



SPEC[®] CFP2006 Result

Copyright 2006-2014 Standard Performance Evaluation Corporation

Intel Corporation

Intel DX58SO2 Motherboard (Intel Core i7-975 Extreme Edition)

SPECfp[®]_rate2006 = 102

SPECfp_rate_base2006 = 99.7

CPU2006 license: 13

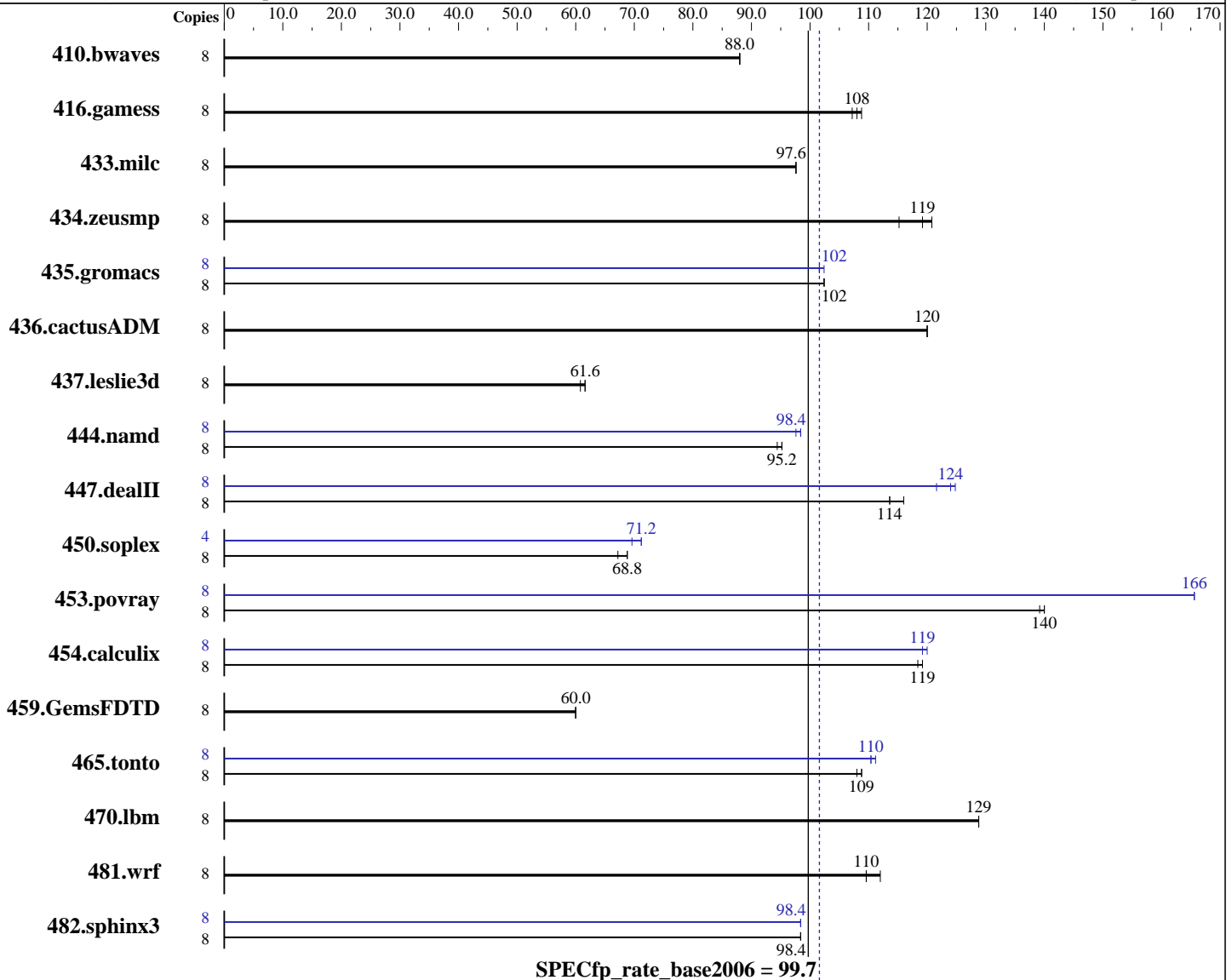
Test sponsor: Intel Corporation

Tested by: Intel Corporation

Test date: Jul-2011

Hardware Availability: Mar-2011

Software Availability: Apr-2011



Hardware

CPU Name: Intel Core i7-975 Extreme Edition
 CPU Characteristics: Intel Turbo Boost Technology up to 3.60 GHz
 CPU MHz: 3333
 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

