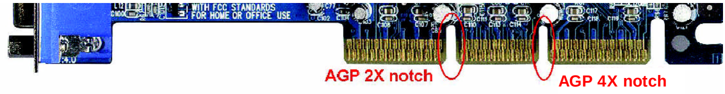
When you installing AGP card, please make sure the following notice is fully understood and practiced. If your AGP card has "AGP 4X (1.5V) notch"(show below), please make sure your AGP card is AGP 4X (1.5V).



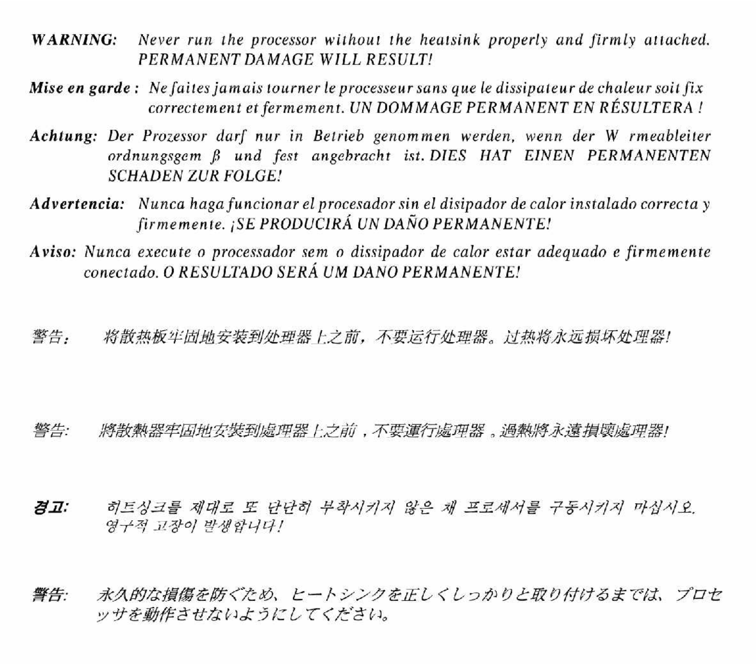
Caution: AGP 2X card is not supported by GA-8VM533(-P). You might experience system unable to boot up normally. Please insert an AGP 4X card.

Example 1: Diamond Vipper V770 golden finger is compatible with 2X/4X mode AGP slot. It can be switched between AGP 2X(3.3V) or 4X(1.5V) mode by adjusting the jumper. The factory default for this card is 2X(3.3V).
The GA-8VM533(-P) (or any AGP 4X only) motherboards might not function properly, if you install this card without switching the jumper to 4X(1.5V) mode in it.

Example 2: Some ATi Rage 128 Pro graphics cards made by "Power Color", the graphics card manufacturer & some SiS 305 cards, their golden finger is compatible with 2X(3.3V)/4X(1.5V) mode AGP slot, but they support 2X(3.3V) only. The GA-8VM533(-P) (or any AGP 4X only) motherboards might not function properly, If you install this card in it.

Note : Although Gigabyte's AG32S(G) graphics card is based on ATi Rage 128 Pro chip, the design of AG32S(G) is compliance with AGP 4X(1.5V) specification. Therefore, AG32S(G) will work fine with GA-8VM533(-P) based motherboards.

- The author assumes no responsibility for any errors or omissions that may appear in this document nor does the author make a commitment to update 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- Due to rapid change in technology, some of the specifications might be out of date before publication of this booklet.



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-8VM533
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** ☒ **EN 50082-1**	Generic emission standard Part 1: Residual commercial and light industry 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**

CE (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**	Safety for information technology equipment including electrical bussiness equipment
☐ **EN 60335**	Safety of household and similar electrical appliances	☐ **EN 50091-1**	General and Safety requirements for uninterruptible power systems (UPS)

Manufacturer/Importer

Signature: Timmy Huang
Name: Timmy Huang

Date : December 19, 2003

(Stamp)

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-8VM533**

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: December 19, 2003

GA-8VM533(-P)
P4 Titan Series Motherboard

USER'S MANUAL

Pentium® 4 Processor Motherboard
Rev. 1003
12ME-8VM533-1003

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Item Checklist

- ☑ The GA-8VM533 or GA-8VM533-P motherboard
- ☑ IDE cable x 1 / Floppy cable x 1
- ☑ CD for motherboard driver & utility
- ☑ GA-8VM533(-P) user's manual
- ☑ I/O Shield
- ☐ Quick PC Installation Guide
- ☐ RAID Manual
- ☐ GC-SATA Card (Optional)
  (Manual; SATA cable x1; Power cable x 1)
- ☐ 2 Port USB Cable x 1
- ☐ 4 Port USB Cable x 1
- ☐ SPDIF-KIT x 1 (SPDIF Out KIT)
- ☐ IEEE 1394 Cable x1
- ☐ Audio Combo Kit x 1
  (SURROUND-Kit + SPDIF Out KIT)
- ☐ Motherboard Settings Label
- ☐ SATA RAID Manual
- ☐ SATA cable x 1

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

Features Summary

Form Factor	• 24.5cm x 20.8cm Micro ATX size form factor, 4 layers PCB
CPU	• Socket 478 for Intel® Micro FC-PGA2 Pentium® 4 processor • Support Intel® Pentium® 4 (Northwood) processor • Support Intel® Pentium® 4 Processor with HT Technology * • Intel® Pentium® 4 533/400MHz FSB • 2nd cache depends on CPU
Chipset	• VIA P4M266A/P4M533 Memory/AGP/PCI Controller (PAC) • VIA VT8235 Integrated Peripheral Controller (PSIPC)
Memory	• 2 184-pin DDR sockets • Supports DDR266/DDR200 DIMM • Supports up to 2GB DDR (Max) • Supports only 2.5V DDR DIMM
I/O Control	• ITE8705
Slots	• 1 AGP slot supports 4X mode(1.5V) • 3 PCI slot supports 33MHz & PCI 2.2 compliant
On-Board IDE	• 2 IDE bus master (UDMA33/ATA66/ATA100/ATA133) IDE ports for up to 4 ATAPI devices • Supports PIO mode3,4 (UDMA 33/ATA66/ATA100/ATA133) 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 • 1 Serial port (COMA/COMB(①)), 1 VGA port • 6 USB 2.0/1.1 ports (2 x Rear, 4 x Front by cable)(②) • 6 USB 2.0/1.1 ports (4 x Rear, 2 x Front by cable)(①) • 1 Front Audio connector

to be continued......

① For GA-8VM533-P only. ② For GA-8VM533 only.

Hardware Monitor	• CPU fan revolution detect • CPU temperature detect • System voltage detect • CPU fan fail warning
On-Board LAN	• Builit in VIA 6103 Chipset • 1 RJ45 port
On-Board Sound	• VIA VT1616 CODEC • Line Out/ 2 front speaker • Line In / 2 rear speaker(by s/w switch) • Mic In / center& subwoofer(by s/w switch) • CD_In
PS/2 Connector	• PS/2 Keyboard interface and PS/2 Mouse interface
BIOS	• Licensed Award BIOS • Supports Q-Flash
Additional Features	• PS/2 Keyboard power on by password • PS/2 Mouse power on • STR (Suspend-To-RAM) • AC Recovery • Poly fuse for keyboard over-current protection • USB KB/Mouse wake up from S3 • Supports @BIOS • Supports EasyTune 4

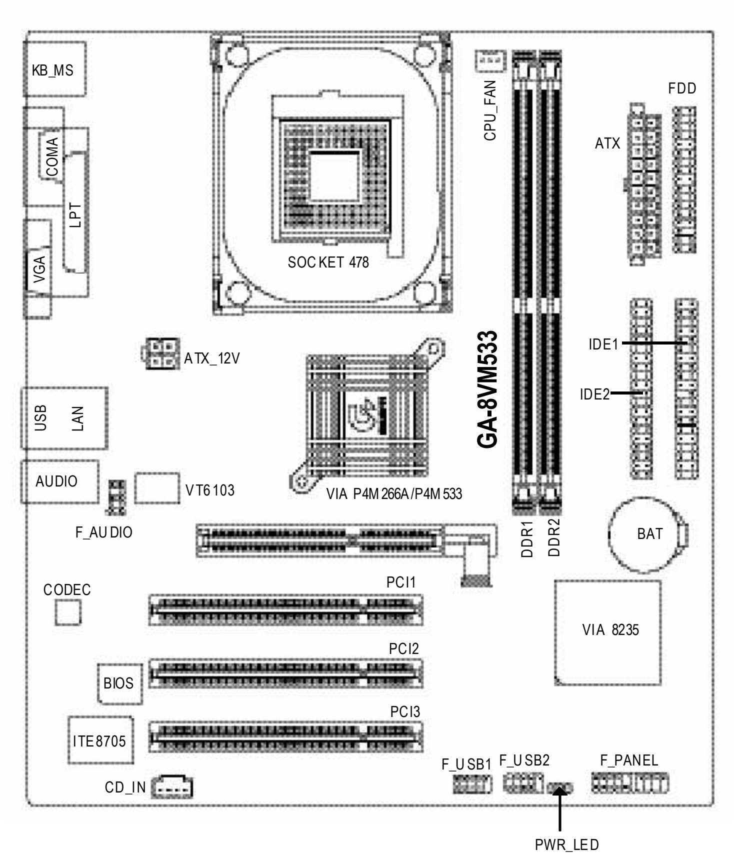
"*" HT functionality requirement content :

Enabling the functionality of Hyper-Threading Technology for your computer system requires all of the following platform components:

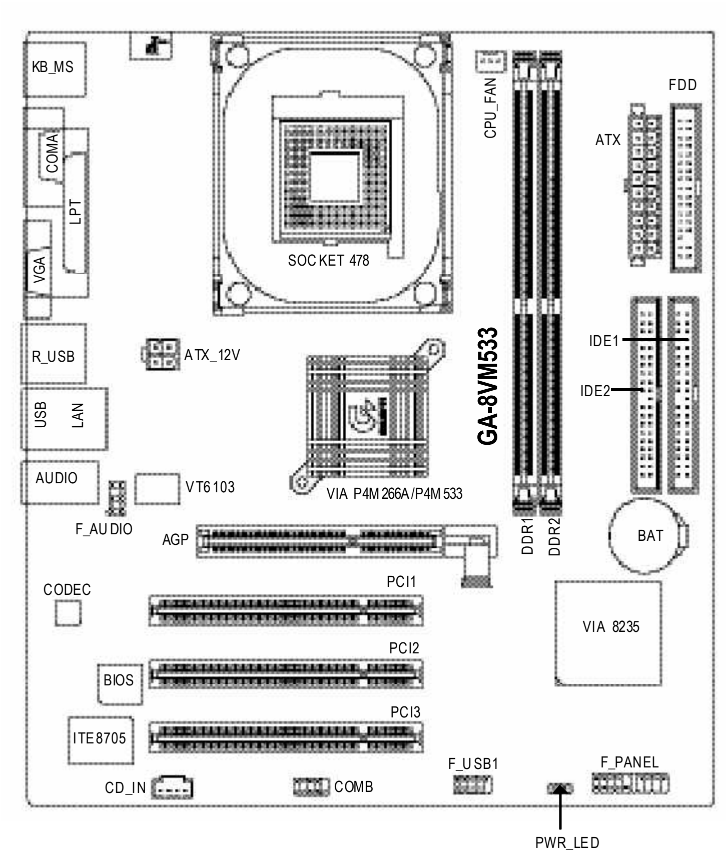
- CPU: An Intel® Pentium 4 Processor with HT Technology
- Chipset: An VIA Chipset that supports HT Technology
- BIOS: A BIOS that supports HT Technology and has it enabled
- OS: An operation system that has optimizations for HT Technology

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, Memory, Cards...etc.

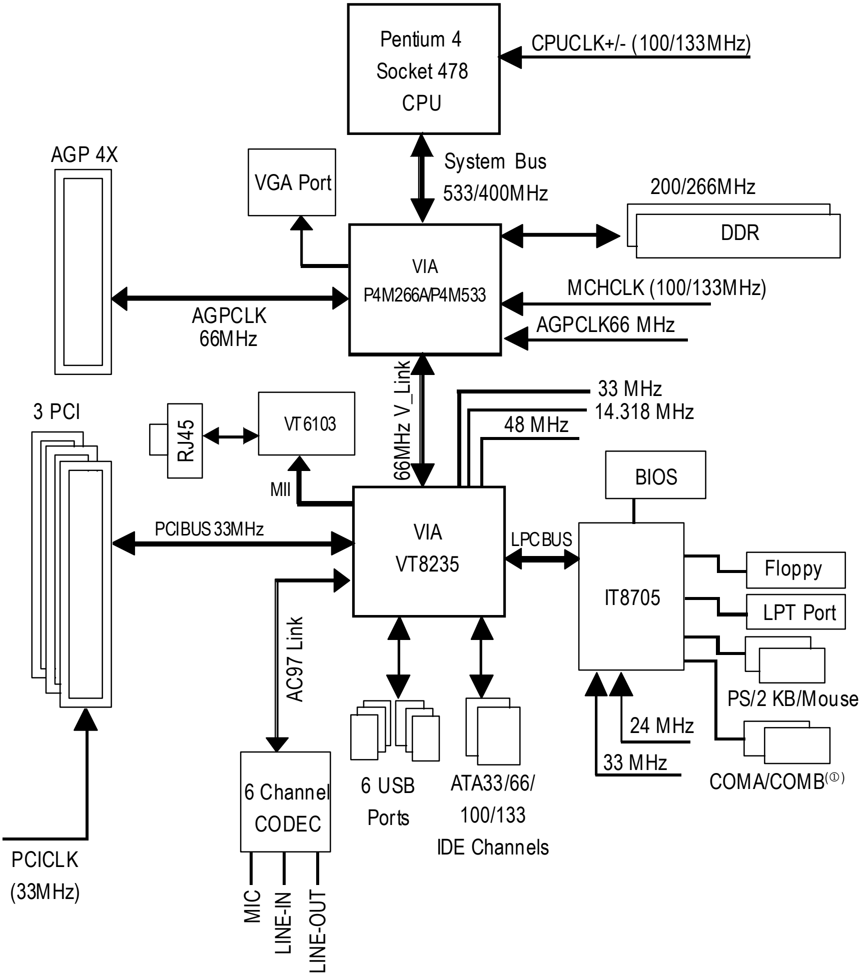
GA-8VM533 Motherboard Layout

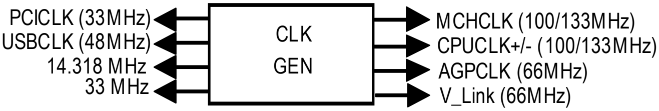

KB_MS
COMA
LPT
VGA
SOCKET 478
CPU_FAN
FDD
ATX
ATX_12V
GA-8VM533
IDE1
IDE2
USB
LAN
AUDIO
VT6103
VIA P4M266A/P4M533
F_AUDIO
DDR1
DDR2
BAT
CODEC
PCI1
VIA 8235
PCI2
BIOS
PCI3
ITE8705
F_USB1
F_USB2
F_PANEL
CD_IN
PWR_LED

GA-8VM533-P Motherboard Layout


KB_MS
COMA
LPT
VGA
SOCKET 478
CPU_FAN
FDD
ATX
R_USB
ATX_12V
USB
LAN
GA-8VM533
IDE1
IDE2
AUDIO
VT6103
VIA P4M266A/P4M533
F_AUDIO
AGP
DDR1
DDR2
BAT
CODEC
PCI1
VIA 8235
PCI2
BIOS
PCI3
ITE8705
F_USB1
F_PANEL
CD_IN
COMB
PWR_LED

Block Diagram


Pentium 4
Socket 478
CPU
CPUCLK+/- (100/133MHz)
AGP 4X
VGA Port
System Bus
533/400MHz
200/266MHz
DDR
VIA
P4M266A/P4M533
MCHCLK (100/133MHz)
AGPCLK66 MHz
AGPCLK
66MHz
66MHz V_Link
33 MHz
14.318 MHz
48 MHz
3 PCI
RJ45
VT6103
MII
BIOS
PCIBUS 33MHz
VIA
VT8235
LPC BUS
IT8705
Floppy
LPT Port
PS/2 KB/Mouse
24 MHz
33 MHz
COMA/COMB(①)
AC97 Link
6 Channel
CODEC
6 USB
Ports
ATA33/66/
100/133
IDE Channels
PCICLK
(33MHz)
MIC
LINE-IN
LINE-OUT


PCICLK (33MHz)
USBCLK (48MHz)
14.318 MHz
33 MHz
CLK
GEN
MCHCLK (100/133MHz)
CPUCLK+/- (100/133MHz)
AGPCLK (66MHz)
V_Link (66MHz)

① For GA-8VM533-P only.

Chapter 2 Hardware Installation Process

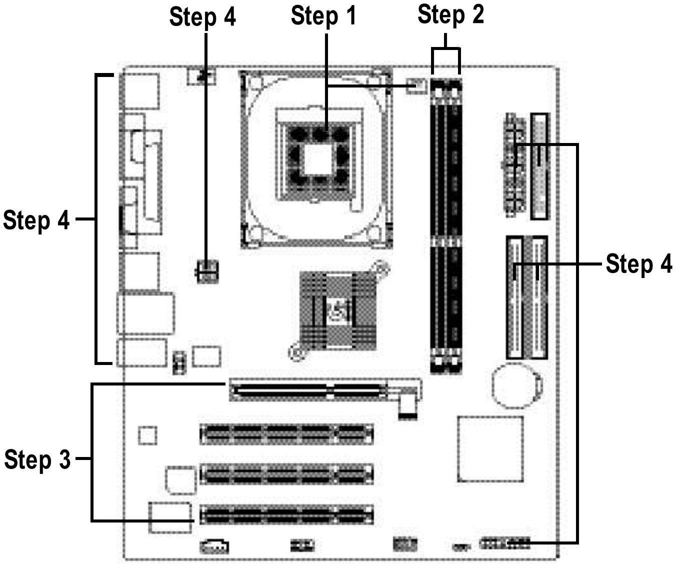
To set up your computer, you must complete the following steps:

Step 1- Install the Central Processing Unit (CPU)

Step 2- Install memory modules

Step 3- Install 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.

