

Asus P5E3 Premium WiFi-APn User Manual

User manual

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P5E3 Premium/ WiFi-AP @n



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Related Manuals for Asus P5E3 Premium WiFi-APn

Network Card Asus P5Q3 Deluxe WiFi-AP n User Manual User manual (44 pages) Motherboard Asus Crosshair II Formula - Republic of Gamers Series Motherboard User Manual User manual (44 pages) Motherboard Asus A7N266-VM AA User Manual User manual (8 pages) Motherboard Asus P5E3 DELUXE WiFi-AP User Manual Wifi-ap@n user's manual (194 pages) Motherboard Asus P5E3 WS PRO User Manual User manual (172 pages) Motherboard Asus P5E64 WS Pro Installation Manual Motherboard installation guide (180 pages) Motherboard Asus P5E Deluxe - Ai Lifestyle Series Motherboard User Manual User manual (174 pages) Motherboard Asus P5E WS PROFESSIONAL User Manual User manual (44 pages) Motherboard Asus P5E WS PROFESSIONAL User Manual User manual (172 pages) Motherboard Asus P5E - AiLifestyle Series Motherboard Instructions Manual Motherboard installation guide (176 pages) Motherboard Asus P5E-V HDMI User Manual User manual (162 pages) Motherboard Asus P5Q-VM DO User Manual User manual (104 pages) Motherboard Asus P5E-VM - Motherboard - Micro ATX User Manual User manual (156 pages) Motherboard Asus P5E-VM SE User Manual User manual (102 pages) Motherboard Asus P5E3 PRO User Manual User manual (62 pages) Motherboard Asus P5KPL User Manual (68 pages)

Summary of Contents for Asus P5E3 Premium WiFi-APn

Page 1 P5E3 Premium/ WiFi-AP @n...

Page 2 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

Page 4: Contents

Page 8: Notices

Notices Federal Communications Commission Statement This device complies with Part 15 of the FCC Rules. Operation is subject to the following two conditions: • This device may not cause harmful interference, and • This device must accept any interference received including interference that may cause undesired operation.

Page 9: 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.

Page 10: About This Guide

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

Page 11: Conventions Used In This Guide

Conventions used in this guide To make sure 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 12: P5E3 Premium/Wifi-Ap @N Specifications Summary

® * For X.M.P. support, CPUs with FSB 1333 or above are recommended. ** Refer to www.asus.com or this user manual for the Memory QVL (Qualified Vendors Lists). Expansion Slots 3 x PCIe x16 (blue @PCIe 2.0 x16 link, black @PCIe x4 or x1 link) with CrossFire[™]...

Page 13 - ASUS Express Gate - ASUS WiFi-AP @n - ASUS AI Direct Link ASUS Quiet Thermal Solution: - ASUS Fanless Design: Pure Copper Heat-pipe solution - ASUS Fanless Design: StackCool 2 - ASUS Q-Fan 2 - ASUS Optional Fan for Water-cooling or Passive-...

Page 14 1 x System Panel (Q-Connector) BIOS Features 16 Mb Flash ROM, AMI BIOS, PnP, DMI 2.0, WfM 2.0, SM BIOS 2.3, ACPI 2.0a, Multi-language BIOS, ASUS EZ Flash 2, ASUS CrashFree

BIOS 3 Manageability WfM 2.0, DMI 2.0, WOL by PME, WOR by PME, PXE...

Page 15: Chapter 1: Product Introduction

This chapter describes the motherboard features and the new technologies it supports. Chapter 1: Product introduction...

Page 16 Chapter summary Welcome!1-1 Package contents1-1 Special features1-2 ASUS P5E3 Premium/WiFi-AP @n...

Page 17: Welcome

[®] 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.

Page 18: Special Features

See page 2-13 for details. ASUS Express Gate With a fast bootup speed of only 5 seconds, the ASUS Express Gate offers a unique environment that allows you to enjoy instant access to commonly used functions like web browsing or communcation without entering the traditional OS.

Page 19: Ai Direct Link

802.11b/g standards. With two antennas, you will not suffer from signal loss like before. You can also enjoy the choice to set the device in AP-Mode or Client Mode. Refer to the bundled ASUS WiFi-AP @n manual for more details.

Page 20: Asus Ai Lifestyle Unique Features

Green ASUS This motherboard and its packaging comply with the European Union's Restriction on the use of Hazardous Substances (RoHS). This is in line with the ASUS vision of creating environment-friendly and recyclable products/packagings to safeguard consumers' health while minimizing the impact on the environment.

Page 21: Asus Quiet Thermal Solution

Fanless Design - Stack Cool 2 ASUS Stack Cool 2 is a fan-less and zero-noise cooling solution that lowers the temperature of critical heat generating components. The motherboard uses a special design on the printed circuit board (PCB) to dissipate heat these critical components generate.

Page 22: Asus Crystal Sound

See page 2-39 for details. Q-Fan 2 ASUS Q-Fan2 technology intelligently adjusts both CPU fan and chassis fan speeds according to system loading to ensure quiet, cool and efficient operation. See pages 4-32 and 5-22 for details.

<u>Page 23</u> ASUS EZ DIY ASUS EZ DIY feature collection provides you easy ways to install computer components, update the BIOS or back up your favorite settings. ASUS Q-Shield The specially designed ASUS Q-Shield provides conductivity to best protect your motherboard against static electricity damage and shields it against Electronic Magnetic Interference (EMI).

Page 24: Asus Intelligent Performance And Overclocking Features

ASUS Intelligent Performance and Overclocking features AI Booster The ASUS AI Booster allows you to overclock the CPU speed in Windows environment without the hassle of booting the BIOS. See page 5-23 for details. Precision Tweaker 2 Allows the user to adjust the NB Voltage, FSB termination Voltage, CPU PLL Voltage and the DRAM Voltage in 0.02v steps to finetune voltages to achieve the...

Page 25: Chapter 2: Hardware Information

This chapter lists the hardware setup procedures that you have to perform when installing system components. It includes description of the jumpers and connectors on the motherboard. Chapter 2: Hardware information...

Page 26 Chapter summary Before you proceed2-1 Motherboard overview

......2-2 Central Processing Unit (CPU)2-6 System memory2-13 Expansion slots2-18 Jumper2-22 Connectors2-24 ASUS P5E3 Premium/WiFi-AP @n...

Page 27: Before You Proceed

The illustration below shows the location of the onboard LED. SB_PWR P5E3 PREMIUM Standby Powered P5E3 Premium/WiFi-AP @n Power Onboard LED ASUS P5E3 Premium/WiFi-AP @n...

Page 28: Motherboard Overview

Motherboard overview Before you install the motherboard, study the configuration of your chassis to ensure that the motherboard fits into it. Make sure to unplug the power cord before installing or removing the motherboard. Failure to do so can cause you physical injury and damage motherboard components.

Page 29: Motherboard Layout

L-FW3227-100 JMB363 CR2032 3V DET_X16_3 Lithium Cell PCIEX16_3 CMOS Power CHA_FAN4 SPDIF_OUT SB_PWR IE1394_2 USB1112 USB78 COM1 CHA_FAN3 PANEL AAFP CLRTC Refer to 2.7 Connectors for more information about rear panel connectors and internal connectors. ASUS P5E3 Premium/WiFi-AP @n...

