CINT2000 Result

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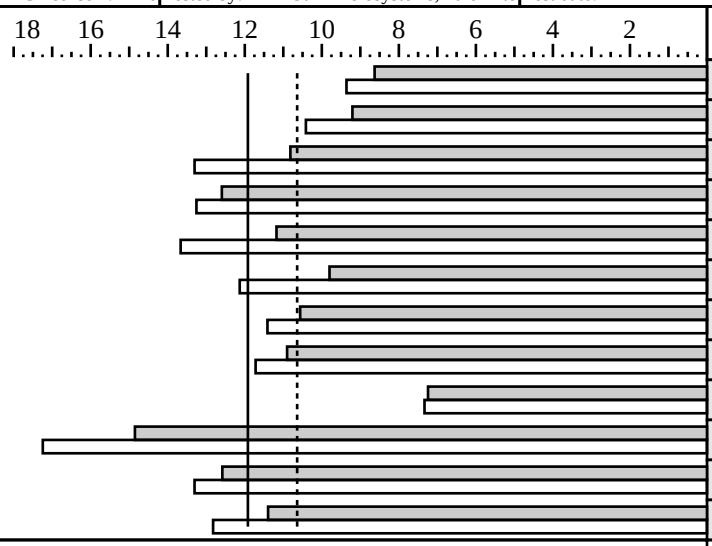
Sun Microsystems
Sun Fire 280R

SPECint_rate2000 = 11.9

SPECint_rate_base2000 = 10.6

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	376	8.63	2	347	9.36
175.vpr	2	353	9.21	2	312	10.4
176.gcc	2	236	10.8	2	192	13.3
181.mcf	2	332	12.6	2	315	13.3
186.crafty	2	208	11.2	2	170	13.7
197.parser	2	426	9.80	2	344	12.1
252.eon	2	286	10.6	2	264	11.4
253.perlbmk	2	383	10.9	2	356	11.7
254.gap	2	352	7.24	2	348	7.33
255.vortex	2	297	14.9	2	256	17.2
256.bzip2	2	277	12.6	2	262	13.3
300.twolf	2	611	11.4	2	543	12.8

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:	2 x 36GB
Other Hardware:	--

Software

Operating System:	Solaris 8 10/01
Compiler:	Forte Developer 7 EA 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 except for C benchmarks in fp base

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

Shell Environments:
 LD_LIBRARY_PATH=/usr/lib:/ForteD7/FD7/lib/v8plusb:/ForteD7/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 December 2001) at
    http://www.sun.com/servers/workgroup/280r/
```