CINT2000 Result

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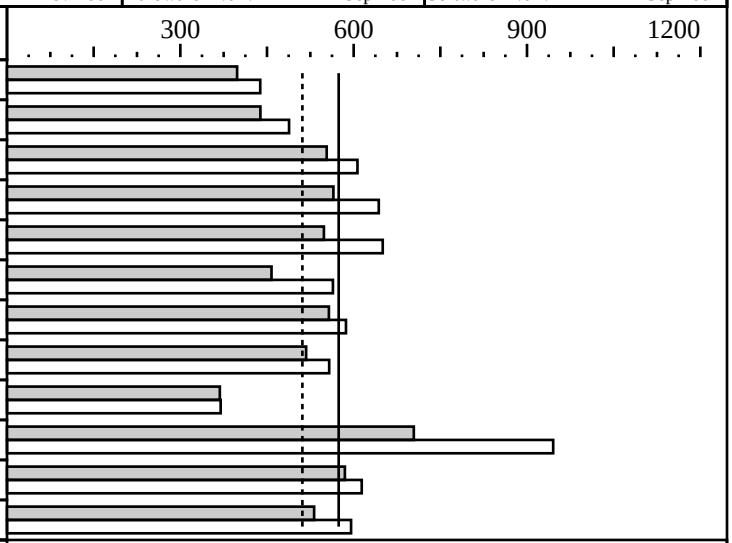
Sun Microsystems
Sun Fire 280R (1.015GHz)

SPECint2000 = 574

SPECint_base2000 = 511

SPEC license #: 6 | Tested by: Sun Microsystems, Santa Clara | Test date: Nov-2002 | Hardware Avail: Sep-2002 | Software Avail: Sep-2002

Benchmark	Reference Time	Base Runtime	Base Ratio	Runtime	Ratio
164.gzip	1400	352	398	319	438
175.vpr	1400	319	439	287	488
176.gcc	1100	199	553	181	607
181.mcf	1800	319	565	280	643
186.crafty	1000	182	548	154	650
197.parser	1800	393	458	319	564
252.eon	1300	233	557	222	587
253.perlbmk	1800	348	518	323	558
254.gap	1100	299	368	297	370
255.vortex	1900	270	704	201	945
256.bzip2	1500	257	585	244	614
300.twolf	3000	564	532	504	596



Hardware

CPU:	UltraSPARC III Cu
CPU MHz:	1015
FPU:	Integrated
CPU(s) enabled:	1 core, 1 chip, 1 core/chip
CPU(s) orderable:	1-2
Parallel:	No
Primary Cache:	32KBI+64KBD on chip
Secondary Cache:	8MB(I+D) off chip
L3 Cache:	None
Other Cache:	None
Memory:	8GB
Disk Subsystem:	2 x 18GB
Other Hardware:	None

Software

Operating System:	Solaris 8 02/02
Compiler:	Sun ONE Studio 7 and Sun Performance Library 7
File System:	ufs
System State:	Single-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:./feedback
 Pass 2: -xprofile=use:./feedback

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 -W2,-whole
```

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Notes/Tuning Information (Continued)

```
          -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 -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 -xprefetch=no%auto -xcrossfile -xregs=syst
          -Wc,-Qgsched-trace_late=1,-Qgsched-T4 -xalias_level=strong -Wc,-Qipa:valueprediction -xprofile
 252.eon: -fast -xcrossfile -xalias_level=compatible -xsafe=mem -Qoption iropt -Mt500,-xrestrict
          -Qoption cg -Qgsched-trace_late=1,-Qgsched-T4 -dn -lmopt -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
              -Wc,-Qiselect-sw_pf_tbl_th=20 -xprofile
 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 -ll2amm -lprism32 -xprofile
 256.bzip2: -fast -W2,-Abopt -xcrossfile -xalias_level=strong
            -Wc,-Qiselect-funcalign=32 -xregs=syst -xprofile
 300.twolf: -fast -xalias_level=strong -xsafe=mem -xcrossfile -xprefetch=no%auto
            -Wc,-Qms_pipe+intdivusefp -xprofile
ONESTEP=yes for all benchmarks in base and peak

Shell Environments:
 LD_LIBRARY_PATH=/usr/lib:/opt/SUNWspro/lib/v8plusb:/opt/SUNWspro/prod/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
 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 7th, 2002 were installed (111704-04, 111705-03,
 111706-02, 111708-01, 111709-02, 111714-02, 111715-01,
 111716-02, 111718-01, 111723-01, 108434-08, 108435-09,
 111697-03, 111721-02
```