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

Acer Incorporated

Altos T110 F3 (Xeon E3-1230 v3)

$SPECfp®\_rate2006 = 147$

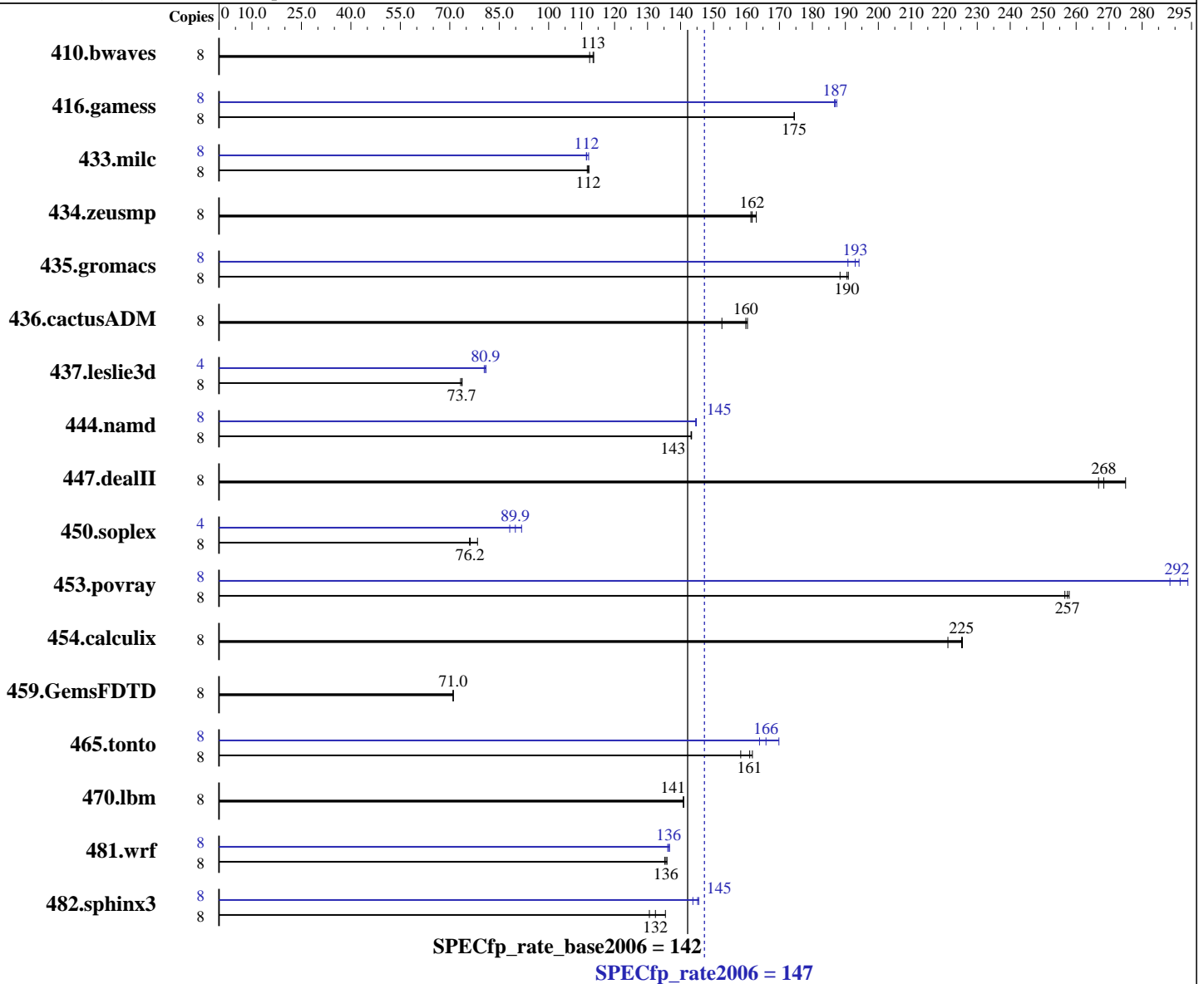$SPECfp\_rate\_base2006 = 142$

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

Test date: Jun-2013
Hardware Availability: Sep-2013
Software Availability: Feb-2013

Benchmark	Copies	Result
410.bwaves	8	113
416.gamess	8	187
416.gamess	8	175
433.milc	8	112
433.milc	8	112
434.zeusmp	8	162
435.gromacs	8	193
435.gromacs	8	190
436.cactusADM	8	160
437.leslie3d	4	80.9
437.leslie3d	8	73.7
444.namd	8	145
444.namd	8	143
447.dealII	8	268
450.soplex	4	89.9
450.soplex	8	76.2
453.povray	8	292
453.povray	8	257
454.calculix	8	225
459.GemsFDTD	8	71.0
465.tonto	8	166
465.tonto	8	161
470.lbm	8	141
481.wrf	8	136
481.wrf	8	136
482.sphinx3	8	145
482.sphinx3	8	132

