



# SPEC® CINT2006 Result

Copyright 2006-2014 Standard Performance Evaluation Corporation

## ACTION S.A.

ACTINA SOLAR 220 X5 (Intel Xeon E5-2630 v2, 2.60 GHz)

SPECint®\_rate2006 = 508

SPECint\_rate\_base2006 = 489

CPU2006 license: 9008

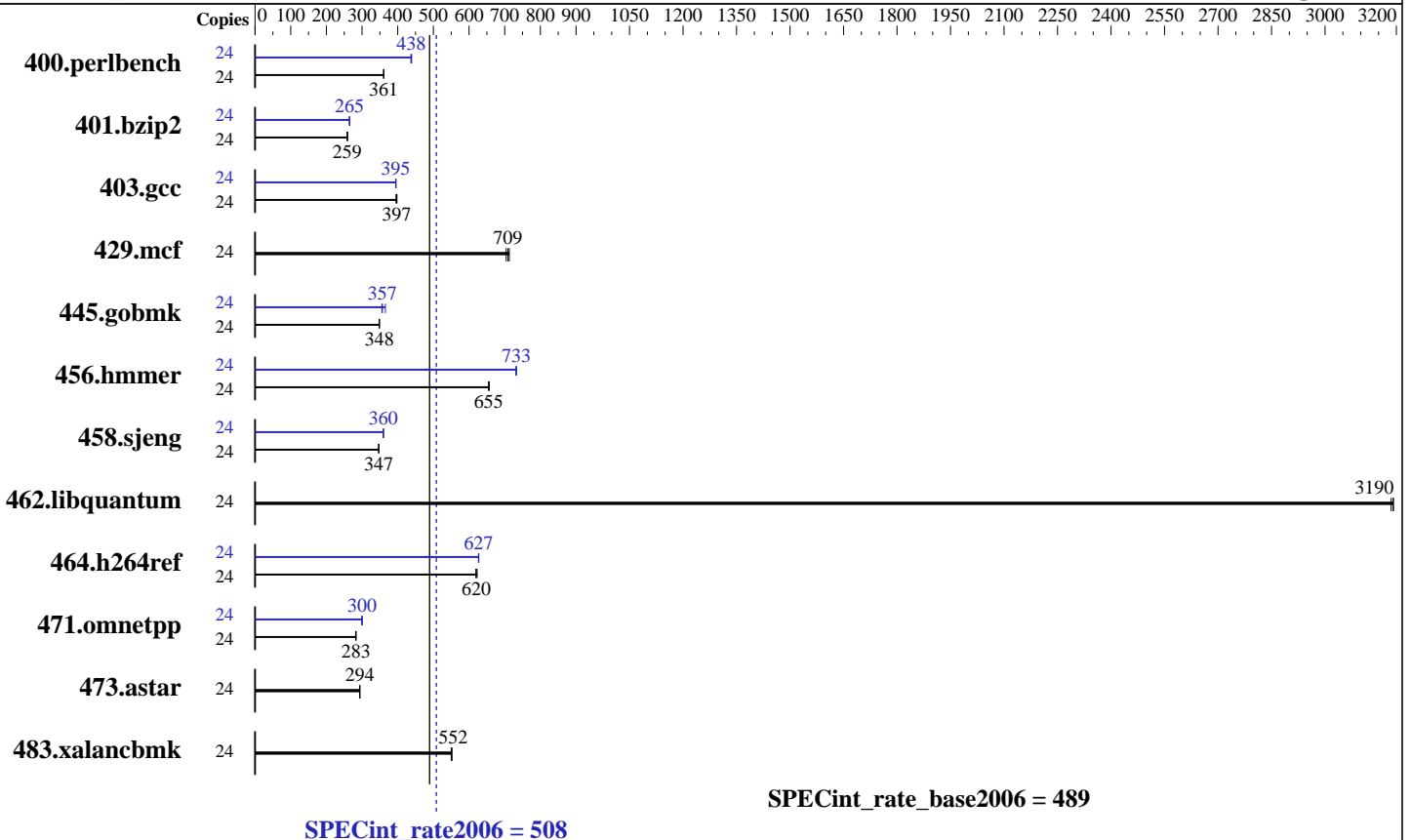
Test sponsor: ACTION S.A.

