ASUS

RS720Q-E12-RS8U

Great scalability and high-performance computing (HPC)
Multi-nodes server with direct to chip liquid cooling solution

intel inside
Xeon

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

ASUS RS720Q-E12-RS8U is the ideal multi-node server powered by Intel® Xeon 6 processors, with each node supporting up to 16 DIMM, two PCIe® 5.0 slots and two M.2 slots plus a total of eight NVMe/SAS/SATA and eight SATA/SAS drives.

FEATURES

- Powered by dual-socket 6th Gen Intel Scalable processors, with DDR5 RDIMM up to 6400MHz 1DPC or MRDIMM Gen1 up to 8000MGz, 1DPC
- Multi-node server with direct-to-chip liquid cooling solution
- Two PCIe 5.0 x16 slot module and one OCP 3.0 x 16 per node
- 3600W 80 PLUS® Titanium power supplies
- Onboard ASUS ASMB12-iKVM
- ASPEED AST2600 controller

Xeon® 6 processors

RS720Q-E12-RS8U is built with the Xeon® 6 processors, with per node 16 DDR5 RDIMM up to 6400MTs (1DPC) or MRDIMM Gen1 up to 8000MTs (1DPC), designed for the demand of high scalability, high-density computing, and a wide range of existing and emerging workloads.

Direct-to-chip liquid cooling solution

Direct-to-chip liquid (D2C) cooling is another highly-effective solution from ASUS. This technique offers more advantages on PUE and encompasses higher-density servers. D2C demands more space and may require retooling of the data-center infrastructure, but can control temperatures more rapidly, efficiently and cost-effectively than traditional methods.

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

RS720Q-E12-RS8U features EPFR FPGA as the platform root-of-trust solution for firmware resilience - Trusted Platform Module 2.0 (TPM 2.0) to secure hardware through integrated cryptographic keys, and benefits from regular firmware updates for vulnerabilities – elevating security to enterprise-grade heights.

ASUS

RS720Q-E12-RS8U

SPECIFICATION

Processor Support		2 x per node Intel Xeon 6 processors (formerly codenamed Sierra Forest and Granite Rapids) Intel Xeon 6700 series processors with E-cores Upcoming Intel Xeon 6 Processors with P-Cores (with Liquid cool up to 350W)
Core Logic		CPU self-boot only (NO PCH)
Memory	**Total Slots**	Per Node: 16 (8-channel per CPU, 8 DIMM per CPU) DDR5 RDIMM up to 6400MTs (1DIMM per Channel) and MRDIMM Gen1 up to 8000 MTs (1DIMM per Channel)
Expansion Slots	**Total PCI/PCI-X/PCI-E/PIKE Slots**	Per Node:
	Slot Type	1 x PCIe Gen5 x16 link (HH, HL) 1 x PCIe Gen5 x8 link (Reserve for D2C) 1 x OCP 3.0 2 x M.2 PICe Gen5 x4 link, up to 22110
Disk Controller	**SATA Controller**	The Same as SAS Controller
	SAS Controller	Per Node: Broadcom SAS3008 (Support RAID0 4pcs , RAID1 2pcs) or - 4 x SAS 12Gb/s ports or 4 x SATA 6Gb/s ports Broadcom SAS3808N (Support RAID0 4pcs , RAID1 2pcs) or - 4 x SAS 12Gb/s ports or 4 x SATA 6Gb/s ports Broadcom SAS3808N (Support RAID0 , RAID1 2pcs) or - 2 x NVMe PCIe Gen4 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 (8 x SATA/SAS/NVMe supported)
Networking	**LAN**	Per Node: 1 x Intel i210 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 Mini-DP Port 1 x RJ-45 Management Port
Switch/LED		Per Node: Rear: 1 x Power Switch/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 ASM12-iKVM for KVM-over-IP
Dimension		928mm x 448mm x 87.3mm (2U) 36.5" x 17.64" x 3.44"
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)**		2+spare Redundant 3600W 80 PLUS Titanium Power Supply
Environment		Operation temperature: 10℃ ~ 35℃ Non operation temperature: -40℃ ~ 70℃ Non operation humidity: 20% ~ 90% (Non condensing)