CFP2000 Result

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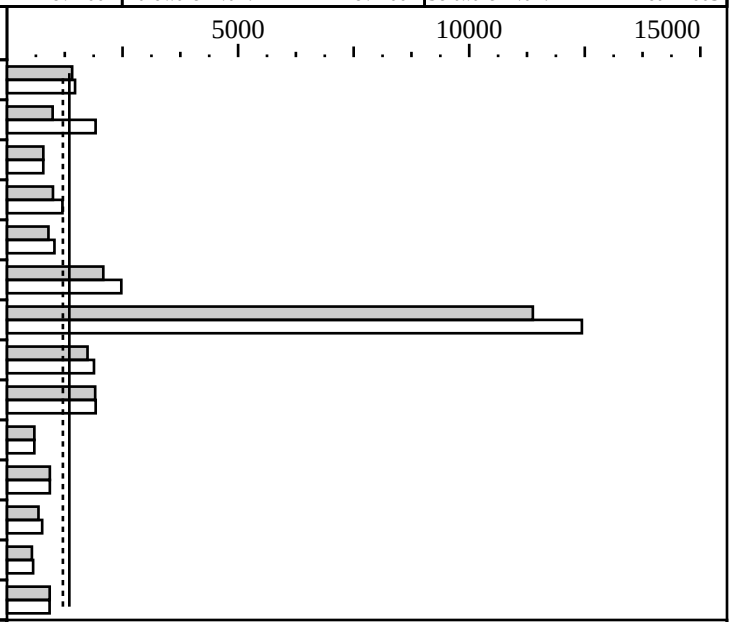
Sun Microsystems
Sun Fire V440 (1600MHz)

SPECfp2000 = 1349

SPECfp_base2000 = 1209

SPEC license #: 6 | Tested by: Sun Microsystems | Test date: Nov-2004 | Hardware Avail: Nov-2004 | Software Avail: Jan-2005

Benchmark	Reference Time	Base Runtime	Base Ratio	Runtime	Ratio
168.wupwise	1600	114	1410	109	1472
171.swim	3100	314	987	162	1917
172.mgrid	1800	229	786	229	785
173.applu	2100	211	994	175	1200
177.mesa	1400	156	897	136	1027
178.galgel	2900	139	2083	117	2473
179.art	2600	22.9	11377	20.9	12438
183.equake	1300	74.6	1742	69.1	1882
187.facerec	1900	99.6	1908	99.0	1919
188.ammp	2200	372	592	372	591
189.lucas	2000	216	927	216	927
191.fma3d	2100	308	681	276	761
200.sixtrack	1100	204	539	195	565
301.apsi	2600	282	923	282	921



Hardware

CPU:	UltraSPARC IIIi
CPU MHz:	1600
FPU:	Integrated
CPU(s) enabled:	1 core, 1 chip, 1 core/chip
CPU(s) orderable:	2,4
Parallel:	No
Primary Cache:	32KBI+64KBD on chip
Secondary Cache:	1MB(I+D) on chip
L3 Cache:	None
Other Cache:	None
Memory:	4GB 16-way interleaved
Disk Subsystem:	1 x 73GB
Other Hardware:	None

Software

Operating System:	Solaris 10
Compiler:	Sun Studio 9
File System:	ufs
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:   -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 -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 -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
 200.sixtrack:-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:  -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
System Settings:
 Other CPUs disabled at boot time by using /etc/system
 parameter "cpu_bringup_set"
 Used asr to disable the memories on unused CPUs.
```