# RS700-E11-RS4U

## Scalable, High Performance 1U Server



**intel inside Xeon**

| Form Factor | 1U | CPU Number | 2 | Memory Number | 32 |
|---|---|---|---|---|---|

ASUS RS700-E11-RS4U is a server powered by 5th Gen Intel Xeon Scalable processors that supports up to 32 DIMMs, one dual-slot GPU, 4NVMe, three plus one PCIe slots, optional OCP 3.0 slot, dual M.2 and ASUS ASMB11-iKVM.

## FEATURE

- Powered by dual-socket 4$^{th}$/5$^{th}$ Gen Intel Scalable processors.

- CPU maximum TDP of up to 350W with 32 DIMMs and support.

- GPU-optimized design allows one dual-slot GPU for AI workloads and high performance computing(HPC).

- Up to 4 all-flash NVMe

- Up to 3+1 PCIe® 5.0 slots

- Flexible onboard LAN-module design

- Flexible air-cooled solution

## 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 4$^{th}$/5th Generation Xeon® Processors
4. Dual M.2 (Up to 2280)
5. 1 x PCI-E x16 (Gen5 x16 link, FHFL) (CPU1),
    1 x PCI-E x16 (Gen5 x16 link) or OCP3.0 (CPU1)
6. 1 x PCIe x8 (Gen5 x16 link, Internal) (CPU2)
7. 1 x PCIe Gen5 x16 , LP (CPU2)
8. 1+1 Redundant AC: 1200W/1600W 80 PLUS Platinum/Titanium Power Supply
9. 4 x 3.5" Hot-swap Bays
10. 8 x Hot-swap fans

### 5th Gen Intel Xeon Scalable processors

The latest Intel Xeon scalable processors offer up to 6x more cores per CPU and 1.52x computing performance increase. ASUS RS700-E11-RS4U 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 1 dual-slot GPU such as NVIDIA A100 in 1U 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.
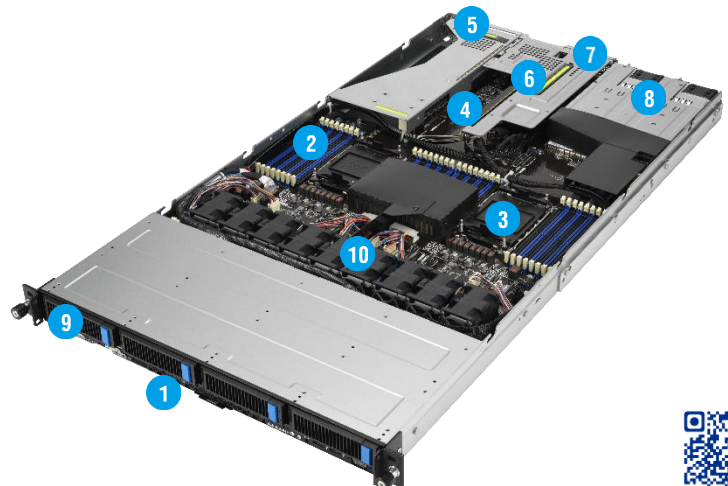
### Enhanced Security

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.

# RS700-E11-RS4U

**SPECIFICATION**

| | | |
|---|---|---|
| **Processor Support.** | | 2 x Socket E (LGA 4677)<br>4th Gen Intel® Xeon® Scalable Processors Family(350w)<br>5th Gen Intel® Xeon® Scalable Processors Family(350w) |
| **Core Logic** | | Intel® PCH C741 |
| **Memory** | **Total Slots** | 32 (8-channel per CPU, 16 DIMM per CPU) |
| | **Capacity** | Maximum up to 4 + 8 TB (DDR5 + Crow Pass) |
| | **Memory Type** | DDR5 5600/5200/4800/4400 RDIMM/RDIMM 3DS (2DIMM per Channel)<br>512GB, 256GB, 128GB<br>*Refer to Asus server AVL for the latest update |
| | **Memory Size** | 64GB, 32GB, 16GB RDIMM<br>256GB, 128GB RDIMM 3DS<br>* Refer to www.asus.com/support for more information |
| **Expansion Slots** | **Total PCI/PCI-X/PCI-E/PIKE Slots** | 3 x Expansion slots + 1 x Internal RAID slot |
| | **Slot Type** | Up to 3+1 PCIe slot<br>1 x OCP 3.0 or PCIe G5 x16 FHFL<br>1 x PCIe G5 x16 FHFL<br>1 x PCIe G5 x8. LP (Internal)<br>1 x PCIe G5 x16, LP |
| **Disk Controller** | **SATA Controller** | 4 x SATA 6Gb/s ports<br>2 x M.2 connector (SATA 6Gb/s & PCI-E Gen4 x8 link) |
| | **SAS Controller** | Optional kits:<br>Broadcom HBA CARD 9500-8i, Mega RAID 9540-8i、9560-16i<br>ASUS PIKE II 3008 8-port SAS HBA card, 3108 8-port SAS HW RAID card<br>12G SAS Support |
| **Storage Bays** | **I = internal**<br>**A or S will be hot-swappable** | 4x 3.5" Hot-Swap Storage Device Bays up to (4x NVMe/SATA/SAS*)<br>2 x M.2 (Up to 2280) (Support SATA/PCIe M.2) (CPU1)<br>*must with PIKE/RAID card |
| **Networking** | **LAN** | 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 |
| **Graphic** | **VGA** | Aspeed AST2600 64MB |
| **Auxiliary storage Device Bay** | | 1 x Slim type Optical Drive Bay (optional) |
| **Front I/O Ports** | | 2 x USB 3.2 Gen 1 ports<br>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<br>2 x 10G or 4 x 1G RJ-45 GbE LAN port (optional) |
| **Switch/LED** | | 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 |
| **OS Support** | | 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 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** | | 842.5mm x 439.5mm x 44mm (1U)<br>(33.17" x 1.73" x 1.73") |
| **Net Weight Kg (CPU, DRAM & HDD not included)** | | 13.7 kg |
| **Gross Weight Kg**<br>**(CPU, DRAM & HDD not included, Packing include)** | | 22.56 kg |
| **Power Supply**<br>**(following different configuration by region)** | | 1+1 Redundant AC: 1200W/1600W 80 PLUS Platinum/Titanium Power Supply<br>Rating: 220-240Vac, 10A (x2), 50/60HzI;<br>Rating: 100-127Vac/220-240Vac, 12A/9.5A (x2), 50/60Hz |
| **Environment** | | Operation temperature: 10℃ ~ 35℃<br>Non operation temperature: -40℃ ~ 60℃<br>Non operation humidity: 20% ~ 90% ( Non condensing) |