Your PDF Guides

You can read the recommendations in the user guide, the technical guide or the installation guide for GIGABYTE GA-AM1M-S2H. You'll find the answers to all your questions on the GIGABYTE GA-AM1M-S2H 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-AM1M-S2H**
> **User guide GIGABYTE GA-AM1M-S2H**
> **Operating instructions GIGABYTE GA-AM1M-S2H**
> **Instructions for use GIGABYTE GA-AM1M-S2H**
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GA-AM1M-S2H

User's Manual
Rev. 1001
12ME-AM1MS2H-1001R

Manual abstract:

Table of Contents GA-AM1M-S2H Motherboard Layout..

. 32 -3- GA-AM1M-S2H Motherboard Layout KB_MS ATX_12V VGA CPU_FAN DDR3_2 DDR3_1 ATX CLR_CMOS F_AUDIO F_USB3 F_USB1 LPT F_PANEL R_USB30 SYS_FAN USB_LAN SATA3 1 0 M_BIOS PCIEX4 AUDIO GA-AM1M-S2H Socket FS1b HDMI Realtek® GbE LAN PCIEX1_1 CODEC PCIEX1_2 BAT iTE® Super I/O SPDIF_O F_USB2 COM Box Contents 55 GA-AM1M-S2H motherboard 55 Motherboard driver disk 55 User's Manual 55 Two SATA cables 55 I/O Shield The box contents above are for reference only and the actual items shall depend on the product package you obtain. The box contents are subject to change without notice. -4- GA-AM1M-S2H Motherboard Block Diagram APU CLK+/- (100 MHz) DISP CLK+/- (100 MHz) 1 PCI Express x4 PCIe CLK (100 MHz) LAN RJ45 Realtek® GbE LAN PCI Express Bus DDR3 1600/1333 MHz Memory AMD APU D-Sub HDMI BIOS 2 USB 3.0/2.0 8 USB 2.0/1.1 2 SATA 6Gb/s LPC Bus LPT iTE® Super I/O COM PS/2 KB/Mouse S/PDIF Out x4 x1 x1 x1 2 x PCI Express x1 CODEC MIC (Center/Subwoofer Speaker Out) Line Out (Front Speaker Out) Line In (Rear Speaker Out) -5- For detailed product information/limitation(s), refer to "1-2 Product Specifications." Chapter 1 Hardware Installation 1-1 Installation Precautions The motherboard contains numerous delicate electronic circuits and components which can become damaged as a result of electrostatic discharge (ESD). Prior to installation, carefully read the user's manual and follow these procedures: •• Prior to installation, make sure the chassis is suitable for the motherboard.

•• Prior to installation, do not remove or break motherboard S/N (Serial Number) sticker or warranty sticker provided by your dealer. These stickers are required for warranty validation. •• Always remove the AC power by unplugging the power cord from the power outlet before installing or removing the motherboard or other hardware components. •• When connecting hardware components to the internal connectors on the motherboard, make sure they are connected tightly and securely. •• When handling the motherboard, avoid touching any metal leads or connectors. •• It is best to wear an electrostatic discharge (ESD) wrist strap when handling electronic components such as a motherboard, CPU or memory. If you do not have an ESD wrist strap, keep your hands dry and first touch a metal object to eliminate static electricity. •• Prior to installing the motherboard, please have it on top of an antistatic pad or within an electrostatic shielding container. •• Before unplugging the power supply cable from the motherboard, make sure the power supply has been turned off. •• Before turning on the power, make sure the power supply voltage has been set according to the local voltage standard.
•• Before using the product, please verify that all cables and power connectors of your hardware components are connected. •• To prevent damage to the motherboard, do not allow screws to come in contact with the motherboard circuit or its components. •• Make sure there are no leftover screws or metal components placed on the motherboard or within the computer casing. •• Do not place the computer system on an uneven surface. •• Do not place the computer system in a high-temperature environment.
•• Turning on the computer power during the installation process can lead to damage to system components as well as physical harm to the user. •• 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. -6- 1-2 Product Specifications APU □□ FS1b Socket: - AMD Athlon™ series processors - AMD Sempron™ series processors (Go to GIGABYTE's website for the latest CPU support list.) □□ 2 x 1.5V DDR3 DIMM sockets supporting up to 32 GB of system memory Memory Onboard Graphics □□ Support for DDR3 1600/1333 MHz memory modules □□ Support for Extreme Memory Profile (XMP) memory modules (Go to GIGABYTE's website for the latest supported memory speeds and memory modules.
) □□ Integrated Graphics Processor: - 1 x D-Sub port, supporting a maximum resolution of 1920x1200 - □ x HDMI port, supporting a maximum resolution of 4096x2160 1 - □ Maximum shared memory of 2 GB □□ Realtek® ALC887 codec □□ High Definition Audio □□ 2/4/5.1/7.1-channel □□ Support for S/PDIF Out * Support for HDMI 1.4a version. * □Due to a Windows 32-bit operating system limitation, when more than 4 GB of physical memory is installed, the actual memory size displayed will be less than the size of the physical memory installed. Audio * □ configure 7.1-channel audio, you have to use an HD front panel audio module To and enable the multi-channel audio feature through the audio driver. LAN □□ Realtek® GbE LAN chip (10/100/1000 Mbit) 1 x PCI Express x16 slot, running at x4 (PCIEX4) 2 x PCI Express x1 slots (The PCI Express slots conform to PCI Express 2.0 standard.) Integrated in the APU: - 2 x SATA 6Gb/s connectors Integrated in the APU: - □ x USB 3.

