**Fujitsu**

**PRIMERGY TX200 S5, Intel Xeon E5540, 2.53 GHz**

**SPECfp®2006 =** 34.3  
**SPECfp_base2006 =** 32.3

**CPU2006 license:** 19  
**Test date:** May-2009  
**Tested by:** Fujitsu

**Test sponsor:** Fujitsu  
**Hardware Availability:** Jun-2009  
**Software Availability:** Feb-2009

**Hardware**

- **CPU Name:** Intel Xeon E5540  
- **CPU Characteristics:** Intel Turbo Boost Technology up to 2.80 GHz  
- **CPU MHz:** 2533  
- **FPU:** Integrated  
- **CPU(s) enabled:** 8 cores, 2 chips, 4 cores/chip  
- **CPU(s) orderable:** 1.2 chips  
- **Primary Cache:** 32 KB I + 32 KB D on chip per core  
- **Secondary Cache:** 256 KB I+D on chip per core

**Software**

- **Operating System:** SUSE Linux Enterprise Server 10 (x86_64) SP2, Kernel 2.6.16.60-0.21-smp  
- **Compiler:** Intel C++ and Fortran Compiler 11.0 for Linux Build 20090131 Package ID: l_cproc_p_11.0.080, l_cprof_p_11.0.080  
- **Auto Parallel:** Yes  
- **File System:** ext3  
- **System State:** Multi-User Run Level 3  
- **Base Pointers:** 64-bit

---

**SPEC® CFP2006 Result**

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<thead>
<tr>
<th>SPECfp2006</th>
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**SPECfp2006 = 34.3**

**SPECfp_base2006 = 32.3**

**410.bwaves**

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**416.gamess**

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**433.milc**

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**437.leslie3d**

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# SPEC CFP2006 Result

## Fujitsu

**PRIMERGY TX200 S5, Intel Xeon E5540, 2.53 GHz**

- **SPECfp2006** = 34.3
- **SPECfp_base2006** = 32.3

### CPU2006 license: 19
- **Test sponsor:** Fujitsu
- **Tested by:** Fujitsu
- **L3 Cache:** 8 MB I+D on chip per chip
- **Other Cache:** None
- **Memory:** 48 GB (12x4 GB PC3-10600R, 2 rank, CL9-9-9, ECC, see add’l detail in notes)
- **Disk Subsystem:** 1 x SATA, 250 GB, 7200 RPM
- **Other Hardware:** None
- **Peak Pointers:** 32/64-bit
- **Other Software:** Binutils 2.18.50.0.7.200802

### Test date:
- Jun-2009
- May-2009

### Hardware Availability:
- Jun-2009

### Software Availability:
- Feb-2009

### 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

### Platform Notes

The system automatically configures the memory to run at 1066 MHz.

### General Notes

- OMP_NUM_THREADS set to number of cores
- KMP_AFFINITY set to granularity=fine,scatter
- KMP_STACKSIZE set to 200M
- For information about Fujitsu please visit: http://www.fujitsu.com

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

**Fujitsu**

PRIMERGY TX200 S5, Intel Xeon E5540, 2.53 GHz

| SPECfp2006 | 34.3 |
| SPECfp_base2006 | 32.3 |

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

Test date: May-2009  
Hardware Availability: Jun-2009  
Software Availability: Feb-2009

**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`

**Base Optimization Flags**

C benchmarks: 
`-xSSE4.2 -ipo -O3 -no-prec-div -static -parallel -opt-prefetch`

C++ benchmarks: 
`-xSSE4.2 -ipo -O3 -no-prec-div -static -parallel -opt-prefetch`

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`
SPEC CFP2006 Result

Fujitsu

PRIMERGY TX200 S5, Intel Xeon E5540, 2.53 GHz

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SPECfp_base2006 = 32.3

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

Test date: May-2009
Hardware Availability: Jun-2009
Software Availability: Feb-2009

Peak Compiler Invocation

C benchmarks:
  icc

C++ benchmarks (except as noted below):
  icpc
    450.soplex: icpc -m32

Fortran benchmarks:
  ifort

Benchmarks using both Fortran and C:
  icc ifort

Peak 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
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

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) -static(pass 2) -prof-use(pass 2)
    -fno-alias
  470.lbm: basepeak = yes
  482.sphinx3: basepeak = yes

Continued on next page
Peak Optimization Flags (Continued)

C++ benchmarks:

444.namd: basepeak = yes

447.dealII: -xsSE4.2(pass 2) -prof-gen(pass 1) -ipo(pass 2) -O3(pass 2)
 -no-prec-div(pass 2) -static(pass 2) -prof-use(pass 2)
 -unroll2 -ansi-alias -scalar-rep -opt-prefetch

450.soplex: -xsSE4.2(pass 2) -prof-gen(pass 1) -ipo(pass 2) -O3(pass 2)
 -no-prec-div(pass 2) -static(pass 2) -prof-use(pass 2)
 -opt-malloc-options=3

453.povray: -xsSE4.2(pass 2) -prof-gen(pass 1) -ipo(pass 2) -O3(pass 2)
 -no-prec-div(pass 2) -static(pass 2) -prof-use(pass 2)
 -unroll4 -ansi-alias

Fortran benchmarks:

410.bwaves: basepeak = yes

416.gamess: -xsSE4.2(pass 2) -prof-gen(pass 1) -ipo(pass 2) -O3(pass 2)
 -no-prec-div(pass 2) -static(pass 2) -prof-use(pass 2)
 -unroll2 -Ob0 -ansi-alias -scalar-rep-

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) -static(pass 2) -prof-use(pass 2)
 -unroll2 -Ob0 -opt-prefetch -parallel

465.tonto: -xsSE4.2(pass 2) -prof-gen(pass 1) -ipo(pass 2) -O3(pass 2)
 -no-prec-div(pass 2) -static(pass 2) -prof-use(pass 2)
 -unroll4 -auto

Benchmarks using both Fortran and C:

435.gromacs: basepeak = yes

436.cactusADM: -xsSE4.2(pass 2) -prof-gen(pass 1) -ipo(pass 2) -O3(pass 2)
 -no-prec-div(pass 2) -static(pass 2) -prof-use(pass 2)
 -unroll2 -opt-prefetch -parallel -auto-ilp32

454.calculix: -xsSE4.2 -ipo -O3 -no-prec-div -static -auto-ilp32

481.wrf: -xsSE4.2 -ipo -O3 -no-prec-div -static -opt-prefetch
 -parallel -auto-ilp32
## SPEC CFP2006 Result

**Fujitsu**

PRIMERGY TX200 S5, Intel Xeon E5540, 2.53 GHz

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| SPECfp_base2006 = | 32.3 |

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**Test date:** May-2009  
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The flags file that was used to format this result can be browsed at [http://www.spec.org/cpu2006/flags/Intel-ic11.0-fp-linux64-revA.20091013.html](http://www.spec.org/cpu2006/flags/Intel-ic11.0-fp-linux64-revA.20091013.html)

You can also download the XML flags source by saving the following link:  

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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 v1.1.  
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