# SPEC® CFP2006 Result

Copyright 2006-2014 Standard Performance Evaluation Corporation

## Bull SAS

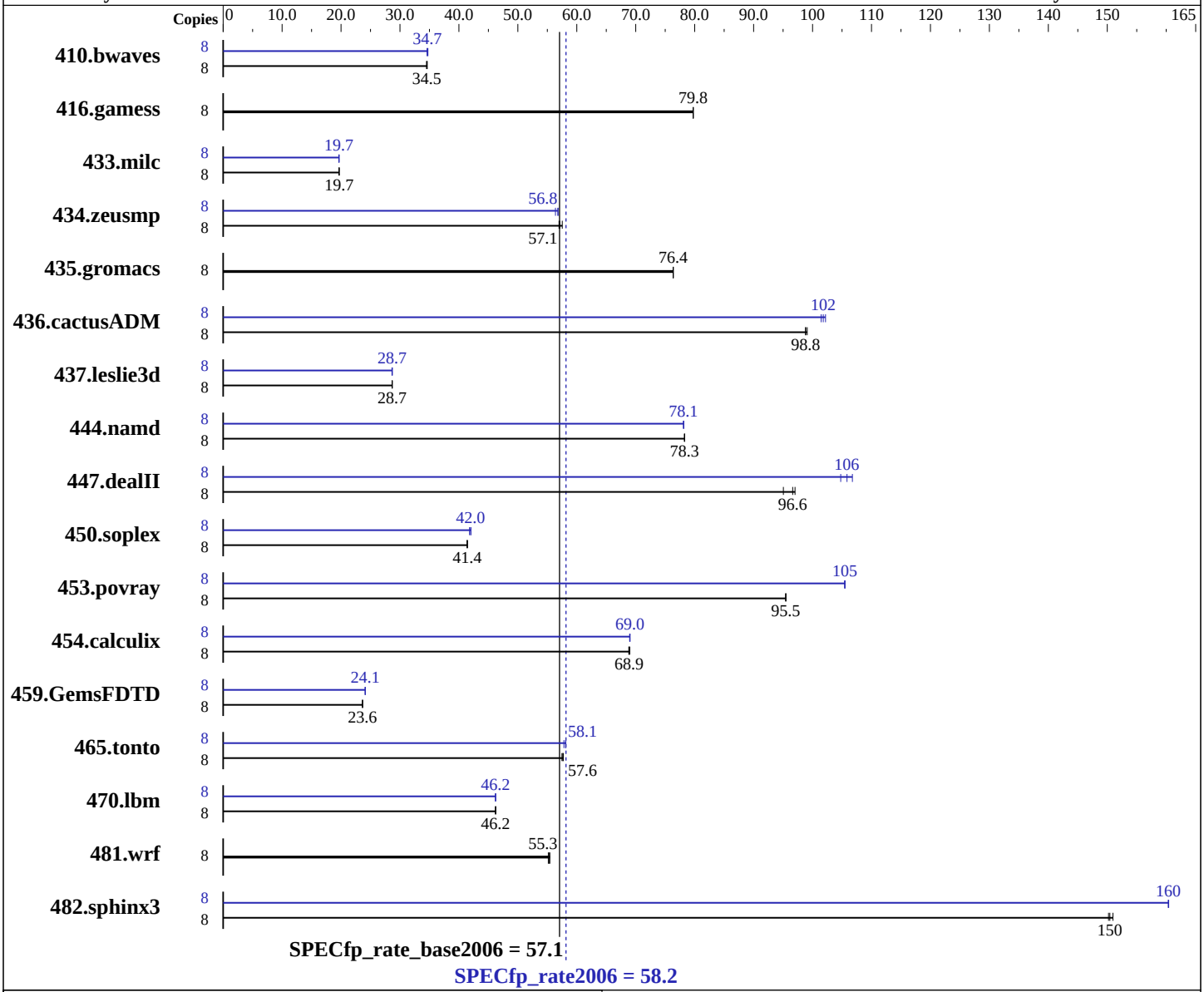
NovaScale T880 (3.40 GHz, Intel Xeon 7140M)

SPECfp®_rate2006 = 58.2

SPECfp_rate_base2006 = 57.1

**CPU2006 license:** 3
**Test sponsor:** Bull SAS
**Tested by:** Bull SAS

**Test date:** Mar-2007
**Hardware Availability:** Sep-2006
**Software Availability:** Nov-2006




### Hardware

| | |
|---|---|
| CPU Name: | Intel Xeon 7140M |
| CPU Characteristics: | 3.4GHz, 800MHz bus |
| CPU MHz: | 3400 |
| FPU: | Integrated |
| CPU(s) enabled: | 8 cores, 4 chips, 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 9.1 for 32-bit<br>Build 20061103Z Package ID: W_CC_C_9.1.033<br>Intel Fortran Compiler 9.1 for 32-bit<br>Build 20061103Z Package ID: W_FC_C_9.1.033<br>Microsoft Visual Studio .NET 2003 (libraries) |
| 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 T880 (3.40 GHz, Intel Xeon 7140M)

