



# SPEC® CFP2006 Result

Copyright 2006-2014 Standard Performance Evaluation Corporation

Acer Incorporated

**SPECfp®\_rate2006 = 75.8**

Acer AR320 F2 (Intel Core i3-2100)

**SPECfp\_rate\_base2006 = 74.0**

CPU2006 license: 97

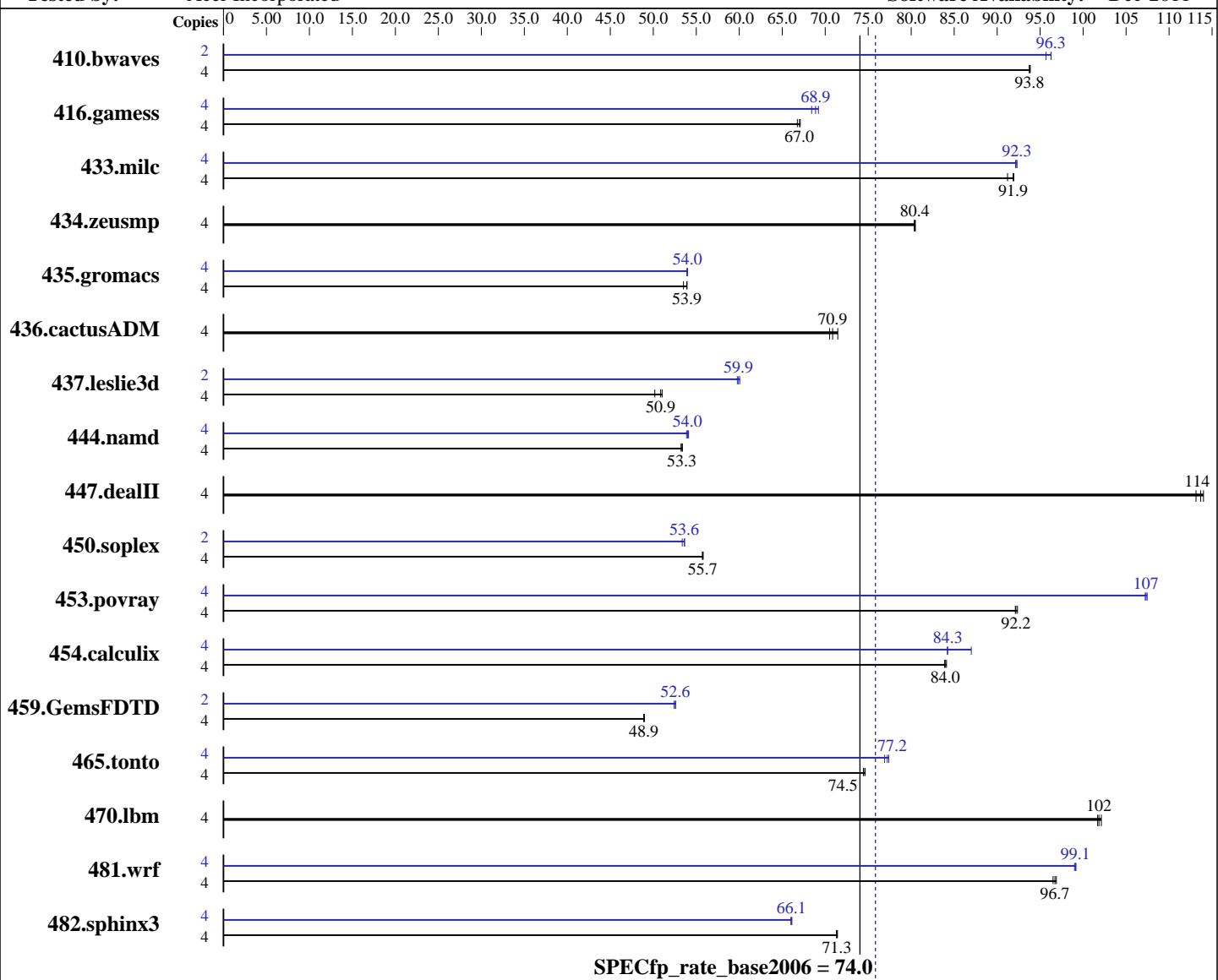
Test date: Mar-2012

Test sponsor: Acer Incorporated

Hardware Availability: Jan-2012

Tested by: Acer Incorporated

Software Availability: Dec-2011



## Hardware

CPU Name: Intel Core i3-2100  
CPU Characteristics:  
CPU MHz: 3100  
FPU: Integrated  
CPU(s) enabled: 2 cores, 1 chip, 2 cores/chip, 2 threads/core  
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

## Software

Operating System: Red Hat Enterprise Linux Server release 6.1 (Santiago)  
2.6.32-131.0.15.el6.x86\_64  
Compiler: C/C++: Version 12.1.0.225 of Intel C++ Studio XE for Linux;  
Fortran: Version 12.1.0.225 of Intel Fortran Studio XE for Linux  
Auto Parallel: No  
File System: ext4

Continued on next page

Continued on next page



# SPEC CFP2006 Result

Copyright 2006-2014 Standard Performance Evaluation Corporation

Acer Incorporated

**SPECfp\_rate2006 = 75.8**

Acer AR320 F2 (Intel Core i3-2100)

**SPECfp\_rate\_base2006 = 74.0**

CPU2006 license: 97

Test date: Mar-2012

Test sponsor: Acer Incorporated

Hardware Availability: Jan-2012

Tested by: Acer Incorporated

Software Availability: Dec-2011

L3 Cache: 3 MB I+D on chip per chip  
 Other Cache: None  
 Memory: 8 GB (2 x 4 GB 2Rx8 PC3-10600E-9,ECC)  
 Disk Subsystem: 1 x 500 GB SATA, 7200RPM  
 Other Hardware: None

System State: Run level 3 (multi-user)  
 Base Pointers: 32/64-bit  
 Peak Pointers: 32/64-bit  
 Other Software: None

## Results Table

Benchmark	Base							Peak						
