



SPEC® CINT2006 Result

Copyright 2006-2014 Standard Performance Evaluation Corporation

Sun Microsystems

SPECint®2006 = 36.8

Sun Blade X6270 (Intel Xeon X5570 2.93GHz)

SPECint_base2006 = 32.0

CPU2006 license: 6

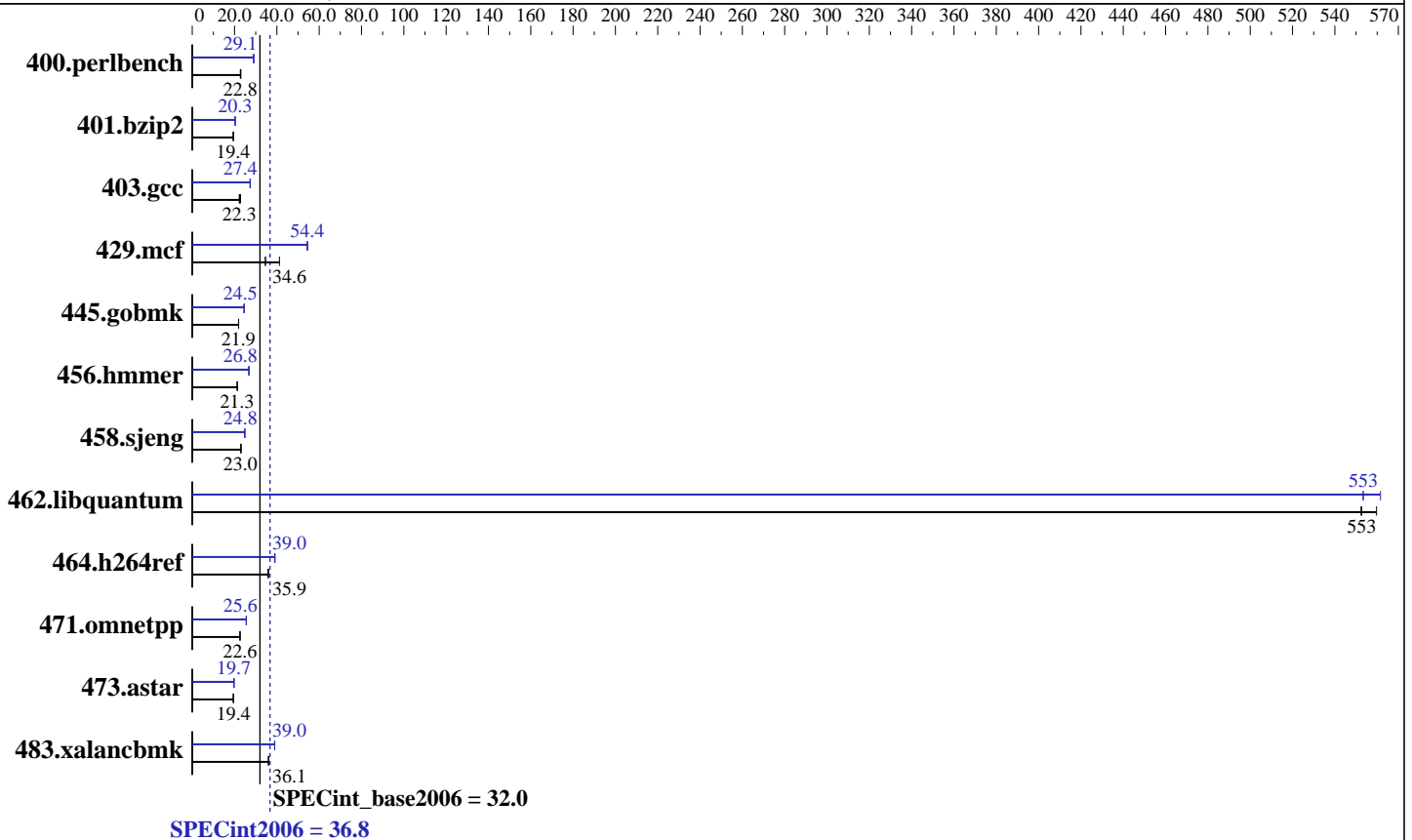
Test date: Apr-2009

Test sponsor: Sun Microsystems

Hardware Availability: Apr-2009

Tested by: Sun Microsystems

Software Availability: Jun-2009



Hardware

CPU Name: Intel Xeon X5570
 CPU Characteristics: Intel Turbo Boost Technology up to 3.33 GHz
 CPU MHz: 2933
 FPU: Integrated
 CPU(s) enabled: 8 cores, 2 chips, 4 cores/chip, 2 threads/core
 CPU(s) orderable: 1 or 2 chips
 Primary Cache: 32 KB I + 32 KB D on chip per core
 Secondary Cache: 256 KB I+D on chip per core
 L3 Cache: 8 MB I+D on chip per chip
 Other Cache: None
 Memory: 24 GB (6 x 4 GB DDR3-1333)
 Disk Subsystem: 134 GB using 1x ST914602SSUN146GSAS SAS 10 K RPM
 Other Hardware: None

Software

Operating System: OpenSolaris 2008.11
 Compiler: Sun Studio 12 Update 1 (internal build 39.0)
 Auto Parallel: Yes
 File System: zfs with gzip compression
 System State: Default
 Base Pointers: 64-bit
 Peak Pointers: 32/64-bit
 Other Software: MicroQuill SmartHeap Library 9.01 for x64



SPEC CINT2006 Result

Copyright 2006-2014 Standard Performance Evaluation Corporation

Sun Microsystems

SPECint2006 = 36.8

Sun Blade X6270 (Intel Xeon X5570 2.93GHz)

SPECint_base2006 = 32.0

CPU2006 license: 6

Test sponsor: Sun Microsystems

Tested by: Sun Microsystems

Test date: Apr-2009

Hardware Availability: Apr-2009

