

# RS720Q-E10-RS8U

Great Scalability and High Performance Computing (HPC)  
with 4 nodes in a 2U Rack Server



2U4N



2



16

ASUS RS720Q-E10-RS8U is the ideal multi-node server powered by 3rd Gen Intel® Xeon Scalable processors, with each node supporting up to 16 DIMM, one PCIe® 4.0 slot, one OCP 3.0 and two M.2, and a total of eight NVMe/SAS/SATA drives.

## FEATURE

- Powered by dual-socket 3rd Gen Intel Scalable processors with DDR4 Memory up to 3200MHz
- One PCIe 4.0 x16 slot and One OCP 3.0 module per node
- 8 x 2.5" Hot-swap Drive Bays support 8 x SATA/SAS/NVMe
- 3000W 80 Plus® Titanium power supplies
- Flexible air- and liquid-cooling solution
- Onboard ASUS ASMB10-iKVM
- ASPEED AST2600 controller

### 3<sup>rd</sup> Gen Intel Xeon Scalable processors

The RS720Q-E9-RS8-S is built with the latest Intel® Xeon® Processor Scalable Family with 16 DDR4 Memory up to 3200MHz, and designed for the demand of high scalability, high density computing, and wide range of existing and emerging workloads.

### PCIe 4.0 Ready

PCI Express® (PCIe®) 4.0 delivers 16 GT/s bandwidth, which is double the speed of PCIe 3.0, offering lower power consumption, better lane scalability and backwards compatibility.

### Cooling Solutions

Air or liquid-cooled solutions. Asetek's Direct-to-Chip (D2C) liquid-cooling technology achieving lower power-usage effectiveness (PUE) and optimized TCO for data centers.

### 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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## FEATURE

- Powered by dual-socket 3rd Gen Intel Scalable processors
- One PCIe 4.0 x16 slot per node enables higher networking bandwidth and improved data-transfer rates.
- One OCP 3.0 module per node delivers the speeds of up to 200Gbps for data-center applications.
- A total of eight front-panel storage bays for a combination of NVMe, SATA and SAS drives to enable extensive storage and high-throughput performance.
- Optional Broadcom® 3008 SAS 12Gbps controller for RAID or SAS drive.
- High power-efficiency with redundant 3000W 80 Plus® Titanium power supplies.
- Flexible air- and liquid-cooling solution to achieve lower power-usage effectiveness (PUE) and optimized TCO for data centers.
- Onboard ASUS ASMB10-iKVM for out-of-band management with ASPEED AST2600 controller.

## Target market

- Data center Storage Server
- HPC Application



1. Asset Tag
2. 8 x 2.5" Hot-Swap HDD Bays (8 x SATA/NVMe Support)
3. 1+1 3000W 80 PLUS Titanium CRPS
4. 3rd Gen Intel® Xeon® processor Scalable family (Up to 205W)
5. 16 x DIMM, DDR4-3200/2933, RDIMM, LRDIMM, LRDIMM 3DS
6. 1 x PCI-E x16 (Gen4 x16 link)
7. 1 x OCP 3.0 Mezzanine (Gen4 x16 link)

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# SPECIFICATION

<b>Processor Support.</b>		2 x Socket P+ (LGA 4189) per Node  3rd Gen Intel® Xeon® processor Scalable family (Up to 205W) UPI 11.2 GT/s
<b>Core Logic</b>		Intel® C621A PCH
<b>Memory</b>	<b>Total Slots</b>	16 (8-channel per CPU, 8 DIMM per CPU)
	<b>Capacity</b>	Maximum up to 6144GB per Node
	<b>Memory Type</b>	DDR4 3200/2933 RDIMM, LRDIMM, LR-DIMM 3DS
	<b>Memory Size</b>	128GB, 64GB, 32GB, 16GB RDIMM 256GB, 128GB, 64GB RDIMM 3DS 128GB, 64GB, 32GB LR-DIMM 3DS 512GB, 256GB, 128GB Intel® Optane™ DC persistent memory 200 Series (DCPMM)
<b>Expansion Slots</b>	<b>Total PCI/PCI-X/PCI-E/PIKE Slots</b>	Per Node:
	<b>Slot Type</b>	1 x PCI-E x16 (Gen4 x16 link), LP, HL 1 x OCP 3.0 Mezzanine (Gen4 x16 link) 2 x M.2 (Gen4 x4 link, up to 2280, PCIe, SATA)
<b>Disk Controller</b>	<b>SATA Controller</b>	The Same as SAS Controller
	<b>SAS Controller</b>	Per Node: Broadcom SAS3008 (Support RAID 0, 1) (Option) - 6 x SAS 12Gb/s ports or - 6 x SATA 6Gb/s ports
	<b>NVMe Controller</b>	Per Node: Intel® VROC (Support RAID 0, 1) - 2 x NVMe ports
<b>Storage Bays</b>	<b>I = internal A or S will be hot-swappable</b>	8 x 2.5" Hot-swap Storage Bays (SATA/SAS/NVMe Supported)
<b>Networking</b>	<b>LAN</b>	Per Node: 1 x Dual Port Intel I350-AM2 Gigabit LAN Controller 1 x Management Port
<b>Graphic</b>	<b>VGA</b>	Aspeed AST2600 64MB
<b>Front I/O Ports</b>		N/A
<b>Rear I/O Ports</b>		Per Node: 2 x USB 3.0 Ports 1 x VGA Port 1 x RJ-45 GbE LAN Ports 1 x RJ-45 Management Port
<b>Switch/LED</b>		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
<b>OS Support</b>		Please find the latest OS support from <a href="http://www.asus.com/">http://www.asus.com/</a>
<b>Management Solution</b>	<b>Software</b>	ASUS Control Center (Classic)
	<b>Out of Band Remote Management</b>	On-Board ASM10-iKVM for KVM-over-IP
<b>Dimension</b>		800mm x 444mm x 88mm(2U) 31.5" x 17.48" x 3.46
<b>Net Weight Kg (CPU, DRAM &amp; HDD not included)</b>		35.5 Kg
<b>Gross Weight Kg (CPU, DRAM &amp; HDD not included, Packing included)</b>		41.5 Kg
<b>Power Supply (following different configuration by region)</b>		1+1 Redundant 3000W 80 PLUS Titanium Power Supply Rating: 220-240 Vac, 15.5A (x2), 50-60Hz, Class I
<b>Environment</b>		Operation temperature: 10°C ~ 35°C Operation temperature: 10°C ~ 30°C (for 205W CPU) Non operation temperature: -40°C ~ 60°C Non operation humidity: 20% ~ 90% (Non condensing)