



SPEC® CINT2006 Result

Copyright 2006-2014 Standard Performance Evaluation Corporation

Sun Microsystems Sun Fire X4450

SPECint®2006 = 25.0
SPECint_base2006 = 21.7

CPU2006 license: 6

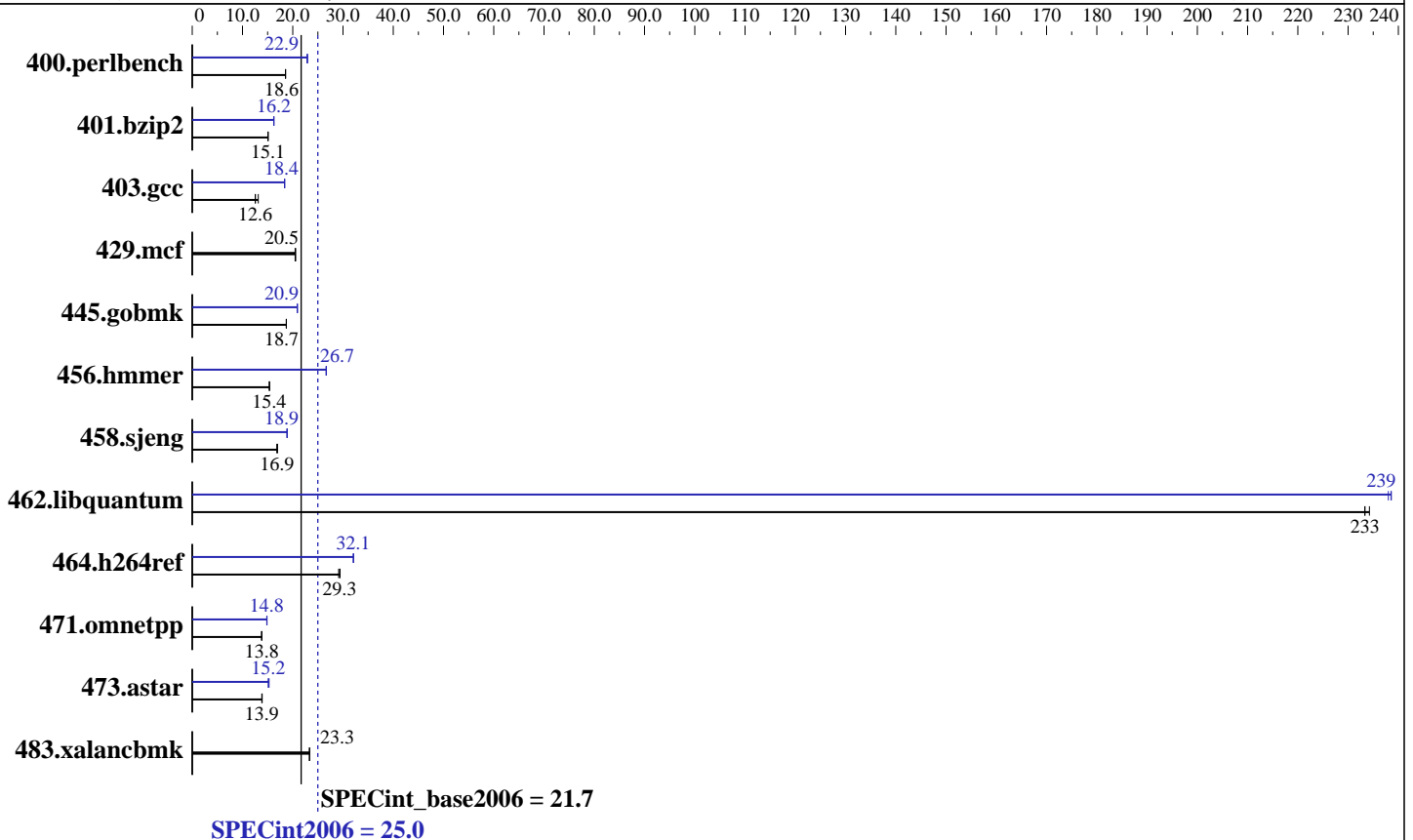
Test sponsor: Sun Microsystems

Tested by: Sun Microsystems

Test date: Oct-2007

Hardware Availability: Nov-2007

Software Availability: Nov-2007



Hardware

CPU Name: Intel Xeon X7350
 CPU Characteristics: Quad Core, 2.93 GHz
 CPU MHz: 2933
 FPU: Integrated
 CPU(s) enabled: 16 cores, 4 chips, 4 cores/chip
 CPU(s) orderable: 2,4 (order by number of chips)
 Primary Cache: 32 KB I + 32 KB D on chip per core
 Secondary Cache: 8 MB I+D on chip per chip, 4 MB shared / 2 cores
 L3 Cache: None
 Other Cache: None
 Memory: 16 GB (8x2GB DDR2 PC2-5300F 2rank CAS 5-5-5 with ECC)
 Disk Subsystem: SAS, 73 GB, 10K RPM
 Other Hardware: None

Software

Operating System: SUSE LINUX Enterprise Server 10 SP1 for x86_64
 Compiler: Intel C++ and Fortran Compiler for Linux32 and Linux64 version 10.1 Build 20070824
 Auto Parallel: Yes
 File System: ReiserFS
 System State: Multi-user, run level 3
 Base Pointers: 32-bit
 Peak Pointers: 32/64-bit
 Other Software: SmartHeap library V8.1 Binutils 2.17.50.0.15



SPEC CINT2006 Result

Copyright 2006-2014 Standard Performance Evaluation Corporation

Sun Microsystems
Sun Fire X4450

SPECint2006 = 25.0
SPECint_base2006 = 21.7

CPU2006 license: 6
Test sponsor: Sun Microsystems
Tested by: Sun Microsystems

Test date: Oct-2007
