SPEC® CFP2006 Result

Copyright 2006-2014 Standard Performance Evaluation Corporation

NEC Corporation

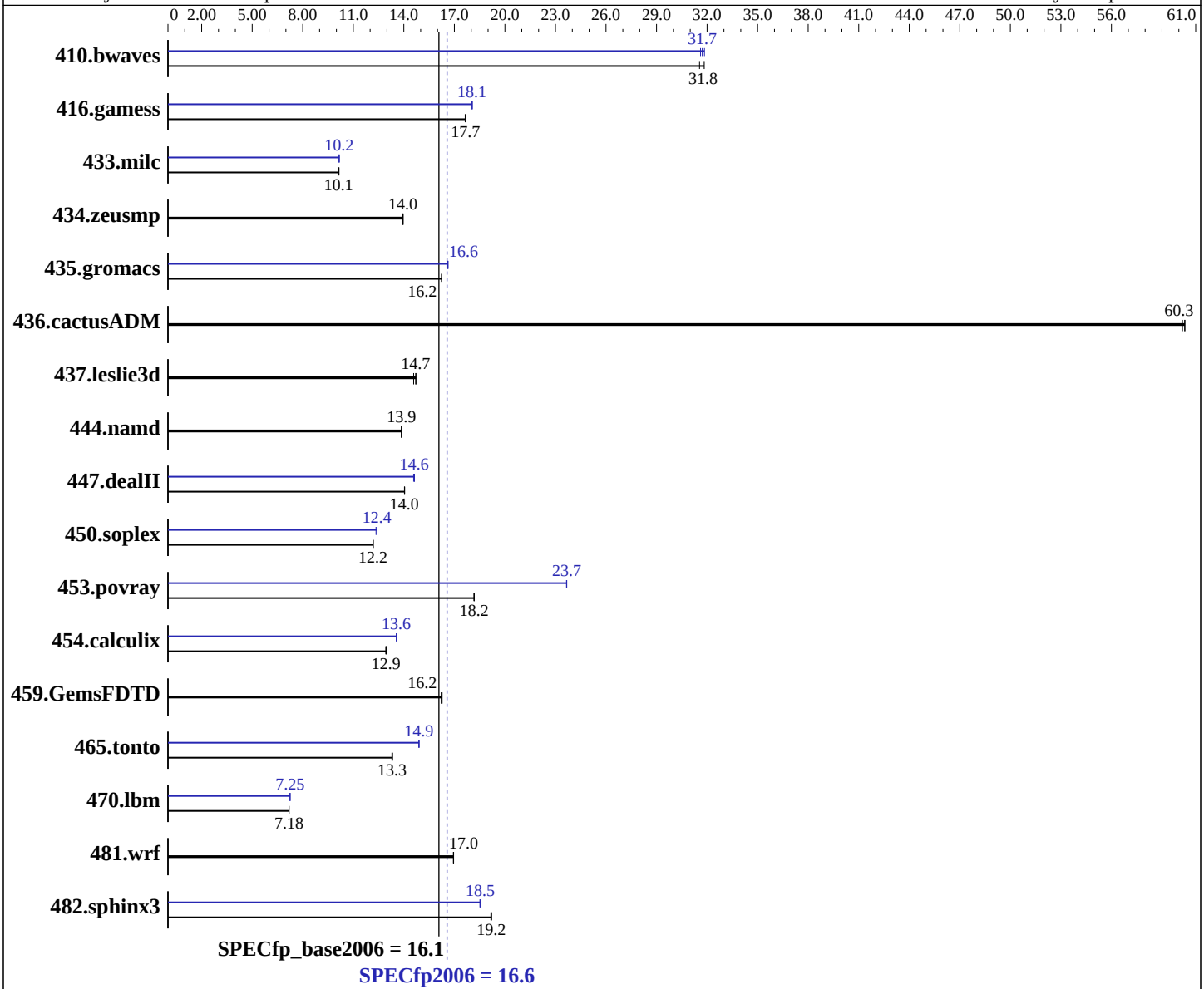
Express5800/120Bb-6
(Intel Xeon processor X5355)

