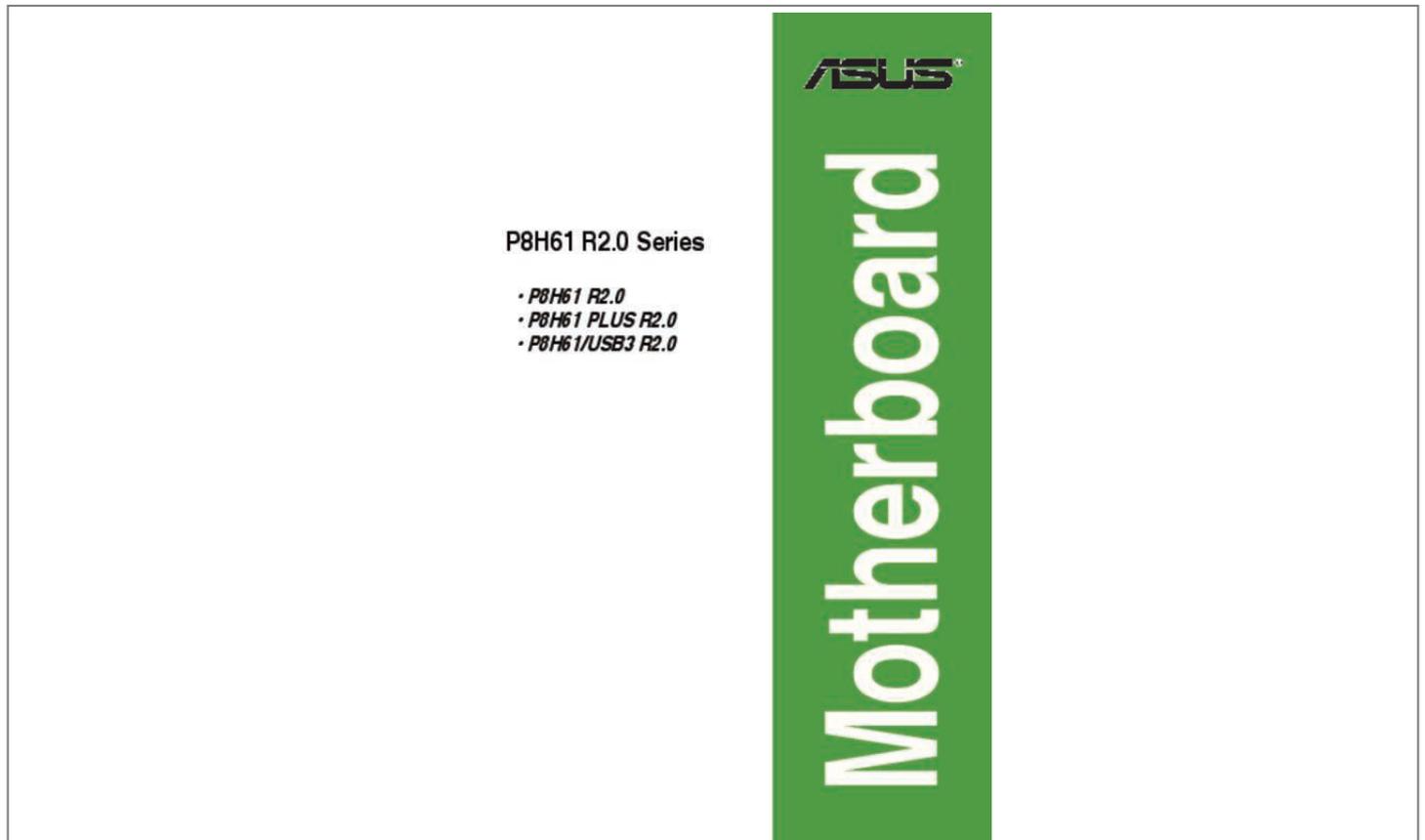




Your PDF Guides

You can read the recommendations in the user guide, the technical guide or the installation guide for ASUS P8H61-M LE R2.0. You'll find the answers to all your questions on the ASUS P8H61-M LE R2.0 in the user manual (information, specifications, safety advice, size, accessories, etc.). Detailed instructions for use are in the User's Guide.

User manual ASUS P8H61-M LE R2.0
User guide ASUS P8H61-M LE R2.0
Operating instructions ASUS P8H61-M LE R2.0
Instructions for use ASUS P8H61-M LE R2.0
Instruction manual ASUS P8H61-M LE R2.0



[You're reading an excerpt. Click here to read official ASUS P8H61-M LE R2.0 user guide](http://yourpdfguides.com/dref/5322559)
<http://yourpdfguides.com/dref/5322559>

Manual abstract:

@@@Such software in this product is distributed without any warranty to the extent permitted by the applicable law. Copies of these licenses are included in this product. Where the applicable license entitles you to the source code of such software and/or other additional data, you may obtain it for a period of three years after our last shipment of the product, either (1) for free by downloading it from <http://support.asus.com/download> or (2) for the cost of reproduction and shipment, which is dependent on the preferred carrier and the location where you want to have it shipped to, by sending a request to: ASUSTeK Computer Inc., Beitou, Taipei 112 Taiwan In your request please provide the name, model number and version, as stated in the About Box of the product for which you wish to obtain the corresponding source code and your contact details so that we can coordinate the terms and cost of shipment with you. The source code will be distributed WITHOUT ANY WARRANTY and licensed under the same license as the corresponding binary/object code. This offer is valid to anyone in receipt of this information. aSUSTeK is eager to duly provide complete source code as required under various Free Open Source Software licenses. If however you encounter any problems in obtaining the full corresponding source code we would be much obliged if you give us a notification to the email address gpl@asus.

Com, stating the product and describing the problem (please DO NOT send large attachments such as source code archives, etc. A-1 □ Safety information Electrical safety •••••To prevent electric shock hazard, disconnect the power cable from the electric 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. Before connecting or removing signal cables from the motherboard, ensure that all power cables are unplugged.

seek professional assistance before using an adapter or extension cord. These devices could interrupt the grounding circuit. Ensure that your power supply is set to the correct voltage in your area. If you are not sure about the voltage of the electrical outlet you are using, contact your local power company. If the power supply is broken, do not try to fix it by yourself.

contact a qualified service technician or your retailer. Operation safety •••••Before installing the motherboard and adding devices on it, carefully read all the manuals that came with the package. Before using the product, ensure that all cables are correctly connected and the power cables are not damaged. If you detect any damage, contact your dealer immediately. To avoid short circuits, keep paper clips, screws, and staples away from connectors, slots, sockets and circuitry. avoid dust, humidity, and temperature extremes. Do not place the product in any area where it may become wet. place the product on a stable surface. If you encounter technical problems with the product, contact a qualified service technician or your retailer. About this guide This user guide contains the information you need when installing and configuring the motherboard.

How this guide is organized This guide contains the following parts: • Chapter 1: Product introduction • This chapter describes the features of the motherboard and the new technology it supports. Chapter 2: BIOS information This chapter tells how to change system settings through the BIOS Setup menus. Detailed descriptions of the BIOS parameters are also provided. Vi 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. IMPORTANT: Instructions that you MUST follow to complete a task. NOTE: Tips and additional information to help you complete a task. Where to find more information 1. 2.

