CINT2000 Result

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IBM

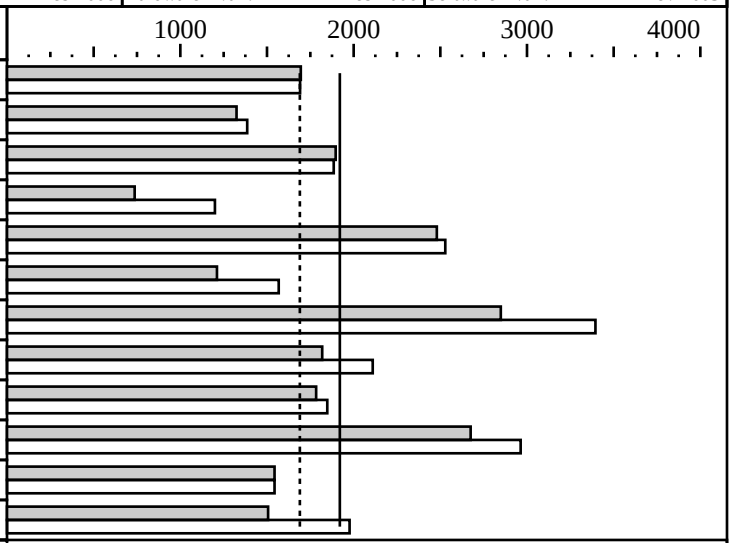
AMD Opteron LS20 for IBM eServer Blade Center (Opteron(tm) 254)

SPECint2000 = 1920

SPECint_base2000 = 1690

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

Benchmark	Reference Time	Base Runtime	Base Ratio	Runtime	Ratio
164.gzip	1400	82.6	1695	82.8	1691
175.vpr	1400	106	1324	101	1386
176.gcc	1100	58.0	1896	58.4	1885
181.mcf	1800	244	737	150	1200
186.crafty	1000	40.3	2480	39.5	2529
197.parser	1800	149	1211	115	1568
252.eon	1300	45.6	2849	38.3	3395
253.perlbmk	1800	99.0	1819	85.3	2110
254.gap	1100	61.7	1784	59.5	1848
255.vortex	1900	71.0	2675	64.1	2963
256.bzip2	1500	97.2	1544	97.2	1544
300.twolf	3000	199	1506	152	1976



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)
```