SPEC® CFP2006 Result

Fujitsu

$SPECfp^®\_rate2006 =$ 191

PRIMERGY TX300 S5, Intel Xeon X5550, 2.66 GHz

$SPECfp\_rate\_base2006 =$ 184

CPU2006 license: 19	**Test date:** Feb-2009
Test sponsor: Fujitsu	**Hardware Availability:** Apr-2009
Tested by: Fujitsu Siemens Computers	**Software Availability:** Feb-2009

Copies 0 10.0 25.0 40.0 55.0 70.0 85.0 100 110 120 130 140 150 160 170 180 190 200 210 220 230 240 250 260 270 280 290 300 305

Benchmark	Copies	Value
410.bwaves	8	192
	16	186
416.gamess	8	192
	16	189
433.milc	16	179
434.zeusmp	16	200
	16	197
435.gromacs	16	190
	16	184
436.cactusADM	16	216
437.leslie3d	16	135
444.namd	16	175
	16	172
447.dealII	16	293
	16	272
450.soplex	16	139
453.povray	16	300
	16	249
454.calculix	16	220
	16	219
459.GemsFDTD	8	126
	16	121
465.tonto	16	210
	16	199
470.lbm	8	133
	16	126
481.wrf	16	228
482.sphinx3	16	210
	16	202

SPECfp_rate_base2006 = 184

SPECfp_rate2006 = 191

Hardware

CPU Name:	Intel Xeon X5550
CPU Characteristics:	Intel Turbo Boost Technology up to 3.06 GHz
CPU MHz:	2667
FPU:	Integrated
CPU(s) enabled:	8 cores, 2 chips, 4 cores/chip, 2 threads/core
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

Continued on next page

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:	No
File System:	ext3
System State:	Multi-User Run Level 3
Base Pointers:	64-bit

Continued on next page

SPEC CFP2006 Result
Copyright 2006-2014 Standard Performance Evaluation Corporation

