AFE-A702

NVIDIA® Jetson Thor™ AMR Control System



Features

- Accelerated by NVIDIA Jetson T5000™ and T4000™, delivering up to 2070 TFLOPS FP4 inference performance
- Dedicated I/Os for Robotics: 6xGbE, 4xUSB, 2xCOM, DIO, CANFD
- Supports SFP28 1x 10GbE
- Sensor connection for camera, LiDAR, IMU...etc.
- Supports NVIDIA JetPack™ 7.2
- IEC 61000-6-4 Heavy Industry Certificate

Specifications

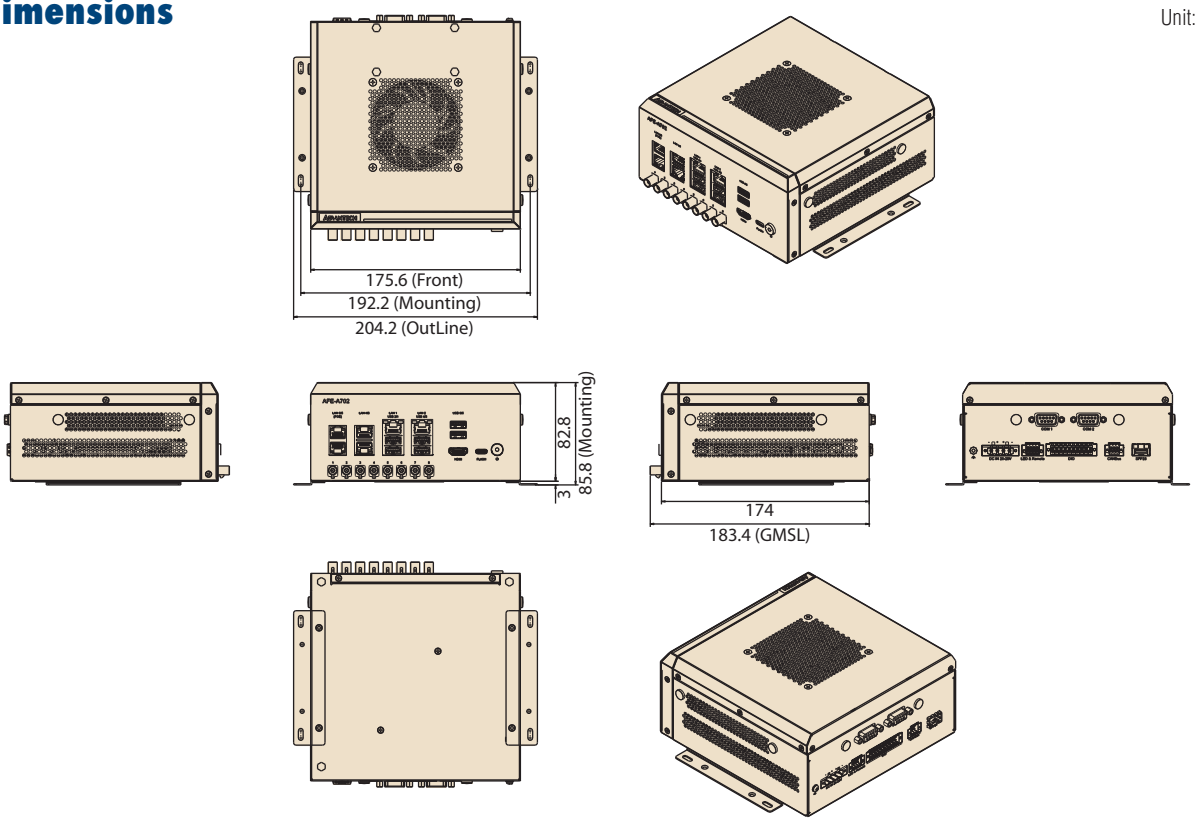
Processor System	NVIDIA Jetson Thor Module	NVIDIA Jetson T5000	NVIDIA Jetson T4000
	CPU	14-core Arm® Neoverse®-V3AE 64-bit CPU	12-core Arm® Neoverse®-V3AE 64-bit CPU
	GPU	2560-core NVIDIA Blackwell architecture GPU with 96 fifth-gen Tensor Cores	1536-core NVIDIA Blackwell architecture GPU with 64 fifth-gen Tensor Cores
	AI Performance Reference	2070 TFLOPS (FP4—Sparse)	1200 TFLOPS (FP4—Sparse)
	TDP	40-130W	40–70 W
	Memory	128GB LPDDR5X, 273 GB/s	64 GB 256-bit LPDDR5X, 273 GB/s
Ethernet	Interface	RJ-45	
	Controller	Intel® i226	
	Speed	6 x 2.5GbE (2 reserve for PoE)	
SFP28	Speed	1 x 25GbE	
Display	HDMI	1 x HDMI 2.0 (Max. resolution 3840 x 2160 @ 24Hz)	
IO Ports	USB	6 x USB 3.2 Type A	
	OTG USB	1 x Type C USB (for system recovery only)	
	CANBus	2 x isolated CANFD	-
	DI/DO	16bit isolated DIO	
	COM	2 x RS232/422/485	
	Remote switch	LED/WDT/PWS/GND/RESET/Debug	
Expansion	M.2 E key	1 x 2230	
	M.2 B key	1 x 2280/3042/3052 (PCIex1, USB, SIM)	
	GMSL	8 x FAKRA (Optional)	
	IMU	BOSCH BMI088 6-axis (Optional)	
Others	TPM	TPM2.0	
	Time Sync	Supports GPS PPS signal (optional)	
Storage	M.2 M key	1 x M.2 2280	
Power	Power Supply voltage	20~28V	
	Power Type	ATX/AT mode, ATX default	
Environment	Operational Temperature	-10 ~ 50°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)	177 x 174 x 83 mm	
	Weight	1.93 Kg	
	Mounting Support	Wall mounting	
Operating System		Ubuntu 24.04 LTS with NVIDIA JetPack 7.1	
Software Support	ROS2	Ready by Advantech Robotic Suite	
Certifications	EMC/Safety	CE/FCC Class B, CB, UL, CCC and BSMI (No RED Certificate)	

