



SPEC® CFP2006 Result

Copyright 2006-2016 Standard Performance Evaluation Corporation

Fujitsu Siemens Computers

SPECfp®_rate2006 = 43.0

PRIMERGY RX330 S1, AMD Opteron 2214, 2.20 GHz

SPECfp_rate_base2006 = 40.7

CPU2006 license: 22

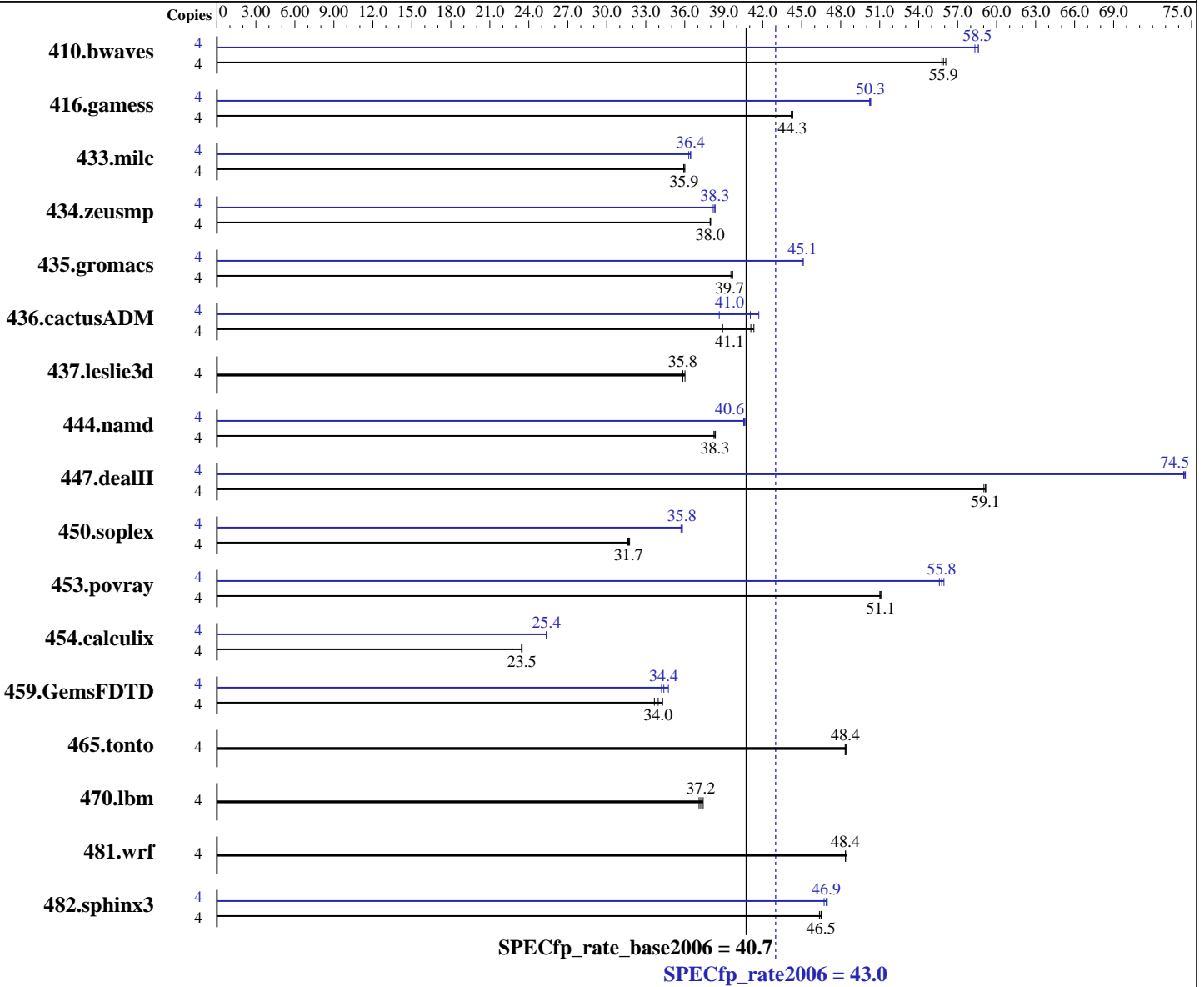
Test date: Jun-2007

Test sponsor: Fujitsu Siemens Computers

Hardware Availability: May-2007

Tested by: Fujitsu Siemens Computers

Software Availability: Mar-2007



Hardware

CPU Name: AMD Opteron 2214
 CPU Characteristics: 2214
 CPU MHz: 2200
 FPU: Integrated
 CPU(s) enabled: 4 cores, 2 chips, 2 cores/chip
 CPU(s) orderable: 1,2 chips
 Primary Cache: 64 KB I + 64 KB D on chip per core
 Secondary Cache: 1 MB I+D on chip per core

Continued on next page

Software

Operating System: SLES 10 for AMD64/EM64T
 Compiler: QLogic PathScale Compiler Suite, - Release 3.0
 Auto Parallel: No
 File System: ReiserFS
 System State: Multi-user run level 3
 Base Pointers: 64-bit
 Peak Pointers: 32/64-bit

Continued on next page



SPEC CFP2006 Result

Copyright 2006-2016 Standard Performance Evaluation Corporation

Fujitsu Siemens Computers

SPECfp_rate2006 = **43.0**

PRIMERGY RX330 S1, AMD Opteron 2214, 2.20 GHz

SPECfp_rate_base2006 = 40.7

CPU2006 license: 22

Test date: Jun-2007

Test sponsor: Fujitsu Siemens Computers

Hardware Availability: May-2007

Tested by: Fujitsu Siemens Computers

Software Availability: Mar-2007

L3 Cache: None
 Other Cache: None
