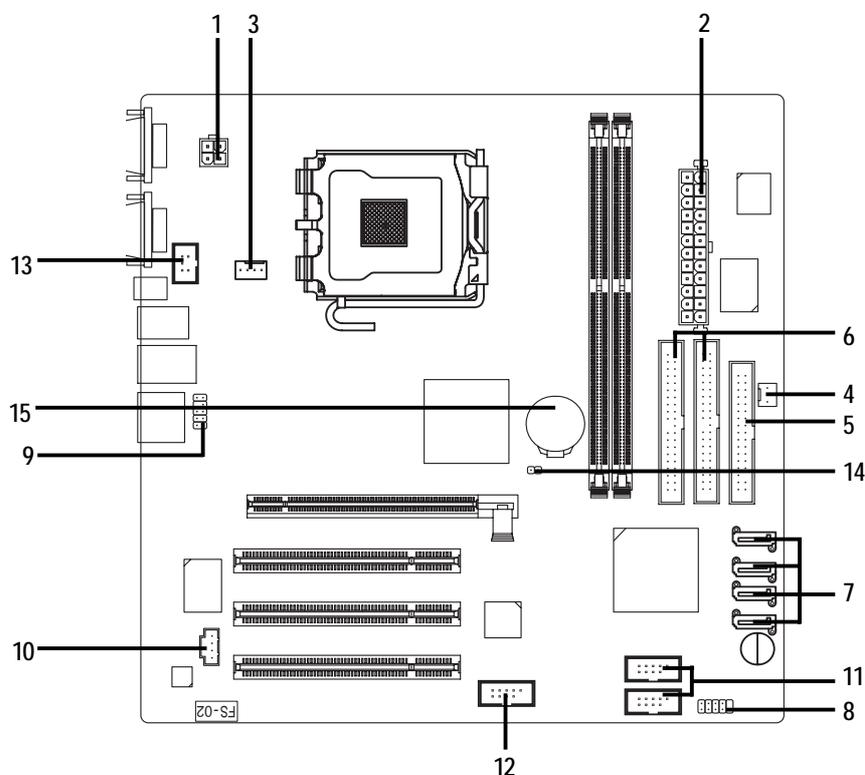


- a COMA (Serial Port)**
Connects to serial-based mouse or data processing devices.
- b VGA Port**
Monitor can be connected to VGA port.
- c SPDIF (OPTICAL)**
The SPDIF optical output port is capable of providing digital audio to external speakers or compressed AC3 data to an external Dolby Digital Decoder via an optical cable.
- d IEEE 1394 Port**
Serial interface standard set by Institute of Electrical and Electronics Engineers, which has features like high speed, high bandwidth and hot plug.
- e USB Port**
Before you connect your device(s) into USB connector(s), please make sure your device(s) such as USB keyboard, mouse, scanner, zip, speaker...etc. have a standard USB interface. Also make sure your OS supports USB controller. If your OS does not support USB controller, please contact OS vendor for possible patch or driver upgrade. For more information please contact your OS or device(s) vendors.
- f LAN Port**
The provided Internet connection provides data transfer speeds of 10/100Mbps.
- g Line In**
Devices like CD-ROM, walkman etc. can be connected to Line In jack.
- h Line Out (Front Speaker Out)**
Connect the stereo speakers, earphone or front surround speakers to this connector.
- i MIC In**
Microphone can be connected to MIC In jack.
- j Rear Speaker Out**
Connect the rear surround speakers to this connector.
- k Center/Subwoofer Speaker Out**
Connect the Center/Subwoofer speakers to this connector.
- l Side Speaker Out**
Connect the side surround speakers to this connector.



NOTE You can use audio software to configure 2-/4-/6-/8-channel audio functioning.

1-3 Connectors Introduction



1) ATX_12V	9) AZALIA_FP
2) ATX (Power Connector)	10) AUX_IN
3) CPU_FAN	11) F_USB1 / F_USB2
4) SYS_FAN	12) F_1394
5) FDD	13) TV_OUT
6) IDE1 / IDE2	14) CLR_CMOS
7) SATA0/ATA1/SATA2/SATA3	15) BAT
8) F_PANEL	

1/2) ATX_12V/ATX (Power Connector)

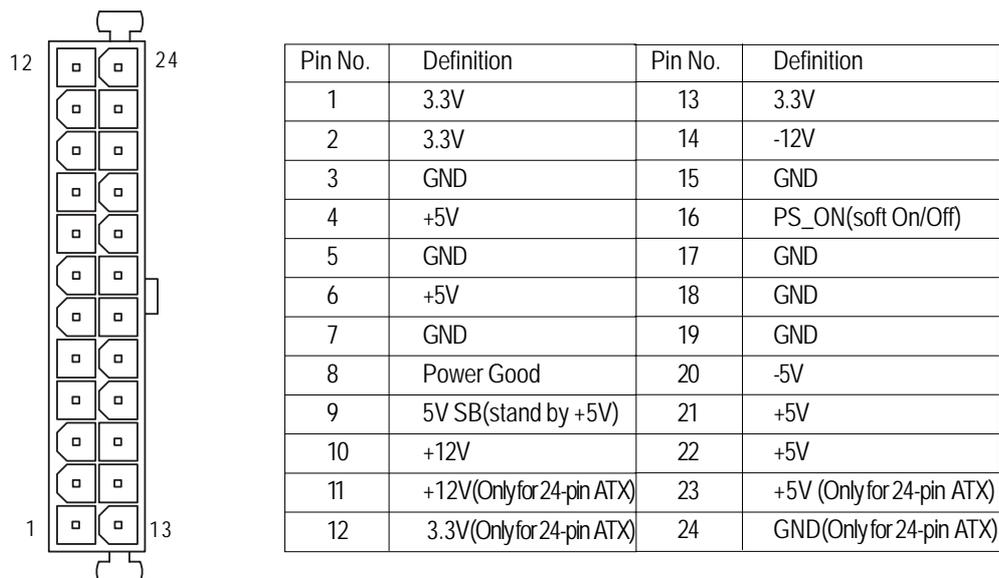
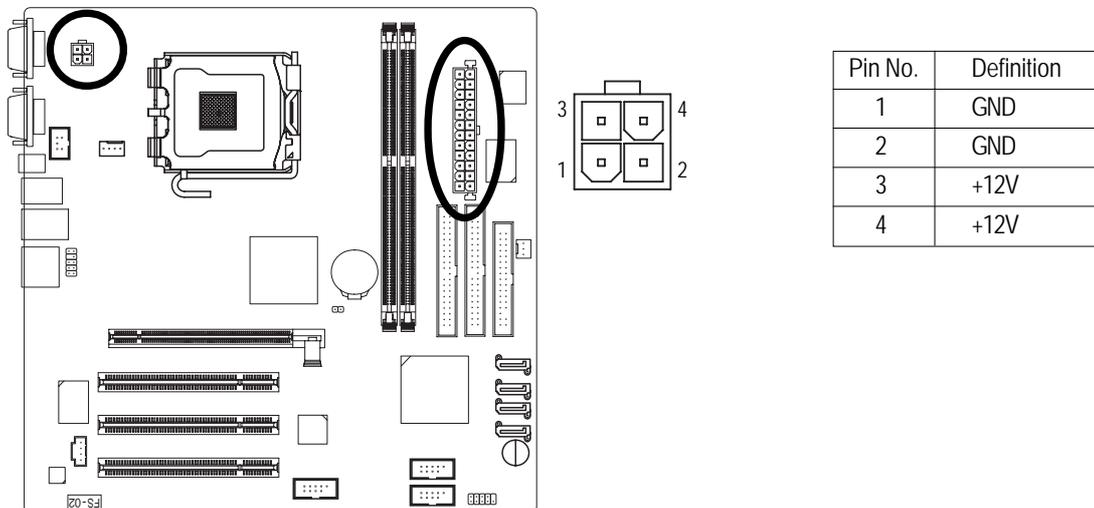
With the use of the power connector, the power supply can supply enough stable power to all the components on the motherboard. Before connecting the power connector, please make sure that all components and devices are properly installed. Align the power connector with its proper location on the motherboard and connect tightly.

The ATX_12V power connector mainly supplies power to the CPU. If the ATX_12V power connector is not connected, the system will not start.

Caution!

Please use a power supply that is able to handle the system voltage requirements. It is recommended that a power supply that can withstand high power consumption be used (300W or greater). If a power supply is used that does not provide the required power, the result can lead to an unstable system or a system that is unable to start.

