Asus 850E - P4 ATX 533MHzFSB USB2 LAN User Manual

Intel 850 micro-atx motherboard

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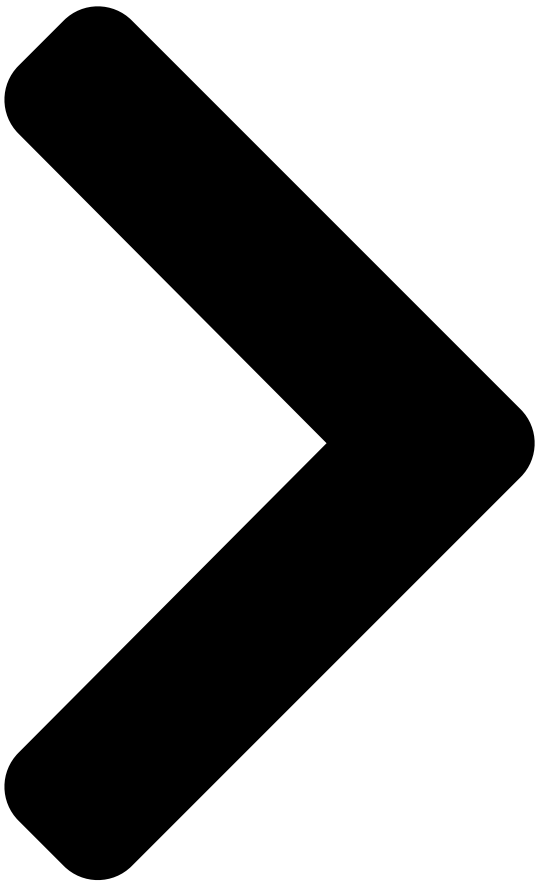

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P4T-M

®

Intel

850 Micro-ATX Motherboard

USER'S MANUAL

ASUS P4T-M User's Manual

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Related Manuals for Asus 850E - P4 ATX 533MHzFSB USB2 LAN

Motherboard Asus P4T-M User Manual

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Motherboard Asus M2A-MVP - Motherboard - ATX User Manual

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Summary of Contents for Asus 850E - P4 ATX 533MHzFSB USB2 LAN

Page 1 ® P4T-M ® Intel 850 Micro-ATX Motherboard USER’S MANUAL ASUS P4T-M User’s Manual...

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ASUS CONTACT INFORMATION ASUSTeK COMPUTER INC. (Asia-Pacific) Marketing Address: 150 Li-Te Road, Peitou, Taipei, Taiwan 112 Telephone: +886-2-2894-3447 Fax: +886-2-2894-3449 Email: info@asus.com.tw Technical Support MB/Others (Tel): +886-2-2890-7121 (English) Notebook (Tel): +886-2-2890-7122 (English) Desktop/Server (Tel):+886-2-2890-7123 (English) Fax: +886-2-2890-7698 Email: tsd@asus.com.tw WWW: www.asus.com.tw FTP: ftp.asus.com.tw/pub/ASUS...

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Page 5 CONTENTS 4.5.2 Hardware Monitor .....64 4.6 Boot Menu .....65 4.7 Exit Menu ..... 67 5. SOFTWARE SETUP ..... 69 5.1 Install Operating System .....69 5.2 Start Windows .....69 5.3 P4T-M Motherboard Support CD .....70 6.1 ASUS Live Update .....72 6.

Page 6: Canadian Department Of Communications Statement

FCC & DOC COMPLIANCE This device complies with FCC Rules Part 15. 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 7: Introduction

1. INTRODUCTION 1.1 How This Manual Is Organized This manual is divided into the following sections: 1. INTRODUCTION Manual information and checklist 2. FEATURES Production information and specifications 3. HARDWARE SETUP Intructions on setting up the motherboard. 4. BIOS SETUP Intructions on setting up the BIOS 5.

