CFP2000 Result

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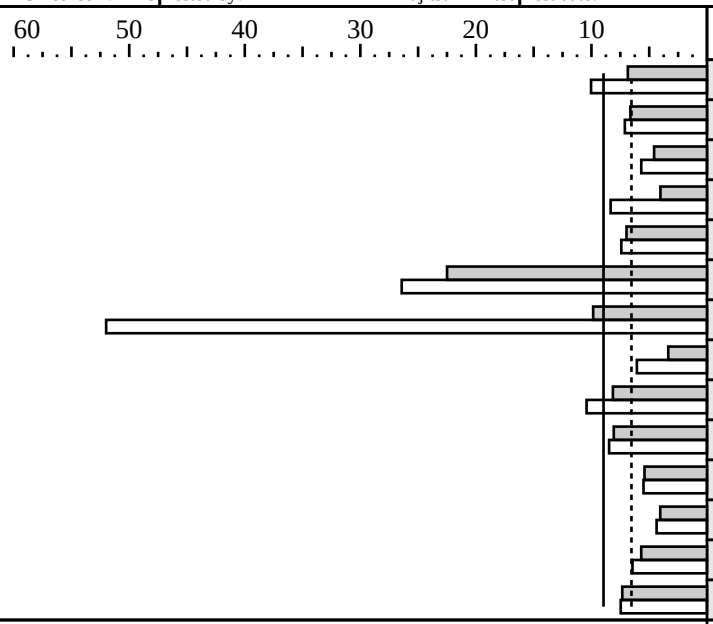
Fujitsu Limited
PRIMEPOWER200 (600MHz)

SPECfp_rate2000 = 8.95

SPECfp_rate_base2000 = 6.54

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



Benchmark	Base Copies	Base Runtime	Base Ratio	Copies	Runtime	Ratio
168.wupwise	2	542	6.85	2	370	10.0
171.swim	2	1085	6.63	2	1012	7.11
172.mgrid	2	912	4.58	2	734	5.69
173.applu	2	1209	4.03	2	584	8.34
177.mesa	2	466	6.96	2	438	7.42
178.galgel	2	299	22.5	2	255	26.4
179.art	2	612	9.85	2	116	52.0
183.equake	2	900	3.35	2	497	6.07
187.facerec	2	541	8.14	2	423	10.4
188.ammp	2	633	8.07	2	602	8.47
189.lucas	2	858	5.41	2	844	5.49
191.fma3d	2	1204	4.05	2	1117	4.36
200.sixtrack	2	448	5.69	2	396	6.45
301.apsi	2	823	7.33	2	808	7.46

Hardware

CPU:	SPARC64 GP
CPU MHz:	600
FPU:	Integrated
CPU(s) enabled:	2 cores, 2 chips, 1 core/chip
CPU(s) orderable:	1 to 2
Parallel:	None
Primary Cache:	128KBI+128KBD on chip
Secondary Cache:	4MB(I+D) off chip, per CPU
L3 Cache:	None
Other Cache:	None
Memory:	4096MB
Disk Subsystem:	1 x 36.4GB SCSI (10000rpm)
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:	single 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:
```

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Notes/Tuning Information (Continued)

(using Fortran compiler of Parallelnavi 1.0.2)
168.wupwise: -Kfast_GP=2,prefetch=4,nounroll,largepage -x dir='pwd'/../../src -fs
FDO ONESTEP=yes
171.swim: -Kfast_GP=2,GREG,preex,ilfunc,prefetch=3,commonpad=152,prefetch_iteration=3,unroll=2,nogs,frecipro
-O4 -dn -fs
172.mgrid: -Kfast_GP=2,preex,GREG,commonpad=144,unroll=3,prefetch=3
-O4 -dn -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,V9FMADD,prefetch=4 -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)
177.mesa: -Kfast_GP=2,GREG,popt,cfunc,prefetch=2,preload,largepage,fuse -x-
FDO ONESTEP=yes
188.ammp: -Kfast_GP=2,GREG,popt,prefetch=4,preex,preload,largepage,fuse,unroll=3 -x-

(using Fortran90 compiler of Forte Developer 6 update 2)
187.facerec: -fast -xarch=v9
FDO ONESTEP=yes

(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 C compiler of Forte Developer 6 update 2)
179.art: -fast -xalias_level=strong -xdepend -xregs=syst -W2,-whole,-Amemopt
-xarch=v8plus -dn -lmopt -lm
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, 200.sixtrack.