



SPEC® CINT2006 Result

Copyright 2006-2014 Standard Performance Evaluation Corporation

Supermicro

SuperStorage Server 5048R-E1CR36L
(X10SRH-CF/CLN4F, Intel Xeon E5-2697 v3)

SPECint®2006 = 65.3

SPECint_base2006 = 62.8

CPU2006 license: 001176

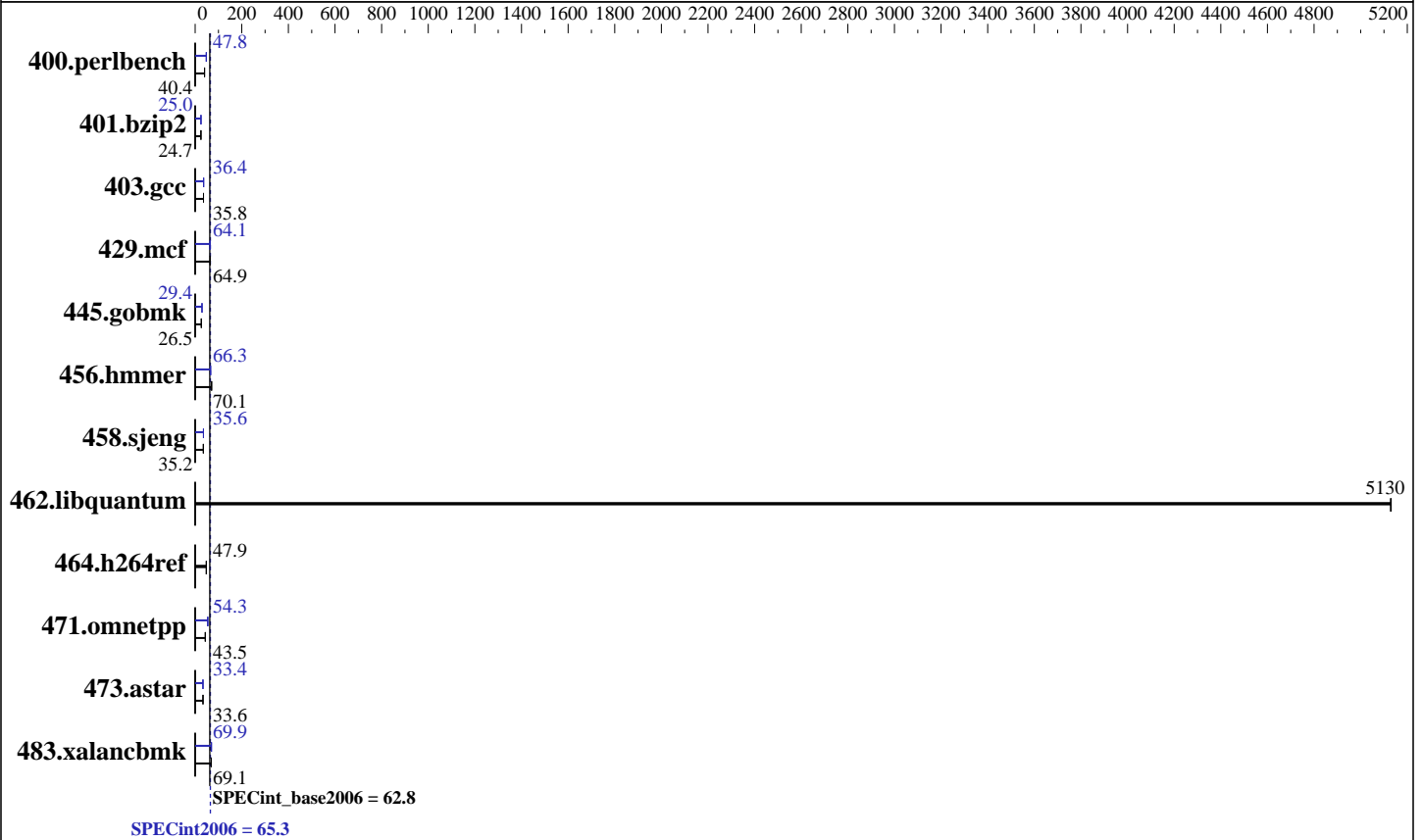
Test sponsor: Supermicro

Tested by: Supermicro

Test date: May-2014

Hardware Availability: Sep-2014

Software Availability: Nov-2013



Hardware

CPU Name: Intel Xeon E5-2697 v3
 CPU Characteristics: Intel Turbo Boost Technology up to 3.60 GHz
 CPU MHz: 2600
 FPU: Integrated
 CPU(s) enabled: 14 cores, 1 chip, 14 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: 35 MB I+D on chip per chip
 Other Cache: None
 Memory: 128 GB (8 x 16 GB 2Rx4 PC4-2133P-R)
 Disk Subsystem: 1 x 1000 GB SATA II, 7200 RPM
 Other Hardware: None

Software

Operating System: Red Hat Enterprise Linux Server release 6.5, Kernel 2.6.32-431.el6.x86_64
 Compiler: C/C++; Version 14.0.0.080 of Intel C++ Studio XE for Linux
 Auto Parallel: Yes
 File System: ext4
 System State: Run level 3 (multi-user)
 Base Pointers: 32/64-bit
 Peak Pointers: 32/64-bit
 Other Software: Microquill SmartHeap V10.0



SPEC CINT2006 Result

Copyright 2006-2014 Standard Performance Evaluation Corporation

Supermicro

SuperStorage Server 5048R-E1CR36L
(X10SRH-CF/CLN4F, Intel Xeon E5-2697 v3)

SPECint2006 = **65.3**

SPECint_base2006 = **62.8**

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

Test date: May-2014
Hardware Availability: Sep-2014
Software Availability: Nov-2013

Results Table

| Benchmark | Base | | | | | | Peak | | | | | |
