



# SPEC<sup>®</sup> CFP2006 Result

Copyright 2006-2014 Standard Performance Evaluation Corporation

## Itaotec

### SPECfp<sup>®</sup>\_rate2006 = 43.2

### Servidor Itaotec MX221 (Intel Xeon X5450)

### SPECfp\_rate\_base2006 = 40.3

CPU2006 license: 9001

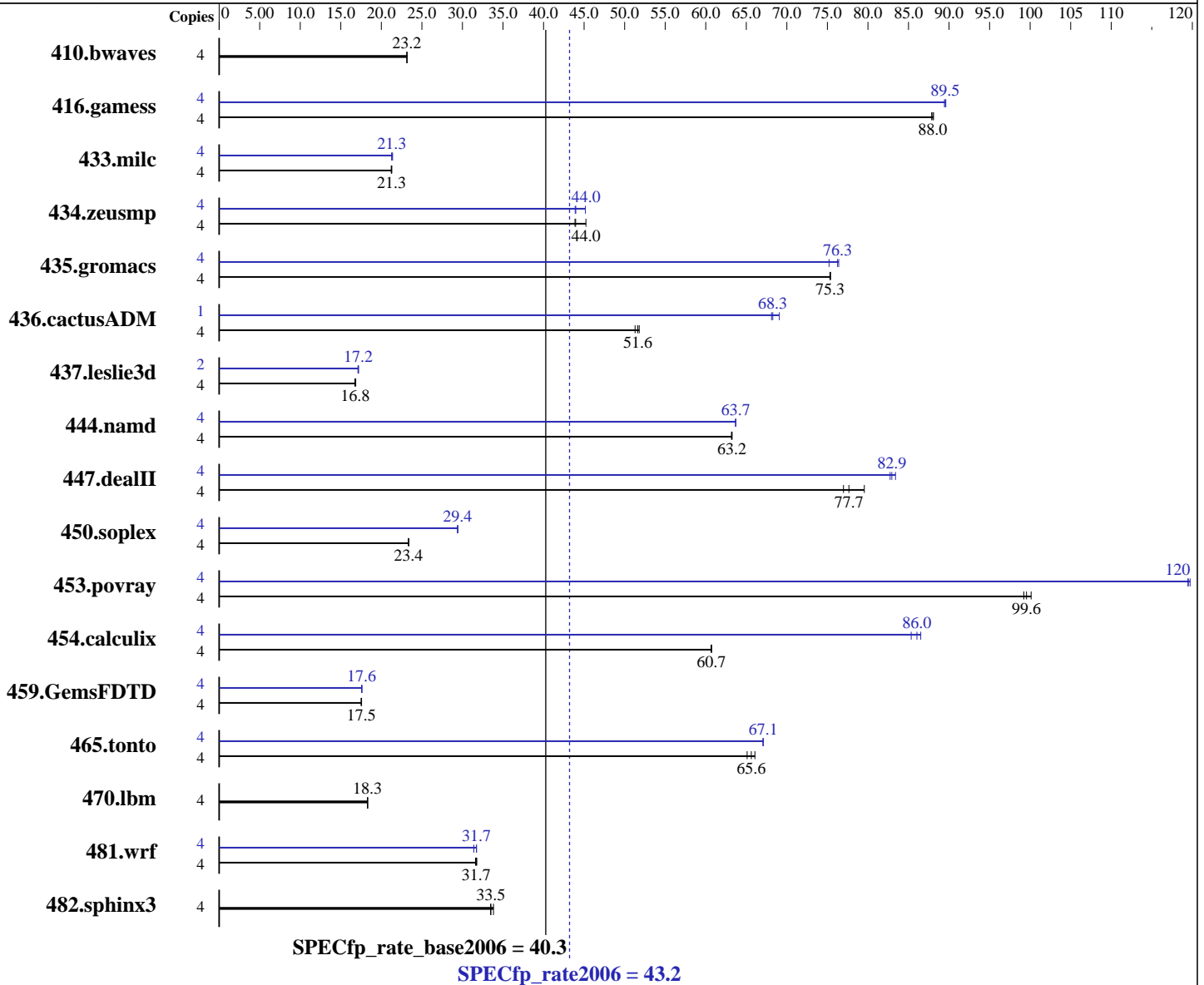
Test sponsor: Itaotec

Tested by: Itaotec

Test date: May-2008

Hardware Availability: Dec-2007

Software Availability: Jan-2008



#### Hardware

CPU Name: Intel Xeon X5450  
 CPU Characteristics:  
 CPU MHz: 3000  
 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: 12 MB I+D on chip per chip, 6 MB shared / 2 cores

Continued on next page

#### Software

Operating System: SUSE Linux Enterprise Server 10 (x86\_64) SP1, Kernel 2.6.16.46-0.12-smpp  
 Compiler: Intel C++ and Fortran Compiler for Linux version 10.1 Build 20080112 Package ID: l\_cc\_p\_10.1.012, l\_fc\_p\_10.1.012  
 Auto Parallel: Yes  
 File System: ReiserFS  
 System State: Run Level 3 (multi-user)