ASUS websites Refer to the following sources for additional information and for product and software updates. Optional documentation Your product package may include optional documentation, such as warranty flyers, that may have been added by your dealer. These documents are not part of the standard package. Keys enclosed in the less-than and greater-than sign means that you must press the enclosed key. Example: <Enter> means that you must press the Enter or Return key.

If you must press two or more keys simultaneously, the key names are linked with a plus sign (+). 0 support depends on the CPU types. Com for Intel® CPU support list.)/1600/1333/1066 MHz, non-ECC, un-buffered memory Dual-channel memory architecture Supports Intel® Extreme Memory Profile (XMP) * □ DDR3 1600 MHz and higher memory frequency is supported by Intel® 3rd generation processors. ** □ Due to the CPU behavior, DDR3 2133/1866 MHz memory module will run at DDR3 2000/1800 MHz frequency.

**** □ When you install a total memory of 4GB capacity or more, Windows® 32-bit operating system may only recognize less than 3GB. We recommend a maximum of 3GB system memory if you are using a Windows® 32-bit operating system. 0 Gb/s connectors Realtek® 8111F Gigabit LAN controller Realtek® ALC887 8-channel* High Definition Audio CODEC * □ Use a chassis with HD audio module in the front panel to support an 8-channel audio output. 1 ports (6 ports at the mid-board, 4 ports at 10 the back panel) P8H61/USB3 R2. 1 ports (6 ports at the mid-board, 2 ports at the 8 back panel) (continued on the next page) Chipset Memory Expansion slots Storage LAN Audio USB viii P8H61 R2. 0 only) ASUS unique features ASUS DIGI+ VRM: - Digital Power Control: Digital Power Design for the CPU - ASUS 3+1 Phase Power Design ASUS Exclusive Features: - Network iControl* featuring instant network bandwidth domination for top network program in use - □ USB 3. 0 Gb/s connectors 1 x CPU fan connector 1 x Chassis fan connector 1 x Front panel audio connector 1 x S/PDIF Out connector 1 x System panel connector 1 x 24-pin EATX power connector 1 x 4-pin ATX 12V power connector 64 Mb Flash ROM, UEFI BIOS, PnP, DMI v2. 8 cm) * Specifications are subject to change without notice. The motherboard delivers a host of new features and latest technologies, making it another standout in the long line of ASUS quality motherboards! Before you start installing the motherboard, and hardware devices on it, check the items in your package with the list below. 0Gb/s cables 1 x I/O shield ASUS motherboard support DVD User Manual Check your motherboard package for the following items.

The package contents vary from models. The layout illustrations in this user guide are for P8H61/USB3 R2.



[You're reading an excerpt. Click here to read official ASUS P8H61-M LE R2.0 user guide](http://yourpdfguides.com/dref/5322559)
<http://yourpdfguides.com/dref/5322559>

0 only. □ If any of the items is damaged or missing, contact your retailer. 1 Special features Product highlights LGA1155 socket for Intel® 3rd/2nd Generation Core™ i7 / Core™ i5 / Core™ i3 / Pentium® / Celeron® Processors This motherboard supports the Intel® 3rd/2nd generation Core™ i7/i5/i3/Pentium®/Celeron® processors in the LGA1155 package, with iGPU, memory, and PCI Express controllers integrated to support onboard graphics out with dedicated chipsets, 2-channel (2 DIMMs) DDR3 memory, and 16 PCI Express 3. This provides great graphics performance. Intel® 3rd/2nd generation Core™ i7/i5/i3/Pentium®/Celeron® processors are among the most powerful and energy efficient CPUs in the world. Chapter 1: Product introduction 1-1 Intel® H61 Express Chipset The Intel® H61 Express Chipset is the latest single-chipset design to support the new 1155 socket Intel® 3rd/2nd Generation Core™ i7 / Core™ i5 / Core™ i3 / Pentium® / Celeron® processors.) / 1600 / 1333/ 1066 MHz to meet the higher bandwidth requirements of the latest 3D graphics, multimedia, and Internet applications. The dual-channel DDR3 architecture enlarges the bandwidth of your system memory to boost system performance.

• □ DDR3 1600 MHz and higher memory frequency is supported by Intel® 3rd generation processors. □ □ Due to the CPU behavior, DDR3 2133/1866 memory module will run at DDR3 2000/1800 MHz frequency. 0) is the latest PCI Express bus standard with improved encoding schemes that provide twice the performance of the current PCIe 2. 0. The total bandwidth for a x16 link reaches a maximum of 32Gb/s, double the 16 Gb/s of PCIe 2.

0 provides users an unprecedented data speeds, combined with the convenience and seamless transition offered by complete backward compatibility with PCIe 1. 0 will become a must-have feature for users who wish to improve and optimize graphic performance, as well as have the latest technology available to them. 8-channel high definition audio The onboard 8-channel HD audio (High Definition Audio, previously codenamed Azalia) CODEC enables high-quality 192KHz/24-bit audio output and jack-detect feature that automatically detects and identifies what types of peripherals are plugged into the audio I/O jacks and notifies users of inappropriate connection, which means there will be no more confusion of Line-in, Line-out, and Mic jacks. gigabit LAN solution The onboard LAN controller is a highly integrated Gb LAN controller. It is enhanced with an ACPI management function to provide efficient power management for advanced operating systems.

2 ASUS DIGI+ VRM Digital Power Control: Digital Power Design for the CPU All-new digital CPU power controls work perfectly together to match digital power signal (SVID) requests from the CPU, with ultra-fast sensing and response efficiently delivering precision power. Accurate delivery reduces waste, and provides more stable CPU Vcore voltages. Users can adjust the CPU voltage for various overclocking scenarios, with accurate input through UEFI BIOS tuning or the exclusive ASUS interface. This proprietary design increases overclocking headroom to push performance to its full potential. EPU Tap into the world's first real-time PC power saving chip through the AI Suite II utility. Get total system-wide energy optimization by automatically detecting current PC loadings and intelligently moderating power consumption. This also reduces fan noise and extends component longevity. 3 Innovative ASUS features ASUS UEFI BIOS Flexible and Easy BIOS Interface ASUS UEFI BIOS offers the first mouse-controlled graphical BIOS designed with selectable modes, providing a user-friendly interface that goes beyond the traditional keyboard-only controls. Advanced Mode for performance enthusiasts includes detailed DRAM settings via a dedicated memory info page for complete insight. new upgrade! Quick and easy information for enhanced system control - □ 12 BIOS snapshot hotkey for sharing UEFI information and F troubleshooting - New F3 Shortcut for most accessed information - □ SUS DRAM SPD (Serial Presence Detect) information for accessing A memory information, detecting faulty DIMMs, and helping with difficult POST situations.

Chapter 1: Product introduction 1-3 ASUS TurboV Feel the adrenaline rush of real-time OC-now a reality with the ASUS TurboV. This easy OC tool allows you to overclock without exiting or rebooting the OS; and its user-friendly interface makes overclock with just a few clicks away. Moreover, the ASUS OC profiles in TurboV provides the best O. 0 Boost technology, a USB device's transmission speed is significantly increased up to 170%, adding rounded object or a metal object, such as the power supply case, to avoid damaging them due to static electricity. □ Hold components by the edges to avoid touching the ICs on them. □ Whenever you uninstall any 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. Standby Power LED The motherboard comes with a standby power LED that 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. 5 Motherboard overview Before you install the motherboard, study the configuration of your chassis to ensure that the motherboard fits into it. Ensure that you unplug the power cord before installing or removing the motherboard. Failure to do so can cause you physical injury and damage motherboard components. 1 When installing the motherboard, ensure that you place it into the chassis in the correct orientation.

