



SPEC[®] CINT2006 Result

Copyright 2006-2014 Standard Performance Evaluation Corporation

Supermicro

SuperServer 6028TP-HTFR
(X10DRT-PIBF, Intel Xeon E5-2660 v3)

SPECint[®]2006 = 61.2

SPECint_base2006 = 58.7

CPU2006 license: 001176

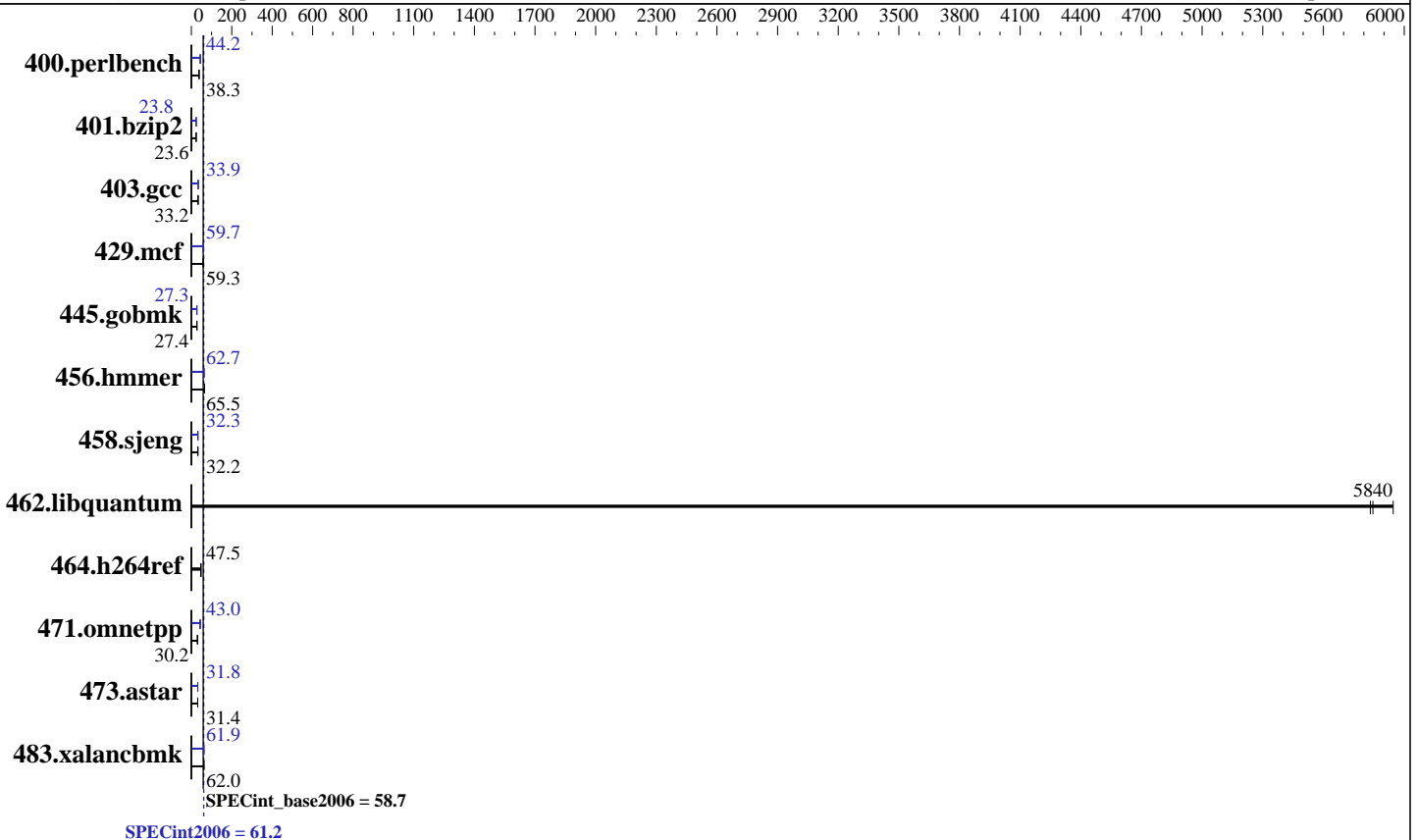
Test sponsor: Supermicro

Tested by: Supermicro

Test date: Nov-2014

Hardware Availability: Sep-2014

Software Availability: Sep-2014



Hardware

CPU Name: Intel Xeon E5-2660 v3
 CPU Characteristics: Intel Turbo Boost Technology up to 3.30 GHz
 CPU MHz: 2600
 FPU: Integrated
 CPU(s) enabled: 20 cores, 2 chips, 10 cores/chip
 CPU(s) orderable: 1,2 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: 25 MB I+D on chip per chip
 Other Cache: None
 Memory: 256 GB (16 x 16 GB 2Rx4 PC4-2133P-R)
 Disk Subsystem: 1 x 1000 GB SATA III, 7200 RPM
 Other Hardware: None

Software

Operating System: Red Hat Enterprise Linux Server release 7.0, Kernel 3.10.0-123.el7.x86_64
 Compiler: C/C++; Version 15.0.0.090 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

SuperServer 6028TP-HTFR
(X10DRT-PIBF, Intel Xeon E5-2660 v3)

