



SPEC® CINT2006 Result

Copyright 2006-2014 Standard Performance Evaluation Corporation

Hewlett-Packard Company

SPECint®2006 = 22.6

ProLiant BL680c G5
(2.4 GHz, Intel Xeon E7458)

SPECint_base2006 = 20.0

CPU2006 license: 3

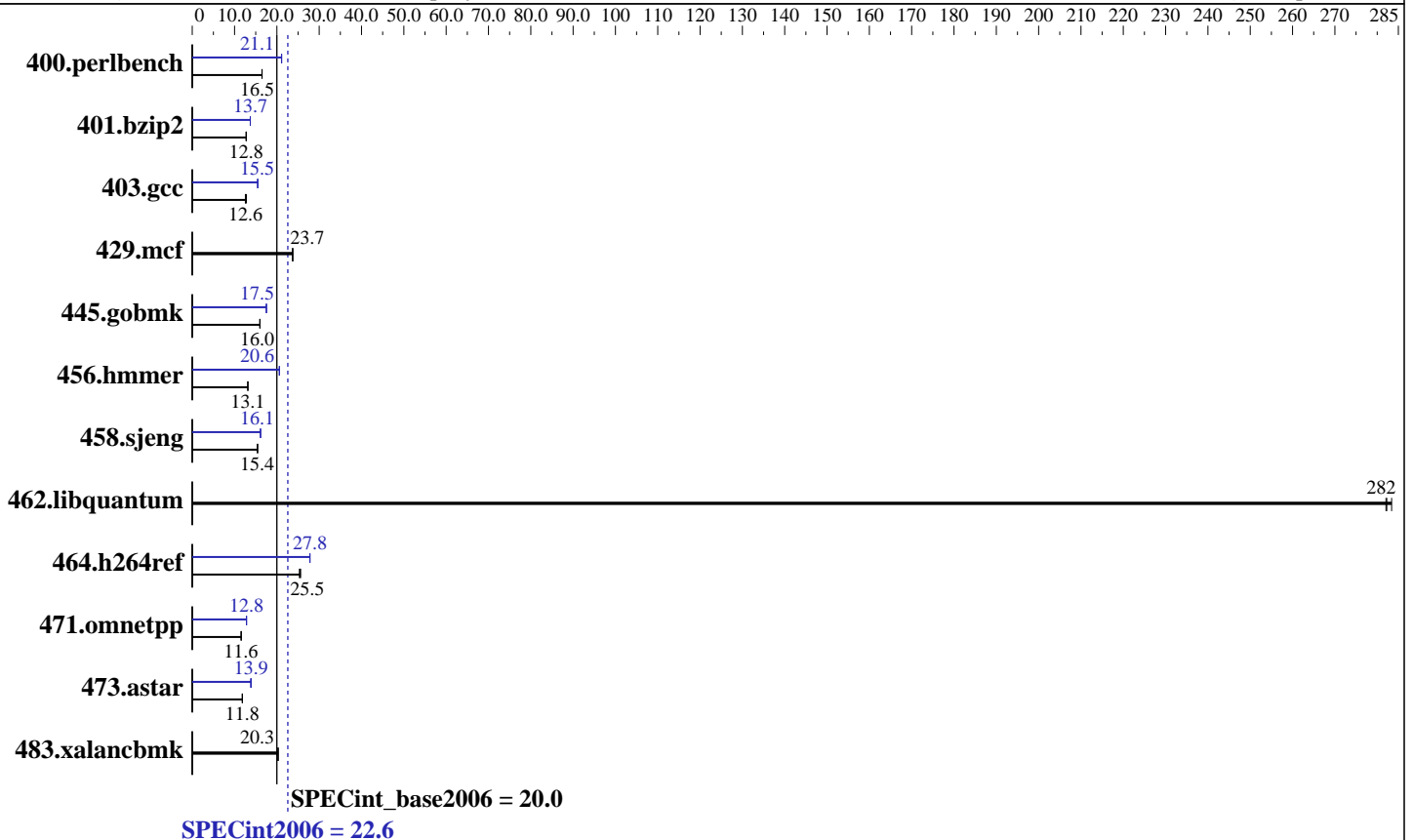
Test date: Mar-2009

Test sponsor: Hewlett-Packard Company

Hardware Availability: Apr-2009

Tested by: Hewlett-Packard Company

Software Availability: Apr-2009



Hardware

CPU Name: Intel Xeon E7458
 CPU Characteristics: 2.4 GHz, 16 MB L3 shared, 1066 MHz system bus
 CPU MHz: 2400
 FPU: Integrated
 CPU(s) enabled: 24 cores, 4 chips, 6 cores/chip
 CPU(s) orderable: 2,4 chips
 Primary Cache: 32 KB I + 32 KB D on chip per core
 Secondary Cache: 9 MB I+D on chip per chip, 3 MB shared / 2 cores
 L3 Cache: 16 MB I+D on chip per chip
 Other Cache: None
 Memory: 64 GB (16x4 GB PC2-5300F CL5)
 Disk Subsystem: 1x146 GB 10 K SAS
 Other Hardware: None

