



# Top Reasons to Buy the HP ProLiant DL585



The choice of a lower power envelope with 95 watt Dual-Core processors or a higher performance envelope of 120 watt Dual-Core processors, each with AMD Virtualization technology (AMD-V) and the industry-leading 128GB memory footprint, makes the ProLiant DL585 G2 the ideal choice as a platform for deploying your virtualized environment.

The HP ProLiant DL585 G2 continues to maintain price to performance and performance to watt leadership, posting industry-leading numbers in TPC-H at 100GB and 300GB benchmarks.

And now, the ProLiant DL585 G2 has made its mark with the new SPEC CPU2006 benchmark by earning 4 worldwide records, achieving a #1 overall SPECweb2005 record, and maintaining 3 worldwide records with the SPEC CPU2000 benchmark.

## Key results at a glance:

CPU 2006	
<ul style="list-style-type: none"> <li>#1 RECORD OVERALL 4P SPECfp_rate2006</li> </ul>	The ProLiant DL585 G2 took the top number for overall and x86/64 and 4P SPECfp_rate2006 with a result of 91.3, defeating Sun, IBM, and Itautec competitors.
<ul style="list-style-type: none"> <li>#1 RECORD x86/64 4P SPECint_rate2006</li> </ul>	The ProLiant DL585 G2 achieved #1 in the x86/64 4P SPECint_rate2006 with a result of 98.3, besting Sun, IBM, and Itautec
<ul style="list-style-type: none"> <li>#1 RECORD x86/64 SPECfp_rate_base2006</li> </ul>	The server also placed #1 in the x86/64 4P SPECfp_rate_base2006 with a result of 86.1, defeating Sun, IBM, and Itautec.
<ul style="list-style-type: none"> <li>#1 RECORD x86/64 4P SPECint_rate_base2006</li> </ul>	The server also earned the x86/64 4P SPECint_rate_base2006 with a score of 87.2, topping Sun, IBM, and Itautec competition.
SPECWeb 2005	
<ul style="list-style-type: none"> <li>#1 RECORD OVERALL: SPECWeb 2005</li> </ul>	The ProLiant DL585 G2 achieved #1 performance in the SPECWeb 2005 benchmark with a result of 20,235, defeating the Fujitsu PRIMERGY RX600 S3, Intel Xeon processor 7140M.
TPC-H	
<ul style="list-style-type: none"> <li>#1 RECORD OVERALL: TPC-H 100GB and #1 NONCLUSTERED/STANDALONE TPC-H 300GB</li> </ul>	Taking the #1 overall performance record with 19,323QpH for 100GB TPC-H benchmark, the ProLiant DL585 G2 beat both Dell and IBM results. In addition, the server earned the #1 non-clustered/standalone performance record with 18,298QpH for 300GB TPC-H benchmark, triumphing over IBM, including a 16-processor configuration.
SPEC CPU2000	
<ul style="list-style-type: none"> <li>#1 RECORD x86/64: SPECfp_rate_base2000</li> <li>#1 RECORD x86/64: 4P SPECfp_rate_base2000</li> <li>#1 RECORD x86/64: 4P SPECfp_rate2000</li> </ul>	The ProLiant DL585 G2 took the top number for Overall x86/64 4P SPECfp_rate_base2000 with a result of 197 and a SPECfp_rate2000 of <b>230</b> . The server defeated Sun, Dell, IBM, and Fujitsu Siemens competitors, including the IBM BladeCenter LS41 and the Sun Blade 8400.

## For more information:

HP ProLiant DL585: [www.hp.com/servers/proliantdl585](http://www.hp.com/servers/proliantdl585)

SPEC benchmark information at: [www.spec.org](http://www.spec.org)

TPC-H benchmark information at: [www.tpc.org](http://www.tpc.org)

SPEC, the SPEC logo, and the benchmark names SPECweb, SPECint, and SPECfp are registered trademarks of the Standard Performance Evaluation Corporation (SPEC). The SPEC logo is © 2006 Standard Performance Evaluation Corporation (SPEC), reprinted with permission. Herein comparison presented above is based on the top performing 4P servers. The competitive benchmark results stated herein reflect results published on [www.spec.org](http://www.spec.org) as of March 30, 2007.