Page 8: Features

• PC Health Monitoring: An easy way to examine and manage system status information, such as CPU and systerm voltages, temperatures, and fan status through the onboard hardware and the bundled ASUS PC Probe or Intel LDCM software. • Legacy Free: Provides three 32-bit PCI (PCI 2.2 compliant) with no ISA, elimi- nating bottlenecks and system memory management issues.

Page 9: Optional Components

2. FEATURES • Low Pin Count (LPC) Multi-I/O: Provides two high-speed UART compatible serial ports and one parallel port with EPP and ECP capabilities. UART2 can also be directed from COM2 to the Infrared Module for wireless connections. • Enhanced ACPI & Anti-Boot Virus Protection: Programmable BIOS (Flash EEPROM), offering enhanced ACPI for Windows 98/2000/Millenium compat- ibility, built-in firmware-based virus protection, and autodetection of most de- vices for virtually automatic setup.

Page 10: Performance Features

2. FEATURES 2.1.3 Performance Features • High-Speed Data Transfer Interface: Onboard IDE Bus Master controller with two connectors that support four IDE devices in two channels. Supports UltraDMA/100/66, UltraDMA/33 (IDE DMA Mode 2), PIO Modes 3 & 4, and supports Enhanced IDE devices, such as DVD-ROM, CD-ROM, CD-R/RW, LS-120, and Tape Backup drives.

Page 11 The onboard hardware ASUS ASIC in conjunction with either the bundled ASUS PC Probe or Intel LDCM will warn the user before the system resources are used up to prevent possible application crashes. Suggestions will give the user information on managing their limited resources more efficiently.

Page 12: P4T-M Motherboard Components

See opposite page for locations. Location Processor Support Socket 423 for Pentium 4 Processors .....1 Chipsets Intel 850 Memory Controller Hub (MCH) ..... 2 Intel I/O Controller Hub 2 (ICH2) ..... 11 4Mbit Firmware Hub (FWH) ..... 9 Yamaha Audio Chipset .....16 Main Memory Maximum 2GB support 4 RIMM Sockets .....

Page 13

2. FEATURES 2.2.1 Component Locations 10 9 ASUS P4T-M User's Manual...

Page 14: Hardware Setup

24.4cm (9.60in) PS/2KBMS Multi T: Mouse CPU_FAN B: Keyboard Bottom: Top: USB1 RJ-45 USB2 ATX12V COM1 Socket 423 PWR_FAN IEEE1394 Intel 850 Memory Line Controller Hub (MCH) 1394HEAD3 Line 1394HEAD2 1394 Physical Layer Accelerated Graphics Port (AGP) Chip SPDIFOUT Realtek PCI1...

Page 15: Layout Contents

3. HARDWARE SETUP 3.2 Layout Contents Expansion 1) RIMMA1/A2/B1/B2 p.17 184-Pin System Memory Support 2) CPU p.19 Central Processing Unit (CPU) 3) HEATSINK p.20 CPU Heatsink Retention Module Installation 3) PCI1/2/3 p.23 32-bit PCI Bus Expansion Slots 4) AGP 4X p.25 Accelerated Graphics Port (AGP 4X) Slot Connectors 1) PS2KBMS...

Page 16: Getting Started

3. HARDWARE SETUP 3.3 Getting Started IMPORTANT: Due to Pentium 4 CPU's power consumption requirement, an ATX12V power supply is recommended for this motherboard. For typical system configurations, an ATX12V power supply that can supply at least 230W and at least 8.5A on the +12V lead is required.

Page 17: System Memory

3. HARDWARE SETUP 3.4 System Memory NOTE: No hardware or BIOS setup is required after adding or removing memory. This motherboard has four 184-pin Rambus Inline Memory Modules (RIMM) sockets. These sockets support 64Mbit, 128Mbit, and 256Mbit Direct RDRAM technologies. Location Memory Module Subtotal...

Page 18: Installing Memory

3. HARDWARE SETUP 3.4.1 Installing Memory The memory module (RIMM/C-RIMM) will fit in only one orientation. IMPORTANT: Do not touch the memory module's connectors. Handle the module only by the edges. P4T-M P4T-M 184-Pin RIMM Sockets 1. Make sure that the notch keys in the module are aligned with the small ribs inside the RIMM sockets.

