SPEC® CFP2006 Result

Fujitsu Siemens Computers

PRIMERGY RX200 S3, Intel Xeon processor L5320, 1.86 GHz

$SPECfp^{®}\_rate2006 =$ 45.6

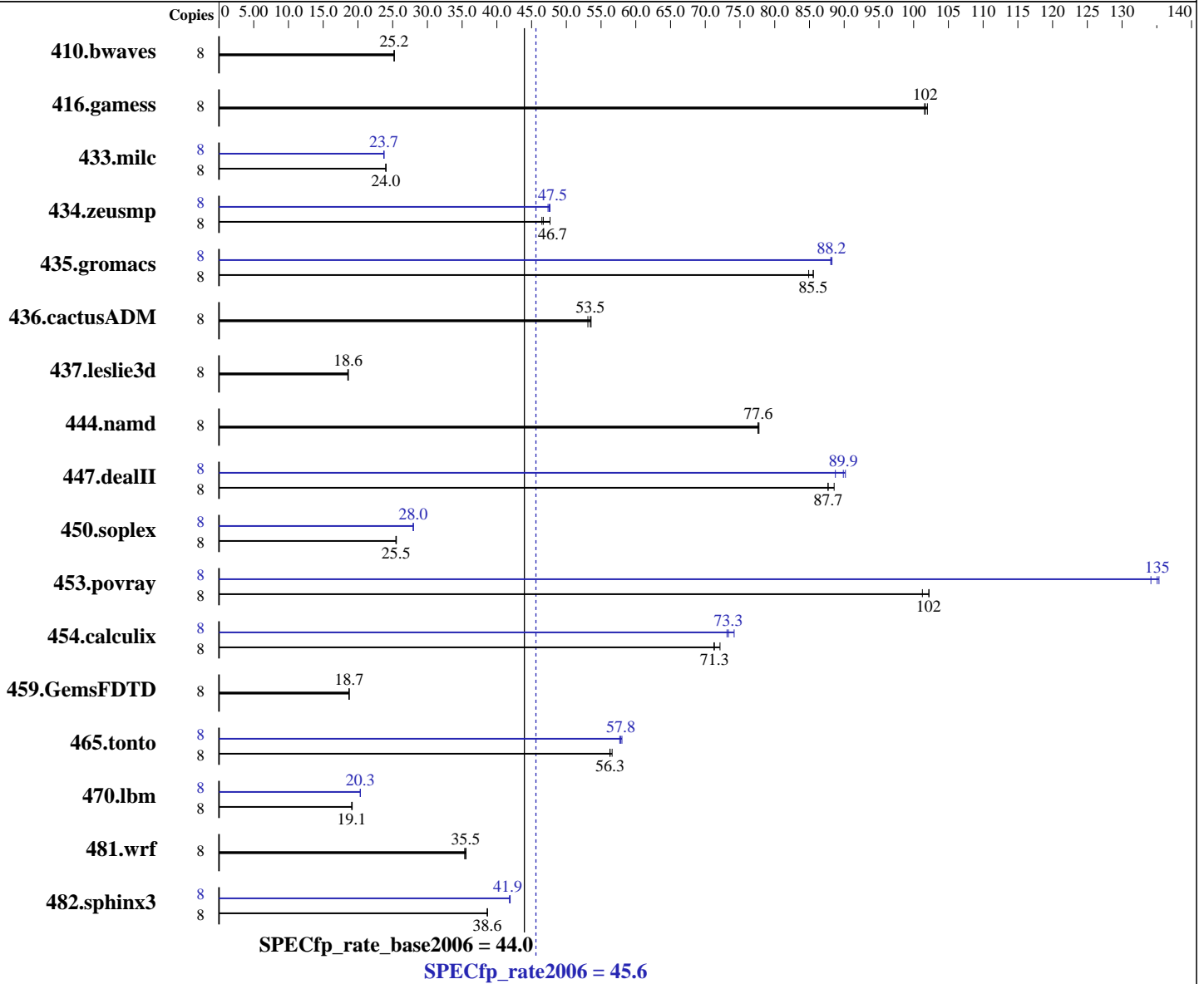$SPECfp\_rate\_base2006 =$ 44.0

CPU2006 license: 22

Test sponsor: Fujitsu Siemens Computers

Tested by: Fujitsu Siemens Computers

Test date: Mar-2007

Hardware Availability: Mar-2007

Software Availability: Jan-2007

Benchmark	Copies	Value
410.bwaves	8	25.2
416.gamess	8	102
433.milc	8	23.7
433.milc	8	24.0
434.zeusmp	8	47.5
434.zeusmp	8	46.7
435.gromacs	8	88.2
435.gromacs	8	85.5
436.cactusADM	8	53.5
437.leslie3d	8	18.6
444.namd	8	77.6
447.dealII	8	89.9
447.dealII	8	87.7
450.soplex	8	28.0
450.soplex	8	25.5
453.povray	8	135
453.povray	8	102
454.calculix	8	73.3
454.calculix	8	71.3
459.GemsFDTD	8	18.7
465.tonto	8	57.8
465.tonto	8	56.3
470.lbm	8	20.3
470.lbm	8	19.1
481.wrf	8	35.5
482.sphinx3	8	41.9
482.sphinx3	8	38.6

SPECfp_rate_base2006 = 44.0

SPECfp_rate2006 = 45.6

Hardware

CPU Name: Intel Xeon L5320
CPU Characteristics: L5320
CPU MHz: 1867
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

Continued on next page

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 - built 20070109, Package-ID: l_cc_p_9.1.046
Intel Fortran Compiler for IA32/EM64T application, Version 9.1 - built 20070109, Package ID: l_fc_p_9.1.041
Auto Parallel: No
File System: ReiserFS

Continued on next page

SPEC CFP2006 Result
Copyright 2006-2014 Standard Performance Evaluation Corporation

Fujitsu Siemens Computers

PRIMERGY RX200 S3, Intel Xeon processor L5320, 1.86 GHz

| SPECfp_rate2006 = | 45.6 |
| SPECfp_rate_base2006 = | 44.0 |

CPU2006 license: 22　　　　　　　　　　　　　　　　　　　　　　　**Test date:** Mar-2007
Test sponsor: Fujitsu Siemens Computers　　　　　　　　　　　**Hardware Availability:** Mar-2007
Tested by: Fujitsu Siemens Computers　　　　　　　　　　　　**Software Availability:** Jan-2007

L3 Cache:	None
Other Cache:	None
