



# SPEC® CINT2006 Result

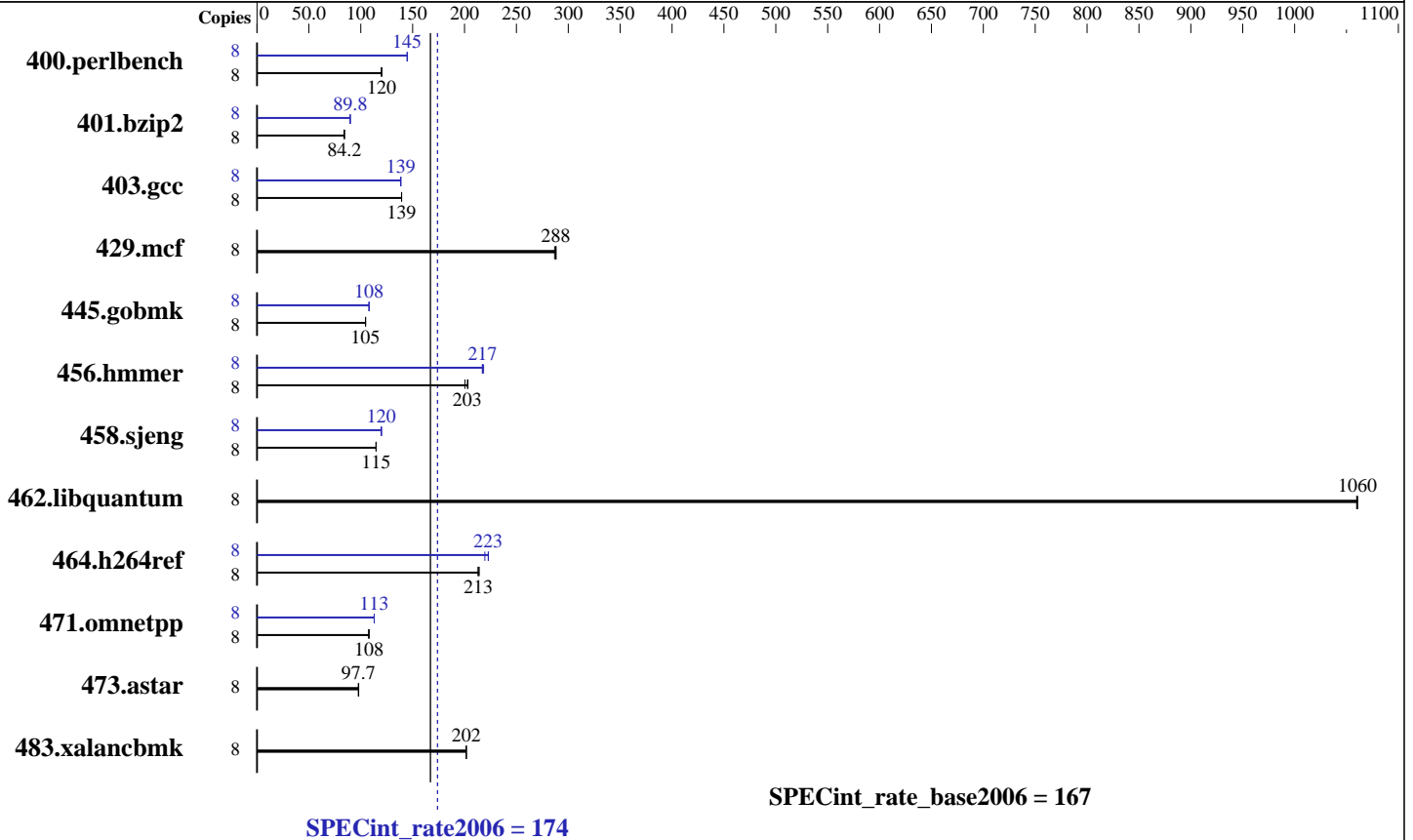
Copyright 2006-2014 Standard Performance Evaluation Corporation

