



Asus AAEON BIO-ST02-C4M1 User Manual

Bio daughter board

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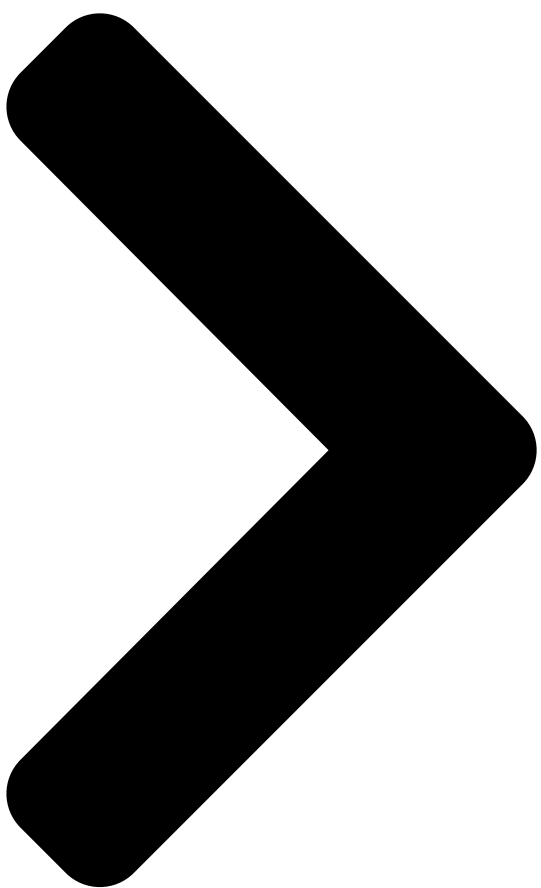
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BIO-ST02-C4M1

BIO Daughter Board

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User Manual 1

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Last Updated: November 10, 2015



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Related Manuals for Asus AAEON BIO-ST02-C4M1

[PCI Card Asus AAEON Myriad UP AI Core X Series Quick Installation Manual](#)

Board (11 pages)

[PCI Card Asus PCE-AC55BT Quick Start Manual](#)

802.11ac wireless dual-band with bluetooth 4.0 pci-e adapter (for 802.11 a/g/b/n/ac wireless networks) (2 pages)

[PCI Card Asus Hyper M.2 x16 Gen 4 Quick Start Manual](#)

(10 pages)

[PCI Card Asus S370-DL Installation Manual](#)

(8 pages)

[PCI Card Asus XONAR DX Quick Start Manual](#)

Xonar dx quick start guide for english (10 pages)

[PCI Card Asus Xonar DG SI User Manual](#)

Pci 7.1 & headphone amp audio card (52 pages)

[PCI Card Asus PCE-AC56 Quick Start Manual](#)

Dual-band wireless pci-e adapter (for 802.11 a/g/b/n/ac wireless networks) (2 pages)

[PCI Card Asus WL-130g User Manual](#)

Wifi-g 54mbps pci ap/wlan adapter (46 pages)

[PCI Card Asus Xonar D1 Quick Start Manual](#)

Pci audio card (10 pages)

[PCI Card Asus ROG Xonar Phoebus Quick Start Manual](#)

7.1 channel pci express audio card (73 pages)

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[PCI Card Asus DVI-ADD2 Installation Manual](#)

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[PCI Card ASUS PCI-SC896 User Manual](#)

2ch. ultra2 pci scsi card (34 pages)

[PCI Card Asus Xonar D-Kara User Manual](#)

Pci 5.1 karaoke audio card (44 pages)

[PCI Card Asus PCI-L101 User Manual](#)

10/100 fast ethernet pci card (28 pages)

[PCI Card Asus NX1001 Quick Installation Manual](#)

Pci fast ethernet adapter (4 pages)

Summary of Contents for Asus AAEON BIO-ST02-C4M1

[Page 1](#) BIO-ST02-C4M1 BIO Daughter Board User Manual 1 Last Updated: November 10, 2015...

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Page 3 Acknowledgement All other products' name or trademarks are properties of their respective owners. ® Microsoft Windows is a registered trademark of Microsoft Corp. □ ITE is a trademark of Integrated Technology Express, Inc. □ IBM, PC/AT, PS/2, and VGA are trademarks of International Business Machines □...

