SPEC® CFP2006 Result

Copyright 2006-2014 Standard Performance Evaluation Corporation

Itautec

$SPECfp^{®}\_rate2006 = 241$

Servidor Itautec MP224 (Intel Xeon X5670)

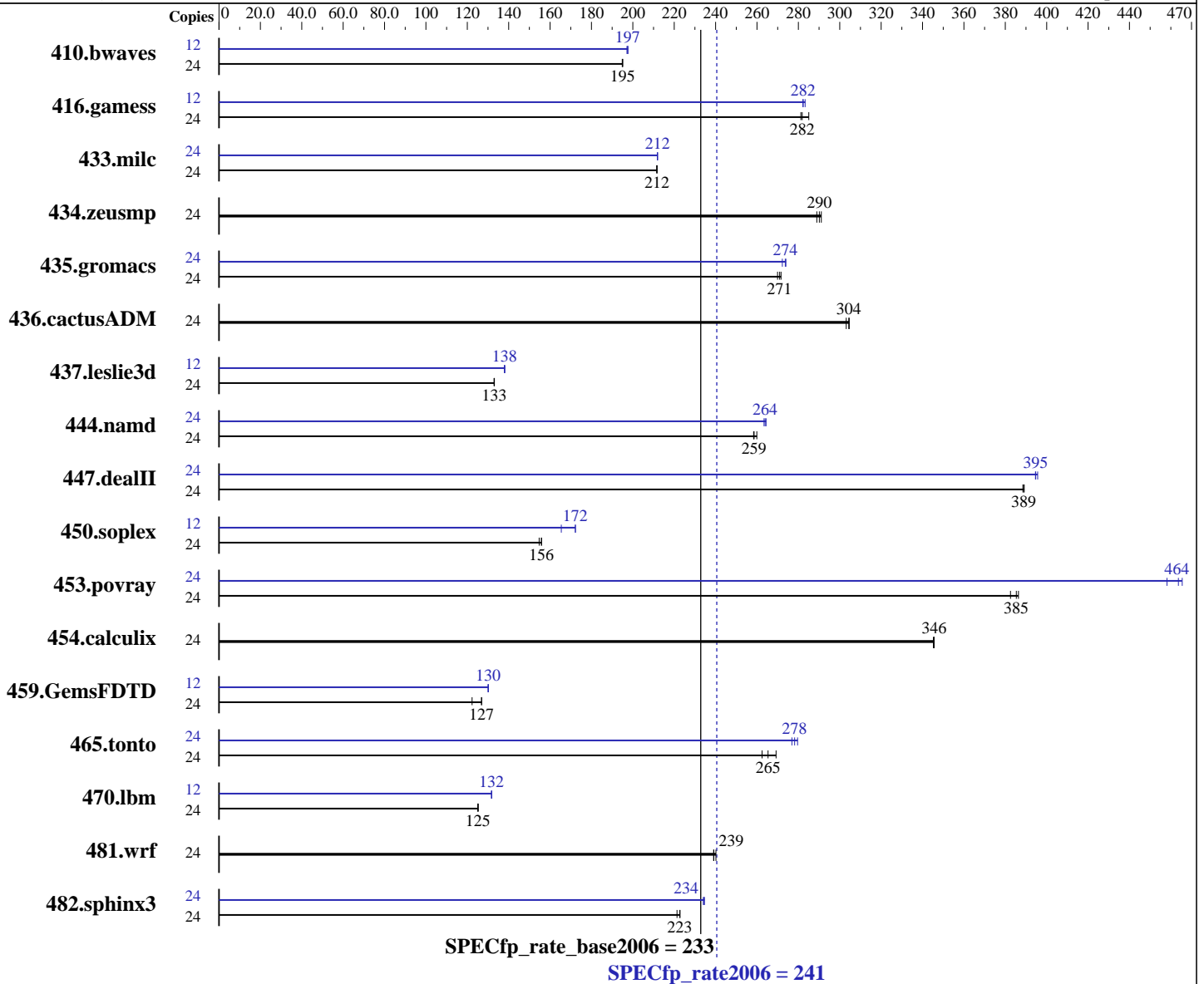$SPECfp\_rate\_base2006 = 233$

CPU2006 license: 9001 **Test date:** Dec-2010
Test sponsor: Itautec **Hardware Availability:** Feb-2011
Tested by: Itautec **Software Availability:** Apr-2010

Hardware

CPU Name: Intel Xeon X5670
CPU Characteristics: Intel Turbo Boost Technology up to 3.33 GHz
CPU MHz: 2933
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 2.6.27.19-5-smp
Compiler: Intel C++ and Fortran Professional Compiler 11.1 for Linux
Build 20100414 Package ID: l_cproc_p_11.1.072, l_cprof_p_11.1.072
Auto Parallel: No
File System: ext3
System State: Run level 3 (multi-user)
Continued on next page

