CINT2000 Result

Copyright ©1999-2004, Standard Performance Evaluation Corporation

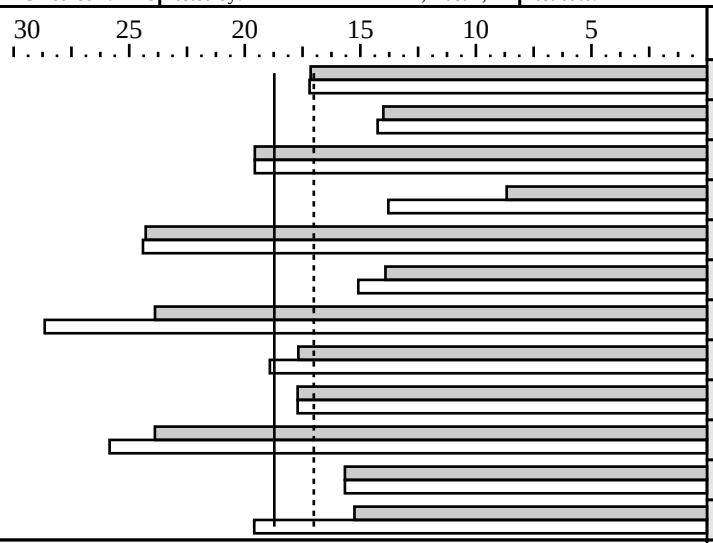
Advanced Micro Devices

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

SPECint_rate2000 = 18.7

SPECint_rate_base2000 = 17.0

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



Benchmark	Base Copies	Base Runtime	Base Ratio	Copies	Runtime	Ratio
164.gzip	1	94.7	17.2	1	94.4	17.2
175.vpr	1	116	14.0	1	114	14.3
176.gcc	1	65.2	19.6	1	65.2	19.6
181.mcf	1	241	8.67	1	151	13.8
186.crafty	1	47.8	24.3	1	47.5	24.4
197.parser	1	150	13.9	1	138	15.1
252.eon	1	63.1	23.9	1	52.6	28.7
253.perlbmk	1	118	17.7	1	110	18.9
254.gap	1	72.0	17.7	1	72.0	17.7
255.vortex	1	92.3	23.9	1	85.3	25.8
256.bzip2	1	111	15.7	1	111	15.7
300.twolf	1	228	15.3	1	178	19.6

Hardware

CPU:	AMD Opteron (TM) 850
CPU MHz:	2400
FPU:	Integrated
CPU(s) enabled:	1 core, 1 chip, 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:	4x512 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
```

Copyright ©1999-2004, Standard Performance Evaluation Corporation

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
    All the memory slots populated on CPU0
    The tested system can be assembled using an SSI MEB footprint case,
    such as the CCSI RC0352 3U rackmount case, and a Tyan recommended 650W EPS-12V
    power supply, such as the Enermax 660W power supply (PEG851AX-VH)

  Submitted_by: "Shroyer, Michael" <michael.shroyer@amd.com>
  Submitted: Mon Nov 15 15:02:49 2004
  Submission: cpu2000-20041115-03577.sub
```