NX215B/TN115B/NO115B Box PC

NVIDIA® Jetson Xavier™ NX/ TX2 NX/ NANO module

For Smart Retail, Smart Security and Smart City Applications

Overview

AVerMedia's AI Box PC NX215B/TN115B/ NO115B equip powerful NVIDIA® Jetson Xavier™ NX/TX2 NX/NANO modules. This efficient system-on-module (SoM) opens new worlds of embedded IoT applications with full analytic capabilities

NX215B/ TN115B/ NO115B are 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 Xavier™ NX/ TX2 NX /NANO module
- 2 x 2 Lane MIPI CSI-2 MIPI Camera input (internal)
- 1 x 4 Lane MIPI CSI-2 MIPI Camera Input (internal)
- 2 x M.2. for WIFI, SSD and Capture card
- 2 x GbE RJ-45, 20-pins expansion header
- 3 x USB 3.0 (1xinternal), 2 x 4Kp60 HDMI outputs
- 1 x micro-SD card slot
- Dimension: W: 126mm x L: 96mm x H: 74mm

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.

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Application

Powered by NVIDIA's Jetson SoM, this power efficient SoM enables AI calculations and predictions on the edge of the network for applications such as driver safety and cost efficiency relationships. An expansive amount of interface options are available supporting AHD, IP, MIPI, etc., and is suitable for multiple scenarios requiring camera flexibility. And for various locations of installment the fanless design combined with optimized thermal chassis ensures full loading through a large temperature range.

AVerMedia Ecosystem

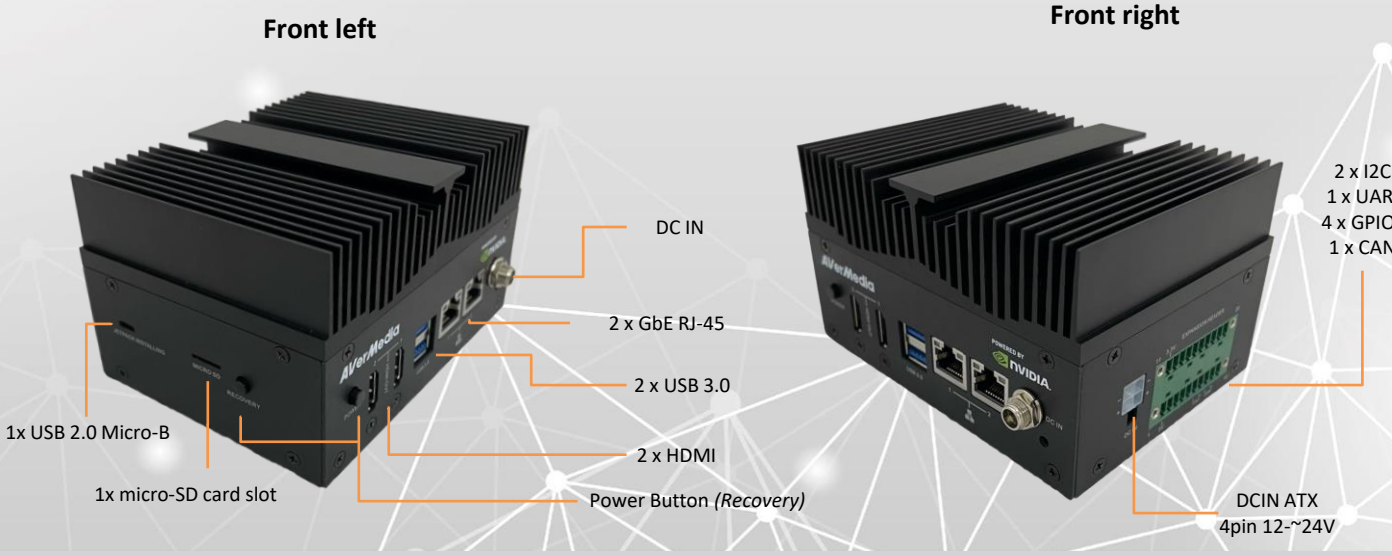
We provide a rich ecosystem of partners to support your growth with the ability to help search for new business partners for your unique project. Our verified partner ecosystem maintains the highest level of experience and professionalism, while offering hardware, software and strategic services. No matter the size or level of experience, if you are looking to accelerate your growth, we have the resources to make it happen.

Expandability

In addition to the default selection of interfaces, frame grabbers can be added for expanded functionality.

Model	Host Interface	Video Interface	Max Input Resolution
CN312MW	M.2 M key 2280	1x SDI; 1x HDMI	2Kp60 in (SDI) 1920 x 1200 p60 in (HDMI) 1080p out
CN312SW	M.2 M key 2280	2x SDI	2Kp60 in - 1080p out

Interface Diagram



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Specifications

Model	NX215B	TN115B	NO115B
Type	Box PC		
NVIDIA GPU SoC Module Compatibility	NVIDIA® Jetson Xavier™ NX module	NVIDIA® Jetson TX2 NX module	NVIDIA® Jetson NANO module
Networking	2x GbE RJ-45 1xM.2. key E 2230 for wifi		2x GbE RJ-45
Display Output	2x HDMI 2.0 (3840 x 2160 at 60Hz)		1x HDMI 2.0 (3840 x 2160 at 60Hz)
Temperature	Operating temperature (based on module and usage) 0°C~60°C for 8G 0°C~55°C for 16G	0°C~50°C	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 3x USB 3.0 Type-A (2 x in the Front ; 1 x inside the Box PC)		
Storage	1x micro-SD card slot 1x M.2. key M 2280 for NVMe or Capture card		
Expansion Header	20 pins: 2x I2C, 1x UART, 4x GPIOs, 1xCAN (EU terminal block)		20 pins: 2x I2C, 1x UART, 4x GPIOs(EU terminal block)
Input Power	DC in JACK on board & ATX 4pin 12V/5A, 12V~24V is recommended.		
Power Cord	US/JP/EU/UK/TW/AU/CN		
Fan Module	Fanless solution		
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) x 74mm (H) Weight: 1kg		
Certifications	CE, FCC, KC		

Optional Accessories

MIPI Camera	For 15 pin MIPI connector: 1. raspberry pi camera v2 2. 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) For 36 pin MIPI connector: 1. Manufacturer: APPRO.PHO ■ B-03: IMX334 (4K) MIPI, 4K (30fps) ■ A-06: IMX334 (4K) V-by-One® HS x1, 4K (30fps)

*All specifications are subject to change without prior notice.

RoHS 2 COMPLIANT

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