

Asus ROG STRIX H370-F GAMING User Manual

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ROG STRIX H370-F GAMING



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Summary of Contents for Asus ROG STRIX H370-F GAMING

Page 1 ROG STRIX H370-F GAMING...

<u>Page 2</u> Product warranty or service will not be extended if: (1) the product is repaired, modified or altered, unless such repair, modification of alteration is authorized in writing by ASUS; or (2) the serial number of the product is defaced or missing.

Page 3: Table Of Contents

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Page 6: Safety Information

Safety information Electrical safety • To prevent electrical shock hazard, disconnect the power cable from the electrical outlet before relocating the system. • When adding or removing devices to or from the system, ensure that the power cables for the devices are unplugged before the signal cables are connected. If possible, disconnect all power cables from the existing system before you add a device.

Page 7: About This Guide

Refer to the following sources for additional information and for product and software updates. ASUS website The ASUS website (www.asus.com) provides updated information on ASUS hardware and software products. Optional documentation Your product package may include optional documentation, such as warranty flyers, that may have been added by your dealer.

Page 8 Conventions used in this guide To ensure that you perform certain tasks properly, take note of the following symbols used throughout this manual. DANGER/WARNING: Information to prevent injury to yourself when trying to complete a task. CAUTION: Information to prevent damage to the components when trying to complete a task.

Page 9: Rog Strix H370-F Gaming Specifications Summary

ROG STRIX H370-F GAMING specifications summary Intel Socket 1151 for 8th Generation Intel Core[™] Processor** ® ® Supports 14nm CPU Supports Intel Turbo Boost Technology 2.0* ® * The support of these features depends on the CPU types. ** Refer to www.asus.com for Intel CPU support list.

Page 10 ROG STRIX H370-F GAMING specifications summary Intel I219-V Gigabit LAN- Dual interconnect between the integrated Media ® Access Controller (MAC) and physical layer (PHY) Anti-surge LANGuard ROG GameFirst Technology ROG SupremeFX S1220A 8-Channel High Definition Audio CODEC - Supports up to 32-Bit/192kHz playback*...

Page 11 - Ai Charger ASUS EZ DIY: - ASUS CrashFree BIOS 3 - ASUS EZ Flash 3 ASUS Q-Design: - ASUS Q-Shield - ASUS Q-LED (CPU, DRAM, VGA, Boot Device LED) ASUS Special Features - ASUS Q-Slot - ASUS Q-DIMM Gamer's Guardian...

Page 12 1 x Front panel audio connector (AAFP) 1 x 128 Mb Flash ROM, UEFI AMI BIOS, PnP, SM BIOS 3.1, ACPI 6.1, Multi-language BIOS, ASUS EZ Flash 3, CrashFree BIOS 3, Secure Erase, BIOS User Profile, F11 EZ RAID Wizard, F6 Qfan Control, F3 My Favorites, Last...

Page 13 * ROG GameFirst IV is only available for Windows ® 10 64-bit. Operating Windows 10 64-bit ® system support Form factor ATX Form Factor, 12"x 9.6" (30.5cm x 24.4cm) Specifications are subject to change without notice. Please refer to the ASUS website for the latest specifications. xiii...

Page 14: Package Contents

Package contents Check your motherboard package for the following items. Motherboard 1 x ROG STRIX H370-F GAMING motherboard 2 x 2-in-1 SATA 6Gb/s cables Cables 1 x Extension cable for RGB Strips 1 x Cable Ties set 1 x ROG Strix Series sticker...

Page 15: Installation Tools And Components

Installation tools and components Intel 1151 CPU ® Intel 1151 compatible CPU Fan ® Phillips (cross) screwdriver SATA hard disk drive PC chassis 1 bag of screws DIMM Power supply unit

SATA optical disc drive (optional) Graphics card The tools and components listed above are not included in the motherboard package.

Page 17: Chapter 1: Product Introduction

Chapter 1: Product Introduction Product Introduction Motherboard overview 1.1.1 Before you proceed Take note of the following precautions before you install motherboard components or change any motherboard settings. • Unplug the power cord from the wall socket before touching any component. • Before handling components, use a grounded wrist strap or touch a safely grounded object or a metal object, such as the power supply case, to avoid damaging them due to static electricity. • Hold component, place it on a grounded antistatic pad or in the bag that came with the component. • Before you install or remove any component, ensure that the ATX power supply is switched off or the power cord is detached from the power supply. Failure to do so may cause severe damage to the motherboard, peripherals, or components. ROG STRIX H370-F GAMING...

