



# CINT2000 Result

Copyright ©1999-2005, Standard Performance Evaluation Corporation

## IBM Corporation

### IBM System X 3105 (AMD Athlon (TM) 64 3500+)

SPECint2000 = 1401

SPECint\_base2000 = 1269

SPEC license #: 11 | Tested by: IBM Corporation | Test date: Sep-2006 | Hardware Avail: Sep-2006 | Software Avail: Mar-2006

Benchmark	Reference Time	Base Runtime	Base Ratio	Runtime	Ratio	
164.gzip	1400	105	1338	105	1338	
175.vpr	1400	156	897	154	910	
176.gcc	1100	86.6	1270	86.8	1267	
181.mcf	1800	286	629	184	980	
186.crafty	1000	53.7	1863	53.4	1871	
197.parser	1800	185	973	149	1210	
252.eon	1300	56.3	2309	49.4	2634	
253.perlbnk	1800	125	1440	110	1629	
254.gap	1100	75.9	1450	75.9	1450	
255.vortex	1900	93.7	2027	87.1	2181	
256.bzip2	1500	132	1134	132	1134	
300.twolf	3000	332	905	277	1082	

### Hardware

CPU: AMD Athlon 64 3500+  
 CPU MHz: 2600  
 FPU: Integrated  
 CPU(s) enabled: 1 core, 1 chip, 1 core/chip  
 CPU(s) orderable: 1 chip  
 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: 4x1GB, PC2-5300  
 Disk Subsystem: SATA, 80GB 10K RPM  
 Other Hardware: None

### Software

Operating System: SuSE Linux 9.0 SP3 SLES 64 bit Kernel 2.6.5-7.244-smp  
 Compiler: PathScale EKO Compiler Suite, Release 2.4  
 PathScale EKOPATH(TM) Compiler Suite, Release 2.4  
 File System: Linux/reiserfs  
 System State: Multi-user, run level 3

## Notes/Tuning Information

+FDO: PASS1= -fb\_create fbdata PASS2= -fb\_opt fbdata

### Baseline optimization flags:

C programs: -Ofast +FDO  
 C++ programs: -Ofast +FDO

### Portability Flags:

186.crafty: -DLINUX\_i386  
 252.eon: -DHAS\_ERRLIST  
 253.perlbnk: -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



# CINT2000 Result

Copyright ©1999-2005, Standard Performance Evaluation Corporation

IBM Corporation

IBM System X 3105 (AMD Athlon (TM) 64 3500+)

SPECint2000 = 1401

SPECint\_base2000 = 1269

SPEC license #: 11 | Tested by: IBM Corporation | Test date: Sep-2006 | Hardware Avail: Sep-2006 | Software Avail: Mar-2006

## Notes/Tuning Information (Continued)

```

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
        -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: basepeak = true
255.vortex: -Ofast -OPT:goto=off -CG:p2align=on
        -GRA:optimize_boundary=on -IPA:min_hotness=120 +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

```