SPEC® CFP2006 Result

Copyright 2006-2014 Standard Performance Evaluation Corporation

Dell Inc.

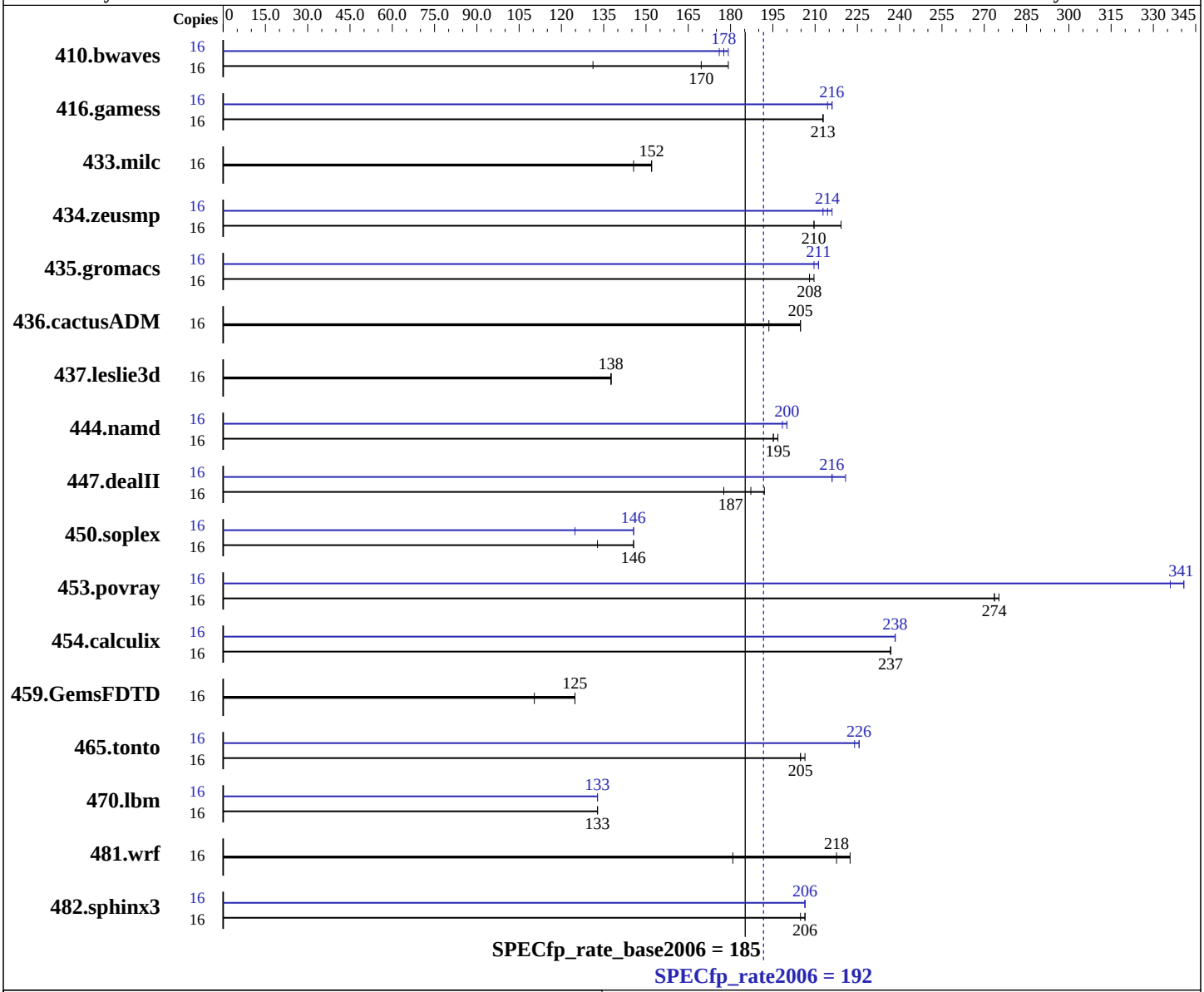
Dell Precision T7500 (Intel Xeon W5580, 3.20 GHz)

SPECfp®_rate2006 = 192

SPECfp_rate_base2006 = 185

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 W5580
CPU Characteristics:	Intel Turbo Boost Technology up to 3.46 GHz
CPU MHz:	3200
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.

Dell Precision T7500 (Intel Xeon W5580, 3.20 GHz)

SPECfp_rate2006 = 192

SPECfp_rate_base2006 = 185

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

Test date: Mar-2009
Hardware Availability: Apr-2009
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	1662	131	1218	179	**1288**	**170**	16	1240	176	**1221**	**178**	1213	179
416.gamess	16	**1475**	**213**	1472	213	1477	213	16	**1453**	**216**	1463	214	1451	216
433.milc	16	1014	146	963	152	**963**	**152**	16	1014	146	963	152	**963**	**152**
434.zeusmp	16	694	210	662	219	**692**	**210**	16	**681**	**214**	683	213	675	216
435.gromacs	16	547	210	**550**	**208**	550	208	16	544	210	**543**	**211**	539	211
436.cactusADM	16	**934**	**205**	984	194	930	205	16	**934**	**205**	984	194	930	205
437.leslie3d	16	1096	138	1097	138	**1097**	**138**	16	1096	138	1097	138	**1097**	**138**
444.namd	16	656	195	655	197	**655**	**195**	16	642	200	646	198	**643**	**200**
447.dealII	16	1033	178	**977**	**187**	954	192	16	848	216	829	221	**847**	**216**
450.soplex	16	1010	133	916	146	**917**	**146**	16	1075	125	**914**	**146**	914	146
453.povray	16	**311**	**274**	309	275	311	274	16	253	336	**250**	**341**	250	341
454.calculix	16	558	237	558	237	**558**	**237**	16	552	238	553	238	**552**	**238**
459.GemsFDTD	16	1547	110	**1367**	**125**	1361	125	16	1547	110	**1367**	**125**	1361	125
465.tonto	16	**767**	**205**	771	205	763	206	16	703	224	**698**	**226**	698	226
470.lbm	16	**1654**	**133**	1654	133	1654	133	16	**1654**	**133**	1654	133	1655	133
481.wrf	16	988	181	**819**	**218**	801	222	16	988	181	**819**	**218**	801	222
482.sphinx3	16	1518	205	**1512**	**206**	1511	206	16	1516	206	1510	206	**1512**	**206**

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)
```

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

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

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

Copyright 2006-2014 Standard Performance Evaluation Corporation

Dell Inc.

Dell Precision T7500 (Intel Xeon W5580, 3.20 GHz)

SPECfp_rate2006 = 192

SPECfp_rate_base2006 = 185

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

Test date: Mar-2009
Hardware Availability: Apr-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 Tue Jul 22 23:58:42 2014 by SPEC CPU2006 PS/PDF formatter v6932.
Originally published on 2 April 2009.