



# NV500-0Y

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
- 1x QSFP28 (MPO) 100GbE
- Operating Temperature: -20°C ~ 60°C
- MIL-STD-810 Vibration Method 514.6: ©Acceleration : 5.0 Grms
- MIL-STD-810 Vibration Method 514.6: ©PSD : 0.01257 g/Hz
- MIL-STD-810 Shock Method 516.6 : ©Wave Form: Half Shine Wave
- MIL-STD-810 Shock Method 516.6 : ©Acceleration: 75G



LAND



SEA



AIR



# Specifications

## SYSTEM

High performance Processor	14-core Arm® Neoverse®-V3AE 64-bit CPU 64 KB I-Cache, 64 KB D-Cache 1 MB L2 cache per core 16 MB shared system L3 cache
GPU	2560-core NVIDIA Blackwell architecture GPU with 96 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	M.2 Key E slot with x1 PCIe Gen5 (populated with WiFi and Bluetooth module)
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## DISPLAY

Graphics Interfaces	1x HDMI 2.0 (max resolution 3840x2160) 1x Type C DP mode
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## STORAGE

M.2	1x M.2 Key M slot with x4 PCIe Gen5 (populated with 1 TB NVMe)
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## ETHERNET

Controller	2x GbE RJ-45 (OOB on board, one port is NCSI) 1x QSFP for 4x25GbE
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## FRONT I/O

Power Button	1x Power button
Phoenix Jack	9~28 V DC-IN
Networking I	1x QSFP28 (4x 15GbE)
USB	2x USB3.1 Type-C
Display	1x HDMI 2.0b 1x Display port 1.4a
Networking II	1x 5GbE RJ45 connector
USB	2x USB3.2 Type-A

## ACCESS I/O

Debug	1x USB Type-C1
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Recovery	1x Recovery Button
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Reset	1x Reset Button
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### INNER I/O

2x 13-in CAN Header
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2x 6-pin automation Header
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2x 5-pin JTAG Connector
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1x 4-pin Fan Connector—12 V, PWM, and Tach
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2x 5-pin Audio Panel Header
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2-pin RTC Backup Battery Connector
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### POWER REQUIREMENT

Power Input	40W~ 130W
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### OPERATING SYSTEM

Operating System	Ubuntu 24.04 with JetPack 7.X
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### PHYSICAL

Dimension	250 x 250 x 118 mm (W x D x H)
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Weight	TBD
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Chassis	Aluminum AL6061
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Heatsink	Aluminum Alloy, Corrosion Resistant.
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Finish	Anodic aluminum Oxide (Color).
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Cooling	Natural Passive Convection/Conduction. No Moving Parts
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### ENVIRONMENTAL

