CINT2000 Result

Copyright ©1999-2004, Standard Performance Evaluation Corporation

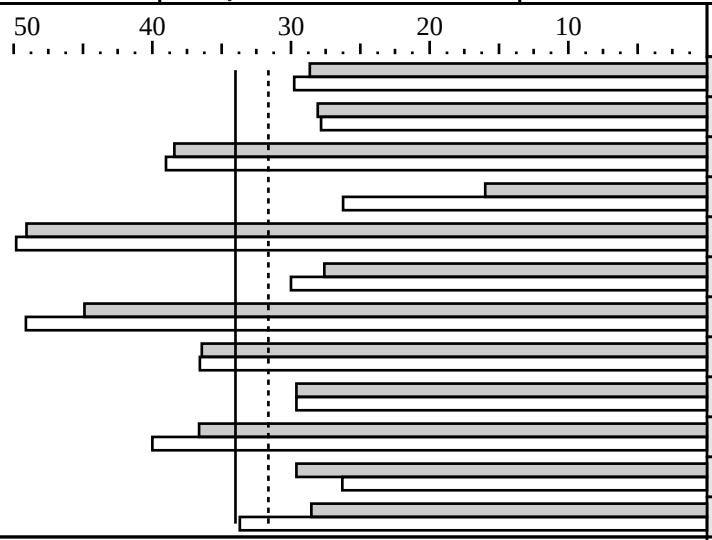
Advanced Micro Devices

Tyan Thunder K8W (S2885), AMD Opteron (TM) 250

SPECint_rate2000 = 34.0

SPECint_rate_base2000 = 31.6

SPEC license #: 49 | Tested by: AMD, Austin, TX | Test date: Apr-2004 | Hardware Avail: May-2004 | Software Avail: Apr-2004



Benchmark	Base Copies	Base Runtime	Base Ratio	Copies	Runtime	Ratio
164.gzip	2	113	28.6	2	109	29.8
175.vpr	2	116	28.1	2	117	27.8
176.gcc	2	66.4	38.4	2	65.4	39.0
181.mcf	2	261	16.0	2	159	26.2
186.crafty	2	47.3	49.1	2	46.6	49.8
197.parser	2	151	27.6	2	139	30.0
252.eon	2	67.2	44.9	2	61.4	49.1
253.perlbmk	2	115	36.4	2	114	36.6
254.gap	2	86.2	29.6	2	86.2	29.6
255.vortex	2	120	36.6	2	110	40.0
256.bzip2	2	118	29.6	2	132	26.3
300.twolf	2	244	28.5	2	207	33.7

Hardware

CPU:	AMD Opteron (TM) 250
CPU MHz:	2400
FPU:	Integrated
CPU(s) enabled:	2 cores, 2 chips, 1 core/chip
CPU(s) orderable:	2
Parallel:	No
Primary Cache:	64KBI + 64KBD on chip
Secondary Cache:	1024KB(I+D) on chip
L3 Cache:	N/A
Other Cache:	N/A
Memory:	4 x 512 MB PC3200 DDR SDRAM CL3.0
Disk Subsystem:	SCSI, Ultra 320, 15k rpm
Other Hardware:	None

Software

Operating System:	SuSE Linux 8.0 SLES 64 bit (SP3) SuSe NUMA kernel 2.4.21-143
Compiler:	SuSE optional gcc 3.3 compiler (20030312) (from SLES8 SP3)
File System:	Linux/ext3
System State:	Multi-user SuSE Run level 3

Notes/Tuning Information

```
+FDO: PASS1=-fprofile-arcs PASS2=-fbranch-probabilities
Portability:
               PORTABILITY=-DSPEC_CPU2000_LP64 is applied to all benchmarks,
               except for peak runs of 181.mcf, 197.parser and 300.twolf, which
               are compiled for 32-bit in peak.
 186.crafty:  CPORTABILITY=-DLINUX_i386
 176.gcc:     Approved src.alt is used
 252.eon:     CXXPORTABILITY=-DHAS_ERRLIST -DFMAX_IS_DOUBLE
              Approved src.alt is used.
 253.perlbmk: CPORTABILITY=-DSPEC_CPU2000_LINUX_I386 -DSPEC_CPU2000_NEED_BOOL
                           -DSPEC_CPU2000_GLIBC22
 254.gap:     CPORTABILITY=-DSYS_IS_USG -DSYS_HAS_IOCTL_PROTO -DSYS_HAS_TIME_PROTO
                          -DSYS_HAS_SIGNAL_PROTO -DSYS_HAS_ANSI -DSYS_HAS_CALLOC_PROTO
Baseline C:   gcc -O3 -funroll-all-loops +FDO
Baseline C++: g++ -O3 -funroll-all-loops +FDO
Peak tuning:
 164.gzip:    -O3 -funroll-all-loops -finline-limit=900 -freduce-all-givs +FDO
 175.vpr:     -O3 -funroll-loops -finline-limit=1000 +FDO
 176.gcc:     -O3 -funroll-all-loops -finline-limit=900 +FDO
 181.mcf:     -O3 -funroll-all-loops -m32 +FDO
```

Copyright ©1999-2004, Standard Performance Evaluation Corporation

Notes/Tuning Information (Continued)

```
    186.crafty:  -O3 -funroll-loops -fprefetch-loop-arrays
    197.parser:  -O3 -funroll-all-loops -m32 +FDO
    252.eon:     -O3 -funroll-all-loops -ffast-math -finline-limit=3000 +FDO
    253.perlbmk: -O3 -funroll-all-loops -finline-limit=1800 +FDO
    254.gap:     basepeak=true
    255.vortex:  -O3 -funroll-all-loops -finline-limit=1000 +FDO
    256.bzip2:   -O3 -funroll-all-loops -freduce-all-givs -finline-limit=2700 +FDO
    300.twolf:   -O3 -funroll-all-loops -finline-limit=2000 -m32 +FDO
  ONESTEP is used for all base and peak runs
Taskset utility used to bind processes to CPU(s)
BIOS rev.: 1.01
```