



# SPEC® CINT2006 Result

Copyright 2006-2014 Standard Performance Evaluation Corporation

Dell Inc.

SPECint®\_rate2006 = 82.2

PowerEdge 2900 III (Intel Xeon X5260, 3.33 GHz)

SPECint\_rate\_base2006 = 69.7

CPU2006 license: 55

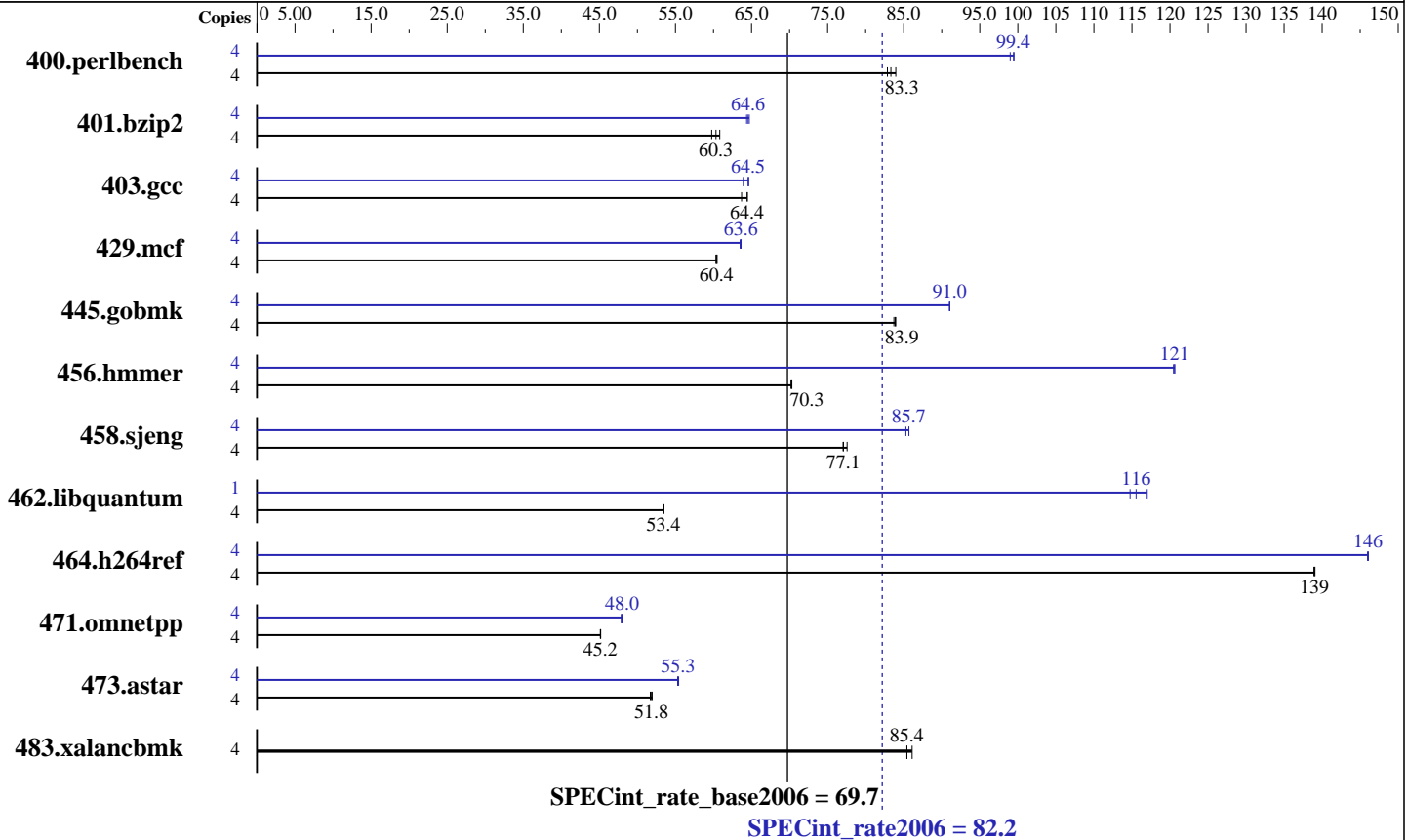
Test date: Jul-2008

Test sponsor: Dell Inc.

Hardware Availability: Jan-2008

Tested by: Dell Inc.

Software Availability: May-2008



## Hardware

CPU Name: Intel Xeon X5260  
 CPU Characteristics: 3333  
 CPU MHz: 3333  
 FPU: Integrated  
 CPU(s) enabled: 4 cores, 2 chips, 2 cores/chip  
 CPU(s) orderable: 1,2 chips  
 Primary Cache: 32 KB I + 32 KB D on chip per core  
 Secondary Cache: 6 MB I+D on chip per chip  
 L3 Cache: None  
 Other Cache: None  
 Memory: 16 GB (8 x 2 GB, DDR2-667 MHz, CL5, Reg, Dual Rank)  
 Disk Subsystem: 2 x 73 GB GB SAS 15000 RPM  
 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 10.1 for Linux Build 20080312 Package ID: l\_cc\_p\_10.1.015  
 Auto Parallel: Yes  
 File System: ReiserFS  
 System State: Run level 3 (multi-user)  
 Base Pointers: 32-bit  
 Peak Pointers: 32/64-bit  
 Other Software: Microquill SmartHeap V8.1 Binutils 2.18.50.0.7.20080502



# SPEC CINT2006 Result

Copyright 2006-2014 Standard Performance Evaluation Corporation

Dell Inc.

