# CFP2000 Result

Copyright ©1999-2004, Standard Performance Evaluation Corporation

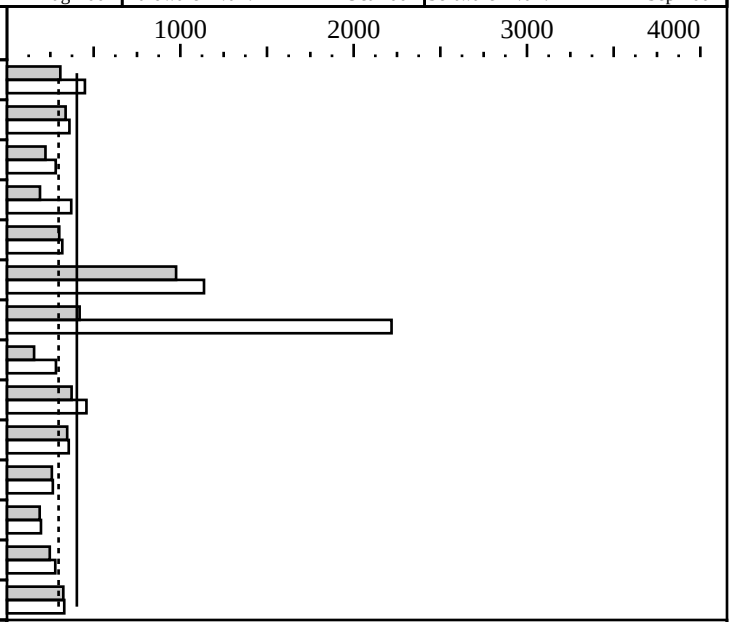
## Fujitsu Siemens Computers PRIMEPOWER200 (600MHz)

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.equake | 1300 | 832 | 156 | 460 | 282 |
| 187.facerec | 1900 | 510 | 373 | 414 | 458 |
| 188.ammp | 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<br>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:
```

Copyright ©1999-2004, Standard Performance Evaluation Corporation



## 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.equake: -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/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.
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