Asus SynJ SB67118 User Manual

Motherboard

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1 Motherboard Overview

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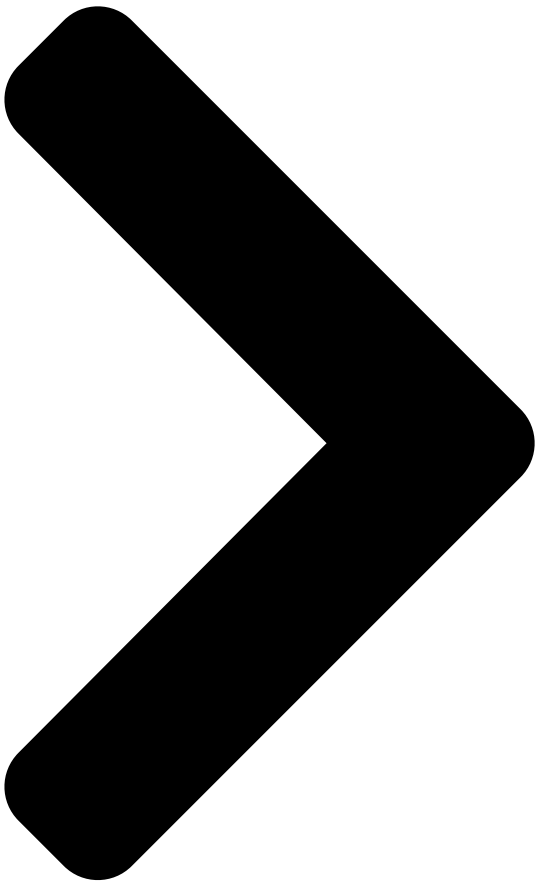

M3A78-CM

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Related Manuals for Asus SynJ SB67118

Motherboard Asus M3A78-CM User Manual

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Motherboard Asus SK8N User Manual

(126 pages)

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User manual (188 pages)

Motherboard Asus SABERTOOTH Z87 User Manual

Sabertooth z87 user's manual (166 pages)

Motherboard Asus STRIX X99 Manual

(130 pages)

Motherboard Asus WS C621E SAGE Series Manual

(122 pages)

Summary of Contents for Asus SynJ SB67118

Page 1 M3A78-CM...

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

Welcome! .....1-2 Package contents ..... 1-2 Special features .....1-2 1.3.1 Product highlights .....1-2 1.3.2 Innovative ASUS features .....1-6 Before you proceed .....1-7 Motherboard overview .....1-8 1.5.1 Motherboard layout .....1-8 1.5.2 Placement direction .....1-9 1.5.3...

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Page 6: 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 7: Safety Information

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

Page 8: 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 9: 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 10: M3A78-Cm Specifications Summary

32-bit operation system. ** Due to AMD CPU limitation, DDR2 1066 is supported by AM2+ CPU for one DIMM per channel only. *** Refer to www.asus.com or user manual for Memory QVL (Qualified Vendors List) Graphics Integrated ATI RV610-based Direct x10.0 graphics Supports maximum shared memory up to 256MB Supports DisplayPort with max.

Page 11 6 ports at back panel) ASUS overclocking SFS (Stepless Frequency Selection) from 200MHz to features 400MHz at 1MHz increment Adjustable DRAM voltage ASUS C.P.R. (CPU Parameter Recall) ASUS special features ASUS Q-Fan ASUS CrashFree BIOS3 ASUS EZ Flash2 ASUS MyLogo2...

Page 12 1 x FDD cable 1 x I/O shield Form Factor uATX Form factor: 9.6'' x 9.6'' (24.4cm x 24.4cm) Support DVD Drivers ASUS PC Probe II ASUS LiveUpdate Utility Anti-Virus software (OEM version) *Specifications are subject to change without notice.

Page 13: Chapter 1: Product Introduction

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

Page 14: 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 15 Due to AMD CPU limitation, DDR2 1066 is supported by AM2+ CPU for one DIMM per channel only. Refer to www.asus.com for the supported CPU models. 64-bit CPU support 64-bit computing, the next generation technology to replace the current 32-bit architecture, delivers advanced system performance, faster memory access and increased productivity.

