SPEC® CINT2006 Result

Copyright 2006-2014 Standard Performance Evaluation Corporation

SGI

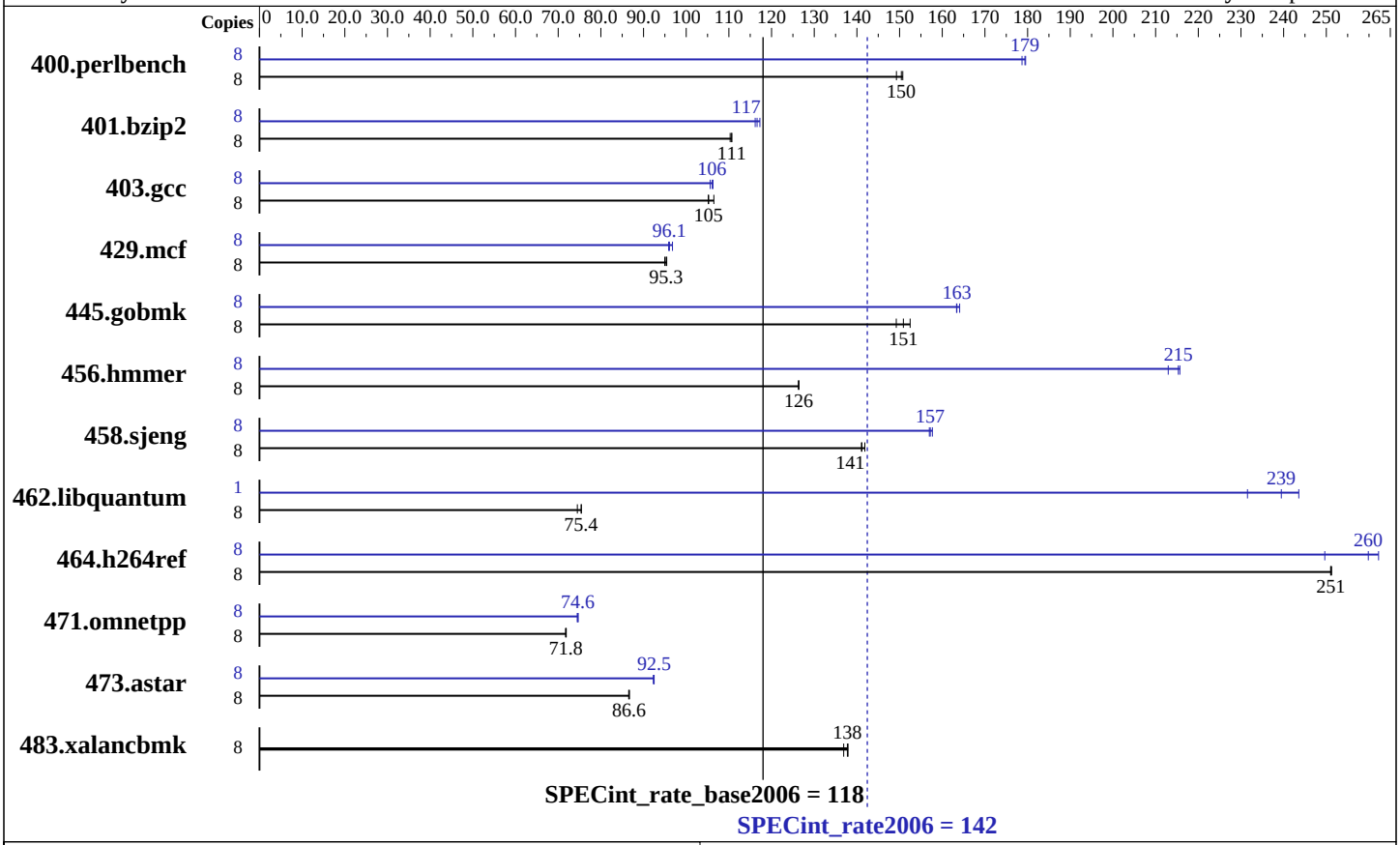
SGI Altix ICE 8200EX (Intel Xeon E5472, 3.00 GHz)

SPECint®_rate2006 = 142

SPECint_rate_base2006 = 118

CPU2006 license: 4
Test sponsor: SGI
Tested by: SGI

Test date: May-2008
Hardware Availability: Mar-2008
Software Availability: Apr-2008



Hardware

CPU Name:	Intel Xeon E5472
CPU Characteristics:	Quad Core, 3.0 GHz
CPU MHz:	2992
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 (8*2GB PC2-6400 CL5-5-5 FB-DIMMs)
Disk Subsystem:	16 TB RAID 6+1 32 x 500 GB SATA (Seagate Barracuda 7200 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++ and Fortran Compiler for Linux Version 10.1, Build 20070913
Auto Parallel:	Yes
File System:	NFSv3 IPoIB
System State:	Multi-user, run level 3
Base Pointers:	32-bit
Peak Pointers:	32/64-bit
Other Software:	SGI ProPack 5 for Linux Service Pack 5 Binutils 2.17 SmartHeap library V8.1