0/2.0 ports on the back panel 2 - □ x USB 2.0/1.1 ports (2 ports on the back panel, 6 ports available through 8 the internal USB headers) 1 x 24-pin ATX main power connector 1 x 4-pin ATX 12V power connector 2 x SATA 6Gb/s connectors 1 x APU fan header 1 x system fan header 1 x front panel header 1 x front panel audio header 1 x S/PDIF Out header 3 x USB 2.0/1.1 headers 1 x serial port header 1 x parallel port header 1 x Clear CMOS jumper Expansion Slots □□ □□ Storage Interface □□ USB □□ Internal Connectors □□ □□ □□ □□ □□ □□ □□ □□ □□ □□ □□ □□ -7- Back Panel Connectors □□ □□ □□ □□ □□ □□ □□ □□ □ □ □ □ □ □ 1 x PS/2 keyboard port 1 x PS/2 mouse port 1 x D-Sub port 1 x HDMI port 2 x USB 3.0/2.0 ports 2 x USB 2.

0/1.1 ports 1 x RJ-45 port 3 x audio jacks (Line In, Line Out, Mic In) iTE® I/O Controller Chip System voltage detection APU/System temperature detection APU/System fan speed detection APU overheating warning APU/System fan speed control I/O Controller Hardware Monitor * Whether the fan speed control function is supported will depend on the cooler you install.

BIOS ▢ ▢ ▢ Unique Features ▢ ▢ ▢ ▢ ▢ Bundled Software Operating System Form Factor ▢ ▢ ▢ ▢ 1 x 32 Mbit flash Use of licensed AMI UEFI BIOS PnP 1.0a, DMI 2.0, SM BIOS 2.6, ACPI 2.0a Support for @BIOS Support for Q-Flash Support for Xpress Install Support for EasyTune Support for Smart Recovery 2 Support for ON/OFF Charge * Available functions in EasyTune may differ by motherboard model.

Norton® Internet Security (OEM version) Support for Windows 8.1/8/7 32-bit/64-bit Support for Windows XP 32-bit Micro ATX Form Factor; 22.6cm x 17.0cm * ▢ GIGABYTE reserves the right to make any changes to the product specifications and product-related information without prior notice. * ▢ Please visit the Support & Downloads\Utility page on GIGABYTE's website to check the supported operating system(s) for the software listed in the "Unique Features" and "Bundled Software" columns.

-8- 1-3 Installing the APU Read the following guidelines before you begin to install the APU: •• Make sure that the motherboard supports the APU. (Go to GIGABYTE's website for the latest APU support list.) •• Always turn off the computer and unplug the power cord from the power outlet before installing the APU to prevent hardware damage. •• Locate the pin one of the APU. The APU cannot be inserted if oriented incorrectly. •• Apply an even and thin layer of thermal grease on the surface of the APU. •• Do not turn on the computer if the APU cooler is not installed, otherwise overheating and damage of the APU may occur. •• Set the APU host frequency in accordance with the APU specifications. It is not recommended that the system bus frequency be set beyond hardware specifications since it does not meet the standard requirements for the peripherals. If you wish to set the frequency beyond the standard specifications, please do so according to your hardware specifications including the APU, graphics card, memory, hard drive, etc.

Installing the APU Locate the pin one (denoted by a small triangle) of the APU socket and the APU. A Small Triangle Marking Denotes Pin One of the Socket FS1b Socket A Small Triangle Marking Denotes APU Pin One APU 1-4 Installing the Memory Read the following guidelines before you begin to install the memory: •• Make sure that the motherboard supports the memory. It is recommended that memory of the same capacity, brand, speed, and chips be used. (Go to GIGABYTE's website for the latest supported memory speeds and memory modules.) •• Always turn off the computer and unplug the power cord from the power outlet before installing the memory to prevent hardware damage. •• Memory modules have a foolproof design. A memory module can be installed in only one direction. 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, first make sure the power supply is turned off and all devices are properly installed. The power connector possesses a foolproof design.

