



SPEC® CFP2006 Result

Copyright 2006-2014 Standard Performance Evaluation Corporation

Intel Corporation

SPECfp®2006 = **45.2**

Intel DQ87PG motherboard (Intel Celeron G1830)

SPECfp_base2006 = **44.3**

CPU2006 license: 13

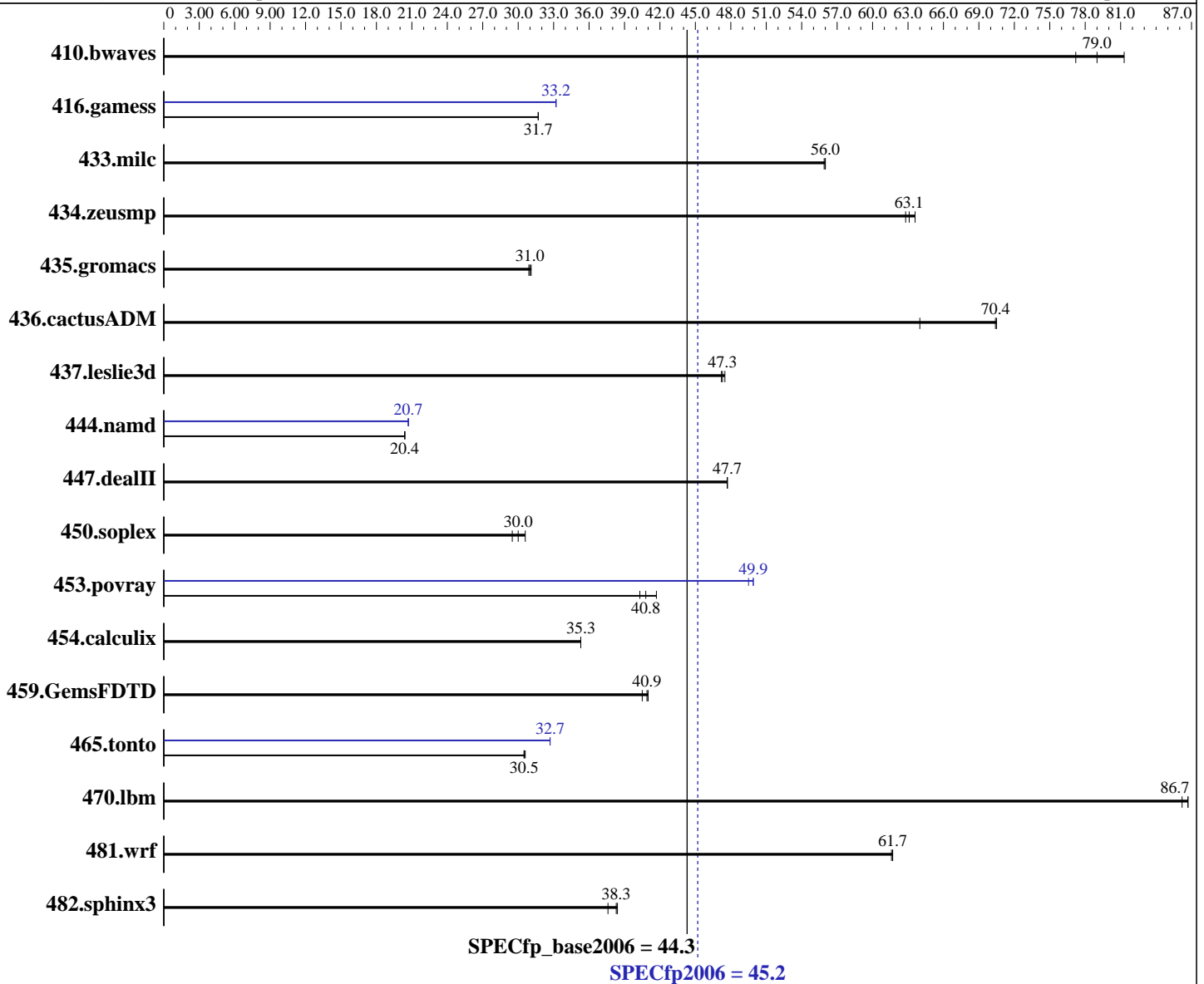
Test date: Feb-2014

Test sponsor: Intel Corporation

Hardware Availability: Dec-2013

Tested by: Intel Corporation

Software Availability: Apr-2013



Hardware

CPU Name: Intel Celeron G1830
 CPU Characteristics:
 CPU MHz: 2800
 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: 256 KB I+D on chip per core