 Memory: 32 GB (8x4 GB DDR2 PC2-5300P, 2 rank, CAS 5-5-5, with ECC)
 Disk Subsystem: SAS (36GB 15.4 krpm)
 Other Hardware: None

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	969	56.1	974	55.8	972	55.9	4	929	58.5	928	58.6	932	58.3		
416.gamess	4	1772	44.2	1768	44.3	1768	44.3	4	1557	50.3	1557	50.3	1559	50.2		
433.milc	4	1022	35.9	1022	35.9	1020	36.0	4	1007	36.5	1007	36.4	1011	36.3		
434.zeusmp	4	959	38.0	958	38.0	959	38.0	4	949	38.3	950	38.3	953	38.2		
435.gromacs	4	722	39.6	720	39.7	720	39.7	4	634	45.0	634	45.1	633	45.1		
436.cactusADM	4	1228	38.9	1163	41.1	1157	41.3	4	1237	38.7	1146	41.7	1165	41.0		
437.leslie3d	4	1049	35.8	1049	35.8	1044	36.0	4	1049	35.8	1049	35.8	1044	36.0		
444.namd	4	839	38.2	836	38.4	837	38.3	4	791	40.5	790	40.6	790	40.6		
447.dealII	4	775	59.0	774	59.2	774	59.1	4	615	74.4	614	74.5	614	74.5		
450.soplex	4	1053	31.7	1055	31.6	1051	31.8	4	932	35.8	934	35.7	931	35.8		
453.povray	4	417	51.1	417	51.0	417	51.1	4	383	55.6	382	55.8	380	55.9		
454.calculix	4	1405	23.5	1408	23.4	1407	23.5	4	1302	25.3	1301	25.4	1299	25.4		
459.GemsFDTD	4	1237	34.3	1261	33.7	1250	34.0	4	1240	34.2	1222	34.7	1234	34.4		
465.tonto	4	813	48.4	814	48.4	814	48.3	4	813	48.4	814	48.4	814	48.3		
470.lbm	4	1481	37.1	1469	37.4	1476	37.2	4	1481	37.1	1469	37.4	1476	37.2		
481.wrf	4	929	48.1	924	48.4	922	48.5	4	929	48.1	924	48.4	922	48.5		
482.sphinx3	4	1677	46.5	1676	46.5	1682	46.4	4	1669	46.7	1660	47.0	1663	46.9		

