# CINT2000 Result

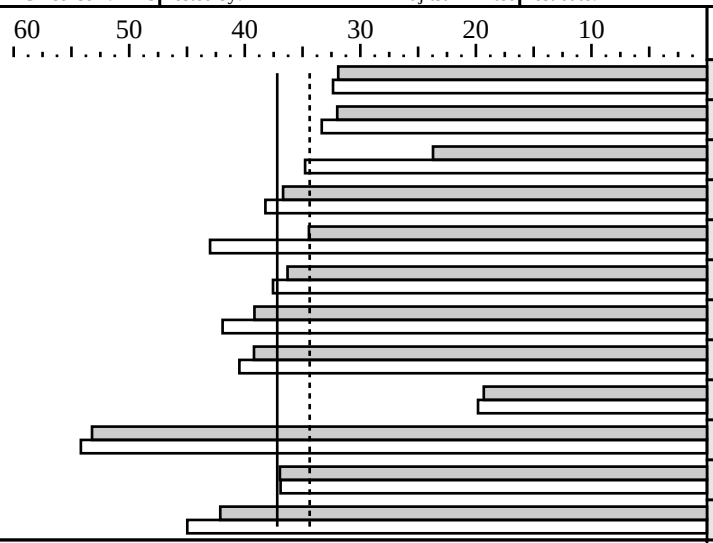
Copyright ©1999-2004, Standard Performance Evaluation Corporation

## Fujitsu Limited
## PRIMEPOWER600 (600MHz)

SPECint_rate2000 = 37.2

SPECint_rate_base2000 = 34.4

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 |
|---|---|---|---|---|---|---|
| 164.gzip | 8 | 407 | 31.9 | 8 | 401 | 32.4 |
| 175.vpr | 8 | 406 | 32.0 | 8 | 390 | 33.3 |
| 176.gcc | 8 | 431 | 23.7 | 8 | 294 | 34.8 |
| 181.mcf | 8 | 455 | 36.7 | 8 | 437 | 38.2 |
| 186.crafty | 8 | 269 | 34.4 | 8 | 216 | 43.0 |
| 197.parser | 8 | 460 | 36.3 | 8 | 445 | 37.6 |
| 252.eon | 8 | 308 | 39.2 | 8 | 288 | 41.9 |
| 253.perlbmk | 8 | 426 | 39.2 | 8 | 413 | 40.5 |
| 254.gap | 8 | 528 | 19.3 | 8 | 515 | 19.8 |
| 255.vortex | 8 | 331 | 53.2 | 8 | 325 | 54.2 |
| 256.bzip2 | 8 | 377 | 37.0 | 8 | 377 | 36.9 |
| 300.twolf | 8 | 661 | 42.1 | 8 | 619 | 45.0 |

### Hardware

| | |
|---|---|
| CPU: | SPARC64 GP |
| CPU MHz: | 600 |
| FPU: | Integrated |
| CPU(s) enabled: | 8 cores, 8 chips, 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: | 32GB |
| Disk Subsystem: | 1 x 36.4GB SCSI (10000rpm) |
| Other Hardware: | None |

### Software

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

## Notes/Tuning Information

```
Baseline (except 252.eon, for Parallelnavi 1.0.2): -Kfast_GP=3,largepage
fdo_pre0=rm -rf ‘pwd‘/*.fbk
PASS1=-Kpg
PASS2=-Kpu=$(EXEBASE).fbk
(252.eon, for Forte Developer 6 update 2): -fast -xcrossfile -xarch=v8plus
fdo_pre0=rm -rf ‘pwd‘/../feedback.profile ‘pwd‘/SunWS_cache
PASS1=-xprofile=collect:‘pwd‘/../feedback
PASS2=-xprofile=use:‘pwd‘/../feedback

Peak (for Parallelnavi 1.0.2):
fdo_pre0=rm -rf ‘pwd‘/*.fbk
PASS1=-Kpg
PASS2=-Kpu=$(EXEBASE).fbk
164.gzip: -Kfast_GP=4,largepage
175.vpr: -Kfast_GP=4,staticclump,memalias,switchopt,cond,GREG,nounroll,largepage,onefile,NOFLTLD=3,xi=30
181.mcf: -Kfast_GP=2,nounroll,memalias,restp,prefetch=2,largepage -x-
197.parser: -Kfast_GP=4,switchopt,cond,staticclump,use_rodata,largepage
253.perlbmk: -Kfast_GP=4,memalias,switchopt,largepage,bcopy
254.gap: -Kfast_GP=3,largepage,memalias,unroll=4
256.bzip2: -Kfast_GP=3,largepage
```

Copyright ©1999-2004, Standard Performance Evaluation Corporation



## Notes/Tuning Information (Continued)

```
300.twolf: -Kfast_GP=5,GREG,memalias,cfunc,staticclump,use_rodata,xi=10,largepage,nounroll,bcopy
(for Forte Developer 6 update 2)
 fdo_pre0=rm -rf ‘pwd‘/../feedback.profile ‘pwd‘/SunWS_cache
 PASS1=-xprofile=collect:‘pwd‘/../feedback
 PASS2=-xprofile=use:‘pwd‘/../feedback
176.gcc: -fast -xcrossfile -W2,-whole -Wc,-Qgsched-trace_late=1,-Qgsched-T4,-Qiselect-funcalign=64
          -xarch=v8plus -xprefetch -DUSG
186.crafty: -fast -xcrossfile -Wc,-Qgsched-trace_late=1,-Qgsched-T4 -xalias_level=strong
          -xregs=syst -xchip=ultra2 -xarch=v8plus -W2,-Amemopt
252.eon: -fast -xcrossfile -xsafe=mem -Qoption iropt -Mt500,-restrict_g,-restrict
          -Qoption cg -Qgsched-trace_late=1,-Qgsched-T4 -xarch=v8plus
255.vortex: -fast -xsafe=mem -xcrossfile -W2,-Aheap,-reroll=1,-Aunroll,-Ms1,-Mt500,-Mr6000,-crit
          -Wc,-Qdepgraph-early_cross_call=1 -Wc,-Qiselect-funcalign=32 -Wc,-Qpeep-Sh0
         -xrestrict -xdepend -Wc,-Qgsched-trace_late=1,-Qgsched-T4  -xarch=v8plus -W2,-Amemopt

Portability:
 176.gcc: -Dalloca=__builtin_alloca -DHOST_WORDS_BIG_ENDIAN
 186.crafty: -DSUN
 252.eon: -library=iostream
 253.perlbmk: -DSPEC_CPU2000_SOLARIS
 254.gap: -DSYS_IS_USG -DSYS_HAS_TIME_PROTO -DSYS_HAS_SIGNAL_PROTO -DSYS_HAS_CALLOC_PROTO

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
 ONESTEP=yes was set for all baseline and peak benchmarks.
 Feedback directed optimization was used for all baseline and peak benchmarks.
```