



SPEC® CFP2006 Result

Copyright 2006-2014 Standard Performance Evaluation Corporation

Dell Inc.

SPECfp®_rate2006 = 25.3

Dell Precision M6300 (Intel X7900, 2.80 GHz)

SPECfp_rate_base2006 = 24.8

CPU2006 license: 55

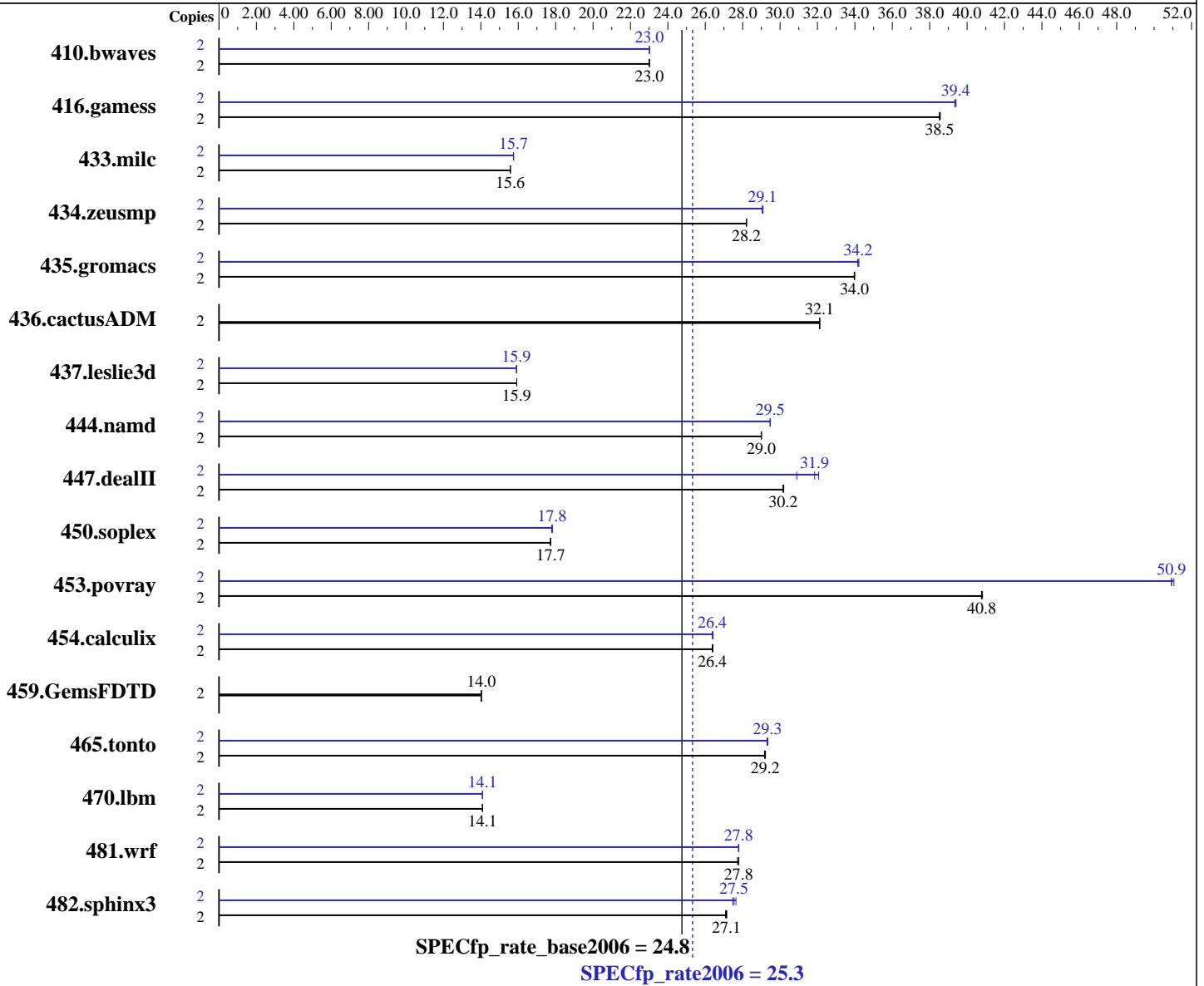
Test date: Aug-2007

Test sponsor: Dell Inc.

