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 customized in a manner that did not meet SPEC's requirements for documented and supported systems.
SPEC CFP2006 Result

Huawei
Huawei RH2285, Intel Xeon E5640

SPECFp2006 = NC
SPECFp_base2006 = NC

CPU2006 license: 3175
Test sponsor: Huawei
Tested by: Huawei

Hardware
CPU Name: Intel Xeon E5640
CPU Characteristics: Intel Turbo Boost Technology up to 2.93 GHz
CPU MHz: 2667
FPU: Integrated
CPU(s) enabled: 8 cores, 2 chips, 4 cores/chip
CPU(s) orderable: 1.2 chip
Primary Cache: 32 KB I + 32 KB D on chip per core
Secondary Cache: 256 KB I+D on chip per core
L3 Cache: 12 MB I+D on chip per chip
Other Cache: None
Memory: 48 GB (12 x 4 GB 2Rx4 PC3-10600R-9, ECC)
Disk Subsystem: 1 x 300 GB SAS, 10K RPM
Other Hardware: None

Software
Operating System: SUSE Linux Enterprise Server 11 SP1 (x86_64), Kernel 2.6.32.12-0.7-default
Compiler: Intel C++ and Fortran Intel 64 Compiler XE
for applications running on Intel 64
Version 12.0 Update 3
Auto Parallel: Yes
File System: ext3
System State: Run level 3 (multi-user)
Peak Pointers: 32/64-bit
Base Pointers: 64-bit
Other Software: None

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 customized in a manner that did not meet SPEC's requirements for documented and supported systems.
SPEC CFP2006 Result

Huawei
Huawei RH2285, Intel Xeon E5640

SPECfp2006 = NC
SPECfp_base2006 = NC

CPU2006 license: 3175
Test sponsor: Huawei
Test date: May-2011

Tested by: Huawei
Hardware Availability: May-2011
Software Availability: Jan-2011

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 customized in a manner that did not meet SPEC's requirements for documented and supported systems.

Results Table

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</tbody>
</table>

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

Operating System Notes

'ulimit -s unlimited' was used to set the stacksize to unlimited prior to run
'mount -t hugetlbfs nodev /mnt/hugepages' was used to enable large pages
'echo 900 > /proc/sys/vm/nr_hugepages'
extport HUGETLB_MORECORE=yes
export LD_PRELOAD=/usr/lib64/libhugetlbfs.so

Non-Compliant
Huawei
Huawei RH2285, Intel Xeon E5640

CPU2006 license: 3175
Test sponsor: Huawei
Tested by: Huawei

Test date: May-2011
Hardware Availability: May-2011
Software Availability: Jan-2011

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 customized in a manner that did not meet SPEC's requirements for documented and supported systems.

Platform Notes
Data Reuse Optimization disabled in BIOS Setup.
Intel HT technology Disabled in BIOS Setup.

General Notes
Binaries compiled on RHEL5.5
OMP_NUM_THREADS set to number of CPUs

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
416. gamess: -DSPEC_CPU_LP64
333.milc: -DSPEC_CPU_LP64
434. zeusmp: -DSPEC_CPU_LP64
435. gamess: -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

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 customized in a manner that did not meet SPEC's requirements for documented and supported systems.

Base 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
482.sphinx3: -DSPEC_CPU_LP64

Base Optimization Flags

C benchmarks:
-xsSE4.2 -ipo -O3 -no-prec-div -static -parallel -opt-prefetch -ansi-alias

C++ benchmarks:
-xsSE4.2 -ipo -O3 -no-prec-div -static -opt-prefetch -ansi-alias

Fortran benchmarks:
-xsSE4.2 -ipo -O3 -no-prec-div -static -parallel -opt-prefetch

Benchmarks using both Fortran and C:
-xsSE4.2 -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
**SPEC CFP2006 Result**

**Huawei**
Huawei RH2285,Intel Xeon E5640

<table>
<thead>
<tr>
<th>SPECfp2006 =</th>
<th>NC</th>
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</thead>
<tbody>
<tr>
<td>SPECfp_base2006 =</td>
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</table>

**CPU2006 license:** 3175
**Test sponsor:** Huawei
**Tested by:** Huawei
**Test date:** May-2011
**Hardware Availability:** May-2011
**Software Availability:** Jan-2011

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 customized in a manner that did not meet SPEC's requirements for documented and supported systems.

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**Peak Portability Flags**
Same as Base Portability Flags

**Peak Optimization Flags**

**C benchmarks:**
- 433.milc: -xSSE4.2(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: -xSSE4.2 -ipo -O3 -no-prec-div -unroll2 -ansi-alias
  -parallel

**C++ benchmarks:**
- 444.namd: -xSSE4.2(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
- 47.dealII: basepeak = yes
- 450.soplex: basepeak = yes
- 463. dealII: -xSSE4.2(pass 2) -prof-gen(pass 1) -ipo(pass 2) -O3(pass 2)
  -no-prec-div(pass 2) -prof-use(pass 2) -unroll4 -ansi-alias
  -B /usr/share/libhugetlbfs/ -Wl,-melf_x86_64 -Wl,-hugetlbfs-link=BDT

**Fortran benchmarks:**
- 410.bwaves: -xSSE4.2 -ipo -O3 -no-prec-div -opt-prefetch -parallel
  -static
- 416.gameess: -xSSE4.2(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

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(Continued on next page)
SPEC CFP2006 Result

Huawei
Huawei RH2285, Intel Xeon E5640

SPECf2006 = NC
SPECfp_base2006 = NC

CPU2006 license: 3175
Test date: May-2011
Test sponsor: Huawei
Hardware Availability: May-2011
Tested by: Huawei
Software Availability: Jan-2011

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 customized in a manner that did not meet SPEC's requirements for documented and supported systems.

Peak Optimization Flags (Continued)

434.zeusmp: basepeak = yes
437.leslie3d: basepeak = yes

459.GemsFDTD: -xsSE4.2(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 -ipo -prof-gen -parallel
-B /usr/share/libhugetlbfs/ -Wl,-melf_x86_64 -Wl,-hugetlbfs-link=BDT

465.tonto: -xsSE4.2(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 -unroll14
-B /usr/share/libhugetlbfs/ -Wl,-melf_x86_64 -Wl,-hugetlbfs-link=BDT

Benchmarks using both Fortran and C:

435.gromacs: -xsSE4.2(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

436.cactusADM: basepeak = yes
454.calculix: -xsSE4.2 -ipo -O3 -no-prec-div -auto-ilp32 -ansi-alias
481.wrf: basepeak = yes

The flags files that were used to format this result can be browsed at
http://www.spec.org/cpu2006/flags/Intel-ic12.0-linux64-revB.html
http://www.spec.org/cpu2006/flags/HUAWEI-platform-linux64-revB.html

You can also download the XML flags sources by saving the following links:
http://www.spec.org/cpu2006/flags/Intel-ic12.0-linux64-revB.xml
http://www.spec.org/cpu2006/flags/HUAWEI-platform-linux64-revB.xml
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 customized in a manner that did not meet SPEC's requirements for documented and supported systems.