



# SPEC<sup>®</sup> CFP2006 Result

Copyright 2006-2014 Standard Performance Evaluation Corporation

## Acer Incorporated

## SPECfp<sup>®</sup>\_rate2006 = 21.5

## Acer Altos R520 (Intel Xeon E5205)

## SPECfp\_rate\_base2006 = 19.6

CPU2006 license: 97

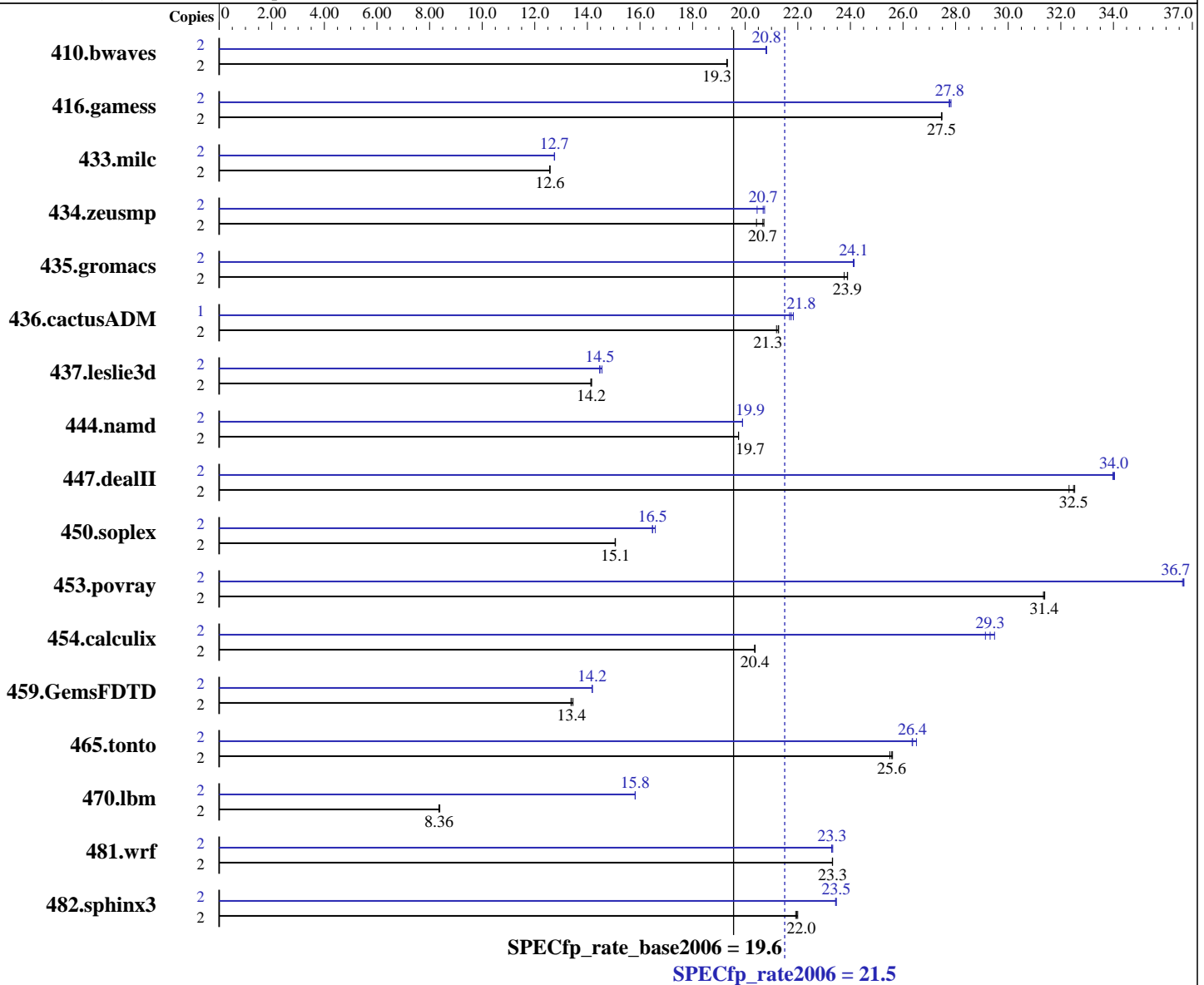
Test sponsor: Acer Incorporated

Tested by: Acer Incorporated

Test date: Mar-2008

Hardware Availability: Nov-2007

Software Availability: Nov-2007



### Hardware

CPU Name: Intel Xeon E5205  
 CPU Characteristics: 1066MHz system bus  
 CPU MHz: 1860  
 FPU: Integrated  
 CPU(s) enabled: 2 cores, 1 chip, 2 cores/chip  
 CPU(s) orderable: 1, 2 chips  
 Primary Cache: 32 KB I + 32 KB D on chip per core  
 Secondary Cache: 6 MB I+D on chip per chip

