



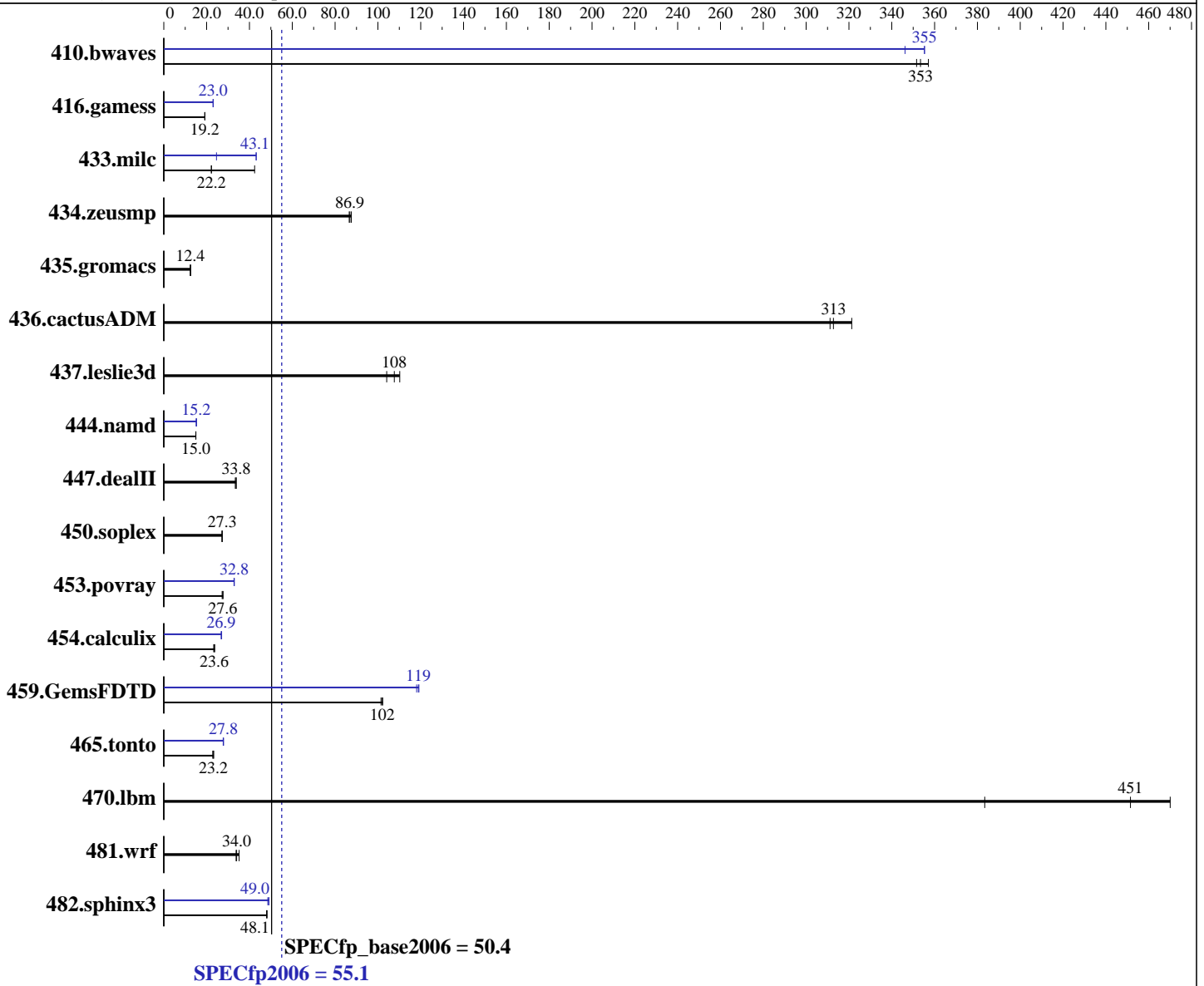
SPEC® CFP2006 Result

Copyright 2006-2014 Standard Performance Evaluation Corporation

Acer Incorporated
Acer AR580 F2 (Xeon E5-4607)

SPECfp®2006 = 55.1
SPECfp_base2006 = 50.4

CPU2006 license: 97
Test sponsor: Acer Incorporated
Tested by: Acer Incorporated
Test date: Dec-2012
Hardware Availability: Dec-2012
Software Availability: Jun-2012



Hardware

CPU Name: Intel Xeon E5-4607
CPU Characteristics:
CPU MHz: 2200
FPU: Integrated
CPU(s) enabled: 24 cores, 4 chips, 6 cores/chip, 2 threads/core
CPU(s) orderable: 2,4 chips
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 6.3 (Santiago)
2.6.32-279.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: Yes
File System: ext4