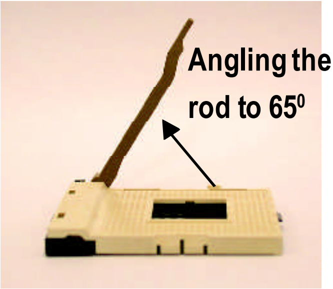
Step 1: Install the Central Processing Unit (CPU)

Before installing the processor, adhere to the following warning:

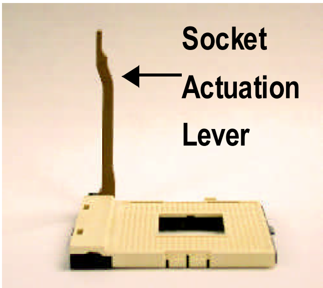
1. Please make sure the CPU type is supported by the motherboard.

2. 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.

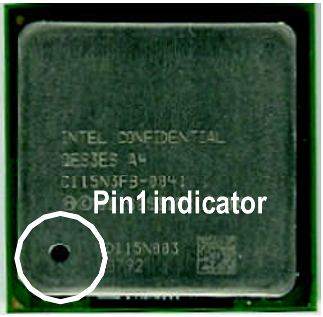
Step 1-1: CPU Installation


Angling the rod to 65^0

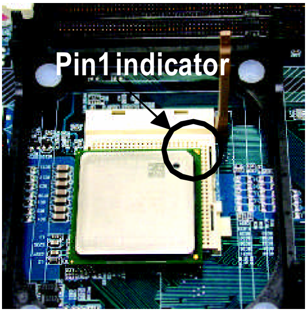
1. Angling the rod to 65-degree maybe feel a kind of tight, and then continue pull the rod to 90-degree when a noise "cough" made.


Socket Actuation Lever

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


Pin1 indicator

3. CPU Top View


Pin1 indicator

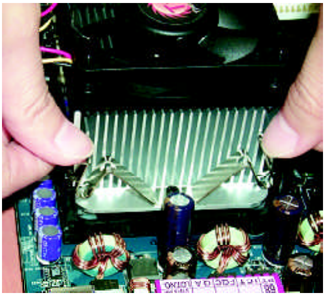
4. Locate Pin 1 in the socket and look for a (golden) cut edge on the CPU upper corner. Then insert the CPU into the socket.

Step 1-2: CPU Cooling Fan Installation

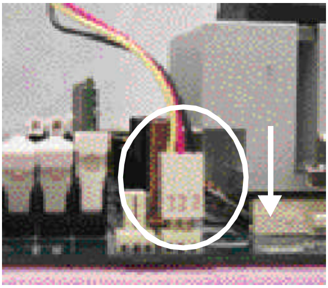
CAUTION

Before installing the CPU cooling fan, adhere to the following warning:

1. **Please use Intel approved cooling fan.**
2. **We recommend you to apply the thermal tape to provide better heat conduction between your CPU and cooling fan.**
   (The CPU cooling fan might stick to the CPU due to the hardening of the thermal paste. During this condition if you try to remove the cooling fan, you might pull the processor out of the CPU socket alone with the cooling fan, and might damage the processor. To avoid this from happening, we suggest you to either use thermal tape instead of thermal paste, or remove the cooling fan with extreme caution.)
3. **Make sure the CPU fan power cable is plugged in to the CPU fan connector, this completes the installation.**
   Please refer to CPU cooling fan user's manual for more detail installation procedure.



1. Fasten the cooling fan supporting-base onto the CPU socket on the motherboard.



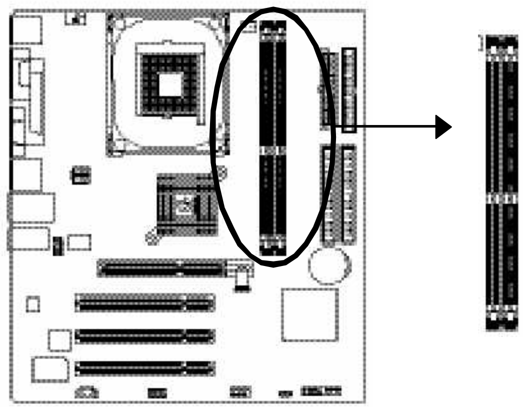
2. Make sure the CPU fan is plugged to the CPU fan connector, than install complete.

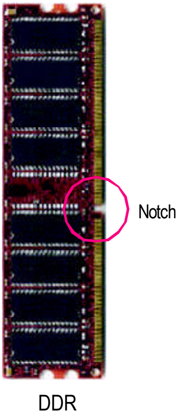
Step 2: Install Memory Modules

Before installing the memory modules, adhere to the following warning:

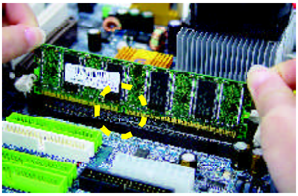
1. Please note that the DIMM module can only fit in one direction due to the one notch. Wrong orientation will cause improper installation. Please change the insert orientation.

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.

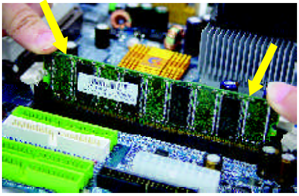




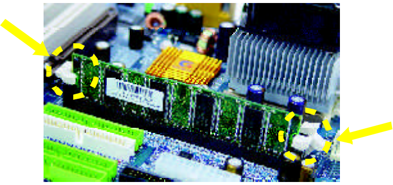
1. The DIMM slot has a notch, so the DIMM memory module can only fit in one direction.



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.



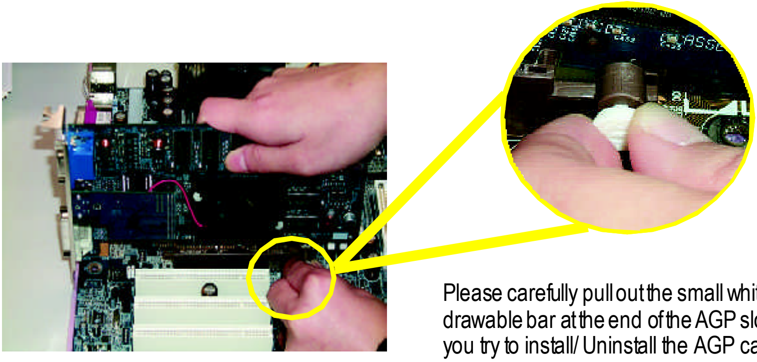
DDR Introduction

Established on the existing SDRAM 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: 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.

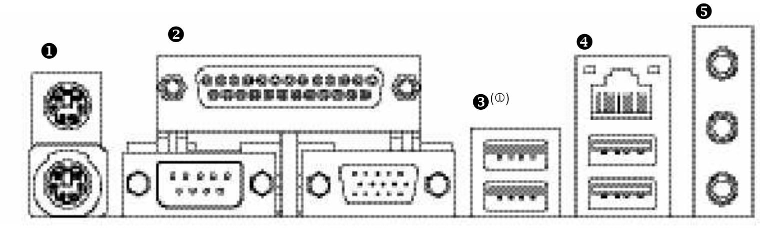


AGP Card

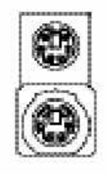
Please carefully pull out the small white-drawable bar at the end of the AGP slot when you try to install/ Uninstall the AGP card. Please align the AGP card to the onboard AGP slot and press firmly down on the slot . Make sure your AGP card is locked by the small white- drawable bar.

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



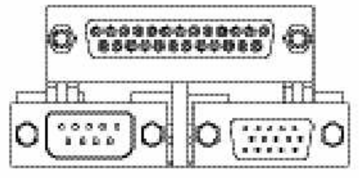
PS/2 Mouse Connector
(6pin Female)

PS/2 Keyboard Connector
(6pin Female)

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

❷ Parallel Port, Serial Port and VGA Port (LPT/COMA/VGA)

Parallel Port
(25 pin Female)



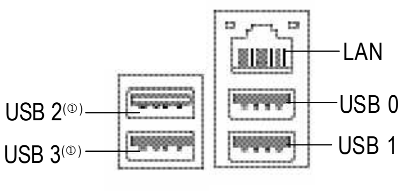
COMA
Serial Port
(9 pin Male)

VGA
VGA Port
(15 pin Female)

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

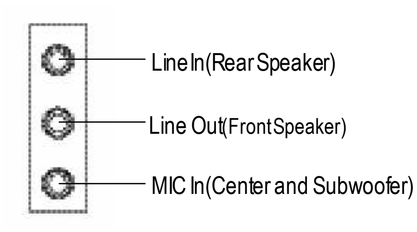
① For GA-8VM533-P only.

❸(①)/❹ 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.

❺ Audio Connectors

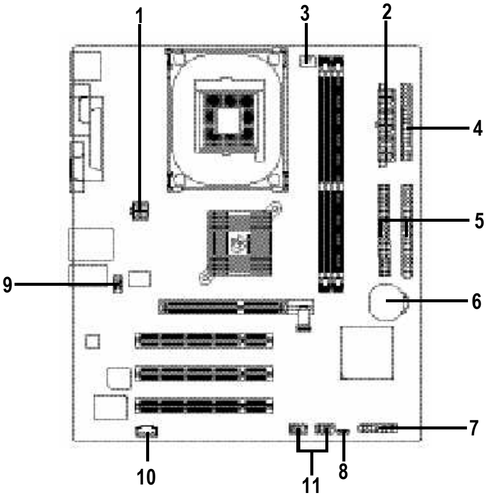


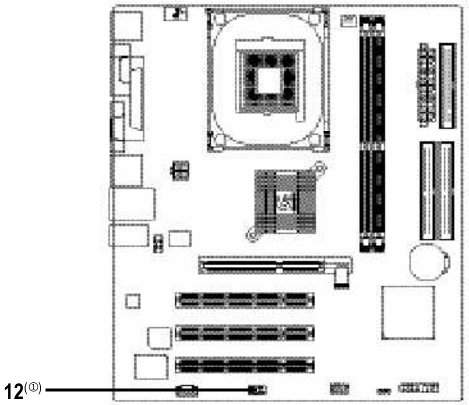
- After install onboard audio driver, you may connect speaker to Line Out jack, microphone to MIC In jack. Device like CD-ROM, walkman etc. can be connected to Line-In jack.
  Please note:
  You are able to use 2-/6-channel audio feature by S/W selection.
  If you want to enable 6-channel function, you 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 6-channel audio setup installation, please refer to page 70.

① For GA-8VM533-P only.

Step 4-2: Connectors Introduction





1) ATX_12V

2) ATX

3) CPU_FAN

4) FDD

5) IDE1 / IDE2

6) BAT

7) F_PANEL

8) PWR_LED

9) F_AUDIO

10) CD_IN

11) F_USB1/F_USB2(②)

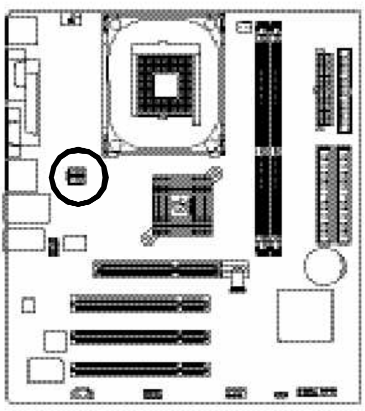
12) COMB(①)

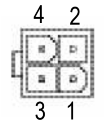
① For GA-8VM533-P only. ② For GA-8VM533 only.

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.

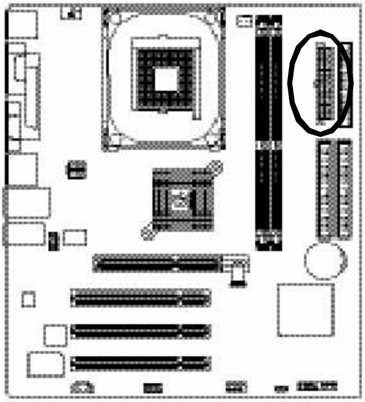


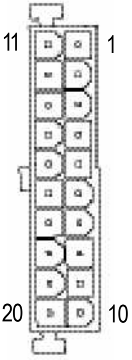


Pin No.	Definition
1	GND
2	GND
3	+12V
4	+12V

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.

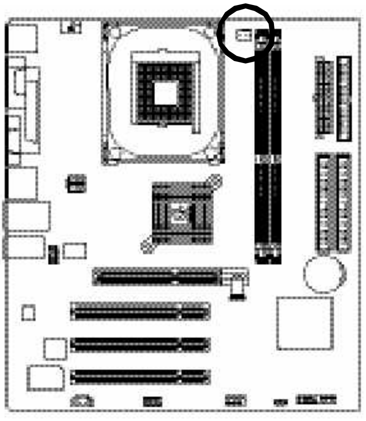


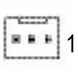


Pin No.	Definition
1	3.3V
2	3.3V
3	GND
4	VCC
5	GND
6	VCC
7	GND
8	PowerGood
9	5VSB (stand by +5V)
10	+12V
11	3.3V
12	-12V
13	GND
14	PS_ON(soft on/off)
15	GND
16	GND
17	GND
18	-5V
19	VCC
20	VCC

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.



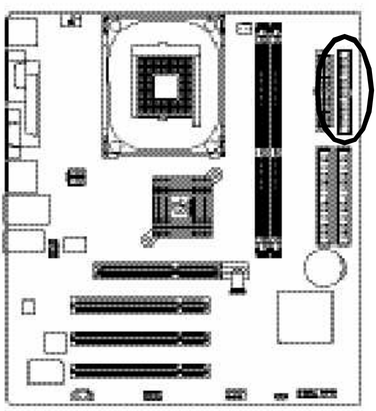


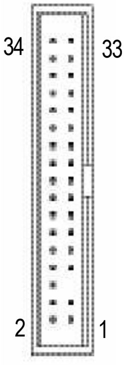
Pin No.	Definition
1	GND
2	+12V
3	Sense

4) 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.



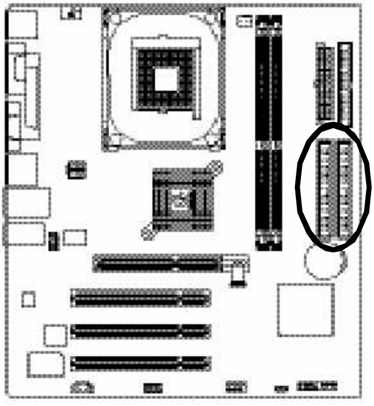


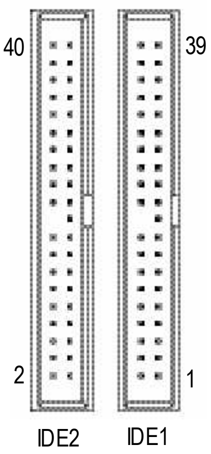
5) IDE1 / IDE2 (IDE1 / IDE2 Connector)

Important Notice:

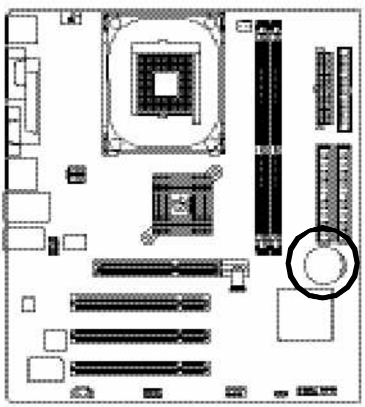
Please connect first hard disk to IDE1 and connect CD-ROM to IDE2.

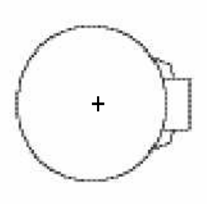
The red stripe of the ribbon cable must be the same side with the Pin1.





6) BAT (BATTERY)





CAUTION

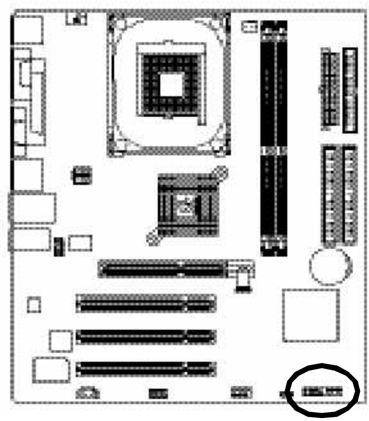
- Danger of explosion if battery is incorrectly replaced.
- Replace only with the same or equivalent type recommended by the manufacturer.
- Dispose of used batteries according to the manufacturer's instructions.

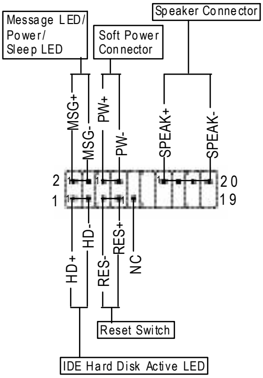
If you want to erase CMOS...

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.

7) F_PANEL (2 x 10 pins Connector)

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

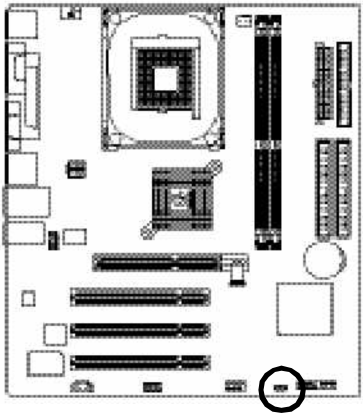


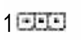

Message LED/ Power/ Sleep LED
Soft Power Connector
Speaker Connector
MSG+
MSG-
PW+
PW-
SPEAK+
SPEAK-
2
1
20
19
HD+
HD-
RES-
RES+
NC
Reset Switch
IDE Hard Disk Active LED

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

8) 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.

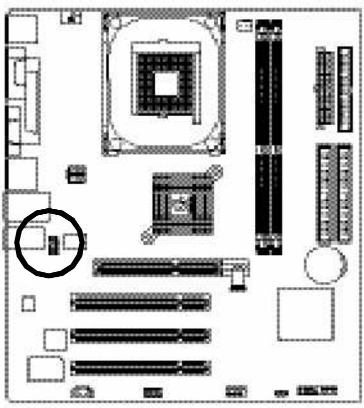


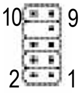


Pin No.	Definition
1	MPD+
2	MPD-
3	MPD-

9) F_AUDIO (Front Audio Connector)

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.