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. Summaries 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 such as database throughput in transactions per minute (tpmC) and cost per transactions per minute (\$/tpmC). Results as of March 30, 2007.

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# Appendix A

## SPEC CPU2006:

### Configurations and Results of ProLiant DL585 G2 overall 4P FP Throughput Peak vs. competitors

ProLiant DL585 G2. AMD Opteron 8220SE. 8 cores, 4 chips, 2 cores/chip. Result: 91.3.  
Sun Microsystems Sun Blade x8420. AMD Opteron 8220. 8 cores, 4 chips, 2 cores/chip. Result: 87.3.  
IBM BladeCenter LS41. AMD Opteron 8220. 8 cores, 4 chips, 2 cores/chip. Result: 57.1.  
Itaotec Servidor Itaotec ZX440. 3.4GHz Intel Xeon 7140M. 8 cores, 4 chips, 2 cores/chip. Result: 53.3.

### Configurations and Results of ProLiant DL585 G2 x86/64 4P FP Throughput Peak vs. competitors

ProLiant DL585 G2. 2.8GHz AMD Opteron 8220SE. 8 cores, 4 chips, 2 cores/chip. Result: 91.3.  
Sun Microsystems Sun Blade x8420. 2.8GHz AMD Opteron 8220. 8 cores, 4 chips, 2 cores/chip. Result: 87.3.  
IBM BladeCenter LS41. 2.8GHz AMD Opteron 8220. 8 cores, 4 chips, 2 cores/chip. Result: 57.1.  
Itaotec Servidor Itaotec ZX440. 3.4GHz Intel Xeon 7140M. 8 cores, 4 chips, 2 cores/chip. Result: 53.3.

### Configurations and Results of ProLiant DL585 G2 x86/64 4P INT Throughput Base vs. competitors

ProLiant DL585 G2. 2.8GHz AMD Opteron 8220SE. 8 cores, 4 chips, 2 cores/chip. Result: 87.2.  
Sun Microsystems Sun Blade x8420. 2.8GHz AMD Opteron 8220. 8 cores, 4 chips, 2 cores/chip. Result: 80.4.  
IBM BladeCenter LS41. 2.8GHz AMD Opteron 8220. 8 cores, 4 chips, 2 cores/chip. Result: 78.8.  
Sun Microsystems Sun Fire X4600 M2. 2.8GHz AMD Opteron 8220. 8 cores, 4 chips, 2 cores/chip. Result: 76.9  
Itaotec Servidor Itaotec ZX440. 3.4GHz Intel Xeon 7140M. 8 cores, 4 chips, 2 cores/chip. Result: 67.2.  
IBM System X3850. 3.5GHz Intel Xeon 7150N. 8 cores, 4 chips, 2 cores/chip. Result: 66.9.  
IBM System X3800. 3.5GHz Intel Xeon 7150N. 8 cores, 4 chips, 2 cores/chip. Result: 66.8.

### Configurations and Results of ProLiant DL585 G2 x86/64 4P INT Throughput Peak vs. competitors

ProLiant DL585 G2. 2.8GHz AMD Opteron 8220SE. 8 cores, 4 chips, 2 cores/chip. Result: 98.3.  
Sun Microsystems Sun Blade x8420. 2.8GHz AMD Opteron 8220. 8 cores, 4 chips, 2 cores/chip. Result: 93.  
IBM BladeCenter LS41. 2.8GHz AMD Opteron 8220. 8 cores, 4 chips, 2 cores/chip. Result: 88.4.  
Itaotec Servidor Itaotec ZX440. 3.4GHz Intel Xeon 7140M. 8 cores, 4 chips, 2 cores/chip. Result: 67.2.

