

MIC-712-0N

AI Platform Based on NVIDIA® Jetson Orin™ Nano

NEW



Features

- Ultra-slim design for mobile equipment in safety & security applications
- Embedded with NVIDIA® Jetson Orin™ Nano
- Multiple expansions for GMSL, PoE, USB
- Support NVIDIA super mode up to 67 TOPS performance
- Integrate Out-of-Band management within the system

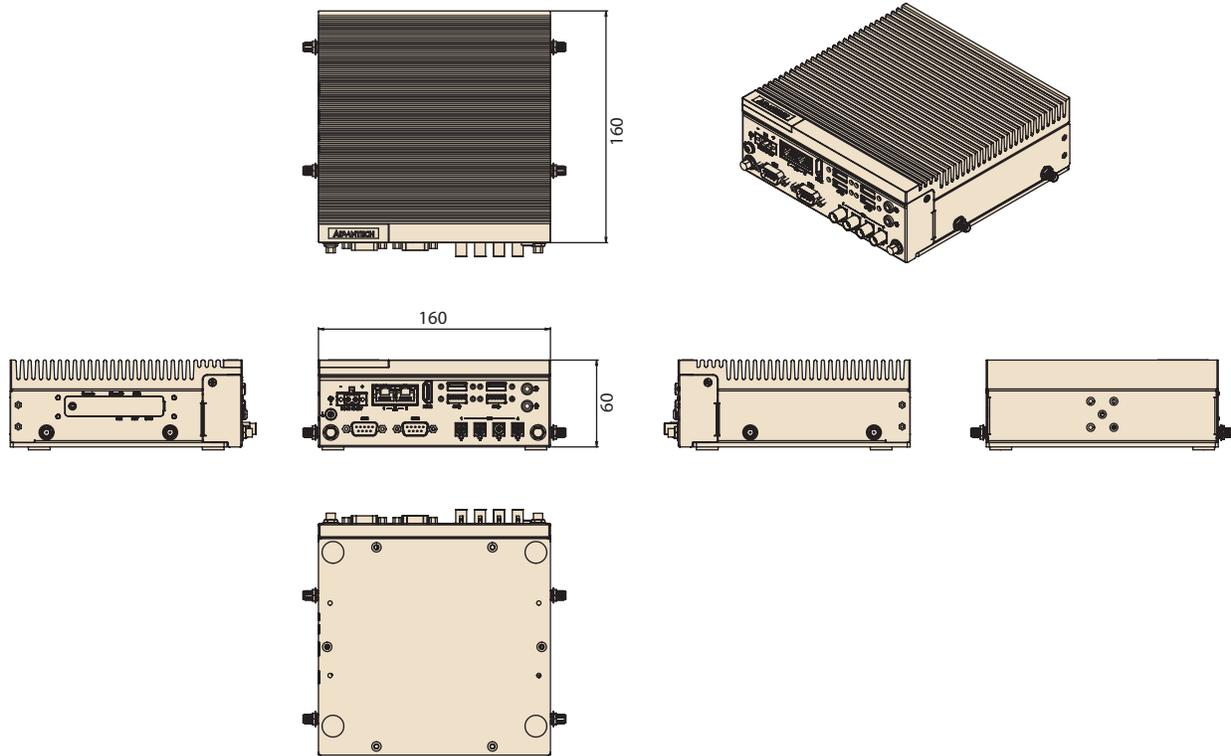


Specifications

		NVIDIA® Jetson Orin™ nano
Processor System	CPU	8GB: 6-core NVIDIA Arm Cortex A78AE v8.2 64-bit CPU 4GB: 6-core NVIDIA Arm Cortex A78AE v8.2 64-bit CPU
	GPU	8GB: 1024 core NVIDIA Ampere GPU with 32 Tensor Cores 4GB: 512 core NVIDIA Ampere GPU with 16 Tensor Cores
	Memory	8GB: 8GB LPDDR5 4GB: 4GB LPDDR5
I/O	Ethernet	2 x 10/100/1000 Mbps
	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 slots
	TPM (Optional)	1 x TPM 2.0
	GMSL (Optional)	1 x MIPI connector for GMSL expansion
	Serial Port (Optional)	1 x RS-232/422/485 (On-board pin header reserved)
	CANBus (Optional)	1 x CANBus (On-board pin header reserved)
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
	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 60 mm (6.3" x 6.3" x 2.36")
	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)

Dimensions

Unit: mm



Ordering Information

Part Number	NVIDIA Module	NVIDIA Module Memory	Installed Jetpack version	NVMe	Super mode support
MIC-712-ON3A1	Orin Nano	8GB	JP6.2	128GB pre installed	Yes
MIC-712-ON2A1	Orin Nano	4GB	JP6.2	128GB pre installed	Yes
MIC-712-ON3A2	Orin nano	8GB	NA	NA	Yes
MIC-712-ON2A2	Orin nano	4GB	NA	NA	Yes

Packing List

Part Number	Description	Quantity
MIC-712-OX	MIC-712 Fanless system	1
1652002202	Power connector - 2-pin	1
1700023619-01	Micro USB cable for System recovery	1
1930005673-11	Screw M3x4.5L for peripheral	2
1960095312N001	Wall Mounting Bracket	2
1930007979	Screw for mounting bracket	4

Optional

Part Number	Description
96PSA-A65W19P2-1	Power Adapter 100-240V 65W 19V C6
1700001524	Power Cord UL 3P 10A 125V C5 183 cm (US)
170203183C	Power Cord EU 3P 2.5A 250V C5 183 cm (EU)
170203180A	Power Cord BSI 3P 2.5A 250V C5 183 cm (UK)
1700008921	Power Cord PSE 3P 7A 125V C5 183 cm (JP)
1700019146	Power Cord CCC 3P 2.5A 250V C5 183 cm (CN)
96PSA-A120W24T2-4	ADP A/D 100-240V 120W 24V C14 CORD END 62368
1702002600	Power Cord UL 3P 15A 125V C13 183 cm (US)
1702002605	Power Cord EU 3P 10A 250V C13 183cm (EU)
1702031801	Power Cord BSI 3P 10A 250V C13 183cm (UK)
1700029019-01	Power Cord (PSE/BSMI), 3-pin, 7A, 125V, 1.8 M, DAC-ST01
1700000596-11	Power Cord CCC 3P 10A 250V C13 183cm (China)
PCA-TPMSPI-00A1	PCA-TPMSPI-00A1
1700019116	COM port / CANBus cable
1700027920-01	Audio port cable (1 x Line-In + 1 x Mic)
MIC-FG-4G2C1	4CH GMSL2 frame grabber with FAKRA
1960095312N001	DIN Rail bracket