# SPEC® CFP2006 Result

Copyright 2006-2014 Standard Performance Evaluation Corporation

## Acer Incorporated

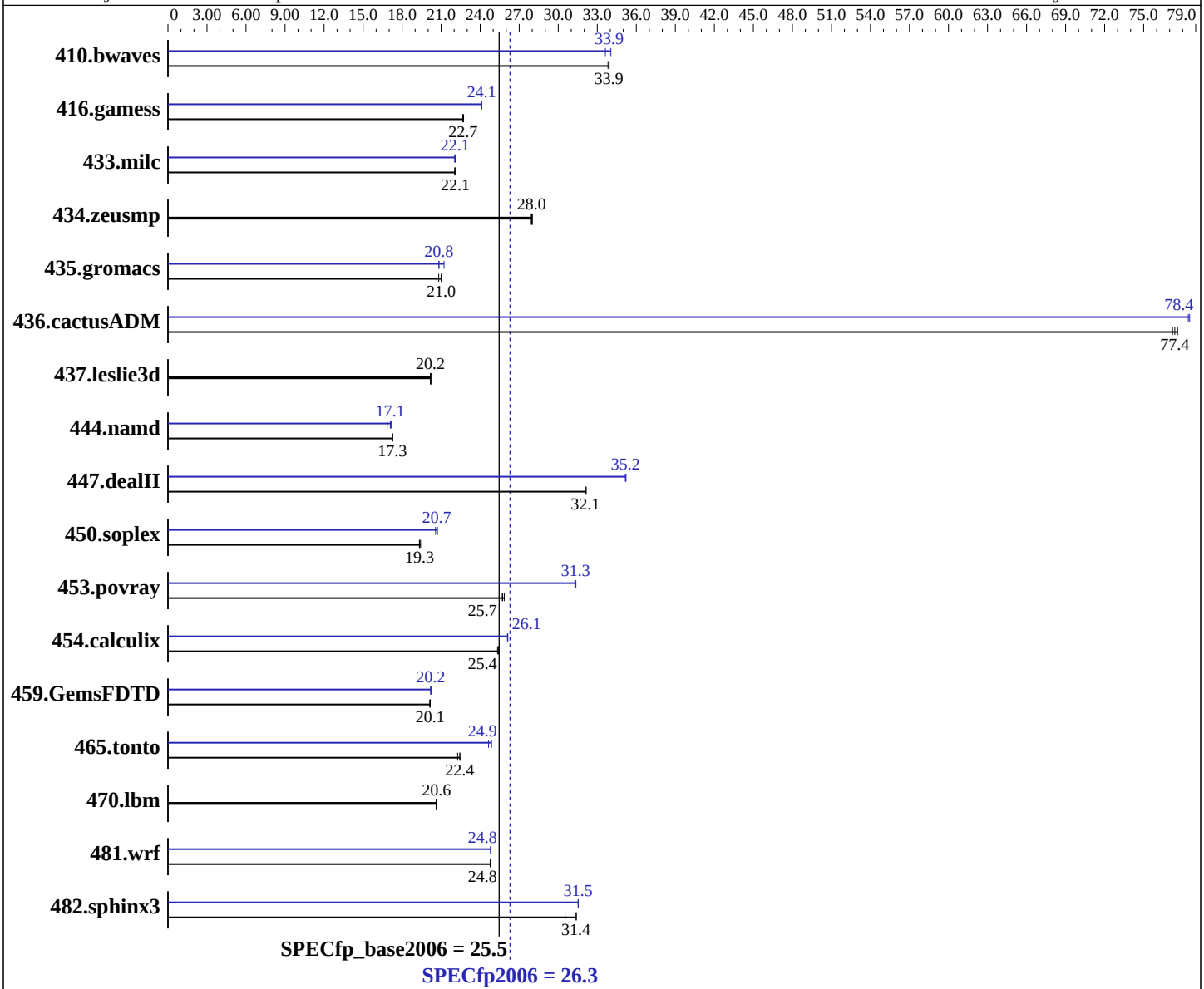
## Acer AT110 F1 (Intel Xeon X3380)

