



# SPEC® CINT2006 Result

Copyright 2006-2014 Standard Performance Evaluation Corporation

Dell Inc.

SPECint®2006 = 30.2

PowerEdge 1950 III (Intel Xeon X5470, 3.33 GHz)

SPECint\_base2006 = 26.3

CPU2006 license: 55

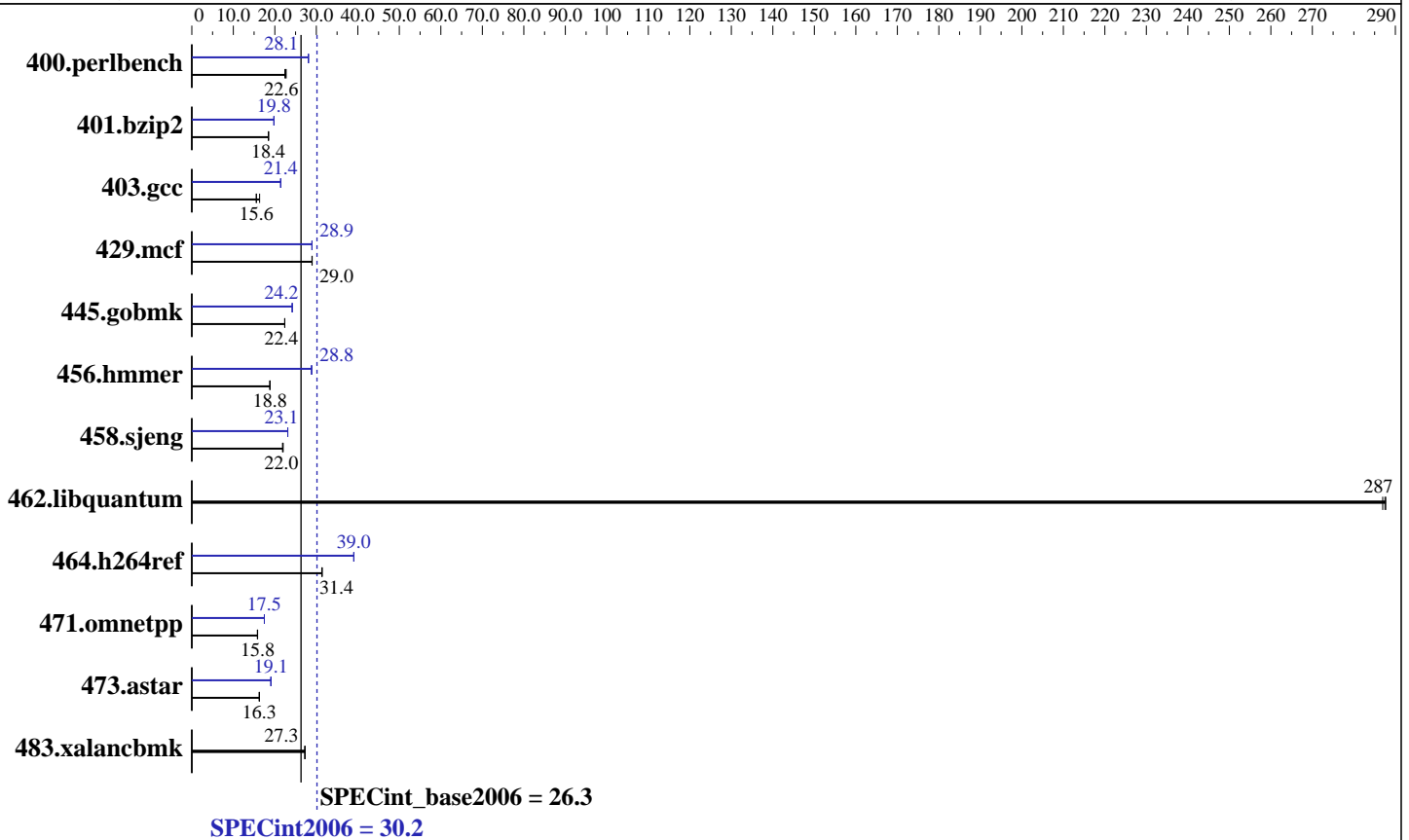
Test date: Sep-2008

Test sponsor: Dell Inc.