Tested by: ACTION S.A.

Test date: Jan-2014

Hardware Availability: Oct-2013

Software Availability: Sep-2013



### Hardware

CPU Name: Intel Xeon E5-2630 v2  
 CPU Characteristics: Intel Turbo Boost Technology up to 3.10 GHz  
 CPU MHz: 2600  
 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: 128 GB (16 x 8 GB 2Rx4 PC3-14900R-13, ECC, running at 1600 MHz and CL11)  
 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 2006-2014 Standard Performance Evaluation Corporation

## ACTION S.A.

ACTINA SOLAR 220 X5 (Intel Xeon E5-2630 v2, 2.60 GHz)

SPECint\_rate2006 = 508

SPECint\_rate\_base2006 = 489

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

Test date: Jan-2014  
Hardware Availability: Oct-2013  
Software Availability: Sep-2013

## Results Table

Benchmark	Base							Peak						
	Copies	Seconds	Ratio	Seconds	Ratio	Seconds	Ratio	Copies	Seconds	Ratio	Seconds	Ratio	Seconds	Ratio
400.perlbench	24	649	361	650	361	<b>650</b>	<b>361</b>	24	536	437	534	439	<b>536</b>	<b>438</b>
401.bzip2	24	893	259	<b>895</b>	<b>259</b>	897	258	24	875	265	<b>874</b>	<b>265</b>	874	265
403.gcc	24	486	398	<b>486</b>	<b>397</b>	489	395	24	<b>490</b>	<b>395</b>	490	395	489	395
429.mcf	24	307	713	311	704	<b>309</b>	<b>709</b>	24	307	713	311	704	<b>309</b>	<b>709</b>
445.gobmk	24	723	348	722	349	<b>723</b>	<b>348</b>	24	708	356	<b>705</b>	<b>357</b>	689	365
456.hammer	24	342	655	<b>342</b>	<b>655</b>	341	657	24	<b>306</b>	<b>733</b>	305	733	306	732
458.sjeng	24	838	347	<b>837</b>	<b>347</b>	837	347	24	<b>807</b>	<b>360</b>	807	360	807	360
462.libquantum	24	156	3190	<b>156</b>	<b>3190</b>	156	3190	24	156	3190	<b>156</b>	<b>3190</b>	156	3190
464.h264ref	24	853	623	858	619	<b>856</b>	<b>620</b>	24	848	627	846	627	<b>848</b>	<b>627</b>
471.omnetpp	24	530	283	532	282	<b>530</b>	<b>283</b>	24	501	299	500	300	<b>500</b>	<b>300</b>
473.astar	24	573	294	<b>574</b>	<b>294</b>	574	293	24	573	294	<b>574</b>	<b>294</b>	574	293
483.xalancbmk	24	<b>300</b>	<b>552</b>	301	550	300	552	24	<b>300</b>	<b>552</b>	301	550	300	552

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

Sysinfo program /cpu2006.1.2/config/sysinfo.rev6818  
\$Rev: 6818 \$ \$Date:: 2012-07-17 #\$ e86d102572650a6e4d596a3cee98f191  
running on localhost.localdomain Thu Jan 2 19:52:57 2014

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  
model name : Intel(R) Xeon(R) CPU E5-2630 v2 @ 2.60GHz  
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

Continued on next page



# SPEC CINT2006 Result

Copyright 2006-2014 Standard Performance Evaluation Corporation

## ACTION S.A.

SPECint\_rate2006 = 508

ACTINA SOLAR 220 X5 (Intel Xeon E5-2630 v2, 2.60 GHz)

SPECint\_rate\_base2006 = 489

CPU2006 license: 9008

Test date: Jan-2014

Test sponsor: ACTION S.A.

Hardware Availability: Oct-2013

Tested by: ACTION S.A.

