MIC-715

AI Inference System Based on NVIDIA® Jetson™ Xavier NX

Preliminary

Features

- All-around IP67 waterproof with compact fanless design
- NVIDIA® Jetson™ Xavier NX embedded
- Support 4 x PoE with IEEE 802.3af compliance
- Linux OS with board support package (BSP)
- Supports deep learning trained models
- Wide operating temperature range
- Support 24/7 secure remote monitoring, control, and OTA deployment empowered by Allxon
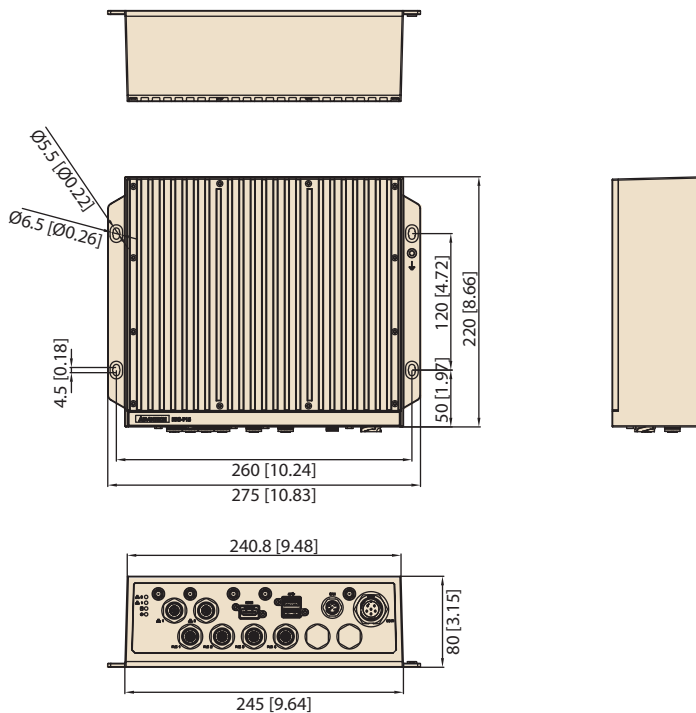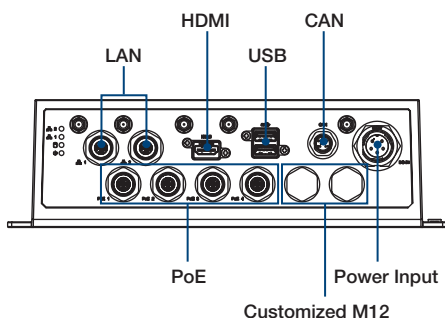- Support SerDes GMSL by optional

Specifications

Processor System	CPU	ARMv8.2 (64-bit) heterogeneous multi-processing (HMP) CPU architecture | 3 x dual-core CPU clusters (six NVIDIA Carmel processor cores) (Max. Operating Frequency: 1.9 GHz)
	GPU	384 CUDA Core, 48 Tensor Cores, Performance up to 21 TOPS (INT8) Max. operating frequency: 1100 MHz
	Memory	8 GB 128-bit LPDDR4x DRAM
	Flash	16G of eMMC
Ethernet	Interface	M12 X-coded, 8-pin female
	Controller	Intel® I210
	Speed	6 x Gigabit Ethernet (10/100/1000 Mbps), support 4 x PoE ports, IEEE 802.3af compliant
I/O	Display	HDMI (Max. resolution 3840 x 2160 @ 60Hz)
	USB	External 2 x USB 3.0 (waterproof connector)
	OTG USB (Internal)	1 x Micro USB
	Serial Ports	2 x CAN (Interface: M12 A-coded, 5-pin male)
Expansion	MiniPCIe	2 x Full size MiniPCIe with one SIM slot support
	M.2	1 x M.2 3052 B key (5G)
Storage	M.2	1 x M.2 2280 M Key (NVMe, PCIex1)
	SD Card	1 x MicroSD slot
Power	Power Supply	Power adaptor: 12/24 V_{DC} (12A-6A)
	Power Type	M16, 6-pin male
LED	LED Indicator	1 x Power, 1 x Storage, 2 x LAN
Environment	Operational Temperature	-25 ~ 60 °C with 0.7 m/s air flow (Max-P ARM mode)
	Operating Humidity	95% @ 40 °C (non-condensing)
	Vibration	3 Grms @ 5 ~ 500 Hz, random, 1 hr/axis
Mechanical	Dimensions (W x D x H)	275 x 220 x 80 mm (10.8 x 8.7 x 3.2")
	Weight	4.5 kg
	Installation	Desktop
Operating System	Linux	Ubuntu 18.04 with JetPack
Certifications		CB/UL/CE/FCC/CCC (No RED certification)

RISC Computing Platforms

Dimensions

Unit: mm

Front View

Ordering Information

Part Number	Description	Quantity
MIC-715-NXA1	NVIDIA AI Inference System	1

Remote Management Enrollment

Enroll in 24/7 secure service to get full feature of remote device management on one centralized cloud portal - Allxon Portal.
Enrollment Page: https://allxon.com/jetson/device_enroll/

Optional

Part Number	Description
XSK320-LRS-150-12*	Open Frame, A/D 100-240V 150W 12V
1700022250-21*	A Cable Waterproof 5P(F) 200cm (CAN cable)
1700025503-01	M cable Waterproof 8P/RJ45-8P8C 100cm (M12 to RJ45)
1700032301-01*	M Cable Waterproof 6P(F)/TEMx6 15cm (Power cable)
1700001524	Power Cord UL 3P 10A 125V 183cm (US)
170203183C	Power Cord EU 3P 2.5A 250V 183cm (EU)
170203180A	Power Cord BSI 3P 2.5A 250V 183cm (UK)
1702031836	Power Cord SAA 3P 10A 250V 183cm (AU)
1700008921	Power Cord PSE 3P 7A 125V 183cm (Japan)
1700019146	Power Cord CCC 3P 2.5A 250V 183cm (China)

* It is only for development/ testing usage, not for deployment