



# SPEC<sup>®</sup> CFP2006 Result

Copyright 2006-2014 Standard Performance Evaluation Corporation

## Fujitsu

PRIMERGY TX140 S2, Intel Xeon E3-1265L v3, 2.50 GHz

SPECfp<sup>®</sup>2006 = 71.7

SPECfp\_base2006 = 69.9

CPU2006 license: 19

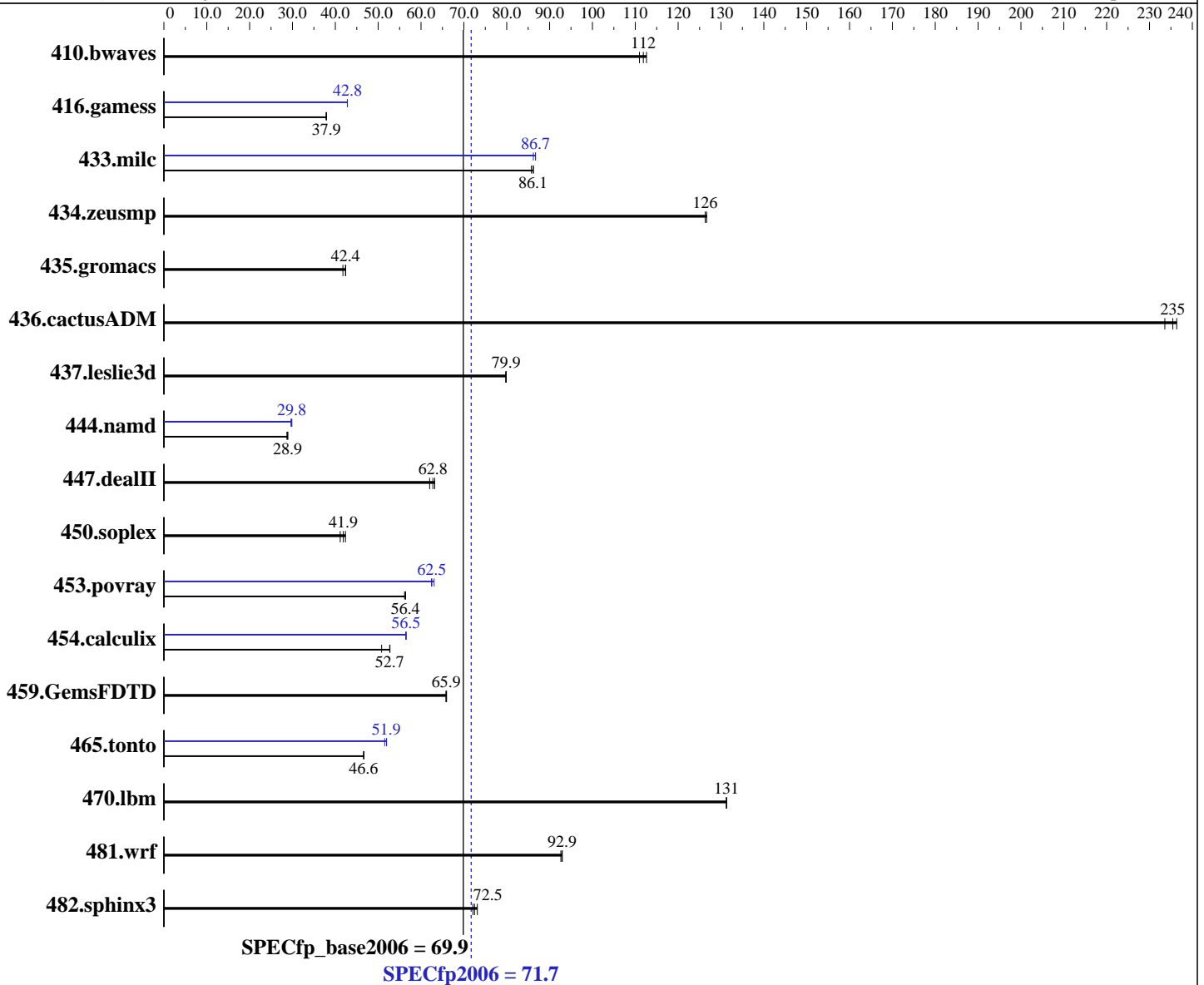
Test sponsor: Fujitsu

Tested by: Fujitsu

Test date: Sep-2013

Hardware Availability: Sep-2013

Software Availability: Sep-2013



SPECfp\_base2006 = 69.9

SPECfp2006 = 71.7

### Hardware

CPU Name: Intel Xeon E3-1265L v3  
 CPU Characteristics: Intel Turbo Boost Technology up to 3.70 GHz  
 CPU MHz: 2500  
 FPU: Integrated  
 CPU(s) enabled: 4 cores, 1 chip, 4 cores/chip, 2 threads/core  
 CPU(s) orderable: 1 chip  
 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: Red Hat Enterprise Linux Server release 6.4 (Santiago)  
 2.6.32-358.11.1.el6.x86\_64  
 Compiler: C/C++: Version 14.0.0.080 of Intel C++ Studio XE for Linux;  
 Fortran: Version 14.0.0.080 of Intel Fortran Studio XE for Linux  
 Auto Parallel: Yes  
 File System: ext4

Continued on next page



# SPEC CFP2006 Result

Copyright 2006-2014 Standard Performance Evaluation Corporation

## Fujitsu

PRIMERGY TX140 S2, Intel Xeon E3-1265L v3, 2.50 GHz

SPECfp2006 = **71.7**

SPECfp\_base2006 = **69.9**

CPU2006 license: 19

Test sponsor: Fujitsu

Tested by: Fujitsu

Test date: Sep-2013

Hardware Availability: Sep-2013

Software Availability: Sep-2013

L3 Cache: 8 MB I+D on chip per chip  
Other Cache: None  
Memory: 32 GB (4 x 8 GB 2Rx8 PC3L-12800E-11, ECC)  
Disk Subsystem: 1 x SATA, 500 GB, 7200 RPM  
Other Hardware: None

System State: Run level 3 (multi-user)  
Base Pointers: 64-bit  
Peak Pointers: 32/64-bit  
Other Software: None

