CFP2000 Result

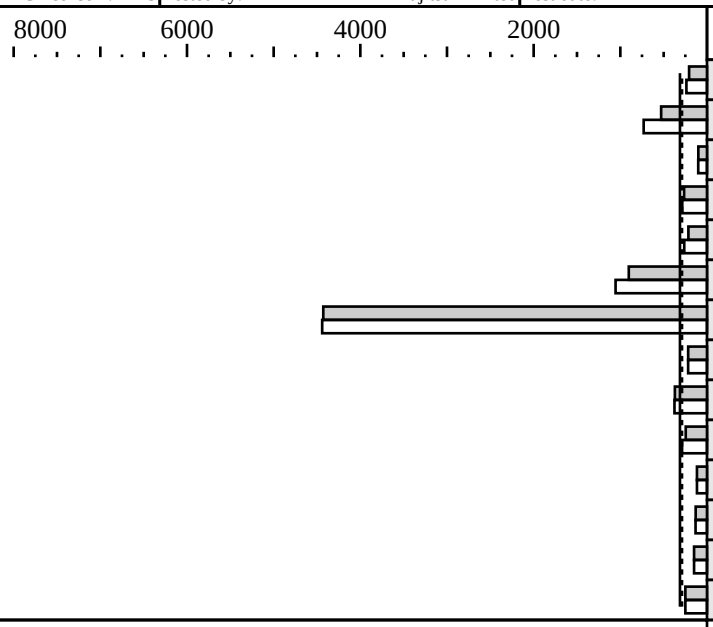
Copyright ©1999-2005, Standard Performance Evaluation Corporation

Fujitsu Limited
PRIMEPOWER900 (2160MHz)

SPECfp_rate2000 = 312

SPECfp_rate_base2000 = 288

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	16	144	207	16	125	238
171.swim	16	109	529	16	78.7	731
172.mgrid	16	334	100	16	330	101
173.applu	16	147	264	16	137	285
177.mesa	16	121	215	16	99.0	263
178.galgel	16	59.6	902	16	51.0	1055
179.art	16	10.9	4428	16	10.9	4440
183.equake	16	111	217	16	111	218
187.facerec	16	95.2	371	16	94.0	375
188.ammp	16	166	245	16	142	288
189.lucas	16	320	116	16	321	116
191.fma3d	16	298	131	16	295	132
200.sixtrack	16	137	149	16	137	149
301.apsi	16	193	250	16	193	250

Hardware

CPU:	SPARC64 V
CPU MHz:	2160
FPU:	Integrated
CPU(s) enabled:	16 cores, 16 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
```

Copyright ©1999-2005, Standard Performance Evaluation Corporation

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.

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

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