CINT2000 Result

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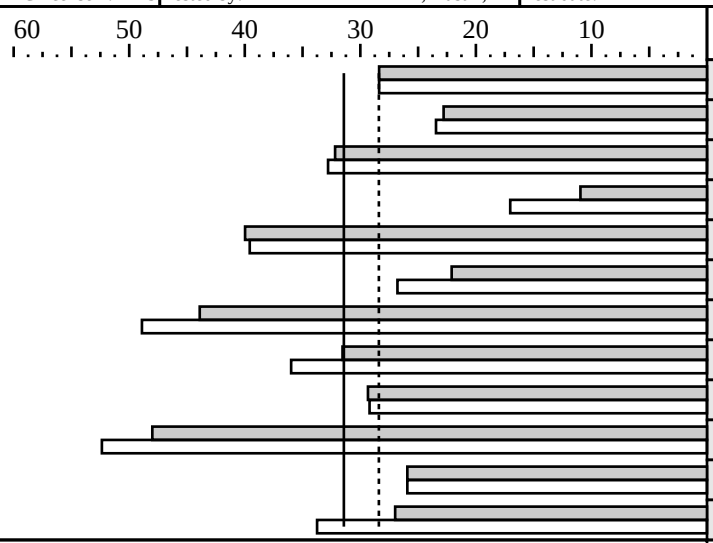
Advanced Micro Devices

TYAN S2865 K8E Tomcat, AMD Opteron (TM) 170

SPECint_rate2000 = 31.4

SPECint_rate_base2000 = 28.4

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	114	28.4	2	114	28.4
175.vpr	2	143	22.8	2	139	23.5
176.gcc	2	79.3	32.2	2	77.8	32.8
181.mcf	2	381	11.0	2	245	17.0
186.crafty	2	58.0	40.0	2	58.6	39.6
197.parser	2	189	22.1	2	156	26.8
252.eon	2	68.7	43.9	2	61.7	48.9
253.perlbmk	2	132	31.5	2	116	36.0
254.gap	2	87.0	29.3	2	87.4	29.2
255.vortex	2	91.8	48.0	2	84.2	52.4
256.bzip2	2	134	25.9	2	134	25.9
300.twolf	2	258	27.0	2	206	33.7

Hardware

CPU:	AMD Opteron (TM) 170 (939-pin)
CPU MHz:	2000
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.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.perlbmk: -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
```