Continued on next page



# SPEC CFP2006 Result

Copyright 2006-2014 Standard Performance Evaluation Corporation

Itaotec

SPECfp\_rate2006 = 43.2

Servidor Itaotec MX221 (Intel Xeon X5450)

SPECfp\_rate\_base2006 = 40.3

CPU2006 license: 9001  
Test sponsor: Itaotec  
Tested by: Itaotec

Test date: May-2008  
Hardware Availability: Dec-2007  
Software Availability: Jan-2008

L3 Cache: None  
Other Cache: None  
Memory: 16 GB (8 \* 2 GB PC2-5300 FBDIMM, CL-5-5-5, ECC)  
Disk Subsystem: 1 x SCSI, 73GB, 15000 RPM  
Other Hardware: None

Base Pointers: 64-bit  
Peak Pointers: 32/64-bit  
Other Software: Binutils 2.17.10.50

## Results Table

Benchmark	Base							Peak						
	Copies	Seconds	Ratio	Seconds	Ratio	Seconds	Ratio	Copies	Seconds	Ratio	Seconds	Ratio	Seconds	Ratio
410.bwaves	4	<b>2348</b>	<b>23.2</b>	2346	23.2	2348	23.2	4	<b>2348</b>	<b>23.2</b>	2346	23.2	2348	23.2
416.gamess	4	889	88.1	891	87.9	<b>890</b>	<b>88.0</b>	4	876	89.4	<b>875</b>	<b>89.5</b>	874	89.6
433.milc	4	1725	21.3	<b>1728</b>	<b>21.3</b>	1731	21.2	4	<b>1723</b>	<b>21.3</b>	1717	21.4	1726	21.3
434.zeusmp	4	805	45.2	830	43.9	<b>828</b>	<b>44.0</b>	4	<b>828</b>	<b>44.0</b>	829	43.9	806	45.2
435.gromacs	4	379	75.4	<b>379</b>	<b>75.3</b>	379	75.3	4	374	76.4	380	75.2	<b>375</b>	<b>76.3</b>
436.cactusADM	4	<b>926</b>	<b>51.6</b>	932	51.3	923	51.8	1	173	69.1	<b>175</b>	<b>68.3</b>	175	68.1
437.leslie3d	4	<b>2238</b>	<b>16.8</b>	2247	16.7	2232	16.8	2	1098	17.1	<b>1095</b>	<b>17.2</b>	1094	17.2
444.namd	4	<b>507</b>	<b>63.2</b>	507	63.2	508	63.2	4	<b>504</b>	<b>63.7</b>	504	63.7	503	63.7
447.dealII	4	594	77.0	<b>589</b>	<b>77.7</b>	575	79.6	4	<b>552</b>	<b>82.9</b>	553	82.7	549	83.4
450.soplex	4	<b>1428</b>	<b>23.4</b>	1426	23.4	1430	23.3	4	1134	29.4	1135	29.4	<b>1134</b>	<b>29.4</b>
453.povray	4	213	100	214	99.2	<b>214</b>	<b>99.6</b>	4	<b>178</b>	<b>120</b>	178	120	178	119
454.calculix	4	<b>544</b>	<b>60.7</b>	543	60.7	544	60.7	4	<b>384</b>	<b>86.0</b>	387	85.3	381	86.5
459.GemsFDTD	4	<b>2421</b>	<b>17.5</b>	2416	17.6	2424	17.5	4	2410	17.6	2415	17.6	<b>2415</b>	<b>17.6</b>
465.tonto	4	596	66.1	605	65.1	<b>600</b>	<b>65.6</b>	4	587	67.1	587	67.1	<b>587</b>	<b>67.1</b>
470.lbm	4	3004	18.3	<b>3002</b>	<b>18.3</b>	3002	18.3	4	3004	18.3	<b>3002</b>	<b>18.3</b>	3002	18.3
481.wrf	4	<b>1409</b>	<b>31.7</b>	1406	31.8	1413	31.6	4	<b>1408</b>	<b>31.7</b>	1423	31.4	1408	31.7
482.sphinx3	4	2305	33.8	2329	33.5	<b>2326</b>	<b>33.5</b>	4	2305	33.8	2329	33.5	<b>2326</b>	<b>33.5</b>

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

## Compiler Invocation Notes

OMP\_NUM\_THREADS set to number of cores  
KMP\_STACK\_SIZE set to 64M  
KMP\_AFFINITY set to physical,0

## Operating System Notes

'ulimit -s unlimited' was used to set the stacksize to unlimited prior to run.  
'/usr/bin/taskset' used to bind benchmark copies to processors, except for 436.cactusADM at peak.



# SPEC CFP2006 Result

Copyright 2006-2014 Standard Performance Evaluation Corporation

Itaotec

SPECfp\_rate2006 = 43.2

Servidor Itaotec MX221 (Intel Xeon X5450)

SPECfp\_rate\_base2006 = 40.3

CPU2006 license: 9001  
Test sponsor: Itaotec  
Tested by: Itaotec

Test date: May-2008  
Hardware Availability: Dec-2007  
Software Availability: Jan-2008

## Platform Notes

BIOS configuration:  
Hardware Prefetch Disabled

## General Notes

This result was measured on the Servidor Itaotec MX201.  
The Servidor Itaotec MX221 and the Servidor Itaotec MX201 are electronically equivalent.

