SPEC® CFP2006 Result

Copyright 2006-2014 Standard Performance Evaluation Corporation

Intel Corporation

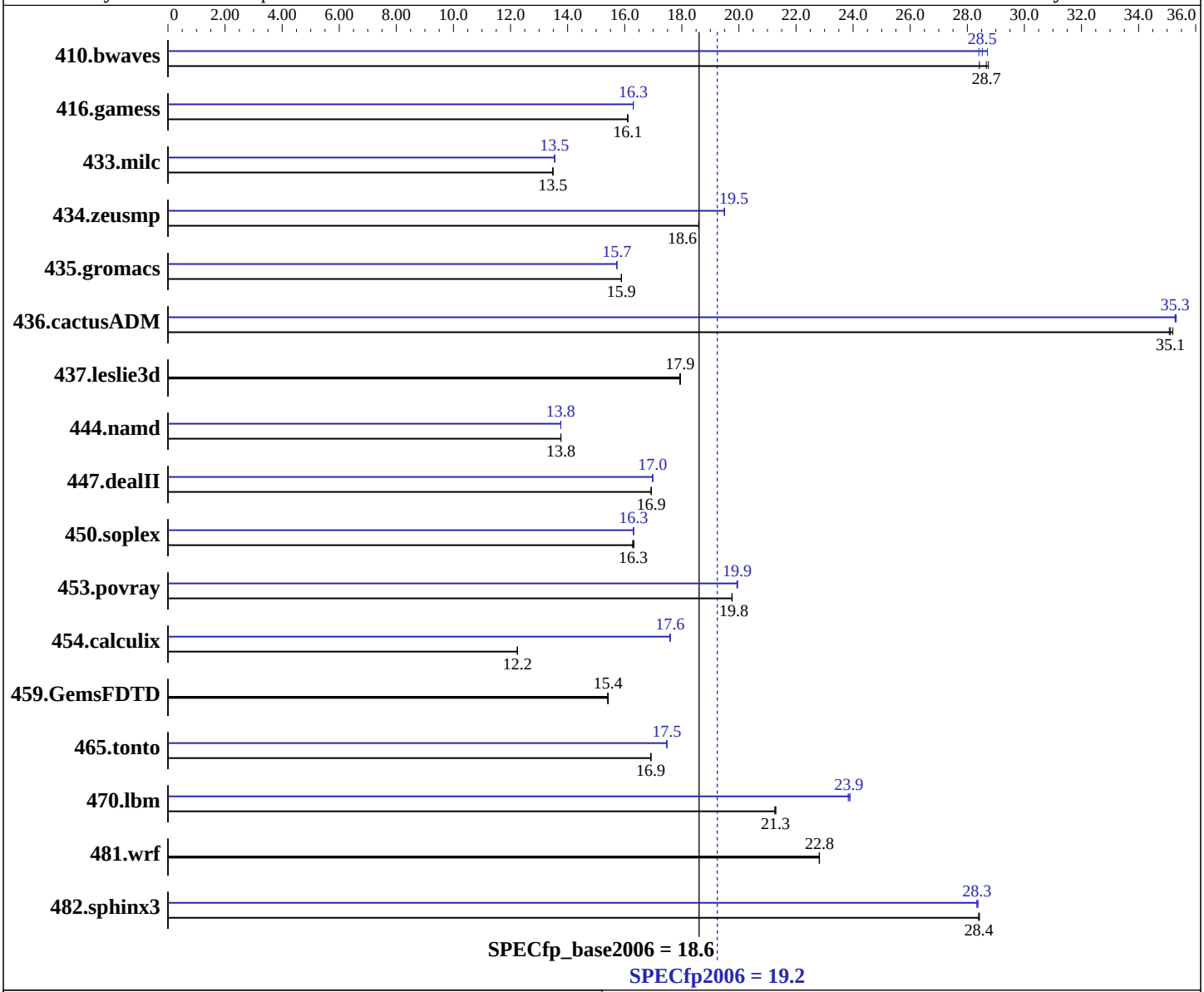
Intel Desktop Board DQ35JO (Intel Core 2 Duo Q9450)

SPECfp®2006 = 19.2

SPECfp_base2006 = 18.6

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

Test date: Feb-2008
Hardware Availability: Mar-2008
Software Availability: Nov-2007



Hardware

CPU Name:	Intel Core 2 Quad Q9450
CPU Characteristics:	2.66 GHz, 1333 FSB
CPU MHz:	2667
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:	12 MB I+D on chip per chip, 6 MB shared / 2 cores

Continued on next page

Software

Operating System:	Windows Vista Ultimate (64-bit)
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 Desktop Board DQ35JO (Intel Core 2 Duo Q9450)

SPECfp2006 = 19.2

SPECfp_base2006 = 18.6

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

Test date: Feb-2008
Hardware Availability: Mar-2008
Software Availability: Nov-2007

L3 Cache: None
Other Cache: None
Memory: 4 GB (4x1GB Micron 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	478	28.4	**474**	**28.7**	473	28.7	**476**	**28.5**	478	28.4	473	28.7
416.gamess	1216	16.1	**1215**	**16.1**	1215	16.1	1201	16.3	1201	16.3	**1201**	**16.3**
433.milc	**681**	**13.5**	680	13.5	681	13.5	677	13.6	678	13.5	**678**	**13.5**
434.zeusmp	490	18.6	**489**	**18.6**	489	18.6	467	19.5	467	19.5	**467**	**19.5**
435.gromacs	450	15.9	**450**	**15.9**	449	15.9	454	15.7	**454**	**15.7**	454	15.7
436.cactusADM	339	35.2	341	35.1	**340**	**35.1**	**339**	**35.3**	339	35.3	338	35.3
437.leslie3d	524	17.9	524	18.0	**524**	**17.9**	524	17.9	524	18.0	**524**	**17.9**
444.namd	583	13.8	**583**	**13.8**	583	13.8	583	13.8	583	13.8	**583**	**13.8**
447.dealII	**676**	**16.9**	676	16.9	676	16.9	674	17.0	**674**	**17.0**	674	17.0
450.soplex	512	16.3	511	16.3	**512**	**16.3**	511	16.3	**511**	**16.3**	512	16.3
453.povray	269	19.8	**269**	**19.8**	269	19.8	267	20.0	**267**	**19.9**	267	19.9
454.calculix	**674**	**12.2**	674	12.2	674	12.2	469	17.6	**469**	**17.6**	469	17.6
459.GemsFDTD	**688**	**15.4**	688	15.4	689	15.4	**688**	**15.4**	688	15.4	689	15.4
465.tonto	582	16.9	582	16.9	**582**	**16.9**	563	17.5	563	17.5	**563**	**17.5**
470.lbm	646	21.3	645	21.3	**646**	**21.3**	575	23.9	577	23.8	**576**	**23.9**
481.wrf	**489**	**22.8**	490	22.8	489	22.8	**489**	**22.8**	490	22.8	489	22.8
482.sphinx3	686	28.4	**686**	**28.4**	686	28.4	688	28.3	**688**	**28.3**	687	28.4

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 03/2008:
http://www.intel.com/products/motherboard/DQ35JO/index.htm
The system bus runs at 1333 MHz
System was configured with Asus EN8800GTX discrete graphics card
Binaries were built on Windows Vista Ultimate (32-bit)
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-ic10.1-win32-flags.html`

You can also download the XML flags source by saving the following link:
`http://www.spec.org/cpu2006/flags/Intel-ic10.1-win32-flags.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 15:24:50 2014 by SPEC CPU2006 PS/PDF formatter v6932.
Originally published on 19 March 2008.