SPEC® CFP2006 Result

Copyright 2006-2014 Standard Performance Evaluation Corporation

Bull SAS

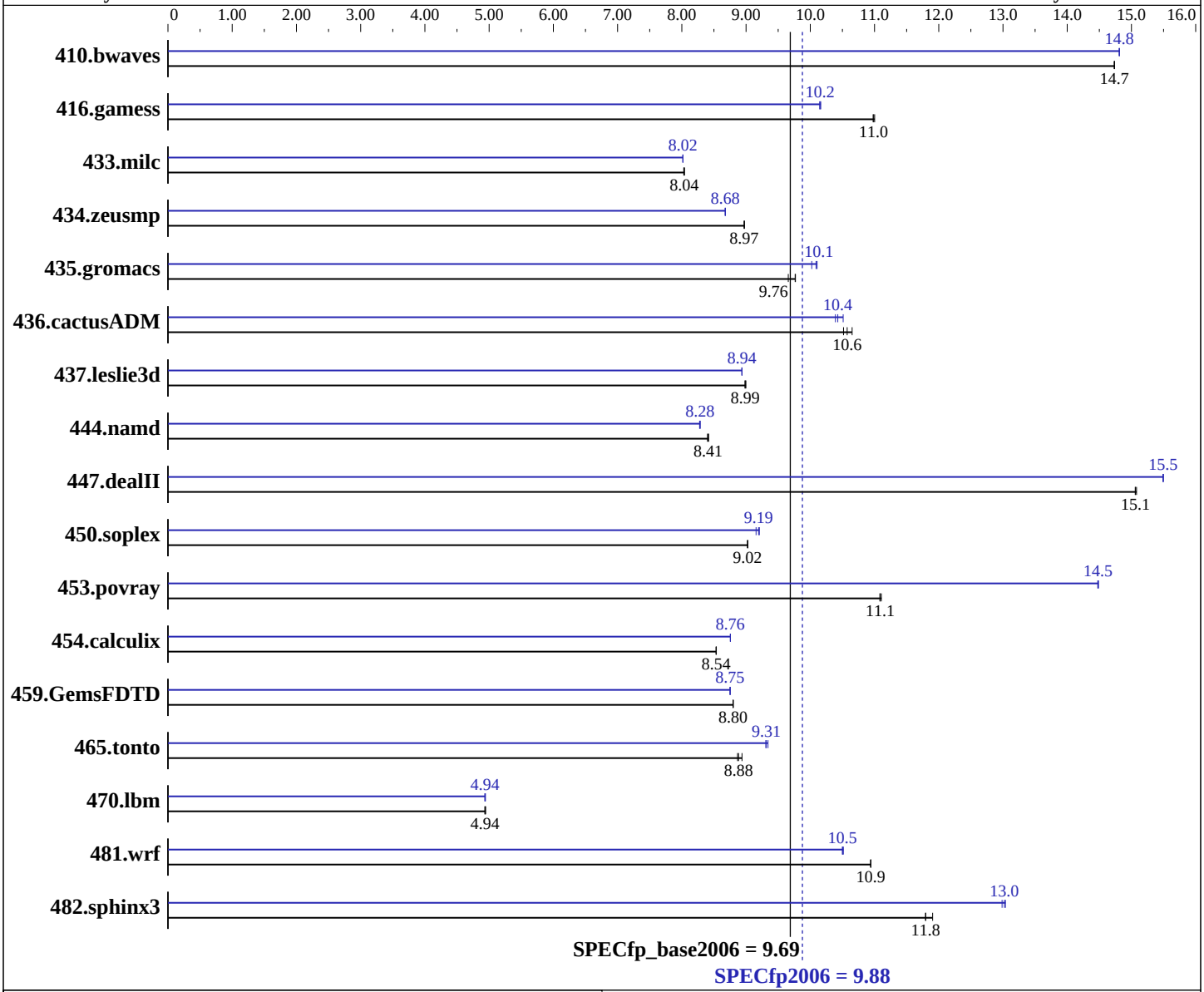
NovaScale R460
(Intel Xeon processor 5110,1.60GHz)

