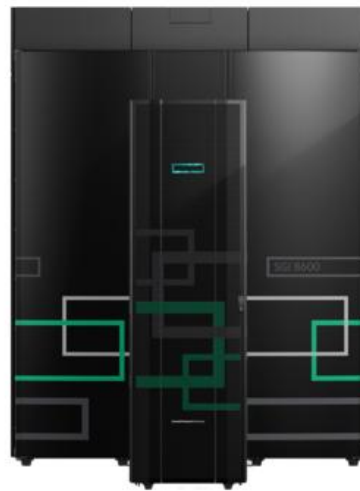# HPE SGI 8600 System

SGI System

Overview

Are you struggling to deploy and manage the size of the supercomputing cluster your users need? The HPE SGI 8600 System offers petaflop speed and scalability to thousands of nodes in an efficient, dense, and easy to manage proven architecture which currently powers some of the most powerful supercomputers in the TOP500. Designed to run the world's most complex problems and high performance computing (HPC) workloads in areas ranging from life, earth, and space sciences, to engineering and manufacturing, to national security, the HPE SGI 8600 is optimized to fully leverage the most powerful industry standard processor and interconnect technologies available today and in the future. Innovative direct attached liquid cooling provides an extremely efficient cooling solution, and with 100% heat removal from the HPE SGI 8600 via data center water and no heat transfer to the data center room, the operating power costs are substantially

less than comparably sized air cooled solutions.

Features

Outstanding Performance in an Industry Standard Cluster

The HPE SGI 8600 System is a liquid cooled, tray-based, scalable, high-density clustered computer system designed from the ground up to run complex high performance computing (HPC) workloads at petaflop speeds.

Compute nodes are available with the Intel® Xeon® Processor Scalable Family, the Intel Xeon Phi™ processor, or the Intel Xeon Processor Scalable Family with NVIDIA® Tesla SXM2 GPUs.

Performant interconnect technologies coupled with leading HPE Message Passing Interface (MPI) software have delivered world record performance for major message passing benchmarks.

Designed to Scale Efficiently to Thousands of Nodes

The HPE SGI 8600 System is based on a compact E-Cell design with up to 36 trays, 144 nodes, and 288 Intel Xeon Processor Scalable Family sockets per rack with integrated dual plane switching, power, and cooling.

The HPE Enhanced Hypercube interconnect technology enables straightforward, effective scaling without use of any external switches.

Reduce operational costs through superior power and cooling efficiency coupled with advanced power management which can limit power use at job, node, rack and system level.

Easy to Use and Easy to Manage

The HPE SGI 8600 System runs industry standard operating systems. Different nodes can run different Operating Systems allowing a broad range of standard Linux applications to run simultaneously to support differing user requirements and quicker times to solutions.

Robust system management tools can provision thousands of nodes in minutes, perform proactive health management to avoid costly downtime from memory errors, and enable scaling systems seamlessly with multi-generation processors.

Optimized, validated, and integrated software ecosystem based on leading Hewlett Packard Enterprise software, commercial software, and open source software.

HPE Pointnext

HPE Pointnext leverages our breadth and depth of technical expertise and innovation to help to accelerate digital transformation. A comprehensive portfolio that includes—Advisory, Professional, and Operational Services is designed to help you evolve and grow today and into the future.
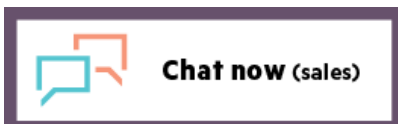
Operational Services

- **HPE Flexible Capacity** is a new consumption model to manage on-demand capacity, combining the agility and economics of public cloud with the security and performance of on-premises IT.

- **HPE Datacenter Care** offers a tailored operational support solution built on core deliverables. It includes hardware and software support, a team of experts to help personalize deliverables and share best practices, as well as optional building blocks to address specific IT and business needs.

- **HPE Proactive Care** is an integrated set of hardware and software support including an enhanced call experience with start to finish case management helping resolve incidents quickly and keeping IT reliable and stable.

- **HPE Foundation Care** helps when there is a hardware or software problem offering several response levels dependent on IT and business requirements.

Advisory Services includes design, strategy, road map, and other services to help enable the digital transformation journey, tuned to IT and business needs. Advisory Services helps customers on their journey to Hybrid IT, Big Data, and the Intelligent Edge.

Professional Services helps integrate the new solution with project management, installation and startup, relocation services, and more. We help mitigate risk to the business so there is no interruption when new technology is being integrated in the existing IT environment.

Find a partner

Chat now (sales)

Get updates

f 𝕏 in ✉

Hewlett Packard Enterprise