

# Asus AAEON PICO-APL4 User Manual

¢

Table of Contents

•

Bookmarks

•

Download this manual

Quick Links



# PICO-APL4



Ed

Last Updated: May 7, 2021

**Table of Contents** 

Next Page

## Related Manuals for Asus AAEON PICO-APL4

Single board computers Asus AAEON PICO-WHU4-SEMI Quick **Installation Manual** (6 pages) Single board computers Asus AAEON PICO-KBU4 User Manual (93 pages) Single board computers Asus AAEON PICO-EHL4 User Manual (108 pages) Single board computers Asus AAEON PICO-V2K4 User Manual (98 pages) Single board computers Asus AAEON PICO-V2K4 User Manual Pico-itx single board computer (101 pages) Single board computers Asus AAEON PICO-ADN4 User Manual Pico-itx single board computer (117 pages) Single board computers Asus AAEON PICO-IMX8PL User Manual Pico-itx single board computer (85 pages) Single board computers Asus AAEON GENE-WHU6 User Manual 3.5" subcompact board (105 pages) Single board computers Asus E394S-IM-AA User Manual (102 pages) Single board computers Asus AAEON GENE-ADN6 User Manual 3.5" subcompact board (124 pages) Single board computers Asus AAEON EPIC-KBS7 User Manual (92 pages) Single board computers Asus Tinker Edge T Getting Started (12 pages) Single board computers Asus Aaeon RICO-3288 User Manual Rockchip rk3288 platform (36 pages) Single board computers Asus AAEON de next-V2K8 User Manual (83 pages) Single board computers Asus Aaeon UP-CORE Quick Installation Manual

(14 pages)

## Summary of Contents for Asus AAEON PICO-APL4

Page 1 PICO-APL4 PICO-ITX Board User's Manual 7 Last Updated: May 7, 2021...

<u>Page 2</u> Copyright Notice This document is copyrighted, 2021. All rights are reserved. The original manufacturer reserves the right to make improvements to the products described in this manual at any time without notice. No part of this manual may be reproduced, copied, translated, or transmitted in any form or by any means without the prior written permission of the original manufacturer.

<u>Page 3</u> Acknowledgement All other product name or trademarks are properties of their respective owners. Microsoft Windows® is a registered trademark of Microsoft Corp. • Intel®,

Pentium® and Celeron® are registered trademarks of Intel Corp.  $\bullet$  Intel Atom  $^{\rm m}$  is a trademark of Intel Corp.  $\bullet...$ 

<u>Page 4</u> Packing List Before setting up your product, please make sure the following items have been shipped: Item Quantity PICO-APL4 If any of these items are missing or damaged, please contact your distributor or sales representative immediately. Preface...

<u>Page 5</u> 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 product page at AAEON.com for the latest version of this document.

<u>Page 6</u> 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.

<u>Page 7</u> If any of the following situations arises, please the 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...

<u>Page 8</u> 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)
 China China Control
 China RoHS Requirements (CN)

 Board/ Backplane
 Control
 Contro

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 &...

#### Page 11: Table Of Contents

#### Page 14: Chapter 1 - Product Specifications

Chapter 1 Chapter 1 - Product Specifications...

#### Page 15: Specifications

Specifications System Form Factor PICO-ITX Intel® Pentium® N4200 (4-core, 1.1 GHz, up to 2.5 GHz, TDP 6W) Intel® Celeron® N3350 (2-core, 1.1 GHz, up to 2.4 GHz, TDP 6W) Intel® Atom<sup>™</sup> x7-Series (4-core 1.6GHz, up to 2.00 GHz, TDP 12W) CPU Frequency Up to 2.4GHz Chipset...

<u>Page 16</u> System Operating Temperature  $32^{\circ}F \sim 140^{\circ}F$  ( $0^{\circ}C \sim 60^{\circ}C$ ) Storage Temperature  $-40^{\circ}F \sim 176^{\circ}F$  ( $-40^{\circ}C \sim 80^{\circ}C$ ) Operating Humidity  $0\% \sim 90\%$  relative humidity, non-condensing

MTBF (Hours) 191,895 Certification CE, FCC Display Chipset Intel SoC Resolution HDMI 1.4b: 3840 x 2160, 30Hz Internal eDP 1.4: 3840 x 2160, 60Hz (Optional) DDI (Optional from BIO) LCD Interface...

Page 17 Expansion Slot M.2 2230 x 1 (E-Key) BIO x 1 (optional) Smbus — — Touch — Chapter 1 - Product Specifications...

