GA-K8VT800M

AMD Socket 754 Processor Motherboard

User's Manual

Rev. 1001 12ME-K8VT800M-1001

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<u>Notice</u>

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Due to rapid change in technology, some of the specifications might be out of date before publication of this booklet.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

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-K8VT800M

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 | EN 61000-3-3* | Disturbances in supply systems cause |
| | of radio disturbance characteristics of | IX EN 60555-3 | by household appliances and similar |
| | broadcast receivers and associated equipment | | electrical equipment "Voltage fluctuations" |
| 🗆 EN 55014 | Limits and methods of measurement | I EN 50081-1 | Generic emission standard Part 1: |
| | of radio disturbance characteristics of | | Residual commercial and light industry |
| | household electrical appliances, portable tools and similar electrical | I EN 50082-1 | Generic immunity standard Part 1: |
| | apparatus | | Residual commercial and light industry |
| C EN 55015 | Limits and methods of measurement | C EN 55081-2 | Generic emission standard Part 2: |
| | of radio disturbance characteristics of | | Industrial environment |
| | fluorescent lamps and luminaries | | |
| 🗆 EN 55020 | Immunity from radio interference of | II EN 55082-2 | Generic emission standard Part 2: |
| | broadcast receivers and associated | | Industrial environment |
| | equipment | | |
| I EN 55022 | Limits and methods of measurement | C ENV 55104 | Immunity requirements for household |
| | of radio disturbance characteristics of | | appliances tools and similar apparatus |
| | information technology equipment | | |
| DIN VDE 0855 | Cabled distribution systems; Equipment | EN50091-2 | EMC requirements for uninterruptible |
| part 10 | for receiving and/or distribution from sound and television signals | | power systems (UPS) |
| | sound and television signals | " | |
| | | CE (EC conformit | u marking) |
| 🗵 CE marking | | | , 0, |
| | The manufacturer also declares the with the actual required safety sta | 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 | |
| 🗆 EN 60065 | Safety requirements for mains operated | 🗆 EN 60950 | Safety for information technology equipment |
| | electronic and related apparatus for | | including electrical bussiness equipment |
| | household and similar general use | | |
| D EN 60335 | Safety of household and similar electrical appliances | EN 50091-1 | General and Safety requirments for |
| | eleculuar appliances | | uninterruptible power systems (UPS) |
| | | Manufacturer/Importer | |
| | | | Signature: Jimmy Huang |
| | (Slamp) | Date : Aug. 29, 2003 | Name: Timmy Huang |
| | A CONTRACT OF A CONTRACT. | | - |

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-K8VT800M

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: Aug. 29, 2003



Read Me First!

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



Caution: AGP 2X card is not supported by VIA K8VT800M. You might experience system unable to boot up normally. Please insert an AGP Pro 4X/8X card.

| WARNING: Never run the processor without the heatsink properly and firmly attached. PERMANENT DAMAGE WILL RESULT! |
|---|
| Mise en garde : Ne faites jamais tourner le processeur sans que le dissipateur de chaleur soit fix correctement et fermement. UN DOMMAGE PERMANENT EN RÉSULTERA ! |
| Achtung: Der Prozessor darf nur in Betrieb genommen werden, wenn der W rmeableiter ordnungsgem β und fest angebracht ist. DIES HAT EINEN PERMANENTEN SCHADEN ZUR FOLGE! |
| Advertencia: Nunca haga funcionar el procesador sin el disipador de calor instalado correcta y firmemente. ¡SE PRODUCIRÁ UN DAÑO PERMANENTE! |
| Aviso: Nunca execute o processador sem o dissipador de calor estar adequado e firmemente conectado. O RESULTADO SERÁ UM DANO PERMANENTE! |
| 警告: 将散热板牢固地安装到处理器上之前,不要运行处理器。过热将永远损坏处理器! |
| 警告: 將散熱器牢固地安裝到處理器上之前,不要運行處理器。過熱將永遠損壞處理器! |
| 경고: 히트싱크를 제대로 또 단단히 부착시키지 않은 채 프로세서를 구동시키지 마십시오. 영구직 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。 |
| |

GA-K8VT800M Motherboard

Prepare your computer...

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

- 1. Unplug your computer when working on the inside.
- 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.
- Hold components by the edges and try not touch the IC chips, leads or connectors, or other components.
- Place components on a grounded antistatic pad or on the bag that came with the components whenever the components are separated from the system.
- 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.

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Chapter 1 Introduction

1.1 Item Checklist

- ☑ The GA-K8VT800M motherboard
- CD for motherboard driver & utility
- GA-K8VT800M user's manual
- Quick PC Installation Guide
- GigaRAID manual
- SATA RAID manual
- GC-SATA Card (optional)
 - (Manual; SATA cable x 1; Power cable x 1)

- ☑ IDE cable x 1 / Floppy cable x 1
- Serial ATA cable x 1
- USB + IEEE1394 Cable x 1
- □ Audio Combo Kit x 1 (SURROUND-Kit + SPDIF Out Kit)
- ☑ I/O Shield
- DPVRM x 1
- □ Motherboard Settings Label

1.2 Features Summary

| Form Factor | • 24.4cm x 24.4cm Micro ATX size form factor, 4 layers PCB |
|--------------|---|
| CPU | Socket 754 for AMD AlthIon[™] 64 processor (K8) |
| | 128K L1& 256K / 512K / 1M L2 cache on die |
| | • 800MHz FSB |
| | Support core frequencies in excess of 1.6 GHz(2800+) and faster |
| Chipset | VIA K8T800 H.T. Bus/AGP/VLINK Controller |
| | VIA VT8237 Integrated Peripheral Controller (PSIPC) |
| Memory | 2 184-pin DDR DIMM sockets |
| | Supports DDR400/333/266/200 DIMM |
| | Supports 128MB/256MB/512MB/1GB unbuffered DRAM |
| | Supports up to 2GB DRAM (Max) |
| | Supports only 2.5V DDR DIMM |
| I/O Control | • IT8705 |
| Slots | 1 AGP slot supports 8X/4X mode, |
| | AGP3.0 8X interface at 533MHz |
| | • 3 PCI slots support 33MHz & PCI 2.2 compliant |
| On-Board IDE | • 2 IDE controllers provide IDE HDD/CD-ROM (IDE1, IDE2) with |
| | PIO, Bus Master(DMA33/ATA66/ATA100/ATA133) operation modes |
| | |

to be continued...

