Mini Barebone User’s Guide

(Mainboard Manual)

Use for ENK8

Version 1.0

Read Me First !

CAUTION

When you installing AGP card, please make sure the following notice is fully understood and practiced. If your AGP card has "AGP 4X/8X(1.5V) notch" (show below), please make sure your AGP card is AGP 4X/8X(1.5V).

AGP 2X(3.3V) card is not supported by nVIDIA® nForce™ 3 150 chipset. You might experience system unable to boot up normally. Please insert an AGP 4X/8X(1.5V) card.
with nVIDIA® nForce™ 3 150 based motherboards.

WARNING: *Never run the processor without the heatsink properly and firmly attached. PERMANENT DAMAGE WILL RESULT!*

Mise en garde : *Ne faites jamais tourner le processeur sans que le dissipateur de chaleur soit fix correctement et fermement. UN DOMMAGE PERMANENT EN RÉSULTERA !*

Achtung: *Der Prozessor darf nur in Betrieb genommen werden, wenn der W rmeableiter ordnungsgem β und fest angebracht ist. DIES HAT EINEN PERMANENTEN SCHADEN ZUR FOLGE!*

Advertencia: *Nunca haga funcionar el procesador sin el disipador de calor instalado correcta y firmemente. ¡SE PRODUCIRÁ UN DAÑO PERMANENTE!*

Aviso: *Nunca execute o processador sem o dissipador de calor estar adequado e firmemente conectado. O RESULTADO SERÁ UM DANO PERMANENTE!*

警告：　将散热板牢固地安装到处理器上之前，不要运行处理器。过热将永远损坏处理器!

警告:　將散熱器牢固地安裝到處理器上之前，不要運行處理器，過熱將永遠損毀處理器!

경고:　히트싱크를 제대로 또 단단히 부착시키지 않은 채 프로세서를 구동시키지 마십시오. 영구적 고장이 발생합니다!

警告:　永久的な損傷を防ぐため、ヒートシンクを正しくしっかりと取り付けるまでは、プロセッサを動作させないようにしてください。

Preparing Your Computer

Computer motherboards and expansion cards contain very delicate Integrated Circuit (IC) chips. To protect them against damage from static electricity, you should follow some precautions whenever you work on your computer.

1. Unplug your computer when working on the inside.
2. Use a grounded wrist strap before handling computer components. If you do not have one, touch both of your hands to a safely grounded object or to a metal object, such as the power supply case.
3. Hold components by the edges and try not touch the IC chips, leads or connectors, or other components.
4. Place components on a grounded antistatic pad or on the bag that came with the components whenever the components are separated from the system.
5. Ensure that the ATX power supply is switched off before you plug in or remove the ATX power connector on the motherboard.

Installing the motherboard to the chassis...

If the motherboard has mounting holes, but they don't line up with the holes on the base and there are no slots to attach the spacers, do not become alarmed you can still attach the spacers to the mounting holes. Just cut the bottom portion of the spacers (the spacer may be a little hard to cut off, so be careful of your hands). In this way you can still attach the motherboard to the base without worrying about short circuits. Sometimes you may need to use the plastic springs to isolate the screw from the motherboard PCB surface, because the circuit wire may be near by the hole. Be careful, don't let the screw contact any printed circuit write or parts on the PCB that are near the fixing hole, otherwise it may damage the board or cause board malfunctioning.

The manufacturer assumes no liability for any damage, caused directly or indirectly, by improper installation of any comfortable performing the installation, consult a qualified computer technician. Damage to system components, and injury to yourself may result if power is applied during installation.

Table of Content

Chapter 1 Introduction

1-1 Features Summary

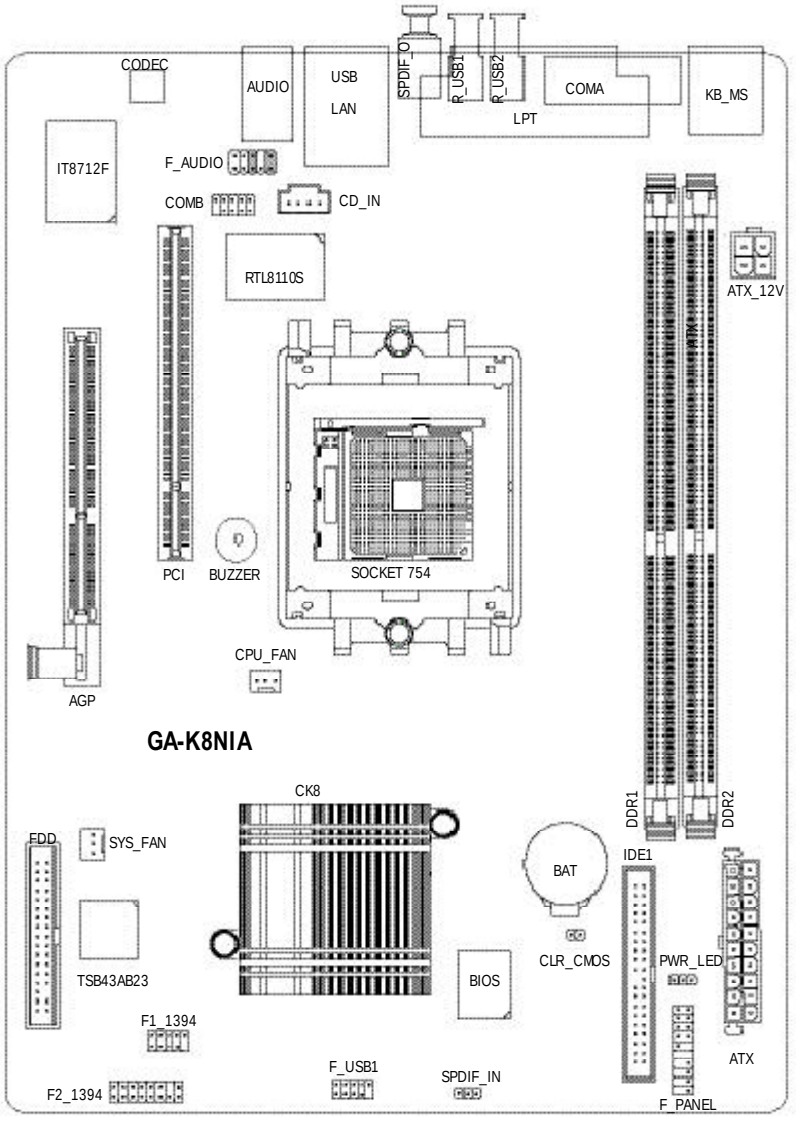
Form Factor	• 24.5 cm x 18 cm Flex-ATX size form factor, 6 layers PCB
CPU	• Socket 754 for AMD Althlon™ 64 processor (K8) 128K L1& 256K / 512K / 1M L2 cache on die • 800MHz FSB • Support core frequencies in excess of 1.6 GHz(2800+) and faster
Chipset	• nVIDIA® nForce™ 3 150
Memory	• 2 184-pin DDR DIMM sockets • Supports DDR400/DDR333/DDR266 DIMM • Supports unbuffered DIMMs with a 64-bit data bus with optional 8 bits of Error Correcting Code (ECC) • Supports 128MB/256MB/512MB/1GB DRAM • Supports up to 2GB DRAM (Max)
I/O Control	• IT8712F
Slots	• 1 AGP slot supports 8X/4X mode, AGP3.0 8X interface at 533MHz • 1 PCI slots support 33MHz & PCI 2.3 compliant
On-Board IDE	• 1 IDE controllers provides IDE HDD/CD-ROM (IDE1) with PIO, Bus Master (Ultra DMA33/ATA66/ATA100/ATA133) operation modes
Hardware Monitor	• CPU/System fan revolution detect • CPU temperature detect • CPU warning temperature • System voltage detect • CPU/System fan fail warning • Thermal shutdown function • CPU Smart Fan control
On-Board Peripherals	• 1 Floppy port supports 2 FDD with 360K, 720K,1.2M, 1.44M and 2.88M bytes • 1 Parallel port supports Normal/EPP/ECP mode • 2 Serial ports (COMA ;COMB onboard) • 6 USB 2.0/1.1 ports (2 x Front by cable) • 1 Front Audio connector
On-Board LAN	• RTL8110S • 1 RJ45 ports

to be continued.....

