SPEC® CFP2006 Result
Copyright 2006-2014 Standard Performance Evaluation Corporation

Acer Incorporated

Acer Altos R520 (Intel Xeon E5405)

SPECfp®_rate2006 = 64.0

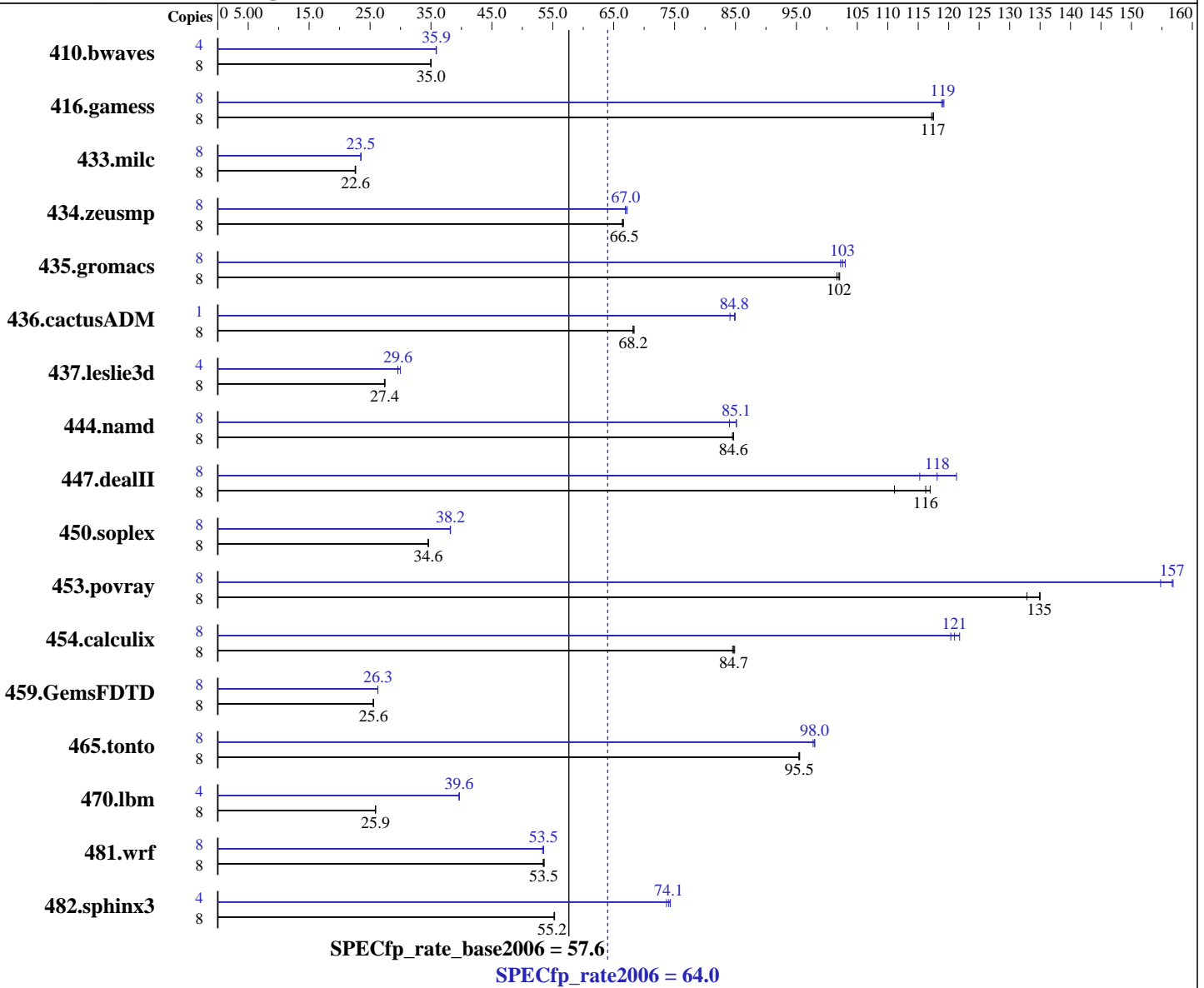SPECfp_rate_base2006 = 57.6

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

Test date: Jan-2008
Hardware Availability: Nov-2007
Software Availability: Nov-2007

SPECfp_rate_base2006 = 57.6

SPECfp_rate2006 = 64.0

Hardware

CPU Name:	Intel Xeon E5405
CPU Characteristics:	1333MHz system bus
CPU MHz:	2000
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:	12 MB I+D on chip per chip, 6 MB shared / 2 cores

