SPEC® CFP2006 Result

Dell Inc.

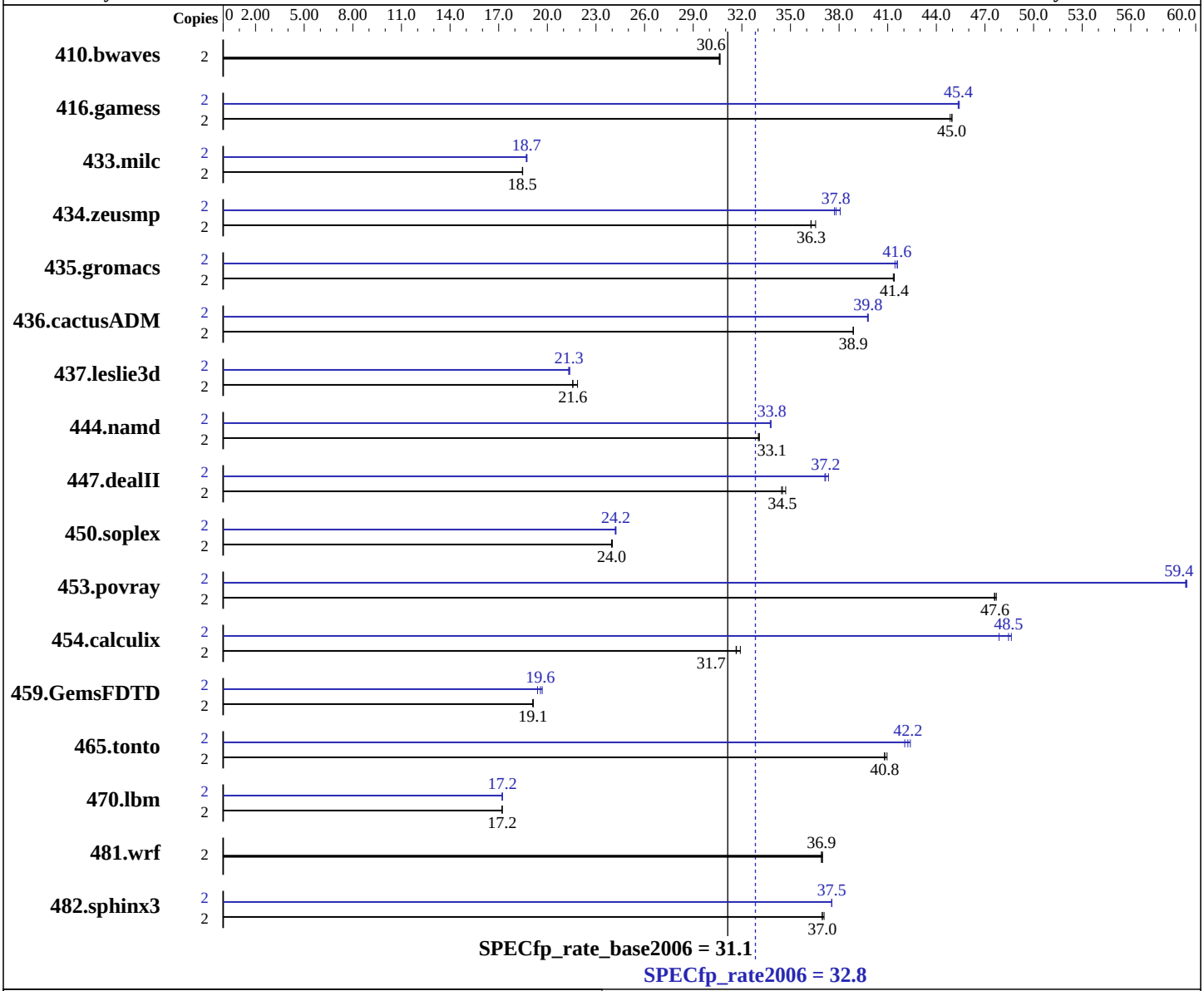
Dell Precision T3400 (Intel E8500, 3.16 GHz)

