CINT2000 Result

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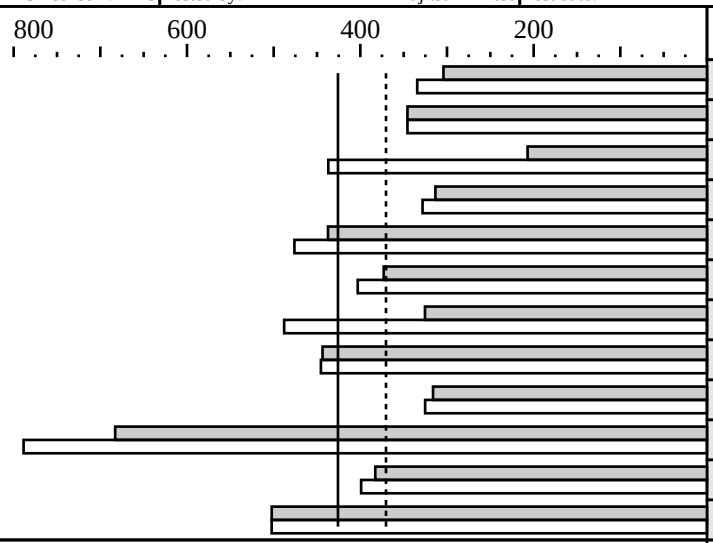
Fujitsu Limited
PRIMEPOWER1500 (1890MHz)

SPECint_rate2000 = 426

SPECint_rate_base2000 = 370

SPEC license #: 19 | Tested by: Fujitsu Limited | Test date: May-2004 | Hardware Avail: Sep-2004 | Software Avail: Apr-2004



Benchmark	Base Copies	Base Runtime	Base Ratio	Copies	Runtime	Ratio
164.gzip	32	171	304	32	155	334
175.vpr	32	150	346	32	150	346
176.gcc	32	197	207	32	93.4	437
181.mcf	32	213	313	32	204	328
186.crafty	32	84.9	437	32	78.0	476
197.parser	32	179	373	32	166	403
252.eon	32	148	325	32	98.9	488
253.perlbmk	32	151	444	32	150	445
254.gap	32	129	316	32	126	325
255.vortex	32	103	683	32	89.4	789
256.bzip2	32	145	383	32	140	399
300.twolf	32	222	502	32	222	502

Hardware

CPU:	SPARC64 V
CPU MHz:	1890
FPU:	Integrated
CPU(s) enabled:	32 cores, 32 chips, 1 core/chip
CPU(s) orderable:	1 to 32 (increments of 1)
Parallel:	None
Primary Cache:	128KBI + 128KBD on chip
Secondary Cache:	3MB(I+D) on chip
L3 Cache:	None
Other Cache:	None
Memory:	65536MB
Disk Subsystem:	1 x 36.4GB SCSI (10000rpm)
Other Hardware:	None

Software

Operating System:	Solaris 9 4/04
Compiler:	Sun Studio 8 Sun Performance Library 8
File System:	ufs
System State:	multi user

Notes/Tuning Information

```
FDO: (for Sun Studio 8)
fdo_pre0=rm -rf ./feedback.profile ./SunWS_cache
PASS1=-xprofile=collect:./feedback
PASS2=-xprofile=use:./feedback

Integer base flags:
(using C compiler of Sun Studio 8)
-fast -xtarget=ultra3cu -xipo=2 ONESTEP=yes FDO
(using C++ compiler of Sun Studio 8)
-fast -xchip=ultra3cu -xarch=v8plusb -xipo=2 ONESTEP=yes

Integer peak flags:
(using C compiler of Sun Studio 8)
164.gzip:     -xO5 -xarch=v8plusb -xchip=ultra2 -xcache=128/64/2:4096/64/4
              -xalias_level=std -xipo=2 -xprefetch -W2,-whole,-Ainline
              -Wc,-Qiselect-funcalign=64 ONESTEP=yes FDO
175.vpr:      basepeak=yes
176.gcc:      -fast -xarch=v8plusb -xchip=ultra3cu -xcache=128/64/2:4096/64/4
              -xipo=2 -W2,-whole -Wc,-Qgsched-T4,-Qgsched-trace_late=1,
              -Qiselect-funcalign=64 -ll2amm ONESTEP=yes FDO
```