| Serial ATA | 2 Serial ATA connectors in 150 MB/s operation mode |
|----------------------|---|
| | Built-in VIA VT8237 (Note 1) |
| On-Board Peripherals | 1 Floppy port supports 2 FDD with 360K, 720K, 1.2M, 1.44M and |
| | 2.88M bytes |
| | 1 Parallel port supports Normal/EPP/ECP mode |
| | • 2 Serial ports (COMA & COMB) |
| | • 8 x USB 2.0/1.1 ports |
| | 1 IrDA connector for IR |
| | 1 Front Audio connector |
| Hardware Monitor | CPU/System fan revolution detect |
| | CPU temperature detect |
| | CPU warning temperature |
| | System voltage detect |
| | CPU/System fan fail warning |
| | Thermal shutdown function |
| On-Board LAN | Built-in RTL8100C (10/100 Mbit) |
| | • 1 RJ45 port |
| On-Board Sound | ALC655 CODEC |
| | Supports Jack Sensing function |
| | Line Out / 2 front speaker |
| | Line In / 2 rear speaker (by s/w switch) |
| | Mic In / center & subwoofer (by s/w switch) |
| | SPDIF In / Out |
| | CD In / AUX In / Game port |
| On-Board SATA RAID | Built-in VIA VT8237 |
| | • Supports disk striping (RAID 0) or disk mirroring (RAID 1) |
| | Supports UDMA up to 150 MB/sec |
| | Up to 2 SATA devices |
| PS/2 Connector | PS/2 Keyboard interface and PS/2 Mouse interface |
| BIOS | Licensed AWARD BIOS |
| | Supports Q-Flash |
| | |

(Note 1) It is recommended to use SATA (1.5Gb/s) hard disks.

to be continued...

| Englisł | Englisł |
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| Englis | Engli |
| Eng | Eng |
| En | En |
| | |
| | |

| Additional Features | PS/2 Keyboard password power on |
|---------------------|--|
| | PS/2 Mouse power on |
| | STR(Suspend-To-RAM) |
| | AC Recovery |
| | USB KB/Mouse wake up from S3 |
| | Poly fuse for keyboard over-current protection |
| | Supports Thermal Shutdown function |
| | Supports @BIOS |
| | Supports EasyTune 4 |
| Overclocking | Over Clock (CPU/DDR/AGP/PCI) by BIOS |



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

GA-K8VT800M Motherboard

English

GA-K8VT800M Motherboard Layout



Introduction

Block Diagram





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GA-K8VT800M Motherboard

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.

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English

Step 1: Install the Central Processing Unit (CPU)

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



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

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

- Step 1-1. Processor insertion
- Step 1-2. Applying thermal grease
- Step 1-3. Cooling fan attachment
- Step 1-4. Connecting processor fan power
- Step1-1. First, check the processor pins to see that none are bent. Move the socket lever to the unlocked position as shown in Figure 1 & Figure 2.(90° to the plane of the motherboard) prior to inserting the processor. The A1 pin location is designated on the processor by a copper triangle that matches up to a triangle on the socket as shown in Figure 3. Align the processor to the socket and gently lower it into place. Do not force the processor into the socket.



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

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

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



Step1-2. When the processor is installed in the socket, apply thermal grease to the processor(as shown in Figure 4) prior to installing the heatsink. AMD recommends using a high thermal conductivity grease (such as Shin-Etsu types G751 or G749, or an equivalent product) for the thermal interface material rather than a phase change material. Phase change materials develop strong adhesive forces between the heatsink and processor.

Removing the heatsink under such conditions can cause the processor to be removed from the socket without moving the socket lever to the unlocked position and then damage the processor pins or socket contacts.

** We recommend you to apply the thermal tape to provide better heat conduction between your CPU and heatsink. (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.)



Figure 4. Application of Thermal Grease to the processor.

Step 1-3.Once the thermal grease has been applied to the processor, the heatsink can be attached to the processor. Align the heatsink assembly with the support frame mating with the backer plate standoffs as shown in Figure 5&6.





Figure 5&6 Alignment of Heatsink Assembly with Standoffs

English

Step 1-4. Connect the fan power wires to the header on the motherboard as shown in Figure 7.



Figure 7. Connecting the Fan Power Wires



Step 2: Install Memory Modules



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

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





Total Memory Size Per Chip Select

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

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- The DIMM socket has a notch, so the DIMM memory module can only fit in one direction.
- Insert the DIMM memory module vertically into the DIMM socket. Then push it down.
- Close the plastic clip at both edges of the DIMM sockets to lock the DIMM module. Reverse the installation steps when you wish to remove the DIMM module.

DDR Introduction

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

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

Step 3: Install expansion cards Step 3-1: AGP Card Installation

- 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



PS/2 Keyboard and PS/2 Mouse Connector



PS/2 Mouse Connector (6 pin Female)

PS/2 Keyboard Connector (6 pin Female) This connector supports standard PS/2 keyboard and PS/2 mouse. English

❷/④ 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.
- LAN connector is fast Ethernet with 10/100 Mbps speed.

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English

Parallel Port, Serial Ports (COMA / COMB)



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

Audio Connectors



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

Please note:

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

If you want to enable 6-channel function, you have 2 choose for hardware connection.

Method1:

Connect "Front Speaker" to "Line Out" Connect "Rear Speaker" to "Line In" Connect "Center and Subwoofer" to "MIC Out ". Method2:

You can refer to page 30, and contact your nearest dealer for optional SUR_CEN cable.



If you want the detail information for 2-/4-/6-channel audio setup installation, please refer to page 68.

