



SPEC[®] CFP2006 Result

Copyright 2006-2014 Standard Performance Evaluation Corporation

Dell Inc.

SPECfp[®]_rate2006 = 92.5

Dell Precision T3500 (Intel Xeon X5570, 2.93 GHz)

SPECfp_rate_base2006 = 90.0

CPU2006 license: 55

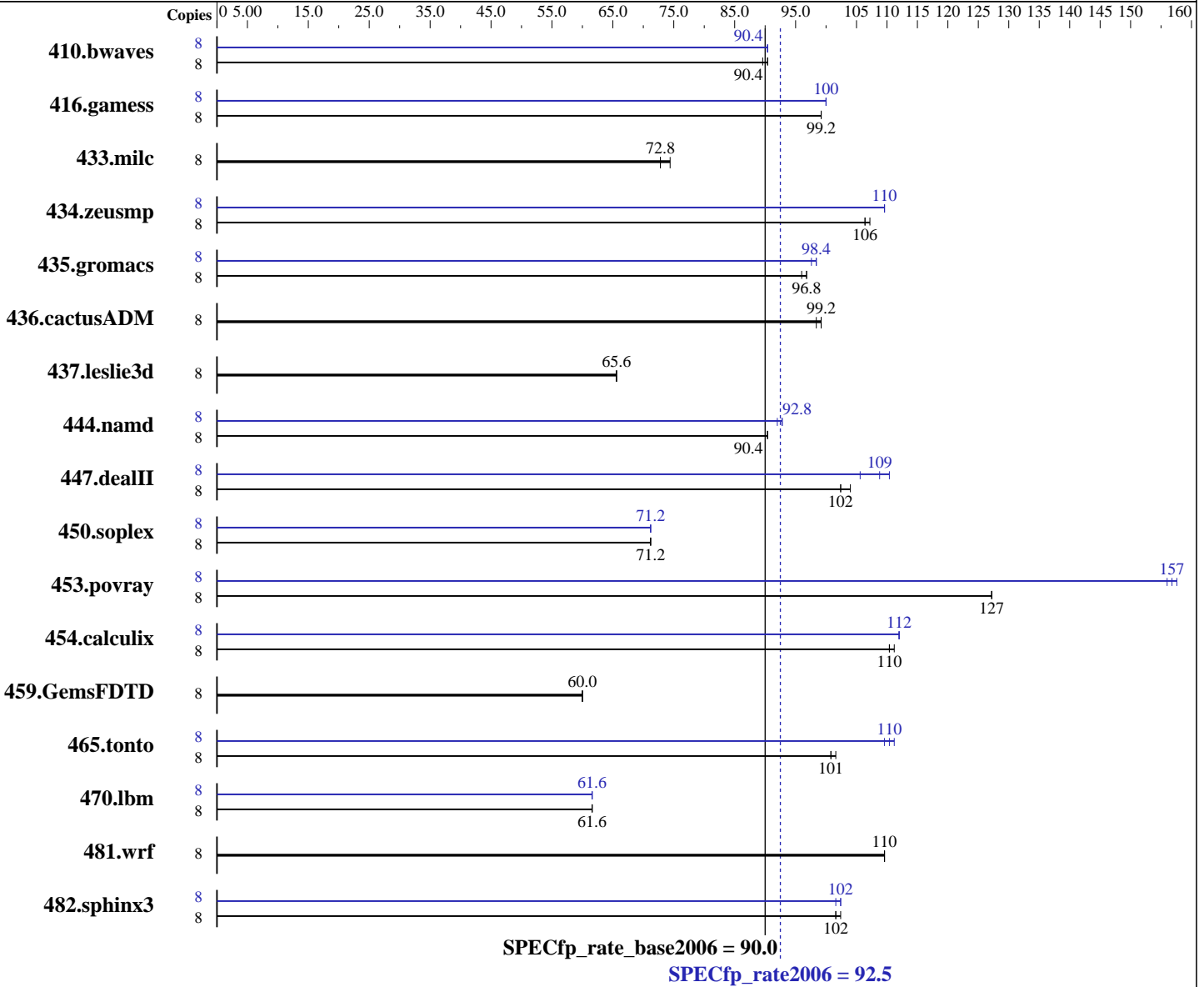
Test sponsor: Dell Inc.

Tested by: Dell Inc.

Test date: Mar-2009

Hardware Availability: Apr-2009

Software Availability: Feb-2008



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: 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.

SPECfp_rate2006 = 92.5

Dell Precision T3500 (Intel Xeon X5570, 2.93 GHz)

SPECfp_rate_base2006 = 90.0

CPU2006 license: 55

Test date: Mar-2009

Test sponsor: Dell Inc.

Hardware Availability: Apr-2009

Tested by: Dell Inc.