Page 30: Layout Contents

2.2.4 Layout contents Slots Page DDR3 DIMM slots 2-13 PCI slots 2-20 PCI Express x 1 slot 2-20 PCI Express 2.0 x16 slots 2-20 Universal PCI Express x16 slot 2-20 Jumpers Page Clear RTC RAM (3-pin CLRTC) 2-22 CPU / Northbridge overvoltage setting 2-23 (3-pin OV_CPU, 3-pin OV_NB) Rear panel connectors...

Page 31 ATX power connectors (24-pin EATXPWR, 2x4-pin EATX12V) 2-34 Front panel audio connector (10-1 pin AAFP) 2-35 Optical drive audio connector (4-pin CD) 2-36 Digital audio connector (4-1 pin SPDIF, for ASUS HDMI card) 2-36 System panel connector (20-8 pin PANEL) 2-37 ASUS Q-Connector (system panel) 2-38...

Page 32: Central Processing Unit (Cpu)

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 LGA775 socket.

Page 33: Installing The Cpu

To prevent damage to the socket pins, do not remove the PnP cap unless you are installing a CPU. Lift the load lever in the direction of the arrow to a 135° angle. ASUS P5E3 Premium/WiFi-AP @n...

Page 34 Lift the load plate with your thumb and forefinger to a 100° angle (A), then push the PnP cap from the load plate window to remove (B). Load plate Alignment key Position the CPU over the socket, making sure that the gold triangle is on the bottom-left corner of the socket then fit the socket...

Page 35: Installing The Cpu Heatsink And Fan

CPU fan connector. Motherboard hole Fastener Narrow end of the groove Make sure to orient each fastener with the narrow end of the groove pointing outward. (The photo shows the groove shaded for emphasis.) ASUS P5E3 Premium/WiFi-AP @n...

<u>Page 36</u> Push down two fasteners at a time in a diagonal sequence to secure the heatsink and fan assembly in place. Connect the CPU fan cable to the connector on the motherboard labeled CPU_FAN. CPU_FAN P5E3 PREMIUM P5E3 Premium/WiFi-AP @n CPU fan connector DO NOT forget to connect the CPU fan connector! Hardware monitoring errors can occur if you fail to plug this connector.

Page 37: Uninstalling The Cpu Heatsink And Fan

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. ASUS P5E3 Premium/WiFi-AP @n 2-11...

<u>Page 38</u> Rotate each fastener clockwise to ensure correct orientation when reinstalling. Narrow end of the groove The narrow end of the groove should point outward after resetting. (The photo shows the groove shaded for emphasis.) Refer to the documentation in the boxed or stand-alone CPU fan package for detailed information on CPU fan installation.

Page 39: System Memory

You may install 512 MB, 1 GB, and 2 GB unbuffered ECC DDR3 DIMMs into the DIMM sockets. Recommend memory configuration Sockets Mode DIMM_A1 DIMM_A2 DIMM_B1 DIMM_B2 populated Single-channel populated Dual-channel (1) populated populated Dual-channel (2) populated populated populated populated ASUS P5E3 Premium/WiFi-AP @n 2-13...

<u>Page 40</u> • 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. •...

Page 41 Kingston IDSH51-03A1F1C-13G N/A QIMONDA KVR1333D3N8/512 • • 1024MB CORSAIR Heat-Sink Package CM3X1024- • • 1333C9DHX 1024MB MICRON Z9HWR MICRON MT8JTF12864AY- • • 1G4BYES 2048MB MICRON Z9HWR MICRON MT16JTF25664AY- • • 1G4BYES ASUS P5E3 Premium/WiFi-AP @n 2-15...

<u>Page 42</u> Supports two modules inserted into either the orange slots or the black slots as one pair of Dual-channel memory configuration. Supports four modules inserted into both the orange slots and the black slots as two pairs of Dual-channel memory configuration. Visit the ASUS website for the latest QVL. 2-16 Chapter 2: Hardware information...

Page 43: Installing A Dimm

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. Remove the DIMM from the socket. ASUS P5E3 Premium/WiFi-AP @n 2-17...

Page 44: Expansion Slots

Expansion slots In the future, you may need to install expansion cards. The following subsections describe the slots and the expansion cards that they support. Make sure to unplug the power cord before adding or removing expansion cards. Failure to do so may cause you physical injury and damage motherboard components.

Page 45: Interrupt Assignments

USB 2.0 controller 2 — shared — — — SATA controller 1 — shared — — — SATA controller 2 — shared — — — ASUS P5E3 Premium/WiFi-AP @n 2-19...

Page 46: Pci Slots

2.5.4 PCI slots The PCI slots support cards such as a LAN card, SCSI card, USB card, and other cards that comply with PCI specifications. 2.5.5 PCI Express x1 slot This motherboard supports PCI Express x1 network cards, SCSI cards and other cards that comply with the PCI Express specifications.

Page 47: Ai Slot Detector

DET_PCI2 DET_X16_3 P5E3 Premium/WiFi-AP @n Slot Detector When the AI Slot Detector lights up for incorrect installation, make sure to shut down the power supply unit before reinstalling the card to avoid electrical shock hazard. ASUS P5E3 Premium/WiFi-AP @n 2-21...

Page 48: Jumpers

Jumpers Clear RTC RAM (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.

Page 49 For system failure due to the wrong setting of the OV_CPU jumper, shut down the computer and move the cap back to pins 2-3. • The system may need a better cooling system

(for example, a water- cooling system) to work stably under high voltage settings. ASUS P5E3 Premium/WiFi-AP @n 2-23...

Page 50: Connectors

Connectors 2.7.1 Rear panel connectors PS/2 keyboard port (purple). This port is for a PS/2 keyboard. Coaxial S/PDIF Out port. This port connects an external audio output device via a coaxial S/PDIF cable. LAN 1 (RJ-45) port. This Marvell LAN port allows Gigabit connection to a ®...

<u>Page 51</u> External SATA port 1 and 2. The external SATA port supports external SATA 3 Gb/s devices. Longer cables support higher power requirements to deliver signal up to two meters away, and enables improved hot-swap function. ASUS P5E3 Premium/WiFi-AP @n 2-25...

<u>Page 52</u> • Before creating a RAID set using Serial ATA hard disks, make sure that you have connected the Serial ATA signal cable and installed Serial ATA hard disk drives; otherwise, you cannot enter the JMicron RAID utility and SATA BIOS setup during POST. •...

Page 53: Internal Connectors

Pin 5 on the connector is removed to prevent incorrect cable connection when using a FDD cable with a covered Pin 5. FLOPPY NOTE: Orient the red markings on the floppy ribbon cable to PIN 1. P5E3 PREMIUM PIN 1 P5E3 Premium/WiFi-AP @n Floppy disk drive connector ASUS P5E3 Premium/WiFi-AP @n 2-27...

Page 54 IDE connector (40-1 pin PRI_E IDE) The onboard IDE connector is for the Ultra DMA 133/100/66 signal cable. There are three connectors on each Ultra DMA 133/100/66 signal cable: blue, black, and gray. Connect the blue connector to the motherboard's IDE connector, then select one of the following modes to configure your device.

