AVerMedia



AVerAI EX731-AAH2 Box PC EX731-AAH2-2AC0 Box PC provides 2x HDMI 4Kp30 inputs

It equips NVIDIA[®] Jetson[™] TX2 module with active cooling system



Features

- Fully support NVIDIA[®] Jetson[™] TX2 module
- 2x HDMI 4Kp30 inputs
- 1x USB3.0 and 1x Gigabit Ethernet RJ-45
- 2x HDMI-out
- Dimension:

W:117.2mm x L:76.8mm x H:94.1mm (4.61" x 3.02" x 3.70", with mounting ears W:144.8mm, 5.7")

Embedded Vision Solutions for NVIDIA Jetson

AVerMedia offers 3 categories of Embedded Vision Solutions for AI application on the edge devices, with the support of NVIDIA Jetson family, battery power, HDMI/VGA/3G-SDI/Composite video sources, and the direct technical support for developers.

- Standard and customized of Nano/Tegra/AGX Xavier/Xavier NX carrier boards.
- Standard and customized Nano/Tegra/AGX Xavier/Xavier NX application-ready systems.
- Software design service of Linux BSP, driver, OpenCV, VisionWorks, and cuDNN.

Why AVerMedia

- As NVIDIA® PREFERRED solution provider, AVerMedia gets the direct support from NVIDIA. We are able to offer technical support in 24 hours to help your project success.
- Support full range of NVIDIA Jetson modules, including Nano, Tegra, and AGX Xavier.
- Support various video input sources from IP camera, USB camera, MIPI camera, and capture cards supporting HDMI/VGA/3G-SDI/Composite video sources.
- Provide customization services of HW, PCB, chassis, BSP, driver, and UX/UI/ID/ME design.
- Supports 65°C/149°F operating temperature in the No-Air-Flow environment for fanless system designed by using AVerCooler technologies.
- Provide flexible user-configured security to protect the SW.

Description

AVerMedia's EX731-AAH2-2AC0 Box PC equips NVIDIA® Jetson [™] TX2 module and 2x 4Kp30 capture cards for analyzing dual 4Kp30 video inputs. This compact product's dimension is W:117.2mm x L:76.8mm x H:94.1mm (4.61" x 3.02" x 3.70", with mounting ears W:144.8mm, 5.7"). It provides 2x M.2 Key M 2280 slots to support 2x AVerMedia's M.2 capture cards, CN311-H, for capturing 2x 4Kp30 video inputs. These two M.2 slots also support SSD for video recording applications.

The AVerMedia's EX731-AAH2-2AC0 design includes 2x HDMI-out, 1x USB 3.0, 1x Gigabit Ethernet RJ-45, 1x USB 0TG, 1x micro SD card slot, 2x M.2 Key M 2280 slots, and 40 pins of GPI0 expansion with 1x 3.3V UART, 1x I2C, and 7x GPI0s.

This Box PC equips a customized chassis with active cooling system. It is one of the best compact Application Ready System by supporting NVIDIA® Jetson™ TX2 module for you to capture dual 4Kp30 video inputs and run your edge computing algorithms for high-end video analysis application markets.

Specifications

| Туре | Box PC with Active Cooling System | | |
|-------------------------------------|---|--|--|
| NVIDIA GPU SoC Module Compatibility | NVIDIA® Jetson™ TX2 module | | |
| Networking | 1x GbE (RJ-45) | | |
| Display Output | TX2: 2x HDMI Type A, 3840 x 2160 at 60Hz | | |
| | Operating temperature 0~40°C | | |
| Temperature | Storage temperature -40°C ~ 85°C | | |
| | Relative humidity 40 °C @ 95%, non-condensing | | |
| USB | 1x USB3.0 Type A (USB 3.2 Gen1x 1) | | |
| Storage | 1x micro-SD card | | |
| Storage | 1x SATA 3Gb/s | | |
| GPIO Expansion | 1x 3.3V UART, 1x I2C, 7x GPIOs | | |
| CAN Bus | 1x CAN bus with transceiver | | |
| RS-485 | 1x RS-485 | | |
| Microphone | 1x 3.5mm phone jack microphone input | | |
| User Expansion | 2x HDMI 4Kp30 video inputs by using 2x CN311-H | | |
| Input Power | 12V/5A | | |
| Buttons | Power and Recovery (Each button has a RGB tri-color LED) | | |
| RTC Battery | Support RTC battery and Battery Life Monitoring by MCU | | |
| | W:117.2mm x L:76.8mm x H:94.1mm | | |
| Chassis Dimension/ Weight | 4.61" x 3.02" x 3.70", with mounting ears W:144.8mm, 5.7" | | |
| | Weight: 884.2 g | | |
| Certifications | CE, FCC, MSIP | | |

Compatible Cards



| | | - | | |
|------------------------------|------------|-----------------|--|--|
| Model | Name | CN311-H | | |
| Host In | terface | PCIe Gen2 x2 | | |
| Max Input | Resolution | 4096x2160 30fps | | |
| Max Record Resolution | | 4096x2160 30fps | | |
| Channel No. | | 1 | | |
| H/W Encode | | | | |
| Audio Interface | | HDMI embedded | | |
| Video Interface | HDMI | ٠ | | |
| Color Depth/Precision | | 8 / 10 bit | | |
| Color Format | | YUY2, YUYV | | |
| Operating Temperature | | 0°C~40°C | | |
| Dimensions (LxW) mm | | 22x80 | | |
| | | | | |

Order Information

| Standard Product | Product Name | M.2/mPCle Video Input | NVIDIA Jetson SoM | Cooling System | Wireless |
|---------------------|-----------------|--------------------------|----------------------|----------------|----------|
| | EX731-AAH2-1AC0 | 2x HDMI 4Kp30 | TX1 | Active Cooling | N/A |
| • | EX731-AAH2-2AC0 | 2x HDMI 4Kp30 | TX2 | Active Cooling | N/A |
| | EX731-AAH2-3AC0 | 2x HDMI 4Kp30 | TX2i | Active Cooling | N/A |
| | EX731-AAH2-4AC0 | 2x HDMI 4Kp30 | TX2 4GB | Active Cooling | N/A |
| | EX731-AAH2-1ACW | 2x HDMI 4Kp30 | TX1 | Active Cooling | Wi-Fi/BT |
| | EX731-AAH2-2ACW | 2x HDMI 4Kp30 | TX2 | Active Cooling | Wi-Fi/BT |
| | EX731-AAH2-3ACW | 2x HDMI 4Kp30 | TX2i | Active Cooling | Wi-Fi/BT |
| | EX731-AAH2-4ACW | 2x HDMI 4Kp30 | TX2 4GB | Active Cooling | Wi-Fi/BT |

* All specifications are subject to change without prior notice.





2019 by AVerMedia Technologies, Inc. All rights reserved

No part of this document may be reproduced or transmitted in any form, or by any means (Electronic, mechanical, photocopy, recording, or otherwise) without prior written permission of AVerMedia Technologies. Information in this document is subject to change without notice. Made in Taiwan Version 1.4 2019/12/09