Page 16: Dvi Interface

PCI Express 2.0 support This motherboard supports the latest PCIe 2.0 devices for double speed and bandwidth which enhances system performance. DVI Interface DVI (Digital Visual Interface) provides high visual quality of digital display devices such as LCD monitors. The interface of this motherboard supports dual VGA output both DVI and RGB and is HDCP compliant allowing playback of HD DVD, Blu-ray Disc.

Page 17: Express Gate

Windows at anytime! • The actual boot time depends on the system configuration. • ASUS Express Gate supports file uploading from SATA HDDs, ODDs and USB drives and downloading to USB drives only. ASUS M3A78-CM...

Page 18: Innovative Asus 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/packaging to safeguard consumers' health while minimizing the impact on the environment.

Page 19: Before You Proceed

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. SB_PWR M3A78-CM Standby Powered Power M3A78-CM Onboard LED ASUS M3A78-CM...

Page 20: Motherboard Overview

Motherboard overview 1.5.1 Motherboard layout 24.4cm (9.6in) PWR_FAN KB_USB56 CPU_FAN ATX12V USB34 LAN1_USB12 SATA6 SATA5 SATA4 CR2032 3V Lithium Cell SATA3 AUDIO CMOS Power AMD 780V SATA2 SATA1 PCIEX1_1 SB_PWR 8111C PCIEX16 M3A78-CM Super I/O SB700 PCI1 CLRTC PCI2 FLOPPY BIOS VT1708B COM1...

Page 21: Placement Direction

Place eight (8) 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. Place this side towards the rear of the chassis M3A78-CM ASUS M3A78-CM...

Page 22: Central Processing Unit (Cpu)

Central Processing Unit (CPU) The motherboard comes with an AM2+/AM2 socket designed for Phenom™ FX / Phenom / Athlon™ / Sempron™ processor. ® The AM2+/AM2 socket has a different pinout from the 940-pin socket designed for the AMD Opteron processor. Ensure you use a CPU designed for the AM2+/AM2 socket.

Page 23 Connect the CPU fan cable to the CPU_FAN connector on the motherboard. CPU_FAN M3A78-CM M3A78-CM CPU Fan Connector Do not forget to connect the CPU fan connector! Hardware monitoring errors can occur if you fail to plug this connector. ASUS M3A78-CM 1-11...

Page 24: Installing The Heatsink And Fan

1.6.2 Installing the heatsink and fan The AMD processor Phenom™ FX / Phenom / Athlon™ / Sempron™ requires a specially designed heatsink and fan assembly to ensure optimum thermal condition and performance. Ensure that you use only qualified heatsink and fan assembly. Follow these steps to install the CPU heatsink and fan.

Page 25 Push down the retention bracket lock on the retention mechanism to secure the heatsink and fan to the module base. ASUS M3A78-CM 1-13...

Page 26: System Memory

System memory 1.7.1 Overview The motherboard comes with four Double Data Rate 2 (DDR2) Dual Inline Memory Modules (DIMM) sockets. A DDR2 module has the same physical dimensions as a DDR DIMM but has a 240-pin footprint compared to the 184-pin DDR DIMM. DDR2 DIMMs are notched differently to prevent installation on a DDR DIMM socket.

Page 27 The motherboard can support 8 GB physical memory on the operating system listed below. You may install a maximum of 2 GB DIMMs on each slot. 64-bit Windows XP Professional x64 Edition ® Windows Vista x64 Edition ® ASUS M3A78-CM 1-15...

Page 28 GE24GB1066C5QC GEIL Heat-Sink Package • • Due to AMD CPU limitation, DDR2 1066 is supported by AM2+ CPU for one DIMM per channel only. Refer to www.asus.com for the supported CPU models. DDR2-800MHz capability DIMM support (Optional) Size Vendor Part No.

