HP ProLiant BL685c G5 Server Blade with new Quad-Core AMD Opteron™ processors takes 4P and 2P x86/64 records on SPEC® CPU2006 benchmark

Key results at a glance

The ProLiant BL685 G5 with the AMD Opteron™ processor Model 8356 achieved four new records on the SPEC® CPU2006 benchmark.

- #1 4P x86/64 SPECfp_rate_base2006 (147)
- #1 4P x86/64 SPECfp_rate2006 (161)
- #1 2P x86/64 SPECfp_rate_base2006 (82)
- #1 2P x86/64 SPECfp_rate2006 (89.8)

HP announced its latest worldwide performance records for the SPEC CPU2006 benchmarks on March 31, 2008, for four-processor and two-processor configurations.

The four-processor configuration of the HP ProLiant BL685c G5 equipped with the new Quad-Core AMD Opteron processor Model 8356 provides the following superior performance deltas:

For 4P x86/64 SPECfp_rate2006 and 4P x86/64 SPECfp_rate_base2006

- 35% and 36% better performance than the Dell PowerEdge R900
- 41% and 37% better performance than the Sun Fire X4450
- 42% and 38% better performance than the IBM x3850 M2

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1Dell PowerEdge R900, 2.93GHz Intel Xeon X7350, 16 cores, 4 chips, 4 cores/chip. SPECfp_rate_base2006 result 108. SPECfp_rate2006 result 119.
2 Sun Fire X4450, 2.93GHz Intel Xeon X7350, 16 cores, 4 chips, 4 cores/chip. SPECfp_rate_base2006 result 107. SPECfp_rate2006 result 114.
3 IBM System x3850 M2, 2.93GHz Intel Xeon X7350, 16 cores, 4 chips, 4 cores/chip. SPECfp_rate_base2006 result 106. SPECfp_rate2006 result 113.
The two-processor configuration of the HP ProLiant BL685c G5 equipped with the new Quad-Core AMD Opteron processor Model 8356 provides the following superior performance deltas:

For 2P x86/64 SPECfp_rate2006 and 4P x86/64 SPECfp_rate_base2006

- 15% and 17% better performance than the Dell PowerEdge 1950 III
- 16% and 20% better performance than the IBM System x3650
- 17% and 18% better performance than the Sun Fire X4150

These performance records show the exceptional performance that the ProLiant BL685c G5 enables on floating-point based compute-intensive applications. All ProLiant and competitor SPEC CPU2006 results and configurations can be found at the SPEC web site at: www.spec.org.

Performance: the server behind the results

Designed to keep pace with strenuous computing demands, the HP ProLiant BL685c G5 Server Blade is equipped with outstanding 4P processing power and expansion capabilities, enterprise-class availability features, and industry-leading management tools that make it easy to deploy and maintain.

About SPEC CPU2006

SPEC CPU2006 was developed by SPEC's Open Systems Group (OSG). It measures component- and system-level performance for a wide variety of operating systems and hardware that ranges from desktop systems to workstations to large-scale servers. SPEC CPU2006 replaces SPEC CPU2000, which was phased out. Performance results from SPEC CPU2006 cannot be compared to those from CPU2000, since new benchmarks have been added and existing ones changed.

What the benchmark measures


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1. Dell PowerEdge 1950 III, 3.16GHz Intel Xeon X5460, 8 cores, 2 chips, 4 cores/ chip. SPECfp_rate_base2006 result 69.7. SPECfp_rate2006 result 77.6.
2. IBM System x3650, 3.16GHz Intel Xeon X5460, 8 cores, 2 chips, 4 cores/ chip. SPECfp_rate_base2006 result 67.9. SPECfp_rate2006 result 77.
3. Sun Microsystems Sun Fire X4150, 3.16GHz Intel Xeon X5460, 8 cores, 2 chips, 4 cores/ chip. SPECfp_rate_base2006 result 69.2. SPECfp_rate2006 result 76.7.
For more information

HP ProLiant BL685c G5: [www.hp.com/servers/bl685c](http://www.hp.com/servers/bl685c)
HP ProLiant storage solutions: [www.hp.com/go/serial](http://www.hp.com/go/serial)
ProLiant benchmarks: [www.hp.com/servers/benchmarks](http://www.hp.com/servers/benchmarks)

SPEC CPU2006 Overview White Paper:

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## Appendix A

Configuration of HP ProLiant BL685c G5 #1 4P x86/64 SPECfp_rate_base2006
ProLiant BL685c G5. 2.3GHz AMD Opteron 8356. 16 cores, 4 chips, 4 cores/chip. Result: 147.

Configuration of HP ProLiant BL685c G5 #1 4P x86/64 SPECfp_rate2006
ProLiant BL685c G5. 2.3GHz AMD Opteron 8356. 16 cores, 4 chips, 4 cores/chip. Result: 161.

Configuration of HP ProLiant BL685c G5 #1 2P x86/64 SPECfp_rate_base2006
ProLiant BL685c G5. 2.3GHz AMD Opteron 8356. 8 cores, 2 chips, 4 cores/chip. Result: 82.

Configuration of HP ProLiant BL685c G5 #1 2P x86/64 SPECfp_rate2006
ProLiant BL685c G5. 2.3GHz AMD Opteron 8356. 8 cores, 2 chips, 4 cores/chip. Result: 89.8.

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March 2008