



SPEC[®] CFP2006 Result

Copyright 2006-2014 Standard Performance Evaluation Corporation

Intel Corporation

SPECfp[®]_rate2006 = 113

Intel DH67BLB3 Motherboard (Intel Core i7-2600K)

SPECfp_rate_base2006 = 111

CPU2006 license: 13

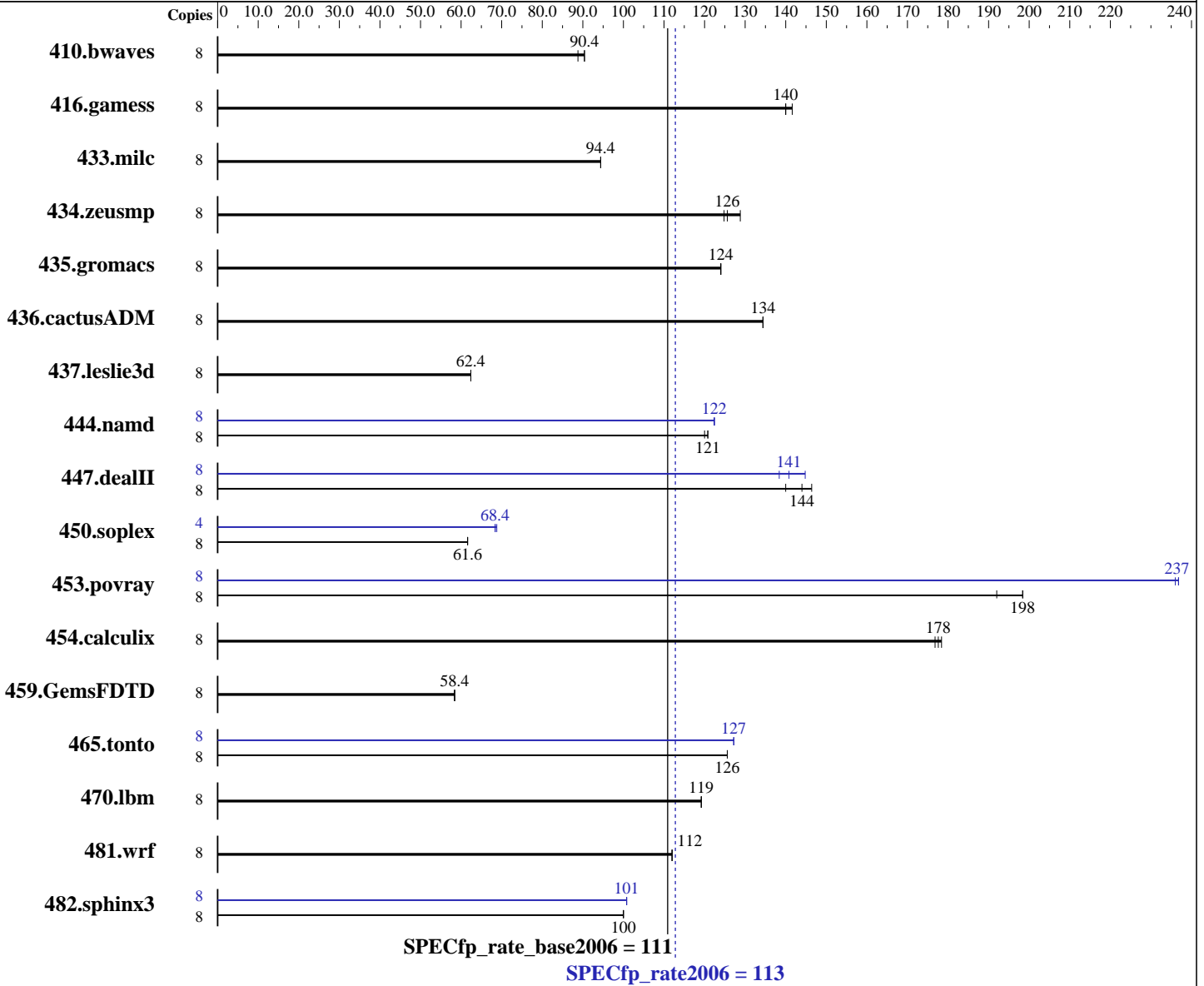
Test sponsor: Intel Corporation

Tested by: Intel Corporation

Test date: Jul-2011

Hardware Availability: Mar-2011

Software Availability: Apr-2011



Hardware

CPU Name: Intel Core i7-2600K
 CPU Characteristics: Intel Turbo Boost Technology up to 3.8 GHz
 CPU MHz: 3400
 FPU: Integrated
 CPU(s) enabled: 4 cores, 1 chip, 4 cores/chip, 2 threads/core
 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: Windows 7 Ultimate (64-bit)
 Compiler: Intel C++ Compiler XE for Intel 64
 Version 12.0.3.176 Build 20110309
 Intel Visual Fortran Compiler XE for Intel 64
 Version 12.0.3.176 Build 20110309
 Microsoft Visual Studio 2008 Professional SP1
 (for libraries)
 Auto Parallel: No
 File System: NTFS

