



# SPEC<sup>®</sup> CFP2006 Result

Copyright 2006-2014 Standard Performance Evaluation Corporation

## Acer Incorporated

Gateway GW2000h-GW170h F1 (Intel Xeon E5502, 1.86 GHz)

SPECfp<sup>®</sup>\_rate2006 = 71.6

SPECfp\_rate\_base2006 = 69.5

CPU2006 license: 97

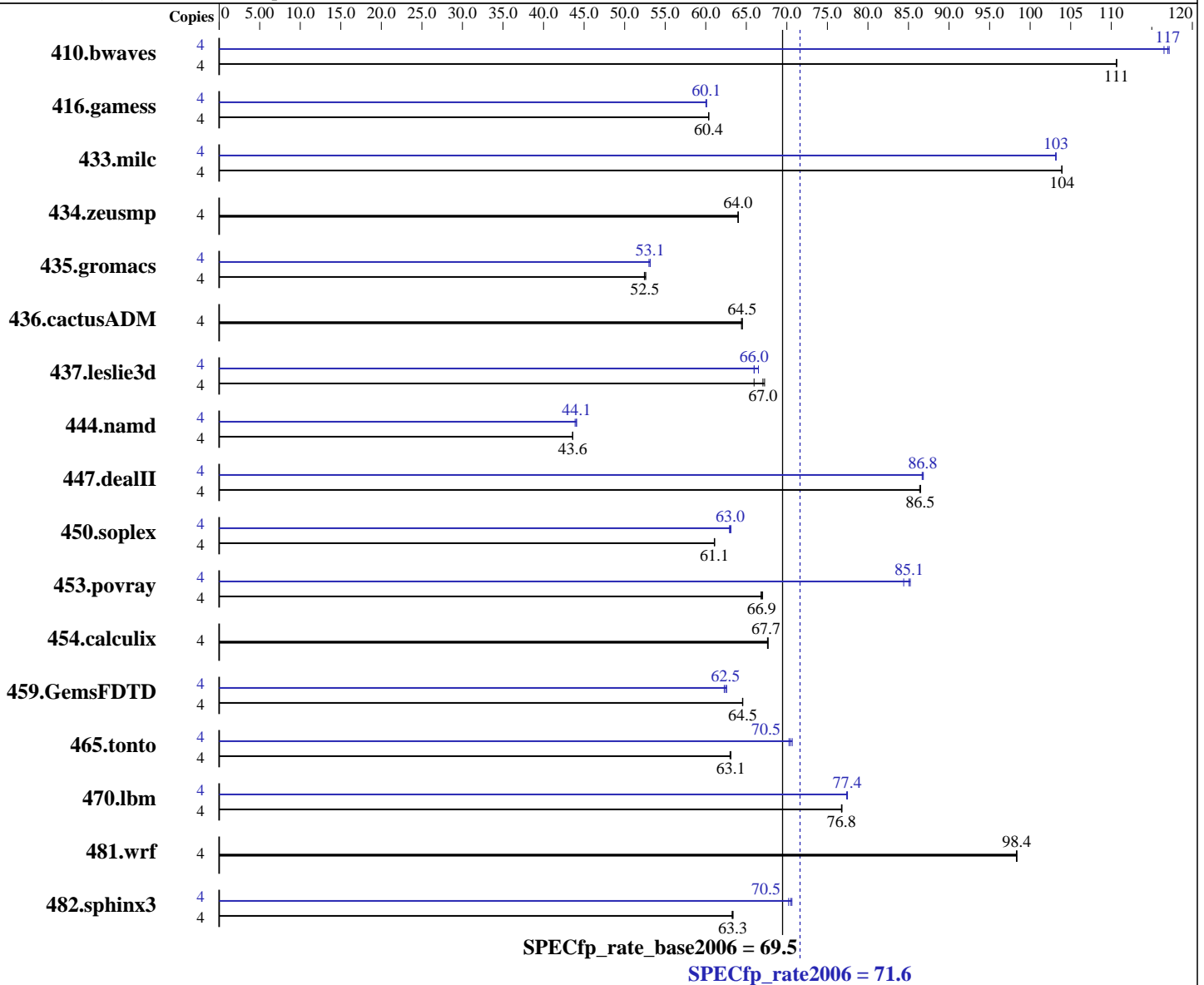
Test sponsor: Acer Incorporated

Tested by: Acer Incorporated

Test date: Jul-2010

Hardware Availability: Aug-2010

Software Availability: Jan-2010



### Hardware

CPU Name: Intel Xeon E5502  
 CPU Characteristics:  
 CPU MHz: 1867  
 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: 256 KB I+D on chip per core

Continued on next page

### Software

Operating System: SUSE Linux Enterprise Server 11 (x86\_64)  
 Kernel 2.6.27.19-5-default  
 Compiler: Intel C++ and Fortran Professional Compiler for IA32 and Intel 64, Version 11.1  
 Build 20091130 Package ID: l\_cproc\_p\_11.1.064, l\_cprof\_p\_11.1.064  
 Auto Parallel: No  
 File System: ReiserFS  
 System State: Run level 3 (multi-user)

