## SPEC CFP2006 Result

**Bull SAS**  
**NovaScale R460**  
(Intel Xeon processor 5120, 1.86GHz)

**SPECfp®2006 = 10.9**  
**SPECfp_base2006 = 10.7**

<table>
<thead>
<tr>
<th>Test sponsor</th>
<th>Bull SAS</th>
<th>Hardware Availability</th>
<th>Test date:</th>
<th>Software Availability:</th>
</tr>
</thead>
<tbody>
<tr>
<td>Tested by:</td>
<td>Bull SAS</td>
<td></td>
<td>May-2007</td>
<td>Dec-2006</td>
</tr>
<tr>
<td>CPU2006 license:</td>
<td>20</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>CPU(s) enabled:</td>
<td>1 core, 1 chip, 2 cores/chip</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>CPU(s) orderable:</td>
<td>1 to 2 chips</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Primary Cache:</td>
<td>32 KB I + 32 KB D on chip per core</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Secondary Cache:</td>
<td>4 MB I+D on chip per chip</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>CPU Name:</td>
<td>Intel Xeon 5120</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>CPU Characteristics:</td>
<td>1.86 GHz, 4 MB L2, 1066 MHz system bus</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>CPU MHz:</td>
<td>1866</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>FPU:</td>
<td>Integrated</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Operating System:</td>
<td>SuSE Linux Enterprise Server 10 (EM64T)</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Compiler:</td>
<td>Intel C++ Compiler for Intel EM64T-based applications, Version 9.1</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Package ID:</td>
<td>1.cc_c_9.1.045 Build no 20061101</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Auto Parallel:</td>
<td>No</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

**Software**  

**Hardware**

<table>
<thead>
<tr>
<th>Software</th>
<th>CPU Name:</th>
<th>CPU Characteristics:</th>
<th>CPU MHz:</th>
<th>FPU:</th>
<th>CPU(s) enabled:</th>
<th>CPU(s) orderable:</th>
<th>Primary Cache:</th>
<th>Secondary Cache:</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Intel Xeon 5120</td>
<td>1.86 GHz, 4 MB L2, 1066 MHz system bus</td>
<td>1866</td>
<td>Integrated</td>
<td>1 core, 1 chip, 2 cores/chip</td>
<td>1 to 2 chips</td>
<td>32 KB I + 32 KB D on chip per core</td>
<td>4 MB I+D on chip per chip</td>
</tr>
</tbody>
</table>
Bull SAS
NovaScale R460
(Intel Xeon processor 5120, 1.86GHz)

SPECFp2006 = 10.9
SPECFp_base2006 = 10.7

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

L3 Cache: None
Other Cache: None
Memory: 24 GB (12x2 GB) FB-DIMM PC2-5300F ECC CL5
Disk Subsystem: 1x73 GB SAS, 15000 RPM
Other Hardware: None

File System: ext2
System State: Multi-user run level 3
Base Pointers: 64-bit
Peak Pointers: 32/64-bit
Other Software: None

Results Table

<table>
<thead>
<tr>
<th>Benchmark</th>
<th>Seconds</th>
<th>Ratio</th>
<th>Seconds</th>
<th>Ratio</th>
<th>Seconds</th>
<th>Ratio</th>
<th>Seconds</th>
<th>Ratio</th>
<th>Seconds</th>
<th>Ratio</th>
</tr>
</thead>
<tbody>
<tr>
<td>416.gamess</td>
<td>1528</td>
<td>12.8</td>
<td>1531</td>
<td>12.8</td>
<td>1528</td>
<td>12.8</td>
<td>1652</td>
<td>11.9</td>
<td>1652</td>
<td>11.9</td>
</tr>
<tr>
<td>433.milc</td>
<td>628</td>
<td>11.4</td>
<td>628</td>
<td>11.4</td>
<td>628</td>
<td>11.4</td>
<td>612</td>
<td>11.7</td>
<td>608</td>
<td>11.7</td>
</tr>
<tr>
<td>434.zeusmp</td>
<td>1027</td>
<td>11.6</td>
<td>1032</td>
<td>11.6</td>
<td>1024</td>
<td>11.7</td>
<td>1050</td>
<td>11.4</td>
<td>1050</td>
<td>11.4</td>
</tr>
<tr>
<td>436.cactusADM</td>
<td>1173</td>
<td>9.04</td>
<td>1173</td>
<td>9.04</td>
<td>1173</td>
<td>9.04</td>
<td>1179</td>
<td>9.00</td>
<td>1179</td>
<td>9.00</td>
</tr>
<tr>
<td>437.leslie3d</td>
<td>952</td>
<td>10.3</td>
<td>962</td>
<td>10.2</td>
<td>957</td>
<td>10.3</td>
<td>917</td>
<td>10.7</td>
<td>917</td>
<td>10.7</td>
</tr>
<tr>
<td>444.namd</td>
<td>836</td>
<td>9.87</td>
<td>836</td>
<td>9.87</td>
<td>836</td>
<td>9.87</td>
<td>816</td>
<td>10.1</td>
<td>814</td>
<td>10.1</td>
</tr>
<tr>
<td>447.dealII</td>
<td>413</td>
<td>12.9</td>
<td>411</td>
<td>13.0</td>
<td>413</td>
<td>12.9</td>
<td>315</td>
<td>16.9</td>
<td>317</td>
<td>16.8</td>
</tr>
<tr>
<td>454.calculix</td>
<td>1468</td>
<td>13.3</td>
<td>1473</td>
<td>13.2</td>
<td>1476</td>
<td>13.2</td>
<td>1344</td>
<td>14.5</td>
<td>1356</td>
<td>14.4</td>
</tr>
</tbody>
</table>

