RS720A-E11-RS12

New Generation, High Performance 2U Server

EPYC

Form Factor / 2U   CPU Number / 2   Memory Number / 32

ASUS RS720A-E11-RS12 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, RS720A-E11-RS12 is optimized for rack placement.

FEATURE

- AMD EPYC 7003 Series Processors with AMD 3D V-Cache™ technology
- PCIe 4.0 Ready
- GPU and FPGA Support
- Cooling Solutions
- Enhanced Security

Target market

- Hot Data Cache Server
- Cloud Solution Provider
- Enterprise Storage
- Virtualized Storage

3rd 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 3rd Gen AMD EPYC™ processors with AMD 3D V-Cache™ technology.

PCIe 4.0 Ready

PCI Express® (PCIe®) 4.0 delivers 16 GT/s bandwidth, which is double the speed of PCIe 3.0, offering lower power consumption, better lane scalability and backwards compatibility.

GPU and FPGA Support

Up to four dual-slot GPUs such as NVIDIA A100 in one 2U system and optimized acceleration for workloads across cloud, data center and for hybrid cloud environment
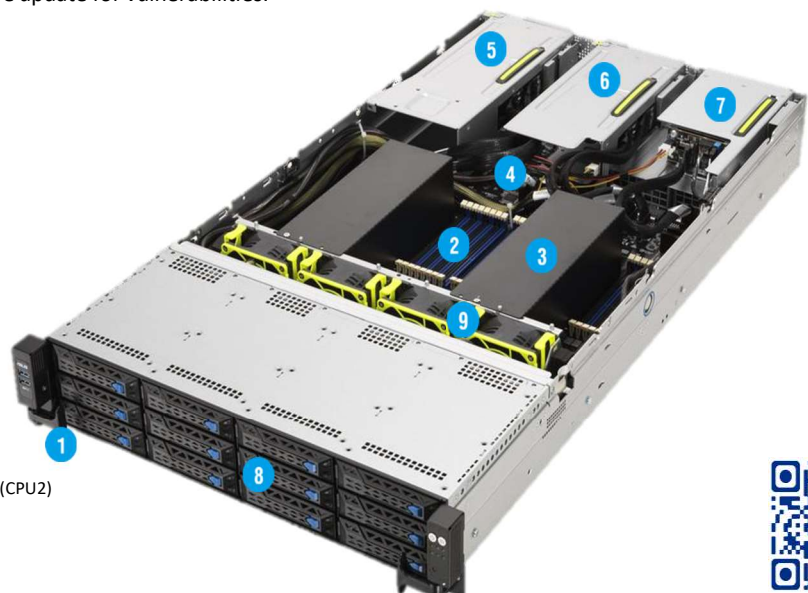
Cooling Solutions

Air or liquid-cooled solutions. Asetek's Direct-to-Chip (D2C) liquid-cooling technology achieving lower power-usage effectiveness (PUE) and optimized TCO for data centers.

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.

1. Asset Tag
2. 32 x DIMM, DDR4-3200/2933, RDIMM, LRDIMM, LRDIMM 3DS
3. AMD EPYC™ 7003/7002 Series
4. Dual M.2 (Up to 22110)
5. 1 x PCI-E Gen4 x16 link) (CPU1),
   1 x PCI-E x16 (Gen4 x16 link) or OCP3.0 (CPU1)
6. 1 x PCI-E x16 (Gen4 x16 link) (CPU2),
   1 x PCI-E Gen4 x8 or x16 (if PCIe M.2 in use, it will drop to x8 link) (CPU2)
7. 1 x PCI-E x16 (Gen4 x16 link) (CPU2),
   1+1 1600W/2400W 80 PLUS Platinum/Titanium CRPS
8. 12 x 3.5" Hot-swap HDD Bays
9. 4 x Hot-swap fan

