



SPEC® CFP2006 Result

Copyright 2006-2014 Standard Performance Evaluation Corporation

Fujitsu

PRIMERGY TX150 S7, Intel Pentium G6950, 2.80 GHz

SPECfp®_rate2006 = 40.7

SPECfp_rate_base2006 = 39.1

CPU2006 license: 19

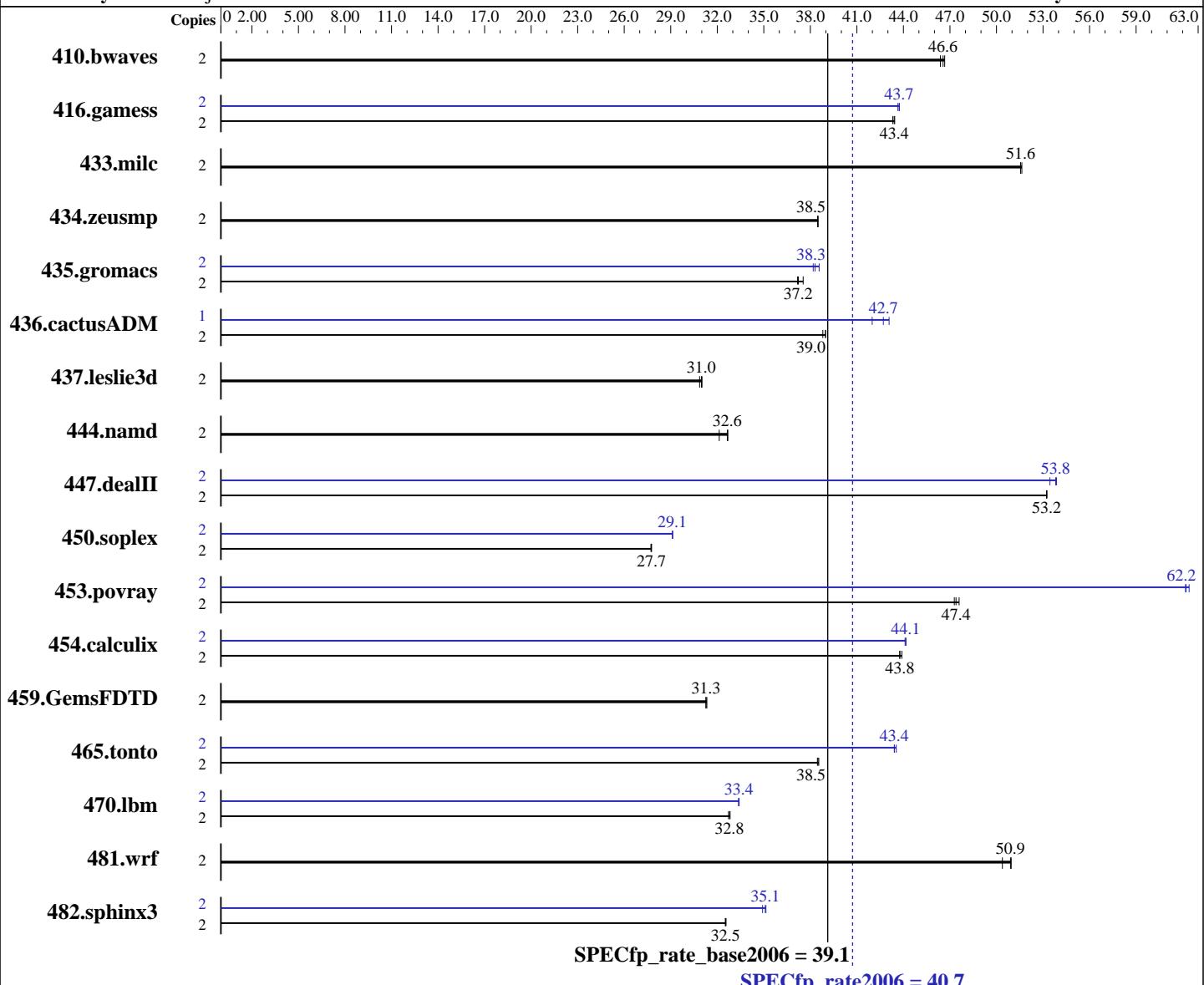
Test date: Jan-2010

Test sponsor: Fujitsu

Hardware Availability: Jan-2010

Tested by: Fujitsu

Software Availability: Nov-2009



Hardware

CPU Name: Intel Pentium G6950
CPU Characteristics:
CPU MHz:
FPU:
CPU(s) enabled: 2 cores, 1 chip, 2 cores/chip
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), Kernel 2.6.27.19-5-smp
Compiler: Intel C++ and Fortran Professional Compiler for IA32 and Intel 64, Version 11.1 Build 20091012 Package ID: l_cproc_p_11.1.059, l_cprof_p_11.1.059
Auto Parallel: Yes
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 = 40.7

