# CINT2000 Result

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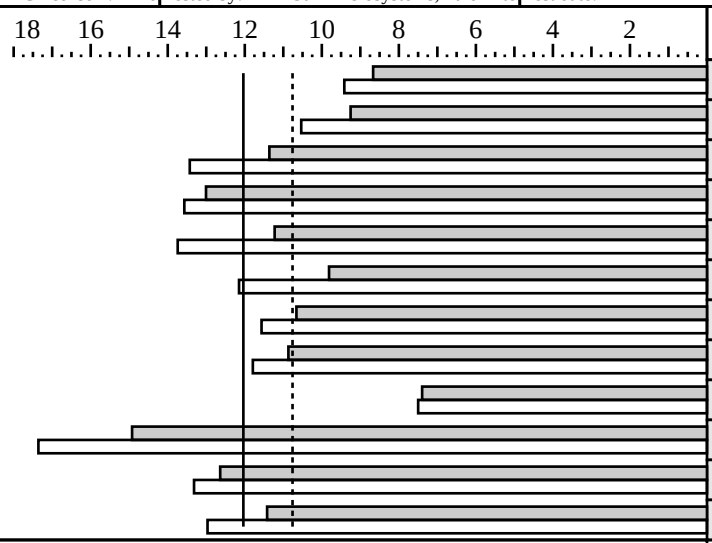
## Sun Microsystems
## Sun Blade 1000 Model 2900 Cu

SPECint_rate2000 = 12.0

SPECint_rate_base2000 = 10.8

SPEC license #: 6 | Tested by: Sun Microsystems, Palo Alto | Test date: Nov-2001 | Hardware Avail: Dec-2001 | Software Avail: Feb-2002




| Benchmark | Base Copies | Base Runtime | Base Ratio | Copies | Runtime | Ratio |
|---|---|---|---|---|---|---|
| 164.gzip | 2 | 375 | 8.67 | 2 | 345 | 9.42 |
| 175.vpr | 2 | 351 | 9.25 | 2 | 308 | 10.5 |
| 176.gcc | 2 | 225 | 11.4 | 2 | 190 | 13.4 |
| 181.mcf | 2 | 321 | 13.0 | 2 | 308 | 13.6 |
| 186.crafty | 2 | 207 | 11.2 | 2 | 169 | 13.7 |
| 197.parser | 2 | 426 | 9.81 | 2 | 344 | 12.1 |
| 252.eon | 2 | 283 | 10.7 | 2 | 261 | 11.6 |
| 253.perlbmk | 2 | 384 | 10.9 | 2 | 354 | 11.8 |
| 254.gap | 2 | 345 | 7.40 | 2 | 340 | 7.50 |
| 255.vortex | 2 | 295 | 14.9 | 2 | 254 | 17.4 |
| 256.bzip2 | 2 | 275 | 12.6 | 2 | 261 | 13.3 |
| 300.twolf | 2 | 609 | 11.4 | 2 | 537 | 13.0 |

### Hardware

| | |
|---|---|
| CPU: | UltraSPARC III Cu |
| CPU MHz: | 900 |
| FPU: | Integrated |
| CPU(s) enabled: | 2 cores, 2 chips, 1 core/chip |
| CPU(s) orderable: | 1-2 |
| Parallel: | None |
| Primary Cache: | 32KBI+64KBD on chip |
| Secondary Cache: | 8MB(I+D) off chip |
| L3 Cache: | None |
| Other Cache: | None |
| Memory: | 2GB |
| Disk Subsystem: | 1 x 36GB |
| Other Hardware: | -- |

### Software

| | |
|---|---|
| Operating System: | Solaris 8 10/01 |
| Compiler: | C: Forte Developer 7 EA<br>C++: Forte Developer 6 update 2 |
| File System: | tmpfs |
| 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

Base Flags:
 Base C   flags: -fast -xcrossfile -ll2amm -xprofile
 Base C++ flags: -fast -xcrossfile -xprofile

Peak Flags:
 164.gzip: -xO5 -xtarget=native -xalias_level=std -W2,-whole -xcrossfile -W2,-Ainline -xprofile
 175.vpr: -fast -xalias_level=std -xcrossfile -xsfpconst -xdepend -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,-Qgsched-trace_late=1,-Qgsched-T4 -ll2amm -xprofile
 181.mcf: -fast -xcrossfile -xprefetch -xdepend
```

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## Notes/Tuning Information (Continued)

```
          -Wc,-Qms_pipe-pref,-Qlp=1-fa=1-av=64-t=3-fl=1 -lprism32 -xprofile
 186.crafty: -fast -xF -xinline= -xcrossfile -Wc,-Qgsched-trace_late=1,-Qgsched-T4
            -xalias_level=strong -xregs=syst -W2,-Ashort_ldst,-Aivel:duplicate_loops
            -xprofile
 197.parser: -fast -xdepend -xprefetch=no%auto -xcrossfile -xregs=syst
          -Wc,-Qgsched-trace_late=1,-Qgsched-T4 -xalias_level=strong -Wc,-Qipa:valueprediction -xprofile
 252.eon: -fast -xcrossfile -xsafe=mem -Qoption iropt -Mt500,-xrestrict
          -Qoption cg -Qgsched-trace_late=1,-Qgsched-T4 -xprofile
              -Wc,-Qiselect-sw_pf_tbl_th=20 -xprofile
 253.perlbmk: -xO5 -xtarget=native -xcrossfile -xalias_level=std -xsafe=mem
              -Wc,-Qgsched-trace_late=1,-Qgsched-T4,-Qgsched-trace_spec_load=1
              -Wc,-Qinline_memcpy=32 -Wc,-Qiselect-funcalign=32,-Qicache-chbab=1
 254.gap: -fast -xcrossfile -xalias_level=std -xprefetch -W2,-whole -lprism32 -xprofile
 255.vortex: -fast -xcrossfile -Wc,-Qeps:enabled=1,-Qeps:do_spec_load=1
           -Wc,-Qinline_memcpy=32 -W2,-Aheap,-reroll=1,-Aunroll,-Ms1,-Mt500,-Mr6000,-crit
            -Wc,-Qdepgraph-early_cross_call=1 -Wc,-Qiselect-funcalign=32
            -Wc,-Qpeep-Sh0 -xrestrict -xdepend -ll2amm -lprism32 -xprofile
 256.bzip2: -fast -W2,-Abopt -xcrossfile -xalias_level=strong
           -Wc,-Qiselect-funcalign=32 -xdepend -xregs=syst -xprofile
 300.twolf: -fast -xalias_level=strong -xsafe=mem -xcrossfile -xprefetch=no%auto
           -Wc,-Qms_pipe+intdivusefp -xprofile

Forte Developer 7 (final) will ship May-2002

ONESTEP=yes for all benchmarks in base and peak

252.eon compiled with Forte Developer 6 update 2 for both base and peak

Shell Environments:
 LD_LIBRARY_PATH=/usr/lib:/opt/fd7/lib/v8plusb:/opt/fd7/YNH/lib/v8plusb
 PRISM_HEAP=268435456
 PRISM_MODE=2

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

Kernel Parameters (/etc/system):
 set shmsys:shminfo_shmmin=1
 set shmsys:shminfo_shmmax=1477846784
 set shmsys:shminfo_shmmni=256
 set shmsys:shminfo_shmseg=400

System configuration details located (as of Dec 2001) at
     http://www.sun.com/desktop/products/ws.html
```