	Copies	Seconds	Ratio	Seconds	Ratio	Seconds	Ratio	Copies	Seconds	Ratio	Seconds	Ratio	Seconds	Ratio
410.bwaves	4	<b>580</b>	<b>93.8</b>	579	93.9	580	93.7	2	284	95.7	282	96.3	<b>282</b>	<b>96.3</b>
416.gamess	4	1167	67.1	<b>1169</b>	<b>67.0</b>	1173	66.8	4	1132	69.2	1145	68.4	<b>1137</b>	<b>68.9</b>
433.milc	4	403	91.2	399	91.9	<b>400</b>	<b>91.9</b>	4	399	92.1	398	92.3	<b>398</b>	<b>92.3</b>
434.zeusmp	4	453	80.4	452	80.5	<b>453</b>	<b>80.4</b>	4	453	80.4	452	80.5	<b>453</b>	<b>80.4</b>
435.gromacs	4	534	53.5	530	53.9	<b>530</b>	<b>53.9</b>	4	<b>529</b>	<b>54.0</b>	530	53.9	529	54.0
436.cactusADM	4	678	70.5	<b>675</b>	<b>70.9</b>	669	71.5	4	678	70.5	<b>675</b>	<b>70.9</b>	669	71.5
437.leslie3d	4	749	50.2	737	51.0	<b>739</b>	<b>50.9</b>	2	315	59.8	<b>314</b>	<b>59.9</b>	313	60.1
444.namd	4	601	53.4	<b>601</b>	<b>53.3</b>	603	53.2	4	593	54.1	<b>594</b>	<b>54.0</b>	595	53.9
447.dealII	4	401	114	404	113	<b>403</b>	<b>114</b>	4	401	114	404	113	<b>403</b>	<b>114</b>
450.soplex	4	<b>598</b>	<b>55.7</b>	598	55.8	599	55.7	2	313	53.4	311	53.6	<b>311</b>	<b>53.6</b>
453.povray	4	<b>231</b>	<b>92.2</b>	230	92.4	231	92.1	4	<b>198</b>	<b>107</b>	198	107	198	107
454.calculix	4	393	83.9	<b>393</b>	<b>84.0</b>	392	84.1	4	<b>392</b>	<b>84.3</b>	392	84.2	379	87.0
459.GemsFDTD	4	867	49.0	<b>868</b>	<b>48.9</b>	868	48.9	2	405	52.4	<b>404</b>	<b>52.6</b>	403	52.6
465.tonto	4	527	74.7	<b>528</b>	<b>74.5</b>	529	74.4	4	<b>510</b>	<b>77.2</b>	509	77.4	512	76.9
470.lbm	4	<b>540</b>	<b>102</b>	540	102	538	102	4	<b>540</b>	<b>102</b>	540	102	<b>538</b>	102
481.wrf	4	463	96.5	461	96.9	<b>462</b>	<b>96.7</b>	4	<b>451</b>	<b>99.1</b>	451	99.2	451	99.0
482.sphinx3	4	<b>1093</b>	<b>71.3</b>	1093	71.3	1091	71.4	4	<b>1180</b>	<b>66.1</b>	1179	66.1	1181	66.0

