**SPEC® CFP2006 Result**

**Hewlett-Packard Company**

HP Integrity rx2620
(1.4GHz/12MB Dual-Core Intel Itanium 2)

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**CPU2006 license:** 03  
**Test sponsor:** Hewlett-Packard Company  
**Tested by:** Hewlett-Packard Company

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**Hardware**

<table>
<thead>
<tr>
<th>Component</th>
<th>Specification</th>
</tr>
</thead>
<tbody>
<tr>
<td>CPU Name</td>
<td>Dual-Core Intel Itanium 2 9015</td>
</tr>
<tr>
<td>CPU Characteristics</td>
<td>1.4GHz/12MB, 400MHz FSB</td>
</tr>
<tr>
<td>CPU MHz</td>
<td>1400</td>
</tr>
<tr>
<td>FPU</td>
<td>Integrated</td>
</tr>
<tr>
<td>CPU(s) enabled</td>
<td>1 core, 1 chip, 2 cores/chip</td>
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<tr>
<td>CPU(s) orderable</td>
<td>1-2 chips</td>
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<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>
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</table>

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**Software**

<table>
<thead>
<tr>
<th>Component</th>
<th>Specification</th>
</tr>
</thead>
<tbody>
<tr>
<td>Operating System</td>
<td>Red Hat Enterprise Linux AS release 4 (Update 4)</td>
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<tr>
<td>Compiler</td>
<td>Intel C++ Compiler for Itanium version 9.1 (Build 20060818)</td>
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<td>Auto Parallel</td>
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<td>System State</td>
<td>Multi-user</td>
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<tr>
<td>Base Pointers</td>
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**SPECfp®2006 =** 13.6  
**SPECfp_base2006 =** 13.3

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**Test date:** Nov-2006  
**Hardware Availability:** Sep-2006  
**Software Availability:** Nov-2006

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**SPECfp_base2006 =** 13.3

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**SPECfp2006 =** 13.6

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**Continued on next page**  
**Continued on next page**
**Hewlett-Packard Company**

(1.4GHz/12MB Dual-Core Intel Itanium 2)

**SPECfp2006 =** 13.6

**SPECfp_base2006 =** 13.3

**Results Table**

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</table>

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

**Operating System Notes**

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

**Base Compiler Invocation**

C benchmarks:
- **icc**

C++ benchmarks:
- **icpc**

Continued on next page
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SPECfp2006 = 13.6
SPECfp_base2006 = 13.3

CPU2006 license: 03
Test sponsor: Hewlett-Packard Company
Tested by: Hewlett-Packard Company

Base Compiler Invocation (Continued)

Fortran benchmarks:
  ifort

Benchmarks using both Fortran and C:
  icc ifort

Base Portability Flags

410.bwaves: -DSPEC_CPU_LP64
416.gamess: -DSPEC_CPU_LP64
433.milc: -DSPEC_CPU_LP64
434.zeusmp: -DSPEC_CPU_LP64
435.gromacs: -DSPEC_CPU_LP64 -nofor_main
436.cactusADM: -DSPEC_CPU_LP64 -nofor_main
437.leslie3d: -DSPEC_CPU_LP64
444.namd: -DSPEC_CPU_LP64
447.dealII: -DSPEC_CPU_LP64
450.soplex: -DSPEC_CPU_LP64
453.povray: -DSPEC_CPU_LP64
454.calculix: -DSPEC_CPU_LP64 -nofor_main
459.GemsFDTD: -DSPEC_CPU_LP64
465.tonto: -DSPEC_CPU_LP64
470.lbm: -DSPEC_CPU_LP64
481.wrf: -DSPEC_CPU_LP64 -DSPEC_CPU_LINUX -DSPEC_CPU_CASE_FLAG
482.sphinx3: -DSPEC_CPU_LP64

Base Optimization Flags

C benchmarks:
  -fast -IPF_fp_relaxed -ansi-alias

C++ benchmarks:
  -fast -IPF_fp_relaxed -ansi-alias

Fortran benchmarks:
  -fast -IPF_fp_relaxed

Benchmarks using both Fortran and C:
  -fast -IPF_fp_relaxed -ansi-alias

Peak Compiler Invocation

C benchmarks:
  icc

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Peak Compiler Invocation (Continued)

C++ benchmarks:
  icpc

Fortran benchmarks:
  ifort

Benchmarks using both Fortran and C:
  icc ifort

Peak Portability Flags

Same as Base Portability Flags

Peak Optimization Flags

C benchmarks:

433.milc: -fast -IPF_fp_relaxed -ansi-alias -fno-alias
470.lbm: -prof_gen(pass 1) -prof_use(pass 2) -fast -IPF_fp_relaxed
  -ansi-alias
482.sphinx3: Same as 470.lbm

C++ benchmarks:

444.namd: -prof_gen(pass 1) -prof_use(pass 2) -fast -IPF_fp_relaxed
  -no-prefetch -fno-alias
447.dealII: -fast -IPF_fp_relaxed -ansi-alias -no-alias-args
450.soplex: -fast -IPF_fp_relaxed -ansi-alias -inline-factor=150
453.povray: -prof_gen(pass 1) -prof_use(pass 2) -fast -IPF_fp_relaxed
  -ansi-alias

Fortran benchmarks:

410.bwaves: -prof_gen(pass 1) -prof_use(pass 2) -fast -IPF_fp_relaxed
416.gamess: -fast -IPF_fp_relaxed -inline-factor=150
434.zeusmp: basepeak = yes
437.leslie3d: basepeak = yes

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### SPEC CFP2006 Result

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HP Integrity rx2620  
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<table>
<thead>
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**Software Availability:** Nov-2006

#### Peak Optimization Flags (Continued)

- 459.GemsFDTD: basepeak = yes
- 465.tonto: basepeak = yes

Benchmarks using both Fortran and C:

- 435.gromacs: -prof_gen(pass 1) -prof_use(pass 2) -fast -IPF_fp_relaxed -fno-alias -inline-factor=150
- 436.cactusADM: basepeak = yes
- 454.calculix: -fast -IPF_fp_relaxed -fno-alias
- 481.wrf: basepeak = yes

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 other inquiries, please contact webmaster@spec.org.

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