Continued on next page



# SPEC CFP2006 Result

Copyright 2006-2014 Standard Performance Evaluation Corporation

## Acer Incorporated

Gateway GW2000h-GW170h F1 (Intel Xeon E5502, 1.86 GHz)

SPECfp\_rate2006 = 71.6

SPECfp\_rate\_base2006 = 69.5

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

Test date: Jul-2010  
Hardware Availability: Aug-2010  
Software Availability: Jan-2010

L3 Cache: 4 MB I+D on chip per chip  
Other Cache: None  
Memory: 24 GB (6 x 4 GB 2Rx8 PC3-10600R, ECC, running at 800 MHz and CL6)  
Disk Subsystem: 1 x 1000 GB SATA II, 7200 RPM  
Other Hardware: None

Base Pointers: 64-bit  
Peak Pointers: 32/64-bit  
Other Software: None

## Results Table

| Benchmark     | Base   |             |             |            |             |             |             |        | Peak       |             |             |             |            |             |  |  |
|---------------|--------|-------------|-------------|------------|-------------|-------------|-------------|--------|------------|-------------|-------------|-------------|------------|-------------|--|--|
|               | Copies | Seconds     | Ratio       | Seconds    | Ratio       | Seconds     | Ratio       | Copies | Seconds    | Ratio       | Seconds     | Ratio       | Seconds    | Ratio       |  |  |
| 410.bwaves    | 4      | 491         | 111         | 491        | 111         | <b>491</b>  | <b>111</b>  | 4      | 464        | 117         | <b>465</b>  | <b>117</b>  | 467        | 117         |  |  |
| 416.gamess    | 4      | <b>1297</b> | <b>60.4</b> | 1298       | 60.3        | 1297        | 60.4        | 4      | 1303       | 60.1        | <b>1304</b> | <b>60.1</b> | 1305       | 60.0        |  |  |
| 433.milc      | 4      | 353         | 104         | <b>353</b> | <b>104</b>  | 353         | 104         | 4      | 356        | 103         | 356         | 103         | <b>356</b> | <b>103</b>  |  |  |
| 434.zeusmp    | 4      | 569         | 64.0        | <b>569</b> | <b>64.0</b> | 569         | 64.0        | 4      | 569        | 64.0        | <b>569</b>  | <b>64.0</b> | 569        | 64.0        |  |  |
| 435.gromacs   | 4      | 545         | 52.4        | 543        | 52.6        | <b>544</b>  | <b>52.5</b> | 4      | <b>537</b> | <b>53.1</b> | 539         | 53.0        | 537        | 53.1        |  |  |
| 436.cactusADM | 4      | 742         | 64.4        | <b>741</b> | <b>64.5</b> | 741         | 64.5        | 4      | 742        | 64.4        | <b>741</b>  | <b>64.5</b> | 741        | 64.5        |  |  |
| 437.leslie3d  | 4      | 559         | 67.3        | <b>561</b> | <b>67.0</b> | 570         | 66.0        | 4      | 565        | 66.5        | 570         | 66.0        | <b>570</b> | <b>66.0</b> |  |  |
| 444.namd      | 4      | 736         | 43.6        | 736        | 43.6        | <b>736</b>  | <b>43.6</b> | 4      | <b>728</b> | <b>44.1</b> | 731         | 43.9        | 728        | 44.1        |  |  |
| 447.dealII    | 4      | <b>529</b>  | <b>86.5</b> | 530        | 86.4        | 529         | 86.5        | 4      | 527        | 86.8        | 528         | 86.7        | <b>527</b> | <b>86.8</b> |  |  |
| 450.soplex    | 4      | <b>546</b>  | <b>61.1</b> | 546        | 61.1        | 546         | 61.1        | 4      | <b>529</b> | <b>63.0</b> | 530         | 62.9        | 529        | 63.1        |  |  |
| 453.povray    | 4      | 318         | 66.8        | <b>318</b> | <b>66.9</b> | 318         | 67.0        | 4      | 252        | 84.4        | <b>250</b>  | <b>85.1</b> | 250        | 85.2        |  |  |
| 454.calculix  | 4      | 487         | 67.7        | <b>488</b> | <b>67.7</b> | 488         | 67.6        | 4      | 487        | 67.7        | <b>488</b>  | <b>67.7</b> | 488        | 67.6        |  |  |
| 459.GemsFDTD  | 4      | 657         | 64.6        | <b>658</b> | <b>64.5</b> | 658         | 64.5        | 4      | 678        | 62.6        | 681         | 62.3        | <b>680</b> | <b>62.5</b> |  |  |
| 465.tonto     | 4      | <b>624</b>  | <b>63.1</b> | 624        | 63.1        | 625         | 63.0        | 4      | 560        | 70.3        | <b>559</b>  | <b>70.5</b> | 557        | 70.7        |  |  |
| 470.lbm       | 4      | <b>716</b>  | <b>76.8</b> | 716        | 76.7        | 716         | 76.8        | 4      | 709        | 77.5        | <b>710</b>  | <b>77.4</b> | 710        | 77.4        |  |  |
| 481.wrf       | 4      | 455         | 98.3        | 454        | 98.4        | <b>454</b>  | <b>98.4</b> | 4      | 455        | 98.3        | 454         | 98.4        | <b>454</b> | <b>98.4</b> |  |  |
| 482.sphinx3   | 4      | 1233        | 63.2        | 1230       | 63.4        | <b>1231</b> | <b>63.3</b> | 4      | 1110       | 70.2        | <b>1106</b> | <b>70.5</b> | 1104       | 70.6        |  |  |

