SPEC® CFP2006 Result

Copyright 2006-2014 Standard Performance Evaluation Corporation

Dell Inc.

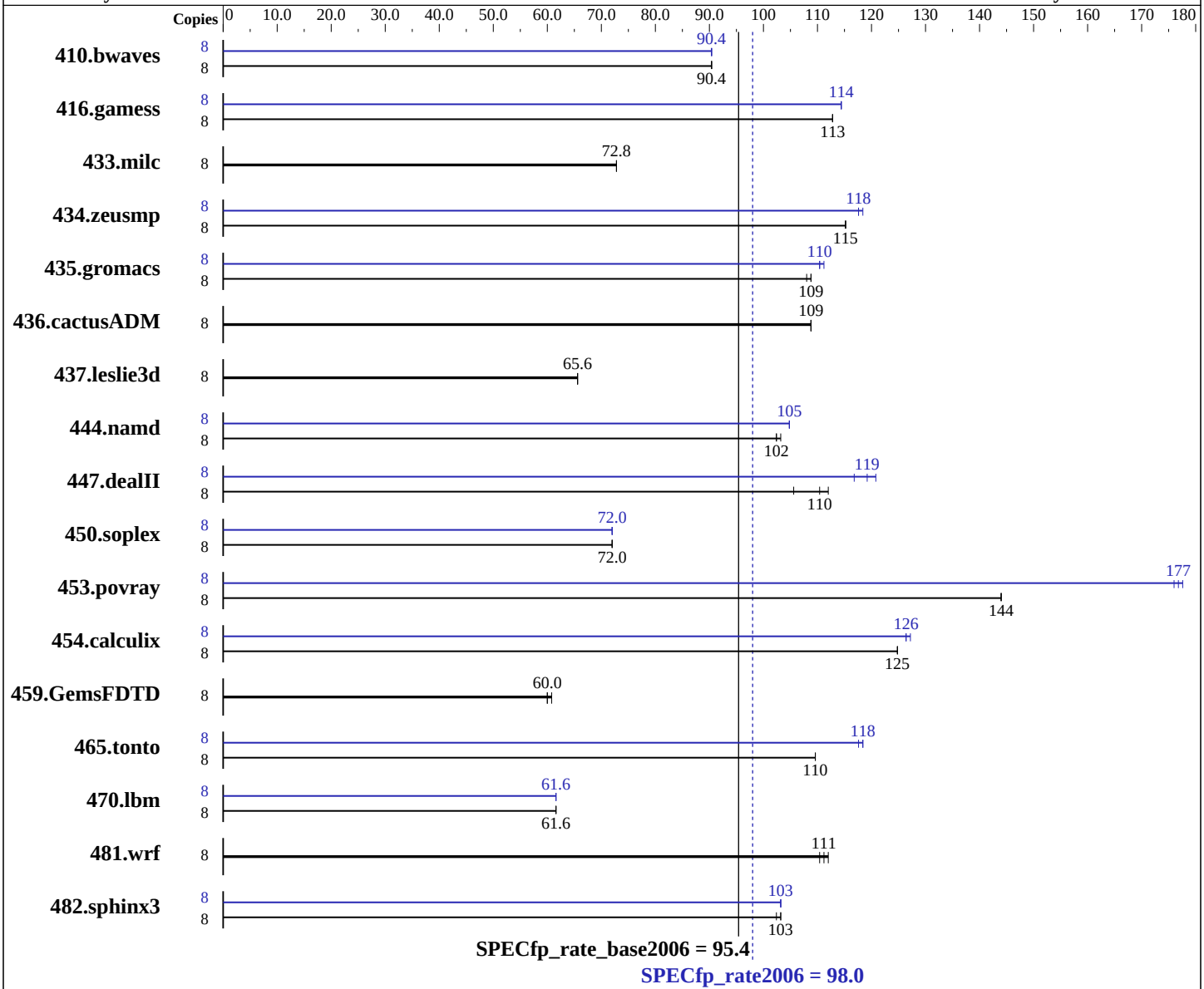
Dell Precision T3500 (Intel Xeon W3580, 3.33 GHz)

SPECfp®_rate2006 = 98.0

SPECfp_rate_base2006 = 95.4

CPU2006 license: 55
Test sponsor: Dell Inc.
Tested by: Dell Inc.

Test date: Jul-2009
Hardware Availability: Aug-2009
Software Availability: Feb-2009



Hardware

CPU Name:	Intel Xeon W3580
CPU Characteristics:	Intel Turbo Boost Technology up to 3.60 GHz
CPU MHz:	3333
FPU:	Integrated
CPU(s) enabled:	4 cores, 1 chip, 4 cores/chip, 2 threads/core
CPU(s) orderable:	1 chip
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:	Windows Vista Ultimate SP1 (64-bit)
Compiler:	Intel C++ Compiler for Intel 64, Version 11.0 Build 20090131 Package ID: w_cproc_p_11.0.072 Intel Visual Fortran Compiler for Intel 64, Version 11.0 Build 20090131 Package ID: w_cprof_p_11.0.072 Microsoft Visual Studio 2008 SP1
Auto Parallel:	No
File System:	NTFS

Continued on next page

SPEC CFP2006 Result

Copyright 2006-2014 Standard Performance Evaluation Corporation

Dell Inc.