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

Operating System Notes

'ulimit -s unlimited' was used to set the stacksize to unlimited prior to run
'/usr/bin/taskset' has been used to bind processes to CPUs

General Notes

BIOS settings:
Node Interleave = disabled

For information about Fujitsu Siemens Computers in your country please see:
<http://www.fujitsu-siemens.com/countries>



SPEC CFP2006 Result

Copyright 2006-2016 Standard Performance Evaluation Corporation

Fujitsu Siemens Computers

SPECfp_rate2006 = 43.0

PRIMERGY RX330 S1, AMD Opteron 2214, 2.20 GHz

SPECfp_rate_base2006 = 40.7

CPU2006 license: 22

Test date: Jun-2007

Test sponsor: Fujitsu Siemens Computers

Hardware Availability: May-2007

Tested by: Fujitsu Siemens Computers

Software Availability: Mar-2007

Base Compiler Invocation

C benchmarks:
pathcc

C++ benchmarks:
pathCC

Fortran benchmarks:
pathf95

Benchmarks using both Fortran and C:
pathcc pathf95

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
436.cactusADM: -DSPEC_CPU_LP64 -fno-second-underscore
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
459.GemsFDTD: -DSPEC_CPU_LP64
465.tonto: -DSPEC_CPU_LP64
470.lbm: -DSPEC_CPU_LP64
481.wrf: -DSPEC_CPU_LP64 -DSPEC_CPU_LINUX -fno-second-underscore
482.sphinx3: -DSPEC_CPU_LP64

Base Optimization Flags

C benchmarks:
-Ofast

C++ benchmarks:
-Ofast

Fortran benchmarks:
-Ofast -OPT:malloc_alg=1

Benchmarks using both Fortran and C:
-Ofast -OPT:malloc_alg=1



SPEC CFP2006 Result

Copyright 2006-2016 Standard Performance Evaluation Corporation

Fujitsu Siemens Computers

SPECfp_rate2006 = 43.0

PRIMERGY RX330 S1, AMD Opteron 2214, 2.20 GHz

SPECfp_rate_base2006 = 40.7

CPU2006 license: 22

Test date: Jun-2007

Test sponsor: Fujitsu Siemens Computers

Hardware Availability: May-2007

Tested by: Fujitsu Siemens Computers

Software Availability: Mar-2007

Base Other Flags

C benchmarks:
-IPA:max_jobs=4

C++ benchmarks:
-IPA:max_jobs=4

Fortran benchmarks:
-IPA:max_jobs=4

Benchmarks using both Fortran and C:
-IPA:max_jobs=4

Peak Compiler Invocation

C benchmarks:
pathcc

C++ benchmarks:
pathCC

Fortran benchmarks:
pathf95

Benchmarks using both Fortran and C:
pathcc pathf95

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
436.cactusADM: -DSPEC_CPU_LP64 -fno-second-underscore
437.leslie3d: -DSPEC_CPU_LP64
444.namd: -DSPEC_CPU_LP64
453.povray: -DSPEC_CPU_LP64
454.calculix: -DSPEC_CPU_LP64
459.GemsFDTD: -DSPEC_CPU_LP64
465.tonto: -DSPEC_CPU_LP64
470.lbm: -DSPEC_CPU_LP64
481.wrf: -DSPEC_CPU_LP64 -DSPEC_CPU_LINUX -fno-second-underscore
482.sphinx3: -DSPEC_CPU_LP64



