SPEC® CFP2006 Result

Copyright 2006-2014 Standard Performance Evaluation Corporation

NEC Corporation

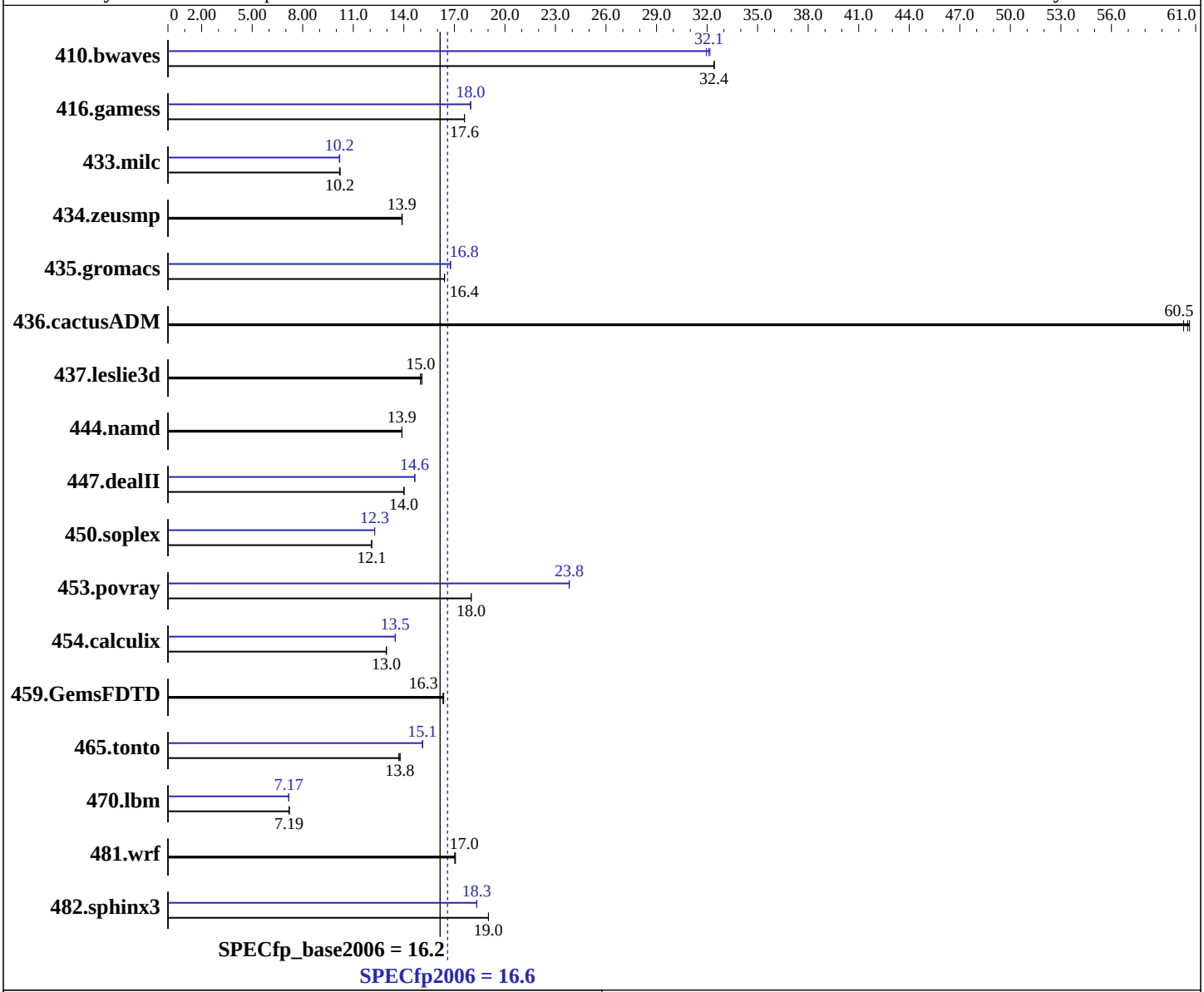
Express5800/120Rg-1
(Intel Xeon processor X5355)

SPECfp®2006 = 16.6

SPECfp_base2006 = 16.2

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

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



Hardware

CPU Name:	Intel Xeon X5355
CPU Characteristics:	2.66 GHz, 2x4 MB L2 shared, 1333 MHz bus
CPU MHz:	2667
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 x64 Edition
Compiler:	Intel C++ Compiler for EM64T version 9.1 Build 20070109, Package-ID W_CC_C_9.1.034 Intel Fortran Compiler for EM64T version 9.1 Build 20070109, Package-ID W_FC_C_9.1.034 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