SPECfp®2006 = 9.88

SPECfp_base2006 = 9.69

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 5110
CPU Characteristics:	1.60 GHz, 4 MB L2, 1066 MHz system bus
CPU MHz:	1600
FPU:	Integrated
CPU(s) enabled:	1 core, 1 chip, 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

Copyright 2006-2014 Standard Performance Evaluation Corporation

Bull SAS

NovaScale R460
(Intel Xeon processor 5110,1.60GHz)

SPECfp2006 = 9.88

SPECfp_base2006 = 9.69

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	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, 15000 RPM	Peak Pointers:	32/64-bit
Other Hardware:	None	Other Software:	None

Results Table

Benchmark	Base						Peak					
	Seconds	Ratio	Seconds	Ratio	Seconds	Ratio	Seconds	Ratio	Seconds	Ratio	Seconds	Ratio
410.bwaves	**922**	**14.7**	923	14.7	922	14.7	**917**	**14.8**	918	14.8	917	14.8
416.gamess	1780	11.0	**1782**	**11.0**	1784	11.0	1930	10.1	**1929**	**10.2**	1927	10.2
433.milc	1142	8.04	**1142**	**8.04**	1143	8.03	**1145**	**8.02**	1145	8.02	1145	8.01
434.zeusmp	1014	8.97	1014	8.97	**1014**	**8.97**	1049	8.67	1049	8.68	**1049**	**8.68**
435.gromacs	739	9.66	731	9.77	**731**	**9.76**	712	10.0	706	10.1	**708**	**10.1**
436.cactusADM	1122	10.7	1136	10.5	**1130**	**10.6**	1137	10.5	**1146**	**10.4**	1150	10.4
437.leslie3d	1046	8.98	1045	9.00	**1046**	**8.99**	**1052**	**8.94**	1052	8.93	1052	8.94
444.namd	953	8.42	**954**	**8.41**	955	8.40	969	8.28	**968**	**8.28**	968	8.29
447.dealII	**759**	**15.1**	759	15.1	760	15.1	**738**	**15.5**	739	15.5	738	15.5
450.soplex	**924**	**9.02**	924	9.02	924	9.03	906	9.21	**907**	**9.19**	911	9.16
453.povray	479	11.1	480	11.1	**480**	**11.1**	**367**	**14.5**	368	14.5	367	14.5
454.calculix	966	8.54	**966**	**8.54**	967	8.53	**942**	**8.76**	942	8.75	942	8.76
459.GemsFDTD	**1206**	**8.80**	1206	8.80	1206	8.80	1212	8.75	**1212**	**8.75**	1212	8.75
465.tonto	1101	8.94	**1108**	**8.88**	1110	8.87	1053	9.34	1057	9.31	**1056**	**9.31**
470.lbm	2778	4.95	**2783**	**4.94**	2785	4.93	**2783**	**4.94**	2780	4.94	2785	4.93
481.wrf	1021	10.9	1021	10.9	**1021**	**10.9**	**1063**	**10.5**	1064	10.5	1062	10.5
482.sphinx3	1637	11.9	**1652**	**11.8**	1653	11.8	1495	13.0	**1497**	**13.0**	1501	13.0

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'

system was booted uniprocessor by setting "maxcpus=0"
kernel parameter in menu.lst

/usr/bin/taskset utility used to bind CPU(s) to processes
```

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

SPEC and SPECfp are registered trademarks of the Standard Performance Evaluation Corporation. All other brand and product names appearing in this result are trademarks or registered trademarks of their respective holders.

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 11:10:04 2014 by SPEC CPU2006 PS/PDF formatter v6932.
Originally published on 12 June 2007.