Page 18: Motherboard Layout

1.1.2 Motherboard layout Refer to 1.1.8 Internal connectors and 2.2.1 Rear I/O connection for more information about rear panel connectors and internal connectors. Chapter 1: Product Introduction...

Page 19 DDR4 DIMM slots USB 3.1 Gen 1 connectors (20-1 pin U31G1_78, U31G1_56) 1-14 M.2 sockets (M.2_1; M.2_2) 1-18 3D Mount 1-10 Intel Serial ATA 6 Gb/s connectors (7-pin SATA6G_1-6) 1-12 ® System panel connector (20-3 pin PANEL) 1-20 10. Thermal sensor connector (2-pin T_SENSOR) 1-18 11. Clear RTC RAM jumper (2-pin CLRTC) 12. USB 2.0 connector (10-1 pin USB910) 1-15 13. TPM connector (14-1 pin TPM) 1-14 14. AURA RGB header (4-pin RGB_HEADER) 1-16 15. Serial port connector (10-1 pin COM) 1-13 16. Front panel audio connector (10-1 pin AAFP) 1-13 17. LED connector (13-pin LED1_CON1) 1-15 ROG STRIX H370-F GAMING...

Page 20: Central Processing Unit (Cpu)

1.1.3 Central Processing Unit (CPU) The motherboard comes with a surface mount LGA1151 socket designed for the 8th Generation Intel Core[™] processor. ® Ensure that you install the correct CPU designed for LGA1151 socket only. DO NOT install a CPU designed for LGA1150, LGA1155 and LGA1156 sockets in the LGA1151 socket. • Ensure that all power cables are unplugged before installing the CPU. • Upon purchase of the motherboard, ensure that the PnP cap is on the socket and the socket contacts are not bent. Contact your retailer immediately if the PnP cap is missing, or if you see any damage to the PnP cap/socket contacts/motherboard components. ASUS will shoulder the cost of repair only if the damage is shipment/ transit-related. • Keep the cap after installing the motherboard comes with the cap on the LGA1151 socket. • The product warranty does not cover damage to the socket contacts resulting from incorrect CPU installation/removal, or misplacement/loss/incorrect removal of the PnP cap. Chapter 1: Product Introduction...

Page 21: System Memory

1.1.4 System memory The motherboard comes with four DDR4 (Double Data Rate 4) Quad Inline Memory Modules (DIMM) slots. A DDR4 module is notched differently from a DDR, DDR2, or DDR3 module. DO NOT install a DDR, DDR2, or DDR3 memory module to the DDR4 slot. Recommended memory configurations The recommended memory DIMM slots are marked with an asterix (*). ROG STRIX H370-F GAMING...

Page 22 Memory configurations You may install 1 GB, 2 GB, 4 GB, 8 GB and 16 GB unbuffered and non-ECC DDR4 DIMMs into the DIMM sockets. You may install varying memory sizes in Channel A and Channel B. The system maps the total size of the lower-sized channel for the dual-channel configuration. Any excess memory from the higher-sized channel is then mapped for single-channel operation. • The default memory operation frequency is dependent on its Serial Presence Detect (SPD), which is the standard way of accessing information from a memory module. Under the default state, some memory modules for overclocking may operate at a lower frequency than the vendor-marked value. • For system stability, use a more efficient memory cooling system to support a full memory load (4 DIMMs) or overclocking condition. • Always install the DIMMS with the same CAS Latency. For an optimum compatibility, we recommend that you install memory modules of the same version or data code (D/C) from the same vendor. Check with the vendor to get the correct memory modules. Chapter 1: Product Introduction...

Page 23: Expansion Slots

1.1.5 Expansion slots Unplug the power cord before adding or removing expansion cards. Failure to do so may cause you physical injury and damage motherboard components. Slot No. Slot Description PCIEX1_1 slot PCIEX16_1 slot PCIEX1_2 slot PCIEX16_2 slot PCIEX1_3 slot PCIEX1_4 slot ROG STRIX H370-F GAMING...

