- The author assumes no responsibility for any errors or omissions that may appear in this document nor does the author make a commitment to up date the information contained herein.

- Third-party brands and names are the property of their respective owners.

- Please do not remove any labels on motherboard, this may void the warranty of this motherboard.

- Due to rapid change in technology, some of the specifications might be out of date before publication of this booklet.

- Before you install PCI cards, please remove the Dual BIOS label from PCI slots if there is one.

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 ß 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，過熱將永遠損壞處理器！

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。

Declaration of Conformity

We, Manufacturer/Importer
(full address)

G.B.T. Technology Träding GMbH
Ausschlager Weg 41, 1F, 20537 Hamburg, Germany

declare that the product
(description of the apparatus, system, installation to which it refers)

Mother Board
GA-7DPXDW-P
is in conformity with
(reference to the specification under which conformity is declared)
in accordance with 89/336 EEC-EMC Directive

☐ **EN 55011**	Limits and methods of measurement of radio disturbance characteristics of industrial,scientific and medical (ISM high frequency equipment	☐ **EN 61000-3-2*** ☒ **EN 60555-2**	Disturbances in supply systems cause by household appliances and similar electrical equipment "Harmonics"
☐ **EN 55013**	Limits and methods of measurement of radio disturbance characteristics of broadcast receivers and associated equipment	☐ **EN 61000-3-3*** ☒ **EN 60555-3**	Disturbances in supply systems cause by household appliances and similar electrical equipment "Voltage fluctuations"
☐ **EN 55014**	Limits and methods of measurement of radio disturbance characteristics of household electrical appliances, portable tools and similar electrical apparatus	☒ **EN 50081-1**	Generic emission standard Part 1: Residual commercial and light industry
		☒ **EN 50082-1**	Generic immunity standard Part 1: Residual commercial and light industry
☐ **EN 55015**	Limits and methods of measurement of radio disturbance characteristics of fluorescent lamps and luminaries	☐ **EN 55081-2**	Generic emission standard Part 2: Industrial environment
☐ **EN 55020**	Immunity from radio interference of broadcast receivers and associated equipment	☐ **EN 55082-2**	Generic emission standard Part 2: Industrial environment
☒ **EN 55022**	Limits and methods of measurement of radio disturbance characteristics of information technology equipment	☐ **ENV 55104**	Immunity requirements for household appliances tools and similar apparatus
☐ **DIN VDE 0855** ☐ **part 10** ☐ **part 12**	Cabled distribution systems; Equipment for receiving and/or distribution from sound and television signals	☐ **EN50091-2**	EMC requirements for uninterruptible power systems (UPS)
☒ **CE marking**		(EC conformity marking)	

The manufacturer also declares the conformity of above mentioned product with the actual required safety standards in accordance with LVD 73/23 EEC

☐ **EN 60065**	Safety requirements for mains operated electronic and related apparatus for household and similar general use	☐ **EN 60950**	
☐ **EN 60335**	Safety of household and similar electrical appliances	☐ **EN 50091-1**	

Manufacturer/Importer

(Stamp)

Date : Jun. 22, 2002

Signature: Timmy Huang
Name: Timmy Huang

DECLARATION OF CONFORMITY

Per FCC Part 2 Section 2.1077(a)

Responsible Party Name: **G.B.T. INC. (U.S.A.)**

Address: **17358 Railroad Street**
City of Industry, CA 91748

Phone/Fax No: **(818) 854-9338/ (818) 854-9339**

hereby declares that the product

Product Name: **Motherboard**

Model Number: **GA-7DPXDW-P**

Conforms to the following specifications:

FCC Part 15, Subpart B, Section 15.107(a) and Section 15.109(a), Class B Digital Device

Supplementary Information:

This device complies with part 15 of the FCC Rules. Operation is subject to the following two conditions: (1) This device may not cause harmful and (2) this device must accept any inference received, including that may cause undesired operation.

Representative Person's Name: ERIC LU

Signature: Eric Lu

Date: Jun. 22, 2002

GA-7DPXDW-P

AMD Socket A Dual Processor Motherboard

USER'S MANUAL

AMD Athlon™ Socket A Dual Processor Motherboard

Rev. 1002

Table of Content

Item Checklist

- ☑ The GA-7DPXDW-P motherboard
- ☑ IDE cable x 1/ Floppy cable x 1
- ☑ CD for motherboard driver & utility
- ☑ GA-7DPXDW-P user's manual
- ☑ Promise RAID Function user's manual

WARNING!

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.

Chapter 1 Introduction

Summary of Features

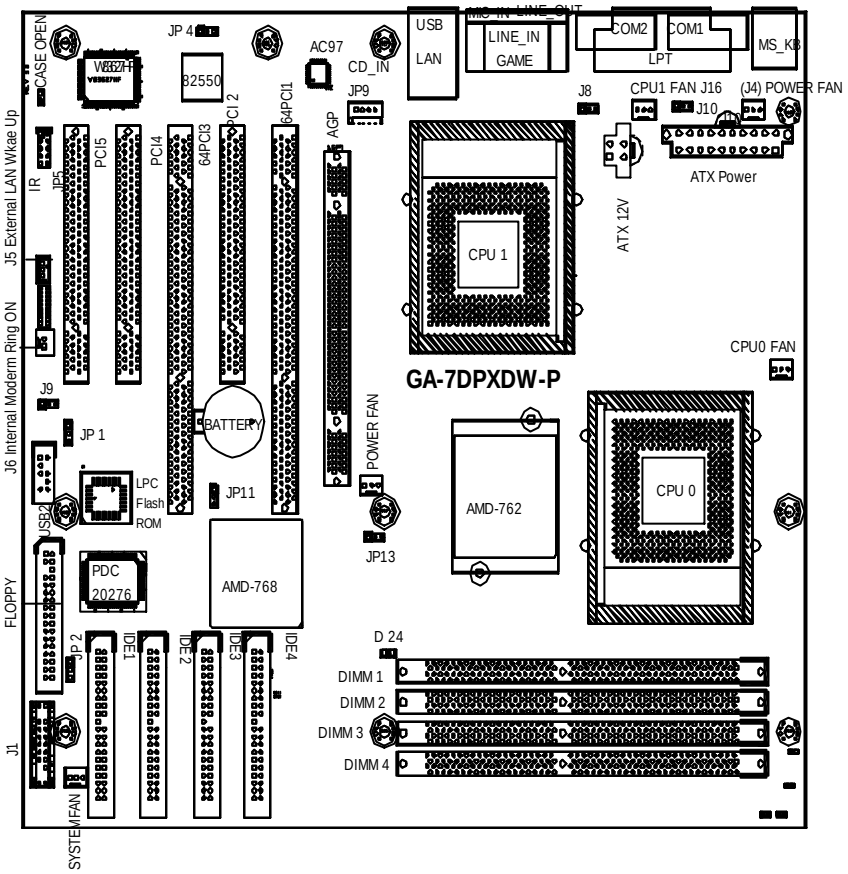
Form Factor	• 30.4cm x 26.9cm ATX size form factor, 6 layers PCB.
Motherboard	• GA-7DPXDW-P Motherboard
CPU	• Socket A Dual high performance Athlon MP System Processor AMD AthlonTM MP/AthlonTM XP/ DuronTM (K7) 128K L1 & 256K/64K L2 cache on die • 200/266MHz FSB and DDR bus speeds • Supports 1.4GHz and faster
Chipset	• AMD-760MPX™ Chipsets is a highly intergrated system logic solution that delivers enhanced performance for the AMD Athlon™ processor and other AMD Athlon processor system bus compatible processors. • AMD-762 North Bridge chipset with memory controller supports 200/266MHz FSB • AMD-768 South Bridge chipset with a host (primary) PCI utilize a 66MHz/32 bit interface and a secendary PCI bridge utilize a 33MHz/ 32bit interface; PCI 2.2 compliant .
Memory	• 4 184-pin DDR sockets are available to support ECC and non-ECC modules • 4 socket are designed to support both PC1600/PC2100 Regis tered DDR DIMM • 2 sockets are designed to support both PC1600/PC2100 Un-buffered DDR DIMM • The DDR memory bus runs the same frequency as the CPU FSB. • Supports only 2.5V DDR DIMM • Supports upto 4GB total system memory size for Registered DDR • Supports up to 2GB total system memory size for Un-Buffered DDR
I/O Control	• W83627HF
Slots	• 1 AGP Pro slot supports 1X/2X/4X mode & AGP 2.0 Compliant • Primary PCI 2.2 Compliant 66MHz / 64 bit PCI Bus

to be continued.....

	• Secondary PCI 2.2 Compliant 33MHz / 32 bit PCI Bus • 2 x 64 bit / 66 MHz PCI slot + 3 x 32 bit / 33MHz PCI slot
On-Board IDE (IDE3 & IDE4)	• 2 IDE bus master (ATA66/100) IDE ports for up to 4 ATAPI devices • Supports PIO mode3,4 ATA66/100 IDE & ATAPI CD-ROM
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 port (COM1 & COM2) • 4 USB ports (Rear USB x 2, Front USB x 2) • 1 IrDA connector for IR/CIR
Hardware Monitor	• CPU/System Fan Revolution detect • CPU/System temperature detect • System Voltage Detect • Power Management Support
On-Board Sound	• AC97 CODEC • Line In/Line Out/Mic In/CD In/Game Port
On-Board Promise RAID (IDE1 & IDE2)	• Promise IDE RAID support RAID 0, RAID 1
On-Board LAN	• Intel 82550 Chipset • Onboard LAN 10/100 Mbps support
PS/2 Connector	• PS/2 Keyboard interface and PS/2 Mouse interface
BIOS	• Licensed AWARD BIOS, 2M bit Flash ROM
Additional Features	• Wake on LAN • Wake on RING • SMBus Support • IOAPIC Support • Serial IRQ Support • AC Recovery

- 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.