Fujitsu

PRIMERGY TX300 S5, Intel Xeon X5550, 2.66 GHz

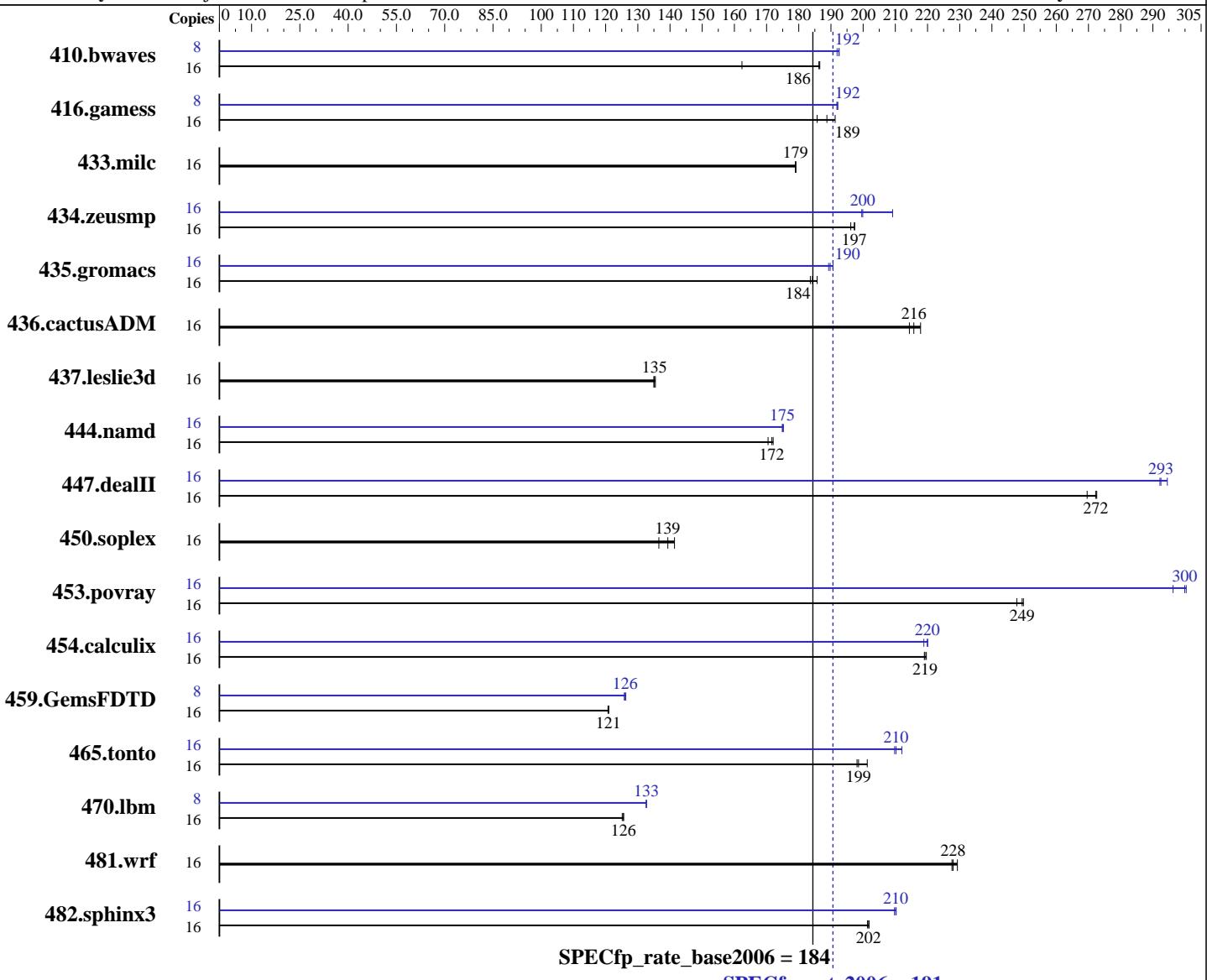$SPECfp\_rate2006 =$ 191

$SPECfp\_rate\_base2006 =$ 184

CPU2006 license: 19	**Test date:** Feb-2009
Test sponsor: Fujitsu	**Hardware Availability:** Apr-2009
Tested by: Fujitsu Siemens Computers	**Software Availability:** Feb-2009

L3 Cache:	8 MB I+D on chip per chip	Peak Pointers:	32/64-bit
Other Cache:	None	Other Software:	Binutils 2.18.50.0.7.20080502
Memory:	24 GB (6x4 GB PC3-10600R, 2 rank, CL9-9-9, ECC)		
Disk Subsystem:	1 x SATA, 250 GB, 7200 RPM		
Other Hardware:	None		

Results Table

Benchmark	Base						Peak						
	Copies	Seconds	Ratio	Seconds	Ratio	Seconds	Ratio	Copies	Seconds	Ratio	Seconds	Ratio	Seconds	Ratio
410.bwaves	16	1339	162	**1167**	**186**	1166	187	8	567	192	**565**	**192**	565	193
416.gamess	16	1638	191	**1660**	**189**	1687	186	8	817	192	**816**	**192**	815	192
433.milc	16	820	179	**821**	**179**	821	179	16	820	179	**821**	**179**	821	179
434.zeusmp	16	**738**	**197**	742	196	738	197	16	696	209	**728**	**200**	730	200
435.gromacs	16	**620**	**184**	622	184	615	186	16	604	189	599	191	**602**	**190**
436.cactusADM	16	892	214	878	218	**886**	**216**	16	892	214	878	218	**886**	**216**
437.leslie3d	16	1110	135	**1113**	**135**	1114	135	16	1110	135	**1113**	**135**	1114	135
444.namd	16	753	170	746	172	**748**	**172**	16	732	175	**733**	**175**	734	175
447.dealII	16	679	270	**672**	**272**	671	273	16	**626**	**293**	626	292	622	294
450.soplex	16	**958**	**139**	944	141	977	137	16	**958**	**139**	944	141	977	137
453.povray	16	**341**	**249**	344	248	341	250	16	**284**	**300**	283	300	287	296
454.calculix	16	601	220	**602**	**219**	603	219	16	603	219	**600**	**220**	600	220
459.GemsFDTD	16	1403	121	**1404**	**121**	1406	121	8	672	126	675	126	**674**	**126**
465.tonto	16	795	198	782	201	**793**	**199**	16	751	210	743	212	**749**	**210**
470.lbm	16	1757	125	1751	126	**1751**	**126**	8	**829**	**133**	829	133	829	133
481.wrf	16	785	228	779	229	**784**	**228**	16	785	228	779	229	**784**	**228**
482.sphinx3	16	1549	201	**1546**	**202**	1545	202	16	1483	210	1487	210	**1484**	**210**

