D115W-1Carrier 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 JetPackTM 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.

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/4G module
Networking	• 2x GbE RJ-45 Optional: Ethernet 1 supports PoE* ; Ethernet 2 can be used for OOB management via NC-SI** • 1xM.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.

RoHS2 COMPLIANT *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)

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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