



Asus AAEON UPCR-HDMI User Manual

Hdmi in carrier board

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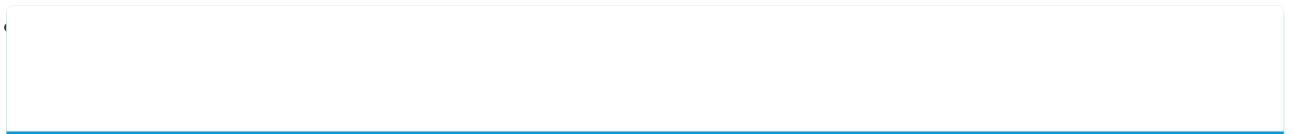
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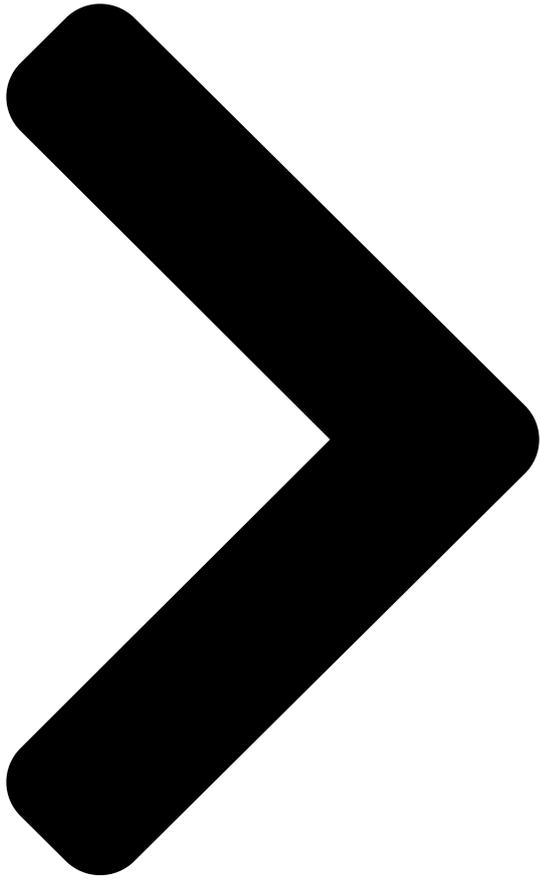
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UPCR-HDMI

HDMI In Carrier Board

User's Manual 1st Ed.

Last Updated: August 24, 2023



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Related Manuals for Asus AAEON UPCR-HDMI

[Carrier boards Asus AAEON ECB-980A User Manual](#)

Com hpc client carrier board (102 pages)

[Carrier boards Asus AAEON UP 4000 M.2 Plus User Manual](#)

(34 pages)

Summary of Contents for Asus AAEON UPCR-HDMI

[Page 1](#) UPCR-HDMI HDMI In Carrier Board User's Manual 1st Ed Last Updated: August 24, 2023...

[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. Lontium is a registered trademark of Lontium Semiconductor. • Microsoft Windows is a registered trademark of Microsoft Corp. • EaseUS is a trademark of CHENGDU Yiwo® Tech Development Co., Ltd •...

[Page 4](#) Packing List Before setting up your product, please make sure the following items have been shipped: Item Quantity UPCR-HDMI (HDMI IN Carrier Board) • FPC Cable • Power Cable • 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) AAEON Main Board/ Daughter Board/ Backplane (Pb) (Hg) (Cd) (Cr(VI)) (PBB) (PBDE) SJ/T 11363-2006

[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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Chapter 1 Chapter 1 - Product Specifications...

[Page 13: Specifications](#)

Specifications System FPC 61-pin MIPI CSI x 1 (Lontium.LT6911UXC) 2-pin Power Wafer x 2
HDMI 2.0 x 1 Color Format: CSC Disabled: RGB565/666/888, YUV422 8/10-bit, Legacy YUV420 8-
bit CSC Enabled: RGB565/666/888, YUV422 8-bit Video Resolutions: 3840 x 2160 @30fps 1920
x 1200 @30fps 1920 x...

