**Fujitsu Siemens Computers**

**CELSIUS R650, Intel Xeon X5260, 3.33 GHz**

| SPECfp_rate2006 = 55.7 | SPECfp_rate_base2006 = 50.4 |

**CPU2006 license:** 22  
**Test sponsor:** Fujitsu Siemens Computers  
**Tested by:** Fujitsu Siemens Computers  
**Test date:** Feb-2008  
**Hardware Availability:** Jan-2008  
**Software Availability:** Nov-2007

| **410.bwaves** | 36.3 | 54.9 | 66.7 |
| **416.gamess** | 23.8 | 27.3 | 35.3 |
| **433.milc** | 23.9 | 32.1 | 31.4 |
| **434.zeusmp** | 54.1 | 84.3 | 92.9 |
| **435.gromacs** | 67.8 | 70.5 | 79.5 |
| **436.cactusADM** | 99.4 | 104.1 | 112.0 |
| **437.leslie3d** | 29.5 | 70.1 | 96.6 |
| **444.namd** | 37.5 | 70.1 | 96.6 |
| **447.dealII** | 54.1 | 84.3 | 112.0 |
| **450.soplex** | 43.0 | 70.5 | 112.0 |
| **453.povray** | 26.6 | 67.8 | 81.5 |
| **454.calculix** | 31.4 | 70.1 | 96.6 |
| **459.GemsFDTD** | 70.5 | 112.0 | 132.0 |
| **465.tonto** | 31.4 | 70.1 | 112.0 |
| **470.lbm** | 19.2 | 51.5 | 66.7 |
| **481.wrf** | 51.5 | 81.5 | 96.6 |
| **482.sphinx3** | 52.4 | 81.5 | 96.6 |

**Hardware**

- **CPU Name:** Intel Xeon X5260  
- **CPU Characteristics:**  
  - **CPU MHz:** 3333  
  - **FPU:** Integrated  
  - **CPU(s) enabled:** 4 cores, 2 chips, 2 cores/chip  
  - **CPU(s) orderable:** 1,2 chips  
  - **Primary Cache:** 32 KB I + 32 KB D on chip per core  
  - **Secondary Cache:** 6 MB I+D on chip per chip

**Operating System:** SUSE Linux Enterprise Server 10 (x86_64) SP1, Kernel 2.6.16.46-0.12-smp  
**Compiler:** Intel C++ and Fortran Compiler for Linux32 and Linux64, Version 10.1 - Build 20070725  
**Auto Parallel:** Yes  
**File System:** ext3  
**System State:** Multi-User, Run Level 3  
**Base Pointers:** 64-bit

**Software**

**Specbench Result**

Continued on next page
# SPEC CFP2006 Result

## Fujitsu Siemens Computers

**CELSIUS R650, Intel Xeon X5260, 3.33 GHz**

<table>
<thead>
<tr>
<th>CPU2006 license:</th>
<th>22</th>
</tr>
</thead>
<tbody>
<tr>
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**Fujitsu Siemens Computers**

**CELSIUS R650, Intel Xeon X5260, 3.33 GHz**

- **SPECfp_rate2006 = 55.7**
- **SPECfp_rate_base2006 = 50.4**

### Results Table

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<thead>
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</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 SPEC. OMP_NUM_THREADS set to number of cores (default)

### Platform Notes

- **BIOS configuration:**
  - Enhanced Speedstep Technology = Disable
  - Hardware Prefetch = Enable, Adjacent Sector Prefetch = Enable
  - SnoopFilter = Enable

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Standard Performance Evaluation Corporation
info@spec.org
http://www.spec.org/
SPEC CFP2006 Result

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Hardware Availability: Jan-2008
Software Availability: Nov-2007

General Notes

All binaries were built with 64-bit Intel compiler except: 437.leslie3d, 450.soplex, 470.lbm, and 482.sphinx3 in peak were built with 32-bit Intel compiler by changing the path for include and library files.
All binaries were built with 64-bit Intel compiler except: 430.soplex, 470.lbm and 482.sphinx3 in peak were built with 32-bit Intel compiler by changing the path for include and library files.

