

RS700-E11-RS12U

Scalable, High Performance 1U Server



1U



2



32

ASUS RS700-E11-RS12U is a server powered by 5th 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/5th 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 12 all-flash NVMe
- Up to 3+1 PCIe® 5.0 slots
- Flexible onboard LAN-module design
- Flexible air-cooled solution

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-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 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.

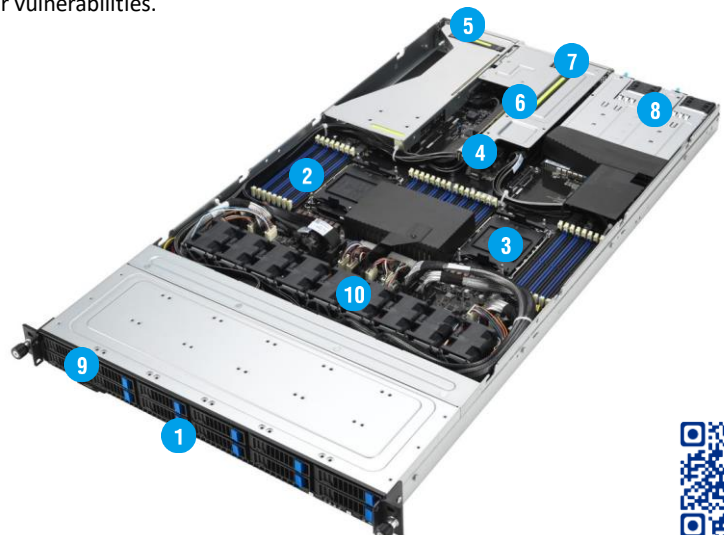
Enhanced Security

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.

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/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. 12 x 2.5" Hot-swap Bays
10. 8 x Hot-swap fans



RS700-E11-RS12U

SPECIFICATION

Processor Support.

2 x Socket E (LGA 4677)
4th Gen Intel® Xeon® Scalable Processors Family(350w)
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)
512GB, 256GB, 128GB

*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 for more information

Expansion Slots

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

3 x Expansion slots + 1 x Internal PIKE slot

Slot Type

Up to 3+1 PCIe slot

1 x OCP 3.0 or PCIe G5 x16 FHFL

1 x PCIe G5 x16 FHFL

1 x PCIe G5 x8. LP (Internal)

1 x PCIe G5 x16, LP

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

A or S will be hot-swappable

12x 2.5" Hot-Swap Storage Device Bays up to (12x NVMe/SATA/SAS*)

2 x M.2 (Up to 2280) (Support SATA/PCIe M.2) (CPU1)

*must with PIKE/RAID card

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

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

OS Support

Windows® Server 2019/2022 64bit

RedHat® Enterprise Linux, SuSE® Linux Enterprise Server

CentOS, Ubuntu, Vmware

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)

(33.17" x 1.73" x 1.73")

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

13.7 kg

Gross Weight Kg

22.56 kg

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

Power Supply

(following different configuration by region)

1+1 Redundant AC: 1200W/1600W 80 PLUS Platinum/Titanium Power Supply

Rating: 220-240Vac, 10A (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)