CINT2000 Result

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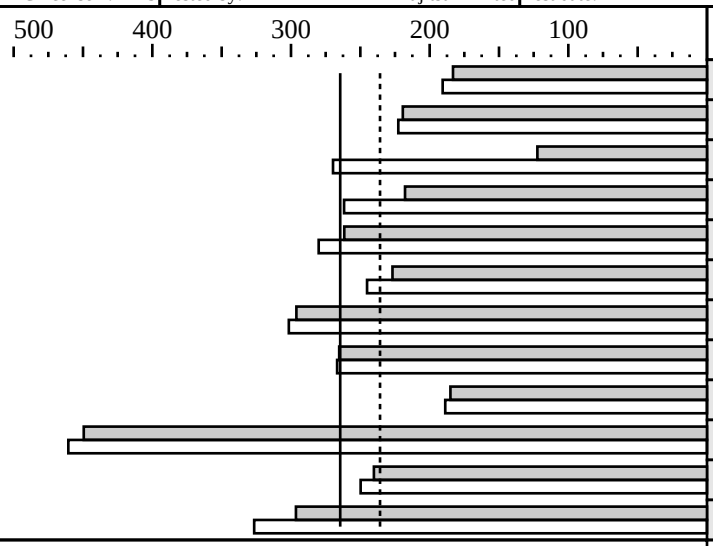
Fujitsu Limited
PRIMEPOWER1500 (2160MHz)

SPECint_rate2000 = 265

SPECint_rate_base2000 = 236

SPEC license #: 19 | Tested by: Fujitsu Limited | Test date: May-2005 | Hardware Avail: Jun-2005 | Software Avail: Sep-2004



Benchmark	Base Copies	Base Runtime	Base Ratio	Copies	Runtime	Ratio
164.gzip	16	142	183	16	136	191
175.vpr	16	118	219	16	117	223
176.gcc	16	167	122	16	75.7	270
181.mcf	16	153	218	16	128	262
186.crafty	16	71.0	262	16	66.3	280
197.parser	16	147	227	16	136	245
252.eon	16	81.5	296	16	80.0	302
253.perlbmk	16	126	265	16	125	267
254.gap	16	110	185	16	108	189
255.vortex	16	78.5	449	16	76.6	461
256.bzip2	16	116	240	16	111	250
300.twolf	16	188	296	16	171	327

Hardware

CPU:	SPARC64 V
CPU MHz:	2160
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:	4MB(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 9/04
Compiler:	(C/C++) Fujitsu Parallelnavi 2.3 with patch 913287-01 Sun Studio 9
File System:	ufs
System State:	multi user

Notes/Tuning Information

```
FDO: (for Parallelnavi 2.3)
fdo_pre0=rm -rf ‘pwd‘/*.f.d
PASS1=-Kpg
PASS2=-Kpu=$(EXEBASE).fbk
FDO: (for Sun Studio 9)
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 9)
-fast -xtarget=ultra3cu -xipo=2 ONESTEP=yes FDO
(using C++ compiler of Sun Studio 9)
-fast -xipo=2 ONESTEP=yes FDO

Integer peak flags:
(using C compiler of Parallelnavi 2.3)
300.twolf:    -Kfast_GP2=3,GREG,eval,preex,cfunc -O3 ONESTEP=yes FDO
```

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Notes/Tuning Information (Continued)

```
(using C compiler of Sun Studio 9)
164.gzip:     -xarch=v8plusb -xchip=ultra2 -xcache=128/64/2:4096/64/4
              -xalias_level=std -xipo=2 -W2,-whole -xO5 ONESTEP=yes FDO
175.vpr:      -fast -xarch=v8plusb -xchip=ultra3cu -xcache=128/64/2:4096/64/4
              -xalias_level=std -xchip=ultra2 -xipo=2 ONESTEP=yes FDO
176.gcc:      -fast -xarch=v8plusb -xchip=ultra3cu -xcache=128/64/2:4096/64/4
              -xipo=2 -ll2amm ONESTEP=yes FDO
181.mcf:      -fast -xarch=v8plusb -xchip=ultra3cu -xcache=128/64/2:4096/64/4
              -xipo=2 -xprefetch_level=3 -W2,-Apf:llist=3:noinnerllist
              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 ONESTEP=yes FDO
253.perlbmk:  -fast -xarch=v8plusb -xchip=ultra3cu -xcache=128/64/2:4096/64/4
              -xipo=2 -xalias_level=std 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 -xvector
              -W2,-Abcopy ONESTEP=yes FDO
255.vortex:   -fast -xarch=v8plusb -xchip=ultra3cu -xcache=128/64/2:4096/64/4
              -xipo=2 -xrestrict -W2,-crit,-Ainline:recursion=1:cs=500:irs=6000
              -Wc,-Qdepgraph-early_cross_call=1 -ll2amm ONESTEP=yes FDO
256.bzip2:    -fast -xarch=v8plusb -xchip=ultra3cu -xcache=128/64/2:4096/64/4
              -xipo=2 -xalias_level=strong -xrestrict ONESTEP=yes FDO

(using C++ compiler of Sun Studio 9)
252.eon:      -fast -xarch=v8plusb -xchip=ultra3cu -xcache=128/64/2:4096/64/4
              -noex -xalias_level=compatible -xipo=2
              -Qoption cg -Qeps:enabled=1,-Qeps:ws=32 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
      MPSSSTACK=4M
      LD_PRELOAD=mpss.so.1

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

Extended Interleave Mode enabled.
```

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Notes/Tuning Information (Continued)

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

Sun Studio 9, posted at URL http://www.sun.com/software/products/studio/previous/9/index.xml was used for this submission.