

# ESC8000A-E13P

## New Generation, High Performance 4U MGX Server



4U



2



24

ESC8000A-E13P 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 600W dual-slot GPU Support
- Optimized Server Configuration
- Toolless Design

### 5<sup>th</sup> Gen AMD EPYC™ Processors

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

### Modularized Design

Fully compliant with NVIDIA MGX architecture, can enable multiple configurations and rapidly deploy in large-scale enterprise AI infrastructures

### GPU and NVLink® bridge Support

Up to eight dual-slot 600W GPUs, NVIDIA NVLink® 2-Way or 4-Way bridge, and NVIDIA Bluefield DPU support to enable performance scaling

### Optimized Server Configuration

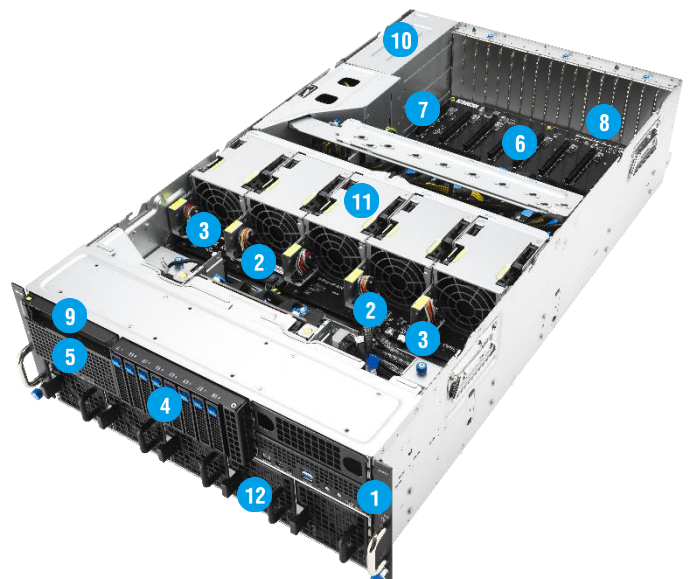
Based on OVX system, configured server as 2-8-5 topology (CPU-GPU-DPU/NIC), 5 high-bandwidth PCIe NICs and DPU enhance network traffic and system performance

### Toolless Design

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

### Target market

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



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 (Gen5, x16 link, FHHL)
8. 4 x PCIe slot for NIC/BlueField-3 cards (Gen5, x16 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-E13P

# SPECIFICATION

**Processor Support**

2 x Socket SP5 (LGA 6096)  
 AMD EPYC™ 9005 series processors\*  
 \* Up to 500W TDP, TDP support varies by configuration

**Core Logic**

System on Chip (SOC)

**Memory**

**Total Slots**  
**Capacity**  
**Memory Type**

24 x DIMM slots (12 channel per CPU, 12 DIMM per CPU)  
 Maximum up to 3TB per CPU socket  
 DDR5 6400\*\*/6000/5600 RDIMM/ 3DS RDIMM  
 \*Refer to ASUS server AVL for the latest update  
 \*\* DDR5 6400 support expected in Q1 2025

**Memory Size**

128GB, 64GB, 32GB RDIMM  
 \*Refer to ASUS server AVL for the latest update

**Expansion Slots**

**Total Slots**  
**Slot Type**

14  
 Rear:  
 - 8 x PCIe x16 (Gen5 x16 link, FHFL) for dual-slot GPU card  
 - 5 x PCIe x16 (Gen5 x16 link, FHHL) for NIC card or BlueField-3 card  
 Front:  
 - 1 x PCIe x8 (Gen5 x8 link, FHHL)

**Storage Bays**

8 x 2.5" Front Hot-swap Storage Bays  
 (Backplane supports up to 8 x NVMe)  
 2 x M.2 socket (Gen 5 x4 link, up to 22110)

**Networking**

**LAN**

2 x 10GbE LAN ports (RJ45, X710-AT2)  
 1 x Management Port (RJ45)

**Graphic**

**VGA**

Aspeed AST2600 64MB

**Front I/O Ports**

1 x Mini DisplayPort  
 2 x USB 5Gbps ports

**Rear I/O Ports**

1 x USB 5Gbps port  
 2 x RJ-45 LAN ports  
 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, 2 x M.2 LEDs, 2 x LAN LEDs, 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**  
**Out of Band Remote Management**

ASUS Control Center (Classic)  
 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)