

#Address # RISC-V Assembly

0x70 beq s0, t5, L1
0x74 add s1, s2, s3
0x78 sub s5, s6, s7
0x7C lw t0, 0(s1)
0x80 L1: addi s1, s1, -15



L1 is 4 instructions (i.e., 16 bytes) past beq

imm_{12:0} = 16 0 0 0 0 0 0 0 0 1 0 0 0 0
bit number 12 11 10 9 8 7 6 5 4 3 2 1 0

Assembly

Field Values

Machine Code

	imm _{12,10:5}	rs2	rs1	funct3	imm _{4:1,11}	op	imm _{12,10:5}	rs2	rs1	funct3	imm _{4:1,11}	op
beq s0, t5, L1	0000 000	30	8	0	1000 0	99	0000 000	11110	01000	000	1000 0	110
beq x8, x30, 16												
	7 bits	5 bits	5 bits	3 bits	5 bits	7 bits	7 bits	5 bits	5 bits	3 bits	5 bits	7 bits

0

m_{4:1,11} op
00 0 110 0011 (0x01E40863)
bits 7 bits