

D131S Carrier Board [Preliminary]

Applies to NVIDIA® Jetson Orin™ NX / Orin Nano module

Support super mode

Suggested Vertical Markets

AMRs / Smart Security/ Smart Inspection



Overview

AVerMedia's D131S Carrier Board support powerful NVIDIA® Jetson Orin™ NX super/Orin™ Nano super/Orin™ NX/ Orin™ Nano modules. This efficient system-on-module (SoM) opens new worlds of embedded IoT applications with full analytic capabilities

D131S Carrier Board is designed for the industry applications with spatial concern and compact yet efficient 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

- Applies to NVIDIA® Jetson Orin™ NX / Orin™ Nano module
- Support super mode
- 2 x 4 Lane MIPI CSI-2 Camera input
- 2 x M.2. for Wi-Fi, SSD and Capture card
- 1 x GbE RJ-45 (Option PoE), 40-pin expansion header
- 4x USB 3.2 (2x native USB 3.2 Gen2 10Gbps, 2x USB 3.2 Gen2 via HUB Shared 10Gbps)
- 1 x 4Kp60 HDMI output (default) or 1x 40-pin I-PEX 20453 wafer output for DP sub-board (customizable)
- Operating temperature: 0°C ~ 70°C (Commercial Type)
- Dimension: 113mm (L) x 87mm (W)

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	D131S	
NVIDIA Jetson SoM	NVIDIA® Jetson Orin™ NX / Orin™ Nano module , support super mode	
Networking	1x GbE RJ-45 (PoE option) 1x M.2. key E 2230 for Wi-Fi	
Display Output	1x HDMI (3840 x 2160 at 60Hz) for Orin NX, (3840 x 2160 at 30Hz) for Orin Nano DP is optional through DP Daughter Board	
Temperature	Operating temperature 0°C~70°C (Commercial Type) Option 0°C~65°C with eDP Sub Board (TBD) Storage temperature -40°C ~ 85°C (Industrial Type) Relative humidity 40 °C @ 95%, Non-Condensing	
MIPI Camera Inputs	2x 4 lane MIPI CSI-2, 22 pin FPC 0.5mm Pitch Connector	
USB	4x USB 3.2 Type-A 1x USB 2.0 type C for recovery	
Storage*	1x M.2 key M 2280 for SSD	
Misc	40-pin expansion Header: 1x UART, 2x SPI, 2x I2C, 1x I2S, 6x GPIOs 1x CAN 2.0 FD (3-pin terminal block)	
Expansion Header	802.3AF PSE board (optional), OOB board(optional) 5G Daughter Board (optional), DP Daughter Board (optional)	
Security	TPM 2.0 supported	
Power requirement	Voltage	DC 12~24V
	Current	DC IN Jack on board: 10A Max
		ATX 4pin: 10A Max
Power Cord	19V/4.73A adapter and US/JP/EU/UK/TW/AU/CN power cord (optional)	
Thermal Solution	Heat sink with fan(optional)	
Buttons	Power and Recovery	
RTC Battery	Support RTC Battery and Battery Life Monitoring by MCU	
Dimensions	113mm x87mm (4.45" x 3.43") Weight: 101g	
Certifications	CE, FCC, VCCI, KC (TBA)	

MIPI Camera Compatibility

MIPI Camera	For 22pin MIPI connector: 1. raspberry pi imx219 & imx477 (V2) 2. Manufacturer: APPRO.PHO <ul style="list-style-type: none"> B-04: IMX179 (8M) MIPI, 1080P (30fps)
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Ordering Information

Model	SKU Number	Description
D131S	D131S-001	Applies to NVIDIA® Jetson Orin Super series. (Industrial Type)
D131S	D131S-002	Applies to NVIDIA® Jetson Orin Super series. (Commercial Type)



*All specifications are subject to change without prior notice.