SPEC® CFP2006 Result
Copyright 2006-2014 Standard Performance Evaluation Corporation

Intel Corporation

Supermicro SuperServer 6026T-NTR+ (Intel Xeon E5504, 2.00 GHz)

$SPECfp®\_rate2006 = \quad 115$

$SPECfp\_rate\_base2006 = \quad 111$
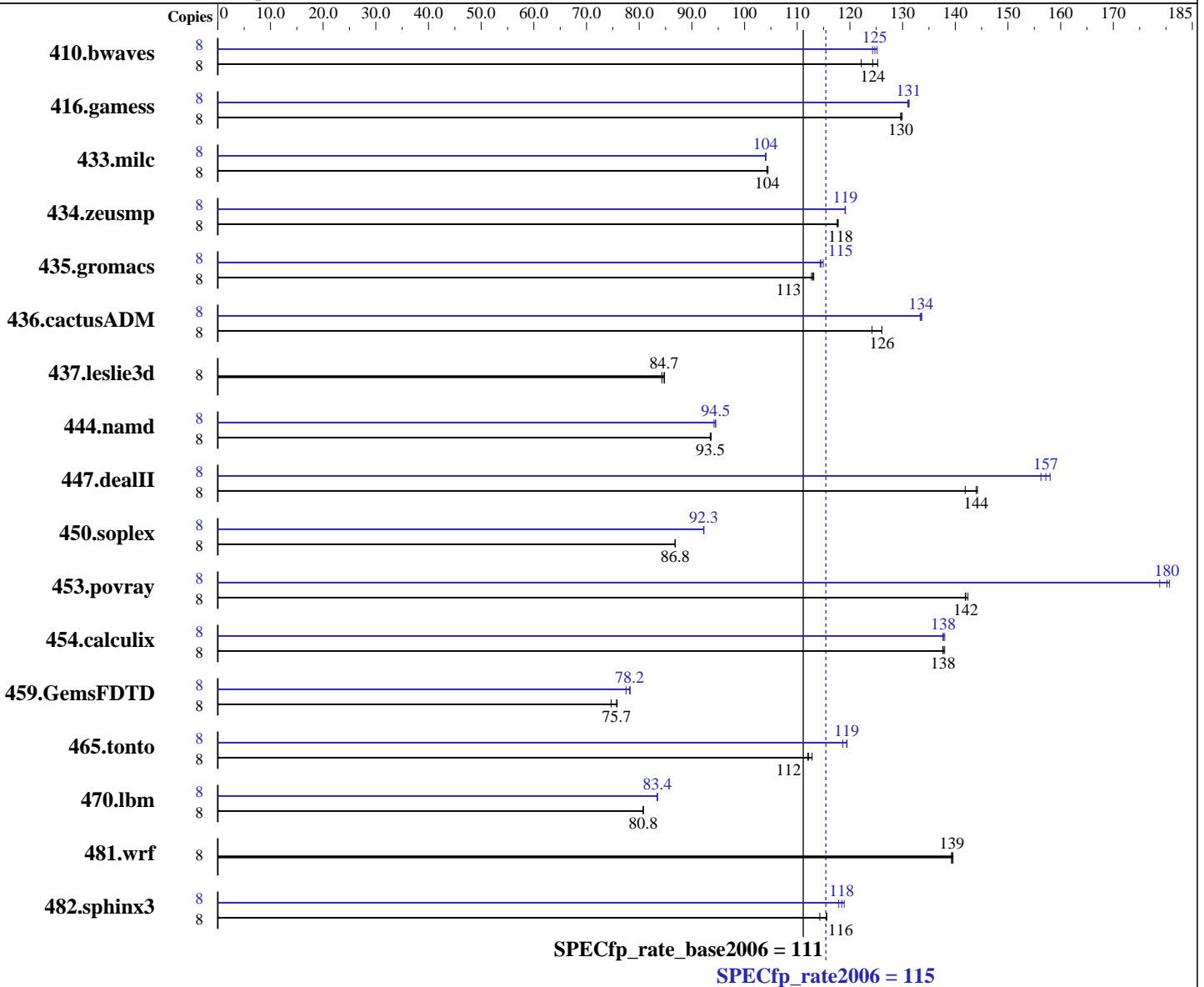
CPU2006 license: 13
Test sponsor: Intel Corporation
Tested by: Intel Corporation

