

CSB1-N4AGXOrin

4-node 1100T Computing Power Server



V1.0 2025-10-28

T-CHIP INTELLIGENCE TECHNOLOGY

Product features







4 computing nodes, 1100T powerful computing power

The server can be configured with up to 4 NVIDIA Jetson AGX Orin (64GB) computing nodes, which can provide up to 1100TOPS (INT8) computing power, and the number of computing nodes can be optional, providing strong computing power guarantee for artificial intelligence and deep learning.



8K video decoding, 4K video encoding

Supports up to 1 channel of 8K@30fps, 3 channels of 4K@60fps, 11 channels of 1080P@60fps video decoding, as well as 2 channels of 4K@60fps and 8 channels of 1080P@60fps video encoding, meeting the requirements of various AI application scenarios.



Supports the private deployment of large language models

It supports the privatization and deployment of large models such as mainstream large language models (Gemma, Llama, Qwen, etc.), large visual models (EfficientVIT, SAM, TAM, etc.), and image generation models (Flux, Stable Diffusion, etc.).



Supports a variety of deep learning frameworks

Supports the Ollama local large model deployment framework and ComfyUI graphical deployment framework; supports multiple deep learning frameworks accelerated by cuDNN, including PaddlePaddle, PyTorch, TensorFlow, MATLAB, MXNet, and Keras.

Product features







Supports 3.5-inch SATA3.0 HDD/SSD

Configure a 3.5-inch (or 2.5-inch) hard drive bay and support SATA3.0 HDD/SSD hard drive expansion, allowing the device to easily expand to terabytes of ultra-large capacity, and support hot-swappable quick replacement to meet one-stop deployment needs such as file management, data backup, and video surveillance.



Four 10G SFP+ network ports

It is equipped with four 10G SFP+ network interfaces, independent BMC management network interfaces, and secure and high-speed network communication methods to ensure the security and reliability of network communication and meet the requirements of different application scenarios such as high bandwidth.



Standard 1U rack server size

The standard 1U rack server chassis design is flexible in deployment, perfectly matches most types of cabinets in the data center, and has a rugged structure. It is equipped with 6 high-efficiency cooling fans and supports stable work for a long time 7×24 hours.



Supporting BMC management system

Equipped with BMC intelligent management system, it can easily complete real-time monitoring, software configuration, hardware management, troubleshooting, system upgrade, remote operation and maintenance, and can provide secondary development.

