

RS720-E11-RS12U

Scalable, High Performance 2U Server



ASUS RS720-E11-RS12U is a server powered by 4th Gen Intel Xeon Scalable processors that supports up to 32 DIMMs, one dual-slot GPU, 12 NVMe, three plus one PCle slots, optional OCP 3.0 slot, dual M.2 and ASUS ASMB11-iKVM.

FEATURE

- Powered by dual-socket 4th Gen Intel Scalable processors.
- CPU maximum TDP of up to 350W with 32 DIMMs and support.
- GPU-optimized design allows four dual-slot GPU for AI workloads and high performance computing(HPC).
- Up to 12 all-flash NVMe.
- Up to 9 PCle® 5.0 slots.
- Flexible onboard LAN-module design.
- Flexible air-cooled solution.

Target market

- High performance computing (HPC).
- Al Forecast of Utilization workload.
- Terabyte-scale data warehousing
- Virtualization applications
- 1. Asset Tag
- 32 x DIMM, DDR5-4800/4400, RDIMM/ RDIMM 3DS (2DIMM per Channel)
- 3. Intel 4th Generation Xeon® Processors
- 4. Dual M.2 (Up to 2280)
- 6 x PCIe G5 x8 link or 3 x PCIe G5 x16 link (FHFL or FHHL) (CPU1)(CPU2)
- 6. 1 x PCle G5 x16 link (FHHL)
- 7. 1 x OCP 3.0/PCle Gen5 x16 link (FHHL)* (CPU1)
- 8. 1 x PCle G5 x16, LP (CPU2)
- 1+1 Redundant AC: 2600W/1600W 80 PLUS Titanium /Platinum Power Supply
- 10. 12 x 3.5" Hot-swap Bays
- 11. 4 x Hot-swap fans

4th Gen Intel Xeon Scalable processors

The latest Intel Xeon scalable processors offer up to 5x more cores per CPU and 1.52x computing performance increase. ASUS RS720-E11-RS12U supports dual Intel Scalable processors to enable up to 32 DIMM slots, all flash and PCIe Gen 5.0

PCIe 5.0 Ready

PCI Express® (PCIe®) 5.0 delivers 32 GT/s bandwidth, which is double the speed of PCIe 4.0, offering lower power consumption, better lane scalability and backwards compatibility.

NVIDIA GPU Support

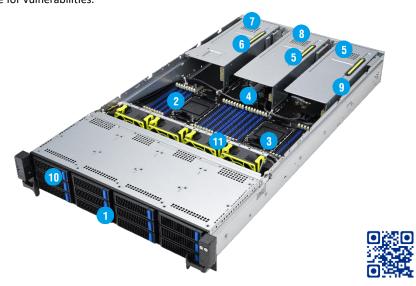
Up to 3 dual-slot GPU such as NVIDIA A100 in 2U system and optimized acceleration for workloads across cloud, data center and for hybrid cloud environment

Flexible Cooling options

Support two Free-air cooling solution on standard heatsink and an enhanced volume air cooling (EVAC) heatsink for efficient cooling performance.

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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SPECIFICATION

Processor Support. 2 x Socket P+ (LGA 4677

4th Gen Intel® Xeon® Scalable Processors Family(350w)

Core Logic

Memory **Total Slots** 32 (8-channel per CPU, 16 DIMM per CPU)

Maximum up to 4 + 8 TB (DDR5 + Crow Pass) Capacity

Memory Type DDR5 4800/4400 RDIMM/RDIMM 3DS (2DIMM per Channel)

Intel® PCH C741

512GB, 256GB, 128GB Intel® Optane™ persistent memory 300 series (Crow Pass)

*Refer to Asus server AVL for the latest update

64GB, 32GB, 16GB RDIMM **Memory Size**

256GB, 128GB RDIMM 3DS

* Refer to www.asus.com/support for more information

Expansion Slots Total PCI/PCI-X/PCI-E/PIKE Slots 9 x Expansion slots

> **Slot Type** Up to 9 slots

6 x PCle G5 x8 link or 3 x PCle G5 x16 link (FHFL or FHHL)

1 x PCIe G5 x16 link (FHHL)

1 x OCP 3.0/PCIe Gen5 x16 link (FHHL)*

1 x PCIe G5 x16, LP

*maximum support 3 double-wide GPU if using OCP3.0

Disk Controller SATA Controller 12 x SATA 6Gb/s ports

2 x M.2 connector (SATA 6Gb/s & PCI-E Gen4 x8 link)

SAS Controller Optional kits:

> Broadcom HBA CARD 9500-8i Broadcom MegaRAID 9540-8i Broadcom MegaRAID 9560-16i

12G SAS Support

Storage Bays I = internal 12x 3.5" Hot-Swap Storage Device Bays up to (12x NVMe/SATA/SAS*)

> 2 x M.2 (Up to 2280) (Support SATA/PCIe M.2) (CPU1) A or S will be hot-swappable

*must with PIKE/RAID card

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

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

1 x Management Port

Graphic VGA Aspeed AST2600 64MB

Front I/O Ports 2 x USB 3.2 Gen 1 ports

1 x VGA port

Rear I/O Ports 2 x USB 3.2 Gen1 ports, 1 x VGA port , 1 x RJ-45 Management LAN port

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

Switch/LED Rear Switch/LED:

1 x Q-Code/Port 80 LED, 1 x Power switch, 1 x Location switch/LED

Front Switch/LED:

1 x Power switch (/LED), 1 x Location switch (/LED), 1 x Reset switch,

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

** The number of LAN LEDs available depends on the LAN

Windows® Server 2019/2022 64bit

RedHat® Enterprise Linux, SuSE® Linux Enterprise Server

CentOS, Ubuntu, Vmware

ASUS Control Center (Classic)

Please find the latest OS support from http://www.asus.com/

Software Solution

OS Support

Management

Dimension

On-Board ASMB11-iKVM for KVM-over-IP **Out of Band Remote Management**

840mm x 447mm x 88mm(2U)

(33.07" x 17.60" x 3.46")

Net Weight Kg (CPU, DRAM & HDD not included) 18.195 kg **Gross Weight Kg** 25.855 kg

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

1+1 Redundant AC: 2600W/1600W 80 PLUS Titanium / Platinum Power Supply **Power Supply** (following different configuration by region)

Rating: 100-127Vac/240Vac, 13.8A/16A (x2), 50/60Hz; Rating: 100-127Vac/220-240Vac, 12A/9.5A (x2), 50/60Hz

Environment Operation temperature: 10°C ~ 35°C

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

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