



# SPEC® CFP2006 Result

Copyright 2006-2014 Standard Performance Evaluation Corporation

## Fujitsu

### SPECfp®\_rate2006 = 110

PRIMERGY BX922 S2, Intel Xeon X5667, 3.06 GHz

### SPECfp\_rate\_base2006 = 106

CPU2006 license: 19

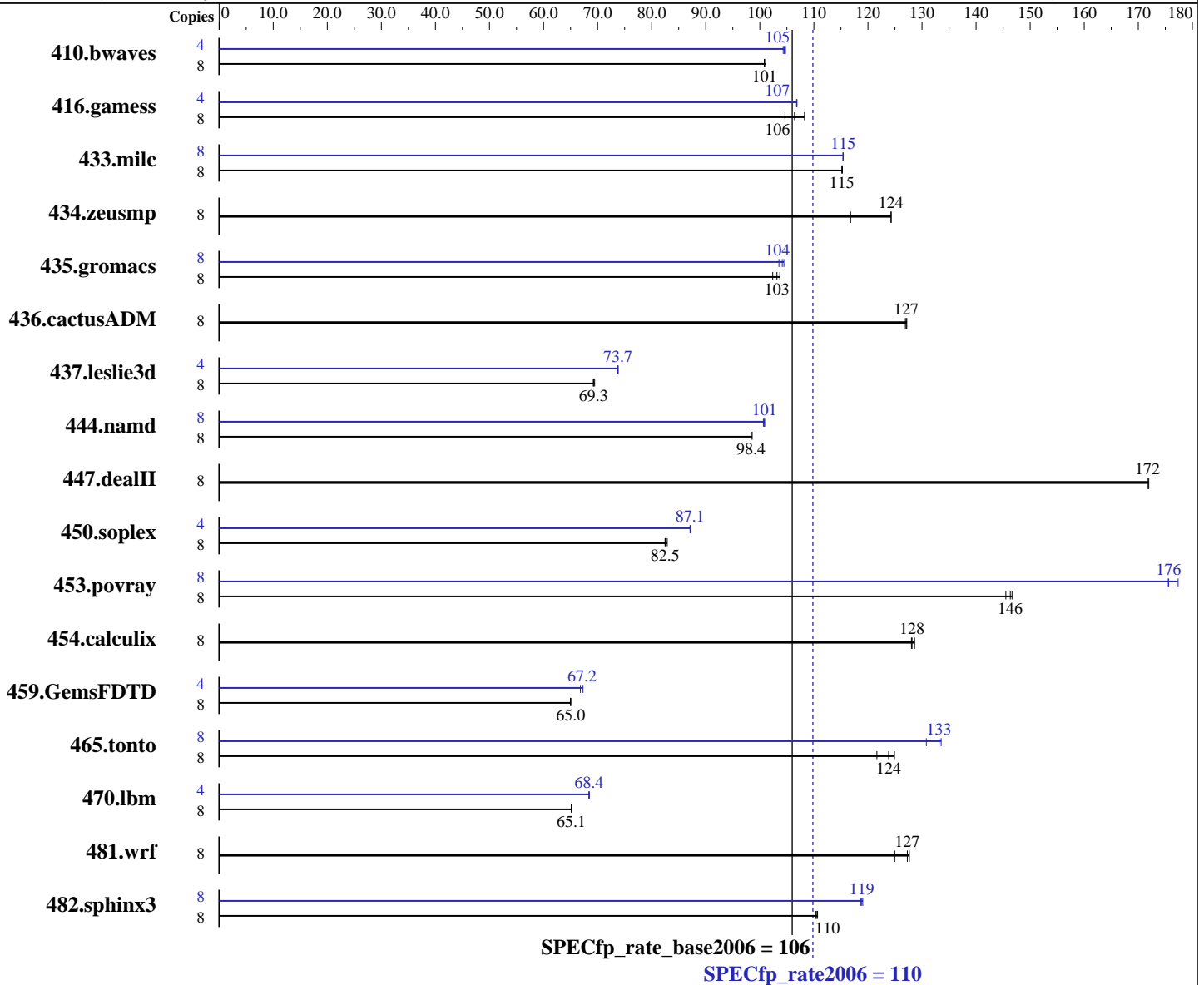
Test date: May-2010

Test sponsor: Fujitsu

Hardware Availability: Mar-2010

Tested by: Fujitsu

Software Availability: Jan-2010



#### Hardware

CPU Name: Intel Xeon X5667  
 CPU Characteristics: Intel Turbo Boost Technology up to 3.46 GHz  
 CPU MHz: 3067  
 FPU: Integrated  
 CPU(s) enabled: 4 cores, 1 chip, 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 11 (x86\_64), Kernel 2.6.27.19-5-default  
 Compiler: Intel C++ and Fortran Professional Compiler for IA32 and Intel 64, Version 11.1 Build 20091130 Package ID: l\_cproc\_p\_11.1.064, l\_cprof\_p\_11.1.064  
 Auto Parallel: No  
 File System: ext3  
 System State: Multi-User Run Level 3

Continued on next page



# SPEC CFP2006 Result

Copyright 2006-2014 Standard Performance Evaluation Corporation

## Fujitsu

SPECfp\_rate2006 = 110

PRIMERGY BX922 S2, Intel Xeon X5667, 3.06 GHz

SPECfp\_rate\_base2006 = 106

CPU2006 license: 19

Test date: May-2010

Test sponsor: Fujitsu

Hardware Availability: Mar-2010

Tested by: Fujitsu

Software Availability: Jan-2010

L3 Cache: 12 MB I+D on chip per chip  
Other Cache: None  
Memory: 24 GB (6x4 GB PC3-10600R, 2 rank, CL9-9-9, ECC)  
Disk Subsystem: 1 x SSD SATA, 64 GB  
Other Hardware: None

Base Pointers: 64-bit  
Peak Pointers: 32/64-bit  
Other Software: None

## Results Table

Benchmark	Base							Peak						
	Copies	Seconds	Ratio	Seconds	Ratio	Seconds	Ratio	Copies	Seconds	Ratio	Seconds	Ratio	Seconds	Ratio
410.bwaves	8	1076	101	<b><u>1078</u></b>	<b><u>101</u></b>	1078	101	4	521	104	519	105	<b><u>520</u></b>	<b><u>105</u></b>
