



SPEC® CINT2006 Result

Copyright 2006-2014 Standard Performance Evaluation Corporation

Hewlett-Packard Company

SPECint®_rate2006 = 26.8

ProLiant DL385 G2 (AMD Opteron 2220)

SPECint_rate_base2006 = 24.1

CPU2006 license: 3

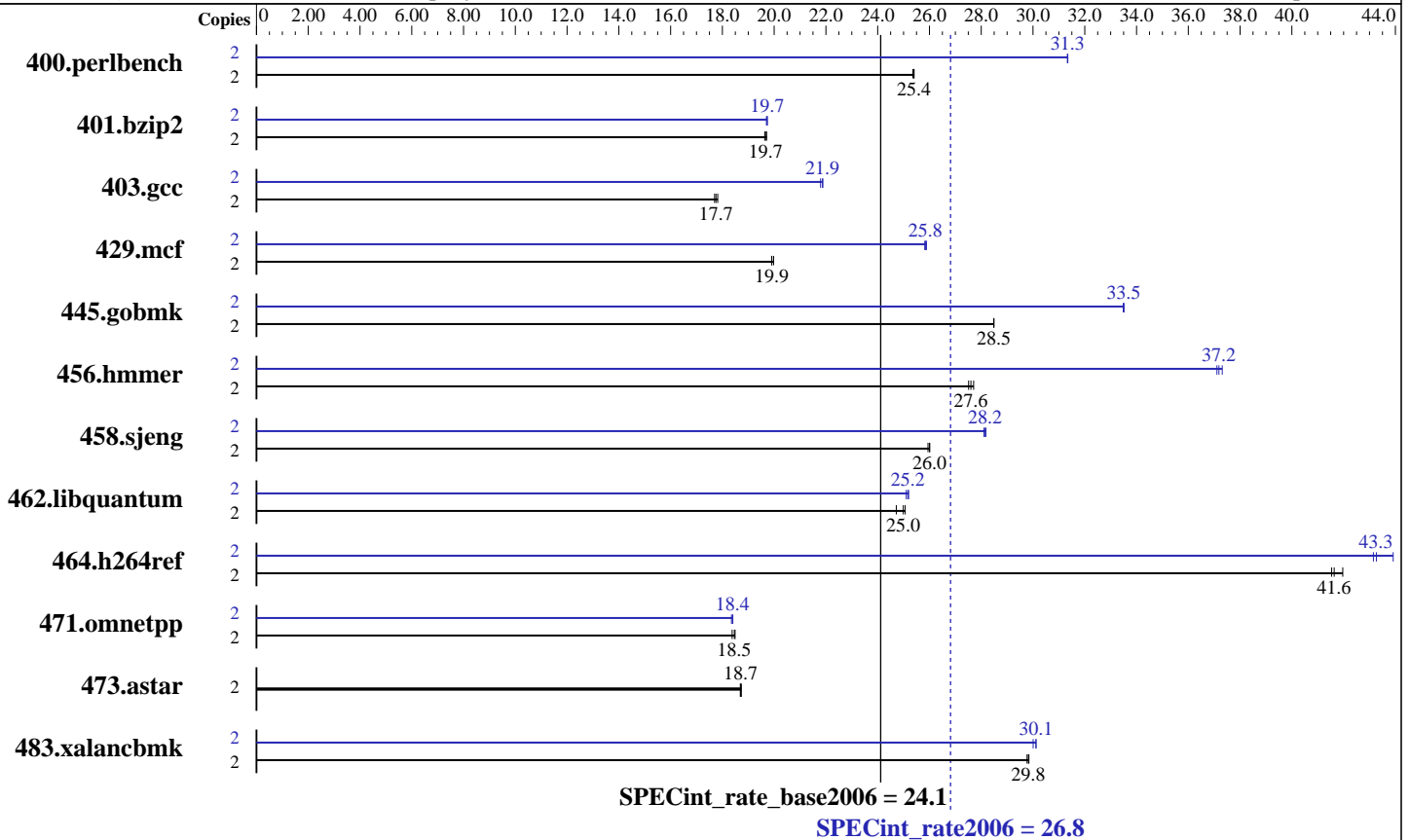
Test sponsor: Hewlett-Packard Company

Tested by: Hewlett-Packard Company

Test date: Jun-2007

Hardware Availability: Jan-2007

Software Availability: Apr-2007



Hardware

CPU Name: AMD Opteron 2220
 CPU Characteristics:
 CPU MHz: 2800
 FPU: Integrated
 CPU(s) enabled: 2 cores, 1 chip, 2 cores/chip
 CPU(s) orderable: 1,2 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: 16 GB (4x4 GB, PC2-5300P CL5)
 Disk Subsystem: 1x72 GB 10 K SAS
 Other Hardware: None

Software

Operating System: SuSE Linux Enterprise Server 10 (x86_64)
 SuSE kernel 2.6.16.21-0.8-smp
 Compiler: QLogic PathScale
 Compiler Suite, Release 3.0
 Auto Parallel: No
 File System: ext2
 System State: Multi-user, run level 3
 Base Pointers: 32/64-bit
 Peak Pointers: 32/64-bit
 Other Software: SmartHeap 8.0 32 bit library for Linux