If you use a 24-pin ATX power supply, please remove the small cover on the power connector on the motherboard before plugging in the power cord; otherwise, please do not remove it.



3/4) CPU_FAN / SYS_FAN (Cooler Fan Power Connector)

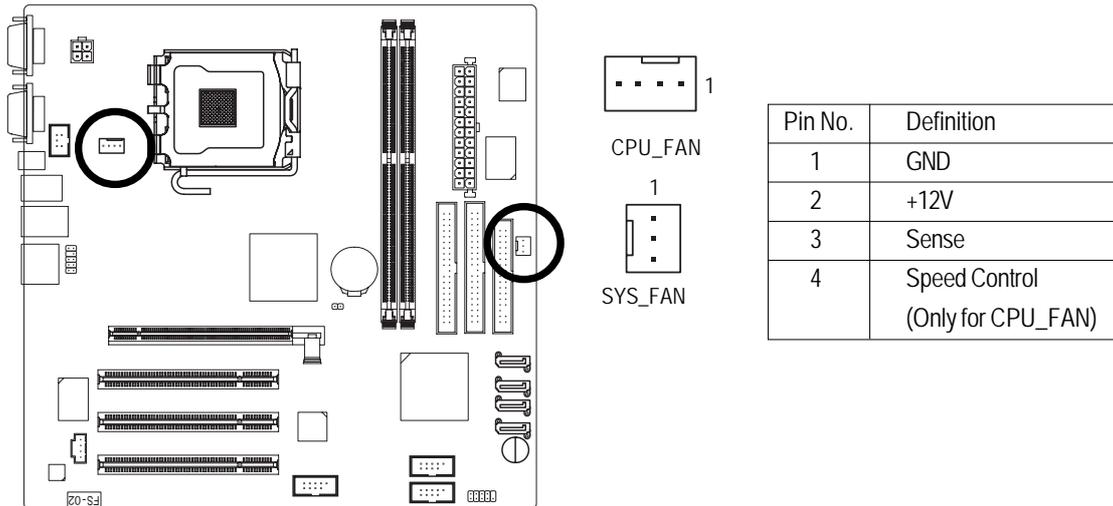
The cooler fan power connector supplies a +12V power voltage via a 3-pin/4-pin (only for CPU_FAN) power connector and possesses a foolproof connection design.

Most coolers are designed with color-coded power connector wires. A red power connector wire indicates a positive connection and requires a +12V power voltage. The black connector wire is the ground wire (GND).

Please remember to connect the power to the cooler to prevent system overheating and failure.

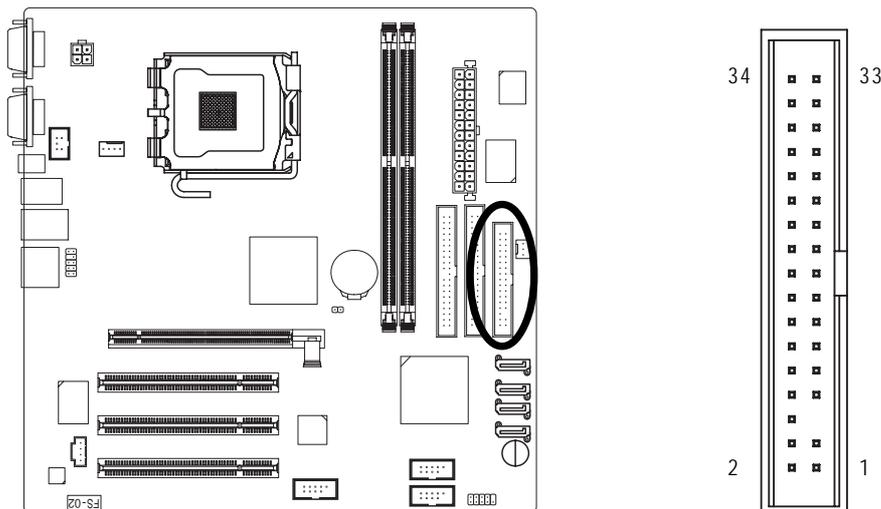
Caution!

Please remember to connect the power to the CPU fan to prevent CPU overheating and failure.



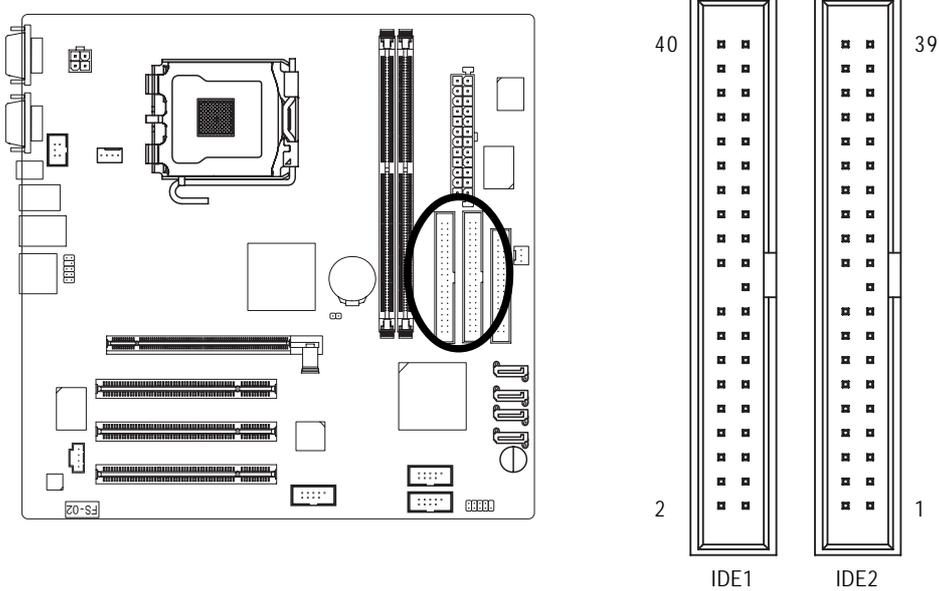
5) FDD (FDD Connector)

The FDD connector is used to connect the FDD cable while the other end of the cable connects to the FDD drive. The types of FDD drives supported are: 360KB, 720KB, 1.2MB, 1.44MB and 2.88MB. Please connect the red power connector wire to the pin1 position.



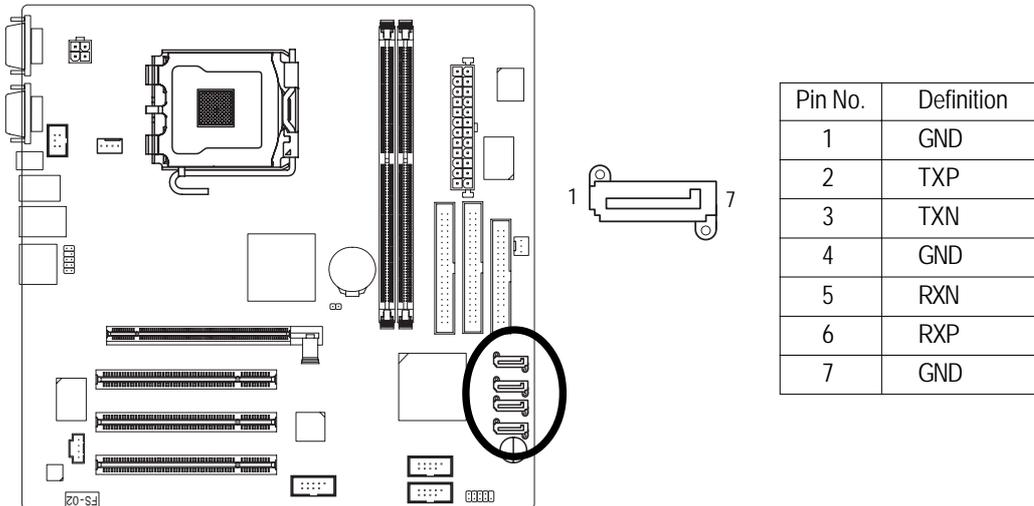
6) IDE1 / IDE2 (IDE Connector)

An IDE device connects to the computer via an IDE connector. One IDE connector can connect to one IDE cable, and the single IDE cable can then connect to two IDE devices (hard drive or optical drive). If you wish to connect two IDE devices, please set the jumper on one IDE device as Master and the other as Slave (for information on settings, please refer to the instructions located on the IDE device).



