



CFP2000 Result

Copyright ©1999-2005, Standard Performance Evaluation Corporation

Fujitsu Siemens Computers
PRIMERGY RX220, AMD Opteron (TM) 250

SPECfp_rate2000 = 24.1
SPECfp_rate_base2000 = 21.9

SPEC license #: 22 | Tested by: Fujitsu Siemens Computers | Test date: Jan-2006 | Hardware Avail: Dec-2005 | Software Avail: Oct-2005

Benchmark	Base Copies	Base Runtime	Base Ratio	Copies	Runtime	Ratio
168.wupwise	1	63.1	29.4	1	55.3	33.5
171.swim	1	121	29.7	1	118	30.4
172.mgrid	1	108	19.4	1	97.2	21.5
173.applu	1	107	22.8	1	94.9	25.7
177.mesa	1	71.7	22.6	1	67.2	24.2
178.galgel	1	92.8	36.3	1	82.6	40.7
179.art	1	102	29.5	1	72.0	41.9
183.quake	1	78.9	19.1	1	72.4	20.8
187.facerec	1	76.4	28.8	1	76.9	28.6
188.amp	1	154	16.6	1	143	17.8
189.lucas	1	101	23.1	1	88.4	26.2
191.fma3d	1	135	18.1	1	134	18.2
200.sixtrack	1	137	9.32	1	131	9.76
301.apsi	1	168	17.9	1	158	19.1

Hardware

CPU: AMD Opteron (TM) 250 processor (2.40 GHz)
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: 4x2048MB DDR-RAM PC3200R CL3-3-3
Disk Subsystem: Western Digital WD2500 (SATA, 7.2krpm)
Other Hardware: None

Software

Operating System: SuSE Linux Enterprise Server 9 (x86_64) SP 2
SuSE Kernel 2.6.5-7.191-smp
Compiler: PathScale EKOPath(TM) Compiler Suite, Release 2.3
(for C and Fortran)
AMD Core Mathematical Library (ACML), Version 3.0.0
File System: Linux/reiserfs
System State: Multi-user run level 3

Notes/Tuning Information

GENERAL

+FDO: PASS1= -fb_create fbdata PASS2= -fb_opt fbdata
+ACML: Linked with AMD Core Math Library

Portability flags

178.galgel: -fixedform

Base tuning flags

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

Peak tuning flags

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



CFP2000 Result

Copyright ©1999-2005, Standard Performance Evaluation Corporation

Fujitsu Siemens Computers
PRIMERGY RX220, AMD Opteron (TM) 250

SPECfp_rate2000 = 24.1
SPECfp_rate_base2000 = 21.9

SPEC license #: 22 | Tested by: Fujitsu Siemens Computers | Test date: Jan-2006 | Hardware Avail: Dec-2005 | Software Avail: Oct-2005

Notes/Tuning Information (Continued)

```

-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 +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
AMD Core Math Library
+ACML means -L<acml-install-dir>/pathscale64/lib -lacml,
which causes linking with AMD Core Math Library
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=

```

MYMASK=`printf '0x%x' \\${(1<<\\$SPECUSERNUM)}`; /usr/bin/taskset \\$MYMASK \$command:
Taskset utility used to bind process to CPU(s)

BIOS settings: Memory timing=1T

This result was measured with 64-bit binaries using the 64-bit version of the operating system.

For information about Fujitsu Siemens Computers in your country please see:
<http://www.fujitsu-siemens.com/countries>