



CFP2000 Result

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Fujitsu Limited
PRIMEPOWER450 (1650MHz)

SPECfp2000 = 1855
SPECfp_base2000 = 1717

SPEC license #: 19 Tested by: Fujitsu Limited Test date: Dec-2005 Hardware Avail: Feb-2006 Software Avail: Nov-2005

Benchmark	Reference Time	Base Runtime	Base Ratio	Runtime	Ratio
168.wupwise	1600	112	1432	112	1435
171.swim	3100	116	2677	86.1	3599
172.mgrid	1800	153	1174	149	1209
173.applu	2100	146	1436	131	1607
177.mesa	1400	153	917	124	1125
178.galgel	2900	84.6	3428	70.2	4129
179.art	2600	13.0	20070	12.9	20080
183.earthquake	1300	54.8	2373	50.7	2562
187.facerec	1900	75.8	2506	74.1	2565
188.amp	2200	222	990	192	1146
189.lucas	2000	168	1188	168	1192
191.fma3d	2100	216	973	216	973
200.sixtrack	1100	181	607	181	607
301.apsi	2600	225	1155	225	1155

Hardware

CPU: SPARC64 V
CPU MHz: 1650
FPU: Integrated
CPU(s) enabled: 1 core, 1 chip, 1 core/chip
CPU(s) orderable: 1 to 4 (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: 16GB (1GB x 16)
Disk Subsystem: 1 x 36.4GB SCSI (10000rpm)
Other Hardware: None

Software

Operating System: Solaris 10
Compiler: Sun Studio 11
File System: ufs
System State: multi user

Notes/Tuning Information

```
FDO: (for Sun Studio 11)
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 11)
-fast -xtarget=ultra3cu -xipo=2 ONESTEP=yes FDO
(using C compiler of Sun Studio 11)
-fast -xtarget=ultra3 -xipo=2 ONESTEP=yes FDO
```

```
Floating point peak flags:
(using Fortran compiler of Sun Studio 11)
168.wupwise: -fast -xarch=v8plusb -xchip=ultra3cu -xcache=128/64/2:4096/64/4
-xipo=1 -Qoption iropt -Ainline:inc=800:cp=1 ONESTEP=yes FDO
171.swim: -fast -xarch=v8plusb -xchip=ultra3cu -xcache=128/64/2:4096/64/4
```



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Notes/Tuning Information (Continued)

```

-xprefetch=latx:2.8 -Qoption iropt
-Ainline:cs=700,-Atile:skewp:b19 -xpad=common:1500
172.mgrid: -fast -xarch=v8plusb -xchip=ultra3cu -xcache=128/64/2:4096/64/4
           -stackvar -xipo=2 -xpad=common:800 -xprefetch=latx:1.6
           ONESTEP=yes FDO
173.applu: -fast -xarch=v8plusb -xchip=ultra3cu -xcache=128/64/2:4096/64/4
           -stackvar -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
189.lucas: -fast -xarch=v8plusb -xchip=ultra3cu -xcache=128/64/2:4096/64/4
           -stackvar -xipo=2 ONESTEP=yes FDO
191.fma3d: -fast -xarch=v8plusb -xchip=ultra3cu -xcache=128/64/2:4096/64/4
           -xipo=2 ONESTEP=yes FDO
200.sixtrack: basepeak=yes
301.apsi: basepeak=yes

```

(using C compiler of Sun Studio 11)

```

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 ONESTEP=yes FDO
188.ammp: -fast -xalias_level=std -xipo=2 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 11, posted at URL <http://www.sun.com/software/products/studio/index.xml> was used for this submission.