

MIC-742-AT

AI Inference System Powered by
NVIDIA® Jetson Thor™



Features

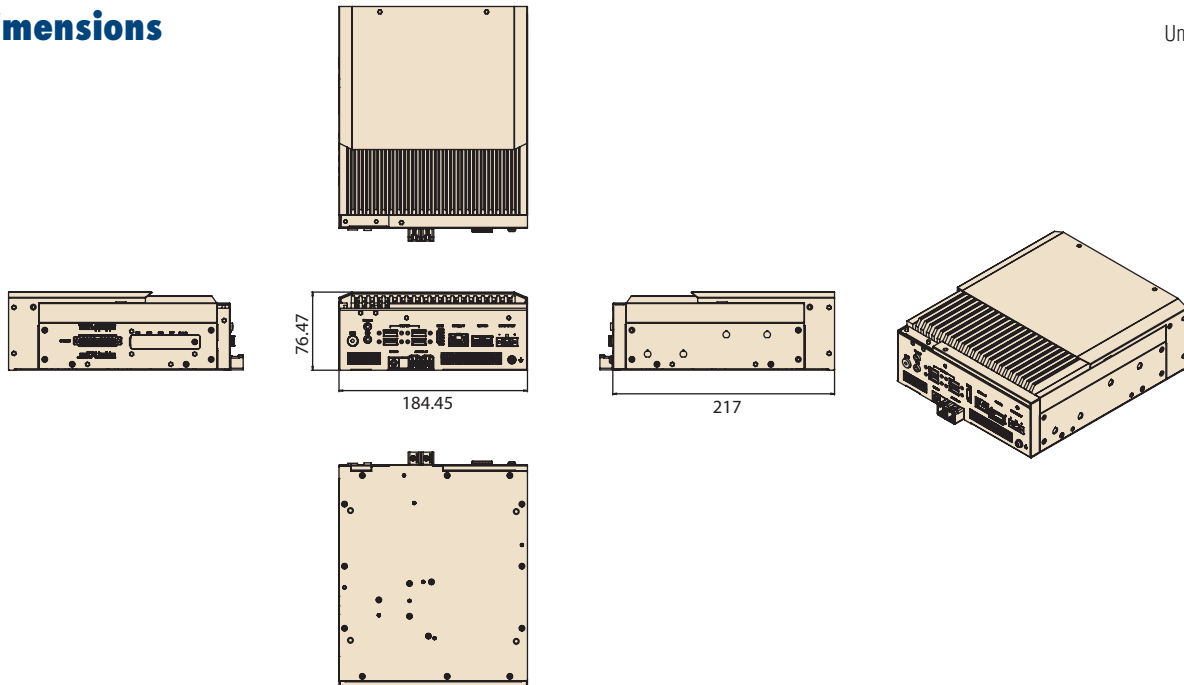
- Embedded with NVIDIA® Jetson T5000™ / Jetson T4000™ up to 2070 TFLOPS(FP4)
- Supports 1 x QSFP28 (T5000: 4 x 25GbE / T4000: 3 x 25GbE)
- Supports 1 x 5GbE, 4 x USB 3.2 Gen 2, 1 x M.2 AEKey(WiFi), 1 x M.2 Bkey(LTE)
- Support 4 x CANbus, 1 x I2C
- Support Total 8-ch GMSL2.0 with mini FAKRA connectors