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Base Compiler Invocation

C benchmarks:
  icc
C++ benchmarks:
  icpc
Fortran benchmarks:
  ifort

Benchmarks using both Fortran and C:
  icc ifort

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
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Base Optimization Flags

C benchmarks:
-fast

C++ benchmarks:
-fast

Fortran benchmarks:
-fast

Benchmarks using both Fortran and C:
-fast

Peak Compiler Invocation

C benchmarks (except as noted below):
/opt/intel/cc/10.1.008/bin/icc -L/opt/intel/cc/10.1.008/lib
-I/opt/intel/cc/10.1.008/include

433.milc: icc

C++ benchmarks (except as noted below):
icpc

450.soplex: /opt/intel/cc/10.1.008/bin/icpc -L/opt/intel/cc/10.1.008/lib
-I/opt/intel/cc/10.1.008/include

Fortran benchmarks (except as noted below):
ifort

437.leslie3d: /opt/intel/fc/10.1.008/bin/ifort -L/opt/intel/fc/10.1.008/lib
-I/opt/intel/fc/10.1.008/include

Benchmarks using both Fortran and C:
icc ifort

Peak Portability Flags

410.bwaves: -DSPEC_CPU_LP64
416.game5: -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
444.namd: -DSPEC_CPU_LP64
447.dealII: -DSPEC_CPU_LP64

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Software Availability: Nov-2007

Peak Portability Flags (Continued)

453.povray: -DSPEC_CPU_LP64
454.calculix: -DSPEC_CPU_LP64 -nofor_main
459.GemsFDTD: -DSPEC_CPU_LP64
465.tonto: -DSPEC_CPU_LP64
481.wrf: -DSPEC_CPU_LP64 -DSPEC_CPU_CASE_FLAG -DSPEC_CPU_LINUX

Peak Optimization Flags

C benchmarks:

433.milc: -prof-gen(pass 1) -prof-use(pass 2) -fast -fno-alias
-autom-ip32

470.lbm: -prof-gen(pass 1) -prof-use(pass 2) -fast -unroll2
-scalar-req -prefetch -opt-malloc-options=3

482.sphinx3: -fast -unroll2

C++ benchmarks:

444.namd: -prof-gen(pass 1) -prof-use(pass 2) -fast -fno-alias
-autom-ip32

447.dealII: -prof-gen(pass 1) -prof-use(pass 2) -fast -unroll2
-ansi-alias -scalar-rep-

450.soplex: -prof-gen(pass 1) -prof-use(pass 2) -fast
-opt-malloc-options=3

453.povray: -prof-gen(pass 1) -prof-use(pass 2) -fast -unroll4
-ansi-alias

Fortran benchmarks:

410.bwaves: -fast -prefetch

416.gamess: -prof-gen(pass 1) -prof-use(pass 2) -fast -unroll2 -Ob0
-ansi-alias -scalar-rep-

434.zeusmp: -prof-gen(pass 1) -prof-use(pass 2) -fast

437.leslie3d: -prof-gen(pass 1) -prof-use(pass 2) -fast -prefetch
-opt-malloc-options=3

459.GemsFDTD: -prof-gen(pass 1) -prof-use(pass 2) -fast -unroll2 -Ob0
-prefetch

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Peak Optimization Flags (Continued)

465.tonto: -prof-gen(pass 1) -prof-use(pass 2) -fast -unroll4 -auto

Benchmarks using both Fortran and C:

435.gromacs: -prof-gen(pass 1) -prof-use(pass 2) -fast -prefetch -auto-ilp32

436.cactusADM: -prof-gen(pass 1) -prof-use(pass 2) -fast -unroll2 -prefetch -parallel -auto-ilp32

454.calculix: -fast -unroll-aggressive -auto-ilp32

481.wrf: -fast -auto-ilp32

The flags file that was used to format this result can be browsed at
http://www.spec.org/cpu2006/flags/flags-ic101-linux-intel64.20090714.01.html

You can also download the XML flags source by saving the following link:
http://www.spec.org/cpu2006/flags/flags-ic101-linux-intel64.20090714.01.xml

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