



Asus Aaeon UP Squared Pro 7000 Edge User Manual

Maker board system

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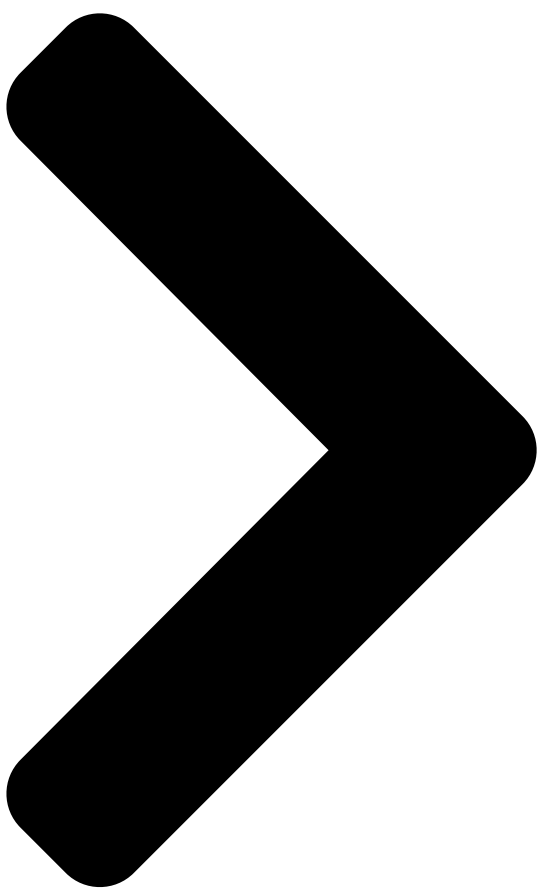
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UP Squared Pro 7000

Edge  an ASUS[®] assoc. co.

Maker Board System

UPN-EDGE-ADLN01

User's Manual 1st Ed

Last Updated: March 28, 2023

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Summary of Contents for Asus Aaeon UP Squared Pro 7000 Edge

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[Page 2](#) Copyright Notice This document is copyrighted, 2023. 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.

[Page 3](#) Acknowledgement All other products' name or trademarks are properties of their respective owners. Microsoft®, Windows®, Windows® 10 IoT Enterprise, and Windows® IoT Core • are registered trademarks of Microsoft Corp. Intel® and Atom® are registered trademarks of Intel Corporation • Core™...

[Page 4](#) Packing List Before setting up your product, please make sure the following items have been shipped: Item Quantity UPN-EDGE-ADLN01 (UP Squared Pro 7000 Edge) • 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 product page at 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 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...

[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) 有害物质检测 AAEON System QO4-381 Rev.A0 有害物质检测 (Pb) (Hg) (Cd) (Cr(VI)) (PBB) (PBDE) 检测 × ○ ○ ○ ○ ○ 检测 × ○ ○ ○ ○ ○ 检测 ○ ○...

[Page 10](#) China RoHS Requirement (EN) Hazardous and Toxic Materials List AAEON System QO4-381 Rev.A0 Hazardous or Toxic Materials or Elements Component Name PCB and Components Wires & Connectors for Ext.Connections Chassis CPU & RAM HDD Drive LCD Module Optical Drive Touch Control Module Battery This form is prepared in compliance with the provisions of SJ/T 11364.

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[Page 12: Chapter 1 - Product Specifications](#)

[Page 13: Specifications](#)

Specifications System Intel® Core™ i3-N305 Intel Atom® x7425E Intel® Processor N97 Intel® Processor N50 (formerly Alder Lake-N) Memory Up to 16GB LPDDR5 Graphics Intel® UHD Graphics for 12th Gen Intel® Processors Storage Up to 64GB eMMC Ethernet 2.5GbE x 2 (Intel® I225/I226) Wi-Fi/BT Optional via M.2 2230 E-Key Expansion...

[Page 14](#) USB 3.2 Gen 2 x 3 (Type-A x 2, Type-C x 1) Display Port HDMI 2.0b x 1 DP 1.2 x 1 DP 1.4a via USB Type-C Ethernet 2.5GbE x 2 (Intel® I226-IT) RS-232/422/485 x 2 Audio Audio Jack x 1 (Line out + MIC in) GPIO 40-pin GPIO x 1 Power Supply...

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Chapter 2 – Hardware Information Chapter 2...

[Page 16: Dimensions](#)

Dimensions Chapter 2 – Hardware Information...

[Page 17: Jumpers And Connectors](#)

Jumpers and Connectors Front I/O Rear I/O Chapter 2 – Hardware Information...