Page 55: Sata Connectors

Connect the right-angle side of SATA signal cable to SATA device. Or you may connect the rightangle side of SATA cable to the onboard SATA port to avoid mechanical conflict with huge graphics cards. ASUS P5E3 Premium/WiFi-AP @n 2-29...

<u>Page 56</u> If your chassis suppots front panel USB ports, you can attach a front panel USB cable to these connectors. Connect the USB cable to ASUS Q-Connector (USB, blue) first, and then install the Q-Connector (USB) to the USB connector onboard.

Page 57 You can attach a FireWire/1394 cable to this connector if your chassis suppots the front panel IEEE1394 port. Connect the 1394 cable to ASUS Q-Connector (1394, red) first, and then install the Q-Connector (1394) to the 1394 connector onboard.

Page 58: Fan Connectors

These are not jumpers! Do not place jumper caps on the fan connectors! • Only the CPU-FAN and CHA-FAN 1-4 connectors support the ASUS Advanced Q-Fan feature. • If you install two VGA cards, we recommend that you plug the rear chassis fan cable to the motherboard connector labled CHA_FAN3 or CHA_FAN4 for better themal environment.

<u>Page 59</u> By default , the pin labeled "Chassis Signal" and "Ground" are shorted with a jumper cap. Remove the jumper caps only when you intend to use the chassis intrusion detection feature. CHASSIS +5VSB_MB Chassis Signal (Default) P5E3 PREMIUM P5E3 Premium/WiFi-AP @n Chassis intrusion connector ASUS P5E3 Premium/WiFi-AP @n 2-33...

Page 60: Atx Power Connectors

CPU: Intel Pentium Extreme 3.73GHz ® ® Memory: 512 MB DDR3 (x4) Graphics card: ASUS EAX1900XT Parallel ATA device: IDE hard disk drive Serial ATA device: SATA hard disk drive (x2) Optical drive: DVD-RW 2-34 Chapter 2: Hardware information...

Page 61 Front Panel Type item in the BIOS is set to [HD Audio]. If you want to connect an AC' 97 front panel audio module to this connector, set the item to [AC97]. Refer to page 4-27 for details. ASUS P5E3 Premium/WiFi-AP @n 2-35...

Page 62 Right Audio Channel P5E3 Premium/WiFi-AP @n Internal audio connector 11. Digital

audio connector (4-1 pin SPDIF, for ASUS HDMI VGA card) This connector is for an additional Sony/Philips Digital Interface (S/PDIF) port(s). If you are using ASUS HDMI-equipped graphics card, connect the HDMI card to this connector with a S/PDIF out cable.

Page 63: System Panel Connector

BIOS 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 chassismounted reset button for system reboot without turning off the system power. ASUS P5E3 Premium/WiFi-AP @n 2-37...

<u>Page 64</u> 13. ASUS Q-Connector (system panel) You can use the ASUS Q-Connector to connect/disconnect chassis front panel cables in a few steps. Refer to the instructions below to install the ASUS Q-Connector. Connect the front panel cables to the ASUS Q-Connector.

Page 65: Installing The Optional Fans

Fit the fan to the grooved edge of the heatsink. and heatsink assembly. Carefully push down the fan until The photo shows the fan installed it snugly fits the heatsink, then on the motherboard. connect the fan cable. ASUS P5E3 Premium/WiFi-AP @n 2-39...

<u>Page 66</u> Follow the previous instructions to install the other optional fan. The photo on the right shows the fans installed on the motherboard. • Plug the optional fan cables to the CHA_FAN1, CHA_FAN2 or PWR_FAN connector on the motherboard. • Make sure the optional fan is installed correctly to prevent damage to the fan and motherboard components.

Page 67: Chapter 3: Powering Up

This chapter describes the power up sequence, the vocal POST messages, and ways of shutting down the system. Chapter 3: Powering up...

Page 69: Starting Up For The First Time

One continuous beep followed by three No VGA detected short beeps One continuous beep followed by four Hardware component failure short beeps At power on, hold down the <Delete> key to enter the BIOS Setup. Follow the instructions in Chapter 4. ASUS P5E3 Premium/WiFi-AP @n...

Page 70: Turning Off The Computer

Turning off the computer 3.2.1 Using the OS shut down function If you are using Windows $\$ Click the Start button then select Turn Off Computer. Click the Turn Off button to shut down the computer. The power supply should turn off after Windows $\$...

Page 71: Chapter 4: Bios Setup

This chapter tells how to change the system settings through the BIOS Setup menus. Detailed descriptions of the BIOS parameters are also provided. Chapter 4: BIOS setup...

Page 72Managing and updating your BIOS4-1 BIOS setup program4-8 Mainmenu4-11 Ai Tweaker menu4-16 Advanced menu4-24Power menu4-30 Boot menu4-35 Tools menu4-39 Exit menu......4-43 ASUS P5E3 Premium/WiFi-AP @n...9

Page 73: Managing And Updating Your Bios

® ASUS EZ Flash 2 (Updates the BIOS using a floppy disk or USB flash disk.) ASUS AFUDOS (Updates the BIOS using a bootable floppy disk) ASUS CrashFree BIOS 3 (Updates the BIOS using a USB flash disk or the motherboard support DVD when the BIOS file fails or gets corrupted.)

<u>Page 74</u> To update the BIOS through the Internet: desktop by clicking Start Launch the ASUS Update utility from the Windows \circledast > Programs > ASUS > ASUSUpdate > ASUSUpdate. The ASUS Update main window appears. Select Update BIOS from the Select the ASUS FTP site

nearest...

<u>Page 75</u> To update the BIOS through a BIOS file: desktop by clicking Start Launch the ASUS Update utility from the Windows @ > Programs > ASUS > ASUSUpdate > ASUSUpdate. The ASUS Update main window appears. Select Update BIOS from a file option from the drop-down menu, then click Next.

Page 76: Asus Ez Flash 2 Utility

4.1.2 ASUS EZ Flash 2 utility The ASUS EZ Flash 2 feature allows you to update the BIOS without having to go through the long process of booting from a floppy disk and using a DOS-based utility. The EZ Flash 2 utility is built-in the BIOS chip so it is accessible by pressing <Alt>...

Page 77: Afudos Utility

Updating the BIOS file To update the BIOS file using the AFUDOS utility: Visit the ASUS website (www.asus.com) and download the latest BIOS file for the motherboard. Save the BIOS file to a bootable floppy disk. ASUS P5E3 Premium/WiFi-AP @n...

Page 78 A:\>afudos /iP5E3P.ROM The utility verifies the file and starts updating the BIOS. A:\>afudos /iP5E3P.ROM AMI Firmware Update Utility - Version 1.19(ASUS V2.07(03.11.24BB)) Copyright (C) 2002 American Megatrends, Inc. All rights reserved. WARNING!! Do not turn off power during flash BIOS Reading file ..

Page 79: Asus Crashfree Bios 3 Utility

4.1.4 ASUS CrashFree BIOS 3 utility 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 update a corrupted BIOS file using the motherboard support DVD or the USB flash disk that contains the updated BIOS file.