GA-7DPXDW-P Motherboard Layout



Chapter 2 Hardware Installation Process

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

Step 1- Set system jumper (JP13)

Step 2- Install the Central Processing Unit (CPU)

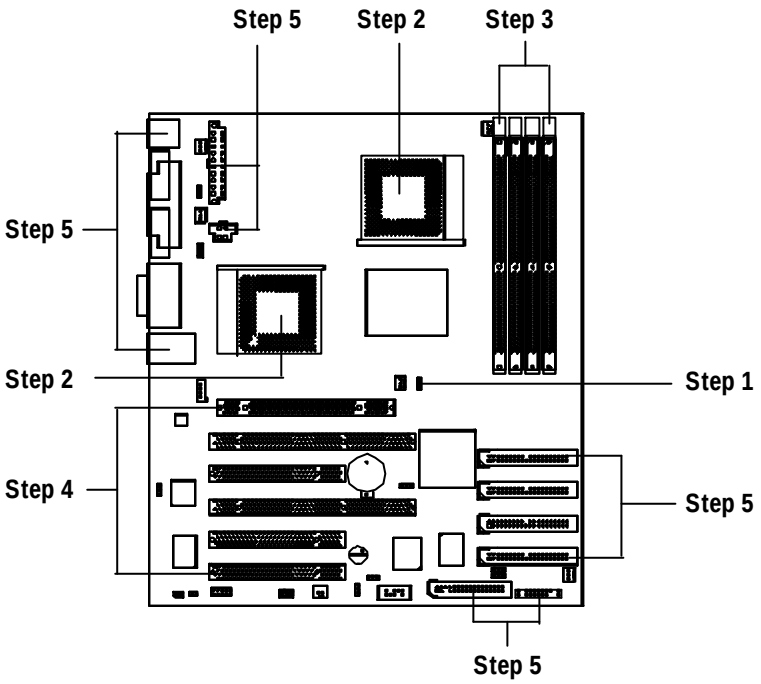
Step 3- Install memory modules

Step 4- Install expansion cards

Step 5- Connect ribbon cables, cabinet wires, and power supply

Step 6- Setup BIOS software

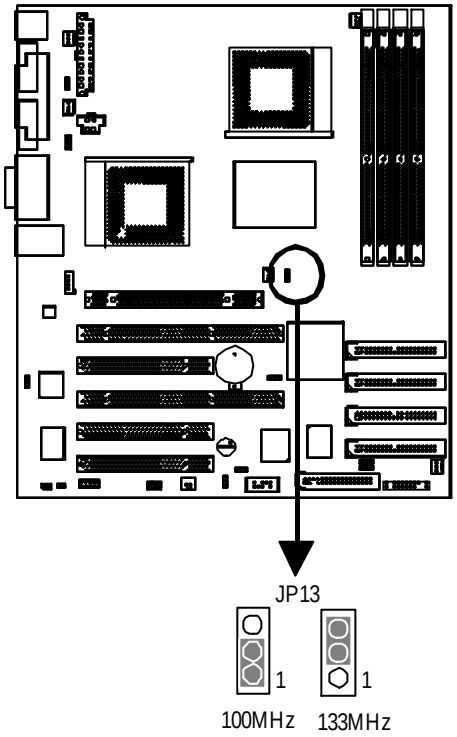
Step 7- Install supporting software tools



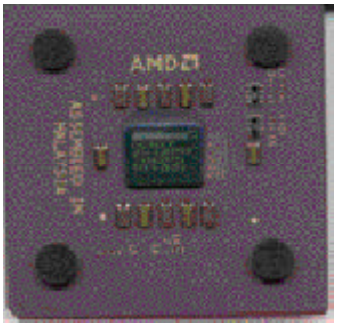
Step 1: Install the Central Processing Unit (CPU)

Step1-1: CPU Speed Setup

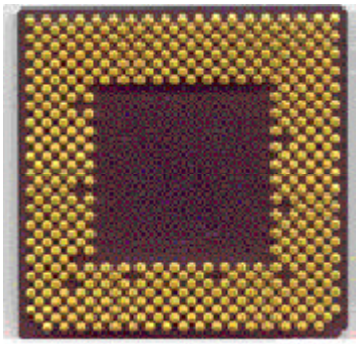
The system bus frequency can be switched at 100/133MHz by adjusting system jumper (JP13). (The internal frequency depend on CPU.)



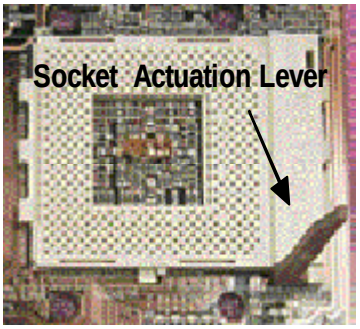
Step1-2: CPU Installation



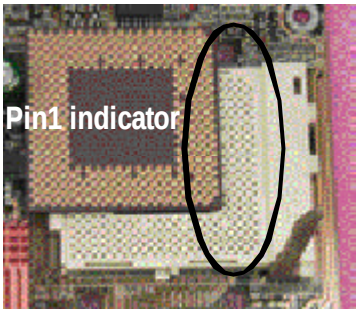
CPU Top View



CPU Bottom View



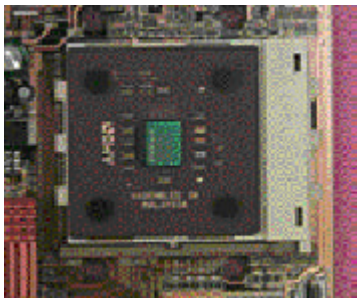
1. Pull up the CPU socket lever and up to 90-degree angle.



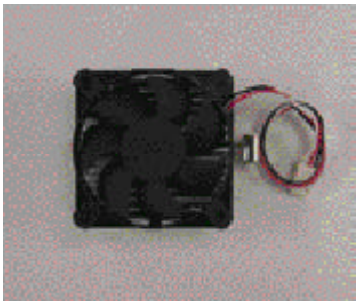
2. Locate Pin 1 in the socket and look for a (golden) cut edge on the CPU upper corner. Then insert the CPU into the socket.

- **Please make sure the CPU type is supported by the motherboard.**
- **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.**

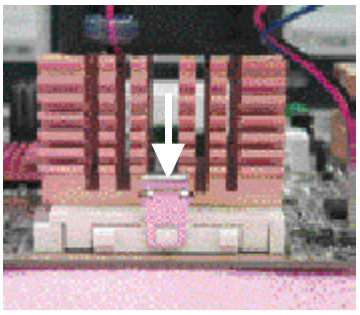
Step1-3:CPU Heat Sink Installation



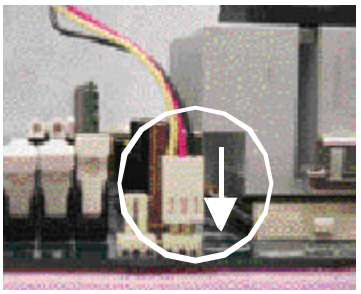
1. Press down the CPU socket lever and finish CPU installation.



2. Use qualified fan approved by AMD.



3. Fasten the heatsink supporting-base onto the CPU socket on the main-board.



4. Make sure the CPU fan is plugged to the CPU fan connector, than install complete.

- **Please use AMD approved cooling fan.**
- **We recommend you to apply the thermal paste to provide better heat conduction between your CPU and heatsink.**
- **Make sure the CPU fan power cable is plugged in to the CPU fan connector, this completes the installation.**
- **Please refer to CPU heat sink user's manual for more detail installation procedure.**

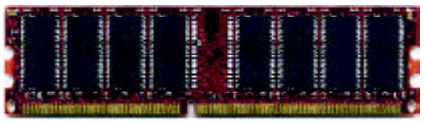
Step 2: Install memory modules

The motherboard has 4 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 Slot.

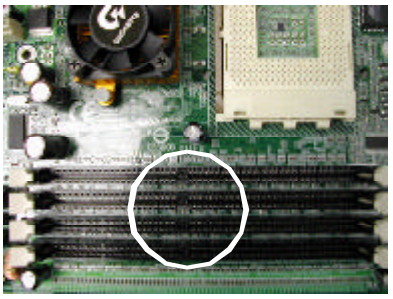
The DIMM module can only fit in one direction due to the notch. Memory size can vary between sockets.

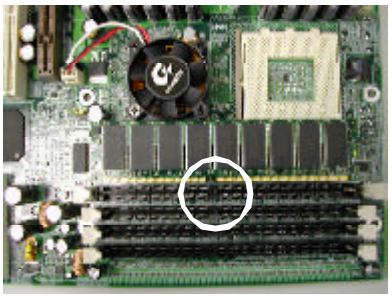
Total Memory Sizes With Registered DDR DIMM

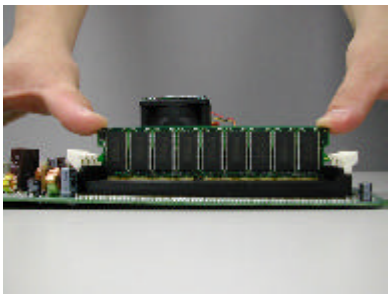
Devices used on DIMM	1 DIMMx64/x72	2 DIMMsx64/x72	3 DIMMsx64/x72	4 DIMMsx64/x72
64 Mbit (4Mx4x4 banks)	256 MBytes	512 MBytes	768 MBytes	1 GBytes
64 Mbit (2Mx8x4 banks)	128 MBytes	256 MBytes	384 MBytes	512 MBytes
64 Mbit (1Mx16x4 banks)	64 MBytes	128 MBytes	192 MBytes	256 MBytes
128 Mbit(8Mx4x4 banks)	512 MBytes	1 GBytes	1.5 GBytes	2 GBytes
128 Mbit(4Mx8x4 banks)	256 MBytes	512 MBytes	768 MBytes	1 GBytes
128 Mbit(2Mx16x4 banks)	128 MBytes	256 MBytes	384 MBytes	512 MBytes
256 Mbit(16Mx4x4 banks)	1 GBytes	2 GBytes	3 GBytes	4 GBytes
256 Mbit(8Mx8x4 banks)	512 MBytes	1 GBytes	1.5 GBytes	2 GBytes
256 Mbit(4Mx16x4 banks)	256 MBytes	512 MBytes	768 MBytes	1 GBytes
512 Mbit(32Mx4x4 banks)	2 GBytes	4 GBytes	4 GBytes	4 GBytes
512 Mbit(16Mx8x4 banks)	1 GBytes	2 GBytes	3 GBytes	4 GBytes
512 Mbit(8Mx16x4 banks)	512 MBytes	1 GBytes	1.5 GBytes	2 GBytes



Un-buffered DDR







1. The DIMM slot has a notch, so the DIMM memory module can only fit in one direction.
2. Insert the DIMM memory module vertically into the DIMM slot. Then push it down.
3. Close the plastic clip at both edges of the DIMM slots to lock the DIMM module.