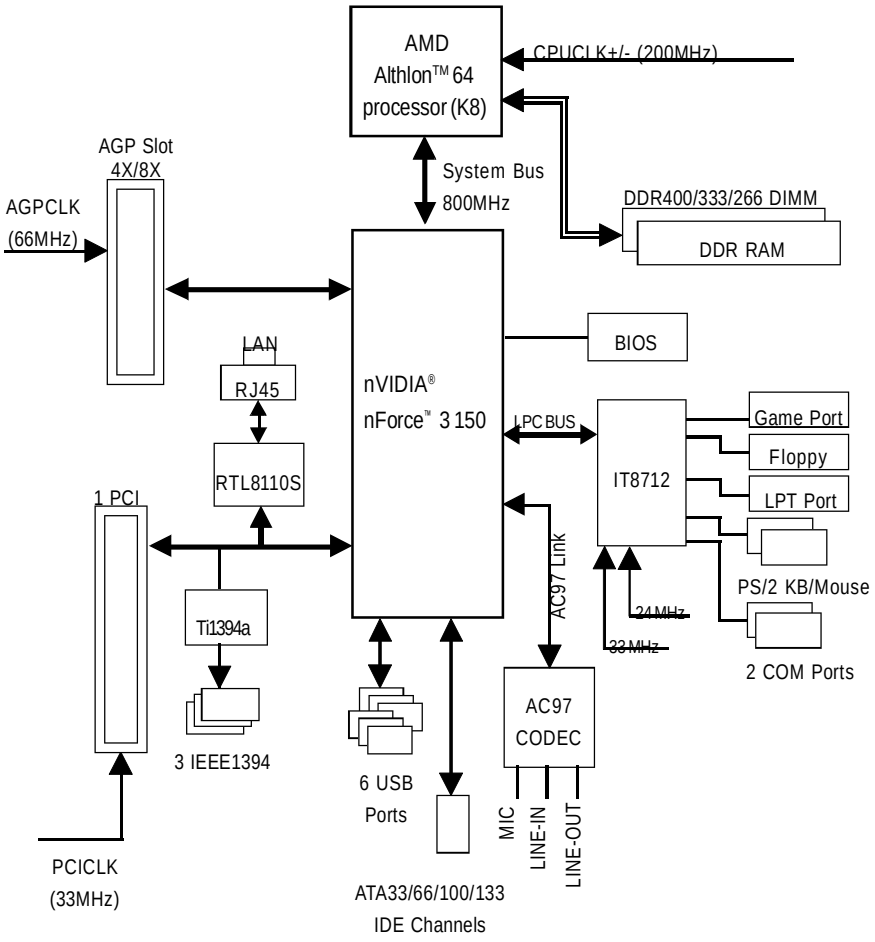
On-Board Sound	• Realtek ALC658 CODEC (UAJ) • Supports Jack Sensing function • Line Out / 2 front speaker • Line In / 2 rear speaker (by s/w switch) • Mic In / center & subwoofer (by s/w switch) • SPDIF In / Out • CD In / Game port
PS/2 Connector	• PS/2 Keyboard interface and PS/2 Mouse interface
BIOS	• Licensed AWARD BIOS • Supports Q-Flash
On-Board 1394	• Onboard TSB43AB23
Additional Features	• PS/2 Keyboard power on by password • PS/2 Mouse power on • External Modem wake up • STR(Suspend-To-RAM) • PME Event wake up • AC Recovery • Poly fuse for keyboard over-current protection • USB KB/Mouse wake up from S3 • Supports Thermal Shutdown function • Supports Easy Tune 4 • Supports @BIOS
Overclocking	• Over Voltage (CPU/DDR/AGP/Vcc_12HT) by BIOS • Over Clock (CPU/DDR/AGP) by BIOS

Please set the CPU host frequency in accordance with your processor's specifications.
We don't recommend you to set the system bus frequency over the CPU's specification because these specific bus frequencies are not the standard specifications for CPU, chipset and most of the peripherals. Whether your system can run under these specific bus frequencies properly will depend on your hardware configurations, including CPU, Chipsets, SDRAM, Cards... etc.

1-2 ENK8 Motherboard Layout



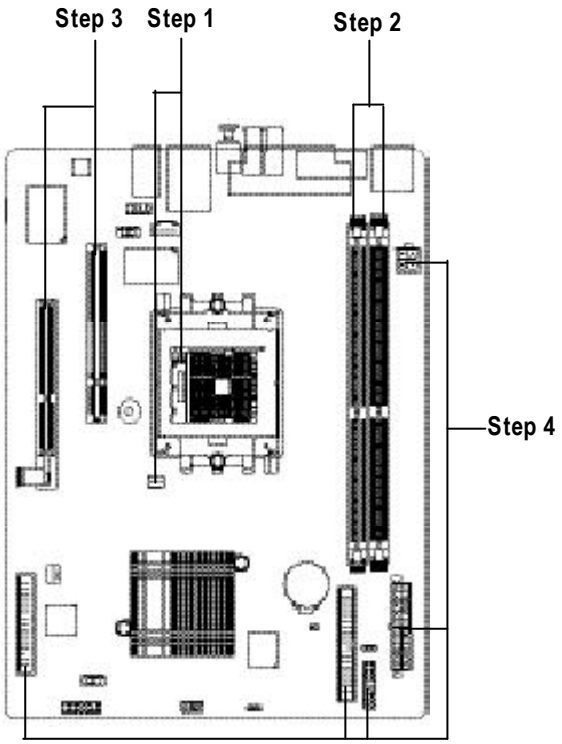
1-3 Block Diagram - CF-ENK8



Chapter 2 Hardware Installation Process

To set up your computer, you must complete the following steps:

Step 1- Installing Processor and CPU Cooling Fan
Step 2- Installing Memory Modules
Step 3- Installing Expansion Cards
Step 4- Connect ribbon Cables, Cabinet Wires, And Power Supply



Congratulations! You have accomplished the hardware installation!
Turn on the power supply or connect the power cable to the power outlet. Continue with the BIOS/software installation.

Step 1: Installing Processor and CPU Cooling Fan

Before installing the processor and cooling fan, adhere to the following warning:

1. The processor will overheat without the heatsink and/or fan, resulting in permanent irreparable damage.
2. Never force the processor into the socket.
3. Apply thermal grease between the processor and cooling fan.
4. Please make sure the CPU type is supported by the motherboard.
5. If you do not match the CPU socket Pin 1 and CPU cut edge well, it will cause improper installation. Please change the insert orientation. Please use AMD approved cooling fan.

The installation of the processor and cooling fan is performed in four main steps:

Step 1-1. Processor insertion

Step 1-2. Applying thermal grease

Step 1-3. Cooling fan attachment

Step 1-4. Connecting processor fan power

Step1-1. First, check the processor pins to see that none are bent. Move the socket lever to the unlocked position as shown in Figure 1 & Figure 2.(90° to the plane of the motherboard) prior to inserting the processor. The A1 pin location is designated on the processor by a copper triangle that matches up to a triangle on the socket as shown in Figure 3. Align the processor to the socket and gently lower it into place. Do not force the processor into the socket.

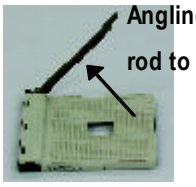


Figure 1. Angling the rod to 65-degree may be feel a kind of tight, and then continue pull the rod to 90-degree when a noise "cough" made.

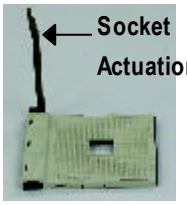


Figure 2. Pull the rod to the 90-degree directly.

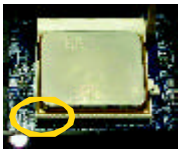


Figure 3. A1 pin location on the Socket and Processor. Move the socket lever to the locked position while holding pressure on the center of the processor.

Step1 -2. When the proces sor is ins talled in the socke t, apply thermal gr ease to the process or(as show n in Figur e 4) prio r to ins talling the heatsink. AMD recommend s using a high th ermal condu ctivity g rease (s uch as Shin-Etsu ty pes G75 1 or G749 , or an e quiv alen t product) for the thermal in terface m aterial r ather tha n a phas e change material. Phase ch ange mate rials dev elop strong adhesiv e forces be tw een the heatsink and proce ssor.

Rem oving the h eatsink u nder such conditio ns can ca use the p rocessor to be rem ov ed from t he socke t without m oving t he socket lever t o the unlocked position and t hen dam ag e the pro cessor pins or so cket cont acts.

** We recommend you to apply the thermal tape to prov ide better heat conduction betw een y our CPU and heatsink. (The CPU cooling fan might stick to the CPU due to the hardening of the thermal paste. During this condition if y ou try to remov e the cooling fan, y ou might pull the processor out of the CPU socket alone w ith the cooling fan, and might damage the processor. To avoid this from happening, w e suggest y ou to either use thermal tape instead of thermal paste, or remove the cooling fan w ith ex treme caution.)

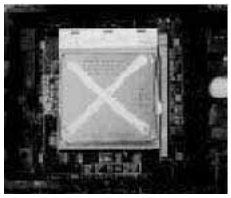


Figure 4. Application of Thermal Grease to the processor.

IF you want to detail information for CPU cooler and Airflow guide installation, please Refer to our attached installation guide in the box of cpu cooler & airflow guide

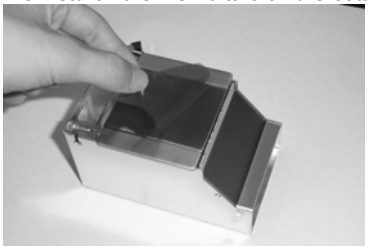
Step 1-3 Place the radiator under the power.

