

RS500A-E12-RS4U

AMD Single-socket, 1U Rack Server



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

ASUS RS500A-E12-RS4U was designed for general purpose application. With the front 4 hot-swap bays supporting 3.5" and 2.5" drives , RS500A-E12-RS4U 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 PCle + 1 x OCP expansion in 1U rack sever.

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.

Comprehensive IT infrastructure management solution

ASUS RS500A-E12 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. 4 x 3.5" / 2.5" Hot-swap Storage Bays
- 2. 1+1 80 PLUS Platinum/ Titanium CRPS CRPS
- 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





RS500A-E12-RS4U





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		
	including once	*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 PCle 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)		
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Storage Bays		Front: 4 x 3.5"/2.5" Hot-swap Storage Bays (4 x SATA/SAS/U.2 or U.3 NVMe Devices)		
		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		
Front I/O Ports		Optional PFR module		
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		
		1 x HDD LED		
		4 x LAN LED (1-2 for on-board LAN, 3-4 for OCP LAN)		
		4 x LAN LED (1-2 for on-board LAN, 3-4 for OCP LAN) Rear:		
		Rear: 1 x Port80 LED (Q-Code)		
		Rear: 1 x Port80 LED (Q-Code) 1 x Power Switch w/ LED		
		Rear: 1 x Port80 LED (Q-Code) 1 x Power Switch w/ LED 1 x Location Switch w/ LED		
OS Support		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		Rear: 1 x Port80 LED (Q-Code) 1 x Power Switch w/ LED 1 x Location Switch w/ LED		
OS Support Management	Software	Rear: 1 x Port80 LED (Q-Code) 1 x Power Switch w/ LED 1 x Location Switch w/ LED 1 x Message LED *Please find the latest OS support from		
	Software Out of Band Remote Management	Rear: 1 x Port80 LED (Q-Code) 1 x Power Switch w/ LED 1 x Location Switch w/ LED 1 x Message LED *Please find the latest OS support from https://www.asus.com/event/Server/OS_support_list/OS.html		
Management		Rear: 1 x Port80 LED (Q-Code) 1 x Power Switch w/ LED 1 x Location Switch w/ LED 1 x Message LED *Please find the latest OS support from https://www.asus.com/event/Server/OS_support_list/OS.html ASUS Control Center (in-band)		
Management Solution Dimension		Rear: 1 x Port80 LED (Q-Code) 1 x Power Switch w/ LED 1 x Location Switch w/ LED 1 x Message LED *Please find the latest OS support from https://www.asus.com/event/Server/OS_support_list/OS.html ASUS Control Center (in-band) ASMB11-iKVM (BMC, AST2600) 842.5mm x 449mm x 43.85mm (1U)		
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Management Solution Dimension Net Weight Kg Gross Weight Kg Power Supply	Out of Band Remote Management	Rear: 1 x Port80 LED (Q-Code) 1 x Power Switch w/ LED 1 x Location Switch w/ LED 1 x Message LED *Please find the latest OS support from https://www.asus.com/event/Server/OS_support_list/OS.html ASUS Control Center (in-band) ASMB11-iKVM (BMC, AST2600) 842.5mm x 449mm x 43.85mm (1U) 33.15" x 17.68" x 1.73" 13.15 kg (CPU, DRAM & HDD not included) 18.15 kg (CPU, DRAM & HDD not included, Packing include) 1+1 Redundant 800W/1200W 80 PLUS Platinum Power Supply		
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Management Solution Dimension Net Weight Kg Gross Weight Kg Power Supply	Out of Band Remote Management	Rear: 1 x Port80 LED (Q-Code) 1 x Power Switch w/ LED 1 x Location Switch w/ LED 1 x Message LED *Please find the latest OS support from https://www.asus.com/event/Server/OS_support_list/OS.html ASUS Control Center (in-band) ASMB11-iKVM (BMC, AST2600) 842.5mm x 449mm x 43.85mm (1U) 33.15" x 17.68" x 1.73" 13.15 kg (CPU, DRAM & HDD not included) 18.15 kg (CPU, DRAM & HDD not included, Packing include) 1+1 Redundant 800W/1200W 80 PLUS Platinum Power Supply		







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 4800/4400/3600 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 PCle 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* Optional 4 x 2.5" Internal drive bays 4 x SATA/NVME** *SAS support only from optional SAS HBA/RAID card **optional, 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.