



# SPEC® CINT2006 Result

Copyright 2006-2014 Standard Performance Evaluation Corporation

IBM Corporation

SPECint®\_rate2006 = 41.5

IBM System x3550 (Intel Xeon 5120)

SPECint\_rate\_base2006 = 38.3

CPU2006 license: 11

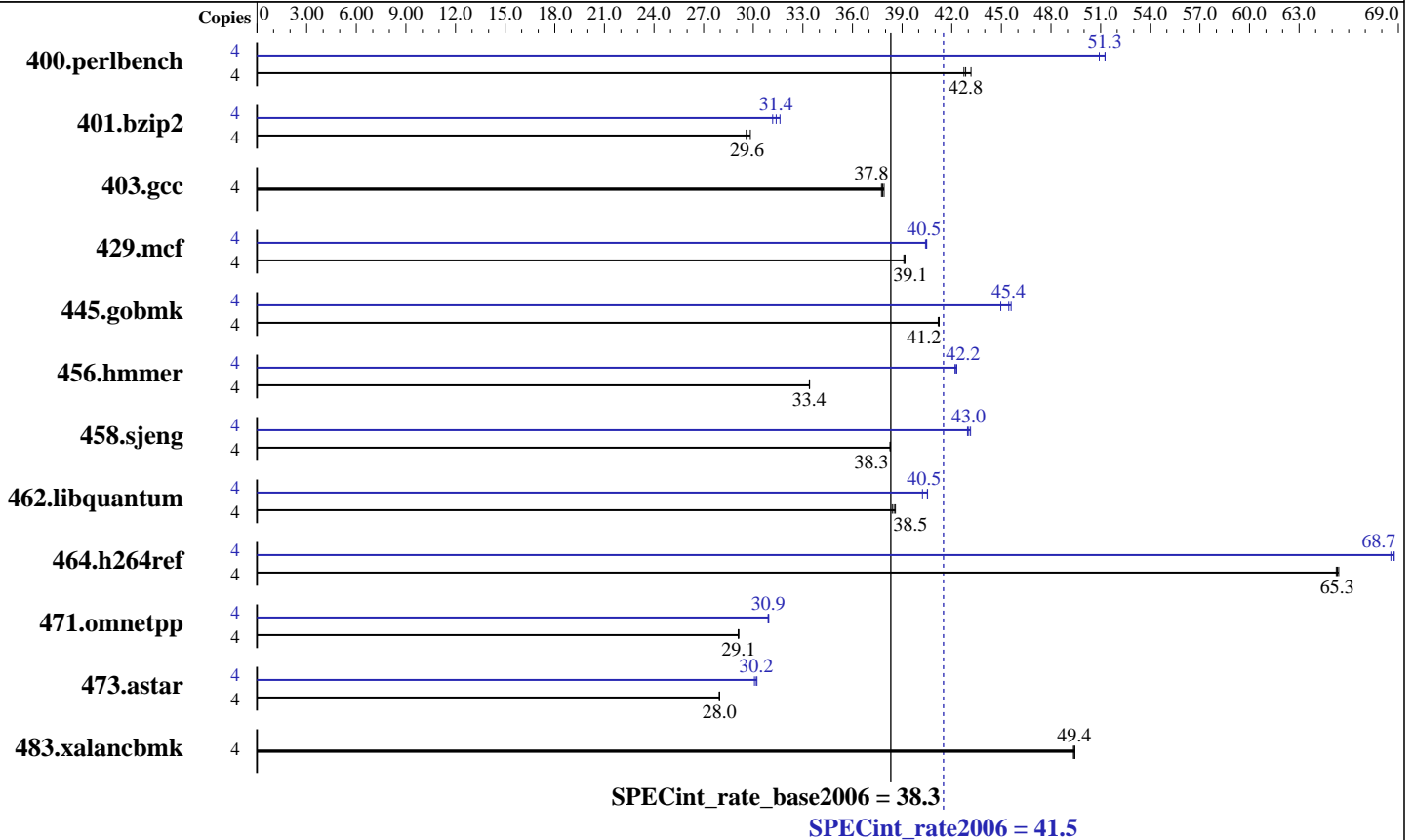
Test date: Aug-2007

Test sponsor: IBM Corporation

Hardware Availability: Jul-2006

Tested by: IBM Corporation

Software Availability: Jul-2007



## Hardware

CPU Name: Intel Xeon 5120  
 CPU Characteristics: 1066MHz system bus  
 CPU MHz: 1866  
 FPU: Integrated  
 CPU(s) enabled: 4 cores, 2 chips, 2 cores/chip  
 CPU(s) orderable: 1,2 chips  
 Primary Cache: 32 KB I + 32 KB D on chip per core  
 Secondary Cache: 4 MB I+D on chip per chip  
 L3 Cache: None  
 Other Cache: None  
 Memory: 16 GB (8 x 2GB DDR2-5300F ECC)  
 Disk Subsystem: 1 x 36 GB SAS, 15000 RPM  
 Other Hardware: None

