CFP2000 Result

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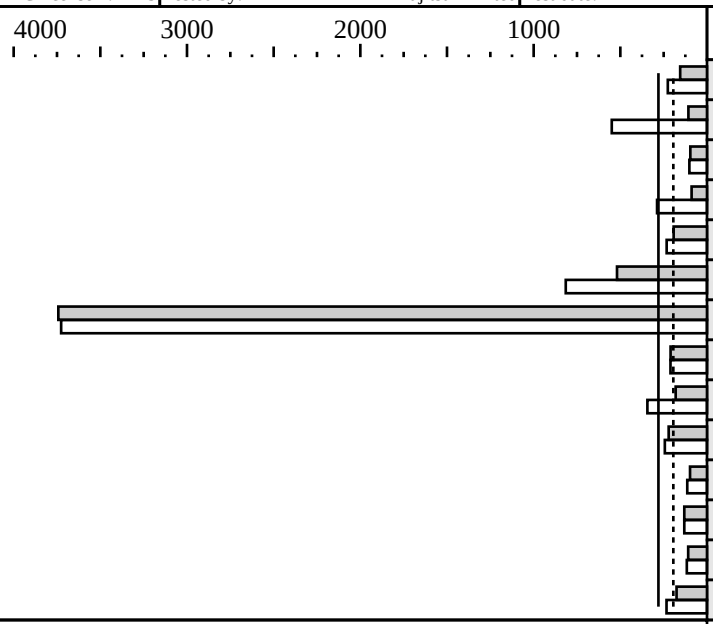
Fujitsu Limited
PRIMEPOWER850 (2025MHz)

SPECfp_rate2000 = 280

SPECfp_rate_base2000 = 194

SPEC license #: 19 | Tested by: Fujitsu Limited | Test date: Apr-2005 | Hardware Avail: Jun-2005 | Software Avail: Apr-2004



Benchmark	Base Copies	Base Runtime	Base Ratio	Copies	Runtime	Ratio
168.wupwise	16	192	155	16	131	226
171.swim	16	536	107	16	105	549
172.mgrid	16	347	96.2	16	329	102
173.applu	16	439	88.9	16	135	288
177.mesa	16	135	192	16	112	233
178.galgel	16	104	519	16	66.1	815
179.art	16	12.9	3742	16	13.0	3726
183.equake	16	115	210	16	115	211
187.facerec	16	195	181	16	103	344
188.ammp	16	185	221	16	168	243
189.lucas	16	379	97.9	16	326	114
191.fma3d	16	298	131	16	298	131
200.sixtrack	16	188	109	16	175	116
301.apsi	16	275	176	16	207	234

Hardware

CPU:	SPARC64 V
CPU MHz:	2025
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:	3MB(I+D) on chip
L3 Cache:	None
Other Cache:	None
Memory:	32768MB
Disk Subsystem:	1 x 36.4GB SCSI (10000rpm)
Other Hardware:	None

Software

Operating System:	Solaris 9 4/04
Compiler:	(Fortran) Fujitsu Parallelnavi 2.3 with patch 913221-03 Sun Studio 9 Sun Performance Library 9 (C) Sun Studio 9
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 9)
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,GREG_SYSTEM -O5
(using C compiler of Sun Studio 9)
-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 -O4 -Kcommonpad=180,alignc=64
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 9)
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
              -xpad=common:1700 -Qoption iropt -Ainline:cs=700,Atile:skewp:b10
173.applu:    -fast -xarch=v8plusb -xchip=ultra3cu -xcache=128/64/2:4096/64/4
              -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
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 9)
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(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

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

Processes were bound to CPUs using "submit=pbind"

Extended Interleave Mode enabled.
```

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Notes/Tuning Information (Continued)

Sun Studio 9, posted at URL http://www.sun.com/software/products/studio/previous/9/index.xml was used for this submission.