Reverse the installation steps when you wish to remove the DIMM module.

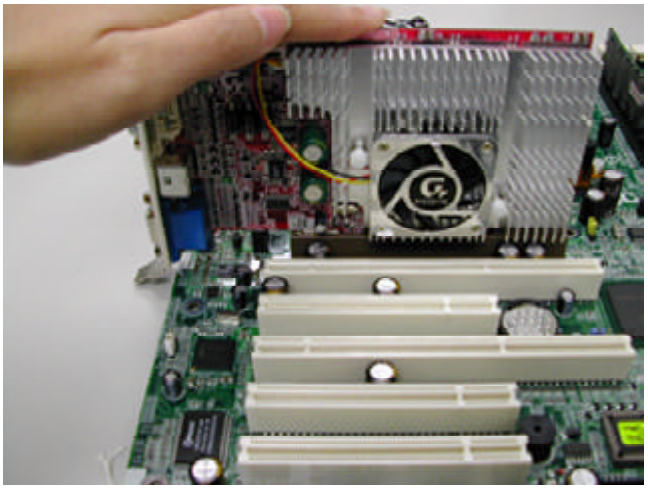
DDR Introduction

Established on the existing SDRAM industry 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 sensible evolutionary solution for the PC industry that builds on the existing SDRAM infrastructure, yet makes awesome advances in solving the system performance bottleneck by doubling the memory bandwidth. DDR SDRAM will offer a superior solution and migration path from existing SDRAM designs due to its availability, pricing and overall market support. PC2100 DDR memory (DDR266) doubles the data rate through reading and writing at both the rising and falling edge of the clock, achieving data bandwidth 2X greater than PC133 when running with the same DRAM clock frequency. With peak bandwidth of 2.1GB per second, DDR memory enables system OEMs to build high performance and low latency DRAM subsystems that are suitable for servers, workstations, high-end PC's and value desktop SMA systems. With a core voltage of only 2.5 Volts compared to conventional SDRAM's 3.3 volts, DDR memory is a compelling solution for small form factor desktops and notebook applications.

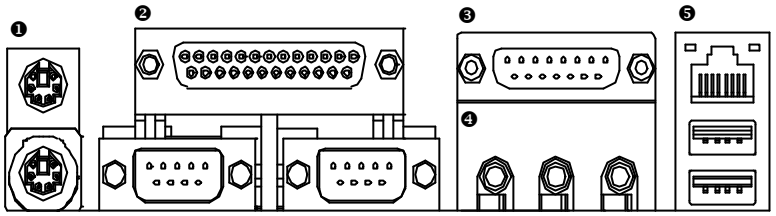
Step 3: Install expansion cards

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.

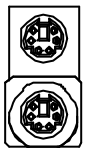


Step 4: Connect ribbon cables, cabinet wires, and power supply

Step4-1:I/O Back Panel Introduction



❶ PS/2 Keyboard and PS/2 Mouse Connector



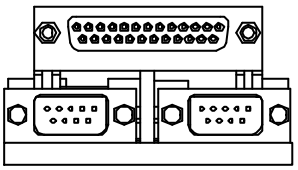
PS/2 Mouse Connector
(6 pin Female)

PS/2 Keyboard Connector
(6 pin Female)

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

❷ Parallel Port , Serial Ports (COM1 / COM2)

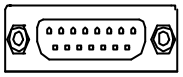
Parallel Port
(25 pin Female)



COM1 COM2
Serial Port (9 pin Male)

➢ This connector supports 2 standard COM ports ,1 Parallel port . Device like printer can be con nected to Parallel port ; mouse and modem etc can be connected to Serial ports.

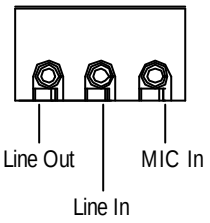
❸ Game /MIDI Ports



Joystick/ MIDI (15 pin Female)

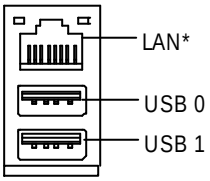
➢ This connector supports joystick, MIDI keyboard and other relate audio devices.

❹ Audio Connectors



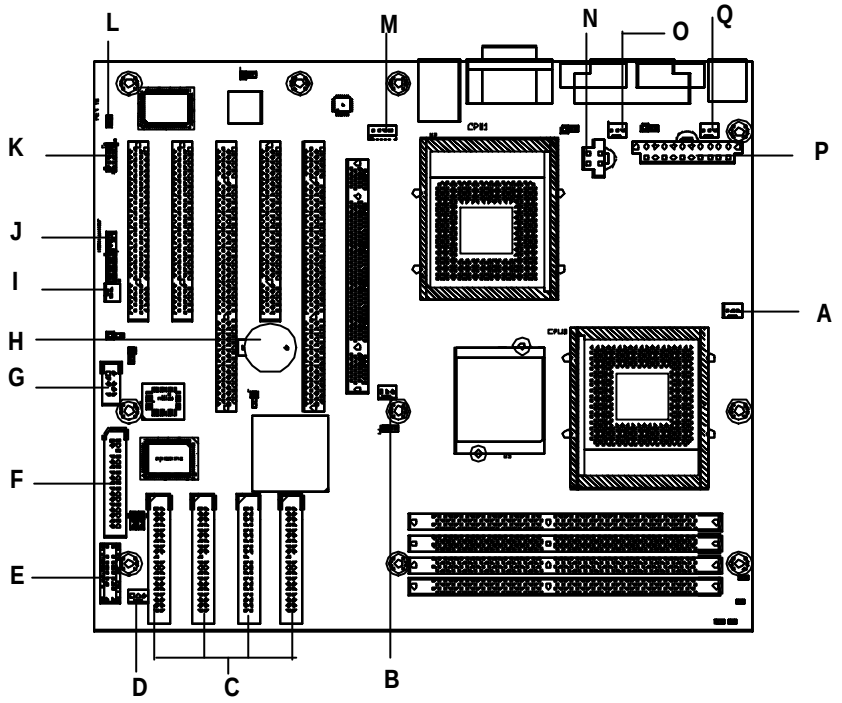
➢ After install onboard audio driver, you may connect speaker to Line Out jack, micro phone to MIC In jack. Device like CD-ROM , walkman etc can be connected to Line-In jack.

❺ USB & LAN Connector



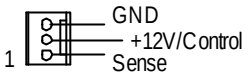
➢ Before you connect your device(s) into USB connector(s), please make sure your device(s) such as USB keyboard,mouse, scanner, zip, speaker..etc. Have a standard USB interface. Also make sure your OS (Win 95 with USB supplement, Win98, Windows 2000, Windows ME, Win NT with SP 6) supports USB controller. 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.

Step4-2: Connectors Introduction



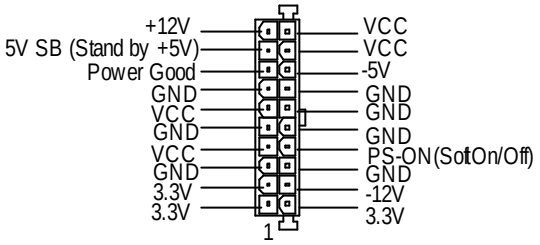
A) CPU0 FAN	J) External LAN Wake Up
B) POWER FAN (North Bridge)	K) IR
C) IDE1~IDE4	L) CASE OPEN
D) SYSTEM FAN	M) CD_IN
E) J1 (Panel)	N) ATX 12V
F) FLOPPY	O) CPU1 FAN
G) USB2 (Front USB)	P) ATX
H) BATTERY	Q) (J4) POWER FAN
I) Internal Moderm Ring On	

A /B / D / O /Q) CPU0_FAN / POWER_FAN/ SYSTEM_FAN/ CPU1_FAN / POWER_FAN



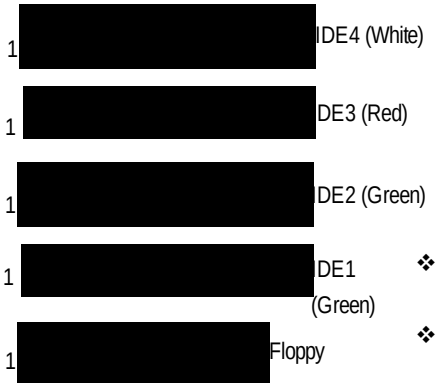
- The CPU fan connector supports Max. current up to 600 mA .

P) ATX (ATX Power)

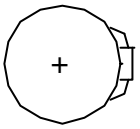


- AC power cord should only be connected to your power supply unit after ATX power cable and other related devices are firmly connected to the mainboard.

C / F) IDE1 / IDE2 / IDE3 / IDE4 / FLOPPY
(IDE1 & IDE2 supports Promise IDE)



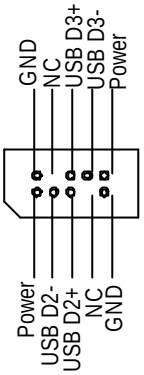
H) Battery



CAUTION

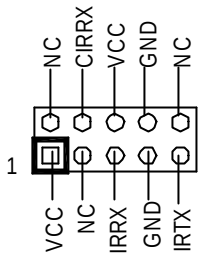
- Danger of explosion if battery is incorrectly replaced.
- Replace only with the same or equivalent type recommended by the manufacturer.
- Dispose of used batteries according to the manufacturer's instructions.