Step 4-2: Connectors Introduction

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| 1) ATX_12V | 12) SUR_CEN |
|--------------------------|---------------------|
| 2) ATX (Power Connector) | 13) SPDIF_IO |
| 3) CPU_FAN | 14) CD_IN |
| 4) SYS_FAN | 15) AUX_IN |
| 5) FDD | 16) F_USB1 / F_USB2 |
| 6) IDE1 / IDE2 | 17) IR |
| 7) SATA0 / SATA1 | 18) GAME |
| 8) F_PANEL | 19) INFO_LINK |
| 9) PWR_LED | 20) CLR_PWD |
| 10) RAM_LED | 21) BAT |
| 11) F_AUDIO | |

English

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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.



| 2 Pin No. Definit | ion |
|-------------------|-----|
| 1 GND | |
| 2 GND | |
| 3 +12V | |
| 1 4 +12V | |

2) ATX (ATX Power Connector)

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 motherboard.

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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

English

4) SYS_FAN (System Fan Connector)

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



| | Pin No. | Definition |
|----------|---------|------------|
| | 1 | GND |
| <u> </u> | 2 | +12V |
| | 3 | Sense |

- 25 -

English

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

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



6) IDE1 / 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.



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English

7) SATA0 / SATA1 (Serial ATA Connector)

You can connect the Serial ATA device to this connector, it provides you high speed transfer rates (150MB/sec). If you wish to use RAID function, please use it in unity with BIOS and install the correct driver to have proper operation. For details, please refer to the "VT8237_SATA_Manual.pdf" at "http://www.gigabyte.com.tw".



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. If you use dual color LED, power LED will turn to another color.



9) F_PANEL (2 x 10 pins Connector)

English

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





⊕

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

10) RAM_LED

Do not remove memory modules while RAM_LED is on. It might cause short or other unexpected damages due to the stand by voltage. Remove memory modules only when AC power cord is disconnected.



11) F_AUDIO (Front Audio Connector)

If you want to use Front Audio connector, you must remove 5-6, 9-10 Jumper. In order to utilize the front audio header, your chassis must have front audio connector. Also please make sure the pin assignent on the cable is the same as the pin assignent 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.



12) SUR_CEN (Surround Center Connector)

Please contact your nearest dealer for optional SUR_CEN cable.



| Pin No. | Definition |
|---------|------------|
| 1 | SUR OUTL |
| 2 | SUROUTR |
| 3 | GND |
| 4 | No Pin |
| 5 | CENTER_OUT |
| 6 | BASS_OUT |

13) SPDIF_IO (SPDIF In / Out Connector)

The SPDIF output is capable of providing digital audio to external speakers or compressed AC3 data to an external Dolby Digital Decoder. Use this feature only when your stereo system has digital input function. Be careful with the polarity of the SPDIF_IO connector. Check the pin assignment carefully while you connect the SPDIF_IO cable, incorrect connection between the cable and connector will make the device unable to work or even damage it. For optional SPDIF_IO cable, please contact your local dealer.

1 2 5 6



| Pin No. | Definition |
|---------|------------|
| 1 | VCC |
| 2 | No Pin |
| 3 | SPDIF |
| 4 | SPDIFI |
| 5 | GND |
| 6 | GND |

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14) CD_IN (CD In Connector)

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



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

English

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15) AUX_IN (AUX In Connector)

 \odot

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



| | Pin No. | Definition |
|------------|---------|------------|
| 1 | 1 | AUX-L |
| - <u>C</u> | 2 | GND |
| | 3 | GND |
| | 4 | AUX-R |

16) F_USB1 / F_USB2 (Front USB Connector)

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

2

1

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9



| 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 |

17) IR

Make sure the pin 1 on the IR device is aling with pin one the connector. To enable the IR function on the board, you are required to purchase an option IR module. Be careful with the polarity of the IR/CIR or IR connector. Check the pin assignment carefully while you connect the IR cable, incorrect connection between the cable and connector will make the device unable to work or even damage it. For optional IR cable, please contact your local dealer.





18) GAME (Game Connector)

This connector supports joystick, MIDI keyboard and other relate audio devices. Check the pin assignment while you connect the game cables. Please contact your nearest dealer for optional game cables.



| Pin No. | Definition |
|---------|------------|
| 1 | VCC |
| 2 | GRX1_R |
| 3 | GND |
| 4 | GPSA2 |
| 5 | VCC |
| 6 | GPX2_R |
| 7 | GPY2_R |
| 8 | MSI_R |
| 9 | GPSA1 |
| 10 | GND |
| 11 | GPY1_R |
| 12 | VCC |
| 13 | GPSB1 |
| 14 | MSO_R |
| 15 | GPSB2 |
| 16 | No Pin |

English

19) INFO_LINK

This connector allows you to connect some external devices to provide you extra function. Check the pin assignment while you connect the external device cable. Please contact your nearest dealer for optional external device cable.



Hardware Installation Process

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20) CLR_PWD

When Jumper is set to "open" and system is restarted, the password that is set will be cleared. On the contrary when Jumper is set to "close", the current status remains.



- Open: Clear Password 1 👀
- 1 👀 Close: Normal (Default)

21) BATTERY





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

If you want to erase CMOS...

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

 \oplus English _____ \oplus \odot

GA-K8VT800M Motherboard

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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

Powering ON the computer and pressing immediately will allow you to enter 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 |
|-----------------|--|
| <1> | Move to next item |
| <+> | Move to the item in the left hand |
| < ->> | Move to the item in the right hand |
| <enter></enter> | Select Item |
| <esc></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></f1> | General help, only for Status Page Setup Menu and Option Page Setup Menu |
| <f2></f2> | Item Help |
| <f3></f3> | Reserved |
| <f4></f4> | Reserved |
| <f5></f5> | Restore the previous CMOS value from CMOS, only for Option Page Setup Menu |
| <f6></f6> | Load the file-safe default CMOS value from BIOS default table |
| <f7></f7> | Load the Optimized Defaults |
| <f8></f8> | Q-Flash utility |
| <f9></f9> | System Information |
| <f10></f10> | Save all the CMOS changes, only for Main Menu |
| | |

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k8vt800m_1001_b.p65

BIOS Setup
GEITING HELP

Main Menu

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

Status Page Setup Menu / Option Page Setup Menu

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

The Main Menu (For example: BIOS Ver. : F1)

Once you enterAward 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.

| 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 | Ex it Without Saving |
| Frequency /Voltage Control | |
| ESC: Quit | $\uparrow \downarrow \rightarrow \leftarrow$: Select Item |
| F8: Q-Flash | F10: Save & Exit Setup |
| Time, Date, H | lard Disk Type |

CMOS Setup Utility-Copy right (C) 1984-2003 Aw ard Softw are

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.