Standard Performance Evaluation Corporation
info@spec.org
http://www.spec.org/

Page 1

SPEC CFP2006 Result
Copyright 2006-2014 Standard Performance Evaluation Corporation

Itautec

Servidor Itautec MP224 (Intel Xeon X5670)

SPECfp_rate2006 = 241

SPECfp_rate_base2006 = 233

CPU2006 license: 9001	**Test date:** Dec-2010
Test sponsor: Itautec	**Hardware Availability:** Feb-2011
Tested by: Itautec	**Software Availability:** Apr-2010

L3 Cache:	12 MB I+D on chip per chip	Base Pointers:	64-bit
Other Cache:	None	Peak Pointers:	32/64-bit
Memory:	48 GB (12 x 4 GB 2Rx4 PC3-10600R-9, ECC)	Other Software:	None
Disk Subsystem:	1 x 160 GB SATA-2, 7200 RPM		
Other Hardware:	None		

Results Table

Benchmark	Base						Peak						
	Copies	Seconds	Ratio	Seconds	Ratio	Seconds	Ratio	Copies	Seconds	Ratio	Seconds	Ratio	Seconds	Ratio
410.bwaves	24	1672	195	**1672**	**195**	1674	195	12	827	197	825	198	**826**	**197**
416.gamess	24	1649	285	**1667**	**282**	1671	281	12	**832**	**282**	833	282	829	283
433.milc	24	1041	212	**1041**	**212**	1041	212	24	1040	212	1039	212	**1040**	**212**
434.zeusmp	24	756	289	750	291	**753**	**290**	24	756	289	750	291	**753**	**290**
435.gromacs	24	**632**	**271**	631	272	635	270	24	629	272	625	274	**626**	**274**
436.cactusADM	24	942	305	**942**	**304**	946	303	24	942	305	**942**	**304**	946	303
437.leslie3d	24	**1696**	**133**	1695	133	1697	133	12	818	138	**818**	**138**	816	138
444.namd	24	**744**	**259**	741	260	745	258	24	731	263	**729**	**264**	728	264
447.dealII	24	706	389	707	389	**706**	**389**	24	694	396	**696**	**395**	696	395
450.soplex	24	1294	155	1284	156	**1284**	**156**	12	605	165	**581**	**172**	581	172
453.povray	24	330	386	334	383	**331**	**385**	24	274	465	279	458	**275**	**464**
454.calculix	24	**573**	**346**	573	345	573	346	24	**573**	**346**	573	345	573	346
459.GemsFDTD	24	2082	122	2006	127	**2007**	**127**	12	978	130	**978**	**130**	979	130
465.tonto	24	900	262	877	269	**890**	**265**	24	**849**	**278**	845	280	853	277
470.lbm	24	2632	125	**2635**	**125**	2637	125	12	**1252**	**132**	1252	132	1251	132
481.wrf	24	1116	240	**1121**	**239**	1121	239	24	1116	240	**1121**	**239**	1121	239
482.sphinx3	24	2113	221	2100	223	**2100**	**223**	24	1998	234	1994	235	**1995**	**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.

Base Compiler Invocation

    C benchmarks:
        icc   -m64

SPEC CFP2006 Result
Copyright 2006-2014 Standard Performance Evaluation Corporation

Itautec

Servidor Itautec MP224 (Intel Xeon X5670)

SPECfp_rate2006 = 241

SPECfp_rate_base2006 = 233

CPU2006 license: 9001
Test sponsor: Itautec
Tested by: Itautec

Test date: Dec-2010
Hardware Availability: Feb-2011
Software Availability: Apr-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

Itautec

Servidor Itautec MP224 (Intel Xeon X5670)

SPECfp_rate2006 = 241

SPECfp_rate_base2006 = 233

CPU2006 license: 9001
Test sponsor: Itautec
Tested by: Itautec

Test date: Dec-2010
Hardware Availability: Feb-2011
Software Availability: Apr-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

Itautec

Servidor Itautec MP224 (Intel Xeon X5670)

SPECfp_rate2006 =   241

SPECfp_rate_base2006 =   233

CPU2006 license: 9001
Test sponsor: Itautec
Tested by: Itautec

Test date: Dec-2010
Hardware Availability: Feb-2011
Software Availability: Apr-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

SPEC CFP2006 Result
Copyright 2006-2014 Standard Performance Evaluation Corporation

Itautec

Servidor Itautec MP224 (Intel Xeon X5670)

SPECfp_rate2006 = 241

SPECfp_rate_base2006 = 233

CPU2006 license: 9001
Test sponsor: Itautec
Tested by: Itautec

Test date: Dec-2010
Hardware Availability: Feb-2011
Software Availability: Apr-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.20101123.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.20101123.xml

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 16:55:00 2014 by SPEC CPU2006 PS/PDF formatter v6932.
Originally published on 18 January 2011.