#### Page 18: Chapter 2 - Hardware Information

Chapter 2 Chapter 2 - Hardware Information...

#### Page 19: Dimensions

Dimensions Component Side Component Side Chapter 2 - Hardware Information...

Page 20 Solder Side Solder Side Chapter 2 - Hardware Information...

Page 21 Rear I/O Configuration Phoenix DC Jack Chapter 2 - Hardware Information...

#### Page 22: Jumpers And Connectors

Jumpers and Connectors Component Side Component Side Chapter 2 - Hardware Information...

Page 23 Solder Side Solder Side Chapter 2 - Hardware Information...

#### Page 24: List Of Jumpers

List of Jumpers Please refer to the table below for all of the board's jumpers that you can configure for your application Label Function Auto Power Button Enable/Disable Selection Clear CMOS Jumper 2.3.1 Auto Power Button Enable/Disable Selection (JP1) 1 2 3 Enable/AT (Default) Disable/ATX Note: When disabled, the power button of CN3 (1-2) is used to power on the system...

#### Page 25: List Of Connectors

List of Connectors Please refer to the table below for all of the board's connectors that you can configure for your application Label Function COM Port 2 COM Port 1 Front Panel Connector M.2 Key-E Slot (2230) M.2 Key-B Slot (2280) BIO Port (Optional) Digital I/O SATA Port...

#### Page 26: Com Port 2 (Cn1)

2.4.1 COM Port 2 (CN1) RS232 Pin Name Signal Type Signal Level DCD2 DSR2 RTS2 ±5V ±5V CTS2 DTR2 ±5V RI2/+5V/+12V +5V/+12V Chapter 2 – Hardware Information...

Page 27 RS485 Pin Name Signal Type Signal Level RS485\_D2- ±5V RS485\_D2+ ±5V NC/+5V/+12V +5V/+12V RS422 Pin Name Signal Type Signal Level RS422\_TX2- ±5V RS422\_TX2+ ±5V RS422\_RX2+ RS422\_RX2- NC/+5V/+12V +5V/+12V Note: COM2 RS-232/422/485 can be set by BIOS setting. Default is RS-232. Note: Pin 8 function can be changed by BOM.

#### Page 28: Com Port 1 (Cn2)

2.4.2 COM Port 1 (CN2) RS232 Pin Name Signal Type Signal Level DCD1 DSR1 RTS1 ±9V ±9V CTS1 DTR1 ±9V Chapter 2 – Hardware Information...

#### Page 29: Front Panel Connector (Cn3)

2.4.3 Front Panel Connector (CN3) Pin Name Pin Name PWR\_BTN- PWR\_BTN+ HDD\_LED-HDD\_LED+ SPEAKER- SPEAKER+ PWR\_LED- PWR\_LED+ H/W RESET- H/W RESET+ 2.4.4 M.2 Key-E Slot (2230) (CN4) Pin Name Signal Type Signal Level +3.3VSB +3.3V USB\_D+ DIFF +3.3VSB +3.3V USB\_D- DIFF Chapter 2 -...

<u>Page 30</u> Pin Name Signal Type Signal Level PCIE\_TX+ DIFF PCIE\_TX- DIFF PCIE\_RX+ DIFF PCIE\_RX+ DIFF Chapter 2 - Hardware Information...

Page 31 Pin Name Signal Type Signal Level PCIE\_REF\_CLK+ DIFF PCIE\_REF\_CLK- DIFF PCIE\_RST# +3.3V PCIE\_CLK\_REQ# +3.3V W\_DISABLE2# +3.3V PCIE\_WAKE# +3.3V

W\_DISABLE1# +3.3V Chapter 2 - Hardware Information...

#### Page 32: Key-B Slot (2280) (Cn5)

Pin Name Signal Type Signal Level +3.3VSB +3.3V +3.3VSB +3.3V 2.4.5 M.2 Key-B Slot (2280) (CN5) Pin Name Signal Type Signal Level +3.3V +3.3V +3.3V +3.3V USB\_D+ DIFF USB\_D- DIFF SSD\_DAS# +3.3V Chapter 2 – Hardware Information...

Page 33 Pin Name Signal Type Signal Level DEVSLP +1.8V SATA\_RX+ DIFF SATA\_RX- DIFF SATA\_TX- DIFF SATA\_TX+ DIFF Chapter 2 - Hardware Information...