The edge with external ports goes to the rear part of the chassis as indicated in the image below. 2 Place six 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. Screw holes Place this side towards the rear of the chassis P8H61/USB3 R2. 0 connectors (10-1 pin USB56, USB78, USB910) Digital audio connector (4-1 pin SPDIF_OUT) Front panel audio connector (10-1 pin AAFP) Standby power LED (SB_PWR) Page 1-32 1-31 1-29 1-27 1-6 Connectors/Jumpers/Slots/LED ATX power connectors (24-pin EATXPWR, 4-pin ATX12V) CPU and chassis fan connectors (4-pin CPU_FAN, 3-pin CHA_FAN) Intel® LGA1155 CPU socket DDR3 DIMM slots Clear RTC RAM (3-pin CLRTC) Intel® H61 Serial ATA 3.

6 Central Processing Unit (CPU) The motherboard comes with a surface mount LGA1155 socket designed for the Intel® 3rd / 2nd Generation Core™ i7 / i5 / i3 / Pentium® / Celeron® processors.



[You're reading an excerpt. Click here to read official ASUS P8H61-M LE R2.0 user guide](http://yourpdfguides.com/dref/5322559)

<http://yourpdfguides.com/dref/5322559>

Unplug all power cables 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. ASUS will process Return Merchandise Authorization (RMA) requests only if the motherboard comes with the cap on the LGA1155 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. To install a CPU: Installing the CPU Locate the CPU socket on the motherboard. Press the load lever with your thumb (A), and then move it to the right (B) until it is released from the retention tab.

To prevent damage to the socket pins, do not remove the PnP cap unless you are installing a CPU. load lever A B Retention tab Chapter 1: Product introduction 1-11 3. Lift the load lever in the direction of the arrow until the load plate is completely lifted. load plate 4. Remove the PnP cap from the CPU socket by lifting the tab only. PnP cap 5. Position the CPU over the socket, ensuring that the gold triangle is on the bottom-left corner of the socket, and then fit the socket alignment keys into the CPU notches. The CPU fits in only one correct orientation. DO NOT force the CPU into the socket to prevent bending the connectors on the socket and damaging the CPU! Apply some Thermal Interface Material to the exposed area of the CPU that the heatsink will be in contact with, ensuring that it is spread in an even thin layer. Some heatsinks come with preapplied thermal paste.

If it gets into your eyes or touches your skin, wash it off immediately, and seek professional medical help. 7. Close the load plate (A), and then push down the load lever (B), ensuring that the front edge of the load plate slides under the retention knob (C). a B C 8. Insert the load lever under the retention tab.

□ When you buy a boxed Intel® processor, the package includes the CPU fan and heatsink assembly. If you buy a CPU separately, ensure that you use only Intel®-certified multi-directional heatsink and fan. The LGA1155 socket is incompatible with the LGA775 and LGA1366 sockets in size and dimension. If you purchased a separate CPU heatsink and fan assembly, ensure that you have properly applied Thermal Interface Material to the CPU heatsink or CPU before you install the heatsink and fan assembly. Ensure that you have installed the motherboard to the chassis before you install the CPU fan and heatsink assembly.

Installing the CPU heatsink and fan To install the CPU heatsink and fan: 1. Place the heatsink on top of the installed CPU, ensuring that the four fasteners match the holes on the motherboard. Orient the heatsink and fan assembly such that the CPU fan cable is closest to the CPU fan connector. b A B A 2. Push down two fasteners at a time in a diagonal sequence to secure the heatsink and fan assembly in place. A B 1 1 B A The type of CPU heatsink and fan assembly may differ, but the installation steps and functions should remain the same. The illustration above is for reference only. Connect the CPU fan cable to the connector on the motherboard labeled CPU_FAN. 0 CPU fan connector Do not forget to connect the CPU fan connector! Hardware monitoring errors can occur if you fail to plug this connector. Uninstalling the CPU heatsink and fan To uninstall the CPU heatsink and fan: Disconnect the CPU fan cable from the connector on the motherboard.

rotate each fastener counterclockwise. Pull up two fasteners at a time in a diagonal sequence to disengage the heatsink and fan assembly from the motherboard. Carefully remove the heatsink and fan assembly from the motherboard. Rotate each fastener clockwise to ensure correct orientation when reinstalling. DDR3 modules are developed for better performance with less power consumption. The figure illustrates the location of the DDR3 DIMM sockets: DIMM_A1 DIMM_B1 Channel Channel A P8H61/USB3 R2. 2 You may install 1GB, 2GB, 4GB, and 8GB unbuffered non-ECC DDR3 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.

For optimum compatibility, we recommend that you obtain memory modules from the same vendor. □ Due to the memory address limitation on 32-bit Windows® OS, when you install 4GB or more memory on the motherboard, the actual usable memory for the OS can be about 3GB or less. For effective use of memory, we recommend that you do any of the following: - Use a maximum of 3GB system memory if you are using a 32-bit Windows® OS. - Install a 64-bit Windows® OS when you want to install 4GB or more on the I motherboard. □ This motherboard does not support DIMMs made up of 512Mb (64MB) chips or less.

□ 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. To operate at the vendor-marked or at a higher frequency, refer to section 2. 4 Ai Tweaker menu for manual memory frequency adjustment. □ For system stability, use a more efficient memory cooling system to support a full memory load (2 DIMMs) or overclocking condition.

65V DIMM socket support (Optional) 1 DIMM 2 DIMMs •••••□ DDR3 1600 MHz and higher memory frequency is supported by Intel® 3rd generation processors. □ □ Due to the CPU behavior, DDR3 2133/1866 memory module will run at DDR3 2000/1800 MHz frequency. 65V N2CB1G80CN-BE 7-7-7-20 H5TQ1G83AFP G7C - SS: Single-sided / DS: Double-sided DIMM support: • 1 DIMM: □ upports one module inserted into either slot as single-channel memory S configuration. □ 2 DIMMs: □ upports one pair of modules inserted into both the blue slots as one pair of S dual-channel memory configuration. 3 Installing a DIMM Unplug the power supply before adding or removing DIMMs or other system components. Failure to do so can cause severe damage to both the motherboard and the components. Align a DIMM on the socket such that the notch on the DIMM matches the DIMM slot key on the socket. 1 Unlocked retaining clip DIMM notch 2 1 DIMM slot key A DIMM is keyed with a notch so that it fits in only one direction. DO NOT force a DIMM into a socket in the wrong direction to avoid damaging the DIMM. 3.

Firmly insert the DIMM into the socket until the retaining clips snap back in place and the DIMM is properly seated.



[You're reading an excerpt. Click here to read official ASUS P8H61-M](http://yourpdfguides.com/dref/5322559)

[LE R2.0 user guide](http://yourpdfguides.com/dref/5322559)

<http://yourpdfguides.com/dref/5322559>

To remove a DIMM: Removing a DIMM Simultaneously press the retaining clips outward to unlock the DIMM. Support the DIMM lightly with your fingers when pressing the retaining clips. The DIMM might get damaged when it flips out with extra force. 2 1 1 2. Remove the DIMM from the socket. dIMM notch Chapter 1: Product introduction 1-23 1. 8 Expansion slots In the future, you may need to install expansion cards. The following sub-sections describe the slots and the expansion cards that they support. Unplug the power cord before adding or removing expansion cards.

