SPEC® CFP2006 Result

Bull SAS

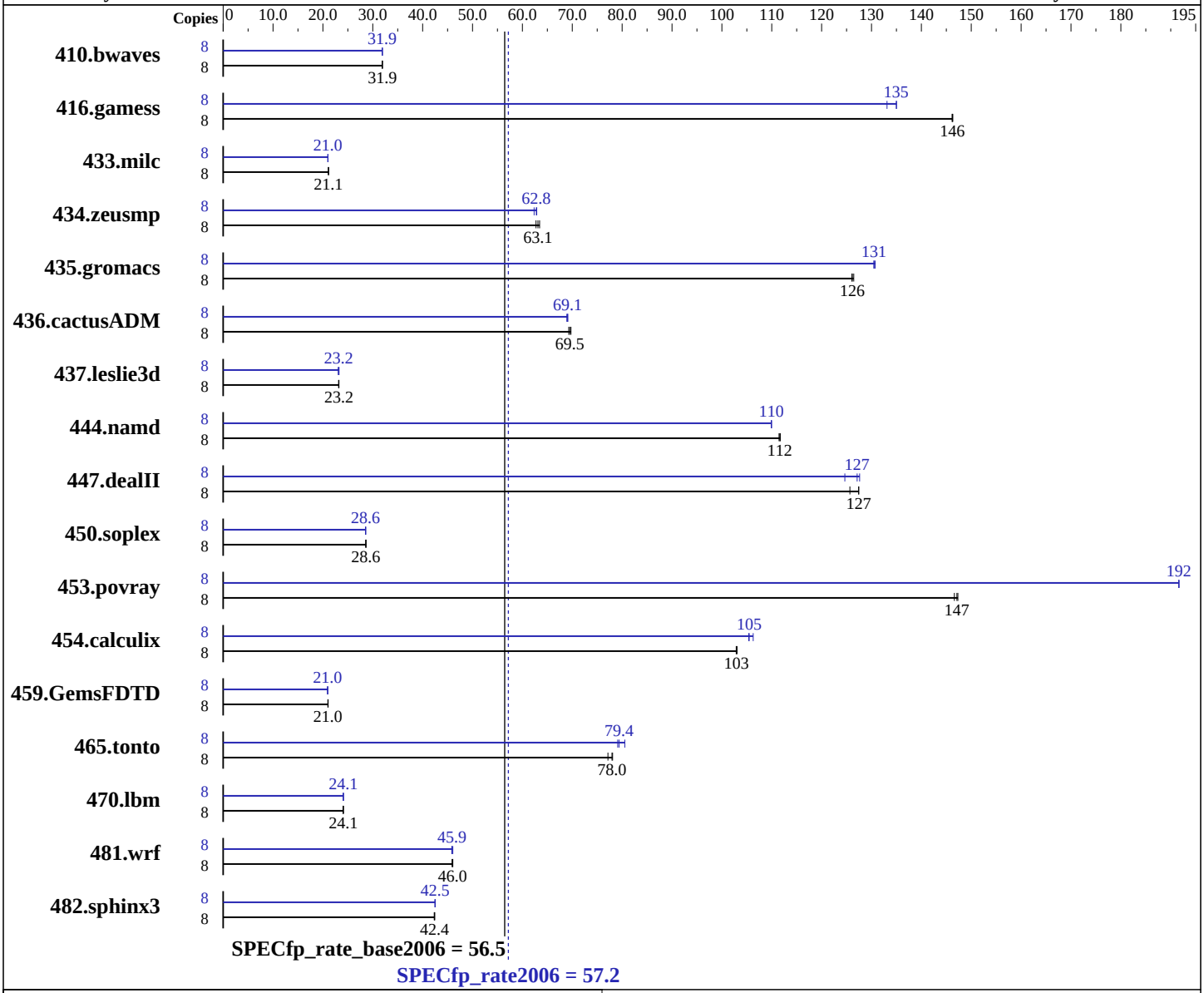
NovaScale R460
(Intel Xeon processor X5355,2.66GHz)

SPECfp®_rate2006 = 57.2

SPECfp_rate_base2006 = 56.5

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

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



Hardware

CPU Name:	Intel Xeon X5355
CPU Characteristics:	2.66 GHz, 8 MB L2, 1333 MHz system bus
CPU MHz:	2666
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 chip, 4 MB shared / 2 cores

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Software

Operating System:	SuSE Linux Enterprise Server 10 (EM64T) kernel 2.6.16.21-0.8-smp
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

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L3 Cache:	None	File System:	ext2
Other Cache:	None	System State:	Multi-user run level 3
Memory:	24 GB (12x2 GB) FB-DIMM PC2-5300F ECC CL5	Base Pointers:	64-bit
Disk Subsystem:	1x73 GB SAS, 10000 RPM	Peak Pointers:	32/64-bit
Other Hardware:	None	Other Software:	None

Results Table

Benchmark	Base							Peak						
	Copies	Seconds	Ratio	Seconds	Ratio	Seconds	Ratio	Copies	Seconds	Ratio	Seconds	Ratio	Seconds	Ratio
410.bwaves	8	3405	31.9	**3405**	**31.9**	3408	31.9	8	3407	31.9	3406	31.9	**3406**	**31.9**
416.gamess	8	1071	146	1072	146	**1071**	**146**	8	1160	135	1177	133	**1161**	**135**
433.milc	8	3479	21.1	**3477**	**21.1**	3476	21.1	8	3492	21.0	3499	21.0	**3497**	**21.0**
434.zeusmp	8	1161	62.7	**1153**	**63.1**	1147	63.5	8	1168	62.3	**1159**	**62.8**	1158	62.9
435.gromacs	8	452	126	453	126	**453**	**126**	8	**438**	**131**	437	131	438	130
436.cactusADM	8	1380	69.3	**1375**	**69.5**	1371	69.7	8	1383	69.1	**1384**	**69.1**	1387	68.9
437.leslie3d	8	**3241**	**23.2**	3250	23.1	3240	23.2	8	3259	23.1	**3247**	**23.2**	3236	23.2
444.namd	8	574	112	576	111	**575**	**112**	8	584	110	**584**	**110**	584	110
447.dealII	8	718	127	**718**	**127**	728	126	8	**720**	**127**	717	128	734	125
450.soplex	8	**2332**	**28.6**	2333	28.6	2329	28.6	8	2334	28.6	2337	28.6	**2336**	**28.6**
453.povray	8	290	147	289	147	**289**	**147**	8	**222**	**192**	222	192	222	192
454.calculix	8	641	103	642	103	**641**	**103**	8	626	105	621	106	**626**	**105**
459.GemsFDTD	8	4041	21.0	**4040**	**21.0**	4031	21.1	8	**4048**	**21.0**	4056	20.9	4046	21.0
465.tonto	8	1008	78.1	**1010**	**78.0**	1020	77.2	8	995	79.1	977	80.5	**992**	**79.4**
470.lbm	8	4575	24.0	4559	24.1	**4559**	**24.1**	8	**4559**	**24.1**	4566	24.1	4559	24.1
481.wrf	8	**1943**	**46.0**	1940	46.1	1947	45.9	8	1949	45.8	1940	46.1	**1948**	**45.9**
482.sphinx3	8	3684	42.3	3675	42.4	**3679**	**42.4**	8	**3668**	**42.5**	3671	42.5	3668	42.5

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 R440 model.
```

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.GemsFDTD: -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

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

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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