# SPEC® CFP2006 Result

Copyright 2006-2014 Standard Performance Evaluation Corporation

## Fujitsu Siemens Computers

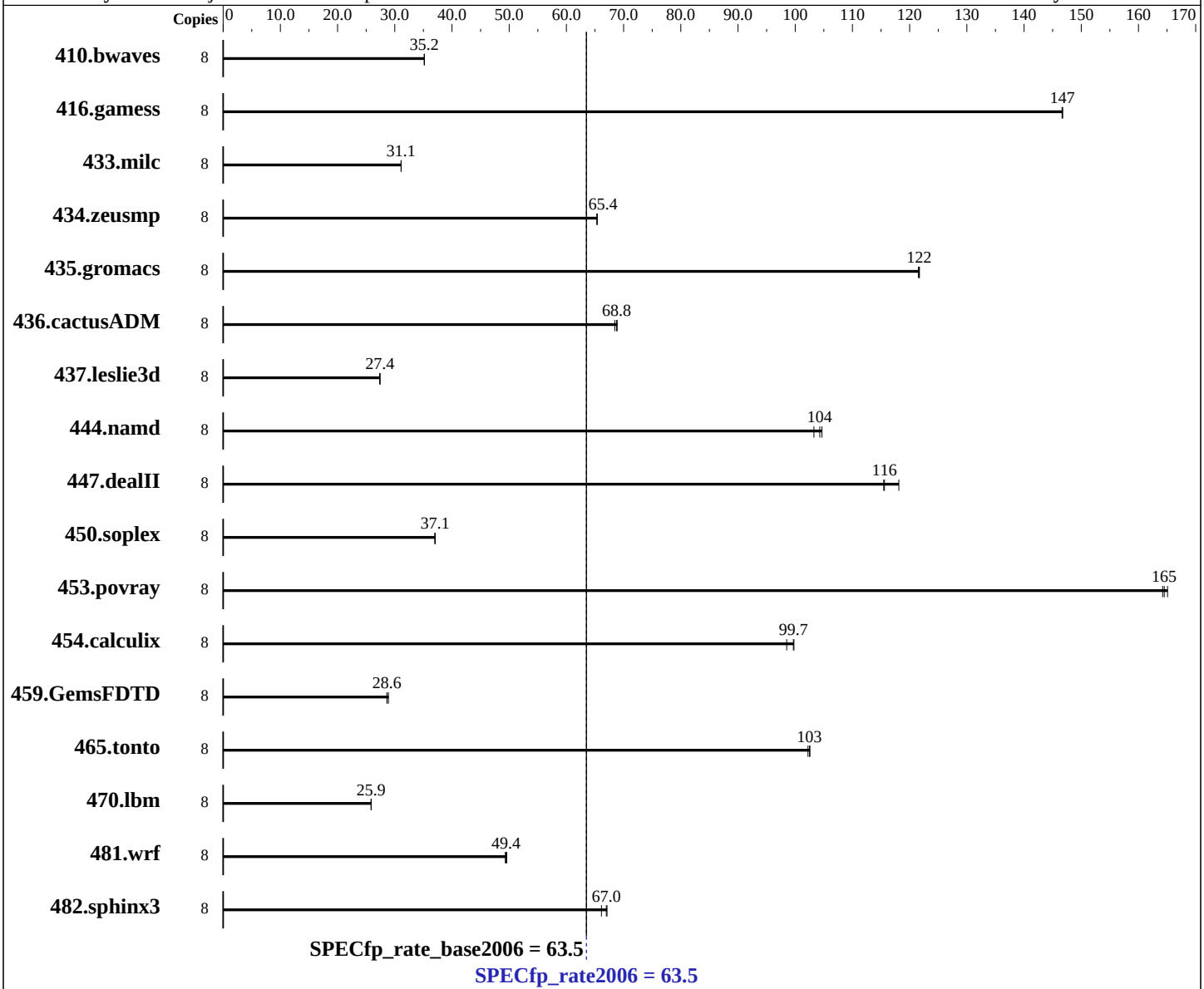
PRIMERGY RX300 S4, Intel Xeon processor E5420, 2.50 GHz

SPECfp®_rate2006 = 63.5

SPECfp_rate_base2006 = 63.5

**CPU2006 license:** 22
**Test sponsor:** Fujitsu Siemens Computers
**Tested by:** Fujitsu Siemens Computers

**Test date:** Oct-2007
**Hardware Availability:** Dec-2007
**Software Availability:** Nov-2007




### Hardware

| | |
|---|---|
| CPU Name: | Intel Xeon E5420 |
| CPU Characteristics: | 1333 MHz system bus |
| CPU MHz: | 2500 |
| 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: | 12 MB I+D on chip per chip, 6 MB shared / 2 cores |

Continued on next page

### Software

| | |
|---|---|
| Operating System: | SUSE Linux Enterprise Server 10 (x86_64) SP1, Kernel 2.6.16.46-0.12-smp |
| Compiler: | Intel C++ and Fortran Compiler for Linux32 and Linux64 Version 10.1 - Build 20070725 |
| Auto Parallel: | No |
| File System: | ext2 |
| System State: | Multiuser, Runlevel 3 |
| Base Pointers: | 64-bit |

