Hewlett-Packard Company

SPEC® CINT2006 Result

SPECint®2006 = 11.9

SPECint_base2006 = 11.4

CPU2006 license: 3
Test sponsor: Hewlett-Packard Company
Tested by: Hewlett-Packard Company

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 chip, 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
Results Table

<table>
<thead>
<tr>
<th>Benchmark</th>
<th>Seconds</th>
<th>Ratio</th>
<th>Seconds</th>
<th>Ratio</th>
<th>Seconds</th>
<th>Ratio</th>
<th>Seconds</th>
<th>Ratio</th>
<th>Seconds</th>
<th>Ratio</th>
</tr>
</thead>
<tbody>
<tr>
<td>400.perlbench</td>
<td>720</td>
<td>13.6</td>
<td>720</td>
<td>13.6</td>
<td>720</td>
<td>13.6</td>
<td>657</td>
<td>14.9</td>
<td>657</td>
<td>14.9</td>
</tr>
<tr>
<td>401.bzip2</td>
<td>980</td>
<td>9.84</td>
<td>981</td>
<td>9.84</td>
<td>981</td>
<td>9.84</td>
<td>953</td>
<td>10.1</td>
<td>953</td>
<td>10.1</td>
</tr>
<tr>
<td>403.gcc</td>
<td>965</td>
<td>8.34</td>
<td>965</td>
<td>8.34</td>
<td>965</td>
<td>8.34</td>
<td>930</td>
<td>8.65</td>
<td>930</td>
<td>8.66</td>
</tr>
<tr>
<td>445.gobmk</td>
<td>852</td>
<td>12.3</td>
<td>852</td>
<td>12.3</td>
<td>852</td>
<td>12.3</td>
<td>753</td>
<td>13.9</td>
<td>753</td>
<td>13.9</td>
</tr>
<tr>
<td>456.hmmer</td>
<td>1193</td>
<td>7.82</td>
<td>1193</td>
<td>7.82</td>
<td>1193</td>
<td>7.82</td>
<td>1161</td>
<td>8.04</td>
<td>1161</td>
<td>8.04</td>
</tr>
<tr>
<td>458.sjeng</td>
<td>1048</td>
<td>11.6</td>
<td>1048</td>
<td>11.6</td>
<td>1048</td>
<td>11.6</td>
<td>964</td>
<td>12.6</td>
<td>964</td>
<td>12.6</td>
</tr>
<tr>
<td>462.libquantum</td>
<td>1760</td>
<td>11.8</td>
<td>1759</td>
<td>11.8</td>
<td>1759</td>
<td>11.8</td>
<td>1743</td>
<td>11.9</td>
<td>1744</td>
<td>11.9</td>
</tr>
<tr>
<td>464.h264ref</td>
<td>1132</td>
<td>19.6</td>
<td>1132</td>
<td>19.6</td>
<td>1132</td>
<td>19.6</td>
<td>1108</td>
<td>20.0</td>
<td>1108</td>
<td>20.0</td>
</tr>
<tr>
<td>471.omnetpp</td>
<td>673</td>
<td>9.28</td>
<td>673</td>
<td>9.28</td>
<td>673</td>
<td>9.29</td>
<td>608</td>
<td>10.3</td>
<td>609</td>
<td>10.3</td>
</tr>
<tr>
<td>473.astar</td>
<td>778</td>
<td>9.03</td>
<td>778</td>
<td>9.03</td>
<td>778</td>
<td>9.03</td>
<td>776</td>
<td>9.05</td>
<td>776</td>
<td>9.05</td>
</tr>
<tr>
<td>483.xalancbmk</td>
<td>480</td>
<td>14.4</td>
<td>480</td>
<td>14.4</td>
<td>480</td>
<td>14.4</td>
<td>476</td>
<td>14.5</td>
<td>476</td>
<td>14.5</td>
</tr>
</tbody>
</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
Hewlett-Packard Company

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

spec

Copyright 2006-2014 Standard Performance Evaluation Corporation

SPEC CINT2006 Result

SPECint2006 = 11.9
SPECint_base2006 = 11.4

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

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

Continued on next page
Hewlett-Packard Company
ProLiant ML370 G5
(1.86 GHz, Intel Xeon processor E5320)

SPECint2006 = 11.9
SPECint_base2006 = 11.4

CPU2006 license: 3
Test sponsor: Hewlett-Packard Company
Tested by: Hewlett-Packard Company

Test date: Feb-2007
Hardware Availability: Nov-2006
Software Availability: Nov-2006

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

SPEC and SPECint are registered trademarks of the Standard Performance Evaluation Corporation. All other brand and product names appearing in this result are trademarks or registered trademarks of their respective holders.

For questions about this result, please contact the tester.
For other inquiries, please contact webmaster@spec.org.

Tested with SPEC CPU2006 v1.0.