SPEC® CFP2006 Result

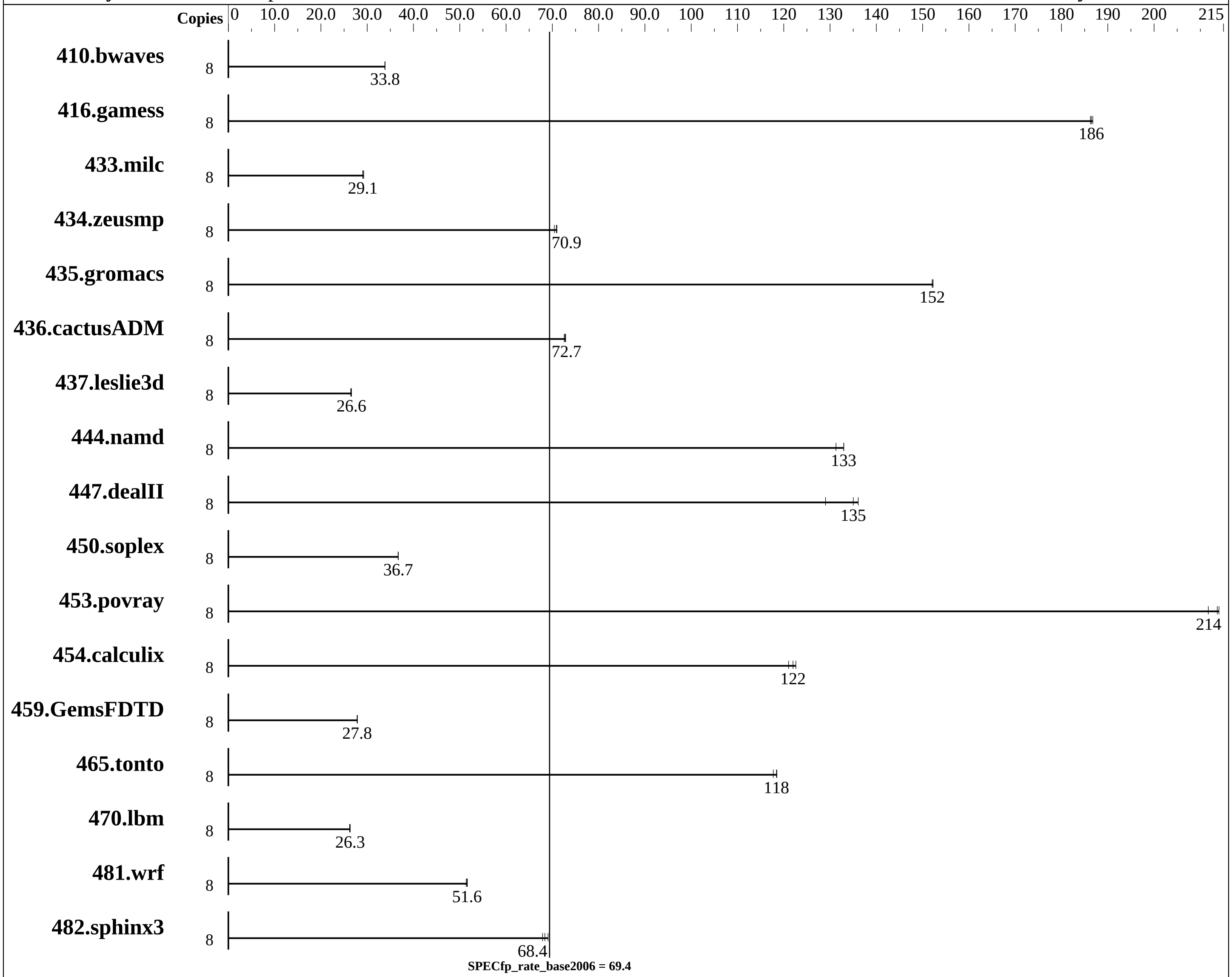
IBM Corporation

SPECfp®_rate2006 = Not Run

IBM BladeCenter HS21 (Intel Xeon X5460)

