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</table>

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"
SPEC CFP2006 Result

Fujitsu
PRIMERGY RX4770 M1, Intel Xeon E7-4830 v2, 2.20 GHz

CPU2006 license: 19
Test sponsor: Fujitsu
Tested by: Fujitsu

SPECfp_rate2006 = NC
SPECfp_rate_base2006 = NC

**SPEC has determined that this result is not in compliance with the SPEC CPU2006 run and reporting rules. Specifically, the submitter has notified SPEC that the system was run with a BIOS which included a version of the Intel MRC (Memory Reference Code) that is not supported by Fujitsu or Intel.**

**Platform Notes**

BIOS configuration:
Energy Performance = Performance

**General Notes**

Environment variables set by runspec before the start of the run:
LD_LIBRARY_PATH = "/SPECcpu2006/libs/32:/SPECcpu2006/libs/64:/SPECcpu2006/sh"

Binaries compiled on a system with 1x Core i7-860 CPU + 8GB memory using RedHat EL 6.
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>
For information about Fujitsu please visit: http://www.fujitsu.com

**Base Compiler Invocation**

C benchmarks:
icc -m64
C++ benchmarks:
icpc -m64
ifort -m64

Benchmarks using both Fortran and C:
icc -m64 ifort -m64

**Base Portability Flags**

410.bwaves: -DSPEC_CPU_LP64

Continued on next page
SPEC has determined that this result is not in compliance with the SPEC CPU2006 run and reporting rules. Specifically, the submitter has notified SPEC that the system was run with a BIOS which included a version of the Intel MRC (Memory Reference Code) that is not supported by Fujitsu or Intel.

### Base Portability Flags (Continued)

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<td>482.sphinx3</td>
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### 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 -layout-trans=3

Fortran benchmarks:
-  
  -AVX -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
SPEC has determined that this result is not in compliance with the SPEC CPU2006 run and reporting rules. Specifically, the submitter has notified SPEC that the system was run with a BIOS which included a version of the Intel MRC (Memory Reference Code) that is not supported by Fujitsu or Intel.

**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:**
  - 43.milc  -xAVX(pass 2)  -prof-gen(pass 1)  -ipo(pass 2)  -O3(pass 2)
    - -spec-div(pass 2)  -opt-mem-layout-trans=3(pass 2)
    - -prof-use(pass 2)  -auto-ilp32
    - 470.mmm: basepeak = yes
  - 4.2.sphinx3: basepeak = yes

- **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

Non-Compliant
SPEC has determined that this result is not in compliance with the SPEC CPU2006 run and reporting rules. Specifically, the submitter has notified SPEC that the system was run with a BIOS which included a version of the Intel MRC (Memory Reference Code) that is not supported by Fujitsu or Intel.

Peak Optimization Flags (Continued)

450.soplex: basepeak = yes

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) -unroll4 -ansialias

Fortran benchmarks:

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 -alarmp

434.zeusmp: basepeak = yes

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

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 -inittcallloc -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
**SPEC CFP2006 Result**

**Fujitsu**

PRIMERGY RX4770 M1, Intel Xeon E7-4830 v2, 2.20 GHz

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CPU2006 license: 19  
Test sponsor: Fujitsu  
Tested by: Fujitsu  
Test date: Apr-2014  
Hardware Availability: Jun-2014  
Software Availability: Sep-2013

SPEC has determined that this result is not in compliance with the SPEC CPU2006 run and reporting rules. Specifically, the submitter has notified SPEC that the system was run with a BIOS which included a version of the Intel MRC (Memory Reference Code) that is not supported by Fujitsu or Intel.

The flags files that were used to format this result can be browsed at:

- [Fujitsu-Platform.20131009.html](http://www.spec.org/cpu2006/flags/Fujitsu-Platform.20131009.html)

You can also download the XML flags sources by saving the following links:

- [Intel-ic14.0-official-linux64-revB.xml](http://www.spec.org/cpu2006/flags/Intel-ic14.0-official-linux64-revB.xml)
- [Fujitsu-Platform.20131009.xml](http://www.spec.org/cpu2006/flags/Fujitsu-Platform.20131009.xml)

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

Tested with SPEC CPU2006 v1.2.  
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