



# SPEC® CFP2006 Result

Copyright 2006-2014 Standard Performance Evaluation Corporation

## Bull SAS

NovaScale R440  
(Intel Xeon processor E5320,1.86GHz)

SPECfp®\_rate2006 = 41.0

SPECfp\_rate\_base2006 = 40.4

CPU2006 license: 20

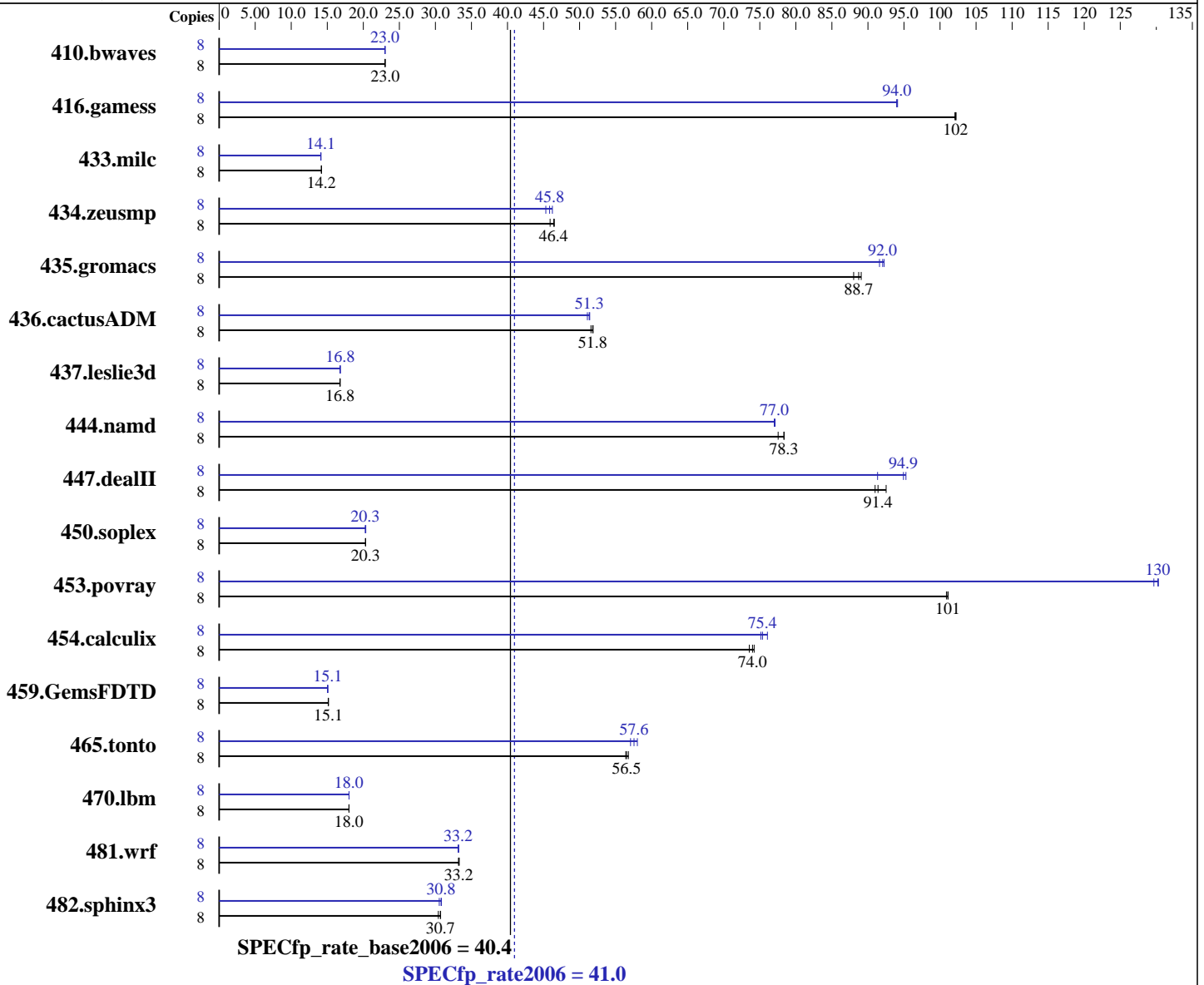
Test sponsor: Bull SAS

Tested by: Bull SAS

Test date: Apr-2007

Hardware Availability: Mar-2007

Software Availability: Dec-2006



### Hardware

CPU Name: Intel Xeon E5320  
 CPU Characteristics: 1.86 GHz, 8 MB L2, 1066 MHz system bus  
 CPU MHz: 1860  
 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

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 R440  
(Intel Xeon processor E5320,1.86GHz)

SPECfp\_rate2006 = 41.0

SPECfp\_rate\_base2006 = 40.4

CPU2006 license: 20

Test sponsor: Bull SAS

Tested by: Bull SAS

Test date: Apr-2007

Hardware Availability: Mar-2007

Software Availability: Dec-2006

L3 Cache: None  
Other Cache: None  
Memory: 12 GB (12x1 GB) FB-DIMM PC2-5300F ECC CL5  
Disk Subsystem: 1x73 GB SAS, 10000 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

