CFP2000 Result

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IBM Corporation

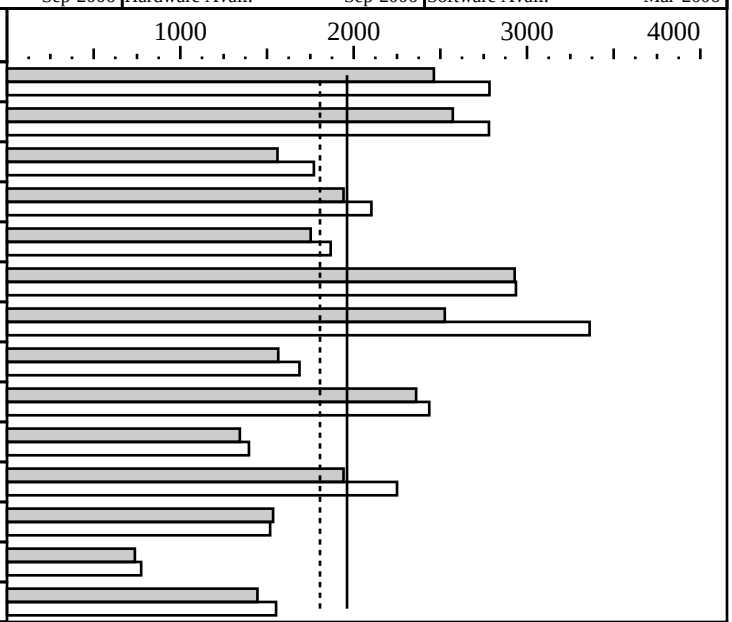
IBM System X 3105 (AMD Opteron (TM) 1214)

SPECfp2000 = 1962

SPECfp_base2000 = 1806

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

Benchmark	Reference Time	Base Runtime	Base Ratio	Runtime	Ratio
168.wupwise	1600	65.0	2463	57.5	2784
171.swim	3100	121	2572	111	2780
172.mgrid	1800	115	1561	102	1770
173.applu	2100	108	1942	99.9	2102
177.mesa	1400	79.9	1752	75.0	1867
178.galgel	2900	99.0	2929	98.8	2936
179.art	2600	103	2526	77.4	3361
183.equake	1300	83.1	1565	77.0	1687
187.facerec	1900	80.5	2360	78.0	2436
188.ammp	2200	164	1343	158	1396
189.lucas	2000	103	1942	88.9	2250
191.fma3d	2100	137	1535	138	1518
200.sixtrack	1100	149	738	142	774
301.apsi	2600	180	1445	167	1552



Hardware

CPU:	AMD Opteron 1214
CPU MHz:	2200
FPU:	Integrated
CPU(s) enabled:	2 cores, 1 chip, 2 cores/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
```

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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.equake:   -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.ammp:     -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
```