SPECfp_rate2006 = 58.2

SPECfp_rate_base2006 = 57.1

**CPU2006 license:** 3
**Test sponsor:** Bull SAS
**Tested by:** Bull SAS

**Test date:** Mar-2007
**Hardware Availability:** Sep-2006
**Software Availability:** Nov-2006

L3 Cache: 16 MB I+D on chip per chip
Other Cache: None
Memory: 16 GB (16X1GB 1Rx4 PC2-3200R-333 400MHz DDR2)
Disk Subsystem: 2x36GB 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 | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | Copies | Seconds | Ratio | Seconds | Ratio | Seconds | Ratio | Copies | Seconds | Ratio | Seconds | Ratio | Seconds | Ratio |
| 410.bwaves | 8 | **3147** | **34.5** | 3150 | 34.5 | 3139 | 34.6 | 8 | 3129 | 34.7 | 3143 | 34.6 | **3137** | **34.7** |
| 416.gamess | 8 | 1965 | 79.7 | 1964 | 79.8 | **1964** | **79.8** | 8 | 1965 | 79.7 | 1964 | 79.8 | **1964** | **79.8** |
| 433.milc | 8 | 3734 | 19.7 | 3732 | 19.7 | **3732** | **19.7** | 8 | **3736** | **19.7** | 3736 | 19.7 | 3739 | 19.6 |
| 434.zeusmp | 8 | **1275** | **57.1** | 1265 | 57.5 | 1278 | 57.0 | 8 | **1282** | **56.8** | 1291 | 56.4 | 1282 | 56.8 |
| 435.gromacs | 8 | 748 | 76.3 | **748** | **76.4** | 748 | 76.4 | 8 | 748 | 76.3 | **748** | **76.4** | 748 | 76.4 |
| 436.cactusADM | 8 | 968 | 98.8 | 965 | 99.1 | **967** | **98.8** | 8 | 942 | 101 | 935 | 102 | **939** | **102** |
| 437.leslie3d | 8 | **2622** | **28.7** | 2623 | 28.7 | 2622 | 28.7 | 8 | 2619 | 28.7 | **2623** | **28.7** | 2626 | 28.6 |
| 444.namd | 8 | 820 | 78.3 | **820** | **78.3** | 820 | 78.3 | 8 | 821 | 78.1 | **821** | **78.1** | 821 | 78.1 |
| 447.dealII | 8 | 963 | 95.0 | 943 | 97.0 | **947** | **96.6** | 8 | **865** | **106** | 873 | 105 | 857 | 107 |
| 450.soplex | 8 | 1613 | 41.4 | **1611** | **41.4** | 1609 | 41.5 | 8 | **1589** | **42.0** | 1596 | 41.8 | 1587 | 42.0 |
| 453.povray | 8 | 446 | 95.4 | 446 | 95.5 | **446** | **95.5** | 8 | 404 | 105 | 403 | 105 | **403** | **105** |
| 454.calculix | 8 | 957 | 69.0 | 959 | 68.8 | **958** | **68.9** | 8 | 957 | 69.0 | **956** | **69.0** | 956 | 69.0 |
| 459.GemsFDTD | 8 | 3591 | 23.6 | **3590** | **23.6** | 3587 | 23.7 | 8 | 3519 | 24.1 | **3520** | **24.1** | 3525 | 24.1 |
| 465.tonto | 8 | **1366** | **57.6** | 1364 | 57.7 | 1370 | 57.5 | 8 | **1354** | **58.1** | 1354 | 58.1 | 1362 | 57.8 |
| 470.lbm | 8 | 2379 | 46.2 | **2378** | **46.2** | 2377 | 46.2 | 8 | **2378** | **46.2** | 2378 | 46.2 | 2379 | 46.2 |
| 481.wrf | 8 | 1620 | 55.2 | **1616** | **55.3** | 1612 | 55.4 | 8 | 1620 | 55.2 | **1616** | **55.3** | 1612 | 55.4 |
| 482.sphinx3 | 8 | 1033 | 151 | **1036** | **150** | 1038 | 150 | 8 | **972** | **160** | 972 | 160 | 972 | 160 |

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

## General Notes

```
Other Configuration Notes

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 11:29:12 2014 by SPEC CPU2006 PS/PDF formatter v6932.
Originally published on 1 May 2007.