CINT2000 Result

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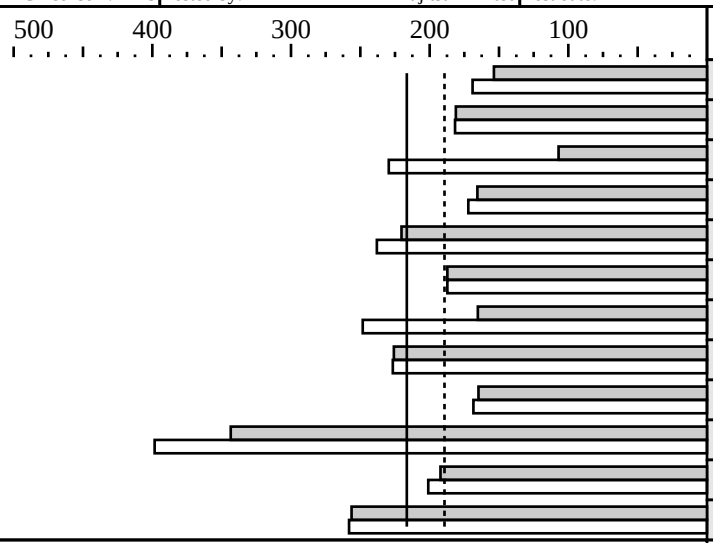
Fujitsu Limited
PRIMEPOWER1500 (1890MHz)

SPECint_rate2000 = 216

SPECint_rate_base2000 = 189

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	16	169	154	16	154	169
175.vpr	16	143	181	16	143	182
176.gcc	16	191	107	16	89.0	229
181.mcf	16	202	166	16	194	172
186.crafty	16	84.2	220	16	78.0	238
197.parser	16	178	187	16	178	187
252.eon	16	146	165	16	97.2	248
253.perlbmk	16	148	226	16	147	227
254.gap	16	124	165	16	121	168
255.vortex	16	103	343	16	88.5	398
256.bzip2	16	145	192	16	138	201
300.twolf	16	217	256	16	216	258

Hardware

CPU:	SPARC64 V
CPU MHz:	1890
FPU:	Integrated
CPU(s) enabled:	16 cores, 16 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:      -fast -xarch=v8plusb -xchip=ultra3cu -xcache=128/64/2:4096/64/4
              -xalias_level=std -xchip=ultra -xipo=2 -xprefetch=latx:1.6
              -xsfpconst -W2,-whole -Wc,-Qeps:do_spec_load=1,
              -Qeps:enabled=1,-Qeps:rp_filtering_margin=100,
```

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Notes/Tuning Information (Continued)

```
                -Qiselect-funcalign=64 -lmopt -lm ONESTEP=yes FDO
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
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:     basepeak=yes
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)

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

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

    Extended Interleave Mode enabled.

    4 CPUs each on 4 system boards. Unused CPUs have physically removed.

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