(1-3)

1-4 Insert the snap rivets to the hole and fasten the snap rivets

(1-4)

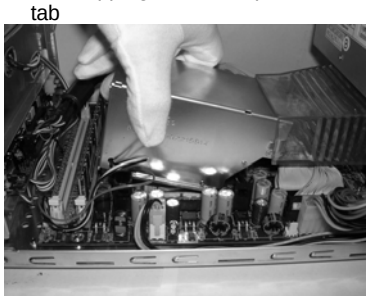
1-5. Tear off the membrane on the bottom of heat sink



(1-5)

1-6. .Apply thermal grease on CPU, place the heat sink squarely on top of CPU and press down

1-7 Fist, clipping it on the top socket, taking a little bit of force to press the round segment and then clipping down over the tab



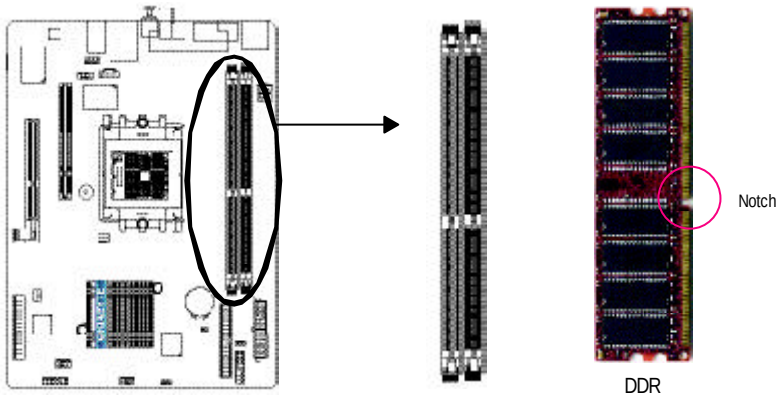
(1-6)

(1-7)

Step 2: Installing Memory Modules

Before installing the memory modules, adhere to the following warning:
1. When DIMM LED is ON, do not install / remove DIMM from socket.
2. Please note that the DIMM module can only fit in one direction due to the one notch. Wrong orientation will cause improper installation. Please change the insert orientation.

The motherboard has 2 dual inline memory module (DIMM) sockets. The BIOS will automatically detects memory type and size. To install the memory module, just push it vertically into the DIMM socket. The DIMM module can only fit in one direction due to the notch. Memory size can vary between sockets.



Total Memory Size Per Chip Select

Device Used on DIMMs	Size Per CS	Comments
64 Mbit (2Mx8-bitsx4 banks)	64 Mbyte	
64 Mbit (1Mx16-bitsx4 banks)	32 Mbyte	
128 Mbit(4Mx8-bitsx4 banks)	128 Mbyte	
128 Mbit(2Mx16-bitsx4 banks)	64 Mbyte	
256 Mbit(8Mx8-bitsx4 banks)	256 Mbyte	
256 Mbit(4Mx16x4 banks)	128 Mbyte	
512 Mbit(16Mx8-bitsx4 banks)	512 Mbyte	
512 Mbit(8Mx16-bitsx4 banks)	256 Mbyte	
1 Gbit(32Mx8-bitsx4 banks)	1 Gbyte	
1 Gbit(16Mx16-bitsx4 banks)	512 Mbyte	

1. The DIMM socket has a notch, so the DIMM memory module can only fit in one direction.

2. Insert the DIMM memory module vertically into the DIMM socket. Then push it down.

3. Close the plastic clip at both edges of the DIMM sockets to lock the DIMM module.
   Reverse the installation steps when you wish to remove the DIMM module.

DDR Introduction

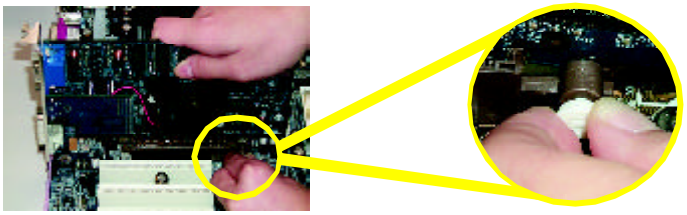
Established on the existing SDRAM infrastructure, DDR (Double Data Rate) memory is a high performance and cost-effective solution that allows easy adoption for memory vendors, OEMs, and system integrators.

DDR memory is a great evolutionary solution for the PC industry that builds on the existing SDRAM architecture, yet make the awesome advances in solving the system performance bottleneck by doubling the memory bandwidth. Nowadays, with the highest bandwidth of 3.2GB/s of DDR400 memory and complete line of DDR400/333/266/200 memory solutions, DDR memory is the best choice for building high performance and low latency DRAM subsystem that are suitable for servers, workstations, and full range of desktop PCs.

Step 3 Installing expansion cards

Step 3-1: AGP Card Installation

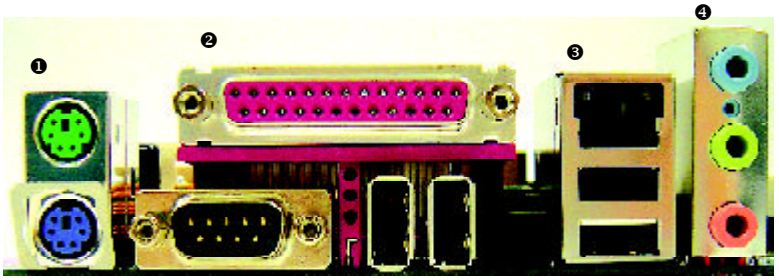
1. Read the related expansion card's instruction document before install the expansion card into the computer.
2. Remove your computer's chassis cover, screws and slot bracket from the computer.
3. Press the expansion card firmly into expansion slot in motherboard.
4. Be sure the metal contacts on the card are indeed seated in the slot.
5. Replace the screw to secure the slot bracket of the expansion card.
6. Replace your computer's chassis cover.
7. Power on the computer, if necessary, setup BIOS utility of expansion card from BIOS.
8. Install related driver from the operating system.



Please carefully pull out the small white-drawable bar at the end of the AGP slot when you try to install / uninstall the AGP card. Please align the AGP card to the onboard AGP slot and press firmly down on the slot. Make sure your AGP card is locked by the small white-drawable bar.

Step 4: Connect ribbon Cables, Cabinet Wires And Power Supply

Step 4-1: I/O Back Panel Introduction



❶ PS/2 Keyboard and PS/2 Mouse Connector

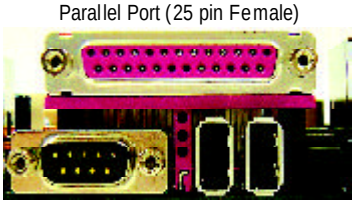
PS/2 Mouse Connector
(6 pin Female)

PS/2 Keyboard Connector
(6 pin Female)

- This connector supports standard PS/2 keyboard and PS/2 mouse.

❷ Parallel Port, Serial Port COMA , R_USB1 , R_USB2 , SPDIF_O

Parallel Port (25 pin Female)



COMA
Serial Port
(9 pin Male)

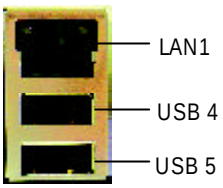
R_USB2

R_USB1

SPDIF_O

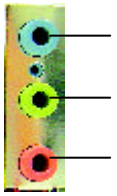
- According to your motherboard, please see the following descriptions for the devices. Device like printer can be connected to Parallel port; mouse and modem etc. can be connected to Serial ports.
- Before you connect your device(s) into USB connector(s), please make sure your device (s) such as USB 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.
- The SPDIF output is capable of providing digital audio to external speakers or compressed AC3 data to an external Dolby Digital Decoder. Use this feature only when your stereo system has digital input function.

❸ USB/LAN Connector



- 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.

❹ Audio Connectors



- After install onboard audio driver, you may connect speaker to Line Out jack, microphone to MIC In jack. Device like CD-ROM,walkman etc. can be connected to Line-In jack.

Please note:

You are able to use 2-/4-/6-channel audio feature by S/W selection.

If you want to enable 6-channel function, you have 1 choose for hardware connection.

Method1:

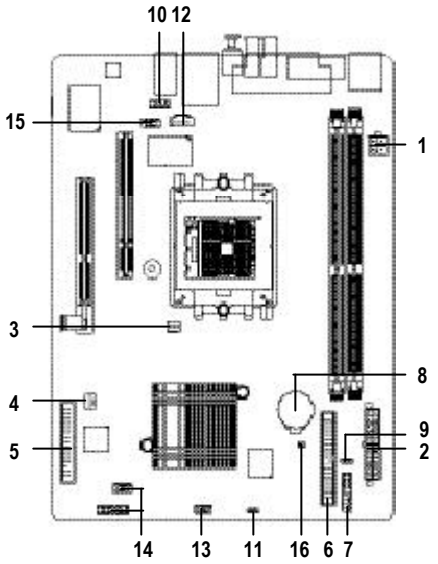
Connect "Front Speaker" to "Line Out"

Connect "Rear Speaker" to "Line In"

Connect "Center and Subwoofer" to "MIC Out".

If you want the detail information for 2-/4-/6-channel audio setup installation, please refer to page 56.

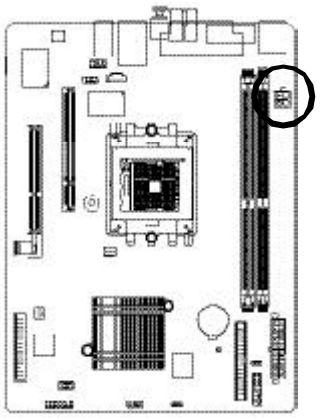
Step 4-2: Connectors Introduction

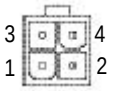


1) ATX_12V	9) PWR_LED
2) ATX	10) F_AUDIO
3) CPU_FAN	11) SPDIF_IN
4) SYS_FAN	12) CD_IN
5) FDD	13) F_USB1
6) IDE1	14) F1_1394 / F2_1394
7) F_PANEL	15) COMB
8) BATTERY	16) CLR_CMOS

1) ATX_12V (+12V Power Connector)

This connector (ATX_12V) supplies the CPU operation voltage (Vcore).
If this "ATX_12V connector" is not connected, system cannot boot.

