

Asus M3N78-CM User Manual

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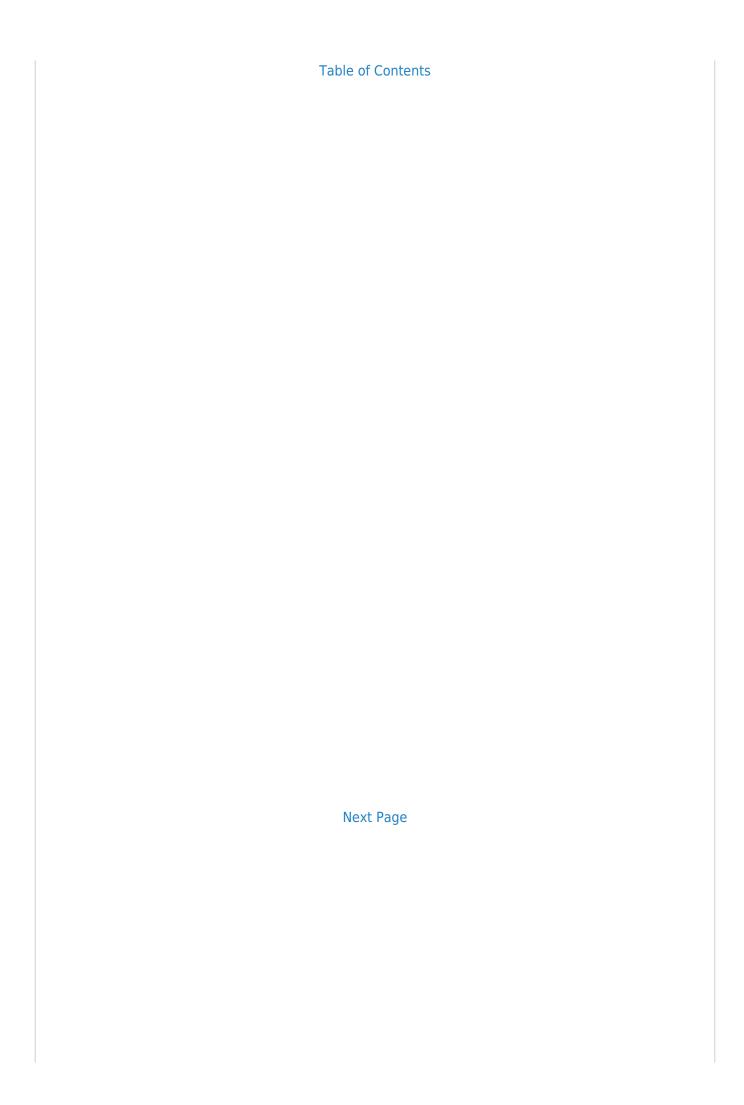
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M3N78-CM







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# Summary of Contents for Asus M3N78-CM

Page 1 M3N78-CM...

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

# Page 3: Table Of Contents

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# Page 6: 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 vour dealer.

# Page 9: Conventions Used In This Guide

Software support Installing an operating system .........

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

### Page 10: M3N78-Cm Specifications Summary

32-bit operation system may only recognize less ® than 3GB. Hence, a total installed memory of less than 3GB is recommended. • Refer to www.asus.com for the memory QVL (Qualified Vendors List.) Expansion slots 1 x PCI Express™ x16 slot...

Page 11 - vDIMM: 8-step DRAM voltage control Stepless Frequency Selection (SFS): - SB tuning up to 300MHz at 1MHz increment Overclocking Protection: - ASUS CPU Parameter Recall (C.P.R.) Internal I/O connectors 1 x High Definition front panel audio connector 1 x IDE connector...

Page 12 M3N78-CM specifications summary Rear panel I/O 1 x LAN (RJ-45) port 1 x COM port 1 x DVI port 6 x USB 2.0 / 1.1 ports 1 x VGA Out port 1 x PS/2 keyboard port 8-channel audio ports Support DVD contents...