Continued on next page

### Software

Operating System: SuSE Linux Enterprise Server 10 SP1 (x86\_64)  
 Kernel 2.6.16.46-0.12-smp  
 Compiler: Intel C++ and Fortran Compiler 10.1 for Linux  
 Build 20070913 Package ID: l\_cc\_p\_10.1.008,  
 l\_fc\_p\_10.1.008  
 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 = 21.5

Acer Altos R520 (Intel Xeon E5205)

SPECfp\_rate\_base2006 = 19.6

CPU2006 license: 97  
Test sponsor: Acer Incorporated  
Tested by: Acer Incorporated

Test date: Mar-2008  
Hardware Availability: Nov-2007  
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 10K RPM SAS HDD  
Other Hardware: None

Peak Pointers: 32/64-bit  
Other Software: Binutils 2.17.50.0.15

## Results Table

Benchmark	Base							Peak						
	Copies	Seconds	Ratio	Seconds	Ratio	Seconds	Ratio	Copies	Seconds	Ratio	Seconds	Ratio	Seconds	Ratio
410.bwaves	2	1406	19.3	<b><u>1408</u></b>	<b><u>19.3</u></b>	1408	19.3	2	1306	20.8	<b><u>1306</u></b>	<b><u>20.8</u></b>	1307	20.8
416.gamess	2	1425	27.5	<b><u>1426</u></b>	<b><u>27.5</u></b>	1426	27.5	2	1411	27.8	<b><u>1410</u></b>	<b><u>27.8</u></b>	1407	27.8
433.milc	2	<b><u>1460</u></b>	<b><u>12.6</u></b>	1461	12.6	1460	12.6	2	1441	12.7	1440	12.8	<b><u>1440</u></b>	<b><u>12.7</u></b>
434.zeusmp	2	891	20.4	879	20.7	<b><u>880</u></b>	<b><u>20.7</u></b>	2	890	20.5	878	20.7	<b><u>880</u></b>	<b><u>20.7</u></b>
435.gromacs	2	601	23.8	<b><u>598</u></b>	<b><u>23.9</u></b>	598	23.9	2	592	24.1	591	24.1	<b><u>592</u></b>	<b><u>24.1</u></b>
436.cactusADM	2	1124	21.3	<b><u>1124</u></b>	<b><u>21.3</u></b>	1128	21.2	1	<b><u>549</u></b>	<b><u>21.8</u></b>	547	21.8	551	21.7
437.leslie3d	2	1330	14.1	1328	14.2	<b><u>1328</u></b>	<b><u>14.2</u></b>	2	<b><u>1298</u></b>	<b><u>14.5</u></b>	1300	14.5	1292	14.6
444.namd	2	812	19.7	<b><u>812</u></b>	<b><u>19.7</u></b>	812	19.7	2	806	19.9	806	19.9	<b><u>806</u></b>	<b><u>19.9</u></b>
447.dealII	2	708	32.3	<b><u>704</u></b>	<b><u>32.5</u></b>	703	32.5	2	672	34.0	673	34.0	<b><u>673</u></b>	<b><u>34.0</u></b>
450.soplex	2	1108	15.1	<b><u>1107</u></b>	<b><u>15.1</u></b>	1107	15.1	2	<b><u>1012</u></b>	<b><u>16.5</u></b>	1013	16.5	1006	16.6
453.povray	2	<b><u>339</u></b>	<b><u>31.4</u></b>	340	31.3	339	31.4	2	<b><u>290</u></b>	<b><u>36.7</u></b>	290	36.6	290	36.7
454.calculix	2	810	20.4	811	20.4	<b><u>810</u></b>	<b><u>20.4</u></b>	2	560	29.5	<b><u>563</u></b>	<b><u>29.3</u></b>	566	29.1
459.GemsFDTD	2	1577	13.5	1586	13.4	<b><u>1584</u></b>	<b><u>13.4</u></b>	2	1496	14.2	<b><u>1496</u></b>	<b><u>14.2</u></b>	1496	14.2
465.tonto	2	<b><u>770</u></b>	<b><u>25.6</u></b>	772	25.5	769	25.6	2	742	26.5	<b><u>746</u></b>	<b><u>26.4</u></b>	747	26.3
470.lbm	2	3275	8.39	<b><u>3287</u></b>	<b><u>8.36</u></b>	3289	8.36	2	1737	15.8	<b><u>1737</u></b>	<b><u>15.8</u></b>	1737	15.8
481.wrf	2	958	23.3	958	23.3	<b><u>958</u></b>	<b><u>23.3</u></b>	2	958	23.3	959	23.3	<b><u>959</u></b>	<b><u>23.3</u></b>
482.sphinx3	2	1772	22.0	<b><u>1775</u></b>	<b><u>22.0</u></b>	1778	21.9	2	1663	23.4	<b><u>1662</u></b>	<b><u>23.5</u></b>	1661	23.5

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.