Failure to do so may cause you physical injury and damage motherboard components. To install an expansion card: Installing an expansion card Before installing the expansion card, read the documentation that came with it and make the necessary hardware settings for the card. Remove the system unit cover (if your motherboard is already installed in a chassis). Remove the bracket opposite the slot that you intend to use. Keep the screw for later use.

Align the card connector with the slot and press firmly until the card is completely seated on the slot. Secure the card to the chassis with the screw you removed earlier. After installing the expansion card, configure it by adjusting the software settings. Turn on the system and change the necessary BIOS settings, if any. See Chapter 2 for information on BIOS setup. assign an IRQ to the card. Install the software drivers for the expansion card. When using PCI cards on shared slots, ensure that the drivers support "Share IRQ" or that the cards do not need IRQ assignments. Otherwise, conflicts will arise between the two PCI groups, making the system unstable and the card inoperable. 5 The PCI slots support cards such as a LAN card, SCSI card, USB card, and other cards that comply with PCI specifications. This motherboard supports PCI Express x1 network cards, SCSI cards, and other cards that comply with the PCI Express specifications. 0 x16 graphic cards complying with the PCI Express specifications. 9 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.

Turn OFF the computer and unplug the power cord. 2. Move the jumper cap from pins 1-2 (default) to pins 2-3. Keep the cap on pins 2-3 for about 5-10 seconds, then move the cap back to pins 1-2. 3. Plug the power cord and turn ON the computer. 4. Hold down the key during the boot process and enter BIOS setup to re-enter data. Except when clearing the RTC RAM, never remove the cap on CLRRTC 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 clearing the CMOS, 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 CPU Parameter Recall (C. Shut down and reboot the system, then the BIOS automatically resets parameter settings to default values.

This port is for a PS/2 mouse.

parallel port. This 25-pin port connects a parallel printer, a scanner, or other devices. LAN (RJ-45) port. This port allows Gigabit connection to a Local Area Network (LAN) through a network hub. Refer to the table below for the LAN port LED indications.

This port connects to the tape, CD, DVD player, or other audio sources. In the 4, 6, and 8-channel configurations, the function of this port becomes Front Speaker Out. Refer to the audio configuration table below for the function of the audio ports in 2, 4, 6, or 8-channel configuration. Audio 2, 4, 6, or 8-channel configuration Port Light Blue (Rear panel) Lime (Rear panel) Pink (Rear panel) Lime (Front panel) Headset 2-channel Line In Line Out Mic In – 4-channel Rear Speaker Out Front Speaker Out Mic In – 6-channel Rear Speaker Out Front Speaker Out Bass/Center – 8-channel Rear Speaker Out Front Speaker Out Bass/Center Side Speaker Out To configure an 8-channel audio output: Use a chassis with HD audio module in the front panel to support 8-channel audio output. These two 4-pin Universal Serial Bus (USB) ports are for USB 2. These two 4-pin Universal Serial Bus (USB) ports are for USB 2. These two 9-pin Universal Serial Bus (USB) ports are available for connecting USB 3. 0 devices can only be used under Windows® OS environment and after the USB 3. 0 devices can only be used as data storage only. 0 ports for faster and better performance for your USB 3.

This 9-pin COM1 port is for pointing devices or other serial devices. This port is for a PS/2 keyboard. Internal connectors This connector is for a chassis-mounted front panel audio I/O module that supports either HD Audio or legacy AC '97 audio standard. Connect one end of the front panel audio I/O module cable to this connector. 0 Front panel audio 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. □ If you want to connect a high-definition front panel audio module to this connector, set the Front Panel Type item in the BIOS setup to [HD]. If you want to connect an AC'97 front panel audio module to this connector, set the item to [AC97]. 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.

0 ATX power connectors • 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 4-pin ATX +12V power plug. Otherwise, the system will not boot up. □ We recommend that you use a PSU with 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 are uncertain about the minimum power supply requirement for your system, refer to the Recommended Power Supply Wattage Calculator at <http://support>. 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. 0 fan connectors 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! • The CPU_FAN connector supports a CPU fan of maximum 1A (12 W) fan power. □ Only the 4-pin CPU fan supports the ASUS Fan Xpert feature. 4. This connector is for an additional Sony/Philips Digital Interface (S/PDIF) port. Connect the S/PDIF Out module cable to this connector, then install the module to a slot opening at the back of the system chassis.



[You're reading an excerpt. Click here to read official ASUS P8H61-M LE R2.0 user guide](http://yourpdfguides.com/dref/5322559)

<http://yourpdfguides.com/dref/5322559>

0Gb/s connectors • You must install Windows® XP Service Pack 3 or later version before using Serial ATA hard disk drives. Under Windows® XP, there is no need to change the SATA type. □ To configure the SATA type in BIOS, click Advanced Mode > Advanced tab > SATA Configuration > SATA Mode Selection. □ When using hot-plug and NCQ on Windows® Vista / Windows® 7, set the SATA Mode Selection item in the BIOS to [AHCI]. These connectors are for USB 2.

0 ports. Connect the USB module cable to any of these connectors, then install the module to a slot opening at the back of the system chassis. These USB connectors comply with USB 2. Doing so will damage the motherboard! This connector supports several chassis-mounted functions. 0 System panel connector • This 2-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 IDE_LED) System power LED (2-pin PLED) • • • • This 2-pin connector is for the HDD Activity LED. Connect the HDD Activity LED cable to this connector. The IDE 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 2-pin connector is for the system power button. 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. Always install the latest OS version and corresponding updates to maximize the features of your hardware.

• Motherboard settings and hardware options vary. Refer to your OS documentation for detailed information. □ Ensure that you install Windows® XP Service Pack 3 or later versions / Windows® Vista Service Pack 1 or later versions before installing the drivers for better compatibility and system stability. 2 The Support DVD that comes with the motherboard package contains the drivers, software applications, and utilities that you can install to avail all motherboard features. The contents of the Support DVD are subject to change at any time without notice.

Support DVD information To run the Support DVD Place the Support DVD to the optical drive. If Autorun is enabled in your computer, the DVD automatically displays the Specials screen. click Drivers , Utilities , Manual , Contact , and Specials tabs to display their respective menus. The following screen is for reference only. Click an icon to display Support DVD/ motherboard information Click an item to install If Autorun is NOT enabled in your computer, browse the contents of the Support DVD to locate the file ASSETUP. 1 Managing and updating your BIOS Save a copy of the original motherboard BIOS file to a USB flash disk in case you need to restore the BIOS in the future. Copy the original motherboard BIOS using the ASUS Update utility. 1 The ASUS Update is a utility that allows you to manage, save, and update the motherboard BIOS in Windows® environment. • ASUS Update requires an Internet connection either through a network or an Internet Service Provider (ISP). □ This utility is available in the support DVD that comes with the motherboard package.

Place the support DVD in the optical drive. the Specials menu appears. Click the Utilities tab, then click AI Suite II. Follow the onscreen instructions to complete the installation. Quit all Windows® applications before you update the BIOS using this utility. Updating the BIOS To update the BIOS: 1. Click Update button from the Quick Bar, and then click ASUS Update from the popup menu. the ASUS Update main screen appears. From the list, select either of the following methods: Updating from the Internet a. Select Update BIOS from the Internet, then click Next.

