SPEC® CFP2006 Result

Copyright 2006-2014 Standard Performance Evaluation Corporation

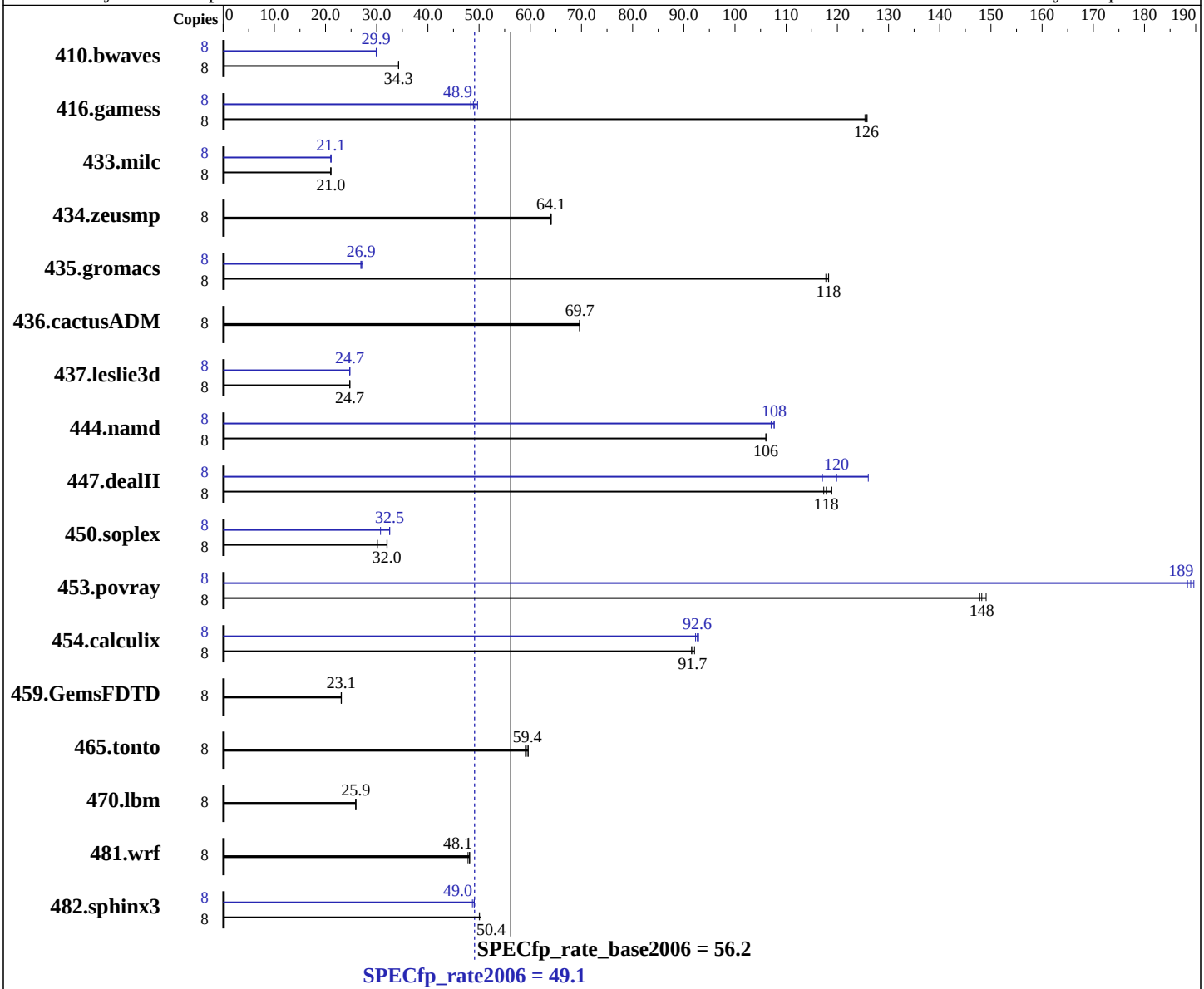
Supermicro
Motherboard X7DB8

SPECfp®_rate2006 = 49.1

SPECfp_rate_base2006 = 56.2

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

Test date: Apr-2007
Hardware Availability: May-2006
Software Availability: Apr-2007



Hardware

CPU Name:	Intel Xeon X5355
CPU Characteristics:	1333MHz system bus
CPU MHz:	2660
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:	8 MB I+D on chip per chip, 4 MB shared / 2 cores

