

	Op 5	Op 4	Op 3	Op 2	Op 1	Op 0	ALUOp	F 5	F 4	F 3	F 2	F 1	F 0	ALUctrl c3 c2 c1 c0
Add	0	0	0	0	0	0	000	1	0	0	0	0	0	0 0 1 0
Addi	0	0	1	0	0	0	100	X	X	X	X	X	X	0 0 1 0
Sub	0	0	0	0	0	0	000	1	0	0	0	1	0	0 1 1 0
And	0	0	0	0	0	0	000	1	0	0	1	0	0	0 0 0 0
Or	0	0	0	0	0	0	000	1	0	0	1	0	1	0 0 0 1
Slt	0	0	0	0	0	0	000	1	0	1	0	1	0	0 1 1 1
Slti	0	0	1	0	1	0	101	X	X	X	X	X	X	0 1 1 1
beq	0	0	0	1	0	0	010	X	X	X	X	X	X	0 1 1 0

$C3 = 0$

$C2 = \sim \text{ALUOp}[0] \sim \text{ALUOp}[1] \sim \text{ALUOp}[2] F1 + \text{ALUOp}[1] + \text{ALUOp}[0]$

$C1 = \sim \text{ALUOp}[0] \sim \text{ALUOp}[1] \sim \text{ALUOp}[2] F2' + \text{ALUOp}[2] + \text{ALUOp}[1]$

$C0 = \sim \text{ALUOp}[0] \sim \text{ALUOp}[1] \sim \text{ALUOp}[2] (F3 + F0) + \text{ALUOp}[0]$