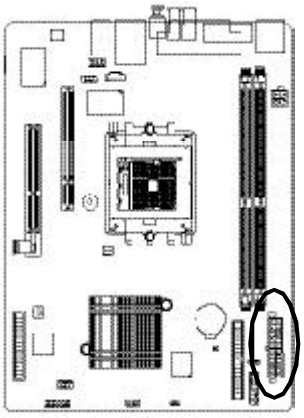


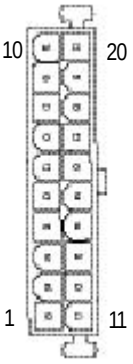


Pin No.	Definition
1	GND
2	GND
3	+12V
4	+12V

2) ATX (ATX Power)

AC power cord should only be connected to your power supply unit after ATX power cable and other related devices are firmly connected to the mainboard.

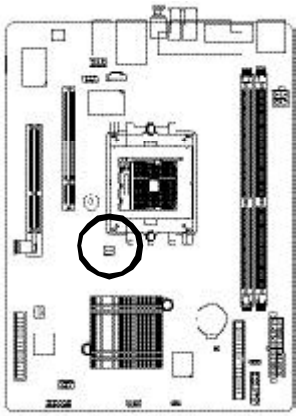




Pin No.	Definition
1	3.3V
2	3.3V
3	GND
4	VCC
5	GND
6	VCC
7	GND
8	Power Good
9	5V SB (stand by +5V)
10	+12V
11	3.3V
12	-12V
13	GND
14	PS_ON(soft on/off)
15	GND
16	GND
17	GND
18	-5V
19	VCC
20	VCC

3) CPU_FAN (CPU Fan Connector)

Please note, a proper installation of the CPU cooler is essential to prevent the CPU from running under abnormal condition or damaged by overheating. The CPU fan connector supports Max. current up to 600 mA.

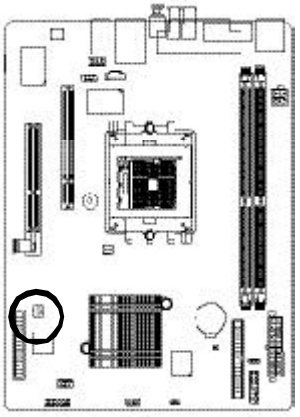


1 

Pin No.	Definition
1	GND
2	+12V
3	Sense

4) SYS_FAN (System Fan Connector)

This connector allows you to link with the cooling fan on the system case to lower the system temperature.



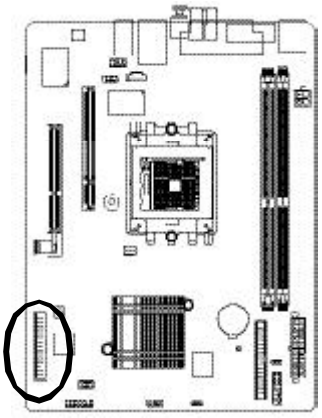
1 

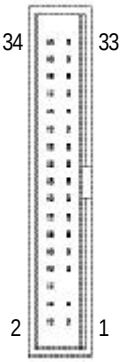
Pin No.	Definition
1	GND
2	+12V
3	Sense

5) FDD (Floppy Connector)

Please connect the floppy drive ribbon cables to FDD. It supports 360K, 1.2M, 720K, 1.44M and 2.88M bytes floppy disk types.

The red stripe of the ribbon cable must be the same side with the Pin1.



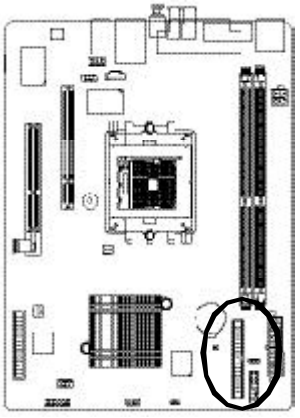


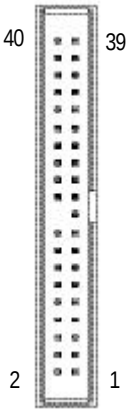
6) IDE1 (IDE1 Connector)

Important Notice:

Please connect first hard disk to IDE1 .

The red stripe of the ribbon cable must be the same side with the Pin1.

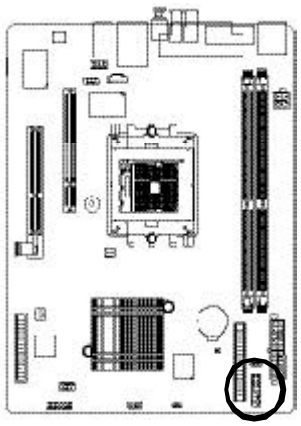


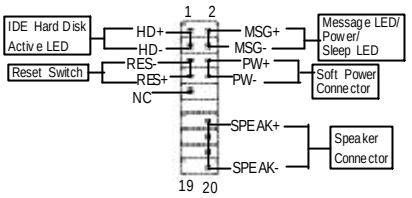


IDE1

7) F_PANEL (2 x 10 pins Connector)

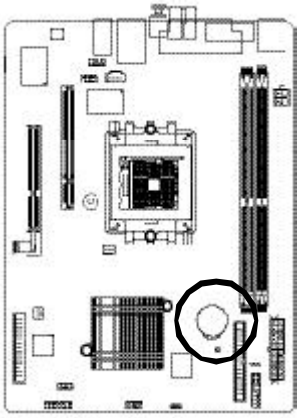
Please connect the power LED, PC speaker, reset switch and power switch etc. of your chassis front panel to the F_PANEL connector according to the pin assignment above.

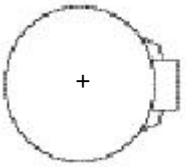




HD (IDE Hard Disk Active LED) (Blue)	Pin 1: LED anode(+) Pin 2: LED cathode(-)
SPK (Speaker Connector) (Amber)	Pin 1: VCC(+) Pin 2- Pin 3: NC Pin 4: Data(-)
RES (Reset Switch) (Green)	Open: Normal Operation Close: Reset Hardware System
PW (Soft Power Connector) (Red)	Open: Normal Operation Close: Power On/Off
MSG(Message LED/ Power/ Sleep LED) (Yellow)	Pin 1: LED anode(+) Pin 2: LED cathode(-)
NC (Purple)	NC

8) BATTERY





CAUTION

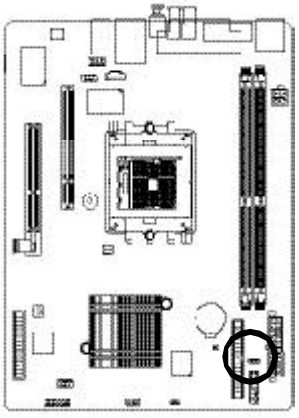
- Danger of explosion if battery is incorrectly replaced.
- Replace only with the same or equivalent type recommended by the manufacturer.
- Dispose of used batteries according to the manufacturer's instructions.

If you want to erase CMOS...

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

9) PWR_LED

PWR_LED is connect with the system power indicator to indicate whether the system is on/off. It will blink when the system enters suspend mode. If you use dual color LED, power LED will turn to another color.

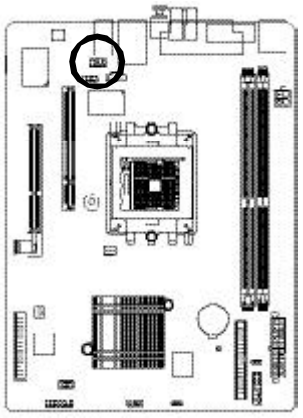


1 

Pin No.	Definition
1	MPD+
2	MPD-
3	MPD-

10) F_AUDIO (Front Audio Connector)

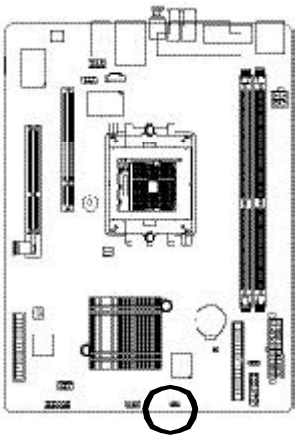
If you want to use Front Audio connector, you must remove 5-6, 9-10 Jumper.
In order to utilize the front audio header, your chassis must have front audio connector. Also please make sure the pin assigment on the cable is the same as the pin assigment on the MB header. To find out if the chassis you are buying support front audio connector, please contact your dealer. Please note, you can have the alternative of using front audio connector or of using rear audio connector to play sound.