Dell Precision T3500 (Intel Xeon W3580, 3.33 GHz)

SPECfp_rate2006 = 98.0

SPECfp_rate_base2006 = 95.4

CPU2006 license: 55
Test sponsor: Dell Inc.
Tested by: Dell Inc.

Test date: Jul-2009
Hardware Availability: Aug-2009
Software Availability: Feb-2009

L3 Cache:	8 MB I+D on chip per chip
Other Cache:	None
Memory:	24 GB (6x4 GB PC3-10600E)
Disk Subsystem:	1 x 80GB SATA 7200 RPM
Other Hardware:	None

System State:	Default
Base Pointers:	32/64-bit
Peak Pointers:	32/64-bit
Other Software:	MicroQuill SmartHeap Library 8.1 for x64

Results Table

Benchmark	Base							Peak						
	Copies	Seconds	Ratio	Seconds	Ratio	Seconds	Ratio	Copies	Seconds	Ratio	Seconds	Ratio	Seconds	Ratio
410.bwaves	8	1207	90.4	1205	90.4	**1206**	**90.4**	8	**1206**	**90.4**	1205	90.4	1206	90.4
416.gamess	8	1392	113	**1391**	**113**	1388	113	8	**1372**	**114**	1372	114	1372	114
433.milc	8	1007	72.8	1014	72.8	**1013**	**72.8**	8	1007	72.8	1014	72.8	**1013**	**72.8**
434.zeusmp	8	**633**	**115**	630	115	633	115	8	**618**	**118**	618	118	616	118
435.gromacs	8	526	109	528	108	**527**	**109**	8	515	111	**516**	**110**	517	110
436.cactusADM	8	881	109	**880**	**109**	878	109	8	881	109	**880**	**109**	878	109
437.leslie3d	8	1150	65.6	1151	65.6	**1151**	**65.6**	8	1150	65.6	1151	65.6	**1151**	**65.6**
444.namd	8	625	102	**625**	**102**	624	103	8	612	105	**613**	**105**	613	105
447.dealII	8	**829**	**110**	866	106	816	112	8	757	121	**765**	**119**	783	117
450.soplex	8	932	72.0	931	72.0	**931**	**72.0**	8	929	72.0	**929**	**72.0**	928	72.0
453.povray	8	295	144	296	144	**295**	**144**	8	242	176	**241**	**177**	240	178
454.calculix	8	528	125	**528**	**125**	528	125	8	523	126	521	127	**521**	**126**
459.GemsFDTD	8	1405	60.8	**1406**	**60.0**	1407	60.0	8	1405	60.8	**1406**	**60.0**	1407	60.0
465.tonto	8	**717**	**110**	717	110	718	110	8	**667**	**118**	664	118	672	118
470.lbm	8	1785	61.6	1785	61.6	**1785**	**61.6**	8	1785	61.6	**1785**	**61.6**	1785	61.6
481.wrf	8	810	110	**803**	**111**	801	112	8	810	110	**803**	**111**	801	112
482.sphinx3	8	1517	102	1514	103	**1516**	**103**	8	1516	103	**1515**	**103**	1514	103

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

Platform Notes

```
BIOS Settings
  Hyperthreading: ENABLE
```

General Notes

```
Binaries were built on Windows Vista Business (64-bit)
```

Base Compiler Invocation

C benchmarks:

```
icl -Qvc9 -Qstd=c99
```

Continued on next page

Base Compiler Invocation (Continued)

C++ benchmarks:
icl -Qvc9

Fortran benchmarks:
ifort

Benchmarks using both Fortran and C:
icl -Qvc9 -Qstd=c99 ifort

Base Portability Flags

410.bwaves: -DSPEC_CPU_P64 /assume:underscore
416.gamess: -DSPEC_CPU_P64
433.milc: -DSPEC_CPU_P64
434.zeusmp: -DSPEC_CPU_P64
435.gromacs: -DSPEC_CPU_P64
436.cactusADM: -DSPEC_CPU_P64 -Qlowercase /assume:underscore
437.leslie3d: -DSPEC_CPU_P64
444.namd: -DSPEC_CPU_P64 /TP
447.dealII: -DSPEC_CPU_P64 -DDEAL_II_MEMBER_VAR_SPECIALIZATION_BUG
450.soplex: -DSPEC_CPU_P64
453.povray: -DSPEC_CPU_P64 -DSPEC_CPU_WINDOWS_ICL
454.calculix: -DSPEC_CPU_P64 -DSPEC_CPU_NOZMODIFIER -Qlowercase
459.GemsFDTD: -DSPEC_CPU_P64
465.tonto: -DSPEC_CPU_P64
470.lbm: -DSPEC_CPU_P64
481.wrf: -DSPEC_CPU_P64 -DSPEC_CPU_WINDOWS_ICL
482.sphinx3: -DSPEC_CPU_P64

