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You can read the recommendations in the user guide, the technical guide or the installation guide for GIGABYTE GA-K8NF-9-RH. You'll find the answers to all your questions on the GIGABYTE GA-K8NF-9-RH in the user manual (information, specifications, safety advice, size, accessories, etc.). Detailed instructions for use are in the User's Guide.


User manual GIGABYTE GA-K8NF-9-RH
User guide GIGABYTE GA-K8NF-9-RH
Operating instructions GIGABYTE GA-K8NF-9-RH
Instructions for use GIGABYTE GA-K8NF-9-RH
Instruction manual GIGABYTE GA-K8NF-9-RH

GA-K8NF-9-RH

AMD Socket 939 Processor Motherboard

User's Manual

Rev. 2301
12ME-K8NF9R-2301R

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



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Manual abstract:

2, 2006 Copyright © 2006 GIGA-BYTE TECHNOLOGY CO., LTD. All rights reserved. @@No part of this manual may be reproduced, copied, translated, or transmitted in any form or by any means without Gigabyte's prior written permission. Specifications and features are subject to change without prior notice. Product Manual Classification In order to assist in the use of this product, Gigabyte has categorized the user manual in the following: For quick installation, please refer to the "Hardware Installation Guide" included with the product. For detailed product information and specifications, please carefully read the "Product User Manual". For detailed information related to Gigabyte's unique features, please go to the "Technology Guide" section on Gigabyte's website to read or download the information you need. For more product details, please click onto Gigabyte's website at www.gigabyte.com.tw

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English Installation Notices 1. Prior to installation, please do not remove the stickers on the motherboard. These stickers are required for warranty validation. 2. Prior to the installation of the motherboard or any hardware, please first carefully read the information in the provided manual. 3. Before using the product, please verify that all cables and power connectors are connected. 4. To prevent damage to the motherboard, please do not allow screws to come in contact with the motherboard circuit or its components. 5. Please make sure there are no leftover screws or metal components placed on the motherboard or within the computer casing. 6. Please do not place the computer system on an uneven surface. 7. Turning on the computer power during the installation process can lead to damage to system components as well as physical harm to the user.

8. If you are uncertain about any installation steps or have a problem related to the use of the product, please consult a certified computer technician. Instances of Non-Warranty 1. 2. 3. 4. 5. 6. Damage due to natural disaster, accident or human cause. Damage as a result of violating the conditions recommended in the user manual.

Damage due to improper installation. Damage due to use of uncertified components. Damage due to use exceeding the permitted parameters. Product determined to be an unofficial Gigabyte product. -9- Hardware Installation English 1-2 CPU Feature Summary Socket 939 for AMD AlthlonTM 64 X2 Dual-Core / Althlon TM 64 FX / AlthlonTM 64 / Sempron TM processor (K8) Supports core frequencies in excess of 3000+ and faster 1600MHz nVIDIA® nForce4-4X chipset Onboard VITESSE 8201 phy (10/100/1000Mbit) Onboard Realtek ALC850 CODEC chip Supports 2 / 4 / 6 / 8 channel audio Supports Jack Sensing (Connector Sensing) Supports SPDIF In/Out connection Supports CD In connection Onboard SNO82AA2/SNO81BA3 chip 3 IEEE1394b ports nVIDIA® nForce4-4X chipset - 1 FDD connector, allowing connection of 2 FDD devices - 2 IDE connectors (IDE1, IDE2) with UDMA 33/ATA 66/ATA 100/ATA 133 support, allowing connection of 4 IDE devices - 4 SATA connectors (SATAII0_1, SATAII2_3), allowing connection of 4 SATA devices - Supports data striping (RAID 0), mirroring (RAID 1), striping + mirroring (RAID 0+1) for Serial ATA Microsoft Windows 2000/XP 4 DDR DIMM memory slots (supports up to 4GB memory) (Note 1) Supports dual channel DDR 400/333/266/200 DIMMs Supports 2. 5V DDR DIMMs 1 PCI Express x16 slot 2 PCI Express x1 slots 3 PCI slots 1 24-pin ATX power connector 1 4-pin ATX 12V power connector 1 floppy connector 2 IDE connectors 4 SATA connectors 1 CPU fan connector 1 system fan connector 1 front panel connector 1 front audio connector 1 CD In connector 3 USB 2.



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0/1.1 connectors for additional 6 USB 2.0/1.1 ports by cables 2 IEEE1394b connectors for 3 additional IEEE1394 ports by cables 1 power LED connector System Bus Chipset LAN Audio IEEE 1394 Storage O.

S Support Memory Expansion Slots Internal Connectors GA-K8NF-9-RH Motherboard - 10 - Rear Panel I/O I/O Control Hardware Monitor BIOS Additional Features Bundle Software Form Factor 1 PS/2 keyboard port 1 PS/2 mouse port 1 parallel port 1 SPDIF in port 1 SPDIF out port 1 serial port (COMA) 4 USB 2.0/1.1 ports 1 RJ-45 port 6 audio jacks (Line In / Line Out / MIC In / Surround Speaker Out (Rear Speaker Out) / Center/Subwoofer Speaker Out / Side Speaker Out) IT8712 chip System voltage detection CPU temperature detection CPU / System fan speed detection CPU warning temperature CPU fan failure warning CPU smart fan control (Note 2) 1 4Mbit flash ROM Use of licensed AWARD BIOS Supports @BIOS Supports Download Center Supports Q-Flash Supports EasyTune (Note 3) Supports Xpress Install Supports Xpress Recovery2 Supports Xpress BIOS Rescue Norton Internet Security (OEM version) ATX form factor; 30.5cm x 21.0cm English (Note 1) Due to standard PC architecture, a certain amount of memory is reserved for system usage and therefore the actual memory size is less than the stated amount. For example, 4 GB of memory size will instead be shown as 3.xxGB memory during system startup. (Note 2) Whether the CPU Smart FAN Control function is supported will depend on the CPU you install. For more detailed information please check at the FAQ section on GIGABYTE's website. (Note 3) EasyTune functions may vary depending on different motherboards.

- 11 Hardware Installation English 1-3 Installation of the CPU and Fan Heat Sink Before installing the CPU, please comply with the following conditions: 1. Please make sure that the motherboard supports the CPU. 2. Please take note of the pin 1 marking (the small triangle) on the CPU. If you install the CPU in the on, if you wish to operate the Dual Channel Technology, follow the guidelines below: 1. Dual Channel mode will not be enabled if only one memory module is installed. 2. To enable Dual Channel mode with two memory modules (it is recommended to use memory modules of identical brand, size, chips, and speed), you must install them into DIMM sockets of the same color. 3. To enable Dual Channel mode with four memory modules, it is recommended to use memory modules of identical brand, size, chips, and speed.

