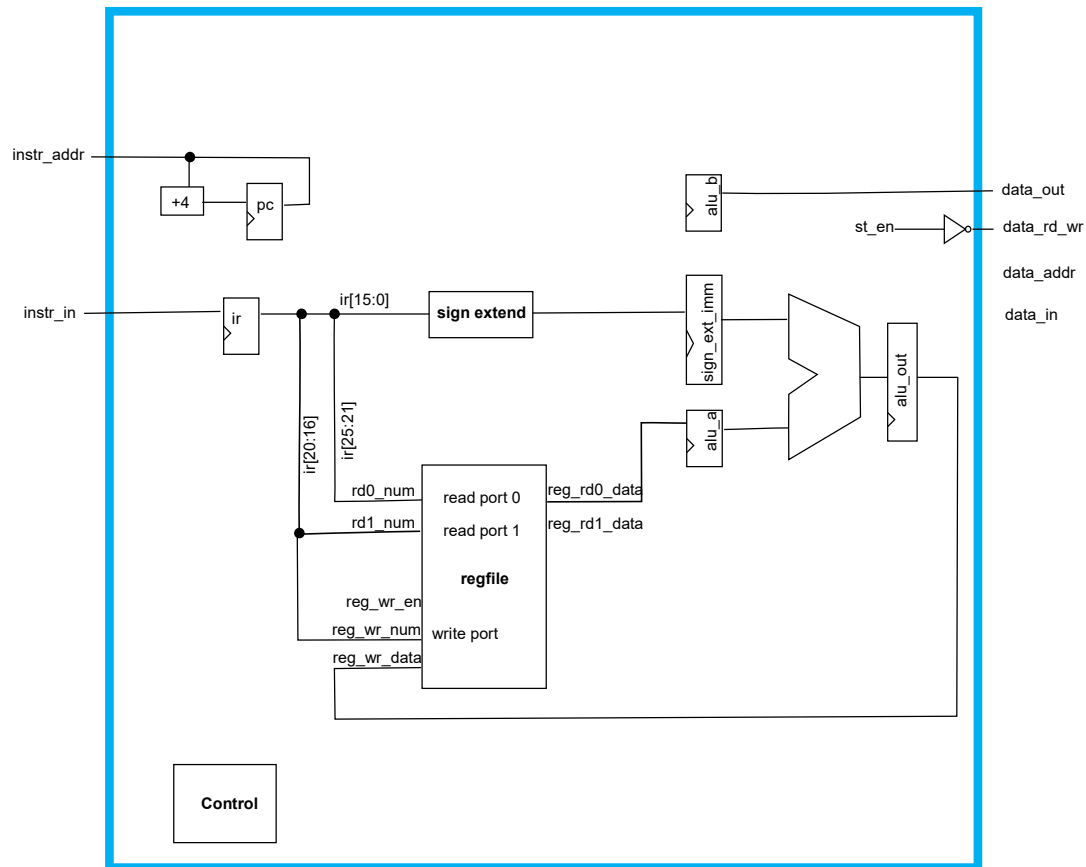# Existing logic in the stub file (mips_stub_new.sv), executes *addiu* instruction

Top-level schematic (p2_tb.sv)

proc

imem

instr_addr ——— addr[31:0]

data_in[31:0]

regs

instr_in ——— data_out[31:0]

sz_word —— access_sz[1:0]   memory

regfile

1 —— rd_wr

~reset —— enable

clk —— clk

mips

dmem

data_addr ——— addr[31:0]

data_out ——— data_in[31:0]

data_in ——— data_out[31:0]

sz_word —— access_sz[1:0]   memory

data_rd_wr ——— rd_wr

reset —— reset   ~reset —— enable

clk —— clk   clk —— clk