CINT2000 Result

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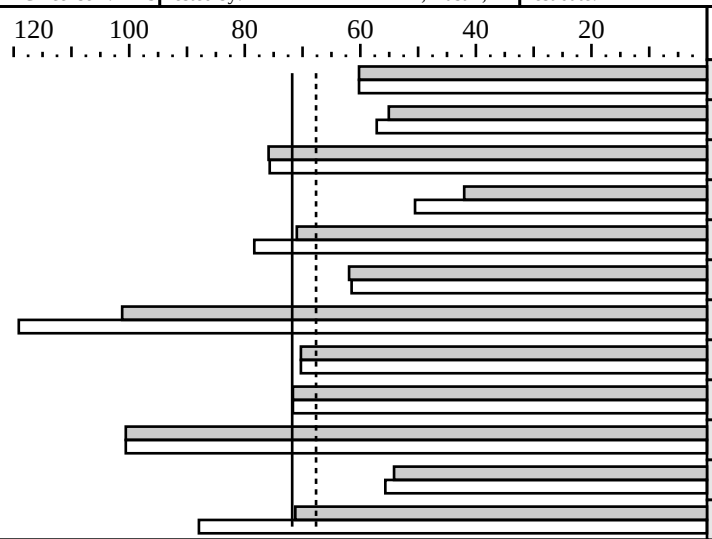
Advanced Micro Devices

Tyan Thunder K8QS Pro (S4882), AMD Opteron (TM) 850

SPECint_rate2000 = 71.8

SPECint_rate_base2000 = 67.7

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



Benchmark	Base Copies	Base Runtime	Base Ratio	Copies	Runtime	Ratio
164.gzip	4	108	60.2	4	108	60.2
175.vpr	4	118	55.1	4	114	57.2
176.gcc	4	67.3	75.9	4	67.4	75.7
181.mcf	4	199	42.0	4	165	50.5
186.crafty	4	65.4	71.0	4	59.2	78.4
197.parser	4	135	61.9	4	136	61.5
252.eon	4	59.6	101	4	50.6	119
253.perlbmk	4	119	70.3	4	119	70.3
254.gap	4	71.2	71.7	4	71.2	71.7
255.vortex	4	87.6	101	4	87.6	101
256.bzip2	4	129	54.2	4	125	55.7
300.twolf	4	195	71.3	4	158	87.9

Hardware

CPU:	AMD Opteron (TM) 850
CPU MHz:	2400
FPU:	Integrated
CPU(s) enabled:	4 cores, 4 chips, 1 core/chip
CPU(s) orderable:	4
Parallel:	No
Primary Cache:	64KBI + 64KBD on chip
Secondary Cache:	1024KB(I+D) on chip
L3 Cache:	N/A
Other Cache:	N/A
Memory:	16x512 MB PC3200 CL3.0 ECC Registered
Disk Subsystem:	SCSI, Seagate Cheetah ST336753LW Ultra 320, 15K rpm
Other Hardware:	None

Software

Operating System:	Microsoft Windows Server 2003, Enterprise Edition
Compiler:	Intel C++ 8.0 build 20040611Z Microsoft Visual Studio .NET 7.0.9466 (libraries) MicroQuill Smartheap Library 7.0
File System:	NTFS
System State:	Default

Notes/Tuning Information

```
Tested by Advanced Micro Devices
  shlW32M7.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:   -fast -arch:SSE2 -Oi- +FDO
  Baseline C++: -fast -arch:SSE2 -GX -GR
 Peak Tuning:
  164.gzip:     basepeak=yes
  175.vpr:      -fast -arch:SSE2 +FDO
                -Qoption,c,-ip_ninl_max_stats=2000,-ip_ninl_max_total_stats=4500
  176.gcc:      -fast -arch:SSE2 +FDO -Oi- -Qunroll3
  181.mcf:      -fast -QaxN      +FDO
  186.crafty:   -fast -arch:SSE2 +FDO
  197.parser:         -arch:SSE2 +FDO -Oi- -Qipo
  252.eon:      -fast -arch:SSE2 +FDO -Qansi_alias
```

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Notes/Tuning Information (Continued)

```
                -Qoption,c,-ip_ninl_max_stats=2000,-ip_ninl_max_total_stats=4500
 253.perlbmk:  basepeak=yes
 254.gap:      basepeak=yes
 255.vortex:   -fast -arch:SSE  +FDO -Oi- shlW32M7.lib
              -Qoption,c,-ip_ninl_max_stats=2000,-ip_ninl_max_total_stats=4500: basepeak=yes
 256.bzip2:    -fast                          -Qunroll2
 300.twolf:    -fast -arch:SSE2 +FDO          -Qunroll3 shlW32M7.lib -Qansi_alias
BIOS rev. 1.02
All memory slots populated on all CPU(s)
The tested system can be assembled using an SSI MEB footprint case, such as the CCSI RC0352 3U
rackmount case, and a Tyan recommended 650W EPS-12V power supply, such as the Enermax
660W power supply (PEG851AX-VH)
Physical Address Extension (PAE) enabled
```