CFP2000 Result

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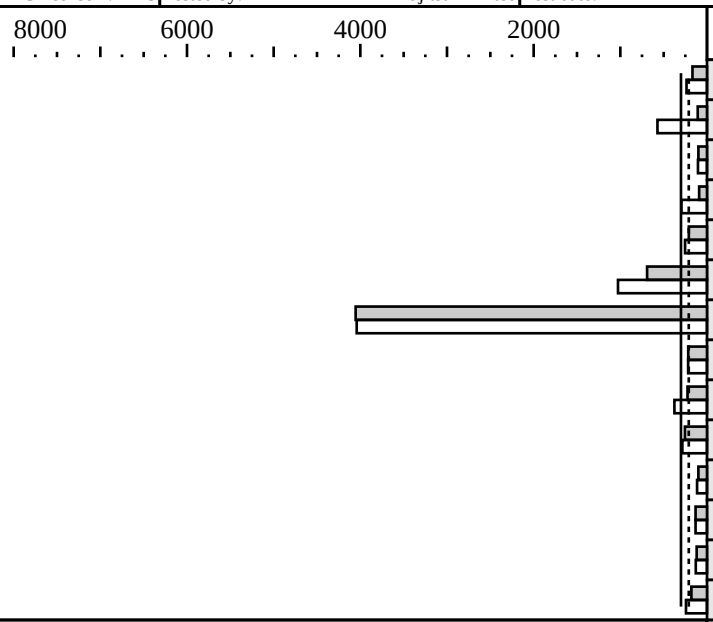
Fujitsu Limited
PRIMEPOWER900 (2160MHz)

SPECfp_rate2000 = 300

SPECfp_rate_base2000 = 210

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	177	168	16	126	236
171.swim	16	538	107	16	101	572
172.mgrid	16	337	99.2	16	321	104
173.applu	16	430	90.5	16	132	295
177.mesa	16	124	210	16	103	253
178.galgel	16	77.9	691	16	52.4	1027
179.art	16	11.9	4054	16	11.9	4042
183.equake	16	111	217	16	111	218
187.facerec	16	157	225	16	93.8	376
188.ammp	16	160	255	16	144	284
189.lucas	16	374	99.3	16	324	115
191.fma3d	16	295	132	16	295	132
200.sixtrack	16	171	119	16	158	129
301.apsi	16	268	180	16	199	242

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:	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.