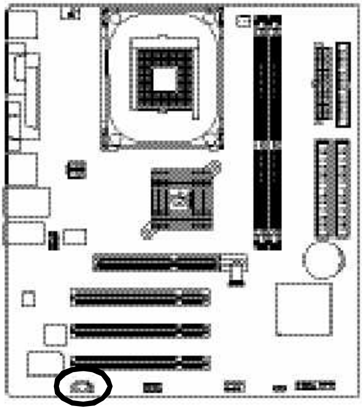


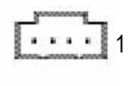


Pin No.	Definition
1	MIC
2	GND
3	REF
4	Power
5	Front Audio (R)
6	Rear Audio (R)
7	Reserved
8	No Pin
9	Front Audio (L)
10	Rear Audio (L)

10) CD_IN (CD In Connector)

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

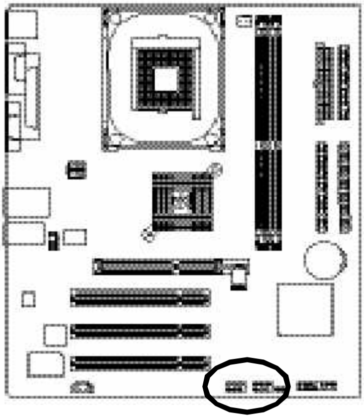


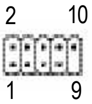


Pin No.	Definition
1	CD-L
2	GND
3	GND
4	CD-R

11) F_USB1 / F_USB2(②) (Front USB Connector, Yellow)

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



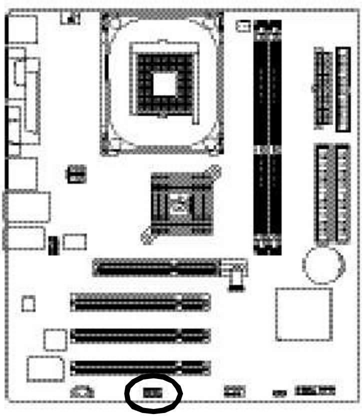


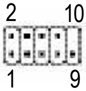
Pin No.	Definition
1	Power
2	Power
3	USB Dx-
4	USB Dy-
5	USB Dx+
6	USB Dy+
7	GND
8	GND
9	No Pin
10	NC

② For GA-8VM533 only.

12) COMB (COM B Connector)(White)(①)

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





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

① For GA-8VM533-P only.

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
Enter	Select item
<Esc>	Main Menu - Quit and not save changes into CMOS Status Page Setup Menu and Option Page Setup Menu - Exit current page and return to Main Menu
<+/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 file-safe default CMOS value from BIOS default table
<F7>	Load the Optimized Defaults
<F8>	Q-Flash function
<F9>	System Information
<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. : F4a)

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.

CMOS Setup Utility-Copyright (C) 1984-2003 Award Software

▶Standard CMOS Features	Load Fail-Safe Defaults
▶Advanced BIOS 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
▶Frequency/Voltage Control	
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.
- **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.
- **Load Top Performance Defaults**

  Top Performance 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

```
        CMOS Setup Utility-Copyright (C) 1984-2003 Award Software
                      Standard CMOS Features
 Date (mm:dd:yy)              Tue, Aug 13 2002          | Item Help
 Time (hh:mm:ss)              22:31:24                  | Menu Level ▶
                                                        | Change the day, month,
▶IDE Primary Master           [None]                    | year
▶IDE Primary Slave            [None]                    |
▶IDE Secondary Master         [None]                    | <Week>
▶IDE Secondary Slave          [None]                    | Sun. to Sat.
                                                        |
 Drive A                      [1.44M, 3.5 in.]          | <Month>
 Drive B                      [None]                    | Jan. to Dec.
 Floppy 3 Mode Support        [Disabled]                |
                                                        | <Day>
 Halt On                      [All, But Keyboard]       | 1 to 31 (or maximum
                                                        | allowed in the month)
 Base Memory                  640K                      |
 Extended Memory              130048K                   | <Year>
 Total Memory                 131072K                   | 1999 to 2098
 ↑↓→←: 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 / 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.

➡ 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

```
                    CMOS Setup Utility-Copyright (C) 1984-2003 Award Software
                                   Advanced BIOS Features
    First Boot Device                            [Floppy]       Item Help
    Second Boot Device                           [HDD-0]        Menu Level ▶
    Third Boot Device                            [CD-ROM]       Select Boot Device
    Password Check                               [Setup]        priority
 #  CPU Hyper-Threading                          [Enabled]      [Floppy]
                                                                Boot from floppy

                                                                [LS120]
                                                                Boot from LS120

                                                                [HDD-0]
                                                                Boot from First HDD

                                                                [HDD-1]
                                                                Boot from second HDD
   ↑↓→←: 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

" # " System will detect automatically and show up when you install the Intel® Pentium® 4 processor with HT Technology.

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	Disable this function.

Password Check

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

CPU Hyper-Threading

» Enabled	Enables CPU Hyper Threading Feature. Please note that this feature is only working for operating system with multi processors mode supported. (Default value)
» Disabled	Disables CPU Hyper Threading.

Integrated Peripherals

```
                  CMOS Setup Utility-Copyright (C) 1984-2003 Award Software
                                   Integrated Peripherals
 OnChip IDE Channel0                        [Enabled]         Item Help
 OnChip IDE Channel1                        [Enabled]         Menu Level ▶
 AC97 Audio                                 [Auto]            If a hard disk
 VIA onboard LAN                            [Enabled]         controller card is
 USB 1.1 Controller                         [Enabled]         used, set at Disabled
 USB 2.0 Controller                         [Enabled]
 USB Keyboard Support                       [Disabled]        [Enabled]
 USB Mouse Support                          [Disabled]        Enable onboard IDE
 Onboard Serial Port 1                      [3F8/IRQ4]        Channel
 Onboard Serial Port 2(①)                   [2F8/IRQ3]
 Onboard Parallel Port                      [378/IRQ7]        [Disabled]
 Parallel Port Mode                         [SPP]             Disable onboard IDE
                                                              Channel

   ↑↓→←: 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

---

① For GA-8VM533-P only.

OnChip IDE Channel0

When enabled, allows you to use the onboard primary PCI IDE. If a hard disk controller card is used, set at Disabled.

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

OnChip IDE Channel1

When enabled, allows you to use the onboard secondary PCI IDE. If a hard disk controller card is used, set at Disabled.

Auto	Enable onboard 2nd channel IDE port. (Default value)
Disabled	Disable onboard 2nd channel IDE port.

AC97 Audio

Auto	Enable onboard AC'97 audio function. (Default Value)
Disabled	Disable this function.

VIA onboard LAN

Enable	Enable onboard LAN function.(Default value)
Disable	Disable onboard LAN function.

USB 1.1 Controller

Disable this option if you are not using the onboard USB feature.

Enabled	Enable USB1.1 Controller. (Default value)
Disabled	Disable USB1.1 Controller.

USB 2.0 Controller

Disable this option if you are not using the onboard USB 2.0 feature.

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

USB Keyboard Support

When a USB keyboard is installed, please set at Enabled.

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

USB Mouse Support

Enabled	Enable USB Mouse Support.
Disabled	Disable USB Mouse Support. (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 (①)

Auto	BIOS will automatically setup the port 2 address.
3F8/IRQ4	Enable onboard Serial port 2 and address is 3F8.
2F8/IRQ3	Enable onboard Serial port 2 and address is 2F8. (Default value)
3E8/IRQ4	Enable onboard Serial port 2 and address is 3E8.
2E8/IRQ3	Enable onboard Serial port 2 and address is 2E8.
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 port and 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.

① For GA-8VM533-P only.

Power Management Setup

```
              CMOS Setup Utility-Copyright (C) 1984-2003 Award Software
                             Power Management Setup
ACPI Suspend Type                          [S1(POS)]       | Item Help
x USB Device Wake-Up From S3               Disabled        | Menu Level ▶
Soft-Off by PWRBTN                         [Instant-off]   | [S1]
AC Back Function                           [Soft-Off]      | Set suspend type to
Keyboard Power On                          [Disabled]      | Power On Suspend under
Mouse Power On                             [Disabled]      | ACPI OS
PME Event Wake Up                          [Enabled]       |
Resume by Alarm                            [Disabled]      | [S3]
x Date(of Month) Alarm                     Everyday        | Set suspend type to
x Time(hh:mm:ss) Alarm                     0 :  0 :  0     | Suspend to RAM under
                                                           | ACPI OS
  ↑↓→←: 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).

USB Device Wakeup From S3(When ACPI Suspend Type is set [S3/STR])

USB device wakeup From S3 can be set when ACPI standby state set to S3/STR.

Enabled	USB Device can wakeup system from S3.
Disabled	USB Device can't wakeup system from S3. (Default value)

Soft-off by PWRBTN

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.

AC Back Function

Memory	System power on depends on the status before AC lost.
Soft-Off	Always in Off state when AC back. (Default value)
Full-On	Always power on the system when AC back.

Keyboard Power On

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

The option "Password" allows you to set up to 8 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 8 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 your system.

Mouse Power On

Disabled	Can't Power on system by Mouse Event. (Default value)
Enabled	Can Power on system by Mouse Event.

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	Disable PME Event Wake up function.
Enabled	Enable PME Event Wake up function. (Default Value)

Resume by Alarm

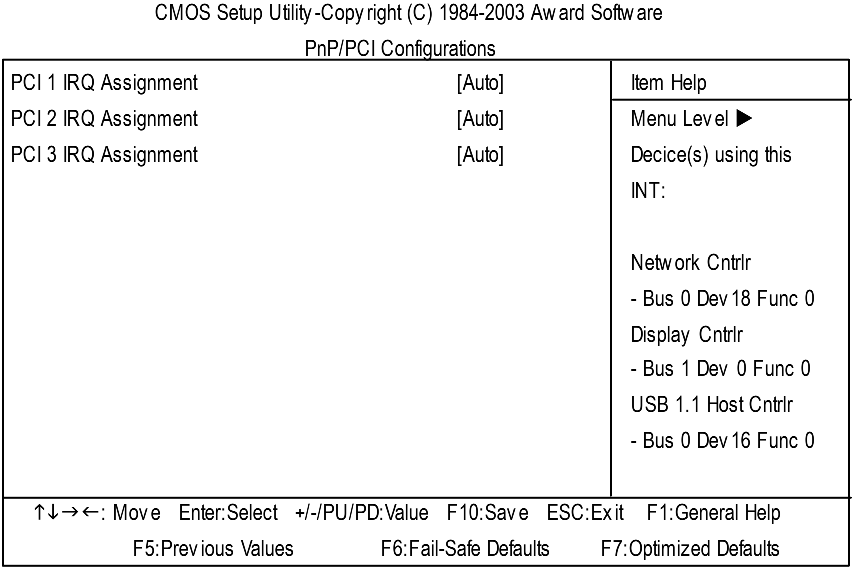
You can set "Resume by Alarm" item to enabled and key in Data/time to power on system.

▸▸ 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)

PnP/PCI Configurations



```
           CMOS Setup Utility-Copyright (C) 1984-2003 Award Software
                              PnP/PCI Configurations
PCI 1 IRQ Assignment                        [Auto]    Item Help
PCI 2 IRQ Assignment                        [Auto]    Menu Level ▶
PCI 3 IRQ Assignment                        [Auto]    Decice(s) using this
                                                      INT:

                                                      Network Cntrlr
                                                      - Bus 0 Dev18 Func 0
                                                      Display Cntrlr
                                                      - Bus 1 Dev 0 Func 0
                                                      USB 1.1 Host Cntrlr
                                                      - Bus 0 Dev16 Func 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: 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.

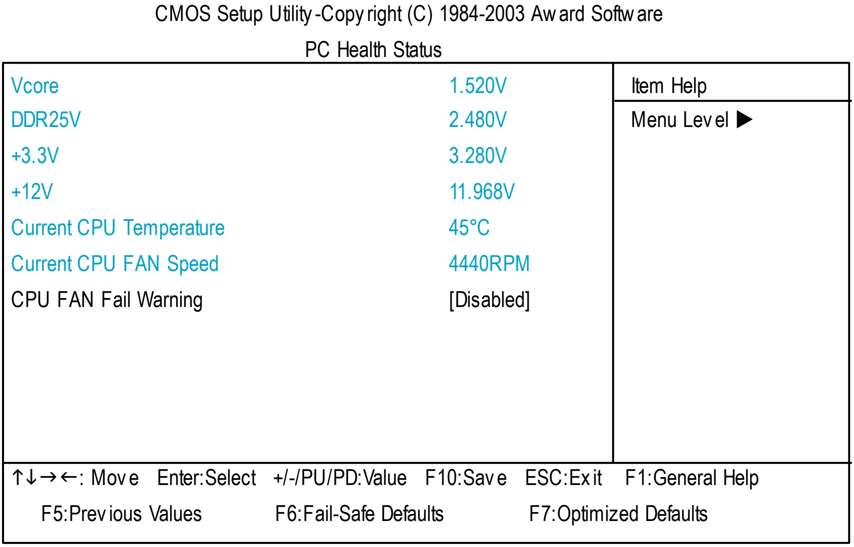
PCI2 IRQ Assignment

➧ Auto	Auto assign IRQ to PCI 2. (Default value)
➧ 3,4,5,7,9,10,11,12,14,15	Set 3,4,5,7,9,10,11,12,14,15 to PCI2.

PCI3 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.

PC Health Status



```
                 CMOS Setup Utility-Copyright (C) 1984-2003 Award Software
                                    PC Health Status
Vcore                                    1.520V              Item Help
DDR25V                                   2.480V              Menu Level ▶
+3.3V                                    3.280V
+12V                                     11.968V
Current CPU Temperature                  45°C
Current CPU FAN Speed                    4440RPM
CPU FAN Fail Warning                     [Disabled]

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

Figure7: PC Health Status

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

Detect system's voltage status automatically.

Current CPU Temperature

- Detect CPU Temp. automatically.

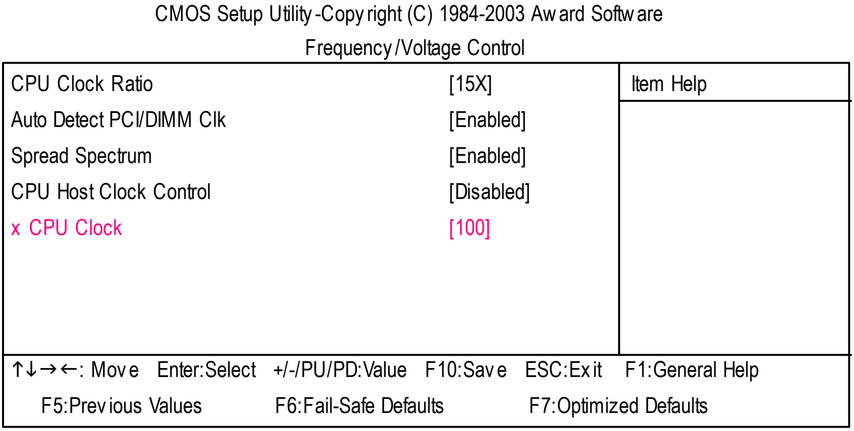
Current CPU FAN Speed (RPM)

Detect Fan speed status automatically.

CPU Fan Fail Warning

Disabled	Don't monitor current fan speed. (Default value)
Enabled	Alarm when stops.

Frequency/Voltage Control



```
CMOS Setup Utility-Copyright (C) 1984-2003 Award Software
Frequency/Voltage Control
CPU Clock Ratio                      [15X]           Item Help
Auto Detect PCI/DIMM Clk             [Enabled]
Spread Spectrum                      [Enabled]
CPU Host Clock Control               [Disabled]
x CPU Clock                          [100]
↑↓→←: 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

CPU Clock Ratio

This option will not be shown or not be available if you are using a CPU with the locked ratio.

15X~21X	It depends on CPU Clock Ratio.

This setup option will automatically assign by CPU detection.

For C-Stepping P4: 8X, 10X~24X default: 15X

For Northwood CPU: 12X~24X default: 16X

The option will display "Locked" and read only if the CPU ratio is not changeable.

Auto Detect PCI/DIMM Clk

Disabled	Disable auto detect PCI/DIMM Clk.
Enabled	Enable auto detect PCI/DIMM Clk. (Default value)

Spread Spectrum

Disabled	Disable spread spectrum.
Enabled	Enable spread spectrum. (Default value)

CPU Host Clock Control

Note: If system hangs up before enter CMOS setup utility, wait for 20 sec for times out reboot. When time out occur, system will reset and run at CPU default Host clock at next boot.

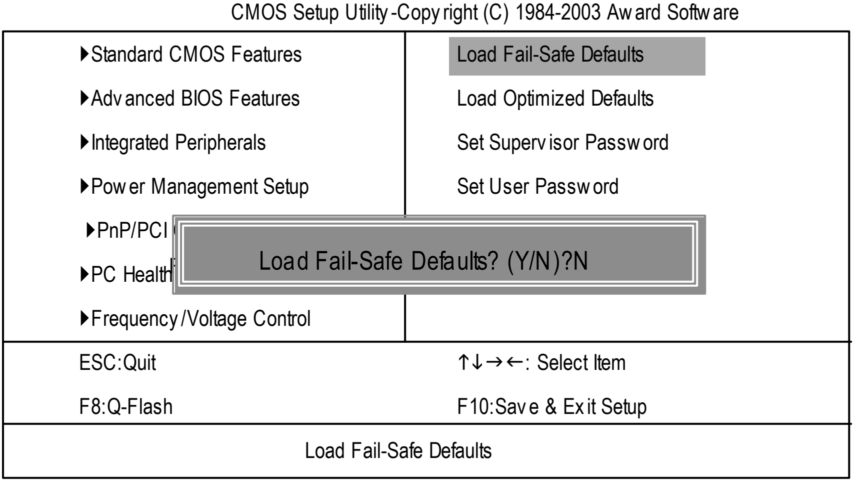
» Disabled	Disable CPU Host Clock Control. (Default value)
» Enabled	Enable CPU Host Clock Control.

CPU Clock

» 100	Set CPU Clock to 100MHz~132MHz.
» 133	Set CPU Clock to 133MHz~165MHz.

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

Load Fail-Safe Defaults



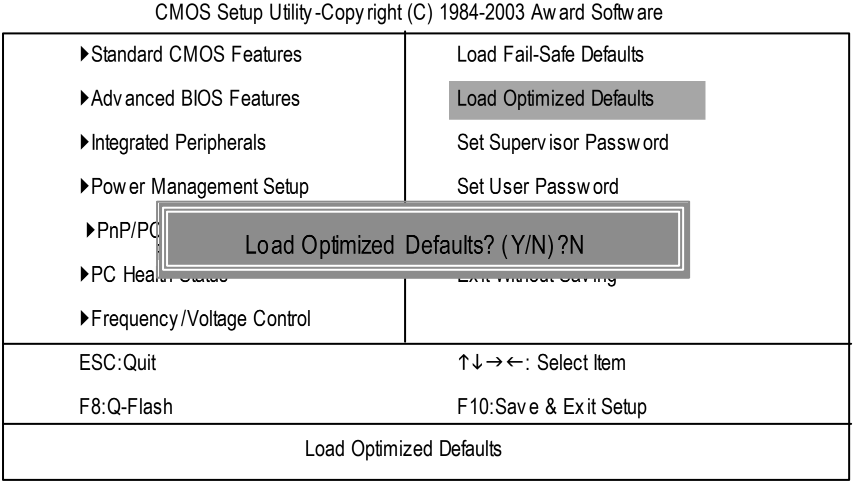
```
CMOS Setup Utility-Copyright (C) 1984-2003 Award Software