**Acer Incorporated**  
**Acer AR380 F2 (Xeon E5-2603)**

**SPECint®\_rate2006 = 174**  
**SPECint\_rate\_base2006 = 167**

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

**Test date:** Jul-2012  
**Hardware Availability:** Jul-2012  
**Software Availability:** Dec-2011



## Hardware

**CPU Name:** Intel Xeon E5-2603  
**CPU Characteristics:**  
**CPU MHz:** 1800  
**FPU:** Integrated  
**CPU(s) enabled:** 8 cores, 2 chips, 4 cores/chip  
**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:** 10 MB I+D on chip per chip  
**Other Cache:** None  
**Memory:** 128 GB (16 x 8 GB 2Rx4 PC3L-10600R-9, ECC)  
**Disk Subsystem:** 1 x 2 TB SAS, 7200 RPM  
**Other Hardware:** None

## Software

**Operating System:** Red Hat Enterprise Linux Server release 6.2 (Santiago)  
 2.6.32-220.el6.x86\_64  
**Compiler:** C/C++: Version 12.1.0.225 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 V9.01



# SPEC CINT2006 Result

Copyright 2006-2014 Standard Performance Evaluation Corporation

Acer Incorporated

SPECint\_rate2006 = 174

Acer AR380 F2 (Xeon E5-2603)

SPECint\_rate\_base2006 = 167

CPU2006 license: 97

Test date: Jul-2012

Test sponsor: Acer Incorporated

Hardware Availability: Jul-2012

Tested by: Acer Incorporated

Software Availability: Dec-2011

## Results Table

Benchmark	Base						Peak							
	Copies	Seconds	Ratio	Seconds	Ratio	Seconds	Ratio	Copies	Seconds	Ratio	Seconds	Ratio	Seconds	Ratio
400.perlbench	8	650	120	652	120	<u>651</u>	<u>120</u>	8	539	145	<u>540</u>	<u>145</u>	540	145
401.bzip2	8	<u>916</u>	<u>84.2</u>	919	84.0	916	84.2	8	861	89.7	<u>859</u>	<u>89.8</u>	859	89.9
403.gcc	8	462	139	462	139	<u>462</u>	<u>139</u>	8	464	139	<u>465</u>	<u>139</u>	466	138
429.mcf	8	254	287	253	288	<u>253</u>	<u>288</u>	8	254	287	253	288	<u>253</u>	<u>288</u>
445.gobmk	8	802	105	803	105	<u>802</u>	<u>105</u>	8	777	108	<u>777</u>	<u>108</u>	778	108
456.hammer	8	367	203	<u>368</u>	<u>203</u>	373	200	8	<u>343</u>	<u>217</u>	344	217	342	218
458.sjeng	8	<u>843</u>	<u>115</u>	843	115	844	115	8	807	120	<u>808</u>	<u>120</u>	808	120
462.libquantum	8	156	1060	156	1060	<u>156</u>	<u>1060</u>	8	156	1060	156	1060	<u>156</u>	<u>1060</u>
464.h264ref	8	<u>830</u>	<u>213</u>	827	214	831	213	8	<u>795</u>	<u>223</u>	794	223	806	220
471.omnetpp	8	463	108	464	108	<u>463</u>	<u>108</u>	8	443	113	<u>443</u>	<u>113</u>	443	113
473.astar	8	<u>575</u>	<u>97.7</u>	575	97.7	573	98.0	8	<u>575</u>	<u>97.7</u>	575	97.7	573	98.0
483.xalancbmk	8	274	202	<u>274</u>	<u>202</u>	274	202	8	274	202	<u>274</u>	<u>202</u>	274	202

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.rev6800  
\$Rev: 6800 \$ \$Date:: 2011-10-11 #\$ 6f2ebdff5032aaa42e583f96b07f99d3  
running on localhost.localdomain Sat Jul 14 09:21:26 2012

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 E5-2603 0 @ 1.80GHz  
2 "physical id"s (chips)  
8 "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 : 4  
siblings : 4

