



# SPEC<sup>®</sup> CFP2006 Result

Copyright 2006-2014 Standard Performance Evaluation Corporation

## Fujitsu

### SPECfp<sup>®</sup>\_rate2006 = 59.6

### PRIMERGY TX300 S5, Intel Xeon E5504, 2.0 GHz

### SPECfp\_rate\_base2006 = 57.5

CPU2006 license: 19

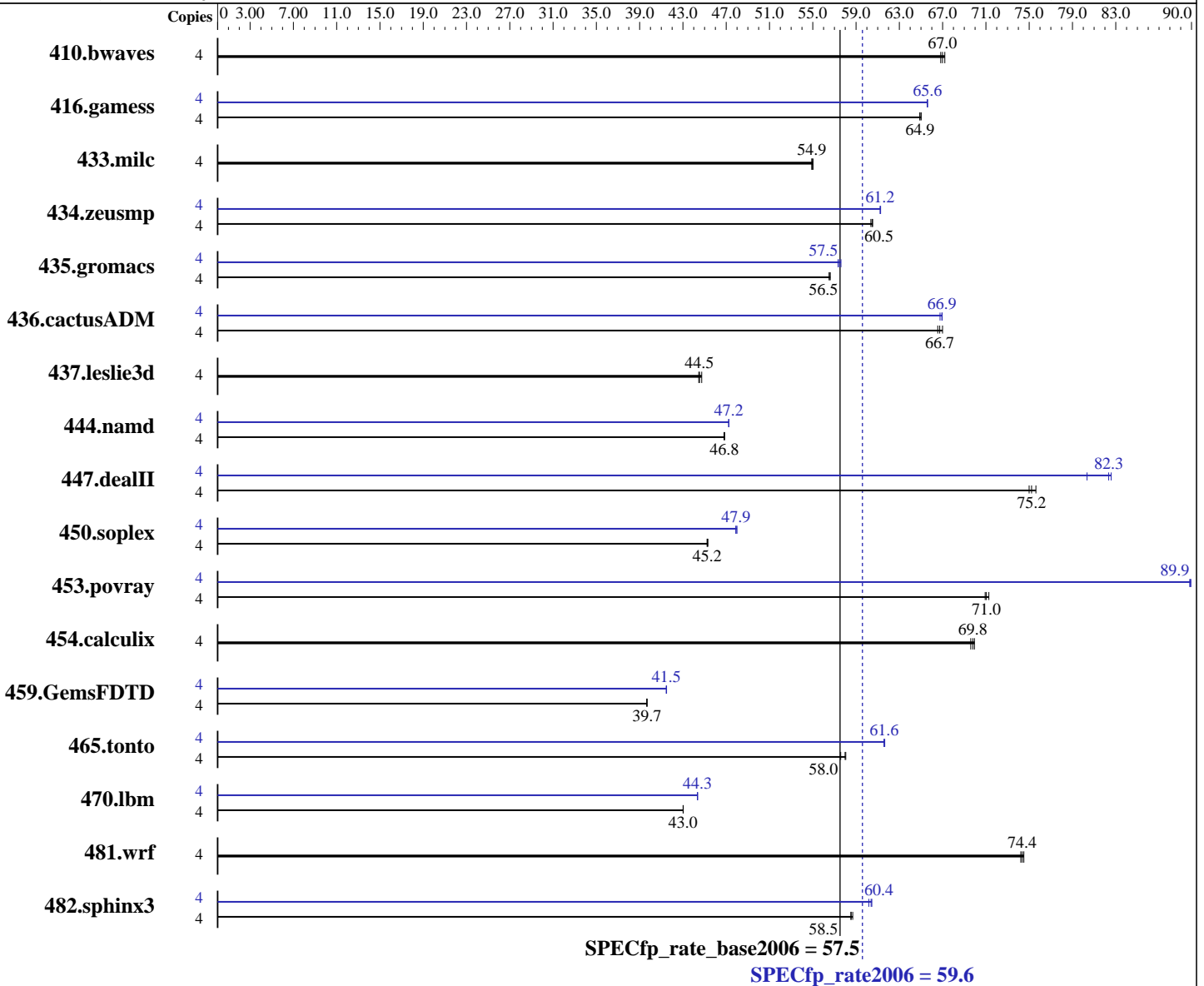
Test sponsor: Fujitsu

Tested by: Fujitsu

Test date: Aug-2009

Hardware Availability: Apr-2009

Software Availability: Feb-2009



#### Hardware

CPU Name: Intel Xeon E5504  
 CPU Characteristics:  
 CPU MHz: 2000  
 FPU: Integrated  
 CPU(s) enabled: 4 cores, 1 chip, 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

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

SPECfp\_rate2006 = **59.6**

PRIMERGY TX300 S5, Intel Xeon E5504, 2.0 GHz

SPECfp\_rate\_base2006 = **57.5**

CPU2006 license: 19

Test sponsor: Fujitsu

Tested by: Fujitsu

Test date: Aug-2009

Hardware Availability: Apr-2009

Software Availability: Feb-2009

L3 Cache: 4 MB I+D on chip per chip  
Other Cache: None  
Memory: 36 GB (9x4 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 2.18.50.0.7.20080502

