



SPEC® CINT2006 Result

Copyright 2006-2014 Standard Performance Evaluation Corporation

IBM Corporation

SPECint®_rate2006 = 96.9

IBM BladeCenter HS21 XM (Intel Xeon L5408)

SPECint_rate_base2006 = 79.4

CPU2006 license: 11

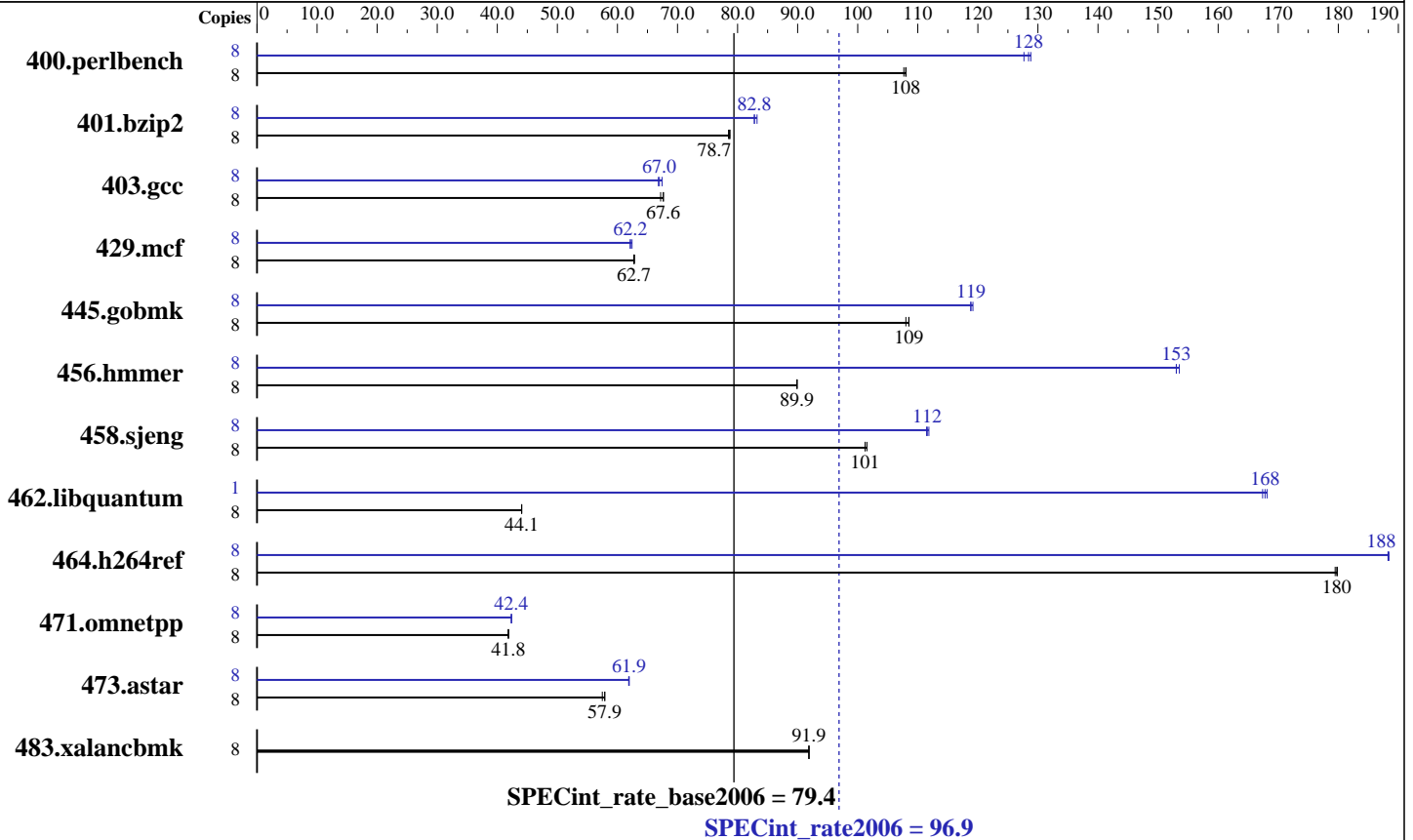
Test date: May-2008

Test sponsor: IBM Corporation

Hardware Availability: Jul-2008

Tested by: IBM Corporation

Software Availability: Nov-2007



Hardware

CPU Name: Intel Xeon L5408
 CPU Characteristics: 1066MHz system bus
 CPU MHz: 2133
 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: 12 MB I+D on chip per chip, 6 MB shared / 2 cores
 L3 Cache: None
 Other Cache: None
 Memory: 16 GB (8 x 2 GB DDR2-5300F ECC)
 Disk Subsystem: 1 x 36 GB SAS, 10000 RPM
 Other Hardware: None

Software

Operating System: SuSE Linux Enterprise Server 10 (x86_64), kernel 2.6.16.21-0.8-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 = 96.9

IBM BladeCenter HS21 XM (Intel Xeon L5408)

SPECint_rate_base2006 = 79.4

CPU2006 license: 11

Test date: May-2008

Test sponsor: IBM Corporation

Hardware Availability: Jul-2008

Tested by: IBM Corporation

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	8	724	108	726	108	<u>724</u>	<u>108</u>	8	607	129	<u>609</u>	<u>128</u>	612	128
401.bzip2	8	984	78.5	980	78.7	<u>981</u>	<u>78.7</u>	8	<u>932</u>	<u>82.8</u>	932	82.8	927	83.2
403.gcc	8	958	67.2	<u>952</u>	<u>67.6</u>	952	67.7	8	964	66.8	<u>961</u>	<u>67.0</u>	955	67.4
429.mcf	8	1161	62.8	1163	62.7	<u>1163</u>	<u>62.7</u>	8	<u>1174</u>	<u>62.2</u>	1174	62.1	1169	62.4
445.gobmk	8	777	108	773	109	<u>773</u>	<u>109</u>	8	706	119	704	119	<u>706</u>	<u>119</u>
