SPEC® CFP2006 Result

Copyright 2006-2014 Standard Performance Evaluation Corporation

Intel Corporation

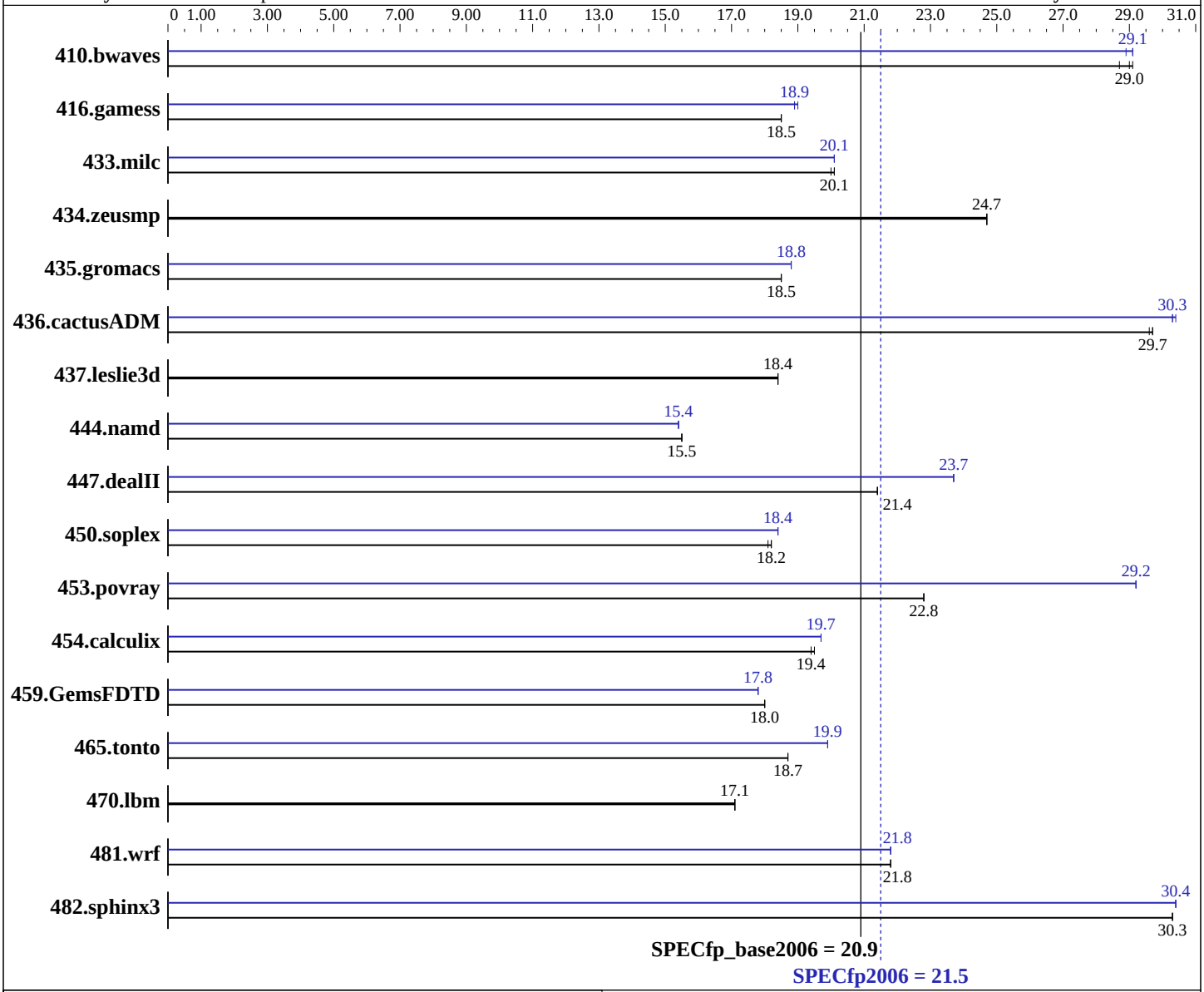
Intel DQ45CB motherboard (Intel Core 2 Duo E8400)

SPECfp®2006 = 21.5

SPECfp_base2006 = 20.9

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

Test date: Apr-2009
Hardware Availability: May-2009
Software Availability: Nov-2008



Hardware

CPU Name:	Intel Core 2 Duo E8400
CPU Characteristics:	
CPU MHz:	3000
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