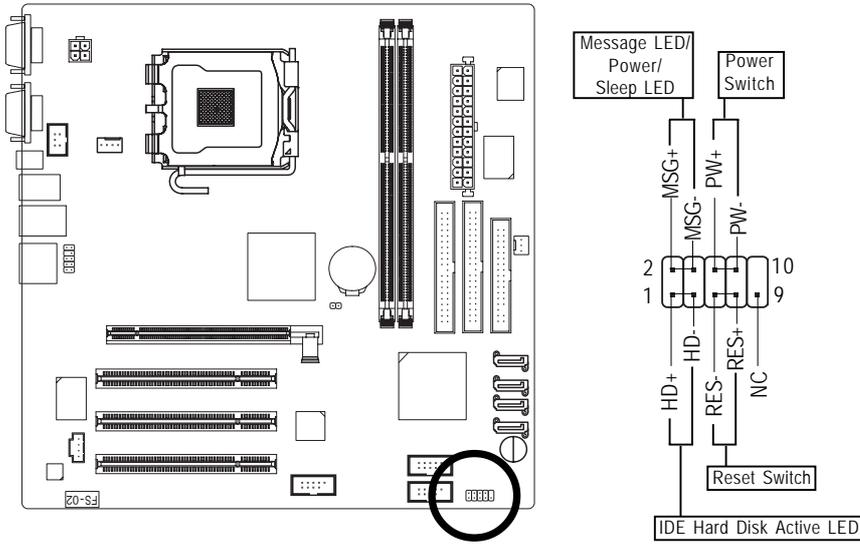
7) SATA0/1/2/3 (SATA Connectors, Controlled by ATi SB450)

Serial ATA can provide up to 150MB/s transfer rate. Please refer to the BIOS setting for the Serial ATA and install the proper driver in order to work properly.



8) F_PANEL (Front Panel Jumper)

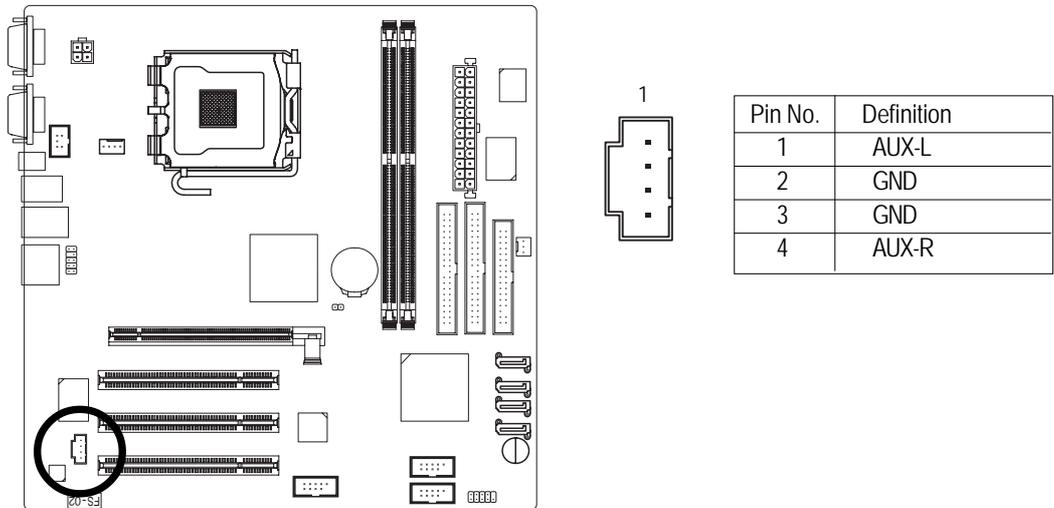
Please connect the power LED, PC speaker, reset switch and power switch etc. of your chassis front panel to the F_PANEL connector according to the pin assignment below.



HD (IDE Hard Disk Active LED)	Pin 1: LED anode(+) Pin 2: LED cathode(-)
RES (Reset Switch)	Open: Normal Close: Reset Hardware System
PW (Power Switch)	Open: Normal Close: Power On/Off
MSG(Message LED/Power/Sleep LED)	Pin 1: LED anode(+) Pin 2: LED cathode(-)
NC	NC

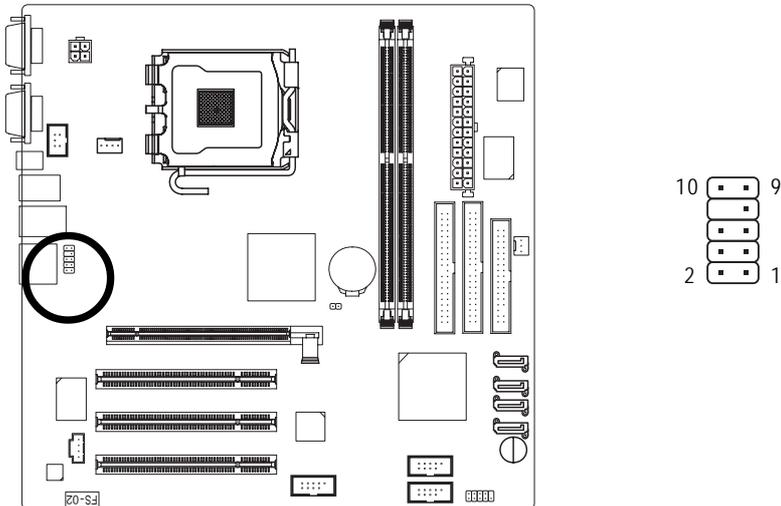
9) AUX_IN (AUX In Connector)

Connect other device (such as PCI TV Tuner audio out) to the connector.



10) AZALIA_FP (Front Audio Connector)

This connector supports HD (High Definition) front panel audio module. If you wish to use the front audio function, connect the front panel audio module to this connector. Check the pin assignments carefully while you connect the front panel audio module. Incorrect connection between the module and connector will make the audio device unable to work or even damage it. For optional front panel audio module, please contact your chassis manufacturer.



HD Audio:

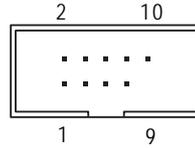
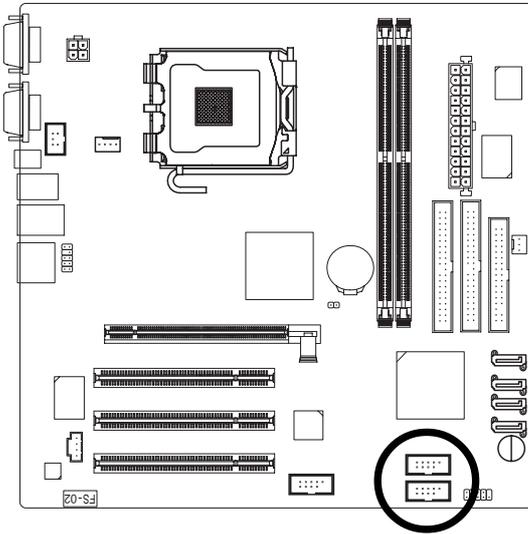
Pin No.	Definition
1	MIC2_L
2	GND
3	MIC2_R
4	-ACZ_DET
5	Line2_R
6	FSENSE1
7	FAUDIO_JD
8	No Pin
9	LINE2_L
10	FSENSE2

AC'97 Audio:

Pin No.	Definition
1	MIC
2	GND
3	MIC Power
4	NC
5	Line Out (R)
6	NC
7	NC
8	No Pin
9	Line Out (L)
10	NC

11) F_USB1 / F_USB2 (Front USB Connector)

Be careful with the polarity of the front USB connector. Check the pin assignment carefully while you connect the front USB cable, incorrect connection between the cable and connector will make the device unable to work or even damage it. For optional front USB cable, please contact your local dealer.

