



SPEC[®] CFP2006 Result

Copyright 2006-2014 Standard Performance Evaluation Corporation

Acer Incorporated

SPECfp[®]_rate2006 = 45.3

Acer Altos R520 (Intel Xeon 5160)

SPECfp_rate_base2006 = 42.3

CPU2006 license: 97

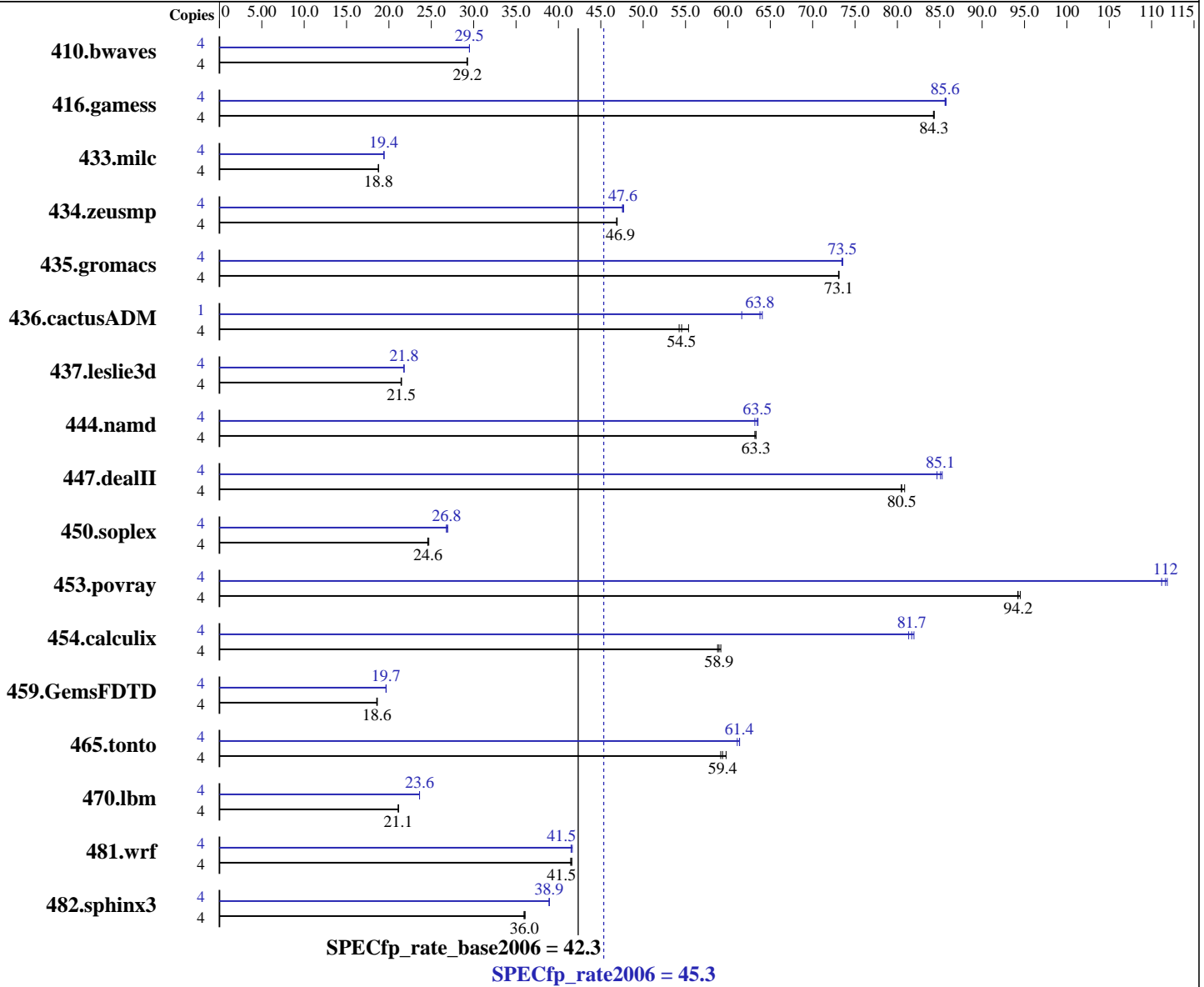
Test sponsor: Acer Incorporated

Tested by: Acer Incorporated

Test date: Nov-2007

Hardware Availability: Nov-2006

Software Availability: Nov-2007



Hardware

CPU Name: Intel Xeon 5160
 CPU Characteristics: 1333MHz system bus
 CPU MHz: 3000
 FPU: Integrated
 CPU(s) enabled: 4 cores, 2 chips, 2 cores/chip
 CPU(s) orderable: 1, 2 chips
 Primary Cache: 32 KB I + 32 KB D on chip per core
 Secondary Cache: 4 MB I+D on chip per chip

Continued on next page

Software

Operating System: SuSE Linux Enterprise Server 10 SP1 EM64T (kernel 2.6.16.46-0.12-smp)
 Compiler: Intel C++ and Fortran Compiler for Linux32 and Linux64 version 10.1 Build 20070725
 Auto Parallel: Yes
 File System: ReiserFS
 System State: Multi-user, level 3
 Base Pointers: 64-bit

Continued on next page



SPEC CFP2006 Result

Copyright 2006-2014 Standard Performance Evaluation Corporation

Acer Incorporated

SPECfp_rate2006 = 45.3

Acer Altos R520 (Intel Xeon 5160)

SPECfp_rate_base2006 = 42.3

CPU2006 license: 97

Test date: Nov-2007

Test sponsor: Acer Incorporated

Hardware Availability: Nov-2006

Tested by: Acer Incorporated

Software Availability: Nov-2007

L3 Cache: None
Other Cache: None
Memory: 16 GB (8 x 2048MB ECC FB-DIMM DDR2-667 CL5-5-5)
Disk Subsystem: 1 x 73GB 10000PRM SAS HDD
Other Hardware: None

Peak Pointers: 32/64-bit
Other Software: MicroQuill SmartHeap Library 8.1

Results Table

Benchmark	Base							Peak						
	Copies	Seconds	Ratio	Seconds	Ratio	Seconds	Ratio	Copies	Seconds	Ratio	Seconds	Ratio	Seconds	Ratio
