CFP2000 Result

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IBM

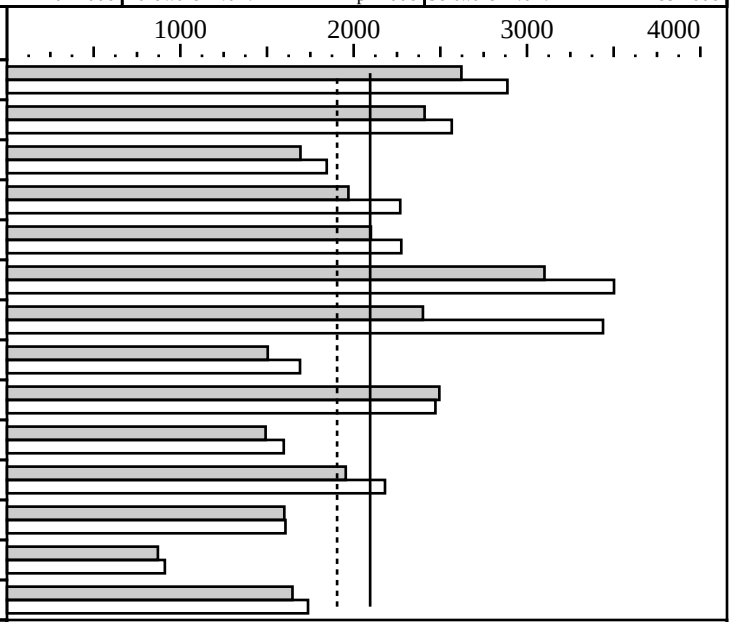
IBM eServer 326m, 2.6 GHz Dual Core AMD Opteron(tm) Processor 285

SPECfp2000 = 2095

SPECfp_base2000 = 1904

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

Benchmark	Reference Time	Base Runtime	Base Ratio	Runtime	Ratio
168.wupwise	1600	61.0	2622	55.4	2887
171.swim	3100	129	2409	121	2566
172.mgrid	1800	106	1693	97.6	1845
173.applu	2100	107	1970	92.6	2269
177.mesa	1400	66.7	2099	61.5	2275
178.galgel	2900	93.5	3101	82.8	3502
179.art	2600	108	2400	75.6	3439
183.equake	1300	86.4	1504	76.9	1690
187.facerec	1900	76.2	2494	76.9	2472
188.ammp	2200	147	1492	138	1597
189.lucas	2000	102	1954	91.7	2181
191.fma3d	2100	131	1600	131	1607
200.sixtrack	1100	126	871	121	911
301.apsi	2600	158	1647	150	1737



Hardware

CPU:	AMD Opteron(tm) Processor 285
CPU MHz:	2600
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
Secondary Cache:	1024KB (I+D) on chip
L3 Cache:	N/A
Other Cache:	N/A
Memory:	8 x 1024MB, 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 2.3 AMD Core Math Library 3.0.0
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=on +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 -OPT:IEEE_a=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:prefetch=3
```

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Notes/Tuning Information (Continued)

```
                  +FDO
    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 +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 +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:Olimit=6000: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)
```