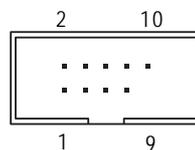
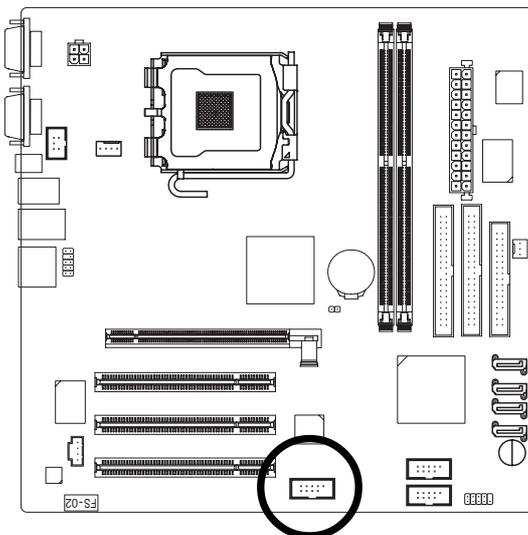


Pin No.	Definition
1	Power
2	Power
3	USB DX-
4	USB Dy-
5	USB DX+
6	USB Dy+
7	GND
8	GND
9	No Pin
10	NC

12) F_1394 (IEEE 1394 Connector)

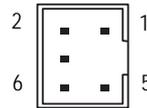
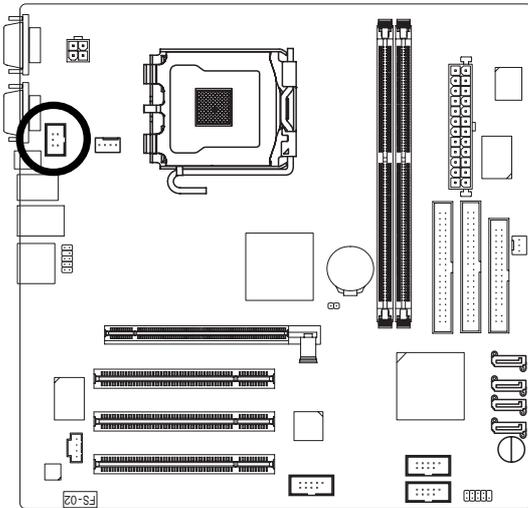
Serial interface standard set by Institute of Electrical and Electronics Engineers, which has features like high speed, highbandwidth and hot plug. Be careful with the polarity of the IEEE1394 connector.

Check the pin assignment carefully while you connect the IEEE1394 cable, incorrect connection between the cable and connector will make the device unable to work or even damage it. For optional IEEE1394 cable, please contact your local dealer.



Pin No.	Definition
1	TPA+
2	TPA-
3	GND
4	GND
5	TPB+
6	TPB-
7	Power
8	Power
9	No Pin
10	GND

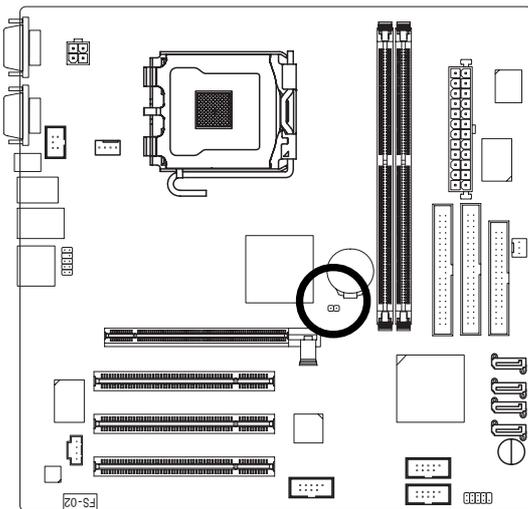
13) TV_OUT



Pin No.	Definition
1	GND1
2	COMP
3	No Pin
4	BTC
5	GND2
6	BTY

14) CLR_CMOS (Clear CMOS)

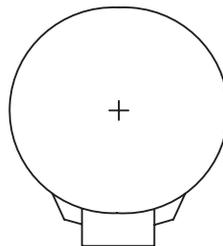
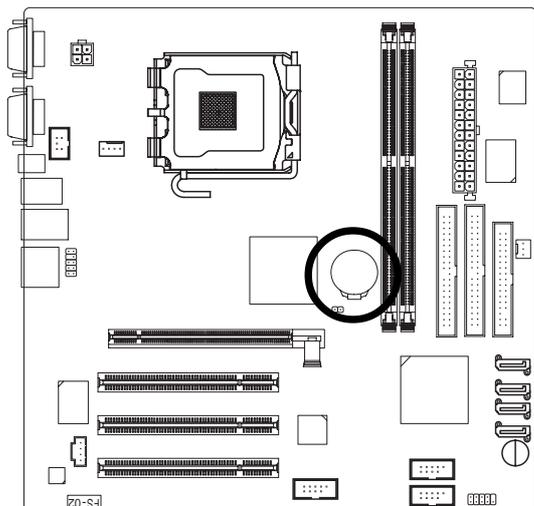
You may clear the CMOS data to its default values by this jumper. To clear CMOS, temporarily short 1-2 pin. Default doesn't include the "Shunter" to prevent from improper use this jumper.



 1 Open: Normal

 1 Short: Clear CMOS

15) BAT(Battery)



- ❖ 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.

If you want to erase CMOS...

1. Turn OFF the computer and unplug the power cord.
2. Remove the battery, wait for 30 seconds.
3. Re-install the battery.
4. Plug the power cord and turn ON the computer.

Chapter 2 BIOS Setup

BIOS (Basic Input and Output System) includes a CMOS SETUP utility which allows user to configure required settings or to activate certain system features.

The CMOS SETUP saves the configuration in the CMOS SRAM of the motherboard.

When the power is turned off, the battery on the motherboard supplies the necessary power to the CMOS SRAM.

CONTROL KEYS

<↑> <↓> <←> <→>	Move to select item
<Enter>	Select Item
<Esc>	Main Menu - Quit and not save changes into CMOS Status Page Setup Menu and Option Page Setup Menu - Exit current page and return to Main Menu
<Page Up>	Increase the numeric value or make changes
<Page Down>	Decrease the numeric value or make changes
<F1>	General help, only for Status Page Setup Menu and Option Page Setup Menu
<F2>	Item Help
<F5>	Restore the previous CMOS value from CMOS, only for Option Page Setup Menu
<F6>	Load the fail-safe default CMOS value from BIOS default table
<F7>	Load the Optimized Defaults
<F9>	System Information
<F10>	Save all the CMOS changes, only for Main Menu

Main Menu

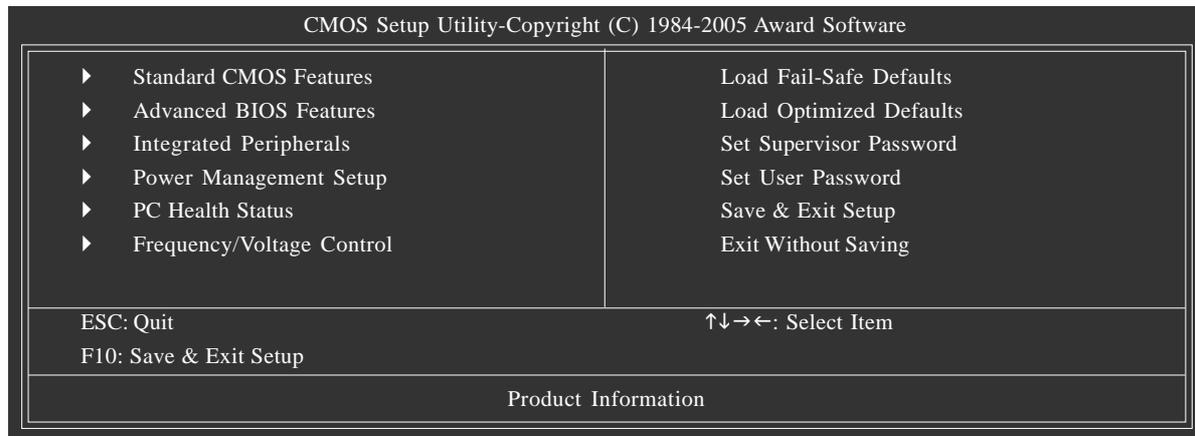
The on-line description of the highlighted setup function is displayed at the bottom of the screen.

Status Page Setup Menu / Option Page Setup Menu

Press F1 to pop up a small help window that describes the appropriate keys to use and the possible selections for the highlighted item. To exit the Help Window press <Esc>.

The Main Menu (BIOS Ver. : E2R)

Once you enter Award BIOS CMOS Setup Utility, the Main Menu (as figure below) will appear on the screen. Use arrow keys to select among the items and press <Enter> to accept or enter the sub-menu.



■ Standard CMOS Features

This setup page includes all the items in standard compatible BIOS.