Page 24 PCI Express 3.0 operating mode VGA configuration PCIEX16_1 PCIEX16_2 x16 (single VGA Single VGA/PCIe card recommended) • We recommend that you provide sufficient power when running CrossFireX[™] mode. • Connect a chassis fan to the motherboard connector labeled CHA_FAN1-2 when using multiple graphics cards for better thermal environment. IRQ assignments for this motherboard PCIEX1_1 shared PCIEX16_1 shared PCIEX1_2 shared PCIEX16_2 shared PCIEX1_3 shared PCIEX1_4 shared I.G.F.X. shared Intel LAN Controller shared SATA Controller shared High Definition Audio shared Intel XHCI Controller...

Page 25: Jumper And Holes

1.1.6 Jumper and holes Clear RTC RAM jumper (2-pin CLRTC) This jumper allows you to clear the Real Time Clock (RTC) RAM in CMOS. You can clear the CMOS memory of date, time, and system setup parameters by erasing the CMOS RTC RAM data. The onboard button cell battery powers the RAM data in CMOS, which include system setup information such as system passwords. To erase the RTC RAM: Turn OFF the computer and unplug the power cord. Short-circuit pin 1-2 with a metal object or jumper cap for about 5-10 seconds. Plug the power cord and turn ON the computer. Hold down the <Delete> key during the boot process and enter BIOS setup to reenter data. Except when clearing the RTC RAM, never remove the cap on CLRTC jumper default position. Removing the cap will cause system boot failure! • If the steps above do not help, remove the onboard battery and move the jumper again to clear the CMOS RTC RAM data. After the CMOS clearance, reinstall the battery. • You do not need to clear the RTC when the system hangs due to overclocking. For system failure due to overclocking, use the C.P.R. (CPU Parameter Recall) feature. Shut down and reboot the system so the BIOS can automatically reset parameter settings to default values. • Due to the chipset behavior, AC power off is required to enable C.P.R. function. You must turn off and on the power supply or unplug and plug the power cord before rebooting the system. ROG STRIX H370-F GAMING...

Page 26 3D Mount Secure 3D printed parts to these 3D Mount holes for a personalized motherboard. • Download 3D source files at http://www.asus.com. • Use the bundled 3D Mount screws to install the 3D printed parts. Chapter 1: Product Introduction 1-10...

Page 27: Onboard Leds

1.1.7 Onboard LEDs Q LEDs (CPU, DRAM, VGA, BOOT) Q LEDs check key components (CPU, DRAM, VGA card, and booting devices) in sequence during motherboard booting process. If an error is found, the corresponding LED remains lit until the problem is solved. This user-friendly design provides an intuitive way to locate the root problem within seconds. The Q LEDs provide the most probable cause of an error code as a starting point for troubleshooting. The actual cause may vary from case to case. Standby Power LED The motherboard comes with a standby power LED. The LED lights up to indicate that the system is ON, in sleep mode, or in soft-off mode. This is a reminder that you should shut down the system and unplug the power cable before removing or plugging in any motherboard component. The illustration below shows the location of the onboard LED. ROG STRIX H370-F GAMING 1-11...

Page 28: Internal Connectors

1.1.8 Internal connectors Intel Serial ATA 6 Gb/s connectors (7-pin SATA6G_1-6) ® These connectors connect to Serial ATA 6 Gb/s hard disk drives via Serial ATA 6 Gb/s signal cables. If you installed Serial ATA hard disk drives, you can create a RAID 0, 1, 5, and 10 configuration with the Intel Rapid Storage Technology through the onboard Intel ® ® H370 chipset. • These connectors are set to [AHCI] by default. If you intend to create a Serial ATA RAID set using these connectors, set the SATA Mode item in the BIOS to [Intel RST Premium With Intel Optane System Acceleration (RAID)]. • Before creating a RAID set, refer to the manual bundled in the motherboard support DVD. Chapter 1: Product Introduction 1-12...

<u>Page 29</u> Front panel audio connector (10-1 pin AAFP) This connector is for a chassis-mounted front panel audio I/O module that supports HD Audio standard. Connect one end of the front panel audio I/O module cable to this connector. We recommend that you connect a high-definition front panel audio module to this connector to avail of the motherboard's high-definition audio capability. Serial port connector (10-1 pin COM) This connector is for a serial (COM) port. Connect the serial port module cable to this connector, then install the module to a slot opening at the back of the system chassis. The COM module is purchased separately. ROG

STRIX H370-F GAMING 1-13...

