



SPEC[®] CINT2006 Result

Copyright 2006-2015 Standard Performance Evaluation Corporation

ACTION S.A.

ACTINA SOLAR 210 S6 (Intel Xeon E5-2620 v3, 2.40 GHz)

SPECint[®]_rate2006 = 530

SPECint_rate_base2006 = 513

CPU2006 license: 9008

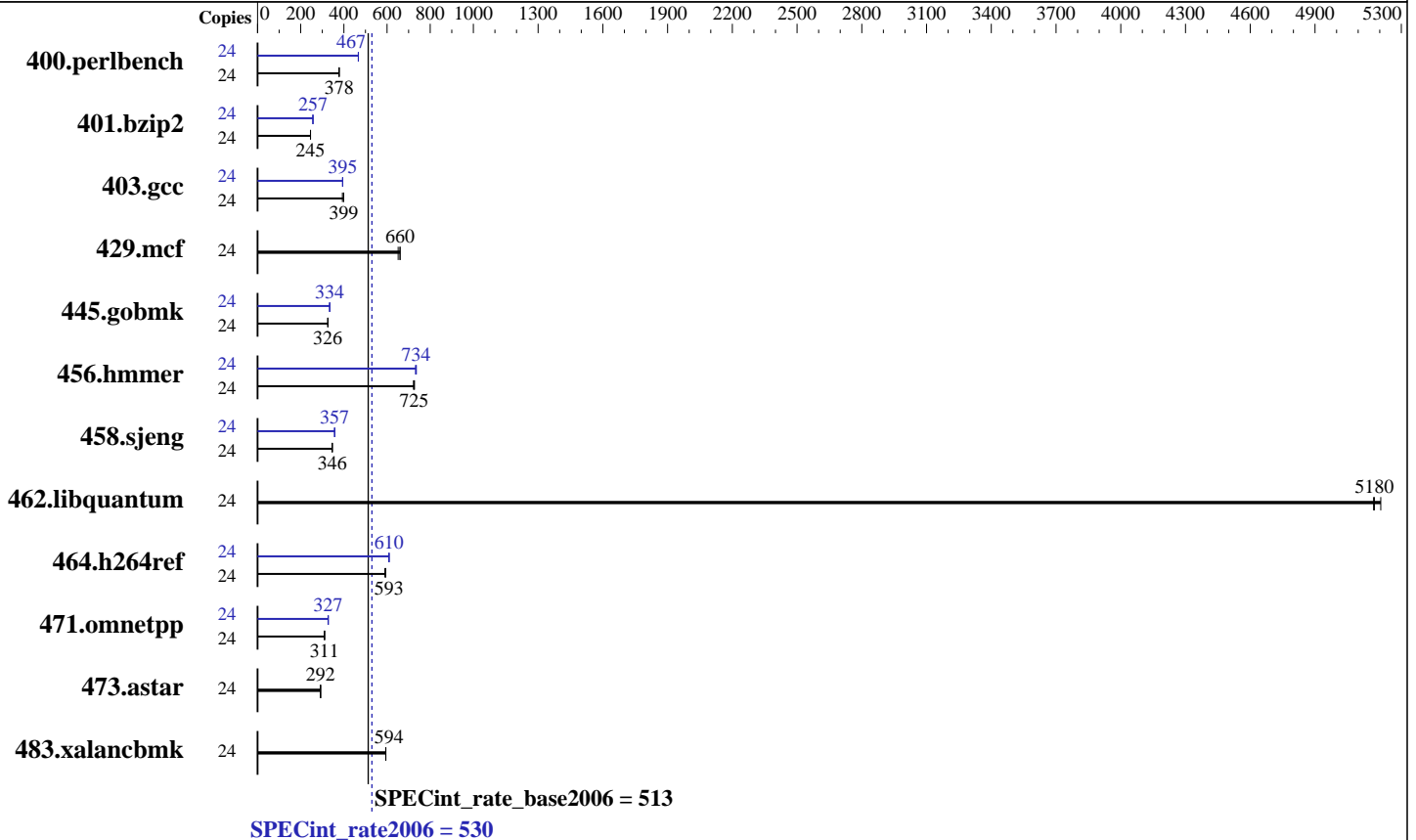
Test sponsor: ACTION S.A.

