CINT2000 Result

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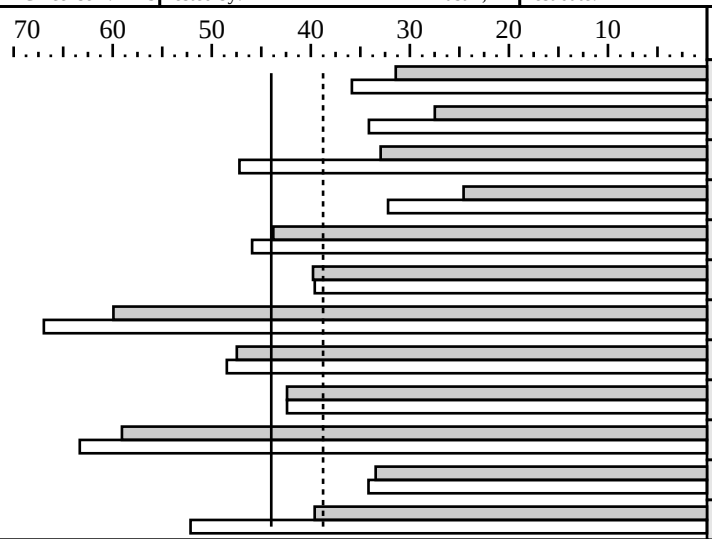
Advanced Micro Devices

Tyan Thunder K9QE (S4985) AMD Opteron (TM) 2220SE

SPECint_rate2000 = 44.0

SPECint_rate_base2000 = 38.8

SPEC license #: 49 | Tested by: AMD Austin, TX | Test date: Jul-2006 | Hardware Avail: Sep-2006 | Software Avail: Sep-2005



Benchmark	Base Copies	Base Runtime	Base Ratio	Copies	Runtime	Ratio
164.gzip	2	103	31.4	2	90.6	35.9
175.vpr	2	118	27.5	2	95.2	34.1
176.gcc	2	77.5	32.9	2	54.1	47.2
181.mcf	2	170	24.6	2	130	32.2
186.crafty	2	53.0	43.8	2	50.5	45.9
197.parser	2	105	39.8	2	105	39.6
252.eon	2	50.3	59.9	2	45.0	67.0
253.perlbmk	2	88.0	47.5	2	86.1	48.5
254.gap	2	60.2	42.4	2	60.2	42.4
255.vortex	2	74.6	59.1	2	69.6	63.3
256.bzip2	2	104	33.5	2	102	34.2
300.twolf	2	176	39.6	2	133	52.1

Hardware

CPU:	AMD Opteron (TM) 2220SE
CPU MHz:	2800
FPU:	Integrated
CPU(s) enabled:	2 cores, 1 chip, 2 cores/chip
CPU(s) orderable:	1,2,4
Parallel:	no
Primary Cache:	64KBI + 64KBD on chip per core
Secondary Cache:	1024KB (I+D) on chip per core
L3 Cache:	N/A
Other Cache:	N/A
Memory:	4x512MB, DDR2-667 CL4 ECC Reg
Disk Subsystem:	SATA, 74Gb
Other Hardware:	None

Software

Operating System:	Windows Server 2003 SP1 (32-bit)
Compiler:	Intel C++ 9.0 build 20050912Z for IA32 Microsoft Visual Studio .NET 7.0.9466 (libraries) MicroQuill Smartheap Library 7.0
File System:	NTFS
System State:	default

Notes/Tuning Information

```
shlW32M.lib is the SmartHeap library V7.0 from MicroQuill (www.microquill.com)
+FDO: PASS1=-Qprof_gen  PASS2=-Qprof_use
Portability:
  176.gcc:      -Dalloca=_alloca /F10000000
  186.crafty:   -DNT_i386
  253.perlbmk:  -DSPEC_CPU2000_NTOS -DPERLDLL /MT
  254.gap:      -DSYS_HAS_CALLOC_PROTO -DSYS_HAS_MALLOC_PROTO
Baseline C:   -O3 -Qipo -Op +FDO
Baseline C++: -O3 -Qipo -Qcxx-features +FDO
Peak Tuning:
164.gzip:     -O3 -Qipo -QxW +FDO
175.vpr:      -O3 -Qipo -QxW +FDO
              -Qoption,c,-ip_ninl_max_stats=2000,-ip_ninl_max_total_stats=4500
176.gcc:      -O3 -Qipo -QxW -Oi- -Qunroll3 +FDO
181.mcf:      -O3 -Qipo -QaxN      +FDO
186.crafty:   -O3 -Qipo -QxW +FDO
197.parser:   -QxW +FDO -Oi- -Qipo
252.eon:      -O3 -Qipo -QxW +FDO -Qansi_alias
             -Qoption,c,-ip_ninl_max_stats=2000,-ip_ninl_max_total_stats=4500
253.perlbmk:  -O3 -Qipo -QxW +FDO
```

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Notes/Tuning Information (Continued)

```
 254.gap:       basepeak = yes
 255.vortex:   -O3 -Qipo -arch:SSE  +FDO -Oi- shlW32M.lib
               -Qoption,c,-ip_ninl_max_stats=2000,-ip_ninl_max_total_stats=4500
 256.bzip2:    -O3 -Qipo              -Qunroll2
 300.twolf:    -O3 -Qipo -QxW +FDO    -Qunroll3 shlW32M.lib -Qansi_alias
All memory slots populated on all CPU(s)
'start /b /wait /affinity' command is used to bind CPU(s) to processes
The system can be built using a Zippy 700W EPS12V power supply and any SSI-MEB case.
BIOS Changes: Enable Basic ECC
```