Select the ASUS FTP site nearest you to avoid network traffic, then click Next. From the FTP site, select the BIOS version that you wish to download then click Next. Chapter 2: BIOS information 2-1 The ASUS Update utility is capable of updating itself through the Internet. Always update the utility to avail all its features. Select Update BIOS from file, then click Next.

Locate the BIOS file from the Open window, then click Open. Follow the onscreen instructions to complete the updating process. 2 The ASUS EZ Flash 2 feature allows you to update the BIOS without using an OS-based utility. Before you start using this utility, download the latest BIOS file from the ASUS website at www.asus.com ASUS EZ Flash 2 To update the BIOS using EZ Flash 2: 1.

2. Enter the Advanced Mode of the BIOS setup program. CAP VER: 0206 DATE: 02/10/2012 Insert the USB flash disk that contains the latest BIOS file to the USB port. Press the Up/Down arrow keys to find the USB flash disk that contains the latest BIOS, and then press <Enter>. Press the Up/Down arrow keys to find the BIOS file, and then press <Enter> to perform the BIOS update process. Reboot the system when the update process is done. □ This function supports USB flash disks with FAT 32/16 format and single partition only. □ @ @ 3 The ASUS CrashFree BIOS 3 is an auto recovery tool that allows you to restore the BIOS file when it fails or gets corrupted during the updating process. You can restore a corrupted BIOS file using the motherboard support DVD or a USB flash drive that contains the updated BIOS file. □ Before using this utility, rename the BIOS file in the removable device into P8H61R2.

ASUS CrashFree BIOS 3 utility • The BIOS file in the support DVD may not be the latest version. Download the latest BIOS file from the ASUS website at www.asus.com. Recovering the BIOS To recover the BIOS: 1. Turn on the system. Insert the support DVD to the optical drive or the USB flash drive that contains the BIOS file to the USB port. The utility automatically checks the devices for the BIOS file. When found, the utility reads the BIOS file and enters ASUS EZ Flash 2 utility automatically. The system requires you to enter BIOS Setup to recover BIOS setting. To ensure system compatibility and stability, we recommend that you press <F5> to load default BIOS values. DO NOT shut down or reset the system while updating the BIOS! Doing so can cause system boot failure! This utility also allows you to copy the current BIOS file that you can use as a backup when the BIOS fails or gets corrupted during the updating process.

The succeeding utility screens are for reference only. The actual utility screen displays may not be same as shown. Prepare the motherboard support DVD and a USB flash drive in FAT32/16 format and single partition. Download the latest BIOS file and BIOS Updater from the ASUS website at <http://support.asus.com>.

Com and save them on the USB flash drive. nTFS is not supported under DOS environment.



[You're reading an excerpt. Click here to read official ASUS P8H61-M LE R2.0 user guide](http://yourpdfguides.com/dref/5322559)
<http://yourpdfguides.com/dref/5322559>

Do not save the BIOS file and BIOS Updater to a hard disk drive or USB flash drive in NTFS format. Turn off the computer and disconnect all SATA hard disk drives (optional). Insert the USB flash drive with the latest BIOS file and BIOS Updater to the USB port.

Booting the system in DOS environment Boot your computer. When the ASUS Logo appears, press <F8> to show the BIOS Boot Device Select Menu. Insert the support DVD into the optical drive and select the optical drive as the boot device. @ @ 4. @ @ @ @ @ @ @ @ @ @ When BIOS update is done, press <ESC> to exit BIOS Updater. restart your computer. @ @ • For BIOS Updater version 1. @ @ @ @ Select the Load Optimized Defaults item under the Exit menu. @ @ chapter 2: BIOS information 2-5 2. @ @ @ @ @ @ If you do not press <Delete>, POST continues with its routines.

@ @ Press the reset button on the system chassis. Press the power button to turn the system off then back on. @ @ @ @ @ @ @ @ @ @ Com to download the latest BIOS file for this motherboard. @ @ @ @ Select the Load Optimized Defaults item under the Exit menu. @ @ see section 1. 9 Jumpers for information on how to erase the RTC RAM. @ @ You can change modes from the Exit menu or from the Exit/Advanced Mode button in the EZ Mode/Advanced Mode screen. 2-6 ASUS P8H61 R2. 0 Series EZ Mode By default, the EZ Mode screen appears when you enter the BIOS setup program. 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, click Exit/Advanced Mode or press Esc, then select Advanced Mode or press F7 hot key for the advanced BIOS settings. The default screen for entering the BIOS setup program can be changed. Selects the display language of the BIOS setup program Exits the BIOS setup program without saving the changes, saves the changes and resets the system, or enters the Advanced Mode Exit/Advanced Mode English Build Date : 02/10/2012 Speed : 3300 MHz Displays the CPU/motherboard temperature, CPU/5V/3. 3V CPU_FAN System Performance Quiet Performance Energy Saving Normal Boot Priority Use the mouse to drag or keyboard to navigate to decide the boot priority. Shortcut (F3) Advanced Mode(F7) Boot Menu(F8) Default(F5) Selects the Advanced mode functions Selects the boot device priority Power Saving mode Normal mode Loads optimized default ASUS Optimal mode Selects the boot device priority Displays the system properties of the selected mode on the right hand side Displays the Advanced mode menus • The boot device options vary depending on the devices you installed to the system.

□ The Boot Menu(F8) button is available only when the boot device is installed to the system. Chapter 2: BIOS information 2-7 Advanced Mode The Advanced Mode provides advanced options for experienced end-users to configure the BIOS settings. The figure below shows an example of the Advanced Mode. Refer to the following sections for the detailed configurations. To access the EZ Mode, click Exit, then select ASUS EZ Mode.

Submenu item Pop-up window Scroll bar Navigation keys Menu bar Main The menu bar on top of the screen has the following main items: Ai Tweaker Advanced Monitor Boot Tool Exit For changing the basic system configuration For changing the overclocking settings For changing the advanced system settings For displaying the system temperature, power status, and changing the fan settings For changing the system boot configuration For configuring options for special functions For selecting the exit options and loading default settings 2-8 ASUS P8H61 R2. 0 Series Menu items The highlighted item on the menu bar displays the specific items for that menu. For example, selecting Main shows the Main menu items. The other items (Ai Tweaker, Advanced, Monitor, Boot, Tool, and Exit) on the menu bar have their respective menu items. Back button This button appears when entering a submenu. Press <Esc> or use the USB mouse to click this button to return to the previous menu screen. Submenu items Pop-up window Scroll bar A greater than sign (>) before each item on any menu screen means that the item has a submenu. To display the submenu, select the item and press <Enter>. Select a menu item and press <Enter> to display a pop-up window with the configuration options for that item. A scroll bar appears on the right side of a menu screen when there are items that do not fit on the screen.

Press the Up/Down arrow keys or <Page Up> / <Page Down> keys to display the other items on the screen. Navigation keys General help At the bottom right corner of the menu screen are the navigation keys for the BIOS setup program. Use the navigation keys to select items in the menu and change the settings. At the top right corner of the menu screen is a brief description of the selected item. Configuration fields These fields show the values for the menu items. If an item is user-configurable, you can change the value of the field opposite the item. You cannot select an item that is not user-configurable. A configurable field is highlighted when selected. To change the value of a field, select it and press <Enter> to display a list of options. chapter 2: BIOS information 2-9 2.