SPECint\_rate2006 = 82.2

PowerEdge 2900 III (Intel Xeon X5260, 3.33 GHz)

SPECint\_rate\_base2006 = 69.7

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

Test date: Jul-2008  
Hardware Availability: Jan-2008  
Software Availability: May-2008

## Results Table

Benchmark	Base							Peak						
	Copies	Seconds	Ratio	Seconds	Ratio	Seconds	Ratio	Copies	Seconds	Ratio	Seconds	Ratio	Seconds	Ratio
400.perlbench	4	472	82.9	465	84.0	<b>469</b>	<b>83.3</b>	4	395	99.0	393	99.5	<b>393</b>	<b>99.4</b>
401.bzip2	4	635	60.8	<b>640</b>	<b>60.3</b>	646	59.8	4	597	64.7	<b>598</b>	<b>64.6</b>	600	64.4
403.gcc	4	506	63.7	<b>500</b>	<b>64.4</b>	500	64.4	4	<b>499</b>	<b>64.5</b>	498	64.6	504	63.9
429.mcf	4	603	60.5	<b>604</b>	<b>60.4</b>	605	60.3	4	574	63.5	<b>573</b>	<b>63.6</b>	573	63.6
445.gobmk	4	<b>500</b>	<b>83.9</b>	501	83.7	500	84.0	4	<b>461</b>	<b>91.0</b>	461	91.1	461	91.0
456.hmmer	4	<b>531</b>	<b>70.3</b>	532	70.2	531	70.3	4	<b>309</b>	<b>121</b>	310	120	309	121
458.sjeng	4	624	77.6	628	77.0	<b>628</b>	<b>77.1</b>	4	565	85.7	567	85.3	<b>565</b>	<b>85.7</b>
462.libquantum	4	1551	53.4	<b>1551</b>	<b>53.4</b>	1550	53.5	1	181	115	177	117	<b>179</b>	<b>116</b>
464.h264ref	4	<b>637</b>	<b>139</b>	637	139	637	139	4	<b>606</b>	<b>146</b>	606	146	606	146
471.omnetpp	4	553	45.2	554	45.1	<b>554</b>	<b>45.2</b>	4	520	48.0	522	47.9	<b>521</b>	<b>48.0</b>
473.astar	4	541	51.9	543	51.7	<b>542</b>	<b>51.8</b>	4	<b>507</b>	<b>55.3</b>	508	55.3	507	55.4
483.xalancbmk	4	321	86.1	323	85.4	<b>323</b>	<b>85.4</b>	4	321	86.1	323	85.4	<b>323</b>	<b>85.4</b>

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

## Submit Notes

The config file option 'submit' was used.

## Platform Notes

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

## General Notes

All benchmarks compiled in 32-bit mode except 401.bzip2 and 456.hmmer, for peak, are compiled in 64-bit mode  
taskset was used to bind processes to cores except for 462.libquantum peak  
OMP\_NUM\_THREADS set to number of processors  
KMP\_AFFINITY set to "physical,0"  
KMP\_STACKSIZE set to 64M

## Base Compiler Invocation

C benchmarks:  
icc

C++ benchmarks:  
icpc



# SPEC CINT2006 Result

Copyright 2006-2014 Standard Performance Evaluation Corporation

Dell Inc.

SPECint\_rate2006 = 82.2

PowerEdge 2900 III (Intel Xeon X5260, 3.33 GHz)

SPECint\_rate\_base2006 = 69.7

CPU2006 license: 55

Test date: Jul-2008

Test sponsor: Dell Inc.

Hardware Availability: Jan-2008

Tested by: Dell Inc.

Software Availability: May-2008

## 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/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/cce/10.1.015/bin/icc  
-L/opt/intel/cce/10.1.015/lib  
-I/opt/intel/cce/10.1.015/include  
  
456.hmmer: /opt/intel/cce/10.1.015/bin/icc  
-L/opt/intel/cce/10.1.015/lib  
-I/opt/intel/cce/10.1.015/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 = 82.2

PowerEdge 2900 III (Intel Xeon X5260, 3.33 GHz)

SPECint\_rate\_base2006 = 69.7

CPU2006 license: 55

Test date: Jul-2008

Test sponsor: Dell Inc.

Hardware Availability: Jan-2008

Tested by: Dell Inc.

Software Availability: May-2008

## 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/cpu2006.1.1/lib -lsmarheap

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/cpu2006.1.1/lib -lsmarheap

483.xalanbmk: basepeak = yes

## Peak Other Flags

C benchmarks:

Continued on next page



# SPEC CINT2006 Result

Copyright 2006-2014 Standard Performance Evaluation Corporation

Dell Inc.

SPECint\_rate2006 = 82.2

PowerEdge 2900 III (Intel Xeon X5260, 3.33 GHz)

SPECint\_rate\_base2006 = 69.7

CPU2006 license: 55

Test date: Jul-2008

Test sponsor: Dell Inc.

Hardware Availability: Jan-2008

Tested by: Dell Inc.

Software Availability: May-2008

## Peak Other Flags (Continued)

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-ic10.1-int-linux64-revD.20090713.00.html>

<http://www.spec.org/cpu2006/flags/Intel-Linux64-Platform.20090713.07.html>

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

<http://www.spec.org/cpu2006/flags/Intel-ic10.1-int-linux64-revD.20090713.00.xml>

<http://www.spec.org/cpu2006/flags/Intel-Linux64-Platform.20090713.07.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 19:15:43 2014 by SPEC CPU2006 PS/PDF formatter v6932.  
Originally published on 2 September 2008.