## Software

Operating System: SLES 10 (x86\_64), 2.6.16.21-0.8-smp  
 Compiler: Intel C++ Compiler for Linux version 10.0  
 Build 20070426 Package ID: 1\_cc\_p\_10.0.023  
 Auto Parallel: No  
 File System: ReiserFS  
 System State: Multi-user, run level 3  
 Base Pointers: 32-bit  
 Peak Pointers: 32/64-bit  
 Other Software: MicroQuill SmartHeap 8.1



# SPEC CINT2006 Result

Copyright 2006-2014 Standard Performance Evaluation Corporation

IBM Corporation

SPECint\_rate2006 = 41.5

IBM System x3550 (Intel Xeon 5120)

SPECint\_rate\_base2006 = 38.3

CPU2006 license: 11

Test date: Aug-2007

Test sponsor: IBM Corporation

Hardware Availability: Jul-2006

Tested by: IBM Corporation

Software Availability: Jul-2007

## Results Table

Benchmark	Base							Peak						
	Copies	Seconds	Ratio	Seconds	Ratio	Seconds	Ratio	Copies	Seconds	Ratio	Seconds	Ratio	Seconds	Ratio
400.perlbench	4	914	42.7	905	43.2	<u>912</u>	<u>42.8</u>	4	<u>762</u>	<u>51.3</u>	767	50.9	762	51.3
401.bzip2	4	1294	29.8	1305	29.6	<u>1303</u>	<u>29.6</u>	4	<u>1230</u>	<u>31.4</u>	1238	31.2	1221	31.6
403.gcc	4	853	37.8	849	37.9	<u>851</u>	<u>37.8</u>	4	853	37.8	849	37.9	<u>851</u>	<u>37.8</u>
429.mcf	4	<u>932</u>	<u>39.1</u>	933	39.1	931	39.2	4	<u>901</u>	<u>40.5</u>	901	40.5	903	40.4
445.gobmk	4	1019	41.2	1017	41.2	<u>1018</u>	<u>41.2</u>	4	933	45.0	<u>923</u>	<u>45.4</u>	920	45.6
456.hammer	4	1118	33.4	<u>1117</u>	<u>33.4</u>	1117	33.4	4	882	42.3	884	42.2	<u>884</u>	<u>42.2</u>
458.sjeng	4	1265	38.3	1264	38.3	<u>1264</u>	<u>38.3</u>	4	1122	43.1	1127	43.0	<u>1125</u>	<u>43.0</u>
462.libquantum	4	<u>2152</u>	<u>38.5</u>	2147	38.6	2158	38.4	4	2060	40.2	<u>2045</u>	<u>40.5</u>	2044	40.5
464.h264ref	4	1357	65.2	1354	65.4	<u>1355</u>	<u>65.3</u>	4	1288	68.7	1291	68.5	<u>1288</u>	<u>68.7</u>
471.omnetpp	4	859	29.1	858	29.1	<u>859</u>	<u>29.1</u>	4	<u>809</u>	<u>30.9</u>	808	30.9	809	30.9
473.astar	4	1005	27.9	1004	28.0	<u>1005</u>	<u>28.0</u>	4	<u>930</u>	<u>30.2</u>	934	30.1	929	30.2
483.xalancbmk	4	<u>559</u>	<u>49.4</u>	558	49.4	559	49.4	4	<u>559</u>	<u>49.4</u>	558	49.4	559	49.4

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

## General Notes

taskset utility used to bind CPU(s) to processes

## Base Compiler Invocation

C benchmarks:

icc

C++ benchmarks:

icpc

## Base Portability Flags

400.perlbench: -DSPEC\_CPU\_LINUX\_IA32  
 462.libquantum: -DSPEC\_CPU\_LINUX  
 483.xalancbmk: -DSPEC\_CPU\_LINUX

