



CFP2000 Result

Copyright ©1999-2005, Standard Performance Evaluation Corporation

IBM Corporation

IBM System X 3105 (AMD Athlon (TM) 64 3500+)

SPECfp_rate2000 = 21.1

SPECfp_rate_base2000 = 19.7

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

Benchmark	Base Copies	Base Runtime	Base Ratio	Copies	Runtime	Ratio
168.wupwise	1	66.0	28.1	1	58.1	32.0
171.swim	1	119	30.1	1	111	32.5
172.mgrid	1	115	18.1	1	113	18.5
173.applu	1	108	22.5	1	100	24.3
177.mesa	1	80.2	20.2	1	74.9	21.7
178.galgel	1	113	29.6	1	113	29.8
179.art	1	122	24.7	1	93.0	32.4
183.quake	1	82.3	18.3	1	76.6	19.7
187.facerec	1	84.3	26.1	1	82.0	26.9
188.amp	1	220	11.6	1	213	12.0
189.lucas	1	104	22.3	1	89.7	25.9
191.fma3d	1	137	17.8	1	138	17.6
200.sixtrack	1	150	8.52	1	142	8.95
301.apsi	1	224	13.5	1	214	14.1

Hardware

CPU: AMD Athlon 64 3500+
 CPU MHz: 2600
 FPU: Integrated
 CPU(s) enabled: 1 core, 1 chip, 1 core/chip
 CPU(s) orderable: 1 chip
 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: 4x1GB, PC2-5300
 Disk Subsystem: SATA, 80GB 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

C programs: -Ofast -WOPT:mem_opnds=on +FDO
 Fortran programs: -Ofast -LNO:fusion=2 -OPT:fast_complex=on +FDO
 Portability Flags:
 178.galgel: -fixedform

Peak Tuning:

168.wupwise: -Ofast -IPA:linear=on -LNO:prefetch Ahead=5:prefetch=3
 -OPT:unroll_times_max=8:unroll_size=128:IEEE_NaN_Inf=off:ro=3
 171.swim: -Ofast -CG:local_fwd_sched=on -LNO:fusion=2 -m3dnow
 172.mgrid: -Ofast -CG:gcm=off -OPT:IEEE_arith=3:unroll_size=200
 -LNO:fusion=2:fission=1:blocking=off:prefetch Ahead=2
 -WOPT:mem_opnds=on:aggstr=0
 173.applu: -Ofast -CG:local_fwd_sched=on -OPT:ro=3 -TENV:X=3
 -LNO:fusion=2:fission=2:full_unroll_size=10000 +FDO



CFP2000 Result

Copyright ©1999-2005, Standard Performance Evaluation Corporation

IBM Corporation

IBM System X 3105 (AMD Athlon (TM) 64 3500+)

SPECfp_rate2000 = 21.1

SPECfp_rate_base2000 = 19.7

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

Notes/Tuning Information (Continued)

```

177.mesa:      -O2 -ipa -OPT:Ofast -fno-math-errno -CG:local_fwd_sched=on -WOPT:mem_opnds=on +FDO
178.galgel:    -Ofast -OPT:fast_complex=on +FDO
179.art:       -O3 -OPT:Ofast -fno-math-errno -mno-sse2 -m32
183.quake:    -Ofast -CG:load_exe=2 -WOPT:mem_opnds=on -m32 +FDO
187.facerec:  -Ofast -IPA:plimit=1500 -LNO:fusion=2
              -OPT:IEEE_NaN_Inf=off:ro=3:unroll_size=0 +FDO
188.amp:      -O3 -OPT:alias=disjoint:unroll_times_max=8:Ofast:ro=3
              -GRA:optimize_boundary=on -fno-math-errno -TENV:X=4 +FDO
189.lucas:    -Ofast -OPT:ro=3:fast_nint=off:unroll_size=256 -WOPT:mem_opnds=on +FDO
191.fma3d:    -O2 -ipa -CG:load_exe=1 -OPT:Ofast:IEEE_arith=3:ro=3
              -WOPT:mem_opnds=on:retype_expr=on -IPA:pu_reorder=1 +FDO
200.sixtrack: -O3 -OPT:Ofast:early_intrinsics=on
              -fno-math-errno -CG:load_exe=1 +FDO
301.apsi:     -Ofast -CG:load_exe=0 -LNO:prefetch=0:simd=2

```