



SPEC® CINT2006 Result

Copyright 2006-2014 Standard Performance Evaluation Corporation

Acer Incorporated

SPECint®_rate2006 = 587

Altos R360 F2 (Intel Xeon E5-2660)

SPECint_rate_base2006 = 568

CPU2006 license: 97

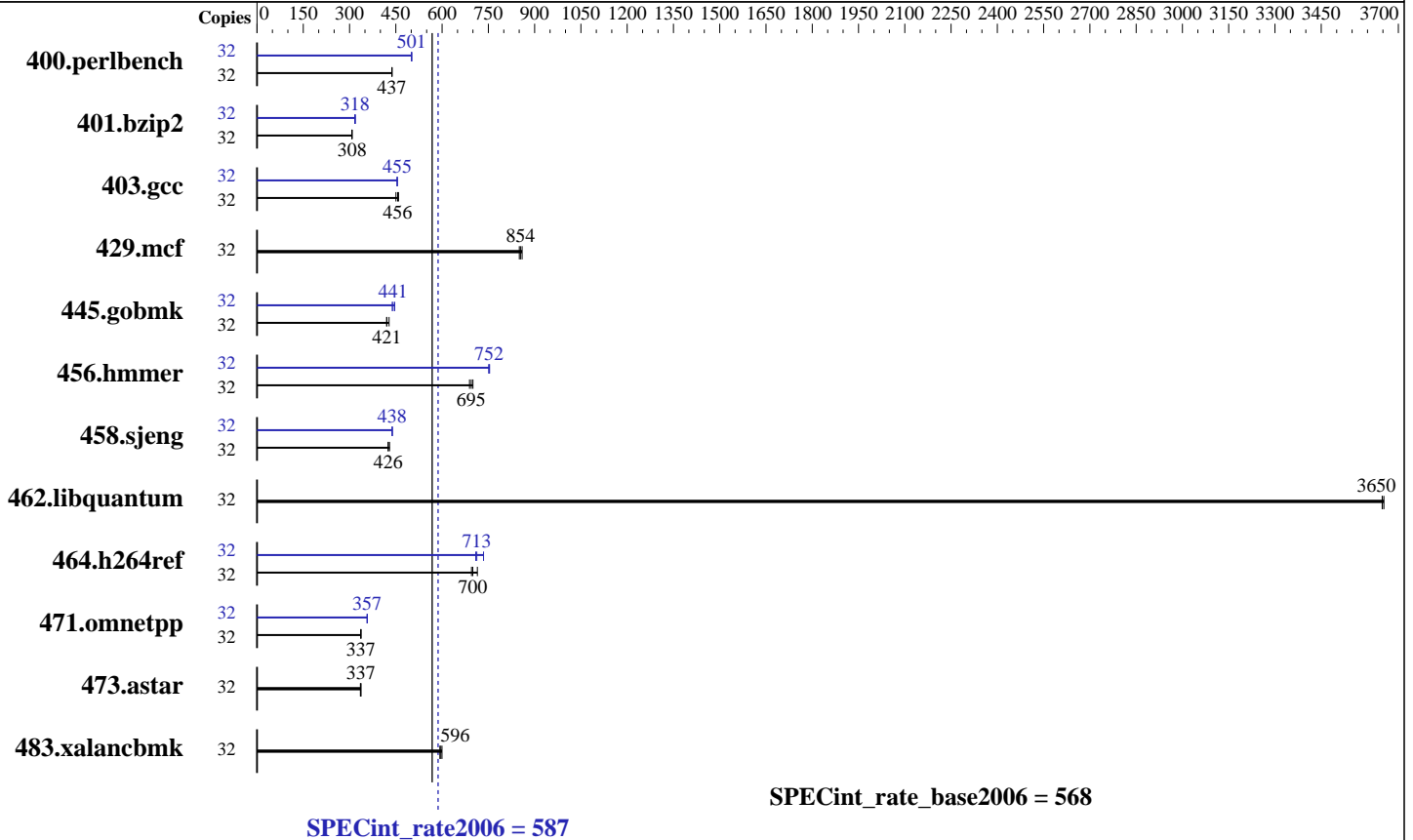
Test date: May-2013

Test sponsor: Acer Incorporated

Hardware Availability: May-2013

Tested by: Acer Incorporated

Software Availability: Feb-2013



Hardware

CPU Name: Intel Xeon E5-2660
 CPU Characteristics: Intel Turbo Boost Technology up to 3.00 GHz
 CPU MHz: 2200
 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 PC3-12800R-11, ECC)
 Disk Subsystem: 1 x 300 GB SAS, 10K RPM
 Other Hardware: None

Software

Operating System: Red Hat Enterprise Linux Server release 6.3 (Santiago)
 2.6.32-279.el6.x86_64
 Compiler: C/C++: Version 13.0.0.133 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

Acer Incorporated

SPECint_rate2006 = 587

Altos R360 F2 (Intel Xeon E5-2660)

SPECint_rate_base2006 = 568

CPU2006 license: 97

Test date: May-2013

Test sponsor: Acer Incorporated

Hardware Availability: May-2013

Tested by: Acer Incorporated

Software Availability: Feb-2013

Results Table

Benchmark	Base						Peak							
	Copies	Seconds	Ratio	Seconds	Ratio	Seconds	Ratio	Copies	Seconds	Ratio	Seconds	Ratio	Seconds	Ratio
400.perlbench	32	715	437	<u>715</u>	<u>437</u>	714	438	32	623	502	<u>624</u>	<u>501</u>	624	501
401.bzip2	32	<u>1003</u>	<u>308</u>	1001	308	1005	307	32	<u>971</u>	<u>318</u>	975	317	968	319
403.gcc	32	561	459	<u>565</u>	<u>456</u>	572	450	32	567	454	<u>567</u>	<u>455</u>	566	455