Continued on next page

Software

Operating System: Microsoft Windows 7 Enterprise 6.1.7601 Service Pack 1 Build 7601
 Compiler: C/C++: Version 13.1.1.171 of Intel C++ Studio XE for Windows;
 Fortran: Version 13.1.1.171 of Intel Fortran Studio XE for Windows;
 Libraries: Version 16.00.30319.01 of Microsoft Visual Studio 2010 Professional SP1
 Auto Parallel: Yes

Continued on next page



SPEC CFP2006 Result

Copyright 2006-2014 Standard Performance Evaluation Corporation

Intel Corporation

SPECfp2006 = **45.2**

Intel DQ87PG motherboard (Intel Celeron G1830)

SPECfp_base2006 = **44.3**

CPU2006 license: 13

Test date: Feb-2014

Test sponsor: Intel Corporation

Hardware Availability: Dec-2013

Tested by: Intel Corporation

Software Availability: Apr-2013

L3 Cache: 2 MB I+D on chip per chip
 Other Cache: None
 Memory: 4 GB (2 x 2 GB 1Rx8 PC3-12800U-11, running at 1333 MHz and CL9)
 Disk Subsystem: 250 GB Seagate SATA HDD, 7200 RPM
 Other Hardware: None

File System: NTFS
 System State: Default
 Base Pointers: 32/64-bit
 Peak Pointers: 32/64-bit
 Other Software: SmartHeap Library Version 10.0 from <http://www.microquill.com/>

Results Table

Benchmark	Base						Peak					
	Seconds	Ratio	Seconds	Ratio	Seconds	Ratio	Seconds	Ratio	Seconds	Ratio	Seconds	Ratio
410.bwaves	<u>172</u>	<u>79.0</u>	167	81.3	176	77.2	<u>172</u>	<u>79.0</u>	167	81.3	176	77.2
416.gamess	618	31.7	617	31.7	<u>617</u>	<u>31.7</u>	589	33.2	590	33.2	<u>589</u>	<u>33.2</u>
433.milc	164	56.0	<u>164</u>	<u>56.0</u>	164	55.9	164	56.0	<u>164</u>	<u>56.0</u>	164	55.9
434.zeusmp	143	63.6	<u>144</u>	<u>63.1</u>	145	62.8	143	63.6	<u>144</u>	<u>63.1</u>	145	62.8
435.gromacs	230	31.1	<u>231</u>	<u>31.0</u>	231	30.9	230	31.1	<u>231</u>	<u>31.0</u>	231	30.9
436.cactusADM	<u>170</u>	<u>70.4</u>	170	70.5	187	64.0	<u>170</u>	<u>70.4</u>	170	70.5	187	64.0
437.leslie3d	199	47.2	198	47.5	<u>199</u>	<u>47.3</u>	199	47.2	198	47.5	<u>199</u>	<u>47.3</u>
444.namd	392	20.4	<u>393</u>	<u>20.4</u>	393	20.4	387	20.7	<u>387</u>	<u>20.7</u>	387	20.7
447.dealII	240	47.7	<u>240</u>	<u>47.7</u>	240	47.7	240	47.7	<u>240</u>	<u>47.7</u>	240	47.7
450.soplex	283	29.5	<u>278</u>	<u>30.0</u>	273	30.6	283	29.5	<u>278</u>	<u>30.0</u>	273	30.6
453.povray	128	41.7	<u>131</u>	<u>40.8</u>	132	40.3	107	49.9	<u>107</u>	<u>49.9</u>	107	49.5
454.calculix	234	35.3	<u>234</u>	<u>35.3</u>	233	35.3	234	35.3	<u>234</u>	<u>35.3</u>	233	35.3
459.GemsFDTD	262	40.5	259	41.0	<u>259</u>	<u>40.9</u>	262	40.5	259	41.0	<u>259</u>	<u>40.9</u>
465.tonto	322	30.6	<u>322</u>	<u>30.5</u>	322	30.5	<u>301</u>	<u>32.7</u>	301	32.7	301	32.7
470.lbm	159	86.2	159	86.7	<u>159</u>	<u>86.7</u>	159	86.2	159	86.7	<u>159</u>	<u>86.7</u>
481.wrf	181	61.6	<u>181</u>	<u>61.7</u>	181	61.7	181	61.6	<u>181</u>	<u>61.7</u>	181	61.7
482.sphinx3	<u>509</u>	<u>38.3</u>	518	37.6	508	38.4	<u>509</u>	<u>38.3</u>	518	37.6	508	38.4