456.hammer	8	830	89.9	830	89.9	<u>830</u>	<u>89.9</u>	8	<u>488</u>	<u>153</u>	486	154	488	153
458.sjeng	8	953	102	956	101	<u>956</u>	<u>101</u>	8	865	112	<u>867</u>	<u>112</u>	868	111
462.libquantum	8	<u>3763</u>	<u>44.1</u>	3763	44.0	3762	44.1	1	123	168	124	167	<u>123</u>	<u>168</u>
464.h264ref	8	986	179	<u>985</u>	<u>180</u>	984	180	8	940	188	<u>940</u>	<u>188</u>	940	188
471.omnetpp	8	<u>1195</u>	<u>41.8</u>	1194	41.9	1195	41.8	8	1181	42.3	<u>1180</u>	<u>42.4</u>	1180	42.4
473.astar	8	977	57.5	<u>970</u>	<u>57.9</u>	970	57.9	8	906	62.0	<u>907</u>	<u>61.9</u>	908	61.9
483.xalancbmk	8	601	91.9	601	91.9	<u>601</u>	<u>91.9</u>	8	601	91.9	601	91.9	<u>601</u>	<u>91.9</u>

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 = 96.9

IBM BladeCenter HS21 XM (Intel Xeon L5408)

SPECint_rate_base2006 = 79.4

CPU2006 license: 11

Test date: May-2008

Test sponsor: IBM Corporation

Hardware Availability: Jul-2008

Tested by: IBM Corporation

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 = 96.9

IBM BladeCenter HS21 XM (Intel Xeon L5408)

SPECint_rate_base2006 = 79.4

CPU2006 license: 11

Test date: May-2008

Test sponsor: IBM Corporation

Hardware Availability: Jul-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 = 96.9

IBM BladeCenter HS21 XM (Intel Xeon L5408)

SPECint_rate_base2006 = 79.4

CPU2006 license: 11

Test date: May-2008

Test sponsor: IBM Corporation

Hardware Availability: Jul-2008

Tested by: IBM Corporation

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.

Tested with SPEC CPU2006 v1.0.
Report generated on Tue Jul 22 17:47:04 2014 by SPEC CPU2006 PS/PDF formatter v6932.
Originally published on 25 June 2008.