429.mcf	32	343	850	<u>342</u>	<u>854</u>	340	859	32	343	850	<u>342</u>	<u>854</u>	340	859
445.gobmk	32	784	428	<u>798</u>	<u>421</u>	798	420	32	766	438	<u>761</u>	<u>441</u>	752	446
456.hammer	32	433	689	<u>430</u>	<u>695</u>	427	700	32	<u>397</u>	<u>752</u>	396	754	397	752
458.sjeng	32	<u>910</u>	<u>426</u>	911	425	901	430	32	883	438	883	438	<u>883</u>	<u>438</u>
462.libquantum	32	<u>182</u>	<u>3650</u>	182	3650	182	3650	32	<u>182</u>	<u>3650</u>	182	3650	182	3650
464.h264ref	32	991	714	1019	695	<u>1012</u>	<u>700</u>	32	999	709	<u>994</u>	<u>713</u>	964	734
471.omnetpp	32	593	337	<u>594</u>	<u>337</u>	595	336	32	<u>560</u>	<u>357</u>	560	357	560	357
473.astar	32	<u>668</u>	<u>337</u>	667	337	670	335	32	<u>668</u>	<u>337</u>	667	337	670	335
483.xalancbmk	32	373	593	<u>371</u>	<u>596</u>	368	600	32	373	593	<u>371</u>	<u>596</u>	368	600

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 /usr/cpu2006/config/sysinfo.rev6818
\$Rev: 6818 \$ \$Date:: 2012-07-17 #\$ e86d102572650a6e4d596a3cee98f191
running on altosr380f2 Mon May 27 09:51:02 2013

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 E5-2660 0 @ 2.20GHz
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

Continued on next page



SPEC CINT2006 Result

Copyright 2006-2014 Standard Performance Evaluation Corporation

Acer Incorporated

SPECint_rate2006 = 587

Altos R360 F2 (Intel Xeon E5-2660)

SPECint_rate_base2006 = 568

CPU2006 license: 97
Test sponsor: Acer Incorporated
Tested by: Acer Incorporated

Test date: May-2013
Hardware Availability: May-2013
Software Availability: Feb-2013

