AVerMedia

NVIDIA ELITE PARTNER

D315AO

An Engineering Kit built with NVIDIA® Jetson AGX Orin™

Suggested Vertical Markets

AMRs/ Smart Security/Smart Inspection
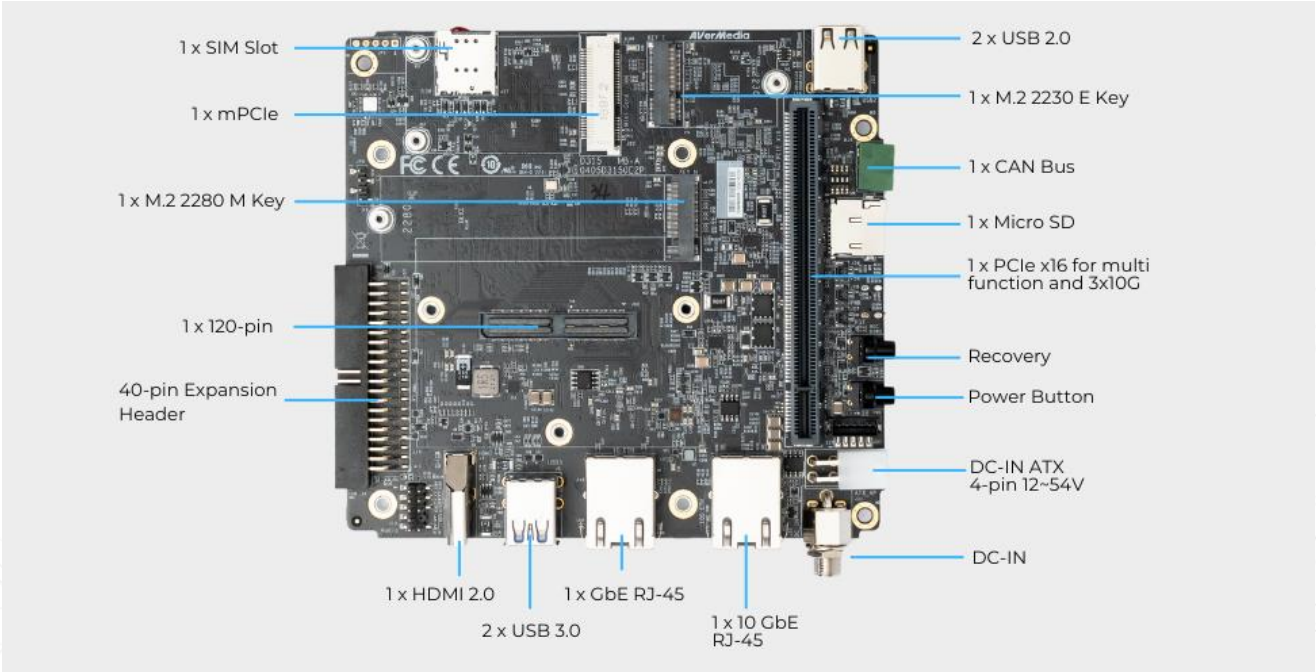
Enterprise-Leading Features

- 120-pin high speed connector for MIPI SerDes cameras, such as GMSL2/FPD-link III/V-by-One® HS, to deploy in AMRs application

- 1x GbE & 1x 10G RJ-45 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

- Dimension : 141.5mm(W) x 133.5mm(L) x 63mm(H)

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 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

1 x SIM Slot
1 x mPCIe
1 x M.2 2280 M Key
1 x 120-pin
40-pin Expansion Header
1 x HDMI 2.0
2 x USB 3.0
1 x GbE RJ-45
1 x 10 GbE RJ-45
2 x USB 2.0
1 x M.2 2230 E Key
1 x CAN Bus
1 x Micro SD
1 x PCIe x16 for multi function and 3x10G
Recovery
Power Button
DC-IN ATX 4-pin 12~54V
DC-IN

Specifications

NVIDIA Jetson SoM	NVIDIA® Jetson AGX Orin™ module (32GB or 64GB)
Networking	• 1x GbE RJ-45 • 1x 10G RJ-45 • 1x M.2 E Key (for Wi-Fi 6E)
Display Output	1x HDMI output
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 (STURDeCAM20 optional)
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 M key (for SSD or AVerMedia capture card: CN311-H, CN312SW, CN312MW) • 1x Micro SIM socket • 1x mPCIe (for 4G LTE module or 5G module via adapter card) • 1x PCIe x16 (only support x8 PCIe lanes) • 1x CAN bus with transceiver • 120-pin (for MIPI SerDes)

Power requirement	Voltage	DC 12~54V
	Current	DC IN Jack on board: 7A Max
		ATX 4pin: 10.8A Max

Power Cord	US/JP/EU/UK/TW/AU/CN
Thermal Solution	Fan
Buttons	Power and Recovery
RTC Battery	Support RTC Battery and Battery Life Monitoring by MCU
Dimensions	141.5mm(W) x 133.5mm(L) x 63mm(H) Weight: 720g
Certifications	CE, FCC, KC