Test date: Mar-2009
Hardware Availability: Mar-2009
Software Availability: Feb-2009

Copies		
410.bwaves 8	125	
8	124	
416.gamess 8	131	
8	130	
433.milc 8	104	
8	104	
434.zeusmp 8	119	
8	118	
435.gromacs 8	115	
8	113	
436.cactusADM 8	134	
8	126	
437.leslie3d 8	84.7	
444.namd 8	94.5	
8	93.5	
447.dealII 8	157	
8	144	
450.soplex 8	92.3	
8	86.8	
453.povray 8	180	
8	142	
454.calculix 8	138	
8	138	
459.GemsFDTD 8	78.2	
8	75.7	
465.tonto 8	119	
8	112	
470.lbm 8	83.4	
8	80.8	
481.wrf 8	139	
482.sphinx3 8	118	
8	116	

SPECfp_rate_base2006 = 111

SPECfp_rate2006 = 115

Hardware

CPU Name: Intel Xeon E5504
CPU Characteristics:
CPU MHz: 2000
FPU: Integrated
CPU(s) enabled: 8 cores, 2 chips, 4 cores/chip
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 SLES10 SP2, Kernel 2.6.16.60-0.34-smp for x86_64
Compiler: Intel C++ and Fortran Compiler 11.0 for Linux Build 20090131 Package ID: l_cproc_p_11.0.080, l_cprof_p_11.0.080
Auto Parallel: No
File System: ReiserFS
System State: Run level 3 (multi-user)
Base Pointers: 64-bit

Continued on next page

SPEC CFP2006 Result
Copyright 2006-2014 Standard Performance Evaluation Corporation

Intel Corporation

Supermicro SuperServer 6026T-NTR+ (Intel Xeon E5504, 2.00 GHz)

SPECfp_rate2006 =   115

SPECfp_rate_base2006 =   111

CPU2006 license: 13	
Test sponsor: Intel Corporation	
Tested by: Intel Corporation	

Test date: Mar-2009	
Hardware Availability: Mar-2009	
Software Availability: Feb-2009	

L3 Cache:	4 MB I+D on chip per chip
Other Cache:	None
Memory:	24 GB (12 x 2GB DDR3-1066, CL7)
Disk Subsystem:	1 x 150 GB SATA, 10000RPM
Other Hardware:	None

Peak Pointers:	32/64-bit
Other Software:	Binutils 2.18.50.0.7.20080502

Results Table

Benchmark	Base Copies	Seconds	Ratio	Seconds	Ratio	Seconds	Ratio	Peak Copies	Seconds	Ratio	Seconds	Ratio	Seconds	Ratio
410.bwaves	8	890	122	**875**	**124**	868	125	8	868	125	875	124	**872**	**125**
416.gamess	8	1208	130	1206	130	**1208**	**130**	8	1196	131	1194	131	**1194**	**131**
433.milc	8	703	104	**704**	**104**	704	104	8	**706**	**104**	706	104	706	104
434.zeusmp	8	**619**	**118**	618	118	619	118	8	**611**	**119**	611	119	611	119
435.gromacs	8	505	113	507	113	**506**	**113**	8	497	115	**499**	**115**	500	114
436.cactusADM	8	770	124	**758**	**126**	758	126	8	717	133	715	134	**716**	**134**
437.leslie3d	8	887	84.8	892	84.3	**888**	**84.7**	8	887	84.8	892	84.3	**888**	**84.7**
444.namd	8	686	93.5	**686**	**93.5**	685	93.7	8	**679**	**94.5**	681	94.2	679	94.5
447.dealII	8	645	142	635	144	**636**	**144**	8	**582**	**157**	586	156	579	158
450.soplex	8	768	86.9	**768**	**86.8**	769	86.8	8	**723**	**92.3**	723	92.2	723	92.3
453.povray	8	300	142	299	142	**300**	**142**	8	238	179	236	181	**236**	**180**
454.calculix	8	478	138	**479**	**138**	479	138	8	478	138	**479**	**138**	479	138
459.GemsFDTD	8	1137	74.7	1119	75.8	**1121**	**75.7**	8	1095	77.5	**1086**	**78.2**	1084	78.3
465.tonto	8	698	113	**702**	**112**	703	112	8	663	119	**659**	**119**	659	119
470.lbm	8	**1361**	**80.8**	1361	80.8	1361	80.8	8	1317	83.5	**1317**	**83.4**	1318	83.4
481.wrf	8	640	140	**641**	**139**	642	139	8	640	140	**641**	**139**	642	139
482.sphinx3	8	**1350**	**116**	1364	114	1349	116	8	1311	119	1323	118	**1316**	**118**

