Edwin Trejo

80653309

Inst'n	I30	I14	I13	I12	I6	I5	I4	ALU_Ctrl3	ALU_Ctrl2	ALU_Ctrl1	ALU_Ctrl0	ALU_Src
AND	0	1	1	1	0	1	1	0	0	0	0	0
OR	0	1	1	0	0	1	1	0	0	0	1	0
XOR	0	1	0	0	0	1	1	0	0	1	0	0
ADD	0	0	0	0	0	1	1	0	0	1	1	0
SUB	1	0	0	0	0	1	1	0	1	1	1	0
ANDI	X	1	1	1	0	0	1	0	0	0	0	1
ORI	X	1	1	0	0	0	1	0	0	0	1	1
XORI	X	1	0	0	0	0	1	0	0	1	0	1
ADDI	X	0	0	0	0	0	1	0	0	1	1	1
LW	X	0	1	0	0	0	0	0	0	1	1	1
SW	X	0	1	0	0	1	0	0	0	1	1	1

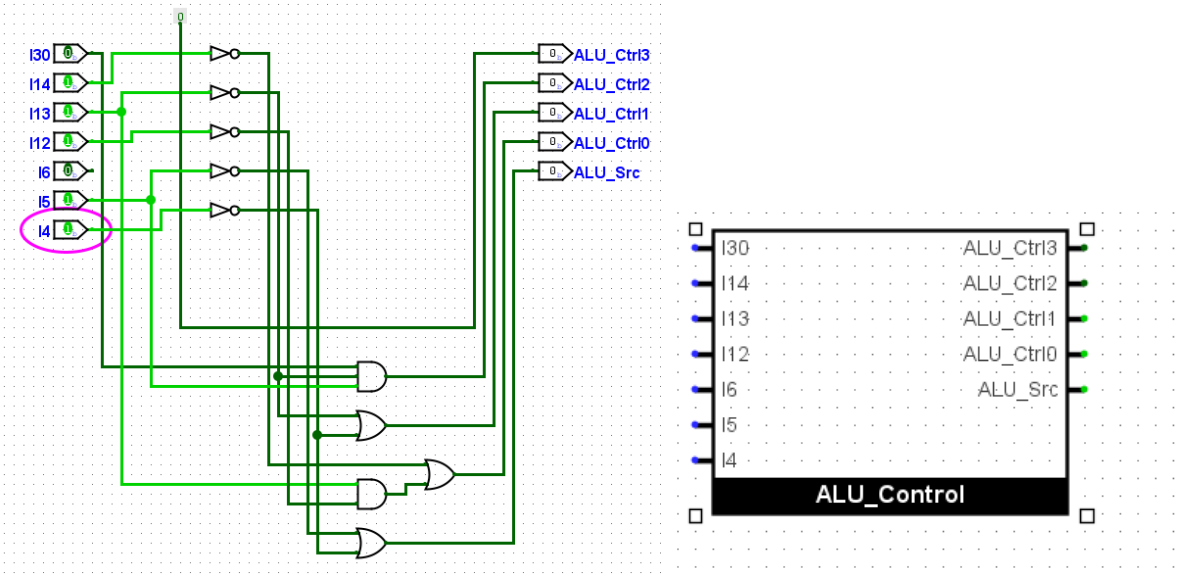

Figure 1. ALU Control Circuit