SPECint2006 = **61.2**

SPECint_base2006 = **58.7**

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

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

Results Table

Benchmark	Base						Peak					
	Seconds	Ratio	Seconds	Ratio	Seconds	Ratio	Seconds	Ratio	Seconds	Ratio	Seconds	Ratio
400.perlbench	258	37.8	254	38.4	<u>255</u>	<u>38.3</u>	<u>221</u>	<u>44.2</u>	221	44.2	221	44.1
401.bzip2	<u>408</u>	<u>23.6</u>	411	23.5	408	23.7	<u>405</u>	<u>23.8</u>	406	23.8	405	23.8
403.gcc	<u>242</u>	<u>33.2</u>	243	33.2	242	33.2	237	34.0	238	33.8	<u>238</u>	<u>33.9</u>
429.mcf	156	58.5	<u>154</u>	<u>59.3</u>	154	59.4	151	60.3	155	58.9	<u>153</u>	<u>59.7</u>
445.gobmk	<u>383</u>	<u>27.4</u>	382	27.4	383	27.4	384	27.4	<u>384</u>	<u>27.3</u>	384	27.3
456.hammer	143	65.4	142	65.5	<u>143</u>	<u>65.5</u>	<u>149</u>	<u>62.7</u>	149	62.8	149	62.5
458.sjeng	376	32.2	375	32.2	<u>376</u>	<u>32.2</u>	<u>374</u>	<u>32.3</u>	374	32.3	374	32.4
462.libquantum	3.49	5950	3.55	5830	<u>3.54</u>	<u>5840</u>	3.49	5950	3.55	5830	<u>3.54</u>	<u>5840</u>
464.h264ref	469	47.2	465	47.6	<u>466</u>	<u>47.5</u>	469	47.2	465	47.6	<u>466</u>	<u>47.5</u>
471.omnetpp	207	30.2	206	30.3	<u>207</u>	<u>30.2</u>	147	42.6	140	44.8	<u>145</u>	<u>43.0</u>
473.astar	223	31.5	<u>223</u>	<u>31.4</u>	224	31.3	222	31.6	<u>221</u>	<u>31.8</u>	219	32.0
483.xalancbmk	111	62.1	113	61.3	<u>111</u>	<u>62.0</u>	<u>111</u>	<u>61.9</u>	111	62.1	111	61.9

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:
Hyper-Threading (ALL) = Disable
Early Snoop = Disable
Enforce POR = Disabled

General Notes

Environment variables set by runspec before the start of the run:

KMP_AFFINITY = "granularity=fine,scatter"

LD_LIBRARY_PATH = "/home/spec2k6/SPEC2006-V12/libs/32:/home/spec2k6/SPEC2006-V12/libs/64:/home/spec2k6/SPEC2006-V12/sh"

OMP_NUM_THREADS = "20"

Binaries compiled on a system with 1x Core i5-4670K CPU + 16GB memory using RedHat EL 7.0

Transparent Huge Pages enabled with:

echo always > /sys/kernel/mm/transparent_hugepage/enabled



SPEC CINT2006 Result

Copyright 2006-2014 Standard Performance Evaluation Corporation

Supermicro

SuperServer 6028TP-HTFR
(X10DRT-PIBF, Intel Xeon E5-2660 v3)

SPECint2006 = 61.2

SPECint_base2006 = 58.7

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

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

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.xalancbmk: -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

Peak Compiler Invocation

C benchmarks (except as noted below):
icc -m64

Continued on next page



SPEC CINT2006 Result

Copyright 2006-2014 Standard Performance Evaluation Corporation

Supermicro

SuperServer 6028TP-HTFR
(X10DRT-PIBF, Intel Xeon E5-2660 v3)

SPECint2006 = **61.2**

SPECint_base2006 = **58.7**

CPU2006 license: 001176

Test sponsor: Supermicro

Tested by: Supermicro

Test date: Nov-2014

Hardware Availability: Sep-2014

Software Availability: Sep-2014

Peak Compiler Invocation (Continued)

400.perlbench: `icc -m32 -L/opt/intel/composer_xe_2015/lib/ia32`

445.gobmk: `icc -m32 -L/opt/intel/composer_xe_2015/lib/ia32`

C++ benchmarks (except as noted below):

`icpc -m32 -L/opt/intel/composer_xe_2015/lib/ia32`

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`

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

Continued on next page



SPEC CINT2006 Result

Copyright 2006-2014 Standard Performance Evaluation Corporation

Supermicro

SuperServer 6028TP-HTFR
(X10DRT-PIBF, Intel Xeon E5-2660 v3)

SPECint2006 = 61.2

SPECint_base2006 = 58.7

CPU2006 license: 001176

Test sponsor: Supermicro

Tested by: Supermicro

Test date: Nov-2014

Hardware Availability: Sep-2014

Software Availability: Sep-2014

Peak Optimization Flags (Continued)

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-ic15.0-official-linux64.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-ic15.0-official-linux64.xml>

<http://www.spec.org/cpu2006/flags/Supermicro-Platform-Settings-V1.2-revE.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 v1.2.

Report generated on Wed Dec 3 10:34:18 2014 by SPEC CPU2006 PS/PDF formatter v6932.

Originally published on 2 December 2014.