



GS1-N2

| Gateway Server

V1.0 2025-3-21

T-CHIP INTELLIGENCE TECHNOLOGY



Product features



High-performance dual-core board module design

It adopts dual-core heterogeneous architecture. One core is responsible for video recording, and the other is for AI processing. It supports real-time inference of AI models. The two core modules work independently, optimizing resource allocation and enabling parallel processing of multiple tasks, which significantly improves the system performance.



Support H.265 video codec, saving bandwidth and storage space

It can support up to 32-channel 8K@60fps H.265 video decoding. Under normal network conditions, H.265 video transmission is clearer and smoother. With the same resolution, the storage volume is smaller, which saves storage space and reduces procurement costs.



Dual SAS/SATA hard drive bays for huge storage space

It has two 3.5-inch/2.5-inch SAS/SATA hard drive bays and supports SATA3.0 HDD/SSD hard disk or PCIe NVMe SSD expansion, enabling the device to easily expand to terabyte-level super capacity.



Equipped with 8 POE Gigabit Ethernet ports

There are 8 Gigabit Ethernet interfaces, support POE/PSE power supply, strong compatibility, can be connected to numerous mainstream manufacturers' network cameras that comply with ONVIF and RTSP standards.

Product features



Supports custom event detection and alarm reporting

Supports custom event detection, such as motion detection, area intrusion detection, out-of-bounds detection, object recognition, video occlusion detection, etc., and automatically alarms when abnormalities are detected.



Multi-screen split preview and instant video playback

Support 1/2/4/8/9/16/32 screen real-time preview, video retrieval and playback, can be retrieved by time point/camera channel/recording type, support 8/16 screen synchronous playback, double-speed playback, multi-screen playback, event point playback, etc.



Standard 1U rack server size

The standard 1U rack server chassis design fully matches most types of cabinets in the data center, improving space utilization and making it easy to manage and maintain.



Wide range of application scenarios

It is widely used in enterprise security, traffic management, public safety, environmental protection, smart city, home security, home storage and other types of products and fields.

Specifications



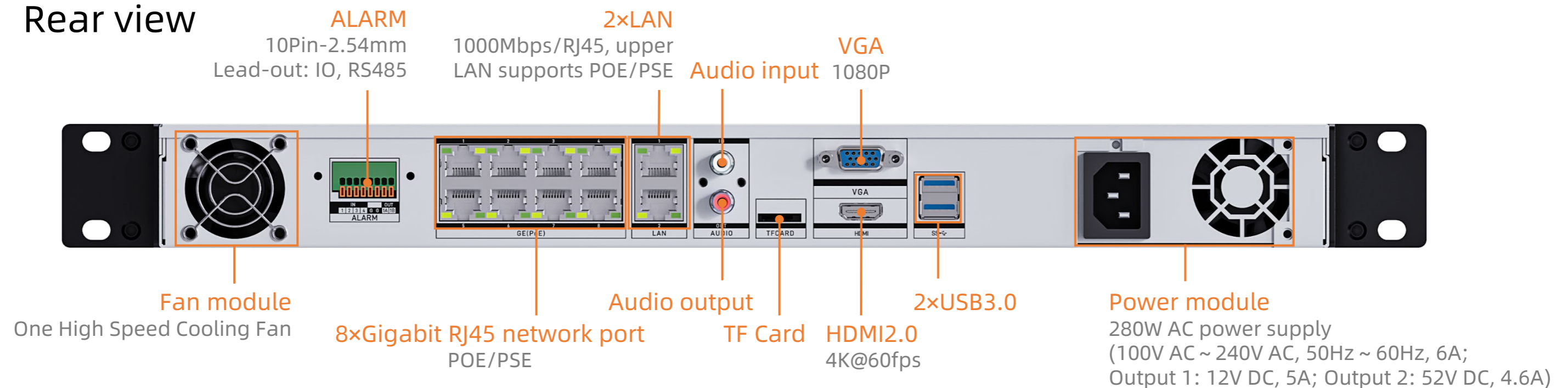
Specifications							
Basic Specifications	Product type	Gateway Server					
	Core module	Type	Optional mods	Memory	AI perf.	Video decoding	Video encoding
		Main mod	Core-3576JD4	LPDDR4/LPDDR4x (2/4/8/16GB optional)	6T	8K@30fps H.265/VP9/AVS2/AV1 4K@120fps H.265/VP9/AVS2/AV1 4K@60fps H.264/AVC	4K@60fps H.265/H.264
		Sub-mod (Optional)	Jetson Orin Nano	LPDDR5 (8GB)	67T	1×4K60, 2×4K30, 5×1080p60 H.265	1080p30 H.265
			Jetson Orin NX	LPDDR5 (16GB)	157T	1×8K30, 2×4K60, 9×1080p60 H.265	1×4K60, 3×4K30, 6×1080p60 H.265
	Storage	eMMC (16GB/32GB/64GB/128GB/256GB optional)					
	Storage expansion	2 × SATA3.0 (Expansion of 3.5" or 2.5" SSD, multiplexed with PCIe) 2 × M.2 M-KEY (Extended PCIe NVMe SSD, support 2242/2260/2280 specifications, multiplexed with SATA3.0) * Due to interface reuse, you can choose one of the following functions: 2 × SATA SSD, 2 × M.2 PCIe SSD, 1 × SATA SSD + 1 × M.2 PCIe WiFi, 1 × PCIe SSD + 1 × M.2 PCIe WiFi 1 × M.2 M-KEY (Expandable PCIe SSD, support 2242/2260/2280 specifications, this M.2 M-KEY port is only available when the sub-mod is selected) 1 × TF Card					
	Power	280W AC power supply (Input: 100V AC ~ 240V AC, 50Hz ~ 60Hz, 6A; Output 1: 12V DC, 5A; Output 2: 52V DC, 4.6A; Does not support hot-swapping)					
	Size	Standard 1U Server Size: 490.0mm (L) × 368.0mm (W) × 44.4mm (H)					
	Environment	Operating Temperature: 0°C ~ 45°C, Storage Temperature: -40°C ~ 60°C, Operating Humidity: 5% ~ 90%RH (non-condensing)					
Video Specifications	Video input	Supports up to 32 channels 1080P@30fps H.265/H.264 video inputs					
	Video output	1 × VGA (Maximum resolution 1080P), 1 × HDMI2.0 (4K@60fps)					
	Video preview	It supports up to 32 channels of high-definition network video real-time preview, AI analysis, storage, and playback Support multi-view, real-time preview of 1/2/4/8/9/16/32 screen, and synchronous playback of 8/16 screen					
	Audio	1 × Audio input, 1 × Audio output					
Interface Specifications	Internet	8 × Gigabit Ethernet (RJ45, support POE/PSE), 2 × LAN (RJ45/1000Mbps, upper LAN supports POE/PSE) Support 2.4GHz/5GHz dual-band WiFi (extended via M.2 E-KEY, multiplexed with SATA3.0) Support IPv6, UPnP (Plug and Play), NTP (Network Timing), SADP (Automatic IP Address Search), DHCP (Automatic IP Address Acquisition) network protocols					
	USB	3 × USB3.0					
	Indicator	1 × Power indicator, 1 × Hard disk indicator, 1 × Network status indicator					
	Others	1 × ALARM (10Pin-2.54mm, Lead-out: RS485, IO)					

