



SPEC[®] CFP2006 Result

Copyright 2006-2014 Standard Performance Evaluation Corporation

Fujitsu Siemens Computers

SPECfp[®]_rate2006 = 34.0

PRIMERGY RX100 S5, Intel Xeon E3110, 3.0 GHz

SPECfp_rate_base2006 = 31.2

CPU2006 license: 22

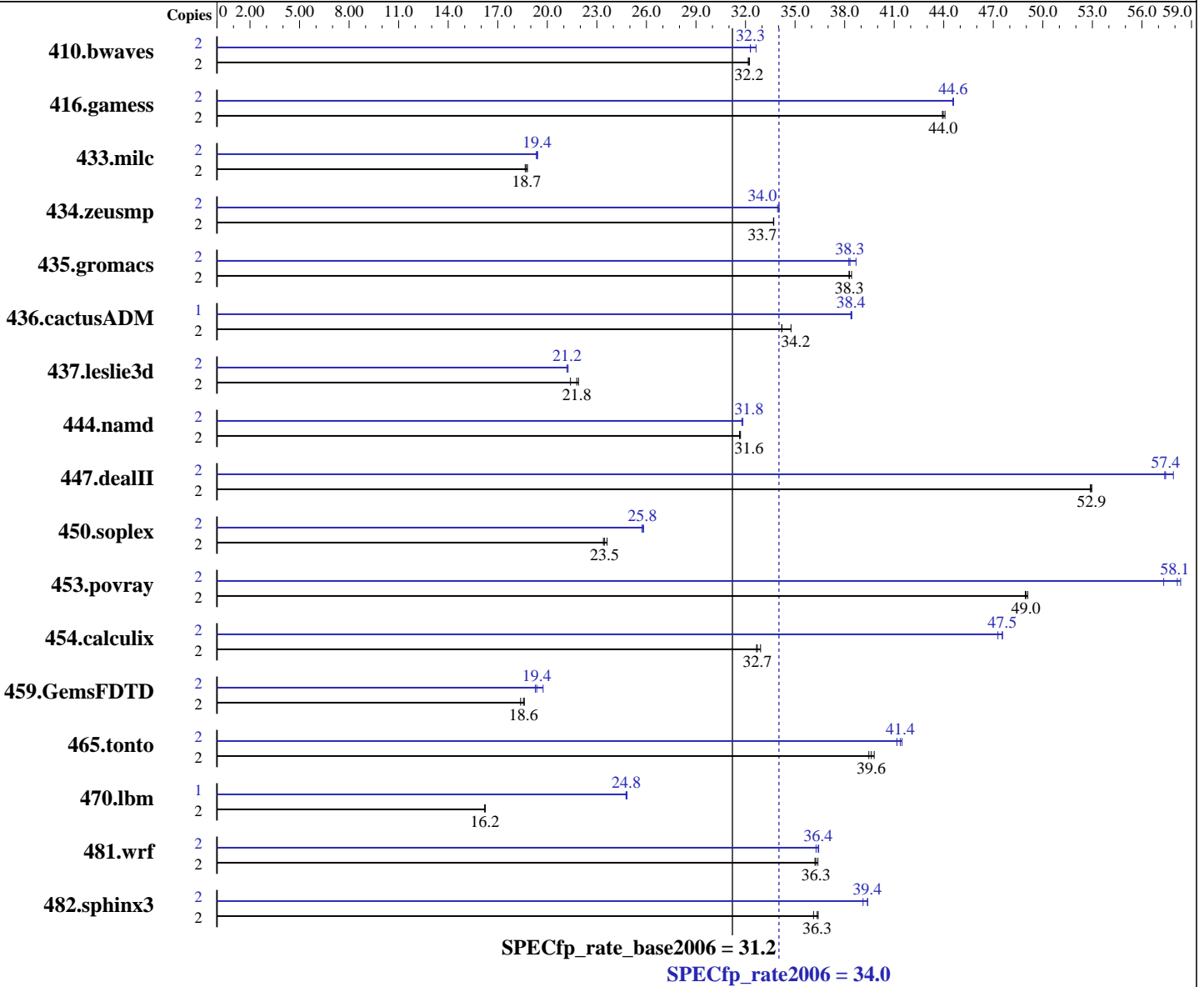
Test sponsor: Fujitsu Siemens Computers

Tested by: Fujitsu Siemens Computers

Test date: Jan-2008

Hardware Availability: Feb-2008

Software Availability: Nov-2007



Hardware

CPU Name: Intel Xeon E3110
 CPU Characteristics: 1333 MHz system bus
 CPU MHz: 3000
 FPU: Integrated
 CPU(s) enabled: 2 cores, 1 chip, 2 cores/chip
 CPU(s) orderable: 1 chip
 Primary Cache: 32 KB I + 32 KB D on chip per core
 Secondary Cache: 6 MB I+D on chip per chip