Memory:	16 GB (8x2 GB DDR2 PC2-5300F, 2 rank, CAS 5-5-5, with ECC)
Disk Subsystem:	SAS (73GB 15400 rpm)
Other Hardware:	None

System State:	Multiuser, Runlevel 3
Base Pointers:	64-bit
Peak Pointers:	32/64-bit
Other Software:	None

Results Table

Benchmark	Copies	Base Seconds	Base Ratio	Base Seconds	Base Ratio	Base Seconds	Base Ratio	Copies	Peak Seconds	Peak Ratio	Peak Seconds	Peak Ratio	Peak Seconds	Peak Ratio
410.bwaves	8	4309	25.2	4312	25.2	**4311**	**25.2**	8	4309	25.2	4312	25.2	**4311**	**25.2**
416.gamess	8	1536	102	1542	102	**1540**	**102**	8	1536	102	1542	102	**1540**	**102**
433.milc	8	3055	24.0	3058	24.0	**3057**	**24.0**	8	3092	23.8	**3093**	**23.7**	3094	23.7
434.zeusmp	8	**1559**	**46.7**	1566	46.5	1528	47.7	8	1537	47.4	**1532**	**47.5**	1528	47.7
435.gromacs	8	673	84.9	668	85.6	**668**	**85.5**	8	647	88.2	649	88.1	**648**	**88.2**
436.cactusADM	8	1785	53.6	1800	53.1	**1788**	**53.5**	8	1785	53.6	1800	53.1	**1788**	**53.5**
437.leslie3d	8	**4042**	**18.6**	4056	18.5	4042	18.6	8	**4042**	**18.6**	4056	18.5	4042	18.6
444.namd	8	**827**	**77.6**	825	77.7	827	77.6	8	**827**	**77.6**	825	77.7	827	77.6
447.dealII	8	1044	87.7	1034	88.6	**1044**	**87.7**	8	1031	88.7	**1018**	**89.9**	1015	90.2
450.soplex	8	2613	25.5	**2616**	**25.5**	2621	25.5	8	2384	28.0	**2385**	**28.0**	2386	28.0
453.povray	8	**417**	**102**	416	102	420	101	8	315	135	317	134	**315**	**135**
454.calculix	8	915	72.1	**925**	**71.3**	926	71.3	8	890	74.2	**900**	**73.3**	903	73.1
459.GemsFDTD	8	**4532**	**18.7**	4532	18.7	4531	18.7	8	**4532**	**18.7**	4532	18.7	4531	18.7
465.tonto	8	**1398**	**56.3**	1391	56.6	1399	56.3	8	1357	58.0	**1361**	**57.8**	1365	57.7
470.lbm	8	5731	19.2	**5749**	**19.1**	5750	19.1	8	5403	20.3	**5403**	**20.3**	5402	20.3
481.wrf	8	2527	35.4	**2518**	**35.5**	2512	35.6	8	2527	35.4	**2518**	**35.5**	2512	35.6
482.sphinx3	8	4038	38.6	4034	38.6	**4036**	**38.6**	8	**3720**	**41.9**	3720	41.9	3730	41.8

