



# SPEC® CINT2006 Result

Copyright 2006-2014 Standard Performance Evaluation Corporation

## Acer Incorporated

### SPECint®\_rate2006 = 156

### Acer AR320 F2 (Intel Xeon E3-1220 v2)

### SPECint\_rate\_base2006 = 150

CPU2006 license: 97

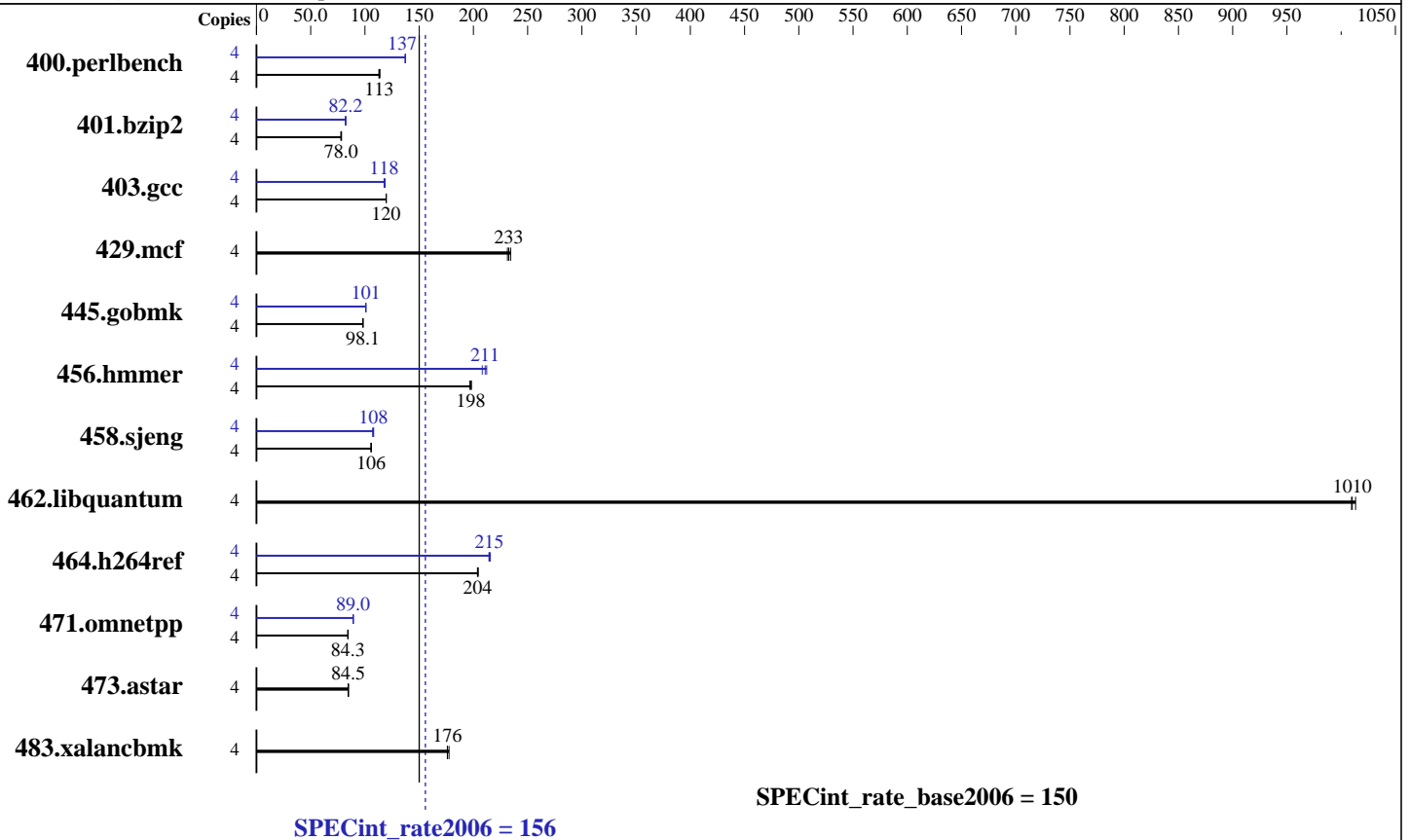
Test sponsor: Acer Incorporated

Tested by: Acer Incorporated

Test date: May-2013

Hardware Availability: Jan-2012

Software Availability: Feb-2013



#### Hardware

CPU Name: Intel Xeon E3-1220 v2  
 CPU Characteristics: Intel Turbo Boost Technology up to 3.5 GHz  
 CPU MHz: 3100  
 FPU: Integrated  
 CPU(s) enabled: 4 cores, 1 chip, 4 cores/chip  
 CPU(s) orderable: 1 chip  
 Primary Cache: 32 KB I + 32 KB D on chip per core  
 Secondary Cache: 256 KB I+D on chip per core  
 L3 Cache: 8 MB I+D on chip per chip  
 Other Cache: None  
 Memory: 16 GB (2 x 8 GB 2Rx8 PC3-12800E-11, ECC)  
 Disk Subsystem: 1 x 500 GB SATA, 7200 RPM SATA HDD  
 Other Hardware: None

#### Software

Operating System: Red Hat Enterprise Linux Server release 6.4 (Santiago)  
 2.6.32-358.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 = 156

Acer AR320 F2 (Intel Xeon E3-1220 v2)

SPECint\_rate\_base2006 = 150

CPU2006 license: 97

Test date: May-2013

Test sponsor: Acer Incorporated

Hardware Availability: Jan-2012

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  | 4      | 343               | 114                | <b><u>345</u></b>  | <b><u>113</u></b>  | 346     | 113   | 4      | <b><u>284</u></b> | <b><u>137</u></b>  | 285                | 137                | 284               | 137               |
| 401.bzip2      | 4      | <b><u>495</u></b> | <b><u>78.0</u></b> | 492                | 78.5               | 496     | 77.9  | 4      | <b><u>470</u></b> | <b><u>82.2</u></b> | 471                | 81.9               | 468               | 82.5              |
| 403.gcc        | 4      | <b><u>269</u></b> | <b><u>120</u></b>  | 269                | 120                | 269     | 120   | 4      | 274               | 118                | <b><u>274</u></b>  | <b><u>118</u></b>  | 271               | 119               |