▶Standard CMOS Features            Load Fail-Safe Defaults
▶Advanced BIOS Features            Load Optimized Defaults
▶Integrated Peripherals            Set Supervisor Password
▶Power Management Setup            Set User Password
▶PnP/PCI
▶PC Health        Load Fail-Safe Defaults? (Y/N)?N
▶Frequency/Voltage Control

ESC:Quit                           ↑↓→←: Select Item
F8:Q-Flash                         F10:Save & Exit Setup

                 Load Fail-Safe Defaults
```

Figure 9: 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



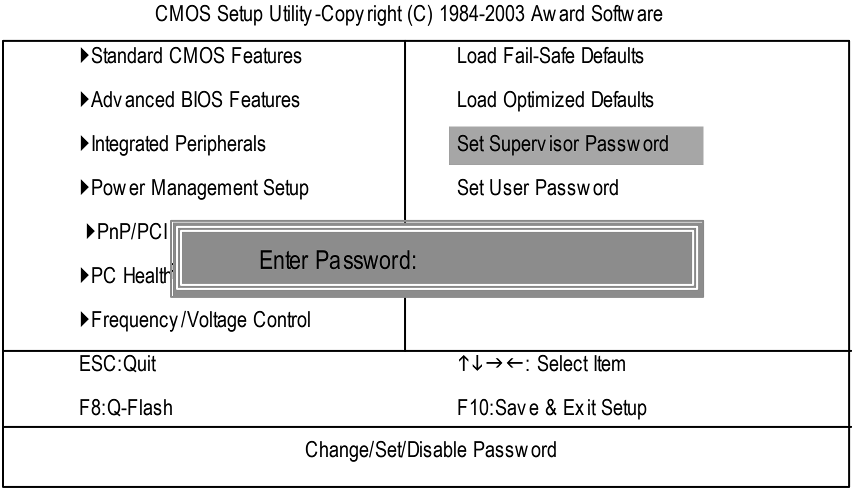
```
              CMOS Setup Utility-Copyright (C) 1984-2003 Award Software
 ▶Standard CMOS Features                 Load Fail-Safe Defaults
 ▶Advanced BIOS Features                 Load Optimized Defaults
 ▶Integrated Peripherals                 Set Supervisor Password
 ▶Power Management Setup                 Set User Password
  ▶PnP/PC     Load Optimized Defaults? (Y/N)?N
 ▶PC Hea
 ▶Frequency/Voltage Control
 ESC:Quit                                ↑↓→←: Select Item
 F8:Q-Flash                              F10:Save & Exit Setup
                          Load Optimized Defaults
```

Figure 10: 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



CMOS Setup Utility-Copyright (C) 1984-2003 Award Software

▶Standard CMOS Features	Load Fail-Safe Defaults
▶Advanced BIOS Features	Load Optimized Defaults
▶Integrated Peripherals	Set Supervisor Password
▶Power Management Setup	Set User Password
▶PnP/PCI	
▶PC Health	
▶Frequency/Voltage Control	
ESC:Quit	↑↓→←: Select Item
F8:Q-Flash	F10:Save & Exit Setup

Enter Password:

Change/Set/Disable Password

Figure 11: 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.

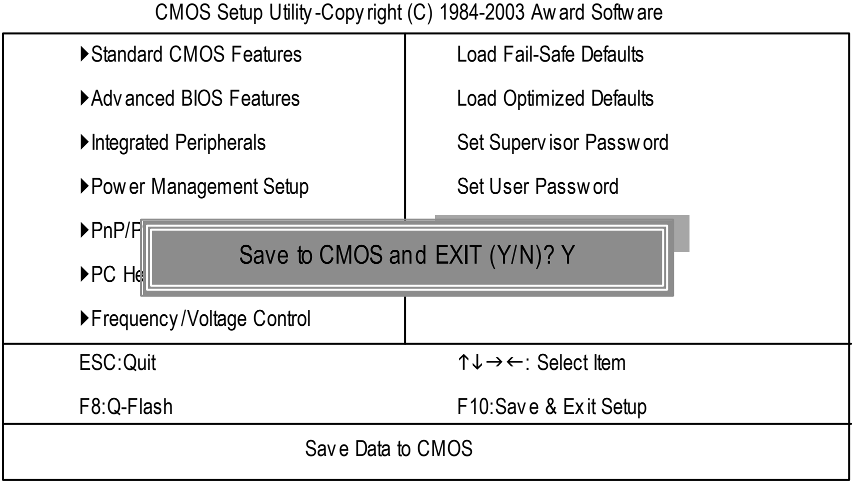
To disable password, just press <Enter> when you are prompted to enter password. A message "PASSWORD DISABLED" will appear to confirm the password being disabled. Once the password is disabled, the system will boot and you can enter Setup freely.

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



CMOS Setup Utility-Copyright (C) 1984-2003 Award Software

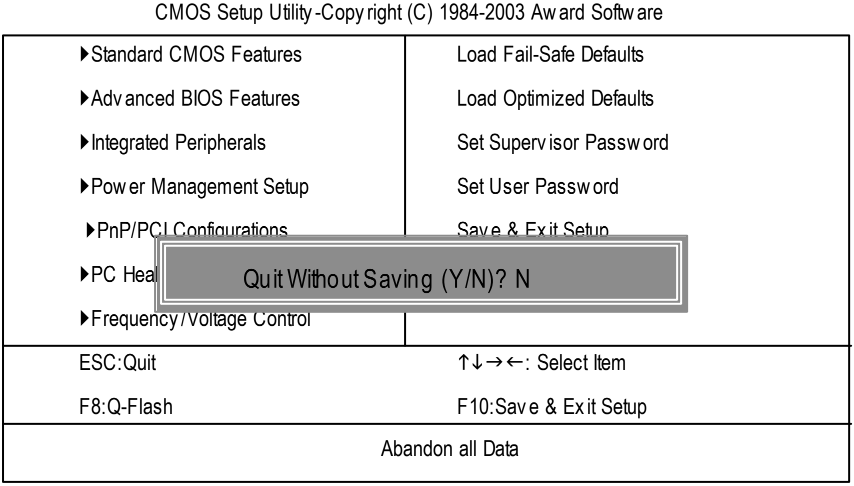
```
▶Standard CMOS Features            Load Fail-Safe Defaults
▶Advanced BIOS Features            Load Optimized Defaults
▶Integrated Peripherals            Set Supervisor Password
▶Power Management Setup            Set User Password
▶PnP/P
▶PC He      Save to CMOS and EXIT (Y/N)? Y
▶Frequency/Voltage Control
ESC:Quit                           ↑↓→←: Select Item
F8:Q-Flash                         F10:Save & Exit Setup
                  Save Data to CMOS
```

Figure 12: 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



CMOS Setup Utility-Copyright (C) 1984-2003 Award Software

▶Standard CMOS Features
▶Advanced BIOS Features
▶Integrated Peripherals
▶Power Management Setup
▶PnP/PCI Configurations
▶PC Heal
▶Frequency/Voltage Control

Load Fail-Safe Defaults
Load Optimized Defaults
Set Supervisor Password
Set User Password
Save & Exit Setup

Quit Without Saving (Y/N)? N

ESC:Quit
↑↓→←: Select Item
F8:Q-Flash
F10:Save & Exit Setup

Abandon all Data

Figure 13: 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

@BIOS™ Introduction

Gigabyte announces @BIOS™ Windows BIOS live update utility

Have you ever updated BIOS by yourself? Or like many other people, you just know what BIOS is, but always hesitate to update it? Because you think updating newest BIOS is unnecessary and actually you don't know how to update it.

Maybe not like others, you are very experienced in BIOS updating and spend quite a lot of time to do it. But of course you don't like to do it too much. First, download different BIOS from website and then switch the operating system to DOS mode. Secondly, use different flash utility to update BIOS. The above process is not a interesting job. Besides, always be carefully to store the BIOS source code correctly in your disks as if you update the wrong BIOS, it will be a nightmare.

Certainly, you wonder why motherboard vendors could not just do something right to save your time and effort and save you from the lousy BIOS updating work? Here it comes! Now Gigabyte announces @BIOS—the first Windows BIOS live update utility. This is a smart BIOS update software. It could help you to download the BIOS from internet and update it. Not like the other BIOS update software, it's a Windows utility. With the help of "@BIOS", BIOS updating is no more than a click.

Besides, no matter which mainboard you are using, if it's a Gigabyte's product*, @BIOS help you to maintain the BIOS. This utility could detect your correct mainboard model and help you to choose the BIOS accordingly. It then downloads the BIOS from the nearest Gigabyte ftp site automatically. There are several different choices; you could use "Internet Update" to download and update your BIOS directly. Or you may want to keep a backup for your current BIOS, just choose "Save Current BIOS" to save it first. You make a wise choice to use Gigabyte, and @BIOS update your BIOS smartly. You are now worry free from updating wrong BIOS, and capable to maintain and manage your BIOS easily. Again, Gigabyte's innovative product erects a milestone in mainboard industries.

For such a wonderful software, how much it costs? Impossible! It's free! Now, if you buy a Gigabyte's motherboard, you could find this amazing software in the attached driver CD. But please remember, connected to internet at first, then you could have a internet BIOS update from your Gigabyte @BIOS.

EasyTune™ 4 Introduction

Gigabyte announces *EasyTune™ 4*

Windows based Overclocking utility

EasyTune 4 carries on the heritage so as to pave the way for future generations.

EasyTune 4
1050
GO

Overclock might be one of the most common issues in computer field. But have many users ever tried it? The answer is probably "no". Because "Overclock" is thought to be very difficult and includes a lot of technical know-how, sometimes "Overclock" is even considered as special skills found only in some enthusiasts. But as to the experts in "Overclock", what's the truth? They may spend quite a lot of time and money to study, try and use many different hardware or BIOS tools to do "Overclock". And even with these technologies, they still learn that it's quite a risk because the safety and stability of an "Overclock" system is unknown. Now everything is different because of a Windows based overclocking utility "EasyTune 4" –announced by Gigabyte. This windows based utility has totally changed the gaming rule of "Overclock". This is the first windows based overclocking utility is suitable for both normal and power users. Users can choose either "Easy Mode" or "Advanced Mode" for overclocking at their convenience. For users who choose "Easy Mode", they just need to click "Auto Optimize" to have autoed and immediate CPU overclocking. This software will then overdrive CPU speed automatically with the result being shown in the control panel. If users prefer "Overclock" by them, there is also another choice. Click "Advanced Mode" to enjoy "sport drive" class Overclocking user interface. "Advanced Mode", allows users to change the system bus / AGP / Memory working frequency in small increments to get ultimate system performance. It operates in coordination with Gigabyte motherboards. Besides, it is different from other traditional over-clocking methods, EasyTune 4 doesn't require users to change neither BIOS nor hardware switch/ jumper setting; on the other hand, they can do "Overclock" at easy step . Therefore, this is a safer way for "Overclock" as nothing is changed on software or hardware. If user runs EasyTune 4 over system's limitation, the biggest lost is only to restart the computer again and the side effect is then well controlled. Moreover, if one well-performed system speed has been tested in EasyTune 4, user can "Save" this setting and "Load" it in next time. Obviously, Gigabyte EasyTune 4 has already turned the "Overclock" technology toward to a newer generation. This wonderful software is now free bundled in Gigabyte motherboard attached in driver CD. Users may make a test drive of "EasyTune 4" to find out more amazing features by themselves.

*Some Gigabyte products are not fully supported by EasyTune 4. Please find the products supported list in the web site.

*Any "Overclocking action" is at user's risk, Gigabyte Technology will not be responsible for any damage or instability to your processor, motherboard, or any other components.

Flash BIOS Method Introduction

Method 1 : Q-Flash

Flash BIOS Method Introduction

Q-Flash™ is a BIOS flash utility embedded in Flash ROM. With this utility, users only have to stay in the BIOS menu when they want to update BIOS. Q-Flash™ allows users to flash BIOS without any utility in DOS or Windows. Using Q-Flash™ indicating no more fooling around with any complicated instructions and operating system since it is in the BIOS menu.

CAUTION

Please note that because updating BIOS has potential risk, please do it with caution!! We are sorry that Gigabyte Technology Co., Ltd is not responsible for damages of system because of incorrect manipulation of updating BIOS to avoid any claims from end-users.

Before You Begin:

Before you start updating BIOS with the Q-Flash™ utility, please follow the steps below first.

1. Download the latest BIOS for your motherboard from Gigabyte's website.
2. Extract the BIOS file downloaded and save the BIOS file (the one with model name.Fxx. For example, 7VRXP.F12) to a floppy disk.
3. Reboot your PC and press **Del** to enter BIOS menu.

The BIOS upgrading guides below are separated into two parts.
If your motherboard has dual BIOS, please refer to Part One.
If your motherboard has single BIOS, please refer to Part Two.

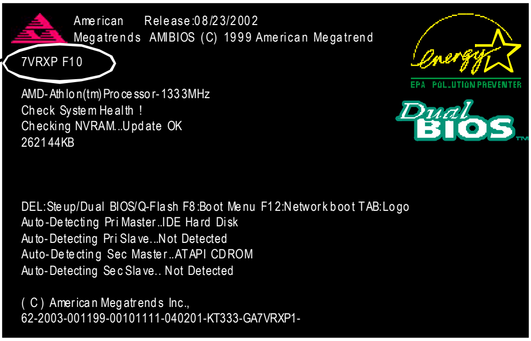
Part One:

Updating BIOS with Q-Flash™ Utility on Dual BIOS Motherboards.

Some of Gigabyte motherboards are equipped with dual BIOS. In the BIOS menu of the motherboards supporting Q-Flash™ and Dual BIOS, the Q-Flash™ utility and Dual BIOS utility are combined in the same screen. This section only deals with how to use Q-Flash™ utility.

In the following sections, we take GA-7VRXP as the example to guide you how to flash BIOS from an older version to the latest version. For example, from F10 to F12.

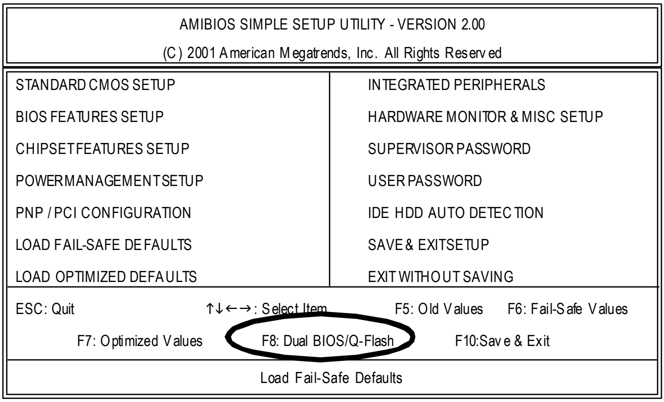
The BIOS file is F10 before updating



```
American     Release:08/23/2002
Megatrends  AMIBIOS (C) 1999 American Megatrend
7VRXP F10
AMD-Athlon(tm)Processor-1333MHz
Check System Health !
Checking NVRAM..Update OK
262144KB


DEL:Steup/Dual BIOS/Q-Flash F8:Boot Menu F12:Network boot TAB:Logo
Auto-Detecting Pri Master..IDE Hard Disk
Auto-Detecting Pri Slave...Not Detected
Auto-Detecting Sec Master..ATAPI CDROM
Auto-Detecting Sec Slave.. Not Detected

( C ) American Megatrends Inc.,
62-2003-001199-00101111-040201-KT333-GA7VRXP1-
```

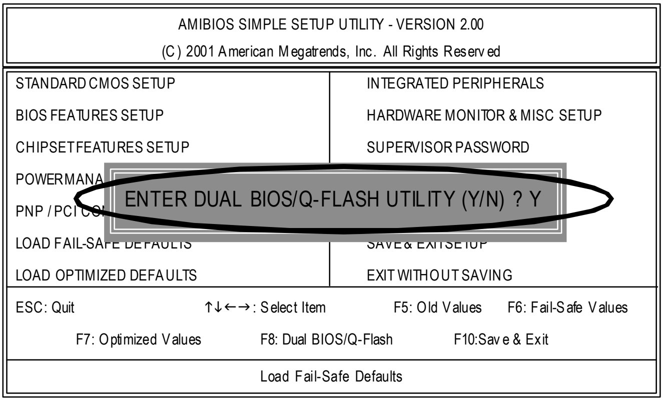
Entering the Q-Flash™ utility:

Step1: To use Q-Flash™ utility, you must press **Del** in the boot screen to enter BIOS menu.



