

ESC4000A-E12 NVIDIA PRO 6000 Max-Q

1-Socket 2U Accelerator Server with 4 GPUs supported



2U



1



12

ESC4000A-E12 is a four-GPU server built for the demands of enterprise AI and high-performance computing. With AMD EPYC™ 9005 / 9004 single-processor 2U GPU server that supports four dual-slot GPUs, twelve DIMMs, PCIe 5.0 slots, six NVMe, OCP 3.0 and ASMB11-iKVM.

FEATURE

- AMD EPYC™ 9005 / 9004 series with AMD 3D V-Cache technology
- PCIe Gen5.0 Ready
- AI and HPC workloads ready
- Comprehensive cooling solutions
- Enhanced IT-infrastructure management

AMD EPYC™ 9005 / 9004 series with AMD 3D V-Cache technology

Powered by AMD EPYC 9005 / 9004 processors with AMD 3D V-Cache technology with 96 cores, 12-channels, up to 4800 MHz DDR5 and support for a maximum TDP of up to 400 watts per socket.

* Turin BIOS can be flashed only if your Server build model is from May 2025, if not sure please contact ASUS support team for further advice.

PCIe Gen5.0 Ready

PCI Express® (PCIe®) 5.0 delivers 64 GT/s bandwidth, which is twice the speed of PCIe 4.0, and offers lower power consumption, better lane scalability and backwards compatibility

AI and HPC workloads ready

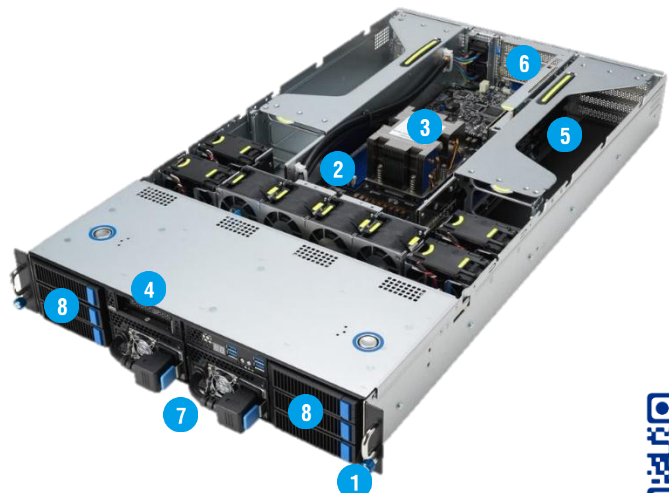
Up to four dual-slot active or passive GPUs, NVIDIA NVLink® bridge, and NVIDIA Bluefield DPU support to enable performance scaling

Enhanced IT-infrastructure management

ASUS ASMB11-iKVM remote control with ASPEED AST2600, ASUS Control Center IT management software and hardware-level Root-of-Trust solution

Target market

- Streaming Media
- Cloud Computing
- Virtualized & VDI Application
- Enterprise & HPC Application



1. Asset Tag
2. 12 x DIMM, DDR5 4800/4400 RDIMM/ RDIMM 3DS
3. AMD EPYC™ 9005/9004 Series
4. 1 x PCI-E x8 (Gen5 x8 link)
5. 4 x PCI-E x16 (Gen5 x16 link)
6. 2 x PCI-E x16 (Gen5 x16/8 link) or OCP socket and 1 x PCI-E x8 (Gen5 x8 link)
7. 1+1 Redundant 2600W 80 PLUS Titanium CRPS-R Power Supply
8. 2 x 2.5" & 4 x 3.5" Hot-swap HDD Bays



ESC4000A-E12

SPECIFICATION

Processor Support		1 x Socket SP5 (LGA 6096) AMD EPYC™ 9005/9004 series (up to 400W) 4th Generation AMD EPYC Processors with AMD 3D V-Cache technology
Memory	Total Slots	12 (12-channel per CPU, 12 DIMM per CPU)
	Capacity	Maximum up to 3TB per CPU socket
	Memory Type	DDR5 4800/4400 RDIMM/3DS RDIMM *Please refer to www.asus.com for latest memory AVL update
	Memory Size	64GB, 32GB, 16GB RDIMM 256GB, 128GB 3DS RDIMM * Refer to www.asus.com/support for more information
Expansion Slots	Total PCI/PCI-X/PCI-E/PIKE Slots	12
	Slot Type	Rear: -4 x PCIe x16 slots (Gen5 x16 link, FH, FL) for dual-slot GPU cards or 8 x PCIe x16 slots (Gen5 x8 link, FH,FL) for single-slot GPU cards -1 x PCIe x16 slots (Gen5 x16 link, FH, HL) -1 x PCIe x16 slot (Gen5 x16/x8 link, FH, HL) or OCP socket option -1 x PCIe x8 slot (Gen5 x0/x8 link, LP, HL) Front: 1 x PCIe x8 slot (Gen5 x8 link, LP, HL) Only for SKU1
Disk Controller	SATA Controller	6 x SATA 6Gb/s ports
	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 9540-8i Broadcom MegaRAID 9560-16i
Storage Bays	I = internal A or S will be hot-swappable	2 x 2.5" & 4 x 3.5" Hot-swap Storage Bays SKU1: 2 x 2.5" SATA/SAS*/NVMe + 2 x 3.5" SATA/SAS*/NVMe + 2 x 3.5" SATA/SAS* SKU2: Build to order 2 x 2.5" SATA/SAS*/NVMe + 4 x 3.5" SATA/SAS*/NVMe (Occupy 1 x PCIe x8 link) *SAS support required a HBA/RAID card. **For SKU1 additional 2 x NVMe support required a RAID card.
Networking	LAN	2 x Gigabit LAN ports (Intel I350 Controller) 1 x Management Port
Graphic	VGA	Aspeed AST2600 64MB
Front I/O Ports		4 x USB 3.2 Gen1 ports
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
Switch/LED		Front : 1 x Power Button/LED 1 x Location Button/LED 1 x Message LED 1 x Q-Code/Port 80 LED 2 x LAN LED Rear : 1 x Power Button/LED 1 x Location LED 1 x Message LED

SPECIFICATION

OS Support		Windows Server RedHat® Enterprise Linux SuSE® Linux Enterprise Server CentOS Ubuntu Vmware *Please find the latest OS support from https://www.asus.com/event/Server/OS_support_list/OS.html
Management Solution	Software	ASUS Control Center (Classic)
	Out of Band Remote Management	On-Board ASMB11-iKVM
Dimension		800mm x 439.5mm x 88.9mm (2U) 845.45mm x 439.5mm x 88.9mm (2U) for immersion cooling
Net Weight Kg (CPU, DRAM & HDD not included)		24 kg
Gross Weight Kg (CPU, DRAM & HDD not included, Packing include)		34.8 kg
Power Supply (following different configuration by region)		1+1 Redundant 2600W 80 PLUS Titanium CRPS-R Power Supply
Environment		Operation temperature: 10°C ~ 35°C Non operation temperature: -40°C ~ 70°C Non operation humidity: 20% ~ 90% (Non condensing)