| 429.mcf        | 4      | 158               | 231                | <b><u>157</u></b>  | <b><u>233</u></b>  | 156     | 234   | 4      | 158               | 231                | <b><u>157</u></b>  | <b><u>233</u></b>  | 156               | 234               |
| 445.gobmk      | 4      | 427               | 98.3               | <b><u>428</u></b>  | <b><u>98.1</u></b> | 428     | 98.1  | 4      | 416               | 101                | 416                | 101                | <b><u>416</u></b> | <b><u>101</u></b> |
| 456.hammer     | 4      | <b><u>189</u></b> | <b><u>198</u></b>  | 188                | 198                | 190     | 197   | 4      | <b><u>177</u></b> | <b><u>211</u></b>  | 176                | 212                | 179               | 208               |
| 458.sjeng      | 4      | 459               | 106                | <b><u>458</u></b>  | <b><u>106</u></b>  | 457     | 106   | 4      | 452               | 107                | <b><u>449</u></b>  | <b><u>108</u></b>  | 448               | 108               |
| 462.libquantum | 4      | 82.1              | 1010               | <b><u>82.0</u></b> | <b><u>1010</u></b> | 81.8    | 1010  | 4      | 82.1              | 1010               | <b><u>82.0</u></b> | <b><u>1010</u></b> | 81.8              | 1010              |
| 464.h264ref    | 4      | 433               | 205                | <b><u>434</u></b>  | <b><u>204</u></b>  | 434     | 204   | 4      | 410               | 216                | <b><u>412</u></b>  | <b><u>215</u></b>  | 413               | 214               |
| 471.omnetpp    | 4      | 296               | 84.5               | <b><u>297</u></b>  | <b><u>84.3</u></b> | 297     | 84.2  | 4      | <b><u>281</u></b> | <b><u>89.0</u></b> | 281                | 89.0               | 279               | 89.5              |
| 473.astar      | 4      | <b><u>332</u></b> | <b><u>84.5</u></b> | 332                | 84.5               | 330     | 85.0  | 4      | <b><u>332</u></b> | <b><u>84.5</u></b> | 332                | 84.5               | 330               | 85.0              |
| 483.xalancbmk  | 4      | <b><u>157</u></b> | <b><u>176</u></b>  | 155                | 178                | 157     | 176   | 4      | <b><u>157</u></b> | <b><u>176</u></b>  | 155                | 178                | 157               | 176               |

