



CFP2000 Result

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Fujitsu Limited
PRIMEPOWER250 (1870MHz)

SPECfp2000 = 1924

SPECfp_base2000 = 1670

SPEC license #: 19 Tested by: Fujitsu Limited Test date: Feb-2005 Hardware Avail: Feb-2005 Software Avail: Sep-2004

Benchmark	Reference Time	Base Runtime	Base Ratio	Runtime	Ratio
168.wupwise	1600	113	1417	101	1581
171.swim	3100	218	1424	91.3	3394
172.mgrid	1800	168	1070	153	1180
173.applu	2100	147	1426	120	1743
177.mesa	1400	133	1056	108	1299
178.galgel	2900	80.1	3622	64.4	4501
179.art	2600	12.3	21129	12.3	21136
183.earth	1300	57.2	2274	51.7	2517
187.facerec	1900	73.1	2599	71.5	2657
188.amp	2200	195	1128	180	1220
189.lucas	2000	183	1095	178	1122
191.fma3d	2100	220	956	208	1011
200.sixtrack	1100	176	626	176	626
301.apsi	2600	216	1204	216	1204

Hardware

CPU: SPARC64 V
CPU MHz: 1870
FPU: Integrated
CPU(s) enabled: 1 core, 1 chip, 1 core/chip
CPU(s) orderable: 1 to 2 (increments of 1)
Parallel: None
Primary Cache: 128KBI + 128KBD on chip
Secondary Cache: 3MB(I+D) on chip
L3 Cache: None
Other Cache: None
Memory: 8192MB
Disk Subsystem: 1 x 36.4GB SCSI (10000rpm)
Other Hardware: None

Software

Operating System: Solaris 9 9/04
Compiler: (Fortran)
Fujitsu Parallelnavi 2.3 with patch 913221-03
Sun Studio 9
Sun Performance Library 9
(C/C++)
Sun Studio 9
File System: ufs
System State: multi user

Notes/Tuning Information

```
FDO: (for Parallelnavi 2.3)
fdo_pre0=rm -rf `pwd`/*.f.d
PASS1=-Kpg
PASS2=-Kpu
FDO: (for Sun Studio 9)
fdo_pre0=rm -rf ./feedback.profile ./SunWS_cache
PASS1=-xprofile=collect:./feedback
PASS2=-xprofile=use:./feedback
```

```
Floating point base flags:
(using Fortran compiler of Sun Studio 9)
-fast -xtarget=ultra3cu -xipo=2 ONESTEP=yes FDO
(using C compiler of Sun Studio 9)
-fast -xtarget=ultra3 -xipo=2 ONESTEP=yes FDO
```

Floating point peak flags:



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Notes/Tuning Information (Continued)

(using Fortran compiler of Parallelnavi 2.3)

```

168.wupwise: -Kfast_GP2=3,prefetch_infer,alignl=64,unroll=4,
             prefetch_cache_level=3 -O5 -x dir=./ FDO
172.mgrid:   -Kfast_GP2=2,GREG_SYSTEM -O4 -Kcommonpad=180,alignc=64
189.lucas:   -Kfast_GP2=3 -O5 -x dir=./ -Kunroll=2,prefetch_infer FDO
191.fma3d:   -Am -Kfast_GP2=3,GREG_SYSTEM -O4 -x dir=./ -x70
             -Kprefetch_infer FDO

```

(using Fortran compiler of Sun Studio 9)

```

171.swim:    -fast -xarch=v8plusb -xchip=ultra3cu -xcache=128/64/2:4096/64/4
             -xpad=common:1700 -Qoption iropt -Ainline:cs=700,Atile:skewp:b10
             ONESTEP=yes
173.applu:   -fast -xarch=v8plusb -xchip=ultra3cu -xcache=128/64/2:4096/64/4
             -xipo=2 -Qoption cg -Qlp=1-av=192-t=4-fa=1-fl=0
             -Qoption iropt -Aujam:inner=g ONESTEP=yes FDO
178.galgel:  -fast -xarch=v8plusb -xchip=ultra3cu -xcache=128/64/2:4096/64/4
             -xipo=2 -Qoption iropt -Addint:sf=9 -xlic_lib=sunperf
             RM_SOURCES=lapak.f90 ONESTEP=yes FDO
187.facerec: -fast -xarch=v8plusb -xchip=ultra3cu -xcache=128/64/2:4096/64/4
             -xprefetch=latx:1.6 ONESTEP=yes FDO
200.sixtrack: basepeak=yes
301.apsi:    basepeak=yes

```

(using C compiler of Sun Studio 9)

```

177.mesa:    -fast -xarch=v8plusb -xchip=ultra3cu -xcache=128/64/2:4096/64/4
             -xchip=ultra2 -xalias_level=strong -xipo=2 -xrestrict
             ONESTEP=yes FDO
179.art:     -fast -xarch=v8plusb -xchip=ultra3cu -xcache=128/64/2:4096/64/4
             -xipo=2 ONESTEP=yes FDO
183.quake:   -fast -xarch=v8plusb -xchip=ultra3cu -xcache=128/64/2:4096/64/4
             -xalias_level=strong -W2,-whole -Wc,-Qms_pipe-pref,
             -Qlp=1-av=512-t=6-fa=1-fl=1 -lmopt -lm ONESTEP=yes FDO
188.ammp:    -fast -xalias_level=std -xipo=2 -lmopt -lm ONESTEP=yes FDO

```

Portability:

178.galgel: -e -fixed

System Tunables:

(for /etc/system)

```

set consistent_coloring=1
set tune_t_fsflushr=86400
set autoup=86400

```

Shell Environments:

```

Stack size set to unlimited via "ulimit -s unlimited"
MPSSHEAP=4M
MPSSSTACK=4M
LD_PRELOAD=mpss.so.1

```

System board used with only ONE CPU present.

Sun Studio 9, posted at URL <http://www.sun.com/software/products/studio/previous/9/index.xml> was used for this submission.