CINT2000 Result

Copyright ©1999-2004, Standard Performance Evaluation Corporation

Advanced Micro Devices

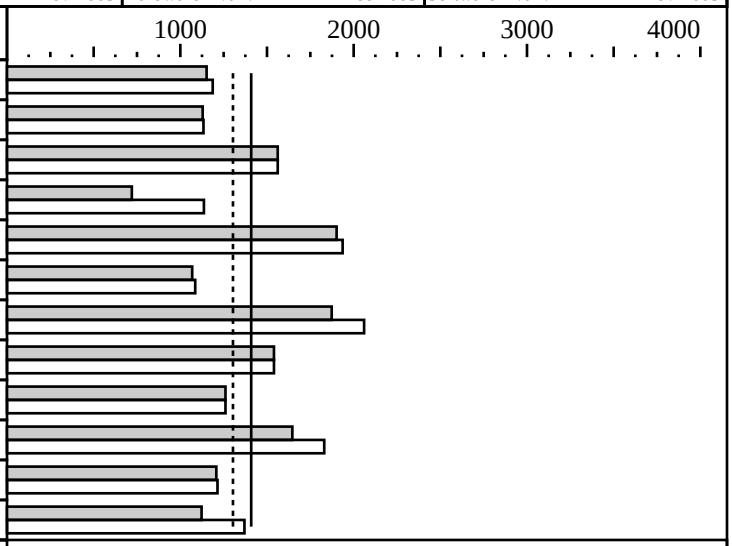
ASUS SK8N Motherboard, AMD Opteron (TM) 148

SPECint2000 = 1409

SPECint_base2000 = 1304

SPEC license #: 49 | Tested by: AMD, Austin, TX | Test date: Nov-2003 | Hardware Avail: Dec-2003 | Software Avail: Nov-2003

Benchmark	Reference Time	Base Runtime	Base Ratio	Runtime	Ratio
164.gzip	1400	122	1152	118	1187
175.vpr	1400	124	1129	124	1134
176.gcc	1100	70.4	1562	70.4	1562
181.mcf	1800	250	720	158	1136
186.crafty	1000	52.6	1902	51.6	1936
197.parser	1800	168	1068	166	1086
252.eon	1300	69.4	1873	63.1	2060
253.perlbmk	1800	117	1540	117	1540
254.gap	1100	87.3	1260	87.3	1260
255.vortex	1900	115	1646	104	1830
256.bzip2	1500	124	1208	124	1214
300.twolf	3000	267	1123	219	1370



Hardware

CPU:	AMD Opteron (TM) 148
CPU MHz:	2200
FPU:	Integrated
CPU(s) enabled:	1 core, 1 chip, 1 core/chip
CPU(s) orderable:	1
Parallel:	No
Primary Cache:	64KBI + 64KBD on chip
Secondary Cache:	1024KB(I+D) on chip
L3 Cache:	N/A
Other Cache:	N/A
Memory:	2 x 512MB PC3200 DDR SDRAM, ECC Registered
Disk Subsystem:	Western Digital WD2000, IDE
Other Hardware:	None

Software

Operating System:	SuSE Linux 9.0 (AMD64) 2.4.21-102-default
Compiler:	SuSE gcc 3.3.1 compiler (from SuSE Linux 9.0)
File System:	Linux/ext3
System State:	Multi-user SuSE Run level 3

Notes/Tuning Information

```
Tested by Advanced Micro Devices
  +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:
   gzip:    -O3 -funroll-all-loops -finline-limit=900 -freduce-all-givs +FDO
   vpr:     -O3 -funroll-loops -finline-limit=1000 +FDO
   gcc:     basepeak=true
```

Copyright ©1999-2004, Standard Performance Evaluation Corporation

Notes/Tuning Information (Continued)

```
  mcf:     -O3 -funroll-all-loops -m32 +FDO
  crafty:  -O3 -funroll-loops -fprefetch-loop-arrays
  parser:  -O3 -funroll-all-loops -m32 +FDO
  eon:     -O3 -funroll-all-loops -ffast-math -finline-limit=3000 +FDO
  perlbmk: basepeak=true
  gap:     basepeak=true
  vortex:  -O3 -funroll-all-loops -finline-limit=1000 +FDO
  bzip2:   -O3 -funroll-all-loops -freduce-all-givs -finline-limit=2700 +FDO
  twolf:   -O3 -funroll-all-loops -finline-limit=2000 -m32 +FDO
 ONESTEP is used for all base and peak runs
The tested system can be assembled using an ATX case such as the Antec KS-282,
a 480W power supply, and a PCI or AGP video card.
```