CINT2000 Result

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Advanced Micro Devices

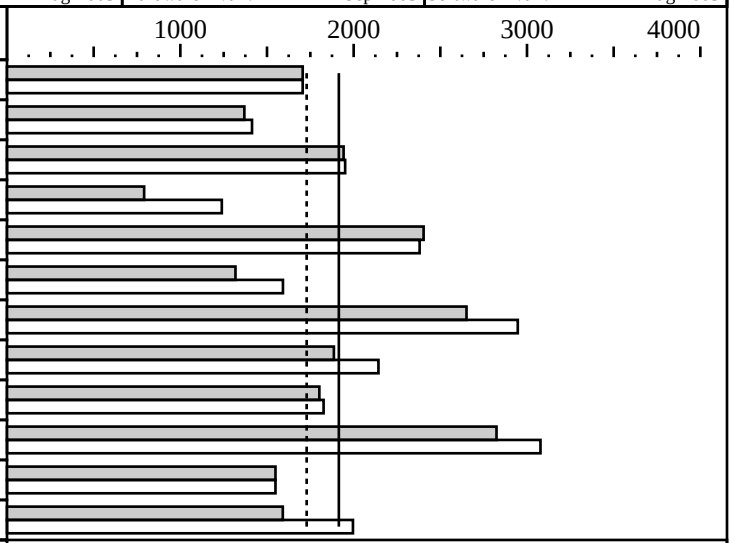
TYAN Tomcat K8E (S2865), AMD Opteron (TM) 154

SPECint2000 = 1915

SPECint_base2000 = 1729

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

Benchmark	Reference Time	Base Runtime	Base Ratio	Runtime	Ratio
164.gzip	1400	82.1	1706	82.1	1706
175.vpr	1400	102	1369	99.0	1414
176.gcc	1100	56.6	1942	56.4	1951
181.mcf	1800	228	791	145	1239
186.crafty	1000	41.6	2404	42.0	2381
197.parser	1800	137	1318	113	1592
252.eon	1300	49.0	2651	44.1	2947
253.perlbmk	1800	95.4	1886	84.0	2143
254.gap	1100	61.0	1802	60.2	1826
255.vortex	1900	67.3	2824	61.7	3078
256.bzip2	1500	96.8	1549	96.8	1549
300.twolf	3000	189	1591	150	1996



Hardware

CPU:	AMD Opteron (TM) 154 (939-pin)
CPU MHz:	2800
FPU:	Integrated
CPU(s) enabled:	1 core, 1 chip, 1 core/chip
CPU(s) orderable:	1
Parallel:	No
Primary Cache:	64KBI + 64KBD on chip
Secondary Cache:	1024KB (I+D) on chip
L3 Cache:	N/A
Other Cache:	N/A
Memory:	4x512 MB, DDR400 CL2.0
Disk Subsystem:	IDE, Hitachi HDS722516VLAT20, 164 GB 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

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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
The tested system can be assembled using a standard ATX case and an Antec True 550
Watt EPS12V power supply.
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
```