RS720Q-E11-RS8U

Great Scalability and High Performance Computing (HPC) Multi-Node Server with Direct to Chip Liquid Cooling Solution

Form Factor 2U4N | CPU Number 2 | Memory Number 16

ASUS RS720Q-E11-RS8U is the ideal multi-node server powered by 5th Gen Intel® Xeon Scalable processors, with each node supporting up to 16 DIMM, two PCIe® 5.0 slot and two M.2, and a total of eight NVMe/SAS/SATA drives.

FEATURE

- Powered by dual-socket 5th Gen Intel Scalable processors with DDR4 Memory up to 5600MHz
- Multi-Node Server with Immersion Cooling Solution
- Two PCIe 5.0 x16 slot module per node
- 8 x 2.5” Hot-swap Drive Bays support 8 x NVMe
- 3000W 80 Plus® Titanium power supplies
- Onboard ASUS ASMB11-iKVM
- ASPEED AST2600 controller

5th Gen Intel Xeon Scalable processors

The RS720Q-E11-RS8U is built with the latest Intel® Xeon® Processor Scalable Family with 16 DDR5 Memory up to 5600MHz, and designed for the demand of high scalability, high density computing, and wide range of existing and emerging workloads.

Direct to Chip Liquid Cooling Solution

ASUS Direct to Chip Liquid cooling is another highly-effective solution from ASUS. This technique offers more advantages on PUE and encompasses higher-density servers. However, it also demands more space, and may require retooling of the data-center infrastructure. But Direct to Chip Liquid cooling can control temperatures more rapidly, efficiently and cost-effectively than traditional methods. For users of supercomputers in particular, immersion cooling is the preferred option.

PCIe 5.0 Ready

PCI Express® (PCIe®) 5.0 delivers 16 GT/s bandwidth, which is double the speed of PCIe 4.0, offering lower power consumption, better lane scalability and backwards compatibility.

Enhanced Security

PFR FPGA as the platform Root-of-Trust solution for firmware resiliency Trusted Platform Module 2.0 (TPM 2.0) to secure hardware through integrated cryptographic keys and offer regular firmware update for vulnerabilities.

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SPECIFICATION

Processor Support		2 x Socket P+ (LGA 4189) per Node 4th Gen Intel® Xeon® processor Scalable family 5th Gen Intel® Xeon® processor Scalable family (Air cool with EVAC up to 270W, with STD HSK up to 205W; with Liquid cool, up to 350W) UPI 11.2 GT/s
Core Logic		Intel® C741 PCH
Memory	**Total Slots**	16 (8-channel per CPU, 8 DIMM per CPU)
	Capacity	Maximum up to 4096GB per Node
	Memory Type	DDR5 5600/5200/4800/4400/4000 RDIMM/RDIMM 3DS (1DIMM per Channel) *Refer to Asus server AVL for the latest update
	Memory Size	64GB, 32GB, 16GB RDIMM 256GB, 128GB RDIMM 3DS * Refer to www.asus.com/support for more information
Expansion Slots	**Total PCI/PCI-X/PCI-E/PIKE Slots**	Per Node:
	Slot Type	2 x PCI-E x16 (Gen5 x16 link), HHHL (CPU1) 2 x M.2 PICe Gen4 x4 link or SATA (CPU1)
Disk Controller	**SATA Controller**	The Same as SAS Controller
	SAS Controller	Per Node: Broadcom SAS3008 (Support RAID 0, 1) - 2 x SAS 12Gb/s ports or - 2 x SATA 6Gb/s ports
	NVMe Controller	The Same as SAS Controller
Storage Bays	**I = internal A or S will be hot-swappable**	8 x 2.5" Hot-swap Storage Bays (NVMe Supported)
Networking	**LAN**	Per Node: 2 x Intel X710-AT2 Gigabit LAN Controller 1 x Management Port
Graphic	**VGA**	Aspeed AST2600 64MB
Front I/O Ports		N/A
Rear I/O Ports		Per Node: 2 x USB 3.1 Ports 1 x VGA Port 1 x RJ-45 GbE LAN Ports 1 x RJ-45 Management Port
Switch/LED		Per Node: Rear: 1 x Power Switch/LED 1 x Q-Code/Port 80 LED Front: 1 x Power Switch/LED 1 x Location Switch/LED 1 x Message LED 2 x LAN LED
OS Support		Please find the latest OS support from http://www.asus.com/
Management Solution	**Software**	ASUS Control Center (Classic)
	Out of Band Remote Management	On-Board ASM10-iKVM for KVM-over-IP
Dimension		800mm x 444mm x 88mm (2U) 31.5" x 17.48" x 3.46"
Net Weight Kg (CPU, DRAM & HDD not included)		35.5 Kg
Gross Weight Kg (CPU, DRAM & HDD not included, Packing included)		41.5 Kg
Power Supply (following different configuration by region)		1+1 Redundant 3000W 80 PLUS Titanium Power Supply Rating: 220-240 Vac, 15.5A (x2), 50-60Hz, Class I * 1+1 Redundant mode only supports CPUs under 205W
Environment		Operation temperature: 10℃ ~ 35℃ Non operation temperature: -40℃ ~ 70℃ Non operation humidity: 20% ~ 90% (Non condensing)