



# SPEC<sup>®</sup> CINT2006 Result

Copyright 2006-2014 Standard Performance Evaluation Corporation

Dell Inc.

SPECint<sup>®</sup>\_rate2006 = 133

PowerEdge 1950 III (Intel Xeon E5450, 3.00 GHz)

SPECint\_rate\_base2006 = 107

CPU2006 license: 55

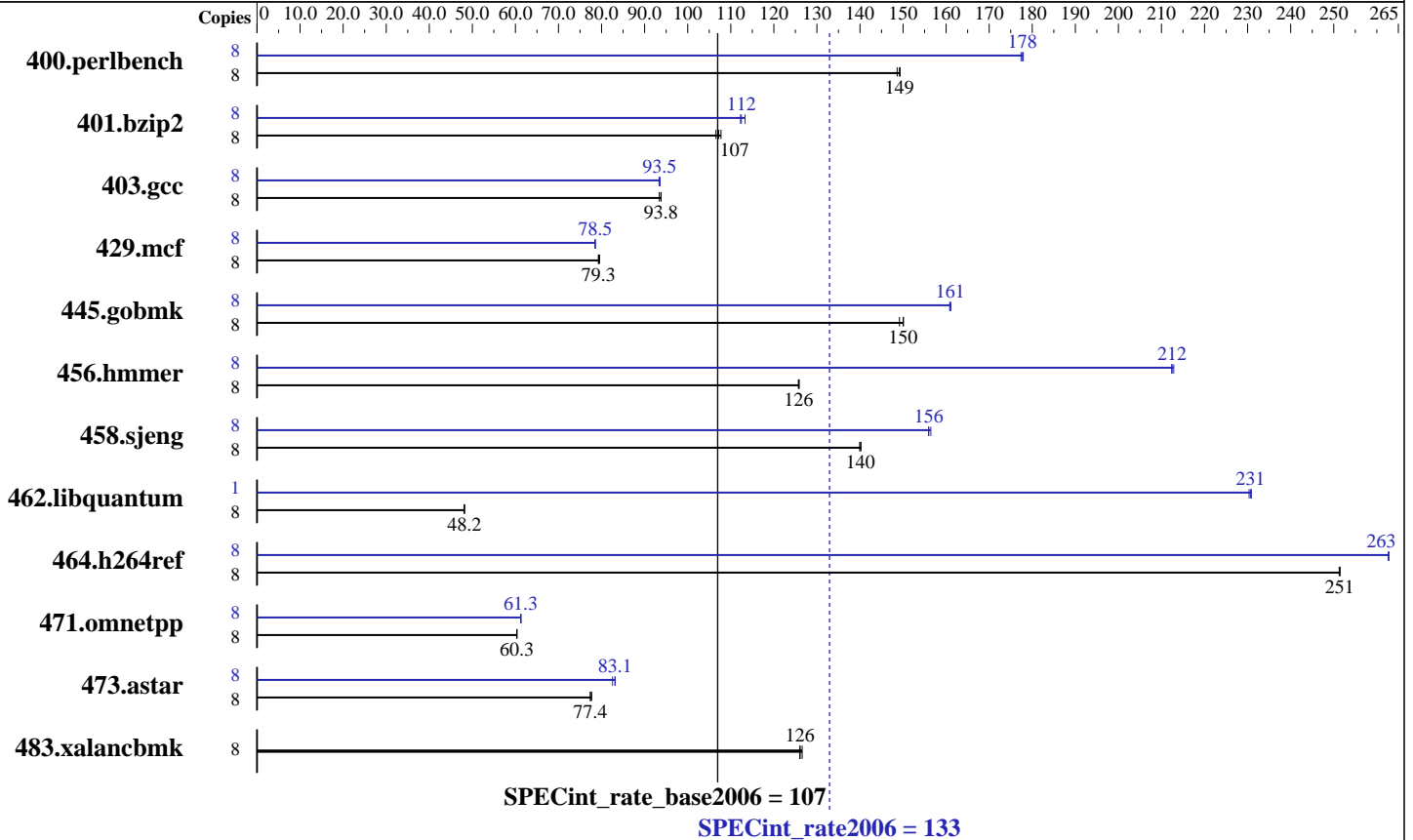
Test date: Dec-2007

Test sponsor: Dell Inc.

Hardware Availability: Nov-2007

Tested by: Dell Inc.

Software Availability: Nov-2007



## Hardware

CPU Name: Intel Xeon E5450  
 CPU Characteristics: 1333 MHz system bus  
 CPU MHz: 3000  
 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 (8x2 GB DDR2-667 ECC CL5 FB-DIMM)  
 Disk Subsystem: 1 x 73 GB SAS 15k RPM  
 Other Hardware: None

## Software

Operating System: SUSE Linux Enterprise Server 10 (x86\_64) SP1, Kernel 2.6.16.46-0.12-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 V8.1 Binutils 2.17.50.0.15



# SPEC CINT2006 Result

Copyright 2006-2014 Standard Performance Evaluation Corporation

Dell Inc.