Page 80: Bios Setup Program

The BIOS setup screens shown in this section are for reference purposes only, and may not exactly match what you see on your screen. • Visit the ASUS website (www.asus.com) to download the latest BIOS file for this motherboard. Chapter 4: BIOS setup...

Page 81: Bios Menu Screen

At the bottom right corner of a menu screen are the navigation keys for that particular menu. Use the navigation keys to select items in the menu and change the settings. The navigation keys may differ from one screen to another. ASUS P5E3 Premium/WiFi-AP @n...

Page 82: Menu Items

4.2.4 Menu items The highlighted item on the menu bar Use [ENTER], [TAB], System Time [06:22:54] or [SHIFT-TAB] to System Date [Mon 01/07/2008] displays the specific items for that select a field. Floppy Diskette A [1.44M, 3.5 in.] Language [English] Use [+] or [-] to menu.

Page 83: Main Menu

Sets the type of floppy drive installed. Configuration options: [Disabled] [720K , 3.5 in.] [1.44M, 3.5 in.] 4.3.4 Language [English] Allows you to select the display language for the BIOS setup screen. Configuration options: [Chinese(BIG5)] [Chinese(GB)] [Japanese] [Français] [German] [English] ASUS P5E3 Premium/WiFi-AP @n 4-11...

Page 84: Sata 1-6

4.3.5 SATA 1-6 While entering Setup, the BIOS automatically detects the presence of Serial ATA devices. There is a separate sub-menu for each SATA device. Select a device item then press <Enter> to display the SATA device information. BIOS SETUP UTILITY Main SATA 1 Select the type of...

Page 85: Sata Configuration

• If you want to create a RAID 0, RAID 1, RAID 5, RAID 10, or the Intel® Matrix Storage Technology configuration from the Serial ATA hard disk drives, set this item to [RAID]. ASUS P5E3 Premium/WiFi-AP @n 4-13...

Page 86: Ahci Configuration

Hard Disk Write Protect [Disabled] Disables or enables device write protection. This will be effective only if the device is accessed through BIOS. Configuration option: [Disabled] [Enabled] SATA Detect Time Out (Sec) [35] Selects the time out value for detecting ATA/ATAPI devices. Configuration options: [0] [5] [10] [15] [20] [25] [30] [35] 4.3.7 AHCI Configuration...

Page 87: System Information

Select Screen Select Item General Help Save and Exit Exit v02.61 (C)Copyright 1985-2007, American Megatrends, Inc. ASUS BIOS Displays the auto-detected BIOS information. Processor Displays the auto-detected CPU specification. System Memory Displays the auto-detected system memory. ASUS P5E3 Premium/WiFi-AP @n 4-15...

Page 88: Ai Tweaker Menu

Ai Tweaker menu The Ai Tweaker menu items allow you to configure overclocking-related items. Take caution when changing the settings of the Ai Tweaker menu items. Incorrect field values can cause the system to malfunction. BIOS SETUP UTILITY Main Ai Tweaker Advanced Power Boot...

Page 89: Cpu Ratio Control

Frequency and DRAM Frequency. Congifuration options: [Auto] [200MHz] [266MHz] [333MHz] [400MHz] The following two items (FSB Frequency and PCIE Freuency) on the next page appear only when you set the Ai Overclock Tuner item to [Manual]. ASUS P5E3 Premium/WiFi-AP @n 4-17...

Page 90: Dram Frequency

FSB Frequency [XXX] Displays the frequency sent by the clock generator to the system bus and PCI bus. The value of this item is auto-detected by the BIOS. Use the <+> and <-> keys to adjust the FSB frequency. You can also type the desired CPU frequency using the numeric keypad.

Page 91: Dram Cmd Skew On Channel A/B

RAS# ACT Time [15 DRAM Clocks] Configuration options: [3 DRAM Clocks] [4 DRAM Clocks]~[33 DRAM Clocks] [34 DRAM Clocks] RAS# to RAS# Delay [Auto] Configuration options: [Auto] [1 DRAM Clocks]~[15 DRAM Clocks] ASUS P5E3 Premium/WiFi-AP @n 4-19...

Page 92 REF Cycle Time [Auto] Configuration options: [Auto] [30 DRAM Clocks] [36 DRAM Clocks] [48 DRAM Clocks] [60 DRAM Clocks] [72 DRAM Clocks] [82 DRAM Clocks] [88 DRAM Clocks] [90 DRAM Clocks] [100 DRAM Clocks] [110 DRAM Clocks] WRITE Recovery Time [Auto] Configuration options: [Auto] [1 DRAM Clocks]~[15 DRAM Clocks] READ to PRE Time [Auto] Configuration options: [Auto] [1 DRAM Clocks]~[15 DRAM Clocks]...

Page 93: Dram Static Read Contro

The value [2.10000V] of the CPU Voltage item is supported only if the • OV_CPU jumper is enalbed, otherwise the maximum voltage suppoted is [1.70000V]. See 2. CPU / Northbridge overvoltage setting on page 2-23 for details. ASUS P5E3 Premium/WiFi-AP @n 4-21...

Page 94: Cpu Gtl Voltage Reference (0/2)

4.4.14 CPU GTL Voltage Reference (0/2) [Auto] Allows you to set the CPU GTL voltage reference. Different ratio might enhance CPU overclocking ability. The values range from 0.370x to 0.760x with a 0.005x interval. 4.4.15 CPU GTL Voltage Reference (1/3) [Auto] Allows you to set the CPU GTL voltage reference.

Page 95: Nb Gtl Voltage Reference

Set to [Disabled] to enhance FSB overclocking ability or [Auto] for EMI control. Configuration options: [Auto] [Disabled] 4.4.25 PCIE Spread Spectrum [Auto] Set to [Disabled] to enhance PCIE overclocking ability or [Auto] for EMI control. Configuration options: [Auto] [Disabled] ASUS P5E3 Premium/WiFi-AP @n 4-23...

Page 96: Advanced Menu

Advanced menu The Advanced menu items allow you to change the settings for the CPU and

other system devices. Take caution when changing the settings of the Advanced menu items. Incorrect field values can cause the system to malfunction. BIOS SETUP UTILITY Main Ai Tweaker Advanced...

Page 97 Setting this item to [Disabled] forces the XD feature flag to always return to zero (0). Configuration options: [Disabled] [Enabled] Max CPUID Value Limit [Disabled] Setting this item to [Enabled] allows legacy operating systems to boot even without support for CPUs with extended CPUID functions. Configuration options: [Disabled] [Enabled] ASUS P5E3 Premium/WiFi-AP @n 4-25...

Page 98: Chipset

4.5.2 Chipset The Chipset menu allows you to change the advanced chipset settings. Select an item then press <Enter> to display the sub-menu. BIOS SETUP UTILITY Advanced Advanced Chipset Settings Configure North Bridge features. WARMING: Setting wrong values in below sections may cause system to malfunction.

Page 99: Onboard Device Configuration

Marvell GigaBit LAN [Enabled] Configuration options: [Enabled] [Disabled] LAN Boot ROM [Disabled] Configuration options: [Disabled] [Enabled] Onboard Wireless LAN [Enabled] Allows you to enable or disable the onboard USB Wireless LAN. Configuration options: [Enabled] [Disabled] ASUS P5E3 Premium/WiFi-AP @n 4-27...