The following is a Dual Channel Memory configuration table: (DS: Double Side, SS: Single Side, "--": Empty) 2 memory modules 4 memory modules DDR 1 DS/SS -DS/SS DDR 2 DS/SS -DS/SS DDR 3 -DS/SS DS/SS DDR 4 -DS/SS DS/SS English If two memory modules are to be used to achieve Dual Channel mode, we recommend installing them in DDR1 and DDR2 DIMM sockets. All of the memory configurations below will cause system unable to boot. (DS: Double Side, SS: Single Side) DDR 1 1 memory module 2 memory modules --DS/SS -3 memory modules DS/SS -DS/SS DS/SS DDR 2 DS/SS -DS/SS -DS/SS DS/SS DS/SS -DS/SS DDR 3 --DS/SS --DS/SS DS/SS DS/SS -DDR 4 -DS/SS -DS/SS DS/SS -DS/SS DS/SS DS/SS - 15 - Hardware Installation English 1-5 Installation of Expansion Cards You can install your expansion card by following the steps outlined below: 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. Installing a PCI Express x16 expansion card: Please carefully pull out the small whitedrawable bar at the end of the PCI Express x 16 slot when you try to install/uninstall the VGA card. Please align the VGA card to the onboard PCI Express x16 slot and press firmly down on the slot.

Make sure your VGA card is locked by the small white-drawable bar. GA-K8NF-9-RH Motherboard - 16 - 1-6 I/O Back Panel Introduction English PS/2 Keyboard and PS/2 Mouse Connector To install a PS/2 port keyboard and mouse, plug the mouse to the upper port (green) and the keyboard to the lower port (purple). Parallel Port The parallel port allows connection of a printer, scanner and other peripheral devices. SPDIF_I (SPDIF In) Use SPDIF In feature only when your device has digital output function. SPDIF_O (SPDIF Out) The SPDIF output is capable of providing digital audio to external speakers or compressed AC3 data to an external Dolby Digital Decoder. COMA (Serial Port) Connects to serial-based mouse or data processing devices. LAN Port The provided Internet connection is Gigabit Ethernet, providing data transfer speeds of 10/100/ 1000Mbps. USB port Before you connect your device(s) into USB connector(s), please make sure your device(s) such as USB keyboard, mouse, scanner, zip, speaker...

etc. have a standard USB interface. Also make sure your OS supports USB controller. If your OS does not support USB controller, please contact OS vendor for possible patch or driver upgrade. For more information please contact your OS or device(s) vendors.

Line In Devices like CD-ROM, walkman etc. can be connected to Line In jack. Line Out (Front Speaker Out) Connect the stereo speakers, earphone or front surround speakers to this connector. MIC In Microphone can be connected to MIC In jack. Center/Subwoofer Speaker Out Connect the Center/Subwoofer speakers to this connector.

Rear Speaker Out Connect the rear surround speakers to this connector. - 17 Hardware Installation English Side Speaker Out Connect the side surround speakers to this connector. You can use audio software to configure 2-/4-/6-/8-channel audio functioning. 1-7 Connectors Introduction 3 6 2 1 11 5 10 8 7 4 15 9 12 14 13 1) 2) 3) 4) 5) 6) 7) 8) ATX_12V ATX (Power Connector) CPU_FAN SYS_FAN FDD IDE1 / IDE2 SATAII0_1 / SATAII2_3 PWR_LED 9) 10) 11) 12) 13) 14) 15) BATTERY F_PANEL F_AUDIO CD_IN F_USB1 / F_USB2 / F_USB3 F1_1394 / F2_1394 CLR_CMOS GA-K8NF-9-RH Motherboard - 18 - 1/2) ATX_12V / ATX (Power Connector) With the use of the power connector, the power supply can supply enough stable power to all the components on the motherboard. Before connecting the power connector, please make sure that all components and devices are properly installed. Align the power connector with its proper location on the motherboard and connect tightly. The ATX_12V power connector mainly supplies power to the CPU. If the ATX_12V power connector is not connected, the system will not start. Caution! Please use a power supply that is able to handle the system voltage requirements.



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It is recommended that a power supply that can withstand high power consumption be used (300W or greater).

If a power supply is used that does not provide the required power, the result can lead to an unstable system or a system that is unable to start. If you use a 24-pin ATX power supply, please remove the small cover on the power connector on the motherboard before plugging in the power cord; otherwise, please do not remove it. Pin No. 1 3 1 4 2 English Definition GND GND +12V +12V Definition 3.3V 3.3V GND +5V GND +5V GND Power Good 5V SB(stand by +5V) +12V +12V(Only for 24-pin ATX) 3.3V(Only for 24-pin ATX) 3.3V -12V GND PS_ON(soft On/Off) GND GND GND -5V +5V +5V +5V(Only for 24-pin ATX) GND(Only for 24-pin ATX) 2 3 4 Pin No. 1 12 24 2 3 4 5 6 7 8 9 10 11 12 13 1 13 14 15 16 17 18 19 20 21 22 23 24 - 19 - Hardware Installation English 3/4) CPU_FAN / SYS_FAN (Cooler Fan Power Connector) The cooler fan power connector supplies a +12V power voltage via a 3-pin power connector and possesses a foolproof connection design. Most coolers are designed with color-coded power connector wires.

A red power connector wire indicates a positive connection and requires a +12V power voltage. The black connector wire is the ground wire (GND). Remember to connect the CPU/system fan cable to the CPU_FAN/SYS_FAN connector to prevent CPU damage or system hanging caused by overheating. Pin No. 1 1 CPU_FAN Definition GND +12V Sense 2 3 1 SYS_FAN 5) FDD (FDD Connector) The FDD connector is used to connect the FDD cable while the other end of the cable connects to the FDD drive.

The types of FDD drives supported are: 360KB, 720KB, 1.2MB, 1.44MB and 2.88MB. Before attaching the FDD cable, please take note of the foolproof groove in the FDD connector.

34 33 2 1 GA-K8NF-9-RH Motherboard - 20 - 6) IDE1 / IDE2 (IDE Connector) An IDE device connects to the computer via an IDE connector. One IDE connector can connect to one IDE cable, and the single IDE cable can then connect to two IDE devices (hard drive or optical drive). If you wish to connect two IDE devices, please set the jumper on one IDE device as Master and the other as Slave (for information on settings, please refer to the instructions located on the IDE device). Before attaching the IDE cable, please take note of the foolproof groove in the IDE connector. 40 39 English 2 IDE2 IDE1 1 7) SATAII0_1 / SATAII2_3 (Serial ATA Connectors, Controlled by nForce4-4X) Serial ATA can provide up to 150MB/s transfer rate. Please refer to the BIOS setting for the Serial ATA and install the proper driver in order to work properly. Pin No. 7 1 SATAII_1 Definition GND TXP TXN GND RXN RXP GND 1 2 3 4 5 6 7 1 7 SATAII_0 7 1 SATAII_3 1 7 SATAII_2 - 21 - Hardware Installation English 8) PWR_LED The PWR_LED connector is connected with the system power indicator to indicate whether the system is on/off. It will blink when the system enters suspend mode. Pin No.

