



SPEC[®] CFP2006 Result

Copyright 2006-2014 Standard Performance Evaluation Corporation

Supermicro

SPECfp[®]_rate2006 = 228

SuperServer 5027R-WRF (X9SRW-F, Intel E5-1660)

SPECfp_rate_base2006 = 222

CPU2006 license: 001176

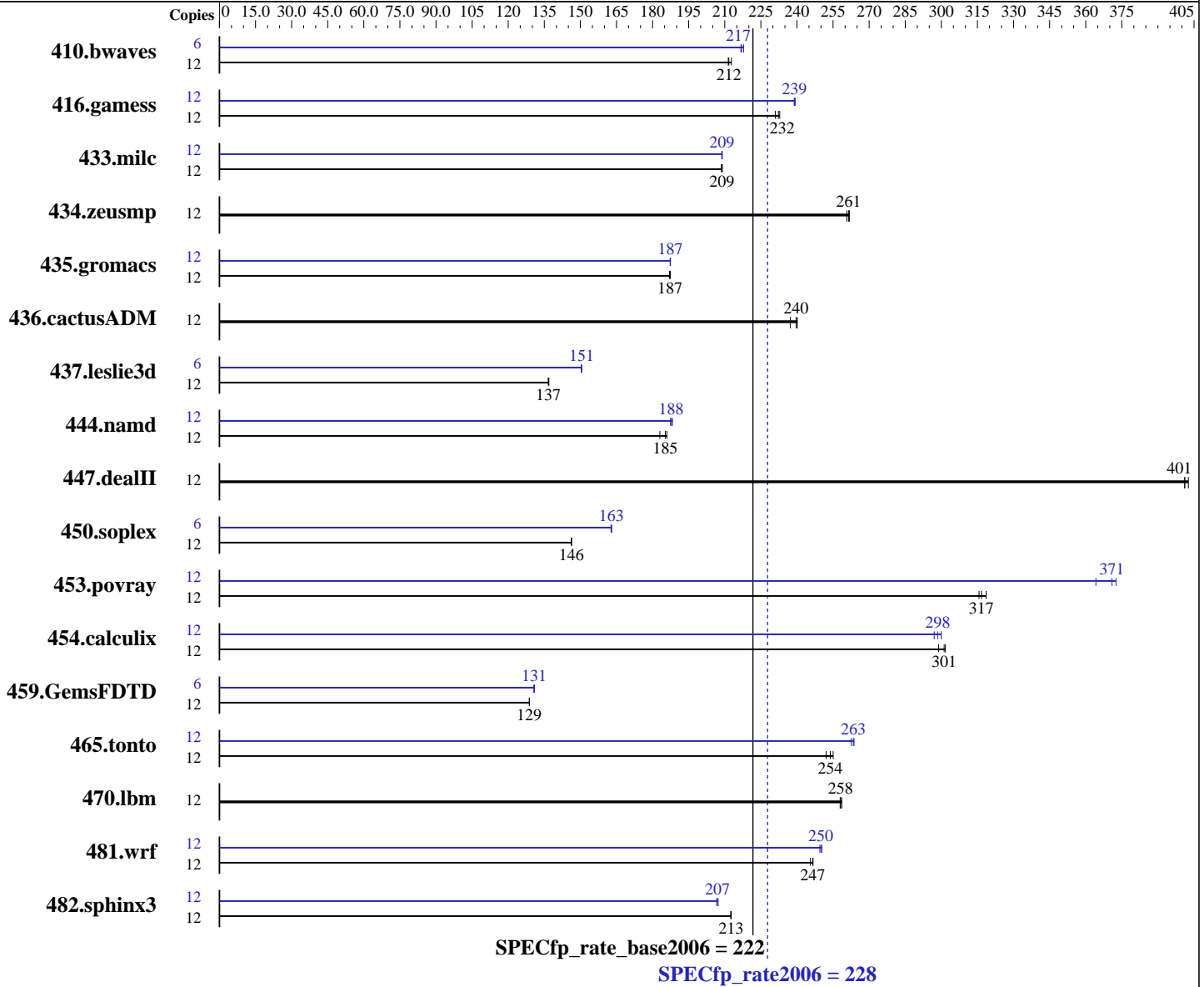
Test date: Mar-2012

Test sponsor: Supermicro

Hardware Availability: Mar-2012

Tested by: Supermicro

Software Availability: Oct-2011



Hardware

CPU Name: Intel Xeon E5-1660
 CPU Characteristics: Intel Turbo Boost Technology up to 3.90 GHz
 CPU MHz: 3300
 FPU: Integrated
 CPU(s) enabled: 6 cores, 1 chip, 6 cores/chip, 2 threads/core
 CPU(s) orderable: 1 chip
 Primary Cache: 32 KB I + 32 KB D on chip per core
 Secondary Cache: 256 KB I+D on chip per core

