



# SPEC® CFP2006 Result

Copyright 2006-2014 Standard Performance Evaluation Corporation

## IBM Corporation

**SPECfp®\_rate2006 = Not Run**

IBM BladeCenter HS21 XM (Intel Xeon E5320)

**SPECfp\_rate\_base2006 = 41.3**

CPU2006 license: 11

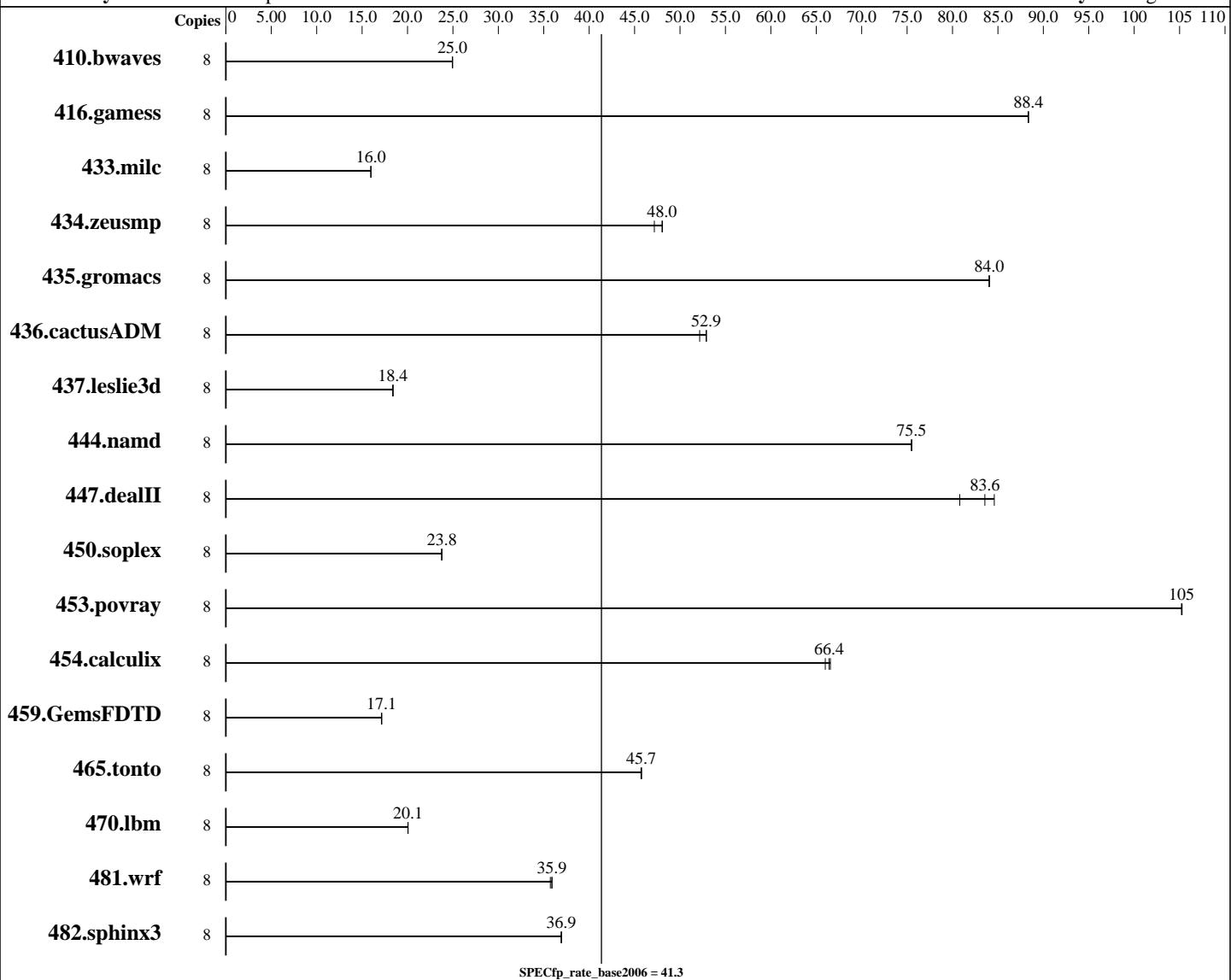
Test date: Jan-2007

Test sponsor: IBM Corporation

Hardware Availability: Feb-2007

Tested by: IBM Corporation

Software Availability: Aug-2006



### Hardware

CPU Name: Intel Xeon E5320  
CPU Characteristics: 1066MHz system bus  
CPU MHz: 1866  
FPU: Integrated  
CPU(s) enabled: 8 cores, 2 chips, 4 cores/chip  
CPU(s) orderable: 1,2 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

### Software

Operating System: Microsoft Windows Server 2003 Enterprise x64 Edition + SP1 (64-bit)  
Compiler: Intel C++ Compiler for IA32 version 9.1 Build no 20060816  
Intel Fortran Compiler for IA32 version 9.1 Build no 20060816  
Microsoft Visual Studio .Net 2003 (for libraries)  
Auto Parallel: No  
File System: NTFS