Software Availability: Feb-2008

L3 Cache: 8 MB I+D on chip per chip
 Other Cache: None
 Memory: 24 GB (6x4 GB, DDR3_1333R, ECC, CL9)
 Disk Subsystem: 1 x 80 GB 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	1208	89.6	<u>1208</u>	<u>90.4</u>	1208	90.4	8	1207	90.4	<u>1207</u>	<u>90.4</u>	1207	90.4
416.gamess	8	<u>1583</u>	<u>99.2</u>	1582	99.2	1585	99.2	8	1562	100	<u>1563</u>	<u>100</u>	1565	100
433.milc	8	990	74.4	<u>1014</u>	<u>72.8</u>	1014	72.8	8	990	74.4	<u>1014</u>	<u>72.8</u>	1014	72.8
434.zeusmp	8	680	107	683	106	<u>682</u>	<u>106</u>	8	666	110	<u>666</u>	<u>110</u>	664	110
435.gromacs	8	<u>591</u>	<u>96.8</u>	594	96.0	590	96.8	8	581	98.4	585	97.6	<u>583</u>	<u>98.4</u>
436.cactusADM	8	<u>965</u>	<u>99.2</u>	963	99.2	975	98.4	8	<u>965</u>	<u>99.2</u>	963	99.2	975	98.4
437.leslie3d	8	<u>1153</u>	<u>65.6</u>	1153	65.6	1152	65.6	8	<u>1153</u>	<u>65.6</u>	1153	65.6	1152	65.6
444.namd	8	708	90.4	<u>709</u>	<u>90.4</u>	710	90.4	8	694	92.8	<u>694</u>	<u>92.8</u>	695	92.0
447.dealII	8	<u>892</u>	<u>102</u>	897	102	881	104	8	869	106	<u>838</u>	<u>109</u>	831	110
450.soplex	8	936	71.2	935	71.2	<u>935</u>	<u>71.2</u>	8	933	71.2	934	71.2	<u>934</u>	<u>71.2</u>
453.povray	8	<u>335</u>	<u>127</u>	335	127	335	127	8	<u>271</u>	<u>157</u>	272	156	271	158
454.calculix	8	597	110	<u>596</u>	<u>110</u>	595	111	8	<u>588</u>	<u>112</u>	588	112	588	112
459.GemsFDTD	8	1408	60.0	1407	60.0	<u>1408</u>	<u>60.0</u>	8	1408	60.0	1407	60.0	<u>1408</u>	<u>60.0</u>
465.tonto	8	<u>780</u>	<u>101</u>	780	101	776	102	8	716	110	707	111	<u>714</u>	<u>110</u>
470.lbm	8	1785	61.6	<u>1785</u>	<u>61.6</u>	1785	61.6	8	<u>1785</u>	<u>61.6</u>	1785	61.6	1786	61.6
481.wrf	8	814	110	<u>815</u>	<u>110</u>	818	110	8	814	110	<u>815</u>	<u>110</u>	818	110
482.sphinx3	8	1531	102	1528	102	<u>1530</u>	<u>102</u>	8	1527	102	<u>1528</u>	<u>102</u>	1529	102

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 Business (64-bit)

Base Compiler Invocation

C benchmarks:

icl -Qvc9 -Qstd=c99

C++ benchmarks:

icl -Qvc9

Fortran benchmarks:

ifort

Continued on next page



SPEC CFP2006 Result

Copyright 2006-2014 Standard Performance Evaluation Corporation

Dell Inc.

SPECfp_rate2006 = 92.5

Dell Precision T3500 (Intel Xeon X5570, 2.93 GHz)

SPECfp_rate_base2006 = 90.0

CPU2006 license: 55

Test date: Mar-2009

Test sponsor: Dell Inc.

Hardware Availability: Apr-2009

Tested by: Dell Inc.

Software Availability: Feb-2008

Base Compiler Invocation (Continued)

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

```



SPEC CFP2006 Result

Copyright 2006-2014 Standard Performance Evaluation Corporation

Dell Inc.

SPECfp_rate2006 = 92.5

Dell Precision T3500 (Intel Xeon X5570, 2.93 GHz)

SPECfp_rate_base2006 = 90.0

CPU2006 license: 55

Test date: Mar-2009

Test sponsor: Dell Inc.

Hardware Availability: Apr-2009

Tested by: Dell Inc.

Software Availability: Feb-2008

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.deallI: -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



SPEC CFP2006 Result

Copyright 2006-2014 Standard Performance Evaluation Corporation

Dell Inc.

SPECfp_rate2006 = 92.5

Dell Precision T3500 (Intel Xeon X5570, 2.93 GHz)

SPECfp_rate_base2006 = 90.0

CPU2006 license: 55

Test date: Mar-2009

Test sponsor: Dell Inc.

Hardware Availability: Apr-2009

Tested by: Dell Inc.

Software Availability: Feb-2008

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.ic11.0.windows.flags.html>

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

<http://www.spec.org/cpu2006/flags/dell.ic11.0.windows.flags.xml>



SPEC CFP2006 Result

Copyright 2006-2014 Standard Performance Evaluation Corporation

Dell Inc.

SPECfp_rate2006 = 92.5

Dell Precision T3500 (Intel Xeon X5570, 2.93 GHz)

SPECfp_rate_base2006 = 90.0

CPU2006 license: 55

Test date: Mar-2009

Test sponsor: Dell Inc.

Hardware Availability: Apr-2009

Tested by: Dell Inc.

Software Availability: Feb-2008

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 Tue Jul 22 23:59:46 2014 by SPEC CPU2006 PS/PDF formatter v6932.
Originally published on 2 April 2009.