Hardware Availability: Aug-2007

Tested by: Dell Inc.

Software Availability: Jun-2007



Hardware

CPU Name: Intel Core 2 Extreme X7900
 CPU Characteristics: 800 MHz Bus Speed
 CPU MHz: 2800
 FPU: Integrated
 CPU(s) enabled: 2 cores, 1 chip, 2 cores/chip
 CPU(s) orderable: 1 chip
 Primary Cache: 32 KB I + 32 KB D on chip per core
 Secondary Cache: 4 MB I+D on chip per chip

Continued on next page

Software

Operating System: Windows XP Professional x64 Edition SP2
 Compiler: Intel C++ Compiler for Intel 64, Version 10.0
 Build 20070426 Package ID: W_CC_P_10.0.025
 Intel Visual Fortran Compiler for Intel 64,
 Version 10.0
 Build 20070426 Package ID: W_FC_P_10.0.025
 Microsoft Visual Studio 2005 SP1
 Auto Parallel: No
 File System: NTFS

Continued on next page



SPEC CFP2006 Result

Copyright 2006-2014 Standard Performance Evaluation Corporation

Dell Inc.

SPECfp_rate2006 = 25.3

Dell Precision M6300 (Intel X7900, 2.80 GHz)

SPECfp_rate_base2006 = 24.8

CPU2006 license: 55

Test date: Aug-2007

Test sponsor: Dell Inc.

Hardware Availability: Aug-2007

Tested by: Dell Inc.

Software Availability: Jun-2007

L3 Cache: None
Other Cache: None
Memory: 4 GB (2x2 GB 667 MHz CL5 DDR2)
Disk Subsystem: 1 x 120GB SATA 7200 RPM
Other Hardware: None

System State: --
Base Pointers: 32/64-bit
Peak Pointers: 32/64-bit
Other Software: MicroQuill SmartHeap Library 8.0 for x64

Results Table

Benchmark	Base							Peak						
	Copies	Seconds	Ratio	Seconds	Ratio	Seconds	Ratio	Copies	Seconds	Ratio	Seconds	Ratio	Seconds	Ratio
410.bwaves	2	1182	23.0	<u>1181</u>	<u>23.0</u>	1181	23.0	2	1181	23.0	1181	23.0	<u>1181</u>	<u>23.0</u>
416.gamess	2	<u>1016</u>	<u>38.5</u>	1017	38.5	1015	38.6	2	996	39.3	<u>994</u>	<u>39.4</u>	994	39.4
433.milc	2	<u>1179</u>	<u>15.6</u>	1179	15.6	1179	15.6	2	1166	15.7	1165	15.8	<u>1166</u>	<u>15.7</u>
434.zeusmp	2	645	28.2	<u>645</u>	<u>28.2</u>	645	28.2	2	<u>626</u>	<u>29.1</u>	626	29.1	627	29.0
435.gromacs	2	420	34.0	420	34.0	<u>420</u>	<u>34.0</u>	2	418	34.2	417	34.2	<u>418</u>	<u>34.2</u>
436.cactusADM	2	<u>744</u>	<u>32.1</u>	744	32.1	744	32.1	2	<u>744</u>	<u>32.1</u>	744	32.1	744	32.1
437.leslie3d	2	1181	15.9	1181	15.9	<u>1181</u>	<u>15.9</u>	2	1181	15.9	<u>1182</u>	<u>15.9</u>	1182	15.9
444.namd	2	553	29.0	553	29.0	<u>553</u>	<u>29.0</u>	2	<u>544</u>	<u>29.5</u>	544	29.5	544	29.5
447.dealII	2	<u>758</u>	<u>30.2</u>	758	30.2	759	30.2	2	<u>718</u>	<u>31.9</u>	714	32.1	741	30.9
450.soplex	2	<u>940</u>	<u>17.7</u>	940	17.7	941	17.7	2	938	17.8	936	17.8	<u>936</u>	<u>17.8</u>
453.povray	2	<u>261</u>	<u>40.8</u>	261	40.8	261	40.8	2	<u>209</u>	<u>50.9</u>	209	50.9	208	51.1
454.calculix	2	625	26.4	625	26.4	<u>625</u>	<u>26.4</u>	2	626	26.4	<u>625</u>	<u>26.4</u>	625	26.4
459.GemsFDTD	2	1514	14.0	1512	14.0	<u>1512</u>	<u>14.0</u>	2	1514	14.0	1512	14.0	<u>1512</u>	<u>14.0</u>
465.tonto	2	<u>674</u>	<u>29.2</u>	675	29.2	673	29.2	2	671	29.3	<u>671</u>	<u>29.3</u>	672	29.3
470.lbm	2	1951	14.1	<u>1951</u>	<u>14.1</u>	1950	14.1	2	1951	14.1	<u>1951</u>	<u>14.1</u>	1951	14.1
481.wrf	2	806	27.7	<u>804</u>	<u>27.8</u>	804	27.8	2	804	27.8	<u>804</u>	<u>27.8</u>	804	27.8
482.sphinx3	2	1436	27.2	<u>1437</u>	<u>27.1</u>	1439	27.1	2	1419	27.5	<u>1415</u>	<u>27.5</u>	1410	27.6