|----------------|--------------------|--------------------|-------------------|--------------------|-------------------|--------------------|--------------------|--------------------|--------------------|--------------------|-------------------|--------------------|
| | Seconds | Ratio | Seconds | Ratio | Seconds | Ratio | Seconds | Ratio | Seconds | Ratio | Seconds | Ratio |
| 400.perlbench | 242 | 40.4 | 243 | 40.2 | <u>242</u> | <u>40.4</u> | 204 | 47.9 | <u>204</u> | <u>47.8</u> | 204 | 47.8 |
| 401.bzip2 | <u>390</u> | <u>24.7</u> | 392 | 24.6 | 389 | 24.8 | 387 | 24.9 | <u>387</u> | <u>25.0</u> | 386 | 25.0 |
| 403.gcc | 224 | 35.9 | <u>225</u> | <u>35.8</u> | 225 | 35.7 | 222 | 36.3 | 221 | 36.5 | <u>221</u> | <u>36.4</u> |
| 429.mcf | 140 | 65.1 | <u>141</u> | <u>64.9</u> | 142 | 64.3 | 143 | 63.8 | 142 | 64.1 | <u>142</u> | <u>64.1</u> |
| 445.gobmk | <u>396</u> | <u>26.5</u> | 396 | 26.5 | 396 | 26.5 | 357 | 29.4 | <u>357</u> | <u>29.4</u> | 357 | 29.4 |
| 456.hammer | 131 | 71.2 | 133 | 69.9 | <u>133</u> | <u>70.1</u> | 142 | 65.9 | <u>141</u> | <u>66.3</u> | 141 | 66.4 |
| 458.sjeng | <u>344</u> | <u>35.2</u> | 344 | 35.2 | 344 | 35.2 | <u>340</u> | <u>35.6</u> | 340 | 35.6 | 340 | 35.6 |
| 462.libquantum | <u>4.04</u> | <u>5130</u> | 4.04 | 5130 | 4.04 | 5130 | <u>4.04</u> | <u>5130</u> | 4.04 | 5130 | 4.04 | 5130 |
| 464.h264ref | 461 | 48.0 | 464 | 47.7 | <u>462</u> | <u>47.9</u> | 461 | 48.0 | 464 | 47.7 | <u>462</u> | <u>47.9</u> |
| 471.omnetpp | <u>144</u> | <u>43.5</u> | 143 | 43.7 | 144 | 43.4 | 115 | 54.3 | 116 | 53.9 | <u>115</u> | <u>54.3</u> |
| 473.astar | <u>209</u> | <u>33.6</u> | 209 | 33.6 | 208 | 33.7 | 211 | 33.3 | <u>210</u> | <u>33.4</u> | 208 | 33.7 |
| 483.xalancbmk | <u>99.8</u> | <u>69.1</u> | 99.9 | 69.0 | 99.7 | 69.2 | <u>98.7</u> | <u>69.9</u> | <u>98.7</u> | <u>69.9</u> | 98.6 | 70.0 |

