SPEC® CFP2006 Result
Copyright 2006-2014 Standard Performance Evaluation Corporation

Fujitsu Siemens Computers

$SPECfp^{®}2006 =$ 15.4

CELSIUS V840, AMD Opteron 2218

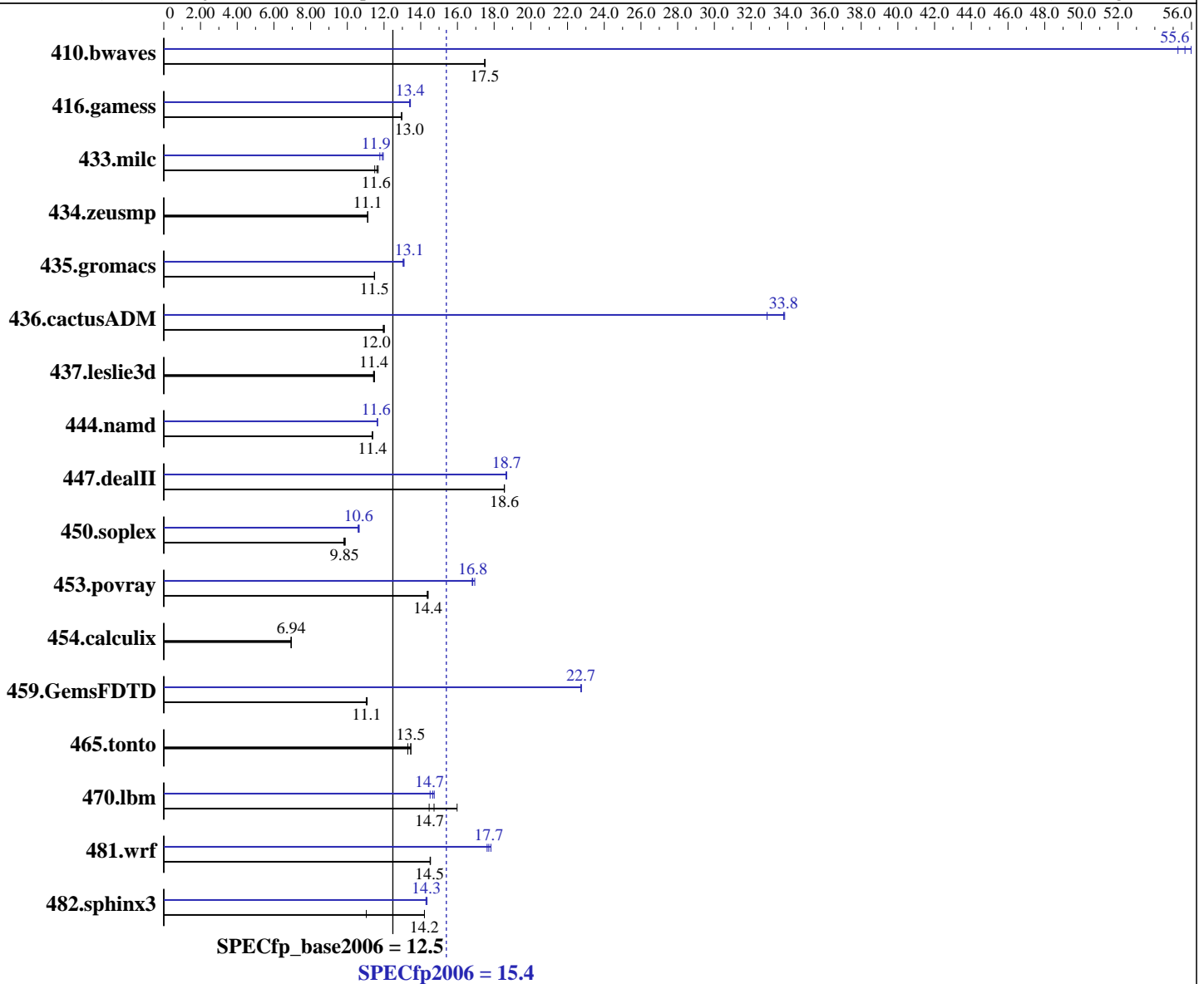$SPECfp\_base2006 =$ 12.5

CPU2006 license: 22
Test sponsor: Fujitsu Siemens Computers
Tested by: Fujitsu Siemens Computers