Page 100: Usb Configuration

Agere Firewire 1394 [Enabled] Configuration options: [Enabled] [Disabled] Serial Port1 Address [3F8/IRQ4] Allows you to select the Serial Port1 base address. Configuration options: [Disabled] [3F8/IRQ4] [2F8/IRQ3] [3E8/IRQ4] [2E8/IRQ3] 4.5.4 USB Configuration The items in this menu allows you to change the USB-related features. Select an item then press <Enter>...

Page 101: Pcipnp

When set to [No], BIOS configures all the devices in the system. When set to [Yes] and if you install a Plug and Play operating system, the operating system configures the Plug and Play devices not required for boot. Configuration options: [No] [Yes] ASUS P5E3 Premium/WiFi-AP @n 4-29...

Page 102: Power Menu

Power menu The Power menu items allow you to change the settings for the Advanced Power Management (APM). Select an item then press <Enter> to display the configuration options. BIOS SETUP UTILITY Main Ai Tweaker Advanced Power Boot Tools Exit Select the ACPI state Suspend Mode [Auto]...

Page 103: Apm Configuration

Allows you to enable or disable the PME to wake up from S5 by PCI devices. Configuration options: [Disabled] [Enabled] Power On By PCIE Devices [Disabled] Allows you to enable or disable the PCIE devices to generate a wake event. Configuration options: [Disabled] [Enabled] ASUS P5E3 Premium/WiFi-AP @n 4-31...

Page 104: Hardware Monitor

Power On By PS/2 Keyboard [Disabled] Allows you to disable the Power On by PS/2 keyboard function or set specific keys 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. Configuration options: [Disabled] [Space Bar] [Ctrl-Esc] [Power Key] Energy Star 4.0C [Disabled] Allows you to enable or disable the Energy Star 4.0C support.

<u>Page 105</u> [Profile]. Fan Profile [Optimal] Allows you to set the appropriate performance level of the ASUS Q-Fan. When set to [Optimal], the CPU fan automatically adjusts depending on the CPU temperature. Set this item to [Silent Mode] to minimize the fan speed for quiet CPU fan operation or [Performance Mode] to achieve maximum CPU fan speed.

Page 106 Chassis Fan 1/2/3/4 Speed [xxxxRPM] or [Ignored] / [N/A] The onboard hardware monitor automatically detects and displays the chassis fan speed in rotations per minute (RPM). If the fan is not connected to the motherboard, the field shows [N/A]. Chassis Fan Controls [Full

Speed] Allows you to select the chassis fan control mode.

Page 107: Boot Menu

These items specify the boot device priority sequence from the available devices. The number of device items that appears on the screen depends on the number of devices installed in the system. Configuration options: [1st FLOPPY DRIVE] [Hard Drive] [ATAPI CD-ROM] [Disabled] ASUS P5E3 Premium/WiFi-AP @n 4-35...

Page 108: Boot Settings Configuration

This allows you to enable or disable the full screen logo display feature. Configuration options: [Disabled] [Enabled] Set this item to [Enabled] to use the ASUS MyLogo3[™] feature. AddOn ROM Display Mode [Force BIOS] Sets the display mode for option ROM.

Page 109: Security

Time Clock (RTC) RAM. See section 2.6 Jumper for information on how to erase the RTC RAM. After you have set a supervisor password, the other items appear to allow you to change other security settings. ASUS P5E3 Premium/WiFi-AP @n 4-37...

Page 110: Change User Password

BIOS SETUP UTILITY Boot Security Settings <Enter> to change password. Supervisor Password : Installed <Enter> again to User Password : Installed disabled password. Change Supervisor Password User Access Level [Full Access] Change User Password Clear User Password Password Check [Setup] Select Screen Select Item...

Page 111: Tools Menu

4.8.1 ASUS EZ Flash 2 Allows you to run ASUS EZ Flash 2. 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. Please see page 4-4, section 4.1.2 for details.

Page 112: Asus Express Gate

4.8.2 ASUS Express Gate Allows you to enable or disable the ASUS Express Gate feature. The ASUS Express Gate feature is a unique instant-on environment that provides quick access to the Internet browser and Skype. Refer to section 5.3.11 for details.

Page 113: Asus O.c. Profile

This function can support devices such as a USB flash disk or a floppy disk with FAT 32/16 format and single partition only. • DO NOT shut down or reset the system while updating the BIOS to prevent the system boot failure! ASUS P5E3 Premium/WiFi-AP @n 4-41...

Page 114: Ai Net 2

4.8.4 Ai Net 2 BIOS SETUP UTILITY Tools Marvell Check LAN Pair Status Length cable during POST. Marvell Controller 0 N/A N/A Realtek Controller 0 N/A ASUSTek O.C. Profile Utility V1.06 N/A Marvell POST Check LAN cable [Disabled] Realtek POST Check LAN cable [Disabled] v02.61 (C)Copyright 1985-2007, American Megatrends, Inc.

Page 115: Exit Menu

Setup menus. When you select this option or if you press <F5>, a confirmation window appears. Select Ok to load default values. Select Exit & Save Changes or make other changes before saving the values to the non-volatile RAM. ASUS P5E3 Premium/WiFi-AP @n 4-43...

Page 116 4-44 Chapter 4: BIOS setup...

Page 117: Chapter 5: Software Support

This chapter describes the contents of the support DVD that comes with the motherboard package and the softwares. Chapter 5: Software support...

 Creating a RAID driver disk5-60 ASUS P5E3 Premium/WiFi-AP @n...

Page 119: Installing An Operating System

The contents of the support DVD are subject to change at any time without notice. Visit the ASUS website(www.asus.com) for updates. 5.2.1 Running the support DVD Place the support DVD to the optical drive. The DVD automatically displays the Drivers menu if Autorun is enabled in your computer.

Page 120: Drivers Menu

JMB36X RAID controller driver. ® ASUS EPU Driver + AI Gear 3 Utility Installs the EPU + AI Gear 3 driver. Install this driver before the ASUS AI Suite utility. ASUS WiFi-AP @n Installs the ASUS WiFi-AP @n driver. USB 2.0 Driver Installs the USB 2.0 driver.

Page 121: Utilities Menu

ASUS InstAll - Installation Wizard for Utilities Installs all of the utilities through the Installation Wizard. ASUS Update The ASUS Update utility allows you to update the motherboard BIOS in Windows ® environment. This utility requires an Internet connection either through a network or an Internet Service Provider (ISP).

Page 122 ASUS AI Suite Installs the ASUS AI Suite. ASUS AI Direct Link Installs the ASUS AI Direct Link application ASUS Express Gate Updater Installs the ASUS Express Gate™ update application. Marvell Yukon VCT Application Installs the Marvell Yukon Virtual Cable Tester™ (VCT) application that ®...

Page 123: Make Disk Menu

® RAID/AHCI driver disk. Intel ICH9 32/64bit RAID/AHCI Driver Disk Allows you to create an ICH9 32/64bit RAID/AHCI driver disk. JMicron JMB36X 32/64bit RAID Driver Allows you to create a JMicron JMB36X 32/64bit RAID driver. ® ASUS P5E3 Premium/WiFi-AP @n...

