CINT2000 Result

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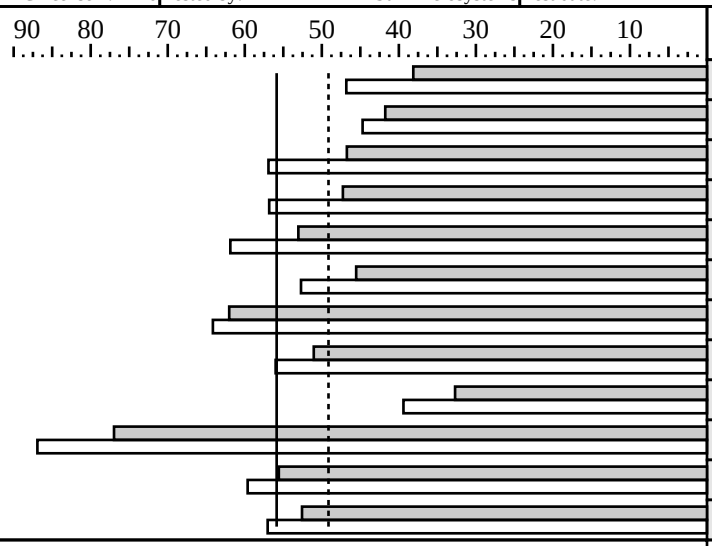
Sun Microsystems
Sun Fire V880 (1050MHz)

SPECint_rate2000 = 55.9

SPECint_rate_base2000 = 49.1

SPEC license #: 6 | Tested by: Sun Microsystems | Test date: Apr-2003 | Hardware Avail: May-2003 | Software Avail: May-2003



Benchmark	Base Copies	Base Runtime	Base Ratio	Copies	Runtime	Ratio
164.gzip	8	341	38.1	8	277	46.8
175.vpr	8	311	41.8	8	291	44.7
176.gcc	8	218	46.7	8	179	56.9
181.mcf	8	353	47.3	8	294	56.8
186.crafty	8	175	53.0	8	150	61.9
197.parser	8	367	45.5	8	317	52.7
252.eon	8	195	62.0	8	188	64.1
253.perlbmk	8	327	51.0	8	298	56.0
254.gap	8	312	32.7	8	259	39.4
255.vortex	8	229	77.0	8	203	86.9
256.bzip2	8	250	55.6	8	233	59.6
300.twolf	8	530	52.6	8	488	57.0

Hardware

CPU:	UltraSPARC III Cu
CPU MHz:	1050
FPU:	Integrated
CPU(s) enabled:	8 cores, 8 chips, 1 core/chip
CPU(s) orderable:	2,4,8
Parallel:	No
Primary Cache:	32KBI+64KBD on chip
Secondary Cache:	8MB(I+D) off chip
L3 Cache:	None
Other Cache:	None
Memory:	16GB 8-way interleaved
Disk Subsystem:	1 x 36GB
Other Hardware:	None

Software

Operating System:	Solaris 9 4/03
Compiler:	Sun ONE Studio 8 Sun Performance Library 8
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 -xipo=2 -ll2amm
 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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Notes/Tuning Information (Continued)

```
 197.parser:  -fast -xipo=2 -xalias_level=strong
              -Wc,-Qgsched-T6,-Qipa:valueprediction
 252.eon:     -fast -xipo=2 -xalias_level=compatible -noex
              -Qoption cg -Qeps:enabled=1,-Qeps:ws=32
 253.perlbmk: -xO5 -xtarget=native -xipo -xalias_level=std -xsafe=mem
              -Wc,-Qeps:enabled=1,-Qeps:ws=8,-Qiselect-sw_pf_tbl_th=20,
              -Qiselect-funcalign=32,-Qicache-chbab=1
 254.gap:     -fast -xipo=2 -xalias_level=strong -xvector
              -xprefetch_level=3 -W2,-Abcopy
 255.vortex:  -fast -xrestrict -xipo=2
              -W2,-crit,-Ainline:recursion=1:cs=500:irs=6000
              -Wc,-Qeps:enabled=1,-Qdepgraph-early_cross_call=1,
              -Qiselect-funcalign=32,-Qpeep-Sh0 -ll2amm
 256.bzip2:   -fast -xipo -xalias_level=strong -xrestrict
              -Wc,-Qeps:enabled=1
 300.twolf:   -fast -xalias_level=strong -xsafe=mem -xipo=2
              -xprefetch=no%auto -Wc,-Qms_pipe+intdivusefp

Feedback is done as follows, unless otherwise noted:
 fdo_pre0:  rm -rf ./feedback.profile ./SunWS_cache
 PASS1:     -xprofile=collect:./feedback
 PASS2:     -xprofile=use:./feedback

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

Shell Environments:
  Stack size set to unlimited via "ulimit -s unlimited"
  MPSSHEAP=4M
  MPSSSTACK=4M
  LD_PRELOAD=mpss.so.1

Kernel Parameters (/etc/system):
 set autoup=900
 set tune_t_fsflushr=1
```