■ Advanced BIOS Features

This setup page includes all the items of Award special enhanced features.

■ Integrated Peripherals

This setup page includes all onboard peripherals.

■ Power Management Setup

This setup page includes all the items of Green function features.

■ PC Health Status

This setup page is the System auto detect Temperature, voltage, fan, speed.

■ Frequency/Voltage Control

This setup page is to control CPU clock and frequency ratio.

■ Load Fail-Safe Defaults

Fail-Safe Defaults indicates the value of the system parameters which the system would be in safe configuration.

■ Load Optimized Defaults

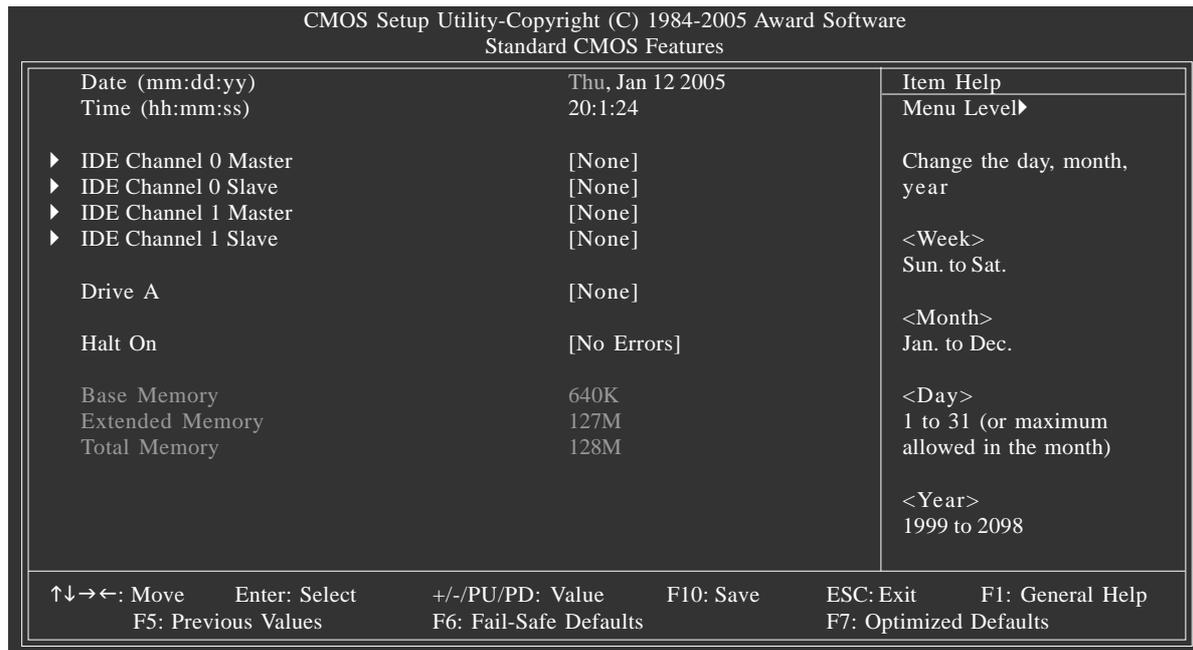
Optimized Defaults indicates the value of the system parameters which the system would be in best performance configuration.

■ Set Supervisor Password

Change, set, or disable password. It allows you to limit access to the system and Setup, or just to Setup.

- **Set User Password**
Change, set, or disable password. It allows you to limit access to the system.
- **Save & Exit Setup**
Save CMOS value settings to CMOS and exit setup.
- **Exit Without Saving**
Abandon all CMOS value changes and exit setup.

2-1 Standard CMOS Features



☞ Date

The date format is <week>, <month>, <day>, <year>.

- ▶▶ Week The week, from Sun to Sat, determined by the BIOS and is display only
- ▶▶ Month The month, Jan. Through Dec.
- ▶▶ Day The day, from 1 to 31 (or the maximum allowed in the month)
- ▶▶ Year The year, from 1999 through 2098

☞ Time

The times format in <hour> <minute> <second>. The time is calculated base on the 24-hour military-time clock. For example, 1 p.m. is 13:00:00.

☞ IDE Channel 0 ~1 Master, Slave

- ▶▶ IDE HDD Auto-Detection Press "Enter" to select this option for automatic device detection.
- ▶▶ IDE Channel 0~1 Master(Slave) IDE Device Setup. You can use one of three methods:
 - Auto Allows BIOS to automatically detect IDE devices during POST(default)
 - None Select this if no IDE devices are used and the system will skip the automatic detection step and allow for faster system start up.
 - Manual User can manually input the correct settings
- ▶▶ Access Mode Use this to set the access mode for the hard drive. The four options are: CHS/LBA/Large/Auto(default:Auto)
- ▶▶ Capacity Capacity of currently installed hard drive.

Hard drive information should be labeled on the outside drive casing. Enter the appropriate option based on this information.

- ▶▶ Cylinder Number of cylinders
- ▶▶ Head Number of heads
- ▶▶ Precomp Write precomp
- ▶▶ Landing Zone Landing zone
- ▶▶ Sector Number of sectors

☞ Drive A

The category identifies the types of floppy disk drive A that has been installed in the computer.

- ▶▶ None No floppy drive installed
- ▶▶ 360K, 5.25" 5.25 inch PC-type standard drive; 360K byte capacity.
- ▶▶ 1.2M, 5.25" 5.25 inch AT-type high-density drive; 1.2M byte capacity (3.5 inch when 3 Mode is Enabled).
- ▶▶ 720K, 3.5" 3.5 inch double-sided drive; 720K byte capacity
- ▶▶ 1.44M, 3.5" 3.5 inch double-sided drive; 1.44M byte capacity.
- ▶▶ 2.88M, 3.5" 3.5 inch double-sided drive; 2.88M byte capacity.

☞ Halt on

The category determines whether the computer will stop if an error is detected during power up.

- ▶▶ No Errors The system boot will not stop for any error that may be detected and you will be prompted. (Default value)
- ▶▶ All Errors Whenever the BIOS detects a non-fatal error the system will be stopped.
- ▶▶ All, But Keyboard The system boot will not stop for a keyboard error; it will stop for all other errors.
- ▶▶ All, But Diskette The system boot will not stop for a disk error; it will stop for all other errors.
- ▶▶ All, But Disk/Key The system boot will not stop for a keyboard or disk error; it will stop for all other errors.

☞ Memory

The category is display-only which is determined by POST (Power On Self Test) of the BIOS.

▶▶ Base Memory

The POST of the BIOS will determine the amount of base (or conventional) memory installed in the system.

The value of the base memory is typically 512K for systems with 512K memory installed on the motherboard, or 640K for systems with 640K or more memory installed on the motherboard.

▶▶ Extended Memory

The BIOS determines how much extended memory is present during the POST.

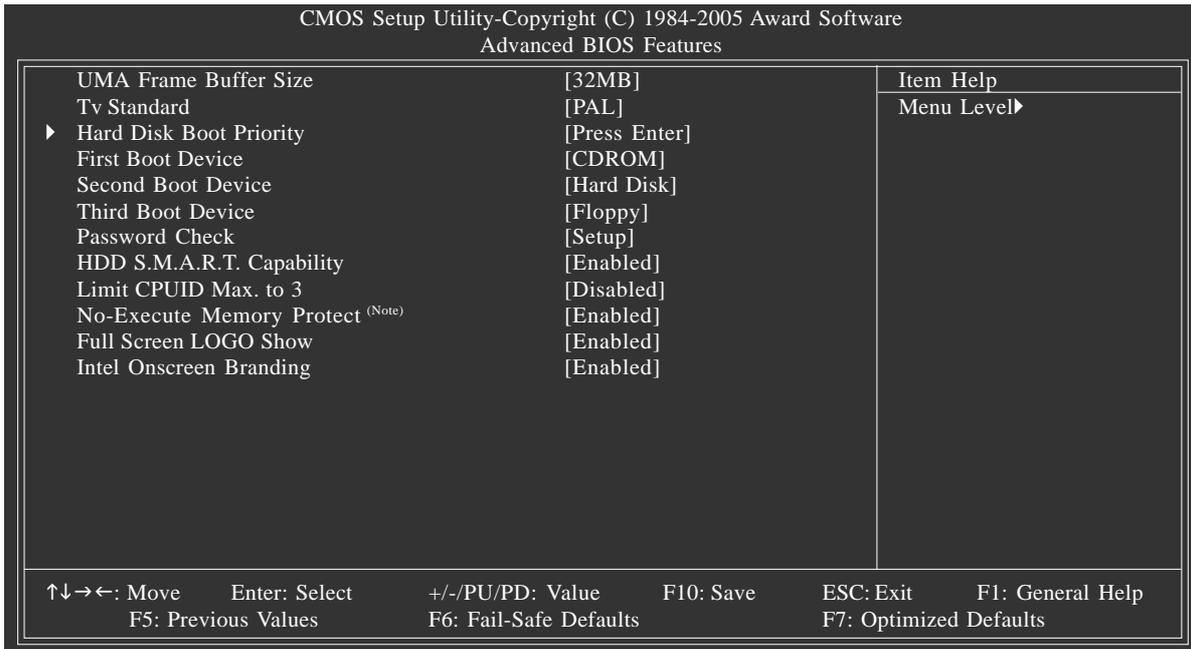
This is the amount of memory located above 1 MB in the CPU's memory address map.

