CINT2000 Result

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Advanced Micro Devices

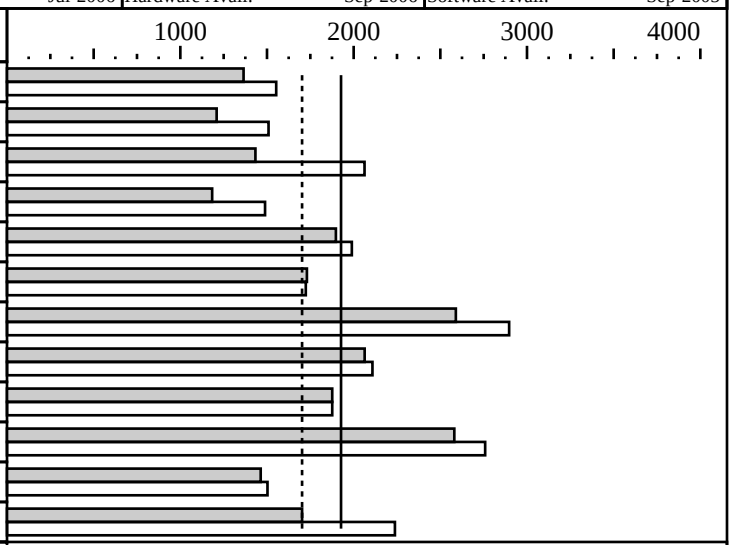
Tyan Thunder K9QE (S4985) AMD Opteron (TM) 2220SE

SPECint2000 = 1927

SPECint_base2000 = 1702

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

Benchmark	Reference Time	Base Runtime	Base Ratio	Runtime	Ratio
164.gzip	1400	103	1365	90.1	1553
175.vpr	1400	116	1210	92.8	1509
176.gcc	1100	76.8	1433	53.3	2063
181.mcf	1800	152	1184	121	1489
186.crafty	1000	52.7	1897	50.3	1989
197.parser	1800	104	1730	104	1724
252.eon	1300	50.2	2589	44.9	2897
253.perlbmk	1800	87.2	2063	85.4	2108
254.gap	1100	58.6	1876	58.6	1876
255.vortex	1900	73.6	2581	68.9	2759
256.bzip2	1500	102	1464	99.8	1503
300.twolf	3000	176	1702	134	2238



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)
The system can be built using a Zippy 700W EPS12V power supply and any SSI-MEB case.
BIOS Changes: Enable Basic ECC
```