



EC-ThorT5000

| 2070TFLOPS AI Computer

V1.0 2025-10-23

T-CHIP INTELLIGENCE TECHNOLOGY



Product features



NVIDIA high-performance edge computing modules

Equipped with the NVIDIA Jetson Thor series Jetson T5000 module, featuring a 14-core CPU and a 2560-core NVIDIA Blackwell architecture GPU with 96 Tensor Cores, the CPU clocking up to 2.6GHz, delivering even more powerful AI performance.



2070 TFLOPS ultra-high computing power

Can run mainstream modern AI models, such as the ROS robot model, to achieve larger and more complex deep neural networks for object recognition, object detection and tracking, speech recognition, and other visual development functions.



The private deployment of large models

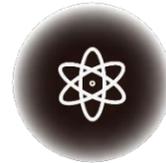
Large language models: Support private deployment of large-scale language models such as Deepseek-R1 series, Gemma series, Llama series, ChatGLM series, Qwen series, Phi series, etc.
Vision models: Support EfficientViT, NanoOWL, NanoSAM, SAM and TAM.
AI painting: Supports the private deployment of Flux, Stable Diffusion, and Stable Diffusion XL image generation models.



Multiple deep learning frameworks

Support Ollama local large model deployment framework, ComfyUI graphical deployment framework, and various deep learning frameworks accelerated by cuDNN, including PaddlePaddle, PyTorch, TensorFlow, MATLAB, MxNet and Keras.

Product features



Supports JetPack 7 with SBSA architecture design

JetPack 7 aligns Jetson software with the Server Base System Architecture (SBSA), ensuring Jetson Thor complies with industry ARM server standards. The SBSA standardizes critical hardware and firmware interfaces, delivering stronger operating system support, simpler software porting, and seamless enterprise integration. Building on this, Jetson Thor enables unified installation of CUDA 13.0 across all Arm targets, simplifying the development process, reducing fragmentation, and ensuring consistency from server systems to Jetson Thor.



Up to 92 channels of 1080P H.265 video decoding

It supports 4-channel 8K@30fps H.265 or 92-channel 1080P@30fps video decoding, and 6-channel 4K@60fps H.265 or 50-channel 1080P@30fps H.265 video encoding to meet the needs of various AI application scenarios.



Strong network communication capabilities

Equipped with 4×10G Ethernet ports, 4×Gigabit Ethernet ports, and a GPS module, it also supports dual-band WiFi6, 5G, and 4G function expansion, meeting the network connection requirements of multiple scenarios.