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: Yes
 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

SPECfp_rate2006 = 34.0

PRIMERGY RX100 S5, Intel Xeon E3110, 3.0 GHz

SPECfp_rate_base2006 = 31.2

CPU2006 license: 22

Test sponsor: Fujitsu Siemens Computers

Tested by: Fujitsu Siemens Computers

Test date: Jan-2008

Hardware Availability: Feb-2008

Software Availability: Nov-2007

L3 Cache: None
Other Cache: None
Memory: 8 GB (4x2 GB PC2-6400E, 2 rank, CAS 6-6-6, with ECC)
Disk Subsystem: Western Digital WD5000AAKS (SATA, 500GB, 7200rpm)
Other Hardware: None

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	2	843	32.2	844	32.2	845	32.2	2	842	32.3	842	32.3	833	32.6
416.gamess	2	888	44.1	892	43.9	891	44.0	2	878	44.6	879	44.6	878	44.6
433.milc	2	984	18.7	977	18.8	980	18.7	2	949	19.3	947	19.4	946	19.4
434.zeusmp	2	540	33.7	540	33.7	540	33.7	2	535	34.0	536	33.9	535	34.0
435.gromacs	2	373	38.3	373	38.3	372	38.4	2	373	38.3	369	38.7	373	38.3
436.cactusADM	2	699	34.2	688	34.8	699	34.2	1	311	38.4	311	38.4	311	38.4
437.leslie3d	2	863	21.8	878	21.4	859	21.9	2	887	21.2	887	21.2	884	21.3
444.namd	2	507	31.6	507	31.6	506	31.7	2	504	31.8	504	31.8	505	31.8
447.dealII	2	432	52.9	432	53.0	433	52.9	2	399	57.4	398	57.4	395	57.9
450.soplex	2	713	23.4	706	23.6	711	23.5	2	647	25.8	646	25.8	648	25.7
453.povray	2	217	48.9	217	49.0	217	49.1	2	182	58.3	183	58.1	186	57.3
454.calculix	2	505	32.7	501	32.9	504	32.7	2	347	47.6	349	47.3	347	47.5
459.GemsFDTD	2	1144	18.6	1154	18.4	1140	18.6	2	1101	19.3	1075	19.7	1096	19.4
465.tonto	2	495	39.8	497	39.6	499	39.5	2	474	41.5	478	41.2	476	41.4
470.lbm	2	1692	16.2	1694	16.2	1695	16.2	1	555	24.8	553	24.8	555	24.8
481.wrf	2	617	36.2	616	36.3	614	36.4	2	616	36.3	613	36.4	614	36.4
482.sphinx3	2	1073	36.3	1071	36.4	1079	36.1	2	997	39.1	990	39.4	989	39.4

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
'OMP_NUM_THREADS' set to number of cores (default)

General Notes

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

All binaries were built with 64-bit Intel compiler except:
437.leslie3d, 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:

Continued on next page



SPEC CFP2006 Result

Copyright 2006-2014 Standard Performance Evaluation Corporation

Fujitsu Siemens Computers

SPECfp_rate2006 = 34.0

PRIMERGY RX100 S5, Intel Xeon E3110, 3.0 GHz

SPECfp_rate_base2006 = 31.2

CPU2006 license: 22

Test date: Jan-2008

Test sponsor: Fujitsu Siemens Computers

Hardware Availability: Feb-2008

Tested by: Fujitsu Siemens Computers

Software Availability: Nov-2007

General Notes (Continued)

Hardware Prefetch = Enable, 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

Continued on next page



SPEC CFP2006 Result

Copyright 2006-2014 Standard Performance Evaluation Corporation

Fujitsu Siemens Computers

SPECfp_rate2006 = 34.0

PRIMERGY RX100 S5, Intel Xeon E3110, 3.0 GHz

SPECfp_rate_base2006 = 31.2

CPU2006 license: 22

Test date: Jan-2008

Test sponsor: Fujitsu Siemens Computers

Hardware Availability: Feb-2008

Tested by: Fujitsu Siemens Computers

Software Availability: Nov-2007

Base Optimization Flags (Continued)

Fortran benchmarks:

-fast

Benchmarks using both Fortran and C:

-fast

Peak Compiler Invocation

C benchmarks (except as noted below):

```
/home/cmplr/usr3/alrahate/compilers/ic10.1mainline/20070725/Linux32/bin/icc
-L/home/cmplr/usr3/alrahate/compilers/ic10.1mainline/20070725/Linux32/lib
-I/home/cmplr/usr3/alrahate/compilers/ic10.1mainline/20070725/Linux32/include
```

