SPEC® CFP2006 Result

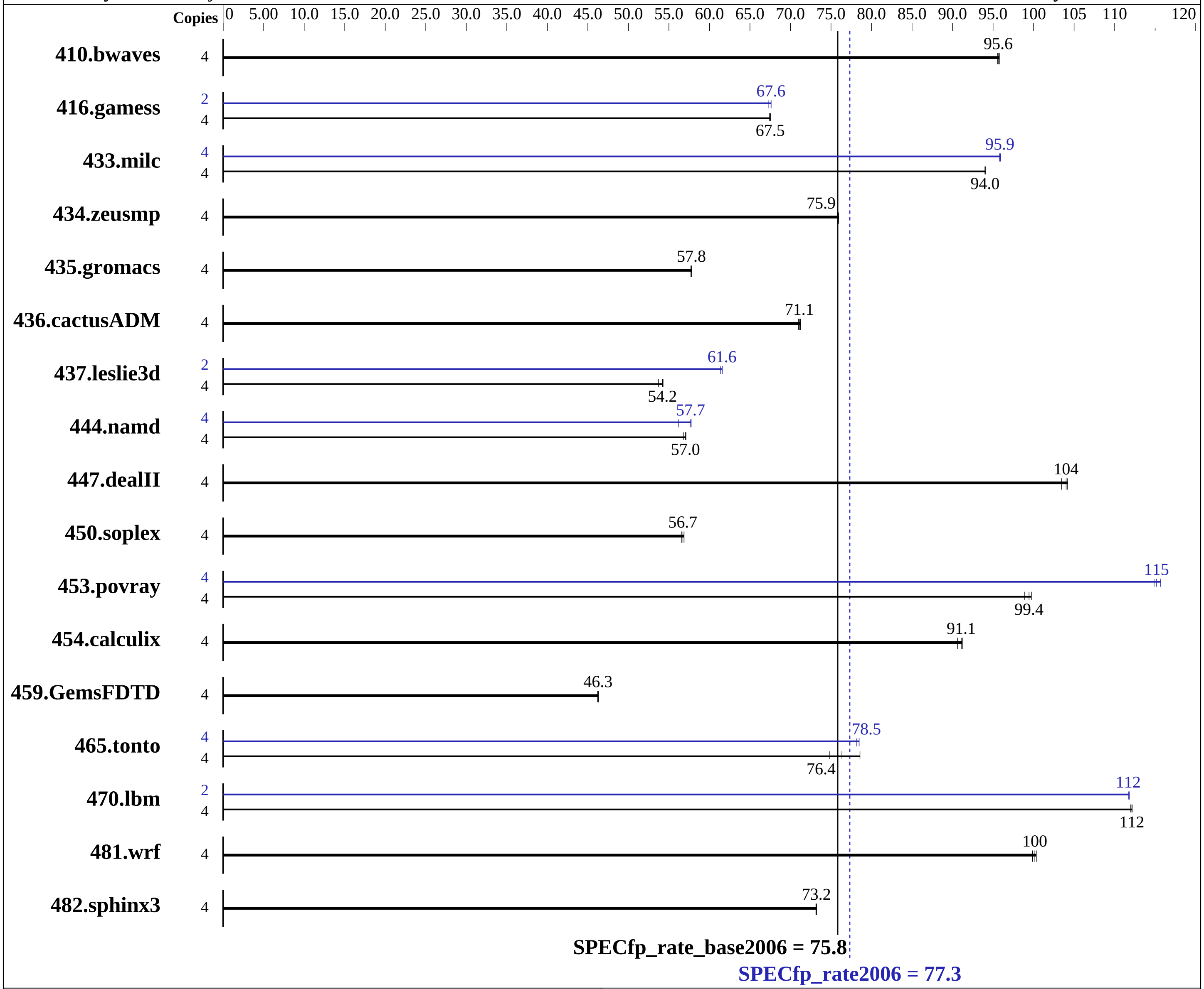
Fujitsu

PRIMERGY TX140 S1, Intel Core i3-2120, 3.30 GHz

SPECfp®_rate2006 = 77.3

SPECfp_rate_base2006 = 75.8

CPU2006 license:	19	**Test date:**	May-2011
Test sponsor:	Fujitsu	**Hardware Availability:**	Jun-2011
Tested by:	Fujitsu	**Software Availability:**	Jan-2011



