AVerAI EA713-AAMN-3PC0 Box PC

EA713-AAMN-3PC0 Box PC supports 2x M.2 and 4x mPCIe slots alternatively
It equips NVIDIA® Jetson AGX Xavier™ 32GB module



Features

- Embedded NVIDIA® Jetson AGX Xavier™ 32GB module
- 2x M.2 Key M 2280 or 4x mPCIe alternatively
- 1x M.2 Key E 2230 for Wi-Fi module
- 1x M.2 Key M 2280 for NVMe
- 2x GbE, 2x USB 3.0, 1x 4Kp60 HDMI output
- 1x CAN bus with transceiver
- Operating temperature: -10˚C ~ 60˚C (MODE_30W_ALL)
- Dimension: W: 196mm x L: 242mm x H: 60mm (7.72” x 9.52” x 2.36”, with mounting ears W:226mm, 8.9”)

Introduction

AVerMedia AVerAI Box PC EA713-AAMN-3PC0 equips NVIDIA® Jetson AGX Xavier™ 32GB module which aims it at AI centric use cases for edge computing such as robotics and industrial automation with dimension 196mm (W) x 242mm (L) x 60mm (H) (7.72” x 9.52” x 2.36”, with mounting ears W:226mm, 8.9”).

EA713-AAMN-3PC0 Box PC provides 2x M.2 Key M 2280 and 4x mPCIe slots alternatively for Xavier to receive various video inputs by using AverMedia’s capture cards.

These 2x M.2 Key M 2280 and 4x mPCIe slots share PCIe Gen2 x4 lanes, so EA713-AAMN-3PC0 Box PC can provide three different combinations for developers to install video capture cards alternatively, such as 2x M.2 Key M 2280 slots, 4x mPCIe slots, and 2x mPCIe slots with 1x M.2 Key M 2280 slot.

By using AVerMedia’s extended video capture cards, Xavier is able to receive HDMI, VGA, SDI, composite video inputs, and even dual 4Kp30 HDMI video inputs for different application scenarios.

This highly integrated edge computer is a well prepared application ready system for developers to overcome the challenges timely and easily.

Embedded Vision Solutions for NVIDIA Jetson

AVerMedia offers 3 categories of Embedded Vision Solutions for deep learning 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/Xavier NX/AGX Xavier carrier boards
- Standard and customized Nano/Tegra/Xavier NX/AGX Xavier application-ready systems
- Software design service of Linux BSP, driver, OpenCV, VisionWorks, and cuDNN.

Why AVerMedia

- As NVIDIA® ELITE partner, 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, Xavier NX, 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 60˚C/140˚F operating temperature for fanless system.
- Provide flexible user-configured security to protect the SW.

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Specifications

Model	EA713-AAMN-3PC0
Type	Box PC
NVIDIA GPU SoC Module Compatibility	NVIDIA® Jetson AGX Xavier™ 32G module
Networking	2x GbE RJ-45
Display Output	1x HDMI type A, maximum resolution: 3840 x 2160 at 60Hz
Temperature	Operating temperature -10°C~60°C (MODE_30W_ALL) Storage temperature -40°C ~ 85°C Relative humidity 40 °C @ 95%, Non-Condensing
USB	1x USB 2.0 Micro-B for BSP installation only 2x USB 3.0 Type-A (USB3.2 Gen1 x 1)
Storage	32GB eMMC 5.1 & 1x micro-SD card slot
RS-485	1x RS-485
CAN bus	1x CAN bus with transceiver
GPIO Expansion	40 pins: 1x UART, 2x 12C, 1x CAN (W/O transceiver), 5x GPIO
User Expansion	1 x M.2 Key E 2230 for Wi-Fi module (PCIe Gen4x 1) 1 x M.2 Key M 2280 for NVMe (PCIe Gen4x 4) 2 x M.2 Key M 2280 (PCIe Gen2x 2) or 4x mPCIe Gen2 x1
Input Power	12V/5A
Buttons	Power and Recovery (Power button with green LED)
RTC Battery	Support RTC battery and Battery Life Monitoring by MCU
Chassis Dimension/ Weight	W: 196mm x L: 242mm x H: 60mm 7.72” x 9.52” x 2.36”, with mounting ears W:226mm, 8.9” Weight: 5 Kg
Certifications	CE, FCC

Compatible Cards





Model Name		CN311-H	CN312SW
Host Interface		PCIe Gen2 x2	PCIe Gen2 x2
Max Input Resolution		4096x2160 30fps	2048x1080 60fps
Max Record Resolution		4096x2160 30fps	1920x1080 60fps
Channel No.		1	2
H/W Encode			
Audio Interface		HDMI embedded	SDI embedded
Video Interface	SDI		●
	HDMI	●	
	DVI		
	VGA		
	Composite		
Color Depth/Precision		8 / 10bit	8 bit
Color Format		YUY2, YUYV	YUY2, YUYV
Operating Temperature		0°C~40°C	-20°C~70°C
Dimensions (LxW) mm		22x80	22x80

RoHS 2 COMPLIANT

*All specifications are subject to change without prior notice.

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