SPEC CFP2006 Result

Copyright 2006-2016 Standard Performance Evaluation Corporation

Fujitsu Siemens Computers

SPECfp_rate2006 = 43.0

PRIMERGY RX330 S1, AMD Opteron 2214, 2.20 GHz

SPECfp_rate_base2006 = 40.7

CPU2006 license: 22

Test date: Jun-2007

Test sponsor: Fujitsu Siemens Computers

Hardware Availability: May-2007

Tested by: Fujitsu Siemens Computers

Software Availability: Mar-2007

Peak Optimization Flags

C benchmarks:

433.milc: -Ofast -CG:cflow=off -LNO:prefetch=1 -OPT:malloc_alg=1

470.lbm: basepeak = yes

482.sphinx3: -fb_create fbdata(pass 1) -fb_opt fbdata(pass 2) -O3
-OPT:Ofast -WOPT:aggstr=0 -m32

C++ benchmarks:

444.namd: -fb_create fbdata(pass 1) -fb_opt fbdata(pass 2) -Ofast
-fno-exceptions

447.deallI: -Ofast -static -INLINE:aggressive=on -OPT:malloc_alg=1
-m32 -fno-exceptions

450.soplex: -fb_create fbdata(pass 1) -fb_opt fbdata(pass 2) -m32 -O3
-OPT:IEEE_arith=3 -CG:load_exe=0 -CG:movnti=1
-LNO:minvariant=off -LNO:prefetch=1 -fno-exceptions

453.povray: -fb_create fbdata(pass 1) -fb_opt fbdata(pass 2) -Ofast
-fno-fast-math

Fortran benchmarks:

410.bwaves: -fb_create fbdata(pass 1) -fb_opt fbdata(pass 2) -O3
-OPT:Ofast -OPT:IEEE_arith=3 -LNO:blocking=off
-LNO:ignore_feedback=off

416.gamess: -fb_create fbdata(pass 1) -fb_opt fbdata(pass 2) -O2
-OPT:Ofast -OPT:ro=3 -OPT:unroll_size=256

434.zeusmp: -Ofast -CG:local_fwd_sched=on -LNO:blocking=off
-LNO:interchange=off -LNO:fu=10 -LNO:full_unroll_outer=on

437.leslie3d: basepeak = yes

459.GemsFDTD: -Ofast -LNO:fission=2 -LNO:prefetch=0

465.tonto: basepeak = yes

Benchmarks using both Fortran and C:

435.gromacs: -O3 -OPT:rsqrt=2 -OPT:ro=3

436.cactusADM: -fb_create fbdata(pass 1) -fb_opt fbdata(pass 2) -O3
-LNO:prefetch=3 -LNO:prefetch_ahead=5 -LNO:ou_prod_max=10
-LNO:full_unroll=5 -ipa

Continued on next page



SPEC CFP2006 Result

Copyright 2006-2016 Standard Performance Evaluation Corporation

Fujitsu Siemens Computers

SPECfp_rate2006 = 43.0

PRIMERGY RX330 S1, AMD Opteron 2214, 2.20 GHz

SPECfp_rate_base2006 = 40.7

CPU2006 license: 22

Test date: Jun-2007

Test sponsor: Fujitsu Siemens Computers

Hardware Availability: May-2007

Tested by: Fujitsu Siemens Computers

Software Availability: Mar-2007

Peak Optimization Flags (Continued)

454.calculix: -Ofast -LNO:simd=0 -WOPT:mem_opnds=on

481.wrf: basepeak = yes

Peak Other Flags

C benchmarks:

-IPA:max_jobs=4

C++ benchmarks:

-IPA:max_jobs=4

Fortran benchmarks:

-IPA:max_jobs=4

Benchmarks using both Fortran and C:

-IPA:max_jobs=4

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

http://www.spec.org/cpu2006/flags/CPU2006_flags.20090714.10.html

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

http://www.spec.org/cpu2006/flags/CPU2006_flags.20090714.10.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 v1.0.

Report generated on Tue Sep 13 11:21:47 2016 by SPEC CPU2006 PS/PDF formatter v6932.

Originally published on 26 June 2007.