SPEC® CFP2006 Result

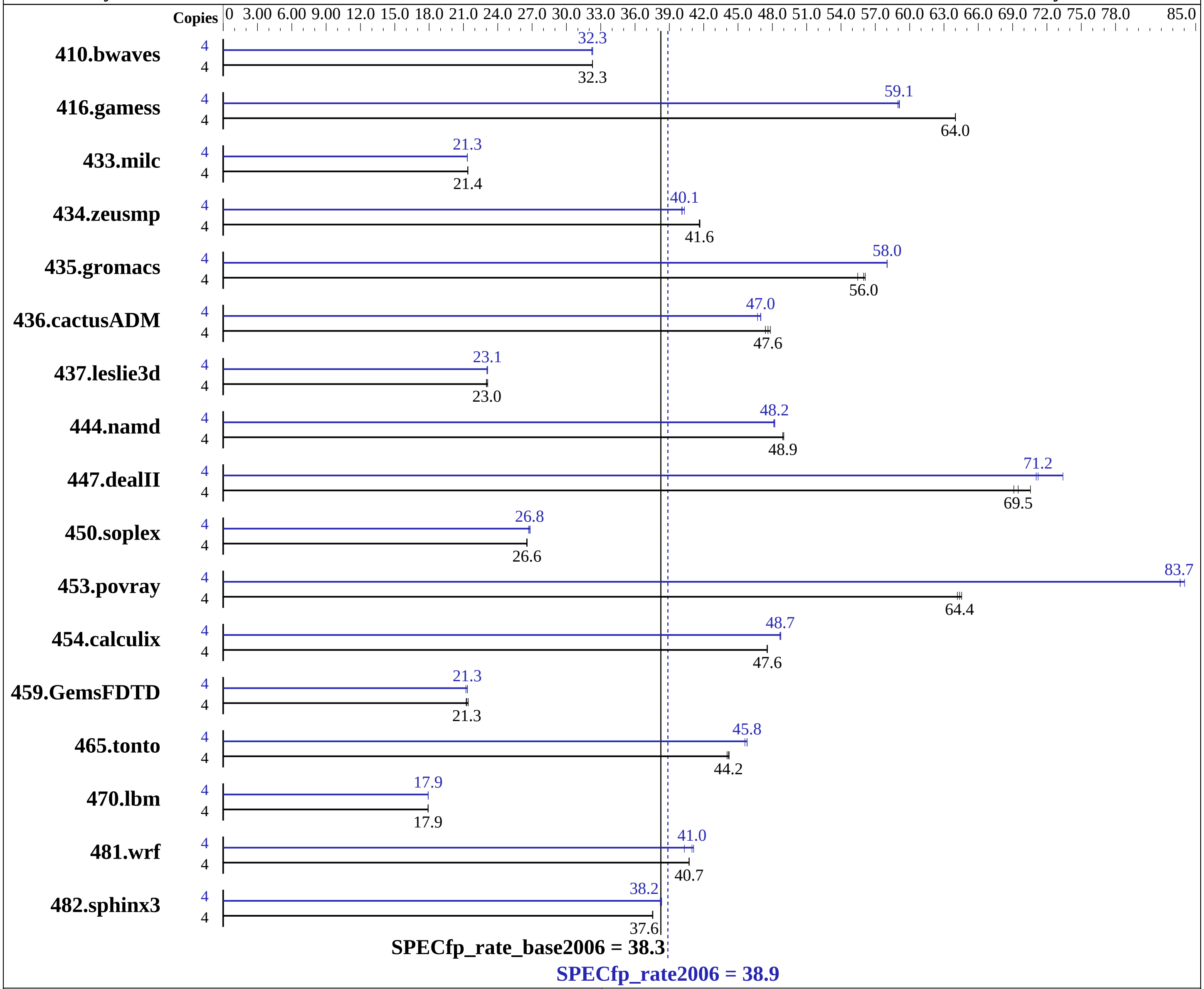
Bull SAS

NovaScale R440
(Intel Xeon processor 5140,2.33GHz)