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

## Submit Notes

The taskset mechanism was used to bind copies to processors. The config file option 'submit' was used to generate taskset 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 localhost.localdomain Tue May 14 07:11:45 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 E3-1220 V2 @ 3.10GHz
1 "physical id"s (chips)
4 "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 = 156**

**Acer AR320 F2 (Intel Xeon E3-1220 v2)**

**SPECint\_rate\_base2006 = 150**

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

**Test date:** May-2013  
**Hardware Availability:** Jan-2012  
**Software Availability:** Feb-2013

## Platform Notes (Continued)

```
physical 0: cores 0 1 2 3
cache size : 8192 KB
```

```
From /proc/meminfo
MemTotal:      16299216 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.el6.x86_64 #1 SMP Tue Jan 29 11:47:41
EST 2013 x86_64 x86_64 x86_64 GNU/Linux
```

```
run-level 3 May 14 07:11
```

```
SPEC is set to: /usr/cpu2006
Filesystem      Type      Size  Used Avail Use% Mounted on
/dev/mapper/VolGroup-lv_root
                ext4      434G  12G  401G   3% /
```

```
Additional information from dmidecode:
BIOS Acer P10 11/23/2012
Memory:
2x 8 GB
2x Kingston ACR1GX72D3E16C11G 8 GB 1600 MHz 2 rank
2x [Empty] [Empty]
```

(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



# SPEC CINT2006 Result

Copyright 2006-2014 Standard Performance Evaluation Corporation

Acer Incorporated

SPECint\_rate2006 = 156

Acer AR320 F2 (Intel Xeon E3-1220 v2)

SPECint\_rate\_base2006 = 150

CPU2006 license: 97

Test sponsor: Acer Incorporated

Tested by: Acer Incorporated

Test date: May-2013

Hardware Availability: Jan-2012

Software Availability: Feb-2013

## 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

458.sjeng: icc -m64

C++ benchmarks:

icpc -m32



# SPEC CINT2006 Result

Copyright 2006-2014 Standard Performance Evaluation Corporation

Acer Incorporated

SPECint\_rate2006 = 156

Acer AR320 F2 (Intel Xeon E3-1220 v2)

SPECint\_rate\_base2006 = 150

CPU2006 license: 97

Test sponsor: Acer Incorporated

Tested by: Acer Incorporated

Test date: May-2013

Hardware Availability: Jan-2012

Software Availability: Feb-2013

## 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:

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



# SPEC CINT2006 Result

Copyright 2006-2014 Standard Performance Evaluation Corporation

Acer Incorporated

SPECint\_rate2006 = 156

Acer AR320 F2 (Intel Xeon E3-1220 v2)

SPECint\_rate\_base2006 = 150

CPU2006 license: 97

Test sponsor: Acer Incorporated

Tested by: Acer Incorporated

Test date: May-2013

Hardware Availability: Jan-2012

Software Availability: Feb-2013

## 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](mailto:webmaster@spec.org).

Tested with SPEC CPU2006 v1.2.  
Report generated on Thu Jul 24 15:54:26 2014 by SPEC CPU2006 PS/PDF formatter v6932.  
Originally published on 18 June 2013.