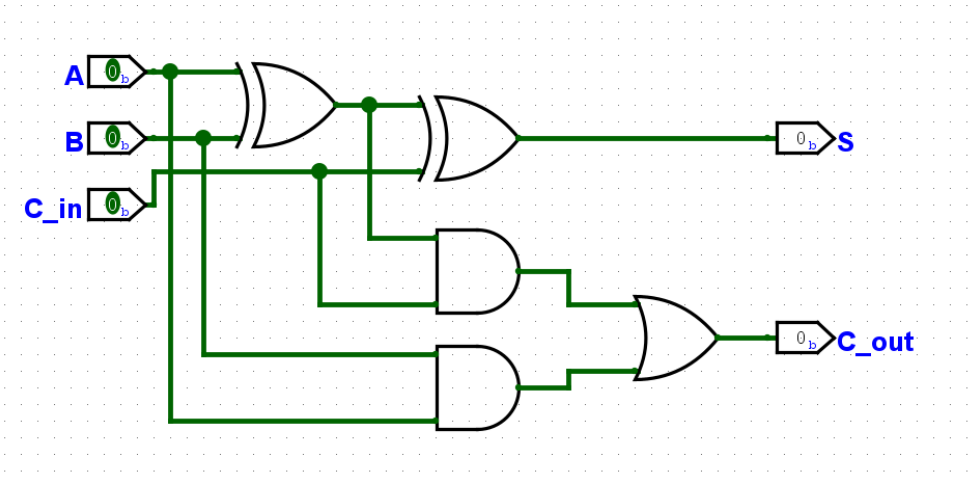

Figure 2. Full adder 1-bit

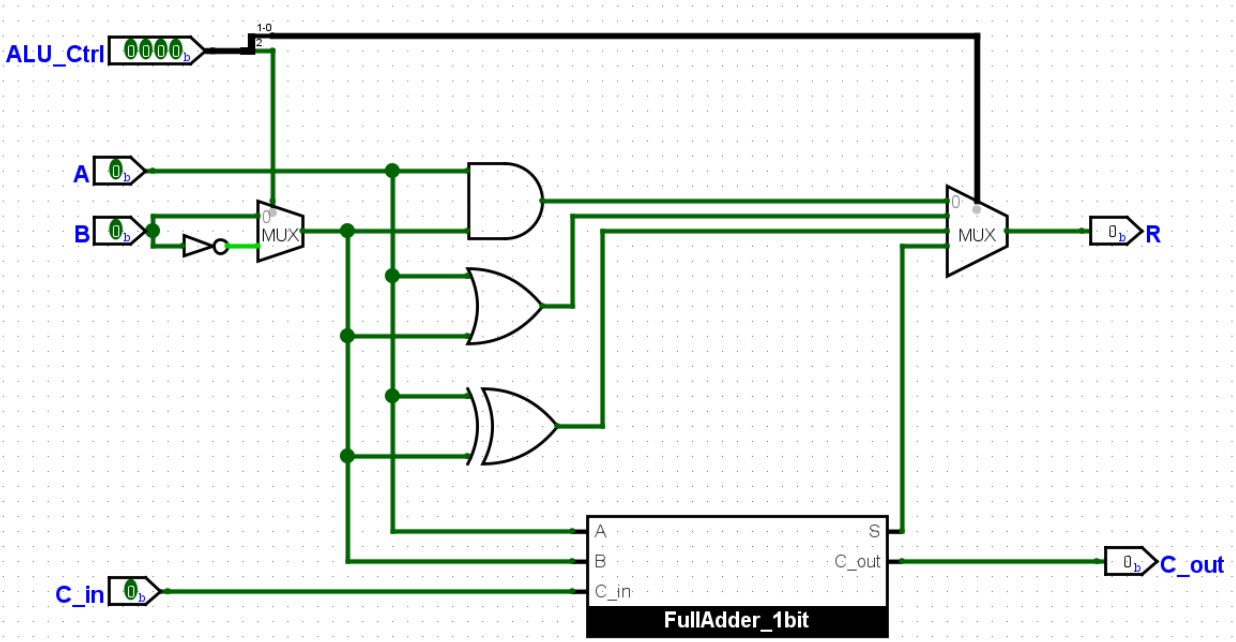

Figure 3. ALU 1-bit

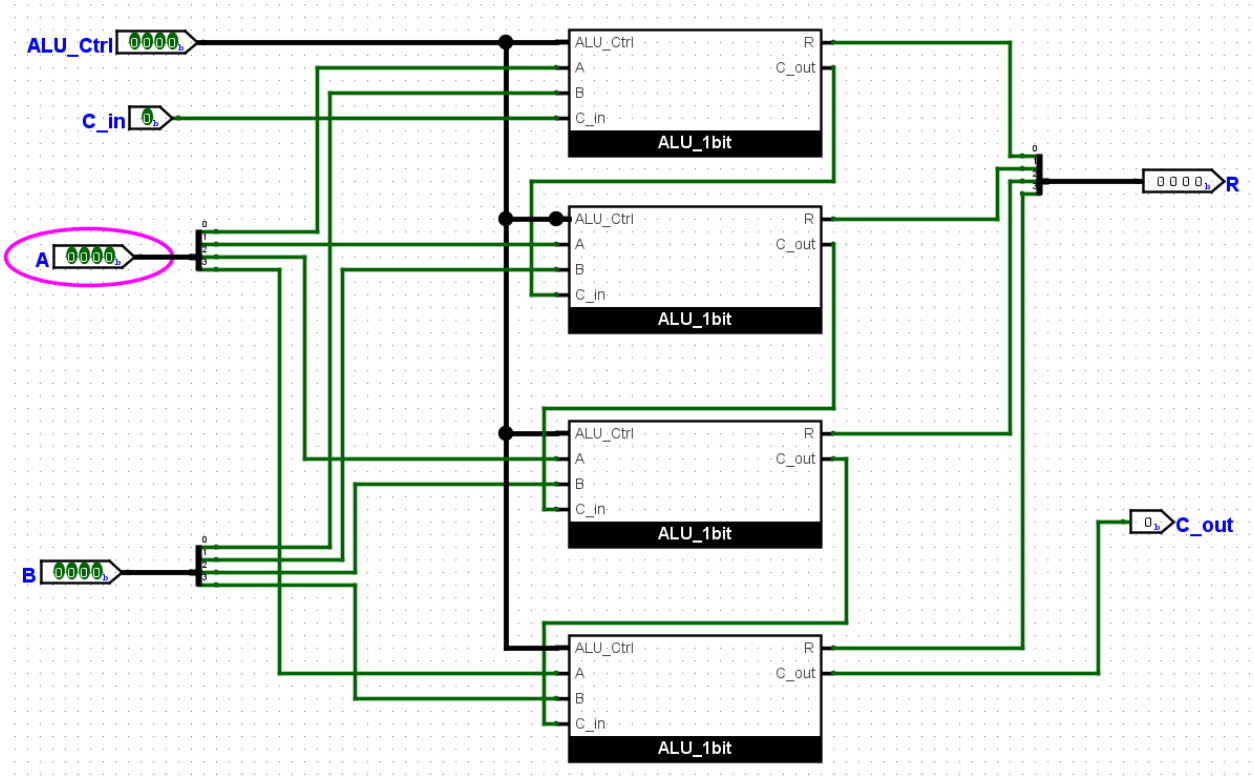

Figure 4. ALU 4-bit

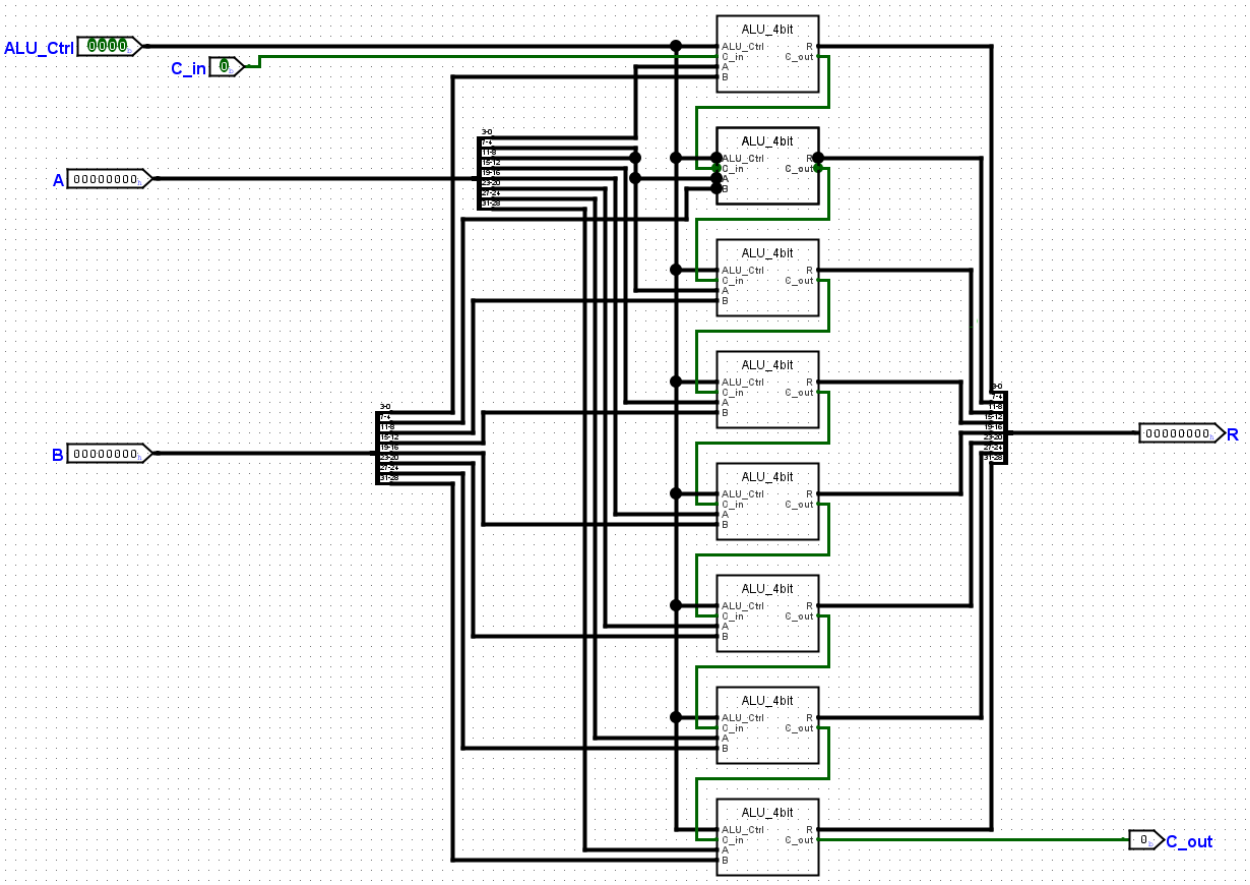

Figure 5. 32-bit ALU