CINT2000 Result

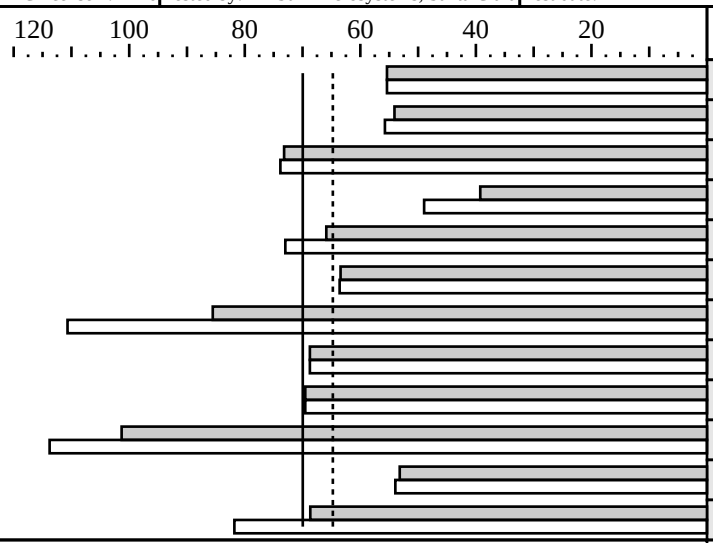
Copyright ©1999-2005, Standard Performance Evaluation Corporation

Sun Microsystems
Sun Fire X4100

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
```

Copyright ©1999-2005, Standard Performance Evaluation Corporation

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. In addition,
Sun has submitted the same result for the Sun Fire X4200, which is
electronically equivalent to the Sun Fire X4100.
```