SPEC® CINT2006 Result
Copyright 2006-2014 Standard Performance Evaluation Corporation

ACTION S.A.

ACTINA SOLAR 220 S5+ (Intel Xeon E5-2650 v2, 2.60 GHz)

SPECint®_rate2006 =   690
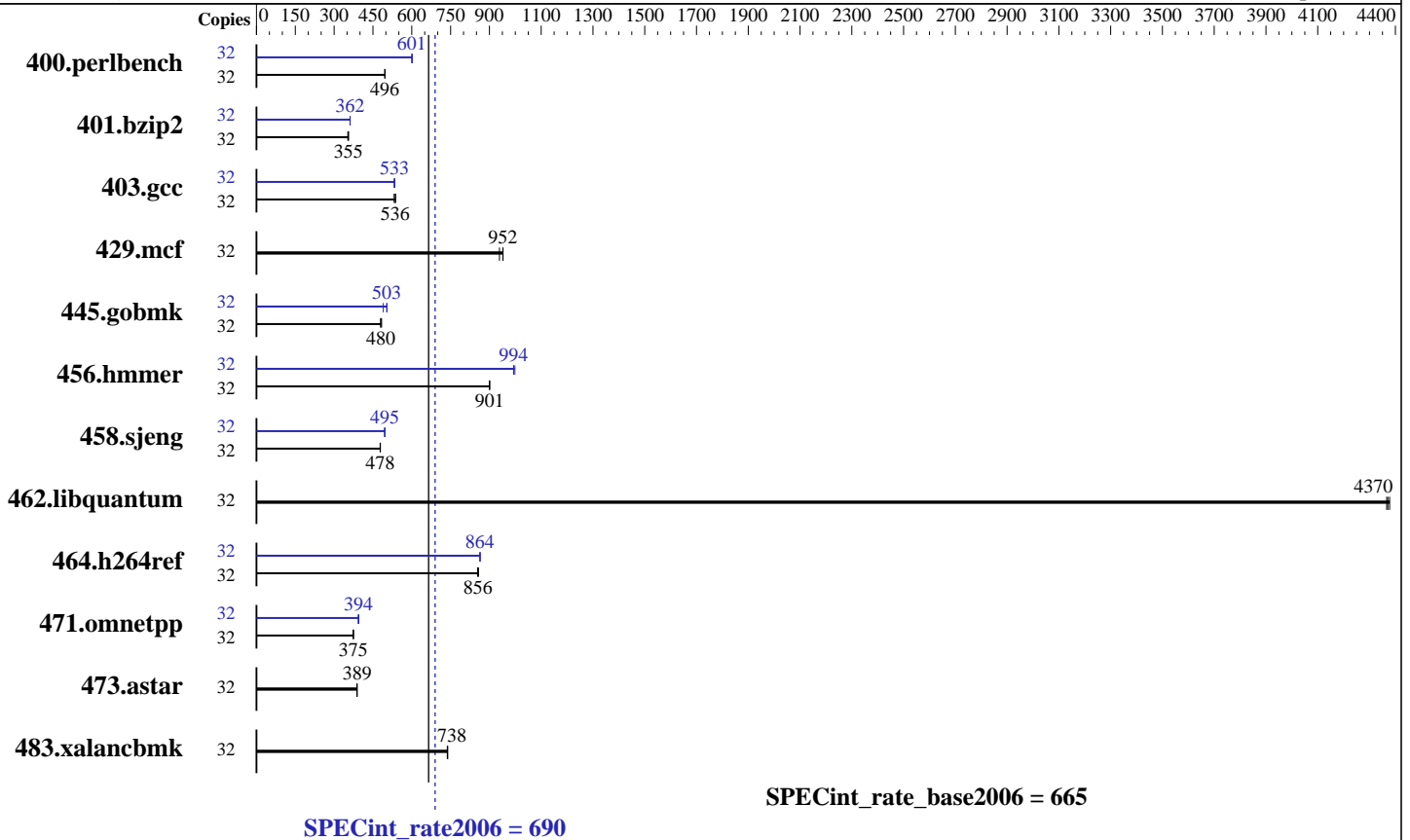
SPECint_rate_base2006 =   665

CPU2006 license: 9008

Test sponsor: ACTION S.A.

Tested by: ACTION S.A.