433.milc: icc

C++ benchmarks (except as noted below):

icpc

```
450.soplex: /home/cmplr/usr3/alrahate/compilers/ic10.1mainline/20070725/Linux32/bin/icpc
-L/home/cmplr/usr3/alrahate/compilers/ic10.1mainline/20070725/Linux32/lib
-I/home/cmplr/usr3/alrahate/compilers/ic10.1mainline/20070725/Linux32/include
```

Fortran benchmarks (except as noted below):

ifort

```
437.leslie3d: /home/cmplr/usr3/alrahate/compilers/ic10.1mainline/20070725/Linux32/bin/ifort
-L/home/cmplr/usr3/alrahate/compilers/ic10.1mainline/20070725/Linux32/lib
-I/home/cmplr/usr3/alrahate/compilers/ic10.1mainline/20070725/Linux32/include
```

Benchmarks using both Fortran and C:

icc ifort

Peak 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
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
```

Continued on next page



SPEC CFP2006 Result

Copyright 2006-2014 Standard Performance Evaluation Corporation

Fujitsu Siemens Computers

SPECfp_rate2006 = 34.0

PRIMERGY RX100 S5, Intel Xeon E3110, 3.0 GHz

SPECfp_rate_base2006 = 31.2

CPU2006 license: 22

Test date: Jan-2008

Test sponsor: Fujitsu Siemens Computers

Hardware Availability: Feb-2008

Tested by: Fujitsu Siemens Computers

Software Availability: Nov-2007

Peak Portability Flags (Continued)

465.tonto: -DSPEC_CPU_LP64

481.wrf: -DSPEC_CPU_LP64 -DSPEC_CPU_CASE_FLAG -DSPEC_CPU_LINUX

Peak Optimization Flags

C benchmarks:

433.milc: -prof-gen(pass 1) -prof-use(pass 2) -fast -fno-alias
-auto-ilp32

470.lbm: -prof-gen(pass 1) -prof-use(pass 2) -fast -unroll2
-scalar-rep- -prefetch -opt-malloc-options=3

482.sphinx3: -fast -unroll2

C++ benchmarks:

444.namd: -prof-gen(pass 1) -prof-use(pass 2) -fast -fno-alias
-auto-ilp32

447.dealII: -prof-gen(pass 1) -prof-use(pass 2) -fast -unroll2
-ansi-alias -scalar-rep-

450.soplex: -prof-gen(pass 1) -prof-use(pass 2) -fast
-opt-malloc-options=3

453.povray: -prof-gen(pass 1) -prof-use(pass 2) -fast -unroll4
-ansi-alias

Fortran benchmarks:

410.bwaves: -fast -prefetch

416.gamess: -prof-gen(pass 1) -prof-use(pass 2) -fast -unroll2 -Ob0
-ansi-alias -scalar-rep-

434.zeusmp: -prof-gen(pass 1) -prof-use(pass 2) -fast

437.leslie3d: -prof-gen(pass 1) -prof-use(pass 2) -fast -prefetch
-opt-malloc-options=3

459.GemsFDTD: -prof-gen(pass 1) -prof-use(pass 2) -fast -unroll2 -Ob0
-prefetch

465.tonto: -prof-gen(pass 1) -prof-use(pass 2) -fast -unroll4 -auto

Benchmarks using both Fortran and C:

Continued on next page



SPEC CFP2006 Result

Copyright 2006-2014 Standard Performance Evaluation Corporation

Fujitsu Siemens Computers

SPECfp_rate2006 = 34.0

PRIMERGY RX100 S5, Intel Xeon E3110, 3.0 GHz

SPECfp_rate_base2006 = 31.2

CPU2006 license: 22

Test sponsor: Fujitsu Siemens Computers

Tested by: Fujitsu Siemens Computers

Test date: Jan-2008

Hardware Availability: Feb-2008

Software Availability: Nov-2007

Peak Optimization Flags (Continued)

435.gromacs: -prof-gen(pass 1) -prof-use(pass 2) -fast -prefetch
-auto-ilp32

436.cactusADM: -prof-gen(pass 1) -prof-use(pass 2) -fast -unroll2
-prefetch -parallel -auto-ilp32

454.calculix: -fast -unroll-aggressive -auto-ilp32

481.wrf: -fast -auto-ilp32

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.20090714.01.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.20090714.01.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 15:55:09 2014 by SPEC CPU2006 PS/PDF formatter v6932.
Originally published on 19 February 2008.