CINT2000 Result

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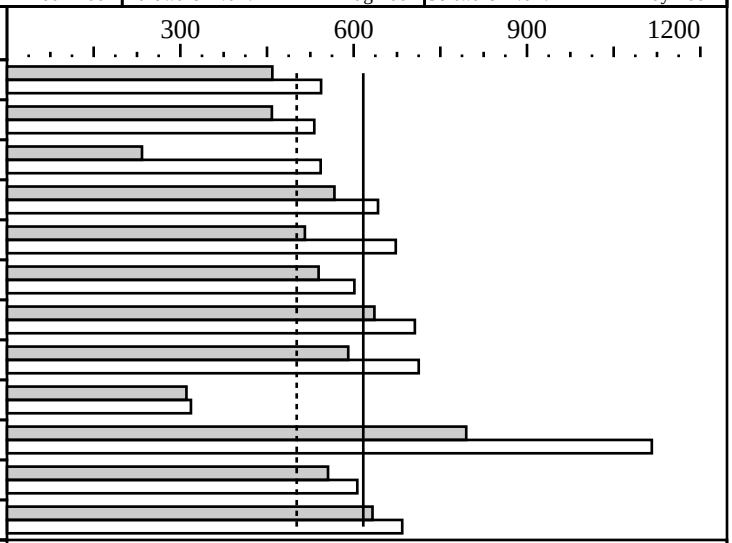
Fujitsu Limited
PRIMEPOWER850 (810MHz)

SPECint2000 = 617

SPECint_base2000 = 501

SPEC license #: 19 | Tested by: Fujitsu Limited | Test date: Jun-2002 | Hardware Avail: Aug-2002 | Software Avail: May-2002

Benchmark	Reference Time	Base Runtime	Base Ratio	Runtime	Ratio
164.gzip	1400	305	459	258	544
175.vpr	1400	305	458	263	532
176.gcc	1100	471	234	203	543
181.mcf	1800	318	567	280	642
186.crafty	1000	194	516	149	673
197.parser	1800	334	539	299	601
252.eon	1300	204	636	184	706
253.perlbmk	1800	305	591	253	713
254.gap	1100	354	311	346	318
255.vortex	1900	239	795	170	1116
256.bzip2	1500	270	556	247	606
300.twolf	3000	474	633	439	684



Hardware

CPU:	SPARC64 GP
CPU MHz:	810
FPU:	Integrated
CPU(s) enabled:	1 core, 1 chip, 1 core/chip
CPU(s) orderable:	4 to 16
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:	36GB SCSI
Other Hardware:	Ethernet

Software

Operating System:	Solaris 8 2/02 with patches 108434-07 and 108435-07.
Compiler:	Fujitsu Parallelnavi 1.0.2 with patches 911403-01 and 911746-01. Sun ONE Studio 7 with patches 111704-01, 111705-01, 111706-01, 111708-01, 111709-01, 111715-01 and 111716-01 Sun Performance Library 7
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 Sun ONE Studio 7): -fast -xcrossfile -xtarget=ultra3
fdo_pre0=rm -rf ‘pwd‘/../feedback.profile ‘pwd‘/SunWS_cache
PASS1=-xprofile=collect:‘pwd‘/../feedback
PASS2=-xprofile=use:‘pwd‘/../feedback

Peak
(for Sun ONE Studio 7)
 fdo_pre0=rm -rf ‘pwd‘/../feedback.profile ‘pwd‘/SunWS_cache
 PASS1=-xprofile=collect:‘pwd‘/../feedback
 PASS2=-xprofile=use:‘pwd‘/../feedback
164.gzip: -xO5 -xtarget=ultra3 -xalias_level=std -W2,-whole -xcrossfile
    -W2,-Ainline -xprefetch -Wc,-Qgsched-trace_late=1,-Qgsched-spec_load=1 -ll2amm
175.vpr: -fast -xarch=v8plusb -xalias_level=std -xcrossfile -xsfpconst
    -xdepend -W2,-whole,-Mt600,-Mr4000 -Wc,-Qeps:enabled=1,-Qeps:do_spec_load=1,-Qeps:rp_filtering_margin=100
    -xregs=syst -lprism32 -lmopt -lm
176.gcc: -fast -xtarget=ultra3 -xcrossfile -W2,-whole -Wc,-Qgsched-trace_late=1,-Qgsched-T4 -ll2amm
```

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Notes/Tuning Information (Continued)