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.rev6800  
 \$Rev: 6800 \$ \$Date::: 2011-10-11 #\\$ 6f2ebdff5032aaa42e583f96b07f99d3  
 running on localhost.localdomain Thu Mar 1 20:23:35 2012

Continued on next page



# SPEC CFP2006 Result

Copyright 2006-2014 Standard Performance Evaluation Corporation

Acer Incorporated

SPECfp\_rate2006 = 75.8

Acer AR320 F2 (Intel Core i3-2100)

SPECfp\_rate\_base2006 = 74.0

CPU2006 license: 97

Test date: Mar-2012

Test sponsor: Acer Incorporated

Hardware Availability: Jan-2012

Tested by: Acer Incorporated

Software Availability: Dec-2011

## Platform Notes (Continued)

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) Core(TM) i3-2100 CPU @ 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 : 2
  siblings   : 4
  physical 0: cores 0 1
  cache size : 3072 KB
```

```
From /proc/meminfo
MemTotal:      8046960 kB
HugePages_Total:       0
Hugepagesize:     2048 kB
```

```
/usr/bin/lsb_release -d
Red Hat Enterprise Linux Server release 6.1 (Santiago)
```

```
From /etc/*release* /etc/*version*
redhat-release: Red Hat Enterprise Linux Server release 6.1 (Santiago)
system-release: Red Hat Enterprise Linux Server release 6.1 (Santiago)
system-release-cpe: cpe:/o:redhat:enterprise_linux:6server:ga:server
```

```
uname -a:
Linux localhost.localdomain 2.6.32-131.0.15.el6.x86_64 #1 SMP Tue May 10
15:42:40 EDT 2011 x86_64 x86_64 x86_64 GNU/Linux
```

```
run-level 3 Mar 1 09:07
```

```
SPEC is set to: /usr/cpu2006
Filesystem      Type  Size  Used Avail Use% Mounted on
/dev/mapper/VolGroup-lv_root
                  ext4   50G   13G   35G  27%  /
```

Additional information from dmidecode:

```
Memory:
 2x Nanya NT4GC72B8PG0NF-DI 4 GB 1333 MHz 2 rank
```

(End of data from sysinfo program)



# SPEC CFP2006 Result

Copyright 2006-2014 Standard Performance Evaluation Corporation

Acer Incorporated	<b>SPECfp_rate2006 = 75.8</b>
Acer AR320 F2 (Intel Core i3-2100)	<b>SPECfp_rate_base2006 = 74.0</b>

CPU2006 license: 97

Test sponsor: Acer Incorporated

Tested by: Acer Incorporated

Test date: Mar-2012

Hardware Availability: Jan-2012

Software Availability: Dec-2011

## 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 disabled with:

echo never > /sys/kernel/mm/redhat\_transparent\_hugepage/enabled

## Base Compiler Invocation

C benchmarks:

icc -m64

C++ benchmarks:

icpc -m64

Fortran benchmarks:

ifort -m64

Benchmarks using both Fortran and C:

icc -m64 ifort -m64

## Base Portability Flags

410.bwaves: -DSPEC\_CPU\_LP64  
416.gamess: -DSPEC\_CPU\_LP64  
433.milc: -DSPEC\_CPU\_LP64  
434.zeusmp: -DSPEC\_CPU\_LP64  
435.gromacs: -DSPEC\_CPU\_LP64 -nofor\_main  
436.cactusADM: -DSPEC\_CPU\_LP64 -nofor\_main  
437.leslie3d: -DSPEC\_CPU\_LP64  
444.namd: -DSPEC\_CPU\_LP64  
447.dealII: -DSPEC\_CPU\_LP64  
450.soplex: -DSPEC\_CPU\_LP64  
453.povray: -DSPEC\_CPU\_LP64  
454.calculix: -DSPEC\_CPU\_LP64 -nofor\_main  
459.GemsFDTD: -DSPEC\_CPU\_LP64  
465.tonto: -DSPEC\_CPU\_LP64  
470.lbm: -DSPEC\_CPU\_LP64  
481.wrf: -DSPEC\_CPU\_LP64 -DSPEC\_CPU\_CASE\_FLAG -DSPEC\_CPU\_LINUX  
482.sphinx3: -DSPEC\_CPU\_LP64

## Base Optimization Flags

C benchmarks:

-xAVX -ipo -O3 -no-prec-div -static -opt-prefetch -auto-p32  
-ansi-alias

Continued on next page



# SPEC CFP2006 Result

Copyright 2006-2014 Standard Performance Evaluation Corporation

Acer Incorporated

**SPECfp\_rate2006 = 75.8**

Acer AR320 F2 (Intel Core i3-2100)

**SPECfp\_rate\_base2006 = 74.0**

CPU2006 license: 97

Test date: Mar-2012

Test sponsor: Acer Incorporated

Hardware Availability: Jan-2012

Tested by: Acer Incorporated

Software Availability: Dec-2011

## Base Optimization Flags (Continued)

C++ benchmarks:

```
-xAVX -ipo -O3 -no-prec-div -static -opt-prefetch -auto-p32  
-ansi-alias
```

Fortran benchmarks:

```
-xAVX -ipo -O3 -no-prec-div -static -opt-prefetch
```

Benchmarks using both Fortran and C:

```
-xAVX -ipo -O3 -no-prec-div -static -opt-prefetch -auto-p32  
-ansi-alias
```

## Peak Compiler Invocation

C benchmarks (except as noted below):

```
icc -m64
```

482.sphinx3: icc -m32

C++ benchmarks (except as noted below):

```
icpc -m64
```

450.soplex: icpc -m32

Fortran benchmarks:

```
ifort -m64
```

Benchmarks using both Fortran and C:

```
icc -m64 ifort -m64
```

## Peak Portability Flags

```
410.bwaves: -DSPEC_CPU_LP64  
416.gamess: -DSPEC_CPU_LP64  
433.milc: -DSPEC_CPU_LP64  
434.zeusmp: -DSPEC_CPU_LP64  
435.gromacs: -DSPEC_CPU_LP64 -nofor_main  
436.cactusADM: -DSPEC_CPU_LP64 -nofor_main  
437.leslie3d: -DSPEC_CPU_LP64  
444.namd: -DSPEC_CPU_LP64  
447.dealII: -DSPEC_CPU_LP64  
453.povray: -DSPEC_CPU_LP64  
454.calculix: -DSPEC_CPU_LP64 -nofor_main  
465.tonto: -DSPEC_CPU_LP64
```

Continued on next page



# SPEC CFP2006 Result

Copyright 2006-2014 Standard Performance Evaluation Corporation

Acer Incorporated

Acer AR320 F2 (Intel Core i3-2100)

**SPECfp\_rate2006 = 75.8**

**SPECfp\_rate\_base2006 = 74.0**

CPU2006 license: 97

Test sponsor: Acer Incorporated

Tested by: Acer Incorporated

Test date: Mar-2012

Hardware Availability: Jan-2012

Software Availability: Dec-2011

## Peak Portability Flags (Continued)

470.lbm: -DSPEC\_CPU\_LP64

481.wrf: -DSPEC\_CPU\_LP64 -DSPEC\_CPU\_CASE\_FLAG -DSPEC\_CPU\_LINUX

## Peak Optimization Flags

C benchmarks:

433.milc: -xAVX(pass 2) -prof-gen(pass 1) -ipo(pass 2) -O3(pass 2)  
-no-prec-div(pass 2) -prof-use(pass 2) -static -auto-ilp32

470.lbm: basepeak = yes

482.sphinx3: -xAVX -ipo -O3 -no-prec-div -unroll12

C++ benchmarks:

444.namd: -xAVX(pass 2) -prof-gen(pass 1) -ipo(pass 2) -O3(pass 2)  
-no-prec-div(pass 2) -prof-use(pass 2) -fno-alias  
-auto-ilp32

447.dealII: basepeak = yes

450.soplex: -xAVX(pass 2) -prof-gen(pass 1) -ipo(pass 2) -O3(pass 2)  
-no-prec-div(pass 2) -prof-use(pass 2) -opt-malloc-options=3

453.povray: -xAVX(pass 2) -prof-gen(pass 1) -ipo(pass 2) -O3(pass 2)  
-no-prec-div(pass 2) -prof-use(pass 2) -unroll4 -ansi-alias

Fortran benchmarks:

410.bwaves: -xAVX(pass 2) -prof-gen(pass 1) -ipo(pass 2) -O3(pass 2)  
-no-prec-div(pass 2) -prof-use(pass 2) -static

416.gamess: -xAVX(pass 2) -prof-gen(pass 1) -ipo(pass 2) -O3(pass 2)  
-no-prec-div(pass 2) -prof-use(pass 2) -unroll2  
-inline-level=0 -scalar-rep- -static

434.zeusmp: basepeak = yes

437.leslie3d: -xAVX -ipo -O3 -no-prec-div -static -opt-prefetch

459.GemsFDTD: -xAVX(pass 2) -prof-gen(pass 1) -ipo(pass 2) -O3(pass 2)  
-no-prec-div(pass 2) -prof-use(pass 2) -opt-malloc-options=3

465.tonto: -xAVX(pass 2) -prof-gen(pass 1) -ipo(pass 2) -O3(pass 2)  
-no-prec-div(pass 2) -prof-use(pass 2) -unroll4 -auto  
-inline-calloc -opt-malloc-options=3

Continued on next page



# SPEC CFP2006 Result

Copyright 2006-2014 Standard Performance Evaluation Corporation

Acer Incorporated

SPECfp\_rate2006 = 75.8

Acer AR320 F2 (Intel Core i3-2100)

SPECfp\_rate\_base2006 = 74.0

CPU2006 license: 97

Test date: Mar-2012

Test sponsor: Acer Incorporated

Hardware Availability: Jan-2012

Tested by: Acer Incorporated

Software Availability: Dec-2011

## Peak Optimization Flags (Continued)

Benchmarks using both Fortran and C:

```
435.gromacs: -xAVX(pass 2) -prof-gen(pass 1) -ipo(pass 2) -O3(pass 2)
               -no-prec-div(pass 2) -prof-use(pass 2) -opt-prefetch
               -static -auto-ilp32
```

```
436.cactusADM: basepeak = yes
```

```
454.calculix: -xAVX -ipo -O3 -no-prec-div -static -auto-ilp32
```

```
481.wrf: Same as 454.calculix
```

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 SPECfp 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 08:58:51 2014 by SPEC CPU2006 PS/PDF formatter v6932.

Originally published on 22 May 2012.