Continued on next page

Software

Operating System:	SuSE Linux Enterprise Server 10 SP1 (x86_64) Kernel 2.6.16.46-0.12-smp
Compiler:	Intel C++ and Fortran Compiler 10.1 for Linux Build 20070913 Package ID: l_cc_p_10.1.008, l_fc_p_10.1.008
Auto Parallel:	Yes
File System:	ReiserFS
System State:	Multi-user, level 3
Base Pointers:	64-bit

Continued on next page

SPEC CFP2006 Result
Copyright 2006-2014 Standard Performance Evaluation Corporation

Acer Incorporated

Acer Altos R520 (Intel Xeon E5405)

SPECfp_rate2006 = 64.0

SPECfp_rate_base2006 = 57.6

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

Test date: Jan-2008
Hardware Availability: Nov-2007
Software Availability: Nov-2007

L3 Cache:	None
Other Cache:	None
Memory:	16 GB (8 x 2048MB ECC FB-DIMM DDR2-667 CL5-5-5)
Disk Subsystem:	1 x 73GB 10000PRM SAS HDD
Other Hardware:	None
Peak Pointers:	32/64-bit
Other Software:	Binutils 2.17.50.0.15

Results Table

Benchmark	Base						Peak						
	Copies	Seconds	Ratio	Seconds	Ratio	Seconds	Ratio	Copies	Seconds	Ratio	Seconds	Ratio	Seconds	Ratio
410.bwaves	8	3103	35.0	**3105**	**35.0**	3112	34.9	4	1517	35.8	**1515**	**35.9**	1515	35.9
416.gamess	8	1333	118	**1334**	**117**	1337	117	8	1314	119	1318	119	**1316**	**119**
433.milc	8	3244	22.6	**3249**	**22.6**	3256	22.6	8	**3126**	**23.5**	3126	23.5	3123	23.5
434.zeusmp	8	1093	66.6	1096	66.4	**1094**	**66.5**	8	1087	66.9	**1087**	**67.0**	1083	67.2
435.gromacs	8	**560**	**102**	562	102	559	102	8	**557**	**103**	559	102	554	103
436.cactusADM	8	1399	68.4	1403	68.2	**1401**	**68.2**	1	141	84.9	**141**	**84.8**	142	84.1
437.leslie3d	8	**2743**	**27.4**	2739	27.5	2748	27.4	4	1272	29.6	**1271**	**29.6**	1254	30.0
444.namd	8	**758**	**84.6**	758	84.7	759	84.5	8	753	85.2	**754**	**85.1**	764	84.0
447.dealII	8	783	117	824	111	**787**	**116**	8	**775**	**118**	794	115	755	121
450.soplex	8	**1931**	**34.6**	1929	34.6	1932	34.5	8	**1747**	**38.2**	1746	38.2	1749	38.2
453.povray	8	315	135	320	133	**316**	**135**	8	271	157	**272**	**157**	275	155
454.calculix	8	781	84.5	**779**	**84.7**	778	84.9	8	548	120	**546**	**121**	542	122
459.GemsFDTD	8	3328	25.5	**3318**	**25.6**	3316	25.6	8	**3229**	**26.3**	3228	26.3	3230	26.3
465.tonto	8	825	95.4	**825**	**95.5**	824	95.5	8	**803**	**98.0**	803	98.0	805	97.7
470.lbm	8	4246	25.9	4243	25.9	**4244**	**25.9**	4	**1387**	**39.6**	1387	39.6	1386	39.7
481.wrf	8	1673	53.4	1668	53.6	**1670**	**53.5**	8	**1670**	**53.5**	1670	53.5	1676	53.3
482.sphinx3	8	2819	55.3	**2823**	**55.2**	2823	55.2	4	1058	73.7	**1053**	**74.1**	1049	74.3

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

General Notes

```
This result was measured on the Acer Altos R520.
The Altos R720 and Altos R520 are electronically equivalent.

All benchmarks compiled in 64-bit mode except 437.leslie3d, 450.soplex
470.lbm and 482.sphinx3, at peak, are compiled in 32-bit mode
BIOS Settings
  Hardware Prefetcher set to OFF

  Adjacent Cache Line Prefetch set to OFF

All results used taskset to bind processes to cores.
"ulimit -s unlimited" was set for stacksize unlimited
```

SPEC CFP2006 Result
Copyright 2006-2014 Standard Performance Evaluation Corporation

Acer Incorporated

Acer Altos R520 (Intel Xeon E5405)

$SPECfp\_rate2006 =$ 64.0

$SPECfp\_rate\_base2006 =$ 57.6

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

Test date: Jan-2008
Hardware Availability: Nov-2007
Software Availability: Nov-2007

Base Compiler Invocation

C benchmarks:
    icc

C++ benchmarks:
    icpc

Fortran benchmarks:
    ifort

Benchmarks using both Fortran and C:
    icc ifort

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:
    -fast

C++ benchmarks:
    -fast

Fortran benchmarks:
    -fast

Benchmarks using both Fortran and C:
    -fast

SPEC CFP2006 Result

Copyright 2006-2014 Standard Performance Evaluation Corporation

Acer Incorporated

Acer Altos R520 (Intel Xeon E5405)