SPECfp®2006 = 16.6

SPECfp_base2006 = 16.1

CPU2006 license: 9006
Test sponsor: NEC Corporation
Tested by: NEC Corporation

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



Hardware

CPU Name:	Intel Xeon X5355
CPU Characteristics:	2.66 GHz, 2x4 MB L2 shared, 1333 MHz bus
CPU MHz:	2666
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, Standard x64 Edition
Compiler:	Intel C++ Compiler for EM64T version 9.1 Build 20070322, Package-ID W_CC_C_9.1.037 Intel Fortran Compiler for EM64T version 9.1 Build 20070322, Package-ID W_FC_C_9.1.037 Microsoft Visual Studio 2005 (libr. & linker)
Auto Parallel:	Yes
File System:	NTFS
System State:	Default

Continued on next page

SPEC CFP2006 Result

Copyright 2006-2014 Standard Performance Evaluation Corporation

NEC Corporation

Express5800/120Bb-6
(Intel Xeon processor X5355)

SPECfp2006 = 16.6

SPECfp_base2006 = 16.1

CPU2006 license: 9006
Test sponsor: NEC Corporation
Tested by: NEC Corporation

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

L3 Cache: None
Other Cache: None
Memory: 8 GB (4x2 GB DDR2 5300F, 2 rank, CL5-5-5, ECC)
Disk Subsystem: 1x73.2 GB SAS, 10000RPM
Other Hardware: None

Base Pointers: 64-bit
Peak Pointers: 64-bit
Other Software: MicroQuill SmartHeap Library 8.1

Results Table

Benchmark	Base						Peak					
	Seconds	Ratio	Seconds	Ratio	Seconds	Ratio	Seconds	Ratio	Seconds	Ratio	Seconds	Ratio
410.bwaves	**428**	**31.8**	427	31.8	431	31.6	430	31.6	**429**	**31.7**	427	31.8
416.gamess	1110	17.6	1107	17.7	**1109**	**17.7**	1085	18.0	**1085**	**18.1**	1084	18.1
433.milc	904	10.2	906	10.1	**906**	**10.1**	902	10.2	906	10.1	**904**	**10.2**
434.zeusmp	**652**	**14.0**	652	14.0	652	13.9	**652**	**14.0**	652	14.0	652	13.9
435.gromacs	440	16.2	**439**	**16.2**	439	16.3	430	16.6	430	16.6	**430**	**16.6**
436.cactusADM	198	60.2	198	60.4	**198**	**60.3**	198	60.2	198	60.4	**198**	**60.3**
437.leslie3d	638	14.7	**639**	**14.7**	645	14.6	638	14.7	**639**	**14.7**	645	14.6
444.namd	579	13.9	578	13.9	**578**	**13.9**	579	13.9	578	13.9	**578**	**13.9**
447.dealII	**815**	**14.0**	814	14.1	815	14.0	785	14.6	782	14.6	**782**	**14.6**
450.soplex	685	12.2	684	12.2	**685**	**12.2**	675	12.3	**673**	**12.4**	672	12.4
453.povray	293	18.2	**293**	**18.2**	293	18.2	225	23.7	225	23.7	**225**	**23.7**
454.calculix	638	12.9	**637**	**12.9**	637	13.0	608	13.6	**608**	**13.6**	608	13.6
459.GemsFDTD	652	16.3	654	16.2	**653**	**16.2**	652	16.3	654	16.2	**653**	**16.2**
465.tonto	740	13.3	738	13.3	**740**	**13.3**	661	14.9	**660**	**14.9**	660	14.9
470.lbm	**1912**	**7.18**	1911	7.19	1913	7.18	1905	7.21	1894	7.25	**1896**	**7.25**
481.wrf	659	16.9	659	17.0	**659**	**17.0**	659	16.9	659	17.0	**659**	**17.0**
482.sphinx3	**1015**	**19.2**	1015	19.2	1017	19.2	1053	18.5	1051	18.6	**1051**	**18.5**