## Base Optimization Flags

C benchmarks:

-fast

Continued on next page



# SPEC CINT2006 Result

Copyright 2006-2014 Standard Performance Evaluation Corporation

IBM Corporation

SPECint\_rate2006 = 41.5

IBM System x3550 (Intel Xeon 5120)

SPECint\_rate\_base2006 = 38.3

CPU2006 license: 11

Test sponsor: IBM Corporation

Tested by: IBM Corporation

Test date: Aug-2007

Hardware Availability: Jul-2006

Software Availability: Jul-2007

## Base Optimization Flags (Continued)

C++ benchmarks:

```
-xT -ipo -O3 -no-prec-div -Wl,-z,muldefs
-L/spec/cpu2006.1.0/lib -lsmartheap
```

## Base Other Flags

C benchmarks:

```
403.gcc: -Dalloca=_alloca
```

## Peak Compiler Invocation

C benchmarks (except as noted below):

icc

```
401.bzip2: /opt/intel/cce/10.0.023/bin/icc
-L/opt/intel/cce/10.0.023/lib
-I/opt/intel/cce/10.0.023/include
```

```
456.hmmer: /opt/intel/cce/10.0.023/bin/icc
-L/opt/intel/cce/10.0.023/lib
-I/opt/intel/cce/10.0.023/include
```

C++ benchmarks:

icpc

## Peak Portability Flags

```
400.perlbench: -DSPEC_CPU_LINUX_IA32
401.bzip2: -DSPEC_CPU_LP64
456.hmmer: -DSPEC_CPU_LP64
462.libquantum: -DSPEC_CPU_LINUX
483.xalancbmk: -DSPEC_CPU_LINUX
```

## Peak Optimization Flags

C benchmarks:

```
400.perlbench: -prof-gen(pass 1) -prof-use(pass 2) -fast -ansi-alias
-prefetch
```

Continued on next page



# SPEC CINT2006 Result

Copyright 2006-2014 Standard Performance Evaluation Corporation

IBM Corporation

SPECint\_rate2006 = 41.5

IBM System x3550 (Intel Xeon 5120)

SPECint\_rate\_base2006 = 38.3

CPU2006 license: 11

Test sponsor: IBM Corporation

Tested by: IBM Corporation

Test date: Aug-2007

Hardware Availability: Jul-2006

Software Availability: Jul-2007

## Peak Optimization Flags (Continued)

401.bzip2: -prof-gen(pass 1) -prof-use(pass 2) -fast

403.gcc: basepeak = yes

429.mcf: -fast -prefetch

445.gobmk: -prof-gen(pass 1) -prof-use(pass 2) -xT -O2 -ipo  
-no-prec\_div -ansi-alias

456.hmmer: -prof-gen(pass 1) -prof-use(pass 2) -fast -unroll2  
-ansi-alias

458.sjeng: -prof-gen(pass 1) -prof-use(pass 2) -fast -unroll4

462.libquantum: -prof-gen(pass 1) -prof-use(pass 2) -fast -unroll4 -Ob0  
-prefetch -opt-streaming-stores always

464.h264ref: Same as 456.hmmer

C++ benchmarks:

471.omnetpp: -prof-gen(pass 1) -prof-use(pass 2) -xT -O3 -ipo  
-no-prec\_div -ansi-alias -Wl,-z,muldefs  
-L/spec/cpu2006.1.0/lib -lsmartheap

473.astar: Same as 471.omnetpp

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-ic10-ia32-intel64-linux-flags.20090714.45.html>

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

<http://www.spec.org/cpu2006/flags/Intel-ic10-ia32-intel64-linux-flags.20090714.45.xml>



# SPEC CINT2006 Result

Copyright 2006-2014 Standard Performance Evaluation Corporation

IBM Corporation

SPECint\_rate2006 = 41.5

IBM System x3550 (Intel Xeon 5120)

SPECint\_rate\_base2006 = 38.3

CPU2006 license: 11

Test sponsor: IBM Corporation

Tested by: IBM Corporation

Test date: Aug-2007

Hardware Availability: Jul-2006

Software Availability: Jul-2007

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 v1.0.  
Report generated on Tue Jul 22 13:05:45 2014 by SPEC CPU2006 PS/PDF formatter v6932.  
Originally published on 4 September 2007.