



SPEC® CFP2006 Result

Copyright 2006-2014 Standard Performance Evaluation Corporation

BOXX Technologies, Inc.

SPECfp®_rate2006 = 296

3DBOXX WORKSTATION 8550 EXXTREME

SPECfp_rate_base2006 = 284

CPU2006 license: 3314

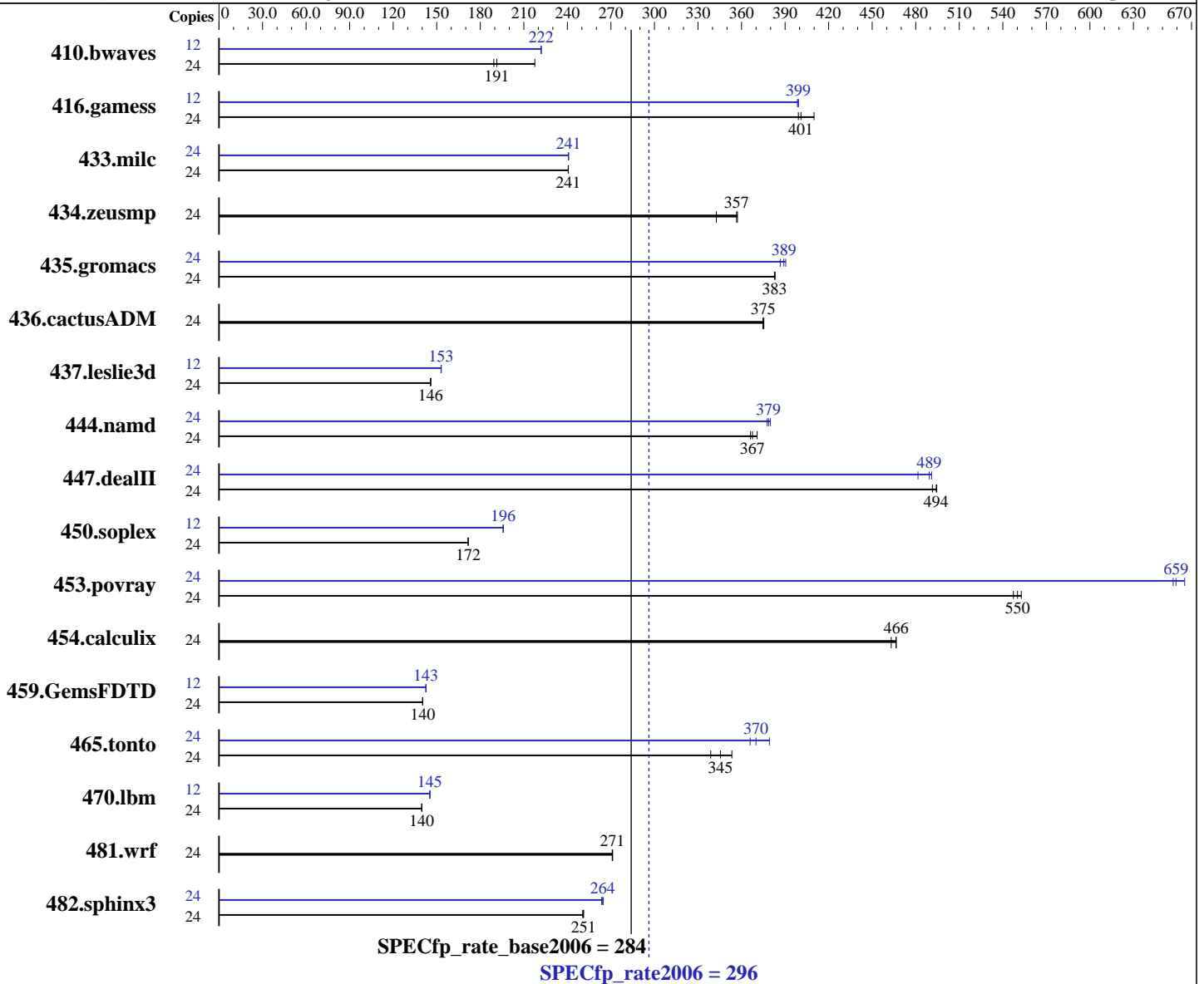
Test date: Oct-2010

Test sponsor: BOXX Technologies, Inc.

Hardware Availability: Sep-2010

Tested by: BOXX Technologies, Inc.

Software Availability: Sep-2010



Hardware

CPU Name: Intel Xeon X5680
 CPU Characteristics: Intel Turbo Boost Technology disabled
 CPU MHz: 4200
 FPU: Integrated
 CPU(s) enabled: 12 cores, 2 chips, 6 cores/chip, 2 threads/core
 CPU(s) orderable: 2 Processors
 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: SUSE Linux Enterprise Desktop 11 (x86_64), Kernel 2.6.32.12-0.7-default
 Compiler: Intel C++ and Fortran Professional Compiler for IA32 and Intel 64, Version 11.1 Build 20091130 Package ID: l_cproc_p_11.1.064, l_cprof_p_11.1.064
 Auto Parallel: No
 File System: ext3
 System State: Run level 3 (multi-user)

Continued on next page



SPEC CFP2006 Result

Copyright 2006-2014 Standard Performance Evaluation Corporation

BOXX Technologies, Inc.

