CFP2000 Result

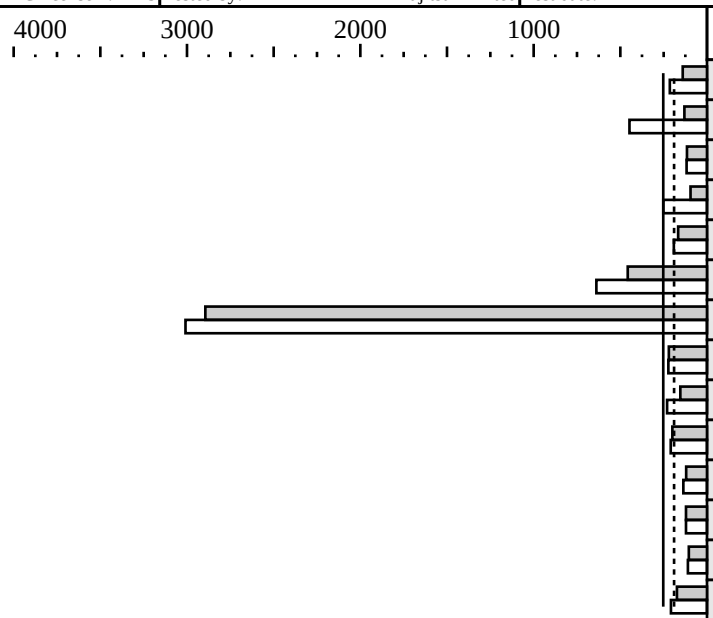
Copyright ©1999-2004, Standard Performance Evaluation Corporation

Fujitsu Limited
PRIMEPOWER1500 (1890MHz)

SPECfp_rate2000 = 252

SPECfp_rate_base2000 = 190

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	16	212	140	16	138	214
171.swim	16	441	130	16	129	447
172.mgrid	16	289	116	16	284	118
173.applu	16	410	95.1	16	155	252
177.mesa	16	156	166	16	136	191
178.galgel	16	118	457	16	84.3	638
179.art	16	16.7	2894	16	16.0	3009
183.equake	16	110	220	16	108	223
187.facerec	16	229	154	16	153	230
188.ammp	16	204	200	16	195	209
189.lucas	16	309	120	16	272	136
191.fma3d	16	322	121	16	322	121
200.sixtrack	16	195	105	16	185	110
301.apsi	16	278	173	16	232	208

Hardware

CPU:	SPARC64 V
CPU MHz:	1890
FPU:	Integrated
CPU(s) enabled:	16 cores, 16 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:
```

Copyright ©1999-2004, Standard Performance Evaluation Corporation

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:   -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= -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
```

Copyright ©1999-2004, Standard Performance Evaluation Corporation

Notes/Tuning Information (Continued)

```
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.

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