

SGI® UV™ Solutions for SAP HANA®





SGI UV 300H

SAP® Certified
Hardware for SAP HANA®

Run Your Business in Real-time at Near Limitless Scale with Mission-Critical Reliability

The ability to combine database, data processing, and application platform capabilities in-memory with the SAP HANA® platform is truly game-changing. Imagine if your operations, financial, research, or marketing teams could operate in real time. Now imagine leveraging SAP HANA in your enterprise with near limitless scale and mission-critical reliability. SGI is making this possible.

Converging transactional and analytic workloads often warrants a *single-node* system for SAP HANA to meet performance objectives. A single-node system provides significant advantages to gain the business breakthroughs of new SAP® S/4HANA. Performance advantages also extend to heavy analytics, and when consolidating applications and IT infrastructure. Furthermore, single-node systems alleviate administrative complexity as well as the difficulty providing high availability(HA) that clusters can pose for applicable application environments.

Developed by SGI, the trusted leader in high performance computing, SGI® UV™ 300H is a purpose-built, in-memory computing system for large or growing applications running on SAP HANA. Currently SAP-certified as a 4-, 8-, 12*- , 16*- , or 20*-socket single-node system with up to 15TBs* of in-memory computing capacity, the future-ready SGI UV 300H for SAP HANA enables enterprises to achieve real-time operations with five nines application availability.

*under controlled availability for >8 sockets and >6TBs



Leverage the full power of SAP HANA in large enterprises

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- Expand SAP HANA with single-node simplicity
- Run on SAP HANA with mission-critical reliability
- Capitalize on proven SGI technology with deployment flexibility

Using a scale-up, single-node architecture with breakthrough coherent shared memory, SGI UV 300H enables you to run business-critical applications on SAP HANA in large environments including SAP Business Suite, SAP Bank Analyzer, SAP S/4HANA Finance, and other SAP S/4HANA applications. It combines OLTP and OLAP workloads and eliminates the time-consuming extract, transform, and load process to generate real-time reports on demand. You can perform very complex joins and run multiple analytic engines simultaneously to include text, geo-spatial, and live data streaming. And you can consolidate applications and infrastructure, while also eliminating silos.

The result is timely insight across your organization to make faster, smarter decisions, accelerate innovation, lower costs, and gain competitive advantage. Returns are dramatic, spanning private and public domains:

- Identify customer behavior and buying trends as they occur, on demand.
- Manage supply chain, inventories, and staffing resources with greater precision.
- Monitor financial conditions in real-time and save millions eliminating reconciliation.
- Identify security threats, attacks on IT systems, and fraud before doing harm.
- Analyze clinical data quicker and with greater accuracy to improve patient care.
- Reduce government waste and abuse with broader impact.

When your core business processes run in real time, the possibilities for business transformation are endless.



Expand SAP HANA with single-node simplicity

Leverage the full power of SAP HANA in large enterprises

Expand SAP HANA with single-node simplicity

Run on SAP HANA with mission-critical reliability

Capitalize on proven SGI technology with deployment flexibility

The single-node architecture of SGI UV 300H allows enterprises to run applications free from the overhead of clustered systems. There are no cluster nodes, cluster network, or storage area network to configure and administer. And there's no need for node segmentation or re-balancing I/O when increasing the size of the SGI system, as performance scales near linearly and automatically.

As the utilization and value of real-time analytics with SAP HANA expands throughout your global enterprise, 24x7 availability may increasingly become a requirement.

But achieving this level of uptime with clustered systems requires special attention due to their native complexity. SGI UV 300H helps maintain application service levels and avoid costly downtime by providing high availability with simplified administration. Using local and remote single-node SGI systems, your IT department can reliably protect against logical, system, and site failures, as well as fully recover critical applications and data warehouse operations in seconds, resulting in round-the-clock application access and protection.

***SGI is an SAP Pinnacle Awards 2015
Finalist in the Platform Co-Innovation
Partner of the Year category.***



Run on SAP HANA with Mission-critical Reliability

Leverage the full power of SAP HANA in large enterprises

Expand SAP HANA with single-node simplicity

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Capitalize on proven SGI technology with deployment flexibility

SGI UV 300H is equipped with high fault-tolerance and robust reliability, availability and serviceability (RAS) features to help ensure continuous operations.