1 1 Definition MPD+ MPDMPD- 2 3 9) 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. Gently take out the battery and put it aside for about one minute.

(Or you can use a metal object to connect the positive and negative pins in the battery holder to make them short for five seconds.) 3. Re-install the battery. 4. Plug the power cord in and turn on the computer.

GA-K8NF-9-RH Motherboard - 22 - 10) F_PANEL (Front Panel Jumper) Please connect the power LED, PC speaker, reset switch and power switch etc. of your chassis front panel to the F_PANEL connector according to the pin assignment below. English 20 19 SPEAKSpeaker Connector SPEAK+ Power Switch Message LED/Power/Sleep LED MSGMSG+ 21 PW+ PW- NC RES+ RESHDHD+ Reset Switch IDE Hard Disk Active LED SPEAK (Speaker Connector) (Amber) PW (Power Switch) (Red) MSG (Message LED/Power/Sleep LED) (Yellow) RES (Reset Switch) (Green) HD (IDE Hard Disk Active LED) (Blue) NC (Purple) Pin 1: VCC(+) Pin 2- Pin 3: NC Pin 4: Data(-) Open: Normal Operation Close: Power On/Off Pin 1: LED anode(+) Pin 2: LED cathode(-) Open: Normal Operation Close: Reset Hardware System Pin 1: LED anode(+) Pin 2: LED cathode(-) NC - 23 - Hardware Installation English 11) F_AUDIO (Front Audio Panel 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 assignments for the cable are the same as the pin assignments for the front audio 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. 10 9 Definition MIC GND MIC_BIAS Power Front Audio(R) Rear Audio(R)/Return R NC No Pin Front Audio(L) Rear Audio(L)/Return L 1 2 3 4 5 6 7 8 9 10 2 1 12) CD_IN (CD In Connector) Connect CD-ROM or DVD-ROM audio out to the connector. 1 Pin No. 1 2 3 4 Definition CD-L GND GND CD-R GA-K8NF-9-RH Motherboard - 24 - 13) F_USB1 / F_USB2 / F_USB3 (Front USB Connector) Be careful with the polarity of the front USB connector. Check the pin assignment carefully while you connect the front USB cable, incorrect connection between the cable and connector will make the device unable to work or even damage it. For optional front USB cable, please contact your local dealer. Pin No. 1 2 3 9 10 English 12 Definition Power (5V) Power (5V) USB DXUSB DyUSB DX+ USB Dy+ GND GND No Pin NC 4 5 6 7 8 9 10 14) F1_1394 / F2_1394 (Front IEEE 1394 Connectors) Serial interface standard set by Institute of Electrical and Electronics Engineers, which has features like high speed, high bandwidth and hot plug.

Be careful with the polarity of the IEEE1394 connector. Check the pin assignment carefully while you connect the IEEE1394 cable, incorrect connection between the cable and connector will make the device unable to work or even damage it. For optional IEEE1394 cable, please contact your local dealer. 2 F1_1394 1 9 10 F2_1394 1 15 2 16 Pin No. 1 2 3 4 5 6 7 8 9 10 Definition TPA0+ TPA0GND GND TPB0+ TPB0No Pin Power(12V) Power(12V) GND Pin No. 1 2 3 4 5 6 7 8 9 10 11 12 13 14 15 16 Definition Power (12V) Power (12V) TPA1+ TPA1GND GND TPB1+ TPB1Power (12V) Power (12V) TPA2+ TPA2GND No Pin TPB2+ TPB2- - 25 - Hardware Installation English 15) CLR_CMOS (Clear CMOS) You may clear the CMOS data to its default values by this header. To clear CMOS, temporarily short the two pins. Default doesn't include the jumper to avoid improper use of this header.



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Open: Normal Short: Clear CMOS GA-K8NF-9-RH Motherboard - 26 - Chapter 2 BIOS Setup BIOS (Basic Input and Output System) includes a CMOS SETUP utility which allows user to configure required settings or to activate certain system features. The CMOS SETUP saves the configuration in the CMOS SRAM of the motherboard.

When the power is turned off, the battery on the motherboard supplies the necessary power to the CMOS SRAM. When the power is turned on, pressing the button during the BIOS POST (Power-On Self Test) will take you to the CMOS SETUP screen. You can enter the BIOS setup screen by pressing "Ctrl + F1". If you wish to upgrade to a new BIOS, either Gigabyte's Q-Flash or @BIOS utility can be used. Q-Flash allows the user to quickly and easily update or backup BIOS without entering the operating system.

@BIOS is a Windows-based utility that does not require users to boot to DOS before upgrading BIOS but directly download and update BIOS from the Internet. English CONTROL KEYS <><><><Enter> <Esc> <Page Up> <Page Down> <F1> <F2> <F5> <F7> <F8> <F9> <F10> <>> Move to select item Select Item 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 Increase the numeric value or make changes Decrease the numeric value or make changes General help, only for Status Page Setup Menu and Option Page Setup Menu Item Help Restore the previous CMOS value from CMOS, only for Option Page Setup Menu Load the Optimized Defaults Q-Flash utility System Information Save all the CMOS changes, only for Main Menu Main Menu The on-line description of the highlighted setup function is displayed at the bottom of the screen. Status Page Setup Menu / Option Page Setup Menu Press <F1> to pop up a small help window that describes the appropriate keys to use and the possible selections for the highlighted item. To exit the Help Window press <Esc>. Because BIOS flashing is potentially risky, please do it with caution and avoid inadequate operation that may result in system malfunction.

- 27 - BIOS Setup English <F12> : For Boot Menu Select boot sequence for onboard (or add-on cards) device. Award Modular BIOS v6.00PG, An Energy Star Ally Copyright (C) 1984-2005, Award Software, Inc. GA-K8NF-9 / K8NF-9-RH FD . . . :BIOS Setup/Q-Flash, <F9>: XpressRecovery2, <F12>For Boot Menu 03/13/2006-NF-CK804-6A61FG0LC-00 <F12> For Boot Menu Use <> or <> to select a device, then press enter to accept . Press <ESC> to exit this menu. Boot Menu == Select a Boot First device == Floppy LS120 Hard Disk CDROM ZIP USB-FDD USB-ZIP USB-CDROM USB-HDD LAN :Move Enter :Accept ESC:Exit The Main Menu (For example: BIOS Ver.