Continued on next page

# SPEC CFP2006 Result

Copyright 2006-2014 Standard Performance Evaluation Corporation

## Fujitsu Siemens Computers

PRIMERGY RX300 S4, Intel Xeon processor E5420, 2.50 GHz

SPECfp_rate2006 = 63.5

SPECfp_rate_base2006 = 63.5

**CPU2006 license:** 22
**Test sponsor:** Fujitsu Siemens Computers
**Tested by:** Fujitsu Siemens Computers

**Test date:** Oct-2007
**Hardware Availability:** Dec-2007
**Software Availability:** Nov-2007

L3 Cache: None
Other Cache: None
Memory: 16 GB (8x2 GB PC2-5300F, 2 rank, CAS 5-5-5, with ECC)
Disk Subsystem: Seagate ST973451SS (SAS, 73GB, 15000rpm)
Other Hardware: None

Peak Pointers: 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 | 3091 | 35.2 | **3092** | **35.2** | 3092 | 35.2 | 8 | 3091 | 35.2 | **3092** | **35.2** | 3092 | 35.2 |
| 416.gamess | 8 | **1068** | **147** | 1068 | 147 | 1068 | 147 | 8 | **1068** | **147** | 1068 | 147 | 1068 | 147 |
| 433.milc | 8 | 2360 | 31.1 | 2361 | 31.1 | **2360** | **31.1** | 8 | 2360 | 31.1 | 2361 | 31.1 | **2360** | **31.1** |
| 434.zeusmp | 8 | **1114** | **65.4** | 1114 | 65.3 | 1113 | 65.4 | 8 | **1114** | **65.4** | 1114 | 65.3 | 1113 | 65.4 |
| 435.gromacs | 8 | **469** | **122** | 469 | 122 | 470 | 122 | 8 | **469** | **122** | 469 | 122 | 470 | 122 |
| 436.cactusADM | 8 | 1388 | 68.9 | 1396 | 68.5 | **1390** | **68.8** | 8 | 1388 | 68.9 | 1396 | 68.5 | **1390** | **68.8** |
| 437.leslie3d | 8 | 2742 | 27.4 | 2748 | 27.4 | **2744** | **27.4** | 8 | 2742 | 27.4 | 2748 | 27.4 | **2744** | **27.4** |
| 444.namd | 8 | 613 | 105 | **615** | **104** | 621 | 103 | 8 | 613 | 105 | **615** | **104** | 621 | 103 |
| 447.dealII | 8 | 793 | 115 | **792** | **116** | 775 | 118 | 8 | 793 | 115 | **792** | **116** | 775 | 118 |
| 450.soplex | 8 | **1800** | **37.1** | 1800 | 37.1 | 1803 | 37.0 | 8 | **1800** | **37.1** | 1800 | 37.1 | 1803 | 37.0 |
| 453.povray | 8 | 259 | 164 | **259** | **165** | 258 | 165 | 8 | 259 | 164 | **259** | **165** | 258 | 165 |
| 454.calculix | 8 | 661 | 99.8 | **662** | **99.7** | 670 | 98.5 | 8 | 661 | 99.8 | **662** | **99.7** | 670 | 98.5 |
| 459.GemsFDTD | 8 | 2937 | 28.9 | 2964 | 28.6 | **2964** | **28.6** | 8 | 2937 | 28.9 | 2964 | 28.6 | **2964** | **28.6** |
| 465.tonto | 8 | 767 | 103 | **768** | **103** | 770 | 102 | 8 | 767 | 103 | **768** | **103** | 770 | 102 |
| 470.lbm | 8 | 4249 | 25.9 | **4248** | **25.9** | 4248 | 25.9 | 8 | 4249 | 25.9 | **4248** | **25.9** | 4248 | 25.9 |
| 481.wrf | 8 | **1807** | **49.4** | 1802 | 49.6 | 1812 | 49.3 | 8 | **1807** | **49.4** | 1802 | 49.6 | 1812 | 49.3 |
| 482.sphinx3 | 8 | **2328** | **67.0** | 2324 | 67.1 | 2358 | 66.1 | 8 | **2328** | **67.0** | 2324 | 67.1 | 2358 | 66.1 |

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

## General Notes

This result has been produced with binaries provided and compiled by Intel.

BIOS configuration:
Hardware Prefetch = Disable, Adjacent Sector Prefetch = Disable

For information about Fujitsu Siemens Computers please see:
http://www.fujitsu-siemens.com

## 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 Optimization Flags

C benchmarks:

433.milc: basepeak = yes

470.lbm: basepeak = yes

482.sphinx3: basepeak = yes

C++ benchmarks:

444.namd: basepeak = yes

447.dealII: basepeak = yes

450.soplex: basepeak = yes

453.povray: basepeak = yes

Fortran benchmarks:

410.bwaves: basepeak = yes

416.gamess: basepeak = yes

434.zeusmp: basepeak = yes

437.leslie3d: basepeak = yes

459.GemsFDTD: basepeak = yes

465.tonto: basepeak = yes

Benchmarks using both Fortran and C:

435.gromacs: basepeak = yes

436.cactusADM: basepeak = yes

454.calculix: basepeak = yes

481.wrf: basepeak = yes

The flags file that was used to format this result can be browsed at
http://www.spec.org/cpu2006/flags/Intel-ic10.1-FP-intel64-linux-flags.20090714.05.html

You can also download the XML flags source by saving the following link:
http://www.spec.org/cpu2006/flags/Intel-ic10.1-FP-intel64-linux-flags.20090714.05.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 14:24:56 2014 by SPEC CPU2006 PS/PDF formatter v6932.
Originally published on 27 November 2007.