MIC-733-TS

NEMA TS2 AI Inference System Based on NVIDIA® Jetson AGX Orin™



Features

- Compact fanless design
- Embedded with NVIDIA® Jetson AGX Orin™
- NEMA TS2 compliance
- -34 to 74°C operating temperature support
- 500ms power interruption backup (Based on NEMA TS2)

Specifications

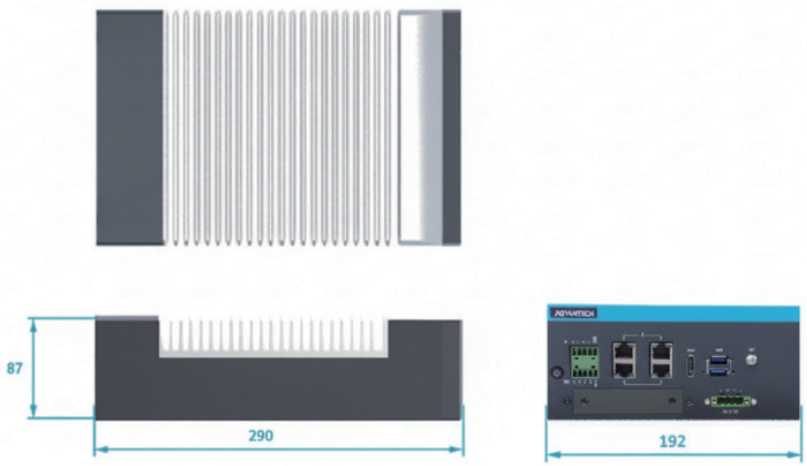
		NVIDIA® Jetson AGX Orin™
Processor	NVIDIA Jetson Series	AGX Orin 32G
	CPU	8-core NVIDIA Arm® Cortex A78AE v8.2 64-bit CPU, 2MB L2 + 4MB L3
	GPU	1792-core NVIDIA Ampere GPU with 56 Tensor Cores, Maximum Operating Frequency: 930 MHz
	AI Performance Reference	Up to 200 TOPs
	Memory	32GB 256-bit LPDDR5 DRAM
I/O	Ethernet	4 x 10/100/1000 Mbps (Support 4 x Gigabit PoE/2 Gigabit PoE+ with 60W power budget)
	Display	HDMI (Max. resolution 3840x2160 @ 60Hz)
	USB	2 x USB 3.0
	Digital I/O	4-ch DI, 4-ch DO
	Power Switch	1 x Power ON/OFF Button
	Serial Ports	2 x RS-232/422/485 (On-board pin header)
	OTG USB	1 x Micro USB
Expansion	Mini PCIe	2 x mPCIe (Signal: PCIe+USB)
	SIM	2 x Nano SIM slots
	M.2	1 x M.2 3052 (B-Key, Signal: USB)
	TPM (Optional)	1 x TPM 2.0
	iDoor (Optional)	1 x iDoor bracket reserve
Storage	M.2	1 x M.2 2280 M-Key Slot, pre-installed NVMe with 512G 3D TLC BiCS5 (-40~85°C)
	SD Card	1 x Micro SD slot
Power	Mode	AT/ATX (Default AT)
	Input Voltage	12 V_{DC} (With external 240W Adapter) (pre-configured with hardened power adaptor/power core)
Environment	Operating Temperature	-34 ~ +74 °C with 0.7 m/s airflow (in 30W AGX Orin mode)
	Operating Humidity	95% @ 40 °C (non-condensing)
	Vibration	3Grms @ 5 ~ 500 Hz, random, 1 hr/axis
	Shock	10G / 11 ms
Mechanical	Dimensions (W x D x H)	192 x 290 x 87 mm
	Weight	4.5 kg (9.9 lb)
	Installation	Desktop / Wall mount
BSP	Jetpack	Above 6.1
Certifications		NEMA-TS2/CE/FCC (No RED certification)

* Depending on the installation conditions and interface connections, it is possible for performance derating for cellular LTE module and the MAXN mode of AGX Orin in the maximum operating temperature, as for the wireless module application, please check the its user documentation first.

All product specifications are subject to change without notice.