Page 19: Cpu Installation

3. HARDWARE SETUP 3.5 Central Processing Unit (CPU) The motherboard provides a ZIF Socket for the P4 Socket 423 CPU. The CPU that came with the motherboard should have a fan attached to it to prevent overheating. If not, then purchase a fan before turning on the system. Socket 423 Pentium 4 Gold Arrow ®...

Page 20: Cpu Heatsink Retention Module Installation

3. HARDWARE SETUP 3.5.2 CPU Heatsink Retention Module Installation Parts Inventory: 1. Two black plastic heatsink support braces have built-in retaining clips, below left. An alternate heatsink support brace with two separate retaining clips may be included with this package, below right. Both types of supports may be affixed to the motherboard using the plastic plugs and shown in #2 below.

Page 21

3. HARDWARE SETUP Step 1: Mount the Black Plastic Heatsink Support Braces: 1. Insert the four black plastic collars from the top through to the bottom of the motherboard. Insert the white plastic plugs into the middle of the black plastic collars and pop them firmly out the bottom of the motherboard.

Page 22

3. HARDWARE SETUP Step 2b: Mount Heatsink Using Separate Retaining Clips 1. Latch the large middle clip on the metal heatsink retainer to the central black tab on the plastic heatsink support base. 2. Then latch the slotted metal tab on the heatsink retaining clip to the protruding black tab on the end of the plastic heatsink...

Page 23: Expansion Cards

3. HARDWARE SETUP 3.6 Expansion Cards In the future, you may need to install expansion cards. The motherboard has five PCI expansion slots to support these cards. Follow the steps in the next section when installing expansion cards. WARNING! Unplug the system power cord when adding or removing expansion cards or other system components.

Page 24: Assigning Irqs For Expansion Cards

3. HARDWARE SETUP 3.6.2 Assigning IRQs for Expansion Cards Some expansion cards need an IRQ to operate. Generally, an IRQ must be exclusively assigned to one use. In a standard design, there are 16 IRQs available but most of them are already in use, leaving 6 IRQs free for expansion cards. If your motherboard has PCI audio onboard, an additional IRQ will be used.

Page 25 3. HARDWARE SETUP 3.6.3 Accelerated Graphics Port (AGP 4X) This motherboard provides an accelerated graphics port (AGP 4X) to support a new generation of AGP graphics cards with ultra-high memory bandwidth. P4T-M P4T-M Accelerated Graphics Port (AGP) IMPORTANT: ® Only 1.5V AGP cards are supported. ASUS AGP 4X cards are rated for both 1.5 and 3.3 Volts.

Page 26: External Connectors

3. HARDWARE SETUP 3.7 External Connectors WARNING! Some pins are used for connectors or power sources. These are clearly distinguished from jumpers in the Motherboard Layout. Placing jumper caps over these connector pins will cause damage to your motherboard. IMPORTANT: Ribbon cables should always be connected with the red stripe to Pin 1 on the connectors.

Page 27 3. HARDWARE SETUP 3) Parallel Port Connector (Burgundy 25-pin PRINTER) You can enable the parallel port and choose the IRQ through Onboard Parallel Port (see 4.4.2 I/O Device Configuration). NOTE: Serial printers must be connected to the serial port. Parallel (Printer) Port (25-pin female) 4) Serial Port Connectors (Teal/Turquoise 9-pin COM1, 10-1 pin COM2) One serial port is ready for a mouse or other serial devices.

Page 28 3. HARDWARE SETUP 5) Universal Serial Bus Ports (Black two 4-pin USB) Two USB ports are available for connecting USB devices. For additional USB ports, you can use the USB headers (see USB Headers later in this section). NOTE: USB Function (see 4.4.3 PCI Configuration) must be Enabled to use these ports.

