CINT2000 Result

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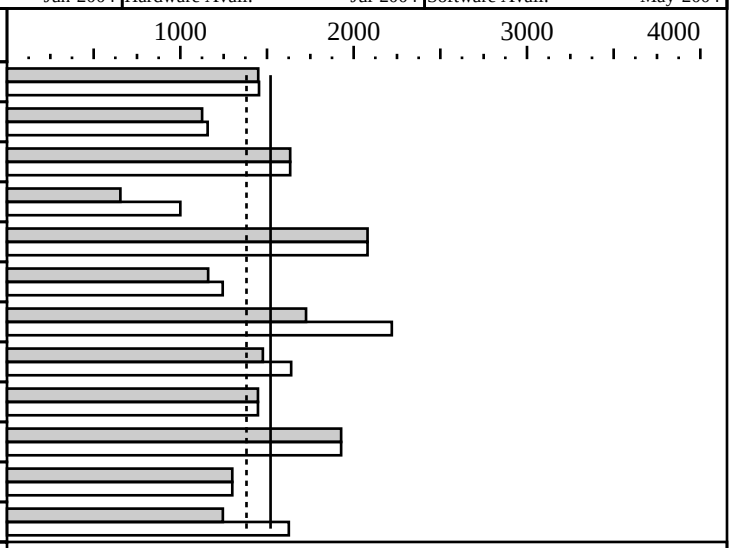
Sun Microsystems
Sun Fire V20z

SPECint2000 = 1521

SPECint_base2000 = 1382

SPEC license #: 6 | Tested by: Sun Microsystems, Santa Clara | Test date: Jun-2004 | Hardware Avail: Jul-2004 | Software Avail: May-2004

Benchmark	Reference Time	Base Runtime	Base Ratio	Runtime	Ratio
164.gzip	1400	96.6	1449	96.3	1454
175.vpr	1400	124	1126	121	1158
176.gcc	1100	67.3	1634	67.3	1634
181.mcf	1800	275	654	180	1000
186.crafty	1000	48.1	2080	48.1	2080
197.parser	1800	155	1160	145	1244
252.eon	1300	75.4	1725	58.6	2220
253.perlbmk	1800	122	1476	110	1639
254.gap	1100	76.0	1448	76.0	1448
255.vortex	1900	98.6	1928	98.6	1928
256.bzip2	1500	115	1300	115	1300
300.twolf	3000	241	1245	185	1626



Hardware

CPU:	AMD Opteron (TM) 250
CPU MHz:	2400
FPU:	Integrated
CPU(s) enabled:	1 core, 1 chip, 1 core/chip
CPU(s) orderable:	1,2
Parallel:	No
Primary Cache:	64KBI + 64KBD on chip
Secondary Cache:	1024KB (I+D) on chip
L3 Cache:	N/A
Other Cache:	N/A
Memory:	4x1GB, PC2700 CL2.5 DDR SDRAM ECC Registered
Disk Subsystem:	SCSI, 73GB, 10K RPM
Other Hardware:	None

Software

Operating System:	SuSE Linux 8.0 SLES 64 bit (SP3)
Compiler:	PathScale EKO Compiler Suite, Release 1.1 SuSE optional gcc 3.3 (from SLES8 SP3)
File System:	Linux/ext3
System State:	Multi-user, Run level 3

Notes/Tuning Information

```
Feedback-directed optimization is indicated by "+FDO", which means,
unless otherwise noted:
     PASS1: -fb_create fbdata
     PASS2: -fb_opt    fbdata

Compiler: pathcc (PathScale C) unless otherwise noted.
If other compilers are used, they are indicated as:
   g++     Gnu C++
   pathCC  PathScale C++

Integer base tuning:
  C programs:       pathcc -O3 -ipa +FDO
  C++ programs:     pathCC -Ofast +FDO

Peak Tuning:
164.gzip:     -O3 -ipa -WOPT:val=0 -CG:p2align_freq=10000 +FDO
175.vpr:      -O2 -ipa -OPT:alias=disjoint -LNO:prefetch_ahead=2
              -CG:p2align_freq=500000 -INLINE:aggressive=on
              -IPA:space=300:plimit=10000:callee_limit=5000:linear=on
```

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Notes/Tuning Information (Continued)

```
                +FDO
    176.gcc:    basepeak = true
    181.mcf:    -O3 -static -OPT:Ofast -m32 +FDO
    186.crafty: basepeak = true
    197.parser: -O3 -ipa -m32 -IPA:ctype=on +FDO
    252.eon:    g++ -O3 -msse2 -funroll-all-loops -ffast-math
                -finline-limit=5000
                Uses g++ style Feedback Directed Optimization:
                   PASS1: -fprofile-arcs   PASS2: -fbranch-probabilities
                Previous feedback is removed prior to compiles, using:
                   fdo_pre0 = rm -f *.da *.life analyz_prbrob.out
    253.perlbmk: -O3 -ipa -TENV:X=3 -IPA:min_hotness=5:plimit=20000 +FDO
    254.gap:    basepeak=yes
    255.vortex: basepeak=yes
    256.bzip2:  basepeak=yes
    300.twolf:  -O2 -OPT:unroll_times=8:unroll_size=256:alias=disjoint:Ofast
                -CG:gcm=off:p2align_freq=100000 -TENV:X=4 +FDO -m32

    Portability:
    186.crafty: -DLINUX_i386
    252.eon:    -DHAS_ERRLIST  -DSPEC_CPU2000_LP64 -lm
                srcalt = fmax_errno
    253.perlbmk: -DSPEC_CPU2000_LINUX_I386 -DSPEC_CPU2000_NEED_BOOL
                -DSPEC_CPU2000_GLIBC22 -DSPEC_CPU2000_LP64
    254.gap:    -DSYS_IS_USG -DSYS_HAS_IOCTL_PROTO -DSYS_HAS_TIME_PROTO
                -DSYS_HAS_SIGNAL_PROTO -DSYS_HAS_ANSI -DSYS_HAS_CALLOC_PROTO
                -DSPEC_CPU2000_LP64
    255.vortex: -DSPEC_CPU2000_LP64

    Notes:
         BIOS build 2.1.0.9E, default setting was used.
         Second CPU was physically removed from the system.
```