HP ProLiant DL580 G5 server posts highest 4P result on the new SPECpower_ssj™2008 benchmark

The HP Difference

The HP ProLiant DL580 G5 delivers the performance demanded by today's compute intensive applications.

Key results at a glance:

■ With **546 overall ssj_ops/watt** on the new SPECpower_ssj™2008 benchmark, the ProLiant DL580 G5 achieved the highest 4P result.

■ **The performance result demonstrated how HP four-processor servers optimized the latest Quad-Core Intel® Xeon® technology for energy efficiency and high performance computing.**

The HP ProLiant DL580 G5 accomplished outstanding energy efficient performance on the SPECpower_ssj™2008 benchmark with a four-processor performance of 546 overall ssj_ops/watt. SPECpower_ssj™2008 is the first industry standard benchmark to measure server system energy usage against server system performance. This measurement provides a way to compare the energy efficiency of servers. With the ProLiant DL580 G5 results, HP has proven that it is aware of and has responded to customer concerns regarding the energy use of servers. Built upon the latest industry-standard technology, the ProLiant DL580 G5 was designed for high performance computing. More information about SPECpower benchmark results for all servers can be found at the following Web page: http://www.spec.org/power_ssj2008.

Designed for performance and energy savings: HP ProLiant DL580 G5

The HP ProLiant DL580 G5 supports HP Power Regulator, which assists in the optimization of energy usage to further drive down costs in the enterprise. Power Regulator is an innovative operating system-independent power management feature of HP ProLiant servers that offers new alternatives to manage server power consumption and system performance to meet critical business needs. This power management technology enables dynamic or static changes in CPU performance and power states. In dynamic mode, Power Regulator automatically adjusts the server's processor power usage and performance to match CPU application activity. This improves server energy efficiency by giving CPUs full power for applications when they need it and enabling power savings without performance degradation when application activity is reduced. Power Regulator effectively executes automated policy-based power management at the individual server level. In addition, a unique static low power mode allows servers to run continuously in a system's lowest power state.

More information on HP Power Regulator can be found on the following Web page:
http://h18013.www1.hp.com/products/servers/management/ilo/power-regulator.html

Figure 1. HP ProLiant DL580 G5 SPECpower_ssj™2008 benchmark metric**s**
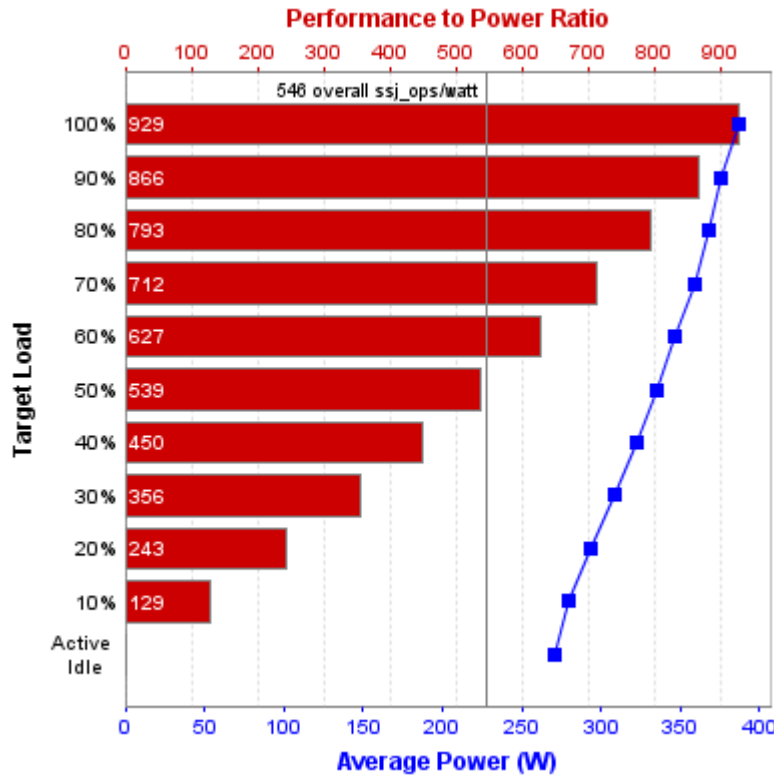
The SPECpower_ssj2008 primary metric is the "overall ssj_ops/watt". The HP ProLiant DL580 G5 showed a 546 overall ssj_ops/watt ratio. This metric is computed by taking the sum of the ssj_ops scores for all target loads, and then dividing by the sum of the power consumption averages for all target loads – including the "active idle" (0% utilization) measurement interval.

SPECpower_ssj™2008 is the first industry standard benchmark to measure server system energy usage against server system performance. This measurement provides a way to compare the energy efficiency of servers and determine which is able to perform a certain amount of work while using the least amount of power. Being a SPEC (Standard Performance Evaluation Corporation) benchmark, SPECpower_ssj2008 is a consortium-policed benchmark that provides a way for server vendors to compare benchmark results in a fair manner.

For more information

www.hp.com/servers/benchmarks
www.spec.org
www.hp.com/servers/proliantdl580

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