

ESC A8A-E12U series

Empowering AI and HPC with excellent performance



Form Factor / 7U

CPU Number / 2

Memory Number / 24

ASUS ESC A8A-E12U series is a 7U AMD® 8-GPU server with dual AMD EPYC 9005 processors that designed for large scale of AI and HPC applications.

FEATURE

- Powered by dual AMD next Gen processors, with DDR5 RDIMM up to 6000MHz 1DPC
- CPU maximum TDP up to 400W
- Powerful Performance
- Enhanced IT-infrastructure management

Target Market

- High Performance Computing
- Generative AI
- Deep Learning / Machine Learning
- Data Analysis
- Scientific Research
- AI Inferencing

A + A Solution -

AMD EPYC 9005 Processors & AMD Instinct™ MI325X Series

ASUS ESC A8A-E12U series is a 7U AMD® eight-GPU server with dual AMD EYCP 9005 processors and 24 DDR5 RDIMM up to 6000 MHz (1DPC), delivering exceptional performance , designed for generative AI and HPC workloads .

Powerful Performance

Support AMD Instinct™ MI325X Series 8-GPUs. NIC and storage are placed close to the GPUs, use a ratio of up to 1:1 GPUs to network interface card and have GPU Direct Storage design could reduce read/write latency. Industry-leading 256 GB HBM capacity and 6 TB/s bandwidth for large AI models and HPC workloads. Direct GPU-to-GPU interconnect delivers 896 GB/s bandwidth for efficient 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

SPECIFICATION

Model Name		ESC A8A-E12U
Processor Support		2 x AMD EPYC 9005 Processors (Up to TDP 400W)
Core Logic		(INTEGRATED I/O – NO CHIPSET)
Memory	Total Slots Capacity Memory Type Memory Size	24x DDR5 DIMM slots, up to 6000MHz(1DPC) (12-channel per CPU, 12 DIMM per CPU) Maximum up to 3TB DDR5 6400/5600 RDIMM 128GB, 96GB, 64GB *Refer to Asus server AVL for the latest update
Expansion Slots	Total PCI/PCI-X/PCI-E/PIKE Slots Slot Type	Up to 11 PCIe slots [89104 PCIe Switch directly] -8 x PCIe Gen5 x16 (LP, HL) – GPU group [89048 PCIe Switch directly] -1 x PCIe Gen5 x16 (FH, HL) – CPU 1 extension -1x PCIe Gen5 x8 (FH, HL) – CPU 1 extension [CPU directly] -1 x PCIe Gen5x16 (FH, HL) (CPU2)
Disk Controller	NVMe Controller	2 x M.2 Gen5 x4 (22110, 2280, 2260) Optional kits: Broadcom MegaRAID 9540-8i Broadcom MegaRAID 9560-16i *Refer to Asus server AVL for the latest update
	SATA/SAS Controller	Optional kits: ASUS PIKE II 3008-8i/3108-8i Broadcom MegaRAID 9540-8i Broadcom MegaRAID 9560-16i *Refer to Asus server AVL for the latest update
Storage Bays	I = internal A or S will be hot-swappable	10 x 2.5" hot-swap bays 8 x NVMe + 2 x NVMe/SATA*/SAS* *HBA/ RAID card is required to support SAS hard drives
Networking	LAN	1 x Management Port
Graphic	VGA	Aspeed AST2600 64MB
Front I/O Ports		4 x USB3.2 Gen1 ports, 1 x VGA port 2 x 10Gb RJ45 LAN module (Intel-x710 Based) 1 x Mgmt LAN 1 x locate button 1 x power button
Rear I/O Ports		1 x locate button 1 x power button
Switch/LED		Front : 1 x Power Button/LED 1 x Location Button/LED 1 x Message LED 1 x Q-Code/Port 80 LED Rear : 1 x Location LED 1 x Power Button/LED
OS Support		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 ASM11-iKVM for KVM-over-IP
Dimension		885mm x 447mm x 306.65mm
Net Weight Kg (CPU, DRAM & HDD not included)		TBC
Gross Weight Kg (CPU, DRAM & HDD not included, Packing included)		TBC
Power Supply (following different configuration by region)		4+2 Redundant 80 PLUS 3000W Titanium PSU
Environment		Operation temperature: 10°C ~ 35°C Non operation temperature: -40°C ~ 70°C Non operation humidity: 20% ~ 90% (Non condensing)