SPECfp®_rate2006 = 38.9

SPECfp_rate_base2006 = 38.3

CPU2006 license: 20		**Test date:**	May-2007
Test sponsor:	Bull SAS	**Hardware Availability:**	Mar-2007
Tested by:	Bull SAS	**Software Availability:**	Dec-2006



Hardware

CPU Name:	Intel Xeon 5140
CPU Characteristics:	2.33 GHz, 4 MB L2, 1333 MHz system bus
CPU MHz:	2333
FPU:	Integrated
CPU(s) enabled:	4 cores, 2 chips, 2 cores/chip
CPU(s) orderable:	1 to 2 chips
Primary Cache:	32 KB I + 32 KB D on chip per core
Secondary Cache:	4 MB I+D on chip per chip

Continued on next page

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

Continued on next page

SPEC CFP2006 Result

Bull SAS

NovaScale R440
(Intel Xeon processor 5140,2.33GHz)

SPECfp_rate2006 = 38.9

SPECfp_rate_base2006 = 38.3

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

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

L3 Cache:	None
Other Cache:	None
Memory:	24 GB (12x2 GB) FB-DIMM PC2-5300F ECC CL5
Disk Subsystem:	1x73 GB SAS, 15000 RPM
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

Results Table

	Base							Peak						
Benchmark	**Copies**	**Seconds**	**Ratio**	**Seconds**	**Ratio**	**Seconds**	**Ratio**	**Copies**	**Seconds**	**Ratio**	**Seconds**	**Ratio**	**Seconds**	**Ratio**
410.bwaves	4	1683	32.3	1684	32.3	**1684**	**32.3**	4	1687	32.2	**1684**	**32.3**	1683	32.3
416.gamess	4	1224	64.0	**1224**	**64.0**	1224	64.0	4	1328	59.0	**1326**	**59.1**	1325	59.1
433.milc	4	1718	21.4	1716	21.4	**1718**	**21.4**	4	**1720**	**21.3**	1720	21.3	1721	21.3
434.zeusmp	4	875	41.6	873	41.7	**874**	**41.6**	4	908	40.1	**907**	**40.1**	903	40.3
435.gromacs	4	515	55.5	509	56.1	**510**	**56.0**	4	**492**	**58.0**	492	58.0	492	58.0
436.cactusADM	4	**1004**	**47.6**	1009	47.4	999	47.8	4	1017	47.0	**1018**	**47.0**	1023	46.7
437.leslie3d	4	1626	23.1	**1631**	**23.0**	1634	23.0	4	1631	23.1	**1628**	**23.1**	1626	23.1
444.namd	4	655	49.0	656	48.9	**656**	**48.9**	4	665	48.2	**666**	**48.2**	667	48.1
447.dealII	4	662	69.1	**659**	**69.5**	649	70.6	4	644	71.1	**642**	**71.2**	623	73.4
450.soplex	4	**1256**	**26.6**	1255	26.6	1258	26.5	4	**1246**	**26.8**	1250	26.7	1243	26.8
453.povray	4	330	64.5	**331**	**64.4**	332	64.2	4	253	84.0	**254**	**83.7**	254	83.6
454.calculix	4	694	47.6	**694**	**47.6**	694	47.5	4	677	48.7	**678**	**48.7**	678	48.7
459.GemsFDTD	4	1998	21.2	**1992**	**21.3**	1981	21.4	4	**1989**	**21.3**	1988	21.4	2001	21.2
465.tonto	4	890	44.2	894	44.0	**891**	**44.2**	4	863	45.6	859	45.8	**860**	**45.8**
470.lbm	4	3071	17.9	3066	17.9	**3069**	**17.9**	4	3068	17.9	**3068**	**17.9**	3067	17.9
481.wrf	4	1097	40.7	1097	40.7	**1097**	**40.7**	4	1108	40.3	1087	41.1	**1090**	**41.0**
482.sphinx3	4	2078	37.5	2075	37.6	**2076**	**37.6**	4	2034	38.3	2041	38.2	**2039**	**38.2**

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
```

General Notes

```
The NovaScale R440 and the NovaScale R460 models are
electronically equivalent.
The results have been measured on a NovaScale R460 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.
Report generated on Tue Jul 22 11:10:47 2014 by SPEC CPU2006 PS/PDF formatter v6932.
Originally published on 12 June 2007.