CFP2000 Result

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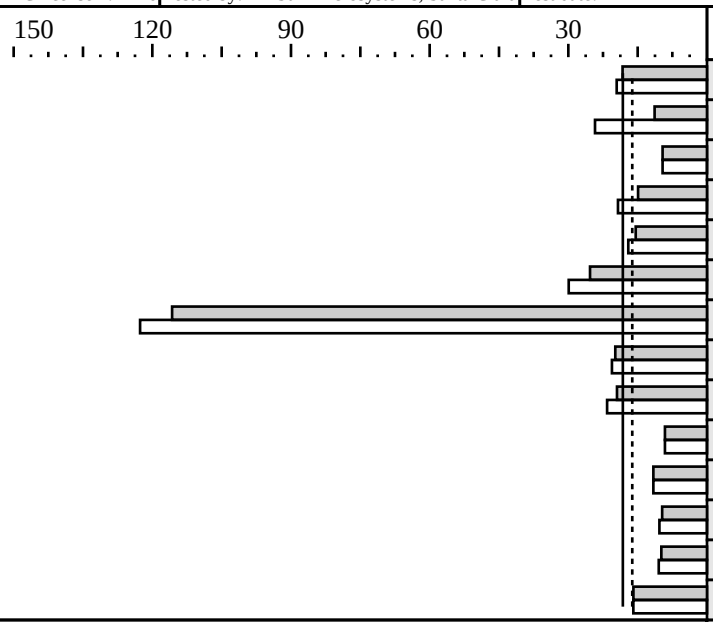
Sun Microsystems
Sun Fire V240 (1.28GHz)

SPECfp_rate2000 = 18.2

SPECfp_rate_base2000 = 16.2

SPEC license #: 6 | Tested by: Sun Microsystems, Santa Clara | Test date: Sep-2003 | Hardware Avail: Jan-2004 | Software Avail: May-2003



Benchmark	Base Copies	Base Runtime	Base Ratio	Copies	Runtime	Ratio
168.wupwise	2	203	18.3	2	190	19.5
171.swim	2	634	11.3	2	297	24.2
172.mgrid	2	435	9.61	2	435	9.61
173.applu	2	327	14.9	2	253	19.3
177.mesa	2	211	15.4	2	191	17.0
178.galgel	2	266	25.3	2	225	29.9
179.art	2	52.1	116	2	49.2	123
183.equake	2	152	19.8	2	147	20.6
187.facerec	2	226	19.5	2	204	21.6
188.ammp	2	561	9.10	2	561	9.10
189.lucas	2	400	11.6	2	400	11.6
191.fma3d	2	502	9.70	2	473	10.3
200.sixtrack	2	258	9.88	2	244	10.4
301.apsi	2	379	15.9	2	379	15.9

Hardware

CPU:	UltraSPARC IIIi
CPU MHz:	1280
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:	1MB(I+D) on chip
L3 Cache:	None
Other Cache:	None
Memory:	8GB 16-way interleaved
Disk Subsystem:	1 x 36GB SEAGATE ST336607LSUN36G
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

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:384 -xprefetch=latx:1.6
              -Qoption iropt -Atile:skewp:b6,-Ainline:cs=700
              (no feedback)
```

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Notes/Tuning Information (Continued)

```
 172.mgrid:   basepeak=yes
 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 -xprefetch=latx:1.5
 183.equake:  -fast -xipo=2 -xalias_level=strong -xprefetch_level=2
 187.facerec: -fast -xipo=2 -xprefetch=latx:1.5
 188.ammp:    basepeak=yes
 189.lucas:   basepeak=yes
 191.fma3d:   -fast -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):
 autoup=900
 tune_t_fsflushr=1
```