SPEC® CFP2006 Result

Copyright 2006-2014 Standard Performance Evaluation Corporation

Intel Corporation

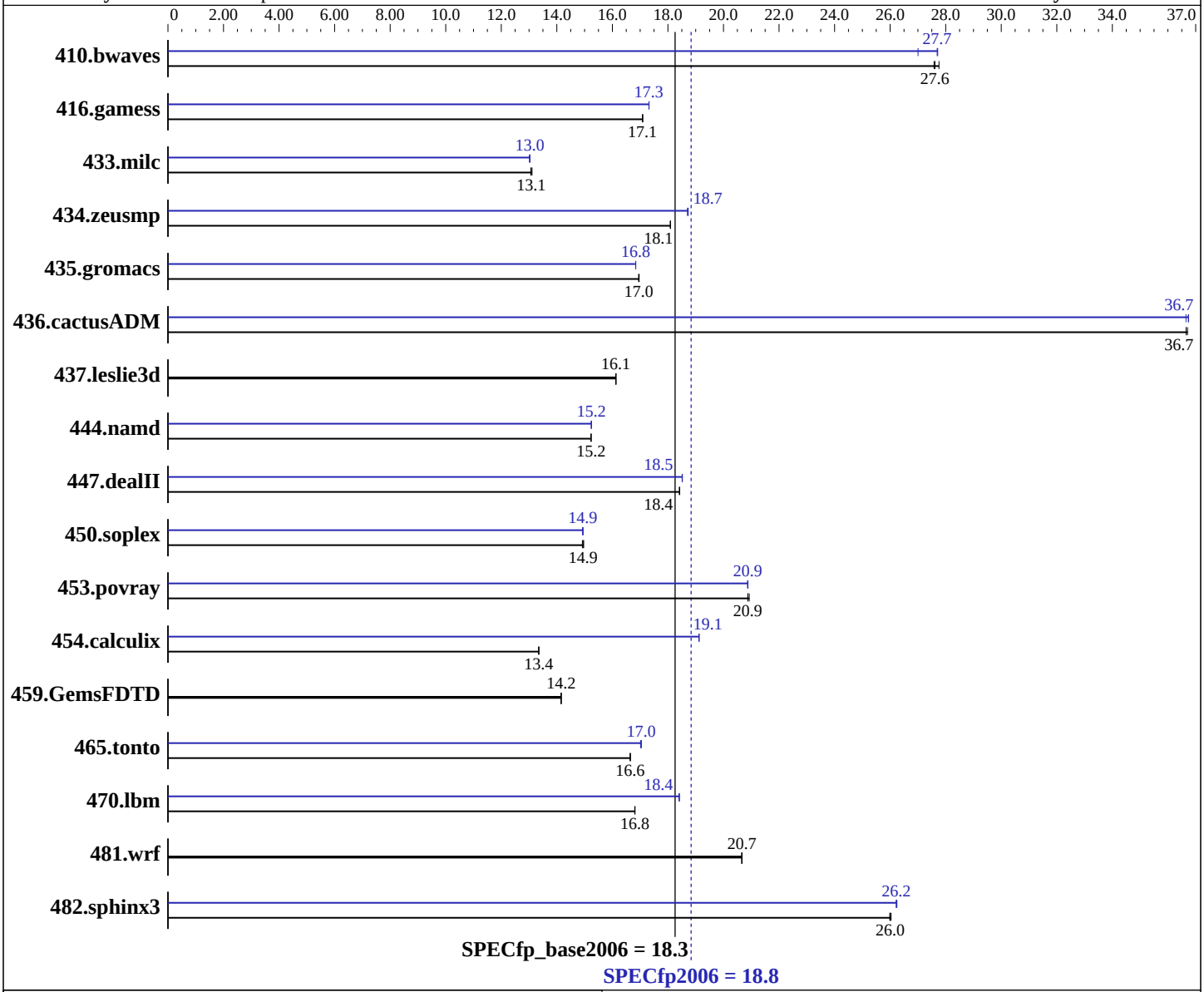
Intel D975XBX2 motherboard (Intel Core 2 Quad QX6800)

SPECfp®2006 = 18.8

SPECfp_base2006 = 18.3

CPU2006 license: 13
Test sponsor: Intel Corporation
Tested by: Intel Corporation

Test date: Nov-2007
Hardware Availability: Sep-2007
Software Availability: Nov-2007