```
              AMIBIOS SIMPLE SETUP UTILITY - VERSION 2.00
          (C) 2001 American Megatrends, Inc. All Rights Reserved

STANDARD CMOS SETUP                   INTEGRATED PERIPHERALS
BIOS FEATURES SETUP                   HARDWARE MONITOR & MISC SETUP
CHIPSET FEATURES SETUP                SUPERVISOR PASSWORD
POWER MANAGEMENT SETUP                USER PASSWORD
PNP / PCI CONFIGURATION               IDE HDD AUTO DETECTION
LOAD FAIL-SAFE DEFAULTS               SAVE & EXIT SETUP
LOAD OPTIMIZED DEFAULTS               EXIT WITHOUT SAVING

ESC: Quit            ↑↓←→: Select Item       F5: Old Values    F6: Fail-Safe Values
        F7: Optimized Values    F8: Dual BIOS/Q-Flash        F10:Save & Exit

                          Load Fail-Safe Defaults
```

Step 2: Press **F8** button on your keyboard and then **Y** button to enter the Q-Flash™ utility.



```
AMIBIOS SIMPLE SETUP UTILITY - VERSION 2.00
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STANDARD CMOS SETUP              INTEGRATED PERIPHERALS
BIOS FEATURES SETUP              HARDWARE MONITOR & MISC SETUP
CHIPSET FEATURES SETUP           SUPERVISOR PASSWORD
POWER MANA
PNP / PCI CO     ENTER DUAL BIOS/Q-FLASH UTILITY (Y/N) ? Y
LOAD FAIL-SAFE DEFAULTS          SAVE & EXIT SETUP
LOAD OPTIMIZED DEFAULTS          EXIT WITHOUT SAVING

ESC: Quit          ↑↓←→: Select Item       F5: Old Values    F6: Fail-Safe Values
      F7: Optimized Values      F8: Dual BIOS/Q-Flash      F10:Save & Exit

Load Fail-Safe Defaults
```
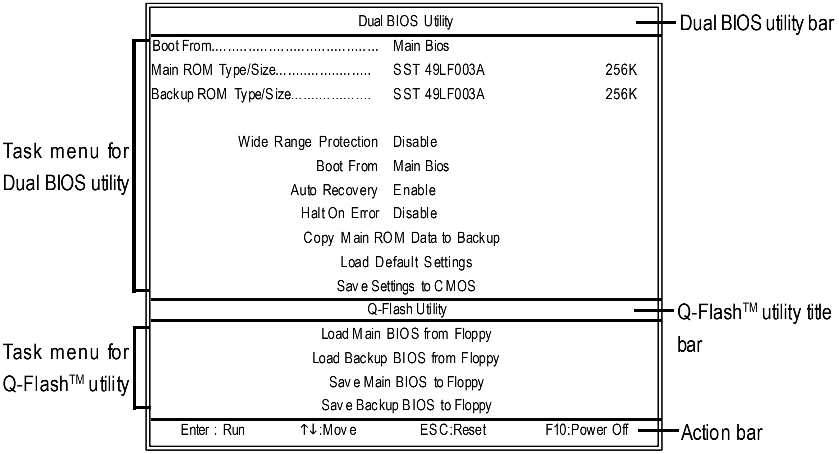

Exploring the Q-Flash™/Dual BIOS utility screen

The Q-Flash™/Dual BIOS utility screen consists of the following key components.



```
Dual BIOS Utility
Boot From..................................  Main Bios
Main ROM Type/Size.......................    SST 49LF003A        256K
Backup ROM Type/Size....................     SST 49LF003A        256K

              Wide Range Protection   Disable
                          Boot From   Main Bios
                      Auto Recovery   Enable
                      Halt On Error   Disable
                        Copy Main ROM Data to Backup
                          Load Default Settings
                          Save Settings to CMOS
Q-Flash Utility
                          Load Main BIOS from Floppy
                         Load Backup BIOS from Floppy
                           Save Main BIOS to Floppy
                          Save Backup BIOS to Floppy
 Enter : Run        ↑↓:Move         ESC:Reset        F10:Power Off
```

Dual BIOS utility bar
Task menu for Dual BIOS utility
Q-Flash™ utility title bar
Task menu for Q-Flash™ utility
Action bar

Task menu for Dual BIOS utility:

Contains the names of eight tasks and two item showing information about the BIOS ROM type. Blocking a task and pressing **Enter** key on your keyboard to enable execution of the task.

Task menu for Q-Flash™ utility:

Contains the names of four tasks. Blocking a task and pressing **Enter** key on your keyboard to enable execution of the task.

Action bar:

Contains the names of four actions needed to operate the Q-Flash™/Dual BIOS utility. Pressing the buttons mentioned on your keyboards to perform these actions.

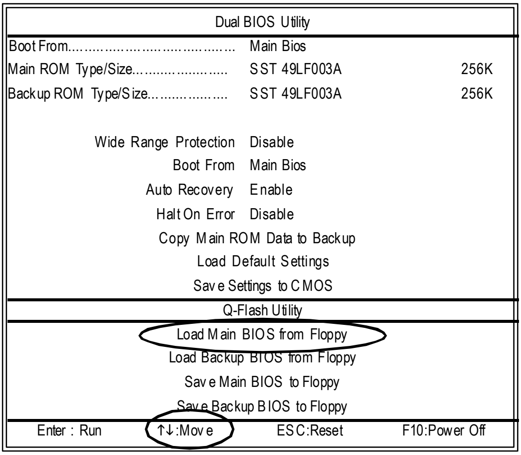
Using the Q-Flash™ utility:

This section tells you how to update BIOS using the Q-Flash™ utility. As described in the "Before you begin" section above, you must prepare a floppy disk having the BIOS file for your motherboard and insert it to your computer. If you have already put the floppy disk into your system and have entered the Q-Flash™ utility, please follow the steps below to flash BIOS.

Steps:

1. Press arrow buttons on your keyboard to move the light bar to "Load Main BIOS from Floppy" item in the Q-Flash™ menu and press **Enter** button.

NOTE If you want to save the current BIOS for backup purpose, you can begin Step 1 with "Save Main BIOS to Floppy" item.



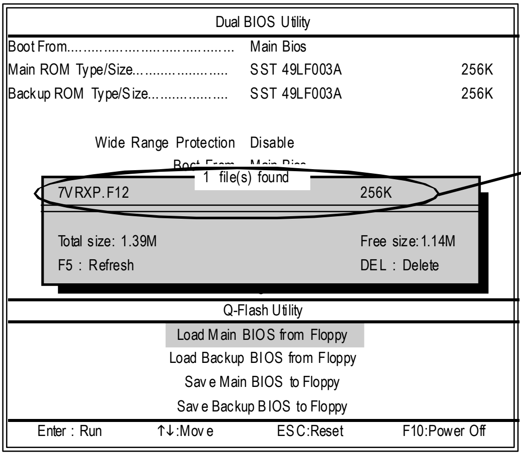
```
                          Dual BIOS Utility
Boot From.................................  Main Bios
Main ROM  Type/Size.....................    SST 49LF003A               256K
Backup ROM  Type/Size..................     SST 49LF003A               256K

               Wide Range Protection   Disable
                           Boot From   Main Bios
                       Auto Recovery   Enable
                       Halt On Error   Disable
                        Copy Main ROM Data to Backup
                          Load Default Settings
                          Save Settings to CMOS
                           Q-Flash Utility
                       Load Main BIOS from Floppy
                      Load Backup BIOS from Floppy
                         Save Main BIOS to Floppy
                        Save Backup BIOS to Floppy
   Enter : Run        ↑↓:Move          ESC:Reset        F10:Power Off
```

Later, you will see a box pop up showing the BIOS files you previously downloaded to the floppy disk.

2.Move to the BIOS file you want to flash and press Enter.

In this example, we only download one BIOS file to the floppy disk so only one BIOS file, 7VRXP.F12, is listed.

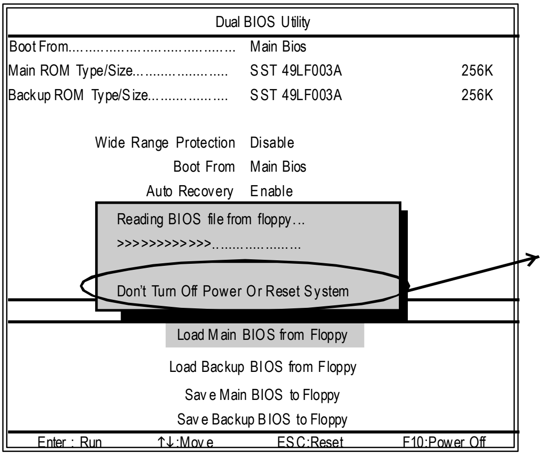
Please confirm again you have the correct BIOS file for your motherboard.



```
                         Dual BIOS Utility
Boot From..............................   Main Bios
Main ROM Type/Size.....................   SST 49LF003A           256K
Backup ROM  Type/Size..................   SST 49LF003A           256K

               Wide Range Protection      Disable
                           1  file(s) found
   7VRXP.F12                                       256K

   Total size: 1.39M                               Free size: 1.14M
   F5 : Refresh                                    DEL : Delete
                          Q-Flash Utility
                      Load Main BIOS from Floppy
                     Load Backup BIOS from Floppy
                       Save Main BIOS to Floppy
                      Save Backup BIOS to Floppy
   Enter : Run        ↑↓:Move          ESC:Reset          F10:Power Off
```

BIOS file in the floppy disk.

After pressing **Enter,** you'll then see the progress of reading the BIOS file from the floppy disk.

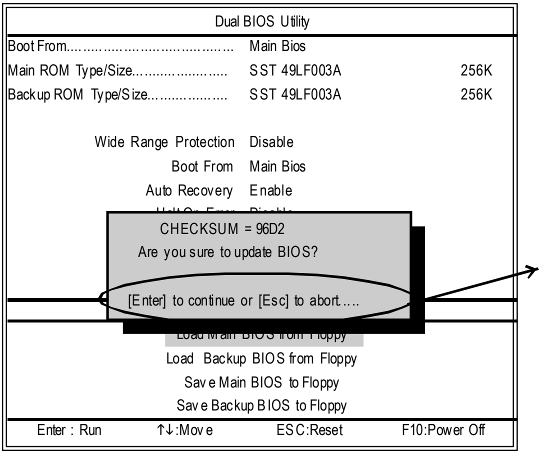


```
                         Dual BIOS Utility
Boot From..............................   Main Bios
Main ROM Type/Size.....................   SST 49LF003A           256K
Backup ROM  Type/Size..................   SST 49LF003A           256K

               Wide Range Protection      Disable
                           Boot From      Main Bios
                       Auto Recovery      Enable
          Reading BIOS file from floppy...
          >>>>>>>>>>>>...................

          Don't Turn Off Power Or Reset System
                      Load Main BIOS from Floppy
                     Load Backup BIOS from Floppy
                       Save Main BIOS to Floppy
                      Save Backup BIOS to Floppy
   Enter : Run        ↑↓:Move          ESC:Reset          F10:Power Off
```

Do not truning off power or reset your system at this stage!!

Please do not take out the floppy disk when it begins flashing BIOS.

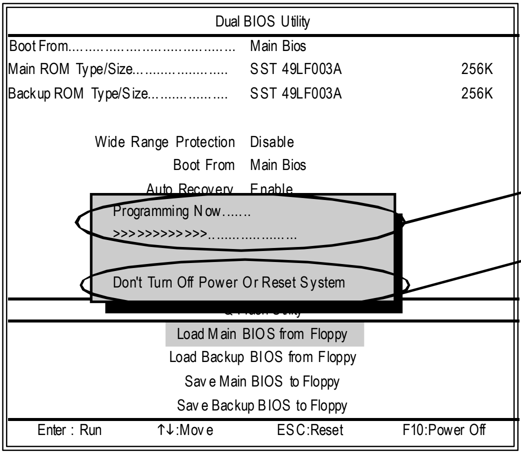
After BIOS file is read, you'll see a confirmation dialog box asking you "Are you sure to update BIOS?"



```
                         Dual BIOS Utility
Boot From..................................   Main Bios
Main ROM Type/Size.......................     SST 49LF003A            256K
Backup ROM Type/Size.....................     SST 49LF003A            256K

                   Wide Range Protection      Disable
                               Boot From      Main Bios
                           Auto Recovery      Enable

                  CHECKSUM = 96D2
             Are you sure to update BIOS?

           [Enter] to continue or [Esc] to abort.....

                   Load  Backup BIOS from Floppy
                        Save Main BIOS to Floppy
                      Save Backup BIOS to Floppy
    Enter : Run        ↑↓:Move         ESC:Reset        F10:Power Off
```

You can press "Enter" to continue updating BIOS or "ESC" to abort.

3. Press **Y** button on your keyboard after you are sure to update BIOS.
Then it will begin to update BIOS. The progress of updating BIOS will be displayed.



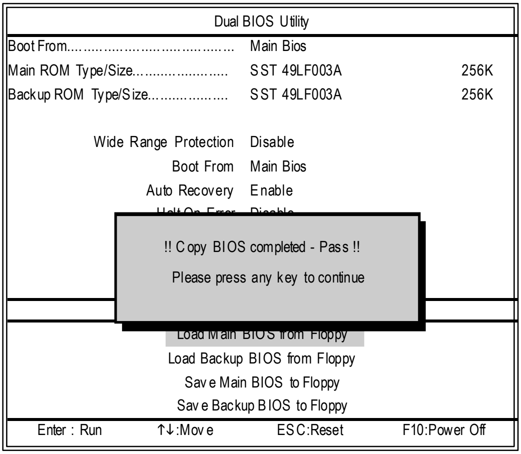
```
                         Dual BIOS Utility
Boot From..................................   Main Bios
Main ROM Type/Size.......................     SST 49LF003A            256K
Backup ROM Type/Size.....................     SST 49LF003A            256K

                   Wide Range Protection      Disable
                               Boot From      Main Bios
                           Auto Recovery      Enable
       Programming Now.......
       >>>>>>>>>>>>......................

       Don't Turn Off Power Or Reset System

                      Load Main BIOS from Floppy
                    Load Backup BIOS from Floppy
                        Save Main BIOS to Floppy
                      Save Backup BIOS to Floppy
    Enter : Run        ↑↓:Move         ESC:Reset        F10:Power Off
```

The progress of updating BIOS.

Do not turning off power or reset your system at this stage to avoid damaging your BIOS rom!!

Please do not take out the floppy disk when it begins flashing BIOS.

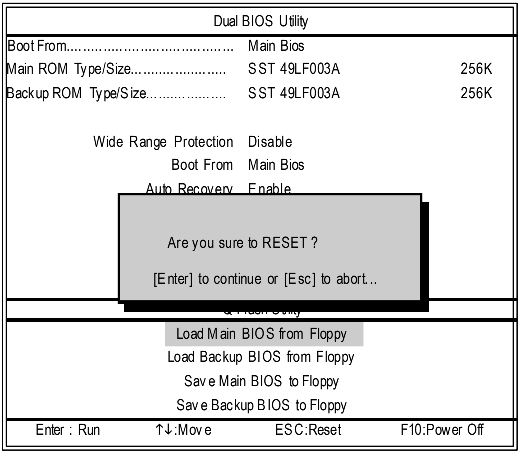
4. Press any keys to return to the Q-Flash™ menu when the BIOS updating procedure is completed.



```
                         Dual BIOS Utility
Boot From.................................  Main Bios
Main ROM Type/Size........................  SST 49LF003A          256K
Backup ROM Type/Size......................  SST 49LF003A          256K

                  Wide Range Protection  Disable
                              Boot From  Main Bios
                          Auto Recovery  Enable

                 !! Copy BIOS completed - Pass !!
                  Please press any key to continue

                    Load Main BIOS from Floppy
                   Load Backup BIOS from Floppy
                     Save Main BIOS to Floppy
                    Save Backup BIOS to Floppy
   Enter : Run        ↑↓:Move         ESC:Reset        F10:Power Off
```

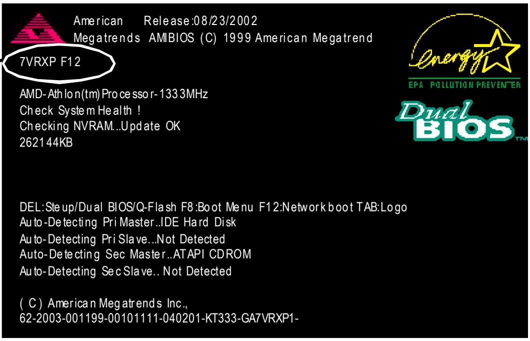
You can repeat Step 1 to 4 to flash the backup BIOS, too.

5. Press **Esc** and then **Y** button to exit the Q-Flash™ utility. The computer will restart automatically after you exit Q-Flash™.



```
                         Dual BIOS Utility
Boot From.................................  Main Bios
Main ROM Type/Size........................  SST 49LF003A          256K
Backup ROM Type/Size......................  SST 49LF003A          256K

                  Wide Range Protection  Disable
                              Boot From  Main Bios
                          Auto Recovery  Enable

                      Are you sure to RESET ?
                 [Enter] to continue or [Esc] to abort...

                    Load Main BIOS from Floppy
                   Load Backup BIOS from Floppy
                     Save Main BIOS to Floppy
                    Save Backup BIOS to Floppy
   Enter : Run        ↑↓:Move         ESC:Reset        F10:Power Off
```

After system reboots, you may find the BIOS version on your boot screen becomes the one you flashed.

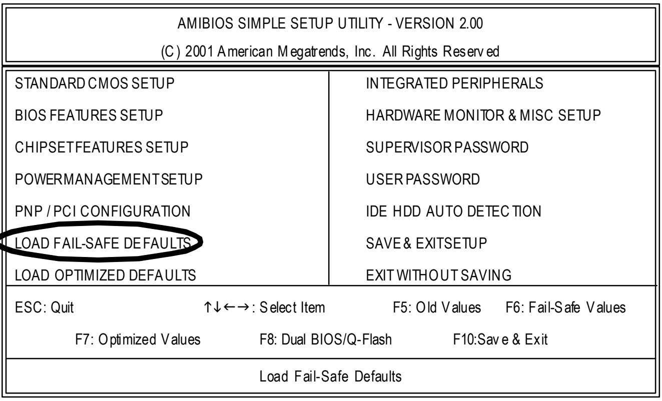


The BIOS file becomes F12 after updating

```
American    Release:08/23/2002
Megatrends  AMIBIOS (C) 1999 American Megatrend
7VRXP F12

AMD-Athlon(tm)Processor-1333MHz
Check System Health !
Checking NVRAM..Update OK
262144KB


DEL:Steup/Dual BIOS/Q-Flash F8:Boot Menu F12:Network boot TAB:Logo
Auto-Detecting Pri Master..IDE Hard Disk
Auto-Detecting Pri Slave...Not Detected
Auto-Detecting Sec Master..ATAPI CDROM
Auto-Detecting Sec Slave.. Not Detected

( C ) American Megatrends Inc.,
62-2003-001199-00101111-040201-KT333-GA7VRXP1-
```

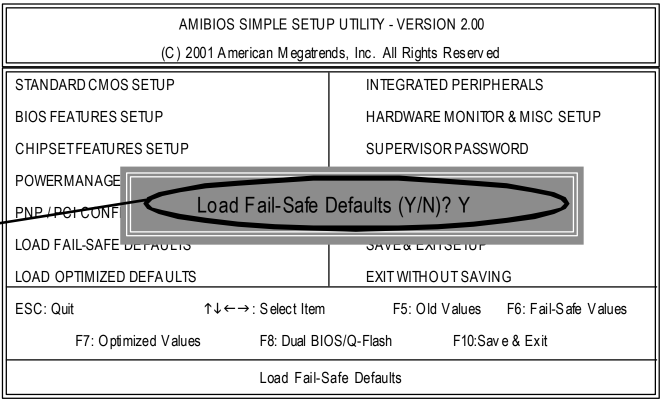
NOTE The following is an AMI BIOS menu screen. However, you can also find similar option in AWARD BIOS menu.

6. Press **Del** to enter BIOS menu after system reboots. When you are in BIOS menu, move to **Load Fail-Safe Defaults** item and press **Enter** to load BIOS Fail-Safe Defaults. Normally the system redetects all devices after BIOS has been upgraded. Therefore, we highly recommend reloading the BIOS defaults after BIOS has been upgraded.