Page 30 TPM connector (14-1 pin TPM) This connector supports a Trusted Platform Module (TPM) system, which securely stores keys, digital certificates, passwords and data. A TPM system also helps enhance network security, protect digital identities, and ensures platform integrity. The TPM module is purchased separately. USB 3.1 Gen 1 connectors (20-1 pin U31G1_78, U31G1_56) These connectors allow you to connect a USB 3.1 Gen 1 module for additional USB 3.1 Gen 1 front or rear panel ports. With an installed USB 3.1 Gen 1 module, you can enjoy all the benefits of USB 3.1 Gen 1 including faster data transfer speeds of up to 5 Gbps, faster charging time for USB-chargeable devices, optimized power efficiency, and backward compatibility with USB 2.0. The USB 3.1 Gen 1 module is purchased separately. Chapter 1: Product Introduction 1-14...

Page 31 USB 2.0 connector (10-1 pin USB910) This connector is for USB 2.0 ports. Connect the USB module cable to these connectors, then install the module to a slot opening at the back of the system chassis. This USB connector complies with USB 2.0 specification that supports up to 480 Mb/s connection speed. DO NOT connect a 1394 cable to the USB connectors. Doing so will damage the motherboard! The USB 2.0 module is purchased separately. LED connector (13-pin LED1_CON1) This connector is for connecting the LED card located under the motherboard back IO cover. ROG STRIX H370-F GAMING 1-15...

Page 32 AURA RGB headers (4-pin RGB_HEADER) This connector is for RGB LED strips. The RGB header supports 5050 RGB multi-color LED strips (12V/G/R/B), with a maximum power rating of 3A (12V), and no longer than 3 m. Before you install or remove any component, ensure that the ATX power supply is switched off or the power cord is detached from the power supply. Failure to do so may cause severe damage to the motherboard, peripherals, or components. • Actual lighting and color will vary with LED strip. • If your LED strip does not light up, check if the RGB LED extension cable and the RGB LED strip is connected in the correct orientation, and the 12V connector is aligned with the 12V header on the motherboard. • The LED strip will only light up when the system is operating. • The LED strip is purchased separately. Chapter 1: Product Introduction 1-16...

Page 33 Fan and pump connectors (4-pin CPU_FAN; 4-pin CPU_OPT; 4-pin AIO_PUMP; 4-pin M.2_FAN; 5-pin EXT_FAN; 4-pin CHA_FAN1-2) Connect the fan cables to the fan connectors on the motherboard, ensuring that the black wire of each cable matches the ground pin of the connector. The EXT_FAN connector is only for the fan extension card. For more details on the fan extension card, please refer to the To install Fan Extension Card section in this guide. • DO NOT forget to connect the fan cables to the fan connectors. Insufficient air flow inside the system may damage the motherboard components. These are not jumpers! Do not place jumper caps on the fan connectors! • Ensure that the CPU fan cable is securely installed to the CPU fan connector. • Connect the fan cables to the CPU_FAN and/or CPU_OPT header(s). • The FAN Extension card is purchased separately. ROG STRIX H370-F GAMING 1-17...

Page 34 Thermal sensor connector (2-pin T_SENSOR) This connector is for the thermistor cable that allows you to monitor the temperature of your motherboard's critical components and connected devices. M.2 sockets (M.2_1; M.2_2) These sockets allow you to install M.2 SSD modules. • M.2_1 socket supports PCIe 3.0 x2 and SATA mode M Key design and type 2242 / 2260 / 2280 PCIe and SATA storage devices. • M.2_2 socket supports PCIe 3.0 x4 M Key design and type 2242 / 2260 / 2280 PCIe storage devices. • These sockets support IRST (Intel Rapid Storage Technology). ® The M.2 SSD module is purchased separately. Chapter 1: Product Introduction 1-18...

Page 35 ATX power connectors (24-pin EATXPWR; 8-pin EATX12V) These connectors are for ATX power supply plugs. The power supply plugs are designed to fit these connectors in only one orientation. Find the proper orientation and push down firmly until the connectors completely fit. • For a fully configured system, we recommend that you use a power supply unit (PSU) that complies with ATX 12 V Specification 2.0 (or later version) and provides a minimum power of 350 W. • DO NOT forget to connect the 8-pin EATX12V power plug. Otherwise, the system will not boot. • We recommend that you use a PSU with a higher power output when configuring a system with more power-consuming devices. The system may become unstable or may not boot up if the power is inadequate. • If you want to use two or more high-end PCI Express x16 cards, use a PSU with 1000W power or above to ensure the system stability. ROG STRIX H370-F GAMING 1-19...

