CINT2000 Result

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IBM

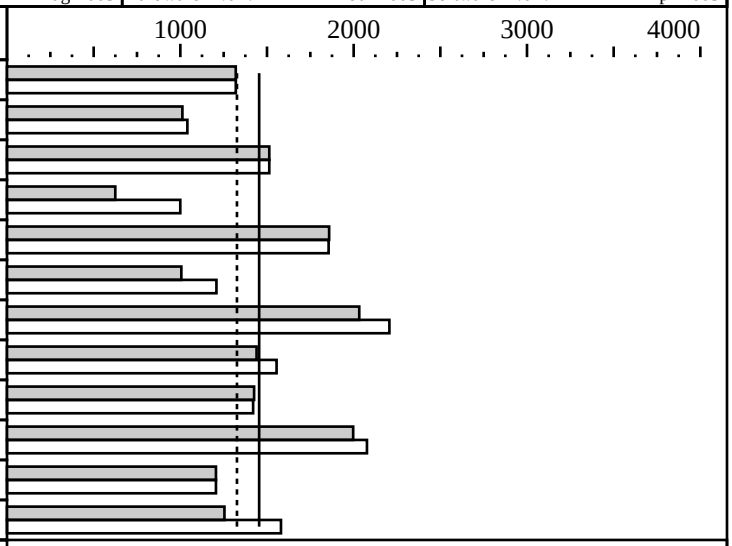
AMD Opteron LS20 for IBM eServer Blade Center

SPECint2000 = 1455

SPECint_base2000 = 1327

SPEC license #: 11 | Tested by: IBM Corporation | Test date: Aug-2005 | Hardware Avail: Jul-2005 | Software Avail: Apr-2005

Benchmark	Reference Time	Base Runtime	Base Ratio	Runtime	Ratio
164.gzip	1400	106	1320	106	1320
175.vpr	1400	138	1012	135	1041
176.gcc	1100	72.7	1513	72.7	1513
181.mcf	1800	288	625	180	1000
186.crafty	1000	53.8	1858	53.9	1856
197.parser	1800	179	1006	149	1208
252.eon	1300	64.0	2032	58.9	2206
253.perlbmk	1800	125	1440	116	1555
254.gap	1100	77.2	1426	77.5	1420
255.vortex	1900	95.1	1997	91.5	2077
256.bzip2	1500	124	1206	124	1206
300.twolf	3000	239	1254	190	1581



Hardware

CPU:	AMD Opteron 275
CPU MHz:	2200
FPU:	Integrated
CPU(s) enabled:	2 cores, 1 chip, 2 cores/chip
CPU(s) orderable:	1,2
Parallel:	No
Primary Cache:	64KBI + 64KBD (on chip) per core
Secondary Cache:	1024KB (I+D) (on chip) per core
L3 Cache:	N/A
Other Cache:	N/A
Memory:	4 x 2048MB, DDR400
Disk Subsystem:	SCSI, 36GB 10K RPM
Other Hardware:	None

Software

Operating System:	SuSE Linux 9.0 SLES 64 bit Kernel 2.6.5-7.151-smp (SP1)
Compiler:	PathScale EKOPath(TM) Compiler Suite, Release 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:   -O3 -ipa +FDO
 Base tuning for C++ programs: -Ofast +FDO
 Portability flags:
   186.crafty:  -DLINUX_i386
   252.eon:     -DHAS_ERRLIST -DSPEC_CPU2000_LP64 srcalt=fmax_errno
   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 srcalt=closed_files
 Peak tuning:
   164.gzip:    -Ofast +FDO
   175.vpr:     -O2 -ipa -OPT:alias=disjoint -CG:p2align_freq=500000 -INLINE:aggressive=on
                -IPA:space=300:plimit=10000:callee_limit=5000:linear=on +FDO
   176.gcc:     basepeak=true
   181.mcf:     -O3 -ipa -IPA:field_reorder=on -m32 +FDO
   186.crafty:  -Ofast +FDO
```

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Notes/Tuning Information (Continued)

```
    197.parser:  -O3 -ipa -m32 -IPA:ctype=on +FDO
    252.eon:     -Ofast -CG:gcm=off:p2align_freq=1:prefetch=off -OPT:treeheight=on
                -TENV:X=4:frame_pointer=off -fno-exceptions -LNO:fu=10:full_unroll_outer=on
                 -IPA:plimit=4000:pu_reorder=1 +FDO
    253.perlbmk: -O3 -ipa -IPA:plimit=10000 +FDO
    254.gap:     -O3 -ipa -OPT:transform_to_memlib=on +FDO
    255.vortex:  -Ofast -IPA:space=70:plimit=3000
              -OPT:goto=off:unroll_analysis=off:unroll_size=0:unroll_times_max=8 -LNO:opt=0 -TENV:X=4
    256.bzip2:   basepeak=true
    300.twolf:   -O2 -OPT:unroll_times=8:unroll_size=256:alias=disjoint:Ofast
                 -CG:gcm=off:p2align_freq=100000 -WOPT:mem_opnds=on -m32 +FDO
BIOS Configuration Notes
  Node Interleaving Disabled
Other Configuration Notes
   Taskset utility used to bind process to CPU(s)
```