Page 34 Pin Name Signal Type Signal Level +3.3V +3.3V +3.3V +3.3V +3.3V +3.3V Chapter 2 - Hardware Information...

#### Page 35: Bio Port (Optional) (Cn6)

2.4.6 BIO Port (Optional) (CN6) Pin Name Signal Type Signal Level +12VSB +12V PCIE\_TXN0 DIFF PCIE\_RXN0 DIFF PCIE\_TXP0 DIFF PCIE\_RXP0 DIFF PCIE\_TXN1 DIFF PCIE\_RXN1 DIFF PCIE\_TXP1 DIFF PCIE\_RXP1 DIFF Chapter 2 - Hardware Information...

Page 36 Pin Name Signal Type Signal Level PS\_ON# DDI\_DDCCLK +3.3V DDI\_DDCDATA +3.3V +5VSB +5VSB +5VSB +5VSB PCIE\_REF\_CLK0 DIFF RESET# PCIE\_REF\_CLK0# DIFF DDI\_TX1N DIFF DDI\_TX0N DIFF DDI\_TX1P DIFF DDI\_TX0P DIFF DDI\_TX3N DIFF DDI\_TX2N DIFF DDI\_TX3P DIFF DDI\_TX2P DIFF Chapter 2 - Hardware Information...

Page 37 Pin Name Signal Type Signal Level DDI\_HPD DDI\_AUXN DIFF DDI0\_AUXP DIFF USB3\_TX\_N DIFF USB3\_TX\_P DIFF USB\_D0- DIFF USB\_D0+ DIFF USB3\_RX\_N DIFF USB3\_RX\_P DIFF SMB\_CLK +3.3V SMB\_DATA +3.3V WAKE# +3.3V USB\_OC# +3.3V USB\_OC# +3.3V LPC\_AD0 +3.3V Chapter 2 - Hardware Information...

#### Page 38: Digital I/O (Cn7)

Pin Name Signal Type Signal Level LPC\_FRAME# +3.3V LPC\_AD1 +3.3V SERIRQ +3.3V LPC\_AD2 +3.3V LPC\_AD3 +3.3V BIO\_PWOK +3.3V LPC\_CLK +3.3V 2.4.7 Digital I/O (CN7) Pin Name Signal Type Signal Level DIO0 DIO1 Chapter 2 - Hardware Information...

#### Page 39: Sata Port (Cn8)

Pin Name Signal Type Signal Level DIO2 DIO3 2.4.8 SATA Port (CN8) Pin Name Signal Type Signal Level SATA\_TX+ DIFF SATA\_TX- DIFF SATA\_RX- DIFF SATA\_RX+ DIFF Chapter 2 - Hardware Information...

#### Page 40: Spi Flash Programming Port (Cn9)

2.4.9 SPI Flash Programming Port (CN9) Pin Name Signal Type Signal Level SPI\_MISO SPI\_CLK +3.3VSB +3.3V SPI\_MOSI SPI\_CS 2.4.10 +5V Output for SATA HDD (CN12) Pin Name Signal Type Signal Level Chapter 2 - Hardware Information...

#### Page 41: Hdmi Port (Cn11)

2.4.11 HDMI Port (CN11) Pin Name Signal Type Signal level TMDS\_DAT2+ DIFF TMDS\_DAT2-DIFF TMDS\_DAT1+ DIFF TMDS\_DAT1- DIFF TMDS\_DAT0+ DIFF TMDS\_DAT0- DIFF TMDS\_CLK+ DIFF TMDS\_CLK- DIFF DDC\_CLK DDC\_DATA HPLG\_DETECT Chapter 2 - Hardware Information...

#### Page 42: Battery (Cn12)

2.4.12 Battery (CN12) Pin Name Signal Type Signal Level +3.3V 3.3V 2.4.13 LAN (RJ-45) Port1 (CN13) Pin Name Signal Type Signal level MDI0+ DIFF MDI0- DIFF MDI1+ DIFF MDI2+ DIFF MDI2- DIFF MDI1- DIFF MDI3+ DIFF MDI3- DIFF Chapter 2 – Hardware Information...

#### Page 43: Lan (Rj-45) Port2 (Cn14)

2.4.14 LAN (RJ-45) Port2 (CN14) Pin Name Signal Type Signal Level MDI0+ DIFF MDI0- DIFF MDI1+ DIFF MDI2+ DIFF MDI2- DIFF MDI1- DIFF MDI3+ DIFF MDI3- DIFF Chapter 2 - Hardware Information...