SPEC CINT2006 Result

Copyright 2006-2014 Standard Performance Evaluation Corporation

Hewlett-Packard Company

SPECint_rate2006 = 26.8

ProLiant DL385 G2 (AMD Opteron 2220)

SPECint_rate_base2006 = 24.1

CPU2006 license: 3

Test date: Jun-2007

Test sponsor: Hewlett-Packard Company

Hardware Availability: Jan-2007

Tested by: Hewlett-Packard Company

Software Availability: Apr-2007

Results Table

Benchmark	Base							Peak						
	Copies	Seconds	Ratio	Seconds	Ratio	Seconds	Ratio	Copies	Seconds	Ratio	Seconds	Ratio	Seconds	Ratio
400.perlbench	2	769	25.4	<u>769</u>	<u>25.4</u>	771	25.4	2	<u>624</u>	<u>31.3</u>	623	31.3	624	31.3
401.bzip2	2	<u>981</u>	<u>19.7</u>	979	19.7	983	19.6	2	<u>978</u>	<u>19.7</u>	980	19.7	978	19.7
403.gcc	2	903	17.8	910	17.7	<u>907</u>	<u>17.7</u>	2	736	21.9	<u>736</u>	<u>21.9</u>	739	21.8
429.mcf	2	913	20.0	916	19.9	<u>916</u>	<u>19.9</u>	2	706	25.8	705	25.9	<u>706</u>	<u>25.8</u>
445.gobmk	2	737	28.5	<u>736</u>	<u>28.5</u>	736	28.5	2	<u>626</u>	<u>33.5</u>	627	33.5	626	33.5
456.hmmer	2	678	27.5	<u>676</u>	<u>27.6</u>	673	27.7	2	503	37.1	<u>502</u>	<u>37.2</u>	500	37.3
458.sjeng	2	931	26.0	<u>931</u>	<u>26.0</u>	933	25.9	2	<u>860</u>	<u>28.2</u>	859	28.2	861	28.1
462.libquantum	2	1676	24.7	<u>1658</u>	<u>25.0</u>	1654	25.1	2	1651	25.1	1645	25.2	<u>1647</u>	<u>25.2</u>
464.h264ref	2	<u>1063</u>	<u>41.6</u>	1055	42.0	1066	41.5	2	<u>1023</u>	<u>43.3</u>	1026	43.2	1008	43.9
471.omnetpp	2	676	18.5	<u>677</u>	<u>18.5</u>	680	18.4	2	681	18.4	679	18.4	<u>680</u>	<u>18.4</u>
473.astar	2	750	18.7	751	18.7	<u>751</u>	<u>18.7</u>	2	750	18.7	751	18.7	<u>751</u>	<u>18.7</u>
483.xalancbmk	2	<u>463</u>	<u>29.8</u>	462	29.8	464	29.8	2	458	30.1	460	30.0	<u>458</u>	<u>30.1</u>

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

Platform Notes

Node interleaving is disabled
taskset utility used to bind CPU(s) to processes
ulimit -s unlimited set

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

Continued on next page



SPEC CINT2006 Result

Copyright 2006-2014 Standard Performance Evaluation Corporation

Hewlett-Packard Company

SPECint_rate2006 = 26.8

ProLiant DL385 G2 (AMD Opteron 2220)

SPECint_rate_base2006 = 24.1

CPU2006 license: 3

Test sponsor: Hewlett-Packard Company

Tested by: Hewlett-Packard Company

Test date: Jun-2007

Hardware Availability: Jan-2007

Software Availability: Apr-2007

Base Portability Flags (Continued)

483.xalancbmk: -DSPEC_CPU_LINUX

Base Optimization Flags

C benchmarks:

-Ofast -OPT:malloc_alg=1

C++ benchmarks:

-Ofast -m32 -L/cpu2006/SmartHeap_8.1/lib -lsmartheap

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

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

Continued on next page



SPEC CINT2006 Result

Copyright 2006-2014 Standard Performance Evaluation Corporation

Hewlett-Packard Company

SPECint_rate2006 = 26.8

ProLiant DL385 G2 (AMD Opteron 2220)

SPECint_rate_base2006 = 24.1

CPU2006 license: 3

Test date: Jun-2007

Test sponsor: Hewlett-Packard Company

Hardware Availability: Jan-2007

Tested by: Hewlett-Packard Company

Software Availability: Apr-2007

Peak Optimization Flags (Continued)

429.mcf: -m32 -O3 -ipa -L/cpu2006/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/cpu2006/SmartHeap_8.1/lib -lsmartheap

473.astar: basepeak = yes

483.xalancbmk: -Ofast -m32 -OPT:unroll_times_max=8
-L/cpu2006/SmartHeap_8.1/lib -lsmartheap

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

http://www.spec.org/cpu2006/flags/CPU2006_flags.20090714.16.html

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

http://www.spec.org/cpu2006/flags/CPU2006_flags.20090714.16.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 12:49:42 2014 by SPEC CPU2006 PS/PDF formatter v6932.
Originally published on 8 August 2007.