CINT2000 Result

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Advanced Micro Devices

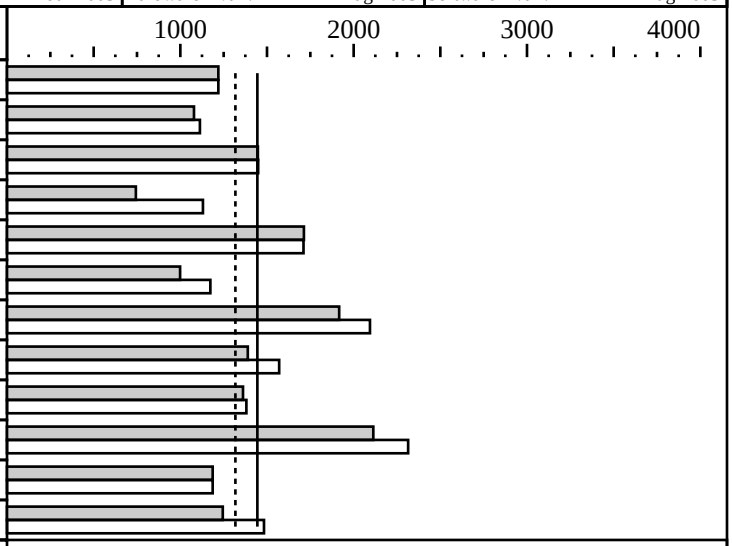
TYAN S2865 K8E Tomcat, AMD Opteron (TM) 146

SPECint2000 = 1444

SPECint_base2000 = 1318

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

Benchmark	Reference Time	Base Runtime	Base Ratio	Runtime	Ratio
164.gzip	1400	115	1219	115	1219
175.vpr	1400	130	1079	126	1113
176.gcc	1100	76.0	1447	75.9	1449
181.mcf	1800	242	743	159	1130
186.crafty	1000	58.4	1713	58.5	1711
197.parser	1800	180	999	153	1173
252.eon	1300	67.8	1916	62.1	2094
253.perlbmk	1800	130	1389	115	1570
254.gap	1100	80.8	1362	79.6	1381
255.vortex	1900	89.9	2113	82.1	2314
256.bzip2	1500	126	1187	126	1187
300.twolf	3000	241	1245	202	1483



Hardware

CPU:	AMD Opteron (TM) 146 (939-pin)
CPU MHz:	2000
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, Western Digital WD2000JB, 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 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 version 1.01
```