SPEC® CINT2006 Result

Sun Microsystems
Sun Blade T6320

SPECint\_rate2006 = NC
SPECint\_rate\_base2006 = NC

CPU2006 license: 6
Test sponsor: Sun Microsystems
Test date: Oct-2007
Tested by: Sun Microsystems
Hardware Availability: Oct-2007
Software Availability: Sep-2007

SPEC has determined that this result was not in compliance with the SPEC CPU2006 run and reporting rules. Specifically, the submittter reported that the result would not meet the 3 month availability requirement in the SPEC CPU2006 run rules due to a change in the availability date of the system.

### Copies

<table>
<thead>
<tr>
<th>SPECbench</th>
<th>Specbase</th>
</tr>
</thead>
<tbody>
<tr>
<td>400.perlbench</td>
<td></td>
</tr>
<tr>
<td>401.bzip2</td>
<td></td>
</tr>
<tr>
<td>403.gcc</td>
<td></td>
</tr>
<tr>
<td>429.mcf</td>
<td></td>
</tr>
<tr>
<td>445.gobmk</td>
<td></td>
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<td></td>
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<tr>
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<td></td>
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<tr>
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<td></td>
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<tr>
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<td></td>
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<tr>
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<tr>
<td>473.astar</td>
<td></td>
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<tr>
<td>483.</td>
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</tbody>
</table>

### Hardware

| CPU Name: | UltraSPARC T2 |
| CPU Characteristics: | |
| CPU MHz: | 1417 |
| FPU: | Integrated |
| CPU(s) enabled: | 8 cores, 1 chip, 8 cores/chip, 8 threads/core |
| CPU(s) orderable: | 1 chip |
| Primary Cache: | 16 KB I + 8 KB D on chip per core |

### Software

| Operating System: | Solaris 10 8/07 (build s10s_u4wos_12b) |
| Compiler: | Sun Studio 12 (patch build 2007/08/30) |
| Auto Parallel: | No |
| File System: | ufs |
| System State: | Default |
| Base Pointers: | 32-bit |
| Peak Pointers: | 32-bit |

Continued on next page

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

Compiler Invocation Notes

Compiler patches are available at http://developers.sun.com/sunstudio/downloads/patches/ss12_patches.jsp
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### Operating System Notes

Processes were bound to cores using "submit" and "obind".

ulimit -s 131072 was used to limit the space consumed by the stack (and therefore make more space available to the heap).

The "webconsole" service was turned off using svcadm disable webconsole.

### Base Compiler Invocation

<table>
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<th>C benchmarks:</th>
<th>cc</th>
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<td>C++ benchmarks:</td>
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### Base Portability Flags

- 400.perlbmk: -DSPEC\_CPU\_SOLARIS\_SPARC
- 492.mcf: -DSPEC\_CPU\_SOLARIS
- 93.mgrid: -DSPEC\_CPU\_SOLARIS
- 83.xalancbmk: -DSPEC\_CPU\_SOLARIS

### Base Optimization Flags

**C benchmarks:**

- `-g`  
- `-fast`  
- `-xipo=2`  
- `-xpagesize=4M`  
- `-xprefetch\_level=2`  
- `-xalias\_level=std`

**C++ benchmarks:**

- `-g0`  
- `-library=stlport4`  
- `-fast`  
- `-xipo=2`  
- `-xpagesize=4M`  
- `-xdepend`  
- `-xprefetch\_level=1`  
- `-xalias\_level=compatible`
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Base Other Flags

C benchmarks:
-xjobs=32 -V

C++ benchmarks:
-xjobs=32 -verbose=diags,version

Peak Compiler Invocation

C benchmarks:
cc

C++ benchmarks:
CC

Peak Portability Flags

400.perlbench: -DSPEC_CPU_SOLARIS_SPARC
403.geomas: -DSPEC_CPU_SOLARIS
462.libquantum: -DSPEC_CPU_SOLARIS
483.xalancbmk: -DSPEC_CPU_SOLARIS

Peak Optimization Flags

C benchmarks:

400.perlbench: -g -xprofile=collect:.feedback(pass 1)
-xprofile=use:.feedback(pass 2) -fast -xpagesize=4M
-xalias_level=std -xipo=2 -Xc -xrestrict -lfast

401.bzip2: -g -xprofile=collect:.feedback(pass 1)
-xprofile=use:.feedback(pass 2) -fast -xpagesize=4M
-xalias_level=strong

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<td><code>-g</code> <code>-xprofile=collect::/feedback(pass 1)</code> <code>-xprofile=use::/feedback(pass 2)</code> <code>-fast</code> <code>-xpagesize=4M</code> <code>-xalias_level=std</code> <code>-xprefetch_level=2</code></td>
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<td>429.mcf</td>
<td><code>-g</code> <code>-fast</code> <code>-xpagesize=256M</code> <code>-xipo=2</code> <code>-xprefetch_level=2</code> <code>-xrestrict</code> <code>-xalias_level=std</code> <code>-W2,-Apf:llist=3</code> <code>-W2,-Apf:noinnerllist</code> <code>-lfast</code></td>
</tr>
<tr>
<td>445.gobmk</td>
<td><code>-g</code> <code>-xprofile=collect::/feedback(pass 1)</code> <code>-xprofile=use::/feedback(pass 2)</code> <code>-fast</code> <code>-xpagesize=4M</code> <code>-xalias_level=std</code> <code>-xrestrict</code></td>
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<td>456.hmmer</td>
<td><code>-g</code> <code>-xprofile=collect::/feedback(pass 1)</code> <code>-xprofile=use::/feedback(pass 2)</code> <code>-fast</code> <code>-xpagesize=4M</code> <code>-xipo=2</code> <code>-xalias_level=std</code></td>
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Peak Other Flags:

C benchmarks:
-\texttt{-xjobs=32 -V}

C++ benchmarks:
-\texttt{-xjobs=32 -verbose=diags,version}

The flags file that was used to format this result can be browsed at:
http://www.spec.org/cpu2006/flags/Sun-Solaris-Studio12.20090714.00.html

You can also download the XML flags source by saving the following link:
http://www.spec.org/cpu2006/flags/Sun-Solaris-Studio12.20090714.00.xml