MIL-STD-461 (Options)
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EMC	CE102 basic curve, 10kHz - 30 MHz
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RE102-4, (1.5 MHz) -30 MHz - 5 GHz
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RS103, 1.5 MHz - 5 GHz, 50 V/m Equal For All Frequencies
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Reliability	No Moving Parts; Passive Cooling.
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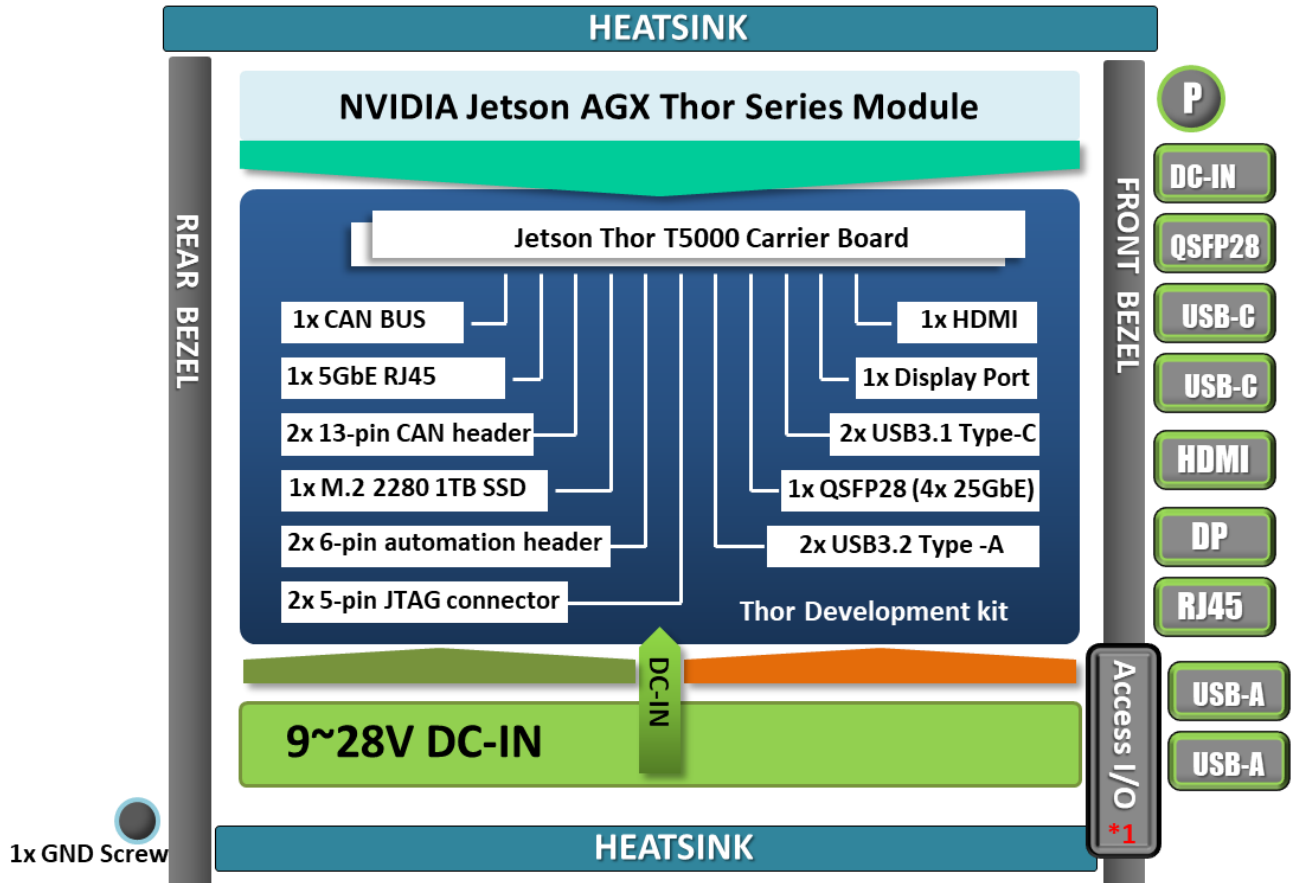
Designed & Manufactured Using ISO 9001/2000 Certified Quality Program.
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Operating Temp.	-20 to 60°C
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Storage Temp.	-40 to 85°C
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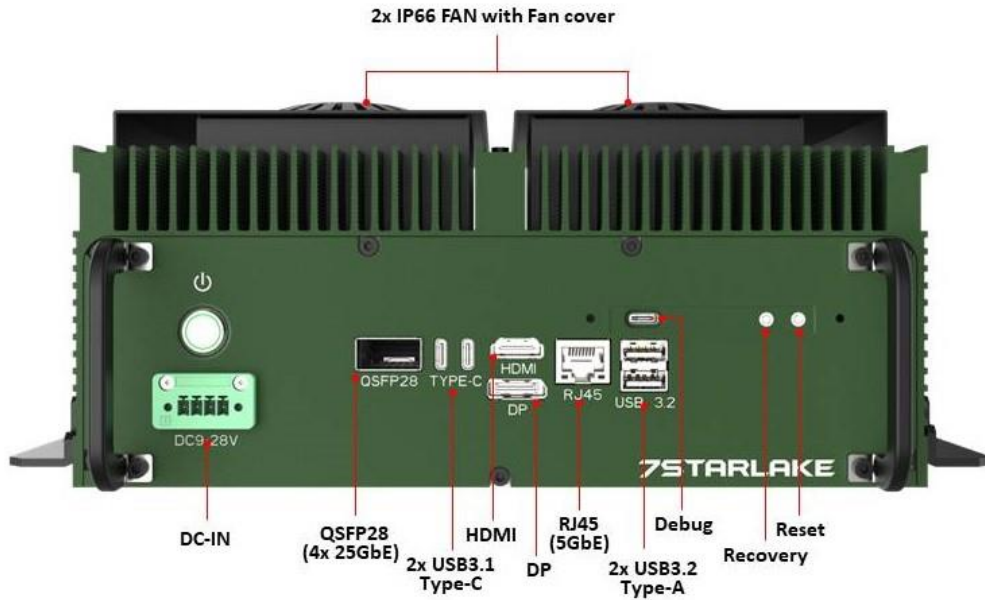
Relative Humidity	5% to 95%, Non-Condensing.
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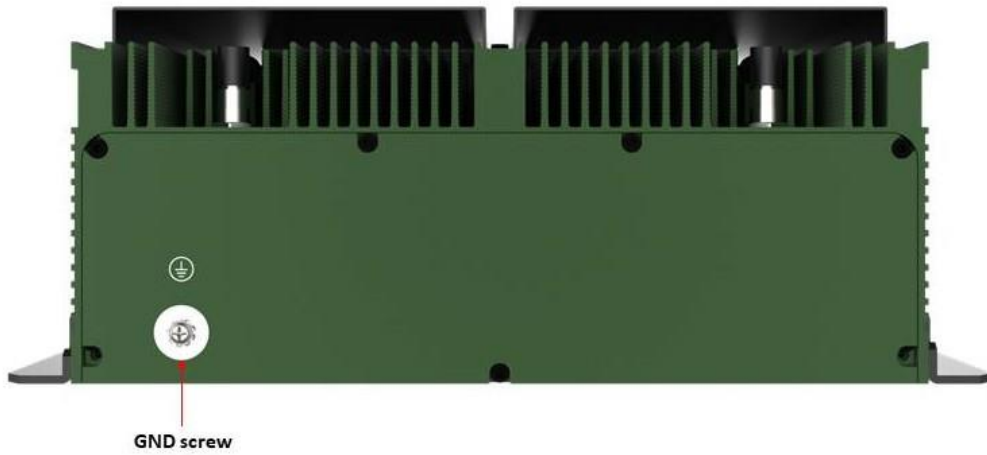
# Block Diagram



