



# SPEC® CINT2006 Result

Copyright 2006-2009 Standard Performance Evaluation Corporation

**ACTION S.A.**  
**ACTINA SOLAR 410 S3**

**SPECint®\_rate2006 = 115**

**SPECint\_rate\_base2006 = 95.6**

CPU2006 license: 9008

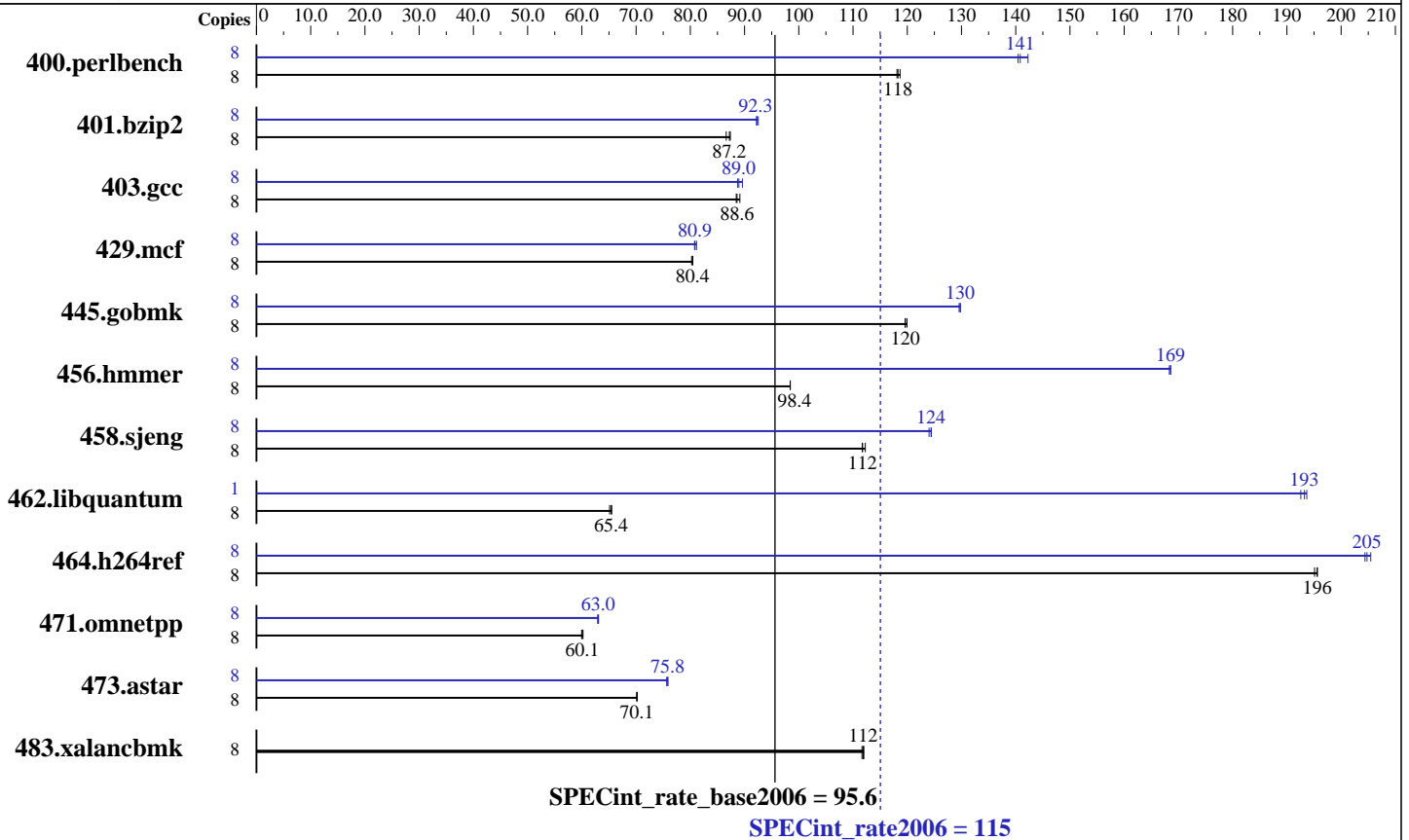
Test sponsor: ACTION S.A.

Tested by: ACTION S.A.

