



HP ProLiant DL585 G5: #1 4-socket power efficiency



HP Leadership



DL585 G5: #1 four-socket
www.hp.com/servers/proliantdl585

spec

Customer Value



How energy efficient are HP ProLiant four-socket servers?

HP announced new record-breaking results on the SPECpower_ssjTM2008 benchmark for the HP ProLiant DL585 G5 on November 17, 2008. This latest result is one of many historical world record results that have been achieved by ProLiant servers on the SPECpower_ssjTM2008 benchmark. HP has posted multiple results on the SPECpower_ssjTM2008 benchmark. This shows the HP commitment to providing information that customers need for purchase decisions.

ProLiant server configuration

The energy-efficient HP ProLiant DL585 G5 was configured with four AMD OpteronTM 8384 2.7-GHz processors (16 cores total, 4 cores per chip, 6 MB L3 shared cache), 8 x 2 GB DDR2 800 MHz RAM, 1 x 120GB 5.4K SFF 2.5" SATA hard drive, and an HP Smart Array P400 controller. The ProLiant DL585 G5 was running Microsoft[®] Windows[®] Server 2003 x64 Enterprise Edition (EE) R2.

What SPECpower_ssj2008 measures

Currently, many vendors report some energy-efficiency figures, but these are often not directly comparable due to differences in workload, configuration, test environment, etc. SPEC defines server power measurement standards in the same way it has done for performance. Development of this benchmark provides a means to measure power in conjunction with a performance metric. This should help IT managers to consider power characteristics along with other selection criteria to increase the efficiency of data centers. Being a Standard Performance Evaluation Corporation (SPEC) benchmark, SPECpower_ssjTM2008 is a consortium-policed benchmark that provides a way for server vendors to compare benchmark results in a fair manner.

Key Points

- **#1 worldwide four-processor result:**
763 overall ssj_ops/watt

More information about SPECpower_ssjTM2008 results can be found at the following Web page: <http://www.spec.org>. Results as of 11-17-08.

The HP ProLiant DL585 G5 achieved #1 4-processor energy efficient performance on the SPECpower_ssjTM2008 benchmark with a score of 763 overall ssj_ops/watt. SPECpower_ssjTM2008 is the first generation SPEC benchmark for evaluating the power and performance characteristics of server class computers. This measurement provides a way to compare the power/performance or energy efficiency of servers. As with previous SPECpower_ssj2008 benchmark world records, HP demonstrates that its ProLiant server family, built upon the latest industry-standard technology, is an industry leader in energy efficiency.

No other vendor has submitted a four-socket result.

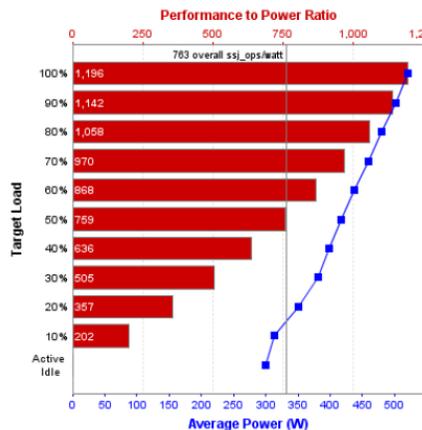


Figure 1. The SPECpower_ssjTM2008 primary metric is the "overall ssj_ops/watt". The HP ProLiant DL585 G5 showed a 763 overall ssj_ops/watt ratio. This metric is computed by taking the sum of the ssj_ops scores for all target loads, and then dividing by the sum of the power consumption averages for all target loads – including the "active idle" (0% utilization) measurement interval.

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