Software Availability: Sep-2013

### Platform Notes (Continued)

```
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:      132125712 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 2 14:06
```

```
SPEC is set to: /cpu2006.1.2
Filesystem      Type      Size  Used Avail Use% Mounted on
/dev/sdal        ext4      193G   75G  108G  42% /
```

Additional information from dmidecode:

BIOS American Megatrends Inc. 3.0a 09/30/2013

Memory:

16x 8 GB

14x Hynix Semiconducto HMT31GR7EFR4C 8 GB 1600 MHz 1 rank

2x Hynix Semiconductor HMT31GR7EFR4C- 8 GB 1600 MHz 1 rank

(End of data from sysinfo program)

dmidecode does not properly display memory modules,  
16 modules of 8 GB were used to run the test (128 GB total)  
Due to BIOS issue memory rank is improperly displayed -

### 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"
```

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 E5-2650 v2 chips

Continued on next page

Standard Performance Evaluation Corporation

info@spec.org

http://www.spec.org/

Page 3



# SPEC CINT2006 Result

Copyright 2006-2014 Standard Performance Evaluation Corporation

**ACTION S.A.**

ACTINA SOLAR 220 X5 (Intel Xeon E5-2630 v2, 2.60 GHz)

**SPECint\_rate2006 = 508**

**SPECint\_rate\_base2006 = 489**

**CPU2006 license:** 9008

**Test sponsor:** ACTION S.A.

**Tested by:** ACTION S.A.

**Test date:** Jan-2014

**Hardware Availability:** Oct-2013

**Software Availability:** Sep-2013

## General Notes (Continued)

+ 256 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:

-xSSE4.2 -ipo -O3 -no-prec-div -opt-prefetch -opt-mem-layout-trans=3

C++ benchmarks:

-xSSE4.2 -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

## Peak Compiler Invocation

C benchmarks (except as noted below):

icc -m32

400.perlbench: icc -m64

401.bzip2: icc -m64

456.hmmer: icc -m64

Continued on next page



# SPEC CINT2006 Result

Copyright 2006-2014 Standard Performance Evaluation Corporation

**ACTION S.A.**

**SPECint\_rate2006 = 508**

ACTINA SOLAR 220 X5 (Intel Xeon E5-2630 v2, 2.60 GHz)

**SPECint\_rate\_base2006 = 489**

**CPU2006 license:** 9008

**Test date:** Jan-2014

**Test sponsor:** ACTION S.A.

**Hardware Availability:** Oct-2013

**Tested by:** ACTION S.A.

**Software Availability:** Sep-2013

## Peak Compiler Invocation (Continued)

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: -xSSE4.2(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: -xSSE4.2(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: -xSSE4.2 -ipo -O3 -no-prec-div

429.mcf: basepeak = yes

445.gobmk: -xSSE4.2(pass 2) -prof-gen(pass 1) -prof-use(pass 2)  
-ansi-alias -opt-mem-layout-trans=3

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

458.sjeng: -xSSE4.2(pass 2) -prof-gen(pass 1) -ipo(pass 2)  
-O3(pass 2) -no-prec-div(pass 2) -prof-use(pass 2)  
-unroll4 -auto-ilp32

462.libquantum: basepeak = yes

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

Continued on next page



# SPEC CINT2006 Result

Copyright 2006-2014 Standard Performance Evaluation Corporation

**ACTION S.A.**

**SPECint\_rate2006 = 508**

ACTINA SOLAR 220 X5 (Intel Xeon E5-2630 v2, 2.60 GHz)

**SPECint\_rate\_base2006 = 489**

**CPU2006 license:** 9008

**Test date:** Jan-2014

**Test sponsor:** ACTION S.A.

**Hardware Availability:** Oct-2013

**Tested by:** ACTION S.A.

**Software Availability:** Sep-2013

## 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/cpu2006.1.2/sh -lsmartheap

473.astar: basepeak = yes

483.xalancbmk: basepeak = yes

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

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

<http://www.spec.org/cpu2006/flags/Intel-ic14.0-official-linux64.20140128.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](mailto:webmaster@spec.org).

Tested with SPEC CPU2006 v1.2.  
Report generated on Thu Jul 24 19:48:58 2014 by SPEC CPU2006 PS/PDF formatter v6932.  
Originally published on 18 February 2014.