



# SPEC® CINT2006 Result

Copyright 2006-2014 Standard Performance Evaluation Corporation

## IBM Corporation

**SPECint®\_rate2006 = 24.6**

IBM BladeCenter HS12 (Intel Core 2 Duo E6305)

**SPECint\_rate\_base2006 = 21.5**

CPU2006 license: 11

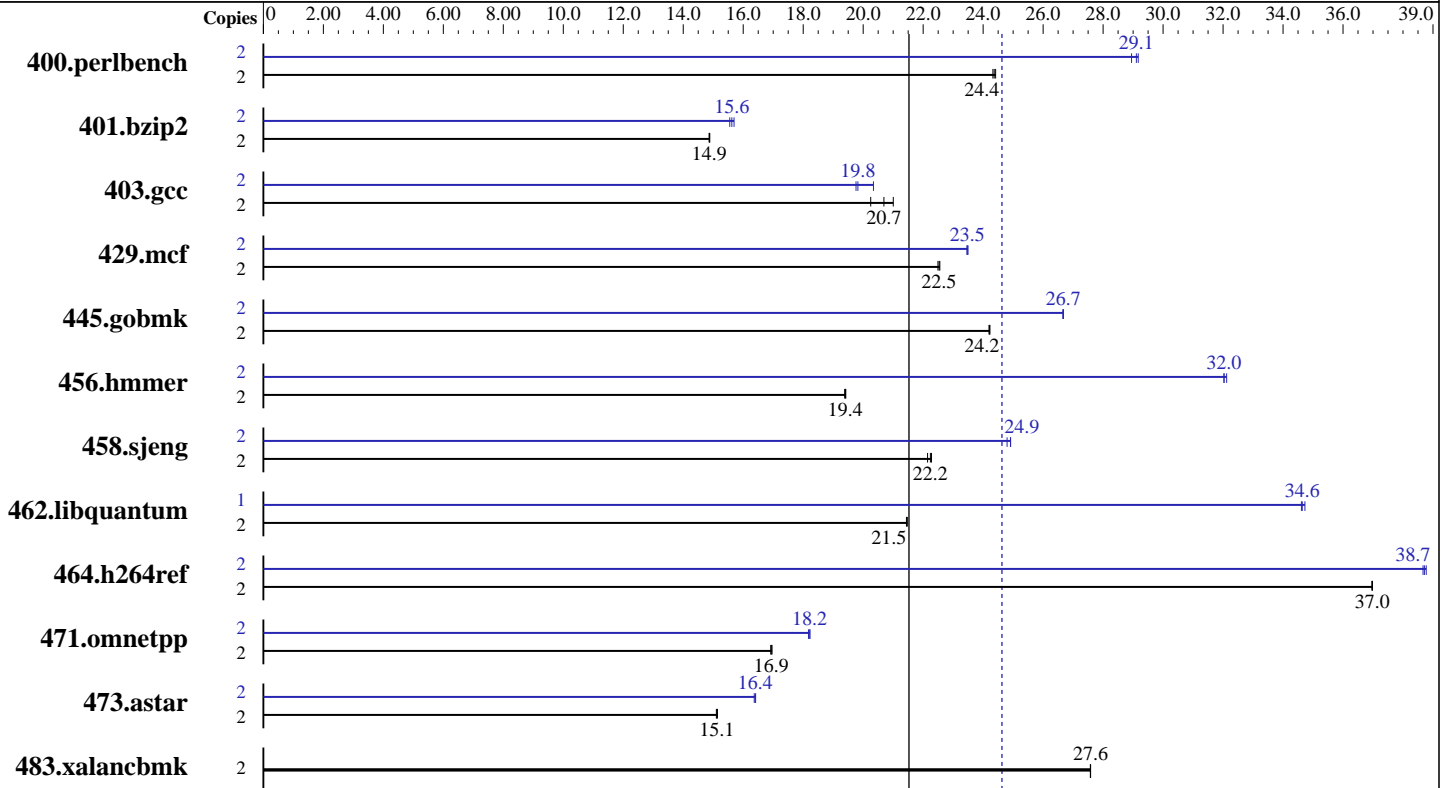
Test date: Apr-2008

Test sponsor: IBM Corporation

Hardware Availability: May-2008

Tested by: IBM Corporation

Software Availability: Nov-2007



SPECint\_rate\_base2006 = 21.5

**SPECint\_rate2006 = 24.6**

### Hardware

CPU Name: Intel Core 2 Duo E6305  
 CPU Characteristics: 1066MHz system bus  
 CPU MHz: 1866  
 FPU: Integrated  
 CPU(s) enabled: 2 cores, 1 chip, 2 cores/chip  
 CPU(s) orderable: 1 chip  
 Primary Cache: 32 KB I + 32 KB D on chip per core  
 Secondary Cache: 2 MB I+D on chip per chip  
 L3 Cache: None  
 Other Cache: None  
 Memory: 8 GB (4 x 2 GB DDR2-5300 ECC)  
 Disk Subsystem: 1 x 73 GB SAS, 10000 RPM  
 Other Hardware: None

### Software

Operating System: SuSE Linux Enterprise Server 10 (x86\_64) SP1, Kernel 2.6.16.46-0.12-smp  
 Compiler: Intel C++ Compiler 10.1 for Linux Build 20070913 Package ID: l\_cc\_p\_10.1.008  
 Auto Parallel: Yes  
 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 Binutils 2.17.50.0.15



# SPEC CINT2006 Result

Copyright 2006-2014 Standard Performance Evaluation Corporation

## IBM Corporation

SPECint\_rate2006 = 24.6

IBM BladeCenter HS12 (Intel Core 2 Duo E6305)

SPECint\_rate\_base2006 = 21.5

CPU2006 license: 11  
