Fujitsu Siemens Computers

CELSIUS M460, Intel Core 2 Duo E6850 processor

<table>
<thead>
<tr>
<th>SPECfp®2006</th>
<th>SPECfp_base2006</th>
</tr>
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<tbody>
<tr>
<td>20.3</td>
<td>19.3</td>
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</table>

CPU2006 license: 22
Test sponsor: Fujitsu Siemens Computers
Tested by: Fujitsu Siemens Computers
Test date: Dec-2007
Hardware Availability: Nov-2007
Software Availability: Nov-2007

### SPECfpm2006

<table>
<thead>
<tr>
<th>Test</th>
<th>Score</th>
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<tr>
<td>410.bwaves</td>
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<td>481.wrf</td>
<td>23.8</td>
</tr>
<tr>
<td>482.sphinx3</td>
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</tbody>
</table>

### Hardware

- **CPU Name:** Intel Core 2 Duo E6850
- **CPU Characteristics:**
  - CPU MHz: 3000
  - FPU: Integrated
  - CPU(s) enabled: 2 cores, 1 chip, 2 cores/chip
  - CPU(s) orderable: 1 chip
- **Primary Cache:** 32 KB I + 32 KB D on chip per core
- **Secondary Cache:** 4 MB I+D on chip per chip

### Software

- **Operating System:** Microsoft Windows Vista Ultimate (x64)
- **Compiler:** Intel C++ and Fortran Compilers for Intel64, Version 10.1, Build 20070913
- **File System:** NTFS
- **Auto Parallel:** Yes

Continued on next page
# SPEC CFP2006 Result

## Fujitsu Siemens Computers

### CELSIUS M460, Intel Core 2 Duo E6850 processor

**SPECfp2006** = 20.3

**SPECfp_base2006** = 19.3

### CPU2006 license: 22

**Test date:** Dec-2007

**Test sponsor:** Fujitsu Siemens Computers

**Tested by:** Fujitsu Siemens Computers

**Hardware Availability:** Nov-2007

**Software Availability:** Nov-2007

### System State:

**Base Pointers:** 64-bit

**Peak Pointers:** 64-bit

### Other Software:

**MicroQuill SmartHeap Library, Version 8.0 (64 bit)**

## Results Table

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

## Operating System Notes

OMP_NUM_THREADS set to number of cores (default).

## Platform Notes

BIOS default settings have been used.

## General Notes

For information about Fujitsu Siemens Computers please see:  
http://www.fujitsu-siemens.com
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Base Compiler Invocation

C benchmarks:
   icl -Qvc8 -Qc99

C++ benchmarks:
   icl -Qvc8

Fortran benchmarks:
   ifort

Benchmarks using both Fortran and C:
   icl -Qvc8 -Qc99 ifort

Base Portability Flags

410.bwaves: -DSPEC_CPU_P64
416.game5: -DSPEC_CPU_P64
433.milc: -DSPEC_CPU_P64
434.zeusmp: -DSPEC_CPU_P64
435.gromacs: -DSPEC_CPU_P64
436.cactusADM: -DSPEC_CPU_P64 -Qlowercase /assume:underscore
437.leslie3d: -DSPEC_CPU_P64
444.namd: -DSPEC_CPU_P64 /TP
447.dealII: -DSPEC_CPU_P64 -DDEAL_II_MEMBER_VAR_SPECIALIZATION_BUG
450.soplex: -DSPEC_CPU_P64
453.povray: -DSPEC_CPU_P64 -DSPEC_CPU_WINDOWS_ICL
454.calculix: -DSPEC_CPU_P64 -DSPEC_CPU_NOZMODIFIER -Qlowercase
459.GemsFDTD: -DSPEC_CPU_P64
465.tonto: -DSPEC_CPU_P64
470.lbm: -DSPEC_CPU_P64
481.wrf: -DSPEC_CPU_P64 -DSPEC_CPU_WINDOWS_ICL
482.sphinx3: -DSPEC_CPU_P64

Base Optimization Flags

C benchmarks:
   -fast -Qparallel -F1000000000 libguide40.lib

C++ benchmarks:
   -fast -Qparallel -Qcxx-features -F1000000000 libguide40.lib
   shlW64M.lib -link -FORCE:MULTIPLE

Fortran benchmarks:
   -fast -Qparallel -F1000000000 libguide40.lib

Benchmarks using both Fortran and C:
   -fast -Qparallel -F1000000000 libguide40.lib
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Peak Compiler Invocation

C benchmarks:
  icl -Qvc8 -Qc99

C++ benchmarks:
  icl -Qvc8

Fortran benchmarks:
  ifort

Benchmarks using both Fortran and C:
  icl -Qvc8 -Qc99 ifort

Peak Portability Flags

Same as Base Portability Flags

Peak Optimization Flags

C benchmarks:

433.milc: -Qprof_gen(pass 1) -Qprof_use(pass 2) -fast -F1000000000 libguide40.lib

470.lbm: -fast -Qunroll2 -Qscalar-rep -Qprefetch -F1000000000 libguide40.lib

482.sphinx3: -fast -Qunroll2 -F1000000000 libguide40.lib

C++ benchmarks:

444.namd: -fast -Qcxx-features -Oa -F1000000000 libguide40.lib shlW64M.lib -link -FORCE:MULTIPLE

447.dealII: -Qprof_gen(pass 1) -Qprof_use(pass 2) -fast -Qcxx-features -F1000000000 libguide40.lib shlW64M.lib -link -FORCE:MULTIPLE

450.soplex: Same as 447.dealII

453.povray: Same as 447.dealII

Fortran benchmarks:

410.bwaves: basepeak = yes

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Peak Optimization Flags (Continued)

416.gamess: basepeak = yes

434.zeusmp: -O2 -qunroll10 -QxT -Qscalar-rep -Qprec-div -F1000000000 libguide40.lib

437.leslie3d: basepeak = yes

459.GemsFDTD: basepeak = yes

465.tonto: -fast -qunroll14 -qauto -F1000000000 libguide40.lib

Benchmarks using both Fortran and C:

435.gromacs: -qprof_gen(pass 1) -qprof_use(pass 2) -fast -F1000000000 libguide40.lib

436.cactusADM: -qprof_gen(pass 1) -qprof_use(pass 2) -fast -qparallel
-qprefetch -qunroll12 -F1000000000 libguide40.lib

454.calculix: -qprof_gen(pass 1) -qprof_use(pass 2) -fast
-qunroll-aggressive -F1000000000 libguide40.lib

481.wrf: basepeak = yes

The flags file that was used to format this result can be browsed at
http://www.spec.org/cpu2006/flags/CPU2006_flags.20090714.02.html

You can also download the XML flags source by saving the following link:
http://www.spec.org/cpu2006/flags/CPU2006_flags.20090714.02.xml

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

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