



CINT2000 Result

Copyright ©1999-2005, Standard Performance Evaluation Corporation

IBM

AMD Opteron LS20 for IBM eServer Blade Center (AMD Opteron (TM) 252)

SPECint_rate2000 = 40.7

SPECint_rate_base2000 = 36.5

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

Benchmark	Base Copies	Base Runtime	Base Ratio	Copies	Runtime	Ratio
164.gzip	2	89.6	36.2	2	90.0	36.1
175.vpr	2	113	28.7	2	110	29.6
176.gcc	2	61.6	41.4	2	61.6	41.4
181.mcf	2	253	16.5	2	156	26.8
186.crafty	2	44.6	52.0	2	43.9	52.8
197.parser	2	152	27.5	2	125	33.4
252.eon	2	54.1	55.7	2	49.7	60.7
253.perlbnk	2	105	39.8	2	92.7	45.1
254.gap	2	66.7	38.3	2	65.2	39.1
255.vortex	2	74.9	58.9	2	67.9	65.0
256.bzip2	2	105	33.3	2	105	33.3
300.twolf	2	212	32.8	2	165	42.1

Hardware

CPU: AMD Opteron 252
 CPU MHz: 2600
 FPU: Integrated
 CPU(s) enabled: 2 cores, 2 chips, 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: 4x2048MB, DDR400
 Disk Subsystem: SCSI, 36GB 10K RPM
 Other Hardware: None

Software

Operating System: SuSE Linux 9.0 SLES 64 bit Kernel 2.6.5-7.139-smp (SP1)
 Compiler: PathScale EKO Compiler Suite, Release 2.0
 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

Baseline optimization flags:

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

Portability Flags:

181.mcf: -DWANT_STDC_PROTO
 186.crafty: -DLINUX_i386
 252.eon: -DHAS_ERRLIST -DSPEC_CPU2000_LP64
 srcalt fmax_errno
 253.perlbnk: -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



CINT2000 Result

Copyright ©1999-2005, Standard Performance Evaluation Corporation

IBM

AMD Opteron LS20 for IBM eServer Blade Center (AMD Opteron (TM) 252)

SPECint_rate2000 = 40.7

SPECint_rate_base2000 = 36.5

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

Notes/Tuning Information (Continued)

300.twolf: -DHAVE_SIGNED_CHAR

Peak Tuning:

164.gzip: -O3 -ipa -m3dnow -WOPT:val=0 +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: -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: -Ofast -OPT:transform_to_memlib=off -IPA:plimit=10000 +FDO

254.gap: -Ofast -WOPT:aggstr=0 +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=8:unroll_size=256:alias=disjoint

-WOPT:mem_opnds=on -m32 +FDO