SGI's *memlog utility* helps overcome errors on memory DIMMs that can lead to application performance issues and unplanned downtime. Corrected memory errors are logged and analyzed. If a DIMM page is deemed defective, an attempt is made to transparently relocate data to a new page and retire the old page, and without interrupting applications. Administrators are also alerted to DIMMs in need of replacement during planned maintenance.

SGI *adaptive routing* continuously monitors traffic over SGI's ultrafast NUMalink® network. Data flows are routed to fully optimize the all-to-all network topology and automatically re-routed to prevent traffic congestion.

Single-node simplicity also extends to High Availability/Disaster Recovery deployments with local automated system failover and remote system replication to achieve five 9's availability.

Keep your business running in real time, all the time.



Capitalize on proven SGI technology with deployment flexibility

Leverage the full power of SAP HANA in large enterprises

Expand SAP HANA with single-node simplicity

Run on SAP HANA with Mission-critical Reliability

Capitalize on proven SGI technology with deployment flexibility

SGI UV 300H is an advanced SMP system in the SGI® UV™ server line built for SAP HANA. Coupled with Intel® Xeon® E7 8890 v2 15-core processors, the system leverages seventh generation SGI technology and in-memory computing expertise spanning 20 years. Using advanced SGI HARP ASICs contained in each 4-socket chassis and SGI NUMalink 7® network interconnects, the UV 300H scales up as a single-node server in 4-socket increments for growing enterprises.

The system is currently certified by SAP for general availability in 4- or 8-socket configurations with up to 6TB of shared memory, and under controlled availability in 12- 16-, or 20-socket configurations with up to 15TB of shared memory. Pending further certification, SGI's future-ready architecture is designed to scale to 32 sockets and 24TB of shared memory as a single-node system.

Installed with your choice of SUSE® Linux Enterprise Server or Red Hat Enterprise Linux for SAP HANA®, UV 300H can be deployed as an appliance pre-configured with SAP HANA* and equipped with SGI storage to protect log files and data against power loss, or in an SAP HANA Tailored Datacenter Integration (TDI) configuration with SAP-certified storage.



>100
SGI patents for
in-memory computing

**SAP provides licensing*



Unleash the power of SAP HANA in your business

Unleash the power of in-memory computing
for your business

Building on SGI's proven in-memory computing technology and unique scale-up architecture, SGI UV 300H enables large and growing enterprises to confidently leverage the power of SAP HANA for mission-critical applications and advanced analytics that require single-node systems, and to reduce overhead and raise service levels for cluster-supported environments that become a struggle.

It's now possible to:

- Achieve real-time business in large enterprises

- Run critical applications on SAP HANA including SAP Business Suite, SAP Bank Analyzer, SAP S/4HANA Finance, and other SAP S/4HANA applications with future-ready scalability
- Run multiple analytic engines and perform highly complex joins
- Run SAP Business Warehouse powered by SAP HANA free from the complexity and overhead of clusters
- Expand view, consolidate applications and eliminate silos
- Achieve greater insight, accelerate innovation and gain competitive advantage

Real-time insight leads to better-informed decisions for achieving business objectives.





Objectives

Summary

Want to leverage SAP HANA® across your large or growing enterprise with mission-critical reliability? You can with SGI UV for SAP HANA. And by simply adding sockets and memory, SGI's single-node system scales up to meet demands with near limitless capacity, low administrative overhead, and round-the-clock application availability.

Objectives

- Achieve real-time operations with SAP HANA across the enterprise
- Run mission-critical applications and/or analytic-intensive apps on SAP HANA without limits
- Alleviate the complexity of clusters to reduce OpEx and provide HA

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Solution

Benefits

Quick Facts

Solution

- Future-ready SGI UV 300H scales seamlessly as a single node with unparalleled in-memory computing capacity
- Currently SAP-certified at 4, 8, 12*, 16*, 20* sockets with up to 15TB of coherent shared memory (*controlled availability for >8 sockets and >6TBs)
- Deploy as an appliance or for SAP HANA Tailored Datacenter Integration
- Protect and restore critical applications in seconds

Benefits

- Unlock information value in real-time with SAP HANA across the enterprise
- Fulfill mission-critical SLAs
- Make faster, smarter decisions and gain competitive advantage

Learn more

To find out more, call your SGI representative today at 1-800-800-7441 or visit www.sgi.com/saphana.

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