



CINT2000 Result

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IBM Corporation

AMD Opteron LS21 for IBM BladeCenter (AMD Opteron (TM) 2216)

SPECint2000 = 1644

SPECint_base2000 = 1474

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	1000 2000 3000 4000			
164.gzip	1400	95.8	1461	95.9	1460	[Bar chart showing ratio 1460]			
175.vpr	1400	119	1175	117	1199	[Bar chart showing ratio 1199]			
176.gcc	1100	67.5	1630	67.4	1631	[Bar chart showing ratio 1631]			
181.mcf	1800	273	659	163	1104	[Bar chart showing ratio 1104]			
186.crafty	1000	49.1	2035	49.1	2035	[Bar chart showing ratio 2035]			
197.parser	1800	165	1094	130	1388	[Bar chart showing ratio 1388]			
252.eon	1300	51.3	2536	45.8	2841	[Bar chart showing ratio 2841]			
253.perlbnk	1800	111	1618	101	1784	[Bar chart showing ratio 1784]			
254.gap	1100	70.7	1555	70.7	1555	[Bar chart showing ratio 1555]			
255.vortex	1900	82.4	2305	76.6	2480	[Bar chart showing ratio 2480]			
256.bzip2	1500	111	1351	111	1351	[Bar chart showing ratio 1351]			
300.twolf	3000	232	1295	181	1659	[Bar chart showing ratio 1659]			

Hardware

CPU: AMD Opteron 2216
CPU MHz: 2400
FPU: Integrated
CPU(s) enabled: 4 cores, 2 chips, 2 cores/chip
CPU(s) orderable: 1,2
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: 8x2GB, PC2-5300
Disk Subsystem: SAS, 36GB 10K 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.perlbnk: -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)

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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.perlbnk: -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
```