Hardware

CPU Name:	Intel Core 2 Quad QX6800
CPU Characteristics:	2.93 GHz 1066 MHz FSB
CPU MHz:	2933
FPU:	Integrated
CPU(s) enabled:	4 cores, 1 chip, 4 cores/chip
CPU(s) orderable:	1 chip
Primary Cache:	32 KB I + 32 KB D on chip per core
Secondary Cache:	8 MB I+D on chip per chip, 4 MB shared / 2 cores

Continued on next page

Software

Operating System:	Windows Vista64 Ultimate
Compiler:	Intel C++ Compiler for IA32 version 10.1 Build 20070913 Package ID: w_cc_p_10.1.011 Intel Fortran Compiler for IA32 version 10.1 Build 20070913 Package ID: w_fc_p_10.1.011 Microsoft Visual Studio 2005 SP1 (for libraries)
Auto Parallel:	Yes
File System:	NTFS
System State:	Default

Continued on next page

SPEC CFP2006 Result

Copyright 2006-2014 Standard Performance Evaluation Corporation

Intel Corporation

Intel D975XBX2 motherboard (Intel Core 2 Quad QX6800)

SPECfp2006 = 18.8

SPECfp_base2006 = 18.3

CPU2006 license: 13
Test sponsor: Intel Corporation
Tested by: Intel Corporation

Test date: Nov-2007
Hardware Availability: Sep-2007
Software Availability: Nov-2007

L3 Cache: None
Other Cache: None
Memory: 4 GB (4x1GB Micron MT16HTF12864AY-80ED4 DDR2-800 CL5)
Disk Subsystem: Seagate 320GB NCQ SATA, 16MB cache, 7200 RPM
Other Hardware: None

Base Pointers: 32-bit
Peak Pointers: 32-bit
Other Software: SmartHeap Library Version 8.1 from http://www.microquill.com/

Results Table

Benchmark	Base						Peak					
	Seconds	Ratio	Seconds	Ratio	Seconds	Ratio	Seconds	Ratio	Seconds	Ratio	Seconds	Ratio
410.bwaves	493	27.6	490	27.8	**492**	**27.6**	503	27.0	**491**	**27.7**	490	27.7
416.gamess	1146	17.1	**1146**	**17.1**	1146	17.1	1130	17.3	**1131**	**17.3**	1131	17.3
433.milc	700	13.1	**702**	**13.1**	703	13.1	705	13.0	704	13.0	**705**	**13.0**
434.zeusmp	503	18.1	503	18.1	**503**	**18.1**	486	18.7	**486**	**18.7**	486	18.7
435.gromacs	421	17.0	**421**	**17.0**	421	16.9	424	16.8	**424**	**16.8**	424	16.8
436.cactusADM	326	36.7	**326**	**36.7**	326	36.7	326	36.7	325	36.7	**325**	**36.7**
437.leslie3d	583	16.1	**583**	**16.1**	583	16.1	583	16.1	**583**	**16.1**	583	16.1
444.namd	526	15.2	**527**	**15.2**	527	15.2	526	15.2	526	15.2	**526**	**15.2**
447.dealII	621	18.4	621	18.4	**621**	**18.4**	618	18.5	618	18.5	**618**	**18.5**
450.soplex	557	15.0	**558**	**14.9**	559	14.9	559	14.9	558	14.9	**558**	**14.9**
453.povray	255	20.9	**255**	**20.9**	254	20.9	255	20.9	255	20.9	**255**	**20.9**
454.calculix	618	13.4	**618**	**13.4**	618	13.3	432	19.1	**432**	**19.1**	431	19.1
459.GemsFDTD	**749**	**14.2**	750	14.1	749	14.2	**749**	**14.2**	750	14.1	749	14.2
465.tonto	**591**	**16.6**	591	16.6	591	16.6	578	17.0	**578**	**17.0**	577	17.0
470.lbm	817	16.8	**817**	**16.8**	818	16.8	746	18.4	**747**	**18.4**	747	18.4
481.wrf	541	20.7	**541**	**20.7**	540	20.7	541	20.7	**541**	**20.7**	540	20.7
482.sphinx3	750	26.0	**749**	**26.0**	749	26.0	**743**	**26.2**	743	26.2	743	26.2

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

General Notes

```
Tested systems can be used with Shin-G ATX case, Antec NeoPower 480W power supply
Product description located as of 11/2007:
http://www.intel.com/products/motherboard/D975XBX2/index.htm
The system bus runs at 1066 MHz
System was configured with Asus EN8800GTX discrete graphics card
Binaries were built on Windows Vista32
The following VS 2005 SP1 updates were applied: KB926601 and KB932232
```