Continued on next page

Continued on next page



# SPEC CFP2006 Result

Copyright 2006-2014 Standard Performance Evaluation Corporation

## IBM Corporation

**SPECfp\_rate2006 = Not Run**

IBM BladeCenter HS21 XM (Intel Xeon E5320)

**SPECfp\_rate\_base2006 = 41.3**

CPU2006 license: 11

Test date: Jan-2007

Test sponsor: IBM Corporation

Hardware Availability: Feb-2007

Tested by: IBM Corporation

Software Availability: Aug-2006

L3 Cache: None  
 Other Cache: None  
 Memory: 16 GB (8 x 2GB DDR2-5300F ECC)  
 Disk Subsystem: 1 x 74 GB SAS, 1000 RPM  
 Other Hardware: None

System State: Default  
 Base Pointers: 32-bit  
 Peak Pointers: Not Applicable  
 Other Software: Smart Heap Library, Version 8

## Results Table

Benchmark	Base							Peak						
	Copies	Seconds	Ratio	Seconds	Ratio	Seconds	Ratio	Copies	Seconds	Ratio	Seconds	Ratio	Seconds	Ratio
410.bwaves	8	<b>4357</b>	<b>25.0</b>	4359	24.9	4357	25.0							
416.gamess	8	1773	88.3	1773	88.4	<b>1773</b>	<b>88.4</b>							
433.milc	8	4598	16.0	<b>4598</b>	<b>16.0</b>	4597	16.0							
434.zeusmp	8	1515	48.1	1543	47.2	<b>1516</b>	<b>48.0</b>							
435.gromacs	8	680	84.0	<b>680</b>	<b>84.0</b>	680	84.1							
436.cactusADM	8	1833	52.2	<b>1808</b>	<b>52.9</b>	1807	52.9							
437.leslie3d	8	4086	18.4	<b>4088</b>	<b>18.4</b>	4089	18.4							
444.namd	8	850	75.5	<b>850</b>	<b>75.5</b>	850	75.5							
447.dealII	8	1133	80.8	<b>1095</b>	<b>83.6</b>	1082	84.6							
450.soplex	8	<b>2806</b>	<b>23.8</b>	2805	23.8	2808	23.8							
453.povray	8	<b>404</b>	<b>105</b>	404	105	404	105							
454.calculix	8	992	66.6	1000	66.0	<b>994</b>	<b>66.4</b>							
459.GemsFDTD	8	<b>4951</b>	<b>17.1</b>	4954	17.1	4946	17.2							
465.tonto	8	1722	45.7	1720	45.8	<b>1721</b>	<b>45.7</b>							
470.lbm	8	5482	20.1	<b>5482</b>	<b>20.1</b>	5482	20.1							
481.wrf	8	2489	35.9	2501	35.7	<b>2490</b>	<b>35.9</b>							
482.sphinx3	8	<b>4221</b>	<b>36.9</b>	4218	37.0	4225	36.9							

Results appear in the order in which they were run. Bold underlined text indicates a median measurement.

## Base Compiler Invocation

C benchmarks:

  icl -Qvc7.1 -Qc99

C++ benchmarks:

  icl -Qvc7.1

Fortran benchmarks:

  ifort

Benchmarks using both Fortran and C:

  icl -Qvc7.1 -Qc99 ifort



# SPEC CFP2006 Result

Copyright 2006-2014 Standard Performance Evaluation Corporation

IBM Corporation

SPECfp\_rate2006 = Not Run

IBM BladeCenter HS21 XM (Intel Xeon E5320)

SPECfp\_rate\_base2006 = 41.3

CPU2006 license: 11

Test date: Jan-2007

Test sponsor: IBM Corporation

Hardware Availability: Feb-2007

Tested by: IBM Corporation

Software Availability: Aug-2006

## Base Portability Flags

```
436.cactusADM: -Qlowercase /assume:underscore
 444.namd: -TP
 447.dealII: -DDEAL_II_MEMBER_VAR_SPECIALIZATION_BUG
   -DBOOST_NO_INTRINSIC_WCHAR_T
 453.povray: -DSPEC_CPU_WINDOWS_ICL
 454.calculix: -DSPEC_CPU_NOZMODIFIER -Qlowercase
 481.wrf: -DSPEC_CPU_WINDOWS_ICL
```

## Base Optimization Flags

C benchmarks:

```
-fast /F950000000 shlw32m.lib           -link /FORCE:MULTIPLE
```

C++ benchmarks:

```
-fast -Qcxx_features /F950000000 shlw32m.lib
   -link /FORCE:MULTIPLE
```

Fortran benchmarks:

```
-fast /F950000000           -link /FORCE:MULTIPLE
```

Benchmarks using both Fortran and C:

```
-fast /F950000000           -link /FORCE:MULTIPLE
```

The flags file that was used to format this result can be browsed at

<http://www.spec.org/cpu2006/flags/Intel-ic91-flags.20090714.html>

You can also download the XML flags source by saving the following link:

<http://www.spec.org/cpu2006/flags/Intel-ic91-flags.20090714.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](mailto:webmaster@spec.org).

Tested with SPEC CPU2006 v1.0.

Report generated on Tue Jul 22 10:39:43 2014 by SPEC CPU2006 PS/PDF formatter v6932.

Originally published on 6 March 2007.