Hardware Availability: Sep-2008

Tested by: Dell Inc.

Software Availability: Nov-2008



### Hardware

CPU Name: Intel Xeon X5470  
 CPU Characteristics: 3333  
 CPU MHz: 3333  
 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 (8x2GB 667 MHz ECC CL5 FB-DIMM)  
 Disk Subsystem: 1 x 73 GB 15000 RPM SAS  
 Other Hardware: None

### Software

Operating System: SUSE Linux Enterprise Server 10 (x86\_64) SP2, Kernel 2.6.16-60.0.21-smp  
 Compiler: Intel C++ Compiler 11.0 for Linux Build 20080730 Package ID: l\_cproc\_b\_11.0.042  
 Auto Parallel: Yes  
 File System: ReiserFS  
 System State: Run level 3 (multi-user)  
 Base Pointers: 32-bit  
 Peak Pointers: 32/64-bit  
 Other Software: Binutils 2.18.50.0.7.20080502, Microquill SmartHeap V8.1



# SPEC CINT2006 Result

Copyright 2006-2014 Standard Performance Evaluation Corporation

Dell Inc.

SPECint2006 = 30.2

PowerEdge 1950 III (Intel Xeon X5470, 3.33 GHz)

SPECint\_base2006 = 26.3

CPU2006 license: 55  
Test sponsor: Dell Inc.  
Tested by: Dell Inc.

Test date: Sep-2008  
Hardware Availability: Sep-2008  
Software Availability: Nov-2008

## Results Table

Benchmark	Base						Peak					
	Seconds	Ratio	Seconds	Ratio	Seconds	Ratio	Seconds	Ratio	Seconds	Ratio	Seconds	Ratio
400.perlbench	430	22.7	436	22.4	<b><u>432</u></b>	<b><u>22.6</u></b>	348	28.1	348	28.1	<b><u>348</u></b>	<b><u>28.1</u></b>
401.bzip2	521	18.5	<b><u>523</u></b>	<b><u>18.4</u></b>	523	18.4	488	19.8	487	19.8	<b><u>488</u></b>	<b><u>19.8</u></b>
403.gcc	<b><u>517</u></b>	<b><u>15.6</u></b>	518	15.5	493	16.3	376	21.4	376	21.4	<b><u>376</u></b>	<b><u>21.4</u></b>
429.mcf	315	28.9	314	29.0	<b><u>315</u></b>	<b><u>29.0</u></b>	<b><u>315</u></b>	<b><u>28.9</u></b>	315	29.0	315	28.9
445.gobmk	<b><u>468</u></b>	<b><u>22.4</u></b>	468	22.4	468	22.4	434	24.2	<b><u>434</u></b>	<b><u>24.2</u></b>	433	24.2
456.hmmer	496	18.8	496	18.8	<b><u>496</u></b>	<b><u>18.8</u></b>	323	28.9	324	28.8	<b><u>323</u></b>	<b><u>28.8</u></b>
458.sjeng	554	21.9	550	22.0	<b><u>551</u></b>	<b><u>22.0</u></b>	<b><u>523</u></b>	<b><u>23.1</u></b>	524	23.1	523	23.1
462.libquantum	72.0	288	72.2	287	<b><u>72.1</u></b>	<b><u>287</u></b>	72.0	288	72.2	287	<b><u>72.1</u></b>	<b><u>287</u></b>
464.h264ref	704	31.4	<b><u>706</u></b>	<b><u>31.4</u></b>	707	31.3	<b><u>567</u></b>	<b><u>39.0</u></b>	567	39.0	566	39.1
471.omnetpp	394	15.8	<b><u>394</u></b>	<b><u>15.8</u></b>	396	15.8	358	17.5	<b><u>358</u></b>	<b><u>17.5</u></b>	358	17.5
473.astar	431	16.3	432	16.3	<b><u>432</u></b>	<b><u>16.3</u></b>	369	19.0	<b><u>368</u></b>	<b><u>19.1</u></b>	367	19.1
483.xalanbmk	253	27.2	253	27.3	<b><u>253</u></b>	<b><u>27.3</u></b>	253	27.2	253	27.3	<b><u>253</u></b>	<b><u>27.3</u></b>

