



SPEC® CFP2006 Result

Copyright ©2007 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

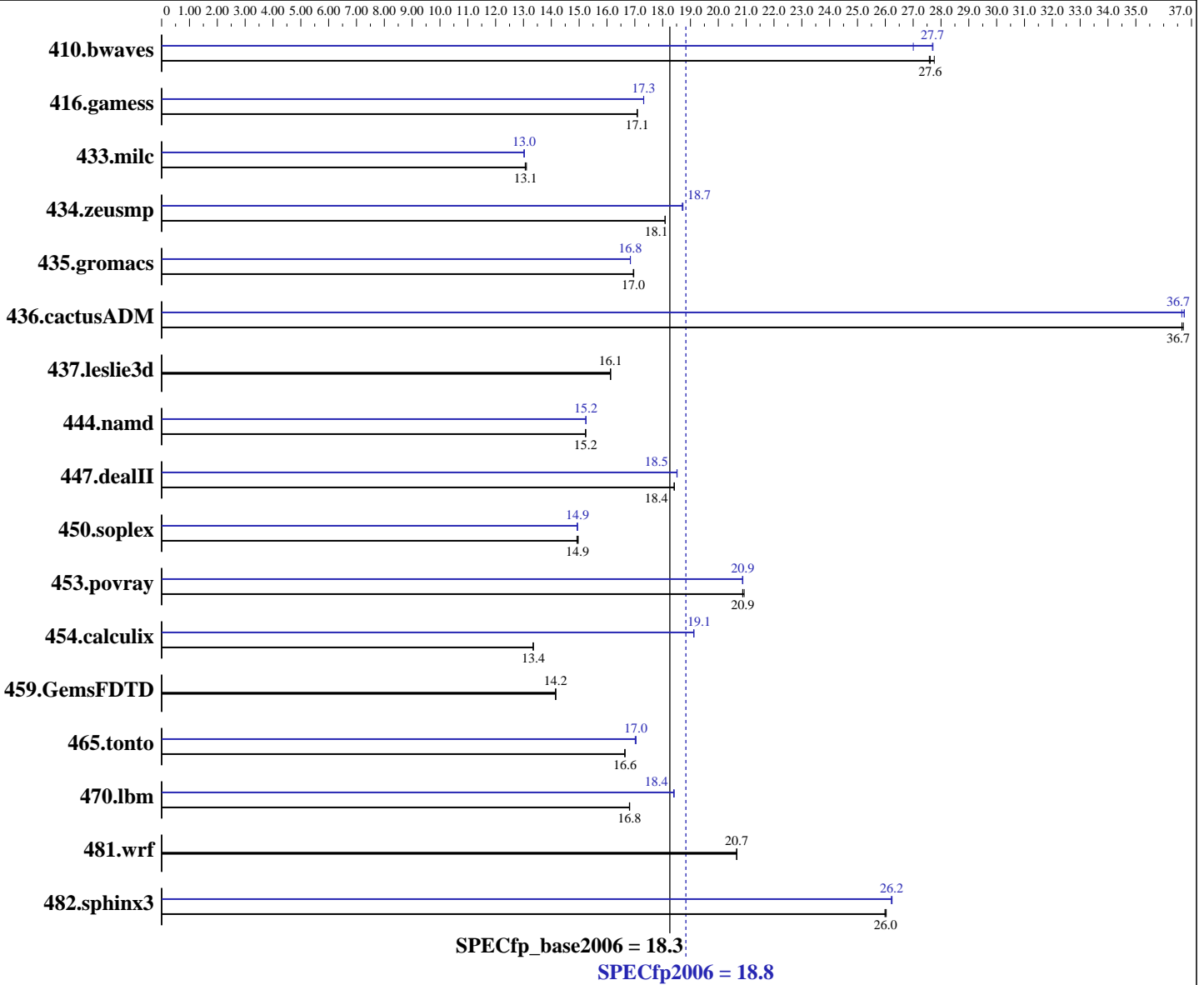
Test sponsor: Intel Corporation

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 ©2007 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

Hardware (Continued)

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

Software (Continued)

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



SPEC CFP2006 Result

Copyright ©2007 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

Compiler Invocation

C benchmarks:

```
icl -Qvc8 -Qc99
```

C++ benchmarks:

```
icl -Qvc8
```

Fortran benchmarks:

```
ifort
```

Benchmarks using both Fortran and C:

```
icl -Qvc8 -Qc99 ifort
```

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 Optimization Flags

C benchmarks:

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

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

Continued on next page



SPEC CFP2006 Result

Copyright ©2007 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

Peak Optimization Flags (Continued)

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

C++ benchmarks:

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

447.dealIII: -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- -Qunroll10 -Qscalar-rep- /F1000000000
libguide40.lib

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-file-20070525.xml.20071127.01.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-file-20070525.xml.20071127.01.xml>



SPEC CFP2006 Result

Copyright ©2007 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

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 Sun Dec 16 11:02:04 2007 by SPEC CPU2006 PS/PDF formatter v5614.