## Results Table

Benchmark	Base						Peak					
	Seconds	Ratio	Seconds	Ratio	Seconds	Ratio	Seconds	Ratio	Seconds	Ratio	Seconds	Ratio
410.bwaves	122	111	<b><u>121</u></b>	<b><u>112</u></b>	121	113	122	111	<b><u>121</u></b>	<b><u>112</u></b>	121	113
416.gamess	517	37.9	<b><u>517</u></b>	<b><u>37.9</u></b>	516	37.9	457	42.8	457	42.8	<b><u>457</u></b>	<b><u>42.8</u></b>
433.milc	<b><u>107</u></b>	<b><u>86.1</u></b>	106	86.2	107	85.7	106	86.7	106	86.2	<b><u>106</u></b>	<b><u>86.7</u></b>
434.zeusmp	71.8	127	<b><u>72.0</u></b>	<b><u>126</u></b>	72.0	126	71.8	127	<b><u>72.0</u></b>	<b><u>126</u></b>	72.0	126
435.gromacs	171	41.8	168	42.4	<b><u>169</u></b>	<b><u>42.4</u></b>	171	41.8	168	42.4	<b><u>169</u></b>	<b><u>42.4</u></b>
436.cactusADM	<b><u>50.8</u></b>	<b><u>235</u></b>	50.6	236	51.2	234	<b><u>50.8</u></b>	<b><u>235</u></b>	50.6	236	51.2	234
437.leslie3d	118	79.8	118	79.9	<b><u>118</u></b>	<b><u>79.9</u></b>	118	79.8	118	79.9	<b><u>118</u></b>	<b><u>79.9</u></b>
444.namd	279	28.7	<b><u>278</u></b>	<b><u>28.9</u></b>	278	28.9	269	29.8	270	29.7	<b><u>269</u></b>	<b><u>29.8</u></b>
447.dealII	184	62.0	<b><u>182</u></b>	<b><u>62.8</u></b>	181	63.2	184	62.0	<b><u>182</u></b>	<b><u>62.8</u></b>	181	63.2
450.soplex	203	41.1	<b><u>199</u></b>	<b><u>41.9</u></b>	197	42.4	203	41.1	<b><u>199</u></b>	<b><u>41.9</u></b>	197	42.4
453.povray	94.7	56.2	<b><u>94.4</u></b>	<b><u>56.4</u></b>	94.3	56.4	84.4	63.1	85.2	62.4	<b><u>85.1</u></b>	<b><u>62.5</u></b>
454.calculix	<b><u>157</u></b>	<b><u>52.7</u></b>	156	52.8	162	50.8	146	56.4	146	56.5	<b><u>146</u></b>	<b><u>56.5</u></b>
459.GemsFDTD	<b><u>161</u></b>	<b><u>65.9</u></b>	161	65.8	161	66.0	<b><u>161</u></b>	<b><u>65.9</u></b>	161	65.8	161	66.0
465.tonto	<b><u>211</u></b>	<b><u>46.6</u></b>	211	46.7	211	46.6	189	52.0	<b><u>189</u></b>	<b><u>51.9</u></b>	191	51.5
470.lbm	105	131	105	131	<b><u>105</u></b>	<b><u>131</u></b>	105	131	105	131	<b><u>105</u></b>	<b><u>131</u></b>
481.wrf	<b><u>120</u></b>	<b><u>92.9</u></b>	121	92.6	120	92.9	<b><u>120</u></b>	<b><u>92.9</u></b>	121	92.6	120	92.9
482.sphinx3	266	73.1	270	72.1	<b><u>269</u></b>	<b><u>72.5</u></b>	266	73.1	270	72.1	<b><u>269</u></b>	<b><u>72.5</u></b>

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

## Operating System Notes

Stack size set to unlimited using "ulimit -s unlimited"

## General Notes

Environment variables set by runspec before the start of the run:

KMP\_AFFINITY = "granularity=fine,compact,1,0"

LD\_LIBRARY\_PATH = "/SPECcpu2006/libs/32:/SPECcpu2006/libs/64:/SPECcpu2006/sh"

OMP\_NUM\_THREADS = "4"

Binaries compiled on a system with 1x Core i7-860 CPU + 8GB memory using RedHat EL 6.4

Transparent Huge Pages enabled with:

echo always > /sys/kernel/mm/redhat\_transparent\_hugepage/enabled

runspec command invoked through numactl i.e.:

Continued on next page

Standard Performance Evaluation Corporation

info@spec.org

http://www.spec.org/

Page 2



# SPEC CFP2006 Result

Copyright 2006-2014 Standard Performance Evaluation Corporation

## Fujitsu

PRIMERGY TX140 S2, Intel Xeon E3-1265L v3, 2.50 GHz

SPECfp2006 = 71.7

SPECfp\_base2006 = 69.9

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

Test date: Sep-2013  
Hardware Availability: Sep-2013  
Software Availability: Sep-2013

### General Notes (Continued)

numactl --interleave=all runspec <etc>  
For information about Fujitsu please visit: <http://www.fujitsu.com>

### 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:  
-xCORE-AVX2 -ipo -O3 -no-prec-div -parallel -opt-prefetch  
-ansi-alias

C++ benchmarks:  
-xCORE-AVX2 -ipo -O3 -no-prec-div -opt-prefetch -ansi-alias

Continued on next page



# SPEC CFP2006 Result

Copyright 2006-2014 Standard Performance Evaluation Corporation

**Fujitsu**

PRIMERGY TX140 S2, Intel Xeon E3-1265L v3, 2.50 GHz

**SPECfp2006 = 71.7**

**SPECfp\_base2006 = 69.9**

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

**Test date:** Sep-2013  
**Hardware Availability:** Sep-2013  
**Software Availability:** Sep-2013

## Base Optimization Flags (Continued)

Fortran benchmarks:  
-xCORE-AVX2 -ipo -O3 -no-prec-div -parallel -opt-prefetch

Benchmarks using both Fortran and C:  
-xCORE-AVX2 -ipo -O3 -no-prec-div -parallel -opt-prefetch  
-ansi-alias

