Performance brief

New HP Integrity Superdome X is front-runner for 16P and 8P x86 servers on SPEC CPU2006 benchmark

8P and 16P leadership across the board

December 2014

Executive summary

HP keeps the performance leadership ball rolling with its latest SPEC CPU2006 performance results. The 8P and 16P HP Integrity Superdome X server results on the SPEC CPU2006 benchmark show superior performance, holding the #1 8P x86 SPEC CPU2006 rate [1]results and #1 overall 16P SPEC CPU2006 rate base results. Superdome X pushes the envelope in standard x86 scalability to support demanding mission-critical workloads. The server delivers groundbreaking performance and availability at industry-standard efficiencies to run the most-demanding, mission-critical workloads and large databases in a scale-up x86 environment.

When a system has a #1 result in the speed metrics (denoted by the labels SPECint2006, SPECint_base2006, SPECfp2006, and SPECfp_base2006), customers know that the system can process and complete an individual task in a very timely or quick manner. If a system has a #1 SPEC result in the rate metrics (denoted by the labels SPECint_rate2006, SPECint_rate_base2006, SPECfp_rate2006, and SPECfp_rate_base2006), customers are assured that the system can process and complete multiple, concurrently executing tasks in a very timely or quick manner. The HP Integrity Superdome X results are proof points that this system delivers above and beyond what standard x86 servers offer.

Key take aways

- **#1 8P x86 on SPECfp_rate_base2006, SPECfp_rate2006, SPECint_rate_base2006, and SPECint_rate2006** [1]
- **#1 overall 16P on SPECfp_rate2006, SPECfp_rate_base2006, SPECint_rate_base2006, and SPECint_rate2006**
- **HP with SUSE Linux Enterprise 11 SP3 operating systems delivers powerful performance solution**
- **Defeats next highest 8P x86 competitors IBM, Huawei, and Fujitsu**
- **Defeats next highest 16P competitors Bull SAS and Fujitsu**

Only from HP

How we do it

HP Integrity Superdome X

The HP Integrity Superdome X delivers groundbreaking, mission-critical performance and availability on x86 efficiencies:

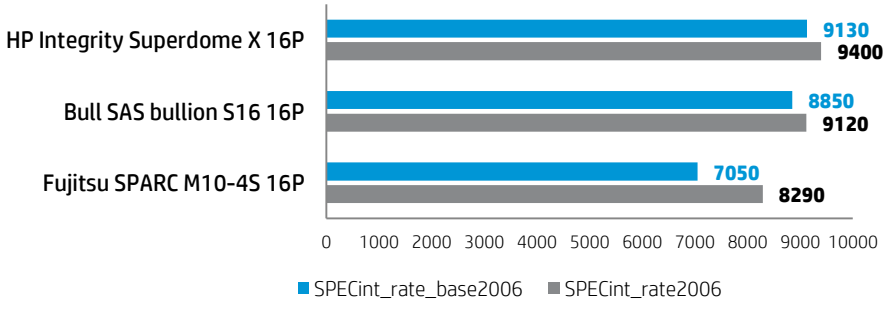
- Record-setting 8P x86 and overall 16P performance
- Superior x86 uptime for Linux workloads
- Breakthrough x86 scalability and cost efficiencies

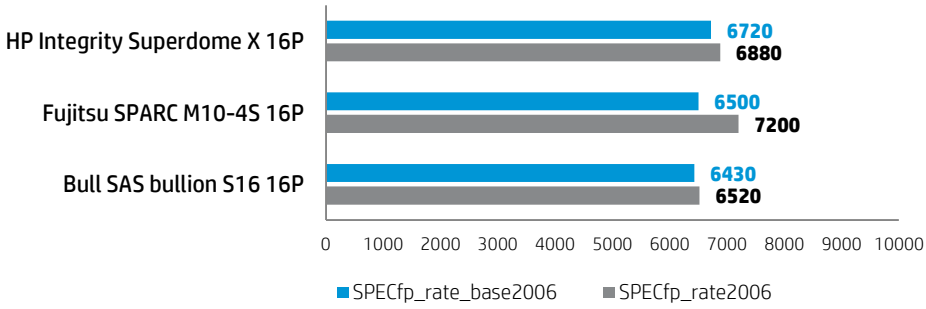
The HP Integrity Superdome X consists of 1-8 scalable HP BL920s Gen8 Server Blades, 2-16 sockets, and up to 12TB of memory, to support the largest workloads.

In addition, it is the first x86 platform to offer hardware partitioning, bringing many customer advantages.

