

AVerMedia



PRELIMINARY
Datasheet v1.r2

D315AOB

A Box PC equipped with NVIDIA® Jetson AGX Orin

Suggested Vertical Markets

AMR/ Smart Security/Smart Inspection

Enterprise-Leading Features

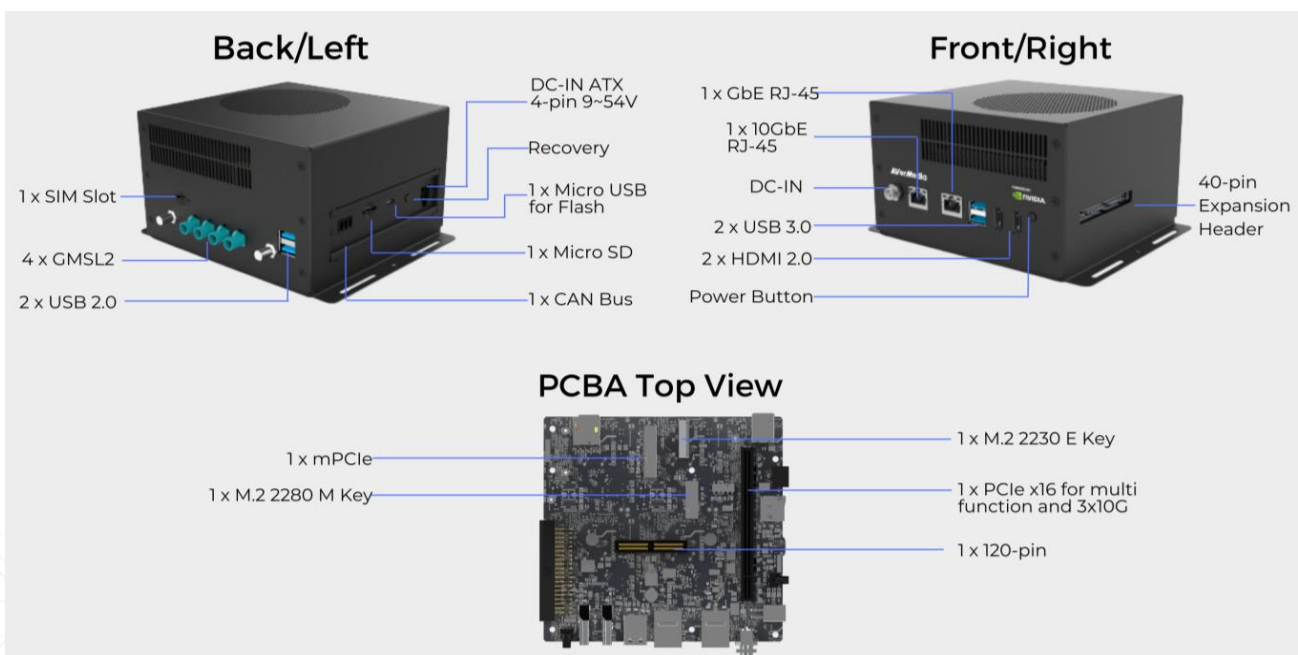
- 120-pin highspeed connector for MIPI SerDes cameras, such as GMSL2/FPD-link III/V-by-One® HS, to deploy in AMR application
- 1x GbE & 1x 10G RJ-45(3x 10G RJ-45 optional via PCIe slot) ethernet for dozens of IP cameras streaming simultaneously in smart security application
- 10GigE Vision camera connector for smart inspection and 1x PCIe slot for multi-function expansion.
- 1x M.2. E key for Wi-Fi 6E, 1x mPCIe for 4G & 5G with adapter card, and 1x M.2. M key for SSD and capture
- Operating temperature: -25°C ~ 70°C (fan)/ -25°C ~ 60°C (fanless)
- Dimension: 145mm(W) x 136.4mm(L) x 88mm(H) (fan)/ TBD (fanless)