Abundant expansion interfaces

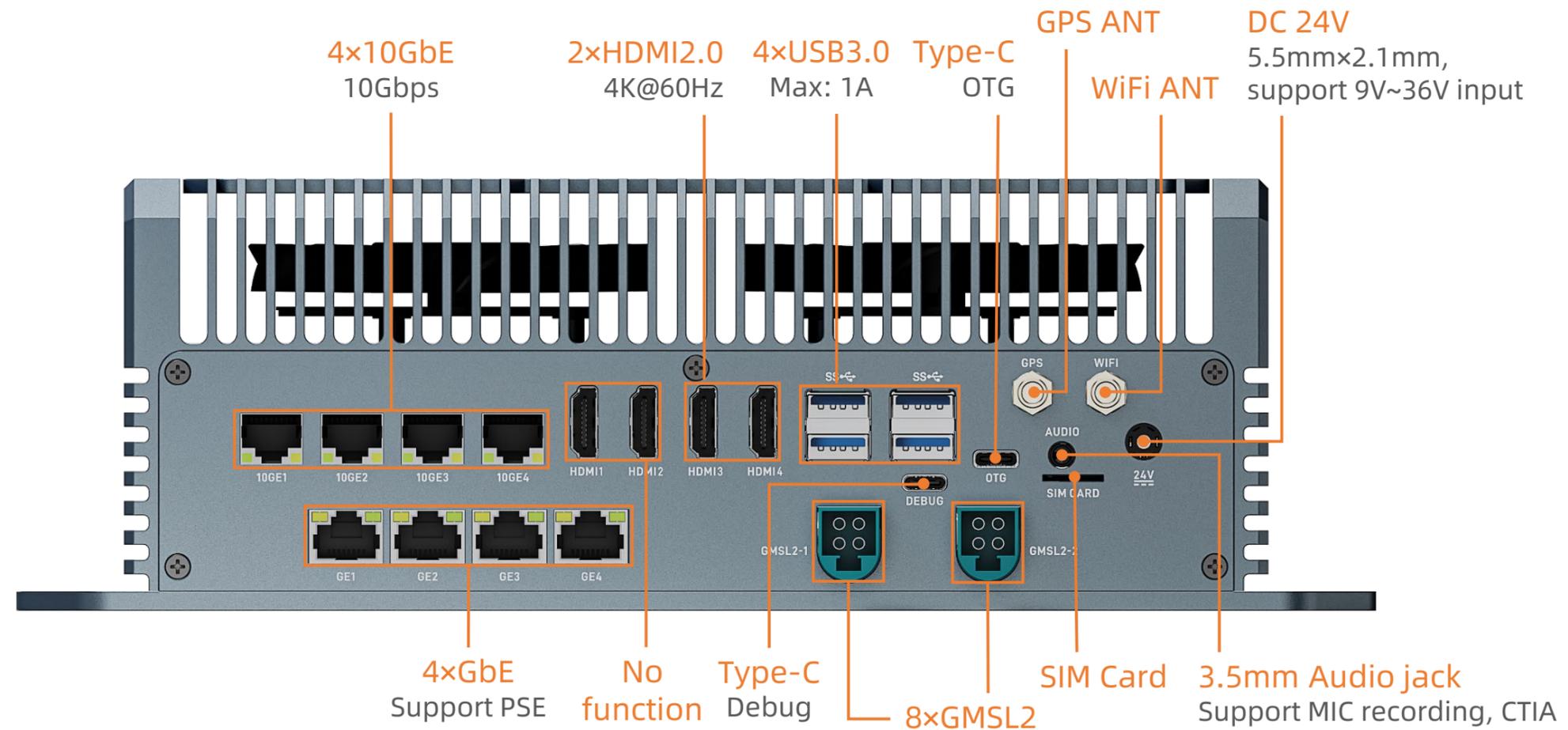
Equipped with GMSL2, HDMI, USB3.0, Type-C, 5G antenna, WiFi antenna, GPS antenna, 3.5mm audio jack and other interfaces, convenient for connecting various external devices.

