CFP2000 Result

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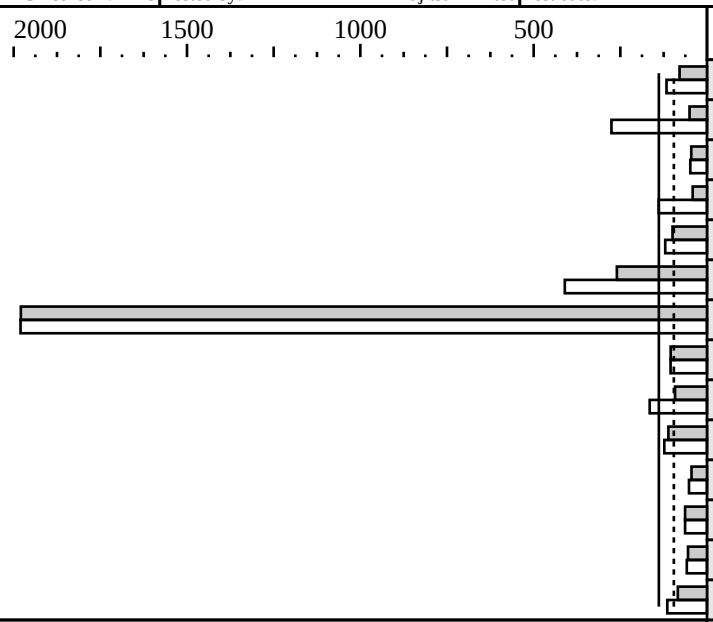
Fujitsu Limited
PRIMEPOWER650 (2025MHz)

SPECfp_rate2000 = 139

SPECfp_rate_base2000 = 95.6

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	8	188	79.1	8	127	117
171.swim	8	571	50.4	8	104	276
172.mgrid	8	368	45.4	8	347	48.2
173.applu	8	472	41.3	8	140	139
177.mesa	8	131	99.4	8	108	120
178.galgel	8	104	260	8	65.6	410
179.art	8	12.2	1979	8	12.2	1980
183.equake	8	115	105	8	115	105
187.facerec	8	191	92.2	8	107	165
188.ammp	8	183	111	8	166	123
189.lucas	8	415	44.7	8	357	52.0
191.fma3d	8	308	63.2	8	308	63.2
200.sixtrack	8	186	54.7	8	175	58.3
301.apsi	8	287	84.2	8	211	115

Hardware

CPU:	SPARC64 V
CPU MHz:	2025
FPU:	Integrated
CPU(s) enabled:	8 cores, 8 chips, 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:	16384MB
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.