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
CN312M	M.2 M key 2280	1x SDI; 1x HDMI	2Kp60 in (SDI) 1920 x 1200p60 in (HDMI) 1080p out
CN312SW	M.2 M key 2280	2x SDI	2Kp60 in - 1080p out
CN311-H	M.2 M key 2280	1x HDMI	4096 x 2160p30

Interface



MIPI/SerDes Cameras Compatibility

MIPI Camera	Raspberry Pi (2Lane/15-pin)	Raspberry Pi camera v2
	APPRO (2Lane/15-pin)	1. B-04: IMX179 (8M) MIPI, 1080P (30fps) 2. C-04: IMX290 (2M) MIPI, 1080P (30fps) 3. C-05: IMX290 (2M) +ISP (YUV), 1080P (30fps)
	e-con (2 Lane/1-pin)	1. e-CAM131_CUNX - 4K Camera 2. e-CAM50_CUNX - 5.0 MP 3. e-CAM24_CUNX - Color Global shutter Camera
	APPRO (4 Lane/36-pin)	B-03: IMX334 (4K) MIPI, 4K (30fps)
SerDes Camera	e-con (GMSL2)	STURDeCAM20 2. STURDeCAM25 3.NileCAM21
	oToBrite (FPD-link III)	oToCAM250/ oToCAM206
	APPRO (V-by-One® HS)	A-06: IMX334 (4K) V-by-One® HS x1, 4K (30fps)

Specifications

NVIDIA Jetson SoM	NVIDIA® Jetson AGX Orin module
Networking	1x GbE RJ-45 1x 10G RJ-45 (3x10G RJ-45 optional via PCIe slot)
Display Output	1x HDMI 2.0 (3840x2160 at 60Hz)
Temperature	Operating temperature -25°C~70°C Storage temperature -40°C ~ 85°C Relative humidity 40 °C @ 95%, Non-Condensing
MIPI & SerDes Camera (120-pin)	GMSL2/FPD-link III/V-by-One® HS
USB	1x USB 2.0 Micro-B for recovery 2x USB 2.0 Type-A 2x USB 3.2 Type-A
Audio	Intel HD Audio analog connector
Storage	1x micro-SD card slot
Expansion Header	40-pin (UART, SPI, CAN, I2C, I2S, GPIOs) 1x M.2 E key (for Wi-Fi 6E) 1x M.2 M key (for SSD or AVerMedia capture card: CN311-H, CN312SW, CN312M) 1x mPCIe (for 4G LTE module or 5G module via adapter card) 1x PCIe x16 1x CAN bus with transceiver 120-pin (for MIPI SerDes)
Input Power	DC in jack on board & ATX 4-pin (54V/2.78A, 9V~54V is recommended)
Power Cord	US/JP/EU/UK/TW/AU/CN
Thermal Solution	Fan /Fanless
Buttons	Power and Recovery
RTC Battery	Support RTC Battery and Battery Life Monitoring by MCU
Dimensions	Fan: 145mm (W) x 136.4mm (L) x 88mm (H) Fanless: TBD
Certifications	CE, FCC, KC

Assured Systems

Assured Systems is a leading technology company with over 1,500 regular clients in 80 countries, deploying over 85,000 systems to a diverse customer base in 12 years of business. We offer high-quality and innovative rugged computing, display, networking and data collection solutions to the embedded, industrial, and digital-out-of-home market sectors.

US

sales@assured-systems.com

Sales: +1 347 719 4508

Support: +1 347 719 4508

1309 Coffeen Ave
Ste 1200
Sheridan
WY 82801
USA

EMEA

sales@assured-systems.com

Sales: +44 (0)1785 879 050

Support: +44 (0)1785 879 050

Unit A5 Douglas Park
Stone Business Park
Stone
ST15 0YJ
United Kingdom

VAT Number: 120 9546 28

Business Registration Number: 07699660