SPECfp_rate_base2006 = 142

SPECfp_rate2006 = 147

Hardware

CPU Name: Intel Xeon E3-1230 v3
CPU Characteristics: Intel Turbo Boost Technology up to 3.70 GHz
CPU MHz: 3300
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

Continued on next page

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;
Fortran: Version 13.0.0.133 of Intel Fortran Studio XE for Linux
Auto Parallel: No
File System: ext4

Continued on next page

SPEC CFP2006 Result
Copyright 2006-2014 Standard Performance Evaluation Corporation

Acer Incorporated

Altos T110 F3 (Xeon E3-1230 v3)

SPECfp_rate2006 =	147
SPECfp_rate_base2006 =	142

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

Test date: Jun-2013
Hardware Availability: Sep-2013
Software Availability: Feb-2013

L3 Cache:	8 MB I+D on chip per chip
Other Cache:	None
Memory:	16 GB (2 x 8 GB 2Rx4 PC3L-12800E-11, ECC)
Disk Subsystem:	1 x SATA, 500 GB, 7200 RPM
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 Copies	Seconds	Ratio	Seconds	Ratio	Seconds	Ratio	Peak Copies	Seconds	Ratio	Seconds	Ratio	Seconds	Ratio
410.bwaves	8	956	114	967	112	**958**	**113**	8	956	114	967	112	**958**	**113**
416.gamess	8	**898**	**175**	897	175	898	174	8	839	187	836	187	**838**	**187**
433.milc	8	657	112	654	112	**656**	**112**	8	655	112	**658**	**112**	659	111
434.zeusmp	8	**450**	**162**	447	163	451	161	8	**450**	**162**	447	163	451	161
435.gromacs	8	303	188	299	191	**300**	**190**	8	294	194	299	191	**296**	**193**
436.cactusADM	8	596	160	627	153	**598**	**160**	8	596	160	627	153	**598**	**160**
437.leslie3d	8	1020	73.7	**1021**	**73.7**	1026	73.3	4	467	80.5	464	81.0	**465**	**80.9**
444.namd	8	**448**	**143**	448	143	448	143	8	444	145	**443**	**145**	443	145
447.dealII	8	**341**	**268**	333	275	343	267	8	**341**	**268**	333	275	343	267
450.soplex	8	851	78.4	878	76.0	**876**	**76.2**	4	**371**	**89.9**	378	88.2	363	91.8
453.povray	8	165	258	**165**	**257**	166	257	8	145	294	**146**	**292**	148	288
454.calculix	8	**293**	**225**	293	226	298	221	8	**293**	**225**	293	226	298	221
459.GemsFDTD	8	1194	71.1	1195	71.0	**1195**	**71.0**	8	1194	71.1	1195	71.0	**1195**	**71.0**
465.tonto	8	487	162	497	158	**489**	**161**	8	463	170	**474**	**166**	480	164
470.lbm	8	780	141	**780**	**141**	780	141	8	780	141	**780**	**141**	780	141
481.wrf	8	658	136	661	135	**659**	**136**	8	654	137	656	136	**655**	**136**
482.sphinx3	8	1194	131	1151	135	**1178**	**132**	8	1085	144	**1074**	**145**	1071	146

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 Sat Jun 1 03:03:58 2013

Acer Incorporated

Altos T110 F3 (Xeon E3-1230 v3)

SPECfp_rate2006 =   147

SPECfp_rate_base2006 =   142

CPU2006 license: 97

Test sponsor: Acer Incorporated

Tested by: Acer Incorporated

Test date: Jun-2013

Hardware Availability: Sep-2013

Software Availability: Feb-2013

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) Xeon(R) CPU E3-1230 v3 @ 3.30GHz
      1 "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  : 8
      physical 0: cores 0 1 2 3
   cache size : 8192 KB

From /proc/meminfo
   MemTotal:       16288740 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 31 17:46

SPEC is set to: /usr/cpu2006
   Filesystem     Type     Size  Used Avail Use% Mounted on
   /dev/mapper/VolGroup-lv_root
                  ext4     444G   21G  401G   5% /

Additional information from dmidecode:
  BIOS Acer                       D05 05/27/2013
  Memory:
   2x   8 GB
   2x Kingston ACR16D3LE1EFG/8G 8 GB 1600 MHz 2 rank
   2x [Empty] [Empty]

(End of data from sysinfo program)
```

SPEC CFP2006 Result

Copyright 2006-2014 Standard Performance Evaluation Corporation

Acer Incorporated

Altos T110 F3 (Xeon E3-1230 v3)

SPECfp_rate2006 =   147

SPECfp_rate_base2006 =   142

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

Test date: Jun-2013
Hardware Availability: Sep-2013
Software Availability: Feb-2013

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
```

