

ESC8000A-E13

New Generation, High Performance 4U GPU Server



4U



2



24

ESC8000A-E13 is a dual-socket server powered by AMD EPYC™ processors, designed for enterprise AI infrastructure with exceptional computational capabilities, accelerating GPU interconnects and high-bandwidth fabric, supporting up to eight 600W dual-slot GPUs, and offering scalable performance through configurable NVIDIA® NVLink™ 2-Way or 4-Way Bridges to optimize bandwidth and performance for demanding AI and HPC workloads.

FEATURE

- AMD EPYC 9005 Series Processors
- Modularized Design
- 8 x Direct 600W GPU Support
- Optimized Server Configuration
- Toolless Design

5th Gen AMD EPYC™ Processors

Powered by AMD EPYC 9005 processors with up to 128 Zen 5/5c cores and support for a maximum TDP of 500 watts per socket

Direct GPU Support

Enable versatile configurations and rapid deployment in large-scale enterprise AI infrastructures, providing the computational power and scalability needed to support demanding AI workloads

Optimized Connectivity

Offers two PCIe 5.0 slots for high-bandwidth NICs, DPUs, and up to eight 600W dual-slot GPUs, all directly connected to the CPU to minimize latency and optimize performance

Storage Flexibility

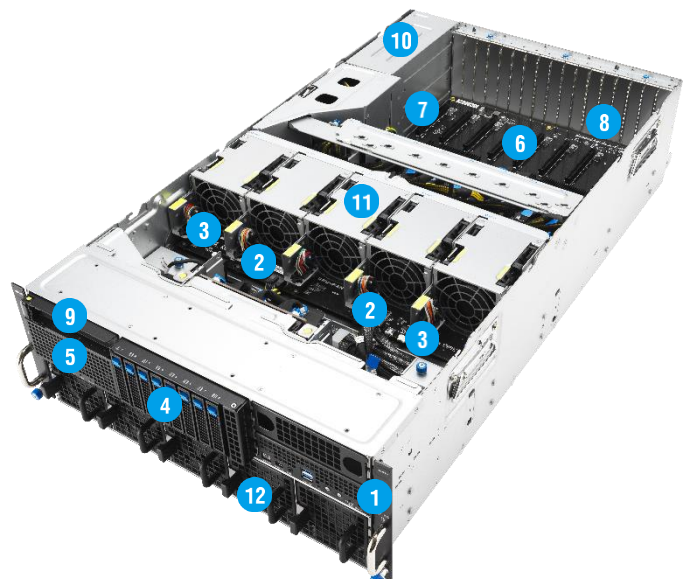
Offers versatile storage configurations, including hardware RAID functionality, and supports up to six 2.5" U.2 NVMe drives for enhanced performance and scalability

Target market

- Virtual Machines
- Data Center
- HPC Application
- AI Training
- LLM Inference

Toolless Design

The ASUS-exclusive toolless design empowers easy service and saves over 90% maintenance time for maximum efficiency



1. Asset Tag
2. 24 x DDR5 DIMM up to 6000Mhz
3. 2 x AMD EPYC™ 9005 Series Processor
4. 8 x 2.5" Hot-swap HDD Bays
5. 2 x M.2 (Gen 5 x4 link, up to 22110)
6. 8 x PCIe slot for dual-slot GPU (Gen5 x16 link, support up 600W)
7. 1 x PCIe slot for NIC / NVIDIA BlueField®-3 DPUs (Gen5, x16 link, FHHL)
8. 1 x PCIe slot for NIC (Gen5, x8 link, FHHL)
9. 1 x PCIe slot for PCIe card (Gen5 x8 link, FHHL)
10. 3+1 Redundant 3200W 80 PLUS Titanium Power Supply
11. 5 x GPU Fan
12. 5 x System Fan

ESC8000A-E13

SPECIFICATION

Processor Support

2 x Socket SP5 (LGA 6096)

AMD EPYC™ 9005 series processors*

*TDP support by configuration

Core Logic

System on Chip (SOC)

Memory

Total Slots

24 x DIMM slots (12 channel per CPU, 12 DIMM per CPU)

Capacity

Maximum up to 3TB per CPU socket

Memory Type

DDR5 6400/5600 RDIMM/ 3DS RDIMM

*Refer to ASUS server AVL for the latest update

Memory Size

128GB, 64GB, 32GB RDIMM

*Refer to ASUS server AVL for the latest update

Expansion Slots

Total Slots

11

Slot Type

Rear:

- 8 x PCIe x16 (Gen5 x16 link, FHFL) for dual-slot GPU cards

- 1 x PCIe x16 (Gen5 x16 link, FHHL) for NIC cards or NVIDIA BlueField®-3 DPU

- 1 x PCIe x16 (Gen5, x8 link, FHHL) for NIC card

Front:

- 1 x PCIe x8 (Gen5 x8 link, FHHL) for HBA/RAID card

Storage Bays

8 x 2.5" Front Hot-swap Storage Bays*

(Backplane supports up to 8 x NVMe)

*The actual number of storage devices depends on the HBA/RAID configuration

Networking

LAN

1 x Management Port (RJ45)

Graphic

VGA

Aspeed AST2600 64MB

Front I/O Ports

1 x Mini display port

2 x USB 5Gbps ports

Rear I/O Ports

1 x USB 5Gbps port

1 x RJ-45 management LAN port

Switch/LED

Front Switch/LED:

1 x Power switch/LED, 1 x Location switch/LED, 1 x Message LED,

1 x Clear CMOS switch, 1 x Reset switch, 1 x Q-Code/Port 80 LED

Rear Switch/LED:

1 x Power switch/LED, 1 x Location switch/LED, 1 x Message LED

OS Support

Windows Server

RedHat® Enterprise Linux, SuSE® Linux Enterprise Server, CentOS, Ubuntu, VMware

Please find the latest OS support from [OS Compatibility Guide | ASUS](#)

Management Solution

Software

ASUS Control Center (Classic)

Out of Band Remote Management

On-Board ASMB12-iKVM for KVM-over-IP

Dimension

800mm x 439.5mm x 175 mm (4U)

31.5"x17.3"x 6.9"

Net Weight Kg (CPU, DRAM & HDD not included)

42 kg

Gross Weight Kg (CPU, DRAM & HDD not included, Packing include)

44.23 kg

Power Supply

(following different configuration by region)

3+1 Redundant 3200W 80 PLUS Titanium power

Rating: 220-240 Vac, 16A (x4) 50/60Hz

Environment

Operating temperature: 10°C ~ 35°C

Non-operating temperature: -40°C ~ 60°C

Non-operating humidity: 20% ~ 95% (Non-condensing)