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 stack size to unlimited prior to run

## General Notes

All benchmarks compiled in 32-bit mode except 401.bzip2 and 456.hmmer, for peak, are compiled in 64-bit mode  
OMP\_NUM\_THREADS set to number of processors  
KMP\_AFFINITY set to "physical,0"

## Base Compiler Invocation

C benchmarks:  
icc

C++ benchmarks:  
icpc

## Base Portability Flags

400.perlbench: -DSPEC\_CPU\_LINUX\_IA32  
462.libquantum: -DSPEC\_CPU\_LINUX  
483.xalanbmk: -DSPEC\_CPU\_LINUX



# SPEC CINT2006 Result

Copyright 2006-2014 Standard Performance Evaluation Corporation

Dell Inc.

SPECint2006 = 30.2

PowerEdge 1950 III (Intel Xeon X5470, 3.33 GHz)

SPECint\_base2006 = 26.3

CPU2006 license: 55

Test date: Sep-2008

Test sponsor: Dell Inc.

Hardware Availability: Sep-2008

Tested by: Dell Inc.

Software Availability: Nov-2008

## 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/spec/cpu2006.1.1/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/11.0/042/bin/intel64/icc  
-L/opt/intel/Compiler/11.0/042/ipp/em64t/lib  
-I/opt/intel/Compiler/11.0/042/ipp/em64t/include

456.hmmer: /opt/intel/Compiler/11.0/042/bin/intel64/icc  
-L/opt/intel/Compiler/11.0/042/ipp/em64t/lib  
-I/opt/intel/Compiler/11.0/042/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

## Peak Optimization Flags

C benchmarks:

Continued on next page



# SPEC CINT2006 Result

Copyright 2006-2014 Standard Performance Evaluation Corporation

Dell Inc.

SPECint2006 = 30.2

PowerEdge 1950 III (Intel Xeon X5470, 3.33 GHz)

SPECint\_base2006 = 26.3

CPU2006 license: 55

Test date: Sep-2008

Test sponsor: Dell Inc.

Hardware Availability: Sep-2008

Tested by: Dell Inc.

Software Availability: Nov-2008

## Peak Optimization Flags (Continued)

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: -xSSE4.1 -ipo -O3 -no-prec-div -static -opt-prefetch

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/spec/cpu2006.1.1/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/spec/cpu2006.1.1/lib -lsmartheap

483.xalancbmk: basepeak = yes

## Peak Other Flags

C benchmarks:

403.gcc: -Dalloca=\_alloca

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-revA.20090713.02.html>

<http://www.spec.org/cpu2006/flags/Intel-Linux64-Platform.20090713.02.html>



# SPEC CINT2006 Result

Copyright 2006-2014 Standard Performance Evaluation Corporation

Dell Inc.

SPECint2006 = 30.2

PowerEdge 1950 III (Intel Xeon X5470, 3.33 GHz)

SPECint\_base2006 = 26.3

CPU2006 license: 55

Test sponsor: Dell Inc.

Tested by: Dell Inc.

Test date: Sep-2008

Hardware Availability: Sep-2008

Software Availability: Nov-2008

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

<http://www.spec.org/cpu2006/flags/Intel-ic11.0-int-linux64-revA.20090713.02.xml>

<http://www.spec.org/cpu2006/flags/Intel-Linux64-Platform.20090713.02.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](mailto:webmaster@spec.org).

Tested with SPEC CPU2006 v1.1.  
Report generated on Tue Jul 22 22:10:10 2014 by SPEC CPU2006 PS/PDF formatter v6932.  
Originally published on 14 October 2008.