: FD) Once you enter Award BIOS CMOS Setup Utility, the Main Menu (as figure below) will appear on the screen. Use arrow keys to select among the items and press <Enter> to accept or enter the sub-menu. CMOS Setup Utility-Copyright (C) 1984-2006 Award Software Standard CMOS Features Advanced BIOS Features Integrated Peripherals Power Management Setup PnP/PCI Configurations PC Health Status MB Intelligent Tweaker(M.I.T.) ESC: Quit F8: Q-Flash : Select Item F10: Save & Exit Setup Time, Date, Hard Disk Type... Top Performance Load Optimized Defaults Set Supervisor Password Set User Password Save & Exit Setup Exit Without Saving If you can't find the setting you want, please press "Ctrl+F1" to search the advanced option hidden. Please Load Optimized Defaults in the BIOS when somehow the system works not stable as usual.

This action makes the system reset to the default for stability. The BIOS Setup menus described in this chapter are for reference only and may differ from the exact settings for your motherboard. GA-K8NF-9-RH Motherboard - 28 - Standard CMOS Features This setup page includes all the items in standard compatible BIOS. English 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 Configuration 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. MB Intelligent Tweaker(M.I.

T.) This setup page is control CPU clock and frequency ratio. Top Performance If you wish to maximize the performance of your system, set "Top Performance" as "Enabled". Load Optimized Defaults Optimized Defaults indicates the value of the system parameters which the system would be in best performance configuration. Set Supervisor Password Change, set, or disable password. It allows you to limit access to the system and Setup, or just to Setup. Set User Password Change, set, or disable password. It allows you to limit access to the system. Save & Exit Setup Save CMOS value settings to CMOS and exit setup. Exit Without Saving Abandon all CMOS value changes and exit setup.

- 29 - BIOS Setup English 2-1 Standard CMOS Features CMOS Setup Utility-Copyright (C) 1984-2006 Award Software Standard CMOS Features Date (mm:dd:yy) Time (hh:mm:ss) IDE Channel 0 Master IDE Channel 0 Slave IDE Channel 1 Master IDE Channel 1 Slave IDE Channel 2 Master IDE Channel 3 Master IDE Channel 4 Master IDE Channel 5 Master Drive A Drive B Halt On Floppy 3 Mode Support Fri, May 12 2006 22:31:24 [None] [None] [None] [None] [None] [None] [None] [None] [None] [None] [1.44M, 3.5"] [None] [All, But Keyboard] [Disabled] Item Help Menu Level Change the day, month, year <Week> Sun. to Sat. <Month> Jan. to Dec. <Day> 1 to 31 (or maximum allowed in the month) <Year> 1999 to 2098 F1: General Help : Move Enter: Select +/-/PU/PD: Value F5: Previous Values F10: Save ESC: Exit F7: Optimized Defaults 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 militarytime clock. For example, 1 p.m. is 13:00:00. IDE Channel 0 Master/Slave ; IDE Channel 1 Master/Slave IDE HDD Auto-Detection Press "Enter" to select this option for automatic device detection.

IDE Channel 0 Master/Slave ; IDE Channel 1 Master/Slave IDE devices setup. You can use one of three methods: · Auto Allows BIOS to automatically detect IDE devices during POST. (Default value) · None Select this if no IDE devices are used and the system will skip the automatic detection step and allow for faster system start up.



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· Manual User can manually input the correct settings. Access Mode Use this to set the access mode for the hard drive. The four options are: CHS/LBA/Large/Auto(default:Auto) Capacity Capacity of currently installed hard drive. IDE Channel 2/3/4/5 Master IDE HDD Auto-Detection Press "Enter" to select this option for automatic device detection. Extended IDE Drive You can use one of the two methods: · Auto Allows BIOS to automatically detect SATA IDE devices during POST(default) · None Select this if no SATA IDE devices are used and the system will skip the automatic detection step and allow for faster system start up. Access Mode Use this to set the access mode for the hard drive. The two options are: Large/Auto(default:Auto) GA-K8NF-9-RH Motherboard - 30 - Capacity Capacity of currently installed hard drive. Hard drive information should be labeled on the outside drive casing. Enter the appropriate option based on this information. Cylinder Number of cylinders Head Number of heads Precomp Write precomp Landing Zone Landing zone Sector Number of sectors English 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. 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 Keyboard 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. Floppy 3 Mode Support (for Japan Area) Disabled Drive A Drive B Both Normal Floppy Drive. (Default value) Drive A is 3 mode Floppy Drive. Drive B is 3 mode Floppy Drive. Drive A & B are 3 mode Floppy Drives. - 31 - BIOS Setup English 2-2 Advanced BIOS Features CMOS Setup Utility-Copyright (C) 1984-2006 Award Software Advanced BIOS Features Hard Disk Boot Priority First Boot Device Second Boot Device Third Boot Device Boot Up Floppy Seek Password Check Init Display First [Press Enter] [Floppy] [Hard Disk] [CDROM] [Disabled] [Setup] [PEG] Item Help Menu Level Select Hard Disk Boot Device Priority : Move Enter: Select +/-/PU/PD: Value F5: Previous Values F10: Save ESC: Exit F7: Optimized Defaults F1: General Help Hard Disk Boot Priority Select boot sequence for onboard(or add-on cards) SCSI, RAID, etc.

Use <> or <> to select a device, then press<+> to move it up, or <-> to move it down the list. Press <ESC> to exit this menu. First / Second / Third Boot Device Floppy LS120 Hard Disk CDROM ZIP USB-FDD USB-ZIP USB-CDROM USB-HDD LAN Disabled Select your boot device priority by Floppy. Select your boot device priority by LS120. Select your boot device priority by Hard Disk. Select your boot device priority by CDROM. Select your boot device priority by ZIP. Select your boot device priority by USB-FDD. Select your boot device priority by USB-ZIP. Select your boot device priority by USB-CDROM. Select your boot device priority by USB-HDD. Select your boot device priority by LAN. Disable this function. Boot Up Floppy Seek During POST, BIOS will determine the floppy disk drive installed is 40 or 80 tracks. 360K type is 40 tracks 720K, 1.

2M and 1.44M are all 80 tracks. Enabled BIOS searches for floppy disk drive to determine it is 40 or 80 tracks. Note that BIOS can not tell from 720K, 1.2M or 1.

