



AEC-8x00

NVIDIA® Jetson Thor T5000 AI Embedded Computer



Features

- 2 x GbE RJ-45
- 1 x QSFP for 4x25GbE
- 1 x M.2. E key for Wi-Fi 6E
- 1 x M.2 B key for 4G/ 5G
- 2 x M.2. M key for SSD
- GMSL support (AEC-8100)
- PoE support (AEC-8200)
- 8 x USB 3.2 Type A support (AEC-8300)

System

CPU	14-core Arm® Neoverse™ V3AE 64-bit CPU
Memory	128GB LPDDR5X DRAM
GPU	2,650-core NVIDIA Blackwell™ GPU with 5th GEN 96 Tensor Cores
Storage	1x NVMe M.2 Key M 2280 x2 PCIe Gen5 (8xPoE, 8xUSB board, either one) 1x NVMe M.2 Key M 2280 x4 PCIe Gen5
TPM	SLB9672XU2.0

I/O

Serial Port	2 x RS-232/422/485 ports with DB9 connector
LAN	2 x GbE ports w/ RJ-45 connector, one port is NCSI OOB on board (Optional) 1 x QSFP for 4 x25GbE
USB Port	4 x USB 3.2 Type A 1 x USB 3.2 Type C 1 x USB 3.2 Type C for BSP install (OTG) Optional 8 x USB 3.2 Type A (via daughter board, AEC-8300)
Expansion	2x10-pin Euro Terminal block (1x CAN-FD (Isolated 3KV), 3x CAN-FD with Transceiver, +5V output 1A , +3.3V output 1A,UART, I2C) 1 x M.2 B key (3042 for 4G LTE module or 3052 for 5G module) 1 x M.2 E key (for Wi-Fi 6E) 2 x M.2 M key (for SSD) 2 x SIM sockets
GPIO	8-DI/ 8-DO with DB9 connector
Video Port	1 x USB Type C DP ALT mode 2 x HDMI output
GMSL	8 x Fakra-Z connectors for GMSL automotive cameras (AEC-8100)
PoE	8 x GbE PoE + LAN w/ RJ-45 connector (AEC-8200)
AUDIO	MIC in/ Line out with 3.5mm phone jack

Environmental

Operating Temp.	-25°C to 50°C, with 0.63 m/s air flow (77W TDP Fan mode)
Storage Temp.	-40°C ~ 85°C (-40°F ~ 185°F)
Operating Humidity	5 ~ 95% (non-condensing)
Relative Humidity	95% @ 65°C, Non-condensing
Shock	Operating, MIL-STD-810H, Method 516.8, Procedure I (TBA)
Vibration	Operating, MIL-STD-810G, Method 514.6, Procedure I, Category 4 (TBA)
EMC	CE,FCC, EN50155(TBA), EN50121-3-2(TBA)

Power Requirement

Power Input	DC 9V ~ 36V with 3-pin terminal block, AT/ ATX Mode selectable ACC IN/ IGN control (ACC optional, via switch)
Thermal solution	1 x SOM Fan 2 x Chassis fan (12V fan wafer)

Mechanical

Button	1 x Power Button, 1 x Force Recovery Button
Antenna	4 x Antenna holes for WiFi
Mounting	Wallmount
LED indicator	1 x System power 1 x Input power
Weight	4Kg
Dimensions (W x D x H)	211 x 194 x 111mm

OS Support

Ubuntu/ NVIDIA JetPack 7.0

Ordering Information

Model	Description	Additional 8 x USB 3.2	8 x PoE	8 x GMSL 1/2
AEC-8000 (Main SKU)		N/A	N/A	N/A
AEC-8100 (BTO)		N/A	N/A	v
AEC-8200 (BTO)	Jetson Thor T5000 128GB BOX	N/A	v	N/A
AEC-8300 (BTO)	PC, up to 2070 TFLOPS	v	N/A	N/A
AEC-8400 (BTO)		N/A	v	v
AEC-8500 (BTO)		v	N/A	v

All specifications are subject to change without notice.