Software

Operating System: Red Hat Enterprise Linux Server release 5.3, Kernel 2.6.18-128.el5 on an x86_64
 Compiler: Intel C++ Compiler 11.0 for Linux Build 20080730 Package ID: l_cproc_b_11.0.074
 Auto Parallel: Yes
 File System: ext3
 System State: Run level 3 (multi-user)
 Base Pointers: 32-bit
 Peak Pointers: 32/64-bit
 Other Software: MicroQuill SmartHeap Library 8.1 binutils-2.17.50



SPEC CINT2006 Result

Copyright 2006-2014 Standard Performance Evaluation Corporation

Hewlett-Packard Company

SPECint2006 = 22.6

ProLiant BL680c G5
(2.4 GHz, Intel Xeon E7458)

SPECint_base2006 = 20.0

CPU2006 license: 3

Test date: Mar-2009

Test sponsor: Hewlett-Packard Company

Hardware Availability: Apr-2009

Tested by: Hewlett-Packard Company

Software Availability: Apr-2009

Results Table

Benchmark	Base						Peak					
	Seconds	Ratio	Seconds	Ratio	Seconds	Ratio	Seconds	Ratio	Seconds	Ratio	Seconds	Ratio
400.perlbench	593	16.5	592	16.5	<u>592</u>	<u>16.5</u>	<u>463</u>	<u>21.1</u>	463	21.1	462	21.1
401.bzip2	759	12.7	755	12.8	<u>756</u>	<u>12.8</u>	702	13.7	<u>703</u>	<u>13.7</u>	704	13.7
403.gcc	<u>639</u>	<u>12.6</u>	629	12.8	641	12.6	521	15.5	<u>520</u>	<u>15.5</u>	520	15.5
429.mcf	385	23.7	384	23.8	<u>384</u>	<u>23.7</u>	385	23.7	384	23.8	<u>384</u>	<u>23.7</u>
445.gobmk	656	16.0	<u>656</u>	<u>16.0</u>	656	16.0	<u>599</u>	<u>17.5</u>	598	17.5	599	17.5
456.hmmer	711	13.1	<u>710</u>	<u>13.1</u>	709	13.2	453	20.6	<u>453</u>	<u>20.6</u>	453	20.6
458.sjeng	785	15.4	784	15.4	<u>784</u>	<u>15.4</u>	749	16.2	751	16.1	<u>750</u>	<u>16.1</u>
462.libquantum	73.1	283	<u>73.4</u>	<u>282</u>	73.5	282	73.1	283	<u>73.4</u>	<u>282</u>	73.5	282
464.h264ref	<u>869</u>	<u>25.5</u>	874	25.3	864	25.6	796	27.8	796	27.8	<u>796</u>	<u>27.8</u>
471.omnetpp	539	11.6	541	11.6	<u>541</u>	<u>11.6</u>	<u>487</u>	<u>12.8</u>	488	12.8	487	12.8
473.astar	594	11.8	592	11.9	<u>593</u>	<u>11.8</u>	<u>505</u>	<u>13.9</u>	509	13.8	504	13.9
483.xalancbmk	340	20.3	<u>340</u>	<u>20.3</u>	341	20.3	340	20.3	<u>340</u>	<u>20.3</u>	341	20.3

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

Operating System Notes

```
'ulimit -s unlimited' was used to set the stacksize to unlimited prior to run
OMP_NUM_THREADS set to number of cores
KMP_AFFINITY set to physical,0
KMP_STACKSIZE set to 64M
```

Platform Notes

BIOS configuration:
Power Regulator set to Static High Performance Mode

Base Compiler Invocation

C benchmarks:
icc

C++ benchmarks:
icpc

Base Portability Flags

400.perlbench: -DSPEC_CPU_LINUX_IA32
462.libquantum: -DSPEC_CPU_LINUX

Continued on next page



SPEC CINT2006 Result

Copyright 2006-2014 Standard Performance Evaluation Corporation

Hewlett-Packard Company

SPECint2006 = 22.6

ProLiant BL680c G5
(2.4 GHz, Intel Xeon E7458)

SPECint_base2006 = 20.0

CPU2006 license: 3

Test date: Mar-2009

Test sponsor: Hewlett-Packard Company

Hardware Availability: Apr-2009

Tested by: Hewlett-Packard Company

Software Availability: Apr-2009

Base Portability Flags (Continued)