Continued on next page

Software

Operating System:	Windows Vista Ultimate w/ SP1 (64-bit)
Compiler:	Intel C++ Compiler Professional 11.0 for IA32 Build 20080930 Package ID: w_cproc_p_11.0.054 Intel Visual Fortran Compiler Professional 11.0 for IA32 Build 20080930 Package ID: w_cprof_p_11.0.054 Microsoft Visual Studio 2008 (for libraries)
Auto Parallel:	Yes
File System:	NTFS

Continued on next page

SPEC CFP2006 Result

Copyright 2006-2014 Standard Performance Evaluation Corporation

Intel Corporation

Intel DQ45CB motherboard (Intel Core 2 Duo E8400)

SPECfp2006 = 21.5

SPECfp_base2006 = 20.9

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

Test date: Apr-2009
Hardware Availability: May-2009
Software Availability: Nov-2008

L3 Cache: None
Other Cache: None
Memory: 4 GB (4x1GB DDR2-800 CL5)
Disk Subsystem: Seagate 320 GB SATA, 7200RPM
Other Hardware: None

System State: Default
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	467	29.1	474	28.7	**469**	**29.0**	470	28.9	**468**	**29.1**	467	29.1
416.gamess	1059	18.5	1060	18.5	**1059**	**18.5**	1034	18.9	1033	19.0	**1034**	**18.9**
433.milc	457	20.1	458	20.0	**458**	**20.1**	457	20.1	457	20.1	**457**	**20.1**
434.zeusmp	**369**	**24.7**	368	24.7	369	24.7	**369**	**24.7**	368	24.7	369	24.7
435.gromacs	385	18.5	386	18.5	**385**	**18.5**	380	18.8	**380**	**18.8**	379	18.8
436.cactusADM	404	29.6	403	29.7	**403**	**29.7**	**395**	**30.3**	395	30.3	393	30.4
437.leslie3d	511	18.4	512	18.4	**511**	**18.4**	511	18.4	512	18.4	**511**	**18.4**
444.namd	519	15.5	**519**	**15.5**	519	15.5	520	15.4	**519**	**15.4**	519	15.4
447.dealII	534	21.4	534	21.4	**534**	**21.4**	483	23.7	482	23.7	**482**	**23.7**
450.soplex	458	18.2	460	18.1	**459**	**18.2**	454	18.4	**454**	**18.4**	453	18.4
453.povray	**234**	**22.8**	234	22.8	233	22.8	182	29.2	**182**	**29.2**	182	29.2
454.calculix	**424**	**19.4**	424	19.4	424	19.5	419	19.7	**419**	**19.7**	419	19.7
459.GemsFDTD	590	18.0	**589**	**18.0**	589	18.0	597	17.8	**595**	**17.8**	595	17.8
465.tonto	**526**	**18.7**	527	18.7	526	18.7	494	19.9	494	19.9	**494**	**19.9**
470.lbm	804	17.1	**804**	**17.1**	804	17.1	804	17.1	**804**	**17.1**	804	17.1
481.wrf	512	21.8	512	21.8	**512**	**21.8**	**512**	**21.8**	511	21.8	513	21.8
482.sphinx3	644	30.3	**644**	**30.3**	643	30.3	641	30.4	641	30.4	**641**	**30.4**

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 Truepower Trio power supply TP3-650
Binaries were built on Windows Vista Ultimate (32-bit)
Binaries were built on Windows Vista Ultimate (32-bit)
OMP_NUM_THREADS set to number of logical processors as seen by the OS
KMP_AFFINITY set to physical,0
```

Base Compiler Invocation

C benchmarks:

```
icl -Qvc9 -Qc99
```

Continued on next page

Base Compiler Invocation (Continued)

C++ benchmarks:
icl -Qvc9

Fortran benchmarks:
ifort

Benchmarks using both Fortran and C:
icl -Qvc9 -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:
-QxSSE4.1 -Qipo -O3 -Qprec-div- -Qparallel -Qopt-prefetch
/F1000000000

C++ benchmarks:
-QxSSE4.1 -Qipo -O3 -Qprec-div- -Qparallel -Qopt-prefetch
-Qcxx-features /F1000000000 shlw32m.lib
-link /FORCE:MULTIPLE

Fortran benchmarks:
-QxSSE4.1 -Qipo -O3 -Qprec-div- -Qparallel -Qopt-prefetch
/F1000000000

Benchmarks using both Fortran and C:
-QxSSE4.1 -Qipo -O3 -Qprec-div- -Qparallel -Qopt-prefetch
/F1000000000

Peak Compiler Invocation

C benchmarks:
icl -Qvc9 -Qc99

C++ benchmarks:
icl -Qvc9

Continued on next page

Peak Compiler Invocation (Continued)

Fortran benchmarks:
ifort

Benchmarks using both Fortran and C:
icl -Qvc9 -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: -QxSSE4.1(pass 2) -Qprof_gen(pass 1) -Qprof_use(pass 2) -Qipo -O3 -Qprec-div- -Oa /F1000000000

470.lbm: basepeak = yes

482.sphinx3: -QxSSE4.1 -Qipo -O3 -Qprec-div- -Qunroll2 /F1000000000

C++ benchmarks:

444.namd: -QxSSE4.1(pass 2) -Qprof_gen(pass 1) -Qprof_use(pass 2) -Qipo -O3 -Qprec-div- -Oa /F1000000000 shlw32m.lib -link /FORCE:MULTIPLE

447.dealII: -QxSSE4.1(pass 2) -Qprof_gen(pass 1) -Qprof_use(pass 2) -Qipo -O3 -Qprec-div- -Qunroll2 -Qopt-prefetch -Qansi-alias -Qscalar-rep- /F1000000000 shlw32m.lib -link /FORCE:MULTIPLE

450.soplex: -QxSSE4.1(pass 2) -Qprof_gen(pass 1) -Qprof_use(pass 2) -Qipo -O3 -Qprec-div- /F1000000000 shlw32m.lib -link /FORCE:MULTIPLE

453.povray: -QxSSE4.1(pass 2) -Qprof_gen(pass 1) -Qprof_use(pass 2) -Qipo -O3 -Qprec-div- -Qunroll4 -Qansi-alias /F1000000000 shlw32m.lib -link /FORCE:MULTIPLE

Continued on next page

Peak Optimization Flags (Continued)

Fortran benchmarks:

410.bwaves: -QxSSE4.1 -Qipo -O3 -Qprec-div- -Qopt-prefetch -Qparallel /F1000000000

416.gamess: -QxSSE4.1(pass 2) -Qprof_gen(pass 1) -Qprof_use(pass 2) -Qipo -O3 -Qprec-div- -Qunroll2 -Ob0 -Qansi-alias -Qscalar-rep- /F1000000000

434.zeusmp: basepeak = yes

437.leslie3d: basepeak = yes

459.GemsFDTD: -QxSSE4.1(pass 2) -Qprof_gen(pass 1) -Qprof_use(pass 2) -Qipo -O3 -Qprec-div- -Qunroll2 -Ob0 -Qopt-prefetch -Qparallel /F1000000000

465.tonto: -QxSSE4.1(pass 2) -Qprof_gen(pass 1) -Qprof_use(pass 2) -Qipo -O3 -Qprec-div- -Qunroll4 -Qauto /F1000000000

Benchmarks using both Fortran and C:

435.gromacs: -QxSSE4.1(pass 2) -Qprof_gen(pass 1) -Qprof_use(pass 2) -Qipo -O3 -Qprec-div- -Qopt-prefetch /F1000000000

436.cactusADM: -QxSSE4.1(pass 2) -Qprof_gen(pass 1) -Qprof_use(pass 2) -Qipo -O3 -Qprec-div- -Qunroll2 -Qopt-prefetch -Qparallel /F1000000000

454.calculix: -QxSSE4.1 -Qipo -O3 -Qprec-div- /F1000000000

481.wrf: -QxSSE4.1 -Qipo -O3 -Qprec-div- -Qopt-prefetch -Qparallel /F1000000000

The flags file that was used to format this result can be browsed at
http://www.spec.org/cpu2006/flags/Intel-ic11.0-win32-revA.20090710.html

You can also download the XML flags source by saving the following link:
http://www.spec.org/cpu2006/flags/Intel-ic11.0-win32-revA.20090710.xml

Copyright 2006-2014 Standard Performance Evaluation Corporation

Intel Corporation

Intel DQ45CB motherboard (Intel Core 2 Duo E8400)

SPECfp2006 = 21.5

SPECfp_base2006 = 20.9

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

Test date: Apr-2009
Hardware Availability: May-2009
Software Availability: Nov-2008

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 Wed Jul 23 01:04:09 2014 by SPEC CPU2006 PS/PDF formatter v6932.
Originally published on 23 June 2009.