RS720-E10-RS12

Scalable, High Performance 2U Server

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

2U dual-socket server powered by 3rd Gen Intel Xeon Scalable processors that supports up to 32 DIMMs, 12 front bays, nine PCIe 4.0 slots, OCP 3.0, M.2 and ASUS ASMB10-iKVM

FEATURE

- Powered by dual-socket 3rd Gen Intel Scalable processors
- CPU maximum TDP of up to 270 With 32 DIMMs and support
- Up to 12 SATA with 8 NVMe drives support
- Up to 9 PCIe® 4.0 slots
- Flexible onboard LAN-module design

3rd Gen Intel Xeon Scalable processors

The latest Intel Xeon scalable processors offer up to 1.42x more cores per CPU and 1.52x computing performance increase. ASUS RS720-E10-RS12 supports dual Intel Scalable processors to enable up to 32 DIMM slots, all flash and PCIe Gen 4.0.

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.

Four Dual-slot GPUs Support

ASUS RS720-E10 servers feature a powerful GPU architecture that supports up to four dual-slot GPUs such as NVIDIA A100 in one 2U system to enable easy scale-up in order to meet the demands of AI and high-performance computing (HPC), and to securely run workloads in virtualized environments.

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.

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Processor Support.		2 x Socket P+ (LGA 4189)
		3rd Gen Intel® Xeon® Scalable Processors Family(270w) UPI (11.2 GT/s)
Core Logic		Intel® C621A Chipset
Memory	**Total Slots**	32 (8-channel per CPU, 16 DIMM per CPU)
	Capacity	Maximum up to 6TB
	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, 8GB RDIMM 256GB, 128GB, 64GB RDIMM 3DSB 128GB, 64GB LRDIMM 128GB LR-DIMM 3DS 512GB, 256GB, 128GBIntel® Optane™ DC persistent memory 200 Series (DCPMM)
Expansion Slots	**Total PCI-E/PIKE Slots**	9
	Slot Type	Slot 1, 2: 2 x PCI-E x16 (Gen4 x8 link) or 1 PCI-E x16 (Gen4 x16 link), FH, FL (CPU1) Slot3: 1 x PCI-E x16 (Gen4 x16 link), FH, HL (CPU1) or 1 x OCP3.0 Mezzanine slot (Gen4 x16 link) (CPU1) Slot 4: 1 x PCI-E x8 (Gen4/Gen3 x8 link), FH, HL (CPU1) Slot 5,6: 2 x PCI-E x16 (Gen4 x8 link) or 1 PCI-E x16 (Gen4 x16 link), FH, FL (CPU2) Slot 7,8: 2 x PCI-E x16 (Gen4 x8 link) or 1 PCI-E x16 (Gen4 x16 link), FH, FL (CPU2) Slot 9: 1 x PCI-E x16 (Gen4 x16 link), LP, HL (CPU2)* *Optional for COM port *Will drop to x8 when M.2 occupied
Disk Controller	**SATA Controller**	Intel® PCH C621A - Intel® RSTe: Support software RAID 0, 1, 10 & 5 - Intel® VROC: Support software RAID 0, 1, 10 & 5, 50
	SAS Controller	Optional kits: ASUS PIKE II 3008 8-port SAS 12Gb/s HBA card ASUS PIKE II 3108 8-port SAS HW 12Gb/s RAID card Broadcom MegaRAID 9560-16i
Storage Bays		Front bays: 12 x 3.5 or 2.5" hot-swap bays (8x NVMe/SATA/SAS*+ 4x SATA/SAS*) Rear bays (option): 2 x 2.5" hot-sway drive bays (2x NVMe) *SAS support only from SAS HBA/RAID card * Support tri-mode card 2 x M.2 connector (NGFF 2280/2260. PCIe Gen4x4 link)(CPU2)
Networking	**LAN**	Optional 1 x Quad Port Intel I350-AM4 1G LAN Controller* or 1 x Dual Port Intel X710-AT2 Gigabit 10G LAN Controller Default Management Port * Only for non-GPU SKU
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 Gen1 ports 1 x VGA port 1 x RJ-45 Mgmt LAN port 4/2 x NIC ports* * The number of NIC ports available depends on the LAN Controller card installed.
Switch/LED		Front Switch/LED: 1 x Power Switch (w/ LED) 1 x Reset Switch 1 x Location Switch (w/ LED) 1 x HDD Access LED* 1 x Message LED, LAN 1/3 and 2/4 LED (on NIC module)** * The HDD Access LED is only functional when an ASUS PIKE II card is installed and connected. ** The number of LAN LEDs available depends on the LAN Controller card installed.

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		Rear Switch/LED: 1 x Port 80 LED (Q-Code) 1 x Power Switch w/ LED 1 x Location Switch w/ LED
OS Support		Windows® Server, RedHat® Enterprise Linux, SuSE® Linux Enterprise Server CentOS, Ubuntu, Vmware 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 ASMB10-iKVM for KVM-over-IP
Dimension		840mm x 449mm x 88.1mm (2U) 24.21" x 17.48" x 3.46"
Net Weight Kg (CPU, DRAM & HDD not included)		18.195 kg
Gross Weight Kg (CPU, DRAM & HDD not included, Packing include)		26.855 kg
Power Supply (following different configuration by region)		1+1 Redundant 1600W 80 PLUS Platinum Power Supply 2400W 80 PLUS Titanium Power Supply
Environment		Operation temperature: 10℃ ~ 35℃ Non operation temperature: -40℃ ~ 70℃ Non operation humidity: 20% ~ 90% (Non condensing)
BIOS		ASUS BIOS in Flash Memory non-volatile and electrically reprogrammable memory, UEFI technology, with S.M.A.R.T.