



CFP2000 Result

Copyright ©1999-2004, Standard Performance Evaluation Corporation

Sun Microsystems
Sun Netra 20 (900MHz)

SPECfp_rate2000 = 14.9
SPECfp_rate_base2000 = 13.4

SPEC license #: 6 Tested by: Sun Microsystems, Palo Alto Test date: May-2002 Hardware Avail: Jun-2002 Software Avail: May-2002

Benchmark	Base Copies	Base Runtime	Base Ratio	Copies	Runtime	Ratio
168.wupwise	2	287	12.9	2	287	12.9
171.swim	2	550	13.1	2	550	13.1
172.mgrid	2	512	8.15	2	512	8.15
173.applu	2	781	6.24	2	395	12.3
177.mesa	2	282	11.5	2	276	11.8
178.galgel	2	203	33.1	2	167	40.2
179.art	2	31.2	193	2	31.2	193
183.equake	2	234	12.9	2	162	18.7
187.facerec	2	241	18.3	2	241	18.3
188.amp	2	493	10.3	2	513	9.95
189.lucas	2	617	7.51	2	491	9.44
191.fma3d	2	634	7.69	2	578	8.43
200.sixtrack	2	436	5.85	2	436	5.85
301.apsi	2	547	11.0	2	544	11.1

Hardware

CPU: UltraSPARC III Cu
CPU MHz: 900
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: 2GB
Disk Subsystem: 1 x 36GB
Other Hardware: None

Software

Operating System: Solaris 9
Compiler: Sun ONE Studio 7 with patch 111704-01
Sun Performance Library 7
File System: ufs
System State: Single-User

Notes/Tuning Information

Portability:
178.galgel: -e -fixed

-xprofile: PASS1=-xprofile=collect, PASS2=-xprofile=use

Base Flags:
Base C flags: -fast -xipo=2 -xalias_level=std -xprofile
Base F90 flags: -fast -xcrossfile -lprism32 -xprofile

Peak Flags:
168.wupwise: basepeak=yes
171.swim: basepeak=yes
172.mgrid: basepeak=yes
173.applu: -fast -Qoption iropt -Adata_access,-Mt7000,-Mm14000,-Mr40000,-Ma400,-whole
-xregs=syst -Qoption iropt -Rscalarrep,-MR -Qoption cg -Qlp=1-av=192-fa=1
-Qoption f90comp -O3



CFP2000 Result

Copyright ©1999-2004, Standard Performance Evaluation Corporation

Sun Microsystems
Sun Netra 20 (900MHz)

SPECfp_rate2000 = 14.9
SPECfp_rate_base2000 = 13.4

SPEC license #: 6 | Tested by: Sun Microsystems, Palo Alto | Test date: May-2002 | Hardware Avail: Jun-2002 | Software Avail: May-2002

Notes/Tuning Information (Continued)

```
177.mesa: -fast -xcrossfile -xalias_level=strong -xprofile
178.galgel: -fast -xcrossfile -xregs=syst -Qoption iropt -Addint:sf=9 -xlic_lib=sunperf -lsunperf -xprofile
179.art: basepeak=yes
183.quake: -fast -xalias_level=strong -W2,-whole,-Amemopt:arrayloc
          -Wc,-Qms_pipe-pref,-Qlp=1-av=256-t=4-fa=1-fl=1 -lprism32 -lmopt -xprofile
187.facerec: basepeak=yes
188.amp: -fast -xcrossfile -xalias_level=std -lprism32 -xprofile
189.lucas: -fast -Qoption f90comp -array_pad_rows,2002 -Qoption iropt -whole
          -Qoption cg -Qms_pipe-pref,-Qlp=1-t=3-fa=1
          -lprism32 -xprofile
191.fma3d: -fast -xcrossfile -stackvar -Qoption cg -Qlp=1-av=256-t=3-fa=1 -xprofile
200.sixtrack: basepeak=yes
301.apsi: -fast -Qoption iropt -Mt450 -lprism32 -xprofile
ONESTEP=yes for all benchmarks in peak and Fortran benchmarks in base
```

Shell Environments:

```
LD_LIBRARY_PATH=/usr/lib:/opt/SUNWspro/lib/v8plusb:/opt/SUNWspro/prod/lib/v8plusb
PRISM_HEAP=268435456
PRISM_MODE=2
```

Stack size set to unlimited via "ulimit -s unlimited"

Kernel Parameters (/etc/system):

```
set shmsys:shminfo_shmmin=1
set shmsys:shminfo_shmmax=1477846784
set shmsys:shminfo_shmmni=256
set shmsys:shminfo_shmseg=400
```

System configuration details located (as of Jun 2002) at
<http://www.sun.com/servers/nebs/>