Software Availability: Jun-2009

Results Table

Benchmark	Base						Peak					
	Seconds	Ratio	Seconds	Ratio	Seconds	Ratio	Seconds	Ratio	Seconds	Ratio	Seconds	Ratio
400.perlbench	430	22.7	425	23.0	<u>428</u>	<u>22.8</u>	337	29.0	336	29.1	<u>336</u>	<u>29.1</u>
401.bzip2	498	19.4	497	19.4	<u>497</u>	<u>19.4</u>	<u>476</u>	<u>20.3</u>	476	20.3	475	20.3
403.gcc	352	22.8	361	22.3	<u>361</u>	<u>22.3</u>	294	27.4	<u>294</u>	<u>27.4</u>	294	27.4
429.mcf	264	34.6	221	41.2	<u>263</u>	<u>34.6</u>	<u>168</u>	<u>54.4</u>	168	54.4	168	54.4
445.gobmk	<u>479</u>	<u>21.9</u>	479	21.9	478	21.9	<u>428</u>	<u>24.5</u>	428	24.5	428	24.5
456.hammer	438	21.3	439	21.3	<u>438</u>	<u>21.3</u>	348	26.8	348	26.8	<u>348</u>	<u>26.8</u>
458.sjeng	526	23.0	526	23.0	<u>526</u>	<u>23.0</u>	487	24.8	487	24.8	<u>487</u>	<u>24.8</u>
462.libquantum	<u>37.5</u>	<u>553</u>	37.5	552	37.0	560	37.4	553	36.9	562	<u>37.4</u>	<u>553</u>
464.h264ref	616	35.9	615	36.0	<u>616</u>	<u>35.9</u>	567	39.0	<u>567</u>	<u>39.0</u>	566	39.1
471.omnetpp	277	22.5	277	22.6	<u>277</u>	<u>22.6</u>	245	25.5	244	25.6	<u>244</u>	<u>25.6</u>
473.astar	361	19.4	361	19.5	<u>361</u>	<u>19.4</u>	356	19.7	356	19.7	<u>356</u>	<u>19.7</u>
483.xalancbmk	191	36.0	191	36.1	<u>191</u>	<u>36.1</u>	<u>177</u>	<u>39.0</u>	177	39.0	177	39.0

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

Operating System Notes

```
ulimit -s 131072 (shell): increases stack
```

```
/etc/system parameters
tune_t_fsflushr=10
autoup=900
set lpg_alloc_prefer=1
set zfs:zfs_arc_max = 0x10000000
```

