



# SPEC® CFP2006 Result

Copyright 2006-2014 Standard Performance Evaluation Corporation

## Fujitsu Siemens Computers

PRIMERGY BX620 S3, Intel Xeon processor X5355,  
2.66 GHz

**SPECfp®\_rate2006 = 60.1**

**SPECfp\_rate\_base2006 = 58.0**

CPU2006 license: 22

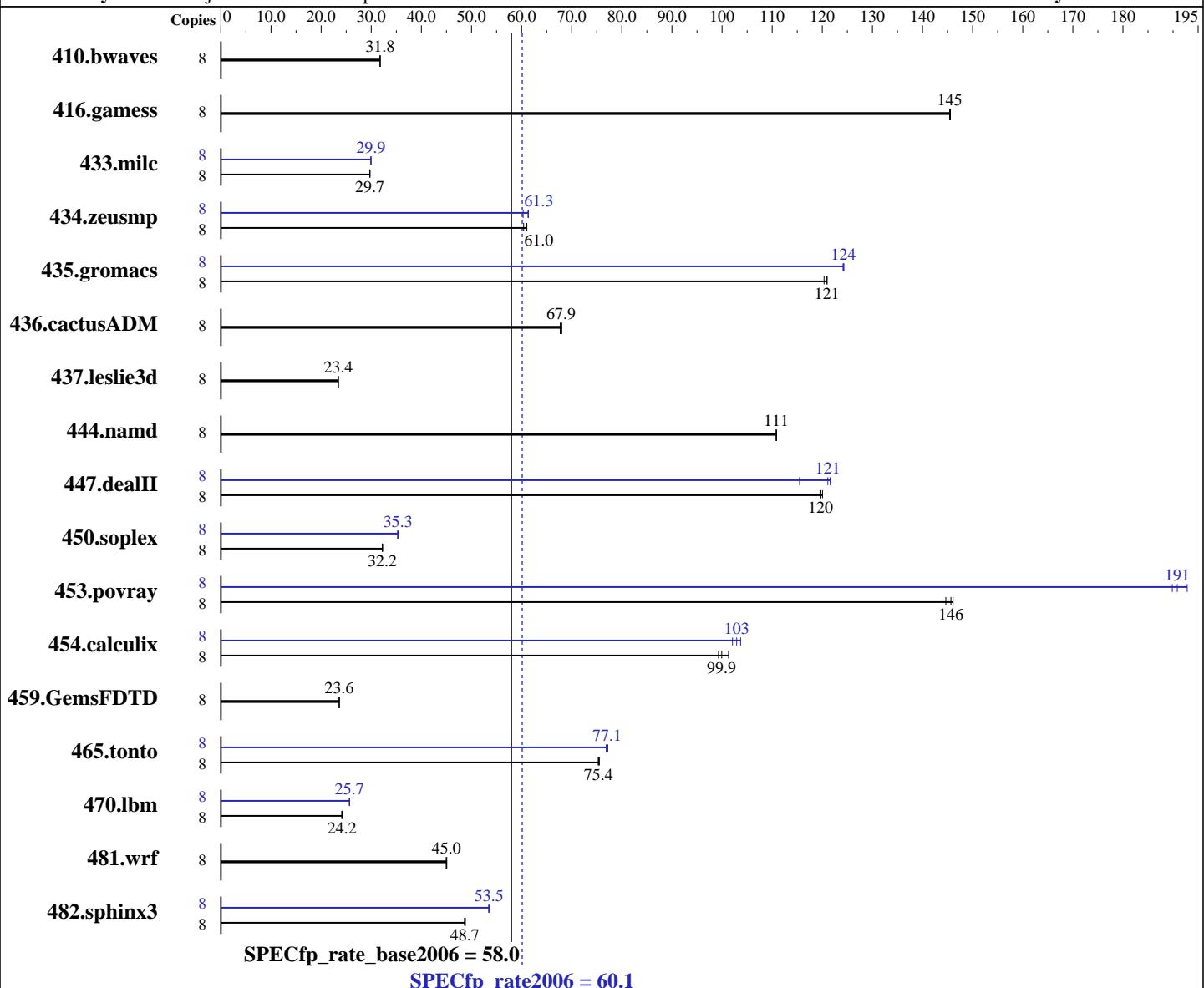
Test date: Mar-2007

Test sponsor: Fujitsu Siemens Computers

Hardware Availability: Jan-2007

Tested by: Fujitsu Siemens Computers

Software Availability: Feb-2007



**SPECfp\_rate\_base2006 = 58.0**

**SPECfp\_rate2006 = 60.1**

### Hardware

CPU Name: Intel Xeon X5355  
 CPU Characteristics: 1333 MHz system bus  
 CPU MHz: 2667  
 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: 64-Bit SUSE LINUX Enterprise Server 10, Kernel 2.6.16.21-0.8-smp on an x86\_64  
 Compiler: Intel C++ Compiler for IA32/EM64T application, Version 9.1 - Build 20070215, Package-ID: l\_cc\_p\_9.1.047  
 Intel Fortran Compiler for IA32/EM64T application, Version 9.1 - Build 20070215, Package ID: l\_fc\_p\_9.1.043  
 Auto Parallel: No  
 File System: ext2

Continued on next page

Continued on next page



# SPEC CFP2006 Result

Copyright 2006-2014 Standard Performance Evaluation Corporation

## Fujitsu Siemens Computers

PRIMERGY BX620 S3, Intel Xeon processor X5355,  
2.66 GHz

**SPECfp\_rate2006 = 60.1**

**SPECfp\_rate\_base2006 = 58.0**

CPU2006 license: 22

Test date: Mar-2007

Test sponsor: Fujitsu Siemens Computers

Hardware Availability: Jan-2007

Tested by: Fujitsu Siemens Computers

Software Availability: Feb-2007

L3 Cache:	None	System State:	Multiuser, Runlevel 3
Other Cache:	None	Base Pointers:	64-bit
Memory:	16 GB (8x2 GB DDR2 PC2-5300F, 2 rank, CAS 5-5-5, with ECC)	Peak Pointers:	32/64-bit
Disk Subsystem:	SAS (36GB 10000 rpm)	Other Software:	None
Other Hardware:	None		