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Processor Support.		2 x Socket SP3 (LGA 4094)
		xGMI (External Global Memory Interface Link)
Core Logic		3rd Gen AMD EPYC™ processors with AMD 3D V-Cache™ technology
Memory	**Total Slots**	32 (8-channel per CPU, 16 DIMM per CPU)
	Capacity	Maximum up to 4096GB
	Memory Type	DDR4 3200/2933 RDIMM/LR-DIMM/LR-DIMM 3DS with ECC and support for Memory Channel Mirroring and Memory Rank Sparing *Refer to ASUS server AVL for the latest update
	Memory Size	64GB, 32GB, 16GB (RDIMM), 128GB, 64GB (LRDIMM), 256GB, 128GB, 64GB (LRDIMM 3DS) *Refer to ASUS server AVL for the latest update
Expansion Slots	**Total PCI/PCI-X/PCI-E/PIKE Slots**	9
	Slot Type	2 x PCIe Gen4 x8 or 1 x PCIe Gen4 x16, FHFL (CPU1 x1) 2 x PCIe Gen4 x8 or 1 x PCIe Gen4 x16, FHFL or OCP3.0 (CPU1 x1) (If choosing OCP3.0, another x8 slot will be limited to support PIKE card only) 4 x PCIe Gen4 x8 or 2 x PCIe Gen4 x16, FHFL (CPU2 x2) 1 x PCIe Gen4 x8 or x16, LP (if PCIe M.2 in use, it will operate at x8 link) (CPU2 x1) *Installing GPU cards will occupied expansion slots.
Disk Controller	**SATA Controller**	8 x SATA3 6Gb/s ports 2 x M.2 connector(SATA 6Gb/s & PCI-E Gen4 x4 link)
	SAS Controller	Optional kits: ASUS PIKE II 3008 8-port SAS HBA card ; ASUS PIKE II 3108 8-port SAS HW RAID card Broadcom MegaRAID 9560-16i12G SAS Support
Storage Bays	**I = internal** **A or S will be hot-swappable**	12 x 3.5" Hot-swap Storage Device Bays up to (4x NVMe+4NVMe/SATA /SAS*+ 4x SATA/SAS*) *must with PIKE/RAID card 2 x 2.5" hot-swap drive bays (2x NVMe)(optional rear bays) 2 x M.2 (Up to 22110) (Support SATA/PCIe M.2) (CPU2)
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
Rear I/O Ports		2 x USB 3.2 Gen 1 ports, 1 x VGA port, optional 2 x 10G or 4 x 1G RJ-45 GbE LAN port, 1 x RJ-45 Mgmt LAN port, 1 x OCP 3.0 port
Switch/LED		Rear Switch/LED: 1 x Q-Code/Port 80 LED, 1 x Power switch, 1 x Location switch/LED, 1 x Message LED
		Front Switch/LED: 1 x Power switch/LED, 1 x Location switch/LED, 1 x Reset switch,1 x HDD Access LED, 1 x Message LED, LAN 1-4 LED * LAN3-4 for OCP3.0 card use
OS Support		Windows® Server 2019; RedHat® Enterprise Linux, SuSE® Linux Enterprise ServerCentOS, Ubuntu, Vmware Please find the latest OS support from http://www.asus.com/
Management Solution	**Software**	ASUS Control Center
	Out of Band Remote Management	On-Board ASMB10-iKVM for KVM-over-IP
Dimension		840mm x 449mm x 88.1mm (33.07" x 17.68" x 3.47"), compatible with standard 19" rack
Accessories		All accessories needed to mount it in the rack, including a closing panel/cover for spaces where there are no discs.
Net Weight Kg (CPU, DRAM & HDD not included)		18.195 kg
Gross Weight Kg **(CPU, DRAM & HDD not included, Packing include)**		23.235 kg
Power Supply **(following different configuration by region)**		1+1 Redundant 1600W 80 PLUS Platinum Power Supply Rating: 100-127/200-240 Vac, 9.4 A/4.72A (x2), 50/60Hz, Class I (240Vdc, 4.6A only for China) 1+1 Redundant 2400W 80 PLUS Titanium Power Supply
Environment		Operation temperature: 10℃ ~ 35℃; Non operation temperature: -40℃ ~ 60℃ Non operation humidity: 20% ~ 90% (Non condensing)
BIOS		ASUS BIOS in Flash Memory non-volatile and electrically reprogrammable memory, UEFI technology.