Bull SAS
NovaScale R440
(Intel Xeon processor E5310, 1.60GHz)

SPECfp\textsuperscript{®}_rate2006 = 38.8
SPECfp_rate_base2006 = 38.2

CPU2006 license: 20
Test sponsor: Bull SAS
Tested by: Bull SAS

Hardware
CPU Name: Intel Xeon E5310
CPU Characteristics: 1.6 GHz, 8 MB L2, 1066 MHz system bus
CPU MHz: 1600
FPU: Integrated
CPU(s) enabled: 8 cores, 2 chips, 4 cores/chip
CPU(s) orderable: 1 to 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

Software
Operating System: SuSE Linux Enterprise Server 10 (EM64T)
Compiler: Intel C++ Compiler for Intel EM64T-based applications, Version 9.1
Package ID l_cc_c_9.1.045 Build no 20061101
Intel Fortran Compiler for Intel EM64T-based applications, Version 9.1
Package ID l_fc_c_9.1.040 Build no 20061101
Auto Parallel: No

Continued on next page
SPEC CFP2006 Result

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L3 Cache: None
Other Cache: None
Memory: 12 GB (1GB DIMM x 12, FB-DIMM PC2-5300F ECC CL5)
Disk Subsystem: 73 GB SAS, 10000RPM
Other Hardware: None

File System: ext2
System State: Multi-user run level 3
Base Pointers: 64-bit
Peak Pointers: 32/64-bit
Other Software: None

SPECfp_rate2006 = 38.8
SPECfp_rate_base2006 = 38.2

Test date: Apr-2007
Hardware Availability: Mar-2007
Software Availability: Dec-2006

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

Environment stack size set to 'unlimited'

General Notes

The NovaScale R440 and the NovaScale R460 models are electronically equivalent.

The results have been measured on a NovaScale R460 model.
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Software Availability: Dec-2006

Base Compiler Invocation

C benchmarks:
   icc
C++ benchmarks:
   icpc
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.GemsFDGD: -DSPEC_CPU_LP64
465.tonto: -DSPEC_CPU_LP64
470.lbm: -DSPEC_CPU_LP64
481.wrf: -DSPEC_CPU_LP64 -DSPEC_CPU_CASE_FLAG -DSPEC_CPU_LINUX
482.sphinx3: -DSPEC_CPU_LP64

Base Optimization Flags

C benchmarks:
   -fast
C++ benchmarks:
   -fast
Fortran benchmarks:
   -fast
Benchmarks using both Fortran and C:
   -fast
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Software Availability: Dec-2006

Peak Compiler Invocation

C benchmarks:
  icc

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:
  -prof_gen(pass 1) -prof_use(pass 2) -fast -auto_ilp32

C++ benchmarks:
  -prof_gen(pass 1) -prof_use(pass 2) -fast -auto_ilp32

Fortran benchmarks:
  -prof_gen(pass 1) -prof_use(pass 2) -fast

Benchmarks using both Fortran and C:
  -prof_gen(pass 1) -prof_use(pass 2) -fast -auto_ilp32

The flags file that was used to format this result can be browsed at
http://www.spec.org/cpu2006/flags/EM64T_Intel91_flags.html

You can also download the XML flags source by saving the following link:
http://www.spec.org/cpu2006/flags/EM64T_Intel91_flags.xml
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**Bull SAS**

NovaScale R440
(Intel Xeon processor E5310, 1.60GHz)

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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.
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