Test date: Jan-2007
Hardware Availability: Nov-2006
Software Availability: Aug-2006

410.bwaves	55.6 / 17.5
416.gamess	13.4 / 13.0
433.milc	11.9 / 11.6
434.zeusmp	11.1
435.gromacs	13.1 / 11.5
436.cactusADM	33.8 / 12.0
437.leslie3d	11.4
444.namd	11.6 / 11.4
447.dealII	18.7 / 18.6
450.soplex	10.6 / 9.85
453.povray	16.8 / 14.4
454.calculix	6.94
459.GemsFDTD	22.7 / 11.1
465.tonto	13.5
470.lbm	14.7 / 14.7
481.wrf	17.7 / 14.5
482.sphinx3	14.3 / 14.2

SPECfp_base2006 = 12.5
SPECfp2006 = 15.4

Hardware
CPU Name: AMD Opteron 2218
CPU Characteristics: Dual Core, 2.6 GHz, 2 MB L2-cache
CPU MHz: 2600
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

Software
Operating System: SLES 10 for AMD64/EM64T
Compiler: QLogic Pathscale Compiler Suite 2.5
Auto Parallel: Yes
File System: ext3
System State: Multi-User SuSE Run Level 3
Base Pointers: 64-bit
Peak Pointers: 64-bit
Other Software: --

Continued on next page

SPEC CFP2006 Result
Copyright 2006-2014 Standard Performance Evaluation Corporation

Fujitsu Siemens Computers

CELSIUS V840, AMD Opteron 2218

SPECfp2006 =	15.4
SPECfp_base2006 =	12.5

CPU2006 license: 22
Test sponsor: Fujitsu Siemens Computers
Tested by: Fujitsu Siemens Computers

Test date: Jan-2007
Hardware Availability: Nov-2006
Software Availability: Aug-2006

L3 Cache: None
Other Cache: None
Memory: 16 GB (8x2GB DDR2-667 CL5 dual rank ECC DIMMs registered)
Disk Subsystem: SATA II, 80 GB
Other Hardware: None

Results Table

Benchmark	Base						Peak					
	Seconds	Ratio	Seconds	Ratio	Seconds	Ratio	Seconds	Ratio	Seconds	Ratio	Seconds	Ratio
410.bwaves	776	17.5	777	17.5	**777**	**17.5**	246	55.3	243	56.0	**244**	**55.6**
416.gamess	1511	13.0	1511	13.0	**1511**	**13.0**	**1458**	**13.4**	1462	13.4	1457	13.4
433.milc	799	11.5	786	11.7	**790**	**11.6**	**771**	**11.9**	768	12.0	780	11.8
434.zeusmp	820	11.1	**819**	**11.1**	818	11.1	820	11.1	**819**	**11.1**	818	11.1
435.gromacs	622	11.5	**622**	**11.5**	622	11.5	**546**	**13.1**	548	13.0	545	13.1
436.cactusADM	999	12.0	994	12.0	**997**	**12.0**	364	32.9	**354**	**33.8**	353	33.8
437.leslie3d	819	11.5	**821**	**11.4**	823	11.4	819	11.5	**821**	**11.4**	823	11.4
444.namd	705	11.4	706	11.4	**705**	**11.4**	**689**	**11.6**	689	11.6	689	11.6
447.dealII	616	18.6	617	18.5	**616**	**18.6**	613	18.7	614	18.6	**613**	**18.7**
450.soplex	844	9.89	**846**	**9.85**	850	9.81	788	10.6	**785**	**10.6**	783	10.6
453.povray	371	14.4	369	14.4	**370**	**14.4**	**316**	**16.8**	314	16.9	317	16.8
454.calculix	1188	6.95	1190	6.93	**1188**	**6.94**	1188	6.95	1190	6.93	**1188**	**6.94**
459.GemsFDTD	957	11.1	**959**	**11.1**	962	11.0	466	22.8	**467**	**22.7**	467	22.7
465.tonto	731	13.5	740	13.3	**731**	**13.5**	731	13.5	740	13.3	**731**	**13.5**
470.lbm	860	16.0	**933**	**14.7**	950	14.5	932	14.7	**938**	**14.7**	947	14.5
481.wrf	770	14.5	769	14.5	**770**	**14.5**	627	17.8	**631**	**17.7**	634	17.6
482.sphinx3	1372	14.2	**1372**	**14.2**	1767	11.0	1364	14.3	1359	14.3	**1362**	**14.3**

