

# MIC-711-0X

## AI Inference System Based on NVIDIA® Jetson Orin™ NX

Preliminary



### Features

- Fanless and ultra-compact design
- NVIDIA® Jetson Orin™ NX embedded
- 1 x M.2 2280 M-key for NVMe storage
- 1 x M.2 3052 B-key for wireless module
- Linux OS with board support package (BSP)
- Supports deep learning trained models
- Supports a wide range of operating temperatures



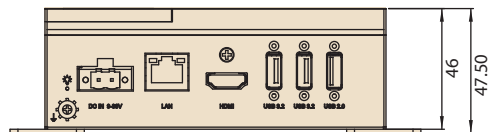
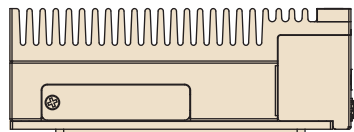
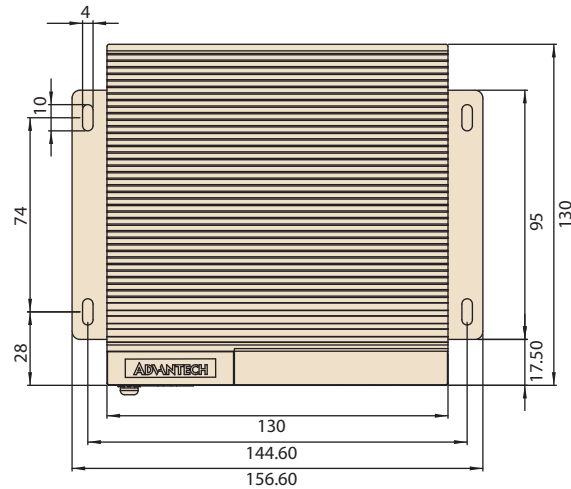
### Specifications

Processor System	CPU	Jetson Orin NX 16GB : 8-core NVIDIA Arm® Cortex A78AE v8.2 64-bit CPU Jetson Orin NX 8GB : 6-core NVIDIA Arm® Cortex A78AE v8.2 64-bit CPU	
	GPU	1024-core NVIDIA Ampere GPU with 32 Tensor Cores (Max. Frequency: 918MHz)	
	AI Performance	Jetson Orin NX 16GB: Up to 100 (Sparse) INT8 TOPs and 50 (Dense) INT8 TOPs Jetson Orin NX 8GB: Up to 70 (Sparse) INT8 TOPs and 35 (Dense) INT8 TOPs	
	Memory	Jetson Orin NX 16GB: 16GB 128-bit LPDDR5 DRAM Jetson Orin NX 8GB: 8GB 128-bit LPDDR5 DRAM	
Ethernet	Interface	RJ-45	
	Controller	On-module embedded	
	Speed	1 x Gigabit Ethernet (10/100/1000 Mbps)	
I/O	Display	HDMI (Max. resolution 3840x2160 @ 60Hz)	
	USB	External	1 x USB 2.0 2 x USB 3.2
		Internal	1 x USB 2.0 (by pin header)
	OTG USB (External)	1 x Micro USB	
	SD Card	1 x Micro SD	
	SIM Card	2 x Nano SIM	
Expansion	MiniPCIe	1 x Full size MiniPCIe (PCIe x1 + USB 2.0)	
	M.2	1 x 3052 B-key (USB 3.2 for wireless module)	
Storage	M.2	1 x 2280 M-key (PCIe x4 NVMe)	
	SD Card	1 x Micro SD	
Power	Power Supply	Power Adaptor: 9 ~ 36V	
	Power Type	Terminal Block 2 Pin	
Environment	Operational Temperature	-10 ~ 50 °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	
Mechanical	Dimensions (W x D x H)	130 x 130 x 46 mm	
	Weight	1.2 kg	
	Installation	Desktop	
Operating System	Linux	Ubuntu 20.04 with JetPack	
Certifications		CB/UL/CE/FCC/BSMI/CCC (No RED certification)	

# MIC-711-OX

## Dimensions

Unit: mm



## Ordering Information

Part Number	NVIDIA Module	Memory	eMMC	SD card
MIC-711-OX4A1	Orin NX	16G	NA	YES
MIC-711-OX3A1	Orin NX	8G	NA	YES

## Packing List

Part Number	Description	Quantity
MIC-711	NVIDIA AI Inference System	1
1652002202	Power connector-2Pin	1
1700023619-01	Micro USB cable for system recovery	1
1960095312N001	Mounting bracket	2
1930007979	Bracket screw	4
1930005673-11	M.2 screw	2
1930008089	MiniPCIe screw	2

## Optional

Part Number	Description
96PSA-A65W19P2-1	Power Adapter 100-240V 65W 19V
1700001524	Power Cord UL 3P 10A 125V 183 cm (US)
170203183C	Power Cord EU 3P 2.5A 250V 183 cm (EU)
170203180A	Power Cord BSI 3P 2.5A 250V 183 cm (UK)
1702031836	Power Cord SAA 3P 10A 250V 183 cm (AU)
1700008921	Power Cord PSE 3P 7A 125V 183 cm (Japan)
1700019146	Power Cord CCC 3P 2.5A 250V 183 cm (China)
98RV710AL00	Allxon OOB module (By optional chassis)

## Front View

