



CFP2000 Result

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Fujitsu Limited
PRIMEPOWER850 (2025MHz)

SPECfp_rate2000 = 163

SPECfp_rate_base2000 = 118

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	187	79.2	8	114	130
171.swim	8	329	87.6	8	103	280
172.mgrid	8	226	73.9	8	213	78.4
173.applu	8	309	63.1	8	124	158
177.mesa	8	131	99.4	8	108	121
178.galgel	8	99.4	271	8	64.6	417
179.art	8	12.7	1896	8	12.5	1937
183.equake	8	80.4	150	8	79.3	152
187.facerec	8	180	97.8	8	85.0	207
188.amp	8	183	111	8	167	122
189.lucas	8	229	81.1	8	203	91.2
191.fma3d	8	238	81.7	8	238	81.7
200.sixtrack	8	187	54.6	8	175	58.2
301.apsi	8	246	98.3	8	195	124

Hardware

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

4 CPUs each on 2 system board. Unused CPUs have physically removed.

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