3 Main menu The Main menu screen appears when you enter the Advanced Mode of the BIOS Setup program. The Main menu provides you an overview of the basic system information, and allows you to set the system date, time, language, and security settings. 4 Allows you to choose the BIOS language version from the options. Configuration options: [English] [Español] [Русский] Allows you to set the system date. Allows you to set the system time.

System Language [English] System Date [Day xx/xx/xxxx] System Time [xx:xx:xx] Security The Security menu items allow you to change the system security settings. □ If you have forgotten your BIOS password, erase the CMOS Real Time Clock (RTC) RAM to clear the BIOS password. see section 1. 9 Jumpers for information on how to erase the RTC RAM. □ The Administrator or User Password items on top of the screen show the default Not Installed.

After you set a password, these items show Installed. 2-10 ASUS P8H61 R2. 0 Series Administrator Password If you have set an administrator password, we recommend that you enter the administrator password for accessing the system. Otherwise, you might be able to see or change only selected fields in the BIOS setup program. Confirm the password when prompted. From the Create New Password box, key in a password, then press <Enter>. to change an administrator password: Select the Administrator Password item and press <Enter>. From the Enter Current Password box, key in the current password, then press <Enter>. From the Create New Password box, key in a new password, then press <Enter>. Confirm the password when prompted.

To clear the administrator password, follow the same steps as in changing an administrator password, but press <Enter> when prompted to create/confirm the password.



[You're reading an excerpt. Click here to read official ASUS P8H61-M LE R2.0 user guide](http://yourpdfguides.com/dref/5322559)

<http://yourpdfguides.com/dref/5322559>

After you clear the password, the Administrator Password item on top of the screen shows Not Installed. User Password If you have set a user password, you must enter the user password for accessing the system. The User Password item on top of the screen shows the default Not Installed. After you set a password, this item shows Installed. Confirm the password when prompted. From the Create New Password box, key in a password, then press <Enter>. to change a user password: Select the User Password item and press <Enter>. From the Enter Current Password box, key in the current password, then press <Enter>.

From the Create New Password box, key in a new password, then press <Enter>.

Confirm the password when prompted. To clear the user password, follow the same steps as in changing a user password, but press <Enter> when prompted to create/confirm the password. After you clear the password, the User Password item on top of the screen shows Not Installed. chapter 2: BIOS information 2-11 2. 4 Ai Tweaker menu Be cautious when changing the settings of the Ai Tweaker menu items.

Incorrect field values can cause the system to malfunction. The configuration options for this section vary depending on the CPU and DIMM model you installed on the motherboard. Scroll down to display the following items: VCCSA Voltage PCH Voltage 0. 1 Allows you to select the CPU overclocking options to achieve the desired CPU internal frequency. Select any of these preset overclocking configuration options: [Auto] Loads the optimal settings for the system.

] If you install memory modules supporting the eXtreme Memory Profile (X.) Technology, choose this item to set the profiles supported by your memory modules for optimizing the system performance. Appears only when you install a DIMM with X. DDR3-xxx x-x-x-xxV [Profile #1] This item appears only when you set the Ai Overclocking Tuner item to [X.] and allows you to select the X. Configuration options: [Profile #1] [Profile #2] The configuration options vary with the DIMM you installed on the system. BCLK/PCIE Frequency [XXX] Appears when you set the Ai Overclock Tuner item to [Manual] or [X.] and allows you to adjust the CPU and VGA frequency to enhance the system performance. Use the <+> and <-> keys to adjust the value. You can also key in the desired value using the numeric keypad.

The values range from 80MHz to 300MHz. 2 Allows you to set the memory operating frequency. Configuration options (Ivy Bridge CPU): [Auto] [DDR3-800MHz] [DDR3-1066MHz] [DDR31333MHz] [DDR3-1400MHz] [DDR3-1600MHz] [DDR3-1800MHz] [DDR3-1866MHz] [DDR3-2000MHz] [DDR3-2133MHz] [DDR3-2200MHz] [DDR3-2400MHz] [DDR3-2600MHz] [DDR3-2666MHz] [DDR3-2800MHz] Configuration options (Sandy Bridge CPU): [Auto] [DDR3-800MHz] [DDR3-1066MHz] [DDR31600MHz] [DDR3-1866MHz] [DDR3-2133MHz] [DDR3-2400MHz] Selecting a very high memory frequency may cause the system to become unstable! If this happens, revert to the default setting. 3 Allows you to enable or disable the EPU power saving function. Configuration options: [Disabled] [Enabled] EPU Power Saving Mode [Disabled] EPU Setting [Auto] This item appears only when you set the EPU Power Saving Mode item to [Enabled] and allows you to select the EPU power saving mode. 4 OC Tuner automatically overclocks the frequency and voltage of CPU and DRAM for enhancing the system performance. 5 The sub-items in this menu allow you to set the DRAM timing control features. Use the <+> and <-> keys to adjust the value. To restore the default setting, type [auto] using the keyboard and press <Enter>. Changing the values in this menu may cause the system to become unstable! If this happens, revert to the default settings.

6 The sub-items in this menu allow you to set the CPU ratio and features. CPU Power Management CPU Ratio [Auto] Allows you to manually adjust the maximum non-turbo CPU ratio. Use <+> and <-> keys or the numeric keypad to adjust the value. The valid value ranges vary according to your CPU model. Enhanced Intel SpeedStep Technology [Enabled] Allows you to enable or disable the Enhanced Intel® SpeedStep Technology (EIST).

[Disabled] Disables this function. [Enabled] The operating system dynamically adjusts the processor voltage and core frequency which may result in decreased average consumption and decreased average heat production. Turbo Mode [Enabled] [Enabled] Allows processor cores to run faster than marked frequency in specific conditions. [Disabled] Disables this function. The following three items appear only when you set the Turbo Mode item to [Enabled].

Long Duration Power Limit [Auto] Long Duration Maintained [Auto] Allows you to limit the turbo ratio's long duration power. Use the <+> and <-> keys to adjust the value. Allows you to maintain the turbo ratio's long duration power. Use the <+> and <-> keys to adjust the value. Short Duration Power Limit [Auto] Allows you to limit the turbo ratio's long duration power. Use the <+> and <-> keys to adjust the value. 2-14 ASUS P8H61 R2. 0 Series Primary Plane Current Limit [Auto] Maximum instantaneous current allowed at any given time for CPU cores Use <+> and <-> key to adjust the value at 0. Secondary Plane Current Limit [Auto] Maximum instantaneous current allowed at any given time for Internal Graphics cores. Use <+> and <-> key to adjust the value at 0.

The CPU working voltage will decrease proportionally to CPU loading. Higher value gets a higher voltage, and a better overclocking performance, but increases the CPU and VRM thermal conditions. This item allows you to adjust the voltage range from the following percentages to boost the system performance: 0% (Regular), 25% (Medium), 50% (High), 75% (Ultra High) and 100% (Extreme). Configuration options: [Auto] [Regular] [Medium] [High] [Ultra High] [Extreme] The actual performance boost may vary depending on your CPU specification. CPU Fixed Frequency [xxx] Allows you to set a fixed CPU frequency. Use the <+> and <-> keys to adjust the value. The values range from 200k Hz to 350k Hz with a 50k Hz interval. CPU Power Phase Control [Standard] Allows you to control the power phase based on the CPU's demands. Configuration options: [Standard] [Optimized] [Extreme] [Manual Adjustment] DO NOT remove the thermal module when switching to Extreme and Manual Mode. The thermal conditions should be monitored.