Specifications

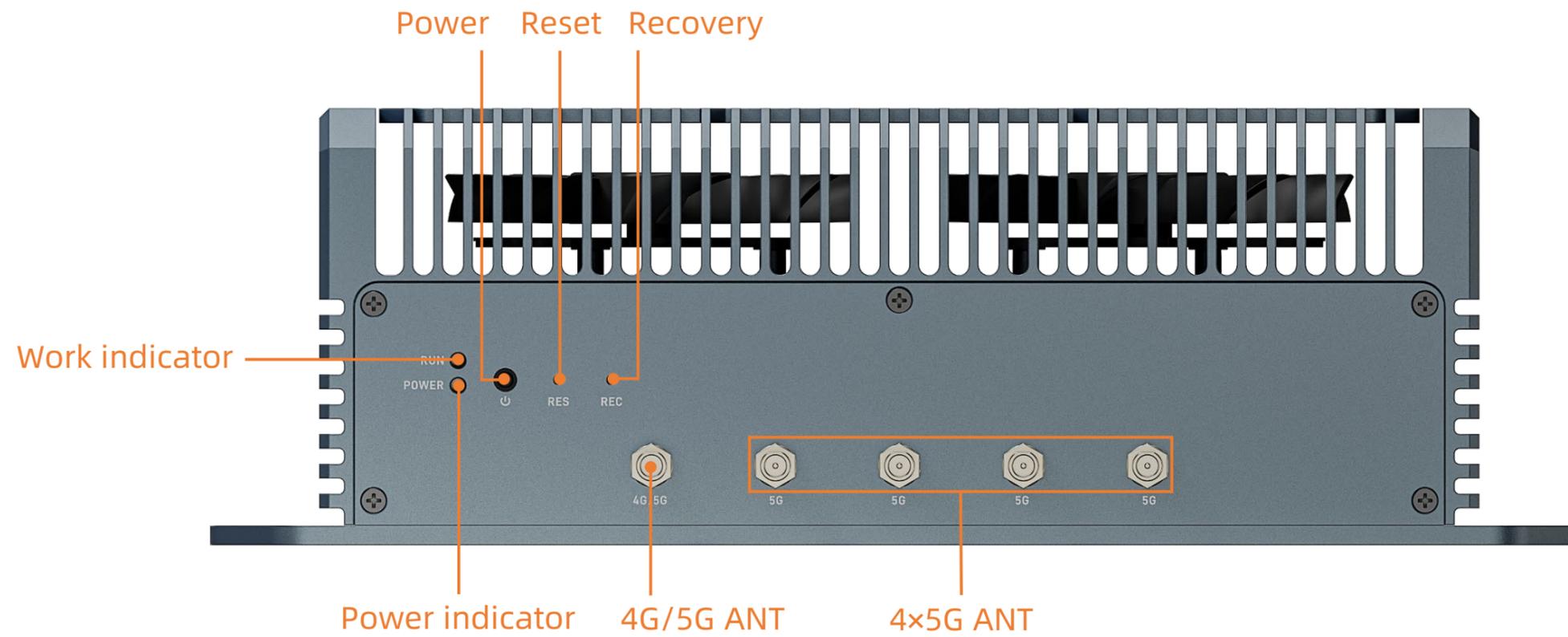


Specifications		
Basic Specifications	SOC	NVIDIA Jetson Thor series Jetson T5000 (original module)
	CPU	14-core 64-bit ARM Neoverse-V3AE processor with a frequency of up to 2.6GHz
	AI performance	2070 TFLOPS (FP4-Sparse)
	GPU	2560-core NVIDIA Blackwell architecture GPU with 96 fifth-gen Tensor Cores, multi-Instance GPU (MIG) with 10 TPCs
	Video encoding	H.265: 6x4K60, 12x4K30, 24x1080p60, 50x1080p30 H.264: 6x4K60, 48x1080p30
	Video decoding	H.265: 4x8K30, 10x4K60, 22x4K30, 46x1080p60, 92x1080p30 H.264: 4x4K60, 82x1080p30
	Memory	128GB LPDDR5X, 273GB/s
	Storage expansion	2 x M.2 M-KEY (Expandable PCIe NVMe 2280 SSD, inside the computer)
	Power	DC 24V (5.5 x 2.1mm, support 9V~36V wide voltage input)
	Size	277.95mm x 136.09mm x 88.0mm
	Environment	Operating Temperature: -20°C ~ 60°C, Storage Temperature: -20°C ~ 70°C, Storage Humidity: 10% ~ 90%RH (non-condensing)
Software Support	OS	Jetson systems based on Ubuntu 24.04 provide a complete desktop Linux environment with graphics acceleration and support for libraries such as NVIDIA CUDA, TensorRT, CuDNN, and more.
	Large model	Robot model: - ROS robot model is supported. Large language models: - Support the privatization deployment of ultra-large-scale parametric models under the Transformer architecture, such as Deepseek-R1 series, Gemma series, Llama series, ChatGLM series, Qwen series, Phi series and other large language models. Large visual models: - Support the privatization deployment of large visual models such as EfficientViT, NanoOWL, NanoSAM, SAM and TAM. AI Painting: - Supports the private deployment of Flux, Stable Diffusion, and Stable Diffusion XL image generation models.
