CINT2000 Result

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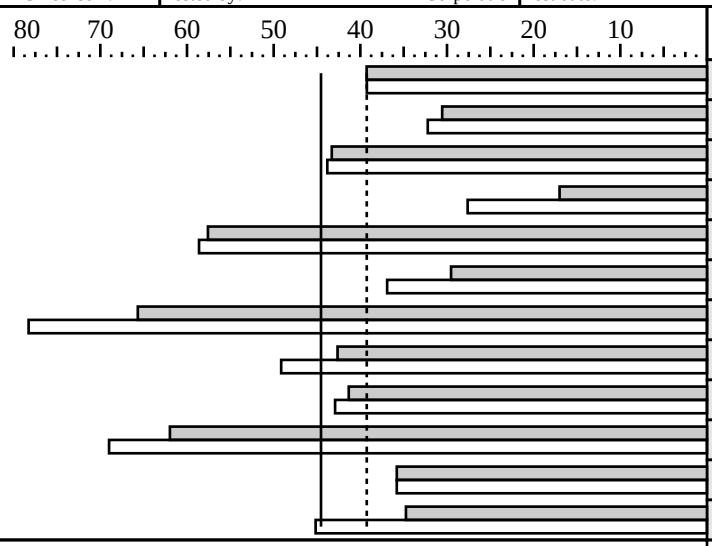
IBM

AMD Opteron LS20 for IBM eServer Blade Center (Opteron(tm) 254)

SPECint_rate2000 = 44.5

SPECint_rate_base2000 = 39.3

SPEC license #: 11 | Tested by: IBM Corporation | Test date: Feb-2006 | Hardware Avail: Feb-2006 | Software Avail: Nov-2005



Benchmark	Base Copies	Base Runtime	Base Ratio	Copies	Runtime	Ratio
164.gzip	2	82.7	39.3	2	82.8	39.2
175.vpr	2	106	30.6	2	101	32.2
176.gcc	2	58.9	43.3	2	58.3	43.8
181.mcf	2	245	17.0	2	151	27.6
186.crafty	2	40.3	57.6	2	39.6	58.6
197.parser	2	141	29.5	2	113	36.9
252.eon	2	45.9	65.7	2	38.5	78.3
253.perlbmk	2	98.0	42.6	2	85.0	49.1
254.gap	2	61.7	41.3	2	59.5	42.9
255.vortex	2	71.1	62.0	2	63.9	69.0
256.bzip2	2	97.2	35.8	2	97.2	35.8
300.twolf	2	200	34.7	2	154	45.2

Hardware

CPU:	AMD Opteron(tm) Processor 254
CPU MHz:	2800
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:	4 x 2048GB PC3200
Disk Subsystem:	SCSI, 36GB 10K RPM
Other Hardware:	None

Software

Operating System:	SuSE Linux 9.0 SP2 SLES 64 bit Kernel 2.6.5-7.191-smp (SP2)
Compiler:	PathScale EKO Compiler Suite, Release 2.2.1
File System:	Linux/reiserfs
System State:	Multi-user, run level 3

Notes/Tuning Information

```
Tested by IBM Corporation
 +FDO: PASS1= -fb_create fbdata  PASS2= -fb_opt fbdata
 Base tuning for C programs:   -Ofast +FDO
 Base tuning for C++ programs: -Ofast +FDO
 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
 Peak tuning:
   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
   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
```

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Notes/Tuning Information (Continued)

```
                -OPT:treeheight=on -TENV:X=4:frame_pointer=off -fno-exception
                -LNO:fu=10:full_unroll_outer=on -GRA:optimize_bundary=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
BIOS Configuration Notes
  Node Interleaving Disabled
Other Configuration Notes
   Taskset utility used to bind process to CPU(s)
```