



CINT2000 Result

Copyright ©1999-2005, Standard Performance Evaluation Corporation

Advanced Micro Devices
TYAN S2865 K8E Tomcat, AMD Opteron (TM) 152

SPECint2000 = 1791
SPECint_base2000 = 1621

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	1000 2000 3000 4000			
164.gzip	1400	89.0	1574	89.0	1574	[Bar chart showing ratio]			
175.vpr	1400	108	1293	105	1333	[Bar chart showing ratio]			
176.gcc	1100	60.8	1810	60.9	1808	[Bar chart showing ratio]			
181.mcf	1800	233	773	150	1199	[Bar chart showing ratio]			
186.crafty	1000	45.0	2223	45.1	2216	[Bar chart showing ratio]			
197.parser	1800	146	1233	122	1481	[Bar chart showing ratio]			
252.eon	1300	52.4	2479	47.8	2722	[Bar chart showing ratio]			
253.perlbnk	1800	101	1776	89.8	2004	[Bar chart showing ratio]			
254.gap	1100	65.6	1678	64.6	1703	[Bar chart showing ratio]			
255.vortex	1900	71.9	2641	66.0	2878	[Bar chart showing ratio]			
256.bzip2	1500	103	1454	103	1454	[Bar chart showing ratio]			
300.twolf	3000	201	1491	160	1879	[Bar chart showing ratio]			

Hardware

CPU: AMD Opteron (TM) 152 (939-pin)
 CPU MHz: 2600
 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

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:



CINT2000 Result

Copyright ©1999-2005, Standard Performance Evaluation Corporation

Advanced Micro Devices
TYAN S2865 K8E Tomcat, AMD Opteron (TM) 152

SPECint2000 = 1791
SPECint_base2000 = 1621

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

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.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

```

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