CINT2000 Result

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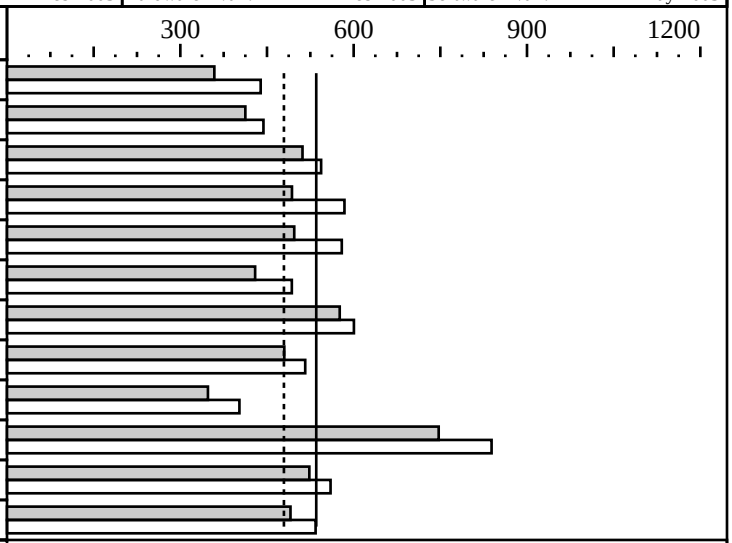
Sun Microsystems
Sun Fire V1280 (900MHz)

SPECint2000 = 535

SPECint_base2000 = 479

SPEC license #: 6 | Tested by: Sun Microsystems, Santa Clara | Test date: Feb-2003 | Hardware Avail: Feb-2003 | Software Avail: May-2003

Benchmark	Reference Time	Base Runtime	Base Ratio	Runtime	Ratio
164.gzip	1400	390	359	319	439
175.vpr	1400	339	413	315	444
176.gcc	1100	215	511	202	544
181.mcf	1800	365	493	308	584
186.crafty	1000	201	497	173	579
197.parser	1800	419	429	365	493
252.eon	1300	226	576	217	600
253.perlbmk	1800	375	480	349	516
254.gap	1100	316	348	273	402
255.vortex	1900	254	747	227	839
256.bzip2	1500	287	523	268	560
300.twolf	3000	611	491	562	534



Hardware

CPU:	UltraSPARC III Cu
CPU MHz:	900
FPU:	Integrated
CPU(s) enabled:	1 core, 1 chip, 1 core/chip
CPU(s) orderable:	4,8,12
Parallel:	No
Primary Cache:	32KBI+64KBD on chip
Secondary Cache:	8MB(I+D) off chip
L3 Cache:	None
Other Cache:	None
Memory:	2GB 4-way interleaved
Disk Subsystem:	2 x 36GB 10K RPM LVD Disk, Sun P/N XTA-3310-36GB-10K
Other Hardware:	None

Software

Operating System:	Solaris 9 9/02
Compiler:	Sun ONE Studio 8 (pre-FCS build 1/28) Sun Performance Library 8 (pre-FCS build 1/28)
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
  LD_LIBRARY_PATH=/usr/lib:/export/home/compilers/EA2-FCS
  /20030128_k2/lib/v8plusb:/export/home/compilers/EA2-FCS
  /20030128_k2/prod/lib/v8plusb
Kernel Parameters (/etc/system):
 autoup=900
 tune_t_fsflushr=1
System Settings:
Other CPUs disabled at the firmware level using
"disablecomponent" on the System Controller processor
running System Management Services software
```