



SPEC[®] CFP2006 Result

Copyright 2006-2017 Standard Performance Evaluation Corporation

NEC Corporation

SPECfp[®]_rate2006 = 150

Express5800/T110i-S (Intel Core i3-7300)

SPECfp_rate_base2006 = 146

CPU2006 license: 9006

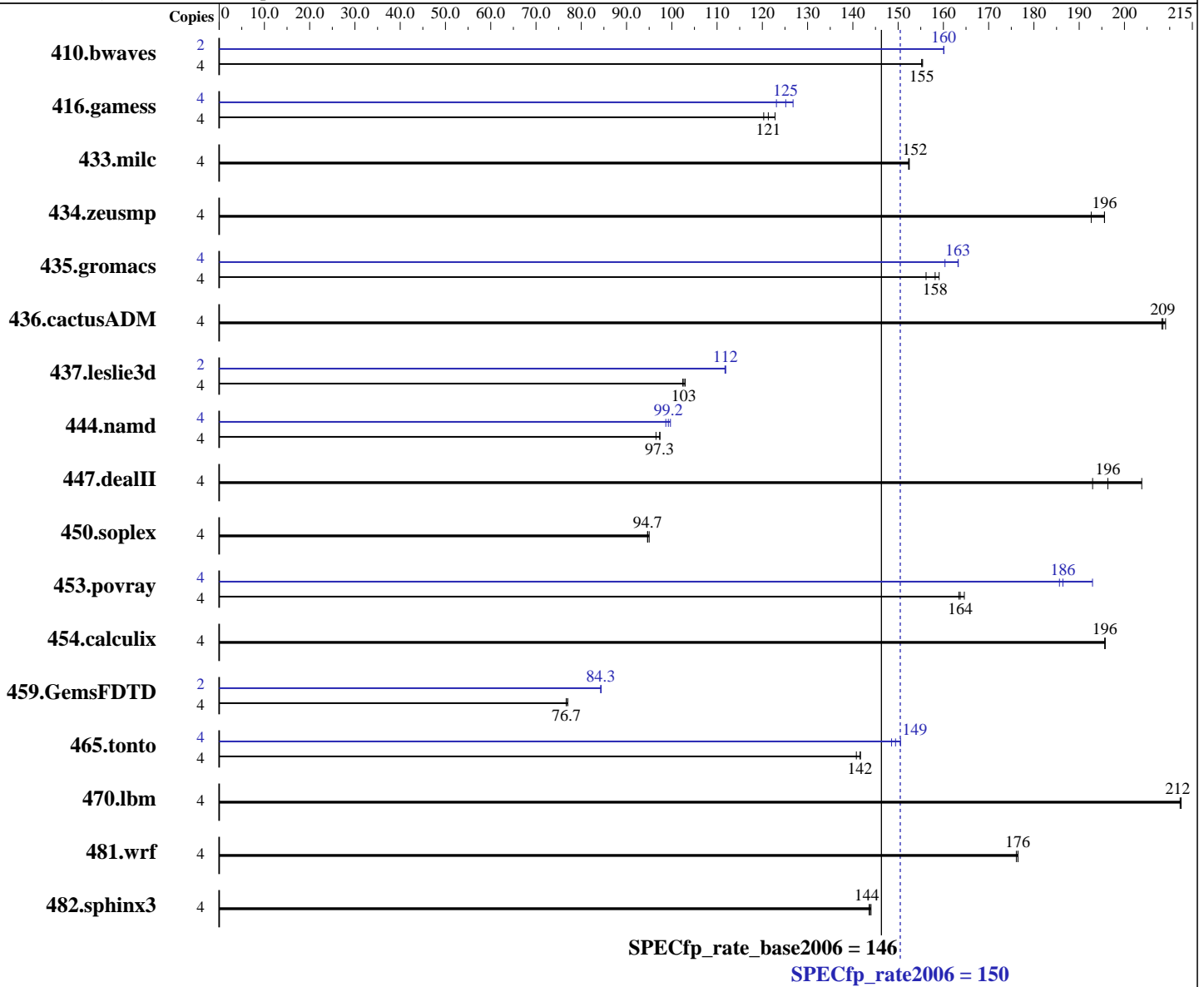
Test date: Apr-2017

Test sponsor: NEC Corporation

Hardware Availability: Apr-2017

Tested by: NEC Corporation

Software Availability: Jan-2017



Hardware

CPU Name: Intel Core i3-7300
 CPU Characteristics:
 CPU MHz: 4000
 FPU: Integrated
 CPU(s) enabled: 2 cores, 1 chip, 2 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 7.3 (Maipo)
 Kernel 3.10.0-514.6.1.el7.x86_64
 Compiler: C/C++: Version 17.0.0.098 of Intel C/C++ Compiler for Linux;
 Fortran: Version 17.0.0.098 of Intel Fortran Compiler for Linux
 Auto Parallel: No
 File System: ext4