Hardware

CPU Name:	Intel Core i3-2120
CPU Characteristics:	
CPU MHz:	3300
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

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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

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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	568	95.8	**568**	**95.6**	569	95.6	4	568	95.8	**568**	**95.6**	569	95.6
416.gamess	4	**1160**	**67.5**	1162	67.4	1160	67.5	2	**579**	**67.6**	582	67.3	579	67.6
433.milc	4	391	94.0	390	94.1	**391**	**94.0**	4	383	95.9	383	95.8	**383**	**95.9**
434.zeusmp	4	479	76.0	480	75.8	**480**	**75.9**	4	479	76.0	480	75.8	**480**	**75.9**
435.gromacs	4	494	57.8	**494**	**57.8**	496	57.6	4	494	57.8	**494**	**57.8**	496	57.6
436.cactusADM	4	673	71.0	671	71.2	**672**	**71.1**	4	673	71.0	671	71.2	**672**	**71.1**
437.leslie3d	4	700	53.7	**694**	**54.2**	693	54.3	2	**305**	**61.6**	306	61.4	305	61.6
444.namd	4	562	57.1	565	56.8	**562**	**57.0**	4	555	57.8	571	56.2	**556**	**57.7**
447.dealII	4	442	103	**440**	**104**	439	104	4	442	103	**440**	**104**	439	104
450.soplex	4	587	56.9	590	56.5	**588**	**56.7**	4	587	56.9	590	56.5	**588**	**56.7**
453.povray	4	213	99.7	215	98.9	**214**	**99.4**	4	185	115	184	116	**185**	**115**
454.calculix	4	362	91.2	**362**	**91.1**	364	90.6	4	362	91.2	**362**	**91.1**	364	90.6
459.GemsFDTD	4	**917**	**46.3**	918	46.2	917	46.3	4	**917**	**46.3**	918	46.2	917	46.3
465.tonto	4	501	78.6	**516**	**76.4**	526	74.8	4	**502**	**78.5**	503	78.2	502	78.5
470.lbm	4	491	112	490	112	**490**	**112**	2	246	112	**246**	**112**	246	112
481.wrf	4	447	99.9	445	100	**446**	**100**	4	447	99.9	445	100	**446**	**100**
482.sphinx3	4	**1065**	**73.2**	1066	73.1	1065	73.2	4	**1065**	**73.2**	1066	73.1	1065	73.2

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

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'ulimit -s unlimited' was used to set the stacksize to unlimited prior to run
 Large pages were not enabled for this run
```

General Notes

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For information about Fujitsu please visit: http://www.fujitsu.com
Binaries were compiled on RHEL5.5
This result was measured on the PRIMERGY TX140 S1. The PRIMERGY TX120 S3
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General Notes (Continued)

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and the PRIMERGY TX140 S1 are electronically equivalent.
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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:
`-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`

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Base Optimization Flags (Continued)

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

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: -xAVX(pass 2) -prof-gen(pass 1) -ipo(pass 2) -O3(pass 2) -no-prec-div(pass 2) -prof-use(pass 2) -static -auto-ilp32

470.lbm: -xAVX(pass 2) -prof-gen(pass 1) -ipo(pass 2) -O3(pass 2) -no-prec-div(pass 2) -prof-use(pass 2) -opt-malloc-options=3 -ansi-alias -opt-prefetch -auto-ilp32

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

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Peak Optimization Flags (Continued)

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

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: basepeak = yes

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

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 18:23:13 2014 by SPEC CPU2006 PS/PDF formatter v6932.
Originally published on 7 June 2011.