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

General Notes

Binaries were built on Windows Vista Ultimate (64-bit)

Base Compiler Invocation

C benchmarks:
icl -Qstd=c99

C++ benchmarks:
icl

Fortran benchmarks:
ifort

Continued on next page



SPEC CFP2006 Result

Copyright 2006-2014 Standard Performance Evaluation Corporation

Dell Inc.

SPECfp_rate2006 = 25.3

Dell Precision M6300 (Intel X7900, 2.80 GHz)

SPECfp_rate_base2006 = 24.8

CPU2006 license: 55

Test date: Aug-2007

Test sponsor: Dell Inc.

Hardware Availability: Aug-2007

Tested by: Dell Inc.

Software Availability: Jun-2007

Base Compiler Invocation (Continued)

Benchmarks using both Fortran and C:

```
icl -Qstd=c99 ifort
```

Base Portability Flags

```

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

```

Base Optimization Flags

C benchmarks:

```
-fast -Qauto_ilp32 /F950000000 shlw64M.lib
-link /FORCE:MULTIPLE
```

C++ benchmarks:

```
-fast -Qcxx_features -Qauto_ilp32 /F950000000 shlw64M.lib
-link /FORCE:MULTIPLE
```

Fortran benchmarks:

```
-fast /F950000000 -link /FORCE:MULTIPLE
```

Benchmarks using both Fortran and C:

```
-fast -Qauto_ilp32 /F950000000 -link /FORCE:MULTIPLE
```



SPEC CFP2006 Result

Copyright 2006-2014 Standard Performance Evaluation Corporation

Dell Inc.

SPECfp_rate2006 = 25.3

Dell Precision M6300 (Intel X7900, 2.80 GHz)

SPECfp_rate_base2006 = 24.8

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

Test date: Aug-2007
Hardware Availability: Aug-2007
Software Availability: Jun-2007

Peak Compiler Invocation

C benchmarks:
icl -Qstd=c99

C++ benchmarks:
icl

Fortran benchmarks:
ifort

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

Peak Portability Flags

Same as Base Portability Flags

Peak Optimization Flags

C benchmarks:

433.milc: ONESTEP -Qprof_gen(pass 1) -Qprof_use(pass 2) -fast
-Qunroll2 -Oa -Qauto_ilp32 /F950000000 sh1W64M.lib
-link /FORCE:MULTIPLE

