CINT2000 Result

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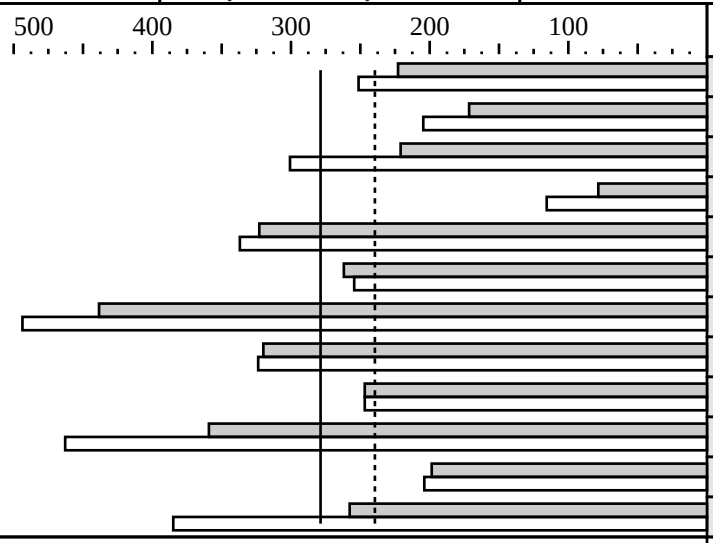
Sun Microsystems
Sun Fire X4600

SPECint_rate2000 = 279

SPECint_rate_base2000 = 239

SPEC license #: 6 | Tested by: Sun Microsystems, Santa Clara | Test date: Jun-2006 | Hardware Avail: Jul-2006 | Software Avail: Sep-2005



Benchmark	Base Copies	Base Runtime	Base Ratio	Copies	Runtime	Ratio
164.gzip	16	117	223	16	103	251
175.vpr	16	151	172	16	127	205
176.gcc	16	92.4	221	16	67.9	301
181.mcf	16	426	78.4	16	289	116
186.crafty	16	57.5	323	16	55.1	337
197.parser	16	128	262	16	131	254
252.eon	16	55.0	438	16	48.9	494
253.perlbmk	16	104	320	16	103	324
254.gap	16	82.7	247	16	82.7	247
255.vortex	16	98.2	359	16	76.2	463
256.bzip2	16	140	199	16	137	204
300.twolf	16	216	258	16	145	385

Hardware

CPU:	AMD Opteron (TM) 885
CPU MHz:	2600
FPU:	Integrated
CPU(s) enabled:	16 cores, 8 chips, 2 cores/chip
CPU(s) orderable:	4,8 (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:	64GB (32x2GB, PC3200 CL3 DDR ECC Regd. SDRAM)
Disk Subsystem:	SAS,73GB,7200RPM
Other Hardware:	None

Software

Operating System:	Windows Server 2003 SP1 (64bit)
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:      -O3 -Qipo -QxW +FDO
 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
Default BIOS Setting was used.
'start /b /wait /affinity' command is used to bind CPU(s) to processes
```