SPECfp®_rate2006 = 32.8

SPECfp_rate_base2006 = 31.1

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

Test date: Apr-2008
Hardware Availability: Jan-2008
Software Availability: Mar-2008



Hardware

CPU Name:	Intel Core 2 Duo E8500
CPU Characteristics:	1333 MHz Bus Speed
CPU MHz:	3166
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:	6 MB I+D on chip per chip

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Software

Operating System:	Windows Vista Ultimate (64-bit)
Compiler:	Intel C++ Compiler for Intel 64, Version 10.1 Build 20080312 Package ID: w_cc_p_10.1.021 Intel Visual Fortran Compiler for Intel 64, Version 10.0 Build 20080312 Package ID: w_fc_p_10.1.021 Microsoft Visual Studio 2005 SP1
Auto Parallel:	No
File System:	NTFS

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L3 Cache:	None
Other Cache:	None
Memory:	8 GB (4x2 GB 800 MHz ECC CL6 DDR2)
Disk Subsystem:	1 x 160 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	2	886	30.7	888	30.6	**888**	**30.6**	2	886	30.7	888	30.6	**888**	**30.6**
416.gamess	2	873	44.9	871	45.0	**871**	**45.0**	2	864	45.3	**863**	**45.4**	862	45.4
433.milc	2	**994**	**18.5**	993	18.5	994	18.5	2	979	18.7	**980**	**18.7**	982	18.7
434.zeusmp	2	**502**	**36.3**	498	36.6	502	36.3	2	478	38.1	483	37.7	**481**	**37.8**
435.gromacs	2	345	41.3	**345**	**41.4**	345	41.4	2	**343**	**41.6**	343	41.6	345	41.5
436.cactusADM	2	615	38.9	615	38.9	**615**	**38.9**	2	601	39.8	**601**	**39.8**	601	39.8
437.leslie3d	2	860	21.9	872	21.6	**871**	**21.6**	2	882	21.3	879	21.4	**881**	**21.3**
444.namd	2	485	33.1	486	33.0	**485**	**33.1**	2	**475**	**33.8**	475	33.8	475	33.8
447.dealII	2	659	34.7	664	34.5	**663**	**34.5**	2	613	37.3	616	37.1	**616**	**37.2**
450.soplex	2	695	24.0	696	24.0	**696**	**24.0**	2	**689**	**24.2**	690	24.2	688	24.2
453.povray	2	223	47.7	224	47.6	**223**	**47.6**	2	**179**	**59.4**	179	59.4	179	59.5
454.calculix	2	517	31.9	521	31.6	**521**	**31.7**	2	345	47.9	339	48.6	**341**	**48.5**
459.GemsFDTD	2	**1110**	**19.1**	1109	19.1	1111	19.1	2	1094	19.4	**1084**	**19.6**	1078	19.7
465.tonto	2	482	40.8	480	41.0	**482**	**40.8**	2	468	42.1	**466**	**42.2**	464	42.4
470.lbm	2	1597	17.2	**1596**	**17.2**	1596	17.2	2	1595	17.2	1597	17.2	**1595**	**17.2**
481.wrf	2	604	37.0	**605**	**36.9**	605	36.9	2	604	37.0	**605**	**36.9**	605	36.9
482.sphinx3	2	1051	37.1	1055	37.0	**1054**	**37.0**	2	1038	37.5	1038	37.6	**1038**	**37.5**

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

Base Compiler Invocation

C benchmarks:
```
icl -Qstd=c99
```

C++ benchmarks:
```
icl
```

Fortran benchmarks:
```
ifort
```

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: -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:
-fast -Qauto-ilp32 /F1000000000 -link /FORCE:MULTIPLE

C++ benchmarks:
-fast -Qauto-ilp32 -Qcxx_features /F1000000000 shlw64m.lib
-link /FORCE:MULTIPLE

