CINT2000 Result

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IBM Corporation

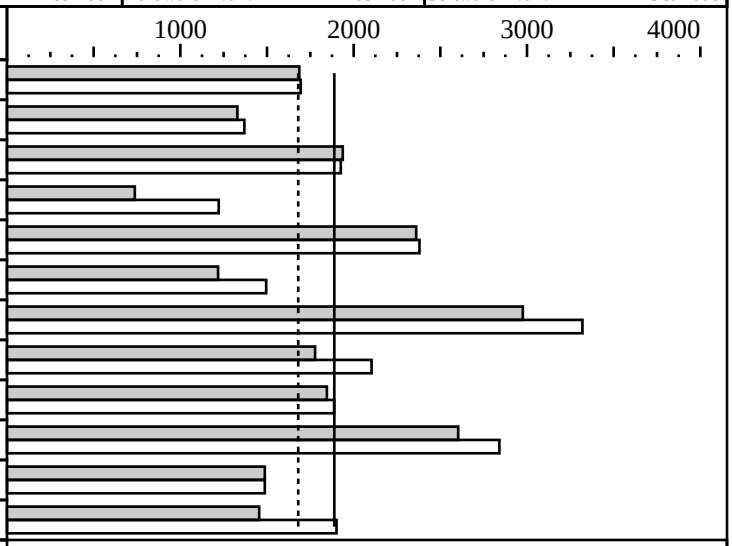
IBM BladeCenter LS21 (AMD Opteron 2220)

SPECint2000 = 1888

SPECint_base2000 = 1680

SPEC license #: 11 | Tested by: IBM Corporation | Test date: Feb-2007 | Hardware Avail: Feb-2007 | Software Avail: Oct-2006

Benchmark	Reference Time	Base Runtime	Base Ratio	Runtime	Ratio
164.gzip	1400	83.0	1686	82.6	1694
175.vpr	1400	105	1329	102	1370
176.gcc	1100	56.8	1937	57.1	1926
181.mcf	1800	244	737	147	1221
186.crafty	1000	42.4	2361	42.0	2380
197.parser	1800	148	1218	120	1495
252.eon	1300	43.7	2976	39.2	3320
253.perlbmk	1800	101	1778	85.6	2103
254.gap	1100	59.6	1846	58.3	1887
255.vortex	1900	73.0	2603	66.9	2841
256.bzip2	1500	101	1487	101	1487
300.twolf	3000	206	1455	158	1901



Hardware

CPU:	AMD Opteron 2220
CPU MHz:	2800
FPU:	Integrated
CPU(s) enabled:	4 cores, 2 chips, 2 cores/chip
CPU(s) orderable:	1,2 chips
Parallel:	No
Primary Cache:	64 KB I + 64 KB D on chip (per core)
Secondary Cache:	1 MB I+D on chip (per core)
L3 Cache:	N/A
Other Cache:	N/A
Memory:	16 GB (8x2 GB PC2-5300)
Disk Subsystem:	1x73 GB 10K SAS
Other Hardware:	

Software

Operating System:	SuSE Linux Enterprise Server 9 (x86_64) SP 3 SuSE kernel 2.6.5-7.244-default
Compiler:	PathScale EKOPath(TM) Compiler Suite, Release 2.5
File System:	Linux/ext2
System State:	Multi-user run level 3

Notes/Tuning Information

```
+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_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
               -OPT:treeheight=on -TENV:X=4:frame_pointer=off -fno-exceptions
```

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Notes/Tuning Information (Continued)

```
                -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
```