



HP ProLiant DL385p Gen8 achieves top AMD price/performance on TPC-E benchmark

May 2013

Executive summary

The HP ProLiant DL385p Gen8, along with the latest AMD technology processor, attained a leadership coup with the #1 overall AMD price/performance result on the TPC-E benchmark. The result, 1416.37tpsE @ \$183.00/tpsE, was also a world record for AMD 2P performance and demonstrated an outstanding accomplishment in performance scalability.

Key Take Aways

- **World record for AMD price/performance**
- **Outstanding result for AMD 2P performance**
- **Strong scalability performance compared to previous result**

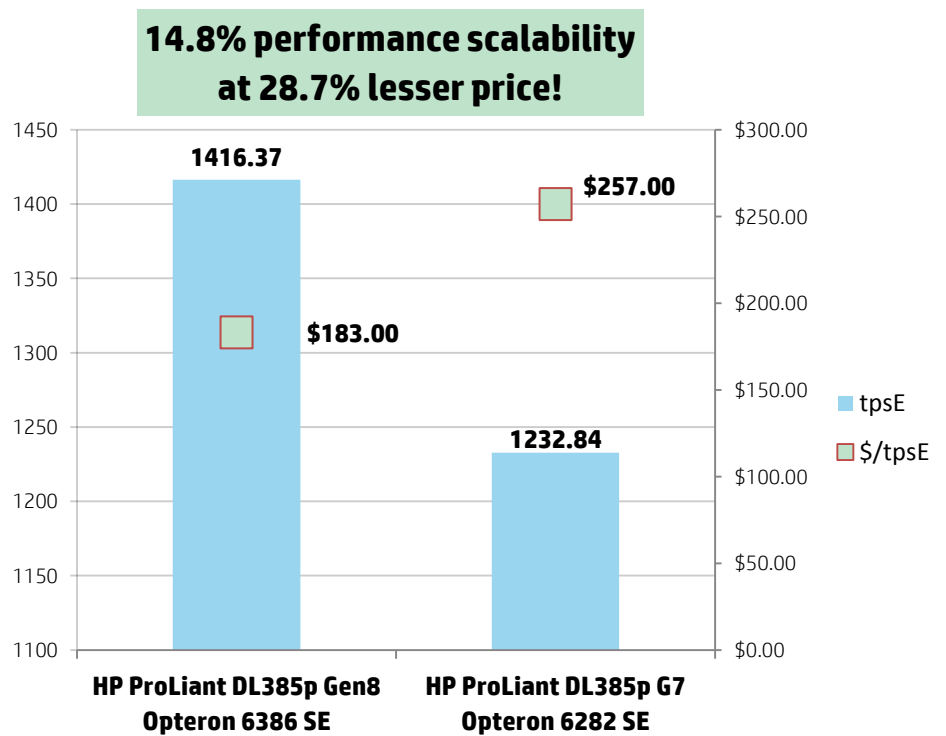
Only with HP How we did it

- **HP SmartMemory.** HP SmartMemory is a unique technology that authenticates whether memory has passed HP's rigorous qualification and test process.

The HP ProLiant DL385p Gen8 used HP SmartMemory, a unique technology that, unlike other third-party memory, unlocks certain performance and high efficiency features optimized for ProLiant Gen8 servers.

- **HP Smart Array Controller.** The DL385p Gen8 ran with the efficient HP Smart Array Controller P421 and HP driver, which allowed a low overhead in high IOPS environments, resulting in a higher performance advantage. HP Smart Array Controllers are ONLY available with HP servers and not available to the competition.
- **AMD Opteron 6300 Series Processors.** AMD Opteron 6300 Series Processors, with up to 16 cores per CPU, provide new levels of performance and efficiency over the previous generation. No other AMD competitor has published a result with this latest processor technology.
- This new TPC-E result further ensures customers HP SMB servers can support business needs in many complex environments.

