



# SPEC® CFP2006 Result

Copyright 2006-2014 Standard Performance Evaluation Corporation

## Acer Incorporated

SPECfp®2006 = 43.7

AW2000ht-AW170ht F1 (Intel Xeon X5570, 2.93 GHz)

SPECfp\_base2006 = 40.8

CPU2006 license: 97

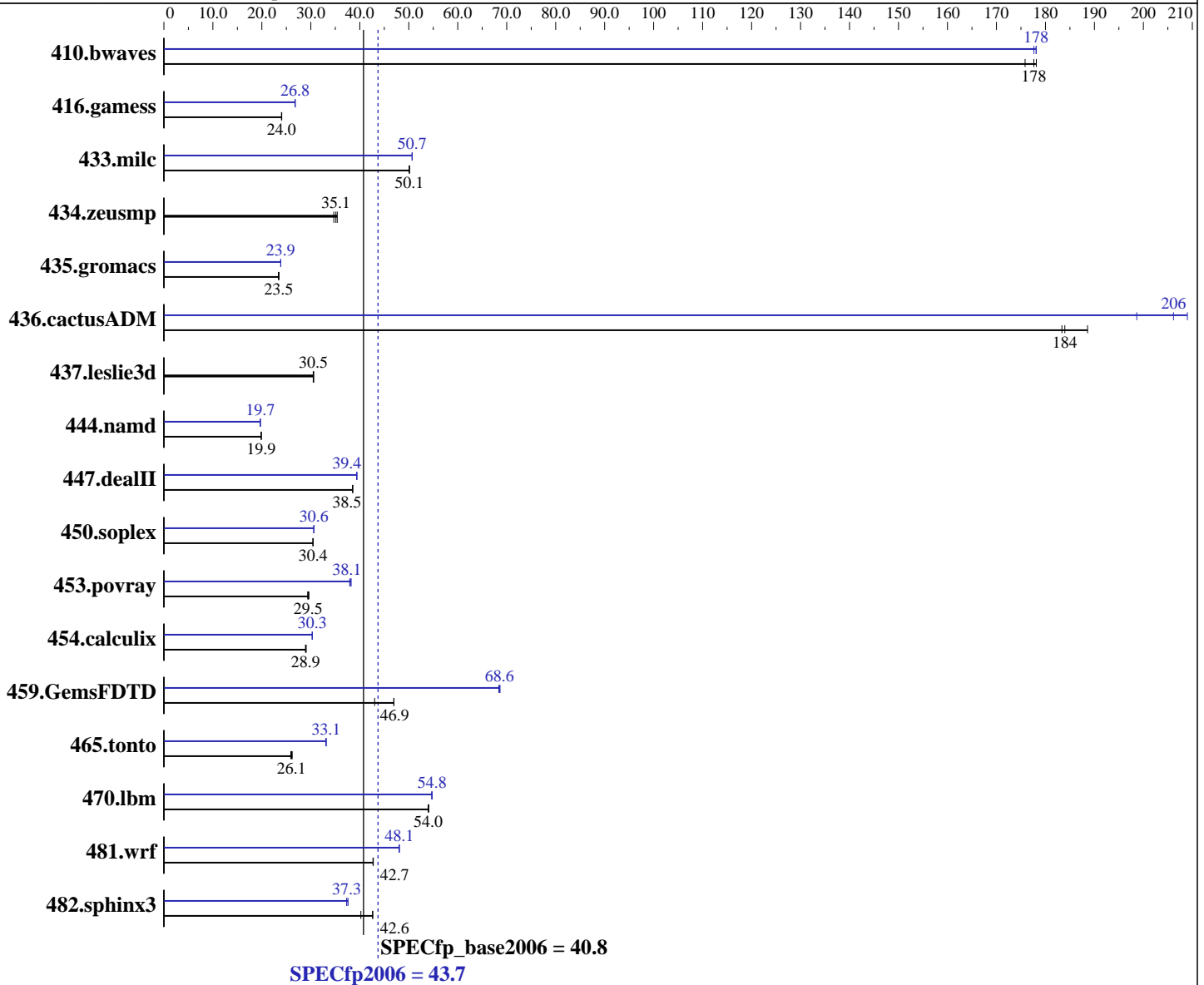
Test date: Jul-2010

Test sponsor: Acer Incorporated

Hardware Availability: Aug-2010

Tested by: Acer Incorporated

Software Availability: Jan-2010



### Hardware

CPU Name: Intel Xeon X5570  
 CPU Characteristics: Intel Turbo Boost Technology up to 3.33 GHz  
 CPU MHz: 2933  
 FPU: Integrated  
 CPU(s) enabled: 8 cores, 2 chips, 4 cores/chip, 2 threads/core  
 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: 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

## Acer Incorporated

SPECfp2006 = **43.7**

AW2000ht-AW170ht F1 (Intel Xeon X5570, 2.93 GHz)

SPECfp\_base2006 = **40.8**

CPU2006 license: 97

Test date: Jul-2010

Test sponsor: Acer Incorporated

Hardware Availability: Aug-2010

Tested by: Acer Incorporated

Software Availability: Jan-2010

L3 Cache: 8 MB I+D on chip per chip  
 Other Cache: None  
 Memory: 24 GB (6 x 4 GB DDR3-1333 RDIMM, ECC)  
 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					
	Seconds	Ratio	Seconds	Ratio	Seconds	Ratio	Seconds	Ratio	Seconds	Ratio	Seconds	Ratio
410.bwaves	77.3	176	<b>76.5</b>	<b>178</b>	76.3	178	76.5	178	<b>76.3</b>	<b>178</b>	76.3	178
416.gamess	<b>815</b>	<b>24.0</b>	814	24.1	815	24.0	731	26.8	730	26.8	<b>731</b>	<b>26.8</b>
