CINT2000 Result

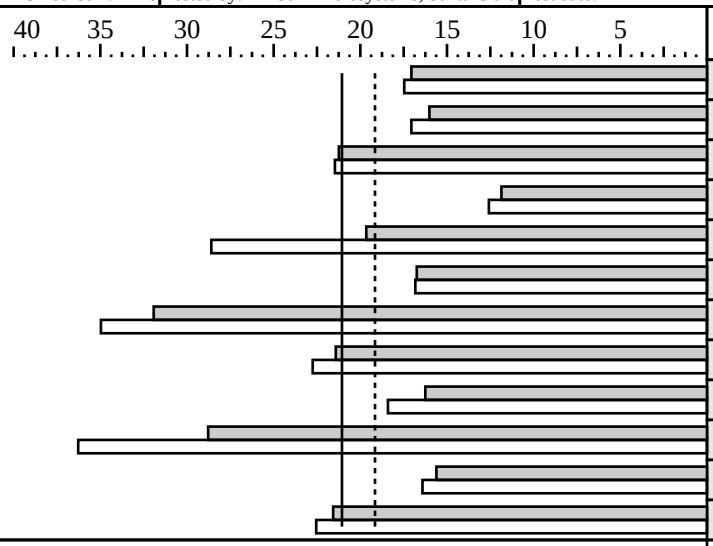
Copyright ©1999-2005, Standard Performance Evaluation Corporation

Sun Microsystems
Sun Fire X2100

SPECint_rate2000 = 21.1

SPECint_rate_base2000 = 19.2

SPEC license #: 6 | Tested by: Sun Microsystems, Santa Clara | Test date: Aug-2005 | Hardware Avail: Nov-2005 | Software Avail: Nov-2005



Benchmark	Base Copies	Base Runtime	Base Ratio	Copies	Runtime	Ratio
164.gzip	1	95.2	17.1	1	93.0	17.5
175.vpr	1	101	16.0	1	95.2	17.1
176.gcc	1	60.1	21.2	1	59.4	21.5
181.mcf	1	176	11.9	1	166	12.6
186.crafty	1	59.0	19.7	1	40.6	28.6
197.parser	1	125	16.7	1	124	16.8
252.eon	1	47.2	31.9	1	43.1	35.0
253.perlbmk	1	97.5	21.4	1	91.8	22.7
254.gap	1	78.5	16.3	1	69.3	18.4
255.vortex	1	76.6	28.8	1	60.8	36.3
256.bzip2	1	111	15.6	1	106	16.4
300.twolf	1	161	21.6	1	154	22.5

Hardware

CPU:	AMD Opteron (TM) 154
CPU MHz:	2800
FPU:	Integrated
CPU(s) enabled:	1 core, 1 chip, 1 core/chip
CPU(s) orderable:	1
Parallel:	No
Primary Cache:	64KBI + 64KBD (on chip) per core
Secondary Cache:	1024KB (I+D) (on chip) per core
L3 Cache:	N/A
Other Cache:	N/A
Memory:	4GB (4x1GB, PC3200 CL3 DDR SDRAM)
Disk Subsystem:	SATA, 80GB, 10K RPM
Other Hardware:	None

Software

Operating System:	Solaris 10 3/05 HW1
Compiler:	Sun Studio 11
File System:	ufs
System State:	Multi-user

Notes/Tuning Information

```
Compiler invocation:
  C: cc
  CXX: CC

FDO:  PASS1= -xprofile=collect:./feedback PASS2= -xprofile=use:./feedback
      fdo_pre0:  rm -rf ./feedback.profile


Integer base flags:
     Base tuning for C programs  : -fast  -xcrossfile -xalias_level=std +FDO ONESTEP=yes
     Base tuning for C++ programs: -fast  -xcrossfile -xarch=amd64 +FDO ONESTEP=yes

Integer peak flags:
 ONESTEP=yes +FDO for all benchmarks

 164.gzip:     -fast -xpagesize=2m -xcrossfile -M /usr/lib/ld/map.bssalign
 175.vpr:     -fast -xpagesize=2m -W2,-Ainline:inc=200:cs=500 -M /usr/lib/ld/map.bssalign -lmopt -lm
 176.gcc:     -fast -xipo=2 -Wd,-iropt-prof -xalias_level=strong -xrestrict
 181.mcf:     -fast -xpagesize=2m -xcrossfile -M /usr/lib/ld/map.bssalign
 186.crafty:  -fast -xrestrict -xipo=2 -xprefetch -xarch=amd64 -xpagesize=2m
```

Copyright ©1999-2005, Standard Performance Evaluation Corporation

Notes/Tuning Information (Continued)

```
                -M /usr/lib/ld/map.bssalign -Wd,-iropt-prof -W2,-Ashort_ldst:ldld
                -W2,-Ainline:rs=50
 197.parser:   -fast -xpagesize=2m -xipo=2 -W2,-Ainline:inc=200:cs=500 -M /usr/lib/ld/map.bssalign
 252.eon:      -fast -xipo=2 -qoption CC -iropt-prof -xvector -qoption iropt -Abcopy -xalias_level
                -xarch=amd64 -xrestrict -Qoption ube -xcallee=yes -xregs=frameptr
 253.perlbmk:  -fast -xcrossfile  -M /usr/lib/ld/map.bssalign -lbsdmalloc
 254.gap:      -fast -xipo=2 -Wd,-iropt-prof -xvector -W2,-Abcopy -lbsdmalloc -xprefetch
                -W2,-Ainline:cp=5:rs=1300:irs=3300:inc=100 -W2,-Arestrict_g
 255.vortex:  -fast -xipo=2 -Wd,-iropt-prof -lbsdmalloc -xrestrict -xprefetch -M /usr/lib/ld/map.bssalign
 256.bzip2:    -fast -xpagesize=2m -xcrossfile -xarch=sse2 -Xc -M /usr/lib/ld/map.bssalign -lbsdmalloc
 300.twolf:    -fast -xipo=2 -Wd,-iropt-prof -xrestrict -M /usr/lib/ld/map.bssalign

Portability:
 186.crafty:  -DUNIX -DHAS_LONGLONG -DLITTLE_ENDIAN_ARCH
 252.eon:     -DFMAX_IS_DOUBLE -DSPEC_CPU2000_LP64 -DUSE_STRERROR
 253.perlbmk: -DSPEC_CPU2000_SOLARIS_X86
 254.gap:     -DSYS_IS_USG -DSYS_HAS_SIGNAL_PROTO -DSYS_HAS_TIME_PROTO -DSYS_HAS_CALLOC_PROTO

Shell Environments:
  Stack size set to unlimited via "ulimit -s unlimited"

Kernel Parameters (/etc/system):
  autoup=900
  tune_t_fsflushr=1

Processes were bound to CPU using submit=pbind

Default BIOS setting was used
```