



CINT2000 Result

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Advanced Micro Devices
TYAN S2865 K8E Tomcat, AMD Opteron (TM) 175

SPECint_rate2000 = 34.0
SPECint_rate_base2000 = 30.5

SPEC license #: 49 | Tested by: AMD, Austin, TX | Test date: Jul-2005 | Hardware Avail: Sep-2005 | Software Avail: Aug-2005

Benchmark	Base Copies	Base Runtime	Base Ratio	Copies	Runtime	Ratio
164.gzip	2	104	31.1	2	104	31.1
175.vpr	2	135	24.1	2	130	24.9
176.gcc	2	73.1	34.9	2	72.7	35.1
181.mcf	2	378	11.1	2	242	17.2
186.crafty	2	52.8	43.9	2	53.4	43.5
197.parser	2	176	23.8	2	143	29.2
252.eon	2	62.4	48.3	2	56.0	53.8
253.perlbnk	2	121	34.6	2	106	39.4
254.gap	2	81.7	31.2	2	80.6	31.7
255.vortex	2	84.7	52.0	2	77.7	56.7
256.bzip2	2	125	27.8	2	125	27.8
300.twolf	2	241	28.9	2	186	37.5

Hardware

CPU: AMD Opteron (TM) 175 (939-pin)
 CPU MHz: 2200
 FPU: Integrated
 CPU(s) enabled: 2 cores, 1 chip, 2 cores/chip
 CPU(s) orderable: 1
 Parallel: No
 Primary Cache: 64KBI + 64KBD/core
 Secondary Cache: 1024KB (I+D)/core
 L3 Cache: N/A
 Other Cache: N/A
 Memory: 4x512 MB, DDR400 CL2.0
 Disk Subsystem: IDE, Hitachi HDS722516VLAT20 165G, 7200 rpm
 Other Hardware: None

Software

Operating System: SuSE Linux Enterprise Server 9 SP2 for AMD64
 Compiler: PathScale EKOPath(TM) Compiler Suite, Release 2.1
 File System: Linux/ext3
 System State: Multi-user, run level 3

Notes/Tuning Information

Tested by AMD

+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.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

Peak Tuning:



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Notes/Tuning Information (Continued)

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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

```

Taskset utility used to bind CPU(s) to processes.

The tested system can be assembled using a standard ATX footprint, an Antec True 550 Watt EPS12V power supply, and a PCI or PCIe graphics card.

All memory slots were populated with Corsair CMX512-3200XL.

Memory timings manually set in BIOS: CAS=2, TRCD=2, TRAS=5, TRP=2

BIOS V2.00b