



SPEC® CFP2006 Result

Copyright 2006-2014 Standard Performance Evaluation Corporation

Supermicro

SuperServer 1017C-TF (X9SCL-F, Intel Xeon E3-1240 v2)

SPECfp®2006 = 69.5

SPECfp_base2006 = 67.8

CPU2006 license: 001176

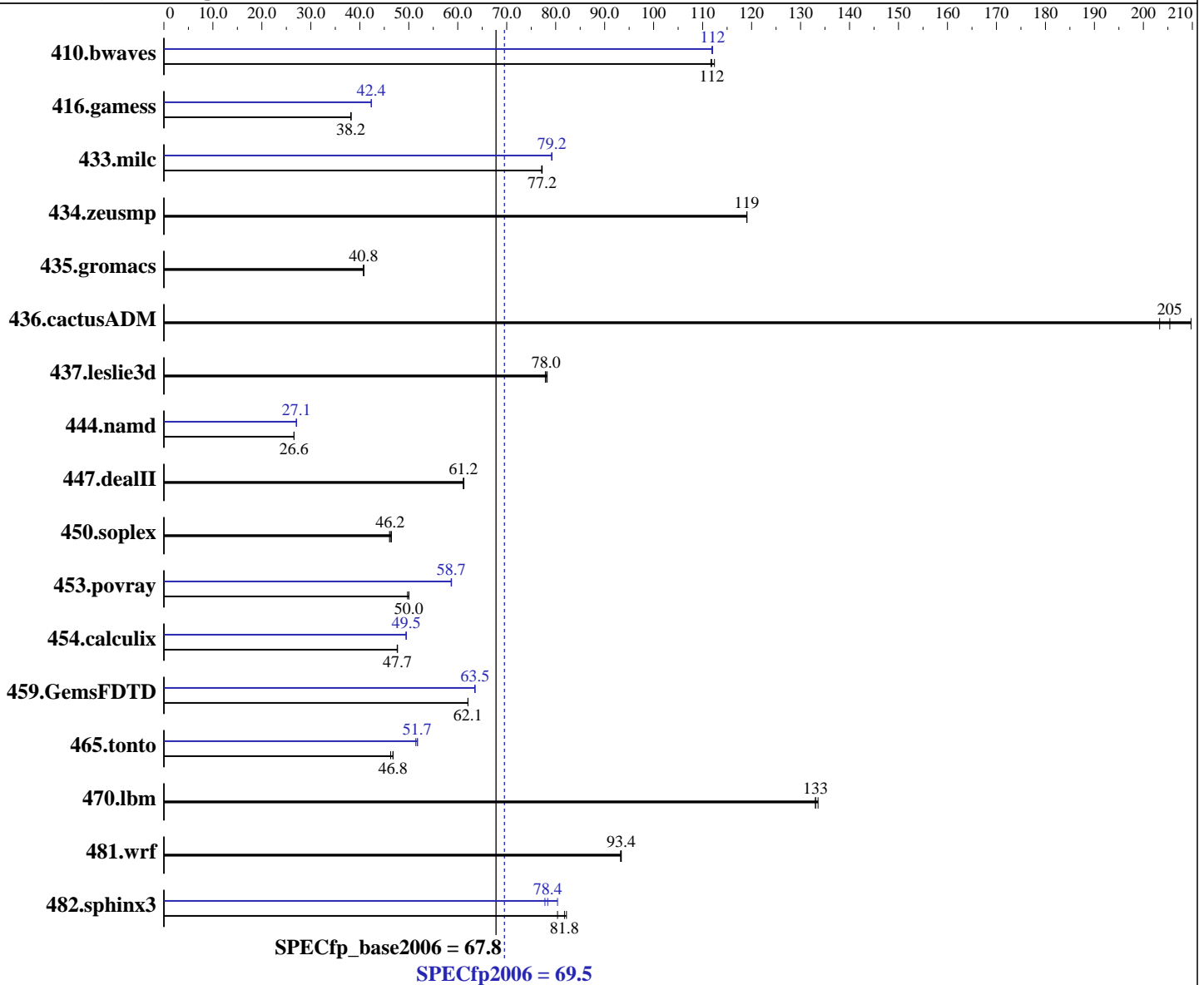
Test sponsor: Supermicro

Tested by: Supermicro

Test date: Jun-2012

Hardware Availability: May-2012

Software Availability: Dec-2011



Hardware

CPU Name: Intel Xeon E3-1240 v2
 CPU Characteristics: Intel Turbo Boost Technology up to 3.80 GHz
 CPU MHz: 3400
 FPU: Integrated
 CPU(s) enabled: 4 cores, 1 chip, 4 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 6.2 (Santiago), Kernel 2.6.32-220.el6.x86_64
 Compiler: C/C++: Version 12.1.0.225 of Intel C++ Studio XE for Linux; Fortran: Version 12.1.0.225 of Intel Fortran Studio XE for Linux
 Auto Parallel: Yes
 File System: ext4

