CINT2000 Result

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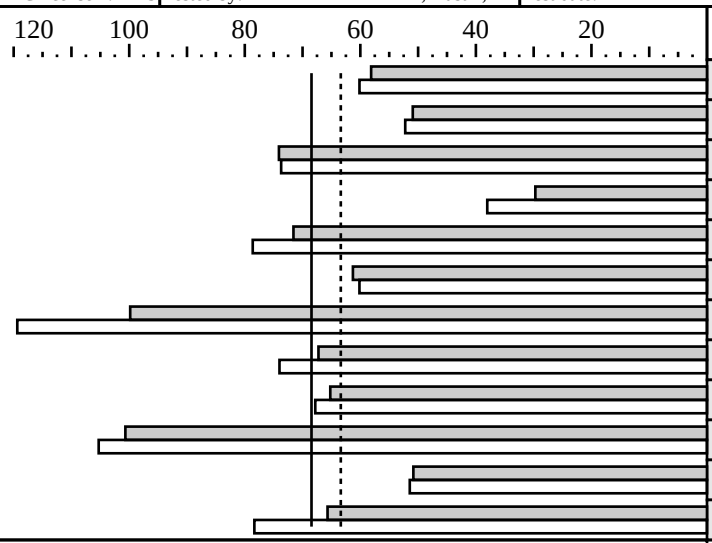
Verari Systems
QuatreX-64 (TM), AMD Opteron (TM) 850

SPECint_rate2000 = 68.5

SPECint_rate_base2000 = 63.4

SPEC license #: 49 | Tested by: AMD, Austin, TX | Test date: Apr-2004 | Hardware Avail: Jun-2004 | Software Avail: Feb-2004



Benchmark	Base Copies	Base Runtime	Base Ratio	Copies	Runtime	Ratio
164.gzip	4	112	58.1	4	108	60.1
175.vpr	4	128	50.9	4	124	52.2
176.gcc	4	68.9	74.1	4	69.3	73.7
181.mcf	4	281	29.7	4	220	38.0
186.crafty	4	64.8	71.6	4	59.0	78.6
197.parser	4	136	61.3	4	139	60.2
252.eon	4	60.4	99.8	4	50.5	119
253.perlbmk	4	124	67.2	4	113	74.0
254.gap	4	78.3	65.2	4	75.3	67.8
255.vortex	4	87.6	101	4	83.7	105
256.bzip2	4	137	50.8	4	135	51.4
300.twolf	4	212	65.7	4	178	78.3

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:	8 x 512 MB PC3200 DDR SDRAM CL3.0
Disk Subsystem:	SCSI, Ultra 320, 10k rpm
Other Hardware:	None

Software

Operating System:	Microsoft Windows Server 2003 Enterprise Edition
Compiler:	Intel C++ 8.0 build 20031229Z Microsoft Visual Studio .NET 7.0.9466 (libraries) MicroQuill Smartheap Library 6.0
File System:	NTFS
System State:	Default

Notes/Tuning Information

```
Tested by AMD
  shlW32M6.lib is the SmartHeap library V6.0 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:     -fast -arch:SSE  +FDO shlW32M6.lib
  175.vpr:      -fast -arch:SSE2 +FDO
               -Qoption,c,-ip_ninl_max_stats=2000 -Qoption,c,-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
              -Qoption,c,-ip_ninl_max_stats=2000 -Qoption,c,-ip_ninl_max_total_stats=4500
```

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Notes/Tuning Information (Continued)

```
  253.perlbmk:        -arch:SSE2 +FDO      -Qipo shlW32M6.lib
  254.gap:      -fast -arch:SSE2 +FDO -Oi- -Oa
               -Qoption,c,-ip_ninl_max_stats=500 -Qoption,c,-ip_ninl_max_total_stats=3000
  255.vortex:   -fast -arch:SSE  +FDO -Oi- shlW32M6.lib
               -Qoption,c,-ip_ninl_max_stats=2000 -Qoption,c,-ip_ninl_max_total_stats=4500
  256.bzip2:    -fast                      -Qunroll2
  300.twolf:    -fast -arch:SSE2 +FDO      -Qunroll3 shlW32M6.lib -Qansi_alias
BIOS rev.: PQTDX0-C
```