Connect the power supply cable to the power connector in the correct orientation. The 12V power connector mainly supplies power to the APU. If the 12V power connector is not connected, the computer will not start. To meet expanssignments and the pin assignments are matched correctly. - 13 _ S S_ _ B 1 2 3 PWR_LED- HD+ HDRESRES+ CICI+ 1 2 3 1 19 F_ 1 1 1 2 3 7) SPDIF_O (S/PDIF Out Header) This header supports digital S/PDIF Out and connects a S/PDIF digital audio cable (provided by expansion cards) for digital audio output from your motherboard to certain expansion cards like graphics cards and sound cards.

For example, some graphics cards may require you to use a S/PDIF digital audio cable for digital audio output from your motherboard to your graphics card if you wish to connect an HDMI display to the graphics card and have digital audio output from the HDMI display at the same time. For information about connecting the S/PDIF digital audio cable, carefully read the manual for your expansion card. Pin No. 1 2 Definition SPDIFO GND 1 8) F_AUDIO (Front Panel Audio Header) The front panel audio header supports Intel High Definition audio (HD) and AC'97 audio. You may connect your chassis front panel audio module to this header.

Make sure the wire assignments of the module connector match the pin assignments of the motherboard header. Incorrect connection between the module connector and the motherboard header will make the device unable to work or even damage it. For HD Front Panel Audio: Pin No. Definition 1 MIC2_L 2 GND 3 MIC2_R 4 -ACZ_DET 5 LINE2_R 6 GND 7 FAUDIO_JD 8 No Pin 9 LINE2_L 10 GND For AC'97 Front Panel Audio: Pin No. Definition 1 MIC 2 GND 3 MIC Power 4 NC 5 Line Out (R) 6 NC 7 NC 8 No Pin 9 Line Out (L) 10 NC 9 10 1 2 •• The front panel audio header supports HD audio by default. •• Audio signals will be present on both of the front and back panel audio connections simultaneously. •• Some chassis provide a front panel audio module that has separated connectors on each wire instead of a single plug. For information about connecting the front panel audio module that has different wire assignments, please contact the chassis manufacturer. 9) F_USB1/F_USB2/F_USB3 (USB 2.0/1.

1 Headers) The headers conform to USB 2.0/1.1 specification. Each USB header can provide two USB ports via an optional USB bracket. For purchasing the optional USB bracket, please contact the local dealer. 9 10 1 2 Pin No. 1 2 3 4 5 Definition Power (5V) Power (5V) USB DXUSB DYUSB DX+ Pin No. 6 7 8 9 10 Definition USB DY+ GND GND No Pin NC •• Do not plug the IEEE 1394 bracket (2x5-pin) cable into the USB header. •• Prior to installing the USB bracket, be sure to turn off your computer and unplug the power cord from the power outlet to prevent damage to the USB bracket. - 14 - 10) COM (Serial Port Header) The COM header can provide one serial port via an optional COM port cable.

For purchasing the optional COM port cable, please contact the local dealer. 9 10 1 2 DEBUG PORT Pin No. 1 2 3 4 5 Definition NDCDNSIN NSOUT NDTRGND Pin No. 6 7 8 9 10 Definition NDSRNRTSNCTSNRINo Pin 11) LPT (Parallel Port Header) The LPT header can provide one parallel port via an optional LPT port cable. For purchasing the optional LPT port cable, please contact the local dealer.

1 2 25 26 Pin No. 1 2 3 4 5 6 7 8 9 Definition STBAFDPD0 ERRPD1 INITPD2 SLINPD3 Pin No. 10 11 12 13 14 15 16 17 18 Definition GND PD4 GND PD5 GND PD6 GND PD7 GND Pin No.

19 20 21 22 23 24 25 26 Definition ACKGND BUSY GND PE No Pin SLCT GND 12) CLR_CMOS (Clear CMOS Jumper) Use this jumper to clear the BIOS configuration and reset the CMOS values to factory defaults. To clear the CMOS values, use a metal object like a screwdriver to touch the two pins for a few seconds.

