CINT2000 Result

Copyright ©1999-2004, Standard Performance Evaluation Corporation

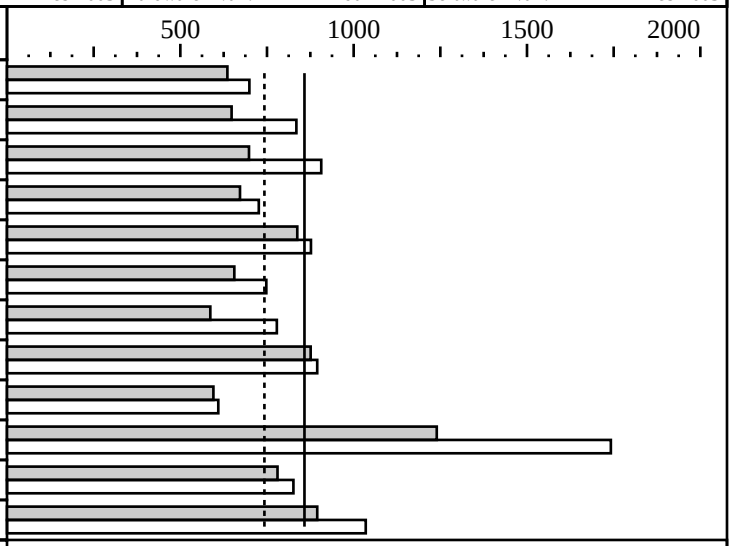
Fujitsu Limited
PRIMEPOWER900 (1350MHz)

SPECint2000 = 858

SPECint_base2000 = 743

SPEC license #: 19 | Tested by: Fujitsu Limited | Test date: Feb-2003 | Hardware Avail: Jun-2003 | Software Avail: Feb-2003

Benchmark	Reference Time	Base Runtime	Base Ratio	Runtime	Ratio
164.gzip	1400	220	636	200	699
175.vpr	1400	216	648	168	835
176.gcc	1100	158	698	121	906
181.mcf	1800	268	672	248	726
186.crafty	1000	119	837	114	877
197.parser	1800	275	656	241	748
252.eon	1300	222	586	167	778
253.perlbmk	1800	205	876	201	895
254.gap	1100	185	595	180	609
255.vortex	1900	153	1240	109	1742
256.bzip2	1500	192	780	182	826
300.twolf	3000	335	895	290	1035



Hardware

CPU:	SPARC64 V
CPU MHz:	1350
FPU:	Integrated
CPU(s) enabled:	1 core, 1 chip, 1 core/chip
CPU(s) orderable:	1 to 16 (increments of 1)
Parallel:	None
Primary Cache:	128KBI+128KBD on chip
Secondary Cache:	2MB(I+D) on chip
L3 Cache:	None
Other Cache:	None
Memory:	8192MB
Disk Subsystem:	1 x 36.4GB SCSI (10000rpm)
Other Hardware:	None

Software

Operating System:	Solaris8 2/02 with current patches (see notes)
Compiler:	Fujitsu Parallelnavi 1.0.2 Sun ONE Studio 7 with current patches (see notes) Sun Performance Library 7
File System:	ufs
System State:	multi user

Notes/Tuning Information

```
Baseline (except 252.eon, for Sun ONE Studio 7): -fast -xtarget=ultra3 -xcrossfile
fdo_pre0=rm -rf ‘pwd‘/../feedback.profile ‘pwd‘/SunWS_cache
PASS1=-xprofile=collect:‘pwd‘/../feedback
PASS2=-xprofile=use:‘pwd‘/../feedback
(252.eon, for Sun ONE Studio 7): -fast -xchip=ultra3 -xarch=v8plus -xcrossfile
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 -xchip=ultra3cu -xcache=128/64/2:2048/64/4 -xarch=v8plusb -xalias_level=std
    -W2,-whole -xcrossfile -W2,-Ainline -xprefetch -xprefetch_level=2
175.vpr: -fast -xchip=ultra2 -xcache=128/64/2:2048/64/4 -xarch=v8plusb
    -xalias_level=std -xipo=1 -xsfpconst -xdepend -W2,-whole
    -Wc,-Qeps:enabled=1,-Qeps:do_spec_load=1,-Qeps:rp_filtering_margin=100 ONESTEP=yes
176.gcc: -fast -xchip=ultra3 -xcache=128/64/2:2048/64/4 -xarch=v8plusb
    -xcrossfile -W2,-whole -Wc,-Qgsched-trace_late=1,-Qgsched-T4 -xprefetch -ll2amm
181.mcf: -fast -xchip=ultra3 -xcache=128/64/2:2048/64/4 -xarch=v8plusb
    -xcrossfile -xprefetch -xdepend -Wc,-Qms_pipe-pref,-Qlp=1-fa=1-av=256-t=2-fl=1
186.crafty: -fast -xchip=ultra3cu -xcache=128/64/2:2048/64/4
```