416.gamess	8	1447	108	1497	105	<b><u>1472</u></b>	<b><u>106</u></b>	4	733	107	733	107	<b><u>733</u></b>	<b><u>107</u></b>
433.milc	8	638	115	<b><u>638</u></b>	<b><u>115</u></b>	637	115	8	637	115	<b><u>636</u></b>	<b><u>115</u></b>	636	115
434.zeusmp	8	623	117	<b><u>586</u></b>	<b><u>124</u></b>	586	124	8	623	117	<b><u>586</u></b>	<b><u>124</u></b>	586	124
435.gromacs	8	558	102	<b><u>554</u></b>	<b><u>103</u></b>	551	104	8	547	104	<b><u>548</u></b>	<b><u>104</u></b>	552	104
436.cactusADM	8	752	127	753	127	<b><u>752</u></b>	<b><u>127</u></b>	8	752	127	753	127	<b><u>752</u></b>	<b><u>127</u></b>
437.leslie3d	8	1087	69.2	1083	69.5	<b><u>1086</u></b>	<b><u>69.3</u></b>	4	510	73.7	<b><u>510</u></b>	<b><u>73.7</u></b>	509	73.8
444.namd	8	652	98.4	651	98.6	<b><u>652</u></b>	<b><u>98.4</u></b>	8	637	101	636	101	<b><u>636</u></b>	<b><u>101</u></b>
447.dealII	8	533	172	<b><u>533</u></b>	<b><u>172</u></b>	532	172	8	533	172	<b><u>533</u></b>	<b><u>172</u></b>	532	172
450.soplex	8	809	82.5	<b><u>809</u></b>	<b><u>82.5</u></b>	805	82.9	4	<b><u>383</u></b>	<b><u>87.1</u></b>	383	87.2	383	87.1
453.povray	8	293	146	<b><u>291</u></b>	<b><u>146</u></b>	290	147	8	240	177	<b><u>242</u></b>	<b><u>176</u></b>	243	175
454.calculix	8	513	129	515	128	<b><u>515</u></b>	<b><u>128</u></b>	8	513	129	515	128	<b><u>515</u></b>	<b><u>128</u></b>
459.GemsFDTD	8	1305	65.0	<b><u>1305</u></b>	<b><u>65.0</u></b>	1306	65.0	4	635	66.8	631	67.3	<b><u>632</u></b>	<b><u>67.2</u></b>
465.tonto	8	<b><u>636</u></b>	<b><u>124</u></b>	647	122	630	125	8	589	134	602	131	<b><u>591</u></b>	<b><u>133</u></b>
470.lbm	8	1688	65.1	<b><u>1688</u></b>	<b><u>65.1</u></b>	1687	65.1	4	804	68.4	<b><u>803</u></b>	<b><u>68.4</u></b>	803	68.5
481.wrf	8	715	125	700	128	<b><u>702</u></b>	<b><u>127</u></b>	8	715	125	700	128	<b><u>702</u></b>	<b><u>127</u></b>
482.sphinx3	8	1409	111	<b><u>1412</u></b>	<b><u>110</u></b>	1412	110	8	1310	119	<b><u>1312</u></b>	<b><u>119</u></b>	1314	119

