CFP2000 Result

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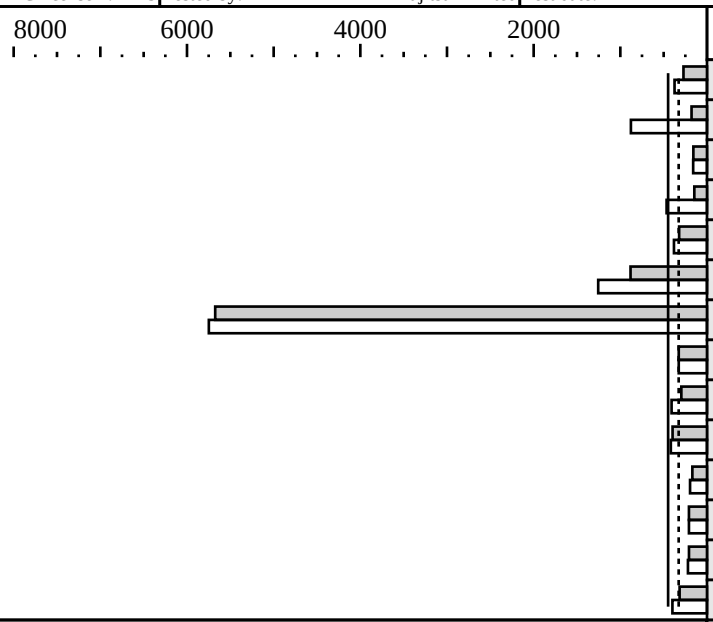
Fujitsu Limited
PRIMEPOWER1500 (1890MHz)

SPECfp_rate2000 = 449

SPECfp_rate_base2000 = 327

SPEC license #: 19 | Tested by: Fujitsu Limited | Test date: May-2004 | Hardware Avail: Sep-2004 | Software Avail: Apr-2004



Benchmark	Base Copies	Base Runtime	Base Ratio	Copies	Runtime	Ratio
168.wupwise	32	219	271	32	159	375
171.swim	32	645	178	32	131	878
172.mgrid	32	425	157	32	419	160
173.applu	32	533	146	32	167	466
177.mesa	32	162	321	32	136	381
178.galgel	32	122	882	32	85.8	1255
179.art	32	17.0	5675	32	16.8	5748
183.equake	32	148	326	32	148	326
187.facerec	32	238	296	32	173	409
188.ammp	32	206	397	32	196	417
189.lucas	32	440	169	32	380	195
191.fma3d	32	374	208	32	374	208
200.sixtrack	32	196	208	32	186	220
301.apsi	32	305	316	32	242	399

Hardware

CPU:	SPARC64 V
CPU MHz:	1890
FPU:	Integrated
CPU(s) enabled:	32 cores, 32 chips, 1 core/chip
CPU(s) orderable:	1 to 32 (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:	65536MB
Disk Subsystem:	1 x 36.4GB SCSI (10000rpm)
Other Hardware:	None

Software

Operating System:	Solaris 9 4/04
Compiler:	Fujitsu Parallelnavi 2.3 with patch 913221-03 Sun Studio 8 Sun Performance Library 8
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 8)
fdo_pre0=rm -rf ./feedback.profile ./SunWS_cache
PASS1=-xprofile=collect:./feedback
PASS2=-xprofile=use:./feedback

Floating point base flags:
(using Fortran compiler of Parallelnavi 2.3)
   -Kfast_GP2=3,prefetch_infer -O5 FDO
(using C compiler of Sun Studio 8)
   -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)
172.mgrid:    -Kfast_GP2=2,GREG_SYSTEM -Kprefetch_line=6,commonpad=144,
              alignc=64 -O4 FDO
189.lucas:    -Kfast_GP2=3 -O5 -x dir=./ -Kunroll=2 FDO
191.fma3d:    basepeak=yes
200.sixtrack: -Kfast_GP2=3 -O4 -x dir=./ -Kunroll=3 -fs FDO

(using Fortran compiler of Sun Studio 8)
168.wupwise:  -fast -xarch=v8plusb -xchip=ultra3cu -xcache=128/64/2:4096/64/4
              -xarch=v8plusa -xipo=2 -Qoption iropt -Ainline:inc=800:cp=1
              ONESTEP=yes FDO
171.swim:     -fast -xarch=v8plusb -xchip=ultra3cu -xcache=128/64/2:4096/64/4
              -xpad=common:1660 -xprefetch=latx:2.6
              -Qoption cg -Qiselect-funcalign=64
              -Qoption iropt -Ainline:cs=700,Atile:skewp:b10
173.applu:    -fast -xarch=v8plusb -xchip=ultra3cu -xcache=128/64/2:4096/64/4
              -xipo=2 -xprefetch=latx:1.6
              -Qoption cg -Qlp=1-av=192-t=4-fa=1-fl=0,-Qms_pipe+prefolim=7
              -Qoption iropt -Aujam:inner=g ONESTEP=yes FDO
178.galgel:   -fast -xarch=v8plusb -xchip=ultra3cu -xcache=128/64/2:4096/64/4
              -xchip=ultra -xipo=2 -Qoption cg -Qiselect-funcalign=64
              -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
              -xarch=v8plus -xprefetch=latx:1.6 ONESTEP=yes FDO
301.apsi:     -fast -xarch=v8plusb -xchip=ultra3cu -xcache=128/64/2:4096/64/4
              -xipo=2 ONESTEP=yes FDO

(using C compiler of Sun Studio 8)
177.mesa:     -fast -xarch=v8plusb -xchip=ultra3cu -xcache=128/64/2:4096/64/4
              -xchip=ultra -xalias_level=strong -xipo=2 -xrestrict
              -Wc,-Qgsched-T4,-Qgsched-trace_late=1,-Qiselect-funcalign=64,
              -Qms_pipe+unoovf ONESTEP=yes FDO
179.art:      -fast -xarch=v8plusb -xchip=ultra3cu -xcache=128/64/2:4096/64/4
              -xalias_level=std -xarch=v8plusa -xipo=2 -xprefetch=latx:1.2
              -Wc,-Qiselect-funcalign=64 ONESTEP=yes FDO
183.equake:   basepeak=yes
188.ammp:     -fast -xarch=v8plusb -xchip=ultra3cu -xcache=128/64/2:4096/64/4
              -xalias_level=std -xipo= -xprefetch=latx:1.2 -xrestrict
              -Wc,-Qiselect-funcalign=64 ONESTEP=yes FDO

Portability:
178.galgel(base):     -Am -Fixed
178.galgel(peak):     -e -fixed
187.facerec(base):    -Am
191.fma3d(base):      -Am

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"
```

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Notes/Tuning Information (Continued)

```
        MPSSHEAP=4M
        MPSSSTACK=4M
        LD_PRELOAD=mpss.so.1

    Processes were bound to CPUs using "submit=pbind".

    Extended Interleave Mode enabled.

    Sun Studio 8, posted at URL http://wwws.sun.com/software/products/studio/
    was used for this submission.
```