SPEC® CFP2006 Result

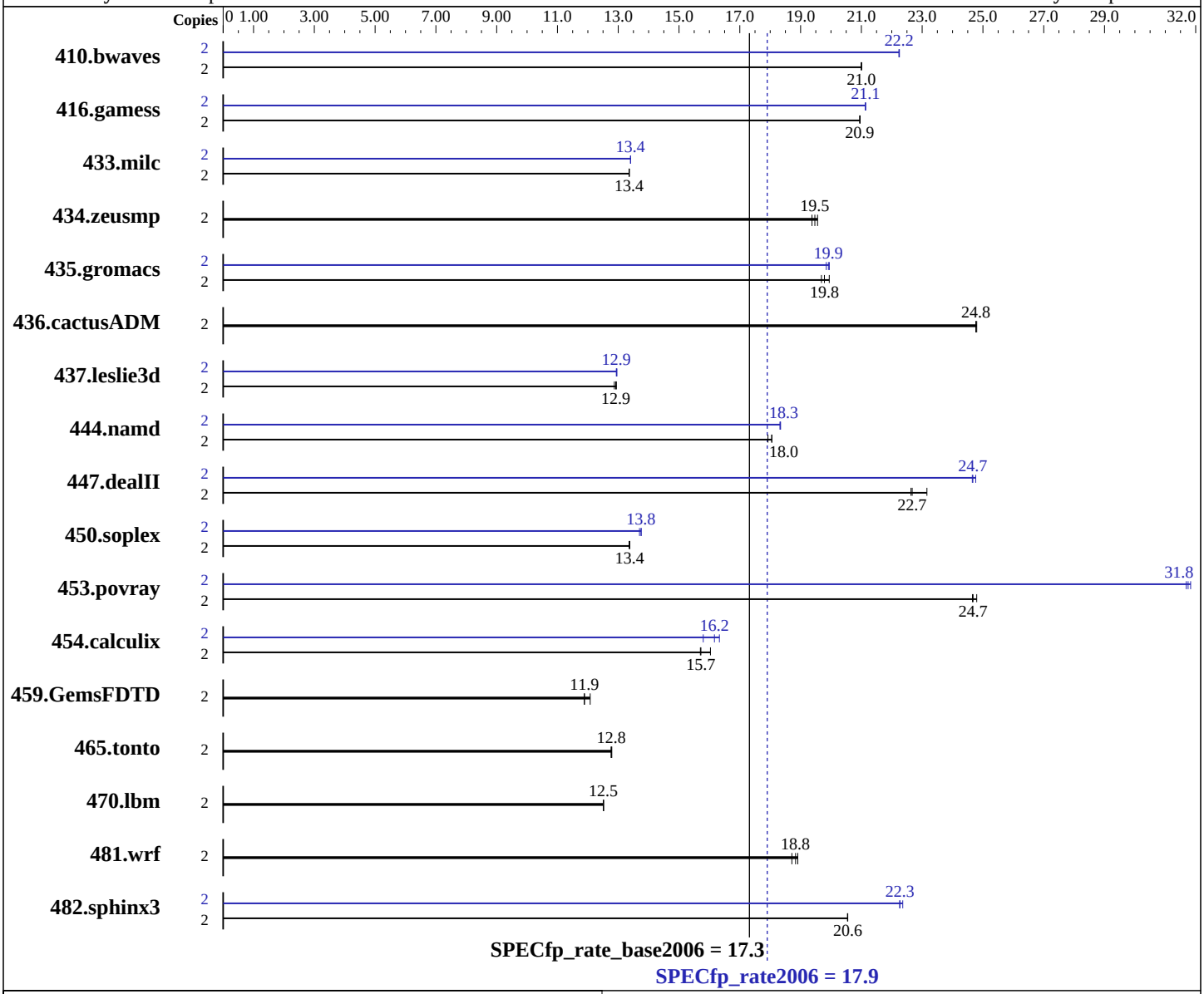
Supermicro
Motherboard PDSM4+

SPECfp®_rate2006 = 17.9

SPECfp_rate_base2006 = 17.3

CPU2006 license: 001176
Test sponsor: Supermicro
Tested by: Supermicro

Test date: Apr-2007
Hardware Availability: Apr-2007
Software Availability: Apr-2007



