

MIC-732-A0

AI Inference System Based on NVIDIA Isaac Nova Orin



Features

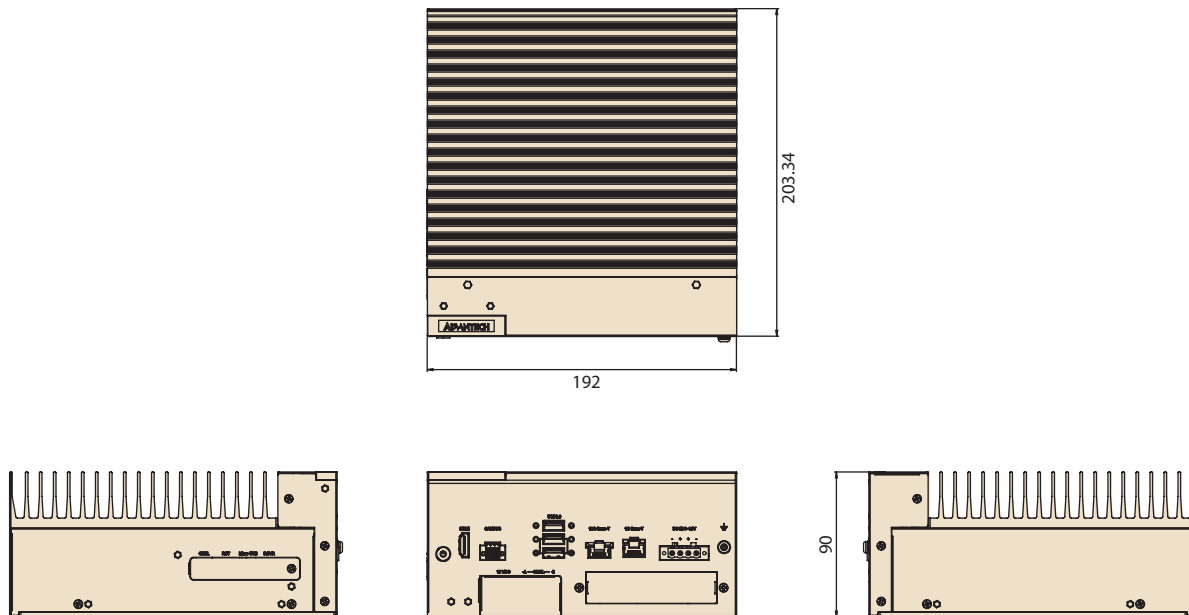
- Fanless and ultra-compact design
- Embedded with NVIDIA® Jetson AGX Orin™ up to 275 TOPS
- Supports 1 x 10GbE, 1 x 1GbE, 3 x USB 3.2 Gen 2 (10 Gbit/s)
- Supports 2 x CANbus, 1 x mPCIe, 2 x Nano SIM slots
- Support Total 8-ch GMSL3.0/2.0 with FAKRA connectors
- Support NVIDIA Isaac Robot Operating System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

Specifications

		NVIDIA	
		MIC-732-A05A1	MIC-732-A06A1
Processor	CPU	8-core ARM Cortex A78AE v8.2 64-bit CPU, 2MB L2 + 4MB L3	12-core NVIDIA Arm® Cortex A78AE v8.2 64-bit CPU, 3MB L2 + 6MB L3
	GPU	1792-core NVIDIA Ampere GPU with 56 Tensor Cores, Maximum Operating Frequency: 930 MHz	2048-core NVIDIA Ampere GPU with 64 Tensor Cores Maximum Operating Frequency: 1.3GH
	Mem	32GB LPDDR5	64GB LPDDR5
	eMMC	64GB eMMC	64GB eMMC
I/O	Ethernet	1 x 10/100/1000/2500 Mbps 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		Reset / Recovery	
Mechanical	Dimension (W x H x D)	192 x 203 x 90 mm (with heat sink)	
	Weight	TBC	
	Installation	Desktop / Wall mount	
BSP	Jetpack	Above 6.0	
Certifications		CE / FCC	

Dimensions

Unit: mm



Ordering Information

Part Number	NVIDIA Module	Memory	eMMC
MIC-732-A05A1	AGX Orin	32 GB	64 GB
MIC-732-A06A1	AGX Orin	64 GB	64 GB

Packing List

Part Number	Description	Quantity
MIC-732-A0	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

For the PCM module application, please use the iDoor cover on the MIC-733 front window.

Remote Management Enrollment

Enroll in 24/7 secure service to get all the features of remote device management on one centralized cloud portal - Allxon Portal.

*Supports JetPack 4.4 GA and above

Enrollment Page: https://allxon.com/jetson/device_enroll/