



SPEC® CINT2006 Result

Copyright 2006-2014 Standard Performance Evaluation Corporation

IBM Corporation

SPECint®2006 = 12.5

IBM BladeCenter LS41 (AMD Opteron 8218)

SPECint_base2006 = 11.3

CPU2006 license: 11

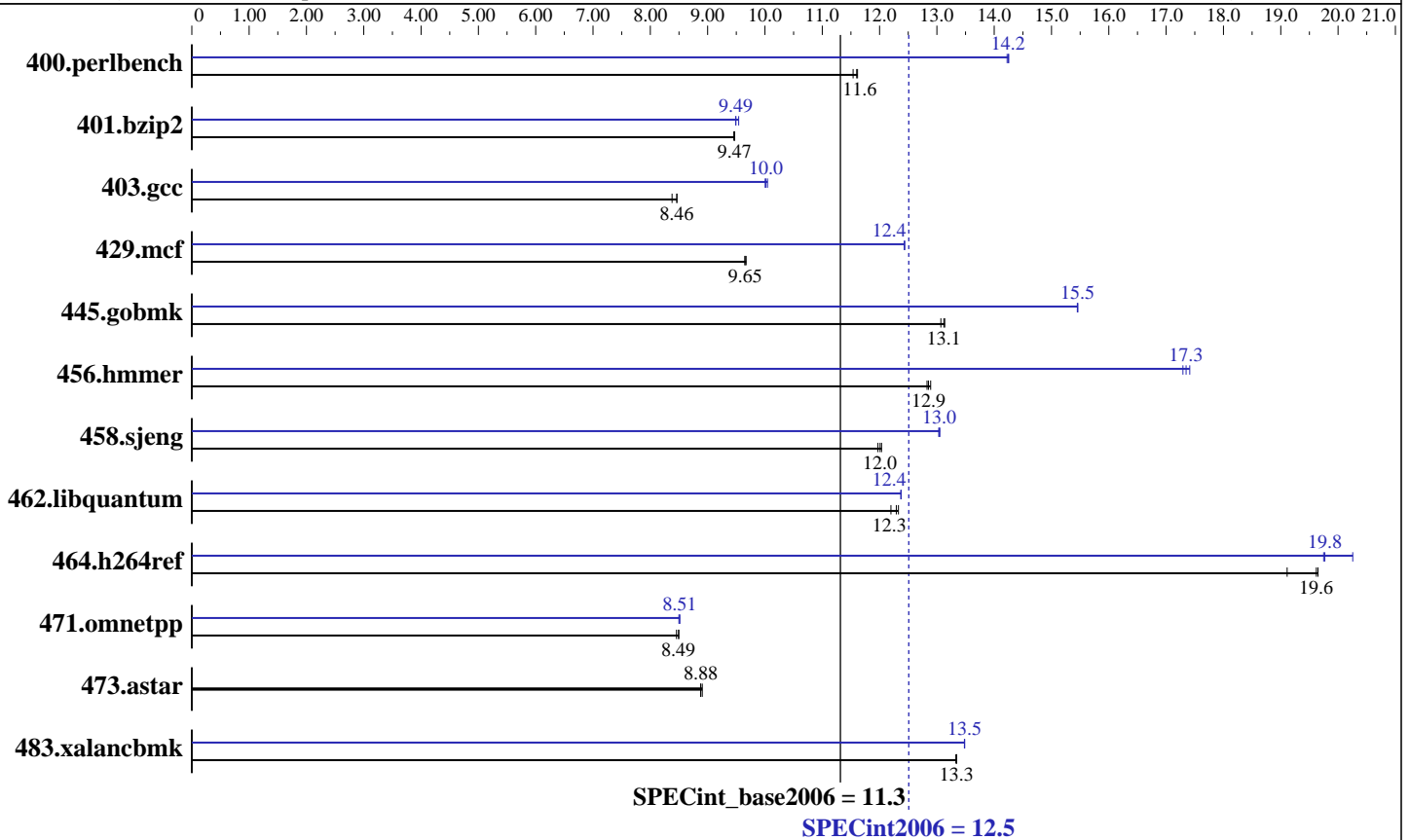
Test sponsor: IBM Corporation

Tested by: IBM Corporation

Test date: Jul-2007

Hardware Availability: Oct-2006

Software Availability: Mar-2007



Hardware

CPU Name: AMD Opteron 8218
 CPU Characteristics:
 CPU MHz: 2600
 FPU: Integrated
 CPU(s) enabled: 8 cores, 4 chips, 2 cores/chip
 CPU(s) orderable: 1, 2, 3, 4 chips
 Primary Cache: 64 KB I + 64 KB D on chip per core
 Secondary Cache: 1 MB I+D on chip per core
 L3 Cache: None
 Other Cache: None
 Memory: 32 GB (16 x 2GB DDR2-5300 ECC)
 Disk Subsystem: 1 x 36 GB SAS, 10000 RPM
 Other Hardware: None

Software

Operating System: SLES 10 (x86_64), 2.6.16.21-0.8-smp
 Compiler: QLogic PathScale Compiler Suite, Release 3.0
 Auto Parallel: No
 File System: ext3
 System State: Multi-user, run level 3
 Base Pointers: 64-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 = 12.5

IBM BladeCenter LS41 (AMD Opteron 8218)

SPECint_base2006 = 11.3

CPU2006 license: 11

Test date: Jul-2007

Test sponsor: IBM Corporation

Hardware Availability: Oct-2006

Tested by: IBM Corporation

Software Availability: Mar-2007

Results Table

Benchmark	Base						Peak					
	Seconds	Ratio	Seconds	Ratio	Seconds	Ratio	Seconds	Ratio	Seconds	Ratio	Seconds	Ratio
400.perlbench	847	11.5	842	11.6	841	11.6	687	14.2	685	14.3	686	14.2