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• Integrated Peripherals

This setup page includes all onboard peripherals.

• Power Management Setup

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

• PnP/PCI Configurations

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

• PC Health Status

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

• Frequency/Voltage Control

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

• Load Fail-Safe Defaults

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

• Load Optimized Defaults

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

• Set Supervis or pass word

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.

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• Save & Exit Setup

Save CMOS value settings to CMOS and exit setup.

• Exit Without Saving

Abandon all CMOS value changes and exit setup.

BIOS Setup

Standard CMOS Features

| Si | andard CMOS Features | |
|---|----------------------------|------------------------|
| Date (mm:dd:yy) | Wed, Jul 16 2003 | Item Help |
| Time (hh:mm:ss) | 22:31:24 | Menu Level 🕨 |
| | | Change the day, month |
| ►IDE Primary Master | [None] | y ear |
| ►IDE Primary Slave | [None] | |
| ►IDE Secondary Master | [None] | <week></week> |
| ►IDE Secondary Slave | [None] | Sun. to Sat. |
| Drive A | [1.44M, 3.5"] | <month></month> |
| Drive B | [None] | Jan. to Dec. |
| Floppy 3 Mode Support | [Disabled] | |
| | | <day></day> |
| Halt On | [All, But Key board] | 1 to 31 (or maximum |
| | | allow ed in the month) |
| Base Memory | 640K | |
| Extended Memory | 130048K | <year></year> |
| Total Memory | 131072K | 1999 to 2098 |
| $\uparrow \downarrow \rightarrow \leftarrow$: Mov e Enter:Select + | /-/PU/PD:Value F10:Save ES | C:Exit F1:General Help |

🗢 Date

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

- Here 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 militarytime clock. For example, 1 p.m. is 13:00:00.

☞ IDE Primary Master, Slave / IDE Secondary Master, Slave

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

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

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

| ►CYLS. | Number of cylinders |
|-----------------|---------------------|
| ► HEADS | Number of heads |
| ▶ PRECOMP | Write precomp |
| ▶LANDZONE | Landing zone |
| ➡ SECTORSNumber | of sectors |

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

∽ Drive A / Drive B

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

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

∽ Floppy 3 Mode Support (for J apan Area)

| ➡ Disabled | Normal Floppy Drive. (Default value) |
|---------------|---------------------------------------|
| Driv e A | Drive A is 3 mode Floppy Drive. |
| ➡ Driv e B | Drive B is 3 mode Floppy Drive. |
| ▶ Both | Drive A & B are 3 mode Floppy Drives. |

🗢 Halt on

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

| NO Errors | The system boot will not stop for any error that may be detected and you will be prompted. |
|----------------------|--|
| ► All Errors | Whenever the BIOS detects a non-fatal error the system will be stopped. |
| ► All, But Key board | 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 (PowerOn Self Test) of the BIOS.

Base Memory

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

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

Extended Memory

The BIOS determines how much extended memory is present during the POST. This is the amount of memory located above 1 MB in the CPU's memory address map.

Advanced BIOS Features

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Advanced BIOS Features

| | Auvaliceu DIOS I ealules | |
|-------------------------|--------------------------|--------------------------|
| First Boot Device | [Floppy] | Item Help |
| Second Boot Device | [HDD-0] | Menu Level 🕨 |
| Third Boot Device | [CDROM] | Select Boot Device |
| Password Check | [Setup] | priority |
| | | |
| | | [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

∽ First / Second / Third Boot Device

| ► Floppy | Select your boot device priority | by | Floppy. |
|------------|----------------------------------|----|------------|
| ▶LS120 | Select your boot device priority | by | LS120. |
| ► HDD-0~3 | Select your boot device priority | by | HDD-0~3. |
| ₩SCSI | Select your boot device priority | by | SCSI. |
| ► CDROM | Select your boot device priority | by | CDROM. |
| ₩ZIP | Select your boot device priority | by | ZIP. |
| ₩USB-FDD | Select your boot device priority | by | USB-FDD. |
| ₩USB-ZIP | Select your boot device priority | by | USB-ZIP. |
| ▶USB-CDROM | Select your boot device priority | by | USB-CDROM. |
| ▶USB-HDD | Select your boot device priority | by | USB-HDD. |
| ▶ LAN | Select your boot device priority | by | LAN. |
| ➡ Disabled | Select your boot device priority | by | Disabled. |

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The Password Check

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

♥

Integrated Peripherals

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Integrated Peripherals

| | integrated Peripherais | |
|-------------------------|------------------------|--------------------------|
| IDE DMA transfer access | [Enabled] | Item Help |
| On-Chip IDE Channel 0 | [Enabled] | Menu Level 🕨 |
| On-Chip IDE Channel 1 | [Enabled] | [Auto] |
| Onchip Serial ATA | [Enabled] | Auto-detect IDE |
| AC97 Audio | [Auto] | cable type |
| USB 1.1 Controller | [Enabled] | |
| USB 2.0 Controller | [Enabled] | [ATA66/100/133] |
| USB Device Function | [Disabled] | Set Conductor cable |
| USB Key board Support | [Disabled] | to ATA66/100/133(80 |
| USB Mouse Support | [Disabled] | -pins) |
| Onboard H/W LAN | [Enabled] | |
| Onboard H/W ATA / RAID | [Enabled] | [ATA33] |
| Onboard LAN Boot ROM | [Disabled] | Set Conductor cable |
| Onboard FDC Controller | [Enabled] | to ATA33(40-pins) |
| Onboard Serial Port 1 | [3F8/IRQ4] | |
| Onboard Serial Port 2 | [2F8/IRQ3] | |
| UART Mode Select | [Normal] | |
| xUR2 Duplex Mode | Half | |
| Onboard Parallel Port | [378/IRQ7] | |
| Parallel Port Mode | [SPP] | |
| Game Port Address | [201] | |
| Midi Port Address | [330] | |
| Midi Port IRQ | [10] | |
| | | |
| ↑↓→←: Move Enter:Select | | ESC:Exit F1:General Help |
| F5:Previous Values | F6:Fail-Safe Defaults | F7:Optimized Defaults |