Continued on next page



SPEC CFP2006 Result

Copyright 2006-2014 Standard Performance Evaluation Corporation

Intel Corporation

SPECfp_rate2006 = 113

Intel DH67BLB3 Motherboard (Intel Core i7-2600K)

SPECfp_rate_base2006 = 111

CPU2006 license: 13

Test date: Jul-2011

Test sponsor: Intel Corporation

Hardware Availability: Mar-2011

Tested by: Intel Corporation

Software Availability: Apr-2011

L3 Cache: 8 MB I+D on chip per chip
 Other Cache: None
 Memory: 8 GB (2 x 4 GB 2Rx8 PC3-10600U-9)
 Disk Subsystem: Seagate 1 TB HDD, 7200 rpm
 Other Hardware: None

System State: Default
 Base Pointers: 32/64-bit
 Peak Pointers: 32/64-bit
 Other Software: SmartHeap Library Version 9.01 from <http://www.microquill.com/>

Results Table

Benchmark	Base								Peak							
	Copies	Seconds	Ratio	Seconds	Ratio	Seconds	Ratio	Copies	Seconds	Ratio	Seconds	Ratio	Seconds	Ratio		
410.bwaves	8	1220	88.8	<u>1202</u>	<u>90.4</u>	1202	90.4	8	1220	88.8	<u>1202</u>	<u>90.4</u>	1202	90.4		
416.gamess	8	<u>1120</u>	<u>140</u>	1122	140	1107	142	8	<u>1120</u>	<u>140</u>	1122	140	1107	142		
433.milc	8	777	94.4	775	94.4	<u>775</u>	<u>94.4</u>	8	777	94.4	775	94.4	<u>775</u>	<u>94.4</u>		
434.zeusmp	8	582	125	565	129	<u>579</u>	<u>126</u>	8	582	125	565	129	<u>579</u>	<u>126</u>		
435.gromacs	8	<u>460</u>	<u>124</u>	460	124	460	124	8	<u>460</u>	<u>124</u>	460	124	460	124		
436.cactusADM	8	713	134	<u>713</u>	<u>134</u>	712	134	8	713	134	<u>713</u>	<u>134</u>	712	134		
437.leslie3d	8	1199	62.4	1202	62.4	<u>1200</u>	<u>62.4</u>	8	1199	62.4	1202	62.4	<u>1200</u>	<u>62.4</u>		
444.namd	8	534	120	530	121	<u>532</u>	<u>121</u>	8	526	122	525	122	<u>525</u>	<u>122</u>		
447.dealII	8	655	140	625	146	<u>636</u>	<u>144</u>	8	630	145	<u>649</u>	<u>141</u>	660	138		
450.soplex	8	1086	61.6	1080	61.6	<u>1082</u>	<u>61.6</u>	4	<u>486</u>	<u>68.4</u>	486	68.8	486	68.4		
453.povray	8	<u>215</u>	<u>198</u>	215	198	221	192	8	180	237	<u>180</u>	<u>237</u>	180	236		
454.calculix	8	<u>371</u>	<u>178</u>	371	178	373	177	8	<u>371</u>	<u>178</u>	371	178	373	177		
459.GemsFDTD	8	1457	58.4	1458	58.4	<u>1458</u>	<u>58.4</u>	8	1457	58.4	1458	58.4	<u>1458</u>	<u>58.4</u>		
465.tonto	8	<u>628</u>	<u>126</u>	626	126	628	126	8	<u>619</u>	<u>127</u>	618	127	619	127		
470.lbm	8	924	119	<u>924</u>	<u>119</u>	924	119	8	924	119	<u>924</u>	<u>119</u>	924	119		
481.wrf	8	796	112	<u>797</u>	<u>112</u>	797	112	8	796	112	<u>797</u>	<u>112</u>	797	112		
482.sphinx3	8	1565	100	<u>1564</u>	<u>100</u>	1564	100	8	1544	101	<u>1546</u>	<u>101</u>	1547	101		

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

Submit Notes

The config file option 'submit' was used.
 The start command with the /affinity switch was used to bind processes to cores

General Notes

Tested systems can be used with Shin-G ATX case,
 PC Power and Cooling 1200W power supply

Base Compiler Invocation

C benchmarks:
 icl -Qvc9 -Qstd=c99

Continued on next page



SPEC CFP2006 Result

Copyright 2006-2014 Standard Performance Evaluation Corporation

Intel Corporation

SPECfp_rate2006 = 113

Intel DH67BLB3 Motherboard (Intel Core i7-2600K)

