CFP2000 Result

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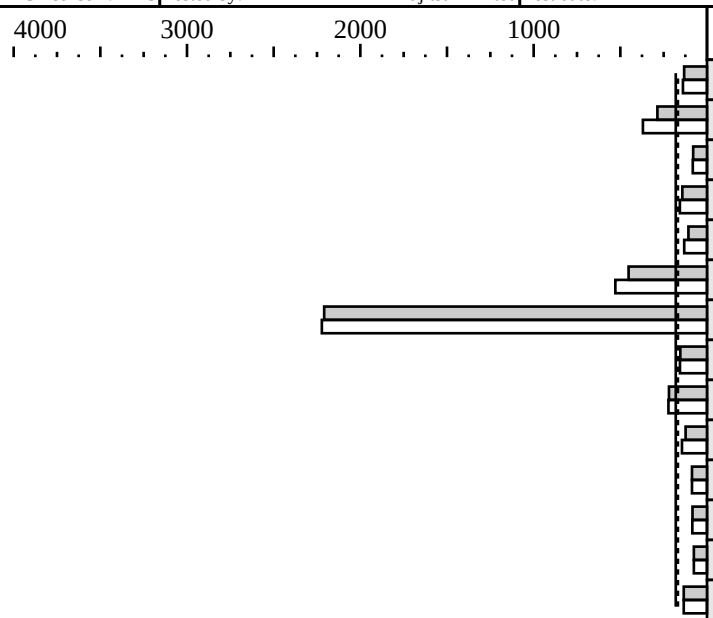
Fujitsu Limited
PRIMEPOWER850 (2160MHz)

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)

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                -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).