Pin No.	Definition
1	MIC
2	GND
3	REF
4	Power
5	Front Audio (R)
6	Rear Audio (R)
7	Reserved
8	No Pin
9	Front Audio (L)
10	Rear Audio (L)

11) SPDIF_IN (SPDIF In Connector)

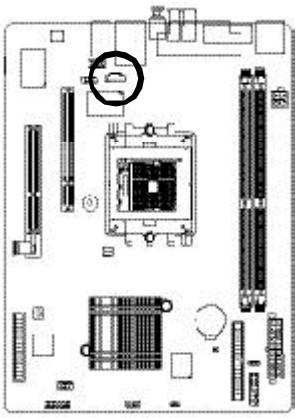
Use this feature only when your stereo system has digital input function. Be careful with the polarity of the SPDIF_IN connector. Check the pin assignment carefully while you connect the SPDIF_IN cable, incorrect connection between the cable and connector will make the device unable to work or even damage it. For optional SPDIF_IN cable, please contact your local dealer.

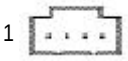


Pin No.	Definition
1	VCC
2	SPDIF IN
3	GND

12) CD_IN (CD In Connector)

Connect CD-ROM or DVD-ROM audio out to the connector.

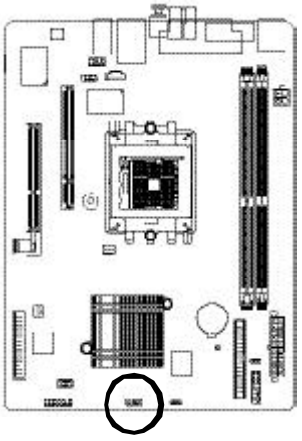


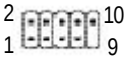


Pin No.	Definition
1	CD-L
2	GND
3	GND
4	CD-R

13) F_USB1 (Front USB Connector, Yellow)

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.

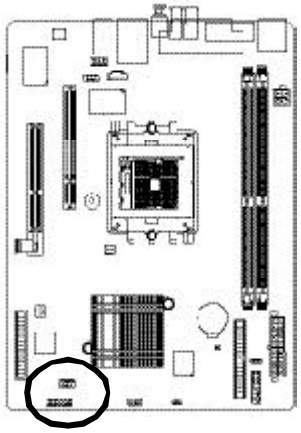




Pin No.	Definition
1	Power
2	Power
3	USB Dx-
4	USB Dy-
5	USB Dx+
6	USB Dy+
7	GND
8	GND
9	No Pin
10	NC

14) F1_1394 / F2_1394 (Front IEEE1394 Connector)

Serial interface standard set by Institute of Electrical and Electronics Engineers, which has features like high speed, highbandwidth and hotplug. 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.IEEE1394b can approach the maximum speed to 800Mb/S, but the speed can be achieved only when you use particular IEEE1394b cable.



F1_1394

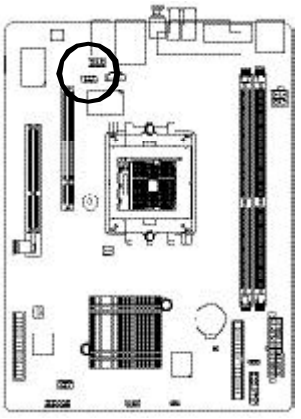
Pin No.	Definition
1	TPA2+
2	TPA2-
3	GND
4	GND
5	TPB2+
6	TPB2-
7	Power
8	Power
9	No Pin
10	GND

F2_1394

Pin No.	Definition
1	Power
2	Power
3	TPA0+
4	TPA0-
5	GND
6	GND
7	TPB0+
8	TPB0-
9	Power
10	Power
11	TPA1+
12	TPA1-
13	GND
14	No Pin
15	TPB1+
16	TPB1-

15) COMB (COM B Connector)

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

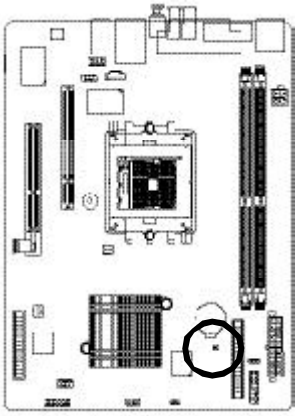


Pin No.	Definition
1	NDCDB-
2	NSINB
3	NSOUTB
4	NDTRB-
5	GND
6	NDSRB-
7	NRTSB-
8	NCTSB-
9	NRIB-
10	No Pin

16) 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.



Open: Normal

Close: CLEAR CMOS

 # Default doesn't include the "Shunter" to prevent from improper use this jumper.

Chapter 3 BIOS Setup

BIOS Setup is an overview of the BIOS Setup Program. The program that allows users to modify the basic system configuration. This type of information is stored in battery-backed CMOS RAM so that it retains the Setup information when the power is turned off.

ENTERING SETUP

After power on the computer, pressing **<Del>** immediately during POST (Power On Self Test) it will allow you to enter standard BIOS CMOS SETUP.

If you require more advanced BIOS settings, please go to "advanced BIOS" setting menu. To enter Advanced BIOS setting menu, press "Ctrl+F1" key on the BIOS screen.

CONTROL KEYS

<↑>	Move to previous item
<↓>	Move to next item
<←>	Move to the item in the left hand
<→>	Move to the item in the right hand
<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
<+/PgUp>	Increase the numeric value or make changes
<-/PgDn>	Decrease the numeric value or make changes
<F1>	General help, only for Status Page Setup Menu and Option Page Setup Menu
<F2>	Item help
<F3>	Reserved
<F4>	Reserved
<F5>	Restore the previous CMOS value from CMOS, only for Option Page Setup Menu
<F6>	Load the default CMOS value from BIOS default table, only for Option Page Setup Menu
<F7>	Load the Setup Defaults
<F8>	Q-Flash
<F9>	Reserved
<F10>	Save all the CMOS changes, only for Main Menu

GETTING HELP

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 (For example: BIOS Ver. : D1)

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 eight setup functions and two exit choices. Use arrow keys to select among the items and press <Enter> to accept or enter the sub-menu.

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▶Standard CMOS Features	Top Performance
▶Advanced BIOS Features	Load Fail-Safe Defaults
▶Integrated Peripherals	Load Optimized Defaults
▶Power Management Setup	Set Supervisor Password
▶PnP/PCI Configurations	Set User Password
▶PC Health Status	Save & Exit Setup
▶Frequency/Voltage Control	Exit Without Saving
ESC:Quit	↑↓→←: Select Item
F8:Q-Flash	F10:Save & Exit Setup
Time, Date, Hard Disk Type...	

Figure 1: Main Menu

If you can't find the setting you want, please press "Ctrl+F1" to search the advanced option widden.

- **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.

- **PnP/PCI Configurations**

  This setup page includes all the configurations of PCI & PnP ISA resources.

- **PC Health Status**

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

- **Frequency/Voltage Control**

  This setup page is control CPU's clock and frequency ratio.

- **Top Performance**

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

- **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 better 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.

Standard CMOS Features

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Standard CMOS Features

Date (mm:dd:yy)	Thu, Feb 21 2002	Item Help
Time (hh:mm:ss)	22:31:24	Menu Level ▶
▶IDE Primary Master	[Press Enter None]	Change the day, month, year
▶IDE Primary Slave	[Press Enter None]	<Week>
		Sun. to Sat.
Drive A	[1.44M, 3.5"]	<Month>
Drive B	[None]	Jan. to Dec.
Floppy 3 Mode Support	[Disabled]	<Day>
		1 to 31(or maximun allowed
Halt On	[All, But Keyboard]	in the month.)
Base Memory	640K	<year>
Extended Memory	130048K	1999 to 2098
Total Memory	131072K	

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

Figure 2: 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 Primary Master, Slave

The category identifies the types of hard disk from drive C to F that has been installed in the computer. There are two types: auto type, and manual type. Manual type is user-definable; Auto type which will automatically detect HDD type.

Note that the specifications of your drive must match with the drive table. The hard disk will not work properly if you enter improper information for this category.

If you select User Type, related information will be asked to enter to the following items. Enter the information directly from the keyboard and press <Enter>. Such information should be provided in the documentation form your hard disk vendor or the system manufacturer.

- ⏩ Capacity: The hard disk size. The unit is Mega Bytes.
- ⏩ Access Mode: The options are: Auto / Large / LBA / Normal.
- ⏩ Cylinder: The cylinder number of hard disk.
- ⏩ Head The read / Write head number of hard disk.
- ⏩ Precomp The cyliner number at which the disk driver changes the write current.
- ⏩ Landing Zone The cylinder number that the disk driver heads (read/write) are seated when the disk drive is parked.
- ⏩ SECTORS The sector number of each track define on the hard disk.

If a hard disk has not been installed select NONE and press <Enter>.

☞ Drive A / Drive B

The category identifies the types of floppy disk drive A or drive B 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.

☞ Floppy 3 Mode Support (for Japan Area)

- ⏩ Disabled Normal Floppy Drive. (Default value)
- ⏩ Drive A Enabled 3 mode function of Drive A.
- ⏩ Drive B Enabled 3 mode function of Drive B.
- ⏩ Both Drive A & B are 3 mode Floppy Drives.

☞ 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.
⏩ All Errors	Whenever the BIOS detects a non-fatal error the system will be stopped.
⏩ All, But Keyboar	The system boot will not stop for a keyboard error; it will stop for all other errors. (Default value)
⏩ 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 512 K for systems with 512 K memory installed on the motherboard, or 640 K for systems with 640 K 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.