#### 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: Dvi Interface

DDR2 1066 is for AM2+ CPU only. Serial ATA 3Gb/s technology The motherboard supports SATA hard drives based on the new SATA 3Gb/s storage specification. It allows RAID 0, RAID 1, RAID 5, RAID 0+1, and JBOD configurations for six SATA connectors. ASUS M3N78-CM...

### Page 16: High Definition Audio

GeForce GPU(s) to the motherboard GPU for a quiet, low power PC experience. Visit the ASUS website (www.asus.com) to download the lastest Hybrid SLI driver after NVIDIA get the Hybrid SLI function prepared. Chapter 1: Product introduction...

### Page 17: Innovative Asus Features

See page 2-35 for details. ASUS CrashFree BIOS 3 The ASUS CrashFree BIOS 3 allows users to restore corrupted BIOS data from a USB flash disk containing the BIOS file. See page 2-7 for details.

Page 18 Windows at anytime! See page 3-13 for details. • The actual boot time depends on the system configuration. • ASUS Express Gate supports file uploading from SATA HDDs, ODDs and USB drive and downloading to USB drives only. Chapter 1: Product introduction...

### Page 19: Before You Proceed

The illustration below shows the location of the onboard LED. SB\_PWR M3N78-CM Standby Powered Power M3N78-CM Onboard LED ASUS M3N78-CM...

### Page 20: Motherboard Overview

Motherboard layout 24.4cm (9.6in) KB\_USB56 CPU\_FAN ATX12V USB34 LAN1\_USB12 AUDIO MCP78S PCIEX1\_1 CLRTC SB\_PWR 8211CL PCIEX16 CR2032 3V Lithium Cell M3N78-CM CMOS Power PCI1 Super I/O BIOS PCI2 USB78 USB1112 VT1708B SPDIF\_OUT FLOPPY PANEL AAFP USB910 Chapter 1: Product introduction...

### 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 M3N78-CM ASUS M3N78-CM...

### Page 22: Central Processing Unit (Cpu)

1.6.1 Installing the CPU To install a CPU. Locate the CPU socket on the motherboard. M3N78-CM M3N78-CM CPU Socket AM2+ Unlock the socket by pressing the lever sideways, then lift it up to a 90°-100° angle. Socket lever Ensure that the socket lever is lifted up to 90°-100° angle, otherwise the CPU does not fit in completely.

Page 23 Connect the CPU fan cable to the CPU\_FAN connector on the motherboard. CPU\_FAN M3N78-CM M3N78-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 M3N78-CM...

# Page 24: Installing The Heatsink And Fan

1.6.2 Installing the heatsink and fan The AMD Phenom™FX / Phenom™ / Athlon™ / Sempron processor 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.

<u>Page 25</u> Otherwise, you cannot snap the retention bracket in place. Push down the retention bracket lock on the retention mechanism to secure the heatsink and fan to the module base. ASUS M3N78-CM 1-13...

# Page 26: System Memory

240-pin footprint compared to the 184-pin DDR DIMM. DDR2 DIMMs are notched differently to prevent installation on a DDR DIMM socket. The figure illustrates the location of the DDR2 DIMM sockets: M3N78-CM M3N78-CM 240-pin DDR2 DIMM Sockets Channel Socket Channel A...

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 M3N78-CM 1-15...

# Page 28: Ddr2-667 Mhz Capability

Qualified Vendors Lists (QVL) DDR2-533 MHz capability Size Vendor Model Brand Component DIMM support 512MB Kingston KVR533D2N4/512 Infineon HYB18T512800AF3733336550 · 512MB Samsung M378T6553BG0-CD5 Samsung K4T51083QB-GCD5 · HYMP512U64CP8-C4 AB Hynix HY5PS12821CFP-C4 · 512MB Micron MT 16HTF6464AG-53EB2 Micron D9BOM ·...