Tested by: ACTION S.A.

Test date: Jan-2015

Hardware Availability: Sep-2014

Software Availability: Sep-2014



Hardware

CPU Name: Intel Xeon E5-2620 v3
 CPU Characteristics: Intel Turbo Boost Technology up to 3.20 GHz
 CPU MHz: 2400
 FPU: Integrated
 CPU(s) enabled: 12 cores, 2 chips, 6 cores/chip, 2 threads/core
 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: 15 MB I+D on chip per chip
 Other Cache: None
 Memory: 256 GB (16 x 16 GB 2Rx4 PC4-2133P-R, running at 1866 MHz)
 Disk Subsystem: 1 x 240 GB SATA II SSD
 Other Hardware: None

Software

Operating System: Red Hat Enterprise Linux Server release 6.4 (Santiago)
 2.6.32-358.11.1.el6.x86_64
 Compiler: C/C++: Version 14.0.0.080 of Intel C++ Studio XE for Linux
 Auto Parallel: No
 File System: ext4
 System State: Run level 3 (multi-user)
 Base Pointers: 32-bit
 Peak Pointers: 32/64-bit
 Other Software: Microquill SmartHeap V10.0



SPEC CINT2006 Result

Copyright 2006-2015 Standard Performance Evaluation Corporation

ACTION S.A.

ACTINA SOLAR 210 S6 (Intel Xeon E5-2620 v3, 2.40 GHz)

SPECint_rate2006 = 530

SPECint_rate_base2006 = 513

CPU2006 license: 9008
Test sponsor: ACTION S.A.
Tested by: ACTION S.A.

Test date: Jan-2015
Hardware Availability: Sep-2014
Software Availability: Sep-2014

Results Table

Benchmark	Base							Peak						
	Copies	Seconds	Ratio	Seconds	Ratio	Seconds	Ratio	Copies	Seconds	Ratio	Seconds	Ratio	Seconds	Ratio
400.perlbench	24	620	378	621	377	620	378	24	502	467	502	468	502	467
401.bzip2	24	943	246	945	245	944	245	24	902	257	901	257	904	256
403.gcc	24	485	399	485	399	491	393	24	489	395	491	393	489	395
429.mcf	24	336	651	331	661	332	660	24	336	651	331	661	332	660
445.gobmk	24	772	326	773	326	773	326	24	753	334	754	334	753	334
456.hammer	24	309	725	310	722	308	727	24	305	734	304	736	306	732
458.sjeng	24	839	346	841	345	838	347	24	813	357	814	357	812	358
462.libquantum	24	96.2	5170	95.5	5200	96.1	5180	24	96.2	5170	95.5	5200	96.1	5180
464.h264ref	24	900	590	896	593	895	594	24	874	608	871	610	871	610
471.omnetpp	24	484	310	483	311	483	311	24	457	328	459	327	458	327
473.astar	24	579	291	577	292	576	293	24	579	291	577	292	576	293
483.xalancbmk	24	279	594	279	594	278	595	24	279	594	279	594	278	595

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

Submit Notes

The numactl mechanism was used to bind copies to processors. The config file option 'submit' was used to generate numactl commands to bind each copy to a specific processor. For details, please see the config file.