Figure 1. HP ProLiant DL385p Gen8 results on the TPC-E benchmark



HP customer value: What others can't offer

HP ProLiant DL385p Gen8: The HP ProLiant DL385p Gen8 Server is purpose-built to redefine the customer experience through user-inspired design features, lifecycle automation, and workload optimization. For IT organizations that need to invest in technology that helps them adapt to changing environments, offer configuration flexibility, reduce downtime, and future-proof their infrastructure, the ProLiant DL385p Gen8 Server is the perfect solution. To learn more, see <http://www.hp.com/servers/proliantdl385pgen8>

Smart Array Controller P421: The HP Smart Array P421 Controller is a low profile, 6 Gb/s, PCIe 3.0, Serial Attached SCSI (SAS) RAID controller that provides enterprise class, second generation storage performance, maximum external scalability, and data protection for select HP ProLiant Gen8 rack servers and tower servers. To learn more, see <http://www.hp.com/servers/proliantstorage/arraycontrollers/p421>

HP ProActive Insight architecture: Powered by the HP ProActive Insight architecture, ProLiant Gen8 servers continuously analyze thousands of system parameters to optimize application performance, proactively improve uptime, and give customers insight into every aspect of their IT infrastructure. With the ProActive Insight architecture inside, ProLiant servers virtually take care of themselves. To learn more, see <http://h17007.www1.hp.com/us/en/whatsnew/proliantgen8/architecture.aspx>.

HP ProLiant and AMD server solutions: Determining the best way to handle growing computer workload requirements is key to solving today's IT challenges. As user loads increase for virtualized environments, database applications, or high performance computing, HP ProLiant Servers with AMD Opteron™ 6300 Series processors can seamlessly handle growing workloads and allow balanced scaling across up to 16 cores per processor. To learn more, see www.hp.com/go/ProLiant/amd.

For more information on ProLiant leading benchmarks, see www.hp.com/servers/benchmarks.

TPC-E Results

Table 1. Two-socket TPC-E result of the HP ProLiant DL385p Gen8 with AMD Opteron processors compared to its previous result

| System description | tpsE | Price/tpsE | Processors | Memory | Availability Date | OS/Database | Link to results |
|---|----------------|---------------------|-----------------------------------|--------|-------------------|--|---|
| HP ProLiant DL385p Gen8 2 sockets/32 cores/32 threads total | 1416.37 | \$183.00 USD | AMD Opteron 6386 SE 2.8GHz | 256GB | May 15, 2013 | Microsoft Windows Server 2012 Standard Edition; Microsoft SQL Server 2012 Enterprise Edition SP1 | http://www.tpc.org/4064 |
| HP ProLiant DL385p G7 2 sockets/32 cores/32 threads | 1232.84 | \$257.00 USD | AMD Opteron 6282 SE 2.6GHz | 256GB | Dec. 31, 2011 | Microsoft Windows Server 2008 R2 Enterprise Edition SP1; Microsoft SQL Server 2008 Enterprise Edition R2 SP1 | http://www.tpc.org/4055 |

About the TPC-E benchmark¹

The TPC-E benchmark uses a database to model a brokerage firm with customers who generate transactions related to trades, account inquiries, and market research. The brokerage firm in turn interacts with financial markets to execute orders on behalf of the customers and updates relevant account information.

The benchmark is “scalable,” meaning that the number of customers defined for the brokerage firm can be varied to represent the workloads of different-size businesses. The benchmark defines the required mix of transactions the benchmark must maintain. The TPC-E metric is given in transactions per second (tps). It specifically refers to the number of Trade-Result transactions the server can sustain over a period of time.

© Copyright 2013 Hewlett-Packard Development Company, L.P. The information contained herein is subject to change without notice. The only warranties for HP products and services are set forth in the express warranty statements accompanying such products and services. Nothing herein should be construed as constituting an additional warranty. HP shall not be liable for technical or editorial errors or omissions contained herein. Intel and Intel Xeon are trademarks of Intel Corporation in the U.S. and other countries. TPC-E is a trademark of the Transaction Processing Performance Council. TPC-E publication. Please see <http://www.tpc.org> for up-to-date information. The stated ProLiant benchmark results reflect published results as of 05-20-2013.



¹Source: <http://www.tpc.org/tpce/default.asp>