<u>Page 29</u> 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 DDR2-533/667/800/1066MHz QVL. ASUS M3N78-CM 1-17...

# Page 30: Installing A Dimm

1.7.3 Installing a DIMM Ensure 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 M3N78-CM 1-19...

# Page 32: Interrupt Assignments

Interrupt assignments Standard function Standard timer Keyboard High precision event timer IRQ holder for PCI steering COM1 IRQ holder for PCI steering Floppy controller Printer port High precision event timer AMD ACPI-Compliant system IRQ holder for PCI steering IRQ holder for PCI steering Microsoft PS/2 mouse Numeric data processor Primary IDE...

### Page 33: Irg Assignments For This Motherboard

When using PCI cards on shared slots, ensure that the drivers support "Share IRQ" or that the cards do not need IRQ assignments. Otherwise, conflicts will arise between the two PCI groups, making the system unstable and the card inoperable. ASUS M3N78-CM 1-21...

### Page 34: Pci Slots

1.8.3 PCI slots The PCI slots support cards such as a LAN card, SCSI card, USB card, and other cards that comply with PCI specifications. The figure shows a LAN card installed on a PCI slot. 1.8.4 PCI Express x1 slot This motherboard supports PCI Express x1 network cards, SCSI cards and other cards that comply with the PCI Express...

# Page 35: Jumper

M3N78-CM Clear RTC (Default) M3N78-CM Clear RTC RAM You do not need to clear the RTC when the system hangs due to overclocking. For system failure due to overclocking, use the C.P.R. (CPU Parameter Recall) feature. Shut down and reboot the system so the BIOS can automatically reset parameter settings to default values.

### Page 36: 1.10 Connectors

1.10 Connectors 1.10.1 Rear panel connectors PS/2 Keyboard port (purple). This port is for a PS/2 keyboard. Video Graphics Adapter (VGA) port. This 15-pin port is for a VGA monitor or other VGA-compatible devices. LAN (RJ-45) port. Supported by Marvell Gigabit LAN controller, this port allows Gigabit connection to a Local Area Network (LAN) through a network hub.

<u>Page 37</u> 13. Serial port. This 9-pin COM1 port is for pointing devices or other serial devices. 14. USB 2.0 ports 5 and 6. These two 4-pin Universal Serial Bus (USB) ports are available for

# Page 38: Internal Connectors

LPT connector (26-1pin LPT) The LPT (Line Printing Terminal) connector supports devices such as a printer. LPT standardizes as IEEE 1394, which is the parallel port interface on IBM PC-compatible computers. M3N78-CM M3N78-CM Parallel Port Connector 1-26 Chapter 1: Product introduction...

<u>Page 39</u> IDE cable. • Use the 80-conductor IDE cable for Ultra DMA 133/100/66 IDE devices. If any device jumper is set as "Cable-Select," ensure that all other device jumpers have the same setting. M3N78-CM IDE Connector M3N78-CM ASUS M3N78-CM 1-27...

Page 40 RSATA\_RXP1 RSATA\_TXN2 RSATA\_TXN1 RSATA\_TXP1 RSATA\_TXP2 M3N78-CM SATA Connectors Install the Windows XP Service Pack 1 before using Serial ATA. ® • For detailed instructions on how to configure RAID 0, RAID 1, RAID 5, and RAID 10, and JBOD, refer to the RAID manual in the support DVD.

<u>Page 41</u> This connector is for an additional Sony/Philips Digital Interface (S/PDIF) port(s). Connect the S/PDIF module cable to this connector, then install the module to a slot opening at the back of the system chassis. M3N78-CM SPDIF\_OUT M3N78-CM Digital Audio Connector The S/PDIF module is purchased separately. ASUS M3N78-CM 1-29...

Page 42 These USB connectors comply with USB 2.0 specification that supports up to 480 Mbps connection speed. USB1112 USB78 M3N78-CM M3N78-CM USB 2.0 Connectors USB910 Never connect a 1394 cable to the USB connectors. Doing so will damage the motherboard! The USB 2.0 module is purchased separately.

