

# RS723Q-E11-RS24

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



2U4N



CPU Number

2



Memory Number

16

ASUS RS723Q-E11-RS24 is the ideal multi-node server powered by 5th Gen Intel® Xeon Scalable processors, with each node supporting up to 16 DIMM, three 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
- 24 x 2.5" Hot-swap Drive Bays support 8 x NVMe
- 3600W 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.

# RS723Q-E11-RS24

# SPECIFICATION

## Processor Support

4th Gen Intel® Xeon® processor Scalable family (350W)  
5th Gen Intel® Xeon® processor Scalable family (350W)  
(with Liquid cool, up to 350W)  
UPI 16 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](http://www.asus.com/support) for more information

## Expansion Slots

### Slot Type

Per node: up to 2+1 slots  
1 x PCI-E x16 (Gen5 x16 link), LP (HHHL)  
1 x PCI-E x8 (Gen5 x8 link), LP (HHHL), optional  
1 x OCP 3.0 Mezzanine (Gen5 x16 link)

## Disk Controller

### SATA Controller

The Same as SAS Controller

### SAS Controller

Per Node:  
ASUS CB8LX12G-R2H-B (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

24 x 2.5" Hot-swap Storage Bays  
(8 x SATA/SAS/NVMe + 16 x SATA/SAS supported)  
\* ASUS CB8LX12G-R2H-B is required to support SATA/SAS hard drives

## Networking

### LAN

Per Node:  
2 x Intel i210 1 Gigabit LAN Controller  
1 x Management Port

## Graphic

### VGA

Aspeed AST2600 64MB

## Front I/O Ports

N/A

## Rear I/O Ports

Per Node:  
1 x USB 3.1 Gen1 ports  
1 x mini Display port  
1 x RJ-45 1GbE LAN ports  
1 x RJ-45 Mgmt LAN port

## Switch/LED

Per Node:  
Front:  
- 1 x Power Switch/LED  
- 1 x Location Switch/LED  
- 1 x Message LED  
- 2 x LAN LED  
Rear:  
- 1 x Power Switch/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 ASM11-iKVM for KVM-over-IP

## Dimension

890mm x 444mm x 88mm (2U)  
35.04" 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 3600W 80 PLUS Titanium Power Supply  
220V-240Vac, 10A (X2), 50HZ-60HZ, Class I  
\* 1+1 Redundant mode only supports CPUs under 205W

## Environment

Operation temperature: 10°C ~ 35°C  
Non operation temperature: -40°C ~ 70°C  
Non operation humidity: 20% ~ 90% (Non condensing)