SPECfp_rate_base2006 = 111

CPU2006 license: 13

Test date: Jul-2011

Test sponsor: Intel Corporation

Hardware Availability: Mar-2011

Tested by: Intel Corporation

Software Availability: Apr-2011

Base Compiler Invocation (Continued)

C++ benchmarks:

icl -Qvc9

Fortran benchmarks:

ifort

Benchmarks using both Fortran and C:

icl -Qvc9 -Qstd=c99 ifort

Base Portability Flags

410.bwaves: -DSPEC_CPU_P64 -names:lowercase
 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
 450.soplex: -DSPEC_CPU_P64
 453.povray: -DSPEC_CPU_P64 -DSPEC_CPU_WINDOWS_ICL
 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:

-QxAVX -Qipo -O3 -Qprec-div- -Qansi-alias -Qauto-ilp32 /F1000000000
-link /FORCE:MULTIPLE

C++ benchmarks:

-QxAVX -Qipo -O3 -Qprec-div- -Qansi-alias -Qcxx-features
-Qauto-ilp32 /F1000000000 shlw64M.lib -link /FORCE:MULTIPLE

Fortran benchmarks:

-QxAVX -Qipo -O3 -Qprec-div- -Qansi-alias /F1000000000
-link /FORCE:MULTIPLE

Benchmarks using both Fortran and C:

-QxAVX -Qipo -O3 -Qprec-div- -Qansi-alias -Qauto-ilp32 /F1000000000
-link /FORCE:MULTIPLE



SPEC CFP2006 Result

Copyright 2006-2014 Standard Performance Evaluation Corporation

Intel Corporation

SPECfp_rate2006 = 113

Intel DH67BLB3 Motherboard (Intel Core i7-2600K)

SPECfp_rate_base2006 = 111

CPU2006 license: 13

Test date: Jul-2011

Test sponsor: Intel Corporation

Hardware Availability: Mar-2011

Tested by: Intel Corporation

Software Availability: Apr-2011

Peak Compiler Invocation

C benchmarks:

icl -Qvc9 -Qstd=c99

C++ benchmarks:

icl -Qvc9

Fortran benchmarks:

ifort

Benchmarks using both Fortran and C:

icl -Qvc9 -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: -QxAVX -Qipo -O3 -Qprec-div- -Qunroll2 -Qansi-alias
-Qauto-ilp32 /F1000000000 -link /FORCE:MULTIPLE

C++ benchmarks:

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

447.dealII: -QxAVX(pass 2) -Qprof_gen(pass 1) -Qprof_use(pass 2) -Qipo
-O3 -Qprec-div- -Qunroll2 -Qansi-alias -Qscalar-rep-
-Qauto-ilp32 /F1000000000 sh1W64M.lib
-link /FORCE:MULTIPLE

450.soplex: -QxAVX(pass 2) -Qprof_gen(pass 1) -Qprof_use(pass 2) -Qipo
-O3 -Qauto-ilp32 /F1000000000 sh1W64M.lib
-link /FORCE:MULTIPLE

453.povray: -QxAVX(pass 2) -Qprof_gen(pass 1) -Qprof_use(pass 2) -Qipo
-O3 -Qprec-div- -Qopt-prefetch -Qauto-ilp32 /F1000000000
sh1W64M.lib -link /FORCE:MULTIPLE

Continued on next page



SPEC CFP2006 Result

Copyright 2006-2014 Standard Performance Evaluation Corporation

Intel Corporation

SPECfp_rate2006 = 113

Intel DH67BLB3 Motherboard (Intel Core i7-2600K)

SPECfp_rate_base2006 = 111

CPU2006 license: 13

Test sponsor: Intel Corporation

Tested by: Intel Corporation

Test date: Jul-2011

Hardware Availability: Mar-2011

Software Availability: Apr-2011

Peak Optimization Flags (Continued)

Fortran benchmarks:

410.bwaves: basepeak = yes

416.gamess: basepeak = yes

434.zeusmp: basepeak = yes

437.lelie3d: basepeak = yes

459.GemsFDTD: basepeak = yes

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

Benchmarks using both Fortran and C:

435.gromacs: basepeak = yes

436.cactusADM: basepeak = yes

454.calculix: basepeak = yes

481.wrf: basepeak = yes

The flags files that were used to format this result can be browsed at

<http://www.spec.org/cpu2006/flags/Intel-ic12-winx64-revC.html>

<http://www.spec.org/cpu2006/flags/Intel-Windows-Platform-Settings.20110719.html>

You can also download the XML flags sources by saving the following links:

<http://www.spec.org/cpu2006/flags/Intel-ic12-winx64-revC.xml>

<http://www.spec.org/cpu2006/flags/Intel-Windows-Platform-Settings.20110719.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 Wed Jul 23 22:11:15 2014 by SPEC CPU2006 PS/PDF formatter v6932.

Originally published on 22 August 2011.