### Hardware

- **CPU Name:** Intel Xeon E3-1280
- **CPU Characteristics:** Intel Turbo Boost Technology up to 3.90 GHz
- **CPU MHz:** 3500
- **FPU:** Integrated
- **CPU(s) enabled:** 4 cores, 1 chip, 4 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
- **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:** ext3
- **System State:** Run level 3 (multi-user)

### SPECf®_rate2006 = 123

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- **SPECf®_rate_base2006 = 119**
**SPEC CFP2006 Result**

**Acer Incorporated**
(Test Sponsor: Acer Incorporation)

**Acer AR320 F2 (Xeon E3-1280)**

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**CPU2006 license:** 97

**Test date:** Dec-2011

**Test sponsor:** Acer Incorporation

**Hardware Availability:** Jan-2012

**Tested by:** Acer Incorporation

**Software Availability:** Dec-2011

L3 Cache: 8 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, 7200 RPM

Other Hardware: None

**Base Pointers:** 32/64-bit

**Peak Pointers:** 32/64-bit

**Other Software:** Microquill SmartHeap V9.01

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### Results Table

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### Submit Notes

numactl was used to bind copies to the cores
The config file option 'submit' was used.

### Operating System Notes

Large pages were disabled for this run.

### General Notes

Binaries compiled on RHEL5.5
Acer Incorporated (Test Sponsor: Acer Incorporation)

SPEC AR320 F2 (Xeon E3-1280)

SPECfp_rate2006 = 123
SPECfp_rate_base2006 = 119

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

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.ml: -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 -nofor_main
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

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

Continued on next page
Acer Incorporated
(Test Sponsor: Acer Incorporation)
Acer AR320 F2 (Xeon E3-1280)

SPECfp_rate2006 = 123
SPECfp_rate_base2006 = 119

CPU2006 license: 97
Test date: Dec-2011
Test sponsor: Acer Incorporation
Hardware Availability: Jan-2012
Tested by: Acer Incorporation
Software Availability: Dec-2011

Base Optimization Flags (Continued)
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
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465.tonto: -DSPEC_CPU_LP64
470.lbm: -DSPEC_CPU_LP64
481.wrf: -DSPEC_CPU_LP64 -DSPEC_CPU_CASE_FLAG -DSPEC_CPU_LINUX

Peak Optimization Flags
C benchmarks:

Continued on next page
Peak Optimization Flags (Continued)

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 -unroll2

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

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
## Acer AR320 F2 (Xeon E3-1280)

### SPEC CFP2006 Result

**Test Sponsor:** Acer Incorporation  
**Hardware Availability:** Jan-2012  
**Software Availability:** Dec-2011

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**Tested by:** Acer Incorporation  
**Software Availability:** Dec-2011

### Peak Optimization Flags (Continued)

```
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](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](http://www.spec.org/cpu2006/flags/Intel-ic12.1-official-linux64.20111122.xml)

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For questions about this result, please contact the tester.  
For other inquiries, please contact webmaster@spec.org.

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