Open: Normal Short: Clear CMOS Values •• Always turn off your computer before clearing the CMOS values. •• After system restart, go to BIOS Setup to load factory defaults (select Load Optimized Defaults) or manually configure the BIOS settings (refer to Chapter 2, "BIOS Setup," for BIOS configurations). - 15 - 14) BAT (Battery) The battery provides power to keep the values (such as BIOS configurations, date, and time information) in the CMOS when the computer is turned off. Replace the battery when the battery voltage drops to a low level, or the CMOS values may not be accurate or may be lost. You may clear the CMOS values by removing the battery: 1. Turn off your computer and unplug the power cord. 2. Gently remove the battery from the battery holder and wait for one minute. (Or use a metal object like a screwdriver to touch the positive and negative terminals of the battery holder, making them short for 5 seconds.) 3.

Replace the battery. 4. Plug in the power cord and restart your computer. •• Always turn off your computer and unplug the power cord before replacing the battery. •• Replace the battery with an equivalent one. Danger of explosion if the battery is replaced with an incorrect model. •• Contact the place of purchase or local dealer if you are not able to replace the battery by yourself or uncertain about the battery model. •• When installing the battery, note the orientation of the positive side (+) and the negative side (-) of the battery (the positive side should face up). •• Used batteries must be handled in accordance with local environmental regulations. Chapter 2 BIOS Setup BIOS (Basic Input and Output System) records hardware parameters of the system in the CMOS on the motherboard.

Its major functions include conducting the Power-On Self-Test (POST) during system startup, saving system parameters and loading operating system, etc. BIOS includes a BIOS Setup program that allows the user to modify basic system configuration settings or to activate certain system features. When the power is turned off, the battery on the motherboard supplies the necessary power to the CMOS to keep the configuration values in the CMOS. To access the BIOS Setup program, press the <Delete> key during the POST when the power is turned on. To upgrade the BIOS, use either the GIGABYTE Q-Flash or @BIOS utility.

•• Q-Flash allows the user to quickly and easily upgrade or back up BIOS without entering the operating system. •• @BIOS is a Windows-based utility that searches and downloads the latest version of BIOS from the Internet and updates the BIOS. •• Because BIOS flashing is potentially risky, if you do not encounter problems using the current version of BIOS, it is recommended that you not flash the BIOS. To flash the BIOS, do it with caution. Inadequate BIOS flashing may result in system malfunction.

•• It is recommended that you not alter the default settings (unless you need to) to prevent system instability or other unexpected results. Inadequately altering the settings may result in system's failure to boot. If this occurs, try to clear the CMOS values and reset the board to default values. (Refer to the "Load Optimized Defaults" section in this chapter or introductions of the battery/clear CMOS jumper in Chapter 1 for how to clear the CMOS values.) - 16 - 2-1 Startup Screen The following startup Logo screen will appear when the computer boots. (Sample BIOS Version: F1) Function Keys On the main menu of the BIOS Setup program, press arrow keys to move among the items and press <Enter> to accept or enter a sub-menu. Or you can use your mouse to select the item you want. •• When the system is not stable as usual, select the Load Optimized Defaults item to set your system to its defaults. •• The BIOS Setup menus described in this chapter are for reference only and may differ by BIOS version. 2-2 M.

I.T. This section provides information on the BIOS version, CPU base clock, CPU frequency, memory frequency, total memory size, CPU temperature, Vcore, and memory voltage. Whether the system will work stably with the overclock/overvoltage settings you made is dependent on your overall system configurations. Incorrectly doing overclock/overvoltage may result in damage to CPU, chipset, or memory and reduce the useful life of these components. This page is for advanced users only and we recommend you not to alter the default settings to prevent system instability or other unexpected results. (Inadequately altering the settings may result in system's failure to boot. If this occurs, clear the CMOS values and reset the board to default values.) - 17 - `` M.I.

T. Current Status This screen provides information on CPU/memory frequencies/parameters. ``Advanced Frequency Settings && Processor Graphics Clock && CPU NorthBridge Frequency Allows you to set the onboard graphics clock. The adjustable range is from 300 MHz to 2000 MHz. Allows you to manually set the CPU North Bridge frequency.

@@The adjustable range is dependent on the CPU being installed. @@@@@@@@@@@@The C6 state is a more enhanced power-saving state than C1. @@ Disabled Disables this function. (Default) Profile1 Uses Profile 1 settings. Profile2 (Note) Uses Profile 2 settings.

