CINT2000 Result

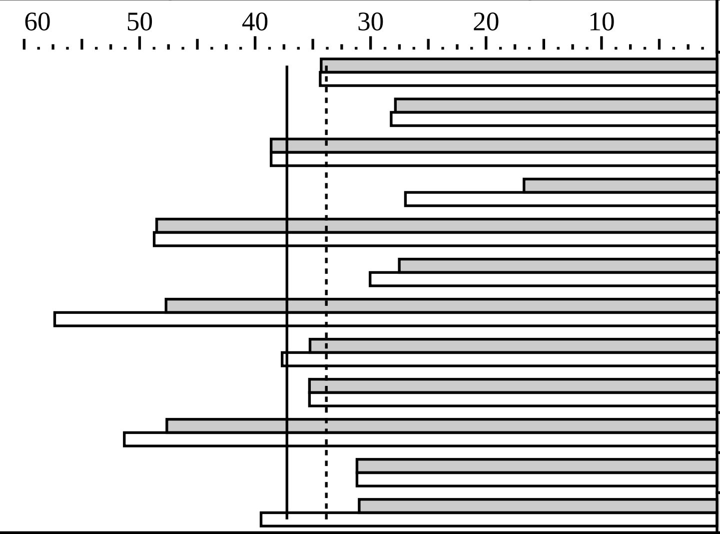
Advanced Micro Devices

Tyan Thunder K8QS Pro,(S4882), AMD Opteron (TM) 850

SPECint_rate2000 = 37.2

SPECint_rate_base2000 = 33.8

SPEC license #:	Tested by:	Test date:	Hardware Avail:	Software Avail:
49	AMD, Austin, TX	Oct-2004	Jul-2004	Aug-2004



Benchmark	Base Copies	Base Runtime	Base Ratio	Copies	Runtime	Ratio
164.gzip	2	94.8	34.3	2	94.5	34.4
175.vpr	2	117	27.8	2	115	28.2
176.gcc	2	66.1	38.6	2	66.1	38.6
181.mcf	2	250	16.7	2	155	27.0
186.crafty	2	47.8	48.5	2	47.6	48.7
197.parser	2	152	27.5	2	139	30.0
252.eon	2	63.2	47.7	2	52.6	57.4
253.perlbmk	2	118	35.2	2	111	37.7
254.gap	2	72.3	35.3	2	72.3	35.3
255.vortex	2	92.5	47.6	2	85.9	51.3
256.bzip2	2	112	31.2	2	112	31.2
300.twolf	2	225	31.0	2	176	39.5

Hardware

CPU:	AMD Opteron (TM) 850
CPU MHz:	2400
FPU:	Integrated
CPU(s) enabled:	2 cores, 2 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:	8x512 MB PC3200 CL3.0 ECC Reg
Disk Subsystem:	SCSI, Seagate Cheetah ST336753LW, U320, 15K rpm
Other Hardware:	None

Software

Operating System:	SuSE Linux Enterprise Sever for AMD64 (SP3)
Compiler:	PathScale EKO Compiler Suite, Release 1.3
File System:	Linux/ext3
System State:	Multi-user SuSE Run level 3

Notes/Tuning Information

```
+FDO: PASS1= -fb_create fbdata  PASS2= -fb_opt fbdata

Baseline optimization flags:
  C programs:       -O3 -ipa +FDO
  C++ programs:     -Ofast +FDO

Portability Flags:
  175.vpr: -DSPEC_CPU2000
  181.mcf: -DWANT_STDC_PROTO
  186.crafty: -DLINUX_i386 -DSPEC_CPU2000
  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
  300.twolf: -DSPEC_CPU2000 -DHAVE_SIGNED_CHAR
```

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Notes/Tuning Information (Continued)

```
Peak Tuning:
164.gzip:  -Ofast +FDO
175.vpr: -O2 -ipa -OPT:alias=disjoint -CG:p2align_freq=500000
         -INLINE:aggressive=on -IPA:space=300:plimit=10000:callee_limit=5000:linear=on
         +FDO
176.gcc: basepeak = true
181.mcf: -O3 -ipa -IPA:field_reorder=on -m32 +FDO
186.crafty: -Ofast +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=1
         +FDO -IPA:plimit=4000:pu_reorder=1
253.perlbmk: -O3 -ipa -TENV:X=3 +FDO -IPA:min_hotness=5:plimit=20000
254.gap:  basepeak = true
255.vortex: -Ofast -IPA:space=70:plimit=3000
    -OPT:goto=off:unroll_analysis=off:unroll_size=0:unroll_times_max=8
    -LNO:opt=0 -TENV:X=4
    +FDO
256.bzip2: basepeak = true
300.twolf: -O2 -OPT:unroll_times_max=8:unroll_size=256:alias=disjoint:Ofast
           -CG:gcm=off:p2align_freq=100000 -WOPT:mem_opnds=on -m32
BIOS rev. 1.00
Taskset utility used to bind CPU(s) to processes
All memory slots populated on CPU0 and CPU1
The tested system can be assembled using an SSI MEB footprint case,
such as the CCSI RC0352 3U rackmount case, and a Tyan recommended 660W EPS-12V
power supply, such as the Enermax 660W power supply (PEG851AX-VH)
```