



SPEC[®] CFP2006 Result

Copyright 2006-2014 Standard Performance Evaluation Corporation

Intel Corporation

SPECfp[®]_rate2006 = 96.8

ASUS H97M-PLUS Motherboard (Intel Core i3-4350)

SPECfp_rate_base2006 = 95.7

CPU2006 license: 13

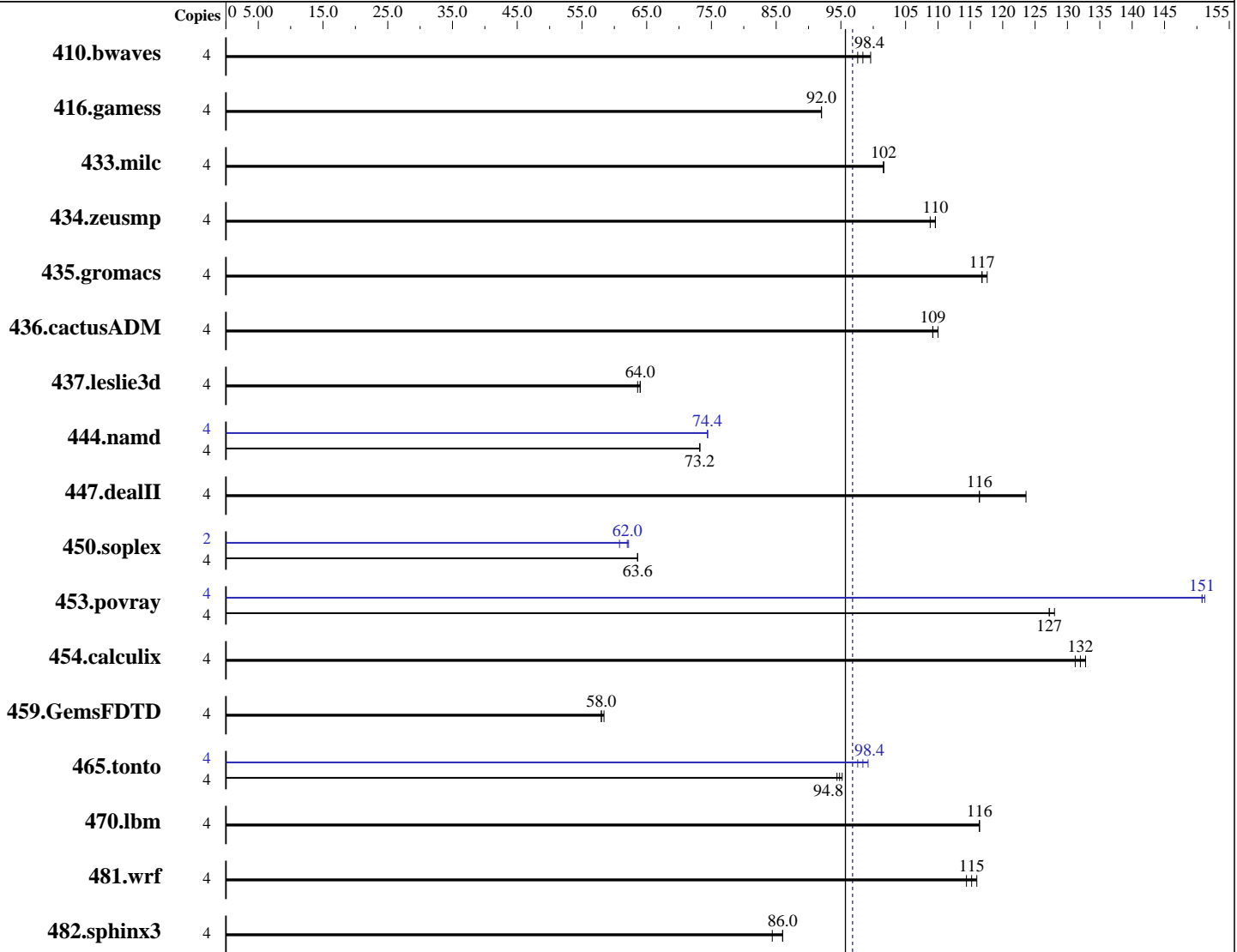
Test sponsor: Intel Corporation

Tested by: Intel Corporation

Test date: Jun-2014

Hardware Availability: Jun-2014

Software Availability: Oct-2013



SPECfp_rate_base2006 = 95.7

SPECfp_rate2006 = 96.8

Hardware

CPU Name: Intel Core i3-4350
 CPU Characteristics:
 CPU MHz: 3600
 FPU: Integrated
 CPU(s) enabled: 2 cores, 1 chip, 2 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: Microsoft Windows 8.1 Pro
 6.3.9600 N/A Build 9600
 Compiler: C/C++: Version 14.0.1.139 of Intel C++ Studio XE for Windows;
 Fortran: Version 14.0.1.139 of Intel Fortran Studio XE for Windows;
 Libraries: Version 16.00.30319.01 of Microsoft Visual Studio 2010 Professional SP1
 Auto Parallel: No

