## SPEC® CINT2006 Result

### Hewlett-Packard Company

**ProLiant ML370 G5**  
(1.86 GHz, Intel Xeon processor E5320)

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**CPU2006 license:** 3  
**Test date:** Feb-2007  
**Test sponsor:** Hewlett-Packard Company  
**Hardware Availability:** Nov-2006  
**Tested by:** Hewlett-Packard Company  
**Software Availability:** Nov-2006

<table>
<thead>
<tr>
<th>SPECint_rate2006 = 34.5</th>
<th>SPECint_rate_base2006 = 33.3</th>
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### SPECint Rate

<table>
<thead>
<tr>
<th>Test</th>
<th>Rate 2006</th>
<th>Rate Base 2006</th>
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<tbody>
<tr>
<td>400.perlbench</td>
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<tr>
<td>401.bzip2</td>
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<td>403.gcc</td>
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<td>429.mcf</td>
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<tr>
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<tr>
<td>462.libquantum</td>
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<tr>
<td>473.astar</td>
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<td></td>
</tr>
<tr>
<td>483.xalancbmk</td>
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</tr>
</tbody>
</table>

### Hardware

- **CPU Name:** Intel Xeon E5320  
- **CPU Characteristics:** 1.86 GHz, 2x4 MB L2 shared, 1066 MHz system bus  
- **CPU MHz:** 1860  
- **FPU:** Integrated  
- **CPU(s) enabled:** 4 cores, 1 chip, 4 cores/chip  
- **CPU(s) orderable:** 1.2 chips  
- **Primary Cache:** 32 KB I + 32 KB D on chip per core  
- **Secondary Cache:** 8 MB I+D on chip per core, 4 MB shared / 2 cores  
- **L3 Cache:** None  
- **Other Cache:** None  
- **Memory:** 16 GB (8x2 GB PC2-5300F CL5)  
- **Disk Subsystem:** 1x72 GB 10 K SAS  
- **Other Hardware:** None

### Software

- **Operating System:** Windows Server 2003 Enterprise x64 Edition  
- **Compiler:** Intel C++ Compiler for 32-bit applications, Version 9.1, Build 20061103Z  
  Package ID: W_CC_C_9.1.033  
  Microsoft Visual Studio .NET 2003 (v7.1.3088, for libraries)  
- **Auto Parallel:** No  
- **File System:** NTFS  
- **System State:** Default  
- **Base Pointers:** 32-bit  
- **Peak Pointers:** 32-bit  
- **Other Software:** MicroQuill SmartHeap Library 8.0
Hewlett-Packard Company

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SPECint_rate2006 = 34.5
SPECint_rate_base2006 = 33.3

Results Table

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</table>

Results appear in the order in which they were run. Bold underlined text indicates a median measurement.

Platform Notes
Power Regulator set to Static High Performance Mode in BIOS.
Adjacent Sector Prefetch disabled in BIOS.

Base Compiler Invocation

C benchmarks:
icl -Qvc7.1 -Qc99

C++ benchmarks:
icl -Qvc7.1

Base Portability Flags

403.gcc: -DSPEC_CPU_WIN32
464.h264ref: -DSPEC_CPU_NO_INTTYPES -DWIN32

Base Optimization Flags

C benchmarks:
-fast /F512000000 shlw32m.lib -link /FORCE:MULTIPLE
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Base Optimization Flags (Continued)

C++ benchmarks:
- fast -Qcxx_features /F512000000 shlw32m.lib
- link /FORCE:MULTIPLE

Base Other Flags

C benchmarks:
403.gcc: -Dalloca=_alloca

Peak Compiler Invocation

C benchmarks:
icl -Qvc7.1 -Qc99
C++ benchmarks:
icl -Qvc7.1

Peak Portability Flags

403.gcc: -DSPEC_CPU_WIN32
464.h264ref: -DSPEC_CPU_NO_INTTYPES -DWIN32

Peak Optimization Flags

C benchmarks:
400.perlbench: -Qprof_gen(pass 1) -Qprof_use(pass 2) -fast /F512000000
shlw32m.lib -link /FORCE:MULTIPLE
401.bzip2: Same as 400.perlbench
403.gcc: Same as 400.perlbench
429.mcf: basepeak = yes
445.gobmk: Same as 400.perlbench
456.hmmer: Same as 400.perlbench
458.sjeng: Same as 400.perlbench

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Peak Optimization Flags (Continued)

462.libquantum: Same as 400.perlbench
464.h264ref: Same as 400.perlbench

C++ benchmarks:
-Qprof_gen(pass 1) -Qprof_use(pass 2) -fast -Qcxx_features
/F512000000 shlw32m.lib -link /FORCE:MULTIPLE

Peak Other Flags

C benchmarks:
403.gcc: -Dalloca=_alloca

The flags file that was used to format this result can be browsed at
http://www.spec.org/cpu2006/flags/hp-ic91-flags.20090715.02.html

You can also download the XML flags source by saving the following link:
http://www.spec.org/cpu2006/flags/hp-ic91-flags.20090715.02.xml

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For other inquiries, please contact webmaster@spec.org.

Tested with SPEC CPU2006 v1.0.