[Page 14](#) System Gross Weight 0.88 lb. (0.4Kg) Operating Temperature 32°F ~ 140°F (0°C ~
60°C), 0.5m/s airflow Operation Humidity 10% ~ 80% relative humidity, non-condensing
Certification — OS Support Windows® 10 Chapter 1 - Product Specifications...

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Dimensions Chapter 2 - Hardware Information...

[Page 17: Jumpers And Connectors](#)

Jumpers and Connectors Bottom Chapter 2 - Hardware Information...

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

List of Jumpers and Connectors Label Functional Description HDMI in Connector Index Functional
Reference Connector Type Description (TF).FPC/FFC Connector Pitch=0.3mm
H=0.9mm.DualContact type.SMD.61P .90D.FEMALE.SHENG-DA.BL309P-61S31-TAHO (TF)HDMI
CONN..SMD.19P .90D.FEMALE.A TYPE.FOXCONN. HDMI in QJ51191-LFB4-7F (TF)WAFER BOX.2P
.180D.(M).SMD.2.0mm.W/LOCK SMD.CATCH .1192-700-02SM Chapter 2 - Hardware
Information...

[Page 19: Csi \(Cn1\)](#)

2.4.1 CSI (CN1) Signal Description Signal Description CSI_A_D0_DN CSI_A_D0_DP CSI_A_D1_DP
CSI_A_D1_DN CSI_A_CK_DN CSI_A_CK_DP CSI_B_D0_DP CSI_B_D0_DN CSI_B_D1_DN CSI_B_D1_DP
CSI_B_CK_DP CSI_B_CK_DN CSI_C_D0_DN CSI_C_D0_DP CSI_C_D1_DP CSI_C_D1_DN CSI_C_CK_DN
CSI_C_CK_DP CSI_D_D0_DP CSI_D_D0_DN CSI_D_D1_DN CSI_D_D1_DP Chapter 2 - Hardware
Information...

[Page 20](#) Signal Description Signal Description CSI_I2S_BCLK CSI_I2S_SDO CSI_I2S_FRM
CSI_I2S_SDI HDMI_IN_DET I2C1_SCL I2C1_SDA INT_IO_GPIO5 HDMI_IN_RST Chapter 2 - Hardware
Information...

[Page 21: Hdmi \(Cn2\)](#)

2.4.2 HDMI (CN2) Signal Description Signal Description TMDS1_D2+ TMDS1_D2- TMDS1_D1+
TMDS1_D1- TMDS1_D0+ TMDS1_D0- TMDS1_CLK+ TMDS1_CLK- DDC_SCL DDC_SDA Chapter 2 -
Hardware Information...

[Page 22: Power \(Cn3\)](#)

2.4.3 Power (CN3) Signal Description Signal Description TMDS1_D2+ Chapter 2 - Hardware
Information...

[Page 23: Chapter 3 - Hardware & Software Installation Guide](#)

Chapter 3 Chapter 3 - Hardware & Software Installation Guide...

[Page 24: Hardware Installation](#)

Hardware Installation For this process you will need a Phillips head screwdriver. 3.1.1 UP Squared i12 UPCR-HDMI Installation Step 1: Remove the four (4) screws from the outer edges of the board. Step 2: Affix and lock the four (4) pillars to the board in the following sequence. Chapter 3 -...

[Page 25](#) Step 3: Make sure to unlock the HDMI IN FPC connector, then plug the FPC cable into the FPC connector and power cable, noting the direction of the FPC cable. Step 4: Unlock the main board FPC connector, the plug the FPC cable and power cable into it.

[Page 26](#) Step 5: Place bracket on top of the pillars, then affix and lock the two (2) black screws. Step 6: Affix and lock the two (2) small pillars. Chapter 3 - Hardware & Software Installation Guide...

[Page 27](#) Step 7: Affix and lock the two (2) silver screws to the HDMI IN carrier board. Chapter 3 - Hardware & Software Installation Guide...

