



CFP2000 Result

Copyright ©1999-2004, Standard Performance Evaluation Corporation

Sun Microsystems
Sun Fire 4800

SPECfp_rate2000 = 86.3

SPECfp_rate_base2000 = 70.1

SPEC license #: 6 Tested by: Sun Microsystems Test date: Apr-2003 Hardware Avail: Mar-2003 Software Avail: May-2003

Benchmark	Base Copies	Base Runtime	Base Ratio	Copies	Runtime	Ratio
168.wupwise	8	218	68.1	8	203	73.2
171.swim	8	611	47.1	8	136	211
172.mgrid	8	376	44.5	8	368	45.4
173.applu	8	338	57.6	8	252	77.5
177.mesa	8	210	61.9	8	197	66.0
178.galgel	8	156	173	8	129	208
179.art	8	29.2	827	8	27.0	893
183.quake	8	130	92.6	8	127	95.2
187.facerec	8	170	104	8	171	103
188.amp	8	468	43.6	8	372	54.9
189.lucas	8	574	32.4	8	470	39.5
191.fma3d	8	548	35.6	8	490	39.7
200.sixtrack	8	286	35.7	8	251	40.7
301.apsi	8	436	55.4	8	436	55.4

Hardware

CPU: UltraSPARC III Cu
 CPU MHz: 1200
 FPU: Integrated
 CPU(s) enabled: 8 cores, 8 chips, 1 core/chip
 CPU(s) orderable: 4-12
 Parallel: No
 Primary Cache: 32KBI+64KBD on chip
 Secondary Cache: 8MB(I+D) off chip
 L3 Cache: None
 Other Cache: None
 Memory: 16GB 16-way interleaved
 Disk Subsystem: 2 x 36GB
 4 x (Sun StorEdge T3, 9x18GB raid5)
 4-way striped
 Other Hardware: None

Software

Operating System: Solaris 9 12/02
 Compiler: Sun ONE Studio 8 (pre-FCS build 3/9)
 Sun Performance Library 8 (pre-FCS build 3/9)
 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



CFP2000 Result

Copyright ©1999-2004, Standard Performance Evaluation Corporation

Sun Microsystems
Sun Fire 4800

SPECfp_rate2000 = 86.3

SPECfp_rate_base2000 = 70.1

SPEC license #: 6 | Tested by: Sun Microsystems | Test date: Apr-2003 | Hardware Avail: Mar-2003 | Software Avail: May-2003

Notes/Tuning Information (Continued)

```

-Qoption iropt -Atile:skewp,-Ainline:cs=700
(no feedback)
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.earthquake: -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=4M
MPSSSTACK=4M
LD_PRELOAD=mpss.so.1

```

Kernel Parameters (/etc/system):

```

autoup=900
tune_t_fsflushr=1

```

Processes were bound to CPUs using submit=pbind

The benchmark was run on the Sun StorEdge T3 disk resident file system.