CINT2000 Result

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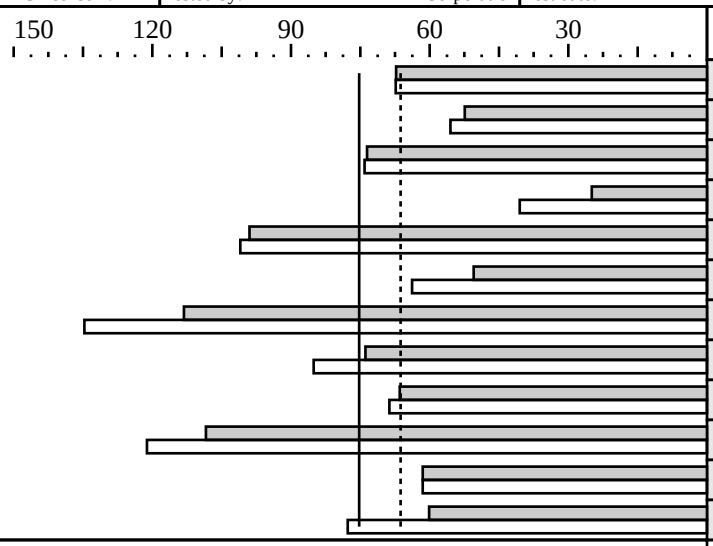
IBM

AMD Opteron LS20 for IBM eServer Blade Center (Opteron(tm) 280)

SPECint_rate2000 = 75.3

SPECint_rate_base2000 = 66.3

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	4	96.6	67.3	4	96.5	67.3
175.vpr	4	124	52.4	4	117	55.5
176.gcc	4	69.4	73.5	4	68.9	74.1
181.mcf	4	335	24.9	4	206	40.5
186.crafty	4	46.9	99.0	4	46.0	101
197.parser	4	165	50.5	4	131	63.8
252.eon	4	53.3	113	4	44.8	135
253.perlbmk	4	113	73.9	4	98.1	85.1
254.gap	4	76.8	66.5	4	74.3	68.7
255.vortex	4	81.3	108	4	72.8	121
256.bzip2	4	113	61.5	4	113	61.5
300.twolf	4	232	60.1	4	179	77.7

Hardware

CPU:	AMD Opteron(tm) Processor 280
CPU MHz:	2400
FPU:	Integrated
CPU(s) enabled:	4 cores, 2 chips, 2 cores/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:unroll_times_max=8:unroll_size=256:alias=disjoint:Ofast
                -WOPT:mem_opnds=on -m32 +FDO
BIOS Configuration Notes
  Node Interleaving Disabled
Other Configuration Notes
   Taskset utility used to bind process to CPU(s)
```