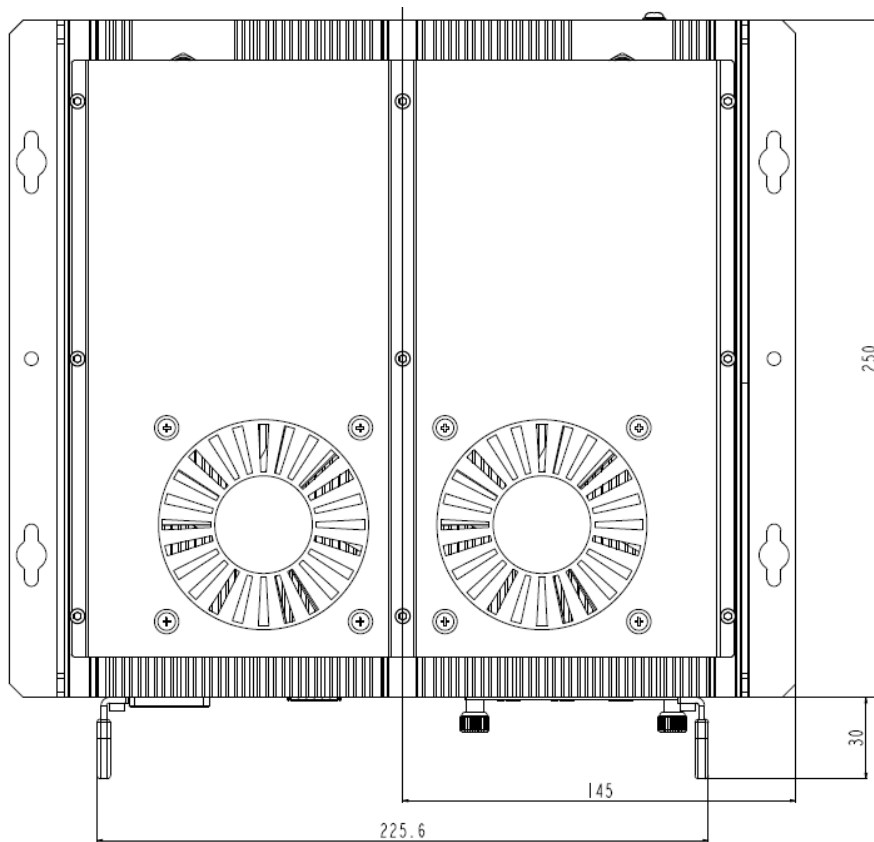
\*1: 1x Debug, Recovery, Reset

# Appearance





## Dimension



This datasheet is for marketing purposes only and does not constitute a warranty. All specifications, dimensions, and data are subject to change without notice. For the latest specifications and updates, please contact your 7STARLAKE representative.