

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

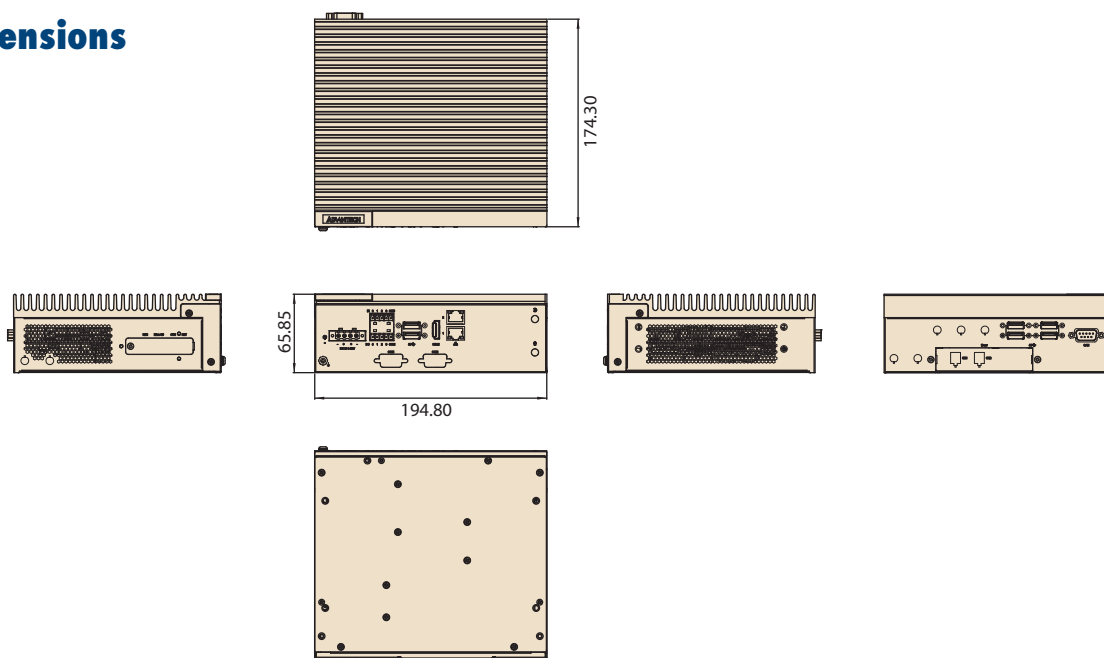
		NVIDIA® Jetson Orin™ Nano
Processor System	CPU	8GB: 6-core NVIDIA Arm Cortex A78AE v8.2 64-bit CPU 4GB: 6-core NVIDIA Arm Cortex A78AE v8.2 64-bit CPU
	GPU	8GB: 1024 core NVIDIA Ampere GPU with 32 Tensor Cores 4GB: 512 core NVIDIA Ampere GPU with 16 Tensor Cores
	Memory	8GB: 8GB LPDDR5 4GB: 4GB LPDDR5
	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	Installed Jetpack version	NVMe	Super mode support
MIC-713-ON3A1	Orin Nano	8GB	JP5.1.2	128GB pre installed	No
MIC-713-ON2A1	Orin Nano	4GB	JP5.1.2	128GB pre installed	No
MIC-713-ON3B2	Orin Nano	8GB	JP6.2	128GB pre installed	Yes
MIC-713-ON2B2	Orin Nano	4GB	JP6.2	128GB pre installed	Yes
MIC-713-ON3B3	Orin Nano	8GB	NA	NA	Yes
MIC-713-ON2B3	Orin Nano	4GB	NA	NA	Yes

Packing List

Part Number	Description	Quantity	Part Number	Description	Quantity
MIC-713-ON	MIC-713 Fanless system	1	1930005673-11	Screw M3x4.5L for GMSL card	3
1652005204	DI/DO Terminal Block	2	1960110505N001	Mounting Bracket	2
1652003234	DC-In Terminal Block	1	1930007259-01	Screw M4x4L for mounting bracket	4
1700023619-01	Micro USB cable for System recovery	1	193A230600	POST F=M3x5L M=M3x5L B=5 H=6.5 Cu for GMSL (only for Bx version)	3

Optional

Category	Part Number	Description	Quantity
Adapter	96PSA-A150W19P4-4	Power Adapter 100-240V 150W 19V C14	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
	1700020098	Power Cord SAA 3P 10A 250V C13 183cm (AU)	1
	1700029019-01	Power Cord (PSE/BSMI), 3-pin, 7A, 125V, 1.8 M	1
	1700000596-11	Power Cord CCC 3P 10A 250V C13 183cm (China)	1
	PCA-TPMSPI-00A1	PCA-TPMSPI-00A1	1
TPM	1700019968	COM port cable (2 ports)	1
Cable	1700027920-01	Audio port cable (1 x Line-In + 1 x Mic)	1
GMSL	MIC-FG-4G2C1	4ch GMSL Video Capture Card	1
	1751000805-01	RF Cable FAKRA-Z/F FAKRA-Z/F KS302 BLK L15M	by camera quantity
Wifi	EWM-W173H01E	Wi-Fi 6+BT 5.0 Module 2.4/5GHz Mini PCIe	1
	1751000626-01	RF Cable SMA/F-R MHF1/113 BLK L250mm	2
	1751000460-01	Dipole Ant. WiFi 6E SMA/M-R BLK L111.7mm IP54 (Wi-Fi)	2
5G	AIW-356-DQ	5G Sub6+GNSS M.2 3052 Key B (by region)	1
	1751000624-01	Cable Ant. SMA/F MHF4L/113 BLK L250mm (5G)	4
	1750009372-01	Ant.SMA/M 90/180 5G BLK 167mm RG178 (5G)	4
Bracket	1960065854N021	Bracket for idoor PCM series add-on module	1
OOB	98R27130000	MIC-713 DIN rail kit	1
	98RV710AL00	Allxon OOB module	1