



CFP2000 Result

Copyright ©1999-2004, Standard Performance Evaluation Corporation

Fujitsu Limited
PRIMEPOWER450 (1870MHz)

SPECfp_rate2000 = 75.5
SPECfp_rate_base2000 = 63.3

SPEC license #: 19 Tested by: Fujitsu Limited Test date: Feb-2005 Hardware Avail: Feb-2005 Software Avail: Sep-2004

Benchmark	Base Copies	Base Runtime	Base Ratio	Copies	Runtime	Ratio
168.wupwise	4	131	56.8	4	119	62.4
171.swim	4	391	36.8	4	95.8	150
172.mgrid	4	280	29.8	4	248	33.6
173.applu	4	156	62.5	4	128	75.9
177.mesa	4	133	48.8	4	108	60.0
178.galgel	4	84.1	160	4	66.0	204
179.art	4	12.6	956	4	12.6	955
183.quake	4	87.0	69.3	4	84.0	71.8
187.facerec	4	92.5	95.3	4	90.8	97.1
188.amp	4	199	51.4	4	184	55.5
189.lucas	4	284	32.7	4	284	32.7
191.fma3d	4	277	35.2	4	258	37.8
200.sixtrack	4	176	29.0	4	176	29.0
301.apsi	4	239	50.5	4	239	50.5

Hardware

CPU: SPARC64 V
CPU MHz: 1870
FPU: Integrated
CPU(s) enabled: 4 cores, 4 chips, 1 core/chip
CPU(s) orderable: 1 to 4 (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 9/04
Compiler: (Fortran)
Fujitsu Parallelnavi 2.3 with patch 913221-03
Sun Studio 9
Sun Performance Library 9
(C/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 Sun Studio 9)
-fast -xtarget=ultra3cu -xipo=2 ONESTEP=yes FDO
(using C compiler of Sun Studio 9)
-fast -xtarget=ultra3 -xipo=2 ONESTEP=yes FDO
```

Floating point peak flags:



CFP2000 Result

Copyright ©1999-2004, Standard Performance Evaluation Corporation

Fujitsu Limited
PRIMEPOWER450 (1870MHz)

SPECfp_rate2000 = 75.5
SPECfp_rate_base2000 = 63.3

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

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
191.fma3d: -Am -Kfast_GP2=3,GREG_SYSTEM -O4 -x dir=./ -x70
-Kprefetch_infer FDO

(using Fortran compiler of Sun Studio 9)

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
ONESTEP=yes
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_SOURCEC=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
189.lucas: basepeak=yes
200.sixtrack: basepeak=yes
301.apsi: basepeak=yes

(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.quake: -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 -lmopt -lm ONESTEP=yes FDO
188.ammp: -fast -xalias_level=std -xipo=2 -lmopt -lm 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
```

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