SPECfp®2006 = 26.3

SPECfp_base2006 = 25.5

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

**Test date:** Nov-2009
**Hardware Availability:** Dec-2009
**Software Availability:** Nov-2008




### Hardware

| | |
|---|---|
| CPU Name: | Intel Xeon X3380 |
| CPU Characteristics: | 1333 MHz system bus |
| CPU MHz: | 3167 |
| FPU: | Integrated |
| CPU(s) enabled: | 4 cores, 1 chip, 4 cores/chip |
| CPU(s) orderable: | 1 chip |
| Primary Cache: | 32 KB I + 32 KB D on chip per core |
| Secondary Cache: | 12 MB I+D on chip per chip, 6 MB shared / 2 cores |

Continued on next page

### Software

| | |
|---|---|
| Operating System: | SUSE Linux Enterprise Server 11 (x86_64) Kernel 2.6.27.19-5 |
| Compiler: | Intel C++ and Fortran Compiler 11.0 for Linux Build 20080930 Package ID: l_cproc_p_11.0.066, l_cprof_p_11.0.066 |
| 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

## Acer AT110 F1 (Intel Xeon X3380)

SPECfp2006 = 26.3

SPECfp_base2006 = 25.5

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

**Test date:** Nov-2009
**Hardware Availability:** Dec-2009
**Software Availability:** Nov-2008

L3 Cache: None
Other Cache: None
Memory: 8 GB (4 x 2048 MB ECC Unbuffered DDR2-800 CL5)
Disk Subsystem: 1 x 640 GB 7200RPM SATA HDD
Other Hardware: None

Peak Pointers: 32/64-bit
Other Software: Microquill SmartHeap V8.1
Binutils 2.18.50.0.7.20080502

## Results Table

| Benchmark | Base | | | | | | Peak | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | Seconds | Ratio | Seconds | Ratio | Seconds | Ratio | Seconds | Ratio | Seconds | Ratio | Seconds | Ratio |
| 410.bwaves | 401 | 33.9 | **401** | **33.9** | 402 | 33.8 | 404 | 33.6 | **401** | **33.9** | 399 | 34.0 |
| 416.gamess | 862 | 22.7 | **863** | **22.7** | 864 | 22.7 | 812 | 24.1 | **812** | **24.1** | 813 | 24.1 |
| 433.milc | 417 | 22.0 | 415 | 22.1 | **415** | **22.1** | 416 | 22.1 | 417 | 22.0 | **416** | **22.1** |
| 434.zeusmp | 326 | 27.9 | **325** | **28.0** | 325 | 28.0 | 326 | 27.9 | **325** | **28.0** | 325 | 28.0 |
| 435.gromacs | **340** | **21.0** | 343 | 20.8 | 340 | 21.0 | 336 | 21.2 | **343** | **20.8** | 343 | 20.8 |
| 436.cactusADM | **154** | **77.4** | 155 | 77.2 | 154 | 77.6 | 152 | 78.5 | 153 | 78.3 | **152** | **78.4** |
| 437.leslie3d | 465 | 20.2 | 466 | 20.2 | **466** | **20.2** | 465 | 20.2 | 466 | 20.2 | **466** | **20.2** |
| 444.namd | 465 | 17.3 | 465 | 17.3 | **465** | **17.3** | 476 | 16.9 | 467 | 17.2 | **469** | **17.1** |
| 447.dealII | 357 | 32.1 | 356 | 32.2 | **356** | **32.1** | 326 | 35.1 | 325 | 35.2 | **325** | **35.2** |
| 450.soplex | 429 | 19.4 | 432 | 19.3 | **431** | **19.3** | **403** | **20.7** | 406 | 20.6 | 403 | 20.7 |
| 453.povray | 206 | 25.8 | 207 | 25.7 | **207** | **25.7** | 170 | 31.4 | 170 | 31.3 | **170** | **31.3** |
| 454.calculix | 325 | 25.4 | **325** | **25.4** | 326 | 25.3 | 316 | 26.1 | 316 | 26.1 | **316** | **26.1** |
| 459.GemsFDTD | **527** | **20.1** | 527 | 20.1 | 526 | 20.2 | 525 | 20.2 | **525** | **20.2** | 525 | 20.2 |
| 465.tonto | 438 | 22.4 | 442 | 22.3 | **439** | **22.4** | 399 | 24.6 | 396 | 24.9 | **396** | **24.9** |
| 470.lbm | 667 | 20.6 | **666** | **20.6** | 665 | 20.7 | 667 | 20.6 | **666** | **20.6** | 665 | 20.7 |
| 481.wrf | 450 | 24.8 | **450** | **24.8** | 451 | 24.8 | 450 | 24.8 | 450 | 24.8 | **450** | **24.8** |
| 482.sphinx3 | 621 | 31.4 | 638 | 30.5 | **621** | **31.4** | **618** | **31.5** | 618 | 31.5 | 618 | 31.5 |