44M drive type as they are all 80 tracks. Disabled BIOS will not search for the type of floppy disk drive by track number. Note that there will not be any warning message if the drive installed is 360K. (Default value) GA-K8NF-9-RH Motherboard - 32 - Password Check System Setup 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. The system will boot, but access to Setup will be denied if the correct password is not entered at the prompt. (Default value) English Init Display First This feature allows you to select the first initiation of the monitor display from which card when you install a PCI VGA card and a PCI Express VGA card on the motherboard. PCI slot Set Init display first to PCI. PEG Set Init display first to PCI Express VGA card. (Default value) - 33 - BIOS Setup English 2-3 Integrated Peripherals CMOS Setup Utility-Copyright (C) 1984-2006 Award Software Integrated Peripherals On-Chip IDE Channel0 On-Chip IDE Channel1 IDE DMA transfer access On-Chip MAC Lan On-Chip LAN BOOT ROM NV IDE/SATA RAID function NV Serial-ATA 1 NV SATA 1 Primary RAID NV SATA 1 Secondary RAID NV Serial-ATA 2 NV SATA 2 Primary RAID NV SATA 2 Secondary RAID IDE Prefetch Mode USB Memory Type AC97 Audio Onboard 1394 Onboard Serial Port 1 Onboard Parallel Port Parallel Port Mode : Move [Enabled] [Enabled] [Enabled] [Auto] [Enabled] [Disabled] [Enabled] Disabled Disabled [Enabled] Disabled Disabled [Enabled] [SHADOW] [Auto] [Enabled] [3F8/IRQ4] [378/IRQ7] [SPP] Item Help Menu Level x x x x Enter: Select +/-/PU/PD: Value F5: Previous Values F10: Save ESC: Exit F7: Optimized Defaults F1: General Help CMOS Setup Utility-Copyright (C) 1984-2006 Award Software Integrated Peripherals x ECP Mode Use DMA On-Chip USB Legacy USB Keyboard/Storage Legacy (DOS) USB Mouse Legacy USB storage detect 3 [V1.1+V2.

0] [Disabled] [Disabled] [Enabled] Item Help Menu Level : Move Enter: Select +/-/PU/PD: Value F5: Previous Values F10: Save ESC: Exit F7: Optimized Defaults F1: General Help On-Chip IDE Channel0 Enabled Disabled Enabled Disabled Enabled Disabled Enable onboard 1st channel IDE port. (Default value) Disable onboard 1st channel IDE port. Enable onboard 2nd channel IDE port. (Default value) Disable onboard 2nd channel IDE port. Enable IDE DMA transfer access. (Default value) Disable this function. On-Chip IDE Channel1 IDE DMA transfer access GA-K8NF-9-RH Motherboard - 34 - On-Chip MAC Lan (controlled by VITESSE 8201 phy) Auto Disabled Auto-detect onboard LAN chip function. (Default value) Disable onboard LAN chip function. English On-Chip LAN BOOT ROM This function decide whether to invoke the boot ROM of the onboard LAN chip. Enabled Enable this function. (Default value) Disabled Disable this function. NV IDE/SATA RAID function Enabled Disabled Allows users to configure individual SATA channels as RAID or ATA mode.



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Disable the RAID function for all of the onboard SATA channels. (Default value) Enable the first SATA controller. (Default value) Disable the first SATA controller.

Enable RAID function for the first channel of the first SATA controller. Disable this function. (Default value) Enable RAID function for the second channel of the first SATA controller. Disable this function. (Default value) Enable the second SATA controller.

(Default value) Disable the second SATA controller. Enable RAID function for the first channel of the second SATA controller. Disable this function. (Default value) Enable RAID function for the second channel of the second SATA controller. Disable this function. (Default value) Enable IDE data buffer to enhance HDD transfer speed. (Default value) Disable IDE data buffer for the system stability. NV Serial-ATA 1 Enabled Disabled Enabled Disabled Enabled Disabled NV SATA 1 Primary RAID NV SATA 1 Secondary RAID NV Serial-ATA 2 Enabled Disabled Enabled Disabled Enabled Disabled Enabled Disabled NV SATA 2 Primary RAID NV SATA 2 Secondary RAID IDE Prefetch Mode USB Memory Type SHADOW Set USB memory type to SHADOW. (Default value) Base Memory(640K)Set USB memory type to base memory(640K). AC97 Audio Auto Disabled Auto-detect onboard AC'97 audio function.

(Default value) Disable this function. Enable onboard IEEE1394 function. (Default value) Disable onboard IEEE1394 function. Onboard 1394 Enabled Disabled - 35 - BIOS Setup English Onboard Serial Port 1 Auto 3F8/IRQ4 2F8/IRQ3 3E8/IRQ4 2E8/IRQ3 Disabled Disabled 378/IRQ7 278/IRQ5 3BC/IRQ7 SPP EPP ECP ECP+EPP 3 1 BIOS will automatically setup the Serial port 1 address. Enable onboard Serial port 1 and address is 3F8. (Default value) Enable onboard Serial port 1 and address is 2F8. Enable onboard Serial port 1 and address is 3E8. Enable onboard Serial port 1 and address is 2E8. Disable onboard Serial port 1. Disable onboard LPT port.

Enable onboard LPT port and address is 378/IRQ7. (Default value) Enable onboard LPT port and address is 278/IRQ5. Enable onboard LPT port and address is 3BC/IRQ7. Using Parallel port as Standard Parallel Port. (Default value) Using Parallel port as Enhanced Parallel Port.

Using Parallel port as Extended Capabilities Port. Using Parallel port as ECP and EPP mode. Set ECP Mode Use DMA to 3. (Default value) Set ECP Mode Use DMA to 1. Disable this function if you are not using onboard USB function.

Enable USB 1.1 and USB 2.0 controller. (Default value) Enable only USB 1.1 controller. Enable USB keyboard support in the MS-DOS environment. Disable this function. (Default value) Enable USB mouse support in the MS-DOS environment. Disable this function. (Default value) Onboard Parallel Port Parallel Port Mode ECP Mode Use DMA On-Chip USB Disabled V1.

1+V2.0 V1.1 Enabled Disabled Enabled Disabled Legacy USB Keyboard/Storage Legacy (DOS) USB Mouse Legacy USB storage detect This option allows users to decide whether to detect USB storage devices, including USB flash drives and USB hard drives during POST. Enabled BIOS will scan all USB storage devices. (Default value) Disabled Disable this function. GA-K8NF-9-RH Motherboard - 36 - 2-4 Power Management Setup CMOS Setup Utility-Copyright (C) 1984-2006 Award Software Power Management Setup [S1(POS)] [Instant-off] [Disabled] [Disabled] [Disabled] [Disabled] Everyday 0:0:0 [Disabled] [Disabled] Enter [Soft-Off] Item Help Menu Level English ACPI Suspend Type Soft-Off by Power button PME Event Wake Up Modem Ring On USB Resume from Suspend Power-On by Alarm x Day of Month Alarm x Time (hh:mm:ss) Alarm Power On by Mouse Power On by Keyboard x KB Power ON Password AC BACK Function : Move Enter: Select +/-/PU/PD: Value F5: Previous Values F10: Save ESC: Exit F7: Optimized Defaults F1: General Help ACPI Suspend Type S1(POS) S3(STR) Instant-off Delay 4 Sec Set ACPI suspend type to S1/POS(Power On Suspend). (Default value) Set ACPI suspend type to S3/STR(Suspend To RAM). Press power button then Power off instantly. (Default value) Press power button 4 seconds to Power off. Enter suspend if button is pressed less than 4 seconds.