Hardware Availability: Nov-2007
Software Availability: Nov-2007

Results Table

Benchmark	Base						Peak					
	Seconds	Ratio	Seconds	Ratio	Seconds	Ratio	Seconds	Ratio	Seconds	Ratio	Seconds	Ratio
400.perlbench	527	18.6	526	18.6	<u>526</u>	<u>18.6</u>	<u>427</u>	<u>22.9</u>	426	23.0	428	22.8
401.bzip2	639	15.1	<u>639</u>	<u>15.1</u>	641	15.0	593	16.3	<u>595</u>	<u>16.2</u>	595	16.2
403.gcc	613	13.1	642	12.5	<u>641</u>	<u>12.6</u>	437	18.4	<u>438</u>	<u>18.4</u>	439	18.4
429.mcf	445	20.5	<u>444</u>	<u>20.5</u>	443	20.6	445	20.5	<u>444</u>	<u>20.5</u>	443	20.6
445.gobmk	<u>560</u>	<u>18.7</u>	560	18.7	560	18.7	<u>502</u>	<u>20.9</u>	502	20.9	502	20.9
456.hmmer	607	15.4	<u>607</u>	<u>15.4</u>	608	15.3	350	26.7	350	26.6	<u>350</u>	<u>26.7</u>
458.sjeng	<u>717</u>	<u>16.9</u>	717	16.9	713	17.0	<u>641</u>	<u>18.9</u>	641	18.9	641	18.9
462.libquantum	88.5	234	<u>88.8</u>	<u>233</u>	88.8	233	87.1	238	<u>86.9</u>	<u>239</u>	86.8	239
464.h264ref	760	29.1	<u>755</u>	<u>29.3</u>	752	29.4	689	32.1	690	32.1	<u>690</u>	<u>32.1</u>
471.omnetpp	<u>452</u>	<u>13.8</u>	452	13.8	452	13.8	420	14.9	<u>421</u>	<u>14.8</u>	421	14.8
473.astar	<u>506</u>	<u>13.9</u>	507	13.9	504	13.9	463	15.1	459	15.3	<u>463</u>	<u>15.2</u>
483.xalancbmk	296	23.3	<u>296</u>	<u>23.3</u>	296	23.3	296	23.3	<u>296</u>	<u>23.3</u>	296	23.3

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 stacksize to unlimited
OMP_NUM_THREADS set to 16
KMP_AFFINITY set to physical,0

Platform Notes

Default BIOS configuration was used.