Advanced BIOS Features

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Advanced BIOS Features

First Boot Device	[Floppy]	Item Help
Second Boot Device	[HDD-0]	Menu Level ▶
Third Boot Device	[CDROM]	
Boot Up Floppy Seek	[Disabled]	
Password Check	[Setup]	
Flexible AGP 8X	[Auto]	
Init Display First	[AGP]	

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

Figure 3: Advanced BIOS Features

☞First / Second / Third Boot device

This feature allows you to select the boot device priority.

- Floppy — Select your boot device priority by Floppy.
- LS120 — Select your boot device priority by LS120.
- HDD-0~3 — Select your boot device priority by HDD-0~3.
- SCSI — Select your boot device priority by SCSI.
- CDROM — Select your boot device priority by CDROM.
- LAN — Select your boot device priority by LAN.
- USB-CDROM — Select your boot device priority by USB-CDROM.
- USB-ZIP — Select your boot device priority by USB-ZIP.
- USB-FDD — Select your boot device priority by USB-FDD.
- USB-HDD — Select your boot device priority by USB-HDD.
- ZIP — Select your boot device priority by ZIP.
- Disabled — Disabled this function.

☞ Boot Up Floppy Seek

✍ During POST, BIOS will determine the floppy disk drive installed is 40 or 80 tracks. 360 K type is 40 tracks 720 K, 1.2 M and 1.44 M are all 80 tracks.

- ⏩ Enabled — BIOS searches for floppy disk drive to determine it is 40 or 80 tracks. Note that BIOS can not tell from 720 K, 1.2 M or 1.44 M drive type as they are all 80tracks.
- ⏩ Disabled — BIOS will not search for the type of floppy disk drive by track number. Note that there will not be any warning message if the drive installed is 360 K. (Default value)

☞ Password Check

- ⏩ System — The system can not boot and can not access to Setup page will be denied if the correct password is not entered at the prompt.
- ⏩ Setup — The system will boot, but access to Setup will be denied if the correct password is not entered at the prompt. (Default value)

☞ Flexible AGP 8X

- ⏩ Auto — Automatically set AGP transfer rate according to AGP compatibility and stability. (Default value)
- ⏩ 8X — Always set AGP transfer rate to 8X mode if the 8X mode supported by the AGP card.
- ⏩ 4X — Set AGP transfer rate to 4X mode no matter what the AGP transfer rate the card is.

☞ Init Display First

✍ This feature allows you to select the first initation of the monitor display from which card, when you install an AGP VGA card and a PCI VGA card on board.

- ⏩ PCI Slot — Set Init Display First to PCI Slot.
- ⏩ AGP — Set Init Display First to AGP. (Default value)

Integrated Peripherals

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Integrated Peripherals

On-Chip Primary PCI IDE	[Enabled]	Item Help
USB Host Controller	[V1.1+V2.0]	Menu Level▶
USB Keyboard Support	[Disabled]	
USB Mouse Support	[Disabled]	
AC97 Audio	[Auto]	
Onboard 1394	[Enabled]	
Onboard LAN Control	[Enabled]	
Onboard LAN Boot Rom	[Disabled]	
Onboard Serial Port 1	[3F8/IRQ4]	
Onboard Serial Port 2	[2F8/IRQ3]	
Onboard Parallel Port	[378/IRQ7]	
Parallel Port Mode	[SPP]	
x ECP Mode Use DMA	3	
Game Port Address	[201]	
Midi Port Address	[330]	
Midi Port IRQ	[10]	
IDE DMA transfer	[Enabled]	

↑↓→←: Move Enter:Select +/-/PU/PD:Value F10:Save ESC:Exit F1:General Help

F5:Previous Values F6:Fail-Safe Defaults F7:Optimized Defaults

Figure 4: Integrated Peripherals

On-Chip Primary PCI IDE

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

USB Host Controller

- Disabled — Disable this function if you are not using onboard USB function.
- V1.1+V2.0 — Enable 1.1&2.0 USB controllers (Default Value)
- V1.1 — Enable 1.1 USB controller.

USB Keyboard Support

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

USB Mouse Support

When USB Mouse is installed, please set at enabled.

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

AC97 Audio

- Auto — Auto detect AC'97 audio function. (Default Value)
- Disabled — Disable AC'97 audio function.

Onboard 1394

- Enabled — Auto detect onboard 1394 function. (Default Value)
- Disabled — Disable this function.

Onboard LAN Control

- Enabled — Enable Onboard LAN chip function. (Default value)
- Disabled — Disable this function.

☞Onboard LAN Boot Rom

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

- Enabled — Enable Onboard LAN chip function.
- Disabled — Disable this function. (Default value)

☞Onboard Serial Port 1

- Auto — BIOS will automatically setup the port 1 address.
- 3F8/IRQ4 — Enable onboard Serial port 1 and address is 3F8,Using IRQ4. (Default value)
- 2F8/IRQ3 — Enable onboard Serial port 1 and address is 2F8,Using IRQ3.
- 3E8/IRQ4 — Enable onboard Serial port 1 and address is 3E8,Using IRQ4.
- 2E8/IRQ3 — Enable onboard Serial port 1 and address is 2E8,Using IRQ3.
- Disabled — Disable onboard Serial port 1.

☞Onboard Serial Port 2

- Auto — BIOS will automatically setup the port 2 address.
- 3F8/IRQ4 — Enable onboard Serial port 2 and address is 3F8,Using IRQ4.
- 2F8/IRQ3 — Enable onboard Serial port 2 and address is 2F8,Using IRQ3. (Default Value)
- 3E8/IRQ4 — Enable onboard Serial port 2 and address is 3E8,Using IRQ4.
- 2E8/IRQ3 — Enable onboard Serial port 2 and address is 2E8,Using IRQ3.
- Disabled — Disable onboard Serial port 2.

☞OnBoard Parallel port

This feature allows you to select from a given set of parameters if the parallel port uses the onboard I/O controller.

- 378/IRQ7 — Enable onboard LPT port and address is 378, Using IRQ7.(Default Value)
- 278/IRQ5 — Enable onboard LPT portand address is 278,Using IRQ5.
- 3BC/IRQ7 — Enable onboard LPT port and address is 3BC,Using IRQ7.
- Disabled — Disable onboard parallel port.

☞ Parallel Port Mode

💣 This feature allows you to connect with an advanced print via the port mode it supports.

⏩ SPP	Using Parallel port as Standard Parallel Port using IRQ7. (Default Value)
⏩ EPP	Using Parallel port as Enhanced Parallel Port IRQ5.
⏩ ECP	Using Parallel port as Extended Capabilities Port using IRQ7.
⏩ ECP+EPP	Using Parallel port as ECP & EPP mode.

☞ ECP Mode Use DMA

This feature allows you to select Direct Memory Access (DMA) channel if the ECP mode selected.

This function will available when "Parallel Port Mode" set at ECP or ECP+EPP.

⏩ 3	Set ECP Mode Use DMA to 3. (Default Value)
⏩ 1	Set ECP Mode Use DMA to 1.

☞ Game Port Address

⏩ Disabled	Disabled this function.
⏩ 201	Set Game Port Address to 201. (Default Value)
⏩ 209	Set Game Port Address to 209.

☞ Midi Port Address

⏩ Disabled	Disabled this function.
⏩ 300	Set Midi Port Address to 300.
⏩ 330	Set Midi Port Address to 330. (Default Value)

☞ Midi Port IRQ

⏩ 5	Set 5 for Midi Port IRQ.
⏩ 10	Set 10 for Midi Port IRQ. (Default value)

☞ IDE DMA transfer

⏩ Enabled	Detect the IDE UDMA automatically.
⏩ Disabled	Disable UDMA function. (Default value)

Power Management Setup

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Power Management Setup

ACPI Suspend Type	[S1(POS)]	Item Help
Soft-Off by PWR-BTTN	[Instant-off]	Menu Level▶
PME Event Wake Up	[Disabled]	
ModemRingOn	[Disabled]	
S3 Resume by USB device	[Disabled]	
Resume by Alarm	[Disabled]	
※ Date(of Month) Alarm	Everyday	
※ Time(hh:mm:ss) Alarm	0 : 0 : 0	
Power On by Mouse	[Disabled]	
Power On by Keyboard	[Disabled]	
x KB Power ON Password	Enter	
AC Back Function	[Soft-Off]	

↑↓→←: Move Enter:Select +/-/PU/PD:Value F10:Save ESC:Exit F1:General Help

F5:Previous Values F6:Fail-Safe Defaults F7:Optimized Defaults

Figure 5: Power Management Setup

☞ ACPI Suspend Type

- ⏩ S1(POS) — Set suspend type to Power On Suspend under ACPI OS(Power On Suspend). (Default value)
- ⏩ S3(STR) — Set suspend type to Suspend To RAM under ACPI OS (Suspend To RAM).

☞ 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.

☞ PME Event Wake up

- When set at Enabled, any PCI-PM event awakes the system from a PCI-PM controlled state.
- This feature requires an ATX power supply that provides at least 1A on the +5VSB lead.

- ⏩ Disabled — Disabled PME Event Wake up function.
- ⏩ Enabled — Enabled PME Event Wake up function. (Default Value).