Operating System Notes

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

Platform Notes

Bios Settings
Power Technology = Energy Efficient
Enforce POR = Disabled

BMC Setting
Fan Mode = Full Speed

Sysinfo program /cpu2006.1.2/config/sysinfo.rev6818
\$Rev: 6818 \$ \$Date:: 2012-07-17 #\$ e86d102572650a6e4d596a3cee98f191
running on localhost.localdomain Sat Jan 24 00:18:41 2015

This section contains SUT (System Under Test) info as seen by some common utilities. To remove or add to this section, see:
<http://www.spec.org/cpu2006/Docs/config.html#sysinfo>

From /proc/cpuinfo

Continued on next page



SPEC CINT2006 Result

Copyright 2006-2015 Standard Performance Evaluation Corporation

ACTION S.A.

SPECint_rate2006 = 530

ACTINA SOLAR 210 S6 (Intel Xeon E5-2620 v3, 2.40 GHz)

SPECint_rate_base2006 = 513

CPU2006 license: 9008

Test date: Jan-2015

Test sponsor: ACTION S.A.

Hardware Availability: Sep-2014

Tested by: ACTION S.A.

Software Availability: Sep-2014

Platform Notes (Continued)

```

model name : Intel(R) Xeon(R) CPU E5-2620 v3 @ 2.40GHz
 2 "physical id"s (chips)
 24 "processors"
cores, siblings (Caution: counting these is hw and system dependent. The
following excerpts from /proc/cpuinfo might not be reliable. Use with
caution.)
  cpu cores : 6
  siblings  : 12
  physical 0: cores 0 1 2 3 4 5
  physical 1: cores 0 1 2 3 4 5
cache size : 15360 KB

```

```

From /proc/meminfo
MemTotal:      264425016 kB
HugePages_Total:    0
Hugepagesize:    2048 kB

```

```

/usr/bin/lsb_release -d
Red Hat Enterprise Linux Server release 6.4 (Santiago)

```

```

From /etc/*release* /etc/*version*
redhat-release: Red Hat Enterprise Linux Server release 6.4 (Santiago)
system-release: Red Hat Enterprise Linux Server release 6.4 (Santiago)
system-release-cpe: cpe:/o:redhat:enterprise_linux:6server:ga:server

```

```

uname -a:
Linux localhost.localdomain 2.6.32-358.11.1.el6.x86_64 #1 SMP Tue Nov 19
17:43:04 CET 2013 x86_64 x86_64 x86_64 GNU/Linux

```

run-level 3 Jan 23 07:48

```

SPEC is set to: /cpu2006.1.2
Filesystem      Type      Size  Used Avail Use% Mounted on
/dev/sdal       ext4      193G   64G  119G  36% /

```

```

Additional information from dmidecode:
BIOS American Megatrends Inc. 1.0b 10/29/2014
Memory:
 16x 16 GB
 2x Samsung (date:14/33) M393A2G40DB0-CPB 16 GB 1866 MHz 2 rank
 14x Samsung (date:14/4p) M393A2G40DB0-CPB 16 GB 1866 MHz 2 rank

```

```

(End of data from sysinfo program)
dmidecode does not properly detect memory modules
16 modules of 16 GB were used to run the test (256 GB total)

```

General Notes

```

Environment variables set by runspec before the start of the run:
LD_LIBRARY_PATH = "/cpu2006.1.2/libs/32:/cpu2006.1.2/libs/64:/cpu2006.1.2/sh"

```

Continued on next page



SPEC CINT2006 Result

Copyright 2006-2015 Standard Performance Evaluation Corporation

ACTION S.A.

SPECint_rate2006 = 530

ACTINA SOLAR 210 S6 (Intel Xeon E5-2620 v3, 2.40 GHz)

SPECint_rate_base2006 = 513

CPU2006 license: 9008

Test date: Jan-2015

Test sponsor: ACTION S.A.

Hardware Availability: Sep-2014

Tested by: ACTION S.A.