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

## Operating System Notes

```
'ulimit -s unlimited' was set for stacksize unlimited
```

## General Notes

```
OMP_NUM_THREADS set to number of processors
KMP_AFFINITY set to "physical,0"
KMP_STACKSIZE set to 200M

This result was measured on the Gateway GT110 F1.
The Acer AT110 F1 and Gateway GT110 F1 are electronically equivalent.
```

## 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:
-xSSE4.1 -ipo -O3 -no-prec-div -static -parallel -opt-prefetch

C++ benchmarks:
-xSSE4.1 -ipo -O3 -no-prec-div -static -parallel -opt-prefetch

Fortran benchmarks:
-xSSE4.1 -ipo -O3 -no-prec-div -static -parallel -opt-prefetch

Benchmarks using both Fortran and C:
-xSSE4.1 -ipo -O3 -no-prec-div -static -parallel -opt-prefetch

# Peak Compiler Invocation

C benchmarks (except as noted below):
icc

482.sphinx3: icc -m32

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

450.soplex: icpc -m32

Fortran benchmarks:
ifort

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
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

# Peak Optimization Flags

C benchmarks:

433.milc: -prof-gen(pass 1) -prof-use(pass 2) -xSSE4.1 -ipo -O3
-no-prec-div -static -fno-alias

470.lbm: basepeak = yes

482.sphinx3: -xSSE4.1 -ipo -O3 -no-prec-div -static -unroll2

Continued on next page

# Peak Optimization Flags (Continued)

C++ benchmarks:

444.namd: -prof-gen(pass 1) -prof-use(pass 2) -xSSE4.1 -ipo -O3 -no-prec-div -static -fno-alias -auto-ilp32

447.dealII: -prof-gen(pass 1) -prof-use(pass 2) -xSSE4.1 -ipo -O3 -no-prec-div -static -unroll2 -ansi-alias -scalar-rep- -opt-prefetch

450.soplex: -prof-gen(pass 1) -prof-use(pass 2) -xSSE4.1 -ipo -O3 -no-prec-div -static -opt-malloc-options=3

453.povray: -prof-gen(pass 1) -prof-use(pass 2) -xSSE4.1 -ipo -O3 -no-prec-div -static -unroll4 -ansi-alias

Fortran benchmarks:

410.bwaves: -xSSE4.1 -ipo -O3 -no-prec-div -static -opt-prefetch -parallel

416.gamess: -prof-gen(pass 1) -prof-use(pass 2) -xSSE4.1 -ipo -O3 -no-prec-div -static -unroll2 -Ob0 -ansi-alias -scalar-rep-

434.zeusmp: basepeak = yes

437.leslie3d: basepeak = yes

459.GemsFDTD: -prof-gen(pass 1) -prof-use(pass 2) -xSSE4.1 -ipo -O3 -no-prec-div -static -unroll2 -Ob0 -opt-prefetch -parallel

465.tonto: -prof-gen(pass 1) -prof-use(pass 2) -xSSE4.1 -ipo -O3 -no-prec-div -static -unroll4 -auto

Benchmarks using both Fortran and C:

435.gromacs: -prof-gen(pass 1) -prof-use(pass 2) -xSSE4.1 -ipo -O3 -no-prec-div -static -opt-prefetch -auto-ilp32

436.cactusADM: -prof-gen(pass 1) -prof-use(pass 2) -xSSE4.1 -ipo -O3 -no-prec-div -static -unroll2 -opt-prefetch -parallel -auto-ilp32

454.calculix: -xSSE4.1 -ipo -O3 -no-prec-div -static -auto-ilp32

481.wrf: -xSSE4.1 -ipo -O3 -no-prec-div -static -opt-prefetch -parallel -auto-ilp32

The flags file that was used to format this result can be browsed at
http://www.spec.org/cpu2006/flags/Intel-ic11.0-fp-linux64-revF.20100209.html

You can also download the XML flags source by saving the following link:
http://www.spec.org/cpu2006/flags/Intel-ic11.0-fp-linux64-revF.20100209.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 v1.1.
Report generated on Wed Jul 23 05:57:22 2014 by SPEC CPU2006 PS/PDF formatter v6932.
Originally published on 9 February 2010.