☞ Acoustic Management

As well as hard disk and optical data drives such as CD-ROM, CD-RW and DVD are also responsible for generating noise in the PC. Therefore the BIOS support the acoustic management feature to reduce the noise. In the Standard CMOS Features please select the IDE drive, which should be support the Acoustic management and press Enter. When the IDE device can support the acoustic management then you can see this option in the BIOS setup. The following options are available:

- ▶▶ Disabled
- ▶▶ Medium (default)
- ▶▶ Default

2-2 Advanced BIOS Features



UMA Frame Buffer Size

Select the size of VGA Share Memory

- ▶▶ 32MB Set UMA Freame Buffer size to 32MB. (Default value)
- ▶▶ 64MB Set UMA Freame Buffer size to 64MB.
- ▶▶ 128MB Set Freame Buffer size to 128MB.
- ▶▶ 256MB Set Freame Buffer size to 256MB.

Tv Standard

- ▶▶ PAL Set Standard TV mode to PAL. (Default value)
- ▶▶ NTSC Set Standard TV mode to NTSC.
- ▶▶ PAL-M Set Standard TV mode to PAL-M.
- ▶▶ PAL-60 Set Standard TV mode to PAL-60.
- ▶▶ NTSC-JAP Set Standard TV mode to NTSC-JAP.
- ▶▶ PAL-CN Set Standard TV mode to PAL-CN.
- ▶▶ PAL-N Set Standard TV mode to PAL-N.
- ▶▶ SCART_RGB Set Standard TV mode to SCART_RGB.

Hard Disk Boot Priority

Select boot sequence for onboard(or add-on cards) SCSI, RAID, etc.

Use <↑> or <↓> to select a device, then press<+> to move it up, or <-> to move it down the list.
Press <ESC> to exit this menu.

(Note) This item will show up when you install a processor that supports this function.

☞ **First / Second / Third Boot Device**

- ▶▶ Floppy Select your boot device priority by Floppy.
- ▶▶ LS120 Select your boot device priority by LS120.
- ▶▶ Hard Disk Select your boot device priority by Hard Disk.
- ▶▶ CDROM Select your boot device priority by CDROM.
- ▶▶ ZIP Select your boot device priority by ZIP.
- ▶▶ USB-FDD Select your boot device priority by USB-FDD.
- ▶▶ USB-ZIP Select your boot device priority by USB-ZIP.
- ▶▶ USB-CDROM Select your boot device priority by USB-CDROM.
- ▶▶ USB-HDD Select your boot device priority by USB-HDD.
- ▶▶ Legacu LAN Select your boot device priority by LAN.
- ▶▶ Disabled Disabled this function.

☞ **Password Check**

- ▶▶ Setup The system will boot but will not access to Setup page if the correct password is not entered at the prompt. (Default value)
- ▶▶ System The system will not boot and will not access to Setup page if the correct password is not entered at the prompt.

☞ **HDD S.M.A.R.T. Capability**

S.M.A.R.T. which allows your hard disk to report any read/write errors and issue a warning when LDCM installed.

- ▶▶ Enabled Enabled HDD S.M.A.R.T. capability. (Default value)
- ▶▶ Disabled Disabled HDD S.M.A.R.T. capability.

☞ **Limit CPUID Max. to 3**

- ▶▶ Enabled Limit CPUID Maximum value to 3 when use older OS like NT4.
- ▶▶ Disabled Disables CPUID Limit for windows XP.(Default value)

☞ **No-Execute Memory Protect^(Note)**

- ▶▶ Enabled Enable No-Execute Memory Protect function.(Default value)
- ▶▶ Disabled Disable No-Execute Memory Protect function.

☞ **Full Screen LOGO Show**

- ▶▶ Enabled Display Full Screen LOGO during POST. (Default value)
- ▶▶ Disabled Don't display Full Screen LOGO during POST.

☞ **Intel OnScreen Branding**

- ▶▶ Enabled Display onscreen brand LOGO. (Default value)
- ▶▶ Disabled Don't display onscreen brand LOGO.

(Note) This item will show up when you install a processor that supports this function.

2-3 Integrated Peripherals

CMOS Setup Utility-Copyright (C) 1984-2004 Award Software		
Integrated Peripherals		
OnChip IDE Channel0	[Enabled]	Item Help
OnChip IDE Channel1	[Enabled]	Menu Level▶
IDE Prefetch Mode	[Disabled]	
Onboard Azalia Audio	[Enabled]	
Onboard SATA Controller	[Both]	
Onboard SATA Type	[IDE Controller]	
Onboard LAN	[Enabled]	
Onboard 1394	[Enabled]	
On-Chip USB 1.1 Controller	[Enabled]	
On-Chip USB 2.0 Controller	[Enabled]	
USB Keyboard Support	[Enabled]	
USB Mouse Support	[Enabled]	
OnBoard LAN Boot ROM	[Disabled]	
Onboard Serial Port 1	[3F8/IRQ4]	

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

☞ OnChip IDE Channel 0

- ▶▶ Enabled Enable onboard 1st channel IDE port. (Default value)
- ▶▶ Disabled Disable onboard 1st channel IDE port.

☞ OnChip IDE Channel 1

- ▶▶ Enabled Enable onboard 2nd channel IDE port. (Default value)
- ▶▶ Disabled Disable onboard 2nd channel IDE port.

☞ IDE Prefetch Mode

- ▶▶ Enabled Enabled IDE Prefetch mode.
- ▶▶ Disabled Disabled IDE Prefetch mode.(Default value)

☞ Onboard Azalia Audio

- ▶▶ Enabled Enable Azalia audio function. (Default value)
- ▶▶ Disabled Disable Azalia audio function.

☞ Onboard SATA Controller

- ▶▶ SATA Disabled Disabled Both Serial ATA controllers.
- ▶▶ SATA0 Controller Connectors SATA0/ SATA1 are enabled while SATA2/ SATA3 are disabled.
- ▶▶ SATA1 Controller Connectors SATA2/ SATA3 are enabled while SATA0/ SATA1 are disabled.
- ▶▶ Both Four connectors from SATA0 to SATA3 are all enabled.(Default value)

☞ Onboard SATA Type

Support SATA RAID function

- ▶▶ IDE Controller Set onboard SATA type to IDE Controller.(Default value)
- ▶▶ RAID Controller Set onboard SATA type to RAID Controller.

☞ Onboard LAN function

- ▶▶ Enabled Enable Onboard H/W LAN function. (Default value)
- ▶▶ Disabled Disable this function.

☞ Onboard H/W 1394

- ▶▶ Enabled Enable onboard IEEE 1394 function.(Default value)
- ▶▶ Disabled Disable this function.

☞ On-Chip USB 1.1 Controller

Disable USB1.1 Host Controller if you are not using high speed USB devices.

- ▶▶ Enabled Enable USB 1.1 Controller. (Default value)
- ▶▶ Disabled Disable USB 1.1 Controller.

☞ On-Chip USB 2.0 Controller

Disable USB2.0 Host Controller if you are not using high speed USB devices.

- ▶▶ Enabled Enable USB 2.0 Controller. (Default value)
- ▶▶ Disabled Disable USB 2.0 Controller.

☞ USB Keyboard Support

When USB Keyboard is installed, please set at Enable.

- ▶▶ Enabled Enable USB Keyboard Support. (Default value)
- ▶▶ Disabled Disable USB Keyboard Support.

