



SPEC[®] CFP2006 Result

Copyright 2006-2014 Standard Performance Evaluation Corporation

Dell Inc.

SPECfp[®]_rate2006 = 184

Dell Precision T7500 (Intel Xeon X5570, 2.93 GHz)

SPECfp_rate_base2006 = 179

CPU2006 license: 55

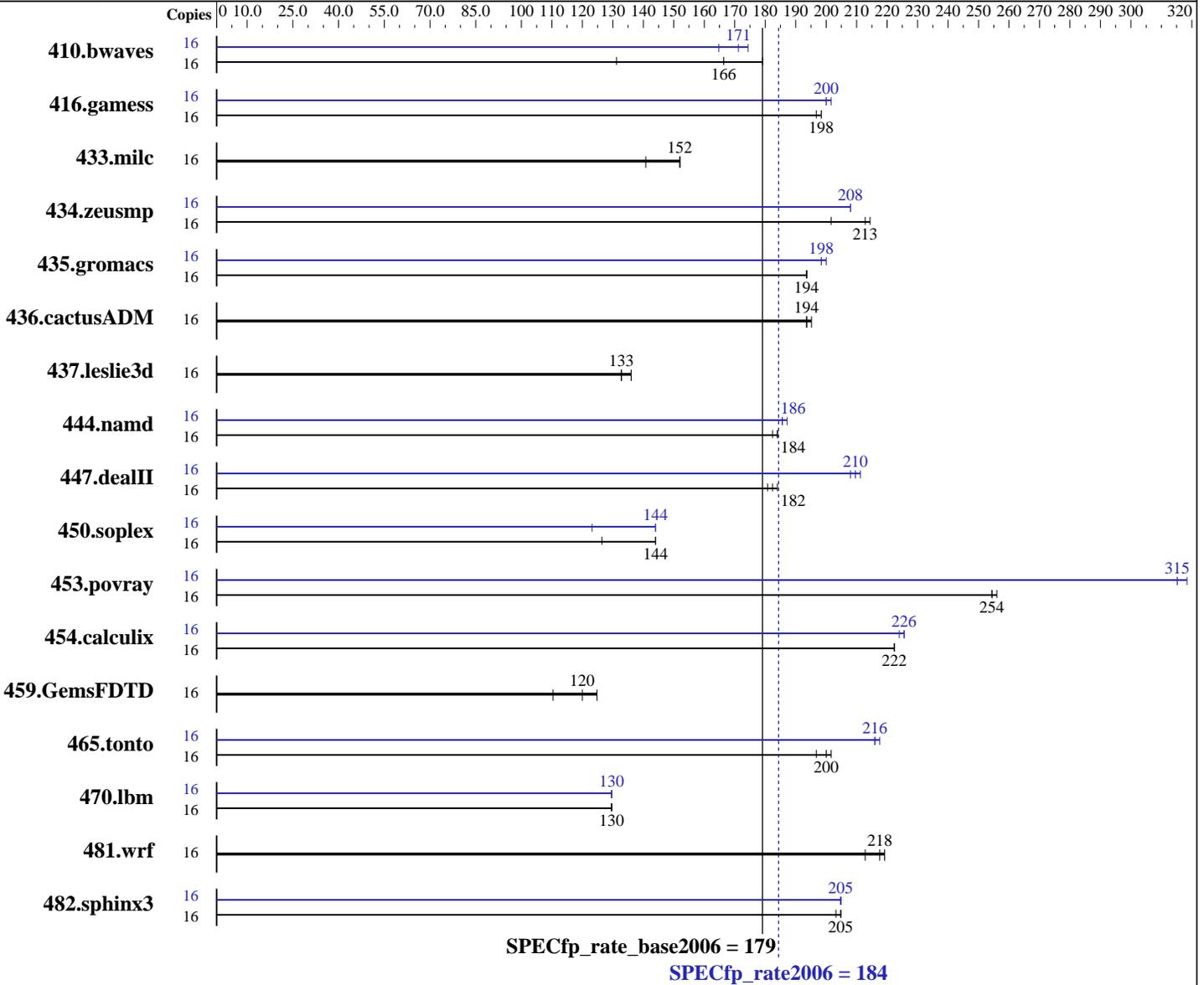
Test sponsor: Dell Inc.

Tested by: Dell Inc.

Test date: Mar-2009

Hardware Availability: Apr-2009

Software Availability: Feb-2009



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: Windows Vista Business 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 = 184

Dell Precision T7500 (Intel Xeon X5570, 2.93 GHz)

SPECfp_rate_base2006 = 179

CPU2006 license: 55

Test date: Mar-2009

Test sponsor: Dell Inc.

Hardware Availability: Apr-2009

Tested by: Dell Inc.