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 1067 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.

BIOS configuration:

SPEC CFP2006 Result
Copyright 2006-2014 Standard Performance Evaluation Corporation

Fujitsu Siemens Computers

PRIMERGY RX200 S3, Intel Xeon processor L5320, 1.86 GHz

SPECfp_rate2006 =   45.6

SPECfp_rate_base2006 = 44.0

CPU2006 license: 22

Test sponsor: Fujitsu Siemens Computers

Tested by: Fujitsu Siemens Computers

Test date: Mar-2007

Hardware Availability: Mar-2007

Software Availability: Jan-2007

General Notes (Continued)

```
Hardware Prefetch = Disable, Adjacent Sector Prefetch = Disable

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

SPEC CFP2006 Result
Copyright 2006-2014 Standard Performance Evaluation Corporation

Fujitsu Siemens Computers

PRIMERGY RX200 S3, Intel Xeon processor L5320, 1.86 GHz

$SPECfp\_rate2006 =$ 45.6

$SPECfp\_rate\_base2006 =$ 44.0

CPU2006 license: 22		**Test date:**	Mar-2007
Test sponsor:	Fujitsu Siemens Computers	**Hardware Availability:**	Mar-2007
Tested by:	Fujitsu Siemens Computers	**Software Availability:**	Jan-2007

Base Optimization Flags (Continued)

Fortran benchmarks:
```
-fast
```

Benchmarks using both Fortran and C:
```
-fast
```

Peak Compiler Invocation

C benchmarks:
```
/opt/intel/cc/9.1.046/bin/icc -I/opt/intel/cc/9.1.046/include
-L/opt/intel/cc/9.1.046/lib
```

C++ benchmarks (except as noted below):
```
icpc
```

```
   450.soplex: /opt/intel/cc/9.1.046/bin/icpc
            -I/opt/intel/cc/9.1.046/include -L/opt/intel/cc/9.1.046/lib
```

Fortran benchmarks (except as noted below):
```
ifort
```

```
   434.zeusmp: /opt/intel/fc/9.1.041/bin/ifort
            -I/opt/intel/fc/9.1.041/include -L/opt/intel/fc/9.1.041/lib
```

Benchmarks using both Fortran and C:
```
icc ifort
```

Peak Portability Flags

```
Same as Base Portability Flags
```

Peak Optimization Flags

C benchmarks:

```
      433.milc: -prof_gen(pass 1) -prof_use(pass 2) -fast
```

```
       470.lbm: Same as 433.milc
```

```
    482.sphinx3: -fast
```

C++ benchmarks:

Continued on next page

SPEC CFP2006 Result
Copyright 2006-2014 Standard Performance Evaluation Corporation

Fujitsu Siemens Computers

PRIMERGY RX200 S3, Intel Xeon processor L5320, 1.86 GHz

$SPECfp\_rate2006 =$ 45.6

$SPECfp\_rate\_base2006 =$ 44.0

Peak Optimization Flags (Continued)

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.20090714.23.html

You can also download the XML flags source by saving the following link:
http://www.spec.org/cpu2006/flags/CPU2006_flags.20090714.23.xml

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 11:53:52 2014 by SPEC CPU2006 PS/PDF formatter v6932.
Originally published on 3 April 2007.