Interface description

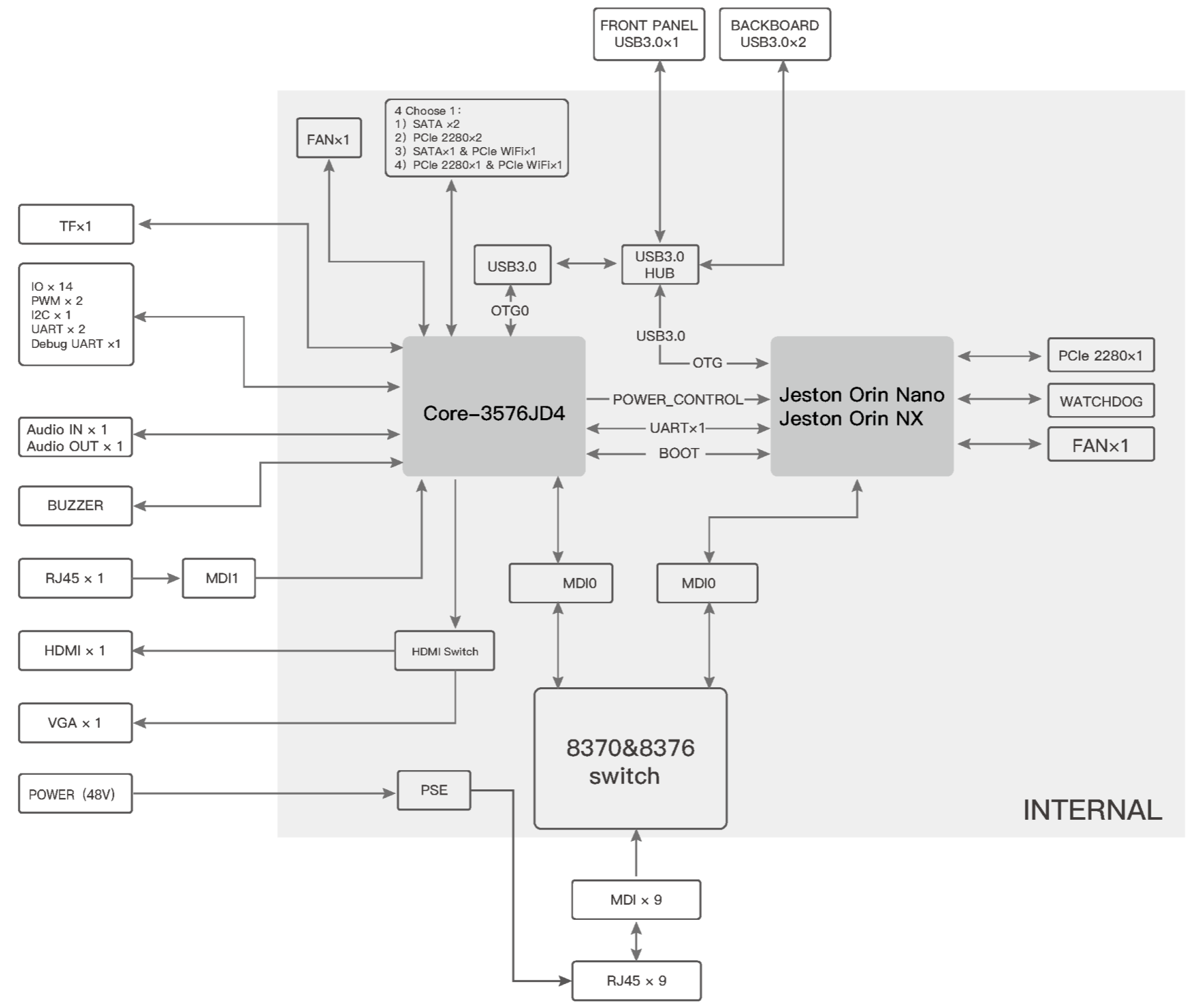
Front view



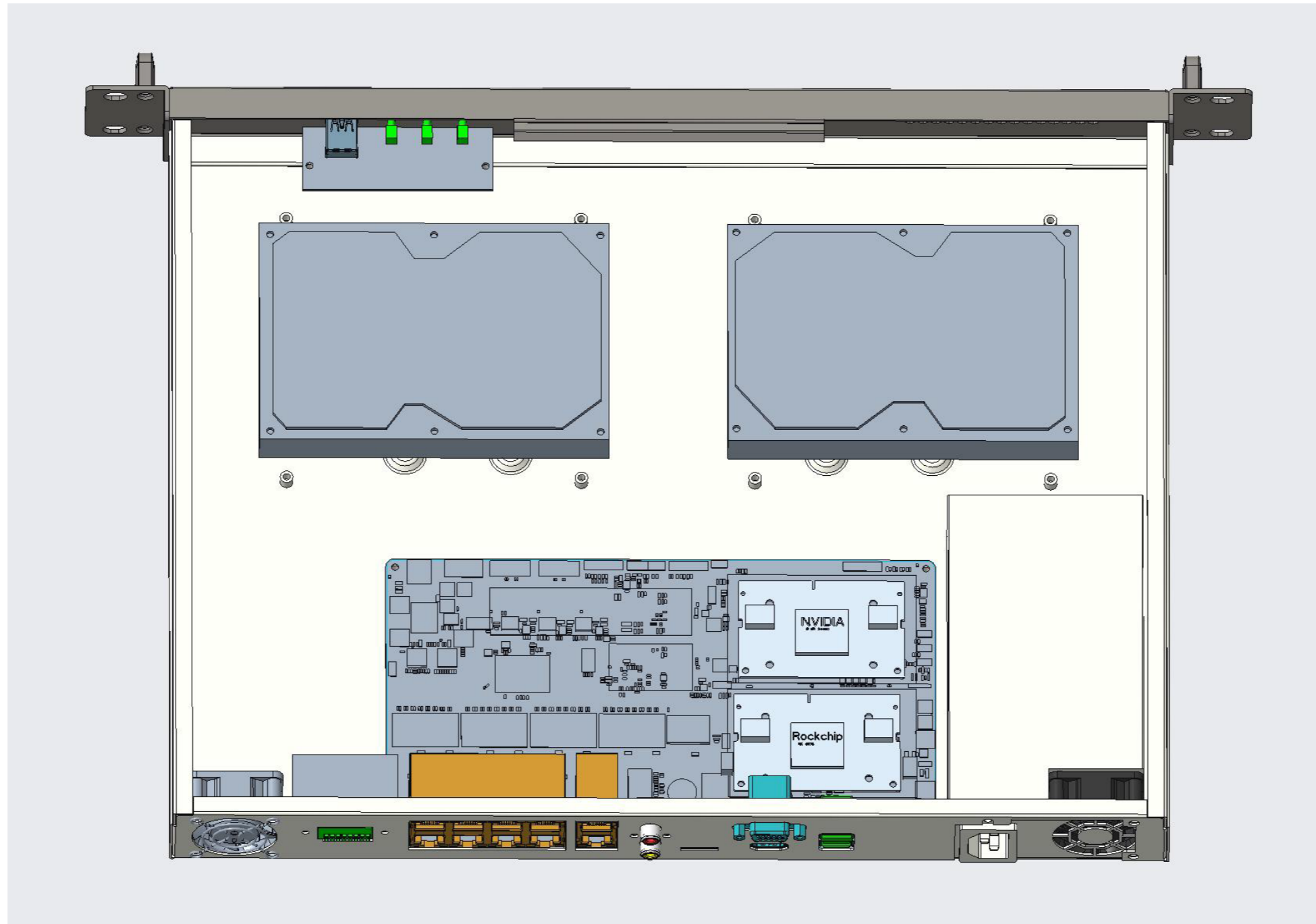
Rear view



Topology diagram



Structural diagram



Dimension





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