General Notes

All benchmarks were compiled in 32-bit mode except 401.bzip2 and 456.hmmer for peak were compiled in 64-bit mode

Base Compiler Invocation

C benchmarks:
icc

C++ benchmarks:
icpc



SPEC CINT2006 Result

Copyright 2006-2014 Standard Performance Evaluation Corporation

Sun Microsystems
Sun Fire X4450

SPECint2006 = 25.0
SPECint_base2006 = 21.7

CPU2006 license: 6
Test sponsor: Sun Microsystems
Tested by: Sun Microsystems

Test date: Oct-2007
Hardware Availability: Nov-2007
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 -vec-guard-write -parallel -par-runtime-control
C++ benchmarks:
-xT -ipo -O3 -no-prec-div -Wl,-z,muldefs
-L/home/cmplr/usr3/alrahate/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: /home/cmplr/usr3/alrahate/compilers/ic10.1mainline/20070824/Linux64/bin/icc
-L/home/cmplr/usr3/alrahate/compilers/ic10.1mainline/20070824/Linux64/lib
-I/home/cmplr/usr3/alrahate/compilers/ic10.1mainline/20070824/Linux64/include
456.hmmr: /home/cmplr/usr3/alrahate/compilers/ic10.1mainline/20070824/Linux64/bin/icc
-L/home/cmplr/usr3/alrahate/compilers/ic10.1mainline/20070824/Linux64/lib
-I/home/cmplr/usr3/alrahate/compilers/ic10.1mainline/20070824/Linux64/include
C++ benchmarks:
icpc

Peak Portability Flags

400.perlbench: -DSPEC_CPU_LINUX_IA32
401.bzip2: -DSPEC_CPU_LP64
456.hmmr: -DSPEC_CPU_LP64
462.libquantum: -DSPEC_CPU_LINUX

Continued on next page



SPEC CINT2006 Result

Copyright 2006-2014 Standard Performance Evaluation Corporation

Sun Microsystems
Sun Fire X4450

SPECint2006 = 25.0
SPECint_base2006 = 21.7

CPU2006 license: 6
Test sponsor: Sun Microsystems
Tested by: Sun Microsystems

Test date: Oct-2007
Hardware Availability: Nov-2007
Software Availability: Nov-2007

Peak Portability Flags (Continued)

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
-auto-ilp32

403.gcc: -fast -inline-calloc -opt-malloc-options=3

429.mcf: basepeak = yes

445.gobmk: -prof-gen(pass 1) -prof-use(pass 2) -xT -O2 -ipo
-no-prec-div -ansi-alias

456.hmmr: -fast -unroll2 -ansi-alias -opt-multi-version-aggressive
-auto-ilp32

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/home/cmplr/usr3/alrahate/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/home/cmplr/usr3/alrahate/cpu2006.1.0/lib -lsmartheap

483.xalancbmk: basepeak = yes



SPEC CINT2006 Result

Copyright 2006-2014 Standard Performance Evaluation Corporation

Sun Microsystems
Sun Fire X4450

SPECint2006 = 25.0
SPECint_base2006 = 21.7

CPU2006 license: 6
Test sponsor: Sun Microsystems
Tested by: Sun Microsystems

Test date: Oct-2007
Hardware Availability: Nov-2007
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.20090714.02.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.20090714.02.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.

Tested with SPEC CPU2006 v1.0.
Report generated on Tue Jul 22 14:18:03 2014 by SPEC CPU2006 PS/PDF formatter v6932.
Originally published on 30 October 2007.