Express5800/120Rg-1
(Intel Xeon processor X5355)

SPECfp2006 = 16.6

SPECfp_base2006 = 16.2

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

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

L3 Cache: None
Other Cache: None
Memory: 8 GB (8x1 GB DDR2 5300F, 2 rank, CL5-5-5, ECC)
Disk Subsystem: 1x73.2 GB SAS, 15000RPM
Other Hardware: None

Base Pointers: 64-bit
Peak Pointers: 64-bit
Other Software: None

Results Table

Benchmark	Base						Peak					
	Seconds	Ratio	Seconds	Ratio	Seconds	Ratio	Seconds	Ratio	Seconds	Ratio	Seconds	Ratio
410.bwaves	419	32.4	419	32.4	**419**	**32.4**	**423**	**32.1**	422	32.2	425	32.0
416.gamess	**1113**	**17.6**	1112	17.6	1113	17.6	**1090**	**18.0**	1090	18.0	1090	18.0
433.milc	898	10.2	902	10.2	**899**	**10.2**	900	10.2	**902**	**10.2**	902	10.2
434.zeusmp	654	13.9	**655**	**13.9**	655	13.9	654	13.9	**655**	**13.9**	655	13.9
435.gromacs	435	16.4	**435**	**16.4**	435	16.4	426	16.8	**426**	**16.8**	426	16.7
436.cactusADM	**197**	**60.5**	197	60.6	198	60.3	**197**	**60.5**	197	60.6	198	60.3
437.leslie3d	627	15.0	**627**	**15.0**	623	15.1	627	15.0	**627**	**15.0**	623	15.1
444.namd	577	13.9	**577**	**13.9**	577	13.9	577	13.9	**577**	**13.9**	577	13.9
447.dealII	817	14.0	816	14.0	**817**	**14.0**	781	14.6	**781**	**14.6**	781	14.7
450.soplex	690	12.1	**690**	**12.1**	690	12.1	680	12.3	**680**	**12.3**	679	12.3
453.povray	**296**	**18.0**	296	18.0	296	18.0	223	23.8	**223**	**23.8**	223	23.8
454.calculix	**636**	**13.0**	637	13.0	636	13.0	611	13.5	**612**	**13.5**	612	13.5
459.GemsFDTD	648	16.4	650	16.3	**649**	**16.3**	648	16.4	650	16.3	**649**	**16.3**
465.tonto	**715**	**13.8**	714	13.8	718	13.7	652	15.1	650	15.1	**651**	**15.1**
470.lbm	**1910**	**7.19**	1909	7.20	1910	7.19	1916	7.17	**1916**	**7.17**	1916	7.17
481.wrf	654	17.1	656	17.0	**656**	**17.0**	654	17.1	656	17.0	**656**	**17.0**
482.sphinx3	**1025**	**19.0**	1024	19.0	1025	19.0	1064	18.3	**1063**	**18.3**	1063	18.3

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

General Notes

```
The Express5800/120Rg-1 and the Express5800/120Ri-2 models are
electronically equivalent.
The results have been measured on a Express5800/120Ri-2 model.
```

Base Compiler Invocation

C benchmarks:

```
icl -Qvc8 -Qc99
```

C++ benchmarks:

```
icl -Qvc8
```

Continued on next page

Base Compiler Invocation (Continued)

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

C++ benchmarks:
-fast -Qparallel -Qcxx-features -F950000000

Fortran benchmarks:
-fast -Qparallel -F950000000

Benchmarks using both Fortran and C:
-fast -Qparallel -F950000000

Peak Compiler Invocation

C benchmarks:
icl -Qvc8 -Qc99

C++ benchmarks:
icl -Qvc8

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

C++ benchmarks:

444.namd: basepeak = yes

447.dealII: -Qprof_gen(pass 1) -Qprof_use(pass 2) -fast -Qcxx-features
-F950000000

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

416.gamess: -fast -F950000000

434.zeusmp: basepeak = yes

437.leslie3d: basepeak = yes

459.GemsFDTD: basepeak = yes

Continued on next page

Peak Optimization Flags (Continued)

465.tonto: `Same as 410.bwaves`

Benchmarks using both Fortran and C:

435.gromacs: `-Qprof_gen`(pass 1) `-Qprof_use`(pass 2) `-fast -F950000000`

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-flags.20090714.html`

You can also download the XML flags source by saving the following link:
`http://www.spec.org/cpu2006/flags/NEC-cpu2006-ic91-flags.20090714.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 13:00:59 2014 by SPEC CPU2006 PS/PDF formatter v6932.
Originally published on 10 July 2007.