CSR1-N10R3399

ARM Cluster servers

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T-CHIP INTELLIGENCE TECHNOLOGY

Product features

Multi-core processors and super computing power

Supporting up to 11pcs RK3399 six-core 64-bit core board, with 1.8GHz processor performance of up to 66 cores. JD4 core boards with NPU (AI accelerator) are optional, with computing power up to 2.8 Tops, which can be combined into an AI cluster server with super high computing power.

Multi-channel video codec

Its distributed cloud architecture supports access to multi-channel cameras. As each core board can encode and decode 10 channels simultaneously, it enables a maximum of more than 100 channels. It supports H265/H264, MPEG-1/2/4 and other video protocols for unified monitoring, management and storage of video footage, enabling a diversified layout.

Virtual Desktop

It adopts desktop virtualization technology to provide multiple cloud desktops for centralized data management to ensure data security, and build an intelligent information operation environment, suitable for enterprise offices, research and development centers, cloud classrooms for learning, hospital outpatient services and other scenarios.

Product features

Standard 1U Rack-mounted Server

Equipped with a standard 1U rack-mounted server case, which has a galvanized panel with black frosted surface of solid structure, built-in multiple heat dissipation fans of 10000 RPM, which enables highly efficient heat dissipation for long-time stable operation.

Integrated BMC management system

Supporting BMC (Baseboard Management Controller) management system, which can manage the running status of the server locally and remotely, supports a visual console interface, and enables easy configuration management, hardware management and troubleshooting of the server.

Application

It is widely applied in cloud computing, cloud gaming, multiple applications (multiple network broad casts, multiple mobile games), multi-channel video encoding and decoding, cloud storage, block chain, virtual desktop and other scenarios.
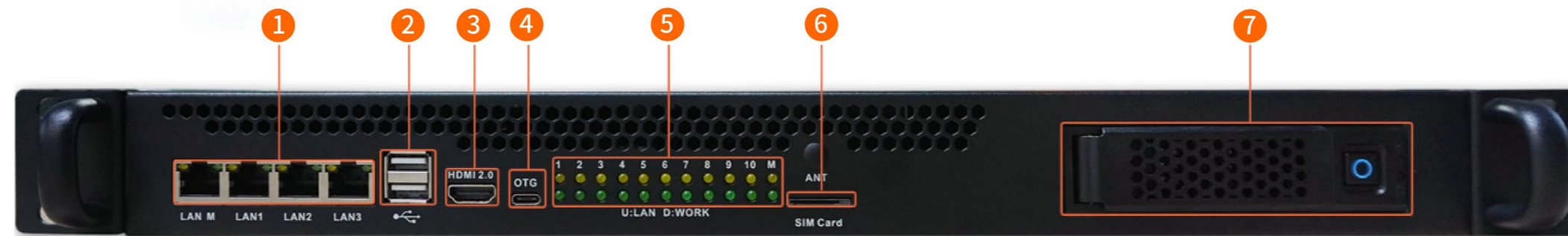
Specifications

	Specification
Product name	1U Rack Cluster Server
Product model	CSR1-N10R3399
Architecture	ARM architecture
Number of cores	Up to 11 processor core boards can be configured (a total of 66 cores)

Core board	RK3399 (AI) Core Board:
	  Hexa-core 64 bit (dual core A72+quad core A53) processor, with a maximum main frequency of 1.8GHz
	  Integrated with Mali-T860 MP4 graphics processor GPU, supporting 4K/1080P H.265/H.264 video hardware encoding and decoding
	  On board NPU, with a maximum computing power of 2.8 Tops (optional)
	RK3328 Core Board:
	  Quad-core 64 bit A53 processor, with a maximum frequency of 1.5GHz
	  Integrated Mali-450 MP2 graphics processor GPU, supporting 4K/1080P H.265/H.264 video hardware encoding and decoding
	RK1808 (AI) Core Board:
	  Dual-core 64 bit A35 processor, with a maximum main frequency of 1.6GHz
	  Integrated NPU, with a maximum computing power of 3.0 Tops

RAM	DDR3/LPDDR3/LPDDR4 memory, each core board can be optionally equipped with 1GB/2GB/4GB (* Memory version can refer to the actual configuration of the core board)
Storage	EMMC built-in memory, each core board can be optionally equipped with 8GB/16GB/32GB/64GB/128GB capacity 3.5-inch hard drive, can be configured with 1 SATA/SSD hard drive (supports hot swapping)
BMC	Integrated BMC management system, providing a web-based management interface
Internet	1GE Gigabit RJ45 Ethernet ports (1 main core board Ethernet port, 3 regular Ethernet ports), 4G/LTE/5G network (optional)
Video	HDMI 2.0, up to 4K@60Hz (Main processor core board display)
USB	2 USB 2.0 HOST, 1 Type-C (processor core board debugging trial)
Light	11 network status indicator lights (yellow) 11 working status indicator lights (green)
Fan	5 high-speed cooling fans
Operating system	Android, Linux
Power	300W AC power supply (input: 100V AC~240V AC)
Size	Standard 1U rack mounted servers: 490mm x 390mm x 44.4mm
Weight	Server host: 5.8kg, total packaging weight: 7.2kg
Working environment	Working temperature: 0 ºC -50 ºC, Working humidity: 8% -95%RH (non-condensing)

Interface description

Front view

1 RJ45 Gigabit Ethernet	**4** OTG	**7** SATA HDD Interface
2 USB 2.0	**5** Pilot Lamp	
3 HDMI	**6** SIM Card	

Rear view

1 Power Module   **2** Fan Module

Dimension

44.4mm

390mm

490mm

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