CINT2000 Result

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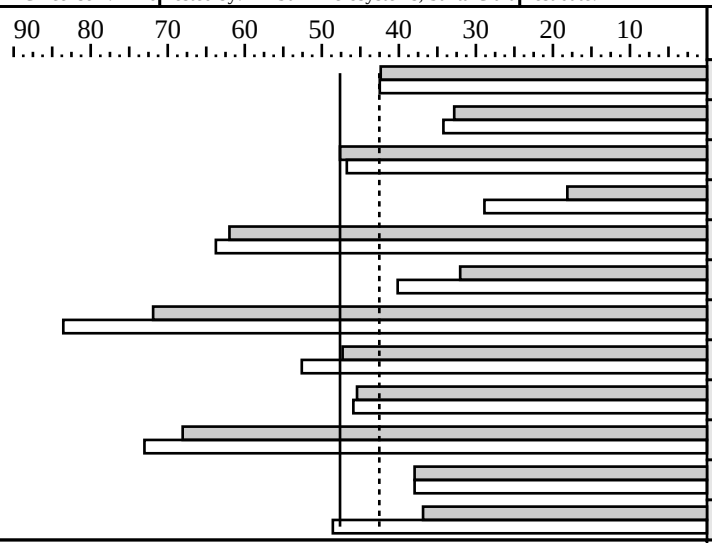
Sun Microsystems
Sun Ultra 40

SPECint_rate2000 = 47.6

SPECint_rate_base2000 = 42.5

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



Benchmark	Base Copies	Base Runtime	Base Ratio	Copies	Runtime	Ratio
164.gzip	2	76.7	42.4	2	76.5	42.5
175.vpr	2	99.0	32.8	2	94.9	34.2
176.gcc	2	53.6	47.6	2	54.6	46.8
181.mcf	2	230	18.1	2	145	28.9
186.crafty	2	37.4	62.0	2	36.4	63.8
197.parser	2	130	32.0	2	104	40.2
252.eon	2	41.9	71.9	2	36.1	83.6
253.perlbmk	2	88.3	47.3	2	79.4	52.6
254.gap	2	56.2	45.4	2	55.6	45.9
255.vortex	2	64.8	68.1	2	60.4	73.0
256.bzip2	2	91.7	38.0	2	91.7	38.0
300.twolf	2	189	36.9	2	143	48.6

Hardware

CPU:	AMD Opteron (TM) 256
CPU MHz:	3000
FPU:	Integrated
CPU(s) enabled:	2 cores, 2 chips, 1 core/chip
CPU(s) orderable:	1,2 (order by number 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:	16GB (8x2GB, 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

taskset has been used to bind processes to CPUs
Default BIOS settings was used.
```