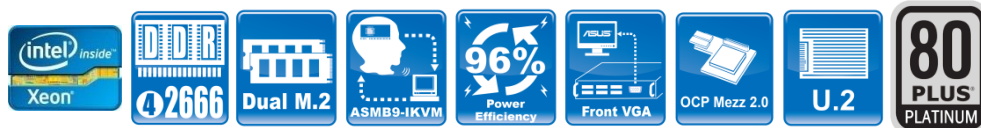


ASUS RS520-E9-RS12-E

Scalable, High Performance 2U Server



Industry-leading memory capability

With 16 RAM slots that support up to 4TB of fast, DDR4-2933MHz 3DS ECC RDIMMs or LRDIMMs, ASUS RS520-E9-RS12-E delivers industry-leading memory capability for your business.

The best storage interface combination for software-defined storage management

12 x 3.5" / 2.5" hot-swap storage bays (supports 4 x 2.5" NVMe or SAS or SATA devices).

Optimized storage with hot-swap bays and dual M.2

RS520-E9-RS12-E features two additional 2.5" hot-swap storage bays on its back panel and dual onboard M.2 slots that can be used for the main system disk as well as for memory caching. The dual M.2 SSDs can be configured as PCI-E RAID with Intel® VROC to speed up storage caching.

Intel® Xeon® Scalable Platform design

RS520-E9-RS12-E is built on the Intel® Xeon® Scalable Platform to deliver incredible performance and features 16 DIMM slots that provide best-in-class memory capacity and bandwidth. Intel® Xeon® Scalable processors offer higher per-core performance and six memory channels that provide 50% more memory bandwidth and capacity for 1.65X faster average system-level performance compared to previous-generation processors. The Intel® Xeon® Scalable platform also delivers better virtualization performance, enabling 4.2X more virtual machines (VMs) per system.

Industry-leading memory capability

The Server features a smart Thermal Radar and Auto Fan Control design with more ambient thermal sensors for the CPU, memory, GPU and front-panel board that provide improved temperature monitoring and enable dynamic fan speed adjustment for better power efficiency.

Rack-optimized thermal performance

With the CPU and memory configured in a front parallel design that enables efficient airflow for excellent thermal performance, ASUS RS520-E9-RS12-E is optimized for rack placement.

Highlights

- Intel® Xeon® Scalable Platform with Industry-leading 4TB memory capability
- 12 x 3.5" Hot-Swap HDD Bays (4 x NVMe Supported)
- Comprehensive IT infrastructure management solution - ASMB9-iKVM and [ASUS Control Center \(ACC\)](#)
- Thermal Radar and Auto Fan Control
- Rack-optimized Design
- 6 x PCIe + 1 x OCP Expansion Slots in 2U
- Dual M.2 Support
- OCP 2.0 Mezzanine

Specification

Processor Support		2 x Socket P0 (LGA 3647) 1st Gen Intel® Xeon® Processor Scalable Family 2nd Gen Intel® Xeon® Processor Scalable Family (150W) UPI 10.4 GT/s
Core Logic		Intel® C621 PCH
Memory	Total Slots	16 (6-channel per CPU, 8 DIMM per CPU)
	Capacity	Maximum up to 4096GB
	Memory Type	DDR4 2933 (1 DIMM per Channel) DDR4 2666/2400/2133 RDIMM/LRDIMM/LRDIMM 3DS (2DIMM per Channel) *Refer to Asus server AVL for the latest update *if 2DPC, 2933MHz speed will drop to 2666MHz
	Memory Size	4GB,8GB, 12GB, 32GB (RDIMM) 64GB,128GB(RDIMM 3DS) 32GB, 64GB,128GB(LRDIMM) 64GB,128GB ,256GB(LRDIMM 3DS) *Refer to Asus server AVL for latest update
Expansion Slots	Total PCI/PCI-X/PCI-E/PIKE Slots	6+1
	Slot Type	2 x PCI-E x16 (Gen3 x16 link), LP, HL 4 x PCI-E x8 (Gen3 x8 link), LP, HL 1 x OCP 2.0 Mezzanine (Gen3 x16 link)
	Proprietary Slot 1	-
Disk Controller	SATA Controller	Intel® Lewisburg PCH - 11 x SATA 6Gb/s ports (8 by 2 mini-SAS Connector) -2 x M.2 connector(SATA 6Gb/s & PCI-E Gen3 x4 link) Intel® RSTe (Support software RAID 0, 1, 10 & 5) Intel® VROC (for Windows only; Support software RAID 0, 1, 10 & 5)
	SAS Controller	Optional kits: ASUS PIKE II 3008 8-port SAS HBA card ASUS PIKE II 3108 8-port SAS HW RAID card 12G SAS Support
Storage Bays	I = internal A or S will be hot-swappable	12 x 2.5" or 3.5" Hot-swap Storage Device Bays (4 x NVMe Supported) 2 x 2.5" Hot-Swap Storage Device Bays (Rear) (SATA HDD/SSD Only) 2 x M.2 (2280, 2260, 2242) (Support SATA/PCIe M.2,SATA/PCIe RAID)
Networking	LAN	1 x Dual Port Intel I350-AM2 Gigabit LAN Controller, 1 x Management Port
Graphic	VGA	Aspeed AST2500 64MB
Auxiliary Storage Device Bay (Floppy / Optical Drive)		-
Front I/O Ports		2 x USB 2.0 ports
Rear I/O Ports		2 x USB 3.0 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 HDD 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 Mezzanine card use
OS Support		Please find the latest OS support from http://www.asus.com/
Management Solution	Software	ASUS Control Center (Classic)
	Out of Band Remote Management	On-Board ASMB9-iKVM for KVM-over-IP
Regulatory Compliance		BSMI, CE, C-TICK, FCC (Class A)
Dimension		615mm x 444mm x 88mm (2U) 24.21" x 17.48" x 3.46"
Net Weight Kg (CPU, DRAM & HDD not included)		24.55 kg
Gross Weight Kg (CPU, DRAM & HDD not included, Packing include)		30.1 kg
Power Supply (following different configuration by region)		1+1 Redundant 800W 80 PLUS Platinum Power Supply Rating: 100-127/200-240 Vac, 9.4 A/4.72 A, 47-63 Hz, Class I
Environment		Operation temperature: 10°C ~ 35°C Non operation temperature: -40°C ~ 70°C Non operation humidity: 20% ~ 90% (Non condensing)