433.milc	183	50.1	<b>183</b>	<b>50.1</b>	183	50.2	181	50.7	181	50.7	<b>181</b>	<b>50.7</b>
434.zeusmp	<b>259</b>	<b>35.1</b>	262	34.7	257	35.4	<b>259</b>	<b>35.1</b>	262	34.7	257	35.4
435.gromacs	304	23.5	<b>304</b>	<b>23.5</b>	306	23.4	<b>299</b>	<b>23.9</b>	299	23.9	299	23.9
436.cactusADM	<b>65.0</b>	<b>184</b>	65.2	183	63.4	189	60.2	199	57.2	209	<b>58.0</b>	<b>206</b>
437.leslie3d	307	30.6	308	30.5	<b>308</b>	<b>30.5</b>	307	30.6	308	30.5	<b>308</b>	<b>30.5</b>
444.namd	404	19.9	404	19.9	<b>404</b>	<b>19.9</b>	<b>407</b>	<b>19.7</b>	407	19.7	407	19.7
447.dealII	297	38.6	<b>297</b>	<b>38.5</b>	297	38.5	290	39.4	<b>290</b>	<b>39.4</b>	290	39.4
450.soplex	274	30.4	<b>274</b>	<b>30.4</b>	274	30.5	273	30.6	272	30.6	<b>272</b>	<b>30.6</b>
453.povray	181	29.3	<b>180</b>	<b>29.5</b>	180	29.6	139	38.2	<b>140</b>	<b>38.1</b>	140	37.9
454.calculix	<b>285</b>	<b>28.9</b>	285	28.9	284	29.1	272	30.3	272	30.3	<b>272</b>	<b>30.3</b>
459.GemsFDTD	<b>226</b>	<b>46.9</b>	226	47.0	247	43.0	155	68.6	155	68.4	<b>155</b>	<b>68.6</b>
465.tonto	376	26.2	<b>377</b>	<b>26.1</b>	380	25.9	297	33.1	297	33.1	<b>297</b>	<b>33.1</b>
470.lbm	<b>255</b>	<b>54.0</b>	254	54.1	255	53.9	251	54.8	251	54.7	<b>251</b>	<b>54.8</b>
481.wrf	262	42.7	<b>261</b>	<b>42.7</b>	261	42.8	232	48.1	232	48.0	<b>232</b>	<b>48.1</b>
482.sphinx3	<b>458</b>	<b>42.6</b>	485	40.2	457	42.7	522	37.3	<b>522</b>	<b>37.3</b>	518	37.6