	Traditional network architecture	Support Ollama local large model deployment framework, which can be used for natural language processing, code generation, and assistance scenarios. Support ComfyUI graphical deployment framework, which can be used for scenarios such as image restoration, image style conversion, and image synthesis. Supports multiple deep learning frameworks accelerated by cuDNN, including PaddlePaddle, PyTorch, TensorFlow, MATLAB, MXNet and Keras. Supports custom operator development. Supports Docker containerization technology, which can be easily used for image deployment.
	AI software stack	The NVIDIA Jetson Thor series delivers powerful AI compute power, massive unified memory, and a comprehensive software stack to power the latest generative AI applications. It enables fast inference on any generative AI model powered by the Transformer architecture, enabling superior edge performance on MLPerf.
Interface Specifications	Internet	Ethernet: 4 x 10G Ethernet (RJ45), 4 x Gigabit Ethernet (RJ45, support PSE) WiFi: Expand WiFi/Bluetooth module via M.2 E-KEY (2230), supports 2.4GHz/5GHz dual-band WiFi6 (802.11a/b/g/n/ac/ax) and Bluetooth 5.2 4G: Expanding 4G LTE through Mini PCIe 5G: Expanding 5G through M.2 B-KEY
	GPS	Support GPS positioning, real-time positioning, tracking, tracking, and time calibration of field devices (synchronized with UTC)
	Video input	8 x GMSL2 (Input via two 4Pin Mini FAKRA interfaces)
	Video output	2 x HDMI2.0 (4K@60Hz)
	Audio	1 x 3.5mm Audio jack (Support MIC recording, American standard CTIA)
	USB	4 x USB3.0 (Max: 1A), 1 x Type-C (USB3.2 OTG), 1 x Type-C (Debug)
	Antenna	4 x 5G antenna, 1 x 4G/5G antenna, 1 x GPS antenna, 1 x WiFi antenna
	Button	1 x Reset, 1 x Recovery, 1 x Power
Others	1 x SIM Card	