Test date: May-2008

Hardware Availability: Dec-2007

Software Availability: Nov-2007



## Hardware

CPU Name: Intel Xeon E5410  
 CPU Characteristics: 2.33 GHz, 12 MB L2, 1333 MHz bus  
 CPU MHz: 2330  
 FPU: Integrated  
 CPU(s) enabled: 8 cores, 2 chips, 4 cores/chip  
 CPU(s) orderable: 1,2 chip  
 Primary Cache: 32 KB I + 32 KB D on chip per core  
 Secondary Cache: 12 MB I+D on chip per chip, 6 MB shared / 2 cores  
 L3 Cache: None  
 Other Cache: None  
 Memory: 16 GB (8x 2 GB PC2-5300 ECC FBDIMM)  
 Disk Subsystem: 1x 160 GB SATA II, 7200 RPM  
 Other Hardware: None

## Software

Operating System: SUSE Linux Enterprise Server 10 (x86\_64) SP1, Kernel 2.6.16.46-0.12-smp  
 Compiler: Intel C++ Compiler 10.1 for Linux Build 20070913 Package ID: l\_cc\_p\_10.1.008  
 Auto Parallel: Yes  
 File System: ReiserFS  
 System State: Multi-user, run level 3  
 Base Pointers: 32-bit  
 Peak Pointers: 32/64-bit  
 Other Software: Microquill SmartHeap V8.1 Binutils 2.17.50.0.15



# SPEC CINT2006 Result

Copyright 2006-2009 Standard Performance Evaluation Corporation

**ACTION S.A.**  
**ACTINA SOLAR 410 S3**

SPECint\_rate2006 = **115**

SPECint\_rate\_base2006 = 95.6

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

Test date: May-2008  
Hardware Availability: Dec-2007  
Software Availability: Nov-2007

## Results Table

Benchmark	Base							Peak						
	Copies	Seconds	Ratio	Seconds	Ratio	Seconds	Ratio	Copies	Seconds	Ratio	Seconds	Ratio	Seconds	Ratio
400.perlbench	8	659	119	662	118	<b>661</b>	<b>118</b>	8	<b>555</b>	<b>141</b>	557	140	549	142
401.bzip2	8	891	86.6	<b>885</b>	<b>87.2</b>	884	87.4	8	837	92.2	<b>837</b>	<b>92.3</b>	834	92.5
403.gcc	8	722	89.1	728	88.5	<b>727</b>	<b>88.6</b>	8	719	89.6	726	88.7	<b>724</b>	<b>89.0</b>
429.mcf	8	907	80.5	<b>907</b>	<b>80.4</b>	909	80.2	8	899	81.1	903	80.8	<b>902</b>	<b>80.9</b>
445.gobmk	8	700	120	702	120	<b>701</b>	<b>120</b>	8	648	130	647	130	<b>647</b>	<b>130</b>
456.hammer	8	758	98.4	<b>758</b>	<b>98.4</b>	758	98.4	8	<b>443</b>	<b>169</b>	443	169	443	168
458.sjeng	8	<b>866</b>	<b>112</b>	867	112	862	112	8	778	124	<b>778</b>	<b>124</b>	781	124
462.libquantum	8	2531	65.5	<b>2534</b>	<b>65.4</b>	2546	65.1	1	107	194	<b>107</b>	<b>193</b>	108	193
464.h264ref	8	907	195	905	196	<b>905</b>	<b>196</b>	8	<b>865</b>	<b>205</b>	866	204	862	205
471.omnetpp	8	830	60.2	<b>832</b>	<b>60.1</b>	834	60.0	8	793	63.1	<b>794</b>	<b>63.0</b>	795	62.9
473.astar	8	800	70.2	801	70.1	<b>801</b>	<b>70.1</b>	8	740	75.9	743	75.6	<b>741</b>	<b>75.8</b>
483.xalancbmk	8	494	112	<b>493</b>	<b>112</b>	493	112	8	494	112	<b>493</b>	<b>112</b>	493	112

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

## General Notes

All benchmarks compiled in 32-bit mode except 401.bzip2 and 456.hammer, for peak, are compiled in 64-bit mode.  
TASKSET command was used to bind processes to CPUs.