```
AMIBIOS SIMPLE SETUP UTILITY - VERSION 2.00
(C) 2001 American Megatrends, Inc. All Rights Reserved

STANDARD CMOS SETUP            INTEGRATED PERIPHERALS
BIOS FEATURES SETUP            HARDWARE MONITOR & MISC SETUP
CHIPSET FEATURES SETUP         SUPERVISOR PASSWORD
POWER MANAGEMENT SETUP         USER PASSWORD
PNP / PCI CONFIGURATION        IDE HDD AUTO DETECTION
LOAD FAIL-SAFE DEFAULTS        SAVE & EXIT SETUP
LOAD OPTIMIZED DEFAULTS        EXIT WITHOUT SAVING

ESC: Quit        ↑↓←→: Select Item        F5: Old Values     F6: Fail-Safe Values
      F7: Optimized Values     F8: Dual BIOS/Q-Flash     F10:Save & Exit

Load Fail-Safe Defaults
```

Press Enter on your keyboard



AMIBIOS SIMPLE SETUP UTILITY - VERSION 2.00
(C) 2001 American Megatrends, Inc. All Rights Reserved

STANDARD CMOS SETUP
BIOS FEATURES SETUP
CHIPSET FEATURES SETUP
POWER MANAGE
PNP / PCI CONF
LOAD FAIL-SAFE
LOAD OPTIMIZED DEFAULTS

INTEGRATED PERIPHERALS
HARDWARE MONITOR & MISC SETUP
SUPERVISOR PASSWORD
EXIT WITHOUT SAVING

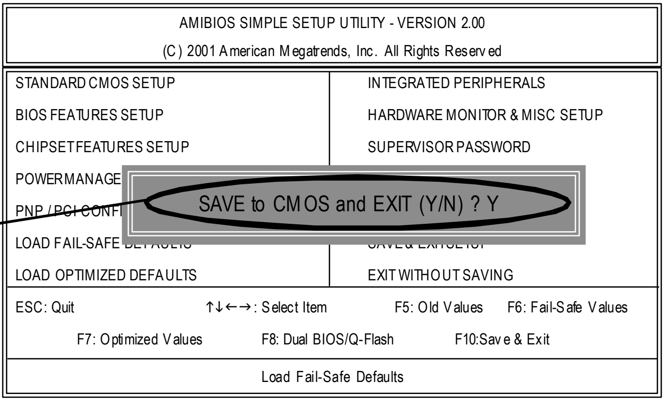
Load Fail-Safe Defaults (Y/N)? Y

ESC: Quit ↑↓←→: Select Item F5: Old Values F6: Fail-Safe Values
F7: Optimized Values F8: Dual BIOS/Q-Flash F10:Save & Exit

Load Fail-Safe Defaults

Press Y on your keyboard to load defaults.

7. Select **Save & Exit Setup** item to save the settings to CMOS and exit the BIOS menu. System will reboot after you exit the BIOS menu. The procedure is completed.



AMIBIOS SIMPLE SETUP UTILITY - VERSION 2.00
(C) 2001 American Megatrends, Inc. All Rights Reserved

STANDARD CMOS SETUP
BIOS FEATURES SETUP
CHIPSET FEATURES SETUP
POWER MANAGE
PNP / PCI CONF
LOAD FAIL-SAFE
LOAD OPTIMIZED DEFAULTS

INTEGRATED PERIPHERALS
HARDWARE MONITOR & MISC SETUP
SUPERVISOR PASSWORD
EXIT WITHOUT SAVING

SAVE to CMOS and EXIT (Y/N) ? Y

ESC: Quit ↑↓←→: Select Item F5: Old Values F6: Fail-Safe Values
F7: Optimized Values F8: Dual BIOS/Q-Flash F10:Save & Exit

Load Fail-Safe Defaults

Press Y on your keyboard to save and exit.

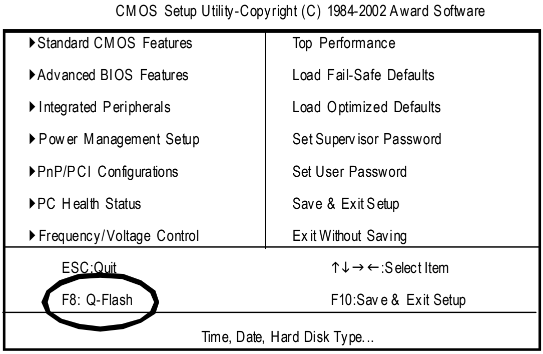
Part Two:

Updating BIOS with Q-Flash™ Utility on Single-BIOS Motherboards.

This part guides users of single-BIOS motherboards how to update BIOS using the Q-Flash™ utility.

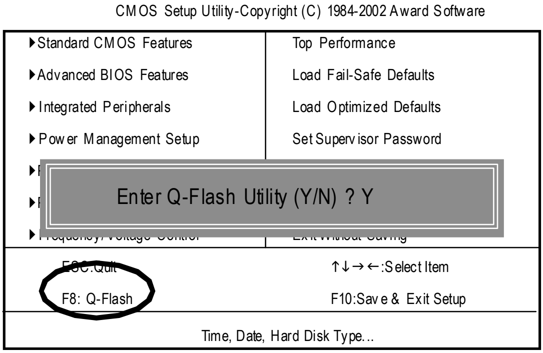
Entering the Q-Flash™ utility:

Step1: To use the Q-Flash™ utility, you must press **Del** in the boot screen to enter BIOS menu.



```
            CMOS Setup Utility-Copyright (C) 1984-2002 Award Software
▸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...
```

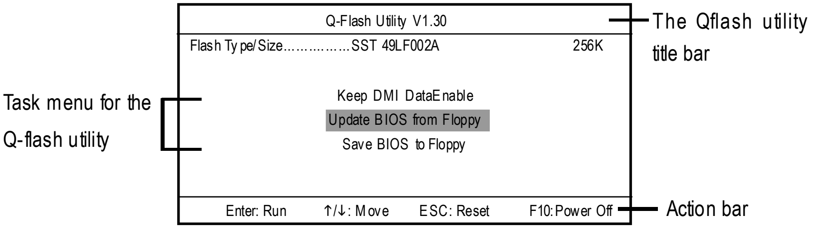
2. Press **F8** on your keyboard and then **Y** button to enter the Q-Flash™ utility.



```
            CMOS Setup Utility-Copyright (C) 1984-2002 Award Software
▸Standard CMOS Features            Top Performance
▸Advanced BIOS Features            Load Fail-Safe Defaults
▸Integrated Peripherals            Load Optimized Defaults
▸Power Management Setup            Set Supervisor Password

            Enter Q-Flash Utility (Y/N) ? Y

     ESC:Quit                           ↑↓→←:Select Item
     F8: Q-Flash                        F10:Save & Exit Setup
                      Time, Date, Hard Disk Type...
```

Exploring the Q-Flash™ utility screen

The Q-Flash™ BIOS utility screen consists of the following key components.



```
                    Q-Flash Utility V1.30
Flash Type/Size................SST 49LF002A                256K

                      Keep DMI DataEnable
                      Update BIOS from Floppy
                      Save BIOS to Floppy

Enter: Run      ↑/↓: Move      ESC: Reset      F10:Power Off
```

The Qflash utility title bar
Task menu for the Q-flash utility
Action bar

Task menu for the Q-Flash™ utility: Contains the names of three tasks. Blocking a task and pressing **Enter** key on your keyboard to enable execution of the task.

Action bar: Contains the names of four actions needed to operate the Q-Flash™ utility. Pressing the buttons mentioned on your keyboard to perform these actions.

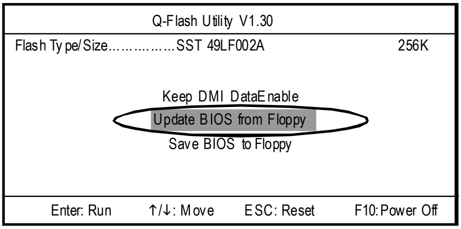
Using the Q-Flash™ utility:

This section tells you how to update BIOS using the Q-Flash™ utility. As described in the "Before you begin" section above, you must prepare a floppy disk having the BIOS file for your motherboard and insert it to your computer. If you have already put the floppy disk into your system and have enter the Q-Flash™ utility, please follow the steps below to flash BIOS.

Steps:

1. Press arrow buttons on your keyboard to move the light bar to "Load Main BIOS from Floppy" item in the Q-Flash™ menu and press **Enter** button.

If you want to save the current BIOS for backup purpose, you can begin Step 1 with **Save Main BIOS to Floppy** item.

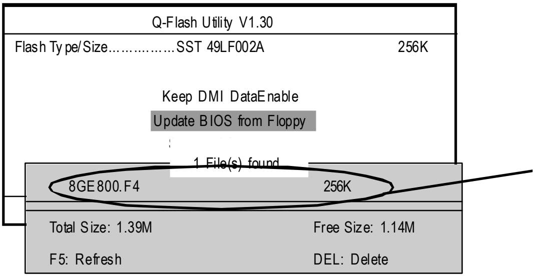


```
                    Q-Flash Utility V1.30
Flash Type/Size................SST 49LF002A                256K

                      Keep DMI DataEnable
                      Update BIOS from Floppy
                      Save BIOS to Floppy

Enter: Run      ↑/↓: Move      ESC: Reset      F10:Power Off
```

Later, you will see a box showing the BIOS files you downloaded to the floppy disk.
In this example, we only download one BIOS for this board, 8GE800.F4 so only one BIOS file is listed.

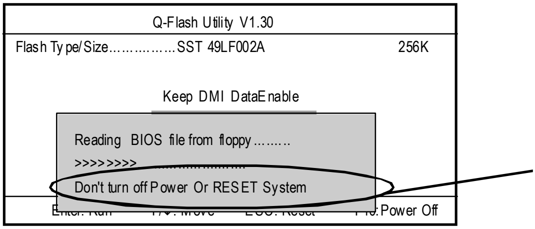
2.Highlight the BIOS file you want to flash and press **Enter** button on your keyboard to enable reading from the BIOS file from the floppy.

⚠ Please confirm again you have the correct BIOS file for your motherboard.



```
Q-Flash Utility V1.30
Flash Type/Size................SST 49LF002A        256K

Keep DMI DataEnable
Update BIOS from Floppy

1 File(s) found
8GE800.F4                              256K

Total Size: 1.39M                Free Size: 1.14M
F5: Refresh                      DEL: Delete
```

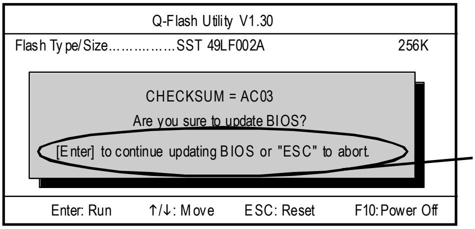
BIOS file in the floppy.



```
Q-Flash Utility V1.30
Flash Type/Size................SST 49LF002A        256K

Keep DMI DataEnable

Reading BIOS file from floppy ........
>>>>>>>> ...................
Don't turn off Power Or RESET System
                                          Power Off
```

⚠ Do not turning power or reset your system at this stage!

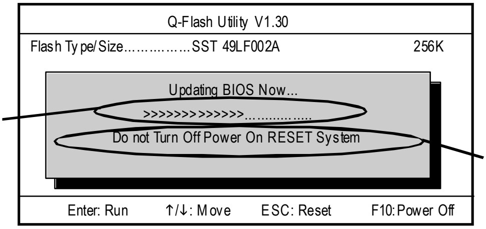
After BIOS file is read, you'll see a confirmation dialog box asking you "Are you sure to update BIOS?"



```
Q-Flash Utility V1.30
Flash Type/Size................SST 49LF002A          256K

CHECKSUM = AC03
Are you sure to update BIOS?
[Enter] to continue updating BIOS or "ESC" to abort.

Enter: Run     ↑/↓: Move     ESC: Reset     F10:Power Off
```

You can press "Enter" to continue updating BIOS or "ESC" to abort.

3. Press **Y** button if you make sure to update BIOS.
   Then it will begin to update BIOS. The progress of updating will be shown at the same time.

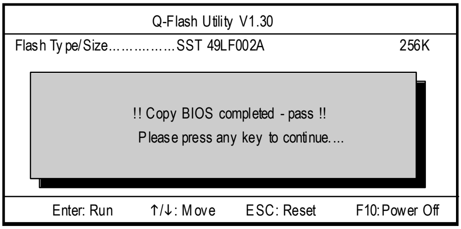


```
Q-Flash Utility V1.30
Flash Type/Size................SST 49LF002A          256K

Updating BIOS Now...
>>>>>>>>>>>>>..............
Do not Turn Off Power On RESET System

Enter: Run     ↑/↓: Move     ESC: Reset     F10:Power Off
```

The porcess of updating BIOS

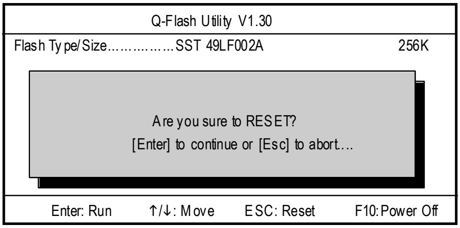
Do not turning off power or reset your system at this stage!!

4. Press any keys to return to the Q-Flash™ menu when the BIOS updating procedure is completed.



```
Q-Flash Utility V1.30
Flash Type/Size................SST 49LF002A          256K

!! Copy BIOS completed - pass !!
Please press any key to continue....

Enter: Run     ↑/↓: Move     ESC: Reset     F10:Power Off
```

5. Press **Esc** and then **Enter** to exit the Q-Flash™ utility. System will restart.



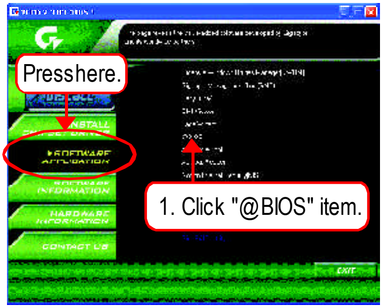
```
Q-Flash Utility V1.30
Flash Type/Size................SST 49LF002A          256K

Are you sure to RESET?
[Enter] to continue or [Esc] to abort....

