



ASUS ESC8000 G4 High-density GPU server with hybrid computing power



ESC8000 G4 features a powerful GPU architecture that supports up to eight high-performance NVIDIA® Quadro® or Tesla® GPU cards in a 4U chassis. With so much graphics power, ESC8000 G4 lets you accomplish demanding computing tasks more quickly and with greater efficiency. An optimized internal layout enables ESC8000 G4 to fit a wide variety of graphics cards — including dual-slot GPUs — with active or passive thermal modules.

Highlights

- High-density GPU server with hybrid computing power
- The Patented Adaptable Topology design
- Scalable design for growing workloads
- Efficient cooling with hot-swappable redundant fans and dedicated air tunnels
- Exclusive thermal radar technology for energy efficiency
- Comprehensive IT infrastructure management software — [ASUS Control Center](#) IT management software and ASMB9-iKVM module support
- Simplified maintenance and management
- Supports 100Gbps Intel® Dual Embedded Omni-Path Architecture

The Patented Adaptable Topology design

ESC8000 G4 provides flexible system topology configuration options, including the ability to choose a single or dual root complex, making it ideal for both deep learning requirements. The patented Adaptable Topology design enables users to switch the system topology easily via the intuitive web-based GUI of the ASUS ASMB9-iKVM server management solution, without changing any hardware configurations or cable routing.

Scalable design for growing workloads

ESC8000 G4 is designed for easy scalability to fit growing businesses and workloads. With eight PCIe Gen3 x16 slots that fit full-height, full-length GPU cards, two PCIe Gen3 x16 slots for high-speed networking cards, and one internal PCIe Gen3 x8 slot for an HBA/RAID card.

Exclusive thermal radar technology for energy efficiency

This design provides internal and external temperature monitoring and enables dynamic fan curve adjustment, lowering fan power consumption up to 20% and reducing TCO which is ideal for extreme workload data center.

Simplified maintenance and management

Easily Swappable Components - With the ingenious placement design, IT staff can swap key components with ease.

Supports 100Gbps Intel® Dual Embedded Omni-Path Architecture

ESC8000 G4 supports two of the latest Intel® Xeon® Scalable Family processors, featuring up to total 56 cores and 112 threads for leading performance. The server also has 24 memory slots that fit up to 3TB of DDR4 2666 memory for intensive computing. With two Skylake-F CPUs, ESC8000 G4 supports optional dual Intel Omni-Path (OPA 100GbE) configurations for cluster management.

Specification

Processor Support		2 x Socket P (LGA 3647) Intel® Xeon® processor Scalable family Intel® Xeon® processors family with Omni-Path Architecture *Refer to support page for more information on UPI (10.4 GT/s)
Core Logic		Intel® PCH C621
Memory	Total Slots	24 (6-channel per CPU, 12 DIMM per CPU)
	Capacity	Maximum up to 3072GB
	Memory Type	DDR4 2666/2400/2133 RDIMM/LR-DIMM/LR-DIMM 3DS *Refer to ASUS server AVL for the latest update
	Memory Size	32GB, 16GB, 8GB, 4GB (RDIMM) 64GB, 32GB (LRDIMM) 128GB, 64GB (LRDIMM/RDIMM 3DS) *Refer to ASUS server AVL for the latest update
Expansion Slots	Total PCI/PCI-X/PCI-E/PIKE Slots	11
	Slot Type	8 x PCI-E x16 (Gen3 x16 link) , FH, FL Low-profile(Rear): 2 x PCI-E x16 (Gen3 x16 link), LP, HL or 1 X PCI-E x16 (Gen3 x16 link), LP, HL Low-profile(Front): 1 x PCI-E x8 (Gen3 x8 link) , LP, HL
	Proprietary Slot 1	-
Disk Controller	SATA Controller	Intel® C621 - 8 x SATA 6Gb/s ports + 2 x M.2 connector(SATA 6Gb/s & PCI-E Gen3 x4 link) or 6 x SATA 6Gb/s ports + 2 x NVMe + 2 x M.2 connector(SATA 6Gb/s & PCI-E Gen3 x4 link) Intel® RSTe (Support software RAID 0, 1, 10 & 5) Intel® VROC (Support software RAID 0, 1, 10 & 5)
	SAS Controller	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	8 x 2.5" Hot-swap Storage Bays
Networking	LAN	1 x Dual Port Intel Ethernet Controller i350-AM2 + 1 x Mgmt LAN
Graphic	VGA	Aspeed AST2500 with 64MB VRAM
Auxiliary Storage Device Bay (Floppy / Optical Drive)		-
Front I/O Ports		2 x USB 3.0 ports, 2 x USB 2.0 ports, 1 x VGA port, 1 x COM port
Rear I/O Ports		2 x RJ-45 GbE LAN ports, 1 x RJ-45 Mgmt LAN port
Switch/LED		Front Switch/LED: 1 x Q-Code/Port 80 LED, 1 x Power switch/LED, 1 x Location switch/LED, 1 x HDD Access LED, 1 x Message LED, LAN 1-4 LED
OS Support		Windows® Server 2016, Windows® Server 2012 R2, RedHat® Enterprise Linux, SuSE® Linux Enterprise Server, CentOS, Ubuntu, VMware, Citrix XenServer Please find the latest OS support from http://www.asus.com/
Management Solution	Software	ACC
	Out of Band Remote Management	On-Board ASMB9-iKVM for KVM-over-IP
Regulatory Compliance		BSMI, CCC, FCC(Class A)
Dimension		798mm x 439mm x 175.6mm(4U)
Net Weight Kg (CPU, DRAM & HDD not included)		TBD
Gross Weight Kg (CPU, DRAM & HDD not included, Packing include)		TBD
Power Supply (following different configuration by region)		2+1 Redundant 1600W 80PLUS Platinum Power Supply; 1600W: 100-127/200-240 Vac, 25.8/19 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)

Distributor -



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