## Peak Compiler Invocation

C benchmarks:  
icc -m64

C++ benchmarks:  
icpc -m64

Fortran benchmarks:  
ifort -m64

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

## Peak Portability Flags

Same as Base Portability Flags

## Peak Optimization Flags

C benchmarks:  
433.milc: -xCORE-AVX2(pass 2) -prof-gen(pass 1) -ipo(pass 2)  
-O3(pass 2) -no-prec-div(pass 2) -prof-use(pass 2)  
-auto-ilp32 -ansi-alias

470.lbm: basepeak = yes

482.sphinx3: basepeak = yes

C++ benchmarks:  
444.namd: -xCORE-AVX2(pass 2) -prof-gen(pass 1) -ipo(pass 2)  
-O3(pass 2) -no-prec-div(pass 2) -prof-use(pass 2)  
-fno-alias -auto-ilp32

Continued on next page



# SPEC CFP2006 Result

Copyright 2006-2014 Standard Performance Evaluation Corporation

## Fujitsu

PRIMERGY TX140 S2, Intel Xeon E3-1265L v3, 2.50 GHz

SPECfp2006 = 71.7

SPECfp\_base2006 = 69.9

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

Test date: Sep-2013  
Hardware Availability: Sep-2013  
Software Availability: Sep-2013

## Peak Optimization Flags (Continued)

447.dealll: basepeak = yes

450.soplex: basepeak = yes

453.povray: -xCORE-AVX2(pass 2) -prof-gen(pass 1) -ipo(pass 2)  
-O3(pass 2) -no-prec-div(pass 2) -prof-use(pass 2) -unroll4  
-ansi-alias

### Fortran benchmarks:

410.bwaves: basepeak = yes

416.gamess: -xCORE-AVX2(pass 2) -prof-gen(pass 1) -ipo(pass 2)  
-O3(pass 2) -no-prec-div(pass 2) -prof-use(pass 2) -unroll2  
-inline-level=0 -scalar-rep-

434.zeusmp: basepeak = yes

437.leslie3d: basepeak = yes

459.GemsFDTD: basepeak = yes

465.tonto: -xCORE-AVX2(pass 2) -prof-gen(pass 1) -ipo(pass 2)  
-O3(pass 2) -no-prec-div(pass 2) -prof-use(pass 2)  
-inline-calloc -opt-malloc-options=3 -auto -unroll4

### Benchmarks using both Fortran and C:

435.gromacs: basepeak = yes

436.cactusADM: basepeak = yes

454.calculix: -xCORE-AVX2 -ipo -O3 -no-prec-div -auto-ilp32 -ansi-alias

481.wrf: basepeak = yes

The flags files that were used to format this result can be browsed at

<http://www.spec.org/cpu2006/flags/Intel-ic14.0-official-linux64.20140128.html>

<http://www.spec.org/cpu2006/flags/Fujitsu-Platform.20130924.html>

You can also download the XML flags sources by saving the following links:

<http://www.spec.org/cpu2006/flags/Intel-ic14.0-official-linux64.20140128.xml>

<http://www.spec.org/cpu2006/flags/Fujitsu-Platform.20130924.xml>



# SPEC CFP2006 Result

Copyright 2006-2014 Standard Performance Evaluation Corporation

## Fujitsu

PRIMERGY TX140 S2, Intel Xeon E3-1265L v3, 2.50 GHz

SPECfp2006 = 71.7

SPECfp\_base2006 = 69.9

CPU2006 license: 19

Test sponsor: Fujitsu

Tested by: Fujitsu

Test date: Sep-2013

Hardware Availability: Sep-2013

Software Availability: Sep-2013

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 v1.2.  
Report generated on Thu Jul 24 18:42:51 2014 by SPEC CPU2006 PS/PDF formatter v6932.  
Originally published on 22 October 2013.