☞ Modem Ring On (When AC Back Function is set to [Soft-Off])

- You can enable wake on LAN feature by the "ModemRingOn/WakeOnLAN" or "PME Event Wake up" when the M/B has "WOL" onboard connector. Only enabled the feature by "PME Event Wake up".
- An incoming call via modem awakes the system from its soft-off mode.
- When set at Enabled, an input signal comes from the other client.

  Server on the LAN awaks the system from a soft off state if connected over LAN.

- ⏩ Disabled — Disabled Modem Ring On / Wake On LAN function.
- ⏩ Enabled — Enabled Modem Ring On / Wake On LAN function. (Default Value)

☞ S3 Resume by USB Device

You can resume the system from USB device.

- ⏩ Disabled — Disable this function. (Default Value)
- ⏩ Enabled — Enable this function.

☞Resume by Alarm

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 Lead To Power On is Enabled.

Date (of Month) Alarm : Everyday, 1~31

Time (hh: mm: ss) Alarm : (0~23) : (0~59) : (0~59)

☞ Power On By Mouse

- ⏩ Disabled — Disabled this function. (Default value)
- ⏩ Double Click — Double click on PS/2 mouse left button to power on the system.

☞ Power On By Keyboard

This feature allows you to set the method for powering-on the system.

The option "Password" allows you to set up to 5 alphanumeric characters to power-on the system.

The option "Keyboard 98" allows you to use the standard keyboard 98 to power on the system.

- ⏩ Password — Enter from 1 to 5 characters to set the Keyboard Power On Password.
- ⏩ Disabled — Disabled this function. (Default value)
- ⏩ Keyboard 98 — If your keyboard have "POWER Key" button, you can press the key to power on the system.

☞ KB Power ON Password

When "Power On by Keyboard" set at Password, you can set the password here.

- ⏩ Enter — Input password (from 1 to 5 characters) and press Enter to set the Keyboard Power On password.

☞ AC BACK Function

- ⏩ Soft-Off — When AC-power back to the system, the system will be in "Off" state. (Default Value)
- ⏩ Full-On — When AC-power back to the system, the system always in "On" state.

PnP/PCI Configurations

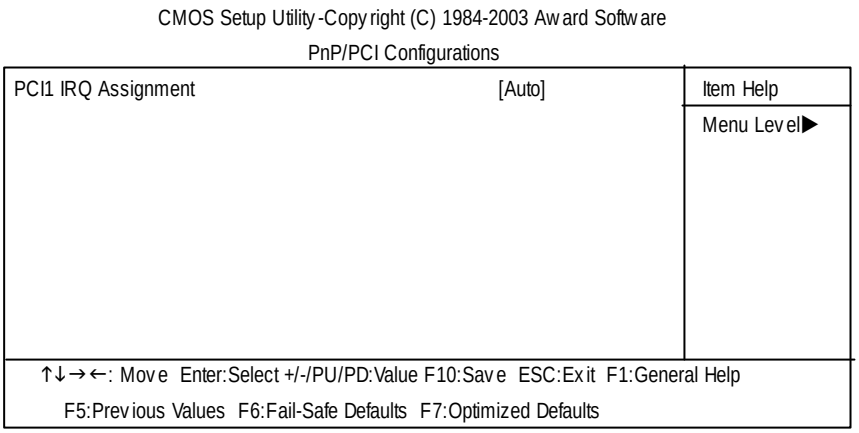

Figure 6: PnP/PCI Configurations

☞PCI1 IRQ Assignment

⏩Auto	Auto assign IRQ to PCI 1. (Default value)
⏩3,4,5,7,9.,10,11,12,14,15	Set 3,4,5,7,9,10,11,12,14,15 to PCI1 .

PC Health Status

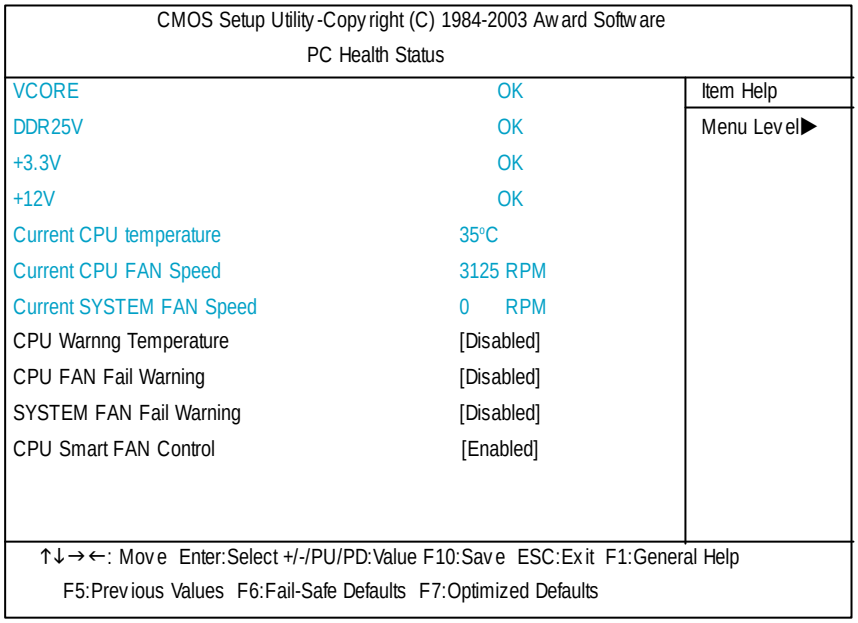

Figure7: PC Health Status

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

➽ Detect system's voltage status automatically.

☞ Current CPU Temperature (°C)

Detect CPU Temp. automatically.

☞ Current CPU FAN / SYSTEM FAN Speed (RPM)

Detect Fan speed status automatically.

☞ CPU Warning Temperature

Alarm When current temperature over than the selected temperature.

- 60°C / 140°F — Monitor CPU Temp. at 60°C / 140°F.
- 70°C / 158°F — Monitor CPU Temp. at 70°C / 158°F.
- 80°C / 176°F — Monitor CPU Temp. at 80°C / 176°F.
- 90°C / 194°F — Monitor CPU Temp. at 90°C / 194°F.
- Disabled — Don't monitor current temperature.(Default value)

☞ CPU FAN Fail Warning

- Disabled — Fan Warning Function Disable. (Default value)
- Enabled — Fan Warning Function Enable.

☞ System FAN Fail Warning

- Disabled — Fan Warning Function Disable. (Default value)
- Enabled — Fan Warning Function Enable.

☞ CPU Smart FAN Control

- Disabled — Disable this function.
- Enabled — Enable CPU Smart Fan control function.(Default value)

  a. When the CPU temperature is higher than 40 degrees Celsius, CPU fan will run at full speed.

  b. When the CPU temperature is lower than 40 degrees Celsius, CPU fan will run at low speed.

Frequency/Voltage Control

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Frequency/Voltage Control

CPU OverClock in MHz	[200]	Item Help
AGP OverClock in MHz	[66]	Menu Level ▶
CPU Voltage Control	[Normal]	
AGP Voltage Control	[Normal]	
Vcc12-HT Voltage Control	[Normal]	
DDR Voltage Control	[Normal]	

↑↓→←: Move Enter:Select +/-/PU/PD: Value F10: Save ESC:Exit F1: General Help

F5: Previous Values F6: Fail-Safe Defaults F7: Optimized Defaults

Figure 8: Frequency/Voltage Control

※Those items will be available when "CPU Host Clock Control" is set to Enabled.

☞ CPU OverClock in MHz

Increase CPU frequency may get stable for Over_Clock. But it may damage to CPU when enable this feature.

➽ 200~300 Increase CPU frequency as user selected.

☝ Incorrect using it may cause your system to fail. For power End-User use only!

☞ AGP OverClock in MHz

Increase AGP frequency may get stable for Over_Clock. But it may damage to AGP when enable this feature.

➽ 66~100 Increase AGP frequency as user selected.

☝ Incorrect using it may cause your system to fail. For power End-User use only!

☞ CPU Voltage Control

- Supports adjustable CPU Vcore from +5.0% to +10.0%.
  (Default value: Normal)

☛ Incorrect using it may cause your system broken. For power End-User use only!

☞ AGP Voltage Control

☛ Warning:CPU may be damageed or reduce CPU life-cycle when CPU is over-voltage.

Normal	Set VDDQ Voltage Control to Normal. (Default value)
+0.1V	Set VDDQ Voltage Control to +0.1V.
+0.2V	Set VDDQ Voltage Control to +0.2V.
+0.3V	Set VDDQ Voltage Control to +0.3V.

☞ Vcc12-HT Voltage Control

☛ Warning:CPU may be damageed or reduce CPU life-cycle when CPU is over-voltage.

Normal	Set Vcc12-HT Voltage Control to Normal. (Default value)
+0.1V	Set Vcc12-HT Voltage Control to +0.1V.
+0.2V	Set Vcc12-HT Voltage Control to +0.2V.
+0.3V	Set Vcc12-HT Voltage Control to +0.3V.

☞ DDR Voltage Control

Normal	Set DDR Voltage Control to Normal. (Default value)
+0.1V	Set DDR Voltage Control to +0.1V.
+0.2V	Set DDR Voltage Control to +0.2V.

☛ Incorrect using it may cause your system to fail. For power End-User use only!

