



CINT2000 Result

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Fujitsu Limited
PRIMEPOWER1500 (2160MHz)

SPECint_rate2000 = 518
SPECint_rate_base2000 = 463

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	32	143	362	32	138	377
175.vpr	32	125	417	32	122	427
176.gcc	32	168	243	32	77.9	524
181.mcf	32	158	424	32	134	499
186.crafty	32	71.9	517	32	66.9	555
197.parser	32	147	453	32	137	488
252.eon	32	82.1	588	32	80.9	597
253.perlbnk	32	128	522	32	127	526
254.gap	32	118	345	32	114	359
255.vortex	32	79.7	885	32	77.3	912
256.bzip2	32	117	477	32	113	493
300.twolf	32	189	589	32	172	648

Hardware

CPU: SPARC64 V
CPU MHz: 2160
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: 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 -l12amm ONESTEP=yes FDO

181.mcf: -fast -xarch=v8plusb -xchip=ultra3cu -xcache=128/64/2:4096/64/4
-xipo=2 -xprefetch_level=3 -W2,-Apf:l1list=3:noinnerl1list
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.perlbnk: -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 -l12amm 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.perlbnk: -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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Sun Studio 9, posted at URL <http://www.sun.com/software/products/studio/previous/9/index.xml> was used for this submission.