Continued on next page



# SPEC CINT2006 Result

Copyright 2006-2014 Standard Performance Evaluation Corporation

Acer Incorporated

SPECint\_rate2006 = 174

Acer AR380 F2 (Xeon E5-2603)

SPECint\_rate\_base2006 = 167

CPU2006 license: 97

Test sponsor: Acer Incorporated

Tested by: Acer Incorporated

Test date: Jul-2012

Hardware Availability: Jul-2012

Software Availability: Dec-2011

## Platform Notes (Continued)

```
physical 0: cores 0 1 2 3
physical 1: cores 0 1 2 3
cache size : 10240 KB
```

```
From /proc/meminfo
MemTotal:      132132504 kB
HugePages_Total:      0
Hugepagesize:    2048 kB
```

```
/usr/bin/lsb_release -d
Red Hat Enterprise Linux Server release 6.2 (Santiago)
```

```
From /etc/*release* /etc/*version*
redhat-release: Red Hat Enterprise Linux Server release 6.2 (Santiago)
system-release: Red Hat Enterprise Linux Server release 6.2 (Santiago)
system-release-cpe: cpe:/o:redhat:enterprise_linux:6server:ga:server
```

```
uname -a:
Linux localhost.localdomain 2.6.32-220.el6.x86_64 #1 SMP Wed Nov 9 08:03:13
EST 2011 x86_64 x86_64 x86_64 GNU/Linux
```

```
run-level 3 Jul 13 18:33
```

```
SPEC is set to: /usr/cpu2006
Filesystem      Type      Size  Used Avail Use% Mounted on
/dev/mapper/VolGroup-lv_root
ext4            338G    113G   209G   36% /
```

Additional information from dmidecode:

```
Memory:
14x Hynix Semiconducto HMT31GR7BFR4A 8 GB 1066 MHz 1 rank
2x Hynix Semiconductor HMT31GR7BFR4A- 8 GB 1066 MHz 1 rank
```

(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"

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>  
The Acer AR360 F2 and AR380 F2 are electronically equivalent.  
This result was measured on Acer AR360 F2.



# SPEC CINT2006 Result

Copyright 2006-2014 Standard Performance Evaluation Corporation

Acer Incorporated

SPECint\_rate2006 = 174

Acer AR380 F2 (Xeon E5-2603)

SPECint\_rate\_base2006 = 167

CPU2006 license: 97

Test sponsor: Acer Incorporated

Tested by: Acer Incorporated

Test date: Jul-2012

Hardware Availability: Jul-2012

Software Availability: Dec-2011

## 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/smartheap -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

458.sjeng: icc -m64

C++ benchmarks:

icpc -m32



# SPEC CINT2006 Result

Copyright 2006-2014 Standard Performance Evaluation Corporation

Acer Incorporated

SPECint\_rate2006 = 174

Acer AR380 F2 (Xeon E5-2603)

SPECint\_rate\_base2006 = 167

CPU2006 license: 97

Test sponsor: Acer Incorporated

Tested by: Acer Incorporated

Test date: Jul-2012

Hardware Availability: Jul-2012

Software Availability: Dec-2011

## 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.xalanbmk: -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:

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/smartheap -lsmartheap

473.astar: basepeak = yes

483.xalanbmk: basepeak = yes



# SPEC CINT2006 Result

Copyright 2006-2014 Standard Performance Evaluation Corporation

Acer Incorporated

SPECint\_rate2006 = 174

Acer AR380 F2 (Xeon E5-2603)

SPECint\_rate\_base2006 = 167

CPU2006 license: 97

Test sponsor: Acer Incorporated

Tested by: Acer Incorporated

Test date: Jul-2012

Hardware Availability: Jul-2012

Software Availability: Dec-2011

## 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-ic12.1-official-linux64.20111122.html>

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

<http://www.spec.org/cpu2006/flags/Intel-ic12.1-official-linux64.20111122.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 12:41:37 2014 by SPEC CPU2006 PS/PDF formatter v6932.  
Originally published on 6 August 2012.