483.xalancbmk: -DSPEC_CPU_LINUX

Base Optimization Flags

C benchmarks:

-xSSE4.1 -ipo -O3 -no-prec-div -static -parallel
-par-runtime-control -opt-prefetch

C++ benchmarks:

-xSSE4.1 -ipo -O3 -no-prec-div -opt-prefetch -Wl,-z,muldefs
-L/cpu2006/SmartHeap_8.1/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/Compiler/11.0/074/bin/intel64/icc
-L/opt/intel/Compiler/11.0/074/ipp/em64t/lib
-I/opt/intel/Compiler/11.0/074/ipp/em64t/include

456.hmmer: /opt/intel/Compiler/11.0/074/bin/intel64/icc
-L/opt/intel/Compiler/11.0/074/ipp/em64t/lib
-I/opt/intel/Compiler/11.0/074/ipp/em64t/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



SPEC CINT2006 Result

Copyright 2006-2014 Standard Performance Evaluation Corporation

Hewlett-Packard Company

SPECint2006 = 22.6

ProLiant BL680c G5
(2.4 GHz, Intel Xeon E7458)

SPECint_base2006 = 20.0

CPU2006 license: 3

Test date: Mar-2009

Test sponsor: Hewlett-Packard Company

Hardware Availability: Apr-2009

Tested by: Hewlett-Packard Company

Software Availability: Apr-2009

Peak Optimization Flags

C benchmarks:

400.perlbench: -prof-gen(pass 1) -prof-use(pass 2) -xSSE4.1 -ipo -O3
-no-prec-div -static -ansi-alias -opt-prefetch

401.bzip2: -prof-gen(pass 1) -prof-use(pass 2) -xSSE4.1 -ipo -O3
-no-prec-div -static -auto-ilp32 -opt-prefetch
-ansi-alias

403.gcc: -xSSE4.1 -ipo -O3 -no-prec-div -static -inline-calloc
-opt-malloc-options=3

429.mcf: basepeak = yes

445.gobmk: -prof-gen(pass 1) -prof-use(pass 2) -xSSE4.1 -O2 -ipo
-no-prec-div -ansi-alias

456.hmmer: -xSSE4.1 -ipo -O3 -no-prec-div -static -unroll2
-ansi-alias -auto-ilp32

458.sjeng: -prof-gen(pass 1) -prof-use(pass 2) -xSSE4.1 -ipo -O3
-no-prec-div -static -unroll4

462.libquantum: basepeak = yes

464.h264ref: -prof-gen(pass 1) -prof-use(pass 2) -xSSE4.1 -ipo -O3
-no-prec-div -static -unroll2 -ansi-alias

C++ benchmarks:

471.omnetpp: -prof-gen(pass 1) -prof-use(pass 2) -xSSE4.1 -ipo -O3
-no-prec-div -ansi-alias -opt-ra-region-strategy=block
-Wl,-z,muldefs -L/cpu2006/SmartHeap_8.1/lib -lsmartheap

473.astar: -prof-gen(pass 1) -prof-use(pass 2) -xSSE4.1 -ipo -O3
-no-prec-div -ansi-alias -opt-ra-region-strategy=routine
-Wl,-z,muldefs -L/cpu2006/SmartHeap_8.1/lib -lsmartheap

483.xalancbmk: basepeak = yes

Peak Other Flags

C benchmarks:

403.gcc: -Dalloca=_alloca



SPEC CINT2006 Result

Copyright 2006-2014 Standard Performance Evaluation Corporation

Hewlett-Packard Company

ProLiant BL680c G5
(2.4 GHz, Intel Xeon E7458)

SPECint2006 = 22.6

SPECint_base2006 = 20.0

CPU2006 license: 3

Test sponsor: Hewlett-Packard Company

Tested by: Hewlett-Packard Company

Test date: Mar-2009

Hardware Availability: Apr-2009

Software Availability: Apr-2009

The flags files that were used to format this result can be browsed at

<http://www.spec.org/cpu2006/flags/Intel-ic11.0-int-linux64-revD.html>

<http://www.spec.org/cpu2006/flags/HP-Intel-Linux-Settings-flags.html>

You can also download the XML flags sources by saving the following links:

<http://www.spec.org/cpu2006/flags/Intel-ic11.0-int-linux64-revD.xml>

<http://www.spec.org/cpu2006/flags/HP-Intel-Linux-Settings-flags.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 v1.1.
Report generated on Tue Jul 22 23:45:04 2014 by SPEC CPU2006 PS/PDF formatter v6932.
Originally published on 12 May 2009.