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

## Platform Notes

BIOS configuration:  
Data Reuse Optimization = Disable  
Performance/Power Setting = Traditional



# SPEC CFP2006 Result

Copyright 2006-2014 Standard Performance Evaluation Corporation

**Fujitsu**

**SPECfp\_rate2006 = 110**

PRIMERGY BX922 S2, Intel Xeon X5667, 3.06 GHz

**SPECfp\_rate\_base2006 = 106**

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

**Test date:** May-2010  
**Hardware Availability:** Mar-2010  
**Software Availability:** Jan-2010

## General Notes

For information about Fujitsu please visit: <http://www.fujitsu.com>  
Binaries were compiled on SLES 10 with Binutils 2.18.50.0.7.20080502

## Base Compiler Invocation

C benchmarks:  
icc -m64

C++ benchmarks:  
icpc -m64

Fortran benchmarks:  
ifort -m64

Benchmarks using both Fortran and C:  
icc -m64 ifort -m64

## 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

Continued on next page



# SPEC CFP2006 Result

Copyright 2006-2014 Standard Performance Evaluation Corporation

Fujitsu

SPECfp\_rate2006 = 110

PRIMERGY BX922 S2, Intel Xeon X5667, 3.06 GHz

SPECfp\_rate\_base2006 = 106

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

Test date: May-2010  
Hardware Availability: Mar-2010  
Software Availability: Jan-2010

## Base Optimization Flags (Continued)

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

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

## Peak Compiler Invocation

C benchmarks (except as noted below):  
icc -m64

482.sphinx3: icc -m32

C++ benchmarks (except as noted below):  
icpc -m64

450.soplex: icpc -m32

Fortran benchmarks:  
ifort -m64

Benchmarks using both Fortran and C:  
icc -m64 ifort -m64

## 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.deallI: -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



# SPEC CFP2006 Result

Copyright 2006-2014 Standard Performance Evaluation Corporation

**Fujitsu**

**SPECfp\_rate2006 = 110**

PRIMERGY BX922 S2, Intel Xeon X5667, 3.06 GHz

**SPECfp\_rate\_base2006 = 106**

**CPU2006 license:** 19

**Test date:** May-2010

**Test sponsor:** Fujitsu

**Hardware Availability:** Mar-2010

**Tested by:** Fujitsu

**Software Availability:** Jan-2010

## 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 -opt-prefetch

470.lbm: -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 -ansi-alias -auto-ilp32

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

### 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: basepeak = yes

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: -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: basepeak = yes

437.leslie3d: -xSSE4.2 -ipo -O3 -no-prec-div -static

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

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 -inline-calloc -opt-malloc-options=3

### Benchmarks using both Fortran and C:

Continued on next page



# SPEC CFP2006 Result

Copyright 2006-2014 Standard Performance Evaluation Corporation

**Fujitsu**

**SPECfp\_rate2006 = 110**

PRIMERGY BX922 S2, Intel Xeon X5667, 3.06 GHz

**SPECfp\_rate\_base2006 = 106**

**CPU2006 license:** 19

**Test date:** May-2010

**Test sponsor:** Fujitsu

**Hardware Availability:** Mar-2010

**Tested by:** Fujitsu

**Software Availability:** Jan-2010

## Peak Optimization Flags (Continued)

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: 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-ic11.1-linux64-revE.20100330.02.html>

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

<http://www.spec.org/cpu2006/flags/Intel-ic11.1-linux64-revE.20100330.02.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 08:15:43 2014 by SPEC CPU2006 PS/PDF formatter v6932.  
Originally published on 22 June 2010.