Page 29 3. HARDWARE SETUP 8) Joystick/MIDI Connector (15-pin Female GAME_AUDIO) You may connect game joysticks or game pades to this connector for playing games. Connect MIDI devices for playing or editing audio. Game/MIDI (15-pin Female) 9) Audio Port Connectors (Three 1/8” Female) Line Out can be connected to headphones or preferably powered speakers.

Page 30 3. HARDWARE SETUP 11) Primary (Blue) / Secondary IDE Connectors (Two 40-1pin IDE) These connectors support the provided IDE hard disk ribbon cable. Connect the cable’s blue connector to the motherboard’s primary (recommended) or second- ary IDE connector. Then connect the gray connector to your UltraDMA/100 slave device (hard disk drive) and the black connector to your UltraDMA/100 master device.

Page 31 3. HARDWARE SETUP 13) Internal Audio Connectors (4-pin VIDEO, CD_IN, AUX) These connectors allow you to receive stereo audio input from such audio-vi- sual sources as a VIDEO or CD-ROM input, or MPEG card. AUX_CON VIDEO CD IN P4T-M P4T-M Internal Audio Connectors 14) IEEE-1394 Headers (8-pin 1394HEAD2/1394HEAD3) (optional) These headers support an IEEE-1394 serial connector cable set that mounts to a standard expansion slot in the computer case.

Page 32 NOTE: The “Rotation” signal is to be used only by a specially designed fan with rotation signal. The Rotations per Minute (RPM) can monitored using a utility such as ASUS PC Probe or Intel LDCM. WARNING! The CPU and/or motherboard will overheat if there is no airflow across the CPU and onboard heatsinks.

Page 33 3. HARDWARE SETUP 16) Digital Audio Interface Connector (3-pin SPDIFOUT) This connector is used to send audio signal outputs to amplifiers and speakers and to digital recording devices like mini CD player/recorders. SPDIFOUT Ground P4T-M SPDIFOUT P4T-M Digital Audio Interface 17) Wake-On-LAN Connector (3-pin WOL) This connector supports a LAN card with a Wake-On-LAN output, such as the ASUS PCI-L101 Ethernet card (see 7.

Page 34 3. HARDWARE SETUP 18) Standard and Consumer Infrared (SIR) Module Connector (5-pin IR) This connector supports an optional wireless transmitting and receiving infrared module. This module mounts to a small opening on system cases that support this feature. You must also configure the setting through UART2 Use Infrared (see 4.4.2 I/O Device Configuration) to select whether UART2 is directed for use with COM2 or IrDA.

Page 35 3. HARDWARE SETUP 20) Power Supply Connectors (20-pin block ATXPWR) (4-pin ATX12V) These connectors supply ATX 12V power. Each power supply plug inserts in one orientation only. Push down firmly and make sure the pins are aligned. IMPORTANT: For typical system configurations, an ATX12V power supply that can supply at least 230W and at least 8.5A on the +12V lead is required.

Page 36 3. HARDWARE SETUP The following diagram is for items 22–28: Speaker Keyboard Lock Connector Power LED Reset SW Message LED ATX Power P4T-M SMI Lead Switch* Requires an ATX power supply. P4T-M System Panel Connectors 22) System Power LED Lead (3-1 pin PWRLED) This 3-1 pin connector connects the system power LED, which lights when the system is powered on and blinks when it is in sleep mode.

Page 37: Starting Up The First Time

3. HARDWARE SETUP 3.8 Starting Up the First Time 1. After all connections are made, close the system case cover. 2. Be sure that all switches are off (in some systems, marked with). 3. Connect the power supply cord into the power supply located on the back of your system case according to your system user's manual.

Page 38 3. HARDWARE SETUP 7. During power-on, hold down <Delete> to enter BIOS setup. Follow the instruc- tions in 4. BIOS SETUP. * Powering Off your computer: You must first exit or shut down your operating system before switching off the power switch. For ATX power supplies, you can press the ATX power switch after exiting or shutting down your operating sys- tem.

