MIC-732D-AO

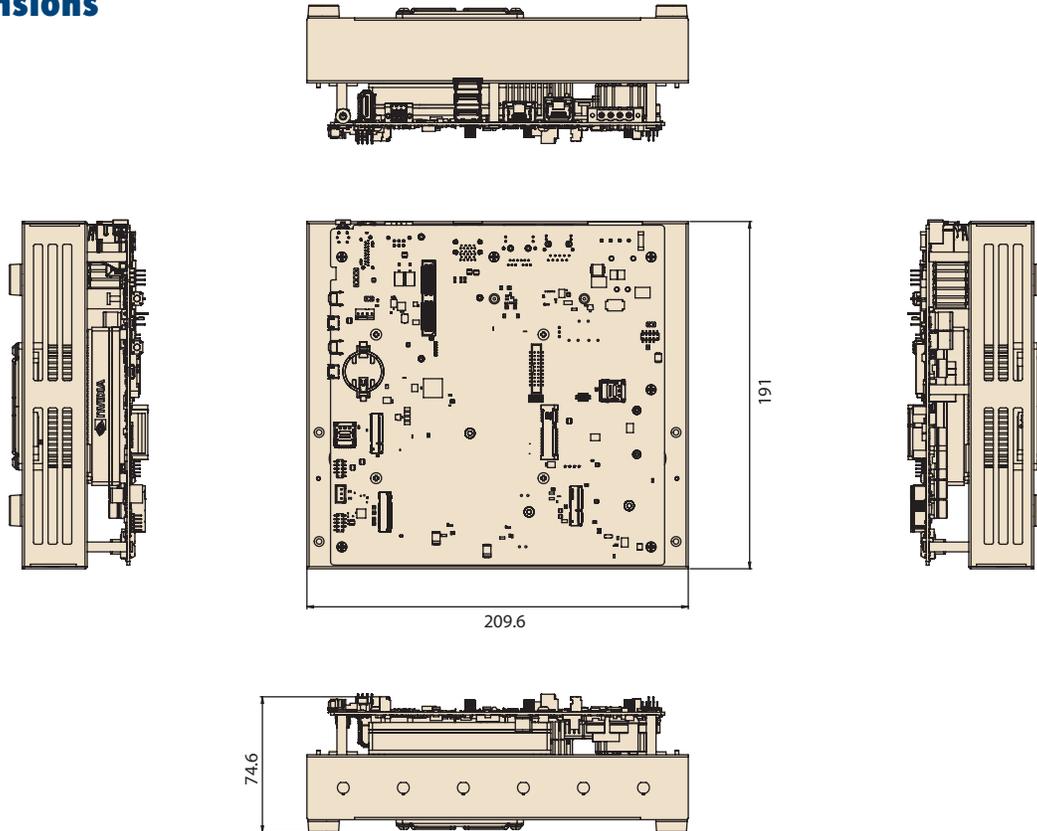## AI Developer Kit Based on NVIDIA Isaac Nova Orin

Features

- Open-frame carrier design with thermal solution
- Embedded with NVIDIA® Jetson AGX Orin™ up to 275 TOPS
- Supports 1 x 10GbE, 1 x 2.5GbE, 3 x USB 3.2 Gen 2 (10 Gbit/s)
- Supports 2 x CANbus, 1 x mPCIe, 2 x Nano SIM slots
- Support Total 8-ch GMSL3.0/2.0 with FAKRA connectors
- Support NVIDIA Isaac Robot Operating System (ROS2)

Specifications

Processor		NVIDIA
		MIC-732D-AO6A1
	CPU	12-core NVIDIA Arm® Cortex A78AE v8.2 64-bit CPU, 3MB L2 + 6MB L3
	GPU	2048-core NVIDIA Ampere GPU with 64 Tensor Cores Maximum Operating Frequency: 1.3GH
	Mem	64GB LPDDR5
	eMMC	64GM eMMC
I/O	Ethernet	1 x 10/100/1000/2500 Mbp 1 x 10GbE
	Display	1 x HDMI Display
	USB	External: 3 x USB 3.2 Gen 2, 2 x USB micro B, (1 from UART for debug) Internal: 1 x USB 2.0 (pin header)
	CAN	2 x CANBus
	Serial Ports	2 x RS-232/422/485 (On-board pin header)
Expansion	M.2	1 x M.2 3052 (B-Key) (Signal: USB 3.0+USB 2.0) 1 x M.2 2230 (E-Key) (Signal: PCIe+USB2.0)
	Mini PCIe	1 x mPCIe (Signal: PCIe+USB 2.0)
	SIM	2 x Nano SIM slots
	GMSL(Optional)	8-ch GMSL3.0/2.0 with FAKRA connectors
	iDoor (Optional)	1 x iDoor bracket reserve
Storage	M.2	1 x M.2 2280 (B/M-Key, NVMe, Signal: PCIe x4)
Power	Mode	AT/ATX (Default AT)
	Input Voltage	9~36V$_{DC}$, Rated 12V$_{DC}$
Environment	Operation Temperature	-20 ~ 60 °C with 0.7 m/s air flow
	Operating Humidity	95% @ 40 °C (non-condensing)
	Vibration	3Grms @ 5 ~ 500 Hz, random, 1 hr/axis
	Shock	10G / 11 ms
Button	Frout panel	Reset / Recovery
Mechanical	Dimension (W*H*D)	191 x 209 x 75 mm (without fan), 191 x 209 x 112 mm (with fan)
	Weight	TBC
	Installation	Desktop / Wall mount
BSP	Jetpack	Above 6.0
Certifications		CE / FCC

ADVANTECH Edge AI Inference System

All product specifications are subject to change without notice.   Last updated: 3-Mar-2025

Dimensions

Unit: mm

Ordering Information

Part Number	NVIDIA Module	Memory	eMMC
MIC-732D-AO6A1	AGX Orin	64 GB	64 GB

Packing List

Part Number	Description	Quantity
MIC-732D-AO	AI Inference System	1
1652003234	Power terminal block 4P	1
1652006794-02	CanBus Plug-In Block 2x3P	1
1700023619-01	Micro USB cable for system recovery	1

Optional

Part Number	Description
96PSA-A150W19P4-4	Adaptor A/D, 100-240V, 150W, 19V
1702002600	Power Cord (USA) UL/CSA, 3-pin, 10A, 125V, 1.83 M,
1700029019-01	Power Cord (PSE/BSMI), 3-pin, 7A, 125V, 1.8 M, DAC-ST01
1702002605	Power Cord (EU) 2-pin, 10/16A, 220V, 1.83 M, 90 D
98R2732D000	MIC-732D fan expansion kit
MIC-FG-8G2C1	8-port GMSL video capture card