



# CINT2000 Result

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## IBM

AMD Opteron LS20 for IBM eServer Blade Center (AMD Opteron (TM) 250)

SPECint2000 = 1575

SPECint\_base2000 = 1417

SPEC license #: 11 | Tested by: IBM, Inc. | Test date: Apr-2005 | Hardware Avail: Apr-2005 | Software Avail: Apr-2005

Benchmark	Reference Time	Base Runtime	Base Ratio	Runtime	Ratio	
164.gzip	1400	97.7	1433	97.7	1433	
175.vpr	1400	129	1086	127	1104	
176.gcc	1100	66.7	1648	66.3	1659	
181.mcf	1800	287	627	175	1028	
186.crafty	1000	49.6	2017	48.5	2063	
197.parser	1800	175	1029	143	1261	
252.eon	1300	59.0	2202	52.9	2459	
253.perlbmk	1800	116	1555	103	1753	
254.gap	1100	72.0	1527	71.3	1542	
255.vortex	1900	87.7	2167	80.9	2349	
256.bzip2	1500	117	1287	117	1287	
300.twolf	3000	223	1348	181	1658	

### Hardware

CPU: AMD Opteron 250  
CPU MHz: 2400  
FPU: Integrated  
CPU(s) enabled: 1 core, 1 chip, 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 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, Inc.

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

#### Baseline optimization flags:

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

#### Portability Flags:

176.gcc: srcalt 64bitgcc  
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:



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## Notes/Tuning Information (Continued)

```

164.gzip: basepeak = true
175.vpr: -O2 -ipa -OPT:alias=disjoint -CG:p2align_freq=500000
        -INLINE:aggressive=on -IPA:plimit=10000:callee_limit=5000
        +FDO
176.gcc: -O3 -ipa -OPT:goto=off +FDO
181.mcf: -O3 -ipa -IPA:field_reorder=on -m32 +FDO
186.crafty: -O3 -OPT:goto=off +FDO
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 +FDO
253.perlbnk: -O2 -ipa -OPT:Ofast:transform_to_memlib=off
        -fno-math-errno -IPA:plimit=10000 +FDO
254.gap: -Ofast -WOPT:aggstr=off +FDO
255.vortex: -Ofast -OPT:goto=off -IPA:plimit=1800 -CG:p2align=on
        +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

```