SPEC® CFP2006 Result

Copyright 2006-2014 Standard Performance Evaluation Corporation

Fujitsu Siemens Computers

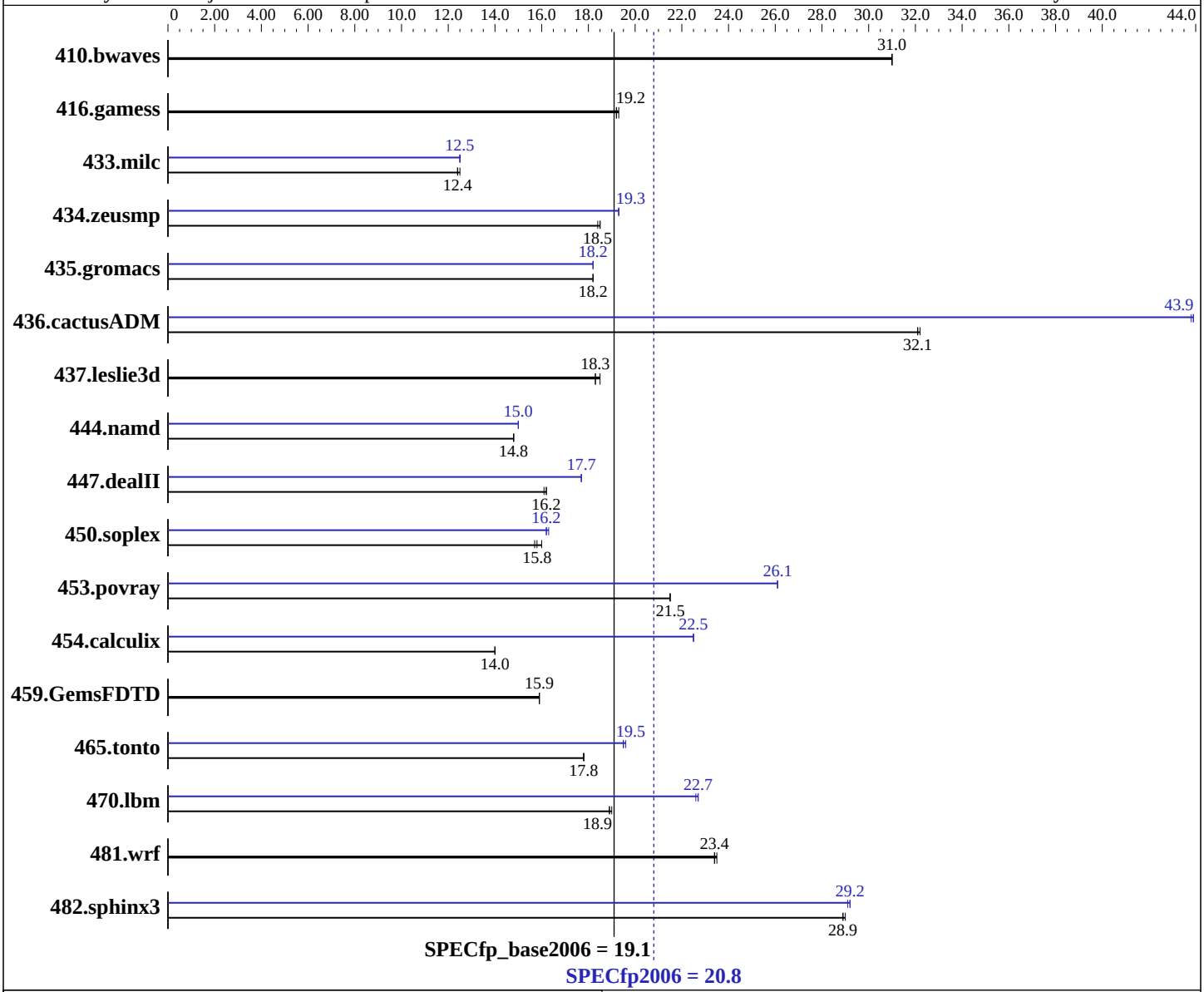
CELSIUS H270, Intel Core 2 Extreme QX9300 processor

SPECfp®2006 = 20.8

SPECfp_base2006 = 19.1

CPU2006 license: 22
Test sponsor: Fujitsu Siemens Computers
Tested by: Fujitsu Siemens Computers

Test date: Nov-2008
Hardware Availability: Dec-2008
Software Availability: Feb-2008



Hardware

CPU Name:	Intel Core 2 Extreme QX9300
CPU Characteristics:	
CPU MHz:	2530
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 Version

Continued on next page

SPEC CFP2006 Result

Copyright 2006-2014 Standard Performance Evaluation Corporation

Fujitsu Siemens Computers

CELSIUS H270, Intel Core 2 Extreme QX9300 processor

SPECfp2006 = 20.8

SPECfp_base2006 = 19.1

CPU2006 license: 22
Test sponsor: Fujitsu Siemens Computers
Tested by: Fujitsu Siemens Computers

Test date: Nov-2008
Hardware Availability: Dec-2008
Software Availability: Feb-2008

L3 Cache: None
Other Cache: None
Memory: 4 GB (2x2 GB DDR3 1066 MHz SDRAM)
Disk Subsystem: 1 x 80 GB SATA 7200 RPM
Other Hardware: None