Soft-Off by Power button PME Event Wake Up This feature requires an ATX power supply that provides at least 1A on the 5VSB lead. Disabled Disable this function. Enabled Enable PME as wake up event. (Default value) Modem Ring On An incoming call via modem can awake the system from any suspend state. Disabled Disable Modem Ring on function.

(Default value) Enabled Enable Modem Ring on function. USB Resume from Suspend Disabled Enable Disable this function. (Default value) Enable USB device wake up system from suspend type. Power-On by Alarm You can set "Resume by Alarm" item to enabled and key in Date/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. Day of Month Alarm : Everyday, 1~31 Time (hh: mm: ss) Alarm : (0~23) : (0~59) : (0~59) - 37 - BIOS Setup English Power On by Mouse Disabled Double Click Disabled Password Any KEY Keyboard 98 Disabled this function. (Default value) Double click on PS/2 mouse left button to power on the system. Disabled this function. (Default value) Enter from 1 to 5 characters to set the keyboard power on password. Press any key to power on the system. If your keyboard have "POWER Key" button, you can press the key to power on the system. Power On by Keyboard KB Power ON Password When "Power On by Keyboard" set at Password, you can set the password here. Enter Input password(from 1 to 5 characters) and press Enter to set the password.

AC BACK Function Soft-Off Full-On When AC-power back to the system, the system will be in "Off" state. (Default value) When AC-power back to the system, the system always in "On" state. GA-K8NF-9-RH Motherboard - 38 - 2-5 PnP/PCI Configurations CMOS Setup Utility-Copyright (C) 1984-2006 Award Software PnP/PCI Configurations PCI 1 IRQ Assignment PCI 2 IRQ Assignment PCI 3 IRQ Assignment [Auto] [Auto] [Auto] Item Help Menu Level English : Move Enter: Select +/-/PU/PD: Value F5: Previous Values F10: Save ESC: Exit F7: Optimized Defaults F1: General Help PCI 1 IRQ Assignment Auto 3,4,5,7,9,10,11,12,14,15 Auto assign IRQ to PCI 1. (Default value) Set IRQ 3,4,5,7,9,10,11,12,14,15 to PCI 1. Auto assign IRQ to PCI 2. (Default value) Set IRQ 3,4,5,7,9,10,11,12,14,15 to PCI 2. Auto assign IRQ to PCI 3. (Default value) Set IRQ 3,4,5,7,9,10,11,12,14,15 to PCI 3. PCI 2 IRQ Assignment Auto 3,4,5,7,9,10,11,12,14,15 PCI 3 IRQ Assignment Auto 3,4,5,7,9,10,11,12,14,15 - 39 - BIOS Setup English 2-6 PC Health Status CMOS Setup Utility-Copyright (C) 1984-2006 Award Software PC Health Status Vcore DDR25V +3.3V +12V Current CPU Temperature Current CPU FAN Speed Current SYSTEM FAN Speed CPU Warning Temperature CPU FAN Fail Warning CPU Smart FAN Control (Note) OK OK OK OK 28 oC 3183 RPM 0 RPM [Disabled] [Disabled] [Disabled] [Disabled] 8 12 80 0 20 50 60 F10: Save ESC: Exit F7: Optimized Defaults F1: General Help Item Help Menu Level x x x x x x x CPU FAN Manual Contol CPU FAN : Low speed CPU FAN : Mid speed CPU FAN : Hige speed Temp of FAN turn off Temp Limit of Low speed Temp Limit of Mid speed Temp Limit of High speed : Move Enter: Select +/-/PU/PD: Value F5: Previous Values CMOS Setup Utility-Copyright (C) 1984-2006 Award Software Integrated Peripherals x Temp of full FAN speed 70 Item Help Menu Level : Move Enter: Select +/-/PU/PD: Value F5: Previous Values F10: Save ESC: Exit F7: Optimized Defaults F1: General Help Current Voltage(V) Vcore / DDR25V / +3.



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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. GA-K8NF-9-RH Motherboard - 40 - CPU Warning Temperature 60 oC / 140 o F 70 oC / 158 o F 80 oC / 176 o F 90 oC / 194 o F Disabled Disabled Enabled Disabled Enabled Monitor CPU temperature at 60o C / 140 oF. Monitor CPU temperature at 70o C / 158 oF.

Monitor CPU temperature at 80o C / 176 oF. Monitor CPU temperature at 90o C / 194 oF. Disable this function. (Default value) Disable CPU fan fail warning function. (Default value) Enable CPU fan fail warning function.

Disable this function. When this function is enabled, CPU fan will run at different speed depending on CPU temperature. Users can adjust the fan speed with Easy Tune based on their requirements. (Default value) English CPU FAN Fail Warning CPU Smart FAN Control (Note) CPU FAN Manual Control CPU Smart Fan Control will become disabled when this item is enabled. Enabled Enable the CPU fan manual control function. Disabled Disable the CPU fan manual control function. (Default value) CPU FAN: Low Speed Set the parameter of the CPU fan speed. The CPU FAN: Low Speed option configures the speed of the CPU fan when the CPU temperature is below the temperature set in Temp Limit of Mid Speed. The parameter can be adjusted from 0~127. Higher parameter means faster CPU fan speed.

(Default parameter: 8) CPU FAN: Mid Speed Set the parameter of the CPU fan speed. The CPU FAN: Mid Speed option configures the speed of the CPU fan when the CPU temperature exceeds the temperature set in Temp Limit of Mid Speed. The parameter can be adjusted from 0~127. Higher parameter means faster CPU fan speed. (Default parameter: 12) CPU FAN: High Speed Set the parameter of the CPU fan speed. The CPU FAN: High Speed option configures the speed of the CPU fan when the CPU temperature exceeds the temperature set in Temp Limit of High Speed. The parameter can be adjusted from 0~127. Higher parameter means faster CPU fan speed. (Default parameter: 80) Temp of FAN turn off (Default temperature: 0oC) When the CPU temperature is below the value set in this option, the CPU fan will stop spinning. (Note) The CPU fan runs at full speed when both CPU Smart FAN Control and CPU FAN Manual Control are disabled.

Whether the CPU Smart FAN Control function is supported will depend on the CPU you install. For more detailed information please check at the FAQ section on GIGABYTE's website. - 41 BIOS Setup English Temp Limit of Low Speed (Default temperature: 20oC) The CPU fan will stop spinning when the CPU temperature is below the value set in Temp of FAN turn off option. The CPU fan will start to spin again with the parameter set in CPU FAN: Low Speed when the CPU temperature exceeds the value set in Temp Limit of Low Speed. Temp Limit of Mid Speed (Default temperature: 50oC) When the CPU temperature exceeds the value set in this option, the CPU fan spins with the parameter specified in CPU FAN: Mid Speed.