☞ USB Mouse Support

When USB Mouse is installed, please set at Enable.

- ▶▶ Enabled Enable USB Mouse Support.(Default value)
- ▶▶ Disabled Disable USB Mouse Support.

☞ Onboard LAN Boot ROM

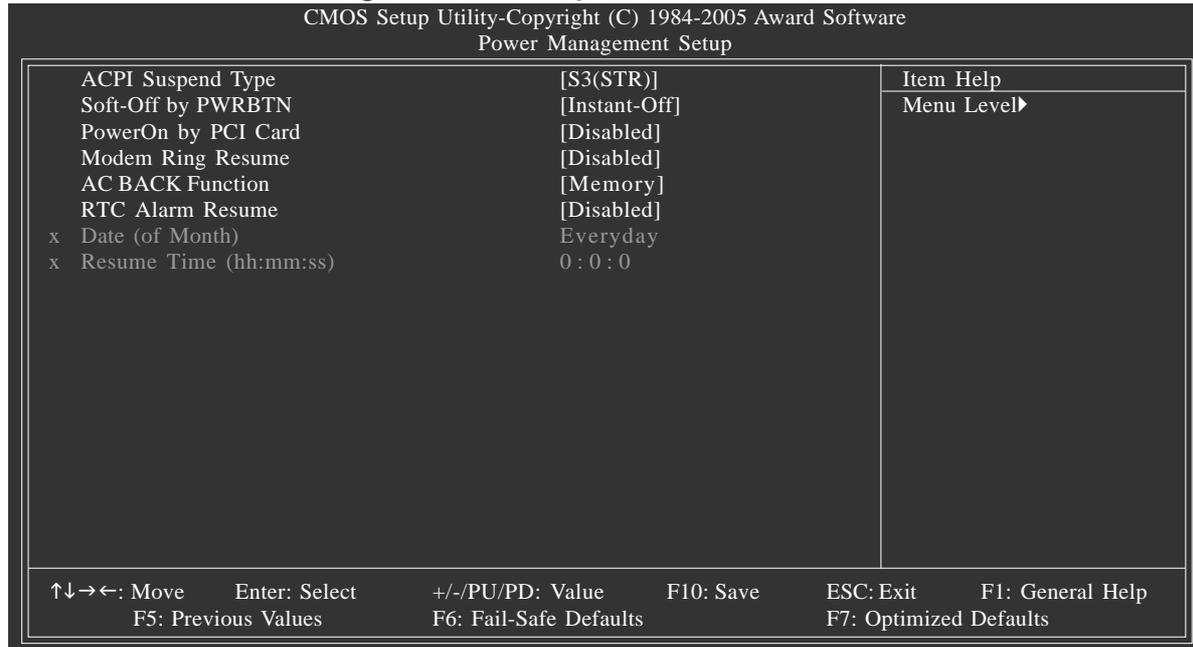
This function decide whether to invoke the boot ROM of the onboard LAN chip.

- ▶▶ Enabled Enable this function.
- ▶▶ Disabled Disable this function. (Default value)

☞ Onboard Serial Port 1

- ▶▶ 3F8/IRQ4 Enable onboard Serial port 1 and address is 3F8/IRQ4. (Default value)
- ▶▶ 2F8/IRQ3 Enable onboard Serial port 1 and address is 2F8/IRQ3.
- ▶▶ 3E8/IRQ4 Enable onboard Serial port 1 and address is 3E8/IRQ4.
- ▶▶ 2E8/IRQ3 Enable onboard Serial port 1 and address is 2E8/IRQ3.
- ▶▶ Disabled Disable onboard Serial port 1.

2-4 Power Management Setup



☞ ACPI Suspend Type

- ▶▶ S1(POS) Set ACPI suspend type to S1/POS(Power On Suspend).
- ▶▶ S3(STR) Set ACPI suspend type to S3/STR(Suspend To RAM). (Default value)

☞ Soft-off by PWR-BTTN

- ▶▶ Instant-off Press power button then Power off instantly. (Default value)
- ▶▶ Delay 4 Sec. Press power button 4 sec. to Power off. Enter suspend if button is pressed less than 4 sec.

☞ PowerOn by PCI Card

This feature requires an ATX power supply that provides at least 1A on the 5VSB lead.

- ▶▶ Disabled Disable this function.
- ▶▶ Enabled Enable PME as wake up event. (Default value)

☞ Modem Ring Resume

An incoming call via modem can awake the system from any suspend state.

- ▶▶ Disabled Disable Modem Ring Resume function.(Default value)
- ▶▶ Enabled Enable Modem Ring Resume function.

☞ AC BACK Function

- ▶▶ Soft-Off When AC-power is back to the system, the system will be in "Soft-Off" state.
- ▶▶ Full-On When AC-power is back to the system, the system will be always in "Full-On" state.
- ▶▶ Memory When AC-power is back to the system, the system will return to the last state before AC-power was off.(Default value)

☞ RTC Alarm Resume

You can set "Resume by Alarm" item to enabled and key in Data/time to power on system.

- ▶ Disabled Disable this function. (Default value)
- ▶ Enabled Enable alarm function to POWER ON system.

If RTC Alarm Resume is Enabled.

- ▶ Date (of Month) : Everyday, 1~31
- ▶ Resume Time (hh:mm:ss) : (0~23) : (0~59) : (0~59)

2-6 PC Health Status

CMOS Setup Utility-Copyright (C) 1984-2005 Award Software		Item Help
PC Health Status		Menu Level▶
Vcore	OK	
DDR25V	OK	
+3.3V	OK	
+12V	OK	
CPU Temperature	33°C	
Current CPU FAN Speed	4687 RPM	
Current SYSTEM FAN Speed	0 RPM	
CPU Warning Temperature	[Disabled]	
CPU Smart FAN Control	[Enabled]	

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

☞ Current Voltage(V) Vcore / DDR25V / 3.3V / +12V

- ▶ Detect system's voltage status automatically.

☞ CPU Temperature

- ▶ Detect CPU temperature automatically.

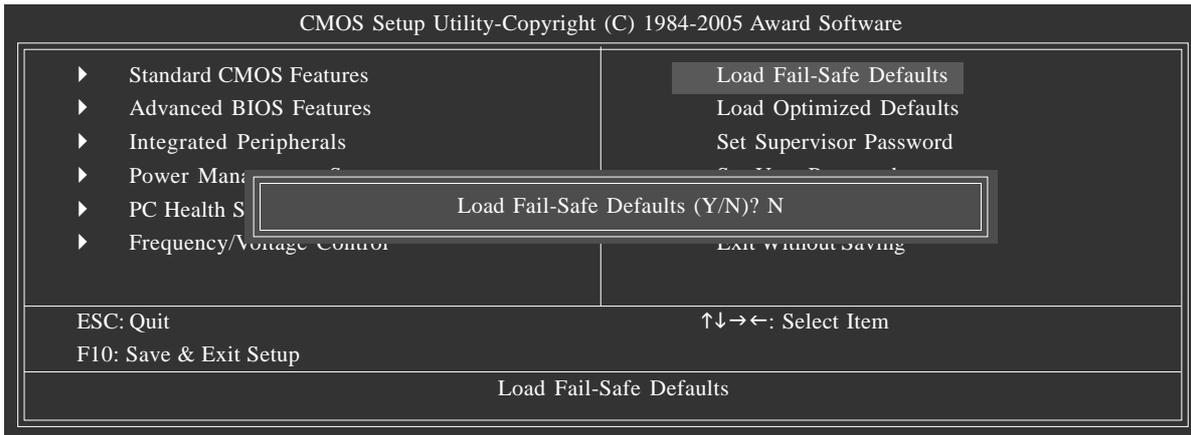
☞ Current CPU/SYSTEM FAN Speed (RPM)

- ▶ Detect CPU/SYSTEM fan speed status automatically.