### Configurations and Results of ProLiant DL585 G2 x86/64 4P FP Throughput Base vs. competitors

ProLiant DL585 G2. 2.8GHz AMD Opteron 8220SE. 8 cores, 4 chips, 2 cores/chip. Result: 86.1.  
Sun Microsystems Sun Blade x8420. 2.8GHz AMD Opteron 8220. 8 cores, 4 chips, 2 cores/chip. Result: 82.5.  
IBM BladeCenter LS41. 2.8GHz AMD Opteron 8220. 8 cores, 4 chips, 2 cores/chip. Result: 54.7.  
Itaotec Servidor Itaotec ZX440. 3.4GHz Intel Xeon 7140M. 8 cores, 4 chips, 2 cores/chip. Result: 45.6

## Appendix A cont'd.

### SPECweb 2005:

#### Configurations and Results of ProLiant DL585 G2 SPECweb 2005 vs. competitors

ProLiant DL585 G2. 2.8GHz AMD Opteron 8220. 8 cores, 4 chips, 2 cores/chip. Result: 20,235.

Fujitsu Siemens PRIMERGY RX600 S3. 3.4GHz Intel Xeon 7140M. 8 cores, 4 chips, 2 cores/chip. Result: 14,896.

### TPC-H:

#### Configurations and Results of ProLiant DL585 G2 TPC-H performance vs. competitors

ProLiant DL585 G2. 2.8GHz AMD Opteron 8220SE. 4 processors, 8 cores, 8 threads. Availability: 1/16/07.

Result: 19,323 QphH@100GB with 10.67 US \$ per QphH@100GB.

Dell PowerEdge 6950. 2.8GHz AMD Opteron 8220SE DC. 4 processors, 8 cores, 8 threads. Availability: 12/04/06.

Result: 17,180 QphH@100GB with 10.02 US \$ per QphH@100GB.

Dell PowerEdge 6800. 3.4GHz Intel Xeon MP. 4 processor, 8 cores, 16 threads. Availability: 8/28/06. Result: 16,320 QphH@100GB with 13.40 US \$ per QphH@100GB.

IBM eServer x325. 2.0GHz AMD Opteron 246. 16 processors, 16 cores, 16 threads. Availability: 11/08/03. Result: 12,216 QphH@100GB with \$ 71 per QphH@100GB.

### SPEC CPU2000:

#### Configurations and Results of ProLiant DL585 G2 4P x86/64 SPECfp\_rate\_base2000 and SPECfp\_rate2000 vs. competitors

HP ProLiant DL585 G2. 2.8GHz AMD Opteron 8220SE. 8 cores, 4 chips, 2 cores/chip. Result: SPECfp\_rate\_base2000 = 197, SPECfp\_rate2000 = 230.

Sun Microsystems Sun Fire X4600 M2. 2.8GHz AMD Opteron 8220SE. 8 cores, 4 chips, 2 cores/chip. Result: SPECfp\_rate\_base2000 = 184, SPECfp\_rate2000 = 214.

Sun Microsystems Sun Blade x8400. 2.6GHz AMD Opteron 885. 8 cores, 4 chips, 2 cores/chip. Result: SPECfp\_rate\_base2000 = 167, SPECfp\_rate2000 = 182.

Dell PowerEdge 6950. 2.8GHz AMD Opteron 8220SE. 8 cores, 4 chips, 2 cores/chip. Result: SPECfp\_rate\_base2000 = 175.

IBM BladeCenter LS41. 2.8GHz AMD Opteron 8220. 8 cores, 4 chips, 2 cores/chip. Result: SPECfp\_rate\_base2000 = 156, SPECfp\_rate2000 = 172.

IBM System X3755. 2.6GHz AMD Opteron 8218. 8 cores, 4 chips, 2 cores/chip. Result: SPECfp\_rate\_base2000 = 151, SPECfp\_rate2000 = 162.

Fujitsu Siemens PRIMERGY BX630. 2.8GHz AMD Opteron 890. 8 cores, 4 chips, 2 cores/chip. Result: SPECfp\_rate\_base2000 = 144, SPECfp\_rate2000 = 154.