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

Submit Notes

```
   The config file option 'submit' was used.
    numactl was used to bind copies to the cores
```

Operating System Notes

```
    'ulimit -s unlimited' was used to set the stacksize to unlimited prior to run
```

General Notes

```
    This result was measured on the PRIMERGY TX300 S5. The PRIMERGY TX300 S5
    and the PRIMERGY RX300 S5 are electronically equivalent.

    For information about Fujitsu please visit: http://www.fujitsu.com
```

SPEC CFP2006 Result
Copyright 2006-2014 Standard Performance Evaluation Corporation

Fujitsu

PRIMERGY TX300 S5, Intel Xeon X5550, 2.66 GHz

$SPECfp\_rate2006 =$ 191

$SPECfp\_rate\_base2006 =$ 184

CPU2006 license: 19	**Test date:** Feb-2009
Test sponsor: Fujitsu	**Hardware Availability:** Apr-2009
Tested by: Fujitsu Siemens Computers	**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
```

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

Fortran benchmarks:
```
-xSSE4.2 -ipo -O3 -no-prec-div -static
```

Benchmarks using both Fortran and C:
```
-xSSE4.2 -ipo -O3 -no-prec-div -static
```

SPEC CFP2006 Result
Copyright 2006-2014 Standard Performance Evaluation Corporation

Fujitsu

PRIMERGY TX300 S5, Intel Xeon X5550, 2.66 GHz

$SPECfp\_rate2006 =$ 191

$SPECfp\_rate\_base2006 =$ 184

CPU2006 license: 19	**Test date:** Feb-2009
Test sponsor: Fujitsu	**Hardware Availability:** Apr-2009
Tested by: Fujitsu Siemens Computers	**Software Availability:** Feb-2009

Peak Compiler Invocation

C benchmarks (except as noted below):
        `icc`

        482.sphinx3: `icc -m32`

C++ benchmarks:
        `icpc`

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`
        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`

Peak Optimization Flags

C benchmarks:

        433.milc: `basepeak = yes`

        470.lbm: `-xSSE4.2 -ipo -O3 -no-prec-div -static -opt-prefetch`
                `-auto-ilp32`

        482.sphinx3: `-xSSE4.2 -ipo -O3 -no-prec-div -static -unroll2`

C++ benchmarks:

SPEC CFP2006 Result
Copyright 2006-2014 Standard Performance Evaluation Corporation

Fujitsu

PRIMERGY TX300 S5, Intel Xeon X5550, 2.66 GHz

SPECfp_rate2006 =   191

SPECfp_rate_base2006 =   184

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

Test date: Feb-2009
Hardware Availability: Apr-2009
Software Availability: Feb-2009

Peak Optimization Flags (Continued)

444.namd: `-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 -auto-ilp32`

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-`

450.soplex: `basepeak = yes`

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

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: `-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)`

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`

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: `-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-prefetch -auto-ilp32`

436.cactusADM: `basepeak = yes`

454.calculix: `-xSSE4.2 -ipo -O3 -no-prec-div -static -auto-ilp32`

481.wrf: `basepeak = yes`

SPEC CFP2006 Result
Copyright 2006-2014 Standard Performance Evaluation Corporation

Fujitsu

PRIMERGY TX300 S5, Intel Xeon X5550, 2.66 GHz

$SPECfp\_rate2006 =$ **191**

$SPECfp\_rate\_base2006 =$ **184**

CPU2006 license:	19	**Test date:**	Feb-2009
Test sponsor:	Fujitsu	**Hardware Availability:**	Apr-2009
Tested by:	Fujitsu Siemens Computers	**Software Availability:**	Feb-2009

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.20090710.04.html`

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

`http://www.spec.org/cpu2006/flags/Intel-ic11.0-fp-linux64-revA.20090710.04.xml`

SPEC and SPECfp are registered trademarks of the Standard Performance
Evaluation Corporation. All other brand and product names appearing in
this result are trademarks or registered trademarks of their respective
holders.

For questions about this result, please contact the tester.
For other inquiries, please contact webmaster@spec.org.

Tested with SPEC CPU2006 v1.1.
Report generated on Tue Jul 22 23:29:10 2014 by SPEC CPU2006 PS/PDF formatter v6932.
Originally published on 31 March 2009.