[Page 28: Up Squared Pro 7000 UPCR-Hdmi Installation](#)

3.1.2 UP Squared Pro 7000 UPCR-HDMI Installation Step 1: Remove the two (2) screws from the outer edges of the board. Note: Components marked in yellow can be found in the product accessories bag. Step 2: Affix and lock the two (2) nuts (left figure) and four (4) pillars (right figure) to the board in the following sequence.

[Page 29](#) Step 3: Make sure to unlock the HDMI IN FPC connector, then plug the FPC cable into the FPC connector and power cable, noting the direction of the FPC cable. Step 4: Unlock the main board FPC connector, the plug the FPC cable and power cable into it.

[Page 30](#) Step 5: Put bracket on top of the pillars and affix and lock the two (2) black screws. Step 6: Affix and lock the two (2) short pillars. Chapter 3 - Hardware & Software Installation Guide...

[Page 31](#) Step 7: Affix and lock the two (2) silver screws to the HDMI IN carrier board. Chapter 3 - Hardware & Software Installation Guide...

[Page 32: Up Xtreme i12 UPCR-Hdmi Installation](#)

3.1.3 UP Xtreme i12 UPCR-HDMI Installation Step 1: Affix and lock the four (4) screws and the four (4) pillars (28mm) to the board in the following sequence. Step 2: Make sure to unlock the HDMI IN FPC connector, then plug the FPC cable into the FPC connector and power cable, noting the direction of the FPC cable.

[Page 33](#) Step 3: Unlock the main board FPC connector, the plug the FPC cable and power cable into it. Step 4: Put bracket on top of the pillars and affix and lock the two (2) black screws. Chapter 3 - Hardware & Software Installation Guide...

[Page 34](#) Step 5: Affix and lock the two (2) small pillars. Chapter 3 - Hardware & Software Installation Guide...

[Page 35](#) Step 6: Affix and lock the two (2) silver screws to the HDMI IN carrier board. Chapter 3 - Hardware & Software Installation Guide...

[Page 36: Bios Settings](#)

BIOS Settings Enter the BIOS password: upassw0rd, then follow the below path: → Advanced → MIPI-CSI Function Selection → HDMI-IN Note the below table for each board version and its corresponding BIOS. Product Board Version BIOS Version UP Squared i12 A1.0 After USADAM11 UP Squared Pro 7000...

[Page 37: Os Driver Settings](#)

OS Driver Settings 3.3.1 Windows 10 Step 1: Drivers can be downloaded from the UP Board website by following the link <https://up-board.org> and navigating to the Downloads section. Step 2: Enter BIOS -> Advanced -> MIPI-CSI Function Selection and select HDMI-In. Step 3: Please install Camera-63.22000.3.7652 driver for HDMI Capture.

[Page 38](#) Step 4 (Optional): Setting HDMI output source unit, only supports 30Hz. Step 5: From capture side, open the RecExperts app to capture HDMI input:
https://recorder.easeus.com/campaign/record-world-cup-qatar-2022.html?gclid=EAlaI QobChMlivC8v4vegAMVp2wPAh0QDAO2EAAAYASAAEgKzz_D_BwE Chapter 3 - Hardware & Software Installation Guide...

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[Page 40: Appendix A - Mating Connectors](#)

Appendix A Appendix A - Mating Connectors...

[Page 41: List Of Connectors](#)

List of Connectors Label Description Connector Type (TF).FPC/FFC Connector Pitch=0.3mm H=0.9mm.Dual Contact type CN1 CSI .SMD.61P .90D.FEMALE.SHENG-DA.BL309P-61S31-TAH0 (TF)HDMI CONN..SMD.19P .90D.FEMALE.ATYPE.FOXCONN.QJ51191- CN2 HDMI in LFB4-7F (TF)WAFER BOX.2P .180D.(M).SMD.2.0mm.W/LOCK SMD.CATCH.1192 CN3 PWR -700-02SM Appendix A - Mating Connectors...