



UQLEAD K03-8220 Ultra

AI/HPC Server

Intel® Xeon® 6 – 8U DP NVIDIA HGX™ B300



Key Features

- NVIDIA HGX™ B300
- 8 x 800 Gb/s OSFP InfiniBand XDR or dual 400 Gb/s Ethernet GPU networking ports via onboard NVIDIA ConnectX®-8 SuperNIC™
- 1.8TB/s GPU-to-GPU bandwidth with NVIDIA NVLink™ and NVSwitch™
- Dual Intel® Xeon® 6700/6500 Series processors
- 32 x DIMMs, 8-channel DDR5 RDIMM/MRDIMM
- Compatible with NVIDIA BlueField®-3 DPUs
- 2 x 10Gb/s LAN ports via Intel® X710-AT2
- 2 x M.2 slots with PCIe Gen5 x4 and x2 interface
- 8 x 2.5" Gen5 NVMe hot-swap bays
- 4 x FHHL PCIe Gen5 x16 slots
- 12 x 3000W 80 PLUS Titanium redundant power supplies

AI platform

AI training server

AI inference server

High-performance computing server

Specifications

Dimensions 8U (W447 x H351 x D923 mm)

CPU

Intel® Xeon® 6 processors:

- Intel® Xeon® 6700 Series processors
- Intel® Xeon® 6500 Series processors

Dual processors, TDP up to 350W

OS compatibility

Visit our website for a list of compatible operating systems

Socket

2 x LGA 4710 (Socket E2)

Chipset

System on Chip

Memory

32 x DIMMs, 8-channel DDR5 RDIMM/MRDIMM
For RDIMM: up to 6400 MT/s (1DPC), 5200 MT/s (2DPC)
For MRDIMM: up to 8000 MT/s*
 *MRDIMMs are supported only on select Intel® Xeon® 6 processors with P-cores and only in a 1DPC configuration.

LAN

Front:
 2 x 10Gb/s LAN (1x Intel® X710-AT2) NCSI support
 1 x 10/100/1000 Mbps Management LAN
Rear:
 8 x 800 Gb/s OSFP InfiniBand XDR or dual 400 Gb/s Ethernet, for GPU networking
 1 x 10/100/1000 Mbps Management LAN

Video

Integrated in ASPEED® AST2600:

- 1 x VGA port

Storage

Front hot-swap:
 8 x 2.5" Gen5 NVMe
Internal M.2:
 1 x M.2 (2280/22110), PCIe Gen5 x4
 1 x M.2 (2280/22110), PCIe Gen5 x2

Modular GPU NVIDIA HGX™ B300 with 8 x SXM GPUs

PCIe expansion slots

4 x FHHL PCIe Gen5 x16

I/O ports

Front:
 2 x USB 3.2 Gen1, 1 x VGA, 2 x RJ45, 1 x MLAN
Rear:
 8 x OSFP, 1 x MLAN

Security modules

TPM 2.0

Backplane board

PCIe Gen5 x4

Power supply

12 x 3000W 80 PLUS Titanium redundant power supplies
 AC Input: 115-240V
 *The system power supply requires C19 power cord.

System management

ASPEED® AST2600 Baseboard Management Controller
 Kerno Management Console web interface

System fans

Motherboard: 2 x 60x60x56 mm / 4 x 60x60x76 mm
OSFP ports: 4 x 40x40x56 mm
PCIe slots: 2 x 80x80x56 mm
GPU tray: 15 x 80x80x80 mm

Operating properties

Operating: 10°C to 30°C, 8% to 80% (non-condensing)
 Non-operating: -40°C to 60°C, 20% to 95% (non-condensing)

Packaging content

1 x 8U chassis
 1 x L-shape rail kit

Warranty

3- to 5-year limited warranty