CINT2000 Result

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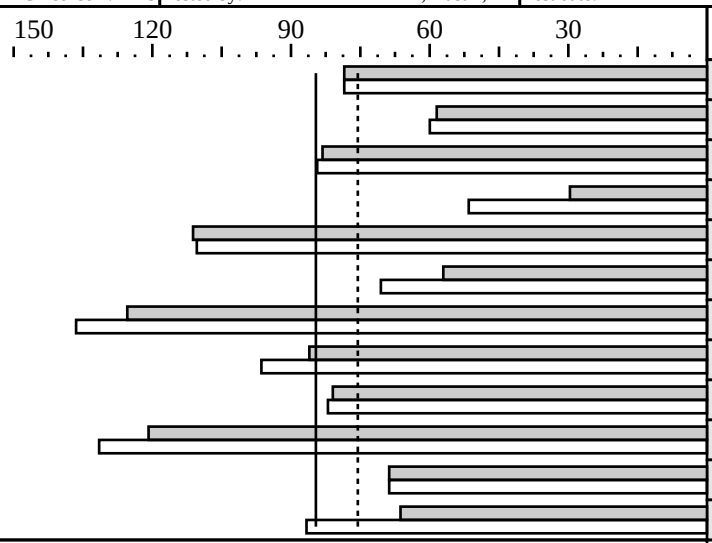
Advanced Micro Devices

TYAN Thunder K8QSD Pro (S4882-D), AMD Opteron (TM) 854

SPECint_rate2000 = 84.6

SPECint_rate_base2000 = 75.5

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



Benchmark	Base Copies	Base Runtime	Base Ratio	Copies	Runtime	Ratio
164.gzip	4	82.8	78.5	4	82.8	78.5
175.vpr	4	111	58.5	4	108	60.0
176.gcc	4	61.4	83.2	4	60.5	84.3
181.mcf	4	282	29.7	4	162	51.5
186.crafty	4	41.7	111	4	42.0	110
197.parser	4	146	57.1	4	118	70.6
252.eon	4	48.1	125	4	44.2	136
253.perlbmk	4	97.1	86.0	4	86.6	96.4
254.gap	4	63.1	81.0	4	62.2	82.0
255.vortex	4	73.0	121	4	67.0	132
256.bzip2	4	101	68.8	4	101	68.8
300.twolf	4	210	66.3	4	161	86.6

Hardware

CPU:	AMD Opteron (TM) 854
CPU MHz:	2800
FPU:	Integrated
CPU(s) enabled:	4 cores, 4 chips, 1 core/chip
CPU(s) orderable:	1-4
Parallel:	No
Primary Cache:	64KBI + 64KBD on chip
Secondary Cache:	1024KB (I+D) on chip
L3 Cache:	N/A
Other Cache:	N/A
Memory:	16x512 MB, DDR400 ECC Reg CL2.5
Disk Subsystem:	SATA, Western Digital WD740GD, 74GB 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

 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 system under test can be built using a 13" x 16" SSI MEB case and an
Enermax EPS 12 Volt ATX-6ES 660 Watt power supply.
All memory slots were populated with Kingston KRX3200AK2 on all CPU(s).
Taskset utility used to bind CPU(s) to processes.
Memory timings were manually set in BIOS: CL=2.5, TRCD=3, TRAS=6, TRP=3
BIOS Rev E.1.02
```