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Notes/Tuning Information (Continued)

```
181.mcf:      -fast -xarch=v8plusb -xchip=ultra3cu -xcache=128/64/2:4096/64/4
              -xipo=2 -W2,-Apf:llist=3:noinnerllist -Wc,-Qeps:enabled=1,
              -Qms_pipe-pref ONESTEP=yes FDO
186.crafty:   -fast -xarch=v8plusb -xchip=ultra3cu -xcache=128/64/2:4096/64/4
              -xalias_level=strong -xipo=2 -xpagesize=512K -W2,-Ashort_ldst
              ONESTEP=yes FDO
197.parser:   -fast -xarch=v8plusb -xchip=ultra3cu -xcache=128/64/2:4096/64/4
              -xalias_level=strong -xipo=2 -xregs=syst -Wc,-Qgsched-T6,
              -Qgsched-trace_late=1,-Qipa:valueprediction,
              -Qiselect-funcalign=64 ONESTEP=yes FDO
253.perlbmk:  -fast -xarch=v8plusb -xchip=ultra3cu -xcache=128/64/2:4096/64/4
              -xipo=2 -Wc,-Qiselect-funcalign=64 ONESTEP=yes FDO
254.gap:      -fast -xarch=v8plusb -xchip=ultra3cu -xcache=128/64/2:4096/64/4
              -xalias_level=strong -xipo=2 -xprefetch_level=3
              -xprefetch=latx:2.0 -xvector -W2,-Abcopy,-whole
              -Wc,-Qgsched-T4,-Qgsched-trace_late=1,-Qiselect-funcalign=64
              ONESTEP=yes FDO
255.vortex:   -fast -xarch=v8plusb -xchip=ultra3cu -xcache=128/64/2:4096/64/4
              -xchip=ultra -xipo=2 -xrestrict -xprefetch=latx:1.6
              -W2,-Aheap,-Ainline:recursion=1:cs=500:irs=6000,-Aunroll,-crit,
              -Ms15,-Mt300,-Mr6000,-reroll=1 -Wc,-Qdepgraph-early_cross_call=1,
              -Qeps:do_spec_load=1,-Qeps:enabled=1,-Qiselect-funcalign=64,
              -Qpeep-Sh0 -ll2amm ONESTEP=yes FDO
256.bzip2:    -fast -xarch=v8plusb -xchip=ultra3cu -xcache=128/64/2:4096/64/4
              -xipo -xalias_level=strong -xregs=syst -xrestrict
              -xprefetch=latx:0.8 -W2,-Abopt -Wc,-Qiselect-funcalign=64,
              -Qeps:enabled ONESTEP=yes FDO
300.twolf:    -fast -xarch=v8plusb -xchip=ultra3cu -xcache=128/64/2:4096/64/4
              -xalias_level=strong -xarch=v8plus -xsafe=mem -xipo=2
              -xprefetch=no%auto ONESTEP=yes FDO

(using C++ compiler of Sun Studio 8)
252.eon:      -fast -xarch=v8plusb -xchip=ultra3cu -xcache=128/64/2:4096/64/4
              -noex -xalias_level=compatible -xipo=2 -xregs=syst -xunroll=3
              -Qoption cg -Qeps:enabled=1,-Qeps:ws=32,-Qgsched-T4,
              -Qgsched-trace_late=1,-Qiselect-funcalign=64
              -Qoption iropt -Mt2000 -lmopt ONESTEP=yes FDO

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

System Tunables:
(for /etc/system)
      set consistent_coloring=1
      set tune_t_fsflushr=86400
      set autoup=86400
      set memscrub_period_sec=172800

Shell Environments:
      Stack size set to unlimited via "ulimit -s unlimited"
      MPSSHEAP=4M
```

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Notes/Tuning Information (Continued)

```
        MPSSSTACK=4M
        LD_PRELOAD=mpss.so.1

    Processes were bound to CPUs using "submit=pbind".

    Extended Interleave Mode enabled.

    Sun Studio 8, posted at URL http://wwws.sun.com/software/products/studio/
    was used for this submission.
```