Fortran benchmarks:
-fast -Qauto-ilp32 /F1000000000 -link /FORCE:MULTIPLE

Benchmarks using both Fortran and C:
-fast -Qauto-ilp32 /F1000000000 -link /FORCE:MULTIPLE

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: -Qprof_gen(pass 1) -Qprof_use(pass 2) -fast -Qauto-ilp32 -Qunroll2 -Oa /F1000000000 -link /FORCE:MULTIPLE

470.lbm: -Qprof_gen(pass 1) -Qprof_use(pass 2) -fast -Qauto-ilp32 -Qunroll2 -Qscalar-rep- -Qprefetch /F1000000000 -link /FORCE:MULTIPLE

482.sphinx3: -fast -Qauto-ilp32 -Qunroll2 /F1000000000 -link /FORCE:MULTIPLE

C++ benchmarks:

444.namd: -Qprof_gen(pass 1) -Qprof_use(pass 2) -fast -Qauto-ilp32 -Oa -Qcxx_features /F1000000000 shlw64m.lib -link /FORCE:MULTIPLE

447.dealII: -Qprof_gen(pass 1) -Qprof_use(pass 2) -fast -Qauto-ilp32 -Qunroll2 -Qprefetch -Qcxx_features /F1000000000 shlw64m.lib -link /FORCE:MULTIPLE

450.soplex: -Qprof_gen(pass 1) -Qprof_use(pass 2) -fast -Qauto-ilp32 -Qcxx_features /F1000000000 shlw64m.lib -link /FORCE:MULTIPLE

453.povray: -Qprof_gen(pass 1) -Qprof_use(pass 2) -fast -Qauto-ilp32 -Qunroll4 -Qansi-alias -Qcxx_features /F1000000000 shlw64m.lib -link /FORCE:MULTIPLE

Fortran benchmarks:

410.bwaves: basepeak = yes

416.gamess: -Qprof_gen(pass 1) -Qprof_use(pass 2) -fast -Qauto-ilp32 -Qunroll2 -Ob0 -Qansi-alias -Qscalar-rep- /F1000000000 -link /FORCE:MULTIPLE

434.zeusmp: -Qprof_gen(pass 1) -Qprof_use(pass 2) -QxT -O2 -Qprec-div- -Qunroll0 -Qscalar-rep- /F1000000000 -link /FORCE:MULTIPLE

437.leslie3d: -Qprof_gen(pass 1) -Qprof_use(pass 2) -fast -Qauto-ilp32 -Qprefetch /F1000000000 -link /FORCE:MULTIPLE

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Peak Optimization Flags (Continued)

459.GemsFDTD: `-Qprof_gen`(pass 1) `-Qprof_use`(pass 2) `-fast -Qauto-ilp32 -Qunroll2 -Ob0 -Qprefetch /F1000000000 -link /FORCE:MULTIPLE`

465.tonto: `-Qprof_gen`(pass 1) `-Qprof_use`(pass 2) `-fast -Qauto-ilp32 -Qunroll4 -Qauto /F1000000000 -link /FORCE:MULTIPLE`

Benchmarks using both Fortran and C:

435.gromacs: `-Qprof_gen`(pass 1) `-Qprof_use`(pass 2) `-fast -Qauto-ilp32 -Oa -Qprefetch /F1000000000 -link /FORCE:MULTIPLE`

436.cactusADM: `-Qprof_gen`(pass 1) `-Qprof_use`(pass 2) `-fast -Qauto-ilp32 -Qunroll2 -Qprefetch /F1000000000 -link /FORCE:MULTIPLE`

454.calculix: `-fast -Qauto-ilp32 -Qunroll-aggressive /F1000000000 -link /FORCE:MULTIPLE`

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.ic10.1.windows.flags.20090714.html`

You can also download the XML flags source by saving the following link:
`http://www.spec.org/cpu2006/flags/dell.ic10.1.windows.flags.20090714.xml`

For questions about this result, please contact the tester.
For other inquiries, please contact webmaster@spec.org.

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