## Results Table

Benchmark	Base								Peak							
	Copies	Seconds	Ratio	Seconds	Ratio	Seconds	Ratio	Copies	Seconds	Ratio	Seconds	Ratio	Seconds	Ratio	Seconds	Ratio
410.bwaves	8	3422	31.8	<b>3422</b>	<b>31.8</b>	3422	31.8	8	3422	31.8	<b>3422</b>	<b>31.8</b>	3422	31.8	3422	31.8
416.gamess	8	1077	145	<b>1077</b>	<b>145</b>	1076	146	8	1077	145	<b>1077</b>	<b>145</b>	1076	146	1076	146
433.milc	8	2473	29.7	2468	29.8	<b>2471</b>	<b>29.7</b>	8	<b>2453</b>	<b>29.9</b>	2454	29.9	2452	29.9	2452	29.9
434.zeusmp	8	<b>1194</b>	<b>61.0</b>	1192	61.1	1205	60.4	8	1207	60.3	<b>1188</b>	<b>61.3</b>	1186	61.4		
435.gromacs	8	472	121	475	120	<b>472</b>	<b>121</b>	8	<b>460</b>	<b>124</b>	460	124	459	124		
436.cactusADM	8	1406	68.0	1412	67.7	<b>1408</b>	<b>67.9</b>	8	1406	68.0	1412	67.7	<b>1408</b>	<b>67.9</b>		
437.leslie3d	8	<b>3210</b>	<b>23.4</b>	3206	23.5	3218	23.4	8	<b>3210</b>	<b>23.4</b>	3206	23.5	3218	23.4		
444.namd	8	579	111	579	111	<b>579</b>	<b>111</b>	8	579	111	579	111	<b>579</b>	<b>111</b>		
447.dealII	8	<b>765</b>	<b>120</b>	765	120	762	120	8	793	115	<b>756</b>	<b>121</b>	753	122		
450.soplex	8	2069	32.3	<b>2070</b>	<b>32.2</b>	2071	32.2	8	<b>1889</b>	<b>35.3</b>	1891	35.3	1889	35.3		
453.povray	8	294	145	291	146	<b>292</b>	<b>146</b>	8	<b>223</b>	<b>191</b>	221	193	224	190		
454.calculix	8	652	101	665	99.3	<b>660</b>	<b>99.9</b>	8	647	102	636	104	<b>641</b>	<b>103</b>		
459.GemsFDTD	8	3595	23.6	3595	23.6	<b>3595</b>	<b>23.6</b>	8	3595	23.6	3595	23.6	<b>3595</b>	<b>23.6</b>		
465.tonto	8	1042	75.5	1045	75.3	<b>1045</b>	<b>75.4</b>	8	1020	77.2	1024	76.9	<b>1021</b>	<b>77.1</b>		
470.lbm	8	<b>4548</b>	<b>24.2</b>	4547	24.2	4557	24.1	8	4286	25.6	4284	25.7	<b>4284</b>	<b>25.7</b>		
481.wrf	8	1988	44.9	<b>1985</b>	<b>45.0</b>	1982	45.1	8	1988	44.9	<b>1985</b>	<b>45.0</b>	1982	45.1		
482.sphinx3	8	3208	48.6	<b>3203</b>	<b>48.7</b>	3196	48.8	8	<b>2918</b>	<b>53.4</b>	<b>2914</b>	<b>53.5</b>	2909	53.6		

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

## Operating System Notes

'ulimit -s unlimited' was used to set the stacksize to unlimited prior to run  
'/usr/bin/taskset' used to bind processes to CPUs

## General Notes

The system bus runs at 1333 MHz

All binaries were built with 64-bit Intel compiler except:  
433.milc, 434.zeusmp, 450.soplex, 470.lbm and 482.sphinx3 in peak were built with  
32-bit Intel compiler by changing the path for include and library files.

For information about Fujitsu Siemens Computers in your country please see:

Continued on next page



# SPEC CFP2006 Result

Copyright 2006-2014 Standard Performance Evaluation Corporation

## Fujitsu Siemens Computers

PRIMERGY BX620 S3, Intel Xeon processor X5355,  
2.66 GHz

**SPECfp\_rate2006 = 60.1**

**SPECfp\_rate\_base2006 = 58.0**

**CPU2006 license:** 22

**Test date:** Mar-2007

**Test sponsor:** Fujitsu Siemens Computers

**Hardware Availability:** Jan-2007

**Tested by:** Fujitsu Siemens Computers

**Software Availability:** Feb-2007

## General Notes (Continued)

<http://www.fujitsu-siemens.com/countries>

## 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

Continued on next page



# SPEC CFP2006 Result

Copyright 2006-2014 Standard Performance Evaluation Corporation

## Fujitsu Siemens Computers

PRIMERGY BX620 S3, Intel Xeon processor X5355,  
2.66 GHz

**SPECfp\_rate2006 = 60.1**

**SPECfp\_rate\_base2006 = 58.0**

CPU2006 license: 22

Test date: Mar-2007

Test sponsor: Fujitsu Siemens Computers

Hardware Availability: Jan-2007

Tested by: Fujitsu Siemens Computers

Software Availability: Feb-2007

## Base Optimization Flags (Continued)

Benchmarks using both Fortran and C:

-fast

## Peak Compiler Invocation

C benchmarks:

```
/opt/intel/cc/9.1.047/bin/icc -I/opt/intel/cc/9.1.047/include  
-L/opt/intel/cc/9.1.047/lib
```

