SPEC® CFP2006 Result

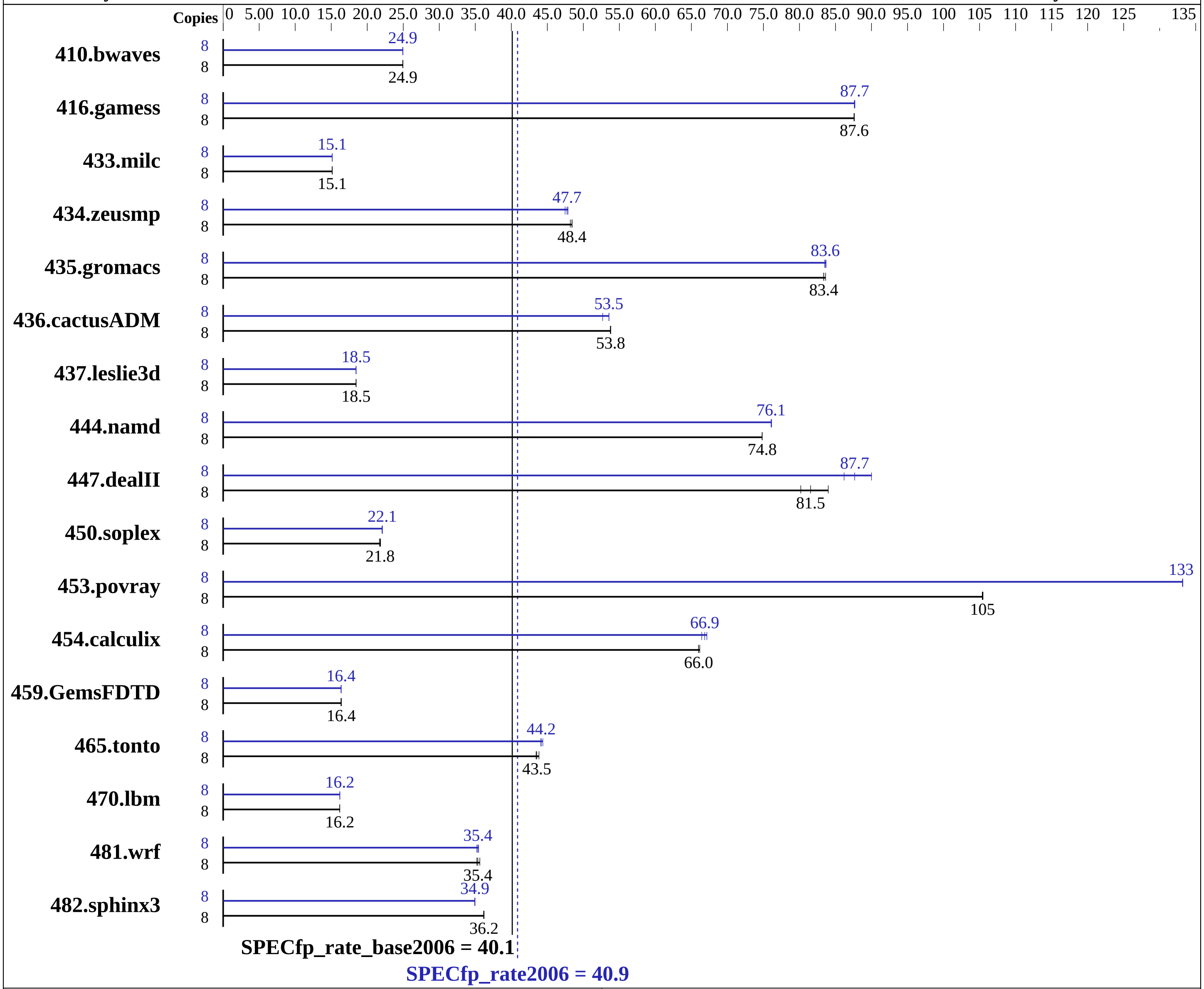
Bull SAS

NovaScale T840 (1.86 GHz, Intel Xeon E5320)

SPECfp®_rate2006 = 40.9

SPECfp_rate_base2006 = 40.1

CPU2006 license:	20	**Test date:**	Mar-2007
Test sponsor:	Bull SAS	**Hardware Availability:**	Jan-2007
Tested by:	Bull SAS	**Software Availability:**	Nov-2006



Hardware	
CPU Name:	Intel Xeon E5320
CPU Characteristics:	1.86 GHz, 8MB L2, 1066MHz bus
CPU MHz:	1860
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 9.1.033 for 32-bit apps. Build 20061103Z Package ID: W_CC_C_9.1.033 Intel Fortran Compiler 9.1.033 for 32-bit app. Build 20061103Z Package ID: W_FC_C_9.1.033 Microsoft Visual Studio .NET 2003 (libraries)
Auto Parallel:	No
File System:	NTFS
System State:	Default