Page 39: Bios Setup

4. BIOS SETUP 4.1 Managing and Updating Your BIOS 4.1.1 Upon First Use of the Computer System It is recommended that you save a copy of the original motherboard BIOS along with a Flash Memory Writer utility (AFLASH.EXE) to a bootable floppy disk in case you need to reinstall the BIOS later.

Page 40: Updating Bios Procedures

4. BIOS SETUP 5. Select 1. Save Current BIOS to File from the Main menu and press <Enter>. The Save Current BIOS To File screen appears. 6. Type a filename and the path, for example, A:\XXX-XX.XXX and then press <Enter>. 4.1.2 Updating BIOS Procedures WARNING! Only update your BIOS if you have problems with your mother-...

Page 41 4. BIOS SETUP 6. When prompted to confirm the BIOS update, press Y to start the update. 7. The utility starts to program the new BIOS information into the flash ROM. The boot block will be updated automatically only when necessary. This will mini- mize the chance that a failed update will prevent your system from booting up.

Page 42: Bios Setup Program

4.2 BIOS Setup Program This motherboard supports a programmable EEPROM that can be updated using the provided utility as described in 4.1 Managing and Updating Your BIOS. The utility is used if you are installing a motherboard, reconfiguring your system, or prompted to "Run Setup".

Page 43: Bios Menu Bar

4.2.1 BIOS Menu Bar The top of the screen has a menu bar with the following selections: MAIN Use this menu to make changes to the basic system configuration. ADVANCED Use this menu to enable and make changes to the advanced fea- tures.

Page 44: General Help

4. BIOS SETUP General Help In addition to the Item Specific Help window, the BIOS setup program also provides a General Help screen. This screen can be called up from any menu by simply press- ing <F1> or the <Alt> + <H> combination. The General Help screen lists the

legend keys with their corresponding alternates and functions.

Page 45: Main Menu

4. BIOS SETUP 4.3 Main Menu When the Setup program is accessed, the following screen appears: System Time [XX:XX:XX] Sets your system to the time that you specify (usually the current time). The format is hour, minute, second. Valid values for hour, minute and second are Hour: (00 to 23), Minute: (00 to 59), Second: (00 to 59).

Page 46: Primary & Secondary Master/Slave

4. BIOS SETUP 4.3.1 Primary & Secondary Master/Slave NOTE: Before attempting to configure a hard disk drive, make sure you have the configuration information supplied by the manufacturer of the drive. Incor- rect settings may cause your system to not recognize the installed hard disk. To allow the BIOS to detect the drive type automatically, select [Auto].

Page 47 4. BIOS SETUP IMPORTANT: If your hard disk was already formatted on an older previous system, incorrect parameters may be detected. You will need to enter the correct parameters manually or use low-level format if you do not need the data stored on the hard disk.

Page 48: Chs Capacity

4. BIOS SETUP Head This field configures the number of read/write heads. Refer to your drive documenta- tion to determine the correct value to enter into this field. NOTE: To make changes to this field, the Type field must be set to [User Type HDD] and the Translation Method field must be set to [Manual].

Page 49: Keyboard Features

4. BIOS SETUP Other options for “Type:” are: [CD-ROM] - for IDE CD-ROM drives [LS-120] - for LS-120 compatible floppy disk drives [ZIP] - for ZIP-100 compatible disk drives [MO] - for IDE magneto optical disk drives [Other ATAPI Device] - for IDE devices not listed here After using the legend keys to make your selections on this sub-menu, press the <Esc>...

Page 50 4. BIOS SETUP Language [English] This allows selection of the BIOS’ displayed language. Currently only English is available. Supervisor Password [Disabled] / User Password [Disabled] These fields allow you to set the passwords. To set the password, highlight the ap- propriate field and press <Enter>.

Page 51: Advanced Menu

4. BIOS SETUP 4.4 Advanced Menu CPU Internal Frequency [1400MHz] This field allows you to select the internal frequency of your CPU. Select the fre- quencies that you desire. Notes: The speed of locked processors may not be ad- justed. Selecting a frequency higher than the CPU manufacturer recommends may cause the system to hang or crash.

