SPEC® CFP2006 Result

Bull SAS

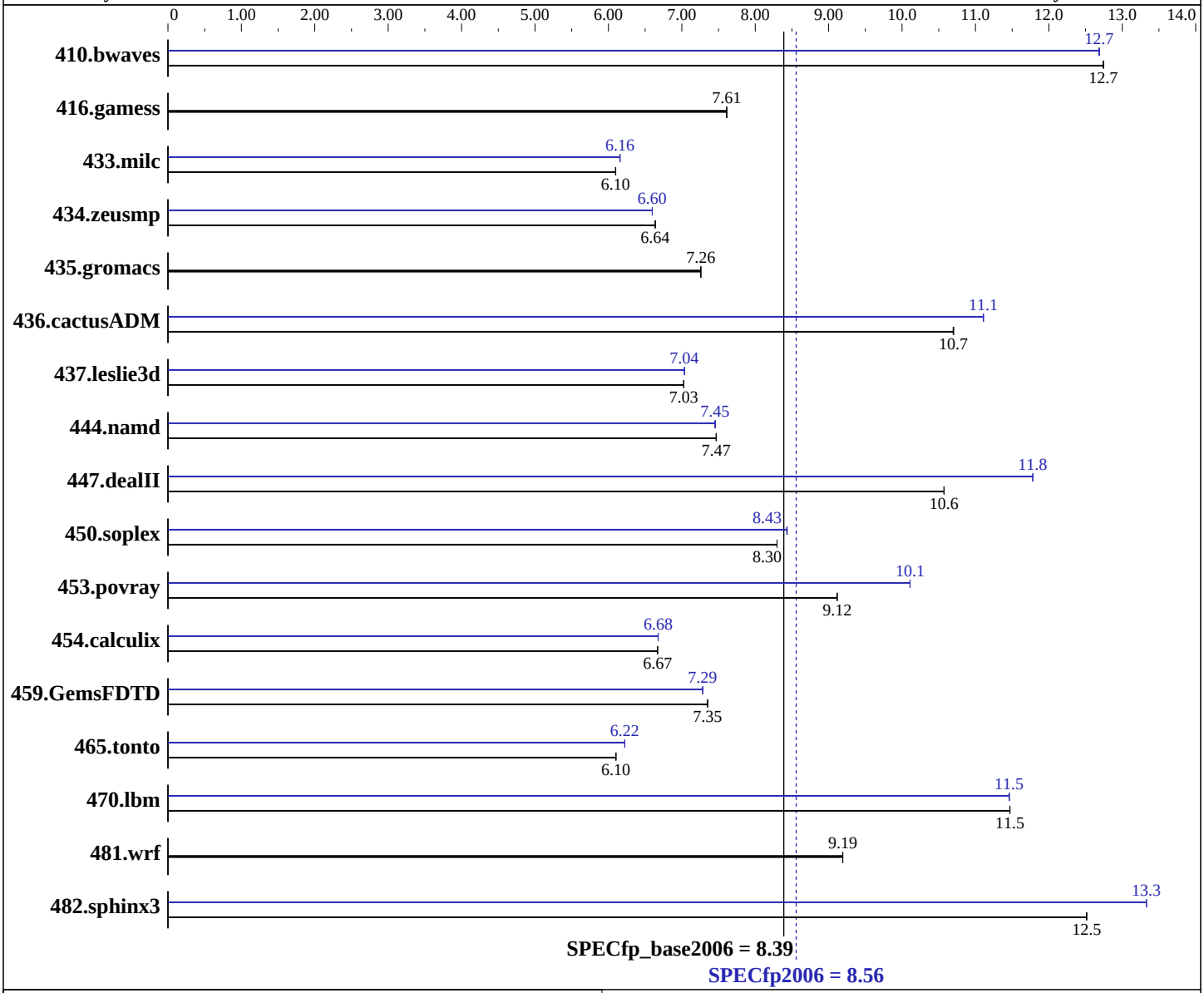
NovaScale R480 (2.60 GHz, Intel Xeon 7110M)

SPECfp®2006 = 8.56

SPECfp_base2006 = 8.39

CPU2006 license: 20
Test sponsor: Bull SAS
Tested by: Bull SAS

Test date: Apr-2007
Hardware Availability: Sep-2006
Software Availability: Nov-2006



Hardware

CPU Name:	Intel Xeon 7110M
CPU Characteristics:	2.6 GHz, 800 MHz bus
CPU MHz:	2600
FPU:	Integrated
CPU(s) enabled:	1 core, 1 chip, 2 cores/chip
CPU(s) orderable:	1,2,4 chips
Primary Cache:	12 K micro-ops I + 16 KB D on chip per core
Secondary Cache:	1 MB I+D on chip per core