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

Compiler Invocation Notes

To compile these binaries, the Intel Compiler 13.1 was set up to generate 64-bit binaries with the command:
 "ipsxe-comp-vars.bat intel64 vs2010" (shortcut provided in the Intel(r) Parallel Studio XE 2013 program folder)

Platform Notes

Sysinfo program C:\SPEC13.1\Docs\sysinfo
 \$Rev: 6775 \$ \$Date:: 2011-08-16 #\$ \8787f7622badcf24e01c368b1db4377c
 running on Clt7C05070FB382 Thu Feb 13 05:54:22 2014

This section contains SUT (System Under Test) info as seen by some common utilities. To remove or add to this section, see:

Continued on next page



SPEC CFP2006 Result

Copyright 2006-2014 Standard Performance Evaluation Corporation

Intel Corporation

SPECfp2006 = 45.2

Intel DQ87PG motherboard (Intel Celeron G1830)

SPECfp_base2006 = 44.3

CPU2006 license: 13

Test sponsor: Intel Corporation

Tested by: Intel Corporation

Test date: Feb-2014

Hardware Availability: Dec-2013

Software Availability: Apr-2013

Platform Notes (Continued)

<http://www.spec.org/cpu2006/Docs/config.html#sysinfo>

Trying 'systeminfo'

OS Name : Microsoft Windows 7 Enterprise

OS Version : 6.1.7601 Service Pack 1 Build 7601

System Manufacturer: INTEL_

System Model : DQ87PG__

Processor(s) : 1 Processor(s) Installed.

[01]: Intel64 Family 6 Model 60 Stepping 3 GenuineIntel ~2800 Mhz

BIOS Version : Intel(R) Corp. PGQ8710H.86A.0036.2013.0702.1908, 7/2/2013

Total Physical Memory: 3,749 MB

Trying 'wmic cpu get /value'

DeviceID : CPU0

L2CacheSize : 512

L3CacheSize : 2048

MaxClockSpeed : 2800

Name : Intel(R) Celeron(R) CPU G1830 @ 2.80GHz

NumberOfCores : 2

NumberOfLogicalProcessors: 2

(End of data from sysinfo program)

BIOS: SATA mode set to RAID

Windows Disk Driver: Intel Rapid Storage Technology 12.5.0.1066

Windows Chipset Driver: Intel Chipset Driver 9.4.0.1027

Component Notes

Tested systems can be used with Shin-G ATX case,

PC Power and Cooling 1200W power supply

Micron MT8JTF25664AZ-1G6 Series Memory DIMMs

General Notes

OMP_NUM_THREADS set to number of processors cores

KMP_AFFINITY set to granularity=fine,scatter

Binaries compiled on a system with 1x Intel Core i7-860 CPU

+ 8GB memory using Windows 7 Enterprise 64-bit

Base Compiler Invocation

C benchmarks:

icl -Qvc10 -Qstd=c99

C++ benchmarks:

icl -Qvc10

Continued on next page

Standard Performance Evaluation Corporation

info@spec.org

<http://www.spec.org/>

Page 3



SPEC CFP2006 Result

Copyright 2006-2014 Standard Performance Evaluation Corporation

Intel Corporation

SPECfp2006 = 45.2

Intel DQ87PG motherboard (Intel Celeron G1830)

SPECfp_base2006 = 44.3

CPU2006 license: 13

Test date: Feb-2014

Test sponsor: Intel Corporation

Hardware Availability: Dec-2013

Tested by: Intel Corporation

Software Availability: Apr-2013

Base Compiler Invocation (Continued)

