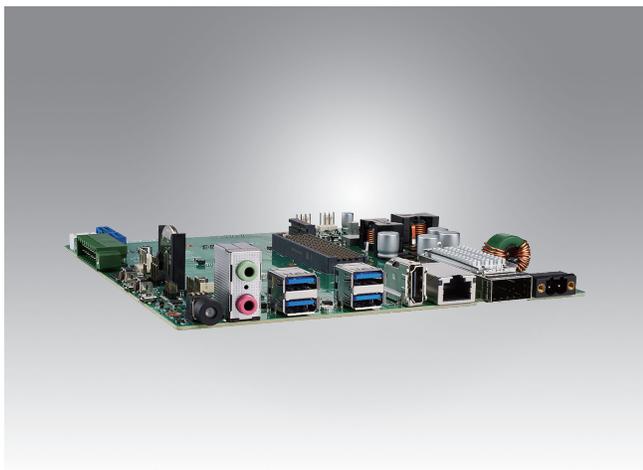# MIB-742-AT

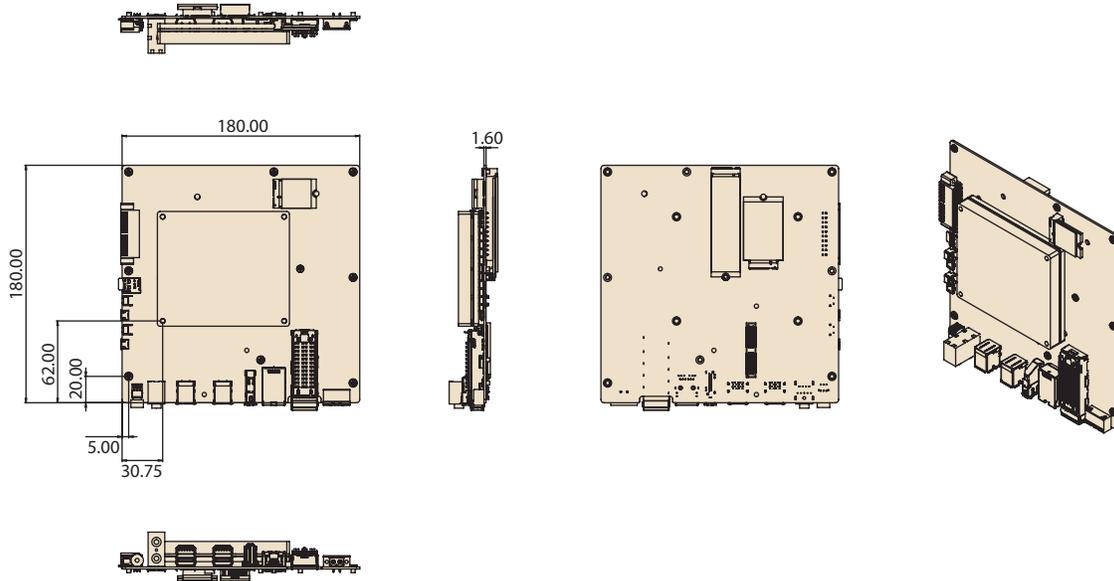## AI Inference SBC Powered by NVIDIA® Jetson Thor™

Features

- Supports 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		NVIDIA® Jetson T5000™ / Jetson T4000™
	CPU	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	4 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
	SIM card	1 x Nano SIM on side of board
Expansion	M.2 Ekey	1 x 2230 E-key (Signal: PCIex1 + USB2.0)
	M.2 Bkey	1 x 3052/3042 B-key (Signal: USB3.0 + USB2.0)
	SATA	2 x SATA connector
	TPM	1 x TPM (onboard)
Storage	M.2 M.key	1 x 2280 M-key NVMe (PCIex4) (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)	180 x 180 mm
	Weight	1kg
	Installation	Wall mount
Operating System		NVIDIA Jetpack™ 7.0
Certifications		CE/FCC

Dimensions

Unit: mm

Ordering Information

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

Packing List

Part Number	Description	Quantity
MIB-742-AT	AI Inference SBC with SOM	1
1700023619-01	Micro USB cable for system recovery	1
1652008236-01	Terminal Plug 20P for CANbus	1
1652002202	Plug-in Block 2P for power	1
1930005673-11	Screws for 5G/ WIFI Module	2

Optional

Part Number	Description
SQF-C8MV4-1TDEFM	SQF PCIe/NVMe Gen.4 M.2 2280 OPAL 730-D 1T 3D TLC BiCS5 (-20~85°C)
SQF-C8MV4-2TDEFM	SQF PCIe/NVMe Gen.4 M.2 2280 OPAL 730-D 2T 3D TLC BiCS5 (-20~85°C)
SQF-C8MV4-4TDEFM	SQF PCIe/NVMe Gen.4 M.2 2280 OPAL 730-D 4T 3D TLC BiCS5 (-20~85°C)
MIC-FG-8G2C1	8CH GMSL2 frame grabber with mini FAKRA
1751000758-01	RF Cable MINI FAKRA B-Z/F FAKRA-Z/M 1x4 BLK L300
1751000805-01	Cable Ant. FAKRA-Z/F FAKRA-Z/F KS302 BLK L15M
96PSA-A84W12V1-4	A/D 100-240V 84W 12V C14 DC JACK 62368 (External power supply for GMSL)
1700026907-01	Cable 1x4P-2.0/1x4P-2.0 10CM (Internal power cable for GMSL)
EWM-W179M201E	Wi-Fi 6 + BT Module M.2 Key A/E
1751000620-01	Cable Ant. SMA/F-R MHF4L/113 BLK L300mm (Wi-Fi)
1751000460-01	Dipole Ant. WiFi 6E SMA/M-R BLK L111.7mm IP54 (Wi-Fi)
AIW-356-DQ	5G Sub6+GNSS M.2 3052 Key B (by region)
1751000623-01	Cable Ant. SMA/F MHF4L/113 BLK L300mm (5G)
1750009372-01	Ant.SMA/M 90/180 5G BLK 167mm RG178 (5G)
XMIC-FSP230-AAAN3	ADP A/D 100-240V 230W 24V C14 TERMINAL BLOCK 2P
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
1970005628T011	C.L R4 130W 116x102x36.7mm SS CPU