410.bwaves	4	1861	29.2	<u>1859</u>	<u>29.2</u>	1857	29.3	4	1843	29.5	1842	29.5	<u>1842</u>	<u>29.5</u>
416.gamess	4	929	84.3	<u>929</u>	<u>84.3</u>	930	84.3	4	913	85.8	915	85.6	<u>915</u>	<u>85.6</u>
433.milc	4	<u>1956</u>	<u>18.8</u>	1956	18.8	1958	18.8	4	1891	19.4	<u>1891</u>	<u>19.4</u>	1892	19.4
434.zeusmp	4	<u>776</u>	<u>46.9</u>	776	46.9	777	46.9	4	<u>765</u>	<u>47.6</u>	765	47.6	763	47.7
435.gromacs	4	391	73.1	<u>391</u>	<u>73.1</u>	391	73.1	4	388	73.6	389	73.4	<u>388</u>	<u>73.5</u>
436.cactusADM	4	881	54.2	864	55.4	<u>876</u>	<u>54.5</u>	1	<u>187</u>	<u>63.8</u>	187	64.1	194	61.6
437.leslie3d	4	1750	21.5	1755	21.4	<u>1752</u>	<u>21.5</u>	4	1727	21.8	<u>1726</u>	<u>21.8</u>	1726	21.8
444.namd	4	507	63.3	<u>507</u>	<u>63.3</u>	508	63.2	4	<u>505</u>	<u>63.5</u>	508	63.2	505	63.6
447.dealII	4	<u>568</u>	<u>80.5</u>	566	80.9	569	80.5	4	<u>538</u>	<u>85.1</u>	537	85.3	540	84.7
450.soplex	4	<u>1356</u>	<u>24.6</u>	1357	24.6	1350	24.7	4	1246	26.8	1238	26.9	<u>1244</u>	<u>26.8</u>
453.povray	4	226	94.2	<u>226</u>	<u>94.2</u>	225	94.5	4	190	112	191	111	<u>191</u>	<u>112</u>
454.calculix	4	<u>560</u>	<u>58.9</u>	558	59.2	561	58.8	4	406	81.3	403	82.0	<u>404</u>	<u>81.7</u>
459.GemsFDTD	4	2278	18.6	<u>2284</u>	<u>18.6</u>	2286	18.6	4	2158	19.7	2158	19.7	<u>2158</u>	<u>19.7</u>
465.tonto	4	658	59.8	665	59.1	<u>663</u>	<u>59.4</u>	4	641	61.4	<u>641</u>	<u>61.4</u>	644	61.1
470.lbm	4	<u>2603</u>	<u>21.1</u>	2603	21.1	2603	21.1	4	2328	23.6	2328	23.6	<u>2328</u>	<u>23.6</u>
481.wrf	4	1078	41.4	<u>1075</u>	<u>41.5</u>	1075	41.6	4	<u>1076</u>	<u>41.5</u>	1073	41.6	1077	41.5
482.sphinx3	4	2169	35.9	<u>2167</u>	<u>36.0</u>	2161	36.1	4	2002	38.9	2004	38.9	<u>2004</u>	<u>38.9</u>