Test date: May-2014

Hardware Availability: Oct-2013

Software Availability: Sep-2013

SPECint_rate2006 = 690

SPECint_rate_base2006 = 665

Hardware

CPU Name: Intel Xeon E5-2650 v2

CPU Characteristics: Intel Turbo Boost Technology up to 3.40 GHz

CPU MHz: 2600

FPU: Integrated

CPU(s) enabled: 16 cores, 2 chips, 8 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: 20 MB I+D on chip per chip

Other Cache: None

Memory: 128 GB (16 x 8 GB 2Rx4 PC3-14900R-13, ECC)

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 S5+ (Intel Xeon E5-2650 v2, 2.60 GHz)

SPECint_rate2006 = 690

SPECint_rate_base2006 = 665

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

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

Results Table

Benchmark	Base Copies	Seconds	Ratio	Seconds	Ratio	Seconds	Ratio	Peak Copies	Seconds	Ratio	Seconds	Ratio	Seconds	Ratio
400.perlbench	32	629	497	**630**	**496**	631	496	32	520	602	**520**	**601**	521	600
401.bzip2	32	869	355	875	353	**869**	**355**	32	**854**	**362**	853	362	854	361
403.gcc	32	479	538	**480**	**536**	484	532	32	484	532	**483**	**533**	482	534
429.mcf	32	**307**	**952**	311	939	306	953	32	**307**	**952**	311	939	306	953
445.gobmk	32	694	483	**699**	**480**	699	480	32	685	490	666	504	**667**	**503**
456.hmmer	32	**332**	**901**	332	900	331	901	32	**300**	**994**	301	993	299	999
458.sjeng	32	809	479	**809**	**478**	811	478	32	782	495	780	497	**782**	**495**
462.libquantum	32	152	4370	151	4380	**152**	**4370**	32	152	4370	151	4380	**152**	**4370**
464.h264ref	32	829	854	826	858	**827**	**856**	32	**820**	**864**	819	864	820	863
471.omnetpp	32	534	375	**534**	**375**	535	374	32	509	393	506	395	**508**	**394**
473.astar	32	**578**	**389**	578	389	579	388	32	**578**	**389**	578	389	579	388
483.xalancbmk	32	**299**	**738**	299	737	299	739	32	**299**	**738**	299	737	299	739

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 = Custom
    Energy Performance = Performance
    Turbo Mode = Enabled
    C1E Support = Disabled
    CPU C3 Report = Disabled
    CPU C6 Report = Disabled
    Package C State Limit = No Limit

    Sysinfo program /cpu2006.1.2/config/sysinfo.rev6818
    $Rev: 6818 $ $Date:: 2012-07-17 #$ e86d102572650a6e4d596a3cee98f191
    running on localhost.localdomain Thu May 29 14:01:02 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

ACTION S.A.

ACTINA SOLAR 220 S5+ (Intel Xeon E5-2650 v2, 2.60 GHz)

SPECint_rate2006 = 690

SPECint_rate_base2006 = 665

CPU2006 license: 9008		**Test date:**	May-2014
Test sponsor: ACTION S.A.		**Hardware Availability:**	Oct-2013
Tested by: ACTION S.A.		**Software Availability:**	Sep-2013

Platform Notes (Continued)

```
From /proc/cpuinfo
   model name : Intel(R) Xeon(R) CPU E5-2650 v2 @ 2.60GHz
      2 "physical id"s (chips)
      32 "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 : 8
      siblings  : 16
      physical 0: cores 0 1 2 3 4 5 6 7
      physical 1: cores 0 1 2 3 4 5 6 7
   cache size : 20480 KB

From /proc/meminfo
   MemTotal:       132124188 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 May 29 13:59

SPEC is set to: /cpu2006.1.2
   Filesystem    Type    Size  Used Avail Use% Mounted on
   /dev/sda1     ext4    193G   56G  128G  31% /

Additional information from dmidecode:
  BIOS American Megatrends Inc. 3.0a 12/05/2013
  Memory:
   16x   8 GB
   16x Hynix Semiconductor HMT31GR7EFR4C-RD 8 GB 1866 MHz 2 rank

(End of data from sysinfo program)
```

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:
```

Continued on next page

SPEC CINT2006 Result
Copyright 2006-2014 Standard Performance Evaluation Corporation

ACTION S.A.

ACTINA SOLAR 220 S5+ (Intel Xeon E5-2650 v2, 2.60 GHz)

SPECint_rate2006 =   690

SPECint_rate_base2006 =   665

CPU2006 license: 9008		**Test date:**	May-2014
Test sponsor: ACTION S.A.		**Hardware Availability:**	Oct-2013
Tested by: ACTION S.A.		**Software Availability:**	Sep-2013

General Notes (Continued)

```
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 + 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
```

SPEC CINT2006 Result
Copyright 2006-2014 Standard Performance Evaluation Corporation

ACTION S.A.

ACTINA SOLAR 220 S5+ (Intel Xeon E5-2650 v2, 2.60 GHz)

SPECint_rate2006 = 690

SPECint_rate_base2006 = 665

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

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

Peak Compiler Invocation (Continued)

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: `-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`

SPEC CINT2006 Result

ACTION S.A.

ACTINA SOLAR 220 S5+ (Intel Xeon E5-2650 v2, 2.60 GHz)

SPECint_rate2006 = 690

SPECint_rate_base2006 = 665

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

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

Peak Optimization Flags (Continued)

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`

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 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-RevB-apr-2014-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-RevB-apr-2014-For-Supermicro-Platform.xml

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 Thu Jul 24 23:44:44 2014 by SPEC CPU2006 PS/PDF formatter v6932.
Originally published on 18 June 2014.