SPEC® CFP2006 Result
Copyright 2006-2014 Standard Performance Evaluation Corporation

Acer Incorporated

Gateway GW2000ht-GW170ht F1 (Intel Xeon X5570, 2.93 GHz)

$SPECfp^{®}2006 =$ 43.7
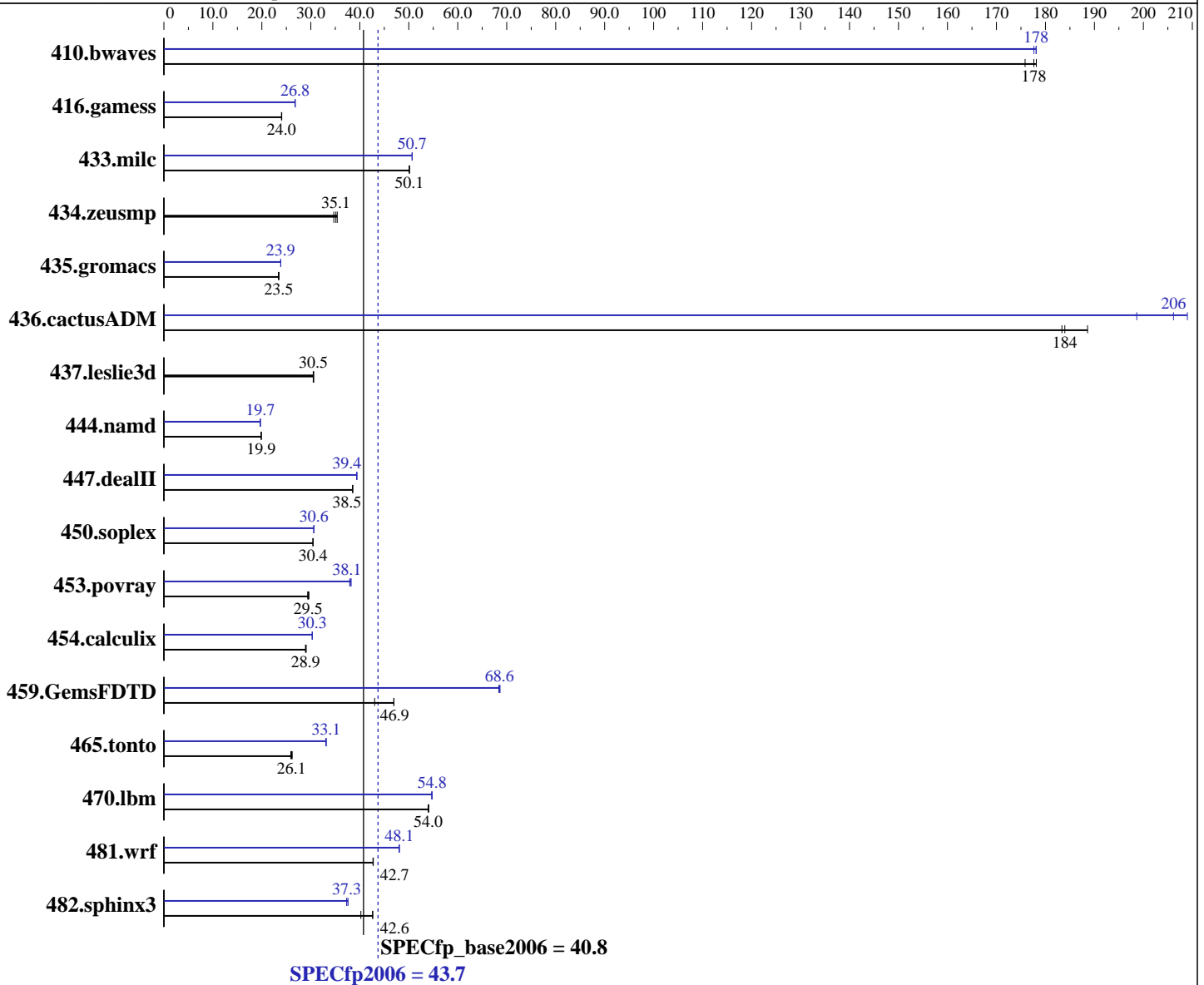
$SPECfp\_base2006 =$ 40.8