English

Figure 4: Integrated Peripherals

∽ IDEDMA transfter access

➡ Enabled Enable IDE DMA transfer access. (Default value) Disable IDE DMA transfer access. ➡ Disabled

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• On-Chip IDE Channel 0

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

∽ On-Chip IDE Channel1

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

😳 On-chip SATA

| Disabled | Disable SATA controller. |
|-----------|--|
| ⋫ Auto | When there is no device to be plugged in IDE1 or IDE2, SATA controller will remap to IDE controller. |
| ➡ Enabled | Set SATA Mode manually. (Default Value) |

∽ AC97 Audio

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

∽ USB 1.1 Controller

If you are not using the onboard USB function, please set at Disabled.

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

∽ USB 2.0 Controller

If you are not using the onboard USB function, please set at Disabled.

► Enabled Enable USB 2.0 Controller. (Default v alue)

➡ Disabled Disable USB 2.0 Controller.

☞ USB Device Function

If you are not using the onboard USB function, please set at Disabled.

| ➡ Enabled | Enable USB Device Function. (Default value) |
|------------|---|
| ➡ Disabled | Disable USB Device Function. |

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∽ USB Keyboard Support

| v. Enabled | Frable UCD Keyboard Current | |
|------------|--|--|
| When USB | key board is installed, please set at Enabled. | |

| ► Enabled | Enable USB Keyboard Support. |
|------------|---|
| ➡ Disabled | Disable USB Keyboard Support. (Default value) |

∽ USB Mouse Support

When USB mouse is installed, please set at Enabled.

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

∽ Onboard H/W LAN

| ➡ Enabled | Enable onboard H/W LAN function. (Default Value) |
|------------|--|
| ➡ Disabled | Disable this function. |

• Onboard H/W ATA / RAID

| Enabled | Enable onboard H/WATA/RAID function. (Default value) |
|----------|--|
| Disabled | Disable this function. |

C Onboard LAN Boot ROM

▶ Enabled Enable onboard LAN boot ROM. (Default Value)▶ Disabled Disable this function.

∽ Onboard EDC Controller

| ➡ Enabled | Enable onboard FDC Controller. (Default value) |
|------------|--|
| ➡ Disabled | Disable onboard FDC Controller. |

∽ Onboard Serial Port 1

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

Onboard Serial Port 2

| ► Auto | BIOS will automatically setup the port 2 address. |
|------------|--|
| ▶3F8/IRQ4 | Enable onboard Serial port 2 and address is 3F8. |
| ▶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. |
| | |

∽ UART Mode Select

∽ UR2 Dupl ex Mode

| ► Full | IR Function Duplex Full. |
|--------|--|
| Half | IR Function Duplex Half. (Default Value) |

🗢 Onboard Parallel port

| ➡ 378/IRQ7 | Enable onboard LPT port and address is 378/IRQ7. (Default Value) |
|------------|--|
| ▶278/IRQ5 | Enable onboard LPT port and address is 278/IRQ5. |
| ➡ Disabled | Disable onboard LPT port. |
| ➡ 3BC/IRQ7 | Enable onboard LPT port and address is 3BC/IRQ7. |

C Parallel Port Mode

| SPP | Using Parallel port as Standard Parallel Port. (Default Value) |
|----------|--|
| ► EPP | Using Parallel port as Enhanced Parallel Port. |
| ₩ECP | Using Parallel port as Extended Capabilities Port. |
| ►ECP+EPP | Using Parallel port as ECP & EPP mode. |

Came Port Address

| ▶201 | Set Game Port Address to 201. (Default Value) |
|------|---|
| ▶209 | Set Game Port Address to 209. |
| | |

➡ Disabled Disable this function.

∽ Midi Port Address

| ▶ 290 | Set Midi Port Address to 290. |
|------------|--|
| ▶ 300 | Set Midi Port Address to 300. |
| ▶ 330 | Set Midi Port Address to 330.(Default Value) |
| ➡ Disabled | Disable this function. |

¢

∽ Midi Port IRQ

| ▶5 | Set Midi Port IRQ to 5. |
|------|--|
| ▶ 10 | Set Midi Port IRQ to 10. (Default Value) |

English

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BIOS Setup

Power Management Setup

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Power Management Setup

| ACPI Suspend Type | [S1(POS)] | Item Help |
|------------------------------|--------------------------|--------------------------|
| x USB Device Wake-Up From S3 | [Disabled] | Menu Level 🕨 |
| Soft-Off by PWRBTTN | [Instant-Off] | [S1] |
| AC Back Function | [Soft-Off] | |
| Keyboard Power On | [Disabled] | |
| Mouse Power On | [Disabled] | |
| PME Event Wake Up | [Enabled] | Set suspend type to |
| ModemRing Resume | [Enabled] | Power On Suspend under |
| Resume by Alarm | [Disabled] | ACPI OS |
| x Date (of Month) Alarm | Ev ery day | |
| x Time (hh:mm:ss) Alarm | 0:0:0 | [S3] |
| | | ACPI OS |
| | | |
| | | |
| 1 ↓ → ←: 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 ACPI suspend type to S1. (Default Value) |
|----------|--|
|----------|--|

S3(STR) Set ACPI suspend type to S3.