SPECint\_rate2006 = 133

PowerEdge 1950 III (Intel Xeon E5450, 3.00 GHz)

SPECint\_rate\_base2006 = 107

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

Test date: Dec-2007  
Hardware Availability: Nov-2007  
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	524	149	<u>524</u>	<u>149</u>	526	149	8	<u>440</u>	<u>178</u>	441	177	439	178
401.bzip2	8	724	107	717	108	<u>720</u>	<u>107</u>	8	<u>686</u>	<u>112</u>	681	113	688	112
403.gcc	8	<u>687</u>	<u>93.8</u>	686	93.8	690	93.4	8	<u>689</u>	<u>93.5</u>	688	93.6	690	93.3
429.mcf	8	<u>920</u>	<u>79.3</u>	920	79.3	917	79.5	8	<u>929</u>	<u>78.5</u>	930	78.5	929	78.6
445.gobmk	8	<u>559</u>	<u>150</u>	563	149	559	150	8	521	161	<u>521</u>	<u>161</u>	522	161
456.hammer	8	594	126	593	126	<u>594</u>	<u>126</u>	8	<u>351</u>	<u>212</u>	351	213	351	212
458.sjeng	8	692	140	690	140	<u>691</u>	<u>140</u>	8	<u>621</u>	<u>156</u>	619	156	621	156
462.libquantum	8	3446	48.1	3441	48.2	<u>3442</u>	<u>48.2</u>	1	89.7	231	90.0	230	<u>89.8</u>	<u>231</u>
464.h264ref	8	705	251	704	251	<u>704</u>	<u>251</u>	8	674	263	<u>674</u>	<u>263</u>	674	263
471.omnetpp	8	<u>829</u>	<u>60.3</u>	829	60.3	829	60.3	8	<u>816</u>	<u>61.3</u>	816	61.2	816	61.3
473.astar	8	723	77.7	<u>725</u>	<u>77.4</u>	726	77.4	8	<u>676</u>	<u>83.1</u>	676	83.1	680	82.5
483.xalancbmk	8	436	127	438	126	<u>438</u>	<u>126</u>	8	436	127	438	126	<u>438</u>	<u>126</u>

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

## Compiler Invocation Notes

OMP\_NUM\_THREADS set to number of cores  
KMP\_STACK\_SIZE set to 64M  
KMP\_AFFINITY set to physical,0

## Operating System Notes

'ulimit -s unlimited' was used to set the stacksize to unlimited prior to run  
'/usr/bin/taskset' used to bind processes to CPUs

## Platform Notes

BIOS Settings:  
Adjacent Cache Line Prefetch = Disabled (default Enabled)

## Base Compiler Invocation

C benchmarks:  
icc

C++ benchmarks:  
icpc



# SPEC CINT2006 Result

Copyright 2006-2014 Standard Performance Evaluation Corporation

Dell Inc.

SPECint\_rate2006 = 133

PowerEdge 1950 III (Intel Xeon E5450, 3.00 GHz)

SPECint\_rate\_base2006 = 107

CPU2006 license: 55

Test date: Dec-2007

Test sponsor: Dell Inc.

Hardware Availability: Nov-2007

Tested by: Dell Inc.

Software Availability: Nov-2007

## Base Portability Flags

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

## 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

Continued on next page



# SPEC CINT2006 Result

Copyright 2006-2014 Standard Performance Evaluation Corporation

Dell Inc.

SPECint\_rate2006 = 133

PowerEdge 1950 III (Intel Xeon E5450, 3.00 GHz)

SPECint\_rate\_base2006 = 107

CPU2006 license: 55

Test date: Dec-2007

Test sponsor: Dell Inc.

Hardware Availability: Nov-2007

Tested by: Dell Inc.

Software Availability: Nov-2007

## Peak Portability Flags (Continued)

483.xalanbmk: -DSPEC\_CPU\_LINUX

## Peak Optimization Flags

C benchmarks:

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.hmmer: -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.xalanbmk: basepeak = yes



# SPEC CINT2006 Result

Copyright 2006-2014 Standard Performance Evaluation Corporation

Dell Inc.

SPECint\_rate2006 = 133

PowerEdge 1950 III (Intel Xeon E5450, 3.00 GHz)

SPECint\_rate\_base2006 = 107

CPU2006 license: 55

Test date: Dec-2007

Test sponsor: Dell Inc.

Hardware Availability: Nov-2007

Tested by: Dell Inc.

Software Availability: Nov-2007

## 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-ia32-intel64-linux-flags.20090714.12.html>

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

<http://www.spec.org/cpu2006/flags/Intel-ic10-ia32-intel64-linux-flags.20090714.12.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 v1.0.  
Report generated on Tue Jul 22 16:38:35 2014 by SPEC CPU2006 PS/PDF formatter v6932.  
Originally published on 6 February 2008.