## SPEC® CINT2006 Result

### Hewlett-Packard Company

**HP Integrity rx6600**  
(1.6GHz/24MB Dual-Core Intel Itanium 2)

<table>
<thead>
<tr>
<th>Test date:</th>
<th>Oct-2006</th>
</tr>
</thead>
<tbody>
<tr>
<td>Hardware Availability:</td>
<td>Sep-2006</td>
</tr>
<tr>
<td>Software Availability:</td>
<td>Nov-2006</td>
</tr>
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</table>

<table>
<thead>
<tr>
<th>SPECint&lt;sup&gt;®&lt;/sup&gt;2006 =</th>
<th>12.9</th>
</tr>
</thead>
<tbody>
<tr>
<td>SPECint&lt;sub&gt;base&lt;/sub&gt;2006 =</td>
<td>12.2</td>
</tr>
</tbody>
</table>

### CPU2006 license: 03  
Tested by: Hewlett-Packard Company

### HW

<table>
<thead>
<tr>
<th>Hardware</th>
<th>Software</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>CPU</strong></td>
<td><strong>Operating System</strong></td>
</tr>
<tr>
<td>Name:</td>
<td>Dual-Core Intel Itanium 2 9050</td>
</tr>
<tr>
<td>Characteristics:</td>
<td>1.6GHz/24MB, 533MHz FSB</td>
</tr>
<tr>
<td>MHz:</td>
<td>1600</td>
</tr>
<tr>
<td>FPU:</td>
<td>Integrated</td>
</tr>
<tr>
<td><strong>CPU(s)</strong> enabled:</td>
<td>1 core, 1 chip, 2 cores/chip</td>
</tr>
<tr>
<td><strong>CPU(s)</strong> orderable:</td>
<td>1-4 chips</td>
</tr>
<tr>
<td>Primary Cache:</td>
<td>16 KB I + 16 KB D on chip per core</td>
</tr>
<tr>
<td>Secondary Cache:</td>
<td>1 MB I + 256 KB D on chip per core</td>
</tr>
<tr>
<td>L3 Cache:</td>
<td>12 MB I+D on chip per core</td>
</tr>
<tr>
<td>Other Cache:</td>
<td>None</td>
</tr>
<tr>
<td>Memory:</td>
<td>24 GB (24x1GB DIMMs)</td>
</tr>
<tr>
<td>Disk Subsystem:</td>
<td>2x73GB 10K RPM SAS (mirrored)</td>
</tr>
<tr>
<td>Other Hardware:</td>
<td>None</td>
</tr>
</tbody>
</table>

| **Compiler** | Red Hat Enterprise Linux AS release 4 (Update 4)  
| **Auto Parallel:** | No |
| **File System:** | ext3 |
| **System State:** | Multi-user |
| **Base Pointers:** | 64-bit |
| **Peak Pointers:** | 64-bit |
| **Other Software:** | MicroQuill Smartheap 8.0 |
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**SPECint2006 =** 12.9

**SPECint_base2006 =** 12.2

<table>
<thead>
<tr>
<th>Benchmark</th>
<th>Seconds</th>
<th>Ratio</th>
<th>Seconds</th>
<th>Ratio</th>
<th>Seconds</th>
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<th>Seconds</th>
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<tbody>
<tr>
<td>400.perlbench</td>
<td>1078</td>
<td>9.06</td>
<td>1078</td>
<td>9.06</td>
<td>1077</td>
<td>9.07</td>
<td>906</td>
<td>10.8</td>
<td>905</td>
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<td>401.bzip2</td>
<td>1113</td>
<td>8.67</td>
<td>1113</td>
<td>8.67</td>
<td>1113</td>
<td>8.67</td>
<td>1097</td>
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<td>8.79</td>
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<td>403.gcc</td>
<td>907</td>
<td>8.88</td>
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<td>8.89</td>
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<td>429.mcf</td>
<td>814</td>
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<td>819</td>
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<td>816</td>
<td>11.2</td>
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<td>11.1</td>
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<td>445.gobmk</td>
<td>1002</td>
<td>10.5</td>
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<td>10.5</td>
<td>886</td>
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<tr>
<td>456.hmmer</td>
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<td>458.sjeng</td>
<td>1410</td>
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<td>8.58</td>
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<td>1238</td>
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<tr>
<td>462.libquantum</td>
<td>416</td>
<td>49.8</td>
<td>413</td>
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<tr>
<td>464.h264ref</td>
<td>1170</td>
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<td>471.omnetpp</td>
<td>951</td>
<td>6.58</td>
<td>951</td>
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<td>473.astar</td>
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<td>643</td>
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<td>483.xalancbmk</td>
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<td>766</td>
<td>9.00</td>
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<td>8.99</td>
<td>752</td>
<td>9.18</td>
<td>750</td>
<td>9.20</td>
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</tbody>
</table>