PRIMERGY TX150 S7, Intel Pentium G6950, 2.80 GHz

SPECfp_rate_base2006 = 39.1

CPU2006 license: 19

Test date: Jan-2010

Test sponsor: Fujitsu

Hardware Availability: Jan-2010

Tested by: Fujitsu

Software Availability: Nov-2009

L3 Cache: 3 MB I+D on chip per chip
 Other Cache: None
 Memory: 8 GB (2x4 GB PC3-10600E, 2 rank, CL9-9-9, ECC,
 see add'l detail in notes)
 Disk Subsystem: 1 x SATA, 250 GB, 7200 RPM
 Other Hardware: None

Base Pointers: 64-bit
 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 | 2 | 583 | 46.7 | 586 | 46.4 | <u>584</u> | <u>46.6</u> | 2 | 583 | 46.7 | 586 | 46.4 | <u>584</u> | <u>46.6</u> |
| 416.gamess | 2 | 902 | 43.4 | <u>902</u> | <u>43.4</u> | 904 | 43.3 | 2 | 895 | 43.7 | <u>896</u> | <u>43.7</u> | 897 | 43.6 |
| 433.milc | 2 | 356 | 51.6 | 356 | 51.6 | <u>356</u> | <u>51.6</u> | 2 | 356 | 51.6 | 356 | 51.6 | <u>356</u> | <u>51.6</u> |
| 434.zeusmp | 2 | 473 | 38.5 | 473 | 38.5 | <u>473</u> | <u>38.5</u> | 2 | 473 | 38.5 | 473 | 38.5 | <u>473</u> | <u>38.5</u> |
| 435.gromacs | 2 | <u>384</u> | <u>37.2</u> | 384 | 37.2 | 380 | 37.5 | 2 | <u>373</u> | <u>38.3</u> | 374 | 38.2 | 370 | 38.6 |
| 436.cactusADM | 2 | 616 | 38.8 | <u>613</u> | <u>39.0</u> | 613 | 39.0 | 1 | 277 | 43.1 | <u>280</u> | <u>42.7</u> | 285 | 42.0 |
| 437.leslie3d | 2 | <u>607</u> | <u>31.0</u> | 609 | 30.9 | 606 | 31.0 | 2 | <u>607</u> | <u>31.0</u> | 609 | 30.9 | 606 | 31.0 |
| 444.namd | 2 | 491 | 32.7 | <u>491</u> | <u>32.6</u> | 499 | 32.1 | 2 | 491 | 32.7 | <u>491</u> | <u>32.6</u> | 499 | 32.1 |
| 447.dealII | 2 | 430 | 53.3 | <u>430</u> | <u>53.2</u> | 430 | 53.2 | 2 | <u>425</u> | <u>53.8</u> | 428 | 53.4 | 425 | 53.9 |
| 450.soplex | 2 | <u>601</u> | <u>27.7</u> | 601 | 27.8 | 602 | 27.7 | 2 | <u>573</u> | <u>29.1</u> | 573 | 29.1 | 573 | 29.1 |
| 453.povray | 2 | 224 | 47.6 | <u>225</u> | <u>47.4</u> | 225 | 47.3 | 2 | 171 | 62.2 | <u>171</u> | <u>62.2</u> | 170 | 62.4 |
| 454.calculix | 2 | 376 | 43.9 | <u>377</u> | <u>43.8</u> | 377 | 43.8 | 2 | <u>374</u> | <u>44.1</u> | 374 | 44.2 | 374 | 44.1 |
| 459.GemsFDTD | 2 | <u>678</u> | <u>31.3</u> | 677 | 31.3 | 679 | 31.3 | 2 | <u>678</u> | <u>31.3</u> | 677 | 31.3 | 679 | 31.3 |
| 465.tonto | 2 | 511 | 38.5 | <u>511</u> | <u>38.5</u> | 512 | 38.5 | 2 | <u>452</u> | <u>43.5</u> | 453 | 43.4 | <u>453</u> | <u>43.4</u> |
| 470.lbm | 2 | 837 | 32.8 | <u>838</u> | <u>32.8</u> | 840 | 32.7 | 2 | <u>823</u> | <u>33.4</u> | <u>823</u> | <u>33.4</u> | 824 | 33.4 |
| 481.wrf | 2 | <u>439</u> | <u>50.9</u> | 443 | 50.4 | 438 | 50.9 | 2 | <u>439</u> | <u>50.9</u> | 443 | 50.4 | 438 | 50.9 |
| 482.sphinx3 | 2 | 1197 | 32.6 | <u>1198</u> | <u>32.5</u> | 1199 | 32.5 | 2 | <u>1109</u> | <u>35.1</u> | 1116 | 34.9 | <u>1111</u> | <u>35.1</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.
 taskset has been used to bind processes to cores except
 for 436.cactusADM peak

Operating System Notes

'ulimit -s unlimited' was used to set the stacksize to unlimited prior to run
 OMP_NUM_THREADS set to number of cores
 KMP_AFFINITY set to "granularity=fine,scatter"
 KMP_STACKSIZE set to 64M



SPEC CFP2006 Result

Copyright 2006-2014 Standard Performance Evaluation Corporation

Fujitsu

PRIMERGY TX150 S7, Intel Pentium G6950, 2.80 GHz

CPU2006 license: 19

Test sponsor: Fujitsu

Tested by: Fujitsu

SPECfp_rate2006 = 40.7

SPECfp_rate_base2006 = 39.1

Test date: Jan-2010

Hardware Availability: Jan-2010

Software Availability: Nov-2009

Platform Notes

The system automatically configures the memory to run at 1066 MHz.