• USB Device Wake-up From S3

| Disabled | Disable USB Dev Wakeup From S3. (Default Value) |
|----------|---|
| Enabled | Enable USB Dev Wakeup From S3. |

∽ Soft-off by PWRBTIN

| ► 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

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

∽ Mouse Power On

| ➡ Disabled | Disabled this function. (Default value) |
|----------------|--|
| ➡ Double Click | Set mouse power on by double click mouse bottom. |

∽ PME Event Wake Up

| ➡ Disabled | Disable this function. |
|------------|---|
| ➡ Enabled | Enable PME Event Wake up. (Default Value) |

∽ ModemRingResume

| ➡ Disabled | Disable Modem Ring On / Wake On LAN function. |
|------------|---|
| ➡ Enabled | The modem ring / LAN wake up will bring the system out of soft-off or |
| | suspend state if this option is set "Enabled". (Default Value) |

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BIOS Setup

☞ 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 : Every day, 1~31

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

PnP/PCI Configurations

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| | PnP/PCI Configurations | |
|-------------------------|--------------------------|--------------------------|
| PCI 1 IRQ Assignment | [Auto] | Item Help |
| PCI 2 IRQ Assignment | [Auto] | Menu Level 🕨 |
| PCI 3 IRQ Assignment | [Auto] | |
| | | Device(s) using this |
| | | INT: |
| | | |
| | | Display Cntrlr |
| | | -BUS 1 Dev 0 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 PCI1. (Default value) |
|----------------------------|--|
| ▶ 3,4,5,7,9,10,11,12,14,15 | Set IRQ 3,4,5,7,9,10,11,12,14,15 to PCI 1/5. |

• PCI 2 IRQ Assignment

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

• PCI3 IRQ Assignment

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

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BIOS Setup

PC Health Status

CMOS Setup Utility-Copy right (C) 1984-2003 Aw ard Softw are PC Health Status

| Vcore | OK | Item Help |
|--|----------------------------|-------------------------|
| DDR25V | OK | Menu Level 🕨 |
| +3.3V | OK | [Disabled] |
| +12V | OK | Don't reset case |
| Current CPU Temperature | 33°C | open status |
| Current CPU FAN Speed | 4440 RPM | [Enabled] |
| Current SYSTEM FAN Speed | 0 RPM | Clear case open |
| CPU FAN Fail Warning | [Disabled] | status at next boot |
| SYSTEM FAN Fail Warning | [Disabled] | |
| | | |
| | | |
| ↑↓→←: Move Enter:Select | +/-/PU/PD:Value F10:Save E | SC:Exit F1:General Help |
| F5:Previous Values F6:Fail-Safe Defaults F7:Optimized Defaults | | |
| | | |

Figure 7: PC Health Status

∽ Vcore / DDR25V / +3.3V / +12V

▶ Detect system's voltage status automatically.

∽ Current CPU Temperature

► Detect CPU temperature automatically.

∽ Current CPU/SYSTEM FAN Speed (RPM)

Detect CPU/System Fan speed status automatically.

✤ CPU FAN Fail Warning

| Disabled | Fan Warning function disable. (Default value) |
|----------|---|
| Enabled | Enalbe FAN warning alarm when FAN stops. |

✤ SYSTEM FAN Fail Warning

| Disabled | Fan Warning function disable. (Default value) |
|----------|---|
| Enabled | Enalbe FAN warning alarm when FAN stops |

Frequency/Voltage Control

CMOS Setup Utility-Copy right (C) 1984-2003 Aw ard Softw are

Frequency/Voltage Control

| CPU Host Clock Control | [Disabled] | ltem Help |
|---|---------------------------|--------------------------|
| x CPU Host Frequency (Mhz) | 200 | Menu Level 🕨 |
| PCI/AGP Frequency (Mhz) | 33/66 | |
| | | |
| | | |
| | | |
| | | |
| | | |
| | | |
| | | |
| $\uparrow \downarrow \rightarrow \leftarrow$: 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 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 v alue)
- Enabled Enable CPU Host Clock Control.

∽ CPU Host Frequency (Mhz)

▶ 200MHz ~455MHz Set CPU Host F requency from 200MHz to 455MHz.

··· PCI/AGP Frequency(Mhz)

▶ The values depend on Fixed PCI/AGP Frequency.

Load Fail-Safe Defaults

CMOS Setup Utility-Copy right (C) 1984-2003 Aw ard Softw are

| 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/PC1 Load Fail-Safe De 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-State 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.



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.

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English

k8vt800m_1001_b.p65

BIOS Setup

Set Supervisor/User Password

CMOS Setup Utility-Copy right (C) 1984-2003 Aw ard Softw are

| Standard CMOS Features | Load Fail-Safe Defaults |
|---|-------------------------|
| Advanced BIOS Features | Load Optimized Defaults |
| Integrated Peripherals | Set Supervisor Password |
| Pow er Management Setup | Set User Password |
| ► PnP/PCI | Ô Ô-Ē¥-ÔI |
| ► PC Healt Enter Password: | |
| Frequency/Voltage Control | |
| ESC: Quit 1 | ∿↓→←: Select Item |
| F8: Q-Flash F | 10: Save & Exit Setup |
| 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:

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

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

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



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.

English

BIOS Setup

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Exit Without Saving CMOS Setup Utility-Copy right (C) 1984-2003 Award Software

| Standard CMOS Features | Load Fail-Safe Defaults |
|--|-------------------------|
| Adv anced BIOS Features | Load Optimized Defaults |
| Integrated Peripherals | Set Supervisor Password |
| Power M Ouit Mithout Cou | |
| PnP/PCI Quit Without Sav | |
| PC Health Status | Ex it Without Saving |
| Frequency/Voltage Control | |
| ESC: Quit | ↑↓→←: Select Item |
| F8:Q-Flash | F10: Save & Exit Setup |
| Abando | n 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.

GA-K8VT800M Motherboard

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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 notlike others, you are very experienced in BIOS updating and spend quite a lotof 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 internetand 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 motherboard 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.