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

Stack size set to unlimited using "ulimit -s unlimited"

Platform Notes

BIOS Settings:
Early Snoop = Disabled
Enforce POR = Disabled
Hyper-Threading (ALL) = Enabled
Memory Frequency = 2133

General Notes

Environment variables set by runspec before the start of the run:
KMP_AFFINITY = "granularity=fine,scatter"
LD_LIBRARY_PATH = "/usr/cpu2006/libs/32:/usr/cpu2006/libs/64:/usr/cpu2006/sh"
OMP_NUM_THREADS = "14"

Binaries compiled on a system with 1x Core i7-860 CPU + 8GB
memory using RedHat EL 6.4
Transparent Huge Pages enabled with:
echo always > /sys/kernel/mm/redhat_transparent_hugepage/enabled
runspec command invoked through numactl i.e.:

Continued on next page



SPEC CINT2006 Result

Copyright 2006-2014 Standard Performance Evaluation Corporation

Supermicro

SuperStorage Server 5048R-E1CR36L
(X10SRH-CF/CLN4F, Intel Xeon E5-2697 v3)

SPECint2006 = 65.3

SPECint_base2006 = 62.8

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

Test date: May-2014
Hardware Availability: Sep-2014
Software Availability: Nov-2013

General Notes (Continued)

numactl --interleave=all runspec <etc>

Base Compiler Invocation

C benchmarks:
icc -m64

C++ benchmarks:
icpc -m64

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.xalanbmk: -DSPEC_CPU_LP64 -DSPEC_CPU_LINUX

Base Optimization Flags

C benchmarks:
-xCORE-AVX2 -ipo -O3 -no-prec-div -parallel -opt-prefetch -auto-p32

C++ benchmarks:
-xCORE-AVX2 -ipo -O3 -no-prec-div -opt-prefetch -auto-p32
-Wl,-z,muldefs -L/sh -lsmartheap64

Base Other Flags

C benchmarks:
403.gcc: -Dalloca=_alloca



SPEC CINT2006 Result

Copyright 2006-2014 Standard Performance Evaluation Corporation

Supermicro

SuperStorage Server 5048R-E1CR36L
(X10SRH-CF/CLN4F, Intel Xeon E5-2697 v3)

SPECint2006 = 65.3

SPECint_base2006 = 62.8

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

Test date: May-2014
Hardware Availability: Sep-2014
Software Availability: Nov-2013

Peak Compiler Invocation

C benchmarks (except as noted below):

icc -m64

400.perlbench: icc -m32

445.gobmk: icc -m32

C++ benchmarks (except as noted below):

icpc -m32

473.astar: icpc -m64

Peak Portability Flags

400.perlbench: -DSPEC_CPU_LINUX_IA32
401.bzip2: -DSPEC_CPU_LP64
403.gcc: -DSPEC_CPU_LP64
429.mcf: -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
473.astar: -DSPEC_CPU_LP64
483.xalancbmk: -DSPEC_CPU_LINUX

