

```

module alu_in_ctrl(clk,in_a,in_b,data_a,data_b,alu_sel,imm);
    input[15:0] in_a,in_b;
    input[7:0] imm;
    input alu_sel,clk;
    output[15:0] data_a;
    output [15:0] data_b;
    (* DONT_TOUCH= "1" *)    reg[15:0] data_a;
    (* DONT_TOUCH= "1" *)    reg [15:0] data_b;

    always @(posedge clk)
        begin
            if(alu_sel)
                begin
                    data_a <= in_a;
                    data_b <= imm;
                end
            else
                begin
                    data_a <= in_a;
                    data_b <= in_b;
                end
            end
        end
endmodule

```