#### Page 44: Usb 3.0 Ports 0 And 1 (Cn15)

2.4.15 USB 3.0 Ports 0 and 1 (CN15) Pin Name Signal Type Signal Level +5VSB USB0\_D- DIFF USB0\_D+ DIFF USB0\_SSRX- DIFF USB0\_SSRX+ DIFF USB0\_SSTX- DIFF USB0\_SSTX+ DIFF +5VSB USB1\_D- DIFF USB1\_D+ DIFF USB1\_SSRX- DIFF USB1\_SSRX+ DIFF USB1\_SSTX- DIFF USB1\_SSTX+ DIFF Chapter 2 -...

#### Page 45: External Power Input (Cn17)

2.4.16 External Power Input (CN17) Pin Name Signal Type Signal Level +VIN +12V 2.4.17 +12V DC Power Jack (Optional) (CN18) Pin Name Signal Type Signal Level +12V +12V 2.4.18 Embedded DisplayPort (Optional) (CN19) Pin Name Signal Type Signal Level VCC\_PWR 3.3V VCC\_PWR 3.3V...

#### Page 47: Usb 2.0 Port 2 (Cn20)

2.4.19 USB 2.0 Port 2 (CN20) Pin Name Signal Type Signal Level +5VSB USB\_D- DIFF USB\_D+ DIFF 2.4.20 USB 2.0 Port 1 (CN21) Pin Name Signal Type Signal Level +5VSB USB\_D- DIFF USB\_D+ DIFF Chapter 2 - Hardware Information...

#### Page 48: Lpc Port (Cn22)

2.4.21 LPC Port (CN22) Pin Name Signal Type Signal Level LAD0 +3.3V LAD1 +3.3V LAD2 +3.3V LAD3 +3.3V +3.3V +3.3V LFRAME# LRESET# +3.3V LCLK SMB\_DATA/I2C\_SDA +3.3V SMB\_CLK/I2C\_SCL +3.3V SMB\_ALERT/INT\_SERIRQ I/O +3.3V Note: I2C/SMBus (pins 10, 11, 12) can be set by Bios Option Menu (BOM) R406/R403/R414: I2C (default) R405/R408/R411: SMBus Chapter 2 -...

#### Page 49: Electrical Specifications For I/O Ports

Electrical Specifications for I/O Ports Reference Signal Level Rate Output COM Port 2 +5V/+12V+5V/0.5A or +12V/0.5A M.2 Key-E Slot (2230) +3.3VSB +3.3V/2A M.2 Key-B Slot (2280) +3.3V+3.3V/2.5A Digital IO Port +5V/1A +5V Output for SATA HDD CN10 +5V/1A USB Ports 0 and 1 CN15 +5VSB...

#### Page 50: Function Block

Function Block Chapter 2 – Hardware Information...

#### Page 51: Assembly Options

Assembly Options 2.7.1 PICO-APL4-HSK01 AAEON provides a heat spreader and a heatsink with both studs and screws included as options. AAEON suggests using both for assembly. Note: For best performance and reliability, AAEON advises enabling a power limit in BIOS setup when using a passive cooling solution. Chapter 2 -...

#### Page 52: Pico-Apl4-Hsp01

2.7.2 PICO-APL4-HSP01 If installing the PICO-APL4 onto a chassis with only the heat spreader provided by AAEON, make sure to apply thermal grease between the heat spreader and chassis. Chapter 2 – Hardware Information...

#### Page 53: Pico-Apl4-Fan01

2.7.3 PICO-APL4-FAN01 Note: The active cooling solution can be operated via +5V USB power from CN20 or CN21 without fan speed control. Chapter 2 – Hardware Information...

#### Page 54: Chapter 3 - Ami Bios Setup

Chapter 3 Chapter 3 - AMI BIOS Setup...

#### Page 55: System Test And Initialization

System Test and Initialization These routines test and initialize board hardware. If the routines encounter an error during the tests, you will either hear a few short beeps or see an error

message on the screen. There are two kinds of errors: fatal and non-fatal. The system can usually continue the boot up sequence with non-fatal errors.

#### Page 56: Ami Bios Setup

AMI BIOS Setup AMI BIOS ROM has a built-in Setup program that allows users to modify the basic system configuration. This type of information is stored in battery-backed CMOS RAM and BIOS NVRAM so that it retains the Setup information when the power is turned off. Entering Setup Power on the computer and press <Del>or <ESC>...