HP Integrity Superdome X 16P leadership results

Figures 1 and 2. The HP Integrity Superdome X 16P achieved higher overall SPECint_rate_base2006, SPECint_rate, and SPECfp_rate_base2006 results than any other 16P competitors, and the highest 16P x86 SPECfp_rate2006 result.

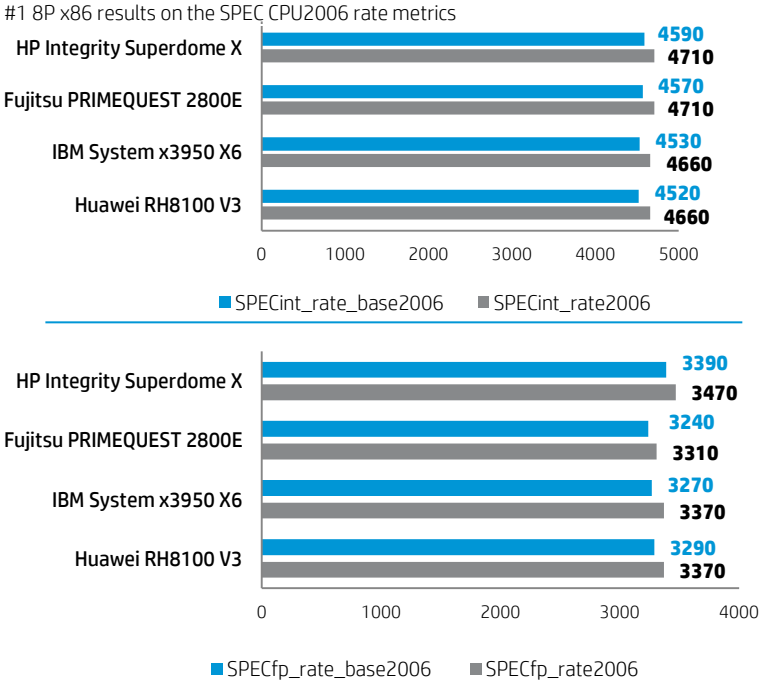




[1] HP Integrity Superdome X SPECint_rate2006 result tied for #1

HP Integrity Superdome X 8P results

Figures 3 and 4. Earning top spots, the HP Integrity Superdome X claims #1 8P x86 results on the SPEC CPU2006 rate metrics



Customer value

About the new HP Integrity Superdome X: Only HP has the technology, portfolio, solutions, and services to run complex, large-scale business workloads on an affordable x86 infrastructure.

Whether customers want to maximize the uptime of their Linux apps, drive down costs, standardize, simplify or consolidate, HP Integrity Superdome X offers new possibilities to transform mission-critical environment in ways never before imagined.

HP Integrity Superdome X offers unique x86 hard partitioning with HP nPars to optimize license costs and resource utilization, 12TB of memory to address large in-memory needs, and a 1.9x scalability factor so customers can scale without sacrificing performance.

HP ConvergedSystem 900 for SAP HANA: The HP ConvergedSystem 900 for SAP HANA is configured with the same HP BladeSystem Superdome enclosure and HP BL920s Gen8 Server Blades that make up the HP Integrity Superdome X. [2,] The difference is the software stack, and the results from both configurations have been record-breaking. In fact, the HP ConvergedSystem 900 for SAP HANA and HP Integrity Superdome X were the first and second x86 platforms respectively to achieve and surpass 1 million max-jOPS performance. [3]

HP enables customers to transform their mission-critical environments with the introduction of the ground-breaking HP Integrity Superdome X. Customers can partner with HP for the right compute, for the right workload, at the right economics every time.

SUSE Linux Enterprise Server 11 SP3 operating system: This system is SUSE's most scalable and secure foundation for running mission-critical workloads. HP and SUSE have partnered for strategic engineering collaboration and engagement across businesses for more than 20 years with joint investment in business development and marketing. HP delivers Linux solutions that combine the security, dependability, value, and flexibility of Open Source with enterprise-quality management applications, services, communication tools, and hardware. As the leader in Linux revenue worldwide, HP is a proven and trusted choice for deploying Linux workloads and solutions.[4]

For more information

HP performance: **hp.com/products/servers/benchmarks**
HP Integrity Superdome X: **hp.com/servers/superdomex**
HP Integrity servers: **hp.com/go/integrity**

[2] hp.com/h20195/V2/GetDocument.aspx?docname=4AA5-1491ENW&cc=us&lc=en
[3] hp.com/products/servers/benchmarks
[4] Source: *IDC Server Tracker for 2QFY14*