



D133-1 Carrier Board

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

For Smart Traffic, Smart Security and Smart City Applications



Overview

AVerMedia's D133-1 Carrier Board support powerful NVIDIA® Jetson OrinTM NX/ OrinTM Nano modules. This efficient system-on-module (SoM) opens new worlds of embedded IoT applications with full analytic capabilities

D133-1 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 $JetPack^{TM}$ SDK.

Enterprise-Leading Features

- Applies to NVIDIA® Jetson Orin[™] NX/ Orin[™] Nano module
- 1 x HDMI output
- 1 x GbE & 2 x USB 3.2
- 2 x M.2 for SSD/wifi
- · 20-pin expansion header
- 1 x OOB for Power cycling and Cloud serial console (Optional)
- 1 x 5G daughter board for 4G/5G functions (Optional)
- Operating temperature: -40°C ~ 85°C
- Dimension: W: 90mm x L: 76mm x H: 27mm
- Support Allxon 24/7 Edge Al device remote management with OOB disaster recovery solutions

allxon

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	D133-1	
Туре	Carrier Board	
NVIDIA Module Compatibility	NVIDIA® Jetson Orin TM NX/ Orin TM Nano module	
Networking	1 x GbE RJ-45 1 x M.2. key E 2230 for wifi	
Display Output	1 x HDMI output 3840 x 2160 at 60Hz for Orin $^{\text{TM}}$ NX, 30Hz for Orin $^{\text{TM}}$ Nano	
Temperature	Operating temperature -40°C ~85°C Storage temperature -40°C ~ 85°C Relative humidity 40°C @ 95%, Non-Condensing	
MIPI Camera Inputs	2 x 4 lane MIPI CSI-2, 22 pin FPC 0.5mm Pitch	
USB	1 x USB 2.0 type C for recovery 2 x USB 3.2 Type-A	
Storage	1x M.2. key M 2280 for NVMe	
Expansion Header	20 pins: 2x I2C, 1x UART, 9x GPIOs 15 pins: support OOB module (optional, sold separately)* 5 pins & 30 pins: support 4G/5G functions via daughter board (optional, sold separately)*	
Input Power	3.5mm Screw Terminal; 12V/5A, 9V~24V is recommended.	
Power Cord	US/JP/EU/UK/TW/AU/CN (optional)	
Thermal solution	Fan solution (optional)	
Buttons	Power and Recovery	
RTC Battery	Support RTC battery and Battery Life Monitoring by MCU	
PCB/Electronics Mechanical Info	W: 90mm x L: 76mm H:27mm Weight: 70g	
Certifications	CE, FCC, KC	
Package	1x D133 Carrier board DC IN jack cable screws	

^{*}For more detailed specification of OOB module and 5G daughter board, please check the "Accessory" page.

^{**}All specifications are subject to change without prior notice.







Optional Accessories

MIPI Camera	For 22pin MIPI connector: 1. raspberry pi imx219 &imx477 (V2) 2. Manufacturer: APPRO.PHO B-04: IMX179 (8M) MIPI, 1080P (30fps)
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Ordering Information

Model	SKU Number	Description
D133	D133-001	-
D133-1	D133-002	Compatible with OOB/5G/4G through the OOB module and daughter board. Please note that a separate order is required.