<u>Page 43</u> Azalia-compliant pin definition pin definition AAFP M3N78-CM M3N78-CM Azalia Analog Front Panel Connector • We recommend that you connect a high-definition front panel audio module to this connector to avail of the motherboard high-definition audio capability. • If you want to connect a high-definition front panel audio module to this...

### Page 44: Atx Power Connectors

+3 Volts -12 Volts +3 Volts +3 Volts M3N78-CM ATX Power Connector • We recommend that you use an ATX 12 V Specification 2.0-compliant power supply unit (PSU) with a minimum of 300 W power rating. This PSU type has 24-pin and 4-pin power plugs.

# Page 45: System Panel Connector

PLED M3N78-CM Reset +IDE\_LED PWRSW M3N78-CM System Panel Connector System power LED (2-pin PLED) • This 2-pin connector is for the system power LED. Connect the chassis power LED cable to this connector. The system power LED lights up when you turn on the system power, and blinks when the system is in sleep mode.

Page 46 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

The following utilities allow you to manage and update the motherboard Basic Input/Output System (BIOS) setup. ASUS EZ Flash 2: Updates the BIOS using a floppy disk, USB Flash, or the motherboard support DVD during POST. ASUS AFUDOS: Updates the BIOS in DOS mode using a bootable floppy disk.

<u>Page 49</u> Right-click Floppy Disk Drive then click Format to display the Format 3 1/2 Floppy dialog box . d. Select the Create an MS-DOS startup disk check box. e. Click Start. Copy the original or the latest motherboard BIOS file to the bootable floppy disk. ASUS M3N78-CM...

### Page 50: Asus Ez Flash 2 Utility

2.1.2 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 51: Afudos Utility

Extension name Press <Enter>. The utility copies the current BIOS file to the floppy disk. A:\>afudos /oOLDBIOS1.rom AMI Firmware Update Utility - Version 1.19(ASUS V2.38(03.11.24BB)) Copyright (C) 2002 American Megatrends, Inc. All rights reserved. Reading flash ..done Write to file..ok A:\>...

# Page 52: Updating The Bios File

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. Write the BIOS filename on a piece of paper. You need to type the exact BIOS filename at the DOS prompt.

# Page 53: Asus Crashfree Bios 3 Utility

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

# Page 54: Recovering The Bios From The Support Dvd

Restart the system after the utility completes the updating process. • Only the USB flash disk with FAT 32/16 format and single partition can support ASUS CrashFree BIOS 3. The device size should be smaller than 8GB. • DO NOT shut down or reset the system while updating the BIOS! Doing so...

### Page 55: Asus Update Utility

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 • Download the latest BIOS file from the Internet •...

<u>Page 56</u> To update the BIOS through the Internet: 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 Select the ASUS FTP site nearest...

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 (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 (www.asus.com) to download the latest BIOS information. ASUS M3N78-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: Main Menu

Allows you to set the system date. 2.3.3 Legacy Diskette A [1.44M, 3.5 in.] Sets the type of floppy drive installed. Configuration options: [Disabled] [360K, 5.25 in.] [1.2M, 5.25 in.] [720K,

# Page 62: Primary Ide Master/Slave, Sata1~4

2.3.4 Primary IDE Master/Slave, SATA1~4 While entering Setup, the BIOS automatically detects the presence of IDE devices. There is a separate sub-menu for each IDE device. Select a device item then press <Enter> to display the IDE device information. Select the type Primary IDE Master of device connected Device...

Page 63 Configuration options: [Auto] [Disabled] [Enabled] 32Bit Data Transfer [Enabled] Enables or disables 32-bit data transfer. Configuration options: [Disabled] [Enabled] ASUS M3N78-CM 2-17...