Copyright ©1999-2004, Standard Performance Evaluation Corporation

Notes/Tuning Information (Continued)

```
    -xarch=v8plusb -xinline=%auto -Wc,-Qgsched-trace_late=1,-Qgsched-T4
    -xalias_level=strong -xregs=syst -W2,-Ashort_ldst,-Aivel:duplicate_loops -xipo=1
197.parser: -fast -xchip=ultra3cu -xcache=128/64/2:2048/64/4 -xarch=v8plusb
    -xdepend -xcrossfile -xregs=syst -Wc,-Qgsched-trace_late=1,-Qgsched-T4
    -xalias_level=strong -Wc,-Qipa:valueprediction -lprism32 ONESTEP=yes
252.eon: -fast -xchip=ultra3 -xcache=128/64/2:2048/64/4 -xarch=v8plus
    -xcrossfile -xregs=syst -xsafe=mem -Qoption iropt -Mt2000 -Qoption cg
    -Qgsched -trace_late=1,-Qgsched-trace_spec_load=1,-Qgsched-T4
    -xunroll=3 -lmopt
253.perlbmk: -dn -xO5 -xchip=ultra3 -xcache=128/64/2:2048/64/2
    -xarch=v8plus -xcrossfile
254.gap: -fast -xchip=ultra3cu -xcache=128/64/2:2048/64/4
    -xarch=v8plusb -xcrossfile -xalias_level=std -xprefetch
    -W2,-whole -Wc,-Qgsched-trace_late=1,-Qgsched-T4
255.vortex: -fast -xchip=ultra3 -xcache=128/64/2:2048/64/4
    -xarch=v8plusb -Wc,-Qeps:enabled=1,-Qeps:do_spec_load=1
    -W2,-Aheap,-reroll=1,-Aunroll,-Ms15,-Mt300,-Mr6000,-crit
    -Wc,-Qdepgraph-early_cross_call=1 -Wc,-Qiselect-funcalign=64
    -Wc,-Qpeep-Sh0 -xrestrict -xdepend -xcrossfile -ll2amm -lprism32
256.bzip2: -fast -xchip=ultra3 -xcache=128/64/2:2048/64/4
    -xarch=v8plusb -W2,-Abopt -xcrossfile -xalias_level=strong
    -Wc,-Qiselect-funcalign=64 -xdepend -xregs=syst -xsafe=mem
(for Parallelnavi 1.0.2)
300.twolf: -Kfast_GP=5,GREG,popt,cfunc,staticclump,use_rodata,xi=10,nounroll,largepage,bcopy,prefetch=4 -dy
    PASS1=-Kpg
    PASS2=-Kpu=$(EXEBASE).fbk
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 -DSYS_HAS_IOCTL_PROTO
Note:
 System Tunables: (for /etc/system)
 consistent_coloring=1,
 shmsys:shminfo_shmmax=2147483648, shmsys:shminfo_shmmni=256,
 shmsys:shminfo_shmseg=400,shminfo_shmmin=1
 set tune_t_fsflushr = 86400
 set autoup = 86400
(for /etc/opt/FJSVpnrm/lpg.conf)
 TSS=512M, SHMSEGSIZE=256M
Shell Environments:
 LD_LIBRARY_PATH="/opt/SUNWspro/prod/lib/v8plusb"
 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 except 252.eon(base).
Stack size set to unlimited via "ulimit -s unlimited"
Small configuration memory system mode used ("4cpu mode", enabled via system console).
System board used with only one CPU present.
All patches of Sun ONE Studio 7 posted at URL http://access1.sun.com/sundev/s1s7-patches.html
   as of date 2003/02/21 were applied: 111704-06, 111706-04, 111709-02, 111715-04, 111718-01
   111705-03, 111708-03, 111714-04, 111716-02, 111723-02
All patches for Sun_ONE_Studio_7_SPARC_SunOS_5.8 posted at
    http://access1.sun.com/patch.public/cgi-bin/show_list.cgi/wrk/Sun_ONE_Studio_7_SPARC_SunOS_5.8
    as of date 2003/02/21 were applied:  108434-10, 108435-10, 111697-04, 111721-02
```