CINT2000 Result

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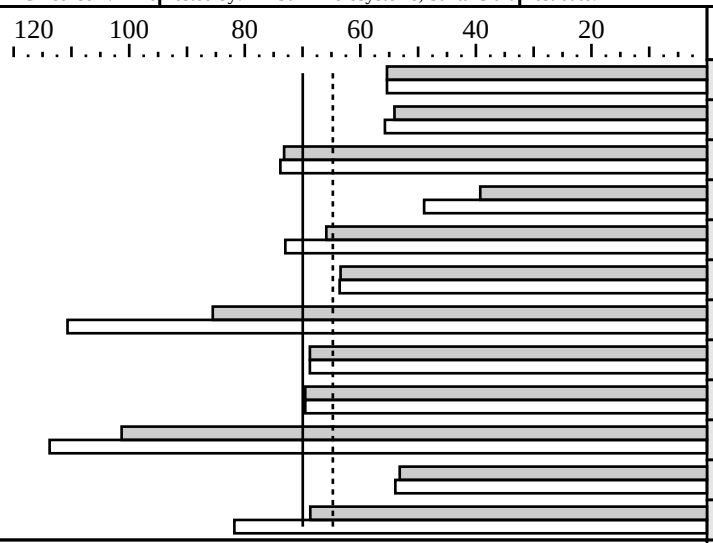
Sun Microsystems
Sun Fire X4200

SPECint_rate2000 = 70.0

SPECint_rate_base2000 = 64.8

SPEC license #: 6 | Tested by: Sun Microsystems, Santa Clara | Test date: May-2006 | Hardware Avail: Oct-2005 | Software Avail: Apr-2004



Benchmark	Base Copies	Base Runtime	Base Ratio	Copies	Runtime	Ratio
164.gzip	4	117	55.4	4	117	55.4
175.vpr	4	120	54.1	4	117	55.7
176.gcc	4	69.7	73.2	4	69.1	73.8
181.mcf	4	213	39.2	4	171	49.0
186.crafty	4	70.4	65.9	4	63.6	73.0
197.parser	4	132	63.4	4	131	63.6
252.eon	4	70.5	85.5	4	54.5	111
253.perlbmk	4	122	68.7	4	122	68.7
254.gap	4	73.4	69.5	4	73.4	69.5
255.vortex	4	87.0	101	4	77.5	114
256.bzip2	4	131	53.2	4	129	53.9
300.twolf	4	203	68.7	4	170	81.8

Hardware

CPU:	AMD Opteron (TM) 275
CPU MHz:	2200
FPU:	Integrated
CPU(s) enabled:	4 cores, 2 chips, 2 cores/chip
CPU(s) orderable:	1,2 (order by # of chips)
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:	16GB (8x2GB, PC3200 CL3 DDR ECC Regd. SDRAM)
Disk Subsystem:	SAS,36GB,10K RPM
Other Hardware:	None

Software

Operating System:	Windows Server 2003 SP1 (64bit)
Compiler:	Intel C++ 8.0 build 20040415Z 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:   -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
             -Qoption,c,-ip_ninl_max_stats=2000,-ip_ninl_max_total_stats=4500
253.perlbmk:  basepeak=yes
```

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Notes/Tuning Information (Continued)

```
 254.gap:      basepeak=yes
 255.vortex:   -fast -arch:SSE  +FDO -Oi- shlW32M.lib
               -Qoption,c,-ip_ninl_max_stats=2000,-ip_ninl_max_total_stats=4500
 256.bzip2:    -fast                        -Qunroll2
 300.twolf:    -fast -arch:SSE2 +FDO        -Qunroll3 shlW32M.lib -Qansi_alias

Default BIOS Setting was used.
'start /b /wait /affinity' command is used to bind CPU(s) to processes

This result was measured on the Sun Fire X4100.
Sun Fire X4100 and Sun Fire X4200 are electronically equivalent.
```