



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

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+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

Standard Performance Evaluation Corporation

info@spec.org

http://www.spec.org



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Notes/Tuning Information (Continued)

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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.perlbnk: -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)