CINT2000 Result

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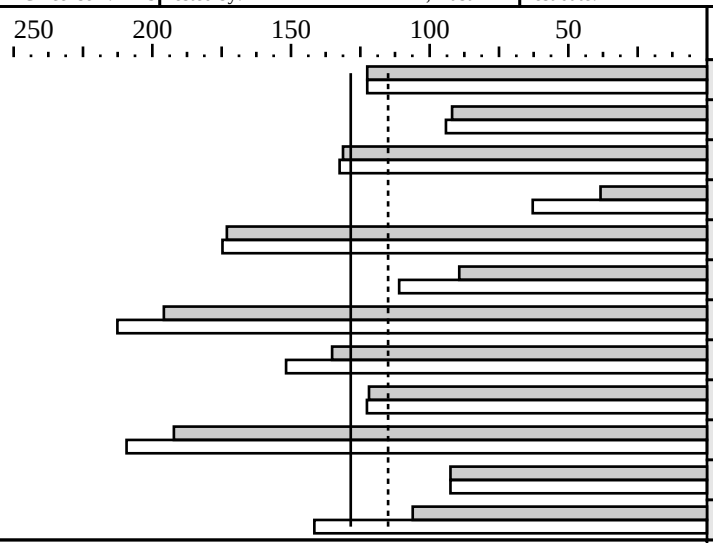
Advanced Micro Devices

TYAN Thunder K8QSD Pro (S4882-D), AMD Opteron (TM) 880

SPECint_rate2000 = 128

SPECint_rate_base2000 = 115

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



Benchmark	Base Copies	Base Runtime	Base Ratio	Copies	Runtime	Ratio
164.gzip	8	106	123	8	106	123
175.vpr	8	141	91.9	8	138	94.1
176.gcc	8	77.8	131	8	77.1	132
181.mcf	8	435	38.4	8	266	62.8
186.crafty	8	53.6	173	8	53.1	175
197.parser	8	187	89.3	8	150	111
252.eon	8	61.6	196	8	56.7	213
253.perlbmk	8	124	135	8	110	152
254.gap	8	83.8	122	8	83.2	123
255.vortex	8	91.7	192	8	84.2	209
256.bzip2	8	150	92.5	8	150	92.5
300.twolf	8	262	106	8	197	142

Hardware

CPU:	AMD Opteron (TM) 880
CPU MHz:	2400
FPU:	Integrated
CPU(s) enabled:	8 cores, 4 chips, 2 cores/chip
CPU(s) orderable:	1-4
Parallel:	No
Primary Cache:	64KBI + 64KBD/core
Secondary Cache:	1024KB (I+D)/core
L3 Cache:	N/A
Other Cache:	N/A
Memory:	16x512 MB, DDR400 ECC Reg CL2.5
Disk Subsystem:	SATA, Western Digital WD740GD, 74 GB 10000 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
```

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Notes/Tuning Information (Continued)

```
Peak Tuning:
  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 system under test can be built using a SSI MEB case and
a Zippy Technology Corp. PSL-6701P 12V 700W power supply.
All memory slots were populated with Kingston KRX3200AK2 on all CPU(s).
BIOS Rev E 1.03
Taskset utility used to bind CPU(s) to processes.
BIOS memory timing manually set CL=2.5
```