Page 4 Packing List Before setting up your product, please make sure the following items have been shipped: Item Quantity BIO-ST02-C4M1 BIO Daughter Board 1 Accessory kit 1 COM cable 1 If any of these items are missing or damaged, please contact your distributor or sales representative immediately.

Page 5 About this Document This User's Manual contains all the essential information, such as detailed descriptions and explanations on the product's hardware and software features (if any), its specifications, dimensions, jumper/connector settings/definitions, and driver installation instructions (if any), to facilitate users in setting up their product. Users may refer to the AAEON.com for the latest version of this document.

Page 6 Safety Precautions Please read the following safety instructions carefully. It is advised that you keep this manual for future references All cautions and warnings on the device should be noted. Make sure the power source matches the power rating of the device. Position the power cord so that people cannot step on it.

Page 7 If any of the following situations arises, please contact our service personnel:
 Damaged power cord or plug Liquid intrusion to the device iii. Exposure to moisture Device is
 not working as expected or in a manner as described in this manual The device is dropped or
 damaged Any obvious signs of damage displayed on the device...

Page 8 FCC Statement This device complies with Part 15 FCC Rules. Operation is subject to the following two conditions: (1) this device may not cause harmful interference, and (2) this device must accept any interference received including interference that may cause undesired operation.

Page 9 China RoHS Requirements (CN) ☐ AAEON Main Board/ Daughter Board/ Backplane ☐ ☐ ☐ ☐ ☐ ☐ ☐ (Pb) (Hg) (Cd) (Cr(VI)) (PBB) (PBDE) ☐
☒ × ☐ ☐ ☐ ☐ ☐ ☐ × ☐ ☐ ☐ ☐ ☐ ...

Page 10 China RoHS Requirement (EN) Poisonous or Hazardous Substances or Elements in Products AAeon Main Board/ Daughter Board/ Backplane Poisonous or Hazardous Substances or Elements Hexavalent Polybrominated Polybrominated Component Lead Mercury Cadmium Chromium Biphenyls Diphenyl Ethers (Pb) (Hg) (Cd) (Cr(VI)) (PBB) (PBDE) PCB &...

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		2.3.2 MiniCard Slot (Full-MiniCard) (CN2)	

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Chapter 1 Chapter 1 - Product Specifications...

Page 13: Specifications

Specifications System PICO-ITX Form Factor □ BIO Interface 80-pin board to board connector □ DB9 for COM3 COM4 x 2 □ Pin Header for COM1, COM2 x 2 I/O Chipset F81216AD □ USB 2.0 USB 2.0 for rear I/O x 1 □...

Page 14: Chapter 2 - Hardware Information

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Page 15: Dimensions, Jumpers And Connectors

Dimensions, Jumpers and Connectors Component Side Component Side Chapter 2 - Hardware

Information...

[Page 16](#) Solder Side Solder Side Chapter 2 – Hardware Information...

[Page 17: Block Diagram](#)

Block Diagram Chapter 2 – Hardware Information...

[Page 18: List Of Connectors](#)

List of Connectors Please refer to the table below for all of the board's jumpers that you can configure for your application Label Function UIM Card Socket MiniCard Slot (Full-MiniCard) COM Port 2 COM Port 1 USB 2.0 Port 1 COM Port 4 (D-SUB 9) COM Port 3 (D-SUB 9) CN10...

[Page 19: Uim Card Socket \(Cn1\)](#)

2.3.1 UIM Card Socket (CN1) Pin Name Signal Type Signal level UIM_PWR UIM_RST UIM_CLK UIM_VPP UIM_DATA 2.3.2 MiniCard Slot (Full-MiniCard) (CN2) Pin Name Signal Type Signal level PCIE_WAKE# +3.3VSB +3.3V +1.5V +1.5V PCIE_CLK_REQ# UIM_PWR UIM_DATA PCIE_REF_CLK- DIFF UIM_CLK PCIE_REF_CLK+ DIFF UIM_RST Chapter 2 -...

[Page 20](#) UIM_VPP W_DISABLE# +3.3V PCIE_RST# +3.3V PCIE_RX- DIFF +3.3VSB +3.3V PCIE_RX+ DIFF +1.5V +1.5V SMB_CLK +3.3V PCIE_TX- DIFF SMB_DATA +3.3V PCIE_TX+ DIFF USB_D- DIFF USB_D+ DIFF +3.3VSB +3.3V +3.3VSB +3.3V Chapter 2 – Hardware Information...