General Notes

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:

-xSSSE3 -ipo -O3 -no-prec-div -static -opt-prefetch

Continued on next page



SPEC CFP2006 Result

Copyright 2006-2014 Standard Performance Evaluation Corporation

Fujitsu

PRIMERGY TX150 S7, Intel Pentium G6950, 2.80 GHz

CPU2006 license: 19

Test sponsor: Fujitsu

Tested by: Fujitsu

SPECfp_rate2006 = 40.7

SPECfp_rate_base2006 = 39.1

Test date: Jan-2010

Hardware Availability: Jan-2010

Software Availability: Nov-2009

Base Optimization Flags (Continued)

C++ benchmarks:

-xSSSE3 -ipo -O3 -no-prec-div -static -opt-prefetch

Fortran benchmarks:

-xSSSE3 -ipo -O3 -no-prec-div -static -opt-prefetch

Benchmarks using both Fortran and C:

-xSSSE3 -ipo -O3 -no-prec-div -static -opt-prefetch

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.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



SPEC CFP2006 Result

Copyright 2006-2014 Standard Performance Evaluation Corporation

Fujitsu

PRIMERGY TX150 S7, Intel Pentium G6950, 2.80 GHz

CPU2006 license: 19

Test sponsor: Fujitsu

Tested by: Fujitsu

SPECfp_rate2006 = 40.7

SPECfp_rate_base2006 = 39.1

Test date: Jan-2010

Hardware Availability: Jan-2010

Software Availability: Nov-2009

Peak Optimization Flags

C benchmarks:

433.milc: basepeak = yes

470.lbm: -xSSSE3 -ipo -O3 -no-prec-div -static -opt-prefetch
-auto-ilp32

482.sphinx3: -xSSSE3 -ipo -O3 -no-prec-div -static -unroll2

C++ benchmarks:

444.namd: basepeak = yes

447.dealII: -prof-gen(pass 1) -prof-use(pass 2) -xSSSE3 -ipo -O3
-no-prec-div -static -unroll2 -ansi-alias -scalar-rep-

450.soplex: -prof-gen(pass 1) -prof-use(pass 2) -xSSSE3 -ipo -O3
-no-prec-div -static -opt-malloc-options=3

453.povray: -prof-gen(pass 1) -prof-use(pass 2) -xSSSE3 -ipo -O3
-no-prec-div -static -unroll4 -ansi-alias

Fortran benchmarks:

410.bwaves: basepeak = yes

416.gamess: -prof-gen(pass 1) -prof-use(pass 2) -xSSSE3 -ipo -O3
-no-prec-div -static -unroll2 -Obo -ansi-alias
-scalar-rep-

434.zeusmp: basepeak = yes

437.leslie3d: basepeak = yes

459.GemsFDTD: basepeak = yes

465.tonto: -prof-gen(pass 1) -prof-use(pass 2) -xSSSE3 -ipo -O3
-no-prec-div -static -unroll4 -auto

Benchmarks using both Fortran and C:

435.gromacs: -prof-gen(pass 1) -prof-use(pass 2) -xSSSE3 -ipo -O3
-no-prec-div -static -opt-prefetch -auto-ilp32

436.cactusADM: -prof-gen(pass 1) -prof-use(pass 2) -xSSSE3 -ipo -O3
-no-prec-div -static -unroll2 -opt-prefetch -parallel
-auto-ilp32

454.calculix: -xSSSE3 -ipo -O3 -no-prec-div -static -auto-ilp32

Continued on next page



SPEC CFP2006 Result

Copyright 2006-2014 Standard Performance Evaluation Corporation

Fujitsu

PRIMERGY TX150 S7, Intel Pentium G6950, 2.80 GHz

CPU2006 license: 19

Test sponsor: Fujitsu

Tested by: Fujitsu

SPECfp_rate2006 = 40.7

SPECfp_rate_base2006 = 39.1

Test date: Jan-2010

Hardware Availability: Jan-2010

Software Availability: Nov-2009

Peak Optimization Flags (Continued)

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-fp-linux64-revF.20100202.html>

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

<http://www.spec.org/cpu2006/flags/Intel-ic11.1-fp-linux64-revF.20100202.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 05:53:33 2014 by SPEC CPU2006 PS/PDF formatter v6932.

Originally published on 2 February 2010.