CFP2000 Result

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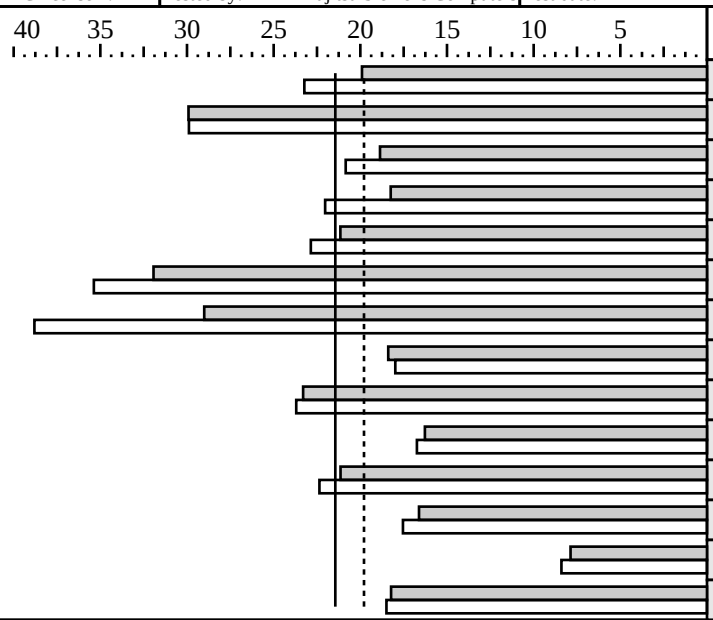
Fujitsu Siemens Computers

CELSIUS V810, Opteron (TM) 250, Linux 64-bit

SPECfp_rate2000 = 21.4

SPECfp_rate_base2000 = 19.8

SPEC license #: 22 | Tested by: Fujitsu Siemens Computers | Test date: Nov-2004 | Hardware Avail: Aug-2004 | Software Avail: Oct-2004



Benchmark	Base Copies	Base Runtime	Base Ratio	Copies	Runtime	Ratio
168.wupwise	1	93.2	19.9	1	79.9	23.2
171.swim	1	120	29.9	1	120	29.9
172.mgrid	1	111	18.9	1	100	20.8
173.applu	1	133	18.2	1	111	22.0
177.mesa	1	76.8	21.2	1	71.1	22.9
178.galgel	1	105	31.9	1	95.1	35.4
179.art	1	104	29.0	1	77.7	38.8
183.equake	1	82.0	18.4	1	83.9	18.0
187.facerec	1	94.6	23.3	1	93.0	23.7
188.ammp	1	157	16.3	1	152	16.7
189.lucas	1	110	21.1	1	104	22.4
191.fma3d	1	147	16.6	1	139	17.5
200.sixtrack	1	162	7.87	1	152	8.40
301.apsi	1	165	18.2	1	163	18.5

Hardware

CPU:	AMD Opteron (TM) 250
CPU MHz:	2400
FPU:	Integrated
CPU(s) enabled:	1 core, 1 chip, 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:	4 x 512 MB PC3200 CL3-3-3 DDR SDRAM
Disk Subsystem:	S-ATA 7200 rpm
Other Hardware:	None

Software

Operating System:	SuSE Linux 9.1 (AMD64) 2.6.4-52-default
Compiler:	PathScale EKO Compiler Suite, Release 1.4 - (both for C and Fortran) ACML (AMD Core Math Library) for AMD64, Version 2.1.0 - available from AMD
File System:	Linux/Reiser
System State:	Multi-user SuSE Run level 3

Notes/Tuning Information

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 +FDO: PASS1= -fb_create fbdata  PASS2= -fb_opt fbdata
 +ACML: -lacml -lg2c
        for linking with ACML.
        ACML is AMD Core Math Library, Version 2.1.0;
        g2c is the Fortran Compatibility Library, required by ACML;
        it comes with GNU Fortran compiler in SuSE's distribution.

 Portability Flags:
   178.galgel: -fixedform

 Baseline optimization flags:
   C programs:       -Ofast -WOPT:mem_opnds=on +FDO
   Fortran programs: -Ofast -LNO:fusion=2 -OPT:fast_complex

 Peak tuning:
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Notes/Tuning Information (Continued)

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 168.wupwise: -Ofast -LNO:prefetch_ahead=5:prefetch=3
              -OPT:unroll_times_max=8:unroll_size=128:IEEE_NaN_Inf=off:ro=3
              -TENV:X=4
   loader:    -IPA:space=1000:linear=on:plimit=50000:callee_limit=5000
              -INLINE:aggressive=on
 171.swim:    -Ofast -LNO:fusion=2
 172.mgrid:   -O3 -LNO:fusion=2:blocking=off
              -OPT:Ofast:unroll_times_max=8:unroll_size=256:ro=3
              -CG:gcm=off:cflow=off
 173.applu:   -Ofast -CG:local_fwd_sched=on
              -LNO:fusion=2:fission=2:full_unroll_size=10000:prefetch=3
              -OPT:ro=3 -TENV:X=3 -WOPT:val=2
 177.mesa:    -O2 -ipa -OPT:Ofast -fno-math-errno
              -CG:local_fwd_sched=on +FDO
 178.galgel:  -Ofast -OPT:fast_complex -CG:use_movlpd=on +ACML
 179.art:     -O3 -OPT:ro=2:div_split=on:alias=typed -fno-math-errno -m32
 183.equake:  -Ofast -WOPT:mem_opnds=on -CG:local_fwd_sched=on
 187.facerec: -Ofast -OPT:treeheight=on:IEEE_NaN_Inf=off:ro=3
              -CG:load_exe=0 -LNO:fusion=2 +FDO
    loader    -IPA:plimit=1800
 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 -CG:local_fwd_sched=on -LNO:fusion=2 +FDO
 191.fma3d:   -O2 -ipa -CG:load_exe=1 -OPT:Ofast:IEEE_arith=3:ro=3
              -WOPT:mem_opnds=on:retype_expr=on +FDO
    loader    -IPA:pu_reorder=1
 200.sixtrack:-Ofast -CG:load_exe=1 +FDO
 301.apsi:    -Ofast -TENV:X=4 -LNO:fusion=2:prefetch=0

System tested with only 1 CPU present.

 BIOS Version 1.05, default settings.

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http://www.fujitsu-siemens.com/countries
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