Dimensions

Unit: mm [inch]



Ordering Information

Part Number	NVIDIA Module	Memory	eMMC	NVMe
MIC-733-TS5A1	AGX Orin	32 GB	64 GB	N/A

Packing List

Part Number	Description	Quantity
MIC-733-TS	AI Inference System	1
1652003234	Power terminal block 4P	1
1652005204	DI/DO terminal block 5P	2
1700023619-01	Micro USB cable for system recovery	1
1702002605	Power Cord EU 3P 10A 250V C13 183cm (EU)	1
1702002600	Power Cord (USA) UL/CSA, 3-pin, 10A, 125V, 1.83 M, 180 D	1
XMIC-FSP270-RHAN3	Power Adapter A/D 100-240V 240W 12V TERMINAL BLOCK 4P	1
98917330011	PoE Board Total 60W output supporting 4 port PoE / 2 port PoE+	1
SQF-C8MV2-512GDEDE	NVMe with 512G 3D TLC BiCS5 (-40~85°C)	1
1960115344N001	MOUNTING Bracket	2
1960081193N002	IDOOR ANTX2 Cover for MIC-733-TS Powder 432C (Support 2 additional Wifi antennas)	1
1960119127N001	Bottom Cover-IDOOR for MIC733-TS Powder 432C (with 2nd side idoor cover opening)	1

[Note]: The MIC-733-TS has four antenna openings on the rear panel. The default bottom cover (P/N: 1960119127N001) supports two additional Wi-Fi antennas when used with the iDoor ANTx2 Cover (P/N: 1960081193N002), which is included in the accessory box.
For configurations requiring both a 5G/LTE module (typically four antennas) and a Wi-Fi module (typically two antennas), install the included iDoor ANTx2 Cover to accommodate a total of six antennas.

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 6.1 GA and above

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

Optional

	Part Number	Description	Quantity
SSD	96FD80-P1TB-TS1	SSSTC M.2 2280 1TB NVME G4x4 SSD -25°C ~85°C	1
	SQF-C8MV4-1TDEFM	SQF M.2 2280 730-D 1T 3D TLC BiCS5 (-20~85°C)	1
	SQF-C8MZ2-128GDEDE	SQF M.2 2280 720-D 128G 3D sTLC BiCS5 (-40~85°C)	1
	SQF-C8MV2-512GDEFE	SQF M.2 2280 730-D 512G 3D TLC BiCS5 (-40~85°C)	1
	SQF-C8MV2-512GDEFN	SQF M.2 2280 730-D 512G 3D TLC BiCS5 (-20~85°C)	1
	SQF-C8MV2-128GDEDM	SQF M.2 2280 720-D 128G 3D TLC BiCS5 (-20~85°C)	1
	SQF-C8MV2-512GDEDM	SQF M.2 2280 720-D 512G 3D TLC BiCS5 (-20~85°C)	1
Wifi	EWM-W173H01E	Wi-Fi 6+BT 5.0 Module 2.4/5GHz Mini PCIe	1
	1751000626-01	Cable Ant. SMA/F-R MHF1/113 BLK L250mm	2
	1751000717-01	Dipole Ant.WiFi 6E SMA/M-R RG178 BLK L183mm IP67	2
	1751000460-01	Dipole Ant. WiFi 6E SMA/M-R BLK L111.7mm IP54	2
	9656EWMG00E	Half-size miniPCIe to miniPCIe bracket set	1
5G	AIW-356-DQ	5G Sub6+GNSS M.2 3052 Key B (by region)	1
	1751000623-01	Cable Ant. SMA/F MHF4L/113 BLK L300mm (5G)	4
	1750009372-01	Ant.SMA/M 90/180 5G BLK 167mm RG178 (5G)	4
Power Cord	1700029019-01	Power Cord (PSE/BSMI), 3-pin, 7A, 125V, 1.8 M, DAC-ST01	1
OOB Extension	98RV710AL00	Allxon OOB module	1
Serial Port Extension	1700019968	F Cable 2x10P-2.0/D-SUB 9P(M)x2 15CM for On-board serial ports pin header extension	1
	1960068789T008	IDOOR COMX2 Cover for On-board serial ports pin header extension	1
iDoor Accessory	1960065854N021	PCM series module bracket for supporting idoor cover fixing	1
TPM 2.0	PCA-TPMSPI-00A1	TPM 2.0 Module by SPI interface	1