

MIC-713S-ON

AI Solution Kit Based on NVIDIA® Jetson Orin™ Nano



Features

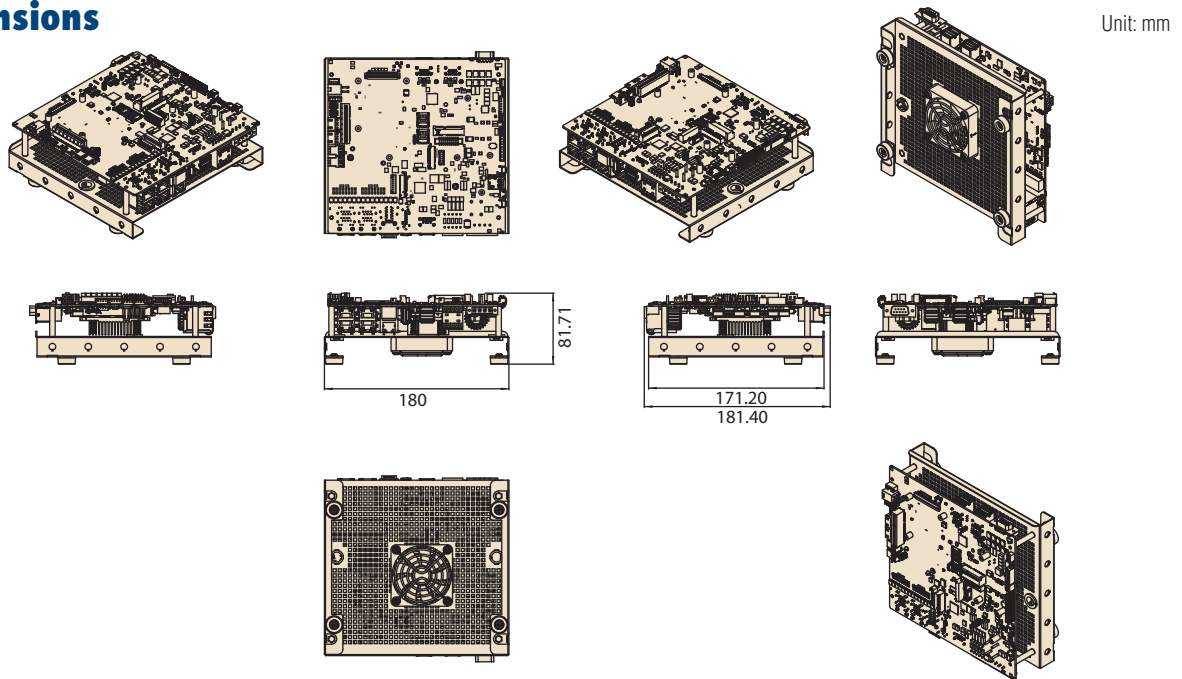
- Open-frame solution kit design
- Embedded with NVIDIA® Jetson Orin™ Nano up to 67 TOPS
- Supports 5 x GbE, 6 x USB 3.2 Gen 2
- Supports 1 x mPCIe, 1 x M.2 3052, 1 x M.2 2280
- Supports Allxon 24/7 remote monitoring and OTA deployment
- Supports Super mode with Jetpack 6.2 and above

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	5 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	2 x RS-232/422/485 (On-board pin header)
	CANBus	1
	OTG USB	1 x Micro USB
Expansion	PCIe	1 x PCIe x4 slot (PCIe x4 link, Gen 4)
	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
Fan	Dimension	60 x 60 x 13 mm (2.36" x 2.36" x 0.51")
	RPM	5400 RPM
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)	181.4 x 180 x 81.71 mm (7.14" x 7.09" x 3.22")
	Weight	0.75 kg (1.65 lb)
	Installation	Desktop
BSP	Jetpack	Above 5.1
Certifications		CE/FCC (No RED certification)

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

Dimensions



Ordering Information

Part Number	NVIDIA Module	NVIDIA Module Memory	Installed Jetpack version	NVMe**	Super mode support
MIC-713S-ON3A1	Orin Nano	8GB	JP5.1.2	128GB pre installed	No
MIC-713S-ON2A1	Orin Nano	4GB	JP5.1.2	128GB pre installed	No
MIC-713S-ON3B2	Orin Nano	8GB	JP6.2	128GB pre installed	Yes
MIC-713S-ON2B2	Orin Nano	4GB	JP6.2	128GB pre installed	Yes

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

Packing List

Part Number	Description	Quantity	Part Number	Description	Quantity
MIC-713S-ON	MIC-713 Solution Kit	1	1700023619-01	Micro USB cable for System recovery	1
1652005204	DI/DO Terminal Block	2	1930005673-11	Screw M3x4.5L for GMSL card	3
1652003234	DC IN Terminal Block	1	193A230600	POST F=M3x5L M=M3x5L B=5 H=6.5 Cu for GMSL (only for Bx version)	3

Ordering Information

Category	Part Number	Description	Quantity
Adapter	96PSA-A150W19P4-4	Power Adapter 100-240V 150W 19V C14	1
	1702002600	Power Cord UL 3P 15A 125V C13 183 cm (US)	1
Power cord	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
TPM	PCA-TPMSP1-00A1	PCA-TPMSP1-00A1	1
Cable	1700019968	COM port cable (2 ports)	1
	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
Bracket	1750009372-01	Ant.SMA/M 90/180 5G BLK 167mm RG178 (5G)	4
	1960065854N001	Bracket for indoor PCM series add-on module	1
OOB	98R27130000	MIC-713 DIN rail kit	1
	98RV710AL00	Allxon OOB module (By optional chassis)	1
POE	98917330010	MIC-733 PoE Board with package 96917330010	1