CFP2000 Result

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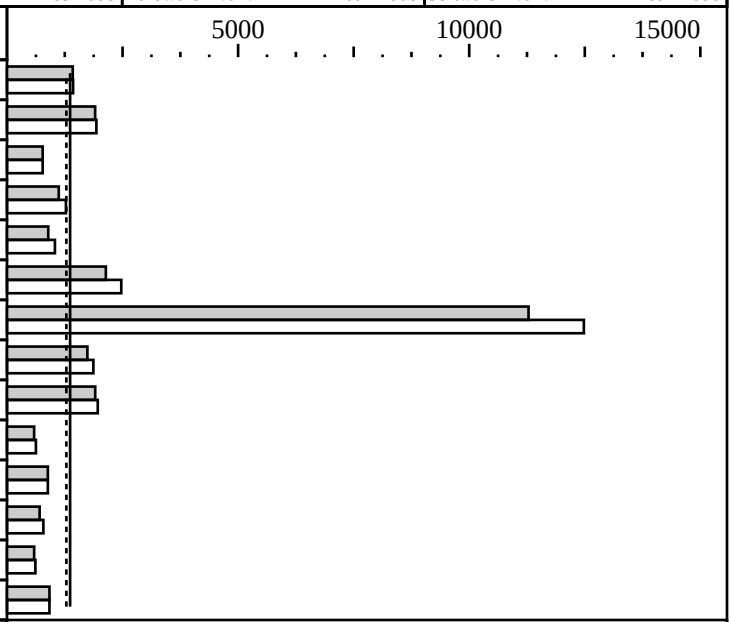
Sun Microsystems
Sun Ultra 45

SPECfp2000 = 1365

SPECfp_base2000 = 1284

SPEC license #: 6 | Tested by: Sun Microsystems | Test date: Feb-2006 | Hardware Avail: Jan-2006 | Software Avail: Jan-2006

Benchmark	Reference Time	Base Runtime	Base Ratio	Runtime	Ratio
168.wupwise	1600	112	1422	112	1430
171.swim	3100	163	1907	160	1934
172.mgrid	1800	233	772	233	772
173.applu	2100	188	1120	165	1275
177.mesa	1400	157	893	135	1037
178.galgel	2900	136	2139	117	2472
179.art	2600	23.0	11283	20.8	12480
183.equake	1300	74.8	1739	69.6	1869
187.facerec	1900	99.6	1908	96.8	1964
188.ammp	2200	375	587	352	626
189.lucas	2000	226	884	226	884
191.fma3d	2100	298	706	267	787
200.sixtrack	1100	187	587	179	614
301.apsi	2600	283	919	283	918



Hardware

CPU:	UltraSPARC IIIi
CPU MHz:	1600
FPU:	Integrated
CPU(s) enabled:	1 core, 1 chip, 1 core/chip
CPU(s) orderable:	1,2 (order by # of chips)
Parallel:	No
Primary Cache:	32KBI+64KBD per chip (on chip)
Secondary Cache:	1MB(I+D) per chip (on chip)
L3 Cache:	None
Other Cache:	None
Memory:	8GB(4x2GB DIMMs)
Disk Subsystem:	SATA,250GB,7200 RPM
Other Hardware:	None

Software

Operating System:	Solaris 10 1/06
Compiler:	Sun Studio 11
File System:	ufs (default ufs logging on with Solaris 10)
System State:	Multi-User

Notes/Tuning Information

```
Compiler invocation:
  C: 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)
 172.mgrid: basepeak = yes
```

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Notes/Tuning Information (Continued)

```
 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
               EXTRALIBS=-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:     -fast -xarch=v9b -xipo=2 -xalias_level=std -lmopt -lm
 189.lucas:    basepeak=yes
 191.fma3d:    -fast -xipo=2 -stackvar -xprefetch_level=3
               -Qoption iropt -Apf:pdl=1
               -xO4 -dalign -xchip=ultra3 -xarch=v8plusb -fsimple=2 -xprefetch=no
 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:  -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

System was tested in 1 CPU configuration.
```