Specifications

Process	CPU	NVIDIA® Jetson T5000™ / Jetson T4000™ Jetson T5000: 14-core Arm® Neoverse V3AE (64-bit) SMP CPU architecture L1 Cache (I, D) per core: 64KB + 64KB, L2 1MB, L3 16MB Jetson T4000: 12-core Arm® Neoverse V3AE (64-bit) SMP CPU architecture L1 Cache (I, D) per core: 64KB + 64KB, L2 1MB, L3 16MB
	GPU	Jetson T5000: 2560-core NVIDIA Blackwell architecture GPU with 96 fifth-gen Tensor Cores Jetson T4000: 1536-core NVIDIA Blackwell architecture GPU with 64 fifth-gen Tensor Cores
	Memory	Jetson T5000: 128GB LPDDR5X Jetson T4000: 64GB LPDDR5X
Ethernet	RJ45	1 x 10/100/1000/2500/5000 Mbps Ethernet
	QSFP28	Jetson T5000: 4 x 25GbE Jetson T4000: 3 x 25GbE
I/O	Display	HDMI (Max. resolution 3840x2160 @ 60Hz)
	USB	4 x USB 3.2 Gen 2
	OTG USB	1 x Micro USB
	Console	1 x microUSB console for debug (UART to USB)
	Audio	1 x audio speaker out, MIC in on board
	CANbus	4 x CAN FD (T5000 only)
	GMSL (optional)	4 x MIPI 4 lanes (Support 8-ch GMSL2.0 with mini FAKRA connectors)
	I2C	1 x I2C
Expansion	SIM card	1 x Nano SIM on side of board
	M.2 Ekey	1 x 2230 E-key (Signal: PCIe1 + USB2.0)
	M.2 Bkey	1 x 3052/3042 B-key (Signal: USB3.0 + USB2.0)
	SATA	2 x SATA connector
Storage	TPM	1 x TPM (onboard)
	M.2 M.key	1 x 2280 M-key NVMe (PCIe4) (pre-installed 1T SSD on A1 SKU)
Power	Power Supply	Power input: 19-36V
	Power Type	Terminal Block 2 Pin
	Internal pin header	3 x SMART FAN
Environment	Operational 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
Mechanical	Dimensions (W x D x H)	217 x 76.4 x 184.5 mm
	Weight	3kg
	Installation	Wall mount/Din rail
Operating System		NVIDIA Jetpack™ 7.0
Certifications		CE/FCC/CCC/KCC/BSMI/UL (No RED certification)

Dimensions

Unit: mm



Ordering Information

Part Number	NVIDIA Module	Memory	eMMC	Installed Jetpack version	NVMe
MIC-742-AT7A1	NVIDIA® Jetson T5000™	128 GB	NA	JetPack 7.0	1TB Pre-installed
MIC-742-AT6A1	NVIDIA® Jetson T4000™	64 GB	NA	JetPack 7.0	1TB Pre-installed
MIC-742-AT7A2	NVIDIA® Jetson T5000™	128GB	NA	NA	NA
MIC-742-AT6A2	NVIDIA® Jetson T4000™	64GB	NA	NA	NA

Packing List

Part Number	Description	Quantity	Part Number	Description	Quantity
MIC-742-AT	AI Inference Developer Kit	1	1960116156N001	Mounting Bracket for MIC-742	2
1700023619-01	Micro USB cable for system recovery	1	1939000410	Screws for mounting bracket	4
1652008236-01	Terminal Plug 20P for CANbus	1	1990019482N010	Thermal pad for GMSL	2
1652002202	Plug-in Block 2P for power	1	1990040296N010	Thermal pad for 5G Module	1
			1930005673-11	Screws for 5G/ WIFI Module	2

Optional

	Part Number	Description	Quantity
SSD	96FD80-P2TB-TS1	SSSTC M.2 2280 2TB NVMe G4x4 DRAMLESS SSD -25°C -85°C	1
	MIC-FG-8G2C1	8CH GMSL2 frame grabber with mini FAKRA	1
GMSL2 frame grabber	1751000758-01	RF Cable MINI FAKRA B-Z/F FAKRA-Z/M 1x4 BLK L300	1 to 4 cameras
	1751000805-01	Cable Ant. FAKRA-Z/F FAKRA-Z/F KS302 BLK L15M	1 (by camera quantity)
	1700026907-01	Cable 1x4P-2.0/1x4P-2.0 10CM (Internal power cable for GMSL)	1
	EWM-W179M201E	Wi-Fi 6 + BT Module M.2 Key A/E	1
Wifi	1751000620-01	Cable Ant. SMA/F-R MHF4L/113 BLK L300mm (Wi-Fi)	2
	1751000460-01	Dipole Ant. WiFi 6E SMA/M-R BLK L111.7mm IP54 (Wi-Fi)	2
	AIW-356-DQ	5G Sub6+GNSS M.2 3052 Key B (by region)	1
5G	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
	XMIC-FSP230-AAAN3	ADP A/D 100-240V 230W 24V C14 TERMINAL BLOCK 2P	1
Power adapter	1702002600	Power Cord (USA) UL/CSA, 3-pin, 10A, 125V, 1.83 M	1
	1700029019-01	Power Cord (PSE/BSMI), 3-pin, 7A, 125V, 1.8 M, DAC-ST01	1
	1702002605	Power Cord (EU) 2-pin, 10/16A, 220V, 1.83 M, 90 D	1
Power Cord	1960120622N000	Din-Rail BKT for MIC-742 Powder 432C	1
	1950016395T108	DIN RAIL Ass'y for EKI-2528PAI Powder 432C	2
	1930004789	Screw M3x6L S/S D=5 H=1 (2+) ST BZn NK	6