Software Availability: Feb-2009

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 146 GB SAS 15000 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 | 16 | 1660 | 131 | 1211 | 179 | 1308 | 166 | 16 | 1271 | 171 | 1241 | 174 | 1318 | 165 |
| 416.gamess | 16 | 1575 | 198 | 1589 | 197 | 1579 | 198 | 16 | 1566 | 200 | 1558 | 202 | 1562 | 200 |
| 433.milc | 16 | 1038 | 141 | 971 | 152 | 971 | 152 | 16 | 1038 | 141 | 971 | 152 | 971 | 152 |
| 434.zeusmp | 16 | 721 | 202 | 686 | 213 | 681 | 214 | 16 | 701 | 208 | 703 | 208 | 702 | 208 |
| 435.gromacs | 16 | 589 | 194 | 588 | 194 | 588 | 194 | 16 | 573 | 200 | 578 | 198 | 578 | 198 |
| 436.cactusADM | 16 | 977 | 195 | 985 | 194 | 988 | 194 | 16 | 977 | 195 | 985 | 194 | 988 | 194 |
| 437.leslie3d | 16 | 1105 | 136 | 1137 | 133 | 1128 | 133 | 16 | 1105 | 136 | 1137 | 133 | 1128 | 133 |
| 444.namd | 16 | 700 | 184 | 703 | 182 | 700 | 184 | 16 | 688 | 187 | 689 | 186 | 692 | 186 |
| 447.dealII | 16 | 1010 | 181 | 994 | 184 | 1002 | 182 | 16 | 870 | 210 | 866 | 211 | 878 | 208 |
| 450.soplex | 16 | 1053 | 126 | 926 | 144 | 924 | 144 | 16 | 1076 | 123 | 924 | 144 | 924 | 144 |
| 453.povray | 16 | 334 | 254 | 334 | 254 | 332 | 256 | 16 | 270 | 315 | 268 | 318 | 270 | 315 |
| 454.calculix | 16 | 593 | 222 | 594 | 222 | 593 | 222 | 16 | 587 | 226 | 588 | 224 | 587 | 226 |
| 459.GemsFDTD | 16 | 1538 | 110 | 1364 | 125 | 1417 | 120 | 16 | 1538 | 110 | 1364 | 125 | 1417 | 120 |
| 465.tonto | 16 | 790 | 200 | 784 | 202 | 799 | 197 | 16 | 730 | 216 | 725 | 218 | 730 | 216 |
| 470.lbm | 16 | 1700 | 130 | 1702 | 130 | 1706 | 130 | 16 | 1704 | 130 | 1701 | 130 | 1706 | 130 |
| 481.wrf | 16 | 840 | 213 | 817 | 219 | 820 | 218 | 16 | 840 | 213 | 817 | 219 | 820 | 218 |
| 482.sphinx3 | 16 | 1530 | 203 | 1520 | 205 | 1520 | 205 | 16 | 1528 | 205 | 1519 | 205 | 1518 | 205 |

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

Submit Notes

The config file option 'submit' was used.

Platform Notes

BIOS Settings
 Memory Node Interleaving set to NUMA.
 Hyper-Threading Technology set to ON.

General Notes

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



SPEC CFP2006 Result

Copyright 2006-2014 Standard Performance Evaluation Corporation

Dell Inc.

SPECfp_rate2006 = 184

Dell Precision T7500 (Intel Xeon X5570, 2.93 GHz)

SPECfp_rate_base2006 = 179

CPU2006 license: 55

Test date: Mar-2009

Test sponsor: Dell Inc.

Hardware Availability: Apr-2009

Tested by: Dell Inc.

Software Availability: Feb-2009

Base 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

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

Continued on next page



SPEC CFP2006 Result

Copyright 2006-2014 Standard Performance Evaluation Corporation

Dell Inc.

SPECfp_rate2006 = 184

Dell Precision T7500 (Intel Xeon X5570, 2.93 GHz)

SPECfp_rate_base2006 = 179

CPU2006 license: 55

Test date: Mar-2009

Test sponsor: Dell Inc.

Hardware Availability: Apr-2009

Tested by: Dell Inc.

Software Availability: Feb-2009

Base Optimization Flags (Continued)

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

Continued on next page



SPEC CFP2006 Result

Copyright 2006-2014 Standard Performance Evaluation Corporation

Dell Inc.

SPECfp_rate2006 = 184

Dell Precision T7500 (Intel Xeon X5570, 2.93 GHz)

SPECfp_rate_base2006 = 179

CPU2006 license: 55

Test date: Mar-2009

Test sponsor: Dell Inc.

Hardware Availability: Apr-2009

Tested by: Dell Inc.

Software Availability: Feb-2009

Peak Optimization Flags (Continued)

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

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.20090710.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.20090710.xml>



SPEC CFP2006 Result

Copyright 2006-2014 Standard Performance Evaluation Corporation

Dell Inc.

SPECfp_rate2006 = 184

Dell Precision T7500 (Intel Xeon X5570, 2.93 GHz)

SPECfp_rate_base2006 = 179

CPU2006 license: 55

Test date: Mar-2009

Test sponsor: Dell Inc.

Hardware Availability: Apr-2009

Tested by: Dell Inc.

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 Tue Jul 22 23:59:37 2014 by SPEC CPU2006 PS/PDF formatter v6932.
Originally published on 2 April 2009.