CINT2000 Result

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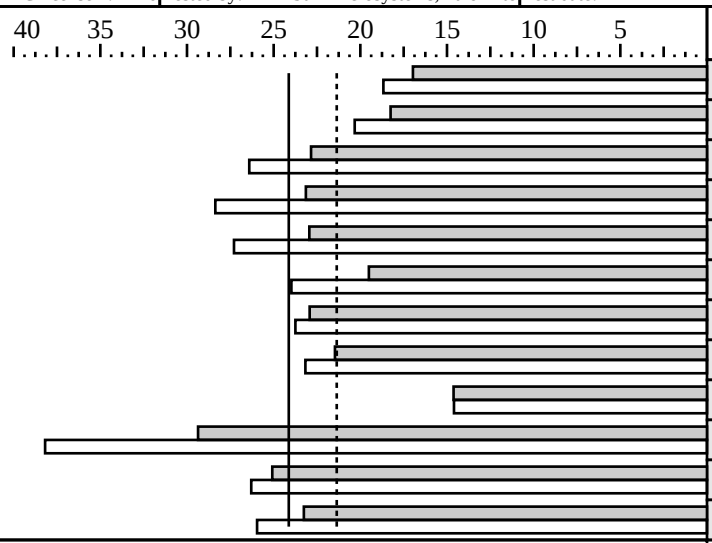
Sun Microsystems
Sun Fire V480

SPECint_rate2000 = 24.1

SPECint_rate_base2000 = 21.4

SPEC license #: 6 | Tested by: Sun Microsystems, Palo Alto | Test date: May-2002 | Hardware Avail: Jun-2002 | Software Avail: May-2002



Benchmark	Base Copies	Base Runtime	Base Ratio	Copies	Runtime	Ratio
164.gzip	4	383	17.0	4	348	18.7
175.vpr	4	356	18.3	4	320	20.3
176.gcc	4	223	22.8	4	193	26.4
181.mcf	4	361	23.1	4	294	28.4
186.crafty	4	202	22.9	4	170	27.3
197.parser	4	428	19.5	4	348	24.0
252.eon	4	263	22.9	4	254	23.7
253.perlbmk	4	389	21.5	4	360	23.2
254.gap	4	349	14.6	4	350	14.6
255.vortex	4	300	29.4	4	231	38.2
256.bzip2	4	278	25.1	4	265	26.3
300.twolf	4	598	23.3	4	536	26.0

Hardware

CPU:	UltraSPARC III Cu
CPU MHz:	900
FPU:	Integrated
CPU(s) enabled:	4 cores, 4 chips, 1 core/chip
CPU(s) orderable:	2,4
Parallel:	No
Primary Cache:	32KBI+64KBD on chip per CPU
Secondary Cache:	8MB(I+D) off chip per CPU
L3 Cache:	None
Other Cache:	None
Memory:	8GB
Disk Subsystem:	1 x 36GB + 1 x 18GB
Other Hardware:	None

Software

Operating System:	Solaris 8 02/02
Compiler:	Sun ONE Studio 7 with patch 111704-01 Sun Performance Library 7
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 -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 -Wc,-Qms_pipe-pref,-Qlp=1-fa=1-av=64-t=3-fl=1
```

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Notes/Tuning Information (Continued)

```
          -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 -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

System configuration details located (as of Jun 2002) at
    http://www.sun.com/servers/entry/
```