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 stack size to unlimited prior to run  
 OMP\_NUM\_THREADS set to number of cores  
 KMP\_AFFINITY set to granularity=fine,scatter  
 KMP\_STACKSIZE set to 200M

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



# SPEC CFP2006 Result

Copyright 2006-2014 Standard Performance Evaluation Corporation

**Acer Incorporated**

**SPECfp2006 = 43.7**

AW2000ht-AW170ht F1 (Intel Xeon X5570, 2.93 GHz)

**SPECfp\_base2006 = 40.8**

**CPU2006 license:** 97

**Test date:** Jul-2010

**Test sponsor:** Acer Incorporated

**Hardware Availability:** Aug-2010

**Tested by:** Acer Incorporated

**Software Availability:** Jan-2010

## 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 -parallel -opt-prefetch

C++ benchmarks:

-xSSE4.2 -ipo -O3 -no-prec-div -static -parallel -opt-prefetch

Fortran benchmarks:

-xSSE4.2 -ipo -O3 -no-prec-div -static -parallel -opt-prefetch

Benchmarks using both Fortran and C:

-xSSE4.2 -ipo -O3 -no-prec-div -static -parallel -opt-prefetch



# SPEC CFP2006 Result

Copyright 2006-2014 Standard Performance Evaluation Corporation

**Acer Incorporated**

**SPECfp2006 = 43.7**

AW2000ht-AW170ht F1 (Intel Xeon X5570, 2.93 GHz)

**SPECfp\_base2006 = 40.8**

**CPU2006 license:** 97

**Test date:** Jul-2010

**Test sponsor:** Acer Incorporated

**Hardware Availability:** Aug-2010

**Tested by:** Acer Incorporated

**Software Availability:** Jan-2010

## 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: -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)  
-ansi-alias

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)  
-parallel -ansi-alias -auto-ilp32

482.sphinx3: -xSSE4.2 -ipo -O3 -no-prec-div -static -auto-ilp32  
-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.dealII: -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- -auto-ilp32

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 -auto-ilp32

Continued on next page



# SPEC CFP2006 Result

Copyright 2006-2014 Standard Performance Evaluation Corporation

**Acer Incorporated**

**SPECfp2006 = 43.7**

AW2000ht-AW170ht F1 (Intel Xeon X5570, 2.93 GHz)

**SPECfp\_base2006 = 40.8**

**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 (Continued)

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  
-parallel

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: basepeak = yes

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 -opt-prefetch -parallel

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)  
-inline-calloc -opt-malloc-options=3 -auto -unroll4

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: -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 -opt-prefetch -parallel -auto-ilp32

454.calculix: -xSSE4.2 -ipo -O3 -no-prec-div -static -auto-ilp32

481.wrf: Same as 454.calculix

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

<http://www.spec.org/cpu2006/flags/Intel-ic11.1-linux64-revE.20100316.html>

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

<http://www.spec.org/cpu2006/flags/Intel-ic11.1-linux64-revE.20100316.xml>



# SPEC CFP2006 Result

Copyright 2006-2014 Standard Performance Evaluation Corporation

**Acer Incorporated**

**SPECfp2006 = 43.7**

AW2000ht-AW170ht F1 (Intel Xeon X5570, 2.93 GHz)

**SPECfp\_base2006 = 40.8**

**CPU2006 license:** 97

**Test sponsor:** Acer Incorporated

**Tested by:** Acer Incorporated

**Test date:** Jul-2010

**Hardware Availability:** Aug-2010

**Software Availability:** Jan-2010

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 11:56:34 2014 by SPEC CPU2006 PS/PDF formatter v6932.  
Originally published on 17 August 2010.