



# SPEC® CINT2006 Result

Copyright 2006-2014 Standard Performance Evaluation Corporation

IBM Corporation

SPECint®2006 = 22.3

IBM System x3550 (Intel Xeon X5355)

SPECint\_base2006 = 19.0

CPU2006 license: 11

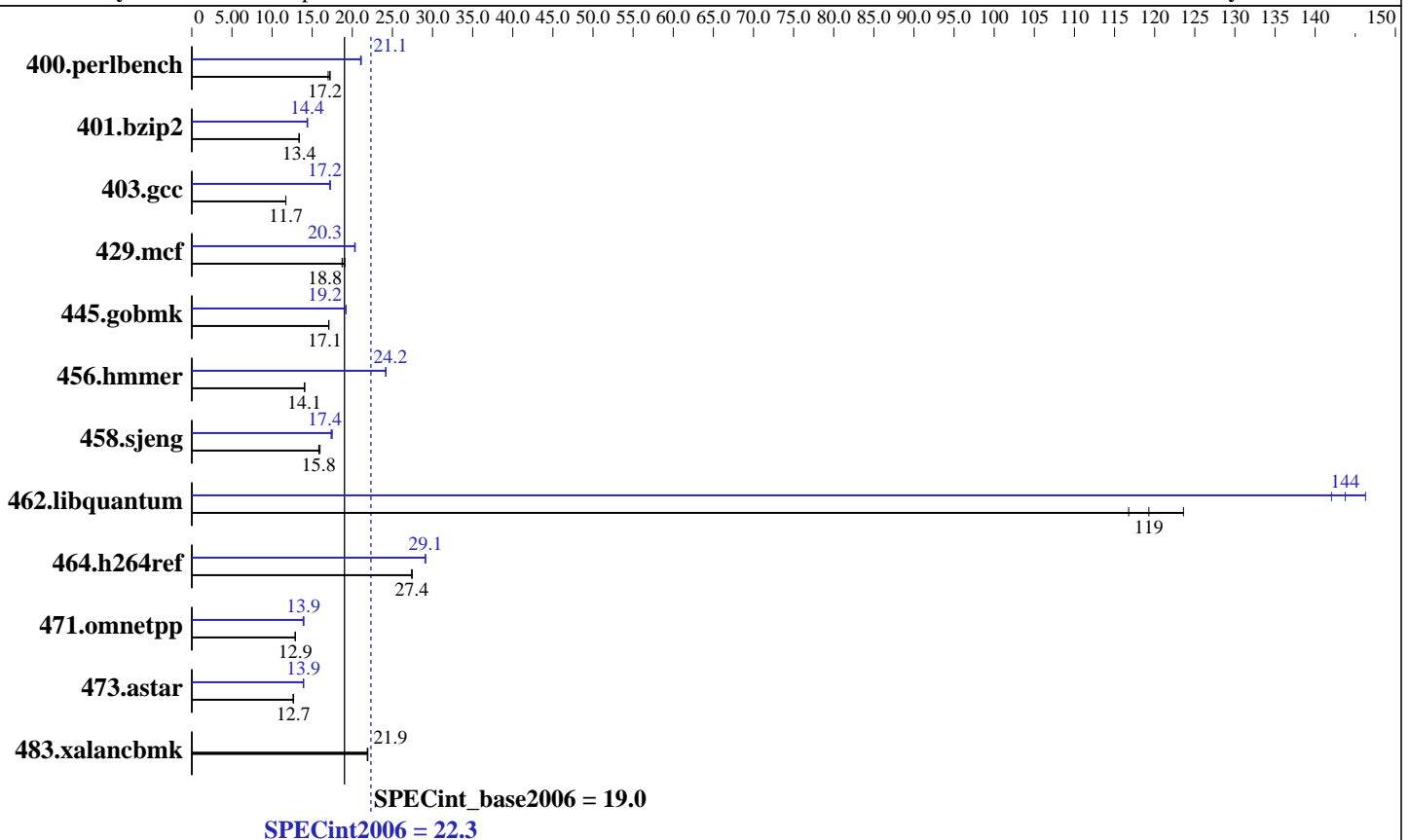
Test date: Sep-2007

Test sponsor: IBM Corporation

Hardware Availability: Apr-2007

Tested by: IBM Corporation

Software Availability: Nov-2007



## Hardware

CPU Name: Intel Xeon X5355  
 CPU Characteristics: 1333MHz system bus  
 CPU MHz: 2667  
 FPU: Integrated  
 CPU(s) enabled: 8 cores, 2 chips, 4 cores/chip  
 CPU(s) orderable: 1,2 chips  
 Primary Cache: 32 KB I + 32 KB D on chip per core  
 Secondary Cache: 8 MB I+D on chip per chip, 4 MB shared / 2 cores  
 L3 Cache: None  
 Other Cache: None  
 Memory: 16 GB (8 x 2GB DRR2-5300F 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 10.1 Build 20070824  
 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



# SPEC CINT2006 Result

Copyright 2006-2014 Standard Performance Evaluation Corporation

IBM Corporation

SPECint2006 = 22.3

IBM System x3550 (Intel Xeon X5355)