For example, by default, when the CPU temperature exceeds 50 o C, CPU fan runs with parameter 12. Temp Limit of High Speed (Default temperature: 60oC) When the CPU temperature exceeds the value set in this option, the CPU fan rotates with the parameter specified in CPU FAN: High Speed. For example, by default, when the CPU temperature exceeds 60 o C, CPU fan runs with parameter 80. Temp of full FAN Speed (Default temperature: 70oC) When the CPU temperature exceeds the value set in this option, the CPU fan runs at full speed. GA-K8NF-9-RH Motherboard - 42 - 2-7 MB Intelligent Tweaker(M.

I.T.) CMOS Setup Utility-Copyright (C) 1984-2006 Award Software MB Intelligent Tweaker(M.I.T.) HT Frequency ratio CPU Frequency K8 CPU Clock Ratio Current DDR speed CPU Spread Spectrum PCIE Clock Robust Graphics Booster Chipset core PCI-E voltage HT-Link voltage control DDR voltage control [Auto] [200] [Auto] 400 [Center Spread] [100Mhz] [Auto] [Normal] [Normal] [Normal] Item Help Menu Level English : Move Enter: Select +/-/PU/PD: Value F5: Previous Values F10: Save ESC: Exit F7: Optimized Defaults F1: General Help Incorrect using these features may cause your system broken. For power end-user use only. HT Frequency Ratio This setup option will automatically assign by CPU detection. (Default value: Auto) CPU Frequency 200 ~ 456 Set CPU frequency from 200Mhz to 456Mhz. K8 CPU Clock Ratio This setup option will automatically assign by CPU detection.

(Default value: Auto) Current DDR speed Display the current DDR speed. CPU Spread Spectrum Disabled Center Spread Disable CPU Spread Spectrum. Set CPU Spread Spectrum to Center Spread. (Default value) PCIE Clock 100Mhz ~ 150Mhz Set PCI-E clock from 100Mhz to 150Mhz. Robust Graphics Booster Select the options can enhance the VGA graphics card bandwidth to get higher performance. Auto Set Robust Graphics Booster to Auto. (Default value) Fast Set Robust Graphics Booster to Fast. Turbo Set Robust Graphics Booster to Turbo. - 43 - BIOS Setup English Chipset core PCI-E voltage Normal +0.1v +0.

2v +0.3v Normal +0.1v +0.2v +0.3v Normal +0.

1v +0.2v Set chipset core PCI-E voltage as Core Power required. (Default value) Increase chipset core PCI-E voltage +0.1V. Increase chipset core PCI-E voltage +0.

2V. Increase chipset core PCI-E voltage +0.3V. Supply HT-Link voltage as HT-Link required. (Default value) Increase HT-Link voltage +0.1V. Increase HT-Link voltage +0.2V. Increase HT-Link voltage +0.2V.

Supply DDR voltage as DDR required. (Default value) Increase DDR voltage +0.1V. Increase DDR voltage +0.2V. HT-Link voltage control DDR voltage control GA-K8NF-9-RH Motherboard - 44 - 2-8 Top Performance CMOS Setup Utility-Copyright (C) 1984-2006 Award Software Standard CMOS Features Advanced BIOS Features Integrated Peripherals Top Performance Power Management Setup PnP/PCI Configurations Disabled.....

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.....
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[] PC Health Status Enabled.....

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.....

.....[] MB Intelligent Tweaker(M.I.T.) ESC: Quit F8: Q-Flash : Move ESC: Abort Top Performance Load Optimized Defaults Set Supervisor Password Set User Password Save & Exit Setup Exit Without Saving English : Select Item ENTER: Accept Save & Exit Setup F10: Load Optimized Defaults If you wish to maximize the performance of your system, set "Top Performance" as "Enabled".

Disabled Disable this function. (Default Value) Enabled Enable Top Performance function. "Top Performance" will increase hardware working speed. Different system configuration (both hardware component and OS) will effect the result. For example, the same hardware configuration might not run properly with Windows XP, but works smoothly with Windows NT. Therefore, if your system is not perform enough, the reliability or stability problem will appear sometimes, and we will recommend you disabling the option to avoid the problem as mentioned above. 2-9 Load Optimized Defaults CMOS Setup Utility-Copyright (C) 1984-2006 Award Software Standard CMOS Features Advanced BIOS Features Integrated Peripherals Power Management Setup



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I.T.) ESC: Quit F8: Q-Flash Load Optimized Defaults Top Performance Load Optimized Defaults Set Supervisor Password Set User Password Load Optimized Defaults (Y/N)? N Setup Save & Exit Exit Without Saving : Select Item F10: Save & Exit Setup Selecting this field loads the factory defaults for BIOS and Chipset Features which the system automatically detects.

- 45 - BIOS Setup English 2-10 Set Supervisor/User Password CMOS Setup Utility-Copyright (C) 1984-2006 Award Software Standard CMOS Features Advanced BIOS Features Integrated Peripherals Power Management Setup PnP/PCI Configurations Enter Password: PC Health Status MB Intelligent Tweaker(M.I.T.) ESC: Quit F8: Q-Flash Top Performance Load Optimized Defaults Set Supervisor Password Set User Password Save & Exit Setup Exit Without Saving : Select Item F10: Save & Exit Setup Change/Set/Disable Password When you select this function, the following message will appear at the center of the screen to assist you in creating a password. Type the password, up to eight characters, and press <Enter>.

You will be asked to confirm the password. Type the password again and press <Enter>. You may also press <Esc> to abort the selection and not enter a password. To disable password, just press <Enter> when you are prompted to enter password. A message "PASSWORD DISABLED" will appear to confirm the password being disabled.

Once the password is disabled, the system will boot and you can enter Setup freely. The BIOS Setup program allows you to specify two separate passwords: SUPERVISOR PASSWORD and a USER PASSWORD. When disabled, anyone may access all BIOS Setup program function.

@@@ and M.I.B. @. 2. 3. 4. 5.

6. 7. 8. 9. 10. 11. @@@@If you wish to run Xpress Recovery2 later, you can simply press F9 during system bootup to enter Xpress Recovery2 without the CD-ROM. System requirements: 1. Intel x86 platforms 2. At least 64M bytes of system memory 3.

VESA-supported VGA cards How to use the Xpress Recovery2 Initial access by booting from CD-ROM and subsequent access by pressing the F9 key: Steps: After entering BIOS Setup, go to Advanced BIOS Feature and set to boot from CD-ROM. Save the settings and exit the BIOS Setup. Insert the provided driver CD into your CD-ROM drive. Upon system restart, the message which says "Boot from CD/DVD:" will appear in the bottom left corner of the screen. Press any key to enter Xpress Recovery2.

After the steps above are completed, subsequent access to Xpress Recovery2 can be made by simply pressing the <F9> key during system power-on. . . Boot from CD/DVD: Press any key to startup XpressRecovery2..