Continued on next page

Software

Operating System:	Windows Server 2003 Enterprise Edition W/ SP1
Compiler:	Intel C++ Compiler for IA32 version 9.1 Build no 20070322Z Intel Fortran Compiler for IA32 version 9.1 Build no 20070322Z Microsoft Visual Studio .Net 2003 (for libraries)
Auto Parallel:	Yes
File System:	NTFS
System State:	Default

Continued on next page

SPEC CFP2006 Result

Copyright 2006-2014 Standard Performance Evaluation Corporation

Supermicro Motherboard X7DB8

SPECfp_rate2006 = 49.1

SPECfp_rate_base2006 = 56.2

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

Test date: Apr-2007
Hardware Availability: May-2006
Software Availability: Apr-2007

L3 Cache: None
Other Cache: None
Memory: 16 GB (8 X 2GB ECC, CL5, FBDIMM)
Disk Subsystem: 1 X 750GB IDE, 7200RPM
Other Hardware: None

Base Pointers: 32-bit
Peak Pointers: 32-bit
Other Software: SmartHeap Library Version 8.0

Results Table

Benchmark	Base							Peak						
	Copies	Seconds	Ratio	Seconds	Ratio	Seconds	Ratio	Copies	Seconds	Ratio	Seconds	Ratio	Seconds	Ratio
410.bwaves	8	3173	34.3	**3171**	**34.3**	3171	34.3	8	3635	29.9	3631	29.9	**3635**	**29.9**
416.gamess	8	1245	126	1249	125	**1246**	**126**	8	3238	48.4	**3204**	**48.9**	3151	49.7
433.milc	8	3489	21.0	3491	21.0	**3490**	**21.0**	8	3485	21.1	**3486**	**21.1**	3488	21.1
434.zeusmp	8	1136	64.1	1137	64.0	**1136**	**64.1**	8	1136	64.1	1137	64.0	**1136**	**64.1**
435.gromacs	8	485	118	483	118	**483**	**118**	8	2100	27.2	2122	26.9	**2120**	**26.9**
436.cactusADM	8	1372	69.7	**1372**	**69.7**	1373	69.6	8	1372	69.7	**1372**	**69.7**	1373	69.6
437.leslie3d	8	3039	24.7	3040	24.7	**3039**	**24.7**	8	3036	24.8	**3040**	**24.7**	3042	24.7
444.namd	8	609	105	605	106	**605**	**106**	8	599	107	**596**	**108**	596	108
447.dealII	8	780	117	**777**	**118**	770	119	8	726	126	**764**	**120**	782	117
450.soplex	8	2213	30.1	**2085**	**32.0**	2082	32.0	8	2170	30.7	2050	32.5	**2051**	**32.5**
453.povray	8	286	149	**287**	**148**	288	148	8	224	190	226	188	**225**	**189**
454.calculix	8	721	91.5	717	92.1	**720**	**91.7**	8	715	92.3	**712**	**92.6**	711	92.9
459.GemsFDTD	8	3673	23.1	3679	23.1	**3679**	**23.1**	8	3673	23.1	3679	23.1	**3679**	**23.1**
465.tonto	8	**1325**	**59.4**	1333	59.0	1320	59.6	8	**1325**	**59.4**	1333	59.0	1320	59.6
470.lbm	8	4243	25.9	**4241**	**25.9**	4240	25.9	8	4243	25.9	**4241**	**25.9**	4240	25.9
481.wrf	8	1868	47.8	**1857**	**48.1**	1855	48.2	8	1868	47.8	**1857**	**48.1**	1855	48.2
482.sphinx3	8	3116	50.0	**3097**	**50.4**	3095	50.4	8	3201	48.7	3177	49.1	**3180**	**49.0**

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-825S2-R700LPV case,
To ensure system stability, a 500W (minimum) ATX power supply [4-pin (+12V), 8-pin (+12V) and 24-pin are required]
Product description located as of http://www.supermicro.com/products/motherboard/Xeon1333/5000P/X7DB8.cfm
The system bus runs at 1333 MHz
```

Base Compiler Invocation

C benchmarks:

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

C++ benchmarks:

```
icl -Qvc7.1
```

Continued on next page

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

Continued on next page

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`

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 Jul 22 11:01:48 2014 by SPEC CPU2006 PS/PDF formatter v6932.
Originally published on 12 June 2007.