



SPEC[®] CFP2006 Result

Copyright 2006-2014 Standard Performance Evaluation Corporation

Cisco Systems

SPECfp[®]_rate2006 = 241

Cisco UCS C210 M2 (Intel Xeon X5650, 2.67 GHz)

SPECfp_rate_base2006 = 234

CPU2006 license: 9019

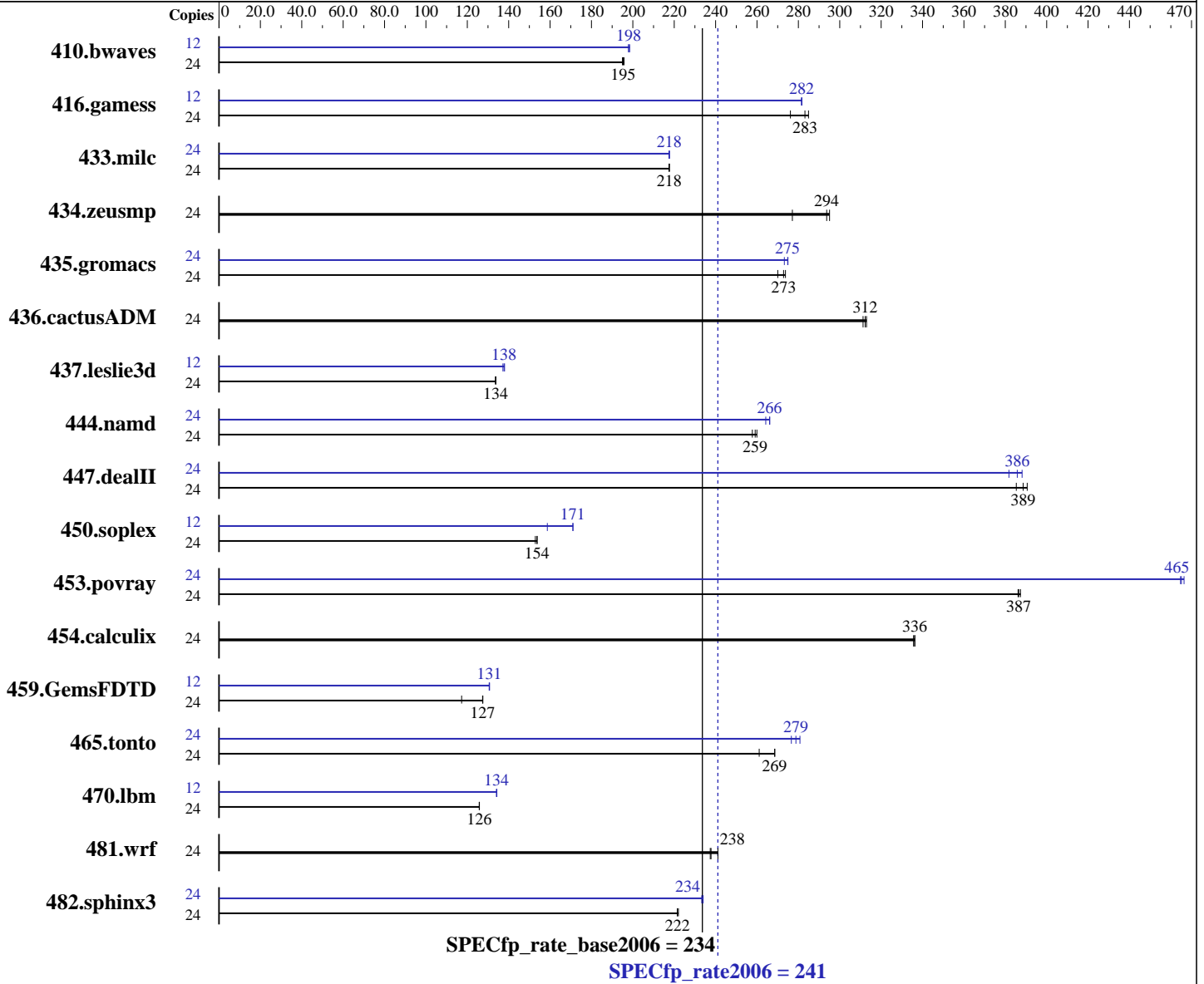
Test date: Sep-2010

Test sponsor: Cisco Systems

Hardware Availability: Apr-2010

Tested by: Cisco Systems

Software Availability: Jan-2010



Hardware

CPU Name: Intel Xeon X5650
 CPU Characteristics: Intel Turbo Boost Technology up to 3.06 GHz
 CPU MHz: 2667
 FPU: Integrated
 CPU(s) enabled: 12 cores, 2 chips, 6 cores/chip, 2 threads/core
 CPU(s) orderable: 1, 2 chips
 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 Server 11 (x86_64), Kernel 2.6.27-15-2-default, RC4
 Compiler: Intel C++ and Fortran Compiler 11.1 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

Cisco Systems

SPECfp_rate2006 = 241

Cisco UCS C210 M2 (Intel Xeon X5650, 2.67 GHz)