```
186.crafty: -fast -xtarget=ultra3 -xarch=v8plus -xF -xinline= -xcrossfile -Wc,-Qgsched-spec_load=1,-Qiselect-funcalign=64
    -xalias_level=strong -xregs=syst -W2,-Ashort_ldst,-Aivel:duplicate_loops -xprefetch=auto,latx:5.0
197.parser: -fast -xarch=v8plusb -xdepend -xprefetch=no%auto
    -xcrossfile -xregs=syst -Wc,-Qgsched-trace_late=1,-Qgsched-T4
    -xalias_level=strong -Wc,-Qipa:valueprediction
    -W2,-Ashort_ldst,-Mt5000 -Wc,-Qiselect-funcalign=32 -lprism32
252.eon: -fast -xtarget=ultra3 -xcrossfile -xalias_level=compatible -xsafe=mem -Qoption iropt
    -Mt2000,-xrestrict -Qoption cg -Qgsched-trace_spec_load=1,-Qgsched-trace_late=1
253.perlbmk: -xO5 -xtarget=ultra3 -xarch=v8plusb -xcrossfile -xalias_level=strong -xsafe=mem
    -Wc,-Qgsched-trace_late=1,-Qgsched-T4,-Qgsched-trace_spec_load=1 -Wc,-Qinline_memcpy=32
   -Wc,-Qiselect-funcalign=32,-Qicache-chbab=1 -Wc,-Qiselect-sw_pf_tbl_th=20 -W2,-Adata_access -xprefetch=auto,latx:5.0 -ll2amm -dn
255.vortex: -fast -xtarget=ultra3 -xcrossfile -W2,-Aheap,-reroll=1,-Aunroll,-Ms1,-Mt600,-Mr13000,-crit
    -Wc,-Qdepgraph-early_cross_call=1 -Wc,-Qiselect-funcalign=32 -Wc,-Qpeep-Sh0
    -xrestrict -xdepend -W2,-Amemopt
    -ll2amm -lprism32
256.bzip2: -fast -xtarget=ultra3 -W2,-whole,-crit
    -xcrossfile -xalias_level=strong -Wc,-Qiselect-funcalign=32
   -xdepend -xregs=syst -xsfpconst -Wc,-Qgsched-trace_spec_load=1 -xsafe=mem -ll2amm -lprism32

(for Parallelnavi 1.0.2):
fdo_pre0=rm -rf ‘pwd‘/*.fbk
PASS1=-Kpg
PASS2=-Kpu=$(EXEBASE).fbk
181.mcf: -Kfast_GP=2,GREG,eval,preex,popt,unroll=2,prefetch=4,largepage,preload -x-
254.gap: -Kfast_GP=3,popt,eval,cfunc,largepage,xi=10
300.twolf: -Kfast_GP=5,eval,GREG,popt,cfunc,staticclump,use_rodata,xi=10,largepage,bcopy,nounroll,prefetch=4

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=1477846784, shmsys:shminfo_shmmni=1024, shmsys:shminfo_shmseg=1024,shminfo_shmmin=1
 (for /etc/opt/FJSVpnrm/lpg.conf)
  TSS=512M, SHMSEGSIZE=256M
 Shell Environments:
   LD_LIBRARY_PATH="/usr/lib:/opt/FD7/SUNWspro/lib/v8plusb:/opt/FD7/SUNWspro/prod/lib/v8plusb:/opt/FSUNf90/lib"
    LD_LIBRARY_PATH_64="/usr/lib/64:/opt/FD7/SUNWspro/lib/v9:/opt/FD7/SUNWspro/prod/lib/v9"
    PRISM_HEAP=268435456
    PRISM_MODE=2
 ONESTEP=yes was set for all baseline and peak benchmarks.
 Feedback directed optimization was used for all baseline and peak benchmarks.
 System board used with only one CPU present.
```