Page 124: Manual Menu

Reader from the Utilities menu before opening a user manual file. ® 5.2.6 ASUS Contact information Click the Contact tab to display the ASUS contact information. You can also find this information on the inside front cover of this user guide. Chapter 5: Software support...

Page 125: Other Information

DVD. Click an icon to display the specified information. Motherboard Info Displays the general specifications of the motherboard. Browse this DVD Displays the support DVD contents in graphical format. ASUS P5E3 Premium/WiFi-AP @n...

Page 126: Technical Support Form

Technical support Form Displays the ASUS Technical Support Request Form that you have to fill out when requesting technical support. Filelist Displays the contents of the support DVD in text format. Chapter 5: Software support...

Page 127: Software Information

5.3.1 ASUS MyLogo3[™] The ASUS MyLogo3[™] utility lets you customize the boot logo. The boot logo is the image that appears on screen during the Power-On-Self-Tests (POST). The ASUS MyLogo3[™] is automatically installed when you install the ASUS Update utility from the support DVD.

<u>Page 128</u> Ratio box. When the screen returns to the ASUS Update utility, flash the original BIOS to load the new boot logo. 10. After flashing the BIOS, restart the computer to display the new boot logo during POST.

Page 129: Ai Net2

LAN cable(s) connected to the LAN port(s). • If you want the system to check the status of the LAN cable before entering the OS, enable the item Post Check LAN Cable in the BIOS Setup. ASUS P5E3 Premium/WiFi-AP @n 5-11...

Page 130: Asus Pc Probe li

To launch the PC Probe II from the Windows \circledast > ASUS > PC Probe II > PC Probe II v1.xx.xx. The PC Probe II main window appears. After launching the application, the PC Probe II icon appears in the Windows \circledast ...

<u>Page 131</u> When displayed, the monitor panel for that sensor also turns red. Refer to the Monitor panels section for details. Preferences You can customize the application using the Preference section in the main window. Click the box before each preference to activate or deactivate. ASUS P5E3 Premium/WiFi-AP @n 5-13...

Page 132 Hardware monitor panels The hardware monitor panels display the current value of a system sensor such as fan rotation, CPU temperature, and voltages. The hardware monitor panels come in two display modes: hexagonal (large) and rectangular (small). When you check the Enable Monitoring Panel option from the Preference section, the monitor panels appear on your computer's desktop.

Page 133 DMI browser Click to display the DMI (Desktop Management Interface) browser. This browser displays various desktop and system information. Click the plus sign (+) before DMI Information to display the available information. ASUS P5E3 Premium/WiFi-AP @n 5-15...

Page 134 PCI browser Click to display the PCI (Peripheral Component Interconnect) browser. This browser provides information on the PCI devices installed on your system. Click the plus sign (+) before the PCI Information item to display available information. Usage The Usage browser displays real-time information on the CPU, hard disk drive space, and memory usage.

Page 135 The Preference tab allows you to customize sensor alerts, or change the temperature scale. Loads the default Loads your saved threshold values for Cancels or configuration each sensor ignores your changes Applies your Saves your changes configuration ASUS P5E3 Premium/WiFi-AP @n 5-17...

Page 136: Asus Ai Suite

ASUS AI Suite allows you to launch AI Gear 3, AI Booster, AI Nap, and Q-Fan 2 utilities easily. Install the ASUS EPU + AI Gear 3 Driver before the ASUS AI Suite utility. Otherwise, the ASUS AI Suite will not function properly. Installing AI Suite To install AI Suite on your computer: Place the support DVD to the optical drive.

Page 137 Displays the CPU/ system temperature, CPU/memory/PCIE voltage, and CPU/ chassis fan speed Displays the FSB/CPU frequency Click on right corner of the expanded window to switch the temperature from degrees Centigrade to degrees Fahrenheit. ASUS P5E3 Premium/WiFi-AP @n 5-19...

Page 138: Asus Epu Utility -- Ai Gear 3

After installing ASUS AI Suite from the bundled support DVD, you can launch ASUS AI Gear 3 by double-clicking the AI Suite icon on your Windows OS taskbar and then click the AI Gear 3 button on the AI Suite main window.

Page 139 Electricity Savings Calculator window. You may reset the Click time for the calculator to start counting. Click to reset the time the calculator starts Displays the electricity saved since the time was reset ASUS P5E3 Premium/WiFi-AP @n 5-21...

Page 140: Asus Ai Nap

5.3.6 ASUS AI Nap This feature allows you to minimize the power consumption of your computer whenever you are away. Enable this feature for minimum power consumption and a more quiet system operation. After installing AI Suite from the bundled support DVD, you can launch the utility by double-clicking the AI Suite icon on the Windows OS taskbar and click the AI Nap button on the AI Suite main window.

Page 141: Asus Q-Fan 2

5.3.7 ASUS Q-Fan 2 This ASUS Q-Fan 2 Control feature allows you to set the appropriate performance level of the CPU Q-Fan 2 or the Chassis Q-Fan 2 for more efficient system operation. After enabling the Q-Fan 2 function, the fans can be set to automatically adjust

depending on the temperature, to decrease fan speed, or to achieve the maximum fan speed.

Page 142: Asus Ai Booster

5.3.8 ASUS AI Booster The ASUS AI Booster application allows you to overclock the CPU speed in WIndows environment without the hassle of booting the BIOS. ® After installing AI Suite from the bundled support DVD, you can launch the utility...

Page 143: Asus Ai Direct Link

You must first connect two computers (at least one of them is ASUS product) using a network cable, and then install the utility to both computers to avail the AI Direct Link feature.

Page 144 The default path of the AlDirectLinkIncoming folder is C:\Program Files\ASUS\AI Direct Link. To change its location, disable the incoming folder first. Then, select Incoming folder > Change incoming folder to open the system directories, and move the AlDirectLinkIncoming folder under another directory.

Page 145: Ai Audio 2 (Soundmax ® High Definition Audio Utility)

You must use 4-channel, 6-channel or 8-channel speakers for this setup. If the SoundMAX \circledast audio utility is correctly installed, you will find the SoundMAX \circledast / SoundMAX \circledast BlackHawk icon on the taskbar. ASUS P5E3 Premium/WiFi-AP @n 5-27...

Page 146 SoundMAX BlackHawk (AI Audio 2) If you are using Windows Vista operation system, from the taskbar, double-click ® the SoundMAX ® BlackHawk icon to display the SoundMAX ® control panel. Enabling AI Audio 2 Click the power button to activate digital signal processing. AI Audio 2, with the new SoundMAX BlackHawk by Sonic Focus, brings you more multi-media enjoyment.

<u>Page 147</u> Press the Test Speakers button to perform speaker test. Port settings Click this port settings tab to display the rear panel ports configuration for the speakers or rear panel digital port configuration for the SPDIF interface. ASUS P5E3 Premium/WiFi-AP @n 5-29...

Page 148 Recording Settings To change the recording settings, click the Recording button on the control panel. You can adjust the speaker delay of Microphone or Line In by moving the slider rightward or leftward. Record testing Port settings Click the tab to perform test Click the tab to display the rear recording and play the test sample panel ports for Microphone or...