Peak Optimization Flags

C benchmarks:

400.perlbench: -xCORE-AVX2(pass 2) -prof-gen(pass 1) -ipo(pass 2)
-O3(pass 2) -no-prec-div(pass 2) -prof-use(pass 2)
-opt-prefetch -ansi-alias

401.bzip2: -xCORE-AVX2(pass 2) -prof-gen(pass 1) -ipo(pass 2)
-O3(pass 2) -no-prec-div -prof-use(pass 2) -auto-ilp32
-opt-prefetch -ansi-alias

403.gcc: -xCORE-AVX2 -ipo -O3 -no-prec-div -inline-calloc
-opt-malloc-options=3 -auto-ilp32

429.mcf: -xCORE-AVX2 -ipo -O3 -no-prec-div -parallel
-opt-prefetch -auto-p32

445.gobmk: -xCORE-AVX2(pass 2) -prof-gen(pass 1) -prof-use(pass 2)
-ansi-alias

Continued on next page



SPEC CINT2006 Result

Copyright 2006-2014 Standard Performance Evaluation Corporation

Supermicro

SuperStorage Server 5048R-E1CR36L
(X10SRH-CF/CLN4F, Intel Xeon E5-2697 v3)

SPECint2006 = 65.3

SPECint_base2006 = 62.8

CPU2006 license: 001176

Test sponsor: Supermicro

Tested by: Supermicro

Test date: May-2014

Hardware Availability: Sep-2014

Software Availability: Nov-2013

Peak Optimization Flags (Continued)

456.hmmr: -xCORE-AVX2 -ipo -O3 -no-prec-div -unroll2 -auto-ilp32
-ansi-alias

458.sjeng: -xCORE-AVX2(pass 2) -prof-gen(pass 1) -ipo(pass 2)
-O3(pass 2) -no-prec-div(pass 2) -prof-use(pass 2)
-unroll4

462.libquantum: basepeak = yes

464.h264ref: basepeak = yes

C++ benchmarks:

471.omnetpp: -xCORE-AVX2(pass 2) -prof-gen(pass 1) -ipo(pass 2)
-O3(pass 2) -no-prec-div(pass 2) -prof-use(pass 2)
-opt-ra-region-strategy=block -ansi-alias
-Wl,-z,muldefs -L/sh -lsmarheap

473.astar: -xCORE-AVX2 -ipo -O3 -no-prec-div -opt-prefetch
-auto-p32 -Wl,-z,muldefs -L/sh -lsmarheap64

483.xalancbmk: -xCORE-AVX2 -ipo -O3 -no-prec-div -opt-prefetch
-ansi-alias -Wl,-z,muldefs -L/sh -lsmarheap

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-ic14.0-official-linux64.20140128.html>

<http://www.spec.org/cpu2006/flags/Supermicro-Platform-Settings-V1.2-revE.html>

You can also download the XML flags sources by saving the following links:

<http://www.spec.org/cpu2006/flags/Intel-ic14.0-official-linux64.20140128.xml>

<http://www.spec.org/cpu2006/flags/Supermicro-Platform-Settings-V1.2-revE.xml>



SPEC CINT2006 Result

Copyright 2006-2014 Standard Performance Evaluation Corporation

Supermicro

SuperStorage Server 5048R-E1CR36L
(X10SRH-CF/CLN4F , Intel Xeon E5-2697 v3)

SPECint2006 = 65.3

SPECint_base2006 = 62.8

CPU2006 license: 001176

Test sponsor: Supermicro

Tested by: Supermicro

Test date: May-2014

Hardware Availability: Sep-2014

Software Availability: Nov-2013

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 v1.2.
Report generated on Wed Nov 12 10:17:35 2014 by SPEC CPU2006 PS/PDF formatter v6932.
Originally published on 7 November 2014.