



# SPEC® CINT2006 Result

Copyright 2006-2014 Standard Performance Evaluation Corporation

## Intel Corporation

**SPECint®2006 = 51.0**

Intel DQ87PG Motherboard (Intel Core i3-4130)

**SPECint\_base2006 = 49.1**

CPU2006 license: 13

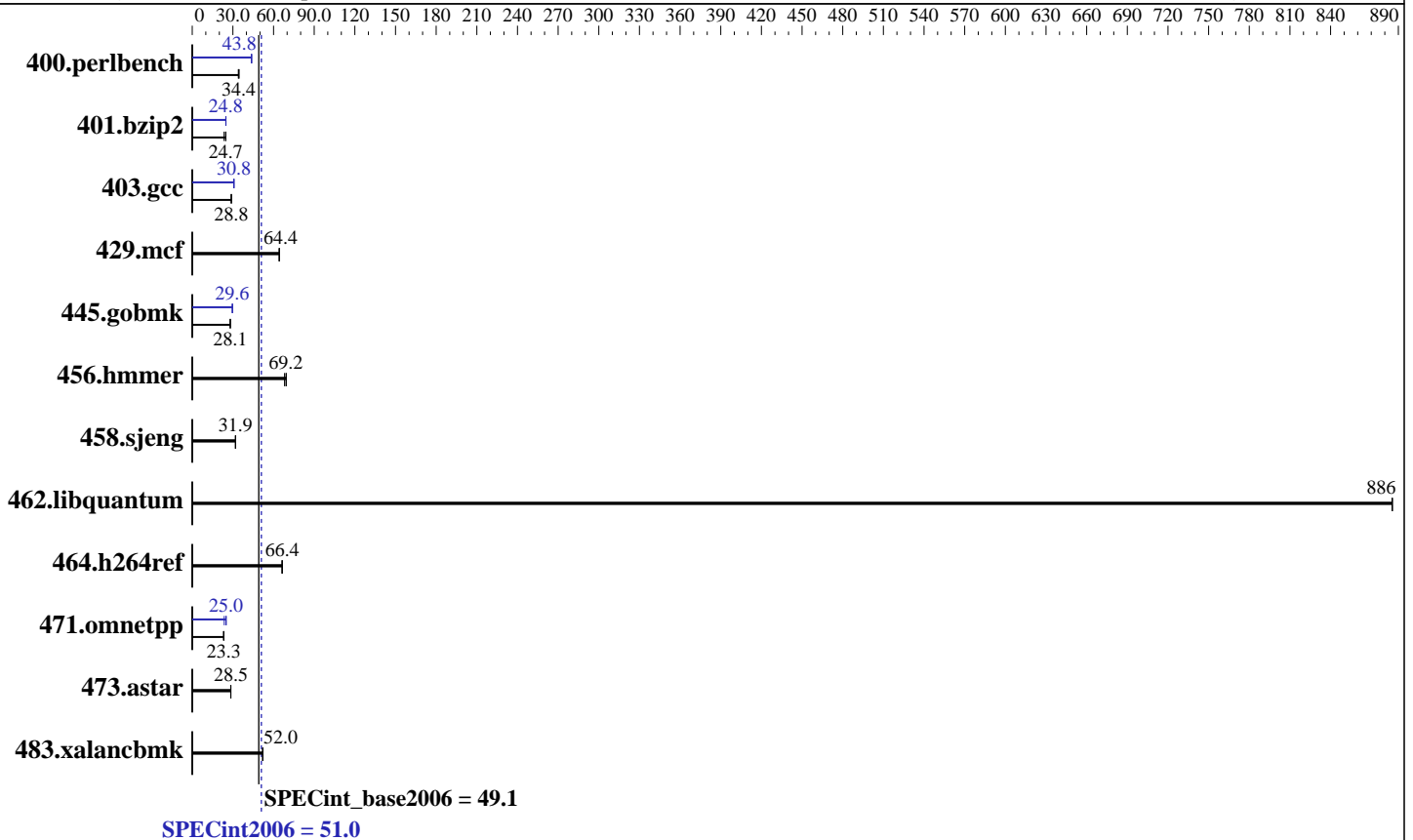
Test date: Oct-2014

Test sponsor: Intel Corporation

Hardware Availability: May-2014

Tested by: Intel Corporation

Software Availability: Oct-2013



### Hardware

CPU Name: Intel Core i3-4150  
 CPU Characteristics: 3500  
 CPU MHz: Integrated  
 FPU: 2 cores, 1 chip, 2 cores/chip, 2 threads/core  
 CPU(s) enabled: 1 chip  
 CPU(s) orderable: 32 KB I + 32 KB D on chip per core  
 Primary Cache: 256 KB I+D on chip per core  
 Secondary Cache: 3 MB I+D on chip per chip  
 L3 Cache: None  
 Other Cache: None  
 Memory: 4 GB (2 x 2 GB 2Rx4 PC3-12800U-11)  
 Disk Subsystem: 40 GB Intel SSD SA2CT040G3  
 Other Hardware: None