G) USB2



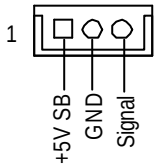
- Be careful with the polarity of the front panel USB connector. Check the pin assignment while you connect the front panel USB cable. Please contact your nearest dealer for optional front panel USB cable.

K) IR

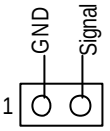


- Make sure the pin 1 on the IR device is aling with pin one the connector. To enable the IR/CIR function on the board, you are required to purchase an option IR/ CIR module. For detail information please contact your autherized Giga-Byte distributor.
  To use IR function only, please connect IR module to Pin1 to Pin5.

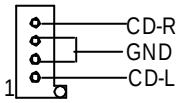
J) External LAN Wake Up (Wake On LAN)



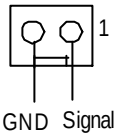
L) CASE_OPEN



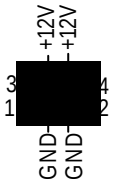
M) CD_IN



I) Internal MODEM RING ON (Wake On RING)

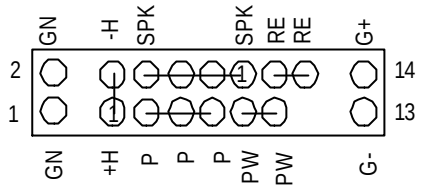


N) AUX_12V(+12V Power Connector)



- This connector (ATX +12V) is used only for CPU Core Voltage.

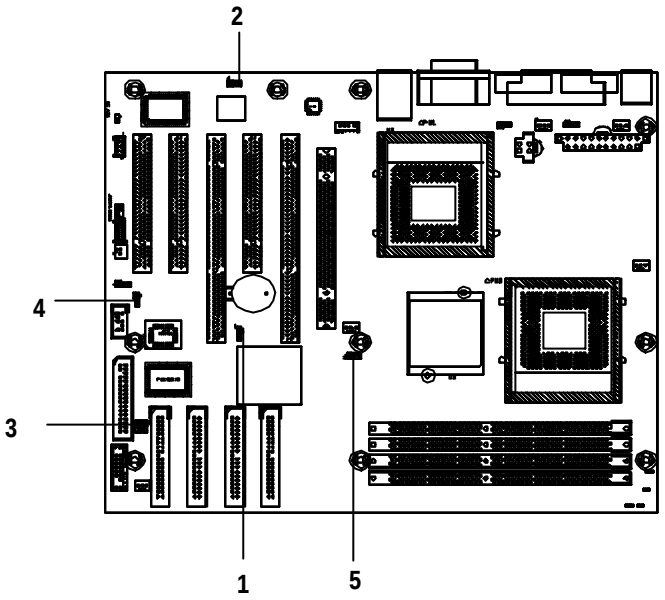
E) J1: F_PANEL (2x11 pins jumper)



H (IDE Hard Disk Active LED)	Pin 1: LED anode(+) Pin 2: LED cathode(-)
SPK (Speaker Connector)	Pin 1: VCC(+) Pin 2- Pin 3: NC Pin 4: Data(-)
RE (Reset Switch)	Open: Normal Operation Close: Reset Hardware System
P(Power LED)	Pin 1: LED anode(+) Pin 2: LED cathode(-) Pin 3: LED cathode(-)
PW (Soft Power Connector)	Open: Normal Operation Close: Power On/Off
GN(Green Switch)	Open: Normal Operation Close: Entering Green Mode
G(Green LED)	Pin1: LED anode (+) Pin2: LED cathode(-)

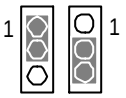
- Please connect the power LED, PC speaker, reset switch and power switch etc of your chassis front panel to the front panel jumper according to the pin assignment above.

Step4-3: Jumper Setting Introduction



1) JP11 (Clear CMOS)	4) JP1 (Buzzer Function)
2) JP4 (Onboard LAN)	5) J13 (CPU FSB Adjustment)
3) JP2 (Promise Function)	

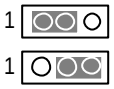
1) JP11: Clear CMOS



1-2 close: Normal (Default)

2-3 close: Clear CMOS

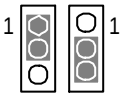
2) JP4: Onboard LAN



1-2 close: Enabled (Default)

2-3 close: Disabled

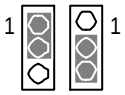
3) JP2: Promise Function



1-2 close: Enabled (Default)

2-3 close: Disabled

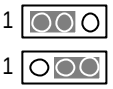
4) JP1: Buzzer Function



1-2 close: Enabled Buzzer (Default)

2-3 close: Disabled

5) JP13: CPU FSB Adjustment



1-2 close: 100MHz

2-3 close: 133Mhz(Default)

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

Power ON the computer and press <Del> immediately will allow you to enter Setup.

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>	Reserved
<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>	Reserved
<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. :F1)

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

Figure 1: Main 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.

- **Advanced Chipset Features**

  This setup page includes all the items of chipset special 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.

- **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.

Standard CMOS Features

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Standard CMOS Features

Date (mm:dd:yy)	Mon, Feb 21 2000	Item Help
Time (hh:mm:ss)	22:31:24	Menu Level
▶IDE Primary Master	None	
▶IDE Primary Slave	None	
▶IDE Secondary Master	None	
▶IDE Secondary Slave	None	
Drive A	1.44M, 3.5 in.	
Drive B	None	
Floppy 3 Mode Support	Disabled	
Halt On	All, But Keyboard	
Base Memory	640K	
Extended Memory	130048K	
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 1994 through 2079

☞ 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 / Secondary 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.

⏩ CYLS	Number of cylinders
⏩ HEADS	Number of heads
⏩ PRECOMP	Write precomp
⏩ LANDZONE	Landing zone
⏩ SECTORS	Number of sectors

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 in.	5.25 inch PC-type standard drive; 360K byte capacity.
⏩ 1.2M, 5.25 in.	5.25 inch AT-type high-density drive; 1.2M byte capacity (3.5 inch when 3 Mode is Enabled).
⏩ 720K, 3.5 in.	3.5 inch double-sided drive; 720K byte capacity
⏩ 1.44M, 3.5 in.	3.5 inch double-sided drive; 1.44M byte capacity.
⏩ 2.88M, 3.5 in.	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	Drive A is 3 mode Floppy Drive.
⏩ Drive B	Drive B is 3 mode Floppy Drive.
⏩ 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

RAID/SCSI Boot Order	RAID,SCSI	Item Help
First Boot Device	Floppy	Menu Level
Second Boot Device	HDD-0	
Third Boot Device	CDROM	
RAID Controller Function	ATA	
Boot Up Floppy Seek	Disabled	
Boot Up Num-Lock	On	
Password Check	Setup	
HDD S.M.A.R.T. Capability	Disabled	
Console Redirection	Diabled	
Agent Connect Via	N, 8, 1, 57600	
Agent after boot	Disabled	

↑↓→←: 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

☞ RAID/SCSI Boot Order

- ⏩ RAID,SCSI Select Boot first from RAID/ATA133 device on board . (Default Value)
- ⏩ SCSI,RAID Select Boot first from SCSI/RAID device on the add-on PCI card.

☞ First / Second / Third Boot device

- ⏩ 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.
- ⏩ 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.
- ⏩LAN Select your boot device priority by LAN.
- ⏩Disabled Select your boot device priority by Disabled.

☞ RAID Controller Function

- ⏩RAID Select on board RAID chip function as RAID (Default value)
- ⏩ATA Select on board RAID chip function as ATA

☞ 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)

☞ Boot Up NumLock

- ⏩On Keypad is number keys. (Default value)
- ⏩Off Keypad is arrow keys.

☞ Password Check

This category allows you to limit access to the system and Setup, or just to Setup.

- ⏩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)

☞HDD S.M.A.R.T. Capability

- ⏩Enabled Enabled HDD S.M.A.R.T. Capability.
- ⏩Disabled Disabled HDD S.M.A.R.T. Capability. (Default value)

☞Console Redirection

- ⏩Enabled Attempt to redirect console via COM port.
- ⏩Disabled Attempt to redirect console when keyboard absent. (Default value)

☞Agent after boot

Enable this option to keep Agent running after OS boot.

- ⏩The Choice:Enabled, Disabled (Default value)

Advanced Chipset Features

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Advanced Chipset Features

System BIOS Cacheable	Disabled	Item Help
Video RAM Cacheable	Disabled	Menu Level
AGP Aperture Size (MB)	128	
AGP ISA Aliasing	Enabled	
AGP Fast Write	Enabled	
AGP Data Transfer Mode	4X	
AGP Always Compensate	Enabled	
AGP Secondary Lat Timer	20h	
SDRAM ECC Setting	Disabled	
Super Bypass Mode	Enabled	
DDR SDRAM Timing by	Auto	
※ Idle Cycle Limit	8 Cycle	
※ Page Hit Limit	8 Cycle	
※ Trc Cycle	8 Cycle	
※ Trp Cycle	3 Cycle	
※ Tras Cycle	7 Cycle	
※ CAS Latency Cycle	2 Cycle	
※ Trcd Cycle	3 Cycle	

↑↓→←: 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: Advanced Chipset Features

☞System BIOS Cacheable

- ⏩Disabled — Disable System BIOS Cacheable. (Default Value)
- ⏩Enabled — Enable System BIOS Cacheable.

☞ Vidio RAM Cacheable

⏩ Disabled	Disable this function. (Default Value)
⏩ Enabled	Enable this function to get better VGA performance; while some brands of VGA must be disabled this function (e.g.ET4000W32P).

☞ AGP Aperture Size

⏩ 32MB	Set AGP Aperture Size to 32 MB.
⏩ 64MB	Set AGP Aperture Size to 64 MB.
⏩ 128MB	Set AGP Aperture Size to 128 MB.(Default Value)
⏩ 256MB	Set AGP Aperture Size to 256 MB.

☞ AGP ISA Aliasing

⏩ Disabled	Disable this function.
⏩ Enabled	When enabled, ISA address bits 15:10 are not used in decoding. (Default Value)

☞ AGP Fast Write

⏩ Disabled	Disabled AGP Fast Write
⏩ Enabled	Enabled AGP Fast Write. (Default Value)

☞ AGP Mode

⏩ 4X	Set AGP Mode is 4X. (Default Value)
⏩ 1X/2X	Set AGP Mode is 1X/2X.