Page 36 System panel connector (20-3 pin PANEL) This connector supports several chassismounted functions. • System power LED (2-pin or 3-1 pin PLED) The 2-pin or 3-1 pin connector is for the system power LED. Connect the chassis power LED cable to this connector. The system power LED lights up when you turn on the system power, and blinks when the system is in sleep mode. • Hard disk drive activity LED (2-pin HDD_LED) This 2-pin connector is for the HDD Activity LED. Connect the HDD Activity LED cable to this connector. The HDD LED lights up or flashes when data is read from or written to the HDD. • System warning speaker (4-pin SPEAKER) This 4-pin connector is for the chassis-mounted system warning speaker. The speaker allows you to hear system beeps and warnings. • ATX power button/soft-off button (2-pin PWRSW) This connector is for the system power button. Pressing the power button turns the system on or puts the system in sleep or soft-off mode depending on the operating system settings. Pressing the power switch for more than four seconds while the system is ON turns the system OFF. • Reset button (2-pin RESET) This 2-pin connector is for the chassis-mounted reset button for system reboot without turning off the system power. Chapter 1: Product Introduction 1-20...

Page 37: Chapter 2: Basic Installation

2.1.1 CPU installation Ensure that you install the correct CPU designed for LGA1151 socket only. DO NOT install a CPU designed for LGA1155 and LGA1156 sockets on the LGA1151 socket. ROG STRIX H370-F GAMING...

Page 38 Chapter 2: Basic Installation...

Page 39: Cooling System Installation

2.1.2 Cooling system installation Apply the Thermal Interface Material to the CPU cooling system and CPU before you install the cooling system, if necessary. To install a CPU heatsink and fan assembly ROG STRIX H370-F GAMING...

Page 40 To install an AIO cooler AIO_PUMP CPU_FAN CPU_OPT Chapter 2: Basic Installation...

Page 41: Motherboard Installation

Place the motherboard into the chassis, ensuring that its rear I/O ports are aligned to the chassis' rear I/O panel. Place nine (9) screws into the holes indicated by circles to secure the motherboard to the chassis. DO NOT overtighten the screws! Doing so can damage the motherboard. ROG STRIX H370-F GAMING...

Page 42: Dimm Installation

2.1.4 DIMM installation To remove a DIMM Chapter 2: Basic Installation...

Page 43: Atx Power Connection

2.1.5 ATX power connection Ensure to connect the 8-pin power plug. 2.1.6 SATA device connection ROG STRIX H370-F GAMING...

Page 44: Front I/O Connector

2.1.7 Front I/O connector To install front panel connector To install front panel audio connector AAFP To install USB 3.1 Gen 1 connector To install USB 2.0 connector USB 3.1 Gen 1 USB 2.0 Chapter 2: Basic Installation...

Page 45: Expansion Card Installation

2.1.8 Expansion card installation To install PCIe x16 cards To install PCIe x1 cards ROG STRIX H370-F GAMING...

Page 46 To install FAN EXTENSION CARD • The illustrations in this section are for reference only. The motherboard layout may vary with models, but the installation steps are the same for all models. • The FAN Extension card is purchased separately. Chapter 2: Basic Installation 2-10...

Page 47 To install Hyper M.2 x4 card The SSD card is purchased separately. ROG STRIX H370-F GAMING 2-11...

Page 48: M.2 Installation

2.1.9 M.2 installation For type 2280 M.2 For type 2260 / 2242 M.2 The M.2 is purchased

Page 49: Motherboard Rear And Audio Connections

* and ** : Refer to the tables on the next page for LAN port LEDs and audio port definitions. • USB 3.1 Gen 1/Gen 2 devices can only be used as data storage only. • We strongly recommend that you connect your devices to ports with matching data transfer rate. Please connect your USB 3.1 Gen 2 devices to USB 3.1 Gen 2 ports for faster and better performance for your devices. ROG STRIX H370-F GAMING 2-13...

<u>Page 50</u> * LAN ports LED indications Activity Link LED Speed LED Status Description Status Description ACT/LINK SPEED No link 10 Mbps connection Orange Linked Orange 100 Mbps connection Orange (Blinking) Data activity Green 1 Gbps connection Orange (Blinking Ready to wake up LAN port then steady) from S5 mode...