### Software

Operating System: Microsoft Windows 7 Enterprise 6.1.7601 Service Pack 1 Build 7601  
 Compiler: C/C++: Version 14.0.1.139 of Intel C++ Studio XE for Windows;  
 Libraries: Version 16.00.30319.01 of Microsoft Visual Studio 2010 Professional SP1  
 Auto Parallel: Yes  
 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/>



# SPEC CINT2006 Result

Copyright 2006-2014 Standard Performance Evaluation Corporation

Intel Corporation

SPECint2006 = 51.0

Intel DQ87PG Motherboard (Intel Core i3-4130)

SPECint\_base2006 = 49.1

CPU2006 license: 13

Test date: Oct-2014

Test sponsor: Intel Corporation

Hardware Availability: May-2014

Tested by: Intel Corporation

Software Availability: Oct-2013

## Results Table

Benchmark	Base						Peak					
	Seconds	Ratio	Seconds	Ratio	Seconds	Ratio	Seconds	Ratio	Seconds	Ratio	Seconds	Ratio
400.perlbench	287	34.0	283	34.5	<b><u>284</u></b>	<b><u>34.4</u></b>	223	43.8	224	43.7	<b><u>223</u></b>	<b><u>43.8</u></b>
401.bzip2	411	23.5	391	24.7	<b><u>391</u></b>	<b><u>24.7</u></b>	<b><u>390</u></b>	<b><u>24.8</u></b>	390	24.8	387	24.9
403.gcc	280	28.8	279	28.9	<b><u>280</u></b>	<b><u>28.8</u></b>	<b><u>262</u></b>	<b><u>30.8</u></b>	262	30.7	261	30.8
429.mcf	142	64.0	142	64.4	<b><u>142</u></b>	<b><u>64.4</u></b>	142	64.0	142	64.4	<b><u>142</u></b>	<b><u>64.4</u></b>
445.gobmk	373	28.1	<b><u>373</u></b>	<b><u>28.1</u></b>	374	28.0	<b><u>354</u></b>	<b><u>29.6</u></b>	354	29.6	354	29.7
456.hammer	137	68.1	<b><u>135</u></b>	<b><u>69.2</u></b>	135	69.4	137	68.1	<b><u>135</u></b>	<b><u>69.2</u></b>	135	69.4
458.sjeng	380	31.9	<b><u>379</u></b>	<b><u>31.9</u></b>	378	32.0	380	31.9	<b><u>379</u></b>	<b><u>31.9</u></b>	378	32.0
462.libquantum	23.4	886	<b><u>23.4</u></b>	<b><u>886</u></b>	23.4	886	23.4	886	<b><u>23.4</u></b>	<b><u>886</u></b>	23.4	886
464.h264ref	333	66.5	334	66.2	<b><u>333</u></b>	<b><u>66.4</u></b>	333	66.5	334	66.2	<b><u>333</u></b>	<b><u>66.4</u></b>
471.omnetpp	271	23.1	269	23.3	<b><u>269</u></b>	<b><u>23.3</u></b>	250	25.0	265	23.6	<b><u>250</u></b>	<b><u>25.0</u></b>
473.astar	<b><u>246</u></b>	<b><u>28.5</u></b>	247	28.4	246	28.5	<b><u>246</u></b>	<b><u>28.5</u></b>	247	28.4	246	28.5
483.xalancbmk	<b><u>133</u></b>	<b><u>52.0</u></b>	133	52.1	133	52.0	<b><u>133</u></b>	<b><u>52.0</u></b>	133	52.1	133	52.0

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)

## Platform Notes

Sysinfo program C:\SPEC14.0\Docs\sysinfo  
\$Rev: 6775 \$ \$Date:: 2011-08-16 #\$ \8787f7622badcf24e01c368b1db4377c  
running on Clt7C05070FB2EF Mon Oct 20 13:04:21 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 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 ~3500 Mhz
BIOS Version  : Intel(R) Corp. PGQ8710H.86A.0148.2014.0804.1451, 8/4/2014
Total Physical Memory: 3,909 MB
```