SPECfp_rate2006 = 64.0

SPECfp_rate_base2006 = 57.6

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

Test date: Jan-2008
Hardware Availability: Nov-2007
Software Availability: Nov-2007

Peak Compiler Invocation

C benchmarks (except as noted below):
```
/opt/intel/cc/10.1.008/bin/icc -L/opt/intel/cc/10.1.008/lib
-I/opt/intel/cc/10.1.008/include
```

    433.milc: `icc`

C++ benchmarks (except as noted below):
```
icpc
```

    450.soplex: `/opt/intel/cc/10.1.008/bin/icpc -L/opt/intel/cc/10.1.008/lib`
        `-I/opt/intel/cc/10.1.008/include`

Fortran benchmarks (except as noted below):
```
ifort
```

    437.leslie3d: `/opt/intel/fc/10.1.008/bin/ifort -L/opt/intel/fc/10.1.008/lib`
        `-I/opt/intel/fc/10.1.008/include`

Benchmarks using both Fortran and C:
```
icc ifort
```

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
444.namd: -DSPEC_CPU_LP64
447.dealII: -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
481.wrf: -DSPEC_CPU_LP64 -DSPEC_CPU_CASE_FLAG -DSPEC_CPU_LINUX
```

Peak Optimization Flags

C benchmarks:

    433.milc: `-prof-gen(pass 1) -prof-use(pass 2) -fast -fno-alias`
        `-auto-ilp32`

    470.lbm: `-prof-gen(pass 1) -prof-use(pass 2) -fast -unroll2`
        `-scalar-rep- -prefetch -opt-malloc-options=3`

Acer Incorporated

Acer Altos R520 (Intel Xeon E5405)

SPECfp_rate2006 = 64.0

SPECfp_rate_base2006 = 57.6

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

Test date: Jan-2008
Hardware Availability: Nov-2007
Software Availability: Nov-2007

Peak Optimization Flags (Continued)

```
      482.sphinx3: -fast -unroll2
```

C++ benchmarks:

```
       444.namd: -prof-gen(pass 1) -prof-use(pass 2) -fast -fno-alias
                 -auto-ilp32

       447.dealII: -prof-gen(pass 1) -prof-use(pass 2) -fast -unroll2
                 -ansi-alias -scalar-rep-

      450.soplex: -prof-gen(pass 1) -prof-use(pass 2) -fast
                 -opt-malloc-options=3

      453.povray: -prof-gen(pass 1) -prof-use(pass 2) -fast -unroll4
                 -ansi-alias
```

Fortran benchmarks:

```
      410.bwaves: -fast -prefetch

      416.gamess: -prof-gen(pass 1) -prof-use(pass 2) -fast -unroll2 -Ob0
                 -ansi-alias -scalar-rep-

      434.zeusmp: -prof-gen(pass 1) -prof-use(pass 2) -fast

      437.leslie3d: -prof-gen(pass 1) -prof-use(pass 2) -fast -prefetch
                 -opt-malloc-options=3

   459.GemsFDTD: -prof-gen(pass 1) -prof-use(pass 2) -fast -unroll2 -Ob0
                 -prefetch

       465.tonto: -prof-gen(pass 1) -prof-use(pass 2) -fast -unroll4 -auto
```

Benchmarks using both Fortran and C:

```
      435.gromacs: -prof-gen(pass 1) -prof-use(pass 2) -fast -prefetch
                 -auto-ilp32

   436.cactusADM: -prof-gen(pass 1) -prof-use(pass 2) -fast -unroll2
                 -prefetch -parallel -auto-ilp32

      454.calculix: -fast -unroll-aggressive -auto-ilp32

          481.wrf: -fast -auto-ilp32
```

The flags file that was used to format this result can be browsed at
http://www.spec.org/cpu2006/flags/Intel-ic10.1-FP-intel64-linux-flags.20090714.08.html

SPEC CFP2006 Result
Copyright 2006-2014 Standard Performance Evaluation Corporation

Acer Incorporated

Acer Altos R520 (Intel Xeon E5405)

$SPECfp\_rate2006 =$ 64.0

$SPECfp\_rate\_base2006 =$ 57.6

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

Test date: Jan-2008
Hardware Availability: Nov-2007
Software Availability: Nov-2007

You can also download the XML flags source by saving the following link:
http://www.spec.org/cpu2006/flags/Intel-ic10.1-FP-intel64-linux-flags.20090714.08.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.

Tested with SPEC CPU2006 v1.0.
Report generated on Tue Jul 22 15:57:08 2014 by SPEC CPU2006 PS/PDF formatter v6932.
Originally published on 19 February 2008.