

D131OXB/D131ONB Box PC

NVIDIA® Jetson Orin NX / Orin Nano module

For Smart Retail, Smart Security and Smart City Applications



Overview

AVerMedia's AI Box PC D131OXB/D131ONB equips powerful NVIDIA® Jetson Orin NX / Orin Nano module. This efficient system-on-module (SoM) opens new worlds of embedded IoT applications with full analytic capabilities.

D131OXB/D131ONB is designed for the industry applications with spatial concern and feature a rich assortment of I/O ports for rapid AI-based solution development and seamless deployment as required by demanding business applications.

AVerMedia supports businesses of all sizes and offers customizable BSP services, flexible MoQ, in addition to NVIDIA's JetPack™ SDK.

Enterprise-Leading Features

- Embedded NVIDIA® Jetson Orin NX / Orin Nano
- 2 x 2 Lane MIPI CSI-2 Camera input/ 1 x 4 Lane MIPI CSI-2 Camera Input
- 2 x M.2. for Wi-Fi, SSD
- 1 x GbE RJ-45 (Option PoE)
- 40-pin expansion header
- 4 x USB 3.2 Gen 1 Type A (Total Bandwidth: 5Gbps)
- 1 x 4Kp60 HDMI output
- Operating temperature: 0°C ~ 60°C
- Dimension: 157mm(W) x 105mm(L) x 85mm(H)
- Support Allxon 24/7 Edge AI device remote management with OOB disaster recovery solutions

The AVerMedia Advantage



Video Processing Technology



Flexibility & Reliability



Dedicated After-Sales Support

AVerMedia understands that each business has a unique set of requirements that requires professional expertise and support. With AVerMedia, you are guaranteed to work with a proven global leader in video processing technology (200+ video capturing & streaming patents) with decades of experience processing multiple video signals for countless award-winning products.

A global leader that supports businesses of all sizes with comprehensive customization services (i.e., HW/PCB/BSP/etc.), flexible MoQ while ensuring a high-quality design and stable product. And for projects requiring additional security, we can provide customizable encryption hardware to support your privacy needs.

By partnering with us, a dedicated NVIDIA® ELITE Partner, our support-driven team offers prompt after-sales support so that your company stays focused on what matters most, customer acquisition.

Specifications

Model	D131OXB-16G /D131OXB-8G D131ONB-8G
NVIDIA Module Compatibility	NVIDIA® Jetson Orin NX 16G/8G module & Jetson Orin Nano 8G module
Networking	1x GbE RJ-45 (PoE option) 1xM.2. key E 2230 for Wi-Fi
Display Output	1x HDMI 2.0 (3840 x 2160 at 60Hz)
Temperature	Operating temperature 0°C~60°C Storage temperature -40°C ~ 85°C Relative humidity 40 °C @ 95%, Non-Condensing
MIPI Camera Inputs (Internal)	2x 2 lane MIPI CSI-2, 15 pin FPC 1mm Pitch Connector 1x 4 lane MIPI CSI-2, 36 pin FPC 0.5mm Pitch Connector
USB	1x USB 2.0 Micro-B for recovery 4 x USB 3.2 Gen 1 Type A (Total Bandwidth: 5Gbps)
Storage*	1x M.2. key M 2280 for SSD (256G SSD installed in box PC)
Expansion Header	40-pin: 1x UART, 2x SPI, 2x I2C, 1x I2S, GPIOs 1xOOB supported by Allxon
Input Power	DC in jack on board & ATX 4-pin 12V/5A, 9V~24V is recommended
Power Cord	US/JP/EU/UK/TW/AU/CN
Thermal Solution	Fan
Buttons	Power and Recovery
RTC Battery	Support RTC Battery and Battery Life Monitoring by MCU
Dimensions	- W: 113mm x L: 101.4mm x H: 57.8mm - Weight: 670g
Certifications	CE, FCC, KC (TBD)
Package	1x Box PC (256G SSD installed) 1x Adapter and Power cable

MIPI Camera Compatibility

MIPI Camera	15-pin MIPI connector	- raspberry pi camera v2 - Manufacturer: APPRO.PHO - B-04: IMX179 (8M) MIPI, 1080P (30fps) - C-04: IMX290 (2M) MIPI, 1080P (30fps) - C-05: IMX290 (2M) +ISP (YUV), 1080P (30fps) - Manufacturer: e-con Systems - e-CAM131_CUNX - 4K Camera - e-CAM50_CUNX - 5.0 MP - e-CAM24_CUNX - Color Global shutter Camera
	36-pin MIPI connector	Manufacturer: APPRO.PHO - B-03: IMX334 (4K) MIPI, 4K (30fps) (TBD) - A-06: IMX334 (4K) V-by-One® HS x1, 4K (30fps) (TBD)

*D131 have one mSD slot, but NVIDIA Orin NX/Orin Nano doesn'tsupport mSD function. It's SOM limitation.

Ordering Information

Model	SKU Number	NVIDIA SOM	SSD	POE function (PSE)
D131OXB	D131OXB-16G-001	Orin NX 16G	256G	-
D131OXB	D131OXB-8G-001	Orin NX 8G	256G	-
D131ONB	D131ONB-8G-001	Orin NANO 8G	256G	-
D131OXB	D131OXB-16G-002	Orin NX 16G	256G	YES
D131OXB	D131OXB-8G-002	Orin NX 8G	256G	YES
D131ONB	D131ONB-8G-002	Orin NANO 8G	256G	YES

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