401.bzip2	1020	9.46	1019	9.47	1019	9.47	1011	9.54	1017	9.49	1017	9.49
403.gcc	951	8.46	951	8.46	961	8.38	801	10.0	804	10.0	805	10.0
429.mcf	945	9.65	943	9.67	945	9.65	733	12.4	733	12.4	733	12.4
445.gobmk	803	13.1	799	13.1	799	13.1	679	15.5	679	15.5	679	15.5
456.hmmer	724	12.9	726	12.9	727	12.8	540	17.3	538	17.3	536	17.4
458.sjeng	1008	12.0	1005	12.0	1011	12.0	928	13.0	927	13.1	928	13.0
462.libquantum	1699	12.2	1686	12.3	1681	12.3	1675	12.4	1674	12.4	1674	12.4
464.h264ref	1128	19.6	1158	19.1	1126	19.6	1121	19.7	1093	20.3	1119	19.8
471.omnetpp	736	8.50	739	8.46	736	8.49	734	8.51	734	8.51	735	8.50
473.astar	791	8.88	790	8.88	788	8.91	791	8.88	790	8.88	788	8.91
483.xalancbmk	517	13.3	518	13.3	517	13.3	512	13.5	512	13.5	512	13.5

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:
pathcc

C++ benchmarks:
pathCC

Base Portability Flags

```

400.perlbench: -DSPEC_CPU_LP64 -DSPEC_CPU_LINUX_X64
401.bzip2: -DSPEC_CPU_LP64
403.gcc: -DSPEC_CPU_LP64
429.mcf: -DSPEC_CPU_LP64
445.gobmk: -DSPEC_CPU_LP64
456.hmmer: -DSPEC_CPU_LP64
458.sjeng: -DSPEC_CPU_LP64
462.libquantum: -DSPEC_CPU_LP64 -DSPEC_CPU_LINUX
464.h264ref: -DSPEC_CPU_LP64
483.xalancbmk: -DSPEC_CPU_LINUX

```



SPEC CINT2006 Result

Copyright 2006-2014 Standard Performance Evaluation Corporation

IBM Corporation

SPECint2006 = 12.5

IBM BladeCenter LS41 (AMD Opteron 8218)

SPECint_base2006 = 11.3

CPU2006 license: 11

Test date: Jul-2007

Test sponsor: IBM Corporation

Hardware Availability: Oct-2006

Tested by: IBM Corporation

Software Availability: Mar-2007

Base Optimization Flags

C benchmarks:

-Ofast -OPT:malloc_alg=1

C++ benchmarks:

-Ofast -m32 -L/tools/SmartHeap_8.1/lib -lsmartheap

Base Other Flags

C benchmarks:

-IPA:max_jobs=2

C++ benchmarks:

-IPA:max_jobs=2

Peak Compiler Invocation

C benchmarks:

pathcc

C++ benchmarks:

pathCC

Peak Portability Flags

400.perlbench: -DSPEC_CPU_LP64 -DSPEC_CPU_LINUX_X64
401.bzip2: -DSPEC_CPU_LP64
445.gobmk: -DSPEC_CPU_LP64
456.hmmer: -DSPEC_CPU_LP64
458.sjeng: -DSPEC_CPU_LP64
462.libquantum: -DSPEC_CPU_LP64 -DSPEC_CPU_LINUX
464.h264ref: -DSPEC_CPU_LP64
483.xalancbmk: -DSPEC_CPU_LINUX

Peak Optimization Flags

C benchmarks:

400.perlbench: -fb_create fbdata(pass 1) -fb_opt fbdata(pass 2) -Ofast
-LNO:opt=0

401.bzip2: -O3 -LNO:ou_prod_max=10 -OPT:Ofast -OPT:alias=disjoint

Continued on next page



SPEC CINT2006 Result

Copyright 2006-2014 Standard Performance Evaluation Corporation

IBM Corporation

SPECint2006 = 12.5

IBM BladeCenter LS41 (AMD Opteron 8218)

SPECint_base2006 = 11.3

CPU2006 license: 11

Test date: Jul-2007

Test sponsor: IBM Corporation

Hardware Availability: Oct-2006

Tested by: IBM Corporation

Software Availability: Mar-2007

Peak Optimization Flags (Continued)

403.gcc: -fb_create fbdata(pass 1) -fb_opt fbdata(pass 2) -m32 -O3
-OPT:Ofast

429.mcf: -m32 -O3 -ipa -L/tools/SmartHeap_8.1/lib -lsmartheap

445.gobmk: -fb_create fbdata(pass 1) -fb_opt fbdata(pass 2) -O3
-OPT:alias=disjoint -LNO:simd=0 -LNO:minvariant=off
-WOPT:retype_expr=on

456.hmmer: -O2 -OPT:alias=disjoint -OPT:malloc_alg=1 -CG:cflow=0

458.sjeng: -fb_create fbdata(pass 1) -fb_opt fbdata(pass 2) -O3
-IPA:plimit=50000 -IPA:pu_reorder=2

462.libquantum: -O3 -ipa -CG:local_fwd_sched=on -IPA:space=1000

464.h264ref: -fb_create fbdata(pass 1) -fb_opt fbdata(pass 2) -O3
-IPA:plimit=20000 -OPT:alias=disjoint -LNO:prefetch=0

C++ benchmarks:

471.omnetpp: -Ofast -CG:gcm=off -m32
-L/tools/SmartHeap_8.1/lib -lsmartheap

473.astar: basepeak = yes

483.xalancbmk: -Ofast -m32 -OPT:unroll_times_max=8
-L/tools/SmartHeap_8.1/lib -lsmartheap

Peak Other Flags

C benchmarks:

-IPA:max_jobs=2

C++ benchmarks:

-IPA:max_jobs=2

The flags file that was used to format this result can be browsed at

http://www.spec.org/cpu2006/flags/CPU2006_flags.20090714.13.html

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

http://www.spec.org/cpu2006/flags/CPU2006_flags.20090714.13.xml



SPEC CINT2006 Result

Copyright 2006-2014 Standard Performance Evaluation Corporation

IBM Corporation

SPECint2006 = 12.5

IBM BladeCenter LS41 (AMD Opteron 8218)

SPECint_base2006 = 11.3

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

Test date: Jul-2007
Hardware Availability: Oct-2006
Software Availability: Mar-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.

Tested with SPEC CPU2006 v1.0.
Report generated on Tue Jul 22 12:51:42 2014 by SPEC CPU2006 PS/PDF formatter v6932.
Originally published on 8 August 2007.