☞ AGP Always Compensate

⏩ Enabled	When enabled, dynamic compensation is performed by AGP on an ongoing basis at regular intervals. (Default Value)
⏩ Disabled	Disabled AGP always compensate.

☞ AGP Secondary Lat Timer

⏩ 00h~FFh	This allows you to set the AGP Secondary Lat Timer.

☞ SDRAM ECC Setting

⏩ Check only	Detects only.
⏩ Correct error	Allows the correction of single-bit errors and the detection of multiple-bit errors.
⏩ Correct+scrub	Detects , corrects read errors, and writes the corrected data to memory.
⏩ Disabled	Disabled SDRAM ECC Setting.(Default Value)

☞ Super Bypass Mode

⏩ Enabled	The chipset internally bypasses certain memory to CPU pipe stages for optimal performance. (Default Value)
⏩ Disabled	Disabled Super Bypass Mode.

☞ DDR SDRAM Timing by

⏩ Auto	The system will automatically set proper values to DDR SDRAM Idle Limit, Page Hit Limit, Trc Cycle, Trp Cycle, Tras Cycle, CAS Latency Cycle and Trcd Cycle by SPD.(Default Value)
⏩ Manual	Set DDR SDRAM Timing by Manual.

Integrated Peripherals

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Integrated Peripherals

IDE Read/Write Prefetch	Disabled	Item Help
On-Chip Primary PCI IDE	Enabled	Menu Level
On-Chip Secondary PCI IDE	Enabled	
USB Host Controller	Disabled	
USB Keyboard Support	Disabled	
USB Mouse Support	Disabled	
Init Display First	PCI Slot	
On-Chip AC97	Auto	
Onboard Serial Port 1	3F8/IRQ4	
Onboard Serial Port 2	2F8/IRQ3	
UART Mode Select	Normal	
※ RxD, TxD Active	Hi, Lo	
※ IR Transmission Delay	Enabled	
※ UR2 Duplex Mode	Half	
※ Use IR Pins	IR-Rx2 Tx2	
Onboard Parallel Port	378/IRQ7	
Parallel Port Mode	ECP	
※ EPP Mode Select	EPP 1.7	
※ ECP Mode Use DMA	3	
Game Port Address	201	
Midi Port Address	330	
Midi Port IRQ	10	

↑↓→←: 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: Integrated Peripherals

☞ IDE Read/Write Prefetch

- ⏩ Disabled — Disabled IDE Read/Write Prefetch.(Default value)
- ⏩ Enabled — Enabled IDE Read/Write Prefetch.

☞ On-Chip Primary PCI IDE (IDE3)

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

☞ On-Chip Second PCI IDE (IDE4)

- ⏩ Disabled — Disable onboard 2nd channel IDE port.
- ⏩ Enabled — Enable onboard 2nd channel IDE port. (Default Value)

☞ USB Host Controller

- ⏩ Enabled — Enabled USB Host Controller.(Default value)
- ⏩ Disabled — Disabled USB Host Controller.

☞ USB Keyboard Support

- ⏩ Enabled — Enabled USB Keyboard legacy Support.
- ⏩ Disabled — Disabled USB Keyboard legacy Support. (Default value)

☞ USB Mouse Support

- ⏩ Enabled — Enabled USB Mouse legacy Support.
- ⏩ Disabled — Disabled USB Mouse legacy Support. (Default value)

☞ Init Display First

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

☞ On-Chip AC97

- ⏩ Auto — BIOS will automatically detect onboard AC97 Audio. (Default value)
- ⏩ Disabled — Disabled AC97 Audio.

☞ Onboard Serial Port 1

- ⏩ Auto — BIOS will automatically setup the port 1 I/O address.
- ⏩ 3F8/IRQ4 — Enable onboard Serial port 1 and set I/O address to 3F8. (Default Value)
- ⏩ 2F8/IRQ3 — Enable onboard Serial port 1 and set I/O address to 2F8.
- ⏩ 3E8/IRQ4 — Enable onboard Serial port 1 and set I/O address to 3E8.
- ⏩ 2E8/IRQ3 — Enable onboard Serial port 1 and set I/O address to 2E8.
- ⏩ Disabled — Disable onboard Serial port 1.

☞ Onboard Serial Port 2

- ⏩ Auto — BIOS will automatically setup the port 2 I/O address.
- ⏩ 3F8/IRQ4 — Enable onboard Serial port 2 and set I/O address to 3F8.
- ⏩ 2F8/IRQ3 — Enable onboard Serial port 2 and set I/O address to 2F8. (Default Value)
- ⏩ 3E8/IRQ4 — Enable onboard Serial port 2 and set I/O address to 3E8.
- ⏩ 2E8/IRQ3 — Enable onboard Serial port 2 and set I/O address to 2E8.
- ⏩ Disabled — Disable onboard Serial port 2.

☞ UART Mode Select

(This item allows you to determine which Infra Red(IR) function of Onboard I/O chip)

- ⏩ ASKIR — Set onboard I/O chip UART to ASKIR Mode.
- ⏩ IrDA — Set onboard I/O chip UART to IrDA Mode.
- ⏩ Normal — Set onboard I/O chip UART to Normal Mode. (Default Value)

☞ Onboard Parallel port

This option allows user to set Parallel Port I/O address.

- ⏩ 378/IRQ7 — Enable onboard LPT port and set I/O address to 378/IRQ7. (Default Value)
- ⏩ 278/IRQ5 — Enable onboard LPT port and set I/O address to 278/IRQ5.
- ⏩ 3BC/IRQ7 — Enable onboard LPT port and set I/O address to 3BC/IRQ7.
- ⏩ Disabled — Disable onboard LPT port.

☞ Parallel Port Mode

This option allows user to set Parallel Port transfer mode.

- ⏩ Normal — Using Parallel port as Normal.
- ⏩ EPP — Using Parallel port as Enhanced Parallel Port.
- ⏩ SPP — Using Parallel port as Serial Parallel Port.(Default Value)
- ⏩ ECP — Using Parallel port as Extended Capabilities Port.
- ⏩ ECP/EPP — Using Parallel port as ECP & EPP mode.

☞ GAME Port Address

- ⏩ 201 — Set Game Port I/O address to 201.(Default Value)
- ⏩ 209 — Set Game Port I/O address to 209.
- ⏩ Disabled — Disabled Game Port

☞ Midi Port Address

- ⏩ 330 — Set Midi Port I/O address to 330.(Default Value)
- ⏩ 300 — Set Midi Port I/O address to 300.
- ⏩ 290 — Set Midi Port I/O address to 290.
- ⏩ Disabled — Disabled Midi Port

☞ Midi Port IRQ

- ⏩ 5 — Set Midi Port IRQ to 5.
- ⏩ 10 — Set Midi Port IRQ to 10.(Default Value)

Power Management Setup

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Power Management Setup

Soft-Off by PBTN	Instant-off	Item Help
State After Power Failure	Off	Menu Level
Wake-Up by PCI card	Disabled	
RI Resume/WOL	Disabled	
RTC Resume	Disabled	
※ Date(of Month) Alarm	Everyday	
※ Time(hh:mm:ss) Alarm	0 0 0	
↑↓→←: Move Enter:Select +/-/PU/PD:Value F10:Save ESC:Exit F1:General Help		
F5:Previous Values F6:Fail-Safe Defaults F7:Optimized Defaults		

Figure 6: Power Management Setup

☞ Soft-off by PBTN

- ⏩ Instant off — Soft switch ON/OFF for Power Button. (Default Value)
- ⏩ Delay-4Sec — Soft switch ON 4 Sec for Power off.

☞ State After Power Failure

- ⏩ Auto — Set auto to leave system in the former status after AC back.
- ⏩ On — Set On to system after AC back.
- ⏩ Off — Set Off to system after AC back. (Default Value)

☞ Wake-UP by PCI card

- ⏩ Disabled — Disabled this function.(Default Value)
- ⏩ Enabled — Enabled Wake up by PCI card.

☞ RI Resume/WOL

- ⏩ Disabled — Disabled Modem Ring on/wake on LAN function. (Default Value)
- ⏩ Enabled — Enabled Modem Ring on/wake on LAN.

☞ RTC Resume

You can set "RTC Alarm Resume" 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.

RTC Alarm Date : Every Day,1~31

RTC Alarm Hour: 0~23

RTC Alarm Minute : 0~59

RTC Alarm Second : 0~59

PnP/PCI Configurations

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PnP/PCI Configurations

Resources Controlled By	Auto	Item Help
※IRQ Resources	Press Enter	Menu Level
64 PCI1/PCI2 IRQ Assignment	Auto	
64 PCI3/PCI4 IRQ Assignment	Auto	
PCI5 IRQ Assignment	Auto	

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

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

Figure 7: PnP/PCI Configurations

☞ Resources Controlled by

- ⏩ Manual — This function requires user to assign the resource manually.
- ⏩ Auto — System will assisgn PnP resource (I/O address, IRQ, DMA channels) for Plug and Play compatible device automatically. (Default value)

☞ 64 PCI1/PCI2 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.

☞ 64 PCI3/PCI4 IRQ Assignment

- ⏩ Auto — Auto assign IRQ to PCI 3. (Default value)
- ⏩ 3,4,5,7,9.,10,11,12,14,15 — Set 3,4,5,7,9,10,11,12,14,15 to PCI3.

☞ PCI5 IRQ Assignment

- ⏩ Auto — Auto assign IRQ to PCI 5. (Default value)
- ⏩ 3,4,5,7,9.,10,11,12,14,15 — Set 3,4,5,7,9,10,11,12,14,15 to PCI3.