Platform Notes

```
AMIBIOS Build Date 1/26/09 ID 07.01.36.00
Default BIOS settings used except:
Intel VT-d: Disabled. VT-d, if enabled, supports
remapping of I/O DMA transfers for virtualization.
```

General Notes

```
Environment variables set by runspec before the start of the run:
OMP_NUM_THREADS = "8"
SUNW_MP_PROCBIND = "true"
SUNW_MP_THR_IDLE = "SPIN"
```



SPEC CINT2006 Result

Copyright 2006-2014 Standard Performance Evaluation Corporation

Sun Microsystems

SPECint2006 = 36.8

Sun Blade X6270 (Intel Xeon X5570 2.93GHz)

SPECint_base2006 = 32.0

CPU2006 license: 6

Test sponsor: Sun Microsystems

Tested by: Sun Microsystems

Test date: Apr-2009

Hardware Availability: Apr-2009

Software Availability: Jun-2009

Base Compiler Invocation

C benchmarks:

/data1/SUNWspro.b39/SUNWspro/bin/cc

C++ benchmarks:

/data1/SUNWspro.b39/SUNWspro/bin/CC

Base Portability Flags

400.perlbench: -DSPEC_CPU_LP64 -DSPEC_CPU_SOLARIS_X64
 401.bzip2: -DSPEC_CPU_LP64
 403.gcc: -DSPEC_CPU_LP64 -DSPEC_CPU_SOLARIS
 429.mcf: -DSPEC_CPU_LP64
 445.gobmk: -DSPEC_CPU_LP64
 456.hmmer: -DSPEC_CPU_LP64
 458.sjeng: -DSPEC_CPU_LP64
 462.libquantum: -DSPEC_CPU_LP64 -DSPEC_CPU_SOLARIS
 464.h264ref: -DSPEC_CPU_LP64
 471.omnetpp: -DSPEC_CPU_LP64
 473.astar: -DSPEC_CPU_LP64
 483.xalancbmk: -DSPEC_CPU_LP64 -DSPEC_CPU_SOLARIS

Base Optimization Flags

C benchmarks:

-fast -xipo=2 -m64 -xpagesize=2M -xprefetch -xalias_level=std
-xautopar

C++ benchmarks:

-fast -xipo=2 -m64 -xpagesize=2M -xvector=simd -xprefetch=no%auto
-xalias_level=compatible
-L/data1/SmartHeap_9/lib -R/data1/SmartHeap_9/lib -lsmartheap64
-library=stlport4

Base Other Flags

C benchmarks:

-V -# -xjobs=16

C++ benchmarks:

-verbose=diags,version -xjobs=16



SPEC CINT2006 Result

Copyright 2006-2014 Standard Performance Evaluation Corporation

Sun Microsystems

SPECint2006 = 36.8

Sun Blade X6270 (Intel Xeon X5570 2.93GHz)

SPECint_base2006 = 32.0

CPU2006 license: 6

Test sponsor: Sun Microsystems

Tested by: Sun Microsystems

Test date: Apr-2009

Hardware Availability: Apr-2009

Software Availability: Jun-2009

Peak Compiler Invocation

C benchmarks:

/data1/SUNWspro.b39/SUNWspro/bin/cc

C++ benchmarks:

/data1/SUNWspro.b39/SUNWspro/bin/CC

Peak Portability Flags

400.perlbench: -DSPEC_CPU_SOLARIS_IA32

403.gcc: -DSPEC_CPU_LP64 -DSPEC_CPU_SOLARIS

462.libquantum: -DSPEC_CPU_SOLARIS

483.xalancbmk: -DSPEC_CPU_SOLARIS

Peak Optimization Flags

C benchmarks:

400.perlbench: -xprofile=collect:./feedback(pass 1)

-xprofile=use:./feedback(pass 2) -fast -xipo=2

-xpagesize=2M -xvector=simd -xalias_level=std

-xprefetch=no%auto -lbsdmalloc -lumem

401.bzip2: -xprofile=collect:./feedback(pass 1)