* Allows you to set the system memory multiplier. Auto sets memory multiplier according to memory SPD data. @@@@@Options are: Auto (default), Manual, Advanced Manual. When using a non-XMP memory module or Extreme Memory Profile (X.M.P.) is set to Disabled, this item will display as 1.50V. @@Enables or disables memory rank interleaving. @@Auto lets the BIOS automatically configure this setting.*

@@@@@@@@@@@@@@@@@@@@@@When temperature exceeds the threshold, BIOS will emit warning sound. @@@@Check the fan condition or fan connection when this occurs. @@@@@@(Default) Silent Allows the fan to run at slow speeds. @@ Full Speed Allows the fan to run at full speeds. Allows you to control the fan speed. @@Options are: 0.75 PWM value /oC ~ 2.50 PWM value /oC. @@@@You can adjust the fan speed with EasyTune based on your system requirements. (Default) Silent Allows the fan to run at slow speeds.

@@ Full Speed Allows the fan to run at full speeds. Allows you to control the fan speed. This item is configurable only when System Fan Speed Control is set to Manual. Options are: 0.75 PWM value /oC ~ 2.

50 PWM value /oC. && Fan Speed Percentage && System Fan Speed Control && Fan Speed Percentage 2-3 System Information This section provides information on your motherboard model and BIOS version.

You can also select the default language used by the BIOS and manually set the system time. && System Language Selects the default language used by the BIOS. - 20 - && System Date && System Time Sets the system date.

The date format is week (read-only), month, date, and year. Use <Enter> to switch between the Month, Date, and Year fields and use the <Page Up> or <Page Down> key to set the desired value. Sets the system time. The time format is hour, minute, and second. For example, 1 p.m. is 13:0:0. Use <Enter> to switch between the Hour, Minute, and Second fields and use the <Page Up> or <Page Down> key to set the desired value. && Access Level Displays the current access level depending on the type of password protection used. (If no password is set, the default will display as Administrator.

) The Administrator level allows you to make changes to all BIOS settings; the User level only allows you to make changes to certain BIOS settings but not all. 2-4 BIOS Features && Boot Option Priorities && □ ard Drive/CD/DVD ROM Drive/Floppy Drive/Network Device BBS Priorities H Specifies the overall boot order from the available devices. For example, you can set hard drive as the first priority (Boot Option #1) and DVD ROM drive as the second priority (Boot Option #2). The list only displays the device with the highest priority for a specific type. For example, only hard drive defined as the first priority on the Hard Drive BBS Priorities submenu will be presented here. Removable storage devices that support GPT format will be prefixed with "UEFI:" string on the boot device list. To boot from an operating system that supports GPT partitioning, select the device prefixed with "UEFI:" string. Or if you want to install an operating system that supports GPT partitioning such as Windows 7 64-bit, select the optical drive that contains the Windows 7 64-bit installation disk and is prefixed with "UEFI:" string. Specifies the boot order for a specific device type, such as hard drives, optical drives, floppy disk drives, and devices that support Boot from LAN function, etc. Press <Enter> on this item to enter the submenu that presents the devices of the same type that are connected.

This item is present only if at least one device for this type is installed. - 21 - && Bootup NumLock State && Security Option Enables or disables Numlock feature on the numeric keypad of the keyboard after the POST. (Default: Enabled) Specifies whether a password is required every time the system boots, or only when you enter BIOS Setup. After configuring this item, set the password(s) under the Administrator Password/User Password item. □Setup □ password is only required for entering the BIOS Setup program.

□ A □System □A password is required for booting the system and for entering the BIOS Setup program. @@Disabled skips the GIGABYTE Logo when the system starts up. @@Ultra Fast provides the fastest bootup speed. @@□Auto □ Enables legacy option ROM only. □EFI Driver □ Enables EFI option ROM. @@@@@@@@@@This item is disabled when Fast Boot is set to Ultra Fast. @@@@@@This item is disabled when Fast Boot is set to Ultra Fast. □Disabled □ Disables booting from the network. (Default) □Enabled □ Enables booting from the network. This item is configurable only when Fast Boot is set to Enabled or Ultra Fast. Allows you to select the operating system to be installed. (Default: Other OS) && Full Screen LOGO Show && Fast Boot && VGA Support && USB Support && PS2 Devices Support && NetWork Stack Driver Support && Windows 8 Features && CSM Support Enables or disables UEFI CSM (Compatibility Support Module) to support a legacy PC boot process. □Always □ Enables UEFI CSM. (Default) □Never □ Disables UEFI CSM and supports UEFI BIOS boot process only. This item is configurable only when Windows 8 Features is set to Windows 8 or Windows 8 WHQL.

