CINT2000 Result

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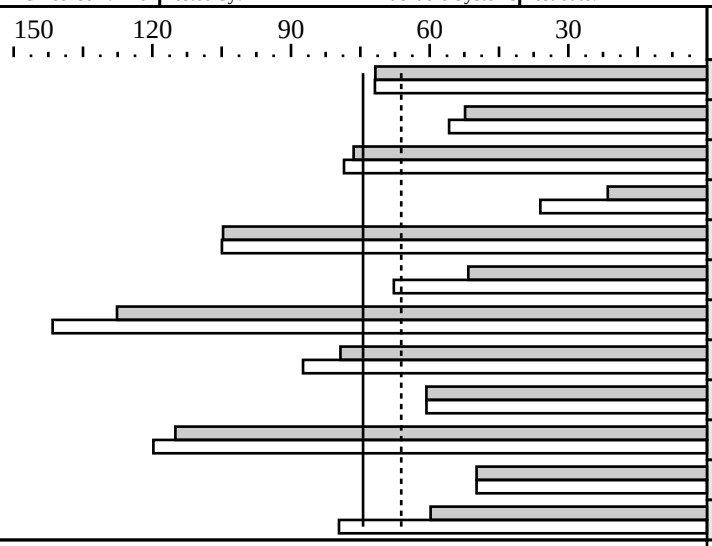
Rackable Systems
C1000-A01-25E26 (AMD Opteron 285)

SPECint_rate2000 = 74.4

SPECint_rate_base2000 = 66.1

SPEC license #: 64 | Tested by: Rackable Systems | Test date: Sep-2006 | Hardware Avail: Aug-2006 | Software Avail: Mar-2006



Benchmark	Base Copies	Base Runtime	Base Ratio	Copies	Runtime	Ratio
164.gzip	4	90.5	71.7	4	90.4	71.8
175.vpr	4	124	52.3	4	116	55.8
176.gcc	4	66.8	76.5	4	65.0	78.5
181.mcf	4	389	21.5	4	232	36.1
186.crafty	4	44.3	105	4	44.2	105
197.parser	4	162	51.6	4	123	67.8
252.eon	4	47.3	128	4	42.6	142
253.perlbmk	4	105	79.3	4	95.6	87.4
254.gap	4	84.1	60.7	4	84.1	60.7
255.vortex	4	76.7	115	4	73.6	120
256.bzip2	4	140	49.9	4	140	49.9
300.twolf	4	233	59.8	4	175	79.6

Hardware

CPU:	AMD Opteron 285
CPU MHz:	2600
FPU:	Integrated
CPU(s) enabled:	4 cores, 2 chips, 2 cores/chip
CPU(s) orderable:	1,2 chip(s)
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:	4x1024MB, DDR2 5300
Disk Subsystem:	1 x 250GB SATA
Other Hardware:	None

Software

Operating System:	Red Hat Enterprise Linux 4 Update 2 x86_64
Compiler:	PathScale EKOPath(TM) Compiler Suite, Release 2.4 (for C and C++)
File System:	Linux/ext3
System State:	Multi-user, run level 3

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_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
 181.mcf:    -O3 -ipa -IPA:field_reorder=on -m32 +FDO
```

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Notes/Tuning Information (Continued)

```
    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 utility used to bind process to CPU(s)
```