-xprofile=use:./feedback(pass 2) -fast -xipo=2 -m64

-xpagesize=2M -xalias_level=strong -xprefetch=no%auto

-lumem

403.gcc: -xprofile=collect:./feedback(pass 1)

-xprofile=use:./feedback(pass 2) -fast -xipo=2

-xpagesize=2M -xalias_level=std -m64 -xprefetch=no%auto

429.mcf: -xprofile=collect:./feedback(pass 1)

-xprofile=use:./feedback(pass 2) -fast -xipo=2

-xalias_level=strict -xprefetch=no%auto -lbsdmalloc

445.gobmk: -xprofile=collect:./feedback(pass 1)

-xprofile=use:./feedback(pass 2) -fast -m64 -xpagesize=2M

-xrestrict -xalias_level=strong -xdepend -xautopar -lmvec

456.hmmer: -xprofile=collect:./feedback(pass 1)

-xprofile=use:./feedback(pass 2) -fast -xipo=2 -m64

458.sjeng: -xprofile=collect:./feedback(pass 1)

-xprofile=use:./feedback(pass 2) -fast -xipo=2 -m64

-xpagesize=2M -xvector=simd -xrestrict -xalias_level=std

-xprefetch=no%auto

Continued on next page

Standard Performance Evaluation Corporation

info@spec.org

http://www.spec.org/



SPEC CINT2006 Result

Copyright 2006-2014 Standard Performance Evaluation Corporation

Sun Microsystems

SPECint2006 = 36.8

Sun Blade X6270 (Intel Xeon X5570 2.93GHz)

SPECint_base2006 = 32.0

CPU2006 license: 6

Test sponsor: Sun Microsystems

Tested by: Sun Microsystems

Test date: Apr-2009

Hardware Availability: Apr-2009

Software Availability: Jun-2009

Peak Optimization Flags (Continued)

462.libquantum: -fast -xipo=2 -m64 -xpagesize=2M -xautopar -xreduction

464.h264ref: -xprofile=collect:./feedback(pass 1)
-xprofile=use:./feedback(pass 2) -fast -xipo=2 -m64
-xpagesize=2M -xalias_level=strong -xautopar

C++ benchmarks:

471.omnetpp: -xprofile=collect:./feedback(pass 1)
-xprofile=use:./feedback(pass 2) -fast -xipo=2
-xpagesize=2M
-L/data1/SmartHeap_9/lib -R/data1/SmartHeap_9/lib -lsmartheap
-library=stlport4

473.astar: -xprofile=collect:./feedback(pass 1)
-xprofile=use:./feedback(pass 2) -fast -xipo=2 -m64
-xpagesize=2M
-L/data1/SmartHeap_9/lib -R/data1/SmartHeap_9/lib -lsmartheap_mt64
-xalias_level=compatible -library=stlport4 -xautopar

483.xalancbmk: -xprofile=collect:./feedback(pass 1)
-xprofile=use:./feedback(pass 2) -fast -xipo=2 -m64
-xpagesize=2M -xunroll=12
-L/data1/SmartHeap_9/lib -R/data1/SmartHeap_9/lib -lsmartheap64
-library=stlport4

Peak Other Flags

C benchmarks:

-V -# -xjobs=16

C++ benchmarks:

-verbose=diags,version -xjobs=16

The flags file that was used to format this result can be browsed at

http://www.spec.org/cpu2006/flags/Sun-OpenSolaris-Studio-x86_64.20090710.00.html

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

http://www.spec.org/cpu2006/flags/Sun-OpenSolaris-Studio-x86_64.20090710.00.xml



SPEC CINT2006 Result

Copyright 2006-2014 Standard Performance Evaluation Corporation

Sun Microsystems

SPECint2006 = 36.8

Sun Blade X6270 (Intel Xeon X5570 2.93GHz)

SPECint_base2006 = 32.0

CPU2006 license: 6

Test sponsor: Sun Microsystems

Tested by: Sun Microsystems

Test date: Apr-2009

Hardware Availability: Apr-2009

Software Availability: Jun-2009

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 Wed Jul 23 01:54:04 2014 by SPEC CPU2006 PS/PDF formatter v6932.
Originally published on 28 April 2009.