**CINT2000 Result**

Sun Microsystems
Sun Fire V1280 (900MHz)

**SPECint_rate2000** = 6.21
**SPECint_rate_base2000** = 5.56

### Hardware

- **CPU:** UltraSPARC III Cu
- **CPU MHz:** 900
- **FPU:** Integrated
- **CPU(s) enabled:** 1 core, 1 chip, 1 core/chip
- **CPU(s) orderable:** 4, 8, 12
- **Parallel:** No
- **Primary Cache:** 32KBI+64KBD on chip
- **Secondary Cache:** 8MB(I+D) off chip
- **L3 Cache:** None
- **Other Cache:** None
- **Memory:** 2GB 4-way interleaved
- **Disk Subsystem:** 2 x 36GB 10K RPM LVD Disk, Sun P/N XTA-3310-36GB-10K
- **Other Hardware:** None

### Software

- **Operating System:** Solaris 9 9/02
- **Compiler:** Sun ONE Studio 8 (pre-FCS build 1/28)
  Sun Performance Library 8 (pre-FCS build 1/28)
- **File System:** ufs with ufs logging
- **System State:** Multi-User

### Notes/Tuning Information

- **Compiler invocation:**
  - C: cc
  - CXX: CC
  - F90: f90
  - F77: f90

  **Integer base flags:**
  - -fast -xipo=2 with ONESTEP=yes and feedback

  **Integer peak flags:**
  - ONESTEP=yes and feedback for all benchmarks

- **164.gzip:** -xO4 -xbuiltin=%all -xtarget=native -xalias_level=std -xipo=2 -Wc,-Qeps:enabled=1,-Qeps:rp_filtering_margin=100
- **175.vpr:** -fast -xalias_level=std -xipo=2 -Wc,-Qeps:enabled=1,-Qeps:rp_filtering_margin=100 -lmopt -lm
- **176.gcc:** -fast -xalias_level=std -xipo=2 -Wc,-Qeps:enabled=1,-Qeps:rp_filtering_margin=100 -lmopt -lm
- **181.mcf:** -fast -xipo=2 -xprefetch_level=3 -Wc,-Qeps:enabled=1
- **186.crafty:** -fast -xinline= -xipo=2 -xalias_level=strong -W2,-Ashort_ldst
  Feedback adds -xlinkopt in PASS2
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<table>
<thead>
<tr>
<th>Notes/Tuning Information (Continued)</th>
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<tbody>
<tr>
<td>197.parser: -fast -xipo=2 -xalias_level=strong</td>
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<tr>
<td>-Wc,-Qgsched-T6,-Qipa:valuemprediction</td>
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<tr>
<td>252.eon: -fast -xipo=2 -xalias_level=compatible -noex</td>
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<tr>
<td>-Qoption cg -Qeps:enabled=1,-Qeps:ws=32</td>
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<tr>
<td>253.perlbmk: -xO5 -xtarget=native -xipo -xalias_level=std -xsafe=mem</td>
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<tr>
<td>-Wc,-Qeps:enabled=1,-Qeps:ws=8,-Qiselect-sw_pf_tls1_th=20,</td>
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<tr>
<td>-Qiselect-funcaic=32,-Qicache-chbab=1</td>
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<tr>
<td>254.gap: -fast -xipo=2 -xalias_level=strong -xvector</td>
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<tr>
<td>-xprofile=collect:/feedback</td>
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<tr>
<td>255.vortex: -fast -xrestrict -xipo=2</td>
</tr>
<tr>
<td>-W2,-crit,-Ainline:recursion=1:cs=500:irs=6000</td>
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<tr>
<td>-Wc,-Qeps:enabled=1,-Qdegraph-early_cross_call=1,</td>
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<tr>
<td>-Qiselect-funcaic=32,-Qicache-chbab=1</td>
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<tr>
<td>256.bzip2: -fast -xipo -xalias_level=strong -xvector</td>
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<tr>
<td>-Wc,-Qeps:enabled=1</td>
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<td>300.twolf: -fast -xprofile=collect:/feedback</td>
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<tr>
<td>PASS1: -xprofile=collect:/feedback</td>
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<tr>
<td>PASS2: -xprofile=use:/feedback</td>
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#### Portability:

176.gcc: -Dalloca=__builtin_alloca -DHOST_WORDS_BIG_ENDIAN
186.crafty: -DSOLARIS
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

Shell Environments:
Stack size set to unlimited via "ulimit -s unlimited"
MPSSHEAP=4M
MPSSSTACK=4M
LD_PRELOAD=mpss.so.1
LD_LIBRARY_PATH=/usr/lib:/export/home/compilers/EA2-FCS:
20030128_k2/lib/v8plusb:/export/home/compilers/EA2-FCS:
20030128_k2/prod/lib/v8plusb
Kernel Parameters (/etc/system):
autoup=900
tune_t_fsflushr=1
System Settings:
Other CPUs disabled at the firmware level using
"disablecomponent" on the System Controller processor
running System Management Services software