Continued on next page



SPEC CFP2006 Result

Copyright 2006-2017 Standard Performance Evaluation Corporation

NEC Corporation

SPECfp_rate2006 = **150**

Express5800/T110i-S (Intel Core i3-7300)

SPECfp_rate_base2006 = **146**

CPU2006 license: 9006

Test sponsor: NEC Corporation

Tested by: NEC Corporation

Test date: Apr-2017

Hardware Availability: Apr-2017

Software Availability: Jan-2017

L3 Cache: 4 MB I+D on chip per chip
 Other Cache: None
 Memory: 32 GB (2 x 16 GB 2Rx8 PC4-2400T-E)
 Disk Subsystem: 1 x 1 TB SATA, 7200 RPM
 Other Hardware: None

System State: Run level 3 (multi-user)
 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	4	350	155	350	155	350	155	2	170	160	170	160	170	160
416.gamess	4	651	120	646	121	638	123	4	618	127	626	125	636	123
433.milc	4	241	152	241	152	241	152	4	241	152	241	152	241	152
434.zeusmp	4	189	193	186	196	186	196	4	189	193	186	196	186	196
435.gromacs	4	180	159	181	158	183	156	4	175	163	175	163	178	160
436.cactusADM	4	230	208	229	209	229	209	4	230	208	229	209	229	209
437.leslie3d	4	366	103	365	103	367	102	2	168	112	168	112	168	112
444.namd	4	330	97.3	332	96.5	329	97.4	4	322	99.7	323	99.2	325	98.7
447.dealII	4	225	204	237	193	233	196	4	225	204	237	193	233	196
450.soplex	4	352	94.6	351	95.0	352	94.7	4	352	94.6	351	95.0	352	94.7
453.povray	4	129	165	130	164	130	163	4	115	186	114	186	110	193
454.calculix	4	169	196	169	196	169	196	4	169	196	169	196	169	196
459.GemsFDTD	4	554	76.7	553	76.7	551	77.0	2	251	84.4	252	84.3	252	84.3
465.tonto	4	278	142	278	142	280	141	4	263	149	261	151	265	149
470.lbm	4	259	212	259	212	259	213	4	259	212	259	212	259	213
481.wrf	4	254	176	253	176	253	176	4	254	176	253	176	253	176
482.sphinx3	4	543	144	541	144	542	144	4	543	144	541	144	542	144

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"

Platform Notes

BIOS Settings:
Power Management Policy: Custom
Energy Performance: Performance



SPEC CFP2006 Result

Copyright 2006-2017 Standard Performance Evaluation Corporation

NEC Corporation

SPECfp_rate2006 = 150

Express5800/T110i-S (Intel Core i3-7300)

SPECfp_rate_base2006 = 146

CPU2006 license: 9006

Test date: Apr-2017

Test sponsor: NEC Corporation

Hardware Availability: Apr-2017

Tested by: NEC Corporation

Software Availability: Jan-2017

General Notes

Environment variables set by runspec before the start of the run:

LD_LIBRARY_PATH = "/home/cpu2006/libs/32:/home/cpu2006/libs/64:/home/cpu2006/sh10.2"

Binaries compiled on a system with 1x Intel Core i7-4790 CPU + 32GB RAM
memory using Redhat Enterprise Linux 7.2
Transparent Huge Pages enabled by default

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:

-xCORE-AVX2 -ipo -O3 -no-prec-div -qopt-prefetch -auto-p32
-qopt-mem-layout-trans=3

Continued on next page



SPEC CFP2006 Result

Copyright 2006-2017 Standard Performance Evaluation Corporation

NEC Corporation

SPECfp_rate2006 = 150

Express5800/T110i-S (Intel Core i3-7300)

SPECfp_rate_base2006 = 146

CPU2006 license: 9006

Test date: Apr-2017

Test sponsor: NEC Corporation

Hardware Availability: Apr-2017

Tested by: NEC Corporation

Software Availability: Jan-2017

Base Optimization Flags (Continued)

