Supermicro Processor Blade SBI-7127R-SH (B9DRP, Intel Xeon E5-2690 v2)
Supermicro Processor Blade SBI-7127R-SH
(B9DRP, Intel Xeon E5-2690 v2)

SPECfp_rate2006 = 655
SPECfp_rate_base2006 = 639

Results Table

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

Submit Notes

The numactl mechanism was used to bind copies to processors. The config file option 'submit' was used to generate numactl 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

DDR Speed set to Force SPD in BIOS.
SPEC CFP2006 Result

Supermicro
Supermicro Processor Blade SBI-7127R-SH
(B9DRP, Intel Xeon E5-2690 v2)

SPECfp_rate2006 = 655
SPECfp_rate_base2006 = 639

CPU2006 license: 001176
Test sponsor: Supermicro
Test date: Dec-2013

Tested by: Supermicro
Hardware Availability: Sep-2013
Software Availability: Sep-2013

General Notes

Environment variables set by runspec before the start of the run:
LD_LIBRARY_PATH = "/home/spec/libs/32:/home/spec/libs/64:/home/spec/sh"

Binaries compiled on a system with 1x Core i7-860 CPU + 8GB memory using RedHat EL 6.4
Transparent Huge Pages enabled with:
echo always > /sys/kernel/mm/redhat_transparent_hugepage/enabled
Filesystem page cache cleared with:
echo 1>       /proc/sys/vm/drop_caches
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
  -DSPEC_CPU_LP64 -nofor_main
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 -DSPEC_CPU_CASE_FLAG -DSPEC_CPU_LINUX
465.tonto: -DSPEC_CPU_LP64
467.dealII: -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
Supermicro

Supermicro Processor Blade SBI-7127R-SH (B9DRP, Intel Xeon E5-2690 v2)

SPECfp_rate2006 = 655
SPECfp_rate_base2006 = 639

CPU2006 license: 001176
Test sponsor: Supermicro
Tested by: Supermicro

Test date: Dec-2013
Hardware Availability: Sep-2013
Software Availability: Sep-2013

Base Optimization Flags

C benchmarks:
- xAVX -ipo -O3 -no-prec-div -opt-prefetch -auto-p32 -ansi-alias
  -opt-mem-layout-trans=3

C++ benchmarks:
- xAVX -ipo -O3 -no-prec-div -opt-prefetch -auto-p32 -ansi-alias
  -opt-mem-layout-trans=3

Fortran benchmarks:
- xAVX -ipo -O3 -no-prec-div -opt-prefetch

Benchmarks using both Fortran and C:
- xAVX -ipo -O3 -no-prec-div -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

Continued on next page
Supermicro
Supermicro Processor Blade SBI-7127R-SH
(B9DRP, Intel Xeon E5-2690 v2)

**SPEC CFP2006 Result**

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<td>Software Availability: Sep-2013</td>
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**SPECfp_rate2006 = 655**

**SPECfp_rate_base2006 = 639**

Peak Portability Flags (Continued)

- 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

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) -opt-mem-layout-trans=3(pass 2)
  -prof-use(pass 2) -auto-ilp32

- 470.lbm: basepeak = yes

- 482.sphinx3: -xAVX -ipo -O3 -no-prec-div -opt-mem-layout-trans=3
  -unroll12

C++ benchmarks:

- 444.namd: -xAVX(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: -xAVX(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: -xAVX(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) -unroll14 -ansi-alias

Fortran benchmarks:

- 410.bwaves: basepeak = yes

- 416.gamess: -xAVX(pass 2) -prof-gen(pass 1) -ipo(pass 2) -O3(pass 2)
  -no-prec-div(pass 2) -prof-use(pass 2) -unroll12
  -inline-level=0 -scalar-rep-

- 434.zeusmp: basepeak = yes

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

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Supermicro
Supermicro Processor Blade SBI-7127R-SH
(B9DRP, Intel Xeon E5-2690 v2)

SPECfp_rate2006 = 655
SPECfp_rate_base2006 = 639

CPU2006 license: 001176
Test sponsor: Supermicro
Tested by: Supermicro
Test date: Dec-2013
Hardware Availability: Sep-2013
Software Availability: Sep-2013

Peak Optimization Flags (Continued)

459.GemsFDTD: basepeak = yes

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) -opt-mem-layout-trans=3(pass 2)
            -prof-use(pass 2) -opt-prefetch -auto-ilp32

436.cactusADM: basepeak = yes
454.calculix: basepeak = yes
481.wrf: -xAVX -ipo -O3 -no-prec-div -auto-ilp32

The flags files that were used to format this result can be browsed at
http://www.spec.org/cpu2006/flags/Intel-ic14.0-official-linux64.20140128.html
http://www.spec.org/cpu2006/flags/Supermicro-Platform-Settings-V1.2-revB.20130719.html

You can also download the XML flags sources by saving the following links:
http://www.spec.org/cpu2006/flags/Intel-ic14.0-official-linux64.20140128.xml
http://www.spec.org/cpu2006/flags/Supermicro-Platform-Settings-V1.2-revB.20130719.xml

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For other inquiries, please contact webmaster@spec.org.

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