Continued on next page



SPEC CFP2006 Result

Copyright 2006-2014 Standard Performance Evaluation Corporation

Intel Corporation

SPECfp_rate2006 = 96.8

ASUS H97M-PLUS Motherboard (Intel Core i3-4350)

SPECfp_rate_base2006 = 95.7

CPU2006 license: 13

Test date: Jun-2014

Test sponsor: Intel Corporation

Hardware Availability: Jun-2014

Tested by: Intel Corporation

Software Availability: Oct-2013

L3 Cache: 4 MB I+D on chip per chip
 Other Cache: None
 Memory: 8 GB (2 x 4 GB 2Rx4 PC3-12800U-11)
 Disk Subsystem: 1 TB 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						
	Copies	Seconds	Ratio	Seconds	Ratio	Seconds	Ratio	Copies	Seconds	Ratio	Seconds	Ratio	Seconds	Ratio
410.bwaves	4	557	97.6	553	98.4	546	99.6	4	557	97.6	553	98.4	546	99.6
416.gamess	4	853	92.0	851	92.0	850	92.0	4	853	92.0	851	92.0	850	92.0
433.milc	4	361	102	361	102	361	102	4	361	102	361	102	361	102
434.zeusmp	4	334	109	332	110	333	110	4	334	109	332	110	333	110
435.gromacs	4	245	117	243	118	244	117	4	245	117	243	118	244	117
436.cactusADM	4	435	110	438	109	438	109	4	435	110	438	109	438	109
437.leslie3d	4	586	64.0	592	63.6	588	64.0	4	586	64.0	592	63.6	588	64.0
444.namd	4	439	73.2	439	73.2	437	73.2	4	432	74.4	432	74.4	432	74.4
447.dealII	4	393	116	393	116	370	124	4	393	116	393	116	370	124
450.soplex	4	525	63.6	524	63.6	525	63.6	2	274	60.8	269	62.0	268	62.2
453.povray	4	166	128	167	127	167	127	4	141	151	141	151	141	151
454.calculix	4	252	131	248	133	250	132	4	252	131	248	133	250	132
459.GemsFDTD	4	730	58.0	732	58.0	729	58.4	4	730	58.0	732	58.0	729	58.4
465.tonto	4	414	95.2	418	94.4	415	94.8	4	404	97.6	398	99.2	400	98.4
470.lbm	4	472	116	473	116	473	116	4	472	116	473	116	473	116
481.wrf	4	386	116	391	114	387	115	4	386	116	391	114	387	115
482.sphinx3	4	923	84.4	907	86.0	905	86.0	4	923	84.4	907	86.0	905	86.0

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 14.0 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)

Submit Notes

Processes were bound to specific processors using the start command with the /affinity switch. The config file option 'submit' was used to generate the affinity mask for each process.



SPEC CFP2006 Result

Copyright 2006-2014 Standard Performance Evaluation Corporation

Intel Corporation

SPECfp_rate2006 = 96.8

ASUS H97M-PLUS Motherboard (Intel Core i3-4350)

SPECfp_rate_base2006 = 95.7

CPU2006 license: 13

Test date: Jun-2014

Test sponsor: Intel Corporation

Hardware Availability: Jun-2014

Tested by: Intel Corporation

Software Availability: Oct-2013

Platform Notes

```
Sysinfo program C:\SPEC14.0\Docs\sysinfo
$Rev: 6775 $ $Date:: 2011-08-16 #$ \8787f7622badcf24e01c368b1db4377c
running on Clt10C37B4DED4E Sat Jun 28 06:49:16 2014
```

This section contains SUT (System Under Test) info as seen by some common utilities. To remove or add to this section, see:
<http://www.spec.org/cpu2006/Docs/config.html#sysinfo>