Page 51: Audio I/O Connections

2.2.2 Audio I/O connections Audio I/O ports Connect to Headphone and Mic Connect to Stereo Speakers Connect to 2-channel Speakers ROG STRIX H370-F GAMING 2-15...

Page 52 Connect to 4-channel Speakers Connect to 5.1-channel Speakers Connect to 7.1-channel Speakers Chapter 2: Basic Installation 2-16...

Page 53: Starting Up For The First Time

Turning off the computer While the system is ON, press the power button for less than four seconds to put the system on sleep mode or soft-off mode, depending on the BIOS setting. Press the power switch for more than four seconds to let the system enter the soft-off mode regardless of the BIOS setting. ROG STRIX H370-F GAMING 2-17...

Page 54 Chapter 2: Basic Installation 2-18...

Page 55: Chapter 3: Bios Setup

BIOS Setup Knowing BIOS The new ASUS UEFI BIOS is a Unified Extensible Interface that complies with UEFI architecture, offering a user-friendly interface that goes beyond the traditional keyboard- only BIOS controls to enable a more flexible and convenient mouse input. You can easily navigate the new UEFI BIOS with the same smoothness as your operating system.

Page 56: Bios Setup Program

RTC RAM via the Clear CMOS jumper. • The BIOS setup program does not support the Bluetooth devices. Please visit ASUS website for the detailed BIOS content manual. BIOS menu screen The BIOS Setup program can be used under two modes: EZ Mode and Advanced Mode.

Page 57: Advanced Mode

Menu bar Language MyFavorite(F3) Qfan Control(F6) EZ Tuning Wizard(F11) AURA ON/OFF(F4) Menu items General help Go back to EZ Mode Hot Keys Last modified settings Search on the FAQ Displays a quick overview of the system status ROG STRIX H370-F GAMING...

Page 58 Menu bar The menu bar on top of the screen has the following main items: For saving the frequently-used system settings and configuration. My Favorites For changing the basic system configuration Main For changing the overclocking settings Ai Tweaker For changing the advanced system settings Advanced For displaying the system temperature, power status, and changing Monitor...

Page 59 Move your mouse over this button to show a QR code, scan this QR code on your mobile device to connect to the BIOS FAQ web page of the ASUS support website. You can also scan the following QR code:...

Page 60: Ez Mode

3.2.2 EZ Mode The EZ Mode provides you an overview of the basic system information, and allows you to select the display language, system performance, mode and boot device priority. To access the Advanced Mode, select Advanced Mode or press the <F7> hotkey for the

advanced BIOS settings.

Page 61: Qfan Control

Click to activate DC Mode configured PWM Mode Select a profile to Click to apply the fan setting apply to your fans Click to undo the Click to go back to main menu changes Select to manually configure your fans ROG STRIX H370-F GAMING...

<u>Page 62</u> Configuring fans manually Select Manual from the list of profiles to manually configure your fans' operating speed. Speed points Select to manually configure your fans To configure your fans: Select the fan that you want to configure and to view its current status. Click and drag the speed points to adjust the fans'...

Page 63: Ez Tuning Wizard

Ensure that your HDDs have no existing RAID volumes. • Ensure to connect your HDDs to Intel SATA connectors. ® Select the port that you want to set to [RAID] mode, PCIE or SATA, then click Next. ROG STRIX H370-F GAMING...

Page 64 Select the type of storage for your RAID, Easy Backup or Super Speed, then click Next. For Easy Backup, click Next then select from Easy Backup (RAID 1) or Easy Backup (RAID 10). You can only select Easy Backup (RAID 10) if you connect four (4) HDDs. For Super Speed, click Next then select from Super Speed (RAID 0) or Super Speed (RAID 5).

Page 65: My Favorites

My Favorites is your personal space where you can easily save and access your favorite BIOS items. My Favorites comes with several performance, power saving, and fast boot related items by default. You can personalize this screen by adding or removing items. ROG STRIX H370-F GAMING 3-11...

<u>Page 66</u> Adding items to My Favorites To add BIOS items: Press <F3> on your keyboard or click from the BIOS screen to open Setup Tree Map screen. On the Setup Tree Map screen, select the BIOS items that you want to save in My Favorites screen.

