HP ProLiant BL685c G7 achieves #1 server blade records

ProLiant x86 server blade takes leadership blade performance and price/performance

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Key Take Aways:
- #1 server blade performance and price/performance with 1,464.12 tpsE@$302.49 USD/tpsE
- Outstanding x86 four-processor performance and value in a small footprint

Advantages of the HP ProLiant BL685c G7

HP offers the most comprehensive portfolio of scale-up and scale out solutions in the industry with six new G7 generation servers based on Intel® Xeon® 7500 Series and AMD Opteron™ 6100 Series processors. This new portfolio is optimized for the most demanding, data intensive workloads.

The ProLiant BL685c G7 is an example of the innovative thinking in Converged Infrastructure, as the new server combines ProLiant’s long-standing x86 leadership with expertise and technologies from HP’s heritage in mission-critical computing. The HP ProLiant BL685c G7 is the world’s first 4P blade shipping with integrated FlexFabric networking. The BL685c G7 delivers four-socket performance at two socket economics, with enterprise-class high performance and reliability. With G7, HP introduces the industry’s simplest server edge convergence solution delivered by HP Virtual Connect FlexFabric 10Gb/24-port Module and HP ProLiant G7 server blades with embedded dual port FlexFabric 10Gb network adapters. Customers can converge storage and network traffic by dividing the embedded dual-port 10GbE adapter into 8 connections using Virtual Connect FlexFabric technology, only from HP.

ProLiant G7 servers introduce next-generation Insight Control remote management functionality, powered by iLO. The third generation of iLO brings new level of remote server management performance, user experience, and standards support to ProLiant customers. HP Insight Control enables customers to deploy and migrate ProLiant servers quickly and reliably, proactively manage ProLiant server health – be it physical or virtual, control ProLiant servers from anywhere and optimize power confidently. The net result is the ability to get work done faster whether your server is across the hall or across the globe.

Benchmark configurations

The HP ProLiant BL685c G7 was set up as a 4-processor system with four 12-Core AMD Opteron 6174 2.2-GHz Processors (4 sockets/48 cores/48 threads), with 12MB L3 cache, and 512 GB main memory (32 x 16GB) PC3-1066 DIMMs. The server was also configured with one onboard HP P410i FBWC Smart Array Controller connected to 2 x 72 GB 15K Dual Port Small Form Factor SAS drives and two onboard HP NC551i Dual Port FlexFabric 10Gb Converged Network Adapters. The server was connected by Fibre Channel through the HP Brocade 8/1c SAN Switch in the blade enclosure to multiple Violin Memory Appliances that appeared to the server as multiple disk arrays. The server was running Windows Server 2008 R2 Enterprise Edition operating system, Microsoft SQL Server 2008 R2 Enterprise Edition database. System availability date is 06/21/10.

Bottom Line

HP customers can identify systems that meet their performance requirements. This TPC-E result shows that the HP ProLiant BL685c G7 can deliver more durability for customer needs with increased performance for demanding scale-out applications.

About the TPC-E benchmark: What TPC-E measures

TPC Benchmark™ E (TPC-E) is a new On-Line Transaction Processing (OLTP) workload developed by the TPC. The TPC-E benchmark simulates the OLTP workload of a brokerage firm. The focus of the benchmark is the central database that executes transactions related to the firm’s customer accounts. Although the underlying business model of TPC-E is a brokerage firm, the database schema, data population, transactions, and implementation rules have been designed to be broadly representative of modern OLTP systems. For more details, see http://www.tpc.org/tpce/spec/TPCEDetailed.doc.
TPC Disclosure
A full disclosure report describing these benchmark results has been filed with the Transaction Processing Performance Council (TPC) and is available upon request. This report describes the benchmark HW and SW configuration in detail, provides costs, and lists the code actually used to perform the test. Similar reports from other vendors are the source of the price/performance comparisons provided above. Summaries of all tests are published each month by the TPC and on the Internet on the TPC’s World Wide Web Server. With these benchmarks, customers can objectively compare the performance of different vendors’ servers in specific areas. Results as of 6-21-10.

For more information check out:
HP Converged Infrastructure: http://h18004 www1 hp com/products/solutions/converged/overview.html
TPC-E details: http://www tpc org

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