Enter: Run     ↑/↓: Move     ESC: Reset     F10:Power Off
```

6. Press **Del** to enter BIOS menu after system reboots and load BIOS Fail-Safe Defaults. See how to load BIOS Fail-Safe Defaults, please kindly refer to Step 6 to 7 in Part One.

Congratulation!! You have updated BIOS successfully!!

Method 2 : @BIOS Utility

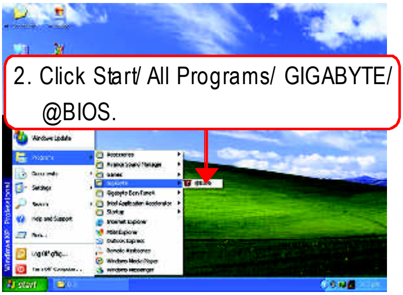
If you don't have DOS boot disk, we recommend that you used Gigabyte @BIOS™ program to flash BIOS.


Press here.

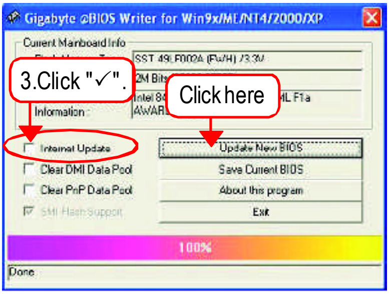
1. Click "@BIOS" item.

SOFTWARE APPLICATION
INFORMATION
HARDWARE INFORMATION
CONTACT US
EXIT

(1)


2. Click Start/ All Programs/ GIGABYTE/ @BIOS.

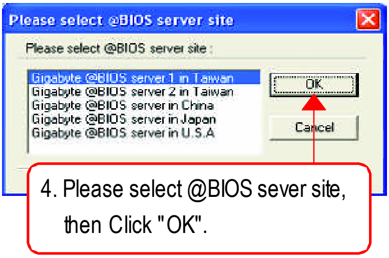
(2)


3.Click "✓".

Click here

Gigabyte @BIOS Writer for Win9x/ME/NT4/2000/XP
Current Marboard Info
SST 49LF002A (FWH) /3.3V
2M Bits
Intel 8
AWAR
L F1a
Information :
☐ Internet Update
☐ Clear DMI Data Pool
☐ Clear PnP Data Pool
☑ SMI Flash Support
Update New BIOS
Save Current BIOS
About this program
Exit
100%
Done

(3)


4. Please select @BIOS sever site, then Click "OK".

Please select @BIOS server site
Please select @BIOS server site :
Gigabyte @BIOS server 1 in Taiwan
Gigabyte @BIOS server 2 in Taiwan
Gigabyte @BIOS server in China
Gigabyte @BIOS server in Japan
Gigabyte @BIOS server in U.S.A
OK
Cancel

(4)

Methods and steps:

I. Update BIOS through Internet

a. Click "Internet Update" icon

b. Click "Update New BIOS" icon

c. Select @BIOS™ sever

d. Select the exact model name on your motherboard.

e. System will automatically download and update the BIOS.

II. Update BIOS NOT through Internet:

a. Do not click "Internet Update" icon
b. Click "Update New BIOS"
c. Please select "All Files" in dialog box while opening the old file.
d. Please search for BIOS unzip file, downloading from internet or any other methods (such as: 8VM533.F2).
e. Complete update process following the instruction.

III. Save BIOS

In the very beginning, there is "Save Current BIOS" icon shown in dialog box. It means to save the current BIOS version.

IV. Check out supported motherboard and Flash ROM:

In the very beginning, there is "About this program" icon shown in dialog box. It can help you check out which kind of motherboard and which brand of Flash ROM are supported.

Note:

a. In method I, if it shows two or more motherboard's model names to be selected, please make sure your motherboard's model name again. Selecting wrong model name will cause the system unbooted.
b. In method II, be sure that motherboard's model name in BIOS unzip file are the same as your motherboard's. Otherwise, your system won't boot.
c. In method I, if the BIOS file you need cannot be found in @BIOS™ server, please go onto Gigabyte's web site for downloading and updating it according to method II.
d. Please note that any interruption during updating will cause system unbooted

6-Channel Audio Function Introduction

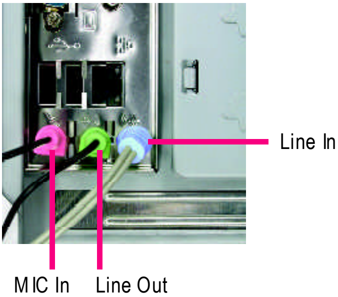
The installation of Windows 98SE/2K/ME/XP is very simple. Please follow next step to install the function!

Basic 6 Channel Analog Audio Output Mode

Use the back audio panel to connect the audio output without any additional module.

STEP 1 :

Connect the front channels to "Line Out", the rear channels to "Line In", and the Center/Subwoofer channels to "MIC In".

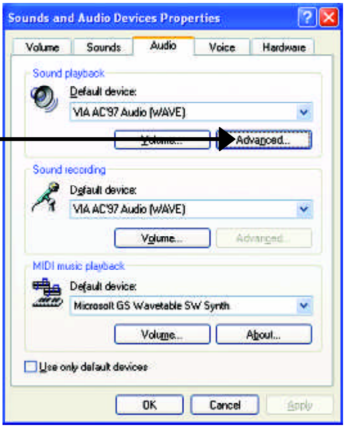

Line In
MIC In
Line Out

STEP 2 :

After installation of the audio driver, you'll find an icon on the taskbar's status area. Right click the audio icon "Volume" from the windows tray at the bottom of the screen. Click the "Adjust Audio Properties".

STEP 3 :

Click "Advanced".


Volume
Sounds
Audio
Voice
Hardware
Volume...
Advanced...
Volume...
Advanced...
Volume...
About...
OK
Cancel
Apply

Sounds and Audio Devices Properties

Sound playback

Default device: VIA AC'97 Audio (WAVE)

Sound recording

Default device: VIA AC'97 Audio (WAVE)

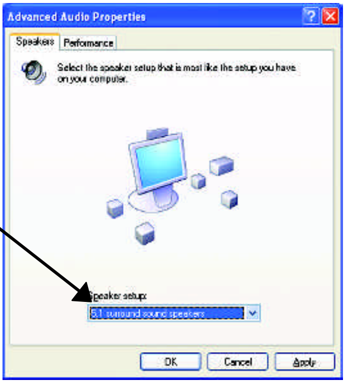
MIDI music playback

Default device: Microsoft GS Wavetable SW Synth

☐ Use only default devices

STEP 4 :

Choose the "5.1 surround sound speakers" and click "OK".


Advanced Audio Properties
Speakers
Performance
OK
Cancel
Apply

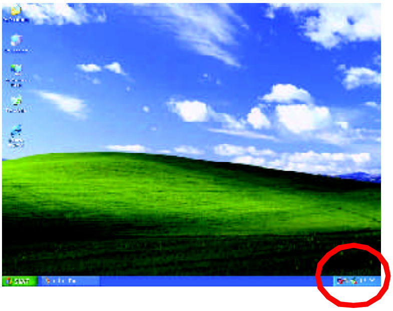
Select the speaker setup that is most like the setup you have on your computer.

Speaker setup: 5.1 surround sound speakers

STEP 5 :

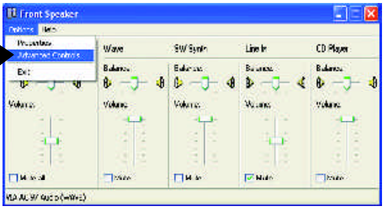
You'll find an icon on the taskbar's status area.

Click the audio icon "Volume" from the windows tray at the bottom of the screen.



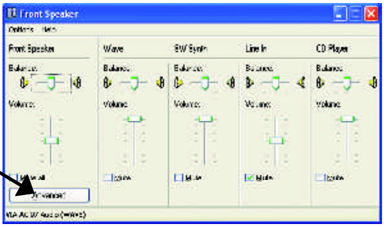
STEP 6 :

Click Options\Advanced Controls.


Front Speaker
Options
Help
Properties
Advanced Controls
Exit
Wave
SW Synth
Line In
CD Player
Balance:
Volume:
Mute all
Mute
VIA AC'97 Audio (WAVE)

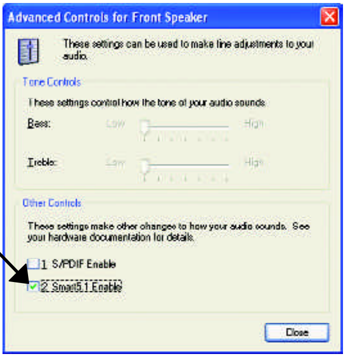
STEP 7 :

Click "Advanced".


Front Speaker
Options
Help
Front Speaker
Wave
SW Synth
Line In
CD Player
Balance:
Volume:
Mute all
Mute
Advanced
VIA AC'97 Audio (WAVE)

STEP 8 :

Click "Smart 5.1 Enabld" and "Close".



These settings can be used to make fine adjustments to your audio.

These settings control how the tone of your audio sounds.

These settings make other changes to how your audio sounds. See your hardware documentation for details.

☐ 1 S/PDIF Enable

☑ 2 Smart5.1 Enable

Advanced Controls for Front Speaker
Tone Controls
Bass:
Low
High
Treble:
Low
High
Other Controls
Close

Xpress Recovery Introduction

What is Xpress Recovery?

Xpress Recovery utility is an utility for backing up and restoring O.S. partition . If the hard drive can not work properly, you can restore it to the original state.

CAUTION

1. It supports FAT16, FAT32, NTFS format .
2. It must be connected to IDE1 Master .
3. It's only allows you to install one O.S .
4. It must be used with IDE hard disk supporting HPA .
5. The first partition must be set as the boot partition. When the boot partition is backed up, please do not change the its size.
6. It is not recommend to use Xpress Recovery if you had ever used Ghost to return boot manager to NTFS format.

NOTE

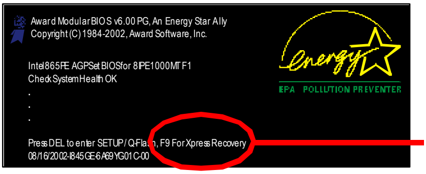
1. System data and hard disk's reading/writing speed will affect backing up speed.
2. We recommend that you install Xpress Recovery immediately after installing O.S , drivers and applications.

How to use the Xpress Recovery

There are two ways to enter the Xpress Recovery utility. (see the below)

1. Text Mode: press F9 during powering on the computer.

Press F9 during powering on the computer .

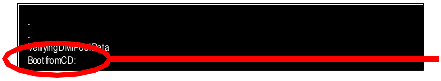


```
Award Modular BIOS v6.00 PG, An Energy Star Ally
Copyright (C) 1984-2002, Award Software, Inc.

Intel 865PE AGPSet BIOS for 8IPE1000MT F1
Check System Health OK
.
.
.

Press DEL to enter SETUP / Q-Flash, F9 For Xpress Recovery
08/16/2002-I845GE-6A69YG01C-00
```

F9 For Xpress Recovery

2. BMP Mode: boot from CD-ROM

Please go to "Advanced BIOS" setting menu and set boot from CD-ROM , then save and exit the BIOS menu . Later,please insert MB driver CD into your drive when "Boot from CD:" appears at the bottom of the screen , press any key to enter Xpress Recovery.

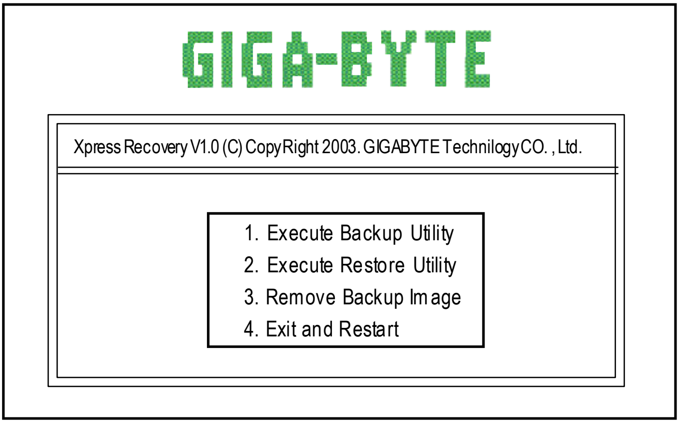


```
.
.
Verifying DMI Pool Data
Boot from CD:
```

Boot from CD:

You can highlight the item by using the arrows keys on your keyboard and enter key to enter the menu.

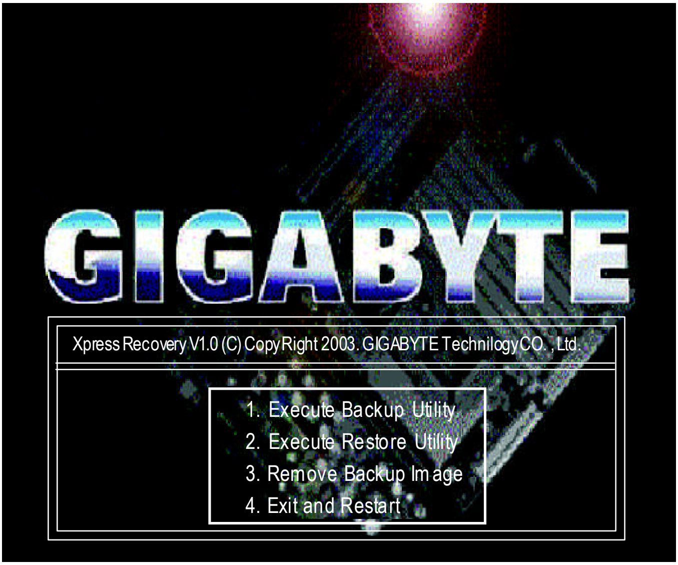
Text Mode:



Xpress Recovery V1.0 (C) CopyRight 2003. GIGABYTE Technilogy CO. , Ltd.

1. Execute Backup Utility
2. Execute Restore Utility
3. Remove Backup Image
4. Exit and Restart

BMP Mode:



Xpress Recovery V1.0 (C) CopyRight 2003. GIGABYTE Technilogy CO. , Ltd.

1. Execute Backup Utility
2. Execute Restore Utility
3. Remove Backup Image
4. Exit and Restart

If you ever entered Xpress Recovery by booting from CD-ROM, you'll still be directed to BMP mode by pressing F9 in the bootup screen.

1.Execute Backup Utility:

✎ **Press B to Backup your System or Esc to Exit**

The Backup utility will scan the system automatically and back up it.

The backed up data will be saved as an hidden image .

2.Execute Restore Utility:

✎ **This program will recover your system to factory default.**

Press R to recover your system.

Press Esc to exit

Restore the backup image to the original state.

3.Remove Backup Image:

✎ **Are you sure to remove backup image? (Y/N)**

Remove the backup image.

4.Exit and Restart:

Exit and restart your computer.

Chapter 5 Appendix

Install Drivers

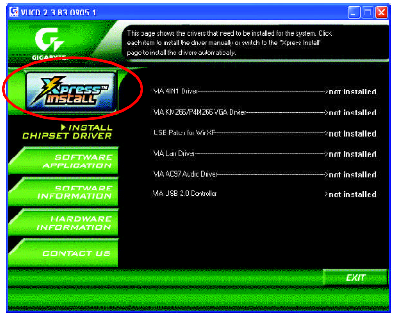
NOTE

Pictures below are shown in Windows XP (CD ver. 2.3)

Insert the driver CD-title that came with your motherboard into your CD-ROM drive, 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.

INSTALL CHIPSET DRIVER

This page shows the drivers that need to be installed for the system. Click each item to install the driver manually or switch to the Xpress Install to install the drivers automatically.


VUCD 2.3 B3.0905.1

This page shows the drivers that need to be installed for the system. Click each item to install the driver manually or switch to the "Xpress Install" page to install the drivers automatically.

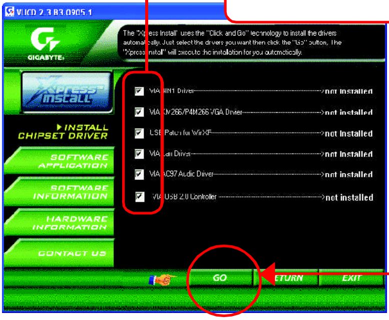
VIA 4IN1 Driver------------------>not installed
VIA KM266/P4M266 VGA Drvier------------------>not installed
LSE Patch for WinXP------------------>not installed
VIA Lan Driver------------------>not installed
VIA AC97 Audio Driver------------------>not installed
VIA USB 2.0 Controller>not installed

GIGABYTE
Xpress Install
INSTALL CHIPSET DRIVER
SOFTWARE APPLICATION
SOFTWARE INFORMATION
HARDWARE INFORMATION
CONTACT US
EXIT

Massage: Some device drivers will restart your system automatically. After restarting your system the "Xpress Install" will continue to install other drivers.

The "Xpress Install" uses the"Click and Go" technology to install the drivers automatically. Just select the drivers you want then click the "GO" button. The Xpress Install will execute the installation for you by itself.

We recommend that you install all components in the list.

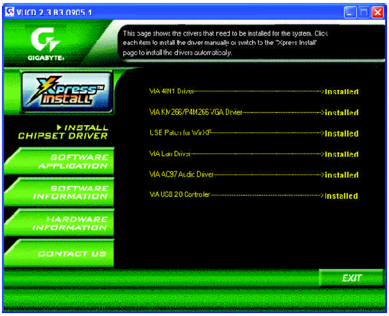

VUCD 2.3 B3.0905.1

The "Xpress Install" uses the "Click and Go" technology to install the drivers automatically. Just select the drivers you want then click the "Go" button. The "Xpress Install" will execute the installation for you automatically.

☑ VIA 4IN1 Driver------------------>not installed
☑ VIA KM266/P4M266 VGA Drvier------------------>not installed
☑ LSE Patch for WinXP------------------>not installed
☑ VIA Lan Driver------------------>not installed
☑ VIA AC97 Audio Driver------------------>not installed
☑ VIA USB 2.0 Controller------------------>not installed

GIGABYTE
Xpress Install
INSTALL CHIPSET DRIVER
SOFTWARE APPLICATION
SOFTWARE INFORMATION
HARDWARE INFORMATION
CONTACT US
GO
RETURN
EXIT

Click "GO".


VUCD 2.3 B3.0905.1
GIGABYTE
Xpress install
INSTALL CHIPSET DRIVER
SOFTWARE APPLICATION
SOFTWARE INFORMATION
HARDWARE INFORMATION
CONTACT US
EXIT

This page shows the drivers that need to be installed for the system. Click each item to install the driver manually or switch to the "Xpress Install" page to install the drivers automatically.

VIA 4IN1 Driver---->Installed
VIA KM266/P4M266 VGA Drvier---->installed
USB Patch for WinXP---->Installed
VIA Lan Driver---->Installed
VIA AC97 Audio Driver---->installed
VIA USB 2.0 Controler---->Installed

Driver install finished!! you have to reboot system!!

Item Description

- VIA 4IN1 Driver

  For INF, AGP, IDE and DMA Driver.
- VIA KM266/P4M266 VGA Driver

  For VIA KM266/P4M266 VGA driver.
- USB Path for WinXP

  This patch driver can help you to resolve the USB device wake up S3 hang up issue in XP.
- VIA Lan Driver

  For VIA LAN driver.
- VIA AC97 Audio Driver

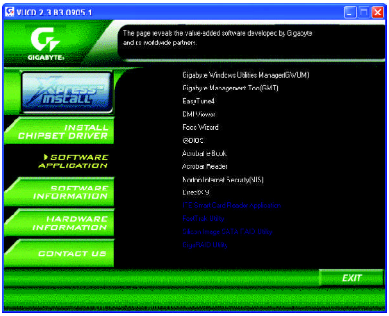
  Audio driver for VIA AC97 codec chipset.
- VIA USB 2.0 Controller

  For VIA VT8233 (VT6203) / VIA VT8235 / VIA VT8237 south bridge.

For USB2.0 driver support under Windows XP operating system, please use Windows Service Pack. After install Windows Service Pack, it will show a question mark "?" in "Universal Serial Bus controller" under "Device Manager". Please remove the question mark and restart the system (System will auto-detect the right USB2.0 driver).

SOFTWARE APPLICATION

This page reveals the value-added software developed by Gigabyte and its worldwide partners.


VUCD 2.3 B3.0905.1
GIGABYTE
Xpress install
INSTALL CHIPSET DRIVER
SOFTWARE APPLICATION
SOFTWARE INFORMATION
HARDWARE INFORMATION
CONTACT US
Gigabyte Windows Utilities Manager(GWUM)
Gigabyte Management Tool(GMT)
EasyTune4
DMI Viewer
Face Wizard
@BIOS
Acrobat e-Book
Acrobat Reader
Norton Internet Security(NIS)
DirectX 9
ITE Smart Card Reader Application
FastTrak Utility
Silicon Image SATA RAID Utility
GigaRAID Utility
EXIT

The page reveals the value-added software developed by Gigabyte and its worldwide partners.

- Gigabyte Windows Utilities Manager(GWUM)

  This utility can integrate the Gigabyte's applications in the system tray.
- Gigabyte Management Tool(GMT)

  A useful tool which can manage the computer via the network.
- EasyTune4

  Powerful utility that integrates the overclocking and hardware monitoring functions.
- DMI Viewer

  Windows based utility which is used to browse the DMI/SMBIOS information of the system.
- Face-Wizard

  New utility for adding BIOS logo.
- @BIOS

  Gigabyte windows flash BIOS utility.
- Acrobat e-Book

  Useful utility from Adobe.
- Acrobat Reader

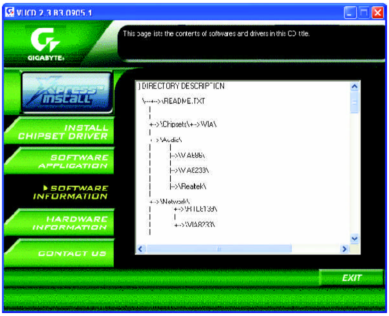
  Popular utility from Adobe for reading .PDF file format documents.
- Norton Internet Security(NIS)

  Integrated utility which includes anti-virus, ad control, etc
- DirectX 9

  Install Microsoft DirectX 9 to enable 3D hardware acceleration that support for operating system to achieve better 3D performence.

SOFTWARE INFORMATION

This page list the contects of softwares and drivers in this CD title.

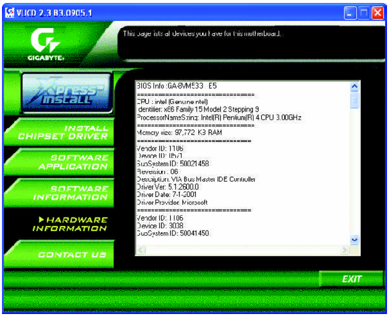

VUCD 2.3 B3.0905.1
GIGABYTE
Xpress Install
INSTALL CHIPSET DRIVER
SOFTWARE APPLICATION
SOFTWARE INFORMATION
HARDWARE INFORMATION
CONTACT US
EXIT

This page ists the conterts of softwares and drivers in this CD title.

