



SPEC® CINT2006 Result

Copyright 2006-2014 Standard Performance Evaluation Corporation

Supermicro

SPECint®2006 = 33.4

Motherboard X8SIT-F (Intel Xeon X3450, 2.66 GHz)

SPECint_base2006 = 30.8

CPU2006 license: 001176

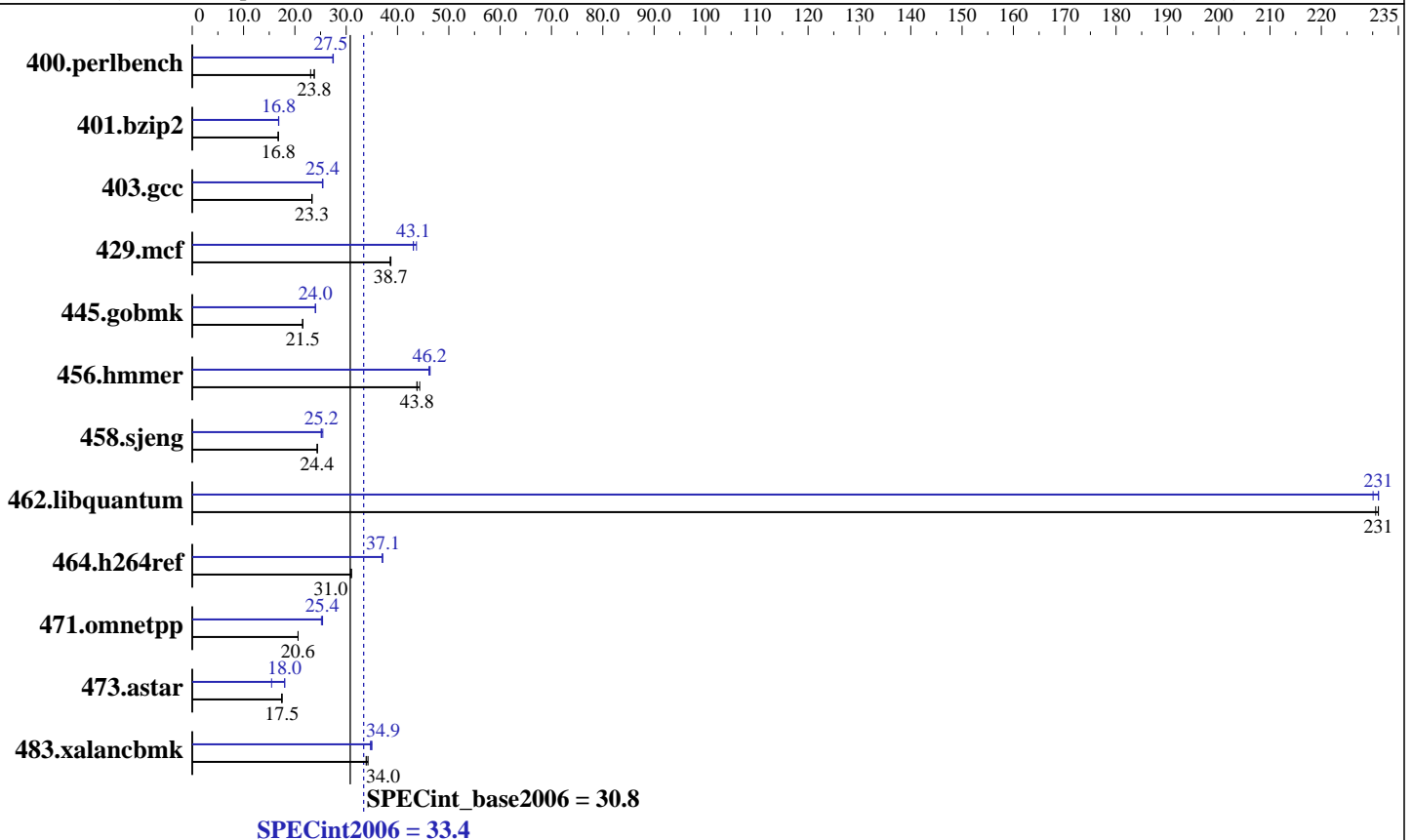
Test date: May-2010

Test sponsor: Supermicro

Hardware Availability: Mar-2010

Tested by: Supermicro

Software Availability: Jan-2010



Hardware

CPU Name: Intel Xeon X3450
 CPU Characteristics: Intel Turbo Boost Technology up to 3.20 GHz
 CPU MHz: 2666
 FPU: Integrated
 CPU(s) enabled: 4 cores, 1 chip, 4 cores/chip, 2 threads/core
 CPU(s) orderable: 1 chip
 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: 16 GB (4 x 4 GB DDR3-1333 RDIMM, ECC, CL9)
 Disk Subsystem: 1 x 160 GB SATA II, 7200 RPM
 Other Hardware: None

