

# RS720-E11-RS12U

## Scalable, High Performance 2U Server



2U



2



32

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 PCIe 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 PCIe® 5.0 slots.
- Flexible onboard LAN-module design.
- Flexible air-cooled solution.

### 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.

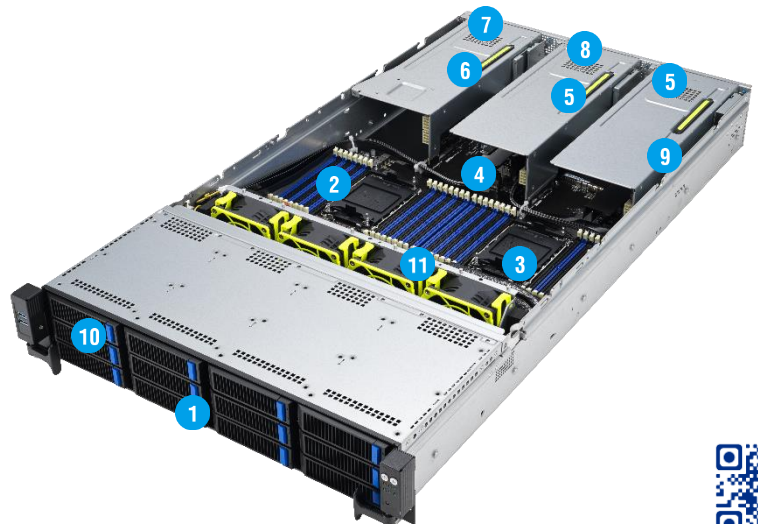
### Enhanced Security

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.

### Target market

- High performance computing (HPC).
- AI Forecast of Utilization workload.
- Terabyte-scale data warehousing
- Virtualization applications

1. Asset Tag
2. 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)
5. 6 x PCIe G5 x8 link or 3 x PCIe G5 x16 link (FHFL or FHHL) (CPU1)(CPU2)
6. 1 x PCIe G5 x16 link (FHHL)
7. 1 x OCP 3.0/PCIe Gen5 x16 link (FHHL)\* (CPU1)
8. 1 x PCIe G5 x16, LP (CPU2)
9. 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



# RS720-E11-RS12U

# SPECIFICATION

|  |  |  |
|--|--|--|
| <b>Processor Support.</b>  |  | 2 x Socket E (LGA 4677)<br>4th Gen Intel® Xeon® Scalable Processors Family(350w)   |
| <b>Core Logic</b>  |  | Intel® PCH C741  |
| <b>Memory</b>  | <b>Total Slots</b>                                   | 32 (8-channel per CPU, 16 DIMM per CPU)  |
|  | <b>Capacity</b>                                      | Maximum up to 4 + 8 TB (DDR5 + Crow Pass)  |
|  | <b>Memory Type</b>                                   | DDR5 4800/4400 RDIMM/RDIMM 3DS (2DIMM per Channel)<br>512GB, 256GB, 128GB Intel® Optane™ persistent memory 300 series (Crow Pass)<br>*Refer to Asus server AVL for the latest update   |
|  | <b>Memory Size</b>                                   | 64GB, 32GB, 16GB RDIMM<br>256GB, 128GB RDIMM 3DS<br>* Refer to <a href="http://www.asus.com/support">www.asus.com/support</a> for more information   |
| <b>Expansion Slots</b>   | <b>Total PCI/PCI-X/PCI-E/PIKE Slots</b>              | 9 x Expansion slots  |
|  | <b>Slot Type</b>                                     | Up to 9 slots<br>6 x PCIe G5 x8 link or 3 x PCIe G5 x16 link (FHFL or FHHL)<br>1 x PCIe G5 x16 link (FHHL)<br>1 x OCP 3.0/PCIe Gen5 x16 link (FHHL)*<br>1 x PCIe G5 x16, LP<br>*maximum support 3 double-wide GPU if using OCP3.0  |
| <b>Disk Controller</b>   | <b>SATA Controller</b>                               | 12 x SATA 6Gb/s ports<br>2 x M.2 connector (SATA 6Gb/s & PCI-E Gen4 x8 link)   |
|  | <b>SAS Controller</b>                                | Optional kits:<br>Broadcom HBA CARD 9500-8i<br>Broadcom MegaRAID 9540-8i<br>Broadcom MegaRAID 9560-16i<br>12G SAS Support  |
| <b>Storage Bays</b>  | <b>I = internal<br/>A or S will be hot-swappable</b> | 12x 3.5" Hot-Swap Storage Device Bays up to (12x NVMe/SATA/SAS*)<br>2 x M.2 (Up to 2280) (Support SATA/PCIe M.2) (CPU1)<br>*must with PIKE/RAID card   |
| <b>Networking</b>  | <b>LAN</b>   | 1 x Quad Port Intel I350-AM4 1G LAN Controller or<br>1 x Dual Port Intel X710-AT2 Gigabit 10G LAN Controller or None<br>1 x Management Port  |
| <b>Graphic</b>   | <b>VGA</b>   | Aspeed AST2600 64MB  |
| <b>Front I/O Ports</b>   |  | 2 x USB 3.2 Gen 1 ports<br>1 x VGA port  |
| <b>Rear I/O Ports</b>  |  | 2 x USB 3.2 Gen1 ports, 1 x VGA port , 1 x RJ-45 Management LAN port<br>2 x 10G or 4 x 1G RJ-45 GbE LAN port (optional)  |
| <b>Switch/LED</b>  |  | Rear Switch/LED:<br>1 x Q-Code/Port 80 LED, 1 x Power switch, 1 x Location switch/LED<br>Front Switch/LED:<br>1 x Power switch (/LED), 1 x Location switch (/LED), 1 x Reset switch,<br>1 x Message LED, LAN 1-4 LED (on NIC module)**<br>** The number of LAN LEDs available depends on the LAN |
| <b>OS Support</b>  |  | Windows® Server 2019/2022 64bit<br>RedHat® Enterprise Linux, SuSE® Linux Enterprise Server<br>CentOS, Ubuntu, Vmware<br>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 ASMB11-iKVM for KVM-over-IP   |
| <b>Dimension</b>   |  | 840mm x 447mm x 88mm(2U)<br>(33.07" x 17.60" x 3.46")  |
| <b>Net Weight Kg (CPU, DRAM &amp; HDD not included)</b>                    |  | 18.195 kg  |
| <b>Gross Weight Kg (CPU, DRAM &amp; HDD not included, Packing include)</b> |  | 25.855 kg  |
| <b>Power Supply (following different configuration by region)</b>          |  | 1+1 Redundant AC: 2600W/1600W 80 PLUS Titanium /Platinum Power Supply<br>Rating: 100-127Vac/240Vac, 13.8A/16A (x2), 50/60Hz;<br>Rating: 100-127Vac/220-240Vac, 12A/9.5A (x2), 50/60Hz  |
| <b>Environment</b>   |  | Operation temperature: 10°C ~ 35°C<br>Non operation temperature: -40°C ~ 60°C<br>Non operation humidity: 20% ~ 90% ( Non condensing)   |