Technical Reference

Easy Tune[™] 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.



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 "sportdrive" 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

A. What is Q-Flash Utility?

Q-Flash utility is a pre-O.S. BIOS flash utility enables users to update its BIOS within BIOS mode, no more fooling around any OS.

B. How to use Q-Flash?

a. After power on the computer, pressing immediately during POST (Power On Self Test) it will allow you to enter AWARD BIOS CMOS SETUP, then press <F8> to enter Q-Flash utility.

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

Standard CMOS Features
Load Fail-Safe Defaults
Advanced BIOS Features
Load Ontimized Defaults

| Advanced BIOS Features | Load Optimized Defaults |
|--------------------------------------|--|
| ▶ Integra <u>ted Peripherals</u> | <u>Set Supervisor Password</u> |
| Power Enter Q-Flash Utility (Y | /N)? Y |
| ► PnP/P | |
| PC Health Status | Exit Without Saving |
| Frequency/Voltage Control | |
| ESC: Quit | $\uparrow \downarrow \rightarrow \leftarrow$: Select Item |
| F8: Q-Flash | F10: Save & Exit Setup |
| Tim e, Date, Ha | rd Disk Type |

b. Q-Flash Utility

| | Q | -Flash Utility v1.30 |) | |
|-----------------|------------|----------------------|--------------|---------|
| Flash Type/Size | | | SST 49LF002A | 256K |
| | Keep D | MI Data Enable | 1 | |
| | Update | BIOS from Floppy | (| |
| | Save | BIOS to Floppy | | |
| | | | | |
| Enter:Run | ↑/↓ : Move | ESC : Reset | F10 : Po | wer Off |

Load BIOS From Floppy

In the A:drive, insert the "BIOS" diskette, then Press Enter to Run.



Press Enter to Run.

| Are you sure to update BIOS? |
|---------------------------------------|
| |
| [Enter] to contiune or [ESC] to abort |
| |

Press Enter to Run.



Congratulation! You have completed the flashed and now can restart system.

Method 2: @ BIOS Utility

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







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 fle, downloading from internet or any other methods (such as: K8VT800M.F1).
- 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 verybeginning, there is "About this program" icon shown in dialog box. It can help you check outwhich 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 systemunbooted.
- 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'tboot.
- 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 itaccording to method II.
- d. Please note that any interruption during updating will cause system unbooted

2-/4-/6-Channel Audio Function Introduction

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

Stereo Speakers Connection and Settings:

We recommend that you use the speaker with amplifier to acqiire the best sound effect if the stereo output is applied.

STEP 1:

Connect the stereo speakers or earphone to "Line Out".



Line Out

STEP 2 :

After installation of the audio driver, you'll find an

icon on the taskbar's status area. Click the audio icon "Sound Effect" from the windows tray at the bottom of the screen.





STEP 3:

Select "Speaker Configuration", and choose the "2 channel for stereo speakers out put".

 2-channel mode for stereo speaker output

| En risten a | I magazitista | S COLORAN Tracks Realists |
|---------------------|---------------|------------------------------|
| (* Hundern | a a a | S that welf |
| Barry Constant | | () 1 3 3 8 1 |
| 1 X6 768 | O -71 | ->-7 1 |
| n Bolanta provincia | | S streets |

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Technical Reference

4 Channel Analog Audio Output Mode

STEP 1 : Connect the front channels to "Line Out", the rear channels to "Line In".



Line Out Line In

and Shari (Early). That is Continuo a (Suiche Mar) SUPER in Ba

torest sub

STEP 2 :

After installation of the audio driver, you'll find an

icon on the taskbar's status area. Click the audio icon "Sound Effect" from the windows tray at the bottom of the screen.





STEP 3 :

Select "Speaker Configuration", and choose the "4 channel for 4 speakers out put". Disable "Only SURROUND-KIT", and press "OK".

4-channel mode for 4 speaker
 output

When the "Environment settings" is "None", the sound would be performed as stereo mode (2 channels output). Please select the other settings for 4 channels output.



LOTA Lait Configuration Configuration States Test State Processing States (Section 1997)

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".



MIC In Line Out

STEP 2:

After installation of the audio driver, you'll find an

icon on the taskbar's status area. Click the audio icon "Sound Effect" from the windows tray at the bottom of the screen.





STEP 3 :

paster (ed.) (2.1014) (2.1014)(0.1016) and (4.1016) Select "Speaker Configuration", and choose the SURROUT int ind. T WE SUITION AT "6 channel for 5.1 speakers out put". 000 SUE/Cont. Disable "Only SURROUND-KIT" and pess "OK". weldinesser 1 0 100- 1-1 - Autor ranks in sur New 2 weeks Ο and a In post of the 0 SPE (100 - 1 6-channel mode for 5.1 speaker output 0 b .---- inde or h C Sate Ident st-Judi...ast

Technical Reference

Advanced 6 Channel Analog Audio Output Mode (using Audio Combo Kit, Optional Device):

(Audio Combo Kit provides SPDIF output port : optical & coaxis and SURROUND-KIT : Rear R/L & CEN /Subwoofer)

SURROUND-KIT access analog output to rear

channels and Center/Subwoofer channels. It is the best solution if you need 6 channel output, Line In and MIC at the same time. "SURROUND-KIT" is included in the GIGABYTE unique "Audio Combo Kit" as picture.



STEP 1 :

Insert the "SURROUND-KIT" in the back of the case ,and fix it with the screw.



STEP 2:

Connect the "SURROUND-KIT" to SUR_CEN on the $\ensuremath{\mathsf{M/B}}\xspace.$



GA-K8VT800M Motherboard

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STEP 3 :

Connect the front channels to back audio panel's

"Line Out", the rear channels to SURROUND-KIT's REAR R/L, and the Center/Subwoofer channels to SURROUND-KIT'S SUB CENTER.



English

STEP 4 :

STEP 5 :

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





Basic & Advanced 6 Channel Analog Audio Output ModeNotes:

When the "Environment settings" is "None", the sound would be performed as stereo mode(2 channels output). Please select the other settings for 6 channels output.

