CINT2000 Result

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IBM Corporation

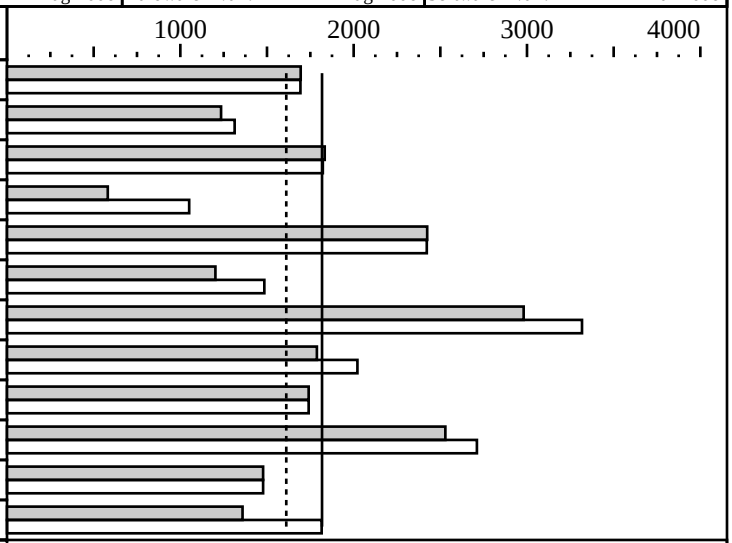
IBM System X 3755 (AMD Opteron (TM) 8220 SE)

SPECint2000 = 1818

SPECint_base2000 = 1611

SPEC license #: 11 | Tested by: IBM Corporation | Test date: Aug-2006 | Hardware Avail: Aug-2006 | Software Avail: Mar-2006

Benchmark	Reference Time	Base Runtime	Base Ratio	Runtime	Ratio
164.gzip	1400	82.6	1694	82.7	1693
175.vpr	1400	113	1235	107	1313
176.gcc	1100	60.0	1833	60.4	1822
181.mcf	1800	310	581	171	1051
186.crafty	1000	41.3	2424	41.3	2422
197.parser	1800	150	1202	121	1485
252.eon	1300	43.6	2981	39.2	3317
253.perlbmk	1800	101	1788	89.0	2022
254.gap	1100	63.2	1740	63.2	1740
255.vortex	1900	75.1	2529	70.1	2711
256.bzip2	1500	102	1478	102	1478
300.twolf	3000	221	1359	165	1815



Hardware

CPU:	AMD Opteron 8220 SE
CPU MHz:	2800
FPU:	Integrated
CPU(s) enabled:	8 cores, 4 chips, 2 cores/chip
CPU(s) orderable:	1,2,3,4
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:	16x2GB, PC2-5300
Disk Subsystem:	SAS, 73GB 15K RPM
Other Hardware:	None

Software

Operating System:	SuSE Linux 9.0 SP3 SLES 64 bit Kernel 2.6.5-7.244-smp
Compiler:	PathScale EKO Compiler Suite, Release 2.4 PathScale EKOPath(TM) Compiler Suite, Release 2.4
File System:	Linux/reiserfs
System State:	Multi-user, run level 3

Notes/Tuning Information

```
+FDO: PASS1= -fb_create fbdata  PASS2= -fb_opt fbdata

Baseline optimization flags:
  C programs:       -Ofast +FDO
  C++ programs:     -Ofast +FDO

Portability Flags:
  186.crafty:  -DLINUX_i386
  252.eon:     -DHAS_ERRLIST
  253.perlbmk: -DSPEC_CPU2000_LINUX_I386 -DSPEC_CPU2000_NEED_BOOL
               -DSPEC_CPU2000_GLIBC22 -DSPEC_CPU2000_LP64
  254.gap:     -DSYS_IS_USG -DSYS_HAS_IOCTL_PROTO -DSYS_HAS_TIME_PROTO
               -DSYS_HAS_CALLOC_PROTO -DSPEC_CPU2000_LP64
  255.vortex:  -DSPEC_CPU2000_LP64

Peak Tuning:
164.gzip:    -O3 -ipa -WOPT:val=0 -OPT:unroll_size=0 +FDO
175.vpr:     -O3 -ipa -m32 +FDO
176.gcc:     -O3 -IPA:plimit=10000 -LNO:opt=0 -OPT:goto=off +FDO
181.mcf:     -O3 -ipa -IPA:field_reorder=on -m32 +FDO
```

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Notes/Tuning Information (Continued)

```
186.crafty:  -Ofast -CG:local_fwd_sched=on -LNO:opt=0 -WOPT:val=0 +FDO
197.parser:  -O3 -ipa -m32 -IPA:ctype=on +FDO
252.eon:     -Ofast -CG:gcm=off:p2align_freq=1:prefetch=off -IPA:plimit=4000
             -OPT:treeheight=on -TENV:X=4:frame_pointer=off -fno-exceptions
             -LNO:fu=10:full_unroll_outer=on -GRA:optimize_boundary=on +FDO
253.perlbmk: -O2 -ipa -OPT:Ofast:transform_to_memlib=off
             -fno-math-errno -IPA:plimit=10000 +FDO
254.gap:   basepeak = true
255.vortex:  -Ofast -OPT:goto=off -CG:p2align=on
             -GRA:optimize_boundary=on -IPA:min_hotness=120 +FDO
256.bzip2:   basepeak = true
300.twolf:   -O2 -CG:gcm=off:p2align_freq=100000
             -OPT:Ofast:unroll_times_max=8:unroll_size=256:alias=disjoint
             -WOPT:mem_opnds=on -m32 +FDO
```