Page 29 Dual-channel memory configuration • C*: Supports four modules inserted into both the yellow slots and the black slots as two pairs of Dual-channel memory configuration Visit the ASUS website for the latest DDR2 DIMM modules for this motherboard. ASUS M3A78-CM 1-17...

Page 30: Installing A Dimm

1.7.3 Installing a DIMM Make sure to unplug the power supply before adding or removing DIMMs or other system components. Failure to do so may cause severe damage to both the motherboard and the components. Unlock a DIMM socket by pressing DDR2 DIMM notch the retaining clips outward.

Page 31: Expansion Slots

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. Refer to the tables on the next page. Install the software drivers for the expansion card. ASUS M3A78-CM 1-19...

Page 32: Interrupt Assignments

Interrupt assignments Standard Function System timer Standard 101/102-Key or Microsoft Natural Keyboard Programmable interrupt controller Standard OpenHCI USB Host Controller Communications Port (COM1) ACPI IRQ Holder for PCI IRQ Steering (free) (free) System CMOS/real time clock SCI IRQ used by ACPI bus Standard PCI Graphics Adapter (VGA) (free) Microsoft PS/2 Port Mouse...

Page 33: Pci Slots

PCI Express x1 slot. 1.8.5 PCI Express x16 slot This motherboard supports PCI Express x16 graphics cards that comply with PCI Express specifications. The photo shows a graphics card installed on the PCI Express x16 slot. ASUS M3A78-CM 1-21...

Page 34: 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 35: 1.10 Connectors

4-channel, 6-channel, and 8-channel configuration, the function of this port becomes Front Speaker Out. Microphone port (pink). This port connects a microphone. Side Speaker Out port (gray). This port connects the side speakers in an 8-channel audio configuration. ASUS M3A78-CM 1-23...

Page 36 Refer to the audio configuration table for the function of the audio ports in 2, 4, 6, or 8-channel configuration. Audio 2, 4, 6, or 8-channel configuration Headset Port 4-channel 6-channel 8-channel 2-channel Light Blue Line In Line In Line In Line In Lime Line Out...

Page 37: Internal Connectors

Floppy Disk Drive Connector M3A78-CM Optical drive audio in connector (4-pin CD) This connector allows you to receive stereo audio input from sound sources such as a CD-ROM, TV tuner, or MPEG card. (black) M3A78-CM M3A78-CM Internal Audio Connector ASUS M3A78-CM 1-25...

Page 38 IDE connector (40-1 pin PRI_IDE) The onboard IDE connector is for an 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(s).

Page 39 [AHCI], set the SATA IDE Combined Mode to [Disabled] to ensure that SATA5 and SATA6 work normally. • If you want to do the task as GHOST, we suggest you connect the original disk to the SATA5 or SATA6. ASUS M3A78-CM 1-27...

Page 40 Power, CPU, and Chassis Fan connectors (3-pin PWR_FAN, 4-pin CPU_FAN, 3-pin CHA_FAN) The fan connectors support cooling fans of 350mA~740mA (8.88W max.) or a total of 1A~2.22A (26.64W max.) at +12V. Connect the fan cables to the fan connectors on the motherboard, making sure that the black wire of each cable matches the ground pin of the connector.

Page 41 Ensure that the audio device of Sound playback is VIA High Definition Audio (the name may be different based on the OS). Go to Start > Control Panel > Sounds and Audio Devices > Sound Playback to configure the setting. ASUS M3A78-CM 1-29...

Page 42 Front panel audio connector (10-1 pin AAFP) This connector is for a chassis-mounted front panel audio I/O module that supports either High Definition Audio or AC'97 audio standard. Connect one end of the front panel audio I/O module cable to this connector. Legacy AC'97-compliant Azalia-compliant pin definition...

Page 43: Atx Power Connectors

• If you are uncertain about the minimum power supply requirement for your system, refer to the Recommended Power Supply Wattage Calculator at http://support.asus.com/PowerSupplyCalculator/PSCalculator. aspx?SLanguage=en-us for details. • You must install a PSU with a higher power rating if you intend to install additional devices.