## 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



# SPEC CFP2006 Result

Copyright 2006-2014 Standard Performance Evaluation Corporation

Itaotec

SPECfp\_rate2006 = 43.2

Servidor Itaotec MX221 (Intel Xeon X5450)

SPECfp\_rate\_base2006 = 40.3

CPU2006 license: 9001  
Test sponsor: Itaotec  
Tested by: Itaotec

Test date: May-2008  
Hardware Availability: Dec-2007  
Software Availability: Jan-2008

## Base Optimization Flags

C benchmarks:  
-fast  
  
C++ benchmarks:  
-fast  
  
Fortran benchmarks:  
-fast  
  
Benchmarks using both Fortran and C:  
-fast

## Peak Compiler Invocation

C benchmarks:  
icc  
  
C++ benchmarks (except as noted below):  
icpc  
  
450.soplex: /opt/intel/cc/10.1.012/bin/icpc -L/opt/intel/cc/10.1.012/lib  
-I/opt/intel/cc/10.1.012/include  
  
Fortran benchmarks (except as noted below):  
ifort  
  
437.leslie3d: /opt/intel/fc/10.1.012/bin/ifort -L/opt/intel/fc/10.1.012/lib  
-I/opt/intel/fc/10.1.012/include  
  
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  
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

Continued on next page



# SPEC CFP2006 Result

Copyright 2006-2014 Standard Performance Evaluation Corporation

Itaotec

SPECfp\_rate2006 = 43.2

Servidor Itaotec MX221 (Intel Xeon X5450)

SPECfp\_rate\_base2006 = 40.3

CPU2006 license: 9001

Test date: May-2008

Test sponsor: Itaotec

Hardware Availability: Dec-2007

Tested by: Itaotec

Software Availability: Jan-2008

## Peak Portability Flags (Continued)

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: -prof-gen(pass 1) -prof-use(pass 2) -fast -fno-alias  
 -auto-ilp32  
 470.lbm: basepeak = yes  
 482.sphinx3: basepeak = yes

### C++ benchmarks:

444.namd: -prof-gen(pass 1) -prof-use(pass 2) -fast -fno-alias  
 -auto-ilp32  
 447.dealII: -prof-gen(pass 1) -prof-use(pass 2) -fast -unroll2  
 -ansi-alias -scalar-rep-  
 450.soplex: -prof-gen(pass 1) -prof-use(pass 2) -fast  
 -opt-malloc-options=3  
 453.povray: -prof-gen(pass 1) -prof-use(pass 2) -fast -unroll4  
 -ansi-alias

### Fortran benchmarks:

410.bwaves: basepeak = yes  
 416.gamess: -prof-gen(pass 1) -prof-use(pass 2) -fast -unroll2 -Ob0  
 -ansi-alias -scalar-rep-  
 434.zeusmp: -prof-gen(pass 1) -prof-use(pass 2) -fast  
 437.leslie3d: -prof-gen(pass 1) -prof-use(pass 2) -fast -prefetch  
 -opt-malloc-options=3  
 459.GemsFDTD: -prof-gen(pass 1) -prof-use(pass 2) -fast -unroll2 -Ob0  
 -prefetch  
 465.tonto: -prof-gen(pass 1) -prof-use(pass 2) -fast -unroll4 -auto

Continued on next page



# SPEC CFP2006 Result

Copyright 2006-2014 Standard Performance Evaluation Corporation

Itaotec

SPECfp\_rate2006 = 43.2

Servidor Itaotec MX221 (Intel Xeon X5450)

SPECfp\_rate\_base2006 = 40.3

CPU2006 license: 9001

Test sponsor: Itaotec

Tested by: Itaotec

Test date: May-2008

Hardware Availability: Dec-2007

Software Availability: Jan-2008

## Peak Optimization Flags (Continued)

Benchmarks using both Fortran and C:

435.gromacs: -prof-gen(pass 1) -prof-use(pass 2) -fast -prefetch  
-auto-ilp32

436.cactusADM: -prof-gen(pass 1) -prof-use(pass 2) -fast -unroll2  
-prefetch -parallel -auto-ilp32

454.calculix: -fast -unroll-aggressive -auto-ilp32

481.wrf: -fast -auto-ilp32

The flags file that was used to format this result can be browsed at

<http://www.spec.org/cpu2006/flags/Itaotec-ic10.1-FP-intel64-linux-flags.20090714.html>

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

<http://www.spec.org/cpu2006/flags/Itaotec-ic10.1-FP-intel64-linux-flags.20090714.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 v1.0.1.  
Report generated on Tue Jul 22 16:57:21 2014 by SPEC CPU2006 PS/PDF formatter v6932.  
Originally published on 27 May 2008.