Continued on next page

Software

Operating System: Red Hat Enterprise Linux Server Release 6.1, Kernel 2.6.32-131.0.15.el6.x86_64
 Compiler: C/C++: Version 12.1.0.225 of Intel C++ Studio XE for Linux;
 Fortran: Version 12.1.0.225 of Intel Fortran Studio XE for Linux
 Auto Parallel: No
 File System: ext4
 System State: Run level 3 (multi-user)

Continued on next page



SPEC CFP2006 Result

Copyright 2006-2014 Standard Performance Evaluation Corporation

Supermicro

SPECfp_rate2006 = **228**

SuperServer 5027R-WRF (X9SRW-F, Intel E5-1660)

SPECfp_rate_base2006 = **222**

CPU2006 license: 001176

Test date: Mar-2012

Test sponsor: Supermicro

Hardware Availability: Mar-2012

Tested by: Supermicro

Software Availability: Oct-2011

L3 Cache: 15 MB I+D on chip per chip
Other Cache: None
Memory: 64 GB (8 x 8 GB 2Rx4 PC3-12800R-11, ECC)
Disk Subsystem: 1 x 1 TB SATA II, 7200 RPM
Other Hardware: None

Base Pointers: 32/64-bit
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	12	766	213	770	212	771	211	6	376	217	374	218	376	217
416.gamess	12	1011	232	1017	231	1009	233	12	982	239	983	239	984	239
433.milc	12	528	209	528	209	527	209	12	528	209	528	209	527	209
434.zeusmp	12	418	261	417	262	419	261	12	418	261	417	262	419	261
435.gromacs	12	458	187	458	187	457	187	12	457	187	458	187	457	187
436.cactusADM	12	604	237	597	240	598	240	12	604	237	597	240	598	240
437.leslie3d	12	824	137	825	137	825	137	6	375	151	375	151	375	150
444.namd	12	526	183	518	186	519	185	12	513	187	513	188	511	188
447.dealII	12	341	403	342	401	342	401	12	341	403	342	401	342	401
450.soplex	12	684	146	684	146	684	146	6	307	163	307	163	308	163
453.povray	12	200	319	202	317	202	316	12	175	364	171	373	172	371
454.calculix	12	331	299	329	301	328	302	12	332	298	330	300	333	297
459.GemsFDTD	12	989	129	989	129	988	129	6	486	131	488	131	487	131
465.tonto	12	465	254	468	252	463	255	12	450	263	448	264	448	263
470.lbm	12	638	259	639	258	639	258	12	638	259	639	258	639	258
481.wrf	12	543	247	546	246	544	247	12	537	250	535	250	536	250
482.sphinx3	12	1101	212	1100	213	1100	213	12	1129	207	1130	207	1132	207

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

Submit Notes

The taskset mechanism was used to bind copies to processors. The config file option 'submit' was used to generate taskset commands to bind each copy to a specific processor. For details, please see the config file.

Operating System Notes

Stack size set to unlimited using "ulimit -s unlimited"

General Notes

Environment variables set by runspec before the start of the run:
LD_LIBRARY_PATH = "/usr/cpu2006/libs/32:/usr/cpu2006/libs/64"

Continued on next page



SPEC CFP2006 Result

Copyright 2006-2014 Standard Performance Evaluation Corporation

Supermicro

SPECfp_rate2006 = 228

SuperServer 5027R-WRF (X9SRW-F, Intel E5-1660)

SPECfp_rate_base2006 = 222

CPU2006 license: 001176
Test sponsor: Supermicro
Tested by: Supermicro

Test date: Mar-2012
Hardware Availability: Mar-2012
Software Availability: Oct-2011

General Notes (Continued)

Binaries compiled on a system with 1x Core i7-860 CPU + 8GB memory using RHEL5.5
Transparent Huge Pages disabled with:
echo never > /sys/kernel/mm/redhat_transparent_hugepage/enabled

Base Compiler Invocation

C benchmarks:
icc -m64

C++ benchmarks:
icpc -m64

Fortran benchmarks:
ifort -m64

Benchmarks using both Fortran and C:
icc -m64 ifort -m64

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:
-xAVX -ipo -O3 -no-prec-div -static -opt-prefetch -auto-p32
-ansi-alias -opt-mem-layout-trans=3

Continued on next page



SPEC CFP2006 Result

Copyright 2006-2014 Standard Performance Evaluation Corporation

Supermicro

SPECfp_rate2006 = 228

SuperServer 5027R-WRF (X9SRW-F, Intel E5-1660)

SPECfp_rate_base2006 = 222

CPU2006 license: 001176

Test date: Mar-2012

Test sponsor: Supermicro

Hardware Availability: Mar-2012

Tested by: Supermicro

Software Availability: Oct-2011

Base Optimization Flags (Continued)

C++ benchmarks:

-xAVX -ipo -O3 -no-prec-div -static -opt-prefetch -auto-p32
-ansi-alias -opt-mem-layout-trans=3

Fortran benchmarks:

-xAVX -ipo -O3 -no-prec-div -static -opt-prefetch

Benchmarks using both Fortran and C:

-xAVX -ipo -O3 -no-prec-div -static -opt-prefetch -auto-p32
-ansi-alias -opt-mem-layout-trans=3