## Results Table

Benchmark	Base								Peak							
	Copies	Seconds	Ratio	Seconds	Ratio	Seconds	Ratio	Copies	Seconds	Ratio	Seconds	Ratio	Seconds	Ratio		
410.bwaves	4	813	66.8	809	67.2	<b>811</b>	<b>67.0</b>	4	813	66.8	809	67.2	<b>811</b>	<b>67.0</b>		
416.gamess	4	1207	64.9	<b>1207</b>	<b>64.9</b>	1205	65.0	4	1194	65.6	<b>1194</b>	<b>65.6</b>	1194	65.6		
433.milc	4	667	55.0	<b>669</b>	<b>54.9</b>	669	54.9	4	667	55.0	<b>669</b>	<b>54.9</b>	669	54.9		
434.zeusmp	4	601	60.5	<b>602</b>	<b>60.5</b>	603	60.4	4	594	61.2	<b>594</b>	<b>61.2</b>	594	61.3		
435.gromacs	4	504	56.6	<b>505</b>	<b>56.5</b>	505	56.5	4	498	57.3	<b>497</b>	<b>57.5</b>	496	57.6		
436.cactusADM	4	718	66.6	<b>716</b>	<b>66.7</b>	714	67.0	4	714	67.0	716	66.8	<b>714</b>	<b>66.9</b>		
437.leslie3d	4	840	44.7	<b>844</b>	<b>44.5</b>	846	44.5	4	840	44.7	<b>844</b>	<b>44.5</b>	846	44.5		
444.namd	4	685	46.8	<b>685</b>	<b>46.8</b>	685	46.9	4	<b>679</b>	<b>47.2</b>	679	47.2	679	47.2		
447.dealII	4	<b>608</b>	<b>75.2</b>	610	75.0	605	75.6	4	570	80.3	554	82.6	<b>556</b>	<b>82.3</b>		
450.soplex	4	736	45.3	<b>737</b>	<b>45.2</b>	737	45.2	4	695	48.0	<b>696</b>	<b>47.9</b>	697	47.9		
453.povray	4	299	71.3	<b>300</b>	<b>71.0</b>	300	70.9	4	237	89.8	237	89.9	<b>237</b>	<b>89.9</b>		
454.calculix	4	474	69.6	<b>473</b>	<b>69.8</b>	472	69.9	4	474	69.6	<b>473</b>	<b>69.8</b>	472	69.9		
459.GemsFDTD	4	1070	39.7	<b>1070</b>	<b>39.7</b>	1070	39.7	4	1023	41.5	<b>1023</b>	<b>41.5</b>	1024	41.5		
465.tonto	4	<b>679</b>	<b>58.0</b>	684	57.6	678	58.1	4	638	61.7	<b>639</b>	<b>61.6</b>	639	61.6		
470.lbm	4	1278	43.0	<b>1278</b>	<b>43.0</b>	1277	43.0	4	1239	44.4	<b>1239</b>	<b>44.3</b>	1240	44.3		
481.wrf	4	<b>601</b>	<b>74.4</b>	600	74.5	602	74.2	4	<b>601</b>	<b>74.4</b>	600	74.5	602	74.2		
482.sphinx3	4	1328	58.7	<b>1332</b>	<b>58.5</b>	1332	58.5	4	1290	60.5	<b>1291</b>	<b>60.4</b>	1295	60.2		

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 800 MHz.

## 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

SPECfp\_rate2006 = 59.6

PRIMERGY TX300 S5, Intel Xeon E5504, 2.0 GHz

SPECfp\_rate\_base2006 = 57.5

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

Test date: Aug-2009  
Hardware Availability: Apr-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.lelie3d: -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**

**SPECfp\_rate2006 = 59.6**

PRIMERGY TX300 S5, Intel Xeon E5504, 2.0 GHz

**SPECfp\_rate\_base2006 = 57.5**

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

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

## Peak Compiler Invocation

C benchmarks (except as noted below):  
icc

482.sphinx3: icc -m32

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

## 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

Continued on next page



# SPEC CFP2006 Result

Copyright 2006-2014 Standard Performance Evaluation Corporation

Fujitsu

SPECfp\_rate2006 = 59.6

PRIMERGY TX300 S5, Intel Xeon E5504, 2.0 GHz

SPECfp\_rate\_base2006 = 57.5

CPU2006 license: 19

Test sponsor: Fujitsu

Tested by: Fujitsu

Test date: Aug-2009

Hardware Availability: Apr-2009

Software Availability: Feb-2009

## Peak Optimization Flags (Continued)

C++ benchmarks:

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.dealIII: -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: -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: -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: -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 -auto-ilp32

Continued on next page



# SPEC CFP2006 Result

Copyright 2006-2014 Standard Performance Evaluation Corporation

**Fujitsu**

**SPECfp\_rate2006 = 59.6**

PRIMERGY TX300 S5, Intel Xeon E5504, 2.0 GHz

**SPECfp\_rate\_base2006 = 57.5**

**CPU2006 license:** 19

**Test sponsor:** Fujitsu

**Tested by:** Fujitsu

**Test date:** Aug-2009

**Hardware Availability:** Apr-2009

**Software Availability:** Feb-2009

## Peak Optimization Flags (Continued)

454.calculix: basepeak = yes

481.wrf: basepeak = yes

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.20090901.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.20090901.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](mailto:webmaster@spec.org).

Tested with SPEC CPU2006 v1.1.  
Report generated on Wed Jul 23 04:40:26 2014 by SPEC CPU2006 PS/PDF formatter v6932.  
Originally published on 13 October 2009.