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

General Notes

This result was measured on the Acer Altos R520.
The Altos R720 and Altos R520 are electronically equivalent.

BIOS Settings

Hardware Prefetcher set to OFF

Adjacent Cache Line Prefetch set to OFF

Optimization for high-frequency FSB applications set to ON

All results used taskset to bind processes to cores.



SPEC CFP2006 Result

Copyright 2006-2014 Standard Performance Evaluation Corporation

Acer Incorporated

SPECfp_rate2006 = 45.3

Acer Altos R520 (Intel Xeon 5160)

SPECfp_rate_base2006 = 42.3

CPU2006 license: 97

Test sponsor: Acer Incorporated

Tested by: Acer Incorporated

Test date: Nov-2007

Hardware Availability: Nov-2006

Software Availability: Nov-2007

Base Compiler Invocation

C benchmarks:

icc

C++ benchmarks:

icpc

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:

-fast

C++ benchmarks:

-fast

Fortran benchmarks:

-fast

Benchmarks using both Fortran and C:

-fast



SPEC CFP2006 Result

Copyright 2006-2014 Standard Performance Evaluation Corporation

Acer Incorporated

SPECfp_rate2006 = 45.3

Acer Altos R520 (Intel Xeon 5160)

SPECfp_rate_base2006 = 42.3

CPU2006 license: 97

Test sponsor: Acer Incorporated

Tested by: Acer Incorporated

Test date: Nov-2007

Hardware Availability: Nov-2006

Software Availability: Nov-2007

Peak Compiler Invocation

C benchmarks (except as noted below):

```
/home/cmplr/usr3/alrahate/compilers/ic10.1mainline/20070725/Linux32/bin/icc
-L/home/cmplr/usr3/alrahate/compilers/ic10.1mainline/20070725/Linux32/lib
-I/home/cmplr/usr3/alrahate/compilers/ic10.1mainline/20070725/Linux32/include
```

433.milc: icc

C++ benchmarks (except as noted below):

icpc

```
450.soplex: /home/cmplr/usr3/alrahate/compilers/ic10.1mainline/20070725/Linux32/bin/icpc
-L/home/cmplr/usr3/alrahate/compilers/ic10.1mainline/20070725/Linux32/lib
-I/home/cmplr/usr3/alrahate/compilers/ic10.1mainline/20070725/Linux32/include
```

