

# RS700A-E12-RS4U

## New Generation, High Performance 1U Server



1U



2



24

ASUS RS700A-E12-RS4U 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, RS700A-E12-RS4U 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 1 dual-slot GPU such as NVIDIA A100 in one 1U system and optimized acceleration for workloads across cloud, data center and for hybrid cloud environment

### Cooling Solutions

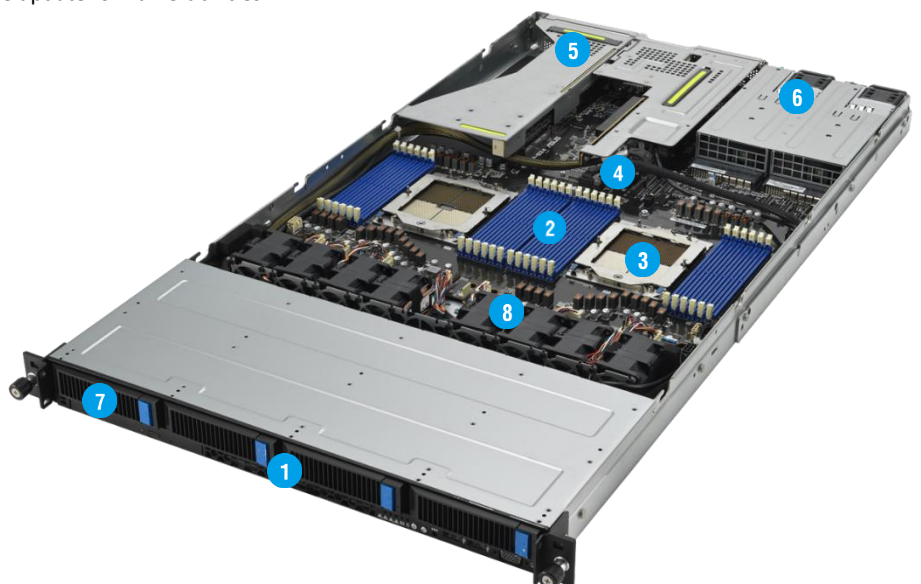
Enhanced Volume Air Cooling (EVAC) Heatsink for Versatile Workload and dedicated GPU fan to support GPU SKU.

### 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. 1 x PCIe Gen5 x16 (FHFL)  
1 x PCIe Gen5 x16 or OCP3.0 (FHFL)  
1 x PCIe Gen5 x16 (LP)  
1 x PCIe Gen4 x8 (LP, internal)
6. 1+1 Redundant 2000W/1600W 80 PLUS Platinum Power Supply  
1+1 Redundant 2600W/1600W 80 PLUS Titanium Power Supply
7. 4 x 3.5" Hot-swap HDD Bays
8. 8 x Easy-maintained fans

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# SPECIFICATION

<b>Processor Support.</b>		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)
<b>Core Logic</b>		(INTEGRATED I/O – NO CHIPSET)
<b>Memory</b>	<b>Total Slots</b>	24 (12 channel per CPU, 1 DIMM per CPU)
	<b>Capacity</b>	Maximum 6144GB
	<b>Memory Type</b>	DDR5 4800/4400 RDIMM/ 3DS RDIMM *Refer to ASUS server AVL for the latest update
	<b>Memory Size</b>	128GB, 64GB, 32GB RDIMM 128GB, 64GB, 32GB 3DS RDIMM *Refer to ASUS server AVL for the latest update
<b>Expansion Slots</b>	<b>Total PCI/PCI-X/PCI-E/PIKE Slots</b>	3 x Expansion slots + 1 x Internal PIKE slot
	<b>Slot Type</b>	Up to 3 x PCIe Gen5 slots + 1 x internal RAID slot 1 x PCIe Gen5 x16 (FHFL) 1 x PCIe Gen5 x16 or OCP3.0 (FHFL) 1 x PCIe Gen5 x16 (LP) 1 x PCIe Gen4 x8 (LP, internal)
<b>Disk Controller</b>	<b>SATA Controller</b>	8 x SATA 6Gb/s ports 2 x M.2 connectors (SATA 6Gb/s & PCI-E Gen4 x4 link)
	<b>SAS Controller</b>	Optional kits: Broadcom HBA CARD 9500-16i Broadcom MegaRAID 9540-8i Broadcom MegaRAID 9560-16i
<b>Storage Bays</b>	<b>I = internal A or S will be hot-swappable</b>	4x 3.5" Hot-Swap Storage Device Bays up to (4x NVMe/SATA/SAS*) 2 x M.2 (Up to 2280 from CPU1) *RAID card is required to support SAS hard drives
<b>Networking</b>	<b>LAN</b>	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
<b>Graphic</b>	<b>VGA</b>	Aspeed AST2600 64MB
<b>Auxiliary storage Device Bay</b>		1 x Slim-type ODD (optional)
<b>Front I/O Ports</b>		2 x USB 3.2 Gen 1 ports 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 Mgmt LAN port 2 x 10G or 4 x 1G RJ-45 GbE LAN port (Optional), 1 x OCP3.0 port (Optional)
<b>Switch/LED</b>		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 switch (w/ LED) 1 x Message LED
<b>OS Support</b>		Windows® Server 2019 RedHat® Enterprise Linux, SuSE® Linux Enterprise Server CentOS, Ubuntu, Vmware 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>		842.5mm x 449mm x 43.85mm / 33.17" x 17.68" x 1.73" (1U)
<b>Net Weight Kg (CPU, DRAM &amp; HDD not included)</b>		13.93 kg
<b>Gross Weight Kg (CPU, DRAM &amp; HDD not included, Packing include)</b>		18.93kg
<b>Power Supply (following different configuration by region)</b>		1+1 Redundant 2600W/1600W 80 PLUS Titanium power supply 1+1 Redundant 2000W/1600W 80 PLUS Platinum power supply
<b>Environment</b>		Operation temperature: 10°C ~ 35°C Non operation temperature: -40°C ~ 60°C Non operation humidity: 20% ~ 90% ( Non condensing)