# Page 64: Storage Configuration

2.3.5 Storage Configuration The items in this menu allow you to set or change the configurations for the IDE devices installed in the system. Select an item then press <Enter> if you wish to configure the item. Disabled: disables Storage Configuration the integrated IDE Controller.

### Page 65: System Information

: AMD Sempron(tm) Processor 3200+ Speed : 1800MHz Count System Memory Installed Size : 512MB Usable Size : 384MB AMI BIOS Displays the auto-detected BIOS information. Processor Displays the auto-detected CPU specification. System Memory Displays the auto-detected system memory. ASUS M3N78-CM 2-19...

# Page 66: 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. Adjust System JumperFree Configuration Frequency/Voltage etc.

<u>Page 67</u> Allows you to enter an integer value from 500MHz to 999MHz to over clock for GPU. Configuration options: [Min.=500] [Max.=999] Shader Frequency [1200] Allows you to enter an integer value from 1000MHz to 2000MHz to over clock for shader. Configuration options: [Min.=1000] [Max.=2000] ASUS M3N78-CM 2-21...

### Page 68: Hyper Transport Configuration

PCIE Overclocking [Auto] Allows selection of PCIE overclocking options to achieve desired PCIE frequency. Select either one of the preset overclocking configuration options: [Auto] - allows you to set overclocking parameters automatically. [Manual] - allows you to individually set overclocking parameters. The following item appears only when the PCIE Overclocking item is set to [Manual].

Page 69 Allows you to specify when the last write is registered by the DRAM. Configuration options: [Auto] [3 CLK] [4 CLK] [5 CLK] [6 CLK] TRRD [ Auto] Allows you to set TRRD. Configuration options: [2 CLK] [3 CLK] [4 CLK] [5 CLK] [Auto] ASUS M3N78-CM 2-23...

### Page 70: Chipset Voltage

tRWTTO [ Auto] Allows you to set tRWTTO. Configuration options: [Auto] [2 CLK] [3 CLK] [4 CLK] [5 CLK] [6 CLK] [7 CLK] [8 CLK] [9 CLK] tWRRD [ Auto] Allows you to specify the write to read delay when accessing different DRAMs.

### Page 71: Cpu Configuration

Allows you to enable or disable the AMD Secure Virtual Machine mode. Configuration options: [Disabled] [Enabled] Cool 'n' Quiet [Enabled] Allows you to enable or disable the generation of ACPI\_PPC, \_PSS, and \_PCT objects. Configuration options: [Disabled] [Enabled] ASUS M3N78-CM 2-25...

# Page 72: Chipset

2.4.3 Chipset The Chipset menu allows you to change the advanced chipset settings. Select an item then press <Enter> to display the sub-menu. Options for NB Advanced Chipset Setting WARNING: Setting wrong values in below sections may cause system to malfunction.

NorthBridge Configuration Southbridge Configuration NorthBridge Configuration...

Page 73 Enables or disables the memory remapping around memory hole. Configuration options: [Disabled] [Enabled] DCT Unganged Mode [Auto] Allow you to enable or disable Unganed mode. Configuration options: [Auto] [Always] Power Down Enable [Enabled] Enables or disables the DDR power down mode. Configuration options: [Disabled] [Enabled] ASUS M3N78-CM 2-27...

### Page 74: Ecc Configuration

ECC Configuration DRAM ECC allows ECC Configuration hardware to report ECC Mode [Disabled] and correct memory DRAM ECC Enable [Disabled] errors automatically maintaining system DRAM SCRUB REDIRECT [Disabled] integrity. 4-Bit ECC Mode [Disabled] DRAM BG Scrub [Disabled] Data Cache BG Scrub [Disabled] L2 Cache BG Scrub [Disabled]...

# Page 75: Southbridge Configuration

Allows you to set HD Audio mode. Configuration options: [Disabled] [External codec] Front Panel Select [HD Audio] Allows you to set HD Audio mode. Configuration options: [AC97] [HD Audio] Onboard LAN [Auto] Allows you to set or disable the Onboard LAN. Configuration options: [Auto] [Disabled] ASUS M3N78-CM 2-29...