Fortran benchmarks (except as noted below):

ifort

```
437.leslie3d: /home/cmplr/usr3/alrahate/compilers/ic10.1mainline/20070725/Linux32/bin/ifort
-L/home/cmplr/usr3/alrahate/compilers/ic10.1mainline/20070725/Linux32/lib
-I/home/cmplr/usr3/alrahate/compilers/ic10.1mainline/20070725/Linux32/include
```

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
444.namd: -DSPEC_CPU_LP64
447.deallI: -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
481.wrf: -DSPEC_CPU_LP64 -DSPEC_CPU_CASE_FLAG -DSPEC_CPU_LINUX
```

Peak Optimization Flags

C benchmarks:

```
433.milc: -prof-gen(pass 1) -prof-use(pass 2) -fast -fno-alias
-auto-ilp32
```

Continued on next page



SPEC CFP2006 Result

Copyright 2006-2014 Standard Performance Evaluation Corporation

Acer Incorporated

SPECfp_rate2006 = 45.3

Acer Altos R520 (Intel Xeon 5160)

SPECfp_rate_base2006 = 42.3

CPU2006 license: 97

Test sponsor: Acer Incorporated

Tested by: Acer Incorporated

Test date: Nov-2007

Hardware Availability: Nov-2006

Software Availability: Nov-2007

Peak Optimization Flags (Continued)

470.lbm: -prof-gen(pass 1) -prof-use(pass 2) -fast -unroll2
-scalar-rep- -prefetch -opt-malloc-options=3

482.sphinx3: -fast -unroll2

C++ benchmarks:

444.namd: -prof-gen(pass 1) -prof-use(pass 2) -fast -fno-alias
-auto-ilp32

447.dealII: -prof-gen(pass 1) -prof-use(pass 2) -fast -unroll2
-ansi-alias -scalar-rep-

450.soplex: -prof-gen(pass 1) -prof-use(pass 2) -fast
-opt-malloc-options=3

453.povray: -prof-gen(pass 1) -prof-use(pass 2) -fast -unroll4
-ansi-alias

Fortran benchmarks:

410.bwaves: -fast -prefetch

416.gamess: -prof-gen(pass 1) -prof-use(pass 2) -fast -unroll2 -Ob0
-ansi-alias -scalar-rep-

434.zeusmp: -prof-gen(pass 1) -prof-use(pass 2) -fast

437.leslie3d: -prof-gen(pass 1) -prof-use(pass 2) -fast -prefetch
-opt-malloc-options=3

459.GemsFDTD: -prof-gen(pass 1) -prof-use(pass 2) -fast -unroll2 -Ob0
-prefetch

465.tonto: -prof-gen(pass 1) -prof-use(pass 2) -fast -unroll4 -auto

Benchmarks using both Fortran and C:

435.gromacs: -prof-gen(pass 1) -prof-use(pass 2) -fast -prefetch
-auto-ilp32

436.cactusADM: -prof-gen(pass 1) -prof-use(pass 2) -fast -unroll2
-prefetch -parallel -auto-ilp32

454.calculix: -fast -unroll-aggressive -auto-ilp32

481.wrf: -fast -auto-ilp32



SPEC CFP2006 Result

Copyright 2006-2014 Standard Performance Evaluation Corporation

Acer Incorporated

SPECfp_rate2006 = 45.3

Acer Altos R520 (Intel Xeon 5160)

SPECfp_rate_base2006 = 42.3

CPU2006 license: 97

Test sponsor: Acer Incorporated

Tested by: Acer Incorporated

Test date: Nov-2007

Hardware Availability: Nov-2006

Software Availability: Nov-2007

The flags file that was used to format this result can be browsed at

<http://www.spec.org/cpu2006/flags/Intel-ic10.1-FP-intel64-linux-flags.20090714.17.html>

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

<http://www.spec.org/cpu2006/flags/Intel-ic10.1-FP-intel64-linux-flags.20090714.17.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 v1.0.
Report generated on Tue Jul 22 13:36:51 2014 by SPEC CPU2006 PS/PDF formatter v6932.
Originally published on 30 November 2007.