



SPEC® CFP2006 Result

Copyright 2006-2014 Standard Performance Evaluation Corporation

Fujitsu

SPECfp®_rate2006 = 64.0

PRIMERGY TX120 S3, Intel Xeon E3-1220L, 2.20 GHz

SPECfp_rate_base2006 = 62.5

CPU2006 license: 19

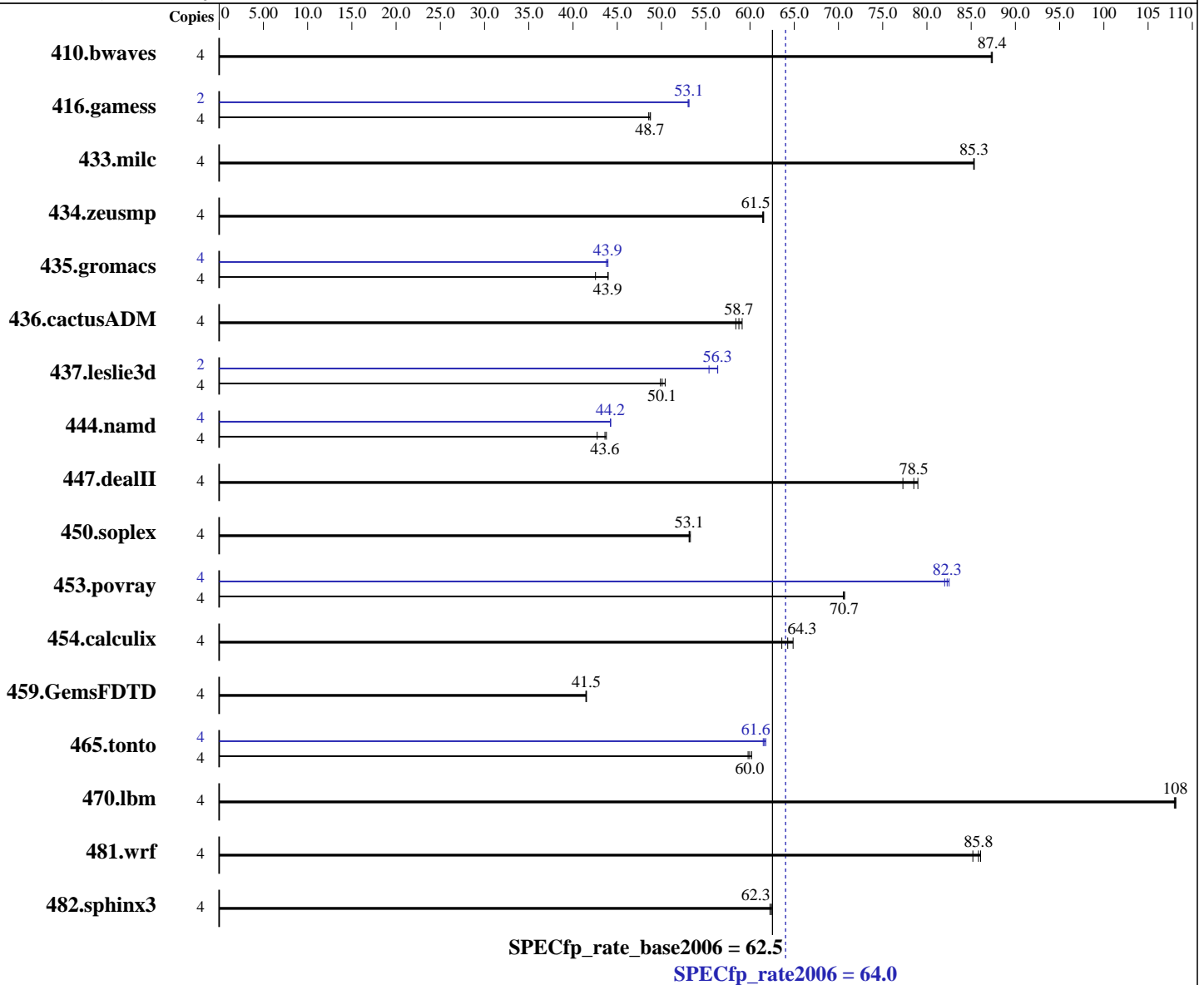
Test sponsor: Fujitsu

Tested by: Fujitsu

Test date: May-2011

Hardware Availability: Jun-2011

Software Availability: Jan-2011



Hardware

CPU Name: Intel Xeon E3-1220L
 CPU Characteristics: Intel Turbo Boost Technology up to 3.40 GHz
 CPU MHz: 2200
 FPU: Integrated
 CPU(s) enabled: 2 cores, 1 chip, 2 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: SUSE Linux Enterprise Server 11 (x86_64) with SP1, Kernel 2.6.32.12-0.7-default
 Compiler: Intel C++ and Fortran Intel 64 Compiler XE for applications running on Intel 64 Version 12.0.1.116 Build 20101116
 Auto Parallel: No
 File System: ext3
 System State: Run level 3 (multi-user)
 Base Pointers: 64-bit

Continued on next page



SPEC CFP2006 Result

Copyright 2006-2014 Standard Performance Evaluation Corporation

Fujitsu

SPECfp_rate2006 = 64.0

PRIMERGY TX120 S3, Intel Xeon E3-1220L, 2.20 GHz

SPECfp_rate_base2006 = 62.5

CPU2006 license: 19

Test date: May-2011

Test sponsor: Fujitsu

Hardware Availability: Jun-2011

Tested by: Fujitsu

Software Availability: Jan-2011

L3 Cache: 3 MB I+D on chip per chip
Other Cache: None
Memory: 8 GB (2 x 4 GB 2Rx8 PC3-10600E-9, ECC)
Disk Subsystem: 1 x SATA, 300 GB, 7200 RPM
Other Hardware: None

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	4	<u>622</u>	<u>87.4</u>	623	87.3	622	87.4	4	<u>622</u>	<u>87.4</u>	623	87.3	622	87.4