C++ benchmarks:

-xCORE-AVX2 -ipo -O3 -no-prec-div -qopt-prefetch -auto-p32
-qopt-mem-layout-trans=3

Fortran benchmarks:

-xCORE-AVX2 -ipo -O3 -no-prec-div -qopt-prefetch

Benchmarks using both Fortran and C:

-xCORE-AVX2 -ipo -O3 -no-prec-div -qopt-prefetch -auto-p32
-qopt-mem-layout-trans=3

Peak Compiler Invocation

C benchmarks:

icc -m64

C++ benchmarks:

icpc -m64

Fortran benchmarks:

ifort -m64

Benchmarks using both Fortran and C:

icc -m64 ifort -m64

Peak Portability Flags

Same as Base Portability Flags

Peak Optimization Flags

C benchmarks:

433.milc: basepeak = yes

470.lbm: basepeak = yes

482.sphinx3: basepeak = yes

C++ benchmarks:

444.namd: -prof-gen(pass 1) -prof-use(pass 2) -xCORE-AVX2(pass 2)
-par-num-threads=1(pass 1) -ipo(pass 2) -O3(pass 2)
-no-prec-div(pass 2) -fno-alias -auto-ilp32
-qopt-mem-layout-trans=3

Continued on next page



SPEC CFP2006 Result

Copyright 2006-2017 Standard Performance Evaluation Corporation

NEC Corporation

SPECfp_rate2006 = 150

Express5800/T110i-S (Intel Core i3-7300)

SPECfp_rate_base2006 = 146

CPU2006 license: 9006

Test date: Apr-2017

Test sponsor: NEC Corporation

Hardware Availability: Apr-2017

Tested by: NEC Corporation

Software Availability: Jan-2017

Peak Optimization Flags (Continued)

447.dealII: basepeak = yes

450.soplex: basepeak = yes

453.povray: -prof-gen(pass 1) -prof-use(pass 2) -xCORE-AVX2(pass 2)
-par-num-threads=1(pass 1) -ipo(pass 2) -O3(pass 2)
-no-prec-div(pass 2) -unroll4 -qopt-mem-layout-trans=3

Fortran benchmarks:

410.bwaves: -xCORE-AVX2 -ipo -O3 -no-prec-div -qopt-prefetch

416.gamess: -prof-gen(pass 1) -prof-use(pass 2) -xCORE-AVX2(pass 2)
-par-num-threads=1(pass 1) -ipo(pass 2) -O3(pass 2)
-no-prec-div(pass 2) -unroll2 -inline-level=0 -scalar-rep-

434.zeusmp: basepeak = yes

437.leslie3d: Same as 410.bwaves

459.GemsFDTD: Same as 410.bwaves

465.tonto: -prof-gen(pass 1) -prof-use(pass 2) -xCORE-AVX2(pass 2)
-par-num-threads=1(pass 1) -ipo(pass 2) -O3(pass 2)
-no-prec-div(pass 2) -unroll4 -auto -inline-calloc
-qopt-malloc-options=3

Benchmarks using both Fortran and C:

435.gromacs: -prof-gen(pass 1) -prof-use(pass 2) -xCORE-AVX2(pass 2)
-par-num-threads=1(pass 1) -qopt-prefetch -auto-ilp32
-qopt-mem-layout-trans=3

436.cactusADM: basepeak = yes

454.calculix: basepeak = yes

481.wrf: basepeak = yes

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

<http://www.spec.org/cpu2006/flags/Intel-ic17.0-official-linux64.html>

<http://www.spec.org/cpu2006/flags/NEC-Platform-Settings-V1.2-110i-RevA.html>

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

<http://www.spec.org/cpu2006/flags/Intel-ic17.0-official-linux64.xml>

<http://www.spec.org/cpu2006/flags/NEC-Platform-Settings-V1.2-110i-RevA.xml>



SPEC CFP2006 Result

Copyright 2006-2017 Standard Performance Evaluation Corporation

NEC Corporation

SPECfp_rate2006 = 150

Express5800/T110i-S (Intel Core i3-7300)

SPECfp_rate_base2006 = 146

CPU2006 license: 9006

Test sponsor: NEC Corporation

Tested by: NEC Corporation

Test date: Apr-2017

Hardware Availability: Apr-2017

Software Availability: Jan-2017

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 Tue May 30 15:32:04 2017 by SPEC CPU2006 PS/PDF formatter v6932.
Originally published on 30 May 2017.