

MIC-713-0X

AI Platform Based on NVIDIA Jetson Orin NX



Features

- Compact fanless design
- Embedded NVIDIA® Jetson Orin™ NX up to 157 TOPS
- Supports 2 x GbE, 6 x USB 3.2 Gen 2
- Supports 1 x mPCIe, 1 x M.2 3052, 1 x M.2 2280
- Supports Allxon 24/7 remote monitoring and OTA deployment
- Supports Super mode with Jetpack 6.2 and above



Specifications

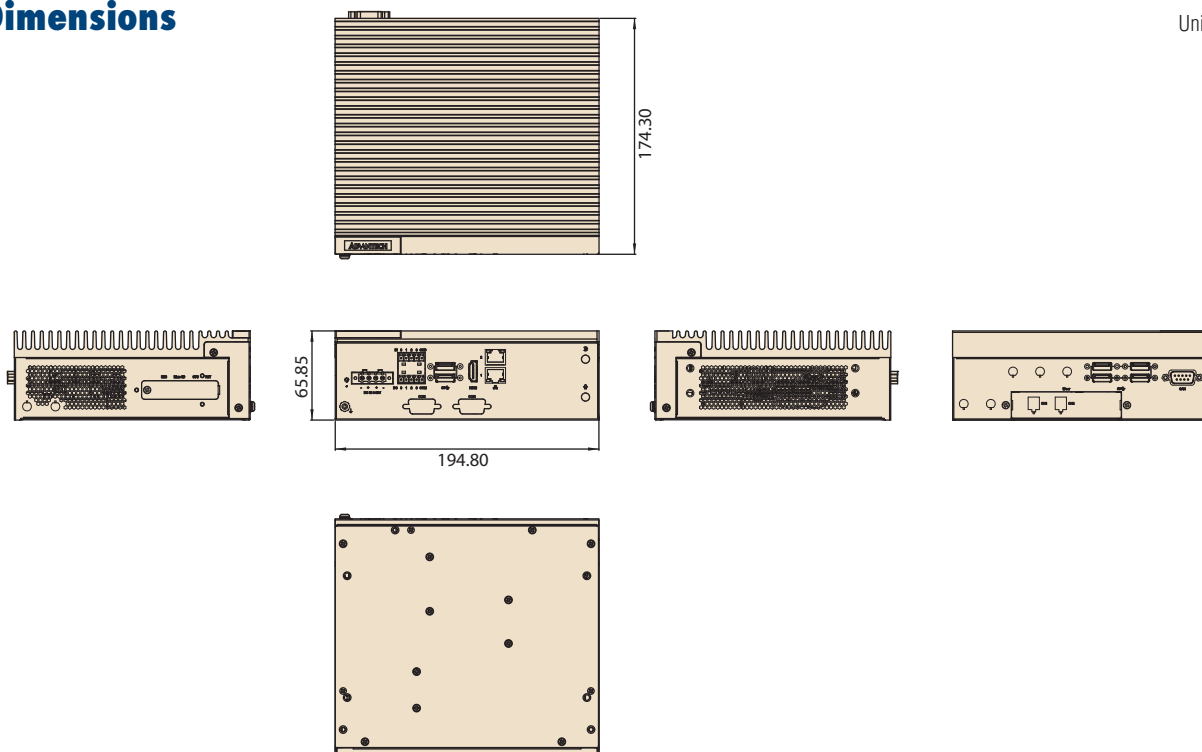
		NVIDIA® Jetson Orin™ NX
Processor System	CPU	16GB: 8-core NVIDIA Arm® Cortex A78AE v8.2 64-bit CPU 8GB: 6-core NVIDIA Arm® Cortex A78AE v8.2 64-bit CPU
	GPU	1024-core NVIDIA Ampere GPU with 32 Tensor Cores
	Memory	16GB: 16GB LPDDR5 8GB: 8GB LPDDR5
	Flash	-
I/O	Ethernet*	2 x 10/100/1000 Mbps
	Display	HDMI (Max. resolution 3840x2160 @ 60Hz)
	USB	External: 6 x USB 3.2 Gen 2
	Digital I/O	4-ch DI, 4-ch DO
	Serial Port (Optional)	2 x RS-232/422/485 (On-board pin header reserved)
	CANBus	1
	OTG USB	1 x Micro USB
Expansion	Mini PCIe	1 x mPCIe (Signal: PCIe + USB 2.0)
	M.2	1 x M.2 3052 (Signal: USB)
	SIM	2 x Nano SIM slots
	TPM (Optional)	1 x TPM 2.0
	GMSL (Optional)	1 x MIPI connector for GMSL video capture card
Storage	M.2	1 x M.2 2280 (Signal: PCIe x1, Gen 4)
	SD Card	1 x Micro SD
Power	Mode	AT
	Input Voltage	9 ~ 36 V _{DC}
Environment	Operating Temperature**	-10 ~ 60 °C with 0.7 m/s airflow (-10~50°C with MAXN_SUPER)
	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)	194.8 x 174.3 x 65.85 mm (7.67" x 6.86" x 2.59")
	Weight	2.05 kg (w/o packing material)
	Installation	Desktop
BSP	Jetpack	Above 5.1
Certifications		CE/FCC/UKCA/CB/UL/BSMI/CCC (No RED certification)

* PoE function by request.

** Depending on the installation situation and interface connection. Derating of max. operating temp. is possible when using the cellular LTE module. Please see user documentation.

Dimensions

Unit: mm



Ordering Information

Part Number	NVIDIA Module	NVIDIA Module Memory	NVIDIA Module eMMC	NVMe**	Super mode support
MIC-713-OX4A1	Orin NX	16GB	N/A	128GB	No
MIC-713-OX3A1	Orin NX	8GB	N/A	128GB	No
MIC-713-OX4B2	Orin NX	16GB	N/A	128GB	Yes
MIC-713-OX3B2	Orin NX	8GB	N/A	128GB	Yes

** The system BSP will be pre-installed in a 128GB NVMe M.2 SSD.

Packing List

Part Number	Description	Quantity
MIC-713-OX	MIC-713 Fanless system	1
1652005204	DI/DO Terminal Block	2
1652003234	DC-In Terminal Block	1
1700023619-01	Micro USB cable for System recovery	1
1930005673-11	Screw M3x4.5L for GMSL card	3
1960110505N001	Mounting Bracket	2
1930007259-01	Screw M4x4L for mounting bracket	4

Optional

Part Number	Description
96PSA-A120W24T2-4	Power Adapter 100-240V 120W 24V C14
96PSA-A150W19P4-4	Power Adapter 100-240V 150W 19V C14
96PSA-A230W24P4-3	Power Adapter 100-240V 230W 24V C14
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)
1700020098	Power Cord SAA 3P 10A 250V C13 183cm (AU)
1700028677-01	Power Cord PSE 3P 7A 125V C13 180cm (Japan)
1700000596-11	Power Cord CCC 3P 10A 250V C13 183cm (China)
98RV710AL00	Allxon OOB module
PCA-TPMSPI-00A1	PCA-TPMSPI-00A1
1700019968	COM port cable (2 ports)
1700027920-01	Audio port cable (1 x Line-In + 1 x Mic)
1960109250N031	idoor bracket for 4ch GMSL card
MIC-FG-4G2C1	4ch GMSL Video Capture Card
1960065854N001	i Door bracket for PCM series add-on cards
98R27130000	MIC-713 DIN rail kit