470.lbm: ONESTEP -Qprof_gen(pass 1) -Qprof_use(pass 2) -fast
-Qunroll2 -Qscalar-rep- -Qprefetch -Qauto_ilp32
/F950000000 sh1W64M.lib -link /FORCE:MULTIPLE

482.sphinx3: ONESTEP -Qprof_gen(pass 1) -Qprof_use(pass 2) -fast
-Qunroll2 -Qauto_ilp32 /F950000000 sh1W64M.lib
-link /FORCE:MULTIPLE

C++ benchmarks:

444.namd: ONESTEP -Qprof_gen(pass 1) -Qprof_use(pass 2) -fast -Oa
-Qcxx_features -Qauto_ilp32 /F950000000 sh1W64M.lib
-link /FORCE:MULTIPLE

447.dealII: ONESTEP -Qprof_gen(pass 1) -Qprof_use(pass 2) -fast
-Qprefetch -Qcxx_features -Qauto_ilp32 /F950000000
sh1W64M.lib -link /FORCE:MULTIPLE

450.soplex: ONESTEP -Qprof_gen(pass 1) -Qprof_use(pass 2) -fast
-Qcxx_features -Qauto_ilp32 /F950000000 sh1W64M.lib
-link /FORCE:MULTIPLE

Continued on next page



SPEC CFP2006 Result

Copyright 2006-2014 Standard Performance Evaluation Corporation

Dell Inc.

SPECfp_rate2006 = 25.3

Dell Precision M6300 (Intel X7900, 2.80 GHz)

SPECfp_rate_base2006 = 24.8

CPU2006 license: 55

Test date: Aug-2007

Test sponsor: Dell Inc.

Hardware Availability: Aug-2007

Tested by: Dell Inc.

Software Availability: Jun-2007

Peak Optimization Flags (Continued)

453.povray: ONESTEP -Qprof_gen(pass 1) -Qprof_use(pass 2) -fast
-Qansi-alias -Qcxx_features -Qauto_ilp32 /F950000000
sh1W64M.lib -link /FORCE:MULTIPLE

Fortran benchmarks:

410.bwaves: ONESTEP -fast /F950000000 -link /FORCE:MULTIPLE

416.gamess: ONESTEP -Qprof_gen(pass 1) -Qprof_use(pass 2) -fast
-Qunroll2 -Ob0 -Qansi-alias -Qscalar-rep- /F950000000
-link /FORCE:MULTIPLE

434.zeusmp: ONESTEP -Qprof_gen(pass 1) -Qprof_use(pass 2) -QxT -O2
-Qprec-div- -Qunroll0 -Qscalar-rep- /F950000000
-link /FORCE:MULTIPLE

437.leslie3d: ONESTEP -Qprof_gen(pass 1) -Qprof_use(pass 2) -fast
/F950000000 -link /FORCE:MULTIPLE

459.GemsFDTD: basepeak = yes

465.tonto: Same as 437.leslie3d

Benchmarks using both Fortran and C:

435.gromacs: -Qprof_gen(pass 1) -Qprof_use(pass 2) -fast -Oa
-Qauto_ilp32 /F950000000 -link /FORCE:MULTIPLE

436.cactusADM: basepeak = yes

454.calculix: -fast -Qauto_ilp32 /F950000000
-link /FORCE:MULTIPLE

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/dell.ic10.windows.flags.html>

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

<http://www.spec.org/cpu2006/flags/dell.ic10.windows.flags.xml>



SPEC CFP2006 Result

Copyright 2006-2014 Standard Performance Evaluation Corporation

Dell Inc.

SPECfp_rate2006 = 25.3

Dell Precision M6300 (Intel X7900, 2.80 GHz)

SPECfp_rate_base2006 = 24.8

CPU2006 license: 55

Test sponsor: Dell Inc.

Tested by: Dell Inc.

Test date: Aug-2007

Hardware Availability: Aug-2007

Software Availability: Jun-2007

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 v1.0.
Report generated on Tue Jul 22 13:12:13 2014 by SPEC CPU2006 PS/PDF formatter v6932.
Originally published on 4 September 2007.