416.gamess	4	<u>1608</u>	<u>48.7</u>	1613	48.6	1606	48.8	2	739	53.0	<u>738</u>	<u>53.1</u>	738	53.1
433.milc	4	<u>430</u>	<u>85.3</u>	431	85.3	430	85.3	4	<u>430</u>	<u>85.3</u>	431	85.3	430	85.3
434.zeusmp	4	593	61.4	591	61.6	<u>592</u>	<u>61.5</u>	4	593	61.4	591	61.6	<u>592</u>	<u>61.5</u>
435.gromacs	4	649	44.0	<u>650</u>	<u>43.9</u>	671	42.5	4	<u>650</u>	<u>43.9</u>	652	43.8	650	43.9
436.cactusADM	4	809	59.1	818	58.4	<u>814</u>	<u>58.7</u>	4	809	59.1	818	58.4	<u>814</u>	<u>58.7</u>
437.leslie3d	4	746	50.4	<u>751</u>	<u>50.1</u>	754	49.9	2	340	55.4	<u>334</u>	<u>56.3</u>	334	56.4
444.namd	4	<u>736</u>	<u>43.6</u>	733	43.8	751	42.7	4	<u>725</u>	<u>44.2</u>	725	44.3	725	44.2
447.dealII	4	592	77.3	<u>583</u>	<u>78.5</u>	579	79.0	4	592	77.3	<u>583</u>	<u>78.5</u>	579	79.0
450.soplex	4	626	53.3	<u>628</u>	<u>53.1</u>	628	53.1	4	626	53.3	<u>628</u>	<u>53.1</u>	628	53.1
453.povray	4	302	70.5	<u>301</u>	<u>70.7</u>	301	70.7	4	258	82.5	<u>259</u>	<u>82.3</u>	259	82.0
454.calculix	4	519	63.6	<u>513</u>	<u>64.3</u>	509	64.9	4	519	63.6	<u>513</u>	<u>64.3</u>	509	64.9
459.GemsFDTD	4	1024	41.4	1022	41.5	<u>1023</u>	<u>41.5</u>	4	1024	41.4	1022	41.5	<u>1023</u>	<u>41.5</u>
465.tonto	4	654	60.2	658	59.8	<u>656</u>	<u>60.0</u>	4	640	61.5	<u>639</u>	<u>61.6</u>	637	61.8
470.lbm	4	509	108	508	108	<u>509</u>	<u>108</u>	4	509	108	508	108	<u>509</u>	<u>108</u>
481.wrf	4	519	86.1	524	85.2	<u>521</u>	<u>85.8</u>	4	519	86.1	524	85.2	<u>521</u>	<u>85.8</u>
482.sphinx3	4	1252	62.3	1249	62.4	<u>1251</u>	<u>62.3</u>	4	1252	62.3	1249	62.4	<u>1251</u>	<u>62.3</u>