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

### Operating System Notes

- stacksize set to unlimited prior to run
- system was booted uniprocessor by setting "maxcpus=0"
- kernel parameter in elilo.conf

### General Notes

Submitted_by: "Kirby Collins" <kirby.collins@hp.com>
Submission: cpu2006-20061016-00117.sub

### Base Compiler Invocation

C benchmarks:
- icc

C++ benchmarks:
- icpc
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Test date: Oct-2006
Hardware Availability: Sep-2006
Software Availability: Nov-2006

Base Portability Flags

400.perlbench: -DSPEC_CPU_LP64 -DSPEC_CPU_LINUX_IA64
401.bzip2: -DSPEC_CPU_LP64
403.gcc: -DSPEC_CPU_LP64
429.mcf: -DSPEC_CPU_LP64
445.gobmk: -DSPEC_CPU_LP64
456.hmmer: -DSPEC_CPU_LP64
458.sjeng: -DSPEC_CPU_LP64
462.libquantum: -DSPEC_CPU_LP64 -DSPEC_CPU_LINUX
464.h264ref: -DSPEC_CPU_LP64
471.omnetpp: -DSPEC_CPU_LP64
473.astar: -DSPEC_CPU_LP64
483.xalancbmk: -DSPEC_CPU_LP64 -DSPEC_CPU_LINUX

Base Optimization Flags

C benchmarks:
  -fast -IPF_fp_relaxed -ansi-alias

C++ benchmarks:
  -fast -IPF_fp_relaxed -ansi-alias -Wl,-z,muldefs
  /opt/SmartHeap_8/lib/libsmartheapC64.a
  /opt/SmartHeap_8/lib/libsmartheap64.a

Peak Compiler Invocation

C benchmarks:
  icc

C++ benchmarks:
  icpc

Peak Portability Flags

Same as Base Portability Flags

Peak Optimization Flags

C benchmarks:
  400.perlbench: -prof_gen(pass 1) -prof_use(pass 2) -fast -IPF_fp_relaxed
                    -ansi-alias

Continued on next page
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Peak Optimization Flags (Continued)

401.bzip2: Same as 400.perlbench
403.gcc: Same as 400.perlbench
429.mcf: basepeak = yes
445.gobmk: Same as 400.perlbench
456.hmmer: basepeak = yes
458.sjeng: Same as 400.perlbench
462.libquantum: basepeak = yes
464.h264ref: basepeak = yes

C++ benchmarks:

471.omnetpp: -prof_gen(pass 1) -prof_use(pass 2) -fast -IPF_fp_relaxed
-ansi-alias -Wl,-z,muldefs
/opt/SmartHeap_8/lib/libsmartheapC64.a
/opt/SmartHeap_8/lib/libsmartheap64.a

473.astar: -prof_gen(pass 1) -prof_use(pass 2) -fast -IPF_fp_relaxed
-ansi-alias -inline-factor=150 -Wl,-z,muldefs
/opt/SmartHeap_8/lib/libsmartheapC64.a
/opt/SmartHeap_8/lib/libsmartheap64.a

483.xalancbmk: Same as 471.omnetpp

The flags file that was used to format this result can be browsed at
http://www.spec.org/cpu2006/flags/IPF_intel91_flags.html

You can also download the XML flags source by saving the following link:
http://www.spec.org/cpu2006/flags/IPF_intel91_flags.xml

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

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