SPEC® CFP2006 Result

Copyright 2006-2014 Standard Performance Evaluation Corporation

Bull SAS

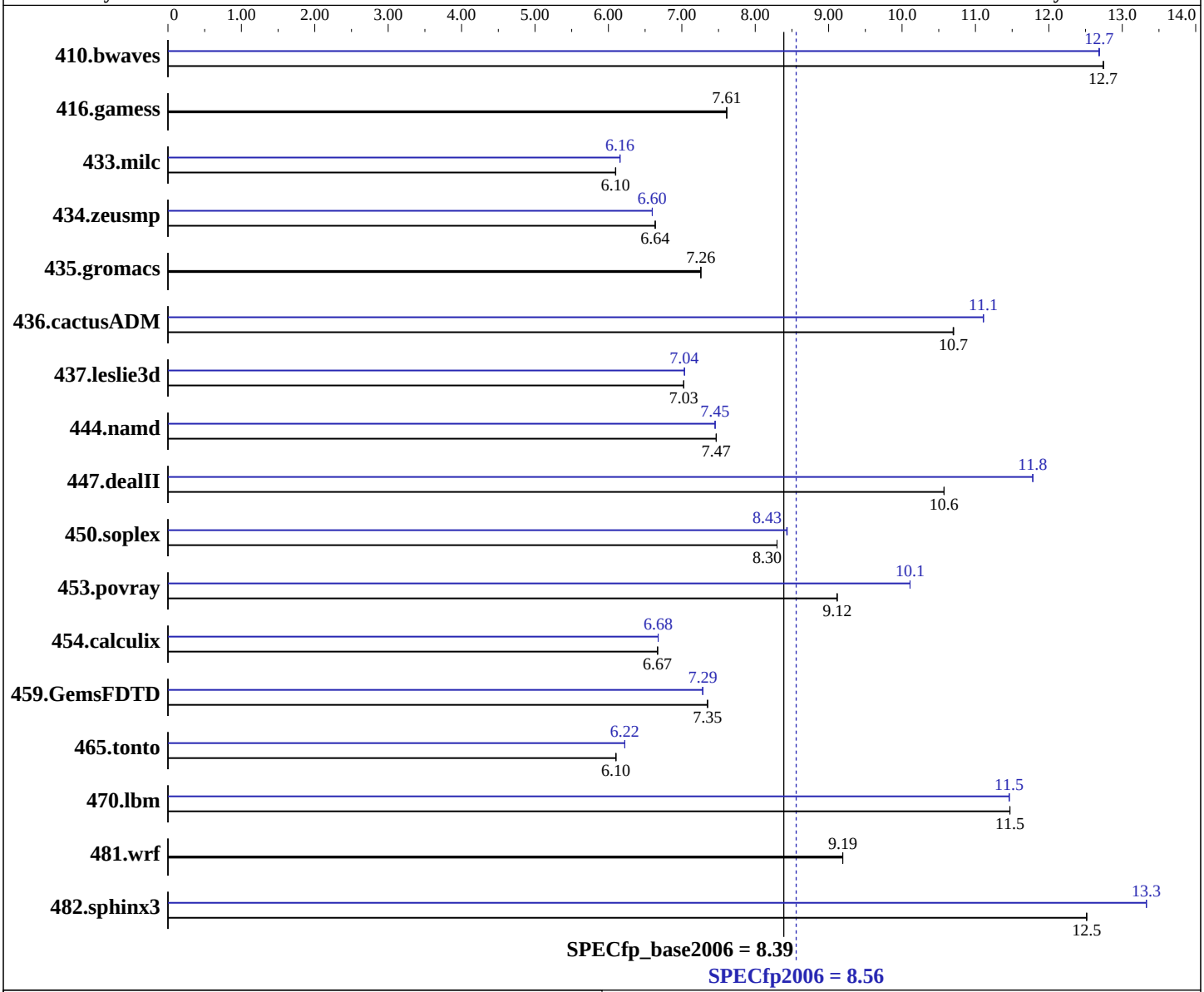
NovaScale R480 (2.60 GHz, Intel Xeon 7110M)

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

Copyright 2006-2014 Standard Performance Evaluation Corporation

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`

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 11:40:43 2014 by SPEC CPU2006 PS/PDF formatter v6932.
Originally published on 29 May 2007.