```
] DIRECTORY DESCRIPTION

 \--+-->\README.TXT
    |
    |
    +-->\Chipsets\+-->\VIA\
    |
    +-->\Audio\
    |         |
    |         |-->\VIA686\
    |         |
    |         |-->\VIA8233\
    |         |
    |         |-->\Realtek\
    |
    +-->\Network\
    |          +-->\RTL8139\
    |          |
    |          +-->\VIA8233\
    |
```

HARDWARE INFORMATION

This page lists all device you have for this motherboard.

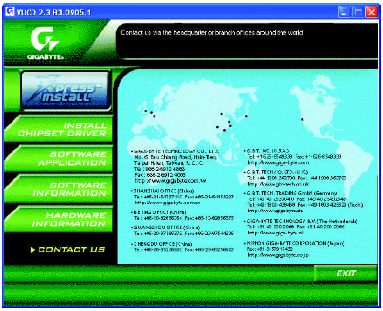

VUCD 2.3 B3.0905.1
GIGABYTE
Xpress Install
INSTALL CHIPSET DRIVER
SOFTWARE APPLICATION
SOFTWARE INFORMATION
HARDWARE INFORMATION
CONTACT US
EXIT

This page ists all devices you have for this motherboard.

```
BIOS Info :GA-8VM533  E5
===================================
CPU : intel (GenuineIntel)
Identifier: x86 Family 15 Model 2 Stepping 9
ProcessorNameString: Intel(R) Pentium(R) 4 CPU 3.00GHz
===================================
Memory size: 97,772  KB RAM
==================================
Vendor ID: 1106
Device ID: 0571
SubSystem ID: 50021458
Revision : 06
Description: VIA Bus Master IDE Controller
Driver Ver: 5.1.2600.0
Driver Date: 7-1-2001
Driver Provider: Microsoft
==================================
Vendor ID: 1106
Device ID: 3038
SubSystem ID: 50041450
```

CONTACT US

Please see the last page for details.


VUCD 2.3 B3.0905.1
GIGABYTE
Xpress Install
INSTALL CHIPSET DRIVER
SOFTWARE APPLICATION
SOFTWARE INFORMATION
HARDWARE INFORMATION
CONTACT US
EXIT

Contact us via the headquarter or branch offices around the world

FAQ

Below is a collection of general asked questions. To check general asked questions based on a specific motherboard model, please log on to http://tw.giga-byte.com/faq/faq.htm

Question 1: I cannot see some options that were included in previous BIOS after updating BIOS. Why?
Answer: Some advanced options are hidden in new BIOS version. Please press Ctrl and F1 keys after entering BIOS menu and you will be able to see these options.

Questions 2: Why is the light of my keyboard/optical mouse still on after computer shuts down?
Answer: In some boards, a small amount of electricity is kept on standby after computer shuts down and that's why the light is still on.

Question 3: Why cannot I use all functions in EasyTune™ 4?
Answer: The availability of the listed functions in EasyTune™ 4 depends on the MB chipset. If the chipset doesn't support certain functions in EasyTune™ 4, these functions will be locked automatically and you will not be able to use them.

Question 4: Why do I fail to install RAID and ATA drivers under Win 2000 and XP on boards that support RAID function after I connect the boot HDD to IDE3 or IDE4 ?
Answer: First of all, you need to save some files in the CD-ROM to a floppy disk before installing drivers. You also need to go through some rather different steps in the installation process. Therefore, we suggest that you refer to the installation steps in the RAID manual at our website.
(Please download it at http://tw.giga-byte.com/support/user_pdf/raid_manual.pdf)

Question 5: How do I clear CMOS?

Answer: If your board has a Clear CMOS jumper, please refer to the Clear CMOS steps in the manual. If your board doesn't have such jumper, you can take off the on-board battery to leak voltage to clear CMOS. Please refer to the steps below:

Steps:

1. Turn off power.
2. Disconnect the power cord from MB.
3. Take out the battery gently and put it aside for about 10 minutes (Or you can use a metal object to connect the positive and negative pins in the battery holder to make them short for one minute).
4. Re-insert the battery to the battery holder.
5. Connect power cord to MB again and turn on power.
6. Press Del to enter BIOS and load Fail-Safe Defaults.
7. Save changes and reboot the system.

Question 6: Why does system seem unstable after updating BIOS?

Answer: Please remember to load Fail-Safe Defaults (Or Load BIOS Defaults) after flashing BIOS. However, if the system instability still remains, please clear CMOS to solve the problem.

Question 7: Why do I still get a weak sound after turning up the speaker to the maximum volume?

Answer: Please make sure the speaker you are using is equipped with an internal amplifier. If not, please change another speaker with power/amplifier and try again later.

Question 8: How do I disable onboard VGA card in order to add an external VGA card?

Answer: Gigabyte motherboards will auto-detect the external VGA card after it is plugged in, so you don't need to change any setting manually to disable the onboard VGA.

Question 9: Why cannot I use the IDE 2?

Answer: Please refer to the user manual and check whether you have connected any cable that is not provided with the motherboard package to the USB Over Current pin in the Front USB Panel. If the cable is your own cable, please remove it from this pin and do not connect any of your own cables to it.

Question 10: Sometimes I hear different continuous beeps from computer after system boots up. What do these beeps usually stand for?

Answer: The beep codes below may help you identify the possible computer problems. However, they are only for reference purposes. The situations might differ from case to case.

→AMI BIOS Beep Codes

*Computer gives 1 short beep when system boots successfully.

*Except for beep code 8, these codes are always fatal.

1 beep Refresh failure
2 beeps Parity error
3 beeps Base 64K memory failure
4 beeps Timer not operational
5 beeps Processor error
6 beeps 8042 - gate A20 failure
7 beeps Processor exception interrupt error
8 beeps Display memory read/write failure
9 beeps ROM checksum error
10 beeps CMOS shutdown register read/write error
11 beeps Cache memory bad

→ AWARD BIOS Beep Codes

1 short: System boots successfully
2 short: CMOS setting error
1 long 1 short: DRAM or M/B error
1 long 2 short: Monitor or display card error
1 long 3 short: Keyboard error
1 long 9 short: BIOS ROM error
Continuous long beeps: DRAM error
Continuous short beeps: Power error

Question 11: How to set in the BIOS in order to bootup from SATA HDDs by either RAID or ATA mode?

Answer: Please set in the BIOS as follow:

1. Advanced BIOS features--> SATA/RAID/SCSI boot order: "SATA"
2. Advanced BIOS features--> First boot device: "SCSI"
3. Integrated Peripherals--> Onboard H/W Serial ATA: "enable"

Then it depends on the SATA mode that you need to set "RAID" to RAID mode or "BASE" to normal ATA mode in the item named Serial ATA function.

Question 12: For the M/B which have RAID function, how to set in the BIOS in order to bootup from IDE3, 4 by either RAID or ATA mode?

Answer: Please set in the BIOS as follow:

1. Advanced BIOS features-->(SATA)/RAID/SCSI boot order: "SATA"
2. Advanced BIOS features--> First boot device: "SCSI"
3. Integrated Peripherals--> Onboard H/W ATA/RAID: "enable"

Then it depends on the RAID mode that you need to set "RAID" to RAID mode or "ATA" to normal ATA mode in the item named RAID controller function.

Question 13: How to set in the BIOS to bootup from the IDE/ SCSI/ RAID card ?

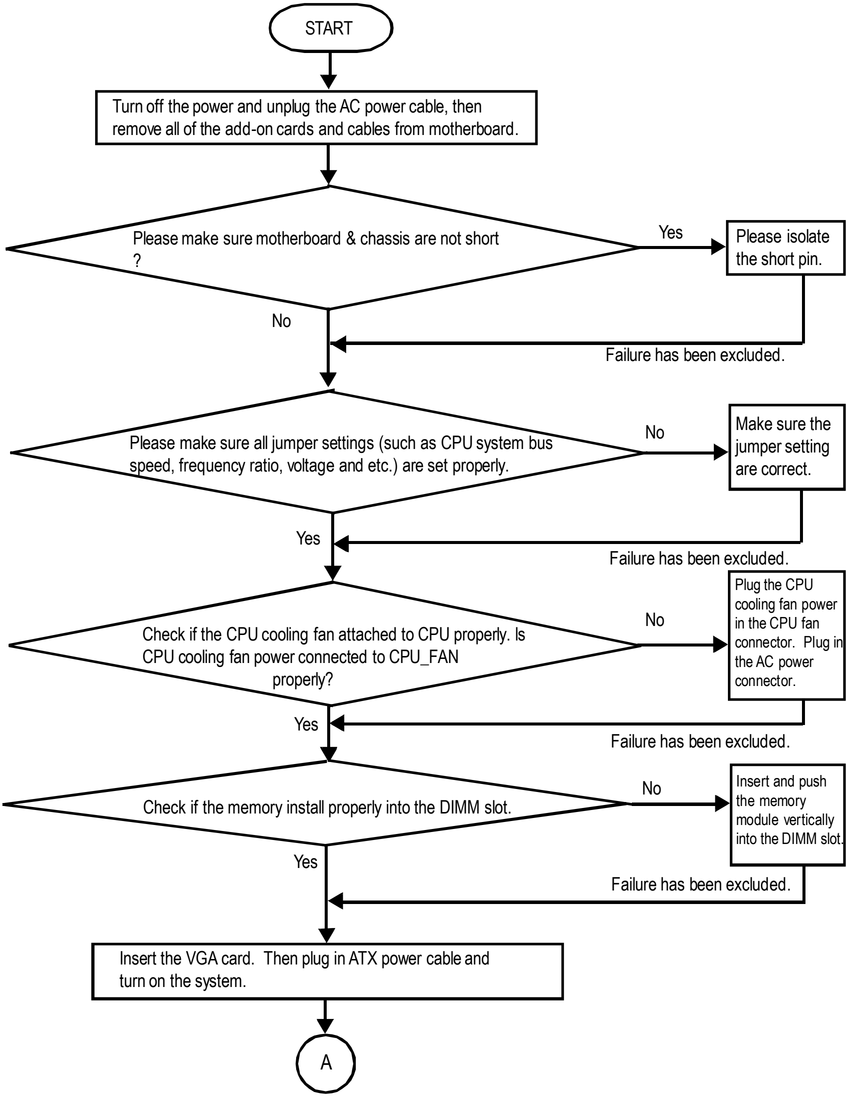
Answer: Please set in the BIOS as follow:

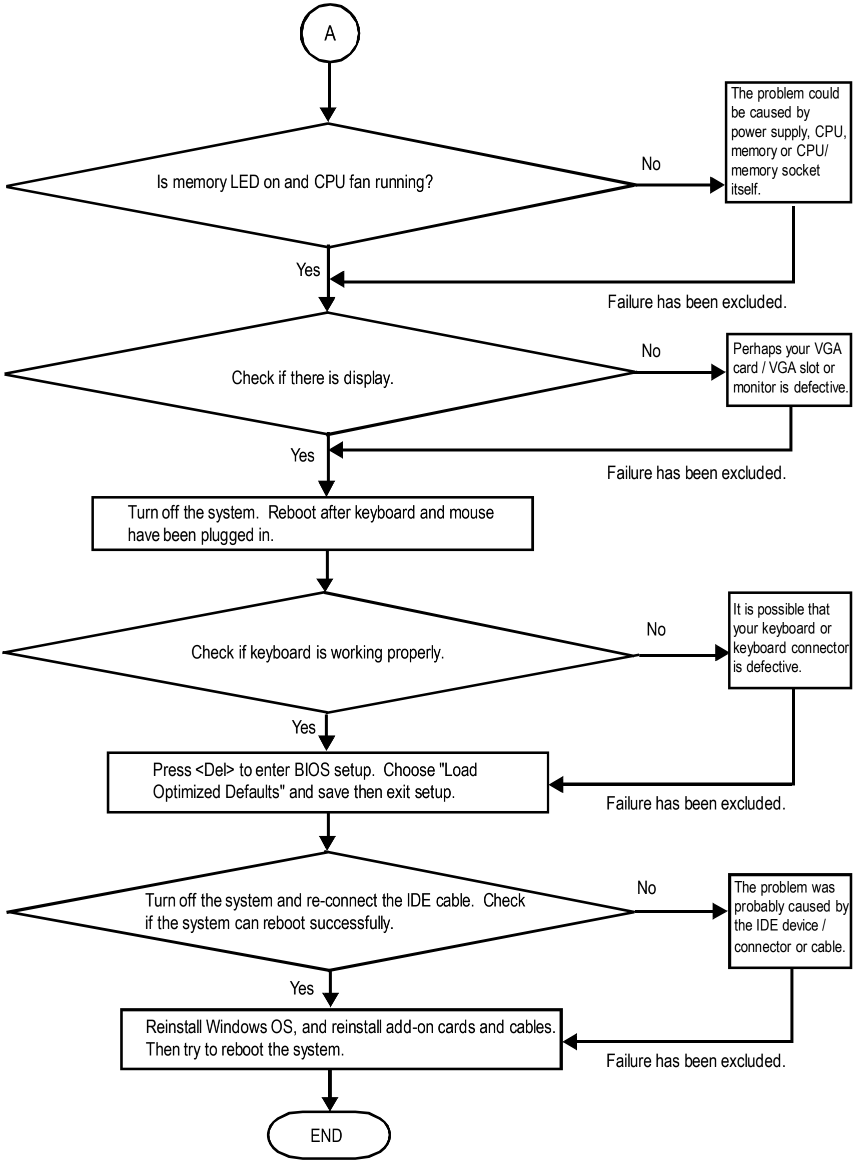
1. Advanced BIOS features-->(SATA)/RAID/SCSI boot order: "SCSI"
2. Advanced BIOS features--> First boot device: "SCSI"

Then it depends on the mode(RAID or ATA) that you need to set in RAID/ SCSI BIOS.

Troubleshooting

If you encounter any trouble during boot up, please follow the troubleshooting procedures .


START
Turn off the power and unplug the AC power cable, then remove all of the add-on cards and cables from motherboard.
Please make sure motherboard & chassis are not short ?
Yes
Please isolate the short pin.
No
Failure has been excluded.
Please make sure all jumper settings (such as CPU system bus speed, frequency ratio, voltage and etc.) are set properly.
No
Make sure the jumper setting are correct.
Yes
Failure has been excluded.
Check if the CPU cooling fan attached to CPU properly. Is CPU cooling fan power connected to CPU_FAN properly?
No
Plug the CPU cooling fan power in the CPU fan connector. Plug in the AC power connector.
Yes
Failure has been excluded.
Check if the memory install properly into the DIMM slot.
No
Insert and push the memory module vertically into the DIMM slot.
Yes
Failure has been excluded.
Insert the VGA card. Then plug in ATX power cable and turn on the system.
A


A
Is memory LED on and CPU fan running?
No
The problem could be caused by power supply, CPU, memory or CPU/ memory socket itself.
Yes
Failure has been excluded.
Check if there is display.
No
Perhaps your VGA card / VGA slot or monitor is defective.
Yes
Failure has been excluded.
Turn off the system. Reboot after keyboard and mouse have been plugged in.
Check if keyboard is working properly.
No
It is possible that your keyboard or keyboard connector is defective.
Yes
Press <Del> to enter BIOS setup. Choose "Load Optimized Defaults" and save then exit setup.
Failure has been excluded.
Turn off the system and re-connect the IDE cable. Check if the system can reboot successfully.
No
The problem was probably caused by the IDE device / connector or cable.
Yes
Reinstall Windows OS, and reinstall add-on cards and cables. Then try to reboot the system.
Failure has been excluded.
END

If the above procedure unable to solve your problem, please contact with your local retailer or national distributor for help. Or, you could submit your question to the service mail via Gigabyte website technical support zone
(http://www.gigabyte.com.tw). The appropriate response will be provided ASAP.

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:

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
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

to be continued......

Acronyms	Meaning
IOAPIC	Input Output Advanced Programmable Input Controller
ISA	Industry Standard Architecture
LAN	Local Area Network
I/O	Input / Output
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

CONTACT US

Contact us via the information in this page all over the world.

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We have been constantly striving hard to provide you with faster and more efficient mail replying service.

If you have any inquiry please classify it into the following topics.

The respective department will attend to the inquiry as soon as possible. Thank you for your cooperation!

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