Page 44: System Panel Connector

10. System panel connector (20-8 pin PANEL) This connector supports several chassis-mounted functions. PANEL SPEAKER PLED M3A78-CM Reset +IDE_LED PWRSW M3A78-CM System Panel Connector • System power LED This 2-pin connector is for the system power LED. Connect the chassis power LED cable to this connector.

Page 45 The connector is for a serial (COM) port. Connect the serial port module cable to the connector, then install the module to a slot opening at the back of the system chassis. The serial port bracket (COM1) is purchased separately. COM1 M3A78-CM M3A78-CM COM Port Connector ASUS M3A78-CM 1-33...

Page 46: Lpt Connector

13. LPT connector The LPT (Line Printing Terminal) connector supports devices such as a printer. LPT standardizes as IEEE 1284, which is the parallel port interface on IBM PC-compatible computers. M3A78-CM M3A78-CM Parallel Port Connector 1-34 Chapter 1: Product introduction...

Page 47: Chapter 2: 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. BIOS setup...

Page 48: Managing And Updating Your Bios

USB flash disk or the motherboard support DVD when the BIOS file fails or gets corrupted. ASUS EZ Flash 2: Updates the BIOS using a floppy disk or a USB flash disk during POST. ASUS Update: Updates the BIOS in Windows® environment.

Page 49: Afudos Utility

Ensure that the floppy disk is not write-protected and has at least 1.2 MB free space to save the file. • The succeeding BIOS screens are for reference only. The actual BIOS screen displays may not be same as shown. ASUS M3A78-CM...

Page 50 Updating the BIOS file To update the BIOS file using the AFUDOS utility: Visit the ASUS website at www.asus.com and download the latest BIOS file for the motherboard. Save the BIOS file to a bootable floppy disk. Write the BIOS filename on a piece of paper. You need to type the exact BIOS filename at the DOS prompt.

Page 51 The utility verifies the file and starts updating the BIOS. A:\>afudos /iM3A78CM.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 ..done Reading flash ..

Page 52: Asus Crashfree Bios 3 Utility

2.1.3 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 , the floppy disk or the USB flash disk that contains the updated BIOS file.

Page 53: Recovering The Bios From The Support Dvd

Restart the system after the utility completes the updating process. The recovered BIOS may not be the latest BIOS version for this motherboard. Visit the ASUS website at www.asus.com to download the latest BIOS file. Recovering the BIOS from the USB flash disk To recover the BIOS from the USB flash disk: Insert the USB flash disk that contains BIOS file to the USB port.

Page 54: Asus Ez Flash 2 Utility

2.1.4 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 55: Asus Update Utility

DO NOT shut down or reset the system while updating the BIOS to prevent system boot failure! 2.1.5 ASUS Update utility The ASUS Update is a utility that allows you to manage, save, and update the motherboard BIOS in Windows® environment. The ASUS Update utility allows you • Save the current BIOS file •...

Page 56 Updating the BIOS through the Internet To update the BIOS through the Internet: Launch the ASUS Update utility from the Windows® desktop by clicking Start > Programs > ASUS > ASUSUpdate > ASUSUpdate. The ASUS Update main window appears. Select Update BIOS from...

Page 57 To update the BIOS through a BIOS file: Launch the ASUS Update utility from the Windows desktop by clicking Start ® > 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 58: 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 at www.asus.com to download the latest BIOS file for this motherboard. 2-12...

Page 59: Bios Menu Screen

The BIOS setup screens shown in this chapter are for reference purposes only, and may not exactly match what you see on your screen. • Visit the ASUS website at www.asus.com to download the latest BIOS information. ASUS M3A78-CM 2-13...

Page 60: Navigation Keys

2.2.3 Navigation keys 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. Some of the navigation keys differ from one screen to another. 2.2.4 Menu items The highlighted item on the menu bar displays the specific items for that menu.

