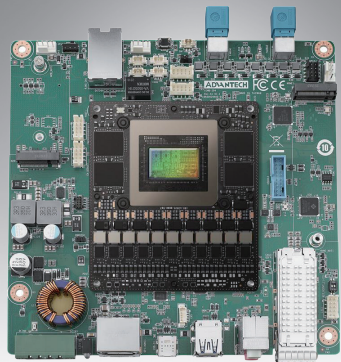


AIMB-294

Mini-ITX Motherboard Accelerated by NVIDIA® Jetson Thor™

Preliminary



WISE-DeviceOn



Features

- Accelerated by NVIDIA Jetson T5000™, up to 2560 CUDA Cores, 128GB LPDDR5
- AI Performance: 2070 TFLOPS
- Super speed I/O: USB3.2 gen2, GMSL, 4 x 25G optical connectivity, 4K displays
- Rich Expansion: M.2 M-key NVMe SSD, B-key & E-key for Wireless connection
- Reliable operation: TPM2.0 onboard, ESD Level 4 protection
- 24V DC power input, Mini-ITX (170 x 170 mm)

Specifications

Processor System	NVIDIA Jetson Thor Module	NVIDIA Jetson T5000
	CPU	14 core Arm® Neoverse V3AE (64-bit) SMP CPU architecture
	GPU	2560-core NVIDIA Blackwell architecture, with 96 fifth-gen Tensor Cores
	Max Frequency	1.57 GHz
	TDP	130W
	Memory	128GB 256-bit LPDDR5X
TPM	TPM2.0	NPCT764
Expansion Slot	M.2 M-Key	1 x M-Key, 2280. Signal: PCIe5 x4 (NVMe SSD)
	M.2 B-Key	1 x B-Key, 3052. Signal: PCIe x1/USB3.2/USB2/I2C
	M.2 E-Key	1 x E-Key, 2230. Signal: PCIe x1, USB2
Rear I/O	DP	1 x DP1.4a, max 7680x4320 (8K) 30Hz
	HDMI	1 x HDMI 2.1, max. 7680x4320 (8K) 30Hz
	Ethernet	4 x 25GbE (QSFP28), 1 x 5GbE (RJ45)
	USB	1 x USB Type-C, DP alt mode 2 x USB3.2 Type-A
	Audio	Mic in & Line out
Internal Connector	USB	2 x USB3.2 (Box header)
	USB for debug	1 port
	GMSL	4 x FAKRA (Optional)
	Serial	2 x COM (RS232/RS485)
	CANBus	4 x CAN
	I2C	3 (pin header)
	GPIO	8-bit
	Smart fan	1 (CPU fan) & 2 (System fan)
Power Requirements	Boost	24V DC in (± 10%)
	Typical	4-pin Phoenix connector
Environment	Temperature	Operating: -20 ~ 60° C (-4 ~ 140° F)
Physical Characteristics	Dimensions	170 x 170 mm (6.69" x 6.69")