Bull SAS

NovaScale T880 (3.20 GHz, Intel Xeon 7130M)

SPECfp®2006 = 10.6
SPECfp_base2006 = 10.4

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

Hardware

CPU Name: Intel Xeon 7130M
CPU Characteristics: 3.2GHz, 800MHz bus
CPU MHz: 3200
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

Software

Compiler: Intel C++ Compiler 9.1 for 32-bit
Auto Parallel: No
File System: NTFS
System State: Default

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| L3 Cache: | 8 MB I+D on chip per chip |
| Other Cache: | None |
| Memory: | 32 GB (667 MHz ECC CL5 DDR2 FB-DIMM) |
| 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) |

### SPEC CFP2006 Result

**SPECfp2006 =** 10.6

**SPECfp_base2006 =** 10.4

### Results Table

<table>
<thead>
<tr>
<th>Benchmark</th>
<th>Base</th>
<th>Peak</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Seconds</td>
<td>Ratio</td>
</tr>
<tr>
<td>434.zeusmp</td>
<td>1145</td>
<td>7.95</td>
</tr>
<tr>
<td>435.gromacs</td>
<td>795</td>
<td>8.98</td>
</tr>
<tr>
<td>436.cactusADM</td>
<td>852</td>
<td>14.0</td>
</tr>
<tr>
<td>437.leslie3d</td>
<td>1119</td>
<td>8.40</td>
</tr>
<tr>
<td>444.namd</td>
<td>872</td>
<td>9.20</td>
</tr>
<tr>
<td>447.dealII</td>
<td>891</td>
<td>12.8</td>
</tr>
<tr>
<td>450.soplex</td>
<td>810</td>
<td>10.3</td>
</tr>
<tr>
<td>453.povray</td>
<td>474</td>
<td>11.2</td>
</tr>
<tr>
<td>454.calculix</td>
<td>1005</td>
<td>8.21</td>
</tr>
<tr>
<td>459.GemsFDTD</td>
<td>1263</td>
<td>8.40</td>
</tr>
<tr>
<td>465.tonto</td>
<td>1299</td>
<td>7.57</td>
</tr>
<tr>
<td>470.lbm</td>
<td>821</td>
<td>16.7</td>
</tr>
<tr>
<td>481.wrf</td>
<td>1000</td>
<td>11.2</td>
</tr>
<tr>
<td>482.sphinx3</td>
<td>1048</td>
<td>18.6</td>
</tr>
</tbody>
</table>

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

The NovaScale T880 and the NovaScale R480 models are electronically equivalent. The results have been measured on a NovaScale R480 model.
Bull SAS
NovaScale T880 (3.20 GHz, Intel Xeon 7130M)

SPECfp2006 = 10.6
SPECfp_base2006 = 10.4

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

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
SPEC CFP2006 Result

Bull SAS
NovaScale T880 (3.20 GHz, Intel Xeon 7130M)

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CPU2006 license: 20
Test sponsor: Bull SAS
Test date: Mar-2007
Hardware Availability: Sep-2006
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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 /F9500000000 shlw32m.lib
  -link /FORCE:MULTIPLE

C++ benchmarks:
  -Qprof_gen(pass 1) -Qprof_use(pass 2) -fast -Qcxx_features
  /F9500000000 shlw32m.lib -link /FORCE:MULTIPLE

Fortran benchmarks:
  410.bwaves: -Qprof_gen(pass 1) -Qprof_use(pass 2) -fast /F9500000000
              -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

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Hardware Availability: Sep-2006
Software Availability: Nov-2006

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

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For questions about this result, please contact the tester.
For other inquiries, please contact webmaster@spec.org.

Tested with SPEC CPU2006 v1.0.