Manual Adjustment [Medium] This item appears only when you set the previous item to [Manual Adjustment]. Select [Ultra Fast] for a faster response. The reaction time will be longer when [Regular] is selected. configuration options: [Ultra Fast] [Fast] [Medium] [Regular] CPU Power Duty Control [T. Probe] DIGI + VRM Duty control adjusts the current and thermal conditions of every component's phase.

CPU Current Capability [100%] Allows you to configure the total power range, and extends the overclocking frequency range simultaneously.



[You're reading an excerpt. Click here to read official ASUS P8H61-M LE R2.0 user guide](http://yourpdfguides.com/dref/5322559)

<http://yourpdfguides.com/dref/5322559>

Configuration options: [100%] [110%] [120%] Choose a higher value when overclocking, or under a high CPU loading for extra power support. Chapter 2: BIOS information 2-15 Some of the following items are adjusted by typing the desired values using the numeric keypad and press the <Enter> key. You can also use the <+> and <-> keys to adjust the value. To restore the default settings, type [auto] using the keyboard and press the <Enter> key.

[Manual Mode] Allows you to set a fixed CPU voltage. CPU Voltage [Offset Mode] Offset Mode Sign [+] This item appears only when you set the CPU Voltage item to [Offset Mode]. CPU Offset Voltage [Auto] Allows you to set the CPU Offset voltage. The values range from 0. CPU Manual Voltage [Auto] This item appears only when you set the CPU Voltage item to [Manual Mode] and allows you to set a fixed CPU voltage. The values range from 0. Refer to the CPU documentation before setting the CPU voltage. Setting a high voltage may damage the CPU permanently, and setting a low voltage may make the system unstable. 9 Allows you to set the DRAM voltage. The values range from 1.

According to Intel CPU specification, DIMMs with voltage requirement over 1.65V may damage the CPU permanently. We recommend you install the DIMMs with the voltage requirement below 1.11 Allows you to set the VCCSA voltage. The values range from 0. Allows you to set the Platform Controller Hub voltage. The values range from 0. 12 Allows you to set the CPU and PCH PLL voltage. configuration options: [Auto] [+0.10V] • The values of the CPU Offset Voltage, CPU Manual Voltage, DRAM Voltage, VCCSA Voltage, and PCH Voltage items are labeled in different color, indicating the risk levels of high voltage settings.

The system may need better cooling system to work stably under high voltage settings. 5 Advanced menu The Advanced menu items allow you to change the settings for the CPU and other system devices. Be cautious when changing the settings of the Advanced menu items. Incorrect field values can cause the system to malfunction. 1 The items in this menu show the CPU-related information that the BIOS automatically detects.

The items shown in submenu may be different due to the CPU you installed. CPU Configuration Intel Adaptive Thermal Monitor [Enabled] [Enabled] [Disabled] Enables the overheated CPU to throttle its clock speed to cool down. disables the CPU thermal monitor function. Hyper-threading [Enabled] The Intel Hyper-Threading Technology allows a hyper-threading processor to appear as two logical processors to the operating system, allowing the operating system to schedule two threads or processes simultaneously. Chapter 2: BIOS information 2-17 Active Processor Cores [All] Allows you to choose the number of CPU cores to activate in each processor package.

Configuration options: [All] [1] [2] [3] Limit CPUID Maximum [Disabled] [Enabled] Allows legacy operating systems to boot even without support for CPUs with extended CPUID functions. Forces the XD feature flag to always return to zero (0). Allows a hardware platform to run multiple operating systems separately and simultaneously, enabling one system to virtually function as several systems. disables this function. Allows a hardware platform to run multiple operating systems separately and simultaneously, enabling one system to virtually function as several systems. Intel® Virtualization Technology [Disabled] [Disabled] [Enabled] Hardware Prefetcher [Enabled] [Disabled] [Enabled] [Disabled] Adjacent Cache Line Prefetch [Enabled] CPU Power Management Configuration CPU Ratio [Auto] Allows you to set the ratio between the CPU Core Clock and the BCLK Frequency. Use <+> and <-> keys to adjust the ratio. The valid value ranges vary according to your CPU model. Enhanced Intel SpeedStep Technology [Enabled] Allows you to enable or disable the Enhanced Intel® SpeedStep Technology (EIST). [Disabled] The CPU runs at its default speed.

[Enabled] The operating system controls the CPU speed. Turbo Mode [Enabled] Allows you to enable or disable the Intel® Turbo Mode Technology. [Enabled] Allows processor cores to run faster than marked frequency in specific condition. [Disabled] Disables this function. CPU C1E [Auto] Enables or disables the C1E support function. This item should be enabled in order to enable the Enhanced Halt State. Configuration options: [Auto] [Enabled] [Disabled] CPU C3 Report [Auto] Allows you to disable or enable the CPU C3 report to OS. configuration options: [Auto] [Enabled] [Disabled] 2-18 ASUS P8H61 R2.0 Series CPU C6 Report [Auto] Allows you to disable or enable the CPU C6 report to OS. 2 PCH Configuration High Precision Timer [Enabled] Allows you to enable or disable the High Precision Event Timer.

3 While entering Setup, the BIOS automatically detects the presence of SATA devices. The SATA Port items show Empty if no SATA device is installed to the corresponding SATA port. SATA Configuration SATA Mode Selection [IDE] Allows you to set the SATA configuration. [Disabled] Disables the SATA function. [IDE] to [IDE] when you want to use the Serial ATA hard disk drives as Set Parallel ATA physical storage devices.

[AHCI] to [AHCI] when you want the SATA hard disk drives to use the AHCI Set (Advanced Host Controller Interface). The AHCI allows the onboard storage driver to enable advanced Serial ATA features that increases storage performance on random workloads by allowing the drive to internally optimize the order of commands. Under Windows® XP, there is no need to change the SATA type. When read/write of your hard disk errors occur, this feature allows the hard disk to report warning messages during the POST. Configuration options: [Enabled] [Disabled] Hot Plug [Disabled] This item only appears when you set the SATA Mode Selection item to [AHCI] and allows you to enable or disable the hot-plug support for each SATA port.

4 [Enabled] [Disabled] System Agent Configuration Allow you to enable remapping the memory above 4GB. disables this function. Memory Remap Feature [Enabled] Graphics Configuration Primary Display [Auto] Allows you to decide which graphics controller to use as the primary boot device. 5 The items in this menu allow you to change the USB-related features. The USB Devices item shows the auto-detected values. If no USB device is detected, the item shows None. USB Configuration Legacy USB Support [Enabled] [Enabled] [Disabled] [Auto] Enables the support for USB devices on legacy operating systems (OS). The USB devices can be used only for the BIOS setup program. Allows the system to detect the presence of USB devices at startup. if detected, the USB controller legacy mode is enabled.

If no USB device is detected, the legacy USB support is disabled. Enables the support for USB 3.0 only) [Enabled] [Disabled] EHCI Hand-off [Disabled] [Enabled] [Disabled] Enables the support for operating systems without an EHCI hand-off feature.