... Award Modular BIOS v6.00PG, An Energy Star Ally Copyright (C) 1984-2006, Award Software, Inc. GA-K8NF-9 / K8NF-9-RH FD . . . :BIOS Setup/Q-Flash, <F9>: XpressRecovery2, <F12>For Boot Menu 03/13/2006-NF-CK804-6A61FG0LC-00 Boot from CD/DVD: <F9> Xpress Recovery2 1.

2. 3. If you have already entered Xpress Recovery2 by booting from the CD-ROM, you can enter Xpress Recovery2 by pressing the <F9> key in the future. System storage capacity and the reading/writing speed of the hard disk will affect the data backup speed. It is recommended that Xpress Recovery2 be immediately installed once you complete installations of OS and all required drivers as well as software. GA-K8NF-9-RH Motherboard - 54 - The Main Screen of Xpress Recovery2 1. RESTORE: Restore the backed-up data to your hard disk. (This button will not appear if there is no backup file.) English 2. BACKUP: Back up data from hard disk.

3. REMOVE: Remove previously-created backup files to release disk space. (This button will not appear if there is no backup file.) 4. REBOOT: Limitations: Not compatible to Xpress Recovery.

For the use of Xpress Recovery2, a primary partition must be reserved. Xpress Recovery2 will store the backup file at the end of the hard disk, so free space available on the hard disk for the backup file must be allocated in advance. (A minimum 4GB is recommended but the actual space is dependent on the size of the data to be backed up) 4. Capable of backing up hard disks installed with Windows operating systems including DOS and Windows XP/2000/NT/9x/Me. 5. USB hard disks are currently not supported. 6. Does not support RAID/AHCI (class code 0104/0106) hard disks. 7. Capable of backing up and restoring only the first physical hard disk. Hard disks detection sequence is as follows: a. PATA IDE primary channel b. PATA IDE secondary channel c. SATA IDE channel 1 d. SATA IDE channel 2 e.

SATA IDE channel 3 f. SATA IDE channel 4 1. 2. 3. Precautions: 1. 2. 3. 4. 5. When using hard disks with more than 128G under Windows 2000, be sure to execute the EnableBigLba.

exe program from the driver CD before data backup. It is normal that data backup takes longer time than data restoration. Xpress Recovery2 is compliant with the GPL regulations. On a few motherboards based on Nvidia chipsets, BIOS update is required for Xpress Recovery2 to correctly identify RAID and SATA IDE mode. Please contact your motherboard manufacturer.

Xpress Recovery2 supports only PATA hard disks and not SATA hard disks on the following motherboards (As this is a BIOS-related issue, it can be solved by BIOS update) GA-K8U GA-K8U-9 GA-K8NXP-SLI GA-K8N Ultra-SLI GA-K8N Pro-SLI GA-K8NXP-9 GA-K8N Ultra-9 GA-K8NF-9 (PCB Ver. 1.0) GA-K8NE (PCB Ver. 1.0) GA-K8NMF-9 - 55 GA-8N-SLI Royal GA-8N-SLI Pro GA-8N-SLI Appendix English 4-1-3 Flash BIOS Method Introduction Method 1 : Q-FlashTM Utility Q-Flash TM 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 TM allows users to flash BIOS without any utility in DOS or TM Windows. Using Q-Flash indicating no more fooling around with any complicated instructions and operating system since it is in the BIOS menu. 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 TM utility, please follow the steps below first. 1. 2. 3. Download the latest BIOS for your motherboard from Gigabyte's website.

Extract the BIOS file downloaded and save the BIOS file (the one with model name.Fxx. For example, 8KNXPU.Fba) to a floppy disk. 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-FlashTM 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.



[You're reading an excerpt. Click here to read official GIGABYTE GA-K8NF-9-RH user guide](http://yourpdfguides.com/dref/3018303)
<http://yourpdfguides.com/dref/3018303>

This section only deals with how to use Q-Flash utility. In the following sections, we take GA-8KNXP Ultra as the example to guide you how to flash BIOS from an older version to the latest version. For example, from Fa3 to Fba. Award Modular BIOS v6.

00PG, An Energy Star Ally Copyright (C) 1984-2003, Award Software, Inc. The BIOS file is Fa3 before updating Intel i875P AGPset BIOS for 8KNXP Ultra Fa3 Check System Health OK , VCore = 1.5250 Main Processor : Intel Pentium(R) 4 1.6GHz (133x12) <CPUID : 0F27 Patch ID : 0027> Memory Testing : 131072K OK Memory Frequency 266 MHz in Single Channel Primary Master : FUJITSU MPE3170AT ED-03-08 Primary Slave : None Secondary Master :

CREATIVEDVD-RM DVD1242E BC101 Secondary Slave : None Press DEL to enter SETUP / Dual BIOS / Q-Flash / F9 For Xpress Recovery 08/07/2003-i875P-6A79BG03C-00 GA-K8NF-9-RH Motherboard - 56 - Entering the Q-Flash™ utility: Step1: To use Q-Flash utility, you must press Del in the boot screen to enter BIOS menu. CMOS Setup Utility-Copyright (C) 1984-2004 Award Software Standard CMOS Features Advanced BIOS Features Integrated Peripherals Power Management Setup PnP/PCI Configurations PC Health Status MB Intelligent Tweaker(M.

I.T.) ESC: Quit F8: Dual BIOS/Q-Flash Select Language Load Fail-Safe Defaults Load Optimized Defaults Set Supervisor Password Set User Password Save & Exit Setup Exit Without Saving F3: Change Language F10: Save & Exit Setup Time, Date, Hard Disk Type... English Step 2: Press F8 button on your keyboard and then Y button to enter the Dual BIOS/Q-Flash utility. 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...

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.... Main Bios Main ROM Type/Size....
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..... SST 49LF004A Backup ROM Type/Size...
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SST 49LF004A Dual BIOS utility bar 512K 512K Task menu for Dual BIOS utility Task menu for Q-Flash™ utility 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 Q-Flash™ utility title bar 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. - 57 - Appendix English 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. Later, you will see a box pop up showing the BIOS files you previously downloaded to the floppy disk. If you want to save the current BIOS for backup purpose, you can begin Step 1 with "Save Main BIOS to Floppy" item. 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, 8KNXPU.Fba, is listed. Please confirm again you have the correct BIOS file for your motherboard. Dual BIOS Utility Boot From.....

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. Main Bios Main ROM Type/Size....
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... SST 49LF004A Backup ROM Type/Size.....
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. SST 49LF004A 512K 512K Wide Range Protection Disable 1 file(s) found Boot From Main Bios 8KNXPU.Fba 512K Auto Recovery Enable Halt On Error Disable Total size Copy Main ROM Data to Backup : 1.39M Free size : 911.50K F5 : Refresh DEL : Load Default Settings Delete 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 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....

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.... Main Bios Main ROM Type/Size.....
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