Benchmark	Base							Peak						
	Copies	Seconds	Ratio	Seconds	Ratio	Seconds	Ratio	Copies	Seconds	Ratio	Seconds	Ratio	Seconds	Ratio
410.bwaves	8	4724	23.0	<u>4723</u>	<u>23.0</u>	4722	23.0	8	4726	23.0	<u>4724</u>	<u>23.0</u>	4724	23.0
416.gamess	8	1535	102	1532	102	<u>1533</u>	<u>102</u>	8	1664	94.1	1667	94.0	<u>1666</u>	<u>94.0</u>
433.milc	8	5177	14.2	<u>5175</u>	<u>14.2</u>	5174	14.2	8	5206	14.1	<u>5204</u>	<u>14.1</u>	5204	14.1
434.zeusmp	8	<u>1569</u>	<u>46.4</u>	1566	46.5	1586	45.9	8	1606	45.3	<u>1588</u>	<u>45.8</u>	1575	46.2
435.gromacs	8	<u>644</u>	<u>88.7</u>	649	88.0	641	89.1	8	619	92.2	<u>621</u>	<u>92.0</u>	624	91.6
436.cactusADM	8	1843	51.9	<u>1845</u>	<u>51.8</u>	1854	51.6	8	1872	51.1	1860	51.4	<u>1862</u>	<u>51.3</u>
437.leslie3d	8	<u>4484</u>	<u>16.8</u>	4485	16.8	4483	16.8	8	4482	16.8	<u>4477</u>	<u>16.8</u>	4476	16.8
444.namd	8	819	78.4	827	77.5	<u>819</u>	<u>78.3</u>	8	832	77.1	<u>833</u>	<u>77.0</u>	833	77.0
447.dealII	8	989	92.5	1006	91.0	<u>1001</u>	<u>91.4</u>	8	961	95.3	1002	91.3	<u>964</u>	<u>94.9</u>
450.soplex	8	3287	20.3	3283	20.3	<u>3285</u>	<u>20.3</u>	8	<u>3289</u>	<u>20.3</u>	3289	20.3	3280	20.3
453.povray	8	421	101	<u>421</u>	<u>101</u>	422	101	8	<u>327</u>	<u>130</u>	328	130	327	130
454.calculix	8	897	73.5	889	74.2	<u>892</u>	<u>74.0</u>	8	<u>876</u>	<u>75.4</u>	878	75.1	868	76.1
459.GemsFDTD	8	5610	15.1	5597	15.2	<u>5604</u>	<u>15.1</u>	8	5646	15.0	<u>5633</u>	<u>15.1</u>	5632	15.1
465.tonto	8	1396	56.4	<u>1393</u>	<u>56.5</u>	1387	56.8	8	1357	58.0	1379	57.1	<u>1368</u>	<u>57.6</u>
470.lbm	8	6106	18.0	<u>6101</u>	<u>18.0</u>	6101	18.0	8	6100	18.0	6101	18.0	<u>6101</u>	<u>18.0</u>
481.wrf	8	<u>2689</u>	<u>33.2</u>	2690	33.2	2683	33.3	8	2689	33.2	2694	33.2	<u>2694</u>	<u>33.2</u>
482.sphinx3	8	5128	30.4	<u>5081</u>	<u>30.7</u>	5075	30.7	8	5106	30.5	<u>5065</u>	<u>30.8</u>	5056	30.8

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.



# SPEC CFP2006 Result

Copyright 2006-2014 Standard Performance Evaluation Corporation

## Bull SAS

NovaScale R440  
(Intel Xeon processor E5320,1.86GHz)

SPECfp\_rate2006 = 41.0

SPECfp\_rate\_base2006 = 40.4

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

Test date: Apr-2007  
Hardware Availability: Mar-2007  
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.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



# SPEC CFP2006 Result

Copyright 2006-2014 Standard Performance Evaluation Corporation

## Bull SAS

NovaScale R440  
(Intel Xeon processor E5320,1.86GHz)

SPECfp\_rate2006 = 41.0

SPECfp\_rate\_base2006 = 40.4

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

Test date: Apr-2007  
Hardware Availability: Mar-2007  
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](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](http://www.spec.org/cpu2006/flags/EM64T_Intel91_flags.xml)



# SPEC CFP2006 Result

Copyright 2006-2014 Standard Performance Evaluation Corporation

## Bull SAS

NovaScale R440  
(Intel Xeon processor E5320,1.86GHz)

SPECfp\_rate2006 = 41.0

SPECfp\_rate\_base2006 = 40.4

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

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

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](mailto:webmaster@spec.org).

Tested with SPEC CPU2006 v1.0.  
Report generated on Tue Jul 22 11:40:57 2014 by SPEC CPU2006 PS/PDF formatter v6932.  
Originally published on 29 May 2007.