



CFP2000 Result

Copyright ©1999-2004, Standard Performance Evaluation Corporation

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.quake | 1 | 110 | 13.7 | 1 | 106 | 14.2 |
| 187.facerec | 1 | 201 | 10.9 | 1 | 201 | 10.9 |
| 188.amp | 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)



CFP2000 Result

Copyright ©1999-2004, Standard Performance Evaluation Corporation

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

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.quake: -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