Base Optimization Flags

C benchmarks:
-QxSSE4.2 -Qauto-ilp32 -Qipo -O3 -Qprec-div- -Qopt-prefetch
/F512000000

C++ benchmarks:
-QxSSE4.2 -Qauto-ilp32 -Qipo -O3 -Qprec-div- -Qopt-prefetch
-Qcxx_features /F512000000 shlw64mt.lib
-link /FORCE:MULTIPLE

Fortran benchmarks:
-QxSSE4.2 -Qauto-ilp32 -Qipo -O3 -Qprec-div- -Qopt-prefetch
/F1000000000

Benchmarks using both Fortran and C:
-QxSSE4.2 -Qauto-ilp32 -Qipo -O3 -Qprec-div- -Qopt-prefetch
/F1000000000

Peak Compiler Invocation

C benchmarks:
icl -Qvc9 -Qstd=c99

C++ benchmarks:
icl -Qvc9

Fortran benchmarks:
ifort

Benchmarks using both Fortran and C:
icl -Qvc9 -Qstd=c99 ifort

Peak Portability Flags

Same as Base Portability Flags

Peak Optimization Flags

C benchmarks:

433.milc: basepeak = yes

470.lbm: -QxSSE4.1 -Qipo -O3 -Qprec-div- -Qopt-prefetch /F512000000

482.sphinx3: -QxSSE4.2 -Qauto-ilp32 -Qipo -O3 -Qprec-div- -Qunroll2 /F512000000

C++ benchmarks:

444.namd: -Qprof_gen(pass 1) -QxSSE4.2(pass 2) -Qauto-ilp32(pass 2) -Qprof_use(pass 2) -Qipo -O3 -Qprec-div- -Oa /F512000000 shlw64mt.lib -link /FORCE:MULTIPLE

447.dealII: -Qprof_gen(pass 1) -QxSSE4.2(pass 2) -Qauto-ilp32(pass 2) -Qprof_use(pass 2) -Qipo -O3 -Qprec-div- -Qunroll2 -Qansi-alias -Qscalar-rep- /F512000000 shlw64mt.lib -link /FORCE:MULTIPLE

450.soplex: -Qprof_gen(pass 1) -QxSSE4.2 -Qauto-ilp32 -Qprof_use(pass 2) -Qipo -O3 -Qprec-div- /F512000000 shlw64mt.lib -link /FORCE:MULTIPLE

453.povray: -Qprof_gen(pass 1) -QxSSE4.2(pass 2) -Qauto-ilp32(pass 2) -Qprof_use(pass 2) -Qipo -O3 -Qprec-div- -Qunroll4 -Qansi-alias /F512000000 shlw64mt.lib -link /FORCE:MULTIPLE

Continued on next page

Peak Optimization Flags (Continued)

Fortran benchmarks:

410.bwaves: -QxSSE4.2 -Qauto-ilp32 -Qipo -O3 -Qprec-div- -Qopt-prefetch /F1000000000

416.gamess: -Qprof_gen(pass 1) -QxSSE4.2(pass 2) -Qauto-ilp32(pass 2) -Qprof_use(pass 2) -Qipo -O3 -Qprec-div- -Qunroll2 -Ob0 -Qansi-alias -Qscalar-rep- /F1000000000

434.zeusmp: -Qprof_gen(pass 1) -QxSSE4.2 -Qauto-ilp32 -Qprof_use(pass 2) -Qipo -O3 -Qprec-div- /F1000000000

437.leslie3d: basepeak = yes

459.GemsFDTD: basepeak = yes

465.tonto: -Qprof_gen(pass 1) -QxSSE4.2(pass 2) -Qauto-ilp32(pass 2) -Qprof_use(pass 2) -Qipo -O3 -Qprec-div- -Qunroll4 -Qauto /F1000000000

Benchmarks using both Fortran and C:

435.gromacs: -Qprof_gen(pass 1) -QxSSE4.2(pass 2) -Qauto-ilp32(pass 2) -Qprof_use(pass 2) -Qipo -O3 -Qprec-div- -Qopt-prefetch /F1000000000

436.cactusADM: basepeak = yes

454.calculix: -QxSSE4.2 -Qauto-ilp32 -Qipo -O3 -Qprec-div- /F1000000000

481.wrf: basepeak = yes

The flags file that was used to format this result can be browsed at
http://www.spec.org/cpu2006/flags/dell.flags.ic11.0.win.html

You can also download the XML flags source by saving the following link:
http://www.spec.org/cpu2006/flags/dell.flags.ic11.0.win.xml

Copyright 2006-2014 Standard Performance Evaluation Corporation

Dell Inc.

Dell Precision T3500 (Intel Xeon W3580, 3.33 GHz)

SPECfp_rate2006 = 98.0

SPECfp_rate_base2006 = 95.4

CPU2006 license: 55
Test sponsor: Dell Inc.
Tested by: Dell Inc.

Test date: Jul-2009
Hardware Availability: Aug-2009
Software Availability: Feb-2009

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 02:46:48 2014 by SPEC CPU2006 PS/PDF formatter v6932.
Originally published on 15 September 2009.