Test sponsor: IBM Corporation  
Tested by: IBM Corporation

Test date: Apr-2008  
Hardware Availability: May-2008  
Software Availability: Nov-2007

## Results Table

Benchmark	Base							Peak						
	Copies	Seconds	Ratio	Seconds	Ratio	Seconds	Ratio	Copies	Seconds	Ratio	Seconds	Ratio	Seconds	Ratio
400.perlbench	2	803	24.3	800	24.4	<b>802</b>	<b>24.4</b>	2	670	29.2	<b>671</b>	<b>29.1</b>	675	28.9
401.bzip2	2	<b>1298</b>	<b>14.9</b>	1297	14.9	1299	14.9	2	1230	15.7	<b>1236</b>	<b>15.6</b>	1241	15.6
403.gcc	2	795	20.3	767	21.0	<b>778</b>	<b>20.7</b>	2	815	19.8	791	20.3	<b>812</b>	<b>19.8</b>
429.mcf	2	<b>809</b>	<b>22.5</b>	811	22.5	809	22.6	2	776	23.5	777	23.5	<b>777</b>	<b>23.5</b>
445.gobmk	2	<b>866</b>	<b>24.2</b>	866	24.2	867	24.2	2	<b>787</b>	<b>26.7</b>	787	26.7	786	26.7
456.hammer	2	963	19.4	<b>961</b>	<b>19.4</b>	961	19.4	2	581	32.1	<b>582</b>	<b>32.0</b>	583	32.0
458.sjeng	2	<b>1088</b>	<b>22.2</b>	1086	22.3	1093	22.1	2	<b>971</b>	<b>24.9</b>	971	24.9	976	24.8
462.libquantum	2	1933	21.4	<b>1931</b>	<b>21.5</b>	1930	21.5	1	599	34.6	597	34.7	<b>598</b>	<b>34.6</b>
464.h264ref	2	1197	37.0	1197	37.0	<b>1197</b>	<b>37.0</b>	2	1145	38.7	1141	38.8	<b>1143</b>	<b>38.7</b>
471.omnetpp	2	739	16.9	<b>738</b>	<b>16.9</b>	737	17.0	2	<b>686</b>	<b>18.2</b>	686	18.2	688	18.2
473.astar	2	<b>929</b>	<b>15.1</b>	930	15.1	927	15.1	2	855	16.4	858	16.4	<b>856</b>	<b>16.4</b>
483.xalancbmk	2	500	27.6	<b>500</b>	<b>27.6</b>	500	27.6	2	500	27.6	<b>500</b>	<b>27.6</b>	500	27.6