SPECint\_base2006 = 19.0

CPU2006 license: 11

Test date: Sep-2007

Test sponsor: IBM Corporation

Hardware Availability: Apr-2007

Tested by: IBM Corporation

Software Availability: Nov-2007

## Results Table

Benchmark	Base						Peak					
	Seconds	Ratio	Seconds	Ratio	Seconds	Ratio	Seconds	Ratio	Seconds	Ratio	Seconds	Ratio
400.perlbench	575	17.0	567	17.2	<b><u>568</u></b>	<b><u>17.2</u></b>	465	21.0	463	21.1	<b><u>464</u></b>	<b><u>21.1</u></b>
401.bzip2	720	13.4	723	13.3	<b><u>721</u></b>	<b><u>13.4</u></b>	669	14.4	672	14.4	<b><u>670</u></b>	<b><u>14.4</u></b>
403.gcc	<b><u>687</u></b>	<b><u>11.7</u></b>	687	11.7	687	11.7	467	17.2	<b><u>467</u></b>	<b><u>17.2</u></b>	467	17.2
429.mcf	478	19.1	487	18.7	<b><u>486</u></b>	<b><u>18.8</u></b>	449	20.3	448	20.4	<b><u>448</u></b>	<b><u>20.3</u></b>
445.gobmk	615	17.1	615	17.1	<b><u>615</u></b>	<b><u>17.1</u></b>	<b><u>546</u></b>	<b><u>19.2</u></b>	546	19.2	546	19.2
456.hmmer	664	14.1	<b><u>664</u></b>	<b><u>14.1</u></b>	664	14.0	<b><u>386</u></b>	<b><u>24.2</u></b>	386	24.2	386	24.2
458.sjeng	757	16.0	<b><u>764</u></b>	<b><u>15.8</u></b>	764	15.8	<b><u>696</u></b>	<b><u>17.4</u></b>	691	17.5	697	17.4
462.libquantum	177	117	<b><u>174</u></b>	<b><u>119</u></b>	168	124	<b><u>144</u></b>	<b><u>144</u></b>	146	142	142	146
464.h264ref	806	27.5	808	27.4	<b><u>807</u></b>	<b><u>27.4</u></b>	760	29.1	761	29.1	<b><u>760</u></b>	<b><u>29.1</u></b>
471.omnetpp	484	12.9	<b><u>485</u></b>	<b><u>12.9</u></b>	485	12.9	450	13.9	<b><u>449</u></b>	<b><u>13.9</u></b>	448	14.0
473.astar	556	12.6	<b><u>555</u></b>	<b><u>12.7</u></b>	554	12.7	505	13.9	504	13.9	<b><u>504</u></b>	<b><u>13.9</u></b>
483.xalancbmk	315	21.9	<b><u>315</u></b>	<b><u>21.9</u></b>	316	21.9	315	21.9	<b><u>315</u></b>	<b><u>21.9</u></b>	316	21.9

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

## General Notes

OMP\_NUM\_THREADS set to number of cores  
KMP\_AFFINITY set to physical,0  
KMP\_STACKSIZE set to 32M

## 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 -vec-guard-write -opt-malloc-options=3 -parallel  
-par-runtime-control

Continued on next page



# SPEC CINT2006 Result

Copyright 2006-2014 Standard Performance Evaluation Corporation

IBM Corporation

SPECint2006 = 22.3

IBM System x3550 (Intel Xeon X5355)

SPECint\_base2006 = 19.0

CPU2006 license: 11

Test date: Sep-2007

Test sponsor: IBM Corporation

Hardware Availability: Apr-2007

Tested by: IBM Corporation

Software Availability: Nov-2007

## Base Optimization Flags (Continued)

C++ benchmarks:

-xT -ipo -O3 -no-prec-div -Wl,-z,muldefs  
-L/home/cmplr/usr3/alrahate/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: /home/cmplr/usr3/alrahate/compilers/ic10.1mainline/20070824/Linux64/bin/icc  
-L/home/cmplr/usr3/alrahate/compilers/ic10.1mainline/20070824/Linux64/lib  
-I/home/cmplr/usr3/alrahate/compilers/ic10.1mainline/20070824/Linux64/include

456.hmmer: /home/cmplr/usr3/alrahate/compilers/ic10.1mainline/20070824/Linux64/bin/icc  
-L/home/cmplr/usr3/alrahate/compilers/ic10.1mainline/20070824/Linux64/lib  
-I/home/cmplr/usr3/alrahate/compilers/ic10.1mainline/20070824/Linux64/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

SPECint2006 = 22.3

IBM System x3550 (Intel Xeon X5355)

SPECint\_base2006 = 19.0

CPU2006 license: 11

Test sponsor: IBM Corporation

Tested by: IBM Corporation

Test date: Sep-2007

Hardware Availability: Apr-2007

Software Availability: Nov-2007

## Peak Optimization Flags (Continued)

401.bzip2: -prof-gen(pass 1) -prof-use(pass 2) -fast -prefetch  
-auto-ilp32

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.hmmcr: -fast -unroll2 -ansi-alias -opt-multi-version-aggressive  
-auto-ilp32

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/home/cmplr/usr3/alrahate/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/home/cmplr/usr3/alrahate/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-ia32-intel64-linux-flags.20090714.28.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.20090714.28.xml>



# SPEC CINT2006 Result

Copyright 2006-2014 Standard Performance Evaluation Corporation

IBM Corporation

SPECint2006 = 22.3

IBM System x3550 (Intel Xeon X5355)

SPECint\_base2006 = 19.0

CPU2006 license: 11

Test sponsor: IBM Corporation

Tested by: IBM Corporation

Test date: Sep-2007

Hardware Availability: Apr-2007

Software Availability: Nov-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 14:51:06 2014 by SPEC CPU2006 PS/PDF formatter v6932.  
Originally published on 16 October 2007.