Continued on next page

L3 Cache: None
Other Cache: None
Memory: 8 GB (667 MHz ECC CL5 DDR2 FB-DIMM)
Disk Subsystem: 3x73GB SCSI 15000 rpm
Other Hardware: None

Base Pointers: 32-bit
Peak Pointers: 32-bit
Other Software: MicroQuill SmartHeap Library 8.0 (shlW32M.lib)

Results Table

	Base							Peak						
Benchmark	**Copies**	**Seconds**	**Ratio**	**Seconds**	**Ratio**	**Seconds**	**Ratio**	**Copies**	**Seconds**	**Ratio**	**Seconds**	**Ratio**	**Seconds**	**Ratio**
410.bwaves	8	**4358**	**24.9**	4357	25.0	4359	24.9	8	4360	24.9	**4359**	**24.9**	4359	24.9
416.gamess	8	1789	87.6	1788	87.6	**1788**	**87.6**	8	1788	87.6	**1787**	**87.7**	1786	87.7
433.milc	8	**4852**	**15.1**	4849	15.1	4852	15.1	8	4850	15.1	**4848**	**15.1**	4847	15.2
434.zeusmp	8	**1504**	**48.4**	1503	48.4	1511	48.2	8	1521	47.9	**1525**	**47.7**	1534	47.5
435.gromacs	8	685	83.4	683	83.6	**685**	**83.4**	8	684	83.5	682	83.7	**683**	**83.6**
436.cactusADM	8	1777	53.8	**1777**	**53.8**	1779	53.7	8	1785	53.6	**1785**	**53.5**	1815	52.7
437.leslie3d	8	4075	18.5	**4075**	**18.5**	4076	18.4	8	4079	18.4	4074	18.5	**4075**	**18.5**
444.namd	8	858	74.8	857	74.8	**857**	**74.8**	8	**844**	**76.1**	843	76.1	844	76.1
447.dealII	8	1141	80.2	1090	84.0	**1122**	**81.5**	8	**1044**	**87.7**	1017	90.0	1062	86.2
450.soplex	8	3053	21.9	**3061**	**21.8**	3076	21.7	8	**3022**	**22.1**	3017	22.1	3025	22.1
453.povray	8	403	105	**404**	**105**	404	105	8	319	133	**320**	**133**	320	133
454.calculix	8	1000	66.0	**1000**	**66.0**	998	66.2	8	**987**	**66.9**	993	66.4	983	67.2
459.GemsFDTD	8	**5175**	**16.4**	5174	16.4	5192	16.3	8	5178	16.4	**5184**	**16.4**	5187	16.4
465.tonto	8	1796	43.8	**1808**	**43.5**	1812	43.4	8	**1783**	**44.2**	1785	44.1	1774	44.4
470.lbm	8	**6788**	**16.2**	6787	16.2	6789	16.2	8	6786	16.2	**6785**	**16.2**	6785	16.2
481.wrf	8	2537	35.2	2508	35.6	**2527**	**35.4**	8	2520	35.5	**2528**	**35.4**	2538	35.2
482.sphinx3	8	4304	36.2	4313	36.2	**4307**	**36.2**	8	4459	35.0	**4463**	**34.9**	4464	34.9

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

Base 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
```

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

Continued on next page

Peak Portability Flags (Continued)

453.povray: -DSPEC_CPU_WINDOWS_ICL
454.calculix: -DSPEC_CPU_NOZMODIFIER -Qlowercase
481.wrf: -DSPEC_CPU_WINDOWS_ICL

Peak Optimization Flags

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

416.gamess: -fast /F950000000 -link /FORCE:MULTIPLE

434.zeusmp: Same as 410.bwaves

437.leslie3d: Same as 410.bwaves

459.GemsFDTD: Same as 410.bwaves

465.tonto: Same as 410.bwaves

Benchmarks using both Fortran and C:

435.gromacs: -fast /F950000000 -link /FORCE:MULTIPLE

436.cactusADM: -Qprof_gen(pass 1) -Qprof_use(pass 2) -fast /F950000000 -link /FORCE:MULTIPLE

454.calculix: Same as 436.cactusADM

481.wrf: Same as 435.gromacs

The flags file that was used to format this result can be browsed at
http://www.spec.org/cpu2006/flags/flags.20090714.00.html

You can also download the XML flags source by saving the following link:
http://www.spec.org/cpu2006/flags/flags.20090714.00.xml

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 11:56:25 2014 by SPEC CPU2006 PS/PDF formatter v6932.
Originally published on 17 April 2007.