Fortran benchmarks:

ifort

Benchmarks using both Fortran and C:

icl -Qvc10 -Qstd=c99 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 -names:lowercase /assume:underscore
 437.leslie3d: -DSPEC_CPU_P64
 444.namd: -DSPEC_CPU_P64 /TP
 447.dealII: -DSPEC_CPU_P64 -DDEAL_II_MEMBER_VAR_SPECIALIZATION_BUG
 -Qoption,cpp,--ms_incompat_treatment_of_commas_in_macros
 450.soplex: -DSPEC_CPU_P64
 453.povray: -DSPEC_CPU_P64 -DSPEC_CPU_NEED_INVHYP -DNEED_INVHYP
 454.calculix: -DSPEC_CPU_P64 -DSPEC_CPU_NOZMODIFIER -names:lowercase
 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:

-QxSSE4.2 -Qipo -O3 -Qprec-div- -Qparallel -Qansi-alias
-Qopt-prefetch -Qauto-ilp32 /F1000000000

C++ benchmarks:

-QxSSE4.2 -Qipo -O3 -Qprec-div- -Qparallel -Qansi-alias
-Qopt-prefetch -Qcxx-features -Qauto-ilp32 /F1000000000 shlw64M.lib
-link /FORCE:MULTIPLE

Fortran benchmarks:

-QxSSE4.2 -Qipo -O3 -Qprec-div- -Qparallel -Qansi-alias
-Qopt-prefetch /F1000000000

Benchmarks using both Fortran and C:

-QxSSE4.2 -Qipo -O3 -Qprec-div- -Qparallel -Qansi-alias
-Qopt-prefetch -Qauto-ilp32 /F1000000000



SPEC CFP2006 Result

Copyright 2006-2014 Standard Performance Evaluation Corporation

Intel Corporation

SPECfp2006 = 45.2

Intel DQ87PG motherboard (Intel Celeron G1830)

SPECfp_base2006 = 44.3

CPU2006 license: 13

Test date: Feb-2014

Test sponsor: Intel Corporation

Hardware Availability: Dec-2013

Tested by: Intel Corporation

Software Availability: Apr-2013

Peak Compiler Invocation

C benchmarks:

icl -Qvc10 -Qstd=c99

C++ benchmarks:

icl -Qvc10

Fortran benchmarks:

ifort

Benchmarks using both Fortran and C:

icl -Qvc10 -Qstd=c99 ifort

Peak Portability Flags

Same as Base Portability Flags

Peak Optimization Flags

C benchmarks:

433.milc: basepeak = yes

470.lbm: basepeak = yes

482.sphinx3: basepeak = yes

C++ benchmarks:

444.namd: -QxSSE4.2(pass 2) -Qprof_gen(pass 1) -Qprof_use(pass 2)
-Qipo -O3 -Qprec-div- -Oa -Qauto-ilp32 /F1000000000
sh1W64M.lib -link /FORCE:MULTIPLE

447.dealIII: basepeak = yes

450.soplex: basepeak = yes

453.povray: -QxSSE4.2(pass 2) -Qprof_gen(pass 1) -Qprof_use(pass 2)
-Qipo -O3 -Qprec-div- -Qunroll4 -Qansi-alias -Qauto-ilp32
/F1000000000 sh1W64M.lib -link /FORCE:MULTIPLE

Fortran benchmarks:

410.bwaves: basepeak = yes

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

Continued on next page



SPEC CFP2006 Result

Copyright 2006-2014 Standard Performance Evaluation Corporation

Intel Corporation

SPECfp2006 = 45.2

Intel DQ87PG motherboard (Intel Celeron G1830)

SPECfp_base2006 = 44.3

CPU2006 license: 13

Test date: Feb-2014

Test sponsor: Intel Corporation

Hardware Availability: Dec-2013

Tested by: Intel Corporation

Software Availability: Apr-2013

Peak Optimization Flags (Continued)

434.zeusmp: basepeak = yes

437.leslie3d: basepeak = yes

459.GemsFDTD: basepeak = yes

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

Benchmarks using both Fortran and C:

435.gromacs: basepeak = yes

436.cactusADM: basepeak = yes

454.calculix: basepeak = yes

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-ic13.1-official-windows.html>

You can also download the XML flags source by saving the following link:

<http://www.spec.org/cpu2006/flags/Intel-ic13.1-official-windows.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 v1.2.
Report generated on Fri Jul 25 00:35:22 2014 by SPEC CPU2006 PS/PDF formatter v6932.
Originally published on 15 July 2014.