- 22 - && Boot Mode Selection && LAN PXE Boot Option ROM Allows you to select which type of operating system to boot. □UEFI and Legacy □ □ Allows booting from operating systems that support legacy option ROM or UEFI option ROM. (Default) □Legacy Only □ □ Allows booting from operating systems that only support legacy Option ROM. □UEFI Only □ □ Allows booting from operating systems that only support UEFI Option ROM. This item is configurable only when CSM Support is set to Always. Allows you to select whether to enable the legacy option ROM for the LAN controller. (Default: Disabled) This item is configurable only when CSM Support is set to Always. && Storage Boot Option Control && Other PCI Device ROM Priority Allows you to select whether to enable the UEFI or legacy option ROM for the storage device controller. □Disabled □ Disables option ROM. □Legacy only □ Enables legacy option ROM only.

(Default) □UEFI only □ Enables UEFI option ROM only. □Legacy First □ Enables legacy option ROM first. □UEFI First □ Enables UEFI option ROM first. This item is configurable only when CSM Support is set to Always. Allows you to select whether to enable the UEFI or Legacy option ROM for the PCI device controller other than the LAN, storage device, and graphics controllers.

□Legacy OpROM □ Enables legacy option ROM only. □UEFI OpROM □ Enables UEFI option ROM only. (Default) This item is configurable only when CSM Support is set to Always. Disables or enables booting from the network to install a GPT format OS, such as installing the OS from the Windows Deployment Services server. (Default: Disabled) Enables or disables IPv4 PXE Support.

This item is configurable only when Network Stack is enabled. && Network stack && Ipv4 PXE Support && Ipv6 PXE Support && Administrator Password Enables or disables IPv6 PXE Support. This item is configurable only when Network Stack is enabled. && User Password Allows you to configure an administrator password. Press <Enter> on this item, type the password, and then press <Enter>. You will be requested to confirm the password. Type the password again and press <Enter>. You must enter the administrator password (or user password) at system startup and when entering BIOS Setup. Differing from the user password, the administrator password allows you to make changes to all BIOS settings. Allows you to configure a user password.

Press <Enter> on this item, type the password, and then press <Enter>. You will be requested to confirm the password. Type the password again and press <Enter>. You must enter the administrator password (or user password) at system startup and when entering BIOS Setup. However, the user password only allows you to make changes to certain BIOS settings but not all. □To cancel the password, press <Enter> on the password item and when requested for the password, enter the correct one first.

When prompted for a new password, press <Enter> without entering any password. Press <Enter> again when prompted to confirm. - 23 - 2-5 Peripherals && HD Audio Azalia Device Enables or disables the onboard audio function. (Default: Enabled) If you wish to install a 3rd party add-in audio card instead of using the onboard audio, set this item to Disabled.

Enables or disables the onboard LAN function. (Default: Enabled) If you wish to install a 3rd party add-in network card instead of using the onboard LAN, set this item to Disabled. Enables or disables the integrated USB controller. (Default: Enabled) Allows USB keyboard/mouse to be used in MS-DOS. (Default: Enabled) && Onboard LAN Controller && OnChip USB Controller && Legacy USB Support && XHCI Hand-off Determines whether to enable XHCI Hand-off feature for an operating system without XHCI Hand-off support.

(Default: Enabled) Determines whether to enable EHCI Hand-off feature for an operating system without EHCI Hand-off support. (Default: Disabled) && EHCI Hand-off && Port 60/64 Emulation □ Enables or disables emulation of I/O ports 64h and 60h. This should be enabled for full legacy support for USB keyboards/mice in MS-DOS or in operating system that does not natively support USB devices. (Default: Disabled) && USB Storage Devices □ Displays a list of connected USB mass storage devices. This item appears only when a USB storage device is installed.

- 24 - ``GFX Configuration && Primary Video Device && Integrated Graphics Specifies the first initiation of the monitor display from the installed PCI Express graphics card or the onboard graphics. □IGD Video □ Sets the onboard graphics as the first display. □NB PCIe Slot Video □ □ Sets the PCI Express graphics card on the PCI Express slot controlled by the North Bridge as the first display. (Default) Enables or disables the onboard graphics function. □Auto □The BIOS will automatically enable or disable the onboard graphics depending on □ the graphics card being installed. (Default) □Disabled □ Disables the onboard graphics. □Force □ □ Always activates the onboard graphics, whether or not a PCI Express card is installed. TEnables or disables the onboard HDMI audio function. (Default: Enabled) && Gnb HD Audio ``SATA Configuration && OnChip SATA Channel && OnChip SATA Type Enables or disables the integrated SATA controllers. (Default: Enabled) && PORT0 Hot Plug~PORT1 Hot Plug Allows you to decide whether to configure the SATA controller integrated in the Chipset to AHCI mode.