Page 67: Main Menu

This item allows you to set the memory operating frequency. The configurable options vary with the BCLK (base clock) frequency setting. Select the auto mode to apply the optimized setting. Configuration options: [Auto] [DDR4-800MHz] - [DDR4-8533MHz] ROG STRIX H370-F GAMING 3-13...

Page 68: Advanced Menu

Internal CPU Power Management The subitems in this menu allow you to set the CPU ratio and features. Intel(R) SpeedStep(tm) Allows the operating system to dynamically adjust the processor voltage and cores frequency to decrease the average power consumption and decrease average heat production.

Page 69: System Agent (Sa) Configuration

SMART Self Test SMART (Self-Monitoring, Analysis and Reporting Technology) is a monitoring system that shows a warning message during POST (Power-on Self Test) when an error occurs in the hard disks. Configuration options: [On] [Off] ROG STRIX H370-F GAMING 3-15...

Page 70: Pch-Fw Configuration

SATA6G_1(Gray) - SATA6G_6(Gray) SATA6G_1(Gray) - SATA6G_6(Gray) This item allows you to enable or disable the selected SATA port. Configuration options: [Disabled] [Enabled] Hot Plug These items appears only when the SATA Mode Selection is set to [AHCI] and allows you to enable or disable SATA Hot Plug Support. Configuration options: [Disabled] [Enabled] 3.6.6 PCH-FW Configuration...

Page 71: Usb Configuration

Detects the type of water pump installed and automatically switches the control modes. [DC mode] Enable the Water Pump control in DC mode for 3-pin chassis fan. [PWM mode] Enable the Water Pump control in PWM mode for 4-pin chassis fan. ROG STRIX H370-F GAMING 3-17...

Page 72: Boot Menu

Boot menu The Boot menu items allow you to change the system boot options. Fast Boot [Disabled] Allows your system to go back to its normal boot speed. [Enabled] Allows your system to accelerate the boot speed. The following items appear only when you set the Fast Boot to [Enabled]. Next Boot after AC Power Loss [Normal Boot] Returns to normal boot on the next boot after an AC power loss.

Page 73: Tool Menu

3.9.1 ASUS EZ Flash 3 Utility This item allows you to run ASUS EZ Flash 3. When you press <Enter>, a confirmation message appears. Use the left/right arrow key to select between [Yes] or [No], then press <Enter> to confirm your choice.

Page 74: Secure Erase

To launch Secure Erase, click Tool > Secure Erase on the Advanced mode menu. Check the ASUS support site for a full list of SSDs tested with Secure Erase. The drive may become unstable if you run Secure Erase on an incompatible SSD.

Page 75: Asus Overclocking Profile

This item displays the information and recommended configuration for the PCIE slots that the graphics card is installed in your system. This feature is only supported on selected ASUS graphics cards. Bus Interface This item allows you to select the bus interface.

Page 76: Exit Menu

 ® ASUS EZ Flash 3: Updates the BIOS using a USB flash drive. ASUS CrashFree BIOS 3: Restores the BIOS using the motherboard support DVD or a USB flash drive when the BIOS file fails or gets corrupted. 3.11.1...

Page 77: Asus Ez Flash 3

3.11.2 ASUS EZ Flash 3 ASUS EZ Flash 3 allows you to download and update to the latest BIOS through the Internet without having to use a bootable floppy disk or an OS-based utility. Updating through the Internet varies per region and Internet conditions. Check your local Internet connection before updating through the Internet.

<u>Page 78</u> To update the BIOS by Internet: Enter the Advanced Mode of the BIOS setup program. Go to the Tool menu to select ASUS EZ Flash Utility and press <Enter>. Select via Internet. Press the Left/Right arrow keys to select an Internet connection method, and then press <Enter>.

Page 79: Asus Crashfree Bios 3

The BIOS file in the motherboard support DVD may be older than the BIOS file published on the ASUS official website. If you want to use the newer BIOS file, download the file at https://www.asus.com/support/ and save it to a USB flash drive.

Page 80 Chapter 3: BIOS Setup 3-26...

Page 81: Chapter 4: Raid Support

With the RAID 10 configuration you get all the benefits of both RAID 0 and RAID 1 configurations. Use four new hard disk drives or use an existing drive and three new drives for this setup. ROG STRIX H370-F GAMING...

