Hewlett-Packard Company

HP Integrity rx3600
(1.4GHz/12MB Dual-Core Intel Itanium 2)

SPECfp®2006 = 14.6
SPECfp_base2006 = 14.2

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

CPU MHz: 1600
FPU: Integrated
CPU(s) enabled: 1 core, 1 chip, 2 cores/chip
CPU(s) orderable: 1-2 chips
Primary Cache: 16 KB I + 16 KB D on chip per core
Secondary Cache: 1 MB I + 256 KB D on chip per core

Operating System: Red Hat Enterprise Linux AS release 4 (Update 4)
Compiler: Intel C++ Compiler 9.1 for Linux (Build 20060818)
Intel Fortran Compiler 9.1 for Linux (Build 20060818)
Auto Parallel: No
File System: ext3
System State: Multi-user

Hardware

Software

Continued on next page
Hewlett-Packard Company

HP Integrity rx3600
(1.4GHz/12MB Dual-Core Intel Itanium 2)

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L3 Cache: 6 MB I+D on chip per core
Other Cache: None
Memory: 16 GB (6x2GB DIMMs, AD124A 8-DIMM memory carrier)
Disk Subsystem: 2x73GB 10K RPM SAS (mirrored)
Other Hardware: None

Base Pointers: 64-bit
Peak Pointers: 64-bit
Other Software: None

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<th>Ratio</th>
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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
Hewlett-Packard Company
HP Integrity rx3600
(1.4GHz/12MB Dual-Core Intel Itanium 2)

SPECfp2006 = 14.6
SPECfp_base2006 = 14.2

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

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

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

Continued on next page
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

Continued on next page
**SPEC CFP2006 Result**

**Hewlett-Packard Company**  
HP Integrity rx3600  
(1.4GHz/12MB Dual-Core Intel Itanium 2)  

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**CPU2006 license:** 03  
**Test date:** Dec-2006  
**Test sponsor:** Hewlett-Packard Company  
**Hardware Availability:** Sep-2006  
**Tested by:** Hewlett-Packard Company  
**Software Availability:** Nov-2006

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**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.20090715.html

You can also download the XML flags source by saving the following link:  
http://www.spec.org/cpu2006/flags/IPF_intel91_flags.20090715.xml

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

Tested with SPEC CPU2006 v1.0.  