#### Page 57: Setup Submenu: Main

Setup Submenu: Main Chapter 3 - AMI BIOS Setup...

#### Page 58: Setup Submenu: Advanced

Setup Submenu: Advanced Chapter 3 - AMI BIOS Setup...

#### Page 59: Trusted Computing

3.4.1 Trusted Computing Options Summary Security Device Support Disable Enable Optimal Default, Failsafe Default Enables or Disables BIOS support for security device. O.S. will not show Security Device. TCG EFI protocol and INT1A interface will not be available. SHA-1 PCR Bank Disable Enable Optimal Default, Failsafe Default...

Page 60 Options Summary Storage Hierarchy Disabled Enabled Optimal Default, Failsafe Default Enable or Disable Storage Hierarchy Endorsement Hierarchy Disabled Enabled Optimal Default, Failsafe Default Enable or Disable Endorsement Hierarchy TPM2.0 UEFI Spec Version TCG\_1\_2 TCG\_2 Optimal Default, Failsafe Default Select the TCG2 Spec Version Support, TCG\_1\_2: the Compatible mode for Win8/Win10 TCG\_2: Support new TCG2 protocol and event format for Win10 or later Physical Presence Spec...

#### Page 61: Cpu Configuration

3.4.2 CPU Configuration Options Summary C-States Disabled Enabled Optimal Default, Failsafe Default Enable/Disable C States. EIST<sup>™</sup> Disabled Enabled Optimal Default, Failsafe Default Enable/Disable Intel SpeedStep. Turbo Mode Disabled Enabled Optimal Default, Failsafe Default Turbo Mode Intel Virtualization Disabled Technology Enabled Optimal Default, Failsafe Default When enabled, a VMM can utilize the additional hardware capabilities provided by Vanderpool Technology.

Page 62 Options Summary Power Limit 1 Enable Disabled Optimal Default, Failsafe Default Enabled Enable/Disable Power Limit 1 Chapter 3 – AMI BIOS Setup...

#### Page 63: Sata Configuration

3.4.3 SATA Configuration Options Summary SATA GEN SPEED AUTO Optimal Default, Failsafe Default GEN1 GEN2 GEN3 SATA GEN SPEED SELECTION Port0 / M.2 port Disabled Enabled Optimal Default, Failsafe Default Enable/Disable SATA port SATA Port 0 Hot Plug Disabled Optimal Default, Failsafe Default Capability Enabled Enable/Disable SATA port hot plug...

#### Page 64: Hardware Monitor

3.4.4 Hardware Monitor Chapter 3 – AMI BIOS Setup...

#### Page 65: Sio Configuration

3.4.5 SIO Configuration Chapter 3 – AMI BIOS Setup...

#### Page 66: Serial Port 1 Configuration

3.4.5.1 Serial Port 1 Configuration Options Summary Use This Device Disable Enable Optimal Default, Failsafe Default Enable or Disable this Logical Device. Possible: Use Automatic Settings Optimal Default, Failsafe Default IO=3F8h; IRQ=4 IO=2F8h; IRQ=3 Allows user to change Device's Resource settings. New settings will be reflected on This Setup Page after System restarts.

#### Page 67: Serial Port 2 Configuration

3.4.5.2 Serial Port 2 Configuration Options Summary Use This Device Disable Enable Optimal Default, Failsafe Default Enable or Disable this Logical Device. Possible: Use Automatic Settings Optimal Default, Failsafe Default IO=2F8h; IRQ=3 IO=3F8h; IRQ=4 Allows user to change Device's Resource settings. New settings will be reflected on This Setup Page after System restarts.

#### Page 68: Digital Io Port Configuration

3.4.5 Digital IO Port Configuration Options Summary DIO Port\* Output Input Set DIO as Input or Output Output Level High Optimal Default, Failsafe Default Set output level when DIO pin is output Chapter 3 – AMI BIOS Setup...

#### Page 69: Power Management

3.4.6 Power Management Options Summary Power Mode ATX Type Optimal Default, Failsafe Default AT Type Select system power mode Restore AC Power Loss Last State Optimal Default, Failsafe Default Always On Always Off Determine the system turn on or off after AC resume from G3 to S5 state RTC wake system from S5 Disable Optimal Default, Failsafe Default...

#### Page 70: Setup Submenu: Chipset

Setup Submenu: Chipset Chapter 3 – AMI BIOS Setup...