Page 61: Pop-Up Window

3.5 in. SATA4 :[Not Detected] Select Screen Select Item SATA5 :[Not Detected] Change Field SATA6 :[Not Detected] Select Field General Help SATA Configuration Save and Exit Exit System Information v02.61 (C)Copyright 1985-2008, American Megatrends, Inc. Pop-up window ASUS M3A78-CM 2-15...

Page 62: Main Menu

Main menu When you enter the BIOS Setup program, the Main menu screen appears, giving you an overview of the basic system information. Refer to section “2.2.1 BIOS menu screen” for information on the menu screen items and how to navigate through them. BIOS SETUP UTILITY Main Advanced...

Page 63: Primary Ide Master/Slave

When set to [Disabled], the data transfer from and to the device occurs one sector at a time. Configuration options: [Disabled] [Auto] PIO Mode [Auto] Selects the PIO mode. Configuration options: [Auto] [0] [1] [2] [3] [4] ASUS M3A78-CM 2-17...

Page 64: Sata 1-6

DMA Mode [Auto] Selects the DMA mode. Configuration options: [Auto] SMART Monitoring [Auto] Sets the Smart Monitoring, Analysis, and Reporting Technology. Configuration options: [Auto] [Disabled] [Enabled] 32Bit Data Transfer [Enabled] Enables or disables 32-bit data transfer. Configuration options: [Disabled] [Enabled] 2.3.5 SATA 1-6 While entering Setup, the BIOS automatically detects the presence of Serial ATA...

Page 65: Sata Configuration

Select an item then press <Enter> to display the sub-menu. BIOS SETUP UTILITY Main Options SATA Configuration Disabled OnChip SATA Channel [Enabled] Enabled OnChip SATA Type [SATA] SATA IDE Combined Mode [Enabled] OnChip SATA Channel [Enabled] Enables or disables OnChip SATA Channel. Configuration options: [Disabled] [Enabled] ASUS M3A78-CM 2-19...

Page 66: System Information

OnChip SATA Type [SATA] This item appears only when you set the OnChip SATA Channel item to [Enabled]. Allows you to set the OnChip SATA Type. Configuration options: [SATA] [RAID] [AHCI] SATA IDE Combined Mode [Enabled] Enables or disables SATA IDE Combined Mode Configuration options: [Disabled] [Enabled] If you set the SATA IDE Combined Mode to [Disabled], PORT 1-4 works well in all the three modes, while PORT 5-6 only works at [RAID] or [AHCI].

Page 67: Advanced Menu

General Help DRAM Timing Mode [Auto] Save and Exit Memory OverVoltage [Auto] Exit v02.61 (C)Copyright 1985-2008, American Megatrends, Inc. Scroll down to display the following items: Chipset Voltage Chipset OverVoltage [Auto] v02.61 (C)Copyright 1985-2008, American Megatrends, Inc. ASUS M3A78-CM 2-21...

Page 68: Processor Frequency Multiplier

CPU Overclocking [Auto] Allows selection of CPU overclocking options to achieve desired CPU internal frequency. Select either one of the preset overclocking. Configuration options: [Auto] [Manual] [Overclock Profile] [Test Mode] GPU Overclocking [Auto] Allows you to configure overclocking of GPU. Configuration options: [Auto] [Manual] PCIE Overclocking [Auto] Allows you to to configure overclocking of PCIE.

Page 69: Cpu Configuration

Configuration options: [Disabled] [Enabled] Secure Virtual Machine Mode [Enabled] Enables or disables Secure Virtual Machine Mode (SVM) Configuration options: [Disabled] [Enabled] Cool ‘n’ Quiet [Enabled] Enables or disables the AMD Cool ‘n’ Quiet technology. Configuration options: [Enabled] [Disabled] ASUS M3A78-CM 2-23...