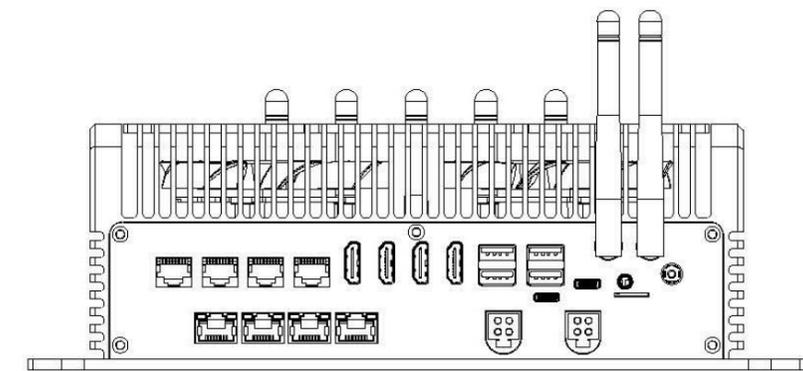
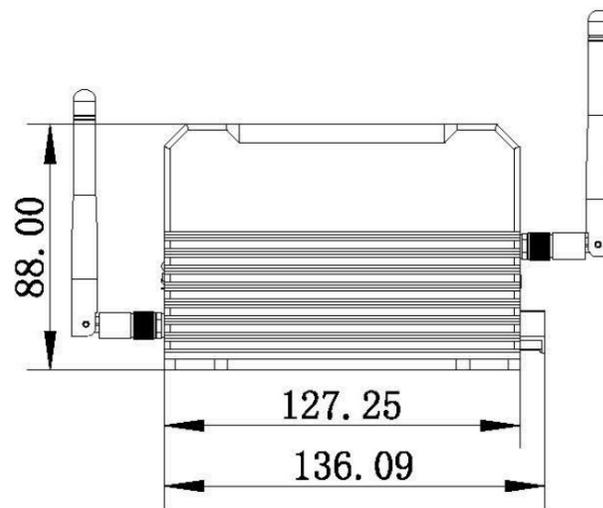
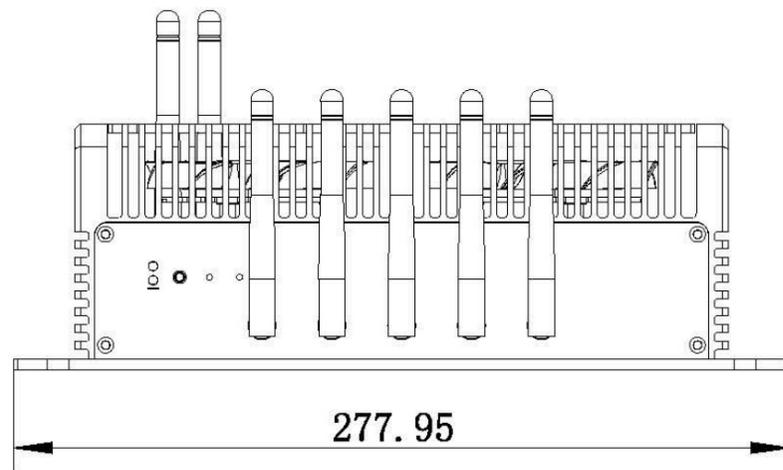
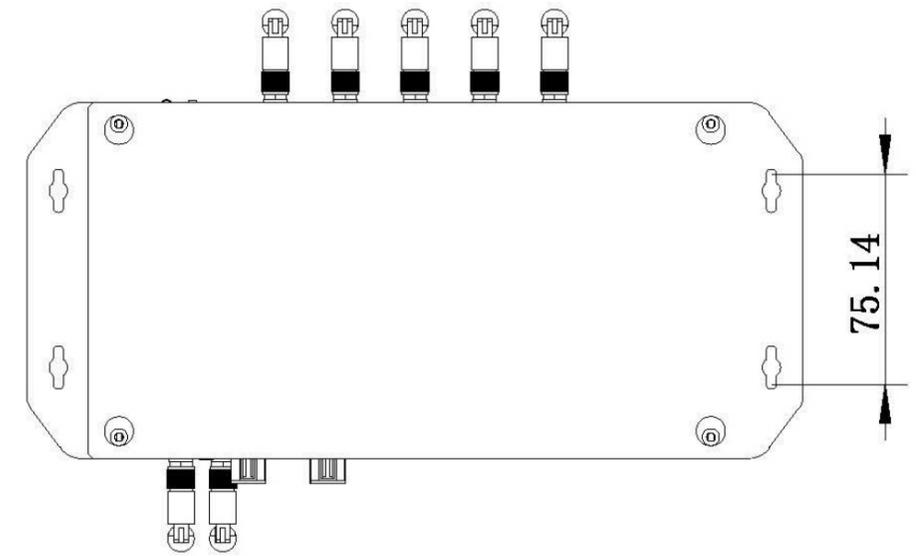
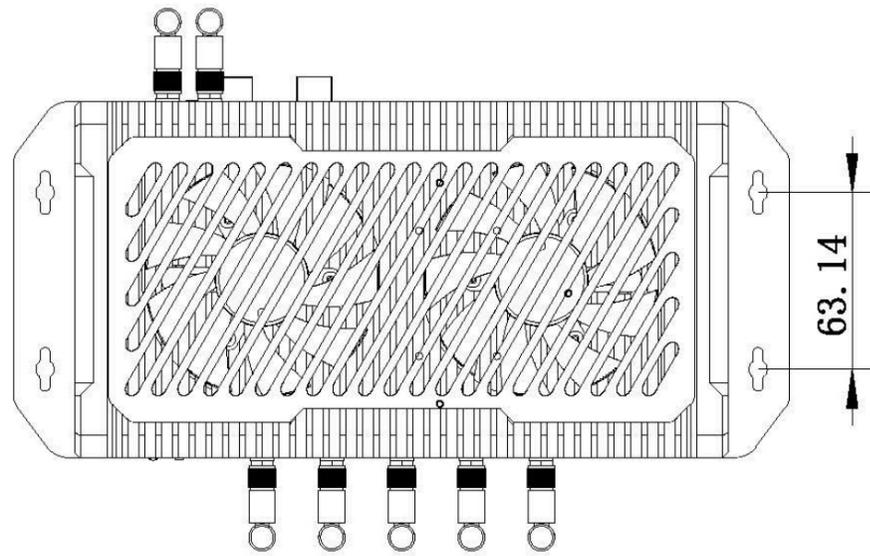
Interface description



Interface description



Dimension





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