#### Page 71: North Bridge

3.5.1 North Bridge Chapter 3 - AMI BIOS Setup...

#### Page 72: South Bridge

3.5.2 South Bridge Options Summary M.2 PCI Express Root Port Disable Enable Optimal Default, Failsafe Default Auto Control the PCI Express Root Port. AUTO: To disable unused root port automatically for the most optimum power savings. Enable: Enable PCIe root port Disable: Disable PCIe root port M.2 PCIe Speed Auto...

#### Page 73: Setup Submenu: Security

Setup Submenu: Security Change User/Administrator Password You can set an Administrator Password or User Password. An Administrator Password must be set before you can set a User Password. The password will be required during boot up, or when the user enters the Setup utility. A User Password does not provide access to many of the features in the Setup utility.

#### Page 74: Secure Boot

3.6.1 Secure Boot Options Summary Secure Boot Disabled Optimal Default, Failsafe Default Enabled Secure Boot feature is Active if Secure Boot is Enabled, Platform Key(PK) is enrolled and the System is in User mode. The mode change requires platform reset Secure Boot Mode Custom Optimal Default, Failsafe Default...

#### Page 75: Key Management

3.6.1.1 Key Management Options Summary Factory Key Provision Disabled Optimal Default, Failsafe Default Enabled Secure Boot feature is Active if Secure Boot is Enabled, Platform Key(PK) is enrolled and the System is in User mode. The mode change requires platform reset Restore Factory Keys Force System to User Mode.

Page 76 Options Summary Restore DB defaults Restore DB variable to factory defaults Platform Key (PK) Details Export Update Delete Key Exchange Keys Details Export Update Append Delete Authorized Signatures Details Export Update Append Delete Forbidden Signatures Details Export Update Append Delete Authorized Time Stamps Update Append...

#### Page 77: Setup Submenu: Boot

Setup Submenu: Boot Options Summary Quiet Boot Disabled Enabled Optimal Default, Failsafe Default Enables or Disables showing boot logo. Monitor Mwait Disable Enabled Auto Optimal Default, Failsafe Default Enable/Disable Monitor Mwait. To install Linux OS, please set this item to disable. Ipv4 PXE Support Disabled Optimal Default, Failsafe Default...

#### Page 78: Bbs Priorities

3.7.1 BBS Priorities Chapter 3 - AMI BIOS Setup...

#### Page 79: Setup Submenu: Save & Exit

Setup Submenu: Save & Exit Chapter 3 – AMI BIOS Setup...

#### Page 80: Chapter 4 - Drivers Installation

Chapter 4 Chapter 4 – Drivers Installation...

#### Page 81: Driver Download/Installation

Driver Download/Installation Drivers for the PICO-APL4 can be downloaded from the product page on the AAEON website by following this link: https://www.aaeon.com/en/p/pico-itx-boards-pico-apl4#downloads Download the driver(s) you need and follow the steps below to install them. Step 1 – Install Chipset Driver Open the STEP1 -CHIPSET folder and open the SetupChipset.exe file Follow the instructions Drivers will be installed automatically...

Page 82 Step 4 – Install Audio Driver Open the STEP4 - AUDIO folder and open the 0006-64bit\_Win7\_Win8\_Win81\_Win10\_R279.exe file Follow the instructions Driver will be installed automatically Step 5 – Install TXE Driver Open the STEP5 - TXE folder and open the SetupTXE.exe file Follow the instructions Driver will be installed automatically Chapter 4 –...

#### Page 83: Appendix A - I/O Information

Appendix A Appendix A - I/O Information...

#### Page 84: I/O Address Map

I/O Address Map Appendix A – I/O Information...

#### Page 85: A.2 Memory Address Map

A.2 Memory Address Map Appendix A – I/O Information...

#### Page 86: A.3 Irq Mapping Chart

A.3 IRQ Mapping Chart Appendix A – I/O Information...

Page 87 Appendix A - I/O Information...

Page 88 Appendix A – I/O Information...

#### Page 89: Appendix B - Mating Connectors

Appendix B Appendix B – Mating Connectors...

#### Page 90: List Of Mating Connectors And Cables

List of Mating Connectors and Cables The table notes mating connectors and available cables. Mating Connector Connector Available Function Cable P/N Label Cable Vendor Model no COM Port #2 Serial Port SHR-09V-S-B 1701090122 Connector Cable COM Port #1 Serial Port SHR-09V-S-B 1701090122 Connector...