SPECfp_rate_base2006 = 69.4

CPU2006 license:	11	**Test date:**	Nov-2007
Test sponsor:	IBM Corporation	**Hardware Availability:**	Jan-2008
Tested by:	IBM Corporation	**Software Availability:**	Nov-2007



Hardware

CPU Name:	Intel Xeon X5460
CPU Characteristics:	1333MHz system bus
CPU MHz:	3158
FPU:	Integrated
CPU(s) enabled:	8 cores, 2 chips, 4 cores/chip
CPU(s) orderable:	1,2 chips
Primary Cache:	32 KB I + 32 KB D on chip per core
Secondary Cache:	12 MB I+D on chip per chip, 6 MB shared / 2 cores

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Software

Operating System:	SLES10 (x86_64), 2.6.16.21-0.8-smp
Compiler:	Intel C++ and Fortran Compiler 10.1 for Linux Build 20070913 Package ID: l_cc_p_10.1.008, l_fc_p_10.1.008
Auto Parallel:	No
File System:	ReiserFS
System State:	Multi-user, run level 3
Base Pointers:	64-bit
Peak Pointers:	Not Applicable

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L3 Cache: None
Other Cache: None
Memory: 16 GB (8 x 2 GB DDR2-5300F ECC)
Disk Subsystem: 1 x 36 GB SAS, 10000 RPM
Other Hardware: Memory and I/O Expansion Unit (P/N 42C1600)

Other Software: None
Binutils 2.17.50.0.15

Results Table

Benchmark	Base							Peak						
	Copies	Seconds	Ratio	Seconds	Ratio	Seconds	Ratio	Copies	Seconds	Ratio	Seconds	Ratio	Seconds	Ratio
410.bwaves	8	**3212**	**33.8**	3214	33.8	3212	33.9							
416.gamess	8	**840**	**186**	839	187	841	186							
433.milc	8	2511	29.2	**2527**	**29.1**	2529	29.0							
434.zeusmp	8	**1027**	**70.9**	1025	71.0	1034	70.4							
435.gromacs	8	375	152	376	152	**376**	**152**							
436.cactusADM	8	**1314**	**72.7**	1312	72.9	1317	72.6							
437.leslie3d	8	2845	26.4	**2827**	**26.6**	2827	26.6							
444.namd	8	**483**	**133**	489	131	482	133							
447.dealII	8	673	136	709	129	**678**	**135**							
450.soplex	8	1817	36.7	1818	36.7	**1818**	**36.7**							
453.povray	8	201	212	**199**	**214**	199	214							
454.calculix	8	538	123	545	121	**541**	**122**							
459.GemsFDTD	8	3051	27.8	3043	27.9	**3050**	**27.8**							
465.tonto	8	669	118	664	119	**665**	**118**							
470.lbm	8	4196	26.2	**4176**	**26.3**	4176	26.3							
481.wrf	8	1730	51.6	**1733**	**51.6**	1739	51.4							
482.sphinx3	8	2257	69.1	**2280**	**68.4**	2297	67.9							

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

General Notes

```
All benchmarks compiled in 64-bit mode except 450.soplex,
470.lbm and 482.sphinx3, at peak, are compiled in 32-bit mode
Hardware Sector Prefetch Disabled and Adjacent Sector Prefetch Disabled
OMP_NUM_THREADS set to number of cores
KMP_AFFINITY set to physical,0
KMP_STACKSIZE set to 64M
taskset utility used to bind CPU(s) to processes
```

Base Compiler Invocation

C benchmarks:
`icc`

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Base Compiler Invocation (Continued)

C++ benchmarks:
    icpc

Fortran benchmarks:
    ifort

Benchmarks using both Fortran and C:
    icc ifort

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:
    -fast

C++ benchmarks:
    -fast

Fortran benchmarks:
    -fast

Benchmarks using both Fortran and C:
    -fast

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The flags file that was used to format this result can be browsed at
http://www.spec.org/cpu2006/flags/Intel-ic10.1-FP-intel64-linux-flags.20090714.26.html

You can also download the XML flags source by saving the following link:
http://www.spec.org/cpu2006/flags/Intel-ic10.1-FP-intel64-linux-flags.20090714.26.xml

Tested with SPEC CPU2006 v1.0.
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