Page 149 Speakers Allows you to adjust the Speaker Trim and Speaker Delay. Bass Allows you to do the Bass management. Preferences Displays the preference options for this utility, version information, AudioESP, etc. ASUS P5E3 Premium/WiFi-AP @n 5-31...

Page 150 SoundMAX If you are using Windows ® XP operating system, from the taskbar, double-click on the SoundMAX icon to display the SoundMAX Control Panel. ® ® Audio Setup Wizard By clicking the icon from the SoundMAX control panel, you can easily ®...

Page 151 Adjust microphone volume This screen helps you adjust microphone volume. You will be asked to read pre-written text to allow the AudioWizard to adjust the volume as you speak. ASUS P5E3 Premium/WiFi-AP @n 5-33...

Page 152 Audio preferences Click the icon to go to the Preferences page. This page allows you to change various audio settings. General options Click the General tab to choose your playback and recording devices, enable/ disable the AudioESP™ feature, and enable/disable digital output. Listening Environment options Click the Listening Environment tab to set up your speaker, acoustic environment, and enable/disable the Virtual Theater Surround function.

<u>Page 153</u> • The Directional Array and Speaker Phonefunction only when working with the ASUS Array Mic. • The ASUS Array Mic is purchased separately. • If you are using Windows Vista, you have to manually enable the directional Array and Speaker Phone function. Go to Control panel >...

Page 154: Asus Express Gate

5.3.11 ASUS Express Gate ASUS Express Gate is an instant-on environment that gives you quick access to web and Skype. Within a few seconds of powering on your computer, you will be at

the Express Gate menu where you can start the web browser, Skype, or other Express Gate applications.

Page 155 Date and Time: set current date and time as well as time zone. Input Method: choose your preferred input language and method. Language and Keyboard: choose your language and keyboard preferences. LaunchBar Setting: customize your LaunchBar (where it docks, whether it auto- hides, etc.) ASUS P5E3 Premium/WiFi-AP @n 5-37...

Page 156 Network Configuration Specify how your computer connects to the Internet. Enable all the network ports that you may use (LAN1, LAN2, and/or wireless [optional]). LAN1 and LAN2 refer to the two RJ-45 network ports on your computer. • You can connect the LAN cable to either port, and Express Gate will automatically use the connected port.

Page 157 How Do I Get on to the Internet If Internet doesn't seem to be working in the Express Gate environment, check the following: Open the Configuration Panel. open Configuration Panel Open Network tool. open Network tool ASUS P5E3 Premium/WiFi-AP @n 5-39...

Page 158 Make the proper network configurations. Each network interface is enabled immediately when you check the box next to it. • If you use a network cable connected to a home router (which is then connected to your DSL/cable modem), enable both LAN1 and LAN2. Express Gate will automatically use whichever port (LAN1 or LAN2) is connected.

<u>Page 159</u> New versions of the Express Gate software will be released regularly, adding refinements or new applications. You can find original version of the software on the support DVD or download new versions from the ASUS support website. Express Gate software is released as an image file with .DFI extension.

Page 160 To install the Express Gate Updater, launch the installer and follow on-screen prompts. To use the Express Gate Updater, launch the application and follow on-screen prompts. The Updater can preserve your Express Gate settings and personal data (web browser bookmarks, etc.) while doing an update. Use the checkbox "Keep user profile"...

Page 161: Raid Configurations

RAID sets to get higher performance, capacity, or fault tolerance provided by the difference RAID function. For example, RAID 0 and RAID 1 set can be created by using only two identical hard disk drives. ASUS P5E3 Premium/WiFi-AP @n 5-43...

Page 162: Installing Serial Ata Hard Disks

5.4.2 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 163: Intel Matrix Storage Manager Option Rom Utility

The navigation keys at the bottom of the screen allow you to move through the menus and select the menu options. The RAID BIOS setup screens shown in this section are for reference only and may not exactly match the items on your screen. ASUS P5E3 Premium/WiFi-AP @n 5-45...

Page 164: Creating A Raid 0 Set (Striped)

Creating a RAID 0 set (striped) To create a RAID 0 set: From the utility main menu, select 1. Create RAID Volume, then press <Enter>. This screen appears. Intel(R) Matrix Storage Manager Option ROM v5.0.0.1032 ICH9R wRAID5 Copyright(C) 2003-05 Intel Corporation. All Rights Reserved. [CREATE ARRAY MENU] Name:...

Page 165 WARNING: ALL DATA ON SELECTED DISKS WILL BE LOST. Are you sure you want to create this volume? (Y/N): Press <Y> to create the RAID volume and return to the main menu, or <N> to go back to the Create Volume menu. ASUS P5E3 Premium/WiFi-AP @n 5-47...

Page 166: Creating A Raid 1 Set (Mirrored)

Creating a RAID 1 set (mirrored) To create a RAID 1 set: From the utility main menu, select 1.

Create RAID Volume, then press <Enter>. This screen appears. Intel(R) Matrix Storage Manager Option ROM v5.0.0.1032 ICH9R wRAID5 Copyright(C) 2003-05 Intel Corporation. All Rights Reserved. [CREATE ARRAY MENU Name: Volume1...

Page 167 Key in the RAID volume capacity that you want then press <Enter> when the Capacity item is highlighted. The default value indicates the maximum allowed capacity. ASUS P5E3 Premium/WiFi-AP @n 5-49...

Page 168 Press <Enter> when the Create Volume item is highlighted. This warning message appears. WARNING: ALL DATA ON SELECTED DISKS WILL BE LOST. Are you sure you want to create this volume? (Y/N): Press <Y> to create the RAID volume and return to the main menu or <N> to go back to the Create Volume menu.

Page 169 WARNING: ALL DATA ON SELECTED DISKS WILL BE LOST. Are you sure you want to create this volume? (Y/N): Press <Y> to create the RAID volume and return to the main menu or <N> to go back to the Create Volume menu. ASUS P5E3 Premium/WiFi-AP @n 5-51...

Page 170: Before Creating A Raid Set

5.4.4 JMicron RAID Configuration ® The JMicron ® Serial ATA controller allows you to configure RAID 0, RAID 1 and JBOD sets on the external Serial ATA hard disk drives. Before creating a RAID set Prepare the following items: Two SATA HDDs, preferably with the same model and capacity. A write-enabled floppy disk (Windows XP).

Page 171: Creating A Raid Set

<Enter>. [Main Menu] Create RAID Disk Drive Delete RAID Disk Drive Revert HDD to Non-RAID Solve Mirror Conflict Rebuild Mirror Drive Save and Exit Setup Exit Without Saving ASUS P5E3 Premium/WiFi-AP @n 5-53...

Page 172 When the Level item is highlighted, use the up/down arrow key to select the RAID set that you want to create. [Create New RAID] [Create New RAID] Name : JRAID Name : JRAID Level: 0-Stripe Level: 1-Mirror Disks: Select Disk Disks: Select Disk Block: 128 KB Block: N/A...

Page 173 Pressing <Y> deletes all the data in the HDDs. The following screen appears, displaying the relevant information about the RAID set you created. [RAID Disk Drive List] Model Name RAID Level Capacity Status Members(HDDx) RDD0: JRAID 0-Stripe XXX GB Normal 01 ASUS P5E3 Premium/WiFi-AP @n 5-55...