Software

Operating System: SUSE Linux Enterprise Server 11 (x86_64)
 Kernel 2.6.27.19-5-default
 Compiler: Intel C++ Professional Compiler for IA32 and Intel 64, Version 11.1
 Build 20091130 Package ID: 1_cproc_p_11.1.064
 Auto Parallel: Yes
 File System: ReiserFS
 System State: Run level 3 (multi-user)
 Base Pointers: 64-bit
 Peak Pointers: 32/64-bit
 Other Software: Microquill SmartHeap V8.1



SPEC CINT2006 Result

Copyright 2006-2014 Standard Performance Evaluation Corporation

Supermicro

SPECint2006 = 33.4

Motherboard X8SIT-F (Intel Xeon X3450, 2.66 GHz)

SPECint_base2006 = 30.8

CPU2006 license: 001176
Test sponsor: Supermicro
Tested by: Supermicro

Test date: May-2010
Hardware Availability: Mar-2010
Software Availability: Jan-2010

Results Table

Benchmark	Base						Peak					
	Seconds	Ratio	Seconds	Ratio	Seconds	Ratio	Seconds	Ratio	Seconds	Ratio	Seconds	Ratio
400.perlbench	424	23.1	<u>411</u>	<u>23.8</u>	411	23.8	<u>357</u>	<u>27.4</u>	355	27.5	<u>356</u>	<u>27.5</u>
401.bzip2	<u>576</u>	<u>16.8</u>	575	16.8	576	16.7	<u>573</u>	<u>16.8</u>	573	16.8	574	16.8
403.gcc	<u>345</u>	<u>23.3</u>	345	23.3	346	23.3	317	25.4	316	25.5	<u>317</u>	<u>25.4</u>
429.mcf	237	38.6	236	38.7	<u>236</u>	<u>38.7</u>	209	43.7	<u>212</u>	<u>43.1</u>	212	43.1
445.gobmk	<u>487</u>	<u>21.5</u>	487	21.5	487	21.5	437	24.0	436	24.1	<u>437</u>	<u>24.0</u>
456.hammer	211	44.3	<u>213</u>	<u>43.8</u>	213	43.8	<u>202</u>	<u>46.2</u>	201	46.4	202	46.1
458.sjeng	496	24.4	<u>497</u>	<u>24.4</u>	497	24.4	<u>481</u>	<u>25.2</u>	481	25.1	476	25.4
462.libquantum	89.7	231	<u>89.7</u>	<u>231</u>	89.9	231	89.6	231	90.1	230	<u>89.6</u>	<u>231</u>
464.h264ref	717	30.9	<u>715</u>	<u>31.0</u>	713	31.0	598	37.0	<u>597</u>	<u>37.1</u>	597	37.1
471.omnetpp	303	20.6	<u>303</u>	<u>20.6</u>	303	20.6	248	25.2	<u>246</u>	<u>25.4</u>	246	25.4
473.astar	401	17.5	<u>402</u>	<u>17.5</u>	403	17.4	<u>390</u>	<u>18.0</u>	454	15.5	390	18.0
483.xalancbmk	<u>203</u>	<u>34.0</u>	201	34.3	204	33.9	<u>198</u>	<u>34.9</u>	197	35.0	199	34.7

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 stack size to unlimited prior to run
OMP_NUM_THREADS set to number of cores
KMP_AFFINITY set to granularity=fine,scatter

Platform Notes

Fan speed set to Full Speed in BIOS Setup.
As tested, the system used a Supermicro
PWS-1K21P-1R power supply, SNK-P0046P heatsink,
and FAN-0077L cooling fan.

General Notes

Binaries were compiled on SLES 10 with Binutils 2.18.50.0.7.20080502

Base Compiler Invocation

C benchmarks:
icc -m64

C++ benchmarks:
icpc -m64



SPEC CINT2006 Result

Copyright 2006-2014 Standard Performance Evaluation Corporation

Supermicro

SPECint2006 = 33.4

Motherboard X8SIT-F (Intel Xeon X3450, 2.66 GHz)

SPECint_base2006 = 30.8

CPU2006 license: 001176

Test date: May-2010

Test sponsor: Supermicro

Hardware Availability: Mar-2010

Tested by: Supermicro

Software Availability: Jan-2010

Base Portability Flags

```

400.perlbench: -DSPEC_CPU_LP64 -DSPEC_CPU_LINUX_X64
401.bzip2: -DSPEC_CPU_LP64
403.gcc: -DSPEC_CPU_LP64
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_LINUX
464.h264ref: -DSPEC_CPU_LP64
471.omnetpp: -DSPEC_CPU_LP64
473.astar: -DSPEC_CPU_LP64
483.xalancbmk: -DSPEC_CPU_LP64 -DSPEC_CPU_LINUX

```

Base Optimization Flags

C benchmarks:

-xSSE4.2 -ipo -O3 -no-prec-div -static -parallel -opt-prefetch

C++ benchmarks:

-xSSE4.2 -ipo -O3 -no-prec-div -opt-prefetch -Wl,-z,muldefs
-L/home/cmplr/usr3/alrahate/cpu2006.1.1.ic11.1/libic11.1-64bit -lsmartheap64