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

Base Compiler Invocation

C benchmarks:
```
icl -Qvc8 -Qc99
```

C++ benchmarks:
```
icl -Qvc8
```

Fortran benchmarks:
```
ifort
```

Benchmarks using both Fortran and C:
```
icl -Qvc8 -Qc99 ifort
```

Base Portability Flags

410.bwaves: -DSPEC_CPU_P64
416.gamess: -DSPEC_CPU_P64
433.milc: -D_Complex= -DSPEC_CPU_P64
434.zeusmp: -DSPEC_CPU_P64
435.gromacs: -D_Complex= -DSPEC_CPU_P64
436.cactusADM: -D_Complex= -DSPEC_CPU_P64 -Qlowercase /assume:underscore
437.leslie3d: -DSPEC_CPU_P64
444.namd: -DSPEC_CPU_P64 /TP
447.dealII: -D_Complex= -DSPEC_CPU_P64 -DBOOST_NO_INTRINSIC_WCHAR_T
-DDEAL_II_MEMBER_VAR_SPECIALIZATION_BUG
450.soplex: -DSPEC_CPU_P64
453.povray: -DSPEC_CPU_P64 -DSPEC_CPU_WINDOWS_ICL
454.calculix: -D_Complex= -DSPEC_CPU_P64 -DSPEC_CPU_NOZMODIFIER
-Qlowercase
459.GemsFDTD: -DSPEC_CPU_P64
465.tonto: -DSPEC_CPU_P64
470.lbm: -D_Complex= -DSPEC_CPU_P64
481.wrf: -DSPEC_CPU_P64 -DSPEC_CPU_WINDOWS_ICL
482.sphinx3: -D_Complex= -DSPEC_CPU_P64

Base Optimization Flags

C benchmarks:
-fast -Qparallel -F950000000 shlW32M.lib
-link -FORCE:MULTIPLE

C++ benchmarks:
-fast -Qparallel -Qcxx-features -F950000000 shlW32M.lib
-link -FORCE:MULTIPLE

Fortran benchmarks:
-fast -Qparallel -F950000000 shlW32M.lib
-link -FORCE:MULTIPLE

Benchmarks using both Fortran and C:
-fast -Qparallel -F950000000 shlW32M.lib
-link -FORCE:MULTIPLE

Peak Compiler Invocation

C benchmarks:
icl -Qvc8 -Qc99

C++ benchmarks:
icl -Qvc8

Continued on next page

Peak Compiler Invocation (Continued)

Fortran benchmarks:
ifort

Benchmarks using both Fortran and C:
icl -Qvc8 -Qc99 ifort

Peak Portability Flags

Same as Base Portability Flags

Peak Optimization Flags

C benchmarks:
-Qprof_gen(pass 1) -Qprof_use(pass 2) -fast -F950000000 shlW32M.lib
-link -FORCE:MULTIPLE

C++ benchmarks:

444.namd: basepeak = yes

447.dealII: -Qprof_gen(pass 1) -Qprof_use(pass 2) -fast -Qcxx-features
-F950000000 shlW32M.lib -link -FORCE:MULTIPLE

450.soplex: Same as 447.dealII

453.povray: Same as 447.dealII

Fortran benchmarks:

410.bwaves: -Qprof_gen(pass 1) -Qprof_use(pass 2) -fast -Qparallel
-F950000000 shlW32M.lib -link -FORCE:MULTIPLE

416.gamess: -fast -F950000000 shlW32M.lib
-link -FORCE:MULTIPLE

434.zeusmp: basepeak = yes

437.leslie3d: basepeak = yes

459.GemsFDTD: basepeak = yes

465.tonto: Same as 410.bwaves

Benchmarks using both Fortran and C:

Continued on next page

Peak Optimization Flags (Continued)

435.gromacs: `-Qprof_gen`(pass 1) `-Qprof_use`(pass 2) `-fast -F950000000 shlW32M.lib -link -FORCE:MULTIPLE`

436.cactusADM: `basepeak = yes`

454.calculix: `Same as 435.gromacs`

481.wrf: `basepeak = yes`

The flags file that was used to format this result can be browsed at
`http://www.spec.org/cpu2006/flags/NEC-cpu2006-ic91-win-flags.html`

You can also download the XML flags source by saving the following link:
`http://www.spec.org/cpu2006/flags/NEC-cpu2006-ic91-win-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 12:43:47 2014 by SPEC CPU2006 PS/PDF formatter v6932.
Originally published on 8 August 2007.