[You're reading an excerpt. Click here to read official ASUS P8H61-M](http://yourpdfguides.com/dref/5322559)

[LE R2.0 user guide](http://yourpdfguides.com/dref/5322559)

<http://yourpdfguides.com/dref/5322559>

HD Audio Controller [Enabled] The following two items appear only when you set the HD Audio Controller item to [Enabled]. **Front Panel Type** [HD] Allows you to set the front panel audio connector (AAFP) mode to legacy AC'97 or highdefinition audio depending on the audio standard that the front panel audio module supports. [HD] Sets the front panel audio connector (AAFP) mode to high definition audio. [AC97] Sets the front panel audio connector (AAFP) mode to legacy AC'97 SPDIF Out Type [SPDIF] [SPDIF] [HDMI] Sets to [SPDIF] for SPDIF audio output. **0 Series Realtek PXE OPRM** [Disabled] This item appears only when you set the previous item to [Enabled] and allows you to enable or disable the PXE OptionRom of the Realtek LAN controller. **0 only**) This item appears only when the Asmedia USB 3. [Disabled] Disables this function **Serial Port Configuration** The sub-items in this menu allow you to set the serial port configuration.

Serial Port [Enabled] Allows you to enable or disable the serial port (COM). Configuration options: [Enabled] [Disabled] **Change Settings** [IO=3F8h; IRQ=4] Allows you to select the Serial Port base address. Configuration options: [IO=3F8h; IRQ=4] [IO=2F8h; IRQ=3] [IO=3E8h; IRQ=4] [IO=2E8h; IRQ=3] **Parallel Port Configuration** The sub-items in this menu allow you to set the parallel port configuration. **Parallel Port** [Enabled] Allows you to enable or disable the parallel port (LPT). Configuration options: [Enabled] [Disabled] **Change Settings** [Auto] Allows you to select an optimal setting for Super I/O devices.

Configuration options: [Auto] [IO=378h; IRQ=5;] [IO=378h; IRQ=5,6,7,9,10,11,12;] [IO=278h; IRQ=5,6,7,9,10,11,12;] [IO=3BCh; IRQ=5,6,7,9,10,11,12;] **Device Mode** [STD Printer Mode] Allows you to change the printer port mode. **7** [Power On] [Power Off] [Last State] **APM** The system goes into on state after an AC power loss. The system goes into off state after an AC power loss. The system goes into either off or on state, whatever the system state was before the AC power loss. **restore AC Power Loss** [Power Off] Chapter 2: BIOS information 2-21 **Power On By PS/2 Keyboard** [Disabled] [Disabled] [Space Bar] [Ctrl-Esc] [Power Key] Disables the Power On by a PS/2 keyboard.

Sets the Space Bar on the PS/2 keyboard to turn on the system. Sets the Ctrl+Esc key on the PS/2 keyboard to turn on the system. Sets Power key on the PS/2 keyboard to turn on the system. This feature requires an ATX power supply that provides at least 1A on the +5VSB lead. **Power On By PS/2 Mouse** [Disabled] [Disabled] [Enabled] **Power On By PCI** [Disabled] [Disabled] Disables the PCI devices to generate a wake event. [Enabled] Enables the PCI devices to generate a wake event. **Power On By PCIE** [Disabled] [Disabled] Disables the PCIE devices to generate a wake event. [Enabled] Enables the PCIE devices to generate a wake event. **Power On By Ring** [Disabled] [Disabled] Disables Ring to generate a wake event.

[Enabled] Enables Ring to generate a wake event. **Power On By RTC** [Disabled] [Disabled] [Enabled] Disables RTC to generate a wake event. When set to [Enabled], the items **RTC Alarm Date (Days)** and **Hour/Minute/Second** will become user-configurable with set values. Configuration options: [Disable Link] [Enabled] This item appears only when you set the **Network Stack** item to [Enabled]. When this item is disabled, the **IPV4 PXE boot** option will not be created. Configuration options: [Disable Link] [Enabled] **Ipv6 PXE Support** [Enabled] This item appears only when you set the **Network Stack** item to [Enabled]. When this item is disabled, the **IPV6 PXE boot** option will not be created. **6 Monitor menu** The Monitor menu displays the system temperature/power status, and allows you to change the fan settings. Scroll down to display the following items: **Anti Surge Support** **Enabled** Version 2. Select **Ignore** if you do not wish to display the detected temperatures.

If the fan is not connected to the motherboard, the field shows N/A. Select **Ignore** if you do not wish to display the detected speed. **4** The onboard hardware monitor automatically detects the voltage output through the onboard voltage regulators. Select **Ignore** if you do not want to detect this item. **CPU Fan Speed Low Limit** [200 RPM] This item appears only when you enable the **CPU Q-Fan Control** feature and allows you to disable or set the CPU fan warning speed. Configuration options: [Ignore] [200 RPM] [300 RPM] [400 RPM] [500 RPM] [600 RPM] **CPU Fan Profile** [Standard] This item appears only when you enable the **CPU Q-Fan Control** feature and allows you to set the appropriate performance level of the CPU fan. [Standard] Sets to [Standard] to make the CPU fan automatically adjust depending on the CPU temperature. [Silent] Sets to [Silent] to minimize the fan speed for quiet CPU fan operation. The following four items appear only when you set **CPU Fan Profile** to [Manual]. **CPU Upper Temperature** [70] Use the <+> and <-> keys to adjust the upper limit of the CPU temperature.

The values range from 20°C to 75°C. **cPU Fan Max. Duty Cycle(%)** [100] Use the <+> and <-> keys to adjust the maximum CPU fan duty cycle. The values range from 20% to 100%. When the CPU temperature reaches the upper limit, the CPU fan will operate at the maximum duty cycle. **CPU Lower Temperature** [20] Use the <+> and <-> keys to adjust the lower limit of the CPU temperature. The values range from 20°C to 75°C. **cPU Fan Min. Duty Cycle(%)** [20] Use the <+> and <-> keys to adjust the minimum CPU fan duty cycle. The values range from 0% to 100%.

When the CPU temperature is under 40°C, the CPU fan will operate at the minimum duty cycle. **Chassis Fan Speed Low Limit** [200 RPM] This item appears only when you enable the **Chassis Q-Fan Control** feature and allows you to disable or set the chassis fan warning speed. Configuration options: [Ignore] [200 RPM] [300 RPM] [400 RPM] [500 RPM] [600 RPM] **Chassis Fan Profile** [Standard] This item appears only when you enable the **Chassis Q-Fan Control** feature and allows you to set the appropriate performance level of the chassis fan. [Standard] Sets to [Standard] to make the chassis fan automatically adjust depending on the chassis temperature. [Silent] Sets to [Silent] to minimize the fan speed for quiet chassis fan operation. The following four items appear only when you set **Chassis Fan Profile** to [Manual]. **Chassis Upper Temperature** [70] Use the <+> and <-> keys to adjust the upper limit of the CPU temperature. The values range from 40°C to 90°C. **chassis Fan Max. Duty Cycle(%)** [100] Use the <+> and <-> keys to adjust the maximum chassis fan duty cycle.

The values range from 60% to 100%. When the chassis temperature reaches the upper limit, the chassis fan will operate at the maximum duty cycle. **Chassis Lower Temperature** [40] Displays the lower limit of the chassis temperature.



[You're reading an excerpt. Click here to read official ASUS P8H61-M](http://yourpdfguides.com/dref/5322559)

[LE R2.0 user guide](http://yourpdfguides.com/dref/5322559)

<http://yourpdfguides.com/dref/5322559>