RS500A-E12-RS12U

AMD Single-socket, 1U Rack Server

EPYC

| Form Factor | 1U | CPU Number | 1 | Memory Number | 24 |

4th Generation AMD EPYC Processors with AMD 3D V-Cache technology

ASUS RS500A-E12-RS12U was designed for general purpose application. With the front 12 hot-swap bays and optional internal 4 bays, RS500A-E12-RS12U is the economic design for rack placement.

FEATURE

- 1 x AMD EPYC 9004 series processor support
- 24 x DDR5 4800 Mhz DIMM support
- 2 x M.2 socket support
- 3 x PCIe + 1 x OCP expansion in 1U rack sever.
- Internal 4-bay cage for mid bay SKU

Target market

- General-purpose Rack Server
- Enterprise Application

AMD EPYC™ 9004 series processors support

RS500A-E12 series is built on the AMD platform to deliver incredible performance and offer more CPU cores powered by AMD EPYC 9004 series processors.

Industry-leading memory capability

With 24 x DIMM slots*, RS500A-E12 Series supports total 6,144GB memory size. The CPU's memory controller supports DDR5 4800Mhz memory with 12 channels. We deliver the industry-leading technology of server memory for our customers' business.

Amazing compact design of internal 4-bay cage option for more storage possibility

ASUS RS500A-E12-RS12U features an internal 4-bay cage option. We redefine the possibility of 1U rack from traditional image of Max. 12 storage bays to the whole new image of 16 drives support.

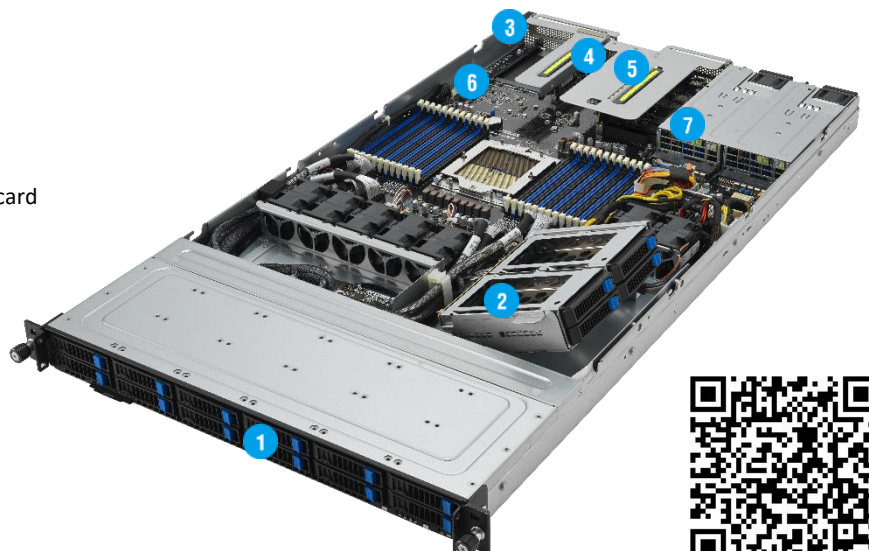### Comprehensive IT infrastructure management solution

ASUS server features an embedded ASMB11-iKVM (BMC, AST2600) and is bundled with ASUS Control Center to provide comprehensive out-of-band and in-band management capability.

1. 12 x 2.5" Hot-swap Storage Bays
2. Internal 4-bay cage for mid bay SKU only
3. 1 x PCIe Gen5 x16 slot for full-height, half-length card
4. 1 x PCIe Gen5 x16 slot for low-profile card
5. 1 x PCIe Gen5 x16 slot for low-profile card
6. 1 x OCP 3.0 Mezzanine socket
7. 1+1 80 PLUS Platinum/ Titanium CRPS

*Please select it when purchasing order and we will have assembling and standard testing before ship

