Al Server



Al Server AGS8200





The Edgecore AGS8200 is a high performance, scalable GPU-based server suitable for AI (Artificial Intelligence)/ ML (Machine Learning) applications. The server is ideal for training large language models, automation, object classification and recognition use cases. The system is designed with eight Intel® Habana® Gaudi® 2 processors and dual Xeon® Sapphire-Rapids processors. The Gaudi® 2 processor integrates 96GB HBM2E memory and 24 NICs of 100GbE RoCEv2 RDMA. The 24 100G NICs offer all-to-all connectivity and scale-out internally and externally for training, fine-tuning, and other DL processing.

Each Gaudi® 2 processor has 21 x 100GbE non-blocking, all-to-all connectivity to other Gaudi® 2 processors within the server, allowing training across all eight Intel Gaudi® 2 processors without requiring an external Ethernet switch.

Each AGS8200 supports 6 QSFP-DD ports for scale-out. The 400G ports can be connected to 400G switches, or 100G switches via breakout cables, in racks and clusters of Intel® Gaudi® 2-based nodes.

The server is able to include $16 \times HDD/SSD + 8 \times NVMe$ or $8 \times HDD/SSD + 16 \times NVMe$ for storage that supports RAID HBA with 0/1/10/5/6/50/60.

Key Features and Benefits

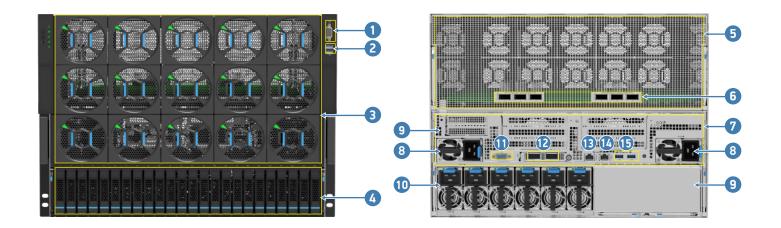
- Featuring eight Habana® Gaudi® 2 Al training processors
- Dual 4th Gen Intel® Xeon® scalable processors
- Expanded networking capacity with 24 x 100GE RoCE ports integrated into every Gaudi® 2
- 700 Gbps scale within the server and 2.4 Tbps scale out
- Ease of system build or migration with Habana® SynapseAI® software stack
- Standardized architecture and Ethernet instead of proprietary Infiniband and NVLINK

Datasheet

AI Server



Interfaces



Description			
1.	VGA port	9.	8 x PCIe slots (Half Height (left 2), Full Height (Central 6))
2.	2 x USB 2.0/3.0	10.	3+3 redundant/hot-swappable AC for GPU
3.	14+1 Hot-swappable fans	11.	VGA port
4.	16 HDD/SSD+8 NVMe	12	OCP 3.0
5.	GPU module	13.	UART 115200
6.	6 x QSFP-DD 400GbE ports	14.	Management port 1GbE
7.	Server module	15.	2 x USB 2.0/3.0
8.	1+1 redundant/hot-swappable AC for system		

Datasheet

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Form Factor

■ 8U

Compute Node

- CPU: Sapphire Rapids, 2 Sockets Intel® Xeon® Platinum 8454H, 32c, 64 threads, 82.5MB, 270 W
- PCH: Emmitsburg
- Memory: Upto 2TB 16x DDR5 memory slots per CPU
- Operating System: Ubuntu 20.04
- BIOS: 32MB Flash

GPU

■ 8 x OAM (Intel Habana HL-225H/C)

Input/Output

Front: 2 x USB 2.0/3.0, 1 x VGA, 1 x UID, 1 x PWR
Rear: 2 x USB 2.0/3.0, 1 x VGA, 1 x RJ-45, 1 x UID

Scale-Out Interface

- RDMA (ROCF v2)
- 24 x 100 GbE
- 6 x QSFP-DD

Storage

- Internal: 2 x M.2
- Front: 16 x HDD/SSD+ 8 x NVMe or 8 x HDD/SSD+ 16 x NVMe

BMC

■ AST2600

TPM 2.0

CD-ROM

■ Support external USB CD-ROM

PSU

- System: 1+1 CRPS 2700 W redundant/hot-swappable AC/DC
- GPU: 3+3 CRPS 3000 W redundant/hot-swappable AC/DC

Fans

■ 14+1 hot-swappable fans

Dimensions

■ 900 mm x 447 mm x 352mm

Operating Temperature

■ 5°C-35°C

Expansion Slots

- 1 x OCP 3.0
- 8 x PCle Slots

Software

- SynapseAl: 1.13.0
- Kernel: 5.4.0 and above
- Python: 3.10
- PyTorch: 2.1.0
- TensorFlow: 2.13.1
- Open MPI: 4.1.5
- Libfabric: 1.16.1 and above
- Transformers: >= 4.33.0, <4.35.0

Warranty

Please check www.edge-core.com for the warranty terms in your country.

For More Information

To find out more about Edgecore Networks Corporation products and solutions, visit www.edge-core.com.

About Edgecore Networks Corporation

Edgecore Networks Corporation is in the business of providing innovative network solutions. In the service provider network, in the data center or in the cloud, Edgecore Networks Corporation delivers the software and systems that transform the way the world connects. Edgecore Networks Corporation serves customers and partners worldwide. Additional information can be found at www.edge-core.com.

Edgecore Networks Corporation is a subsidiary of Accton Technology Corporation, the leading network ODM company. The Edgecore data center switches are developed and manufactured by Accton.

To purchase Edgecore Networks solutions, please contact your Edgecore Networks Corporation representatives at +886 3 563 8888 (HQ) or +1 (949)-336-6801 or authorized resellers.

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