CFP2000 Result

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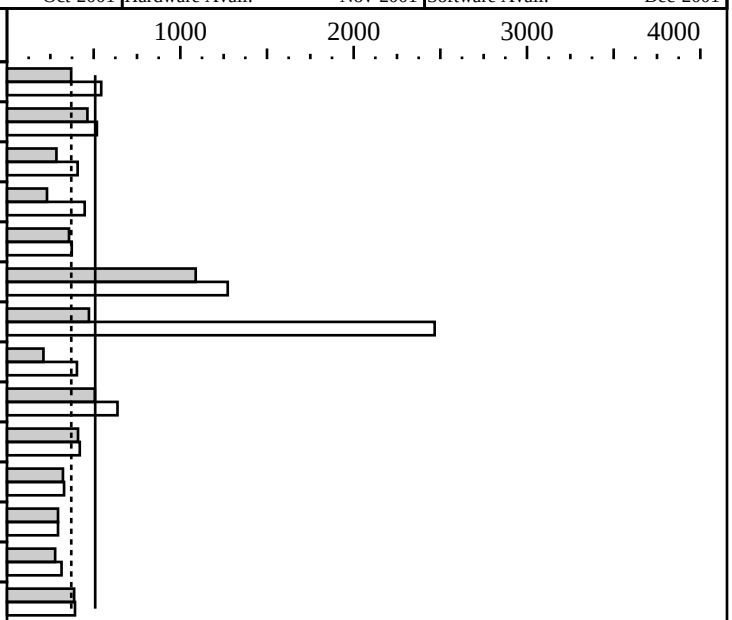
Fujitsu Limited
PRIMEPOWER650 (675MHz)

SPECfp2000 = 509

SPECfp_base2000 = 371

SPEC license #: 19 | Tested by: Fujitsu Limited | Test date: Oct-2001 | Hardware Avail: Nov-2001 | Software Avail: Dec-2001

Benchmark	Reference Time	Base Runtime	Base Ratio	Runtime	Ratio
168.wupwise	1600	432	370	294	544
171.swim	3100	668	464	598	519
172.mgrid	1800	631	285	442	408
173.applu	2100	910	231	469	448
177.mesa	1400	391	358	375	373
178.galgel	2900	266	1089	228	1273
179.art	2600	550	473	105	2467
183.equake	1300	618	210	322	404
187.facerec	1900	375	507	298	638
188.ammp	2200	537	410	524	420
189.lucas	2000	620	323	608	329
191.fma3d	2100	714	294	714	294
200.sixtrack	1100	396	278	350	315
301.apsi	2600	671	387	663	392



Hardware

CPU:	SPARC64 GP
CPU MHz:	675
FPU:	Integrated
CPU(s) enabled:	1 core, 1 chip, 1 core/chip
CPU(s) orderable:	2 to 8
Parallel:	None
Primary Cache:	128KBI+128KBD on chip
Secondary Cache:	8MB(I+D) off chip, per CPU
L3 Cache:	None
Other Cache:	None
Memory:	8192MB
Disk Subsystem:	2 x 18GB SCSI (10025rpm)
Other Hardware:	None

Software

Operating System:	Solaris 8 7/01
Compiler:	Fujitsu Parallelnavi 1.0.2 with patch 911403-01 Sun Forte Developer 6 update 2
File System:	ufs
System State:	multi user

Notes/Tuning Information

```
FDO: (Parallelnavi 1.0.2)
    fdo_pre0=rm -rf ‘pwd‘/*.*.d
    PASS1=-Kpg    PASS2=-Kpu
FDO: (Forte Developer 6 update 2)
    fdo_pre0=rm -rf ‘pwd‘/../feedback.profile
    PASS1=-xprofile=collect:‘pwd‘/../feedback
    PASS2=-xprofile=use:‘pwd‘/../feedback
Baseline :
(using Fortran compiler of Parallelnavi 1.0.2)
-Kfast_GP=2,largepage -O4 -fs FDO

(using C compiler of Parallelnavi 1.0.2)
-Kfast_GP=2,largepage FDO

Peak:
(using Fortran compiler of Parallelnavi 1.0.2)
 168.wupwise: -Kfast_GP=2,prefetch=4,nounroll -x dir=‘pwd‘/../../src -fs
```

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Notes/Tuning Information (Continued)

```
    FDO ONESTEP=yes
171.swim: -Kfast_GP=2,GREG,preex,ilfunc,prefetch=3,commonpad=152,prefetch_iteration=3,unroll=2,nogs,frecipro
    -O4 -fs -dn
172.mgrid: -Kfast_GP=2,preex,GREG,commonpad=144,unroll=3,largepage,prefetch=3
    -O4 -fs
178.galgel: -Kfast_GP=2,GREG,largepage,preex,unroll=2,prefetch_iteration=2,commonpad=24
    -O4 -lssl2mtfma -fs FDO
    RM_SOURCES=lapak.f90
189.lucas: -Kfast_GP=2,GREG,preex,largepage,nounroll -O4 -fs FDO
191.fma3d: -Kfast_GP=2,preex,GREG,nounroll,prefetch=4,largepage -O4 -fs FDO
200.sixtrack: -Kfast_GP=2,GREG,noprefetch,unroll=4,largepage,frecipro -fs
301.apsi: -Kfast_GP=2,GREG,preex,largepage,unroll=2 -O4 -fs FDO

(using C compiler of Parallelnavi 1.0.2)
188.ammp: -Kfast_GP=2,GREG,popt,prefetch=4,preex,preload,largepage,fuse,unroll=3 -x-

(using FORTRAN77 compiler of Forte Developer 6 update 2)
173.applu: -fast -Qoption iropt -whole,-Adata_access,-Mt6000,-Mm12000,-Mr40000,-Ma400 -xarch=v8plus -dn
    ONESTEP=yes

(using FORTRAN90 compiler of Forte Developer 6 update 2)
187.facerec: -fast -xarch=v9 FDO ONESTEP=yes

(using C compiler of Forte Developer 6 update 2)
177.mesa: -fast -xcrossfile -xrestrict -xalias_level=std -xregs=syst -Wc,-Qgsched-trace_late=1,-Qgsched-trace_spec_load=1
    -xarch=v8plus -W2,-Amemopt -dn
    FDO ONESTEP=yes
179.art: -fast -xalias_level=strong -xdepend -xregs=syst -W2,-whole,-Amemopt
    -xarch=v8plus -lmopt -lm -dn FDO ONESTEP=yes
183.equake: -fast -xalias_level=strong -xdepend -W2,-whole,-Amemopt
    -xarch=v8plus -lmopt -lm FDO ONESTEP=yes

Portability:
 (for Parallelnavi 1.0.2)
   178.galgel: -Am -Fixed
   187.facerec: -Am
   191.fma3d: -Am

Note:
 System Tunables: (for /etc/system)
  consistent_coloring=1, tune_t_fsflushr=86400, autoup=86400,
  shmsys:shminfo_shmmax=8589934592, shmsys:shminfo_shmmni=1024, shmsys:shminfo_shmseg=1024
 (for /etc/opt/FJSVpnrm/lpg.conf)
  TSS=512M, SHMSEGSIZE=256M
 Feedback directed optimization was used for all baseline benchmarks and peak benchmarks
 except following peak benchmarks: 171.swim, 172.mgrid, 173.applu, 188.ammp, 200.sixtrack.
 Only one CPU installed on the system board.
 4cpu-mode option applied/enabled.
```