Page 174: Deleting A Raid Set

Deleting a RAID set In the main JMB363 RAID BIOS menu, highlight Delete RAID Disk Drive using the up/down arrow key then press <Enter>. [Main Menu] Create RAID Disk Drive Delete RAID Disk Drive Revert HDD to Non-RAID Solve Mirror Conflict Rebuild Mirror Drive Save and Exit Setup Exit Without Saving...

Page 175: Resetting Disks To Non-Raid

Use the space bar to select the HDD that you want to reset to non-RAID. A selected HDD shows a sign before it. A dialogue box appears to confirm the action. Press <Y> to confirm; otherwise, press <N>. Pressing <Y> deletes all the data in the HDD. ASUS P5E3 Premium/WiFi-AP @n 5-57...

Page 176: Solving A Mirror Conflict

Solving a Mirror conflict A Mirror conflict occurs when both disks in a RAID 1 (Mirror) configuration are unplugged from the system in turn, then plugged in again. Since both disks contain exactly the same data, the system will be unable to determine which of the two is the source drive.

Page 177: Rebuilding A Mirror Drive

<Enter> to save the current RAID configuration and exit the JMB363 RAID BOS utility. A dialogue box appears to confirm the action. Press <Y> to confirm; otherwise, press <N> to return to the JMB RAID BIOS menu. ASUS P5E3 Premium/WiFi-AP @n 5-59...

Page 178: Creating A Raid Driver Disk

Creating a RAID driver disk A floppy disk with the RAID driver is required when installing Windows ® XP/Vista and later operating system on a hard disk drive that is included in a RAID set. For Windows Vista user, you can create a RAID driver disk with a floppy disk drive or a USB flash disk drive.

Page 179 To install the RAID driver in Windows Vista:
Insert the floppy disk/USB device with RAID driver into the floppy disk drive/USB port. During the OS installation, select JMicron JMB363. Follow the succeeding screen instructions to complete the installation. ASUS P5E3 Premium/WiFi-AP @n 5-61...

Page 180 5-62 Chapter 5: Software support...

Page 181: Chapter 6: Ati [®] Crossfire[™] Technology Support

This chapter tells how to install ATI [®] CrossFire[™] graphics cards to avail of ATI's Multi-Video Processing technology. Chapter 6: CrossFire[™] [®] technology support...

Page 182 Chapter summary Overview6-1 Installing CrossFire[™] graphics cards6-2 Software information6-5 ASUS P5E3 Premium/WiFi-AP @n...

Page 183: Overview

Uninstall other graphics card drivers in your system To uninstall other graphics card drivers: Close all current applications. Go to Control Panel > Add/Remove Programs. Select your current graphics card driver/s. Select Add/Remove. Restart your system. ASUS P5E3 Premium/WiFi-AP @n...

Page 184: Installing Crossfire[™] Graphics Cards

Installing CrossFire[™] graphics cards Before installing a CrossFire[™] system, refer to the user guide that came with the ATI CrossFire[™] Edition graphics card. ® To install the graphics cards: Prepare one CrossFire[™] Edition (Master) graphics card and one CrossFire[™]-ready (Slave) graphics card. Slave graphics card Master graphics card Insert the CrossFire[™]...

Page 185 Insert the CrossFire[™]-ready (Slave) graphics card into the PCI Express x16 black slot. Make sure that the card is properly seated on the slot. Connect an auxiliary power source from the power supply to the graphics cards. ASUS P5E3 Premium/WiFi-AP @n...

Page 186 Connect one end of the external cable to the Master graphics card. Connect the other end of the external cable to the Slave graphics card. Connect the loose end to the corresponding port on your monitor. Chapter 6: ATI MVP technology support ®...

Page 187: Software Information

Hardware Wizard window. Click Cancel. Place the CrossFire[™] installation CD in your optical drive and install drivers from the opening menu. Click Next to continue from the installation window that appears. Read the License Agreement, then click Yes. ASUS P5E3 Premium/WiFi-AP @n...

Page 188 Select the components that you want to install, then click Next. • Select Express to install the HydraVision[™] multi-monitor and desktop management software, as well as the ATI driver. • Select Custom to individually choose desired software components. Setup prepares the installation wizard that will guide you to setup process.

Page 189: Using The Catalyst[™] Control Center

Start > ATI Catalyst[™] Control Center > • On the Windows ® Catalyst[™] Control Center • Double-click the Catalyst[™] Control Center desktop shortcut. • On the Windows task bar, double-® click the Catalyst[™] Control Center icon. ASUS P5E3 Premium/WiFi-AP @n...

Page 190 The Catalyst[™] Control Center Dialog Box View The Catalyst[™] Control Center provides two views: Standard - simple view with wizards for beginners Advance - allows advanced users to access and configure the complete features of the software Set to Advance view to enable the CrossFire[™] function. Chapter 6: ATI MVP technology support ®...

Page 191 CrossFire[™]. Click OK to effect the setting. Hotkeys Click the Hotkeys tab on the Catalyst[™] Control Center to access the Hotkeys Manager, which allows you to create key combinations as shortcuts for performing certain functions quickly. ASUS P5E3 Premium/WiFi-AP @n...

Page 192 Profiles Click the Profiles tab on the Catalyst[™] Control Center to access the Profiles Manager, which allows you to create customized environments for your desktop, video, and 3D applications. Preferences Click the Preferences tab on the Catalyst[™] Control Center to select a language, restore defaults, change skins, or enable/disable the System Tray icon.

Page 193 Help Click the Help tab on the Catalyst[™] Control Center to access the online help system, generate a Problem Report, and get the Catalyst[™] Control Center version information. ASUS P5E3 Premium/WiFi-AP @n 6-11...

Page 194 6-12 Chapter 6: ATI MVP technology support ®...

Page 195: Appendix: Cpu Features

The Appendix describes the CPU features and technologies that the motherboard supports. Appendix: CPU features...

Page 196: A.1 Intel ® Em64T

Chapter summary Intel ® EM64TA-1 Enhanced Intel SpeedStep Technology (EIST)A-1 ® Intel Hyper-Threading TechnologyA-3 ® ASUS P5E3 Premium/WiFi-AP @n...

Page 197: Intel ® Em64T

32-bit operating systems. • The motherboard comes with a BIOS file that supports EM64T. You can download the latest BIOS file from the ASUS website (www.asus.com/ support/download/) if you need to update the BIOS file. See Chapter 4 for details.

Page 198: Using The Eist

A.2.2 Using the EIST To use the EIST feature: Turn on the computer, then enter the BIOS Setup. Go to the Advanced Menu, highlight CPU Configuration, then press <Enter>. Set the Intel(R) SpeedStep Technology item to [Automatic], then press <Enter>. Press <F10>...

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Power up the system and enter the BIOS Setup. Under the Advanced Menu, make sure that the item Hyper-Threading Technology is set to [Enabled]. The BIOS item appears only if you installed a CPU that supports Hyper- -Threading Technology. Restart the computer. ASUS P5E3 Premium/WiFi-AP @n...

Page 200 Appendix: CPU features...