```
Trying 'wmic cpu get /value'
DeviceID      : CPU0
```

Continued on next page



# SPEC CINT2006 Result

Copyright 2006-2014 Standard Performance Evaluation Corporation

Intel Corporation

SPECint2006 = 51.0

Intel DQ87PG Motherboard (Intel Core i3-4130)

SPECint\_base2006 = 49.1

CPU2006 license: 13

Test sponsor: Intel Corporation

Tested by: Intel Corporation

Test date: Oct-2014

Hardware Availability: May-2014

Software Availability: Oct-2013

## Platform Notes (Continued)

L2CacheSize : 512  
L3CacheSize : 3072  
MaxClockSpeed : 3500  
Name : Intel(R) Core(TM) i3-4150 CPU @ 3.50GHz  
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

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

## Base Portability Flags

400.perlbench: -DSPEC\_CPU\_P64 -DSPEC\_CPU\_WIN64\_X64  
-DSPEC\_CPU\_NO\_NEED\_VA\_COPY  
401.bzip2: -DSPEC\_CPU\_P64  
403.gcc: -DSPEC\_CPU\_P64 -DSPEC\_CPU\_WIN64  
429.mcf: -DSPEC\_CPU\_P64  
445.gobmk: -DSPEC\_CPU\_P64  
456.hmmmer: -DSPEC\_CPU\_P64  
458.sjeng: -DSPEC\_CPU\_P64  
462.libquantum: -DSPEC\_CPU\_P64  
464.h264ref: -DSPEC\_CPU\_P64 -DWIN32 -DSPEC\_CPU\_NO\_INTTYPES  
471.omnetpp: -DSPEC\_CPU\_P64 -DSPEC\_CPU\_WIN64  
473.astar: -DSPEC\_CPU\_P64  
483.xalancbmk: -DSPEC\_CPU\_P64 -Qoption,cpp,--no\_wchar\_t\_keyword



# SPEC CINT2006 Result

Copyright 2006-2014 Standard Performance Evaluation Corporation

Intel Corporation

SPECint2006 = 51.0

Intel DQ87PG Motherboard (Intel Core i3-4130)

SPECint\_base2006 = 49.1

CPU2006 license: 13

Test date: Oct-2014

Test sponsor: Intel Corporation

Hardware Availability: May-2014

Tested by: Intel Corporation

Software Availability: Oct-2013

## Base Optimization Flags

C benchmarks:

-QxCORE-AVX2 -Qipo -O3 -Qprec-div- -Qopt-prefetch -Qparallel  
-Qauto-ilp32 /F512000000

C++ benchmarks:

-QxCORE-AVX2 -Qipo -O3 -Qprec-div- -Qopt-prefetch -Qcxx-features  
-Qauto-ilp32 /F512000000 shlw64M.lib -link /FORCE:MULTIPLE

## Base Other Flags

C benchmarks:

403.gcc: -Dalloca=\_alloca

## Peak Compiler Invocation

C benchmarks:

icl -Qvc10 -Qstd=c99

C++ benchmarks:

icl -Qvc10

## Peak Portability Flags

Same as Base Portability Flags

## Peak Optimization Flags

C benchmarks:

400.perlbench: -QxCORE-AVX2(pass 2) -Qprof\_gen(pass 1) -Qprof\_use(pass 2)  
-Qipo -O3 -Qprec-div- -Qansi-alias -Qopt-prefetch  
-Qauto-ilp32 /F512000000 shlw64M.lib  
-link /FORCE:MULTIPLE

401.bzip2: -QxCORE-AVX2(pass 2) -Qprof\_gen(pass 1) -Qprof\_use(pass 2)  
-Qipo -O3 -Qprec-div- -Qopt-prefetch -Qansi-alias  
-Qauto-ilp32 /F512000000

403.gcc: -QxCORE-AVX2(pass 2) -Qprof\_gen(pass 1) -Qprof\_use(pass 2)  
-Qipo -O3 -Qprec-div- -Qauto-ilp32 /F512000000

Continued on next page



# SPEC CINT2006 Result

Copyright 2006-2014 Standard Performance Evaluation Corporation

Intel Corporation

SPECint2006 = 51.0

Intel DQ87PG Motherboard (Intel Core i3-4130)

SPECint\_base2006 = 49.1

CPU2006 license: 13

Test date: Oct-2014

Test sponsor: Intel Corporation

Hardware Availability: May-2014

Tested by: Intel Corporation

Software Availability: Oct-2013

## Peak Optimization Flags (Continued)

429.mcf: basepeak = yes

445.gobmk: -QxCORE-AVX2(pass 2) -Qprof\_gen(pass 1) -Qprof\_use(pass 2)  
-Qipo -O2 -Qprec-div- -Qansi-alias -Qauto-ilp32  
/F512000000

456.hmmer: basepeak = yes

458.sjeng: basepeak = yes

462.libquantum: basepeak = yes

464.h264ref: basepeak = yes

C++ benchmarks:

471.omnetpp: -QxCORE-AVX2(pass 2) -Qprof\_gen(pass 1) -Qprof\_use(pass 2)  
-Qipo -O3 -Qprec-div- -Qansi-alias  
-Qopt-ra-region-strategy=block -Qauto-ilp32 /F512000000  
shlW64M.lib -link /FORCE:MULTIPLE

473.astar: basepeak = yes

483.xalancbmk: basepeak = yes

## Peak Other Flags

C benchmarks:

403.gcc: -Dalloca=\_alloca

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 CINT2006 Result

Copyright 2006-2014 Standard Performance Evaluation Corporation

Intel Corporation

SPECint2006 = 51.0

Intel DQ87PG Motherboard (Intel Core i3-4130)

SPECint\_base2006 = 49.1

CPU2006 license: 13

Test sponsor: Intel Corporation

Tested by: Intel Corporation

Test date: Oct-2014

Hardware Availability: May-2014

Software Availability: Oct-2013

SPEC and SPECint 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](mailto:webmaster@spec.org).

Tested with SPEC CPU2006 v1.2.  
Report generated on Tue Nov 18 16:34:00 2014 by SPEC CPU2006 PS/PDF formatter v6932.  
Originally published on 18 November 2014.