Platform Notes (Continued)

```
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:      132113952 kB
HugePages_Total:      0
Hugepagesize:    2048 kB
```

```
/usr/bin/lsb_release -d
Red Hat Enterprise Linux Server release 6.3 (Santiago)
```

```
From /etc/*release* /etc/*version*
redhat-release: Red Hat Enterprise Linux Server release 6.3 (Santiago)
system-release: Red Hat Enterprise Linux Server release 6.3 (Santiago)
system-release-cpe: cpe:/o:redhat:enterprise_linux:6server:ga:server
```

```
uname -a:
Linux altosr380f2 2.6.32-279.el6.x86_64 #1 SMP Wed Jun 13 18:24:36 EDT 2012
x86_64 x86_64 x86_64 GNU/Linux
```

```
run-level 3 May 27 09:49
```

```
SPEC is set to: /usr/cpu2006
Filesystem      Type      Size  Used Avail Use% Mounted on
/dev/mapper/vg_altosr380f2-lv_root
                ext4      270G  145G  111G   57% /
```

```
Additional information from dmidecode:
BIOS Intel Corp. SE5C600.86B.01.06.0002.110120121539 11/01/2012
Memory:
16x 8 GB
16x Hynix HMT31GR7CFR4C-PB 8 GB 1600 MHz 2 rank
8x NO DIMM NO DIMM
```

(End of data from sysinfo program)

General Notes

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

```
Binaries compiled on a system with 1x Core i7-860 CPU + 8GB
memory using RHEL5.5
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>
Altos R360 F2 and Altos R380 F2 are electronically equivalent.
```

Continued on next page



SPEC CINT2006 Result

Copyright 2006-2014 Standard Performance Evaluation Corporation

Acer Incorporated

SPECint_rate2006 = 587

Altos R360 F2 (Intel Xeon E5-2660)

SPECint_rate_base2006 = 568

CPU2006 license: 97

Test sponsor: Acer Incorporated

Tested by: Acer Incorporated

Test date: May-2013

Hardware Availability: May-2013

Software Availability: Feb-2013

General Notes (Continued)

This result was measured on Altos R380 F2.

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:

-xAVX -ipo -O3 -no-prec-div -opt-prefetch -opt-mem-layout-trans=3

C++ benchmarks:

-xAVX -ipo -O3 -no-prec-div -opt-prefetch -opt-mem-layout-trans=3
-Wl,-z,muldefs -L/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

Acer Incorporated

SPECint_rate2006 = 587

Altos R360 F2 (Intel Xeon E5-2660)

SPECint_rate_base2006 = 568

CPU2006 license: 97

Test sponsor: Acer Incorporated

Tested by: Acer Incorporated

Test date: May-2013

Hardware Availability: May-2013

Software Availability: Feb-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: -xAVX(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: -xAVX(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: -xAVX -ipo -O3 -no-prec-div

429.mcf: basepeak = yes

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

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

458.sjeng: -xAVX(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: -xAVX(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:

Continued on next page



SPEC CINT2006 Result

Copyright 2006-2014 Standard Performance Evaluation Corporation

Acer Incorporated

SPECint_rate2006 = 587

Altos R360 F2 (Intel Xeon E5-2660)

SPECint_rate_base2006 = 568

CPU2006 license: 97

Test sponsor: Acer Incorporated

Tested by: Acer Incorporated

Test date: May-2013

Hardware Availability: May-2013

Software Availability: Feb-2013

Peak Optimization Flags (Continued)

471.omnetpp: -xAVX(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/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-ic13-official-linux64.html>

<http://www.spec.org/cpu2006/flags/Acer-Platform-Settings-V1.2-revA.20130423.html>

You can also download the XML flags sources by saving the following links:

<http://www.spec.org/cpu2006/flags/Intel-ic13-official-linux64.xml>

<http://www.spec.org/cpu2006/flags/Acer-Platform-Settings-V1.2-revA.20130423.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 Thu Jul 24 15:50:21 2014 by SPEC CPU2006 PS/PDF formatter v6932.

Originally published on 18 June 2013.