Base Other Flags

C benchmarks:

403.gcc: -Dalloca=_alloca

Peak Compiler Invocation

C benchmarks (except as noted below):

icc -m64

400.perlbench: icc -m32

429.mcf: icc -m32

445.gobmk: icc -m32

464.h264ref: icc -m32

C++ benchmarks (except as noted below):

icpc -m32

Continued on next page



SPEC CINT2006 Result

Copyright 2006-2014 Standard Performance Evaluation Corporation

Supermicro

SPECint2006 = 33.4

Motherboard X8SIT-F (Intel Xeon X3450, 2.66 GHz)

SPECint_base2006 = 30.8

CPU2006 license: 001176

Test date: May-2010

Test sponsor: Supermicro

Hardware Availability: Mar-2010

Tested by: Supermicro

Software Availability: Jan-2010

Peak Compiler Invocation (Continued)

473.astar: icpc -m64

Peak Portability Flags

400.perlbench: -DSPEC_CPU_LINUX_IA32
 401.bzip2: -DSPEC_CPU_LP64
 403.gcc: -DSPEC_CPU_LP64
 456.hmmer: -DSPEC_CPU_LP64
 458.sjeng: -DSPEC_CPU_LP64
 462.libquantum: -DSPEC_CPU_LP64 -DSPEC_CPU_LINUX
 473.astar: -DSPEC_CPU_LP64
 483.xalancbmk: -DSPEC_CPU_LINUX

Peak Optimization Flags

C benchmarks:

400.perlbench: -xSSE4.2(pass 2) -prof-gen(pass 1) -ipo(pass 2)
 -O3(pass 2) -no-prec-div(pass 2) -static(pass 2)
 -prof-use(pass 2) -ansi-alias -opt-prefetch

401.bzip2: -xSSE4.2(pass 2) -prof-gen(pass 1) -ipo(pass 2)
 -O3(pass 2) -no-prec-div -static(pass 2) -prof-use(pass 2)
 -auto-ilp32 -opt-prefetch -ansi-alias

403.gcc: -xSSE4.2 -ipo -O3 -no-prec-div -static -inline-calloc
 -opt-malloc-options=3 -auto-ilp32

429.mcf: -xSSE4.2 -ipo -O3 -no-prec-div -static -opt-prefetch

445.gobmk: -xSSE4.2(pass 2) -prof-gen(pass 1) -prof-use(pass 2) -O2
 -ipo -no-prec-div -ansi-alias

456.hmmer: -xSSE4.2 -ipo -O3 -no-prec-div -static -unroll2
 -ansi-alias -auto-ilp32

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

462.libquantum: -xSSE4.2 -ipo -O3 -no-prec-div -static -parallel
 -opt-prefetch -par-schedule-static=32768 -ansi-alias

464.h264ref: -xSSE4.2(pass 2) -prof-gen(pass 1) -ipo(pass 2)
 -O3(pass 2) -no-prec-div(pass 2) -static(pass 2)
 -prof-use(pass 2) -unroll2 -ansi-alias

Continued on next page



SPEC CINT2006 Result

Copyright 2006-2014 Standard Performance Evaluation Corporation

Supermicro

SPECint2006 = 33.4

Motherboard X8SIT-F (Intel Xeon X3450, 2.66 GHz)

SPECint_base2006 = 30.8

CPU2006 license: 001176

Test date: May-2010

Test sponsor: Supermicro

Hardware Availability: Mar-2010

Tested by: Supermicro

Software Availability: Jan-2010

Peak Optimization Flags (Continued)

C++ benchmarks:

471.omnetpp: -xSSE4.2(pass 2) -prof-gen(pass 1) -ipo(pass 2)
-O3(pass 2) -no-prec-div(pass 2) -prof-use(pass 2)
-ansi-alias -opt-ra-region-strategy=block -Wl,-z,muldefs
-L/home/cmplr/usr3/alrahate/cpu2006.1.1.ic11.1/libic11.1-32bit -lsmartheap

473.astar: -xSSE4.2(pass 2) -prof-gen(pass 1) -ipo(pass 2)
-O3(pass 2) -no-prec-div(pass 2) -prof-use(pass 2)
-ansi-alias -opt-ra-region-strategy=routine -Wl,-z,muldefs
-L/home/cmplr/usr3/alrahate/cpu2006.1.1.ic11.1/libic11.1-64bit -lsmartheap64

483.xalancbmk: -xSSE4.2 -ipo -O3 -no-prec-div -opt-prefetch
-Wl,-z,muldefs
-L/home/cmplr/usr3/alrahate/cpu2006.1.1.ic11.1/libic11.1-32bit -lsmartheap

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-ic11.1-linux64-revE.20100316.html>

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

<http://www.spec.org/cpu2006/flags/Intel-ic11.1-linux64-revE.20100316.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 Wed Jul 23 08:46:40 2014 by SPEC CPU2006 PS/PDF formatter v6932.
Originally published on 9 June 2010.