CFP2000 Result

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IBM

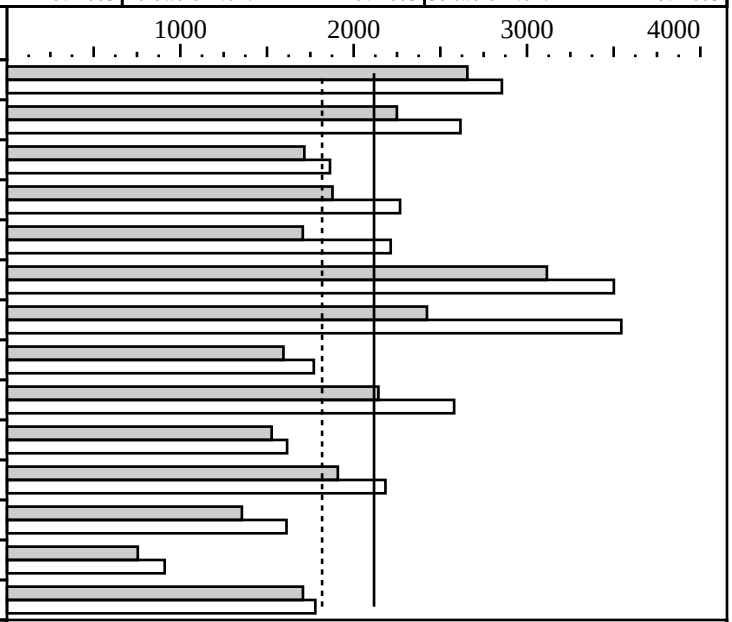
IBM eServer 326m, 2.6 GHz AMD Opteron(tm) Processor 252

SPECfp2000 = 2118

SPECfp_base2000 = 1818

SPEC license #: 11 | Tested by: IBM Corporation | Test date: Nov-2005 | Hardware Avail: Nov-2005 | Software Avail: Nov-2005

Benchmark	Reference Time	Base Runtime	Base Ratio	Runtime	Ratio
168.wupwise	1600	60.2	2656	56.0	2855
171.swim	3100	138	2249	118	2616
172.mgrid	1800	105	1715	96.6	1863
173.applu	2100	112	1878	92.6	2268
177.mesa	1400	82.0	1707	63.2	2214
178.galgel	2900	93.1	3115	82.8	3501
179.art	2600	107	2423	73.4	3544
183.equake	1300	81.5	1595	73.4	1770
187.facerec	1900	88.7	2143	73.7	2580
188.ammp	2200	144	1527	136	1616
189.lucas	2000	105	1909	91.6	2183
191.fma3d	2100	155	1355	130	1613
200.sixtrack	1100	146	755	121	910
301.apsi	2600	152	1707	146	1779



Hardware

CPU:	AMD Opteron(tm) Processor 252
CPU MHz:	2600
FPU:	Integrated
CPU(s) enabled:	2 cores, 2 chips, 1 core/chip
CPU(s) orderable:	1,2
Parallel:	No
Primary Cache:	64KBI + 64KBD on chip
Secondary Cache:	1024KB (I+D) on chip
L3 Cache:	N/A
Other Cache:	N/A
Memory:	8 x 1024GB PC3200
Disk Subsystem:	SCSI, 36GB 15K RPM
Other Hardware:	None

Software

Operating System:	SuSE Linux 9.0 SP2 SLES 64 bit Kernel 2.6.5-7.191-smp (SP2)
Compiler:	PathScale EKO Compiler Suite, Release 2.2.1 AMD Core Math Library 2.5.1
File System:	Linux/reiserfs
System State:	Multi-user, run level 3

Notes/Tuning Information

```
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 +ACML: Linked with AMD Core Math Library
 Base tuning for C programs: -Ofast -WOPT:mem_opnds=on +FDO
 Base tuning for FORTRAN programs: -Ofast -LNO:fusion=2 -OPT:fast_complex +FDO
 Portability flags:
   178.galgel:    -fixedform
 Peak tuning:
   168.wupwise:   -Ofast -LNO:prefetch_ahead=5:prefetch=3
                  -OPT:unroll_times_max=8:unroll_size=128:IEEE_NaN_Inf=off:ro=3
                  -IPA:linear=on:plimit=50000:callee_limit=5000
                  -INLINE:aggressive=on
   171.swim:      -Ofast -CG:local_fwd_sched=on -LNO:fusion=2 -m3dnow
   172.mgrid:     -Ofast -CG:gcm=off:cflow=on -OPT:IEEE_a=3:unroll_size=200
                  -LNO:fusion=2:fission=1:blocking=off:prefetch_ahead=2
      -WOPT:memopnds=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:prefetch=3 +FDO
```

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Notes/Tuning Information (Continued)

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  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 +ACML +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 -LNO:fusion=2
                  -OPT:fast_complex=on:IEEE_NaN_Inf=off:unroll_size=0 +FDO
   188.ammp:      -O3 -OPT:alias=disjoint:unroll_times_max=8:Ofast:ro=3
                  -fno-math-errno -TENV:X=4 -LNO:prefetch=0 +FDO
   189.lucas:     -Ofast -OPT:ro=3:fast_nint=off:unroll_size=256 -WOPT:memopnds=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:Olimit=60000:early_intrinsics=on
      -fno-math-errno -CG:load_exe=1 +FDO
   301.apsi:      -Ofast -CG:load_exe=0 -LNO:prefetch=0:simd=2
BIOS Configuration Notes
  Node Interleaving is Disabled
Other Configuration Notes
   Taskset utility used to bind process to CPU(s)
```