

RS720A-E12-RS12

New Generation, High Performance 2U Server



2U



2



24

ASUS RS720A-E12-RS12 was designed to accelerate application performance leveraging accelerator cards and storage scalability. With the CPU and memory configured in a front parallel design that enables efficient airflow for excellent thermal performance, RS720A-E12-RS12 is optimized for rack placement.

FEATURE

- AMD EPYC 9004 Series Processors with AMD 3D V-Cache™ technology
- PCIe 5.0 Ready
- GPU and FPGA Support
- Enhanced Security

4th Gen AMD EPYC™ processors with AMD 3D V-Cache™ technology

AMD was first with X86 multi-chip-module server CPUs and continues to innovate with the 4th Gen AMD EPYC™ processors with AMD 3D V-Cache™ technology.

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.

GPU and FPGA Support

Up to 3 dual-slot GPU such as NVIDIA A100 in one 2U system and optimized acceleration for workloads across cloud, data center and for hybrid cloud environment

Cooling Solutions

Enhanced Volume Air Cooling (EVAC) Heatsink for Versatile Workload and dedicated GPU fan to support GPU SKU.

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.

Target market

- Hot Data Cache Server
- Cloud Solution Provider
- Enterprise Storage
- Virtualized Storage



1. Asset Tag
2. 24 x DIMM, DDR5-4800/4400, RDIMM, LRDIMM, LRDIMM 3DS
3. AMD EPYC™ 9004 Series
4. Dual M.2 (Up to 2280)
5. 3 x PCIe Gen5 x16 (FHFL)
1 x PCIe Gen5 x16 or OCP3.0 (FHFL)
1 x PCIe Gen5 x16 (LP)
6. 1+1 Redundant 2000W/1600W 80 PLUS Platinum Power Supply
1+1 Redundant 2600W/1600W 80 PLUS Titanium Power Supply
7. 12 x 3.5" Hot-swap HDD Bays
8. 4 x Easy-maintained fans



RS720A-E12-RS12

SPECIFICATION

Processor Support.

2 x Socket SP5 (LGA 6096)
 AMD EPYC™ 9004 Series Processors (up to 400W)
 4th Generation AMD EPYC Processors with AMD 3D V-Cache technology
 xGMI (External Global Memory Interface Link)

Core Logic

(INTEGRATED I/O – NO CHIPSET)

Memory

Total Slots

24 (12 channel per CPU, 1 DIMM per CPU)

Capacity

Maximum 6144GB

Memory Type

DDR5 4800/4400 RDIMM/ 3DS RDIMM

*Refer to ASUS server AVL for the latest update

Memory Size

128GB, 64GB, 32GB RDIMM

128GB, 64GB, 32GB 3DS RDIMM

*Refer to ASUS server AVL for the latest update

Expansion Slots

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

9 x Expansion slots

Slot Type

Up to 9 PCIe Gen5 slots

6 x PCIe Gen5 x8 or 3 x PCIe Gen5 x16 (FHFL)

2 x PCIe Gen5 x8 or 1 x PCIe Gen5 x16 or 1 x OCP3.0 (FHFL)

1 x PCIe Gen5 x16 (LPHL)

*GPU SKU do not support OCP3.0

Disk Controller

SATA Controller

8 x SATA 6Gb/s ports

2 x M.2 connectors (SATA 6Gb/s & PCI-E Gen4 x4 link)

SAS Controller

Optional kits:

Broadcom HBA CARD 9500-16i

Broadcom MegaRAID 9540-8i / 9560-16i

Storage Bays

I = internal

A or S will be hot-swappable

Front Bays:

12 x 3.5" Hot-Swap Drive Bays

Support up to 8 x NVMe/SATA/SAS* + 4 x SATA/SAS*

Rear Bays:

2 x 2.5" hot swap drive bays (Optional)

Support 2 x NVMe*

2 x M.2 (Up to 2280 from CPU1)

*RAID card is required to support SAS hard drives

Networking

LAN

1 x Quad Port Intel I350-AM4 1G LAN Controller or

1 x Dual Port Intel X710-AT2 Gigabit 10G LAN Controller or None

1 x Management Port

Graphic

VGA

Aspeed AST2600 64MB

Auxiliary storage Device Bay

1 x External ODD (optional)

Front I/O Ports

2 x USB 3.2 Gen1 ports

Rear I/O Ports

2 x USB 3.1 Gen1 ports, 1 x VGA port, 1 x RJ-45 Mgmt LAN port

2 x 10G or 4 x 1G RJ-45 GbE LAN port (Optional)

1 x OCP3.0 port (Optional)

Switch/LED

Front Switch/LED:

1 x Power Switch (w/ LED), 1 x Reset Switch, 1 x Location Switch (w/ LED)

1 x HDD Access LED, 1 x Message LED, LAN 1-4 LED (on NIC module)

Rear Switch/LED:

1 x Port 80 LED (Q-Code), 1 x Power Switch (w/ LED), 1 x Location LED (w/ LED)

1 x Message 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 ASMB11-iKVM for KVM-over-IP

Dimension

840mm x 449mm x 88.1mm / 33.07" x 17.68" x 3.47" (2U)

Net Weight Kg (CPU, DRAM & HDD not included)

19.3 kg

Gross Weight Kg

25.77kg

Power Supply

(following different configuration by region)

1+1 Redundant 2600W/1600W 80 PLUS Titanium Power Supply

1+1 Redundant 2000W/1600W 80 PLUS Platinum Power Supply

Environment

Operation temperature: 10°C ~ 35°C

Non operation temperature: -40°C ~ 60°C

Non operation humidity: 20% ~ 90% (Non condensing)