

ESC N4A-E11 Series

NVIDIA HGX A100 4-GPU Server



Form
Factor

3U

CPU
Number

1

Memory
Number

16

ASUS ESC N4A-E11 Series was designed to accelerate application performance leveraging NVIDIA HGX A100 4-GPU baseboard. Support Single AMD Milan up to 280W TDP CPU with 16 DIMM slots, ESC N4A-E11 is optimized for high performance & highest C/P ratio.

FEATURE

- Single AMD Milan Up to 280W TDP CPU
- NVIDIA HGX A100 4-GPU baseboard
- M.2 support
- 3 x PCI-E Gen4 x16(1 x OCP support)
- 4 x 3.5" Hot-swap NVME(x2)/SATA/SAS drive bays
- 1+1 redundancy 3000 Watt Titanium power supplies

Industry-leading GPU technology

Implement NVIDIA HGX A100 4-GPU baseboard and adopting NVIDIA NVLink technology to make GPU to GPU communication speeds up to 200GB per second.

Thermal optimized design

Separate CPU and GPU tunnel to provide sufficient air flow even the CPUs and GPUs are running at maximum performance, enable 400W GPUs in system.

Optional liquid cooling solution

Asetek Direct-to-Chip (D2C) liquid-cooling technology achieving lower-usage effectiveness (PUE) and optimized TCO for data centers.

200Gb networking support ready

Features up to 3 x PCI-E 4.0 expansion slots for high speed networking like 200Gb per second Mellanox HDR InfiniBand smart NICs.

Enhanced Security

PFR FPGA as the platform Root-of-Trust solution for firmware resiliency Trusted Platform Module 2.0 (TPM 2.0) to secure hardware through integrated cryptographic keys and offer regular firmware update for vulnerabilities.

Comprehensive IT infrastructure management solution

ASMB10-iKVM and ASUS Control Center (ACC)

Target market

- Data center
- Enterprise
- College



ESC N4A-E11

SPECIFICATION

| | | |
|--|--------------------------------------|--|
| Processor Support. | | 1 x Socket SP3 (LGA-4094) Supports AMD EPYC™ 7003 series processors (up to 280W) |
| Core Logic | | System on Chip (SoC) |
| GPU | | GPU Baseboard Options: HGX A100 4-GPU 40GB(160GB total) 400W HGX A100 4-GPU 80GB(320GB total) 400W |
| Memory | Total Slots | 16 (8-channel per CPU) |
| | Capacity | Maximum up to 4,096GB |
| | Memory Type | DDR4 3200 RDIMM/LR-DIMM/LR-DIMM 3DS |
| | Memory Size | 64GB, 32GB, 16GB(RDIMM), 128GB, 64GB(LRDIMM), 256GB, 128GB, 64GB(LRDIMM 3D) *Refer to ASUS server AVL for the latest update |
| Expansion Slots | Total Slots | 3 |
| | Slot Type | 1 x PCIe x16 slot (Gen4 x16 link, FH,HL) or OCP3.0 NIC socket (optional) 2 x PCIe x16 slot (Gen4 x16 link, LP,HL) |
| Storage Bays | | 4 x 3.5" Hot-swap Storage Bays (Backplane supports 4 x SATA/SAS/MVMe Devices) 1 x M.2 socket (Gen4 x4 link, up to 2280 module) |
| Networking | LAN | 2 x 10GbE LAN ports (Intel X710-AT2) 1 x Dedicated management port (BMC AST2600) |
| Front I/O Ports | | 1 x USB 3.2 Gen1 ports |
| Rear I/O Ports | | 2 x USB 3.2 Gen1 port 2 x 10GbE LAN ports (RJ45) 1 x Management port (RJ45) 1 x VGA port 1 x COM port |
| Switch/LED | | Front: 1 x Power button/LED, 1 x Location button/LED 1 x Reset switch 1 x HDD Access LED 1 x Message LED 2 x LAN LED Rear: 1 x Q-Code/Port 80 LED 1 x Power button/LED 1 x Location button/LED |
| OS Support | | Please find the latest OS support from http://www.asus.com/ |
| Management Solution | Software | ASUS Control Center (in-band) |
| | Out of Band Remote Management | ASMB10-iKVM (BMC AST2600) |
| Dimension | | 3U 823mm x 439.5mm x 130.6mm |
| Net Weight Kg (CPU, DRAM & HDD not included) | | 38 kg |
| Gross Weight Kg (CPU, DRAM & HDD not included, Packing include) | | 43 kg |
| Power Supply (following different configuration by region) | | 1+1 Redundant 3000W 80 PLUS Titanium Power Supply |
| Environment | | Operation temperature: 10°C ~ 35°C Non operation temperature: -40°C ~ 70°C Non operation humidity: 20% ~ 90% (Non condensing) |

