CINT2000 Result

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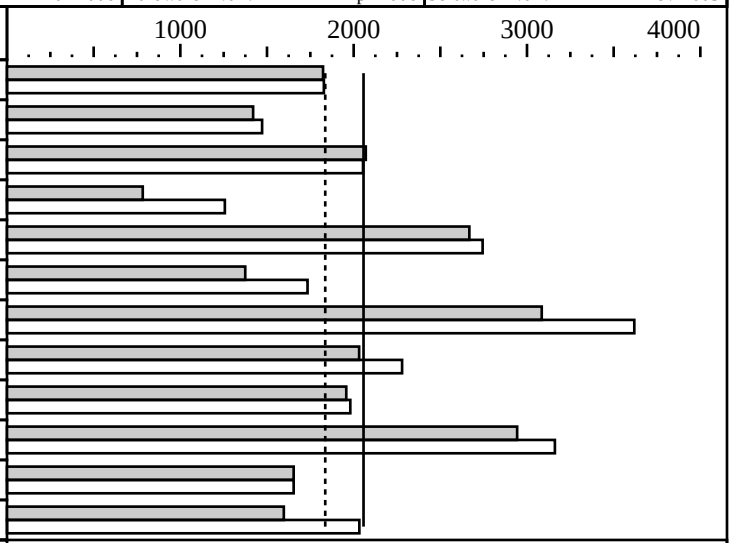
Sun Microsystems
Sun Ultra 40

SPECint2000 = 2057

SPECint_base2000 = 1836

SPEC license #: 6 | Tested by: Sun Microsystems, Santa Clara | Test date: Mar-2006 | Hardware Avail: Apr-2006 | Software Avail: Nov-2005

Benchmark	Reference Time	Base Runtime	Base Ratio	Runtime	Ratio
164.gzip	1400	76.8	1823	76.6	1828
175.vpr	1400	98.6	1420	95.1	1472
176.gcc	1100	53.1	2070	53.6	2054
181.mcf	1800	230	783	143	1257
186.crafty	1000	37.5	2667	36.4	2744
197.parser	1800	131	1375	104	1734
252.eon	1300	42.1	3085	35.9	3619
253.perlbmk	1800	88.6	2032	79.0	2279
254.gap	1100	56.2	1957	55.5	1981
255.vortex	1900	64.6	2943	60.1	3161
256.bzip2	1500	90.7	1654	90.7	1654
300.twolf	3000	188	1597	148	2033



Hardware

CPU:	AMD Opteron (TM) 256
CPU MHz:	3000
FPU:	Integrated
CPU(s) enabled:	1 core, 1 chip, 1 core/chip
CPU(s) orderable:	1,2 (order by # of chips)
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:	8GB (4x2GB, PC3200 CL3 DDR ECC Registered SDRAM)
Disk Subsystem:	SATA,250GB,7200 RPM
Other Hardware:	None

Software

Operating System:	SUSE LINUX Enterprise Server 9 SP3 (x86_64)
Compiler:	PathScale EKOPath(TM) Compiler Suite, Version 2.3
File System:	ufs
System State:	Multi-user

Notes/Tuning Information

```
Portability flags:
 186.crafty:  -DLINUX_i386
 252.eon:     -DHAS_ERRLIST -DSPEC_CPU2000_LP64
 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_CALLOC_PROTO -DSPEC_CPU2000_LP64
 255.vortex:  -DSPEC_CPU2000_LP64

Feedback Optimization:
 +FDO: PASS1=-fb_create fbdata   PASS2=-fb_opt fbdata

Baseline Optimization Flags:
   C programs:       -Ofast +FDO
   C++ programs:     -Ofast +FDO

Peak Tuning Flags:
 164.gzip:   -O3 -ipa -WOPT:val=0 -OPT:unroll_size=0 +FDO
 175.vpr:    -O3 -ipa -m32 +FDO
 176.gcc:    -O3 -IPA:plimit=10000 -LNO:opt=0 -OPT:goto=off +FDO
```

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Notes/Tuning Information (Continued)

```
 181.mcf:    -O3 -ipa -IPA:field_reorder=on -m32 +FDO
 186.crafty: -Ofast -CG:local_fwd_sched=on -LNO:opt=0 -WOPT:val=0 +FDO
 197.parser: -O3 -ipa -m32 -IPA:ctype=on +FDO
 252.eon:    -Ofast -CG:gcm=off:p2align_freq=1:prefetch=off -IPA:plimit=4000
             -OPT:treeheight=on -TENV:X=4:frame_pointer=off -fno-exceptions
             -LNO:fu=10:full_unroll_outer=on -GRA:optimize_boundary=on +FDO
 253.perlbmk:-O2 -ipa -OPT:Ofast:transform_to_memlib=off
             -fno-math-errno -IPA:plimit=10000 +FDO
 254.gap:    -Ofast -IPA:min_hotness=5 -OPT:alias=disjoint -CG:movnti=1 +FDO
 255.vortex: -Ofast -OPT:goto=off +FDO
 256.bzip2:  basepeak = true
 300.twolf:  -O2 -CG:gcm=off:p2align_freq=100000
             -OPT:Ofast:unroll_times_max=8:unroll_size=256:alias=disjoint
             -WOPT:mem_opnds=on -m32 +FDO

Default BIOS settings was used.
System was tested in 1-chip configuration.
```