## Base Compiler Invocation

C benchmarks:  
icc

C++ benchmarks:  
icpc

## Base Portability Flags

400.perlbench: -DSPEC\_CPU\_LINUX\_IA32  
462.libquantum: -DSPEC\_CPU\_LINUX  
483.xalancbmk: -DSPEC\_CPU\_LINUX

## Base Optimization Flags

C benchmarks:  
-fast -inline-calloc -opt-malloc-options=3

Continued on next page



# SPEC CINT2006 Result

Copyright 2006-2009 Standard Performance Evaluation Corporation

**ACTION S.A.**

**ACTINA SOLAR 410 S3**

**SPECint\_rate2006 = 115**

**SPECint\_rate\_base2006 = 95.6**

**CPU2006 license:** 9008

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

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

**Test date:** May-2008

**Hardware Availability:** Dec-2007

**Software Availability:** Nov-2007

## Base Optimization Flags (Continued)

C++ benchmarks:

```
-xT -ipo -O3 -no-prec-div -Wl,-z,muldefs
-L/spec/users/rahul/cpu2006.1.0/lib -lsmartheap
```

## Base Other Flags

C benchmarks:

```
403.gcc: -Dalloca=_alloca
```

## Peak Compiler Invocation

C benchmarks (except as noted below):

icc

```
401.bzip2: /opt/intel/cce/10.1.008/bin/icc
-L/opt/intel/cce/10.1.008/lib
-I/opt/intel/cce/10.1.008/include
```

```
456.hmmer: /opt/intel/cce/10.1.008/bin/icc
-L/opt/intel/cce/10.1.008/lib
-I/opt/intel/cce/10.1.008/include
```

C++ benchmarks:

icpc

## Peak Portability Flags

```
400.perlbench: -DSPEC_CPU_LINUX_IA32
401.bzip2: -DSPEC_CPU_LP64
456.hmmer: -DSPEC_CPU_LP64
462.libquantum: -DSPEC_CPU_LINUX
483.xalancbmk: -DSPEC_CPU_LINUX
```

## Peak Optimization Flags

C benchmarks:

```
400.perlbench: -prof-gen(pass 1) -prof-use(pass 2) -fast -ansi-alias
-prefetch
```

Continued on next page



# SPEC CINT2006 Result

Copyright 2006-2009 Standard Performance Evaluation Corporation

**ACTION S.A.**  
**ACTINA SOLAR 410 S3**

**SPECint\_rate2006 = 115**  
**SPECint\_rate\_base2006 = 95.6**

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

**Test date:** May-2008  
**Hardware Availability:** Dec-2007  
**Software Availability:** Nov-2007

## Peak Optimization Flags (Continued)

401.bzip2: -prof-gen(pass 1) -prof-use(pass 2) -fast -prefetch

403.gcc: -fast -inline-calloc -opt-malloc-options=3

429.mcf: -fast -prefetch

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

456.hmmmer: -fast -unroll2 -ansi-alias -opt-multi-version-aggressive

458.sjeng: -prof-gen(pass 1) -prof-use(pass 2) -fast -unroll4

462.libquantum: -fast -unroll4 -Ob0 -prefetch  
-opt-streaming-stores always -vec-guard-write  
-opt-malloc-options=3 -parallel -par-runtime-control

464.h264ref: -prof-gen(pass 1) -prof-use(pass 2) -fast -unroll2  
-ansi-alias

C++ benchmarks:

471.omnetpp: -prof-gen(pass 1) -prof-use(pass 2) -xT -O3 -ipo  
-no-prec-div -ansi-alias -opt-ra-region-strategy=block  
-Wl,-z,muldefs  
-L/spec/users/rahul/cpu2006.1.0/lib -lsmartheap

473.astar: -prof-gen(pass 1) -prof-use(pass 2) -xT -O3 -ipo  
-no-prec-div -ansi-alias -opt-ra-region-strategy=routine  
-Wl,-z,muldefs  
-L/spec/users/rahul/cpu2006.1.0/lib -lsmartheap

483.xalancbmk: basepeak = yes

## Peak Other Flags

Same as Base Other Flags

The flags file that was used to format this result can be browsed at  
<http://www.spec.org/cpu2006/flags/Intel-ic10.1-int-linux64-revC.html>

You can also download the XML flags source by saving the following link:  
<http://www.spec.org/cpu2006/flags/Intel-ic10.1-int-linux64-revC.xml>



# SPEC CINT2006 Result

Copyright 2006-2009 Standard Performance Evaluation Corporation

**ACTION S.A.**

**ACTINA SOLAR 410 S3**

**SPECint\_rate2006 = 115**

**SPECint\_rate\_base2006 = 95.6**

**CPU2006 license:** 9008

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

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

**Test date:** May-2008

**Hardware Availability:** Dec-2007

**Software Availability:** Nov-2007

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 v1.0.1.  
Report generated on Mon Jul 13 17:48:58 2009 by SPEC CPU2006 PS/PDF formatter v6323.