assign aluif.port\_A = (idexif.ALUSrc\_out == 2'b01)? idexif.rdat2\_out : idexif.rdat1\_out;

assign aluif.port\_B = (idexif.ALUSrc\_out == 2'b01)? idexif.rdat1\_out : (idexif.ALUSrc\_out == 2'b10) ? idexif.Extender\_out:idexif.rdat2\_out;

assign aluif.ALUOP = idexif.ALUOP\_out;

//Branch

assign BranchAddr = ((idexif.instr\_out[31:26] == BEQ && aluif.zero == 1) || (idexif.instr\_out[31:26] == BNE && aluif.zero == 0))? (idexif.npc\_out + {idexif.SignExt\_out[29:0], 2'b00}) : idexif.npc\_out;

//For Jump

assign JumpAddr = {idexif.npc\_out[31:28], idexif.instr\_out[25:0],2'b00};

//For Write Back Address

always\_comb

begin

casez(idexif.RegDst\_out)

2'b00:

Wrsel\_temp = idexif.rd\_out;

2'b01:

Wrsel\_temp = idexif.rt\_out;

2'b10:

Wrsel\_temp = 5'b11111;

2'b11:

Wrsel\_temp = idexif.SignExt\_out;

endcase

end