C++ benchmarks (except as noted below):

icpc

```
450.soplex: /opt/intel/cc/9.1.047/bin/icpc  
-I/opt/intel/cc/9.1.047/include -L/opt/intel/cc/9.1.047/lib
```

Fortran benchmarks (except as noted below):

ifort

```
434.zeusmp: /opt/intel/fc/9.1.043/bin/ifort  
-I/opt/intel/fc/9.1.043/include -L/opt/intel/fc/9.1.043/lib
```

Benchmarks using both Fortran and C:

icc ifort

## Peak Portability Flags

```
410.bwaves: -DSPEC_CPU_LP64  
416.gamess: -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  
453.povray: -DSPEC_CPU_LP64  
454.calculix: -DSPEC_CPU_LP64 -nofor_main  
459.GemsFDTD: -DSPEC_CPU_LP64  
465.tonto: -DSPEC_CPU_LP64  
481.wrf: -DSPEC_CPU_LP64 -DSPEC_CPU_CASE_FLAG -DSPEC_CPU_LINUX
```

## Peak Optimization Flags

C benchmarks:

Continued on next page



# SPEC CFP2006 Result

Copyright 2006-2014 Standard Performance Evaluation Corporation

## Fujitsu Siemens Computers

PRIMERGY BX620 S3, Intel Xeon processor X5355,  
2.66 GHz

**SPECfp\_rate2006 = 60.1**

**SPECfp\_rate\_base2006 = 58.0**

**CPU2006 license:** 22

**Test date:** Mar-2007

**Test sponsor:** Fujitsu Siemens Computers

**Hardware Availability:** Jan-2007

**Tested by:** Fujitsu Siemens Computers

**Software Availability:** Feb-2007

## Peak Optimization Flags (Continued)

433.milc: -prof\_gen(pass 1) -prof\_use(pass 2) -fast

470.lbm: Same as 433.milc

482.sphinx3: -fast

C++ benchmarks:

444.namd: basepeak = yes

447.dealII: -prof\_gen(pass 1) -prof\_use(pass 2) -fast

450.soplex: Same as 447.dealII

453.povray: Same as 447.dealII

Fortran benchmarks:

410.bwaves: basepeak = yes

416.gamess: basepeak = yes

434.zeusmp: -fast

437.leslie3d: basepeak = yes

459.GemsFDTD: basepeak = yes

465.tonto: -prof\_gen(pass 1) -prof\_use(pass 2) -fast

Benchmarks using both Fortran and C:

435.gromacs: -prof\_gen(pass 1) -prof\_use(pass 2) -fast

436.cactusADM: basepeak = yes

454.calculix: Same as 435.gromacs

481.wrf: basepeak = yes

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

[http://www.spec.org/cpu2006/flags/CPU2006\\_flags.20090714.09.html](http://www.spec.org/cpu2006/flags/CPU2006_flags.20090714.09.html)

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

[http://www.spec.org/cpu2006/flags/CPU2006\\_flags.20090714.09.xml](http://www.spec.org/cpu2006/flags/CPU2006_flags.20090714.09.xml)



# SPEC CFP2006 Result

Copyright 2006-2014 Standard Performance Evaluation Corporation

## Fujitsu Siemens Computers

PRIMERGY BX620 S3, Intel Xeon processor X5355,  
2.66 GHz

**SPECfp\_rate2006 = 60.1**

**SPECfp\_rate\_base2006 = 58.0**

**CPU2006 license:** 22

**Test date:** Mar-2007

**Test sponsor:** Fujitsu Siemens Computers

**Hardware Availability:** Jan-2007

**Tested by:** Fujitsu Siemens Computers

**Software Availability:** Feb-2007

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 11:37:11 2014 by SPEC CPU2006 PS/PDF formatter v6932.

Originally published on 2 May 2007.