Compiler: Intel C++ Compiler for applications running on Intel 64, Version 10.1, Build 20080212
Intel Visual Fortran Compiler for applications running on Intel 64, Version 10.1, Build 20080212
Microsoft Visual Studio 2005 with SP1 (for libraries)
Auto Parallel: Yes
File System: NTFS
System State: Default
Base Pointers: 64-bit
Peak Pointers: 64-bit
Other Software: MicroQuill SmartHeap Library 8.0 (64 bit)

Results Table

Benchmark	Base						Peak					
	Seconds	Ratio	Seconds	Ratio	Seconds	Ratio	Seconds	Ratio	Seconds	Ratio	Seconds	Ratio
410.bwaves	**438**	**31.0**	439	31.0	438	31.0	**438**	**31.0**	439	31.0	438	31.0
416.gamess	**1017**	**19.2**	1017	19.2	1017	19.3	**1017**	**19.2**	1017	19.2	1017	19.3
433.milc	732	12.5	**739**	**12.4**	740	12.4	737	12.5	732	12.5	**734**	**12.5**
434.zeusmp	495	18.4	492	18.5	**492**	**18.5**	472	19.3	471	19.3	**471**	**19.3**
435.gromacs	392	18.2	**392**	**18.2**	392	18.2	**392**	**18.2**	392	18.2	392	18.2
436.cactusADM	372	32.1	371	32.2	**372**	**32.1**	273	43.8	272	43.9	**273**	**43.9**
437.leslie3d	507	18.5	513	18.3	**513**	**18.3**	507	18.5	513	18.3	**513**	**18.3**
444.namd	543	14.8	543	14.8	**543**	**14.8**	534	15.0	**534**	**15.0**	534	15.0
447.dealII	709	16.1	708	16.2	**708**	**16.2**	**648**	**17.7**	647	17.7	648	17.7
450.soplex	531	15.7	521	16.0	**528**	**15.8**	516	16.2	511	16.3	**514**	**16.2**
453.povray	247	21.5	**247**	**21.5**	247	21.5	204	26.1	**204**	**26.1**	204	26.1
454.calculix	**589**	**14.0**	589	14.0	590	14.0	**367**	**22.5**	367	22.5	367	22.5
459.GemsFDTD	666	15.9	666	15.9	**666**	**15.9**	666	15.9	666	15.9	**666**	**15.9**
465.tonto	554	17.8	553	17.8	**553**	**17.8**	**504**	**19.5**	503	19.6	504	19.5
470.lbm	725	19.0	727	18.9	**725**	**18.9**	606	22.7	609	22.6	**607**	**22.7**
481.wrf	477	23.4	476	23.5	**477**	**23.4**	477	23.4	476	23.5	**477**	**23.4**
482.sphinx3	673	29.0	**674**	**28.9**	674	28.9	669	29.1	668	29.2	**668**	**29.2**

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

Operating System Notes

```
Screen Saver was disabled
Power scheme was set to "Always On"
"Turn off monitor" option within this scheme was set to "Never".
```

Platform Notes

```
BIOS default settings have been used.
```

General Notes

```
For information about Fujitsu Siemens Computers please see:
http://www.fujitsu-siemens.com
```

Base Compiler Invocation

C benchmarks:
```
icl -Qvc8 -Qc99
```

C++ benchmarks:
```
icl -Qvc8
```

Fortran benchmarks:
```
ifort
```

Benchmarks using both Fortran and C:
```
icl -Qvc8 -Qc99 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 -Qparallel -F1000000000 libguide40.lib
```

Continued on next page

Base Optimization Flags (Continued)

C++ benchmarks:
```
-fast -Qparallel -Qcxx-features -F1000000000 libguide40.lib
shlW64M.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
```

Benchmarks using both Fortran and C:
```
icl -Qvc8 -Qc99 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 -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 -Qcxx-features -Oa -F1000000000 libguide40.lib shlW64M.lib -link -FORCE:MULTIPLE`

Continued on next page

Peak Optimization Flags (Continued)

447.dealII: -Qprof_gen(pass 1) -Qprof_use(pass 2) -fast -Qcxx-features -F10000000000 libguide40.lib shlW64M.lib -link -FORCE:MULTIPLE

450.soplex: Same as 447.dealII

453.povray: Same as 447.dealII

Fortran benchmarks:

410.bwaves: basepeak = yes

416.gamess: basepeak = yes

434.zeusmp: -O2 -Qunroll0 -QxT -Qscalar-rep- -Qprec-div- -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: -Qprof_gen(pass 1) -Qprof_use(pass 2) -fast -F1000000000 libguide40.lib

436.cactusADM: -Qprof_gen(pass 1) -Qprof_use(pass 2) -fast -Qparallel -Qprefetch -Qunroll2 -F1000000000 libguide40.lib

454.calculix: -Qprof_gen(pass 1) -Qprof_use(pass 2) -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/CPU2006_flags.20090713.00.html

You can also download the XML flags source by saving the following link:
http://www.spec.org/cpu2006/flags/CPU2006_flags.20090713.00.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 v1.1.
Report generated on Tue Jul 22 21:19:46 2014 by SPEC CPU2006 PS/PDF formatter v6932.
Originally published on 9 December 2008.