MIC-712P-OX

AI Platform Based on NVIDIA® Jetson Orin™ NX



Features

- Ultra-slim design for mobile equipment in safety & security applications
- Embedded with NVIDIA® Jetson Orin™ NX
- Support 6 ports POE with 25W supply per port.
- Support NVIDIA super mode up to 157 TOPS performance
- Integrate Out-of-Band management within the system

Specifications

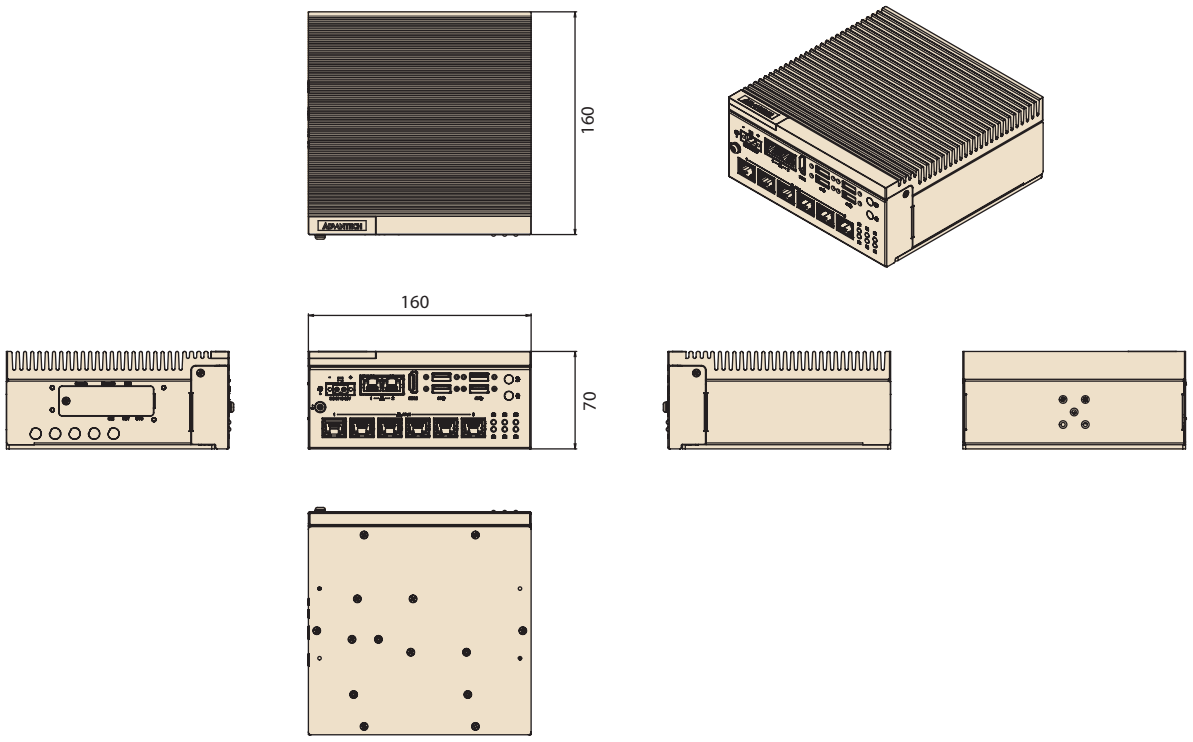
		NVIDIA® Jetson Orin™ NX
Processor System	CPU	16GB: 8-core NVIDIA Arm® Cortex A78AE v8.2 64-bit CPU 8GB: 6-core NVIDIA Arm® Cortex A78AE v8.2 64-bit CPU
	GPU	1024-core NVIDIA Ampere GPU with 32 Tensor Cores
	Memory	16GB: 16GB LPDDR5 8GB: 8GB LPDDR5
	Flash	-
I/O	Ethernet	2 x 10/100/1000 Mbps 6 x 10/100/1000 Mbps POE. Support 30W per port, individual control, total power budget 150W
	Display	HDMI (Max. resolution 3840x2160 @ 60Hz)
	USB	External: 4 x USB 3.2 Gen 2
	Debug console	1 x Micro USB
	OTG USB	1 x Micro USB
Expansion	M.2 E-key	1 x 2230 E-key (Signal: PCIe + USB 2.0)
	M.2 B-key	1 x M.2 3052 (Signal: USB3.2)
	SIM	1 x Nano SIM slot 1 x eSIM (Optional)
	TPM (Optional)	1 x TPM 2.0
Storage	M.2	1 x M.2 2280 (Signal: PCIe x4) (pre-installed 128G SSD on A1 SKU)
	SD Card	1 x Micro SD
Power	Mode	AT
	Input Voltage	19 ~ 36 V_{DC}
Environment	Operating Temperature	-25 ~ 70 °C with 0.7 m/s airflow (25W power mode) -25 ~ 50 °C with 0.7 m/s airflow (40W power mode)
	Operating Humidity	95% @ 40 °C (non-condensing)
	Vibration	3 Grms @ 5 ~ 500 Hz, random, 1 hr/axis
	Shock	10G / 11ms
Mechanical	Dimensions (W x D x H)	160 x 160 x 70 mm (6.3" x 6.3" x 2.76")
	Weight	2.05 kg (w/o packing material)
	Installation	Desktop
BSP	Jetpack	JP6.2 or above
Certifications		CE/FCC/UKCA/CB/UL/BSMI/CCC (No RED certification)

All product specifications are subject to change without notice.

Last updated: 4-Sep-2026

Dimensions

Unit: mm



Ordering Information

Part Number	NVIDIA Module	NVIDIA Module Memory	Installed Jetpack version	NVMe	Super mode support
MIC-712P-OX4A1	Orin NX	16GB	JP6.2	128GB pre installed	Yes
MIC-712P-OX3A1	Orin NX	8GB	JP6.2	128GB pre installed	Yes
MIC-712P-OX4A2	Orin NX	16GB	NA	NA	Yes
MIC-712P-OX3A2	Orin NX	8GB	NA	NA	Yes

Packing List

Part Number	Description	Quantity
MIC-712P-OX	MIC-712 Fanless system	1
1652002202	Power connector - 2-pin	1
1700023619-01	Micro USB cable for System recovery	1

Part Number	Description	Quantity
1930005673-11	Screw M3x4.5L for Peripheral	2
1960095312N001	Mounting Bracket	2
1930007979	Screw for mounting bracket	4

Optional

	Part Number	Description	Quantity
5G	AIW-356-DQ	5G Sub6+GNSS M.2 3052 Key B (by region)	1
	1751000809-01	RF Cable SMA/F/RA MHF4L/113 BLK L250mm	4
	1750009372-01	Ant.SMA/M 90/180 5G BLK 167mm RG178 (5G)	4
AC/DC Adapter	XMIC-FSP230-AAAN3	ADP A/D 100-240V 230W 24V C14 TERMINAL BLOCK 2P	1
Power Cord	1702002600	Power Cord UL 3P 15A 125V C13 183 cm (US)	1
	1702002605	Power Cord EU 3P 10A 250V C13 183cm (EU)	1
	1702031801	Power Cord BSI 3P 10A 250V C13 183cm (UK)	1
	1700029019-01	Power Cord (PSE/BSMI), 3-pin, 7A, 125V, 1.8 M, DAC-ST01	1
	1700000596-11	Power Cord CCC 3P 10A 250V C13 183cm (China)	1
TPM	PCA-TPMSPI-00A1	PCA-TPMSPI-00A1	1
Cable	1700027920-01	Audio port cable (1 x Line-In + 1 x Mic)	1