PC Health Status

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PC Health Status

Reset Case Open Status	Disabled	Item Help
Case Opened	No	Menu Level
VCORE A	1.72V	
VCORE B	1.74V	
+3.3V	3.30V	
+5V	5.02V	
+12V	12.280 V	
-12V	-12.280 V	
-5V	-5.09 V	
※VBAT	3.04V	
※5VSB	4.94V	
Current System Temperature	31℃~89℉	
※Current CPU0 Fan Speed	5443 RPM	
※Current CPU1 Fan Speed	5443 RPM	
※Current System Fan speed	0 RPM	
CPU0 Fan Fail Warning	Disabled	
CPU1 Fan Fail Warning	Disabled	
System Fan Fail Warning	Disabled	
CPU0 Shutdown Temperature	Disabled	
※Current CPU0 Temperature	34℃/93℉	
CPU1 Shutdown Temperature	Disabled	
※Current CPU1 Temperature	88℃/190℉	

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

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

Figure8: PC Health Status

☞ **Reset Case Open Status**

☞ **Case Status**

If the case is closed, "Case Opened" will show "No".

If the case have been opened, "Case Opened" will show "Yes".

If you want to reset "Case Opened" value, set "Reset Case Open Status" to "Enabled" and save CMOS, your computer will restart.

The Choice: Enabled, Disabled (Default value)

☞ **Current CPU0/1 & System Temp. (°C / °F)**

⏩ Displays CPU0/1 & System Temp. automatically.

☞ **Current CPU0/1 & System Fan Speed (RPM)**

⏩ Displays Fan speed status automatically.

☞ **CPU0/1 Warning Temperature**

⏩ 80°C / 176°F	Monitor CPU0/1 Temp. at 80°C / 176°F.
⏩ 85°C / 185°F	Monitor CPU0/1 Temp. at 85°C / 185°F.
⏩ 90°C / 194°F	Monitor CPU0/1 Temp. at 90°C / 194°F.
⏩ 95°C / 203°F	Monitor CPU0/1 Temp. at 95°C / 203°F.
⏩ 100°C / 212°F	Monitor CPU0/1 Temp. at 100°C / 212°F.
⏩ 105°C /221°F	Monitor CPU0/1 Temp. at 105°C / 221°F.
⏩ Disabled	Disabled this function.(Default value)

☞ **Fan Fail Warning (CPU0/1 & SYSTEM)**

⏩ Disabled	Fan Fail Warning Function Disabled. (Default value)
⏩ Enabled	Fan Fail Warning Function Enabled.

☞ **CPU0/1 Shutdown Temperture**

⏩ Disabled	Disable CPU0/1 shtdown temperture function. (Default value)
⏩ Enabled	Enable CPU0/1 shtdown temperture function.

When you enable **CPU0/1 Shutdown Temperature** function, the **CPU0/1 Warning Temperature** function will appears on the main screen of **PC Health Status**. Set up the **CPU0/1 Warning Temperature**. If the CPU Temperature reaches the warning temperature, the system will shutdown automatically and the power switch will be locked. It is recommended to open the system case, to see whether the **D24** lights on (please refer to Page 12 for D24 position). If D24 lights on, please check whether the **CPU, CPU FAN** and the **Heat Sink** are overheating. To restart the system, you must unplug the powercord and plug in it again.

Frequency/Voltage Control

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Frequency/Voltage Control

ClkGen Spread Spectrum	Enabled	Item Help
CPU Host/PCI Clock	Default	Menu Level

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

Figure 9: Frequency/Voltage Control

☞ ClkGen Spread Spectrum

- ⏩ Disabled — Disabled ClkGen Spread Spectrum .
- ⏩ Enabled — Enabled ClkGen Spread Spectrum . (Default value)

☞ CPU Host /PCI Clock

- ⏩ Default — Set Default Value. Set the FSB to 133MHz. (Default value)
- ⏩ 133/33 MHz — Set 133/33 MHz
- ⏩ 135/34 MHz — Set 135/34 MHz
- ⏩ 138/34 MHz — Set 138/34 MHz
- ⏩ 140/35 MHz — Set 140/35 MHz
- ⏩ 144/36 MHz — Set 144/36 MHz
- ⏩ 146/36 MHz — Set 146/36 MHz
- ⏩ 150/37 MHz — Set 145/37 MHz

If you set the FSB (JP11) to 100MHz, the folloing information will appears:

- ⏩ Default — Set Default Value. Set the FSB to 100MHz. (Default value)
- ⏩ 100/33 MHz — Set 100/33 MHz
- ⏩ 103/34 MHz — Set 103/34 MHz

⏩105/35 MHz	Set 105/35 MHz
⏩109/36 MHz	Set 109/36 MHz
⏩113/37 MHz	Set 113/37 MHz
⏩117/39 MHz	Set 117/39 MHz
⏩119/39 MHz	Set 119/39 MHz

Load Fail-Safe Defaults

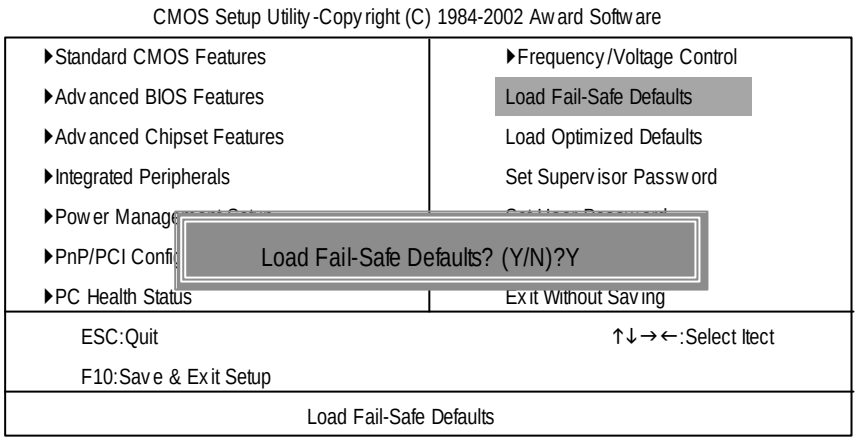


Figure 10: Load Fail-Safe Defaults

Load Fail-Safe Defaults

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

Load Optimized Defaults

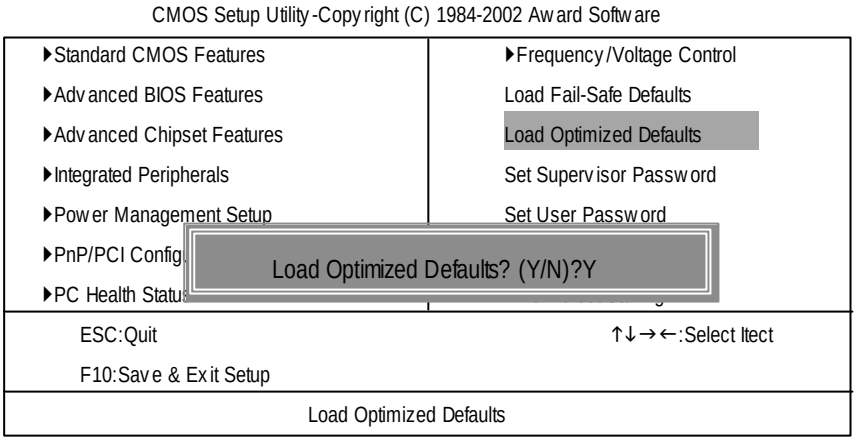


Figure 11: Load Optimized Defaults

Load Optimized Defaults

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

Set Supervisor/User Password

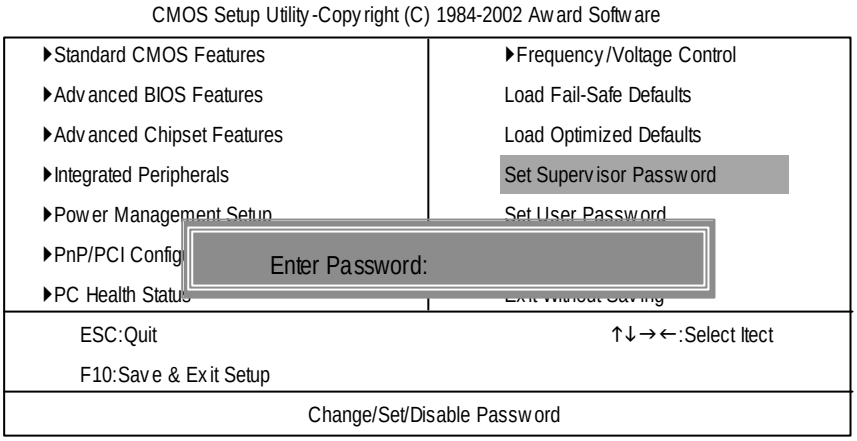


Figure 12: Password Setting

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:

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

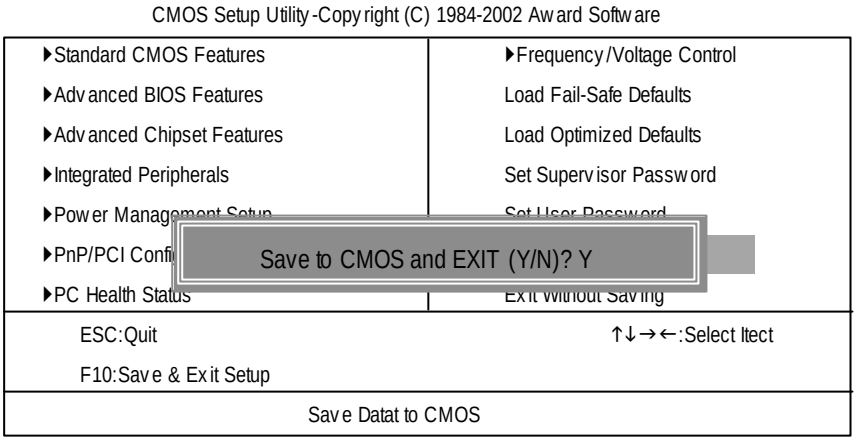


Figure 13: Save & Exit Setup

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

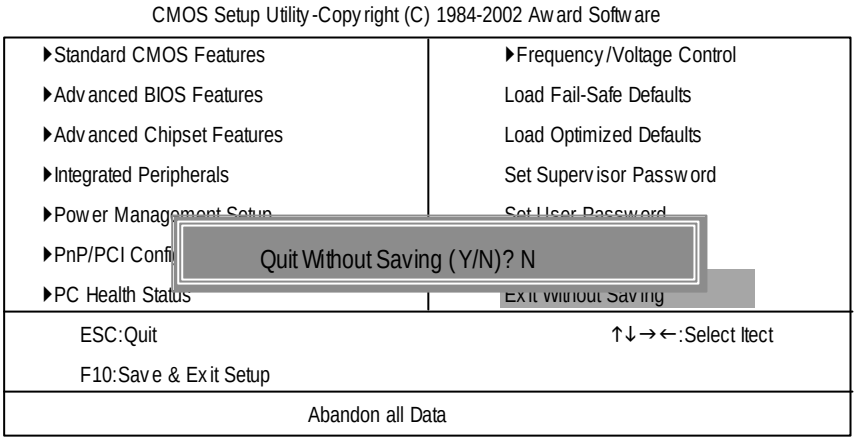


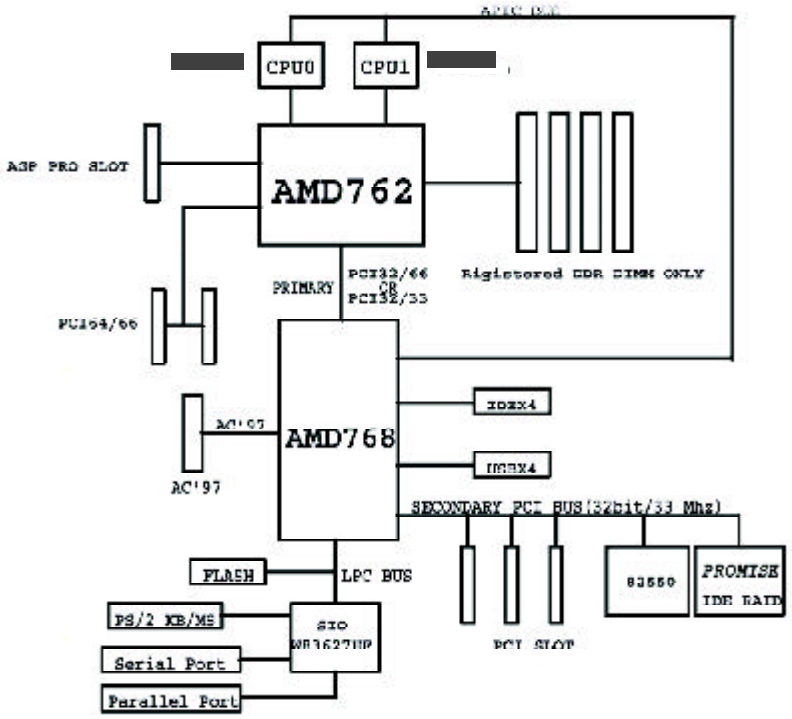
Figure 14: Exit Without Saving

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

Type "N" will return to Setup Utility.

Chapter 4 Technical Reference

Block Diagram

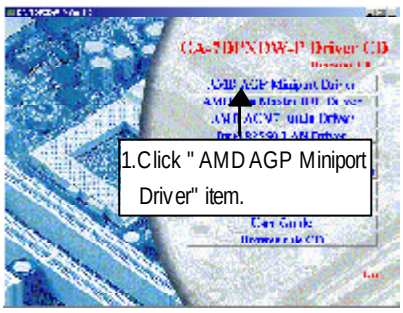


Chapter 5 Appendix

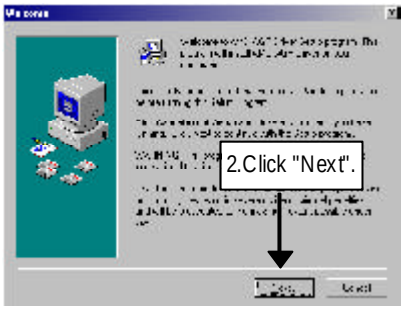
(For example: Driver CD Ver. : 1.0)

Appendix A: AMD AGP Miniport Driver

Insert the driver CD-title that came with your motherboard into your CD-ROM driver, the driver CD-title will auto start and show the installation guide. If not, please double click the CD-ROM device icon in "My computer", and execute the setup.exe.

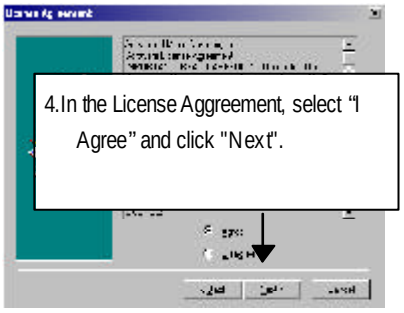


(1)



(2)

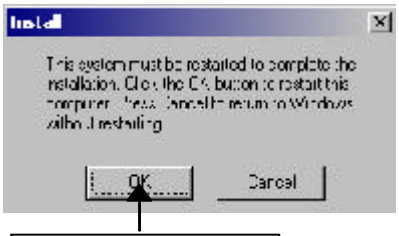
(3)



(4)

(5)

(6)

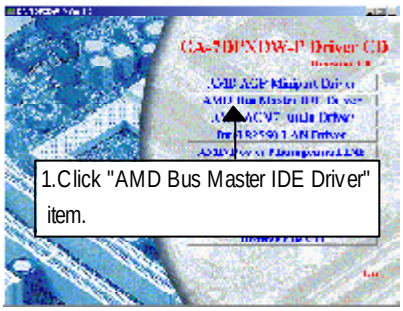


7.Click "OK" then the system will be restarted.

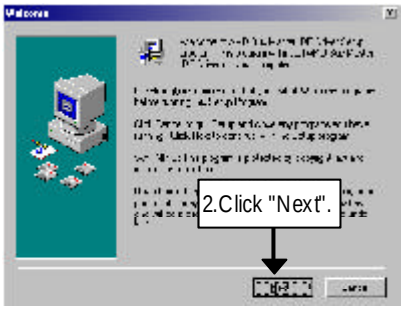
(7)

Appendix B: AMD Bus Master IDE Driver

Insert the driver CD-title that came with your motherboard into your CD-ROM driver, the driver CD-title will auto start and show the installation guide. If not, please double click the CD-ROM device icon in "My computer", and execute the setup.exe.

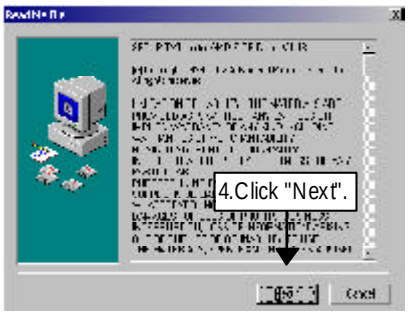


(1)



(2)

(3)



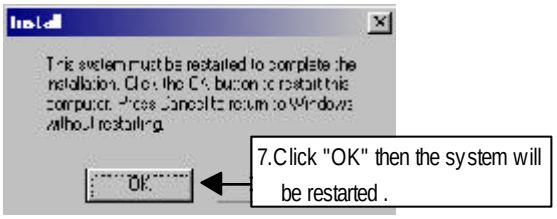
(4)


5.Click "Next" to start the installation.

(5)


6. Installation completed.Click "Finish".

(6)

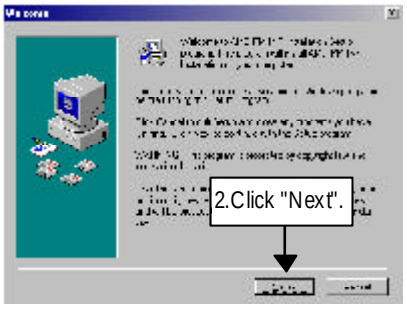

OK
7.Click "OK" then the system will be restarted .

(7)

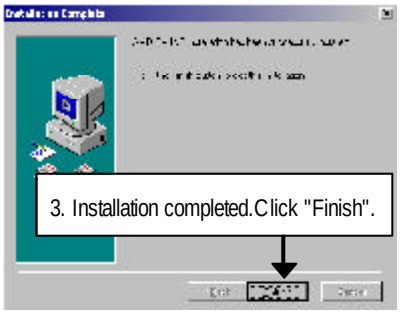
Appendix C: AMD Power Management INF

Insert the driver CD-title that came with your motherboard into your CD-ROM driver, the driver CD-title will auto start and show the installation guide. If not, please double click the CD-ROM device icon in "My computer", and execute the setup.exe.

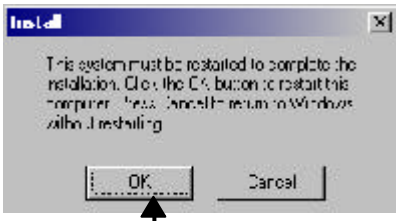
(1)



(2)



(3)



(4)

4.Click "OK" then the system will be restarted.

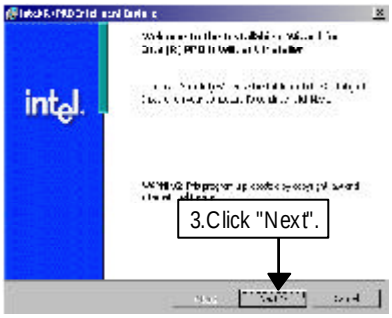
Please make sure you have installed the AMD AGP Miniport Driver, AMD Bus Master IDE Driver and AMD Power Management INF driver before installing other utilities and drivers.

Appendix D: Intel 82550 LAN Utility

Insert the driver CD-title that came with your motherboard into your CD-ROM driver, the driver CD-title will auto start and show the installation guide. If not, please double click the CD-ROM device icon in "My computer", and execute the setup.exe.