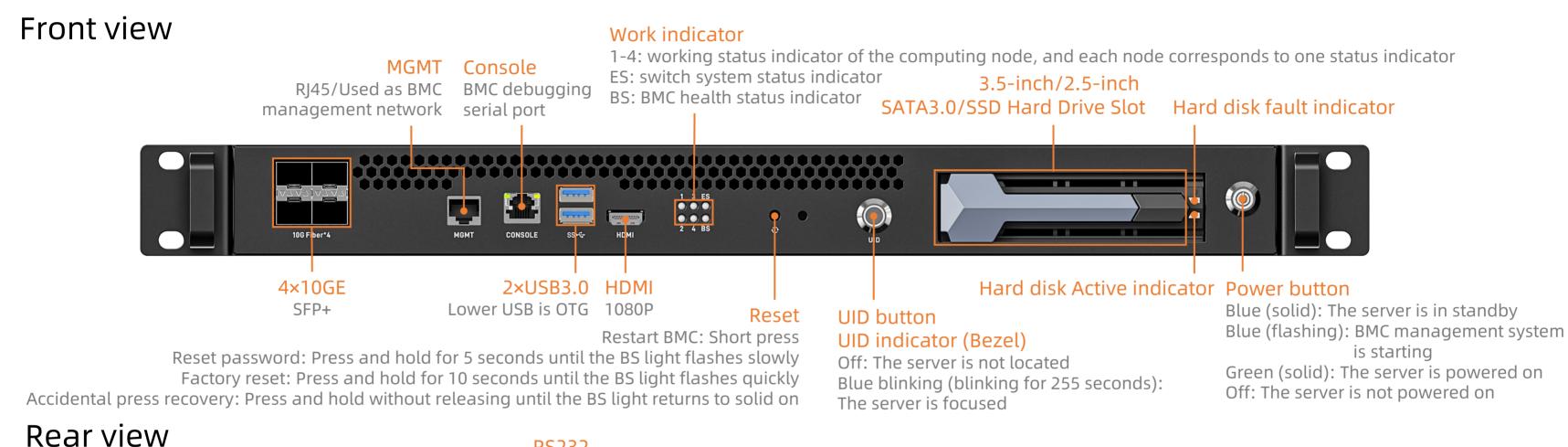
Specifications

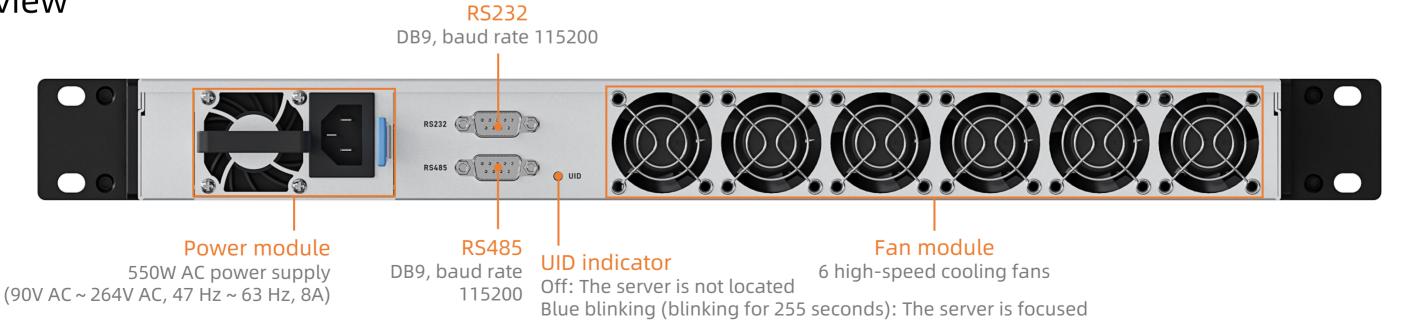


Specifications		
Technical Specifications	Server form	1U rack-mounted computing power server
	Architecture	ARM architecture
	Number of nodes	4 distributed computing nodes + 1 control node
	Compute nodes	12-core 64-bit processor NVIDIA Jetson AGX Orin (64GB), main frequency up to 2.2GHz
	Video encoding	H.265: 2×4K@60fps, 4×4K@30fps, 8×1080P@60fps, 16×1080P@30fps
	Video decoding	H.265: 1×8K@30fps, 3×4K@60fps, 7×4K@30fps, 11×1080P@60fps, 22×1080P@30fps
	Control nodes	Octa-core 64-bit processor RK3588, main frequency up to 2.4GHz, the highest computing power is 6TOPS
	Al computing power	1100TOPS (275T × 4, INT8)
	RAM	64GB LPDDR5 × 4
	Storage	64GB eMMC × 4
	Storage expansion	3.5-inch/2.5-inch SATA3.0 SSD hard drive slot \times 1 (Supports hot swapping; BMC can directly operate the hard drive, and computing child nodes can indirectly access the hard drive through the network sharing method provided by BMC)
	Power	550W AC power supply (Input: 90V AC~264V AC, 47 Hz~63 Hz, 8A; Hot swappable not supported)
	Power consumption	Normal: 135W, Max: 400W
	Fan module	6 high-speed cooling fans
Physical Specifications	Size	494.0mm(L) × 469.3mm(W) × 44.4mm(H)
	Installation requirements	IEC 297 Universal Cabinet Installation: 19 inches wide and 800 mm deep and above Retractable slideway installation: The distance between the front and rear holes of the cabinet is 543.5mm~848.5mm
	Full weight	Server net weight: 8.8kg, total weight with packaging: 11kg
	Environment	Operating Temperature: 0°C ~ 40°C, Storage Temperature: -40°C ~ 60°C, Operating Humidity: 5% ~ 80%RH (non-condensing)
Software Specifications	ВМС	The BMC management system is integrated with the web-based management interface, supporting Redfish, VNC, NTP, monitoring advanced and virtual media, and the BMC management system can be redeveloped.
	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.
	Visual large model	Support the privatization deployment of large visual models such as EfficientVIT, NanoOWL, NanoSAM, SAM and TAM.
	Al Painting	Supports the private deployment of Flux, Stable Diffusion, and Stable Diffusion XL image generation models.
	Deep learning	Support Ollama local large model deployment framework and ComfyUI graphical deployment framework. Support for a variety of deep learning frameworks supported by cuDNN acceleration, including PaddlePaddle, PyTorch, TensorFlow, MATLAB, MXNet, Keras. Support custom operator development and Docker containerization management technology.
Interface Specifications	Internet	4 × 10G Ethernet (SFP+), 1 × Gigabit Ethernet (RJ45, MGMT is used as BMC management network)
	Console	1 × Console (RJ45, BMC debug serial port, baud rate 115200)
	Display	1 × HDMI (maximum resolution 1080P, BMC management display)
	USB	2 × USB3.0 (The lower USB is USB3.0 OTG, and the BMC can be upgraded OTG by using a USB flash drive)
	Button	1 × Reset, 1 × UID, 1 × Power
	Other interfaces	1 × RS232 (DB9, baud rate 115200),1 × RS485 (DB9, baud rate 115200)



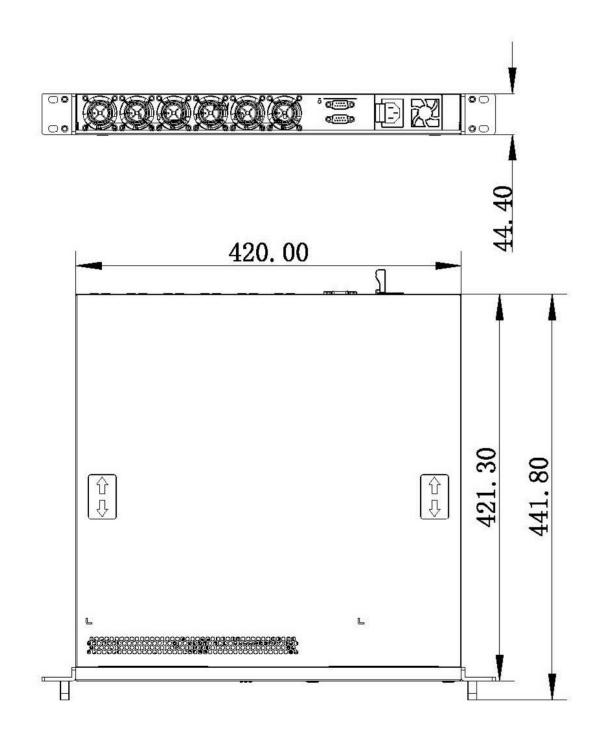
Interface description

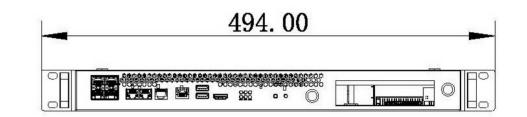


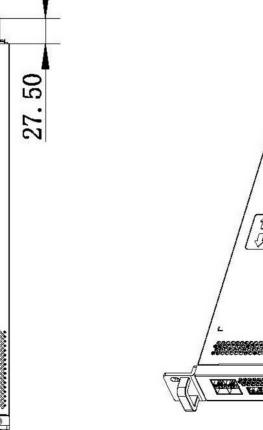


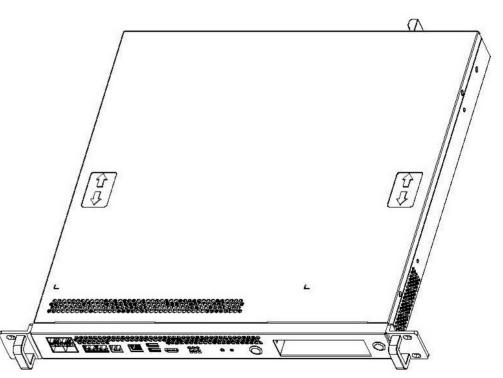
















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