

MIC-711-0X

AI Inference System Based on NVIDIA® Jetson Orin™ NX

NEW



Features

- Fanless and ultra-compact design
- Embedded with NVIDIA® Jetson Orin™ NX up to 157 TOPS
- Supports 1 x GbE, 2 x USB 3.2 Gen1 (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

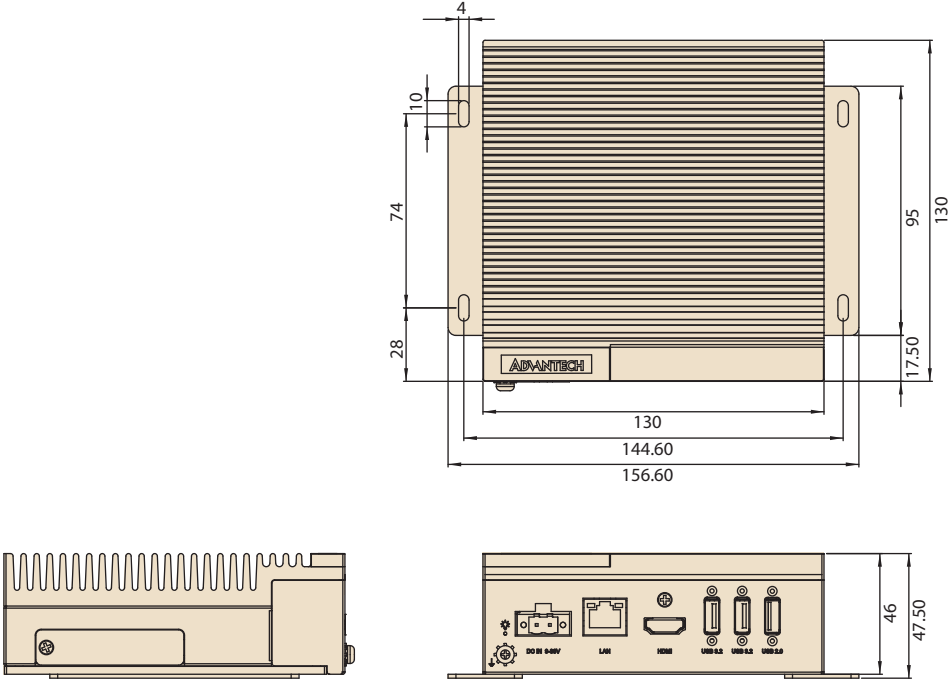
Specifications

		NVIDIA® Jetson Orin™ NX
Processor System	CPU	16GB: 8-core NVIDIA Arm® Cortex A78AE v8.2 64-bit CPU (2MB L2 + 4MB L3) 8GB: 6-core NVIDIA Arm® Cortex A78AE v8.2 64-bit CPU (1.5MB L2 + 4MB L3)
	GPU	1024-core NVIDIA Ampere GPU with 32 Tensor Cores
	Memory	16GB: 16GB LPDDR5 8GB: 8GB 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 1, 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		CE/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



Ordering Information

Part Number	NVIDIA Module	NVIDIA Module Memory	NVIDIA Module eMMC	NVMe	Super mode support
MIC-711-OX4A1	Orin NX	16G	NA	128G(pre-installed system BSP)	No
MIC-711-OX3A1	Orin NX	8G	NA	128G(pre-installed system BSP)	No
MIC-711-OX4A2	Orin NX	16G	NA	128G(pre-installed system BSP)	Yes
MIC-711-OX3A2	Orin NX	8G	NA	128G(pre-installed system BSP)	Yes

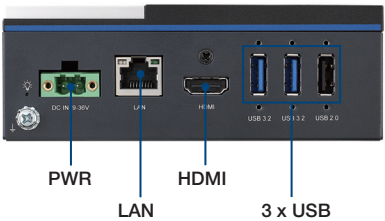
Packing List

Part Number	Description	Quantity
MIC-711-OX	AI inference system	1
1652002202	Power connector — 2-pin	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	Mini PCIe 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 adding Expansion kit)
98R2711AL00	Allxon Bolt OOB module (By adding Expansion kit)
98RVC711002	Expansion kit_4ch GMSL_iDoor
98RVC711010	MIC-711 DIN rail kit
MIC-FG-4G2C1	4ch GMSL SW video card (By adding Expansion kit)

Front View



To support NVIDIA Jetson Orin Super Mode & BSP upgrade

Super ModeをサポートするSKUに関しては別製品型番となっています。現行モデルは JetPack5.1.2 のままとなります。

Super Mode 対応製品は JetPack 6.2 となり、対応する BSP がインストールされています。詳細に関しましては、下記の表をご参照ください。

Affected Model	Current JetPack version	Replacement Model to Support Super Mode	JetPack version	Note
MIC-711-ON2A1*	5.1.2	MIC-711-ON2A 2	6.2	BSP upgrade
MIC-711-ON3A1*	5.1.2	MIC-711-ON3A 2	6.2	BSP upgrade
MIC-711-OX3A1	5.1.2	MIC-711-OX3A 2	6.2	BOM changed
MIC-711-OX4A1	5.1.2	MIC-711-OX4A 2	6.2	BOM changed
MIC-711D-ON2A1*	5.1.2	MIC-711D-ON2A 2	6.2	BSP upgrade
MIC-711D-ON3A1*	5.1.2	MIC-711D-ON3A 2	6.2	BSP upgrade
MIC-711D-OX3A1	5.1.2	MIC-711D-OX3A 2	6.2	BOM changed
MIC-711D-OX4A1	5.1.2	MIC-711D-OX4A 2	6.2	BOM changed
MIC-713-ON2A1	5.1.2	MIC-713-ON2 B2	6.2	PCB Revision
MIC-713-ON3A1	5.1.2	MIC-713-ON3 B2	6.2	PCB Revision
MIC-713-OX3A1	5.1.2	MIC-713-OX3 B2	6.2	PCB Revision
MIC-713-OX4A1	5.1.2	MIC-713-OX4 B2	6.2	PCB Revision
MIC-713S-ON2A1	5.1.2	MIC-713S-ON2 B2	6.2	PCB Revision
MIC-713S-ON3A1	5.1.2	MIC-713S-ON3 B2	6.2	PCB Revision
MIC-713S-OX3A1	5.1.2	MIC-713S-OX3 B2	6.2	PCB Revision
MIC-713S-OX4A1	5.1.2	MIC-713S-OX4 B2	6.2	PCB Revision