Continued on next page



SPEC CFP2006 Result

Copyright 2006-2014 Standard Performance Evaluation Corporation

Supermicro

SuperServer 1017C-TF (X9SCL-F, Intel Xeon E3-1240 v2)

SPECfp2006 = **69.5**

SPECfp_base2006 = **67.8**

CPU2006 license: 001176

Test sponsor: Supermicro

Tested by: Supermicro

Test date: Jun-2012

Hardware Availability: May-2012

Software Availability: Dec-2011

L3 Cache: 8 MB I+D on chip per chip
Other Cache: None
Memory: 16 GB (2 x 8 GB 2Rx8 PC3-12800E-11, ECC)
Disk Subsystem: 1 x 500 GB SATA II, 7200 RPM
Other Hardware: None

System State: Run level 3 (multi-user)
Base Pointers: 64-bit
Peak Pointers: 32/64-bit
Other Software: None

Results Table

Benchmark	Base						Peak					
	Seconds	Ratio	Seconds	Ratio	Seconds	Ratio	Seconds	Ratio	Seconds	Ratio	Seconds	Ratio
410.bwaves	121	112	122	112	<u>121</u>	<u>112</u>	121	112	<u>121</u>	<u>112</u>	121	112
416.gamess	513	38.2	<u>513</u>	<u>38.2</u>	512	38.2	462	42.4	462	42.3	<u>462</u>	<u>42.4</u>
433.milc	119	77.2	119	77.1	<u>119</u>	<u>77.2</u>	116	79.1	<u>116</u>	<u>79.2</u>	116	79.2
434.zeusmp	<u>76.4</u>	<u>119</u>	76.4	119	76.4	119	<u>76.4</u>	<u>119</u>	76.4	119	76.4	119
435.gromacs	175	40.9	<u>175</u>	<u>40.8</u>	175	40.7	175	40.9	<u>175</u>	<u>40.8</u>	175	40.7
436.cactusADM	58.8	203	57.0	210	<u>58.2</u>	<u>205</u>	58.8	203	57.0	210	<u>58.2</u>	<u>205</u>
437.leslie3d	120	78.3	<u>120</u>	<u>78.0</u>	121	77.9	120	78.3	<u>120</u>	<u>78.0</u>	121	77.9
444.namd	302	26.6	<u>302</u>	<u>26.6</u>	302	26.6	296	27.1	296	27.1	<u>296</u>	<u>27.1</u>
447.dealII	187	61.3	187	61.1	<u>187</u>	<u>61.2</u>	187	61.3	187	61.1	<u>187</u>	<u>61.2</u>
450.soplex	179	46.5	<u>180</u>	<u>46.2</u>	181	46.1	179	46.5	<u>180</u>	<u>46.2</u>	181	46.1
453.povray	<u>106</u>	<u>50.0</u>	106	50.0	107	49.7	<u>90.6</u>	<u>58.7</u>	90.7	58.7	90.6	58.7
454.calculix	<u>173</u>	<u>47.7</u>	173	47.6	173	47.7	167	49.5	<u>167</u>	<u>49.5</u>	167	49.4
459.GemsFDTD	<u>171</u>	<u>62.1</u>	171	62.1	171	62.1	<u>167</u>	<u>63.5</u>	167	63.5	167	63.5
465.tonto	<u>210</u>	<u>46.8</u>	213	46.3	210	46.8	191	51.4	190	51.8	<u>190</u>	<u>51.7</u>
470.lbm	103	133	103	134	<u>103</u>	<u>133</u>	103	133	103	134	<u>103</u>	<u>133</u>
481.wrf	120	93.4	<u>120</u>	<u>93.4</u>	120	93.2	120	93.4	<u>120</u>	<u>93.4</u>	120	93.2
482.sphinx3	<u>238</u>	<u>81.8</u>	242	80.4	237	82.2	242	80.4	<u>249</u>	<u>78.4</u>	250	77.8

