



SPEC® CFP2006 Result

Copyright 2006-2014 Standard Performance Evaluation Corporation

ASUSTeK Computer Inc.

SPECfp®2006 = **61.1**

ASUS RS300-E7(P8B-E/4L) Server System
(Intel Xeon E3-1280, 3.50 GHz)

SPECfp_base2006 = **58.9**

CPU2006 license: 9016

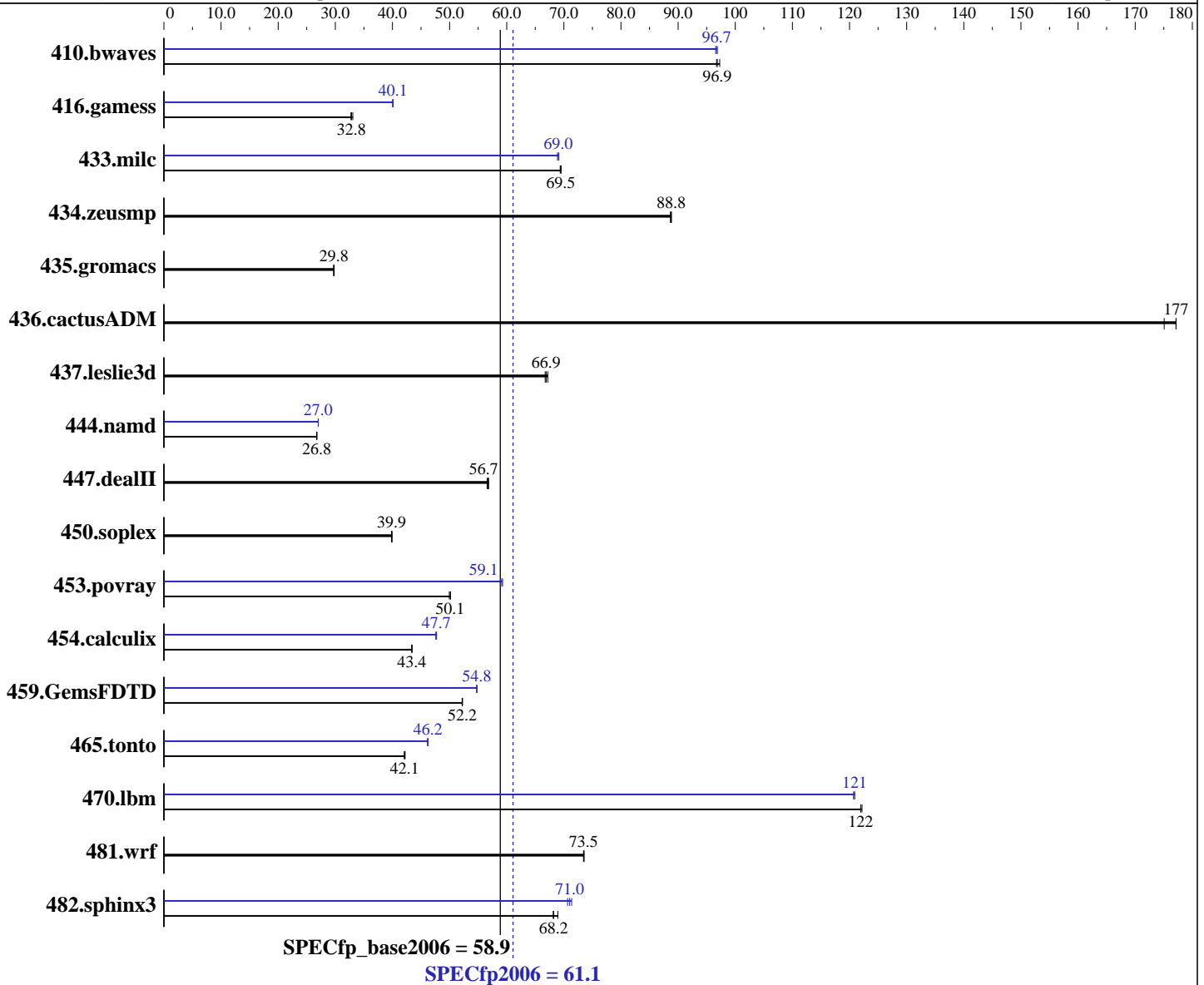
Test date: Mar-2011

Test sponsor: ASUSTeK Computer Inc.

Hardware Availability: Apr-2011

Tested by: ASUSTeK Computer Inc.

Software Availability: Apr-2011



Hardware

CPU Name: Intel Xeon E3-1280
 CPU Characteristics: Intel Turbo Boost Technology up to 3.9 GHz
 CPU MHz: 3500
 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: SUSE Linux Enterprise Server 11 SP1 (x86_64),
Kernel 2.6.32.12-0.7-default
 Compiler: Intel C++ and Fortran Intel 64 Compiler XE
for applications running on Intel 64
Version 12.0 Update 3
 Auto Parallel: Yes
 File System: ReiserFS
 System State: Run level 3 (multi-user)

Continued on next page



SPEC CFP2006 Result

Copyright 2006-2014 Standard Performance Evaluation Corporation

ASUSTeK Computer Inc.

SPECfp2006 = **61.1**

ASUS RS300-E7(P8B-E/4L) Server System
(Intel Xeon E3-1280, 3.50 GHz)

SPECfp_base2006 = **58.9**

CPU2006 license: 9016

Test date: Mar-2011

Test sponsor: ASUSTeK Computer Inc.

Hardware Availability: Apr-2011

Tested by: ASUSTeK Computer Inc.