□IDE □ Configures the SATA controller to IDE mode. □AHCI □ □ Configures the SATA controller to AHCI mode. Advanced Host Controller Interface (AHCI) is an interface specification that allows the storage driver to enable advanced Serial ATA features such as Native Command Queuing and hot plug. (Default) Enables or disable the hot plug capability for each SATA port. (Default: Disabled) Enables or disables each SATA port. (Default: Enabled) && SATA Power on PORT0~SATA Power on PORT1 ``Super IO Configuration && Serial Port A □ This section provides information on the super I/O chip and allows you to configure the serial port and parallel port. Enables or disables the onboard serial port. (Default: Enabled) Enables or disables the onboard parallel port. (Default: Enabled) && Parallel Port && Device Mode This item is configurable only when Parallel Port is set to Enabled. Selects an operating mode for the onboard parallel (LPT) port.

Options are: Standard Parallel Port Mode (Default), EPP Mode (Enhanced Parallel Port), ECP Mode (Extended Capabilities Port), EPP Mode & ECP Mode. - 25 - 2-6 Power Management && Resume by Alarm && HPET Timer Determines whether to power on the system at a desired time. (Default: Disabled) If enabled, set the date and time as following: □Wake up day: Turn on the system at a specific time on each day or on a specific day in a month. □ □Wake up hour/minute/second: Set the time at which the system will be powered on automatically. □ Note: When using this function, avoid inadequate shutdown from the operating system or removal of the AC power, or the settings may not be effective.

Enables or disables High Precision Event Timer (HPET) for Windows 8/7/Vista operating system. (Default: Enabled) Configures the way to turn off the computer in MS-DOS mode using the power button. □Instant-Off □ Press the power button and then the system will be turned off instantly. (Default) □Delay 4 Sec. □ □ Press and hold the power button for 4 seconds to turn off the system.

If the power button is pressed for less than 4 seconds, the system will enter suspend mode. Determines the state of the system after the return of power from an AC power loss. □Memory □ The system returns to its last known awake state upon the return of the AC power. □Always On □ The system is turned on upon the return of the AC power. □Always Off □ system stays off upon the return of the AC power. (Default) □ The Allows the system to be turned on by a PS/2 keyboard wake-up event. Note: To use this function, you need an ATX power supply providing at least 1A on the +5VSB lead. □Disabled □ Disables this function. (Default) □Password □ Set a password with 1~5 characters to turn on the system. □Keyboard 98 Press POWER button on the Windows 98 keyboard to turn on the system.

□ □Any Key □ Press any key to turn on the system. && Soft-Off by PWR-BTTN && AC BACK && Power On By Keyboard - 26 - && Power On Password && Power On By Mouse Set the password when Power On By Keyboard is set to Password. Press <Enter> on this item and set a password with up to 5 characters and then press <Enter> to accept. To turn on the system, enter the password and press <Enter>. Note: To cancel the password, press <Enter> on this item. When prompted for the password, press <Enter> again without entering the password to clear the password settings. Allows the system to be turned on by a PS/2 mouse wake-up event. Note: To use this function, you need an ATX power supply providing at least 1A on the +5VSB lead. □Disabled □ Disables this function. (Default) □Move □ Move the mouse to turn on the system.

□Double Click Double click on left button on the mouse to turn on the system. □ Determines whether to let the system consume least power in S5 (shutdown) state. (Default: Disabled) Note: When this item is set to Enabled, the following functions will become unavailable: PME event wake up, power on by mouse, power on by keyboard, and wake on LAN. && ErP 2-7 Save & Exit && Save & Exit Setup && Exit Without Saving Press <Enter> on this item and select Yes. This saves the changes to the CMOS and exits the BIOS Setup program.

Select No or press <Esc> to return to the BIOS Setup Main Menu. Press <Enter> on this item and select Yes. This exits the BIOS Setup without saving the changes made in BIOS Setup to the CMOS. Select No or press <Esc> to return to the BIOS Setup Main Menu. Press <Enter> on this item and select Yes to load the optimal BIOS default settings.

The BIOS defaults settings help the system to operate in optimum state. Always load the Optimized defaults after updating the BIOS or after clearing the CMOS values. Allows you to select a device to boot immediately. Press <Enter> on the device you select and select Yes to confirm. Your system will restart automatically and boot from that device. - 27 - && Load Optimized Defaults && Boot Override && Save Profiles && Load Profiles This function allows you to save the current BIOS settings to a profile. You can create up to 8 profiles and save as Setup Profile 1~ Setup Profile 8. Press <Enter> to complete. Or you can select Select File in HDD/USB/FDD to save the profile to your storage device. If your system becomes unstable and you have loaded the BIOS default settings, you can use this function to load the BIOS settings from a profile created before, without the hassles of reconfiguring the BIOS settings.