☞ CPU Warning Temperature

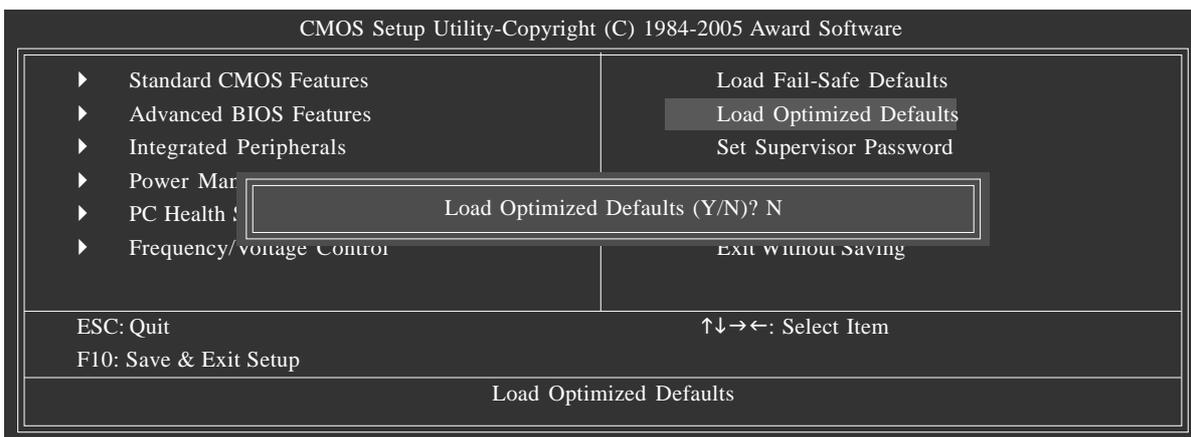
- ▶ 60°C / 140°F Monitor CPU temperature at 60°C / 140°F.
- ▶ 70°C / 158°F Monitor CPU temperature at 70°C / 158°F.
- ▶ 80°C / 176°F Monitor CPU temperature at 80°C / 176°F.
- ▶ 90°C / 194°F Monitor CPU temperature at 90°C / 194°F.
- ▶ Disabled Disable this function. (Default value)

2-8 Load Fail-Safe Defaults



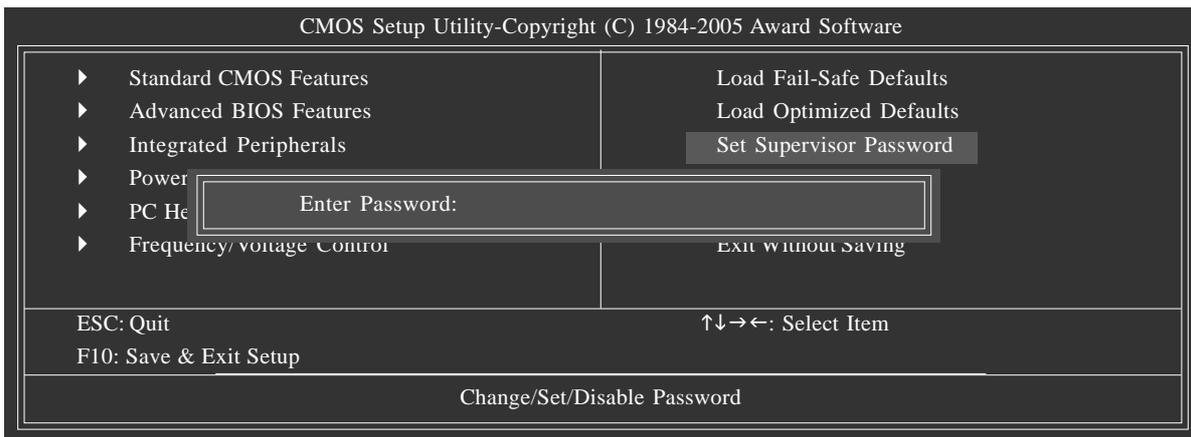
Fail-Safe defaults contain the most appropriate values of the system parameters that allow minimum system performance.

2-9 Load Optimized Defaults



Selecting this field loads the factory defaults for BIOS and Chipset Features which the system automatically detects.

2-10 Set Supervisor/User Password



When you select this function, the following message will appear at the center of the screen to assist you in creating a password.

Type the password, up to eight characters, and press <Enter>. You will be asked to confirm the password. Type the password again and press <Enter>. You may also press <Esc> to abort the selection and not enter a password.

To disable password, just press <Enter> when you are prompted to enter password. A message "PASSWORD DISABLED" will appear to confirm the password being disabled. Once the password is disabled, the system will boot and you can enter Setup freely.

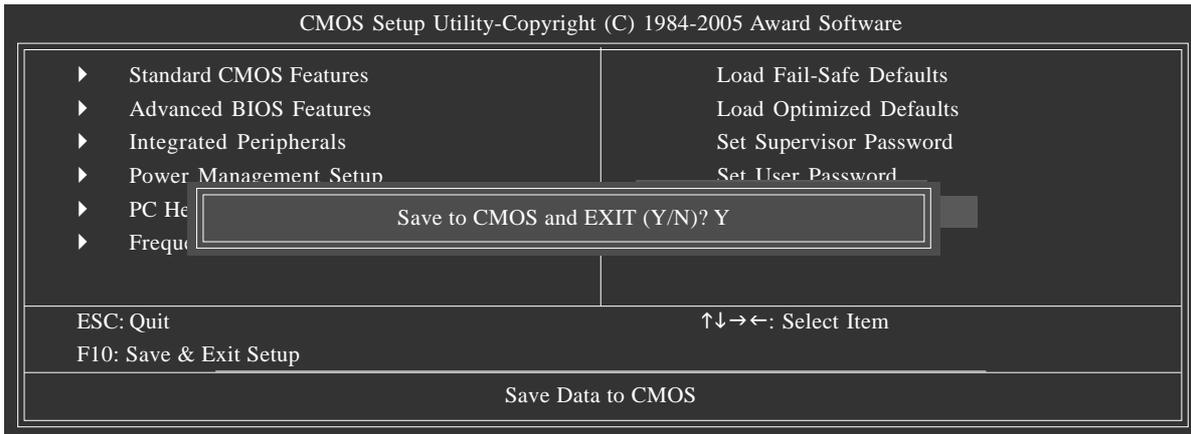
The BIOS Setup program allows you to specify two separate passwords:

SUPERVISOR PASSWORD and a USER PASSWORD. When disabled, anyone may access all BIOS Setup program function. When enabled, the Supervisor password is required for entering the BIOS Setup program and having full configuration fields, the User password is required to access only basic items.

If you select "System" at "Password Check" in Advance BIOS Features Menu, you will be prompted for the password every time the system is rebooted or any time you try to enter Setup Menu.

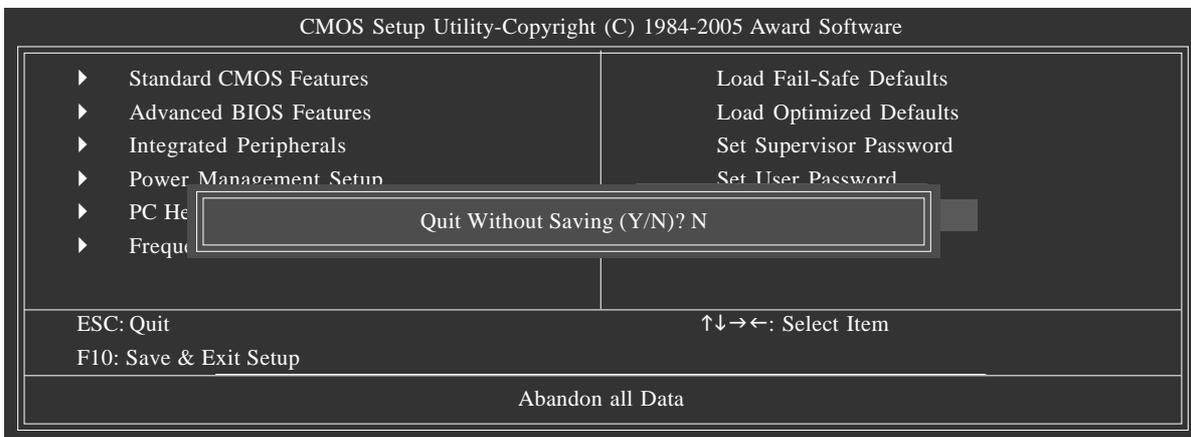
If you select "Setup" at "Password Check" in Advance BIOS Features Menu, you will be prompted only when you try to enter Setup.

2-11 Save & Exit Setup



Type "Y" will quit the Setup Utility and save the user setup value to RTC CMOS.
Type "N" will return to Setup Utility.

2-12 Exit Without Saving



Type "Y" will quit the Setup Utility without saving to RTC CMOS.
Type "N" will return to Setup Utility.