Page 70: Chipset

2.4.3 Chipset Memory Options & Chipset Configuration Information NorthBridge Configuration Internal Graphics NorthBridge Configuration NorthBridge Chipset Configuration Memory Configuration ECC Configuration Memory CLK :333MHz CAS Latency(Tc1) :5.0 RAS/CAS Delay(Trcd) :5 CLK Row Precharge Time(Trp) :5 CLK Min Active RAS(Tras) :15 CLK RAS/RAS Delay(Trrd) :3 CLK Row Cycle(Trc)

Page 71: Ecc Configuration

L2 Cache BG Scrub [Disabled] L3 Cache BG Scrub [Disabled] ECC Mode [Disabled] Enables or disables the DRAM ECC that allows the hardware to report and correct memory errors automatically. Configuration options: [Disabled] [Basic] [Good] [Super] [Max] [User] ASUS M3A78-CM 2-25...

Page 72: Internal Graphics

Internal Graphics Internal Graphics GFX0-GPP-IGFX-PCI GPP-GFX0-IGFX-PCI Primary Video Controller [GFX0-GPP-IGFX-PCI] PCI-GFX0-GPP-IGFX UMA Frame Buffer Size [Auto] IGFX-GFX0-GPP-PCI Surround View [Auto] DisplayPort Config [Disabled] Primary Video Controller [GFX0-GPP-IGFX-PCI] Configuration options: [GFX0-GPP-IGFX-PCI] [GPP-GFX0-IGFX-PCI] [PCI-GFX0-GPP-IGFX] [IGFX-GFX0-GPP-PCI] GFX0: VGA out port on a graphics card connected into a PCIE x16 slot GPP: VGA out port on a graphics card connected into a PCIE x1 slot IGFX...

Page 73: Onboard Device Configuration

Enables or disables the high definition audio controller. Configuration options: [Enabled] [Disabled] Front Panel Select [HD Audio] Configuration options: [HD Audio] [AC97] OnBoard LAN Controller [Enabled] Configuration options: [Enabled] [Disabled] OnBoard LAN Boot ROM [Disabled] Configuration options: [Disabled] [Enabled] ASUS M3A78-CM 2-27...

Page 74: Pcipnp

2.4.5 PCIPnP The PCI PnP menu items allow you to change the advanced settings for PCI/PnP devices. The menu includes setting IRQ and DMA channel resources for either PCI/PnP or legacy ISA devices, and setting the memory size block for legacy ISA devices.

Page 75: Usb Configuration

If no USB device is detected, the legacy USB support is disabled. Configuration options: [Disabled] [Enabled] [Auto] USB 2.0 Controller Mode [HiSpeed] Allows you to configure the USB 2.0 controller in HiSpeed (480 Mbps) or FullSpeed (12 Mbps). Configuration options: [FullSpeed] [HiSpeed] ASUS M3A78-CM 2-29...

Page 76: Power Menu

Power menu The Power menu items allow you to change the settings for the Advanced Configuration and Power Interface (ACPI) and the Advanced Power Management (APM). Select an item then press <Enter> to display the configuration options. BIOS SETUP UTILITY Main Advanced Power...

Page 77: Apm Configuration

Power on From S5 By PS/2 KB/MS [Disabled] Enables or disables PS/2 Keyboard/Mouse to generate a wake event. Configuration options: [Disabled] [Enabled] Power on From S5 By RTC Alarm [Disabled] Enables or disables RTC to generate a wake event. Configuration options: [Disabled] [Enabled] ASUS M3A78-CM 2-31...

Page 78: Hw Monitor Configuration

2.5.5 HW Monitor Configuration BIOS SETUP UTILITY Power Hardware Monitor CPU Temperature CPU Temperature [23ºC/73ºF] MB Temperature [30ºC/86ºF] CPU Fan Speed [4891RPM] Chassis Fan Speed [N/A] Power Fan Speed [N/A] VCORE Voltage [1.344V] 3.3V Voltage [3.152V] 5V Voltage [4.838V] 12V Voltage [11.712V]...

Page 79: Boot Menu

Smart Q-Fan Function [Enabled] Allows you to enable or disable the ASUS Q-Fan feature that smartly adjusts the CPU fan speeds for more efficient system operation. Configuration options: [Disabled] [Enabled] Fan Auto Mode Start Voltage [5.0V] Allows you to set the fan auto mode

start voltage. Configuration options: [4.0V] [4.5V] [5.0V] [5.5V] [6.0V]...

