SPEC® CINT2006 Result

Copyright 2006-2014 Standard Performance Evaluation Corporation

Dell Inc.

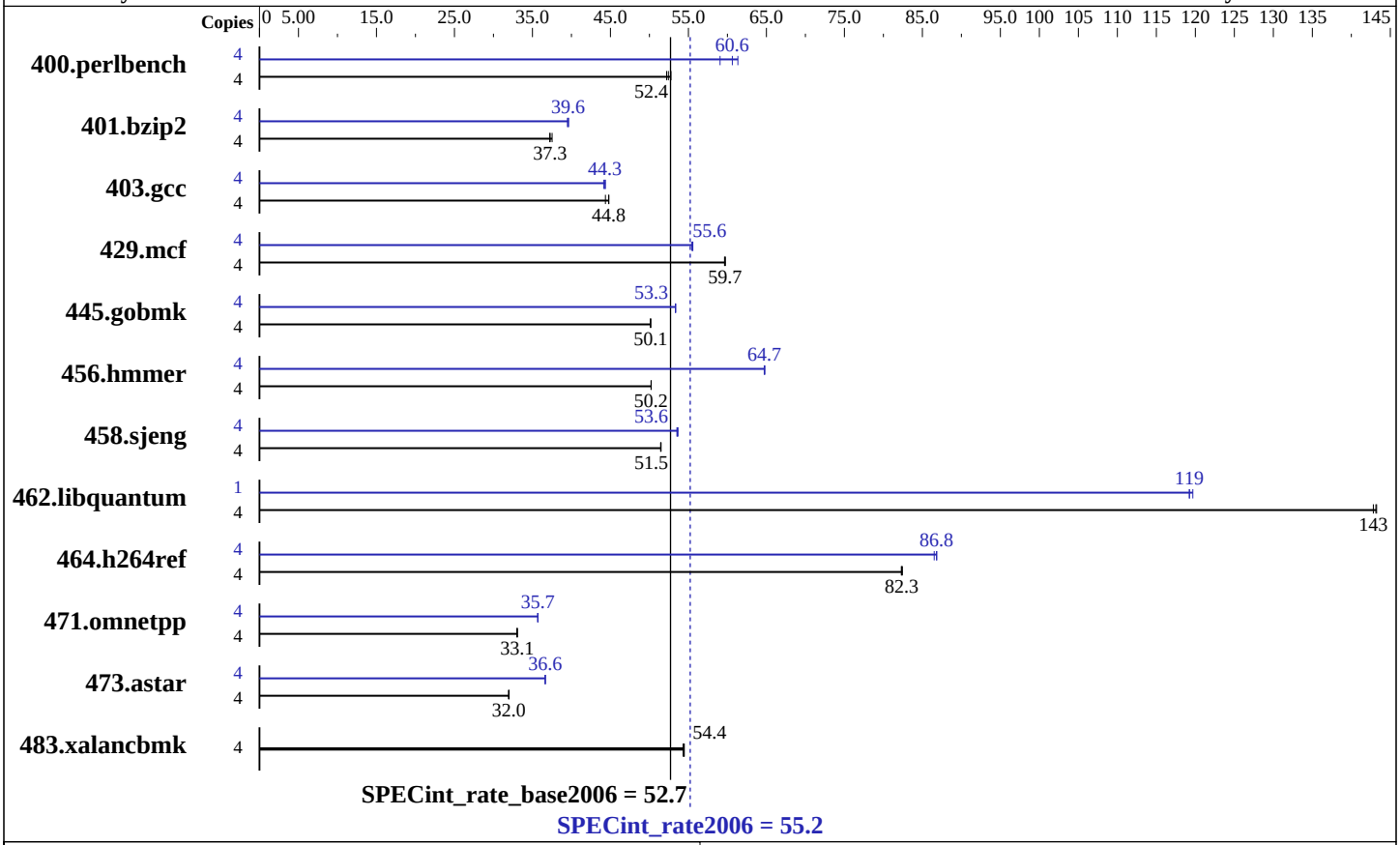
PowerEdge 2950 III (Intel Xeon E5205, 1.86 GHz)