SPECfp_rate2006 = **296**

3DBOXX WORKSTATION 8550 EXXTREME

SPECfp_rate_base2006 = **284**

CPU2006 license: 3314

Test date: Oct-2010

Test sponsor: BOXX Technologies, Inc.

Hardware Availability: Sep-2010

Tested by: BOXX Technologies, Inc.

Software Availability: Sep-2010

L3 Cache: 12 MB I+D on chip per chip
 Other Cache: None
 Memory: 48 GB (12 x 4 GB 2Rx4 PC3-10600R-9, ECC)
 Disk Subsystem: 1 x 300 GB SATA II, 10,000 RPM
 Other Hardware: None

Base Pointers: 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	24	1499	218	<u>1704</u>	<u>191</u>	1723	189	12	<u>735</u>	<u>222</u>	734	222	735	222
416.gamess	24	1146	410	1177	399	<u>1172</u>	<u>401</u>	12	<u>589</u>	<u>399</u>	589	399	590	398
433.milc	24	915	241	<u>916</u>	<u>241</u>	916	241	24	<u>915</u>	<u>241</u>	915	241	915	241
434.zeusmp	24	611	357	637	343	<u>612</u>	<u>357</u>	24	611	357	637	343	<u>612</u>	<u>357</u>
435.gromacs	24	<u>448</u>	<u>383</u>	447	383	448	383	24	<u>440</u>	<u>389</u>	439	390	443	387
436.cactusADM	24	764	375	<u>765</u>	<u>375</u>	765	375	24	764	375	<u>765</u>	<u>375</u>	765	375
437.leslie3d	24	1547	146	<u>1547</u>	<u>146</u>	1547	146	12	<u>737</u>	<u>153</u>	737	153	737	153
444.namd	24	526	366	<u>524</u>	<u>367</u>	519	371	24	<u>508</u>	<u>379</u>	510	378	507	380
447.dealII	24	555	494	<u>556</u>	<u>494</u>	559	491	24	<u>561</u>	<u>489</u>	559	491	570	482
450.soplex	24	1166	172	1166	172	<u>1166</u>	<u>172</u>	12	511	196	<u>511</u>	<u>196</u>	511	196
453.povray	24	233	547	231	553	<u>232</u>	<u>550</u>	24	194	657	192	665	<u>194</u>	<u>659</u>
454.calculix	24	424	467	428	463	<u>424</u>	<u>466</u>	24	424	467	428	463	<u>424</u>	<u>466</u>
459.GemsFDTD	24	1816	140	<u>1814</u>	<u>140</u>	1814	140	12	<u>893</u>	<u>143</u>	893	143	893	143
465.tonto	24	<u>684</u>	<u>345</u>	668	353	697	339	24	623	379	645	366	<u>638</u>	<u>370</u>
470.lbm	24	2360	140	<u>2361</u>	<u>140</u>	2361	140	12	1135	145	<u>1135</u>	<u>145</u>	1136	145
481.wrf	24	989	271	<u>989</u>	<u>271</u>	988	271	24	989	271	<u>989</u>	<u>271</u>	988	271
482.sphinx3	24	1863	251	<u>1863</u>	<u>251</u>	1867	251	24	1767	265	1774	264	<u>1770</u>	<u>264</u>

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

Submit Notes

The config file option 'submit' was used.
numactl was used to bind copies to the cores

General Notes

Binaries were compiled on SLES 10 with Binutils 2.18.50.0.7.20080502

Base Compiler Invocation

C benchmarks:
icc -m64

Continued on next page



SPEC CFP2006 Result

Copyright 2006-2014 Standard Performance Evaluation Corporation

BOXX Technologies, Inc.

SPECfp_rate2006 = 296

3DBOXX WORKSTATION 8550 EXXTREME

SPECfp_rate_base2006 = 284

CPU2006 license: 3314

Test date: Oct-2010

Test sponsor: BOXX Technologies, Inc.

Hardware Availability: Sep-2010

Tested by: BOXX Technologies, Inc.

Software Availability: Sep-2010

Base Compiler Invocation (Continued)

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:

-xSSE4.2 -ipo -O3 -no-prec-div -static

C++ benchmarks:

-xSSE4.2 -ipo -O3 -no-prec-div -static

Fortran benchmarks:

-xSSE4.2 -ipo -O3 -no-prec-div -static

Benchmarks using both Fortran and C:

-xSSE4.2 -ipo -O3 -no-prec-div -static



SPEC CFP2006 Result

Copyright 2006-2014 Standard Performance Evaluation Corporation

BOXX Technologies, Inc.

