CFP2000 Result

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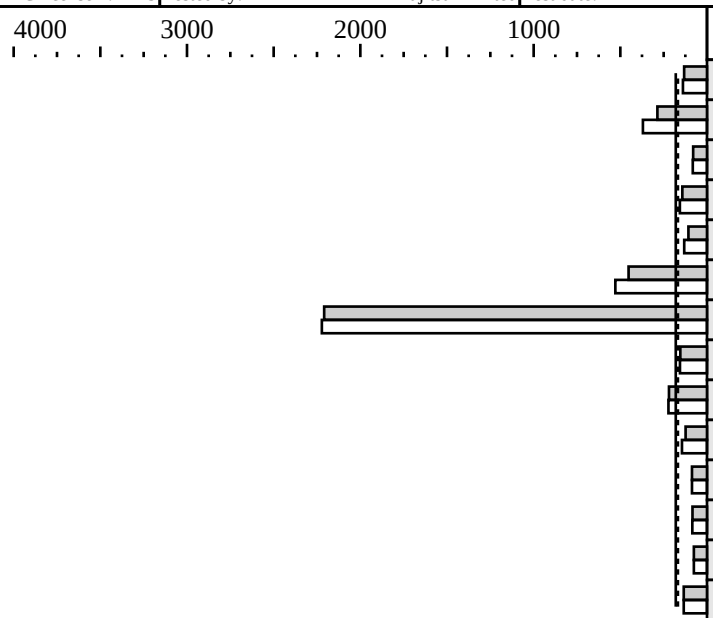
Fujitsu Limited
PRIMEPOWER900 (2160MHz)

SPECfp_rate2000 = 180

SPECfp_rate_base2000 = 168

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



Benchmark	Base Copies	Base Runtime	Base Ratio	Copies	Runtime	Ratio
168.wupwise	8	113	132	8	107	139
171.swim	8	101	286	8	77.8	370
172.mgrid	8	209	79.8	8	204	82.0
173.applu	8	137	142	8	124	157
177.mesa	8	121	107	8	98.9	131
178.galgel	8	59.5	452	8	50.9	529
179.art	8	10.9	2209	8	10.9	2222
183.equake	8	78.4	154	8	77.4	156
187.facerec	8	80.4	219	8	79.3	222
188.ammp	8	165	123	8	141	144
189.lucas	8	214	86.6	8	214	86.6
191.fma3d	8	233	83.7	8	230	84.6
200.sixtrack	8	135	75.8	8	135	75.8
301.apsi	8	180	134	8	180	134

Hardware

CPU:	SPARC64 V
CPU MHz:	2160
FPU:	Integrated
CPU(s) enabled:	8 cores, 8 chips, 1 core/chip
CPU(s) orderable:	1 to 16 (increments of 1)
Parallel:	None
Primary Cache:	128KBI + 128KBD on chip
Secondary Cache:	4MB(I+D) on chip
L3 Cache:	None
Other Cache:	None
Memory:	32GB (512MB x 64)
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.equake: -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
          set memscrub_period_sec=172800

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

    Procceses were bound to CPUs using "submit=pbind"

    Extended Interleave Mode enabled.

    4 CPUs each on 2 system board. Unused CPUs have physically removed.

    Sun Studio 11, posted at URL http://www.sun.com/software/products/studio/index.xml
    was used for this submission.
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Notes/Tuning Information (Continued)

Model PRIMEPOWER850 (2160MHz) and model PRIMEPOWER900 (2160MHz) are electronically equivalent. This result was measured on model PRIMEPOWER900 (2160MHz).