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

Operating System Notes

```
powersave -f is applied to set CPU to maximum frequency prior to run
stacksize is set to unlimited prior to run
```

General Notes

```
Binaries are generated on an Opteron-based system
        running Suse 9.3.

BIOS default settings with
Node memory interleave disabled, SRAT enabled

For information about Fujitsu Siemens Computers in your country please see:
```

SPEC CFP2006 Result
Copyright 2006-2014 Standard Performance Evaluation Corporation

Fujitsu Siemens Computers	SPECfp2006 =	15.4
CELSIUS V840, AMD Opteron 2218	SPECfp_base2006 =	12.5

CPU2006 license: 22
Test sponsor: Fujitsu Siemens Computers
Tested by: Fujitsu Siemens Computers

Test date: Jan-2007
Hardware Availability: Nov-2006
Software Availability: Aug-2006

General Notes (Continued)

http://www.fujitsu-siemens.com/countries

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 -DSPEC_CPU_TABLE_WORKAROUND
         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

Fujitsu Siemens Computers

CELSIUS V840, AMD Opteron 2218

SPECfp2006 =	15.4
SPECfp_base2006 =	12.5

CPU2006 license: 22
Test sponsor: Fujitsu Siemens Computers
Tested by: Fujitsu Siemens Computers

Test date: Jan-2007
Hardware Availability: Nov-2006
Software Availability: Aug-2006

Base Optimization Flags (Continued)

Fortran benchmarks:
```
-Ofast
```

Benchmarks using both Fortran and C:
```
-Ofast
```

Peak Compiler Invocation

C benchmarks:
```
pathcc
```

C++ benchmarks:
```
pathCC
```

Fortran benchmarks:
```
pathf95
```

Benchmarks using both Fortran and C:
```
pathcc pathf95
```

Peak Portability Flags

```
Same as Base Portability Flags
```

Peak Optimization Flags

C benchmarks:

433.milc: `-fb_create fbdata(pass 1) -fb_opt fbdata(pass 2) -Ofast`

470.lbm: `-fb_create fbdata(pass 1) -fb_opt fbdata(pass 2)`

482.sphinx3: `-Ofast -apo`

C++ benchmarks:

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

447.dealII: `-Ofast -fno-exceptions`

450.soplex: `-O3 -OPT:IEEE_arith=3 -CG:load_exe=0 -CG:movnti=1`
`-LNO:minvariant=off -fno-exceptions`

SPEC CFP2006 Result
Copyright 2006-2014 Standard Performance Evaluation Corporation

Fujitsu Siemens Computers

CELSIUS V840, AMD Opteron 2218

SPECfp2006 =   15.4

SPECfp_base2006 =   12.5

CPU2006 license: 22
Test sponsor: Fujitsu Siemens Computers
Tested by: Fujitsu Siemens Computers

Test date: Jan-2007
Hardware Availability: Nov-2006
Software Availability: Aug-2006

Peak Optimization Flags (Continued)

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

Fortran benchmarks:

410.bwaves: `-Ofast -apo`

416.gamess: `-fb_create fbdata`(pass 1) `-fb_opt fbdata`(pass 2) `-Ofast`

434.zeusmp: `basepeak = yes`

437.leslie3d: `basepeak = yes`

459.GemsFDTD: `Same as 410.bwaves`

465.tonto: `basepeak = yes`

Benchmarks using both Fortran and C:

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

436.cactusADM: `-Ofast -apo`

454.calculix: `basepeak = yes`

481.wrf: `Same as 436.cactusADM`

The flags file that was used to format this result can be browsed at
http://www.spec.org/cpu2006/flags/CPU2006_flags.20090715.14.html

You can also download the XML flags source by saving the following link:
http://www.spec.org/cpu2006/flags/CPU2006_flags.20090715.14.xml

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 Jul 22 10:22:27 2014 by SPEC CPU2006 PS/PDF formatter v6932.
Originally published on 20 February 2007.