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

## Operating System Notes

'ulimit -s unlimited' was used to set the stack size to unlimited prior to run

## General Notes

Binaries were compiled on SLES 10 with Binutils 2.18.50.0.7.20080502

The Acer AW2000h-AW170h F1, Gateway GW2000h-GW170h F1, Acer AW2000ht-AW170ht F1

Continued on next page



# SPEC CFP2006 Result

Copyright 2006-2014 Standard Performance Evaluation Corporation

**Acer Incorporated**

Gateway GW2000h-GW170h F1 (Intel Xeon E5502, 1.86 GHz)

**SPECfp\_rate2006 = 71.6**

**SPECfp\_rate\_base2006 = 69.5**

**CPU2006 license:** 97

**Test sponsor:** Acer Incorporated

**Tested by:** Acer Incorporated

**Test date:** Jul-2010

**Hardware Availability:** Aug-2010

**Software Availability:** Jan-2010

## General Notes (Continued)

and Gateway GW2000ht-GW170ht F1 are electronically equivalent.  
This result was measured on GW2000ht-GW170ht F1.

## 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:

-xSSE4.2 -ipo -O3 -no-prec-div -static

C++ benchmarks:

-xSSE4.2 -ipo -O3 -no-prec-div -static

Continued on next page



# SPEC CFP2006 Result

Copyright 2006-2014 Standard Performance Evaluation Corporation

**Acer Incorporated**

Gateway GW2000h-GW170h F1 (Intel Xeon E5502, 1.86 GHz)

**SPECfp\_rate2006 = 71.6**

**SPECfp\_rate\_base2006 = 69.5**

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

**Test date:** Jul-2010  
**Hardware Availability:** Aug-2010  
**Software Availability:** Jan-2010

## Base Optimization Flags (Continued)

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 -m64

482.sphinx3: icc -m32

C++ benchmarks (except as noted below):  
icpc -m64

450.soplex: icpc -m32

Fortran benchmarks:  
ifort -m64

Benchmarks using both Fortran and C:  
icc -m64 ifort -m64

## 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



# SPEC CFP2006 Result

Copyright 2006-2014 Standard Performance Evaluation Corporation

## Acer Incorporated

**SPECfp\_rate2006 = 71.6**

Gateway GW2000h-GW170h F1 (Intel Xeon E5502, 1.86 GHz)

**SPECfp\_rate\_base2006 = 69.5**

**CPU2006 license:** 97

**Test date:** Jul-2010

**Test sponsor:** Acer Incorporated

**Hardware Availability:** Aug-2010

**Tested by:** Acer Incorporated

**Software Availability:** Jan-2010

## 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 -opt-prefetch

470.lbm: -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 -ansi-alias -auto-ilp32

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

C++ benchmarks:

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.dealIII: -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: basepeak = yes

437.leslie3d: -xSSE4.2 -ipo -O3 -no-prec-div -static

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

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 -inline-calloc -opt-malloc-options=3

Continued on next page



# SPEC CFP2006 Result

Copyright 2006-2014 Standard Performance Evaluation Corporation

**Acer Incorporated**

Gateway GW2000h-GW170h F1 (Intel Xeon E5502, 1.86 GHz)

**SPECfp\_rate2006 = 71.6**

**SPECfp\_rate\_base2006 = 69.5**

**CPU2006 license:** 97

**Test sponsor:** Acer Incorporated

**Tested by:** Acer Incorporated

**Test date:** Jul-2010

**Hardware Availability:** Aug-2010

**Software Availability:** Jan-2010

## Peak Optimization Flags (Continued)

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: basepeak = yes

454.calculix: basepeak = yes

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-ic11.1-linux64-revG.20101027.html>

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

<http://www.spec.org/cpu2006/flags/Intel-ic11.1-linux64-revG.20101027.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 v1.1.  
Report generated on Wed Jul 23 14:08:59 2014 by SPEC CPU2006 PS/PDF formatter v6932.  
Originally published on 7 December 2010.