Page 80: Boot Device Priority

2.6.1 Boot Device Priority BIOS SETUP UTILITY Boot Boot Device Priority Specifies the boot sequence from the available devices. 1st Boot Device [1st FLOPPY DRIVE] 2nd Boot Device [Hard Drive] A device enclosed 3rd Boot Device [ATAPI CD-ROM] in parenthesis has been disabled in the corresponding type menu.

Page 81

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 MyLogo2™ feature. AddOn ROM Display Mode [Force BIOS] Sets the display mode for option ROM.

Page 82: Security

2.6.3 Security The Security menu items allow you to change the system security settings. Select an item then press <Enter> to display the configuration options. BIOS SETUP UTILITY Boot <Enter> to change Security Settings password. <Enter> again to Supervisor Password :Not Installed disabled password.

Page 83: Change User Password

Password Check [Setup] When set to [Setup], BIOS checks for user password when accessing the Setup utility. When set to [Always], BIOS checks for user password both when accessing Setup and booting the system. Configuration options: [Setup] [Always] ASUS M3A78-CM 2-37...

Page 84: Tools Menu

2.7.1 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. See section 2.1.4 for details.

Page 85: Express Gate

2.7.2 Express Gate [Enabled] 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. Configuration options: [Enabled] [Disabled] Enter OS Timer [10 Seconds] Sets countdown duration that the system waits at the Express Gate’s first...

Page 86: Exit Menu

Exit menu The Exit menu items allow you to load the optimal or failsafe default values for the BIOS items, and save or discard your changes to the BIOS items. BIOS SETUP UTILITY Main Advanced Power Boot Tools Exit Exit Options Exit system setup after saving the changes.

Page 87: Chapter 3: Software Support

This chapter describes the contents of the support DVD that comes with the motherboard package. Software support...

Page 88: Installing An Operating System

The contents of the support DVD are subject to change at any time without notice. Visit the ASUS website at www.asus.com for updates. 3.2.1 Running the support DVD Place the support DVD to the optical drive.

Page 89: Drivers Menu

The Drivers menu shows the available device drivers if the system detects installed devices. Install the necessary drivers to activate the devices. ASUS InstAll - Installation Wizard for Drivers Launches the ASUS InstallAll - drivers installation wizard. AMD Chipset Driver Installs the AMD chipset driver.

Page 90: Utilities Menu

This utility helps you keep your computer in healthy operating condition. ASUS Update The ASUS Update utility allows you to update the motherboard BIOS in a Windows® environment. This utility requires an Internet connection either through a network or an Internet Service

Provider (ISP).

Page 91 Ulead Burn.Now Installs the Ulead Burn.Now application for Audio DVD, CD and data disc creation. Ulead PhotoImpact 12 SE Installs the PhotoImpact image editing software. ASUS Express Gate Installer Allows you to install or update Express Gate functions. ASUS M3A78-CM...

Page 92: Make Disk Menu

Anti-Virus Utility The anti-virus application detects and protects your computer from viruses that destroys data. Anti-Virus Utility Download Downloads and installs the latest anti-virus application. 3.2.4 Make Disk menu The Make Disk menu allows you to make a RAID driver disk. Make ATI RAID/AHCI Vista32 Driver Allows you to create an ATI®...

Page 93: Manual Menu

The Manual menu contains a list of supplementary user manuals. Click an item to open the folder of the user manual. Most user manual files are in Portable Document Format (PDF). Install the Adobe® Acrobat® Reader from the Utilities menu before opening a user manual file. ASUS M3A78-CM...

Page 94: Asus Contact Information

3.2.6 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. 3.2.7 Other information The icons on the top right corner of the screen give additional information on the motherboard and the contents of the support DVD.

Page 95: Technical Support Form

Browse this DVD Displays the support DVD contents in graphical format. 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 and a brief description of each in text format.

Page 96 3-10 Chapter 3: Software support...

This manual is also suitable for:

M3a78-vmM3a78-cm