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
Large pages were not enabled for this run

General Notes

For information about Fujitsu please visit: <http://www.fujitsu.com>
Binaries were compiled on RHEL5.5



SPEC CFP2006 Result

Copyright 2006-2014 Standard Performance Evaluation Corporation

Fujitsu

SPECfp_rate2006 = 64.0

PRIMERGY TX120 S3, Intel Xeon E3-1220L, 2.20 GHz

SPECfp_rate_base2006 = 62.5

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

Test date: May-2011
Hardware Availability: Jun-2011
Software Availability: Jan-2011

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.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:
-xAVX -ipo -O3 -no-prec-div -static -ansi-alias

C++ benchmarks:
-xAVX -ipo -O3 -no-prec-div -static -ansi-alias

Fortran benchmarks:
-xAVX -ipo -O3 -no-prec-div -static

Benchmarks using both Fortran and C:
-xAVX -ipo -O3 -no-prec-div -static -ansi-alias



SPEC CFP2006 Result

Copyright 2006-2014 Standard Performance Evaluation Corporation

Fujitsu

SPECfp_rate2006 = 64.0

PRIMERGY TX120 S3, Intel Xeon E3-1220L, 2.20 GHz

SPECfp_rate_base2006 = 62.5

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

Test date: May-2011
Hardware Availability: Jun-2011
Software Availability: Jan-2011

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: basepeak = yes

470.lbm: basepeak = yes

482.sphinx3: basepeak = yes

C++ benchmarks:

444.namd: -xAVX(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

447.dealII: basepeak = yes

450.soplex: basepeak = yes

453.povray: -xAVX(pass 2) -prof-gen(pass 1) -ipo(pass 2) -O3(pass 2)
-no-prec-div(pass 2) -prof-use(pass 2) -unroll4 -ansi-alias
-B /usr/share/libhugetlbfs/ -Wl,-melf_x86_64 -Wl,-hugetlbfs-link=BDT

Fortran benchmarks:

410.bwaves: basepeak = yes

416.gamess: -xAVX(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- -static

Continued on next page



SPEC CFP2006 Result

Copyright 2006-2014 Standard Performance Evaluation Corporation

Fujitsu

SPECfp_rate2006 = 64.0

PRIMERGY TX120 S3, Intel Xeon E3-1220L, 2.20 GHz

SPECfp_rate_base2006 = 62.5

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

Test date: May-2011
Hardware Availability: Jun-2011
Software Availability: Jan-2011

Peak Optimization Flags (Continued)

434.zeusmp: basepeak = yes

437.leslie3d: -xAVX -ipo -O3 -no-prec-div
-B /usr/share/libhugetlbfs/ -Wl,-melf_x86_64 -Wl,-hugetlbfs-link=BDT

459.GemsFDTD: basepeak = yes

465.tonto: -xAVX(pass 2) -prof-gen(pass 1) -ipo(pass 2) -O3(pass 2)
-no-prec-div(pass 2) -prof-use(pass 2) -unroll4 -auto
-inline-calloc -opt-malloc-options=3
-B /usr/share/libhugetlbfs/ -Wl,-melf_x86_64 -Wl,-hugetlbfs-link=BDT

Benchmarks using both Fortran and C:

435.gromacs: -xAVX(pass 2) -prof-gen(pass 1) -ipo(pass 2) -O3(pass 2)
-no-prec-div(pass 2) -prof-use(pass 2) -opt-prefetch
-static -auto-ilp32

436.cactusADM: basepeak = yes

454.calculix: basepeak = yes

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-ic12.0-linux64-revB.20110316.html>
<http://www.spec.org/cpu2006/flags/Fujitsu-Platform.html>

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

<http://www.spec.org/cpu2006/flags/Intel-ic12.0-linux64-revB.20110316.xml>
<http://www.spec.org/cpu2006/flags/Fujitsu-Platform.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 Wed Jul 23 18:10:38 2014 by SPEC CPU2006 PS/PDF formatter v6932.
Originally published on 7 June 2011.