# Page 76: Onboard Devices Configuration

OnBoard LAN Boot ROM [Disabled] Allows you to enable or disable the OnBoard LAN Boot ROM. Configuration options: [Enabled] [Disabled] SouthBridge ACPI HPET TABLE [Enabled] Allows you to enable or disable SouthBridge ACPI HPET TABLE. Configuration options: [Disabled] [Enabled] 2.4.4 Onboard Devices Configuration Allows BIOS to select Configure ITE8712 Super IO Chipset...

### Page 77: Pci Pnp

Configuration options: [Yes] [No] Palette Snooping [Disabled] When set to [Enabled], the palete snooping feature informs the PCI devices that an ISA graphics device is installed in the system so that the latter can function correctly. Configuration options: [Disabled] [Enabled] ASUS M3N78-CM 2-31...

### Page 78: Usb Configuration

IRQ-xx assigned to [PCI Device] When set to [PCI Device], the specific IRQ is free for use of PCI/PnP devices. When set to [Reserved], the IRQ is reserved for legacy ISA devices. Configuration options: [PCI Device] [Reserved] 2.4.6 USB Configuration The items in this menu allows you to change the USB-related features.

### Page 79: Power Menu

Allows you to enable or disable the Advanced Configuration and Power Interface (ACPI) support in the Application-Specific Integrated Circuit (ASIC). When set to Enabled, the ACPI APIC table pointer is included in the RSDT pointer list. Configuration options: [Disabled] [Enabled] ASUS M3N78-CM 2-33...

### Page 80: Apm Configuration

2.5.4 APM Configuration APM Configuration Options Restore on AC Power Loss [Power Off] Power On Power Off Power On By PCI Device [Disabled] Power On By Ring [Disabled] Power On By PS/2 KB/MS [Disabled] Power On By RTC Alarm [Disabled] Restore on AC Power Loss [Power Off] When set to Power Off, the system goes into off state after an AC power loss.

### Page 81: Hardware Monitor

The onboard hardware monitor automatically detects the voltage output through the onboard voltage regulators. Smart Q-Fan Function [Disabled] Allows you to enable or disable the ASUS Q-Fan feature that smartly adjusts the fan speeds for more efficient system operation. Configuration options: [Disabled] [Enabled]...

# Page 82: Boot Menu

Boot menu The Boot menu items allow you to change the system boot options. Select an item then press <Enter> to display the sub-menu. Specifies the Boot Boot settings Device Priority sequence. Boot Device Priority A virtual floopy disk Boot Settings Configuration drive (Floppy

# Page 83: 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 MyLogo 2<sup>™</sup> feature. Add On ROM Display Mode [Force BIOS] Sets the display mode for option ROM. Configuration options: [Force BIOS] [Keep...

# Page 84: Security

Interrupt 19 Capture [Disabled] When set to [Enabled], this function allows the option ROMs to trap Interrupt 19. Configuration options: [Disabled] [Enabled] 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. Security Settings <Enter>...

# Page 85: 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 M3N78-CM 2-39...

### Page 86: Tools Menu

AI NET 2 2.7.1 ASUS EZ Flash 2 Allows you to run ASUS EZ Flash 2. When you press <0k>, a confirmation message appears. Use the left/right arrow key to select between [Yes] or [No], then press <0k> to confirm your choice.

### Page 87: 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: [Disabled] [Enabled] Enter OS Timer [10 Seconds] Allows you to set the countdown duration that the system waits at the Express Gate's first screen before starting Windows or other installed OS.

## Page 88: 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. Exit system setup Exit Options after saving the Exit & Save Changes changes.

### Page 89: Chapter 3: Software Support

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

### Page 90: Installing An Operating System

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

### Page 91: 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 Anti-Virus and Drivers Utility Launches the ASUS installation wizard for anti-virus and drivers utility.

