**Fujitsu Siemens Computers**

**PRIMERGY TX600 S3, Intel Xeon processor 7130M, 3.20 GHz**

**SPECfp**\(_{\text{rate2006}} = 51.4\)

**SPECfp_rate_base2006 = 49.9**

**CPU2006 license:** 22  
**Test sponsor:** Fujitsu Siemens Computers  
**Tested by:** Fujitsu Siemens Computers

**Test date:** May-2007  
**Hardware Availability:** Aug-2006  
**Software Availability:** Feb-2007

### Hardware
- **CPU Name:** Intel Xeon 7130M  
- **CPU Characteristics:** 800 MHz system bus  
- **CPU MHz:** 3200  
- **FPU:** Integrated  
- **CPU(s) enabled:** 8 cores, 4 chips, 2 cores/chip  
- **CPU(s) orderable:** 1,2,4 chips  
- **Primary Cache:** 12 K micro-ops I + 16 KB D on chip per core  
- **Secondary Cache:** 1 MB I+D on chip per core

### Software
- **Operating System:** 64-Bit SUSE LINUX Enterprise Server 10, Kernel 2.6.16.21-0.8-smp on an x86_64  
- **Compiler:** Intel C++ Compiler for IA32/EM64T application, Version 9.1 - Build 20070215, Package-ID: l_cc_p_9.1.047  
- **File System:** ReiserFS  
- **Auto Parallel:** No

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Fujitsu Siemens Computers

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SPECfp_rate2006 = 51.4
SPECfp_rate_base2006 = 49.9

CPU2006 license: 22
Test sponsor: Fujitsu Siemens Computers
Tested by: Fujitsu Siemens Computers

L3 Cache: 8 MB I+D on chip per chip
Other Cache: None
Memory: 32 GB (16x2 GB DDR2 PC2-3200R, 2 rank, CAS 3-3-3, with ECC)
Disk Subsystem: Seagate ST973401SS (SAS 73GB 10 krpm)
Other Hardware: None

System State: Multiuser Runlevel 3
Base Pointers: 64-bit
Peak Pointers: 32/64-bit
Other Software: None

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

'ulimit -s unlimited' was used to set the stacksize to unlimited prior to run '/usr/bin/taskset' used to bind processes to CPUs

General Notes

The system bus runs at 800 MHz

All binaries were built with 64-bit Intel compiler except: 433.milc, 434.zeusmp, 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.

BIOS configuration:

Continued on next page
Fujitsu Siemens Computers
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**SPEC CFP2006 Result**

| SPECfp_rate2006 | 51.4 |
| SPECfp_rate_base2006 | 49.9 |

CPU2006 license: 22
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Tested by: Fujitsu Siemens Computers

Test date: May-2007
Hardware Availability: Aug-2006
Software Availability: Feb-2007

**General Notes (Continued)**

Hyper-Threading Technology = Disable
Hardware Prefetch = Enable
Adjacent Sector Prefetch = Enable

This result was measured on the PRIMERGY RX600 S3. The PRIMERGY RX600 S3 and the PRIMERGY TX600 S3 are electronically equivalent.

For information about Fujitsu Siemens Computers in your country please see: http://www.fujitsu-siemens.com/countries

**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`
SPEC CFP2006 Result

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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:
(optarg/cent/cc/9.1.047/bin/icc -I/opt/intel/cc/9.1.047/include
-L/opt/intel/cc/9.1.047/lib

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

430.soplex: /opt/intel/cc/9.1.047/bin/icpc
- I/opt/intel/cc/9.1.047/include -L/opt/intel/cc/9.1.047/lib

Fortran benchmarks (except as noted below):
ifort

434.zeusmp: /opt/intel/fc/9.1.043/bin/ifort
- I/opt/intel/fc/9.1.043/include -L/opt/intel/fc/9.1.043/lib

Benchmarks using both Fortran and C:
icc ifort

Peak Portability Flags

410.bwaves: -DSPEC_CPU_LP64
416.gamess: -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
454.calculix: -DSPEC_CPU_LP64 -nofor_main
459.GemsFDTD: -DSPEC_CPU_LP64

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Peak Portability Flags (Continued)

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
470.lbm: Same as 433.milc
482.sphinx3: -fast

C++ benchmarks:

444.namd: basepeak = yes
447.dealII: -prof_gen(pass 1) -prof_use(pass 2) -fast
450.soplex: Same as 447.dealII
453.povray: Same as 447.dealII

Fortran benchmarks:

410.bwaves: basepeak = yes
416.gamess: basepeak = yes
434.zeusmp: -fast
437.leslie3d: basepeak = yes
459.GemsFDTD: basepeak = yes
465.tonto: -prof_gen(pass 1) -prof_use(pass 2) -fast

Benchmarks using both Fortran and C:

435.gromacs: -prof_gen(pass 1) -prof_use(pass 2) -fast
436.cactusADM: basepeak = yes
454.calculix: Same as 435.gromacs
481.wrf: basepeak = yes
**SPEC CFP2006 Result**

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The flags file that was used to format this result can be browsed at

You can also download the XML flags source by saving the following link:
http://www.spec.org/cpu2006/flags/CPU2006_flags.20090714.09.xml

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

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