CFP2000 Result

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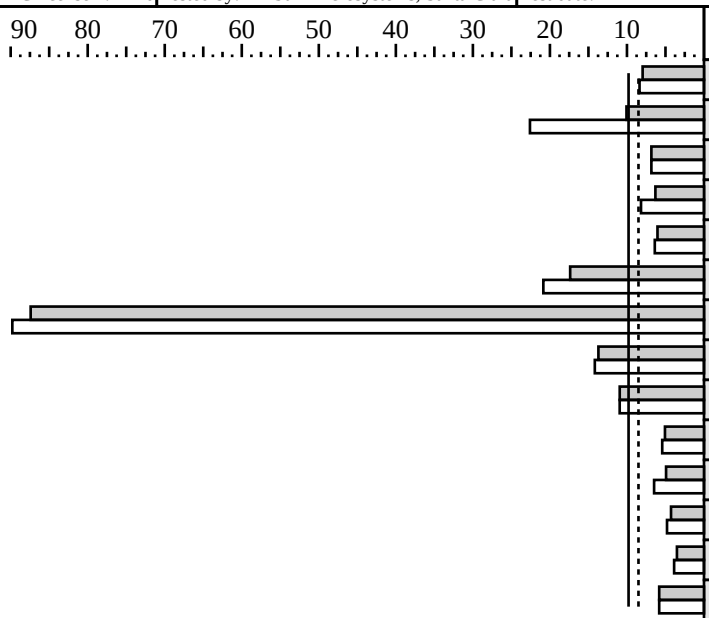
Sun Microsystems
Sun Fire V1280 (900MHz)

SPECfp_rate2000 = 9.79

SPECfp_rate_base2000 = 8.50

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



Benchmark	Base Copies	Base Runtime	Base Ratio	Copies	Runtime	Ratio
168.wupwise	1	233	7.97	1	222	8.37
171.swim	1	357	10.1	1	159	22.6
172.mgrid	1	306	6.83	1	306	6.83
173.applu	1	386	6.31	1	298	8.18
177.mesa	1	269	6.04	1	254	6.39
178.galgel	1	194	17.4	1	161	20.9
179.art	1	34.5	87.4	1	33.6	89.8
183.equake	1	110	13.7	1	106	14.2
187.facerec	1	201	10.9	1	201	10.9
188.ammp	1	504	5.07	1	471	5.42
189.lucas	1	471	4.92	1	358	6.48
191.fma3d	1	569	4.28	1	508	4.80
200.sixtrack	1	363	3.51	1	329	3.88
301.apsi	1	519	5.82	1	519	5.82

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

Floating point base flags:
    C:  -fast -xipo=2 -xalias_level=std with ONESTEP=yes and feedback
  F90:  -fast -xipo=2 with ONESTEP=yes and feedback

Floating point peak flags:
 ONESTEP=yes and feedback for all benchmarks, unless otherwise noted

 168.wupwise: -fast -xipo=2 -Qoption iropt -Ainline:inc=800:cp=1
 171.swim:    -fast -xpad=common:3969 -xpagesize=64K -xprefetch=latx:1.6
              -Qoption iropt -Atile:skewp,-Ainline:cs=700
              (no feedback)
```

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Notes/Tuning Information (Continued)

```
 172.mgrid:   -fast -xipo=2
 173.applu:   -fast -xipo=2
              -Qoption cg -Qlp=1-av=192-fa=1,-Qms_pipe+prefolim=7
              -Qoption iropt -Aujam:inner=g
 177.mesa:    -fast -xipo=2 -xalias_level=strong -xrestrict
              -Wc,-Qms_pipe+unoovf
 178.galgel:  -fast -xipo=2 -Qoption iropt -Addint:sf=9 -xlic_lib=sunperf
              RM_SOURCES=lapak.f90
 179.art:     -fast -xipo=2 -xalias_level=std
              -Wc,-Qms_pipe-prefst,-Qms_pipe+prefolim=11
 183.equake:  -fast -xipo=2 -xalias_level=strong -xprefetch_level=2
 187.facerec: -fast -xipo=2
 188.ammp:    -fast -xipo=2 -xalias_level=std -xpagesize=512K -lmopt -lm
 189.lucas:   -fast -xipo=2 -xprefetch_level=3 -Qoption iropt -Apf:pdl=1
              -Qoption f90comp -array_pad_rows,1977
 191.fma3d:   -fast -xipo=2 -stackvar -xprefetch_level=3
              -Qoption iropt -Apf:pdl=1
 200.sixtrack:-O -dalign -xchip=ultra3 -xarch=v8plusb -fsimple=2
 301.apsi:    -fast -xipo=2

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:
 178.galgel:  -e -fixed

Shell Environments:
  Stack size set to unlimited via "ulimit -s unlimited"
  MPSSHEAP=512K
  MPSSSTACK=512K
  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
```