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

Operating System Notes

Stack size set to unlimited using "ulimit -s unlimited"
Transparent Huge Pages enabled with:
echo always > /sys/kernel/mm/redhat_transparent_hugepage/enabled

General Notes

Environment variables set by runspec before the start of the run:
KMP_AFFINITY = "granularity=fine,scatter"
LD_LIBRARY_PATH = "/home/cpu2006/libs/32:/home/cpu2006/libs/64"
OMP_NUM_THREADS = "4"

Binaries compiled on a system with 1x Core i7-860 CPU + 8GB memory using RHEL5.5



SPEC CFP2006 Result

Copyright 2006-2014 Standard Performance Evaluation Corporation

Supermicro

SuperServer 1017C-TF (X9SCL-F, Intel Xeon E3-1240 v2)

SPECfp2006 = 69.5

SPECfp_base2006 = 67.8

CPU2006 license: 001176
Test sponsor: Supermicro
Tested by: Supermicro

Test date: Jun-2012
Hardware Availability: May-2012
Software Availability: Dec-2011

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:
-xAVX -ipo -O3 -no-prec-div -static -parallel -opt-prefetch
-ansi-alias

C++ benchmarks:
-xAVX -ipo -O3 -no-prec-div -static -opt-prefetch -ansi-alias

Fortran benchmarks:
-xAVX -ipo -O3 -no-prec-div -static -parallel -opt-prefetch

Benchmarks using both Fortran and C:
-xAVX -ipo -O3 -no-prec-div -static -parallel -opt-prefetch
-ansi-alias



SPEC CFP2006 Result

Copyright 2006-2014 Standard Performance Evaluation Corporation

Supermicro

SuperServer 1017C-TF (X9SCL-F, Intel Xeon E3-1240 v2)

SPECfp2006 = 69.5

SPECfp_base2006 = 67.8

CPU2006 license: 001176
Test sponsor: Supermicro
Tested by: Supermicro

Test date: Jun-2012
Hardware Availability: May-2012
Software Availability: Dec-2011

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: -xAVX(pass 2) -prof-gen(pass 1) -ipo(pass 2) -O3(pass 2)
-no-prec-div(pass 2) -prof-use(pass 2) -static -auto-ilp32
-ansi-alias

470.lbm: basepeak = yes

482.sphinx3: -xAVX -ipo -O3 -no-prec-div -unroll2 -ansi-alias
-parallel

C++ benchmarks:

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

447.dealIII: basepeak = yes

450.soplex: basepeak = yes

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

Fortran benchmarks:

410.bwaves: -xAVX -ipo -O3 -no-prec-div -opt-prefetch -parallel
-static

Continued on next page



SPEC CFP2006 Result

Copyright 2006-2014 Standard Performance Evaluation Corporation

Supermicro

SuperServer 1017C-TF (X9SCL-F, Intel Xeon E3-1240 v2)

SPECfp2006 = 69.5

SPECfp_base2006 = 67.8

CPU2006 license: 001176

Test sponsor: Supermicro

Tested by: Supermicro

Test date: Jun-2012

Hardware Availability: May-2012

Software Availability: Dec-2011

Peak Optimization Flags (Continued)

416.gamess: -xAVX(pass 2) -prof-gen(pass 1) -ipo(pass 2) -O3(pass 2)
-no-prec-div(pass 2) -prof-use(pass 2) -unroll2
-inline-level=0 -scalar-rep- -static

434.zeusmp: basepeak = yes

437.leslie3d: basepeak = yes

459.GemsFDTD: -xAVX(pass 2) -prof-gen(pass 1) -ipo(pass 2) -O3(pass 2)
-no-prec-div(pass 2) -prof-use(pass 2) -unroll2
-inline-level=0 -opt-prefetch -parallel

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

Benchmarks using both Fortran and C:

435.gromacs: basepeak = yes

436.cactusADM: basepeak = yes

454.calculix: -xAVX -ipo -O3 -no-prec-div -auto-ilp32 -ansi-alias

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-ic12.1-official-linux64.20120425.html>

<http://www.spec.org/cpu2006/flags/Supermicro-Platform-Settings-revA.html>

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

<http://www.spec.org/cpu2006/flags/Intel-ic12.1-official-linux64.20120425.xml>

<http://www.spec.org/cpu2006/flags/Supermicro-Platform-Settings-revA.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 v1.2.

Report generated on Thu Jul 24 08:37:49 2014 by SPEC CPU2006 PS/PDF formatter v6932.

Originally published on 19 June 2012.