CFP2000 Result

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Fujitsu Siemens Computers

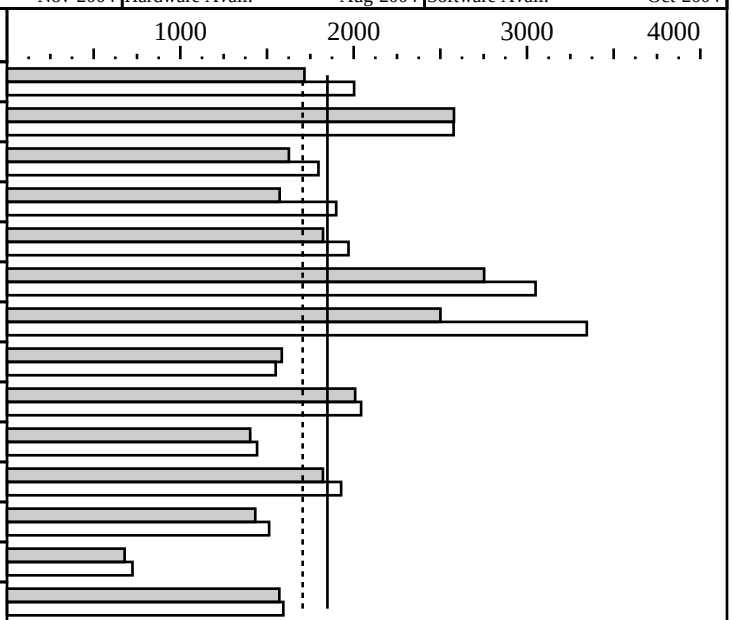
CELSIUS V810, Opteron (TM) 250, Linux 64-bit

SPECfp2000 = 1849

SPECfp_base2000 = 1706

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

Benchmark	Reference Time	Base Runtime	Base Ratio	Runtime	Ratio
168.wupwise	1600	93.2	1716	79.9	2003
171.swim	3100	120	2579	120	2577
172.mgrid	1800	111	1626	100	1797
173.applu	2100	133	1573	111	1899
177.mesa	1400	76.8	1823	71.1	1970
178.galgel	2900	105	2753	95.1	3049
179.art	2600	104	2501	77.7	3345
183.equake	1300	82.0	1585	83.9	1550
187.facerec	1900	94.6	2009	93.0	2043
188.ammp	2200	157	1403	152	1443
189.lucas	2000	110	1823	104	1928
191.fma3d	2100	147	1432	139	1512
200.sixtrack	1100	162	679	152	724
301.apsi	2600	165	1571	163	1594



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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Tested by Fujitsu Siemens Computers

 +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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