CINT2000 Result

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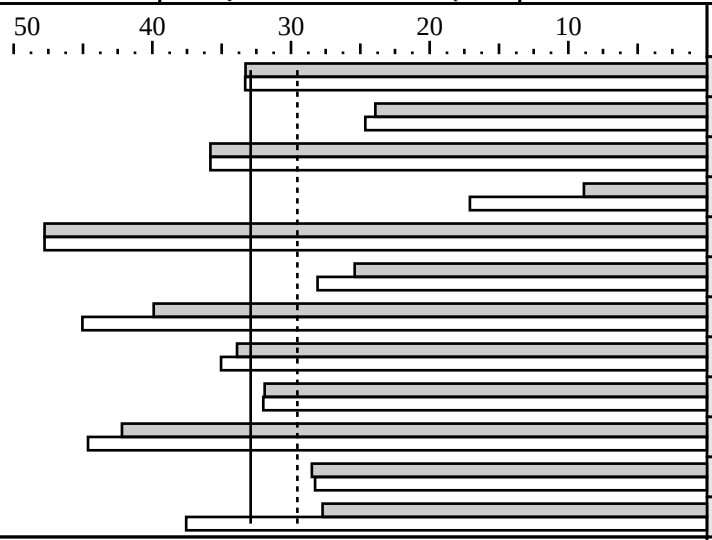
IBM Corporation
eServer 325, 2.4 GHz AMD Opteron (TM)

SPECint_rate2000 = 32.9

SPECint_rate_base2000 = 29.5

SPEC license #: 11 | Tested by: IBM Corporation | Test date: May-2004 | Hardware Avail: May-2004 | Software Avail: May-2004



Benchmark	Base Copies	Base Runtime	Base Ratio	Copies	Runtime	Ratio
164.gzip	2	97.6	33.3	2	97.5	33.3
175.vpr	2	136	23.9	2	132	24.6
176.gcc	2	71.3	35.8	2	71.3	35.8
181.mcf	2	470	8.88	2	244	17.1
186.crafty	2	48.6	47.8	2	48.6	47.8
197.parser	2	164	25.4	2	149	28.1
252.eon	2	75.6	39.9	2	67.0	45.0
253.perlbmk	2	123	33.9	2	119	35.0
254.gap	2	80.0	31.9	2	79.8	32.0
255.vortex	2	104	42.2	2	98.8	44.6
256.bzip2	2	122	28.5	2	123	28.3
300.twolf	2	251	27.7	2	185	37.6

Hardware

CPU:	AMD Opteron 250
CPU MHz:	2400
FPU:	Integrated
CPU(s) enabled:	2 cores, 2 chips, 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:	4x512MB+1024MB, DDR333
Disk Subsystem:	SCSI, 36GB 10K RPM
Other Hardware:	None

Software

Operating System:	SUSE Linux 8.0 SLES 64-bit Kernel 2.4.19-249 (SP2)
Compiler:	PathScale EKO Compiler Suite, Release 1.1
File System:	Linux/reiserfs
System State:	Multi-user, run level 3

Notes/Tuning Information

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

Baseline optimization flags:
  C programs:       -O3 -ipa +FDO
  C++ programs:     -Ofast +FDO

Portability Flags:
  175.vpr: -DSPEC_CPU2000
  181.mcf: -DWANT_STDC_PROTO
  186.crafty: -DLINUX_i386 -DSPEC_CPU2000
  252.eon: -DHAS_ERRLIST -DFMAX_IS_DOUBLE -DSPEC_CPU2000_LP64 -DNDEBUG
  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
  300.twolf: -DSPEC_CPU2000 -DHAVE_SIGNED_CHAR
```

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Notes/Tuning Information (Continued)

```
    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
             +FDO
    186.crafty: basepeak = true
    181.mcf: -O3 -static -OPT:Ofast -m32 +FDO
    197.parser: -O3 -ipa -m32 -IPA:ctype=on +FDO
    252.eon: -Ofast -CG:gcm=off:p2align_freq=1:prefetch=off
             -OPT:unroll_times_max=16:treeheight=on -TENV:X=4:frame_pointer=off
             -fno-exceptions +FDO
    253.perlbmk: -O3 -ipa -TENV:X=3 +FDO -IPA:min_hotness=5:plimit=20000
    254.gap:  -O3 -ipa +FDO -IPA:min_hotness=7
    255.vortex: -Ofast -LNO:opt=0 -TENV:X=4
        -OPT:goto=off:unroll_analysis=off:unroll_size=0:unroll_times_max=8
        +FDO -IPA:min_hotness=14:space=500:plimit=3600
    256.bzip2: -O3 -ipa -OPT:unroll_times=8:unroll_size=256 +FDO
    300.twolf: -O2 -CG:gcm=off:p2align_freq=100000 -TENV:X=4 +FDO -m32
               -OPT:unroll_times=8:unroll_size=256:alias=disjoint:Ofast

  Notes
     BIOS build level M1E127AUS, date, May-2004.
```