Page 82: Installing Serial Ata Hard Disks

4.1.2 Installing Serial ATA hard disks The motherboard supports Serial ATA hard disk drives. For optimal performance, install identical drives of the same model and capacity when creating a disk array. To install the SATA hard disks for a RAID configuration: Install the SATA hard disks into the drive bays.

Page 83 When the RAID Level item is selected, press <Enter> to select the RAID level to create, and then press <Enter>. Under Select Disks, press <Enter> and select X for the disks you want to include in the RAID set. ROG STRIX H370-F GAMING...

Page 84 When the Strip Size item is selected, press <Enter> to select strip size for the RAID array (for RAID 0, 10 and 5 only), and then press <Enter>. The available strip size values range from 4 KB to 128 KB. The following are typical values: RAID 0: 128 KB RAID 10: 64 KB...

Page 85 <Enter>. The following screen appears: When the Delete item is selected, press <Enter>, then select Yes to delete the RAID volume and return to the Intel Rapid Storage Technology menu, or select No to ® cancel. ROG STRIX H370-F GAMING...

Page 86: Intel ® Rapid Storage Technology Option Rom Utility

4.1.4 Intel Rapid Storage Technology Option ROM utility To enter the Intel Rapid Storage Technology Option ROM utility: Turn on the system. During POST, press <Ctrl> + <l> to display the utility main menu. RAID Volumes: None defined. Physical Devices: Port Device Model...

Page 87 Serial # Size Status ST3160812AS 9LS0HJA4 149.0GB Non-RAID Disk ST3160812AS 9LS0F4HL 149.0GB Non-RAID Disk ST3160812AS 3LS0JYL8 149.0GB Non-RAID Disk ST3160812AS 9LS0BJ5H 149.0GB Non-RAID Disk Select 2 to 6 to use in creating the volume. [↑↓]-Prev/Next [SPACE]-SelectDisk [ENTER]-Done ROG STRIX H370-F GAMING...

Page 88 Use the up/down arrow key to select a drive, and then press <Space> to select. A small triangle marks the selected drive. Press <Enter> after completing your selection. Use the up/down arrow key to select the strip size for the RAID array (for RAID 0, 10 and 5 only),and then press <Enter>.

<u>Page 89</u> (This does not apply to Recovery volumes) Are you sure you want to delete "Volume0"? (Y/N): Press <Y> to delete the RAID set and return to the utility main menu, or press <N> to return to the DELETE VOLUME menu. ROG STRIX H370-F GAMING...

Page 90: Creating A Raid Driver Disk

Exiting the Intel Rapid Storage Technology Option ROM utility ® To exit the utility: From the utility main menu, select 5. Exit, and then press <Enter>. The following warning message appears: [CONFIRM EXIT] Are you sure you want to exit? (Y/N): Press <Y>...

Page 91: Appendix

Consult the dealer or an experienced radio/TV technician for help. The use of shielded cables for connection of the monitor to the graphics card is required to assure compliance with FCC regulations. Changes or modifications to this unit not expressly approved by the party responsible for compliance could void the user's authority to operate this equipment. ROG STRIX H370-F GAMING...

Page 92 Compliance Statement of Innovation, Science and Economic Development Canada (ISED) This device complies with Innovation, Science and Economic Development Canada licence exempt RSS standard(s). 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.

<u>Page 93</u> ASUS Recycling/Takeback Services ASUS recycling and takeback programs come from our commitment to the highest standards for protecting our environment. We believe in providing solutions for you to be able to responsibly recycle our products, batteries, other components as well as the packaging materials.

<u>Page 94</u> доступний на: www.asus.com/support Cijeli tekst EU izjave o sukladnosti dostupan je na: www.asus.com/support Türkçe AsusTek Computer Inc., bu aygıtın temel gereksinimlerle ve ilişkili Čeština Společnost ASUSTeK Computer Inc. tímto prohlašuje, že toto Yönergelerin diğer ilgili koşullarıyla uyumlu olduğunu beyan eder.

Page 95: Asus Contact Information

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Page 96 CA 94539. Phone/Fax No: (510)739-3777/(510)608-4555 hereby declares that the product Product Name : Motherboard Model Number : ROG STRIX H370-F GAMING Conforms to the following specifications: FCC Part 15, Subpart B, Unintentional Radiators Supplementary Information: This device complies with part 15 of the FCC Rules. Operation is subject to the...