SPECfp_rate_base2006 = 234

CPU2006 license: 9019

Test date: Sep-2010

Test sponsor: Cisco Systems

Hardware Availability: Apr-2010

Tested by: Cisco Systems

Software Availability: Jan-2010

L3 Cache: 12 MB I+D on chip per chip
Other Cache: None
Memory: 48 GB (12 x 4GB DDR3-1333 MHz DR RDIMM, CL9, ECC)
Disk Subsystem: 146 GB SAS, 10K 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	1673	195	<u>1670</u>	<u>195</u>	1666	196	12	824	198	822	198	<u>824</u>	<u>198</u>
416.gamess	24	1649	285	1702	276	<u>1659</u>	<u>283</u>	12	835	282	<u>834</u>	<u>282</u>	834	282
433.milc	24	1012	218	1013	218	<u>1012</u>	<u>218</u>	24	<u>1012</u>	<u>218</u>	1013	217	1012	218
434.zeusmp	24	<u>744</u>	<u>294</u>	740	295	788	277	24	<u>744</u>	<u>294</u>	740	295	788	277
435.gromacs	24	626	274	635	270	<u>628</u>	<u>273</u>	24	623	275	627	273	<u>624</u>	<u>275</u>
436.cactusADM	24	916	313	921	311	<u>918</u>	<u>312</u>	24	916	313	921	311	<u>918</u>	<u>312</u>
437.leslie3d	24	<u>1687</u>	<u>134</u>	1686	134	1688	134	12	817	138	<u>819</u>	<u>138</u>	822	137
444.namd	24	740	260	747	258	<u>743</u>	<u>259</u>	24	<u>723</u>	<u>266</u>	723	266	728	264
447.dealII	24	<u>706</u>	<u>389</u>	703	391	713	385	24	719	382	707	388	<u>712</u>	<u>386</u>
450.soplex	24	1309	153	<u>1302</u>	<u>154</u>	1302	154	12	631	159	<u>585</u>	<u>171</u>	585	171
453.povray	24	330	387	<u>330</u>	<u>387</u>	331	386	24	<u>275</u>	<u>465</u>	275	465	274	466
454.calculix	24	589	336	590	336	<u>589</u>	<u>336</u>	24	589	336	590	336	<u>589</u>	<u>336</u>
459.GemsFDTD	24	2172	117	<u>1999</u>	<u>127</u>	1997	128	12	974	131	<u>975</u>	<u>131</u>	975	131
465.tonto	24	879	269	905	261	<u>879</u>	<u>269</u>	24	854	277	841	281	<u>847</u>	<u>279</u>
470.lbm	24	<u>2621</u>	<u>126</u>	2620	126	2622	126	12	1228	134	<u>1229</u>	<u>134</u>	1229	134
481.wrf	24	1112	241	1129	237	<u>1127</u>	<u>238</u>	24	1112	241	1129	237	<u>1127</u>	<u>238</u>
482.sphinx3	24	2112	221	<u>2111</u>	<u>222</u>	2107	222	24	2005	233	<u>2000</u>	<u>234</u>	1999	234

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

Operating System Notes

ulimit -s unlimited was used to set the stacksize to unlimited prior to run

General Notes

Binaries were compiled on SLES 10 with Binutils 2.18.50.0.7.20080502



SPEC CFP2006 Result

Copyright 2006-2014 Standard Performance Evaluation Corporation

Cisco Systems

SPECfp_rate2006 = 241

Cisco UCS C210 M2 (Intel Xeon X5650, 2.67 GHz)

SPECfp_rate_base2006 = 234

CPU2006 license: 9019

Test date: Sep-2010

Test sponsor: Cisco Systems

Hardware Availability: Apr-2010

Tested by: Cisco Systems

Software Availability: Jan-2010

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:

-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

Cisco Systems

SPECfp_rate2006 = 241

Cisco UCS C210 M2 (Intel Xeon X5650, 2.67 GHz)

SPECfp_rate_base2006 = 234

CPU2006 license: 9019

Test date: Sep-2010

Test sponsor: Cisco Systems

Hardware Availability: Apr-2010

Tested by: Cisco Systems

Software Availability: Jan-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

Cisco Systems

SPECfp_rate2006 = 241

Cisco UCS C210 M2 (Intel Xeon X5650, 2.67 GHz)

SPECfp_rate_base2006 = 234

CPU2006 license: 9019

Test date: Sep-2010

Test sponsor: Cisco Systems

Hardware Availability: Apr-2010

Tested by: Cisco Systems

Software Availability: Jan-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

Cisco Systems

SPECfp_rate2006 = 241

Cisco UCS C210 M2 (Intel Xeon X5650, 2.67 GHz)

SPECfp_rate_base2006 = 234

CPU2006 license: 9019

Test sponsor: Cisco Systems

Tested by: Cisco Systems

Test date: Sep-2010

Hardware Availability: Apr-2010

Software Availability: Jan-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-revG.20100929.html>

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

<http://www.spec.org/cpu2006/flags/Intel-ic11.1-linux64-revG.20100929.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 14:49:50 2014 by SPEC CPU2006 PS/PDF formatter v6932.
Originally published on 12 October 2010.