



CFP2000 Result

Copyright ©1999-2004, Standard Performance Evaluation Corporation

Fujitsu Siemens Computers
PRIMEPOWER200 (600MHz)

SPECfp2000 = 403
SPECfp_base2000 = 298

SPEC license #: 22 Tested by: Fujitsu Limited Test date: Aug-2001 Hardware Avail: Oct-2001 Software Avail: Sep-2001

Benchmark	Reference Time	Base Runtime	Base Ratio	Runtime	Ratio
168.wupwise	1600	520	308	356	449
171.swim	3100	917	338	861	360
172.mgrid	1800	811	222	640	281
173.applu	2100	1103	190	567	371
177.mesa	1400	464	302	439	319
178.galgel	2900	297	976	255	1137
179.art	2600	620	419	117	2219
183.earthquake	1300	832	156	460	282
187.facerec	1900	510	373	414	458
188.amp	2200	634	347	618	356
189.lucas	2000	773	259	757	264
191.fma3d	2100	1114	189	1072	196
200.sixtrack	1100	446	247	395	278
301.apsi	2600	800	325	787	330

Hardware

CPU: SPARC64 GP
 CPU MHz: 600
 FPU: Integrated
 CPU(s) enabled: 1 core, 1 chip, 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: Ethernet

Software

Operating System: Solaris 8 4/01
 Compiler: Fujitsu Parallelnavi 1.0.2
 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:



CFP2000 Result

Copyright ©1999-2004, Standard Performance Evaluation Corporation

Fujitsu Siemens Computers
PRIMEPOWER200 (600MHz)

SPECfp2000 = 403
SPECfp_base2000 = 298

SPEC license #: 22 | Tested by: Fujitsu Limited | Test date: Aug-2001 | Hardware Avail: Oct-2001 | Software Avail: Sep-2001

Notes/Tuning Information (Continued)

(using Fortran compiler of Parallelnavi 1.0.2)

```

168.wupwise: -Kfast_GP=2,prefetch=4,nounroll -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
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,fuse -x- -dn
  FDO ONESTEP=yes

```

(using Fortran90 compiler of Forte Developer 6 update 2)

```

187.facerec: -fast -xarch=v9
  FDO ONESTEP=yes
191.fma3d: -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.quake: -fast -xalias_level=strong -xdepend -W2,-whole,-Amemopt -xarch=v8plus -lmopt
  FDO ONESTEP=yes
188.ammp: -fast -xcrossfile -xrestrict -xalias_level=strong -xdepend -xarch=v8plus -xprefetch -dn
  FDO ONESTEP=yes

```

Portability:

```

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

```

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/FJSVpnrmlpg.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.
System board used with only one CPU present.

Submitted_by: Maki Nagahama <nagahama@cs.fujitsu.co.jp>
Submitted: Tue Aug 14 01:00:38 2001
Submission: cpu2000-20010814-00802.sub