CFP2000 Result

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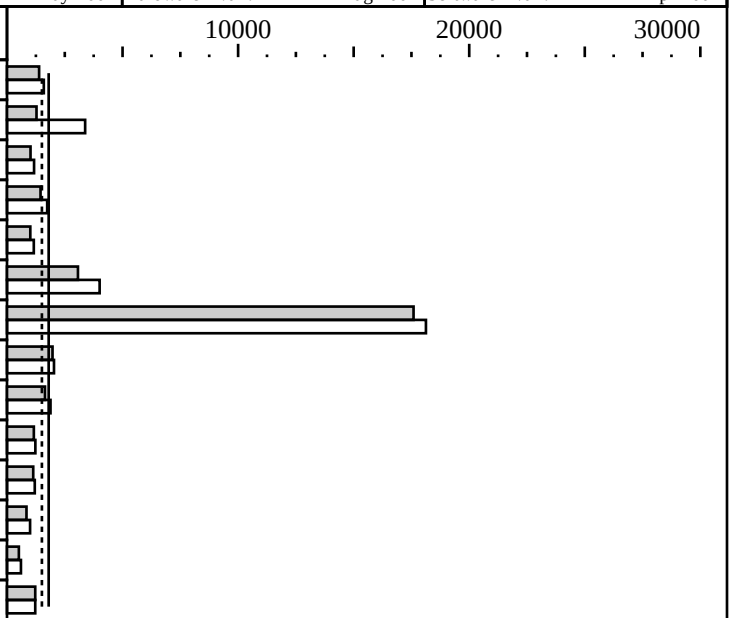
Fujitsu Limited
PRIMEPOWER650 (1890MHz)

SPECfp2000 = 1803

SPECfp_base2000 = 1510

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

Benchmark	Reference Time	Base Runtime	Base Ratio	Runtime	Ratio
168.wupwise	1600	115	1389	100	1593
171.swim	3100	243	1277	91.7	3381
172.mgrid	1800	177	1017	154	1171
173.applu	2100	145	1451	121	1739
177.mesa	1400	139	1008	121	1160
178.galgel	2900	94.5	3070	72.4	4008
179.art	2600	14.8	17591	14.3	18127
183.equake	1300	66.0	1970	63.9	2033
187.facerec	1900	116	1644	101	1882
188.ammp	2200	189	1161	179	1227
189.lucas	2000	176	1135	166	1201
191.fma3d	2100	249	843	210	999
200.sixtrack	1100	214	513	182	603
301.apsi	2600	213	1222	213	1222



Hardware

CPU:	SPARC64 V
CPU MHz:	1890
FPU:	Integrated
CPU(s) enabled:	1 core, 1 chip, 1 core/chip
CPU(s) orderable:	1 to 8 (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:	8192MB
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 Sun Studio 8)
-fast -xtarget=ultra3cu -xipo=2 ONESTEP=yes 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)
168.wupwise:  -Kfast_GP2=3,prefetch_infer,alignl=64,unroll=4,
              prefetch_cache_level=3 -O5 -x dir=./ FDO
172.mgrid:    -Kfast_GP2=2,GREG_SYSTEM -O4 -Kcommonpad=180,alignc=64
189.lucas:    -Kfast_GP2=3 -O5 -x dir=./ -Kunroll=2 FDO
191.fma3d:    -Am -Kfast_GP2=3,GREG_SYSTEM -O4 -x dir=./ -x70
              -Kprefetch_infer FDO
200.sixtrack: -Kfast_GP2=3 -O4 -x dir=./ -Kunroll=3 -fs FDO

(using Fortran compiler of Sun Studio 8)
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:     basepeak=yes

(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:   -fast -xarch=v8plusb -xchip=ultra3cu -xcache=128/64/2:4096/64/4
              -xalias_level=strong -xarch=v8plus -W2,-Amemopt:arrayloc,-whole
              -Wc,-Qiselect-funcalign=64,-Qms_pipe-pref,
              -Qlp=1-av=512-t=6-fa=1-fl=1 -lmopt -lm ONESTEP=yes FDO
188.ammp:     -fast -xarch=v8plusb -xchip=ultra3cu -xcache=128/64/2:4096/64/4
              -xalias_level=std -xipo=2 -xprefetch=latx:1.2 -xrestrict
              -Wc,-Qiselect-funcalign=64 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
```

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Notes/Tuning Information (Continued)

System board used with only ONE CPU present.

Small configuration memory system mode used ("4cpu mode", enabled via front panel).

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