Only SURROUND-KIT



Technical Reference

5
SPDIF Output Device (Optional Device)

A "SPDF output" device is available on the motherboard. Cable with rear bracket is provided and could link to the "SPDIF output" connector (As picture.) For the further linkage to decoder, rear bracket provides coaxial cable and Fiber connecting port.

1. Connect the SPDIF output device to the rear bracket of PC, and fix it with screw.



-

2. Connect SPDIF device to the motherboard.



3. Connect SPDIF to the SPDIF decoder.



GA-K8VT800M Motherboard

Jack-Sensing Introduction



Jack-Sensing provides audio connectors error-detection function.



Install Microsoft DirectX8.1 before to enable Jack-Sensing support for Windows 98/98SE/2000 /ME.

Jack-Sensing includes 2 parts: AUTO and MANUAL. Following is an example for 2 channels (Windows XP):

Introduction of audio connectors

You may connect CDROM, Walkman or others audio input devices to Line In jack, speakers, earphone or others output devices to Line Out jack, and microphone to MIC In jack.



Auto-detecting:

Please connect the devices to the right jacks as above. A window will appear as right picture if you setup the devices properly.

Please note that 3D audio function will only appear when 3D audio inputs.



Technical Reference

If you set wrong with the connectors, the warning message will come out as right picture.



Manual setting:

If the device picture shows different from what you set, please press "Manual Selecion" to set.



GA-K8VT800M Motherboard

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.



1. It supports FAT16 、 FAT32 、 NTFS format .

2. It must be connected to IDE1 Master.

- 3. It's only allows you to install one $\ensuremath{\mathsf{O.S}}$.
- 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.
- It is not recommend to use Xpress Recovery if you had ever used Ghost to return boot manager to NTFS format.



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. TextMode: press F9 during powering on the computer.

Press F9 during powering on the computer .



2. BMP Mode: boot from CD-ROM

Please go to "Advanced BIOS" setting menu and setboot 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.



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Technical Reference

English

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

Text Mode:



BMP Mode:



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

GA-K8VT800M Motherboard

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.

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Technical Reference

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GA-K8VT800M Motherboard

Chapter 5 Appendix

Install Drivers



Pictures below are shown in Windows XP

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 *manually* to install the drivers automatically.

| | his page shows the drivers that need to be installe ach tem to install the driver manually or switch to it age to install the drivers automatically | |
|----------------|---|----------------|
| X | ViA 4INT Direg | |
| | USB Patch for WinVP | onot installed |
| CHIPSET DRIVER | RealTek LAN Drivet | onot installed |
| SOFTWARE | RealTek AC97 Audio Daver | not installed |
| | VIA.8237 Senal ATA Driver | not installed |
| SOFTWARE | | |
| HARDWARE | | |
| CONTACT US | | |
| | | FXIT |

The "Xpress Install" uses the "Click and Forget" technology to install the drivers automatically. Just select the drivers you want then click the "GO" button. The *mathematically* will finish the installation for you automatically.



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Appendix

English

| Installed |
|-------------|
| |
| >installed |
| installed |
| - Installen |
| |
| |
| |

Driver installation finished ! You have to reboot system !

Item Description

- VIA 4IN1Driver
 VIA Chipset Driver
- USB Patch for WinXP
 This patch driver can help you to resolve the USB device wake up S3 hang up issue in XP.
- Realtek Lan Driver
 RealTek 10/100 LAN driver
- RealTek AC97 Codec Driver Realtek Audio Driver
- VIA 8237 Serial ATA Driver
 For VIA 8237 SATA Driver
- VIA USB 2.0 Controller
 VIA USB 2.0 Host Controller use the inbox driver in Service Pack 1
 Please upgrade to Windows XP Service Pack 1 and rescan for hardware change in Device Manage.



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.

| | ge reveals the value added colliviale developed by Gigabyte volidixide partners. |
|--|---|
| CIGABYTE. | |
| -7 | lagabyte Windows Utilities Manager(LaWUM) |
| 2012 ALTER | Rigshole Massgement Tav(RMT) |
| Instally | EasyTune4 |
| | DMI Vieneer |
| INSTALL | Face-Wicaid |
| CHIPSET DRIVER | rearies. |
| ► SOFTWARE APPLICATION | Acrobat e Book |
| | Acrobat Reader |
| | Noron Internet Security(NIS) |
| SOFTWARE | Danete 9.0 |
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| HARDWARE | |
| INFORMATION | |
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English

- 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
- EasyTune 4

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
 Deputer utility from Adebe for

Popular utility from Adobe for reading .PDF file format documents

DirectX 9.0

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.



HARDWARE INFORMATION

This page lists all device you have for this motherboard.



CONTACT US

Please see the last page for details.



GA-K8VT800M Motherboard

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<u>FAQ</u>

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/fag/fag.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

- \rightarrow 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.

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Troubleshooting



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



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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 (<u>http://www.gigabyte.com.tw</u>). The appropriate response will be provided ASAP.

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| Customer/Count Contact Person: Model name/Lot BIOS version: | | Company: E-mail Add. : | | |
|--|---------|---------------------------|-------|-----------------|
| | Number: | | | |
| | Number: | | | |
| BIOS version: | | | | PCB revision: |
| | | O.S./A.S.: | | · |
| | | | | |
| Hardware | Mfs. | Model name | Size: | Driver/Utility: |
| Configuration | | | | |
| CPU | | | | |
| Memory | | | | |
| Brand | | | | |
| Video Card | | | | |
| Audio Card | | | | |
| HDD | | | | |
| CD-ROM / | | | | |
| DVD-ROM | | | | |
| Modem | | | | |
| Network | | | | |
| AMR / CNR | | | | |
| Keyboard | | | | |
| Mouse | | | | |
| Power supply | | | | |
| Other Device | | | | |
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Appendix

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Acronyms

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| 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 |
| | |

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to be continued.....

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| 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 |

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CONTACT US

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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! WEB Address: http://tw.giga-byte.com

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