Intel DX58SO2 Motherboard (Intel Core i7-975 Extreme Edition)

SPECfp_rate2006 = 102

SPECfp_rate_base2006 = 99.7

CPU2006 license: 13

Test sponsor: Intel Corporation

Tested by: Intel Corporation

Test date: Jul-2011

Hardware Availability: Mar-2011

Software Availability: Apr-2011

L3 Cache: 8 MB I+D on chip per chip
Other Cache: None
Memory: 12 GB (3 x 4 GB 2Rx8 PC3-8600U-9)
Disk Subsystem: Seagate 1 TB SATA, 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	1239	88.0	1240	88.0	<u>1239</u>	<u>88.0</u>	8	1239	88.0	1240	88.0	<u>1239</u>	<u>88.0</u>
416.gamess	8	1462	107	<u>1446</u>	<u>108</u>	1442	109	8	1462	107	<u>1446</u>	<u>108</u>	1442	109
433.milc	8	753	97.6	<u>753</u>	<u>97.6</u>	753	97.6	8	753	97.6	<u>753</u>	<u>97.6</u>	753	97.6
434.zeusmp	8	633	115	<u>609</u>	<u>119</u>	604	121	8	633	115	<u>609</u>	<u>119</u>	604	121
435.gromacs	8	<u>558</u>	<u>102</u>	560	102	557	102	8	560	102	564	102	<u>564</u>	<u>102</u>
436.cactusADM	8	<u>796</u>	<u>120</u>	796	120	795	120	8	<u>796</u>	<u>120</u>	796	120	795	120
437.leslie3d	8	<u>1228</u>	<u>61.6</u>	1230	60.8	1218	61.6	8	<u>1228</u>	<u>61.6</u>	1230	60.8	1218	61.6
444.namd	8	677	94.4	<u>673</u>	<u>95.2</u>	672	95.2	8	655	97.6	<u>653</u>	<u>98.4</u>	652	98.4
447.dealII	8	804	114	<u>803</u>	<u>114</u>	788	116	8	753	122	735	125	<u>740</u>	<u>124</u>
450.soplex	8	995	67.2	<u>967</u>	<u>68.8</u>	966	68.8	4	478	69.6	<u>468</u>	<u>71.2</u>	468	71.2
453.povray	8	306	139	<u>304</u>	<u>140</u>	304	140	8	257	166	<u>257</u>	<u>166</u>	257	166
454.calculix	8	556	118	555	119	<u>555</u>	<u>119</u>	8	553	119	552	120	<u>552</u>	<u>119</u>
459.GemsFDTD	8	1417	60.0	<u>1419</u>	<u>60.0</u>	1419	60.0	8	1417	60.0	<u>1419</u>	<u>60.0</u>	1419	60.0
465.tonto	8	728	108	<u>725</u>	<u>109</u>	724	109	8	711	110	<u>711</u>	<u>110</u>	710	111
470.lbm	8	855	129	<u>855</u>	<u>129</u>	854	129	8	855	129	<u>855</u>	<u>129</u>	854	129
481.wrf	8	799	112	813	110	<u>812</u>	<u>110</u>	8	799	112	813	110	<u>812</u>	<u>110</u>
482.sphinx3	8	1584	98.4	1580	98.4	<u>1582</u>	<u>98.4</u>	8	<u>1581</u>	<u>98.4</u>	1582	98.4	1580	98.4

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
System was configured with an ATI HD5770 discrete graphics card



SPEC CFP2006 Result

Copyright 2006-2014 Standard Performance Evaluation Corporation

Intel Corporation

Intel DX58SO2 Motherboard (Intel Core i7-975 Extreme Edition)

