nv500

Military Jetson THOR Computer -T5000 series

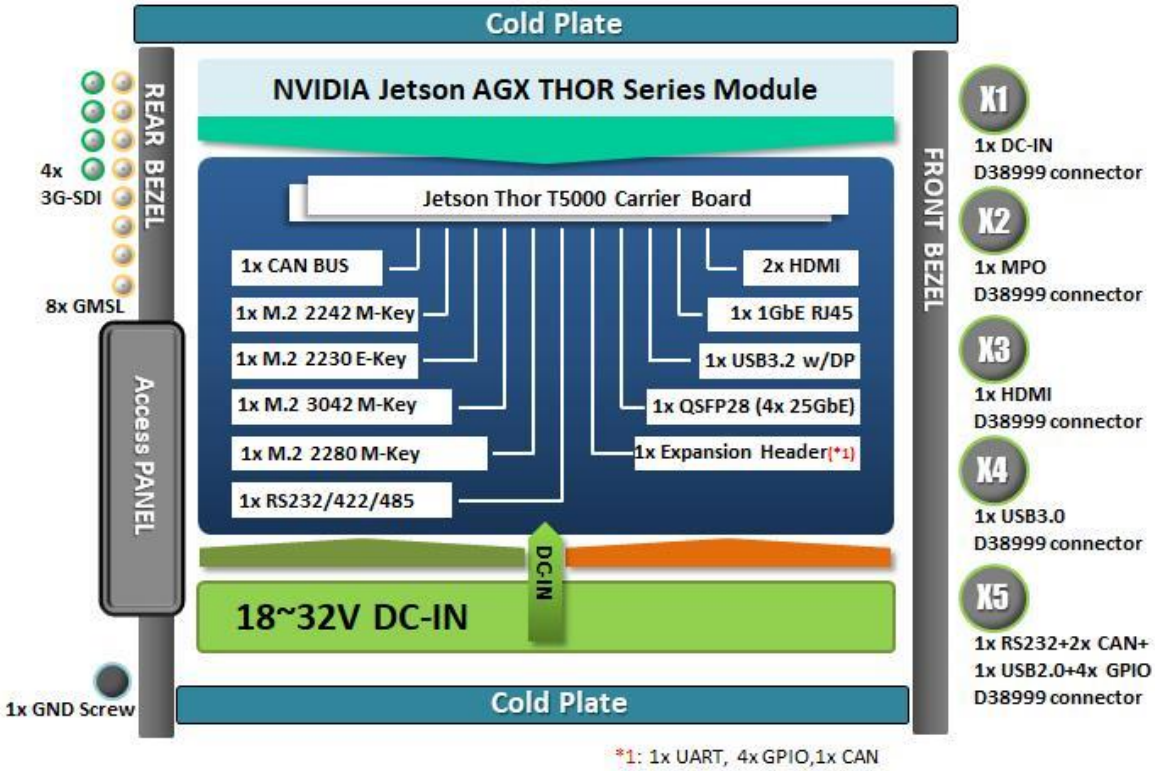
- NVIDIA Jetson THOR T5000 Military Computer
- 2070 FP4 TFLOPS AI Compute powered by Blackwell GPU
- 14-core ARM® Neoverse® CPU
- 128 GB 256-bit LPDDR5X Memory
- 1 x QSFP28 (MPO) 100GbE
- Operating Temperature: -20℃~60℃
- MIL-STD-810 Vibration Method 514.6: ◎Acceleration: 5.0 Grms
- MIL-STD-810 Vibration Method 514.6: ◎PSD: 0.01257 g2/Hz
- MIL-STD-810 Shock Method 516.6: ◎Wave Form: Half Shine Wave
- MIL-STD-810 Shock Method 516.6: ◎Acceleration: 75G

Specifications

System	
High performance Processor	14-core Arm® Neoverse®-V3AE 64-bit CPU 1 MB L2 cache per core 16 MB shared system L3 cache
GPU	2560-core NVIDIA Blackwell architecture GPU with fifth-gen Tensor Cores Multi-Instance GPU (MIG) with 10 TPCs
AI Performance	2070 TFLOPS (FP4—Sparse)
Memory Type	128 GB 256-bit LPDDR5X, 273 GB/s
Expansion Slot	
Expansion Slot	1x M.2 Key-B, 1x M.2 Key-E, 2x SIM, 1x mPCIe GNSS 1x I2C, 1x UART, 1x I2S, 2x SPI, 4x CAN 1x 120pin for GMSL camera board 2x 3.5mm phone jack for Mic in & line out. 1x TPM (TI SLB9672XU2.0) on board
Display	
Graphics Interfaces	1x HDMI 2.0 (max resolution 3840x2160) 1x Type C DP mode
Storage	
M.2	- 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
Ethernet	
Controller	2x GbE RJ-45 (OOB on board, one port is NCSI) 1x QSFP for 4x25GbE
Front I/O	
X1	18~32 VDC
X2	1x QSFP with MPO D38999
X3	1x HDMI with D38999
X4	1x USB3.1 with D38999
X5	1x RS232+2x CAN+1x USB2.0+4x GPIO D38999 connector
Rear I/O	
Ground Screw	1

Debug Access Panel	1x Reset Button
	1x Recover Button
	1x USB Type-C for BSP install
3G-SDI	4x 3G-SDI with BNC connector
GMSL	8x Z-code with FAKRA connector
Power Requirement	
Power Input	18V~32V
Operating System	
Operating System	Ubuntu 24.04 with JetPack 7.X
Physical	
Dimension	250 x 325 x 120 mm (W x D x H)
Weight	TBD
Chassis	Aluminum AL6061
Heatsink	Aluminum Alloy, Corrosion Resistant.
Finish	Anodic aluminum oxide (Color).
Cooling	Natural Passive Convection/Conduction. No Moving Parts
Ingress Protection	IP65
Environmental	
MIL-STD-461 (Options)	
EMC	CE102 basic curve, 10kHz - 30 MHz RE102-4, (1.5 MHz) -30 MHz - 5 GHz RS103, 1.5 MHz - 5 GHz, 50 V/m equal for all frequencies
Reliability	No Moving Parts; Passive Cooling. Designed & Manufactured using ISO 9001/2000 Certified Quality Program.
Operating Temp.	-20 to 60°C
Storage Temp.	-40 to 85°C
Relative Humidity	5% to 95%, non-condensing.

Block Diagram



Appearance

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