Software Availability: Sep-2014

General Notes (Continued)

Transparent Huge Pages enabled with:
echo always > /sys/kernel/mm/redhat_transparent_hugepage/enabled
Filesystem page cache cleared with:
echo 1> /proc/sys/vm/drop_caches
runspec command invoked through numactl i.e.:
numactl --interleave=all runspec <etc>
Binaries compiled on a system with 2x Xeon E5-2670 v3 chips + 128 GB memory
using RedHat EL 6.4

Base Compiler Invocation

C benchmarks:
icc -m32

C++ benchmarks:
icpc -m32

Base Portability Flags

400.perlbench: -DSPEC_CPU_LINUX_IA32
462.libquantum: -DSPEC_CPU_LINUX
483.xalancbmk: -DSPEC_CPU_LINUX

Base Optimization Flags

C benchmarks:
-xCORE-AVX2 -ipo -O3 -no-prec-div -opt-prefetch
-opt-mem-layout-trans=3

C++ benchmarks:
-xCORE-AVX2 -ipo -O3 -no-prec-div -opt-prefetch
-opt-mem-layout-trans=3 -Wl,-z,muldefs -L/cpu2006.1.2/sh -lsmartheap

Base Other Flags

C benchmarks:
403.gcc: -Dalloca=_alloca



SPEC CINT2006 Result

Copyright 2006-2015 Standard Performance Evaluation Corporation

ACTION S.A.

SPECint_rate2006 = 530

ACTINA SOLAR 210 S6 (Intel Xeon E5-2620 v3, 2.40 GHz)

SPECint_rate_base2006 = 513

CPU2006 license: 9008

Test date: Jan-2015

Test sponsor: ACTION S.A.

Hardware Availability: Sep-2014

Tested by: ACTION S.A.

Software Availability: Sep-2014

Peak Compiler Invocation

C benchmarks (except as noted below):

icc -m32

400.perlbench: icc -m64

401.bzip2: icc -m64

456.hmmer: icc -m64

458.sjeng: icc -m64

C++ benchmarks:

icpc -m32

Peak Portability Flags

400.perlbench: -DSPEC_CPU_LP64 -DSPEC_CPU_LINUX_X64

401.bzip2: -DSPEC_CPU_LP64

456.hmmer: -DSPEC_CPU_LP64

458.sjeng: -DSPEC_CPU_LP64

462.libquantum: -DSPEC_CPU_LINUX

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)
-auto-ilp32

401.bzip2: -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 -auto-ilp32 -ansi-alias

403.gcc: -xCORE-AVX2 -ipo -O3 -no-prec-div

429.mcf: basepeak = yes

445.gobmk: -xCORE-AVX2(pass 2) -prof-gen(pass 1) -prof-use(pass 2)
-ansi-alias -opt-mem-layout-trans=3

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

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 -auto-ilp32

Continued on next page



SPEC CINT2006 Result

Copyright 2006-2015 Standard Performance Evaluation Corporation

ACTION S.A.

ACTINA SOLAR 210 S6 (Intel Xeon E5-2620 v3, 2.40 GHz)

SPECint_rate2006 = 530

SPECint_rate_base2006 = 513

CPU2006 license: 9008

Test sponsor: ACTION S.A.

Tested by: ACTION S.A.

Test date: Jan-2015

Hardware Availability: Sep-2014

Software Availability: Sep-2014

Peak Optimization Flags (Continued)

462.libquantum: basepeak = yes

464.h264ref: -xCORE-AVX2(pass 2) -prof-gen(pass 1) -ipo(pass 2)
-O3(pass 2) -no-prec-div(pass 2) -prof-use(pass 2)
-unroll2 -ansi-alias

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)
-ansi-alias -opt-ra-region-strategy=block -Wl,-z,muldefs
-L/cpu2006.1.2/sh -lsmartheap

473.astar: basepeak = yes

483.xalancbmk: basepeak = yes

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/ACTION.SA-Platform-Flags-RevC-jan-2015-For-Supermicro-Platform.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/ACTION.SA-Platform-Flags-RevC-jan-2015-For-Supermicro-Platform.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 Feb 25 11:29:33 2015 by SPEC CPU2006 PS/PDF formatter v6932.

Originally published on 24 February 2015.