### Page 92: Utilities Menu

ASUS Install - Installation Wizard for Utilities Launches the ASUS InstallAll installation wizard for utilities. 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  $\[ \mathbb{R} \]$  ...

<u>Page 93</u> 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 Cool 'n' Quiet Utility This item installs the ASUS Cool 'n' Quiet utility. ASUS M3N78-CM...

# Page 94: Make Disk Menu

3.2.4 Make Disk menu The Make Disk menu allows you to make a RAID driver disk. Click to display the next page Click to return to the previous page Chapter 3: Software support...

Page 95 Vista, install the AHCI / RAID driver through the motherboard support ® DVD or a USB device. Find RAID driver in the support DVD through the path below: Drivers\Chipset\Disk\RAID Find AHCI driver in the support DVD through the path below: Drivers\Chipset\Disk\AHCI ASUS M3N78-CM...

### Page 96: Manual Menu

Reader from the Utilities menu before opening a user manual ® ® file. 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. Chapter 3: Software support...

# Page 97: 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. 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 M3N78-CM...

# Page 98: 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 and a brief description of each in text format. 3-10 Chapter 3: Software support...

### Page 99: Creating A Raid Driver Disk

During the OS installation, the system prompts you to press the F6 key to install third-party SCSI or RAID driver. Press <F6> then insert the floppy disk with RAID driver into the floppy disk drive. Follow the succeeding screen instructions to complete the installation. ASUS M3N78-CM 3-11...

<u>Page 100</u> Using the driver disks you created: • Insert Disk1 when you see the following instruction in Windows Setup. DO NOT remove Disk1 until you are asked to insert Disk2. Windows Setup Please insert the disk labeled Manufacturer-supplied hardware support disk into Drive A: Press ENTER when ready.

### Page 101: Software Information

ASUS Express Gate ASUS Express Gate is an instant-on environment that gives you quick access to the Internet. 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 softwares.

<u>Page 102</u> Select the language for installation and click OK. The InstallShield Wizard for Express Gate appears. Click Next to continue. Select the target disk volume for you to install Express Gate. If you have multiple volumes and OS installed in your hard drive, it is recommended to install Express Gate in Volume C.

Page 103 Enter Boot selection pop-up In the Express Gate Environment: Function <Alt> + <Tab> Switch between softwares <Ctrl> + <Alt> + <Del> Bring up Power-Off dialog box <Ctrl> + <Alt> + <Print Screen> Save screen snapshot as picture to file ASUS M3N78-CM 3-15...

# Page 104: Using The Configuration Panel

Using the Configuration Panel Use the configuration panel to change various Express Gate settings. Click on an icon to open a particular configuration tool. The following tools are available: Date and Time: set current date and time as well as time zone. •...

# Page 105: Using The Launchbar

USB drive. If a USB device is detected, the icon contains a green arrow. ASUS Express Gate supports file uploading from SATA HDDs, ODDs and USB drive and downloading to USB drives only. Shows network status; click to configure network.

<u>Page 106</u> Click to choose input language and method as well as keyboard shortcuts (Ctrl-Space by default). Click to change LaunchBar options (auto-hide, docking position, etc). Click to show the "ASUS Utility" panel. Click to show "About Express Gate". Click to open Express Gate Help.

<u>Page 107</u> The most common scenario is for your computer to automatically obtain network settings (i.e. DHCP). If this is the case, you don't need to click Setup for any LAN port. If this is not the case, click Setup to configure the static IP settings manually. ASUS M3N78-CM 3-19...

<u>Page 108</u> Shows user- created image album(s) Image control bar ASUS Express Gate supports HDDs connected to motherboard chipset- controlled onboard SATA ports only. All onboard extended SATA ports and external SATA ports are NOT supported. 3-20 Chapter 3: Software support...

# Page 109: Updating Express Gate

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. To update Express Gate Double-click the Express Gate setup file to start software update.

Page 110 3-22 Chapter 3: Software support...