SPEC CINT2006 Result

Copyright 2006-2014 Standard Performance Evaluation Corporation

SGI

SGI Altix ICE 8200EX (Intel Xeon E5472, 3.00 GHz)

SPECint_rate2006 = 142

SPECint_rate_base2006 = 118

CPU2006 license: 4
Test sponsor: SGI
Tested by: SGI

Test date: May-2008
Hardware Availability: Mar-2008
Software Availability: Apr-2008

Results Table

Benchmark	Base							Peak						
	Copies	Seconds	Ratio	Seconds	Ratio	Seconds	Ratio	Copies	Seconds	Ratio	Seconds	Ratio	Seconds	Ratio
400.perlbench	8	524	149	518	151	**520**	**150**	8	**436**	**179**	435	180	437	179
401.bzip2	8	700	110	697	111	**698**	**111**	8	**662**	**117**	658	117	665	116
403.gcc	8	612	105	605	106	**612**	**105**	8	**607**	**106**	606	106	610	106
429.mcf	8	**766**	**95.3**	765	95.4	768	95.0	8	**759**	**96.1**	754	96.8	761	95.9
445.gobmk	8	**556**	**151**	550	152	562	149	8	511	164	**513**	**163**	514	163
456.hmmer	8	**591**	**126**	591	126	591	126	8	346	216	**347**	**215**	350	213
458.sjeng	8	682	142	**686**	**141**	686	141	8	**616**	**157**	617	157	614	158
462.libquantum	8	2225	74.5	2198	75.4	**2199**	**75.4**	1	85.1	244	89.5	232	**86.5**	**239**
464.h264ref	8	705	251	705	251	**705**	**251**	8	675	262	709	250	**681**	**260**
471.omnetpp	8	697	71.7	695	71.9	**696**	**71.8**	8	670	74.7	672	74.5	**670**	**74.6**
473.astar	8	**648**	**86.6**	649	86.5	648	86.7	8	609	92.3	**607**	**92.5**	607	92.5
483.xalancbmk	8	400	138	**401**	**138**	403	137	8	400	138	**401**	**138**	403	137

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

General Notes

```
BIOS settings:
  Snoop Filter:             Enabled
  Hardware Prefetcher:      Enabled
  Adjacent Sector Prefetch: Disabled
All benchmarks compiled in 32-bit mode except 401.bzip2 and 456.hmmer,
for peak, are compiled in 64-bit mode
The taskset utility was used to bind processes to cores
Parallel settings for 462.libquantum peak:
  OMP_NUM_THREADS = 8
  KMP_AFFINITY = physical,0
  KMP_STACKSIZE = 64M
```

Base Compiler Invocation

C benchmarks:

```
/opt/intel/cc/10.1.008/bin/icc -L/opt/intel/cc/10.1.008/lib
-I/opt/intel/cc/10.1.008/include
```

C++ benchmarks:

```
/opt/intel/cc/10.1.008/bin/icpc -L/opt/intel/cc/10.1.008/lib
-I/opt/intel/cc/10.1.008/include
```

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 -lsmartheap

Base Other Flags

C benchmarks:

403.gcc: -Dalloca=_alloca

Peak Compiler Invocation

C benchmarks (except as noted below):
/opt/intel/cc/10.1.008/bin/icc -L/opt/intel/cc/10.1.008/lib
-I/opt/intel/cc/10.1.008/include

401.bzip2: /sw/sdev/intel-cc/x86_64/10.1.008/bin/icc
-L/sw/sdev/intel-cc/x86_64/10.1.008/lib
-I/sw/sdev/intel-cc/x86_64/10.1.008/include

456.hmmer: /sw/sdev/intel-cc/x86_64/10.1.008/bin/icc
-L/sw/sdev/intel-cc/x86_64/10.1.008/lib
-I/sw/sdev/intel-cc/x86_64/10.1.008/include

C++ benchmarks:
/opt/intel/cc/10.1.008/bin/icpc -L/opt/intel/cc/10.1.008/lib
-I/opt/intel/cc/10.1.008/include

Peak Portability Flags

400.perlbench: -DSPEC_CPU_LINUX_IA32
401.bzip2: -DSPEC_CPU_LP64
456.hmmer: -DSPEC_CPU_LP64

Continued on next page

Peak Portability Flags (Continued)

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) -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 -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 -lsmartheap

483.xalancbmk: basepeak = yes

Peak Other Flags

C benchmarks:

Continued on next page

Peak Other Flags (Continued)

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.20090714.04.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.20090714.04.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 v1.0.
Report generated on Tue Jul 22 17:32:22 2014 by SPEC CPU2006 PS/PDF formatter v6932.
Originally published on 11 June 2008.