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

## General Notes

All benchmarks compiled in 32-bit mode except 401.bzip2 and 456.hammer, for peak, are compiled in 64-bit mode  
Hardware Sector Prefetch Enabled and Adjacent Sector Prefetch Disabled  
OMP\_NUM\_THREADS set to number of cores  
KMP\_AFFINITY set to physical,0  
KMP\_STACKSIZE set to 64M  
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



# SPEC CINT2006 Result

Copyright 2006-2014 Standard Performance Evaluation Corporation

IBM Corporation

SPECint\_rate2006 = 24.6

IBM BladeCenter HS12 (Intel Core 2 Duo E6305)

SPECint\_rate\_base2006 = 21.5

CPU2006 license: 11

Test sponsor: IBM Corporation

Tested by: IBM Corporation

Test date: Apr-2008

Hardware Availability: May-2008

Software Availability: Nov-2007

## Base Optimization Flags

C benchmarks:

-fast -inline-calloc -opt-malloc-options=3

C++ benchmarks:

-xT -ipo -O3 -no-prec-div -Wl,-z,muldefs  
-L/spec/users/rahul/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/10.1.008/bin/icc  
-L/opt/intel/cce/10.1.008/lib  
-I/opt/intel/cce/10.1.008/include

456.hmmer: /opt/intel/cce/10.1.008/bin/icc  
-L/opt/intel/cce/10.1.008/lib  
-I/opt/intel/cce/10.1.008/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:

Continued on next page



# SPEC CINT2006 Result

Copyright 2006-2014 Standard Performance Evaluation Corporation

IBM Corporation

SPECint\_rate2006 = 24.6

IBM BladeCenter HS12 (Intel Core 2 Duo E6305)

SPECint\_rate\_base2006 = 21.5

CPU2006 license: 11

Test date: Apr-2008

Test sponsor: IBM Corporation

Hardware Availability: May-2008

Tested by: IBM Corporation

Software Availability: Nov-2007

## Peak Optimization Flags (Continued)

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

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

403.gcc: -fast -inline-calloc -opt-malloc-options=3

429.mcf: -fast -prefetch

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

456.hmmr: -fast -unroll2 -ansi-alias -opt-multi-version-aggressive

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

462.libquantum: -fast -unroll4 -Ob0 -prefetch  
-opt-streaming-stores always -vec-guard-write  
-opt-malloc-options=3 -parallel -par-runtime-control

464.h264ref: -prof-gen(pass 1) -prof-use(pass 2) -fast -unroll2  
-ansi-alias

C++ benchmarks:

471.omnetpp: -prof-gen(pass 1) -prof-use(pass 2) -xT -O3 -ipo  
-no-prec-div -ansi-alias -opt-ra-region-strategy=block  
-Wl,-z,muldefs  
-L/spec/users/rahul/cpu2006.1.0/lib -lsmartheap

473.astar: -prof-gen(pass 1) -prof-use(pass 2) -xT -O3 -ipo  
-no-prec-div -ansi-alias -opt-ra-region-strategy=routine  
-Wl,-z,muldefs  
-L/spec/users/rahul/cpu2006.1.0/lib -lsmartheap

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-ic10.1-int-linux64-revC.20090713.html>



# SPEC CINT2006 Result

Copyright 2006-2014 Standard Performance Evaluation Corporation

IBM Corporation

SPECint\_rate2006 = 24.6

IBM BladeCenter HS12 (Intel Core 2 Duo E6305)

SPECint\_rate\_base2006 = 21.5

CPU2006 license: 11

Test sponsor: IBM Corporation

Tested by: IBM Corporation

Test date: Apr-2008

Hardware Availability: May-2008

Software Availability: Nov-2007

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

<http://www.spec.org/cpu2006/flags/Intel-ic10.1-int-linux64-revC.20090713.xml>

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 17:15:25 2014 by SPEC CPU2006 PS/PDF formatter v6932.  
Originally published on 13 May 2008.