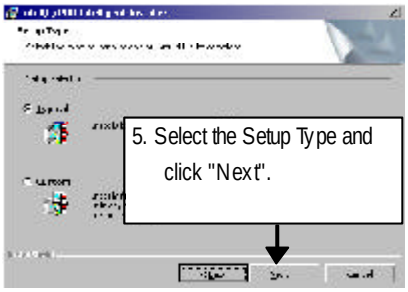
(1)

(2)



(3)

(4)


5. Select the Setup Type and
click "Next".

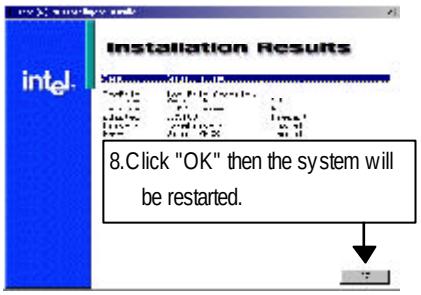
(5)


6.Click "Install" to begin the installation.

(6)


intel.
7.Click "Finish" to restart computer.

(7)


Installation Results
intel.
8.Click "OK" then the system will
be restarted.

(8)

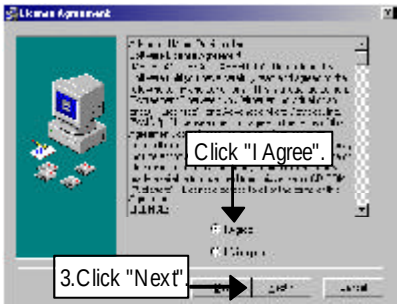
Appendix E: AMD AC'97 Audio Driver

Insert the driver CD-title that came with your motherboard into your CD-ROM driver, the driver CD-title will auto start and show the installation guide. If not, please double click the CD-ROM device icon in "My computer", and execute the setup.exe.

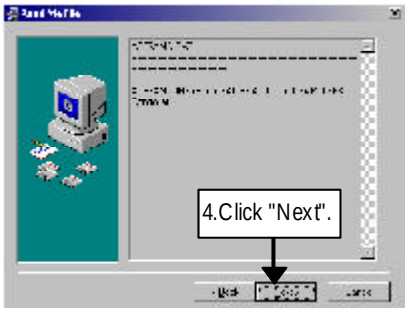
(1)

(2)

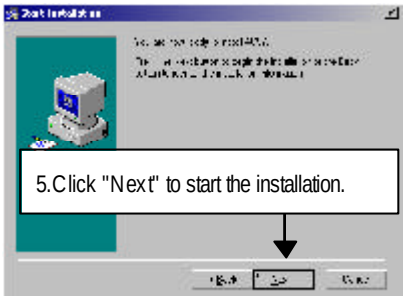
5.Click "Finish" to restart computer.



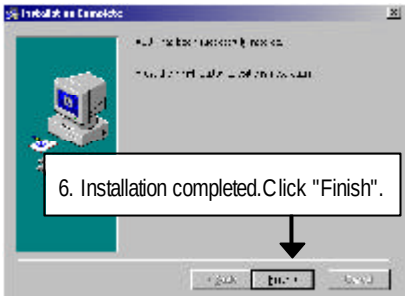
(3)



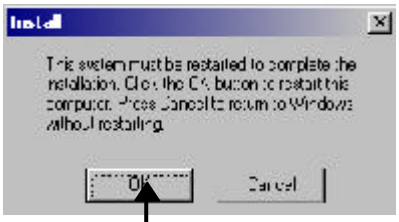
(4)


5.Click "Next" to start the installation.

(5)


6. Installation completed.Click "Finish".

(6)

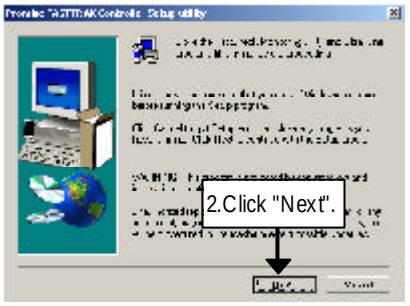

Install
OK
Cancel
7.Click "OK" then the system will be restarted.

(7)

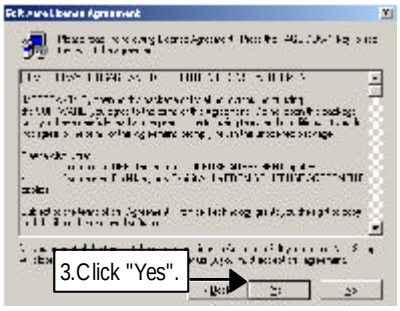
Appendix F: Promise RAID Driver Installation

Insert the driver CD-title that came with your motherboard into your CD-ROM driver, the driver CD-title will auto start and show the installation guide. If not, please double click the CD-ROM device icon in "My computer", and execute the setup.exe.

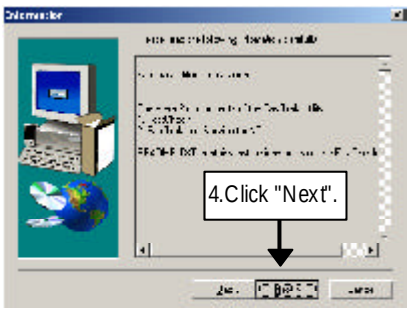
(1)



(2)



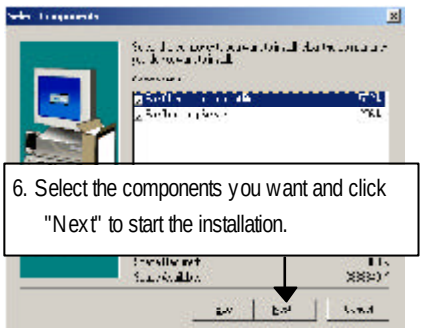
(3)



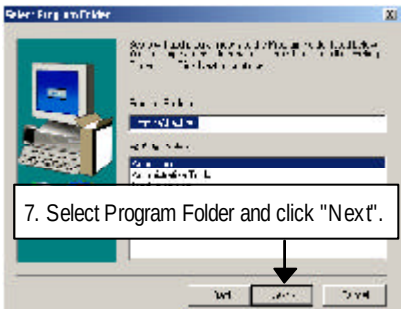
(4)


5. Choose the destination and click "Next".

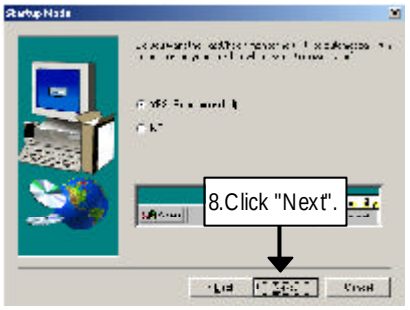
(5)


6. Select the components you want and click "Next" to start the installation.

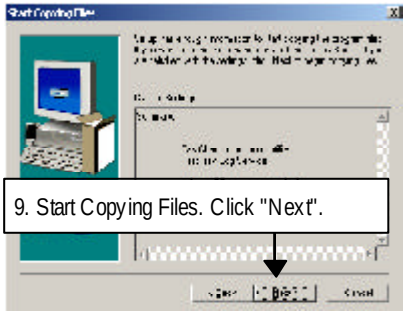
(6)


7. Select Program Folder and click "Next".

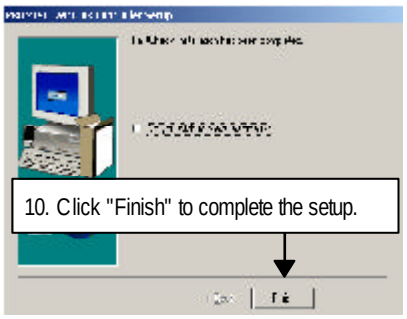
(7)


8.Click "Next".

(8)


9. Start Copying Files. Click "Next".

(9)


10. Click "Finish" to complete the setup.

(10)

Appendix G: Acronyms

Acronyms	Meaning
ACPI	Advanced Configuration and Power Interface
APM	Advanced Power Management
AGP	Accelerated Graphics Port
AMR	Audio Modem Riser
ACR	Advanced Communications Riser
BBS	BIOS Boot Specification
BIOS	Basic Input / Output System
CPU	Central Processing Unit
CMOS	Complementary Metal Oxide Semiconductor
CRIMM	Continuity RIMM
CNR	Communication and Networking Riser
DMA	Direct Memory Access
DMI	Desktop Management Interface
DIMM	Dual Inline Memory Module
DRM	Dual Retention Mechanism
DRAM	Dynamic Random Access Memory
DDR	Double Data Rate
ECP	Extended Capabilities Port
ESCD	Extended System Configuration Data
ECC	Error Checking and Correcting
EMC	Electromagnetic Compatibility
EPP	Enhanced Parallel Port
ESD	Electrostatic Discharge
FDD	Floppy Disk Device
FSB	Front Side Bus
HDD	Hard Disk Device
IDE	Integrated Dual Channel Enhanced
IRQ	Interrupt Request
I/O	Input / Output
IOAPIC	Input Output Advanced Programmable Input Controller
ISA	Industry Standard Architecture

to be continued.....

Acronyms	Meaning
LAN	Local Area Network
LBA	Logical Block Addressing
LED	Light Emitting Diode
MHz	Megahertz
MIDI	Musical Instrument Digital Interface
MTH	Memory Translator Hub
MPT	Memory Protocol Translator
NIC	Network Interface Card
OS	Operating System
OEM	Original Equipment Manufacturer
PAC	PCI A.G.P. Controller
POST	Power-On Self Test
PCI	Peripheral Component Interconnect
RIMM	Rambus in-line Memory Module
SCI	Special Circumstance Instructions
SECC	Single Edge Contact Cartridge
SRAM	Static Random Access Memory
SMP	Symmetric Multi-Processing
SMI	System Management Interrupt
USB	Universal Serial Bus
VID	Voltage ID

Technical Support/RMA Sheet

Customer/Country:	Company:	Phone No.:
Contact Person:	E-mail Add. :	

Model name/Lot Number:	PCB revision:
BIOS version:	O.S./A.S.:

Hardware Configuration	Mfs.	Model name	Size:	Driver/Utility:
CPU				
Memory Brand				
Video Card				
Audio Card				
HDD				
CD-ROM / DVD-ROM				
Modem				
Network				
AMR / CNR				
Keyboard				
Mouse				
Power supply				
Other Device				

Problem Description: