New World Record SPECpower_ssj2008 Benchmark Result for 2U4N ThinkSystem SD530

Performance Benchmark Result (withdrawn product)

July 19, 2017 ... Lenovo has published leadership 2-socket (4-node) performance results for the SPECpower_ssj 2008 benchmark. The SPECpower_ssj 2008 benchmark is the first industry-standard benchmark that evaluates the power and performance characteristics of single server and multi-node servers.

Figure 1. Four ThinkSystem SD530 servers installed in a D2 Enclosure

Lenovo ThinkSystem SD530 delivered the following SPECpower_ssj 2008 2-socket (4-node) world record performance result:

- **SPECpower_ssj2008 = 11,472 overall ssj_ops/watt**

The SD530 was configured as follows (per node) :

- Intel Xeon Platinum 8176, 2.10 GHz with 38.5 MB L3 cache per processor (2 processors, 28 cores per processor).
- 192 GB of DDR4 memory.
- 1x 32GB M.2 SSD
- Microsoft Windows Server 2012 R2 Datacenter Edition using the Oracle Java HotSpot 64-Bit Server VM (JVM).

This benchmark result can be found at the following web page:
http://www.spec.org/power_ssj2008/results/res2017q3/power_ssj2008-20170705-00770.html

Results referenced are current as of July 19, 2017. To view all SPECpower_ssj 2008 results, see the following page:
https://www.spec.org/power_ssj2008/results/power_ssj2008.html

About the ThinkSystem SD530

The Lenovo ThinkSystem SD530 is an ultradense and economical two-socket server in a 0.5U rack form factor. With four SD530 servers installed in the ThinkSystem D2 Enclosure, you have an ideal high-density 2U four-node (2U4N) platform for enterprise and cloud workloads.

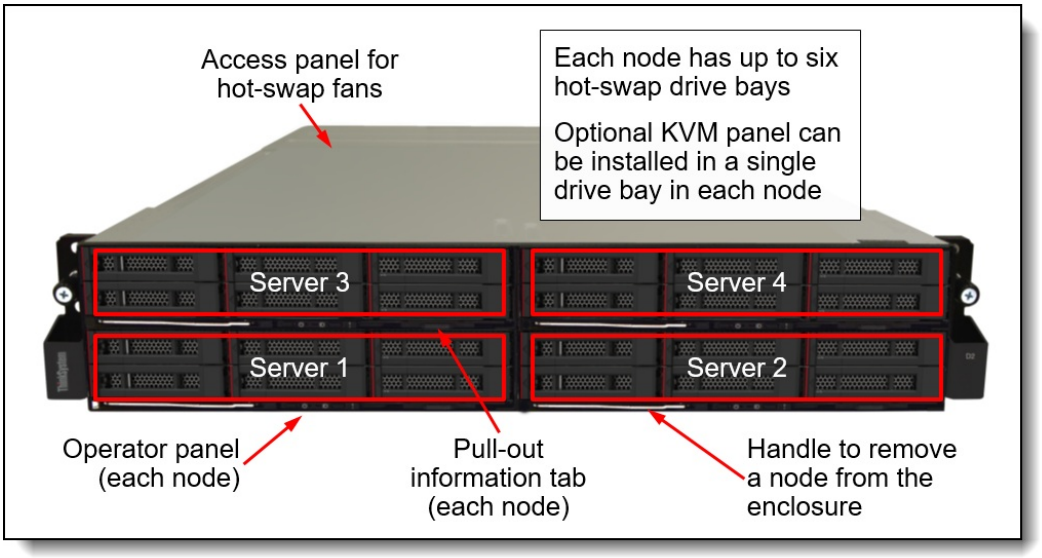

Figure 2. Front view of the ThinkSystem D2 Enclosure

2U4N systems have gained popularity in a variety of data centers, from large enterprises to service providers, because their small footprint and inherent density make them ideal for building solution-based appliances at a low cost. The combination of the Lenovo ThinkSystem SD530 and D2 Enclosure is engineered to deliver these types of solutions.

Suggested use: Cloud, MSP, CSP, HPC, hyperconverged solutions, branch office or remote office needs.

The SD530 combines the efficiency and density of blades with the value and simplicity of rack-based servers. It is designed to run the highest-core-count Xeon Platinum processors, to power through your most demanding HPC/technical computing/AI workloads.

The ThinkSystem SD530 dense offering fits four hot-pluggable SD530 servers into a ThinkSystem D2 Enclosure that takes up only 2U (0.5U per server) and includes room for plenty of internal storage. The overall design makes the solution extremely affordable, with a low total cost of ownership (TCO).

Lenovo XClarity Controller is an all-new hardware embedded management engine common in every ThinkSystem server. XClarity Controller features an uncluttered graphical user interface, industry standard Redfish-compliant REST APIs, and enables booting in half the time of prior generation servers, with up to 6x faster firmware updates.

Lenovo XClarity Administrator is a virtualized application that centrally manages ThinkSystem servers, storage, and networking. Via reusable patterns and policies, it ramps up and scales infrastructure provisioning and maintenance. It serves as a central integration point to extend your data center management processes to physical IT. Running XClarity Integrators in external IT applications, or integrating through REST APIs, helps you further speed services provisioning, streamline IT management, and contain costs.

About SPECpower

The SPEC Power benchmark suite measures the power and performance characteristics of server-class computer equipment. It is used to compare power and performance among different servers and serves as a toolset for use in improving server efficiency. This benchmark is targeted for use by hardware vendors, IT industry, computer manufacturers, and governments.

Learn more

To learn more about power-efficient solutions for compute-intensive applications, please contact your Lenovo Sales Representative.

To find out more about SPEC, visit https://www.spec.org

To learn more about the Lenovo ThinkSystem SD530 server, visit the SD530 product web page.

Related product families

Product families related to this document are the following:

- Multi-Node Servers
- SPECpower Benchmark Results
- ThinkSystem SD530 Server

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