

RS720Q-E10-RS24

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



2U4N



2



16

ASUS RS720Q-E10-RS24 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 24 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
- 24 x 2.5" Hot-swap Drive Bays support 8 x SATA/SAS/NVMe + 16 x SATA/SAS Devices
- 3000W 80 Plus® Titanium power supplies
- Flexible air- and liquid-cooling solution
- Onboard ASUS ASMB10-iKVM
- ASPEED AST2600 controller

3rd Gen Intel Xeon Scalable processors

The RS720Q-E10-RS24 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.

RS720Q-E10-RS24

SPECIFICATION

Processor Support

2 x Socket P+ (LGA 4189) per Node

3rd Gen Intel® Xeon® processor Scalable family
(Up to 205W for air cooling, up to 350W for liquid cooling)
UPI 11.2 GT/s

Core Logic

Intel® C621A PCH

Memory

Total Slots

16 (8-channel per CPU, 8 DIMM per CPU)

Capacity

Maximum up to 8192GB per Node

Memory Type

DDR4 3200/2933 RDIMM, LRDIMM, LR-DIMM 3DS

Memory Size

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)

Expansion Slots

Total PCI/PCI-X/PCI-E/PIKE Slots

Per Node:

Slot Type

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)

Disk Controller

SATA Controller

The Same as SAS Controller

SAS Controller

Per Node:
Broadcom SAS3008 (Support RAID 0, 1)
- 6 x SAS 12Gb/s ports or
- 6 x SATA 6Gb/s ports

NVMe Controller

Per Node:
Intel® VROC (Support RAID 0, 1)
- 2 x NVMe ports

Storage Bays

**I = internal
A or S will be hot-swappable**

8 x 2.5" Hot-swap Storage Bays (SATA/SAS/NVMe Supported) +
16 x 2.5" Hot-swap Storage Bays (SATA/SAS Supported)

Networking

LAN

Per Node:
1 x Intel I210-AT 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 3.0 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 ASMB9-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)

37.5 Kg

Gross Weight Kg

46.5 Kg

(CPU, DRAM & HDD not included, Packing included)

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

Environment

Operation temperature: 10°C ~ 35°C (for < 205W CPU, with air cooling)
Operation temperature: 10°C ~ 30°C (for 205W CPU, with air cooling)
Operation temperature: 10°C ~ 35°C (for > 205W CPU, with liquid cooling)
Non operation temperature: -40°C ~ 60°C
Non operation humidity: 20% ~ 90% (Non condensing)