Continued on next page

Software

Operating System:	Windows Server 2003 Enterprise X64 Edition
Compiler:	Intel C++ Compiler for IA32 version 9.1 Package ID W_CC_C_9.1.033 Build no 20061103Z Intel Fortran Compiler for IA32 version 9.1 Package ID W_FC_C_9.1.033 Build no 20061103Z Microsoft Visual Studio .NET 2003 (lib & linker)
Auto Parallel:	No
File System:	NTFS
System State:	Default

Continued on next page

SPEC CFP2006 Result

Bull SAS

NovaScale R480 (2.60 GHz, Intel Xeon 7110M)

SPECfp2006 = 8.56

SPECfp_base2006 = 8.39

CPU2006 license: 20
Test sponsor: Bull SAS
Tested by: Bull SAS

Test date: Apr-2007
Hardware Availability: Sep-2006
Software Availability: Nov-2006

L3 Cache: 4 MB I+D on chip per chip
Other Cache: None
Memory: 32 GB (16x2 GB) DDR2 400 PC2-3200R-333
Disk Subsystem: 2x36 GB SAS 15000 RPM
Other Hardware: None

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

Results Table

Benchmark	Base						Peak					
	Seconds	Ratio	Seconds	Ratio	Seconds	Ratio	Seconds	Ratio	Seconds	Ratio	Seconds	Ratio
410.bwaves	1066	12.7	1067	12.7	**1067**	**12.7**	**1071**	**12.7**	1072	12.7	1071	12.7
416.gamess	**2572**	**7.61**	2572	7.61	2572	7.61	**2572**	**7.61**	2572	7.61	2572	7.61
433.milc	1505	6.10	**1506**	**6.10**	1506	6.10	1491	6.16	**1491**	**6.16**	1491	6.16
434.zeusmp	1371	6.64	**1371**	**6.64**	1371	6.64	**1379**	**6.60**	1379	6.60	1379	6.60
435.gromacs	984	7.26	984	7.26	**984**	**7.26**	984	7.26	984	7.26	**984**	**7.26**
436.cactusADM	**1117**	**10.7**	1117	10.7	1117	10.7	**1076**	**11.1**	1076	11.1	1075	11.1
437.leslie3d	1338	7.03	1338	7.03	**1338**	**7.03**	**1336**	**7.04**	1336	7.04	1336	7.04
444.namd	1074	7.47	1074	7.47	**1074**	**7.47**	1076	7.45	1076	7.45	**1076**	**7.45**
447.dealII	1082	10.6	**1082**	**10.6**	1082	10.6	**971**	**11.8**	971	11.8	971	11.8
450.soplex	1005	8.30	1005	8.30	**1005**	**8.30**	**989**	**8.43**	989	8.43	989	8.43
453.povray	584	9.11	583	9.12	**584**	**9.12**	526	10.1	**526**	**10.1**	526	10.1
454.calculix	1237	6.67	1237	6.67	**1237**	**6.67**	**1235**	**6.68**	1235	6.68	1235	6.68
459.GemsFDTD	1443	7.35	1443	7.35	**1443**	**7.35**	1456	7.29	**1456**	**7.29**	1456	7.28
465.tonto	1612	6.10	**1613**	**6.10**	1613	6.10	1581	6.22	**1581**	**6.22**	1581	6.22
470.lbm	1198	11.5	**1198**	**11.5**	1198	11.5	1199	11.5	1199	11.5	**1199**	**11.5**
481.wrf	**1215**	**9.19**	1215	9.19	1215	9.19	**1215**	**9.19**	1215	9.19	1215	9.19
482.sphinx3	1557	12.5	1558	12.5	**1557**	**12.5**	1462	13.3	1462	13.3	**1462**	**13.3**

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

General Notes

```
Other Configuration Notes
/NUMPROC=1 flag was added to boot.ini to invoke
uniprocessor environment
Hyper-Threading technology was disabled in the Bios.

The NovaScale T880 and the NovaScale R480 models are
electronically equivalent.
The results have been measured on a NovaScale R480 model.
```

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
```

Continued on next page

Peak Compiler Invocation (Continued)

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:
-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: basepeak = yes

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: basepeak = yes

Continued on next page

Peak Optimization Flags (Continued)

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

454.calculix: `Same as 436.cactusADM`

481.wrf: `basepeak = yes`

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 11:40:42 2014 by SPEC CPU2006 PS/PDF formatter v6932.
Originally published on 29 May 2007.