Hardware

CPU Name:	Intel Core 2 Duo E4300
CPU Characteristics:	1.8GHz, 800MHz bus
CPU MHz:	1800
FPU:	Integrated
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:	2 MB I+D on chip per chip

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Software

Operating System:	Windows XP Professional w/ SP2
Compiler:	Intel C++ Compiler for IA32 version 9.1 Build no 20070322Z Intel Fortran Compiler for IA32 version 9.1 Build no 20070322Z
Auto Parallel:	Yes
File System:	NTFS
System State:	Default
Base Pointers:	32-bit

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L3 Cache: None
Other Cache: None
Memory: 2 GB (4 X 512MB, DDR2 667MHz, CL5, ECC)
Disk Subsystem: WD2500YS-01SHB1 250GB SATA II, 7200RPM
Other Hardware: None

Peak Pointers: 32-bit
Other Software: SmartHeap Library Version 8.0 from http://www.microquill.com/

Results Table

Benchmark	Base							Peak						
	Copies	Seconds	Ratio	Seconds	Ratio	Seconds	Ratio	Copies	Seconds	Ratio	Seconds	Ratio	Seconds	Ratio
410.bwaves	2	1295	21.0	1294	21.0	**1294**	**21.0**	2	**1222**	**22.2**	1221	22.3	1222	22.2
416.gamess	2	1870	20.9	1868	21.0	**1869**	**20.9**	2	1852	21.1	**1853**	**21.1**	1854	21.1
433.milc	2	1375	13.4	1374	13.4	**1374**	**13.4**	2	**1370**	**13.4**	1369	13.4	1370	13.4
434.zeusmp	2	931	19.6	939	19.4	**935**	**19.5**	2	931	19.6	939	19.4	**935**	**19.5**
435.gromacs	2	725	19.7	716	19.9	**722**	**19.8**	2	720	19.8	**717**	**19.9**	716	19.9
436.cactusADM	2	964	24.8	**965**	**24.8**	965	24.8	2	964	24.8	**965**	**24.8**	965	24.8
437.leslie3d	2	1461	12.9	**1455**	**12.9**	1453	12.9	2	1451	13.0	**1453**	**12.9**	1453	12.9
444.namd	2	895	17.9	**889**	**18.0**	888	18.1	2	875	18.3	876	18.3	**875**	**18.3**
447.dealII	2	988	23.2	**1009**	**22.7**	1011	22.6	2	**928**	**24.7**	924	24.8	928	24.6
450.soplex	2	1249	13.4	**1247**	**13.4**	1247	13.4	2	**1213**	**13.8**	1213	13.8	1218	13.7
453.povray	2	**431**	**24.7**	432	24.7	429	24.8	2	**335**	**31.8**	336	31.7	334	31.8
454.calculix	2	1029	16.0	1051	15.7	**1050**	**15.7**	2	**1021**	**16.2**	1010	16.3	1045	15.8
459.GemsFDTD	2	1786	11.9	**1785**	**11.9**	1757	12.1	2	1786	11.9	**1785**	**11.9**	1757	12.1
465.tonto	2	1539	12.8	**1541**	**12.8**	1542	12.8	2	1539	12.8	**1541**	**12.8**	1542	12.8
470.lbm	2	2196	12.5	**2196**	**12.5**	2196	12.5	2	2196	12.5	**2196**	**12.5**	2196	12.5
481.wrf	2	1194	18.7	1181	18.9	**1186**	**18.8**	2	1194	18.7	1181	18.9	**1186**	**18.8**
482.sphinx3	2	1897	20.6	**1897**	**20.6**	1898	20.5	2	1743	22.4	1751	22.3	**1750**	**22.3**

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

General Notes

```
Tested systems can be used with CSE-823S-R500LP case,
For a general system, a 420W (minimum) ATX12V power supply [8-pin +12V AND 24-pin is recommended to assure system stability].
Product description located as of http://www.supermicro.com/products/motherboard/Xeon3000/3010/PDSM4+.cfm
The system bus runs at 800 MHz
```

