CINT2000 Result

Copyright ©1999-2004, Standard Performance Evaluation Corporation

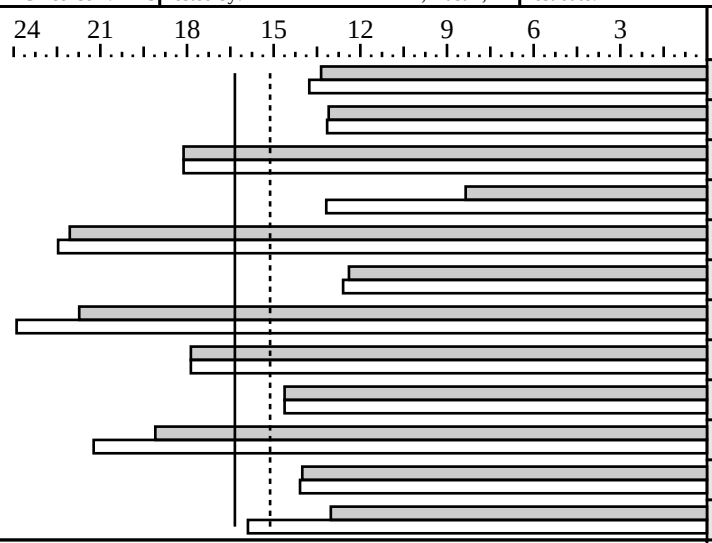
Advanced Micro Devices

ASUS SK8N Motherboard, AMD Opteron (TM) 148

SPECint_rate2000 = 16.3

SPECint_rate_base2000 = 15.1

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



Benchmark	Base Copies	Base Runtime	Base Ratio	Copies	Runtime	Ratio
164.gzip	1	122	13.4	1	118	13.8
175.vpr	1	124	13.1	1	124	13.1
176.gcc	1	70.4	18.1	1	70.4	18.1
181.mcf	1	250	8.35	1	158	13.2
186.crafty	1	52.6	22.1	1	51.6	22.5
197.parser	1	168	12.4	1	166	12.6
252.eon	1	69.4	21.7	1	63.1	23.9
253.perlbmk	1	117	17.9	1	117	17.9
254.gap	1	87.3	14.6	1	87.3	14.6
255.vortex	1	115	19.1	1	104	21.2
256.bzip2	1	124	14.0	1	124	14.1
300.twolf	1	267	13.0	1	219	15.9

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.
```