[Page 21: Com Port 2 \(Cn4\)](#)

+1.5V +1.5V +3.3VSB +3.3V 2.3.3 COM Port 2 (CN4) Pin Name Signal Type Signal level $\pm 9V \pm 9V$ Chapter 2 – Hardware Information...

[Page 22: Com Port 1 \(Cn5\)](#)

$\pm 9V$ 2.3.4 COM Port 1 (CN5) Pin Name Signal Type Signal level $\pm 9V \pm 9V \pm 9V$ 2.3.5 USB 2.0 Port 1 (CN6) 2 3 4 Chapter 2 – Hardware Information...

[Page 23: Com Port 4 \(D-Sub 9\) \(Cn7\)](#)

Pin Name Signal Type Signal level +5VSB USB_D- DIFF USB_D+ DIFF 2.3.6 COM Port 4 (D-SUB 9) (CN7) Pin Name Signal Type Signal level $\pm 9V \pm 9V \pm 9V$ 2.3.7 COM Port 3 (D-SUB 9) (CN9) Chapter 2 – Hardware Information...

[Page 24: Bio Connector \(Cn10\)](#)

Pin Name Signal Type Signal level $\pm 9V \pm 9V \pm 9V$ 2.3.8 BIO Connector (CN10) Pin Name Signal Type Signal level +12VSB +12V PCIE_TXN0 DIFF PCIE_RXN0 DIFF PCIE_TXP0 DIFF PCIE_RXP0 DIFF Chapter 2 – Hardware Information...

[Page 25](#) PS_ON# +5VSB +5VSB +5VSB +5VSB PCIE_REF_CLK0 DIFF RESET# PCIE_REF_CLK0# DIFF Chapter 2 – Hardware Information...

[Page 26](#) USB_D0- DIFF USB_D0+ DIFF USB_D1- DIFF USB_D1+ DIFF Chapter 2 – Hardware Information...

[Page 27](#) SMB_CLK +3.3V SMB_DATA +3.3V WAKE# +3.3V USB_OC0# +3.3V USB_OC1# +3.3V LPC_AD0 +3.3V LPC_FRAME# +3.3V LPC_AD1 +3.3V SERIRQ +3.3V LPC_AD2 +3.3V LPC_DRQ +3.3V LPC_AD3 +3.3V GPIO0 +3.3V Chapter 2 – Hardware Information...

[Page 28](#) AGND LPC_CLK +3.3V AUD_LINEOUT_L PME# AUD_LINEOUT_R Chapter 2 – Hardware Information...

[Page 29: Chapter 3 - Bios And Drivers Installation](#)

Chapter 3 Chapter 3 – BIOS and Drivers Installation...

[Page 30: Bios Update](#)

BIOS Update In order for the main board to recognize the BIO daughter board, you will have to

update its BIOS so that necessary system configurations can be performed. Please contact AAEON FAE for the BIOS update, or get more information about the update on <http://www.aaeon.com> Chapter 3 –...

[Page 31: Drivers Installation](#)

Drivers Installation Please follow the steps below to install the drivers for BIO-ST02-C4M1, which can be found in <http://www.aaeon.com/tw/support/download.php> Step 1 – Install Serial Port Drivers For Windows XP Open the patch.exe file in the folder Follow the instructions Drivers will be installed automatically For Windows 7 –...

[Page 32](#) Method 2 Change User Account Control settings to Never notify Reboot and log in as administrator Chapter 3 – BIOS and Driver Installation...

[Page 33](#) Run patch.bat as administrator Chapter 3 – BIOS and Driver Installation...

[Page 34](#) For Windows 8: Open the Apps Screen, right click on the Command Prompt tile and select Run as Administrator To install the driver (patch.bat), you will first have to locate the file in command prompt. To do that, first go to the directory which contains the file by entering <drive letter>: eg.

[Page 35](#) <folder> command again to access the subfolder (screenshot below is for reference only). Reboot after installation completes. To confirm the installation, go to Device Manager, expand the Ports (COM & LPT) tree and double click on any of the COM ports to open its properties.

[Page 36](#) Chapter 3 – BIOS and Driver Installation...