



# HP ProLiant DL785 G5 achieves #1 8P non-clustered performance and price/performance on TPC-H@300GB benchmark



## Interpreting the TPC-H@300GB result

- #1 8P non-clustered performance (#2 overall)
- #1 8P non-clustered price/performance (#2 overall)

The ProLiant DL785 G5 achieved **new world record results on the TPC-H@300 GB decision support benchmark: 52,860 QphH, \$3.71/QphH@300GB USD price/performance**. These leading results demonstrate that customers can deploy large business intelligence solutions at aggressive TCO on high-performance 8-socket x86 servers. Announced on July 14, 2008, this benchmark was performed using Microsoft Windows Server 2008 x64 operating system and Microsoft SQL Server 2008 Enterprise Edition x64 database. The HP ProLiant DL785 G5 achieved 14% better performance at 31% less cost as compared to the IBM System x3950 M2.

Figure 1. 8P non-clustered performance and price-performance results on TPC-H@300 GB benchmark

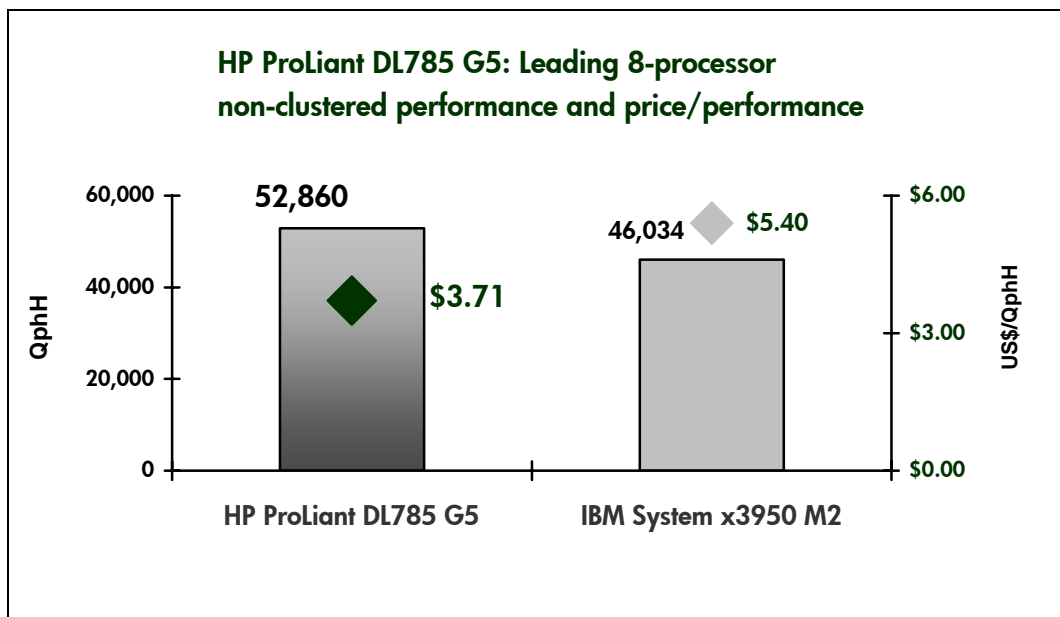


Table 1. 8P non-clustered performance and price/performance results on TPC-H @ 300 GB benchmark

System	QphH	Price/QphH	System Availability	Database	OS
HP ProLiant DL785 G5 AMD Opteron™ Processor 8360 SE, Quad-Core 2.50 GHz (8 processors/32 cores/32 threads)	52,860	3.71 US\$	8/30/2008	Microsoft SQL Server 2008 Enterprise Edition x64	Microsoft Windows Server 2008 x64
<a href="#">IBM System x3950 M2</a> , Intel Xeon Quad-Core X7350 2.93GHz (8 processors/32 cores/32 threads)	46,034	5.40 US\$	3/7/2008	Microsoft SQL Server 2005 Enterprise Edt (x64)	Microsoft Windows Server 2003 Enterprise x64 Ent. R2

# HP ProLiant DL785 G5 server configuration

The HP ProLiant DL785 G5 was configured with eight AMD Opteron™ Processor 8360 SE, Quad-Core 2.50 GHz (8 processor/32 cores/32 threads) and 256 GB main memory. The server used 2 x 36GB 15K-rpm HP Small Form Factor Single Port SAS internal disk drives and 230 x 72GB 15K-rpm HP Small Form Factor Single Port SAS external disk drives, an onboard controller Smart Array P400i and 7 HP Smart Array P800 controllers.

The HP ProLiant DL785 G5 is a powerful and highly scalable eight-socket x86 server for virtualized environments and infrastructure consolidation projects. Customers can better control operational costs through improved utilization with the Quad-Core AMD Opteron processor-based DL785. By leveraging its expertise in industry standard technology, manufacturing, solution design and delivery, HP is driving volume economics into the eight-socket x86 server market.

## TPC-H Overview

TPC-H is a benchmark that simulates a Decision Support System or Business Intelligence database environment. The performance of a system is measured when the system is tasked with providing answers for business analyses on a dataset. These analyses include:

- Pricing & Promotions Analysis
- Supply & Demand Management Analysis
- Profit & Revenue Management Analysis
- Customer Satisfaction Studies
- Market Share Studies
- Shipping Management Analysis

The server system runs a read-intensive Decision Support System (DSS) style database to provide the results for the business analyses. The DSS database is designed to mimic a repository of commercial order-processing Online Transaction Processing Databases. The analyses are performed are 100GB, 300GB, 1000GB, 10,000GB, 30,000GB or even 100,000GB scale factor datasets.

### For more information

HP ProLiant DL785: [www.hp.com/servers/proliantdl785](http://www.hp.com/servers/proliantdl785)

HP ProLiant storage solutions: [www.hp.com/go/serial](http://www.hp.com/go/serial)

HP white paper about the TPC-H benchmark: [ftp://ftp.compaq.com/pub/products/servers/benchmarks/tpch\\_on\\_hp\\_proliant.pdf](ftp://ftp.compaq.com/pub/products/servers/benchmarks/tpch_on_hp_proliant.pdf)

TPC Benchmark is a trademark of the TPC. TPC: Results valid as of July 14, 2008. Complete results can be found at <http://www.tpc.org>.

The TPC Benchmark™ (TPC-H) is a decision support benchmark. It consists of a suite of business oriented ad-hoc queries and concurrent data modifications. The queries and the data populating the database have been chosen to have broad industry-wide relevance. This benchmark illustrates decision support systems that examine large volumes of data, execute queries with a high degree of complexity, and give answers to critical business question. The performance metric reported by TPC-H is called the TPC-H Composite Query-per-Hour Performance Metric (QphH@Size), and reflects multiple aspects of the capability of the system to process queries. These aspects include the selected database size against which the queries are executed, the query processing power when queries are submitted by a single stream, and the query throughput when queries are submitted by multiple concurrent users. The TPC-H Price/Performance metric is expressed as \$/QphH@Size. A full disclosure report describing these benchmark results has been filed with the Transaction Processing Performance Council (TPC) and is available upon request. The full disclosure report describes the benchmark hardware and software 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 are also posted 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.

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