SPEC® CFP2006 Result

Bull SAS

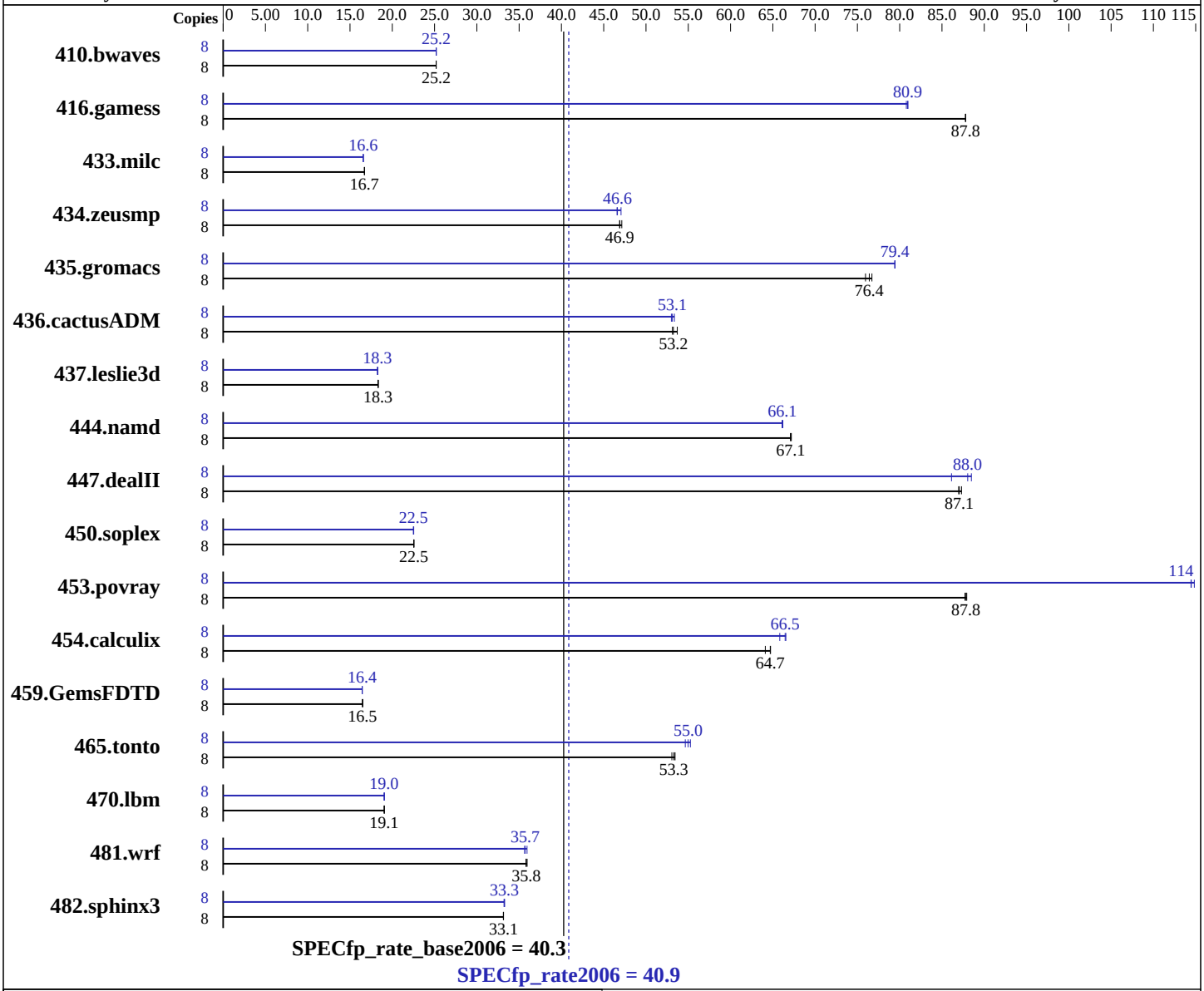
NovaScale T860
(Intel Xeon processor E5310,1.60GHz)

SPECfp®_rate2006 = 40.9

SPECfp_rate_base2006 = 40.3

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 E5310
CPU Characteristics:	1.60 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 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:	1x147 GB SAS, 15000 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	**4317**	**25.2**	4315	25.2	4317	25.2	8	4317	25.2	4313	25.2	**4316**	**25.2**
416.gamess	8	**1784**	**87.8**	1784	87.8	1784	87.8	8	**1935**	**80.9**	1939	80.8	1934	81.0
433.milc	8	4395	16.7	4395	16.7	**4395**	**16.7**	8	4437	16.6	**4432**	**16.6**	4430	16.6
434.zeusmp	8	1553	46.9	1544	47.1	**1552**	**46.9**	8	**1561**	**46.6**	1563	46.6	1547	47.0
435.gromacs	8	745	76.7	**748**	**76.4**	752	76.0	8	**719**	**79.4**	719	79.4	719	79.4
436.cactusADM	8	1780	53.7	**1796**	**53.2**	1799	53.1	8	1804	53.0	**1800**	**53.1**	1792	53.4
437.leslie3d	8	4098	18.4	4110	18.3	**4104**	**18.3**	8	4120	18.3	4115	18.3	**4118**	**18.3**
444.namd	8	957	67.1	955	67.2	**956**	**67.1**	8	969	66.2	**970**	**66.1**	971	66.1
447.dealII	8	1048	87.3	1052	87.0	**1051**	**87.1**	8	1034	88.5	**1040**	**88.0**	1063	86.1
450.soplex	8	2956	22.6	**2959**	**22.5**	2961	22.5	8	2965	22.5	**2964**	**22.5**	2960	22.5
453.povray	8	**485**	**87.8**	484	87.9	485	87.7	8	**372**	**114**	371	115	372	114
454.calculix	8	1020	64.7	**1020**	**64.7**	1029	64.1	8	**993**	**66.5**	1003	65.8	992	66.5
459.GemsFDTD	8	5155	16.5	**5147**	**16.5**	5143	16.5	8	5159	16.5	5165	16.4	**5162**	**16.4**
465.tonto	8	1473	53.4	**1477**	**53.3**	1484	53.1	8	1425	55.2	**1432**	**55.0**	1441	54.6
470.lbm	8	5771	19.0	**5769**	**19.1**	5769	19.1	8	5770	19.0	**5770**	**19.0**	5770	19.1
481.wrf	8	**2493**	**35.8**	2486	35.9	2496	35.8	8	**2503**	**35.7**	2506	35.7	2487	35.9
482.sphinx3	8	**4704**	**33.1**	4702	33.2	4706	33.1	8	**4687**	**33.3**	4686	33.3	4695	33.2

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'
'/usr/bin/taskset' used to bind processes to CPUs
```

Base Compiler Invocation

C benchmarks:
`icc`

C++ benchmarks:
`icpc`

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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_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

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:
-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.
Report generated on Tue Jul 22 11:22:41 2014 by SPEC CPU2006 PS/PDF formatter v6932.
Originally published on 26 June 2007.