SPECfp_rate2006 = 296

3DBOXX WORKSTATION 8550 EXXTREME

SPECfp_rate_base2006 = 284

CPU2006 license: 3314

Test date: Oct-2010

Test sponsor: BOXX Technologies, Inc.

Hardware Availability: Sep-2010

Tested by: BOXX Technologies, Inc.

Software Availability: Sep-2010

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
 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

Peak Optimization Flags

C benchmarks:

433.milc: -xSSE4.2(pass 2) -prof-gen(pass 1) -ipo(pass 2) -O3(pass 2)
 -no-prec-div(pass 2) -static(pass 2) -prof-use(pass 2)
 -fno-alias -opt-prefetch

470.lbm: -xSSE4.2(pass 2) -prof-gen(pass 1) -ipo(pass 2) -O3(pass 2)
 -no-prec-div(pass 2) -static(pass 2) -prof-use(pass 2)
 -opt-malloc-options=3 -ansi-alias -auto-ilp32

Continued on next page



SPEC CFP2006 Result

Copyright 2006-2014 Standard Performance Evaluation Corporation

BOXX Technologies, Inc.

SPECfp_rate2006 = 296

3DBOXX WORKSTATION 8550 EXXTREME

SPECfp_rate_base2006 = 284

CPU2006 license: 3314

Test date: Oct-2010

Test sponsor: BOXX Technologies, Inc.

Hardware Availability: Sep-2010

Tested by: BOXX Technologies, Inc.

Software Availability: Sep-2010

Peak Optimization Flags (Continued)

482.sphinx3: -xSSE4.2 -ipo -O3 -no-prec-div -static -unroll2

C++ benchmarks:

444.namd: -xSSE4.2(pass 2) -prof-gen(pass 1) -ipo(pass 2) -O3(pass 2)
-no-prec-div(pass 2) -static(pass 2) -prof-use(pass 2)
-fno-alias -auto-ilp32

447.dealII: -xSSE4.2(pass 2) -prof-gen(pass 1) -ipo(pass 2) -O3(pass 2)
-no-prec-div(pass 2) -static(pass 2) -prof-use(pass 2)
-unroll2 -ansi-alias -scalar-rep-

450.soplex: -xSSE4.2(pass 2) -prof-gen(pass 1) -ipo(pass 2) -O3(pass 2)
-no-prec-div(pass 2) -static(pass 2) -prof-use(pass 2)
-opt-malloc-options=3

453.povray: -xSSE4.2(pass 2) -prof-gen(pass 1) -ipo(pass 2) -O3(pass 2)
-no-prec-div(pass 2) -static(pass 2) -prof-use(pass 2)
-unroll4 -ansi-alias

Fortran benchmarks:

410.bwaves: -xSSE4.2 -ipo -O3 -no-prec-div -static -opt-prefetch

416.gamess: -xSSE4.2(pass 2) -prof-gen(pass 1) -ipo(pass 2) -O3(pass 2)
-no-prec-div(pass 2) -static(pass 2) -prof-use(pass 2)
-unroll2 -Ob0 -ansi-alias -scalar-rep-

434.zeusmp: basepeak = yes

437.leslie3d: -xSSE4.2 -ipo -O3 -no-prec-div -static

459.GemsFDTD: -xSSE4.2(pass 2) -prof-gen(pass 1) -ipo(pass 2) -O3(pass 2)
-no-prec-div(pass 2) -static(pass 2) -prof-use(pass 2)
-unroll2 -Ob0

465.tonto: -xSSE4.2(pass 2) -prof-gen(pass 1) -ipo(pass 2) -O3(pass 2)
-no-prec-div(pass 2) -static(pass 2) -prof-use(pass 2)
-unroll4 -auto -inline-calloc -opt-malloc-options=3

Benchmarks using both Fortran and C:

435.gromacs: -xSSE4.2(pass 2) -prof-gen(pass 1) -ipo(pass 2) -O3(pass 2)
-no-prec-div(pass 2) -static(pass 2) -prof-use(pass 2)
-opt-prefetch -auto-ilp32

436.cactusADM: basepeak = yes

454.calculix: basepeak = yes

Continued on next page



SPEC CFP2006 Result

Copyright 2006-2014 Standard Performance Evaluation Corporation

BOXX Technologies, Inc.

SPECfp_rate2006 = 296

3DBOXX WORKSTATION 8550 EXXTREME

SPECfp_rate_base2006 = 284

CPU2006 license: 3314

Test date: Oct-2010

Test sponsor: BOXX Technologies, Inc.

Hardware Availability: Sep-2010

Tested by: BOXX Technologies, Inc.

Software Availability: Sep-2010

Peak Optimization Flags (Continued)

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-ic11.1-linux64-revE.20100316.html>

You can also download the XML flags source by saving the following link:

<http://www.spec.org/cpu2006/flags/Intel-ic11.1-linux64-revE.20100316.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 v1.1.
Report generated on Wed Jul 23 14:27:44 2014 by SPEC CPU2006 PS/PDF formatter v6932.
Originally published on 23 November 2010.