CFP2000 Result

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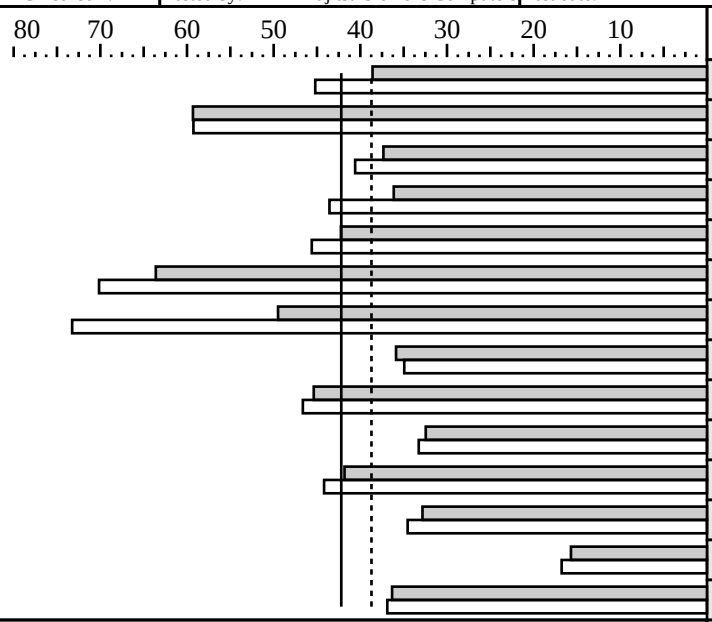
Fujitsu Siemens Computers

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

SPECfp_rate2000 = 42.2

SPECfp_rate_base2000 = 38.7

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	2	96.2	38.6	2	82.1	45.2
171.swim	2	121	59.3	2	121	59.3
172.mgrid	2	112	37.3	2	103	40.6
173.applu	2	135	36.1	2	112	43.6
177.mesa	2	76.9	42.2	2	71.2	45.6
178.galgel	2	106	63.6	2	95.9	70.1
179.art	2	122	49.5	2	82.3	73.3
183.equake	2	84.1	35.9	2	86.3	34.9
187.facerec	2	97.1	45.4	2	94.5	46.6
188.ammp	2	157	32.5	2	153	33.3
189.lucas	2	111	41.8	2	105	44.2
191.fma3d	2	148	32.8	2	141	34.5
200.sixtrack	2	163	15.7	2	152	16.8
301.apsi	2	166	36.3	2	164	36.9

Hardware

CPU:	AMD Opteron (TM) 250
CPU MHz:	2400
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:	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-smp
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

 BIOS Version 1.05
 BIOS default settings have been used. These include
 - Node Memory Interleave disabled
 - ACPI SRAT Table enabled

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