

MIC-713-ON

AI Platform Based on NVIDIA® Jetson Orin™ Nano



Features

- Compact fanless design
- Embedded NVIDIA® Jetson Orin™ Nano up to 67 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

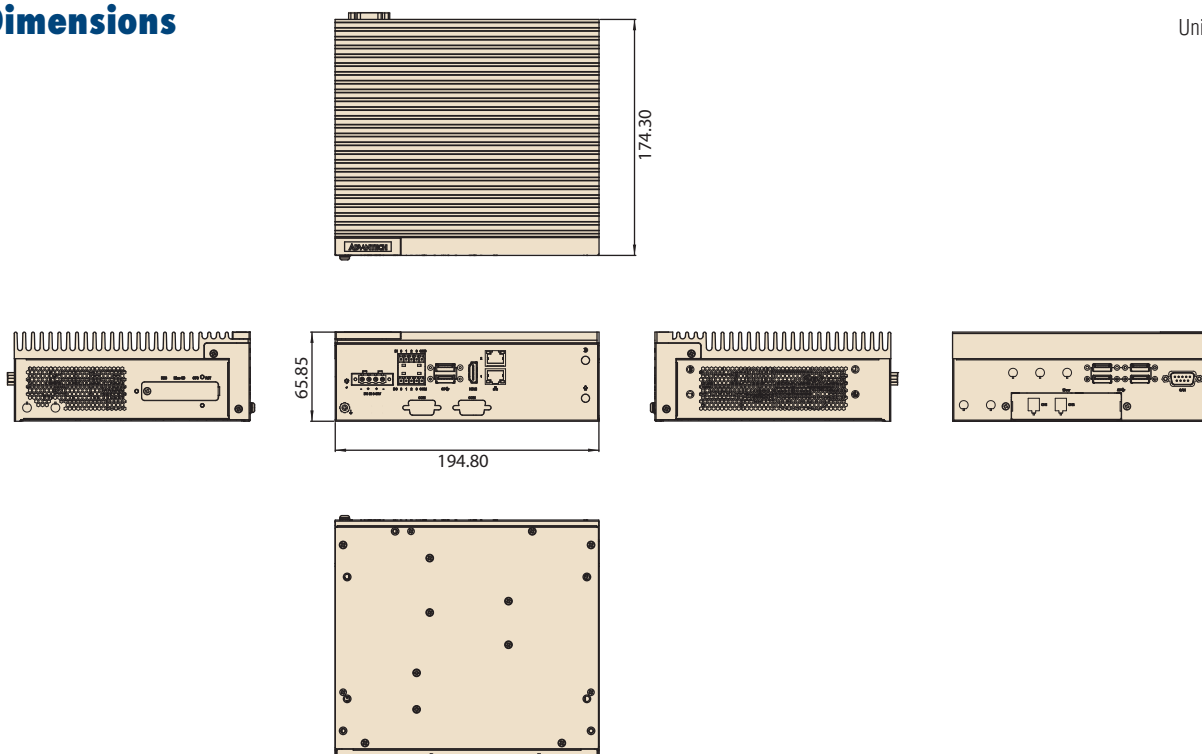
		NVIDIA® Jetson Orin™ Nano
Processor System	CPU	8GB: 6-core NVIDIA Arm Cortex A78AE v8.2 64-bit CPU 4GB: 6-core NVIDIA Arm Cortex A78AE v8.2 64-bit CPU
	GPU	8GB: 1024 core NVIDIA Ampere GPU with 32 Tensor Cores 4GB: 512 core NVIDIA Ampere GPU with 16 Tensor Cores
	Memory	8GB: 8GB LPDDR5 4GB: 4GB LPDDR5
	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-ON3A1	Orin Nano	8GB	N/A	128GB	No
MIC-713-ON2A1	Orin Nano	4GB	N/A	128GB	No
MIC-713-ON3B2	Orin Nano	8GB	N/A	128GB	Yes
MIC-713-ON2B2	Orin Nano	4GB	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-ON	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
1700027928-01	Power Cord UL 3P 15A 125V C13 183 cm (US)
1702002605-11	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