Page 52 4. BIOS SETUP BIOS Update [Enabled] This functions as an update loader integrated into the BIOS to supply the processor with the required data. In the default position of [Enabled], the BIOS will load the update on all processors during system bootup. Configuration options: [Disabled] [Enabled] PS/2 Mouse Function Control [Auto] The default of [Auto] allows the system to detect a PS/2 mouse on startup.

Page 53 4. BIOS SETUP System Hangup If your system crashes or hangs due to improper frequency settings, power OFF your system and restart. The system will start up in safe mode running and enter BIOS setup. ASUS P4T-M User’s Manual...

Page 54: Chip Configuration

4. BIOS SETUP 4.4.1 Chip Configuration RDRAM Pool B State [Standby] This sets the operating state of the RDRAM devices in Pool B. Selecting [Nap] allows the RDRAM in Pool B to enter power-saving mode. [Standby] allows the RDRAM in Pool B to return to the working state quickly. Configuration options: [Standby] [Nap] AGP Fast-Write [Enabled] This controls the AGP fast-write function.

Page 55 4. BIOS SETUP Memory Hole At 15M-16M [Disabled] This field allows you to reserve an address space for ISA expansion cards that re- quire it. Setting the address space to a particular setting will make that memory space unavailable to the system. Expansion cards can

only access memory up to 16MB.

Page 56: I/O Device Configuration

4. BIOS SETUP 4.4.2 I/O Device Configuration Onboard AC97 Controller [Auto] The motherboard offers an AC97 Audio Controller chip. BIOS will automatically activate the Audio Controller if it is available. Configuration options; [Auto] [Dis- abled] Onboard Lan Controller [Enabled] (only on model with LAN) This motherboard features an integrated LAN controller.

Page 57: Ecp Dma Select

4. BIOS SETUP UART2 Use Standard Infrared [Disabled] When enabled, this field activates the onboard standard infrared feature and sets the second serial UART to support the infrared module connector on the motherboard. If your system already has a second serial port connected to the onboard COM2 connector, it will no longer work if you enable the infrared feature.

Page 58: Pci Configuration

4. BIOS SETUP 4.4.3 PCI Configuration Slot 1 IRQ, Slot 2 IRQ, Slot 3 IRQ [Auto] These fields set how IRQ use is determined for each PCI slot. The default setting for each field is [Auto], which utilizes auto-routing to determine IRQ use. Configura- tion options: [Auto] [NA] [3] [4] [5] [7] [9] [10] [11] [12] [14] [15] PCI/VGA Palette Snoop [Disabled] Some nonstandard VGA cards, such as graphics accelerators or MPEG video cards,...

Page 59

4. BIOS SETUP PCI IRQ Resource Exclusion (submenu) IRQ XX Reserved for Legacy Device [No/ICU] These fields indicate whether or not the displayed IRQ for each field is being used by an onboard legacy (non-PnP) device. The default value indicates either that the displayed IRQ is not used or that the ISA Configuration Utility (ICU) is being used to determine if a legacy device is using that IRQ.

Page 60: Shadow Configuration

4. BIOS SETUP 4.4.4 Shadow Configuration Video ROM BIOS Shadow [Enabled] This field allows you to change the video BIOS location from ROM to RAM. Relo- cating to RAM enhances system performance, as information access is faster than the ROM. Configuration options: [Disabled] [Enabled] C8000-DFFFF Shadow [Disabled] These fields are used for shadowing other expansion card ROMs.

Page 61: Power Menu

4. BIOS SETUP 4.5 Power Menu The Power menu allows you to reduce power consumption. This feature turns off the video display and shuts down the hard disk after a period of inactivity. Power Management [User Define] This option must be enabled to use any of the automatic power saving features. If this menu item is set to [Disabled], power management features will not function regardless of other field settings on this menu.

Page 62

4. BIOS SETUP Video Off Option [Suspend -> Off] This field determines when to activate the video off feature for monitor power man- agement. Configuration options: [Always On] [Suspend -> Off] Video Off Method [DPMS OFF] This field defines the video off features. The DPMS (Display Power Management System) feature allows the BIOS to control the video display card if it supports the DPMS feature.