[Page 18: List Of Jumpers And Connectors](#)

List of Jumpers and Connectors Please refer to the table below for all of the board's jumpers and connectors that you can configure for your application Label Function USB 3.2 Gen 2 (Type-C)/DP 1.4a COM 2 2.5GbE Dual LAN Port Display Port 1.2 HDMI 2.0b USB 3.2 Gen 2 (Type-A) Dual Port...

[Page 19: Com 1/Com 2: Rs232/Rs422/Rs485 \(10/2\)](#)

2.3.1 COM 1/COM 2: RS232/RS422/RS485 (10/2) Signal DCDA / RS422TX- / RS485- RXA / RS422TX+ / RS485+ TXA / RS422RX+ DTRA / RS422RX- DSRA RTSA CTSA Chapter 2 – Hardware Information...

[Page 20: 40-Pin Gpio \(9\)](#)

2.3.2 40-Pin GPIO (9) Signal Signal +3.3V I2C1_DAT / GPIO1 I2C1_CLK / GPIO2 ANALOG_DATA / GPIO3 UART_TX / GPIO16 UART_RX / GPIO17 GPIO4/ UART_RTS I2S_BCLK / GPIO18 GPIO5 GPIO6 GPIO19 +3.3V GPIO20 SPI_MOSI / GPIO7 SPI_MISO / GPIO8 GPIO21 SPI_CLK / GPIO9 SPI_CS0 / GPIO22 GPIO23 I2C0_DAT / GPIO10...

[Page 21: Chapter 3 - Software Installation](#)

Chapter 3 Chapter 3 – Software Installation...

[Page 22: Linux Setup](#)

Linux Setup The UP Squared Pro 7000 Edge supports Linux operating systems (see Chapter 1 for specifications). For instructions on how to install a Linux OS onto your UP Squared Pro 7000 Edge, you can find several guides and tutorials in the wiki section of the UP website at <https://up-board.org> for both installing supported distributions as well as...

[Page 23: Dummy Driver Information](#)

Dummy Driver Information 3.3.1 Dummy Driver Installation The following instructions detail how to install the dummy driver for your UP Squared Pro 7000 Edge (UPN-EDGE-ADLN01). Step 1 – Download UPNullDrv.msi. Step 2 – Click UPNullDrv.msi and follow the steps as per the below images to install Driver.

[Page 24](#) Chapter 3 – Software Installation...

[Page 25](#) Chapter 3 – Software Installation...

[Page 26](#) Once you have successfully installed the dummy driver, you will be able to locate it

via your system's Device Manager, as shown below. Chapter 3 – Software Installation...

[Page 27: Uninstalling The Dummy Driver](#)

3.3.2 Uninstalling the Dummy Driver Click UPNullDrv.msi to uninstall driver, then select Remove UPNullDrv. Chapter 3 – Software Installation...

[Page 28: Appendix A - Up Framework Sdk Installation](#)

Appendix A Appendix A – UP Framework SDK Installation...

[Page 29: Introduction](#)

Introduction This section provides instructions for the installation of the UP Framework SDK. Instructions are provided for Windows 10 and Windows IoT Core. You can download the latest version of UP Framework SDK from the UP community:

<https://downloads.up-community.org/download/up-sdk-for-windows-10-and-windows-iot/> A.2

Installation for Windows 10 Step 1 Locate the downloaded file UpFrameworkSetup.msi and run the installer.

[Page 30](#) Step 2 Select the installation folder. Default destination path is C:\Program Files(x86)\AAEON\ You may also choose to install the UP Framework SDK for all users or only the current user. Press “Next” to continue installation. Step 3 Press “Next” to confirm the installation. Appendix A –...

[Page 31](#) Step 4 Press “Close” to exit once setup is complete. Appendix A – UP Framework SDK Installation...

[Page 32: Installation For Windows IoT Core](#)

A.3 Installation for Windows IoT Core Before you begin, make sure you have downloaded and installed the latest version of the Windows IoT Core image from the UP community. Installation requires using a connected PC with the UP Framework SDK software downloaded and saved.

[Page 33](#) Step 2 Download the UP Framework SDK to your PC and unzip the files. Open PowerShell as an Administrator. Enter the command RemoteInstallation.ps1 to install the UP Framework SDK on the UP IoT Core device. Enter the IP address of the UP IoT Core device when prompted. Note: you must connect Up IoT Core and PC in the same network.

This manual is also suitable for:

[Upn-edge-adln01](#)