RS520A-E11-RS24U

AMD Single Socket, High Performance 2U Server









Memory Number

16

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

ASUS RS520A-E11-RS24U 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, RS520A-E11-RS24U is optimized for rack placement. Featuring the single processor in a 2U chassis, RS520A-E11 series delivers the right-sized rack server dimensions for price sensitive applications and meets the demanding computing requirements.

FEATURE

- 1 x AMD EPYC 7003 Series Processor with DDR4 Memeory up to 3200Mhz
- PCle Gen4 Ready
- Max 2x DW GPU cards supported
- · Rack-optimized Design
- 24 x 2.5" Hot-swap HDD bays

Target market

- Data center Storage Server
- Enterprise Application

Industry-leading memory capability

With 16 x DIMM slots, RS520A-E11 Series supports total 4,096GB memory size. The CPU's memory controller supports 16 x DDR4 memory slots with 8 channels, up to 3200Mhz of RDIMMs or LRDIMMs/3DS. We deliver the industry-leading technology of server memory for our customers' business.

AMD EPYC™ 7003 Series Processor

The RS520A-E11 Series is built on the latest AMD EPYC™ 7003 Series Processor, and designed for the demand of scale-out computing, and wide range of existing and emerging workloads.

The best storage interface combination for software-defined storage management

24 x 2.5" hot-swap storage bays (supports maximum 24 x 2.5" NVMe devices)

ASMB10-iKVM and ASUS Control Center (ACC*) ASMB10-iKVM and ASUS Control Center (ACC*) ASMB10-iKVM and ASUS Control Center (ACC*)

- Asset Tag
- 16 x DIMM, DDR4-3200/2933, RDIMM, LRDIMM, LRDIMM 3DS
- 3. AMD EPYC™ 7002/7003 Processor Family (Up to 280W)
- 4. Dual M.2 (NGFF), 22110/2280/2260/2242
- 2 x PCle x16 slot(Gen4 x16 link, FHFL) or dual-slot GPU cards or 4 x PCle x16 slot(Gen4 x8 link, FHFL)*
- 6. 1 x PCle x16 slot(Gen4 x8 link, LP)
- 7. 1 x OCP 3.0 Mezzanine (Gen4 x16 link)
- 1+1 800W/1200W/1600W 80 PLUS Platinum PSUs or 850W 80 PLUS Titanium PSUs
- 9. 24 x 2.5" Hot-swap HDD Bays

 $^{^*}$ support NOT available on 24 NVMe SKU



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Processor Support.		1 x Socket SP3 (LGA 4094) Support 3rd Gen AMD EPYC™ processors with AMD 3D V-Cache™ technology AMD EPYC™ 7002/7003 Processor Family (Up to 280W)
		UPI 10.4 GT/s
Core Logic		System on Chip (SOC)
Memory	Total Slots	16 (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
	Memory Size	128GB, 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	Up to 5+1
	Slot Type	2 x PCIe x16 slot(Gen4 x16 link, FHFL) or dual-slot GPU cards or 4 x PCIe x16 slot(Gen4 x8 link, FHFL)(CPU1)* 1 x PCIe x16 slot(Gen4 x8 link, LP)(CPU1) 1 x OCP 3.0 Mezzanine (Gen4 x16 link) *support NOT available on 24 NVMe SKU
Disk Controller	SATA Controller	CPU Integrated
	SAS Controller	Optional kits: ASUS PIKE II 3008 8-port SAS HBA card ASUS PIKE II 3108 8-port SAS HW RAID card
Storage Bays	I = internal A or S will be hot-swappable	24 x 2.5" hot-swap drive bays (24x NVMe or 16x NVMe + 8x SATA/SAS or 12x NVMe + 12x SATA/SAS or 8x NVMe + 16x SATA/SAS) 2 x M.2 (22110, 2280, 2260, 2242) (Support SATA 6Gb/s*2 or PCIe Gen4 x4 link*1 or PCIe Gen4 x2 link*2)
Networking	LAN	1 x Dual Port Intel I350-AM2 Gigabit LAN Controller, 1 x Management Port
Graphic	VGA	Aspeed AST2600 64MB
Front I/O Ports		2 x USB 3.2 Gen1 ports
Rear I/O Ports		2 x USB 3.2 Gen1 ports, 1 x VGA port, 2 x RJ-45 GbE LAN ports, 1 x RJ-45 Mgmt LAN 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 1-2 LED
OS Support		Please find the latest OS support from OS Compatibility Guide ASUS
Management Solution	Software	ASUS Control Center (Classic)
Solution	Out of Band Remote Management	On-Board ASMB10-iKVM for KVM-over-IP
Dimension		840mm x 449mm x 88mm (2U) 33.07" x 17.68" x 3.47"
Net Weight Kg (CPU, DRAM & HDD not included)		19.15 kg
Gross Weight Kg (CPU, DRAM & HDD not included, Packing include)		28.74 kg
Power Supply (following different configuration by region)		1+1 Redundant 800W/1200W/1600W 80 PLUS Platinum Power Supply Rating: 100-127 / 200-240Vac, 10A / 5A (for each inlet), 50-60Hz, Class I Rating: 100-127 / 200-240Vac, 10A / 8A (for each inlet), 50-60Hz or 240Vdc, 6A 1+1 Redundant 850W 80 PLUS Titanium Power Supply Rating: 100-127 / 200-240Vac, 11A / 5A (for each inlet), 47-63Hz or 240Vdc, 4A 240Vdc Only for China
Environment		Operation temperature: $10^{\circ}\text{C} \sim 35^{\circ}\text{C}$ Non operation temperature: $-40^{\circ}\text{C} \sim 70^{\circ}\text{C}$ Non operation humidity: $20\% \sim 90\%$ (Non condensing)
BIOS		ASUS BIOS in Flash Memory non-volatile and electrically reprogrammable memory, UEFI technology.