VANTAGEO 2540-RG-H200GPU Architecture

High Performance

Supports NVIDIA HGX™ H200 8-GPU

The NVIDIA HGX™ H200 combines H200 Tensor Core **GPUs** with high-speed interconnects to deliver extraordinary performance, scalability, and security for every data center. Configurations of up to eight GPUs deliver unprecedented acceleration, with a staggering 32 petaFLOPS of performance to create the world's most powerful accelerated scale-up server platform for AI and HPC. An eight-way HGX H200 provides over 32 petaflops of FP8 deep learning compute and 1.1TB of aggregate high-bandwidth memory. NVIDIA HGX™ H200 also includes NVIDIA BlueField®-3 data processing units (DPUs) to enable cloud networking, composable storage, zero-trust security, and GPU compute elasticity in hyperscale AI clouds.





Dual ROM Architecture

If the ROM that stores the BMC and BIOS fails to boot, the system will reboot with the backup BMC and/or BIOS replacing the primary. Once the primary BMC is updated, the ROM of the backup BMC will automatically update the backup through synchronization. For the BIOS, it can be updated based on user's choice of firmware version.



Automatic Fan Speed Control

Automatic Fan Speed Control to achieve the best cooling and power efficiency. Individual fan speeds will be automatically adjusted according to temperature sensors strategically placed in the servers.



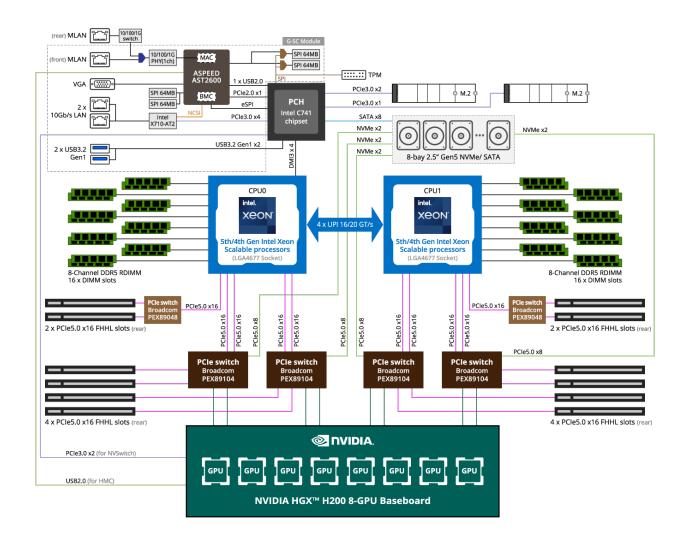
Hardware Security



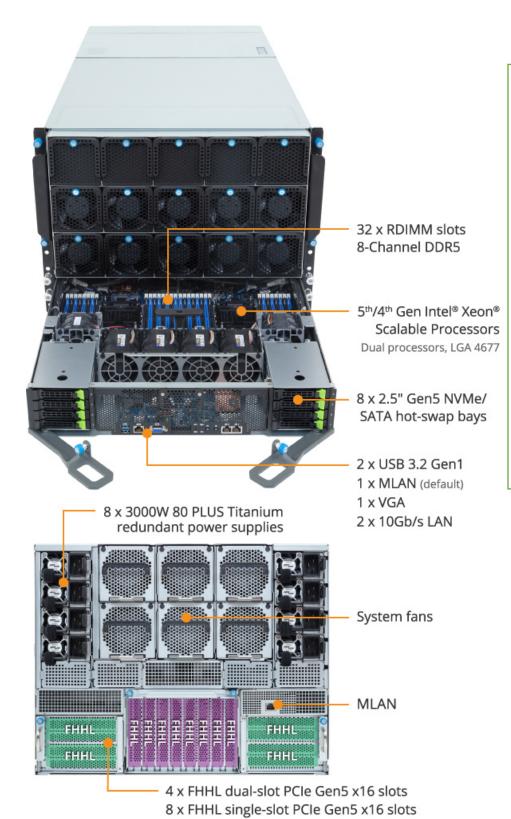
TPM 2.0 Module

For hardware-based authentication, the passwords, encryption keys, and digital certificates are stored in a TPM module to prevent unwanted users from gaining access to your data. TPM modules come in either a Serial Peripheral Interface or Low Pin Count bus.

Block Diagram



Product Architecture



The systems are built on G893-SDI-AAX3G

from Gigabyte with a System board model number MSB3-PE0.

The systems architecture is certified under NVIDIA Qualified System Catalog

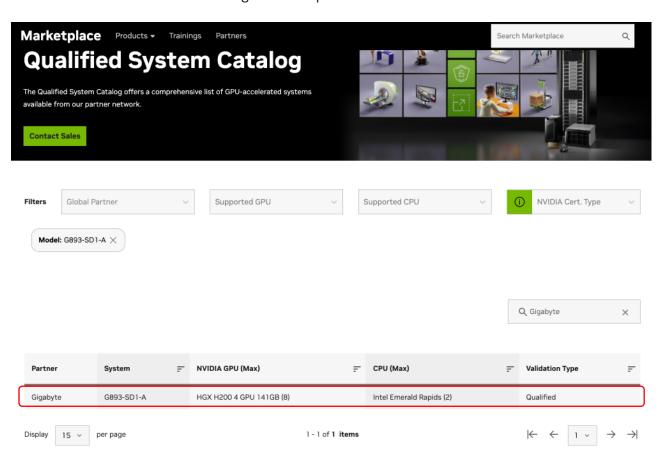
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For management and maintenance of a server or a small cluster, users can use the Management Console, which is pre-installed on each server. Once the servers are running, IT staff can perform real-time health monitoring and management on each server through the browser-based graphical user interface.

In addition, the Management Console also provides:

- Support for standard IPMI specifications that allows users to integrate services into a single platform through an open interface
- Automatic event recording, which can record system behavior 30 seconds before an event occurs, making it easier to determine subsequent actions
- Integrate SAS/SATA/NVMe devices and RAID controller firmware in to Management Console to monitor and control Broadcom® MegaRAID adapters.



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