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:
    -xCORE-AVX2 -ipo -O3 -no-prec-div -static -opt-prefetch -auto-p32
    -ansi-alias -opt-mem-layout-trans=3

Continued on next page

SPEC CFP2006 Result
Copyright 2006-2014 Standard Performance Evaluation Corporation

Acer Incorporated

Altos T110 F3 (Xeon E3-1230 v3)

SPECfp_rate2006 =   147

SPECfp_rate_base2006 =   142

CPU2006 license: 97

Test sponsor: Acer Incorporated

Tested by: Acer Incorporated

Test date: Jun-2013

Hardware Availability: Sep-2013

Software Availability: Feb-2013

Base Optimization Flags (Continued)

C++ benchmarks:

```
-xCORE-AVX2 -ipo -O3 -no-prec-div -static -opt-prefetch -auto-p32
-ansi-alias -opt-mem-layout-trans=3
```

Fortran benchmarks:

```
-xCORE-AVX2 -ipo -O3 -no-prec-div -static -opt-prefetch
```

Benchmarks using both Fortran and C:

```
-xCORE-AVX2 -ipo -O3 -no-prec-div -static -opt-prefetch -auto-p32
-ansi-alias -opt-mem-layout-trans=3
```

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
    459.GemsFDTD: -DSPEC_CPU_LP64
```

Continued on next page

SPEC CFP2006 Result
Copyright 2006-2014 Standard Performance Evaluation Corporation

Acer Incorporated

Altos T110 F3 (Xeon E3-1230 v3)

SPECfp_rate2006 = 147

SPECfp_rate_base2006 = 142

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

Test date: Jun-2013
Hardware Availability: Sep-2013
Software Availability: Feb-2013

Peak Portability Flags (Continued)

```
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:

```
433.milc: -xCORE-AVX2(pass 2) -prof-gen(pass 1) -ipo(pass 2)
          -O3(pass 2) -no-prec-div(pass 2)
          -opt-mem-layout-trans=3(pass 2) -prof-use(pass 2) -static
          -auto-ilp32

470.lbm: basepeak = yes

482.sphinx3: -xCORE-AVX2 -ipo -O3 -no-prec-div -opt-mem-layout-trans=3
             -unroll2
```

C++ benchmarks:

```
444.namd: -xCORE-AVX2(pass 2) -prof-gen(pass 1) -ipo(pass 2)
          -O3(pass 2) -no-prec-div(pass 2)
          -opt-mem-layout-trans=3(pass 2) -prof-use(pass 2) -fno-alias
          -auto-ilp32

447.dealII: basepeak = yes

450.soplex: -xCORE-AVX2(pass 2) -prof-gen(pass 1) -ipo(pass 2)
            -O3(pass 2) -no-prec-div(pass 2)
            -opt-mem-layout-trans=3(pass 2) -prof-use(pass 2)
            -opt-malloc-options=3

453.povray: -xCORE-AVX2(pass 2) -prof-gen(pass 1) -ipo(pass 2)
            -O3(pass 2) -no-prec-div(pass 2)
            -opt-mem-layout-trans=3(pass 2) -prof-use(pass 2) -unroll4
            -ansi-alias
```

Fortran benchmarks:

```
410.bwaves: basepeak = yes

416.gamess: -xCORE-AVX2(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
```

Acer Incorporated

Altos T110 F3 (Xeon E3-1230 v3)

SPECfp_rate2006 =   147

SPECfp_rate_base2006 =   142

CPU2006 license: 97		**Test date:**	Jun-2013
Test sponsor:	Acer Incorporated	**Hardware Availability:**	Sep-2013
Tested by:	Acer Incorporated	**Software Availability:**	Feb-2013

Peak Optimization Flags (Continued)

437.leslie3d: `-xCORE-AVX2 -ipo -O3 -no-prec-div -static -opt-prefetch`

459.GemsFDTD: `basepeak = yes`

465.tonto: `-xCORE-AVX2(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: `-xCORE-AVX2(pass 2) -prof-gen(pass 1) -ipo(pass 2)`
`-O3(pass 2) -no-prec-div(pass 2)`
`-opt-mem-layout-trans=3(pass 2) -prof-use(pass 2)`
`-opt-prefetch -static -auto-ilp32`

436.cactusADM: `basepeak = yes`

454.calculix: `basepeak = yes`

481.wrf: `-xCORE-AVX2 -ipo -O3 -no-prec-div -static -auto-ilp32`

The flags files that were used to format this result can be browsed at
http://www.spec.org/cpu2006/flags/Intel-ic13-official-linux64.20130716.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-linux64.20130716.xml
http://www.spec.org/cpu2006/flags/Acer-Platform-Settings-V1.2-revA.20130423.xml

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

Tested with SPEC CPU2006 v1.2.
Report generated on Thu Jul 24 16:01:17 2014 by SPEC CPU2006 PS/PDF formatter v6932.
Originally published on 24 September 2013.