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

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

Benchmark	Result
410.bwaves	178 / 178
416.gamess	26.8 / 24.0
433.milc	50.7 / 50.1
434.zeusmp	35.1
435.gromacs	23.9 / 23.5
436.cactusADM	206 / 184
437.leslie3d	30.5
444.namd	19.7 / 19.9
447.dealII	39.4 / 38.5
450.soplex	30.6 / 30.4
453.povray	38.1 / 29.5
454.calculix	30.3 / 28.9
459.GemsFDTD	68.6 / 46.9
465.tonto	33.1 / 26.1
470.lbm	54.8 / 54.0
481.wrf	48.1 / 42.7
482.sphinx3	37.3 / 42.6

SPECfp_base2006 = 40.8

SPECfp2006 = 43.7

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

Gateway GW2000ht-GW170ht F1 (Intel Xeon X5570, 2.93 GHz)

SPECfp2006 =	43.7
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	Base Pointers:	64-bit
Other Cache:	None	Peak Pointers:	32/64-bit
Memory:	24 GB (6 x 4 GB DDR3-1333 RDIMM, ECC)	Other Software:	None
Disk Subsystem:	1 x 1000 GB SATA II, 7200 RPM		
Other Hardware:	None		

Results Table

Benchmark	Base Seconds	Base Ratio	Base Seconds	Base Ratio	Base Seconds	Base Ratio	Peak Seconds	Peak Ratio	Peak Seconds	Peak Ratio	Peak Seconds	Peak Ratio
410.bwaves	77.3	176	**76.5**	**178**	76.3	178	76.5	178	**76.3**	**178**	76.3	178
416.gamess	**815**	**24.0**	814	24.1	815	24.0	731	26.8	730	26.8	**731**	**26.8**
433.milc	183	50.1	**183**	**50.1**	183	50.2	181	50.7	181	50.7	**181**	**50.7**
434.zeusmp	**259**	**35.1**	262	34.7	257	35.4	**259**	**35.1**	262	34.7	257	35.4
435.gromacs	304	23.5	**304**	**23.5**	306	23.4	**299**	**23.9**	299	23.9	299	23.9
436.cactusADM	**65.0**	**184**	65.2	183	63.4	189	60.2	199	57.2	209	**58.0**	**206**
437.leslie3d	307	30.6	308	30.5	**308**	**30.5**	307	30.6	308	30.5	**308**	**30.5**
444.namd	404	19.9	404	19.9	**404**	**19.9**	**407**	**19.7**	407	19.7	407	19.7
447.dealII	297	38.6	**297**	**38.5**	297	38.5	290	39.4	**290**	**39.4**	290	39.4
450.soplex	274	30.4	**274**	**30.4**	274	30.5	273	30.6	272	30.6	**272**	**30.6**
453.povray	181	29.3	**180**	**29.5**	180	29.6	139	38.2	**140**	**38.1**	140	37.9
454.calculix	**285**	**28.9**	285	28.9	284	29.1	272	30.3	272	30.3	**272**	**30.3**
459.GemsFDTD	**226**	**46.9**	226	47.0	247	43.0	155	68.6	155	68.4	**155**	**68.6**
465.tonto	376	26.2	**377**	**26.1**	380	25.9	297	33.1	297	33.1	**297**	**33.1**
470.lbm	**255**	**54.0**	254	54.1	255	53.9	251	54.8	251	54.7	**251**	**54.8**
481.wrf	262	42.7	**261**	**42.7**	261	42.8	232	48.1	232	48.0	**232**	**48.1**
482.sphinx3	**458**	**42.6**	485	40.2	457	42.7	522	37.3	**522**	**37.3**	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

Gateway GW2000ht-GW170ht F1 (Intel Xeon X5570, 2.93 GHz)

$SPECfp2006 = $ 43.7

$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

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

Gateway GW2000ht-GW170ht F1 (Intel Xeon X5570, 2.93 GHz)

$SPECfp2006 =$ 43.7

$SPECfp\_base2006 =$ 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

SPEC CFP2006 Result
Copyright 2006-2014 Standard Performance Evaluation Corporation

Acer Incorporated

Gateway GW2000ht-GW170ht F1 (Intel Xeon X5570, 2.93 GHz)

$SPECfp2006 = $ 43.7

$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

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

Gateway GW2000ht-GW170ht F1 (Intel Xeon X5570, 2.93 GHz)

SPECfp2006 = 43.7

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.

Tested with SPEC CPU2006 v1.1.
Report generated on Wed Jul 23 11:46:27 2014 by SPEC CPU2006 PS/PDF formatter v6932.
Originally published on 17 August 2010.