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
```

Base Compiler Invocation

C benchmarks:
    icc

C++ benchmarks:
    icpc

SPEC CFP2006 Result
Copyright 2006-2014 Standard Performance Evaluation Corporation

Intel Corporation

Supermicro SuperServer 6026T-NTR+ (Intel Xeon E5504, 2.00 GHz)

SPECfp_rate2006 = 115

SPECfp_rate_base2006 = 111

CPU2006 license: 13
Test sponsor: Intel Corporation
Tested by: Intel Corporation

Test date: Mar-2009
Hardware Availability: Mar-2009
Software Availability: Feb-2009

Base Compiler Invocation (Continued)

Fortran benchmarks:
```
ifort
```

Benchmarks using both Fortran and C:
```
icc ifort
```

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
```

Peak Compiler Invocation

C benchmarks (except as noted below):
```
icc
```

Intel Corporation

Supermicro SuperServer 6026T-NTR+ (Intel Xeon E5504, 2.00 GHz)

SPECfp_rate2006 =   115

SPECfp_rate_base2006 =   111

CPU2006 license: 13

Test sponsor: Intel Corporation

Tested by: Intel Corporation

Test date: Mar-2009

Hardware Availability: Mar-2009

Software Availability: Feb-2009

Peak Compiler Invocation (Continued)

482.sphinx3: `icc -m32`

C++ benchmarks (except as noted below):
`icpc`

450.soplex: `icpc -m32`

Fortran benchmarks:
`ifort`

Benchmarks using both Fortran and C:
`icc ifort`

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`

470.lbm: `-xSSE4.2 -ipo -O3 -no-prec-div -static -opt-prefetch`
`-auto-ilp32`

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

C++ benchmarks:

Intel Corporation

Supermicro SuperServer 6026T-NTR+ (Intel Xeon E5504, 2.00 GHz)

$SPECfp_rate2006 = $ 115

$SPECfp_rate_base2006 = $ 111

CPU2006 license: 13
Test sponsor: Intel Corporation
Tested by: Intel Corporation

Test date: Mar-2009
Hardware Availability: Mar-2009
Software Availability: Feb-2009

Peak Optimization Flags (Continued)

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: -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)

437.leslie3d: basepeak = yes

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 -opt-prefetch

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

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: -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 -opt-prefetch -auto-ilp32

454.calculix: -xSSE4.2 -ipo -O3 -no-prec-div -static -auto-ilp32

SPEC CFP2006 Result

Intel Corporation

Supermicro SuperServer 6026T-NTR+ (Intel Xeon E5504, 2.00 GHz)

$SPECfp\_rate2006 = 115$

$SPECfp\_rate\_base2006 = 111$

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-ic11.0-fp-linux64-revA.20090710.04.html

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

http://www.spec.org/cpu2006/flags/Intel-ic11.0-fp-linux64-revA.20090710.04.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 Tue Jul 22 23:25:32 2014 by SPEC CPU2006 PS/PDF formatter v6932.
Originally published on 31 March 2009.