CFP2000 Result

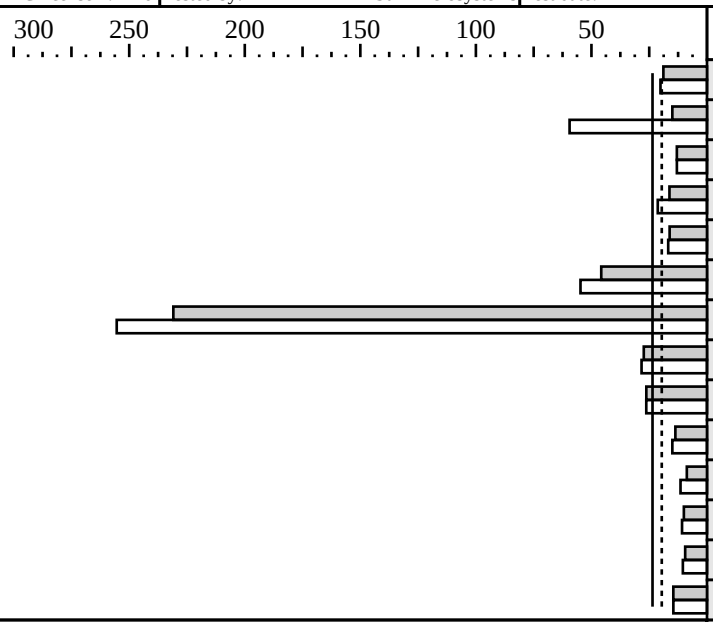
Copyright ©1999-2004, Standard Performance Evaluation Corporation

Sun Microsystems
Sun Fire 280R (1200 MHz)

SPECfp_rate2000 = 23.6

SPECfp_rate_base2000 = 19.6

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



Benchmark	Base Copies	Base Runtime	Base Ratio	Copies	Runtime	Ratio
168.wupwise	2	197	18.9	2	184	20.1
171.swim	2	480	15.0	2	121	59.5
172.mgrid	2	320	13.0	2	320	13.0
173.applu	2	300	16.2	2	229	21.3
177.mesa	2	201	16.2	2	194	16.8
178.galgel	2	147	45.8	2	123	54.7
179.art	2	26.1	231	2	23.6	255
183.equake	2	110	27.4	2	107	28.3
187.facerec	2	168	26.3	2	168	26.3
188.ammp	2	373	13.7	2	340	15.0
189.lucas	2	532	8.73	2	405	11.5
191.fma3d	2	487	10.0	2	451	10.8
200.sixtrack	2	270	9.44	2	244	10.4
301.apsi	2	414	14.6	2	414	14.6

Hardware

CPU:	UltraSPARC III Cu
CPU MHz:	1200
FPU:	Integrated
CPU(s) enabled:	2 cores, 2 chips, 1 core/chip
CPU(s) orderable:	1-2
Parallel:	No
Primary Cache:	32KBI+64KBD on chip
Secondary Cache:	8MB(I+D) off chip
L3 Cache:	None
Other Cache:	None
Memory:	4GB 4-way interleaved
Disk Subsystem:	2 x 18GB SEAGATE ST318304FC
Other Hardware:	None

Software

Operating System:	Solaris 9 4/03
Compiler:	Sun ONE Studio 8 (pre-FCS build 3/9) Sun Performance Library 8 (pre-FCS build 3/9)
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)
```

Copyright ©1999-2004, Standard Performance Evaluation Corporation

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

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