RS500A-E11-RS12U

SPECIFICATION

Processor		1 x Socket SP5 (LGA-6096) Supports 4th Generation AMD EPYC Processors with AMD 3D V-Cache technology Supports AMD EPYC™ 9004 series processors (up to 400W)
Memory	**Total Slots**	**24** 12-channel, 2 DIMM per channel
	Capacity	Up to 6,144GB
	Memory Type	DDR5 4800/4400/4000/3600 RDIMM/ 3DS RDIMM 1DPC up to 4800 2DPC up to 4000(1R+1R) 2DPC up to 3600(1R+2R)/ (2R+2R)
	Memory Size	256GB, 128GB, 64GB, 32GB, 16GB *Refer to ASUS server AVL for the latest update
Expansion Slots	**Total Slots**	3+1
	Slot Type	1 x PCIe x16 slot (Gen5 x16 link, FH, HL) 1 x PCIe x16 slot (Gen5 x16 link, LP, HL) 1 x PCIe x16 slot (Gen5 x8 link, LP, HL) 1 x OCP3.0 socket (Gen5 x16 link)
Storage Bays		Front:12 x 2.5" Hot-swap Storage Bays (12 x SATA/SAS/ U.2 or U.3 NVMe Devices) Mid storage bays SKU support up to 16NVMe/SATA 2 x M.2 socket (Gen4 x4 link or SATA mode, up to 22110 module)
Networking	**LAN**	1 x Dual Port Intel I350-AM2 Gigabit LAN controller 1 x Dedicated Management port (BMC AST2600)
Security		Optional TPM module Optional PFR module
Front I/O Ports		-
Rear I/O Ports		2 x USB 3.2 Gen1 ports 2 x Gigabit LAN ports (RJ45) 1 x Management port (RJ45) 1 x VGA port 1 x COM port
Switch/LED		Front: 1 x Power Button/LED 1 x Location Button/LED 1 x Message LED 2 x LAN LED Rear: 1 x Port80 LED (Q-Code) 1 x Power Switch w/ LED 1 x Location Switch w/ LED 1 x Message LED
OS Support		*Please find the latest OS support from https://www.asus.com/event/Server/OS_support_list/OS.html
Management Solution	**Software**	ASUS Control Center (in-band)
	Out of Band Remote Management	ASMB11-iKVM (BMC AST2600)
Dimension		842.5mm x 449mm x 43.85mm (1U) 33.15" x 17.68" x 1.73"
Net Weight Kg **(CPU, DRAM & HDD not included)**		14.16 kg
Gross Weight Kg **(CPU, DRAM & HDD not included, Packing include)**		19.16 kg
Power Supply **(following different configuration by region)**		1+1 Redundant 1200W /1600W 80 PLUS Platinum Power Supp 1+1 Redundant 1600W 80 PLUS Titanium Power Supply
Environment		Operation temperature: 10℃ ~ 35℃ Non operation temperature: -40℃ ~ 70℃ Non operation humidity: 20% ~ 90% (Non condensing)

RS500A-E12 Series

SPECIFICATION

Series	RS500A-E12 Series Support Matrix	
Model	RS500A-E12-RS12U	RS500A-E12-RS4U
Processor	1 x Genoa CPU	
GPU	Up to 2 single-slot GPU cards	
Memory	24 x DIMM DDR5 4800/4400/4000/3600 RDIMM/ 3DS RDIMM 1DPC up to 4800 2DPC up to 4000(1R+1R) 2DPC up to 3600(1R+2R)/ (2R+2R)	
M.2	2 x PCIe x4 or 2 x SATA	
Expansion	1 x PCIe x16 slot (Gen5 x16 link, FH, HL) 1 x PCIe x16 slot (Gen5 x16 link, LP, HL) 1 x PCIe x16 slot (Gen5 x8 link, LP, HL) 1 x OCP3.0 socket (Gen5 x16 link)	
Storage	Front bays: 12 x 2.5" Hot-Swap drive bays 12 x SATA/SAS/NVME* Mid storage bays SKU support up to 16NVMe/SATA *SAS support only from optional SAS HBA/RAID card **Mid bay cannot be purchased separately	Front bays: 4 x 3.5" Hot-Swap drive bays Support up to 4 x NVMe/SATA/SAS* *SAS support only from optional SAS HBA/RAID card
NIC	2 x 1GbE RJ45 onboard LAN ports (Intel i350-AM2 controller) 2 x 10Gb OCP Card (Optional) 1 x Management LAN	

* The total number of NVMe drives installed will affect the total number of GPUs that can be installed.