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

Operating System Notes

Environment stack size set to 'unlimited'
system was booted uniprocessor by setting "maxcpus=0"
kernel parameter in menu.lst
/usr/bin/taskset utility used to bind CPU(s) to processes

General Notes

The NovaScale R440 and the NovaScale R460 models are electronically equivalent.
The results have been measured on a NovaScale R460 model.
SPEC CFP2006 Result

Bull SAS

NovaScale R460
(Intel Xeon processor 5120, 1.86GHz)

SPECfp2006 = 10.9
SPECfp_base2006 = 10.7

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

Base Compiler Invocation

C benchmarks:
icc

C++ benchmarks:
icpc

Fortran benchmarks:
ifort

Benchmarks using both Fortran and C:
icc ifort

Base Portability Flags

410.bwaves: -DSPEC_CPU_LP64
416.gamess: -DSPEC_CPU_LP64
433.milc: -DSPEC_CPU_LP64
434.zeusmp: -DSPEC_CPU_LP64
435.gromacs: -DSPEC_CPU_LP64 -nofor_main
436.cactusADM: -DSPEC_CPU_LP64 -nofor_main
437.leslie3d: -DSPEC_CPU_LP64
444.namd: -DSPEC_CPU_LP64
447.dealII: -DSPEC_CPU_LP64
450.soplex: -DSPEC_CPU_LP64
453.povray: -DSPEC_CPU_LP64
454.calculix: -DSPEC_CPU_LP64 -nofor_main
459.GemsFDTD: -DSPEC_CPU_LP64
465.tonto: -DSPEC_CPU_LP64
470.lbm: -DSPEC_CPU_LP64
481.wrf: -DSPEC_CPU_LP64 -DSPEC_CPU_CASE_FLAG -DSPEC_CPU_LINUX
482.sphinx3: -DSPEC_CPU_LP64

Base Optimization Flags

C benchmarks:
-fast

C++ benchmarks:
-fast

Fortran benchmarks:
-fast

Benchmarks using both Fortran and C:
-fast
Bull SAS
NovaScale R460
(Intel Xeon processor 5120, 1.86GHz)

<table>
<thead>
<tr>
<th>SPECfp2006 =</th>
<th>10.9</th>
</tr>
</thead>
<tbody>
<tr>
<td>SPECfp_base2006 =</td>
<td>10.7</td>
</tr>
</tbody>
</table>

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

Test date: May-2007
Hardware Availability: Mar-2007
Software Availability: Dec-2006

Peak Compiler Invocation

C benchmarks:
  icc
C++ benchmarks:
  icpc
Fortran benchmarks:
  ifort
Benchmarks using both Fortran and C:
  icc ifort

Peak Portability Flags
Same as Base Portability Flags

Peak Optimization Flags

C benchmarks:
  -prof_gen(pass 1) -prof_use(pass 2) -fast -auto_ilp32
C++ benchmarks:
  -prof_gen(pass 1) -prof_use(pass 2) -fast -auto_ilp32
Fortran benchmarks:
  -prof_gen(pass 1) -prof_use(pass 2) -fast
Benchmarks using both Fortran and C:
  -prof_gen(pass 1) -prof_use(pass 2) -fast -auto_ilp32

The flags file that was used to format this result can be browsed at
http://www.spec.org/cpu2006/flags/EM64T_Intel91_flags.html

You can also download the XML flags source by saving the following link:
http://www.spec.org/cpu2006/flags/EM64T_Intel91_flags.xml
Bull SAS
NovaScale R460
(Intel Xeon processor 5120,1.86GHz)

<table>
<thead>
<tr>
<th>SPECfp2006</th>
<th>10.9</th>
</tr>
</thead>
<tbody>
<tr>
<td>SPECfp_base2006</td>
<td>10.7</td>
</tr>
</tbody>
</table>

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

Test date: May-2007
Hardware Availability: Mar-2007
Software Availability: Dec-2006

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 11:00:47 2014 by SPEC CPU2006 PS/PDF formatter v6932.