Peak Compiler Invocation

C benchmarks (except as noted below):

icc -m64

482.sphinx3: icc -m32

C++ benchmarks (except as noted below):

icpc -m64

450.soplex: icpc -m32

Fortran benchmarks:

ifort -m64

Benchmarks using both Fortran and C:

icc -m64 ifort -m64

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
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
465.tonto: -DSPEC_CPU_LP64
470.lbm: -DSPEC_CPU_LP64
481.wrf: -DSPEC_CPU_LP64 -DSPEC_CPU_CASE_FLAG -DSPEC_CPU_LINUX



SPEC CFP2006 Result

Copyright 2006-2014 Standard Performance Evaluation Corporation

Supermicro

SPECfp_rate2006 = 228

SuperServer 5027R-WRF (X9SRW-F, Intel E5-1660)

SPECfp_rate_base2006 = 222

CPU2006 license: 001176

Test date: Mar-2012

Test sponsor: Supermicro

Hardware Availability: Mar-2012

Tested by: Supermicro

Software Availability: Oct-2011

Peak Optimization Flags

C benchmarks:

433.milc: -xAVX(pass 2) -prof-gen(pass 1) -ipo(pass 2) -O3(pass 2)
-no-prec-div(pass 2) -prof-use(pass 2) -static -auto-ilp32
-opt-mem-layout-trans=3

470.lbm: basepeak = yes

482.sphinx3: -xAVX -ipo -O3 -no-prec-div -unroll2

C++ benchmarks:

444.namd: -xAVX(pass 2) -prof-gen(pass 1) -ipo(pass 2) -O3(pass 2)
-no-prec-div(pass 2) -prof-use(pass 2) -fno-alias
-auto-ilp32

447.dealIII: basepeak = yes

450.soplex: -xAVX(pass 2) -prof-gen(pass 1) -ipo(pass 2) -O3(pass 2)
-no-prec-div(pass 2) -prof-use(pass 2) -opt-malloc-options=3

453.povray: -xAVX(pass 2) -prof-gen(pass 1) -ipo(pass 2) -O3(pass 2)
-no-prec-div(pass 2) -prof-use(pass 2) -unroll4 -ansi-alias

Fortran benchmarks:

410.bwaves: -xAVX(pass 2) -prof-gen(pass 1) -ipo(pass 2) -O3(pass 2)
-no-prec-div(pass 2) -prof-use(pass 2) -static

416.gamess: -xAVX(pass 2) -prof-gen(pass 1) -ipo(pass 2) -O3(pass 2)
-no-prec-div(pass 2) -prof-use(pass 2) -unroll2
-inline-level=0 -scalar-rep- -static

434.zeusmp: basepeak = yes

437.leslie3d: -xAVX -ipo -O3 -no-prec-div -static -opt-prefetch

459.GemsFDTD: -xAVX(pass 2) -prof-gen(pass 1) -ipo(pass 2) -O3(pass 2)
-no-prec-div(pass 2) -prof-use(pass 2) -opt-malloc-options=3

465.tonto: -xAVX(pass 2) -prof-gen(pass 1) -ipo(pass 2) -O3(pass 2)
-no-prec-div(pass 2) -prof-use(pass 2) -unroll4 -auto
-inline-calloc -opt-malloc-options=3

Benchmarks using both Fortran and C:

435.gromacs: -xAVX(pass 2) -prof-gen(pass 1) -ipo(pass 2) -O3(pass 2)
-no-prec-div(pass 2) -prof-use(pass 2) -opt-prefetch
-static -auto-ilp32 -opt-mem-layout-trans=3

Continued on next page



SPEC CFP2006 Result

Copyright 2006-2014 Standard Performance Evaluation Corporation

Supermicro

SPECfp_rate2006 = 228

SuperServer 5027R-WRF (X9SRW-F, Intel E5-1660)

SPECfp_rate_base2006 = 222

CPU2006 license: 001176

Test date: Mar-2012

Test sponsor: Supermicro

Hardware Availability: Mar-2012

Tested by: Supermicro

Software Availability: Oct-2011

Peak Optimization Flags (Continued)

436.cactusADM: basepeak = yes

454.calculix: -xAVX -ipo -O3 -no-prec-div -static -auto-ilp32
-opt-mem-layout-trans=3

481.wrf: Same as 454.calculix

The flags files that were used to format this result can be browsed at

<http://www.spec.org/cpu2006/flags/Intel-ic12.1-official-linux64.20111122.html>

<http://www.spec.org/cpu2006/flags/Supermicro-Platform-Settings-revA.html>

You can also download the XML flags sources by saving the following links:

<http://www.spec.org/cpu2006/flags/Intel-ic12.1-official-linux64.20111122.xml>

<http://www.spec.org/cpu2006/flags/Supermicro-Platform-Settings-revA.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 v1.2.
Report generated on Thu Jul 24 03:10:43 2014 by SPEC CPU2006 PS/PDF formatter v6932.
Originally published on 27 March 2012.