All benchmarks compiled in 64-bit mode except 437.leslie3d, 450.soplex  
470.lbm and 482.sphinx3, at peak, are compiled in 32-bit mode

### BIOS Settings

Hardware Prefetcher set to ON

Adjacent Cache Line Prefetch set to ON

All results but peak 436.cactusADM used taskset to bind  
processes to cores.

"ulimit -s unlimited" was set for stacksize unlimited

Continued on next page



# SPEC CFP2006 Result

Copyright 2006-2014 Standard Performance Evaluation Corporation

Acer Incorporated

SPECfp\_rate2006 = 21.5

Acer Altos R520 (Intel Xeon E5205)

SPECfp\_rate\_base2006 = 19.6

CPU2006 license: 97

Test sponsor: Acer Incorporated

Tested by: Acer Incorporated

Test date: Mar-2008

Hardware Availability: Nov-2007

Software Availability: Nov-2007

## General Notes (Continued)

OMP\_NUM\_THREADS set to number of cores

## 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

Continued on next page



# SPEC CFP2006 Result

Copyright 2006-2014 Standard Performance Evaluation Corporation

Acer Incorporated

SPECfp\_rate2006 = 21.5

Acer Altos R520 (Intel Xeon E5205)

SPECfp\_rate\_base2006 = 19.6

CPU2006 license: 97

Test sponsor: Acer Incorporated

Tested by: Acer Incorporated

Test date: Mar-2008

Hardware Availability: Nov-2007

Software Availability: Nov-2007

## Base Optimization Flags (Continued)

Benchmarks using both Fortran and C:

-fast

## Peak Compiler Invocation

C benchmarks (except as noted below):

```
/opt/intel/cc/10.1.008/bin/icc -L/opt/intel/cc/10.1.008/lib
-I/opt/intel/cc/10.1.008/include
```

433.milc: icc

C++ benchmarks (except as noted below):

icpc

```
450.soplex: /opt/intel/cc/10.1.008/bin/icpc -L/opt/intel/cc/10.1.008/lib
-I/opt/intel/cc/10.1.008/include
```

Fortran benchmarks (except as noted below):

ifort

```
437.leslie3d: /opt/intel/fc/10.1.008/bin/ifort -L/opt/intel/fc/10.1.008/lib
-I/opt/intel/fc/10.1.008/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.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
481.wrf: -DSPEC_CPU_LP64 -DSPEC_CPU_CASE_FLAG -DSPEC_CPU_LINUX
```



# SPEC CFP2006 Result

Copyright 2006-2014 Standard Performance Evaluation Corporation

Acer Incorporated

SPECfp\_rate2006 = 21.5

Acer Altos R520 (Intel Xeon E5205)

SPECfp\_rate\_base2006 = 19.6

CPU2006 license: 97

Test sponsor: Acer Incorporated

Tested by: Acer Incorporated

Test date: Mar-2008

Hardware Availability: Nov-2007

Software Availability: Nov-2007

## Peak Optimization Flags

### C benchmarks:

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

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

Continued on next page



# SPEC CFP2006 Result

Copyright 2006-2014 Standard Performance Evaluation Corporation

Acer Incorporated

SPECfp\_rate2006 = 21.5

Acer Altos R520 (Intel Xeon E5205)

SPECfp\_rate\_base2006 = 19.6

CPU2006 license: 97

Test sponsor: Acer Incorporated

Tested by: Acer Incorporated

Test date: Mar-2008

Hardware Availability: Nov-2007

Software Availability: Nov-2007

## Peak Optimization Flags (Continued)

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

481.wrf: -fast -auto-ilp32

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

<http://www.spec.org/cpu2006/flags/Intel-ic10.1-fp-linux64-revC.20090713.html>

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

<http://www.spec.org/cpu2006/flags/Intel-ic10.1-fp-linux64-revC.20090713.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](mailto:webmaster@spec.org).

Tested with SPEC CPU2006 v1.0.  
Report generated on Tue Jul 22 18:26:47 2014 by SPEC CPU2006 PS/PDF formatter v6932.  
Originally published on 15 April 2008.