SPECint®_rate2006 = 55.2

SPECint_rate_base2006 = 52.7

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

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



Hardware

CPU Name:	Intel Xeon E5205
CPU Characteristics:	
CPU MHz:	1866
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 (4 x 4 GB 667 MHz ECC CL5 FB-DIMM)
Disk Subsystem:	1 x 73 GB 15000 RPM SAS, 1 x 73 GB 10000 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:	Microquill SmartHeap V8.1 Binutils 2.18.50.0.7.20080502

SPEC CINT2006 Result

Copyright 2006-2014 Standard Performance Evaluation Corporation

Dell Inc.

PowerEdge 2950 III (Intel Xeon E5205, 1.86 GHz)

SPECint_rate2006 = 55.2

SPECint_rate_base2006 = 52.7

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

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

Results Table

Benchmark	Base							Peak						
	Copies	Seconds	Ratio	Seconds	Ratio	Seconds	Ratio	Copies	Seconds	Ratio	Seconds	Ratio	Seconds	Ratio
400.perlbench	4	741	52.8	749	52.2	**745**	**52.4**	4	637	61.3	**645**	**60.6**	662	59.1
401.bzip2	4	**1036**	**37.3**	1029	37.5	1037	37.2	4	978	39.5	974	39.6	**975**	**39.6**
403.gcc	4	726	44.4	719	44.8	**719**	**44.8**	4	730	44.1	726	44.4	**727**	**44.3**
429.mcf	4	**611**	**59.7**	612	59.6	611	59.7	4	658	55.4	**657**	**55.6**	656	55.6
445.gobmk	4	837	50.1	**837**	**50.1**	837	50.2	4	786	53.4	787	53.3	**787**	**53.3**
456.hmmer	4	743	50.2	743	50.2	**743**	**50.2**	4	**576**	**64.7**	576	64.8	577	64.7
458.sjeng	4	940	51.5	941	51.4	**940**	**51.5**	4	902	53.7	**904**	**53.6**	904	53.5
462.libquantum	4	580	143	579	143	**579**	**143**	1	174	119	**174**	**119**	173	120
464.h264ref	4	**1075**	**82.3**	1074	82.4	1076	82.3	4	1023	86.5	1019	86.8	**1020**	**86.8**
471.omnetpp	4	**756**	**33.1**	756	33.1	758	33.0	4	700	35.7	**701**	**35.7**	701	35.7
473.astar	4	**878**	**32.0**	877	32.0	880	31.9	4	766	36.7	**766**	**36.6**	767	36.6
483.xalancbmk	4	508	54.3	507	54.5	**507**	**54.4**	4	508	54.3	507	54.5	**507**	**54.4**

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.
```

Operating System Notes

```
'ulimit -s unlimited' was used to set the stack size to unlimited prior to run
```

Platform Notes

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

General Notes

```
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
```

Continued on next page

Base Compiler Invocation (Continued)

C++ benchmarks:
icpc

Base Portability Flags

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

Base Optimization Flags

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

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 -opt-prefetch -ansi-alias

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

429.mcf: -prof-gen(pass 1) -prof-use(pass 2) -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

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

462.libquantum: -xSSE4.1 -ipo -O3 -no-prec-div -static
-opt-malloc-options=3 -parallel -par-runtime-control
-opt-prefetch

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

Continued on next page

Peak Optimization Flags (Continued)

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.20090713.11.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-revA.20090713.02.xml`
`http://www.spec.org/cpu2006/flags/Intel-Linux64-Platform.20090713.11.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 21:56:08 2014 by SPEC CPU2006 PS/PDF formatter v6932.
Originally published on 26 November 2008.