Trying 'systeminfo'

```
OS Name       : Microsoft Windows 8.1 Pro
OS Version    : 6.3.9600 N/A Build 9600
System Manufacturer: ASUS
System Model  : All Series
Processor(s)  : 1 Processor(s) Installed.
               [01]: Intel64 Family 6 Model 60 Stepping 3 GenuineIntel ~3600 Mhz
BIOS Version  : American Megatrends Inc. 2001, 6/13/2014
Total Physical Memory: 8,006 MB
```

Trying 'wmic cpu get /value'

```
DeviceID      : CPU0
L2CacheSize   : 512
L3CacheSize   : 4096
MaxClockSpeed : 3600
Name          : Intel(R) Core(TM) i3-4350 CPU @ 3.60GHz
NumberOfCores : 2
NumberOfLogicalProcessors: 4
```

(End of data from sysinfo program)

Component Notes

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

General Notes

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



SPEC CFP2006 Result

Copyright 2006-2014 Standard Performance Evaluation Corporation

Intel Corporation

SPECfp_rate2006 = 96.8

ASUS H97M-PLUS Motherboard (Intel Core i3-4350)

SPECfp_rate_base2006 = 95.7

CPU2006 license: 13

Test date: Jun-2014

Test sponsor: Intel Corporation

Hardware Availability: Jun-2014

Tested by: Intel Corporation

Software Availability: Oct-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:

-QxCORE-AVX2 -Qipo -O3 -Qprec-div- -Qansi-alias -Qopt-prefetch
-Qauto-ilp32 /F1000000000 -link /FORCE:MULTIPLE

C++ benchmarks:

-QxCORE-AVX2 -Qipo -O3 -Qprec-div- -Qansi-alias -Qopt-prefetch
-Qcxx-features -Qauto-ilp32 /F1000000000 shlw64M.lib
-link /FORCE:MULTIPLE

Fortran benchmarks:

-QxCORE-AVX2 -Qipo -O3 -Qprec-div- -Qansi-alias -Qopt-prefetch
/F1000000000 -link /FORCE:MULTIPLE

Benchmarks using both Fortran and C:

-QxCORE-AVX2 -Qipo -O3 -Qprec-div- -Qansi-alias -Qopt-prefetch
-Qauto-ilp32 /F1000000000 -link /FORCE:MULTIPLE



SPEC CFP2006 Result

Copyright 2006-2014 Standard Performance Evaluation Corporation

Intel Corporation

SPECfp_rate2006 = 96.8

ASUS H97M-PLUS Motherboard (Intel Core i3-4350)

SPECfp_rate_base2006 = 95.7

CPU2006 license: 13

Test date: Jun-2014

Test sponsor: Intel Corporation

Hardware Availability: Jun-2014

Tested by: Intel Corporation

Software Availability: Oct-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: -QxCORE-AVX2(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: basepeak = yes

450.soplex: -QxCORE-AVX2(pass 2) -Qprof_gen(pass 1) -Qprof_use(pass 2)
-Qipo -O3 -Qauto-ilp32 /F1000000000 shlW64M.lib
-link /FORCE:MULTIPLE

453.povray: -QxCORE-AVX2(pass 2) -Qprof_gen(pass 1) -Qprof_use(pass 2)
-Qipo -O3 -Qprec-div- -Qopt-prefetch -Qauto-ilp32
/F1000000000 shlW64M.lib -link /FORCE:MULTIPLE

Fortran benchmarks:

410.bwaves: basepeak = yes

Continued on next page



SPEC CFP2006 Result

Copyright 2006-2014 Standard Performance Evaluation Corporation

Intel Corporation

SPECfp_rate2006 = 96.8

ASUS H97M-PLUS Motherboard (Intel Core i3-4350)

SPECfp_rate_base2006 = 95.7

CPU2006 license: 13

Test date: Jun-2014

Test sponsor: Intel Corporation

Hardware Availability: Jun-2014

Tested by: Intel Corporation

Software Availability: Oct-2013

Peak Optimization Flags (Continued)

416.gamess: basepeak = yes

434.zeusmp: basepeak = yes

437.leslie3d: basepeak = yes

459.GemsFDTD: basepeak = yes

465.tonto: -QxCORE-AVX2(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 file that was used to format this result can be browsed at

<http://www.spec.org/cpu2006/flags/Intel-ic14.0-official-windows.html>

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

<http://www.spec.org/cpu2006/flags/Intel-ic14.0-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 Tue Aug 12 13:16:28 2014 by SPEC CPU2006 PS/PDF formatter v6932.
Originally published on 12 August 2014.