Continued on next page



SPEC CFP2006 Result

Copyright 2006-2014 Standard Performance Evaluation Corporation

Acer Incorporated

SPECfp2006 = 55.1

Acer AR580 F2 (Xeon E5-4607)

SPECfp_base2006 = 50.4

CPU2006 license: 97

Test sponsor: Acer Incorporated

Tested by: Acer Incorporated

Test date: Dec-2012

Hardware Availability: Dec-2012

Software Availability: Jun-2012

L3 Cache: 12 MB I+D on chip per chip
Other Cache: None
Memory: 256 GB (32 x 8 GB 2Rx4 PC3-12800R-11, ECC, running at 1066 MHz and CL7)
Disk Subsystem: 1 x 300 GB SAS, 15K RPM
Other Hardware: None

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

Results Table

Benchmark	Base						Peak					
	Seconds	Ratio	Seconds	Ratio	Seconds	Ratio	Seconds	Ratio	Seconds	Ratio	Seconds	Ratio
410.bwaves	38.1	357	38.7	352	38.5	353	38.3	355	38.3	355	39.3	346
416.gamess	1019	19.2	1024	19.1	1020	19.2	850	23.0	849	23.0	849	23.1
433.milc	413	22.2	413	22.2	216	42.4	213	43.1	213	43.2	373	24.6
434.zeusmp	105	86.6	104	87.6	105	86.9	105	86.6	104	87.6	105	86.9
435.gromacs	575	12.4	570	12.5	575	12.4	575	12.4	570	12.5	575	12.4
436.cactusADM	38.2	313	37.2	321	38.4	311	38.2	313	37.2	321	38.4	311
437.leslie3d	90.3	104	87.3	108	85.3	110	90.3	104	87.3	108	85.3	110
444.namd	536	15.0	535	15.0	536	15.0	527	15.2	527	15.2	527	15.2
447.dealII	338	33.8	339	33.8	343	33.4	338	33.8	339	33.8	343	33.4
450.soplex	306	27.3	306	27.3	307	27.2	306	27.3	306	27.3	307	27.2
453.povray	195	27.2	193	27.6	192	27.6	162	32.9	162	32.8	162	32.8
454.calculix	350	23.6	347	23.8	354	23.3	305	27.0	307	26.9	307	26.8
459.GemsFDTD	104	102	105	101	104	102	89.2	119	89.0	119	89.8	118
465.tonto	423	23.2	431	22.8	423	23.2	355	27.7	354	27.8	353	27.9
470.lbm	29.2	470	35.8	383	30.4	451	29.2	470	35.8	383	30.4	451
481.wrf	328	34.0	317	35.2	331	33.8	328	34.0	317	35.2	331	33.8
482.sphinx3	405	48.1	405	48.1	404	48.2	397	49.1	401	48.6	398	49.0

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

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 Tue Dec 18 03:30:27 2012

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

Continued on next page



SPEC CFP2006 Result

Copyright 2006-2014 Standard Performance Evaluation Corporation

Acer Incorporated

SPECfp2006 = 55.1

Acer AR580 F2 (Xeon E5-4607)

SPECfp_base2006 = 50.4

CPU2006 license: 97

Test sponsor: Acer Incorporated

Tested by: Acer Incorporated

Test date: Dec-2012

Hardware Availability: Dec-2012

Software Availability: Jun-2012

Platform Notes (Continued)

```

model name : Genuine Intel(R) CPU @ 2.20GHz
 4 "physical id"s (chips)
 48 "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 : 6
  siblings  : 12
  physical 0: cores 0 1 2 3 4 5
  physical 1: cores 0 1 2 3 4 5
  physical 2: cores 0 1 2 3 4 5
  physical 3: cores 0 1 2 3 4 5
cache size : 12288 KB

```

From /proc/meminfo

```

MemTotal:      264460152 kB
HugePages_Total:    0
Hugepagesize:    2048 kB

```

/usr/bin/lsb_release -d

Red Hat Enterprise Linux Server release 6.3 (Santiago)

From /etc/*release* /etc/*version*

```

redhat-release: Red Hat Enterprise Linux Server release 6.3 (Santiago)
system-release: Red Hat Enterprise Linux Server release 6.3 (Santiago)
system-release-cpe: cpe:/o:redhat:enterprise_linux:6server:ga:server

```

uname -a:

```

Linux localhost.localdomain 2.6.32-279.el6.x86_64 #1 SMP Wed Jun 13 18:24:36
EDT 2012 x86_64 x86_64 x86_64 GNU/Linux

```

run-level 3 Dec 18 03:28

SPEC is set to: /usr/cpu2006

```

Filesystem      Type      Size  Used Avail Use% Mounted on
/dev/sda2        ext4      244G   17G  215G   7% /

```

Additional information from dmidecode:

```

Memory:
 32x Hynix HMT31GR7CFR4C-PB 8 GB 1600 MHz 2 rank

```

(End of data from sysinfo program)

General Notes

Environment variables set by runspec before the start of the run:

```

KMP_AFFINITY = "granularity=fine,compact,1,0"
LD_LIBRARY_PATH = "/usr/cpu2006/libs/32:/usr/cpu2006/libs/64"
OMP_NUM_THREADS = "24"

```

Binaries compiled on a system with 1x Core i7-860 CPU + 8GB

Continued on next page

Standard Performance Evaluation Corporation

info@spec.org
http://www.spec.org/

Page 3



SPEC CFP2006 Result

Copyright 2006-2014 Standard Performance Evaluation Corporation

Acer Incorporated	SPECfp2006 =	55.1
Acer AR580 F2 (Xeon E5-4607)	SPECfp_base2006 =	50.4

CPU2006 license: 97	Test date:	Dec-2012
Test sponsor: Acer Incorporated	Hardware Availability:	Dec-2012
Tested by: Acer Incorporated	Software Availability:	Jun-2012

General Notes (Continued)

memory using RHEL5.5
Transparent Huge Pages enabled with:
echo always > /sys/kernel/mm/redhat_transparent_hugepage/enabled
runspec command invoked through numactl i.e.:
numactl --interleave=all runspec <etc>

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.deallI: -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 -parallel -opt-prefetch
-ansi-alias

Continued on next page



SPEC CFP2006 Result

Copyright 2006-2014 Standard Performance Evaluation Corporation

Acer Incorporated	SPECfp2006 =	55.1
Acer AR580 F2 (Xeon E5-4607)	SPECfp_base2006 =	50.4

CPU2006 license: 97	Test date:	Dec-2012
Test sponsor: Acer Incorporated	Hardware Availability:	Dec-2012
Tested by: Acer Incorporated	Software Availability:	Jun-2012

Base Optimization Flags (Continued)

C++ benchmarks:

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

Fortran benchmarks:

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

Benchmarks using both Fortran and C:

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

Peak Compiler Invocation

C benchmarks:

`icc -m64`

C++ benchmarks:

`icpc -m64`

Fortran benchmarks:

`ifort -m64`

Benchmarks using both Fortran and C:

`icc -m64 ifort -m64`

Peak Portability Flags

Same as Base Portability Flags

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
-ansi-alias`

470.lbm: `basepeak = yes`

482.sphinx3: `-xAVX -ipo -O3 -no-prec-div -unroll2 -ansi-alias
-parallel`

C++ benchmarks:

Continued on next page



SPEC CFP2006 Result

Copyright 2006-2014 Standard Performance Evaluation Corporation

Acer Incorporated	SPECfp2006 =	55.1
Acer AR580 F2 (Xeon E5-4607)	SPECfp_base2006 =	50.4

CPU2006 license: 97	Test date: Dec-2012
Test sponsor: Acer Incorporated	Hardware Availability: Dec-2012
Tested by: Acer Incorporated	Software Availability: Jun-2012

Peak Optimization Flags (Continued)

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: basepeak = yes

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 -ipo -O3 -no-prec-div -opt-prefetch -parallel
 -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: basepeak = yes

459.GemsFDTD: -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 -opt-prefetch -parallel

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

Benchmarks using both Fortran and C:

435.gromacs: basepeak = yes

436.cactusADM: basepeak = yes

454.calculix: -xAVX -ipo -O3 -no-prec-div -auto-ilp32 -ansi-alias

481.wrf: basepeak = yes

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 CFP2006 Result

Copyright 2006-2014 Standard Performance Evaluation Corporation

Acer Incorporated	SPECfp2006 =	55.1
Acer AR580 F2 (Xeon E5-4607)	SPECfp_base2006 =	50.4

CPU2006 license: 97	Test date: Dec-2012
Test sponsor: Acer Incorporated	Hardware Availability: Dec-2012
Tested by: Acer Incorporated	Software Availability: Jun-2012

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 v1.2.
Report generated on Thu Jul 24 14:45:05 2014 by SPEC CPU2006 PS/PDF formatter v6932.
Originally published on 15 January 2013.