All product specifications are subject to change without notice.

Last updated: 5-Nov-2026

Dimensions

Unit: mm



Front View



Rear View



Ordering Information

Model Name	Part Number	Module	NVMe	Heatsink	System Fan	Made In
AFE-A702	AFE-A702-X1A1U	NVIDIA Jetson T5000	512GB	yes	yes	Taiwan
	AFE-A702-X2A1U	NVIDIA Jetson T4000	512GB	yes	yes	Taiwan
	AFE-A702-X0A1U	Optional	optional	yes	yes	Taiwan

Packing List

Part Number	Description
1652008233-01	CANBUS terminal plug
1652008720-01	DIO terminal plug
1652008721-01	LED&remote terminal plug
1930004789	Screws for wall mounting kit
2190000902	CARDBOARD-WARRANTY REV. A2

Optional Accessories

Part Number	Description
1960087696N003	Wall mount bracket (QTY:2)
AMK-A0064	AFE-A702 8ports GMSL bracket
AFE-RM04-8PA1	MAX96712, 8ports GMSL board
MIOE-PSE-DPA1*	PoE Module
96PSA-A330W24P4-3	AC to DC adapter, DC 24V 330W
1751000759-01	FAKRA Cable 1M, Z Type
1702002600	Power cable 3-pin 183cm, USA type
1702002605	Power cable 3-pin 183cm, EU type
1702031801	Power cable 3-pin 183cm, UK type
1700000237	Power cable, 3-Pin 183cm, PSE type
1700036551-01	Cable for SFP28

*Please order thermal pads 1990026100T000 (Qty:1) and 1990022340N000 (Qty:2) together with PoE module for better heat dissipation.

Compatible Sensors List

For comprehensive hardware integration details, please visit the Sensor Selector