Page 63: Power Up Control

4. BIOS SETUP 4.5.1 Power Up Control AC PWR Loss Restart [Disabled] This allows you to set whether you want your system to reboot after the power has been interrupted. [Disabled] leaves your system off and [Enabled] reboots your sys- tem.

Page 64: Hardware Monitor

4. BIOS SETUP Automatic Power Up [Disabled] This allows an unattended or automatic system power up. You may configure your system to power up at a certain time of the day by selecting [Everyday] or at a certain time and day by selecting [By Date]. NOTE: Automatic Power Up will not work if the system is powered down by operating systems, such as Windows 98/ 2000/Millenium, that have ACPI support enabled.

Page 65: Boot Menu

4. BIOS SETUP 4.6 Boot Menu Boot Sequence The Boot menu allows you to select among the four possible types of boot devices listed using the up and down arrow keys. By using the <+> or <Space> key, you can promote devices and by using the <->...

Page 66

4. BIOS SETUP Plug & Play O/S [No] This field allows you to use a Plug-and-Play (PnP) operating system to configure the PCI bus slots instead of using the BIOS. When [Yes] is selected, interrupts may be reassigned by the OS. When a non-PnP OS is installed or you want to prevent reassigning of interrupt settings, select the default setting of [No].

Page 67: Exit Menu

4. BIOS SETUP 4.7 Exit Menu Once you have made all of your selections from the various menus in the Setup program, you should save your changes and exit Setup. Select Exit from the menu bar to display the following menu: NOTE: Pressing <Esc>...

Page 68: Load Setup Defaults

4. BIOS SETUP Load Setup Defaults This option allows you to load the default values for each of the parameters on the Setup menus. When this option is selected or if <F5> is pressed, a confirmation is requested. Select [Yes] to load default values. You can now select Exit Saving Changes or make other changes before saving the values to the non-volatile RAM.

Page 69: Software Setup

5. SOFTWARE SETUP 5. SOFTWARE SETUP 5.1 Install Operating System You should always use the latest operating system and updates when using new hardware to ensure full compliancy. You may use any version of Windows 98/2000/ Millenium, but for Windows 95, you must use OSR 2.0 or later. For Windows NT 4.0, you must use Service Pack 3.0 or later.

Page 70: P4T-M Motherboard Support Cd

E:\ASSETUP.EXE (assuming that your CD-ROM drive is drive E:). 5.3.1 Installation Menu • INF Update Utility for Intel 850 Chipset: Installs INF files in Windows for the following items: System and Graphics, LPC Interface, SM Bus, PCI Bridge, Bus Master IDE, USB Host, and Controllers.

Page 71

5. SOFTWARE SETUP • Browse Support CD: Allows you to view the contents of the CD. • ReadMe: Allows you to view the support CD file list and contact information. • Exit: Exits the CD installation menu. (TO RETURN TO THE MAIN MENU, CLICK LEFT ARROW ON THE LOWER-RIGHT CORNER OF THE SECONDARY MENU) ASUS P4T-M User's Manual...

Page 72: Asus Live Update

6. SOFTWARE REFERENCE 6.1 ASUS Live Update ASUS LiveUpdate is a utility that allows you to update your motherboard's BIOS and drivers. The use of this utility requires that you are properly con- nected to the Internet through an Internet Service Provider (ISP). 1.

Page 73: Software Reference

6. SOFTWARE REFERENCE 6.2 ASUS PC Probe ASUS PC Probe is a convenient utility to continuously monitor your com- puter system's vital components, such as fan rotations, voltages, and tem- peratures. It also has a utility that lets you review useful information about your computer, such as hard disk space, memory usage, and CPU type, CPU speed, and internal/external frequencies through the DMI Explorer.

