

MIC-711-ON

AI Inference System Based on NVIDIA® Jetson Orin™ Nano

NEW



Features

- Fanless and ultra-compact design
- Embedded with NVIDIA® Jetson Orin™ Nano up to 67 TOPS
- Supports 1 x GbE, 2 x USB 3.2 Gen 1 (5 Gbit/s)
- 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

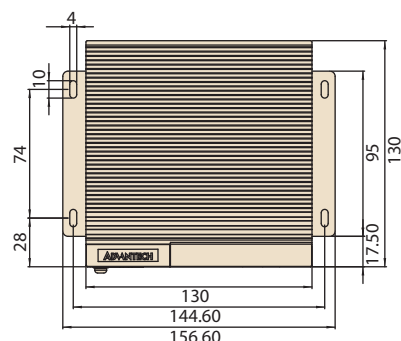
Specifications

		NVIDIA® Jetson Orin™ Nano
Processor System	CPU	6-core Arm® Cortex®-A78AE v8.2 64-bit CPU 1.5MB L2 + 4MB L3
	GPU	8G: 1024-core NVIDIA Ampere architecture GPU with 32 Tensor Cores 4G: 512-core NVIDIA Ampere architecture GPU with 16 Tensor Cores
	Memory	8GB: 8GB LPDDR5 4GB: 4GB LPDDR5
	Flash	-
I/O	Ethernet	1 x 10/100/1000 Mbps
	Display	HDMI (Max. resolution 3840x2160 @ 60Hz)
	USB	External: 2 x USB 3.2 Gen 2, 1 x USB 2.0 Internal: 1 x USB 2.0 (by pin header)
	OTG USB	1 x Micro USB
Expansion	Mini PCIe	1 x mPCIe (Signal: PCIe + USB 2.0)
	M.2	1 x M.2 3052 (B-Key, Signal: USB)
	SIM	2 x Nano SIM slots
Storage	M.2	1 x M.2 2280 (M-Key, NVMe, Signal: PCIe x4)
	SD Card	1 x Micro SD
Power	Mode	Terminal block, 2-pin, AT
	Input Voltage	9 ~ 36 V _{DC}
Environment	Operating Temperature*	-10 ~ 60 °C with 0.7 m/s air flow
	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)	130 x 130 x 46 mm (5.1" x 5.1" x 1.8")
	Weight	1.2 kg (2.65 lb)
	Installation	Desktop / Wall mount
BSP	Jetpack	Above 5.1 (Above Linux Ubuntu 20.04)
Certifications		CB/UL/CE/FCC/BSMI/CCC (No RED certification)

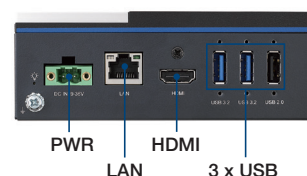
*Depending on the installation situation and interface connection. Derating of max. operating temp. is possible when using the cellular LTE module. Please see the user documentation.

Dimensions

Unit: mm



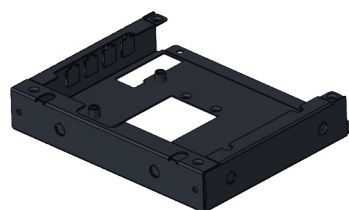
Front View



Back View



MIC-711 Expansion Kit View



Ordering Information

Part Number	NVIDIA Module	NVIDIA Module Memory	Installed Jetpack version	NVMe	Super mode support
MIC-711-ON3A1 (EOL)	Orin Nano	8GB	JP5.1.2	128GB pre installed	Yes (needs to update to JetPack 6.2)
MIC-711-ON2A1 (EOL)	Orin Nano	4GB	JP5.1.2	128GB pre installed	Yes (needs to update to JetPack 6.2)
MIC-711-ON3A2	Orin Nano	8GB	JP6.2	128GB pre installed	Yes (default)
MIC-711-ON2A2	Orin Nano	4GB	JP6.2	128GB pre installed	Yes (default)
MIC-711-ON3A3	Orin Nano	8GB	NA	NA	Yes (No SSD/BSP included. Customer to provide SSD and install JetPack 6.2)

Packing List

Part Number	Description	Quantity
MIC-711-ON	AI inference system	1
1652002202	Power connector — 2-pin	1
1700023619-01	Micro USB cable for system recovery	1

Part Number	Description	Quantity
1960095312N001	Mounting bracket	1
1930007979	Bracket screw	4
1930005673-11	M.2 screw	2
1930008089	Mini PCIe screw	2

Optional

Category	Part Number	Description	Quantity
Adapter	96PSA-A65W19P2-1	Power Adapter 100-240V 65W 19V	1
	1700001524	Power Cord UL 3P 10A 125V 183 cm (US)	1
Power cord	170203183C	Power Cord EU 3P 2.5A 250V 183 cm (EU)	1
	170203180A	Power Cord BSI 3P 2.5A 250V 183 cm (UK)	1
	1702031836	Power Cord SAA 3P 10A 250V 183 cm (AU)	1
	1700008921	Power Cord PSE 3P 7A 125V 183 cm (Japan)	1
	1700019146	Power Cord CCC 3P 2.5A 250V 183 cm (China)	1
	MIC-FG-4G2C1	4ch GMSL Video Capture Card	1
GMSL	1751000805-01	RF Cable FAKRA-Z/F FAKRA-Z/F KS302 BLK L15M	by camera quantity
	EWM-W173H01E	Wi-Fi 6+BT 5.0 Module 2.4/5GHz Mini PCIe	1
Wifi	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
	98RVC711010	MIC-711 DIN rail kit	1
OOB	98RV710AL00	Allxon OOB module (By adding Expansion kit)	1
MIC-711 Expansion Kit	98RVC711002	MIC-711 Expansion kit (2nd-layer expansion for 4-ch Video Capture Card, iDoor & additional 4 antenna holes)	1

** Standard MIC-711 chassis provides 2 antenna holes. Add the MIC-711 Expansion Kit (P/N: 98RVC711002) for 4 additional antenna holes.