Base Compiler Invocation

C benchmarks:

```
icl -Qvc7.1 -Qc99
```

C++ benchmarks:

```
icl -Qvc7.1
```

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Base Compiler Invocation (Continued)

Fortran benchmarks:
ifort

Benchmarks using both Fortran and C:
icl -Qvc7.1 -Qc99 ifort

Base Portability Flags

436.cactusADM: -Qlowercase /assume:underscore
444.namd: -TP
447.dealII: -DDEAL_II_MEMBER_VAR_SPECIALIZATION_BUG -DBOOST_NO_INTRINSIC_WCHAR_T
453.povray: -DSPEC_CPU_WINDOWS_ICL
454.calculix: -DSPEC_CPU_NOZMODIFIER -Qlowercase
481.wrf: -DSPEC_CPU_WINDOWS_ICL

Base Optimization Flags

C benchmarks:
-fast /F950000000 shlw32m.lib -link /FORCE:MULTIPLE

C++ benchmarks:
-fast -Qcxx_features /F950000000 shlw32m.lib -link /FORCE:MULTIPLE

Fortran benchmarks:
-fast /F950000000 -link /FORCE:MULTIPLE

Benchmarks using both Fortran and C:
-fast /F950000000 -link /FORCE:MULTIPLE

Peak Compiler Invocation

C benchmarks:
icl -Qvc7.1 -Qc99

C++ benchmarks:
icl -Qvc7.1

Fortran benchmarks:
ifort

Benchmarks using both Fortran and C:
icl -Qvc7.1 -Qc99 ifort

Peak Portability Flags

436.cactusADM: `-Qlowercase /assume:underscore`
444.namd: `-TP`
447.dealII: `-DDEAL_II_MEMBER_VAR_SPECIALIZATION_BUG -DBOOST_NO_INTRINSIC_WCHAR_T`
453.povray: `-DSPEC_CPU_WINDOWS_ICL`
454.calculix: `-DSPEC_CPU_NOZMODIFIER -Qlowercase`
481.wrf: `-DSPEC_CPU_WINDOWS_ICL`

Peak Optimization Flags

C benchmarks:

433.milc: `-Qprof_gen`(pass 1) `-Qprof_use`(pass 2) `-fast /F950000000 shlw32m.lib -link /FORCE:MULTIPLE`

470.lbm: `basepeak = yes`

482.sphinx3: `-Qprof_gen`(pass 1) `-Qprof_use`(pass 2) `-QxB -Qipo -O3 -Qprec-div- /F950000000 shlw32m.lib -link /FORCE:MULTIPLE`

C++ benchmarks:
`-Qprof_gen`(pass 1) `-Qprof_use`(pass 2) `-fast -Qcxx_features /F950000000 shlw32m.lib -link /FORCE:MULTIPLE`

Fortran benchmarks:

410.bwaves: `-QxW -Qparallel -Qipo -O3 -Qprec-div- /F950000000 libguide.lib libguide40.lib -link /FORCE:MULTIPLE`

416.gamess: `Same as 410.bwaves`

434.zeusmp: `basepeak = yes`

437.leslie3d: `-Qprof_gen`(pass 1) `-Qprof_use`(pass 2) `-fast /F950000000 -link /FORCE:MULTIPLE`

459.GemsFDTD: `basepeak = yes`

465.tonto: `basepeak = yes`

Benchmarks using both Fortran and C:

435.gromacs: `-QxW -Qparallel -Qipo -O3 -Qprec-div- /F950000000 shlw32m.lib libguide.lib libguide40.lib -link /FORCE:MULTIPLE`

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Peak Optimization Flags (Continued)

436.cactusADM: `basepeak = yes`

454.calculix: `-Qprof_gen`(pass 1) `-Qprof_use`(pass 2) `-fast /F950000000 -link /FORCE:MULTIPLE`

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-ic91-ia32-flags.html`

You can also download the XML flags source by saving the following link:
`http://www.spec.org/cpu2006/flags/Intel-ic91-ia32-flags.xml`

For questions about this result, please contact the tester.
For other inquiries, please contact webmaster@spec.org.

Tested with SPEC CPU2006 v1.0.
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