First select the profile you wish to load and then press <Enter> to complete. @@@@@@@@Or click Install Single Items to manually select the drivers you wish to install. - 28 - Regulatory Statements Regulatory Notices This document must not be copied without our written permission, and the contents there of must not be imparted to a third party nor be used for any unauthorized purpose. Contravention will be prosecuted. We believe that the information contained herein was accurate in all respects at the time of printing. GIGABYTE cannot, however, assume any responsibility for errors or omissions in this text. Also note that the information in this document is subject to change without notice and should not be construed as a commitment by GIGABYTE. Our Commitment to Preserving the Environment In addition to high-efficiency performance, all GIGABYTE motherboards fulfill European Union regulations for RoHS (Restriction of Certain Hazardous Substances in Electrical and Electronic Equipment) and WEEE (Waste Electrical and Electronic Equipment) environmental directives, as well as most major worldwide safety requirements. @@@@@@@@Under the Directive, used equipment must be marked, collected separately, and disposed of properly. WEEE Symbol Statement The symbol shown below is on the product or on its packaging, which indicates that this product must not be disposed of with other waste.

Instead, the device should be taken to the waste collection centers for activation of the treatment, collection, recycling and disposal procedure. The separate collection and recycling of your waste equipment at the time of disposal will help to conserve natural resources and ensure that it is recycled in a manner that protects human health and the environment. For more information about where you can drop off your waste equipment for recycling, please contact your local government office, your household waste disposal service or where you purchased the product for details of environmentally safe recycling. ⬜⬜ When your electrical or electronic equipment is no longer useful to you, "take it back" to your local or regional waste collection administration for recycling. ⬜⬜ If you need further assistance in recycling, reusing in your "end of life" product, you may contact us at the Customer Care number listed in your product's user's manual and we will be glad to help you with your effort.

Finally, we suggest that you practice other environmentally friendly actions by understanding and using the energy-saving features of this product (where applicable), recycling the inner and outer packaging (including shipping containers) this product was delivered in, and by disposing of or recycling used batteries properly. With your help, we can reduce the amount of natural resources needed to produce electrical and electronic equipment, minimize the use of landfills for the disposal of "end of life" products, and generally improve our quality of life by ensuring that potentially hazardous substances are not released into the environment and are disposed of properly. - 29 - FCC Notice (U.S.A.

Only) This equipment has been tested and found to comply with the limits for a Class B digital device, pursuant to Part 15 of the FCC Rules. These limits are designed to provide reasonable protection against harmful interference in a residential installation. This equipment generates, uses, and can radiate radio frequency energy and, if not installed and used in accordance with the instructions, may cause harmful interference to radio communications. However, there is no guarantee that interference will not occur in a particular installation. If this equipment does cause harmful interference to radio or television reception, which can be determined by turning the equipment off and on, the user is encouraged to try to correct the interference by one or more of the following measures: ⬜⬜ Reorient or relocate the receiving antenna. ⬜⬜ Increase the separation between the equipment and receiver. ⬜⬜ Connect the equipment into an outlet on a circuit different from that to which the receiver is connected. ⬜⬜ Consult a dealer or experienced TV/radio technician for help. Canada, Industry Canada (IC) Notices / Canada, avis d'Industry Canada (IC) ⬜⬜ This Class B digital apparatus complies with Canadian ICES-003 and RSS-210. ⬜⬜ Operation is subject to the following two conditions: (1) this device may not cause interference, and (2) this device must accept any interference, including interference that may cause undesired operation of the device.

⬜⬜ Cet appareil numérique de classe B est conforme aux normes canadiennes ICES-003 et RSS-210. ⬜⬜ Son fonctionnement est soumis aux deux conditions suivantes : (1) cet appareil ne doit pas causer d'interférence et (2) cet appareil doit accepter toute interférence, notamment les interférences qui peuvent affecter son fonctionnement. - 30 - - 31 - Contact Us GIGA-BYTE TECHNOLOGY CO., LTD. Address: No.6, Bao Chiang Road, Hsin-Tien Dist., New Taipei City 231,Taiwan TEL: +886-2-8912-4000, FAX: +886-2-8912-4005 Tech. and Non-Tech. Support (Sales/Marketing) : http://ggts.gigabyte. com.tw WEB address (English): http://www.gigabyte.com WEB address (Chinese): http://www.gigabyte. tw You may go to the GIGABYTE website, select your language in the language list on the top right corner of the website. •• GIGABYTE Global Service System To submit a technical or non-technical (Sales/Marketing) question, please link to: http://ggts.gigabyte.com.tw Then select your language to enter the system.
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