Top Performance

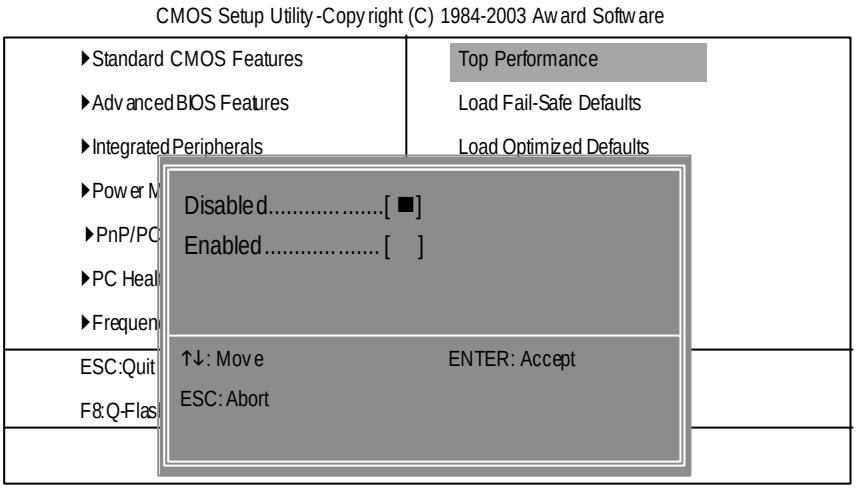

Figure 9: Top Performance

Top Performance

If you wish to maximize the performance of your system, set "Top Performance" as "Enabled".

- Disabled Disable this function. (Default Value)
- Enabled Enable Top Performance function.

You must check whether your RAM, CPU support over clock when you set "Top Performance" to "Enabled".

Load Fail-Safe Defaults

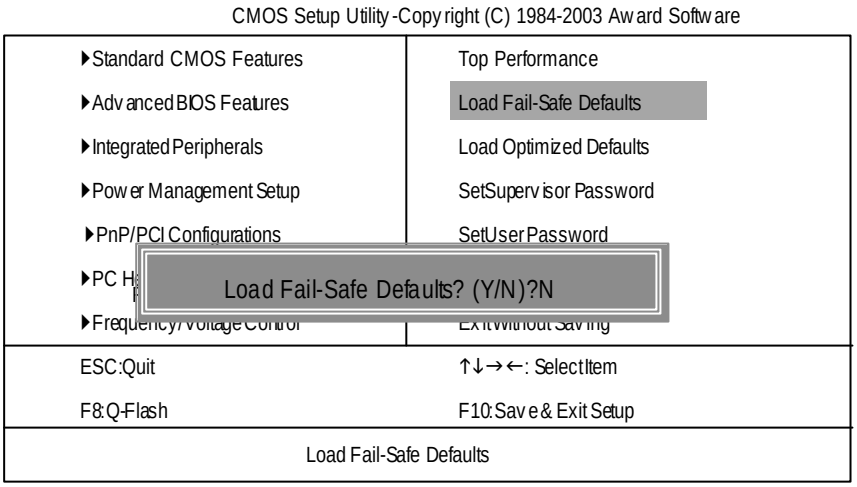

Figure 11: Load Fail-Safe Defaults

☞ Load Fail-Safe Defaults

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

Load Optimized Defaults

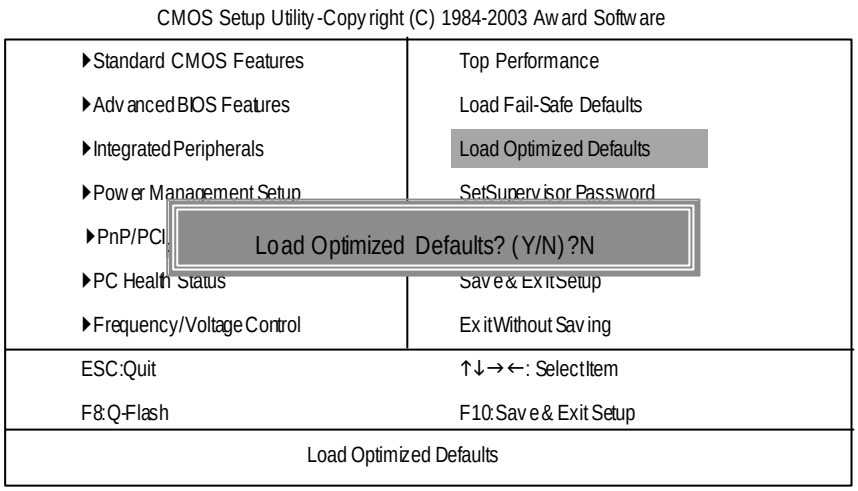

Figure 12: Load Optimized Defaults

☞ Load Optimized Defaults

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

Set Supervisor/User Password

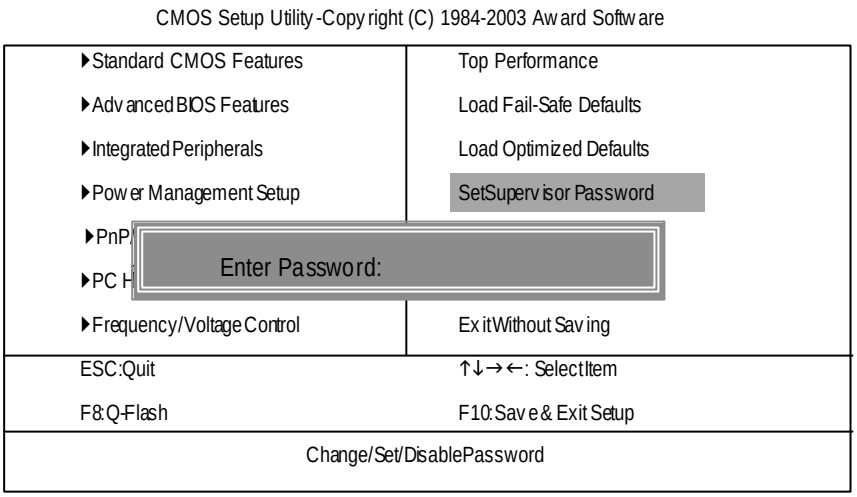

Figure 13: Password Setting

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: a 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 **"**Security Option**"** 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 "Security Option" in Advance BIOS Features Menu, you will be prompted only when you try to enter Setup.

Save & Exit Setup

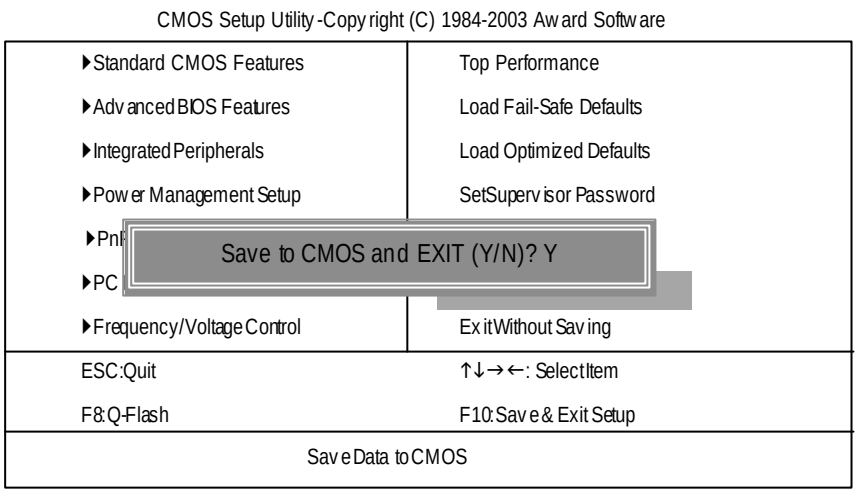

Figure 14: Save & Exit Setup

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

Exit Without Saving

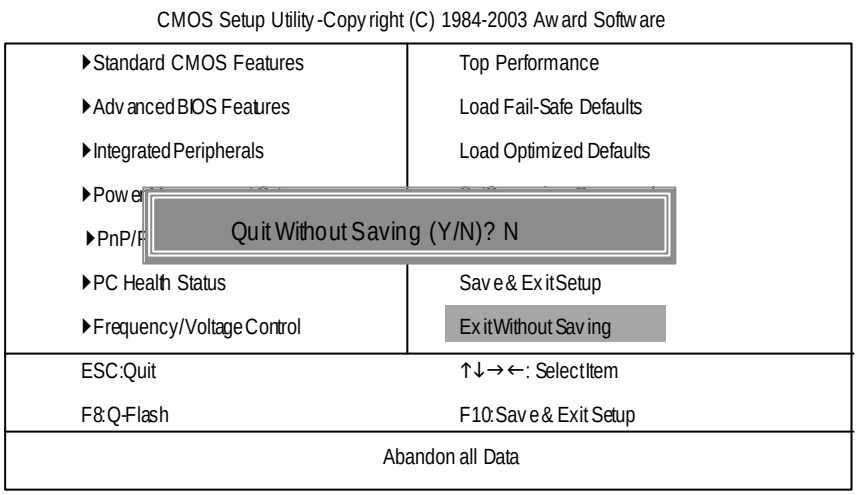

Figure 15: Exit Without Saving

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

Type "N" will return to Setup Utility.