

D115W-1 Carrier Board

Applies to NVIDIA® Jetson Orin NX/Orin Nano module

For Smart Retail, Smart Security and Smart City Applications



Overview

AVerMedia's AI Carrier board D115W-1 applies to NVIDIA® Jetson Orin NX/Orin Nano module. This efficient system-on-module (SoM) opens new worlds of embedded IoT applications with full analytic capabilities.

D115-1 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

- Applies to NVIDIA® Jetson Orin™ NX/Orin™ Nano
- 2 x 4 Lane MIPI CSI-2 MIPI Camera input
- 2 x M.2. for WIFI and SSD and 1 x HDMI output
- 2 x GbE RJ-45 (Optional: Ethernet 1 supports PoE ; Ethernet 2 can be used for OOB management via NC-SI)
- 1 x OOB for Power cycling and Cloud serial console (Optional)
- 1 x 5G daughter board for 4G/5G card functions (Optional)
- 20-pin expansion header
- Operating temperature: -40°C ~ 85°C
- Dimension: W: 126mm x L: 96mm
- Support remote monitoring and management, swift disaster recovery empowered by 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	D115W-1
Type	Carrier board
NVIDIA Module Compatibility	NVIDIA® Jetson Orin™ NX 16G/8G, Orin™ Nano 8G module
Networking	2x GbE RJ-45 - Optional: Ethernet 1 supports PoE* ; Ethernet 2 can be used for OOB management via NC-SI** 1x M.2. key E 2230 for wifi
Display Output	1x HDMI 4Kp60
Temperature	Operating temperature -40°C~85°C Storage temperature -40°C ~ 85°C Relative humidity 40 °C @ 95%, Non-Condensing
MIPI Camera Inputs	2x 4 lane MIPI CSI-2, 22-pin FPC 0.5mm Pitch Connector
USB	1x USB 2.0 type C for recovery 2x USB 3.2 Type-A
Storage	1x M.2. key M 2280 for NVMe
Expansion Header	20-pin: 2x I2C, 2x UART, 4x GPIOs, 1x CAN (EU terminal block)*** 10 pins x2: support OOB module (optional, sold separately) 5-pin & 30-pin wafer: Supports 4G/5G card functions via daughter board (optional, sold separately)
Power requirement	DC in JACK on board & ATX 4-pin 12V/5A, 9V~24V is recommended.
Power Cord	US/JP/EU/UK/TW/AU/CN (optional)
Thermal Solution	Heat sink with fan (optional)
Buttons	Power and Recovery
RTC Battery	Support RTC battery and Battery Life Monitoring by MCU
PCB/Electronics Mechanical Info	W: 126mm (W) x 96mm (L) Weight: 125g
Certifications	CE, FCC, KC
Package	1x D115W Carrier board Terminal blocks and screws

* For details, please refer to the "[Accessory-PoE Board](#)" webpage.

** For details, please refer to the "[Accessory-OOB module](#)" webpage. Ethernet 2 supports NC-SI for enabling Allxon OOB and In-Band functions simultaneously.

***When equipped with the OOB module, 2x UART will be unavailable.



*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
D115W-1	D115W-002	Compatible with OOB/4G/5G card through the OOB module and daughter board. Please note that a separate order is required.



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