Software Availability: Apr-2011

L3 Cache: 8 MB I+D on chip per chip
Other Cache: None
Memory: 8 GB (2 x 4 GB 2Rx8 PC3L-10600E-9, ECC)
Disk Subsystem: Seagate ST3500320AS 1 x 500 GB SATA, 7200 RPM
Other Hardware: None

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	140	97.3	141	96.7	140	96.9	140	96.9	141	96.7	141	96.6
416.gamess	592	33.1	596	32.8	598	32.7	489	40.1	488	40.1	489	40.0
433.milc	132	69.4	132	69.5	132	69.5	133	68.9	133	69.1	133	69.0
434.zeusmp	102	88.8	102	88.8	103	88.6	102	88.8	102	88.8	103	88.6
435.gromacs	240	29.8	240	29.8	241	29.7	240	29.8	240	29.8	241	29.7
436.cactusADM	67.5	177	68.3	175	67.5	177	67.5	177	68.3	175	67.5	177
437.leslie3d	140	67.2	141	66.7	140	66.9	140	67.2	141	66.7	140	66.9
444.namd	300	26.8	300	26.8	300	26.8	297	27.0	297	27.0	297	27.0
447.dealII	201	56.8	202	56.7	202	56.6	201	56.8	202	56.7	202	56.6
450.soplex	209	39.9	209	39.9	209	39.9	209	39.9	209	39.9	209	39.9
453.povray	106	50.1	106	50.2	107	49.9	90.0	59.1	90.2	58.9	89.8	59.3
454.calculix	190	43.4	190	43.4	190	43.4	173	47.6	173	47.7	173	47.7
459.GemsFDTD	203	52.2	203	52.3	203	52.2	194	54.8	194	54.8	194	54.8
465.tonto	234	42.1	233	42.2	234	42.1	213	46.2	213	46.2	213	46.1
470.lbm	112	122	113	122	113	122	114	121	114	121	114	121
481.wrf	152	73.4	152	73.6	152	73.5	152	73.4	152	73.6	152	73.5
482.sphinx3	283	68.9	286	68.2	286	68.1	273	71.4	274	71.0	276	70.7

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

Operating System Notes

'ulimit -s unlimited' was used to set the stacksize to unlimited prior to run
Hugepages was not enabled

General Notes

OMP_NUM_THREADS set to number of cores
KMP_AFFINITY set to granularity=fine,scatter
KMP_STACKSIZE set to 200M
Binaries compiled on RHEL5.5 with
binutils-2.17.50.0.6-14.el5



SPEC CFP2006 Result

Copyright 2006-2014 Standard Performance Evaluation Corporation

ASUSTeK Computer Inc.

SPECfp2006 = 61.1

ASUS RS300-E7(P8B-E/4L) Server System
(Intel Xeon E3-1280, 3.50 GHz)

SPECfp_base2006 = 58.9

CPU2006 license: 9016

Test date: Mar-2011

Test sponsor: ASUSTeK Computer Inc.

Hardware Availability: Apr-2011

Tested by: ASUSTeK Computer Inc.

Software Availability: Apr-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

ASUSTeK Computer Inc.

SPECfp2006 = 61.1

ASUS RS300-E7(P8B-E/4L) Server System
(Intel Xeon E3-1280, 3.50 GHz)

SPECfp_base2006 = 58.9

CPU2006 license: 9016

Test date: Mar-2011

Test sponsor: ASUSTeK Computer Inc.

Hardware Availability: Apr-2011

Tested by: ASUSTeK Computer Inc.

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

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.dealII: 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
-B /usr/share/libhugetlbfs/ -Wl,-melf_x86_64 -Wl,-hugetlbfs-link=BDT

Continued on next page



SPEC CFP2006 Result

Copyright 2006-2014 Standard Performance Evaluation Corporation

ASUSTeK Computer Inc.

SPECfp2006 = 61.1

ASUS RS300-E7(P8B-E/4L) Server System
(Intel Xeon E3-1280, 3.50 GHz)

SPECfp_base2006 = 58.9

CPU2006 license: 9016

Test date: Mar-2011

Test sponsor: ASUSTeK Computer Inc.

Hardware Availability: Apr-2011

Tested by: ASUSTeK Computer Inc.

Software Availability: Apr-2011

Peak Optimization Flags (Continued)

Fortran benchmarks:

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

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
-B /usr/share/libhugetlbfs/ -Wl,-melf_x86_64 -Wl,-hugetlbfs-link=BDT

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
-B /usr/share/libhugetlbfs/ -Wl,-melf_x86_64 -Wl,-hugetlbfs-link=BDT

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
-B /usr/share/libhugetlbfs/ -Wl,-melf_x86_64 -Wl,-hugetlbfs-link=BDT

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-ic12.0-linux64-revB.html>

<http://www.spec.org/cpu2006/flags/ASUSTekPlatform.html>

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

<http://www.spec.org/cpu2006/flags/Intel-ic12.0-linux64-revB.xml>

<http://www.spec.org/cpu2006/flags/ASUSTekPlatform.xml>



SPEC CFP2006 Result

Copyright 2006-2014 Standard Performance Evaluation Corporation

ASUSTeK Computer Inc.

SPECfp2006 = 61.1

ASUS RS300-E7(P8B-E/4L) Server System
(Intel Xeon E3-1280, 3.50 GHz)

SPECfp_base2006 = 58.9

CPU2006 license: 9016

Test date: Mar-2011

Test sponsor: ASUSTeK Computer Inc.

Hardware Availability: Apr-2011

Tested by: ASUSTeK Computer Inc.

Software Availability: Apr-2011

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 17:16:37 2014 by SPEC CPU2006 PS/PDF formatter v6932.
Originally published on 13 April 2011.