### Sun Microsystems
#### Sun Blade 150 (550 MHz)

- **SPECint2000 = 217**
- **SPECint_base2000 = 202**

#### Benchmark Results

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<th>Base Ratio</th>
<th>Runtime</th>
<th>Ratio</th>
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<td>300.twolf</td>
<td>3000</td>
<td>1684</td>
<td>1.78</td>
<td>1658</td>
<td>1.81</td>
</tr>
</tbody>
</table>

#### Hardware

- **CPU:** UltraSPARC IIIi
- **CPU MHz:** 550
- **FPU:** Integrated
- **CPU(s) enabled:** 1 core, 1 chip, 1 core/chip
- **CPU(s) orderable:** 1
- **Parallel:** No
- **Primary Cache:** 16KB+16KBD on chip
- **Secondary Cache:** 512KB (I+D) on chip
- **L3 Cache:** None
- **Memory:** 256MB
- **Disk Subsystem:** 1 x Seagate ST340016A
- **Other Hardware:** None

#### Software

- **Operating System:** Solaris 8 2/02
- **Compiler:** Sun ONE Studio 7 and Sun Performance Library 7
- **File System:** ufs
- **System State:** Multi-User

#### Notes/Tuning Information

**Portability:**
- **176.gcc:** `-Dalloca=_builtin_alloca -DHOST_WORDS_BIG_ENDIAN`
- **186.crafty:** `-DSUN`
- **252.eon:** `-library=iostream`
- **253.perlbmk:** `-DSPEC_CPU2000_SOLARIS`
- **254.gap:** `-DSYS_IS_USG -DSYS_HAS_TIME_PROTO -DSYS_HAS_SIGNAL_PROTO -DSYS_HAS_CALLOC_PROTO -DSYS_HAS_IOCTL_PROTO`

**Profile Feedback (-xprofile):**
- `fdo_pre0`: rm -rf ./feedback.profile ./SunWS_cache
- Pass 1: `-xprofile=collect`.
- Pass 2: `-xprofile=use`.

**Base Flags:**
- **Base C flags:** `-fast -xcrossfile -xprofile`
- **Base C++ flags:** `-fast -xcrossfile -xprofile`

**Peak Flags:**
- `164.gzip`: `-xO5 -xtarget-native -xalias_level=std -W2,-whole -xcrossfile -W2,-Ainline -xprofile`
CINT2000 Result

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SPECint2000 = 217
SPECint_base2000 = 202

Notes/Tuning Information (Continued)

175.vpr: -fast -xalias_level=std -xcrossfile -xsfpcost -W2,-whole
-Wc,-Qeps:enabled=1,-Qeps:do_spec_load=1,-Qeps:rp_filtering_margin=100
-xregs=syst -lmopt -xprofile
176.gcc: -fast -xcrossfile -W2,-whole -Wc,-Qsched-traceLate=1,-Qsched-T4 -xprofile
181.mcf: basepeak=yes
186.crafty: -fast -xF -xinline= -xcrossfile -Wc,-Qsched-traceLate=1,-Qsched-T4
-xalias_level=strong -xregs=syst -W2,-Ashort_ldst,-Aivel:duplicate_loops
-xprofile
197.parser: -fast -xprefetch=no%auto -xcrossfile -xregs=syst
-Wc,-Qsched-traceLate=1,-Qsched-T4 -xalias_level=strong -Wc,-Qipa:valueprediction -xprofile
252.eon: -fast -xchip=generic -xcrossfile -xalias_level=compatible -xsafe=mem
-Option iropt -Mr500,-xrestrict -Option cg -Qsched-traceLate=1,-Qsched-T4
-dn -lmopt -xprofile
253.perlbmk: -xO5 -xtarget=native -xcrossfile -xalias_level=std -xsafe=mem
-Wc,-Qsched-traceLate=1,-Qsched-T4,-Qsched-trace_spec_load=1
-Wc,-Qinline_memcpy=32 -Wc,-Qselect-funcalign=32,-Qcache-chbab=1
-Wc,-Qselect-sw_pf_tbl_th=20 -xprofile
254.gap: -fast -xcrossfile -xalias_level=std -xprefetch=no%auto -xprofile
255.vortex: -fast -xcrossfile -Wc,-Qeps:enabled=1,-Qeps:do_spec_load=1
-Wc,-Qinline_memcpy=32 W2,-Aheap,-reroll1,-Aunroll,-Ms1,-Mt500,-Mr6000,-crit
-Wc,-Qdepgraph-early_cross_call=1 -Wc,-Qselect-funcalign=32
-Wc,-Qdepep-Sh0 -xrestrict -xprofile
256.bzip2: -fast -W2,-Abopt -xcrossfile -xalias_level=strong
-Wc,-Qselect-funcalign=32 -xregs=syst -xprofile
300.twolf: -fast -xalias_level=strong -xsafe=mem -xcrossfile -xprefetch=no%auto -xprofile

ONESTEP=yes for all benchmarks in base and peak

Stack size set to unlimited via "ulimit -s unlimited"

Software Patches: All patches for the Sun ONE Studio 7 Compiler (Product Patches and
OS patches) as recommended by http://access1.sun.com/sundev/s1s7-patches.html on Aug
the 7th, 2002 were installed (111704-03 111705-02 111706-01 111708-01 111709-01
111714-01 111715-01 111716-02 111718-01 111723-01 108434-08 108435-08 111697-03
111721-02)