Page 74: Using Asus Pc Probe

6. SOFTWARE REFERENCE 6.2.2 Using ASUS PC Probe Monitoring Monitor Summary Shows a summary of the items being monitored. Temperature Monitor Shows the PC's temperature (for supported processors only). Temperature Warning threshold adjustment (Move the slider up to increase the threshold level or down to decrease the threshold level) Fan Monitor...

Page 75

6. SOFTWARE REFERENCE Settings Lets you set threshold levels and poll- ing intervals or refresh times of the PC's temperature, fan rotation, and voltages. CPU Cooling System Setup Lets you select when to enable software CPU cooling. When When CPU Overheated is selected, the CPU cooling system is enabled whenever the CPU temperature reaches the...

Page 76 6. SOFTWARE REFERENCE Memory Shows the PC's memory load, memory usage, and paging file usage. Device Summary Shows a summary of devices in your PC. DMI Explorer Shows information pertinent to the PC, such as CPU type, CPU speed, and in- ternal/external frequencies, and memory size.

Page 77: Asus Pc Probe Task Bar Icon

6. SOFTWARE REFERENCE 6.2.3 ASUS PC Probe Task Bar Icon Right clicking the PC Probe icon will bring up a menu to open or exit ASUS PC Probe and pause or resume all sys- tem monitoring. When the ASUS PC Probe senses a problem with your PC, portions of the ASUS PC Probe icon changes to red, the...

Page 78: Cyberlink Powerplayer Se

6. SOFTWARE REFERENCE 6.3 CyberLink PowerPlayer SE CyberLink PowerPlayer SE is an intelligent software player that can automatically detect and playback all kinds of video/audio files, CD and MP3 files as well. This is the only software you need for all types of video and audio files. No need to waste time identifying your file types.

Page 79: Cyberlink Videolive Mail

6. SOFTWARE REFERENCE 6.4 CyberLink VideoLive Mail CyberLink's VideoLive Mail Plus Ver 3.0 (a.k.a. VLM 3) is a convenient and excel- lent way to create professional quality video mails from PC video/audio input de- vices and to send the mails to any recipients via VLM 3's built-in e-mail system through the Internet.

Page 80: Starting Videolive Mail

6. SOFTWARE REFERENCE 6.4.1 Starting VideoLive Mail To start VideoLive Mail, click the Windows Start button, point to Programs, and then CyberLink VideoLive Mail, and then click VideoLive Mail x.x. VLM 3's Setup Wizard will start and guide you through configuring the video and audio input peripherals and to setup the e-mail environment.

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7. APPENDIX 7.1 Glossary 1394 1394 is the IEEE designation for a high performance serial bus tht offers data transfers at 100/ 200/400 Mbps. This serial bus defines both a back plane physical layer and a point-to-point cable-connected virtual bus. The primary application of the cable version is the integration of I/O connectivity at the back panel of personal computers using a low-cost, scalable, high- speed serial interface.

Page 82 7. APPENDIX Boot Boot means to start the computer operating system by loading it into system memory. When the manual instructs you to "boot" your system (or computer), it means to turn ON your computer. "Reboot" means to restart your computer. When using Windows 95 or later, select- ing "Restart"...

Page 83 7. APPENDIX IDE (Integrated Drive Electronics) IDE devices integrate the drive control circuitry directly on the drive itself, eliminating the need for a separate adapter card (in the case for SCSI devices). UltraDMA/33 IDE devices can achieve up to 33MB/Sec transfer. I/O (Input/Output) The data transfers from the input devices like a keyboard, mouse, or scanner, to the output devices like a printer or the monitor screen.

Page 84 7. APPENDIX PS/2 Port PS/2 ports are based on IBM Micro Channel Architecture. This type of architecture transfers data through a 16-bit or 32-bit bus. A PS/2 mouse and/or keyboard may be used on ATX motherboards. RDRAM (Rambus DRAM) Developed by Rambus, Inc., this type of memory can deliver up to 1.6GB of data per second. RDRAM is the first interface standard that can be directly implemented on high performance VLSI components such as, CMOS DRAMs, memory controllers, and graphics/video ICs.

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This manual is also suitable for:

P4t-m