SPECfp_rate2006 = 102

SPECfp_rate_base2006 = 99.7

CPU2006 license: 13

Test sponsor: Intel Corporation

Tested by: Intel Corporation

Test date: Jul-2011

Hardware Availability: Mar-2011

Software Availability: Apr-2011

Base 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

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.lelie3d: -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:

-QxSSE4.2 -Qipo -O3 -Qprec-div- -Qansi-alias -Qauto-ilp32
/F1000000000 -link /FORCE:MULTIPLE

C++ benchmarks:

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

Fortran benchmarks:

-QxSSE4.2 -Qipo -O3 -Qprec-div- -Qansi-alias /F1000000000
-link /FORCE:MULTIPLE

Continued on next page



SPEC CFP2006 Result

Copyright 2006-2014 Standard Performance Evaluation Corporation

Intel Corporation

Intel DX58SO2 Motherboard (Intel Core i7-975 Extreme Edition)

SPECfp_rate2006 = 102

SPECfp_rate_base2006 = 99.7

CPU2006 license: 13

Test sponsor: Intel Corporation

Tested by: Intel Corporation

Test date: Jul-2011

Hardware Availability: Mar-2011

Software Availability: Apr-2011

Base Optimization Flags (Continued)

Benchmarks using both Fortran and C:

```
-QxSSE4.2 -Qipo -O3 -Qprec-div- -Qansi-alias -Qauto-ilp32
/F1000000000 -link /FORCE:MULTIPLE
```

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: -QxSSE4.2 -Qipo -O3 -Qprec-div- -Qunroll2 -Qansi-alias
-Qauto-ilp32 /F1000000000 -link /FORCE:MULTIPLE
```

C++ benchmarks:

```
444.namd: -QxSSE4.2(pass 2) -Qprof_gen(pass 1) -Qprof_use(pass 2)
-Qipo -O3 -Qprec-div- -Oa -Qauto-ilp32 /F1000000000
shlw64M.lib -link /FORCE:MULTIPLE
```

```
447.dealIII: -QxSSE4.2(pass 2) -Qprof_gen(pass 1) -Qprof_use(pass 2)
-Qipo -O3 -Qprec-div- -Qunroll2 -Qansi-alias
-Qscalar-rep- -Qauto-ilp32 /F1000000000 shlw64M.lib
-link /FORCE:MULTIPLE
```

Continued on next page



SPEC CFP2006 Result

Copyright 2006-2014 Standard Performance Evaluation Corporation

Intel Corporation

Intel DX58SO2 Motherboard (Intel Core i7-975 Extreme Edition)

SPECfp_rate2006 = 102

SPECfp_rate_base2006 = 99.7

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)

450.soplex: -QxSSE4.2(pass 2) -Qprof_gen(pass 1) -Qprof_use(pass 2)
-Qipo -O3 -Qauto-ilp32 /F1000000000 sh1W64M.lib
-link /FORCE:MULTIPLE

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

Fortran benchmarks:

410.bwaves: basepeak = yes

416.gamess: basepeak = yes

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 /F1000000000
-link /FORCE:MULTIPLE

Benchmarks using both Fortran and C:

435.gromacs: -QxSSE4.2(pass 2) -Qprof_gen(pass 1) -Qprof_use(pass 2)
-Qipo -O3 -Qprec-div- -Qopt-prefetch -Qauto-ilp32
/F1000000000 -link /FORCE:MULTIPLE

436.cactusADM: basepeak = yes

454.calculix: -QxSSE4.2 -Qipo -O3 -Qprec-div- -Qauto-ilp32 /F1000000000
-link /FORCE:MULTIPLE

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-ic12-winx64-revB.20110808.html>

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

<http://www.spec.org/cpu2006/flags/Intel-ic12-winx64-revB.20110808.xml>



SPEC CFP2006 Result

Copyright 2006-2014 Standard Performance Evaluation Corporation

Intel Corporation

Intel DX58SO2 Motherboard (Intel Core i7-975 Extreme Edition)

SPECfp_rate2006 = 102

SPECfp_rate_base2006 = 99.7

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

Test date: Jul-2011
Hardware Availability: Mar-2011
Software Availability: Apr-2011

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 23:57:53 2014 by SPEC CPU2006 PS/PDF formatter v6932.
Originally published on 2 August 2011.