Base Compiler Invocation

C benchmarks:

```
icl -Qvc8 -Qc99
```

Continued on next page

Base Compiler Invocation (Continued)

C++ benchmarks:
icl -Qvc8

Fortran benchmarks:
ifort

Benchmarks using both Fortran and C:
icl -Qvc8 -Qc99 ifort

Base Portability Flags

436.cactusADM: -Qlowercase /assume:underscore
444.namd: -TP
447.dealII: -DDEAL_II_MEMBER_VAR_SPECIALIZATION_BUG
453.povray: -DSPEC_CPU_WINDOWS_ICL
454.calculix: -DSPEC_CPU_NOZMODIFIER -Qlowercase
481.wrf: -DSPEC_CPU_WINDOWS_ICL

Base Optimization Flags

C benchmarks:
-fast -Qparallel /F1000000000 libguide40.lib

C++ benchmarks:
-fast -Qparallel -Qcxx_features /F1000000000 shlw32m.lib
libguide40.lib -link /FORCE:MULTIPLE

Fortran benchmarks:
-fast -Qparallel /F1000000000 libguide40.lib

Benchmarks using both Fortran and C:
-fast -Qparallel /F1000000000 libguide40.lib

Peak Compiler Invocation

C benchmarks:
icl -Qvc8 -Qc99

C++ benchmarks:
icl -Qvc8

Fortran benchmarks:
ifort

Continued on next page

Peak Compiler Invocation (Continued)

Benchmarks using both Fortran and C:
icl -Qvc8 -Qc99 ifort

Peak Portability Flags

436.cactusADM: -Qlowercase /assume:underscore
444.namd: -TP
447.dealII: -DDEAL_II_MEMBER_VAR_SPECIALIZATION_BUG
453.povray: -DSPEC_CPU_WINDOWS_ICL
454.calculix: -DSPEC_CPU_NOZMODIFIER -Qlowercase
481.wrf: -DSPEC_CPU_WINDOWS_ICL

Peak Optimization Flags

C benchmarks:

433.milc: -fast -Qunroll2 -Oa /F1000000000 libguide40.lib

470.lbm: -fast -Qunroll2 -Qscalar-rep- -Qprefetch /F1000000000 libguide40.lib

482.sphinx3: -fast -Qunroll2 /F1000000000 libguide40.lib

C++ benchmarks:

444.namd: -fast -Oa -Qcxx_features /F1000000000 shlw32m.lib libguide40.lib -link /FORCE:MULTIPLE

447.dealII: -fast -Qunroll2 -Qprefetch -Qcxx_features /F1000000000 shlw32m.lib libguide40.lib -link /FORCE:MULTIPLE

450.soplex: -fast -Qparallel -Qcxx_features /F1000000000 shlw32m.lib libguide40.lib -link /FORCE:MULTIPLE

453.povray: -fast -Qunroll4 -Qcxx_features /F1000000000 shlw32m.lib libguide40.lib -link /FORCE:MULTIPLE

Fortran benchmarks:

410.bwaves: -fast -Qparallel -Qprefetch /F1000000000 libguide40.lib

416.gamess: -fast -Qunroll2 -Ob0 -Qansi-alias -Qscalar-rep- /F1000000000 libguide40.lib

434.zeusmp: -QxT -O2 -Qprec-div- -Qunroll0 -Qscalar-rep- /F1000000000 libguide40.lib

Continued on next page

Peak Optimization Flags (Continued)

437.leslie3d: `basepeak = yes`

459.GemsFDTD: `basepeak = yes`

465.tonto: `-fast -Qunroll4 -Qauto /F1000000000 libguide40.lib`

Benchmarks using both Fortran and C:

435.gromacs: `-fast -Oa -Qprefetch /F1000000000 libguide40.lib`

436.cactusADM: `-fast -Qunroll2 -Qparallel -Qprefetch /F1000000000 libguide40.lib`

454.calculix: `-fast -Qunroll-aggressive /F1000000000 libguide40.lib`

481.wrf: `basepeak = yes`

The flags file that was used to format this result can be browsed at
`http://www.spec.org/cpu2006/flags/Intel-ic10-ia32-intel64-linux-flags.20090714.09.html`

You can also download the XML flags source by saving the following link:
`http://www.spec.org/cpu2006/flags/Intel-ic10-ia32-intel64-linux-flags.20090714.09.xml`

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 14:20:24 2014 by SPEC CPU2006 PS/PDF formatter v6932.
Originally published on 27 November 2007.